

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: P265743

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265743
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-AF72-280-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26370.5 lumens
Efficiency: N/A
Efficacy: 94.5 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

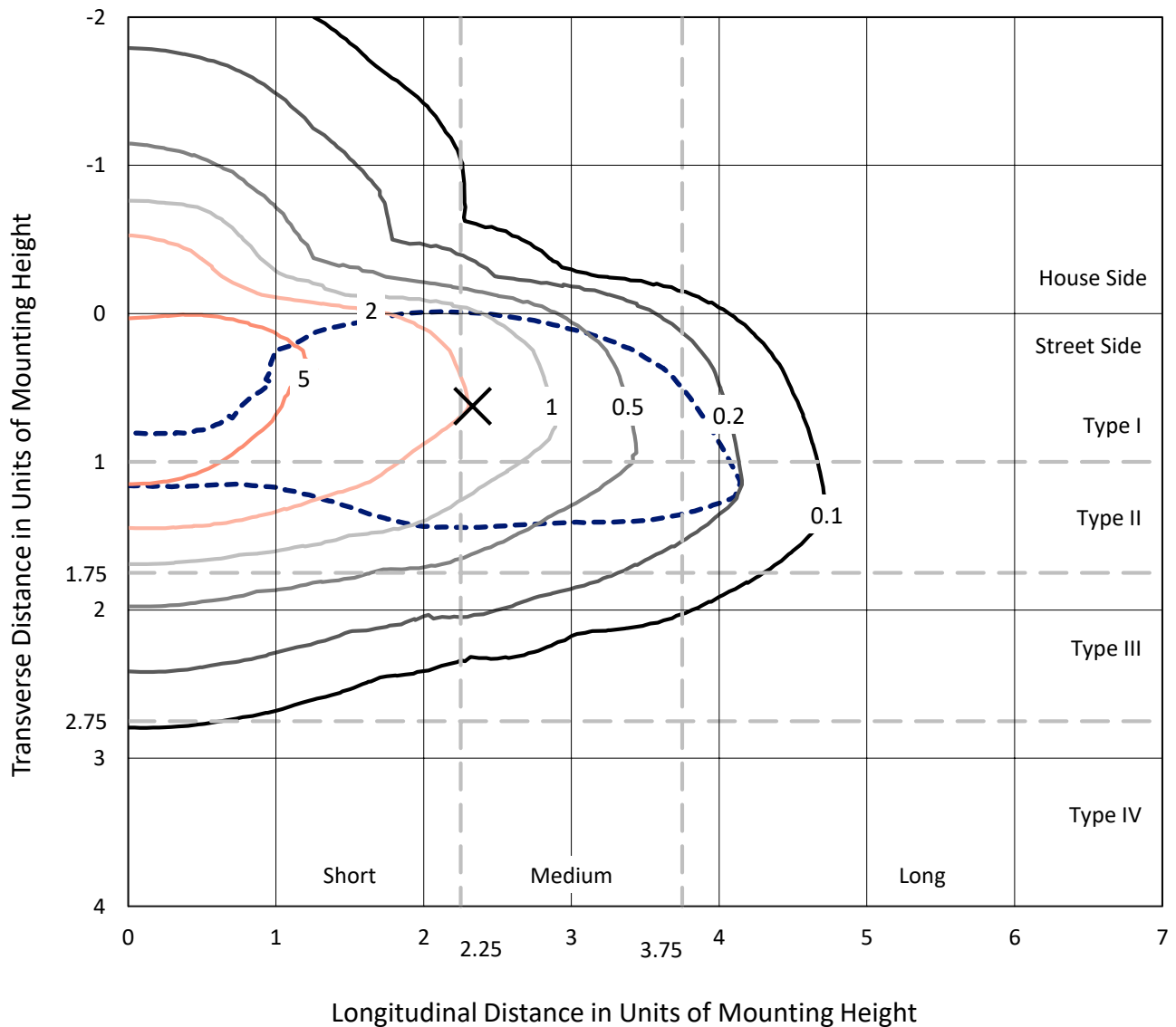
Input Watts (W): 279
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

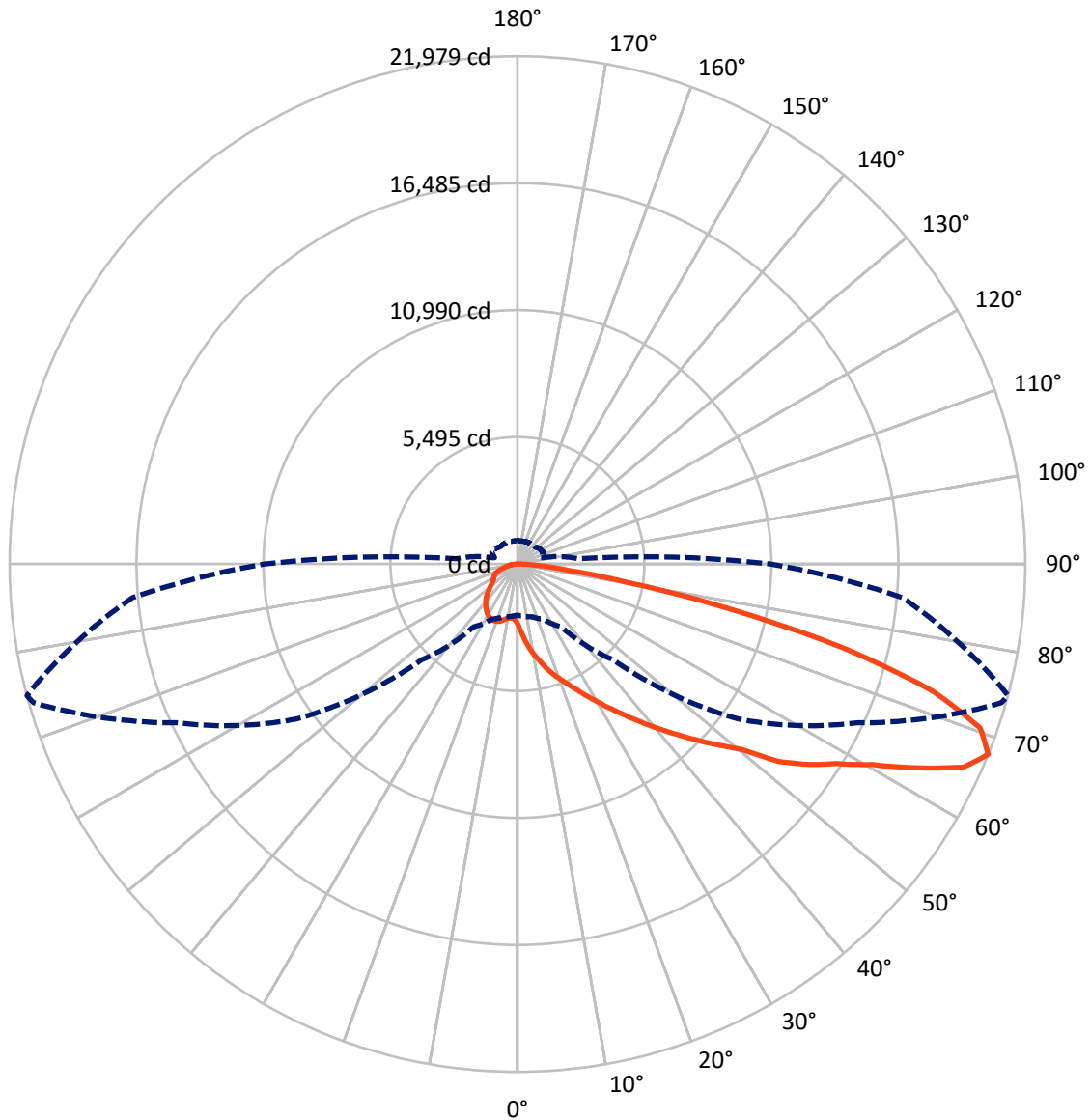
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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	4503.1	0.0	4503.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	21867.3	0.0	21867.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	26370.5	0.0	26370.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.0	1.2
10°-20°	1109.4	4.2
20°-30°	2023.4	7.7
30°-40°	3321.3	12.6
40°-50°	4803.0	18.2
50°-60°	5660.4	21.5
60°-70°	5500.5	20.9
70°-80°	3057.5	11.6
80°-90°	587.9	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°	26370.5	100.0
0°-180°	26370.5	100.0

Coefficient of Utilization



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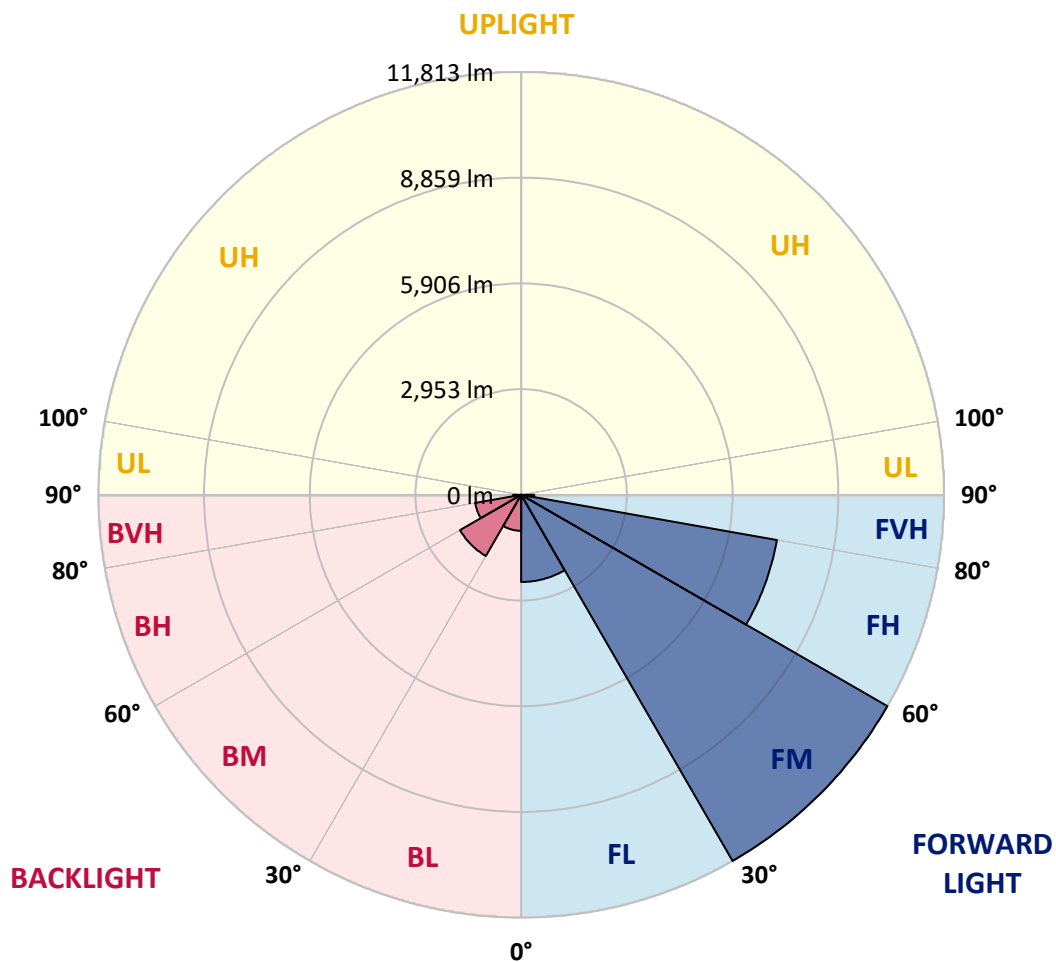
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2434.7	9.2			
FM (30°-60°)	11812.6	44.8			
FH (60°-80°)	7254.2	27.5			G3/7500
FVH (80°-90°)	365.9	1.4			G3/500
BL (0°-30°)	1005.1	3.8	B3/2500		
BM (30°-60°)	1972.1	7.5	B2/2500		
BH (60°-80°)	1303.9	4.9	B3/2500		G3/2500
