Enclosed Vertical Axis Wind Turbines

A Major Qualifying Project

Submitted to

The Faculty of

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by

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Abstract

Enclosing vertical axis wind turbines (VAWTs) could increase the efficiency of the turbines; In addition, a wind funneling system may help further benefit the power output. Wind tunnel testing concluded that enclosing VAWTs shows potential to increase efficiency. Additional wind tunnel designs were completed to look for further increases in efficiency through wind funneling.

Executive Summary- Enclosed Vertical Axis Wind Turbines

Enclosed vertical axis wind turbines (VAWTs) may hold the potential to be widely used as small-scale residential turbines. Additionally, wind funneling into wind turbines, particularly structure mounted VAWTs, has the potential to increase the efficiency of sustainable energy solutions.

Goals

The goals of this project were to determine if enclosing VAWTs in a enclosurer could increase the efficiency of the turbines and to design a wind funneling system to help further benefit the potential power output. The final product of this design and experimentation will be used to develop a small-scale, one-kilowatt enclosed vertical axis wind turbine to be developed at an affordable price point and sold to homeowners.

Background

Sustainable energy solutions are currently under high development. A system that can produce one-kilowatt of energy operating at 25% time for a product and installation cost of $2000 could yield an eight-year return on investment (ROI). If enclosing a turbine or funneling wind into it could increase the efficiency of the system, the ROI could be significantly reduced. Every increase in efficiency is less energy that needs to come from non-sustainable sources.

Methodology

A number of scale model VAWTs, enclosures, and a testing device were designed and fabricated to test in a wind tunnel. The turbines ranged from two to eight blades and had a variation of blade angles from 30° to 60°. The enclosures varied in orientation of flow entry and exit. Figure 1: Example Turbine, Enclosure, and Testing Setup shows a six blade turbine, enclosure, and assembled testing set up.

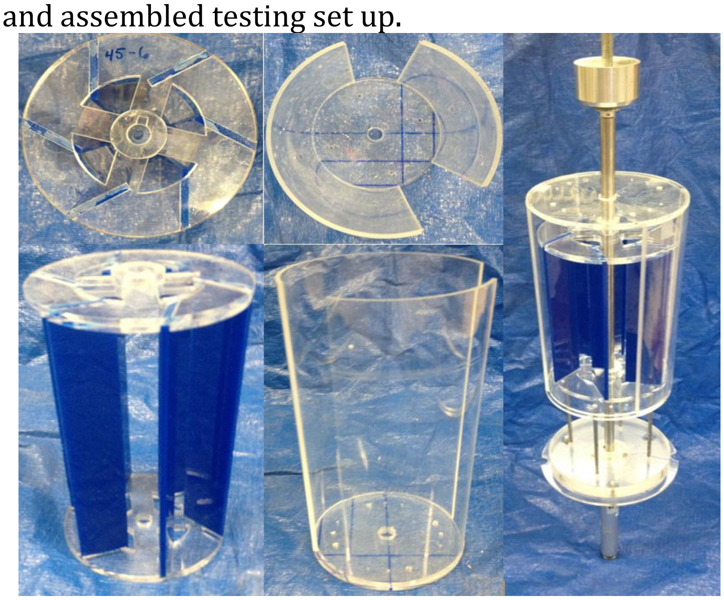

Figure 1: Example Turbine, Enclosure, and Testing Setup

Data from combinations of every turbine and enclosure was collected at wind speeds ranging from zero miles per hour to 42 miles per hour. Data analysis included comparing revolutions per minute to wind speed in order to evaluate the effectiveness of each enclosure-turbine combination at increasing efficiency. Additionally, three variations of wind funneling systems and a torque-monitoring device to estimate potential power were designed for testing inside of the wind tunnel.

Findings

Analysis of the data collected during tests, shows that it is possible to achieve a higher number of rpm's with a range of turbines and enclosures. Figure 2 shows an example of the six blade turbine with four different enclosures.

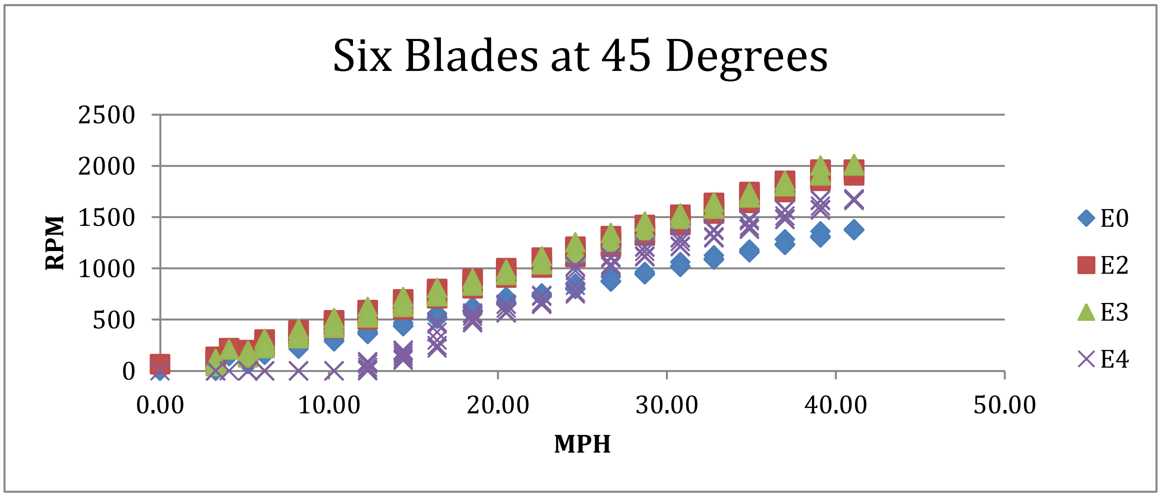

Figure 2: Six-blade turbine with four different enclosures

Summary

Enclosing vertical axis wind turbines shows the potential to increase their efficiency which would not only reduce the turbine's ROI to a homeowner, but also could decrease emission of eCO_2 into the atmosphere from non-sustainable energy sources.

Authorship

We certify that all members of the project team have contributed equally to the completion of this project.

Acknowledgements

Thank you to Don Pellegrino, Neil Whitehouse, and Russ Lang for their help in the lab; and thank you to Julie Eagle for her previous research. Also thank you to Francis X. Reilly Sr. for introducing us to this concept.

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1. Introduction

On a daily basis the world uses many sources of energy that expel carbon dioxide into the atmosphere. It takes years for this gas to dissipate. The increase of carbon dioxide levels has led to an increase of the earth's average temperature. This effect is commonly known as the "Global Warming Effect". Alternative energy sources are a viable way to lower the amount of carbon dioxide released. Wind, one of the main alternative energy sources, is a common choice for small scale energy applications.

There are two different kinds of wind turbines, one using a horizontal axis shown in Figure 3: Horizontal Axis Wind Turbine and the other using a vertical axis shown in Figure 4: Vertical Axis Wind Turbine. Enclosing the VAWTs may make it plausible for these to be widely used as small-scale residential turbines. Additionally, wind funneling into wind turbines, particularly structure mounted VAWTs, has the potential to increase the efficiency of sustainable energy solutions.

Figure 3: Horizontal Wind Turbine (Source: http://jcwinnie.biz/wordpress/?p=2330)

Figure 4: Vertical Axis Wind Turbine (Source: http://www.planetarysystems.com/productD.php?PtID=13)

The goals of this project were to determine if enclosing VAWTs in a shroud could increase the efficiency of the turbines and to design a wind funneling system to help further benefit the potential power output. The final product of this design and experimentation will be used to develop a small-scale, one-kilowatt enclosed vertical axis wind turbine to be developed at an affordable price point and sold to homeowners.

This report covers the research done to see if the hypothesis of the team regarding enclosures is supported or not. The report includes examples of other sustainable solutions as well as some VAWTs that are used in the world today.

2. Background

Sustainable energy solutions are currently under widespread and enthusiastic development. This chapter discusses the different types of alternative energy. The discussion of the different types of winds sources can also be found here.

2.1. Types of Alternative Energies

There are many types of alternative energies. This section includes the three main types of sources: hydro, solar, and wind.

2.1.1. Hydro Power

Hydro power is use of water flowing through a turbine connected to a generator which creates electricity. To effectively have hydro power as a source, one needs to have an elevation drop for the water to fall. Usually there is a water reservoir with an intake near the bottom of the dam’s wall where it funnels the water toward the turbine that is connected to the generator. After flowing through the turbine it flows back into the river at a much lower elevation then the top of the reservoir (Perlman). An example of a dam is shown in Figure 3: How Hydro Power Works.

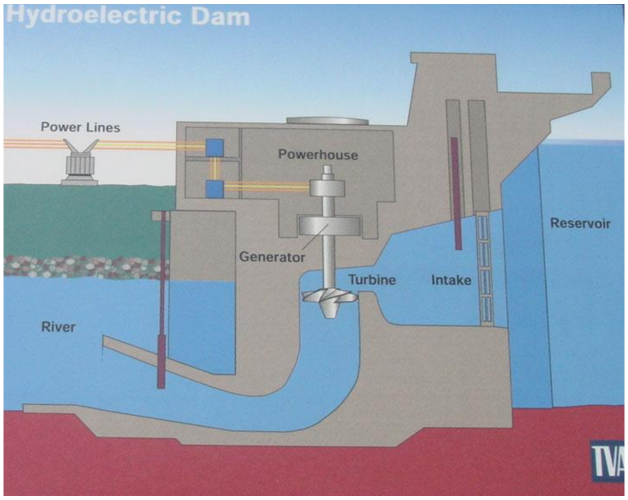

Figure 5: How Hydro Power Works (Source: http://www.kentuckylake.com/)

2.1.2. Solar Power

Solar power is the collection of the sunlight by a solar panel which converts light energy directly into electricity. Most solar panels are created out of silicon, since it is such a good semiconductor. Solar panels can be arranged in large solar arrays that have the ability to power large areas. The Air Force currently utilizes this form of alternative energy to power Nellis Air Force Base in Nevada. this is also the largest PV array in North America, shown in Figure 4: Nellis Air Force Base Solar Panels (Whitney).

Figure 6: Nellis Air Force Base Solar Panels (Source: http://www.metaefficient.com/news)

2.1.3. Wind Power

Society had been using wind energy as a source of power for the longest time. The use of the windmill to grind grain was first used by the Persians and the Greeks. Now one can find entire fields of wind turbines, such as the Roscoe Wind Farm in Texas , the largest onshore wind farm in the world. Wind Farms can also be found off the coasts of several countries. Europe is growing in their use of wind power, with Denmark leading the charge being the holder of the largest offshore wind farm (Schwartz).

2.2 Types of Wind Sources

This section goes into greater details about available types of wind energies. Also, greater details on how the turbines work will be explained.

2.2.1. Horizontal Axis Wind Turbines (HAWT)

HAWTs are more commonly used for wind farming than for use in households. One of the major concerns of a HAWT is that for it to work best it should be facing into the wind. The big turbines in wind farms usually have motors to help point them into the wind. "Horizontal axis" means that the axis of rotation is parallel to the ground with the blades spinning perpendicular to the ground. Typically these look more like a fan that one could buy in a store for their household. An example of a HAWT is shown in Figure 3: Horizontal Wind Turbine.

2.2.2. Vertical Axis Wind Turbines (VAWT)

The biggest advantage for the VAWT is that no matter from which direction the wind is coming from, the turbine will be capturing the wind and working effectively. This is why in more residential areas where the wind is changing more often VAWTs are more practical. With the vertical axis both of the blades and the axis are perpendicular to the ground or straight up in the air. VAWTs tend to spin considerably faster than HAWTs so a concern of the VAWT is that wildlife, birds and small animals, might fly or get caught in them. An example of a VAWT is shown in Figure 4: Vertical Axis Wind Turbine.

2.3. Enclosing a VAWT and Wind Funneling

The theory behind enclosing a VAWT is that it would increase the flow of the wind into the turbine thus increasing the rotations per minute (RPMs). The idea is that depending on how more efficient the enclosed turbine is working, one could decrease the ROI by a substantial amount. Figure 7: Enclosing a VAWT shows a turbine with an enclosure around it.

Wind funneling is thought to increase the amount of wind going into the enclosed VAWT, thus increasing the RPMs. The more RPMs a turbine has, the more energy it is creating. This translates to lower electricity and gas bills.

Figure 7: Enclosing a VAWT

3. Methodology

In order to test if the addition of an enclosure and wind funneling system to a VAWT can make them more efficient, the following methodology was completed. Components of the design were adapted from previous research where incomplete data was gathered. The methodology includes the design of the testing set up and the procedure used to run the tests. Additional testing procedures have been evaluated for the first designs, and designs of funnel and wind vectoring structures were designed and constructed for further testing. In addition, the next part of the research not only will involve wind funneling systems, but a torque-monitor will be added to the turbine shafts.

3.1. Design and Fabrication

Turbines were designed and then modeled in software named Solidworks. They were fabricated out of Acrylic plastic cut with a laser-cutting machine and molded together with modeling glue. The turbines ranged from two blades up to eight blades with most blades at 45° to tangent. However, different angles relative to their tangent were designed and fabricated in order to test how angles affected efficiency.

A two-blade and 45 degree turbine was designed and created. It can be seen in Figure 8: Two Blades and 45°.

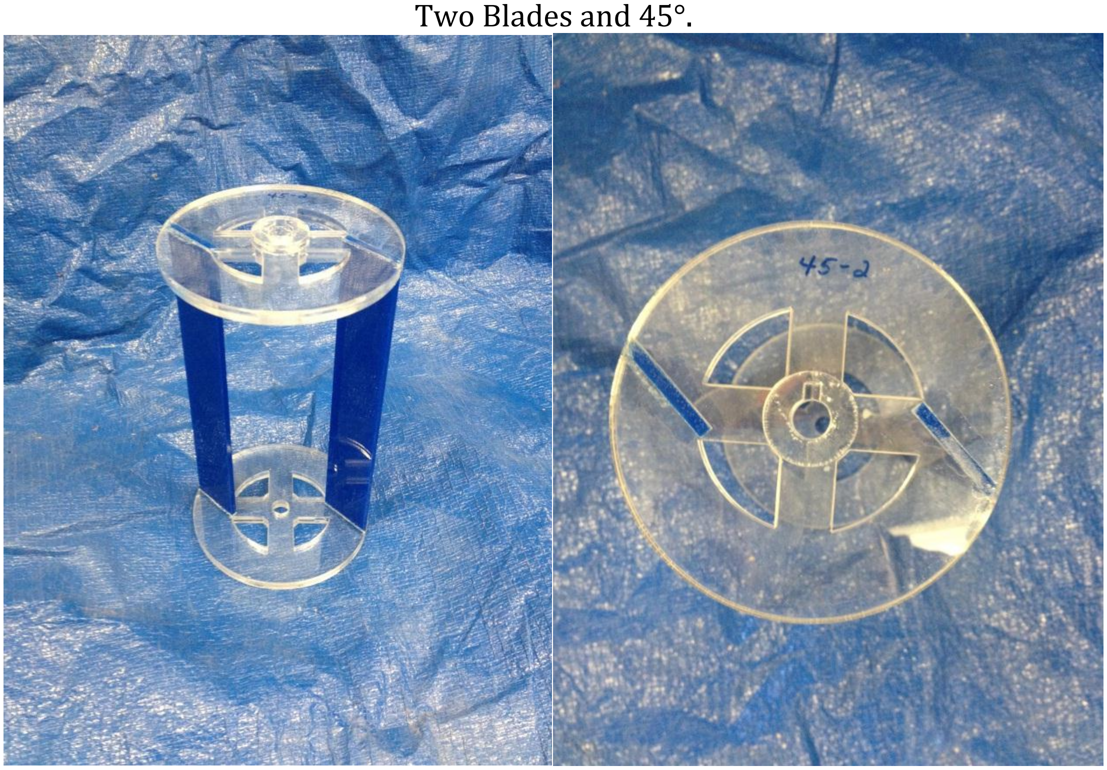

Figure 8: Two Blades and 45°

A three-blade and 45 degree turbine was designed and created. It can be seen in Figure 9: Three Blades and 45°.

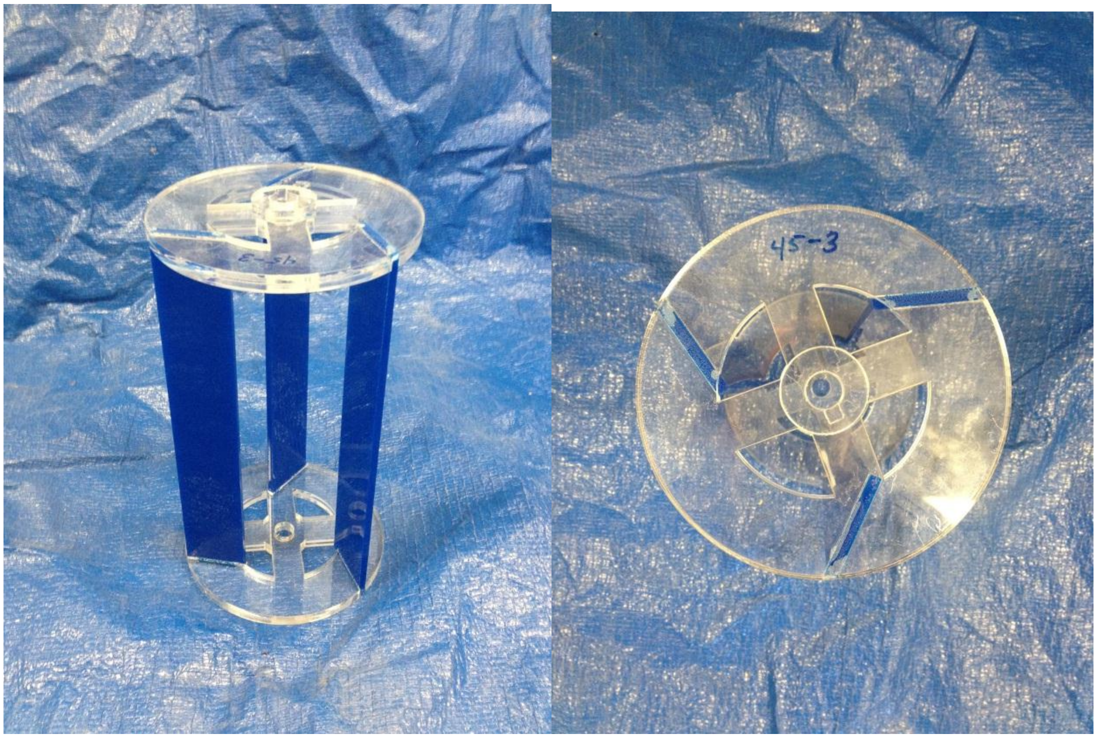

Figure 9: Three Blades and 45°

A four-blade and 30° degree turbine was designed and created. It can be seen in Figure 10: Four Blades and 30°.

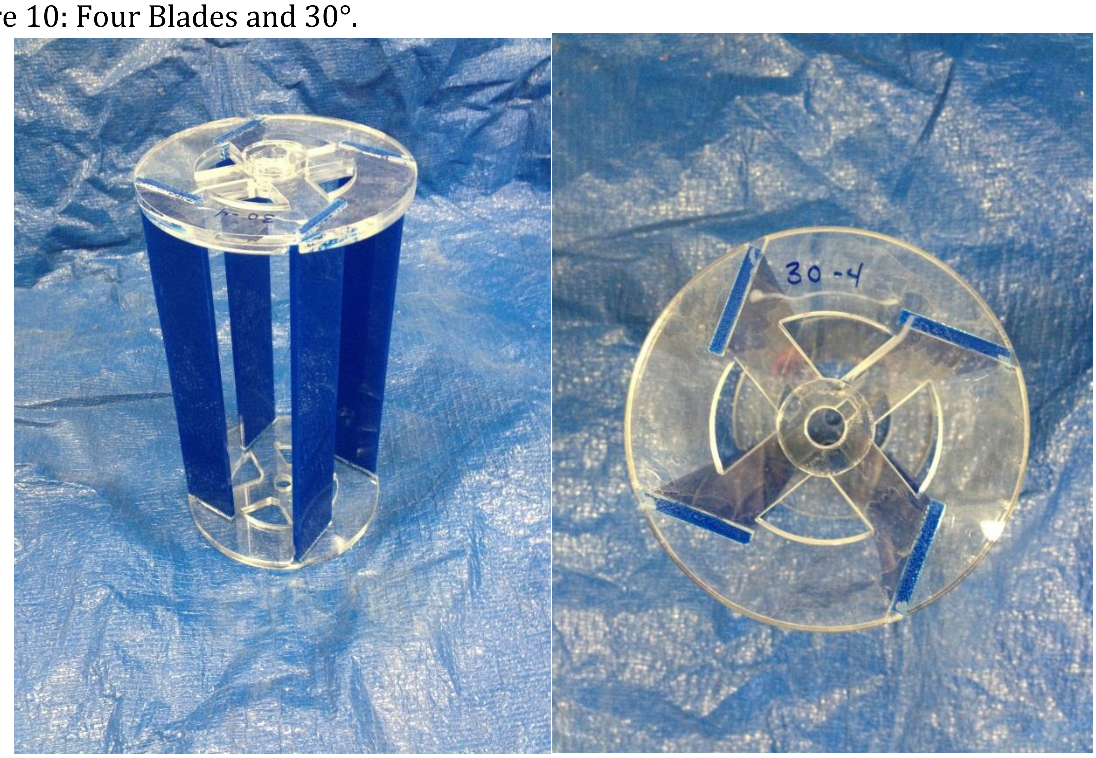

Figure 10: Four Blades and 30°

A four-blade and 37.5 degree turbine was designed and created. It can be seen in Figure 11: Four Blades and 37.5°.

Figure 11: Four Blades and 37.5°

A four-blade and 45 degree turbine was designed and created. It can be seen in Figure 12: Four Blades and 45°.

Figure 12: Four Blades and 45°

A four-blade and 52.5 degree turbine was designed and created. It can be seen in Figure 13: Four Blades and 52.5°.

Figure 13: Four Blades and 52.5°

A four-blade and 60 degree turbine was designed and created. It can be seen in Figure 14: Four Blades and 60°.

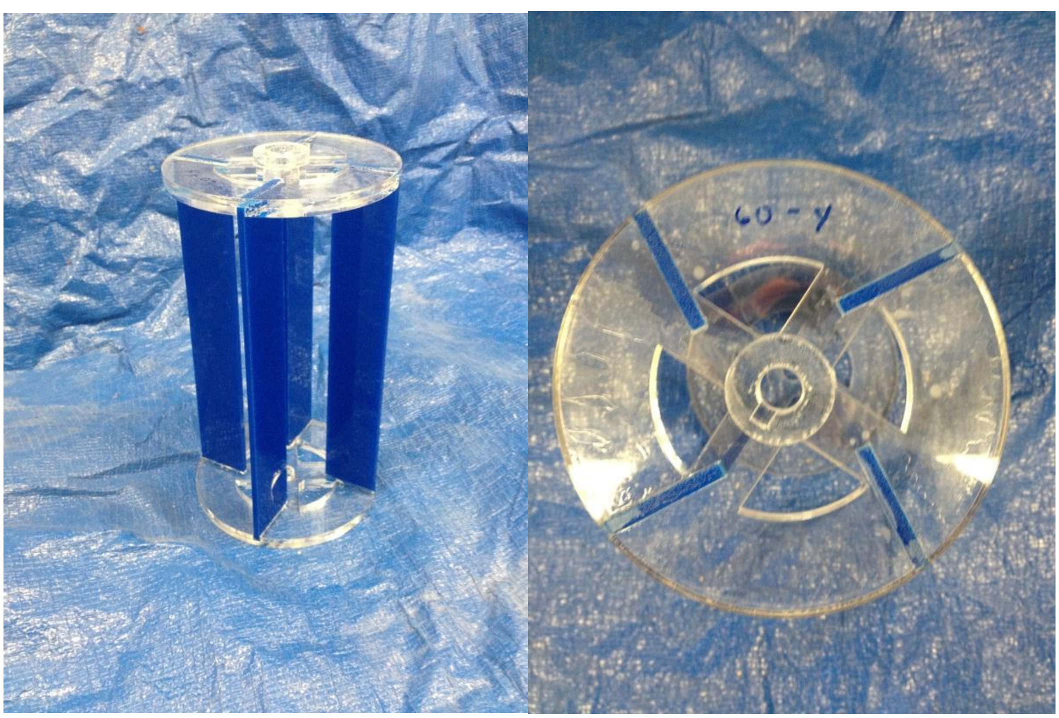

Figure 14: Four Blades and 60°

A five-blade and 45 degree turbine was designed and created. It can be seen in Figure 15: Five Blades and 45°.

Figure 15: Five Blades and 45°

A six-blade and 45 degree turbine was designed and created. It can be seen in Figure 16: Six Blades and 45°.

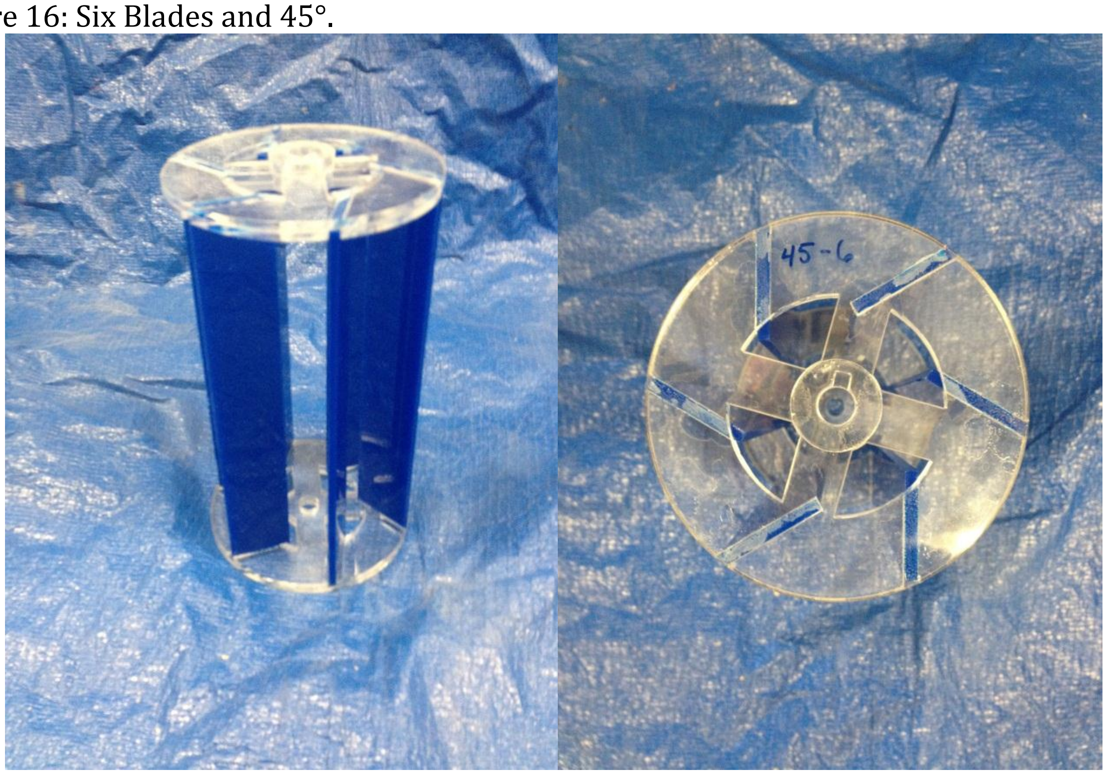

Figure 16: Six Blades and 45°

A seven-blade and 45 degree turbine was designed and created. It can be seen in Figure 17: Seven Blades and 45°.

Figure 17: Seven Blades and 45°

An eight-blade and 45 degree turbine was designed and created. It can be seen in Figure 18: Eight Blades and 45°.

