

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: P300365

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300365  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-AFL-7050-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

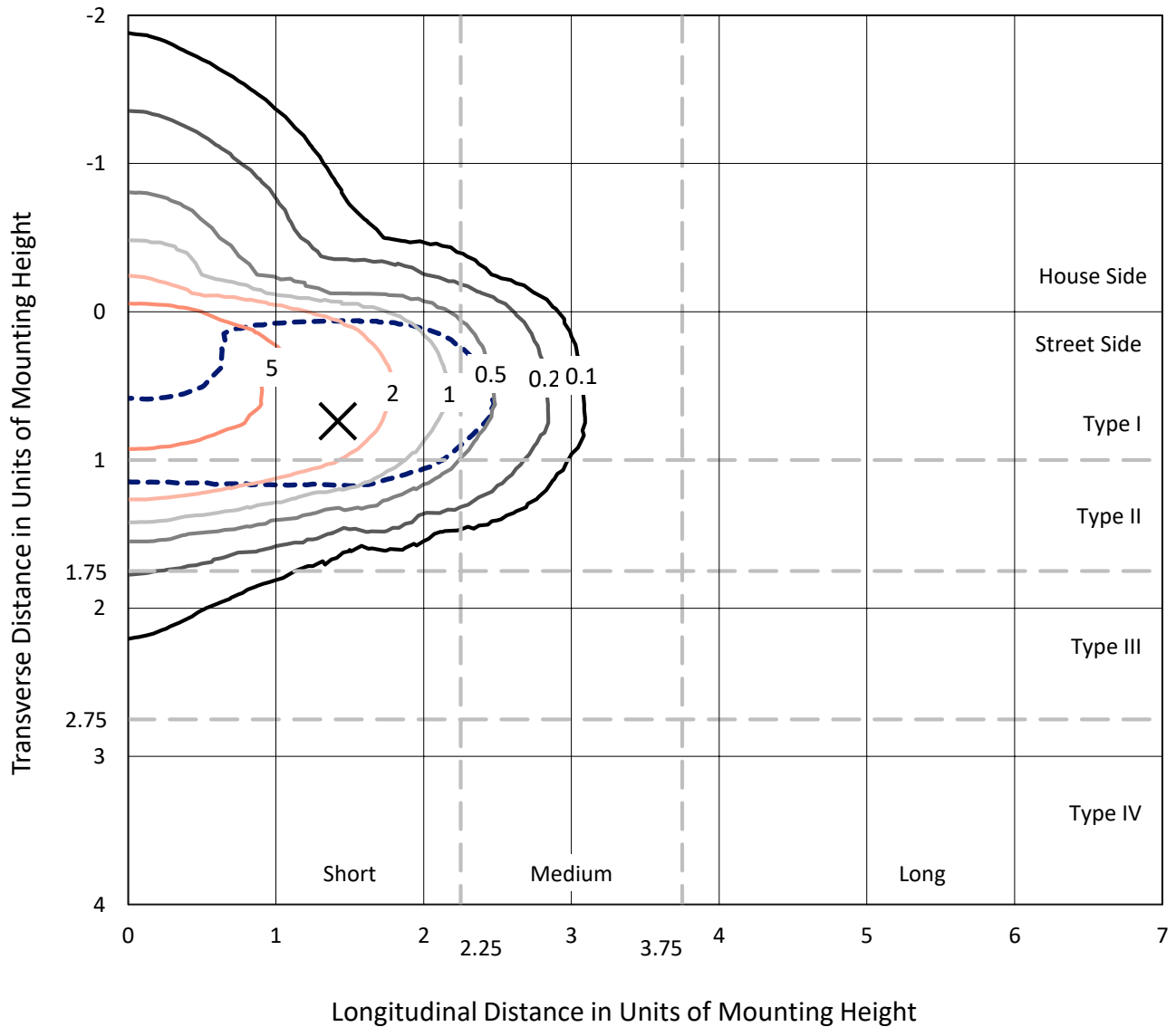
Lumens per Lamp: N/A  
Luminaire Lumens: 10059.2 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (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

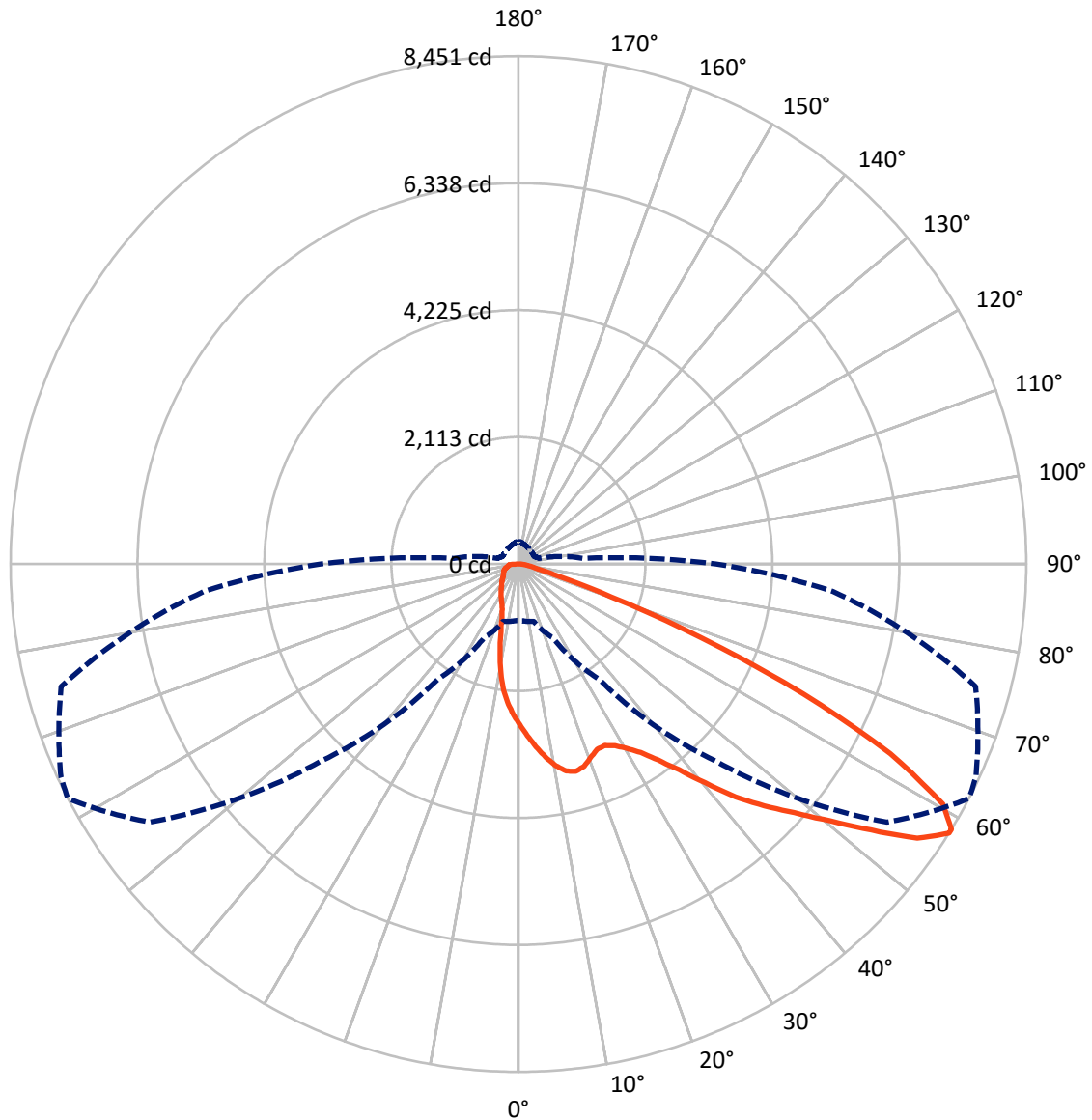
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1534.1	0.0	1534.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	8525.1	0.0	8525.1
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	10059.2	0.0	10059.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.0	2.4
10°-20°	610.9	6.1
20°-30°	987.5	9.8
30°-40°	1567.6	15.6
40°-50°	2293.7	22.8
50°-60°	2399.0	23.8
60°-70°	1417.4	14.1
70°-80°	399.3	4.0
80°-90°	145.0	1.4
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°	10059.2	100.0
0°-180°	10059.2	100.0

**Coefficient of Utilization**



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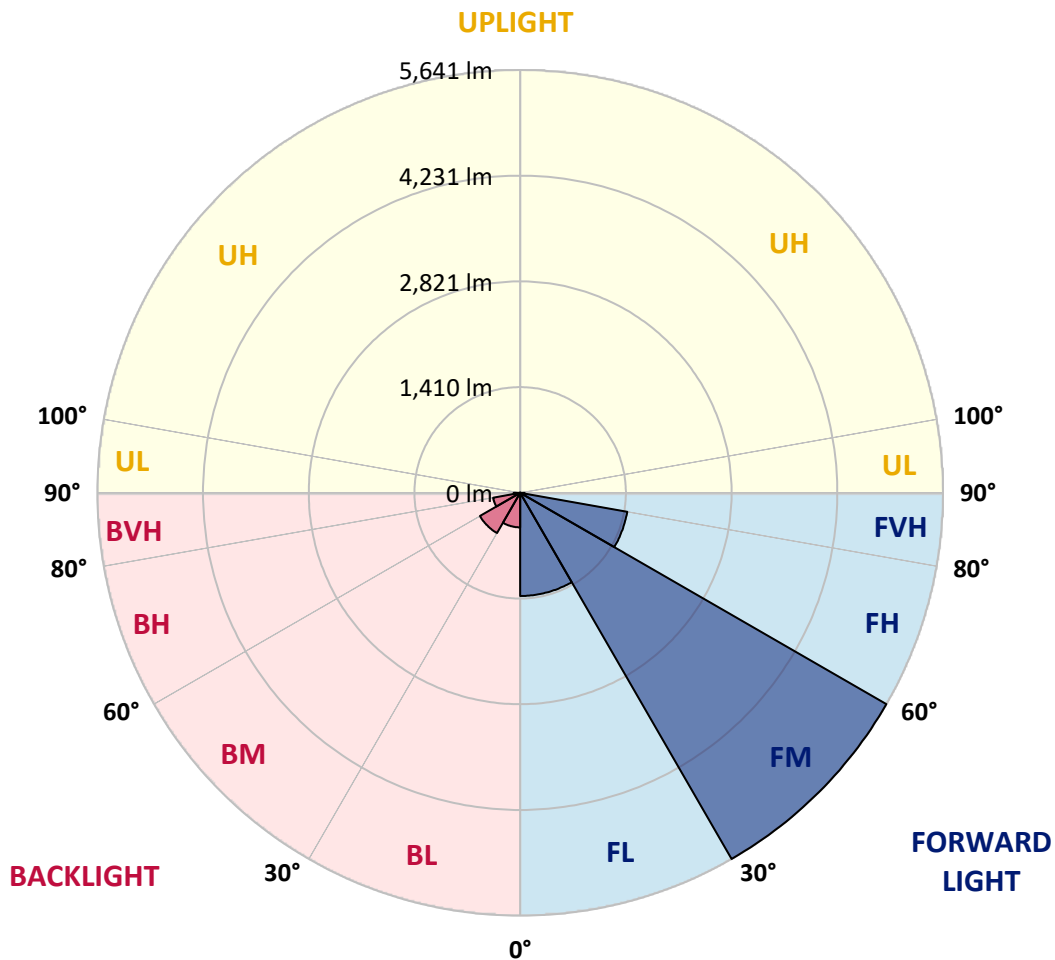
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1376.2	13.7			
FM	(30°-60°)	5641.1	56.1			
FH	(60°-80°)	1450.6	14.4			G1/1800
FVH	(80°-90°)	57.2	0.6			G1/100
BL	(0°-30°)	461.1	4.6	B1/500		
BM	(30°-60°)	619.2	6.2	B1/1000		
BH	(60°-80°)	366.0	3.6	B1/500		G1/500
