

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: P573248

Luminaire Tested: **ARCH-S-PA2-50-750-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8043 lumens  
Efficiency: N/A  
Efficacy: 150.1 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

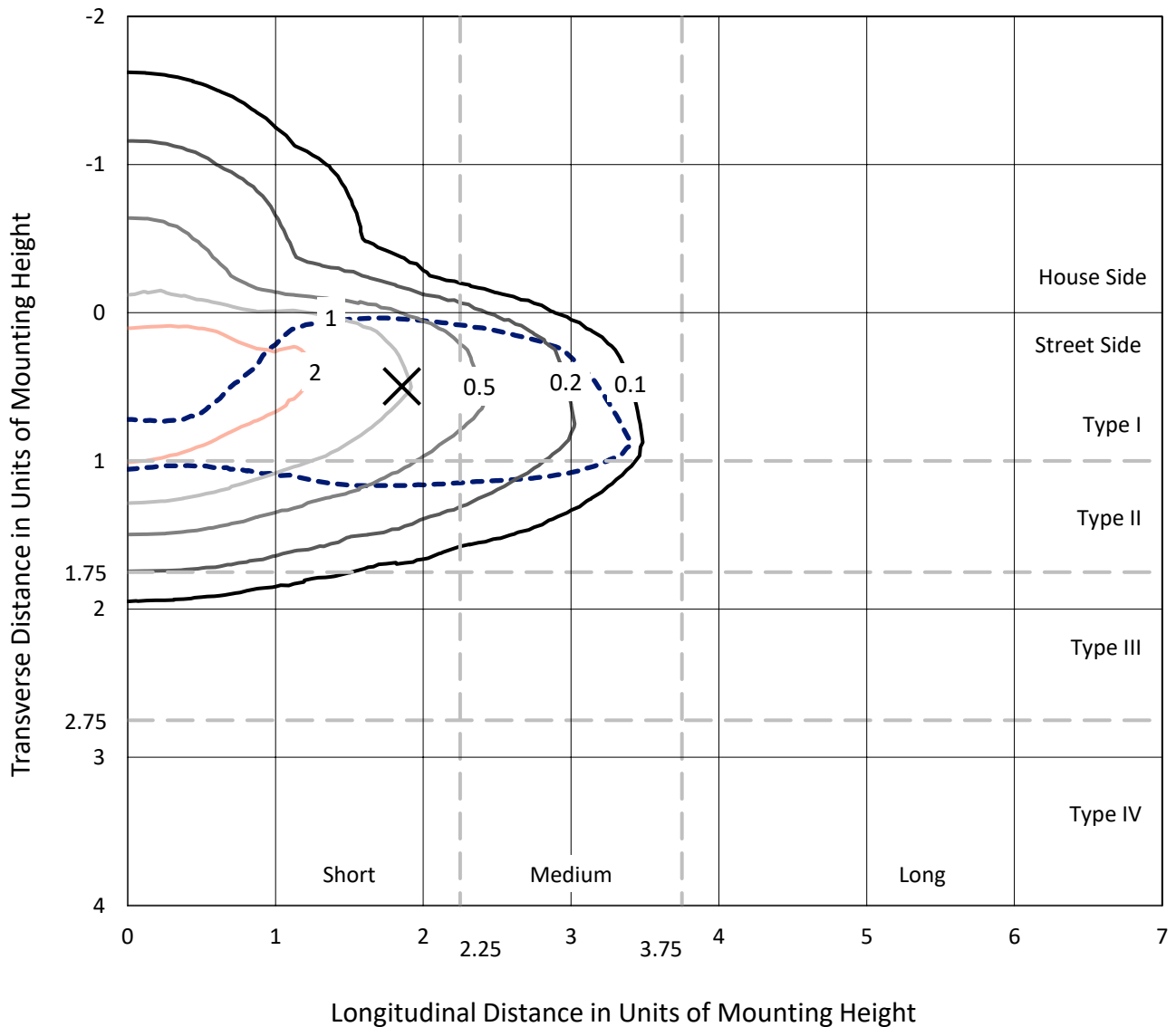




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### Iso-Footcandle Lines of Horizontal Illumination

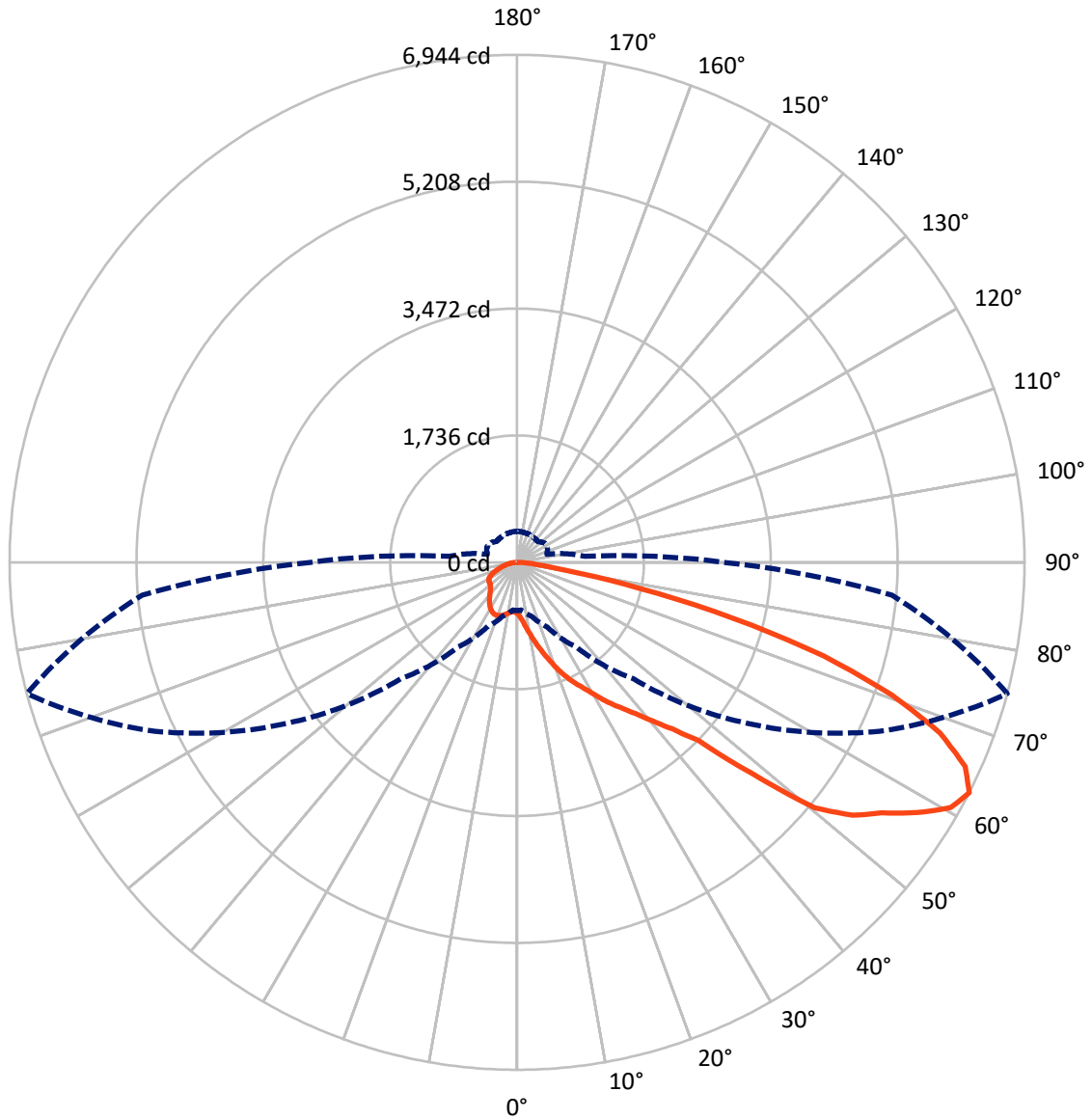
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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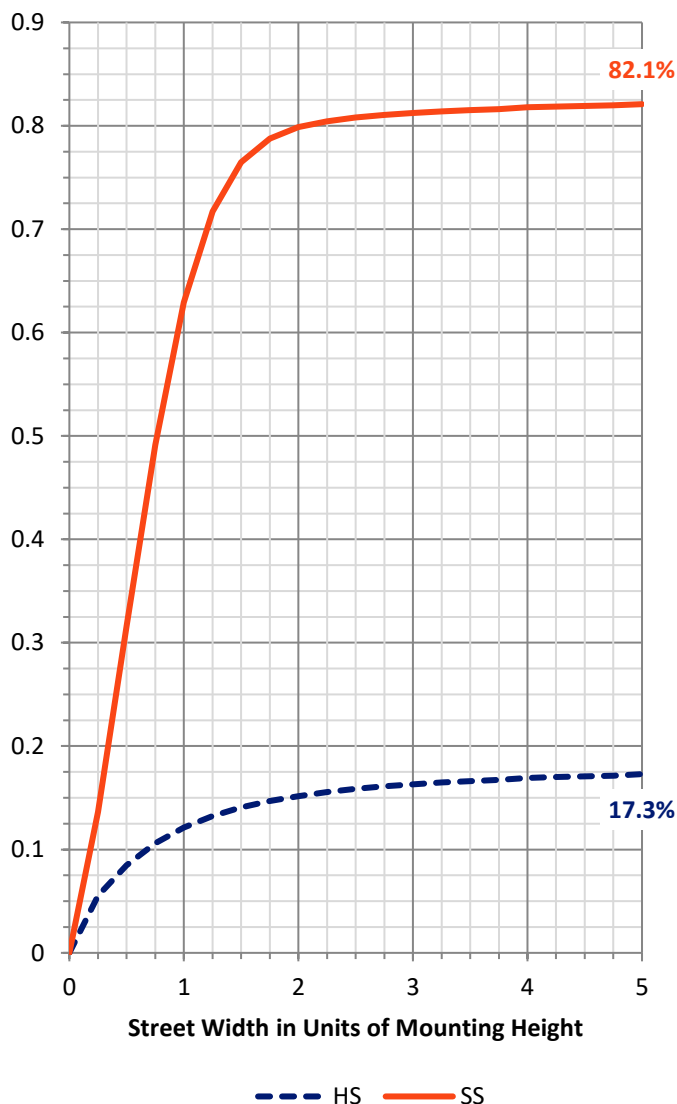
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1418.6	0.0	1418.6
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	6624.4	0.0	6624.4
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	8043.0	0.0	8043.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.2	1.0
10°-20°	332.8	4.1
20°-30°	658.4	8.2
30°-40°	1097.5	13.6
40°-50°	1619.5	20.1
50°-60°	1946.8	24.2
60°-70°	1513.1	18.8
70°-80°	669.4	8.3
80°-90°	121.2	1.5
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°	8043.0	100.0
0°-180°	8043.0	100.0

