

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: P237237

Luminaire Tested: **ARCH-L-AF72-240-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-240-D-U-T3-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20158 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

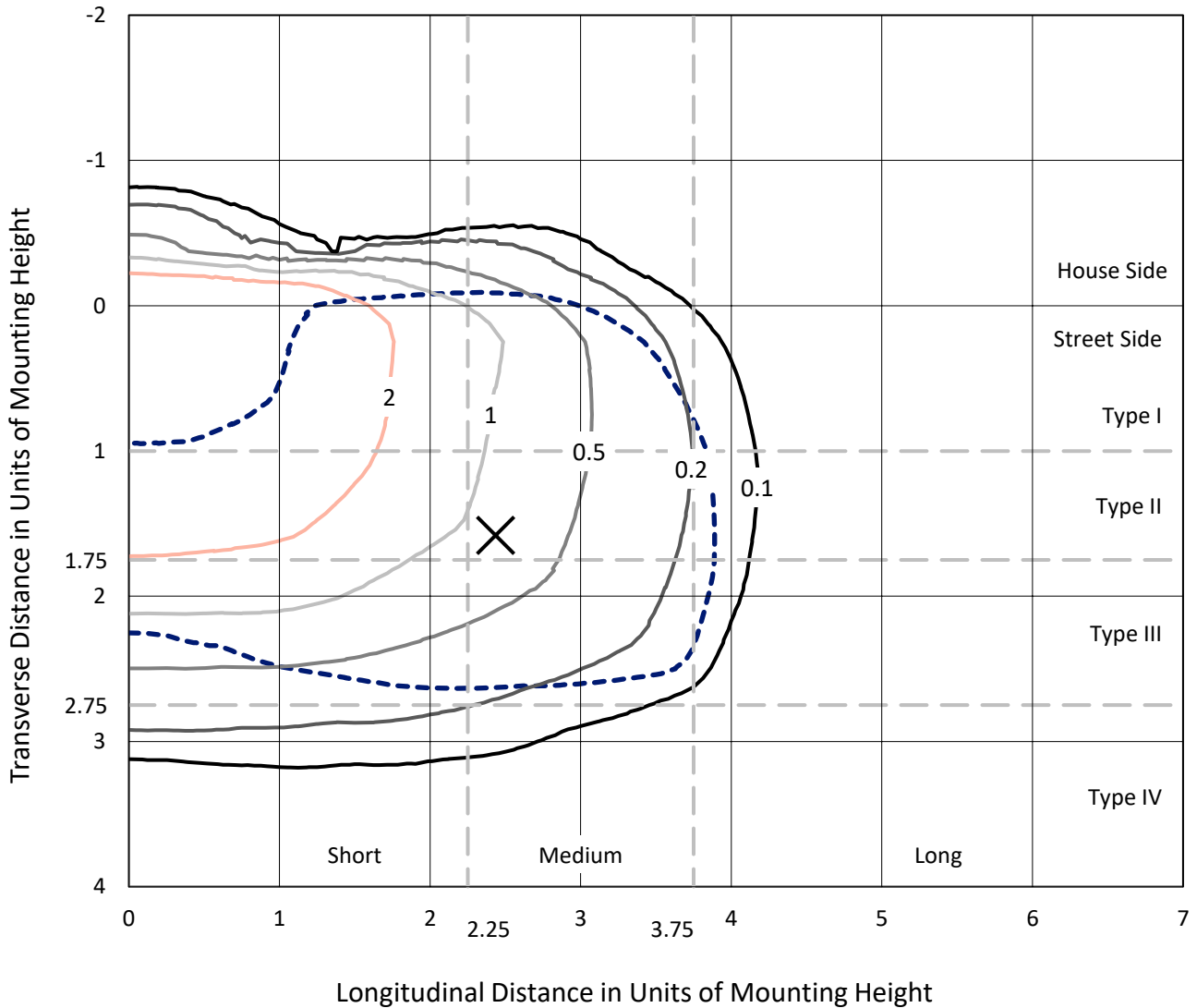
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

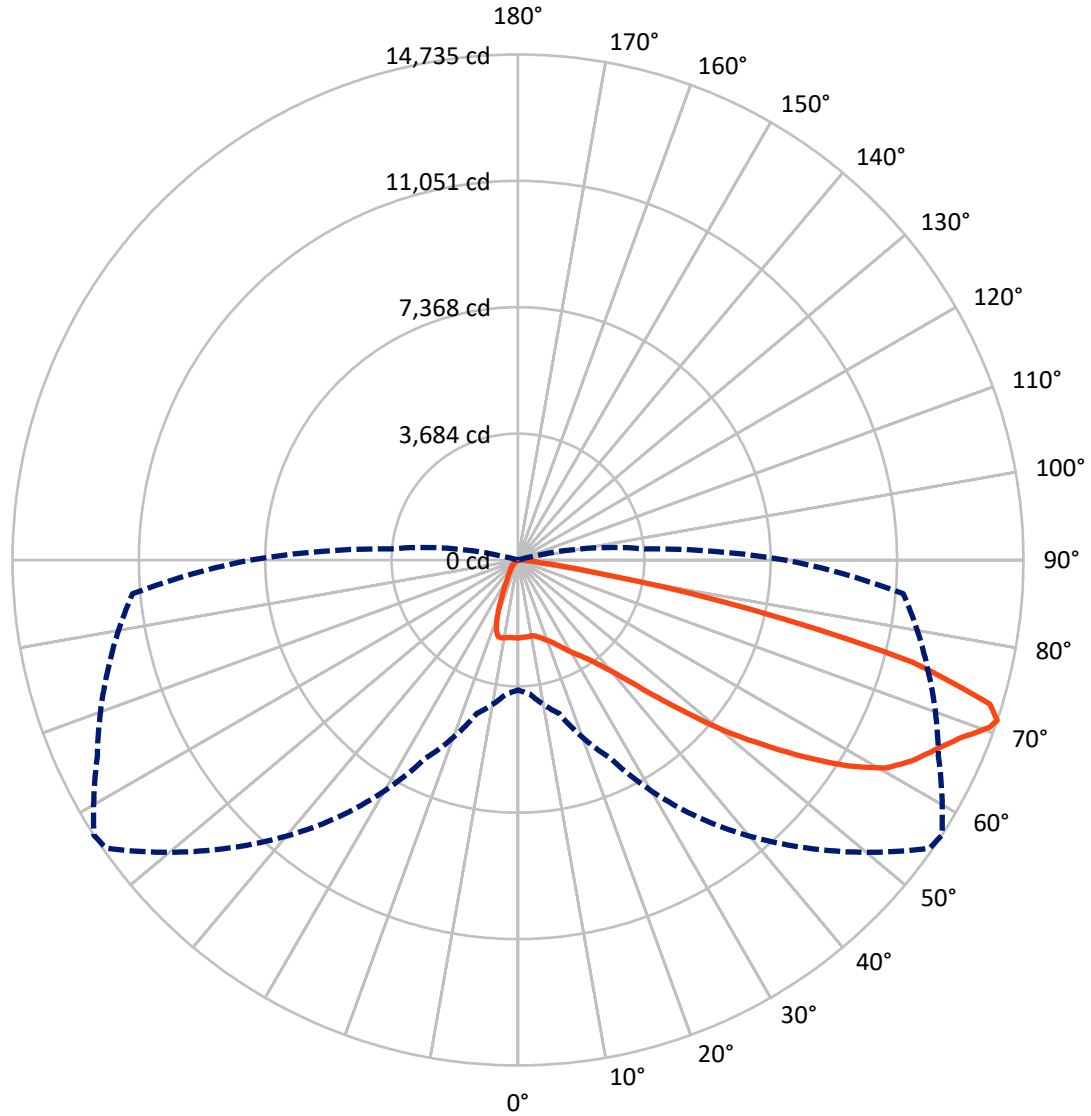
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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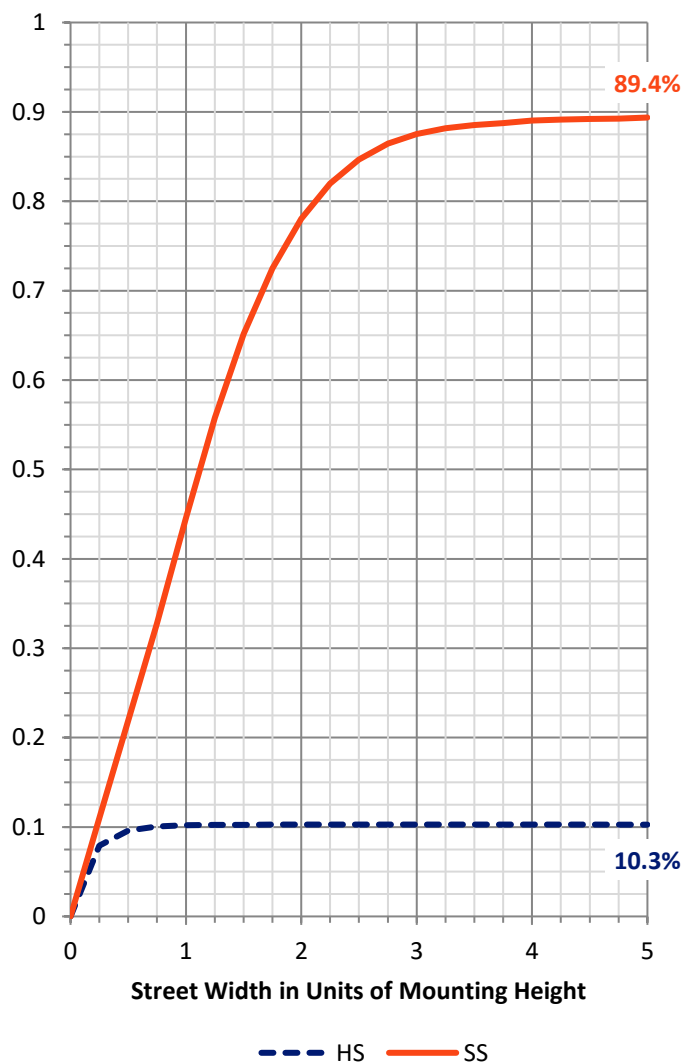
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2089.0	0.0	2089.0
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	18069.0	0.0	18069.0
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	20158.0	0.0	20158.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.9	1.1
10°-20°	572.0	2.8
20°-30°	892.4	4.4
30°-40°	1508.3	7.5
40°-50°	2929.5	14.5
50°-60°	4919.5	24.4
60°-70°	5871.0	29.1
70°-80°	3094.1	15.3
80°-90°	157.2	0.8
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°	20158.0	100.0
0°-180°	20158.0	100.0

**Coefficient of Utilization**



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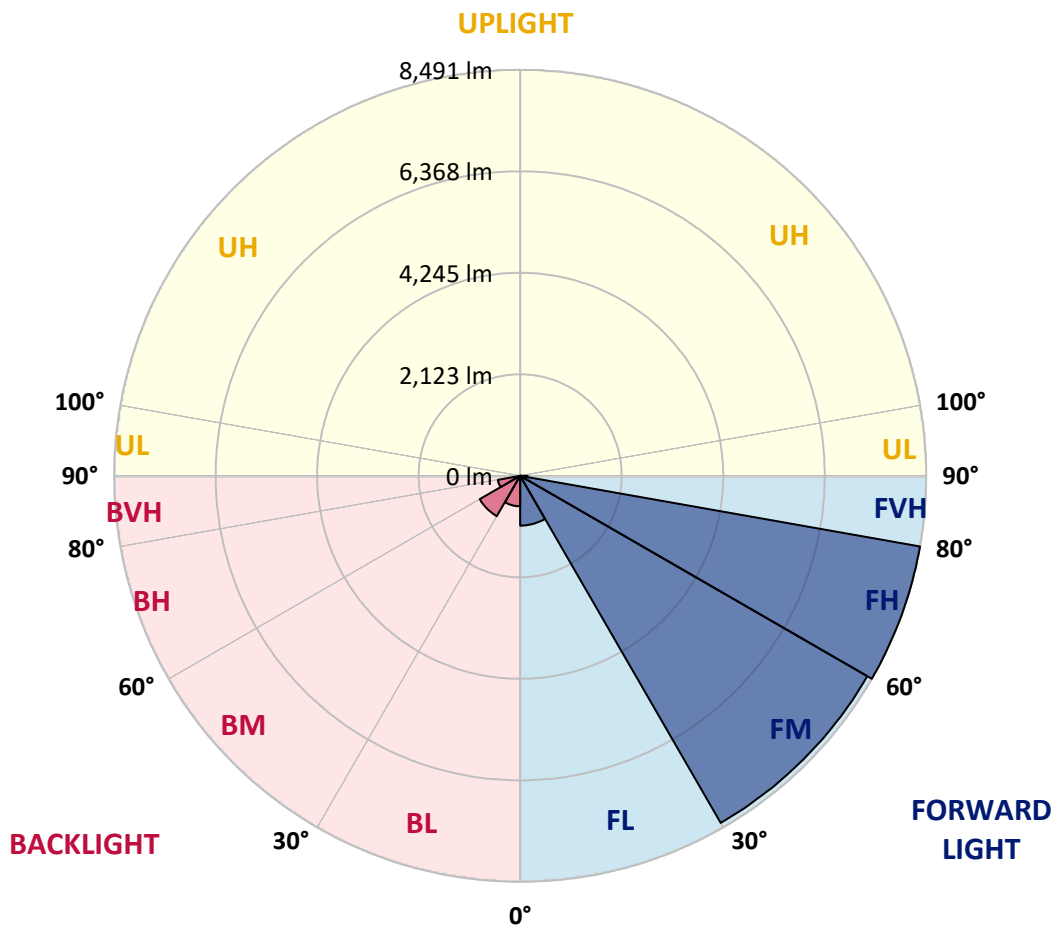
