

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: P14207

Luminaire Tested: **GAR-080-LED-E1-3-SPUN-X-3000**

Issue Date: 6/29/2020

Test Information

Test Method: LM-79-08
Report Number: P14207
Test Lab: INNOVATION CENTER-P1
Issue Date: 6/29/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GAR-080-LED-E1-3-SPUN-X-3000
Description: MCGRAW-EDISON TOP WITH A TYPE III SOLID TOP
PRISMATIC REFRACTOR
Light Source: [6] 3000K LEDS
Ballast/Driver: [2] ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12810 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.08' x H: 2.21')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U5 - G5

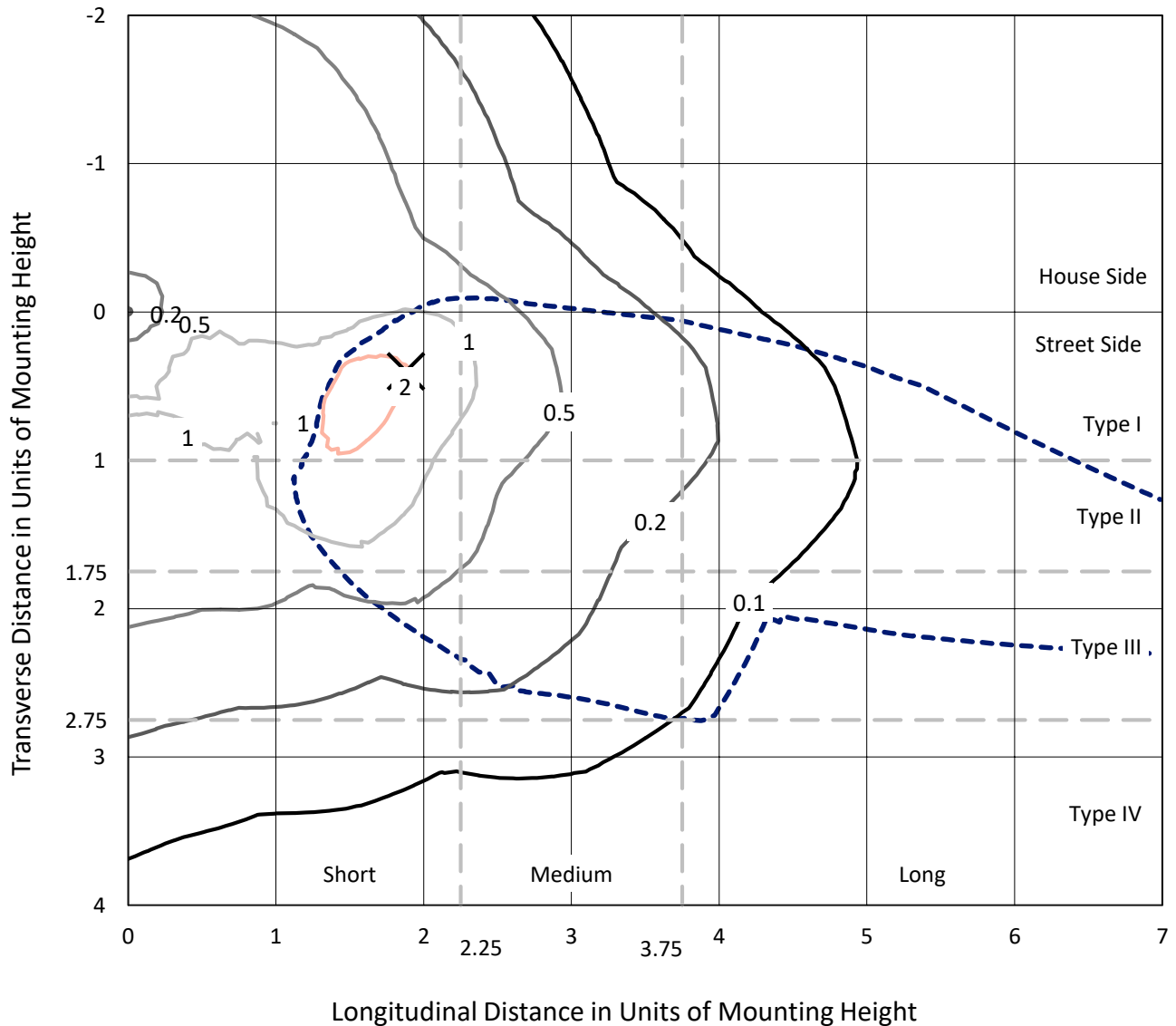
Input Watts (W): 101.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

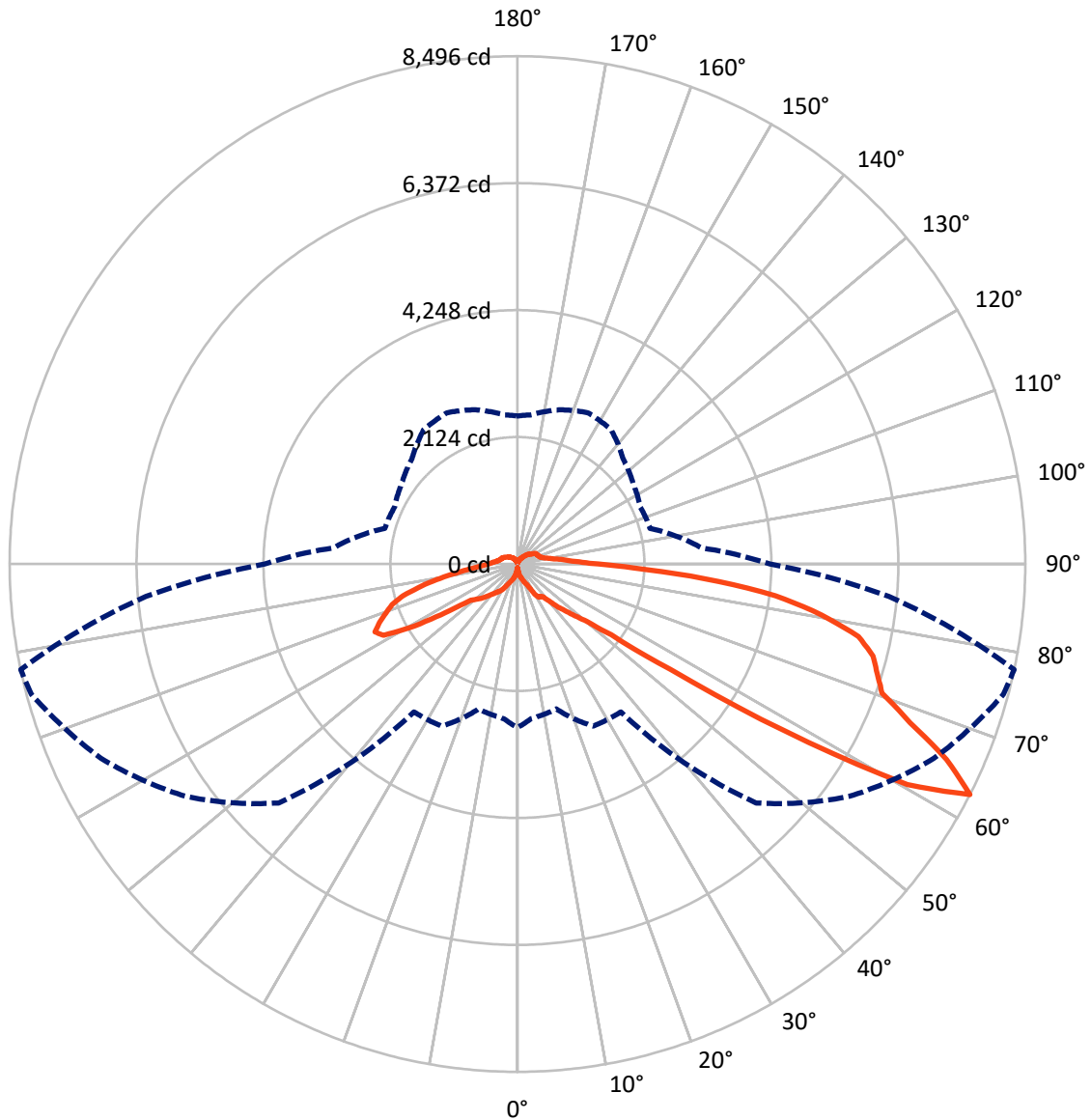
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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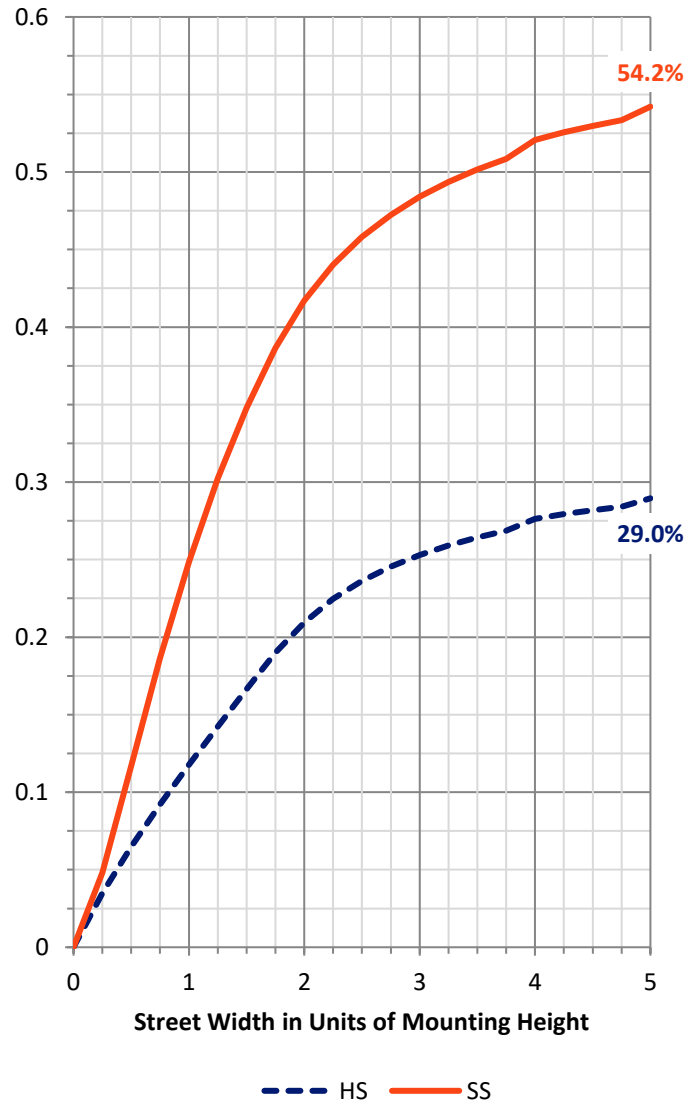
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3902.0	707.9	4609.9
	% Fixture	30.5	5.5	36.0
Street Side	Lumens	7308.4	891.7	8200.1
	% Fixture	57.1	7.0	64.0
Total	Lumens	11210.4	1599.6	12810.0
	% Fixture	87.5	12.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.0	0.1
10°-20°	72.7	0.6
20°-30°	202.6	1.6
30°-40°	431.8	3.4
40°-50°	769.5	6.0
50°-60°	1826.0	14.3
60°-70°	3593.9	28.1
70°-80°	2889.3	22.6
80°-90°	1411.7	11.0
90°-100°	526.2	4.1
100°-110°	341.8	2.7
110°-120°	283.2	2.2
120°-130°	199.6	1.6
130°-140°	129.4	1.0
140°-150°	74.9	0.6
150°-160°	33.9	0.3
160°-170°	9.7	0.1
170°-180°	1.0	0.0
0°-90°	11210.4	87.5
