

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: P398167

Luminaire Tested: **ARCH-S-PA1-90-830-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9320 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

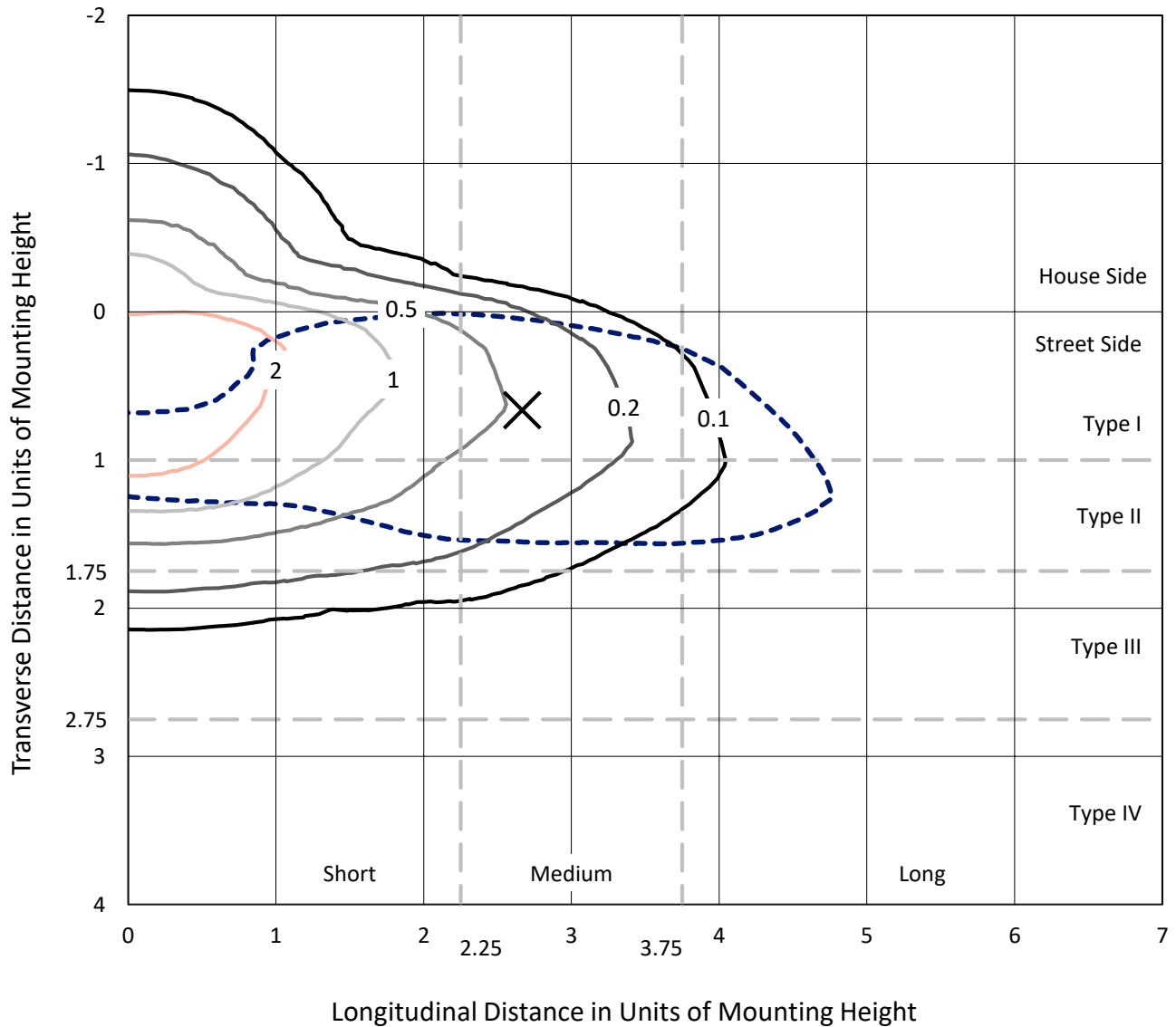
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

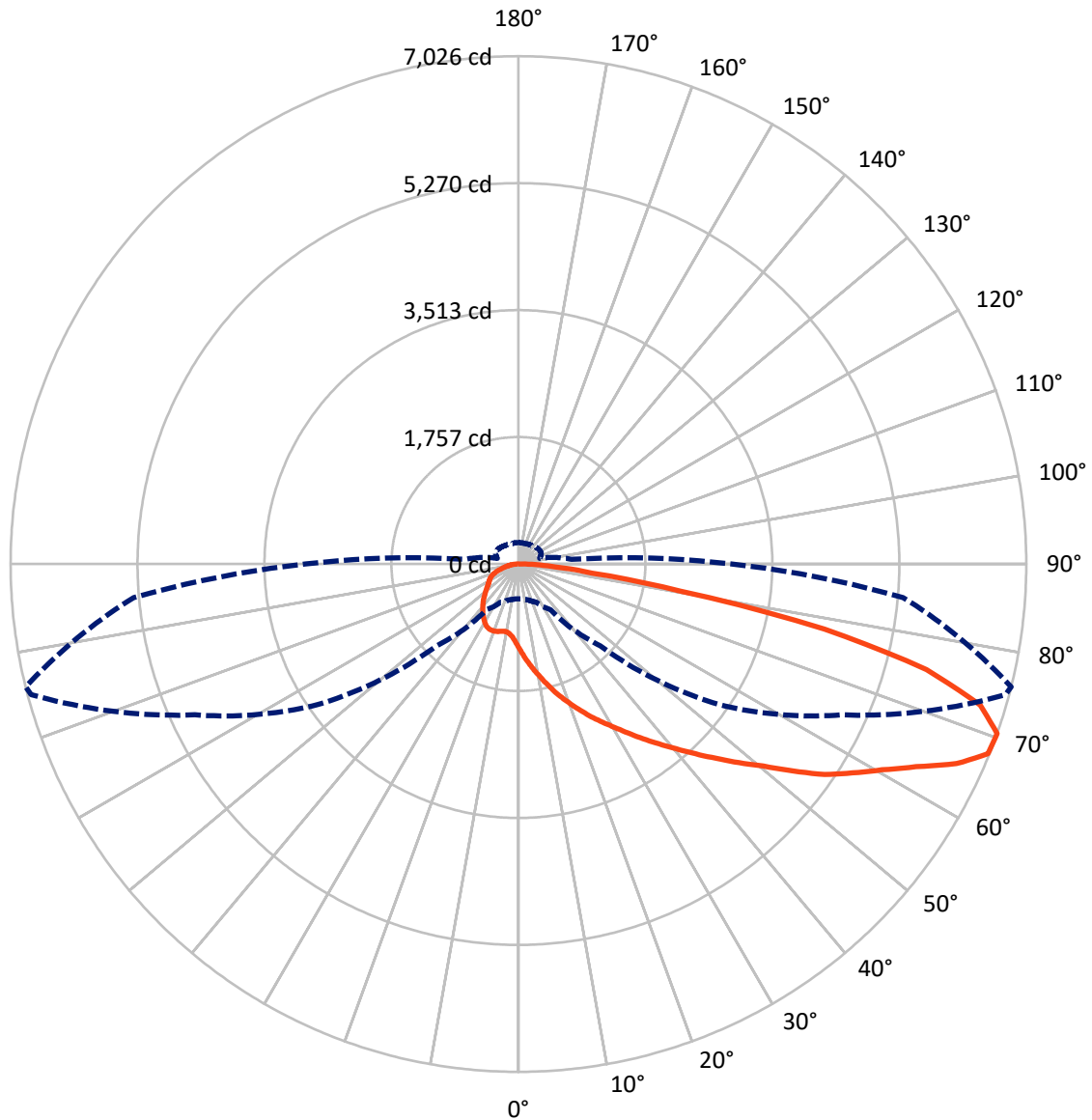


Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1521.6	0.0	1521.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	7798.4	0.0	7798.4
	% Fixture	83.7	0.0	83.7
Total	Lumens	9320.0	0.0	9320.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	1.3
10°-20°	411.6	4.4
20°-30°	736.4	7.9
30°-40°	1191.2	12.8
40°-50°	1723.2	18.5
50°-60°	1972.4	21.2
60°-70°	1814.3	19.5
70°-80°	1122.0	12.0
80°-90°	227.8	2.4
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°	9320.0	100.0
0°-180°	9320.0	100.0



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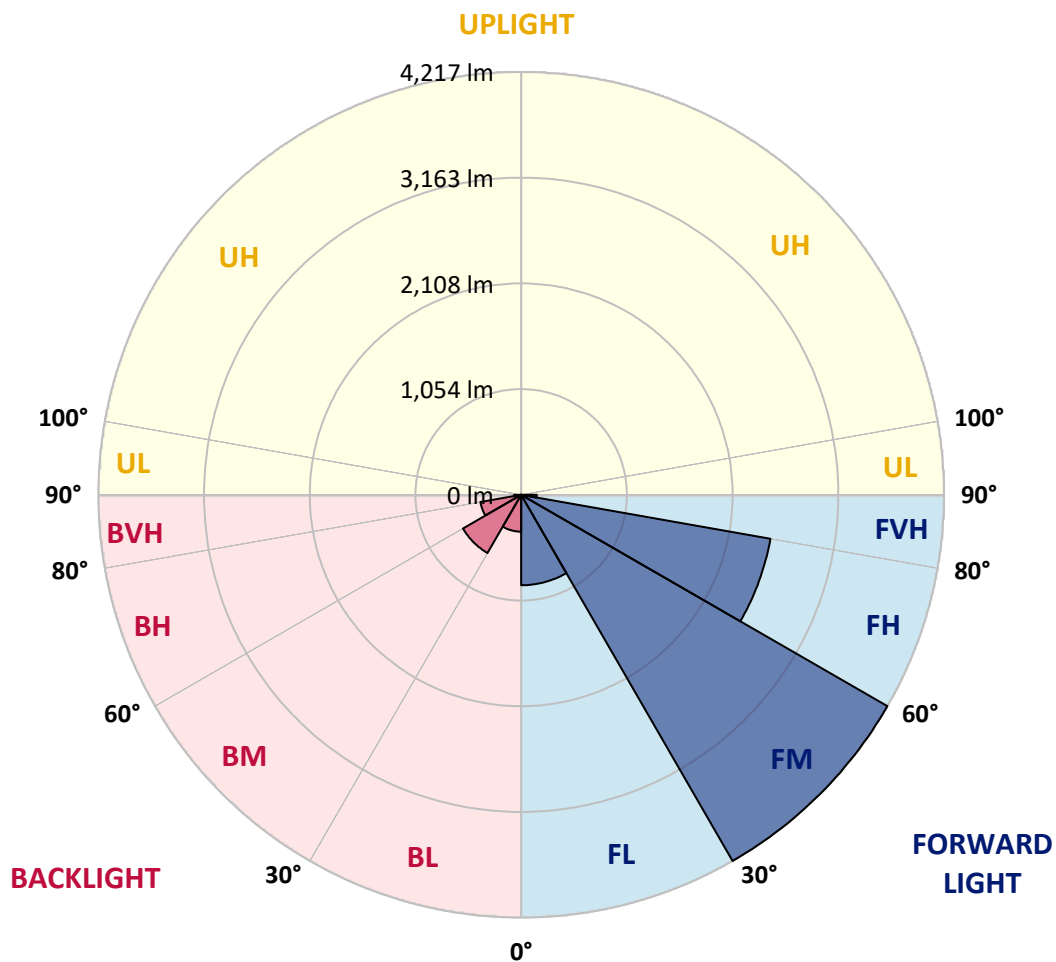
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	901.6	9.7			
FM (30°-60°)	4216.9	45.2			
FH (60°-80°)	2523.6	27.1			G2/5000
FVH (80°-90°)	156.4	1.7			G2/225
BL (0°-30°)	367.5	3.9	B1/500		
BM (30°-60°)	669.9	7.2	B1/1000		
BH (60°-80°)	412.7	4.4	B1/500		G1/500
BVH (80°-90°)	71.4	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5
2.5°	1485.4	1474.3	1473.1	1456.0	1440.0	1397.1	1366.5	1312.6	1258.6	1257.4	1203.5
