

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: P573436

Luminaire Tested: **ARCH-S-PA2-70-830-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6545 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

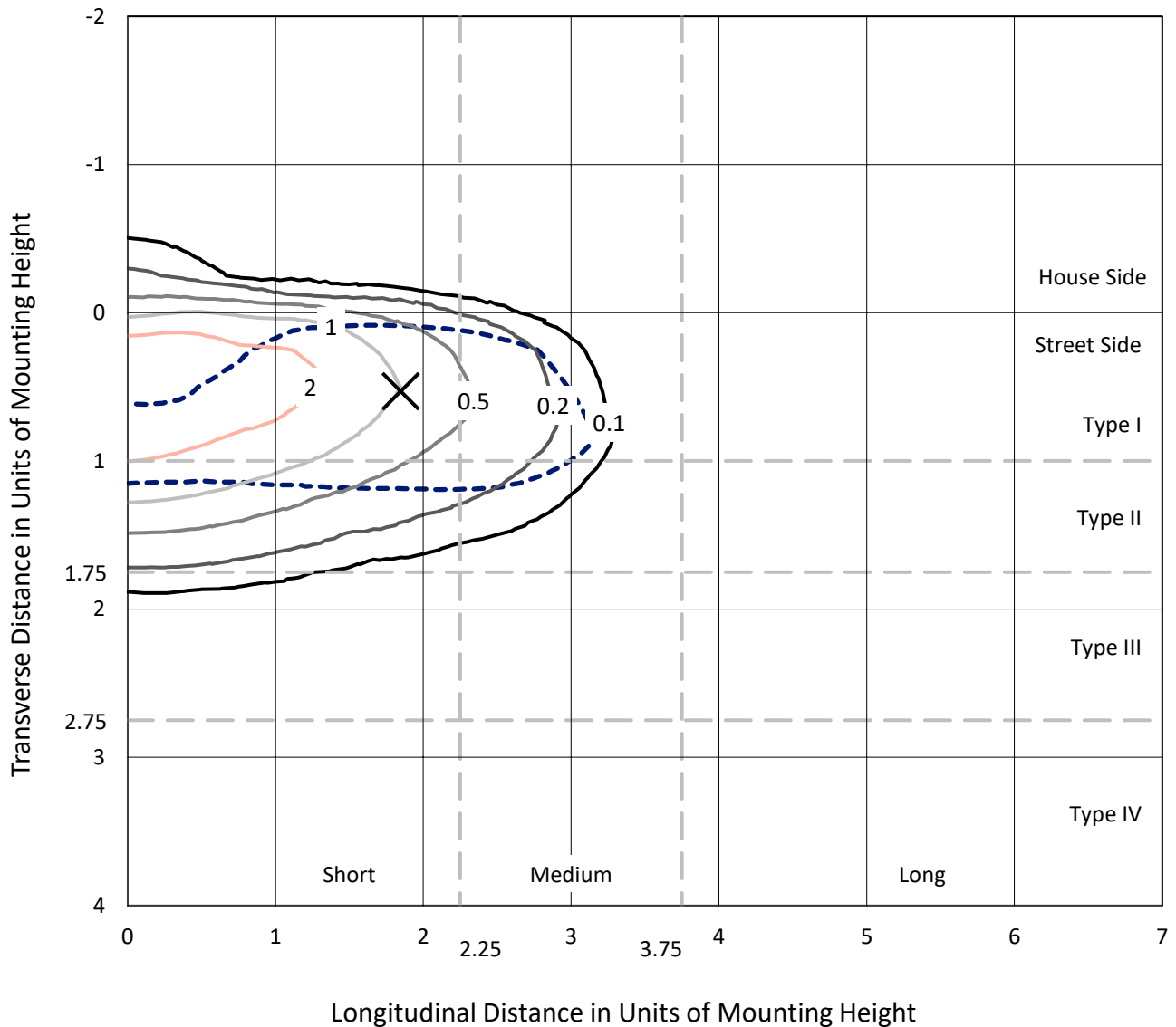
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573436  
 CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

