

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: P265635

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2R-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265635  
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-AF72-160-D-U-T2R-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18349.8 lumens  
Efficiency: N/A  
Efficacy: 113.3 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 - G3

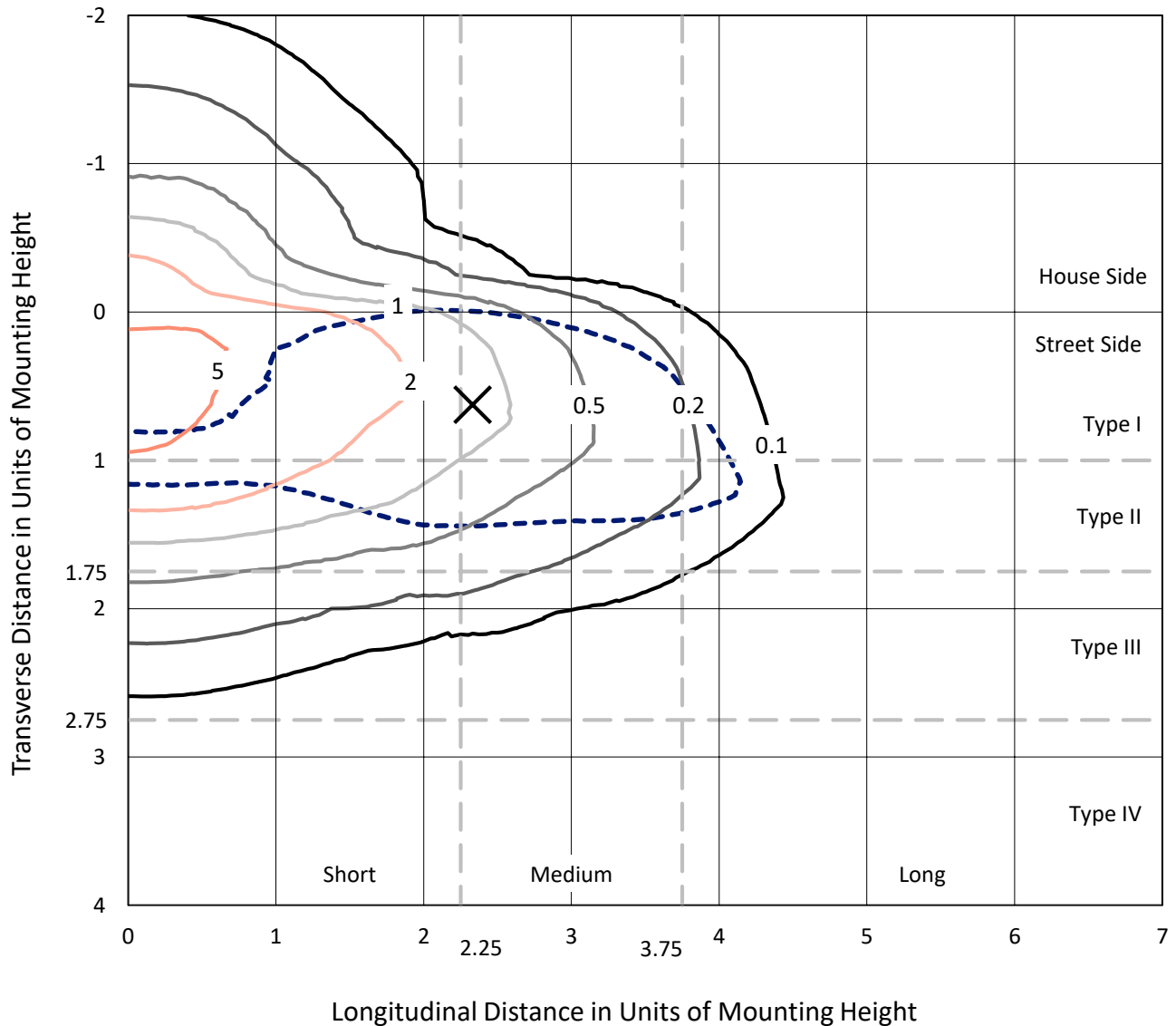
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

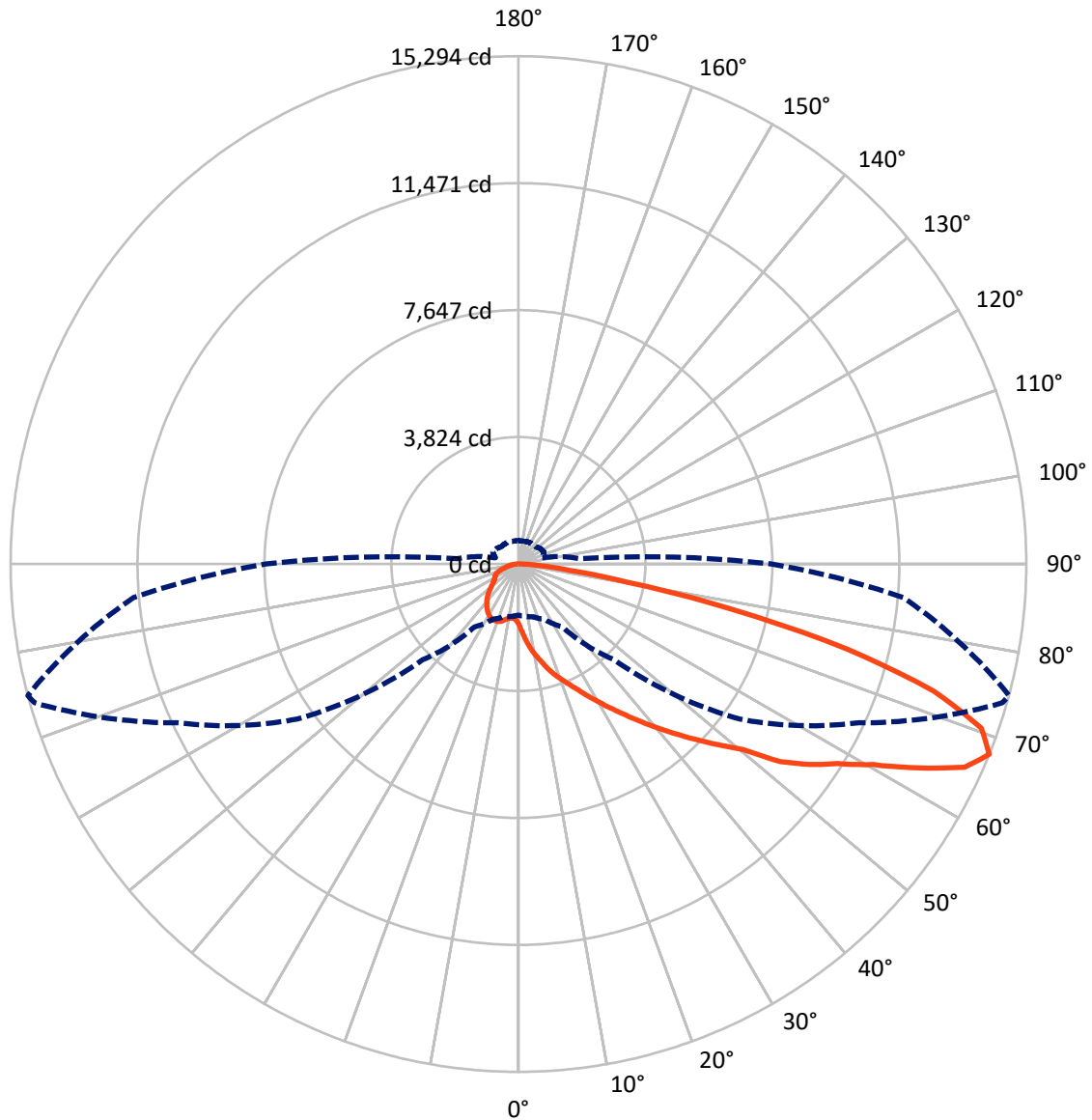


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
 Type II - Medium - Semi-Cutoff

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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	3133.5	0.0	3133.5
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	15216.3	0.0	15216.3
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	18349.8	0.0	18349.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.6	1.2
10°-20°	772.0	4.2
20°-30°	1408.0	7.7
30°-40°	2311.1	12.6
40°-50°	3342.2	18.2
50°-60°	3938.8	21.5
60°-70°	3827.5	20.9
70°-80°	2127.6	11.6
80°-90°	409.1	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°	18349.8	100.0
0°-180°	18349.8	100.0

**Coefficient of Utilization**



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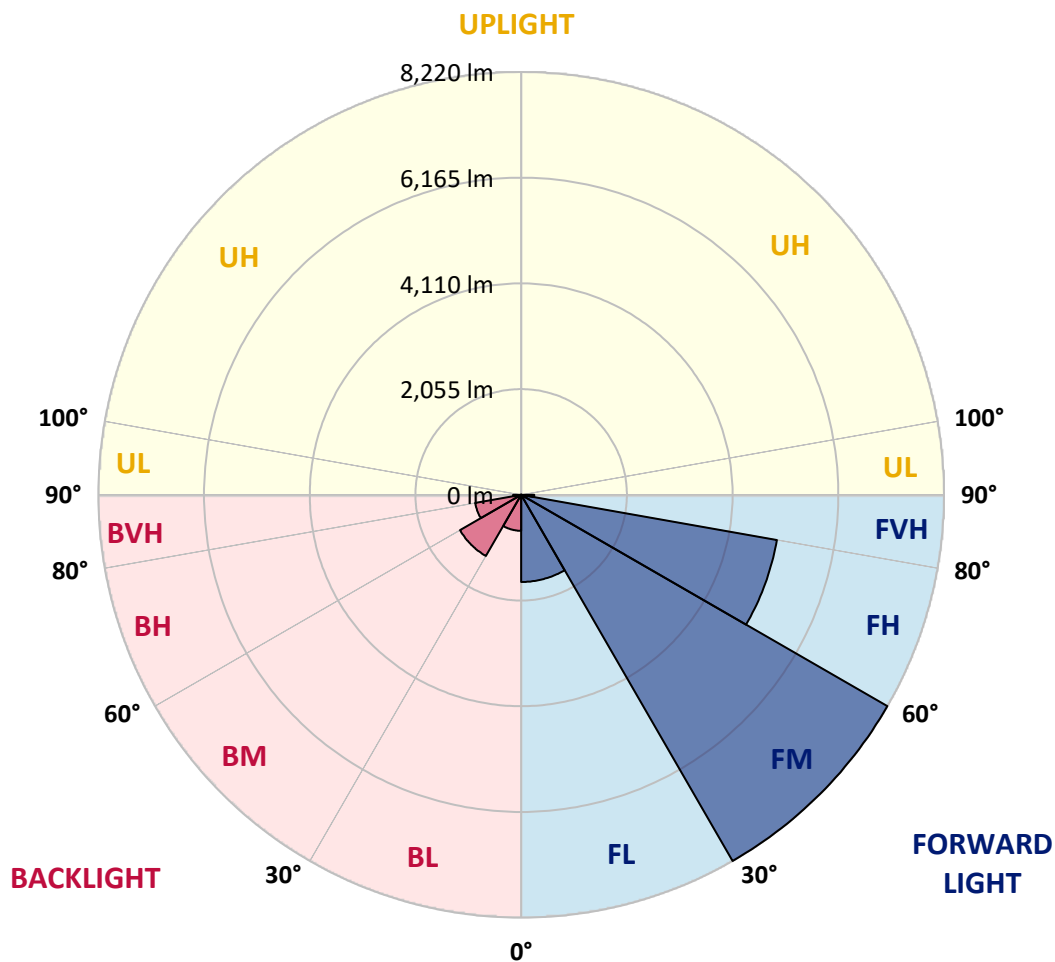
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1694.2	9.2			
FM	(30°-60°)	8219.7	44.8			
FH	(60°-80°)	5047.8	27.5			G3/7500
