

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: P300367

Luminaire Tested: **GLNA-AF-03-LED-E1-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300367  
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-03-LED-E1-AFL-7027-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13041.4 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

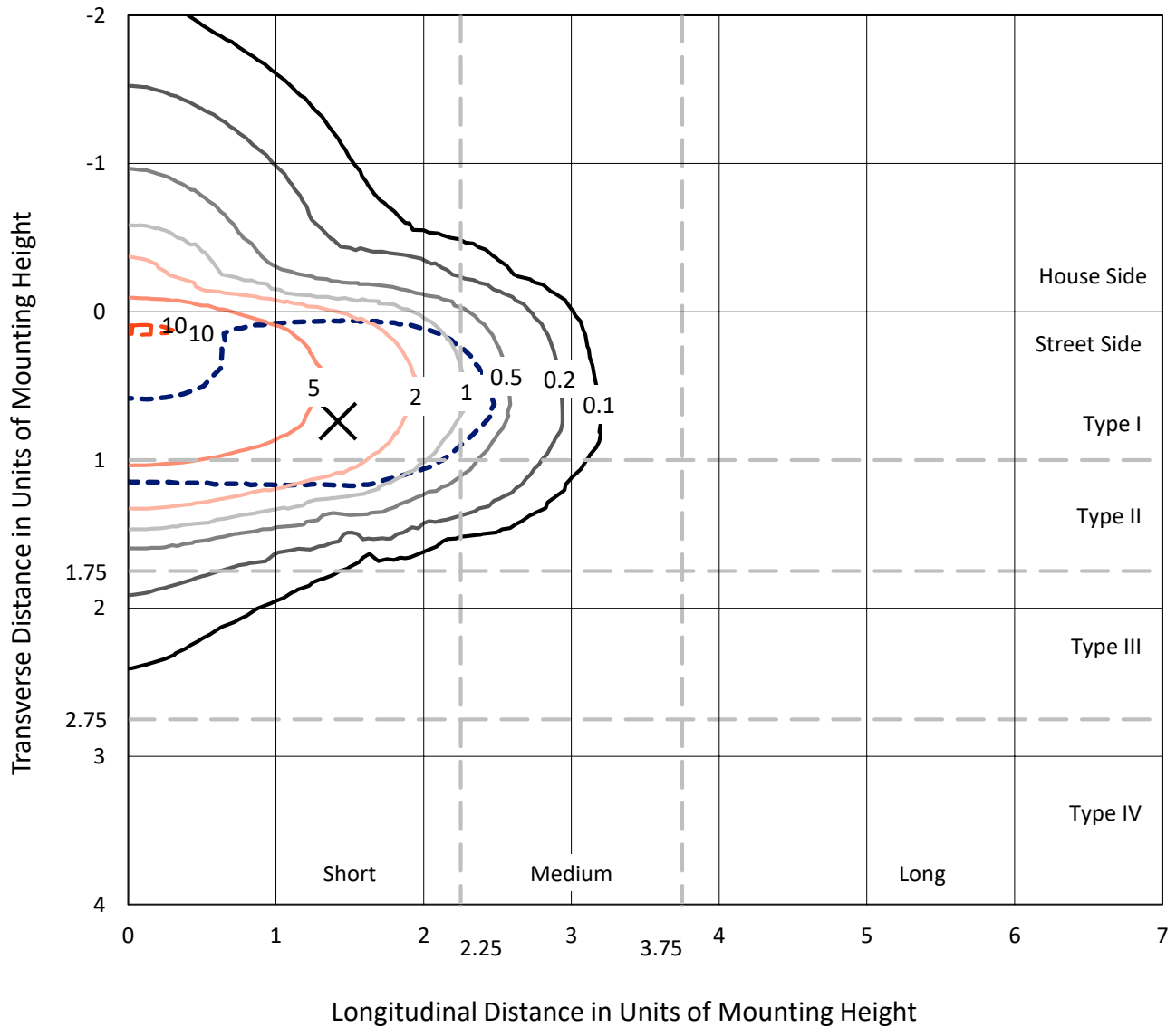
Input Watts (W): 124  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

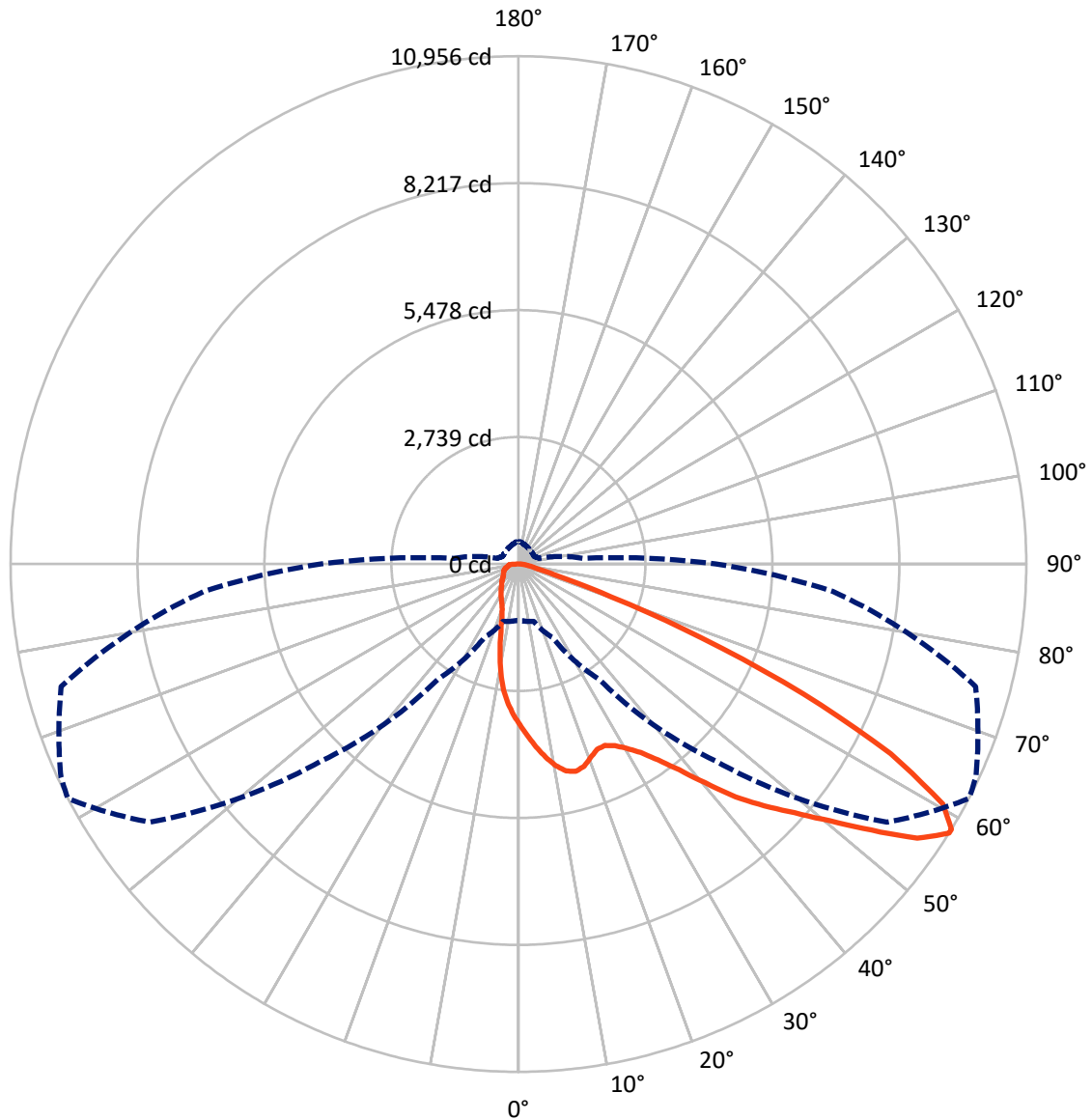
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.6 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	1988.9	0.0	1988.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	11052.5	0.0	11052.5
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	13041.4	0.0	13041.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.8	2.4
10°-20°	791.9	6.1
20°-30°	1280.2	9.8
30°-40°	2032.3	15.6
40°-50°	2973.7	22.8
50°-60°	3110.2	23.8
60°-70°	1837.5	14.1
70°-80°	517.6	4.0
80°-90°	187.9	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°	13041.4	100.0
0°-180°	13041.4	100.0



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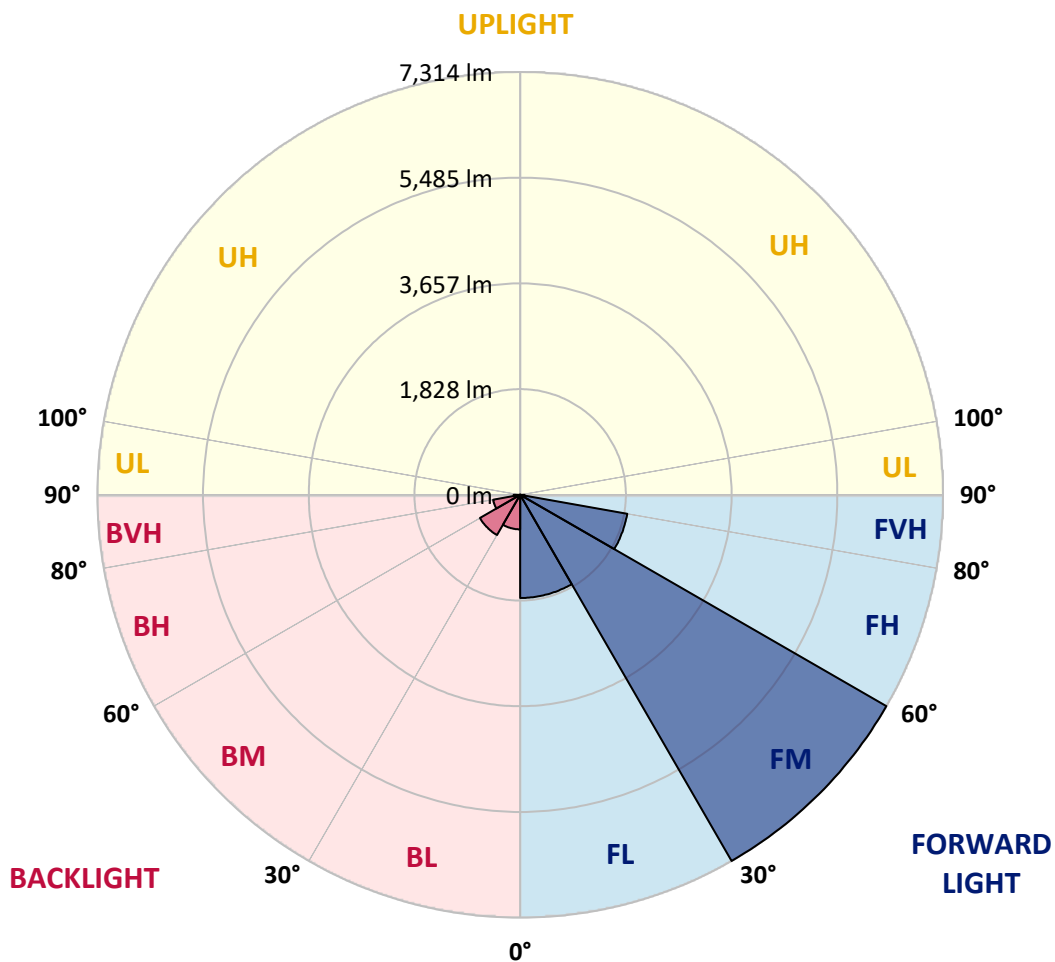
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1784.2	13.7			
FM (30°-60°)	7313.5	56.1			
FH (60°-80°)	1880.6	14.4			G2/5000
FVH (80°-90°)	74.1	0.6			G1/100
BL (0°-30°)	597.8	4.6	B2/1000		
BM (30°-60°)	802.8	6.2	B1/1000		
BH (60°-80°)	474.6	3.6	B1/500		G1/500
