

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: P265713

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23884.4 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 242
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

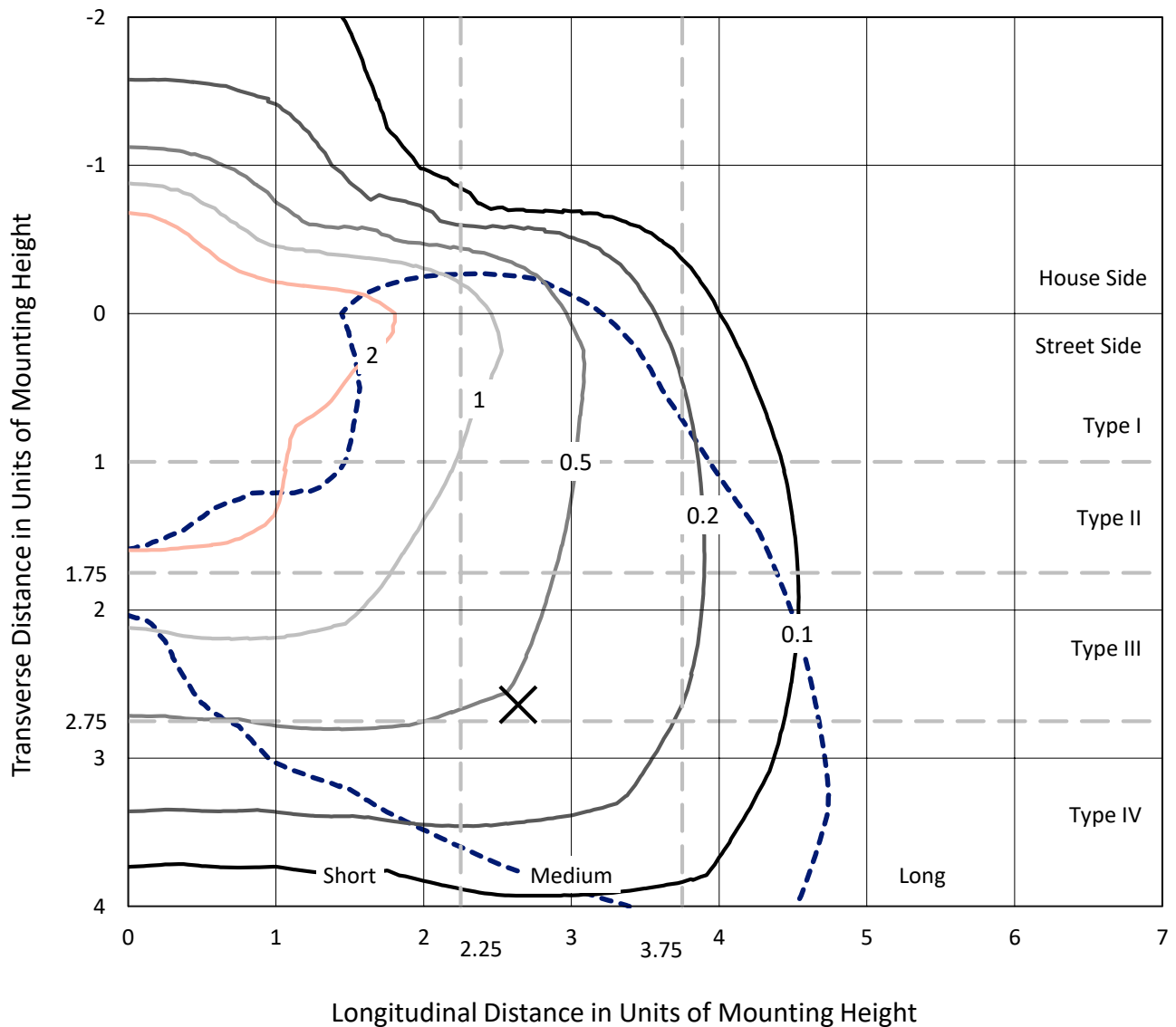


REPORT NUMBER: P265713

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

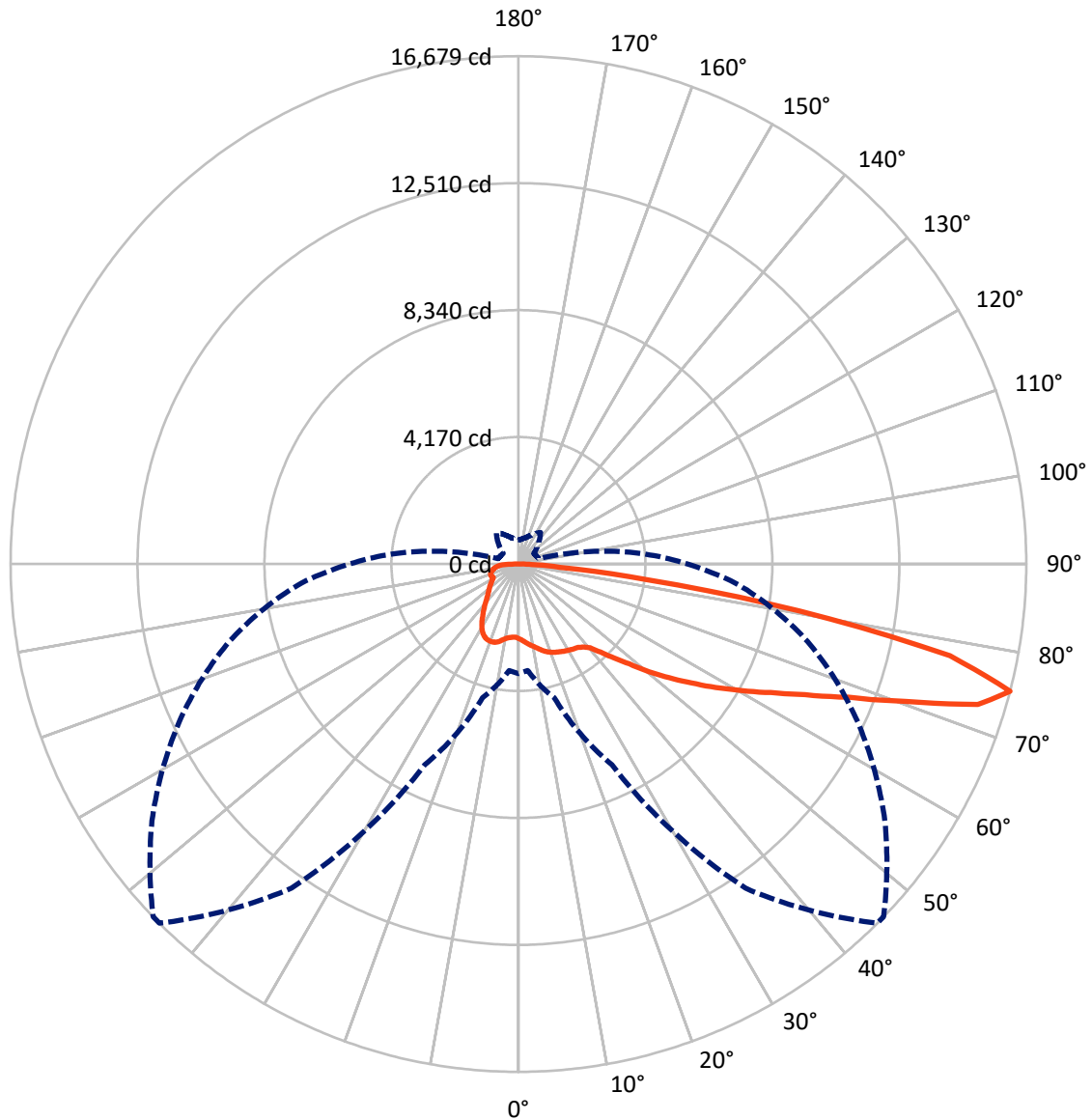


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265713

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P265713

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5533.0	0.0	5533.0
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	18351.3	0.0	18351.3
	% Fixture	76.8	0.0	76.8
Total	Lumens	23884.4	0.0	23884.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.6	1.0
10°-20°	786.3	3.3
20°-30°	1349.3	5.6
30°-40°	1887.2	7.9
40°-50°	2768.3	11.6
50°-60°	4312.2	18.1
60°-70°	6205.0	26.0
70°-80°	5405.2	22.6
80°-90°	928.3	3.9
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°	23884.4	100.0
0°-180°	23884.4	100.0