BVH	(80°-90°)	87.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0
2.5°	3053.3	3028.7	3013.1	2999.3	2981.3	2943.0	2891.3	2858.7	2842.1	2785.7	2718.9
5°	3352.7	3330.9	3314.8	3296.3	3264.1	3204.0	3120.6	3054.3	3021.6	2908.9	2775.3
7.5°	3282.6	3291.6	3319.5	3368.3	3410.0	3402.0	3327.6	3243.3	3200.2	3043.4	2840.7
10°	2860.1	2875.7	2924.0	3038.2	3222.9	3412.4	3470.2	3411.9	3368.3	3176.5	2907.9
12.5°	2775.3	2774.8	2778.6	2808.9	2918.8	3185.5	3474.9	3533.6	3507.6	3303.4	2976.6
15°	2809.9	2810.8	2808.0	2820.8	2854.9	2960.5	3330.0	3580.5	3599.0	3431.3	3047.7
17.5°	2900.8	2898.4	2887.5	2887.5	2899.9	2941.1	3159.4	3537.0	3622.2	3544.5	3110.2
20°	3053.3	3042.4	3013.5	2987.0	2973.8	2996.0	3089.3	3436.5	3582.0	3643.5	3161.8
22.5°	3238.1	3229.5	3182.7	3125.8	3079.9	3079.4	3125.3	3348.9	3512.3	3736.9	3205.4
25°	3476.8	3463.1	3393.4	3302.5	3222.0	3191.2	3204.0	3344.6	3474.4	3838.2	3244.2
27.5°	3757.2	3732.1	3649.7	3518.5	3400.1	3338.0	3319.5	3421.9	3509.0	3963.7	3298.2
30°	4097.3	4068.4	3962.8	3791.8	3624.6	3522.8	3483.4	3558.8	3623.6	4116.7	3384.9
32.5°	4484.3	4442.6	4320.4	4131.9	3912.1	3756.7	3692.8	3739.7	3791.3	4301.0	3493.4
35°	5019.1	4969.4	4792.7	4532.6	4284.4	4070.8	3968.5	4002.6	4052.8	4575.7	3650.2
37.5°	5383.8	5361.6	5244.1	4999.7	4729.7	4483.8	4325.6	4345.5	4374.0	4919.2	3851.0
40°	5380.5	5389.5	5391.9	5394.3	5210.5	4975.1	4805.0	4784.2	4778.5	5296.2	4079.3
42.5°	5111.0	5147.9	5267.3	5509.4	5621.2	5513.2	5357.3	5297.2	5267.3	5740.5	4321.4
