

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: P397973

Luminaire Tested: **ARCH-S-PA1-70-727-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-727-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8422 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 74
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

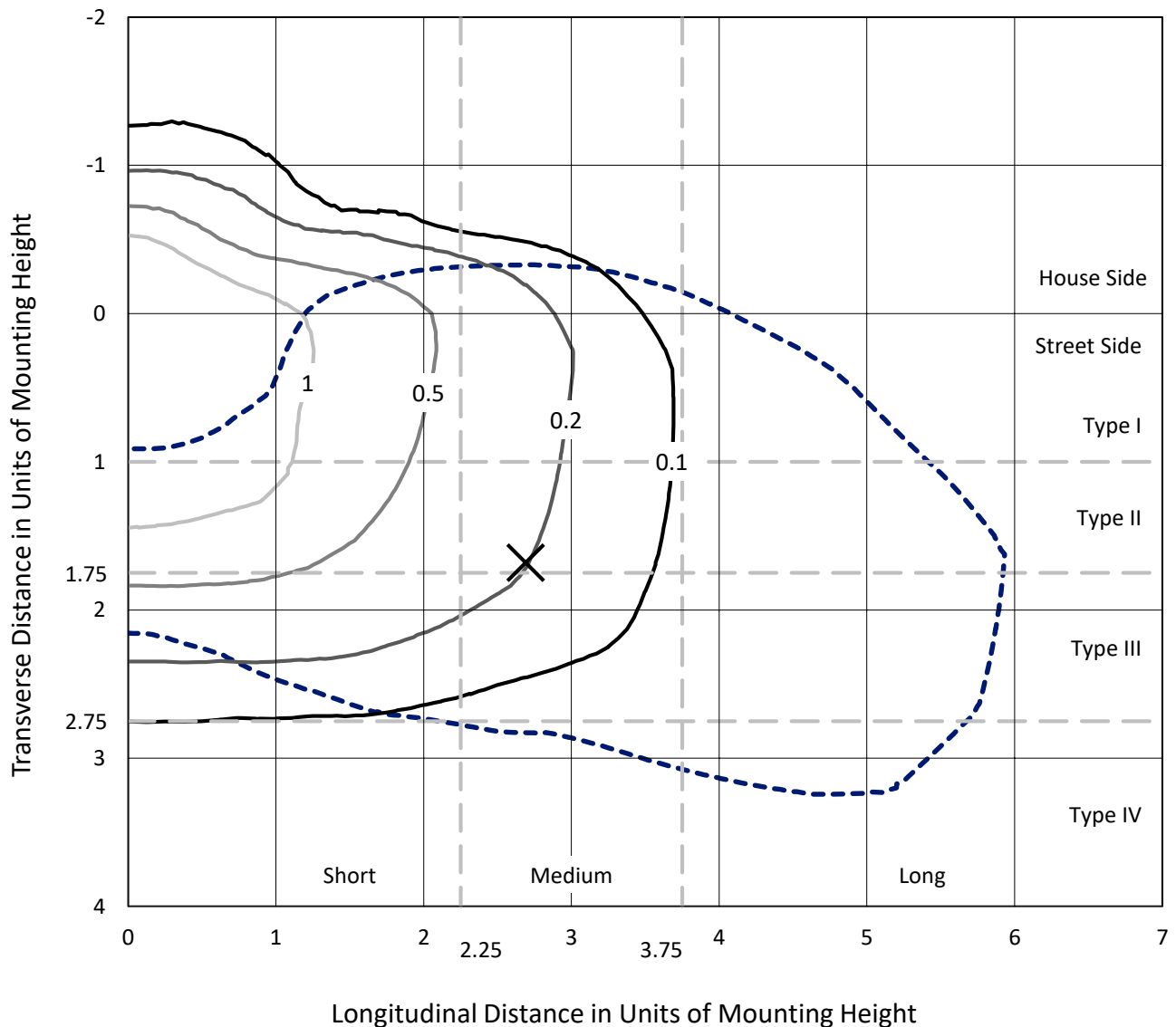


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

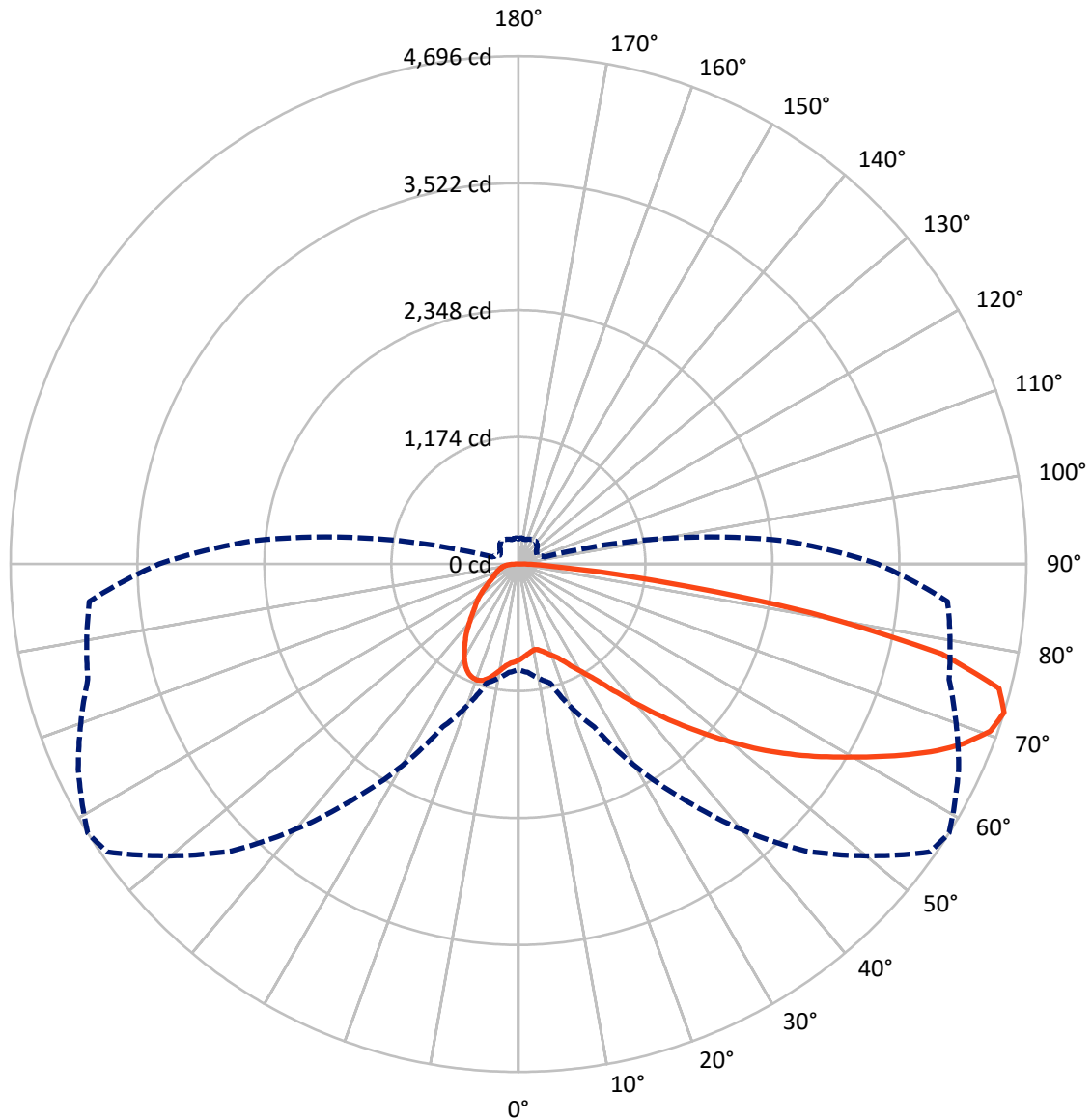


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1910.0	0.0	1910.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6512.0	0.0	6512.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	8422.0	0.0	8422.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.6	1.0
10°-20°	271.8	3.2
20°-30°	486.8	5.8
30°-40°	732.3	8.7
40°-50°	1185.9	14.1
50°-60°	1785.1	21.2
60°-70°	2100.9	24.9
70°-80°	1489.7	17.7
80°-90°	283.9	3.4
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°	8422.0	100.0
0°-180°	8422.0	100.0

Coefficient of Utilization



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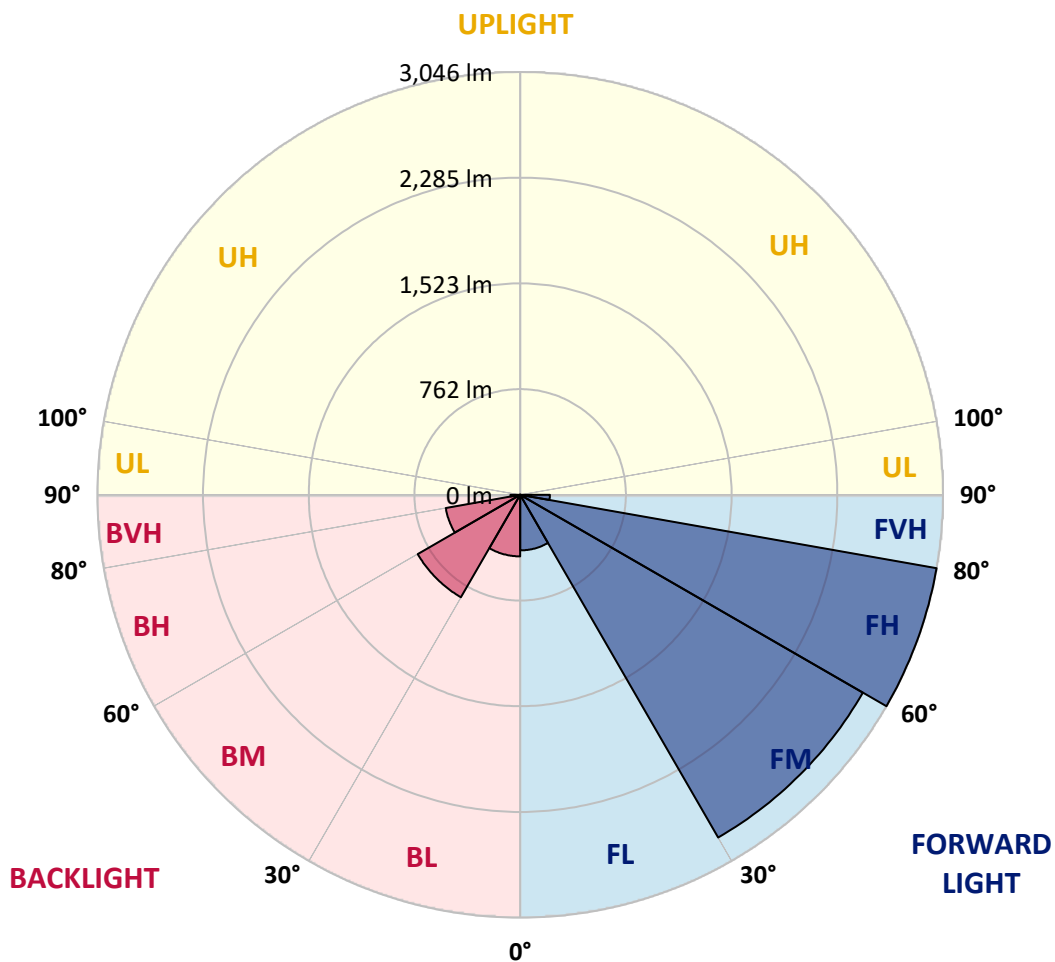
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	400.5	4.8			
FM	(30°-60°)	2851.1	33.9			
FH	(60°-80°)	3046.3	36.2			G2/5000
FVH	(80°-90°)	214.1	2.5			G2/225
BL	(0°-30°)	443.7	5.3	B1/500		
BM	(30°-60°)	852.2	10.1	B1/1000		
BH	(60°-80°)	544.4	6.5	B2/1000		G2/1000