BVH (80°-90°)	113.8	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2
2.5°	3958.5	3926.6	3906.3	3888.5	3865.2	3815.4	3748.5	3706.1	3684.6	3611.6	3525.0
5°	4346.6	4318.4	4297.5	4273.6	4231.8	4153.8	4045.7	3959.8	3917.4	3771.2	3598.0
7.5°	4255.8	4267.4	4303.7	4366.9	4421.0	4410.5	4314.1	4204.8	4148.9	3945.6	3682.8
10°	3708.0	3728.2	3790.9	3938.9	4178.4	4424.0	4498.9	4423.4	4366.9	4118.2	3770.0
12.5°	3598.0	3597.4	3602.3	3641.7	3784.1	4129.9	4505.1	4581.2	4547.5	4282.8	3859.0
15°	3642.9	3644.1	3640.4	3657.0	3701.2	3838.2	4317.2	4642.0	4666.0	4448.6	3951.2
17.5°	3760.8	3757.7	3743.6	3743.6	3759.6	3813.0	4096.1	4585.5	4696.1	4595.4	4032.2
20°	3958.5	3944.4	3906.9	3872.6	3855.4	3884.2	4005.2	4455.3	4643.9	4723.7	4099.2
22.5°	4198.0	4187.0	4126.2	4052.5	3992.9	3992.3	4051.9	4341.7	4553.6	4844.7	4155.7
25°	4507.5	4489.7	4399.5	4281.5	4177.2	4137.2	4153.8	4336.2	4504.5	4976.1	4206.0
27.5°	4871.1	4838.5	4731.7	4561.6	4408.1	4327.6	4303.7	4436.3	4549.3	5138.8	4276.0
30°	5312.0	5274.6	5137.6	4915.9	4699.1	4567.1	4516.1	4613.8	4697.9	5337.2	4388.4
32.5°	5813.7	5759.7	5601.3	5356.9	5071.9	4870.5	4787.6	4848.4	4915.3	5576.1	4529.0
35°	6507.1	6442.6	6213.5	5876.4	5554.6	5277.6	5145.0	5189.2	5254.3	5932.3	4732.3
37.5°	6979.9	6951.1	6798.8	6481.9	6131.9	5813.1	5608.0	5633.8	5670.7	6377.5	4992.7
40°	6975.6	6987.3	6990.4	6993.4	6755.2	6450.0	6229.5	6202.5	6195.1	6866.3	5288.7
42.5°	6626.2	6674.1	6828.9	7142.7	7287.6	7147.6	6945.5	6867.6	6828.9	7442.4	5602.5
