

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: P573276

Luminaire Tested: **ARCH-S-PA2-50-830-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573276  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-830-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4375 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

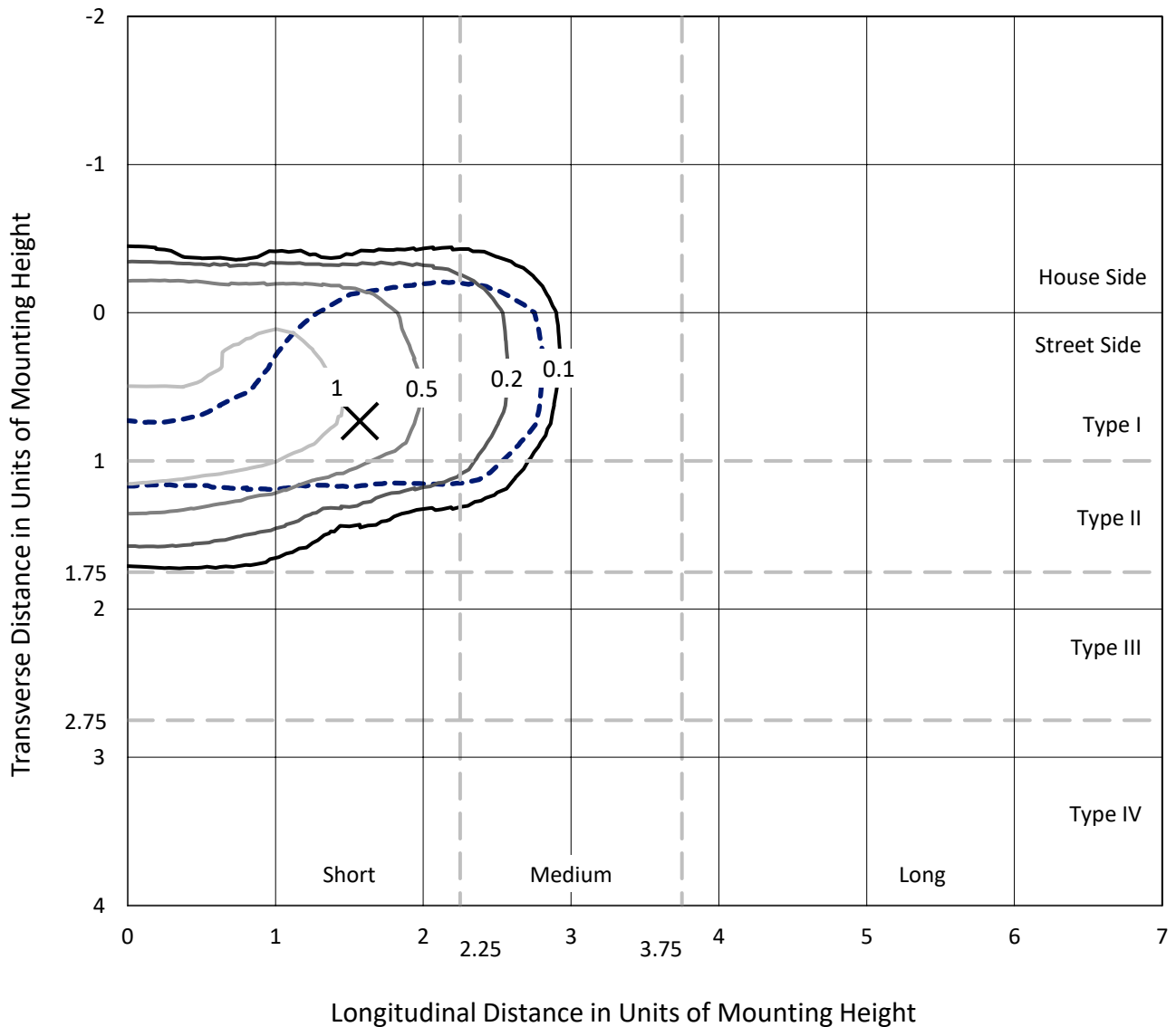
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

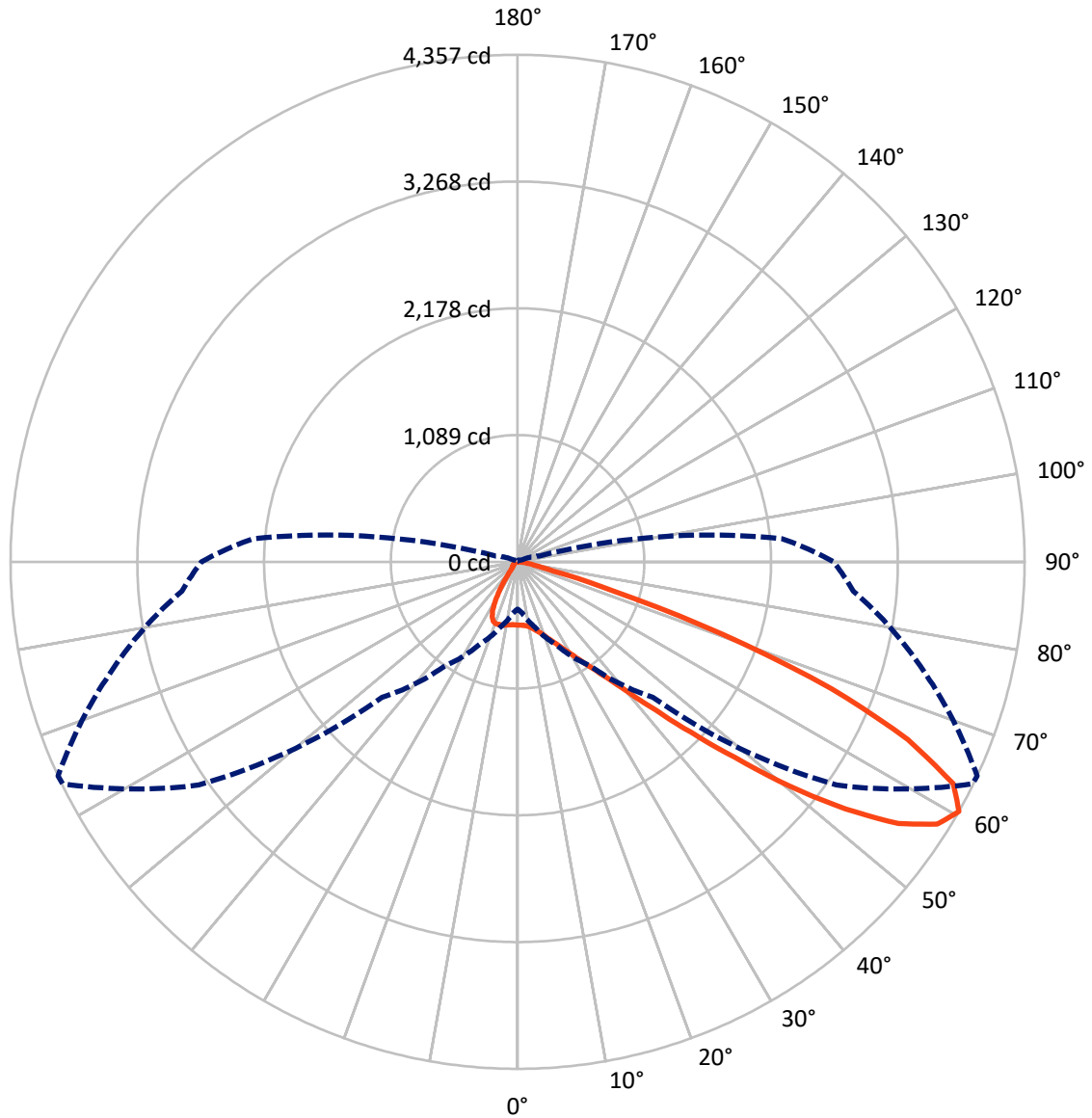
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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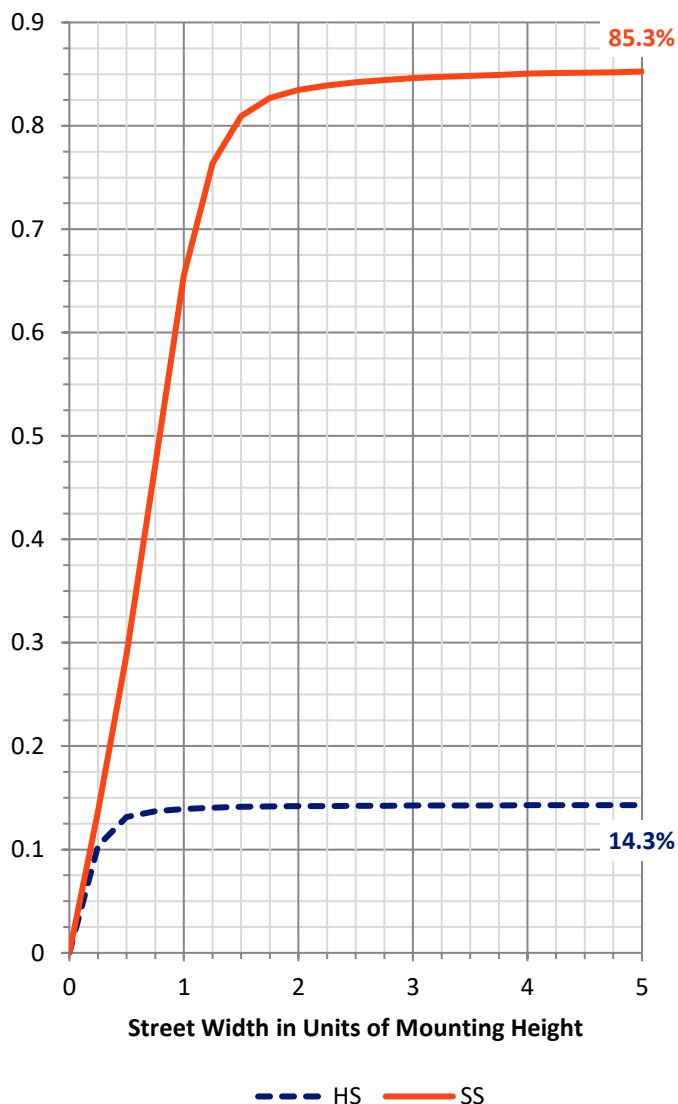
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	633.4	0.0	633.4
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	3741.6	0.0	3741.6
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	4375.0	0.0	4375.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	1.2
10°-20°	146.1	3.3
20°-30°	248.2	5.7
30°-40°	512.2	11.7
40°-50°	1030.2	23.5
50°-60°	1260.6	28.8
60°-70°	891.8	20.4
70°-80°	214.9	4.9
80°-90°	19.4	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°	4375.0	100.0