Figure 18: Eight Blades and 45°

Three different enclosure styles were designed and fabricated from designs completed in SolidWorks, fabricated from Acrylic plastic cut with a laser-cutting machine, and then molded together with model glue. These enclosures included: enclosure 2 with two openings which blocked the 90° where the turbine was returning into the wind and directed the wind around approximately 260° of the turbine and an enclosed top and bottom; enclosure 3 which blocked the 90° of the where the turbine was returning into the wind and an enclosed top and bottom; and enclosure 4 which blocked the 90° of the where the turbine was returning into the wind and the directed the wind around the opposite 90° of the turbine and an enclosed top and bottom. The Enclosures are shown in figures 19 through figure 21.

Enclosure 2 is shown in Figure 19: Enclosure Two Front and Top Views.

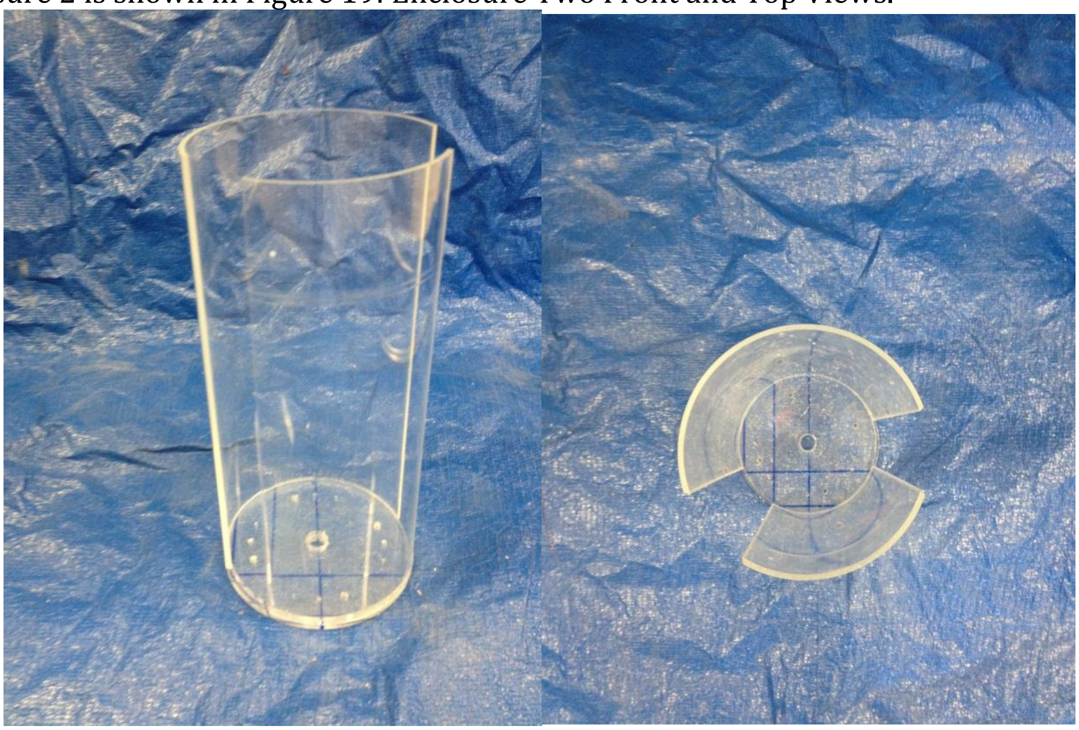

Figure 19: Enclosure Two Front and Top Views

Enclosure 3 is shown in Figure 20: Enclosure Three Front and Top Views.

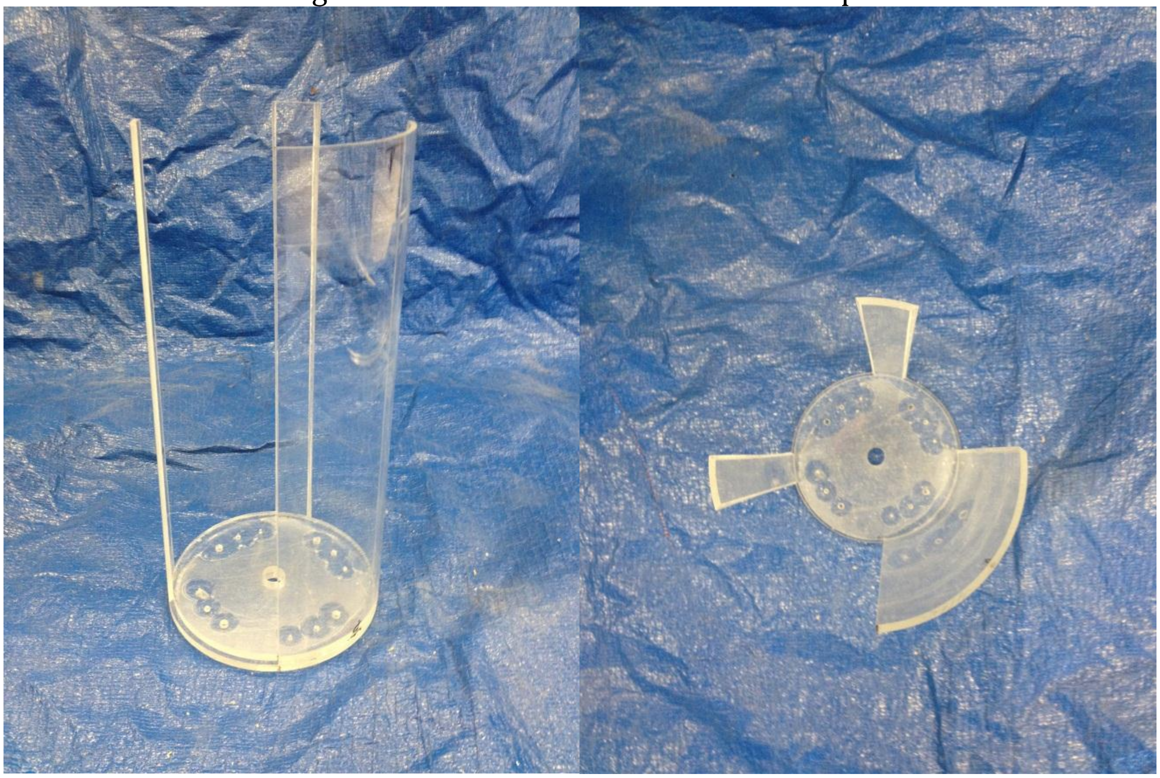

Figure 20: Enclosure Three Front and Top Views

Enclosure 4 is shown in Figure 21: Enclosure Four Front and Top Views.

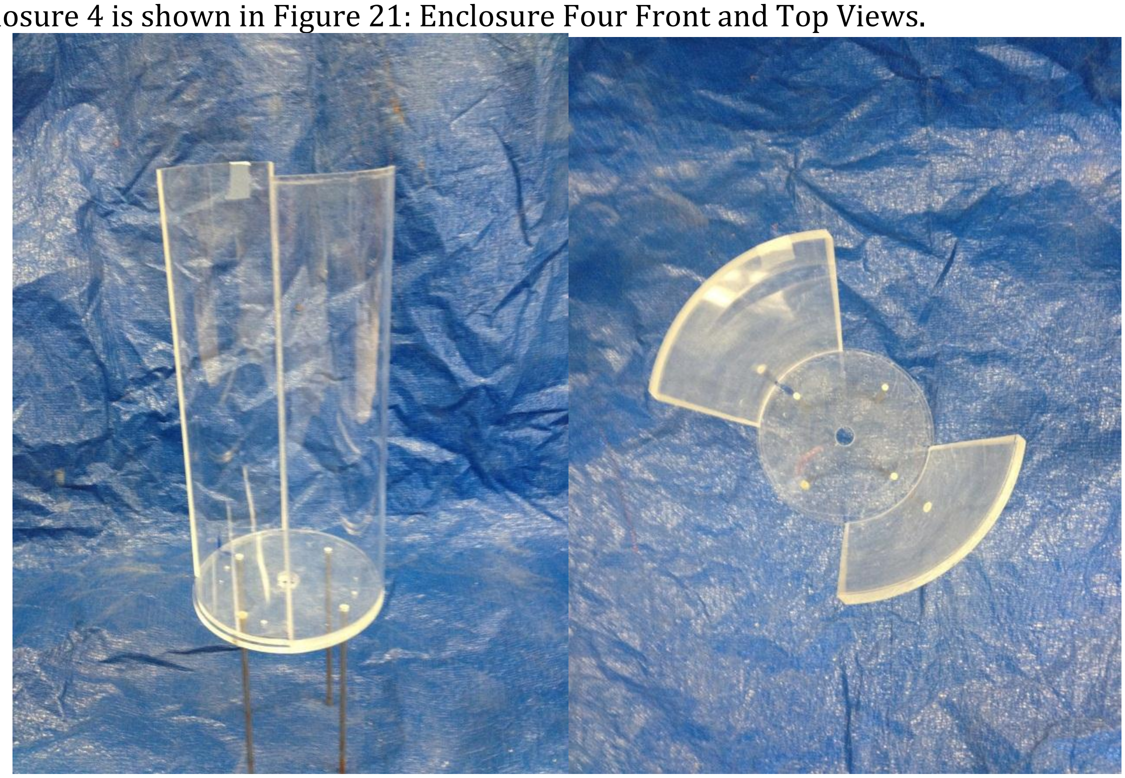

Figure 21: Enclosure Four Front and Top Views

Note that all tests completed with the top pictured in Figure 22: Top of an Enclosure.

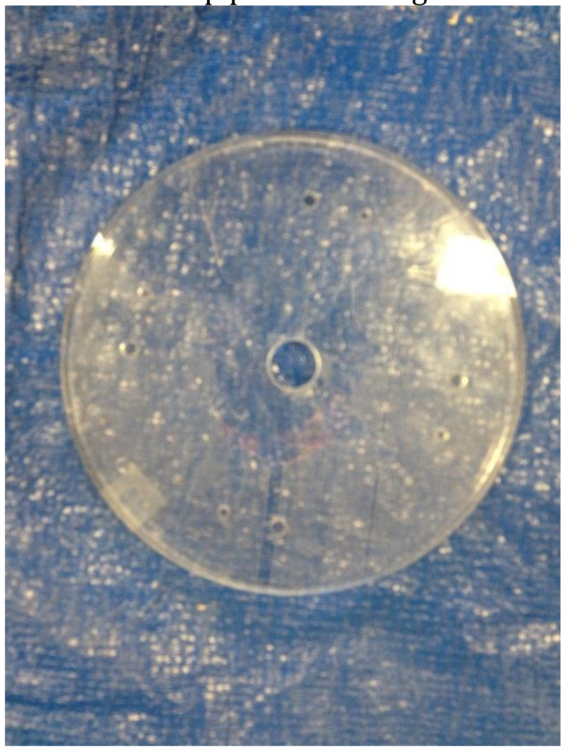

Figure 22: Top of an Enclosure

Previous testing had been completed using two through eight blade turbines. These tests used no enclosure and enclosure 1. The results of these tests, indicated that enclosing the wind turbines created shaft alignment vibration under various conditions the following designs and procedures were created to provide more reliable data. The turbine shafts in these test were fixed only at the bottom end of the shaft, and as a result acted as cantilever structures.

A shaft to mount the turbines on was designed in SolidWorks and fabricated out of ¼ inch steel axil shaft. This shaft was securely attached to the top of the wind turbine at the top by a stabilization mount and bearing which was designed in SolidWorks and fabricated out of cylindrical stock aluminum. The other end of the shaft was securely mounted to an anemometer, which could record the revolutions per minute on a data logger and computer programming. This set up was designed to hold the wind turbine and enclosure securely in the middle of the wind turbine. A complete example set up can be seen in Figure 23: Turbine Set Up.

3.2. Testing

Before testing of the previously mentioned setups could be completed a calibration of the wind tunnel had to be complete. All testing was completed in a wind tunnel with a 24-inch by 24-inch cross section with in a rectangular testing segment. In order to confirm accuracy of the data relative to wind speeds a three-cup anemometer was used to measure the wind speed within the testing segment of the wind tunnel at the give output in hertz provided on the tunnel's display.

Each turbine was first tested without an enclosure, then with enclosure 2, enclosure 3, and then enclosure 4. The procedure was to place the completed set up, shown in Figure 18: Turbine Set Up, inside the wind tunnel and begin the test at 42 miles per hour and step the wind speed down in even increments every 30 seconds until a wind speed of zero was reached.

Figure 23: Turbine Set Up

Once this was completed the turbine would be changed and the test then completed with that turbine. Once every turbine was tested with an enclosure, the enclosure was changed and every turbine was tested with the next enclosure.

3.3. Further Design

Designs were completed in SolidWorks of a wind funneling system to be used in conjunction with the previously constructed testing equipment in order to test for further efficiency gains.

Designs were completed for a torque-measuring device to be used with the previously constructed testing equipment in order to test for further efficiency gains. Images of these designs can be seen in detain in the results section of the report.

4. Findings

This section outlines our results and findings from our research. It outlines the data collected and designs created. It then suggests further research, which could build off the data collected and analyzed. Blade area was found to be the most promising variable to follow because of the clarity of results seen.

4.1. Enclosures vs. No Enclosures

A comparison of the differences of each turbine shows that regardless of blade number, area, or angle any turbine tested can be made more efficient when enclosed.

Figure 24: Two Bladed Enclosure Comparison shows that all the enclosures tested will increase the efficiency of the two-blade turbine tested.

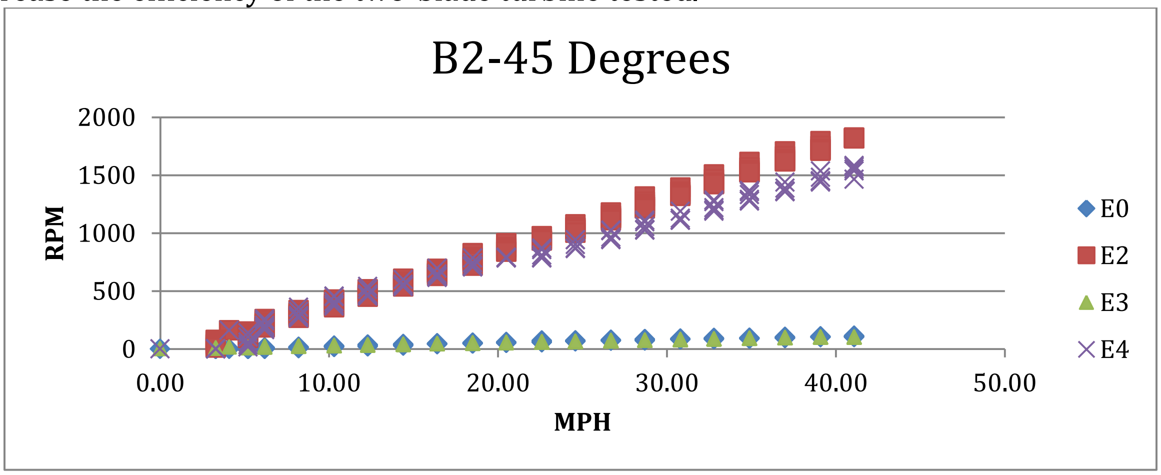

Figure 24: Two Bladed Enclosure Comparison

Figure 25: Three Bladed Enclosure Comparison shows that all the enclosures tested will increase the efficiency of the three-blade turbine tested.

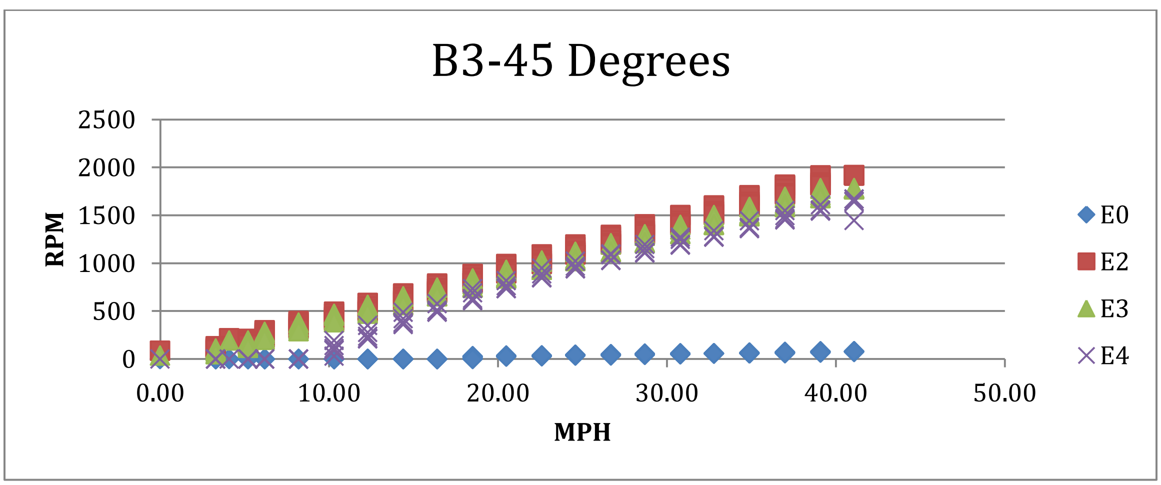

Figure 25: Three Bladed Enclosure Comparison

Figure 26, Figure 27, Figure 28, Figure 29, and Figure 30 shows that all the enclosures tested will increase the efficiency of the five different four-blade turbine tested.

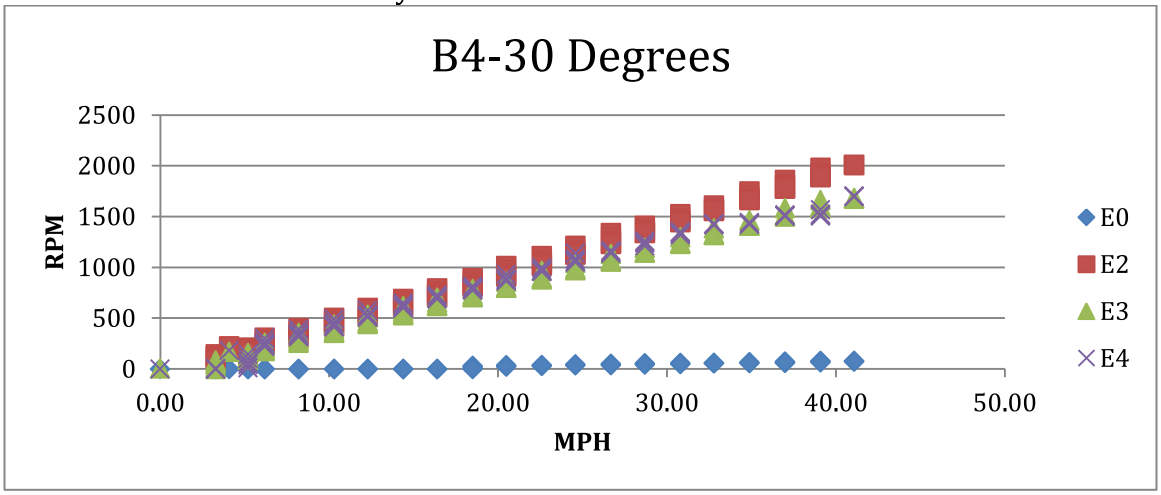

Figure 26: Four Bladed 30 Degree Enclosure Comparison

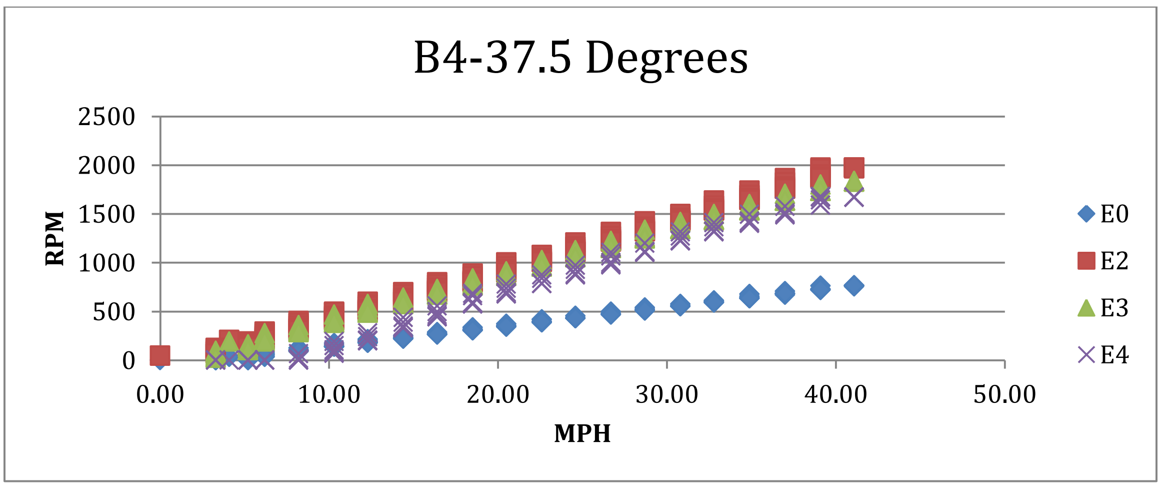

Figure 27: Four Bladed 37.5 Degree Enclosure Comparison

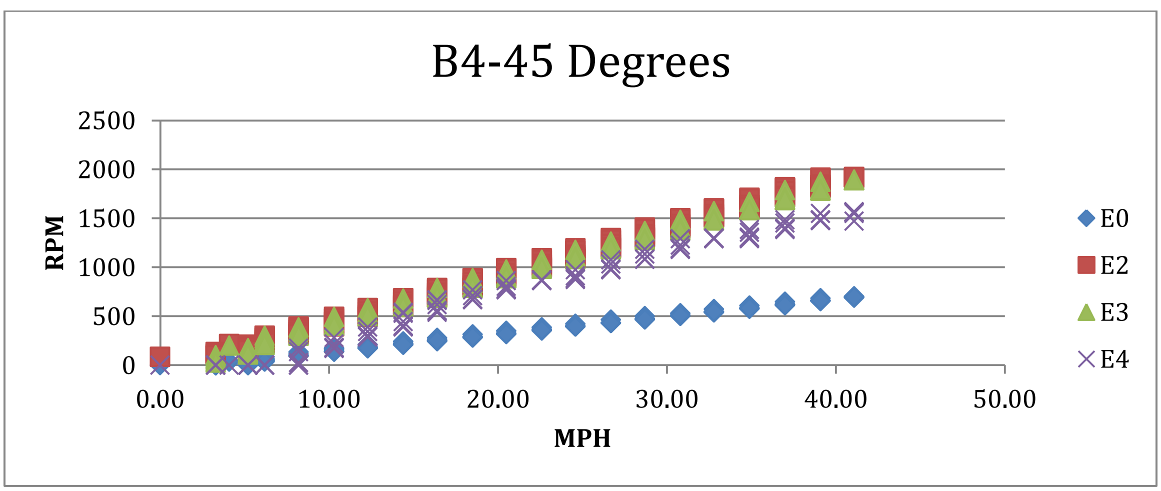

Figure 28: Four Bladed 45 Degree Enclosure Comparison

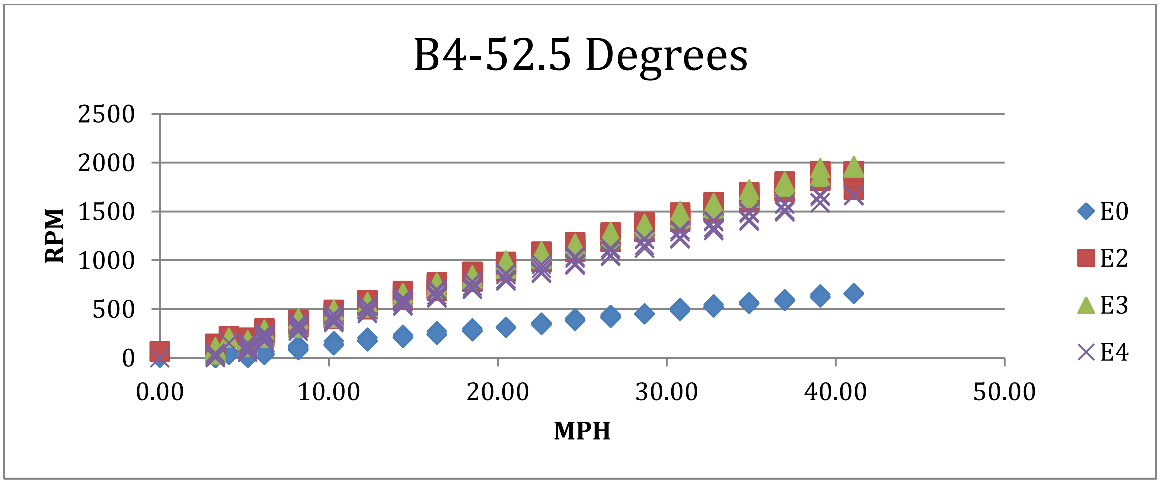

Figure 29: Four Bladed 52.5 Degree Enclosure Comparison

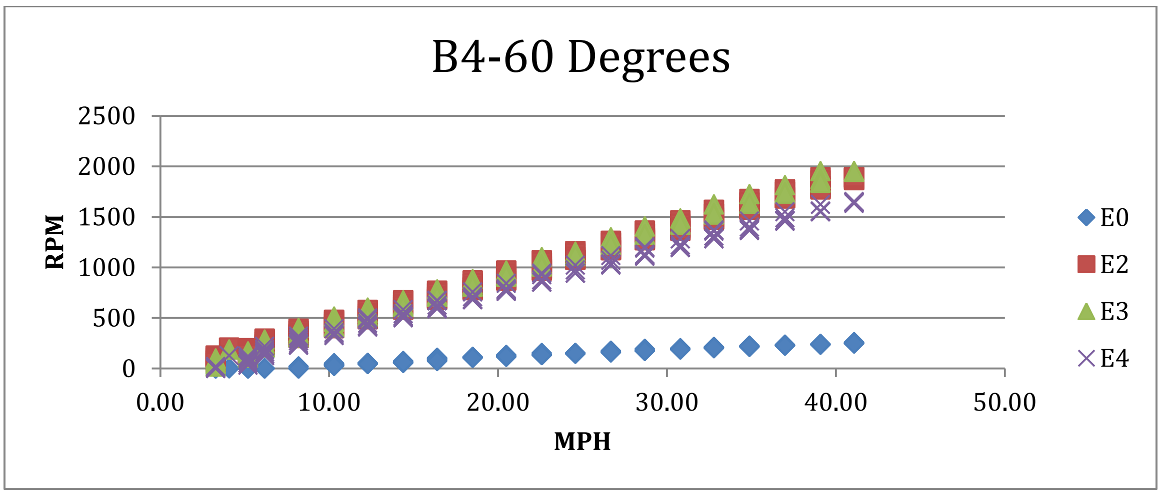

Figure 30: Four Bladed 60 Degree Enclosure Comparison

Figure 31: Five Bladed Enclosure Comparison shows that all the enclosures tested will increase the efficiency of the five-blade turbine tested.

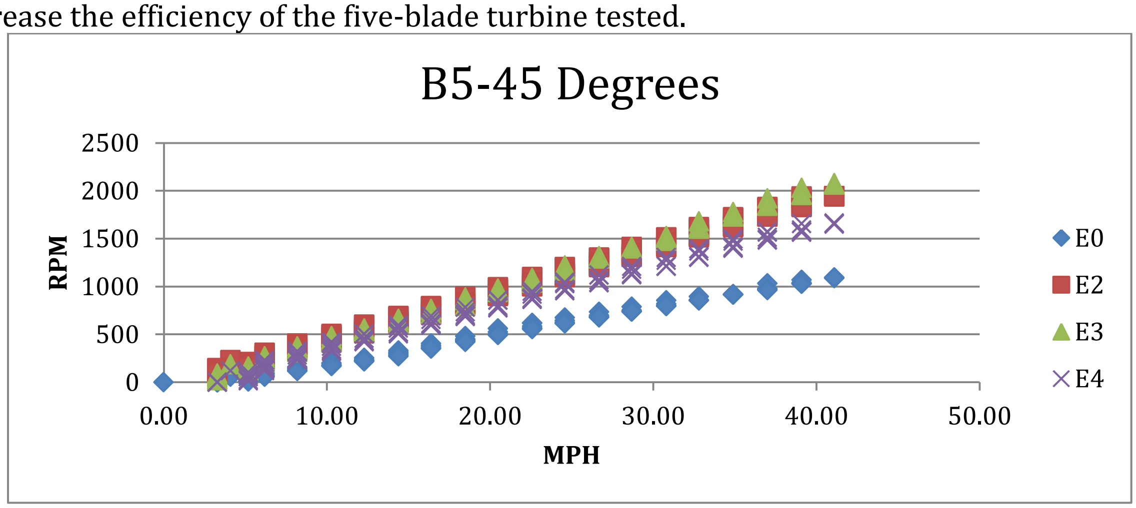

Figure 31: Five Bladed Enclosure Comparison

Figure 32: Six Bladed Enclosure shows that all the enclosures tested will increase the efficiency of the six-blade turbine tested.