**Coefficient of Utilization**



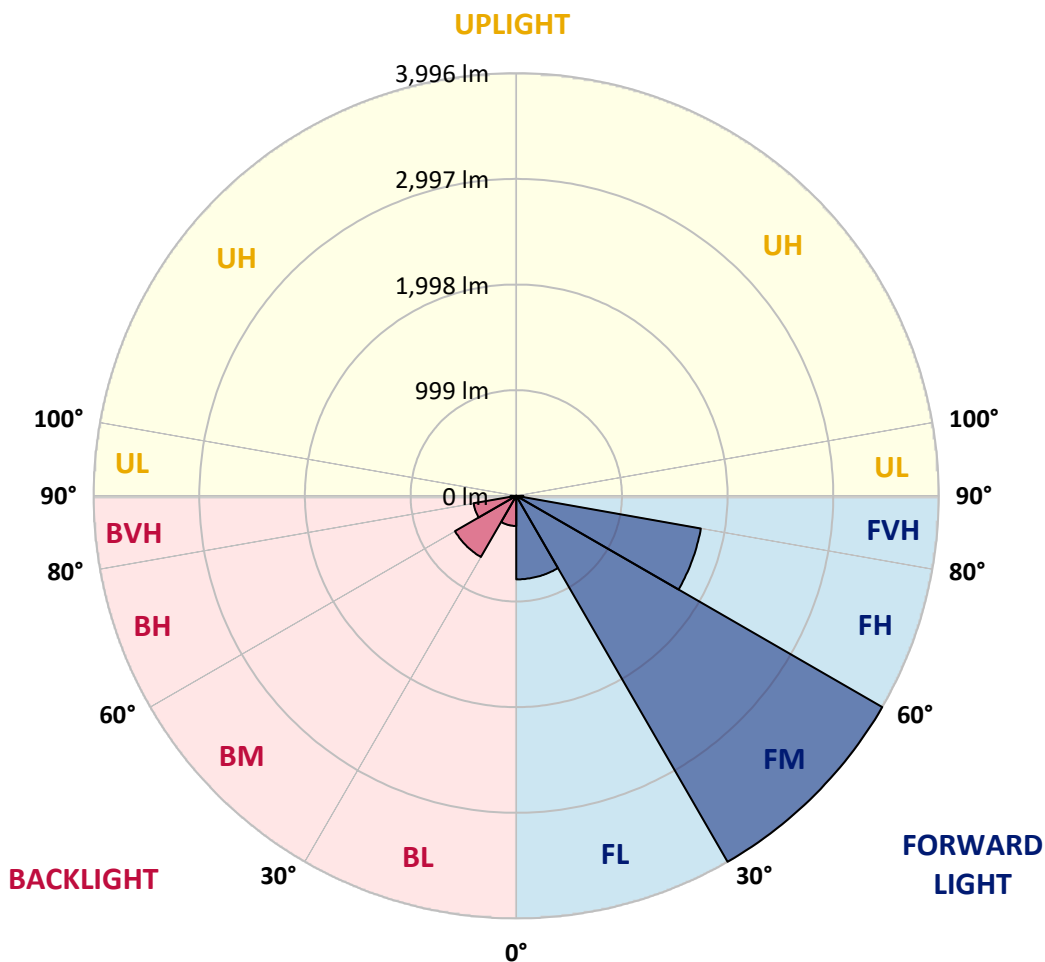
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	790.0	9.8			
FM (30°-60°)	3995.8	49.7			
FH (60°-80°)	1772.0	22.0			G1/1800
FVH (80°-90°)	66.6	0.8			G1/100
BL (0°-30°)	285.4	3.5	B1/500		
BM (30°-60°)	668.1	8.3	B1/1000		
BH (60°-80°)	410.4	5.1	B1/500		G1/500
BVH (80°-90°)	54.6	0.7			G1/100
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°	65°	75°	85°	90°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	896.4	870.4	870.4	842.2	844.3	820.5	794.4	768.4	740.2	718.4	707.6
5°	1172.1	1152.6	1146.0	1113.5	1061.4	1002.8	939.8	874.7	807.4	755.3	729.3
7.5°	1430.4	1415.2	1406.5	1369.6	1298.0	1235.0	1135.2	1015.8	900.8	803.1	764.0
10°	1621.4	1610.5	1593.2	1575.8	1523.7	1469.5	1345.7	1176.4	1007.1	861.7	803.1
12.5°	1760.3	1745.1	1745.1	1742.9	1708.2	1658.3	1543.2	1360.9	1130.8	926.8	846.5
15°	1853.6	1851.5	1858.0	1871.0	1862.3	1829.8	1714.7	1530.2	1256.7	1000.6	896.4
17.5°	1923.1	1914.4	1927.4	1962.2	1988.2	1975.2	1879.7	1693.0	1395.7	1080.9	950.7
20°	1999.1	1981.7	1999.1	2042.5	2075.0	2094.6	2049.0	1849.3	1545.4	1167.7	1002.8
