

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: P191770

Luminaire Tested: **GLEON-AF-02-LED-E1-AFL-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191770  
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: GLEON-AF-02-LED-E1-AFL-7050  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12494 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

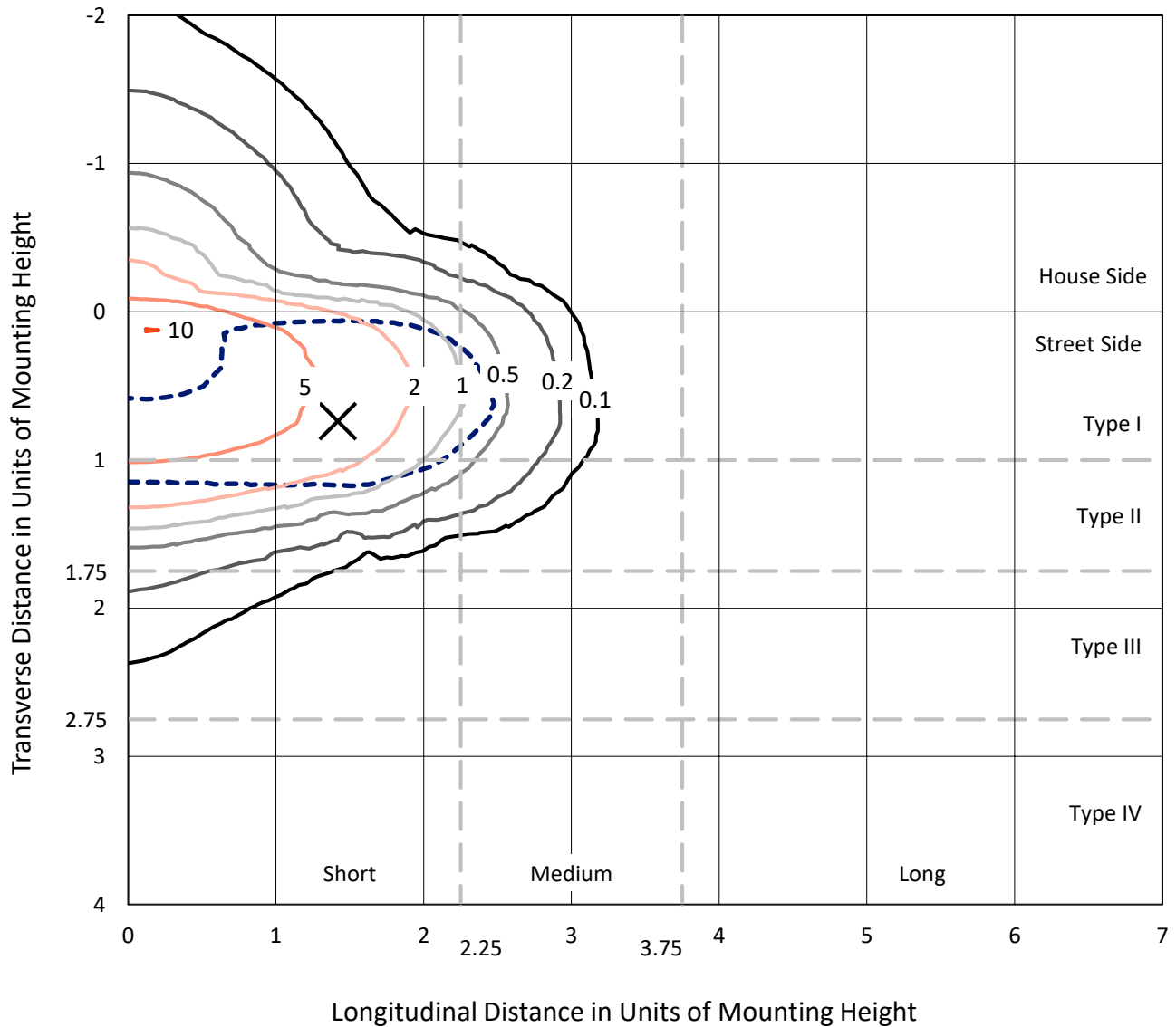
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

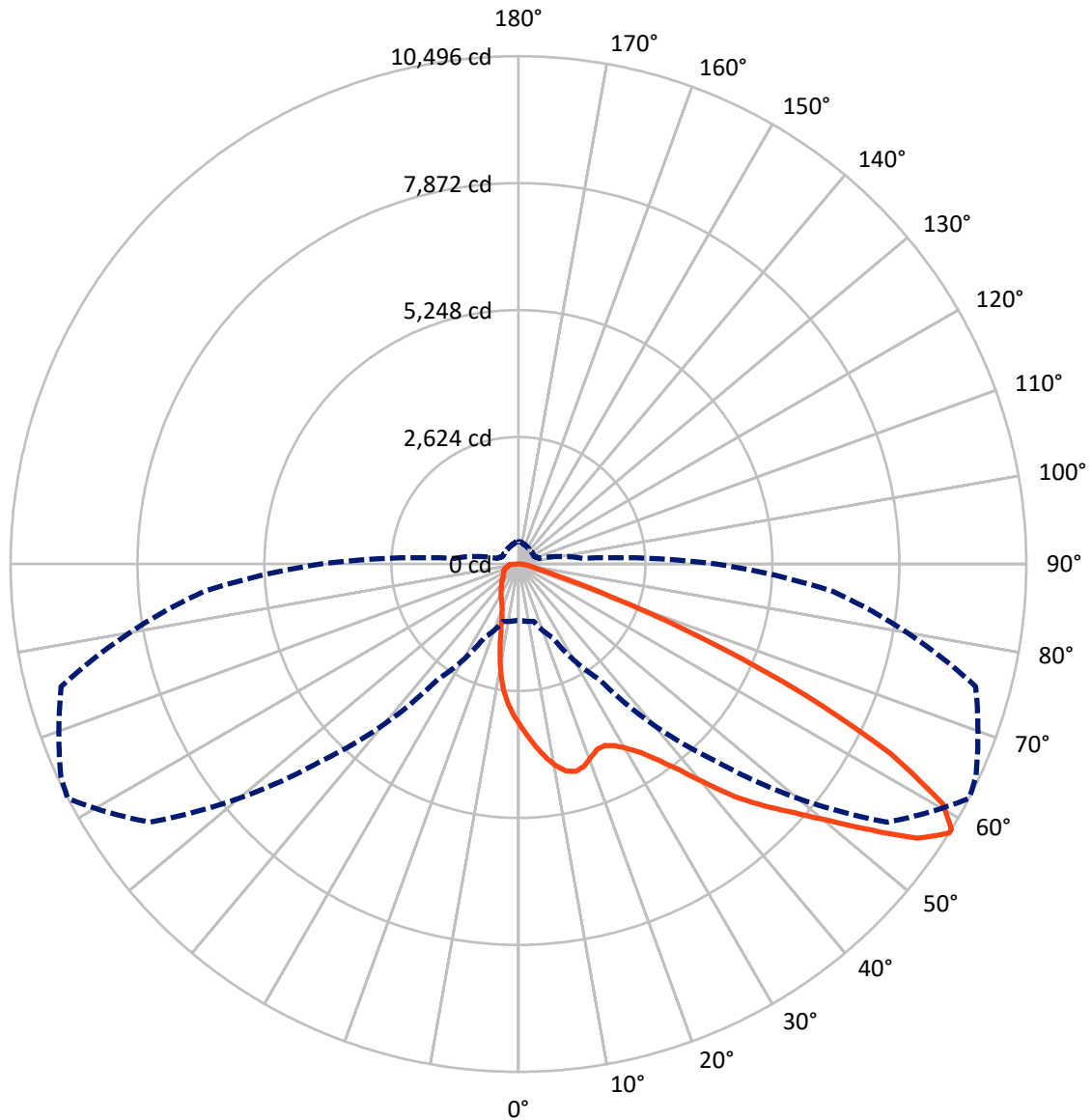
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.1 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	1905.4	0.0	1905.4
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	10588.6	0.0	10588.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	12494.0	0.0	12494.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.8	2.4
10°-20°	758.7	6.1
20°-30°	1226.5	9.8
30°-40°	1947.0	15.6
40°-50°	2848.9	22.8
50°-60°	2979.7	23.8
60°-70°	1760.4	14.1
70°-80°	495.9	4.0
80°-90°	180.0	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°	12494.0	100.0
0°-180°	12494.0	100.0



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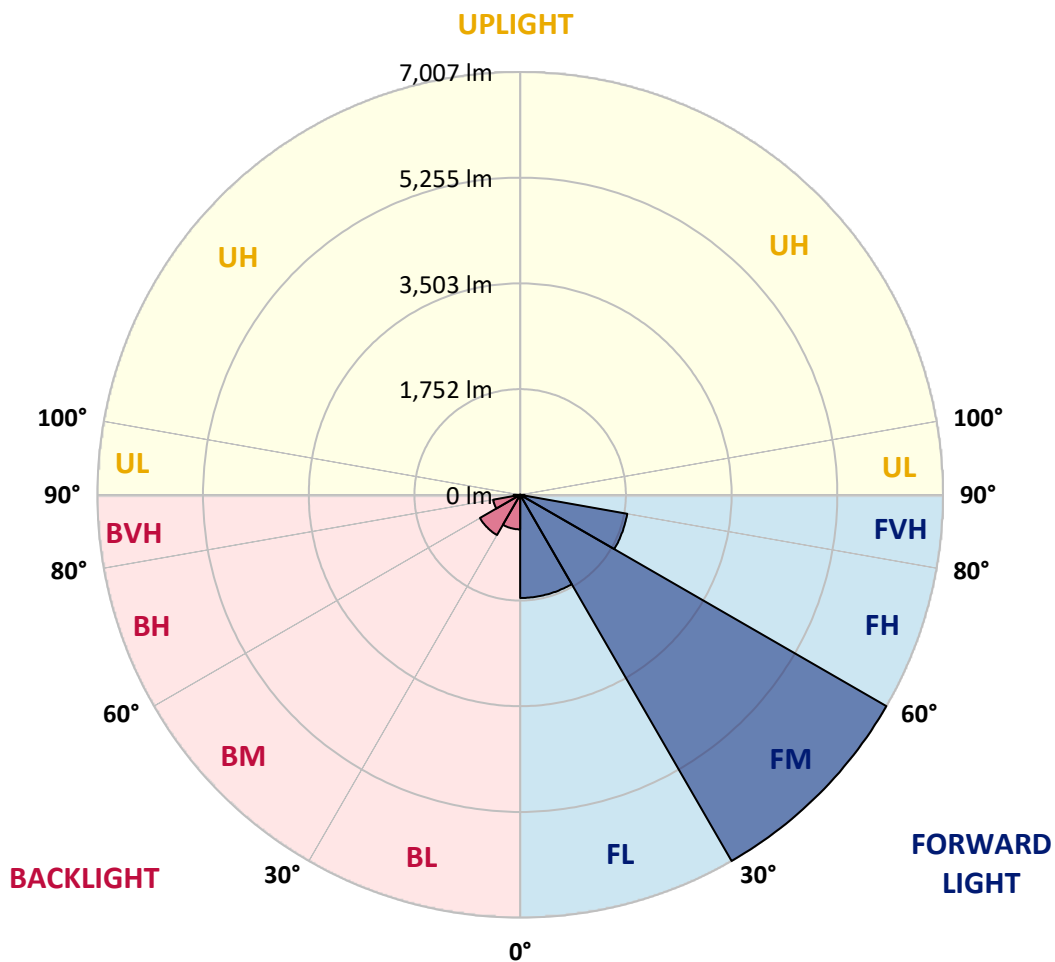
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1709.3	13.7			
FM	(30°-60°)	7006.6	56.1			
FH	(60°-80°)	1801.7	14.4			G2/5000
FVH	(80°-90°)	71.0	0.6			G1/100
BL	(0°-30°)	572.7	4.6	B2/1000		
BM	(30°-60°)	769.1	6.2	B1/1000		
BH	(60°-80°)	454.6	3.6	B1/500		G1/500