Coefficient of Utilization



REPORT NUMBER: P265713

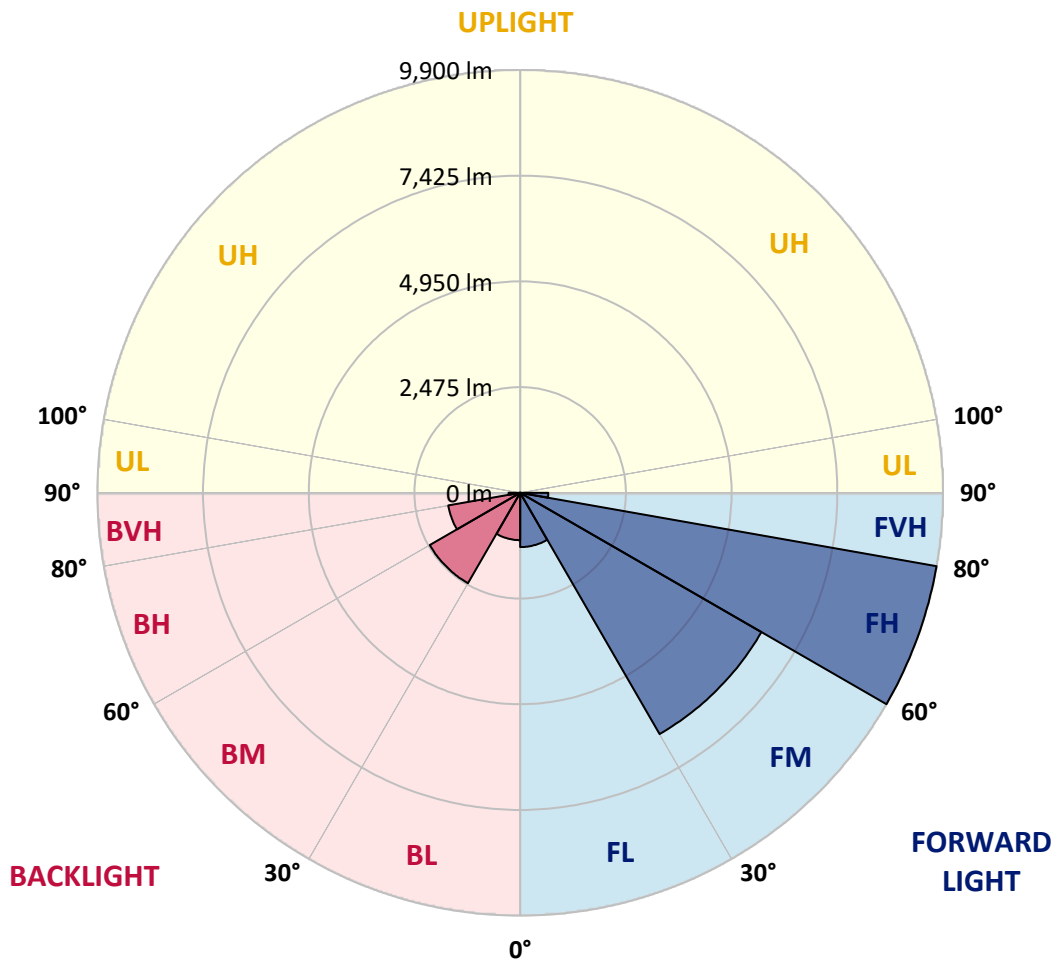
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1270.1	5.3			
FM	(30°-60°)	6522.4	27.3			
FH	(60°-80°)	9900.3	41.5			G4/12000
FVH	(80°-90°)	658.6	2.8			G4/750
BL	(0°-30°)	1108.2	4.6	B3/2500		
BM	(30°-60°)	2445.3	10.2	B2/2500		
BH	(60°-80°)	1709.9	7.2	B3/2500		G3/2500
BVH	(80°-90°)	269.7	1.1			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 IV Medium





