

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: P191473

Luminaire Tested: **GLEON-AF-05-LED-E1-T3R-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191473  
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-05-LED-E1-T3R-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20501 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 162  
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

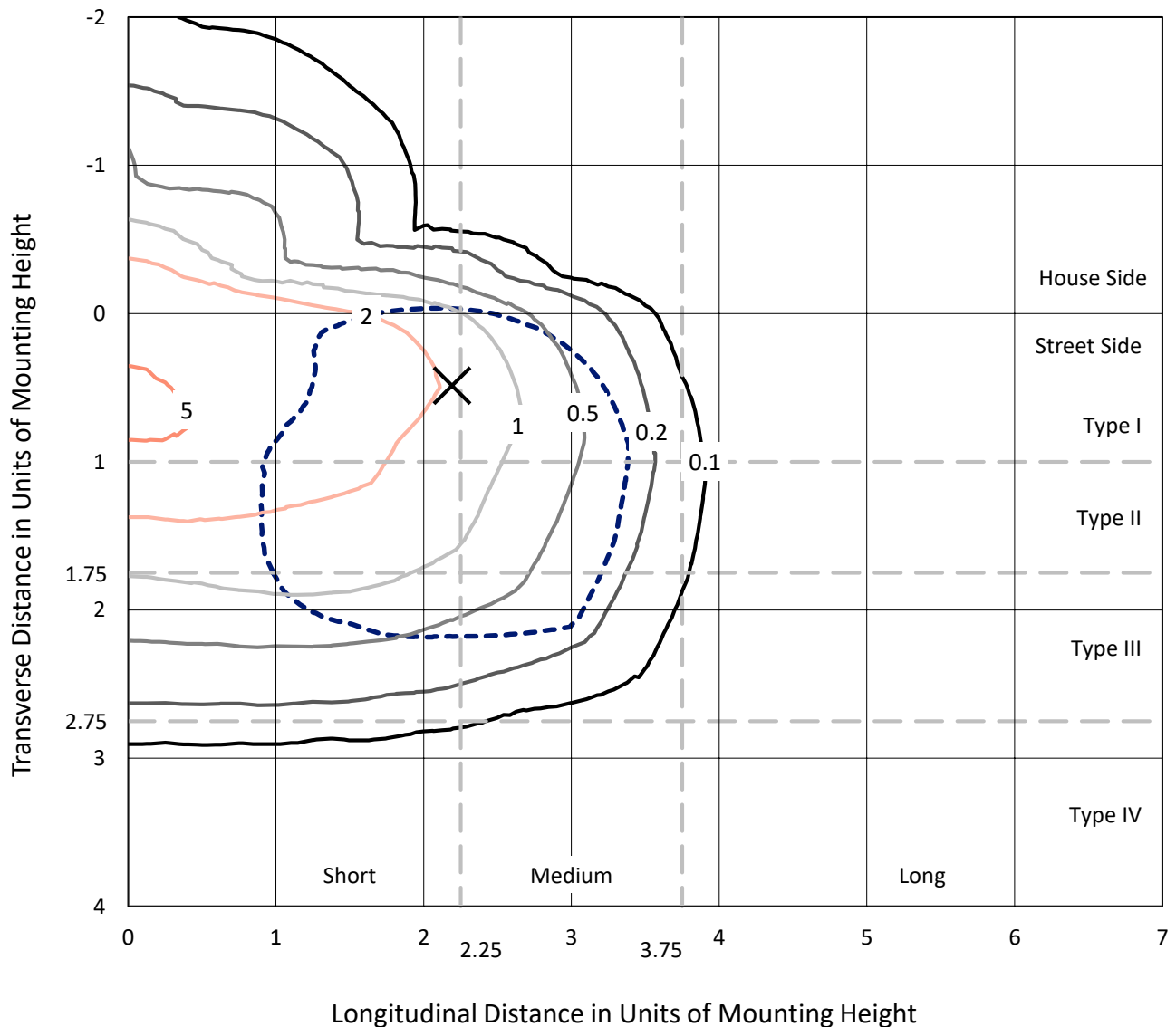


REPORT NUMBER: P191473

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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

