

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: P573203

Luminaire Tested: **ARCH-S-PA2-50-722-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573203  
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-PA2-50-722-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 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: 5913 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

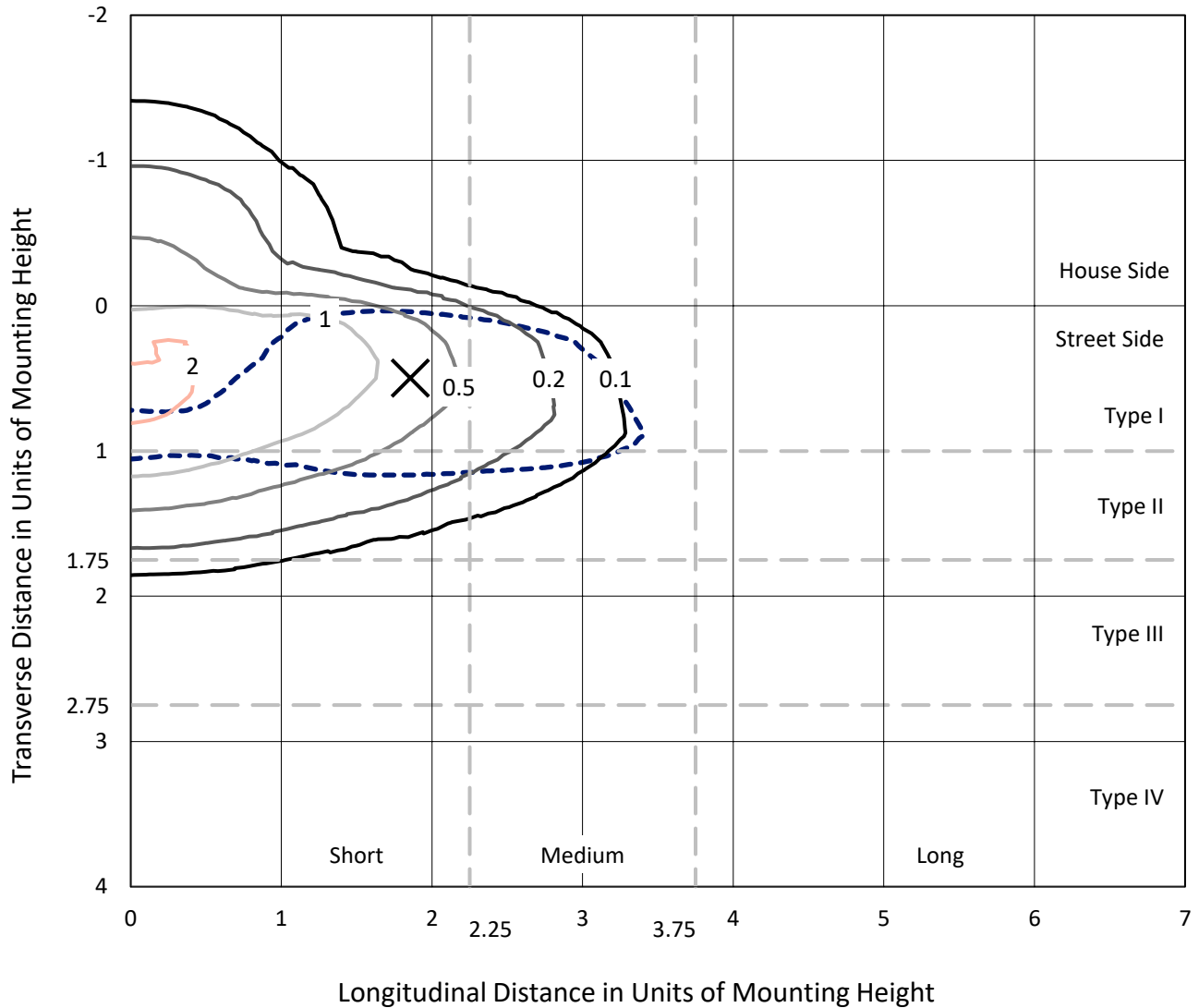
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

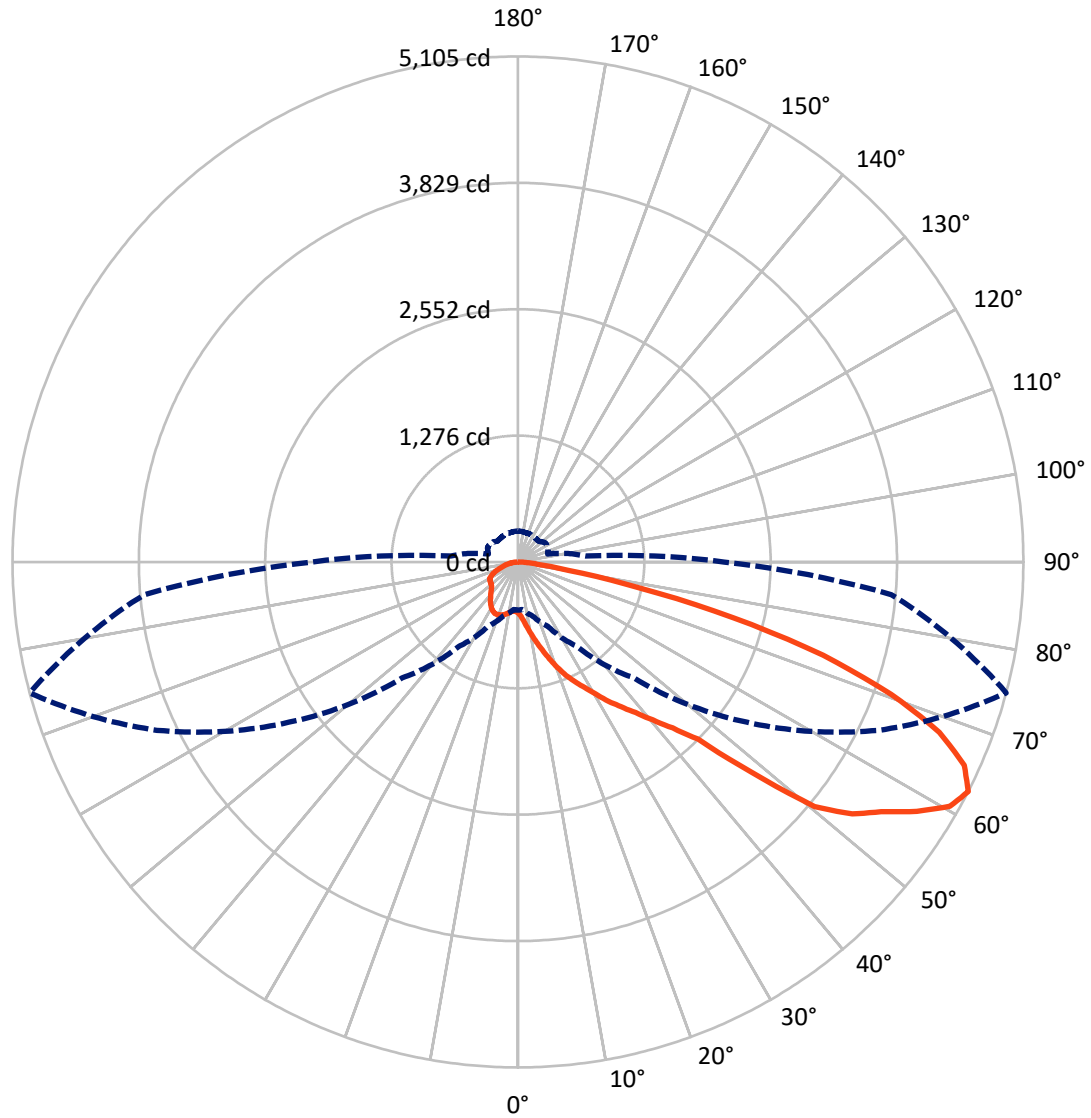
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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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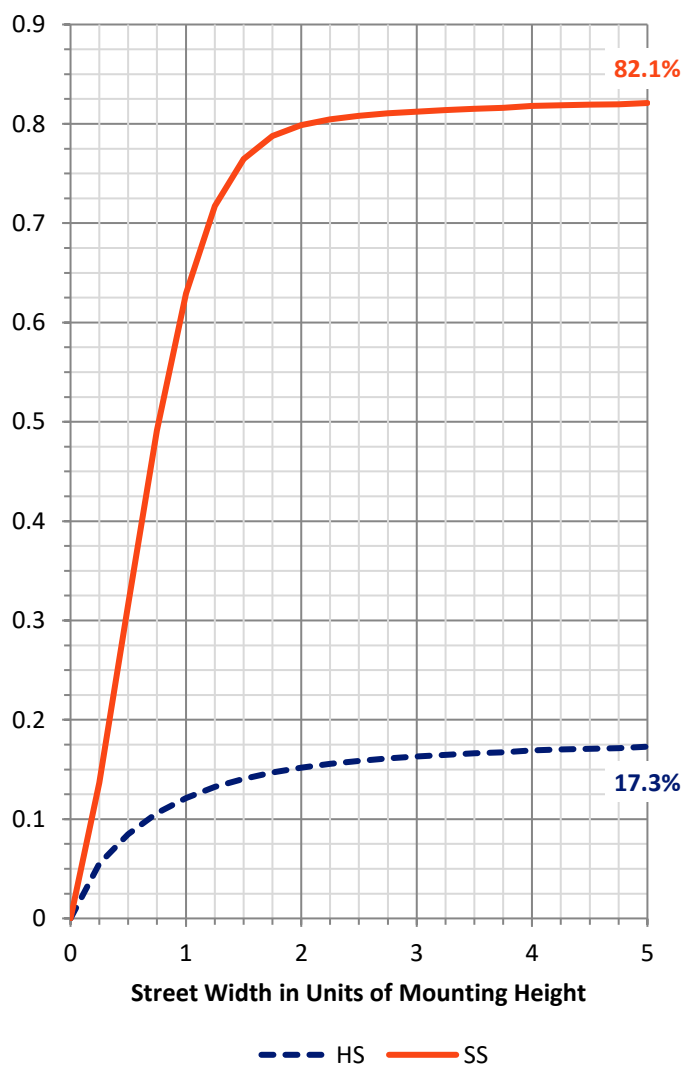
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1042.9	0.0	1042.9
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	4870.1	0.0	4870.1
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	5913.0	0.0	5913.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.9	1.0
10°-20°	244.7	4.1
20°-30°	484.1	8.2
30°-40°	806.9	13.6
40°-50°	1190.6	20.1
50°-60°	1431.3	24.2
60°-70°	1112.4	18.8
70°-80°	492.1	8.3