0°-180°	12810.0	100.0



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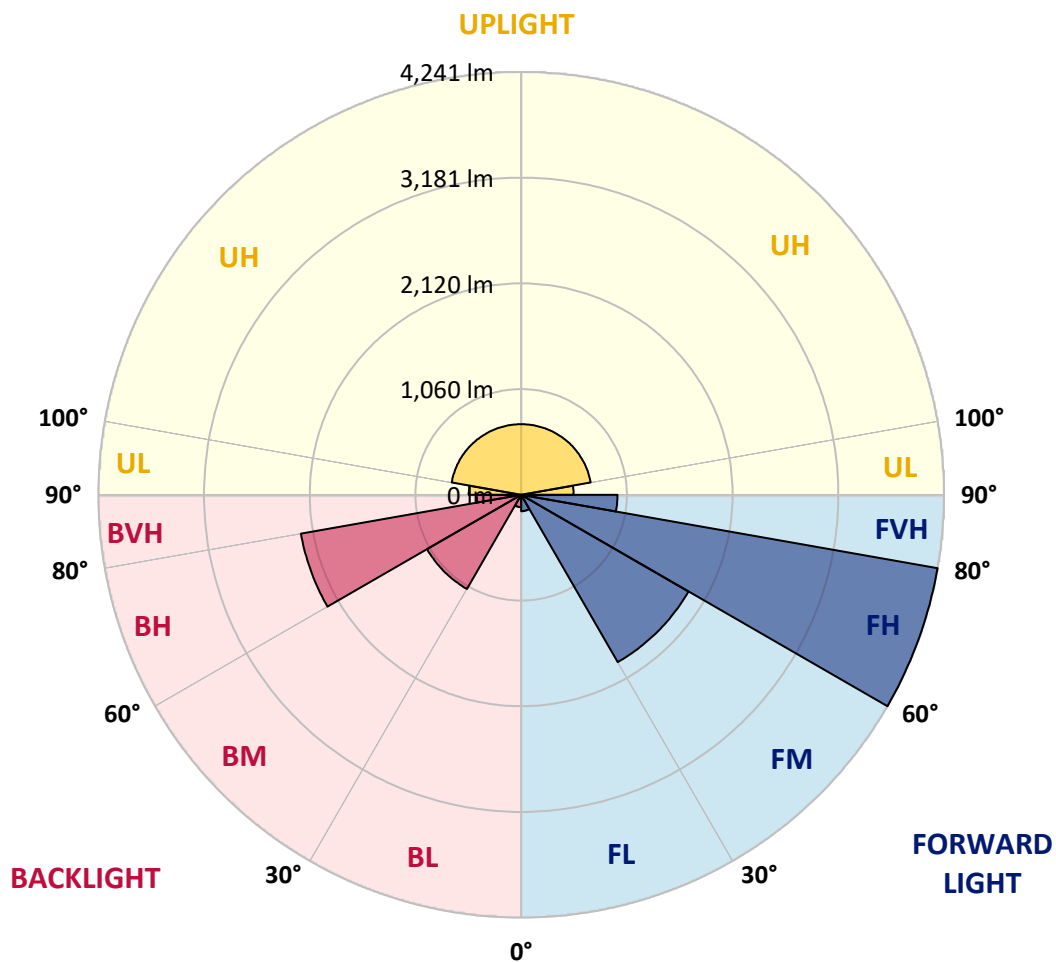
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	164.6	1.3			
FM (30°-60°)	1937.5	15.1			
FH (60°-80°)	4240.7	33.1			G2/5000
FVH (80°-90°)	965.7	7.5			G5
BL (0°-30°)	123.7	1.0	B1/500		
BM (30°-60°)	1089.8	8.5	B2/2500		
BH (60°-80°)	2242.5	17.5	B3/2500		G3/2500
BVH (80°-90°)	446.0	3.5			G3/500
UL (90°-100°)	526.2	4.1		U4/1000	
UH (100°-180°)	707.9	5.5		U4/1000	

BUG Rating: B3-U5-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
2.5°	84.7	84.7	86.3	84.7	83.3	83.3	81.7	80.2	80.2	78.6	81.7
5°	115.0	115.0	116.5	115.0	115.0	115.0	110.4	107.5	107.5	107.5	112.0
7.5°	160.4	160.4	163.5	159.0	161.9	160.4	160.4	154.3	148.4	148.4	146.8
10°	211.8	210.3	211.8	213.4	208.9	205.8	199.7	196.7	192.2	193.8	187.7
12.5°	245.2	248.2	248.2	248.2	243.7	237.6	228.5	225.4	219.5	217.9	217.9
15°	276.9	278.5	276.9	280.0	278.5	266.3	260.4	252.7	248.2	245.2	243.7
17.5°	313.2	319.3	313.2	317.8	322.3	325.4	328.4	301.1	283.0	278.5	278.5
20°	342.0	340.5	346.5	355.7	379.9	376.7	358.6	348.0	326.8	322.3	317.8
22.5°	393.4	390.5	390.5	401.1	447.9	482.8	440.4	391.9	355.7	349.6	342.0
25°	428.2	420.7	432.7	470.7	500.9	535.7	487.3	437.4	396.6	395.0	390.5
27.5°	528.2	526.7	516.0	556.9	673.5	736.9	700.6	623.5	502.5	482.8	438.8
30°	673.5	668.9	638.7	679.5	808.1	947.4	1057.8	876.3	649.3	606.8	516.0
32.5°	729.5	727.9	705.3	738.5	867.2	1010.9	1177.3	935.2	696.1	664.4	594.7
35°	735.5	721.8	709.8	755.2	796.1	921.6	1118.4	891.4	684.1	662.8	638.7
37.5°	729.5	727.9	736.9	811.2	885.3	929.1	1089.7	948.8	723.4	696.1	673.5
