

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: P237095

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26646.8 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

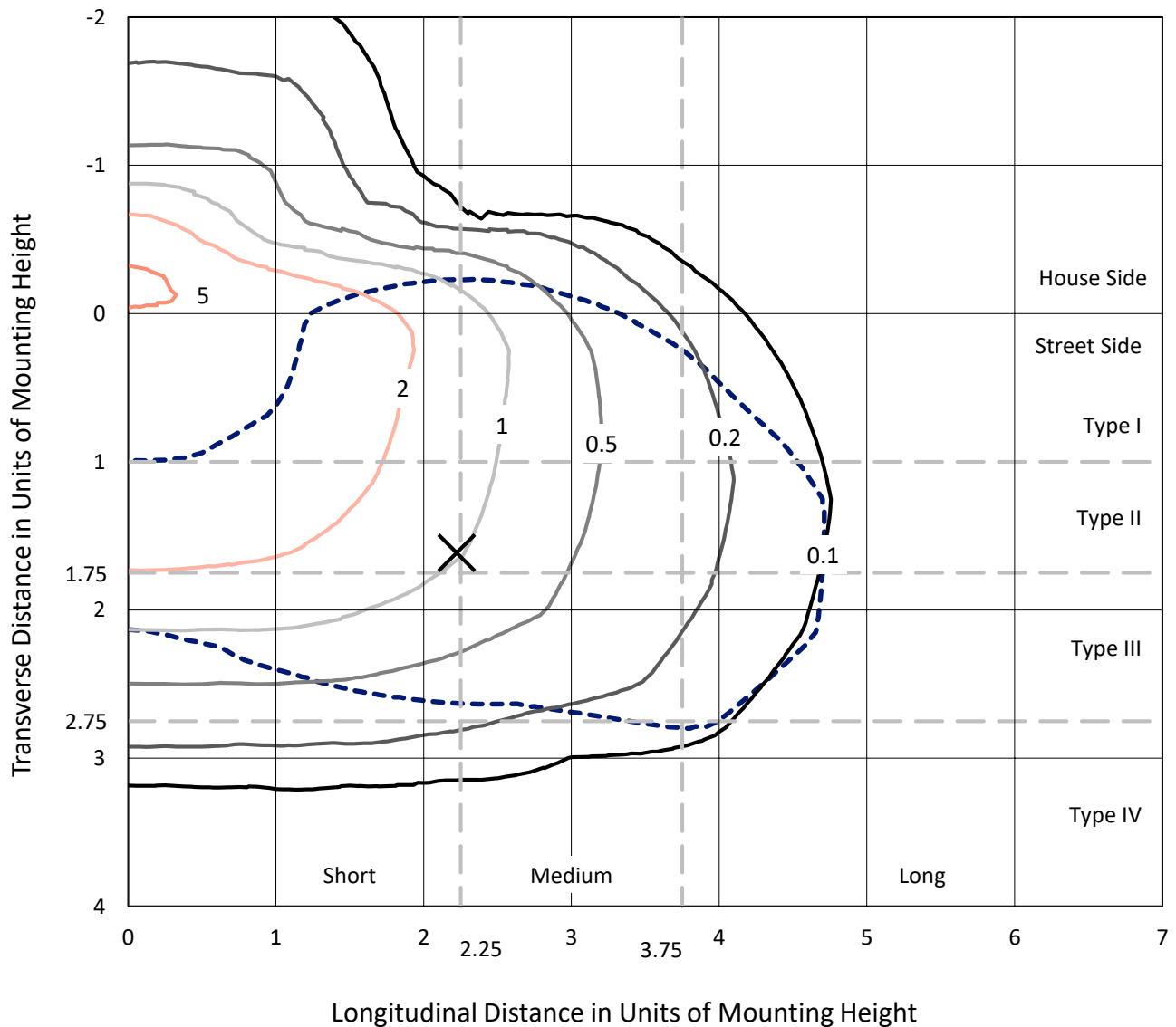
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

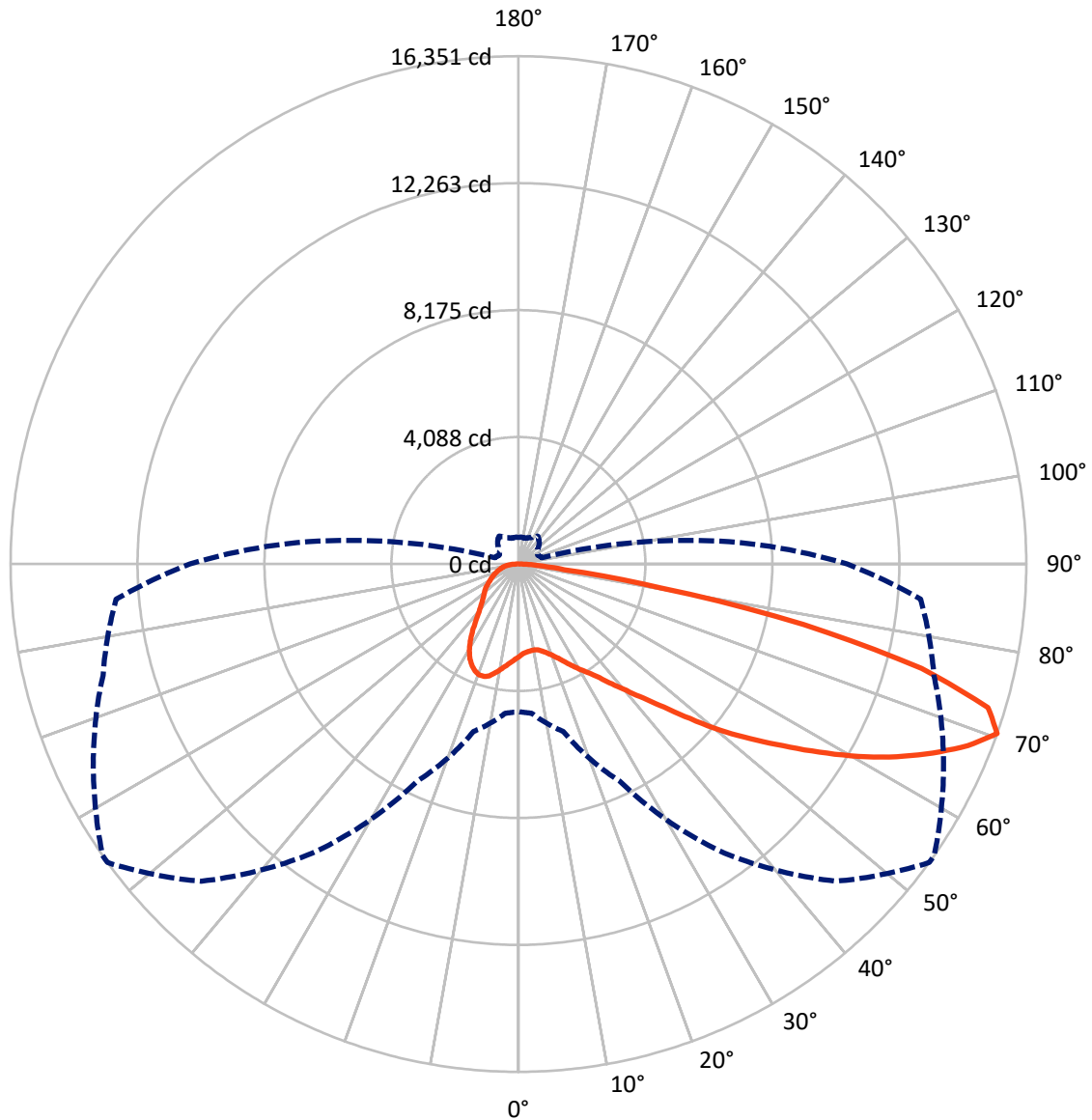


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6043.4	0.0	6043.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	20603.4	0.0	20603.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	26646.8	0.0	26646.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.6	1.1
10°-20°	934.8	3.5
20°-30°	1624.2	6.1
30°-40°	2373.5	8.9
40°-50°	3725.1	14.0
50°-60°	5728.4	21.5
60°-70°	6998.7	26.3
70°-80°	4339.2	16.3
80°-90°	630.4	2.4
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°	26646.8	100.0
0°-180°	26646.8	100.0

Coefficient of Utilization



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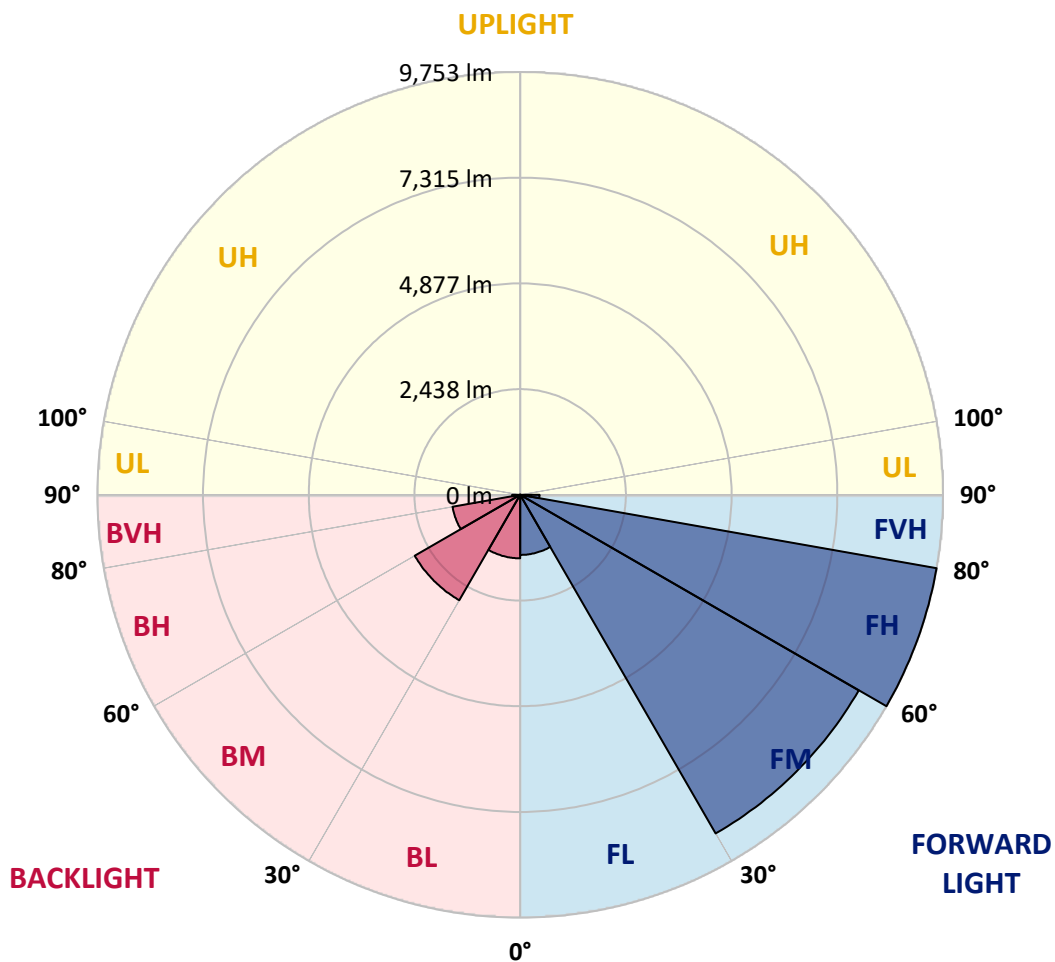
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1386.4	5.2			
FM	(30°-60°)	9018.7	33.8			
FH	(60°-80°)	9753.2	36.6			G4/12000
FVH	(80°-90°)	445.1	1.7			G3/500
BL	(0°-30°)	1465.1	5.5	B3/2500		
BM	(30°-60°)	2808.3	10.5	B3/5000		
BH	(60°-80°)	1584.7	5.9	B3/2500		G3/2500
BVH	(80°-90°)	185.2	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3
2.5°	2864.2	2854.3	2854.3	2869.1	2873.9	2888.5	2888.5	2893.4	2908.0	2932.5	2961.7
