

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: P237327

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19269.3 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 143
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

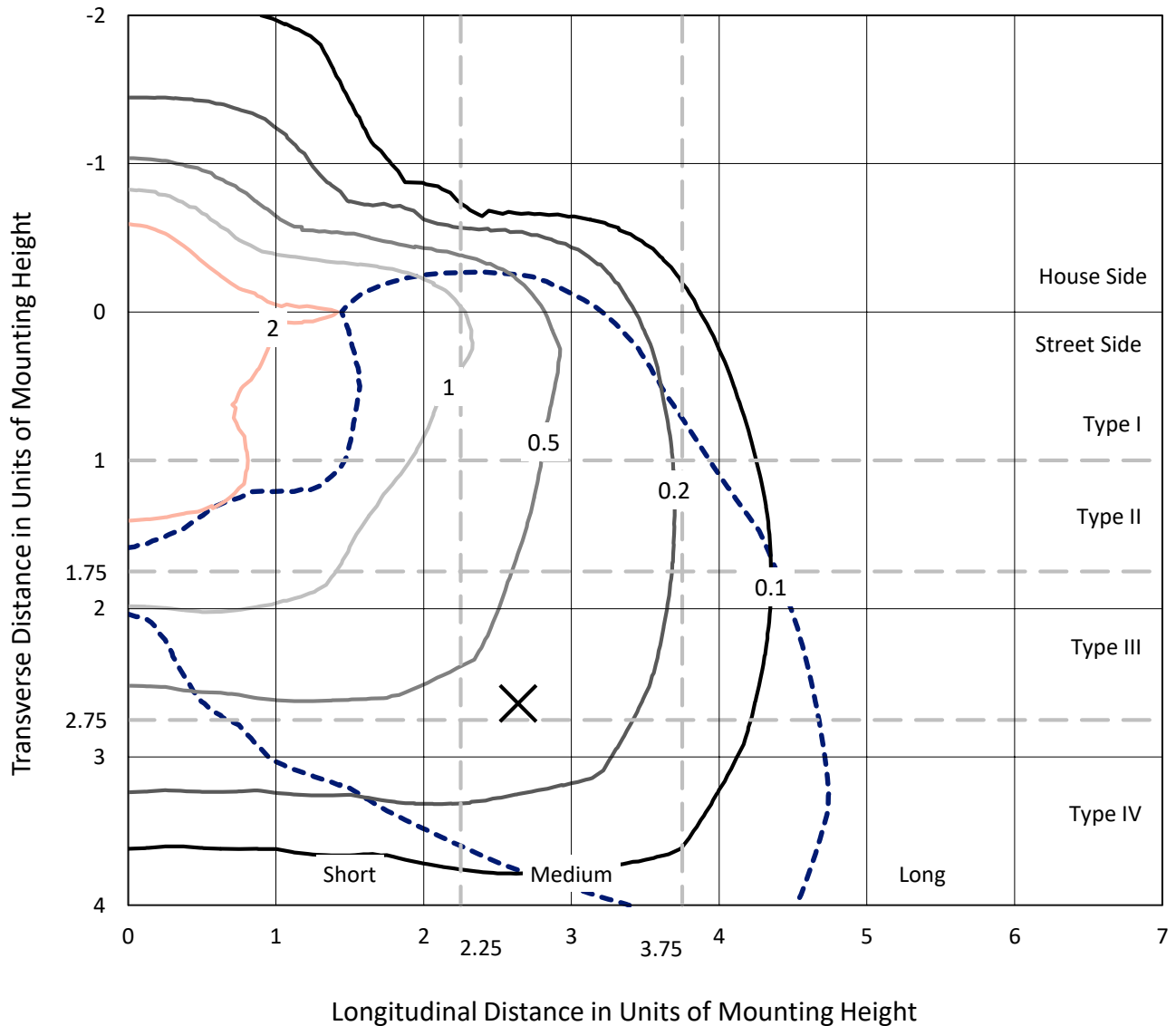


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Iso-Footcandle Lines of Horizontal Illumination

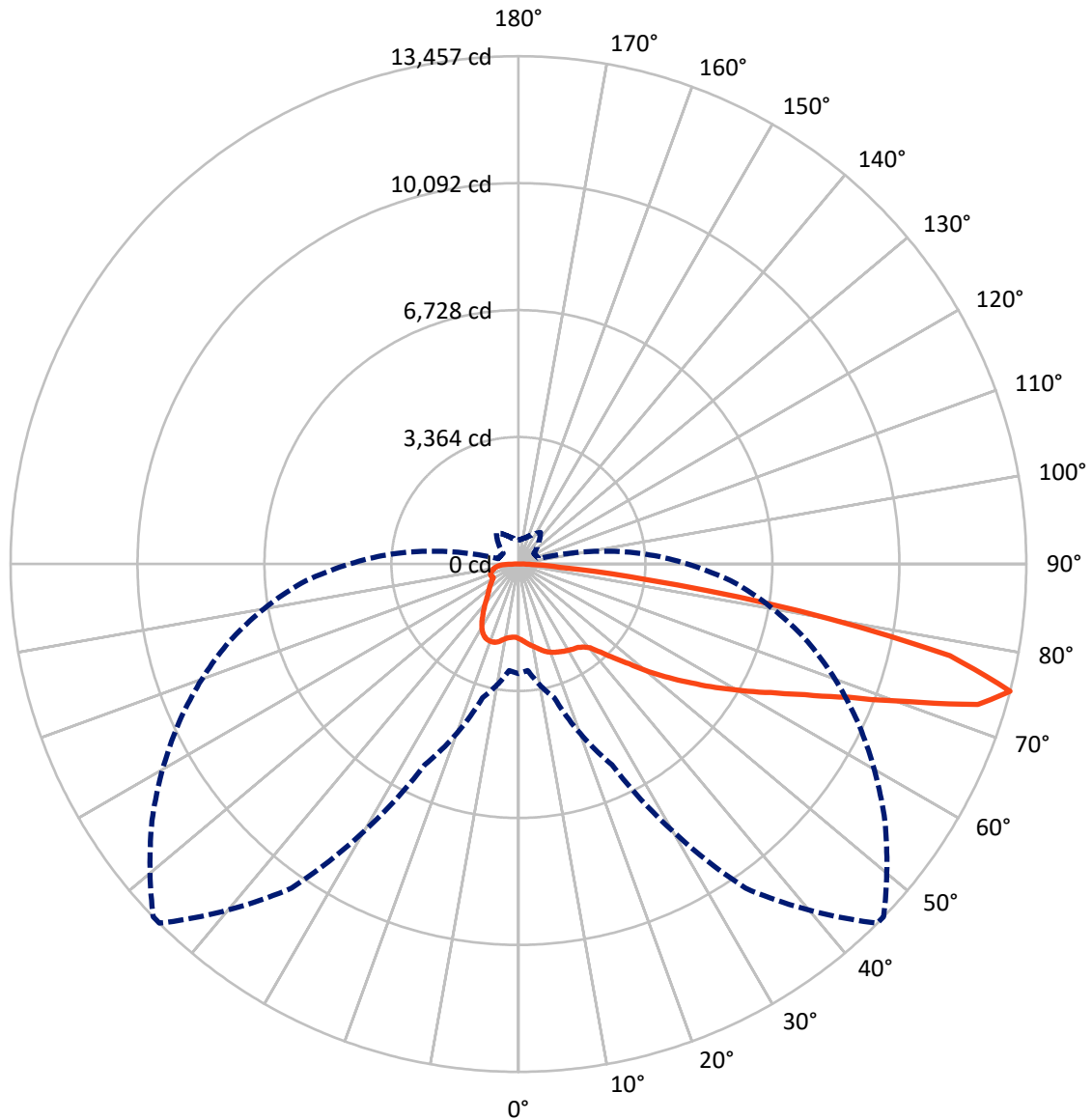
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4463.9	0.0	4463.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	14805.4	0.0	14805.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	19269.3	0.0	19269.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	1.0
10°-20°	634.4	3.3
20°-30°	1088.6	5.6
30°-40°	1522.5	7.9
40°-50°	2233.4	11.6
50°-60°	3479.0	18.1
60°-70°	5006.0	26.0
70°-80°	4360.8	22.6
80°-90°	748.9	3.9
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°	19269.3	100.0
0°-180°	19269.3	100.0

Coefficient of Utilization



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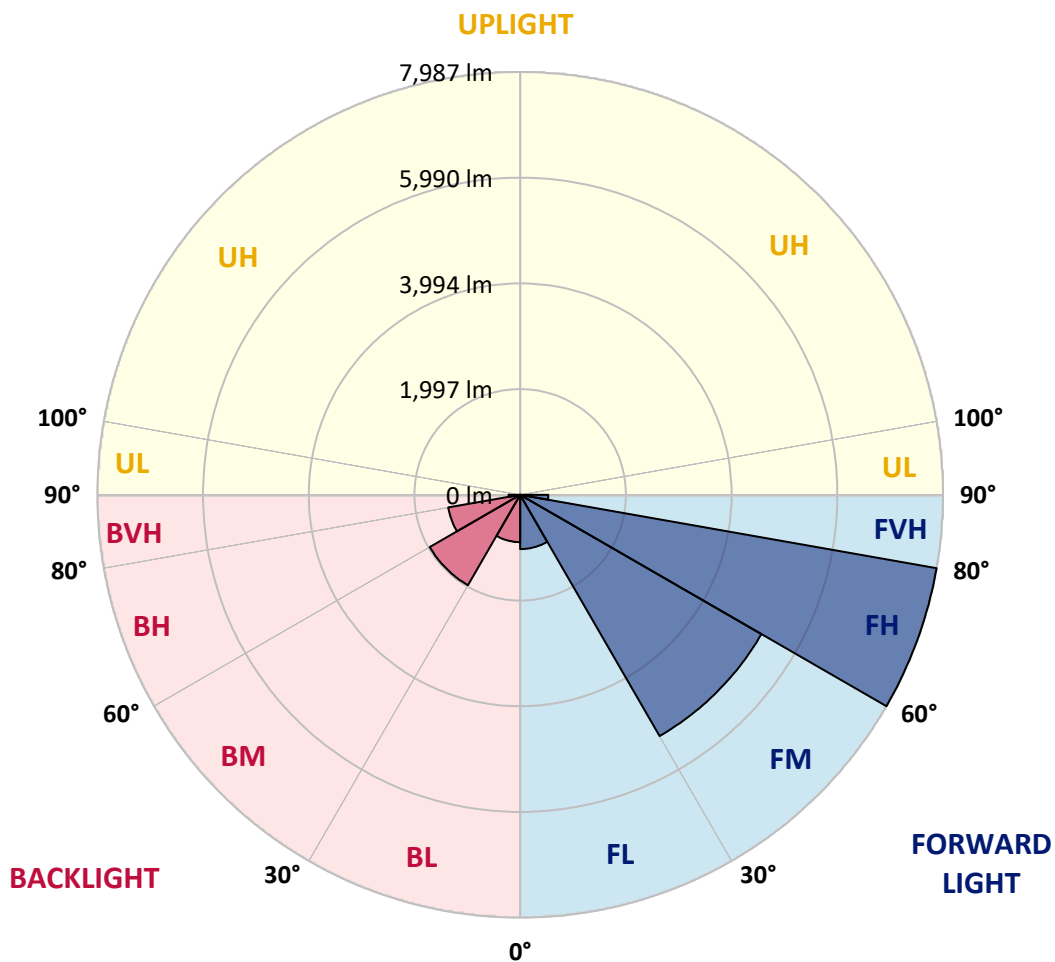
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1024.7	5.3			
FM	(30°-60°)	5262.1	27.3			
FH	(60°-80°)	7987.3	41.5			G4/12000
FVH	(80°-90°)	531.4	2.8			G4/750
BL	(0°-30°)	894.1	4.6	B2/1000		
BM	(30°-60°)	1972.8	10.2	B2/2500		
BH	(60°-80°)	1379.5	7.2	B3/2500		G3/2500
BVH	(80°-90°)	217.6	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4