40°	882.3	873.1	829.3	855.0	968.4	1012.4	1268.1	1275.8	880.8	808.1	705.3
42.5°	995.7	995.7	950.4	986.7	1156.1	1195.6	1437.7	1602.6	1066.9	965.5	805.1
45°	1057.8	1066.9	1023.0	1066.9	1271.2	1275.8	1430.1	1844.7	1243.9	1103.2	897.5
47.5°	1136.5	1129.0	1075.9	1131.9	1401.3	1461.9	1554.2	2253.3	1511.8	1292.3	1007.9
50°	1056.3	1045.7	1045.7	1085.0	1309.0	1412.0	1448.3	2043.0	1734.3	1507.3	1136.5
52.5°	1071.4	1104.8	1135.1	1271.2	1524.0	1808.4	1799.3	2351.7	2291.2	1965.8	1371.1
55°	1396.8	1430.1	1398.2	1575.3	1872.0	2710.3	2881.3	3837.8	3684.9	3105.3	1882.6
57.5°	1993.1	2017.2	1872.0	2077.8	2229.1	4111.7	4853.2	6390.7	6203.0	5269.4	2901.0
60°	2496.9	2418.3	2289.6	2592.3	2681.6	5018.2	6272.6	7569.6	8049.3	7495.5	4493.0
62.5°	2737.6	2596.8	2510.7	2993.3	3019.1	5652.2	6776.6	7689.1	8418.5	8495.8	6237.8
65°	2577.1	2428.9	2375.9	2872.3	2907.1	5936.7	6601.1	6728.1	7640.7	7887.4	6840.1
67.5°	2362.3	2233.6	2174.6	2639.2	2766.3	5785.4	6384.6	5852.0	6923.4	7083.8	6408.9
70°	2265.4	2112.6	2021.8	2366.8	2595.4	5109.0	5773.2	5121.0	6292.4	6470.9	5720.4
72.5°	2185.2	2027.8	1941.6	2251.9	2475.7	4450.7	5112.0	4659.6	6023.0	6295.4	5541.7
75°	2233.6	2033.9	1915.8	2211.0	2369.8	4081.4	4676.1	4447.6	5802.1	6144.1	5413.0
77.5°	2170.1	1961.2	1791.8	2055.1	2103.5	3547.1	4358.3	4287.2	5603.8	5835.3	4871.4
80°	1937.1	1767.5	1590.4	1823.5	1741.9	2879.8	3749.9	3881.6	5081.7	5155.8	3940.7
82.5°	1619.3	1517.9	1331.8	1528.5	1402.9	2174.6	3102.2	3395.8	4467.4	4347.7	2934.4
85°	1122.9	1106.2	980.6	1148.6	1051.8	1498.2	2047.5	2440.9	3335.3	3141.7	1896.2
