

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: P191413

Luminaire Tested: **GAN-AF-05-LED-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191413
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-05-LED-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31705.3 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

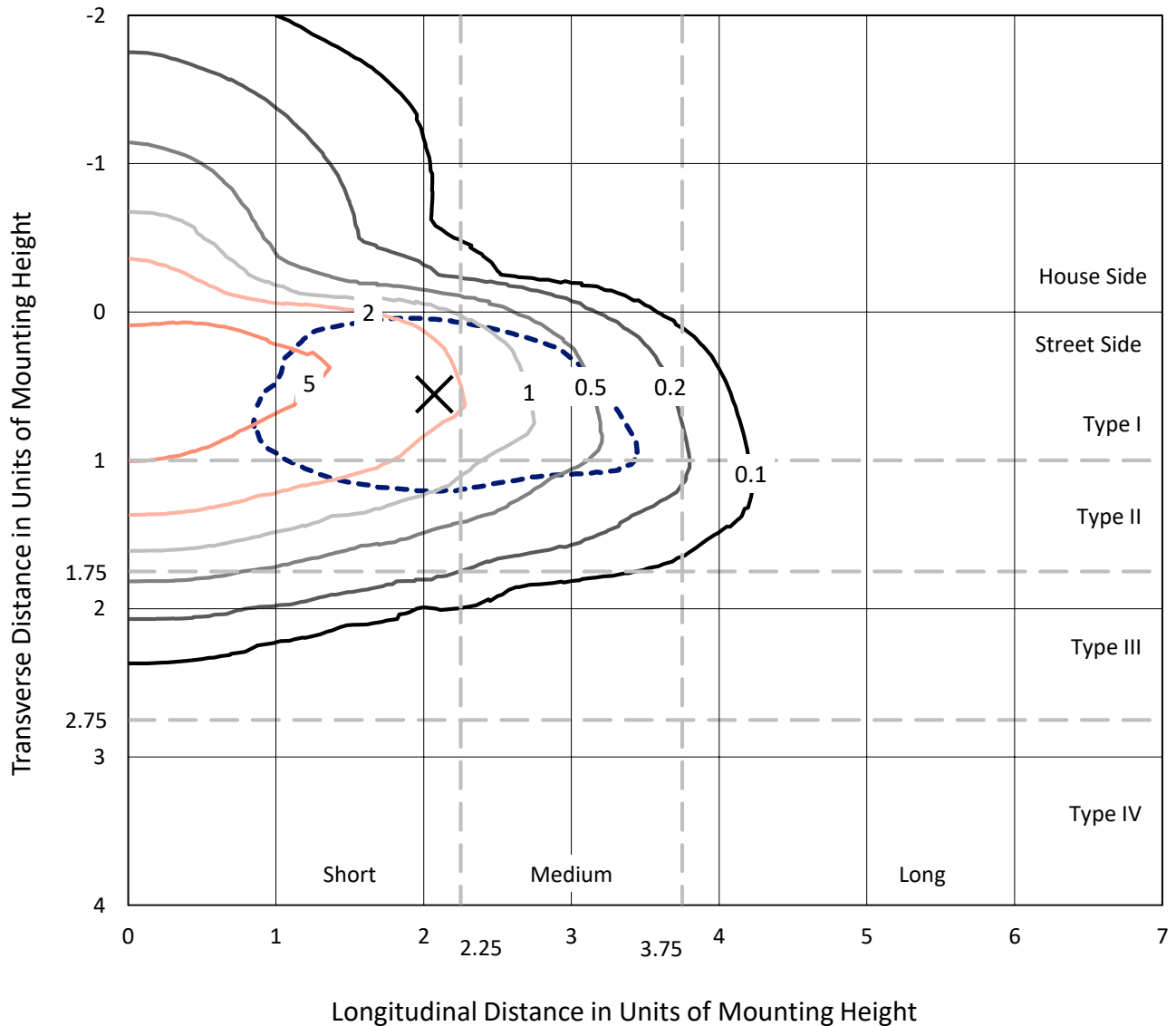
Input Watts (W): 279
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P191413
 CATALOG NUMBER: GAN-AF-05-LED-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

