

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: P301699

Luminaire Tested: **GAA-AF-04-LED-U-T2R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194759)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-04-LED-U-T2R-7030-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15883 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

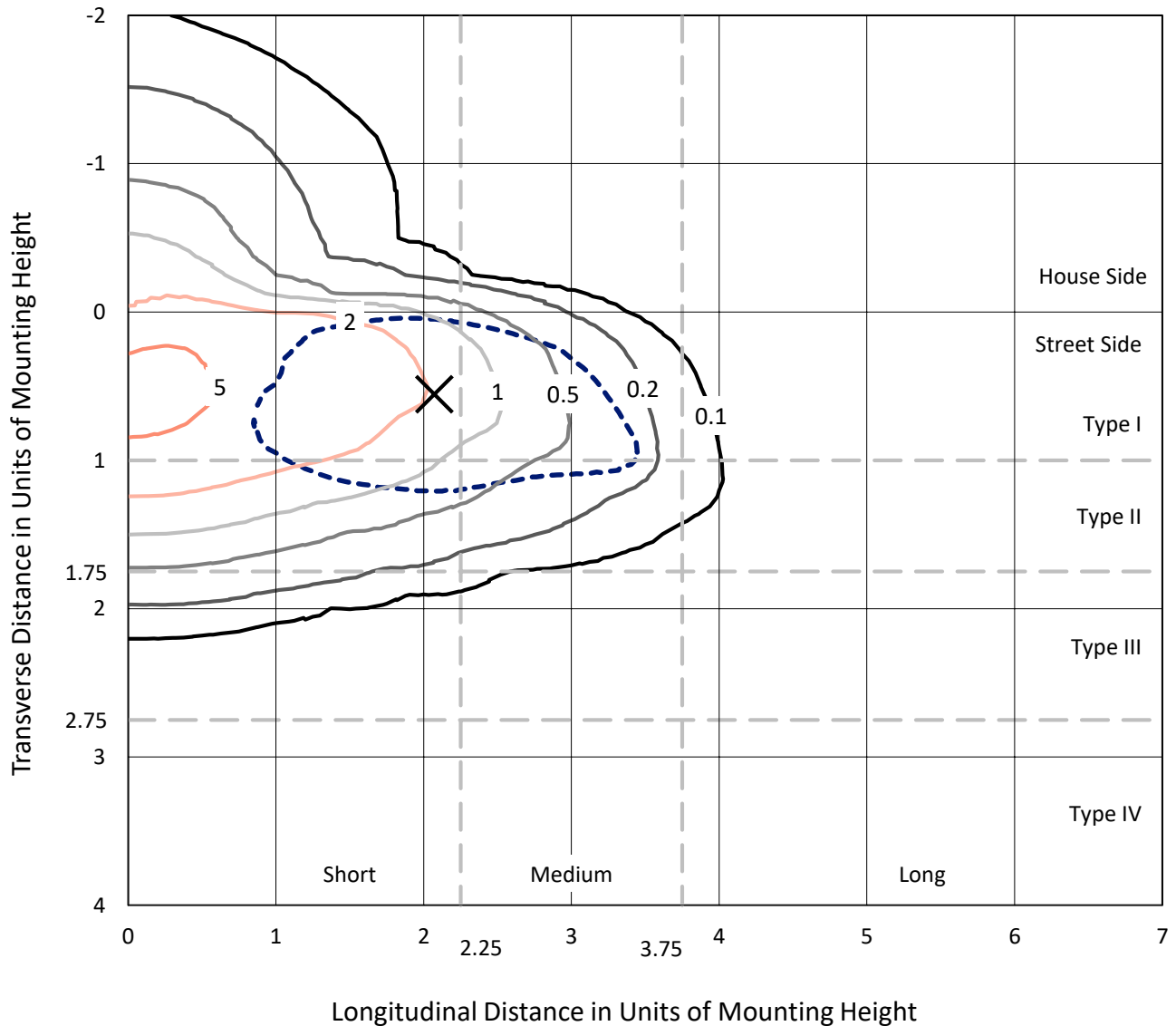
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P301699
 CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

