

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: P299238

Luminaire Tested: **GLNA-AF-04-LED-E1-SL2-7060-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299238  
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-SL2-7060-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

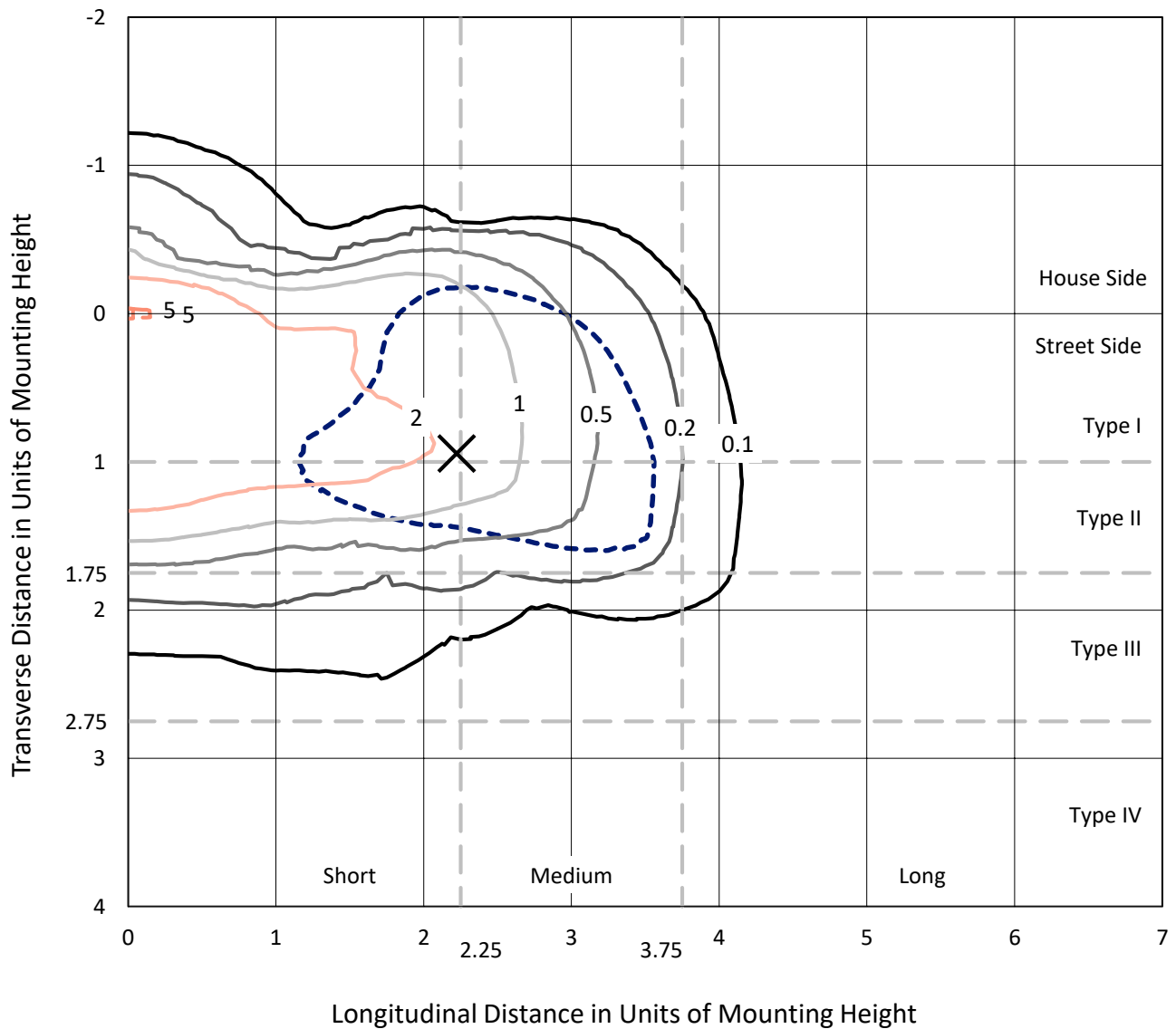
Lumens per Lamp: N/A  
Luminaire Lumens: 15442 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (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