FVH	(80°-90°)	254.6	1.4			G3/500
BL	(0°-30°)	699.4	3.8	B2/1000		
BM	(30°-60°)	1372.3	7.5	B2/2500		
BH	(60°-80°)	907.3	4.9	B2/1000		G2/1000
BVH	(80°-90°)	154.5	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-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3
2.5°	2577.9	2585.5	2570.1	2535.6	2485.8	2393.8	2313.1	2171.3	2044.6	2029.4	1895.1
5°	3030.5	3038.2	3018.9	2976.8	2923.1	2823.4	2712.2	2527.9	2324.6	2286.2	2002.4
7.5°	3341.2	3345.0	3322.0	3279.8	3237.6	3137.9	3026.6	2819.5	2570.1	2539.5	2140.5
10°	3605.8	3613.5	3582.9	3556.0	3509.9	3410.2	3295.2	3076.5	2819.5	2777.3	2282.5
12.5°	3851.5	3859.1	3839.9	3816.9	3801.4	3709.5	3582.9	3322.0	3045.9	2999.8	2451.3
15°	4016.3	4024.0	4027.8	4058.5	4077.6	4012.5	3885.9	3602.1	3291.3	3249.1	2650.7
17.5°	3970.2	3989.6	4047.0	4158.3	4277.2	4281.1	4177.5	3878.3	3533.0	3487.0	2854.1
20°	3836.0	3851.5	3920.5	4089.3	4323.3	4457.5	4449.8	4158.3	3759.3	3709.5	3042.0
22.5°	3947.3	3966.5	3966.5	4070.0	4300.1	4549.6	4649.3	4434.5	3985.6	3939.5	3229.9
25°	4423.0	4434.5	4353.9	4311.8	4396.0	4626.4	4814.2	4733.7	4261.9	4208.1	3433.2
27.5°	5086.7	5067.3	4967.6	4798.8	4706.8	4768.3	4960.0	5017.6	4580.3	4515.1	3644.2
30°	5746.4	5734.9	5619.7	5393.5	5186.4	5055.9	5121.1	5270.7	4925.4	4848.7	3847.5
32.5°	6364.0	6344.8	6218.2	5953.5	5719.6	5477.9	5351.3	5501.0	5293.7	5205.5	4073.9
35°	6931.7	6881.8	6755.3	6479.0	6237.4	6007.2	5696.5	5719.6	5692.6	5600.7	4323.3
37.5°	7392.1	7353.6	7215.5	6958.6	6701.5	6482.9	6156.9	5968.9	6122.3	6034.1	4610.9