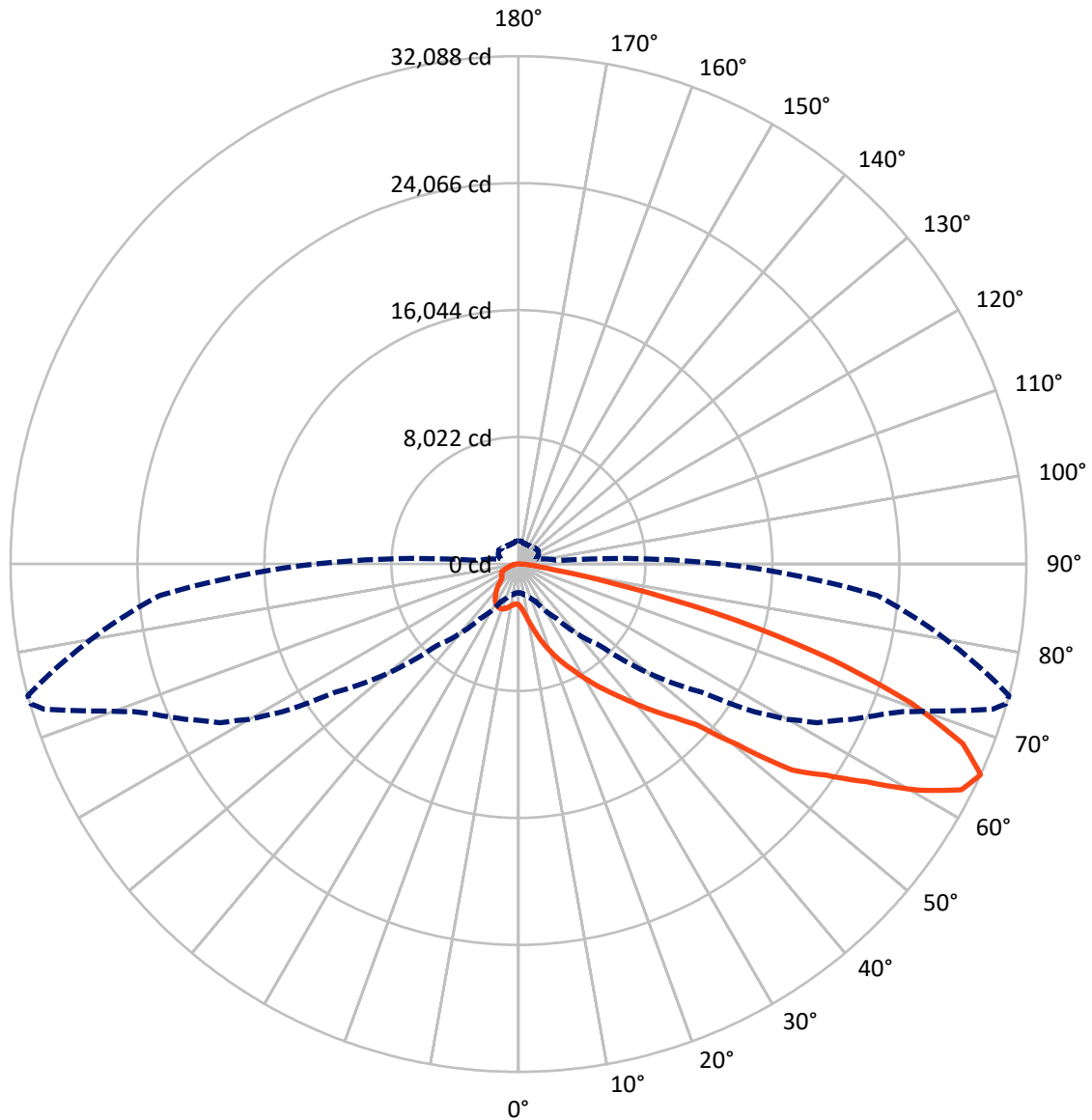
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P191413
CATALOG NUMBER: GAN-AF-05-LED-U-T2R

