

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: P236858

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236858
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-AF72-250-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29088.6 lumens
Efficiency: N/A
Efficacy: 115.9 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): 251
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

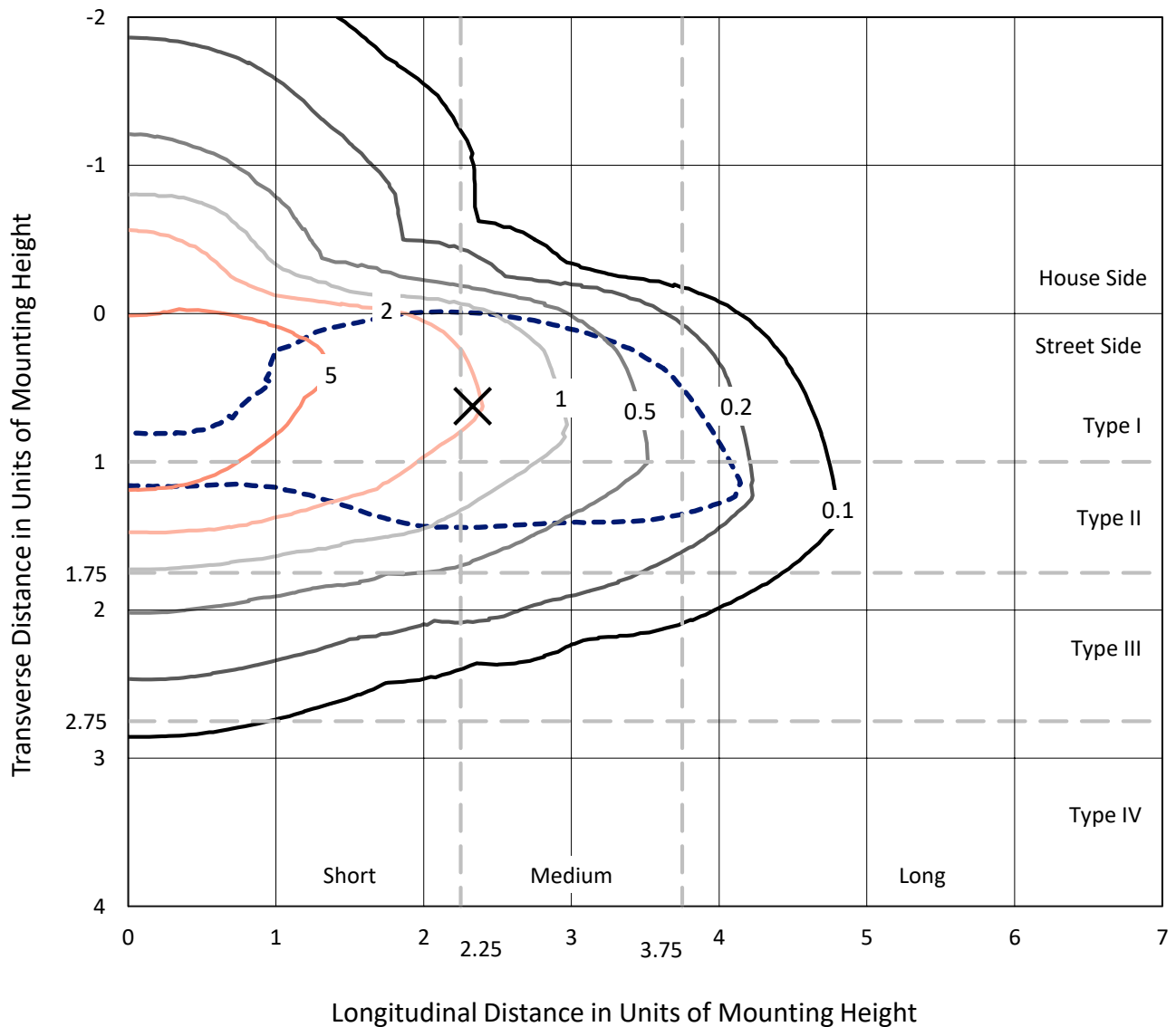


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

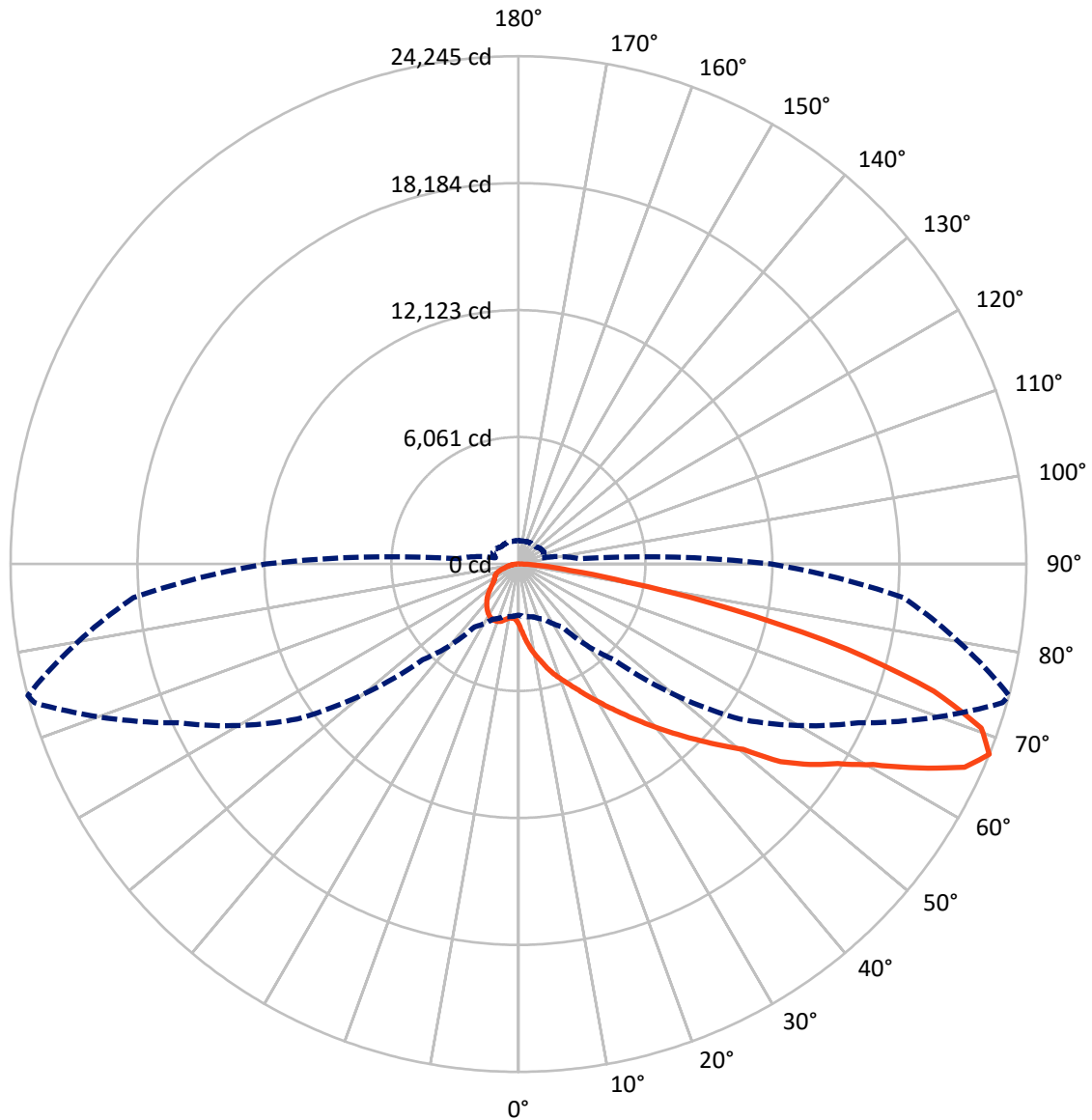


Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Medium - Semi-Cutoff

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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	4967.3	0.0	4967.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	24121.4	0.0	24121.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	29088.6	0.0	29088.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.6	1.2
10°-20°	1223.7	4.2
20°-30°	2232.0	7.7
30°-40°	3663.6	12.6
40°-50°	5298.1	18.2
50°-60°	6243.8	21.5
60°-70°	6067.5	20.9
70°-80°	3372.7	11.6
80°-90°	648.5	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°	29088.6	100.0
0°-180°	29088.6	100.0