2.5°	2072.8	2057.9	2057.9	2046.6	2046.6	2027.9	2020.3	2016.6	1997.8	1986.7	1975.4
5°	2192.8	2174.1	2170.3	2144.1	2132.9	2091.6	2087.8	2061.6	2027.9	1994.1	1967.9
7.5°	2301.4	2290.3	2271.5	2245.3	2211.5	2159.0	2155.3	2114.0	2057.9	2012.9	1975.4
10°	2380.2	2372.7	2346.4	2312.7	2275.2	2222.8	2219.0	2174.1	2106.6	2054.1	2001.6
12.5°	2473.9	2462.7	2428.9	2384.0	2342.8	2294.0	2290.3	2252.7	2177.8	2110.3	2042.8
15°	2563.8	2548.9	2507.7	2462.7	2417.6	2376.4	2376.4	2335.2	2256.5	2177.8	2099.1
17.5°	2608.8	2601.4	2560.1	2511.3	2473.9	2443.9	2440.1	2402.7	2323.9	2241.5	2155.3
20°	2623.9	2627.6	2590.1	2537.6	2511.3	2496.4	2492.6	2466.4	2380.2	2301.4	2219.0
22.5°	2620.1	2631.3	2601.4	2545.1	2537.6	2537.6	2537.6	2507.7	2440.1	2361.5	2279.0
25°	2635.1	2650.1	2627.6	2560.1	2560.1	2575.1	2575.1	2560.1	2500.2	2432.7	2350.2
27.5°	2687.6	2698.9	2680.0	2586.3	2590.1	2612.6	2608.8	2612.6	2575.1	2511.3	2428.9
30°	2751.3	2766.3	2743.8	2627.6	2623.9	2646.4	2646.4	2665.1	2638.8	2571.4	2503.9
32.5°	2923.7	2920.0	2848.7	2672.6	2661.3	2683.8	2683.8	2702.5	2687.6	2635.1	2571.4
35°	3437.2	3381.1	3223.6	2818.7	2706.3	2717.6	2717.6	2751.3	2758.8	2717.6	2661.3
37.5°	3962.0	3943.3	3823.3	3208.6	2871.2	2788.8	2785.0	2833.8	2867.5	2833.8	2796.2
40°	4490.5	4475.5	4449.3	3729.6	3216.1	2916.2	2905.0	2946.2	3006.1	2983.6	2961.2
42.5°	4981.6	4974.1	5000.3	4243.1	3654.6	3189.9	3156.1	3107.4	3193.6	3186.1	3186.1
45°	5367.6	5386.3	5401.4	4723.0	4130.7	3542.2	3500.9	3336.0	3452.3	3482.2	3504.7
