

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: P192228

Luminaire Tested: **GLEON-AF-10-LED-E1-T2R-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-10-LED-E1-T2R-7050-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 67333 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

Input Watts (W): 640
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

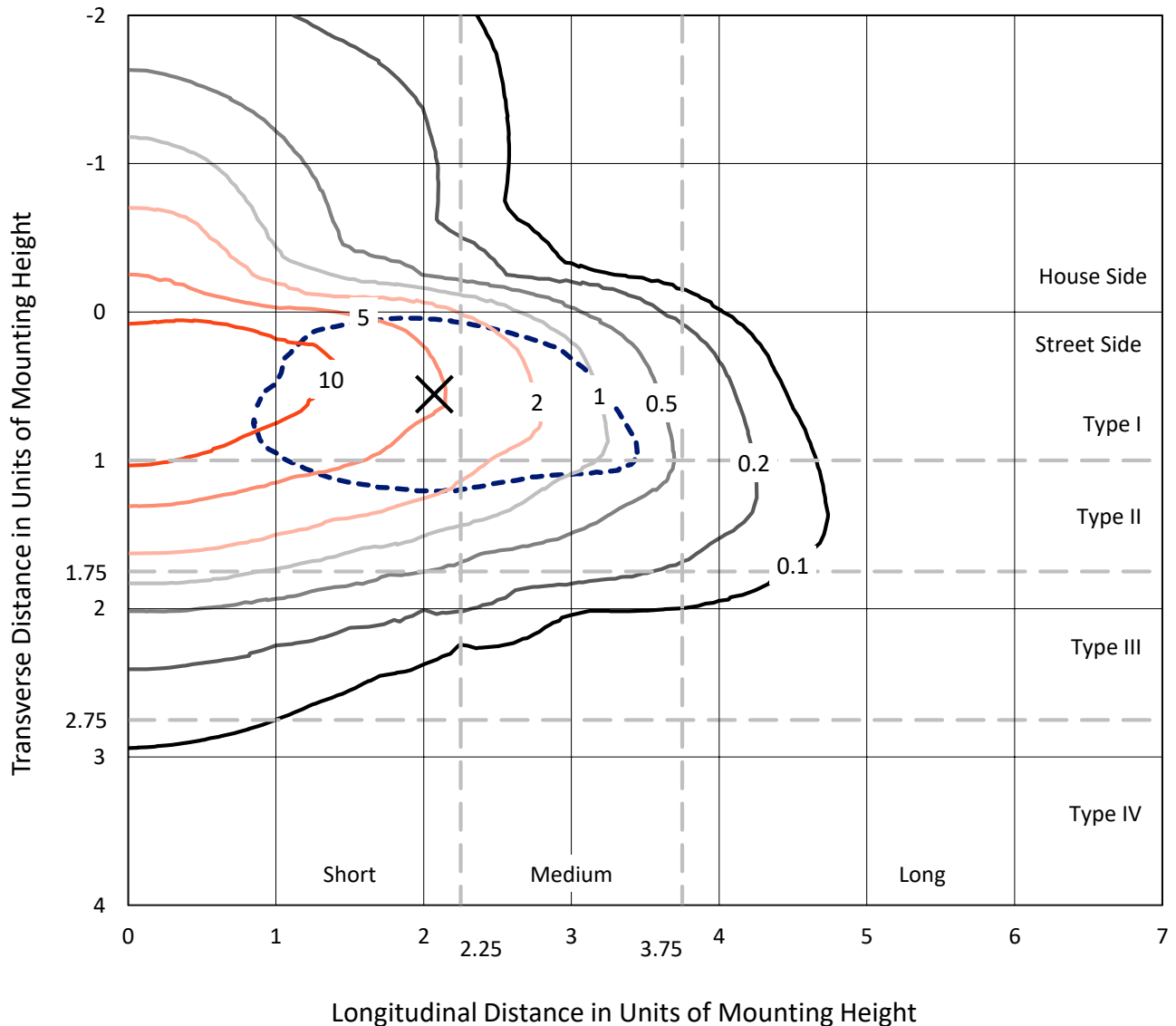


REPORT NUMBER: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

Iso-Footcandle Lines of Horizontal Illumination

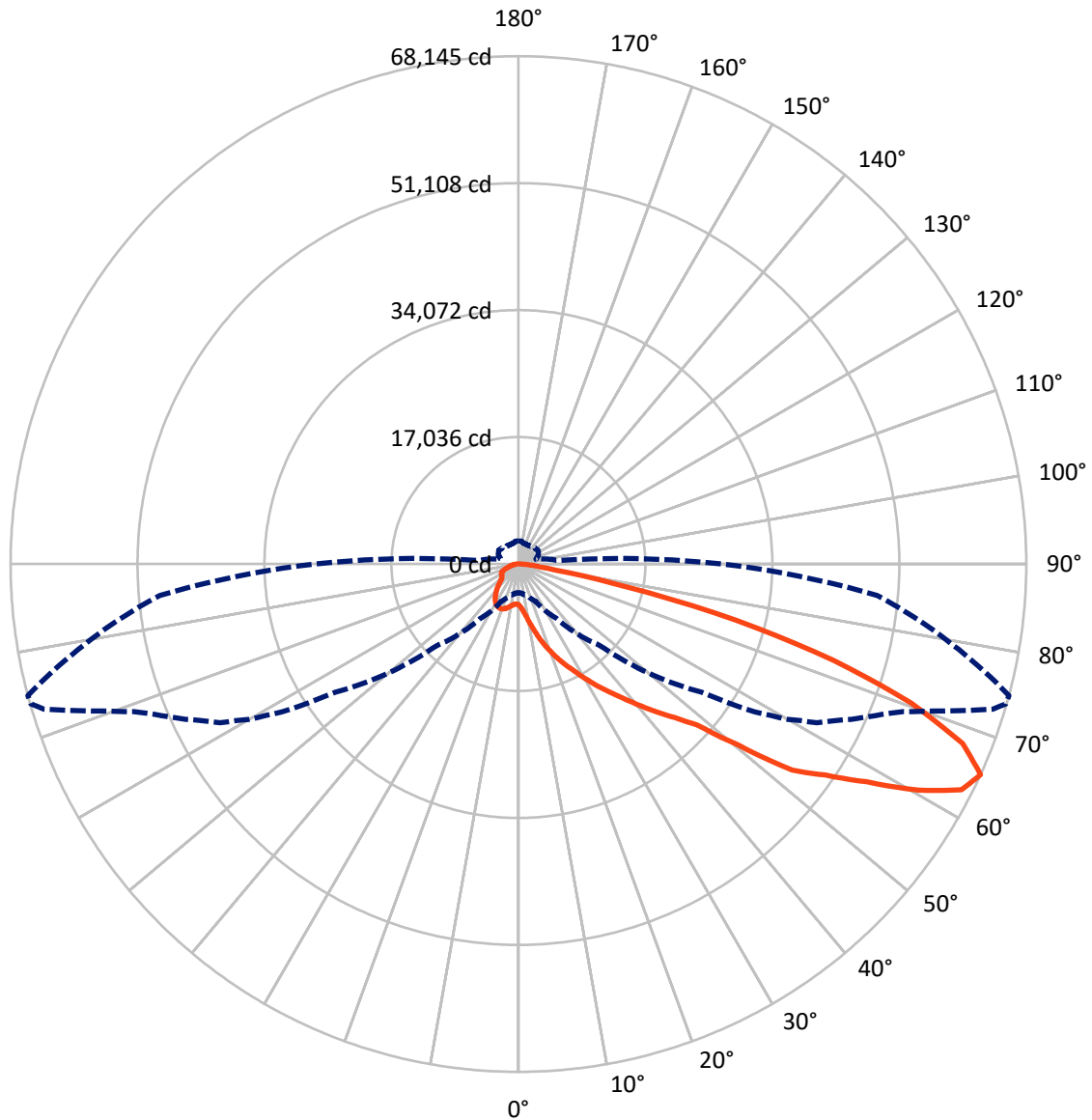
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 18.9 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P192228
CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10381.2	0.0	10381.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	56951.8	0.0	56951.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	67333.0	0.0	67333.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.4	1.0
10°-20°	2642.7	3.9
20°-30°	5422.0	8.1
30°-40°	9122.3	13.5
40°-50°	12604.4	18.7
50°-60°	15734.1	23.4
60°-70°	14159.0	21.0
70°-80°	5935.3	8.8
80°-90°	1036.9	1.5
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°	67333.0	100.0
0°-180°	67333.0	100.0



REPORT NUMBER: P192228

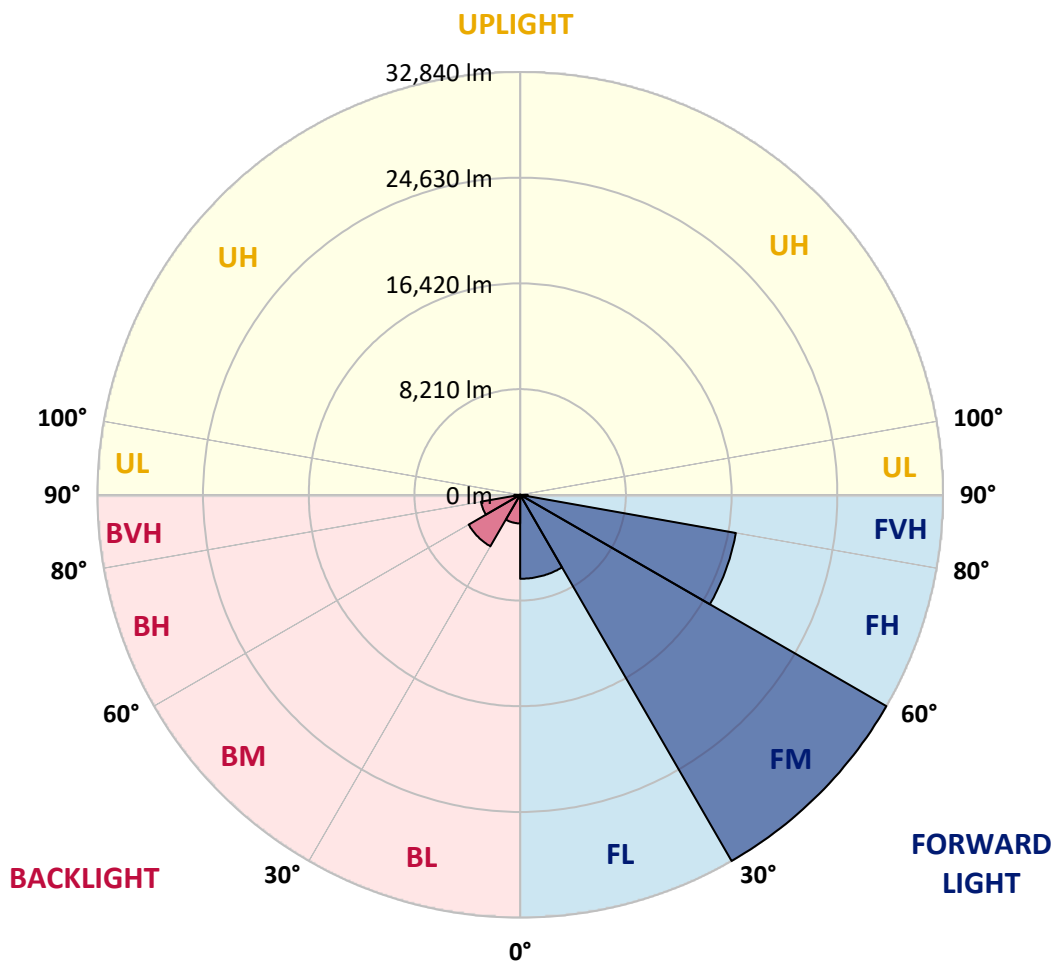
CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6521.0	9.7			
FM (30°-60°)	32839.9	48.8			
FH (60°-80°)	17008.1	25.3			G5
FVH (80°-90°)	582.8	0.9			G4/750
BL (0°-30°)	2220.1	3.3	B3/2500		
BM (30°-60°)	4620.8	6.9	B3/5000		
BH (60°-80°)	3086.2	4.6	B4/5000		G4/5000
BVH (80°-90°)	454.1	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