45°	6091.3	6117.1	6407.0	7019.9	7560.3	7838.5	7685.5	7439.9	7369.9	7971.7	5862.9
47.5°	5815.6	5843.8	6026.2	6694.4	7557.2	8396.7	8485.1	8017.2	7891.9	8432.3	6087.6
50°	5159.1	5218.1	5447.7	6128.2	7281.5	8653.4	9320.9	8705.0	8445.8	8880.6	6313.0
52.5°	3953.6	4044.5	4301.8	5197.2	6582.0	8526.3	9989.7	9538.9	9172.9	9344.9	6506.5
55°	2493.9	2561.4	2777.6	3670.5	5265.3	7864.9	10243.3	10441.0	10115.6	9784.6	6674.1
57.5°	1355.9	1386.0	1467.1	2026.6	3424.9	6402.7	9873.6	10954.4	10819.3	10157.9	6800.6
58°	1213.5	1233.7	1284.1	1756.3	3037.4	6002.9	9709.6	10956.3	10888.7	10212.6	6810.4
60°	900.3	889.8	845.0	1002.2	1690.6	4147.1	8718.5	10517.8	10716.2	10279.5	6762.5
62.5°	791.0	765.8	674.3	663.8	822.3	1910.5	6671.0	9009.6	9478.1	9897.6	6471.5
65°	743.1	716.0	598.1	560.1	593.2	808.2	3929.7	6757.0	7344.7	8739.3	5727.2
67.5°	707.5	672.4	549.6	497.4	499.9	534.3	1575.2	4255.8	4917.2	6635.4	4454.7
70°	673.1	635.0	508.5	448.3	434.2	422.5	626.4	2130.3	2730.3	4191.3	2840.2
72.5°	636.2	598.8	472.2	409.6	382.0	343.3	409.0	871.4	1217.2	1982.9	1288.4
75°	582.8	549.0	436.0	375.2	335.9	284.3	308.9	455.1	545.9	789.7	620.9
77.5°	517.1	489.4	395.5	347.0	297.8	230.9	237.7	315.7	350.0	452.0	369.1
80°	371.5	381.4	351.9	312.0	265.3	187.3	182.4	230.3	248.7	290.5	240.1
82.5°	261.0	266.5	291.1	254.9	219.2	147.4	134.5	162.1	173.2	191.0	129.6
85°	179.9	173.8	199.6	177.5	158.4	98.3	92.1	109.9	116.7	118.5	66.9
