

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: P299890

Luminaire Tested: **GLNA-AF-03-LED-E1-SL3-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SL3-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Medium OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14631.5 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

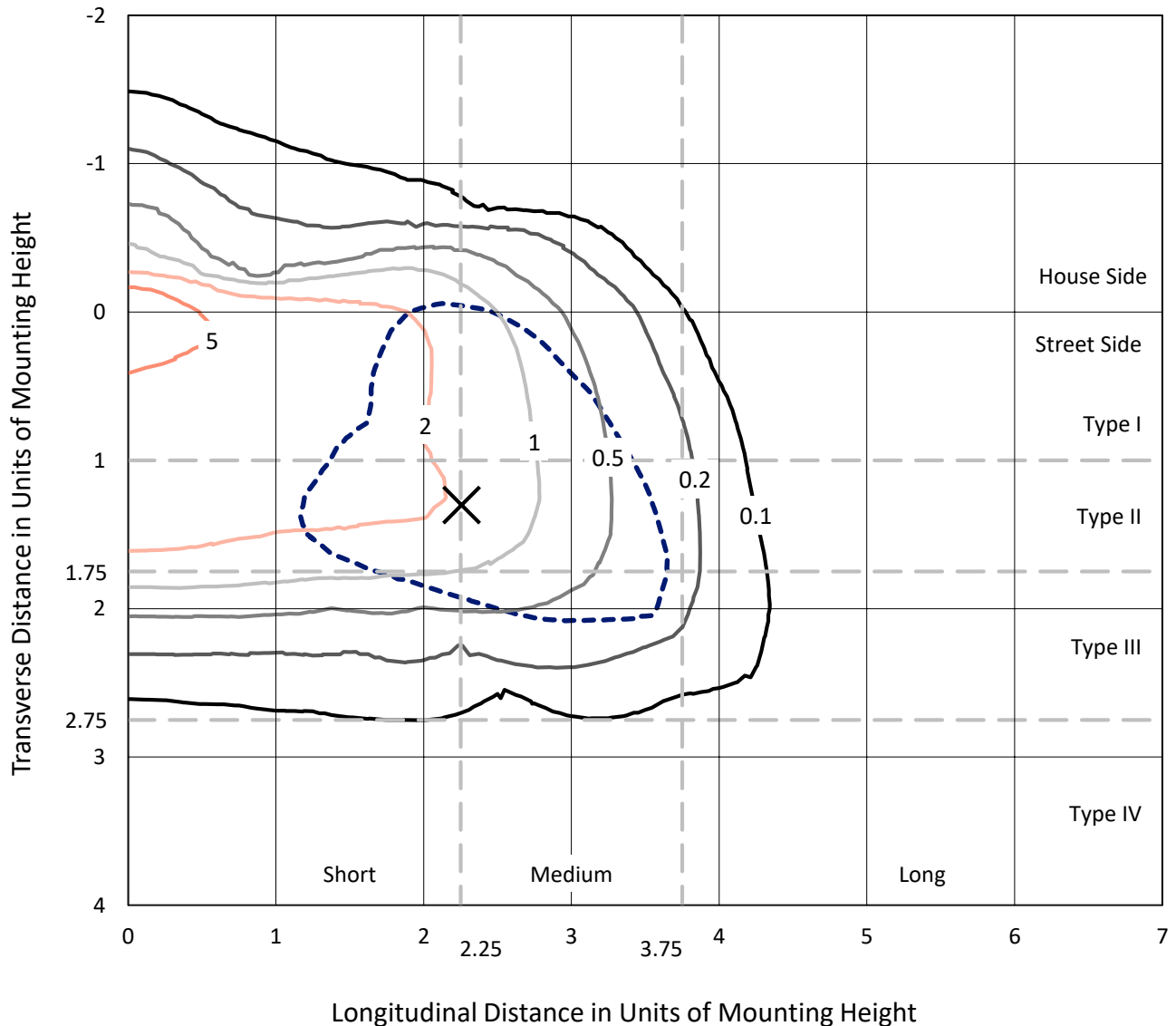
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

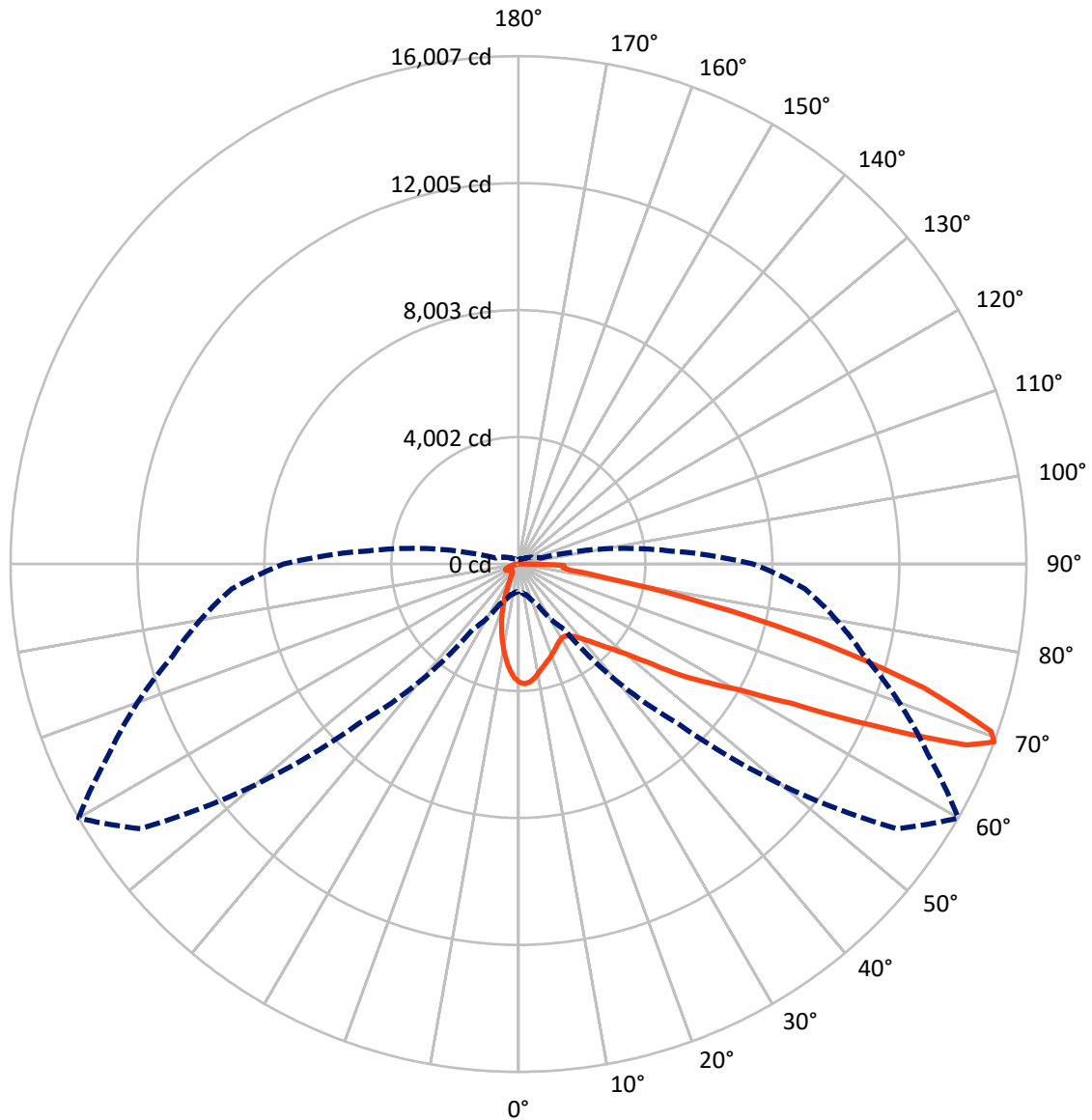
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.3 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2081.6	0.0	2081.6
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	12549.9	0.0	12549.9
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	14631.5	0.0	14631.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.2	2.2
10°-20°	671.6	4.6
20°-30°	855.8	5.8
30°-40°	1176.5	8.0
40°-50°	1909.0	13.0
50°-60°	3061.5	20.9
60°-70°	4074.7	27.8
70°-80°	2200.0	15.0
80°-90°	367.1	2.5
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°	14631.5	100.0
0°-180°	14631.5	100.0

**Coefficient of Utilization**



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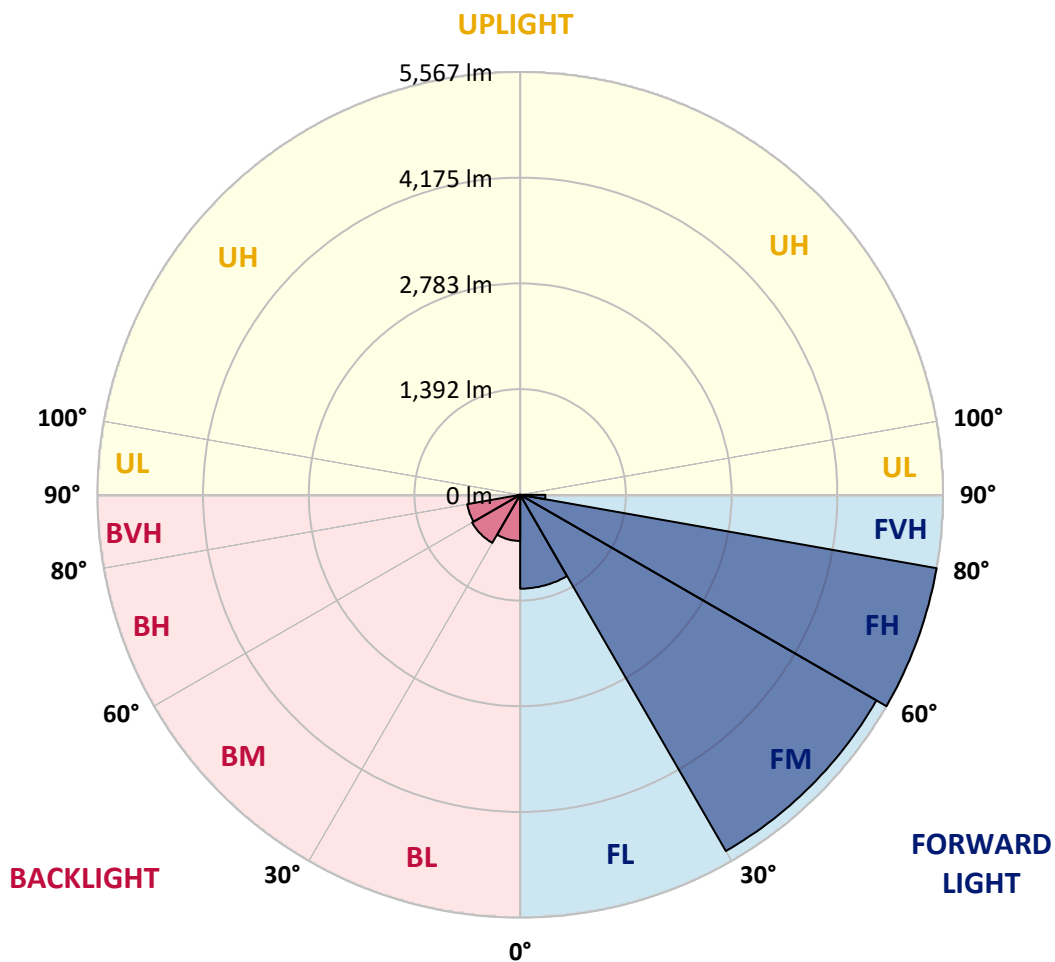
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1235.4	8.4			
FM	(30°-60°)	5415.7	37.0			
FH	(60°-80°)	5567.0	38.0			G3/7500
FVH	(80°-90°)	331.7	2.3			G3/500
BL	(0°-30°)	607.3	4.2	B2/1000		
BM	(30°-60°)	731.3	5.0	B1/1000		
BH	(60°-80°)	707.7	4.8	B2/1000		G2/1000