22.5°	2144.5	2142.3	2133.6	2146.7	2168.4	2203.1	2177.0	2007.7	1690.8	1254.6	1063.6
25°	2405.0	2381.1	2357.2	2329.0	2305.1	2316.0	2294.3	2155.3	1823.2	1350.1	1115.7
27.5°	2695.8	2669.8	2626.3	2556.9	2491.8	2452.7	2407.1	2283.4	1951.3	1436.9	1165.6
30°	2962.8	2954.1	2889.0	2813.0	2700.1	2628.5	2541.7	2431.0	2105.4	1532.4	1217.7
32.5°	3212.4	3195.0	3129.9	3049.6	2917.2	2836.9	2717.5	2591.6	2281.2	1649.6	1271.9
35°	3427.3	3409.9	3333.9	3231.9	3116.9	3047.4	2910.7	2734.9	2441.8	1751.6	1317.5
37.5°	3590.1	3570.5	3498.9	3399.1	3297.0	3264.5	3147.3	2917.2	2624.2	1879.7	1373.9
40°	3681.2	3657.3	3609.6	3540.1	3455.5	3440.3	3390.4	3142.9	2854.3	2036.0	1456.4
42.5°	3692.1	3670.4	3644.3	3637.8	3631.3	3644.3	3668.2	3399.1	3116.9	2244.3	1578.0
45°	3596.6	3583.5	3585.7	3659.5	3761.5	3880.9	4024.2	3776.7	3470.7	2641.5	1851.5
47.5°	3392.5	3386.0	3433.8	3557.5	3785.4	4056.7	4462.6	4423.5	4308.5	3281.8	2203.1
50°	3062.6	3051.8	3153.8	3349.1	3674.7	4115.3	4757.8	5185.4	5280.9	3778.9	2433.2
52.5°	2589.4	2602.5	2760.9	3027.9	3420.8	4052.4	4879.4	5498.0	5749.7	4145.7	2609.0
55°	2105.4	2085.9	2229.1	2559.1	3045.3	3822.3	4903.2	5678.1	6053.6	4484.3	2780.5
