

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: STREETWORKS

Report Number: P193167

Luminaire Tested: **GAN-AF-09-LED-U-T2R-7030-1200-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193167
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: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-T2R-7030-1200-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K, 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: 58818.6 lumens
Efficiency: N/A
Efficacy: 102.3 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): 575
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: 28.75 FT

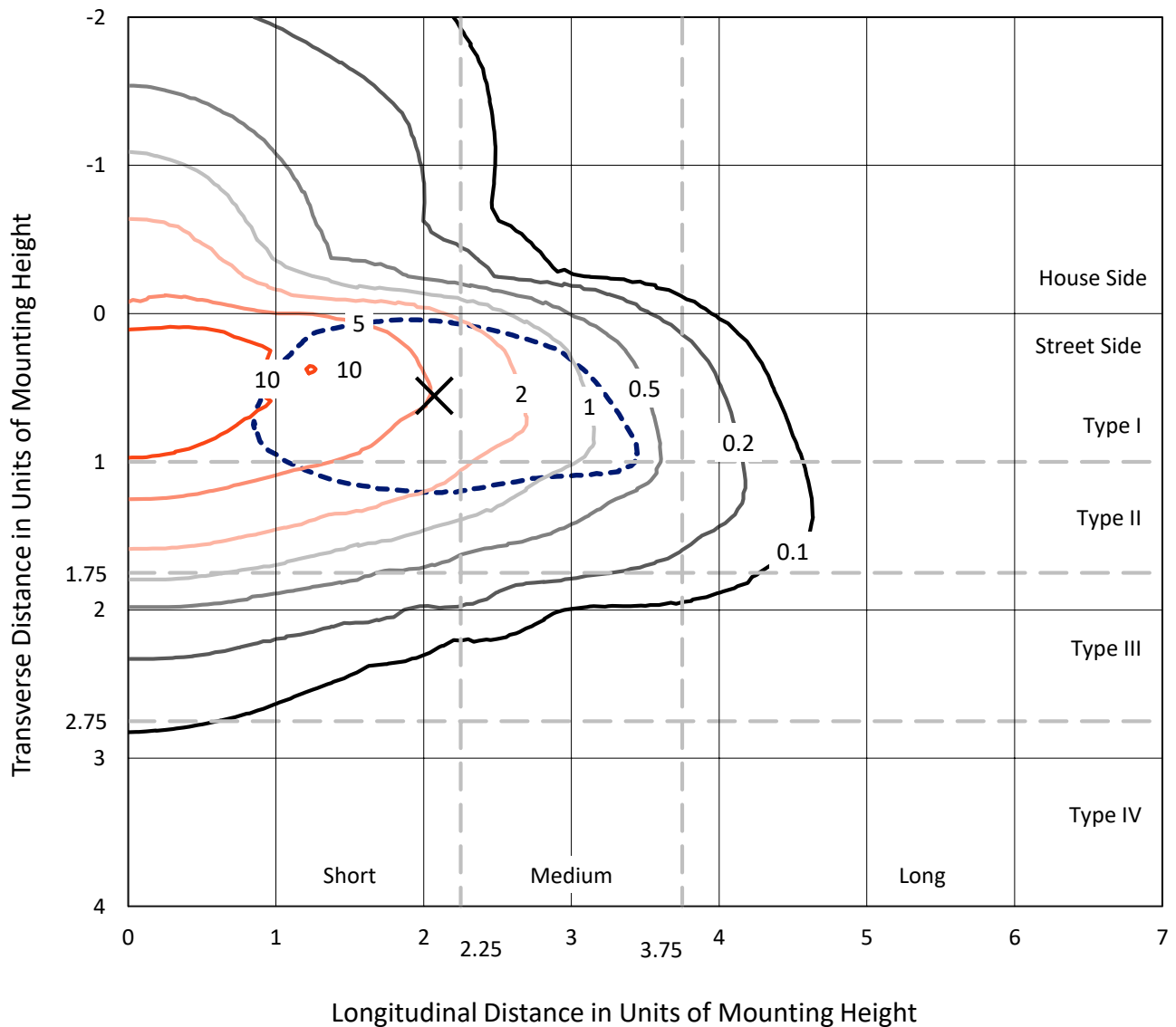


REPORT NUMBER: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

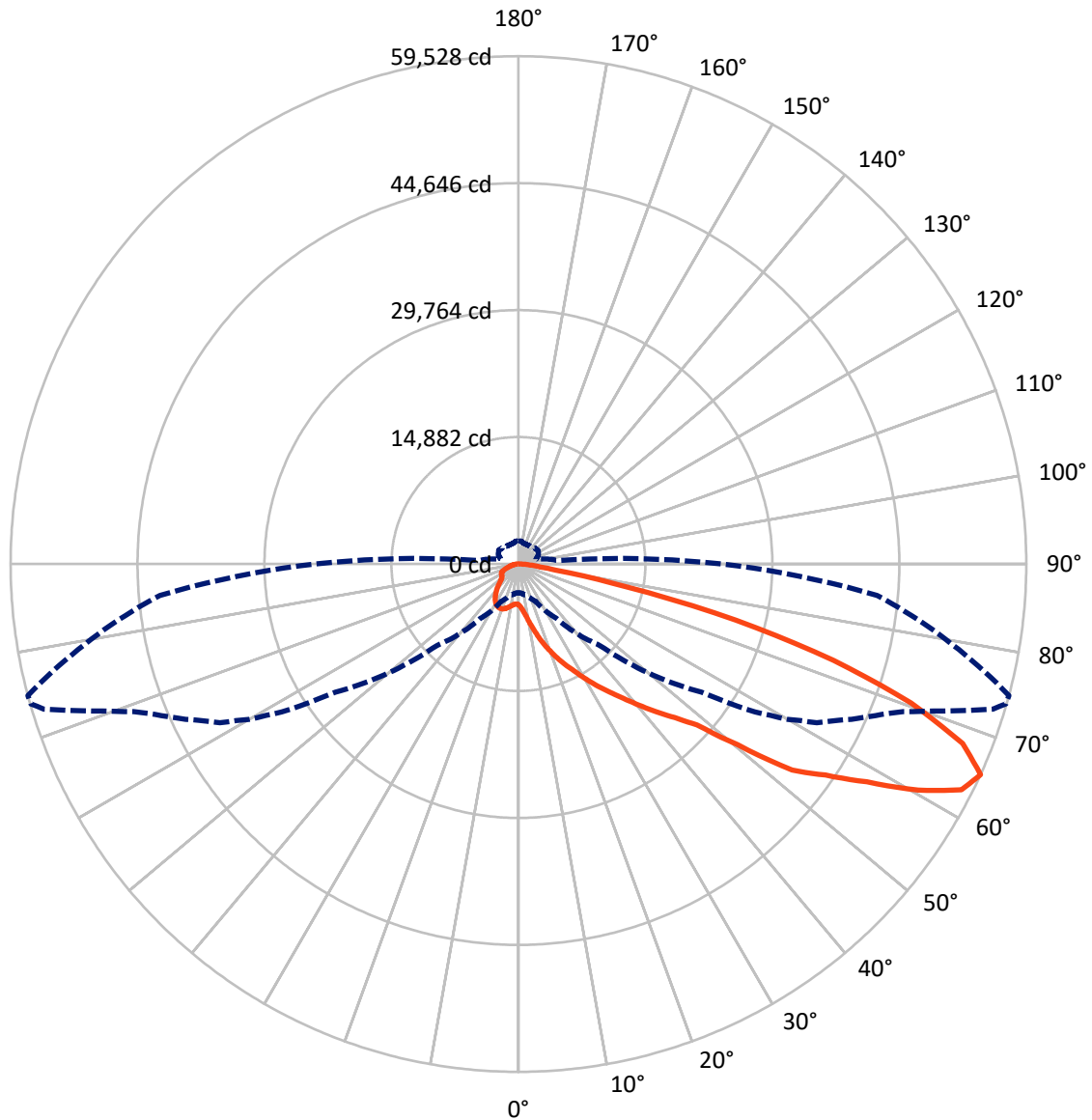


Based on 30 foot mounting height. Maximum calculated value = 16.5 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

Luminous Intensity Polar Plot



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

REPORT NUMBER: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9068.5	0.0	9068.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	49750.2	0.0	49750.2
	% Fixture	84.6	0.0	84.6
Total	Lumens	58818.6	0.0	58818.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	590.8	1.0
10°-20°	2308.5	3.9
20°-30°	4736.4	8.1
30°-40°	7968.7	13.5
40°-50°	11010.5	18.7
50°-60°	13744.5	23.4
60°-70°	12368.5	21.0
70°-80°	5184.8	8.8
80°-90°	905.8	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°	58818.6	100.0
0°-180°	58818.6	100.0



REPORT NUMBER: P193167

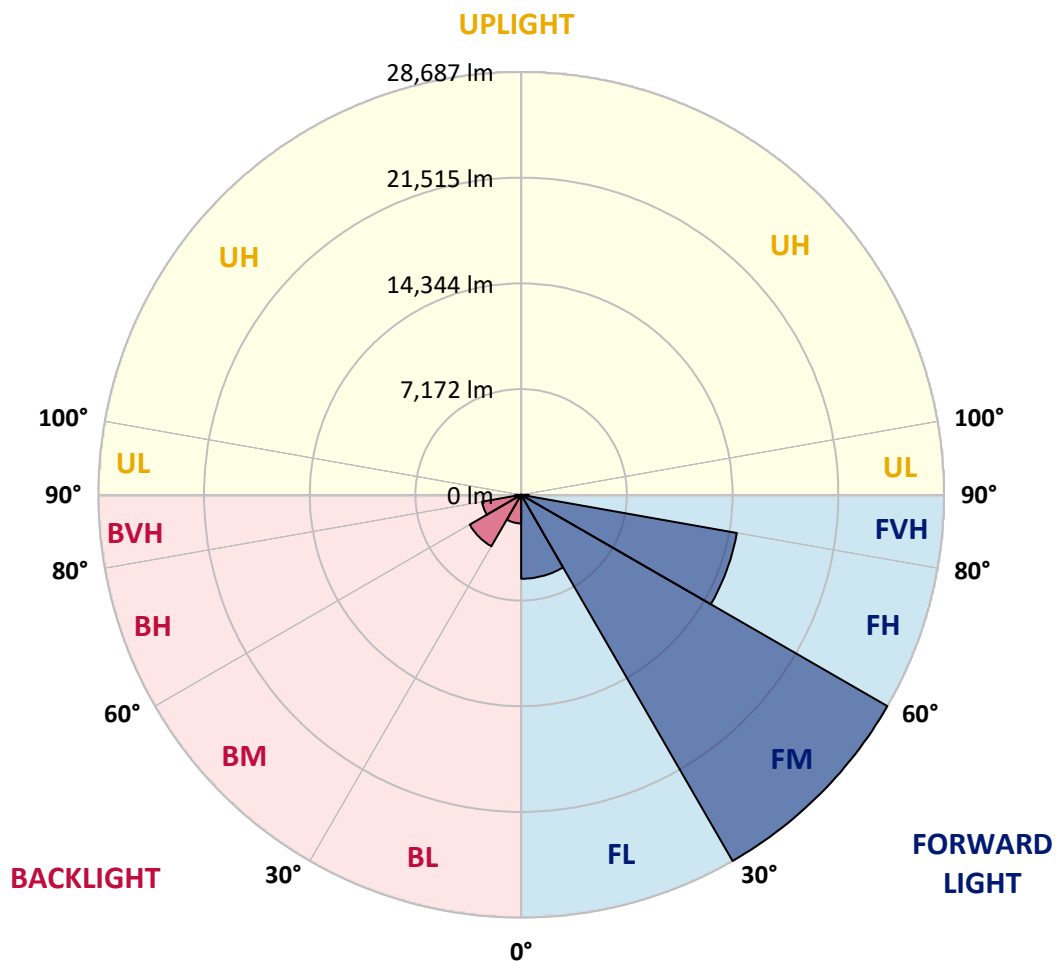
CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5696.4	9.7			
FM	(30°-60°)	28687.3	48.8			