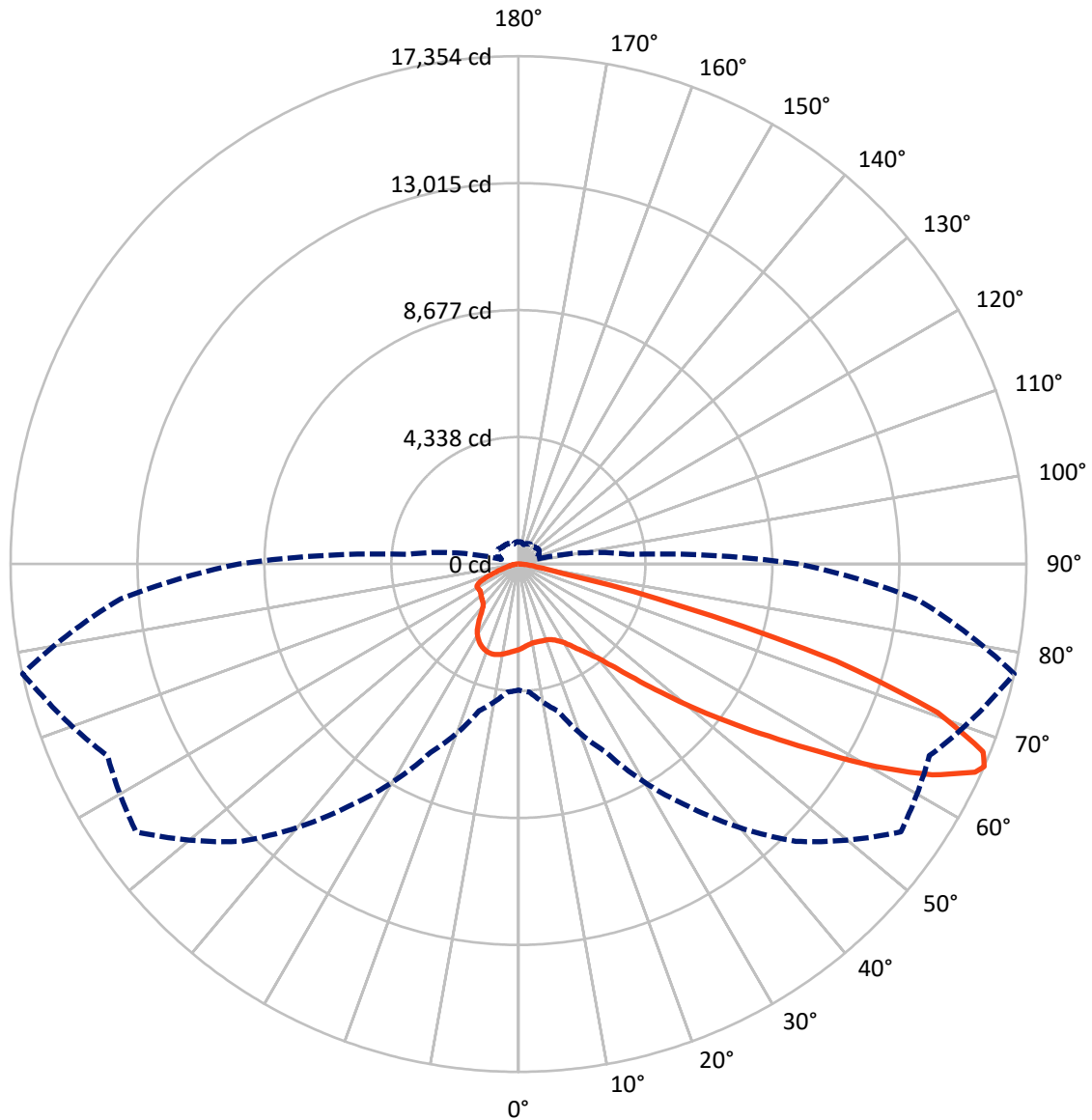


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P191473

CATALOG NUMBER: GLEON-AF-05-LED-E1-T3R-600

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLEON-AF-05-LED-E1-T3R-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3502.5	0.0	3502.5
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	16998.5	0.0	16998.5
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	20501.0	0.0	20501.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.0	1.3
10°-20°	736.4	3.6
20°-30°	1256.7	6.1
30°-40°	2011.8	9.8
40°-50°	3108.0	15.2
50°-60°	4408.2	21.5
60°-70°	5896.9	28.8
70°-80°	2560.9	12.5
80°-90°	261.1	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°	20501.0	100.0
0°-180°	20501.0	100.0



