

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: P190962

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190962  
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-04-LED-E1-AFL-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20359.8 lumens  
Efficiency: N/A  
Efficacy: 119.1 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): 171  
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

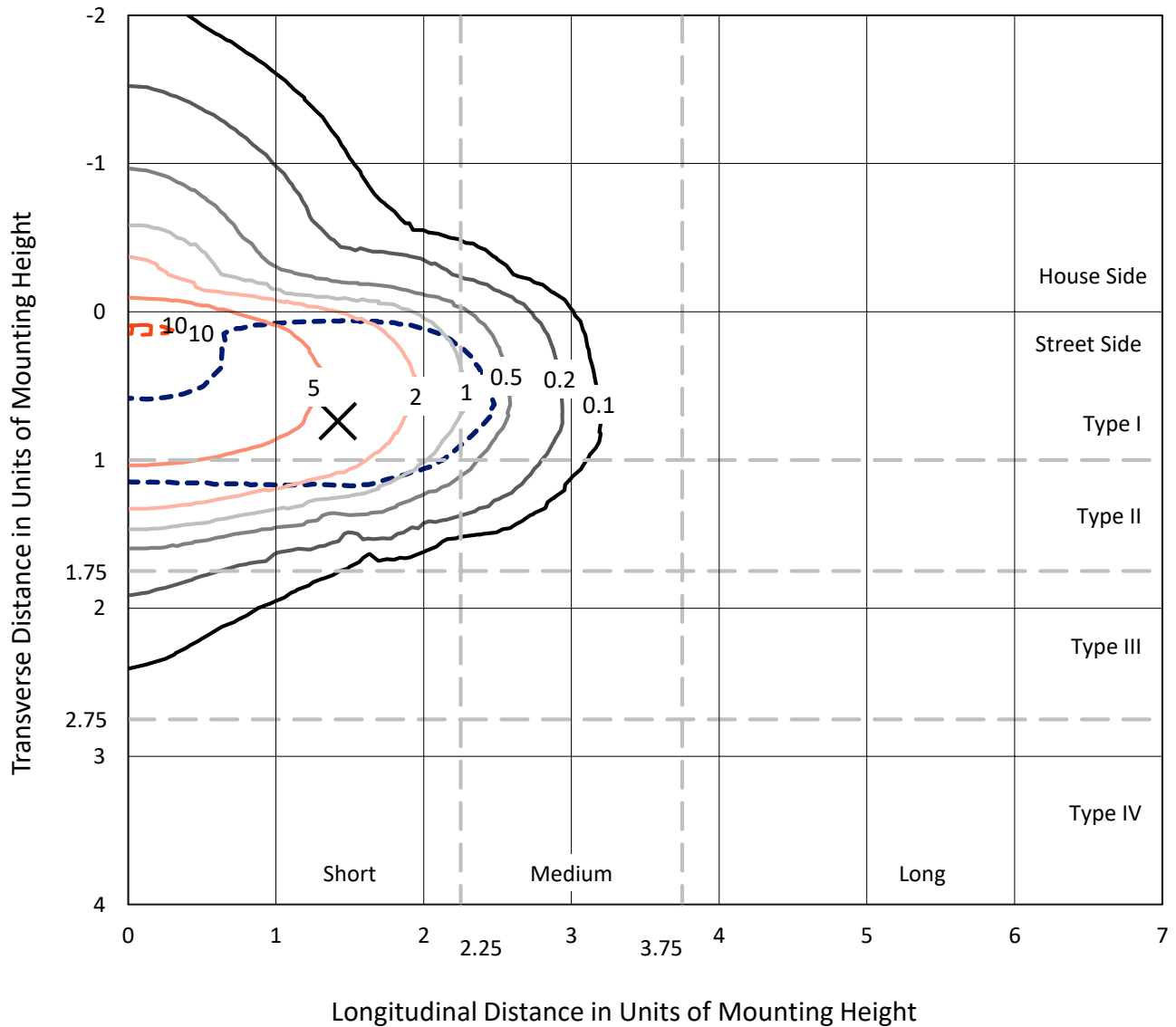


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

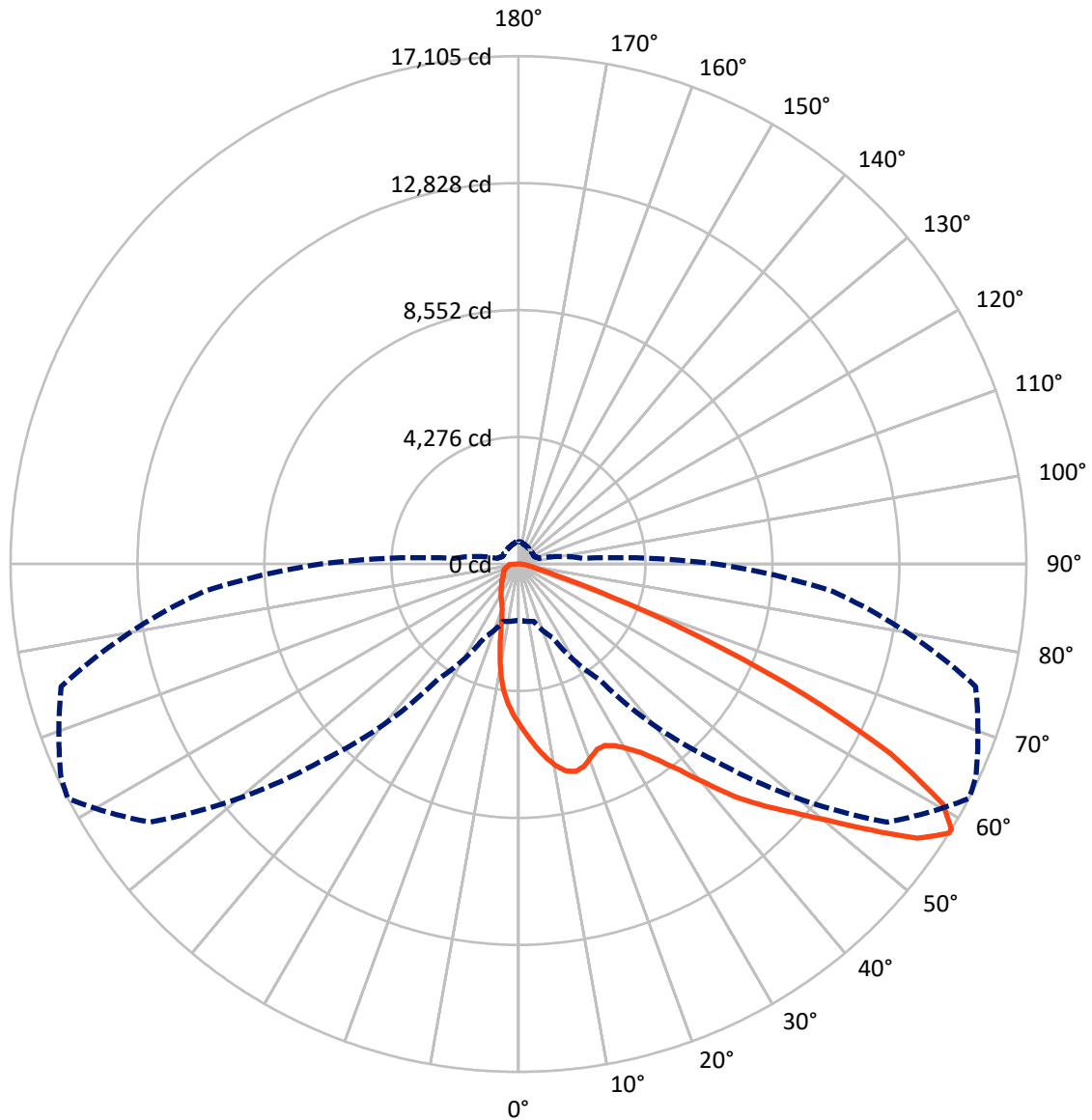


Based on 25 foot mounting height. Maximum calculated value = 10.5 fc  
 Type II - Short - Full Cutoff

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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	3104.9	0.0	3104.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	17254.8	0.0	17254.8
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	20359.8	0.0	20359.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	483.7	2.4
10°-20°	1236.4	6.1
20°-30°	1998.6	9.8
30°-40°	3172.8	15.6
40°-50°	4642.5	22.8
50°-60°	4855.6	23.8
60°-70°	2868.7	14.1
70°-80°	808.1	4.0
80°-90°	293.4	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°	20359.8	100.0
0°-180°	20359.8	100.0



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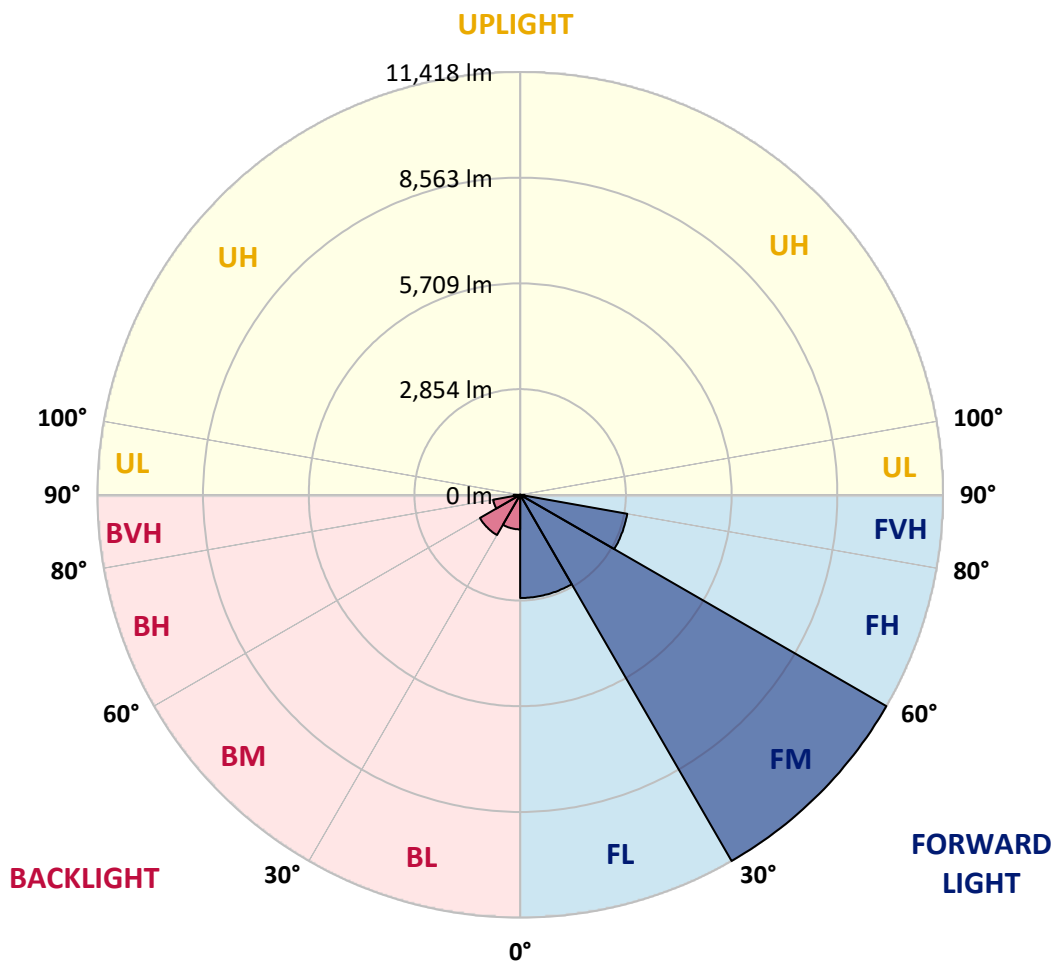
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2785.5	13.7			
FM	(30°-60°)	11417.7	56.1			
FH	(60°-80°)	2936.0	14.4			G2/5000
FVH	(80°-90°)	115.7	0.6			G2/225
BL	(0°-30°)	933.2	4.6	B2/1000		