0°-180°	4375.0	100.0

**Coefficient of Utilization**

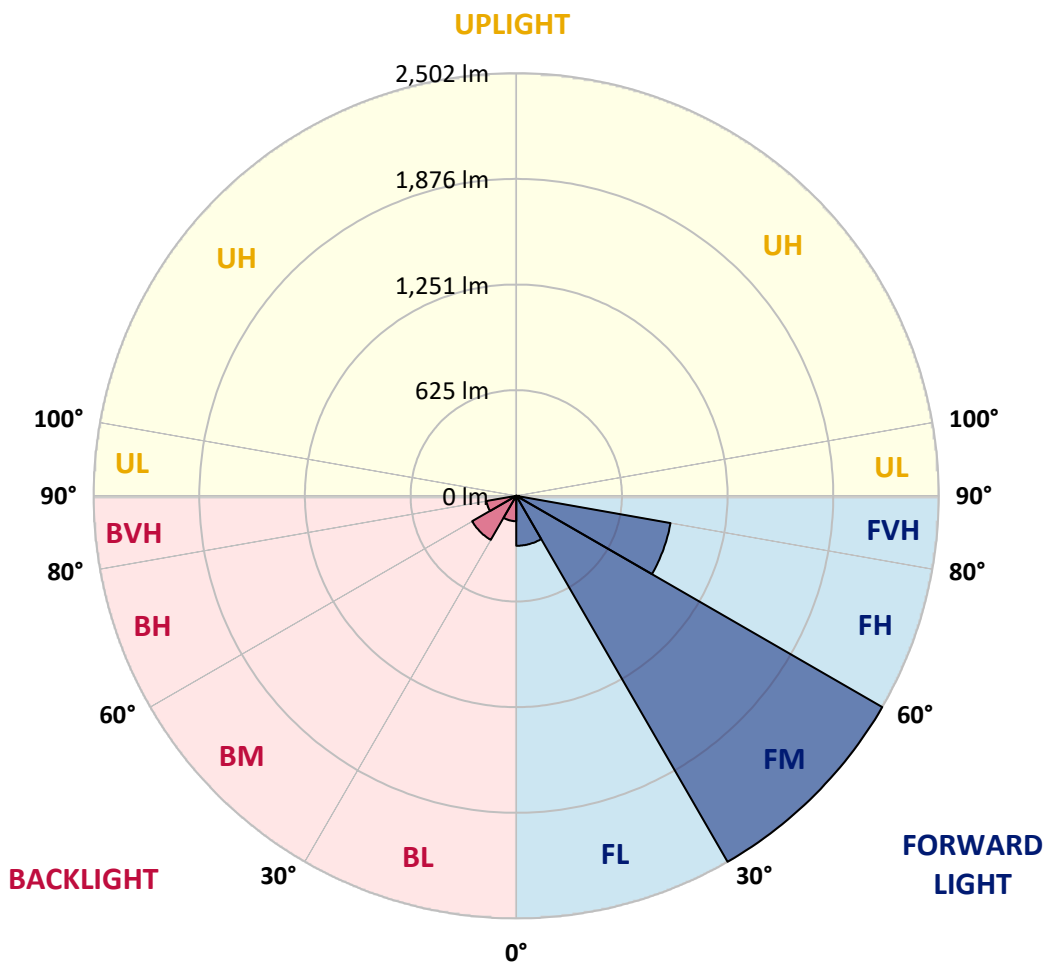


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	295.7	6.8			
FM (30°-60°)	2501.8	57.2			
FH (60°-80°)	927.2	21.2			G1/1800
FVH (80°-90°)	16.9	0.4			G1/100
BL (0°-30°)	150.2	3.4	B1/500		
BM (30°-60°)	301.2	6.9	B1/1000		
BH (60°-80°)	179.5	4.1	B1/500		G1/500
BVH (80°-90°)	2.5	0.1			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°	64°	65°	75°	85°
0°	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0
2.5°	546.7	545.0	545.0	545.0	546.7	546.7	548.5	545.0	545.0	545.0	545.0
5°	543.3	541.6	541.6	543.3	545.0	545.0	548.5	548.5	548.5	550.2	550.2
7.5°	550.2	546.7	546.7	548.5	550.2	550.2	553.6	555.4	555.4	558.8	560.5
10°	558.8	557.1	557.1	560.5	564.0	564.0	569.2	569.2	569.2	572.6	574.3
12.5°	570.9	569.2	569.2	574.3	579.5	583.0	586.4	588.1	589.9	589.9	589.9
15°	588.1	586.4	586.4	591.6	598.5	607.1	612.3	612.3	615.7	614.0	607.1
17.5°	612.3	610.6	612.3	615.7	624.4	633.0	643.3	645.1	643.3	639.9	629.5
20°	651.9	646.8	650.2	658.8	658.8	664.0	677.8	683.0	684.7	674.4	655.4
