

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: P573589

Luminaire Tested: **ARCH-S-PA2-90-827-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573589  
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-PA2-90-827-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 910mA 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: 7260 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

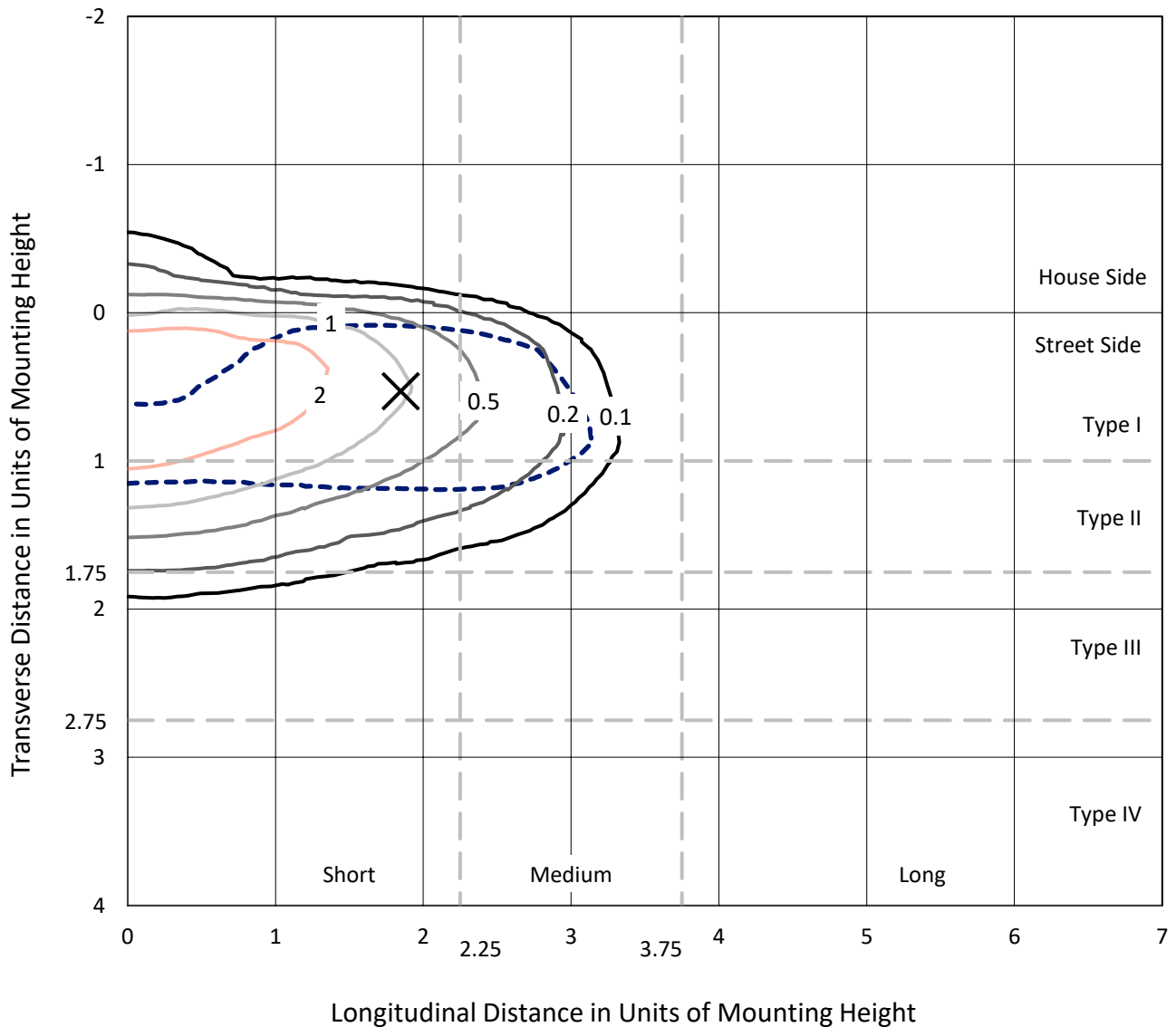
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

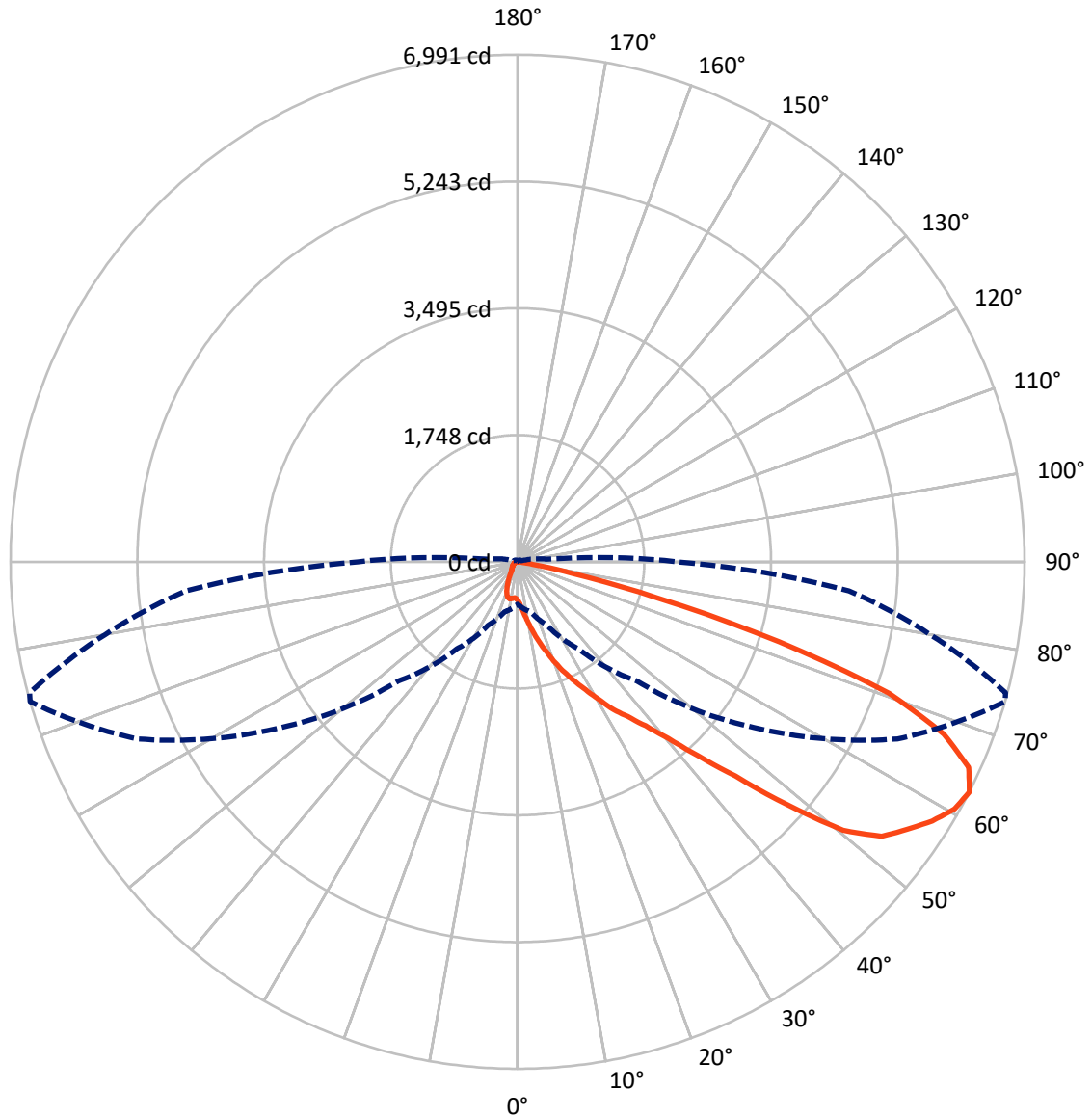
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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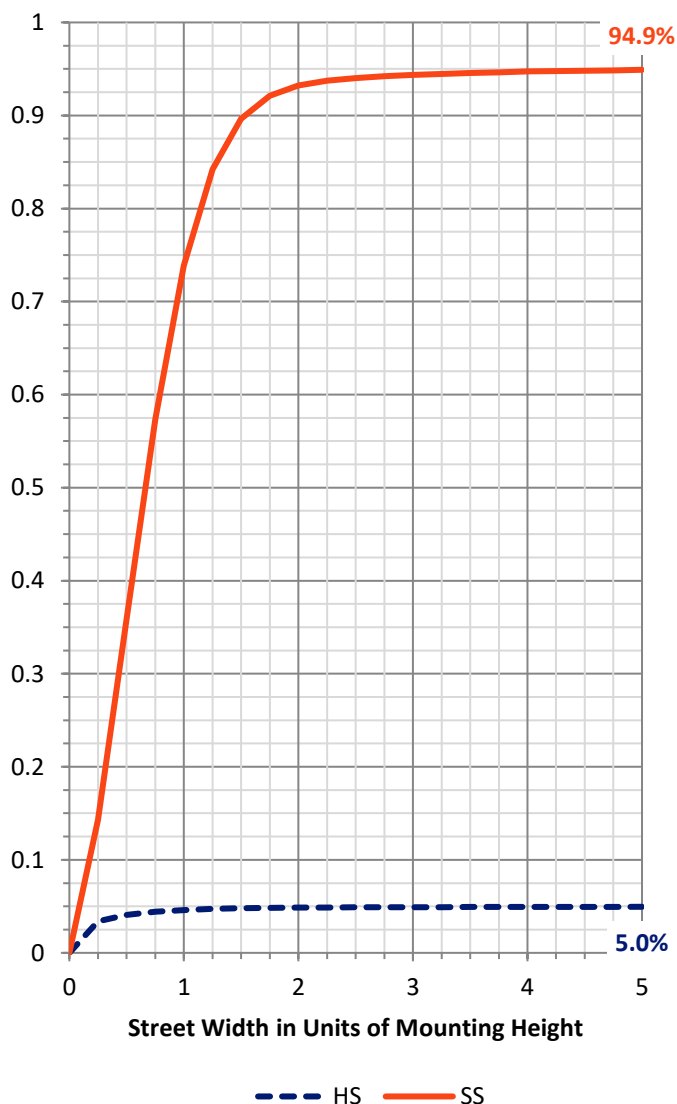
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	362.1	0.0	362.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	6897.9	0.0	6897.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	7260.0	0.0	7260.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	0.9
10°-20°	279.2	3.8
20°-30°	599.1	8.3
30°-40°	1050.8	14.5
40°-50°	1629.0	22.4
50°-60°	1878.0	25.9
60°-70°	1319.3	18.2
70°-80°	411.0	5.7
