

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: P397876

Luminaire Tested: **ARCH-S-PA1-50-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5748 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 54  
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

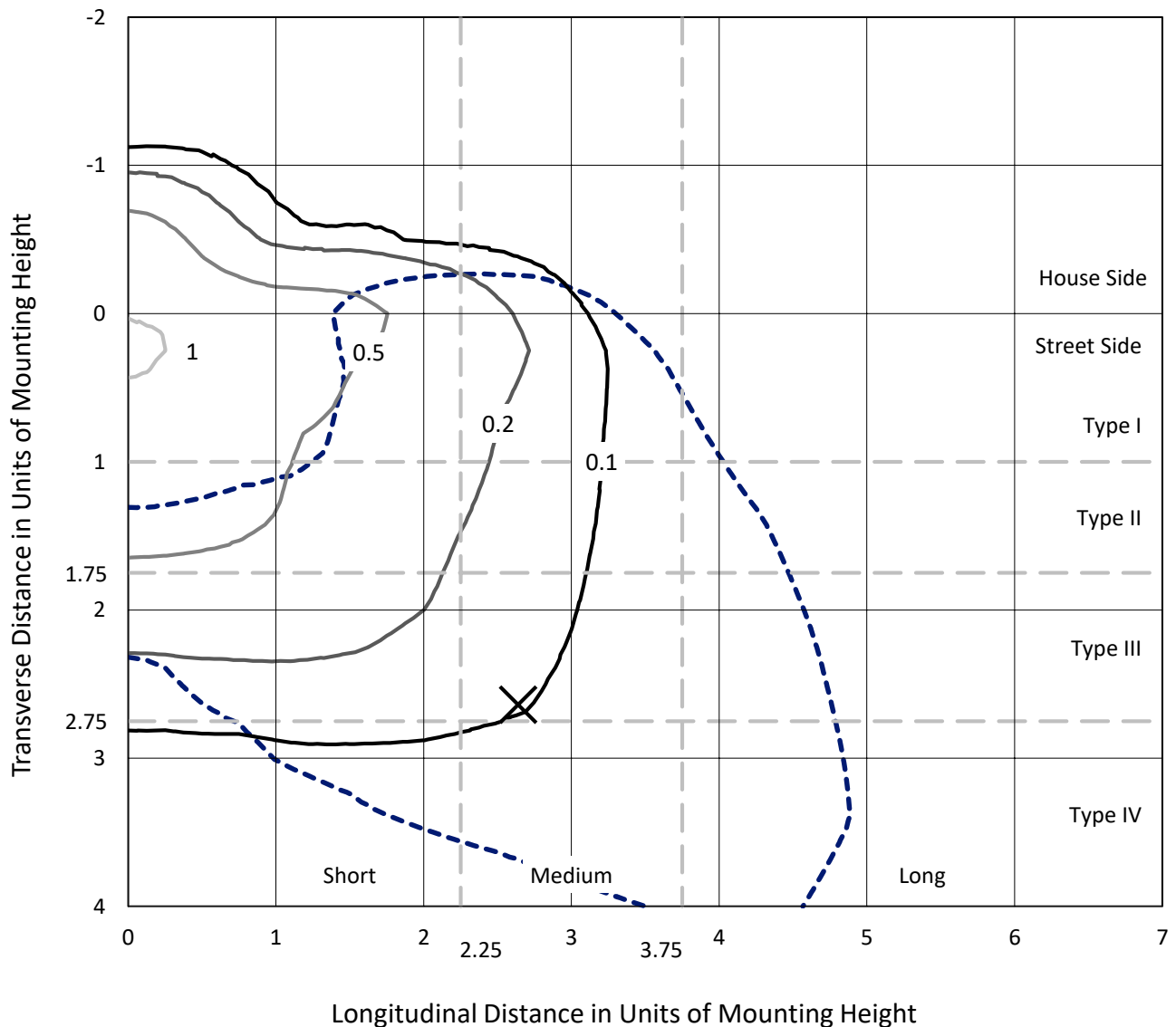


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

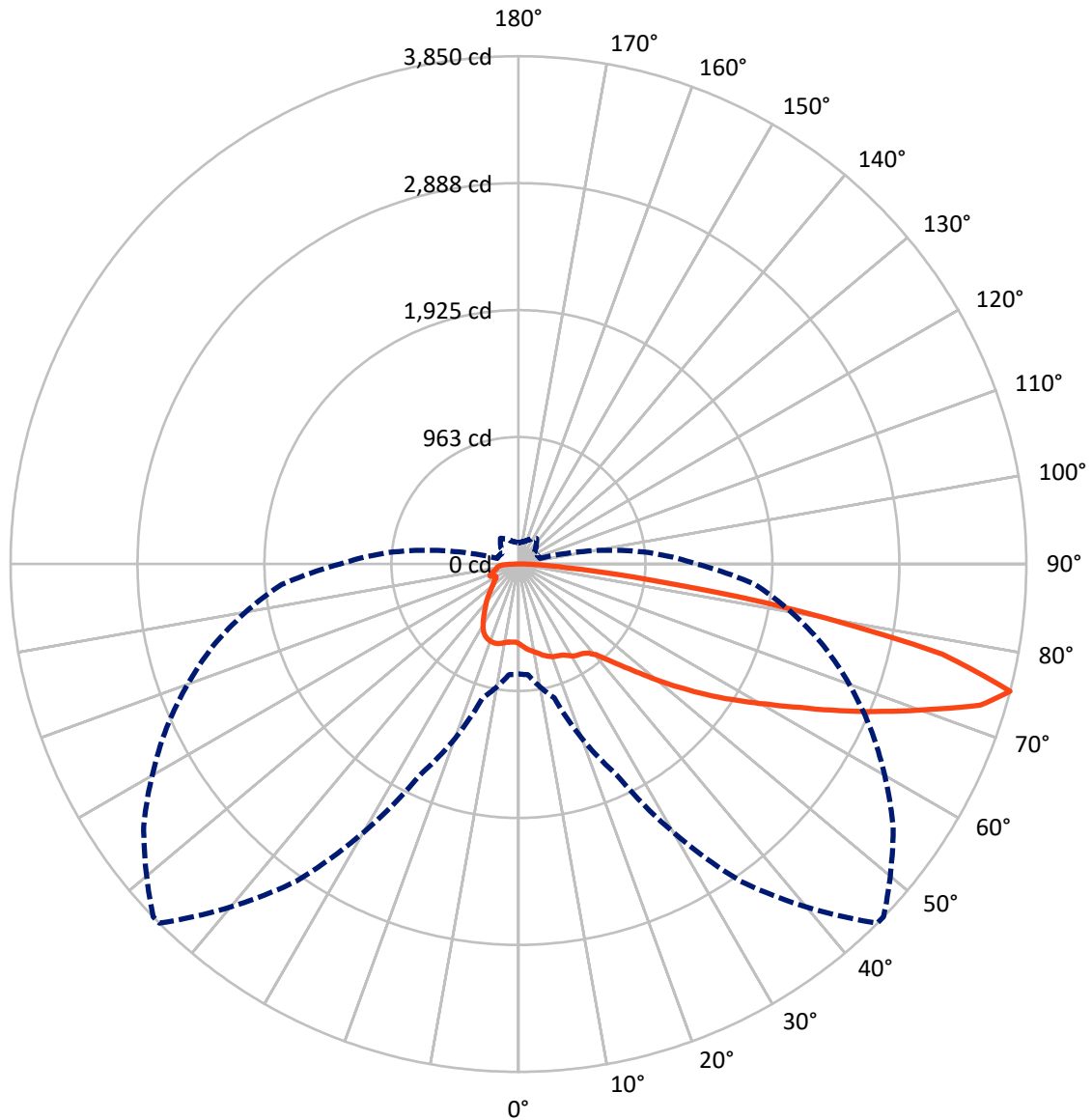


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	1270.3	0.0	1270.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	4477.7	0.0	4477.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	5748.0	0.0	5748.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.0
10°-20°	190.0	3.3
20°-30°	323.9	5.6
30°-40°	453.8	7.9
40°-50°	666.7	11.6
50°-60°	1061.1	18.5
60°-70°	1509.5	26.3
70°-80°	1263.9	22.0
80°-90°	219.3	3.8
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°	5748.0	100.0
0°-180°	5748.0	100.0



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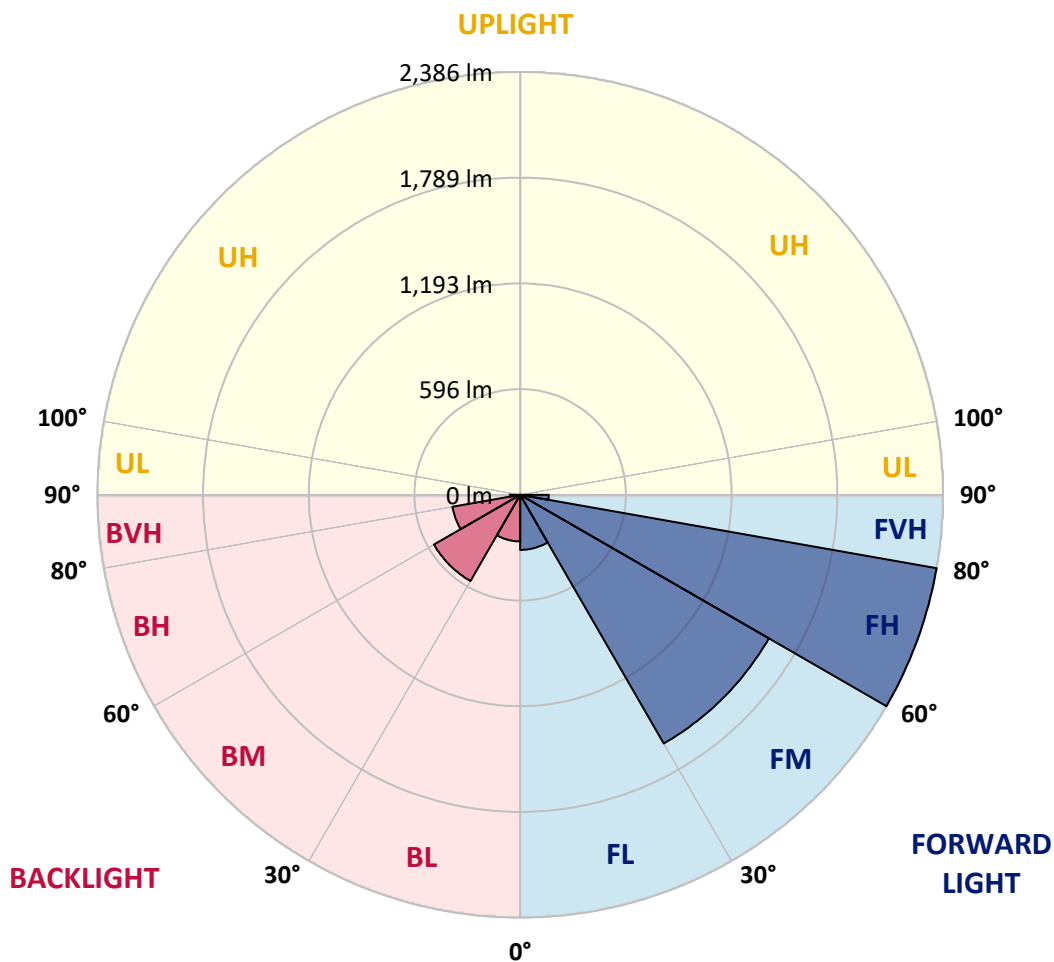
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	310.7	5.4			
FM (30°-60°)	1620.2	28.2			
FH (60°-80°)	2385.6	41.5			G2/5000
FVH (80°-90°)	161.3	2.8			G2/225
BL (0°-30°)	262.9	4.6	B1/500		
BM (30°-60°)	561.5	9.8	B1/1000		
BH (60°-80°)	387.8	6.7	B1/500		G1/500
BVH (80°-90°)	58.1	1.0			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7
