

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: P236861

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236861
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
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 31048.6 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G4

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

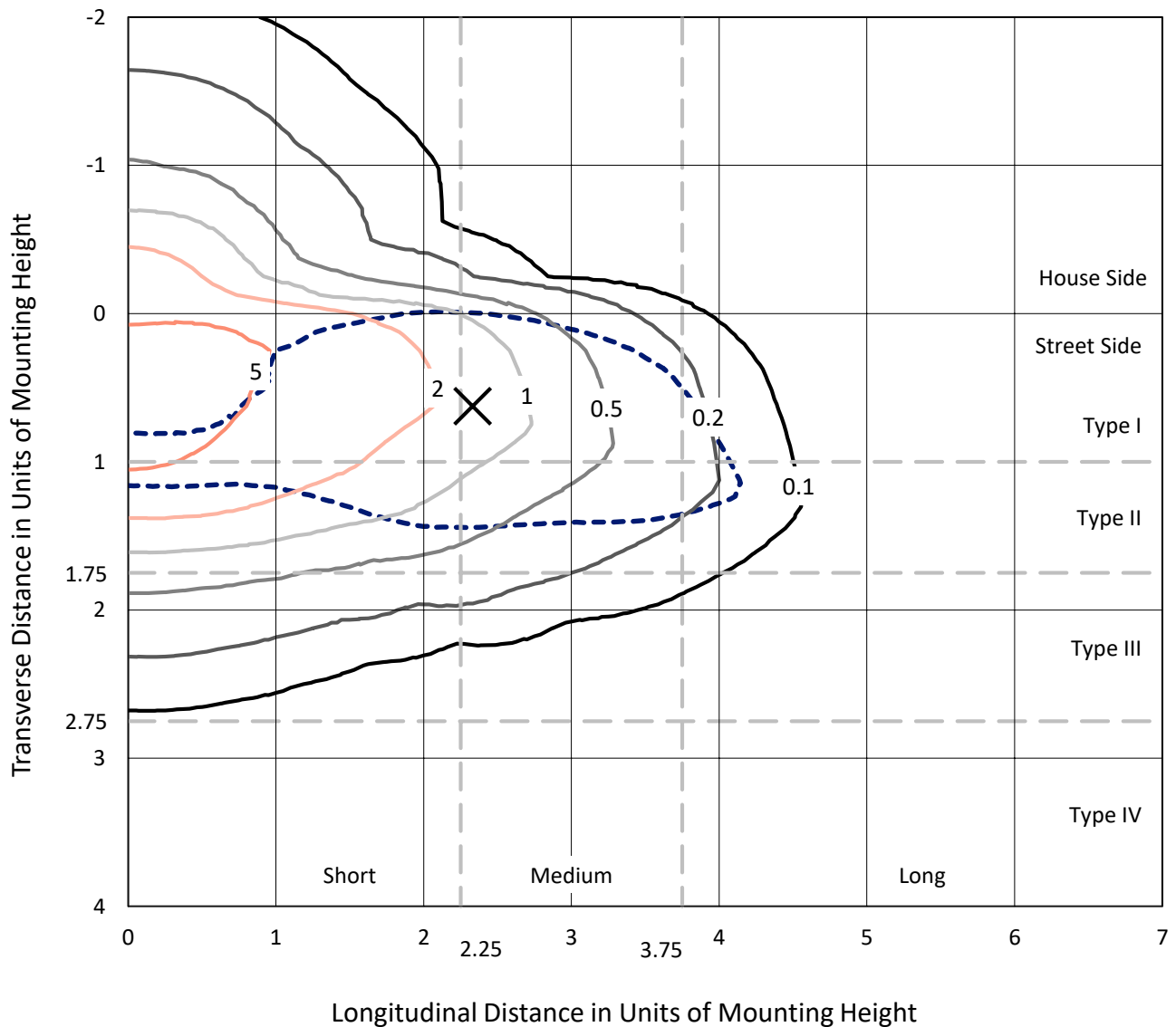


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

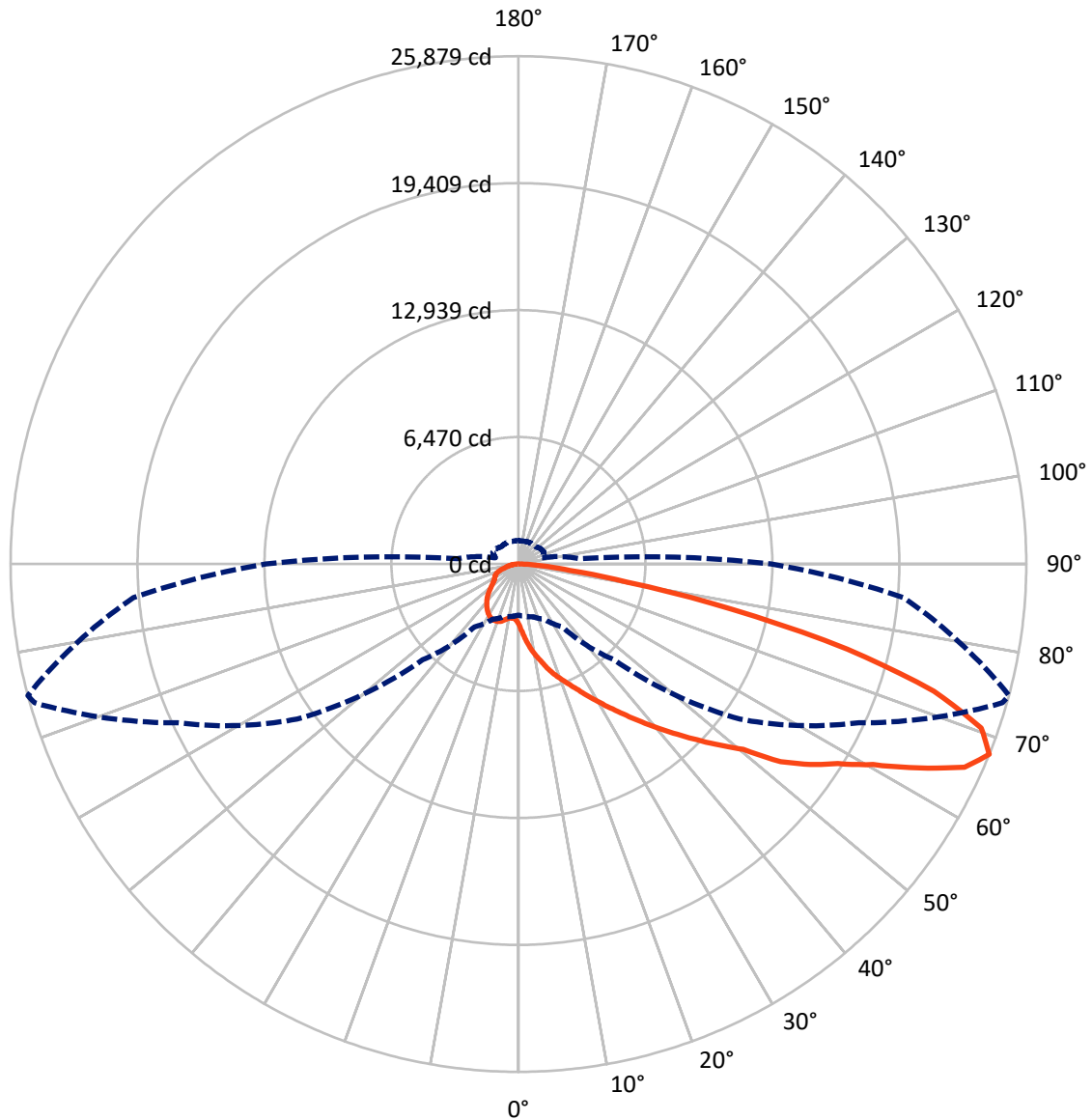


Based on 30 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Semi-Cutoff

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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	5302.0	0.0	5302.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	25746.6	0.0	25746.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	31048.6	0.0	31048.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	361.4	1.2
10°-20°	1306.2	4.2
20°-30°	2382.4	7.7
30°-40°	3910.5	12.6
40°-50°	5655.1	18.2
50°-60°	6664.6	21.5
60°-70°	6476.3	20.9
70°-80°	3599.9	11.6
80°-90°	692.2	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°	31048.6	100.0
0°-180°	31048.6	100.0



