

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: P397829

Luminaire Tested: **ARCH-S-PA1-50-727-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397829  
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-PA1-50-727-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6580 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

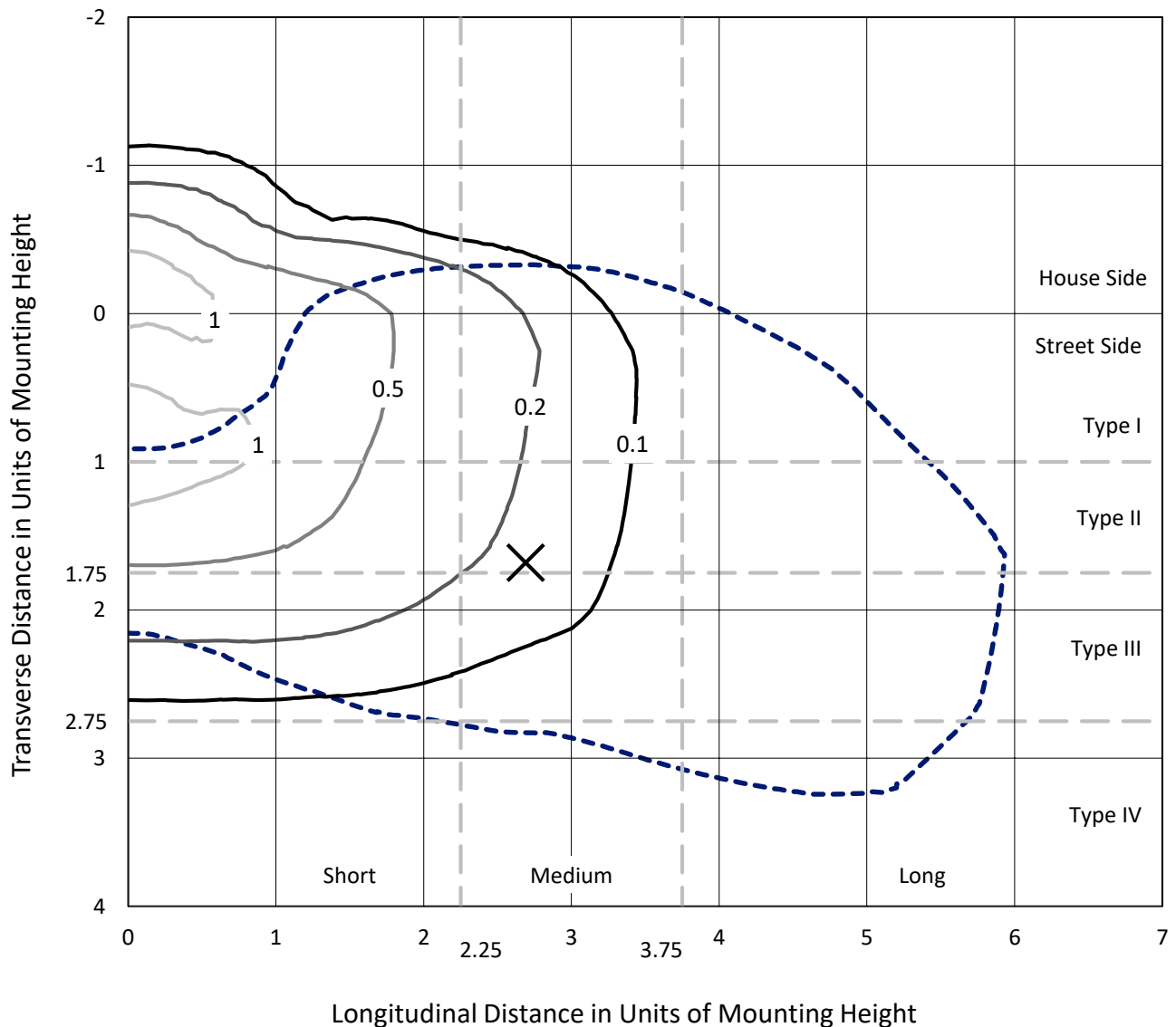


REPORT NUMBER: P397829

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

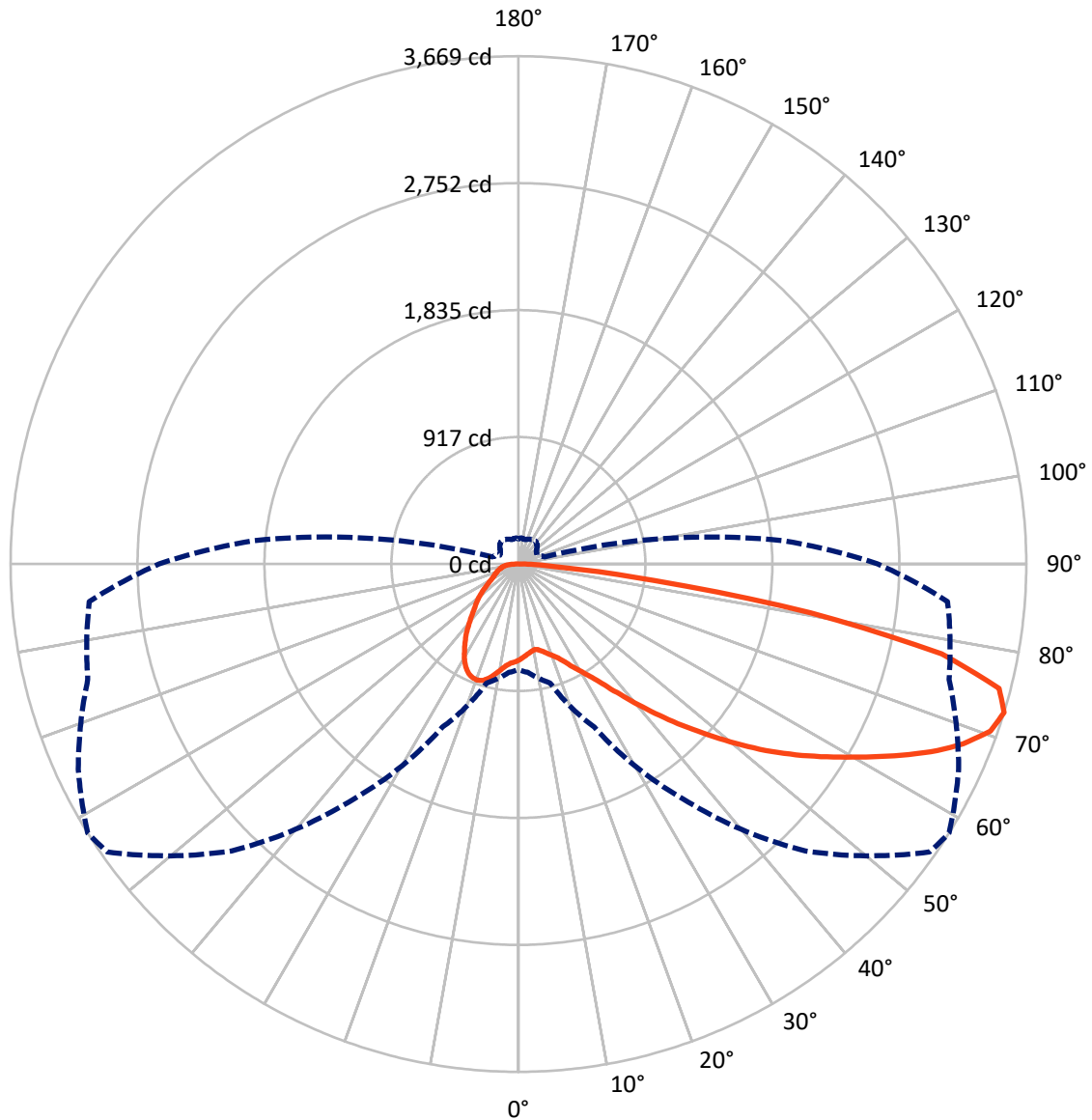


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397829

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397829

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1492.3	0.0	1492.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	5087.7	0.0	5087.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	6580.0	0.0	6580.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.9	1.0
10°-20°	212.3	3.2
20°-30°	380.4	5.8
30°-40°	572.1	8.7
40°-50°	926.5	14.1
50°-60°	1394.7	21.2
60°-70°	1641.4	24.9
70°-80°	1163.9	17.7
80°-90°	221.8	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°	6580.0	100.0
0°-180°	6580.0	100.0