2.5°	638.2	635.2	633.6	633.6	627.5	623.6	622.9	617.5	612.9	608.3	604.4
5°	675.1	672.8	668.2	664.3	655.9	645.1	643.6	632.1	620.6	609.8	600.6
7.5°	708.9	704.3	698.9	691.2	677.4	662.8	660.5	644.4	628.2	612.1	599.8
10°	737.3	732.7	725.0	714.3	696.6	678.9	676.6	659.7	642.8	623.6	606.0
12.5°	764.2	760.3	748.8	734.2	713.5	697.4	695.1	680.5	662.8	641.3	618.3
15°	787.2	783.4	771.1	754.2	730.4	718.1	715.0	701.2	683.5	660.5	636.7
17.5°	798.7	798.7	785.7	767.3	745.0	735.8	733.5	716.6	700.4	678.2	654.4
20°	802.6	804.1	794.9	772.6	753.4	749.6	747.3	733.5	715.0	693.5	671.3
22.5°	804.9	808.0	800.3	774.9	758.8	756.5	755.0	745.7	731.2	710.4	688.1
25°	812.6	812.6	807.2	778.8	765.7	765.0	765.0	759.6	749.6	731.9	709.7
27.5°	824.1	823.3	816.4	787.2	781.1	783.4	782.6	781.8	774.9	757.3	733.5
30°	843.3	843.3	835.6	804.1	800.3	810.3	811.0	812.6	801.8	774.2	755.0
32.5°	872.5	869.4	861.7	821.0	814.9	824.1	825.6	824.9	815.6	789.5	780.3
35°	962.3	955.4	927.8	858.6	827.9	833.3	834.1	837.9	839.4	818.7	814.1
37.5°	1119.8	1110.6	1068.3	947.7	869.4	856.3	855.6	865.6	874.0	855.6	855.6
40°	1291.0	1283.4	1258.8	1101.3	946.2	903.2	900.1	909.3	920.1	907.0	910.9
42.5°	1438.5	1444.7	1447.0	1264.2	1061.4	990.7	982.3	969.2	986.1	974.6	990.0
45°	1549.1	1546.0	1588.3	1430.8	1210.4	1100.6	1089.1	1053.7	1075.2	1074.5	1108.3