40°	7798.6	7756.4	7614.6	7357.5	7119.6	6912.5	6655.5	6272.0	6605.6	6506.0	4933.1
42.5°	8105.5	8074.9	7959.8	7706.6	7476.5	7288.5	7161.8	6655.5	7108.2	7012.3	5286.0
45°	8270.5	8239.9	8178.3	7975.2	7764.1	7618.3	7629.8	7112.1	7633.7	7553.2	5704.1
47.5°	8067.1	8090.2	8143.9	8105.5	7975.2	7906.2	8048.0	7583.9	8220.6	8143.9	6156.9
50°	7522.4	7545.6	7760.3	8025.0	8071.0	8155.4	8423.9	8128.6	8842.0	8780.8	6716.8
52.5°	6183.8	6310.2	6904.9	7537.8	7971.3	8320.5	8842.0	8938.0	9889.4	9889.4	7706.6
55°	4672.4	4783.6	5462.6	6567.2	7583.9	8335.7	9149.0	9486.6	10645.0	10660.4	8224.4
57.5°	3786.1	3855.3	4188.9	5320.7	6770.6	8143.9	9513.4	9958.4	11274.1	11343.2	8892.0
60°	3072.7	3111.0	3329.7	4116.0	5646.7	7626.0	9774.3	10633.4	12171.8	12267.7	9743.6
62.5°	2470.3	2508.7	2654.5	3126.5	4430.6	6655.5	9728.1	11335.5	13368.5	13525.9	10859.8
65°	1971.7	2013.9	2109.8	2401.3	3283.7	5451.1	9256.3	11696.1	14607.7	14761.0	11600.3
67.5°	1538.3	1576.6	1641.8	1833.6	2313.1	4077.6	8140.1	11316.3	15163.8	15294.4	11638.5
70°	1162.3	1181.5	1235.2	1358.0	1653.3	2708.2	6371.7	10042.7	14665.2	14784.0	10871.4
72.5°	901.4	897.6	928.3	989.8	1154.6	1864.3	4223.6	8166.9	12965.9	13088.6	9275.5
75°	736.5	732.7	751.9	771.0	836.2	1250.5	2493.4	6149.2	10464.7	10230.7	6958.6
77.5°	621.4	617.7	636.8	640.6	667.5	863.1	1419.3	4047.0	6981.5	6578.7	3920.5
80°	525.6	521.6	544.7	552.4	571.6	632.9	817.1	2190.3	3506.2	3322.0	1872.0
82.5°	395.2	410.4	452.7	471.8	494.8	467.9	506.4	966.7	1626.6	1553.6	813.2
