

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: P236948

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T2R-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 665mA 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: 15466.8 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

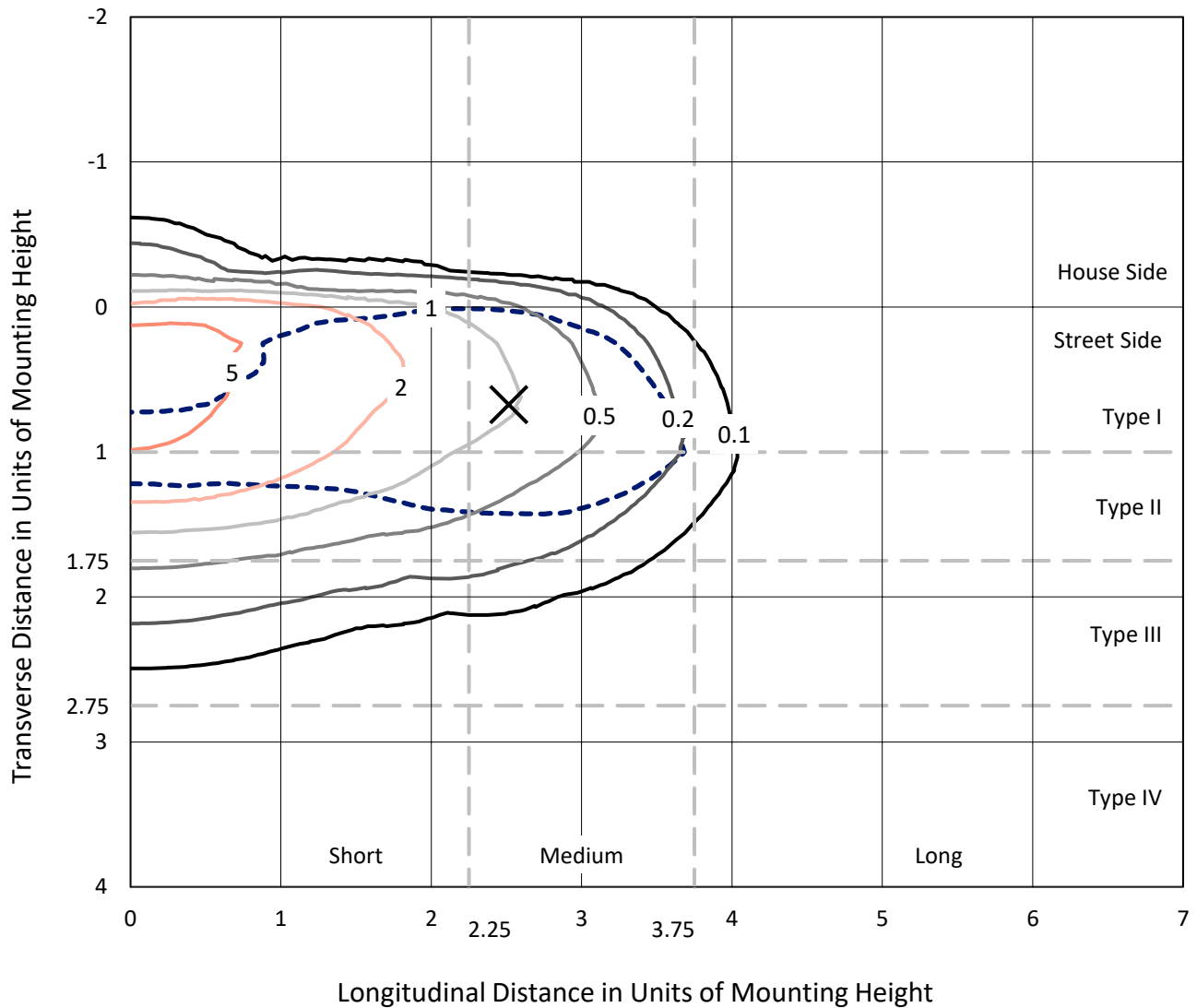
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

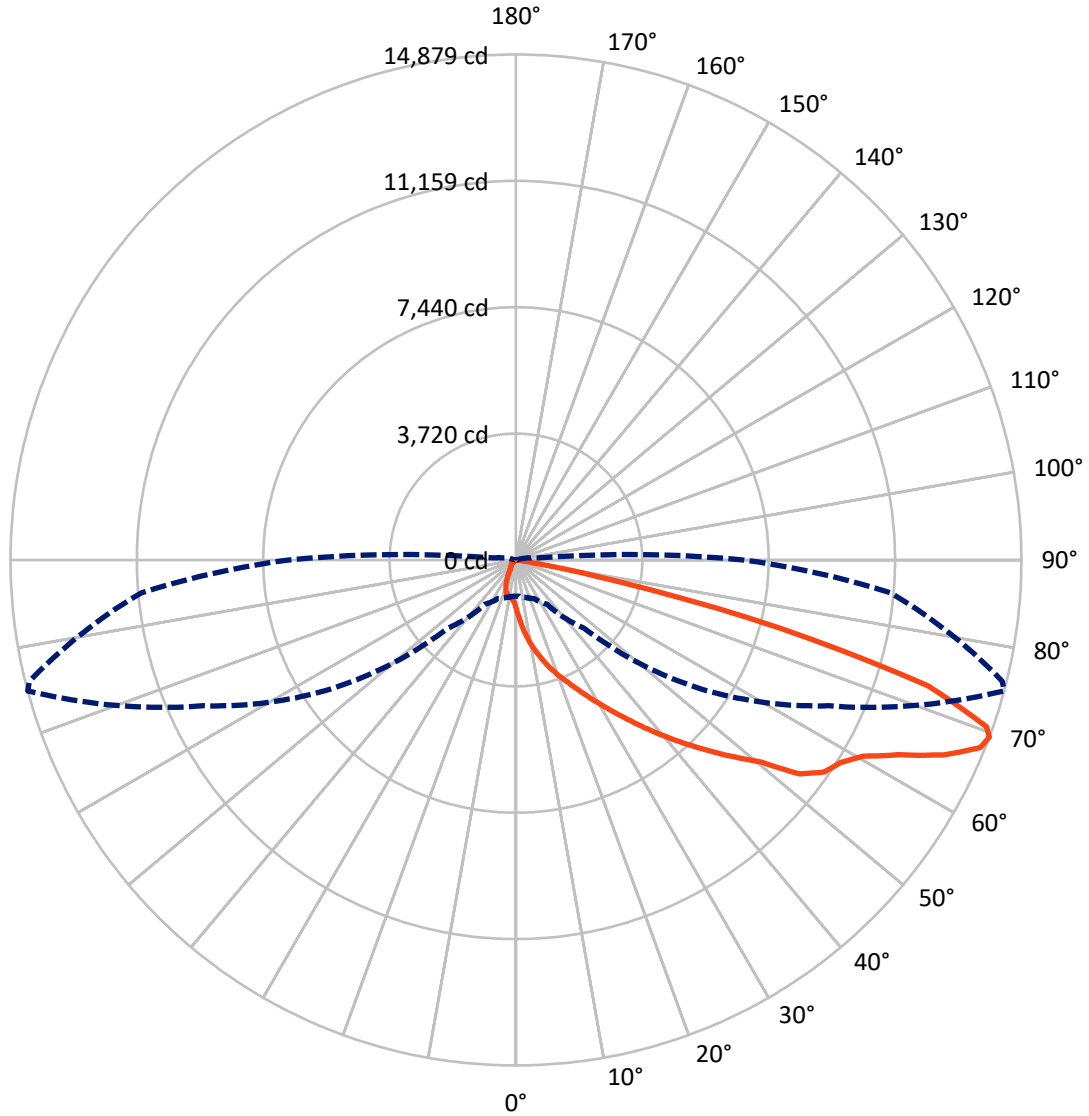
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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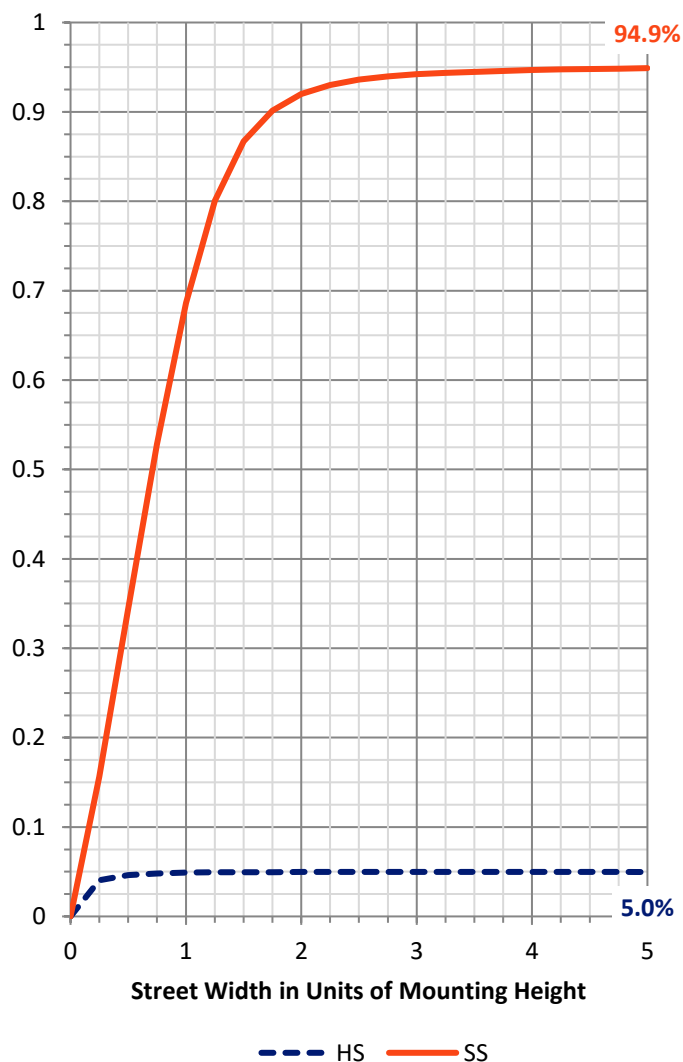
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	771.7	0.0	771.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	14695.1	0.0	14695.1
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	15466.8	0.0	15466.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.8	1.1
10°-20°	600.0	3.9
20°-30°	1145.3	7.4
30°-40°	2054.5	13.3
40°-50°	3147.7	20.4
50°-60°	3658.4	23.7
60°-70°	3239.6	20.9
70°-80°	1397.4	9.0
80°-90°	56.0	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°	15466.8	100.0
0°-180°	15466.8	100.0

**Coefficient of Utilization**



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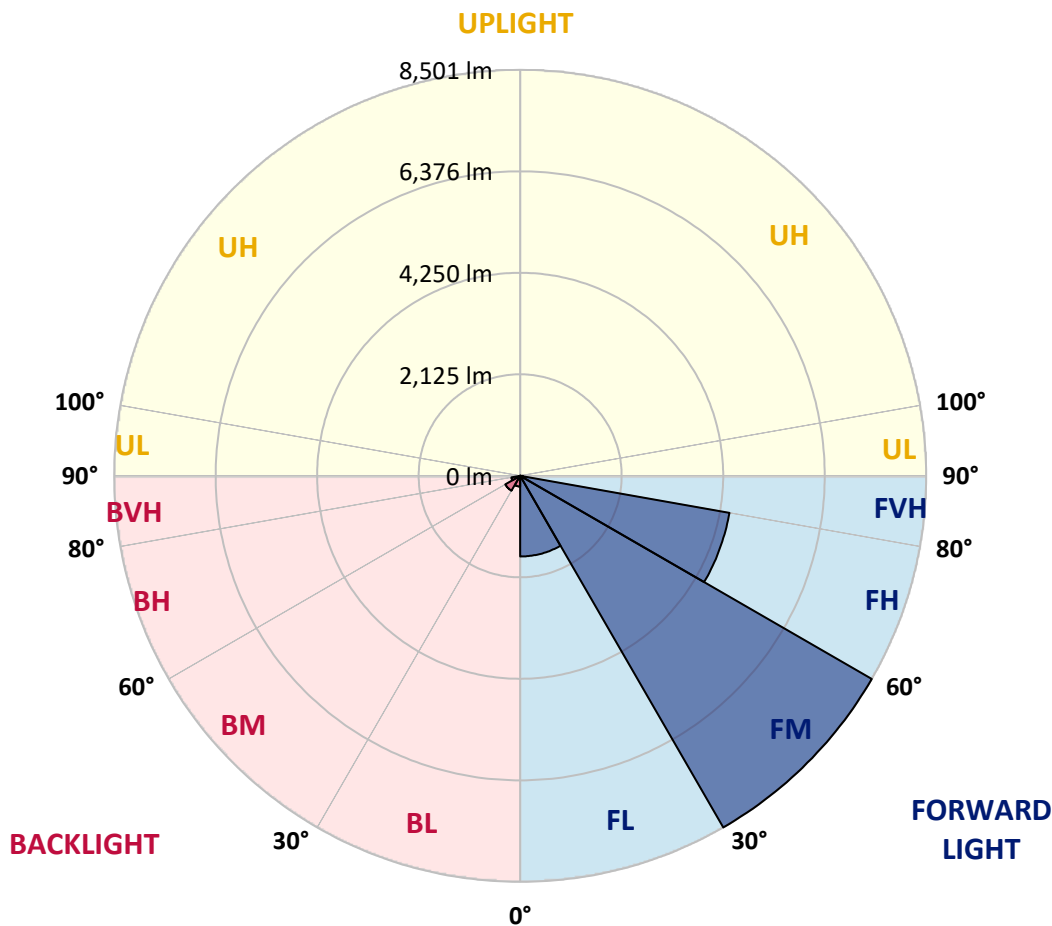