80°-90°	89.1	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°	5913.0	100.0
0°-180°	5913.0	100.0

**Coefficient of Utilization**



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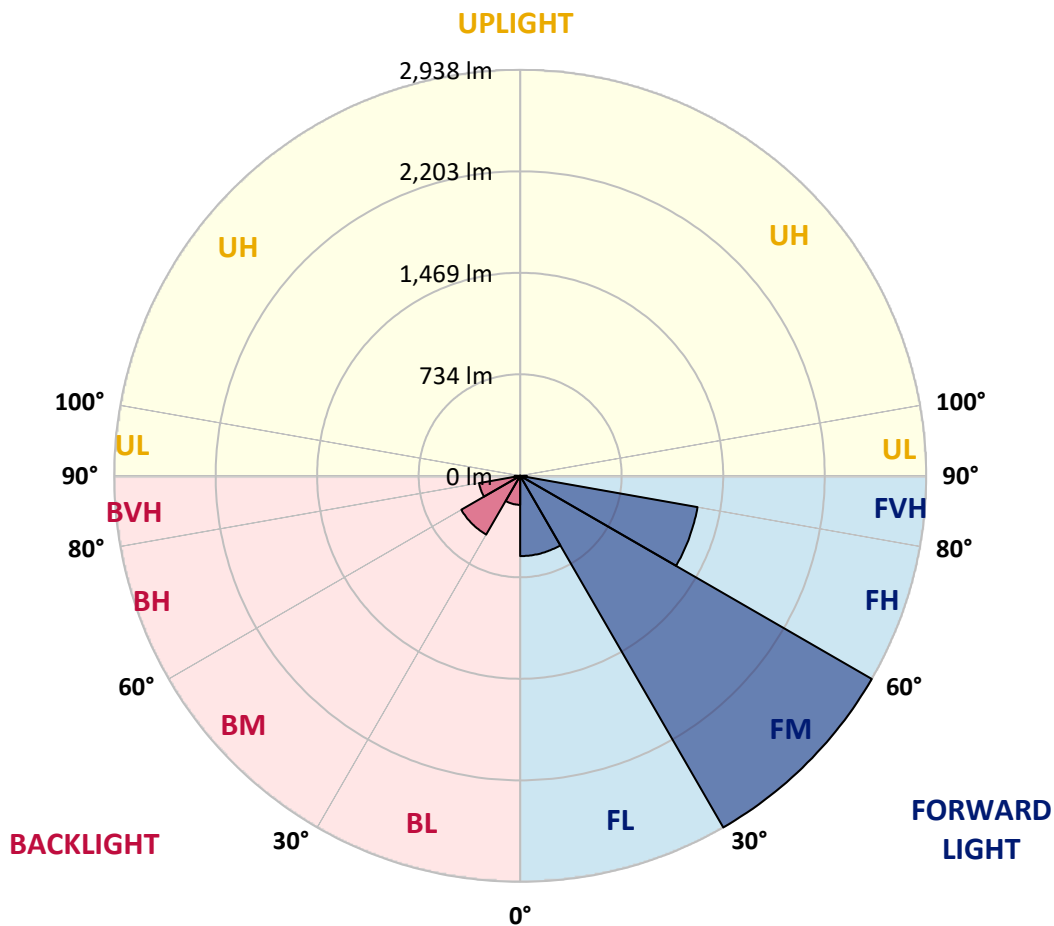
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	580.8	9.8			
FM (30°-60°)	2937.6	49.7			
FH (60°-80°)	1302.7	22.0			G1/1800
FVH (80°-90°)	49.0	0.8			G1/100
BL (0°-30°)	209.8	3.5	B1/500		
BM (30°-60°)	491.2	8.3	B1/1000		
BH (60°-80°)	301.7	5.1	B1/500		G1/500
BVH (80°-90°)	40.1	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°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	659.0	639.9	639.9	619.1	620.7	603.2	584.0	564.9	544.1	528.2	520.2
5°	861.7	847.3	842.5	818.6	780.3	737.2	690.9	643.1	593.6	555.3	536.2
7.5°	1051.6	1040.4	1034.0	1006.9	954.2	908.0	834.6	746.8	662.2	590.4	561.7
10°	1192.0	1184.0	1171.3	1158.5	1120.2	1080.3	989.3	864.9	740.4	633.5	590.4
12.5°	1294.1	1283.0	1283.0	1281.4	1255.8	1219.1	1134.6	1000.5	831.4	681.4	622.3
15°	1362.7	1361.1	1365.9	1375.5	1369.1	1345.2	1260.6	1125.0	923.9	735.6	659.0
17.5°	1413.8	1407.4	1417.0	1442.5	1461.7	1452.1	1381.9	1244.7	1026.0	794.7	698.9