47.5°	5585.0	5600.0	5652.5	5191.5	4606.8	3950.7	3920.8	3650.9	3804.6	3894.6	3958.2
50°	5896.2	5855.0	5899.9	5648.7	5180.2	4483.0	4400.5	4074.4	4269.4	4426.8	4576.7
52.5°	6196.0	6128.5	6166.0	6177.3	5832.5	5004.1	4917.8	4573.0	4816.7	5064.0	5330.2
55°	6465.9	6462.2	6499.6	6690.8	6462.2	5562.5	5465.1	5124.0	5476.4	5742.4	6192.2
57.5°	6683.3	6720.8	6885.7	7286.8	7189.3	6169.8	6061.1	5764.9	6181.0	6447.1	7193.1
60°	6938.2	6998.2	7271.7	7792.8	7852.8	6807.0	6694.6	6480.9	6904.4	7174.4	8351.3
62.5°	7024.4	7110.6	7672.8	8325.1	8546.2	7504.2	7403.0	7260.6	7665.4	7909.0	9505.8
65°	6450.9	6615.8	7894.0	8598.7	9292.2	8343.8	8257.6	8133.9	8422.6	8583.7	10289.2
67.5°	6293.5	6368.5	7462.9	8992.2	9993.1	9423.3	9337.1	9123.5	9131.0	9063.5	10544.1
70°	6072.3	6154.8	7020.6	9288.4	10997.6	10900.2	10795.2	10165.5	9779.4	9370.8	10041.8
72.5°	5172.8	5146.5	6049.8	8490.0	11481.2	12729.4	12605.7	11286.3	10259.3	9104.8	8475.0
75°	2905.0	2830.0	3669.6	5873.7	10484.1	13456.6	13452.8	11852.3	9921.9	7931.6	5768.7
77.5°	843.4	820.9	1210.8	2462.7	7058.2	11691.1	11833.5	10690.2	8280.1	5697.5	3167.4
80°	397.3	404.8	521.0	813.3	3013.7	7545.4	7954.0	7039.4	4947.8	2627.6	1308.1
82.5°	251.1	254.9	356.1	524.8	1274.4	3426.0	3763.3	3167.4	1960.4	1135.8	577.3
85°	157.4	157.4	236.1	344.8	760.9	1094.6	1188.3	1079.5	839.6	618.5	314.9
87.5°	86.2	86.2	142.4	198.7	416.0	352.3	363.6	431.1	524.8	378.6	157.4