REPORT NUMBER: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1
2.5°	6947.7	6871.2	6890.3	6762.8	6606.7	6402.7	6176.4	6173.2	6176.4	6154.1	6071.3
5°	9634.3	9541.9	9506.8	9220.0	8799.3	8200.2	7550.0	7479.9	7451.2	7377.9	7209.0
7.5°	11594.3	11543.3	11489.2	11272.5	10890.0	10220.7	9347.5	9197.7	9054.3	9019.2	8828.0
10°	12859.6	12846.8	12732.1	12674.7	12435.7	11855.7	11004.7	10861.3	10705.2	10651.0	10450.2
12.5°	13860.3	13857.1	13802.9	13818.9	13611.7	13191.0	12458.0	12327.4	12212.6	12046.9	11903.5
15°	14551.9	14555.1	14634.7	14724.0	14692.1	14408.5	13720.1	13662.7	13563.9	13449.2	13280.3
17.5°	15119.2	15135.1	15218.0	15380.5	15555.8	15533.5	14988.5	14940.7	14854.6	14698.5	14609.2
20°	16400.3	16460.9	16301.6	16301.6	16320.7	16406.7	16145.4	16107.1	15986.0	15903.2	15833.1
22.5°	18564.3	18634.4	18274.3	17907.8	17547.7	17286.3	17025.0	17072.8	16989.9	16932.6	16891.1
25°	21375.3	21429.4	20846.2	20227.9	19494.9	18538.8	17891.9	17863.2	17818.6	17783.5	17764.4
27.5°	24020.5	24042.8	23491.4	22586.3	21735.4	20361.8	18771.5	18736.4	18682.2	18615.3	18558.0
30°	26283.3	26276.9	25709.6	24845.9	23934.4	22414.2	20106.8	19998.5	19839.1	19657.5	19517.2
32.5°	28243.3	28233.7	27612.2	26716.7	25760.6	24447.5	21936.2	21713.1	21464.5	21110.7	20897.2
35°	29785.8	29779.4	29193.0	28259.2	27162.9	26362.9	24033.2	23759.2	23443.6	22968.8	22640.5
37.5°	30369.0	30369.0	30040.7	29403.3	28434.5	27886.3	26362.9	26031.5	25693.7	25155.1	24785.4
40°	30028.0	30034.4	30104.5	29986.6	29514.9	29094.2	28536.5	28338.9	28048.9	27564.4	27178.8
42.5°	28883.9	28918.9	29384.2	29954.7	30190.5	30123.6	30464.6	30375.4	30171.4	29798.5	29492.6