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1040.7	5.2			
FM (30°-60°)	8381.9	41.6			
FH (60°-80°)	8490.7	42.1			G4/12000
FVH (80°-90°)	155.7	0.8			G2/225
BL (0°-30°)	637.7	3.2	B2/1000		
BM (30°-60°)	975.4	4.8	B1/1000		
BH (60°-80°)	474.4	2.4	B1/500		G1/500
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2
2.5°	2245.3	2245.3	2245.3	2250.0	2254.7	2254.7	2264.1	2259.4	2259.4	2259.4	2268.8
5°	2184.2	2188.9	2193.6	2203.0	2221.8	2235.9	2259.4	2259.4	2264.1	2273.5	2278.2
7.5°	2099.7	2104.4	2118.5	2137.2	2174.8	2207.7	2245.3	2254.7	2268.8	2292.3	2301.6
10°	2048.0	2057.4	2076.2	2099.7	2141.9	2184.2	2231.2	2245.3	2287.6	2329.8	2353.3
12.5°	2033.9	2038.6	2057.4	2095.0	2146.6	2198.3	2259.4	2273.5	2334.5	2400.3	2437.9
15°	2057.4	2062.1	2071.5	2113.8	2174.8	2240.6	2320.4	2339.2	2414.4	2489.5	2536.5
17.5°	2099.7	2099.7	2109.1	2146.6	2212.4	2287.6	2390.9	2419.1	2503.6	2588.2	2639.8
20°	2127.8	2127.8	2141.9	2179.5	2254.7	2353.3	2475.4	2513.0	2607.0	2700.9	2747.9
22.5°	2156.0	2160.7	2174.8	2217.1	2301.6	2437.9	2578.8	2616.4	2724.4	2823.0	2870.0
25°	2235.9	2231.2	2235.9	2273.5	2372.1	2541.2	2719.7	2766.7	2879.4	2987.4	3010.9