Luminous Intensity Polar Plot



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



REPORT NUMBER: P191413

CATALOG NUMBER: GAN-AF-05-LED-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4888.2	0.0	4888.2
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	26817.1	0.0	26817.1
	% Fixture	84.6	0.0	84.6
Total	Lumens	31705.3	0.0	31705.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.5	1.0
10°-20°	1244.4	3.9
20°-30°	2553.1	8.1
30°-40°	4295.4	13.5
40°-50°	5935.1	18.7
50°-60°	7408.8	23.4
60°-70°	6667.1	21.0
70°-80°	2794.8	8.8
80°-90°	488.3	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°	31705.3	100.0
0°-180°	31705.3	100.0



REPORT NUMBER: P191413

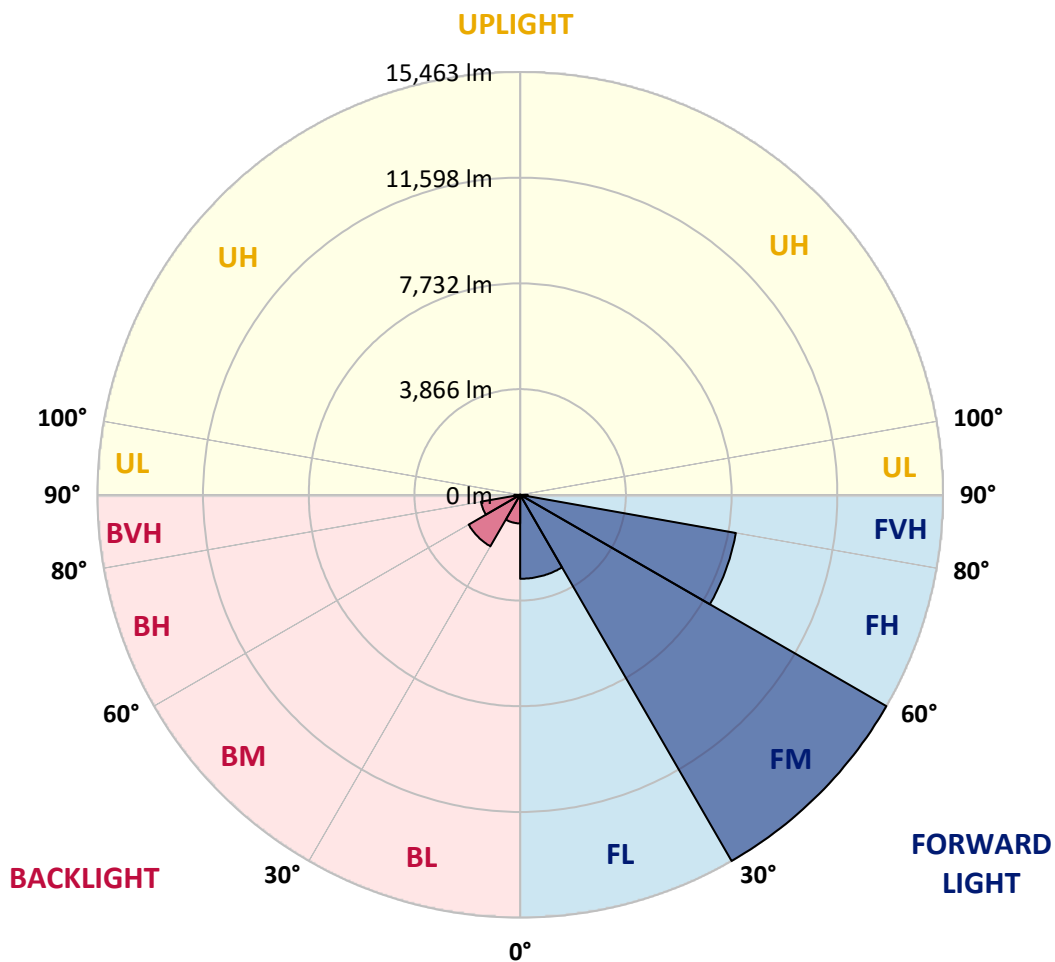
CATALOG NUMBER: GAN-AF-05-LED-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3070.6	9.7			
FM	(30°-60°)	15463.5	48.8			
FH	(60°-80°)	8008.7	25.3			G4/12000
FVH	(80°-90°)	274.4	0.9			G3/500
BL	(0°-30°)	1045.4	3.3	B3/2500		
BM	(30°-60°)	2175.8	6.9	B2/2500		
BH	(60°-80°)	1453.2	4.6	B3/2500		G3/2500
BVH	(80°-90°)	213.8	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