BVH	(80°-90°)	69.7	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3
2.5°	855.0	850.5	851.7	851.7	856.1	858.3	859.4	862.8	865.0	870.6	878.3
5°	815.0	811.6	812.7	813.9	821.6	829.4	836.1	840.5	847.2	856.1	867.2
7.5°	786.1	783.8	784.9	787.2	793.8	802.7	813.9	820.5	830.5	847.2	866.1
10°	764.9	764.9	766.0	770.5	777.2	788.3	797.2	805.0	825.0	855.0	883.9
12.5°	748.3	748.3	751.6	760.5	771.6	782.7	803.8	812.7	839.4	880.6	915.0
15°	747.1	748.3	749.4	757.1	769.4	793.8	825.0	838.3	870.6	919.5	959.5
17.5°	764.9	766.0	761.6	763.8	778.3	812.7	853.9	869.4	910.6	963.9	1005.1
20°	819.4	819.4	806.1	793.8	803.8	841.6	888.3	903.9	949.5	1008.4	1049.6
22.5°	930.6	936.2	905.0	878.3	862.8	883.9	926.1	942.8	994.0	1057.3	1098.5
25°	1065.1	1070.7	1028.4	990.6	961.7	958.4	986.2	1004.0	1046.2	1111.8	1146.3
27.5°	1195.2	1185.2	1146.3	1110.7	1074.0	1044.0	1065.1	1080.7	1129.6	1179.6	1200.8
30°	1297.5	1289.7	1251.9	1226.3	1191.9	1153.0	1140.7	1157.4	1197.4	1244.1	1255.2
32.5°	1410.9	1405.3	1367.5	1334.2	1305.3	1268.6	1241.9	1249.7	1271.9	1305.3	1311.9
35°	1555.4	1567.7	1527.6	1459.8	1427.6	1392.0	1373.1	1375.3	1392.0	1413.1	1402.0
37.5°	1707.8	1722.2	1724.4	1617.7	1574.3	1542.1	1522.1	1529.9	1549.9	1564.3	1529.9
40°	1990.2	1975.7	1917.9	1838.9	1772.2	1741.1	1713.3	1712.2	1726.7	1752.2	1690.0
42.5°	2364.8	2351.5	2234.8	2132.5	2026.8	1991.3	1936.8	1913.4	1920.1	1952.4	1865.6