87.5°	746.0	753.6	690.1	788.4	765.8	1006.4	1206.0	1454.2	2103.5	1944.5	1225.8
90°	573.6	566.0	535.7	599.2	620.4	786.9	886.9	938.2	1260.6	1207.6	898.9
92.5°	502.5	491.9	466.1	514.5	537.3	671.9	749.1	734.0	933.7	917.1	715.7
95°	460.0	449.4	429.8	472.2	476.7	585.6	662.8	632.6	768.8	762.7	619.0
97.5°	411.7	402.5	384.4	416.2	419.2	513.1	570.5	538.7	612.9	611.4	510.0
100°	372.2	367.7	351.2	375.3	376.7	451.0	502.5	467.7	519.0	525.1	455.5
102.5°	336.0	332.9	320.9	339.0	340.5	395.0	438.8	402.5	447.9	454.0	405.6
105°	311.7	305.8	296.6	316.2	317.8	366.3	396.6	360.2	408.6	417.6	375.3
107.5°	289.1	285.9	284.5	308.7	304.2	343.5	361.6	331.3	376.7	387.3	355.7
110°	272.4	269.4	270.8	289.1	289.1	331.3	343.5	326.8	370.8	376.7	352.6



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CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-X-3000

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
112.5°	260.4	258.8	255.7	272.4	273.9	334.5	343.5	332.9	372.2	379.9	352.6
115°	255.7	249.8	242.1	257.2	251.2	317.8	323.9	319.3	354.1	358.6	329.9
117.5°	240.6	239.1	236.0	243.7	246.6	310.3	316.2	316.2	351.2	358.6	331.3
120°	224.0	225.4	224.0	237.6	234.6	295.2	298.1	302.6	337.4	348.0	323.9
122.5°	211.8	210.3	208.9	217.9	220.9	270.8	273.9	284.5	314.8	319.3	296.6
125°	195.2	193.8	193.8	196.7	208.9	249.8	251.2	258.8	284.5	287.5	264.9
127.5°	186.1	184.5	184.5	190.6	199.7	237.6	239.1	242.1	261.8	266.3	252.7
130°	177.1	175.5	174.1	178.6	192.2	228.5	227.0	233.1	251.2	255.7	236.0
132.5°	164.9	164.9	161.9	169.4	183.1	215.0	210.3	217.9	236.0	233.1	216.4
135°	152.9	154.3	152.9	155.8	168.0	192.2	192.2	196.7	211.8	207.3	193.8
