

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: P299170

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299170  
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-03-LED-E1-SL2-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14332.3 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

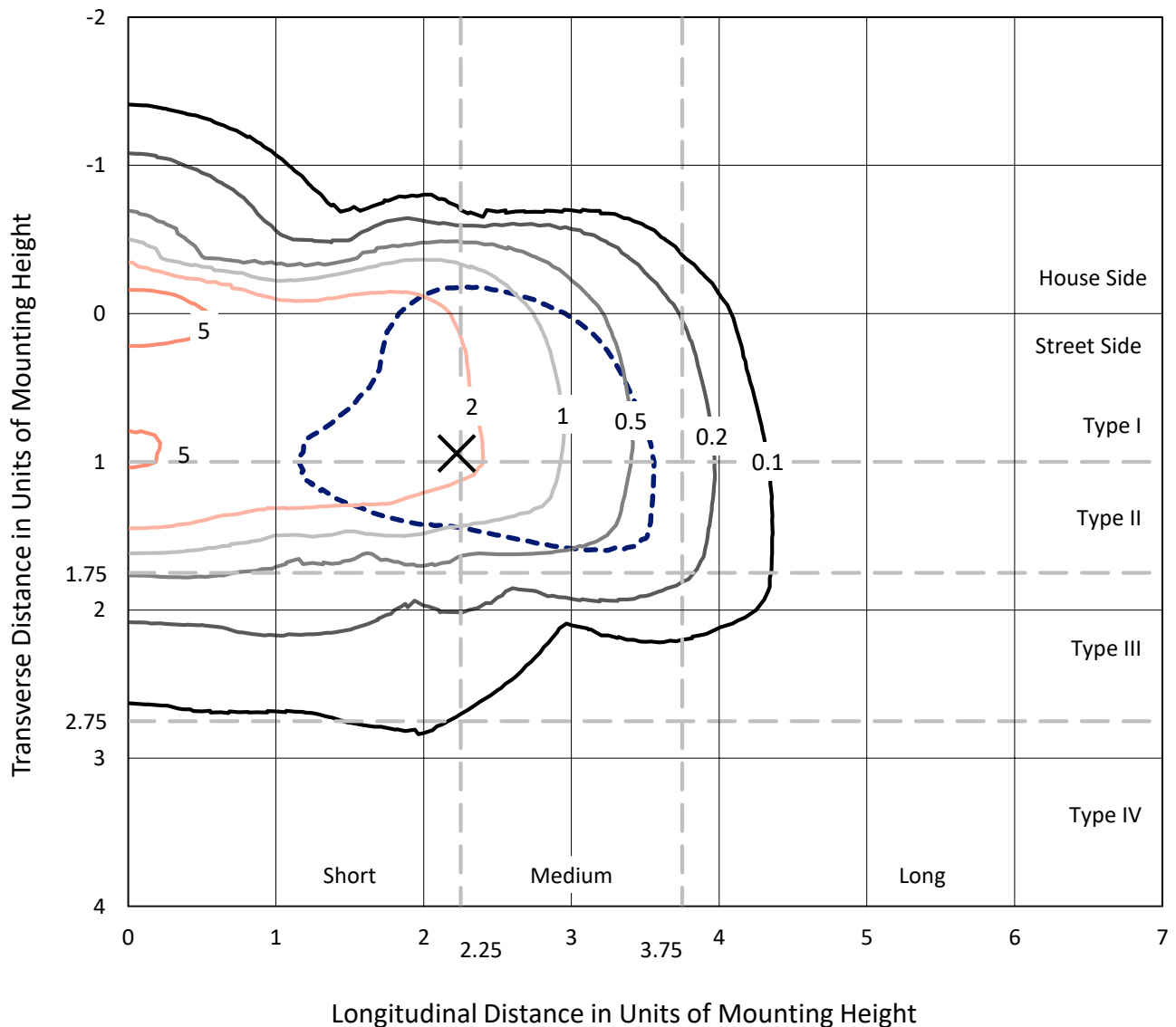
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

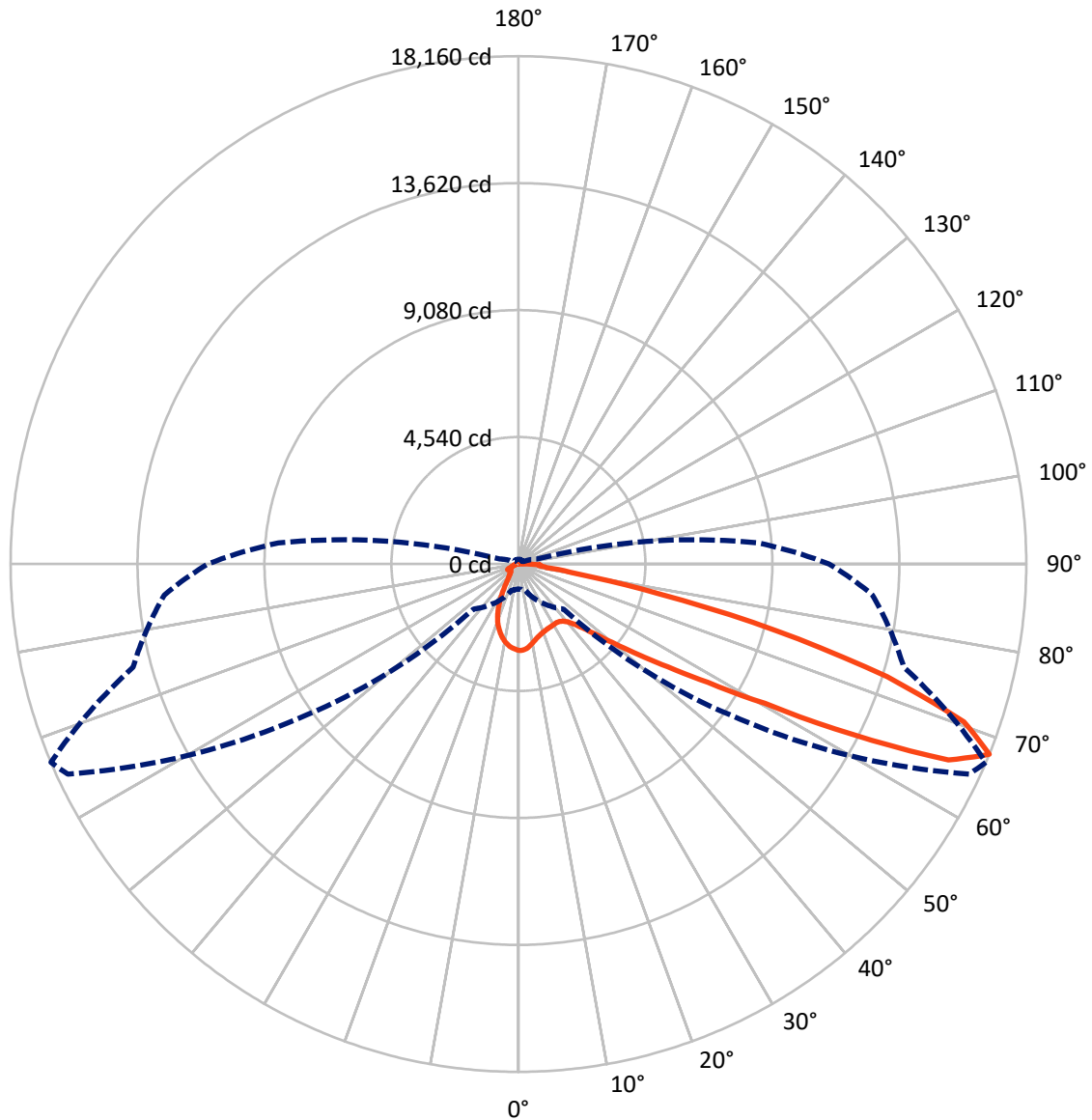
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 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
<b>House Side</b>	Lumens	2374.7	0.0	2374.7
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	11957.6	0.0	11957.6
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	14332.3	0.0	14332.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.7	1.8
10°-20°	610.3	4.3
20°-30°	827.2	5.8
30°-40°	1176.0	8.2
40°-50°	1967.5	13.7
50°-60°	3112.5	21.7
60°-70°	3965.1	27.7
70°-80°	2076.9	14.5
80°-90°	333.1	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°	14332.3	100.0
0°-180°	14332.3	100.0



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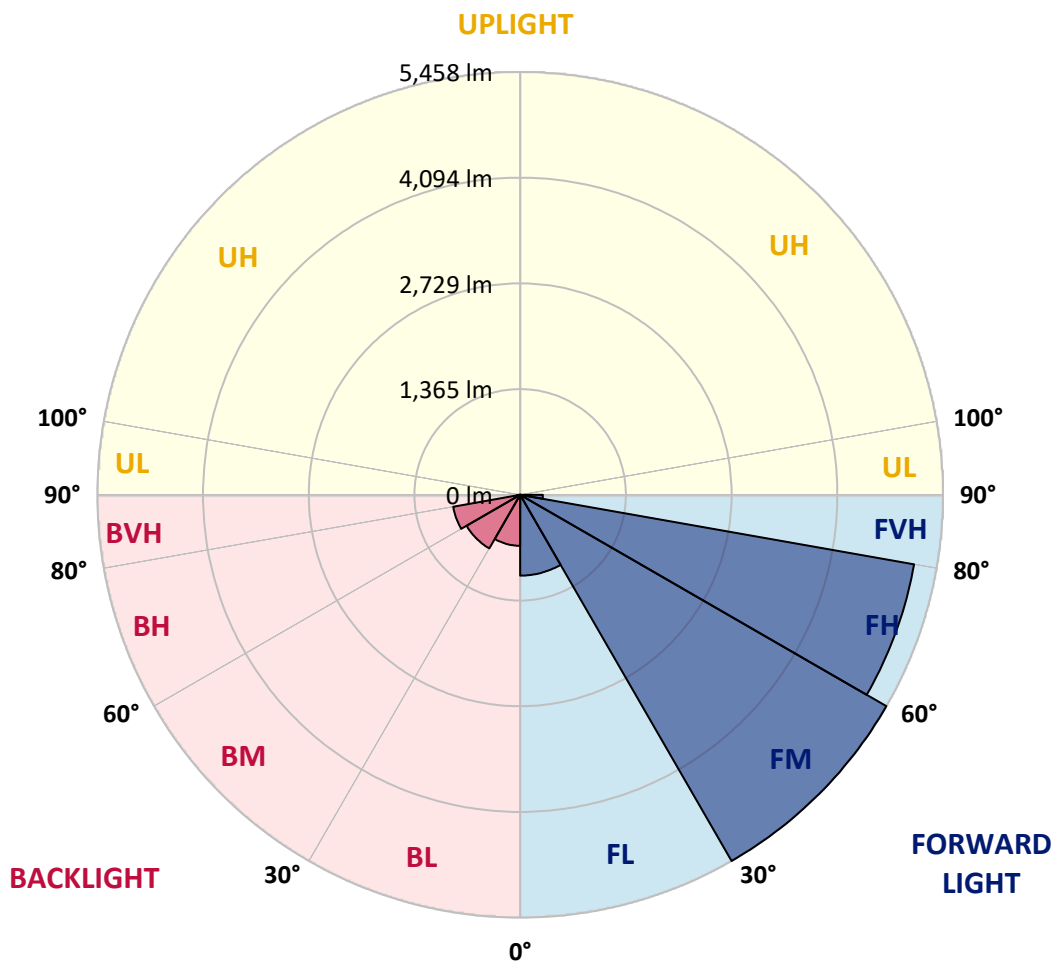
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1043.0	7.3			
FM (30°-60°)	5458.0	38.1			
FH (60°-80°)	5163.6	36.0			G3/7500
FVH (80°-90°)	292.9	2.0			G3/500
BL (0°-30°)	658.2	4.6	B2/1000		
BM (30°-60°)	798.0	5.6	B1/1000		
BH (60°-80°)	878.3	6.1	B2/1000		G2/1000