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°	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4	1975.4
2.5°	1971.6	1964.2	1952.9	1949.1	1945.3	1941.7	1945.3	1952.9	1945.3	1945.3	1949.1
5°	1960.4	1952.9	1937.9	1937.9	1941.7	1945.3	1964.2	1975.4	1979.1	1979.1	1979.1
7.5°	1960.4	1949.1	1937.9	1941.7	1949.1	1964.2	1994.1	2012.9	2027.9	2031.6	2031.6
10°	1979.1	1964.2	1956.6	1964.2	1986.7	1997.8	2027.9	2057.9	2076.6	2084.1	2084.1
12.5°	2012.9	1997.8	1997.8	2012.9	2042.8	2057.9	2084.1	2106.6	2129.1	2140.3	2140.3
15°	2069.1	2050.3	2054.1	2080.4	2114.0	2129.1	2147.8	2155.3	2174.1	2189.0	2189.0
17.5°	2121.6	2102.8	2110.3	2140.3	2162.8	2170.3	2181.5	2177.8	2185.3	2196.6	2200.3
20°	2181.5	2162.8	2166.5	2185.3	2189.0	2181.5	2181.5	2170.3	2166.5	2185.3	2192.8
22.5°	2241.5	2222.8	2219.0	2207.7	2189.0	2170.3	2159.0	2147.8	2140.3	2159.0	2166.5
25°	2312.7	2286.5	2267.8	2219.0	2170.3	2136.5	2121.6	2114.0	2110.3	2129.1	2136.5
27.5°	2391.5	2365.2	2309.0	2204.0	2125.3	2069.1	2057.9	2057.9	2065.3	2076.6	2084.1
30°	2466.4	2440.1	2339.0	2170.3	2046.6	1964.2	1952.9	1964.2	1982.9	1994.1	2005.4
32.5°	2541.4	2515.1	2357.7	2117.8	1930.4	1825.5	1818.0	1836.7	1866.7	1874.1	1881.7
35°	2642.6	2616.3	2380.2	2042.8	1784.2	1671.8	1664.2	1675.5	1701.8	1713.0	1724.3
37.5°	2785.0	2770.0	2414.0	1960.4	1649.3	1525.5	1503.1	1495.6	1510.6	1506.8	1521.8
40°	2972.5	2983.6	2473.9	1851.6	1518.1	1390.6	1341.9	1319.4	1304.5	1274.4	1289.4
