

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: P236991

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236991  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17961 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

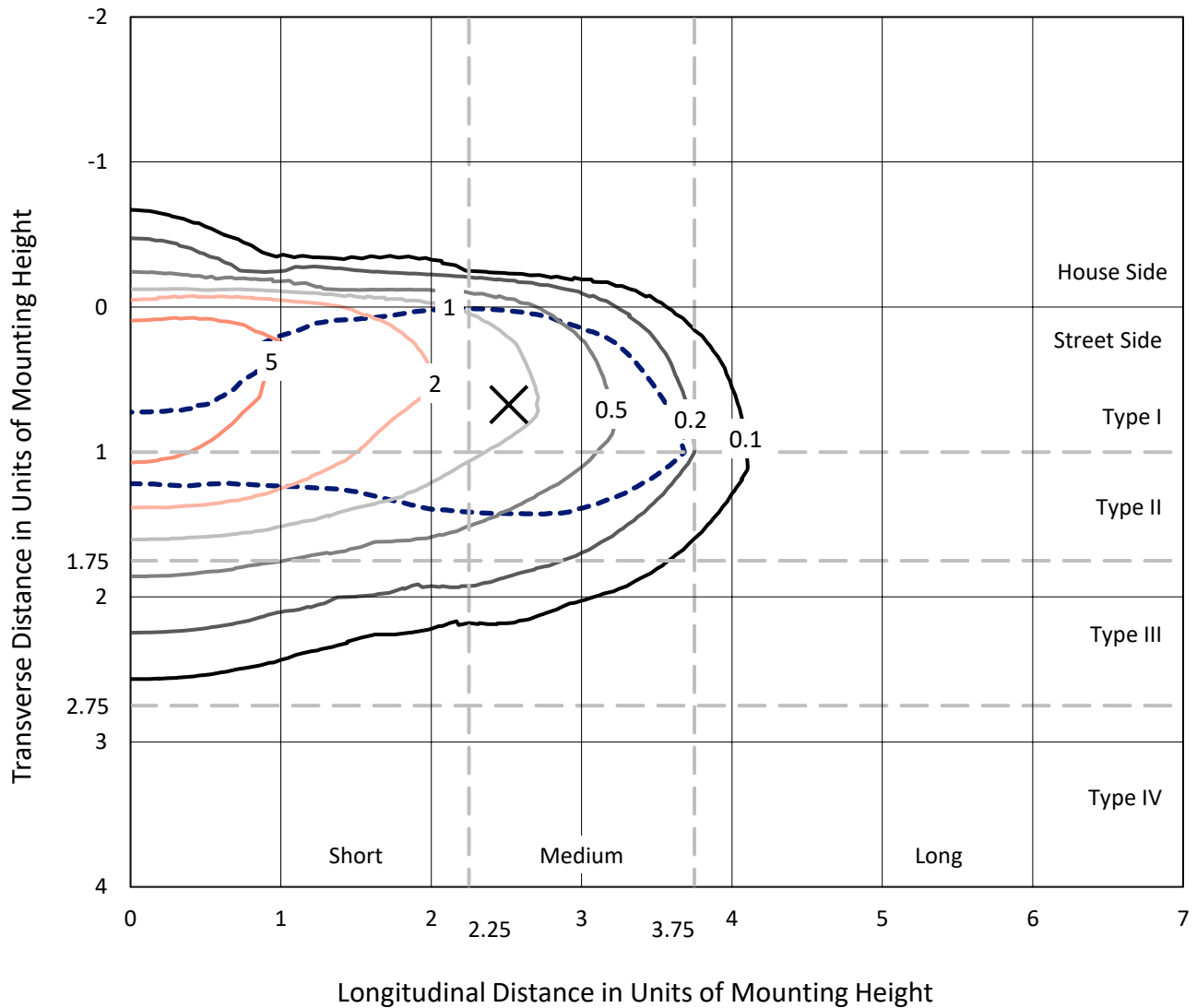
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

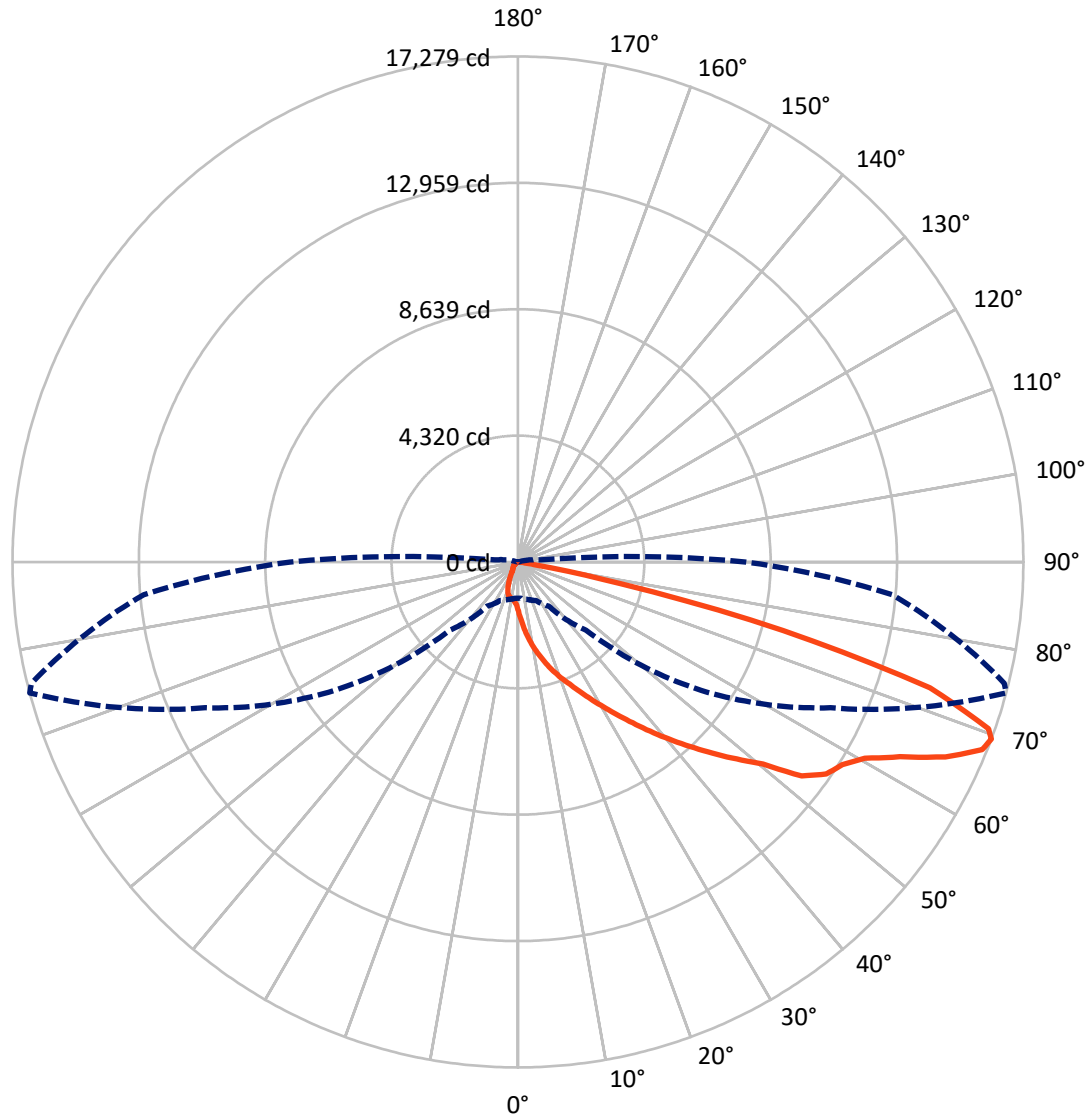
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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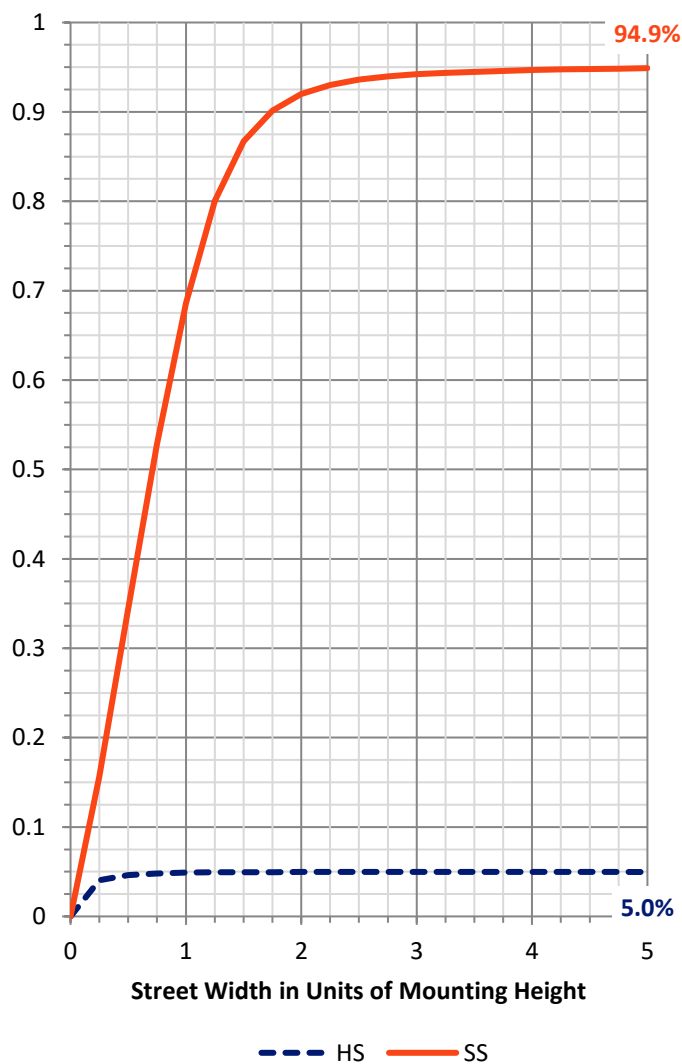
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	896.1	0.0	896.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	17064.9	0.0	17064.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	17961.0	0.0	17961.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.9	1.1
10°-20°	696.7	3.9
20°-30°	1330.1	7.4
30°-40°	2385.9	13.3
40°-50°	3655.3	20.4
50°-60°	4248.4	23.7
60°-70°	3762.0	20.9
70°-80°	1622.7	9.0
80°-90°	65.0	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°	17961.0	100.0
0°-180°	17961.0	100.0

**Coefficient of Utilization**



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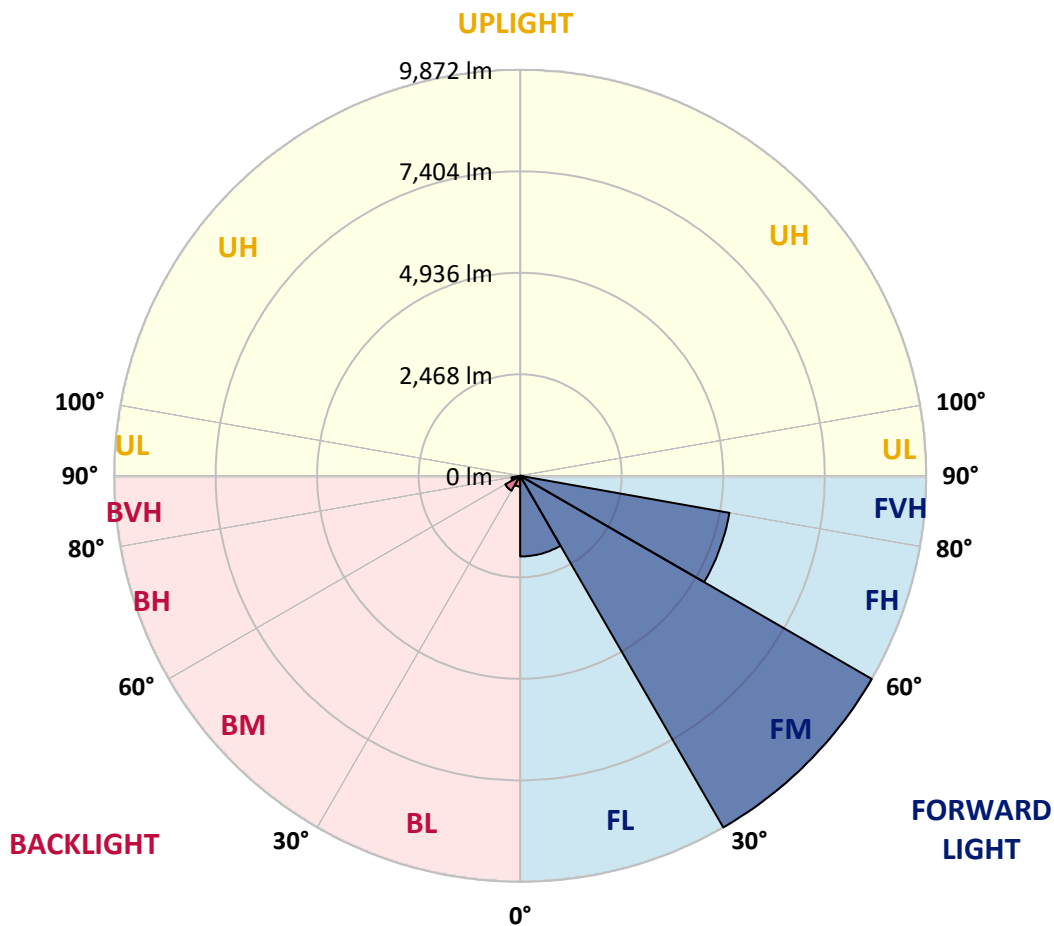