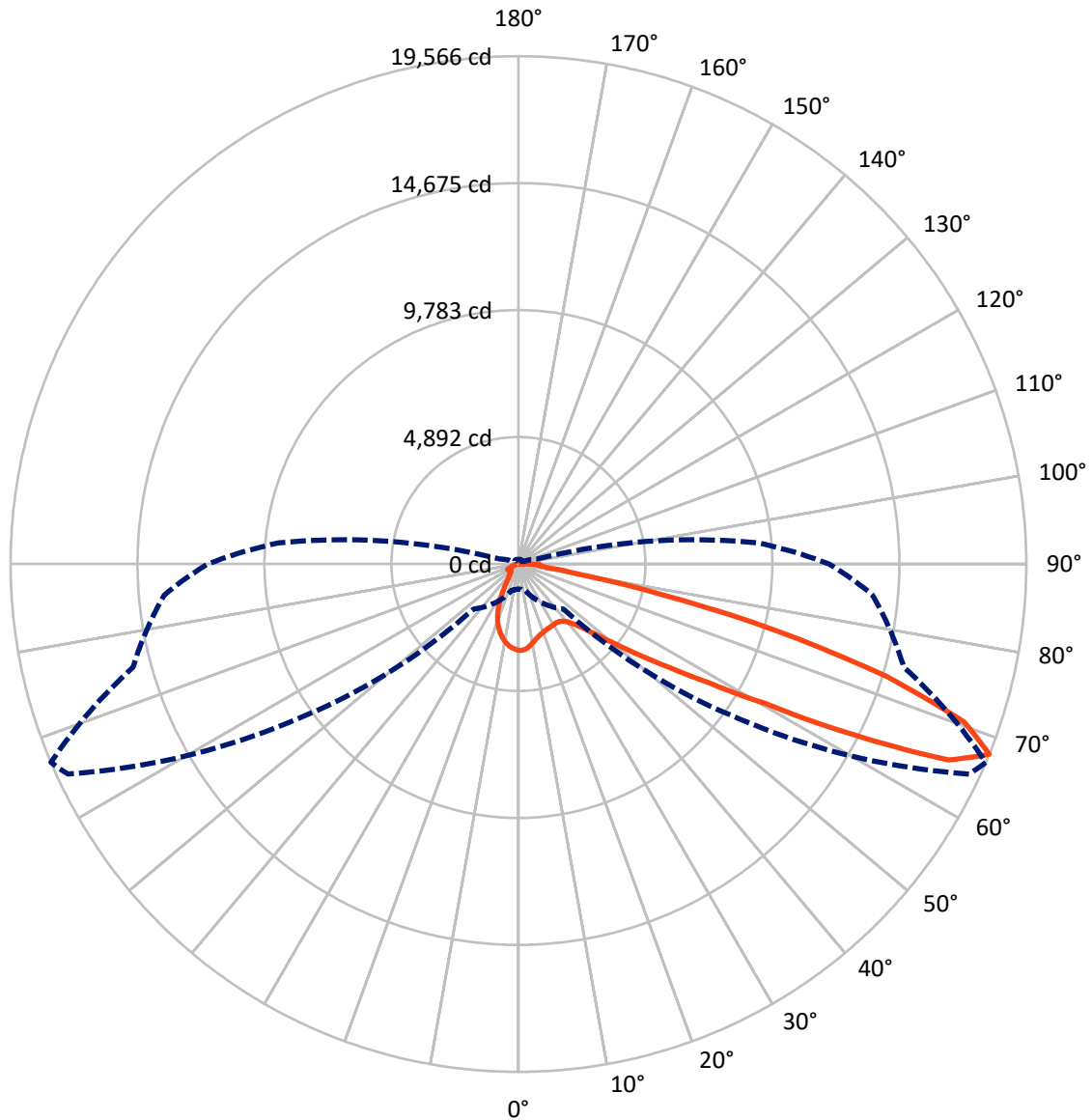
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299238  
CATALOG NUMBER: GLNA-AF-04-LED-E1-SL2-7060-600

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLNA-AF-04-LED-E1-SL2-7060-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2558.6	0.0	2558.6
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	12883.5	0.0	12883.5
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	15442.0	0.0	15442.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.2	1.8
10°-20°	657.5	4.3
20°-30°	891.3	5.8
30°-40°	1267.0	8.2
40°-50°	2119.8	13.7
50°-60°	3353.5	21.7
60°-70°	4272.1	27.7
70°-80°	2237.7	14.5
80°-90°	358.9	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°	15442.0	100.0
0°-180°	15442.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P299238

