

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: P236860

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236860
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-AF72-270-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30594.4 lumens
Efficiency: N/A
Efficacy: 112.1 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 - G4

Input Watts (W): 273
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

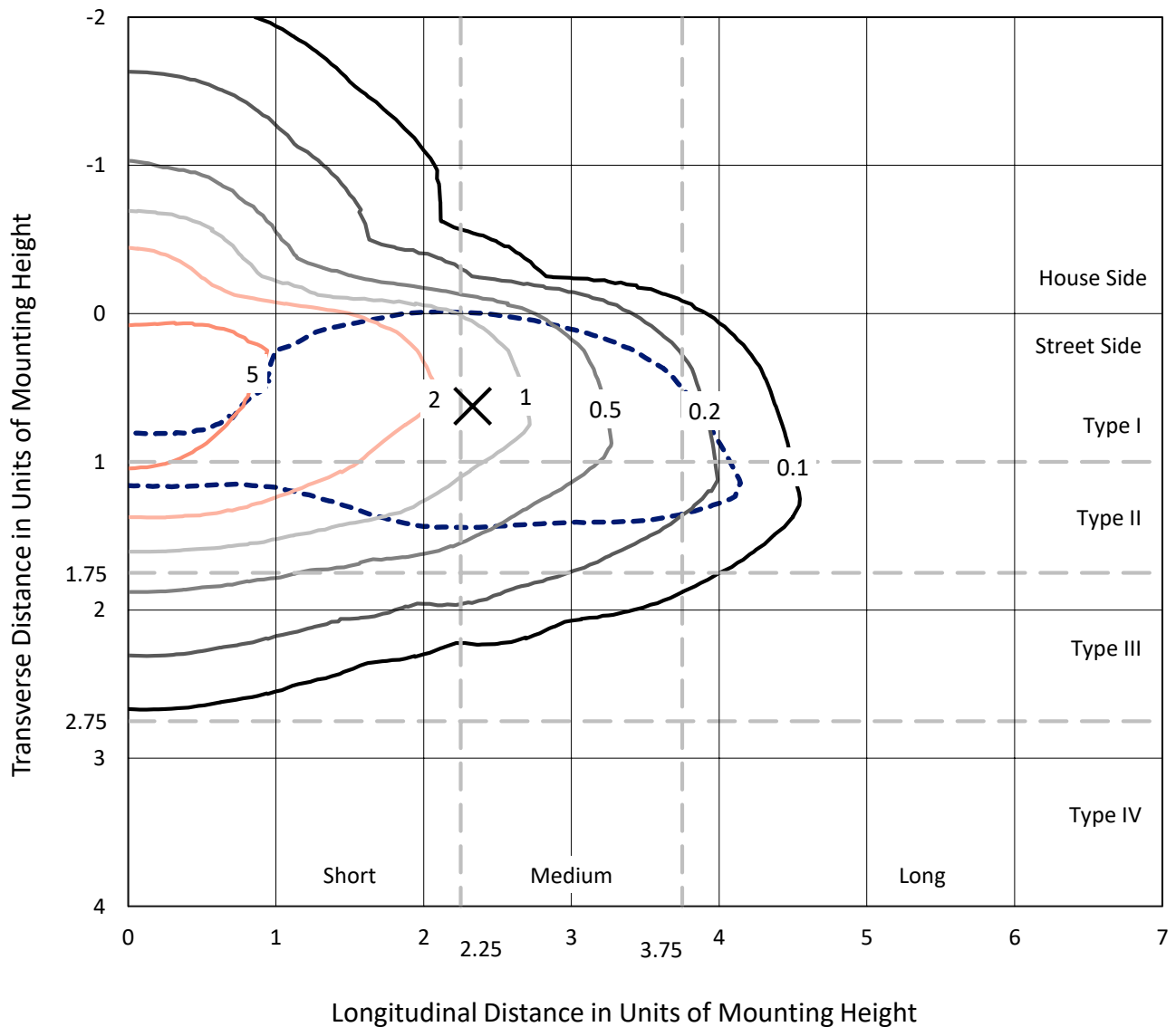


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

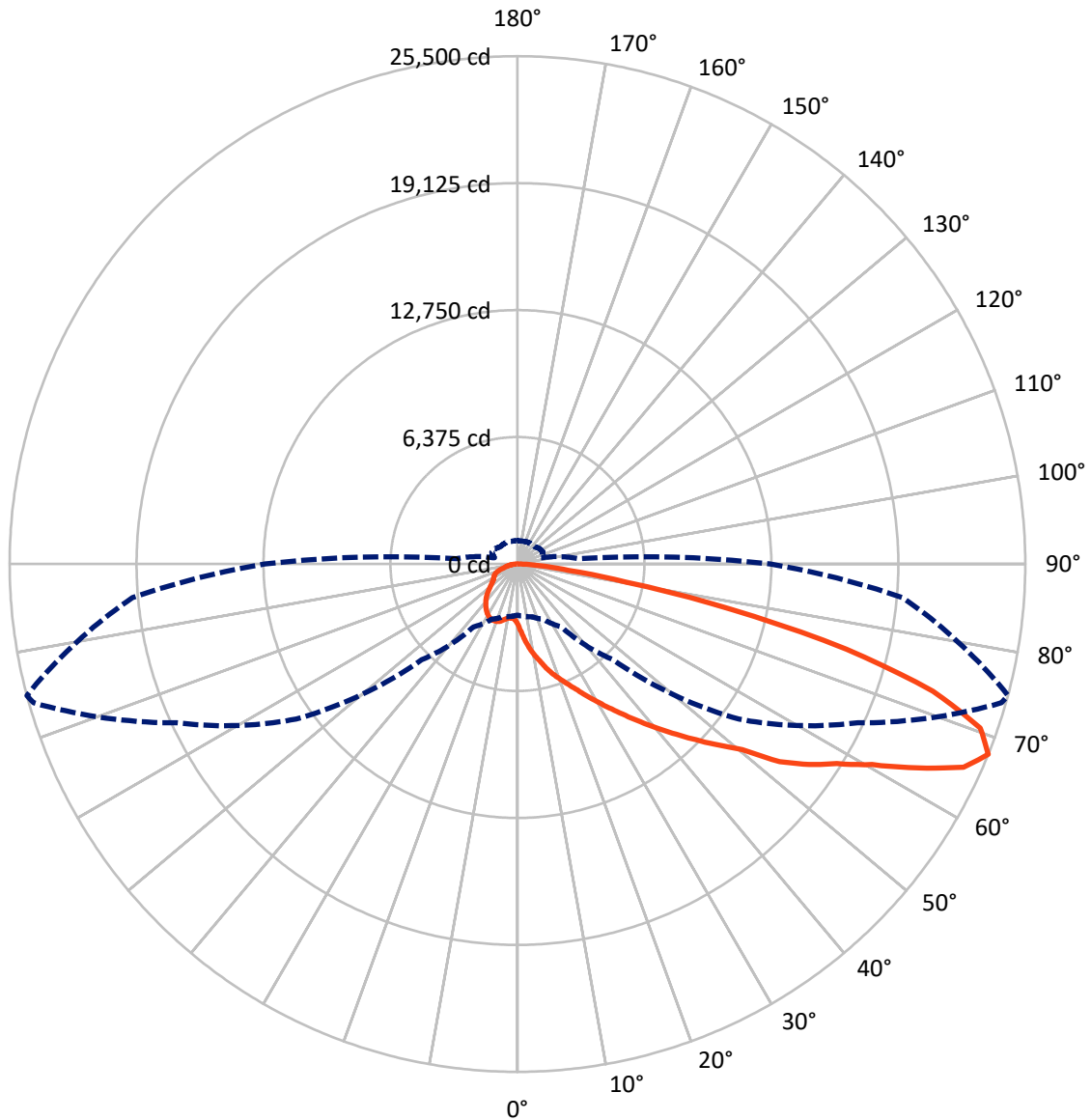


Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - Semi-Cutoff

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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
House Side	Lumens	5224.4	0.0	5224.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	25370.0	0.0	25370.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	30594.4	0.0	30594.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.2	1.2
10°-20°	1287.1	4.2
20°-30°	2347.5	7.7
30°-40°	3853.3	12.6
40°-50°	5572.4	18.2
50°-60°	6567.1	21.5
60°-70°	6381.6	20.9
70°-80°	3547.3	11.6
80°-90°	682.1	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°	30594.4	100.0
0°-180°	30594.4	100.0