REPORT NUMBER: P191473

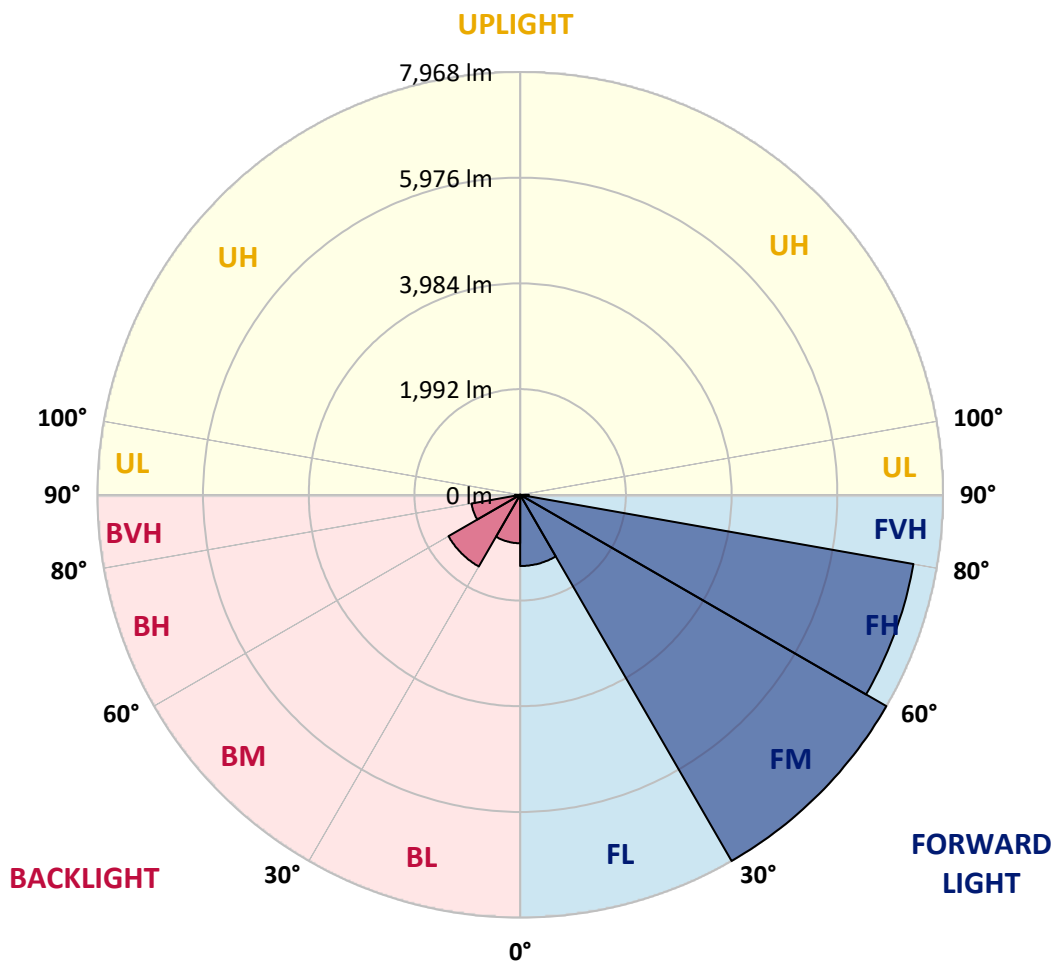
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1341.9	6.5			
FM	(30°-60°)	7967.7	38.9			
FH	(60°-80°)	7525.1	36.7			G4/12000
FVH	(80°-90°)	163.8	0.8			G2/225
BL	(0°-30°)	912.2	4.4	B2/1000		
BM	(30°-60°)	1560.2	7.6	B2/2500		
BH	(60°-80°)	932.8	4.5	B2/1000		G2/1000
BVH	(80°-90°)	97.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





