

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: P237335

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237335
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-AF72-220-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26536.4 lumens
Efficiency: N/A
Efficacy: 119.5 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

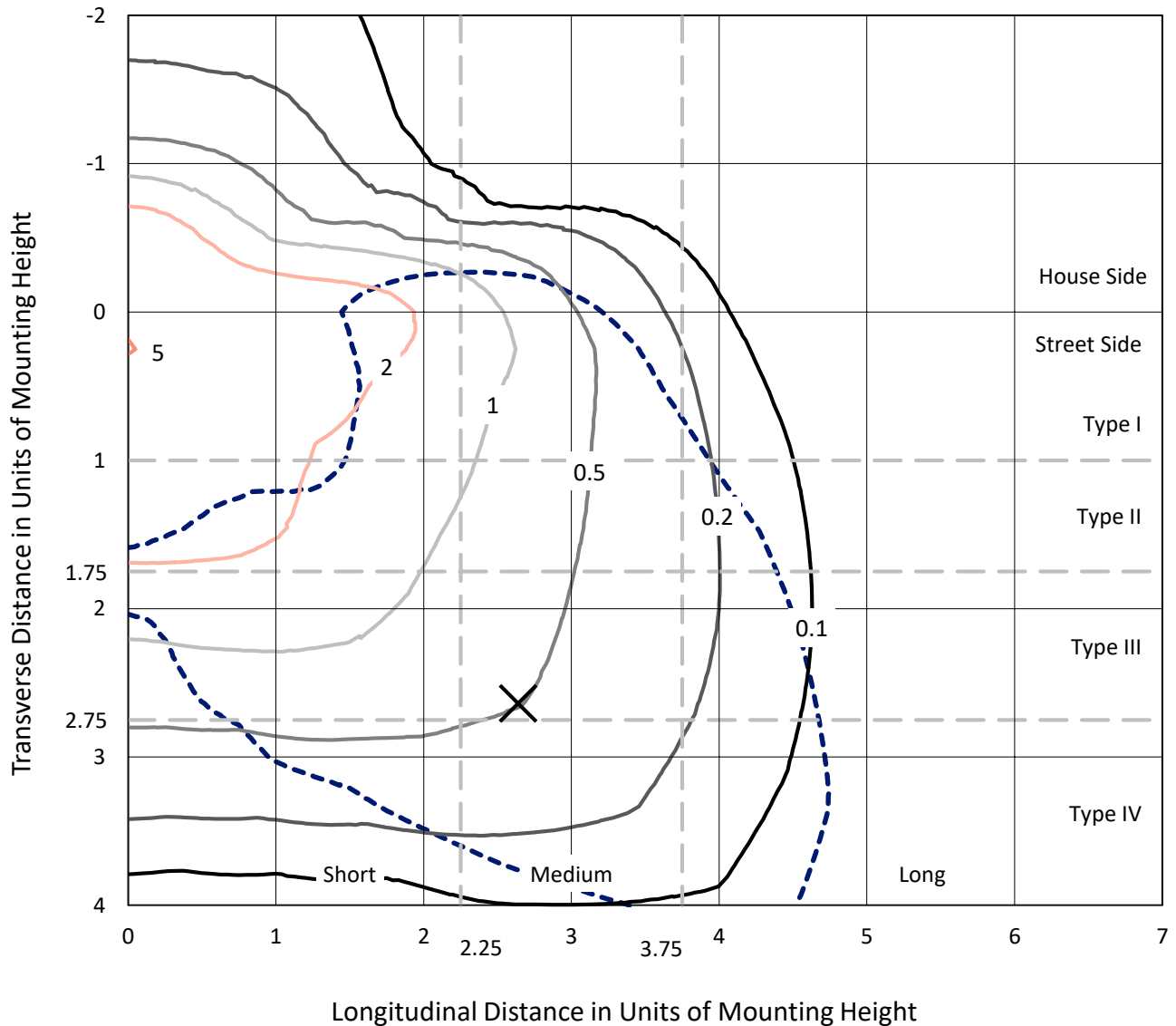
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

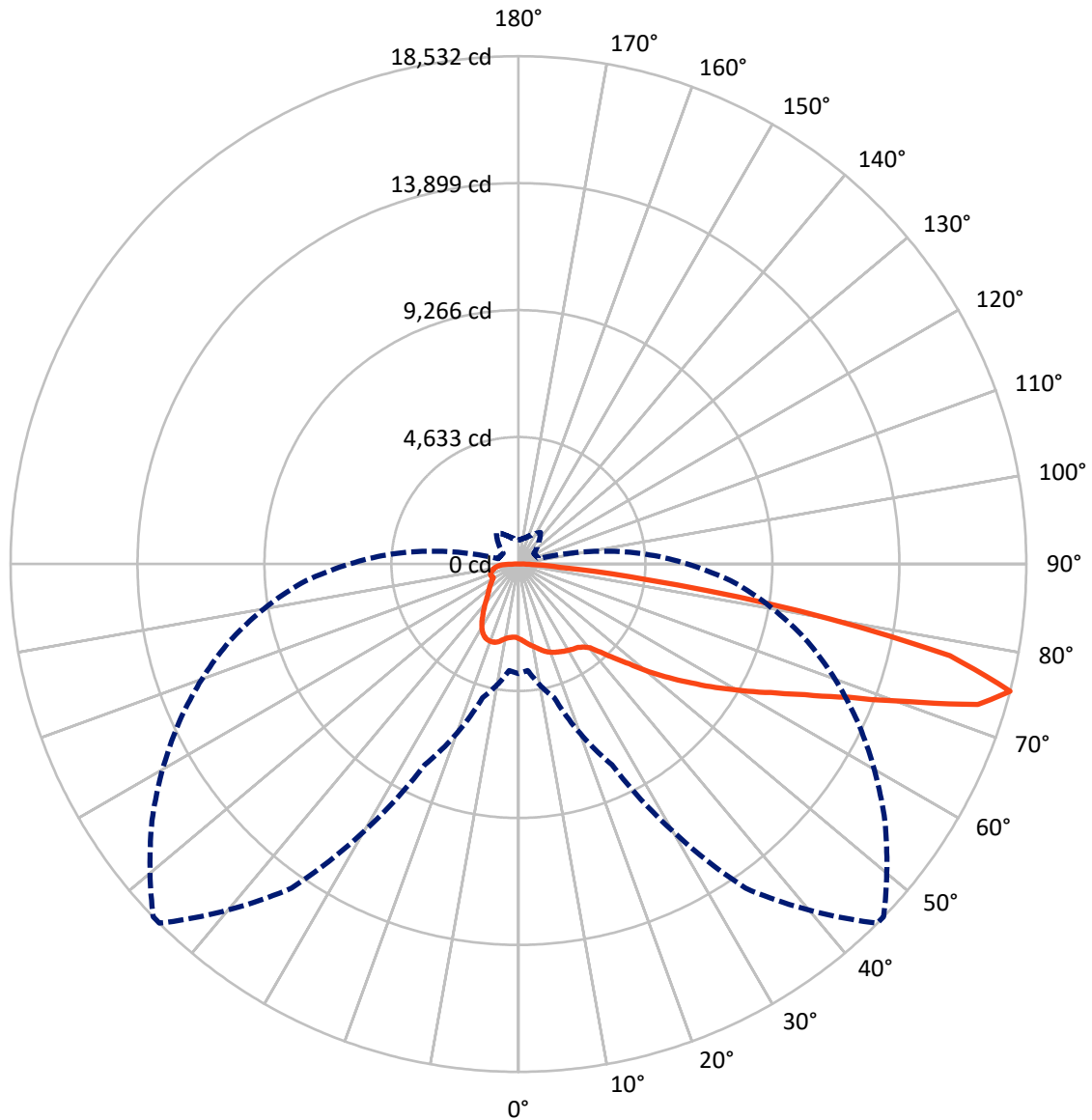
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6147.4	0.0	6147.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	20389.0	0.0	20389.0
	% Fixture	76.8	0.0	76.8
Total	Lumens	26536.4	0.0	26536.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.6	1.0
10°-20°	873.6	3.3
20°-30°	1499.1	5.6
30°-40°	2096.7	7.9
40°-50°	3075.6	11.6
50°-60°	4791.0	18.1
60°-70°	6893.9	26.0
70°-80°	6005.4	22.6
80°-90°	1031.4	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°	26536.4	100.0
0°-180°	26536.4	100.0



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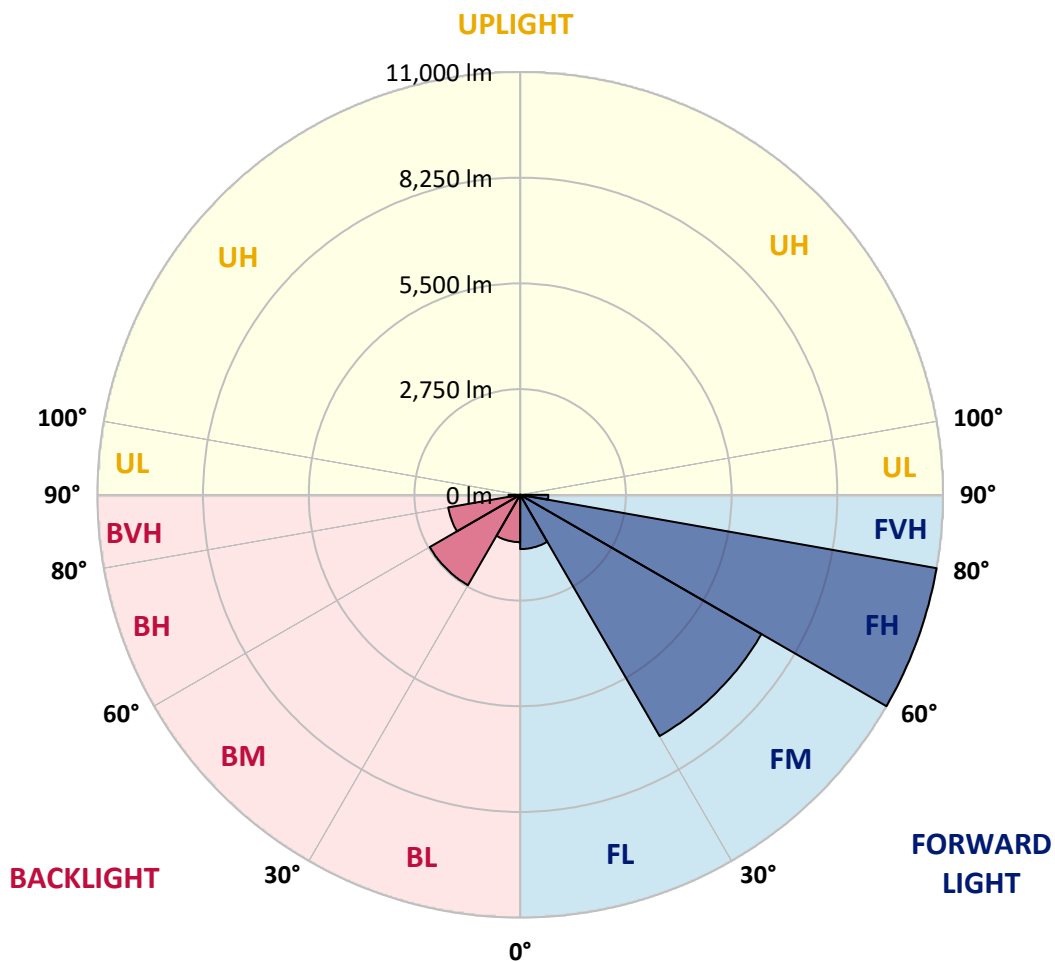
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1411.1	5.3			
FM	(30°-60°)	7246.6	27.3			
FH	(60°-80°)	10999.6	41.5			G4/12000
FVH	(80°-90°)	731.7	2.8			G4/750
BL	(0°-30°)	1231.2	4.6	B3/2500		
BM	(30°-60°)	2716.8	10.2	B3/5000		
BH	(60°-80°)	1899.7	7.2	B3/2500		G3/2500
BVH	(80°-90°)	299.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3