REPORT NUMBER: P191413

CATALOG NUMBER: GAN-AF-05-LED-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	3271.5	3235.5	3244.5	3184.4	3110.9	3014.8	2908.4	2906.8	2908.4	2897.8	2858.8
5°	4536.6	4493.0	4476.5	4341.5	4143.4	3861.2	3555.1	3522.1	3508.6	3474.0	3394.6
7.5°	5459.5	5435.4	5410.0	5307.9	5127.8	4812.7	4401.5	4331.0	4263.5	4246.9	4156.9
10°	6055.3	6049.2	5995.2	5968.2	5855.7	5582.5	5181.9	5114.3	5040.8	5015.2	4920.7
12.5°	6526.4	6525.0	6499.4	6507.0	6409.4	6211.4	5866.1	5804.6	5750.6	5672.6	5605.1
15°	6852.1	6853.6	6891.1	6933.2	6918.1	6784.6	6460.4	6433.4	6386.9	6332.9	6253.3
17.5°	7119.2	7126.7	7165.8	7242.3	7324.8	7314.3	7057.6	7035.1	6994.6	6921.1	6879.1
20°	7722.5	7751.0	7676.0	7676.0	7685.0	7725.5	7602.5	7584.5	7527.4	7488.4	7455.4
22.5°	8741.4	8774.5	8604.9	8432.3	8262.8	8139.7	8016.7	8039.2	8000.1	7973.1	7953.6
25°	10065.0	10090.6	9815.9	9524.8	9179.7	8729.5	8424.8	8411.3	8390.3	8373.8	8364.8
27.5°	11310.7	11321.1	11061.5	10635.3	10234.6	9587.8	8839.0	8822.4	8797.0	8765.5	8738.5
30°	12376.1	12373.1	12106.0	11699.3	11270.1	10554.3	9467.8	9416.8	9341.7	9256.2	9190.2
32.5°	13299.0	13294.5	13001.9	12580.1	12129.9	11511.7	10329.1	10224.1	10107.1	9940.5	9840.0
35°	14025.4	14022.3	13746.2	13306.5	12790.3	12413.6	11316.6	11187.6	11039.0	10815.4	10660.8
37.5°	14299.9	14299.9	14145.4	13845.2	13389.1	13130.9	12413.6	12257.5	12098.4	11844.8	11670.7
40°	14139.4	14142.4	14175.4	14119.9	13897.8	13699.7	13437.1	13344.0	13207.5	12979.4	12797.8
42.5°	13600.6	13617.1	13836.2	14104.9	14215.9	14184.4	14344.9	14303.0	14206.9	14031.3	13887.3
45°	12917.8	12968.9	13209.0	13716.2	14304.4	14603.1	15105.8	15110.3	15092.3	14997.8	14886.7
47.5°	11979.9	12052.0	12368.6	13054.4	14097.4	15009.8	15878.7	15919.2	15956.7	15895.2	15844.2
50°	10734.3	10819.9	11294.1	12203.5	13675.7	15431.5	17338.8	17521.9	17693.0	17672.0	17706.5
52.5°	9400.2	9500.8	10081.6	11094.5	12950.9	15529.0	18272.3	18570.9	18869.6	19114.1	19373.8
55°	8196.7	8142.7	8723.4	9790.5	11759.3	15089.3	19111.2	19471.3	19804.4	20104.6	20413.7
57.5°	6565.5	6654.0	7236.3	8291.2	10182.1	13848.3	19688.9	20215.7	20694.4	21191.0	21629.3
60°	4799.2	4887.8	5519.5	6591.0	8469.8	11966.4	19247.7	20046.1	20813.0	21573.7	22168.1
62.5°	2897.8	2963.8	3520.6	4541.1	6530.9	9734.9	17281.8	18329.3	19457.8	20367.3	21278.1
65°	1803.8	1841.3	2046.9	2608.2	4194.4	7267.8	14119.9	15261.9	16477.5	17631.5	18578.4
67.5°	1476.6	1490.1	1527.7	1647.8	2303.6	4739.1	10509.3	11520.7	12617.7	13734.2	14787.7
70°	1328.1	1319.1	1319.1	1326.6	1476.6	2548.2	6880.6	7539.5	8453.4	9424.2	10387.7
72.5°	1199.0	1190.0	1173.5	1151.0	1205.0	1554.7	3556.6	4053.3	4712.1	5575.0	6498.0
75°	1077.5	1065.5	1046.0	1017.4	1055.0	1173.5	1707.8	1916.4	2237.5	2696.7	3211.5
77.5°	951.4	936.4	918.4	897.4	945.4	912.4	1001.0	1075.9	1199.0	1346.1	1539.7
80°	808.8	795.3	789.3	778.9	835.9	694.8	706.9	753.3	825.4	904.9	994.9
82.5°	633.3	633.3	657.3	661.8	724.9	499.7	528.3	568.8	606.3	648.2	690.3
85°	417.2	420.2	501.2	532.8	571.7	336.1	396.2	409.7	439.7	463.7	481.7
87.5°	130.5	141.1	306.2	339.1	328.7	190.6	243.2	249.1	270.2	286.6	301.7
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: P191413