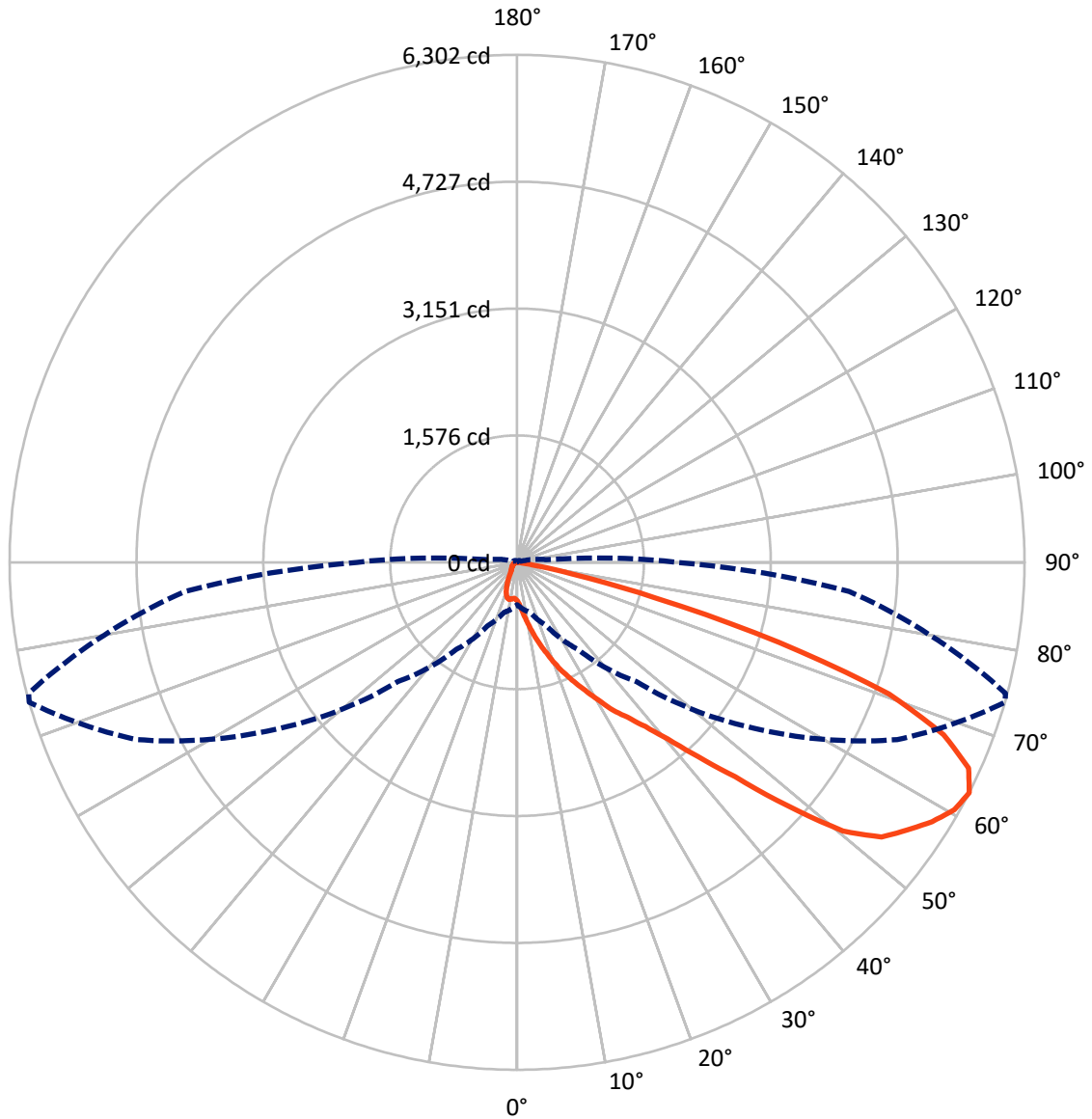
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type II - Short - N/A

REPORT NUMBER: P573436  
CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P573436  
 CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

