

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: P236881

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236881
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2R-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30352 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

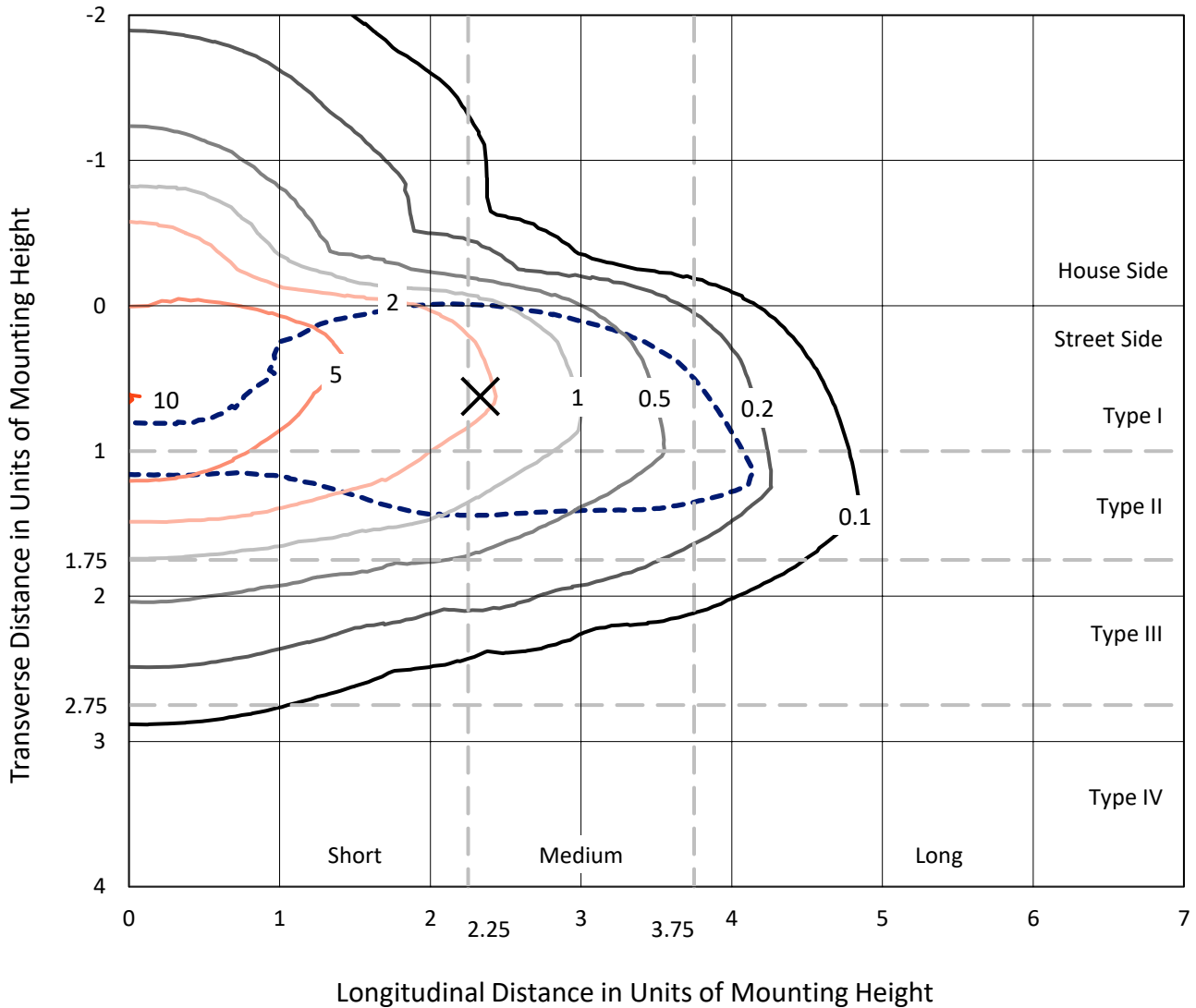
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

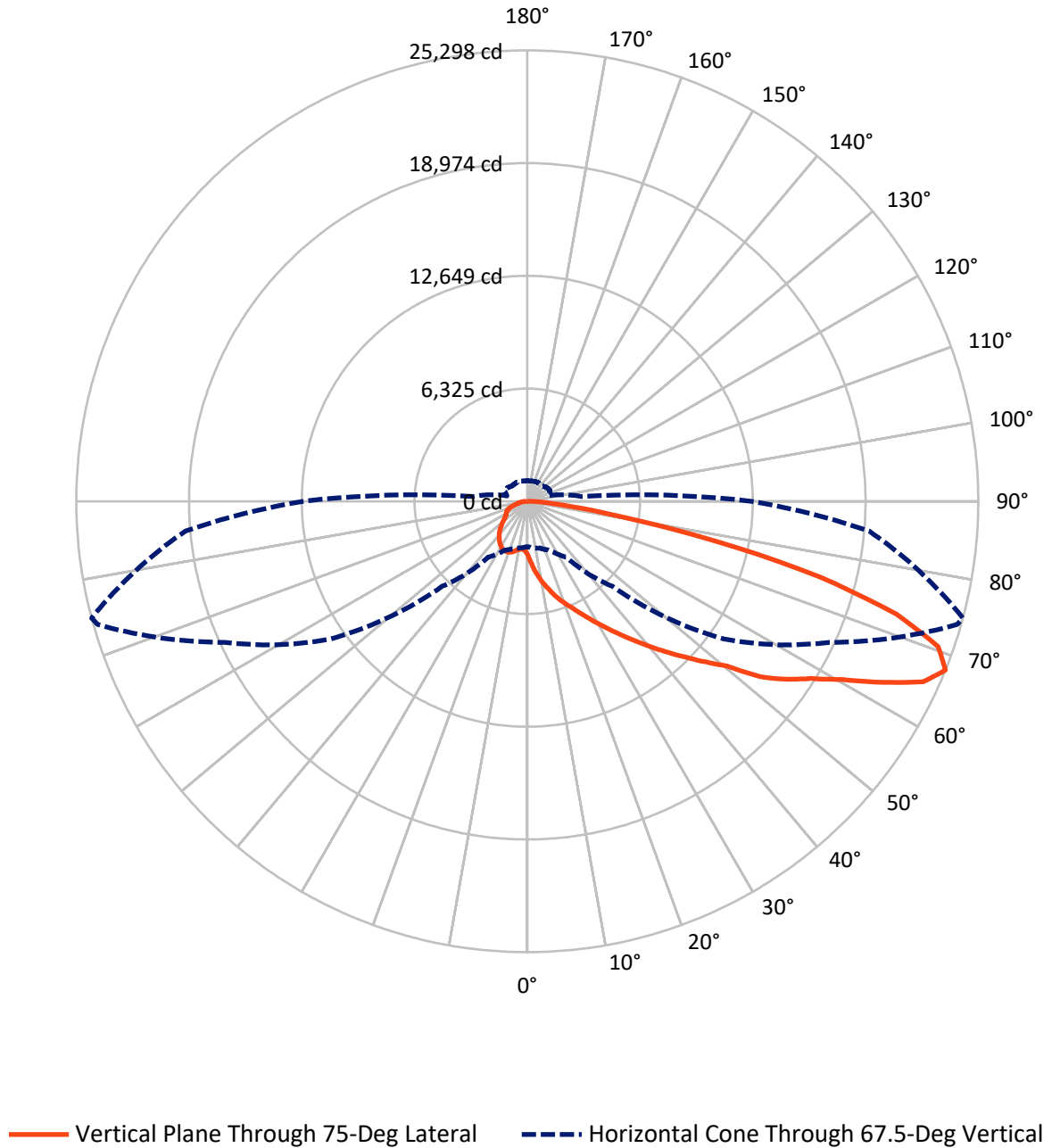
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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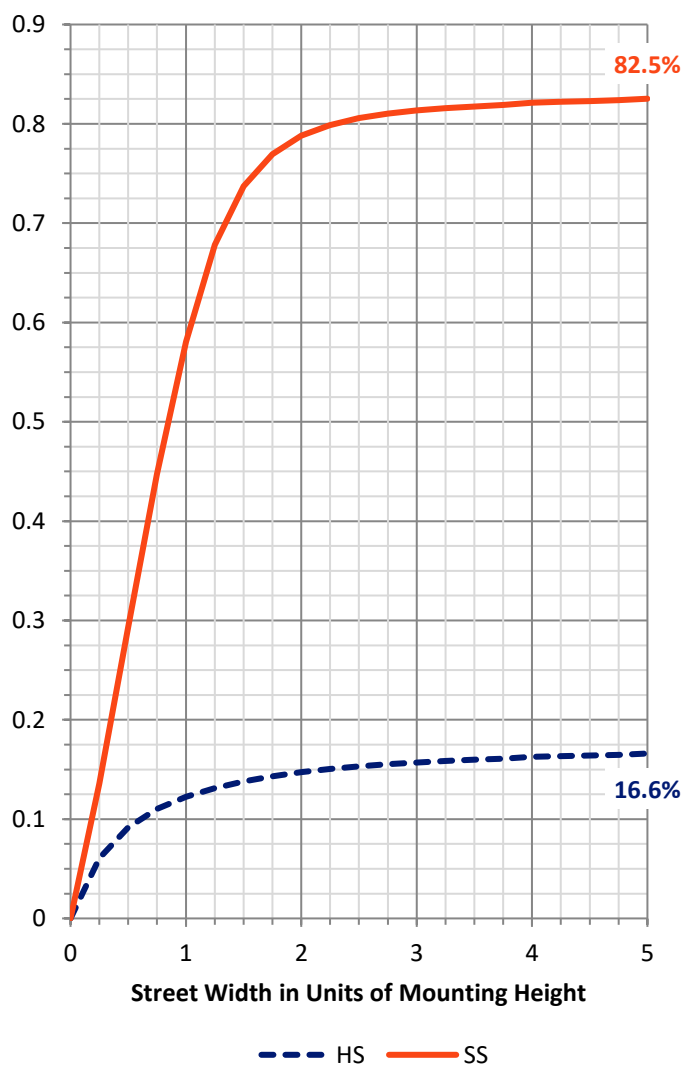
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5183.0	0.0	5183.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	25169.0	0.0	25169.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	30352.0	0.0	30352.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.3	1.2
10°-20°	1276.9	4.2
20°-30°	2328.9	7.7
30°-40°	3822.7	12.6
40°-50°	5528.2	18.2
50°-60°	6515.0	21.5
60°-70°	6331.0	20.9
70°-80°	3519.2	11.6
80°-90°	676.7	2.2
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°	30352.0	100.0
0°-180°	30352.0	100.0

Coefficient of Utilization



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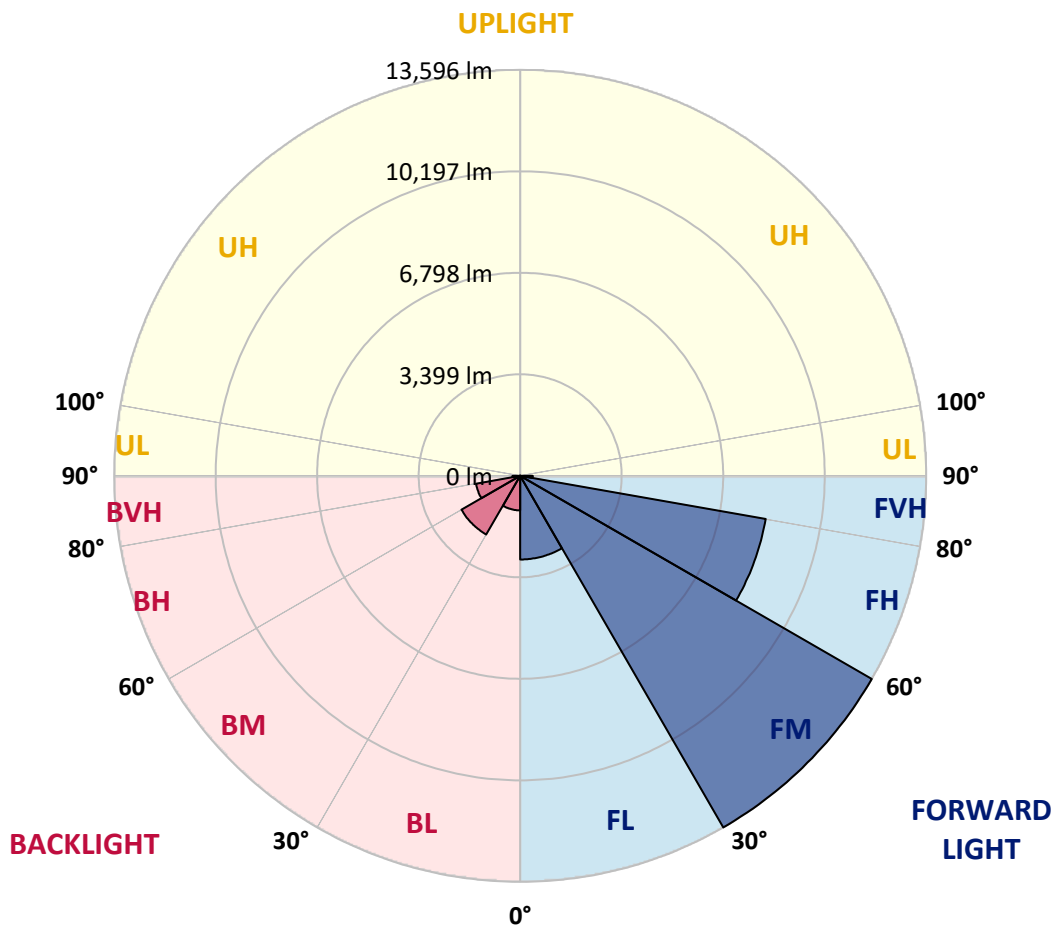
