

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: P236846

Luminaire Tested: **ARCH-L-AF72-130-D-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236846  
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-AF72-130-D-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 575mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18312.9 lumens  
Efficiency: N/A  
Efficacy: 137.7 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): 133  
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

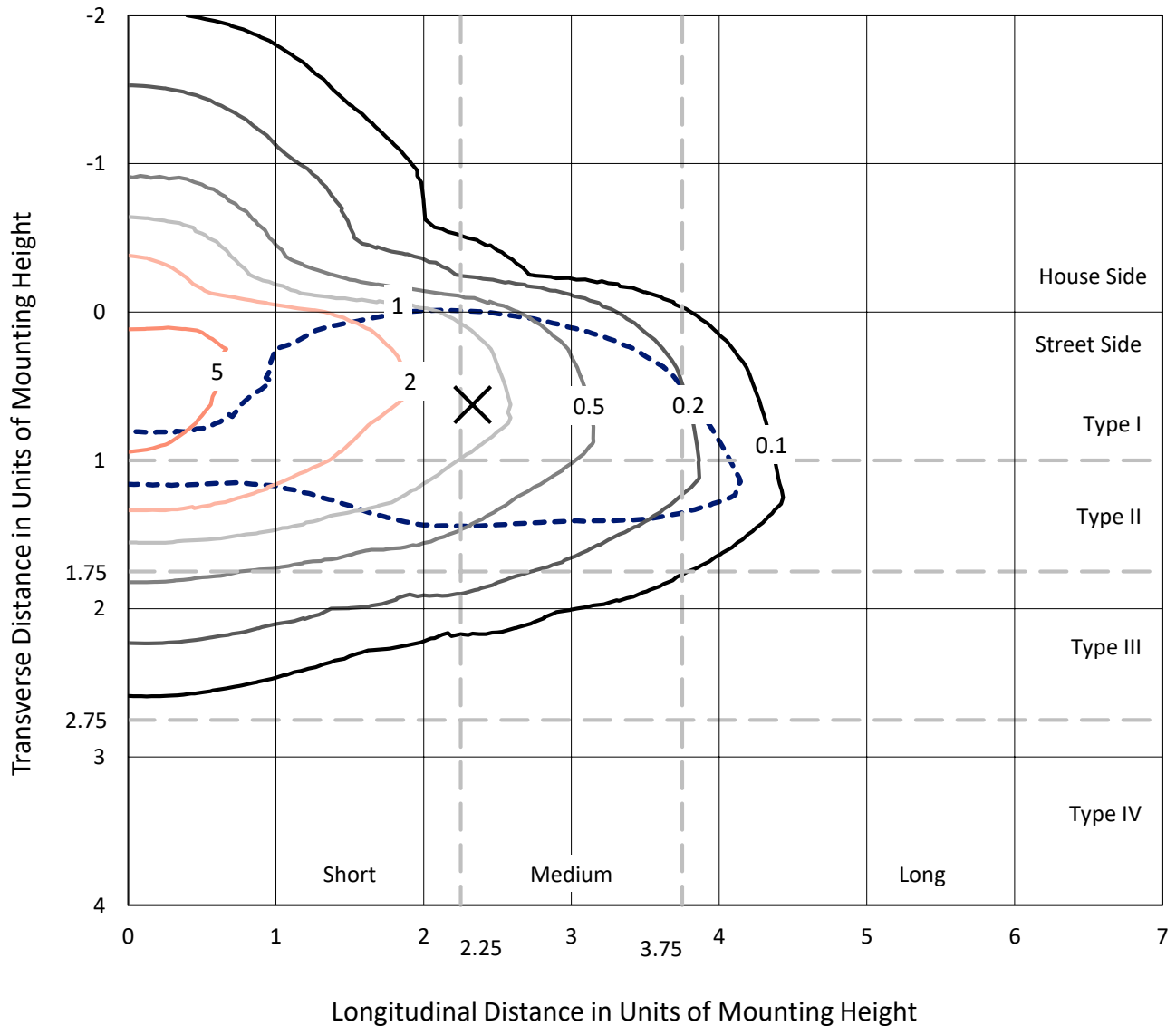


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

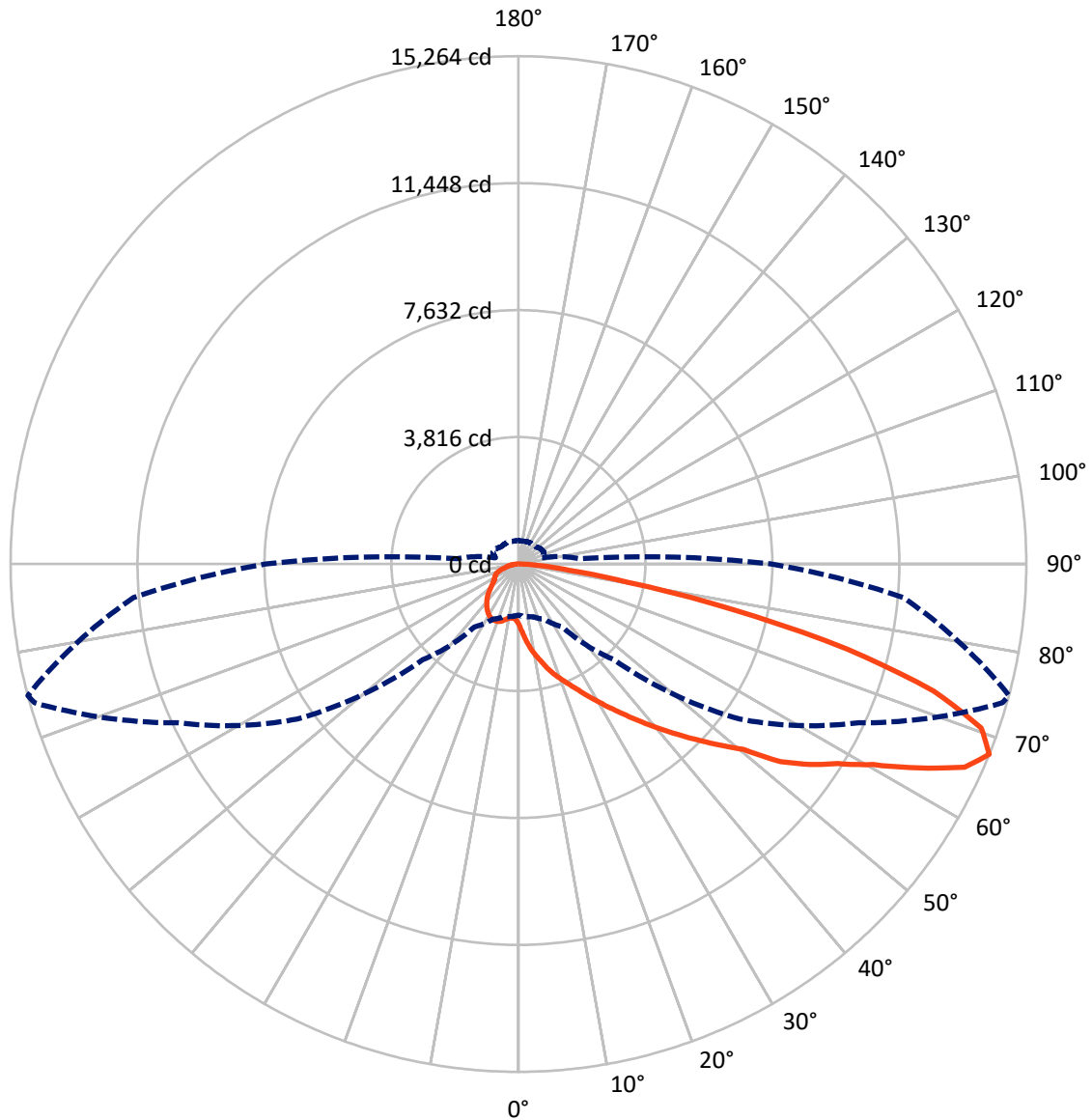


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
 Type II - Medium - Semi-Cutoff

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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	3127.2	0.0	3127.2
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	15185.7	0.0	15185.7
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	18312.9	0.0	18312.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.2	1.2
10°-20°	770.4	4.2
20°-30°	1405.2	7.7
30°-40°	2306.5	12.6
40°-50°	3335.4	18.2
50°-60°	3930.8	21.5
60°-70°	3819.8	20.9
70°-80°	2123.3	11.6
80°-90°	408.3	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°	18312.9	100.0
0°-180°	18312.9	100.0



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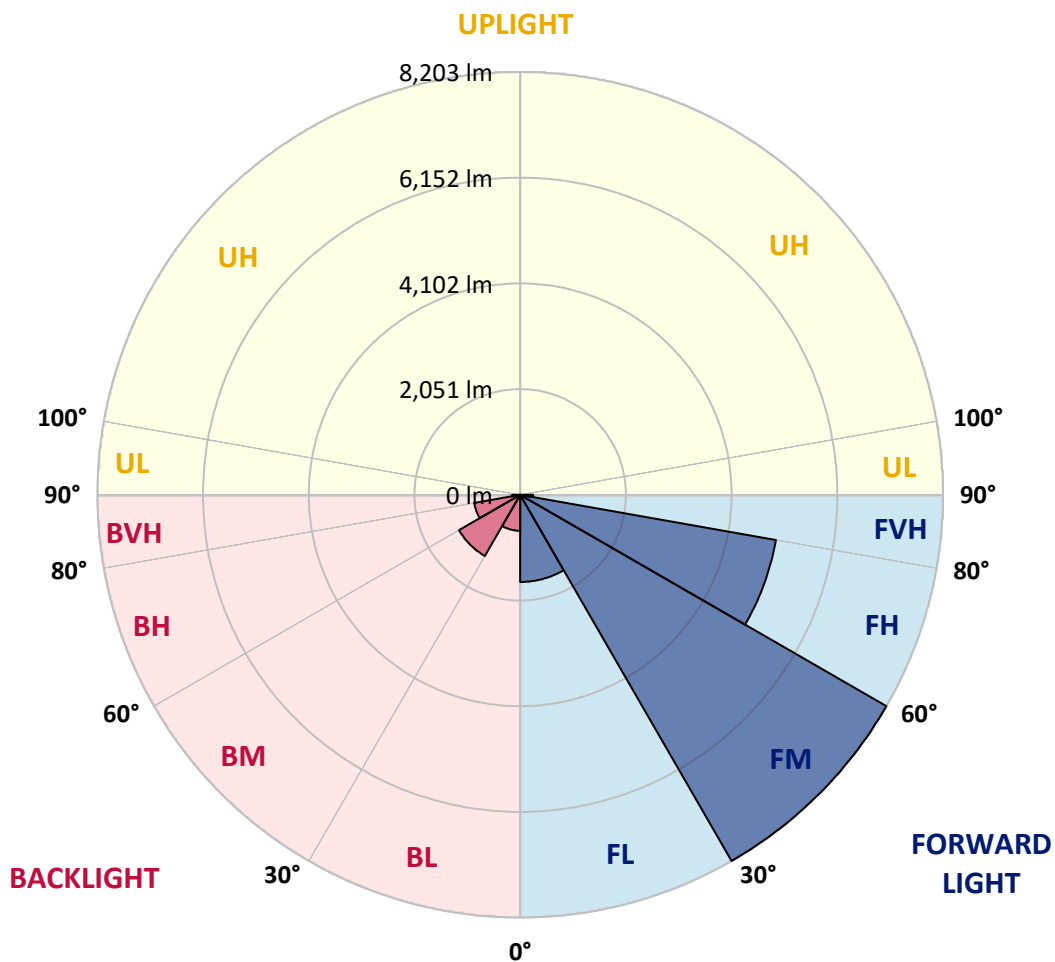
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1690.8	9.2			
FM (30°-60°)	8203.2	44.8			