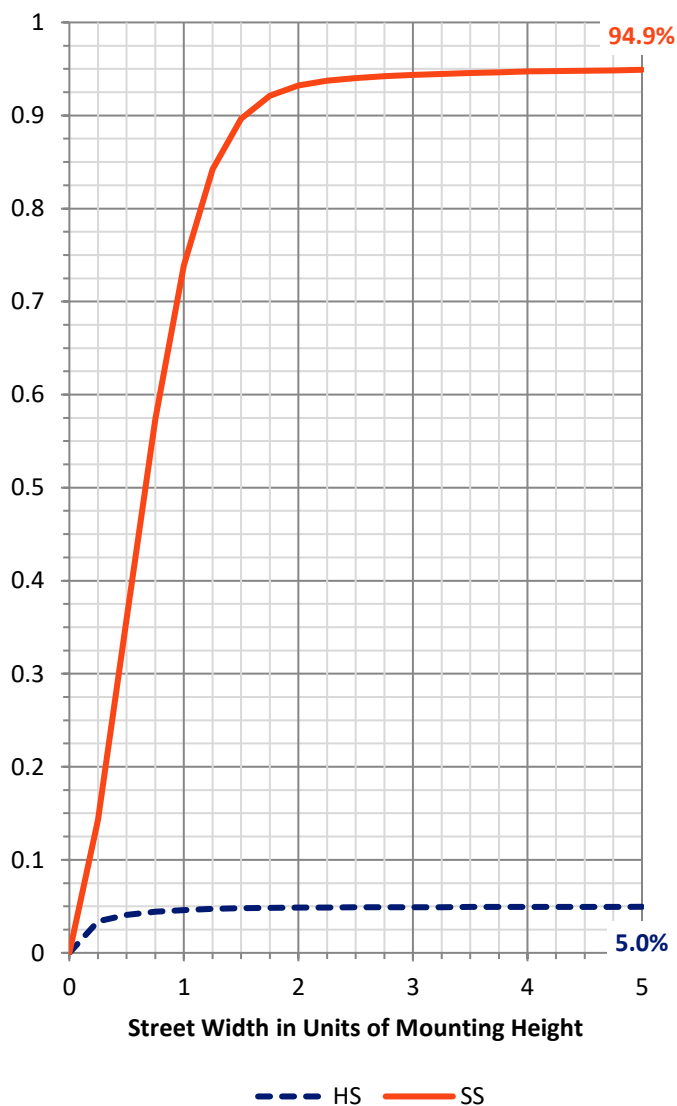
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	326.4	0.0	326.4
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	6218.6	0.0	6218.6
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	6545.0	0.0	6545.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.9	0.9
10°-20°	251.7	3.8
20°-30°	540.1	8.3
30°-40°	947.3	14.5
40°-50°	1468.6	22.4
50°-60°	1693.0	25.9
60°-70°	1189.4	18.2
70°-80°	370.5	5.7
80°-90°	24.5	0.4
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°	6545.0	100.0
0°-180°	6545.0	100.0