BM	(30°-60°)	1253.2	6.2	B2/2500		
BH	(60°-80°)	740.9	3.6	B2/1000		G2/1000
BVH	(80°-90°)	177.7	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°	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1
2.5°	6180.0	6130.0	6098.4	6070.6	6034.2	5956.5	5852.1	5785.9	5752.4	5638.3	5503.1
5°	6785.8	6741.8	6709.1	6671.8	6606.5	6484.8	6316.1	6181.9	6115.7	5887.5	5617.1
7.5°	6644.0	6662.2	6718.7	6817.5	6901.8	6885.6	6735.0	6564.4	6477.1	6159.8	5749.5
10°	5788.8	5820.4	5918.2	6149.3	6523.2	6906.7	7023.6	6905.7	6817.5	6429.2	5885.6
12.5°	5617.1	5616.2	5623.9	5685.3	5907.6	6447.5	7033.2	7152.1	7099.4	6686.1	6024.7
15°	5687.2	5689.0	5683.3	5709.2	5778.2	5992.0	6739.8	7247.0	7284.4	6945.0	6168.4
17.5°	5871.2	5866.4	5844.4	5844.4	5869.3	5952.8	6394.7	7158.8	7331.4	7174.2	6294.9
20°	6180.0	6157.9	6099.4	6045.7	6018.8	6064.0	6252.8	6955.6	7249.9	7374.6	6399.5
22.5°	6553.8	6536.6	6441.6	6326.6	6233.7	6232.6	6325.6	6778.2	7108.9	7563.4	6487.7
25°	7037.1	7009.3	6868.3	6684.3	6521.2	6458.9	6484.8	6769.6	7032.3	7768.5	6566.3
27.5°	7604.6	7553.8	7386.9	7121.4	6881.7	6756.2	6718.7	6925.8	7102.2	8022.6	6675.6
30°	8293.0	8234.4	8020.7	7674.6	7336.2	7130.1	7050.5	7202.9	7334.3	8332.2	6851.0
32.5°	9076.2	8991.8	8744.5	8362.9	7918.2	7603.6	7474.2	7569.1	7673.7	8705.2	7070.6
35°	10158.6	10058.0	9700.3	9174.0	8671.7	8239.3	8032.2	8101.3	8202.8	9261.3	7388.0
37.5°	10896.9	10851.8	10614.0	10119.3	9572.9	9075.3	8755.0	8795.3	8852.8	9956.4	7794.5
40°	10890.1	10908.3	10913.1	10918.0	10546.0	10069.5	9725.3	9683.2	9671.6	10719.5	8256.5