REPORT NUMBER: P191473

CATALOG NUMBER: GLEON-AF-05-LED-E1-T3R-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4
2.5°	2584.4	2601.9	2616.4	2629.9	2657.0	2701.6	2753.0	2794.6	2854.6	2866.3	2898.2
5°	2347.1	2347.1	2358.7	2379.1	2415.8	2482.7	2552.5	2645.5	2776.2	2807.2	2892.4
7.5°	2231.8	2232.8	2239.5	2256.9	2289.0	2349.9	2426.5	2536.0	2713.2	2764.5	2909.9
10°	2274.4	2264.7	2250.2	2241.5	2246.3	2282.2	2354.8	2476.9	2674.5	2740.4	2948.7
12.5°	2512.7	2494.3	2443.9	2377.1	2313.2	2287.0	2329.7	2448.7	2658.0	2734.6	2999.9
15°	2902.1	2894.3	2800.4	2661.9	2506.9	2377.1	2348.1	2438.1	2660.0	2741.3	3061.0
17.5°	3390.4	3379.6	3255.6	3054.2	2801.4	2548.6	2412.9	2446.8	2666.7	2753.0	3120.1
20°	3883.3	3850.4	3716.8	3476.5	3152.0	2782.0	2520.4	2469.1	2675.4	2765.5	3182.1
22.5°	4251.5	4224.4	4104.2	3870.7	3496.9	3052.3	2664.8	2507.9	2703.6	2802.4	3258.6
25°	4574.9	4576.9	4457.8	4232.0	3845.6	3339.0	2850.8	2611.5	2775.3	2877.9	3363.2
27.5°	4975.0	4951.8	4840.4	4616.7	4190.4	3628.6	3075.5	2753.9	2881.8	2985.4	3500.7
30°	5453.6	5437.1	5308.3	5054.5	4573.1	3939.6	3332.2	2919.5	3019.3	3126.9	3680.9
32.5°	6016.4	6008.6	5874.9	5548.5	5014.8	4305.7	3633.4	3138.4	3224.6	3336.0	3939.6
35°	6677.0	6677.9	6520.1	6127.8	5498.2	4731.9	3975.4	3420.3	3474.6	3590.9	4247.6
37.5°	7083.8	7133.2	7074.1	6674.0	6045.4	5208.5	4419.0	3794.2	3759.3	3876.6	4577.9
40°	7171.0	7231.0	7418.0	7214.6	6657.6	5733.5	4812.3	4153.6	4110.0	4253.4	5003.2
42.5°	7048.9	7132.2	7527.5	7670.8	7307.6	6380.6	5341.2	4687.4	4632.1	4825.0	5532.0
45°	6976.3	7038.3	7495.5	7908.1	7871.3	7112.0	6014.4	5357.7	5337.3	5590.1	6142.3
47.5°	6850.4	6906.6	7346.3	7963.4	8202.6	7782.2	6823.3	6177.2	6216.9	6548.1	6831.0
50°	6918.2	6941.4	7179.7	7822.9	8298.5	8273.3	7727.1	7126.5	7262.0	7675.7	7610.8
52.5°	6908.5	6968.5	7160.3	7592.3	8311.2	8576.5	8617.2	8185.1	8471.0	8945.6	8475.8
55°	5585.3	5695.7	6932.7	7534.2	8355.7	8873.9	9409.6	9301.1	9833.8	10386.9	9452.2
57.5°	5333.5	5403.2	6089.0	7656.3	8592.1	9441.5	10291.1	10529.3	11420.5	12062.7	10641.8
60°	5284.1	5370.3	6080.3	7805.5	9071.5	10366.6	11597.8	12016.3	13351.0	14054.3	12021.1
62.5°	5130.0	5223.0	6023.1	7786.1	9752.5	11646.2	13270.6	13597.1	15181.8	15865.7	13174.8
65°	4641.8	4729.0	5557.2	7473.3	10211.6	13012.0	15250.6	15046.2	16627.0	17141.5	13750.2
66°	4307.6	4392.9	5190.0	7105.1	10105.1	13399.5	15951.9	15494.7	16950.6	17353.5	13637.8
67.5°	3696.4	3763.2	4477.1	6280.8	9538.4	13508.0	16541.8	15831.8	16984.6	17127.0	12995.6
70°	2335.4	2354.8	2909.9	4335.8	7220.4	11715.0	15643.9	14994.9	15583.8	15198.3	10894.5
72.5°	1013.2	1006.5	1396.8	2205.7	4087.7	7860.7	12654.6	12372.7	12224.5	11344.9	7626.3
75°	563.7	571.5	725.5	1023.9	1661.3	3861.1	8278.2	7921.7	6688.6	5707.3	3458.1
77.5°	452.3	463.0	601.5	726.5	745.8	1346.4	3873.7	3152.0	1897.6	1522.8	961.0
80°	357.4	376.9	525.0	565.7	502.8	555.1	1251.5	1000.7	750.7	688.8	497.9
82.5°	282.8	296.5	450.4	428.1	351.6	373.9	599.6	584.1	488.3	444.6	287.7
85°	203.5	228.6	370.0	322.5	230.6	251.9	398.1	381.7	280.0	228.6	126.8
87.5°	83.3	108.5	261.6	214.1	128.8	117.2	198.6	187.0	132.7	96.9	63.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P191473