80°-90°	27.2	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°	7260.0	100.0
0°-180°	7260.0	100.0

**Coefficient of Utilization**



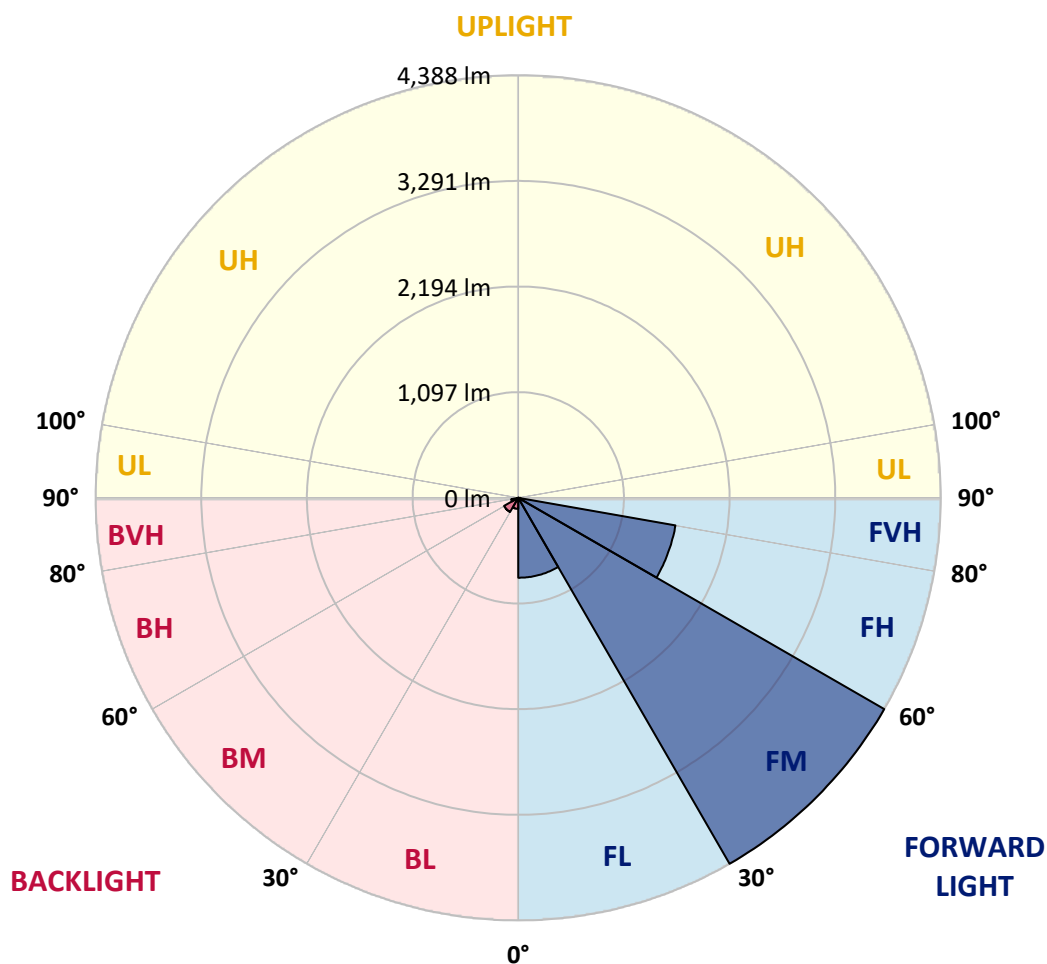
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	829.9	11.4			
FM (30°-60°)	4387.6	60.4			
FH (60°-80°)	1657.1	22.8			G1/1800
FVH (80°-90°)	23.4	0.3			G1/100
BL (0°-30°)	114.9	1.6	B1/500		
BM (30°-60°)	170.2	2.3	B0/220		
BH (60°-80°)	73.3	1.0	B0/110		G0/110
BVH (80°-90°)	3.7	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°	65°	74°	75°	85°
0°	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5
2.5°	738.4	725.6	710.3	697.5	672.0	654.1	631.1	605.6	577.4	574.9	551.9
5°	1034.8	996.5	996.5	963.3	924.9	855.9	792.1	712.9	654.1	649.0	587.7
7.5°	1338.9	1308.2	1290.3	1239.2	1177.9	1101.2	999.0	866.2	758.9	741.0	641.3
10°	1622.5	1599.5	1566.3	1525.4	1471.7	1346.5	1218.8	1045.0	873.8	861.1	705.2
12.5°	1842.2	1814.1	1798.8	1780.9	1711.9	1612.2	1446.2	1226.4	1022.0	993.9	769.1
15°	2008.3	1995.5	1980.2	1980.2	1944.4	1847.3	1676.1	1420.6	1165.1	1131.9	850.8
17.5°	2141.1	2125.8	2123.3	2138.6	2128.4	2059.4	1898.4	1607.1	1313.3	1287.8	935.2