2.5°	2854.5	2833.9	2833.9	2818.4	2818.4	2792.7	2782.3	2777.1	2751.3	2735.9	2720.3
5°	3019.8	2994.0	2988.8	2952.6	2937.2	2880.4	2875.2	2839.1	2792.7	2746.2	2710.0
7.5°	3169.4	3154.0	3128.2	3092.0	3045.5	2973.3	2968.1	2911.3	2833.9	2772.0	2720.3
10°	3277.8	3267.5	3231.4	3185.0	3133.3	3061.1	3055.9	2994.0	2901.0	2828.8	2756.4
12.5°	3406.9	3391.4	3344.9	3283.1	3226.2	3159.1	3154.0	3102.3	2999.1	2906.2	2813.3
15°	3530.8	3510.2	3453.4	3391.4	3329.5	3272.7	3272.7	3216.0	3107.5	2999.1	2890.7
17.5°	3592.7	3582.4	3525.6	3458.5	3406.9	3365.6	3360.4	3308.8	3200.4	3086.9	2968.1
20°	3613.4	3618.6	3566.9	3494.6	3458.5	3437.8	3432.7	3396.6	3277.8	3169.4	3055.9
22.5°	3608.3	3623.7	3582.4	3504.9	3494.6	3494.6	3494.6	3453.4	3360.4	3252.1	3138.5
25°	3628.8	3649.5	3618.6	3525.6	3525.6	3546.3	3546.3	3525.6	3443.0	3350.2	3236.5
27.5°	3701.1	3716.6	3690.8	3561.7	3566.9	3597.9	3592.7	3597.9	3546.3	3458.5	3344.9
30°	3788.9	3809.6	3778.6	3618.6	3613.4	3644.4	3644.4	3670.1	3634.0	3541.1	3448.2
32.5°	4026.3	4021.2	3923.1	3680.5	3665.0	3695.9	3695.9	3721.8	3701.1	3628.8	3541.1
35°	4733.5	4656.1	4439.3	3881.8	3726.9	3742.5	3742.5	3788.9	3799.2	3742.5	3665.0
37.5°	5456.2	5430.3	5265.2	4418.6	3954.1	3840.5	3835.3	3902.5	3948.9	3902.5	3850.8
40°	6184.0	6163.4	6127.3	5136.1	4429.0	4016.0	4000.6	4057.3	4139.9	4108.9	4078.0
42.5°	6860.2	6849.9	6886.1	5843.3	5032.9	4392.9	4346.4	4279.3	4398.0	4387.6	4387.6
45°	7391.9	7417.7	7438.4	6504.0	5688.5	4878.0	4821.3	4594.2	4754.2	4795.5	4826.4