BVH	(80°-90°)	35.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3
2.5°	3804.7	3813.1	3809.6	3807.5	3813.8	3803.9	3783.4	3777.1	3767.2	3743.9	3704.3
5°	3661.9	3687.3	3685.9	3705.0	3736.8	3745.3	3736.1	3737.5	3719.1	3690.2	3624.4
7.5°	3415.2	3425.8	3431.5	3473.2	3531.1	3577.8	3617.4	3630.1	3621.6	3596.9	3512.0
10°	3160.8	3169.2	3182.7	3231.4	3305.0	3369.3	3444.2	3487.3	3505.7	3501.4	3406.7
12.5°	2942.4	2950.8	2968.5	3023.6	3111.3	3190.5	3299.3	3353.0	3396.8	3423.0	3321.2
15°	2746.6	2765.0	2781.9	2845.5	2943.8	3047.7	3170.7	3238.5	3306.4	3365.0	3245.6
17.5°	2593.9	2612.3	2622.2	2680.1	2784.8	2912.0	3056.2	3136.0	3220.8	3317.0	3170.7
20°	2505.6	2514.1	2509.8	2542.3	2636.3	2771.3	2942.4	3035.0	3137.4	3271.7	3095.7
22.5°	2480.8	2481.5	2466.0	2462.5	2523.2	2637.0	2820.8	2933.2	3059.0	3242.0	3031.4
25°	2540.9	2538.8	2496.4	2461.8	2468.1	2534.6	2703.5	2834.2	2993.3	3235.7	2981.9
27.5°	2674.5	2680.9	2618.0	2552.9	2488.6	2486.5	2614.4	2752.2	2939.5	3264.7	2960.7
30°	2861.8	2872.4	2805.3	2722.6	2601.7	2502.0	2579.8	2703.5	2906.3	3324.7	2957.2
32.5°	3066.8	3078.1	3027.2	2940.2	2781.9	2598.2	2603.8	2707.7	2904.9	3408.8	2981.2
35°	3285.2	3297.9	3271.7	3198.2	3022.2	2775.6	2695.7	2776.3	2950.8	3537.5	3045.6
37.5°	3529.0	3548.8	3555.9	3485.9	3297.9	3009.5	2846.2	2906.3	3054.7	3716.3	3163.6
40°	3880.3	3907.8	3905.7	3805.4	3613.8	3325.4	3078.8	3094.3	3216.6	3955.2	3352.3
42.5°	4553.1	4558.8	4382.8	4164.4	3961.6	3657.6	3353.0	3340.3	3439.9	4257.7	3630.1