45°	27433.8	27542.1	28052.1	29129.3	30378.6	31012.8	32080.4	32090.0	32051.7	31851.0	31615.1
47.5°	25441.9	25594.9	26267.3	27723.8	29938.8	31876.5	33721.7	33807.8	33887.5	33756.8	33648.4
50°	22796.7	22978.3	23985.4	25916.8	29043.2	32772.0	36822.7	37211.5	37574.8	37530.2	37603.5
52.5°	19963.4	20177.0	21410.3	23561.6	27503.9	32979.2	38805.0	39439.2	40073.4	40592.9	41144.3
55°	17407.4	17292.7	18526.1	20792.0	24973.4	32045.4	40586.6	41351.4	42059.0	42696.4	43352.9
57.5°	13943.2	14131.2	15367.8	17608.2	21623.9	29409.7	41813.6	42932.2	43948.9	45003.8	45934.4
60°	10192.1	10380.1	11721.8	13997.3	17987.5	25413.2	40876.6	42572.1	44200.6	45816.4	47078.5
62.5°	6154.1	6294.3	7476.7	9643.9	13869.9	20674.1	36701.6	38926.1	41322.8	43254.1	45188.6
65°	3830.8	3910.5	4347.1	5539.0	8907.7	15434.7	29986.6	32411.9	34993.4	37444.2	39455.2
67.5°	3136.0	3164.7	3244.4	3499.3	4892.1	10064.6	22318.6	24466.7	26796.4	29167.5	31404.8
70°	2820.5	2801.4	2801.4	2817.3	3136.0	5411.5	14612.4	16011.5	17952.4	20014.4	22060.5
72.5°	2546.4	2527.3	2492.2	2444.4	2559.2	3301.7	7553.2	8608.1	10007.2	11839.7	13799.7
75°	2288.3	2262.8	2221.3	2160.8	2240.5	2492.2	3626.8	4069.8	4751.8	5727.1	6820.2
77.5°	2020.6	1988.7	1950.4	1905.8	2007.8	1937.7	2125.7	2285.1	2546.4	2858.7	3269.9
80°	1717.8	1689.1	1676.4	1654.1	1775.2	1475.6	1501.1	1599.9	1752.9	1921.8	2113.0
82.5°	1344.9	1344.9	1395.9	1405.5	1539.3	1061.3	1121.8	1207.9	1287.6	1376.8	1466.0
85°	886.0	892.4	1064.5	1131.4	1214.3	713.9	841.4	870.1	933.8	984.8	1023.0
87.5°	277.3	299.6	650.1	720.3	698.0	404.8	516.3	529.0	573.7	608.7	640.6
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: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1