CATALOG NUMBER: GAN-AF-05-LED-U-T2R

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2858.8	2840.7	2824.3	2822.7	2810.8	2794.3	2800.2	2774.8	2776.3	2762.8	2747.7
5°	3361.5	3349.6	3289.5	3272.9	3227.9	3199.5	3195.0	3134.9	3127.4	3092.9	3055.3
7.5°	4084.8	4045.9	3961.8	3921.3	3844.8	3787.7	3760.7	3681.2	3642.1	3552.1	3511.6
10°	4842.6	4793.1	4689.6	4632.6	4559.1	4467.5	4418.0	4302.4	4257.4	4174.9	4075.8
12.5°	5545.0	5495.5	5388.9	5345.4	5247.8	5150.4	5096.3	4965.7	4907.2	4775.1	4697.1
15°	6194.8	6145.3	6052.2	6007.2	5909.7	5830.1	5758.1	5629.1	5560.0	5437.0	5334.9
17.5°	6825.1	6772.5	6691.5	6651.0	6556.5	6475.4	6397.4	6275.8	6205.3	6082.3	5990.7
20°	7410.4	7371.4	7312.8	7258.8	7164.2	7090.7	6997.7	6892.6	6790.6	6700.5	6613.5
22.5°	7920.6	7905.6	7842.6	7818.5	7737.5	7674.5	7593.5	7489.8	7416.4	7302.3	7221.2
25°	8360.3	8355.8	8325.8	8318.2	8261.2	8201.2	8183.2	8097.7	8030.2	7929.6	7845.5
27.5°	8738.5	8743.0	8735.5	8756.5	8741.4	8714.4	8716.0	8687.4	8648.4	8564.3	8490.8
30°	9158.7	9134.6	9148.1	9178.1	9187.1	9190.2	9239.7	9256.2	9253.2	9197.7	9161.6
32.5°	9752.9	9695.8	9643.4	9638.9	9668.8	9680.9	9764.9	9808.5	9845.9	9859.5	9865.4
35°	10510.7	10396.7	10287.2	10228.6	10177.6	10191.1	10251.1	10321.7	10404.2	10461.2	10528.7
37.5°	11465.2	11325.6	11132.1	10994.0	10959.5	10884.4	10923.5	10978.9	11060.0	11148.5	11265.6
40°	12622.2	12410.6	12193.1	12010.0	11910.9	11772.8	11771.3	11760.9	11810.4	11892.9	12057.9
42.5°	13735.7	13548.2	13317.0	13125.0	12995.9	12811.3	12773.8	12676.2	12698.7	12770.8	12931.3
45°	14778.7	14624.1	14483.0	14261.0	14151.4	13951.8	13888.8	13773.2	13708.7	13741.7	13902.3
