

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: P191487

Luminaire Tested: **GLEON-AF-09-LED-E1-T3R-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191487  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-09-LED-E1-T3R-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 44967.9 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 374  
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

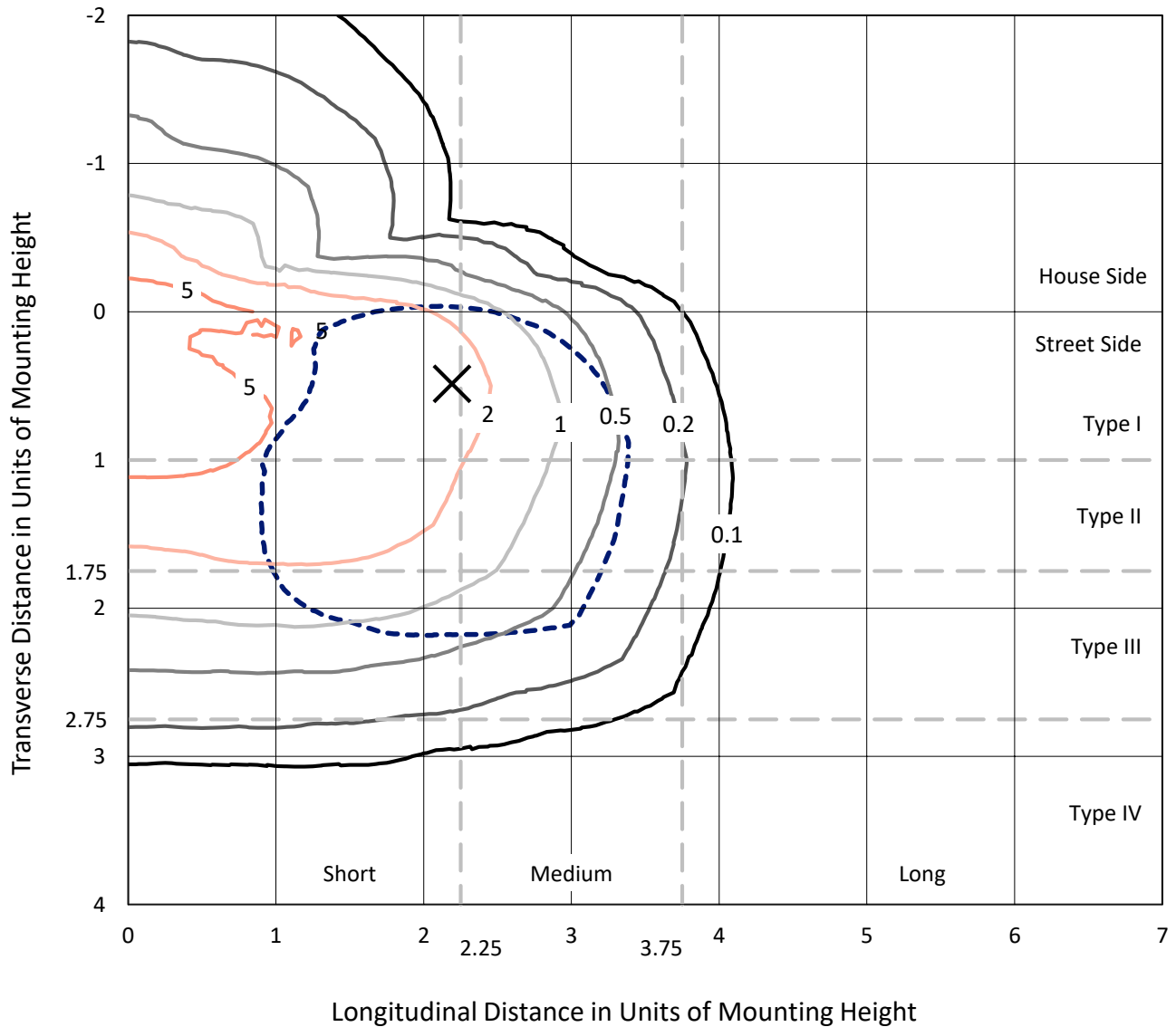


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

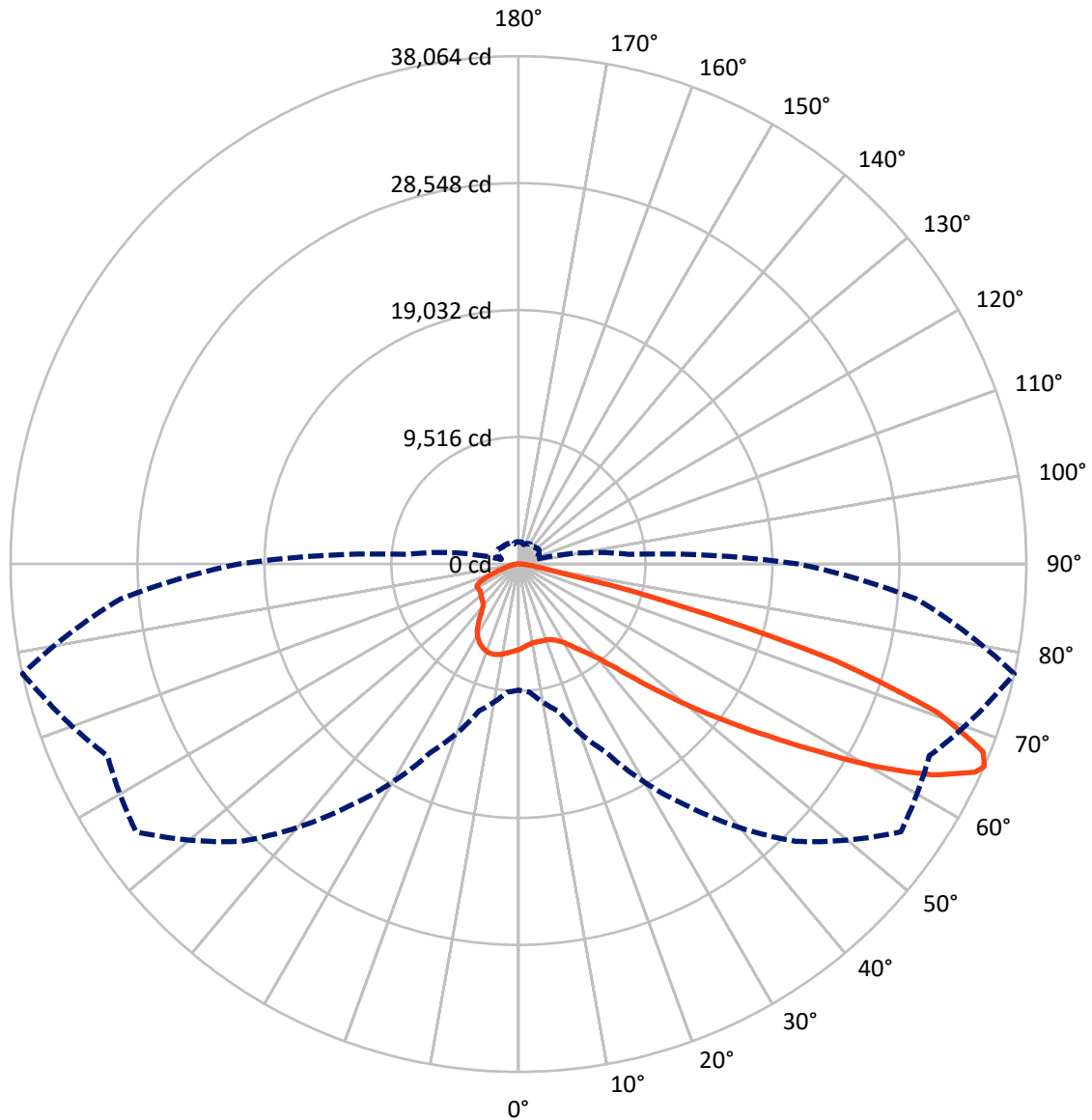


Based on 30 foot mounting height. Maximum calculated value = 8.8 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7682.5	0.0	7682.5
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	37285.4	0.0	37285.4
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	44967.9	0.0	44967.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	572.5	1.3
10°-20°	1615.2	3.6
20°-30°	2756.5	6.1
30°-40°	4412.7	9.8
40°-50°	6817.2	15.2
50°-60°	9669.1	21.5
60°-70°	12934.7	28.8
70°-80°	5617.3	12.5
80°-90°	572.8	1.3
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°	44967.9	100.0
0°-180°	44967.9	100.0



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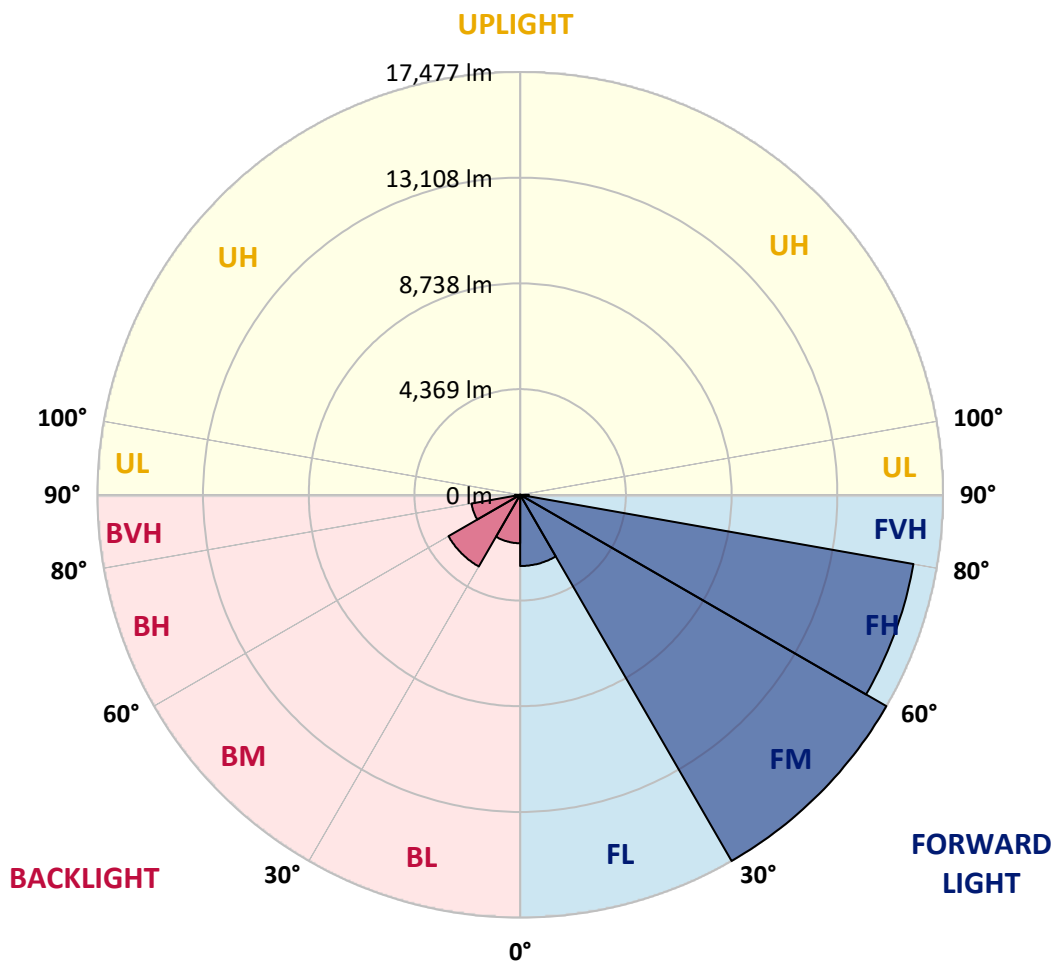
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2943.3	6.5			
FM	(30°-60°)	17476.9	38.9			
FH	(60°-80°)	16505.9	36.7			G5
FVH	(80°-90°)	359.2	0.8			G3/500
BL	(0°-30°)	2000.8	4.4	B3/2500		
BM	(30°-60°)	3422.1	7.6	B3/5000		
BH	(60°-80°)	2046.0	4.5	B3/2500		G3/2500
BVH	(80°-90°)	213.5	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2