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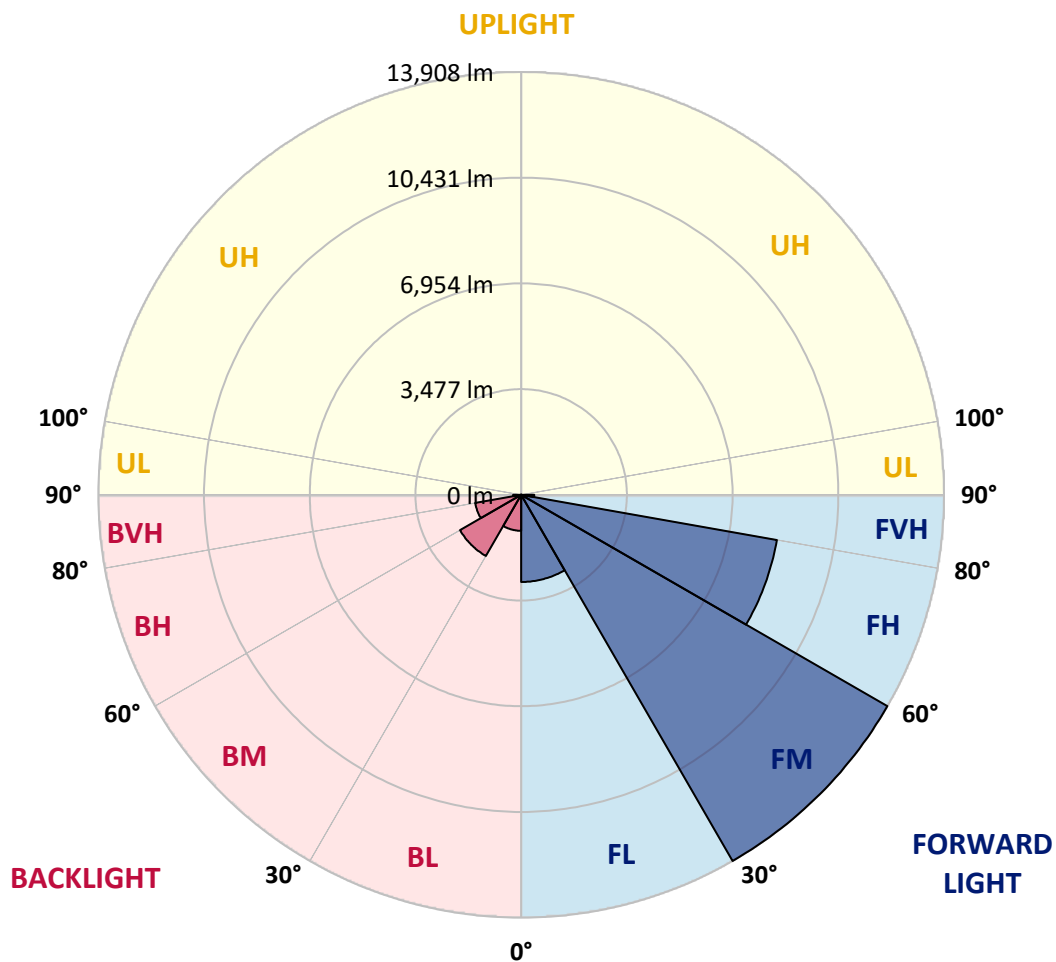
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2866.6	9.2			
FM (30°-60°)	13908.1	44.8			
FH (60°-80°)	8541.1	27.5			G4/12000
FVH (80°-90°)	430.8	1.4			G3/500
BL (0°-30°)	1183.4	3.8	B3/2500		
BM (30°-60°)	2322.0	7.5	B2/2500		
BH (60°-80°)	1535.2	4.9	B3/2500		G3/2500
BVH (80°-90°)	261.4	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°	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6
2.5°	4361.8	4374.8	4348.8	4290.4	4206.0	4050.3	3913.9	3673.7	3459.5	3433.6	3206.4
5°	5127.6	5140.6	5108.2	5036.8	4946.0	4777.2	4589.0	4277.4	3933.3	3868.5	3388.2
7.5°	5653.4	5659.9	5621.0	5549.6	5478.2	5309.4	5121.2	4770.7	4348.8	4296.9	3621.9
10°	6101.3	6114.3	6062.3	6016.9	5939.0	5770.3	5575.6	5205.6	4770.7	4699.3	3861.9
12.5°	6516.7	6529.7	6497.3	6458.3	6432.3	6276.5	6062.3	5621.0	5153.6	5075.8	4147.6
15°	6795.8	6808.8	6815.3	6867.2	6899.7	6789.3	6575.1	6094.8	5569.0	5497.6	4485.1
17.5°	6717.9	6750.4	6847.7	7036.0	7237.2	7243.7	7068.4	6562.1	5978.0	5900.1	4829.1
20°	6490.7	6516.7	6633.5	6919.1	7315.0	7542.2	7529.2	7036.0	6360.9	6276.5	5147.2
22.5°	6678.9	6711.5	6711.5	6886.7	7276.1	7698.0	7866.8	7503.3	6743.9	6666.0	5465.2
25°	7483.8	7503.3	7367.0	7295.6	7438.4	7827.8	8145.9	8009.6	7211.2	7120.4	5809.2
27.5°	8606.7	8574.3	8405.5	8119.9	7964.2	8068.0	8392.5	8489.9	7750.0	7639.6	6166.2
30°	9723.1	9703.7	9508.9	9125.9	8775.5	8554.8	8665.1	8918.3	8334.1	8204.3	6510.3
32.5°	10768.1	10735.7	10521.5	10073.6	9677.7	9268.8	9054.5	9307.7	8957.3	8807.9	6893.2
35°	11728.7	11644.4	11430.2	10962.9	10554.0	10164.6	9638.8	9677.7	9632.3	9476.5	7315.0
37.5°	12507.6	12442.8	12209.1	11774.2	11339.3	10969.3	10417.6	10099.6	10359.2	10210.0	7801.8
40°	13195.7	13124.3	12884.2	12449.2	12046.8	11696.3	11261.5	10612.4	11177.1	11008.3	8347.1
42.5°	13714.9	13663.0	13468.3	13039.9	12650.4	12332.4	12118.2	11261.5	12027.3	11865.1	8944.3
45°	13994.1	13942.1	13838.3	13494.3	13137.2	12890.6	12910.0	12033.8	12916.6	12780.2	9651.7
47.5°	13650.1	13689.0	13779.9	13714.9	13494.3	13377.4	13617.6	12832.2	13909.7	13779.9	10417.6
