

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: P573508

Luminaire Tested: **ARCH-S-PA2-80-827-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573508  
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-PA2-80-827-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 820mA 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: 6692 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

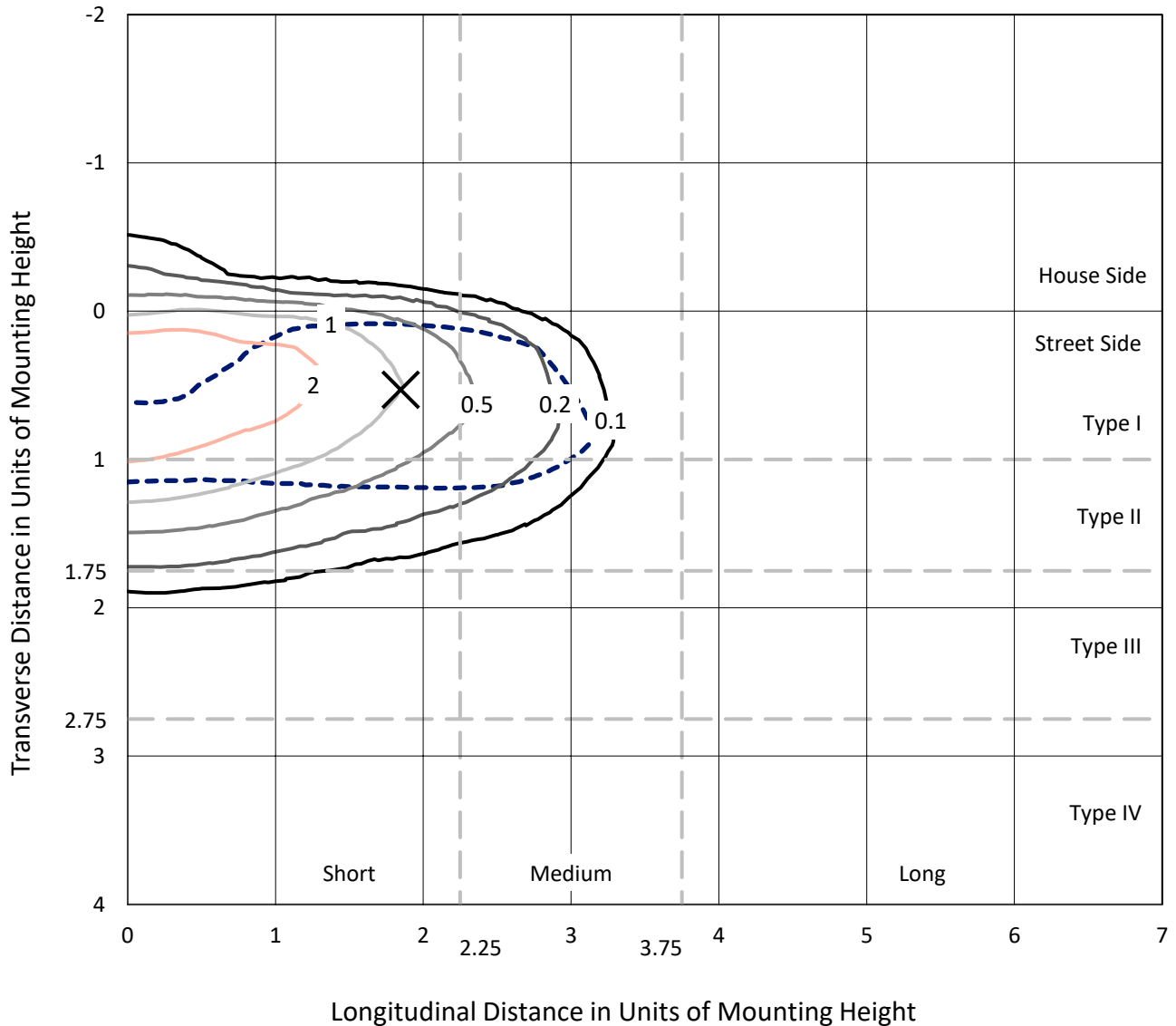
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

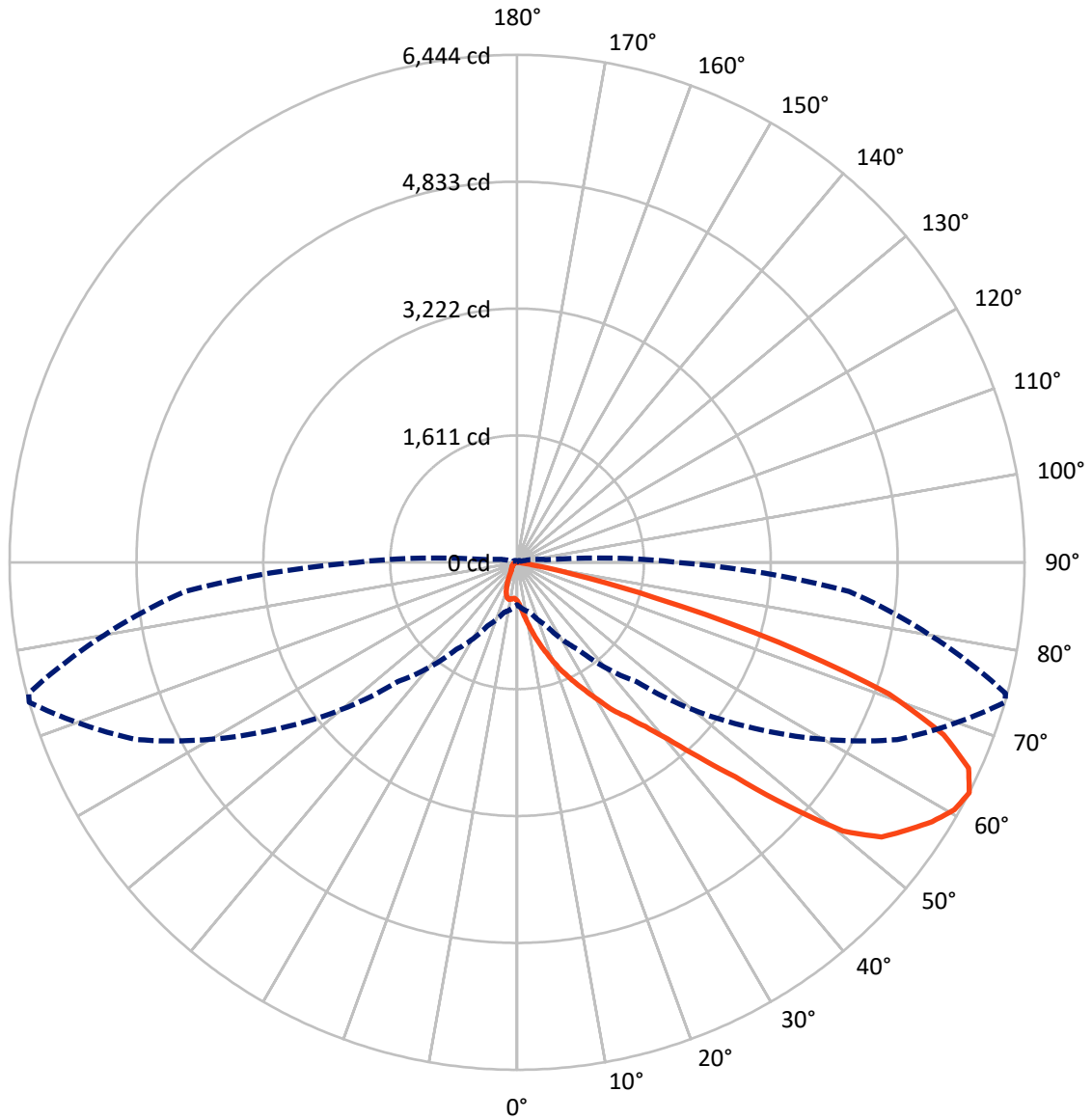
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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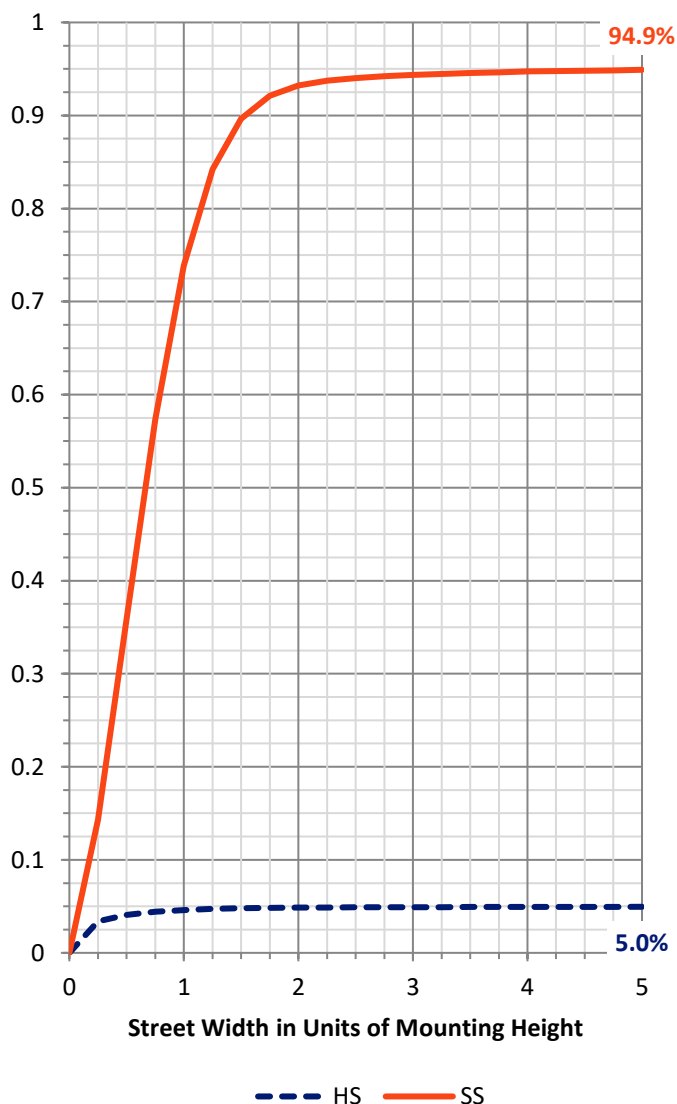
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	333.8	0.0	333.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	6358.2	0.0	6358.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	6692.0	0.0	6692.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.3	0.9
10°-20°	257.3	3.8
20°-30°	552.3	8.3
30°-40°	968.6	14.5
40°-50°	1501.5	22.4
50°-60°	1731.0	25.9
60°-70°	1216.1	18.2
70°-80°	378.9	5.7