2.5°	6071.3	6033.0	5998.0	5994.8	5969.3	5934.2	5947.0	5892.8	5896.0	5867.3	5835.4
5°	7138.9	7113.4	6985.9	6950.9	6855.3	6794.7	6785.1	6657.7	6641.7	6568.4	6488.8
7.5°	8675.0	8592.2	8413.7	8327.7	8165.1	8044.0	7986.6	7817.7	7734.9	7543.6	7457.6
10°	10284.5	10179.3	9959.4	9838.3	9682.1	9487.7	9382.6	9137.2	9041.5	8866.3	8655.9
12.5°	11776.0	11670.8	11444.5	11352.1	11145.0	10937.8	10823.1	10545.8	10421.5	10141.1	9975.3
15°	13156.0	13050.8	12853.2	12757.6	12550.4	12381.5	12228.6	11954.5	11807.9	11546.5	11329.8
17.5°	14494.5	14383.0	14210.9	14124.8	13924.0	13751.9	13586.2	13328.1	13178.3	12916.9	12722.5
20°	15737.4	15654.6	15530.3	15415.6	15214.8	15058.6	14861.0	14637.9	14421.2	14230.0	14045.1
22.5°	16821.0	16789.2	16655.3	16604.3	16432.2	16298.4	16126.3	15906.4	15750.2	15508.0	15335.9
25°	17754.8	17745.3	17681.5	17665.6	17544.5	17417.0	17378.8	17197.1	17053.7	16840.2	16661.7
27.5°	18558.0	18567.5	18551.6	18596.2	18564.3	18507.0	18510.1	18449.6	18366.7	18188.3	18032.1
30°	19450.3	19399.3	19428.0	19491.7	19510.9	19517.2	19622.4	19657.5	19651.1	19533.2	19456.7
32.5°	20712.4	20591.3	20479.7	20470.2	20533.9	20559.4	20737.9	20830.3	20910.0	20938.6	20951.4
35°	22321.8	22079.6	21846.9	21722.7	21614.3	21643.0	21770.5	21920.2	22095.5	22216.6	22360.1
37.5°	24348.7	24052.4	23641.2	23348.0	23274.7	23115.4	23198.2	23316.2	23488.3	23676.3	23924.9
40°	26805.9	26356.6	25894.4	25505.6	25295.3	25002.1	24998.9	24976.6	25081.8	25257.0	25607.6
42.5°	29170.7	28772.3	28281.5	27873.6	27599.5	27207.5	27127.8	26920.7	26968.5	27121.4	27462.5
45°	31385.7	31057.4	30757.8	30286.1	30053.5	29629.6	29495.8	29250.4	29113.3	29183.4	29524.5