20°	2289.3	2268.9	2268.9	2281.7	2279.1	2240.8	2100.3	1821.8	1487.0	1441.1	1032.2
22.5°	2498.9	2486.1	2475.9	2455.4	2440.1	2404.3	2281.7	2031.3	1653.1	1609.7	1131.9
25°	2779.9	2764.6	2718.6	2682.8	2616.4	2562.7	2458.0	2217.8	1821.8	1773.2	1229.0
27.5°	3053.3	3022.6	2979.2	2933.2	2859.1	2767.1	2636.8	2394.1	1998.1	1947.0	1328.6
30°	3342.0	3319.0	3265.4	3191.3	3099.3	2997.1	2841.2	2606.2	2199.9	2143.7	1435.9
32.5°	3572.0	3536.2	3487.7	3416.1	3321.6	3250.0	3081.4	2838.7	2432.4	2358.3	1548.4
35°	3756.0	3727.8	3664.0	3595.0	3523.4	3503.0	3319.0	3027.8	2618.9	2550.0	1668.5
37.5°	3873.5	3845.4	3791.7	3722.7	3694.6	3730.4	3610.3	3285.8	2869.3	2782.5	1806.4
40°	3965.5	3932.3	3888.8	3858.2	3847.9	3947.6	3934.8	3620.5	3198.9	3147.8	1995.5
42.5°	4031.9	3998.7	3970.6	3968.0	4034.5	4228.6	4371.7	4088.1	3658.9	3554.1	2238.2
45°	3947.6	3919.5	3934.8	4024.2	4185.2	4491.8	4900.6	4749.9	4213.3	4139.2	2626.6
47.5°	3712.5	3694.6	3763.6	3927.1	4226.1	4652.8	5411.6	5475.5	5005.4	4893.0	3130.0
50°	3344.6	3342.0	3451.9	3674.2	4098.3	4714.1	5669.7	6173.0	5817.9	5702.9	3538.8
52.5°	2846.3	2836.1	2997.1	3306.3	3796.8	4599.1	5718.2	6451.5	6288.0	6152.6	3796.8
