

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: P265662

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265662
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-AF72-190-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20376.6 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 189
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

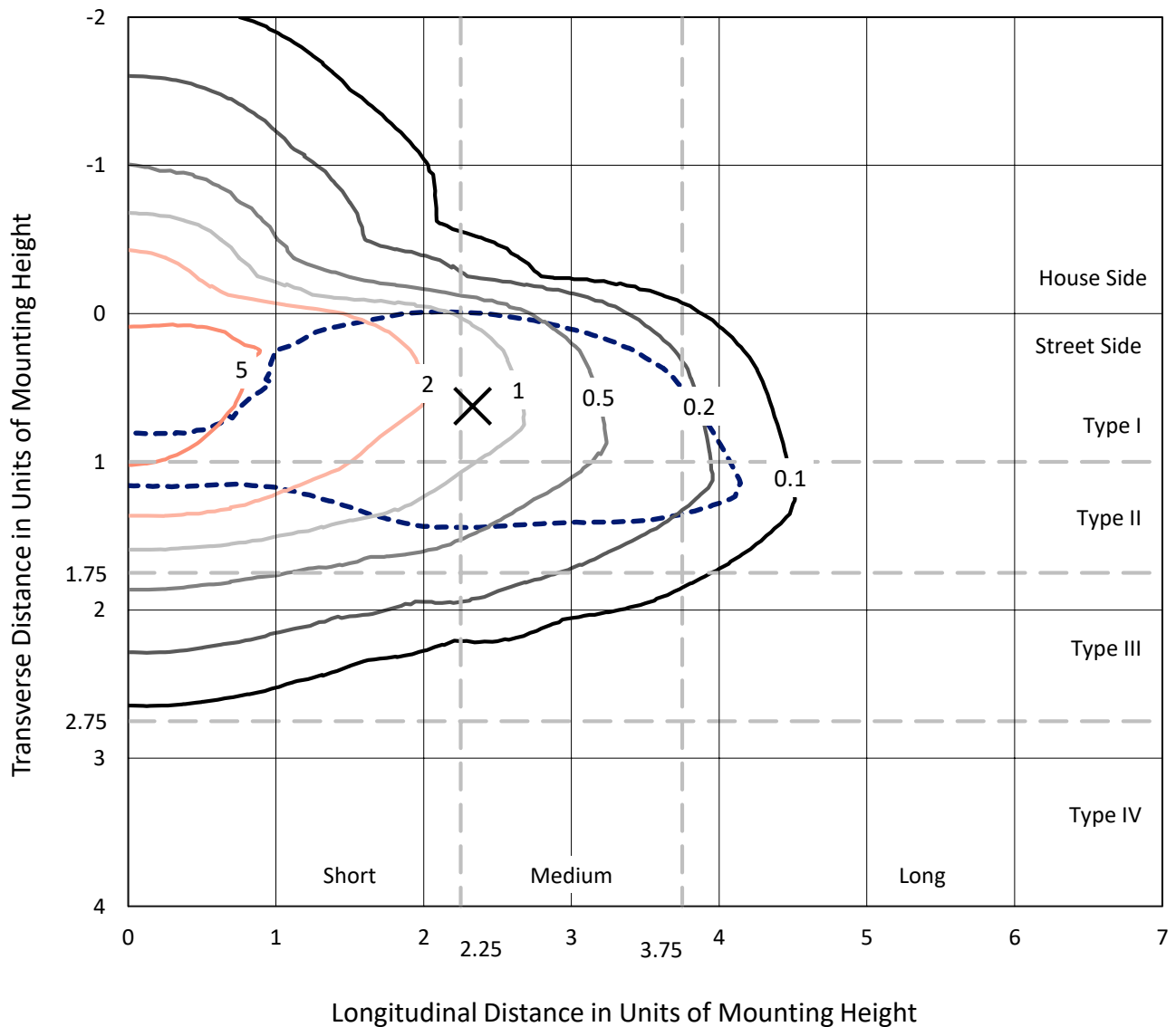


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

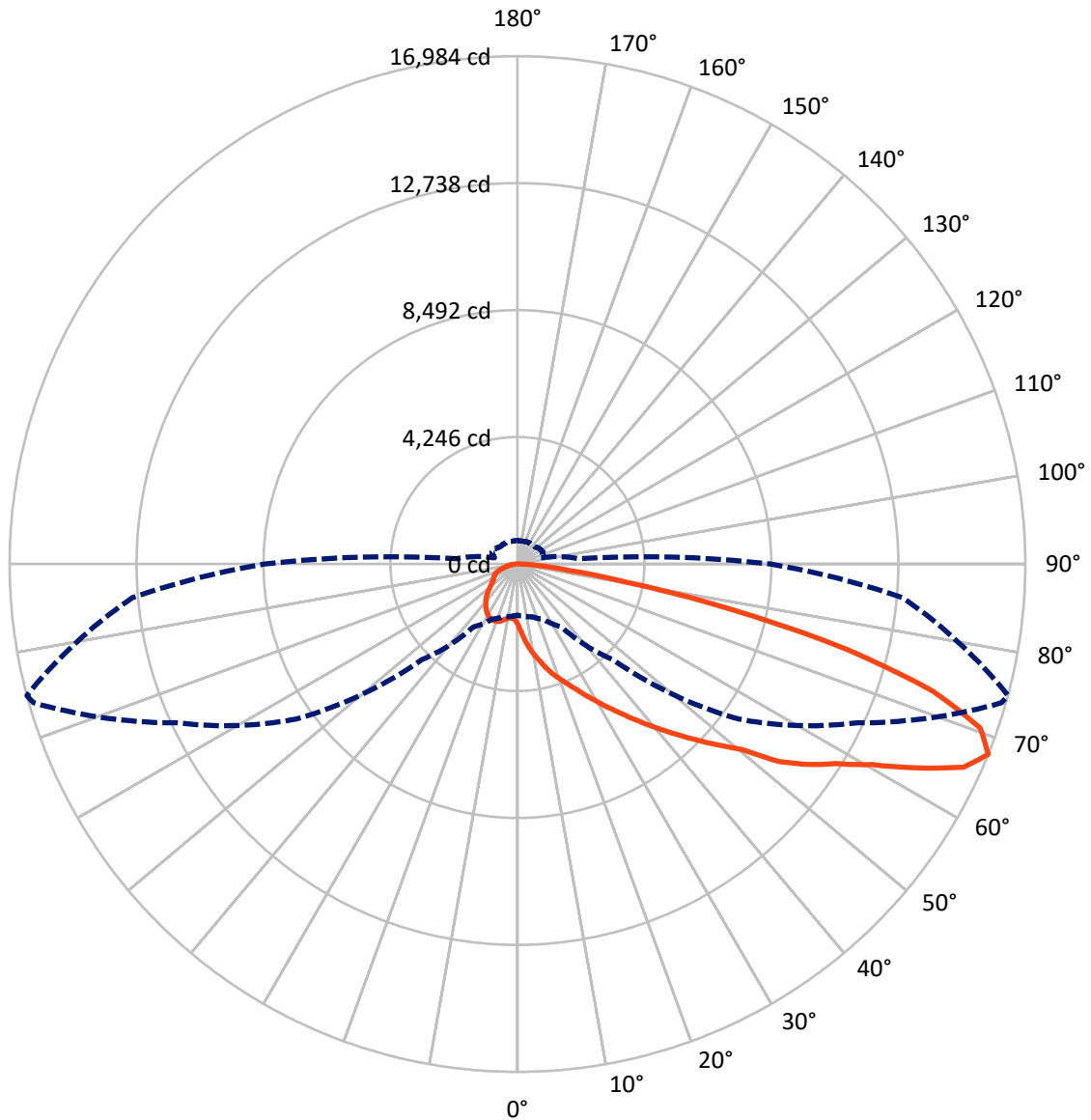


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Medium - Semi-Cutoff

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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
House Side	Lumens	3479.6	0.0	3479.6
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	16897.0	0.0	16897.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	20376.6	0.0	20376.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.2	1.2
10°-20°	857.2	4.2
20°-30°	1563.5	7.7
30°-40°	2566.4	12.6
40°-50°	3711.3	18.2
50°-60°	4373.8	21.5
60°-70°	4250.3	20.9
70°-80°	2362.6	11.6
80°-90°	454.3	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°	20376.6	100.0
0°-180°	20376.6	100.0



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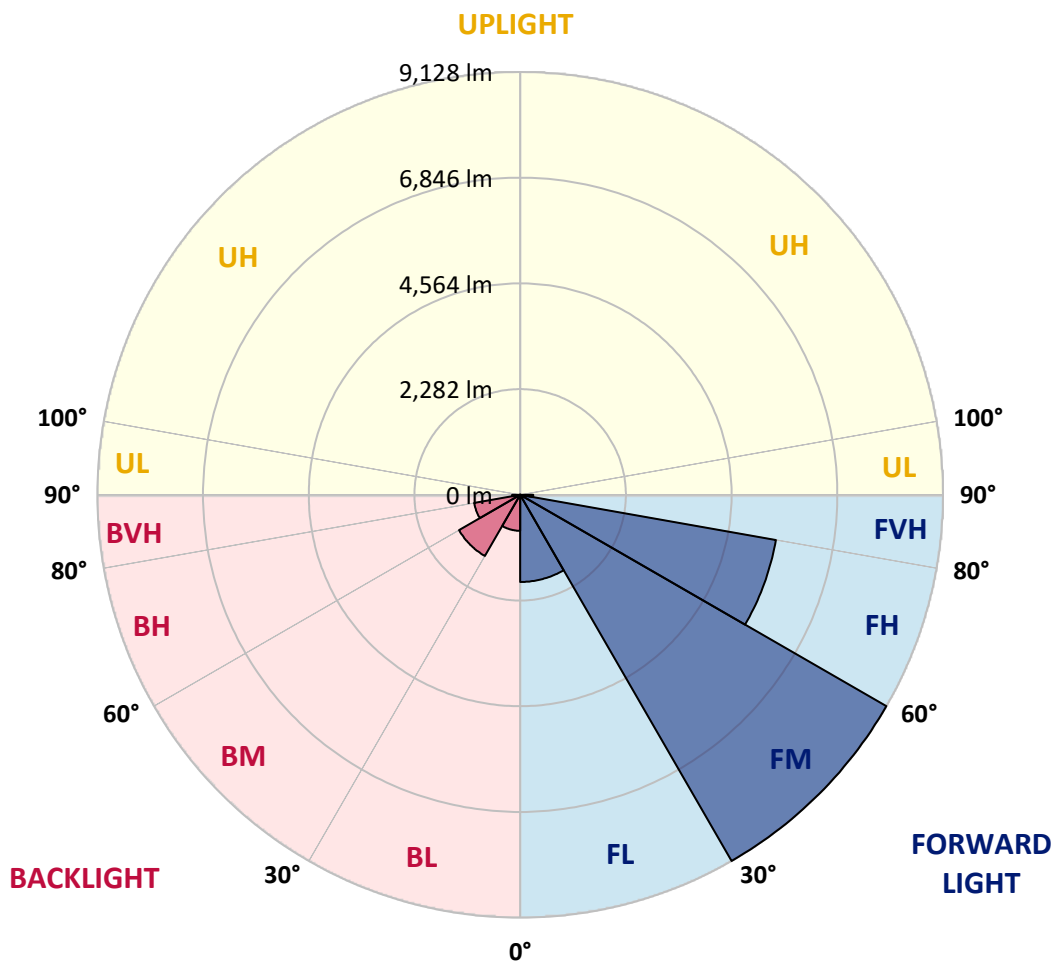
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1881.3	9.2			
FM	(30°-60°)	9127.6	44.8			
FH	(60°-80°)	5605.3	27.5			G3/7500
FVH	(80°-90°)	282.7	1.4			G3/500
BL	(0°-30°)	776.6	3.8	B2/1000		