80°-90°	25.0	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°	6692.0	100.0
0°-180°	6692.0	100.0

**Coefficient of Utilization**



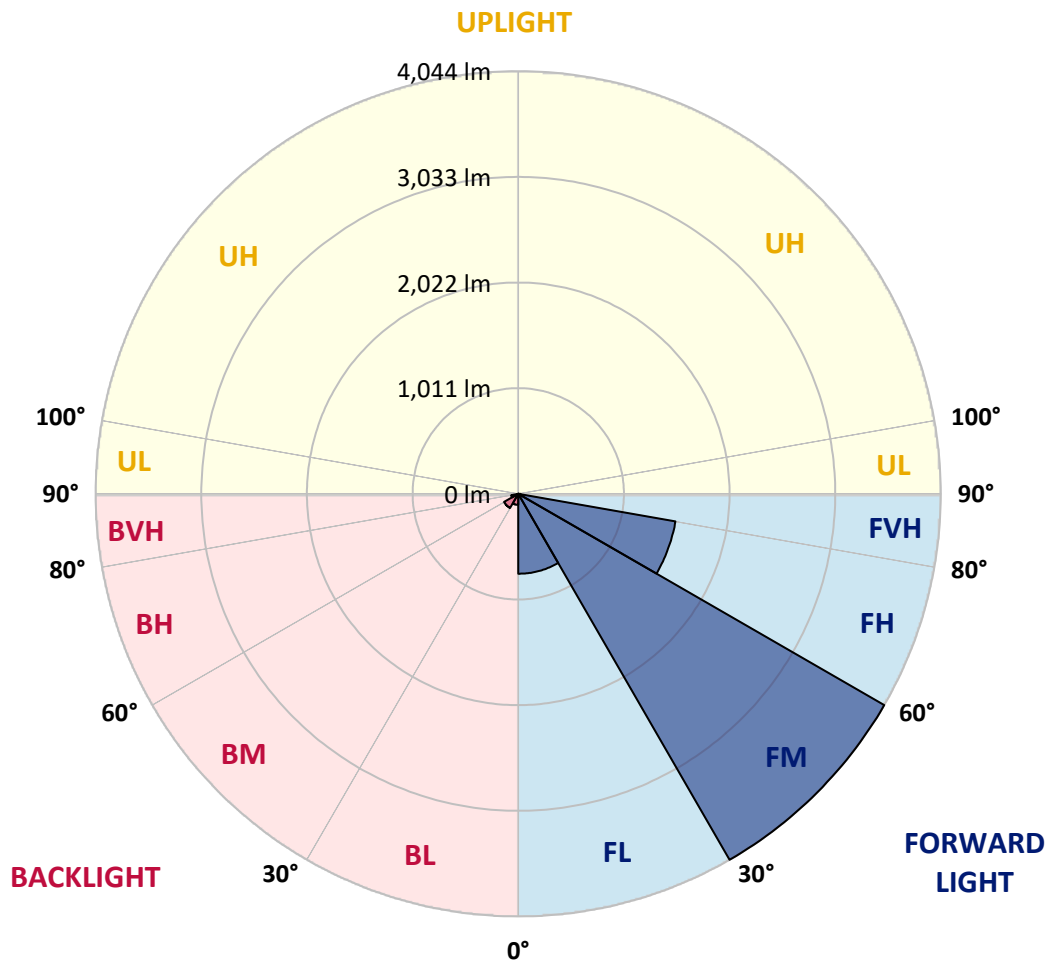
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	764.9	11.4			
FM (30°-60°)	4044.3	60.4			
FH (60°-80°)	1527.4	22.8			G1/1800
FVH (80°-90°)	21.6	0.3			G1/100
BL (0°-30°)	105.9	1.6	B0/110		
BM (30°-60°)	156.9	2.3	B0/220		
BH (60°-80°)	67.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9
2.5°	680.6	668.9	654.7	643.0	619.4	602.9	581.7	558.2	532.3	529.9	508.7
5°	953.8	918.5	918.5	887.9	852.6	789.0	730.1	657.1	602.9	598.2	541.7
7.5°	1234.1	1205.8	1189.4	1142.3	1085.7	1015.1	920.9	798.4	699.5	683.0	591.1
10°	1495.5	1474.3	1443.7	1406.0	1356.6	1241.2	1123.4	963.3	805.5	793.7	650.0
12.5°	1698.1	1672.2	1658.0	1641.6	1578.0	1486.1	1333.0	1130.5	942.1	916.2	708.9
15°	1851.2	1839.4	1825.3	1825.3	1792.3	1702.8	1545.0	1309.5	1074.0	1043.3	784.3
17.5°	1973.6	1959.5	1957.1	1971.3	1961.9	1898.3	1749.9	1481.4	1210.6	1187.0	862.0
20°	2110.2	2091.4	2091.4	2103.2	2100.8	2065.5	1935.9	1679.2	1370.7	1328.3	951.5