REPORT NUMBER: P397829

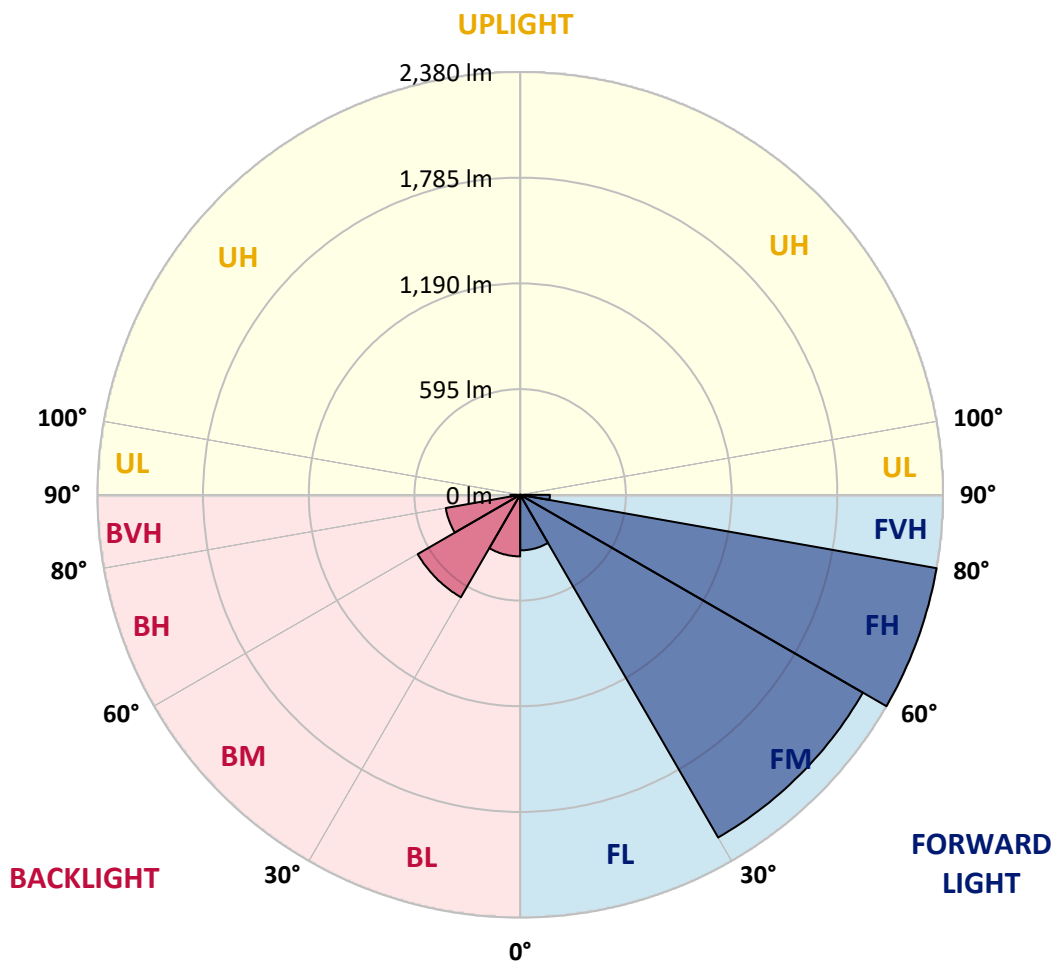
CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.9	4.8			
FM (30°-60°)	2227.5	33.9			
FH (60°-80°)	2380.0	36.2			G2/5000
FVH (80°-90°)	167.3	2.5			G2/225
BL (0°-30°)	346.6	5.3	B1/500		
BM (30°-60°)	665.8	10.1	B1/1000		
BH (60°-80°)	425.3	6.5	B1/500		G1/500
BVH (80°-90°)	54.5	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 IV Medium