Coefficient of Utilization



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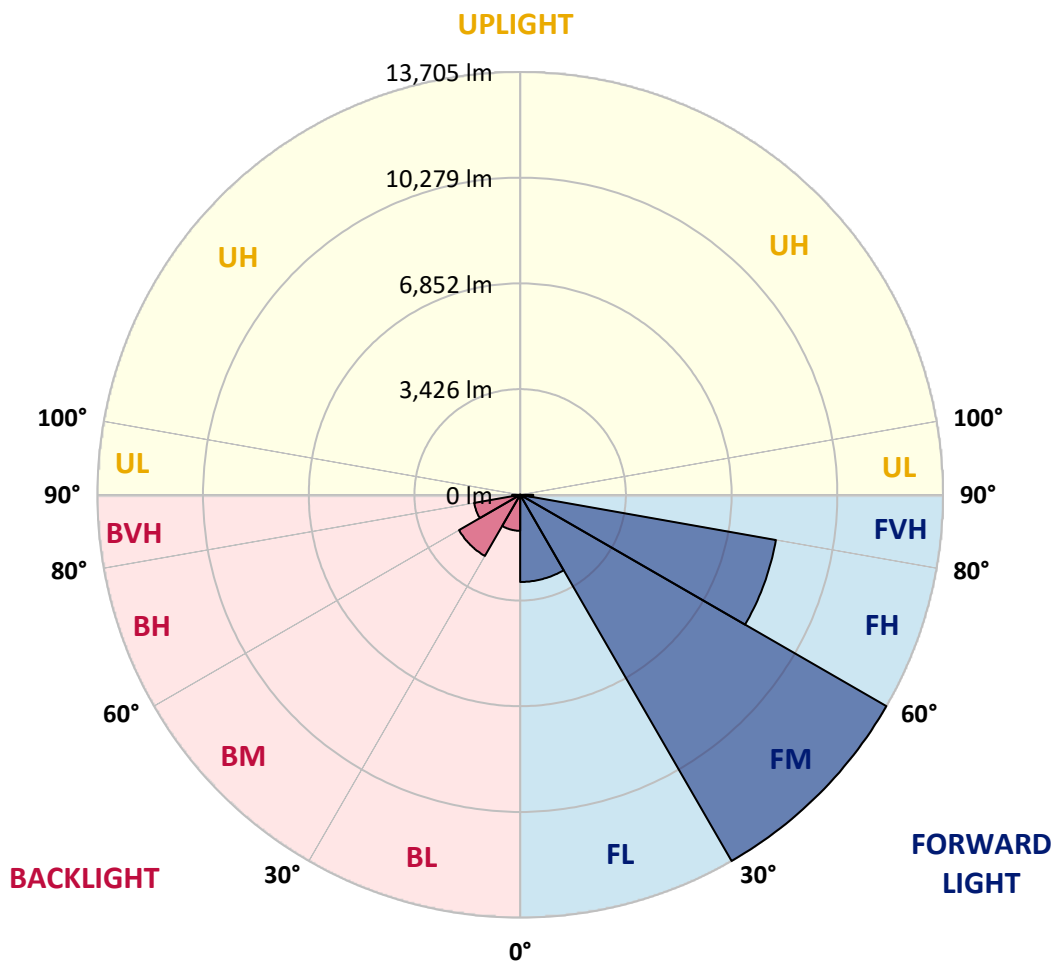
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2824.7	9.2			
FM (30°-60°)	13704.7	44.8			
FH (60°-80°)	8416.2	27.5			G4/12000
FVH (80°-90°)	424.5	1.4			G3/500
BL (0°-30°)	1166.1	3.8	B3/2500		
BM (30°-60°)	2288.0	7.5	B2/2500		
BH (60°-80°)	1512.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	257.6	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6
2.5°	4297.9	4310.7	4285.1	4227.7	4144.5	3990.9	3856.6	3620.0	3409.0	3383.4	3159.5
5°	5052.7	5065.4	5033.5	4963.2	4873.6	4707.3	4521.9	4214.9	3875.9	3811.9	3338.6
7.5°	5570.8	5577.1	5538.8	5468.4	5398.0	5231.8	5046.3	4700.9	4285.1	4234.0	3568.9
10°	6012.1	6024.9	5973.6	5928.9	5852.2	5685.9	5494.0	5129.4	4700.9	4630.6	3805.5
12.5°	6421.4	6434.2	6402.2	6363.8	6338.2	6184.8	5973.6	5538.8	5078.2	5001.5	4086.9
15°	6696.4	6709.2	6715.6	6766.7	6798.7	6690.0	6479.0	6005.6	5487.6	5417.2	4419.5
17.5°	6619.6	6651.6	6747.6	6933.0	7131.3	7137.7	6965.1	6466.2	5890.6	5813.7	4758.5
20°	6395.8	6421.4	6536.5	6818.0	7208.0	7431.9	7419.2	6933.0	6267.9	6184.8	5071.9
22.5°	6581.3	6613.3	6613.3	6785.9	7169.7	7585.4	7751.7	7393.6	6645.2	6568.5	5385.2
25°	7374.4	7393.6	7259.3	7188.9	7329.5	7713.4	8026.7	7892.4	7105.7	7016.2	5724.2
27.5°	8480.8	8448.9	8282.5	8001.1	7847.7	7950.0	8269.7	8365.7	7636.5	7527.9	6076.0
30°	9580.9	9561.7	9369.8	8992.5	8647.1	8429.6	8538.4	8787.9	8212.2	8084.3	6415.0
32.5°	10610.7	10578.6	10367.6	9926.3	9536.2	9133.2	8922.2	9171.6	8826.2	8679.1	6792.3
35°	11557.2	11474.0	11263.0	10802.5	10399.5	10015.8	9497.8	9536.2	9491.3	9337.9	7208.0
37.5°	12324.7	12260.8	12030.5	11602.0	11173.5	10808.9	10265.2	9951.9	10207.7	10060.6	7687.8
40°	13002.6	12932.2	12695.6	12267.1	11870.6	11525.2	11096.7	10457.1	11013.6	10847.3	8225.0
42.5°	13514.3	13463.2	13271.3	12849.2	12465.4	12152.0	11940.9	11096.7	11851.4	11691.5	8813.4
45°	13789.4	13738.1	13635.8	13296.8	12945.1	12702.1	12721.2	11857.8	12727.7	12593.3	9510.6
47.5°	13450.4	13488.7	13578.2	13514.3	13296.8	13181.7	13418.4	12644.5	13706.2	13578.2	10265.2