22.5°	2303.4	2291.6	2282.2	2263.3	2249.2	2216.2	2103.2	1872.4	1523.8	1483.8	1043.3
25°	2562.4	2548.3	2505.9	2472.9	2411.7	2362.2	2265.7	2044.3	1679.2	1634.5	1132.8
27.5°	2814.4	2786.2	2746.1	2703.7	2635.4	2550.6	2430.5	2206.8	1841.7	1794.6	1224.7
30°	3080.6	3059.4	3009.9	2941.6	2856.8	2762.6	2618.9	2402.3	2027.8	1976.0	1323.6
32.5°	3292.5	3259.6	3214.8	3148.9	3061.7	2995.8	2840.3	2616.6	2242.1	2173.8	1427.2
35°	3462.1	3436.2	3377.3	3313.7	3247.8	3228.9	3059.4	2790.9	2414.0	2350.5	1537.9
37.5°	3570.4	3544.5	3495.1	3431.5	3405.6	3438.5	3327.9	3028.7	2644.9	2564.8	1665.1
40°	3655.2	3624.6	3584.6	3556.3	3546.9	3638.7	3627.0	3337.3	2948.7	2901.6	1839.4
42.5°	3716.5	3685.8	3659.9	3657.6	3718.8	3897.8	4029.7	3768.3	3372.6	3276.0	2063.1
45°	3638.7	3612.8	3627.0	3709.4	3857.8	4140.4	4517.2	4378.3	3883.7	3815.4	2421.1
47.5°	3422.1	3405.6	3469.2	3619.9	3895.4	4288.8	4988.2	5047.1	4613.8	4510.1	2885.1
50°	3082.9	3080.6	3181.8	3386.7	3777.7	4345.3	5226.1	5690.1	5362.7	5256.7	3261.9
52.5°	2623.7	2614.2	2762.6	3047.6	3499.8	4239.3	5270.9	5946.8	5796.1	5671.2	3499.8
55°	2103.2	2082.0	2258.6	2571.8	3090.0	3930.8	5150.8	6003.3	6003.3	5890.3	3676.4