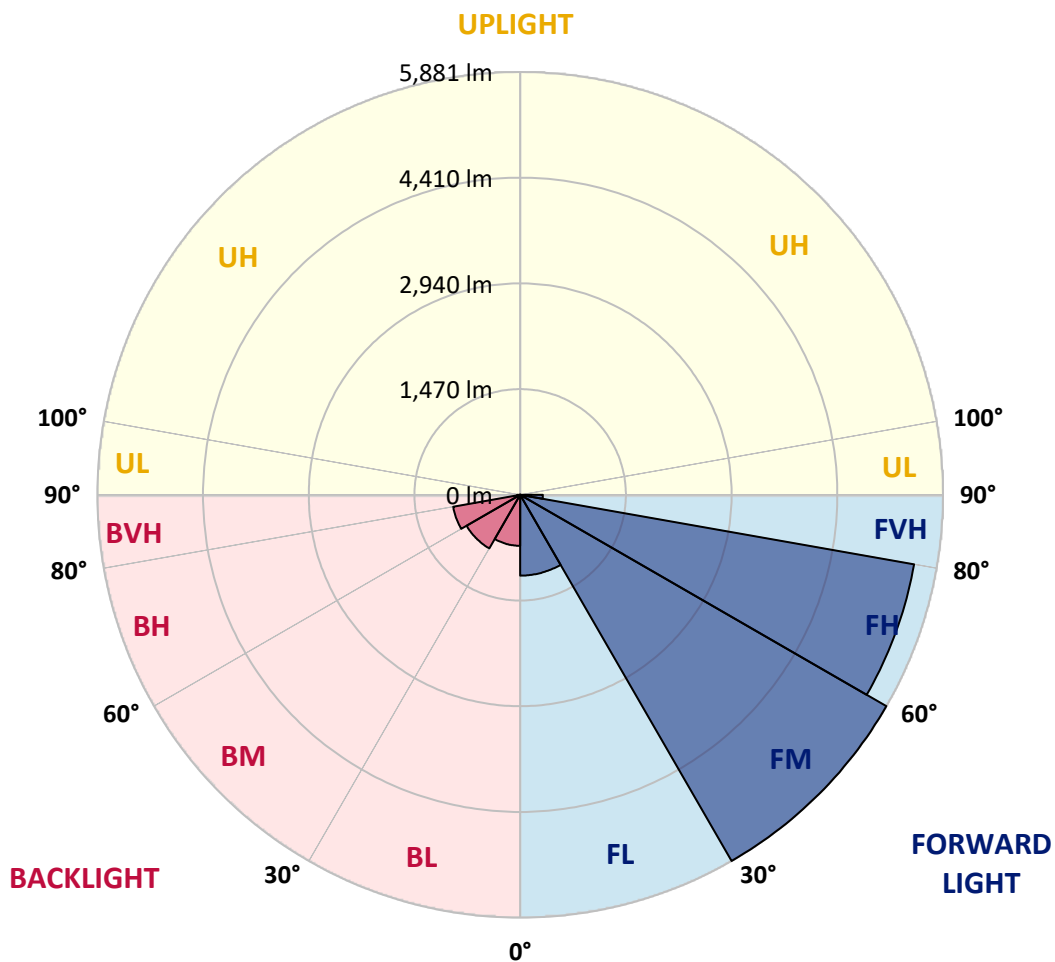
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1123.8	7.3			
FM (30°-60°)	5880.7	38.1			
FH (60°-80°)	5563.4	36.0			G3/7500
FVH (80°-90°)	315.6	2.0			G3/500
BL (0°-30°)	709.2	4.6	B2/1000		
BM (30°-60°)	859.8	5.6	B1/1000		
BH (60°-80°)	946.3	6.1	B2/1000		G2/1000
BVH (80°-90°)	43.3	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