45°	5409.1	5385.7	4994.2	4572.2	4324.8	4039.3	3709.9	3647.7	3723.4	4626.6	3977.8
47.5°	6119.4	6065.7	5570.9	4988.5	4709.3	4454.2	4129.1	4020.2	4061.9	5045.1	4427.3
50°	6366.1	6325.8	5915.8	5334.9	5073.3	4960.3	4645.0	4490.9	4502.3	5544.1	4953.9
52.5°	6313.1	6307.4	6033.9	5563.1	5414.0	5491.8	5375.8	5167.3	5057.1	6098.2	5522.2
55°	6187.9	6200.0	6101.0	5828.9	5803.5	6004.9	6330.7	6176.6	5833.8	6657.3	6109.5
57.5°	5753.3	5784.4	6002.1	6163.2	6430.4	6730.1	7099.7	7055.9	6670.0	7261.6	6807.8
60°	4635.1	4707.2	5291.0	6098.2	7075.7	8012.9	8178.3	8076.5	7532.3	8011.5	7730.2
62.5°	3247.7	3322.6	4016.7	5279.7	6969.7	9461.8	10106.4	9667.5	8770.6	9116.2	8923.9
65°	1738.7	1774.8	2304.8	3663.3	5884.0	9760.8	12924.4	12256.5	10731.2	10478.2	9945.2
67.5°	959.1	978.9	1181.8	1849.7	3768.6	8595.3	14719.6	15224.3	13181.6	11385.0	9759.4
69°	867.2	885.6	1018.5	1400.9	2521.8	7106.8	14544.3	16006.7	14256.0	11295.2	9072.4
70°	848.1	865.1	984.6	1291.3	2041.2	5857.9	13957.0	15806.7	14511.8	10973.6	8473.0
72.5°	763.3	781.7	897.6	1159.8	1744.4	2920.5	11055.6	13364.7	13175.3	9514.8	6426.8
75°	711.7	728.7	925.2	1135.8	1670.1	1848.3	7288.4	9849.8	9685.1	6655.8	3465.4
77.5°	304.6	303.2	429.0	961.2	1694.9	1789.6	3916.3	6153.3	5614.0	2844.8	995.2
80°	203.6	200.0	203.6	282.7	1554.2	1799.5	2051.8	3123.3	2359.3	725.2	490.5
82.5°	175.3	172.5	178.8	172.5	546.3	2053.9	1744.4	1661.0	1121.7	412.1	243.1
85°	118.0	113.1	154.1	154.8	258.0	1824.9	1964.9	1403.0	907.5	244.5	120.2