CATALOG NUMBER: GLEON-AF-05-LED-E1-T3R-600

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4
2.5°	2918.6	2941.8	2971.9	2990.3	2999.9	3006.8	3017.4	3016.4	3019.3	3020.3	3024.1
5°	2937.9	2976.7	3020.3	3031.9	3031.9	3021.3	3010.6	2993.2	2986.4	2984.5	2986.4
7.5°	2988.3	3030.9	3068.8	3055.1	3026.1	2983.4	2928.3	2879.8	2853.7	2844.9	2843.0
10°	3052.3	3103.6	3119.1	3067.7	2982.5	2879.8	2770.4	2691.0	2645.5	2632.9	2629.0
12.5°	3129.7	3178.2	3156.8	3048.4	2890.4	2724.8	2573.7	2446.8	2351.9	2321.9	2320.0
15°	3215.0	3252.8	3178.2	2988.3	2753.0	2508.8	2239.5	2020.6	1902.5	1864.6	1861.8
17.5°	3294.4	3313.7	3165.6	2883.7	2550.5	2155.3	1797.8	1629.3	1588.6	1598.3	1600.2
20°	3362.2	3362.2	3123.0	2733.5	2231.8	1689.3	1463.6	1460.8	1489.8	1518.9	1524.7
22.5°	3436.8	3392.2	3048.4	2521.5	1780.4	1382.3	1349.4	1376.5	1409.4	1441.3	1446.2
25°	3528.9	3416.5	2944.8	2199.9	1399.7	1255.4	1267.9	1290.2	1306.7	1327.1	1329.9
27.5°	3631.5	3447.4	2808.1	1757.1	1214.7	1176.0	1185.6	1193.4	1191.4	1199.2	1201.1
30°	3754.5	3483.4	2621.2	1373.5	1138.1	1108.2	1090.7	1083.9	1083.9	1096.5	1101.4
32.5°	3919.2	3536.5	2352.9	1176.9	1101.4	1059.7	1003.5	978.4	988.1	1030.6	1040.3
35°	4100.4	3593.7	1989.6	1110.1	1093.6	1037.5	950.2	903.8	904.7	944.5	957.1
37.5°	4297.9	3666.4	1591.5	1097.5	1111.0	1038.4	922.2	858.3	832.1	832.1	836.9
40°	4550.8	3740.9	1288.3	1106.2	1147.9	1050.1	907.7	822.4	748.8	750.7	754.6
42.5°	4880.1	3804.9	1125.6	1124.6	1192.5	1065.5	906.6	774.9	711.0	754.6	794.3
45°	5246.3	3836.9	1053.9	1141.1	1228.3	1075.2	891.2	767.2	715.9	845.7	921.2
47.5°	5667.7	3818.5	1014.2	1146.9	1237.0	1075.2	873.7	785.6	749.7	979.3	1067.4
50°	6129.7	3765.2	975.5	1135.3	1234.1	1073.3	890.2	804.0	762.3	1002.6	1063.6
52.5°	6673.1	3720.7	934.8	1110.1	1213.7	1062.6	909.6	796.3	722.6	911.6	954.1
55°	7293.0	3733.3	889.3	1074.2	1181.8	1042.3	902.8	765.3	681.0	803.0	829.2
57.5°	8085.4	3883.3	835.0	1028.7	1138.1	1008.4	878.6	750.7	668.4	728.4	743.9
60°	8969.8	4144.9	767.2	983.2	1083.9	954.1	860.2	757.5	674.2	722.6	730.4
62.5°	9618.8	4297.0	709.1	916.4	1010.3	894.1	836.9	766.2	689.7	743.0	741.0
65°	9795.1	4047.1	636.4	818.6	910.5	831.1	807.8	775.9	696.4	759.4	750.7
66°	9548.1	3777.8	604.5	772.9	860.2	800.2	793.3	774.9	693.6	761.4	746.9
67.5°	8948.5	3225.7	549.2	706.1	779.8	753.6	770.1	766.2	685.8	759.4	739.1
70°	7297.9	2200.8	469.8	588.0	649.0	663.5	725.5	735.2	660.6	725.5	681.0
72.5°	5099.0	1340.6	415.5	456.2	525.0	565.7	664.5	692.6	626.8	633.5	590.9
75°	2464.3	712.0	376.9	353.5	407.9	472.7	590.9	634.4	573.5	529.9	514.3
77.5°	768.1	435.0	319.7	284.8	319.7	381.7	494.0	556.0	510.5	443.7	437.8
80°	412.7	319.7	246.0	228.6	252.8	299.3	388.4	464.0	438.8	398.1	355.5
82.5°	272.2	207.2	182.1	177.3	192.7	228.6	288.7	384.5	384.5	340.9	248.0
85°	140.5	126.8	125.0	125.0	134.6	152.1	196.6	296.5	315.8	180.1	149.1
87.5°	69.8	72.6	67.8	70.7	75.6	74.6	94.0	149.1	178.2	109.5	91.0
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)