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2802.3	9.2			
FM (30°-60°)	13596.1	44.8			
FH (60°-80°)	8349.5	27.5			G4/12000
FVH (80°-90°)	421.1	1.4			G3/500
BL (0°-30°)	1156.9	3.8	B3/2500		
BM (30°-60°)	2269.9	7.5	B2/2500		
BH (60°-80°)	1500.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	255.5	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6
2.5°	4263.9	4276.6	4251.2	4194.1	4111.6	3959.4	3826.1	3591.3	3381.9	3356.6	3134.5
5°	5012.6	5025.3	4993.6	4923.8	4835.0	4670.0	4486.0	4181.4	3845.1	3781.7	3312.2
7.5°	5526.6	5532.9	5494.9	5425.1	5355.3	5190.3	5006.3	4663.7	4251.2	4200.5	3540.6
10°	5964.4	5977.1	5926.3	5881.9	5805.8	5640.8	5450.5	5088.8	4663.7	4593.9	3775.3
12.5°	6370.5	6383.2	6351.5	6313.4	6288.0	6135.7	5926.3	5494.9	5038.0	4961.9	4054.5
15°	6643.3	6656.0	6662.4	6713.1	6744.9	6637.0	6427.6	5958.1	5444.1	5374.3	4384.5
17.5°	6567.2	6598.9	6694.1	6878.1	7074.8	7081.2	6909.8	6414.9	5843.9	5767.7	4720.8
20°	6345.1	6370.5	6484.7	6763.9	7150.9	7373.0	7360.3	6878.1	6218.2	6135.7	5031.7
22.5°	6529.1	6560.9	6560.9	6732.2	7112.9	7525.3	7690.3	7335.0	6592.6	6516.4	5342.6
25°	7315.9	7335.0	7201.7	7131.9	7271.5	7652.2	7963.1	7829.9	7049.4	6960.6	5678.9
27.5°	8413.6	8381.9	8216.9	7937.7	7785.5	7887.0	8204.2	8299.4	7576.1	7468.2	6027.9
