

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: P265707

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24150.3 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 242
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

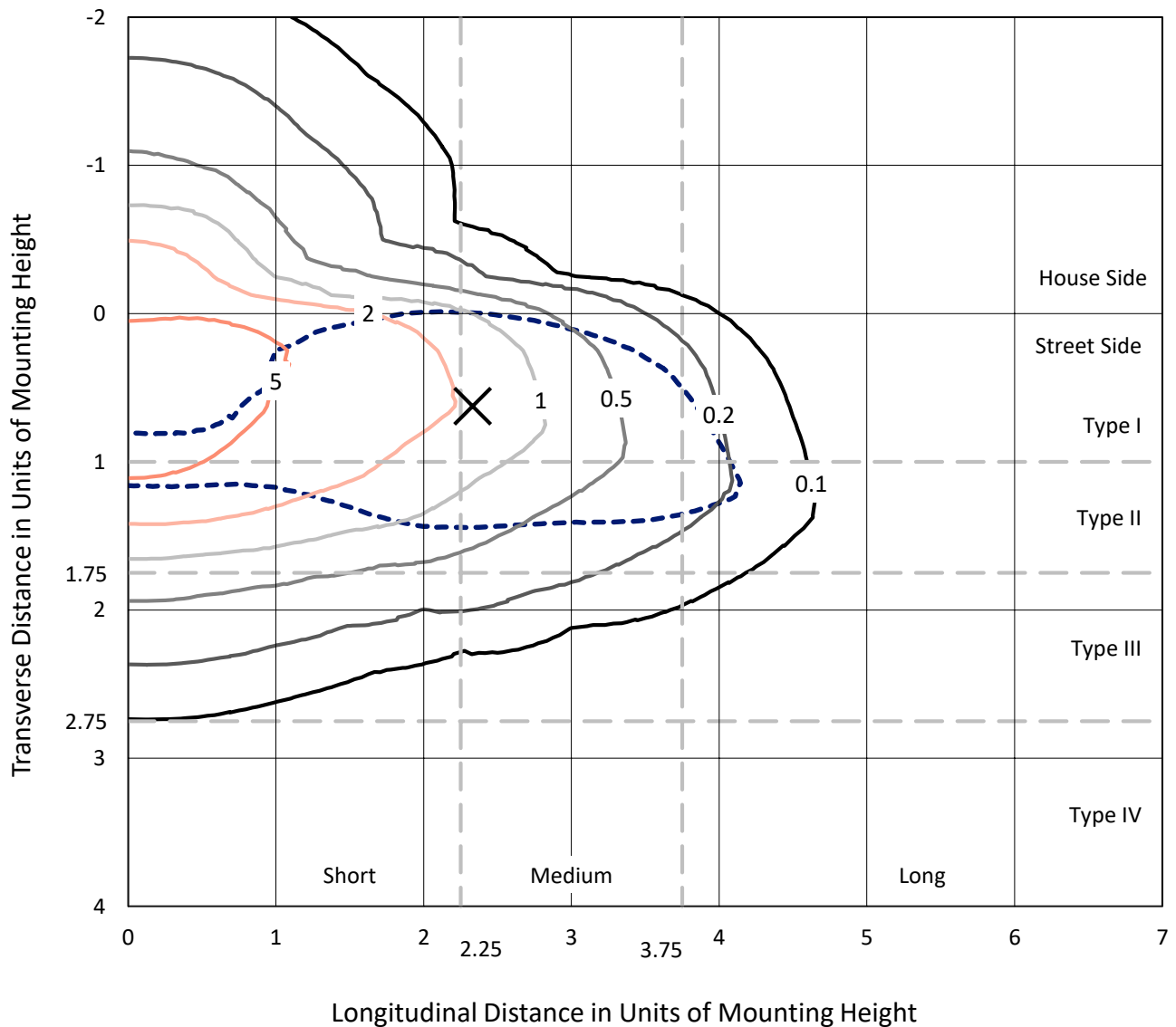


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Iso-Footcandle Lines of Horizontal Illumination

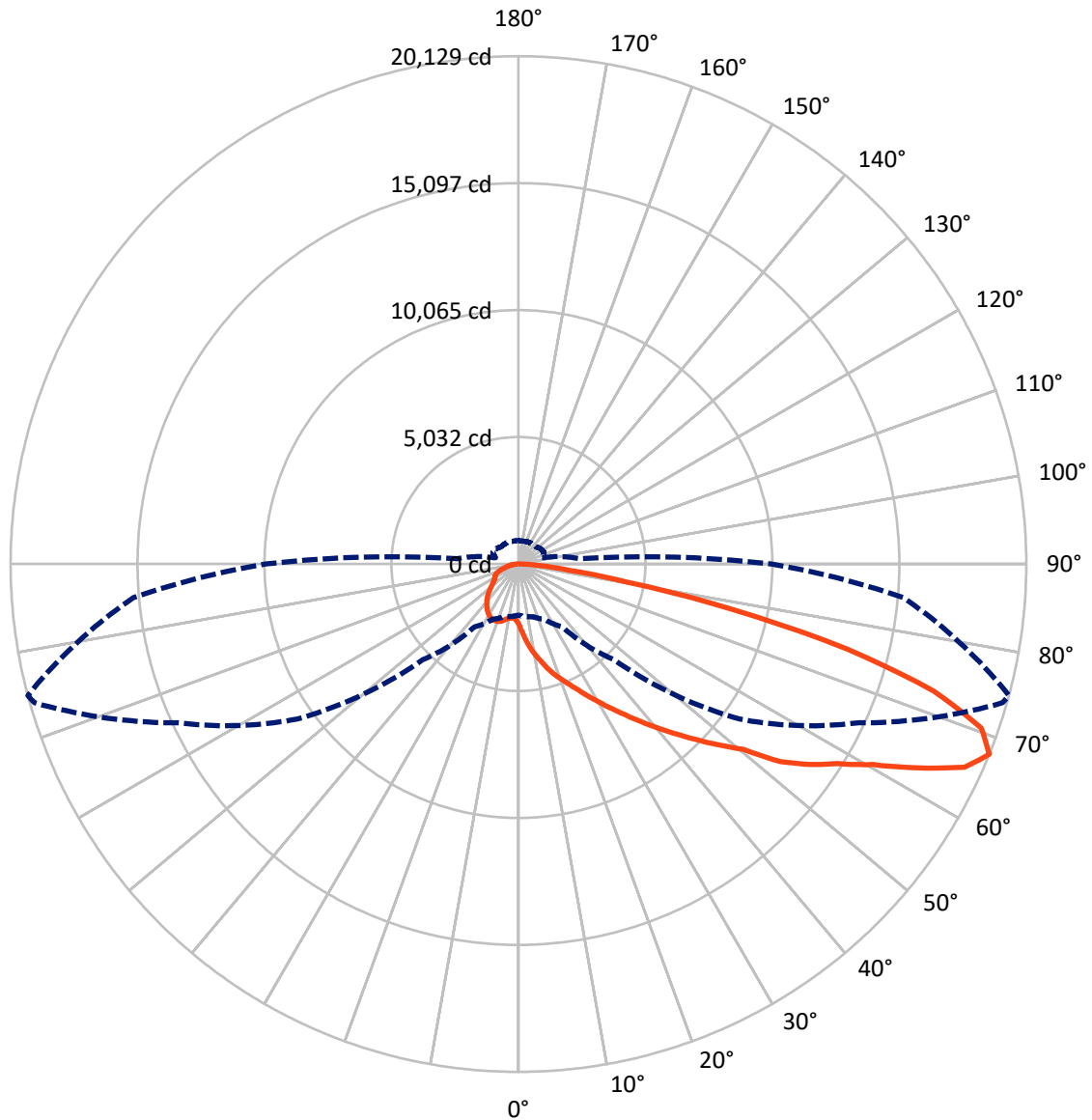
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4124.0	0.0	4124.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	20026.4	0.0	20026.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	24150.3	0.0	24150.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.1	1.2
10°-20°	1016.0	4.2
20°-30°	1853.1	7.7
30°-40°	3041.7	12.6
40°-50°	4398.7	18.2
50°-60°	5183.8	21.5
60°-70°	5037.4	20.9
70°-80°	2800.1	11.6
80°-90°	538.4	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°	24150.3	100.0
0°-180°	24150.3	100.0

Coefficient of Utilization



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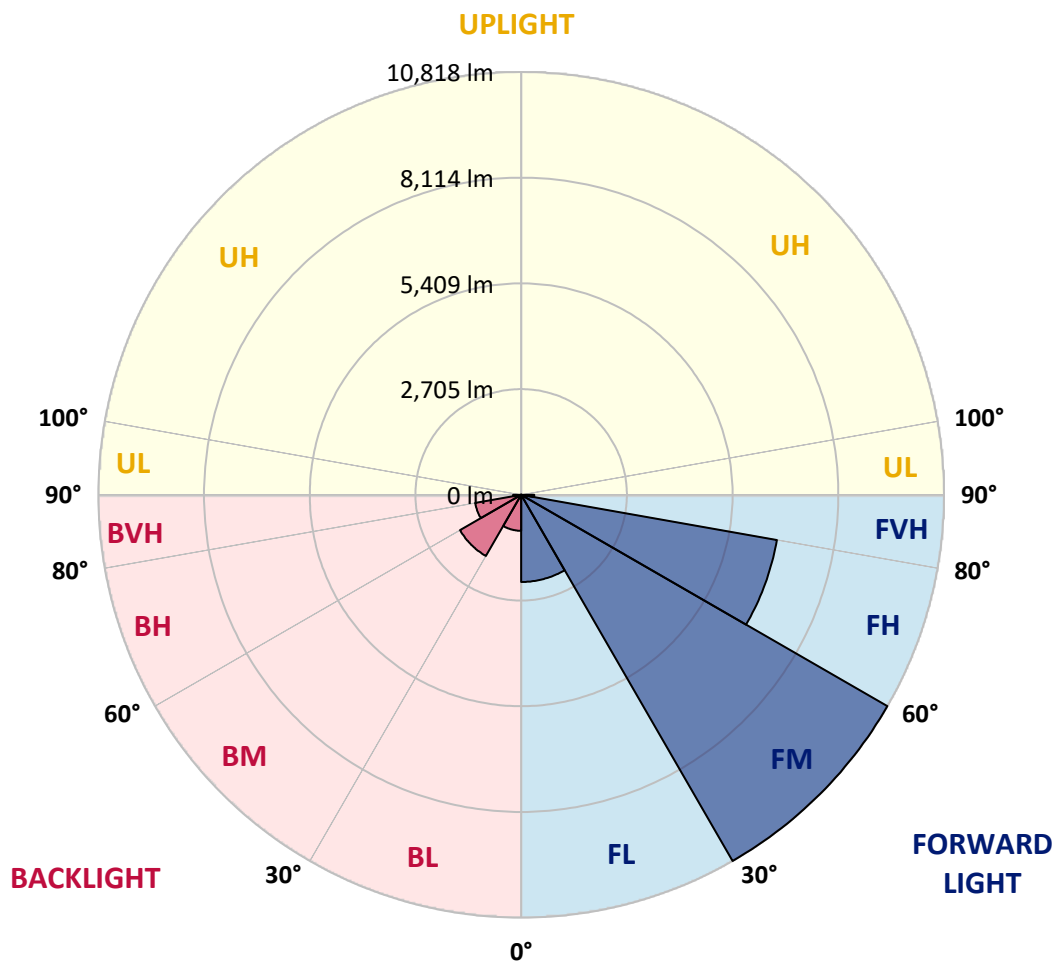
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2229.7	9.2			
FM	(30°-60°)	10818.1	44.8			
FH	(60°-80°)	6643.5	27.5			G3/7500
FVH	(80°-90°)	335.1	1.4			G3/500
BL	(0°-30°)	920.5	3.8	B2/1000		
BM	(30°-60°)	1806.1	7.5	B2/2500		
BH	(60°-80°)	1194.1	4.9	B3/2500		G3/2500
BVH	(80°-90°)	203.3	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1
