

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: P397898

Luminaire Tested: **ARCH-S-PA1-60-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397898  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-727-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5155 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

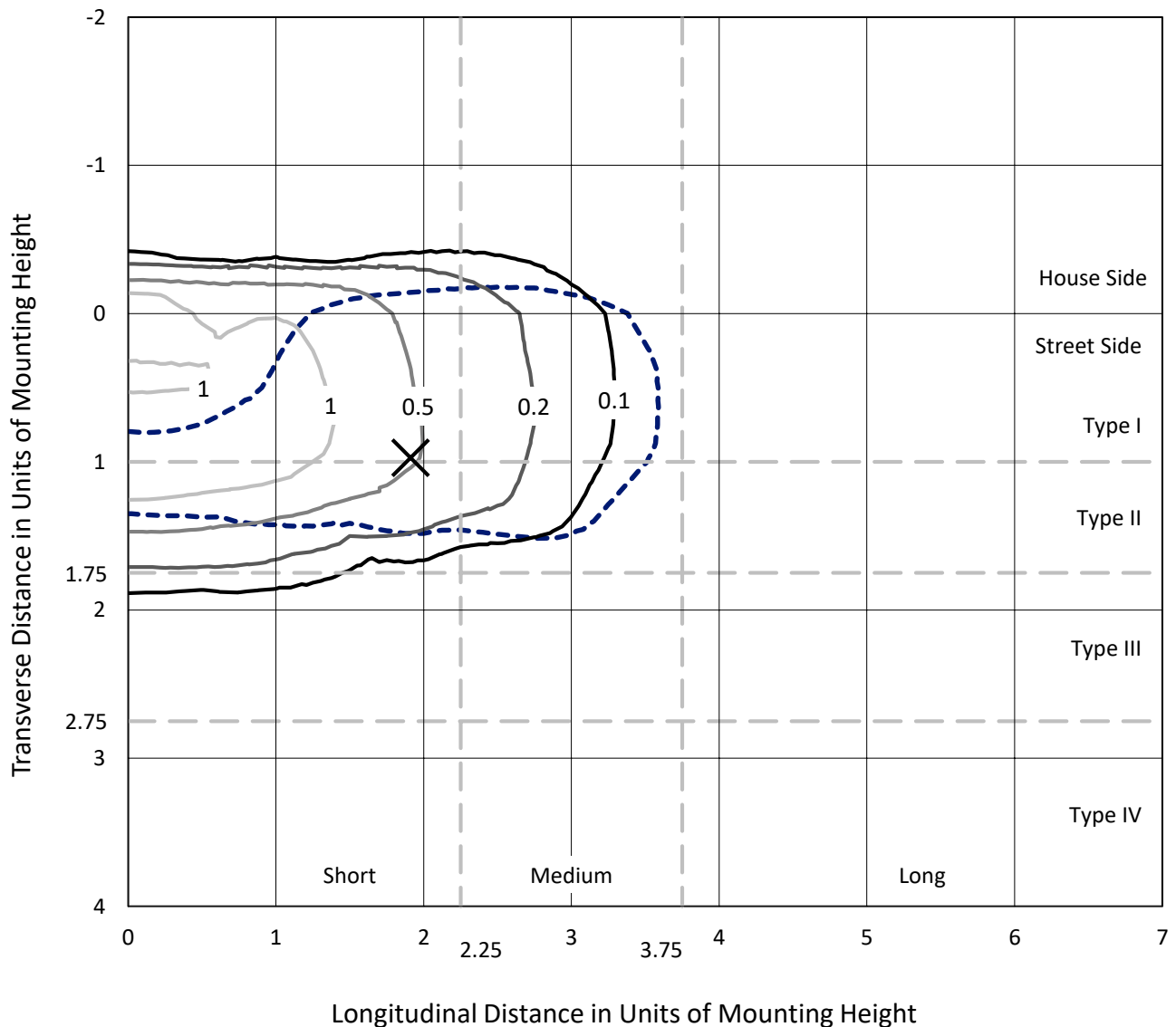
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

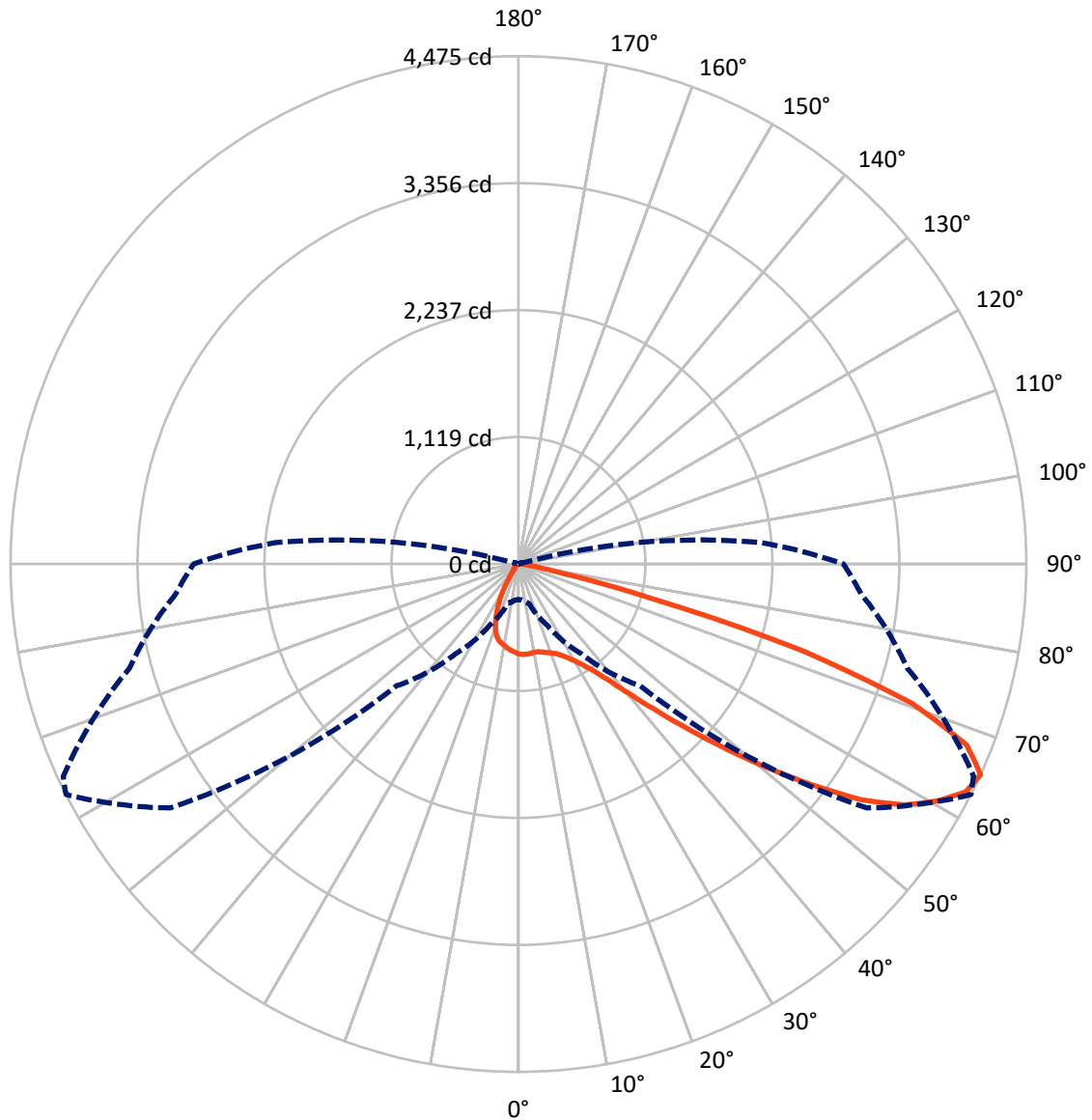
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical



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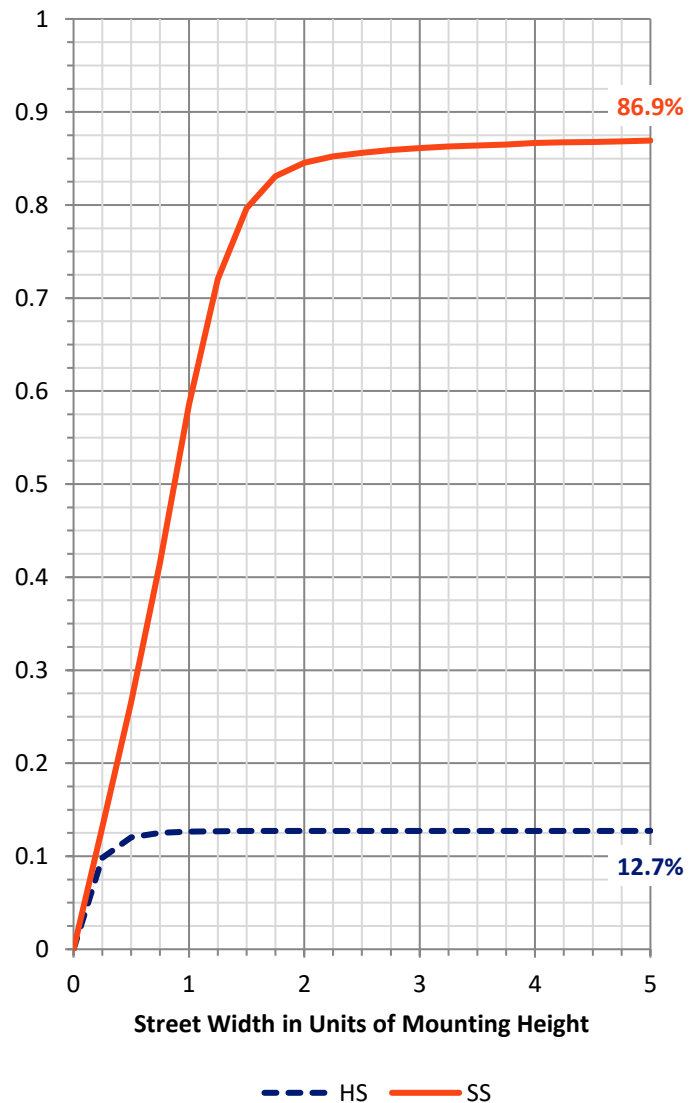
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	663.4	0.0	663.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	4491.6	0.0	4491.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	5155.0	0.0	5155.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.5	1.4
10°-20°	178.8	3.5
20°-30°	265.0	5.1
30°-40°	491.9	9.5
40°-50°	1042.2	20.2
50°-60°	1441.0	28.0
60°-70°	1153.6	22.4
70°-80°	479.3	9.3
80°-90°	30.8	0.6
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°	5155.0	100.0
0°-180°	5155.0	100.0

**Coefficient of Utilization**



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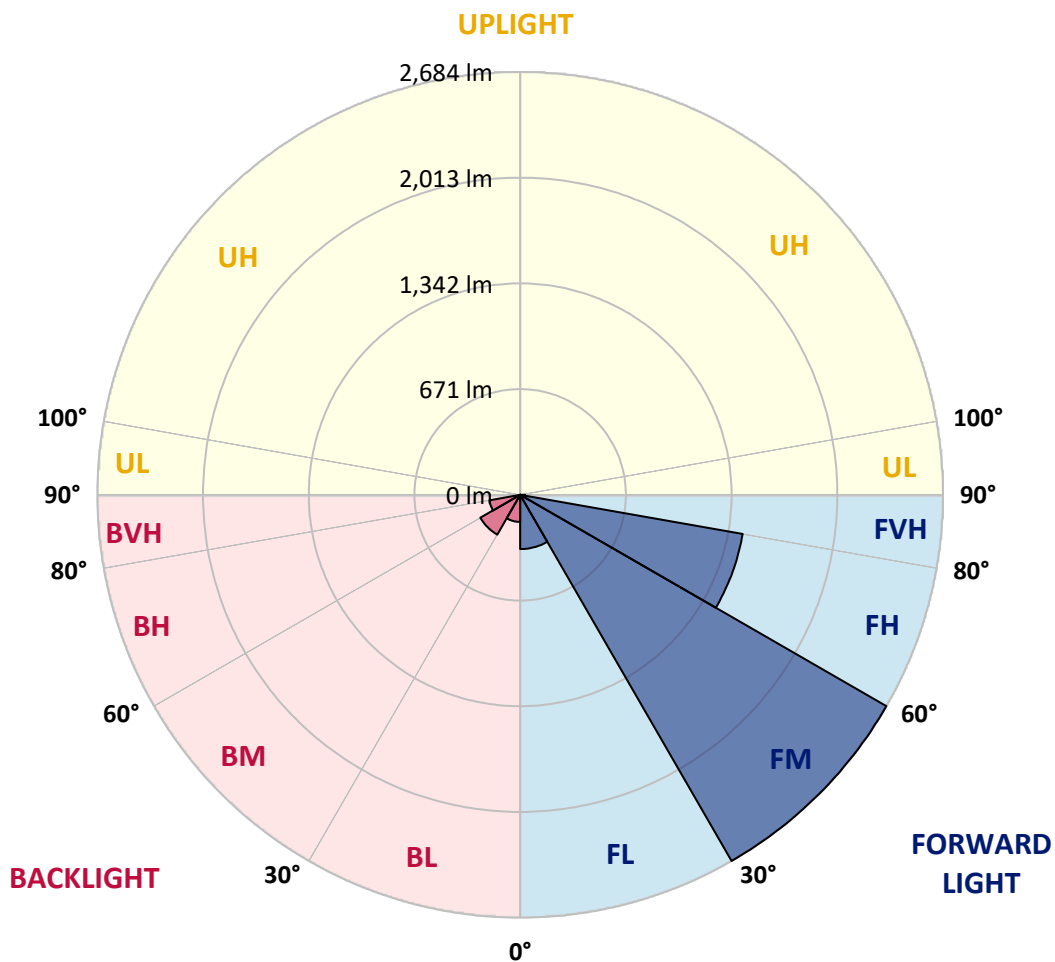
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	344.2	6.7			