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1689.0	10.9			
FM (30°-60°)	8500.9	55.0			
FH (60°-80°)	4450.0	28.8			G2/5000
FVH (80°-90°)	55.2	0.4			G1/100
BL (0°-30°)	224.1	1.4	B1/500		
BM (30°-60°)	359.8	2.3	B1/1000		
BH (60°-80°)	187.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.8	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-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2
2.5°	2370.8	2347.4	2324.1	2297.2	2237.2	2133.8	2003.5	1863.2	1689.5	1659.5	1519.4
5°	2878.3	2868.4	2845.0	2808.2	2741.5	2627.9	2481.0	2274.0	1983.5	1933.4	1636.1
7.5°	3235.6	3228.9	3209.0	3165.6	3105.3	2991.8	2838.2	2614.6	2277.3	2220.5	1783.1
10°	3556.2	3552.9	3536.1	3496.1	3435.9	3312.4	3148.9	2915.0	2557.8	2494.4	1953.4
12.5°	3846.7	3850.1	3843.4	3823.3	3780.0	3663.0	3476.1	3222.3	2828.2	2758.1	2157.1
15°	4017.0	4027.0	4053.7	4093.8	4107.2	4013.6	3820.0	3539.5	3105.3	3045.3	2390.8
17.5°	3960.2	3970.3	4053.7	4190.6	4320.8	4334.2	4160.6	3840.0	3379.2	3319.1	2621.2
20°	3823.3	3836.6	3923.5	4110.5	4364.3	4541.3	4471.1	4167.2	3639.7	3566.2	2841.7
22.5°	3976.9	3976.9	4003.7	4117.2	4347.5	4624.7	4718.3	4494.5	3906.8	3816.7	3062.0