85°	191.8	226.4	341.4	379.8	406.7	295.4	345.3	456.5	732.7	698.2	329.9
87.5°	65.1	57.5	203.2	241.6	264.7	134.2	191.8	253.2	303.1	276.1	103.6
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°	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3	1818.3
2.5°	1837.5	1779.9	1695.6	1630.3	1588.2	1553.6	1538.3	1534.5	1526.8	1522.8	1522.8
5°	1875.8	1772.3	1641.8	1572.8	1553.6	1538.3	1546.0	1549.8	1549.8	1549.8	1549.8
7.5°	1933.3	1787.5	1630.3	1584.3	1580.5	1580.5	1603.5	1615.0	1622.7	1622.7	1622.7
10°	2010.0	1814.4	1649.5	1611.1	1622.7	1630.3	1657.2	1672.6	1680.2	1684.1	1687.8
12.5°	2113.6	1872.0	1687.8	1657.2	1672.6	1676.3	1695.6	1703.1	1710.9	1714.8	1714.8
15°	2251.7	1956.4	1749.2	1710.9	1714.8	1710.9	1710.9	1703.1	1699.4	1699.4	1707.0
17.5°	2393.8	2036.9	1803.0	1749.2	1733.9	1703.1	1680.2	1661.0	1649.5	1641.8	1645.7
20°	2535.6	2109.8	1833.6	1756.9	1714.8	1664.9	1622.7	1595.7	1580.5	1565.0	1572.8
22.5°	2677.6	2178.8	1845.1	1733.9	1672.6	1599.6	1553.6	1511.4	1476.9	1453.8	1457.7
25°	2834.8	2255.6	1845.1	1707.0	1615.0	1538.3	1480.6	1411.6	1361.8	1342.5	1350.3
27.5°	2992.2	2320.9	1826.0	1657.2	1549.8	1473.0	1388.6	1308.1	1277.4	1265.9	1269.8
30°	3149.4	2370.6	1783.8	1595.7	1480.6	1396.3	1285.0	1231.3	1192.9	1162.3	1166.2
32.5°	3306.8	2405.2	1726.3	1519.0	1407.9	1300.4	1208.4	1147.0	1078.0	1039.6	1043.4
35°	3487.0	2432.0	1657.2	1442.4	1327.2	1216.0	1147.0	1047.2	974.3	943.7	936.0
37.5°	3675.0	2451.3	1584.3	1358.0	1246.7	1154.6	1085.6	962.9	893.9	851.7	847.8
