

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: McGRAW-EDISON

Report Number: P299174

Luminaire Tested: **GLNA-AF-04-LED-E1-SL2-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-SL2-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18317.8 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

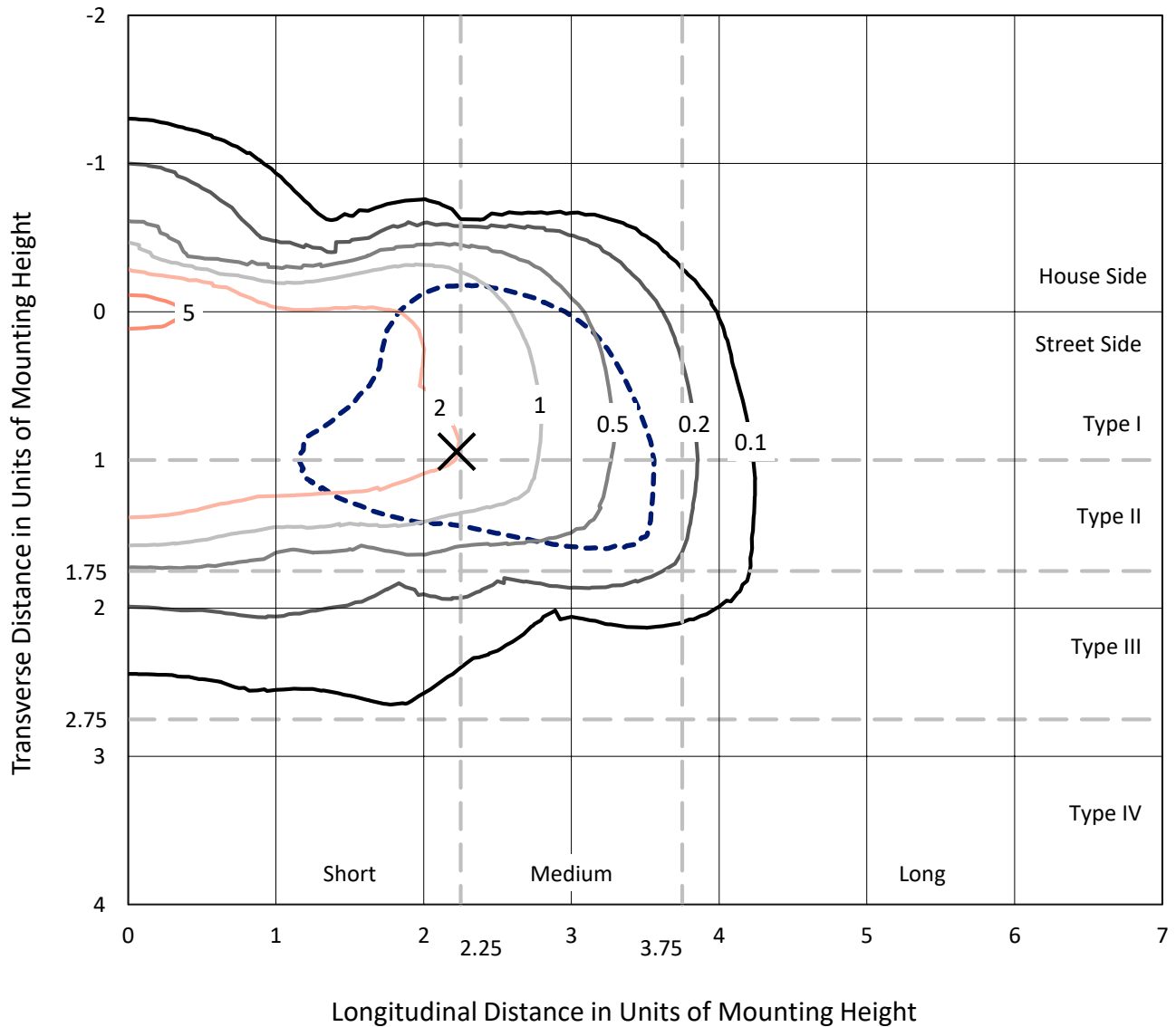
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

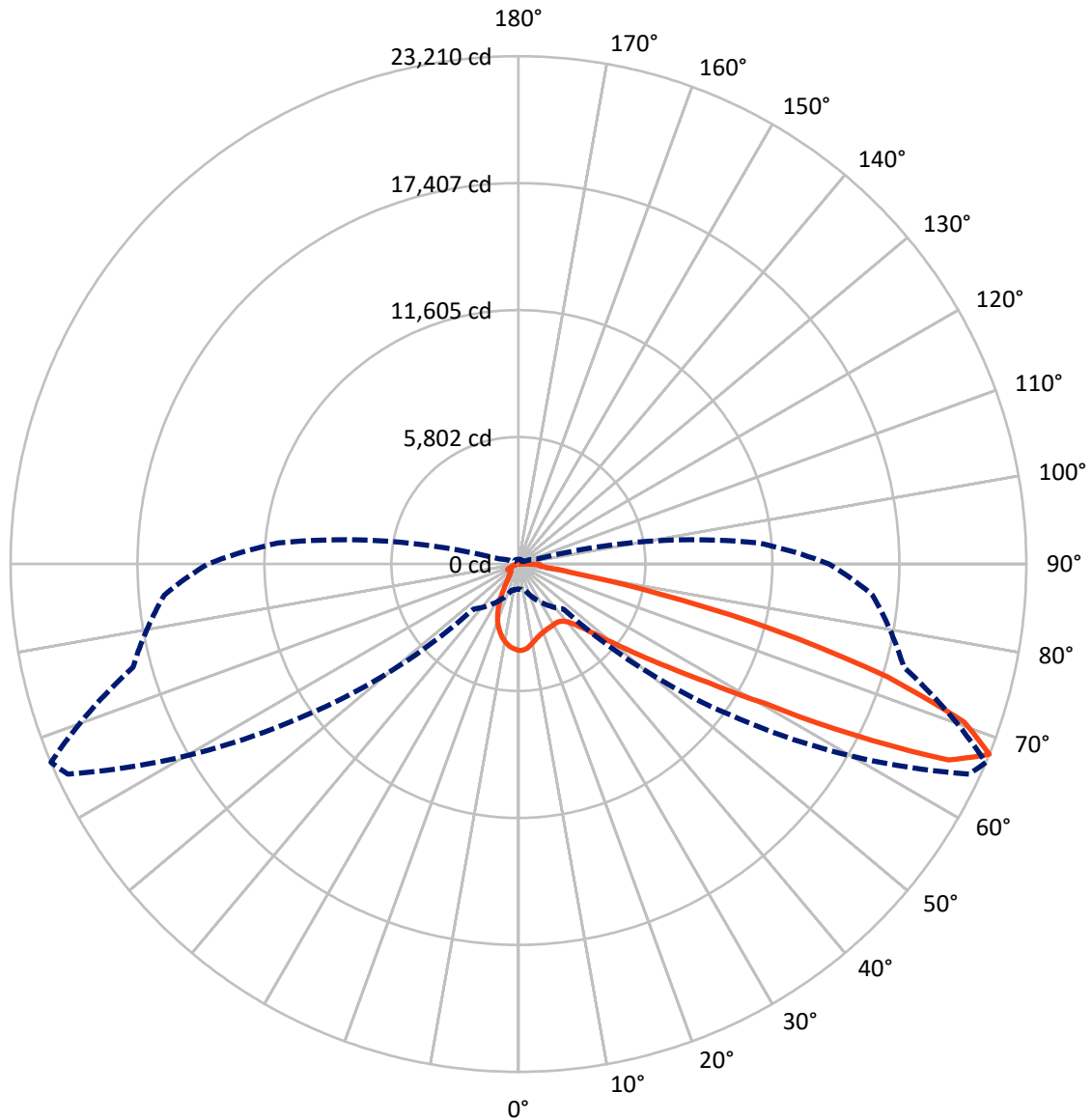
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3035.1	0.0	3035.1
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	15282.8	0.0	15282.8
	% Fixture	83.4	0.0	83.4
Total	Lumens	18317.8	0.0	18317.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.1	1.8
10°-20°	780.0	4.3
20°-30°	1057.3	5.8
30°-40°	1503.0	8.2
40°-50°	2514.6	13.7
50°-60°	3978.1	21.7
60°-70°	5067.7	27.7
70°-80°	2654.4	14.5
80°-90°	425.7	2.3
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°	18317.8	100.0
0°-180°	18317.8	100.0

Coefficient of Utilization



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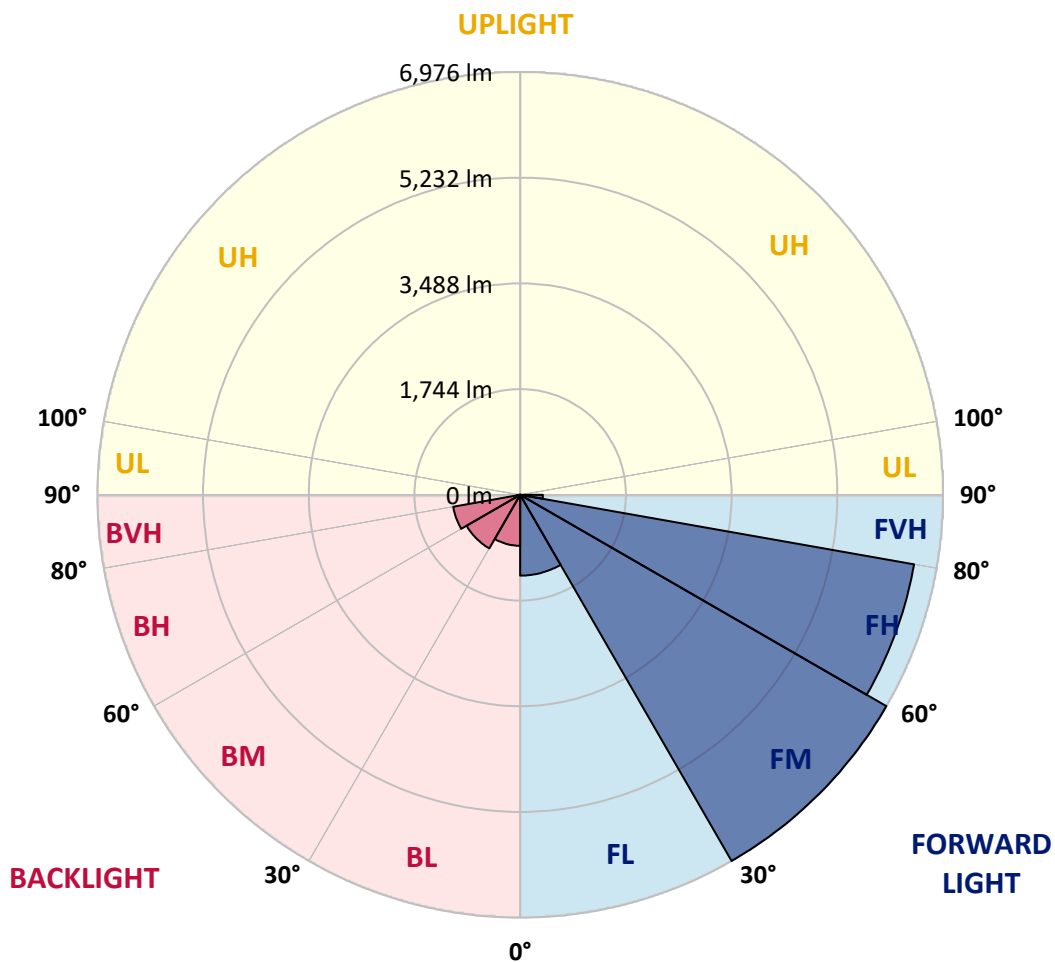
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1333.1	7.3			
FM (30°-60°)	6975.8	38.1			
FH (60°-80°)	6599.5	36.0			G3/7500
FVH (80°-90°)	374.3	2.0			G3/500
BL (0°-30°)	841.2	4.6	B2/1000		
BM (30°-60°)	1019.9	5.6	B2/2500		
BH (60°-80°)	1122.6	6.1	B3/2500		G3/2500
BVH (80°-90°)	51.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1