FH	(60°-80°)	14857.4	25.3			G5
FVH	(80°-90°)	509.1	0.9			G4/750
BL	(0°-30°)	1939.4	3.3	B3/2500		
BM	(30°-60°)	4036.5	6.9	B3/5000		
BH	(60°-80°)	2695.9	4.6	B4/5000		G4/5000
BVH	(80°-90°)	396.7	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: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1
2.5°	6069.2	6002.2	6019.0	5907.6	5771.3	5593.1	5395.4	5392.6	5395.4	5375.9	5303.6
5°	8416.0	8335.3	8304.7	8054.1	7686.6	7163.2	6595.3	6534.0	6509.0	6444.9	6297.3
7.5°	10128.3	10083.6	10036.3	9847.0	9512.9	8928.3	8165.5	8034.6	7909.4	7878.6	7711.7
10°	11233.5	11222.3	11122.1	11072.0	10863.2	10356.4	9613.1	9487.8	9351.5	9304.2	9128.7
12.5°	12107.7	12104.9	12057.6	12071.4	11890.4	11523.0	10882.7	10768.5	10668.3	10523.6	10398.3
15°	12711.8	12714.6	12784.2	12862.1	12834.2	12586.4	11985.2	11935.1	11848.7	11748.5	11600.9
17.5°	13207.4	13221.3	13293.7	13435.6	13588.7	13569.2	13093.2	13051.4	12976.2	12839.8	12761.9
20°	14326.5	14379.4	14240.2	14240.2	14256.9	14332.1	14103.7	14070.4	13964.5	13892.2	13830.9
22.5°	16216.8	16278.1	15963.6	15643.3	15328.7	15100.5	14872.2	14913.9	14841.6	14791.4	14755.3
25°	18672.3	18719.6	18210.1	17670.1	17029.8	16194.5	15629.4	15604.4	15565.4	15534.8	15518.1
27.5°	20983.0	21002.6	20521.0	19730.2	18987.0	17787.0	16397.8	16367.1	16319.8	16261.4	16211.3
30°	22959.7	22954.2	22458.6	21704.2	20907.9	19580.0	17564.3	17469.7	17330.4	17171.7	17049.3
32.5°	24671.9	24663.5	24120.6	23338.4	22503.1	21356.2	19162.3	18967.4	18750.3	18441.3	18254.7
35°	26019.3	26013.7	25501.5	24685.8	23728.1	23029.3	20994.1	20754.8	20479.1	20064.4	19777.6
37.5°	26528.8	26528.8	26242.0	25685.2	24838.9	24360.0	23029.3	22739.8	22444.7	21974.1	21651.3