47.5°	33530.5	33320.2	33007.9	32701.9	32523.4	32144.2	31972.1	31796.8	31621.5	31615.1	31972.1
50°	37711.9	37600.3	37230.6	36911.9	36998.0	36532.7	36561.4	36089.7	36303.2	36328.7	37077.7
52.5°	41641.5	42030.3	42304.4	42639.0	42855.7	42897.1	43040.6	43254.1	43512.2	44022.2	44716.9
55°	43891.5	44379.1	44662.7	44917.7	45338.4	45427.6	45666.7	45950.3	46176.6	46750.2	47339.8
57.5°	46565.4	47470.5	47910.3	48315.1	48882.3	49099.1	49497.4	49806.6	50099.8	50778.6	51492.5
60°	48213.1	49315.8	50211.3	50851.9	51562.6	52072.5	52674.9	53159.3	53847.7	54660.4	55724.9
62.5°	46903.2	48522.2	49711.0	50810.5	51776.1	52751.4	53615.1	54520.2	55565.5	56795.7	58446.6
65°	41686.1	43333.8	45370.3	46511.2	47789.2	49293.5	50606.5	52072.5	53497.1	55288.2	57729.5
67.5°	33559.2	35474.6	37762.9	38913.4	40382.6	42062.1	43534.5	45325.6	46989.3	49159.6	52177.7
70°	24189.4	26665.7	28590.7	29792.2	31506.8	33237.3	34658.7	36743.0	38119.8	40344.3	43464.4
72.5°	15316.8	17270.4	19628.8	21142.6	22666.0	24418.9	25872.1	27669.6	28954.0	30980.9	33807.8
75°	8235.2	9675.8	11747.3	13184.7	14816.4	16314.3	18016.2	19220.9	20170.6	21773.6	24068.3
77.5°	3859.5	4735.9	5784.4	6890.3	7996.2	9149.9	10271.7	11247.0	11654.9	12572.7	13927.2
80°	2342.5	2626.1	2932.0	3273.1	3735.2	4108.1	4602.0	4959.0	4984.5	5274.5	5688.8
82.5°	1564.8	1670.0	1762.4	1848.5	1966.4	2058.8	2164.0	2288.3	2339.3	2406.2	2540.0
85°	1067.6	1118.6	1137.8	1191.9	1179.2	1211.1	1252.5	1293.9	1316.2	1313.0	1373.6
87.5°	656.5	682.0	694.8	707.5	698.0	685.2	704.3	726.6	733.0	713.9	720.3
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: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1