BM	(30°-60°)	1523.9	7.5	B2/2500		
BH	(60°-80°)	1007.5	4.9	B3/2500		G3/2500
BVH	(80°-90°)	171.6	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1
2.5°	2862.5	2871.1	2854.1	2815.6	2760.3	2658.1	2568.7	2411.1	2270.5	2253.4	2104.3
5°	3365.2	3373.8	3352.5	3305.6	3245.9	3135.2	3011.7	2807.2	2581.4	2538.8	2223.6
7.5°	3710.2	3714.5	3688.9	3642.1	3595.2	3484.4	3360.9	3131.0	2854.1	2820.0	2376.9
10°	4004.1	4012.6	3978.7	3948.8	3897.7	3787.0	3659.2	3416.3	3131.0	3084.1	2534.6
12.5°	4276.8	4285.3	4264.0	4238.5	4221.3	4119.2	3978.7	3688.9	3382.2	3331.2	2722.0
15°	4459.9	4468.4	4472.8	4506.7	4528.0	4455.8	4315.1	4000.0	3654.8	3608.0	2943.4
17.5°	4408.8	4430.1	4494.0	4617.6	4749.6	4753.9	4638.8	4306.7	3923.2	3872.1	3169.2
20°	4259.8	4276.8	4353.5	4540.9	4800.7	4949.8	4941.2	4617.6	4174.6	4119.2	3377.9
22.5°	4383.3	4404.6	4404.6	4519.6	4775.2	5052.1	5162.7	4924.2	4425.9	4374.7	3586.8
25°	4911.5	4924.2	4834.8	4788.0	4881.7	5137.2	5346.0	5256.5	4732.6	4673.0	3812.4
27.5°	5648.5	5627.2	5516.3	5328.9	5226.7	5294.9	5507.9	5571.7	5086.2	5013.7	4046.8
30°	6381.1	6368.4	6240.5	5989.2	5759.2	5614.3	5686.7	5852.8	5469.5	5384.4	4272.5
32.5°	7066.8	7045.5	6905.0	6611.0	6351.2	6083.0	5942.4	6108.5	5878.5	5780.5	4523.9
35°	7697.3	7642.1	7501.3	7194.6	6926.3	6670.8	6325.8	6351.2	6321.5	6219.2	4800.7
37.5°	8208.5	8166.0	8012.5	7727.2	7441.7	7198.9	6836.9	6628.1	6798.6	6700.5	5120.2
40°	8660.0	8613.2	8455.6	8170.2	7906.1	7676.0	7390.6	6964.6	7335.3	7224.4	5478.0