40°	26230.9	26236.4	26297.7	26194.7	25782.7	25415.3	24928.0	24755.4	24502.1	24078.9	23742.0
42.5°	25231.5	25262.1	25668.5	26166.8	26372.9	26314.4	26612.3	26534.3	26356.2	26030.5	25763.3
45°	23964.7	24059.4	24504.7	25445.8	26537.1	27091.2	28023.8	28032.2	27998.8	27823.3	27617.4
47.5°	22224.8	22358.4	22945.7	24218.1	26153.0	27845.6	29457.6	29532.8	29602.3	29488.2	29393.6
50°	19914.0	20072.7	20952.4	22639.5	25370.6	28627.9	32166.4	32506.0	32823.4	32784.5	32848.5
52.5°	17439.0	17625.6	18703.0	20582.1	24026.0	28808.9	33898.0	34452.0	35006.1	35459.9	35941.5
55°	15206.2	15105.9	16183.5	18162.8	21815.5	27993.2	35454.3	36122.5	36740.5	37297.3	37870.8
57.5°	12180.0	12344.3	13424.4	15381.6	18889.5	25690.7	36526.1	37503.3	38391.4	39312.9	40125.9
60°	8903.2	9067.5	10239.6	12227.3	15712.9	22199.7	35707.7	37188.8	38611.3	40022.9	41125.3
62.5°	5375.9	5498.4	6531.3	8424.4	12116.0	18059.9	32060.6	34003.8	36097.4	37784.6	39474.4
65°	3346.4	3416.0	3797.5	4838.6	7781.3	13482.9	26194.7	28313.3	30568.3	32709.3	34466.1
67.5°	2739.4	2764.5	2834.0	3056.8	4273.4	8791.9	19496.4	21372.9	23407.9	25479.3	27433.6
70°	2463.8	2447.2	2447.2	2461.1	2739.4	4727.2	12764.6	13986.9	15682.3	17483.5	19270.9
72.5°	2224.4	2207.7	2177.1	2135.4	2235.6	2884.2	6598.0	7519.6	8741.9	10342.6	12054.8
75°	1998.9	1976.6	1940.5	1887.6	1957.2	2177.1	3168.2	3555.2	4151.0	5002.9	5957.8
77.5°	1765.1	1737.2	1703.8	1664.8	1753.9	1692.7	1857.0	1996.1	2224.4	2497.2	2856.4
80°	1500.5	1475.5	1464.4	1445.0	1550.7	1289.0	1311.2	1397.5	1531.2	1678.8	1845.8
82.5°	1174.9	1174.9	1219.5	1227.7	1344.7	927.1	979.9	1055.1	1124.8	1202.7	1280.6
85°	774.0	779.6	929.9	988.4	1060.7	623.7	735.0	760.0	815.7	860.3	893.6