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1961.4	10.9			
FM (30°-60°)	9871.8	55.0			
FH (60°-80°)	5167.6	28.8			G3/7500
FVH (80°-90°)	64.1	0.4			G1/100
BL (0°-30°)	260.3	1.4	B1/500		
BM (30°-60°)	417.8	2.3	B1/1000		
BH (60°-80°)	217.1	1.2	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3
2.5°	2753.1	2726.0	2698.8	2667.8	2598.0	2477.8	2326.6	2163.7	1962.1	1927.2	1764.3
5°	3342.5	3330.9	3303.8	3261.1	3183.5	3051.7	2881.1	2640.7	2303.3	2245.2	1900.0
7.5°	3757.4	3749.7	3726.4	3676.0	3606.2	3474.4	3296.0	3036.2	2644.6	2578.6	2070.7
10°	4129.7	4125.8	4106.4	4059.9	3990.1	3846.6	3656.6	3385.2	2970.3	2896.6	2268.4
12.5°	4467.0	4470.9	4463.2	4439.9	4389.5	4253.8	4036.6	3741.9	3284.4	3202.9	2505.0
15°	4664.8	4676.4	4707.5	4754.0	4769.5	4660.9	4436.0	4110.3	3606.2	3536.4	2776.4
17.5°	4598.9	4610.5	4707.5	4866.4	5017.7	5033.2	4831.5	4459.3	3924.2	3854.4	3044.0
20°	4439.9	4455.4	4556.2	4773.4	5068.1	5273.6	5192.2	4839.3	4226.6	4141.3	3299.9
22.5°	4618.3	4618.3	4649.3	4781.1	5048.7	5370.5	5479.1	5219.3	4536.8	4432.1	3555.8
25°	5230.9	5219.3	5153.4	5099.1	5184.4	5471.4	5696.3	5607.1	4901.3	4781.1	3827.2
