

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: P397943

Luminaire Tested: **ARCH-S-PA1-60-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397943  
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-PA1-60-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 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: 4531 lumens  
Efficiency: N/A  
Efficacy: 70.8 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

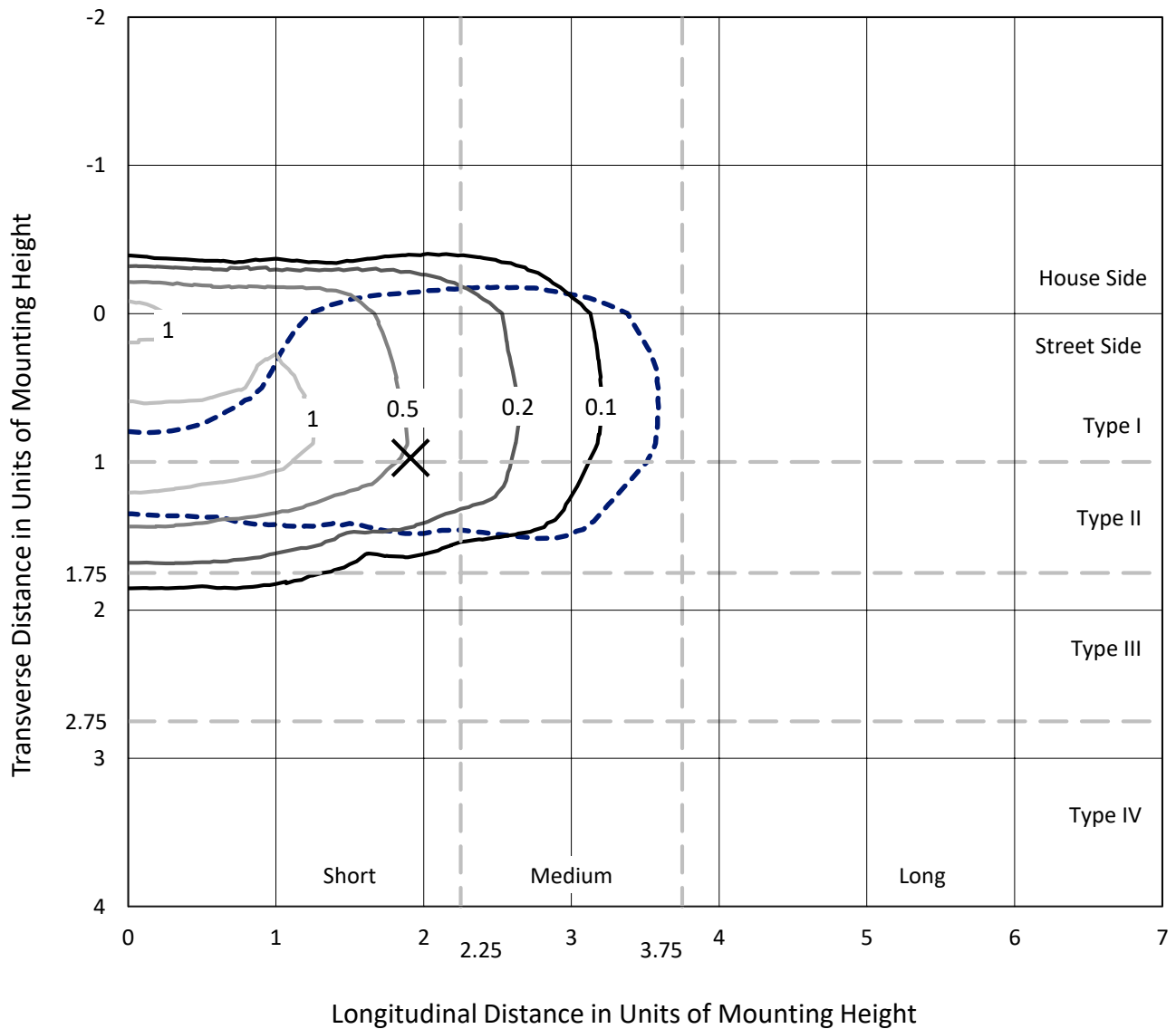
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397943  
 CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