27.5°	2456.7	2447.3	2386.2	2362.7	2437.9	2649.2	2898.2	2945.2	3076.7	3184.7	3184.7
30°	2964.0	2945.2	2794.9	2602.3	2541.2	2747.9	3067.3	3133.1	3302.2	3396.1	3367.9
32.5°	3607.5	3565.2	3372.6	3043.8	2799.6	2879.4	3245.8	3320.9	3537.0	3616.9	3555.8
35°	4312.1	4307.4	4067.8	3645.1	3297.5	3151.8	3476.0	3565.2	3837.6	3908.1	3809.5
37.5°	5058.9	5077.7	4918.0	4335.5	3926.9	3598.1	3781.3	3884.6	4218.1	4302.7	4208.7
40°	5890.3	5885.6	5824.6	5134.1	4683.1	4232.2	4222.8	4316.8	4720.7	4852.2	4720.7
42.5°	6942.5	6933.1	6712.4	6092.3	5599.1	5058.9	4866.3	4899.2	5350.2	5566.2	5373.6
45°	8013.5	7947.7	7694.1	7158.6	6721.7	6082.9	5716.5	5716.5	6101.7	6397.6	6097.0
47.5°	8610.0	8544.3	8440.9	8145.0	8013.5	7299.5	6759.3	6693.6	6994.2	7294.8	6872.1
50°	9394.5	9394.5	9136.1	9023.4	9248.9	8746.3	7910.1	7844.4	7990.0	8229.6	7675.3
52.5°	10014.5	9901.8	9718.6	9817.2	10460.7	10230.6	9061.0	8934.1	9046.9	9107.9	8375.2
55°	10272.9	10164.8	10150.7	10512.4	11508.2	11188.8	10240.0	10127.2	10117.8	9817.2	8985.8
57.5°	10324.5	10230.6	10409.1	11043.2	12527.5	11973.3	11414.3	11329.7	11066.7	10315.1	9610.5
60°	9887.7	9934.7	10366.8	11334.4	13128.8	12654.4	12405.4	12316.2	11710.2	10737.9	10305.7