REPORT NUMBER: P397829

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1
2.5°	668.0	664.5	665.4	665.4	668.9	670.6	671.5	674.1	675.8	680.2	686.2
5°	636.7	634.1	635.0	635.9	641.9	648.0	653.2	656.7	661.9	668.9	677.5
7.5°	614.1	612.4	613.3	615.0	620.2	627.2	635.9	641.1	648.9	661.9	676.7
10°	597.6	597.6	598.5	602.0	607.2	615.9	622.8	628.9	644.5	668.0	690.6
12.5°	584.6	584.6	587.2	594.2	602.8	611.5	628.0	635.0	655.8	688.0	714.9
15°	583.7	584.6	585.5	591.5	601.1	620.2	644.5	655.0	680.2	718.4	749.6
17.5°	597.6	598.5	595.0	596.8	608.1	635.0	667.1	679.3	711.4	753.1	785.3
20°	640.2	640.2	629.8	620.2	628.0	657.6	694.1	706.2	741.8	787.9	820.0
22.5°	727.1	731.4	707.1	686.2	674.1	690.6	723.6	736.6	776.6	826.1	858.2
25°	832.2	836.5	803.5	774.0	751.4	748.8	770.5	784.4	817.4	868.6	895.6
27.5°	933.8	926.0	895.6	867.8	839.1	815.7	832.2	844.3	882.5	921.6	938.1
30°	1013.7	1007.6	978.1	958.1	931.2	900.8	891.2	904.3	935.5	972.0	980.7
32.5°	1102.3	1098.0	1068.4	1042.4	1019.8	991.1	970.3	976.4	993.7	1019.8	1025.0
35°	1215.2	1224.8	1193.5	1140.5	1115.3	1087.5	1072.8	1074.5	1087.5	1104.1	1095.4
37.5°	1334.2	1345.5	1347.3	1263.9	1230.0	1204.8	1189.2	1195.3	1210.9	1222.2	1195.3
40°	1554.9	1543.6	1498.4	1436.7	1384.6	1360.3	1338.6	1337.7	1349.0	1369.0	1320.3
42.5°	1847.6	1837.2	1746.0	1666.1	1583.5	1555.7	1513.2	1494.9	1500.2	1525.3	1457.6
45°	2128.2	2123.8	2050.9	1957.9	1858.9	1805.1	1707.8	1663.5	1659.1	1679.1	1598.3
47.5°	2377.5	2358.4	2305.4	2233.3	2222.9	2082.2	1903.2	1843.3	1822.4	1833.7	1743.4
50°	2644.2	2579.0	2506.1	2461.7	2537.3	2406.2	2100.4	2037.8	1986.6	1994.4	1900.6
52.5°	2785.8	2676.3	2628.5	2641.6	2743.2	2692.8	2314.9	2238.5	2156.0	2167.3	2057.0
55°	2664.1	2663.3	2684.1	2764.9	2906.5	2848.3	2519.1	2433.1	2342.7	2345.4	2236.8
57.5°	2497.4	2531.2	2639.0	2817.0	3108.9	3011.6	2719.7	2628.5	2546.0	2533.0	2440.9
60°	2345.4	2382.7	2539.1	2808.3	3179.3	3161.0	2910.8	2830.9	2764.0	2725.8	2655.5
62.5°	2114.3	2142.1	2363.6	2752.7	3120.2	3268.7	3104.5	3049.8	2999.4	2920.4	2886.5
65°	1842.4	1852.0	2085.6	2569.5	3046.4	3310.4	3297.4	3273.1	3224.4	3108.0	3115.0
67.5°	1547.9	1567.0	1772.0	2276.7	2884.8	3291.3	3446.8	3466.8	3409.4	3234.8	3260.9
70°	1234.3	1257.8	1413.3	1871.9	2610.3	3208.8	3584.9	3617.1	3506.7	3276.5	3287.8
72.5°	763.5	786.1	890.4	1300.4	2069.1	2931.7	3627.5	3669.2	3509.3	3220.9	3112.4
75°	264.1	266.7	348.3	623.7	1228.3	2213.3	3488.5	3586.6	3399.0	3018.6	2708.4
77.5°	120.7	125.1	154.6	257.1	544.6	1194.4	2880.4	3126.3	3063.7	2702.4	2084.8
80°	83.4	85.1	106.8	153.8	314.5	420.4	1818.1	2138.6	2248.1	2092.6	1336.0
82.5°	62.5	64.3	82.5	104.2	226.7	204.1	692.3	993.7	1235.2	1212.6	558.5
85°	59.9	59.1	64.3	69.5	151.1	121.6	224.1	307.5	482.1	412.6	140.7
87.5°	26.1	28.7	66.0	39.1	79.0	56.5	97.3	113.8	146.8	127.7	50.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397829