87.5°	242.2	261.6	567.9	629.3	609.6	353.6	451.0	462.1	501.2	531.8	559.6
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: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1
2.5°	5303.6	5270.1	5239.5	5236.7	5214.4	5183.8	5194.9	5147.6	5150.4	5125.4	5097.5
5°	6236.2	6213.9	6102.5	6071.9	5988.4	5935.5	5927.1	5815.8	5801.8	5737.9	5668.3
7.5°	7578.1	7505.7	7349.8	7274.6	7132.7	7026.8	6976.7	6829.1	6756.8	6589.8	6514.6
10°	8984.0	8892.1	8700.0	8594.3	8457.8	8288.0	8196.1	7981.7	7898.3	7745.1	7561.4
12.5°	10286.9	10195.0	9997.3	9916.6	9735.6	9554.7	9454.5	9212.3	9103.7	8858.7	8714.0
15°	11492.3	11400.5	11227.9	11144.3	10963.4	10815.9	10682.3	10442.8	10314.7	10086.5	9897.1
17.5°	12661.6	12564.3	12413.9	12338.7	12163.3	12012.9	11868.2	11642.6	11511.9	11283.5	11113.8
20°	13747.4	13675.0	13566.5	13466.2	13290.9	13154.4	12981.8	12786.9	12597.6	12430.5	12269.2
22.5°	14694.0	14666.2	14549.2	14504.7	14354.4	14237.3	14087.2	13894.9	13758.6	13546.9	13396.6
25°	15509.7	15501.3	15445.7	15431.8	15325.9	15214.6	15181.1	15022.5	14897.2	14710.6	14554.8
27.5°	16211.3	16219.6	16205.7	16244.6	16216.8	16166.8	16169.5	16116.7	16044.1	15888.4	15751.9
30°	16990.8	16946.2	16971.4	17027.0	17043.7	17049.3	17141.1	17171.7	17166.2	17063.1	16996.4
32.5°	18093.3	17987.5	17890.0	17881.7	17937.3	17959.6	18115.5	18196.2	18265.9	18290.9	18302.0
35°	19499.2	19287.6	19084.4	18975.8	18881.1	18906.2	19017.5	19148.3	19301.5	19407.2	19532.6
37.5°	21269.8	21010.9	20651.7	20395.7	20331.6	20192.4	20264.8	20367.8	20518.2	20682.3	20899.5
40°	23416.2	23023.7	22620.1	22280.3	22096.7	21840.5	21837.7	21818.3	21910.1	22063.3	22369.5
42.5°	25482.0	25134.0	24705.2	24349.0	24109.4	23767.0	23697.5	23516.5	23558.3	23691.9	23989.7