27.5°	6006.5	6060.8	5936.7	5738.9	5545.0	5669.1	5890.1	5991.0	5304.6	5180.5	4106.4
30°	6875.1	6898.3	6751.0	6487.3	6146.1	6025.9	6118.9	6320.6	5742.8	5607.1	4397.2
32.5°	7658.3	7639.0	7514.9	7239.6	6816.9	6557.1	6413.6	6584.2	6219.7	6064.6	4695.8
35°	8352.4	8368.0	8216.7	7898.8	7483.9	7208.5	6867.3	6882.8	6754.9	6576.5	5040.9
37.5°	8976.7	8949.6	8806.1	8488.2	8112.0	7813.5	7452.8	7193.0	7340.4	7154.3	5428.7
40°	9484.7	9457.6	9306.3	8996.1	8643.3	8399.0	8115.9	7607.9	7956.9	7743.7	5843.6
42.5°	9888.0	9857.0	9729.0	9430.4	9089.2	8872.0	8736.3	8119.8	8616.1	8402.9	6308.9
45°	10085.8	10058.6	9981.1	9756.2	9457.6	9267.6	9333.5	8709.2	9321.9	9143.5	6820.8
47.5°	9853.1	9841.5	9930.6	9891.9	9721.3	9620.4	9849.2	9352.9	10062.5	9888.0	7410.2
50°	9147.4	9166.7	9426.6	9748.4	9829.8	9950.0	10271.9	10031.5	10857.4	10671.3	8088.8
52.5°	7406.3	7538.1	8321.4	9097.0	9698.0	10151.7	10768.2	11000.9	12152.5	11970.3	9147.4
55°	5529.5	5583.8	6436.9	7763.0	9166.7	10136.2	11136.6	11570.9	12792.3	12606.2	9426.6
57.5°	4385.6	4405.0	4827.7	6181.0	8073.3	9787.2	11330.5	11776.4	13071.5	12916.4	9841.5
60°	3443.3	3466.6	3772.9	4703.6	6533.8	8844.9	11051.3	11954.8	13618.3	13494.2	10566.6