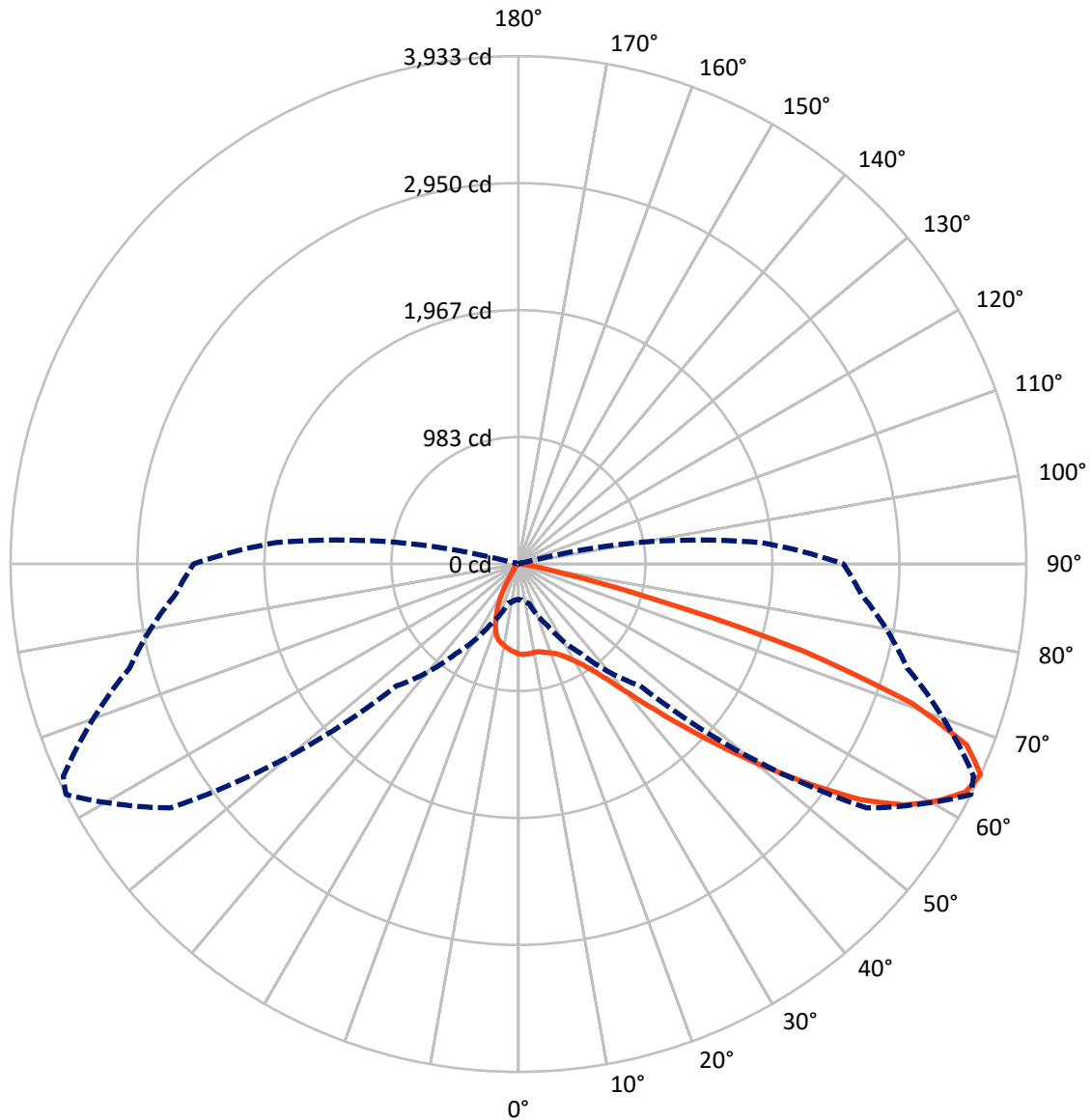
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P397943  
CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397943