57.5°	1479.0	1512.0	1658.0	2034.9	2583.6	3469.2	4854.0	5951.5	6212.9	6116.4	3914.3
60°	932.6	946.8	1106.9	1410.7	1959.5	2852.1	4324.1	5727.8	6380.1	6323.6	4105.1
62.5°	537.0	581.7	661.8	892.6	1351.9	2143.2	3669.4	5325.0	6443.7	6420.2	4229.9
65°	327.4	332.1	369.8	504.0	831.4	1462.6	2936.9	4764.5	6300.1	6321.3	4206.3
67.5°	244.9	244.9	256.7	317.9	473.4	930.3	2166.8	4083.9	5840.8	5909.1	3984.9
70°	212.0	212.0	214.3	233.2	292.0	551.1	1431.9	3292.5	5007.1	5000.0	3292.5
72.5°	167.2	174.3	188.4	197.8	221.4	322.7	838.4	2301.0	3478.6	3561.0	2119.7
75°	134.2	136.6	155.4	171.9	186.1	219.0	395.7	1278.9	1825.3	1825.3	932.6
77.5°	103.6	108.3	120.1	136.6	155.4	155.4	164.9	494.6	706.6	683.0	275.6
80°	65.9	68.3	87.1	108.3	129.5	110.7	89.5	164.9	193.1	186.1	75.4
82.5°	40.0	42.4	56.5	87.1	87.1	61.2	56.5	68.3	61.2	56.5	30.6
85°	11.8	14.1	40.0	56.5	49.5	23.6	28.3	30.6	28.3	25.9	16.5
87.5°	2.4	2.4	11.8	14.1	11.8	11.8	9.4	11.8	11.8	11.8	7.1
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°	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9	489.9
2.5°	496.9	487.5	468.7	454.5	442.8	431.0	421.6	419.2	414.5	414.5	412.2