BVH (80°-90°)	222.0	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°	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1
2.5°	3704.6	3715.6	3693.6	3644.0	3572.3	3440.0	3324.2	3120.3	2938.3	2916.3	2723.3
5°	4355.2	4366.1	4338.5	4277.9	4200.7	4057.5	3897.6	3632.9	3340.7	3285.6	2877.7
7.5°	4801.6	4807.1	4774.0	4713.4	4652.9	4509.4	4349.6	4051.9	3693.6	3649.5	3076.2
10°	5182.1	5193.0	5148.9	5110.4	5044.3	4900.9	4735.4	4421.3	4051.9	3991.3	3280.2
12.5°	5534.8	5545.9	5518.3	5485.2	5463.1	5330.8	5148.9	4774.0	4377.1	4311.0	3522.7
15°	5771.9	5782.8	5788.4	5832.5	5860.1	5766.4	5584.5	5176.6	4729.9	4669.3	3809.4
17.5°	5705.8	5733.3	5815.9	5975.9	6146.7	6152.2	6003.5	5573.4	5077.3	5011.1	4101.5
20°	5512.8	5534.8	5634.1	5876.6	6212.9	6405.9	6394.9	5975.9	5402.4	5330.8	4371.6
22.5°	5672.6	5700.3	5700.3	5849.0	6179.8	6538.1	6681.5	6372.8	5727.8	5661.6	4641.7
25°	6356.2	6372.8	6257.0	6196.4	6317.6	6648.4	6918.6	6802.8	6124.6	6047.5	4933.9
27.5°	7310.0	7282.4	7139.0	6896.5	6764.1	6852.5	7128.1	7210.8	6582.2	6488.5	5237.1
30°	8258.1	8241.6	8076.2	7750.9	7453.2	7265.9	7359.5	7574.6	7078.5	6968.2	5529.2
32.5°	9145.6	9118.2	8936.2	8555.7	8219.5	7872.2	7690.3	7905.4	7607.7	7480.8	5854.6
35°	9961.6	9889.9	9708.1	9311.0	8963.7	8633.0	8186.4	8219.5	8181.0	8048.6	6212.9
37.5°	10623.0	10568.0	10369.6	10000.1	9630.8	9316.6	8847.9	8577.8	8798.4	8671.6	6626.3
40°	11207.4	11146.8	10942.9	10573.5	10231.8	9933.9	9564.7	9013.4	9493.0	9349.6	7089.5
42.5°	11648.5	11604.3	11438.9	11075.2	10744.4	10474.2	10292.3	9564.7	10215.2	10077.4	7596.5