BVH (80°-90°)	40.2	0.3			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4
2.5°	2964.2	2969.2	2984.7	2994.6	3039.1	3058.2	3071.7	3085.1	3087.2	3093.6	3087.2
5°	2653.2	2663.8	2692.8	2725.3	2811.6	2879.4	2950.8	3025.0	3038.4	3086.5	3099.9
7.5°	2412.2	2409.4	2433.4	2472.3	2560.7	2654.7	2779.8	2927.5	2956.4	3064.6	3116.9
10°	2236.2	2234.1	2259.6	2299.9	2384.0	2473.0	2614.4	2816.5	2857.5	3030.0	3133.1
12.5°	2106.2	2106.9	2132.3	2176.9	2262.4	2352.2	2495.6	2709.1	2761.4	2989.7	3150.1
15°	2020.0	2025.6	2046.1	2093.5	2176.9	2266.6	2407.3	2628.5	2687.2	2957.9	3169.2
17.5°	1991.0	2000.2	2007.2	2041.9	2113.3	2203.0	2340.8	2569.1	2631.3	2936.0	3186.2
20°	2017.8	2028.5	2015.0	2027.0	2072.3	2151.4	2288.5	2522.5	2586.1	2911.2	3188.3
22.5°	2133.1	2142.9	2103.4	2068.7	2065.9	2114.0	2245.4	2485.7	2551.5	2892.8	3189.0
25°	2335.9	2342.3	2275.8	2195.2	2116.8	2100.5	2215.0	2460.3	2530.3	2876.6	3175.5
27.5°	2584.7	2589.6	2513.3	2394.6	2236.9	2132.3	2204.4	2445.4	2518.2	2862.4	3152.9
30°	2887.2	2910.5	2808.0	2658.2	2428.5	2226.3	2225.6	2437.7	2504.8	2838.4	3108.4
32.5°	3196.8	3206.6	3136.0	2984.0	2686.5	2391.7	2285.0	2443.3	2501.3	2809.4	3051.9
35°	3510.6	3523.3	3477.3	3355.1	3039.1	2634.2	2400.9	2476.5	2523.2	2799.5	3012.3
37.5°	3917.0	3933.9	3870.3	3729.0	3468.2	2962.8	2593.9	2559.9	2590.3	2827.8	3000.3
40°	4559.4	4551.6	4365.8	4155.1	3937.5	3383.3	2869.5	2701.3	2719.0	2919.0	3037.0