47.5°	1666.6	1661.2	1678.9	1587.5	1380.1	1235.0	1217.3	1165.1	1197.3	1219.6	1275.7
50°	1778.0	1779.5	1785.7	1711.2	1564.5	1398.6	1376.3	1306.4	1352.5	1399.3	1478.4
52.5°	1923.1	1912.4	1904.7	1855.5	1771.1	1569.1	1554.5	1474.6	1539.1	1594.4	1699.6
55°	2049.9	2042.9	2038.3	2036.0	1943.9	1757.2	1741.9	1658.9	1751.9	1791.0	1946.2
57.5°	2185.0	2181.2	2205.8	2244.9	2208.1	1948.5	1932.3	1852.5	1956.2	1983.8	2213.4
60°	2284.1	2286.4	2354.0	2453.8	2428.5	2155.8	2136.6	2066.0	2155.1	2179.6	2480.7
62.5°	2284.9	2307.9	2464.6	2643.5	2672.7	2394.7	2372.4	2295.6	2359.4	2359.4	2720.3
65°	2066.7	2092.9	2444.6	2690.4	2920.0	2678.9	2657.4	2536.8	2560.6	2528.3	2945.4
67.5°	1849.4	1880.1	2211.1	2694.2	3093.6	2983.0	2957.7	2777.9	2737.2	2655.8	3102.8
70°	1705.0	1726.5	2003.0	2644.3	3198.0	3301.0	3281.8	3006.8	2876.2	2762.6	3069.8
72.5°	1435.4	1427.8	1692.0	2407.0	3256.4	3661.9	3645.8	3255.6	2996.8	2711.9	2618.2
75°	833.3	842.5	1049.9	1763.4	2935.4	3850.1	3848.6	3468.4	2943.8	2395.5	1804.1
77.5°	240.4	247.3	344.8	774.9	1856.3	3284.1	3389.3	3171.9	2488.4	1707.3	935.5
80°	105.2	110.6	149.8	258.1	799.5	2145.1	2237.2	2145.1	1500.7	783.4	367.1
82.5°	62.2	66.0	97.5	159.7	383.2	1020.7	1145.1	1000.0	647.4	332.6	152.1
85°	35.3	36.9	56.1	101.4	241.2	357.1	400.9	375.6	315.7	188.9	79.9
87.5°	16.1	16.9	27.6	47.6	135.2	120.6	125.2	165.9	182.8	115.2	39.9