22.5°	693.3	693.3	696.8	707.1	700.2	707.1	719.2	727.8	731.3	722.7	691.6
25°	771.0	774.4	769.2	765.8	748.5	752.0	767.5	784.8	784.8	777.9	733.0
27.5°	941.7	938.3	902.0	852.0	807.2	810.6	826.1	848.6	850.3	834.8	774.4
30°	1186.6	1190.1	1119.4	1005.5	907.2	881.3	898.6	924.5	927.9	902.0	827.9
32.5°	1569.5	1540.2	1409.1	1257.3	1072.8	979.6	986.5	1014.1	1024.5	1002.1	912.4
35°	2064.5	1995.5	1798.9	1610.9	1343.6	1155.6	1102.1	1131.4	1136.6	1124.5	1017.6
37.5°	2359.4	2304.2	2176.6	2005.9	1692.0	1390.1	1253.9	1283.2	1278.0	1253.9	1122.8
40°	2542.3	2511.2	2442.2	2362.9	2162.8	1759.2	1504.0	1479.8	1481.5	1447.1	1293.5
42.5°	2645.7	2618.1	2592.3	2613.0	2554.3	2428.4	1866.2	1755.8	1745.4	1679.9	1491.9
45°	2650.9	2609.5	2640.6	2761.3	2854.4	3021.7	2338.7	2083.5	2088.7	1980.0	1738.5
47.5°	2452.6	2419.8	2509.5	2745.8	3054.5	3409.8	2888.9	2531.9	2507.8	2293.9	1988.6
50°	2061.1	2059.3	2178.3	2512.9	3054.5	3609.9	3478.8	3058.0	3032.1	2621.6	2216.3
52.5°	1631.6	1664.4	1745.4	2062.8	2773.4	3590.9	3913.4	3601.2	3528.8	2913.1	2406.0
55°	1269.4	1257.3	1355.6	1574.7	2199.0	3263.2	4054.8	4029.0	3968.6	3171.8	2573.3