45°	4698.4	4718.3	4941.9	5414.6	5831.5	6046.0	5928.1	5738.6	5684.6	6148.8	4522.2
47.5°	4485.7	4507.5	4648.2	5163.6	5829.1	6476.6	6544.8	6183.9	6087.3	6504.1	4695.6
50°	3979.4	4024.9	4202.0	4726.8	5616.4	6674.6	7189.5	6714.4	6514.5	6849.9	4869.4
52.5°	3049.5	3119.7	3318.1	4008.7	5076.9	6576.6	7705.3	7357.7	7075.3	7208.0	5018.6
55°	1923.6	1975.7	2142.5	2831.2	4061.3	6066.4	7901.0	8053.5	7802.4	7547.1	5147.9
57.5°	1045.9	1069.1	1131.6	1563.1	2641.7	4938.6	7615.8	8449.5	8345.3	7835.1	5245.5
58°	936.0	951.6	990.5	1354.7	2342.8	4630.2	7489.3	8450.9	8398.8	7877.3	5253.1
60°	694.4	686.4	651.8	773.0	1304.0	3198.8	6724.8	8112.7	8265.7	7928.9	5216.2
62.5°	610.1	590.7	520.1	512.0	634.3	1473.6	5145.6	6949.3	7310.8	7634.3	4991.6
65°	573.2	552.3	461.4	432.0	457.6	623.4	3031.1	5211.9	5665.2	6740.9	4417.5
67.5°	545.7	518.7	423.9	383.7	385.6	412.1	1215.0	3282.6	3792.7	5118.1	3436.1
70°	519.2	489.8	392.2	345.8	334.9	325.9	483.2	1643.2	2106.0	3232.9	2190.8
72.5°	490.7	461.8	364.3	315.9	294.6	264.8	315.5	672.2	938.8	1529.5	993.8
75°	449.5	423.5	336.3	289.4	259.1	219.3	238.3	351.0	421.1	609.2	478.9
77.5°	398.8	377.5	305.0	267.6	229.7	178.1	183.3	243.5	270.0	348.6	284.7
80°	286.6	294.2	271.4	240.6	204.6	144.5	140.7	177.6	191.8	224.1	185.2
82.5°	201.3	205.6	224.5	196.6	169.1	113.7	103.7	125.1	133.6	147.3	99.9
85°	138.8	134.1	153.9	136.9	122.2	75.8	71.1	84.8	90.0	91.4	51.6
87.5°	83.4	83.4	89.1	73.4	65.8	39.3	38.4	48.3	51.6	49.3	28.4