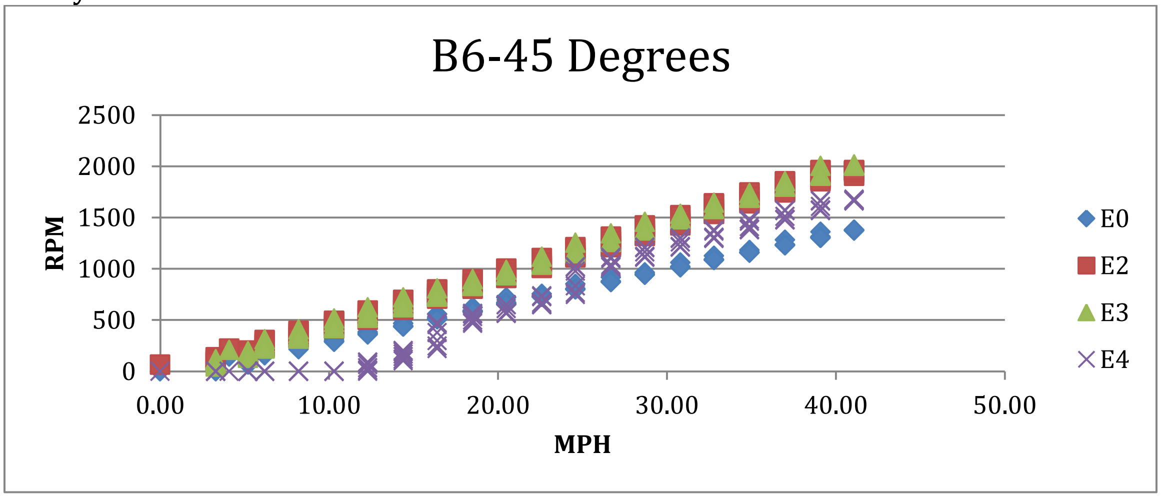

Figure 32: Six Bladed Enclosure Comparison

Figure 33: Seven Bladed Enclosure shows that all the enclosures tested will increase the efficiency of the seven-blade turbine tested.

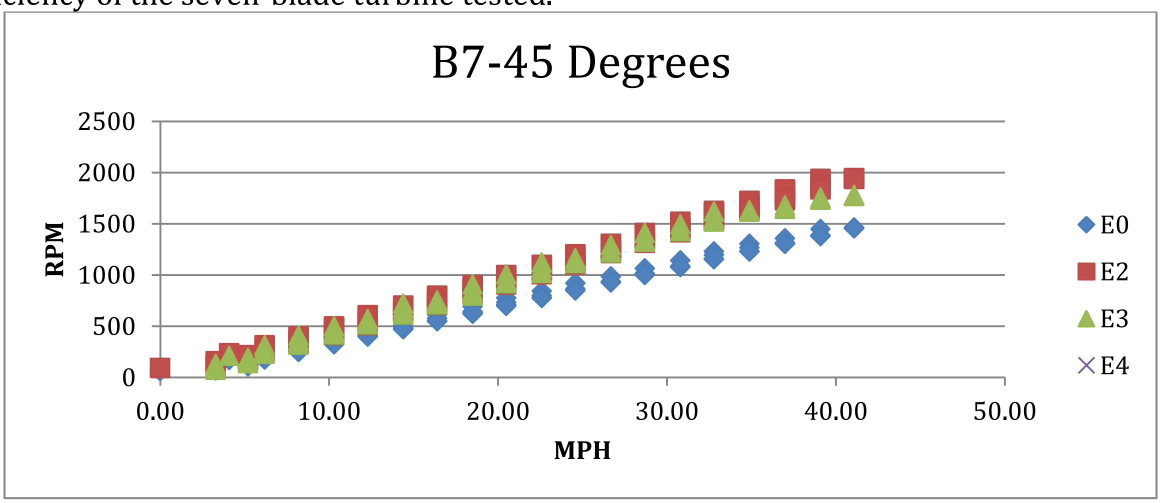

Figure 33: Seven Bladed Enclosure Comparison

Figure 34: Eight Bladed Enclosure Comparison shows that all the enclosures tested will increase the efficiency of the eight-blade turbine tested.

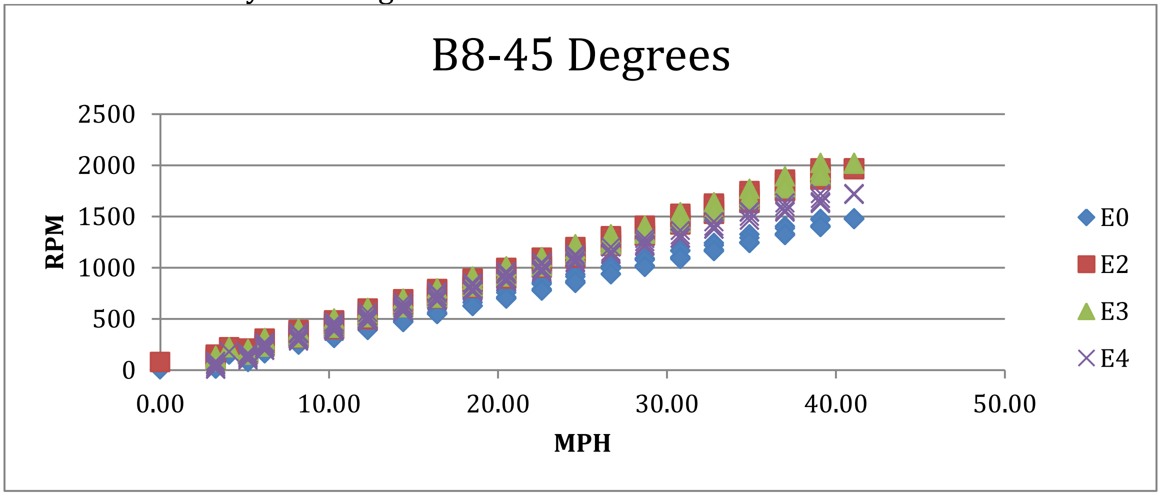

Figure 34: Eight Bladed Enclosure Comparison

A comparison of the differences of each enclosure shows how the enclosures affected the complete data set of each enclosure.

Figure 35: No Enclosure Turbine Comparison shows a comparison of all the data collected for each turbine with no enclosure.

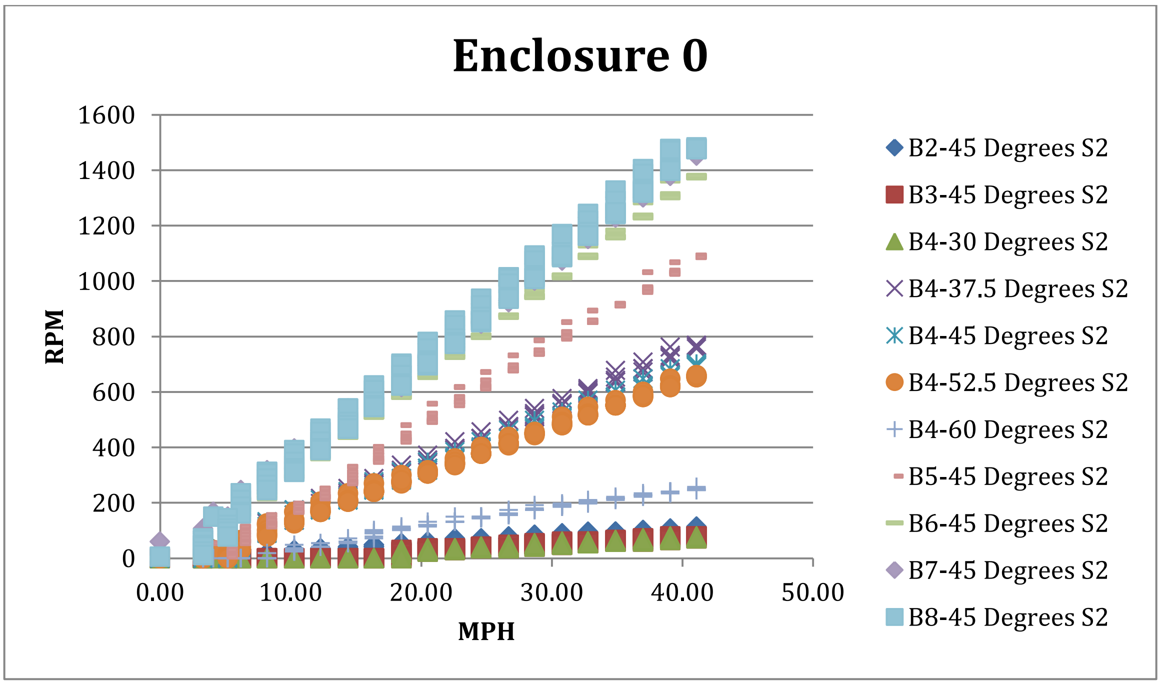

Figure 35: No Enclosure Turbine Comparison

Figure 36: Enclosure Two Turbine Comparison shows a comparison of all the data collected for each turbine with enclosure 2.

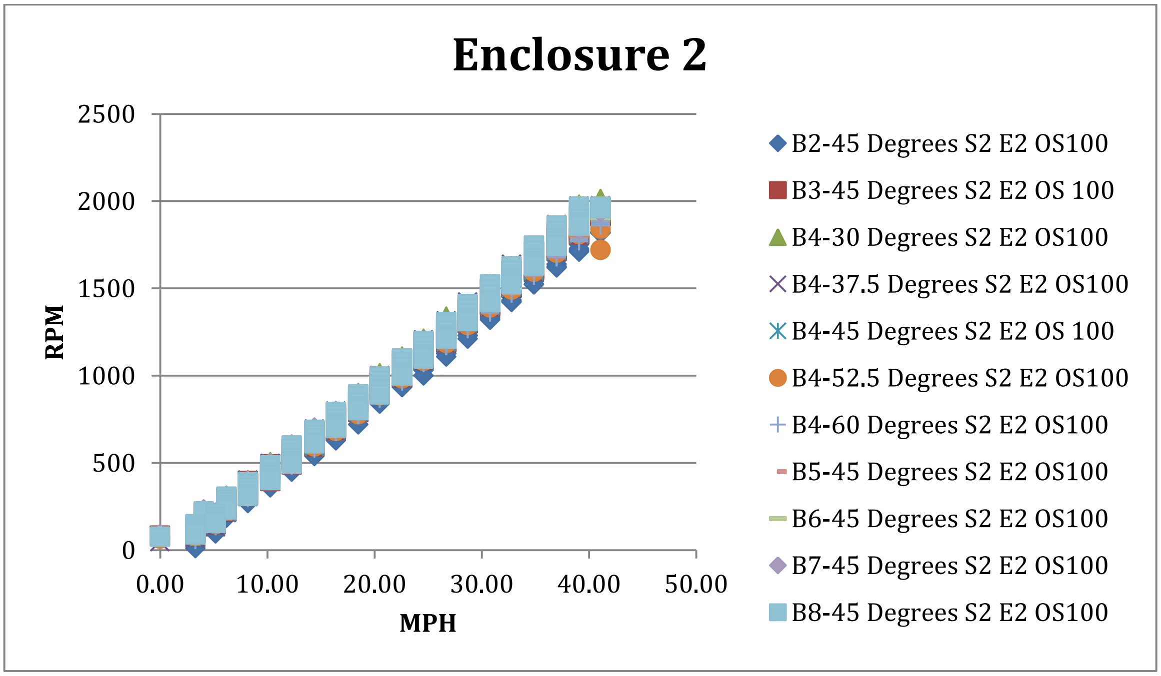

Figure 36: Enclosure Two Turbine Comparison

Figure 37: Enclosure Three Turbine Comparison shows a comparison of all the data collected for each turbine with enclosure 3.

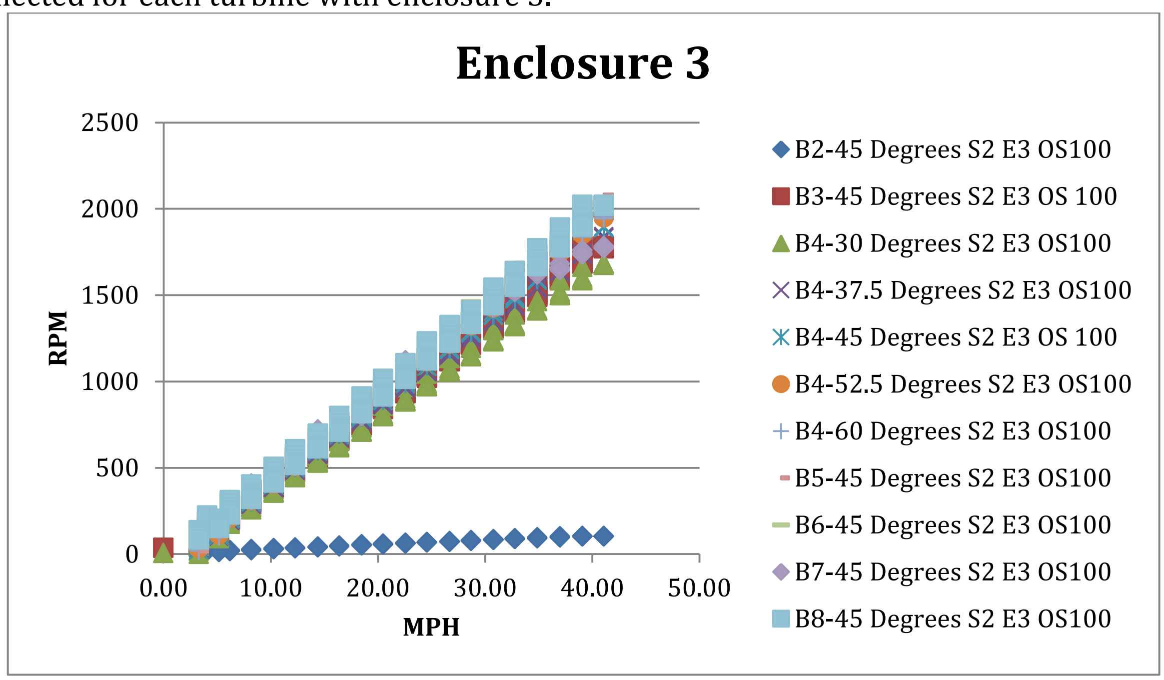

Figure 37: Enclosure Three Turbine Comparison

Figure 38: Enclosure Four Turbine Comparison shows a comparison of all the data collected for each turbine with enclosure 4.

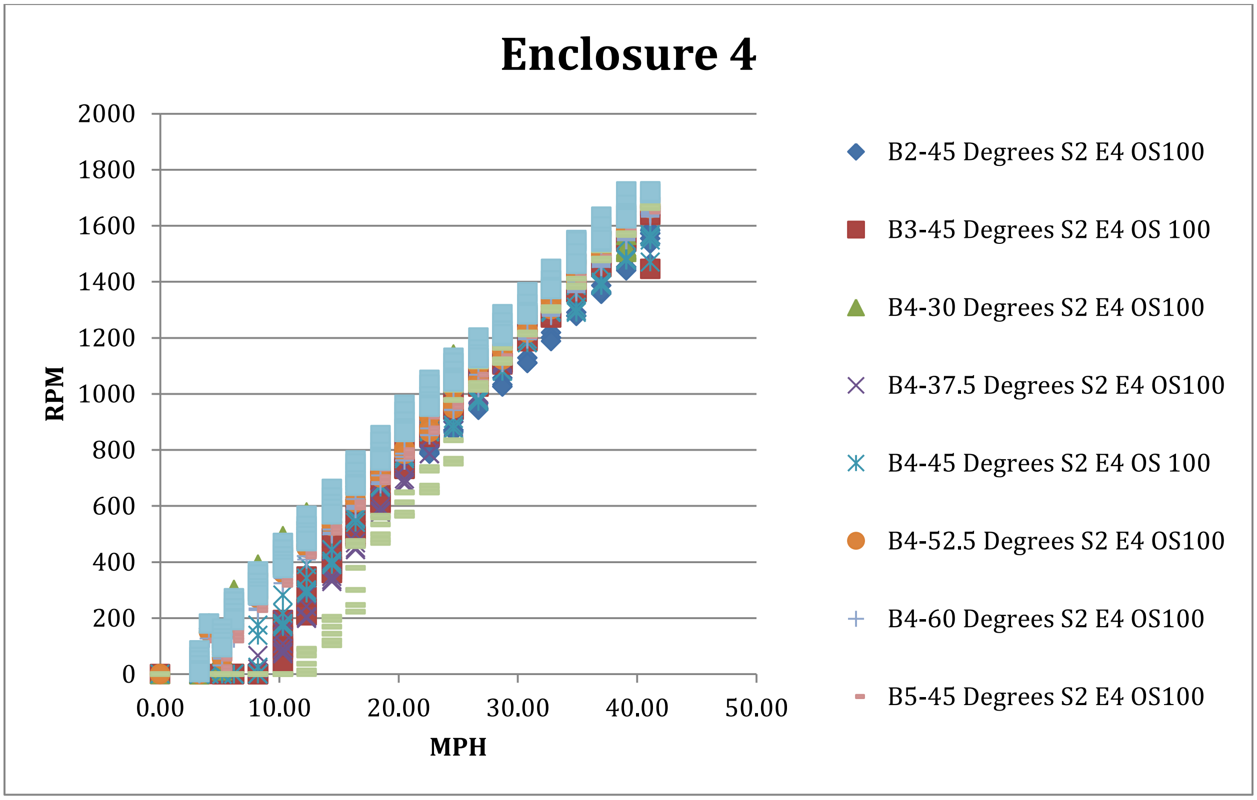

Figure 38: Enclosure Four Turbine Comparison

While the general overview of data presented in these figures makes it apparent that enclosing a VAWT will increase its efficiency the combination of the data makes it hard to form any real trends. Comparison of other factors such as blade area may prove to be more useful.

4.2 Blade Area

Evaluating the blade area VAWTs used for testing shows the potential to increase the efficiency of the turbines. An evaluation using the median value of rpm yielded the following findings.

Figure 39: No Enclosure Blade Area vs. RPM Graph shows that blade area appears to have a large effect on any non-enclosed VAWT's rpm's.

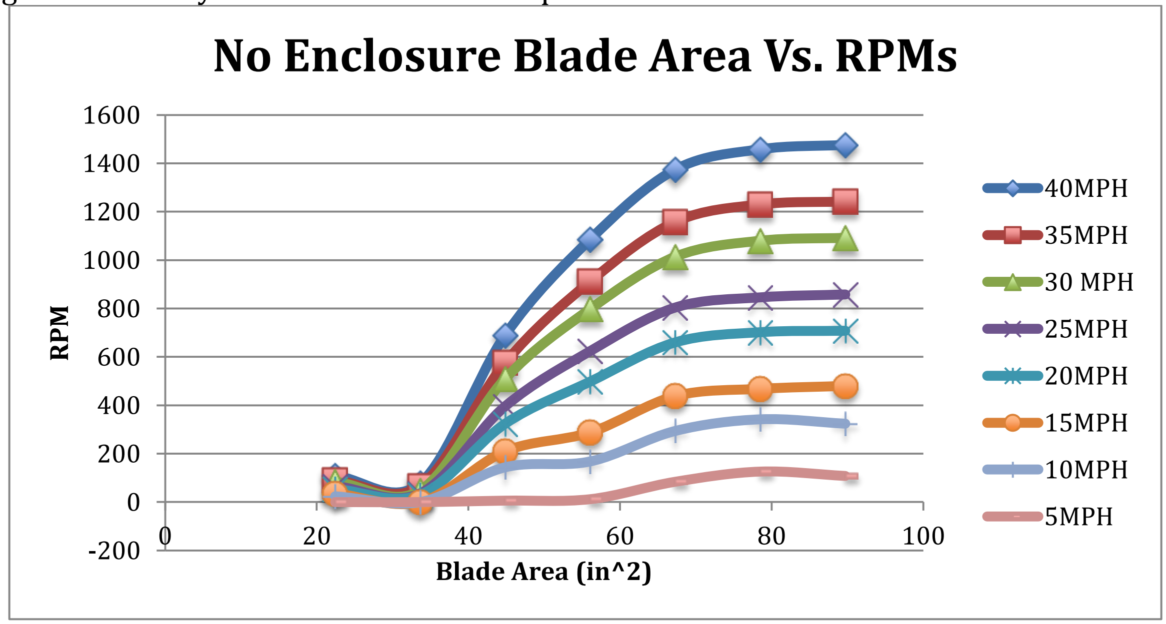

Figure 39: No Enclosure Blade Area vs. RPM Graph

Figure 40: Enclosure 2 Blade Area vs. RPM Graph shows that blade area appears to have a minimal effect on any VAWT in enclosure 2.

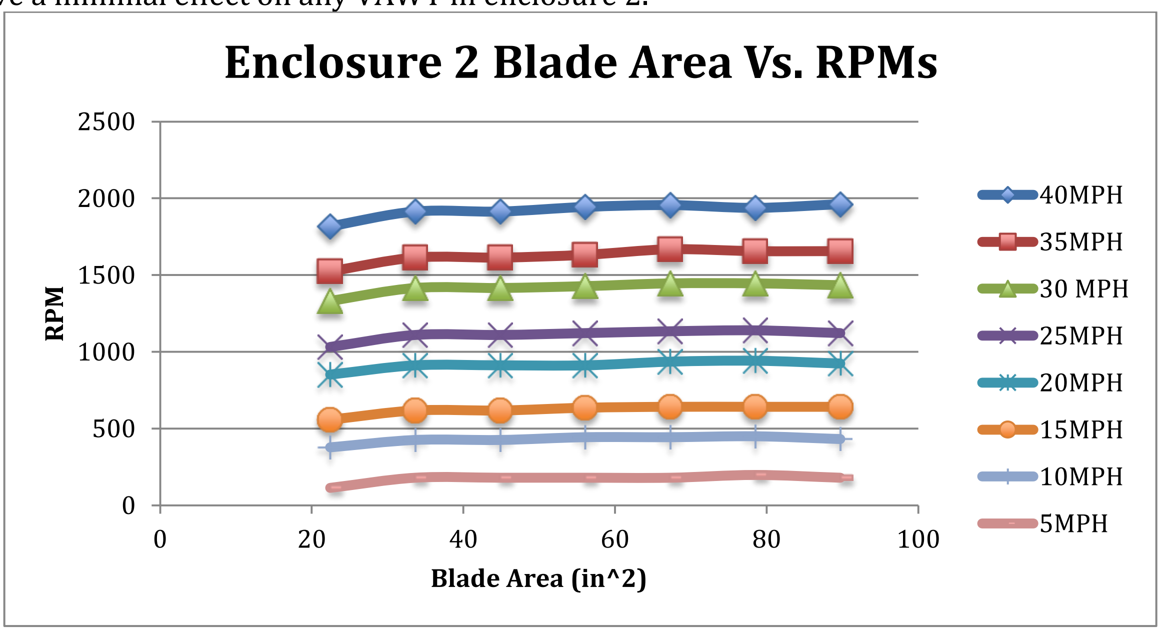

Figure 40: Enclosure 2 Blade Area vs. RPM Graph

Figure 41: Enclosure 3 Blade Area vs. RPM Graph shows that blade area appears to have little effect on a VAWT with an area between 30in^2 and 90in^2 at 45° to tangent and a wind speed below 40MPH in enclosure 3.

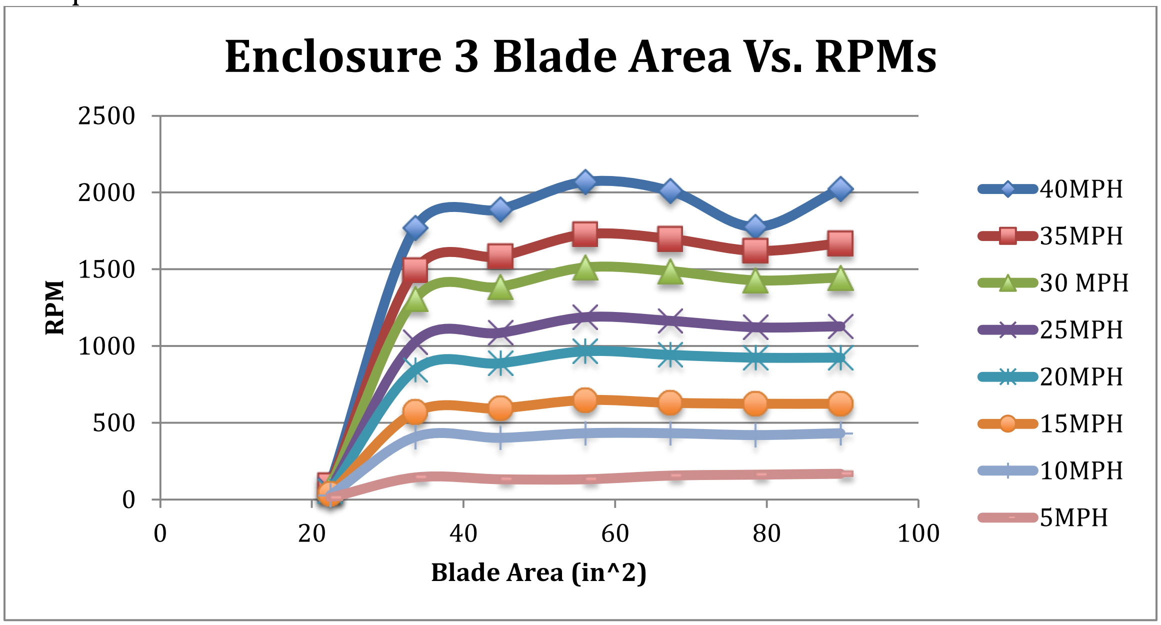

Figure 41: Enclosure 3 Blade Area vs. RPM Graph

Figure 42: Enclosure 4 Blade Area vs. RPM Graph shows that blade area appears to have variable effects on rpm with varying wind speeds.