57.5°	1534.6	1582.3	1734.3	2033.8	2561.2	3405.6	4764.3	5801.8	6461.7	4822.9	2938.9
60°	1039.7	1039.7	1174.3	1473.8	1979.5	2899.8	4393.2	5756.3	6817.6	5087.7	2973.6
62.5°	662.0	655.5	764.0	976.7	1417.4	2253.0	3837.5	5469.7	6943.5	5150.7	2828.2
65°	418.9	427.6	466.7	596.9	907.3	1599.7	3080.0	4898.9	6737.3	5005.2	2574.3
67.5°	336.4	338.6	358.1	412.4	557.8	1026.7	2283.4	4111.0	6244.6	4638.4	2276.9
70°	297.4	301.7	306.0	325.6	382.0	649.0	1499.8	3310.1	5437.2	4000.3	1957.8
72.5°	271.3	275.7	280.0	284.3	314.7	423.3	885.6	2509.1	4386.6	3073.5	1493.3
75°	249.6	254.0	254.0	256.1	273.5	314.7	486.2	1729.9	3053.9	1912.2	931.2
77.5°	223.6	225.7	225.7	230.1	247.4	247.4	301.7	1070.1	1695.2	866.0	471.0
80°	188.8	193.2	193.2	199.7	217.1	191.0	201.9	547.0	703.3	356.0	210.5
82.5°	138.9	147.6	151.9	162.8	173.6	145.4	145.4	275.7	297.4	158.4	112.9
85°	76.0	78.1	112.9	121.5	128.1	86.8	97.7	136.7	147.6	69.5	56.4
87.5°	21.7	23.9	54.3	67.3	60.8	36.9	41.2	52.1	52.1	19.5	15.2
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	698.9	681.5	666.4	655.5	644.6	638.1	636.0	631.6	631.6	633.8