57.5°	779.6	824.4	957.2	1152.1	1600.6	2566.4	3851.3	4289.4	4253.2	3413.2	2747.5
60°	405.3	439.8	583.0	786.5	1093.5	1645.4	3342.5	4349.8	4356.7	3608.1	2895.8
62.5°	255.3	253.5	319.1	551.9	703.7	924.5	2595.7	4135.9	4201.5	3758.2	3037.3
65°	191.4	193.2	219.0	365.6	477.8	482.9	1540.2	3577.1	3685.8	3797.9	3085.5
67.5°	177.6	179.4	191.4	239.7	358.7	322.5	677.8	2757.8	2909.6	3432.2	2899.3
70°	158.7	160.4	179.4	198.3	270.8	236.3	305.3	1660.9	1871.3	2490.5	2319.8
72.5°	124.2	127.6	150.1	188.0	201.8	179.4	212.1	734.7	857.2	1369.4	1328.0
75°	91.4	93.1	113.8	144.9	177.6	127.6	163.8	291.5	319.1	514.0	438.1
77.5°	63.8	63.8	79.3	108.7	148.3	89.7	117.3	157.0	160.4	191.4	125.9
80°	39.7	41.4	50.0	74.2	91.4	86.2	72.4	105.2	105.2	100.0	51.7
82.5°	22.4	24.1	34.5	50.0	62.1	58.6	46.6	60.4	62.1	63.8	29.3
85°	10.3	12.1	20.7	31.0	36.2	27.6	27.6	31.0	31.0	41.4	17.2
87.5°	1.7	1.7	10.3	13.8	12.1	13.8	13.8	17.2	17.2	20.7	8.6
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°	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0	545.0
2.5°	543.3	543.3	543.3	541.6	541.6	539.8	536.4	536.4	536.4	536.4	538.1