REPORT NUMBER: P299238

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL2-7060-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8
2.5°	3193.7	3199.1	3215.8	3226.5	3274.5	3295.0	3309.5	3324.0	3326.2	3333.1	3326.2
5°	2858.7	2870.1	2901.3	2936.4	3029.3	3102.4	3179.3	3259.2	3273.7	3325.5	3339.9
7.5°	2599.0	2596.0	2621.9	2663.7	2758.9	2860.2	2995.0	3154.1	3185.4	3301.9	3358.2
10°	2409.4	2407.1	2434.5	2477.9	2568.5	2664.5	2816.8	3034.6	3078.8	3264.6	3375.7
12.5°	2269.3	2270.0	2297.5	2345.4	2437.6	2534.3	2688.9	2918.8	2975.2	3221.2	3394.0
15°	2176.4	2182.5	2204.5	2255.6	2345.4	2442.1	2593.7	2832.0	2895.2	3186.9	3414.6
17.5°	2145.2	2155.1	2162.7	2200.0	2276.9	2373.6	2522.1	2768.1	2835.1	3163.3	3432.9
20°	2174.1	2185.5	2171.0	2184.0	2232.7	2318.0	2465.7	2717.8	2786.3	3136.6	3435.1
22.5°	2298.2	2308.9	2266.2	2228.9	2225.9	2277.7	2419.3	2678.2	2749.0	3116.8	3435.9
25°	2516.8	2523.6	2452.0	2365.2	2280.7	2263.2	2386.5	2650.8	2726.2	3099.3	3421.4
27.5°	2784.8	2790.1	2707.9	2580.0	2410.2	2297.5	2375.1	2634.8	2713.2	3084.1	3397.1
30°	3110.7	3135.9	3025.4	2864.0	2616.5	2398.7	2398.0	2626.4	2698.8	3058.2	3349.1
32.5°	3444.3	3454.9	3378.8	3215.1	2894.5	2576.9	2461.9	2632.5	2695.0	3027.0	3288.2
35°	3782.4	3796.1	3746.6	3614.9	3274.5	2838.1	2586.8	2668.3	2718.6	3016.3	3245.5
37.5°	4220.2	4238.5	4170.0	4017.7	3736.7	3192.2	2794.7	2758.2	2790.9	3046.8	3232.6
40°	4912.5	4904.1	4703.8	4476.9	4242.3	3645.3	3091.7	2910.5	2929.5	3145.0	3272.2
42.5°	5718.1	5697.6	5352.6	4996.2	4798.2	4193.6	3484.6	3174.7	3170.9	3338.4	3411.5
45°	6360.8	6344.1	6033.4	5594.0	5435.6	4818.0	3992.6	3568.4	3540.2	3645.3	3668.9
47.5°	6708.8	6709.6	6530.6	6172.0	6168.2	5611.5	4645.2	4138.0	4089.3	4138.8	4113.6
50°	6587.0	6603.0	6583.9	6469.7	6836.8	6651.7	5497.3	4932.2	4834.0	4882.8	4786.0
52.5°	5997.6	6018.2	6130.9	6306.0	7117.8	7909.0	6749.2	5919.2	5804.9	5787.4	5680.0
55°	4952.8	4977.9	5207.9	5683.9	6884.0	8753.5	8724.5	7177.2	6995.2	6829.9	6784.2
57.5°	3413.8	3455.7	3825.8	4532.5	6127.8	9008.6	11076.8	8970.5	8600.4	8023.2	8033.8
60°	1924.3	1973.1	2409.4	3051.3	4601.8	8731.4	12866.3	11686.8	10905.5	9420.5	9499.7
62.5°	1223.7	1276.3	1607.5	2120.0	2761.2	7238.8	13599.7	15463.1	14470.8	11143.1	11220.7
65°	990.7	1013.6	1169.7	1749.9	2005.0	4361.1	13043.0	18573.8	18203.7	13329.3	12966.9
67.5°	967.1	974.7	1055.4	1468.9	1922.8	2451.3	10403.6	19155.6	19566.0	15370.9	13694.1
70°	955.7	982.3	1189.5	1401.9	1841.3	2067.5	6251.9	17561.0	18209.0	15904.7	12726.2
72.5°	463.8	462.2	598.5	1267.9	2074.3	2144.4	3212.0	14208.9	14859.2	13779.4	10457.7
75°	373.9	341.9	326.7	464.5	1994.4	2214.4	2046.9	9776.9	10247.5	9238.5	6428.6
77.5°	354.9	316.8	290.1	290.9	843.0	2348.5	1733.9	5411.2	5548.3	4173.0	1761.4
80°	293.9	258.9	239.9	270.3	408.2	2236.5	1874.8	2449.0	2247.2	1025.0	586.4
82.5°	204.1	185.8	180.5	226.9	326.7	1593.8	2180.2	1315.9	1103.4	513.3	361.7
85°	130.2	111.2	123.4	165.2	254.3	735.6	2245.7	1025.7	815.6	325.9	204.1
87.5°	60.2	48.7	60.9	91.4	166.0	253.6	2136.8	1152.2	839.9	172.1	128.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299238