55°	2281.7	2258.7	2450.3	2790.1	3352.2	4264.4	5587.9	6512.9	6512.9	6390.2	3988.5
57.5°	1604.6	1640.4	1798.8	2207.6	2802.9	3763.6	5266.0	6456.7	6740.3	6635.5	4246.5
60°	1011.8	1027.1	1200.9	1530.5	2125.8	3094.2	4691.1	6213.9	6921.7	6860.4	4453.5
62.5°	582.6	631.1	718.0	968.4	1466.6	2325.1	3980.8	5777.0	6990.7	6965.1	4588.9
65°	355.2	360.3	401.1	546.8	901.9	1586.7	3186.2	5168.9	6834.8	6857.8	4563.4
67.5°	265.7	265.7	278.5	344.9	513.6	1009.3	2350.7	4430.5	6336.6	6410.7	4323.2
70°	230.0	230.0	232.5	253.0	316.8	597.9	1553.5	3572.0	5432.1	5424.4	3572.0
72.5°	181.4	189.1	204.4	214.6	240.2	350.0	909.6	2496.3	3773.8	3863.3	2299.6
75°	145.6	148.2	168.6	186.5	201.9	237.6	429.3	1387.4	1980.2	1980.2	1011.8
77.5°	112.4	117.5	130.3	148.2	168.6	168.6	178.9	536.6	766.5	741.0	298.9
80°	71.5	74.1	94.5	117.5	140.5	120.1	97.1	178.9	209.5	201.9	81.8
82.5°	43.4	46.0	61.3	94.5	94.5	66.4	61.3	74.1	66.4	61.3	33.2
85°	12.8	15.3	43.4	61.3	53.7	25.6	30.7	33.2	30.7	28.1	17.9
87.5°	2.6	2.6	12.8	15.3	12.8	12.8	10.2	12.8	12.8	12.8	7.7
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°	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5