62.5°	2679.5	2702.7	2888.8	3435.6	4901.3	7394.7	10489.0	12241.7	14657.5	14599.3	11753.1
65°	2074.5	2082.3	2210.3	2466.2	3462.7	5824.2	9802.7	12509.3	16061.2	16010.8	12714.8
67.5°	1531.7	1543.3	1632.5	1791.5	2338.2	4184.0	8678.2	12303.8	17119.8	16972.4	13063.8
69°	1237.0	1248.6	1326.2	1454.1	1845.8	3296.0	7650.6	11795.8	17278.8	17139.2	12842.8
70°	1058.6	1066.4	1143.9	1252.5	1574.3	2799.7	6836.3	11357.6	17069.4	16933.7	12338.7
72.5°	678.6	717.4	794.9	864.7	1043.1	1853.5	4614.4	9418.8	14727.3	14494.6	9663.1
75°	376.1	387.8	527.4	612.7	694.1	1205.9	2567.0	5874.6	9368.4	9205.5	5168.9
77.5°	310.2	318.0	372.3	465.3	465.3	674.7	969.4	2315.0	3563.6	3214.6	1399.8
80°	217.1	224.9	283.1	306.3	333.5	380.0	314.1	508.0	550.6	488.6	209.4
82.5°	151.2	159.0	193.9	252.0	267.6	178.4	116.3	151.2	159.0	159.0	81.4
85°	27.1	38.8	143.5	209.4	159.0	54.3	65.9	54.3	50.4	54.3	19.4
87.5°	0.0	0.0	89.2	100.8	85.3	23.3	27.1	19.4	11.6	15.5	7.8
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°	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3	1671.3
2.5°	1682.9	1601.5	1461.9	1361.1	1275.7	1209.8	1182.7	1140.0	1109.0	1124.5	1105.1