42.5°	10344.6	10419.4	10661.0	11150.9	11377.2	11158.6	10843.2	10721.4	10661.0	11618.8	8746.4
45°	9509.6	9549.9	10002.4	10959.2	11802.8	12237.2	11998.4	11615.0	11505.6	12445.2	9153.0
47.5°	9079.1	9123.2	9408.0	10451.1	11798.1	13108.6	13246.7	12516.1	12320.5	13164.3	9503.8
50°	8054.2	8146.3	8504.8	9567.1	11367.6	13509.4	14551.5	13589.9	13185.3	13864.2	9855.7
52.5°	6172.3	6314.2	6715.9	8113.6	10275.6	13310.9	15595.6	14891.9	14320.5	14588.9	10157.7
55°	3893.4	3998.8	4336.3	5730.3	8220.1	12278.4	15991.5	16300.2	15792.1	15275.3	10419.4
57.5°	2116.9	2163.8	2290.4	3163.8	5346.8	9995.7	15414.3	17101.7	16890.8	15858.3	10616.9
58°	1894.4	1926.1	2004.7	2741.9	4741.9	9371.6	15158.4	17104.6	16999.1	15943.6	10632.2
60°	1405.5	1389.2	1319.2	1564.6	2639.4	6474.3	13611.0	16420.1	16729.7	16048.1	10557.5
62.5°	1234.8	1195.5	1052.7	1036.4	1283.7	2982.6	10414.7	14065.5	14797.0	15451.8	10103.1
65°	1160.0	1117.9	933.7	874.3	926.1	1261.7	6134.8	10548.9	11466.4	13643.6	8941.1
67.5°	1104.5	1049.8	858.1	776.5	780.4	834.1	2459.2	6644.0	7676.5	10359.0	6954.6
70°	1050.8	991.3	793.8	699.9	677.8	659.6	977.9	3325.8	4262.5	6543.3	4434.1
72.5°	993.3	934.8	737.2	639.4	596.3	535.9	638.5	1360.4	1900.2	3095.8	2011.4
75°	909.8	857.1	680.7	585.7	524.5	443.9	482.2	710.4	852.3	1233.0	969.2
77.5°	807.2	764.1	617.5	541.7	464.9	360.5	371.0	492.8	546.5	705.6	576.2
80°	580.0	595.4	549.3	487.0	414.2	292.5	284.8	359.6	388.3	453.5	374.9
82.5°	407.4	416.1	454.4	397.8	342.3	230.1	209.9	253.1	270.4	298.2	202.3
