

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P258072

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14825.6 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

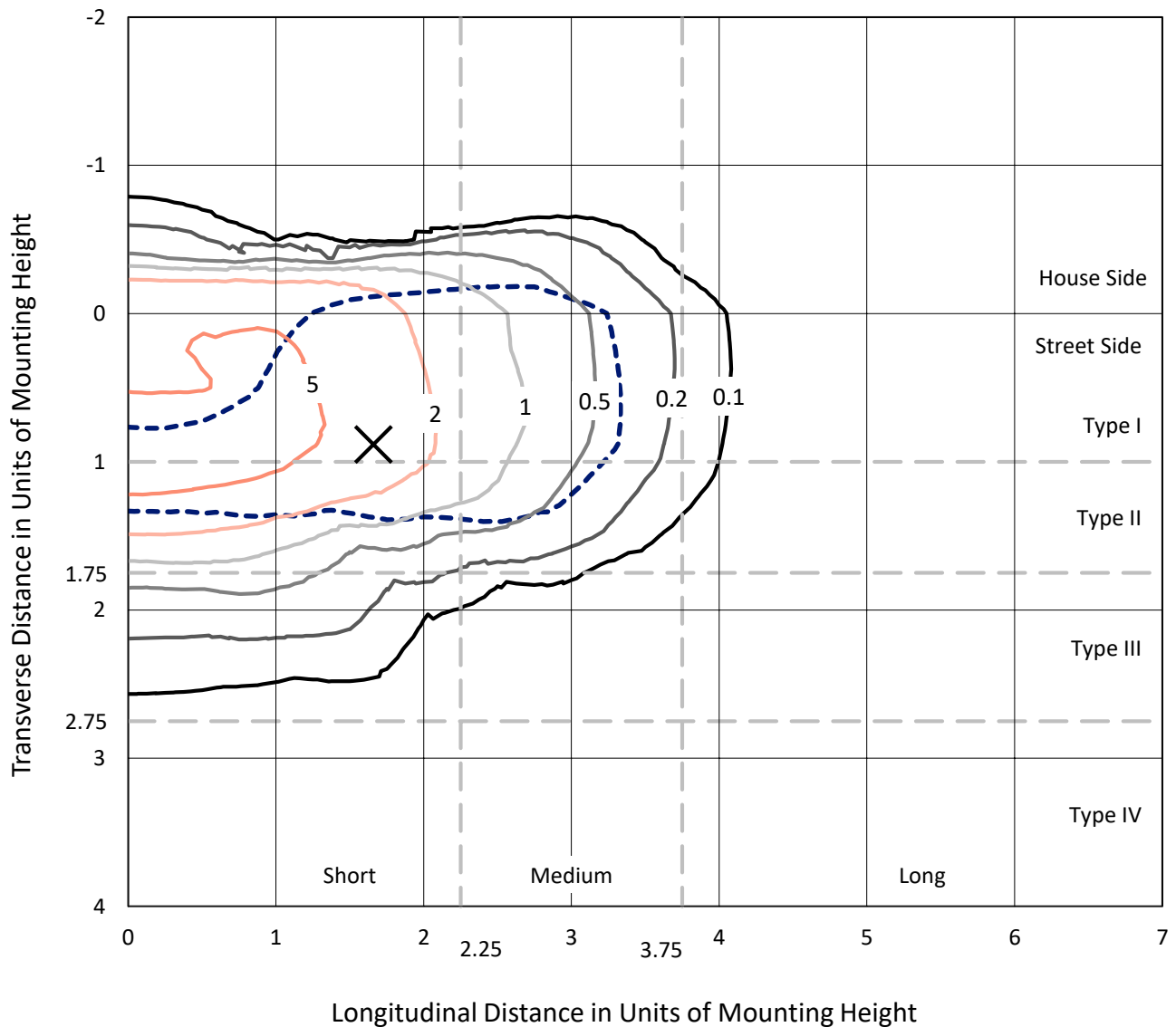
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

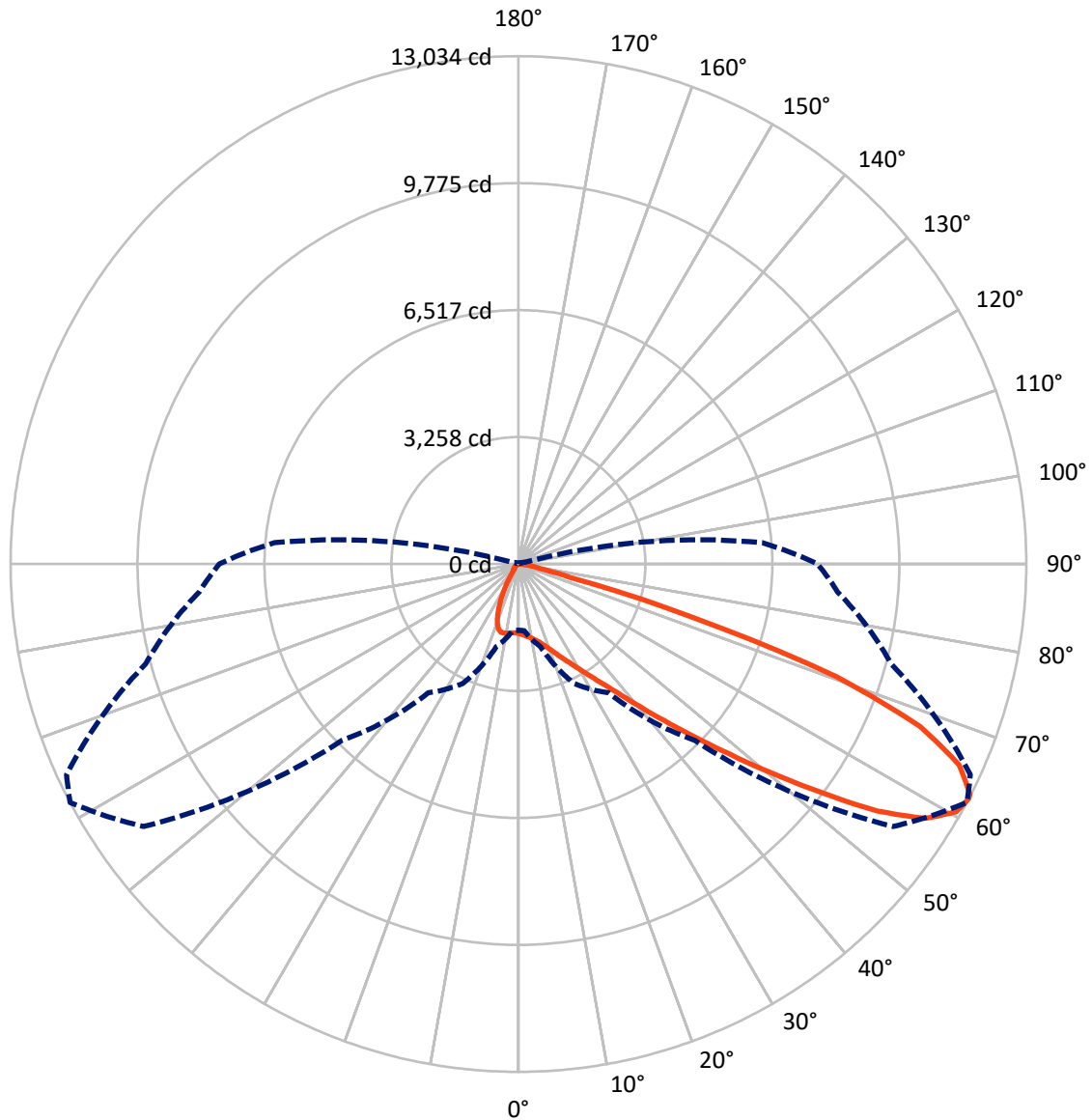
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical



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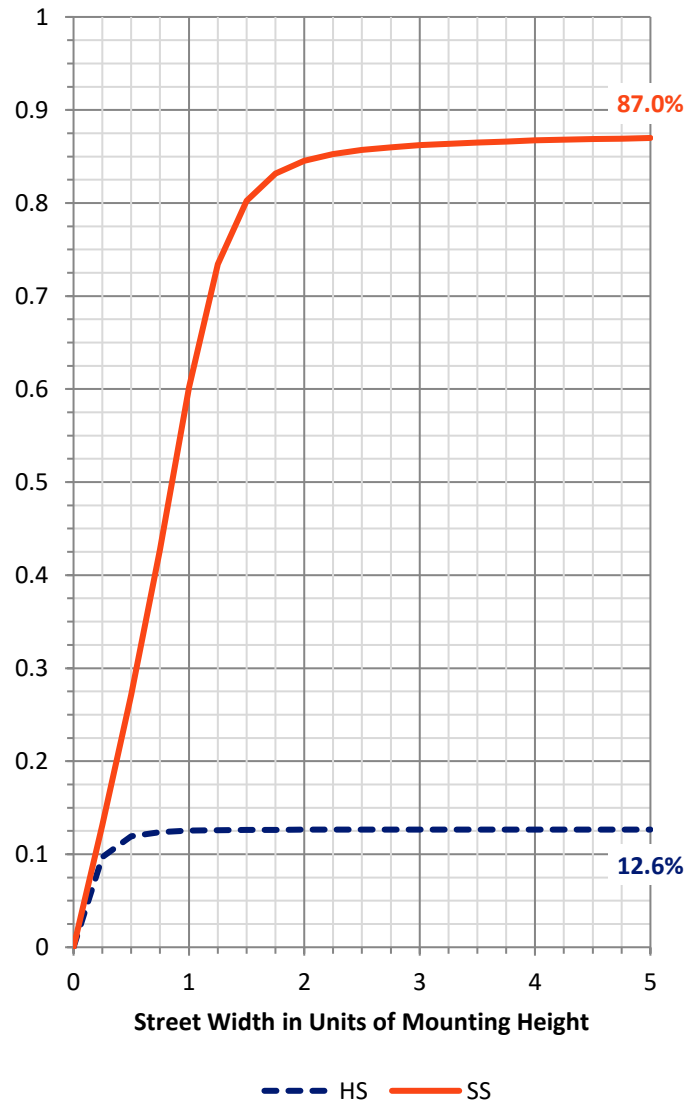
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1895.7	0.0	1895.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12930.0	0.0	12930.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	14825.6	0.0	14825.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	1.2
10°-20°	480.0	3.2
20°-30°	806.1	5.4
30°-40°	1545.2	10.4
40°-50°	3156.0	21.3
50°-60°	4176.5	28.2
60°-70°	3244.4	21.9
70°-80°	1171.1	7.9
80°-90°	74.6	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	14825.6	100.0
0°-180°	14825.6	100.0



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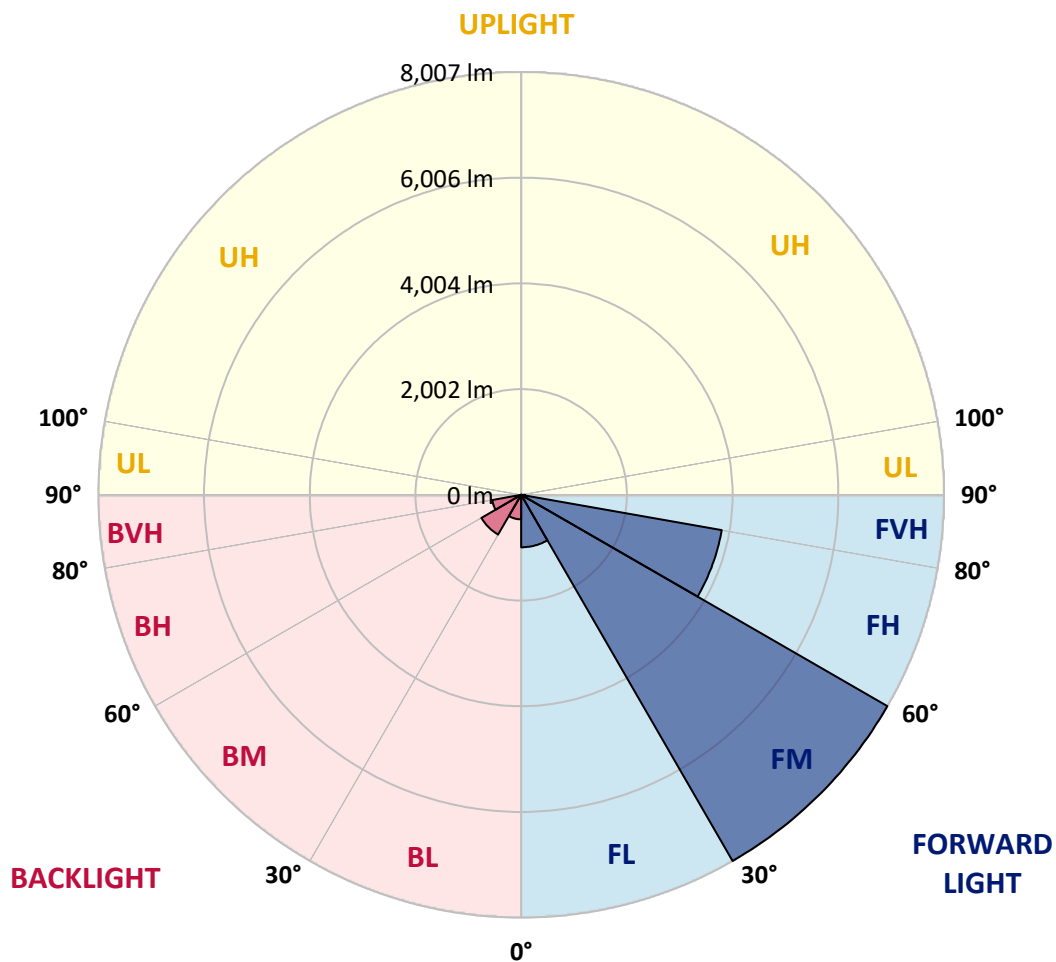
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	993.9	6.7			