**Coefficient of Utilization**

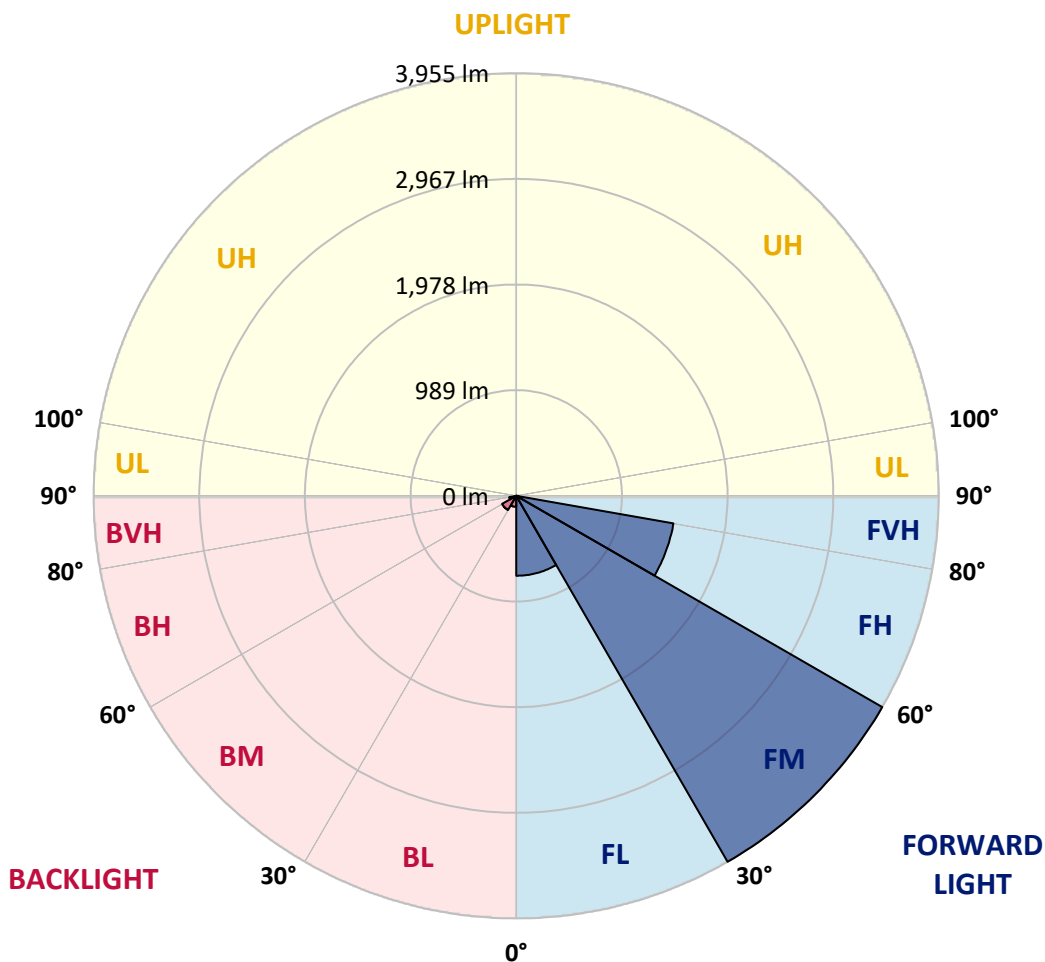


REPORT NUMBER: P573436  
 CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	748.1	11.4			
FM (30°-60°)	3955.5	60.4			
FH (60°-80°)	1493.9	22.8			G1/1800
FVH (80°-90°)	21.1	0.3			G1/100
BL (0°-30°)	103.6	1.6	B0/110		
BM (30°-60°)	153.4	2.3	B0/220		
BH (60°-80°)	66.1	1.0	B0/110		G0/110
BVH (80°-90°)	3.4	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type II Short





