

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: P237100

Luminaire Tested: **ARCH-L-AF72-270-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237100
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-AF72-270-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30383.7 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 III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 273
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

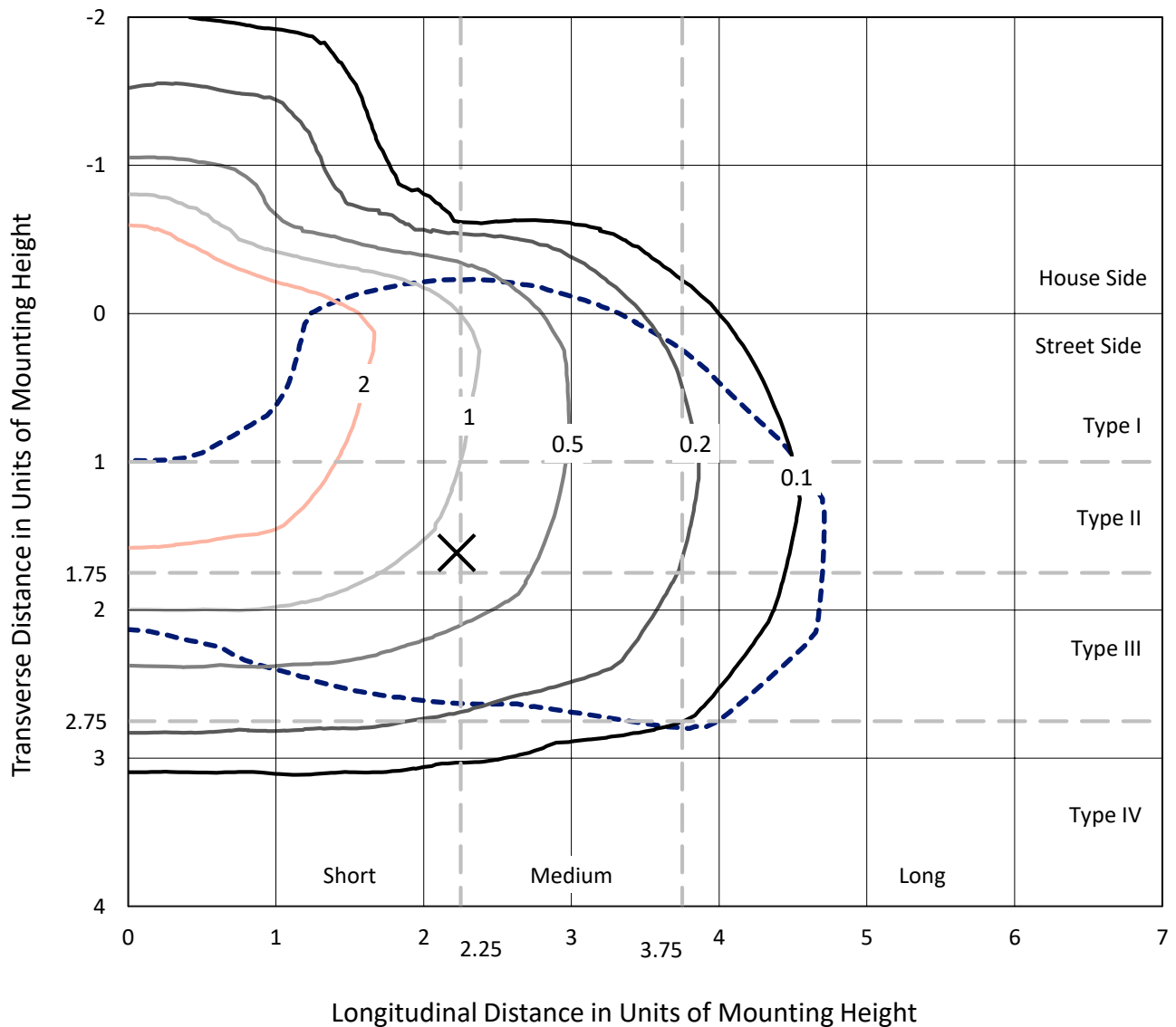


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Iso-Footcandle Lines of Horizontal Illumination

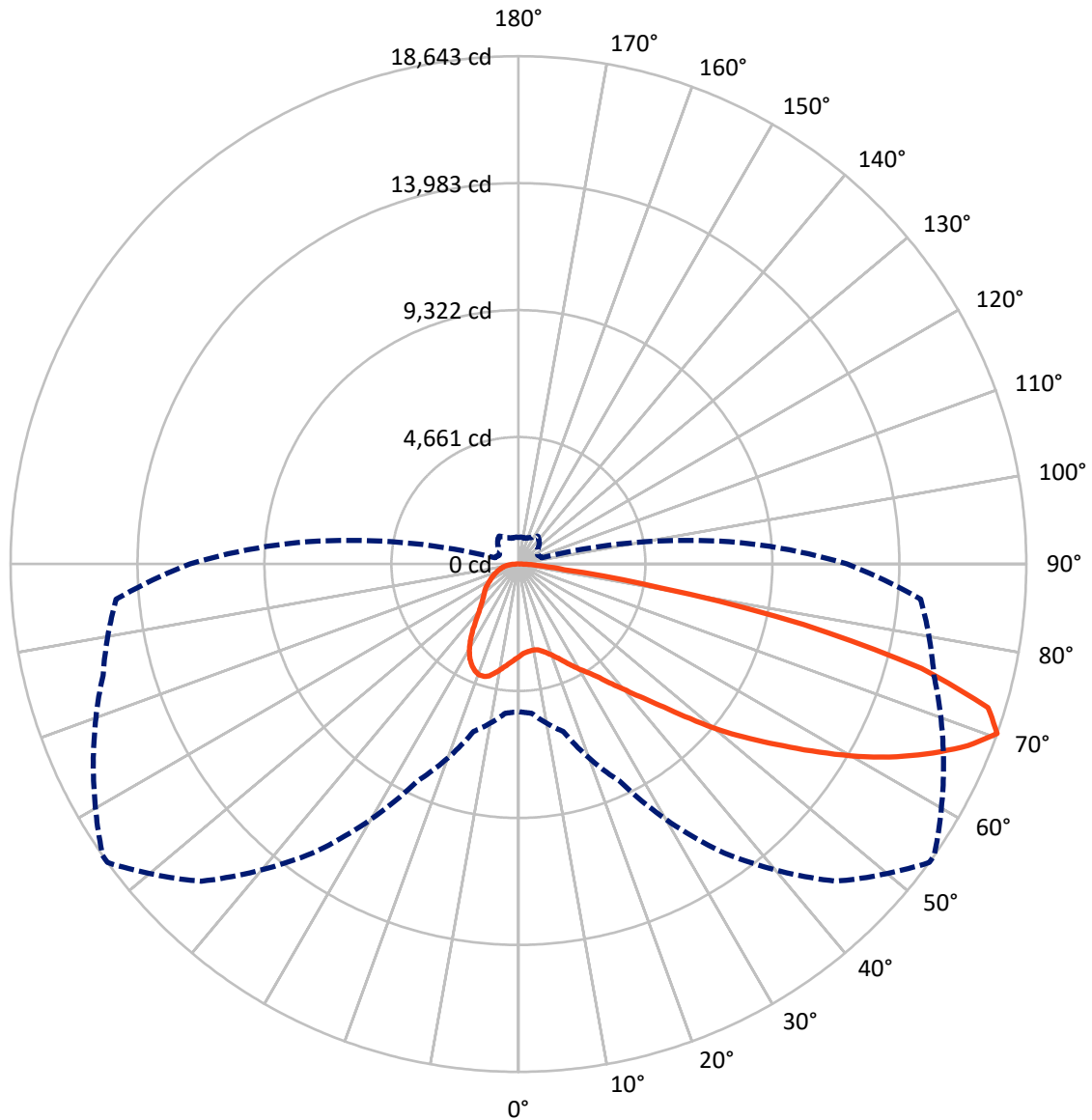
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 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	6890.9	0.0	6890.9
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	23492.8	0.0	23492.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	30383.7	0.0	30383.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	1.1
10°-20°	1065.9	3.5
20°-30°	1851.9	6.1
30°-40°	2706.4	8.9
40°-50°	4247.5	14.0
50°-60°	6531.7	21.5
60°-70°	7980.1	26.3
70°-80°	4947.7	16.3
80°-90°	718.8	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°	30383.7	100.0
0°-180°	30383.7	100.0

Coefficient of Utilization



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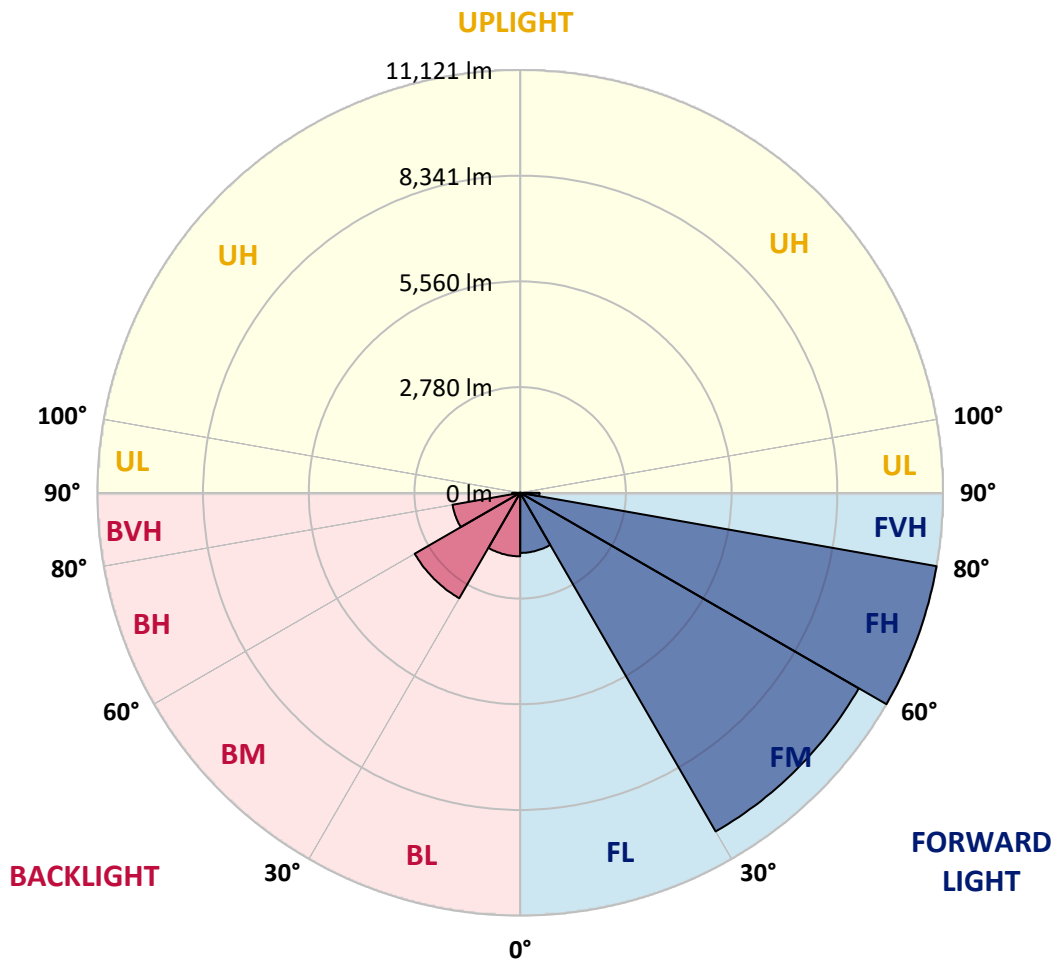
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1580.9	5.2			
FM	(30°-60°)	10283.5	33.8			
FH	(60°-80°)	11120.9	36.6			G4/12000
FVH	(80°-90°)	507.5	1.7			G4/750
BL	(0°-30°)	1670.6	5.5	B3/2500		