87.5°	56.5	55.1	89.8	109.6	151.3	741.4	2204.5	1437.6	915.3	125.1	57.3
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°	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3	3728.3
2.5°	3692.3	3663.3	3635.0	3601.1	3565.8	3526.2	3506.4	3486.6	3481.6	3476.0	3456.2
5°	3590.5	3549.5	3478.8	3401.1	3319.1	3239.2	3178.4	3140.3	3111.3	3096.4	3070.3
7.5°	3459.0	3399.0	3275.3	3141.0	3003.2	2877.3	2768.5	2699.9	2634.9	2604.5	2569.9
10°	3333.9	3244.2	3051.9	2854.0	2656.1	2466.0	2287.2	2160.7	2048.3	1985.4	1940.8
12.5°	3226.5	3103.5	2837.1	2569.2	2297.8	2027.1	1759.2	1548.6	1372.6	1280.0	1232.6
15°	3121.9	2973.5	2632.8	2292.8	1944.4	1576.1	1224.2	985.3	839.7	781.7	761.9
17.5°	3027.2	2837.1	2427.8	2014.4	1579.7	1134.4	822.7	691.2	635.4	616.3	610.0
20°	2924.7	2699.2	2215.1	1723.2	1199.4	793.0	642.5	584.5	561.9	556.2	553.4
22.5°	2825.7	2563.5	2011.5	1411.5	861.6	612.1	552.0	528.0	524.4	529.4	529.4
25°	2741.6	2442.0	1791.7	1085.6	632.6	515.3	494.0	488.4	501.8	520.2	523.7
27.5°	2678.7	2342.3	1557.8	801.5	503.9	448.1	447.4	456.6	489.8	525.1	532.2
30°	2635.6	2247.6	1307.6	578.2	422.7	394.4	405.7	425.5	474.3	524.4	537.9
32.5°	2613.7	2177.6	1046.8	447.4	361.9	346.3	365.4	389.4	437.5	484.2	501.8
35°	2630.7	2126.0	800.8	373.2	319.5	307.5	327.2	350.6	378.8	398.6	412.1
37.5°	2694.3	2105.5	604.3	334.3	290.5	279.2	294.7	308.2	319.5	325.1	331.5
40°	2831.4	2127.4	484.2	314.5	274.2	260.1	266.5	271.4	278.5	284.1	287.0