45°	11885.6	11841.5	11753.2	11461.0	11157.8	10948.4	10964.9	10220.6	10970.5	10854.6	8197.6
47.5°	11593.3	11626.5	11703.6	11648.5	11461.0	11361.9	11565.8	10898.7	11813.9	11703.6	8847.9
50°	10810.6	10843.6	11152.4	11532.7	11598.8	11720.1	12106.1	11681.6	12707.0	12618.8	9652.8
52.5°	8886.7	9068.5	9922.9	10832.7	11455.5	11957.2	12707.0	12844.8	14211.9	14211.9	11075.2
55°	6714.6	6874.4	7850.2	9437.9	10898.7	11979.3	13148.0	13633.0	15298.0	15320.0	11819.4
57.5°	5441.2	5540.3	6019.9	7646.3	9730.0	11703.6	13671.7	14311.2	16202.0	16301.3	12778.6
60°	4415.7	4470.9	4785.1	5915.2	8114.7	10959.4	14046.5	15281.3	17492.1	17629.9	14002.4
62.5°	3550.2	3605.3	3814.8	4493.0	6367.2	9564.7	13980.4	16290.3	19212.1	19438.1	15606.7
65°	2833.6	2894.2	3032.0	3451.0	4718.9	7833.6	13302.3	16808.5	20992.6	21213.1	16670.7
67.5°	2210.5	2265.7	2359.5	2635.1	3324.2	5860.1	11698.1	16262.6	21792.0	21979.4	16725.7
70°	1670.4	1697.9	1775.1	1951.5	2375.9	3891.9	9156.8	14432.3	21075.3	21246.3	15623.2
72.5°	1295.4	1290.0	1334.2	1422.2	1659.3	2679.3	6069.6	11736.6	18633.2	18809.6	13329.9
75°	1058.5	1053.0	1080.5	1108.1	1201.8	1797.1	3583.2	8836.9	15038.9	14702.6	10000.1
77.5°	893.0	887.5	915.2	920.7	959.2	1240.4	2039.7	5815.9	10033.2	9454.4	5634.1
80°	755.2	749.7	782.9	793.8	821.4	909.7	1174.3	3147.8	5038.7	4774.0	2690.2
82.5°	567.8	589.8	650.6	678.1	711.2	672.6	727.6	1389.1	2337.4	2232.6	1168.8
85°	275.6	325.2	490.7	545.8	584.3	424.4	496.1	656.0	1053.0	1003.3	474.0
87.5°	93.8	82.7	292.2	347.4	380.4	193.0	275.6	363.9	435.5	397.0	148.8