FH (60°-80°)	5037.7	27.5			G3/7500
FVH (80°-90°)	254.1	1.4			G3/500
BL (0°-30°)	698.0	3.8	B2/1000		
BM (30°-60°)	1369.5	7.5	B2/2500		
BH (60°-80°)	905.5	4.9	B2/1000		G2/1000
BVH (80°-90°)	154.2	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°	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6
2.5°	2572.6	2580.3	2564.9	2530.5	2480.8	2388.9	2308.5	2166.8	2040.5	2025.1	1891.2
5°	3024.4	3032.0	3012.9	2970.8	2917.1	2817.6	2706.6	2522.9	2320.0	2281.7	1998.3
7.5°	3334.5	3338.3	3315.3	3273.2	3231.1	3131.6	3020.6	2813.8	2564.9	2534.4	2136.2
10°	3598.6	3606.3	3575.6	3548.8	3502.9	3403.4	3288.5	3070.3	2813.8	2771.7	2277.8
12.5°	3843.6	3851.3	3832.2	3809.2	3793.9	3702.0	3575.6	3315.3	3039.7	2993.8	2446.3
15°	4008.2	4015.9	4019.8	4050.4	4069.5	4004.4	3878.1	3594.8	3284.7	3242.5	2645.4
17.5°	3962.3	3981.4	4038.9	4149.9	4268.6	4272.5	4169.0	3870.4	3525.9	3480.0	2848.3
20°	3828.3	3843.6	3912.6	4081.0	4314.5	4448.5	4440.8	4149.9	3751.8	3702.0	3035.8
22.5°	3939.4	3958.5	3958.5	4061.8	4291.6	4540.4	4639.9	4425.6	3977.6	3931.7	3223.4
25°	4414.0	4425.6	4345.2	4303.0	4387.2	4617.0	4804.6	4724.2	4253.2	4199.6	3426.4
27.5°	5076.4	5057.3	4957.6	4789.3	4697.4	4758.6	4950.1	5007.4	4571.1	4505.9	3636.9
30°	5734.9	5723.3	5608.5	5382.7	5175.9	5045.7	5110.8	5260.1	4915.6	4839.0	3839.9
32.5°	6351.2	6332.1	6205.7	5941.6	5708.1	5466.9	5340.5	5489.8	5283.1	5195.1	4065.7
35°	6917.8	6868.0	6741.7	6466.1	6224.9	5995.1	5685.0	5708.1	5681.3	5589.4	4314.5
37.5°	7377.2	7338.9	7201.1	6944.6	6688.1	6469.9	6144.5	5956.8	6110.0	6021.9	4601.6