42.5°	3033.5	2193.2	434.0	306.7	265.8	245.3	243.8	246.0	255.2	265.8	267.9
45°	3316.3	2309.1	430.4	311.7	261.5	233.2	226.9	229.7	243.8	260.1	262.9
47.5°	3677.4	2485.8	458.7	326.5	265.0	226.9	216.3	219.8	237.5	259.4	262.9
50°	4114.9	2732.5	506.1	348.4	280.6	228.3	212.7	214.9	233.2	257.3	260.8
52.5°	4631.6	3082.3	557.7	369.7	296.9	237.5	215.6	210.6	227.6	248.8	253.0
55°	5206.2	3531.1	610.7	388.7	305.3	248.8	221.2	205.0	217.0	234.7	238.2
57.5°	5911.6	4158.8	702.5	407.1	311.0	256.6	226.9	199.3	203.6	216.3	219.1
60°	6866.5	5046.5	864.4	437.5	323.7	259.4	226.2	194.4	190.1	197.2	198.6
62.5°	8010.8	6010.5	999.4	475.7	344.9	261.5	221.9	190.8	178.8	178.8	180.2
65°	8690.0	6268.5	924.5	507.5	362.6	259.4	217.0	187.3	170.3	162.6	163.3
67.5°	8114.0	5513.0	792.3	513.8	361.9	249.5	209.2	180.9	161.9	149.8	149.1
69°	7392.3	4756.7	732.9	496.9	344.9	236.8	199.3	173.9	155.5	142.8	142.1
70°	6810.6	4295.2	694.1	478.5	326.5	227.6	191.5	167.5	150.5	138.5	137.1
72.5°	4951.8	2814.4	593.0	411.4	269.3	190.8	165.4	147.0	134.3	127.2	125.8
75°	2474.5	1342.2	481.3	333.6	206.4	152.7	135.7	123.0	116.6	115.2	114.5
77.5°	812.8	614.9	344.2	248.8	153.4	119.4	109.6	100.4	99.0	103.2	101.8
80°	446.7	357.6	218.4	164.7	104.6	87.6	86.2	81.3	83.4	90.5	89.1
82.5°	227.6	185.9	135.0	99.0	70.7	62.9	68.6	65.7	68.6	74.9	74.2
85°	112.4	101.8	85.5	60.1	46.6	40.3	48.8	50.9	52.3	57.3	57.3
87.5°	65.0	60.1	45.2	28.3	23.3	21.2	28.3	27.6	32.5	35.3	34.6
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)