45°	2724.0	2718.4	2625.0	2506.0	2379.3	2310.4	2185.8	2129.1	2123.6	2149.1	2045.7
47.5°	3043.0	3018.6	2950.8	2858.5	2845.1	2665.0	2436.0	2359.3	2332.6	2347.0	2231.4
50°	3384.4	3301.0	3207.6	3150.9	3247.6	3079.7	2688.4	2608.3	2542.7	2552.7	2432.7
52.5°	3565.6	3425.5	3364.4	3381.0	3511.1	3446.6	2963.0	2865.2	2759.5	2774.0	2632.8
55°	3409.9	3408.8	3435.5	3538.9	3720.1	3645.6	3224.3	3114.2	2998.6	3001.9	2862.9
57.5°	3196.5	3239.8	3377.7	3605.6	3979.2	3854.7	3481.1	3364.4	3258.7	3242.1	3124.2
60°	3001.9	3049.7	3249.8	3594.5	4069.3	4045.9	3725.7	3623.4	3537.8	3488.9	3398.8
62.5°	2706.2	2741.7	3025.3	3523.3	3993.6	4183.8	3973.6	3903.6	3839.1	3737.9	3694.6
65°	2358.2	2370.4	2669.5	3288.8	3899.1	4237.1	4220.5	4189.3	4127.1	3978.1	3987.0
67.5°	1981.3	2005.7	2268.1	2914.1	3692.3	4212.7	4411.7	4437.3	4363.9	4140.4	4173.8
70°	1579.9	1609.9	1808.9	2396.0	3341.0	4107.1	4588.5	4629.6	4488.4	4193.8	4208.2
72.5°	977.3	1006.2	1139.6	1664.4	2648.3	3752.4	4642.9	4696.3	4491.7	4122.6	3983.6
75°	338.0	341.3	445.8	798.3	1572.1	2832.9	4465.1	4590.7	4350.5	3863.6	3466.6
77.5°	154.5	160.1	197.9	329.1	697.1	1528.7	3686.8	4001.4	3921.4	3458.9	2668.4
80°	106.7	109.0	136.8	196.8	402.5	538.1	2327.0	2737.3	2877.4	2678.4	1710.0
82.5°	80.1	82.3	105.6	133.4	290.2	261.3	886.1	1271.9	1581.0	1552.1	714.9
85°	76.7	75.6	82.3	88.9	193.5	155.7	286.8	393.6	617.1	528.1	180.1
87.5°	33.4	36.7	84.5	50.0	101.2	72.3	124.5	145.6	187.9	163.4	64.5