FM	(30°-60°)	2683.7	52.1			
FH	(60°-80°)	1434.2	27.8			G1/1800
FVH	(80°-90°)	29.4	0.6			G1/100
BL	(0°-30°)	171.9	3.3	B1/500		
BM	(30°-60°)	291.4	5.7	B1/1000		
BH	(60°-80°)	198.7	3.9	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1
2.5°	807.8	805.8	803.9	802.9	802.9	801.9	798.0	797.1	795.1	793.2	791.2
5°	800.0	797.1	796.1	797.1	798.0	800.0	798.0	798.0	796.1	794.1	790.2
7.5°	780.5	778.6	779.5	782.5	783.4	790.2	791.2	794.1	794.1	792.2	789.3
10°	757.1	756.2	756.2	761.0	765.9	775.6	782.5	790.2	791.2	791.2	786.3
12.5°	739.6	738.7	741.6	747.4	757.1	769.8	781.5	793.2	795.1	796.1	788.3
15°	728.9	728.9	732.8	744.5	758.1	775.6	789.3	804.8	806.8	805.8	795.1
17.5°	719.2	720.2	728.0	747.4	763.0	786.3	802.9	820.4	821.4	820.4	802.9
20°	715.3	717.2	728.9	754.2	771.7	798.0	819.4	837.0	837.9	834.0	810.7
22.5°	726.0	727.0	741.6	768.8	785.4	814.6	841.8	858.4	859.3	853.5	822.4
25°	763.0	763.0	775.6	799.0	813.6	842.8	872.0	891.5	891.5	884.6	848.6
27.5°	849.6	841.8	838.9	845.7	850.6	881.7	912.9	937.2	936.2	926.5	882.7
30°	1017.0	997.5	966.4	931.4	913.8	935.2	964.4	995.6	994.6	979.0	924.5
32.5°	1298.2	1270.0	1196.1	1103.6	1028.7	1004.3	1031.6	1065.7	1066.6	1048.1	991.7
35°	1692.4	1647.6	1515.3	1386.8	1215.5	1123.1	1130.9	1167.8	1179.5	1169.8	1104.6
