

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: P14208

Luminaire Tested: **GAR-080-LED-E1-3-SPUN-CAGE**

Issue Date: 6/29/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P14208  
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-CAGE  
Description: MCGRAW-EDISON POST TOP WITH A TYPE III SOLID TOP  
PRISMATIC REFRACTOR WITH ARCHITECTURAL CAGE  
Light Source: [6] 4000K LEDS  
Ballast/Driver: [2] ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9474.5 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.08' x H: 2.21')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U3 - G3

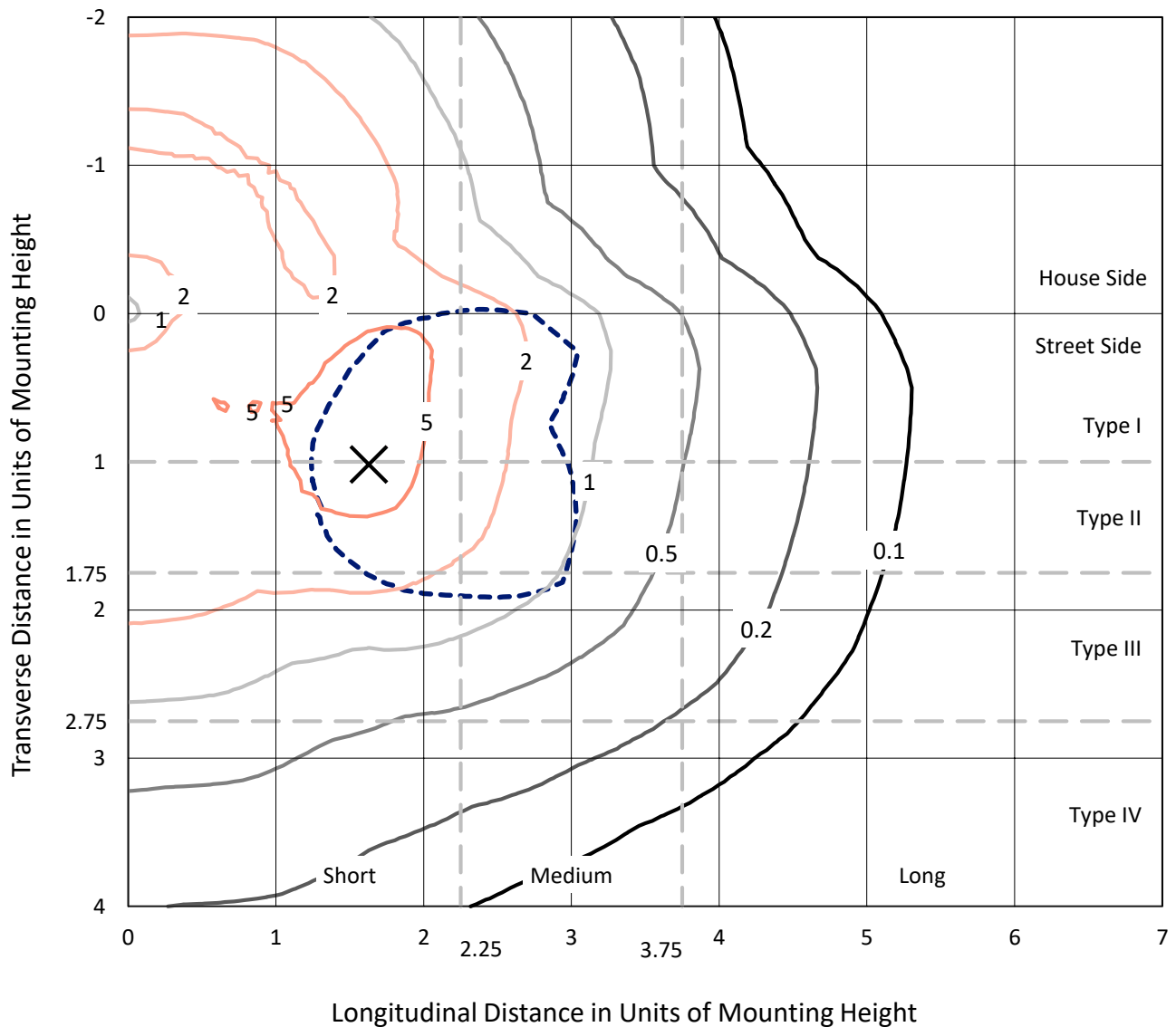
Input Watts (W): 101.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P14208  
 CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