Iso-Footcandle Lines of Horizontal Illumination

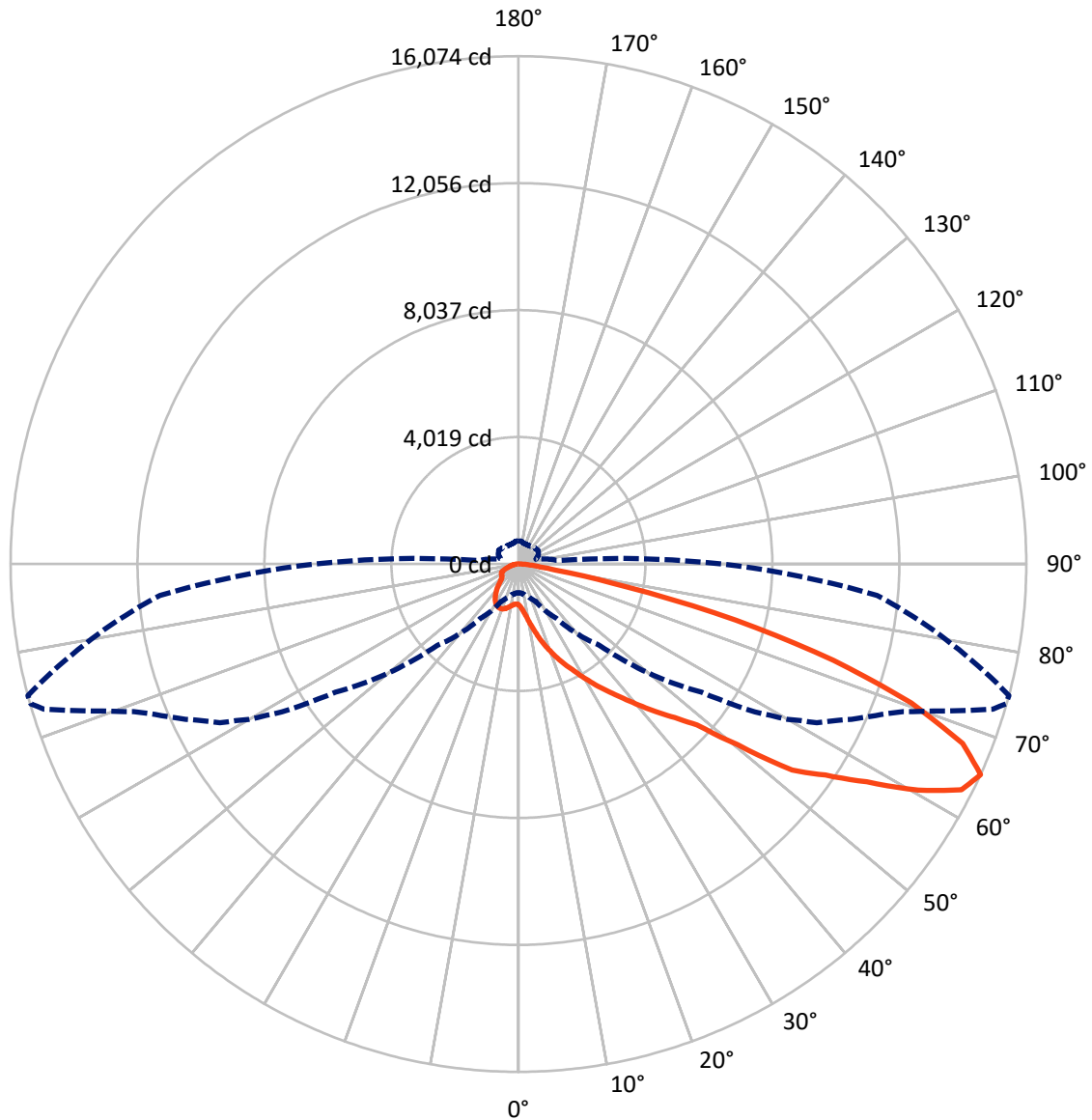
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P301699
CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P301699

CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2448.8	0.0	2448.8
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	13434.2	0.0	13434.2
	% Fixture	84.6	0.0	84.6
Total	Lumens	15883.0	0.0	15883.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	1.0
10°-20°	623.4	3.9
20°-30°	1279.0	8.1
30°-40°	2151.8	13.5
40°-50°	2973.2	18.7
50°-60°	3711.5	23.4
60°-70°	3339.9	21.0
70°-80°	1400.1	8.8
80°-90°	244.6	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°	15883.0	100.0
0°-180°	15883.0	100.0

