

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: P191170

Luminaire Tested: **GLEON-AF-02-LED-E1-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191170  
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: GLEON-AF-02-LED-E1-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12459.5 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 113  
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

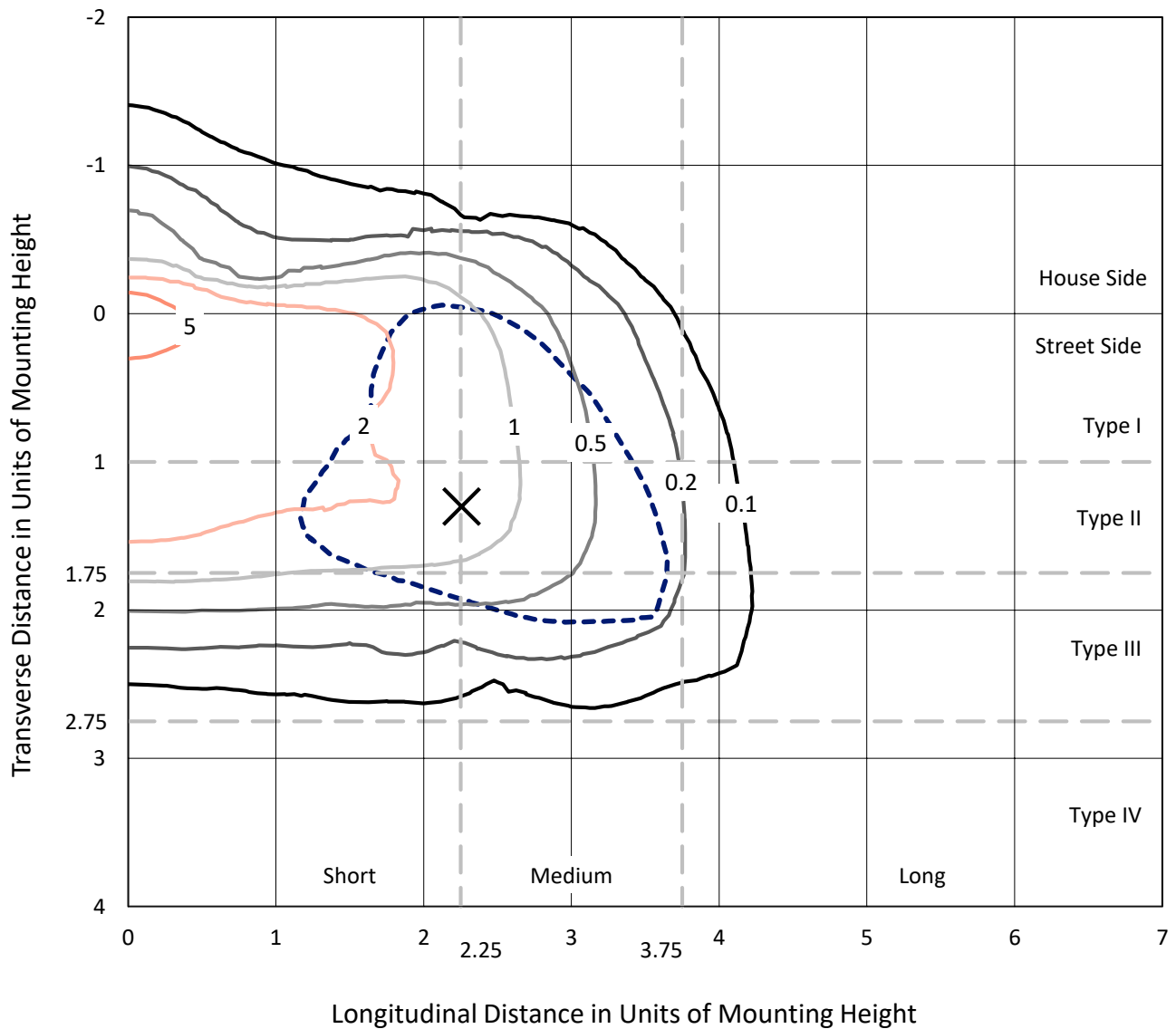


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

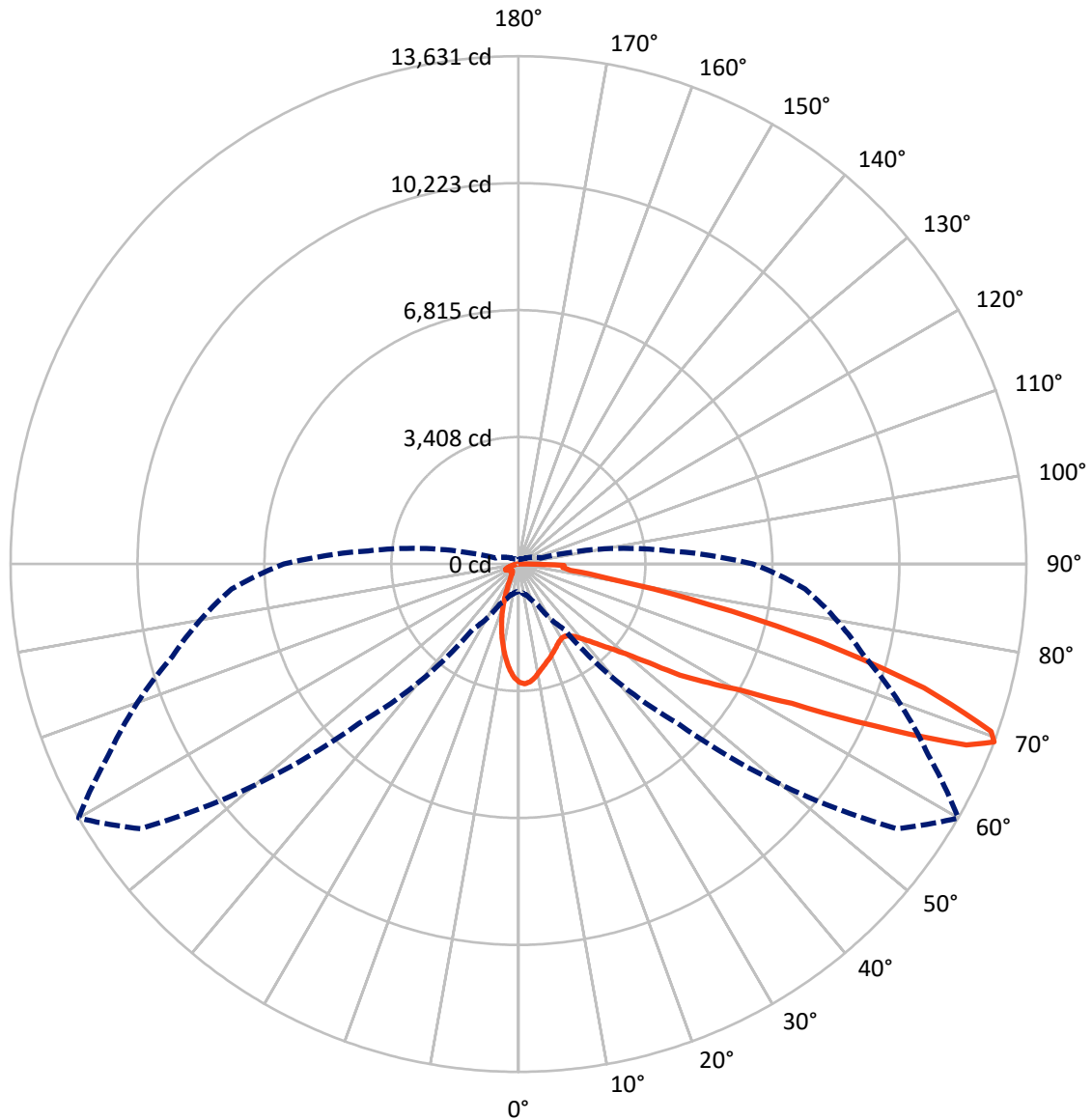


Based on 20 foot mounting height. Maximum calculated value = 7.9 fc  
 Type III - Medium - Non-Cutoff

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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	1772.6	0.0	1772.6
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	10686.9	0.0	10686.9
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	12459.5	0.0	12459.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	268.4	2.2
10°-20°	571.9	4.6
20°-30°	728.8	5.8
30°-40°	1001.8	8.0
40°-50°	1625.6	13.0
50°-60°	2607.1	20.9
60°-70°	3469.8	27.8
70°-80°	1873.4	15.0
80°-90°	312.6	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°	12459.5	100.0
0°-180°	12459.5	100.0



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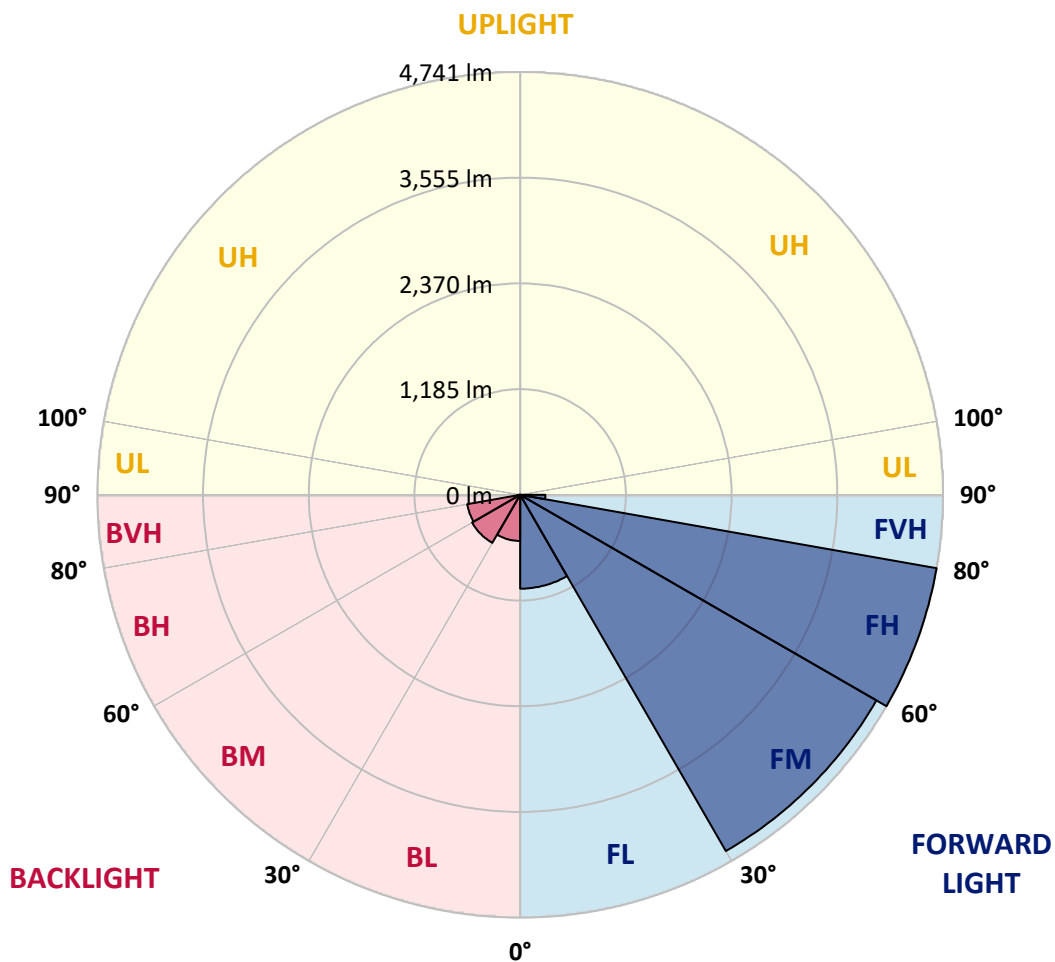
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1052.0	8.4			
FM	(30°-60°)	4611.8	37.0			
FH	(60°-80°)	4740.6	38.0			G2/5000
FVH	(80°-90°)	282.5	2.3			G3/500