20°	1469.7	1456.9	1469.7	1501.6	1525.5	1539.9	1506.4	1359.6	1136.2	858.5	737.2
22.5°	1576.6	1575.0	1568.6	1578.2	1594.1	1619.7	1600.5	1476.0	1243.1	922.3	781.9
25°	1768.1	1750.5	1732.9	1712.2	1694.7	1702.6	1686.7	1584.5	1340.4	992.5	820.2
27.5°	1981.9	1962.7	1930.8	1879.8	1831.9	1803.2	1769.7	1678.7	1434.6	1056.4	856.9
30°	2178.2	2171.8	2123.9	2068.1	1985.1	1932.4	1868.6	1787.2	1547.8	1126.6	895.2
32.5°	2361.7	2348.9	2301.0	2242.0	2144.6	2085.6	1997.8	1905.3	1677.1	1212.7	935.1
35°	2519.6	2506.9	2451.0	2376.0	2291.5	2240.4	2139.9	2010.6	1795.2	1287.7	968.6
37.5°	2639.3	2625.0	2572.3	2498.9	2423.9	2400.0	2313.8	2144.6	1929.2	1381.9	1010.1
40°	2706.3	2688.8	2653.7	2602.6	2540.4	2529.2	2492.5	2310.6	2098.4	1496.8	1070.7
42.5°	2714.3	2698.4	2679.2	2674.4	2669.6	2679.2	2696.8	2498.9	2291.5	1650.0	1160.1
45°	2644.1	2634.5	2636.1	2690.4	2765.4	2853.1	2958.5	2776.5	2551.6	1942.0	1361.1
47.5°	2494.1	2489.3	2524.4	2615.4	2782.9	2982.4	3280.8	3252.1	3167.5	2412.7	1619.7
50°	2251.6	2243.6	2318.6	2462.2	2701.6	3025.5	3497.8	3812.2	3882.4	2778.1	1788.8
52.5°	1903.7	1913.3	2029.8	2226.0	2514.9	2979.2	3587.2	4042.0	4227.1	3047.8	1918.1
