

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: P236844

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236844  
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-AF72-110-D-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15851.7 lumens  
Efficiency: N/A  
Efficacy: 140.3 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 - G2

Input Watts (W): 113  
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

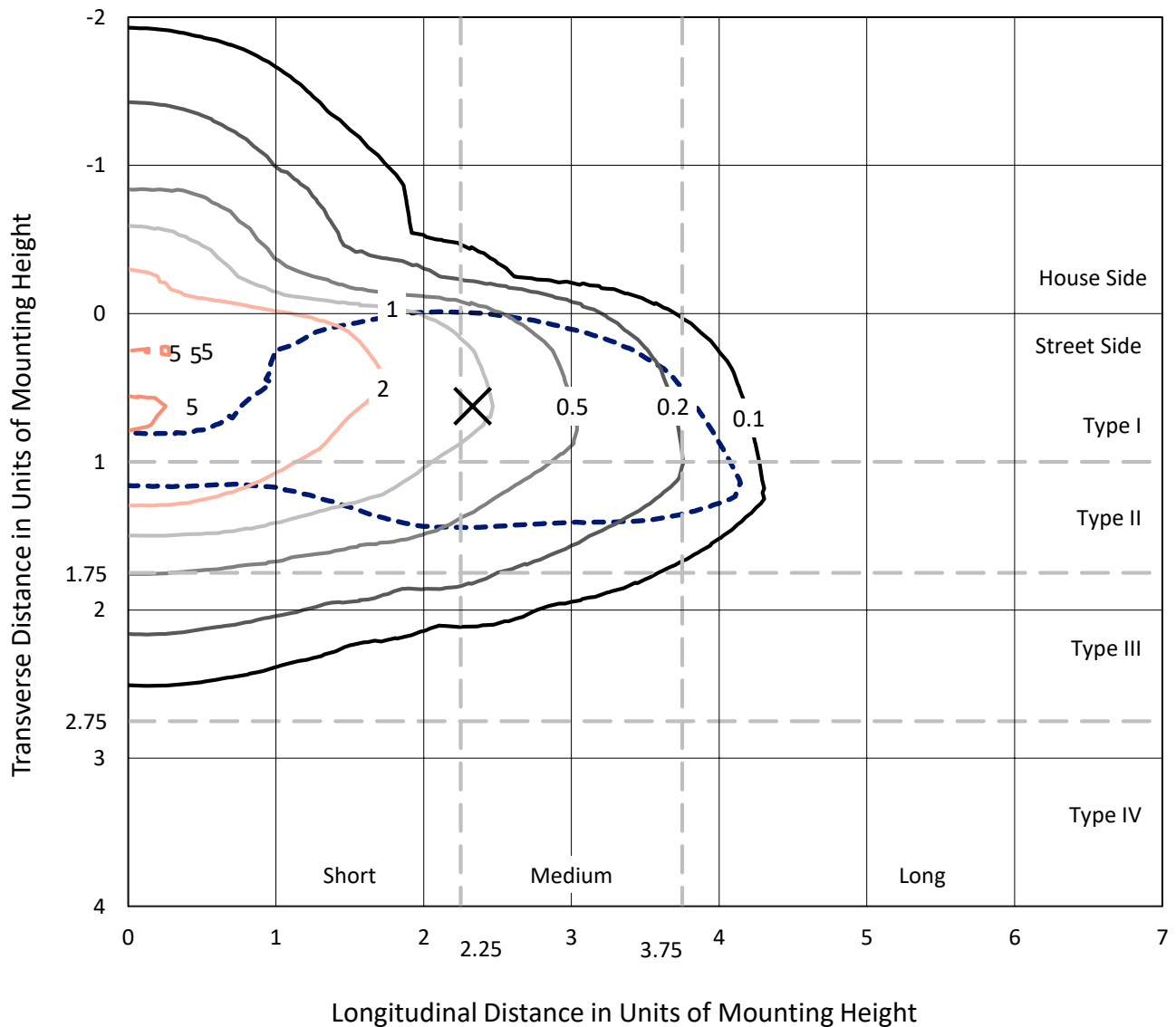


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

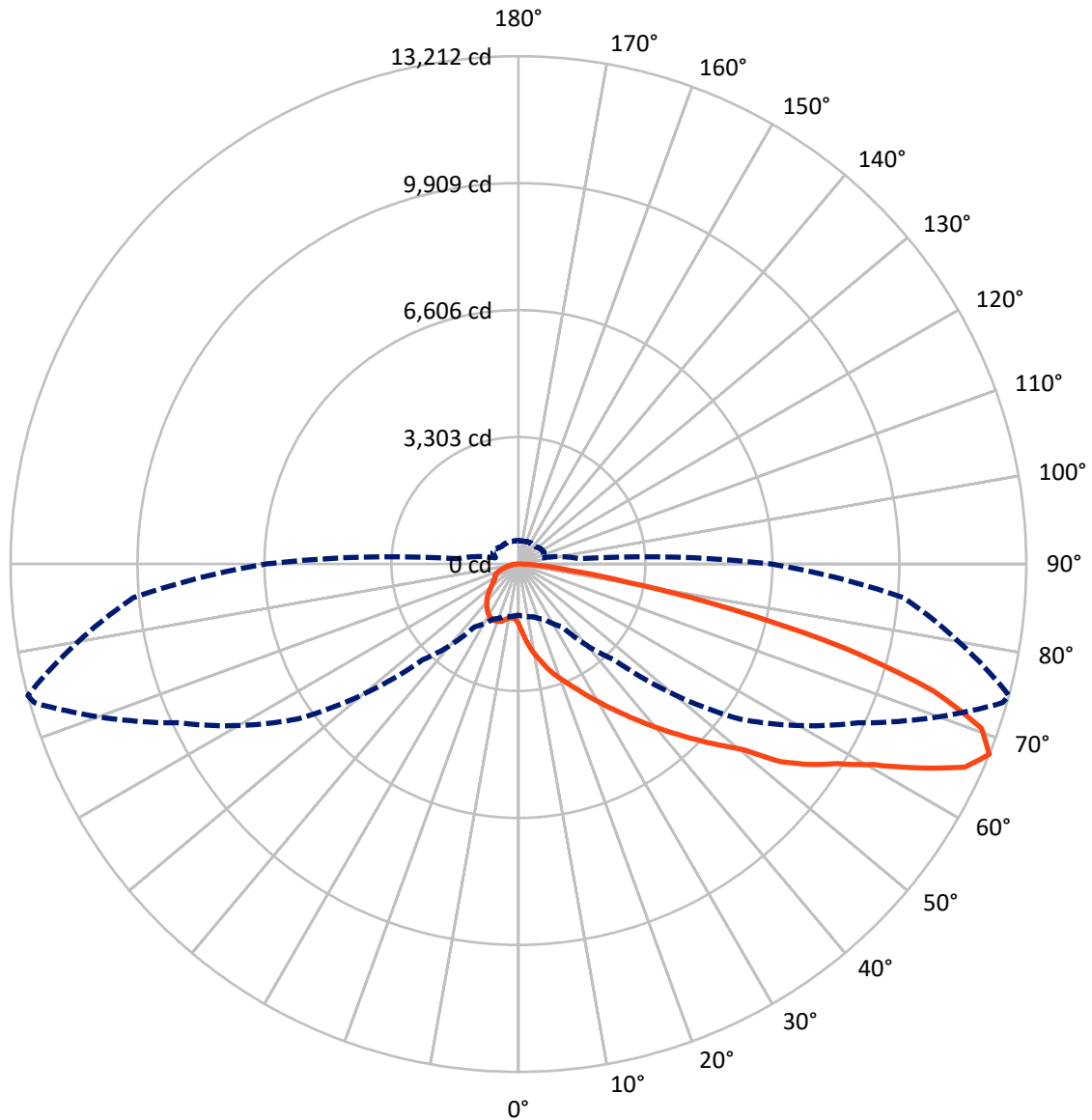


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type II - Medium - Semi-Cutoff

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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	2706.9	0.0	2706.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	13144.8	0.0	13144.8
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	15851.7	0.0	15851.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.5	1.2
10°-20°	666.9	4.2
20°-30°	1216.3	7.7
30°-40°	1996.5	12.6
40°-50°	2887.2	18.2
50°-60°	3402.5	21.5
60°-70°	3306.4	20.9
70°-80°	1837.9	11.6
80°-90°	353.4	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°	15851.7	100.0
0°-180°	15851.7	100.0