2.5°	5668.8	5706.9	5738.9	5768.6	5828.1	5925.9	6038.5	6129.8	6261.6	6287.1	6357.1
5°	5148.2	5148.2	5173.7	5218.3	5299.0	5445.7	5598.6	5802.6	6089.4	6157.4	6344.4
7.5°	4895.3	4897.5	4912.3	4950.6	5020.7	5154.5	5322.4	5562.5	5951.3	6064.0	6382.6
10°	4988.8	4967.6	4935.7	4916.6	4927.2	5005.8	5165.2	5432.9	5866.3	6010.9	6467.6
12.5°	5511.6	5471.2	5360.7	5214.1	5073.8	5016.4	5109.9	5371.3	5830.2	5998.1	6580.2
15°	6365.6	6348.6	6142.5	5838.7	5498.8	5214.1	5150.4	5347.9	5834.5	6012.9	6714.1
17.5°	7436.5	7413.1	7141.1	6699.2	6144.7	5590.1	5292.6	5367.0	5849.3	6038.5	6843.7
20°	8518.0	8445.8	8152.5	7625.6	6913.8	6102.2	5528.5	5415.9	5868.5	6066.1	6979.7
22.5°	9325.3	9265.9	9002.4	8490.4	7670.2	6695.0	5845.0	5500.9	5930.0	6146.8	7147.6
25°	10035.0	10039.2	9778.0	9282.9	8435.2	7323.9	6253.0	5728.2	6087.3	6312.5	7377.0
27.5°	10912.5	10861.6	10617.2	10126.4	9191.5	7959.2	6746.0	6040.5	6321.0	6548.4	7678.7
30°	11962.2	11926.1	11643.4	11086.7	10030.7	8641.2	7309.0	6403.9	6622.7	6858.6	8073.9
32.5°	13196.6	13179.6	12886.4	12170.4	10999.7	9444.4	7969.8	6884.0	7073.2	7317.5	8641.2
35°	14645.7	14647.7	14301.5	13441.0	12059.9	10379.3	8719.8	7502.3	7621.4	7876.3	9316.8
37.5°	15538.0	15646.4	15516.8	14639.2	13260.3	11424.6	9693.0	8322.5	8246.0	8503.1	10041.4
40°	15729.3	15861.0	16271.1	15824.8	14603.1	12576.2	10555.6	9110.8	9015.2	9329.6	10974.1
42.5°	15461.6	15644.3	16511.1	16825.6	16028.8	13995.5	11715.7	10281.5	10160.4	10583.2	12134.2
45°	15302.2	15438.2	16441.1	17346.2	17265.5	15599.7	13192.4	11751.8	11707.2	12261.7	13472.8