2.5°	3788.5	3794.8	3814.7	3827.4	3884.3	3908.7	3925.8	3943.0	3945.7	3953.8	3945.7
5°	3391.1	3404.6	3441.6	3483.2	3593.4	3680.1	3771.4	3866.2	3883.4	3944.8	3962.0
7.5°	3083.0	3079.4	3110.1	3159.8	3272.7	3392.9	3552.7	3741.5	3778.6	3916.8	3983.6
10°	2858.1	2855.4	2887.9	2939.4	3046.9	3160.7	3341.4	3599.7	3652.1	3872.5	4004.4
12.5°	2691.9	2692.8	2725.3	2782.2	2891.5	3006.2	3189.6	3462.4	3529.3	3821.0	4026.1
15°	2581.7	2588.9	2615.1	2675.6	2782.2	2896.9	3076.7	3359.4	3434.4	3780.4	4050.5
17.5°	2544.6	2556.4	2565.4	2609.7	2700.9	2815.6	2991.8	3283.6	3363.1	3752.4	4072.2
20°	2579.0	2592.5	2575.4	2590.7	2648.5	2749.7	2924.9	3223.9	3305.2	3720.8	4074.9
22.5°	2726.2	2738.9	2688.3	2644.0	2640.4	2701.8	2869.8	3177.0	3261.0	3697.3	4075.8
25°	2985.5	2993.6	2908.7	2805.7	2705.4	2684.7	2831.0	3144.4	3233.9	3676.5	4058.6
27.5°	3303.4	3309.8	3212.2	3060.4	2859.0	2725.3	2817.4	3125.5	3218.5	3658.4	4029.7
30°	3690.1	3719.9	3588.9	3397.4	3103.8	2845.5	2844.5	3115.5	3201.4	3627.7	3972.8
32.5°	4085.7	4098.4	4008.0	3813.8	3433.5	3056.8	2920.4	3122.8	3196.8	3590.7	3900.5
35°	4486.8	4503.0	4444.3	4288.0	3884.3	3366.7	3068.6	3165.2	3224.8	3578.0	3849.9
37.5°	5006.2	5027.9	4946.6	4765.9	4432.6	3786.7	3315.2	3271.8	3310.7	3614.2	3834.6
40°	5827.3	5817.4	5579.8	5310.6	5032.4	4324.2	3667.5	3452.5	3475.1	3730.7	3881.6
42.5°	6783.0	6758.6	6349.4	5926.7	5691.8	4974.6	4133.6	3765.9	3761.4	3960.1	4046.9