BL	(0°-30°)	517.1	4.2	B2/1000		
BM	(30°-60°)	622.8	5.0	B1/1000		
BH	(60°-80°)	602.6	4.8	B2/1000		G2/1000
BVH	(80°-90°)	30.1	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°	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8
2.5°	3239.9	3247.2	3244.1	3242.2	3247.7	3239.3	3221.8	3216.4	3208.0	3188.1	3154.4
5°	3118.3	3139.9	3138.7	3155.0	3182.1	3189.4	3181.5	3182.7	3167.1	3142.4	3086.4
7.5°	2908.2	2917.3	2922.1	2957.6	3007.0	3046.7	3080.4	3091.3	3084.0	3062.9	2990.7
10°	2691.6	2698.7	2710.2	2751.7	2814.3	2869.2	2932.9	2969.6	2985.3	2981.7	2901.0
12.5°	2505.6	2512.8	2527.9	2574.8	2649.4	2716.9	2809.5	2855.3	2892.6	2914.9	2828.2
15°	2338.9	2354.5	2368.9	2423.2	2506.8	2595.2	2700.0	2757.8	2815.6	2865.5	2763.8
17.5°	2208.9	2224.5	2233.0	2282.3	2371.4	2479.7	2602.5	2670.5	2742.7	2824.6	2700.0
20°	2133.7	2140.8	2137.3	2165.0	2245.0	2359.9	2505.6	2584.5	2671.7	2786.1	2636.2
22.5°	2112.6	2113.2	2099.9	2096.9	2148.7	2245.6	2402.1	2497.7	2604.9	2760.8	2581.4
25°	2163.7	2161.9	2125.8	2096.3	2101.8	2158.3	2302.2	2413.6	2548.9	2755.4	2539.3
27.5°	2277.5	2282.9	2229.3	2174.0	2119.1	2117.4	2226.4	2343.7	2503.2	2780.1	2521.3
30°	2437.0	2446.0	2388.8	2318.4	2215.5	2130.6	2196.8	2302.2	2474.9	2831.2	2518.2
32.5°	2611.5	2621.1	2577.8	2503.8	2368.9	2212.4	2217.3	2305.7	2473.7	2902.8	2538.7
35°	2797.5	2808.3	2786.1	2723.5	2573.6	2363.5	2295.5	2364.1	2512.8	3012.4	2593.5
37.5°	3005.1	3022.0	3028.0	2968.4	2808.3	2562.8	2423.8	2474.9	2601.3	3164.6	2693.9