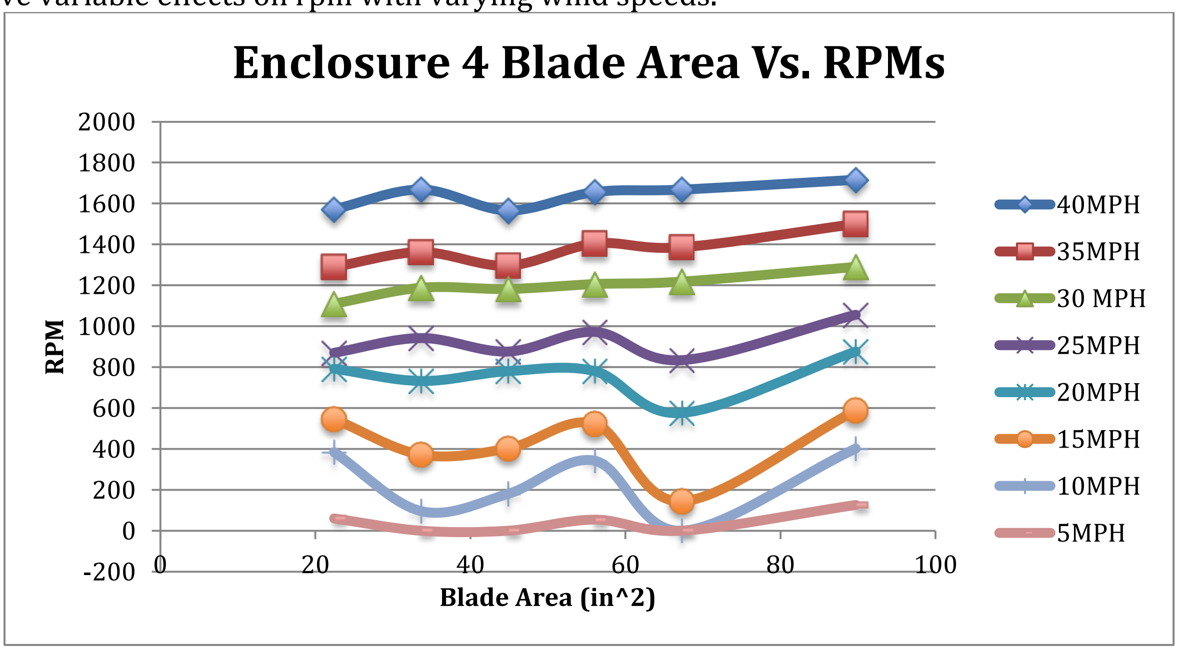

Figure 42: Enclosure 4 Blade Area vs. RPM Graph

The different blade areas associated with the turbines proved to have the biggest effect when they were not within an enclosure. When the turbines were placed within an enclosure the blade areas seemed to matter less when analyzing the number of rpms produced. Enclosure 2 provided the most promising results because very similar results were yielded at each wind speed regardless of blade area. This is promising for testing with the torque monitoring set up because it may be possible for the VAWTs with greater areas to produce more torque at the same rpms as the turbines with lower blade areas.

4.3. Torque-Monitoring Device

Figure 43: Torque-Monitoring Device Front and Back shows the torque-monitoring device fabricated to test the differences in torque produced between different blade areas.

Figure 43: Torque-Monitoring Device Front and Back

4.4. Wind Funneling Testing Device

Figure 44: 30 Degree Wind Funneling Device shows the completed designs for the wind funning device with a 30° opening.

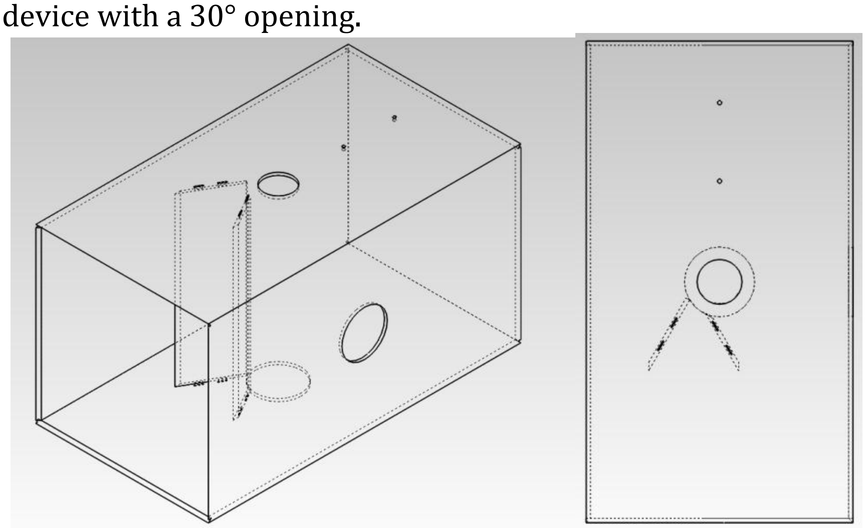

Figure 44: 30 Degree Wind Funneling Device

Figure 45: 45 Degree Wind Funneling Device shows the completed designs for the wind funning device with a 45° opening.

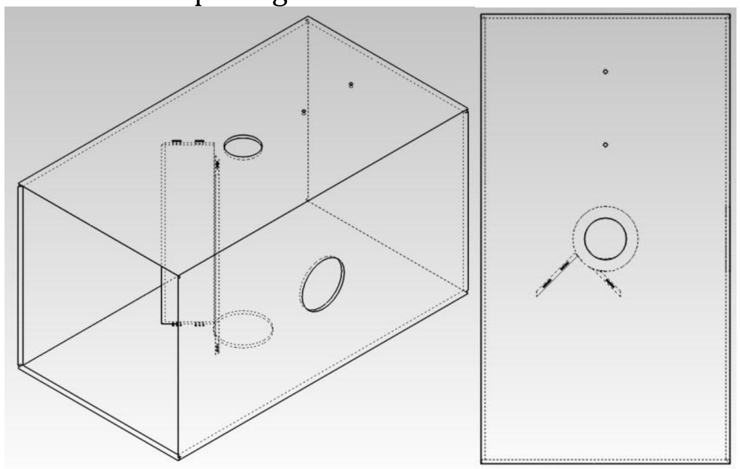

Figure 45: 45 Degree Wind Funneling Device

Figure 46: 60 Degree Wind Funneling Device shows the completed designs for the wind funning device with a 60° opening.

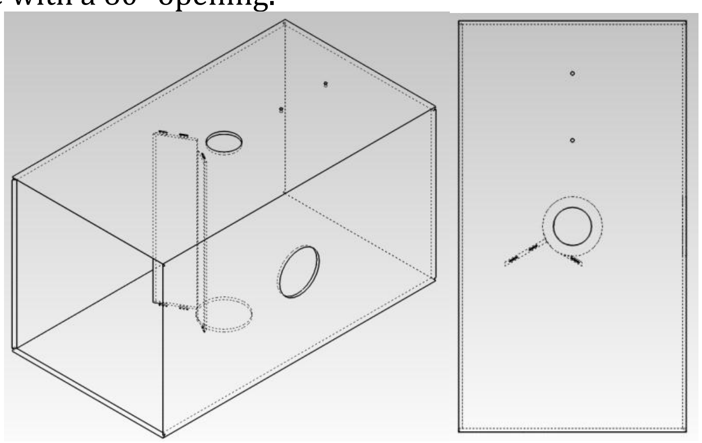

Figure 46: 60 Degree Wind Funneling Device

5. Summary

Enclosing vertical axis wind turbines shows the potential to increase their efficiency which would not only reduce the turbine's ROI to a homeowner, but also could decrees emission of eCO_2 into the atmosphere from non-sustainable energy sources.

Comparison of blade area may be the best way to continue with research because of the trends seen. It will be possible to test if a greater blade area will yield a greater torque with the relatively similar rpm's.

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Appendix A

This Appendix contains data collected during testing of the various turbines and shrouds. The following terminology was used.

Enclosures
E0 or bank name where the enclosure name would be: no enclosure
E2: 260 degrees “back” and 90 degree “front”
E3: 90 degrees “front”
E4: 90 degrees “front and 90 degrees “back”

Offsets
100 degrees for E2 is closest to wind tunnel controls
100 degrees for E3 is opposite wind tunnel controls
Note: A 100 degrees of set put the wind coming directly into the opening of each enclosure.

S1,S2: refers to which shaft was used. This report used only data gather while using S2 which was securely supported at both ends.

Note: View Electronically and use zoom function to view data

Table 1: No Enclosure Data

B2-45 Degrees S2			B3-45 Degrees S2			B4-30 Degrees S2			B4-37.5 Degrees S2			B4-45 Degrees S2			B4-52.5 Degrees S2			B4-60 Degrees S2			B5-45 Degrees S2			B6-45 Degrees S2			B7-45 Degrees S2			B8-45 Degrees S2		
2	11.2125	22.425	3	11.2125	33.6375	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	5	11.2125	56.0625	6	11.2125	67.275	7	11.2125	78.4875	8	11.2125	89.7
Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm
20.00	41.10	102	20.00	41.10	72	20.00	41.10	72	20.00	41.10	768	20.00	41.10	696	20.00	41.10	654	20.00	41.10	252	20.00	41.10	1092	20.00	41.10	1380	20.00	41.10	1458	20.00	41.10	1482
20.00	41.10	108	20.00	41.10	78	20.00	41.10	78	20.00	41.10	756	20.00	41.10	690	20.00	41.10	660	20.00	41.10	246	20.00	41.10	1086	20.00	41.10	1374	20.00	41.10	1464	20.00	41.10	1476
20.00	41.10	108	20.00	41.10	78	20.00	41.10	78	20.00	41.10	768	20.00	41.10	702	20.00	41.10	654	20.00	41.10	246	20.00	41.10	1092	20.00	41.10	1380	20.00	41.10	1452	20.00	41.10	1476
20.00	41.10	108	20.00	41.10	78	20.00	41.10	78	20.00	41.10	762	20.00	41.10	690	20.00	41.10	660	20.00	41.10	258	20.00	41.10	1086	20.00	41.10	1374	20.00	41.10	1458	20.00	41.10	1476
20.00	41.10	102	20.00	41.10	78	20.00	41.10	78	20.00	41.10	768	20.00	41.10	696	20.00	41.10	654	20.00	41.10	252	20.00	41.10	1092	20.00	41.10	1374	20.00	41.10	1458	20.00	41.10	1476
20.00	41.10	114	20.00	41.10	78	20.00	41.10	78	20.00	41.10	768	20.00	41.10	696	20.00	41.10	660	20.00	41.10	246	20.00	41.10	1086	20.00	41.10	1380	20.00	41.10	1458	20.00	41.10	1476
19.00	39.10	102	19.00	39.10	78	19.00	39.10	78	19.00	39.10	762	19.00	39.10	684	19.00	39.10	648	19.00	39.10	240	19.00	39.10	1068	19.00	39.10	1362	19.00	39.10	1446	19.00	39.10	1476
19.00	39.10	108	19.00	39.10	78	19.00	39.10	78	19.00	39.10	732	19.00	39.10	660	19.00	39.10	624	19.00	39.10	240	19.00	39.10	1038	19.00	39.10	1314	19.00	39.10	1386	19.00	39.10	1470
19.00	39.10	102	19.00	39.10	72	19.00	39.10	72	19.00	39.10	720	19.00	39.10	660	19.00	39.10	624	19.00	39.10	234	19.00	39.10	1032	19.00	39.10	1308	19.00	39.10	1386	19.00	39.10	1410
19.00	39.10	102	19.00	39.10	72	19.00	39.10	72	19.00	39.10	726	19.00	39.10	654	19.00	39.10	618	19.00	39.10	234	19.00	39.10	1026	19.00	39.10	1302	19.00	39.10	1380	19.00	39.10	1398
19.00	39.10	102	19.00	39.10	72	19.00	39.10	72	19.00	39.10	720	19.00	39.10	660	19.00	39.10	624	19.00	39.10	240	19.00	39.10	1032	19.00	39.10	1308	19.00	39.10	1386	19.00	39.10	1404
19.00	39.10	102	19.00	39.10	66	19.00	39.10	66	19.00	39.10	726	19.00	39.10	660	19.00	39.10	618	19.00	39.10	240	19.00	39.10	1026	19.00	39.10	1302	19.00	39.10	1380	19.00	39.10	1398
18.00	37.00	102	18.00	37.00	72	18.00	37.00	72	18.00	37.00	708	18.00	37.00	648	18.00	37.00	600	18.00	37.00	234	18.00	37.00	1032	18.00	37.00	1284	18.00	37.00	1356	18.00	37.00	1404
18.00	37.00	102	18.00	37.00	72	18.00	37.00	72	18.00	37.00	684	18.00	37.00	618	18.00	37.00	588	18.00	37.00	228	18.00	37.00	978	18.00	37.00	1236	18.00	37.00	1314	18.00	37.00	1386
18.00	37.00	96	18.00	37.00	66	18.00	37.00	66	18.00	37.00	684	18.00	37.00	624	18.00	37.00	582	18.00	37.00	228	18.00	37.00	972	18.00	37.00	1230	18.00	37.00	1302	18.00	37.00	1332
18.00	37.00	96	18.00	37.00	60	18.00	37.00	60	18.00	37.00	684	18.00	37.00	618	18.00	37.00	588	18.00	37.00	228	18.00	37.00	966	18.00	37.00	1230	18.00	37.00	1302	18.00	37.00	1320
18.00	37.00	96	18.00	37.00	66	18.00	37.00	66	18.00	37.00	672	18.00	37.00	618	18.00	37.00	582	18.00	37.00	228	18.00	37.00	972	18.00	37.00	1236	18.00	37.00	1308	18.00	37.00	1326
18.00	37.00	96	18.00	37.00	66	18.00	37.00	66	18.00	37.00	684	18.00	37.00	612	18.00	37.00	588	18.00	37.00	222	18.00	37.00	960	18.00	37.00	1230	18.00	37.00	1302	18.00	37.00	1320
17.00	34.90	96	17.00	34.90	60	17.00	34.90	60	17.00	34.90	678	17.00	34.90	606	17.00	34.90	570	17.00	34.90	222	17.00	34.90	918	17.00	34.90	1182	17.00	34.90	1302	17.00	34.90	1326
17.00	34.90	96	17.00	34.90	66	17.00	34.90	66	17.00	34.90	654	17.00	34.90	582	17.00	34.90	552	17.00	34.90	216	17.00	34.90	918	17.00	34.90	1158	17.00	34.90	1266	17.00	34.90	1290
17.00	34.90	96	17.00	34.90	60	17.00	34.90	60	17.00	34.90	642	17.00	34.90	582	17.00	34.90	552	17.00	34.90	210	17.00	34.90	912	17.00	34.90	1158	17.00	34.90	1230	17.00	34.90	1248
17.00	34.90	90	17.00	34.90	66	17.00	34.90	66	17.00	34.90	636	17.00	34.90	576	17.00	34.90	552	17.00	34.90	216	17.00	34.90	912	17.00	34.90	1158	17.00	34.90	1230	17.00	34.90	1242
17.00	34.90	96	17.00	34.90	60	17.00	34.90	60	17.00	34.90	636	17.00	34.90	582	17.00	34.90	552	17.00	34.90	216	17.00	34.90	918	17.00	34.90	1164	17.00	34.90	1230	17.00	34.90	1242
17.00	34.90	90	17.00	34.90	60	17.00	34.90	60	17.00	34.90	636	17.00	34.90	582	17.00	34.90	552	17.00	34.90	216	17.00	34.90	912	17.00	34.90	1158	17.00	34.90	1230	17.00	34.90	1248
16.00	32.80	96	16.00	32.80	60	16.00	32.80	60	16.00	32.80	612	16.00	32.80	570	16.00	32.80	546	16.00	32.80	210	16.00	32.80	894	16.00	32.80	1128	16.00	32.80	1230	16.00	32.80	1242
16.00	32.80	90	16.00	32.80	60	16.00	32.80	60	16.00	32.80	600	16.00	32.80	540	16.00	32.80	516	16.00	32.80	204	16.00	32.80	858	16.00	32.80	1086	16.00	32.80	1194	16.00	32.80	1218
16.00	32.80	90	16.00	32.80	54	16.00	32.80	54	16.00	32.80	594	16.00	32.80	546	16.00	32.80	516	16.00	32.80	204	16.00	32.80	852	16.00	32.80	1092	16.00	32.80	1152	16.00	32.80	1176
16.00	32.80	84	16.00	32.80	60	16.00	32.80	60	16.00	32.80	606	16.00	32.80	540	16.00	32.80	522	16.00	32.80	198	16.00	32.80	852	16.00	32.80	1086	16.00	32.80	1152	16.00	32.80	1164
16.00	32.80	90	16.00	32.80	54	16.00	32.80	54	16.00	32.80	594	16.00	32.80	546	16.00	32.80	516	16.00	32.80	204	16.00	32.80	852	16.00	32.80	1086	16.00	32.80	1158	16.00	32.80	1164
16.00	32.80	90	16.00	32.80	54	16.00	32.80	54	16.00	32.80	594	16.00	32.80	546	16.00	32.80	516	16.00	32.80	204	16.00	32.80	858	16.00	32.80	1092	16.00	32.80	1152	16.00	32.80	1164
15.00	30.80	84	15.00	30.80	54	15.00	30.80	54	15.00	30.80	576	15.00	30.80	528	15.00	30.80	510	15.00	30.80	198	15.00	30.80	852	15.00	30.80	1062	15.00	30.80	1140	15.00	30.80	1170
15.00	30.80	90	15.00	30.80	60	15.00	30.80	60	15.00	30.80	558	15.00	30.80	510	15.00	30.80	492	15.00	30.80	192	15.00	30.80	816	15.00	30.80	1020	15.00	30.80	1086	15.00	30.80	1164
15.00	30.80	84	15.00	30.80	48	15.00	30.80	48	15.00	30.80	552	15.00	30.80	504	15.00	30.80	480	15.00	30.80	192	15.00	30.80	798	15.00	30.80	1020	15.00	30.80	1086	15.00	30.80	1104
15.00	30.80	84	15.00	30.80	48	15.00	30.80	48	15.00	30.80	552	15.00	30.80	510	15.00	30.80	486	15.00	30.80	192	15.00	30.80	798	15.00	30.80	1014	15.00	30.80	1080	15.00	30.80	1092
15.00	30.80	84	15.00	30.80	54	15.00	30.80	54	15.00	30.80	558	15.00	30.80	504	15.00	30.80	480	15.00	30.80	186	15.00	30.80	792	15.00	30.80	1014	15.00	30.80	1074	15.00	30.80	1086
15.00	30.80	84	15.00	30.80	48	15.00	30.80	48	15.00	30.80	558	15.00	30.80	510	15.00	30.80	486	15.00	30.80	186	15.00	30.80	798	15.00	30.80	1020	15.00	30.80	1080	15.00	30.80	1092
14.00	28.70	84	14.00	28.70	48	14.00	28.70	48	14.00	28.70	540	14.00	28.70	498	14.00	28.70	456	14.00	28.70	192	14.00	28.70	786	14.00	28.70	966	14.00	28.70	1062	14.00	28.70	1086
14.00	28.70	84	14.00	28.70	54	14.00	28.70	54	14.00	28.70	522	14.00	28.70	474	14.00	28.70	450	14.00	28.70	174	14.00	28.70	750	14.00	28.70	948	14.00	28.70	1014	14.00	28.70	1092
14.00	28.70	78	14.00	28.70	48	14.00	28.70	48	14.00	28.70	510	14.00	28.70	468	14.00	28.70	450	14.00	28.70	174	14.00	28.70	738	14.00	28.70	942	14.00	28.70	1002	14.00	28.70	1074
14.00	28.70	78	14.00	28.70	42	14.00	28.70	42	14.00	28.70	510	14.00	28.70	474	14.00	28.70	444	14.00	28.70	174	14.00	28.70	738	14.00	28.70	942	14.00	28.70	1002	14.00	28.70	1020
14.00	28.70	72	14.00	28.70	48	14.00	28.70	48	14.00	28.70	516	14.00	28.70	468	14.00	28.70	450	14.00	28.70	180	14.00	28.70	738	14.00	28.70	948	14.00	28.70	1002	14.00	28.70	1014
14.00	28.70	84	14.00	28.70	48	14.00	28.70	48	14.00	28.70	510	14.00	28.70	468	14.00	28.70	450	14.00	28.70	174	14.00	28.70	738	14.00	28.70	942	14.00	28.70	1002	14.00	28.70	1008
13.00	26.70	72	13.00	26.70	42	13.00	26.70	42	13.00	26.70	498	13.00	26.70	462	13.00	26.70	438	13.00	26.70	174	13.00	26.70	732	13.00	26.70	918	13.00	26.70	984	13.00	26.70	1014
13.00	26.70	78	13.00	26.70	48	13.00	26.70	48	13.00	26.70	474	13.00	26.70	432	13.00	26.70	408	13.00	26.70	162	13.00	26.70	696	13.00	26.70	876	13.00	26.70	936	13.00	26.70	1014
13.00	26.70	78	13.00	26.70	42	13.00	26.70	42	13.00	26.70	474	13.00	26.70	432	13.00	26.70	414	13.00	26.70	156	13.00	26.70	678	13.00	26.70	876	13.00	26.70	930	13.00	26.70	1008
13.00	26.70	72	13.00	26.70	42	13.00	26.70	42	13.00	26.70	474	13.00	26.70	432	13.00	26.70	414	13.00	26.70	162	13.00	26.70	684	13.00	26.70	870	13.00	26.70	924	13.00	26.70	990
13.00	26.70	72	13.00	26.70	48	13.00	26.70	48	13.00	26.70	474	13.00	26.70	432	13.00	26.70	414	13.00	26.70	162	13.00	26.70	678	13.00	26.70	876	13.00	26.70	930	13.00	26.70	942
13.00	26.70	72	13.00	26.70	36	13.00	26.70	36	13.00	26.70	468	13.00	26.70	432	13.00	26.70	414	13.00	26.70	156	13.00	26.70	678	13.00	26.70	870	13.00	26.70	930	13.00	26.70	936
12.00	24.60	72	12.00	24.60	42	12.00	24.60	42	12.00	24.60	456	12.00	24.60	420	12.00	24.60	402	12.00	24.60	150	12.00	24.60	672	12.00	24.60	852	12.00	24.60	918	12.00	24.60	936
12.00	24.60	72	12.00	24.60	42	12.00	24.60	42	12.00	24.60	432	12.00	24.60	402	12.00	24.60	378	12.00	24.60	144	12.00	24.60	642	12.00	24.60	804	12.00	24.60	864	12.00	24.60	912
12.00	24.60	66	12.00	24.60	42	12.00	24.60	42	12.00	24.60	432	12.00	24.60	396	12.00	24.60	378	12.00	24.60	150	12.00	24.60	618	12.00	24.60	804	12.00	24.60	852	12.00	24.60	870
12.00	24.60	66	12.00	24.60	36	12.00	24.60	36	12.00	24.60	432	12.00	24.60	396	12.00	24.60	378	12.00	24.60	150	12.00	24.60	624	12.00	24.60	804	12.00	24.60	846	12.00	24.60	858
12.00	24.60	66	12.00	24.60	36	12.00	24.60	36	12.00	24.60	432	12.00	24.60	396	12.00	24.60	378	12.00	24.60	144	12.00	24.60	618	12.00	24.60	798	12.00	24.60	852	12.00	24.60	852
12.00	24.60	66	12.00	24.60	42	12.00	24.60	42	12.00	24.60	432	12.00	24.60	396	12.00	24.60	378	12.00	24.60	144	12.00	24.60	612	12.00	24.60	798	12.00	24.60	852	12.00	24.60	858
11.00	22.60	72	11.00	22.60	30	11.00	22.60	30	11.00	22.60	420	11.00	22.60	384	11.00	22.60	360	11.00	22.60	150	11.00	22.60	618	11.00	22.60	756	11.00	22.60	840	11.00	22.60	858
11.00	22.60	60	11.00	22.60	36	11.00	22.60	36	11.00	22.60	396	11.00	22.60	360	11.00	22.60	342	11.00	22.60	132	11.00	22.60	618	11.00	22.60	738	11.00	22.60	798	11.00	22.60	840
11.00	22.60	60	11.00	22.60	36	11.00	22.60	36	11.00	22.60	390	11.00	22.60	354	11.00	22.60	342	11.00	22.60	132	11.00	22.60	582	11.00	22.60	726	11.00	22.60	774	11.00	22.60	792
11.00	22.60	66	11.00	22.60	30	11.00	22.60	30	11.00	22.60	390	11.00	22.60	360	11.00	22.60	342	11.00	22.60	132	11.00	22.60	564	11.00	22.60	726	11.00	22.60	774	11.00	22.60	780
11.00	22.60	60	11.00	22.60	30	11.00	22.60	30	11.00	22.60	390	11.00	22.60	366	11.00	22.60	348	11.00	22.60	132	11.00	22.60	564	11.00	22.60	732	11.00	22.60	774	11.00	22.60	780
11.00	22.60	60	11.00	22.60	36	11.00	22.60	36	11.00	22.60	396	11.00	22.60	360	11.00	22.60	336	11.00	22.60	132	11.00	22.60	552	11.00	22.60	726	11.00	22.60	774	11.00	22.60	774
10.00	20.50	60	10.00	20.50	30	10.00	20.50	30	10.00	20.50	372	10.00	20.50	348	10.00	20.50	318	10.00	20.50	132	10.00	20.50	558	10.00	20.50	720	10.00	20.50	774	10.00	20.50	780
10.00	20.50	60	10.00	20.50	36	10.00	20.50	36	10.00	20.50	354	10.00	20.50	324	10.00	20.50	306	10.00	20.50	120	10.00	20.50	522	10.00	20.50	672	10.00	20.50	732	10.00	20.50	756
10.00	20.50	54	10.00	20.50	24	10.00	20.50	24	10.00	20.50	348	10.00	20.50	324	10.00	20.50	312	10.00	20.50	120	10.00	20.50	504	10.00	20.50	654	10.00	20.50	708	10.00	20.50	714
10.00	20.50	54	10.00	20.50	30	10.00	20.50	30	10.00	20.50	348	10.00	20.50	324	10.00	20.50	306	10.00	20.50	114	10.00	20.50	498	10.00	20.50	660	10.00	20.50	702	10.00	20.50	708
10.00	20.50	54	10.00	20.50	24	10.00	20.50	24	10.00	20.50	342	10.00	20.50	324	10.00	20.50	312	10.00	20.50	120	10.00	20.50	492	10.00	20.50	654	10.00	20.50	696	10.00	20.50	696
10.00	20.50	54	10.00	20.50	24	10.00	20.50	24	10.00	20.50	348	10.00	20.50	318	10.00	20.50	306	10.00	20.50	120	10.00	20.50	492	10.00	20.50	660	10.00	20.50	696	10.00	20.50	702
9.00	18.50	54	9.00	18.50	30	9.00	18.50	30	9.00	18.50	336	9.00	18.50	312	9.00	18.50	300	9.00	18.50	114	9.00	18.50	480	9.00	18.50	624	9.00	18.50	690	9.00	18.50	702
9.00	18.50	54	9.00	18.50	24	9.00	18.50	24	9.00	18.50	318	9.00	18.50	288	9.00	18.50	276	9.00	18.50	108	9.00	18.50	450	9.00	18.50	594	9.00	18.50	642	9.00	18.50	696
9.00	18.50	48	9.00	18.50	18	9.00	18.50	18	9.00	18.50	312	9.00	18.50	288	9.00	18.50	276	9.00	18.50	102	9.00	18.50	438	9.00	18.50	582	9.00	18.50	630	9.00	18.50	660
9.00	18.50	48	9.00	18.50	18	9.00	18.50	18	9.00	18.50	306	9.00	18.50	282	9.00	18.50	276	9.00	18.50	108	9.00	18.50	432	9.00	18.50	588	9.00	18.50	618	9.00	18.50	630
9.00	18.50	48	9.00	18.50	6	9.00	18.50	6	9.00	18.50	306	9.00	18.50	288	9.00	18.50	270	9.00	18.50	108	9.00	18.50	426	9.00	18.50	582	9.00	18.50	624	9.00	18.50	624
9.00	18.50	48	9.00	18.50	0	9.00	18.50	0	9.00	18.50	306	9.00	18.50	288	9.00	18.50	282	9.00	18.50	102	9.00	18.50	420	9.00	18.50	582	9.00	18.50	624	9.00	18.50	624
8.00	16.40	48	8.00	16.40	0	8.00	16.40	0	8.00	16.40	288	8.00	16.40	276	8.00	16.40	270	8.00	16.40	102	8.00	16.40	402	8.00	16.40	558	8.00	16.40	612	8.00	16.40	624
8.00	16.40	48	8.00	16.40	0	8.00	16.40	0	8.00	16.40	270	8.00	16.40	258	8.00	16.40	246	8.00	16.40	96	8.00	16.40	384	8.00	16.40	528	8.00	16.40	576	8.00	16.40	606
8.00	16.40	42	8.00	16.40	0	8.00	16.40	0	8.00	16.40	270	8.00	16.40	246	8.00	16.40	240	8.00	16.40	90	8.00	16.40	372	8.00	16.40	510	8.00	16.40	552	8.00	16.40	564
8.00	16.40	42	8.00	16.40	0	8.00	16.40	0	8.00	16.40	264	8.00	16.40	252	8.00	16.40	240	8.00	16.40	90	8.00	16.40	360	8.00	16.40	510	8.00	16.40	552	8.00	16.40	552
8.00	16.40	42	8.00	16.40	0	8.00	16.40	0	8.00	16.40	264	8.00	16.40	246	8.00	16.40	240	8.00	16.40	78	8.00	16.40	354	8.00	16.40	510	8.00	16.40	546	8.00	16.40	546
8.00	16.40	42	8.00	16.40	0	8.00	16.40	0	8.00	16.40	264	8.00	16.40	252	8.00	16.40	240	8.00	16.40	72	8.00	16.40	348	8.00	16.40	510	8.00	16.40	546	8.00	16.40	546
7.00	14.40	36	7.00	14.40	0	7.00	14.40	0	7.00	14.40	252	7.00	14.40	240	7.00	14.40	234	7.00	14.40	72	7.00	14.40	330	7.00	14.40	510	7.00	14.40	540	7.00	14.40	540
7.00	14.40	42	7.00	14.40	0	7.00	14.40	0	7.00	14.40	234	7.00	14.40	222	7.00	14.40	210	7.00	14.40	60	7.00	14.40	312	7.00	14.40	468	7.00	14.40	498	7.00	14.40	540
7.00	14.40	36	7.00	14.40	0	7.00	14.40	0	7.00	14.40	222	7.00	14.40	216	7.00	14.40	204	7.00	14.40	54	7.00	14.40	300	7.00	14.40	444	7.00	14.40	480	7.00	14.40	492
7.00	14.40	36	7.00	14.40	0	7.00	14.40	0	7.00	14.40	228	7.00	14.40	210	7.00	14.40	204	7.00	14.40	60	7.00	14.40	288	7.00	14.40	438	7.00	14.40	468	7.00	14.40	480
7.00	14.40	30	7.00	14.40	0	7.00	14.40	0	7.00	14.40	222	7.00	14.40	210	7.00	14.40	210	7.00	14.40	60	7.00	14.40	276	7.00	14.40	438	7.00	14.40	474	7.00	14.40	468
7.00	14.40	36	7.00	14.40	0	7.00	14.40	0	7.00	14.40	222	7.00	14.40	210	7.00	14.40	204	7.00	14.40	60	7.00	14.40	270	7.00	14.40	438	7.00	14.40	468	7.00	14.40	468
6.00	12.30	36	6.00	12.30	0	6.00	12.30	0	6.00	12.30	216	6.00	12.30	210	6.00	12.30	204	6.00	12.30	54	6.00	12.30	252	6.00	12.30	438	6.00	12.30	462	6.00	12.30	468
6.00	12.30	36	6.00	12.30	0	6.00	12.30	0	6.00	12.30	198	6.00	12.30	186	6.00	12.30	180	6.00	12.30	54	6.00	12.30	234	6.00	12.30	426	6.00	12.30	426	6.00	12.30	456
6.00	12.30	30	6.00	12.30	0	6.00	12.30	0	6.00	12.30	186	6.00	12.30	180	6.00	12.30	174	6.00	12.30	42	6.00	12.30	222	6.00	12.30	384	6.00	12.30	408	6.00	12.30	420
6.00	12.30	24	6.00	12.30	0	6.00	12.30	0	6.00	12.30	186	6.00	12.30	174	6.00	12.30	168	6.00	12.30	42	6.00	12.30	222	6.00	12.30	372	6.00	12.30	402	6.00	12.30	396
6.00	12.30	30	6.00	12.30	0	6.00	12.30	0	6.00	12.30	180	6.00	12.30	174	6.00	12.30	168	6.00	12.30	42	6.00	12.30	216	6.00	12.30	366	6.00	12.30	396	6.00	12.30	396
6.00	12.30	24	6.00	12.30	0	6.00	12.30	0	6.00	12.30	180	6.00	12.30	174	6.00	12.30	168	6.00	12.30	42	6.00	12.30	222	6.00	12.30	360	6.00	12.30	396	6.00	12.30	390
5.00	10.30	30	5.00	10.30	0	5.00	10.30	0	5.00	10.30	174	5.00	10.30	174	5.00	10.30	168	5.00	10.30	48	5.00	10.30	198	5.00	10.30	360	5.00	10.30	396	5.00	10.30	390
5.00	10.30	24	5.00	10.30	0	5.00	10.30	0	5.00	10.30	156	5.00	10.30	174	5.00	10.30	138	5.00	10.30	36	5.00	10.30	186	5.00	10.30	324	5.00	10.30	390	5.00	10.30	378
5.00	10.30	24	5.00	10.30	0	5.00	10.30	0	5.00	10.30	144	5.00	10.30	156	5.00	10.30	138	5.00	10.30	36	5.00	10.30	174	5.00	10.30	306	5.00	10.30	366	5.00	10.30	348
5.00	10.30	24	5.00	10.30	0	5.00	10.30	0	5.00	10.30	138	5.00	10.30	144	5.00	10.30	132	5.00	10.30	30	5.00	10.30	168	5.00	10.30	294	5.00	10.30	342	5.00	10.30	324
5.00	10.30	18	5.00	10.30	0	5.00	10.30	0	5.00	10.30	138	5.00	10.30	138	5.00	10.30	126	5.00	10.30	24	5.00	10.30	168	5.00	10.30	294	5.00	10.30	324	5.00	10.30	318
5.00	10.30	18	5.00	10.30	0	5.00	10.30	0	5.00	10.30	138	5.00	10.30	138	5.00	10.30	132	5.00	10.30	24	5.00	10.30	168	5.00	10.30	288	5.00	10.30	324	5.00	10.30	312
4.00	8.20	18	4.00	8.20	0	4.00	8.20	0	4.00	8.20	126	4.00	8.20	132	4.00	8.20	126	4.00	8.20	18	4.00	8.20	156	4.00	8.20	294	4.00	8.20	318	4.00	8.20	312
4.00	8.20	18	4.00	8.20	0	4.00	8.20	0	4.00	8.20	108	4.00	8.20	114	4.00	8.20	120	4.00	8.20	0	4.00	8.20	138	4.00	8.20	288	4.00	8.20	282	4.00	8.20	312
4.00	8.20	12	4.00	8.20	0	4.00	8.20	0	4.00	8.20	102	4.00	8.20	102	4.00	8.20	102	4.00	8.20	0	4.00	8.20	126	4.00	8.20	270	4.00	8.20	270	4.00	8.20	306
4.00	8.20	12	4.00	8.20	0	4.00	8.20	0	4.00	8.20	96	4.00	8.20	96	4.00	8.20	90	4.00	8.20	0	4.00	8.20	120	4.00	8.20	240	4.00	8.20	252	4.00	8.20	288
4.00	8.20	12	4.00	8.20	0	4.00	8.20	0	4.00	8.20	96	4.00	8.20	90	4.00	8.20	84	4.00	8.20	0	4.00	8.20	120	4.00	8.20	228	4.00	8.20	246	4.00	8.20	264
4.00	8.20	6	4.00	8.20	0	4.00	8.20	0	4.00	8.20	90	4.00	8.20	90	4.00	8.20	78	4.00	8.20	0	4.00	8.20	114	4.00	8.20	216	4.00	8.20	246	4.00	8.20	246
3.00	6.20	12	3.00	6.20	0	3.00	6.20	0	3.00	6.20	84	3.00	6.20	84	3.00	6.20	66	3.00	6.20	0	3.00	6.20	114	3.00	6.20	216	3.00	6.20	246	3.00	6.20	234
3.00	6.20	6	3.00	6.20	0	3.00	6.20	0	3.00	6.20	72	3.00	6.20	66	3.00	6.20	60	3.00	6.20	0	3.00	6.20	96	3.00	6.20	210	3.00	6.20	228	3.00	6.20	234
3.00	6.20	12	3.00	6.20	0	3.00	6.20	0	3.00	6.20	60	3.00	6.20	54	3.00	6.20	42	3.00	6.20	0	3.00	6.20	84	3.00	6.20	210	3.00	6.20	210	3.00	6.20	210
3.00	6.20	6	3.00	6.20	0	3.00	6.20	0	3.00	6.20	54	3.00	6.20	48	3.00	6.20	42	3.00	6.20	0	3.00	6.20	72	3.00	6.20	192	3.00	6.20	192	3.00	6.20	186
3.00	6.20	0	3.00	6.20	0	3.00	6.20	0	3.00	6.20	42	3.00	6.20	42	3.00	6.20	36	3.00	6.20	0	3.00	6.20	60	3.00	6.20	174	3.00	6.20	180	3.00	6.20	168
3.00	6.20	0	3.00	6.20	0	3.00	6.20	0	3.00	6.20	36	3.00	6.20	36	3.00	6.20	30	3.00	6.20	0	3.00	6.20	54	3.00	6.20	156	3.00	6.20	174	3.00	6.20	162
2.00	4.10	0	2.00	4.10	0	2.00	4.10	0	2.00	4.10	36	2.00	4.10	36	2.00	4.10	30	2.00	4.10	0	2.00	4.10	54	2.00	4.10	144	2.00	4.10	168	2.00	4.10	150
2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	24	2.00	5.20	18	2.00	5.20	18	2.00	5.20	0	2.00	5.20	42	2.00	5.20	126	2.00	5.20	150	2.00	5.20	144
2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	6	2.00	5.20	6	2.00	5.20	6	2.00	5.20	0	2.00	5.20	30	2.00	5.20	102	2.00	5.20	138	2.00	5.20	120
2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	6	2.00	5.20	6	2.00	5.20	0	2.00	5.20	12	2.00	5.20	84	2.00	5.20	126	2.00	5.20	108
2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	12	2.00	5.20	78	2.00	5.20	120	2.00	5.20	96
2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	0	2.00	5.20	6	2.00	5.20	66	2.00	5.20	108	2.00	5.20	78
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	48	1.00	3.30	108	1.00	3.30	72
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	42	1.00	3.30	96	1.00	3.30	66
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	24	1.00	3.30	90	1.00	3.30	48
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	6	1.00	3.30	78	1.00	3.30	42
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	12	1.00	3.30	72	1.00	3.30	24
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	66	1.00	3.30	12
0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00		0.00	0.00	0	0.00	0.00	0	0.00	0.00	60	0.00	0.00	6