42.5°	5307.2	5288.1	4967.9	4637.2	4453.4	3892.2	3234.2	2946.6	2943.0	3098.5	3166.4
45°	5903.7	5888.2	5599.8	5192.0	5045.0	4471.8	3705.6	3312.0	3285.8	3383.3	3405.3
47.5°	6226.7	6227.4	6061.3	5728.4	5724.9	5208.2	4311.3	3840.6	3795.4	3841.3	3818.0
50°	6113.6	6128.5	6110.8	6004.8	6345.4	6173.7	5102.2	4577.8	4486.6	4531.9	4442.1
52.5°	5566.6	5585.7	5690.3	5852.8	6606.2	7340.6	6264.2	5493.8	5387.8	5371.5	5271.9
55°	4596.9	4620.2	4833.6	5275.4	6389.3	8124.4	8097.5	6661.4	6492.5	6339.1	6296.7
57.5°	3168.5	3207.4	3550.8	4206.7	5687.4	8361.2	10280.8	8325.8	7982.3	7446.6	7456.5
60°	1786.0	1831.3	2236.2	2832.1	4271.1	8103.9	11941.7	10846.9	10121.8	8743.5	8817.0
62.5°	1135.8	1184.6	1492.0	1967.7	2562.8	6718.6	12622.3	14351.8	13430.9	10342.3	10414.4
65°	919.5	940.7	1085.6	1624.2	1860.9	4047.7	12105.7	17239.0	16895.5	12371.4	12035.0
67.5°	897.6	904.7	979.6	1363.4	1784.6	2275.1	9656.0	17779.0	18159.9	14266.3	12710.0
70°	887.0	911.7	1104.0	1301.2	1709.0	1918.9	5802.6	16299.0	16900.5	14761.7	11811.7
72.5°	430.4	429.0	555.5	1176.8	1925.3	1990.3	2981.2	13187.8	13791.3	12789.1	9706.2
75°	347.0	317.3	303.2	431.1	1851.0	2055.3	1899.8	9074.3	9511.1	8574.6	5966.6
77.5°	329.4	294.0	269.3	270.0	782.4	2179.7	1609.3	5022.4	5149.6	3873.1	1634.8
80°	272.8	240.3	222.6	250.9	378.8	2075.8	1740.1	2273.0	2085.7	951.3	544.2
82.5°	189.4	172.5	167.5	210.6	303.2	1479.3	2023.5	1221.3	1024.1	476.4	335.7
85°	120.9	103.2	114.5	153.4	236.1	682.7	2084.3	952.0	757.0	302.5	189.4