45°	27416.9	27130.1	26868.5	26456.4	26253.2	25882.9	25765.9	25551.6	25432.0	25493.1	25791.0
47.5°	29290.5	29106.7	28833.9	28566.7	28410.8	28079.5	27929.2	27776.0	27622.9	27617.4	27929.2
50°	32943.2	32845.7	32522.7	32244.4	32319.6	31913.1	31938.1	31526.1	31712.6	31734.9	32389.2
52.5°	36375.8	36715.5	36954.9	37247.2	37436.5	37472.7	37598.0	37784.6	38009.9	38455.4	39062.4
55°	38341.4	38767.3	39015.1	39237.7	39605.3	39683.2	39891.9	40139.7	40337.4	40838.6	41353.6
57.5°	40677.1	41467.8	41852.0	42205.5	42701.1	42890.4	43238.4	43508.4	43764.6	44357.6	44981.2
60°	42116.5	43079.8	43862.0	44421.6	45042.4	45487.9	46014.1	46437.3	47038.7	47748.5	48678.4
62.5°	40972.2	42386.5	43425.0	44385.4	45229.0	46080.8	46835.3	47626.0	48539.2	49613.7	51055.9
65°	36414.8	37854.2	39633.1	40629.8	41746.3	43060.2	44207.3	45487.9	46732.4	48297.0	50429.4
67.5°	29315.6	30988.7	32987.7	33992.7	35276.1	36743.4	38029.6	39594.1	41047.4	42943.3	45579.8
70°	21130.6	23293.7	24975.3	26024.9	27522.7	29034.4	30276.1	32096.8	33299.5	35242.7	37968.2
72.5°	13379.9	15086.5	17146.7	18469.0	19799.9	21331.0	22600.6	24170.8	25292.7	27063.3	29532.8
75°	7193.8	8452.3	10261.8	11517.4	12942.9	14251.3	15738.0	16790.3	17620.0	19020.3	21024.9
77.5°	3371.4	4137.0	5053.0	6019.0	6985.1	7992.9	8972.8	9824.8	10181.1	10983.0	12166.1
80°	2046.2	2294.0	2561.2	2859.2	3262.8	3588.6	4020.0	4331.9	4354.2	4607.6	4969.4
82.5°	1367.0	1458.8	1539.6	1614.8	1717.8	1798.5	1890.3	1998.9	2043.4	2101.9	2218.8
85°	932.6	977.3	993.9	1041.2	1030.1	1057.9	1094.1	1130.3	1149.9	1147.0	1199.8
87.5°	573.5	595.8	606.9	618.1	609.6	598.5	615.2	634.8	640.4	623.7	629.3