87.5°	108.1	108.1	115.5	95.2	85.4	51.0	49.7	62.6	66.9	63.9	36.8
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°	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2	3464.2
2.5°	3473.4	3429.8	3337.1	3262.7	3168.8	3071.1	3016.5	2958.2	2918.2	2889.4	2935.4
5°	3499.8	3410.7	3219.1	3037.4	2836.6	2627.8	2469.3	2321.9	2219.4	2155.5	2215.7
7.5°	3541.6	3404.6	3099.4	2788.7	2428.2	2080.6	1769.9	1575.2	1461.6	1405.7	1440.7
10°	3589.5	3394.8	2958.8	2451.5	1935.7	1497.8	1265.7	1187.1	1161.3	1150.8	1155.7
12.5°	3629.4	3373.9	2786.2	2043.7	1453.6	1182.8	1115.8	1114.0	1119.5	1120.7	1122.6
15°	3657.6	3343.2	2530.1	1618.8	1162.5	1077.8	1074.1	1085.1	1095.6	1099.9	1102.3
17.5°	3676.7	3279.9	2240.9	1279.8	1041.5	1026.8	1035.4	1049.5	1060.6	1063.6	1066.1
20°	3674.8	3187.2	1896.4	1067.3	975.8	975.8	990.6	1001.6	1002.2	998.5	1000.4
22.5°	3655.8	3060.1	1562.3	954.3	917.5	927.9	942.7	932.2	889.2	861.0	862.8
25°	3623.8	2908.4	1276.1	882.5	863.4	881.9	877.6	799.0	737.5	709.9	709.9
27.5°	3595.6	2729.1	1056.3	819.8	809.4	832.1	756.0	684.7	658.9	646.0	641.7
30°	3575.3	2535.6	909.5	759.6	758.4	741.8	655.9	636.2	631.9	621.5	617.8
32.5°	3580.2	2339.7	815.5	706.8	711.1	635.0	608.0	612.3	608.6	597.5	592.6
35°	3620.8	2153.7	754.1	658.9	646.0	573.6	579.7	587.7	586.5	571.1	566.2
37.5°	3693.2	1977.4	713.6	619.0	563.7	542.9	552.7	565.0	561.9	551.5	547.8
40°	3769.4	1811.6	680.4	587.7	515.2	522.0	530.6	537.3	540.4	543.5	541.0
42.5°	3843.7	1638.4	639.9	555.8	495.0	502.3	506.0	512.8	529.4	541.0	540.4