87.5°	55.8	45.2	56.5	84.8	154.1	235.4	1983.2	1069.4	779.6	159.7	119.4
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°	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4
2.5°	3092.9	3079.4	3068.8	3049.0	3027.1	3005.9	2986.8	2962.8	2955.7	2949.4	2959.3
5°	3102.8	3089.3	3050.5	2989.7	2922.5	2859.6	2796.7	2743.0	2709.8	2691.4	2702.0
7.5°	3117.6	3098.5	3017.9	2906.3	2785.4	2675.2	2561.4	2470.2	2403.0	2371.2	2380.4
10°	3131.0	3094.3	2962.8	2795.3	2618.6	2454.6	2275.1	2126.7	2016.4	1958.5	1972.6
12.5°	3136.7	3078.0	2885.8	2656.8	2414.4	2174.0	1909.7	1687.8	1529.5	1471.5	1459.5
15°	3142.3	3059.6	2801.0	2499.2	2167.7	1827.7	1457.4	1191.6	1060.2	1031.2	1024.8
17.5°	3143.7	3027.8	2704.8	2328.1	1878.6	1415.7	996.6	827.6	828.3	875.0	880.6
20°	3128.9	2980.5	2588.2	2115.4	1532.3	978.9	684.2	655.2	761.9	878.5	892.7
22.5°	3095.0	2917.6	2456.1	1867.3	1135.8	644.6	529.4	561.2	699.0	841.8	858.0
25°	3051.9	2841.2	2299.9	1579.6	752.0	460.8	443.9	482.7	576.0	671.4	680.6
27.5°	2993.2	2750.8	2124.6	1250.3	488.4	379.5	390.8	417.0	455.2	497.6	501.8
30°	2917.6	2642.6	1937.3	911.7	368.9	341.4	357.6	371.8	388.0	412.1	414.2
32.5°	2830.6	2538.7	1745.0	629.7	327.2	321.6	334.3	341.4	354.1	368.9	370.4
35°	2757.8	2439.8	1545.7	445.3	309.6	306.7	315.2	318.0	330.1	346.3	347.7
37.5°	2716.1	2359.2	1340.0	359.0	297.6	293.3	298.3	298.3	315.2	339.3	342.8
40°	2719.0	2314.7	1134.4	324.4	287.7	282.0	282.7	282.7	304.6	330.8	332.9