62.5°	8990.5	9103.2	9911.2	11362.6	12908.0	12931.5	12955.0	12893.9	12208.1	11123.1	11005.6
65°	7928.9	7961.8	8934.1	10972.7	12522.8	12846.9	13358.9	13354.2	12588.6	11555.2	11794.8
67.5°	6533.9	6590.2	7431.0	9657.5	11752.5	12809.4	13889.7	13875.6	13020.7	12048.4	12264.5
70°	4861.6	4932.1	5613.2	7510.9	10033.3	12339.6	14584.9	14594.3	13476.4	12424.2	11940.4
71°	3790.7	3917.5	4631.5	6378.8	9154.9	11865.2	14650.7	14735.2	13528.0	12372.5	11273.4
72.5°	1860.1	2010.4	2907.6	4490.6	7534.4	10803.6	14218.5	14382.9	13203.9	11729.0	9638.7
75°	483.8	512.0	869.0	1836.6	4039.6	7158.6	11466.0	11884.0	10794.2	8929.4	5890.3
77.5°	305.3	314.7	408.7	714.0	1512.5	2719.7	6735.8	6942.5	6167.5	4523.4	2076.2
80°	216.1	220.8	258.3	460.3	883.1	793.8	2423.8	2513.0	2231.2	1197.8	371.1
82.5°	131.5	131.5	187.9	295.9	544.9	432.1	638.8	681.1	601.2	333.5	122.1
85°	75.2	79.9	117.4	202.0	258.3	211.4	239.6	253.7	258.3	220.8	51.7
87.5°	61.1	65.8	103.3	169.1	140.9	103.3	103.3	108.0	112.7	131.5	23.5
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°	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2	2278.2
2.5°	2268.8	2268.8	2273.5	2268.8	2268.8	2268.8	2273.5	2273.5	2273.5	2282.9	2287.6
5°	2278.2	2278.2	2278.2	2273.5	2268.8	2268.8	2278.2	2282.9	2282.9	2296.9	2296.9