50°	12542.2	12580.6	12938.7	13380.0	13456.7	13597.5	14045.1	13552.7	14742.3	14640.0	11199.1
52.5°	10310.0	10521.0	11512.4	12567.8	13290.5	13872.4	14742.3	14902.2	16488.3	16488.3	12849.2
55°	7790.1	7975.5	9107.6	10949.6	12644.5	13898.0	15253.9	15816.8	17748.3	17773.9	13712.6
57.5°	6312.6	6427.8	6984.2	8870.9	11288.6	13578.2	15861.6	16603.5	18797.2	18912.3	14825.4
60°	5123.0	5187.0	5551.6	6862.7	9414.6	12714.9	16296.5	17729.2	20293.8	20453.8	16245.3
62.5°	4118.9	4182.8	4425.9	5212.5	7387.1	11096.7	16219.7	18899.5	22289.4	22551.6	18106.5
65°	3287.5	3357.8	3517.7	4003.7	5474.8	9088.4	15433.1	19500.8	24355.2	24611.0	19340.9
67.5°	2564.7	2628.7	2737.4	3057.2	3856.6	6798.7	13571.9	18867.6	25282.5	25500.0	19404.9
70°	1937.9	1969.9	2059.4	2264.1	2756.5	4515.4	10623.4	16744.2	24451.1	24649.4	18125.7
72.5°	1503.0	1496.6	1547.8	1650.1	1925.1	3108.3	7041.8	13616.6	21617.8	21822.4	15465.1
75°	1228.0	1221.6	1253.6	1285.5	1394.3	2085.0	4157.3	10252.4	17447.8	17057.6	11602.0
77.5°	1036.1	1029.7	1061.7	1068.1	1112.9	1439.1	2366.5	6747.6	11640.4	10968.8	6536.5
80°	876.3	869.8	908.2	921.0	953.0	1055.3	1362.3	3652.0	5845.8	5538.8	3121.1
82.5°	658.8	684.4	754.7	786.6	825.0	780.3	844.2	1611.8	2711.8	2590.3	1355.9
85°	319.8	377.4	569.3	633.2	677.9	492.4	575.6	761.1	1221.6	1164.0	550.0
87.5°	108.7	96.0	339.0	402.9	441.3	223.8	319.8	422.2	505.2	460.5	172.7
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°	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6	3031.6
2.5°	3063.6	2967.7	2826.9	2718.2	2647.9	2590.3	2564.7	2558.3	2545.5	2539.2	2539.2
5°	3127.6	2954.9	2737.4	2622.2	2590.3	2564.7	2577.5	2583.9	2583.9	2583.9	2583.9
7.5°	3223.5	2980.5	2718.2	2641.5	2635.0	2635.0	2673.5	2692.6	2705.4	2705.4	2705.4
10°	3351.4	3025.2	2750.2	2686.3	2705.4	2718.2	2763.0	2788.6	2801.4	2807.8	2814.1
12.5°	3524.1	3121.1	2814.1	2763.0	2788.6	2795.0	2826.9	2839.7	2852.5	2858.9	2858.9
15°	3754.3	3261.9	2916.4	2852.5	2858.9	2852.5	2852.5	2839.7	2833.4	2833.4	2846.2
17.5°	3990.9	3396.2	3006.0	2916.4	2890.9	2839.7	2801.4	2769.3	2750.2	2737.4	2743.8
20°	4227.7	3517.7	3057.2	2929.3	2858.9	2775.8	2705.4	2660.7	2635.0	2609.4	2622.2
22.5°	4464.3	3632.8	3076.4	2890.9	2788.6	2667.0	2590.3	2519.9	2462.3	2424.0	2430.4