2.5°	539.1	528.9	508.5	493.1	480.4	467.6	457.4	454.8	449.7	449.7	447.1
5°	562.1	539.1	500.8	475.2	454.8	436.9	421.6	406.3	401.1	396.0	398.6
7.5°	597.9	562.1	508.5	470.1	434.4	393.5	360.3	332.2	311.7	306.6	298.9
10°	643.9	590.2	521.2	459.9	393.5	321.9	275.9	247.8	237.6	224.8	227.4
12.5°	689.9	623.4	531.5	431.8	324.5	253.0	214.6	196.7	189.1	186.5	189.1
15°	743.5	659.2	526.3	380.7	260.6	204.4	181.4	173.7	168.6	168.6	166.1
17.5°	797.2	689.9	508.5	314.3	209.5	173.7	163.5	155.9	150.7	148.2	148.2
20°	855.9	718.0	467.6	250.4	173.7	158.4	148.2	138.0	132.9	132.9	132.9
22.5°	917.3	738.4	413.9	199.3	155.9	140.5	130.3	122.6	117.5	117.5	117.5
25°	970.9	748.6	350.0	166.1	143.1	127.8	117.5	109.9	107.3	104.8	104.8
27.5°	1022.0	746.1	283.6	145.6	127.8	115.0	104.8	99.6	94.5	94.5	94.5
30°	1073.1	730.7	224.8	132.9	117.5	102.2	94.5	89.4	86.9	84.3	84.3
32.5°	1116.6	705.2	176.3	122.6	107.3	92.0	84.3	79.2	79.2	76.7	76.7
35°	1160.0	666.9	148.2	115.0	97.1	84.3	76.7	74.1	71.5	71.5	71.5
37.5°	1206.0	618.3	130.3	104.8	86.9	76.7	71.5	69.0	66.4	63.9	63.9
40°	1262.2	569.8	122.6	97.1	79.2	69.0	63.9	61.3	58.8	58.8	58.8
42.5°	1351.6	528.9	115.0	86.9	71.5	63.9	58.8	53.7	53.7	51.1	51.1