137.5°	139.2	137.7	137.7	139.2	149.8	169.4	172.5	177.1	181.6	177.1	168.0
140°	136.2	139.2	134.6	136.2	145.2	161.9	164.9	169.4	168.0	164.9	154.3
142.5°	130.1	127.1	122.6	124.0	134.6	149.8	154.3	154.3	148.4	143.8	136.2
145°	113.6	113.6	112.0	115.0	127.1	136.2	142.3	139.2	130.1	125.6	122.6
147.5°	103.0	99.8	99.8	107.5	116.5	127.1	127.1	122.6	113.6	112.0	108.9
150°	92.4	92.4	90.8	98.4	107.5	113.6	113.6	112.0	103.0	98.4	95.3
152.5°	81.7	83.3	83.3	92.4	96.9	105.9	99.8	93.8	87.8	83.3	80.2
155°	71.1	68.2	69.6	77.2	83.3	81.7	80.2	74.1	69.6	68.2	68.2
157.5°	65.1	62.1	65.1	71.1	74.1	74.1	69.6	65.1	60.5	59.0	62.1
160°	53.0	54.4	56.0	60.5	62.1	60.5	59.0	54.4	49.9	51.5	51.5
162.5°	43.8	45.4	45.4	48.4	49.9	47.0	45.4	40.9	39.3	42.4	39.3
165°	34.8	36.3	36.3	37.9	39.3	34.8	31.8	28.7	30.3	28.7	30.3
167.5°	25.7	25.7	27.3	27.3	27.3	24.2	19.7	21.2	21.2	19.7	21.2
170°	16.7	18.1	18.1	16.7	16.7	13.6	12.2	10.6	12.2	10.6	12.2
172.5°	12.2	10.6	12.2	10.6	10.6	9.0	9.0	9.0	7.6	7.6	7.6
175°	13.6	12.2	10.6	12.2	10.6	10.6	7.6	7.6	7.6	9.0	7.6
177.5°	12.2	9.0	10.6	10.6	9.0	7.6	7.6	6.1	6.1	7.6	7.6
180°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
2.5°	78.6	81.7	80.2	80.2	80.2	77.2	78.6	80.2	78.6	77.2	81.7
5°	107.5	110.4	108.9	108.9	108.9	105.9	104.4	103.0	103.0	104.4	103.0
7.5°	145.2	143.8	142.3	139.2	137.7	136.2	134.6	134.6	133.2	133.2	136.2
10°	186.1	181.6	180.0	175.5	172.5	171.0	169.4	169.4	169.4	171.0	166.5
12.5°	213.4	208.9	207.3	202.8	198.3	195.2	193.8	193.8	193.8	195.2	196.7
15°	242.1	240.6	236.0	230.1	224.0	224.0	220.9	220.9	224.0	225.4	222.5