2.5°	5841.8	5813.1	5784.4	5765.3	5758.9	5590.0	5516.7	5468.9	5366.9	5284.1	5217.1
5°	6444.1	6383.6	6335.8	6278.4	6246.5	5819.5	5663.3	5555.0	5376.5	5271.3	5175.7
7.5°	7413.0	7244.1	7145.3	7033.7	6938.1	6166.9	5908.7	5739.8	5491.2	5351.0	5242.6
10°	8512.5	8337.2	8181.1	8009.0	7859.2	6629.0	6252.9	5991.6	5663.3	5481.7	5338.2
12.5°	9739.5	9567.4	9369.8	9149.9	8958.7	7215.4	6692.7	6319.8	5870.5	5628.3	5427.5
15°	11189.6	10886.8	10647.8	10392.8	10169.7	7916.5	7205.8	6689.5	6090.4	5762.1	5494.4
17.5°	12537.7	12219.0	11893.9	11670.8	11412.7	8703.7	7722.1	7065.6	6272.0	5848.2	5507.2
20°	13853.9	13506.5	13226.1	12926.5	12655.6	9519.6	8273.5	7397.0	6390.0	5851.3	5427.5
22.5°	15014.0	14797.3	14485.0	14159.9	13885.8	10335.5	8789.8	7677.5	6434.6	5778.0	5287.2
25°	16333.4	16104.0	15721.5	15447.4	15141.5	11167.3	9296.5	7894.2	6409.1	5641.0	5070.5
27.5°	17742.1	17487.1	17095.1	16808.3	16438.6	12031.0	9761.8	8050.4	6313.5	5417.9	4780.5
30°	19211.3	18978.6	18593.0	18303.0	17930.1	12945.6	10281.3	8155.6	6122.2	5108.8	4442.7
32.5°	20788.9	20594.5	20212.0	19909.2	19510.9	13936.8	10765.7	8187.4	5832.2	4742.3	4085.7
35°	22286.8	22152.9	21831.0	21547.4	21133.1	14873.8	11278.8	8171.5	5488.0	4340.7	3760.7
37.5°	23972.7	23893.0	23733.7	23373.5	22866.8	16145.4	11893.9	8104.6	5067.3	3942.3	3512.1
40°	25770.2	25776.5	25604.4	25359.0	24887.4	17687.9	12626.9	7973.9	4608.4	3591.8	3285.8
42.5°	27672.8	27771.6	27688.7	27513.4	27060.9	19243.2	13503.4	7814.5	4162.2	3250.7	3062.7
45°	29852.7	29973.8	30101.3	29843.2	29403.3	21295.6	14657.1	7607.4	3681.0	2967.1	2909.7
47.5°	32367.3	32558.5	32673.2	32676.4	32236.6	23838.8	16531.0	7483.1	3253.9	2775.9	2836.4