BM	(30°-60°)	3202.1	10.5	B3/5000		
BH	(60°-80°)	1807.0	5.9	B3/2500		G3/2500
BVH	(80°-90°)	211.2	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°	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4
2.5°	3265.8	3254.6	3254.6	3271.4	3276.9	3293.6	3293.6	3299.2	3315.9	3343.7	3377.1
5°	3165.6	3160.1	3165.6	3187.9	3199.1	3232.4	3243.6	3249.1	3282.4	3327.0	3377.1
7.5°	3065.5	3060.0	3071.1	3104.5	3137.8	3187.9	3215.7	3221.3	3271.4	3332.6	3399.4
10°	3032.1	3026.6	3043.3	3071.1	3104.5	3160.1	3204.6	3210.1	3282.4	3354.8	3449.4
12.5°	3076.6	3071.1	3087.8	3115.6	3148.9	3187.9	3237.9	3243.6	3338.1	3432.7	3532.9
15°	3187.9	3187.9	3193.4	3210.1	3243.6	3276.9	3321.4	3327.0	3427.1	3538.4	3638.5
17.5°	3360.4	3349.2	3349.2	3343.7	3365.9	3382.6	3438.2	3443.9	3549.5	3649.7	3749.8
20°	3571.8	3566.2	3544.0	3516.2	3510.6	3521.7	3577.4	3582.9	3688.7	3772.0	3866.7
22.5°	3827.7	3833.3	3783.2	3722.0	3694.2	3710.9	3761.0	3766.5	3844.5	3916.8	4000.1
25°	4167.1	4150.4	4078.1	3989.1	3933.5	3933.5	3983.5	3983.5	4055.8	4100.3	4155.9
27.5°	4489.7	4456.4	4389.6	4261.7	4172.6	4189.4	4239.4	4239.4	4306.2	4322.9	4350.7
30°	4840.3	4806.8	4723.5	4562.1	4445.2	4434.2	4495.4	4489.7	4578.8	4573.2	4551.0
32.5°	5268.7	5251.9	5112.9	4907.0	4751.3	4712.3	4768.0	4773.5	4829.1	4812.5	4740.1
35°	5869.5	5864.0	5736.0	5374.4	5168.6	5096.2	5129.6	5129.6	5168.6	5124.1	5001.6
37.5°	6626.2	6637.3	6526.0	5991.9	5702.6	5580.2	5585.8	5580.2	5591.3	5541.3	5413.4
40°	7382.8	7410.7	7405.0	6759.7	6392.5	6181.1	6103.2	6092.1	6119.9	6097.6	5975.3