BVH	(80°-90°)	109.0	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°	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8
2.5°	3792.4	3761.8	3742.4	3725.3	3703.0	3655.3	3591.2	3550.6	3530.0	3460.0	3377.0
5°	4164.2	4137.1	4117.1	4094.2	4054.2	3979.5	3875.9	3793.6	3753.0	3612.9	3447.0
7.5°	4077.1	4088.3	4123.0	4183.6	4235.4	4225.4	4133.0	4028.3	3974.8	3780.0	3528.2
10°	3552.3	3571.8	3631.8	3773.6	4003.0	4238.3	4310.1	4237.8	4183.6	3945.3	3611.8
12.5°	3447.0	3446.4	3451.2	3488.8	3625.3	3956.5	4316.0	4389.0	4356.6	4103.0	3697.1
15°	3490.0	3491.2	3487.6	3503.5	3545.9	3677.1	4136.0	4447.2	4470.1	4261.9	3785.3
17.5°	3602.9	3600.0	3586.5	3586.5	3601.8	3652.9	3924.2	4393.1	4499.0	4402.5	3863.0
20°	3792.4	3778.9	3743.0	3710.0	3693.5	3721.2	3837.1	4268.3	4449.0	4525.4	3927.1
22.5°	4021.8	4011.2	3953.0	3882.4	3825.3	3824.7	3881.8	4159.5	4362.5	4641.3	3981.2
25°	4318.4	4301.3	4214.8	4101.8	4001.8	3963.6	3979.5	4154.2	4315.4	4767.2	4029.5
27.5°	4666.6	4635.5	4533.1	4370.1	4223.0	4146.0	4123.0	4250.1	4358.4	4923.2	4096.6
30°	5089.1	5053.2	4922.0	4709.6	4501.9	4375.4	4326.6	4420.1	4500.7	5113.2	4204.2
32.5°	5569.7	5518.0	5366.2	5132.0	4859.0	4666.1	4586.6	4644.9	4709.0	5342.0	4338.9
35°	6234.0	6172.2	5952.7	5629.7	5321.5	5056.1	4929.0	4971.4	5033.8	5683.3	4533.7
37.5°	6687.0	6659.3	6513.4	6209.8	5874.5	5569.1	5372.6	5397.4	5432.7	6109.8	4783.1
40°	6682.9	6694.0	6697.0	6699.9	6471.6	6179.2	5968.0	5942.1	5935.1	6578.1	5066.7