50°	37673.6	37734.2	38005.1	38476.8	38138.9	29725.2	19804.1	7406.6	2963.9	2658.0	2782.3
52.5°	45319.3	45985.4	46453.8	46422.0	45963.0	33463.6	21607.9	7011.4	2791.8	2613.3	2756.8
55°	48433.0	49264.8	50131.6	50361.1	50004.2	36653.8	23313.0	6616.2	2709.0	2645.2	2766.3
57.5°	52582.5	53984.7	55173.5	55673.9	55157.6	40736.3	25556.6	6409.1	2683.5	2731.3	2826.9
60°	57429.9	59163.6	60725.3	61624.0	61624.0	45427.6	27883.1	6323.0	2648.4	2858.7	2928.9
62.5°	60543.6	63090.0	65448.4	66764.6	66726.4	48694.3	28915.7	6029.8	2568.7	2948.0	3069.1
65°	60556.4	63584.0	66589.4	68068.1	68144.6	48292.7	27210.7	5325.5	2422.1	2960.7	3209.3
67.5°	55508.1	58736.6	62239.1	63893.2	64275.6	44455.6	23555.2	4379.0	2183.1	2833.3	3260.3
70°	46880.9	50032.9	53608.7	55234.1	55912.9	37896.7	18972.3	3375.0	1877.1	2552.8	3155.1
72.5°	36934.2	40025.6	42514.7	43703.5	44232.5	28966.7	13815.7	2549.6	1539.3	2151.2	2871.5
75°	26149.4	28469.6	29792.2	30056.7	30139.5	17461.6	8394.6	1896.3	1268.4	1673.2	2425.3
77.5°	14759.0	15753.4	15645.0	15762.9	14781.3	6740.5	3655.5	1357.7	1045.3	1271.6	1880.3
80°	5762.1	5940.6	5580.5	5468.9	5016.4	2508.2	1612.6	946.5	835.0	962.5	1316.2
82.5°	2540.0	2622.9	2546.4	2565.5	2454.0	1293.9	965.7	685.2	637.4	704.3	873.2
85°	1399.1	1424.6	1418.2	1459.7	1399.1	516.3	458.9	420.7	446.2	478.1	560.9
87.5°	682.0	688.4	666.1	701.1	678.8	261.3	226.3	239.0	261.3	267.7	267.7
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: P192228

CATALOG NUMBER: GLEON-AF-10-LED-E1-T2R-7050-1200

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	5472.1	5472.1	5472.1	5472.1	5472.1	5472.1
2.5°	5169.3	5143.8	5147.0	5140.6	5127.9	5127.9