40°	7783.0	7740.9	7599.2	7342.7	7105.4	6898.7	6642.1	6259.3	6592.4	6492.9	4923.3
42.5°	8089.3	8058.6	7943.7	7691.1	7461.4	7273.8	7147.5	6642.1	7093.9	6998.2	5275.5
45°	8253.9	8223.2	8162.0	7959.1	7748.5	7603.1	7614.5	7097.7	7618.3	7537.9	5692.7
47.5°	8050.9	8073.9	8127.5	8089.3	7959.1	7890.2	8031.8	7568.6	8204.1	8127.5	6144.5
50°	7507.3	7530.4	7744.7	8008.9	8054.8	8139.0	8407.0	8112.2	8824.3	8763.0	6703.4
52.5°	6171.3	6297.6	6891.0	7522.7	7955.3	8303.6	8824.3	8920.0	9869.4	9869.4	7691.1
55°	4662.9	4773.9	5451.5	6554.0	7568.6	8318.9	9130.6	9467.4	10623.5	10638.9	8208.0
57.5°	3778.6	3847.4	4180.5	5309.9	6757.0	8127.5	9494.2	9938.4	11251.4	11320.4	8874.1
60°	3066.5	3104.8	3323.0	4107.8	5635.3	7610.8	9754.6	10612.1	12147.2	12243.0	9724.0
62.5°	2465.4	2503.8	2649.2	3120.1	4421.7	6642.1	9708.6	11312.7	13341.7	13498.7	10838.0
65°	1967.7	2009.9	2105.5	2396.6	3277.0	5440.1	9237.8	11672.6	14578.3	14731.4	11576.8
67.5°	1535.1	1573.4	1638.6	1830.0	2308.5	4069.5	8123.7	11293.6	15133.3	15263.6	11615.1
70°	1160.0	1179.2	1232.8	1355.2	1650.0	2702.8	6358.9	10022.6	14635.7	14754.3	10849.5
72.5°	899.7	895.8	926.5	987.7	1152.4	1860.5	4215.0	8150.5	12939.7	13062.3	9256.9
75°	735.0	731.2	750.3	769.5	834.6	1248.0	2488.4	6136.8	10443.7	10210.2	6944.6
77.5°	620.2	616.3	635.5	639.3	666.1	861.3	1416.5	4038.9	6967.5	6565.6	3912.6
80°	524.5	520.7	543.6	551.3	570.4	631.7	815.4	2185.9	3499.1	3315.3	1868.2
82.5°	394.3	409.6	451.7	470.9	493.9	467.1	505.3	964.7	1623.2	1550.5	811.6