17.5°	272.4	270.8	266.3	258.8	255.7	252.7	252.7	251.2	254.3	257.2	257.2
20°	305.8	296.6	290.6	285.9	283.0	278.5	280.0	278.5	283.0	284.5	283.0
22.5°	339.0	334.5	325.4	319.3	317.8	308.7	308.7	310.3	313.2	316.2	317.8
25°	376.7	366.3	357.1	351.2	340.5	339.0	342.0	342.0	348.0	348.0	345.1
27.5°	422.3	417.6	411.7	404.0	395.0	391.9	390.5	395.0	398.0	396.6	396.6
30°	478.1	472.2	475.2	470.7	464.6	447.9	443.4	449.4	457.1	461.6	460.0
32.5°	549.3	538.7	519.0	510.0	498.0	493.3	490.3	494.8	503.9	513.1	513.1
35°	597.8	581.1	555.4	520.6	507.0	507.0	517.6	525.1	532.7	531.2	534.1
37.5°	641.6	629.6	591.7	546.3	537.3	546.3	567.5	578.1	576.6	561.4	556.9
40°	687.0	678.0	638.7	605.3	603.9	605.3	609.8	624.9	634.1	638.7	638.7
42.5°	755.2	741.5	690.1	665.8	665.8	658.3	665.8	682.5	706.7	724.9	726.3
45°	838.3	823.2	747.6	705.3	705.3	705.3	729.5	755.2	770.3	765.8	762.7
47.5°	930.7	911.0	817.1	780.9	786.9	770.3	794.5	817.1	852.1	858.0	862.5
50°	1018.5	986.7	871.7	814.2	805.1	814.2	853.5	879.2	886.9	882.3	883.7
52.5°	1172.8	1098.7	932.3	886.9	894.3	929.1	979.1	1000.3	997.3	976.1	974.5
55°	1501.2	1333.2	1163.8	1166.7	1195.6	1245.5	1304.5	1322.6	1349.9	1327.2	1345.3
57.5°	2088.4	1766.1	1560.2	1649.5	1685.9	1688.9	1731.3	1782.6	1876.5	1921.9	1938.6
60°	3028.1	2394.1	1984.0	2056.5	2101.9	2130.8	2270.0	2359.2	2365.3	2316.9	2316.9
62.5°	4223.7	3090.2	2297.3	2265.4	2360.7	2495.4	2737.6	2792.1	2671.0	2503.0	2475.7
65°	4891.1	3432.2	2301.8	2283.5	2460.6	2625.6	2837.5	2792.1	2646.9	2498.5	2478.8
67.5°	4824.5	3374.7	2129.2	2165.6	2362.3	2463.7	2578.7	2510.7	2457.6	2339.5	2350.1