5°	2776.3	2771.5	2776.3	2795.8	2805.5	2834.9	2844.6	2849.5	2878.8	2917.8	2961.7
7.5°	2688.5	2683.6	2693.3	2722.7	2751.9	2795.8	2820.3	2825.1	2869.1	2922.7	2981.3
10°	2659.2	2654.4	2669.0	2693.3	2722.7	2771.5	2810.5	2815.4	2878.8	2942.2	3025.2
12.5°	2698.2	2693.3	2708.0	2732.4	2761.7	2795.8	2839.7	2844.6	2927.6	3010.5	3098.3
15°	2795.8	2795.8	2800.7	2815.4	2844.6	2873.9	2913.0	2917.8	3005.6	3103.2	3191.1
17.5°	2947.1	2937.3	2937.3	2932.5	2951.9	2966.6	3015.4	3020.3	3112.9	3200.8	3288.7
20°	3132.5	3127.7	3108.1	3083.7	3078.9	3088.6	3137.4	3142.3	3235.0	3308.1	3391.1
22.5°	3356.9	3361.8	3317.9	3264.2	3239.9	3254.5	3298.4	3303.3	3371.5	3435.0	3508.2
25°	3654.6	3640.0	3576.5	3498.5	3449.7	3449.7	3493.6	3493.6	3557.0	3596.1	3644.9
27.5°	3937.5	3908.3	3849.8	3737.6	3659.5	3674.1	3718.0	3718.0	3776.5	3791.2	3815.6
30°	4244.9	4215.7	4142.5	4001.0	3898.6	3888.7	3942.5	3937.5	4015.7	4010.8	3991.2
32.5°	4620.7	4606.0	4484.1	4303.6	4166.9	4132.7	4181.5	4186.4	4235.2	4220.6	4157.2
35°	5147.7	5142.8	5030.6	4713.3	4532.9	4469.5	4498.7	4498.7	4532.9	4493.8	4386.5
37.5°	5811.2	5821.0	5723.4	5255.0	5001.3	4893.9	4898.8	4893.9	4903.7	4859.7	4747.5
40°	6474.8	6499.2	6494.3	5928.3	5606.3	5420.9	5352.6	5342.8	5367.2	5347.7	5240.4
42.5°	7348.2	7406.8	7270.1	6757.8	6396.7	6084.5	5899.1	5874.7	5928.3	5952.8	5850.3
45°	8255.7	8236.2	8021.6	7650.8	7323.8	6923.7	6572.4	6533.4	6572.4	6645.6	6538.3
47.5°	8729.0	8714.4	8660.7	8475.4	8426.6	7967.9	7436.0	7401.9	7328.7	7431.1	7304.3