7.5°	2301.6	2301.6	2292.3	2282.9	2273.5	2259.4	2264.1	2268.8	2264.1	2268.8	2268.8
10°	2353.3	2353.3	2339.2	2320.4	2292.3	2250.0	2193.6	2123.2	2057.4	2033.9	2024.5
12.5°	2437.9	2433.2	2405.0	2372.1	2311.0	2165.4	1954.1	1705.1	1498.4	1442.1	1423.3
15°	2531.8	2522.4	2489.5	2433.2	2268.8	1883.6	1442.1	1122.6	925.4	878.4	869.0
17.5°	2630.5	2616.4	2569.4	2456.7	2076.2	1399.8	930.1	704.6	596.5	587.2	591.9
20°	2733.8	2715.0	2649.2	2409.7	1676.9	934.8	601.2	544.9	535.5	535.5	540.2
22.5°	2851.2	2827.7	2738.5	2240.6	1221.3	620.0	516.7	512.0	507.3	502.6	502.6
25°	2987.4	2959.3	2823.0	1935.3	840.8	507.3	493.2	479.1	469.7	460.3	455.6
27.5°	3151.8	3114.3	2888.8	1559.5	577.8	474.4	465.0	441.5	422.8	404.0	404.0
30°	3316.2	3269.3	2870.0	1174.3	469.7	441.5	422.8	394.6	366.4	347.6	342.9
32.5°	3490.0	3443.1	2747.9	789.1	427.4	404.0	380.5	338.2	305.3	281.8	277.1
35°	3748.4	3710.8	2508.3	521.4	385.2	357.0	324.1	281.8	239.6	216.1	211.4
37.5°	4133.6	4086.6	2212.4	399.3	338.2	295.9	267.7	220.8	178.5	155.0	150.3
40°	4650.3	4509.3	1860.1	352.3	295.9	244.3	206.7	159.7	126.8	112.7	112.7
42.5°	5251.5	4918.0	1479.6	319.4	263.0	202.0	150.3	108.0	89.2	84.6	84.6