42.5°	8378.7	8445.5	8289.7	7705.5	7293.8	6937.8	6726.3	6698.5	6759.7	6787.5	6670.7
45°	9413.5	9391.2	9146.4	8723.6	8350.9	7894.6	7494.0	7449.5	7494.0	7577.5	7455.2
47.5°	9953.2	9936.4	9875.3	9663.8	9608.3	9085.2	8478.8	8439.9	8356.4	8473.3	8328.7
50°	10843.4	10860.1	10609.6	10587.4	10821.1	10531.8	9591.5	9502.5	9352.3	9446.8	9324.5
52.5°	11488.7	11416.3	11260.6	11455.3	12184.2	12028.4	10637.5	10598.5	10459.5	10437.2	10381.5
55°	11750.2	11750.2	11778.1	12228.7	13269.0	13063.2	11772.4	11811.4	11622.3	11466.5	11538.8
57.5°	11828.1	11861.4	12100.7	12846.2	14543.1	13869.9	13024.2	13079.9	12807.2	12495.8	12723.8
60°	11444.2	11544.3	12117.4	13196.7	15260.8	14726.7	14342.8	14359.5	13964.5	13508.3	13908.9
62.5°	10459.5	10581.8	11605.6	13341.3	15144.0	15605.7	15589.1	15627.9	15088.3	14520.8	15021.5
65°	9252.2	9374.5	10465.0	12935.2	15055.0	16234.4	16729.5	16835.2	16139.8	15377.6	15717.0
67.5°	7477.4	7638.8	8673.6	11566.6	14620.9	16751.8	17797.7	17909.0	16952.1	15822.7	15655.8
70°	5418.9	5496.7	6364.7	8790.4	12851.7	16468.1	18643.4	18637.9	17219.1	15789.3	14821.2
72.5°	2609.3	2670.5	3421.6	5457.9	9191.0	13975.6	18031.5	18137.1	16852.0	15305.3	12913.0
75°	1073.8	1135.0	1385.3	2303.3	4823.6	9235.5	15283.0	15533.4	15305.3	13736.4	10103.4
77.5°	667.6	689.9	812.3	1190.6	2203.1	4311.7	10698.6	11038.0	12128.5	11004.7	6670.7
80°	500.7	517.4	606.4	834.5	1390.9	1591.2	5313.2	5741.6	7349.4	6314.6	3021.0
82.5°	417.3	422.8	484.1	606.4	945.8	912.4	1702.4	1897.2	3427.1	2409.0	1040.3
85°	389.4	400.6	433.9	433.9	600.9	573.1	706.6	739.9	995.8	823.4	361.6