50°	12728.4	12767.2	13130.8	13578.6	13656.5	13799.3	14253.7	13753.9	14961.2	14857.3	11365.3
52.5°	10463.0	10677.3	11683.3	12754.4	13487.8	14078.5	14961.2	15123.4	16733.1	16733.1	13039.9
55°	7905.8	8094.0	9242.8	11112.1	12832.2	14104.3	15480.4	16051.6	18011.8	18037.8	13916.1
57.5°	6406.3	6523.2	7087.9	9002.7	11456.1	13779.9	16097.1	16849.9	19076.3	19193.1	15045.6
60°	5199.0	5264.0	5634.0	6964.6	9554.4	12903.6	16538.5	17992.4	20595.2	20757.4	16486.5
62.5°	4180.1	4244.9	4491.6	5290.0	7496.8	11261.5	16460.5	19180.1	22620.2	22886.4	18375.3
65°	3336.3	3407.7	3569.9	4063.2	5556.1	9223.3	15662.2	19790.3	24716.7	24976.4	19628.0
67.5°	2602.8	2667.7	2778.0	3102.6	3913.9	6899.7	13773.3	19147.7	25657.9	25878.6	19692.9
70°	1966.7	1999.2	2090.0	2297.8	2797.5	4582.5	10781.1	16992.7	24814.1	25015.3	18394.8
72.5°	1525.3	1518.9	1570.7	1674.6	1953.7	3154.5	7146.3	13818.8	21938.7	22146.4	15694.6
75°	1246.3	1239.7	1272.1	1304.7	1414.9	2116.0	4219.0	10404.6	17706.8	17310.8	11774.2
77.5°	1051.5	1045.0	1077.5	1083.9	1129.4	1460.5	2401.6	6847.7	11813.1	11131.6	6633.5
80°	889.3	882.7	921.7	934.7	967.1	1070.9	1382.5	3706.3	5932.5	5621.0	3167.5
82.5°	668.5	694.5	765.9	798.3	837.3	791.9	856.8	1635.7	2752.0	2628.8	1376.1
85°	324.6	383.0	577.7	642.6	688.0	499.8	584.2	772.4	1239.7	1181.3	558.2
87.5°	110.4	97.4	344.0	408.9	447.8	227.2	324.6	428.4	512.8	467.3	175.2
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°	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6	3076.6
2.5°	3109.1	3011.7	2868.9	2758.6	2687.2	2628.8	2602.8	2596.2	2583.4	2576.8	2576.8
5°	3174.0	2998.7	2778.0	2661.2	2628.8	2602.8	2615.8	2622.2	2622.2	2622.2	2622.2
7.5°	3271.3	3024.7	2758.6	2680.6	2674.2	2674.2	2713.2	2732.6	2745.6	2745.6	2745.6
10°	3401.1	3070.1	2791.0	2726.1	2745.6	2758.6	2804.0	2830.0	2843.0	2849.4	2856.0
12.5°	3576.4	3167.5	2856.0	2804.0	2830.0	2836.4	2868.9	2881.9	2894.8	2901.4	2901.4
15°	3810.1	3310.3	2959.8	2894.8	2901.4	2894.8	2894.8	2881.9	2875.4	2875.4	2888.4
17.5°	4050.3	3446.6	3050.6	2959.8	2933.8	2881.9	2843.0	2810.5	2791.0	2778.0	2784.6
20°	4290.4	3569.9	3102.6	2972.8	2901.4	2817.0	2745.6	2700.2	2674.2	2648.2	2661.2
22.5°	4530.5	3686.7	3122.0	2933.8	2830.0	2706.6	2628.8	2557.4	2499.0	2460.0	2466.4
