

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: P236845

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236845  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17085.3 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

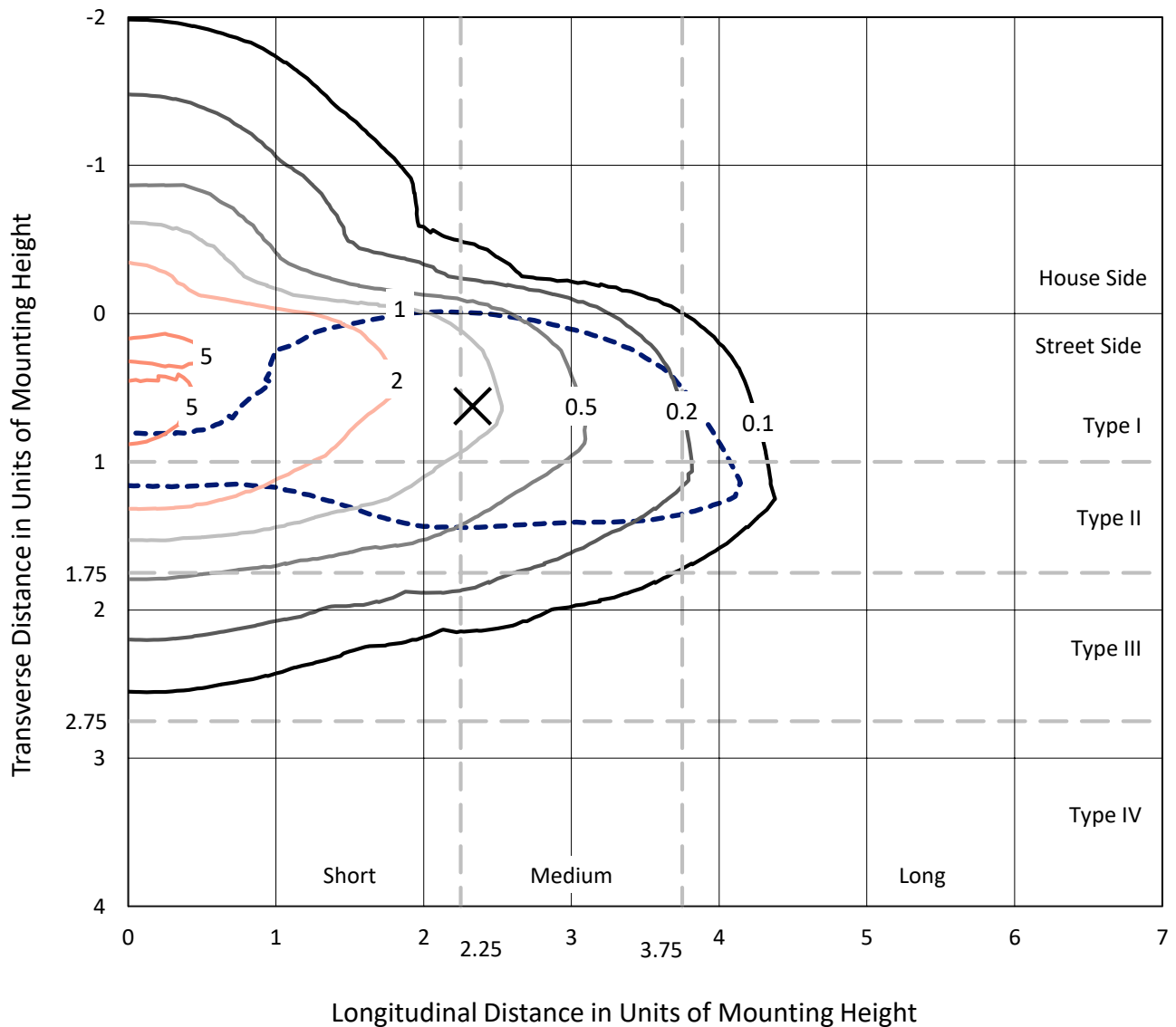
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

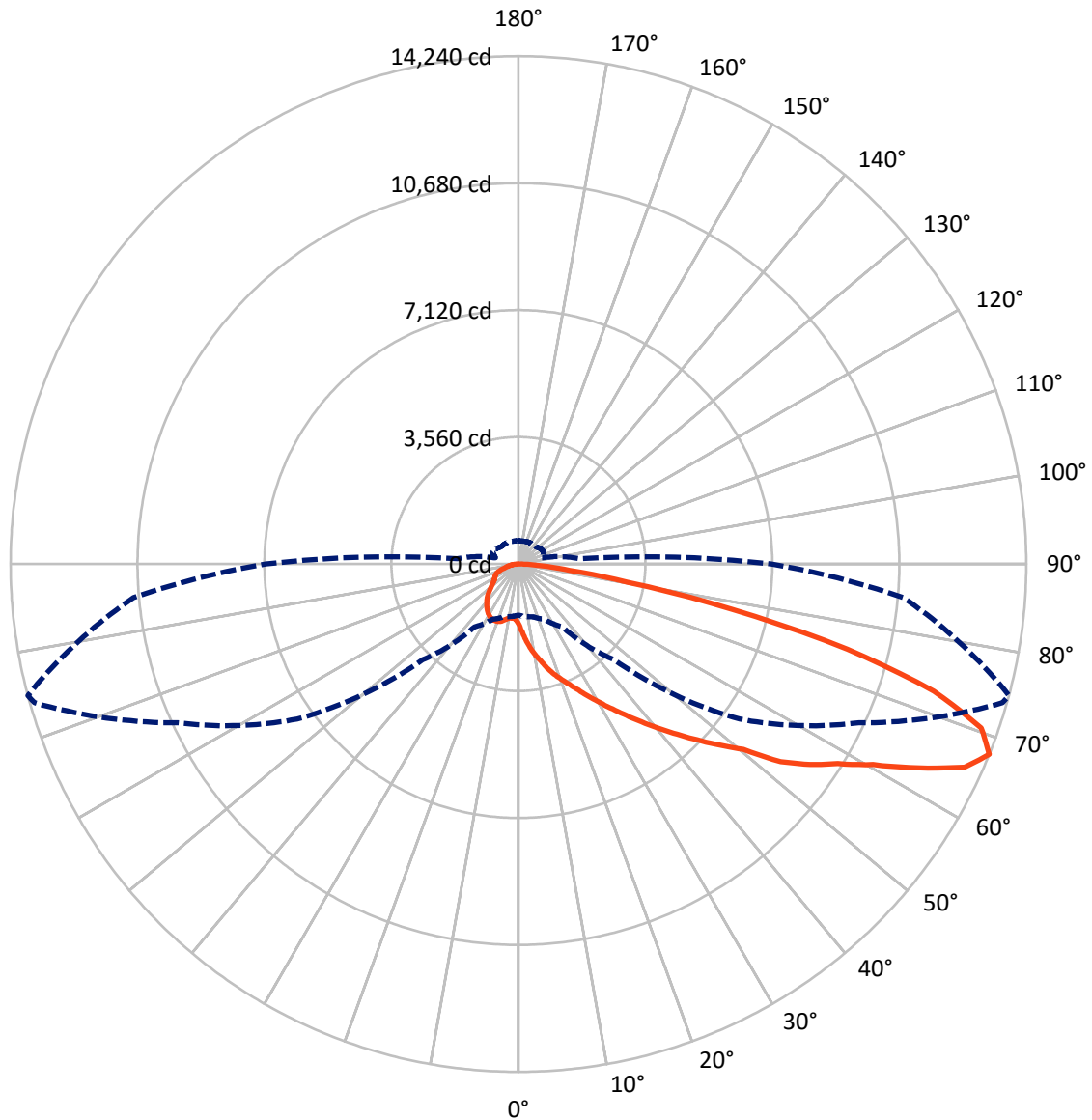


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2917.5	0.0	2917.5
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	14167.8	0.0	14167.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	17085.3	0.0	17085.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.9	1.2
10°-20°	718.8	4.2
20°-30°	1311.0	7.7
30°-40°	2151.8	12.6
40°-50°	3111.9	18.2
50°-60°	3667.3	21.5
60°-70°	3563.8	20.9
70°-80°	1981.0	11.6
80°-90°	380.9	2.2
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°	17085.3	100.0
0°-180°	17085.3	100.0



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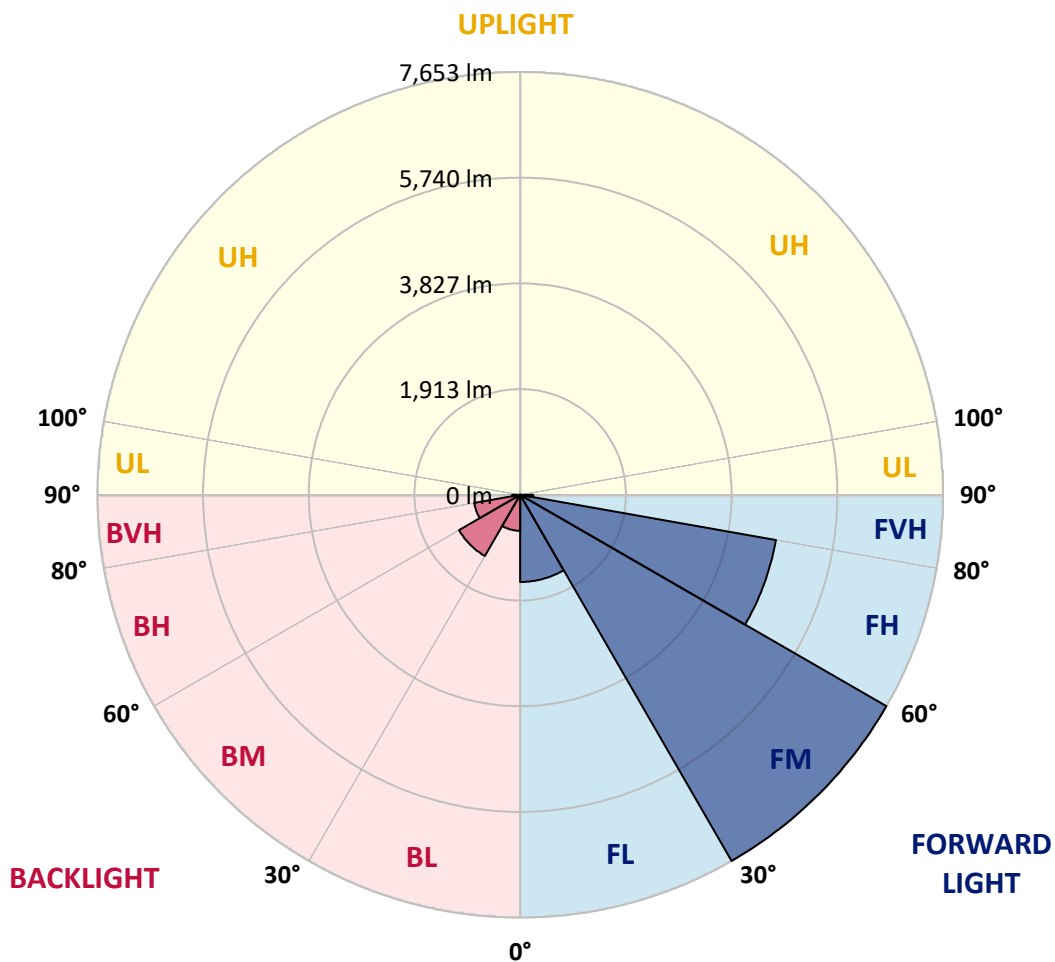
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1577.4	9.2			
FM (30°-60°)	7653.3	44.8			
FH (60°-80°)	4700.0	27.5			G2/5000
FVH (80°-90°)	237.1	1.4			G3/500
BL (0°-30°)	651.2	3.8	B2/1000		
BM (30°-60°)	1277.7	7.5	B2/2500		
BH (60°-80°)	844.8	4.9	B2/1000		G2/1000
BVH (80°-90°)	143.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0
2.5°	2400.1	2407.3	2393.1	2360.9	2314.4	2228.7	2153.7	2021.6	1903.7	1889.4	1764.4