47.5°	15788.6	15689.6	15542.5	15398.5	15314.4	15135.9	15054.8	14972.3	14889.8	14886.7	15054.8
50°	17757.5	17705.0	17530.9	17380.9	17421.4	17202.2	17215.8	16993.7	17094.2	17106.2	17458.9
52.5°	19607.8	19790.9	19920.0	20077.6	20179.6	20199.1	20266.7	20367.3	20488.8	20728.9	21056.0
55°	20667.4	20896.9	21030.5	21150.5	21348.7	21390.7	21503.2	21636.7	21743.3	22013.5	22291.1
57.5°	21926.4	22352.6	22559.7	22750.3	23017.4	23119.4	23307.0	23452.6	23590.7	23910.4	24246.5
60°	22702.2	23221.5	23643.2	23944.8	24279.4	24519.6	24803.2	25031.3	25355.5	25738.2	26239.4
62.5°	22085.5	22847.8	23407.6	23925.3	24380.0	24839.2	25245.9	25672.1	26164.3	26743.6	27521.0
65°	19628.9	20404.7	21363.6	21900.9	22502.7	23211.0	23829.2	24519.6	25190.4	26033.8	27183.3
67.5°	15802.1	16704.1	17781.5	18323.3	19015.1	19806.0	20499.3	21342.6	22126.0	23147.9	24569.1
70°	11390.1	12556.2	13462.5	14028.3	14835.8	15650.5	16319.9	17301.4	17949.6	18997.1	20466.3
72.5°	7212.2	8132.2	9242.7	9955.5	10672.9	11498.2	12182.5	13028.9	13633.7	14588.1	15919.2
75°	3877.8	4556.0	5531.5	6208.3	6976.6	7682.0	8483.3	9050.6	9497.8	10252.6	11333.2
77.5°	1817.3	2230.0	2723.7	3244.5	3765.2	4308.5	4836.7	5295.9	5488.0	5920.2	6557.9
80°	1103.0	1236.5	1380.6	1541.2	1758.8	1934.4	2167.0	2335.1	2347.1	2483.6	2678.7
82.5°	736.8	786.3	829.9	870.4	925.9	969.5	1019.0	1077.5	1101.5	1133.0	1196.0
85°	502.7	526.7	535.7	561.3	555.3	570.3	589.7	609.3	619.8	618.3	646.8
87.5°	309.1	321.1	327.1	333.2	328.7	322.6	331.6	342.2	345.1	336.1	339.1
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: P191413