42.5°	6348.1	6394.0	6542.2	6842.9	6981.7	6847.6	6654.0	6579.3	6542.2	7130.0	5367.3
45°	5835.7	5860.4	6138.1	6725.2	7242.9	7509.5	7363.0	7127.6	7060.6	7637.1	5616.8
47.5°	5571.5	5598.6	5773.3	6413.4	7240.0	8044.3	8129.0	7680.7	7560.6	8078.4	5832.1
50°	4942.6	4999.1	5219.1	5871.0	6975.8	8290.2	8929.7	8339.6	8091.3	8507.9	6048.0
52.5°	3787.7	3874.7	4121.3	4979.0	6305.7	8168.4	9570.4	9138.5	8787.9	8952.6	6233.4
55°	2389.2	2453.9	2661.0	3516.5	5044.4	7534.8	9813.4	10002.8	9691.0	9373.9	6394.0
57.5°	1299.0	1327.9	1405.5	1941.5	3281.1	6133.9	9459.2	10494.7	10365.2	9731.6	6515.2
58°	1162.5	1182.0	1230.2	1682.6	2909.9	5750.9	9302.1	10496.4	10431.7	9783.9	6524.6
60°	862.5	852.5	809.5	960.2	1619.7	3973.0	8352.5	10076.3	10266.4	9848.1	6478.7
62.5°	757.8	733.6	646.0	636.0	787.8	1830.3	6391.0	8631.4	9080.3	9482.1	6199.8
65°	711.9	686.0	573.0	536.6	568.3	774.2	3764.7	6473.4	7036.4	8372.5	5486.8
67.5°	677.8	644.2	526.6	476.5	478.9	511.8	1509.1	4077.1	4710.8	6356.9	4267.8
70°	644.8	608.3	487.1	429.5	416.0	404.8	600.1	2040.9	2615.7	4015.4	2721.0
72.5°	609.5	573.6	452.4	392.4	365.9	328.9	391.8	834.8	1166.1	1899.7	1234.3
75°	558.3	526.0	417.7	359.5	321.8	272.4	295.9	436.0	523.0	756.6	594.8
77.5°	495.4	468.9	378.9	332.4	285.3	221.2	227.7	302.4	335.3	433.0	353.6
80°	355.9	365.4	337.1	298.9	254.2	179.4	174.7	220.6	238.3	278.3	230.0
82.5°	250.0	255.3	278.9	244.2	210.0	141.2	128.8	155.3	165.9	183.0	124.1
85°	172.4	166.5	191.2	170.0	151.8	94.1	88.2	105.3	111.8	113.5	64.1