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

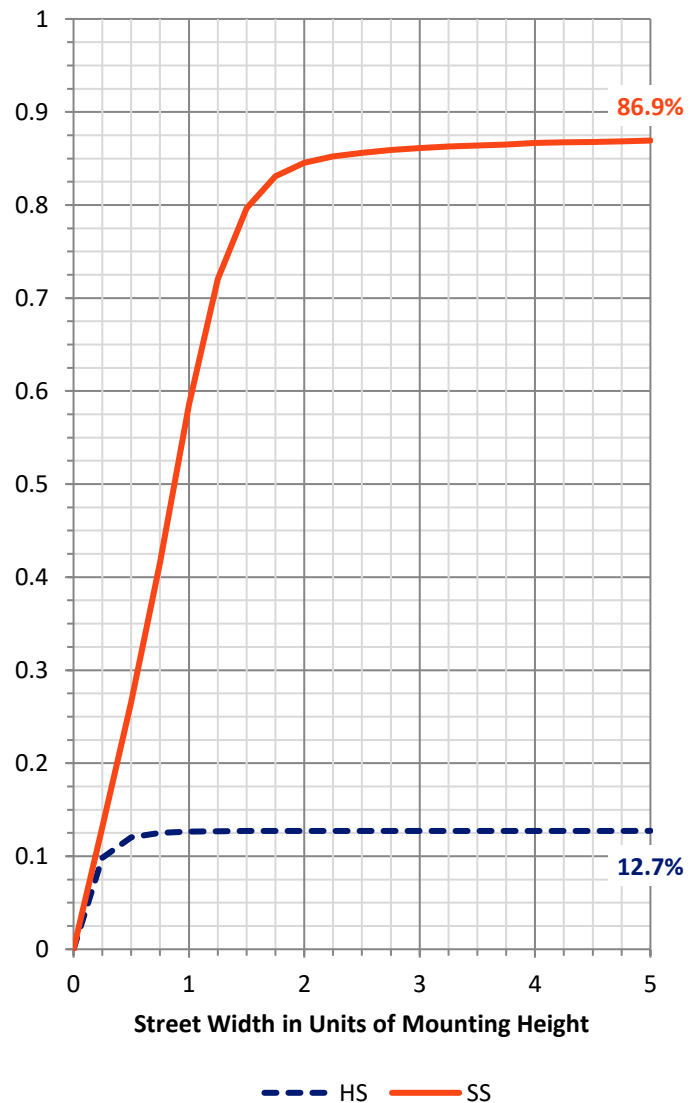
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	583.1	0.0	583.1
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	3947.9	0.0	3947.9
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	4531.0	0.0	4531.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.7	1.4
10°-20°	157.1	3.5
20°-30°	232.9	5.1
30°-40°	432.4	9.5
40°-50°	916.0	20.2
50°-60°	1266.6	28.0
60°-70°	1014.0	22.4
70°-80°	421.3	9.3
80°-90°	27.1	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°	4531.0	100.0
0°-180°	4531.0	100.0