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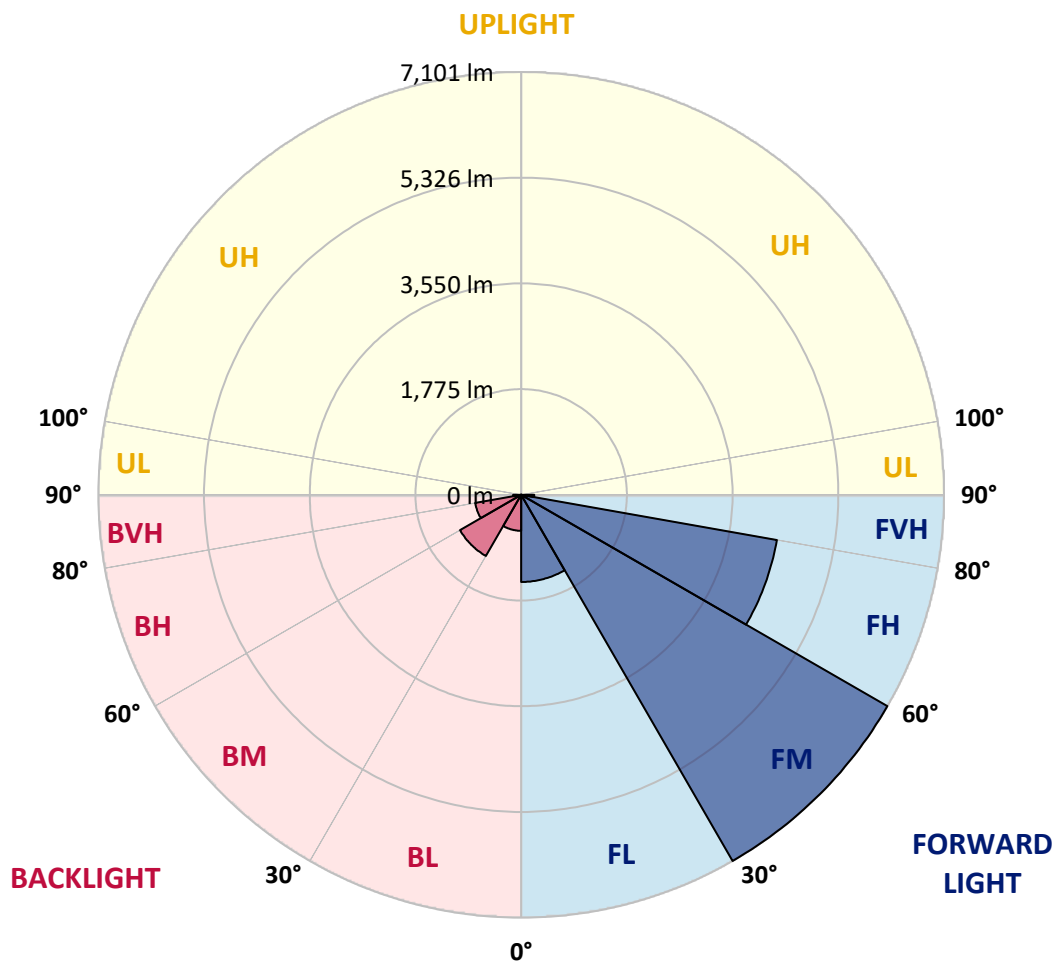
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1463.5	9.2			
FM (30°-60°)	7100.7	44.8			
FH (60°-80°)	4360.6	27.5			G2/5000
FVH (80°-90°)	219.9	1.4			G2/225
BL (0°-30°)	604.2	3.8	B2/1000		
BM (30°-60°)	1185.5	7.5	B2/2500		
BH (60°-80°)	783.8	4.9	B2/1000		G2/1000
BVH (80°-90°)	133.5	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-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7
2.5°	2226.9	2233.5	2220.2	2190.4	2147.4	2067.8	1998.2	1875.6	1766.2	1753.0	1637.0
5°	2617.9	2624.5	2608.0	2571.5	2525.2	2438.9	2342.9	2183.8	2008.2	1975.0	1729.8
7.5°	2886.4	2889.6	2869.8	2833.3	2796.8	2710.7	2614.6	2435.6	2220.2	2193.7	1849.1
10°	3115.0	3121.6	3095.1	3071.9	3032.1	2946.0	2846.6	2657.6	2435.6	2399.2	1971.7
12.5°	3327.0	3333.7	3317.1	3297.3	3284.0	3204.5	3095.1	2869.8	2631.1	2591.4	2117.5
15°	3469.5	3476.2	3479.5	3506.0	3522.5	3466.3	3356.9	3111.6	2843.3	2806.8	2289.9
17.5°	3429.7	3446.3	3496.0	3592.2	3694.9	3698.2	3608.8	3350.3	3052.0	3012.3	2465.5
20°	3313.8	3327.0	3386.7	3532.6	3734.7	3850.6	3844.0	3592.2	3247.6	3204.5	2627.9
22.5°	3409.9	3426.5	3426.5	3516.0	3714.7	3930.2	4016.3	3830.7	3443.0	3403.3	2790.2
25°	3820.8	3830.7	3761.2	3724.7	3797.6	3996.5	4158.8	4089.2	3681.6	3635.3	2965.8
27.5°	4394.1	4377.5	4291.4	4145.6	4066.0	4119.0	4284.7	4334.4	3956.7	3900.3	3148.1
30°	4964.1	4954.2	4854.7	4659.2	4480.2	4367.6	4424.0	4553.2	4255.0	4188.7	3323.8
32.5°	5497.6	5481.1	5371.7	5143.0	4940.9	4732.1	4622.7	4752.0	4573.0	4496.8	3519.3
35°	5988.0	5945.0	5835.6	5597.0	5388.3	5189.4	4921.0	4940.9	4917.7	4838.1	3734.7
37.5°	6385.7	6352.5	6233.2	6011.3	5789.2	5600.3	5318.6	5156.3	5288.9	5212.7	3983.2
40°	6736.9	6700.5	6577.9	6355.9	6150.4	5971.5	5749.5	5418.1	5706.3	5620.2	4261.5
42.5°	7002.1	6975.6	6876.2	6657.5	6458.6	6296.3	6186.9	5749.5	6140.5	6057.6	4566.5
45°	7144.6	7118.0	7065.0	6889.4	6707.2	6581.3	6591.2	6143.7	6594.5	6524.9	4927.7
47.5°	6969.0	6988.8	7035.2	7002.1	6889.4	6829.7	6952.4	6551.4	7101.5	7035.2	5318.6