REPORT NUMBER: P265713

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5
2.5°	2569.3	2550.6	2550.6	2536.8	2536.8	2513.5	2504.3	2499.7	2476.4	2462.4	2448.5
5°	2717.9	2694.7	2690.1	2657.5	2643.6	2592.5	2587.8	2555.4	2513.5	2471.7	2439.2
7.5°	2852.7	2838.7	2815.5	2782.9	2741.2	2676.1	2671.5	2620.4	2550.6	2495.0	2448.5
10°	2950.3	2941.1	2908.4	2866.6	2820.1	2755.1	2750.5	2694.7	2611.2	2546.1	2480.9
12.5°	3066.5	3052.5	3010.7	2955.0	2903.9	2843.4	2838.7	2792.3	2699.3	2615.8	2532.1
15°	3177.9	3159.2	3108.2	3052.5	2996.7	2945.6	2945.6	2894.5	2797.0	2699.3	2601.9
17.5°	3233.7	3224.3	3173.3	3112.8	3066.5	3029.3	3024.7	2978.2	2880.5	2778.4	2671.5
20°	3252.3	3257.0	3210.5	3145.3	3112.8	3094.3	3089.6	3057.1	2950.3	2852.7	2750.5
22.5°	3247.6	3261.6	3224.3	3154.7	3145.3	3145.3	3145.3	3108.2	3024.7	2927.0	2824.8
25°	3266.1	3284.8	3257.0	3173.3	3173.3	3191.9	3191.9	3173.3	3099.0	3015.3	2913.2
27.5°	3331.3	3345.2	3321.9	3205.8	3210.5	3238.3	3233.7	3238.3	3191.9	3112.8	3010.7
30°	3410.2	3428.8	3401.0	3257.0	3252.3	3280.2	3280.2	3303.3	3270.9	3187.1	3103.6
32.5°	3623.9	3619.4	3531.0	3312.7	3298.8	3326.7	3326.7	3349.8	3331.3	3266.1	3187.1
35°	4260.4	4190.8	3995.7	3493.9	3354.5	3368.5	3368.5	3410.2	3419.5	3368.5	3298.8
37.5°	4910.9	4887.7	4739.0	3977.1	3558.8	3456.7	3452.0	3512.5	3554.2	3512.5	3466.0
40°	5566.0	5547.5	5515.0	4622.9	3986.4	3614.7	3600.8	3651.8	3726.2	3698.3	3670.5
42.5°	6174.6	6165.3	6197.9	5259.3	4530.0	3953.8	3911.9	3851.7	3958.4	3949.2	3949.2
45°	6653.1	6676.5	6695.0	5854.1	5120.0	4390.6	4339.4	4135.0	4279.0	4316.1	4344.2
47.5°	6922.7	6941.3	7006.3	6434.7	5710.0	4897.0	4859.8	4525.3	4715.7	4827.3	4906.3
50°	7308.3	7257.1	7312.9	7001.7	6420.8	5556.7	5454.5	5050.4	5291.8	5487.0	5672.8
52.5°	7680.0	7596.3	7642.8	7656.8	7229.3	6202.4	6095.7	5668.2	5970.2	6276.8	6606.8
55°	8014.5	8009.8	8056.3	8293.2	8009.8	6894.9	6773.9	6351.1	6788.0	7117.8	7675.3
57.5°	8284.0	8330.4	8534.8	9032.0	8911.1	7647.5	7512.7	7145.7	7661.4	7991.2	8915.9
60°	8600.0	8674.3	9013.5	9659.3	9733.6	8437.3	8298.0	8033.1	8558.2	8892.6	10351.4
62.5°	8706.7	8813.6	9510.5	10318.9	10593.1	9301.5	9175.9	8999.5	9501.3	9803.3	11782.4
65°	7996.0	8200.4	9784.7	10658.1	11517.6	10342.1	10235.3	10081.9	10439.7	10639.5	12753.4
67.5°	7800.8	7893.6	9250.3	11146.0	12386.5	11680.2	11573.5	11308.6	11317.8	11234.3	13069.4
70°	7526.7	7628.9	8702.2	11512.9	13631.6	13510.8	13380.8	12600.2	12121.5	11615.3	12446.8
72.5°	6411.7	6379.0	7498.8	10523.4	14230.9	15778.1	15624.8	13989.3	12716.3	11285.3	10504.8
75°	3600.8	3507.8	4548.5	7280.5	12995.2	16679.4	16674.8	14690.9	12298.2	9831.1	7150.2
77.5°	1045.4	1017.5	1500.7	3052.5	8748.6	14491.1	14667.6	13250.5	10263.1	7062.0	3926.0
80°	492.5	501.8	645.8	1008.2	3735.4	9352.6	9859.0	8725.3	6132.8	3257.0	1621.5
82.5°	311.4	315.9	441.3	650.5	1579.7	4246.5	4664.7	3926.0	2429.8	1407.7	715.5
85°	195.1	195.1	292.7	427.5	943.1	1356.7	1472.9	1338.0	1040.7	766.7	390.3
87.5°	106.9	106.9	176.5	246.2	515.6	436.8	450.7	534.3	650.5	469.3	195.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265713