5°	1717.0	1706.0	1699.8	1679.0	1652.1	1595.7	1540.5	1457.2	1365.3	1359.1	1257.4
7.5°	1873.9	1864.1	1851.8	1843.2	1817.5	1767.3	1699.8	1600.6	1474.3	1462.1	1319.9
10°	1979.3	1973.1	1970.7	1964.6	1948.6	1908.2	1843.2	1737.8	1583.4	1569.9	1386.1
12.5°	2024.6	2022.2	2033.2	2050.4	2056.5	2040.6	1978.1	1878.8	1703.5	1688.8	1465.8
15°	1971.9	1974.4	2002.6	2061.4	2123.9	2158.2	2121.4	2024.6	1839.6	1818.7	1558.9
17.5°	1947.4	1951.1	1970.7	2027.1	2115.3	2221.9	2239.1	2163.1	1970.7	1941.3	1657.0
20°	1990.3	1995.2	2009.9	2054.0	2115.3	2229.3	2318.8	2295.5	2099.4	2068.7	1751.3
22.5°	2099.4	2105.5	2104.3	2132.5	2174.1	2252.6	2362.9	2420.5	2234.2	2199.9	1849.4
25°	2332.2	2327.3	2285.7	2272.2	2283.2	2333.5	2421.7	2540.6	2375.1	2340.8	1952.3
27.5°	2648.4	2642.3	2566.3	2497.7	2436.4	2458.5	2505.0	2637.4	2518.5	2479.3	2050.4
30°	2986.7	2979.3	2891.1	2779.6	2643.5	2611.7	2605.5	2722.0	2663.1	2621.5	2154.5
32.5°	3316.4	3310.2	3215.9	3086.0	2898.4	2802.9	2744.0	2816.3	2827.4	2786.9	2268.5
35°	3616.6	3616.6	3535.7	3381.3	3169.3	3024.7	2927.9	2932.8	3016.1	2969.5	2398.4
37.5°	3883.8	3882.6	3794.3	3642.4	3438.9	3273.5	3153.4	3073.7	3196.3	3155.8	2534.5
40°	4095.8	4087.2	4022.3	3889.9	3685.3	3521.0	3399.7	3239.2	3397.2	3360.5	2679.1
42.5°	4250.2	4245.3	4201.2	4086.0	3891.1	3736.7	3653.4	3447.5	3625.2	3588.4	2848.2