85°	191.4	225.9	340.7	379.0	405.8	294.8	344.5	455.5	731.2	696.7	329.2
87.5°	65.1	57.4	202.9	241.2	264.1	134.0	191.4	252.7	302.5	275.7	103.3
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°	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6	1814.6
2.5°	1833.7	1776.4	1692.2	1627.0	1585.0	1550.5	1535.1	1531.4	1523.7	1519.8	1519.8
5°	1872.0	1768.7	1638.6	1569.6	1550.5	1535.1	1542.8	1546.6	1546.6	1546.6	1546.6
7.5°	1929.5	1784.0	1627.0	1581.1	1577.3	1577.3	1600.2	1611.8	1619.3	1619.3	1619.3
10°	2006.0	1810.8	1646.1	1607.9	1619.3	1627.0	1653.8	1669.1	1676.8	1680.6	1684.5
12.5°	2109.4	1868.2	1684.5	1653.8	1669.1	1672.9	1692.2	1699.7	1707.4	1711.3	1711.3
15°	2247.2	1952.4	1745.7	1707.4	1711.3	1707.4	1707.4	1699.7	1696.0	1696.0	1703.6
17.5°	2388.9	2032.8	1799.3	1745.7	1730.4	1699.7	1676.8	1657.7	1646.1	1638.6	1642.3
20°	2530.5	2105.5	1830.0	1753.3	1711.3	1661.5	1619.3	1592.6	1577.3	1561.9	1569.6
22.5°	2672.2	2174.5	1841.4	1730.4	1669.1	1596.4	1550.5	1508.3	1473.9	1451.0	1454.7
25°	2829.2	2251.0	1841.4	1703.6	1611.8	1535.1	1477.8	1408.8	1359.1	1340.0	1347.5
27.5°	2986.1	2316.2	1822.3	1653.8	1546.6	1470.1	1385.9	1305.5	1274.8	1263.3	1267.1
30°	3143.0	2365.9	1780.1	1592.6	1477.8	1393.5	1282.5	1228.9	1190.6	1160.0	1163.8
32.5°	3300.0	2400.4	1722.8	1516.0	1405.0	1297.8	1206.0	1144.7	1075.7	1037.5	1041.3
35°	3480.0	2427.2	1653.8	1439.5	1324.6	1213.6	1144.7	1045.1	972.4	941.7	934.2
37.5°	3667.5	2446.3	1581.1	1355.2	1244.2	1152.4	1083.4	961.0	892.0	849.9	846.1