5°	2821.6	2828.8	2811.0	2771.7	2721.7	2628.8	2525.2	2353.7	2164.5	2128.8	1864.4
7.5°	3111.0	3114.5	3093.1	3053.8	3014.5	2921.6	2818.0	2625.2	2393.1	2364.4	1993.0
10°	3357.4	3364.6	3335.9	3311.0	3268.1	3175.2	3068.1	2864.5	2625.2	2585.9	2125.2
12.5°	3586.0	3593.1	3575.3	3553.8	3539.5	3453.8	3335.9	3093.1	2835.9	2793.1	2282.3
15°	3739.6	3746.8	3750.2	3778.9	3796.7	3736.0	3618.2	3353.8	3064.6	3025.3	2468.1
17.5°	3696.7	3714.5	3768.1	3871.8	3982.4	3986.0	3889.6	3611.0	3289.5	3246.6	2657.3
20°	3571.7	3586.0	3650.3	3807.4	4025.3	4150.3	4143.2	3871.8	3500.2	3453.8	2832.3
22.5°	3675.3	3693.2	3693.2	3789.6	4003.9	4236.0	4328.9	4128.9	3711.0	3668.1	3007.4
25°	4118.2	4128.9	4053.9	4014.6	4093.1	4307.4	4482.5	4407.5	3968.1	3918.2	3196.7
27.5°	4736.1	4718.3	4625.4	4468.2	4382.5	4439.6	4618.2	4671.8	4264.6	4203.9	3393.1
30°	5350.4	5339.7	5232.6	5021.8	4828.9	4707.5	4768.2	4907.5	4586.1	4514.6	3582.4
32.5°	5925.4	5907.6	5789.7	5543.3	5325.4	5100.4	4982.5	5121.8	4929.0	4846.8	3793.1
35°	6454.1	6407.7	6289.8	6032.6	5807.6	5593.3	5304.0	5325.4	5300.4	5214.7	4025.3
37.5°	6882.7	6846.9	6718.3	6479.1	6239.8	6036.2	5732.6	5557.6	5700.4	5618.3	4293.2
40°	7261.3	7222.0	7089.9	6850.5	6629.1	6436.2	6196.9	5839.7	6150.5	6057.6	4593.3
42.5°	7547.0	7518.5	7411.3	7175.6	6961.3	6786.3	6668.4	6196.9	6618.4	6529.1	4921.8
45°	7700.6	7672.0	7614.8	7425.6	7229.1	7093.4	7104.1	6622.0	7107.7	7032.7	5311.2