30°	9505.0	9486.0	9295.6	8921.2	8578.6	8362.9	8470.7	8718.2	8147.1	8020.2	6364.2
32.5°	10526.5	10494.8	10285.4	9847.6	9460.6	9060.8	8851.4	9098.9	8756.3	8610.3	6738.5
35°	11465.6	11383.1	11173.8	10716.9	10317.2	9936.5	9422.5	9460.6	9416.2	9263.9	7150.9
37.5°	12227.0	12163.6	11935.2	11510.0	11084.9	10723.2	10183.9	9873.0	10126.8	9980.9	7626.8
40°	12899.6	12829.8	12595.1	12169.9	11776.5	11433.9	11008.8	10374.3	10926.3	10761.3	8159.8
42.5°	13407.2	13356.5	13166.1	12747.3	12366.6	12055.7	11846.3	11008.8	11757.5	11598.9	8743.6
45°	13680.1	13629.3	13527.8	13191.5	12842.5	12601.4	12620.4	11763.8	12626.8	12493.5	9435.2
47.5°	13343.8	13381.9	13470.7	13407.2	13191.5	13077.3	13312.1	12544.3	13597.6	13470.7	10183.9
50°	12442.8	12480.8	12836.2	13274.0	13350.1	13489.7	13933.9	13445.3	14625.5	14524.0	11110.3
52.5°	10228.3	10437.7	11421.2	12468.2	13185.2	13762.6	14625.5	14784.1	16357.7	16357.7	12747.3
55°	7728.4	7912.4	9035.4	10862.8	12544.3	13787.9	15133.1	15691.5	17607.7	17633.1	13603.9
57.5°	6262.6	6376.8	6928.9	8800.7	11199.1	13470.7	15735.9	16471.9	18648.3	18762.5	14708.0
60°	5082.4	5145.9	5507.6	6808.3	9340.0	12614.1	16167.4	17588.7	20133.1	20291.7	16116.6
62.5°	4086.3	4149.7	4390.8	5171.3	7328.6	11008.8	16091.2	18749.8	22112.7	22372.9	17963.0