47.5°	7691.4	7711.9	7784.2	7149.3	6344.0	5440.7	5399.4	5027.7	5239.3	5363.2	5451.0
50°	8119.8	8063.0	8124.9	7779.0	7133.9	6173.7	6060.2	5611.1	5879.5	6096.3	6302.7
52.5°	8532.7	8439.9	8491.4	8507.0	8032.0	6891.2	6772.4	6297.6	6633.1	6973.8	7340.3
55°	8904.4	8899.3	8950.8	9214.1	8899.3	7660.4	7526.2	7056.4	7541.6	7908.1	8527.5
57.5°	9203.8	9255.4	9482.5	10034.8	9900.6	8496.6	8346.9	7939.1	8512.1	8878.6	9905.8
60°	9554.8	9637.4	10014.2	10731.7	10814.3	9374.1	9219.2	8925.0	9508.3	9880.0	11500.8
62.5°	9673.5	9792.2	10566.6	11464.7	11769.3	10334.3	10194.8	9998.7	10556.2	10891.8	13090.7
65°	8883.7	9110.9	10871.1	11841.6	12796.5	11490.5	11371.8	11201.4	11598.9	11820.9	14169.6
67.5°	8667.0	8770.2	10277.5	12383.5	13761.8	12977.2	12858.5	12564.2	12574.5	12481.6	14520.6
70°	8362.4	8476.0	9668.3	12791.4	15145.2	15011.0	14866.4	13999.3	13467.6	12904.9	13828.9
72.5°	7123.5	7087.4	8331.4	11691.8	15811.1	17530.0	17359.7	15542.7	14128.3	12538.4	11671.2
75°	4000.6	3897.2	5053.6	8088.8	14438.0	18531.5	18526.3	16322.1	13663.8	10922.8	7944.2
77.5°	1161.5	1130.5	1667.3	3391.4	9720.0	16100.1	16296.3	14721.9	11402.7	7846.1	4361.9
80°	547.2	557.5	717.5	1120.1	4150.2	10391.0	10953.7	9694.2	6813.8	3618.6	1801.5
82.5°	345.9	351.0	490.4	722.7	1755.1	4718.1	5182.6	4361.9	2699.7	1564.1	794.9
85°	216.8	216.8	325.2	474.9	1047.9	1507.3	1636.3	1486.7	1156.2	851.7	433.6
87.5°	118.8	118.8	196.2	273.5	573.0	485.2	500.7	593.6	722.7	521.4	216.8