5°	518.1	496.9	461.6	438.1	419.2	402.7	388.6	374.5	369.8	365.1	367.4
7.5°	551.1	518.1	468.7	433.4	400.4	362.7	332.1	306.2	287.3	282.6	275.6
10°	593.5	544.0	480.5	423.9	362.7	296.8	254.4	228.5	219.0	207.3	209.6
12.5°	635.9	574.7	489.9	398.0	299.1	233.2	197.8	181.3	174.3	171.9	174.3
15°	685.4	607.6	485.2	350.9	240.2	188.4	167.2	160.2	155.4	155.4	153.1
17.5°	734.8	635.9	468.7	289.7	193.1	160.2	150.7	143.7	139.0	136.6	136.6
20°	789.0	661.8	431.0	230.8	160.2	146.0	136.6	127.2	122.5	122.5	122.5
22.5°	845.5	680.6	381.5	183.7	143.7	129.5	120.1	113.0	108.3	108.3	108.3
25°	895.0	690.1	322.7	153.1	131.9	117.8	108.3	101.3	98.9	96.6	96.6
27.5°	942.1	687.7	261.4	134.2	117.8	106.0	96.6	91.9	87.1	87.1	87.1
30°	989.2	673.6	207.3	122.5	108.3	94.2	87.1	82.4	80.1	77.7	77.7
32.5°	1029.2	650.0	162.5	113.0	98.9	84.8	77.7	73.0	73.0	70.7	70.7
35°	1069.2	614.7	136.6	106.0	89.5	77.7	70.7	68.3	65.9	65.9	65.9
37.5°	1111.6	570.0	120.1	96.6	80.1	70.7	65.9	63.6	61.2	58.9	58.9
40°	1163.5	525.2	113.0	89.5	73.0	63.6	58.9	56.5	54.2	54.2	54.2
42.5°	1245.9	487.5	106.0	80.1	65.9	58.9	54.2	49.5	49.5	47.1	47.1