5°	707.6	677.2	653.3	640.3	631.6	627.3	625.1	625.1	627.3	627.3
7.5°	729.3	683.7	662.0	651.2	642.5	638.1	638.1	636.0	638.1	638.1
10°	759.7	703.3	679.4	666.4	659.8	653.3	651.2	649.0	649.0	649.0
12.5°	792.2	725.0	698.9	683.7	672.9	664.2	659.8	655.5	653.3	653.3
15°	822.6	746.7	711.9	694.6	679.4	666.4	657.7	651.2	649.0	649.0
17.5°	855.2	761.9	720.6	696.7	677.2	659.8	649.0	640.3	636.0	636.0
20°	889.9	772.7	720.6	690.2	664.2	646.8	633.8	625.1	616.4	616.4
22.5°	918.1	777.1	711.9	675.0	649.0	627.3	614.3	603.4	596.9	596.9
25°	942.0	772.7	692.4	651.2	620.8	601.2	588.2	579.5	573.0	573.0
27.5°	957.2	755.3	668.5	625.1	596.9	577.4	568.7	560.0	555.7	555.7
30°	965.9	733.6	638.1	596.9	568.7	557.8	553.5	544.8	538.3	536.1
32.5°	970.2	701.1	607.7	568.7	549.1	544.8	544.8	534.0	525.3	523.1
35°	965.9	666.4	577.4	544.8	538.3	540.5	536.1	523.1	512.2	507.9
37.5°	959.4	625.1	544.8	527.4	534.0	538.3	525.3	507.9	490.5	486.2
40°	955.0	588.2	518.8	510.1	529.6	531.8	507.9	475.3	462.3	458.0
42.5°	976.7	551.3	494.9	497.1	518.8	520.9	477.5	462.3	453.6	451.5
45°	1050.5	518.8	475.3	488.4	505.7	497.1	462.3	460.2	453.6	451.5