45°	7545.4	7525.5	7157.0	6635.8	6447.9	5715.3	4736.1	4232.9	4199.5	4324.2	4352.2
47.5°	7958.2	7959.1	7746.9	7321.4	7316.9	6656.5	5510.2	4908.6	4850.8	4909.5	4879.7
50°	7813.7	7832.7	7810.1	7674.6	8110.0	7890.5	6521.1	5850.8	5734.3	5792.1	5677.4
52.5°	7114.5	7138.9	7272.6	7480.4	8443.3	9381.9	8006.1	7021.5	6886.0	6865.2	6737.8
55°	5875.2	5905.0	6177.8	6742.4	8166.0	10383.6	10349.3	8513.8	8297.9	8101.9	8047.7
57.5°	4049.6	4099.3	4538.3	5376.5	7269.0	10686.3	13139.7	10641.1	10202.1	9517.4	9530.0
60°	2282.7	2340.5	2858.1	3619.6	5458.7	10357.4	15262.5	13863.2	12936.4	11174.9	11268.9
62.5°	1451.6	1514.0	1906.9	2514.8	3275.4	8586.9	16132.4	18342.8	17165.7	13218.3	13310.4
65°	1175.2	1202.3	1387.5	2075.8	2378.4	5173.3	15472.0	22032.8	21593.8	15811.7	15381.7
67.5°	1147.2	1156.2	1252.0	1742.5	2280.9	2907.8	12341.1	22723.0	23209.8	18233.5	16244.4
70°	1133.7	1165.3	1411.0	1663.0	2184.2	2452.5	7416.2	20831.4	21600.1	18866.7	15096.2
72.5°	550.1	548.3	710.0	1504.0	2460.6	2543.7	3810.2	16855.0	17626.4	16345.5	12405.3
75°	443.5	405.6	387.5	551.0	2365.8	2626.8	2428.1	11597.7	12155.9	10959.1	7625.8
77.5°	420.9	375.8	344.2	345.1	1000.0	2785.8	2056.9	6419.0	6581.6	4950.2	2089.4
80°	348.7	307.1	284.5	320.7	484.2	2653.0	2224.0	2905.1	2665.7	1215.9	695.6
82.5°	242.1	220.4	214.1	269.2	387.5	1890.6	2586.2	1560.9	1308.9	608.8	429.1
85°	154.5	131.9	146.3	196.0	301.7	872.6	2663.9	1216.8	967.5	386.6	242.1