Table 2: Enclosure 2 Data

B2-45 Degrees S2 E2 OS100			B3-45 Degrees S2 E2 OS 100			B4-30 Degrees S2 E2 OS100			B4-37.5 Degrees S2 E2 OS100			B4-45 Degrees S2 E2 OS 100		
2	11.2125	22.425	3	11.2125	33.6375	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85
Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm
20.00	41.10	1818	20.00	41.10	1914	20.00	41.10	2010	20.00	41.10	1974	20.00	41.10	1914
20.00	41.10	1824	20.00	41.10	1920	20.00	41.10	2010	20.00	41.10	1968	20.00	41.10	1920
20.00	41.10	1824	20.00	41.10	1914	20.00	41.10	2010	20.00	41.10	1974	20.00	41.10	1914
20.00	41.10	1818	20.00	41.10	1914	20.00	41.10	2010	20.00	41.10	1974	20.00	41.10	1914
20.00	41.10	1818	20.00	41.10	1914	20.00	41.10	2010	20.00	41.10	1974	20.00	41.10	1914
20.00	41.10	1818	20.00	41.10	1914	20.00	41.10	2010	20.00	41.10	1968	20.00	41.10	1914
19.00	39.10	1794	19.00	39.10	1914	19.00	39.10	1980	19.00	39.10	1974	19.00	39.10	1914
19.00	39.10	1752	19.00	39.10	1908	19.00	39.10	1926	19.00	39.10	1962	19.00	39.10	1908
19.00	39.10	1728	19.00	39.10	1842	19.00	39.10	1902	19.00	39.10	1902	19.00	39.10	1842
19.00	39.10	1722	19.00	39.10	1824	19.00	39.10	1890	19.00	39.10	1878	19.00	39.10	1824
19.00	39.10	1716	19.00	39.10	1812	19.00	39.10	1890	19.00	39.10	1872	19.00	39.10	1812
19.00	39.10	1710	19.00	39.10	1812	19.00	39.10	1890	19.00	39.10	1866	19.00	39.10	1812
18.00	37.00	1704	18.00	37.00	1818	18.00	37.00	1860	18.00	37.00	1866	18.00	37.00	1818
18.00	37.00	1662	18.00	37.00	1806	18.00	37.00	1812	18.00	37.00	1824	18.00	37.00	1806
18.00	37.00	1638	18.00	37.00	1812	18.00	37.00	1794	18.00	37.00	1782	18.00	37.00	1812
18.00	37.00	1626	18.00	37.00	1776	18.00	37.00	1776	18.00	37.00	1764	18.00	37.00	1776
18.00	37.00	1620	18.00	37.00	1728	18.00	37.00	1782	18.00	37.00	1758	18.00	37.00	1728
18.00	37.00	1620	18.00	37.00	1716	18.00	37.00	1776	18.00	37.00	1758	18.00	37.00	1716
17.00	34.90	1614	17.00	34.90	1710	17.00	34.90	1746	17.00	34.90	1740	17.00	34.90	1710
17.00	34.90	1566	17.00	34.90	1698	17.00	34.90	1704	17.00	34.90	1692	17.00	34.90	1698
17.00	34.90	1542	17.00	34.90	1638	17.00	34.90	1674	17.00	34.90	1662	17.00	34.90	1638
17.00	34.90	1524	17.00	34.90	1614	17.00	34.90	1674	17.00	34.90	1650	17.00	34.90	1614
17.00	34.90	1524	17.00	34.90	1602	17.00	34.90	1668	17.00	34.90	1644	17.00	34.90	1602
17.00	34.90	1524	17.00	34.90	1608	17.00	34.90	1662	17.00	34.90	1644	17.00	34.90	1608
16.00	32.80	1506	16.00	32.80	1602	16.00	32.80	1608	16.00	32.80	1638	16.00	32.80	1602
16.00	32.80	1464	16.00	32.80	1596	16.00	32.80	1578	16.00	32.80	1584	16.00	32.80	1596
16.00	32.80	1434	16.00	32.80	1542	16.00	32.80	1566	16.00	32.80	1554	16.00	32.80	1542
16.00	32.80	1428	16.00	32.80	1518	16.00	32.80	1560	16.00	32.80	1542	16.00	32.80	1518
16.00	32.80	1422	16.00	32.80	1506	16.00	32.80	1554	16.00	32.80	1536	16.00	32.80	1506
16.00	32.80	1422	16.00	32.80	1506	16.00	32.80	1560	16.00	32.80	1536	16.00	32.80	1506
15.00	30.80	1392	15.00	30.80	1500	15.00	30.80	1524	15.00	30.80	1500	15.00	30.80	1500
15.00	30.80	1356	15.00	30.80	1494	15.00	30.80	1482	15.00	30.80	1458	15.00	30.80	1494
15.00	30.80	1338	15.00	30.80	1440	15.00	30.80	1464	15.00	30.80	1440	15.00	30.80	1440
15.00	30.80	1332	15.00	30.80	1416	15.00	30.80	1458	15.00	30.80	1434	15.00	30.80	1416
15.00	30.80	1326	15.00	30.80	1404	15.00	30.80	1452	15.00	30.80	1434	15.00	30.80	1404
15.00	30.80	1320	15.00	30.80	1398	15.00	30.80	1446	15.00	30.80	1428	15.00	30.80	1398
14.00	28.70	1314	14.00	28.70	1404	14.00	28.70	1410	14.00	28.70	1422	14.00	28.70	1404
14.00	28.70	1272	14.00	28.70	1386	14.00	28.70	1374	14.00	28.70	1368	14.00	28.70	1386
14.00	28.70	1248	14.00	28.70	1338	14.00	28.70	1356	14.00	28.70	1344	14.00	28.70	1338
14.00	28.70	1230	14.00	28.70	1314	14.00	28.70	1344	14.00	28.70	1332	14.00	28.70	1314
14.00	28.70	1230	14.00	28.70	1302	14.00	28.70	1344	14.00	28.70	1326	14.00	28.70	1302
14.00	28.70	1212	14.00	28.70	1302	14.00	28.70	1338	14.00	28.70	1320	14.00	28.70	1302
13.00	26.70	1176	13.00	26.70	1296	13.00	26.70	1338	13.00	26.70	1314	13.00	26.70	1296
13.00	26.70	1152	13.00	26.70	1278	13.00	26.70	1290	13.00	26.70	1272	13.00	26.70	1278
13.00	26.70	1140	13.00	26.70	1236	13.00	26.70	1260	13.00	26.70	1242	13.00	26.70	1236
13.00	26.70	1128	13.00	26.70	1206	13.00	26.70	1242	13.00	26.70	1230	13.00	26.70	1206
13.00	26.70	1128	13.00	26.70	1200	13.00	26.70	1236	13.00	26.70	1224	13.00	26.70	1200
13.00	26.70	1110	13.00	26.70	1194	13.00	26.70	1230	13.00	26.70	1218	13.00	26.70	1194
12.00	24.60	1074	12.00	24.60	1194	12.00	24.60	1212	12.00	24.60	1206	12.00	24.60	1194
12.00	24.60	1050	12.00	24.60	1170	12.00	24.60	1170	12.00	24.60	1164	12.00	24.60	1170
12.00	24.60	1044	12.00	24.60	1128	12.00	24.60	1146	12.00	24.60	1140	12.00	24.60	1128
12.00	24.60	1032	12.00	24.60	1110	12.00	24.60	1134	12.00	24.60	1122	12.00	24.60	1110
12.00	24.60	1032	12.00	24.60	1092	12.00	24.60	1128	12.00	24.60	1110	12.00	24.60	1092
12.00	24.60	1002	12.00	24.60	1092	12.00	24.60	1128	12.00	24.60	1116	12.00	24.60	1092
11.00	22.60	972	11.00	22.60	1092	11.00	22.60	1110	11.00	22.60	1080	11.00	22.60	1092
11.00	22.60	954	11.00	22.60	1074	11.00	22.60	1062	11.00	22.60	1044	11.00	22.60	1074
11.00	22.60	942	11.00	22.60	1032	11.00	22.60	1044	11.00	22.60	1026	11.00	22.60	1032
11.00	22.60	936	11.00	22.60	1008	11.00	22.60	1032	11.00	22.60	1014	11.00	22.60	1008
11.00	22.60	936	11.00	22.60	996	11.00	22.60	1020	11.00	22.60	1008	11.00	22.60	996
11.00	22.60	936	11.00	22.60	990	11.00	22.60	1020	11.00	22.60	1008	11.00	22.60	990
10.00	20.50	912	10.00	20.50	990	10.00	20.50	1014	10.00	20.50	1002	10.00	20.50	990
10.00	20.50	876	10.00	20.50	978	10.00	20.50	972	10.00	20.50	960	10.00	20.50	978
10.00	20.50	864	10.00	20.50	936	10.00	20.50	942	10.00	20.50	930	10.00	20.50	936
10.00	20.50	852	10.00	20.50	912	10.00	20.50	930	10.00	20.50	918	10.00	20.50	912
10.00	20.50	840	10.00	20.50	900	10.00	20.50	924	10.00	20.50	906	10.00	20.50	900
10.00	20.50	840	10.00	20.50	894	10.00	20.50	912	10.00	20.50	900	10.00	20.50	894
9.00	18.50	828	9.00	18.50	888	9.00	18.50	894	9.00	18.50	888	9.00	18.50	888
9.00	18.50	792	9.00	18.50	882	9.00	18.50	858	9.00	18.50	858	9.00	18.50	882
9.00	18.50	774	9.00	18.50	846	9.00	18.50	834	9.00	18.50	822	9.00	18.50	846
9.00	18.50	762	9.00	18.50	816	9.00	18.50	822	9.00	18.50	816	9.00	18.50	816
9.00	18.50	750	9.00	18.50	798	9.00	18.50	816	9.00	18.50	804	9.00	18.50	798
9.00	18.50	720	9.00	18.50	792	9.00	18.50	810	9.00	18.50	804	9.00	18.50	792
8.00	16.40	690	8.00	16.40	786	8.00	16.40	792	8.00	16.40	798	8.00	16.40	786
8.00	16.40	678	8.00	16.40	774	8.00	16.40	762	8.00	16.40	774	8.00	16.40	774
8.00	16.40	660	8.00	16.40	738	8.00	16.40	738	8.00	16.40	744	8.00	16.40	738
8.00	16.40	654	8.00	16.40	714	8.00	16.40	720	8.00	16.40	720	8.00	16.40	714
8.00	16.40	648	8.00	16.40	702	8.00	16.40	714	8.00	16.40	714	8.00	16.40	702
8.00	16.40	630	8.00	16.40	690	8.00	16.40	708	8.00	16.40	702	8.00	16.40	690
7.00	14.40	606	7.00	14.40	684	7.00	14.40	690	7.00	14.40	696	7.00	14.40	684
7.00	14.40	582	7.00	14.40	678	7.00	14.40	660	7.00	14.40	672	7.00	14.40	678
7.00	14.40	576	7.00	14.40	648	7.00	14.40	636	7.00	14.40	642	7.00	14.40	648
7.00	14.40	558	7.00	14.40	618	7.00	14.40	624	7.00	14.40	624	7.00	14.40	618
7.00	14.40	552	7.00	14.40	606	7.00	14.40	612	7.00	14.40	606	7.00	14.40	606
7.00	14.40	540	7.00	14.40	594	7.00	14.40	606	7.00	14.40	600	7.00	14.40	594
6.00	12.30	516	6.00	12.30	582	6.00	12.30	600	6.00	12.30	600	6.00	12.30	582
6.00	12.30	492	6.00	12.30	582	6.00	12.30	582	6.00	12.30	570	6.00	12.30	582
6.00	12.30	480	6.00	12.30	546	6.00	12.30	546	6.00	12.30	552	6.00	12.30	546
6.00	12.30	468	6.00	12.30	516	6.00	12.30	534	6.00	12.30	522	6.00	12.30	516
6.00	12.30	468	6.00	12.30	504	6.00	12.30	522	6.00	12.30	516	6.00	12.30	504
6.00	12.30	450	6.00	12.30	492	6.00	12.30	510	6.00	12.30	504	6.00	12.30	492
5.00	10.30	426	5.00	10.30	492	5.00	10.30	504	5.00	10.30	498	5.00	10.30	492
5.00	10.30	408	5.00	10.30	474	5.00	10.30	486	5.00	10.30	492	5.00	10.30	474
5.00	10.30	390	5.00	10.30	444	5.00	10.30	462	5.00	10.30	456	5.00	10.30	444
5.00	10.30	378	5.00	10.30	426	5.00	10.30	438	5.00	10.30	438	5.00	10.30	426
5.00	10.30	372	5.00	10.30	408	5.00	10.30	426	5.00	10.30	420	5.00	10.30	408
5.00	10.30	360	5.00	10.30	396	5.00	10.30	420	5.00	10.30	408	5.00	10.30	396
4.00	8.20	336	4.00	8.20	396	4.00	8.20	402	4.00	8.20	402	4.00	8.20	396
4.00	8.20	312	4.00	8.20	384	4.00	8.20	384	4.00	8.20	378	4.00	8.20	384
4.00	8.20	300	4.00	8.20	366	4.00	8.20	360	4.00	8.20	354	4.00	8.20	366
4.00	8.20	288	4.00	8.20	342	4.00	8.20	342	4.00	8.20	330	4.00	8.20	342
4.00	8.20	276	4.00	8.20	324	4.00	8.20	330	4.00	8.20	324	4.00	8.20	324
4.00	8.20	270	4.00	8.20	312	4.00	8.20	312	4.00	8.20	306	4.00	8.20	312
3.00	6.20	258	3.00	6.20	300	3.00	6.20	306	3.00	6.20	294	3.00	6.20	300
3.00	6.20	240	3.00	6.20	288	3.00	6.20	288	3.00	6.20	276	3.00	6.20	288
3.00	6.20	222	3.00	6.20	276	3.00	6.20	270	3.00	6.20	258	3.00	6.20	276
3.00	6.20	210	3.00	6.20	258	3.00	6.20	258	3.00	6.20	240	3.00	6.20	258
3.00	6.20	192	3.00	6.20	240	3.00	6.20	240	3.00	6.20	228	3.00	6.20	240
3.00	6.20	186	3.00	6.20	222	3.00	6.20	228	3.00	6.20	216	3.00	6.20	222
2.00	4.10	162	2.00	4.10	216	2.00	4.10	222	2.00	4.10	210	2.00	4.10	216
2.00	5.20	150	2.00	5.20	210	2.00	5.20	210	2.00	5.20	192	2.00	5.20	210
2.00	5.20	132	2.00	5.20	186	2.00	5.20	198	2.00	5.20	174	2.00	5.20	186
2.00	5.20	114	2.00	5.20	180	2.00	5.20	180	2.00	5.20	156	2.00	5.20	180
2.00	5.20	102	2.00	5.20	156	2.00	5.20	168	2.00	5.20	150	2.00	5.20	156
2.00	5.20	96	2.00	5.20	150	2.00	5.20	156	2.00	5.20	132	2.00	5.20	150
1.00	3.30	78	1.00	3.30	132	1.00	3.30	144	1.00	3.30	126	1.00	3.30	132
1.00	3.30	66	1.00	3.30	120	1.00	3.30	126	1.00	3.30	114	1.00	3.30	120
1.00	3.30	48	1.00	3.30	114	1.00	3.30	120	1.00	3.30	96	1.00	3.30	114
1.00	3.30	36	1.00	3.30	108	1.00	3.30	108	1.00	3.30	90	1.00	3.30	108
1.00	3.30	24	1.00	3.30	96	1.00	3.30	90	1.00	3.30	72	1.00	3.30	96
1.00	3.30	12	1.00	3.30	96	1.00	3.30	84	1.00	3.30	66	1.00	3.30	96
0.00	0.00		0.00	0.00	84	0.00	0.00		0.00	0.00	48	0.00	0.00	84