42.5°	9000.8	8966.7	8839.0	8557.9	8302.2	8093.5	7953.0	7390.6	7893.2	7786.8	5870.0
45°	9184.0	9150.0	9081.8	8856.0	8621.8	8459.9	8472.6	7897.5	8476.9	8387.5	6334.2
47.5°	8958.2	8983.8	9043.4	9000.8	8856.0	8779.3	8936.9	8421.5	9128.7	9043.4	6836.9
50°	8353.3	8378.9	8617.4	8911.4	8962.5	9056.3	9354.4	9026.3	9818.7	9750.6	7458.7
52.5°	6866.7	7007.3	7667.6	8370.3	8851.7	9239.3	9818.7	9925.3	10981.6	10981.6	8557.9
55°	5188.4	5311.9	6065.9	7292.7	8421.5	9256.5	10159.6	10534.3	11820.7	11837.9	9132.9
57.5°	4204.3	4281.1	4651.7	5908.2	7518.5	9043.4	10564.2	11058.2	12519.4	12596.0	9874.1
60°	3412.0	3454.6	3697.5	4570.7	6270.3	8468.3	10853.9	11808.0	13516.2	13622.6	10819.7
62.5°	2743.2	2785.9	2947.8	3471.7	4919.9	7390.6	10802.7	12587.5	14845.2	15019.8	12059.2
65°	2189.4	2236.4	2342.9	2666.6	3646.3	6053.0	10278.8	12988.0	16221.1	16391.5	12881.4
67.5°	1708.1	1750.7	1823.2	2036.2	2568.7	4528.0	9039.1	12566.2	16838.8	16983.5	12924.0
70°	1290.8	1312.1	1371.6	1508.0	1836.0	3007.3	7075.4	11152.0	16285.0	16417.1	12072.1
72.5°	1001.0	996.8	1030.8	1098.9	1282.2	2070.2	4690.1	9069.0	14397.9	14534.2	10300.1
75°	817.8	813.7	835.0	856.3	928.6	1388.7	2768.8	6828.3	11620.6	11360.8	7727.2
77.5°	690.1	685.9	707.1	711.4	741.2	958.4	1576.0	4494.0	7752.7	7305.5	4353.5
80°	583.5	579.3	604.9	613.5	634.7	702.8	907.3	2432.3	3893.4	3688.9	2078.8
82.5°	438.7	455.8	502.6	523.9	549.6	519.7	562.2	1073.5	1806.1	1725.1	903.1
85°	213.0	251.3	379.2	421.8	451.6	328.1	383.3	507.0	813.7	775.2	366.2