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°	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3	2720.3
2.5°	2715.2	2704.9	2689.3	2684.2	2679.1	2673.9	2679.1	2689.3	2679.1	2679.1	2684.2
5°	2699.7	2689.3	2668.8	2668.8	2673.9	2679.1	2704.9	2720.3	2725.6	2725.6	2725.6
7.5°	2699.7	2684.2	2668.8	2673.9	2684.2	2704.9	2746.2	2772.0	2792.7	2797.8	2797.8
10°	2725.6	2704.9	2694.6	2704.9	2735.9	2751.3	2792.7	2833.9	2859.8	2870.1	2870.1
12.5°	2772.0	2751.3	2751.3	2772.0	2813.3	2833.9	2870.1	2901.0	2932.0	2947.5	2947.5
15°	2849.4	2823.5	2828.8	2864.9	2911.3	2932.0	2957.8	2968.1	2994.0	3014.6	3014.6
17.5°	2921.6	2895.9	2906.2	2947.5	2978.4	2988.8	3004.3	2999.1	3009.4	3024.9	3030.1
20°	3004.3	2978.4	2983.6	3009.4	3014.6	3004.3	3004.3	2988.8	2983.6	3009.4	3019.8
22.5°	3086.9	3061.1	3055.9	3040.4	3014.6	2988.8	2973.3	2957.8	2947.5	2973.3	2983.6
25°	3185.0	3148.8	3123.0	3055.9	2988.8	2942.3	2921.6	2911.3	2906.2	2932.0	2942.3
27.5°	3293.3	3257.2	3179.7	3035.2	2926.9	2849.4	2833.9	2833.9	2844.2	2859.8	2870.1
30°	3396.6	3360.4	3221.1	2988.8	2818.4	2704.9	2689.3	2704.9	2730.7	2746.2	2761.7
32.5°	3499.8	3463.7	3246.8	2916.5	2658.4	2513.9	2503.6	2529.3	2570.7	2581.0	2591.3
35°	3639.1	3603.0	3277.8	2813.3	2457.1	2302.3	2291.9	2307.4	2343.6	2359.0	2374.5
37.5°	3835.3	3814.7	3324.3	2699.7	2271.3	2100.9	2069.9	2059.6	2080.3	2075.2	2095.7
40°	4093.4	4108.9	3406.9	2550.0	2090.6	1915.1	1848.0	1817.0	1796.4	1755.1	1775.7
42.5°	4470.3	4480.6	3499.8	2379.7	1935.7	1739.6	1651.9	1595.1	1553.8	1486.7	1497.0