5°	1729.4	1586.0	1361.1	1217.6	1116.8	1031.5	961.7	907.4	864.7	857.0	849.2
7.5°	1803.1	1597.6	1302.9	1124.5	973.3	841.4	732.9	651.4	589.4	589.4	566.1
10°	1903.9	1628.6	1268.0	1031.5	806.5	628.2	519.6	442.1	411.0	407.2	399.4
12.5°	2043.5	1686.8	1240.8	911.2	628.2	457.6	391.6	364.5	352.9	349.0	345.1
15°	2233.5	1772.1	1209.8	763.9	477.0	376.1	349.0	325.7	314.1	310.2	306.3
17.5°	2415.8	1849.6	1143.9	612.7	387.8	341.2	310.2	290.8	275.3	271.4	271.4
20°	2586.4	1915.6	1031.5	477.0	349.0	306.3	275.3	252.0	236.5	232.7	232.7
22.5°	2764.8	1969.8	891.9	387.8	318.0	271.4	240.4	217.1	201.6	197.8	193.9
25°	2954.8	2008.6	732.9	345.1	286.9	240.4	205.5	186.1	174.5	170.6	166.7
27.5°	3160.3	2024.1	581.6	314.1	252.0	209.4	178.4	159.0	151.2	147.4	147.4
30°	3346.4	2008.6	449.8	279.2	221.0	182.2	155.1	139.6	131.8	128.0	128.0
32.5°	3540.3	1969.8	360.6	248.2	193.9	155.1	131.8	120.2	116.3	112.5	112.5
35°	3745.8	1919.4	310.2	221.0	166.7	135.7	116.3	108.6	104.7	100.8	100.8
37.5°	3986.2	1857.4	283.1	197.8	147.4	120.2	100.8	96.9	93.1	93.1	93.1
40°	4257.7	1779.8	263.7	178.4	131.8	104.7	89.2	85.3	81.4	81.4	81.4
42.5°	4544.6	1690.7	244.3	159.0	116.3	89.2	77.6	77.6	73.7	73.7	69.8