Coefficient of Utilization



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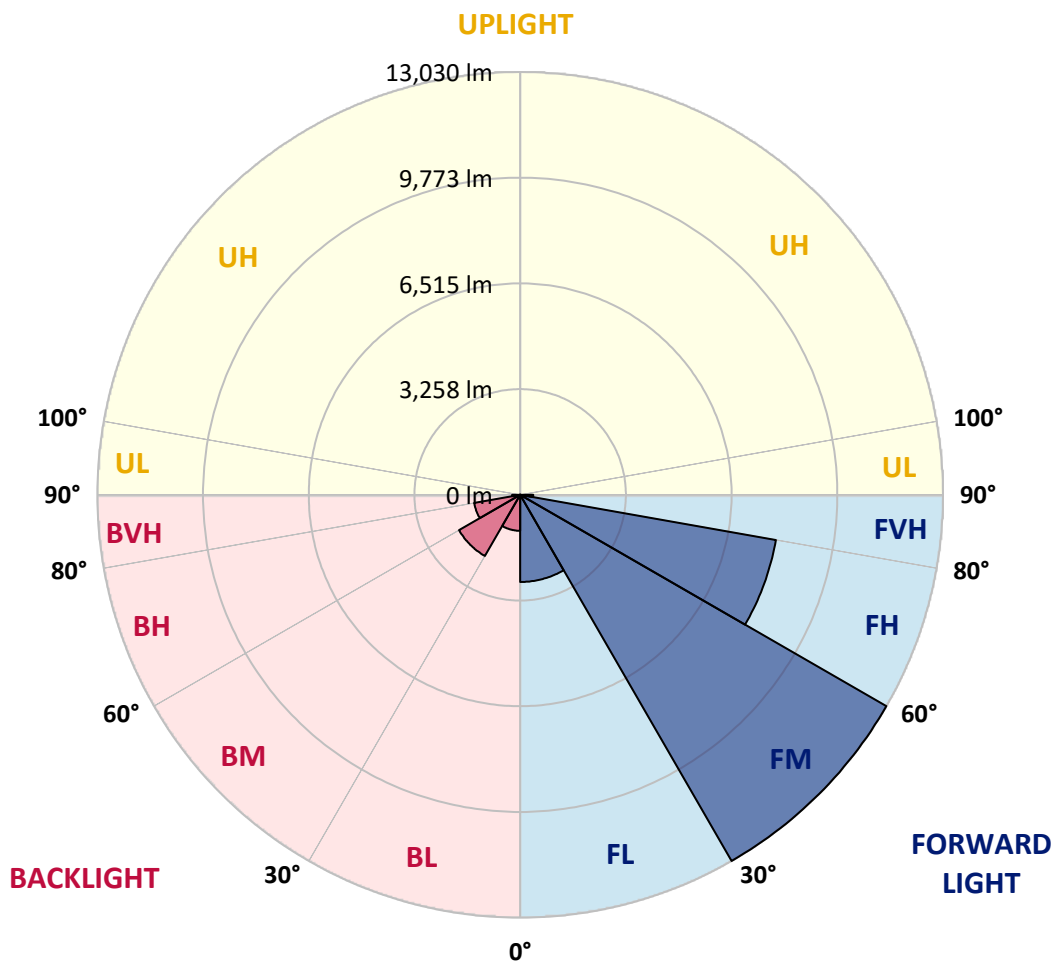
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2685.7	9.2			
FM (30°-60°)	13030.2	44.8			
FH (60°-80°)	8001.9	27.5			G4/12000
FVH (80°-90°)	403.6	1.4			G3/500
BL (0°-30°)	1108.7	3.8	B3/2500		
BM (30°-60°)	2175.4	7.5	B2/2500		
BH (60°-80°)	1438.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	244.9	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°	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4
2.5°	4086.5	4098.6	4074.3	4019.6	3940.5	3794.5	3666.9	3441.8	3241.2	3216.9	3004.0
5°	4804.0	4816.2	4785.8	4718.9	4633.8	4475.6	4299.3	4007.4	3685.1	3624.3	3174.3
7.5°	5296.5	5302.7	5266.2	5199.2	5132.3	4974.3	4797.9	4469.6	4074.3	4025.6	3393.2
10°	5716.1	5728.3	5679.6	5637.1	5564.1	5406.0	5223.6	4876.9	4469.6	4402.7	3618.2
12.5°	6105.4	6117.5	6087.1	6050.7	6026.3	5880.3	5679.6	5266.2	4828.3	4755.4	3885.8
15°	6366.8	6379.0	6385.1	6433.7	6464.1	6360.7	6160.1	5710.1	5217.5	5150.7	4202.0
17.5°	6293.8	6324.3	6415.4	6591.8	6780.3	6786.4	6622.2	6147.9	5600.7	5527.6	4524.3
20°	6081.0	6105.4	6214.8	6482.3	6853.3	7066.1	7054.0	6591.8	5959.4	5880.3	4822.2
22.5°	6257.4	6287.8	6287.8	6452.0	6816.8	7212.1	7370.2	7029.6	6318.2	6245.2	5120.2
25°	7011.4	7029.6	6902.0	6835.1	6968.9	7333.7	7631.6	7504.0	6756.0	6670.9	5442.5
27.5°	8063.4	8033.0	7874.9	7607.4	7461.4	7558.7	7862.7	7954.0	7260.7	7157.4	5776.9
30°	9109.4	9091.1	8908.7	8549.9	8221.6	8014.8	8118.1	8355.3	7808.0	7686.4	6099.2
32.5°	10088.4	10058.0	9857.4	9437.7	9066.8	8683.7	8483.0	8720.1	8391.8	8251.9	6458.0
35°	10988.3	10909.4	10708.7	10270.8	9887.7	9522.9	9030.3	9066.8	9024.3	8878.3	6853.3
37.5°	11718.1	11657.3	11438.3	11031.0	10623.5	10276.9	9760.0	9462.1	9705.2	9565.4	7309.4
40°	12362.7	12295.8	12070.8	11663.4	11286.3	10958.0	10550.5	9942.5	10471.5	10313.4	7820.2
42.5°	12849.2	12800.5	12618.1	12216.8	11851.9	11553.9	11353.2	10550.5	11268.1	11116.1	8379.6
45°	13110.6	13062.0	12964.7	12642.4	12307.9	12076.9	12095.2	11274.1	12101.2	11973.5	9042.5
47.5°	12788.3	12824.8	12909.9	12849.2	12642.4	12533.0	12757.9	12022.1	13031.6	12909.9	9760.0