25°	4504.5	4494.5	4437.8	4391.0	4464.5	4711.6	4905.2	4828.3	4220.6	4117.2	3295.7
27.5°	5172.4	5219.1	5112.2	4941.9	4774.9	4881.8	5072.2	5159.0	4567.9	4461.0	3536.1
30°	5920.3	5940.3	5813.4	5586.4	5292.5	5189.0	5269.1	5442.9	4945.3	4828.3	3786.6
32.5°	6594.8	6578.2	6471.3	6234.3	5870.3	5646.5	5522.9	5669.9	5356.0	5222.5	4043.6
35°	7192.5	7205.8	7075.6	6801.8	6444.5	6207.4	5913.6	5927.0	5816.9	5663.2	4340.9
37.5°	7730.1	7706.7	7583.2	7309.5	6985.5	6728.4	6417.9	6194.1	6320.9	6160.7	4674.7
40°	8167.5	8144.1	8013.9	7746.8	7443.0	7232.6	6988.9	6551.4	6851.9	6668.3	5032.2
42.5°	8514.8	8488.2	8377.9	8120.8	7827.0	7640.0	7523.1	6992.1	7419.6	7235.9	5432.8
45°	8685.1	8661.7	8595.0	8401.3	8144.1	7980.7	8037.3	7499.8	8027.3	7873.8	5873.6
47.5°	8484.7	8474.8	8551.6	8518.2	8371.2	8284.5	8481.5	8054.0	8665.2	8514.8	6381.1
50°	7877.0	7893.8	8117.5	8394.6	8464.8	8568.2	8845.4	8638.4	9349.7	9189.4	6965.5
52.5°	6377.8	6491.3	7165.8	7833.7	8351.2	8742.0	9272.9	9473.3	10464.9	10307.9	7877.0
55°	4761.6	4808.4	5542.9	6685.0	7893.8	8728.5	9590.0	9964.0	11015.8	10855.6	8117.5
57.5°	3776.5	3793.3	4157.2	5322.6	6952.1	8428.0	9757.0	10141.0	11256.3	11122.7	8474.8