B4-52.5 Degrees S2 E2 OS100			B4-60 Degrees S2 E2 OS100			B5-45 Degrees S2 E2 OS100			B6-45 Degrees S2 E2 OS100			B7-45 Degrees S2 E2 OS100			B8-45 Degrees S2 E2 OS100		
4	11.2125	44.85	4	11.2125	44.85	5	11.2125	56.0625	6	11.2125	67.275	7	11.2125	78.4875	8	11.2125	89.7
Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm
20.00	41.10	1722	20.00	41.10	1860	20.00	41.10	1944	20.00	41.10	1908	20.00	41.10	1938	20.00	41.10	1968
20.00	41.10	1842	20.00	41.10	1872	20.00	41.10	1944	20.00	41.10	1938	20.00	41.10	1944	20.00	41.10	1962
20.00	41.10	1896	20.00	41.10	1884	20.00	41.10	1944	20.00	41.10	1950	20.00	41.10	1944	20.00	41.10	1968
20.00	41.10	1902	20.00	41.10	1890	20.00	41.10	1944	20.00	41.10	1956	20.00	41.10	1938	20.00	41.10	1962
20.00	41.10	1908	20.00	41.10	1884	20.00	41.10	1944	20.00	41.10	1956	20.00	41.10	1938	20.00	41.10	1968
20.00	41.10	1914	20.00	41.10	1890	20.00	41.10	1938	20.00	41.10	1962	20.00	41.10	1938	20.00	41.10	1962
19.00	39.10	1914	19.00	39.10	1890	19.00	39.10	1938	19.00	39.10	1962	19.00	39.10	1938	19.00	39.10	1968
19.00	39.10	1902	19.00	39.10	1860	19.00	39.10	1926	19.00	39.10	1956	19.00	39.10	1932	19.00	39.10	1926
19.00	39.10	1860	19.00	39.10	1806	19.00	39.10	1872	19.00	39.10	1914	19.00	39.10	1884	19.00	39.10	1896
19.00	39.10	1824	19.00	39.10	1788	19.00	39.10	1848	19.00	39.10	1884	19.00	39.10	1860	19.00	39.10	1878
19.00	39.10	1818	19.00	39.10	1776	19.00	39.10	1830	19.00	39.10	1866	19.00	39.10	1842	19.00	39.10	1866
19.00	39.10	1812	19.00	39.10	1770	19.00	39.10	1836	19.00	39.10	1854	19.00	39.10	1836	19.00	39.10	1860
18.00	37.00	1806	18.00	37.00	1770	18.00	37.00	1830	18.00	37.00	1854	18.00	37.00	1830	18.00	37.00	1860
18.00	37.00	1794	18.00	37.00	1746	18.00	37.00	1818	18.00	37.00	1848	18.00	37.00	1836	18.00	37.00	1830
18.00	37.00	1740	18.00	37.00	1698	18.00	37.00	1764	18.00	37.00	1800	18.00	37.00	1806	18.00	37.00	1788
18.00	37.00	1722	18.00	37.00	1686	18.00	37.00	1740	18.00	37.00	1764	18.00	37.00	1764	18.00	37.00	1770
18.00	37.00	1710	18.00	37.00	1680	18.00	37.00	1734	18.00	37.00	1752	18.00	37.00	1740	18.00	37.00	1752
18.00	37.00	1704	18.00	37.00	1680	18.00	37.00	1728	18.00	37.00	1746	18.00	37.00	1728	18.00	37.00	1746
17.00	34.90	1698	17.00	34.90	1674	17.00	34.90	1722	17.00	34.90	1740	17.00	34.90	1722	17.00	34.90	1746
17.00	34.90	1692	17.00	34.90	1644	17.00	34.90	1710	17.00	34.90	1746	17.00	34.90	1722	17.00	34.90	1716
17.00	34.90	1650	17.00	34.90	1596	17.00	34.90	1668	17.00	34.90	1704	17.00	34.90	1692	17.00	34.90	1674
17.00	34.90	1614	17.00	34.90	1584	17.00	34.90	1632	17.00	34.90	1668	17.00	34.90	1656	17.00	34.90	1656
17.00	34.90	1596	17.00	34.90	1572	17.00	34.90	1626	17.00	34.90	1650	17.00	34.90	1632	17.00	34.90	1638
17.00	34.90	1596	17.00	34.90	1572	17.00	34.90	1620	17.00	34.90	1638	17.00	34.90	1626	17.00	34.90	1632
16.00	32.80	1596	16.00	32.80	1566	16.00	32.80	1620	16.00	32.80	1638	16.00	32.80	1626	16.00	32.80	1626
16.00	32.80	1584	16.00	32.80	1530	16.00	32.80	1596	16.00	32.80	1632	16.00	32.80	1614	16.00	32.80	1602
16.00	32.80	1536	16.00	32.80	1494	16.00	32.80	1554	16.00	32.80	1584	16.00	32.80	1590	16.00	32.80	1560
16.00	32.80	1512	16.00	32.80	1476	16.00	32.80	1530	16.00	32.80	1554	16.00	32.80	1548	16.00	32.80	1548
16.00	32.80	1500	16.00	32.80	1470	16.00	32.80	1524	16.00	32.80	1536	16.00	32.80	1530	16.00	32.80	1530
16.00	32.80	1494	16.00	32.80	1470	16.00	32.80	1512	16.00	32.80	1536	16.00	32.80	1524	16.00	32.80	1524
15.00	30.80	1488	15.00	30.80	1464	15.00	30.80	1512	15.00	30.80	1524	15.00	30.80	1512	15.00	30.80	1524
15.00	30.80	1482	15.00	30.80	1428	15.00	30.80	1500	15.00	30.80	1512	15.00	30.80	1518	15.00	30.80	1494
15.00	30.80	1434	15.00	30.80	1392	15.00	30.80	1452	15.00	30.80	1476	15.00	30.80	1482	15.00	30.80	1464
15.00	30.80	1410	15.00	30.80	1380	15.00	30.80	1428	15.00	30.80	1446	15.00	30.80	1446	15.00	30.80	1434
15.00	30.80	1398	15.00	30.80	1362	15.00	30.80	1416	15.00	30.80	1434	15.00	30.80	1428	15.00	30.80	1422
15.00	30.80	1392	15.00	30.80	1368	15.00	30.80	1410	15.00	30.80	1422	15.00	30.80	1416	15.00	30.80	1422
14.00	28.70	1386	14.00	28.70	1362	14.00	28.70	1410	14.00	28.70	1422	14.00	28.70	1410	14.00	28.70	1410
14.00	28.70	1380	14.00	28.70	1332	14.00	28.70	1392	14.00	28.70	1410	14.00	28.70	1404	14.00	28.70	1386
14.00	28.70	1338	14.00	28.70	1296	14.00	28.70	1350	14.00	28.70	1374	14.00	28.70	1380	14.00	28.70	1356
14.00	28.70	1308	14.00	28.70	1278	14.00	28.70	1320	14.00	28.70	1344	14.00	28.70	1344	14.00	28.70	1332
14.00	28.70	1290	14.00	28.70	1266	14.00	28.70	1314	14.00	28.70	1326	14.00	28.70	1320	14.00	28.70	1314
14.00	28.70	1290	14.00	28.70	1272	14.00	28.70	1308	14.00	28.70	1320	14.00	28.70	1314	14.00	28.70	1314
13.00	26.70	1284	13.00	26.70	1260	13.00	26.70	1302	13.00	26.70	1314	13.00	26.70	1302	13.00	26.70	1308
13.00	26.70	1272	13.00	26.70	1242	13.00	26.70	1296	13.00	26.70	1308	13.00	26.70	1302	13.00	26.70	1296
13.00	26.70	1236	13.00	26.70	1200	13.00	26.70	1248	13.00	26.70	1272	13.00	26.70	1272	13.00	26.70	1260
13.00	26.70	1212	13.00	26.70	1176	13.00	26.70	1224	13.00	26.70	1242	13.00	26.70	1242	13.00	26.70	1230
13.00	26.70	1188	13.00	26.70	1170	13.00	26.70	1212	13.00	26.70	1224	13.00	26.70	1218	13.00	26.70	1218
13.00	26.70	1188	13.00	26.70	1170	13.00	26.70	1200	13.00	26.70	1212	13.00	26.70	1212	13.00	26.70	1212
12.00	24.60	1182	12.00	24.60	1158	12.00	24.60	1200	12.00	24.60	1212	12.00	24.60	1200	12.00	24.60	1200
12.00	24.60	1182	12.00	24.60	1140	12.00	24.60	1182	12.00	24.60	1200	12.00	24.60	1200	12.00	24.60	1170
12.00	24.60	1146	12.00	24.60	1104	12.00	24.60	1146	12.00	24.60	1164	12.00	24.60	1170	12.00	24.60	1140
12.00	24.60	1110	12.00	24.60	1080	12.00	24.60	1122	12.00	24.60	1134	12.00	24.60	1140	12.00	24.60	1122
12.00	24.60	1098	12.00	24.60	1074	12.00	24.60	1110	12.00	24.60	1116	12.00	24.60	1116	12.00	24.60	1110
12.00	24.60	1086	12.00	24.60	1074	12.00	24.60	1098	12.00	24.60	1110	12.00	24.60	1104	12.00	24.60	1098
11.00	22.60	1086	11.00	22.60	1068	11.00	22.60	1098	11.00	22.60	1104	11.00	22.60	1098	11.00	22.60	1098
11.00	22.60	1074	11.00	22.60	1044	11.00	22.60	1086	11.00	22.60	1098	11.00	22.60	1098	11.00	22.60	1080
11.00	22.60	1032	11.00	22.60	1014	11.00	22.60	1044	11.00	22.60	1062	11.00	22.60	1074	11.00	22.60	1050
11.00	22.60	1014	11.00	22.60	990	11.00	22.60	1020	11.00	22.60	1032	11.00	22.60	1044	11.00	22.60	1020
11.00	22.60	990	11.00	22.60	978	11.00	22.60	1002	11.00	22.60	1020	11.00	22.60	1020	11.00	22.60	1014
11.00	22.60	984	11.00	22.60	966	11.00	22.60	1002	11.00	22.60	1008	11.00	22.60	1008	11.00	22.60	1002
10.00	20.50	984	10.00	20.50	966	10.00	20.50	990	10.00	20.50	1002	10.00	20.50	996	10.00	20.50	996
10.00	20.50	972	10.00	20.50	936	10.00	20.50	966	10.00	20.50	996	10.00	20.50	996	10.00	20.50	972
10.00	20.50	954	10.00	20.50	906	10.00	20.50	930	10.00	20.50	966	10.00	20.50	972	10.00	20.50	942
10.00	20.50	918	10.00	20.50	888	10.00	20.50	912	10.00	20.50	936	10.00	20.50	942	10.00	20.50	924
10.00	20.50	900	10.00	20.50	876	10.00	20.50	900	10.00	20.50	912	10.00	20.50	918	10.00	20.50	912
10.00	20.50	888	10.00	20.50	870	10.00	20.50	900	10.00	20.50	912	10.00	20.50	906	10.00	20.50	894
9.00	18.50	882	9.00	18.50	870	9.00	18.50	894	9.00	18.50	900	9.00	18.50	900	9.00	18.50	894
9.00	18.50	870	9.00	18.50	840	9.00	18.50	876	9.00	18.50	894	9.00	18.50	888	9.00	18.50	882
9.00	18.50	840	9.00	18.50	810	9.00	18.50	840	9.00	18.50	858	9.00	18.50	876	9.00	18.50	846
9.00	18.50	804	9.00	18.50	798	9.00	18.50	822	9.00	18.50	840	9.00	18.50	846	9.00	18.50	822
9.00	18.50	792	9.00	18.50	780	9.00	18.50	804	9.00	18.50	816	9.00	18.50	828	9.00	18.50	810
9.00	18.50	780	9.00	18.50	774	9.00	18.50	798	9.00	18.50	804	9.00	18.50	810	9.00	18.50	804
8.00	16.40	774	8.00	16.40	768	8.00	16.40	792	8.00	16.40	798	8.00	16.40	798	8.00	16.40	792
8.00	16.40	762	8.00	16.40	744	8.00	16.40	786	8.00	16.40	792	8.00	16.40	792	8.00	16.40	774
8.00	16.40	738	8.00	16.40	714	8.00	16.40	750	8.00	16.40	762	8.00	16.40	768	8.00	16.40	750
8.00	16.40	708	8.00	16.40	696	8.00	16.40	726	8.00	16.40	738	8.00	16.40	744	8.00	16.40	726
8.00	16.40	702	8.00	16.40	690	8.00	16.40	708	8.00	16.40	720	8.00	16.40	720	8.00	16.40	714
8.00	16.40	684	8.00	16.40	678	8.00	16.40	702	8.00	16.40	708	8.00	16.40	708	8.00	16.40	702
7.00	14.40	684	7.00	14.40	672	7.00	14.40	690	7.00	14.40	696	7.00	14.40	702	7.00	14.40	690
7.00	14.40	678	7.00	14.40	660	7.00	14.40	684	7.00	14.40	696	7.00	14.40	690	7.00	14.40	684
7.00	14.40	660	7.00	14.40	630	7.00	14.40	654	7.00	14.40	666	7.00	14.40	666	7.00	14.40	660
7.00	14.40	630	7.00	14.40	612	7.00	14.40	636	7.00	14.40	642	7.00	14.40	642	7.00	14.40	642
7.00	14.40	612	7.00	14.40	588	7.00	14.40	612	7.00	14.40	618	7.00	14.40	624	7.00	14.40	618
7.00	14.40	594	7.00	14.40	582	7.00	14.40	606	7.00	14.40	600	7.00	14.40	612	7.00	14.40	612
6.00	12.30	588	6.00	12.30	576	6.00	12.30	600	6.00	12.30	594	6.00	12.30	606	6.00	12.30	600
6.00	12.30	576	6.00	12.30	546	6.00	12.30	588	6.00	12.30	582	6.00	12.30	594	6.00	12.30	582
6.00	12.30	558	6.00	12.30	522	6.00	12.30	564	6.00	12.30	564	6.00	12.30	582	6.00	12.30	552
6.00	12.30	528	6.00	12.30	504	6.00	12.30	546	6.00	12.30	540	6.00	12.30	552	6.00	12.30	528
6.00	12.30	510	6.00	12.30	492	6.00	12.30	522	6.00	12.30	522	6.00	12.30	534	6.00	12.30	510
6.00	12.30	498	6.00	12.30	486	6.00	12.30	510	6.00	12.30	504	6.00	12.30	510	6.00	12.30	498
5.00	10.30	492	5.00	10.30	480	5.00	10.30	504	5.00	10.30	492	5.00	10.30	498	5.00	10.30	486
5.00	10.30	480	5.00	10.30	468	5.00	10.30	492	5.00	10.30	486	5.00	10.30	492	5.00	10.30	474
5.00	10.30	456	5.00	10.30	444	5.00	10.30	468	5.00	10.30	468	5.00	10.30	468	5.00	10.30	450
5.00	10.30	432	5.00	10.30	420	5.00	10.30	444	5.00	10.30	444	5.00	10.30	450	5.00	10.30	432
5.00	10.30	420	5.00	10.30	408	5.00	10.30	420	5.00	10.30	420	5.00	10.30	432	5.00	10.30	414
5.00	10.30	402	5.00	10.30	396	5.00	10.30	414	5.00	10.30	414	5.00	10.30	414	5.00	10.30	402
4.00	8.20	390	4.00	8.20	390	4.00	8.20	402	4.00	8.20	396	4.00	8.20	396	4.00	8.20	390
4.00	8.20	384	4.00	8.20	372	4.00	8.20	390	4.00	8.20	390	4.00	8.20	396	4.00	8.20	378
4.00	8.20	360	4.00	8.20	348	4.00	8.20	366	4.00	8.20	372	4.00	8.20	372	4.00	8.20	360
4.00	8.20	342	4.00	8.20	330	4.00	8.20	348	4.00	8.20	354	4.00	8.20	360	4.00	8.20	342
4.00	8.20	324	4.00	8.20	312	4.00	8.20	336	4.00	8.20	330	4.00	8.20	336	4.00	8.20	324
4.00	8.20	312	4.00	8.20	300	4.00	8.20	318	4.00	8.20	324	4.00	8.20	324	4.00	8.20	312
3.00	6.20	300	3.00	6.20	294	3.00	6.20	306	3.00	6.20	306	3.00	6.20	312	3.00	6.20	306
3.00	6.20	294	3.00	6.20	282	3.00	6.20	294	3.00	6.20	294	3.00	6.20	306	3.00	6.20	288
3.00	6.20	276	3.00	6.20	264	3.00	6.20	276	3.00	6.20	282	3.00	6.20	288	3.00	6.20	276
3.00	6.20	258	3.00	6.20	246	3.00	6.20	264	3.00	6.20	264	3.00	6.20	270	3.00	6.20	258
3.00	6.20	246	3.00	6.20	234	3.00	6.20	246	3.00	6.20	246	3.00	6.20	258	3.00	6.20	246
3.00	6.20	228	3.00	6.20	222	3.00	6.20	228	3.00	6.20	234	3.00	6.20	240	3.00	6.20	234
2.00	4.10	222	2.00	4.10	204	2.00	4.10	228	2.00	4.10	222	2.00	4.10	234	2.00	4.10	222
2.00	5.20	204	2.00	5.20	198	2.00	5.20	210	2.00	5.20	204	2.00	5.20	216	2.00	5.20	210
2.00	5.20	198	2.00	5.20	180	2.00	5.20	198	2.00	5.20	198	2.00	5.20	210	2.00	5.20	192
2.00	5.20	180	2.00	5.20	168	2.00	5.20	180	2.00	5.20	180	2.00	5.20	198	2.00	5.20	180
2.00	5.20	168	2.00	5.20	150	2.00	5.20	168	2.00	5.20	162	2.00	5.20	180	2.00	5.20	168
2.00	5.20	150	2.00	5.20	138	2.00	5.20	156	2.00	5.20	156	2.00	5.20	174	2.00	5.20	156
1.00	3.30	144	1.00	3.30	126	1.00	3.30	144	1.00	3.30	138	1.00	3.30	156	1.00	3.30	150
1.00	3.30	126	1.00	3.30	114	1.00	3.30	138	1.00	3.30	126	1.00	3.30	150	1.00	3.30	132
1.00	3.30	120	1.00	3.30	102	1.00	3.30	120	1.00	3.30	114	1.00	3.30	138	1.00	3.30	126
1.00	3.30	108	1.00	3.30	84	1.00	3.30	108	1.00	3.30	102	1.00	3.30	126	1.00	3.30	108
1.00	3.30	90	1.00	3.30	78	1.00	3.30	96	1.00	3.30	90	1.00	3.30	114	1.00	3.30	102
1.00	3.30	84	1.00	3.30	60	1.00	3.30	90	1.00	3.30	78	1.00	3.30	102	1.00	3.30	90
0.00	0.00	66	0.00	0.00		0.00	0.00		0.00	0.00	66	0.00	0.00	90	0.00	0.00	78