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°	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1	2613.1
2.5°	2640.6	2558.0	2436.7	2342.9	2282.2	2232.6	2210.5	2205.1	2194.1	2188.6	2188.6
5°	2695.8	2547.0	2359.5	2260.2	2232.6	2210.5	2221.7	2227.2	2227.2	2227.2	2227.2
7.5°	2778.5	2569.0	2342.9	2276.8	2271.3	2271.3	2304.3	2321.0	2331.9	2331.9	2331.9
10°	2888.7	2607.5	2370.4	2315.3	2331.9	2342.9	2381.5	2403.5	2414.6	2420.2	2425.7
12.5°	3037.4	2690.2	2425.7	2381.5	2403.5	2409.1	2436.7	2447.7	2458.8	2464.2	2464.2
15°	3236.1	2811.5	2513.8	2458.8	2464.2	2458.8	2458.8	2447.7	2442.1	2442.1	2453.2
17.5°	3440.0	2927.2	2591.0	2513.8	2491.8	2447.7	2414.6	2387.1	2370.4	2359.5	2365.0
20°	3644.0	3032.0	2635.1	2524.9	2464.2	2392.5	2331.9	2293.4	2271.3	2249.1	2260.2
22.5°	3847.9	3131.2	2651.6	2491.8	2403.5	2298.9	2232.6	2172.0	2122.4	2089.4	2094.8
25°	4074.0	3241.5	2651.6	2453.2	2321.0	2210.5	2127.9	2028.7	1957.0	1929.5	1940.5
27.5°	4299.9	3335.2	2624.0	2381.5	2227.2	2116.9	1995.7	1879.9	1835.7	1819.2	1824.7
30°	4526.0	3406.9	2563.5	2293.4	2127.9	2006.6	1846.7	1769.7	1714.4	1670.4	1675.9
32.5°	4752.0	3456.5	2480.8	2183.1	2023.3	1868.8	1736.6	1648.3	1549.0	1493.9	1499.5
35°	5011.1	3495.0	2381.5	2072.7	1907.5	1747.6	1648.3	1505.0	1400.3	1356.1	1345.1
37.5°	5281.2	3522.7	2276.8	1951.5	1791.7	1659.3	1560.0	1383.7	1284.4	1223.9	1218.3
40°	5573.4	3533.8	2150.0	1824.7	1681.4	1604.3	1444.4	1312.1	1141.1	1102.6	1102.6
42.5°	5920.6	3528.2	2023.3	1697.9	1560.0	1477.4	1361.7	1301.0	1152.2	1113.5	1091.5