25°	4796.6	3816.5	3122.0	2888.4	2732.6	2602.8	2505.4	2388.6	2304.2	2271.8	2284.8
27.5°	5062.8	3926.9	3089.6	2804.0	2622.2	2492.4	2349.6	2213.4	2161.4	2142.0	2148.4
30°	5328.9	4011.3	3018.2	2700.2	2505.4	2362.6	2174.4	2083.5	2018.6	1966.7	1973.2
32.5°	5595.0	4069.7	2920.8	2570.4	2382.1	2200.4	2044.6	1940.7	1823.9	1759.0	1765.5
35°	5900.1	4115.1	2804.0	2440.6	2245.8	2057.6	1940.7	1772.0	1648.7	1596.7	1583.7
37.5°	6218.1	4147.6	2680.6	2297.8	2109.5	1953.7	1836.9	1629.2	1512.3	1440.9	1434.5
40°	6562.1	4160.5	2531.4	2148.4	1979.7	1888.8	1700.6	1544.8	1343.5	1298.1	1298.1
42.5°	6971.1	4154.1	2382.1	1999.2	1836.9	1739.5	1603.2	1531.8	1356.5	1311.1	1285.1
45°	7438.4	4154.1	2219.8	1823.9	1694.1	1551.3	1492.9	1447.5	1330.6	1350.1	1363.1
47.5°	7970.6	4141.1	2025.1	1681.1	1577.3	1453.9	1421.5	1324.1	1278.7	1291.7	1304.7
50°	8704.1	4160.5	1849.9	1564.3	1492.9	1389.1	1350.1	1298.1	1278.7	1285.1	1278.7
52.5°	9723.1	4095.7	1681.1	1492.9	1427.9	1291.7	1291.7	1285.1	1291.7	1285.1	1285.1
55°	10281.4	3952.9	1557.7	1453.9	1382.5	1246.3	1272.1	1285.1	1298.1	1291.7	1291.7
57.5°	11073.2	3855.5	1460.5	1427.9	1356.5	1233.3	1259.3	1285.1	1291.7	1285.1	1285.1
60°	12007.9	3790.5	1395.5	1434.5	1337.1	1233.3	1265.7	1285.1	1278.7	1272.1	1272.1
62.5°	13091.8	3764.7	1350.1	1453.9	1317.7	1239.7	1265.7	1285.1	1259.3	1252.7	1252.7
65°	13500.7	3530.9	1291.7	1466.9	1330.6	1239.7	1259.3	1265.7	1233.3	1226.7	1220.3
67.5°	12871.2	3128.5	1207.3	1440.9	1369.5	1239.7	1239.7	1233.3	1194.3	1187.9	1174.9
70°	11462.7	2596.2	1077.5	1356.5	1395.5	1246.3	1213.7	1181.3	1142.3	1142.3	1116.4
72.5°	9385.6	2044.6	908.7	1207.3	1376.1	1265.7	1161.9	1116.4	1070.9	1070.9	1045.0
75°	6763.3	1525.3	727.0	1006.1	1291.7	1259.3	1096.9	1038.5	986.6	980.1	947.7
77.5°	3855.5	1070.9	590.7	785.4	1148.9	1226.7	1038.5	947.7	889.3	869.7	850.3
80°	1979.7	720.5	480.3	616.6	954.1	1135.9	993.1	843.8	778.9	746.4	714.0
82.5°	941.1	480.3	370.0	454.4	720.5	993.1	934.7	727.0	655.6	616.6	577.7
85°	421.9	285.6	246.6	292.1	512.8	772.4	824.3	597.2	512.8	642.6	473.8
87.5°	136.3	129.8	129.8	136.3	246.6	337.5	603.6	441.4	408.9	337.5	285.6
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)