### Iso-Footcandle Lines of Horizontal Illumination

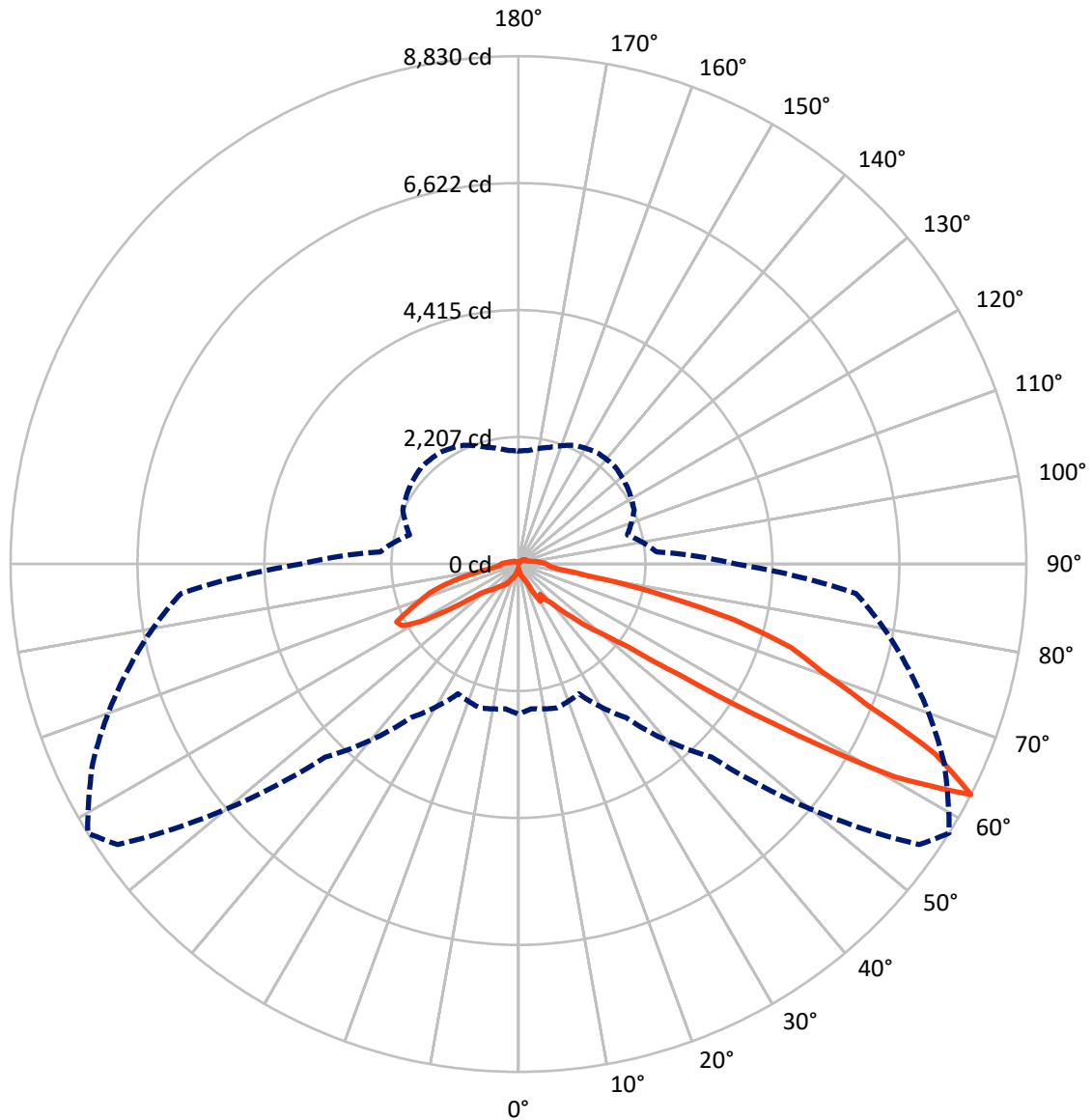
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.4 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P14208  
CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P14208

CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

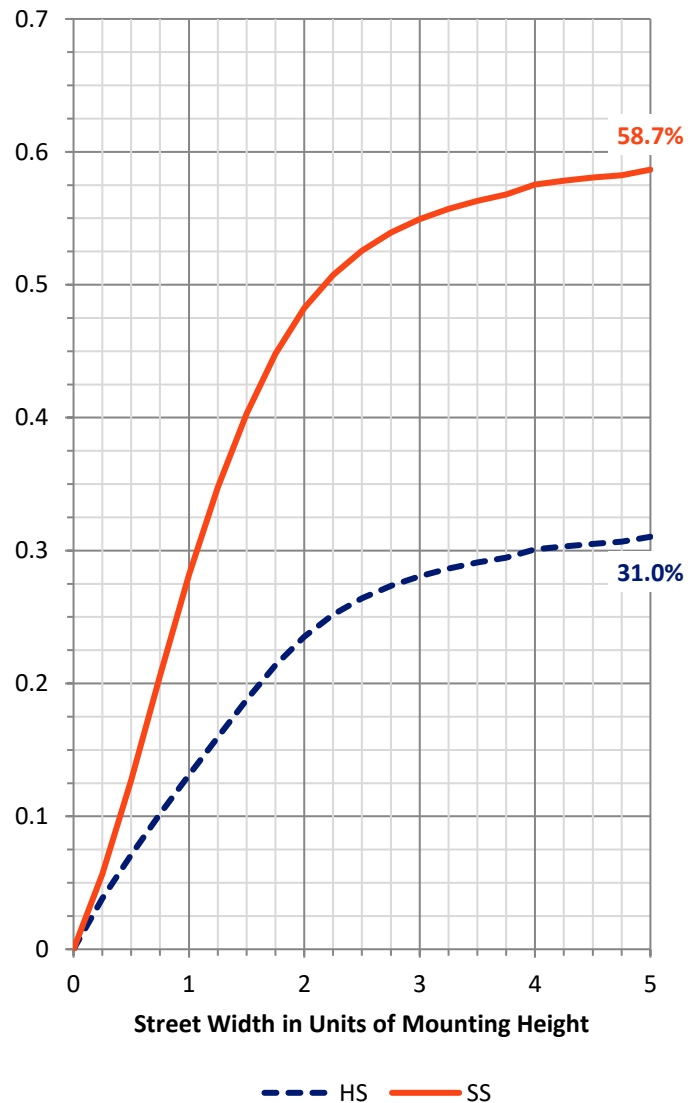
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3023.5	327.2	3350.7
	% Fixture	31.9	3.5	35.4
<b>Street Side</b>	Lumens	5687.7	436.1	6123.8
	% Fixture	60.0	4.6	64.6
<b>Total</b>	Lumens	8711.2	763.3	9474.5
	% Fixture	91.9	8.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.5	0.1
10°-20°	60.0	0.6
20°-30°	165.6	1.7
30°-40°	362.2	3.8
40°-50°	663.8	7.0
50°-60°	1642.1	17.3
60°-70°	3308.4	34.9
70°-80°	2002.6	21.1
80°-90°	495.0	5.2
90°-100°	294.6	3.1
100°-110°	167.3	1.8
110°-120°	114.2	1.2
120°-130°	84.2	0.9
130°-140°	54.4	0.6
140°-150°	28.7	0.3
150°-160°	13.1	0.1
160°-170°	5.6	0.1
170°-180°	1.2	0.0
0°-90°	8711.2	91.9
0°-180°	9474.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P14208