45°	1520.3	513.6	107.3	79.2	66.4	56.2	53.7	48.5	46.0	46.0	46.0
47.5°	1740.0	516.1	99.6	71.5	61.3	51.1	48.5	46.0	40.9	40.9	40.9
50°	1921.4	503.3	92.0	66.4	53.7	48.5	43.4	40.9	38.3	38.3	38.3
52.5°	1993.0	480.4	84.3	61.3	51.1	43.4	40.9	38.3	35.8	35.8	35.8
55°	2064.5	470.1	76.7	53.7	46.0	43.4	38.3	35.8	33.2	30.7	30.7
57.5°	2194.8	475.2	69.0	51.1	43.4	40.9	35.8	30.7	25.6	23.0	23.0
60°	2263.8	457.4	63.9	46.0	40.9	38.3	30.7	23.0	17.9	15.3	15.3
62.5°	2205.0	406.3	58.8	43.4	38.3	33.2	23.0	17.9	12.8	7.7	7.7
65°	2041.5	334.7	53.7	40.9	33.2	25.6	20.4	12.8	7.7	5.1	5.1
67.5°	1834.5	263.2	48.5	38.3	30.7	23.0	17.9	10.2	5.1	2.6	2.6
70°	1481.9	189.1	46.0	35.8	28.1	20.4	15.3	10.2	5.1	2.6	2.6
72.5°	955.6	122.6	40.9	33.2	25.6	20.4	12.8	7.7	5.1	2.6	2.6
75°	442.0	81.8	38.3	30.7	25.6	17.9	12.8	10.2	5.1	2.6	2.6
77.5°	130.3	58.8	35.8	28.1	23.0	17.9	12.8	10.2	5.1	2.6	2.6
80°	53.7	40.9	28.1	25.6	23.0	17.9	12.8	10.2	5.1	2.6	2.6
82.5°	25.6	17.9	12.8	10.2	12.8	12.8	10.2	10.2	5.1	2.6	2.6
85°	12.8	7.7	5.1	5.1	5.1	2.6	2.6	5.1	5.1	2.6	2.6
87.5°	7.7	5.1	5.1	5.1	2.6	2.6	2.6	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)