87.5°	72.5	63.9	225.7	268.4	293.9	149.1	213.0	281.1	336.5	306.7	115.1
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°	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1	2019.1
2.5°	2040.4	1976.5	1882.8	1810.4	1763.6	1725.1	1708.1	1703.8	1695.5	1691.1	1691.1
5°	2083.0	1967.9	1823.2	1746.5	1725.1	1708.1	1716.8	1721.0	1721.0	1721.0	1721.0
7.5°	2146.9	1985.1	1810.4	1759.3	1755.0	1755.0	1780.6	1793.3	1801.9	1801.9	1801.9
10°	2232.1	2014.9	1831.6	1789.1	1801.9	1810.4	1840.2	1857.2	1865.8	1870.0	1874.3
12.5°	2347.1	2078.8	1874.3	1840.2	1857.2	1861.5	1882.8	1891.3	1899.8	1904.0	1904.0
15°	2500.4	2172.6	1942.4	1899.8	1904.0	1899.8	1899.8	1891.3	1887.1	1887.1	1895.6
17.5°	2658.1	2261.9	2002.1	1942.4	1925.3	1891.3	1865.8	1844.5	1831.6	1823.2	1827.4
20°	2815.6	2342.9	2036.2	1950.9	1904.0	1848.7	1801.9	1772.0	1755.0	1738.0	1746.5
22.5°	2973.3	2419.6	2048.9	1925.3	1857.2	1776.3	1725.1	1678.4	1639.9	1614.4	1618.7
25°	3147.9	2504.7	2048.9	1895.6	1793.3	1708.1	1644.3	1567.6	1512.1	1490.8	1499.5
27.5°	3322.7	2577.1	2027.7	1840.2	1721.0	1635.8	1542.0	1452.6	1418.6	1405.7	1410.0
30°	3497.2	2632.6	1980.9	1772.0	1644.3	1550.6	1427.0	1367.4	1324.8	1290.8	1294.9
32.5°	3671.9	2670.8	1916.9	1686.8	1563.3	1444.0	1341.8	1273.6	1197.0	1154.4	1158.6
35°	3872.1	2700.7	1840.2	1601.7	1473.8	1350.3	1273.6	1162.9	1082.0	1048.0	1039.3
37.5°	4080.8	2722.0	1759.3	1508.0	1384.4	1282.2	1205.5	1069.3	992.4	945.6	941.5
40°	4306.7	2730.5	1661.2	1410.0	1299.2	1239.7	1116.1	1013.7	881.7	852.0	852.0