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1	694.1
2.5°	688.8	690.6	695.8	703.6	707.9	716.6	722.7	726.2	728.8	729.7	729.7
5°	682.8	686.2	697.5	710.6	722.7	741.0	757.5	767.0	774.0	776.6	777.4
7.5°	684.5	693.2	709.7	728.8	744.4	767.9	787.9	807.0	822.6	828.7	828.7
10°	701.0	713.2	735.7	760.9	780.9	805.2	826.1	842.6	860.8	871.3	873.0
12.5°	726.2	741.0	770.5	798.3	820.9	840.0	859.1	871.3	879.9	887.8	889.5
15°	761.8	780.0	809.6	838.2	858.2	870.4	875.6	875.6	874.7	875.6	877.3
17.5°	797.4	814.8	844.3	873.0	882.5	875.6	869.5	867.8	866.9	865.2	866.0
20°	832.2	848.7	873.9	895.6	887.8	863.4	855.6	854.8	852.1	850.4	848.7
22.5°	866.9	879.1	899.9	907.7	876.5	841.7	832.2	827.0	823.5	819.1	814.8
25°	906.9	910.3	926.0	913.8	848.7	801.8	787.9	780.0	776.6	772.2	768.8
27.5°	944.2	944.2	946.8	904.3	807.8	748.8	727.9	714.0	713.2	712.3	711.4
30°	978.1	973.8	965.1	875.6	754.9	683.6	652.4	638.5	643.7	648.0	648.9
32.5°	1018.1	1009.4	985.0	836.5	691.4	610.7	572.4	566.4	572.4	577.7	574.2
35°	1080.6	1065.0	1005.9	791.3	630.6	543.8	507.3	498.6	496.9	496.0	489.0
37.5°	1170.1	1143.1	1022.4	742.7	570.7	484.7	457.8	439.5	423.0	405.7	403.1
40°	1279.5	1233.5	1033.7	687.1	507.3	435.2	406.5	383.1	355.3	324.9	321.4
42.5°	1399.4	1330.8	1038.9	625.4	451.7	394.4	358.8	329.2	297.9	274.5	270.1
45°	1528.8	1435.9	1034.6	566.4	406.5	359.6	319.7	287.5	262.3	245.8	242.4
47.5°	1654.8	1556.6	1022.4	519.5	371.8	330.1	289.3	259.7	240.6	222.4	218.0
50°	1816.3	1672.1	1007.6	483.0	333.6	300.6	270.1	238.9	217.2	208.5	206.7
52.5°	1995.3	1787.7	990.3	436.9	296.2	277.1	258.0	230.2	223.2	206.7	204.1
55°	2189.0	1924.9	986.8	378.7	263.2	260.6	245.8	238.0	239.7	206.7	202.4
57.5°	2393.1	2071.7	994.6	320.5	236.3	245.8	251.0	245.0	242.4	211.1	202.4
60°	2605.9	2213.3	971.1	266.7	215.4	233.7	257.1	241.5	222.4	209.3	203.3
62.5°	2812.7	2332.3	869.5	228.5	199.8	230.2	253.6	228.5	206.7	206.7	204.1
65°	2963.0	2385.3	680.2	200.7	189.4	225.8	247.6	219.8	202.4	208.5	205.0
67.5°	2980.3	2330.6	456.9	178.9	180.7	218.0	233.7	212.0	198.1	213.7	208.5
70°	2873.5	2188.1	279.7	162.4	169.4	204.1	221.5	204.1	192.0	209.3	201.5
72.5°	2596.4	1922.3	197.2	148.5	157.2	191.1	210.2	197.2	183.3	189.4	181.5
75°	2129.9	1489.7	156.4	135.5	145.1	178.9	200.7	186.8	172.9	170.3	165.0
77.5°	1508.8	954.6	126.0	125.1	132.0	164.2	187.6	174.6	160.7	155.5	152.0
80°	867.8	468.2	108.6	112.9	119.9	149.4	172.0	160.7	147.7	139.9	134.6
82.5°	331.8	163.3	95.6	98.2	106.0	133.8	156.4	146.8	133.8	140.7	118.1
85°	107.7	89.5	78.2	80.8	88.6	111.2	138.1	130.3	115.5	102.5	94.7
87.5°	47.8	48.6	41.7	46.0	55.6	73.8	100.8	95.6	84.3	70.4	67.8
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)