60°	2965.2	2985.2	3249.1	4050.3	5626.6	7616.6	9516.6	10294.6	11727.2	11620.3	9099.2
62.5°	2307.3	2327.4	2487.7	2958.5	4220.6	6367.7	9032.4	10541.7	12621.9	12571.9	10121.0
65°	1786.5	1793.2	1903.3	2123.7	2981.9	5015.4	8441.4	10772.1	13830.8	13787.3	10949.1
67.5°	1319.0	1329.0	1405.7	1542.7	2013.5	3603.0	7473.0	10595.1	14742.4	14615.5	11249.6
69°	1065.2	1075.2	1142.0	1252.2	1589.4	2838.2	6588.2	10157.8	14879.3	14759.1	11059.2
70°	911.6	918.3	985.1	1078.5	1355.7	2411.0	5886.9	9780.4	14698.9	14582.1	10625.1
72.5°	584.3	617.8	684.5	744.6	898.2	1596.2	3973.5	8110.8	12682.0	12481.8	8321.1
75°	323.9	333.9	454.1	527.6	597.7	1038.5	2210.6	5058.8	8067.3	7927.2	4451.1
77.5°	267.1	273.8	320.5	400.7	400.7	581.0	834.7	1993.4	3068.6	2768.2	1205.4
80°	187.0	193.7	243.7	263.8	287.2	327.2	270.5	437.5	474.1	420.7	180.3
82.5°	130.2	136.9	166.9	217.1	230.4	153.6	100.2	130.2	136.9	136.9	70.2
85°	23.4	33.5	123.6	180.3	136.9	46.8	56.9	46.8	43.3	46.8	16.7
87.5°	0.0	0.0	76.8	86.9	73.4	20.0	23.4	16.7	10.1	13.3	6.7
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°	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2	1439.2
2.5°	1449.3	1379.1	1258.8	1172.1	1098.6	1041.8	1018.4	981.7	955.0	968.4	951.6