85°	280.9	271.3	311.6	277.1	247.3	153.4	143.8	171.7	182.2	185.1	104.5
87.5°	168.7	168.7	180.2	148.6	133.3	79.6	77.6	97.8	104.5	99.7	57.5
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°	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1	5408.1
2.5°	5422.6	5354.4	5209.7	5093.7	4947.0	4794.6	4709.3	4618.2	4555.8	4510.8	4582.7
5°	5463.8	5324.8	5025.7	4741.9	4428.4	4102.3	3855.0	3624.9	3464.8	3365.1	3459.1
7.5°	5528.9	5315.2	4838.7	4353.6	3790.7	3248.2	2763.1	2459.2	2281.8	2194.5	2249.2
10°	5603.7	5299.8	4619.1	3827.3	3021.9	2338.4	1975.9	1853.2	1813.0	1796.6	1804.3
12.5°	5666.0	5267.3	4349.7	3190.6	2269.3	1846.5	1742.0	1739.1	1747.7	1749.7	1752.5
15°	5710.1	5219.3	3949.9	2527.2	1814.8	1682.5	1676.8	1694.1	1710.4	1717.1	1720.9
17.5°	5739.9	5120.6	3498.4	1998.0	1626.0	1603.0	1616.4	1638.5	1655.7	1660.6	1664.3
20°	5737.0	4975.7	2960.5	1666.3	1523.4	1523.4	1546.4	1563.7	1564.6	1558.9	1561.7
22.5°	5707.2	4777.3	2439.0	1489.8	1432.3	1448.6	1471.6	1455.4	1388.2	1344.2	1347.0
25°	5657.4	4540.5	1992.2	1377.7	1347.9	1376.7	1370.0	1247.3	1151.4	1108.3	1108.3
27.5°	5613.3	4260.6	1649.0	1279.9	1263.5	1299.0	1180.2	1069.0	1028.7	1008.5	1001.9
30°	5581.7	3958.6	1419.9	1185.9	1184.1	1158.2	1023.9	993.3	986.5	970.3	964.4
32.5°	5589.4	3652.8	1273.2	1103.5	1110.2	991.3	949.1	955.8	950.1	932.8	925.2
35°	5652.6	3362.2	1177.3	1028.7	1008.5	895.5	905.0	917.5	915.5	891.6	883.9
37.5°	5765.8	3087.1	1114.0	966.4	880.1	847.5	862.9	882.0	877.3	860.9	855.2
40°	5884.6	2828.3	1062.2	917.5	804.3	814.9	828.4	838.9	843.6	848.4	844.7