2.5°	3392.7	3402.8	3382.6	3337.2	3271.5	3150.4	3044.4	2857.6	2691.0	2670.8	2494.1
5°	3988.5	3998.5	3973.4	3917.8	3847.1	3715.7	3569.3	3327.1	3059.4	3009.1	2635.4
7.5°	4397.4	4402.5	4372.1	4316.5	4261.1	4129.8	3983.4	3710.8	3382.6	3342.2	2817.2
10°	4745.7	4755.8	4715.5	4680.1	4619.5	4488.2	4336.7	4049.0	3710.8	3655.3	3003.9
12.5°	5068.9	5078.9	5053.8	5023.4	5003.2	4882.1	4715.5	4372.1	4008.6	3948.1	3226.2
15°	5285.9	5296.0	5301.1	5341.5	5366.7	5280.9	5114.3	4740.6	4331.7	4276.2	3488.6
17.5°	5225.4	5250.7	5326.3	5472.7	5629.3	5634.3	5497.9	5104.2	4649.7	4589.3	3756.3
20°	5048.7	5068.9	5159.8	5381.8	5689.9	5866.6	5856.4	5472.7	4947.7	4882.1	4003.6
22.5°	5195.1	5220.3	5220.3	5356.7	5659.5	5987.7	6119.0	5836.3	5245.6	5184.9	4251.0
25°	5821.0	5836.3	5730.2	5674.8	5785.8	6088.7	6336.0	6230.0	5609.0	5538.4	4518.6
27.5°	6694.4	6669.2	6538.0	6315.9	6194.7	6275.5	6528.0	6603.6	6028.0	5942.3	4796.2
30°	7562.9	7547.6	7396.3	7098.3	6825.9	6654.1	6740.0	6936.8	6482.4	6381.5	5063.7
32.5°	8375.6	8350.5	8183.9	7835.5	7527.5	7209.4	7042.9	7239.8	6967.2	6851.1	5361.7
35°	9122.8	9057.3	8890.6	8527.3	8209.2	7906.3	7497.3	7527.5	7492.3	7371.0	5689.9
37.5°	9728.7	9678.2	9496.5	9158.3	8820.0	8532.2	8103.2	7855.7	8057.6	7941.6	6068.5
40°	10263.9	10208.3	10021.6	9683.3	9370.3	9097.7	8759.5	8254.5	8693.7	8562.6	6492.6
42.5°	10667.8	10627.4	10475.9	10142.8	9839.9	9592.5	9425.8	8759.5	9355.2	9228.9	6957.1
45°	10884.9	10844.5	10763.8	10496.2	10218.5	10026.6	10041.8	9360.2	10046.9	9940.9	7507.3