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°	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0	2672.0
2.5°	2679.1	2645.5	2574.0	2516.7	2444.2	2368.9	2326.7	2281.7	2250.9	2228.7	2264.2
5°	2699.5	2630.8	2483.0	2342.8	2187.9	2026.9	1904.7	1791.0	1711.9	1662.6	1709.0
7.5°	2731.7	2626.1	2390.7	2151.0	1872.9	1604.8	1365.1	1215.0	1127.4	1084.3	1111.3
10°	2768.7	2618.5	2282.2	1890.9	1493.0	1155.3	976.3	915.6	895.7	887.7	891.5
12.5°	2799.4	2602.4	2149.1	1576.4	1121.2	912.3	860.7	859.3	863.5	864.5	865.9
15°	2821.2	2578.7	1951.6	1248.6	896.7	831.3	828.5	837.0	845.0	848.4	850.3
17.5°	2835.9	2529.9	1728.5	987.1	803.4	792.0	798.6	809.5	818.0	820.4	822.3
20°	2834.5	2458.4	1462.7	823.3	752.7	752.7	764.0	772.6	773.0	770.2	771.6
22.5°	2819.8	2360.3	1205.0	736.1	707.7	715.7	727.1	719.0	685.9	664.1	665.5
25°	2795.2	2243.3	984.3	680.7	666.0	680.2	676.9	616.3	568.9	547.6	547.6
27.5°	2773.4	2105.0	814.7	632.4	624.3	641.8	583.1	528.2	508.3	498.3	495.0
30°	2757.8	1955.8	701.5	585.9	585.0	572.2	505.9	490.7	487.4	479.4	476.5
32.5°	2761.5	1804.7	629.0	545.2	548.5	489.8	468.9	472.3	469.4	460.9	457.1
35°	2792.8	1661.2	581.7	508.3	498.3	442.4	447.2	453.3	452.4	440.5	436.7
37.5°	2848.7	1525.2	550.4	477.5	434.8	418.7	426.3	435.8	433.4	425.4	422.5
40°	2907.4	1397.4	524.8	453.3	397.4	402.6	409.3	414.5	416.8	419.2	417.3
42.5°	2964.8	1263.8	493.6	428.7	381.8	387.5	390.3	395.5	408.3	417.3	416.8