50°	9509.8	9524.4	9304.8	9285.3	9490.2	9236.5	8411.9	8333.8	8202.1	8285.0	8177.7
52.5°	10075.8	10012.3	9875.7	10046.4	10685.6	10549.0	9329.2	9295.0	9173.1	9153.6	9104.8
55°	10305.0	10305.0	10329.5	10724.7	11637.1	11456.5	10324.5	10358.7	10192.8	10056.2	10119.6
57.5°	10373.3	10402.6	10612.4	11266.3	12754.5	12164.0	11422.4	11471.2	11232.1	10958.9	11159.0
60°	10036.7	10124.6	10627.1	11573.7	13383.9	12915.5	12578.8	12593.4	12247.0	11846.9	12198.2
62.5°	9173.1	9280.4	10178.2	11700.5	13281.4	13686.4	13671.7	13705.9	13232.6	12734.9	13174.1
65°	8114.3	8221.6	9177.9	11344.3	13203.3	14237.7	14672.0	14764.8	14154.8	13486.4	13784.0
67.5°	6557.7	6699.3	7606.8	10144.0	12822.8	14691.5	15608.8	15706.4	14867.2	13876.7	13730.4
70°	4752.4	4820.8	5581.9	7709.3	11271.2	14442.7	16350.5	16345.6	15101.4	13847.4	12998.4
72.5°	2288.3	2342.0	3000.7	4786.6	8060.5	12256.8	15813.8	15906.5	14779.4	13423.0	11324.8
75°	941.7	995.3	1215.0	2020.0	4230.3	8099.6	13403.4	13622.9	13423.0	12047.0	8860.8
77.5°	585.5	605.1	712.4	1044.1	1932.1	3781.4	9382.9	9680.5	10636.8	9651.2	5850.3
80°	439.2	453.8	531.8	731.9	1219.9	1395.5	4659.7	5035.4	6445.5	5537.9	2649.4
82.5°	365.9	370.8	424.5	531.8	829.5	800.2	1493.1	1663.8	3005.6	2112.7	912.5
85°	341.6	351.3	380.5	380.5	526.9	502.6	619.7	649.0	873.4	722.1	317.1
87.5°	175.6	165.9	336.7	297.7	273.2	244.0	263.5	282.9	326.9	346.5	141.5
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°	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3	2981.3