47.5°	10617.2	10647.6	10718.2	10667.8	10496.2	10405.2	10592.0	9981.2	10819.2	10718.2	8103.2
50°	9900.4	9930.8	10213.4	10561.8	10622.4	10733.5	11086.8	10698.0	11637.2	11556.3	8840.2
52.5°	8138.5	8305.0	9087.6	9920.6	10491.0	10950.5	11637.2	11763.3	13015.5	13015.5	10142.8
55°	6149.3	6295.7	7189.2	8643.3	9981.2	10970.7	12041.1	12485.4	14010.1	14030.2	10824.2
57.5°	4983.0	5073.8	5513.1	7002.5	8910.8	10718.2	12520.7	13106.4	14838.1	14928.8	11702.8
60°	4044.0	4094.5	4382.2	5417.1	7431.6	10036.8	12864.0	13994.9	16019.4	16145.5	12823.6
62.5°	3251.3	3301.8	3493.7	4114.6	5831.2	8759.5	12803.5	14918.8	17594.6	17801.5	14292.8
65°	2595.1	2650.5	2776.8	3160.4	4321.7	7174.1	12182.5	15393.4	19225.3	19427.3	15267.1
67.5°	2024.5	2074.9	2160.9	2413.2	3044.4	5366.7	10713.2	14893.4	19957.4	20129.0	15317.5
70°	1529.8	1555.0	1625.7	1787.2	2176.0	3564.4	8385.8	13217.4	19301.1	19457.5	14307.8
72.5°	1186.4	1181.5	1221.8	1302.5	1519.7	2453.6	5558.5	10748.6	17064.5	17226.0	12207.6
75°	969.4	964.3	989.6	1014.7	1100.7	1645.9	3281.6	8093.0	13772.8	13464.8	9158.3
77.5°	817.8	812.8	838.1	843.1	878.5	1135.9	1867.9	5326.3	9188.6	8658.5	5159.8
80°	691.6	686.7	716.8	727.0	752.2	833.0	1075.5	2882.8	4614.5	4372.1	2463.7
82.5°	519.9	540.2	595.8	621.0	651.4	616.0	666.5	1272.3	2140.7	2044.7	1070.3
85°	252.5	297.9	449.3	499.7	535.2	388.7	454.5	600.7	964.3	918.8	434.2
87.5°	85.8	75.7	267.5	318.1	348.4	176.6	252.5	333.2	398.8	363.5	136.4