55°	1547.8	1533.5	1638.8	1881.4	2238.8	2810.1	3604.7	4174.4	4450.5	3296.8	2044.1
57.5°	1128.2	1163.3	1275.0	1495.2	1882.9	2503.7	3502.6	4265.4	4750.5	3545.7	2160.6
60°	764.3	764.3	863.3	1083.5	1455.3	2131.9	3229.7	4231.8	5012.2	3740.4	2186.1
62.5°	486.7	481.9	561.7	718.1	1042.0	1656.4	2821.2	4021.2	5104.7	3786.6	2079.2
65°	308.0	314.4	343.1	438.8	667.0	1176.0	2264.3	3601.5	4953.1	3679.7	1892.5
67.5°	247.3	248.9	263.3	303.2	410.1	754.8	1678.7	3022.3	4590.9	3410.0	1673.9
70°	218.6	221.8	225.0	239.4	280.8	477.1	1102.6	2433.5	3997.3	2940.9	1439.3
72.5°	199.5	202.7	205.8	209.0	231.4	311.2	651.1	1844.7	3224.9	2259.5	1097.9
75°	183.5	186.7	186.7	188.3	201.1	231.4	357.4	1271.8	2245.2	1405.8	684.6
77.5°	164.4	166.0	166.0	169.1	181.9	181.9	221.8	786.7	1246.3	636.7	346.3
80°	138.8	142.0	142.0	146.8	159.6	140.4	148.4	402.1	517.0	261.7	154.8
82.5°	102.1	108.5	111.7	119.7	127.7	106.9	106.9	202.7	218.6	116.5	83.0
85°	55.9	57.4	83.0	89.4	94.1	63.8	71.8	100.5	108.5	51.1	41.5
87.5°	16.0	17.6	39.9	49.5	44.7	27.1	30.3	38.3	38.3	14.4	11.2
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°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	513.8	501.1	489.9	481.9	473.9	469.1	467.5	464.4	464.4	465.9