5°	550.2	548.5	546.7	541.6	538.1	531.2	524.3	522.6	517.4	517.4	519.1
7.5°	558.8	558.8	553.6	545.0	536.4	524.3	512.2	503.6	495.0	493.3	491.5
10°	574.3	570.9	565.7	550.2	536.4	517.4	498.4	476.0	458.8	450.2	446.7
12.5°	586.4	584.7	574.3	557.1	534.7	505.3	462.2	410.5	369.1	346.7	346.7
15°	603.7	600.2	584.7	560.5	529.5	460.5	372.5	293.2	248.4	224.2	220.8
17.5°	620.9	614.0	595.0	562.3	507.1	379.4	260.4	188.0	157.0	144.9	141.4
20°	641.6	629.5	601.9	564.0	451.9	276.0	169.0	125.9	113.8	108.7	110.4
22.5°	669.2	648.5	608.8	553.6	369.1	179.4	119.0	101.8	94.9	89.7	89.7
25°	703.7	674.4	620.9	524.3	267.3	120.7	94.9	84.5	77.6	74.2	72.4
27.5°	734.7	698.5	633.0	472.6	170.7	94.9	79.3	70.7	63.8	62.1	60.4
30°	776.1	726.1	645.1	389.8	112.1	77.6	67.3	58.6	53.5	51.7	51.7
32.5°	846.8	779.6	667.5	296.7	84.5	67.3	56.9	50.0	46.6	44.8	44.8
35°	929.6	845.1	686.4	207.0	72.4	56.9	48.3	43.1	41.4	39.7	39.7
37.5°	1015.9	922.7	689.9	131.1	63.8	50.0	43.1	39.7	36.2	36.2	36.2
40°	1171.1	1059.0	674.4	88.0	55.2	44.8	37.9	36.2	32.8	32.8	32.8
42.5°	1352.2	1224.6	634.7	70.7	50.0	39.7	36.2	32.8	29.3	29.3	27.6