40°	3304.2	3327.8	3325.9	3240.5	3077.3	2831.8	2621.7	2635.0	2739.2	3368.1	2854.6
42.5°	3877.3	3882.1	3732.2	3546.3	3373.5	3114.7	2855.3	2844.4	2929.3	3625.6	3091.3
45°	4606.1	4586.3	4252.8	3893.6	3682.8	3439.7	3159.3	3106.3	3170.6	3939.9	3387.3
47.5°	5211.0	5165.3	4743.9	4248.0	4010.3	3793.0	3516.2	3423.4	3459.0	4296.2	3770.1
50°	5421.0	5386.8	5037.7	4542.9	4320.2	4224.0	3955.5	3824.3	3833.9	4721.1	4218.5
52.5°	5375.9	5371.1	5138.2	4737.4	4610.3	4676.5	4577.8	4400.3	4306.4	5193.0	4702.4
55°	5269.4	5279.7	5195.4	4963.7	4942.0	5113.5	5391.0	5259.8	4967.9	5669.1	5202.6
57.5°	4899.2	4925.7	5111.1	5248.4	5475.9	5731.1	6045.8	6008.5	5679.8	6183.6	5797.3
60°	3947.1	4008.4	4505.6	5193.0	6025.4	6823.4	6964.2	6877.6	6414.2	6822.3	6582.7
62.5°	2765.6	2829.4	3420.4	4496.0	5935.1	8057.3	8606.2	8232.4	7468.7	7763.0	7599.3
65°	1480.6	1511.3	1962.7	3119.5	5010.6	8311.9	11005.8	10437.1	9138.2	8922.8	8468.9
67.5°	816.7	833.6	1006.4	1575.1	3209.2	7319.4	12534.6	12964.4	11224.9	9695.0	8310.7
69°	738.5	754.1	867.3	1192.9	2147.5	6051.9	12385.4	13630.6	12139.8	9618.5	7725.6
70°	722.2	736.7	838.4	1099.7	1738.2	4988.3	11885.2	13460.3	12357.7	9344.7	7215.3
72.5°	650.0	665.6	764.3	987.7	1485.4	2486.9	9414.5	11380.8	11219.5	8102.4	5472.8
75°	606.1	620.5	787.9	967.2	1422.2	1573.9	6206.5	8387.7	8247.4	5667.9	2951.0
77.5°	259.4	258.2	365.3	818.6	1443.3	1524.0	3335.0	5239.9	4780.7	2422.6	847.4
80°	173.4	170.3	173.4	240.7	1323.5	1532.4	1747.2	2659.7	2009.1	617.6	417.7
82.5°	149.2	146.9	152.3	146.9	465.2	1749.0	1485.4	1414.4	955.1	350.9	207.0