47.5°	15026.0	15149.2	16113.8	17467.3	17992.1	17070.0	14966.5	13549.3	13636.4	14363.0	14983.5
50°	15174.8	15225.7	15748.4	17159.2	18202.4	18147.1	16948.9	15631.5	15929.0	16836.2	16693.8
52.5°	15153.5	15285.2	15705.9	16653.5	18230.0	18812.3	18901.5	17953.8	18580.7	19621.7	18591.2
55°	12251.1	12493.3	15206.6	16526.1	18327.8	19464.5	20639.5	20401.5	21570.1	22783.3	20733.0
57.5°	11698.7	11851.7	13356.0	16793.8	18846.2	20709.6	22572.9	23095.7	25050.4	26459.0	23342.1
60°	11590.3	11779.4	13336.8	17120.9	19897.9	22738.7	25439.3	26357.0	29284.9	30827.4	26367.7
62.5°	11252.5	11456.4	13211.5	17078.5	21391.6	25545.4	29108.6	29824.6	33300.6	34800.7	28898.3
65°	10181.6	10372.8	12189.5	16392.2	22398.7	28541.2	33451.5	33003.2	36470.8	37599.0	30160.3
66°	9448.6	9635.6	11384.2	15584.8	22165.0	29391.2	34989.8	33986.9	37180.4	38064.3	29913.8
67.5°	8107.9	8254.5	9820.4	13776.7	20922.1	29629.2	36283.8	34726.3	37254.7	37567.1	28505.1
70°	5122.7	5165.2	6382.6	9510.3	15837.6	25696.3	34314.2	32890.6	34182.4	33336.7	23896.6
72.5°	2222.5	2207.5	3063.8	4837.9	8966.3	17242.0	27757.3	27139.0	26813.9	24884.6	16727.9
75°	1236.5	1253.6	1591.4	2245.8	3643.9	8469.1	18157.8	17375.9	14671.2	12518.8	7585.2
77.5°	992.3	1015.6	1319.4	1593.6	1636.0	2953.4	8496.7	6913.8	4162.3	3340.0	2107.7
80°	784.0	826.5	1151.6	1240.8	1102.7	1217.4	2745.1	2194.8	1646.6	1510.7	1092.1
82.5°	620.4	650.2	988.0	939.2	771.3	820.1	1315.2	1281.2	1070.8	975.3	631.1
85°	446.2	501.5	811.6	707.6	505.6	552.4	873.3	837.2	614.1	501.5	278.3
87.5°	182.7	237.9	573.7	469.5	282.5	257.1	435.6	410.1	291.1	212.5	138.1