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°	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1	2393.1
2.5°	2418.2	2342.6	2231.5	2145.7	2090.1	2044.7	2024.5	2019.5	2009.4	2004.3	2004.3
5°	2468.8	2332.4	2160.9	2070.0	2044.7	2024.5	2034.7	2039.6	2039.6	2039.6	2039.6
7.5°	2544.4	2352.8	2145.7	2085.1	2080.0	2080.0	2110.4	2125.5	2135.6	2135.6	2135.6
10°	2645.5	2388.1	2170.9	2120.4	2135.6	2145.7	2181.1	2201.1	2211.3	2216.4	2221.4
12.5°	2781.8	2463.7	2221.4	2181.1	2201.1	2206.2	2231.5	2241.6	2251.7	2256.7	2256.7
15°	2963.6	2574.8	2302.1	2251.7	2256.7	2251.7	2251.7	2241.6	2236.6	2236.6	2246.7
17.5°	3150.4	2680.8	2372.9	2302.1	2282.0	2241.6	2211.3	2186.0	2170.9	2160.9	2165.9
20°	3337.2	2776.8	2413.2	2312.2	2256.7	2191.1	2135.6	2100.2	2080.0	2059.9	2070.0
22.5°	3524.0	2867.6	2428.4	2282.0	2201.1	2105.3	2044.7	1989.1	1943.8	1913.4	1918.5
25°	3730.9	2968.5	2428.4	2246.7	2125.5	2024.5	1948.8	1858.0	1792.3	1767.1	1777.1
27.5°	3937.9	3054.4	2403.1	2181.1	2039.6	1938.7	1827.6	1721.6	1681.2	1666.0	1671.0
30°	4145.0	3120.1	2347.6	2100.2	1948.8	1837.8	1691.2	1620.6	1570.1	1529.8	1534.8
32.5°	4352.0	3165.4	2272.0	1999.3	1852.8	1711.5	1590.3	1509.5	1418.7	1368.2	1373.1
35°	4589.3	3200.8	2181.1	1898.3	1746.8	1600.4	1509.5	1378.3	1282.4	1241.9	1231.8
37.5°	4836.7	3226.2	2085.1	1787.2	1640.8	1519.7	1428.8	1267.1	1176.3	1120.7	1115.8
40°	5104.2	3236.1	1968.9	1671.0	1539.9	1469.2	1322.8	1201.7	1045.1	1009.8	1009.8
42.5°	5422.3	3231.2	1852.8	1555.0	1428.8	1353.0	1246.9	1191.5	1055.1	1019.8	999.6