85°	100.6	96.3	131.2	131.9	219.7	1554.1	1673.2	1194.7	772.8	208.3	102.3
87.5°	48.2	47.0	76.4	93.3	128.8	631.4	1877.2	1224.2	779.4	106.5	48.8
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°	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8	3174.8
2.5°	3144.1	3119.5	3095.4	3066.5	3036.4	3002.8	2985.9	2969.0	2964.8	2960.0	2943.1
5°	3057.5	3022.6	2962.5	2896.2	2826.4	2758.4	2706.6	2674.1	2649.4	2636.8	2614.6
7.5°	2945.6	2894.4	2789.1	2674.7	2557.4	2450.3	2357.5	2299.2	2243.7	2217.9	2188.4
10°	2839.0	2762.6	2598.9	2430.3	2261.8	2099.9	1947.7	1839.9	1744.2	1690.6	1652.8
12.5°	2747.5	2642.8	2415.9	2187.8	1956.7	1726.1	1498.1	1318.7	1168.8	1090.0	1049.6
15°	2658.4	2532.1	2242.0	1952.5	1655.7	1342.2	1042.5	839.0	715.0	665.6	648.9
17.5°	2577.8	2415.9	2067.4	1715.4	1345.2	966.0	700.6	588.6	541.0	524.9	519.5
20°	2490.6	2298.6	1886.2	1467.3	1021.4	675.4	547.1	497.8	478.5	473.6	471.3
22.5°	2406.3	2183.0	1712.9	1202.0	733.7	521.2	470.0	449.6	446.6	450.8	450.8
25°	2334.7	2079.5	1525.7	924.4	538.7	438.7	420.7	415.9	427.3	442.9	446.0
27.5°	2281.1	1994.7	1326.6	682.5	429.1	381.6	380.9	388.8	417.1	447.2	453.2
30°	2244.4	1913.9	1113.5	492.3	359.9	335.8	345.5	362.3	403.9	446.6	458.0
32.5°	2225.7	1854.4	891.4	380.9	308.1	294.9	311.2	331.6	372.6	412.2	427.3
35°	2240.2	1810.4	681.9	317.8	272.0	261.8	278.7	298.5	322.6	339.4	350.9
37.5°	2294.4	1793.0	514.6	284.7	247.3	237.7	251.0	262.4	272.0	276.8	282.2
40°	2411.1	1811.6	412.2	267.8	233.5	221.5	226.9	231.1	237.1	241.9	244.4