87.5°	103.5	103.5	110.6	91.2	81.8	48.8	47.7	60.0	64.1	61.2	35.3
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°	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8	3318.8
2.5°	3327.6	3285.8	3197.0	3125.8	3035.8	2942.2	2889.9	2834.0	2795.8	2768.1	2812.2
5°	3352.9	3267.6	3084.0	2909.9	2717.5	2517.5	2365.7	2224.5	2126.2	2065.0	2122.7
7.5°	3392.9	3261.7	2969.3	2671.6	2326.3	1993.3	1695.6	1509.1	1400.2	1346.7	1380.2
10°	3438.8	3252.3	2834.6	2348.6	1854.4	1434.9	1212.6	1137.2	1112.5	1102.5	1107.2
12.5°	3477.0	3232.3	2669.3	1958.0	1392.6	1133.1	1069.0	1067.2	1072.5	1073.7	1075.5
15°	3504.1	3202.9	2423.9	1550.8	1113.7	1032.5	1029.0	1039.6	1049.6	1053.7	1056.1
17.5°	3522.3	3142.3	2146.8	1226.1	997.8	983.7	991.9	1005.5	1016.0	1019.0	1021.3
20°	3520.6	3053.4	1816.8	1022.5	934.9	934.9	949.0	959.6	960.2	956.6	958.4
22.5°	3502.3	2931.7	1496.7	914.3	879.0	889.0	903.1	893.1	851.9	824.8	826.6
25°	3471.7	2786.3	1222.6	845.4	827.2	844.8	840.7	765.4	706.6	680.1	680.1
27.5°	3444.7	2614.5	1011.9	785.4	775.4	797.2	724.2	656.0	631.3	618.9	614.8
30°	3425.3	2429.2	871.3	727.8	726.6	710.7	628.3	609.5	605.4	595.4	591.9
32.5°	3430.0	2241.5	781.3	677.2	681.3	608.3	582.4	586.6	583.0	572.4	567.7
35°	3468.8	2063.3	722.5	631.3	618.9	549.5	555.4	563.0	561.9	547.1	542.4
37.5°	3538.2	1894.4	683.6	593.0	540.1	520.1	529.5	541.3	538.3	528.3	524.8
40°	3611.2	1735.6	651.9	563.0	493.6	500.1	508.3	514.8	517.7	520.7	518.3
42.5°	3682.4	1569.7	613.0	532.4	474.2	481.3	484.8	491.3	507.1	518.3	517.7