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°	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7	603.7
2.5°	602.9	600.6	596.0	594.4	592.1	592.9	593.7	593.7	594.4	592.1	592.1
5°	596.8	592.9	588.3	588.3	588.3	594.4	599.8	602.9	604.4	604.4	602.9
7.5°	594.4	589.8	584.5	586.0	587.5	595.2	605.2	615.2	618.3	618.3	616.7
10°	599.1	594.4	590.6	592.9	596.8	602.9	610.6	619.8	627.5	628.2	627.5
12.5°	609.8	604.4	600.6	605.2	609.8	613.7	617.5	621.3	631.3	632.9	632.9
15°	627.5	622.1	617.5	621.3	622.9	622.9	622.9	622.9	632.9	634.4	634.4
17.5°	645.1	640.5	635.9	636.7	632.1	625.9	623.6	622.9	628.2	632.9	633.6
20°	662.0	658.2	653.6	645.9	634.4	622.9	619.0	619.0	622.1	629.0	629.0
22.5°	680.5	675.9	668.2	650.5	631.3	615.2	611.3	613.7	617.5	626.7	625.9
25°	701.2	695.1	682.0	649.0	621.3	602.1	602.9	609.8	616.7	626.7	626.7
27.5°	724.2	715.8	689.7	636.7	599.1	580.6	587.5	603.7	613.7	624.4	625.9
30°	749.6	741.9	695.8	615.2	563.0	546.1	563.0	589.1	604.4	614.4	616.7
32.5°	780.3	774.2	701.2	587.5	516.1	501.5	526.1	558.4	582.9	594.4	596.8
35°	818.7	812.6	708.1	556.0	472.3	457.0	479.2	512.3	544.5	559.1	563.7
37.5°	868.6	859.4	714.3	522.3	435.5	417.8	428.6	458.5	487.7	507.7	513.0
40°	932.4	917.8	719.6	483.9	403.2	383.2	387.1	401.7	418.6	436.2	443.1
42.5°	1022.2	993.1	720.4	443.1	370.2	351.8	350.2	354.8	354.8	354.8	357.1