87.5°	200.3	189.1	383.9	339.4	311.6	278.1	300.4	322.6	372.8	395.0	161.3
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°	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4	3399.4
2.5°	3388.2	3404.9	3432.7	3460.5	3493.9	3532.9	3555.1	3582.9	3605.2	3594.0	3588.5
5°	3404.9	3432.7	3493.9	3549.5	3616.3	3694.2	3744.3	3799.9	3844.5	3855.5	3838.8
7.5°	3432.7	3482.7	3566.2	3666.4	3755.4	3855.5	3933.5	4011.3	4066.9	4078.1	4078.1
10°	3499.5	3555.1	3666.4	3799.9	3905.6	4011.3	4100.3	4161.6	4211.6	4233.9	4233.9
12.5°	3594.0	3660.8	3794.3	3955.6	4072.5	4172.6	4222.7	4250.6	4272.8	4295.1	4300.6
15°	3705.3	3777.7	3939.0	4111.4	4233.9	4283.9	4283.9	4278.4	4278.4	4289.4	4300.6
17.5°	3816.6	3894.5	4061.4	4244.9	4322.9	4295.1	4256.1	4239.4	4228.3	4222.7	4239.4
20°	3933.5	4011.3	4178.2	4350.7	4328.4	4211.6	4155.9	4117.0	4083.6	4066.9	4089.2
22.5°	4061.4	4133.7	4306.2	4423.0	4256.1	4078.1	3972.3	3911.2	3855.5	3822.2	3844.5
25°	4211.6	4283.9	4450.9	4445.2	4128.1	3877.8	3710.9	3610.7	3549.5	3516.2	3516.2
27.5°	4389.6	4450.9	4612.2	4389.6	3950.1	3610.7	3365.9	3271.4	3254.6	3226.9	3226.9
30°	4573.2	4623.3	4762.3	4261.7	3705.3	3260.2	2993.2	2948.7	2954.3	2926.5	2932.0
32.5°	4762.3	4812.5	4851.4	4072.5	3388.2	2865.2	2687.2	2653.8	2648.2	2626.0	2603.7
35°	5029.4	5101.8	4862.5	3816.6	3004.3	2537.0	2409.0	2375.6	2342.3	2264.4	2264.4
37.5°	5435.6	5513.5	4834.7	3499.5	2609.3	2281.1	2164.3	2119.7	2064.1	1986.2	1958.3
40°	5991.9	5991.9	4773.5	3143.4	2292.1	2075.2	1964.0	1908.3	1847.1	1769.2	1752.5