50°	11924.8	11961.4	12301.9	12721.5	12794.5	12928.3	13353.9	12885.7	14016.7	13919.4	10647.9
52.5°	9802.6	10003.2	10945.8	11949.2	12636.3	13189.7	14016.7	14168.8	15676.8	15676.8	12216.8
55°	7406.7	7583.0	8659.4	10410.7	12022.1	13214.1	14503.2	15038.3	16874.8	16899.1	13037.7
57.5°	6002.0	6111.4	6640.5	8434.3	10733.0	12909.9	15080.9	15786.3	17872.1	17981.5	14095.8
60°	4870.9	4931.7	5278.3	6524.9	8951.2	12089.0	15494.4	16856.6	19295.0	19447.1	15445.7
62.5°	3916.2	3977.0	4208.0	4956.0	7023.6	10550.5	15421.4	17969.4	21192.3	21441.7	17215.3
65°	3125.6	3192.5	3344.5	3806.7	5205.4	8641.1	14673.5	18541.0	23156.4	23399.7	18389.0
67.5°	2438.5	2499.3	2602.7	2906.7	3666.9	6464.1	12903.9	17939.0	24038.2	24245.0	18449.7
70°	1842.5	1872.9	1958.1	2152.7	2620.9	4293.2	10100.5	15920.1	23247.7	23436.2	17233.6
72.5°	1429.1	1422.9	1471.6	1568.9	1830.4	2955.4	6695.2	12946.5	20553.8	20748.4	14703.9
75°	1167.6	1161.5	1191.8	1222.3	1325.6	1982.4	3952.7	9747.9	16589.0	16218.1	11031.0
77.5°	985.1	979.1	1009.4	1015.5	1058.1	1368.2	2250.0	6415.4	11067.4	10428.9	6214.8
80°	833.1	827.1	863.5	875.6	906.0	1003.4	1295.3	3472.3	5558.0	5266.2	2967.6
82.5°	626.4	650.7	717.6	748.0	784.5	741.8	802.7	1532.4	2578.3	2462.9	1289.2
85°	304.0	358.7	541.2	602.0	644.6	468.2	547.3	723.6	1161.5	1106.7	522.9
87.5°	103.4	91.2	322.3	383.1	419.6	212.9	304.0	401.3	480.4	437.8	164.2
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°	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4	2882.4
2.5°	2912.9	2821.6	2687.8	2584.4	2517.6	2462.9	2438.5	2432.4	2420.2	2414.2	2414.2
5°	2973.6	2809.4	2602.7	2493.2	2462.9	2438.5	2450.7	2456.7	2456.7	2456.7	2456.7
7.5°	3064.9	2833.8	2584.4	2511.4	2505.4	2505.4	2541.8	2560.1	2572.3	2572.3	2572.3
10°	3186.5	2876.3	2614.9	2554.0	2572.3	2584.4	2627.0	2651.3	2663.5	2669.6	2675.6
12.5°	3350.7	2967.6	2675.6	2627.0	2651.3	2657.4	2687.8	2700.0	2712.1	2718.2	2718.2
15°	3569.6	3101.3	2772.9	2712.1	2718.2	2712.1	2712.1	2700.0	2693.8	2693.8	2706.0
17.5°	3794.5	3229.0	2858.1	2772.9	2748.6	2700.0	2663.5	2633.1	2614.9	2602.7	2608.7
20°	4019.6	3344.5	2906.7	2785.1	2718.2	2639.1	2572.3	2529.7	2505.4	2481.1	2493.2
22.5°	4244.5	3454.0	2924.9	2748.6	2651.3	2535.8	2462.9	2396.0	2341.2	2304.7	2310.7