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5	2448.5
2.5°	2443.7	2434.5	2420.7	2415.9	2411.3	2406.6	2411.3	2420.7	2411.3	2411.3	2415.9
5°	2429.8	2420.7	2402.0	2402.0	2406.6	2411.3	2434.5	2448.5	2453.1	2453.1	2453.1
7.5°	2429.8	2415.9	2402.0	2406.6	2415.9	2434.5	2471.7	2495.0	2513.5	2518.2	2518.2
10°	2453.1	2434.5	2425.2	2434.5	2462.4	2476.4	2513.5	2550.6	2574.0	2583.3	2583.3
12.5°	2495.0	2476.4	2476.4	2495.0	2532.1	2550.6	2583.3	2611.2	2639.0	2653.0	2653.0
15°	2564.7	2541.5	2546.1	2578.6	2620.4	2639.0	2662.1	2671.5	2694.7	2713.3	2713.3
17.5°	2629.7	2606.4	2615.8	2653.0	2680.8	2690.1	2704.0	2699.3	2708.7	2722.7	2727.3
20°	2704.0	2680.8	2685.5	2708.7	2713.3	2704.0	2704.0	2690.1	2685.5	2708.7	2717.9
22.5°	2778.4	2755.1	2750.5	2736.5	2713.3	2690.1	2676.1	2662.1	2653.0	2676.1	2685.5
25°	2866.6	2834.2	2810.8	2750.5	2690.1	2648.3	2629.7	2620.4	2615.8	2639.0	2648.3
27.5°	2964.1	2931.7	2862.0	2731.8	2634.3	2564.7	2550.6	2550.6	2560.0	2574.0	2583.3
30°	3057.1	3024.7	2899.2	2690.1	2536.8	2434.5	2420.7	2434.5	2457.9	2471.7	2485.7
32.5°	3150.0	3117.5	2922.4	2625.0	2392.7	2262.7	2253.4	2276.6	2313.8	2323.0	2332.3
35°	3275.5	3243.1	2950.3	2532.1	2211.5	2072.1	2062.9	2076.8	2109.3	2123.2	2137.2
37.5°	3452.0	3433.4	2992.1	2429.8	2044.3	1890.9	1863.1	1853.8	1872.3	1867.8	1886.4
40°	3684.4	3698.3	3066.5	2295.2	1881.7	1723.7	1663.3	1635.5	1616.8	1579.7	1598.3
42.5°	4023.5	4032.9	3150.0	2141.9	1742.4	1565.7	1486.8	1435.6	1398.5	1338.0	1347.4
45°	4520.6	4441.7	3247.6	1979.2	1616.8	1440.3	1347.4	1286.9	1235.9	1184.8	1189.4
47.5°	5180.3	4938.8	3354.5	1844.5	1491.4	1338.0	1254.5	1184.8	1124.4	1082.5	1087.2
50°	5993.4	5556.7	3461.3	1719.0	1366.0	1259.1	1184.8	1110.5	1049.9	1008.2	1003.5
52.5°	7066.6	6300.2	3531.0	1579.7	1240.5	1189.4	1124.4	1054.7	980.3	929.1	924.5
55°	8181.8	7164.3	3591.5	1412.5	1119.6	1110.5	1077.8	998.9	910.6	845.6	836.3
57.5°	9408.3	8088.8	3637.9	1249.8	1026.9	1045.4	1036.0	943.1	845.6	785.2	780.5
60°	10523.4	9045.9	3489.1	1105.8	943.1	980.3	989.7	910.6	859.5	873.4	878.2
62.5°	11647.8	9784.7	2922.4	998.9	887.3	938.5	1017.5	1012.8	989.7	1012.8	1017.5
65°	12051.9	9937.9	2072.1	910.6	831.7	957.1	1105.8	1096.6	989.7	947.8	938.5
67.5°	11824.3	9482.7	1393.8	841.0	789.8	980.3	1198.7	1096.6	952.5	896.7	878.2
70°	10741.8	8363.0	1022.1	771.3	752.7	975.6	1249.8	1091.8	933.9	873.4	850.2
72.5°	8567.3	6453.5	822.4	706.2	696.9	952.5	1277.7	1082.5	915.3	850.2	822.4
75°	5547.5	4014.3	692.2	641.2	613.4	915.3	1263.7	1054.7	892.0	808.5	789.8
77.5°	2574.0	1728.3	590.0	566.8	534.3	859.5	1222.0	998.9	841.0	761.9	738.8
80°	1198.7	817.6	497.1	492.5	478.5	813.1	1166.2	933.9	780.5	715.5	678.3
82.5°	641.2	492.5	404.1	404.1	418.2	757.4	1096.6	854.8	701.5	669.1	571.5
85°	339.2	283.4	292.7	315.9	357.7	669.1	1003.5	771.3	613.4	511.0	497.1
87.5°	171.8	181.2	181.2	213.7	274.2	543.6	827.0	636.4	520.4	418.2	408.9
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)