45°	3724.7	1413.8	573.0	488.9	458.9	463.0	460.7	473.6	493.0	511.3	511.8
47.5°	3771.8	1292.6	541.3	448.9	444.2	447.1	440.1	453.0	470.7	493.0	495.4
50°	3828.9	1220.2	516.0	417.1	424.2	424.2	422.4	434.2	458.9	484.8	489.5
52.5°	3893.6	1206.1	494.8	394.2	404.2	403.6	405.4	423.0	450.1	475.4	479.5
55°	3972.4	1244.3	471.8	377.1	384.8	387.1	393.0	413.0	436.0	464.8	466.5
57.5°	4064.2	1322.0	453.6	363.6	367.1	374.8	384.2	402.4	427.1	458.9	460.7
58°	4079.5	1338.5	450.7	362.4	363.6	372.4	383.0	400.7	425.4	460.1	461.8
60°	4080.1	1393.2	444.2	357.1	350.1	364.8	376.5	394.2	422.4	464.2	468.3
62.5°	3935.3	1392.6	439.5	349.5	335.9	354.2	367.7	388.3	419.5	474.2	482.4
65°	3465.3	1265.5	417.1	337.7	324.8	344.8	360.1	384.2	427.7	517.7	523.0
67.5°	2710.4	1037.2	375.4	321.2	310.1	335.3	355.4	383.6	436.5	527.7	531.3
70°	1792.1	776.0	329.5	302.4	294.8	324.2	357.7	403.6	426.5	506.6	497.1
72.5°	930.2	544.8	292.4	278.9	277.1	314.2	391.8	401.2	416.5	476.5	464.8
75°	488.3	378.3	260.0	253.0	255.9	311.8	462.4	390.7	403.6	456.0	478.3
77.5°	298.9	305.3	232.4	229.4	235.3	304.8	461.8	377.1	384.8	419.5	444.2
80°	200.0	247.7	211.2	211.8	215.9	278.9	414.8	355.9	361.8	396.5	421.8
82.5°	126.5	146.5	191.8	201.8	196.5	230.0	352.4	324.2	332.4	453.6	479.5
85°	64.1	91.8	166.5	194.1	177.1	161.2	285.9	284.2	288.3	327.1	341.8
87.5°	29.4	50.6	130.0	169.4	133.6	100.6	207.7	210.6	227.1	232.4	232.4
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)