5°	5124.7	5099.2	5099.2	5092.8	5076.9	5080.1
7.5°	5169.3	5127.9	5112.0	5089.7	5067.3	5067.3
10°	5220.3	5147.0	5102.4	5064.2	5035.5	5035.5
12.5°	5258.6	5143.8	5070.5	5019.5	4990.9	4990.9
15°	5271.3	5121.5	5019.5	4959.0	4933.5	4930.3
17.5°	5229.9	5035.5	4911.2	4841.1	4809.2	4799.6
20°	5102.4	4879.3	4729.5	4649.8	4605.2	4589.3
22.5°	4911.2	4656.2	4480.9	4398.1	4340.7	4331.1
25°	4643.5	4369.4	4197.3	4117.6	4085.7	4076.2
27.5°	4331.1	4076.2	3929.6	3878.6	3849.9	3846.7
30°	4034.8	3818.0	3709.7	3671.4	3636.4	3630.0
32.5°	3757.5	3620.4	3579.0	3524.8	3442.0	3432.4
35°	3559.9	3547.1	3518.5	3397.4	3295.4	3266.7
37.5°	3438.8	3556.7	3410.1	3171.1	3097.8	3091.4
40°	3368.7	3457.9	3206.1	3123.3	3129.6	3123.3
42.5°	3209.3	3301.7	3212.5	3174.3	3199.8	3206.1
45°	3050.0	3152.0	3260.3	3234.8	3295.4	3295.4
47.5°	2960.7	3113.7	3257.1	3257.1	3346.4	3378.2
50°	2858.7	3081.8	3206.1	3250.7	3320.9	3295.4
52.5°	2852.4	3027.7	3132.8	3212.5	3244.4	3215.7
55°	2861.9	2983.0	3059.5	3148.8	3187.0	3190.2
57.5°	2874.7	2957.5	3008.5	3050.0	3164.7	3164.7
60°	2906.6	2935.2	2963.9	2986.2	3136.0	3139.2
62.5°	2957.5	2912.9	2906.6	2928.9	3120.1	3107.3
65°	3037.2	2881.1	2833.3	2855.6	3104.1	3065.9
67.5°	3145.6	2833.3	2740.8	2756.8	3091.4	3008.5
70°	3244.4	2756.8	2626.1	2610.2	2970.3	2823.7
72.5°	3253.9	2667.5	2466.7	2418.9	2581.5	2441.2
75°	3094.6	2607.0	2291.5	2151.2	2132.1	2113.0
77.5°	2788.6	2571.9	2087.5	1867.6	1829.3	1842.1
80°	2332.9	2441.2	1842.1	1580.8	1787.9	1765.6
82.5°	1743.3	2154.4	1564.8	1399.1	1395.9	1233.4
85°	968.9	1679.6	1274.8	1048.5	729.8	707.5
87.5°	270.9	933.8	892.4	592.8	404.8	420.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)