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°	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2	6408.2
2.5°	6401.7	6452.8	6518.7	6559.0	6580.2	6595.1	6618.5	6616.3	6622.7	6624.8	6633.3
5°	6444.3	6529.3	6624.8	6650.3	6650.3	6627.0	6603.7	6565.4	6550.5	6546.3	6550.5
7.5°	6554.8	6648.3	6731.1	6701.4	6637.6	6544.1	6423.0	6316.8	6259.4	6240.3	6236.0
10°	6695.0	6807.6	6841.6	6729.0	6542.0	6316.8	6076.6	5902.4	5802.6	5775.0	5766.5
12.5°	6864.9	6971.2	6924.5	6686.5	6340.1	5976.8	5645.4	5367.0	5158.8	5093.0	5088.7
15°	7051.9	7134.8	6971.2	6554.8	6038.5	5503.0	4912.3	4432.1	4172.9	4090.1	4083.7
17.5°	7226.1	7268.7	6943.6	6325.3	5594.4	4727.5	3943.5	3573.8	3484.6	3505.8	3510.1
20°	7374.9	7374.9	6850.1	5995.9	4895.3	3705.5	3210.4	3204.1	3267.8	3331.5	3344.3
22.5°	7538.5	7440.7	6686.5	5530.6	3905.2	3031.9	2959.7	3019.2	3091.5	3161.5	3172.2
25°	7740.4	7493.8	6459.1	4825.3	3070.2	2753.6	2781.3	2830.1	2866.2	2910.9	2917.3
27.5°	7965.5	7561.9	6159.6	3854.3	2664.4	2579.4	2600.6	2617.6	2613.4	2630.4	2634.6
30°	8235.4	7640.5	5749.5	3012.8	2496.5	2430.6	2392.5	2377.5	2377.5	2405.2	2415.8
32.5°	8596.6	7757.3	5160.9	2581.5	2415.8	2324.5	2201.2	2145.9	2167.2	2260.7	2281.9
35°	8993.9	7882.7	4364.1	2434.9	2398.8	2275.6	2084.4	1982.4	1984.5	2071.6	2099.2
37.5°	9427.3	8042.0	3490.9	2407.3	2437.1	2277.7	2022.7	1882.5	1825.1	1825.1	1835.8
40°	9982.0	8205.6	2825.9	2426.4	2517.8	2303.2	1990.9	1803.9	1642.4	1646.6	1655.1
42.5°	10704.4	8345.8	2468.9	2466.7	2615.5	2337.1	1988.7	1699.7	1559.6	1655.1	1742.3