Table 3: Enclosure 3 Data

B2-45 Degrees S2 E3 OS100			B3-45 Degrees S2 E3 OS 100			B4-30 Degrees S2 E3 OS100			B4-37.5 Degrees S2 E3 OS100			B4-45 Degrees S2 E3 OS 100			B4-52.5 Degrees S2 E3 OS100			B4-60 Degrees S2 E3 OS100			B5-45 Degrees S2 E3 OS100			B6-45 Degrees S2 E3 OS100			B7-45 Degrees S2 E3 OS100			B8-45 Degrees S2 E3 OS100		
2	11.2125	22.425	3	11.2125	33.6375	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	5	11.2125	56.0625	6	11.2125	67.275	7	11.2125	78.4875	8	11.2125	89.7
Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm
20.00	41.10	102.3	20.00	41.10	1782	20.00	41.10	1680	20.00	41.10	1830	20.00	41.10	1890	20.00	41.10	1962	20.00	41.10	1950	20.00	41.10	2076	20.00	41.10	2016	20.00	41.10	1770	20.00	41.10	2016
20.00	41.10	102.6	20.00	41.10	1776	20.00	41.10	1680	20.00	41.10	1836	20.00	41.10	1890	20.00	41.10	1962	20.00	41.10	1944	20.00	41.10	2070	20.00	41.10	2004	20.00	41.10	1776	20.00	41.10	2016
20.00	41.10	102.3	20.00	41.10	1782	20.00	41.10	1674	20.00	41.10	1830	20.00	41.10	1890	20.00	41.10	1962	20.00	41.10	1944	20.00	41.10	2070	20.00	41.10	2016	20.00	41.10	1776	20.00	41.10	2016
20.00	41.10	103	20.00	41.10	1770	20.00	41.10	1680	20.00	41.10	1830	20.00	41.10	1890	20.00	41.10	1962	20.00	41.10	1950	20.00	41.10	2070	20.00	41.10	2010	20.00	41.10	1776	20.00	41.10	2022
20.00	41.10	102.3	20.00	41.10	1776	20.00	41.10	1680	20.00	41.10	1836	20.00	41.10	1896	20.00	41.10	1950	20.00	41.10	1944	20.00	41.10	2076	20.00	41.10	2010	20.00	41.10	1776	20.00	41.10	2022
20.00	41.10	102.6	20.00	41.10	1782	20.00	41.10	1680	20.00	41.10	1836	20.00	41.10	1890	20.00	41.10	1962	20.00	41.10	1944	20.00	41.10	2064	20.00	41.10	2010	20.00	41.10	1782	20.00	41.10	2016
19.00	39.10	102.3	19.00	39.10	1776	19.00	39.10	1662	19.00	39.10	1800	19.00	39.10	1872	19.00	39.10	1944	19.00	39.10	1950	19.00	39.10	2028	19.00	39.10	2004	19.00	39.10	1758	19.00	39.10	2022
19.00	39.10	102.3	19.00	39.10	1782	19.00	39.10	1602	19.00	39.10	1734	19.00	39.10	1800	19.00	39.10	1860	19.00	39.10	1872	19.00	39.10	1962	19.00	39.10	1926	19.00	39.10	1740	19.00	39.10	1950
19.00	39.10	103	19.00	39.10	1710	19.00	39.10	1590	19.00	39.10	1734	19.00	39.10	1788	19.00	39.10	1860	19.00	39.10	1842	19.00	39.10	1956	19.00	39.10	1920	19.00	39.10	1740	19.00	39.10	1914
19.00	39.10	102.3	19.00	39.10	1680	19.00	39.10	1584	19.00	39.10	1734	19.00	39.10	1782	19.00	39.10	1854	19.00	39.10	1836	19.00	39.10	1962	19.00	39.10	1914	19.00	39.10	1734	19.00	39.10	1902
19.00	39.10	102.6	19.00	39.10	1686	19.00	39.10	1596	19.00	39.10	1734	19.00	39.10	1788	19.00	39.10	1860	19.00	39.10	1842	19.00	39.10	1956	19.00	39.10	1908	19.00	39.10	1734	19.00	39.10	1902
19.00	39.10	102.3	19.00	39.10	1680	19.00	39.10	1590	19.00	39.10	1740	19.00	39.10	1788	19.00	39.10	1860	19.00	39.10	1836	19.00	39.10	1956	19.00	39.10	1914	19.00	39.10	1734	19.00	39.10	1896
18.00	37.00	101.5	18.00	37.00	1680	18.00	37.00	1584	18.00	37.00	1704	18.00	37.00	1788	18.00	37.00	1806	18.00	37.00	1812	18.00	37.00	1920	18.00	37.00	1854	18.00	37.00	1680	18.00	37.00	1890
18.00	37.00	97.2	18.00	37.00	1692	18.00	37.00	1518	18.00	37.00	1632	18.00	37.00	1716	18.00	37.00	1752	18.00	37.00	1734	18.00	37.00	1848	18.00	37.00	1812	18.00	37.00	1656	18.00	37.00	1818
18.00	37.00	96.9	18.00	37.00	1620	18.00	37.00	1506	18.00	37.00	1638	18.00	37.00	1692	18.00	37.00	1752	18.00	37.00	1740	18.00	37.00	1842	18.00	37.00	1800	18.00	37.00	1650	18.00	37.00	1788
18.00	37.00	96.9	18.00	37.00	1590	18.00	37.00	1500	18.00	37.00	1638	18.00	37.00	1686	18.00	37.00	1752	18.00	37.00	1734	18.00	37.00	1842	18.00	37.00	1806	18.00	37.00	1650	18.00	37.00	1782
18.00	37.00	96.9	18.00	37.00	1584	18.00	37.00	1500	18.00	37.00	1638	18.00	37.00	1686	18.00	37.00	1752	18.00	37.00	1734	18.00	37.00	1842	18.00	37.00	1800	18.00	37.00	1644	18.00	37.00	1782
18.00	37.00	96.9	18.00	37.00	1584	18.00	37.00	1500	18.00	37.00	1638	18.00	37.00	1692	18.00	37.00	1752	18.00	37.00	1728	18.00	37.00	1848	18.00	37.00	1800	18.00	37.00	1650	18.00	37.00	1776
17.00	34.90	95.8	17.00	34.90	1584	17.00	34.90	1464	17.00	34.90	1602	17.00	34.90	1668	17.00	34.90	1722	17.00	34.90	1722	17.00	34.90	1776	17.00	34.90	1740	17.00	34.90	1632	17.00	34.90	1770
17.00	34.90	92.2	17.00	34.90	1584	17.00	34.90	1416	17.00	34.90	1542	17.00	34.90	1590	17.00	34.90	1644	17.00	34.90	1632	17.00	34.90	1734	17.00	34.90	1698	17.00	34.90	1620	17.00	34.90	1704
17.00	34.90	91.5	17.00	34.90	1512	17.00	34.90	1410	17.00	34.90	1536	17.00	34.90	1584	17.00	34.90	1644	17.00	34.90	1632	17.00	34.90	1728	17.00	34.90	1698	17.00	34.90	1620	17.00	34.90	1668
17.00	34.90	91.5	17.00	34.90	1494	17.00	34.90	1410	17.00	34.90	1542	17.00	34.90	1584	17.00	34.90	1644	17.00	34.90	1632	17.00	34.90	1728	17.00	34.90	1698	17.00	34.90	1620	17.00	34.90	1668
17.00	34.90	91.9	17.00	34.90	1494	17.00	34.90	1410	17.00	34.90	1542	17.00	34.90	1584	17.00	34.90	1644	17.00	34.90	1632	17.00	34.90	1734	17.00	34.90	1698	17.00	34.90	1620	17.00	34.90	1668
17.00	34.90	91.5	17.00	34.90	1488	17.00	34.90	1410	17.00	34.90	1536	17.00	34.90	1584	17.00	34.90	1638	17.00	34.90	1626	17.00	34.90	1728	17.00	34.90	1692	17.00	34.90	1620	17.00	34.90	1668
16.00	32.80	90.8	16.00	32.80	1500	16.00	32.80	1386	16.00	32.80	1500	16.00	32.80	1572	16.00	32.80	1584	16.00	32.80	1620	16.00	32.80	1680	16.00	32.80	1644	16.00	32.80	1620	16.00	32.80	1638
16.00	32.80	86.9	16.00	32.80	1476	16.00	32.80	1332	16.00	32.80	1446	16.00	32.80	1494	16.00	32.80	1536	16.00	32.80	1536	16.00	32.80	1620	16.00	32.80	1590	16.00	32.80	1554	16.00	32.80	1572
16.00	32.80	86.5	16.00	32.80	1404	16.00	32.80	1326	16.00	32.80	1440	16.00	32.80	1482	16.00	32.80	1536	16.00	32.80	1530	16.00	32.80	1626	16.00	32.80	1590	16.00	32.80	1524	16.00	32.80	1560
16.00	32.80	86.5	16.00	32.80	1404	16.00	32.80	1320	16.00	32.80	1440	16.00	32.80	1482	16.00	32.80	1530	16.00	32.80	1524	16.00	32.80	1620	16.00	32.80	1590	16.00	32.80	1524	16.00	32.80	1548
16.00	32.80	86.5	16.00	32.80	1398	16.00	32.80	1320	16.00	32.80	1434	16.00	32.80	1482	16.00	32.80	1530	16.00	32.80	1524	16.00	32.80	1620	16.00	32.80	1584	16.00	32.80	1518	16.00	32.80	1554
16.00	32.80	86.5	16.00	32.80	1398	16.00	32.80	1326	16.00	32.80	1440	16.00	32.80	1476	16.00	32.80	1536	16.00	32.80	1524	16.00	32.80	1602	16.00	32.80	1590	16.00	32.80	1524	16.00	32.80	1548
15.00	30.80	84.7	15.00	30.80	1398	15.00	30.80	1296	15.00	30.80	1416	15.00	30.80	1482	15.00	30.80	1500	15.00	30.80	1482	15.00	30.80	1524	15.00	30.80	1536	15.00	30.80	1494	15.00	30.80	1542
15.00	30.80	81.5	15.00	30.80	1398	15.00	30.80	1242	15.00	30.80	1350	15.00	30.80	1404	15.00	30.80	1434	15.00	30.80	1428	15.00	30.80	1506	15.00	30.80	1494	15.00	30.80	1434	15.00	30.80	1476
15.00	30.80	81.5	15.00	30.80	1350	15.00	30.80	1230	15.00	30.80	1344	15.00	30.80	1380	15.00	30.80	1428	15.00	30.80	1422	15.00	30.80	1512	15.00	30.80	1488	15.00	30.80	1434	15.00	30.80	1452
15.00	30.80	81.5	15.00	30.80	1308	15.00	30.80	1236	15.00	30.80	1344	15.00	30.80	1386	15.00	30.80	1428	15.00	30.80	1422	15.00	30.80	1512	15.00	30.80	1488	15.00	30.80	1428	15.00	30.80	1446
15.00	30.80	81.1	15.00	30.80	1302	15.00	30.80	1236	15.00	30.80	1344	15.00	30.80	1380	15.00	30.80	1434	15.00	30.80	1428	15.00	30.80	1506	15.00	30.80	1482	15.00	30.80	1428	15.00	30.80	1440
15.00	30.80	81.5	15.00	30.80	1308	15.00	30.80	1236	15.00	30.80	1344	15.00	30.80	1380	15.00	30.80	1428	15.00	30.80	1422	15.00	30.80	1476	15.00	30.80	1488	15.00	30.80	1428	15.00	30.80	1446
14.00	28.70	79.72	14.00	28.70	1302	14.00	28.70	1194	14.00	28.70	1338	14.00	28.70	1368	14.00	28.70	1374	14.00	28.70	1404	14.00	28.70	1410	14.00	28.70	1458	14.00	28.70	1410	14.00	28.70	1410
14.00	28.70	76.5	14.00	28.70	1284	14.00	28.70	1152	14.00	28.70	1266	14.00	28.70	1290	14.00	28.70	1326	14.00	28.70	1326	14.00	28.70	1398	14.00	28.70	1386	14.00	28.70	1344	14.00	28.70	1350
14.00	28.70	76.14	14.00	28.70	1218	14.00	28.70	1146	14.00	28.70	1248	14.00	28.70	1284	14.00	28.70	1326	14.00	28.70	1326	14.00	28.70	1404	14.00	28.70	1386	14.00	28.70	1326	14.00	28.70	1338
14.00	28.70	76.14	14.00	28.70	1212	14.00	28.70	1152	14.00	28.70	1248	14.00	28.70	1284	14.00	28.70	1326	14.00	28.70	1320	14.00	28.70	1398	14.00	28.70	1374	14.00	28.70	1326	14.00	28.70	1332
14.00	28.70	76.5	14.00	28.70	1212	14.00	28.70	1146	14.00	28.70	1248	14.00	28.70	1284	14.00	28.70	1326	14.00	28.70	1320	14.00	28.70	1398	14.00	28.70	1380	14.00	28.70	1326	14.00	28.70	1338
14.00	28.70	76.14	14.00	28.70	1212	14.00	28.70	1146	14.00	28.70	1248	14.00	28.70	1278	14.00	28.70	1326	14.00	28.70	1320	14.00	28.70	1398	14.00	28.70	1380	14.00	28.70	1326	14.00	28.70	1332
13.00	26.70	74.71	13.00	26.70	1206	13.00	26.70	1134	13.00	26.70	1224	13.00	26.70	1260	13.00	26.70	1290	13.00	26.70	1296	13.00	26.70	1314	13.00	26.70	1344	13.00	26.70	1290	13.00	26.70	1326
13.00	26.70	71.13	13.00	26.70	1194	13.00	26.70	1074	13.00	26.70	1164	13.00	26.70	1194	13.00	26.70	1230	13.00	26.70	1224	13.00	26.70	1290	13.00	26.70	1278	13.00	26.70	1236	13.00	26.70	1266
13.00	26.70	71.13	13.00	26.70	1122	13.00	26.70	1056	13.00	26.70	1152	13.00	26.70	1182	13.00	26.70	1224	13.00	26.70	1224	13.00	26.70	1290	13.00	26.70	1260	13.00	26.70	1224	13.00	26.70	1242
13.00	26.70	70.77	13.00	26.70	1116	13.00	26.70	1062	13.00	26.70	1152	13.00	26.70	1188	13.00	26.70	1224	13.00	26.70	1218	13.00	26.70	1290	13.00	26.70	1272	13.00	26.70	1224	13.00	26.70	1230
13.00	26.70	71.13	13.00	26.70	1116	13.00	26.70	1062	13.00	26.70	1152	13.00	26.70	1182	13.00	26.70	1230	13.00	26.70	1218	13.00	26.70	1296	13.00	26.70	1266	13.00	26.70	1218	13.00	26.70	1230
13.00	26.70	70.41	13.00	26.70	1116	13.00	26.70	1056	13.00	26.70	1152	13.00	26.70	1188	13.00	26.70	1218	13.00	26.70	1218	13.00	26.70	1290	13.00	26.70	1266	13.00	26.70	1224	13.00	26.70	1224
12.00	24.60	67.91	12.00	24.60	1116	12.00	24.60	1044	12.00	24.60	1128	12.00	24.60	1176	12.00	24.60	1170	12.00	24.60	1152	12.00	24.60	1218	12.00	24.60	1254	12.00	24.60	1164	12.00	24.60	1230
12.00	24.60	66.12	12.00	24.60	1116	12.00	24.60	990	12.00	24.60	1062	12.00	24.60	1110	12.00	24.60	1122	12.00	24.60	1122	12.00	24.60	1188	12.00	24.60	1182	12.00	24.60	1134	12.00	24.60	1182
12.00	24.60	65.76	12.00	24.60	1044	12.00	24.60	972	12.00	24.60	1056	12.00	24.60	1086	12.00	24.60	1122	12.00	24.60	1116	12.00	24.60	1182	12.00	24.60	1170	12.00	24.60	1122	12.00	24.60	1140
12.00	24.60	65.76	12.00	24.60	1026	12.00	24.60	972	12.00	24.60	1062	12.00	24.60	1086	12.00	24.60	1122	12.00	24.60	1122	12.00	24.60	1188	12.00	24.60	1164	12.00	24.60	1122	12.00	24.60	1128
12.00	24.60	65.76	12.00	24.60	1020	12.00	24.60	978	12.00	24.60	1056	12.00	24.60	1086	12.00	24.60	1122	12.00	24.60	1110	12.00	24.60	1182	12.00	24.60	1152	12.00	24.60	1116	12.00	24.60	1122
12.00	24.60	65.76	12.00	24.60	1026	12.00	24.60	972	12.00	24.60	1056	12.00	24.60	1086	12.00	24.60	1116	12.00	24.60	1116	12.00	24.60	1164	12.00	24.60	1152	12.00	24.60	1116	12.00	24.60	1122
11.00	22.60	64.33	11.00	22.60	1026	11.00	22.60	966	11.00	22.60	1026	11.00	22.60	1074	11.00	22.60	1092	11.00	22.60	1098	11.00	22.60	1086	11.00	22.60	1116	11.00	22.60	1122	11.00	22.60	1104
11.00	22.60	60.75	11.00	22.60	1014	11.00	22.60	900	11.00	22.60	972	11.00	22.60	1002	11.00	22.60	1032	11.00	22.60	1026	11.00	22.60	1080	11.00	22.60	1056	11.00	22.60	1068	11.00	22.60	1044
11.00	22.60	60.39	11.00	22.60	948	11.00	22.60	888	11.00	22.60	960	11.00	22.60	990	11.00	22.60	1020	11.00	22.60	1008	11.00	22.60	1074	11.00	22.60	1050	11.00	22.60	1026	11.00	22.60	1032
11.00	22.60	60.39	11.00	22.60	930	11.00	22.60	888	11.00	22.60	960	11.00	22.60	984	11.00	22.60	1014	11.00	22.60	1014	11.00	22.60	1074	11.00	22.60	1044	11.00	22.60	1020	11.00	22.60	1020
11.00	22.60	60.39	11.00	22.60	930	11.00	22.60	882	11.00	22.60	966	11.00	22.60	990	11.00	22.60	1020	11.00	22.60	1014	11.00	22.60	1074	11.00	22.60	1050	11.00	22.60	1020	11.00	22.60	1020
11.00	22.60	60.04	11.00	22.60	930	11.00	22.60	888	11.00	22.60	960	11.00	22.60	990	11.00	22.60	1020	11.00	22.60	1008	11.00	22.60	1038	11.00	22.60	1038	11.00	22.60	1026	11.00	22.60	1014
10.00	20.50	58.96	10.00	20.50	930	10.00	20.50	858	10.00	20.50	912	10.00	20.50	978	10.00	20.50	996	10.00	20.50	966	10.00	20.50	978	10.00	20.50	990	10.00	20.50	1008	10.00	20.50	1014
10.00	20.50	55.03	10.00	20.50	918	10.00	20.50	810	10.00	20.50	876	10.00	20.50	912	10.00	20.50	924	10.00	20.50	918	10.00	20.50	966	10.00	20.50	948	10.00	20.50	948	10.00	20.50	966
10.00	20.50	55.03	10.00	20.50	858	10.00	20.50	798	10.00	20.50	864	10.00	20.50	888	10.00	20.50	918	10.00	20.50	912	10.00	20.50	966	10.00	20.50	942	10.00	20.50	930	10.00	20.50	930
10.00	20.50	55.03	10.00	20.50	846	10.00	20.50	798	10.00	20.50	870	10.00	20.50	888	10.00	20.50	918	10.00	20.50	906	10.00	20.50	966	10.00	20.50	942	10.00	20.50	924	10.00	20.50	924
10.00	20.50	55.03	10.00	20.50	840	10.00	20.50	798	10.00	20.50	864	10.00	20.50	888	10.00	20.50	918	10.00	20.50	912	10.00	20.50	966	10.00	20.50	936	10.00	20.50	924	10.00	20.50	918
10.00	20.50	54.67	10.00	20.50	840	10.00	20.50	798	10.00	20.50	870	10.00	20.50	894	10.00	20.50	912	10.00	20.50	912	10.00	20.50	942	10.00	20.50	942	10.00	20.50	918	10.00	20.50	912
9.00	18.50	54.67	9.00	18.50	840	9.00	18.50	786	9.00	18.50	840	9.00	18.50	888	9.00	18.50	846	9.00	18.50	882	9.00	18.50	882	9.00	18.50	900	9.00	18.50	906	9.00	18.50	912
9.00	18.50	52.17	9.00	18.50	834	9.00	18.50	732	9.00	18.50	786	9.00	18.50	840	9.00	18.50	816	9.00	18.50	828	9.00	18.50	858	9.00	18.50	852	9.00	18.50	846	9.00	18.50	882
9.00	18.50	49.66	9.00	18.50	780	9.00	18.50	708	9.00	18.50	774	9.00	18.50	798	9.00	18.50	816	9.00	18.50	804	9.00	18.50	858	9.00	18.50	840	9.00	18.50	822	9.00	18.50	840
9.00	18.50	49.66	9.00	18.50	750	9.00	18.50	714	9.00	18.50	768	9.00	18.50	792	9.00	18.50	816	9.00	18.50	810	9.00	18.50	858	9.00	18.50	834	9.00	18.50	822	9.00	18.50	822
9.00	18.50	49.66	9.00	18.50	744	9.00	18.50	708	9.00	18.50	768	9.00	18.50	792	9.00	18.50	810	9.00	18.50	810	9.00	18.50	858	9.00	18.50	834	9.00	18.50	822	9.00	18.50	816
9.00	18.50	49.3	9.00	18.50	750	9.00	18.50	708	9.00	18.50	774	9.00	18.50	792	9.00	18.50	816	9.00	18.50	810	9.00	18.50	798	9.00	18.50	834	9.00	18.50	798	9.00	18.50	816
8.00	16.40	47.87	8.00	16.40	744	8.00	16.40	702	8.00	16.40	732	8.00	16.40	786	8.00	16.40	768	8.00	16.40	780	8.00	16.40	762	8.00	16.40	810	8.00	16.40	750	8.00	16.40	798
8.00	16.40	44.65	8.00	16.40	744	8.00	16.40	654	8.00	16.40	690	8.00	16.40	726	8.00	16.40	726	8.00	16.40	726	8.00	16.40	756	8.00	16.40	750	8.00	16.40	726	8.00	16.40	756
8.00	16.40	44.29	8.00	16.40	690	8.00	16.40	624	8.00	16.40	678	8.00	16.40	696	8.00	16.40	714	8.00	16.40	708	8.00	16.40	750	8.00	16.40	738	8.00	16.40	720	8.00	16.40	732
8.00	16.40	44.29	8.00	16.40	660	8.00	16.40	624	8.00	16.40	672	8.00	16.40	690	8.00	16.40	708	8.00	16.40	708	8.00	16.40	750	8.00	16.40	732	8.00	16.40	714	8.00	16.40	720
8.00	16.40	43.94	8.00	16.40	654	8.00	16.40	618	8.00	16.40	678	8.00	16.40	696	8.00	16.40	714	8.00	16.40	708	8.00	16.40	750	8.00	16.40	726	8.00	16.40	720	8.00	16.40	714
8.00	16.40	44.29	8.00	16.40	654	8.00	16.40	624	8.00	16.40	672	8.00	16.40	690	8.00	16.40	714	8.00	16.40	708	8.00	16.40	714	8.00	16.40	732	8.00	16.40	714	8.00	16.40	708
7.00	14.40	42.86	7.00	14.40	654	7.00	14.40	618	7.00	14.40	642	7.00	14.40	678	7.00	14.40	666	7.00	14.40	672	7.00	14.40	660	7.00	14.40	720	7.00	14.40	720	7.00	14.40	696
7.00	14.40	39.64	7.00	14.40	648	7.00	14.40	570	7.00	14.40	600	7.00	14.40	624	7.00	14.40	624	7.00	14.40	624	7.00	14.40	654	7.00	14.40	678	7.00	14.40	678	7.00	14.40	660
7.00	14.40	38.57	7.00	14.40	600	7.00	14.40	546	7.00	14.40	582	7.00	14.40	600	7.00	14.40	612	7.00	14.40	606	7.00	14.40	642	7.00	14.40	642	7.00	14.40	642	7.00	14.40	630
7.00	14.40	38.93	7.00	14.40	570	7.00	14.40	534	7.00	14.40	576	7.00	14.40	594	7.00	14.40	612	7.00	14.40	612	7.00	14.40	648	7.00	14.40	630	7.00	14.40	624	7.00	14.40	624
7.00	14.40	38.93	7.00	14.40	564	7.00	14.40	534	7.00	14.40	582	7.00	14.40	600	7.00	14.40	612	7.00	14.40	606	7.00	14.40	642	7.00	14.40	630	7.00	14.40	624	7.00	14.40	612
7.00	14.40	38.57	7.00	14.40	558	7.00	14.40	528	7.00	14.40	576	7.00	14.40	594	7.00	14.40	612	7.00	14.40	612	7.00	14.40	612	7.00	14.40	624	7.00	14.40	612	7.00	14.40	612
6.00	12.30	37.5	6.00	12.30	564	6.00	12.30	534	6.00	12.30	576	6.00	12.30	582	6.00	12.30	570	6.00	12.30	600	6.00	12.30	558	6.00	12.30	624	6.00	12.30	570	6.00	12.30	606
6.00	12.30	34.63	6.00	12.30	564	6.00	12.30	510	6.00	12.30	540	6.00	12.30	534	6.00	12.30	528	6.00	12.30	546	6.00	12.30	546	6.00	12.30	576	6.00	12.30	540	6.00	12.30	570
6.00	12.30	33.2	6.00	12.30	528	6.00	12.30	468	6.00	12.30	504	6.00	12.30	504	6.00	12.30	516	6.00	12.30	522	6.00	12.30	540	6.00	12.30	546	6.00	12.30	522	6.00	12.30	546
6.00	12.30	33.56	6.00	12.30	486	6.00	12.30	456	6.00	12.30	486	6.00	12.30	498	6.00	12.30	510	6.00	12.30	510	6.00	12.30	534	6.00	12.30	528	6.00	12.30	522	6.00	12.30	528
6.00	12.30	33.2	6.00	12.30	474	6.00	12.30	444	6.00	12.30	486	6.00	12.30	498	6.00	12.30	516	6.00	12.30	510	6.00	12.30	540	6.00	12.30	528	6.00	12.30	522	6.00	12.30	522
6.00	12.30	33.2	6.00	12.30	474	6.00	12.30	444	6.00	12.30	486	6.00	12.30	498	6.00	12.30	510	6.00	12.30	504	6.00	12.30	528	6.00	12.30	522	6.00	12.30	516	6.00	12.30	516
5.00	10.30	32.49	5.00	10.30	468	5.00	10.30	438	5.00	10.30	468	5.00	10.30	492	5.00	10.30	492	5.00	10.30	510	5.00	10.30	480	5.00	10.30	516	5.00	10.30	498	5.00	10.30	504
5.00	10.30	29.62	5.00	10.30	468	5.00	10.30	396	5.00	10.30	414	5.00	10.30	444	5.00	10.30	450	5.00	10.30	462	5.00	10.30	450	5.00	10.30	480	5.00	10.30	456	5.00	10.30	480
5.00	10.30	28.19	5.00	10.30	450	5.00	10.30	372	5.00	10.30	402	5.00	10.30	414	5.00	10.30	420	5.00	10.30	420	5.00	10.30	438	5.00	10.30	444	5.00	10.30	438	5.00	10.30	450
5.00	10.30	27.84	5.00	10.30	408	5.00	10.30	360	5.00	10.30	390	5.00	10.30	402	5.00	10.30	414	5.00	10.30	414	5.00	10.30	432	5.00	10.30	432	5.00	10.30	420	5.00	10.30	432
5.00	10.30	27.84	5.00	10.30	384	5.00	10.30	360	5.00	10.30	384	5.00	10.30	402	5.00	10.30	408	5.00	10.30	408	5.00	10.30	432	5.00	10.30	420	5.00	10.30	420	5.00	10.30	426
5.00	10.30	27.84	5.00	10.30	384	5.00	10.30	354	5.00	10.30	390	5.00	10.30	402	5.00	10.30	414	5.00	10.30	408	5.00	10.30	420	5.00	10.30	420	5.00	10.30	420	5.00	10.30	414
4.00	8.20	27.12	4.00	8.20	378	4.00	8.20	354	4.00	8.20	360	4.00	8.20	384	4.00	8.20	402	4.00	8.20	396	4.00	8.20	372	4.00	8.20	408	4.00	8.20	408	4.00	8.20	402
4.00	8.20	24.61	4.00	8.20	372	4.00	8.20	324	4.00	8.20	318	4.00	8.20	348	4.00	8.20	354	4.00	8.20	354	4.00	8.20	348	4.00	8.20	372	4.00	8.20	366	4.00	8.20	378
4.00	8.20	22.83	4.00	8.20	342	4.00	8.20	294	4.00	8.20	306	4.00	8.20	318	4.00	8.20	330	4.00	8.20	330	4.00	8.20	336	4.00	8.20	348	4.00	8.20	348	4.00	8.20	354
4.00	8.20	22.47	4.00	8.20	312	4.00	8.20	276	4.00	8.20	294	4.00	8.20	306	4.00	8.20	318	4.00	8.20	312	4.00	8.20	324	4.00	8.20	324	4.00	8.20	330	4.00	8.20	336
4.00	8.20	22.47	4.00	8.20	294	4.00	8.20	270	4.00	8.20	294	4.00	8.20	300	4.00	8.20	312	4.00	8.20	306	4.00	8.20	324	4.00	8.20	324	4.00	8.20	318	4.00	8.20	324
4.00	8.20	22.47	4.00	8.20	288	4.00	8.20	258	4.00	8.20	288	4.00	8.20	300	4.00	8.20	312	4.00	8.20	306	4.00	8.20	312	4.00	8.20	318	4.00	8.20	318	4.00	8.20	318
3.00	6.20	22.11	3.00	6.20	282	3.00	6.20	258	3.00	6.20	276	3.00	6.20	300	3.00	6.20	288	3.00	6.20	282	3.00	6.20	270	3.00	6.20	312	3.00	6.20	312	3.00	6.20	312
3.00	6.20	20.32	3.00	6.20	276	3.00	6.20	234	3.00	6.20	240	3.00	6.20	270	3.00	6.20	252	3.00	6.20	246	3.00	6.20	252	3.00	6.20	282	3.00	6.20	288	3.00	6.20	294
3.00	6.20	18.17	3.00	6.20	258	3.00	6.20	210	3.00	6.20	222	3.00	6.20	240	3.00	6.20	234	3.00	6.20	228	3.00	6.20	234	3.00	6.20	258	3.00	6.20	264	3.00	6.20	270
3.00	6.20	17.1	3.00	6.20	228	3.00	6.20	192	3.00	6.20	210	3.00	6.20	222	3.00	6.20	222	3.00	6.20	210	3.00	6.20	222	3.00	6.20	240	3.00	6.20	246	3.00	6.20	252
3.00	6.20	17.1	3.00	6.20	204	3.00	6.20	186	3.00	6.20	198	3.00	6.20	210	3.00	6.20	210	3.00	6.20	210	3.00	6.20	222	3.00	6.20	228	3.00	6.20	234	3.00	6.20	246
3.00	6.20	16.74	3.00	6.20	198	3.00	6.20	174	3.00	6.20	192	3.00	6.20	204	3.00	6.20	210	3.00	6.20	204	3.00	6.20	210	3.00	6.20	222	3.00	6.20	228	3.00	6.20	228
2.00	4.10	16.39	2.00	4.10	192	2.00	4.10	168	2.00	4.10	192	2.00	4.10	198	2.00	4.10	204	2.00	4.10	186	2.00	4.10	186	2.00	4.10	210	2.00	4.10	210	2.00	4.10	222
2.00	5.20	14.24	2.00	5.20	192	2.00	5.20	156	2.00	5.20	162	2.00	5.20	174	2.00	5.20	180	2.00	5.20	168	2.00	5.20	162	2.00	5.20	198	2.00	5.20	192	2.00	5.20	204
2.00	5.20	12.81	2.00	5.20	162	2.00	5.20	132	2.00	5.20	144	2.00	5.20	156	2.00	5.20	156	2.00	5.20	138	2.00	5.20	144	2.00	5.20	180	2.00	5.20	174	2.00	5.20	186
2.00	5.20	12.09	2.00	5.20	144	2.00	5.20	114	2.00	5.20	132	2.00	5.20	132	2.00	5.20	138	2.00	5.20	126	2.00	5.20	132	2.00	5.20	156	2.00	5.20	162	2.00	5.20	168
2.00	5.20	11.38	2.00	5.20	132	2.00	5.20	102	2.00	5.20	114	2.00	5.20	120	2.00	5.20	126	2.00	5.20	114	2.00	5.20	120	2.00	5.20	144	2.00	5.20	144	2.00	5.20	156
2.00	5.20	11.02	2.00	5.20	114	2.00	5.20	90	2.00	5.20	102	2.00	5.20	108	2.00	5.20	114	2.00	5.20	102	2.00	5.20	114	2.00	5.20	132	2.00	5.20	138	2.00	5.20	150
1.00	3.30	10.66	1.00	3.30	108	1.00	3.30	84	1.00	3.30	96	1.00	3.30	102	1.00	3.30	108	1.00	3.30	96	1.00	3.30	90	1.00	3.30	120	1.00	3.30	132	1.00	3.30	138
1.00	3.30	8.87	1.00	3.30	96	1.00	3.30	72	1.00	3.30	84	1.00	3.30	90	1.00	3.30	102	1.00	3.30	84	1.00	3.30	72	1.00	3.30	102	1.00	3.30	120	1.00	3.30	132
1.00	3.30	7.798	1.00	3.30	90	1.00	3.30	54	1.00	3.30	66	1.00	3.30	72	1.00	3.30	78	1.00	3.30	66	1.00	3.30	60	1.00	3.30	90	1.00	3.30	102	1.00	3.30	120
1.00	3.30	6.725	1.00	3.30	78	1.00	3.30	42	1.00	3.30	48	1.00	3.30	60	1.00	3.30	66	1.00	3.30	48	1.00	3.30	48	1.00	3.30	78	1.00	3.30	90	1.00	3.30	108
1.00	3.30	5.651	1.00	3.30	54	1.00	3.30	18	1.00	3.30	36	1.00	3.30	42	1.00	3.30	54	1.00	3.30	36	1.00	3.30	30	1.00	3.30	60	1.00	3.30	84	1.00	3.30	102
1.00	3.30	5.294	1.00	3.30	48	1.00	3.30	0	1.00	3.30	24	1.00	3.30	24	1.00	3.30	36	1.00	3.30	18	1.00	3.30	18	1.00	3.30	48	1.00	3.30	72	1.00	3.30	84
0.00	0.00	4.578	0.00	0.00	36	0.00	0.00	6	0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00	