37.5°	2071.9	2031.1	1904.6	1726.5	1493.9	1305.1	1272.0	1304.1	1317.7	1317.7	1248.6
40°	2454.4	2406.7	2294.8	2115.7	1870.5	1589.2	1470.5	1496.8	1511.4	1514.3	1423.8
42.5°	2761.0	2729.8	2644.2	2505.0	2275.3	2087.5	1756.6	1742.0	1755.7	1744.9	1627.2
45°	2973.1	2948.8	2889.4	2836.9	2725.0	2630.6	2139.1	2040.8	2049.6	2012.6	1855.9
47.5°	3016.9	2989.7	2977.0	3050.0	3129.8	3153.2	2609.1	2396.0	2387.3	2305.5	2093.4
50°	2826.2	2829.1	2875.8	3084.1	3416.9	3627.1	3154.1	2797.0	2764.9	2582.9	2314.3
52.5°	2414.5	2461.2	2579.0	2916.7	3504.5	3971.6	3699.1	3222.3	3172.6	2852.4	2479.7
55°	1889.0	1949.3	2143.0	2531.3	3321.5	4125.4	4158.5	3664.1	3551.2	3054.9	2608.2
57.5°	1404.3	1422.8	1648.6	2002.8	2888.5	3974.5	4394.0	4004.7	3859.7	3216.4	2735.7
60°	874.9	886.6	1125.0	1525.0	2187.8	3416.9	4394.0	4239.3	4101.1	3361.4	2852.4
62.5°	544.0	547.9	637.4	1045.2	1487.0	2534.2	4212.0	4421.2	4310.3	3465.6	2952.7
65°	313.4	317.3	359.1	590.7	967.4	1517.2	3746.8	4474.8	4425.1	3548.3	3030.5
67.5°	228.7	230.6	247.2	331.9	632.6	779.5	2814.5	4259.7	4322.0	3589.2	3028.6
70°	198.5	201.5	222.9	258.9	456.4	478.8	1432.5	3678.7	3852.9	3530.8	2938.1
72.5°	152.8	156.7	188.8	243.3	334.8	344.5	518.7	2617.9	2881.6	3165.8	2689.9
75°	105.1	109.0	141.1	200.5	276.4	257.9	285.1	1204.8	1520.1	2123.5	2047.6
77.5°	67.2	68.1	88.6	146.0	238.4	183.0	195.6	393.2	551.8	960.5	966.4