70°	4444.6	3185.5	1993.1	1997.6	2079.3	2130.8	2241.3	2227.5	2256.4	2127.7	2135.3
72.5°	4193.4	2978.2	1879.5	1835.7	1843.1	1914.3	2062.6	2100.5	2138.3	1999.1	1996.0
75°	3922.5	2663.4	1691.8	1637.4	1666.1	1723.6	1853.7	1902.3	1961.2	1847.8	1847.8
77.5°	3237.0	2117.1	1448.3	1469.4	1511.8	1516.3	1564.8	1629.9	1711.6	1649.5	1645.0
80°	2427.4	1589.0	1197.0	1256.1	1306.0	1242.4	1237.9	1287.8	1380.1	1369.5	1377.2
82.5°	1707.0	1124.4	939.7	1017.0	1073.0	989.7	961.0	974.5	1045.7	1057.8	1063.9
85°	1141.0	821.7	718.8	749.1	773.3	727.9	715.7	718.8	736.9	723.4	724.9
87.5°	846.0	646.2	573.6	578.1	572.1	549.3	550.8	555.4	553.8	535.7	532.7
90°	653.8	520.6	490.3	490.3	476.7	464.6	466.1	473.6	472.2	461.6	463.0
92.5°	543.3	446.5	438.8	435.9	419.2	413.1	422.3	428.2	425.3	416.2	411.7
95°	487.3	411.7	399.5	390.5	375.3	372.2	378.3	382.8	382.8	373.8	373.8
97.5°	420.7	364.7	355.7	345.1	325.4	325.4	329.9	331.3	332.9	328.4	323.9
100°	375.3	334.5	331.3	316.2	302.6	302.6	307.2	310.3	310.3	302.6	301.1
102.5°	346.5	311.7	310.3	296.6	285.9	284.5	289.1	292.0	289.1	284.5	289.1
105°	328.4	296.6	295.2	284.5	276.9	275.5	280.0	281.4	281.4	273.9	272.4
107.5°	316.2	289.1	281.4	276.9	267.9	267.9	276.9	278.5	278.5	267.9	267.9
110°	310.3	283.0	273.9	272.4	272.4	273.9	284.5	290.6	293.6	283.0	284.5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	313.2	283.0	270.8	278.5	283.0	292.0	304.2	311.7	316.2	305.8	304.2
115°	292.0	258.8	251.2	260.4	278.5	285.9	295.2	293.6	296.6	289.1	289.1
117.5°	285.9	254.3	242.1	251.2	264.9	264.9	267.9	264.9	266.3	258.8	258.8
120°	275.5	249.8	225.4	231.5	234.6	236.0	236.0	234.6	234.6	228.5	225.4