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: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1
2.5°	5103.1	5078.1	5053.0	5036.3	5030.8	4883.2	4819.1	4777.4	4688.4	4615.8	4557.4
5°	5629.2	5576.4	5534.6	5484.5	5456.6	5083.7	4947.2	4852.5	4696.6	4604.7	4521.2
7.5°	6475.6	6328.1	6241.8	6144.3	6060.8	5387.0	5161.5	5014.0	4796.8	4674.3	4579.7
10°	7436.0	7283.0	7146.5	6996.2	6865.3	5790.7	5462.2	5233.9	4947.2	4788.5	4663.1
12.5°	8507.9	8357.6	8184.9	7992.9	7825.8	6302.9	5846.5	5520.7	5128.2	4916.5	4741.2
15°	9774.7	9510.2	9301.4	9078.7	8883.8	6915.4	6294.7	5843.6	5320.3	5033.5	4799.6
17.5°	10952.2	10673.9	10389.9	10195.0	9969.6	7603.2	6745.6	6172.2	5479.0	5108.6	4810.8
20°	12102.1	11798.6	11553.6	11292.0	11055.3	8315.8	7227.3	6461.7	5581.9	5111.4	4741.2
22.5°	13115.5	12926.1	12653.4	12369.4	12130.0	9028.5	7678.3	6706.7	5621.0	5047.4	4618.7
25°	14268.0	14067.5	13733.5	13494.1	13226.8	9755.1	8120.9	6896.0	5598.7	4927.7	4429.4
27.5°	15498.5	15275.9	14933.4	14682.8	14360.0	10509.6	8527.3	7032.4	5515.1	4732.8	4176.0
30°	16782.0	16578.8	16241.9	15988.6	15662.9	11308.7	8981.2	7124.2	5348.0	4462.8	3880.9
32.5°	18160.1	17990.3	17656.2	17391.7	17043.7	12174.4	9404.4	7152.1	5094.8	4142.6	3569.1
35°	19468.6	19351.7	19070.4	18822.6	18460.8	12993.0	9852.6	7138.2	4794.1	3791.9	3285.1
37.5°	20941.2	20871.7	20732.5	20418.0	19975.3	14103.7	10389.9	7079.8	4426.5	3443.9	3068.0
40°	22511.4	22517.0	22366.7	22152.4	21740.3	15451.2	11030.3	6965.6	4025.6	3137.6	2870.3
42.5°	24173.5	24259.8	24187.5	24034.3	23639.0	16809.9	11795.8	6826.4	3635.9	2839.6	2675.4
45°	26077.8	26183.6	26295.0	26069.5	25685.2	18602.7	12803.6	6645.4	3215.5	2591.9	2541.8