42.5°	4575.0	2726.3	1563.3	1312.1	1205.5	1141.6	1052.2	1005.4	890.3	860.4	843.4
45°	4881.7	2726.3	1456.8	1197.0	1111.8	1018.0	979.7	949.9	873.2	886.0	894.5
47.5°	5231.0	2717.7	1329.0	1103.3	1035.0	954.2	932.9	869.0	839.1	847.7	856.3
50°	5712.3	2730.5	1214.0	1026.7	979.7	911.6	886.0	852.0	839.1	843.4	839.1
52.5°	6381.1	2687.9	1103.3	979.7	937.1	847.7	847.7	843.4	847.7	843.4	843.4
55°	6747.3	2594.1	1022.4	954.2	907.3	817.8	835.0	843.4	852.0	847.7	847.7
57.5°	7267.1	2530.3	958.4	937.1	890.3	809.4	826.4	843.4	847.7	843.4	843.4
60°	7880.6	2487.6	915.8	941.5	877.6	809.4	830.7	843.4	839.1	835.0	835.0
62.5°	8591.8	2470.7	886.0	954.2	864.7	813.7	830.7	843.4	826.4	822.0	822.0
65°	8860.3	2317.3	847.7	962.8	873.2	813.7	826.4	830.7	809.4	805.2	800.7
67.5°	8447.0	2053.2	792.3	945.6	898.8	813.7	813.7	809.4	783.9	779.5	771.0
70°	7522.6	1703.8	707.1	890.3	915.8	817.8	796.5	775.2	749.7	749.7	732.7
72.5°	6159.6	1341.8	596.4	792.3	903.1	830.7	762.5	732.7	702.8	702.8	685.9
75°	4438.6	1001.0	477.1	660.3	847.7	826.4	719.9	681.5	647.5	643.2	621.9
77.5°	2530.3	702.8	387.6	515.4	753.9	805.2	681.5	621.9	583.5	570.9	558.0
80°	1299.2	472.9	315.2	404.6	626.2	745.5	651.7	553.7	511.1	489.8	468.6
82.5°	617.7	315.2	242.8	298.1	472.9	651.7	613.5	477.1	430.3	404.6	379.2
85°	276.9	187.4	161.9	191.7	336.5	507.0	541.0	391.9	336.5	421.8	311.0
87.5°	89.4	85.2	85.2	89.4	161.9	221.5	396.2	289.7	268.4	221.5	187.4
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)