FM	(30°-60°)	8007.4	54.0			
FH	(60°-80°)	3857.3	26.0			G2/5000
FVH	(80°-90°)	71.4	0.5			G1/100
BL	(0°-30°)	463.9	3.1	B1/500		
BM	(30°-60°)	870.3	5.9	B1/1000		
BH	(60°-80°)	558.2	3.8	B2/1000		G2/1000
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0
2.5°	1833.3	1829.6	1826.1	1822.4	1822.4	1818.7	1815.1	1807.8	1800.5	1793.2	1789.6
5°	1866.2	1862.5	1858.8	1862.5	1858.8	1858.8	1855.2	1847.9	1840.6	1829.6	1818.7
7.5°	1891.6	1888.0	1884.4	1888.0	1891.6	1895.3	1898.9	1891.6	1888.0	1873.4	1862.5
10°	1924.5	1920.8	1917.1	1924.5	1924.5	1942.7	1946.3	1942.7	1939.0	1928.1	1909.8
12.5°	1971.8	1975.4	1975.4	1982.8	1990.0	2011.9	2019.2	2008.3	2008.3	1993.7	1971.8
15°	2059.3	2059.3	2059.3	2066.6	2070.2	2099.4	2106.7	2095.7	2103.1	2077.5	2055.6
17.5°	2143.1	2146.8	2154.0	2168.7	2168.7	2194.1	2208.8	2208.8	2223.3	2190.5	2161.4
20°	2227.0	2230.6	2241.5	2274.3	2274.3	2307.2	2332.6	2343.6	2358.2	2325.4	2274.3
22.5°	2318.1	2318.1	2336.3	2387.4	2376.4	2442.0	2489.4	2507.6	2522.2	2478.4	2398.3
25°	2456.6	2442.0	2456.6	2504.0	2496.7	2587.8	2675.2	2693.5	2711.7	2660.7	2540.4
27.5°	2719.0	2697.1	2646.1	2649.7	2649.7	2755.4	2879.4	2904.9	2915.8	2872.0	2722.7