47.5°	28274.3	28441.4	28541.6	28544.4	28160.3	20824.4	14440.7	6536.9	2842.5	2424.9	2477.8
50°	32909.8	32962.7	33199.3	33611.3	33316.2	25966.4	17299.8	6470.0	2589.1	2321.9	2430.5
52.5°	39588.6	40170.5	40579.7	40551.8	40150.9	29232.1	18875.5	6124.8	2438.7	2282.9	2408.2
55°	42308.6	43035.1	43792.4	43992.9	43681.1	32018.9	20365.1	5779.6	2366.4	2310.8	2416.5
57.5°	45933.3	47158.3	48196.7	48633.8	48182.8	35585.2	22325.0	5598.7	2344.1	2385.9	2469.4
60°	50167.8	51682.3	53046.5	53831.5	53831.5	39683.2	24357.2	5523.5	2313.4	2497.2	2558.6
62.5°	52887.8	55112.2	57172.3	58322.1	58288.7	42536.9	25259.3	5267.4	2243.8	2575.2	2681.0
65°	52898.9	55543.7	58169.0	59460.8	59527.6	42186.1	23769.9	4652.0	2115.8	2586.3	2803.5
67.5°	48489.0	51309.2	54368.8	55813.8	56147.8	38834.1	20576.6	3825.2	1907.0	2474.9	2848.1
70°	40952.8	43706.1	46829.7	48249.7	48842.6	33104.6	16573.2	2948.3	1639.8	2230.0	2756.2
72.5°	32263.8	34964.4	37138.7	38177.1	38639.2	25303.8	12068.7	2227.2	1344.7	1879.2	2508.4
75°	22842.8	24869.5	26024.9	26256.0	26328.3	15253.5	7333.1	1656.5	1108.0	1461.6	2118.6
77.5°	12892.7	13761.3	13666.7	13769.7	12912.3	5888.2	3193.2	1186.0	913.2	1110.8	1642.6
80°	5033.5	5189.4	4874.8	4777.4	4382.1	2190.9	1408.7	826.9	729.5	840.7	1149.9
82.5°	2218.8	2291.2	2224.4	2241.1	2143.6	1130.3	843.6	598.5	556.7	615.2	762.8
85°	1222.2	1244.5	1238.9	1275.0	1222.2	451.0	400.9	367.4	389.7	417.6	490.0
87.5°	595.8	601.4	581.8	612.5	592.9	228.3	197.6	208.8	228.3	233.9	233.9
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: P193167

CATALOG NUMBER: GAN-AF-09-LED-U-T2R-7030-1200-ADJ

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	4780.1	4780.1	4780.1	4780.1	4780.1	4780.1