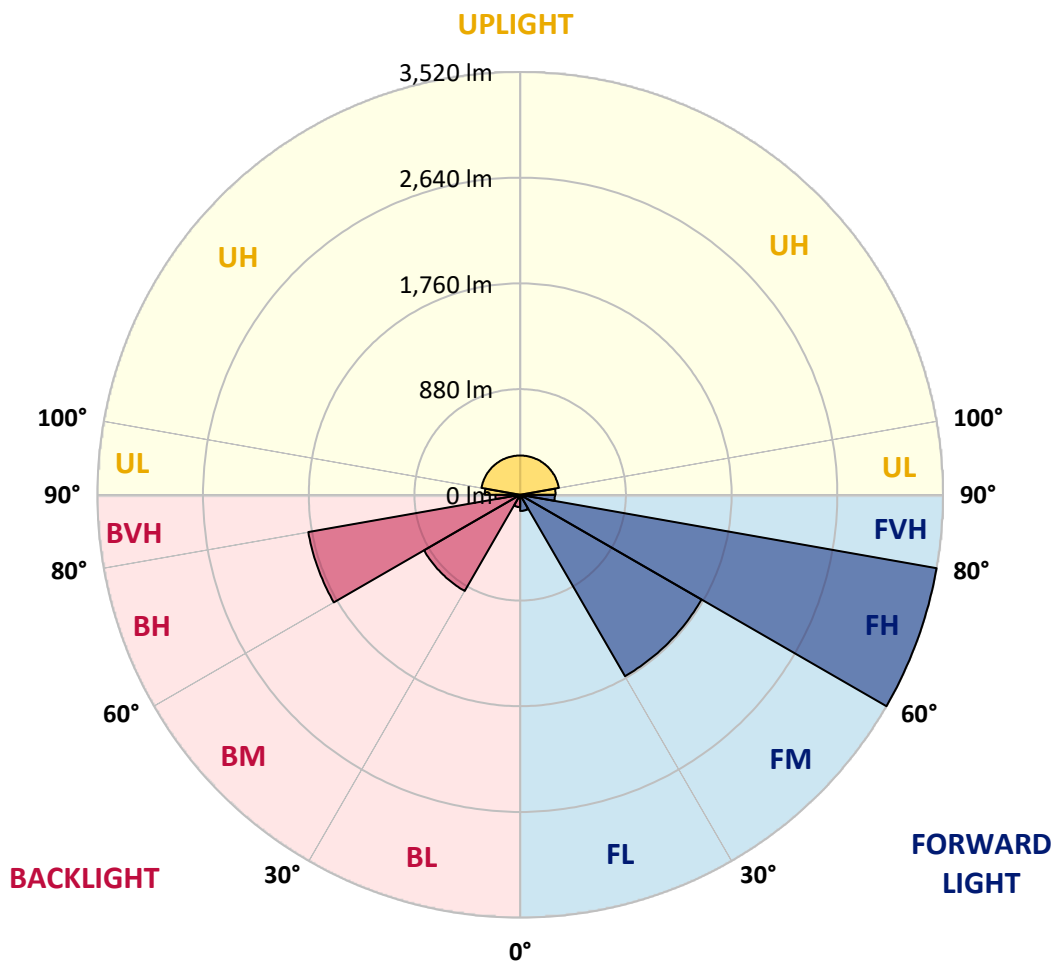
CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	135.0	1.4			
FM (30°-60°)	1743.8	18.4			
FH (60°-80°)	3520.2	37.2			G2/5000
FVH (80°-90°)	288.7	3.0			G3/500
BL (0°-30°)	102.2	1.1	B0/110		
BM (30°-60°)	924.3	9.8	B1/1000		
BH (60°-80°)	1790.8	18.9	B3/2500		G3/2500
BVH (80°-90°)	206.3	2.2			G2/225
UL (90°-100°)	294.6	3.1		U3/500	
UH (100°-180°)	327.2	3.5		U3/500	