30°	3243.9	3243.9	3054.3	2926.8	2842.9	2937.7	3112.6	3156.4	3170.9	3105.4	2908.6
32.5°	4158.7	4158.7	3808.8	3484.4	3167.3	3167.3	3367.8	3448.0	3462.6	3386.0	3156.4
35°	5325.0	5317.7	4792.8	4348.3	3728.7	3495.3	3666.7	3801.5	3845.3	3743.2	3477.1
37.5°	6564.3	6516.8	5951.9	5441.7	4592.4	4020.2	4071.2	4249.8	4289.9	4206.1	3892.6
40°	7570.2	7515.5	7059.9	6633.5	5707.8	4858.5	4654.4	4818.4	4865.8	4749.2	4388.4
42.5°	8481.4	8346.6	8033.1	7727.0	6990.6	6309.2	5430.7	5496.3	5547.4	5423.4	4946.0
45°	9141.1	8933.3	8772.9	8678.2	8288.3	7901.9	6436.7	6305.5	6323.7	6170.6	5554.6
47.5°	9159.3	9013.5	9028.2	9275.9	9436.3	9421.8	7745.2	7278.6	7209.3	6954.2	6203.4
50°	8284.6	8368.5	8634.5	9341.6	10209.0	10733.8	9301.5	8430.3	8222.6	7763.4	6848.6
52.5°	6826.7	6957.9	7457.2	8649.0	10322.0	11597.7	10916.1	9746.2	9374.3	8565.3	7344.2
55°	5346.9	5354.1	5879.0	7092.7	9567.6	11754.4	12206.4	11193.1	10624.5	9173.9	7672.2
57.5°	3677.6	3878.0	4545.1	5361.5	7865.5	10974.4	12691.1	12315.7	11583.1	9549.3	7901.9
60°	2409.2	2420.1	3196.5	4140.5	5354.1	8929.7	12395.9	12909.8	12359.4	9771.6	8058.6