45°	1586.8	1412.6	567.4	62.1	44.8	36.2	32.8	29.3	27.6	25.9	25.9
47.5°	1807.5	1626.4	503.6	55.2	41.4	34.5	29.3	25.9	24.1	24.1	24.1
50°	2017.9	1790.3	429.5	51.7	37.9	32.8	27.6	24.1	22.4	20.7	20.7
52.5°	2169.7	1919.6	360.5	46.6	34.5	29.3	25.9	22.4	19.0	17.2	17.2
55°	2338.7	2050.7	298.4	41.4	32.8	27.6	22.4	19.0	15.5	13.8	13.8
57.5°	2528.5	2178.3	241.5	37.9	31.0	24.1	19.0	15.5	12.1	10.3	10.3
60°	2716.5	2280.1	193.2	34.5	27.6	22.4	17.2	12.1	8.6	6.9	6.9
62.5°	2904.5	2349.1	148.3	31.0	25.9	19.0	13.8	8.6	5.2	3.4	3.4
65°	2982.1	2330.1	110.4	27.6	22.4	15.5	12.1	8.6	5.2	3.4	3.4
67.5°	2766.5	2095.6	77.6	27.6	20.7	15.5	10.3	6.9	3.4	1.7	1.7
70°	2159.4	1617.8	56.9	27.6	20.7	15.5	10.3	6.9	3.4	1.7	1.7
72.5°	1224.6	900.3	43.1	24.1	19.0	13.8	10.3	6.9	3.4	1.7	1.7
75°	436.4	289.8	32.8	22.4	17.2	12.1	10.3	6.9	3.4	1.7	1.7
77.5°	105.2	74.2	25.9	19.0	15.5	12.1	8.6	6.9	5.2	1.7	1.7
80°	43.1	31.0	20.7	15.5	12.1	10.3	8.6	6.9	3.4	1.7	1.7
82.5°	19.0	15.5	8.6	8.6	6.9	6.9	6.9	6.9	3.4	1.7	1.7
85°	8.6	6.9	3.4	3.4	1.7	1.7	1.7	3.4	3.4	1.7	1.7
87.5°	5.2	3.4	3.4	3.4	1.7	1.7	1.7	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)