45°	4866.4	1601.5	224.9	139.6	100.8	77.6	65.9	62.0	62.0	58.2	58.2
47.5°	5246.5	1520.0	205.5	124.1	89.2	65.9	58.2	54.3	50.4	46.5	46.5
50°	5781.6	1512.3	182.2	108.6	81.4	54.3	46.5	42.7	38.8	34.9	34.9
52.5°	6312.8	1442.5	155.1	89.2	65.9	46.5	34.9	31.0	27.1	27.1	23.3
55°	6433.0	1326.2	135.7	77.6	50.4	34.9	27.1	19.4	19.4	15.5	15.5
57.5°	6696.7	1271.9	116.3	62.0	38.8	27.1	15.5	11.6	11.6	11.6	11.6
60°	7216.3	1256.4	100.8	54.3	27.1	19.4	11.6	7.8	7.8	3.9	3.9
62.5°	7933.7	1240.8	85.3	46.5	19.4	11.6	7.8	3.9	0.0	0.0	0.0
65°	8329.2	1136.1	69.8	34.9	15.5	11.6	3.9	0.0	0.0	0.0	0.0
67.5°	8224.5	938.4	62.0	23.3	11.6	7.8	3.9	0.0	0.0	0.0	0.0
69°	7786.3	791.0	50.4	19.4	11.6	7.8	3.9	0.0	0.0	0.0	0.0
70°	7258.9	682.5	46.5	15.5	7.8	3.9	3.9	0.0	0.0	0.0	0.0
72.5°	5153.4	356.7	31.0	11.6	7.8	3.9	0.0	0.0	0.0	0.0	0.0
75°	2408.0	159.0	19.4	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0
77.5°	531.2	73.7	11.6	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	100.8	27.1	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.9	11.6	3.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	0.0	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)