62°	1698.5	1716.7	2197.8	3382.4	4034.7	6400.2	11743.5	13033.7	12796.8	9902.9	8222.6
62.5°	1574.5	1589.2	1993.7	3192.8	3790.5	5740.5	11510.2	13004.6	12862.4	9946.6	8280.9
65°	1155.4	1155.4	1304.9	2194.1	2777.3	3101.7	9753.4	12425.1	12774.9	10296.5	8499.6
67.5°	892.9	900.3	951.2	1352.2	2095.7	1880.7	6225.3	11120.2	11863.8	10814.0	8623.6
70°	769.1	765.4	801.9	896.6	1512.5	1250.1	2740.9	8678.2	9935.6	10682.9	8510.5
72.5°	568.6	572.2	656.0	787.3	1053.3	812.7	1239.2	4607.0	6444.0	8361.1	7293.2
75°	364.5	368.2	462.9	619.6	758.1	532.1	714.3	1374.1	2638.8	4636.1	4461.2
77.5°	244.2	251.4	302.5	433.7	663.4	331.6	448.3	575.9	794.5	1738.6	1600.1
80°	164.0	164.0	193.1	291.5	419.1	277.0	240.6	382.7	411.8	539.4	269.8
82.5°	109.4	109.4	127.6	193.1	273.3	247.9	145.8	207.8	240.6	269.8	94.7
85°	65.6	65.6	87.5	120.3	178.6	138.5	94.7	116.6	123.9	171.3	51.0
87.5°	40.1	36.4	58.3	83.8	94.7	83.8	62.0	62.0	65.6	94.7	25.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0	1786.0
2.5°	1782.3	1778.6	1775.0	1767.8	1756.8	1749.5	1742.2	1734.9	1727.7	1727.7	1738.6
5°	1815.1	1804.2	1789.6	1775.0	1753.1	1738.6	1727.7	1713.0	1705.8	1705.8	1709.4
7.5°	1855.2	1844.3	1818.7	1793.2	1760.4	1734.9	1709.4	1676.6	1651.0	1640.2	1651.0