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°	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3	888.3
2.5°	881.7	883.9	890.6	900.6	906.1	917.2	925.0	929.5	932.8	933.9	933.9
5°	873.9	878.3	892.8	909.5	925.0	948.4	969.5	981.7	990.6	994.0	995.1
7.5°	876.1	887.2	908.4	932.8	952.8	982.8	1008.4	1032.9	1052.9	1060.7	1060.7
10°	897.2	912.8	941.7	974.0	999.5	1030.7	1057.3	1078.5	1101.8	1115.2	1117.4
12.5°	929.5	948.4	986.2	1021.8	1050.7	1075.1	1099.6	1115.2	1126.3	1136.3	1138.5
15°	975.1	998.4	1036.2	1072.9	1098.5	1114.0	1120.7	1120.7	1119.6	1120.7	1122.9
17.5°	1020.6	1042.9	1080.7	1117.4	1129.6	1120.7	1112.9	1110.7	1109.6	1107.4	1108.5
20°	1065.1	1086.2	1118.5	1146.3	1136.3	1105.1	1095.1	1094.0	1090.7	1088.5	1086.2
22.5°	1109.6	1125.2	1151.8	1161.8	1121.8	1077.4	1065.1	1058.4	1054.0	1048.4	1042.9
25°	1160.7	1165.2	1185.2	1169.6	1086.2	1026.2	1008.4	998.4	994.0	988.4	984.0
27.5°	1208.5	1208.5	1211.9	1157.4	1034.0	958.4	931.7	913.9	912.8	911.7	910.6
30°	1251.9	1246.3	1235.2	1120.7	966.2	875.0	835.0	817.2	823.9	829.4	830.5
32.5°	1303.0	1291.9	1260.8	1070.7	885.0	781.6	732.7	724.9	732.7	739.4	734.9
35°	1383.1	1363.1	1287.5	1012.9	807.2	696.0	649.3	638.2	636.0	634.8	626.0
37.5°	1497.6	1463.2	1308.6	950.6	730.5	620.4	585.9	562.6	541.5	519.2	515.9
40°	1637.7	1578.8	1323.1	879.4	649.3	557.0	520.3	490.3	454.7	415.8	411.4
42.5°	1791.1	1703.3	1329.7	800.5	578.1	504.8	459.2	421.4	381.4	351.3	345.8