CATALOG NUMBER: GLNA-AF-04-LED-E1-SL2-7060-600

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8	3330.8
2.5°	3332.3	3317.9	3306.4	3285.1	3261.5	3238.7	3218.1	3192.2	3184.6	3177.7	3188.4
5°	3343.0	3328.5	3286.6	3221.2	3148.8	3081.0	3013.3	2955.4	2919.6	2899.8	2911.2
7.5°	3359.0	3338.4	3251.6	3131.3	3001.1	2882.3	2759.7	2661.4	2589.1	2554.8	2564.7
10°	3373.5	3333.9	3192.2	3011.7	2821.4	2644.7	2451.3	2291.4	2172.6	2110.1	2125.4
12.5°	3379.5	3316.3	3109.2	2862.5	2601.3	2342.4	2057.6	1818.5	1647.9	1585.4	1572.5
15°	3385.6	3296.5	3017.8	2692.7	2335.5	1969.2	1570.2	1283.9	1142.3	1111.0	1104.2
17.5°	3387.2	3262.3	2914.3	2508.4	2024.1	1525.3	1073.7	891.7	892.5	942.7	948.8
20°	3371.2	3211.3	2788.6	2279.2	1650.9	1054.7	737.1	705.9	820.9	946.5	961.8
22.5°	3334.6	3143.5	2646.2	2011.9	1223.7	694.5	570.4	604.6	753.1	906.9	924.5
25°	3288.2	3061.2	2477.9	1702.0	810.2	496.5	478.2	520.1	620.6	723.4	733.3
27.5°	3225.0	2963.8	2289.1	1347.1	526.2	408.9	421.1	449.3	490.4	536.1	540.7
30°	3143.5	2847.3	2087.3	982.3	397.5	367.8	385.3	400.6	418.1	444.0	446.2
32.5°	3049.8	2735.3	1880.1	678.5	352.6	346.5	360.2	367.8	381.5	397.5	399.0
35°	2971.4	2628.7	1665.4	479.7	333.5	330.5	339.6	342.7	355.6	373.1	374.7
37.5°	2926.5	2541.9	1443.8	386.8	320.6	316.0	321.4	321.4	339.6	365.5	369.3
40°	2929.5	2493.9	1222.2	349.5	309.9	303.8	304.6	304.6	328.2	356.4	358.7
42.5°	3012.5	2506.1	1025.7	335.1	301.6	294.7	290.9	293.2	313.0	331.3	332.8
45°	3207.4	2592.2	841.5	325.9	293.2	290.9	282.5	281.8	289.4	297.7	297.7
47.5°	3527.3	2762.0	716.6	319.8	286.3	285.6	275.7	265.8	265.0	268.0	268.0
50°	4047.4	3054.4	632.8	313.0	281.8	275.7	264.2	249.0	243.7	246.0	246.0
52.5°	4827.2	3576.0	600.8	303.8	271.9	262.0	249.0	233.8	229.2	230.0	230.0
55°	5849.9	4377.1	596.3	293.2	261.2	245.2	234.5	223.1	217.8	219.3	219.3
57.5°	7099.5	5485.1	677.7	276.4	246.7	228.5	222.4	214.7	210.9	213.2	212.5
60°	8618.7	6935.0	1005.2	258.9	232.3	213.2	213.2	207.1	204.1	206.4	205.6
62.5°	10368.6	8600.4	1413.3	246.0	217.0	201.0	204.1	201.0	198.0	199.5	198.8
65°	11920.6	9685.5	1323.5	236.1	201.8	189.6	194.9	193.4	191.1	192.7	191.9
67.5°	11965.5	9283.5	743.2	225.4	187.3	178.2	185.8	185.0	183.5	185.0	184.3
70°	10678.5	7838.9	418.8	205.6	172.1	164.5	175.1	174.4	172.9	175.9	175.1
72.5°	8555.5	5688.4	306.1	181.2	156.9	150.0	162.2	161.4	161.4	166.0	163.7
75°	4923.1	2927.2	244.4	155.3	140.9	135.5	146.2	147.0	148.5	154.6	150.0
77.5°	1403.4	912.3	199.5	131.7	121.1	118.8	129.5	131.0	131.7	138.6	132.5
80°	521.6	420.3	164.5	110.4	99.0	99.8	109.7	111.9	112.7	119.6	111.9
82.5°	332.8	277.2	133.3	85.3	77.7	76.9	89.1	92.1	92.1	92.9	88.3
85°	194.2	166.0	100.5	61.7	54.8	52.5	66.3	71.6	69.3	67.8	64.7
87.5°	130.2	114.2	61.7	34.3	29.7	28.2	38.8	42.6	41.1	38.8	36.6
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)