45°	5890.3	5298.5	1099.2	295.9	230.2	159.7	108.0	75.2	65.8	61.1	61.1
47.5°	6547.9	5608.5	765.6	267.7	192.6	122.1	75.2	56.4	47.0	42.3	42.3
50°	7163.3	5810.5	540.2	239.6	164.4	89.2	56.4	42.3	32.9	32.9	32.9
52.5°	7590.7	5791.7	389.9	206.7	126.8	61.1	37.6	28.2	28.2	28.2	28.2
55°	7966.5	5721.2	305.3	178.5	98.6	42.3	28.2	23.5	23.5	18.8	18.8
57.5°	8285.9	5608.5	258.3	145.6	70.5	32.9	18.8	18.8	14.1	14.1	14.1
60°	8558.4	5467.6	216.1	122.1	47.0	23.5	14.1	9.4	9.4	4.7	9.4
62.5°	8929.4	5378.3	187.9	93.9	32.9	14.1	9.4	4.7	4.7	0.0	0.0
65°	9201.9	5209.2	159.7	65.8	18.8	9.4	4.7	4.7	0.0	0.0	0.0
67.5°	9211.3	4903.9	117.4	37.6	14.1	9.4	4.7	0.0	0.0	0.0	0.0
70°	8469.1	4180.5	75.2	18.8	9.4	4.7	4.7	0.0	0.0	0.0	0.0
71°	7788.0	3701.4	61.1	14.1	9.4	4.7	0.0	0.0	0.0	0.0	0.0
72.5°	6416.4	2719.7	47.0	14.1	4.7	4.7	0.0	0.0	0.0	0.0	0.0
75°	3537.0	986.4	23.5	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1132.0	300.6	14.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	192.6	47.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	65.8	18.8	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.8	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	4.7	0.0	0.0	0.0	0.0	0.0	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)