**BUG Rating: B3-U3-G3**

Type III Short





REPORT NUMBER: P14208

CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
2.5°	90.2	91.8	91.8	90.2	88.6	86.9	83.6	83.6	82.0	82.0	82.0
5°	114.8	114.8	114.8	113.2	111.5	108.2	105.0	105.0	106.6	101.7	98.4
7.5°	147.6	146.0	147.6	146.0	144.3	141.0	142.7	139.4	136.1	134.5	132.8
10°	180.4	178.8	180.4	180.4	178.8	177.1	170.6	172.2	168.9	162.4	159.1
12.5°	208.3	206.6	209.9	209.9	208.3	205.0	203.4	200.1	195.2	193.5	185.3
15°	226.3	223.0	226.3	226.3	228.0	231.2	226.3	223.0	218.1	213.2	206.6
17.5°	244.4	246.0	249.3	247.6	250.9	259.1	255.8	252.6	242.7	239.4	231.2
20°	265.7	269.0	270.6	269.0	269.0	278.8	283.7	280.4	269.0	265.7	249.3
22.5°	311.6	313.2	316.5	318.2	303.4	316.5	329.6	326.4	310.0	313.2	282.1
25°	367.4	362.4	362.4	357.5	359.2	380.5	403.4	403.4	380.5	344.4	310.0
27.5°	446.1	451.0	464.1	457.6	478.9	519.9	577.3	600.2	592.0	515.0	401.8
30°	572.4	572.4	608.4	618.3	624.8	683.9	724.9	754.4	782.3	659.3	506.8
32.5°	605.2	608.4	664.2	662.6	670.8	749.5	746.2	741.3	798.7	698.6	551.0
35°	588.8	601.9	651.1	644.5	667.5	865.9	680.6	646.2	693.7	649.4	526.4
37.5°	623.2	636.3	659.3	662.6	716.7	1015.2	818.4	800.3	793.8	703.6	557.6
40°	710.1	728.2	769.2	793.8	833.1	1164.4	926.6	892.2	826.6	864.3	642.9
42.5°	838.0	846.2	864.3	908.6	985.6	1256.2	1166.0	1113.6	943.0	1011.9	738.0
45°	926.6	941.4	966.0	988.9	1043.0	1320.2	1392.4	1328.4	1075.8	1216.9	856.1
47.5°	1013.5	1010.2	1023.4	1044.7	1107.0	1503.9	1692.5	1638.4	1251.3	1389.1	966.0
50°	906.9	905.3	993.8	1025.0	966.0	1415.3	1897.5	1930.3	1549.8	1392.4	1062.7
52.5°	1021.7	988.9	1116.8	1128.3	1148.0	1700.7	2348.5	2386.2	2173.0	1786.0	1241.5
55°	1428.4	1333.3	1467.8	1480.9	1615.4	2161.5	3225.9	3403.0	3414.5	3047.1	1854.8
57.5°	1987.7	1828.6	2009.0	2018.8	2341.9	2937.2	4836.4	5262.8	5439.9	4747.8	3098.0
60°	2369.8	2222.2	2378.0	2340.3	2927.4	3790.0	6976.6	7514.5	7458.7	6296.0	4701.9
62.5°	2607.6	2527.2	2589.6	2489.5	3255.4	4747.8	8505.0	8829.8	8163.9	7015.9	5890.9
65°	2446.9	2450.2	2451.8	2386.2	3140.6	5021.7	7957.3	7962.2	7276.7	6122.1	6023.7
67.5°	2355.0	2353.4	2386.2	2269.8	2845.4	4808.5	6587.9	6533.8	6123.8	5213.6	5467.8
70°	2125.4	2112.3	2197.6	2089.4	2478.0	4160.7	5408.7	5585.8	5223.4	4567.4	4777.3
72.5°	1951.6	1912.2	2007.4	1869.6	2169.7	3347.2	4641.2	4951.2	4656.0	4126.2	4237.8
75°	1640.0	1590.8	1690.8	1528.5	1704.0	2455.1	3560.4	3863.8	3786.8	3475.2	3470.2
77.5°	1161.1	1107.0	1172.6	1048.0	1166.0	1505.5	2223.8	2460.0	2642.0	2496.1	2392.8
80°	716.7	672.4	720.0	649.4	720.0	792.1	1084.0	1215.2	1425.2	1431.7	1313.6
82.5°	451.0	429.7	449.4	414.9	444.4	518.2	634.7	687.2	762.6	765.9	690.4
85°	360.8	351.0	362.4	355.9	378.8	455.9	531.4	554.3	554.3	501.8	482.2
87.5°	354.2	346.0	357.5	357.5	387.0	469.0	506.8	511.7	501.8	444.4	457.6
90°	342.8	334.6	344.4	349.3	385.4	470.7	480.5	478.9	460.8	410.0	416.6
92.5°	301.8	295.2	308.3	314.9	341.1	400.2	413.3	418.2	406.7	365.7	342.8
95°	277.2	273.9	285.4	290.3	308.3	344.4	364.1	367.4	355.9	314.9	305.0
97.5°	242.7	239.4	246.0	252.6	267.3	303.4	308.3	311.6	290.3	259.1	252.6
100°	211.6	209.9	218.1	221.4	229.6	259.1	252.6	252.6	239.4	216.5	213.2
102.5°	190.2	187.0	191.9	191.9	205.0	223.0	213.2	211.6	198.4	175.5	170.6
105°	172.2	170.6	177.1	175.5	182.0	193.5	185.3	185.3	168.9	152.5	149.2
107.5°	154.2	157.4	162.4	164.0	172.2	185.3	172.2	167.3	149.2	137.8	136.1
110°	144.3	141.0	144.3	147.6	155.8	168.9	157.4	157.4	144.3	131.2	134.5