42.5°	3246.0	3253.6	2541.4	1728.0	1405.6	1263.2	1199.5	1158.3	1128.2	1079.5	1087.0
45°	3647.1	3583.4	2620.1	1596.8	1304.5	1162.0	1087.0	1038.3	997.1	955.8	959.5
47.5°	4179.4	3984.5	2706.3	1488.1	1203.2	1079.5	1012.0	955.8	907.1	873.4	877.1
50°	4835.4	4483.0	2792.6	1386.9	1102.0	1015.8	955.8	895.9	847.1	813.3	809.7
52.5°	5701.2	5082.7	2848.7	1274.4	1000.9	959.5	907.1	850.9	790.9	749.7	745.9
55°	6600.8	5780.0	2897.5	1139.5	903.4	895.9	869.6	805.9	734.7	682.2	674.7
57.5°	7590.4	6525.9	2934.9	1008.3	828.4	843.4	835.9	760.9	682.2	633.5	629.7
60°	8490.0	7298.0	2815.1	892.1	760.9	790.9	798.4	734.7	693.5	704.7	708.4
62.5°	9397.1	7894.0	2357.7	805.9	716.0	757.2	820.9	817.1	798.4	817.1	820.9
65°	9723.2	8017.7	1671.8	734.7	671.0	772.1	892.1	884.6	798.4	764.7	757.2
67.5°	9539.5	7650.3	1124.5	678.4	637.2	790.9	967.1	884.6	768.4	723.4	708.4
70°	8666.1	6747.1	824.6	622.3	607.2	787.2	1008.3	880.9	753.4	704.7	686.0
72.5°	6912.0	5206.4	663.5	569.8	562.2	768.4	1030.8	873.4	738.5	686.0	663.5
75°	4475.5	3238.6	558.5	517.3	494.8	738.5	1019.6	850.9	719.6	652.2	637.2
77.5°	2076.6	1394.4	476.1	457.3	431.1	693.5	985.8	805.9	678.4	614.7	596.0
80°	967.1	659.7	401.1	397.3	386.1	655.9	940.8	753.4	629.7	577.3	547.3
82.5°	517.3	397.3	326.1	326.1	337.4	611.0	884.6	689.7	566.0	539.8	461.0
85°	273.6	228.6	236.1	254.9	288.6	539.8	809.7	622.3	494.8	412.4	401.1
87.5°	138.7	146.2	146.2	172.5	221.2	438.5	667.2	513.5	419.8	337.4	329.9
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)