REPORT NUMBER: P397943

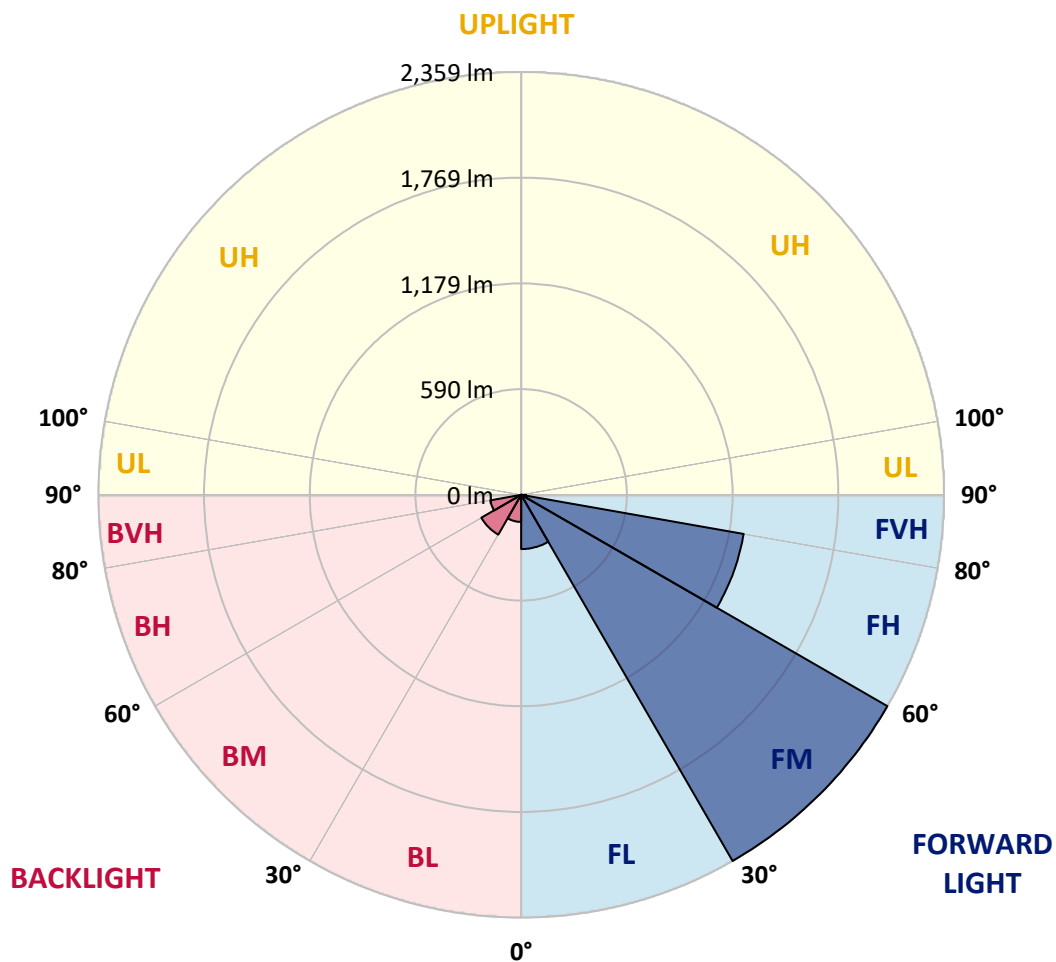
CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	302.6	6.7			
FM	(30°-60°)	2358.9	52.1			
FH	(60°-80°)	1260.6	27.8			G1/1800
FVH	(80°-90°)	25.8	0.6			G1/100
BL	(0°-30°)	151.1	3.3	B1/500		
BM	(30°-60°)	256.2	5.7	B1/1000		
BH	(60°-80°)	174.6	3.9	B1/500		G1/500
BVH	(80°-90°)	1.2	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