40°	3878.3	2458.9	1496.0	1269.8	1170.0	1116.2	1005.1	912.9	794.0	767.2	767.2
42.5°	4119.8	2455.1	1407.9	1181.5	1085.6	1028.1	947.5	905.3	801.7	774.9	759.5
45°	4396.0	2455.1	1312.0	1078.0	1001.3	916.8	882.2	855.5	786.3	798.0	805.6
47.5°	4710.6	2447.4	1196.8	993.5	932.1	859.3	840.0	782.6	755.7	763.4	771.0
50°	5144.1	2458.9	1093.2	924.4	882.2	821.0	798.0	767.2	755.7	759.5	755.7
52.5°	5746.4	2420.6	993.5	882.2	844.0	763.4	763.4	759.5	763.4	759.5	759.5
55°	6076.2	2336.1	920.7	859.3	817.1	736.5	751.9	759.5	767.2	763.4	763.4
57.5°	6544.3	2278.6	863.1	844.0	801.7	728.9	744.2	759.5	763.4	759.5	759.5
60°	7096.7	2240.3	824.7	847.8	790.1	728.9	748.0	759.5	755.7	751.9	751.9
62.5°	7737.3	2224.9	798.0	859.3	778.7	732.7	748.0	759.5	744.2	740.4	740.4
65°	7978.9	2086.9	763.4	867.0	786.3	732.7	744.2	748.0	728.9	725.0	721.2
67.5°	7606.8	1849.0	713.6	851.7	809.5	732.7	732.7	728.9	705.8	701.9	694.3
70°	6774.5	1534.5	636.8	801.7	824.7	736.5	717.3	698.2	675.2	675.2	659.7
72.5°	5546.9	1208.4	537.0	713.6	813.2	748.0	686.7	659.7	632.9	632.9	617.7
75°	3997.2	901.4	429.6	594.6	763.4	744.2	648.2	613.7	583.1	579.2	560.1
77.5°	2278.6	632.9	349.1	464.2	678.9	725.0	613.7	560.1	525.6	514.0	502.5
80°	1170.0	425.7	283.9	364.4	563.9	671.4	587.0	498.6	460.3	441.2	421.9
82.5°	556.2	283.9	218.6	268.6	425.7	587.0	552.4	429.6	387.4	364.4	341.4
85°	249.3	168.8	145.7	172.7	303.1	456.5	487.2	352.9	303.1	379.8	280.0
87.5°	80.6	76.7	76.7	80.6	145.7	199.5	356.7	260.9	241.6	199.5	168.8
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)