Coefficient of Utilization



REPORT NUMBER: P301699

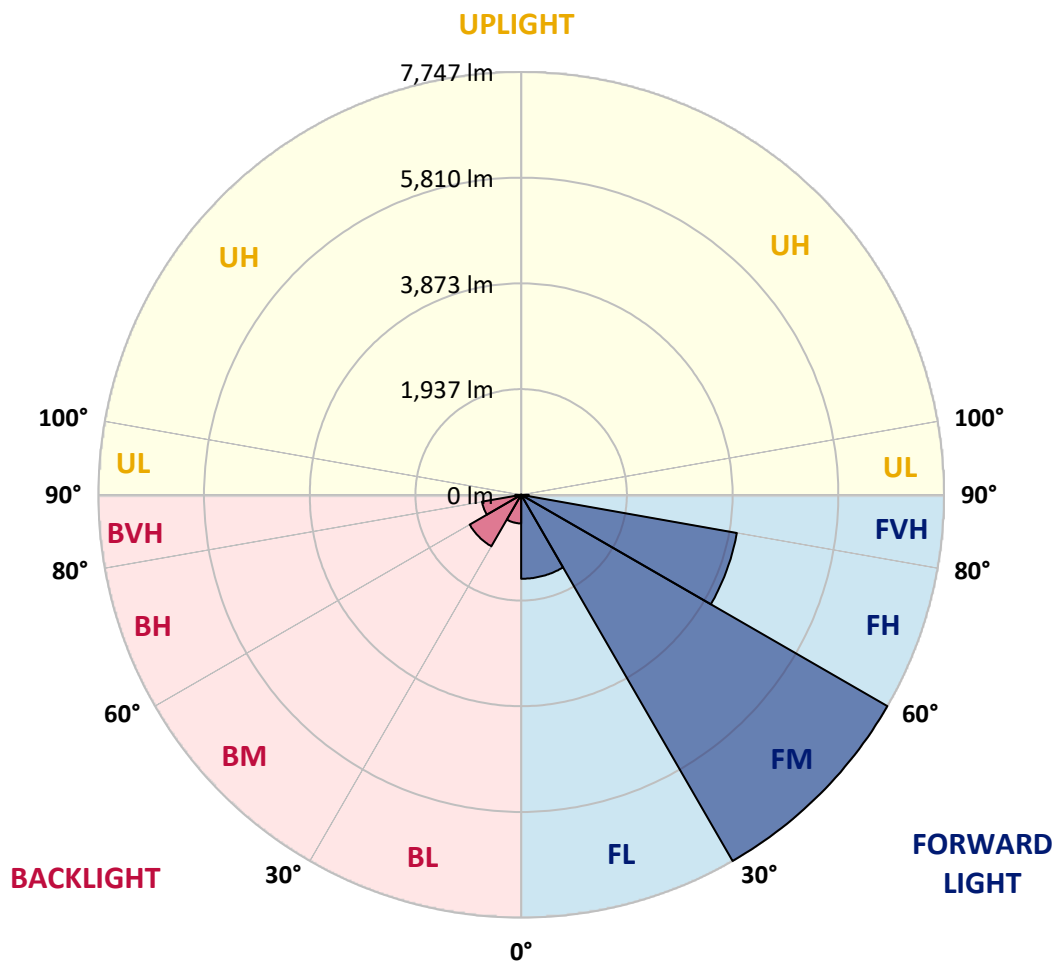
CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1538.2	9.7			
FM (30°-60°)	7746.5	48.8			
FH (60°-80°)	4012.0	25.3			G2/5000
FVH (80°-90°)	137.5	0.9			G2/225
BL (0°-30°)	523.7	3.3	B2/1000		
BM (30°-60°)	1090.0	6.9	B2/2500		
BH (60°-80°)	728.0	4.6	B2/1000		G2/1000
BVH (80°-90°)	107.1	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P301699

CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8
2.5°	1638.9	1620.9	1625.3	1595.2	1558.4	1510.2	1456.9	1456.3	1456.9	1451.6	1432.2
5°	2272.5	2250.9	2242.6	2174.8	2075.6	1934.4	1781.0	1764.5	1757.6	1740.4	1700.5
7.5°	2735.0	2723.0	2710.1	2659.0	2568.9	2411.0	2204.9	2169.7	2135.8	2127.5	2082.5
10°	3033.4	3030.3	3003.3	2989.7	2933.5	2796.6	2595.9	2562.0	2525.2	2512.5	2465.0
12.5°	3269.4	3268.7	3256.0	3259.8	3210.7	3111.7	2938.6	2907.9	2880.9	2841.6	2808.0
15°	3432.6	3433.3	3452.2	3473.2	3465.6	3398.7	3236.4	3222.8	3199.6	3172.6	3132.7
17.5°	3566.4	3570.2	3589.6	3628.0	3669.5	3664.1	3535.6	3524.3	3504.0	3467.2	3446.2
20°	3868.6	3882.9	3845.4	3845.4	3849.9	3870.2	3808.4	3799.5	3770.9	3751.3	3734.8
22.5°	4379.1	4395.6	4310.6	4224.3	4139.3	4077.6	4016.0	4027.2	4007.8	3994.2	3984.3
25°	5042.1	5055.0	4917.4	4771.6	4598.5	4373.1	4220.5	4213.6	4203.1	4194.9	4190.4
27.5°	5666.1	5671.4	5541.4	5327.8	5127.1	4803.0	4427.9	4419.7	4407.0	4391.1	4377.5
30°	6200.0	6198.4	6064.6	5860.8	5645.8	5287.2	4743.0	4717.4	4679.7	4636.9	4603.9
32.5°	6662.3	6660.1	6513.3	6302.1	6076.7	5766.9	5174.6	5121.9	5063.3	4979.7	4929.5
35°	7026.0	7024.7	6886.2	6666.1	6407.4	6218.7	5669.2	5604.5	5530.0	5418.1	5340.7
37.5°	7163.6	7163.6	7086.2	6935.9	6707.3	6578.0	6218.7	6140.4	6060.8	5933.7	5846.5
40°	7083.1	7084.7	7101.2	7073.5	6962.2	6863.0	6731.4	6684.8	6616.3	6502.2	6411.2
42.5°	6813.3	6821.5	6931.5	7065.9	7121.5	7105.9	7186.1	7165.2	7117.0	7029.1	6956.9
45°	6471.2	6496.8	6617.0	6871.2	7165.8	7315.5	7567.3	7569.5	7560.6	7513.3	7457.5
47.5°	6001.5	6037.4	6196.2	6539.6	7062.1	7519.3	7954.4	7974.7	7993.7	7962.9	7937.2
50°	5377.5	5420.3	5657.8	6113.5	6851.0	7730.5	8685.9	8777.8	8863.4	8852.9	8870.1
52.5°	4709.1	4759.5	5050.3	5557.9	6487.9	7779.4	9153.6	9303.2	9452.8	9575.3	9705.3
55°	4106.1	4079.1	4370.2	4904.5	5890.9	7559.0	9573.9	9754.4	9921.2	10071.5	10226.5
57.5°	3289.0	3333.4	3625.1	4153.6	5100.7	6937.3	9863.2	10127.2	10367.0	10615.9	10835.3
60°	2404.1	2448.5	2764.9	3301.7	4243.0	5994.6	9642.2	10042.3	10426.3	10807.4	11105.1
62.5°	1451.6	1484.8	1763.6	2275.0	3271.8	4876.8	8657.4	9182.1	9747.4	10203.1	10659.3
65°	903.6	922.4	1025.4	1306.6	2101.2	3640.9	7073.5	7645.5	8254.4	8832.6	9307.0
67.5°	739.7	746.4	765.4	825.4	1153.9	2374.2	5264.7	5771.3	6320.9	6880.2	7408.0
70°	665.2	660.8	660.8	664.6	739.7	1276.5	3446.9	3776.9	4234.8	4721.2	5203.8
72.5°	600.6	596.1	587.9	576.7	603.7	778.8	1781.6	2030.5	2360.6	2792.8	3255.1
75°	539.7	533.7	524.1	509.8	528.5	587.9	855.5	960.1	1120.9	1351.0	1608.8
77.5°	476.6	469.0	460.1	449.6	473.7	457.2	501.3	539.0	600.6	674.4	771.4
80°	405.2	398.5	395.4	390.3	418.8	348.1	354.1	377.3	413.5	453.4	498.4
82.5°	317.3	317.3	329.2	331.6	363.1	250.4	264.7	285.0	303.7	324.7	345.9
85°	209.0	210.5	251.1	266.9	286.3	168.4	198.5	205.2	220.3	232.4	241.3
87.5°	65.3	70.7	153.4	169.9	164.6	95.4	121.8	124.9	135.4	143.6	151.2
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: P301699

CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8
2.5°	1432.2	1423.0	1414.8	1414.1	1408.1	1399.9	1402.8	1390.0	1390.7	1384.0	1376.4
5°	1684.0	1677.9	1647.8	1639.6	1617.1	1602.8	1600.6	1570.5	1566.7	1549.5	1530.5
7.5°	2046.4	2026.7	1984.6	1964.3	1925.9	1897.4	1884.0	1844.1	1824.5	1779.4	1759.1
10°	2425.9	2401.2	2349.2	2320.7	2283.9	2237.9	2213.2	2155.4	2132.7	2091.4	2041.9
12.5°	2777.8	2753.1	2699.6	2677.7	2628.9	2580.0	2553.1	2487.7	2458.3	2392.0	2353.0
15°	3103.2	3078.5	3031.9	3009.3	2960.5	2920.6	2884.4	2820.0	2785.4	2723.7	2672.6
17.5°	3419.0	3392.7	3352.1	3331.8	3284.5	3243.9	3204.9	3143.8	3108.6	3047.0	3001.1
20°	3712.3	3692.6	3663.4	3636.2	3588.9	3552.1	3505.5	3452.9	3401.8	3356.6	3313.1
22.5°	3967.8	3960.3	3928.8	3916.8	3876.2	3844.5	3803.9	3752.2	3715.2	3658.1	3617.5
25°	4188.2	4186.0	4170.8	4167.0	4138.4	4108.3	4099.4	4056.6	4022.7	3972.3	3930.4
27.5°	4377.5	4379.7	4376.2	4386.7	4379.1	4365.5	4366.4	4352.1	4332.5	4290.3	4253.5
30°	4588.0	4576.0	4582.9	4597.9	4602.3	4603.9	4628.6	4636.9	4635.5	4607.7	4589.6
32.5°	4885.8	4857.2	4830.9	4828.7	4843.6	4849.6	4891.8	4913.6	4932.4	4939.1	4942.2
35°	5265.3	5208.2	5153.4	5124.2	5098.5	5105.2	5135.3	5170.8	5212.0	5240.6	5274.5
37.5°	5743.5	5673.7	5576.7	5507.5	5490.1	5452.7	5472.1	5499.9	5540.5	5584.9	5643.6
40°	6323.1	6217.2	6108.1	6016.4	5966.9	5897.6	5896.9	5891.6	5916.5	5957.8	6040.5
42.5°	6881.1	6786.9	6671.2	6575.1	6510.4	6417.9	6399.1	6350.3	6361.4	6397.6	6478.1
45°	7403.4	7326.0	7255.3	7144.2	7089.1	6989.2	6957.6	6899.8	6867.5	6884.0	6964.5
47.5°	7909.4	7859.9	7786.0	7714.0	7671.9	7582.4	7541.8	7500.4	7459.1	7457.5	7541.8
50°	8895.8	8869.4	8782.2	8707.1	8727.4	8617.7	8624.4	8513.1	8563.5	8569.5	8746.1
52.5°	9822.6	9914.5	9979.2	10057.9	10109.2	10119.0	10152.7	10203.1	10263.9	10384.1	10548.1
55°	10353.4	10468.4	10535.3	10595.6	10694.8	10715.8	10772.2	10839.1	10892.4	11027.8	11166.9
57.5°	10984.3	11197.7	11301.4	11396.8	11530.7	11581.7	11675.8	11748.8	11817.9	11978.0	12146.4
60°	11372.8	11633.0	11844.2	11995.2	12162.9	12283.3	12425.4	12539.6	12701.9	12893.7	13144.8
62.5°	11063.9	11445.7	11726.2	11985.6	12213.3	12443.4	12647.1	12860.7	13107.1	13397.3	13786.9
65°	9833.3	10221.8	10702.2	10971.3	11272.9	11627.7	11937.4	12283.3	12619.2	13041.8	13617.6
67.5°	7916.3	8367.9	8907.8	9179.2	9525.8	9921.8	10269.3	10691.7	11084.2	11596.0	12308.1
70°	5706.0	6290.1	6744.1	7027.6	7432.1	7840.2	8175.6	8667.2	8991.9	9516.6	10252.8
72.5°	3613.0	4073.8	4630.2	4987.2	5346.5	5760.2	6103.0	6526.9	6829.8	7307.9	7974.7
75°	1942.7	2282.3	2770.9	3110.1	3495.1	3848.3	4249.7	4533.9	4758.0	5136.2	5677.5
77.5°	910.3	1117.1	1364.4	1625.3	1886.2	2158.3	2423.0	2653.0	2749.3	2965.8	3285.2
80°	552.6	619.5	691.6	772.1	881.1	969.0	1085.6	1169.7	1175.7	1244.2	1341.9
82.5°	369.1	393.8	415.7	436.0	463.9	485.7	510.5	539.7	551.7	567.6	599.2
85°	251.8	263.8	268.3	281.2	278.1	285.7	295.5	305.3	310.4	309.8	324.0
87.5°	154.8	160.8	163.9	166.8	164.6	161.7	166.1	171.5	172.8	168.4	169.9
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: P301699

CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

CANDELA DISTRIBUTION (continued):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8
2.5°	1378.0	1371.3	1364.4	1359.9	1358.4	1318.7	1301.3	1290.1	1266.0	1246.4	1230.6
5°	1520.1	1505.8	1494.6	1481.0	1473.4	1372.6	1335.8	1310.4	1268.3	1243.5	1220.8
7.5°	1748.6	1708.7	1685.5	1659.2	1636.7	1454.7	1393.8	1353.9	1295.3	1262.3	1236.6
10°	2008.0	1966.7	1929.7	1889.1	1853.9	1563.8	1475.0	1413.2	1335.8	1293.0	1259.1
12.5°	2297.5	2256.9	2210.3	2158.3	2113.3	1702.0	1578.7	1490.8	1384.7	1327.6	1280.3
15°	2639.6	2568.0	2511.6	2451.6	2398.9	1867.5	1699.8	1578.0	1436.6	1359.3	1296.2
17.5°	2957.4	2882.2	2805.7	2753.1	2692.2	2053.1	1821.6	1666.6	1479.5	1379.6	1299.0
20°	3268.0	3186.0	3119.9	3049.3	2985.2	2245.5	1951.6	1744.9	1507.3	1380.2	1280.3
22.5°	3541.7	3490.4	3416.8	3340.1	3275.4	2438.0	2073.4	1811.1	1517.8	1363.1	1247.1
25°	3852.8	3798.8	3708.5	3643.8	3571.8	2634.2	2192.9	1862.2	1511.8	1330.7	1196.0
27.5°	4185.1	4125.1	4032.5	3964.9	3877.7	2837.8	2302.6	1899.0	1489.3	1278.1	1127.6
30°	4531.6	4476.8	4385.8	4317.5	4229.4	3053.7	2425.3	1923.7	1444.2	1205.2	1047.9
32.5°	4903.8	4857.9	4767.8	4696.4	4602.3	3287.4	2539.4	1931.3	1375.8	1118.6	963.9
35°	5257.1	5225.6	5149.6	5082.7	4985.0	3508.4	2660.5	1927.5	1294.6	1023.9	887.1
37.5°	5654.9	5636.0	5598.5	5513.5	5394.0	3808.4	2805.7	1911.7	1195.3	930.0	828.5
40°	6078.9	6080.4	6039.9	5981.9	5870.6	4172.3	2978.6	1880.9	1087.0	847.2	775.0
42.5°	6527.6	6551.0	6531.4	6490.1	6383.3	4539.2	3185.3	1843.4	981.9	766.7	722.6
45°	7041.9	7070.4	7100.5	7039.6	6935.9	5023.4	3457.4	1794.6	868.2	699.8	686.4
47.5°	7635.1	7680.1	7707.1	7708.0	7604.3	5623.3	3899.4	1765.1	767.6	654.8	669.0
50°	8886.6	8901.1	8964.9	9076.2	8996.6	7011.7	4671.4	1747.1	699.1	626.9	656.3
52.5°	10690.1	10847.3	10958.0	10950.4	10842.0	7893.5	5097.0	1653.9	658.6	616.4	650.3
55°	11424.7	11621.0	11825.5	11879.4	11795.4	8646.2	5499.3	1560.6	638.9	624.0	652.5
57.5°	12403.5	12734.3	13014.8	13132.8	13011.0	9609.2	6028.5	1511.8	632.9	644.3	666.8
60°	13546.9	13955.9	14324.3	14536.2	14536.2	10715.8	6577.3	1491.5	624.7	674.4	690.9
62.5°	14281.5	14882.1	15438.5	15748.9	15739.8	11486.3	6820.8	1422.4	605.9	695.4	723.9
65°	14284.4	14998.7	15707.5	16056.5	16074.3	11391.7	6418.8	1256.2	571.4	698.5	757.1
67.5°	13093.8	13855.1	14681.4	15071.7	15161.7	10486.5	5556.4	1033.0	514.9	668.4	769.2
70°	11058.5	11802.1	12645.5	13029.1	13189.2	8939.2	4475.2	796.2	442.9	602.1	744.2
72.5°	8712.2	9441.5	10028.7	10309.0	10433.9	6832.9	3258.9	601.5	363.1	507.4	677.3
75°	6168.3	6715.6	7027.6	7090.0	7109.4	4119.0	1980.1	447.4	299.3	394.7	572.0
77.5°	3481.5	3716.1	3690.4	3718.3	3486.8	1590.1	862.4	320.2	246.7	300.0	443.6
80°	1359.3	1401.4	1316.4	1290.1	1183.3	591.7	380.5	223.2	196.9	227.0	310.4
82.5°	599.2	618.6	600.6	605.3	578.9	305.3	227.7	161.7	150.3	166.1	206.1
85°	330.1	336.1	334.5	344.3	330.1	121.8	108.2	99.2	105.3	112.8	132.2
87.5°	160.8	162.4	157.2	165.5	160.1	61.6	53.3	56.4	61.6	63.1	63.1
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: P301699