80°	44.8	45.7	54.5	94.4	163.5	169.3	120.7	182.0	199.5	280.3	194.6
82.5°	27.2	27.2	37.0	59.4	99.3	140.1	78.8	95.4	102.2	108.0	50.6
85°	10.7	10.7	22.4	38.9	62.3	65.2	49.6	55.5	58.4	63.3	23.4
87.5°	2.9	2.9	12.7	21.4	27.2	30.2	30.2	27.2	29.2	36.0	11.7
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°	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1	794.1
2.5°	790.2	787.3	783.4	779.5	775.6	772.7	769.8	769.8	767.9	764.9	763.0
5°	788.3	783.4	774.7	767.9	757.1	749.4	743.5	738.7	735.7	728.9	728.0
7.5°	785.4	779.5	766.9	753.3	735.7	722.1	708.5	698.8	689.0	681.2	679.3
10°	780.5	773.7	755.2	735.7	711.4	686.1	654.0	617.0	582.9	563.5	557.6
12.5°	780.5	771.7	747.4	721.1	686.1	623.8	542.1	460.3	397.1	368.8	361.1
15°	785.4	773.7	741.6	705.6	640.4	513.8	381.5	273.5	204.4	183.0	178.1
17.5°	790.2	773.7	732.8	684.2	556.7	372.7	217.0	144.0	121.6	116.8	116.8
20°	792.2	771.7	721.1	644.3	444.8	231.6	129.4	108.0	99.3	96.3	96.3
22.5°	800.0	772.7	712.4	586.8	323.1	136.2	102.2	90.5	81.7	78.8	78.8
25°	819.4	784.4	714.3	513.8	207.3	103.2	86.6	74.9	66.2	62.3	62.3
27.5°	850.6	810.7	725.0	429.2	130.4	88.6	73.0	60.3	53.5	49.6	49.6
30°	885.6	839.9	729.9	331.9	97.3	74.9	59.4	47.7	42.8	39.9	38.9
32.5°	946.9	890.5	726.0	227.7	79.8	63.3	47.7	38.0	34.1	33.1	33.1