65°	3261.4	3331.2	3489.8	3972.0	5431.4	9016.4	15310.8	19346.3	24162.2	24416.0	19187.6
67.5°	2544.4	2607.8	2715.7	3033.0	3826.1	6744.9	13464.3	18718.1	25082.2	25298.0	19251.1
70°	1922.6	1954.3	2043.1	2246.2	2734.7	4479.7	10539.2	16611.5	24257.4	24454.1	17982.1
72.5°	1491.1	1484.8	1535.5	1637.0	1909.9	3083.7	6986.0	13508.8	21446.5	21649.5	15342.5
75°	1218.3	1211.9	1243.6	1275.4	1383.2	2068.5	4124.3	10171.2	17309.5	16922.4	11510.0
77.5°	1027.9	1021.6	1053.3	1059.6	1104.1	1427.7	2347.7	6694.1	11548.1	10881.9	6484.7
80°	869.3	862.9	901.0	913.7	945.4	1046.9	1351.5	3623.1	5799.4	5494.9	3096.4
82.5°	653.5	678.9	748.7	780.4	818.5	774.1	837.6	1599.0	2690.3	2569.8	1345.2
85°	317.3	374.4	564.7	628.2	672.6	488.6	571.1	755.1	1211.9	1154.8	545.7
87.5°	107.9	95.2	336.3	399.7	437.8	222.1	317.3	418.8	501.3	456.8	171.3
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°	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6	3007.6
2.5°	3039.3	2944.1	2804.5	2696.7	2626.9	2569.8	2544.4	2538.0	2525.4	2519.0	2519.0
5°	3102.8	2931.4	2715.7	2601.5	2569.8	2544.4	2557.1	2563.4	2563.4	2563.4	2563.4
7.5°	3197.9	2956.8	2696.7	2620.5	2614.2	2614.2	2652.3	2671.3	2684.0	2684.0	2684.0
10°	3324.8	3001.2	2728.4	2664.9	2684.0	2696.7	2741.1	2766.5	2779.2	2785.5	2791.9