CATALOG NUMBER: GAA-AF-04-LED-U-T2R-7030-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	1290.8	1290.8	1290.8	1290.8	1290.8	1290.8
2.5°	1219.4	1213.4	1214.1	1212.5	1209.6	1209.6
5°	1209.0	1202.9	1202.9	1201.4	1197.6	1198.2
7.5°	1219.4	1209.6	1205.8	1200.5	1195.3	1195.3
10°	1231.5	1214.1	1203.6	1194.7	1187.8	1187.8
12.5°	1240.4	1213.4	1196.0	1184.0	1177.3	1177.3
15°	1243.5	1208.1	1184.0	1169.7	1163.7	1163.0
17.5°	1233.7	1187.8	1158.6	1142.0	1134.5	1132.2
20°	1203.6	1151.0	1115.7	1096.8	1086.3	1082.5
22.5°	1158.6	1098.3	1057.1	1037.5	1023.9	1021.6
25°	1095.4	1030.8	990.2	971.2	963.9	961.4
27.5°	1021.6	961.4	926.8	914.8	908.1	907.4
30°	951.8	900.5	875.1	866.0	857.7	856.4
32.5°	886.3	853.9	844.3	831.4	812.0	809.8
35°	839.6	836.7	830.1	801.3	777.4	770.5
37.5°	811.1	839.0	804.4	748.0	730.8	729.3
40°	794.6	815.8	756.2	736.8	738.2	736.8
42.5°	757.1	778.8	757.8	748.9	754.7	756.2
45°	719.4	743.5	769.2	763.1	777.4	777.4
47.5°	698.5	734.4	768.3	768.3	789.5	796.8
50°	674.4	727.0	756.2	766.7	783.4	777.4
52.5°	672.8	714.1	739.1	757.8	765.4	758.5
55°	675.1	703.6	721.7	742.9	751.8	752.4
57.5°	678.2	697.6	709.6	719.4	746.4	746.4
60°	685.5	692.5	699.1	704.5	739.7	740.4
62.5°	697.6	687.1	685.5	690.9	735.9	733.0
65°	716.5	679.5	668.4	673.5	732.2	723.2
67.5°	742.0	668.4	646.5	650.3	729.3	709.6
70°	765.4	650.3	619.5	615.7	700.7	666.1
72.5°	767.6	629.3	581.8	570.7	609.0	575.8
75°	729.9	614.8	540.6	507.4	502.9	498.4
77.5°	657.9	606.6	492.4	440.5	431.5	434.4
80°	550.4	575.8	434.4	372.9	421.7	416.6
82.5°	411.2	508.2	369.1	330.1	329.2	291.0
85°	228.6	396.3	300.6	247.3	172.2	166.8
87.5°	64.0	220.3	210.5	139.8	95.4	99.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)