10°	1898.9	1884.4	1847.9	1807.8	1771.3	1705.8	1621.9	1519.9	1432.4	1392.3	1410.5
12.5°	1953.6	1935.4	1891.6	1837.0	1753.1	1592.7	1385.0	1148.1	998.7	929.5	944.0
15°	2033.8	2008.3	1946.3	1862.5	1676.6	1330.3	991.3	718.0	579.5	521.2	528.5
17.5°	2128.6	2095.7	2011.9	1855.2	1479.8	958.6	590.4	419.1	360.8	346.3	346.3
20°	2230.6	2186.9	2077.5	1800.5	1180.9	601.4	368.2	320.7	298.9	288.0	288.0
22.5°	2336.3	2278.0	2132.2	1672.9	842.0	375.4	302.5	269.8	244.2	233.2	233.2
25°	2463.9	2387.4	2186.9	1450.6	535.8	302.5	258.8	226.0	200.5	185.9	189.6
27.5°	2613.3	2514.9	2234.2	1173.6	346.3	262.4	215.0	182.3	160.4	153.0	153.0
30°	2770.0	2653.4	2245.2	878.4	280.7	226.0	178.6	149.5	134.8	127.6	127.6
32.5°	2985.1	2832.0	2212.3	583.2	236.9	189.6	149.5	123.9	113.0	109.4	109.4
35°	3269.4	3065.3	2135.8	360.8	200.5	156.7	123.9	109.4	98.4	94.7	94.7
37.5°	3630.1	3389.6	2001.0	247.9	171.3	127.6	105.7	94.7	87.5	83.8	83.8
40°	4111.3	3783.3	1826.1	215.0	145.8	109.4	91.1	83.8	76.5	76.5	76.5
42.5°	4621.6	4260.7	1600.1	189.6	123.9	94.7	80.2	72.9	69.3	65.6	65.6
45°	5179.2	4749.2	1319.4	167.7	105.7	83.8	72.9	62.0	58.3	58.3	58.3