45°	2998.9	1138.3	461.4	393.6	369.5	372.8	370.9	381.3	396.9	411.6	412.1
47.5°	3036.8	1040.7	435.8	361.4	357.6	360.0	354.3	364.7	378.9	396.9	398.8
50°	3082.7	982.4	415.4	335.8	341.5	341.5	340.1	349.6	369.5	390.3	394.1
52.5°	3134.8	971.0	398.4	317.4	325.4	324.9	326.4	340.6	362.4	382.7	386.0
55°	3198.3	1001.8	379.9	303.6	309.8	311.7	316.4	332.5	351.0	374.2	375.6
57.5°	3272.2	1064.4	365.2	292.7	295.6	301.7	309.3	324.0	343.9	369.5	370.9
58°	3284.5	1077.6	362.8	291.8	292.7	299.8	308.4	322.6	342.5	370.4	371.8
60°	3285.0	1121.7	357.6	287.5	281.8	293.7	303.2	317.4	340.1	373.7	377.0
62.5°	3168.4	1121.2	353.8	281.4	270.5	285.2	296.0	312.6	337.7	381.8	388.4
65°	2790.0	1018.9	335.8	271.9	261.5	277.6	289.9	309.3	344.4	416.8	421.1
67.5°	2182.2	835.1	302.2	258.6	249.6	270.0	286.1	308.8	351.5	424.9	427.7
70°	1442.8	624.8	265.3	243.5	237.3	261.0	288.0	324.9	343.4	407.8	400.3
72.5°	748.9	438.6	235.4	224.5	223.1	252.9	315.5	323.0	335.4	383.7	374.2
75°	393.2	304.6	209.4	203.7	206.1	251.0	372.3	314.5	324.9	367.1	385.1
77.5°	240.6	245.8	187.1	184.7	189.5	245.4	371.8	303.6	309.8	337.7	357.6
80°	161.1	199.4	170.1	170.5	173.8	224.5	333.9	286.6	291.3	319.3	339.6
82.5°	101.8	117.9	154.4	162.5	158.2	185.2	283.7	261.0	267.6	365.2	386.0
85°	51.6	73.9	134.1	156.3	142.6	129.8	230.2	228.8	232.1	263.4	275.2
87.5°	23.7	40.7	104.7	136.4	107.5	81.0	167.2	169.6	182.8	187.1	187.1
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)