45°	11507.5	8416.0	2311.7	2503.0	2694.1	2358.4	1954.8	1682.8	1570.1	1854.9	2020.6
47.5°	12431.7	8375.6	2224.6	2515.6	2713.3	2358.4	1916.5	1723.2	1644.5	2148.1	2341.4
50°	13445.2	8258.8	2139.6	2490.2	2706.9	2354.2	1952.6	1763.5	1672.1	2199.0	2332.9
52.5°	14637.2	8161.0	2050.3	2434.9	2662.2	2330.8	1995.1	1746.5	1585.1	1999.4	2092.9
55°	15997.0	8188.6	1950.5	2356.3	2592.2	2286.2	1980.2	1678.6	1493.7	1761.4	1818.8
57.5°	17735.0	8518.0	1831.5	2256.4	2496.5	2211.8	1927.1	1646.6	1466.1	1597.7	1631.8
60°	19674.8	9091.7	1682.8	2156.6	2377.5	2092.9	1886.7	1661.5	1478.8	1585.1	1602.0
62.5°	21098.5	9425.3	1555.3	2010.0	2216.1	1961.1	1835.8	1680.6	1512.8	1629.7	1625.4
65°	21485.1	8877.1	1395.9	1795.4	1997.2	1823.0	1772.1	1701.9	1527.7	1665.8	1646.6
66°	20943.3	8286.4	1325.8	1695.5	1886.7	1755.0	1740.1	1699.7	1521.3	1670.1	1638.2
67.5°	19628.1	7075.3	1204.7	1549.0	1710.4	1653.0	1689.2	1680.6	1504.2	1665.8	1621.2
70°	16007.6	4827.3	1030.5	1289.7	1423.5	1455.5	1591.4	1612.7	1449.0	1591.4	1493.7
72.5°	11184.5	2940.6	911.6	1000.8	1151.6	1240.8	1457.6	1519.2	1374.6	1389.6	1296.1
75°	5405.3	1561.6	826.5	775.5	894.5	1036.9	1296.1	1391.7	1257.8	1162.2	1128.2
77.5°	1684.9	954.0	701.1	624.7	701.1	837.2	1083.6	1219.6	1119.7	973.1	960.3
80°	905.1	701.1	539.7	501.5	554.5	656.5	852.0	1017.7	962.5	873.3	779.8
82.5°	597.0	454.7	399.5	388.8	422.8	501.5	633.2	843.5	843.5	747.9	543.9
85°	308.1	278.3	274.0	274.0	295.3	333.6	431.3	650.2	692.6	395.2	327.2
87.5°	152.9	159.4	148.7	155.1	165.7	163.6	206.1	327.2	391.0	240.1	199.7
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)