45°	5022.6	4934.8	3608.3	2199.0	1796.4	1600.2	1497.0	1429.9	1373.1	1316.3	1321.4
47.5°	5755.6	5487.2	3726.9	2049.3	1657.0	1486.7	1393.8	1316.3	1249.2	1202.8	1207.9
50°	6658.9	6173.7	3845.7	1910.0	1517.6	1398.9	1316.3	1233.7	1166.6	1120.1	1115.0
52.5°	7851.4	6999.6	3923.1	1755.1	1378.2	1321.4	1249.2	1171.8	1089.1	1032.4	1027.2
55°	9090.2	7959.8	3990.2	1569.2	1244.0	1233.7	1197.6	1109.8	1011.7	939.5	929.1
57.5°	10453.0	8986.9	4041.8	1388.6	1140.8	1161.5	1151.1	1047.9	939.5	872.4	867.3
60°	11691.8	10050.4	3876.7	1228.6	1047.9	1089.1	1099.5	1011.7	954.9	970.5	975.6
62.5°	12941.0	10871.1	3246.8	1109.8	985.9	1042.7	1130.5	1125.3	1099.5	1125.3	1130.5
65°	13390.1	11041.4	2302.3	1011.7	924.0	1063.4	1228.6	1218.2	1099.5	1053.0	1042.7
67.5°	13137.1	10535.6	1548.5	934.4	877.5	1089.1	1331.8	1218.2	1058.2	996.3	975.6
70°	11934.5	9291.6	1135.7	856.9	836.3	1084.0	1388.6	1213.0	1037.6	970.5	944.6
72.5°	9518.7	7170.0	913.7	784.6	774.3	1058.2	1419.5	1202.8	1016.9	944.6	913.7
75°	6163.4	4460.0	769.2	712.4	681.4	1016.9	1404.1	1171.8	991.1	898.2	877.5
77.5°	2859.8	1920.3	655.6	629.7	593.6	954.9	1357.6	1109.8	934.4	846.6	820.7
80°	1331.8	908.5	552.3	547.2	531.7	903.4	1295.7	1037.6	867.3	794.9	753.6
82.5°	712.4	547.2	449.1	449.1	464.6	841.4	1218.2	949.8	779.5	743.3	634.9
85°	376.9	314.9	325.2	351.0	397.5	743.3	1115.0	856.9	681.4	567.8	552.3
87.5°	191.0	201.3	201.3	237.4	304.5	604.0	918.8	707.2	578.2	464.6	454.3
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)