45°	3887.9	1475.7	598.1	510.3	479.0	483.3	480.8	494.4	514.6	533.7	534.3
47.5°	3937.0	1349.2	565.0	468.6	463.7	466.7	459.4	472.9	491.3	514.6	517.1
50°	3996.6	1273.7	538.6	435.4	442.8	442.8	440.9	453.2	479.0	506.0	510.9
52.5°	4064.2	1258.9	516.5	411.5	421.9	421.3	423.1	441.5	469.8	496.2	500.5
55°	4146.4	1298.8	492.5	393.6	401.6	404.1	410.2	431.1	455.1	485.1	487.0
57.5°	4242.2	1379.9	473.5	379.5	383.2	391.2	401.0	420.0	445.8	479.0	480.8
58°	4258.2	1397.1	470.4	378.3	379.5	388.7	399.8	418.2	444.0	480.2	482.1
60°	4258.8	1454.2	463.7	372.8	365.4	380.7	393.0	411.5	440.9	484.5	488.8
62.5°	4107.8	1453.6	458.7	364.8	350.7	369.7	383.8	405.3	437.9	495.0	503.6
65°	3617.1	1320.9	435.4	352.5	339.0	359.9	375.8	401.0	446.5	540.4	545.9
67.5°	2829.2	1082.7	391.8	335.3	323.6	350.0	370.9	400.4	455.7	550.9	554.5
70°	1870.6	810.0	343.9	315.7	307.7	338.4	373.4	421.3	445.2	528.7	518.9
72.5°	970.9	568.7	305.2	291.1	289.2	327.9	409.0	418.8	434.8	497.4	485.1
75°	509.7	394.9	271.4	264.1	267.1	325.5	482.7	407.8	421.3	475.9	499.3
77.5°	312.0	318.7	242.6	239.5	245.6	318.1	482.1	393.6	401.6	437.9	463.7
80°	208.8	258.5	220.5	221.1	225.4	291.1	432.9	371.5	377.7	413.9	440.3
82.5°	132.0	152.9	200.2	210.6	205.1	240.1	367.8	338.4	347.0	473.5	500.5
85°	66.9	95.8	173.8	202.7	184.8	168.3	298.5	296.6	300.9	341.4	356.8
87.5°	30.7	52.8	135.7	176.9	139.4	105.0	216.8	219.9	237.0	242.6	242.6
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)