REPORT NUMBER: P397943

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0
2.5°	710.0	708.3	706.6	705.7	705.7	704.8	701.4	700.6	698.9	697.1	695.4
5°	703.1	700.6	699.7	700.6	701.4	703.1	701.4	701.4	699.7	698.0	694.6
7.5°	686.0	684.3	685.2	687.7	688.6	694.6	695.4	698.0	698.0	696.3	693.7
10°	665.5	664.6	664.6	668.9	673.2	681.8	687.7	694.6	695.4	695.4	691.2
12.5°	650.1	649.2	651.8	656.9	665.5	676.6	686.9	697.1	698.9	699.7	692.9
15°	640.7	640.7	644.1	654.4	666.4	681.8	693.7	707.4	709.1	708.3	698.9
17.5°	632.1	633.0	639.8	656.9	670.6	691.2	705.7	721.1	722.0	721.1	705.7
20°	628.7	630.4	640.7	662.9	678.3	701.4	720.2	735.6	736.5	733.1	712.5
22.5°	638.1	639.0	651.8	675.8	690.3	716.0	739.9	754.5	755.3	750.2	722.8
25°	670.6	670.6	681.8	702.3	715.1	740.8	766.4	783.5	783.5	777.6	745.9
27.5°	746.8	739.9	737.4	743.3	747.6	775.0	802.4	823.7	822.9	814.3	775.8
30°	893.9	876.8	849.4	818.6	803.2	822.0	847.7	875.1	874.2	860.5	812.6
32.5°	1141.1	1116.3	1051.3	970.0	904.2	882.8	906.7	936.7	937.5	921.3	871.6
35°	1487.5	1448.2	1331.9	1218.9	1068.4	987.1	994.0	1026.5	1036.7	1028.2	970.9
37.5°	1821.1	1785.2	1674.0	1517.5	1313.0	1147.1	1118.0	1146.2	1158.2	1158.2	1097.5
40°	2157.3	2115.4	2017.0	1859.6	1644.1	1396.9	1292.5	1315.6	1328.4	1331.0	1251.4
42.5°	2426.8	2399.4	2324.1	2201.8	1999.9	1834.8	1544.0	1531.2	1543.1	1533.7	1430.2
45°	2613.2	2591.8	2539.7	2493.5	2395.1	2312.1	1880.2	1793.8	1801.5	1769.0	1631.2
47.5°	2651.7	2627.8	2616.7	2680.8	2751.0	2771.5	2293.3	2106.0	2098.3	2026.4	1840.0
50°	2484.1	2486.6	2527.7	2710.7	3003.3	3188.1	2772.3	2458.4	2430.2	2270.2	2034.1
52.5°	2122.2	2163.3	2266.8	2563.6	3080.3	3490.9	3251.4	2832.2	2788.6	2507.2	2179.5
55°	1660.3	1713.4	1883.6	2224.9	2919.5	3626.0	3655.1	3220.6	3121.3	2685.1	2292.5
57.5°	1234.3	1250.6	1449.0	1760.4	2538.8	3493.4	3862.1	3520.0	3392.5	2827.1	2404.5
60°	769.0	779.3	988.8	1340.4	1922.9	3003.3	3862.1	3726.1	3604.6	2954.5	2507.2
62.5°	478.2	481.6	560.3	918.7	1307.0	2227.5	3702.2	3886.1	3788.5	3046.1	2595.3
65°	275.4	278.9	315.6	519.2	850.3	1333.6	3293.3	3933.1	3889.5	3118.8	2663.7
67.5°	201.0	202.7	217.3	291.7	556.0	685.2	2473.8	3744.1	3798.8	3154.7	2662.0
70°	174.5	177.1	195.9	227.5	401.2	420.9	1259.1	3233.4	3386.5	3103.4	2582.4
72.5°	134.3	137.7	165.9	213.8	294.3	302.8	455.9	2301.0	2532.8	2782.6	2364.3
75°	92.4	95.8	124.0	176.2	242.9	226.7	250.6	1059.0	1336.1	1866.5	1799.8
77.5°	59.0	59.9	77.8	128.3	209.6	160.8	171.9	345.6	485.0	844.3	849.4
80°	39.3	40.2	47.9	83.0	143.7	148.8	106.1	160.0	175.4	246.4	171.1
82.5°	24.0	24.0	32.5	52.2	87.3	123.2	69.3	83.8	89.8	94.9	44.5
85°	9.4	9.4	19.7	34.2	54.7	57.3	43.6	48.8	51.3	55.6	20.5
87.5°	2.6	2.6	11.1	18.8	24.0	26.5	26.5	24.0	25.7	31.6	10.3
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: P397943