5°	520.2	497.9	480.3	470.7	464.4	461.2	459.6	459.6	461.2	461.2
7.5°	536.2	502.7	486.7	478.7	472.3	469.1	469.1	467.5	469.1	469.1
10°	558.5	517.0	499.5	489.9	485.1	480.3	478.7	477.1	477.1	477.1
12.5°	582.4	533.0	513.8	502.7	494.7	488.3	485.1	481.9	480.3	480.3
15°	604.8	548.9	523.4	510.6	499.5	489.9	483.5	478.7	477.1	477.1
17.5°	628.7	560.1	529.8	512.2	497.9	485.1	477.1	470.7	467.5	467.5
20°	654.2	568.1	529.8	507.4	488.3	475.5	465.9	459.6	453.2	453.2
22.5°	675.0	571.3	523.4	496.3	477.1	461.2	451.6	443.6	438.8	438.8
25°	692.5	568.1	509.0	478.7	456.4	442.0	432.4	426.1	421.3	421.3
27.5°	703.7	555.3	491.5	459.6	438.8	424.5	418.1	411.7	408.5	408.5
30°	710.1	539.4	469.1	438.8	418.1	410.1	406.9	400.5	395.7	394.1
32.5°	713.3	515.4	446.8	418.1	403.7	400.5	400.5	392.5	386.2	384.6
35°	710.1	489.9	424.5	400.5	395.7	397.3	394.1	384.6	376.6	373.4
37.5°	705.3	459.6	400.5	387.8	392.5	395.7	386.2	373.4	360.6	357.4
40°	702.1	432.4	381.4	375.0	389.4	391.0	373.4	349.5	339.9	336.7
42.5°	718.1	405.3	363.8	365.4	381.4	383.0	351.1	339.9	333.5	331.9
45°	772.3	381.4	349.5	359.0	371.8	365.4	339.9	338.3	333.5	331.9