42.5°	6648.5	6492.7	4679.0	2781.8	2058.5	1936.1	1836.0	1774.7	1702.4	1613.4	1602.2
45°	7416.2	6993.4	4545.4	2459.1	1886.0	1852.7	1791.5	1685.7	1563.4	1468.8	1452.1
47.5°	8161.7	7444.0	4417.4	2231.0	1741.4	1819.3	1769.2	1591.2	1424.3	1290.8	1274.1
50°	8979.6	7844.6	4267.2	2041.8	1630.1	1797.0	1741.4	1452.1	1268.5	1173.9	1162.8
52.5°	9797.4	8250.7	4105.9	1841.5	1535.6	1752.5	1674.7	1351.9	1262.9	1135.0	1118.3
55°	10659.8	8723.6	3916.8	1619.0	1424.3	1663.5	1585.6	1346.4	1301.9	1135.0	1096.0
57.5°	11499.8	9246.6	3610.7	1402.1	1301.9	1529.9	1552.2	1313.0	1218.4	1123.8	1079.3
60°	12429.0	9802.9	3104.5	1218.4	1196.1	1418.7	1507.7	1240.6	1123.8	1090.5	1068.2
62.5°	13174.5	10303.7	2425.7	1090.5	1107.1	1329.7	1452.1	1196.1	1084.8	1057.1	1051.5
65°	13497.1	10314.8	1741.4	979.2	1018.1	1246.3	1396.4	1157.3	1051.5	1040.3	1034.8
67.5°	13157.8	9747.3	1224.0	873.5	923.5	1168.3	1324.1	1118.3	1018.1	1023.7	1012.5
70°	12061.7	8551.2	895.7	773.4	834.5	1084.8	1246.3	1068.2	979.2	990.3	973.6
72.5°	10092.2	6665.1	717.7	689.9	762.2	995.8	1168.3	1012.5	918.0	923.5	890.2
75°	7455.2	4417.4	600.9	617.6	678.7	912.4	1068.2	940.2	851.2	829.0	806.7
77.5°	4434.2	2269.9	495.1	539.7	606.4	812.3	957.0	851.2	778.9	739.9	723.2
80°	1830.4	918.0	406.1	456.2	528.6	723.2	845.7	745.5	695.4	656.5	634.2
82.5°	728.9	450.6	322.6	372.8	445.1	628.7	739.9	656.5	606.4	578.6	517.4
85°	278.1	222.5	217.0	261.5	333.8	484.1	612.0	550.8	511.9	439.6	422.8
87.5°	111.3	100.1	100.1	128.0	189.1	306.0	439.6	383.9	400.6	317.1	322.6
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)