50°	6498.4	6518.2	6703.8	6932.4	6972.2	7045.2	7277.1	7021.9	7638.3	7585.3	5802.5
52.5°	5341.8	5451.2	5964.8	6511.6	6886.1	7187.7	7638.3	7721.1	8543.0	8543.0	6657.5
55°	4036.3	4132.3	4718.9	5673.2	6551.4	7200.9	7903.4	8195.1	9195.8	9209.0	7104.8
57.5°	3270.7	3330.4	3618.7	4596.2	5848.8	7035.2	8218.2	8602.6	9739.3	9798.9	7681.4
60°	2654.4	2687.5	2876.3	3555.7	4877.9	6587.8	8443.5	9185.9	10514.7	10597.6	8417.0
62.5°	2134.1	2167.2	2293.1	2700.8	3827.5	5749.5	8403.8	9792.3	11548.6	11684.5	9381.4
65°	1703.3	1739.7	1822.6	2074.4	2836.6	4708.9	7996.2	10103.8	12618.9	12751.5	10020.9
67.5°	1328.8	1362.0	1418.3	1584.0	1998.2	3522.5	7031.9	9775.7	13099.5	13212.1	10054.1
70°	1004.1	1020.7	1067.0	1173.1	1428.2	2339.6	5504.2	8675.5	12668.6	12771.4	9391.3
72.5°	778.8	775.4	801.9	855.0	997.5	1610.5	3648.5	7055.1	11200.7	11306.7	8012.8
75°	636.3	632.9	649.5	666.0	722.4	1080.3	2153.9	5312.0	9040.0	8837.9	6011.3
77.5°	536.8	533.6	550.0	553.4	576.6	745.6	1226.1	3496.0	6031.1	5683.2	3386.7
80°	454.0	450.7	470.6	477.2	493.8	546.8	705.8	1892.2	3028.9	2869.8	1617.2
82.5°	341.4	354.6	391.1	407.6	427.5	404.3	437.4	835.0	1405.0	1342.1	702.6
85°	165.7	195.5	294.9	328.1	351.3	255.1	298.3	394.3	632.9	603.1	285.0
87.5°	56.4	49.7	175.6	208.8	228.6	116.0	165.7	218.7	261.8	238.6	89.5
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°	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7	1570.7
2.5°	1587.3	1537.6	1464.7	1408.4	1371.9	1342.1	1328.8	1325.5	1318.9	1315.6	1315.6
5°	1620.5	1530.9	1418.3	1358.7	1342.1	1328.8	1335.5	1338.7	1338.7	1338.7	1338.7
7.5°	1670.2	1544.2	1408.4	1368.6	1365.3	1365.3	1385.2	1395.1	1401.7	1401.7	1401.7
10°	1736.5	1567.5	1425.0	1391.8	1401.7	1408.4	1431.5	1444.8	1451.5	1454.7	1458.1
12.5°	1825.9	1617.2	1458.1	1431.5	1444.8	1448.1	1464.7	1471.3	1478.0	1481.2	1481.2
15°	1945.2	1690.0	1511.1	1478.0	1481.2	1478.0	1478.0	1471.3	1468.0	1468.0	1474.7
17.5°	2067.8	1759.7	1557.4	1511.1	1497.8	1471.3	1451.5	1434.9	1425.0	1418.3	1421.6
20°	2190.4	1822.6	1584.0	1517.8	1481.2	1438.2	1401.7	1378.5	1365.3	1352.0	1358.7