87.5°	71.4	57.8	72.3	108.4	196.9	300.8	2534.7	1366.7	996.4	204.1	152.7
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°	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1	3951.1
2.5°	3952.9	3935.8	3922.2	3896.9	3868.9	3841.8	3817.4	3786.7	3777.7	3769.5	3782.2
5°	3965.6	3948.4	3898.7	3821.0	3735.2	3654.8	3574.4	3505.8	3463.3	3439.8	3453.4
7.5°	3984.5	3960.1	3857.2	3714.4	3560.0	3419.1	3273.6	3157.1	3071.3	3030.6	3042.4
10°	4001.7	3954.7	3786.7	3572.6	3346.8	3137.2	2907.8	2718.1	2577.2	2503.1	2521.2
12.5°	4008.9	3933.9	3688.2	3395.6	3085.7	2778.6	2440.8	2157.1	1954.8	1880.7	1865.4
15°	4016.2	3910.5	3579.8	3194.1	2770.5	2336.0	1862.6	1523.0	1355.0	1317.9	1309.8
17.5°	4018.0	3869.8	3457.0	2975.5	2401.0	1809.3	1273.7	1057.8	1058.7	1118.3	1125.5
20°	3999.0	3809.3	3307.9	2703.6	1958.4	1251.1	874.4	837.4	973.8	1122.8	1140.9
22.5°	3955.6	3728.9	3139.0	2386.6	1451.6	823.8	676.6	717.2	893.4	1075.9	1096.6
25°	3900.5	3631.3	2939.4	2018.9	961.1	589.0	567.3	617.0	736.2	858.2	869.9
27.5°	3825.6	3515.7	2715.4	1598.0	624.2	485.1	499.5	533.0	581.7	635.9	641.4
30°	3728.9	3377.5	2476.0	1165.3	471.5	436.3	457.1	475.1	495.9	526.6	529.3
32.5°	3617.8	3244.7	2230.3	804.9	418.2	411.0	427.3	436.3	452.6	471.5	473.3
35°	3524.7	3118.3	1975.6	569.1	395.7	392.0	402.9	406.5	421.8	442.6	444.4
37.5°	3471.5	3015.3	1712.7	458.9	380.3	374.9	381.2	381.2	402.9	433.6	438.1
40°	3475.1	2958.4	1449.8	414.6	367.7	360.4	361.3	361.3	389.3	422.8	425.5