42.5°	2583.3	1867.6	369.6	261.3	226.3	208.9	207.7	209.5	217.3	226.3	228.1
45°	2824.0	1966.3	366.5	265.5	222.7	198.7	193.2	195.6	207.7	221.5	223.9
47.5°	3131.6	2116.8	390.7	278.0	225.7	193.2	184.1	187.2	202.2	220.9	223.9
50°	3504.1	2326.8	431.0	296.8	239.0	194.4	181.2	183.0	198.7	219.1	222.1
52.5°	3944.1	2624.8	474.9	314.8	252.8	202.2	183.6	179.3	193.8	211.9	215.4
55°	4433.4	3007.0	520.1	331.0	260.0	211.9	188.4	174.5	184.7	199.8	202.9
57.5°	5034.0	3541.5	598.2	346.7	264.8	218.5	193.2	169.7	173.4	184.1	186.6
60°	5847.2	4297.4	736.1	372.6	275.7	220.9	192.6	165.5	161.9	168.0	169.1
62.5°	6821.6	5118.3	851.1	405.1	293.7	222.7	188.9	162.5	152.3	152.3	153.4
65°	7400.0	5338.0	787.3	432.1	308.7	220.9	184.7	159.5	145.1	138.4	139.0
67.5°	6909.5	4694.6	674.7	437.5	308.1	212.5	178.2	154.1	137.8	127.6	126.9
69°	6295.0	4050.6	624.1	423.1	293.7	201.6	169.7	148.0	132.4	121.6	121.0
70°	5799.6	3657.6	591.1	407.4	278.0	193.8	163.1	142.6	128.2	117.9	116.7
72.5°	4216.7	2396.7	504.9	350.3	229.3	162.5	140.9	125.2	114.4	108.3	107.1
75°	2107.2	1142.9	409.9	284.1	175.7	130.0	115.6	104.8	99.3	98.1	97.5
77.5°	692.1	523.6	293.1	211.9	130.6	101.7	93.3	85.4	84.3	87.9	86.6
80°	380.3	304.5	186.0	140.2	89.1	74.7	73.4	69.3	71.0	77.0	75.8
82.5°	193.8	158.3	115.0	84.3	60.1	53.6	58.4	56.0	58.4	63.8	63.2
85°	95.7	86.6	72.8	51.1	39.7	34.3	41.5	43.4	44.5	48.8	48.8
87.5°	55.3	51.1	38.6	24.0	19.8	18.1	24.0	23.4	27.7	30.1	29.5
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)