42.5°	2796.0	2326.0	952.0	311.0	279.9	273.5	270.0	272.1	290.5	307.4	308.9
45°	2976.9	2405.9	781.0	302.5	272.1	270.0	262.2	261.5	268.6	276.3	276.3
47.5°	3273.8	2563.5	665.1	296.8	265.7	265.0	255.9	246.7	246.0	248.8	248.8
50°	3756.5	2834.9	587.3	290.5	261.5	255.9	245.3	231.1	226.2	228.3	228.3
52.5°	4480.3	3319.0	557.6	282.0	252.3	243.1	231.1	217.0	212.7	213.4	213.4
55°	5429.5	4062.6	553.4	272.1	242.4	227.6	217.7	207.1	202.1	203.6	203.6
57.5°	6589.3	5090.9	629.0	256.6	229.0	212.0	206.4	199.3	195.8	197.9	197.2
60°	7999.3	6436.6	932.9	240.3	215.6	197.9	197.9	192.2	189.4	191.5	190.8
62.5°	9623.5	7982.3	1311.8	228.3	201.4	186.6	189.4	186.6	183.8	185.2	184.5
65°	11063.9	8989.5	1228.4	219.1	187.3	176.0	180.9	179.5	177.4	178.8	178.1
67.5°	11105.6	8616.3	689.8	209.2	173.9	165.4	172.5	171.7	170.3	171.7	171.0
70°	9911.1	7275.6	388.7	190.8	159.7	152.7	162.6	161.9	160.4	163.3	162.6
72.5°	7940.6	5279.6	284.1	168.2	145.6	139.2	150.5	149.8	149.8	154.1	152.0
75°	4569.3	2716.9	226.9	144.2	130.8	125.8	135.7	136.4	137.8	143.5	139.2
77.5°	1302.6	846.7	185.2	122.3	112.4	110.3	120.2	121.6	122.3	128.6	123.0
80°	484.1	390.1	152.7	102.5	91.9	92.6	101.8	103.9	104.6	111.0	103.9
82.5°	308.9	257.3	123.7	79.2	72.1	71.4	82.7	85.5	85.5	86.2	82.0
85°	180.2	154.1	93.3	57.2	50.9	48.8	61.5	66.4	64.3	62.9	60.1
87.5°	120.9	106.0	57.2	31.8	27.6	26.2	36.0	39.6	38.2	36.0	33.9
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)