35°	1045.2	979.0	718.2	143.1	66.2	50.6	38.0	31.1	28.2	27.2	26.3
37.5°	1178.5	1108.5	694.9	94.4	54.5	39.9	31.1	26.3	23.4	22.4	22.4
40°	1341.1	1256.4	650.1	72.0	46.7	32.1	26.3	22.4	20.4	19.5	19.5
42.5°	1526.9	1420.9	579.1	62.3	38.9	27.2	22.4	18.5	17.5	16.5	16.5
45°	1730.3	1593.1	480.8	55.5	33.1	22.4	18.5	16.5	14.6	14.6	13.6
47.5°	1946.4	1766.4	369.8	48.7	28.2	19.5	16.5	13.6	12.7	11.7	11.7
50°	2154.7	1921.1	259.8	41.8	23.4	16.5	13.6	11.7	10.7	9.7	9.7
52.5°	2301.6	2014.5	183.9	36.0	19.5	14.6	10.7	8.8	7.8	7.8	7.8
55°	2419.4	2072.9	128.5	30.2	16.5	12.7	8.8	6.8	6.8	5.8	5.8
57.5°	2530.3	2110.9	94.4	25.3	13.6	9.7	6.8	4.9	4.9	3.9	3.9
60°	2645.2	2131.3	72.0	20.4	11.7	7.8	4.9	3.9	2.9	2.9	2.9
62.5°	2761.0	2144.0	55.5	16.5	9.7	5.8	3.9	2.9	1.9	1.0	1.0
65°	2862.2	2147.9	42.8	12.7	7.8	3.9	2.9	1.0	0.0	0.0	0.0
67.5°	2892.3	2103.1	33.1	9.7	5.8	2.9	1.9	0.0	0.0	0.0	0.0
70°	2810.6	1984.4	25.3	7.8	4.9	1.9	1.0	0.0	0.0	0.0	0.0
72.5°	2494.3	1664.2	19.5	4.9	3.9	1.9	1.0	0.0	0.0	0.0	0.0
75°	1784.8	887.6	13.6	3.9	2.9	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	821.4	343.5	9.7	2.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0
80°	160.6	85.6	3.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.0	14.6	1.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	4.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)