47.5°	7511.3	7532.7	7582.7	7547.0	7425.6	7361.3	7493.4	7061.2	7654.1	7582.7	5732.6
50°	7004.1	7025.5	7225.5	7472.0	7514.9	7593.5	7843.5	7568.4	8232.8	8175.6	6254.0
52.5°	5757.6	5875.4	6429.0	7018.4	7422.0	7747.0	8232.8	8322.1	9207.9	9207.9	7175.6
55°	4350.3	4453.9	5086.1	6114.8	7061.2	7761.3	8518.5	8832.9	9911.5	9925.8	7657.7
57.5°	3525.3	3589.5	3900.3	4953.9	6304.0	7582.7	8857.8	9272.1	10497.2	10561.6	8279.3
60°	2860.9	2896.7	3100.3	3832.5	5257.6	7100.5	9100.7	9900.7	11333.1	11422.3	9072.1
62.5°	2300.2	2335.9	2471.7	2910.9	4125.4	6196.9	9057.8	10554.4	12447.4	12593.9	10111.5
65°	1835.9	1875.2	1964.5	2235.9	3057.4	5075.4	8618.6	10890.1	13601.1	13744.0	10800.8
67.5°	1432.2	1467.9	1528.7	1707.3	2153.7	3796.7	7579.1	10536.5	14119.0	14240.4	10836.5
70°	1082.2	1100.1	1150.1	1264.4	1539.4	2521.6	5932.6	9350.7	13654.7	13765.3	10122.2
72.5°	839.3	835.8	864.4	921.5	1075.1	1735.8	3932.4	7604.2	12072.4	12186.6	8636.4
75°	685.8	682.2	700.0	717.9	778.7	1164.4	2321.6	5725.5	9743.6	9525.7	6479.1
77.5°	578.6	575.0	592.9	596.5	621.4	803.6	1321.6	3768.1	6500.5	6125.4	3650.3
80°	489.3	485.8	507.2	514.3	532.1	589.3	760.8	2039.5	3264.5	3093.1	1743.0
82.5°	367.9	382.2	421.5	439.4	460.7	435.8	471.5	900.1	1514.4	1446.6	757.2
85°	178.6	210.7	317.8	353.6	378.6	275.1	321.4	425.0	682.2	650.1	307.2
87.5°	60.8	53.6	189.3	225.0	246.4	125.0	178.6	235.7	282.1	257.2	96.5