45°	1401.3	473.4	98.9	73.0	61.2	51.8	49.5	44.7	42.4	42.4	42.4
47.5°	1603.9	475.7	91.9	65.9	56.5	47.1	44.7	42.4	37.7	37.7	37.7
50°	1771.1	464.0	84.8	61.2	49.5	44.7	40.0	37.7	35.3	35.3	35.3
52.5°	1837.0	442.8	77.7	56.5	47.1	40.0	37.7	35.3	33.0	33.0	33.0
55°	1903.0	433.4	70.7	49.5	42.4	40.0	35.3	33.0	30.6	28.3	28.3
57.5°	2023.1	438.1	63.6	47.1	40.0	37.7	33.0	28.3	23.6	21.2	21.2
60°	2086.7	421.6	58.9	42.4	37.7	35.3	28.3	21.2	16.5	14.1	14.1
62.5°	2032.5	374.5	54.2	40.0	35.3	30.6	21.2	16.5	11.8	7.1	7.1
65°	1881.8	308.5	49.5	37.7	30.6	23.6	18.8	11.8	7.1	4.7	4.7
67.5°	1691.0	242.6	44.7	35.3	28.3	21.2	16.5	9.4	4.7	2.4	2.4
70°	1366.0	174.3	42.4	33.0	25.9	18.8	14.1	9.4	4.7	2.4	2.4
72.5°	880.8	113.0	37.7	30.6	23.6	18.8	11.8	7.1	4.7	2.4	2.4
75°	407.4	75.4	35.3	28.3	23.6	16.5	11.8	9.4	4.7	2.4	2.4
77.5°	120.1	54.2	33.0	25.9	21.2	16.5	11.8	9.4	4.7	2.4	2.4
80°	49.5	37.7	25.9	23.6	21.2	16.5	11.8	9.4	4.7	2.4	2.4
82.5°	23.6	16.5	11.8	9.4	11.8	11.8	9.4	9.4	4.7	2.4	2.4
85°	11.8	7.1	4.7	4.7	4.7	2.4	2.4	4.7	4.7	2.4	2.4
87.5°	7.1	4.7	4.7	4.7	2.4	2.4	2.4	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)