CATALOG NUMBER: GAN-AF-05-LED-U-T2R

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2750.7	2737.2	2723.7	2714.7	2711.7	2632.2	2597.7	2575.2	2527.1	2488.1	2456.6
5°	3034.4	3005.8	2983.3	2956.3	2941.3	2740.3	2666.7	2615.7	2531.6	2482.1	2437.1
7.5°	3490.6	3411.0	3364.5	3312.0	3267.0	2903.9	2782.2	2702.7	2585.7	2519.6	2468.6
10°	4008.3	3925.8	3852.2	3771.2	3700.6	3121.4	2944.4	2821.3	2666.7	2581.2	2513.6
12.5°	4586.1	4505.1	4412.0	4308.5	4218.4	3397.5	3151.4	2975.9	2764.2	2650.2	2555.6
15°	5268.9	5126.3	5013.8	4893.7	4788.6	3727.7	3393.0	3150.0	2867.8	2713.3	2587.1
17.5°	5903.7	5753.6	5600.6	5495.5	5374.0	4098.4	3636.2	3327.0	2953.4	2753.8	2593.2
20°	6523.5	6359.9	6227.8	6086.8	5959.2	4482.6	3895.8	3483.0	3008.9	2755.2	2555.6
22.5°	7069.7	6967.6	6820.6	6667.5	6538.5	4866.7	4138.9	3615.1	3029.9	2720.7	2489.7
25°	7691.0	7582.9	7402.9	7273.8	7129.8	5258.4	4377.5	3717.2	3017.9	2656.2	2387.6
27.5°	8354.2	8234.2	8049.6	7914.6	7740.5	5665.1	4596.6	3790.7	2972.8	2551.1	2251.0
30°	9046.1	8936.5	8754.9	8618.4	8442.8	6095.8	4841.2	3840.3	2882.8	2405.6	2091.9
32.5°	9788.9	9697.4	9517.3	9374.7	9187.1	6562.4	5069.3	3855.2	2746.2	2233.0	1923.9
35°	10494.2	10431.2	10279.6	10146.1	9951.0	7003.6	5310.9	3847.7	2584.2	2044.0	1770.8
37.5°	11288.1	11250.6	11175.5	11005.9	10767.4	7602.5	5600.6	3816.2	2386.0	1856.3	1653.7
40°	12134.4	12137.5	12056.5	11940.9	11718.8	8328.8	5945.7	3754.7	2170.0	1691.2	1547.2
42.5°	13030.3	13076.9	13037.9	12955.4	12742.3	9061.1	6358.4	3679.7	1959.9	1530.6	1442.2
45°	14056.9	14113.9	14173.9	14052.4	13845.2	10027.6	6901.6	3582.2	1733.3	1397.1	1370.1
47.5°	15240.8	15331.0	15385.0	15386.4	15179.4	11225.0	7784.0	3523.6	1532.2	1307.1	1335.6
50°	17739.5	17768.0	17895.6	18117.7	17958.6	13996.8	9325.2	3487.5	1395.6	1251.6	1310.1
52.5°	21339.7	21653.3	21873.9	21858.9	21642.8	15757.1	10174.6	3301.5	1314.6	1230.5	1298.1
55°	22805.8	23197.5	23605.7	23713.7	23545.7	17259.3	10977.5	3115.4	1275.6	1245.5	1302.6
57.5°	24759.7	25420.0	25979.8	26215.4	25972.2	19181.7	12033.9	3017.9	1263.5	1286.1	1331.1
60°	27042.2	27858.6	28593.9	29017.1	29017.1	21390.7	13129.5	2977.3	1247.1	1346.1	1379.1
62.5°	28508.4	29707.4	30817.9	31437.7	31419.7	22928.8	13615.7	2839.3	1209.5	1388.1	1445.1
65°	28514.3	29940.0	31355.2	32051.5	32087.5	22739.8	12812.8	2507.7	1140.5	1394.2	1511.2
67.5°	26137.3	27657.5	29306.7	30085.6	30265.6	20932.9	11091.5	2062.0	1028.0	1334.1	1535.2
70°	22075.0	23559.2	25242.9	26008.2	26327.9	17844.6	8933.5	1589.3	883.9	1202.1	1485.6
72.5°	17391.4	18847.1	20019.0	20578.8	20827.9	13639.6	6505.5	1200.5	724.9	1012.9	1352.1
75°	12313.1	13405.6	14028.3	14152.9	14191.9	8222.2	3952.8	892.9	597.3	787.9	1142.0
77.5°	6949.6	7417.8	7366.8	7422.3	6960.2	3173.9	1721.3	639.2	492.2	598.7	885.4
80°	2713.3	2797.3	2627.7	2575.2	2362.1	1181.0	759.3	445.7	393.2	453.2	619.8
82.5°	1196.0	1235.0	1199.0	1208.0	1155.5	609.3	454.7	322.6	300.1	331.6	411.2
85°	658.8	670.9	667.8	687.3	658.8	243.2	216.0	198.0	210.1	225.2	264.1
87.5°	321.1	324.2	313.6	330.1	319.7	123.1	106.6	112.5	123.1	126.0	126.0
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: P191413