22.5°	2313.0	1882.2	1594.0	1497.8	1444.8	1381.9	1342.1	1305.6	1275.8	1256.0	1259.3
25°	2448.9	1948.5	1594.0	1474.7	1395.1	1328.8	1279.1	1219.5	1176.4	1159.8	1166.5
27.5°	2584.8	2004.9	1577.4	1431.5	1338.7	1272.6	1199.6	1130.1	1103.5	1093.5	1096.9
30°	2720.6	2047.9	1540.9	1378.5	1279.1	1206.3	1110.1	1063.8	1030.6	1004.1	1007.4
32.5°	2856.5	2077.7	1491.3	1312.2	1216.2	1123.4	1043.8	990.8	931.2	898.0	901.3
35°	3012.3	2100.9	1431.5	1246.0	1146.6	1050.5	990.8	904.7	841.7	815.2	808.5
37.5°	3174.6	2117.5	1368.6	1173.1	1077.0	997.5	937.8	831.8	772.1	735.7	732.3
40°	3350.3	2124.2	1292.4	1096.9	1010.7	964.3	868.2	788.7	686.0	662.8	662.8
42.5°	3559.1	2120.9	1216.2	1020.7	937.8	888.1	818.5	782.0	692.5	669.4	656.1
45°	3797.6	2120.9	1133.3	931.2	864.9	792.0	762.2	739.0	679.3	689.3	695.9
47.5°	4069.4	2114.2	1033.9	858.3	805.3	742.3	725.7	676.0	652.8	659.5	666.0
50°	4443.8	2124.2	944.4	798.6	762.2	709.1	689.3	662.8	652.8	656.1	652.8
52.5°	4964.1	2091.0	858.3	762.2	729.1	659.5	659.5	656.1	659.5	656.1	656.1
55°	5249.1	2018.1	795.3	742.3	705.8	636.3	649.5	656.1	662.8	659.5	659.5
57.5°	5653.3	1968.4	745.6	729.1	692.5	629.6	642.9	656.1	659.5	656.1	656.1
60°	6130.5	1935.2	712.5	732.3	682.6	629.6	646.2	656.1	652.8	649.5	649.5
62.5°	6684.0	1922.0	689.3	742.3	672.7	632.9	646.2	656.1	642.9	639.5	639.5
65°	6892.7	1802.7	659.5	748.9	679.3	632.9	642.9	646.2	629.6	626.4	623.0
67.5°	6571.2	1597.2	616.3	735.7	699.2	632.9	632.9	629.6	609.8	606.4	599.8
70°	5852.2	1325.5	550.0	692.5	712.5	636.3	619.7	603.1	583.2	583.2	570.0
72.5°	4791.8	1043.8	463.9	616.3	702.6	646.2	593.2	570.0	546.8	546.8	533.6
75°	3453.0	778.8	371.1	513.6	659.5	642.9	560.1	530.2	503.7	500.4	483.9
77.5°	1968.4	546.8	301.6	401.0	586.6	626.4	530.2	483.9	454.0	444.1	434.1
80°	1010.7	367.9	245.2	314.8	487.1	579.9	507.0	430.8	397.6	381.0	364.5
82.5°	480.5	245.2	188.8	232.0	367.9	507.0	477.2	371.1	334.7	314.8	294.9
85°	215.4	145.8	125.9	149.1	261.8	394.3	420.8	304.8	261.8	328.1	241.9
87.5°	69.6	66.3	66.3	69.6	125.9	172.4	308.2	225.4	208.8	172.4	145.8
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)