REPORT NUMBER: P14208

CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
112.5°	126.3	126.3	131.2	132.8	139.4	147.6	147.6	150.9	141.0	129.6	129.6
115°	123.0	116.4	121.4	123.0	131.2	134.5	137.8	137.8	132.8	126.3	123.0
117.5°	109.9	109.9	111.5	114.8	124.6	136.1	146.0	147.6	136.1	137.8	127.9
120°	101.7	106.6	105.0	106.6	111.5	121.4	131.2	132.8	118.1	127.9	119.7
122.5°	100.0	100.0	103.3	103.3	111.5	123.0	127.9	124.6	118.1	119.7	121.4
125°	93.5	91.8	93.5	95.1	108.2	111.5	116.4	116.4	118.1	114.8	119.7
127.5°	86.9	85.3	90.2	90.2	101.7	105.0	116.4	116.4	123.0	116.4	108.2
130°	78.7	80.4	82.0	83.6	93.5	96.8	111.5	113.2	113.2	105.0	103.3
132.5°	80.4	77.1	78.7	83.6	86.9	95.1	108.2	111.5	109.9	103.3	95.1
135°	72.2	72.2	73.8	75.4	80.4	85.3	98.4	98.4	98.4	93.5	85.3
137.5°	55.8	54.1	60.7	60.7	67.2	70.5	78.7	77.1	75.4	75.4	65.6
140°	60.7	60.7	65.6	65.6	67.2	68.9	72.2	70.5	70.5	72.2	65.6
142.5°	50.8	50.8	50.8	52.5	52.5	57.4	57.4	55.8	55.8	59.0	52.5
145°	50.8	50.8	50.8	49.2	50.8	54.1	54.1	54.1	55.8	60.7	50.8
147.5°	44.3	42.6	42.6	42.6	41.0	45.9	44.3	44.3	49.2	49.2	44.3
150°	37.7	37.7	37.7	36.1	34.4	36.1	41.0	39.4	41.0	39.4	39.4
152.5°	34.4	32.8	32.8	29.5	31.2	31.2	34.4	32.8	36.1	36.1	34.4
155°	27.9	26.2	24.6	23.0	21.3	21.3	24.6	26.2	26.2	27.9	27.9
157.5°	23.0	24.6	21.3	21.3	21.3	18.0	21.3	21.3	23.0	23.0	24.6
160°	14.8	18.0	16.4	16.4	16.4	16.4	16.4	18.0	16.4	19.7	21.3
162.5°	16.4	16.4	14.8	13.1	14.8	16.4	14.8	18.0	14.8	19.7	18.0
165°	13.1	13.1	14.8	13.1	13.1	14.8	13.1	14.8	14.8	16.4	18.0
167.5°	16.4	14.8	14.8	14.8	16.4	14.8	16.4	16.4	18.0	18.0	19.7
170°	11.5	11.5	9.8	9.8	13.1	13.1	11.5	13.1	13.1	13.1	13.1
172.5°	13.1	11.5	13.1	11.5	13.1	13.1	9.8	13.1	11.5	13.1	13.1
175°	11.5	9.8	9.8	9.8	9.8	11.5	8.2	8.2	9.8	9.8	11.5
177.5°	13.1	9.8	9.8	13.1	11.5	9.8	11.5	9.8	9.8	9.8	9.8
180°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1