45°	4310.3	4320.1	4320.1	4211.0	4056.6	3915.7	3878.9	3676.7	3871.5	3834.8	3029.6
47.5°	4213.5	4239.2	4291.9	4299.3	4163.2	4067.6	4079.9	3907.1	4125.2	4105.6	3228.1
50°	3910.8	3958.6	4073.8	4282.1	4206.1	4184.1	4251.5	4142.4	4397.3	4391.2	3469.6
52.5°	3130.1	3246.5	3605.6	3979.4	4176.7	4238.0	4421.8	4407.1	4747.8	4757.6	3784.5
55°	2400.9	2445.0	2860.5	3496.5	3996.5	4220.8	4535.8	4665.7	5127.7	5140.0	4073.8
57.5°	1941.3	1970.7	2197.4	2860.5	3586.0	4127.7	4625.3	4816.4	5419.4	5451.3	4331.1
60°	1538.1	1581.0	1732.9	2188.8	3011.2	3903.4	4687.8	4984.3	5733.2	5781.0	4638.7
62.5°	1143.4	1164.3	1307.7	1621.4	2383.7	3500.2	4654.7	5167.0	6118.0	6175.6	5008.9
65°	813.8	832.2	933.9	1153.3	1762.4	2954.8	4462.3	5303.0	6600.9	6659.7	5381.4
67.5°	609.1	616.5	674.1	806.4	1187.6	2295.5	4072.5	5279.7	6953.8	7006.5	5530.9
70°	481.6	484.1	512.3	583.4	772.1	1598.1	3389.9	4937.8	6979.6	7026.1	5342.2
72.5°	399.5	398.3	414.2	448.6	538.0	1011.1	2511.2	4302.9	6648.7	6680.5	4815.2
75°	329.7	332.1	343.2	362.8	410.6	666.7	1627.5	3432.8	5865.5	5831.2	4040.7
77.5°	277.0	275.8	280.7	297.8	332.1	479.2	953.5	2480.5	4347.1	4329.9	2652.1
80°	223.1	225.5	232.9	247.6	279.4	365.2	563.8	1547.9	2332.2	2269.7	1267.2
82.5°	149.5	172.8	187.5	204.7	241.4	269.6	357.9	786.8	1043.0	1027.0	574.8
85°	71.1	94.4	139.7	159.3	196.1	169.1	242.7	375.0	522.1	516.0	207.1
87.5°	14.7	14.7	74.8	89.5	121.3	72.3	134.8	163.0	252.5	236.5	84.6