25°	4493.8	3575.6	2924.9	2706.0	2560.1	2438.5	2347.3	2237.8	2158.7	2128.4	2140.5
27.5°	4743.2	3679.0	2894.5	2627.0	2456.7	2335.1	2201.3	2073.6	2024.9	2006.7	2012.9
30°	4992.5	3758.0	2827.6	2529.7	2347.3	2213.5	2037.1	1952.0	1891.2	1842.5	1848.7
32.5°	5241.8	3812.7	2736.5	2408.1	2231.8	2061.5	1915.5	1818.2	1708.7	1648.0	1654.0
35°	5527.6	3855.4	2627.0	2286.5	2104.0	1927.6	1818.2	1660.1	1544.6	1496.0	1483.8
37.5°	5825.6	3885.8	2511.4	2152.7	1976.3	1830.4	1720.9	1526.3	1416.9	1350.0	1344.0
40°	6147.9	3898.0	2371.6	2012.9	1854.7	1769.6	1593.2	1447.3	1258.7	1216.2	1216.2
42.5°	6531.0	3891.8	2231.8	1872.9	1720.9	1629.7	1502.0	1435.1	1270.9	1228.4	1204.0
45°	6968.9	3891.8	2079.7	1708.7	1587.1	1453.4	1398.7	1356.0	1246.6	1264.9	1277.1
47.5°	7467.4	3879.6	1897.3	1574.9	1477.7	1362.2	1331.8	1240.5	1198.0	1210.2	1222.3
50°	8154.7	3898.0	1733.1	1465.5	1398.7	1301.3	1264.9	1216.2	1198.0	1204.0	1198.0
52.5°	9109.4	3837.1	1574.9	1398.7	1337.8	1210.2	1210.2	1204.0	1210.2	1204.0	1204.0
55°	9632.3	3703.3	1459.4	1362.2	1295.3	1167.6	1191.8	1204.0	1216.2	1210.2	1210.2
57.5°	10374.2	3612.1	1368.2	1337.8	1270.9	1155.4	1179.7	1204.0	1210.2	1204.0	1204.0
60°	11249.9	3551.3	1307.4	1344.0	1252.7	1155.4	1185.8	1204.0	1198.0	1191.8	1191.8
62.5°	12265.4	3527.0	1264.9	1362.2	1234.4	1161.5	1185.8	1204.0	1179.7	1173.6	1173.6
65°	12648.5	3308.0	1210.2	1374.3	1246.6	1161.5	1179.7	1185.8	1155.4	1149.3	1143.2
67.5°	12058.6	2931.1	1131.1	1350.0	1283.1	1161.5	1161.5	1155.4	1118.9	1112.9	1100.7
70°	10739.0	2432.4	1009.4	1270.9	1307.4	1167.6	1137.1	1106.7	1070.2	1070.2	1046.0
72.5°	8793.2	1915.5	851.3	1131.1	1289.2	1185.8	1088.5	1046.0	1003.4	1003.4	979.1
75°	6336.4	1429.1	681.1	942.5	1210.2	1179.7	1027.7	972.9	924.3	918.2	887.8
77.5°	3612.1	1003.4	553.4	735.8	1076.3	1149.3	972.9	887.8	833.1	814.9	796.6
80°	1854.7	674.9	450.0	577.7	894.0	1064.2	930.4	790.5	729.7	699.3	668.9
82.5°	881.8	450.0	346.6	425.6	674.9	930.4	875.6	681.1	614.2	577.7	541.2
85°	395.3	267.6	231.1	273.6	480.4	723.6	772.3	559.5	480.4	602.0	444.0
87.5°	127.7	121.6	121.6	127.7	231.1	316.2	565.5	413.5	383.1	316.2	267.6
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)