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°	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0	1693.0
2.5°	1710.9	1657.3	1578.7	1518.0	1478.7	1446.6	1432.2	1428.7	1421.5	1418.0	1418.0
5°	1746.6	1650.1	1528.7	1464.4	1446.6	1432.2	1439.4	1443.0	1443.0	1443.0	1443.0
7.5°	1800.2	1664.4	1518.0	1475.1	1471.5	1471.5	1493.0	1503.7	1510.8	1510.8	1510.8
10°	1871.6	1689.4	1535.9	1500.2	1510.8	1518.0	1543.0	1557.2	1564.4	1568.0	1571.6
12.5°	1968.1	1743.0	1571.6	1543.0	1557.2	1560.8	1578.7	1585.9	1592.9	1596.5	1596.5
15°	2096.6	1821.6	1628.7	1592.9	1596.5	1592.9	1592.9	1585.9	1582.3	1582.3	1589.4
17.5°	2228.7	1896.6	1678.7	1628.7	1614.4	1585.9	1564.4	1546.6	1535.9	1528.7	1532.3
20°	2360.9	1964.5	1707.3	1635.8	1596.5	1550.1	1510.8	1485.8	1471.5	1457.3	1464.4
22.5°	2493.0	2028.7	1717.9	1614.4	1557.2	1489.4	1446.6	1407.3	1375.2	1353.7	1357.3
25°	2639.5	2100.1	1717.9	1589.4	1503.7	1432.2	1378.6	1314.4	1267.9	1250.0	1257.2
27.5°	2785.9	2160.9	1700.1	1543.0	1443.0	1371.6	1292.9	1217.9	1189.4	1178.6	1182.2
30°	2932.4	2207.3	1660.9	1485.8	1378.6	1300.1	1196.5	1146.5	1110.8	1082.2	1085.8
32.5°	3078.8	2239.4	1607.3	1414.4	1310.8	1210.8	1125.0	1068.0	1003.6	967.9	971.5
35°	3246.6	2264.5	1543.0	1342.9	1235.8	1132.2	1068.0	975.1	907.3	878.6	871.5
37.5°	3421.7	2282.3	1475.1	1264.4	1160.8	1075.1	1010.8	896.5	832.2	792.9	789.3
40°	3611.0	2289.5	1393.0	1182.2	1089.3	1039.3	935.8	850.1	739.4	714.3	714.3