45°	6317.6	3528.2	1885.4	1549.0	1438.8	1317.5	1268.0	1229.3	1130.1	1146.6	1157.6
47.5°	6769.6	3517.1	1720.0	1427.8	1339.6	1234.9	1207.3	1124.6	1086.1	1097.0	1108.1
50°	7392.6	3533.8	1571.1	1328.6	1268.0	1179.7	1146.6	1102.6	1086.1	1091.5	1086.1
52.5°	8258.1	3478.5	1427.8	1268.0	1212.8	1097.0	1097.0	1091.5	1097.0	1091.5	1091.5
55°	8732.2	3357.2	1323.1	1234.9	1174.3	1058.5	1080.5	1091.5	1102.6	1097.0	1097.0
57.5°	9404.7	3274.6	1240.4	1212.8	1152.2	1047.5	1069.5	1091.5	1097.0	1091.5	1091.5
60°	10198.5	3219.4	1185.3	1218.3	1135.6	1047.5	1075.0	1091.5	1086.1	1080.5	1080.5
62.5°	11119.3	3197.3	1146.6	1234.9	1119.1	1053.0	1075.0	1091.5	1069.5	1064.0	1064.0
65°	11466.5	2998.9	1097.0	1245.9	1130.1	1053.0	1069.5	1075.0	1047.5	1041.9	1036.5
67.5°	10931.8	2657.1	1025.3	1223.9	1163.1	1053.0	1053.0	1047.5	1014.4	1008.8	997.7
70°	9735.6	2205.1	915.2	1152.2	1185.3	1058.5	1030.8	1003.3	970.3	970.3	948.3
72.5°	7971.5	1736.6	771.7	1025.3	1168.8	1075.0	986.8	948.3	909.7	909.7	887.5
75°	5744.3	1295.4	617.5	854.5	1097.0	1069.5	931.6	882.0	837.9	832.4	804.9
77.5°	3274.6	909.7	501.7	667.0	975.7	1041.9	882.0	804.9	755.2	738.6	722.1
80°	1681.4	611.9	407.9	523.7	810.5	964.7	843.5	716.7	661.5	633.9	606.4
82.5°	799.3	407.9	314.2	385.9	611.9	843.5	793.8	617.5	556.8	523.7	490.7
85°	358.3	242.5	209.5	248.1	435.5	656.0	700.0	507.2	435.5	545.8	402.4
87.5°	115.8	110.2	110.2	115.8	209.5	286.6	512.8	374.9	347.4	286.6	242.5
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)