2.5°	2971.5	2986.1	3010.5	3034.9	3064.1	3098.3	3117.9	3142.3	3161.7	3152.0	3147.1
5°	2986.1	3010.5	3064.1	3112.9	3171.6	3239.9	3283.8	3332.6	3371.5	3381.4	3366.7
7.5°	3010.5	3054.4	3127.7	3215.4	3293.5	3381.4	3449.7	3517.9	3566.7	3576.5	3576.5
10°	3069.1	3117.9	3215.4	3332.6	3425.2	3517.9	3596.1	3649.7	3693.6	3713.1	3713.1
12.5°	3152.0	3210.5	3327.7	3469.1	3571.6	3659.5	3703.4	3727.7	3747.3	3766.8	3771.7
15°	3249.6	3313.0	3454.5	3605.8	3713.1	3757.1	3757.1	3752.2	3752.2	3761.9	3771.7
17.5°	3347.2	3415.5	3561.9	3722.9	3791.2	3766.8	3732.6	3718.0	3708.3	3703.4	3718.0
20°	3449.7	3517.9	3664.3	3815.6	3796.1	3693.6	3644.9	3610.7	3581.4	3566.7	3586.3
22.5°	3561.9	3625.3	3776.5	3879.0	3732.6	3576.5	3483.8	3430.2	3381.4	3352.1	3371.5
25°	3693.6	3757.1	3903.5	3898.6	3620.4	3400.9	3254.5	3166.6	3112.9	3083.7	3083.7
27.5°	3849.8	3903.5	4045.0	3849.8	3464.3	3166.6	2951.9	2869.1	2854.3	2830.0	2830.0
30°	4010.8	4054.7	4176.7	3737.6	3249.6	2859.2	2625.1	2586.0	2590.9	2566.5	2571.4
32.5°	4176.7	4220.6	4254.8	3571.6	2971.5	2512.9	2356.7	2327.4	2322.5	2303.1	2283.5
35°	4410.9	4474.3	4264.5	3347.2	2634.8	2224.9	2112.7	2083.4	2054.2	1985.9	1985.9
37.5°	4767.1	4835.4	4240.1	3069.1	2288.3	2000.5	1898.1	1859.0	1810.2	1741.9	1717.5
40°	5255.0	5255.0	4186.4	2756.8	2010.3	1819.9	1722.3	1673.5	1619.9	1551.6	1537.0
42.5°	5830.7	5694.2	4103.5	2439.6	1805.3	1698.0	1610.1	1556.5	1493.1	1414.9	1405.2