45°	5785.8	3231.2	1726.6	1418.7	1317.8	1206.7	1161.1	1125.8	1034.9	1050.1	1060.2
47.5°	6199.7	3221.1	1575.2	1307.7	1226.8	1130.8	1105.6	1029.9	994.7	1004.7	1014.7
50°	6770.3	3236.1	1438.8	1216.8	1161.1	1080.4	1050.1	1009.8	994.7	999.6	994.7
52.5°	7562.9	3185.7	1307.7	1161.1	1110.8	1004.7	1004.7	999.6	1004.7	999.6	999.6
55°	7997.2	3074.5	1211.6	1130.8	1075.5	969.4	989.6	999.6	1009.8	1004.7	1004.7
57.5°	8612.9	2998.9	1135.9	1110.8	1055.1	959.2	979.4	999.6	1004.7	999.6	999.6
60°	9339.9	2948.3	1085.4	1115.8	1040.0	959.2	984.5	999.6	994.7	989.6	989.6
62.5°	10183.1	2928.2	1050.1	1130.8	1024.8	964.3	984.5	999.6	979.4	974.4	974.4
65°	10501.1	2746.5	1004.7	1140.9	1034.9	964.3	979.4	984.5	959.2	954.2	949.1
67.5°	10011.5	2433.5	939.1	1120.7	1065.3	964.3	964.3	959.2	928.9	923.8	913.8
70°	8915.9	2019.5	838.1	1055.1	1085.4	969.4	944.1	918.8	888.6	888.6	868.4
72.5°	7300.3	1590.3	706.7	939.1	1070.3	984.5	903.8	868.4	833.0	833.0	812.8
75°	5260.7	1186.4	565.5	782.6	1004.7	979.4	853.2	807.8	767.4	762.3	737.1
77.5°	2998.9	833.0	459.5	610.8	893.6	954.2	807.8	737.1	691.6	676.6	661.4
80°	1539.9	560.5	373.5	479.6	742.2	883.6	772.5	656.3	605.8	580.6	555.3
82.5°	732.1	373.5	287.7	353.5	560.5	772.5	727.0	565.5	509.9	479.6	449.3
85°	328.2	222.2	191.9	227.2	398.8	600.7	641.2	464.5	398.8	499.7	368.6
87.5°	106.0	101.0	101.0	106.0	191.9	262.6	469.5	343.3	318.1	262.6	222.2
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)