12.5°	3496.2	3096.4	2791.9	2741.1	2766.5	2772.8	2804.5	2817.2	2829.9	2836.3	2836.3
15°	3724.6	3236.0	2893.4	2829.9	2836.3	2829.9	2829.9	2817.2	2810.9	2810.9	2823.6
17.5°	3959.4	3369.3	2982.2	2893.4	2868.0	2817.2	2779.2	2747.4	2728.4	2715.7	2722.1
20°	4194.1	3489.8	3033.0	2906.1	2836.3	2753.8	2684.0	2639.6	2614.2	2588.8	2601.5
22.5°	4428.9	3604.0	3052.0	2868.0	2766.5	2645.9	2569.8	2500.0	2442.9	2404.8	2411.1
25°	4689.0	3730.9	3052.0	2823.6	2671.3	2544.4	2449.2	2335.0	2252.5	2220.8	2233.5
27.5°	4949.2	3838.8	3020.3	2741.1	2563.4	2436.5	2296.9	2163.7	2112.9	2093.9	2100.2
30°	5209.3	3921.3	2950.5	2639.6	2449.2	2309.6	2125.6	2036.8	1973.3	1922.6	1928.9
32.5°	5469.5	3978.4	2855.3	2512.7	2328.7	2151.0	1998.7	1897.2	1783.0	1719.5	1725.9
35°	5767.7	4022.8	2741.1	2385.8	2195.4	2011.4	1897.2	1732.2	1611.7	1560.9	1548.2
37.5°	6078.6	4054.5	2620.5	2246.2	2062.2	1909.9	1795.7	1592.6	1478.4	1408.6	1402.3
40°	6414.9	4067.2	2474.6	2100.2	1935.3	1846.4	1662.4	1510.1	1313.4	1269.0	1269.0
42.5°	6814.7	4060.9	2328.7	1954.3	1795.7	1700.5	1567.2	1497.4	1326.1	1281.7	1256.3
45°	7271.5	4060.9	2170.0	1783.0	1656.1	1516.5	1459.4	1415.0	1300.7	1319.8	1332.5
47.5°	7791.8	4048.2	1979.7	1643.4	1541.9	1421.3	1389.6	1294.4	1250.0	1262.7	1275.4
50°	8508.8	4067.2	1808.4	1529.2	1459.4	1357.9	1319.8	1269.0	1250.0	1256.3	1250.0