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°	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5	1165.5
2.5°	1171.6	1138.5	1072.4	1019.7	965.7	935.1	897.1	878.7	875.0	865.2	872.6
5°	1192.5	1127.5	1002.5	920.4	865.2	838.3	824.8	819.9	818.7	816.2	816.2
7.5°	1220.7	1121.4	958.4	875.0	839.5	830.9	834.6	842.0	843.2	845.6	844.4
10°	1255.0	1122.6	933.9	864.0	846.9	848.1	860.3	870.1	875.0	878.7	877.5
12.5°	1302.8	1137.3	930.2	871.4	864.0	868.9	881.2	891.0	895.9	897.1	897.1
15°	1365.3	1168.0	938.8	887.3	881.2	884.9	892.2	895.9	897.1	895.9	895.9
17.5°	1433.9	1204.7	951.0	897.1	887.3	883.6	881.2	877.5	870.1	865.2	865.2
20°	1500.1	1237.8	957.2	895.9	878.7	864.0	849.3	830.9	818.7	808.9	808.9
22.5°	1566.3	1268.5	957.2	882.4	855.4	827.3	796.6	767.2	748.8	736.6	736.6
25°	1636.1	1297.9	949.8	859.1	818.7	778.2	736.6	699.8	681.4	669.2	666.7
27.5°	1694.9	1315.0	930.2	826.0	773.3	721.9	674.1	636.1	622.6	611.6	611.6
30°	1757.5	1326.1	893.4	783.1	721.9	663.0	614.0	583.4	568.7	552.7	551.5
32.5°	1827.3	1333.4	851.8	737.8	669.2	606.7	565.0	540.5	508.6	491.4	489.0
35°	1908.2	1343.2	807.6	686.3	616.5	560.1	535.6	495.1	464.5	449.8	448.6
37.5°	1994.0	1350.6	759.8	641.0	568.7	529.4	504.9	457.1	430.2	408.1	405.7
40°	2084.7	1350.6	710.8	596.8	530.7	516.0	469.4	426.5	381.1	370.1	367.7
42.5°	2185.2	1348.1	661.8	554.0	495.1	485.3	448.6	403.2	379.9	370.1	367.7