REPORT NUMBER: P14208

CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
2.5°	80.4	82.0	82.0	78.7	78.7	75.4	72.2	70.5	72.2	72.2	68.9
5°	101.7	98.4	96.8	95.1	93.5	91.8	88.6	86.9	83.6	85.3	83.6
7.5°	127.9	127.9	123.0	119.7	116.4	114.8	113.2	111.5	111.5	111.5	109.9
10°	155.8	154.2	150.9	147.6	142.7	142.7	139.4	137.8	137.8	137.8	136.1
12.5°	182.0	180.4	175.5	172.2	170.6	167.3	167.3	167.3	165.6	165.6	164.0
15°	201.7	200.1	196.8	191.9	191.9	191.9	188.6	187.0	187.0	188.6	187.0
17.5°	224.7	223.0	218.1	213.2	213.2	218.1	214.8	209.9	209.9	213.2	214.8
20°	241.1	236.2	231.2	236.2	234.5	234.5	232.9	231.2	229.6	234.5	232.9
22.5°	272.2	262.4	255.8	260.8	255.8	260.8	262.4	259.1	255.8	257.5	259.1
25°	295.2	290.3	285.4	282.1	283.7	282.1	280.4	280.4	282.1	282.1	278.8
27.5°	360.8	341.1	328.0	328.0	324.7	328.0	323.1	323.1	324.7	326.4	328.0
30°	441.2	413.3	382.1	380.5	377.2	375.6	378.8	375.6	373.9	382.1	378.8
32.5°	492.0	452.6	414.9	416.6	418.2	421.5	421.5	419.8	411.6	416.6	416.6
35°	480.5	454.3	434.6	431.3	439.5	444.4	444.4	436.2	426.4	421.5	419.8
37.5°	503.5	487.1	477.2	477.2	472.3	474.0	475.6	469.0	460.8	457.6	457.6
40°	578.9	547.8	523.2	506.8	503.5	513.3	526.4	523.2	510.0	508.4	513.3
42.5°	651.1	605.2	565.8	544.5	549.4	570.7	585.5	574.0	560.9	556.0	554.3
45°	734.7	662.6	605.2	597.0	610.1	633.0	636.3	618.3	610.1	615.0	618.3
47.5°	821.6	739.6	679.0	659.3	672.4	698.6	710.1	693.7	680.6	660.9	670.8
50°	884.0	775.7	687.2	697.0	728.2	747.8	739.6	713.4	683.9	688.8	690.4
52.5°	956.1	839.7	788.8	808.5	826.6	841.3	833.1	810.2	806.9	779.0	772.4
55°	1266.1	1066.0	1041.4	1074.2	1070.9	1080.8	1125.0	1110.3	1085.7	1110.3	1123.4
57.5°	1984.4	1490.8	1410.4	1454.7	1515.4	1569.5	1628.5	1558.0	1479.3	1480.9	1497.3
60°	2906.1	1977.8	1712.2	1894.2	1994.2	2066.4	2076.2	1943.4	1818.8	1786.0	1787.6
62.5°	3780.2	2412.4	1959.8	2218.9	2315.7	2384.6	2371.4	2278.0	2099.2	1981.1	1963.1
65°	4413.2	2763.4	2050.0	2328.8	2353.4	2389.5	2476.4	2389.5	2089.4	1913.9	1905.7
67.5°	4624.8	2883.1	1899.1	2058.2	2091.0	2263.2	2315.7	2214.0	1964.7	1784.3	1787.6
70°	4334.5	2647.0	1592.4	1723.6	1859.8	2027.0	1982.8	1889.3	1754.8	1628.5	1644.9
72.5°	3747.4	2194.3	1320.2	1521.9	1653.1	1735.1	1667.9	1612.1	1576.0	1494.0	1520.3
75°	2925.8	1695.8	1095.5	1266.1	1321.8	1394.0	1328.4	1316.9	1331.7	1295.6	1313.6
77.5°	1902.4	1128.3	824.9	911.8	947.9	982.4	941.4	957.8	975.8	974.2	984.0
80°	1005.3	652.7	564.2	603.5	619.9	619.9	611.7	634.7	652.7	656.0	667.5
82.5°	554.3	416.6	395.2	421.5	418.2	410.0	413.3	421.5	421.5	408.4	410.0
85°	418.2	324.7	323.1	341.1	341.1	341.1	332.9	326.4	313.2	290.3	290.3
87.5°	400.2	311.6	303.4	319.8	319.8	318.2	314.9	303.4	287.0	260.8	260.8
90°	354.2	273.9	278.8	305.0	305.0	298.5	298.5	287.0	270.6	246.0	255.8
92.5°	288.6	224.7	247.6	270.6	270.6	267.3	265.7	260.8	242.7	223.0	214.8
95°	262.4	205.0	218.1	241.1	242.7	242.7	241.1	232.9	221.4	200.1	198.4
97.5°	213.2	172.2	185.3	198.4	201.7	208.3	205.0	200.1	185.3	172.2	165.6
100°	185.3	154.2	162.4	178.8	182.0	185.3	183.7	180.4	167.3	150.9	157.4
102.5°	152.5	129.6	141.0	154.2	164.0	159.1	159.1	154.2	142.7	129.6	129.6
105°	136.1	119.7	127.9	141.0	141.0	144.3	142.7	137.8	131.2	118.1	119.7
107.5°	131.2	108.2	118.1	126.3	131.2	131.2	131.2	124.6	119.7	109.9	108.2
110°	119.7	103.3	109.9	119.7	119.7	118.1	116.4	114.8	109.9	100.0	100.0