42.5°	3836.0	2285.9	1310.8	1100.1	1010.8	957.2	882.2	842.9	746.4	721.5	707.2
45°	4093.1	2285.9	1221.5	1003.6	932.2	853.7	821.5	796.5	732.2	742.9	750.0
47.5°	4386.0	2278.7	1114.4	925.1	868.0	800.0	782.3	728.6	703.6	710.7	717.9
50°	4789.7	2289.5	1017.9	860.8	821.5	764.3	742.9	714.3	703.6	707.2	703.6
52.5°	5350.4	2253.8	925.1	821.5	785.7	710.7	710.7	707.2	710.7	707.2	707.2
55°	5657.5	2175.2	857.2	800.0	760.8	685.8	700.0	707.2	714.3	710.7	710.7
57.5°	6093.3	2121.6	803.6	785.7	746.4	678.6	692.9	707.2	710.7	707.2	707.2
60°	6607.6	2085.9	767.9	789.3	735.8	678.6	696.5	707.2	703.6	700.0	700.0
62.5°	7204.1	2071.6	742.9	800.0	725.1	682.2	696.5	707.2	692.9	689.4	689.4
65°	7429.2	1943.0	710.7	807.2	732.2	682.2	692.9	696.5	678.6	675.0	671.5
67.5°	7082.7	1721.5	664.3	792.9	753.6	682.2	682.2	678.6	657.1	653.7	646.5
70°	6307.6	1428.7	592.9	746.4	767.9	685.8	667.9	650.1	628.6	628.6	614.4
72.5°	5164.7	1125.0	500.0	664.3	757.2	696.5	639.3	614.4	589.3	589.3	575.0
75°	3721.7	839.3	400.1	553.6	710.7	692.9	603.6	571.5	542.9	539.3	521.5
77.5°	2121.6	589.3	325.0	432.2	632.2	675.0	571.5	521.5	489.3	478.6	467.9
80°	1089.3	396.5	264.3	339.3	525.1	625.0	546.5	464.3	428.6	410.7	392.9
82.5°	517.9	264.3	203.6	250.0	396.5	546.5	514.3	400.1	360.7	339.3	317.8
85°	232.2	157.1	135.7	160.7	282.1	425.0	453.6	328.6	282.1	353.6	260.8
87.5°	75.0	71.4	71.4	75.0	135.7	185.8	332.2	242.8	225.0	185.8	157.1
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)