40°	3870.4	2454.0	1493.0	1267.1	1167.6	1114.0	1003.0	911.1	792.5	765.7	765.7
42.5°	4111.6	2450.2	1405.0	1179.2	1083.4	1026.0	945.6	903.5	800.2	773.4	758.0
45°	4387.2	2450.2	1309.3	1075.7	999.2	914.9	880.6	853.8	784.8	796.3	803.9
47.5°	4701.2	2442.5	1194.4	991.5	930.3	857.5	838.4	781.0	754.2	761.8	769.5
50°	5133.8	2454.0	1091.1	922.6	880.6	819.3	796.3	765.7	754.2	758.0	754.2
52.5°	5734.9	2415.7	991.5	880.6	842.2	761.8	761.8	758.0	761.8	758.0	758.0
55°	6064.1	2331.4	918.8	857.5	815.4	735.0	750.3	758.0	765.7	761.8	761.8
57.5°	6531.1	2274.0	861.3	842.2	800.2	727.4	742.7	758.0	761.8	758.0	758.0
60°	7082.4	2235.8	823.1	846.1	788.6	727.4	746.5	758.0	754.2	750.3	750.3
62.5°	7721.7	2220.4	796.3	857.5	777.1	731.2	746.5	758.0	742.7	738.9	738.9
65°	7963.0	2082.6	761.8	865.2	784.8	731.2	742.7	746.5	727.4	723.5	719.7
67.5°	7591.5	1845.3	712.1	849.9	807.8	731.2	731.2	727.4	704.4	700.6	692.9
70°	6760.8	1531.4	635.5	800.2	823.1	735.0	715.9	696.7	673.8	673.8	658.5
72.5°	5535.8	1206.0	535.9	712.1	811.6	746.5	685.3	658.5	631.7	631.7	616.3
75°	3989.1	899.7	428.8	593.4	761.8	742.7	647.0	612.5	581.9	578.1	558.9
77.5°	2274.0	631.7	348.4	463.2	677.6	723.5	612.5	558.9	524.5	513.0	501.6
80°	1167.6	424.9	283.3	363.7	562.7	669.9	585.7	497.7	459.4	440.3	421.1
82.5°	555.2	283.3	218.2	268.0	424.9	585.7	551.3	428.8	386.7	363.7	340.7
85°	248.9	168.5	145.5	172.3	302.5	455.5	486.2	352.2	302.5	379.0	279.5
87.5°	80.4	76.5	76.5	80.4	145.5	199.1	356.0	260.3	241.2	199.1	168.5
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)