Table 4: Enclosure 4 Data

B2-45 Degrees S2 E4 OS100			B3-45 Degrees S2 E4 OS 100			B4-30 Degrees S2 E4 OS100			B4-37.5 Degrees S2 E4 OS100			B4-45 Degrees S2 E4 OS 100			B4-52.5 Degrees S2 E4 OS100			B4-60 Degrees S2 E4 OS100			B5-45 Degrees S2 E4 OS100			B6-45 Degrees S2 E4 OS100			B7-45 Degrees S2 E4 OS100			B8-45 Degrees S2 E4 OS100		
2	11.2125	22.425	3	11.2125	33.6375	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	4	11.2125	44.85	5	11.2125	56.0625	6	11.2125	67.275	7	11.2125	78.4875	8	11.2125	89.7
Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm	Hz	MPH	rpm
20.00	41.10	1464	20.00	41.10	1446	20.00	41.10	1698	20.00	41.10	1674	20.00	41.10	1470	20.00	41.10	1662	20.00	41.10	1632	20.00	41.10	1656	20.00	41.10	1680	20.00	41.10		20.00	41.10	1722
20.00	41.10	1584	20.00	41.10	1644	20.00	41.10	1698	20.00	41.10	1668	20.00	41.10	1548	20.00	41.10	1668	20.00	41.10	1644	20.00	41.10	1650	20.00	41.10	1668	20.00	41.10		20.00	41.10	1716
20.00	41.10	1572	20.00	41.10	1668	20.00	41.10	1698	20.00	41.10	1674	20.00	41.10	1560	20.00	41.10	1668	20.00	41.10	1644	20.00	41.10	1662	20.00	41.10	1674	20.00	41.10		20.00	41.10	1716
20.00	41.10	1572	20.00	41.10	1668	20.00	41.10	1704	20.00	41.10	1668	20.00	41.10	1566	20.00	41.10	1662	20.00	41.10	1650	20.00	41.10	1656	20.00	41.10	1668	20.00	41.10		20.00	41.10	1716
20.00	41.10	1554	20.00	41.10	1644	20.00	41.10	1698	20.00	41.10	1674	20.00	41.10	1566	20.00	41.10	1668	20.00	41.10	1644	20.00	41.10	1656	20.00	41.10	1662	20.00	41.10		20.00	41.10	1716
20.00	41.10	1536	20.00	41.10	1638	20.00	41.10	1704	20.00	41.10	1674	20.00	41.10	1566	20.00	41.10	1662	20.00	41.10	1638	20.00	41.10	1656	20.00	41.10	1668	20.00	41.10		20.00	41.10	1722
19.00	39.10	1536	19.00	39.10	1608	19.00	39.10	1566	19.00	39.10	1674	19.00	39.10	1548	19.00	39.10	1668	19.00	39.10	1620	19.00	39.10	1656	19.00	39.10	1668	19.00	39.10		19.00	39.10	1722
19.00	39.10	1482	19.00	39.10	1548	19.00	39.10	1524	19.00	39.10	1674	19.00	39.10	1482	19.00	39.10	1650	19.00	39.10	1554	19.00	39.10	1590	19.00	39.10	1662	19.00	39.10		19.00	39.10	1674
19.00	39.10	1452	19.00	39.10	1554	19.00	39.10	1512	19.00	39.10	1680	19.00	39.10	1476	19.00	39.10	1590	19.00	39.10	1554	19.00	39.10	1572	19.00	39.10	1608	19.00	39.10		19.00	39.10	1644
19.00	39.10	1452	19.00	39.10	1542	19.00	39.10	1506	19.00	39.10	1644	19.00	39.10	1476	19.00	39.10	1584	19.00	39.10	1548	19.00	39.10	1566	19.00	39.10	1572	19.00	39.10		19.00	39.10	1638
19.00	39.10	1446	19.00	39.10	1548	19.00	39.10	1512	19.00	39.10	1590	19.00	39.10	1482	19.00	39.10	1584	19.00	39.10	1548	19.00	39.10	1572	19.00	39.10	1566	19.00	39.10		19.00	39.10	1632
19.00	39.10	1440	19.00	39.10	1548	19.00	39.10	1518	19.00	39.10	1590	19.00	39.10	1476	19.00	39.10	1584	19.00	39.10	1548	19.00	39.10	1566	19.00	39.10	1572	19.00	39.10		19.00	39.10	1626
18.00	37.00	1440	18.00	37.00	1548	18.00	37.00	1506	18.00	37.00	1578	18.00	37.00	1482	18.00	37.00	1578	18.00	37.00	1548	18.00	37.00	1572	18.00	37.00	1572	18.00	37.00		18.00	37.00	1632
18.00	37.00	1386	18.00	37.00	1494	18.00	37.00	1512	18.00	37.00	1512	18.00	37.00	1452	18.00	37.00	1572	18.00	37.00	1488	18.00	37.00	1566	18.00	37.00	1566	18.00	37.00		18.00	37.00	1596
18.00	37.00	1356	18.00	37.00	1464	18.00	37.00	1506	18.00	37.00	1488	18.00	37.00	1398	18.00	37.00	1512	18.00	37.00	1464	18.00	37.00	1512	18.00	37.00	1512	18.00	37.00		18.00	37.00	1560
18.00	37.00	1362	18.00	37.00	1452	18.00	37.00	1518	18.00	37.00	1494	18.00	37.00	1386	18.00	37.00	1494	18.00	37.00	1452	18.00	37.00	1482	18.00	37.00	1482	18.00	37.00		18.00	37.00	1548
18.00	37.00	1356	18.00	37.00	1452	18.00	37.00	1512	18.00	37.00	1500	18.00	37.00	1386	18.00	37.00	1500	18.00	37.00	1458	18.00	37.00	1488	18.00	37.00	1476	18.00	37.00		18.00	37.00	1542
18.00	37.00	1362	18.00	37.00	1452	18.00	37.00	1506	18.00	37.00	1494	18.00	37.00	1392	18.00	37.00	1494	18.00	37.00	1464	18.00	37.00	1488	18.00	37.00	1476	18.00	37.00		18.00	37.00	1548
17.00	34.90	1368	17.00	34.90	1440	17.00	34.90	1440	17.00	34.90	1494	17.00	34.90	1386	17.00	34.90	1494	17.00	34.90	1458	17.00	34.90	1494	17.00	34.90	1482	17.00	34.90		17.00	34.90	1548
17.00	34.90	1356	17.00	34.90	1374	17.00	34.90	1428	17.00	34.90	1428	17.00	34.90	1356	17.00	34.90	1476	17.00	34.90	1398	17.00	34.90	1470	17.00	34.90	1464	17.00	34.90		17.00	34.90	1542
17.00	34.90	1332	17.00	34.90	1362	17.00	34.90	1428	17.00	34.90	1416	17.00	34.90	1308	17.00	34.90	1416	17.00	34.90	1374	17.00	34.90	1416	17.00	34.90	1410	17.00	34.90		17.00	34.90	1542
17.00	34.90	1290	17.00	34.90	1362	17.00	34.90	1428	17.00	34.90	1404	17.00	34.90	1296	17.00	34.90	1404	17.00	34.90	1362	17.00	34.90	1404	17.00	34.90	1386	17.00	34.90		17.00	34.90	1500
17.00	34.90	1278	17.00	34.90	1362	17.00	34.90	1428	17.00	34.90	1410	17.00	34.90	1296	17.00	34.90	1398	17.00	34.90	1368	17.00	34.90	1398	17.00	34.90	1380	17.00	34.90		17.00	34.90	1464
17.00	34.90	1278	17.00	34.90	1362	17.00	34.90	1422	17.00	34.90	1404	17.00	34.90	1290	17.00	34.90	1404	17.00	34.90	1374	17.00	34.90	1398	17.00	34.90	1386	17.00	34.90		17.00	34.90	1464
16.00	32.80	1284	16.00	32.80	1338	16.00	32.80	1428	16.00	32.80	1410	16.00	32.80	1290	16.00	32.80	1404	16.00	32.80	1368	16.00	32.80	1392	16.00	32.80	1380	16.00	32.80		16.00	32.80	1446
16.00	32.80	1272	16.00	32.80	1272	16.00	32.80	1422	16.00	32.80	1368	16.00	32.80	1296	16.00	32.80	1392	16.00	32.80	1356	16.00	32.80	1368	16.00	32.80	1368	16.00	32.80		16.00	32.80	1404
16.00	32.80	1218	16.00	32.80	1272	16.00	32.80	1428	16.00	32.80	1326	16.00	32.80	1290	16.00	32.80	1332	16.00	32.80	1308	16.00	32.80	1308	16.00	32.80	1308	16.00	32.80		16.00	32.80	1374
16.00	32.80	1200	16.00	32.80	1278	16.00	32.80	1422	16.00	32.80	1320	16.00	32.80	1296	16.00	32.80	1308	16.00	32.80	1284	16.00	32.80	1308	16.00	32.80	1302	16.00	32.80		16.00	32.80	1380
16.00	32.80	1200	16.00	32.80	1272	16.00	32.80	1428	16.00	32.80	1320	16.00	32.80	1290	16.00	32.80	1308	16.00	32.80	1284	16.00	32.80	1308	16.00	32.80	1302	16.00	32.80		16.00	32.80	1374
16.00	32.80	1188	16.00	32.80	1278	16.00	32.80	1416	16.00	32.80	1314	16.00	32.80	1296	16.00	32.80	1302	16.00	32.80	1278	16.00	32.80	1302	16.00	32.80	1296	16.00	32.80		16.00	32.80	1374
15.00	30.80	1188	15.00	30.80	1272	15.00	30.80	1350	15.00	30.80	1314	15.00	30.80	1290	15.00	30.80	1308	15.00	30.80	1278	15.00	30.80	1302	15.00	30.80	1296	15.00	30.80		15.00	30.80	1362
15.00	30.80	1128	15.00	30.80	1248	15.00	30.80	1344	15.00	30.80	1272	15.00	30.80	1224	15.00	30.80	1290	15.00	30.80	1218	15.00	30.80	1272	15.00	30.80	1302	15.00	30.80		15.00	30.80	1320
15.00	30.80	1110	15.00	30.80	1194	15.00	30.80	1332	15.00	30.80	1230	15.00	30.80	1194	15.00	30.80	1230	15.00	30.80	1200	15.00	30.80	1212	15.00	30.80	1260	15.00	30.80		15.00	30.80	1290
15.00	30.80	1110	15.00	30.80	1188	15.00	30.80	1338	15.00	30.80	1224	15.00	30.80	1182	15.00	30.80	1224	15.00	30.80	1194	15.00	30.80	1206	15.00	30.80	1218	15.00	30.80		15.00	30.80	1290
15.00	30.80	1110	15.00	30.80	1188	15.00	30.80	1338	15.00	30.80	1230	15.00	30.80	1182	15.00	30.80	1218	15.00	30.80	1194	15.00	30.80	1212	15.00	30.80	1212	15.00	30.80		15.00	30.80	1284
15.00	30.80	1110	15.00	30.80	1194	15.00	30.80	1320	15.00	30.80	1224	15.00	30.80	1182	15.00	30.80	1218	15.00	30.80	1194	15.00	30.80	1212	15.00	30.80	1212	15.00	30.80		15.00	30.80	1284
14.00	28.70	1110	14.00	28.70	1194	14.00	28.70	1260	14.00	28.70	1200	14.00	28.70	1182	14.00	28.70	1212	14.00	28.70	1200	14.00	28.70	1206	14.00	28.70	1206	14.00	28.70		14.00	28.70	1284
14.00	28.70	1098	14.00	28.70	1152	14.00	28.70	1242	14.00	28.70	1116	14.00	28.70	1134	14.00	28.70	1218	14.00	28.70	1188	14.00	28.70	1176	14.00	28.70	1212	14.00	28.70		14.00	28.70	1254
14.00	28.70	1056	14.00	28.70	1110	14.00	28.70	1242	14.00	28.70	1104	14.00	28.70	1080	14.00	28.70	1212	14.00	28.70	1128	14.00	28.70	1134	14.00	28.70	1164	14.00	28.70		14.00	28.70	1224
14.00	28.70	1026	14.00	28.70	1104	14.00	28.70	1242	14.00	28.70	1110	14.00	28.70	1080	14.00	28.70	1152	14.00	28.70	1122	14.00	28.70	1122	14.00	28.70	1122	14.00	28.70		14.00	28.70	1212
14.00	28.70	1032	14.00	28.70	1110	14.00	28.70	1242	14.00	28.70	1104	14.00	28.70	1080	14.00	28.70	1122	14.00	28.70	1110	14.00	28.70	1128	14.00	28.70	1110	14.00	28.70		14.00	28.70	1206
14.00	28.70	1026	14.00	28.70	1110	14.00	28.70	1212	14.00	28.70	1116	14.00	28.70	1080	14.00	28.70	1122	14.00	28.70	1110	14.00	28.70	1122	14.00	28.70	1116	14.00	28.70		14.00	28.70	1212
13.00	26.70	1026	13.00	26.70	1098	13.00	26.70	1164	13.00	26.70	1104	13.00	26.70	1074	13.00	26.70	1122	13.00	26.70	1116	13.00	26.70	1116	13.00	26.70	1110	13.00	26.70		13.00	26.70	1200
13.00	26.70	1020	13.00	26.70	1086	13.00	26.70	1146	13.00	26.70	1068	13.00	26.70	1032	13.00	26.70	1098	13.00	26.70	1068	13.00	26.70	1116	13.00	26.70	1098	13.00	26.70		13.00	26.70	1158
13.00	26.70	966	13.00	26.70	1032	13.00	26.70	1146	13.00	26.70	1002	13.00	26.70	984	13.00	26.70	1050	13.00	26.70	1032	13.00	26.70	1068	13.00	26.70	1038	13.00	26.70		13.00	26.70	1140
13.00	26.70	948	13.00	26.70	1026	13.00	26.70	1146	13.00	26.70	990	13.00	26.70	972	13.00	26.70	1044	13.00	26.70	1026	13.00	26.70	1044	13.00	26.70	1026	13.00	26.70		13.00	26.70	1128
13.00	26.70	942	13.00	26.70	1032	13.00	26.70	1152	13.00	26.70	984	13.00	26.70	972	13.00	26.70	1038	13.00	26.70	1026	13.00	26.70	1038	13.00	26.70	1020	13.00	26.70		13.00	26.70	1128
13.00	26.70	948	13.00	26.70	1026	13.00	26.70	1140	13.00	26.70	978	13.00	26.70	978	13.00	26.70	1038	13.00	26.70	1020	13.00	26.70	1038	13.00	26.70	1014	13.00	26.70		13.00	26.70	1128
12.00	24.60	942	12.00	24.60	1020	12.00	24.60	1140	12.00	24.60	972	12.00	24.60	972	12.00	24.60	1038	12.00	24.60	1020	12.00	24.60	1044	12.00	24.60	1014	12.00	24.60		12.00	24.60	1128
12.00	24.60	942	12.00	24.60	966	12.00	24.60	1086	12.00	24.60	930	12.00	24.60	912	12.00	24.60	1020	12.00	24.60	972	12.00	24.60	1038	12.00	24.60	1020	12.00	24.60		12.00	24.60	1110
12.00	24.60	900	12.00	24.60	948	12.00	24.60	1062	12.00	24.60	888	12.00	24.60	888	12.00	24.60	966	12.00	24.60	942	12.00	24.60	1026	12.00	24.60	978	12.00	24.60		12.00	24.60	1080
12.00	24.60	870	12.00	24.60	942	12.00	24.60	1050	12.00	24.60	876	12.00	24.60	876	12.00	24.60	960	12.00	24.60	942	12.00	24.60	972	12.00	24.60	834	12.00	24.60		12.00	24.60	1056
12.00	24.60	870	12.00	24.60	942	12.00	24.60	1056	12.00	24.60	876	12.00	24.60	876	12.00	24.60	948	12.00	24.60	942	12.00	24.60	954	12.00	24.60	768	12.00	24.60		12.00	24.60	1050
12.00	24.60	864	12.00	24.60	942	12.00	24.60	1050	12.00	24.60	882	12.00	24.60	876	12.00	24.60	954	12.00	24.60	942	12.00	24.60	954	12.00	24.60	750	12.00	24.60		12.00	24.60	1044
11.00	22.60	870	11.00	22.60	948	11.00	22.60	996	11.00	22.60	876	11.00	22.60	870	11.00	22.60	954	11.00	22.60	942	11.00	22.60	948	11.00	22.60	738	11.00	22.60		11.00	22.60	1050
11.00	22.60	858	11.00	22.60	888	11.00	22.60	972	11.00	22.60	840	11.00	22.60	864	11.00	22.60	918	11.00	22.60	924	11.00	22.60	918	11.00	22.60	726	11.00	22.60		11.00	22.60	1032
11.00	22.60	810	11.00	22.60	852	11.00	22.60	966	11.00	22.60	786	11.00	22.60	870	11.00	22.60	876	11.00	22.60	876	11.00	22.60	876	11.00	22.60	672	11.00	22.60		11.00	22.60	990
11.00	22.60	792	11.00	22.60	846	11.00	22.60	960	11.00	22.60	786	11.00	22.60	870	11.00	22.60	870	11.00	22.60	852	11.00	22.60	864	11.00	22.60	660	11.00	22.60		11.00	22.60	972
11.00	22.60	786	11.00	22.60	846	11.00	22.60	966	11.00	22.60	786	11.00	22.60	864	11.00	22.60	864	11.00	22.60	852	11.00	22.60	864	11.00	22.60	648	11.00	22.60		11.00	22.60	960
11.00	22.60	786	11.00	22.60	846	11.00	22.60	960	11.00	22.60	786	11.00	22.60	870	11.00	22.60	870	11.00	22.60	852	11.00	22.60	864	11.00	22.60	648	11.00	22.60		11.00	22.60	954
10.00	20.50	792	10.00	20.50	816	10.00	20.50	930	10.00	20.50	780	10.00	20.50	864	10.00	20.50	864	10.00	20.50	840	10.00	20.50	858	10.00	20.50	648	10.00	20.50		10.00	20.50	960
10.00	20.50	786	10.00	20.50	762	10.00	20.50	894	10.00	20.50	738	10.00	20.50	804	10.00	20.50	852	10.00	20.50	786	10.00	20.50	852	10.00	20.50	648	10.00	20.50		10.00	20.50	936
10.00	20.50	792	10.00	20.50	738	10.00	20.50	882	10.00	20.50	696	10.00	20.50	774	10.00	20.50	804	10.00	20.50	774	10.00	20.50	798	10.00	20.50	612	10.00	20.50		10.00	20.50	900
10.00	20.50	792	10.00	20.50	732	10.00	20.50	876	10.00	20.50	684	10.00	20.50	780	10.00	20.50	792	10.00	20.50	762	10.00	20.50	780	10.00	20.50	576	10.00	20.50		10.00	20.50	876
10.00	20.50	786	10.00	20.50	732	10.00	20.50	876	10.00	20.50	678	10.00	20.50	774	10.00	20.50	786	10.00	20.50	762	10.00	20.50	780	10.00	20.50	564	10.00	20.50		10.00	20.50	870
10.00	20.50	786	10.00	20.50	732	10.00	20.50	864	10.00	20.50	684	10.00	20.50	768	10.00	20.50	786	10.00	20.50	762	10.00	20.50	774	10.00	20.50	564	10.00	20.50		10.00	20.50	864
9.00	18.50	786	9.00	18.50	732	9.00	18.50	816	9.00	18.50	684	9.00	18.50	768	9.00	18.50	780	9.00	18.50	756	9.00	18.50	780	9.00	18.50	558	9.00	18.50		9.00	18.50	852
9.00	18.50	744	9.00	18.50	690	9.00	18.50	792	9.00	18.50	660	9.00	18.50	708	9.00	18.50	774	9.00	18.50	708	9.00	18.50	732	9.00	18.50	564	9.00	18.50		9.00	18.50	828
9.00	18.50	720	9.00	18.50	630	9.00	18.50	792	9.00	18.50	594	9.00	18.50	672	9.00	18.50	732	9.00	18.50	684	9.00	18.50	702	9.00	18.50	534	9.00	18.50		9.00	18.50	792
9.00	18.50	714	9.00	18.50	612	9.00	18.50	786	9.00	18.50	582	9.00	18.50	672	9.00	18.50	708	9.00	18.50	678	9.00	18.50	690	9.00	18.50	498	9.00	18.50		9.00	18.50	774
9.00	18.50	708	9.00	18.50	612	9.00	18.50	786	9.00	18.50	576	9.00	18.50	672	9.00	18.50	702	9.00	18.50	678	9.00	18.50	690	9.00	18.50	480	9.00	18.50		9.00	18.50	768
9.00	18.50	708	9.00	18.50	606	9.00	18.50	774	9.00	18.50	576	9.00	18.50	666	9.00	18.50	702	9.00	18.50	678	9.00	18.50	684	9.00	18.50	468	9.00	18.50		9.00	18.50	762
8.00	16.40	696	8.00	16.40	576	8.00	16.40	726	8.00	16.40	558	8.00	16.40	666	8.00	16.40	702	8.00	16.40	672	8.00	16.40	690	8.00	16.40	474	8.00	16.40		8.00	16.40	762
8.00	16.40	648	8.00	16.40	510	8.00	16.40	702	8.00	16.40	498	8.00	16.40	660	8.00	16.40	684	8.00	16.40	666	8.00	16.40	654	8.00	16.40	456	8.00	16.40		8.00	16.40	750
8.00	16.40	630	8.00	16.40	492	8.00	16.40	702	8.00	16.40	468	8.00	16.40	618	8.00	16.40	642	8.00	16.40	624	8.00	16.40	612	8.00	16.40	378	8.00	16.40		8.00	16.40	720
8.00	16.40	624	8.00	16.40	486	8.00	16.40	696	8.00	16.40	450	8.00	16.40	558	8.00	16.40	618	8.00	16.40	600	8.00	16.40	606	8.00	16.40	300	8.00	16.40		8.00	16.40	690
8.00	16.40	624	8.00	16.40	492	8.00	16.40	702	8.00	16.40	444	8.00	16.40	552	8.00	16.40	618	8.00	16.40	594	8.00	16.40	594	8.00	16.40	246	8.00	16.40		8.00	16.40	678
8.00	16.40	618	8.00	16.40	492	8.00	16.40	690	8.00	16.40	444	8.00	16.40	540	8.00	16.40	612	8.00	16.40	588	8.00	16.40	600	8.00	16.40	222	8.00	16.40		8.00	16.40	672
7.00	14.40	600	7.00	14.40	486	7.00	14.40	648	7.00	14.40	438	7.00	14.40	540	7.00	14.40	612	7.00	14.40	582	7.00	14.40	594	7.00	14.40	204	7.00	14.40		7.00	14.40	660
7.00	14.40	558	7.00	14.40	420	7.00	14.40	624	7.00	14.40	390	7.00	14.40	528	7.00	14.40	600	7.00	14.40	540	7.00	14.40	594	7.00	14.40	192	7.00	14.40		7.00	14.40	630
7.00	14.40	540	7.00	14.40	384	7.00	14.40	618	7.00	14.40	348	7.00	14.40	444	7.00	14.40	570	7.00	14.40	516	7.00	14.40	564	7.00	14.40	168	7.00	14.40		7.00	14.40	606
7.00	14.40	546	7.00	14.40	372	7.00	14.40	606	7.00	14.40	336	7.00	14.40	402	7.00	14.40	540	7.00	14.40	504	7.00	14.40	522	7.00	14.40	144	7.00	14.40		7.00	14.40	588
7.00	14.40	540	7.00	14.40	360	7.00	14.40	612	7.00	14.40	336	7.00	14.40	396	7.00	14.40	540	7.00	14.40	504	7.00	14.40	516	7.00	14.40	120	7.00	14.40		7.00	14.40	570
7.00	14.40	540	7.00	14.40	360	7.00	14.40	600	7.00	14.40	330	7.00	14.40	390	7.00	14.40	528	7.00	14.40	498	7.00	14.40	504	7.00	14.40	102	7.00	14.40		7.00	14.40	570
6.00	12.30	540	6.00	12.30	348	6.00	12.30	576	6.00	12.30	282	6.00	12.30	390	6.00	12.30	534	6.00	12.30	498	6.00	12.30	504	6.00	12.30	90	6.00	12.30		6.00	12.30	564
6.00	12.30	516	6.00	12.30	276	6.00	12.30	534	6.00	12.30	240	6.00	12.30	342	6.00	12.30	522	6.00	12.30	480	6.00	12.30	498	6.00	12.30	84	6.00	12.30		6.00	12.30	528
6.00	12.30	474	6.00	12.30	234	6.00	12.30	522	6.00	12.30	204	6.00	12.30	300	6.00	12.30	492	6.00	12.30	444	6.00	12.30	456	6.00	12.30	66	6.00	12.30		6.00	12.30	504
6.00	12.30	462	6.00	12.30	216	6.00	12.30	516	6.00	12.30	204	6.00	12.30	288	6.00	12.30	462	6.00	12.30	420	6.00	12.30	432	6.00	12.30	36	6.00	12.30		6.00	12.30	492
6.00	12.30	456	6.00	12.30	210	6.00	12.30	516	6.00	12.30	198	6.00	12.30	294	6.00	12.30	450	6.00	12.30	420	6.00	12.30	426	6.00	12.30	12	6.00	12.30		6.00	12.30	474
6.00	12.30	456	6.00	12.30	210	6.00	12.30	510	6.00	12.30	198	6.00	12.30	288	6.00	12.30	450	6.00	12.30	408	6.00	12.30	420	6.00	12.30	0	6.00	12.30		6.00	12.30	474
5.00	10.30	456	5.00	10.30	192	5.00	10.30	492	5.00	10.30	192	5.00	10.30	282	5.00	10.30	444	5.00	10.30	390	5.00	10.30	420	5.00	10.30	0	5.00	10.30		5.00	10.30	468
5.00	10.30	450	5.00	10.30	138	5.00	10.30	456	5.00	10.30	150	5.00	10.30	216	5.00	10.30	438	5.00	10.30	354	5.00	10.30	402	5.00	10.30	0	5.00	10.30		5.00	10.30	444
5.00	10.30	408	5.00	10.30	108	5.00	10.30	432	5.00	10.30	108	5.00	10.30	180	5.00	10.30	402	5.00	10.30	342	5.00	10.30	372	5.00	10.30	0	5.00	10.30		5.00	10.30	420
5.00	10.30	384	5.00	10.30	96	5.00	10.30	420	5.00	10.30	90	5.00	10.30	180	5.00	10.30	378	5.00	10.30	324	5.00	10.30	342	5.00	10.30	0	5.00	10.30		5.00	10.30	402
5.00	10.30	372	5.00	10.30	90	5.00	10.30	414	5.00	10.30	78	5.00	10.30	168	5.00	10.30	366	5.00	10.30	324	5.00	10.30	330	5.00	10.30	0	5.00	10.30		5.00	10.30	390
5.00	10.30	372	5.00	10.30	30	5.00	10.30	414	5.00	10.30	72	5.00	10.30	174	5.00	10.30	360	5.00	10.30	324	5.00	10.30	318	5.00	10.30	0	5.00	10.30		5.00	10.30	378
4.00	8.20	360	4.00	8.20	0	4.00	8.20	390	4.00	8.20	66	4.00	8.20	174	4.00	8.20	354	4.00	8.20	318	4.00	8.20	324	4.00	8.20	0	4.00	8.20		4.00	8.20	366
4.00	8.20	324	4.00	8.20	0	4.00	8.20	354	4.00	8.20	18	4.00	8.20	138	4.00	8.20	348	4.00	8.20	294	4.00	8.20	312	4.00	8.20	0	4.00	8.20		4.00	8.20	354
4.00	8.20	288	4.00	8.20	0	4.00	8.20	336	4.00	8.20	0	4.00	8.20	24	4.00	8.20	330	4.00	8.20	270	4.00	8.20	282	4.00	8.20	0	4.00	8.20		4.00	8.20	324
4.00	8.20	276	4.00	8.20	0	4.00	8.20	330	4.00	8.20	0	4.00	8.20	0	4.00	8.20	300	4.00	8.20	246	4.00	8.20	252	4.00	8.20	0	4.00	8.20		4.00	8.20	306
4.00	8.20	270	4.00	8.20	0	4.00	8.20	324	4.00	8.20	0	4.00	8.20	0	4.00	8.20	276	4.00	8.20	234	4.00	8.20	240	4.00	8.20	0	4.00	8.20		4.00	8.20	294
4.00	8.20	270	4.00	8.20	0	4.00	8.20	318	4.00	8.20	0	4.00	8.20	0	4.00	8.20	270	4.00	8.20	228	4.00	8.20	228	4.00	8.20	0	4.00	8.20		4.00	8.20	282
3.00	6.20	258	3.00	6.20	0	3.00	6.20	300	3.00	6.20	0	3.00	6.20	0	3.00	6.20	258	3.00	6.20	216	3.00	6.20	228	3.00	6.20	0	3.00	6.20		3.00	6.20	270
3.00	6.20	240	3.00	6.20	0	3.00	6.20	264	3.00	6.20	0	3.00	6.20	0	3.00	6.20	246	3.00	6.20	186	3.00	6.20	204	3.00	6.20	0	3.00	6.20		3.00	6.20	258
3.00	6.20	204	3.00	6.20	0	3.00	6.20	252	3.00	6.20	0	3.00	6.20	0	3.00	6.20	222	3.00	6.20	162	3.00	6.20	174	3.00	6.20	0	3.00	6.20		3.00	6.20	234
3.00	6.20	186	3.00	6.20	0	3.00	6.20	234	3.00	6.20	0	3.00	6.20	0	3.00	6.20	192	3.00	6.20	144	3.00	6.20	150	3.00	6.20	0	3.00	6.20		3.00	6.20	216
3.00	6.20	180	3.00	6.20	0	3.00	6.20	222	3.00	6.20	0	3.00	6.20	0	3.00	6.20	174	3.00	6.20	138	3.00	6.20	132	3.00	6.20	0	3.00	6.20		3.00	6.20	198
3.00	6.20	168	3.00	6.20	0	3.00	6.20	222	3.00	6.20	0	3.00	6.20	0	3.00	6.20	162	3.00	6.20	126	3.00	6.20	120	3.00	6.20	0	3.00	6.20		3.00	6.20	192
2.00	4.10	162	2.00	4.10	0	2.00	4.10	180	2.00	4.10	0	2.00	4.10	0	2.00	4.10	150	2.00	4.10	126	2.00	4.10	120	2.00	4.10	0	2.00	4.10		2.00	4.10	180
2.00	5.20	138	2.00	5.20	0	2.00	5.20	144	2.00	5.20	0	2.00	5.20	0	2.00	5.20	150	2.00	5.20	120	2.00	5.20	102	2.00	5.20	0	2.00	5.20		2.00	5.20	162
2.00	5.20	102	2.00	5.20	0	2.00	5.20	102	2.00	5.20	0	2.00	5.20	0	2.00	5.20	120	2.00	5.20	96	2.00	5.20	72	2.00	5.20	0	2.00	5.20		2.00	5.20	144
2.00	5.20	60	2.00	5.20	0	2.00	5.20	66	2.00	5.20	0	2.00	5.20	0	2.00	5.20	96	2.00	5.20	78	2.00	5.20	54	2.00	5.20	0	2.00	5.20		2.00	5.20	126
2.00	5.20	36	2.00	5.20	0	2.00	5.20	42	2.00	5.20	0	2.00	5.20	0	2.00	5.20	78	2.00	5.20	54	2.00	5.20	24	2.00	5.20	0	2.00	5.20		2.00	5.20	114
2.00	5.20	18	2.00	5.20	0	2.00	5.20	12	2.00	5.20	0	2.00	5.20	0	2.00	5.20	54	2.00	5.20	30	2.00	5.20	12	2.00	5.20	0	2.00	5.20		2.00	5.20	96
1.00	3.30	0	1.00	3.30	0	1.00	3.30	6	1.00	3.30	0	1.00	3.30	0	1.00	3.30	48	1.00	3.30	18	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	84
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0.00	1.00	3.30	0	1.00	3.30	0	1.00	3.30	30	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	60
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0.00	1.00	3.30	0	1.00	3.30	0	1.00	3.30	18	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	48
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0.00	1.00	3.30	0	1.00	3.30	0	1.00	3.30	6	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	30
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0.00	1.00	3.30	0	1.00	3.30	0	1.00	3.30	6	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	12
1.00	3.30	0	1.00	3.30	0	1.00	3.30	0.00	1.00	3.30		1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30	0	1.00	3.30		1.00	3.30	6
0.00	0.00	0	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0	0.00	0.00	0	0.00	0.00		0.00	0.00		0.00	0.00	0	0.00	0.00		0.00	0.00	