47.5°	5733.2	5252.1	1013.2	145.8	91.1	72.9	62.0	54.6	51.0	47.4	47.4
50°	6301.8	5707.8	743.6	127.6	80.2	65.6	54.6	47.4	40.1	36.4	36.4
52.5°	6713.6	5981.1	543.1	109.4	69.3	54.6	43.8	36.4	29.2	25.5	25.5
55°	7016.2	6148.8	397.3	91.1	62.0	47.4	36.4	29.2	21.9	21.9	18.2
57.5°	7253.1	6229.0	298.9	80.2	54.6	40.1	29.2	21.9	18.2	14.6	14.6
60°	7435.3	6232.5	222.3	65.6	47.4	32.8	21.9	14.6	10.9	10.9	10.9
62°	7675.9	6280.0	182.3	54.6	43.8	29.2	18.2	10.9	7.3	3.7	3.7
62.5°	7745.2	6298.2	174.9	54.6	40.1	25.5	14.6	10.9	7.3	3.7	3.7
65°	8065.9	6330.9	134.8	43.8	32.8	21.9	10.9	7.3	0.0	0.0	0.0
67.5°	8357.5	6280.0	98.4	32.8	25.5	14.6	10.9	3.7	0.0	0.0	0.0
70°	8328.4	5930.0	69.3	21.9	18.2	10.9	7.3	0.0	0.0	0.0	0.0
72.5°	6863.1	4439.3	47.4	18.2	10.9	7.3	3.7	0.0	0.0	0.0	0.0
75°	4144.1	1942.7	32.8	10.9	10.9	7.3	3.7	0.0	0.0	0.0	0.0
77.5°	1359.5	703.5	21.9	7.3	7.3	3.7	3.7	0.0	0.0	0.0	0.0
80°	222.3	116.6	10.9	7.3	7.3	3.7	3.7	0.0	0.0	0.0	0.0
82.5°	69.3	29.2	7.3	7.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0
85°	25.5	10.9	7.3	7.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	7.3	7.3	7.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)