45°	6504.1	6133.3	3986.3	2156.7	1654.1	1624.8	1571.2	1478.5	1371.1	1288.1	1273.5
47.5°	7157.9	6528.5	3874.1	1956.6	1527.3	1595.5	1551.6	1395.5	1249.1	1132.0	1117.4
50°	7875.2	6879.8	3742.4	1790.7	1429.7	1576.1	1527.3	1273.5	1112.5	1029.5	1019.8
52.5°	8592.4	7235.9	3600.9	1615.0	1346.7	1537.0	1468.7	1185.7	1107.5	995.3	980.7
55°	9348.7	7650.8	3435.0	1419.9	1249.1	1458.9	1390.6	1180.8	1141.7	995.3	961.3
57.5°	10085.5	8109.3	3166.6	1229.6	1141.7	1341.8	1361.3	1151.5	1068.6	985.6	946.5
60°	10900.4	8597.3	2722.7	1068.6	1049.0	1244.2	1322.3	1088.1	985.6	956.4	936.8
62.5°	11554.1	9036.4	2127.3	956.4	971.0	1166.2	1273.5	1049.0	951.4	927.1	922.2
65°	11837.2	9046.2	1527.3	858.8	892.9	1092.9	1224.7	1014.9	922.2	912.5	907.6
67.5°	11539.5	8548.5	1073.5	766.1	810.0	1024.7	1161.3	980.7	892.9	897.7	888.0
70°	10578.3	7499.5	785.5	678.2	731.9	951.4	1092.9	936.8	858.8	868.5	853.9
72.5°	8851.0	5845.3	629.4	605.1	668.5	873.4	1024.7	888.0	805.1	810.0	780.7
75°	6538.3	3874.1	526.9	541.6	595.3	800.2	936.8	824.6	746.5	727.0	707.5
77.5°	3888.7	1990.8	434.2	473.3	531.8	712.4	839.2	746.5	683.1	649.0	634.3
80°	1605.3	805.1	356.2	400.1	463.5	634.3	741.6	653.9	609.9	575.7	556.3
82.5°	639.1	395.3	282.9	326.9	390.4	551.4	649.0	575.7	531.8	507.5	453.8
85°	244.0	195.2	190.3	229.3	292.8	424.5	536.7	483.0	448.9	385.4	370.8
87.5°	97.6	87.9	87.9	112.2	165.9	268.3	385.4	336.7	351.3	278.1	282.9
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)