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0	698.0
2.5°	694.6	692.0	688.6	685.2	681.8	679.2	676.6	676.6	674.9	672.3	670.6
5°	692.9	688.6	680.9	674.9	665.5	658.7	653.5	649.2	646.7	640.7	639.8
7.5°	690.3	685.2	674.1	662.1	646.7	634.7	622.7	614.2	605.6	598.8	597.1
10°	686.0	680.0	663.8	646.7	625.3	603.1	574.8	542.3	512.4	495.3	490.1
12.5°	686.0	678.3	656.9	633.8	603.1	548.3	476.5	404.6	349.0	324.2	317.4
15°	690.3	680.0	651.8	620.2	562.9	451.6	335.3	240.4	179.6	160.8	156.5
17.5°	694.6	680.0	644.1	601.3	489.3	327.6	190.8	126.6	106.9	102.6	102.6
20°	696.3	678.3	633.8	566.3	390.9	203.6	113.8	94.9	87.3	84.7	84.7
22.5°	703.1	679.2	626.1	515.8	284.0	119.8	89.8	79.6	71.9	69.3	69.3
25°	720.2	689.4	627.9	451.6	182.2	90.7	76.1	65.9	58.2	54.7	54.7
27.5°	747.6	712.5	637.3	377.2	114.6	77.8	64.2	53.0	47.0	43.6	43.6
30°	778.4	738.2	641.5	291.7	85.5	65.9	52.2	41.9	37.6	35.1	34.2
32.5°	832.3	782.7	638.1	200.2	70.1	55.6	41.9	33.4	29.9	29.1	29.1
35°	918.7	860.5	631.3	125.7	58.2	44.5	33.4	27.4	24.8	24.0	23.1
37.5°	1035.9	974.3	610.8	83.0	47.9	35.1	27.4	23.1	20.5	19.7	19.7
40°	1178.7	1104.3	571.4	63.3	41.1	28.2	23.1	19.7	18.0	17.1	17.1
42.5°	1342.1	1248.9	509.0	54.7	34.2	24.0	19.7	16.3	15.4	14.5	14.5
45°	1520.9	1400.3	422.6	48.8	29.1	19.7	16.3	14.5	12.8	12.8	12.0
47.5°	1710.8	1552.5	325.1	42.8	24.8	17.1	14.5	12.0	11.1	10.3	10.3
50°	1893.8	1688.6	228.4	36.8	20.5	14.5	12.0	10.3	9.4	8.6	8.6
52.5°	2023.0	1770.7	161.7	31.6	17.1	12.8	9.4	7.7	6.8	6.8	6.8
55°	2126.5	1822.0	112.9	26.5	14.5	11.1	7.7	6.0	6.0	5.1	5.1
57.5°	2224.0	1855.4	83.0	22.2	12.0	8.6	6.0	4.3	4.3	3.4	3.4
60°	2325.0	1873.3	63.3	18.0	10.3	6.8	4.3	3.4	2.6	2.6	2.6
62.5°	2426.8	1884.4	48.8	14.5	8.6	5.1	3.4	2.6	1.7	0.9	0.9
65°	2515.7	1887.9	37.6	11.1	6.8	3.4	2.6	0.9	0.0	0.0	0.0
67.5°	2542.2	1848.5	29.1	8.6	5.1	2.6	1.7	0.0	0.0	0.0	0.0
70°	2470.4	1744.2	22.2	6.8	4.3	1.7	0.9	0.0	0.0	0.0	0.0
72.5°	2192.4	1462.7	17.1	4.3	3.4	1.7	0.9	0.0	0.0	0.0	0.0
75°	1568.8	780.1	12.0	3.4	2.6	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	722.0	302.0	8.6	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0
80°	141.1	75.3	3.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.5	12.8	1.7	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.1	4.3	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	1.7	0.9	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)