5°	1489.3	1365.7	1172.1	1048.5	961.7	888.2	828.0	781.3	744.6	737.9	731.3
7.5°	1552.7	1375.7	1122.0	968.4	838.1	724.6	631.1	560.9	507.5	507.5	487.6
10°	1639.6	1402.5	1091.9	888.2	694.6	541.0	447.4	380.7	354.0	350.6	343.9
12.5°	1759.7	1452.5	1068.5	784.7	541.0	394.0	337.3	313.9	303.8	300.6	297.1
15°	1923.4	1526.1	1041.8	657.8	410.7	323.9	300.6	280.5	270.5	267.1	263.8
17.5°	2080.3	1592.8	985.1	527.6	333.9	293.8	267.1	250.4	237.1	233.7	233.7
20°	2227.2	1649.5	888.2	410.7	300.6	263.8	237.1	217.1	203.7	200.4	200.4
22.5°	2380.9	1696.2	768.0	333.9	273.8	233.7	207.0	187.0	173.6	170.3	166.9
25°	2544.4	1729.7	631.1	297.1	247.2	207.0	177.0	160.3	150.2	147.0	143.5
27.5°	2721.4	1743.0	500.9	270.5	217.1	180.3	153.6	136.9	130.2	126.8	126.8
30°	2881.7	1729.7	387.4	240.4	190.3	156.9	133.6	120.1	113.5	110.3	110.3
32.5°	3048.7	1696.2	310.6	213.7	166.9	133.6	113.5	103.5	100.2	96.8	96.8
35°	3225.7	1652.9	267.1	190.3	143.5	116.9	100.2	93.5	90.1	86.9	86.9
37.5°	3432.6	1599.4	243.7	170.3	126.8	103.5	86.9	83.5	80.1	80.1	80.1
40°	3666.4	1532.7	227.0	153.6	113.5	90.1	76.8	73.4	70.2	70.2	70.2
42.5°	3913.4	1455.9	210.4	136.9	100.2	76.8	66.7	66.7	63.5	63.5	60.1