52.5°	9505.0	4003.8	1643.4	1459.4	1395.9	1262.7	1262.7	1256.3	1262.7	1256.3	1256.3
55°	10050.7	3864.2	1522.8	1421.3	1351.5	1218.3	1243.6	1256.3	1269.0	1262.7	1262.7
57.5°	10824.8	3769.0	1427.7	1395.9	1326.1	1205.6	1231.0	1256.3	1262.7	1256.3	1256.3
60°	11738.5	3705.5	1364.2	1402.3	1307.1	1205.6	1237.3	1256.3	1250.0	1243.6	1243.6
62.5°	12798.1	3680.2	1319.8	1421.3	1288.1	1211.9	1237.3	1256.3	1231.0	1224.6	1224.6
65°	13197.8	3451.7	1262.7	1434.0	1300.7	1211.9	1231.0	1237.3	1205.6	1199.2	1192.9
67.5°	12582.4	3058.3	1180.2	1408.6	1338.8	1211.9	1211.9	1205.6	1167.5	1161.2	1148.5
70°	11205.5	2538.0	1053.3	1326.1	1364.2	1218.3	1186.5	1154.8	1116.7	1116.7	1091.4
72.5°	9175.0	1998.7	888.3	1180.2	1345.2	1237.3	1135.8	1091.4	1046.9	1046.9	1021.6
75°	6611.6	1491.1	710.7	983.5	1262.7	1231.0	1072.3	1015.2	964.5	958.1	926.4
77.5°	3769.0	1046.9	577.4	767.8	1123.1	1199.2	1015.2	926.4	869.3	850.2	831.2
80°	1935.3	704.3	469.5	602.8	932.7	1110.4	970.8	824.9	761.4	729.7	698.0
82.5°	920.0	469.5	361.7	444.2	704.3	970.8	913.7	710.7	640.9	602.8	564.7
85°	412.4	279.2	241.1	285.5	501.3	755.1	805.8	583.8	501.3	628.2	463.2
87.5°	133.2	126.9	126.9	133.2	241.1	329.9	590.1	431.5	399.7	329.9	279.2
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)