47.5°	1107.0	494.9	466.7	481.9	494.9	464.5	460.2	458.0	451.5	449.3
50°	1126.5	479.7	464.5	477.5	479.7	449.3	455.8	455.8	449.3	447.1
52.5°	1128.7	471.0	468.8	475.3	455.8	442.8	451.5	451.5	445.0	442.8
55°	1137.4	466.7	471.0	475.3	429.8	434.1	442.8	445.0	438.4	436.3
57.5°	1120.0	460.2	475.3	477.5	418.9	425.4	434.1	434.1	434.1	434.1
60°	1052.7	447.1	473.2	473.2	410.2	414.6	423.3	427.6	429.8	429.8
62.5°	929.0	421.1	460.2	460.2	401.5	405.9	416.7	416.7	423.3	423.3
65°	772.7	384.2	434.1	431.9	392.9	397.2	410.2	405.9	416.7	418.9
67.5°	644.6	338.6	395.0	399.4	384.2	395.0	403.7	388.5	410.2	410.2
70°	514.4	284.3	342.9	362.5	369.0	397.2	390.7	366.8	395.0	388.5
72.5°	399.4	240.9	282.2	316.9	351.6	395.0	362.5	336.4	353.8	342.9
75°	290.9	199.7	232.2	262.6	327.8	388.5	334.3	295.2	295.2	290.9
77.5°	204.0	162.8	186.7	208.4	303.9	371.2	299.5	254.0	243.1	240.9
80°	138.9	128.1	147.6	160.6	269.1	336.4	258.3	210.5	191.0	186.7
82.5°	91.2	91.2	99.8	108.5	208.4	280.0	201.9	156.3	201.9	193.2
85°	52.1	54.3	54.3	62.9	115.0	197.5	143.3	156.3	93.3	86.8
87.5°	17.4	17.4	17.4	17.4	23.9	80.3	60.8	56.4	21.7	19.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)