25°	4726.4	3760.8	3076.4	2846.2	2692.6	2564.7	2468.8	2353.6	2270.5	2238.5	2251.3
27.5°	4988.7	3869.4	3044.4	2763.0	2583.9	2456.0	2315.2	2180.9	2129.8	2110.7	2117.0
30°	5250.9	3952.6	2974.0	2660.7	2468.8	2328.0	2142.6	2053.1	1989.1	1937.9	1944.3
32.5°	5513.2	4010.2	2878.1	2532.7	2347.3	2168.1	2014.7	1912.3	1797.2	1733.3	1739.6
35°	5813.7	4055.0	2763.0	2404.9	2212.9	2027.5	1912.3	1746.1	1624.5	1573.4	1560.6
37.5°	6127.2	4086.9	2641.5	2264.1	2078.6	1925.1	1810.0	1605.3	1490.2	1419.9	1413.5
40°	6466.2	4099.7	2494.4	2117.0	1950.8	1861.2	1675.7	1522.2	1323.9	1279.2	1279.2
42.5°	6869.1	4093.3	2347.3	1969.9	1810.0	1714.1	1579.7	1509.4	1336.7	1292.0	1266.4
45°	7329.5	4093.3	2187.4	1797.2	1669.3	1528.6	1471.0	1426.3	1311.1	1330.3	1343.1
47.5°	7854.0	4080.6	1995.5	1656.5	1554.2	1432.6	1400.7	1304.8	1260.0	1272.8	1285.5
50°	8576.7	4099.7	1822.8	1541.4	1471.0	1368.7	1330.3	1279.2	1260.0	1266.4	1260.0
52.5°	9580.9	4035.7	1656.5	1471.0	1407.1	1272.8	1272.8	1266.4	1272.8	1266.4	1266.4
55°	10130.9	3895.0	1535.0	1432.6	1362.3	1228.0	1253.6	1266.4	1279.2	1272.8	1272.8
57.5°	10911.2	3799.1	1439.1	1407.1	1336.7	1215.2	1240.7	1266.4	1272.8	1266.4	1266.4
60°	11832.3	3735.1	1375.1	1413.5	1317.6	1215.2	1247.2	1266.4	1260.0	1253.6	1253.6
62.5°	12900.3	3709.5	1330.3	1432.6	1298.3	1221.6	1247.2	1266.4	1240.7	1234.4	1234.4
65°	13303.3	3479.4	1272.8	1445.4	1311.1	1221.6	1240.7	1247.2	1215.2	1208.8	1202.4
67.5°	12682.9	3082.8	1189.6	1419.9	1349.5	1221.6	1221.6	1215.2	1176.8	1170.5	1157.7
70°	11295.0	2558.3	1061.7	1336.7	1375.1	1228.0	1196.0	1164.0	1125.7	1125.7	1100.1
72.5°	9248.3	2014.7	895.4	1189.6	1355.9	1247.2	1144.9	1100.1	1055.3	1055.3	1029.7
75°	6664.4	1503.0	716.4	991.3	1272.8	1240.7	1080.8	1023.4	972.1	965.8	933.7
77.5°	3799.1	1055.3	582.1	773.9	1132.1	1208.8	1023.4	933.7	876.3	857.0	837.9
80°	1950.8	709.9	473.3	607.6	940.2	1119.3	978.6	831.5	767.5	735.5	703.6
82.5°	927.4	473.3	364.6	447.7	709.9	978.6	921.0	716.4	646.0	607.6	569.3
85°	415.7	281.4	243.1	287.9	505.2	761.1	812.2	588.4	505.2	633.2	466.9
87.5°	134.3	127.9	127.9	134.3	243.1	332.6	594.8	435.0	402.9	332.6	281.4
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)