2.5°	4515.6	4493.4	4496.1	4490.5	4479.5	4479.5
5°	4476.7	4454.4	4454.4	4448.8	4435.0	4437.7
7.5°	4515.6	4479.5	4465.5	4446.1	4426.5	4426.5
10°	4560.2	4496.1	4457.2	4423.8	4398.8	4398.8
12.5°	4593.6	4493.4	4429.4	4384.8	4359.8	4359.8
15°	4604.7	4473.9	4384.8	4331.9	4309.6	4306.9
17.5°	4568.5	4398.8	4290.2	4228.9	4201.0	4192.8
20°	4457.2	4262.3	4131.4	4061.8	4022.9	4008.9
22.5°	4290.2	4067.4	3914.3	3841.9	3791.9	3783.4
25°	4056.2	3816.9	3666.5	3597.0	3569.1	3560.8
27.5°	3783.4	3560.8	3432.7	3388.1	3363.1	3360.3
30°	3524.6	3335.2	3240.6	3207.2	3176.6	3171.0
32.5°	3282.3	3162.6	3126.5	3079.2	3006.7	2998.4
35°	3109.7	3098.6	3073.6	2967.7	2878.7	2853.7
37.5°	3004.0	3107.0	2978.9	2770.0	2706.1	2700.5
40°	2942.7	3020.7	2800.8	2728.3	2733.8	2728.3
42.5°	2803.5	2884.2	2806.4	2772.9	2795.2	2800.8
45°	2664.3	2753.4	2848.1	2825.8	2878.7	2878.7
47.5°	2586.3	2720.0	2845.2	2845.2	2923.2	2951.1
50°	2497.2	2692.1	2800.8	2839.6	2901.0	2878.7
52.5°	2491.6	2644.8	2736.7	2806.4	2834.0	2809.0
55°	2500.1	2605.9	2672.7	2750.6	2784.0	2786.7
57.5°	2511.3	2583.6	2628.1	2664.3	2764.5	2764.5
60°	2538.9	2564.1	2589.1	2608.6	2739.4	2742.3
62.5°	2583.6	2544.5	2538.9	2558.6	2725.6	2714.4
65°	2653.2	2516.8	2474.9	2494.5	2711.6	2678.2
67.5°	2747.8	2474.9	2394.2	2408.2	2700.5	2628.1
70°	2834.0	2408.2	2294.0	2280.1	2594.7	2466.6
72.5°	2842.5	2330.2	2154.8	2113.1	2255.0	2132.5
75°	2703.3	2277.3	2001.7	1879.2	1862.6	1845.8
77.5°	2436.1	2246.7	1823.5	1631.5	1598.0	1609.2
80°	2037.9	2132.5	1609.2	1380.8	1561.9	1542.3
82.5°	1522.8	1882.0	1367.0	1222.2	1219.5	1077.4
85°	846.3	1467.2	1113.6	915.9	637.5	618.1
87.5°	236.6	815.7	779.6	517.8	353.6	367.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)