REPORT NUMBER: P14208

CATALOG NUMBER: GAR-080-LED-E1-3-SPUN-CAGE

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	116.4	100.0	106.6	113.2	111.5	109.9	106.6	103.3	100.0	90.2	90.2
115°	109.9	93.5	98.4	105.0	106.6	103.3	96.8	100.0	91.8	86.9	80.4
117.5°	108.2	91.8	93.5	101.7	100.0	103.3	98.4	93.5	88.6	82.0	83.6
120°	106.6	86.9	85.3	86.9	88.6	86.9	86.9	85.3	73.8	72.2	68.9
122.5°	111.5	93.5	88.6	90.2	91.8	88.6	86.9	82.0	77.1	72.2	72.2
125°	101.7	86.9	80.4	83.6	82.0	82.0	77.1	77.1	72.2	68.9	68.9
127.5°	96.8	85.3	78.7	78.7	77.1	77.1	73.8	75.4	70.5	65.6	67.2
130°	88.6	75.4	70.5	70.5	72.2	70.5	65.6	64.0	64.0	60.7	64.0
132.5°	82.0	70.5	68.9	68.9	65.6	65.6	64.0	62.3	60.7	57.4	54.1
135°	73.8	65.6	60.7	62.3	60.7	60.7	59.0	59.0	57.4	55.8	55.8
137.5°	57.4	50.8	47.6	45.9	49.2	45.9	44.3	42.6	45.9	45.9	45.9
140°	60.7	57.4	52.5	50.8	47.6	47.6	47.6	49.2	50.8	50.8	49.2
142.5°	45.9	49.2	41.0	39.4	37.7	37.7	37.7	36.1	41.0	41.0	41.0
145°	47.6	45.9	42.6	41.0	39.4	37.7	37.7	37.7	41.0	44.3	44.3
147.5°	41.0	41.0	39.4	36.1	34.4	32.8	31.2	34.4	36.1	37.7	37.7
150°	39.4	39.4	34.4	32.8	31.2	32.8	29.5	31.2	34.4	34.4	34.4
152.5°	34.4	32.8	32.8	29.5	27.9	29.5	29.5	31.2	31.2	32.8	36.1
155°	26.2	26.2	27.9	26.2	26.2	24.6	26.2	27.9	27.9	27.9	27.9
157.5°	23.0	26.2	27.9	26.2	27.9	27.9	26.2	27.9	27.9	27.9	31.2
160°	21.3	21.3	26.2	27.9	26.2	27.9	26.2	24.6	29.5	26.2	26.2
162.5°	19.7	21.3	23.0	24.6	26.2	27.9	26.2	26.2	26.2	26.2	27.9
165°	18.0	21.3	23.0	24.6	24.6	24.6	24.6	24.6	23.0	24.6	23.0
167.5°	18.0	19.7	21.3	23.0	24.6	24.6	24.6	24.6	24.6	24.6	26.2
170°	13.1	14.8	16.4	18.0	18.0	16.4	13.1	16.4	16.4	16.4	14.8
172.5°	13.1	13.1	14.8	13.1	16.4	13.1	13.1	11.5	14.8	13.1	14.8
175°	9.8	11.5	11.5	11.5	11.5	9.8	9.8	9.8	9.8	11.5	8.2
177.5°	9.8	11.5	11.5	9.8	11.5	13.1	9.8	11.5	11.5	9.8	9.8
180°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1

(END OF REPORT)