CATALOG NUMBER: GAN-AF-05-LED-U-T2R

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	2576.7	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2434.1	2422.1	2423.6	2420.6	2414.6	2414.6
5°	2413.1	2401.1	2401.1	2398.1	2390.5	2392.1
7.5°	2434.1	2414.6	2407.1	2396.6	2386.0	2386.0
10°	2458.2	2423.6	2402.6	2384.6	2371.1	2371.1
12.5°	2476.2	2422.1	2387.6	2363.5	2350.0	2350.0
15°	2482.1	2411.6	2363.5	2335.1	2323.0	2321.6
17.5°	2462.7	2371.1	2312.6	2279.5	2264.5	2260.0
20°	2402.6	2297.5	2227.0	2189.5	2168.5	2161.0
22.5°	2312.6	2192.5	2109.9	2071.0	2044.0	2039.5
25°	2186.5	2057.5	1976.4	1938.9	1923.9	1919.4
27.5°	2039.5	1919.4	1850.3	1826.4	1812.8	1811.3
30°	1899.8	1797.8	1746.8	1728.8	1712.3	1709.2
32.5°	1769.3	1704.7	1685.3	1659.7	1620.8	1616.3
35°	1676.2	1670.3	1656.8	1599.7	1551.7	1538.2
37.5°	1619.2	1674.8	1605.7	1493.2	1458.6	1455.7
40°	1586.2	1628.2	1509.7	1470.7	1473.7	1470.7
42.5°	1511.2	1554.7	1512.6	1494.6	1506.7	1509.7
45°	1436.1	1484.2	1535.2	1523.2	1551.7	1551.7
47.5°	1394.2	1466.2	1533.7	1533.7	1575.8	1590.7
50°	1346.1	1451.2	1509.7	1530.6	1563.7	1551.7
52.5°	1343.1	1425.7	1475.2	1512.6	1527.7	1514.2
55°	1347.6	1404.6	1440.6	1482.7	1500.7	1502.2
57.5°	1353.6	1392.6	1416.7	1436.1	1490.1	1490.1
60°	1368.6	1382.1	1395.6	1406.1	1476.6	1478.2
62.5°	1392.6	1371.6	1368.6	1379.1	1469.2	1463.1
65°	1430.2	1356.6	1334.1	1344.6	1461.7	1443.7
67.5°	1481.1	1334.1	1290.6	1298.1	1455.7	1416.7
70°	1527.7	1298.1	1236.5	1229.1	1398.7	1329.6
72.5°	1532.2	1256.1	1161.6	1139.1	1215.6	1149.5
75°	1457.2	1227.5	1079.0	1012.9	1003.9	994.9
77.5°	1313.1	1211.1	983.0	879.4	861.4	867.4
80°	1098.5	1149.5	867.4	744.3	841.9	831.4
82.5°	820.9	1014.5	736.8	658.8	657.3	580.7
85°	456.2	790.8	600.3	493.7	343.6	333.2
87.5°	127.6	439.7	420.2	279.2	190.6	198.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)