42.5°	3573.5	2972.8	1216.8	397.5	357.7	349.6	345.1	347.8	371.3	392.9	394.7
45°	3804.8	3074.9	998.2	386.6	347.8	345.1	335.1	334.2	343.3	353.2	353.2
47.5°	4184.2	3276.3	850.0	379.4	339.6	338.7	327.0	315.3	314.4	318.0	318.0
50°	4801.1	3623.2	750.7	371.3	334.2	327.0	313.5	295.4	289.1	291.8	291.8
52.5°	5726.1	4242.0	712.7	360.4	322.5	310.7	295.4	277.3	271.9	272.8	272.8
55°	6939.3	5192.3	707.3	347.8	309.8	290.9	278.2	264.7	258.3	260.2	260.2
57.5°	8421.6	6506.6	804.0	327.9	292.7	271.0	263.8	254.7	250.2	252.9	252.0
60°	10223.8	8226.5	1192.4	307.1	275.5	252.9	252.9	245.7	242.1	244.8	243.9
62.5°	12299.6	10202.1	1676.6	291.8	257.4	238.5	242.1	238.5	234.9	236.7	235.8
65°	14140.5	11489.3	1570.0	280.0	239.4	224.9	231.2	229.4	226.7	228.5	227.6
67.5°	14193.8	11012.3	881.6	267.4	222.2	211.4	220.4	219.5	217.7	219.5	218.6
70°	12667.2	9298.8	496.8	243.9	204.1	195.1	207.8	206.9	205.1	208.7	207.8
72.5°	10148.8	6747.8	363.1	215.0	186.1	178.0	192.4	191.5	191.5	196.9	194.2
75°	5839.9	3472.4	290.0	184.3	167.1	160.8	173.4	174.3	176.1	183.4	178.0
77.5°	1664.8	1082.2	236.7	156.3	143.6	140.9	153.6	155.4	156.3	164.4	157.2
80°	618.8	498.6	195.1	131.0	117.4	118.3	130.1	132.8	133.7	141.8	132.8
82.5°	394.7	328.8	158.1	101.2	92.1	91.2	105.7	109.3	109.3	110.2	104.8
85°	230.3	196.9	119.2	73.2	65.0	62.3	78.6	84.9	82.2	80.4	76.8
87.5°	154.5	135.5	73.2	40.6	35.2	33.4	46.1	50.6	48.8	46.1	43.4
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)