45°	4190.6	1379.1	193.7	120.1	86.9	66.7	56.9	53.4	53.4	50.0	50.0
47.5°	4517.9	1308.9	177.0	106.8	76.8	56.9	50.0	46.8	43.3	40.1	40.1
50°	4978.7	1302.3	156.9	93.5	70.2	46.8	40.1	36.7	33.5	30.0	30.0
52.5°	5436.0	1242.2	133.6	76.8	56.9	40.1	30.0	26.7	23.4	23.4	20.0
55°	5539.7	1142.0	116.9	66.7	43.3	30.0	23.4	16.7	16.7	13.3	13.3
57.5°	5766.7	1095.3	100.2	53.4	33.5	23.4	13.3	10.1	10.1	10.1	10.1
60°	6214.1	1081.8	86.9	46.8	23.4	16.7	10.1	6.7	6.7	3.4	3.4
62.5°	6831.9	1068.5	73.4	40.1	16.7	10.1	6.7	3.4	0.0	0.0	0.0
65°	7172.6	978.4	60.1	30.0	13.3	10.1	3.4	0.0	0.0	0.0	0.0
67.5°	7082.3	808.1	53.4	20.0	10.1	6.7	3.4	0.0	0.0	0.0	0.0
69°	6705.0	681.2	43.3	16.7	10.1	6.7	3.4	0.0	0.0	0.0	0.0
70°	6250.9	587.7	40.1	13.3	6.7	3.4	3.4	0.0	0.0	0.0	0.0
72.5°	4437.8	307.2	26.7	10.1	6.7	3.4	0.0	0.0	0.0	0.0	0.0
75°	2073.6	136.9	16.7	6.7	3.4	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	457.5	63.5	10.1	6.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	86.9	23.4	6.7	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.0	10.1	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.1	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	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)