45°	1956.8	1837.8	1324.2	724.9	520.3	460.3	409.1	368.0	335.8	314.6	310.2
47.5°	2118.0	1992.4	1308.6	664.9	475.9	422.5	370.2	332.4	308.0	284.6	279.1
50°	2324.8	2140.2	1289.7	618.2	426.9	384.7	345.8	305.7	278.0	266.8	264.6
52.5°	2553.8	2288.1	1267.5	559.2	379.1	354.7	330.2	294.6	285.7	264.6	261.3
55°	2801.8	2463.8	1263.0	484.8	336.9	333.5	314.6	304.6	306.9	264.6	259.1
57.5°	3063.1	2651.7	1273.0	410.3	302.4	314.6	321.3	313.5	310.2	270.2	259.1
60°	3335.5	2832.9	1243.0	341.3	275.7	299.1	329.1	309.1	284.6	267.9	260.2
62.5°	3600.1	2985.2	1112.9	292.4	255.7	294.6	324.7	292.4	264.6	264.6	261.3
65°	3792.4	3053.1	870.6	256.8	242.4	289.1	316.9	281.3	259.1	266.8	262.4
67.5°	3814.6	2983.0	584.8	229.0	231.3	279.1	299.1	271.3	253.5	273.5	266.8
70°	3677.9	2800.7	358.0	207.9	216.8	261.3	283.5	261.3	245.7	267.9	257.9
72.5°	3323.2	2460.5	252.4	190.1	201.2	244.6	269.1	252.4	234.6	242.4	232.4
75°	2726.2	1906.8	200.1	173.4	185.7	229.0	256.8	239.0	221.3	217.9	211.2
77.5°	1931.2	1221.9	161.2	160.1	169.0	210.1	240.2	223.5	205.7	199.0	194.6
80°	1110.7	599.3	139.0	144.5	153.4	191.2	220.1	205.7	189.0	179.0	172.3
82.5°	424.7	209.0	122.3	125.6	135.6	171.2	200.1	187.9	171.2	180.1	151.2
85°	137.9	114.5	100.1	103.4	113.4	142.3	176.8	166.8	147.9	131.2	121.2
87.5°	61.1	62.3	53.4	58.9	71.2	94.5	129.0	122.3	107.8	90.1	86.7
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)