REPORT NUMBER: P573436

CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1
2.5°	665.7	654.2	640.4	628.8	605.8	589.7	568.9	545.9	520.6	518.3	497.5
5°	932.9	898.3	898.3	868.4	833.8	771.7	714.1	642.7	589.7	585.1	529.8
7.5°	1207.0	1179.4	1163.2	1117.2	1061.9	992.8	900.6	780.9	684.1	668.0	578.2
10°	1462.7	1441.9	1412.0	1375.1	1326.8	1213.9	1098.7	942.1	787.8	776.3	635.7
12.5°	1660.8	1635.4	1621.6	1605.5	1543.3	1453.5	1303.7	1105.6	921.4	896.0	693.3
15°	1810.5	1799.0	1785.2	1785.2	1752.9	1665.4	1511.1	1280.7	1050.4	1020.4	767.0
17.5°	1930.3	1916.5	1914.2	1928.0	1918.8	1856.6	1711.5	1448.9	1184.0	1160.9	843.1
20°	2063.9	2045.4	2045.4	2057.0	2054.7	2020.1	1893.4	1642.3	1340.6	1299.1	930.6
22.5°	2252.8	2241.2	2232.0	2213.6	2199.8	2167.5	2057.0	1831.2	1490.3	1451.2	1020.4
25°	2506.1	2492.3	2450.9	2418.6	2358.7	2310.3	2215.9	1999.4	1642.3	1598.6	1108.0
27.5°	2752.6	2725.0	2685.8	2644.3	2577.5	2494.6	2377.1	2158.3	1801.3	1755.2	1197.8
30°	3012.9	2992.2	2943.8	2877.0	2794.1	2701.9	2561.4	2349.5	1983.3	1932.6	1294.5
32.5°	3220.2	3188.0	3144.2	3079.7	2994.5	2930.0	2777.9	2559.1	2192.9	2126.1	1395.9
35°	3386.0	3360.7	3303.1	3240.9	3176.4	3158.0	2992.2	2729.6	2361.0	2298.8	1504.1
37.5°	3492.0	3466.7	3418.3	3356.1	3330.8	3363.0	3254.8	2962.2	2586.8	2508.4	1628.5
40°	3574.9	3545.0	3505.8	3478.2	3469.0	3558.8	3547.3	3264.0	2883.9	2837.8	1799.0
42.5°	3634.8	3604.9	3579.5	3577.2	3637.1	3812.2	3941.2	3685.5	3298.5	3204.1	2017.8
45°	3558.8	3533.5	3547.3	3627.9	3773.0	4049.4	4418.0	4282.1	3798.4	3731.6	2367.9
47.5°	3346.9	3330.8	3393.0	3540.4	3809.9	4194.6	4878.7	4936.3	4512.4	4411.1	2821.7
50°	3015.2	3012.9	3111.9	3312.3	3694.7	4249.8	5111.3	5565.1	5244.9	5141.3	3190.3
52.5°	2566.0	2556.8	2701.9	2980.6	3422.9	4146.2	5155.1	5816.2	5668.7	5546.7	3422.9
55°	2057.0	2036.2	2209.0	2515.3	3022.1	3844.4	5037.6	5871.5	5871.5	5760.9	3595.7
57.5°	1446.6	1478.8	1621.6	1990.2	2526.9	3393.0	4747.4	5820.8	6076.5	5982.0	3828.3
60°	912.2	926.0	1082.6	1379.8	1916.5	2789.5	4229.1	5601.9	6240.0	6184.7	4014.9
62.5°	525.2	568.9	647.3	873.0	1322.2	2096.1	3588.7	5208.1	6302.2	6279.2	4137.0
65°	320.2	324.8	361.6	492.9	813.1	1430.4	2872.4	4659.8	6161.7	6182.4	4113.9
67.5°	239.6	239.6	251.1	311.0	463.0	909.9	2119.2	3994.2	5712.5	5779.3	3897.4
70°	207.3	207.3	209.6	228.0	285.6	539.0	1400.5	3220.2	4897.1	4890.2	3220.2
72.5°	163.5	170.5	184.3	193.5	216.5	315.6	820.0	2250.5	3402.2	3482.8	2073.1
75°	131.3	133.6	152.0	168.2	182.0	214.2	387.0	1250.8	1785.2	1785.2	912.2
77.5°	101.4	106.0	117.5	133.6	152.0	152.0	161.2	483.7	691.0	668.0	269.5
80°	64.5	66.8	85.2	106.0	126.7	108.3	87.5	161.2	188.9	182.0	73.7
82.5°	39.2	41.5	55.3	85.2	85.2	59.9	55.3	66.8	59.9	55.3	29.9
85°	11.5	13.8	39.2	55.3	48.4	23.0	27.6	29.9	27.6	25.3	16.1
87.5°	2.3	2.3	11.5	13.8	11.5	11.5	9.2	11.5	11.5	11.5	6.9
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: P573436