122.5°	261.8	236.0	215.0	219.5	219.5	217.9	219.5	217.9	217.9	211.8	208.9
125°	242.1	219.5	199.7	204.4	204.4	201.2	199.7	199.7	199.7	196.7	199.7
127.5°	230.1	208.9	189.2	187.7	190.6	190.6	190.6	189.2	187.7	186.1	186.1
130°	219.5	199.7	178.6	178.6	177.1	178.6	177.1	175.5	175.5	174.1	174.1
132.5°	204.4	187.7	164.9	164.9	164.9	163.5	163.5	161.9	160.4	160.4	159.0
135°	187.7	172.5	154.3	152.9	154.3	152.9	151.3	149.8	149.8	148.4	149.8
137.5°	160.4	152.9	139.2	134.6	133.2	134.6	133.2	131.7	133.2	130.1	130.1
140°	152.9	145.2	136.2	130.1	128.7	128.7	127.1	130.1	128.7	130.1	130.1
142.5°	134.6	134.6	125.6	121.1	121.1	122.6	116.5	116.5	116.5	116.5	116.5
145°	125.6	125.6	119.5	112.0	110.4	107.5	105.9	105.9	105.9	104.4	108.9
147.5°	110.4	112.0	108.9	103.0	96.9	93.8	93.8	92.4	92.4	93.8	92.4
150°	98.4	99.8	96.9	90.8	86.3	83.3	83.3	80.2	81.7	80.2	81.7
152.5°	83.3	84.7	83.3	78.6	77.2	74.1	72.7	71.1	72.7	69.6	69.6
155°	66.6	68.2	69.6	66.6	62.1	59.0	57.6	57.6	59.0	57.6	57.6
157.5°	60.5	60.5	62.1	60.5	57.6	54.4	56.0	54.4	53.0	54.4	54.4
160°	51.5	49.9	53.0	51.5	49.9	47.0	49.9	47.0	45.4	43.8	47.0
162.5°	40.9	39.3	40.9	40.9	40.9	39.3	37.9	36.3	36.3	34.8	33.2
165°	30.3	30.3	31.8	31.8	31.8	30.3	28.7	27.3	28.7	28.7	27.3
167.5°	19.7	21.2	21.2	21.2	21.2	19.7	21.2	18.1	19.7	18.1	18.1
170°	12.2	12.2	13.6	13.6	13.6	12.2	12.2	10.6	10.6	10.6	10.6
172.5°	7.6	7.6	10.6	12.2	10.6	9.0	7.6	6.1	7.6	7.6	9.0
175°	9.0	10.6	12.2	10.6	12.2	10.6	7.6	7.6	7.6	7.6	9.0
177.5°	6.1	9.0	7.6	9.0	10.6	9.0	7.6	6.1	7.6	6.1	6.1
180°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0

(END OF REPORT)