47.5°	813.8	363.8	343.1	354.2	363.8	341.5	338.3	336.7	331.9	330.3
50°	828.2	352.7	341.5	351.1	352.7	330.3	335.1	335.1	330.3	328.7
52.5°	829.8	346.3	344.7	349.5	335.1	325.5	331.9	331.9	327.1	325.5
55°	836.2	343.1	346.3	349.5	316.0	319.1	325.5	327.1	322.3	320.7
57.5°	823.4	338.3	349.5	351.1	308.0	312.8	319.1	319.1	319.1	319.1
60°	773.9	328.7	347.9	347.9	301.6	304.8	311.2	314.4	316.0	316.0
62.5°	683.0	309.6	338.3	338.3	295.2	298.4	306.4	306.4	311.2	311.2
65°	568.1	282.4	319.1	317.5	288.8	292.0	301.6	298.4	306.4	308.0
67.5°	473.9	248.9	290.4	293.6	282.4	290.4	296.8	285.6	301.6	301.6
70°	378.2	209.0	252.1	266.5	271.3	292.0	287.2	269.7	290.4	285.6
72.5°	293.6	177.1	207.4	233.0	258.5	290.4	266.5	247.3	260.1	252.1
75°	213.8	146.8	170.7	193.1	241.0	285.6	245.7	217.0	217.0	213.8
77.5°	150.0	119.7	137.2	153.2	223.4	272.9	220.2	186.7	178.7	177.1
80°	102.1	94.1	108.5	118.1	197.9	247.3	189.9	154.8	140.4	137.2
82.5°	67.0	67.0	73.4	79.8	153.2	205.8	148.4	114.9	148.4	142.0
85°	38.3	39.9	39.9	46.3	84.6	145.2	105.3	114.9	68.6	63.8
87.5°	12.8	12.8	12.8	12.8	17.6	59.0	44.7	41.5	16.0	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)