CATALOG NUMBER: ARCH-S-PA2-70-830-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1	479.1
2.5°	486.0	476.8	458.4	444.6	433.0	421.5	412.3	410.0	405.4	405.4	403.1
5°	506.8	486.0	451.5	428.4	410.0	393.9	380.1	366.2	361.6	357.0	359.3
7.5°	539.0	506.8	458.4	423.8	391.6	354.7	324.8	299.4	281.0	276.4	269.5
10°	580.5	532.1	469.9	414.6	354.7	290.2	248.8	223.4	214.2	202.7	205.0
12.5°	621.9	562.0	479.1	389.3	292.5	228.0	193.5	177.4	170.5	168.2	170.5
15°	670.3	594.3	474.5	343.2	235.0	184.3	163.5	156.6	152.0	152.0	149.7
17.5°	718.7	621.9	458.4	283.3	188.9	156.6	147.4	140.5	135.9	133.6	133.6
20°	771.7	647.3	421.5	225.7	156.6	142.8	133.6	124.4	119.8	119.8	119.8
22.5°	826.9	665.7	373.2	179.7	140.5	126.7	117.5	110.6	106.0	106.0	106.0
25°	875.3	674.9	315.6	149.7	129.0	115.2	106.0	99.0	96.7	94.4	94.4
27.5°	921.4	672.6	255.7	131.3	115.2	103.7	94.4	89.8	85.2	85.2	85.2
30°	967.4	658.8	202.7	119.8	106.0	92.1	85.2	80.6	78.3	76.0	76.0
32.5°	1006.6	635.7	158.9	110.6	96.7	82.9	76.0	71.4	71.4	69.1	69.1
35°	1045.8	601.2	133.6	103.7	87.5	76.0	69.1	66.8	64.5	64.5	64.5
37.5°	1087.2	557.4	117.5	94.4	78.3	69.1	64.5	62.2	59.9	57.6	57.6
40°	1137.9	513.7	110.6	87.5	71.4	62.2	57.6	55.3	53.0	53.0	53.0
42.5°	1218.5	476.8	103.7	78.3	64.5	57.6	53.0	48.4	48.4	46.1	46.1
45°	1370.5	463.0	96.7	71.4	59.9	50.7	48.4	43.8	41.5	41.5	41.5
47.5°	1568.6	465.3	89.8	64.5	55.3	46.1	43.8	41.5	36.9	36.9	36.9
50°	1732.2	453.8	82.9	59.9	48.4	43.8	39.2	36.9	34.6	34.6	34.6
52.5°	1796.7	433.0	76.0	55.3	46.1	39.2	36.9	34.6	32.2	32.2	32.2
55°	1861.2	423.8	69.1	48.4	41.5	39.2	34.6	32.2	29.9	27.6	27.6
57.5°	1978.6	428.4	62.2	46.1	39.2	36.9	32.2	27.6	23.0	20.7	20.7
60°	2040.8	412.3	57.6	41.5	36.9	34.6	27.6	20.7	16.1	13.8	13.8
62.5°	1987.9	366.2	53.0	39.2	34.6	29.9	20.7	16.1	11.5	6.9	6.9
65°	1840.4	301.7	48.4	36.9	29.9	23.0	18.4	11.5	6.9	4.6	4.6
67.5°	1653.9	237.3	43.8	34.6	27.6	20.7	16.1	9.2	4.6	2.3	2.3
70°	1336.0	170.5	41.5	32.2	25.3	18.4	13.8	9.2	4.6	2.3	2.3
72.5°	861.5	110.6	36.9	29.9	23.0	18.4	11.5	6.9	4.6	2.3	2.3
75°	398.5	73.7	34.6	27.6	23.0	16.1	11.5	9.2	4.6	2.3	2.3
77.5°	117.5	53.0	32.2	25.3	20.7	16.1	11.5	9.2	4.6	2.3	2.3
80°	48.4	36.9	25.3	23.0	20.7	16.1	11.5	9.2	4.6	2.3	2.3
82.5°	23.0	16.1	11.5	9.2	11.5	11.5	9.2	9.2	4.6	2.3	2.3
85°	11.5	6.9	4.6	4.6	4.6	2.3	2.3	4.6	4.6	2.3	2.3
87.5°	6.9	4.6	4.6	4.6	2.3	2.3	2.3	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)