45°	2291.8	1339.5	615.2	504.9	458.4	438.7	410.6	398.3	388.5	388.5	388.5
47.5°	2413.1	1332.2	562.5	460.8	431.4	409.3	388.5	381.1	379.9	383.6	387.3
50°	2568.8	1329.7	518.4	428.9	410.6	384.8	382.4	376.2	377.5	377.5	377.5
52.5°	2757.5	1307.7	476.7	405.7	389.7	359.1	366.4	372.6	375.0	373.8	372.6
55°	2896.0	1268.5	441.2	389.7	375.0	349.3	359.1	368.9	371.3	367.7	367.7
57.5°	3021.0	1213.3	413.0	377.5	365.2	343.2	354.2	364.0	361.5	360.3	359.1
60°	3164.4	1160.6	391.0	371.3	355.4	340.7	350.5	356.6	353.0	350.5	349.3
62.5°	3320.0	1109.1	375.0	371.3	348.1	339.5	346.8	349.3	341.9	339.5	339.5
65°	3392.3	1028.2	357.9	371.3	344.4	337.0	339.5	337.0	329.7	329.7	328.4
67.5°	3273.5	894.7	335.8	366.4	349.3	333.4	328.4	324.8	316.2	316.2	313.7
70°	2945.0	735.3	303.9	350.5	350.5	332.1	313.7	305.2	295.4	299.0	294.1
72.5°	2516.1	583.4	264.7	323.5	343.2	330.9	297.8	284.3	275.8	279.4	272.1
75°	2038.1	452.2	218.1	280.7	324.8	324.8	281.9	263.5	253.7	253.7	245.1
77.5°	1299.1	334.6	177.7	232.9	291.7	316.2	268.4	240.2	225.5	221.8	215.7
80°	643.4	235.3	145.8	185.1	248.8	296.6	258.6	213.2	192.4	185.1	174.0
82.5°	341.9	163.0	116.4	144.6	198.5	267.2	246.3	183.8	158.1	147.1	134.8
85°	153.2	100.5	93.1	110.3	150.7	219.4	221.8	150.7	121.3	144.6	106.6
87.5°	56.4	45.3	45.3	56.4	87.0	91.9	156.9	96.8	77.2	52.7	41.7
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)