45°	1147.4	1092.1	721.9	404.7	336.4	317.2	312.6	311.0	299.5	277.3	275.7
47.5°	1305.6	1221.9	728.9	372.5	301.1	284.2	278.0	271.9	250.4	227.3	222.7
50°	1508.4	1372.5	742.7	341.8	271.1	259.6	251.9	237.3	213.5	195.8	191.2
52.5°	1741.9	1551.4	755.7	309.5	248.8	241.2	231.9	214.3	188.9	178.2	176.6
55°	2009.9	1751.1	781.8	281.1	229.6	224.3	215.8	198.9	179.7	172.0	171.3
57.5°	2284.1	1974.6	818.7	255.8	211.2	208.1	208.1	193.5	181.3	178.2	178.2
60°	2548.3	2166.6	790.3	231.9	194.3	195.8	210.4	206.6	197.4	201.2	203.5
62.5°	2753.4	2279.5	641.3	212.7	182.0	195.8	233.5	233.5	222.7	221.2	221.2
65°	2840.9	2278.0	450.8	198.1	177.4	215.0	260.4	248.1	219.7	208.9	206.6
67.5°	2818.6	2178.1	311.0	188.2	175.9	235.0	272.6	238.1	205.8	196.6	189.7
70°	2622.8	1966.9	239.6	178.9	173.6	226.6	268.8	226.6	195.1	186.6	180.5
72.5°	2115.9	1577.5	198.9	169.7	164.4	209.7	255.8	215.8	186.6	177.4	171.3
75°	1349.4	992.3	168.2	157.4	146.7	188.2	238.1	205.1	177.4	165.1	160.5
77.5°	649.0	427.8	146.7	142.9	132.1	174.3	220.4	191.2	165.1	155.1	152.1
80°	262.7	195.8	127.5	128.3	121.3	165.9	208.1	178.2	152.8	142.1	136.7
82.5°	136.7	113.7	107.5	110.6	110.6	158.2	198.9	167.4	142.1	137.5	119.8
85°	73.7	70.7	82.9	89.1	96.0	142.9	185.1	155.9	129.8	111.4	107.5
87.5°	36.1	46.1	46.8	53.8	66.8	114.4	155.9	130.6	108.3	89.9	88.3
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)