42.5°	6000.6	2557.9	999.0	867.7	772.7	784.2	790.0	800.6	826.4	844.7	843.6
45°	6069.7	2303.8	933.7	796.7	747.8	754.5	750.6	771.8	803.4	833.1	834.1
47.5°	6146.4	2106.4	882.0	731.5	723.8	728.6	717.1	738.3	767.0	803.4	807.2
50°	6239.4	1988.4	840.8	679.8	691.2	691.2	688.3	707.6	747.8	790.0	797.7
52.5°	6344.9	1965.4	806.3	642.3	658.7	657.7	660.5	689.4	733.5	774.7	781.3
55°	6473.3	2027.7	768.8	614.6	627.0	630.9	640.5	673.0	710.4	757.4	760.3
57.5°	6622.9	2154.2	739.2	592.5	598.2	610.7	626.0	655.8	696.0	747.8	750.6
58°	6647.7	2181.1	734.4	590.5	592.5	606.9	624.1	652.8	693.2	749.7	752.6
60°	6648.8	2270.2	723.8	582.0	570.4	594.4	613.6	642.3	688.3	756.5	763.1
62.5°	6412.9	2269.3	716.2	569.5	547.4	577.1	599.2	632.8	683.5	772.7	786.1
65°	5646.9	2062.2	679.8	550.3	529.2	561.8	586.8	626.0	697.0	843.6	852.3
67.5°	4416.8	1690.2	611.6	523.4	505.2	546.5	579.1	625.1	711.4	860.0	865.7
70°	2920.3	1264.6	536.8	492.8	480.3	528.3	582.9	657.7	695.1	825.4	810.1
72.5°	1515.7	887.8	476.5	454.4	451.5	512.0	638.5	653.9	678.7	776.5	757.4
75°	795.8	616.4	423.7	412.2	417.1	508.1	753.6	636.6	657.7	743.0	779.5
77.5°	487.0	497.6	378.7	373.9	383.5	496.6	752.6	614.6	627.0	683.5	723.8
80°	326.0	403.7	344.2	345.1	351.9	454.4	675.9	580.0	589.6	646.2	687.4
82.5°	206.1	238.8	312.5	328.9	320.2	374.9	574.3	528.3	541.7	739.2	781.3
85°	104.5	149.6	271.3	316.4	288.6	262.7	466.0	463.1	469.7	533.1	557.0
87.5°	48.0	82.4	211.9	276.1	217.6	164.0	338.4	343.2	370.1	378.7	378.7
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)