

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: INVUE

Report Number: P139863

Luminaire Tested: **ENT-F01-LED-E1-GZW-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P139863
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33649)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-F01-LED-E1-GZW-8030
Description: ENTRI LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1940.3 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.17' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

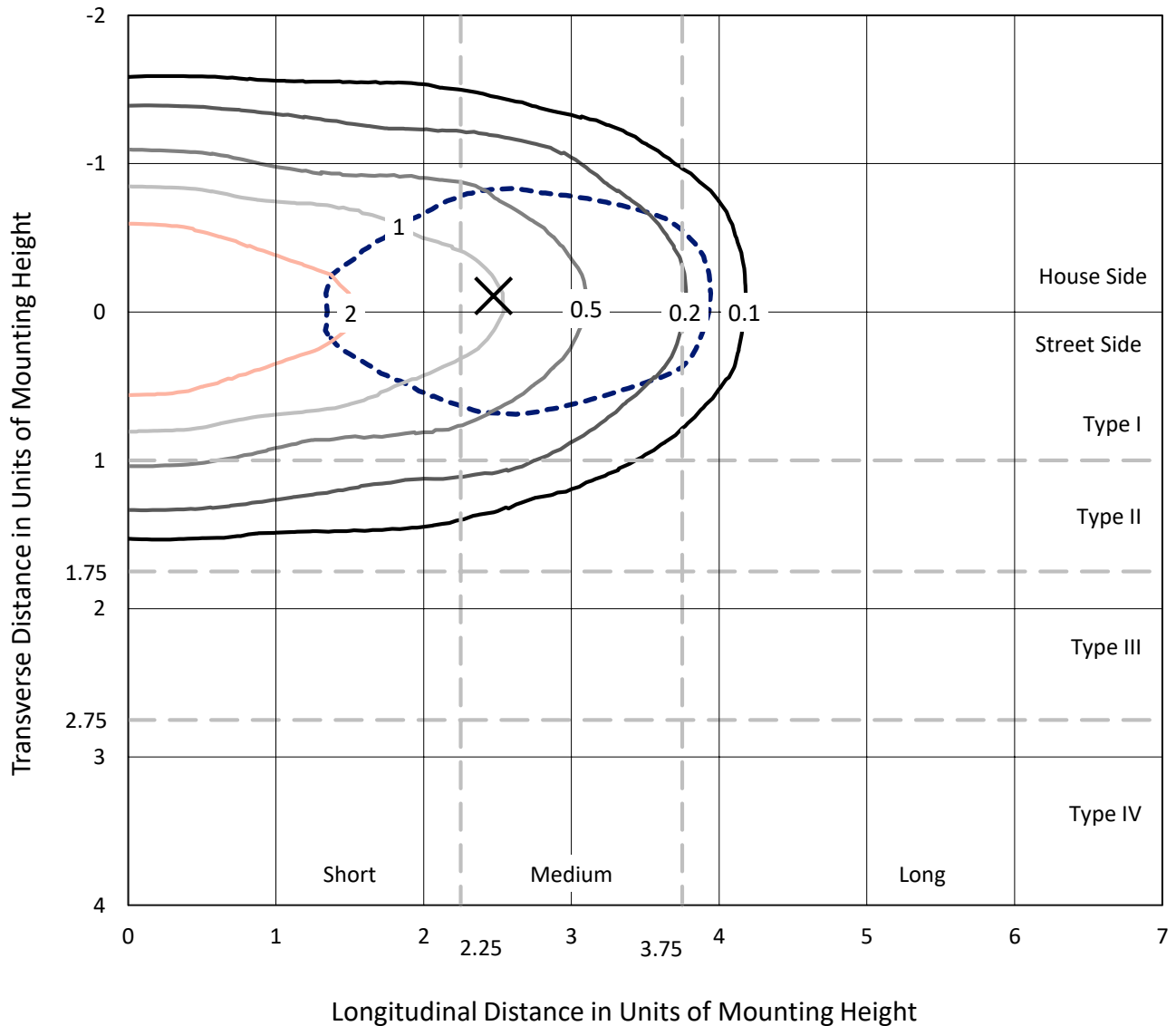
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

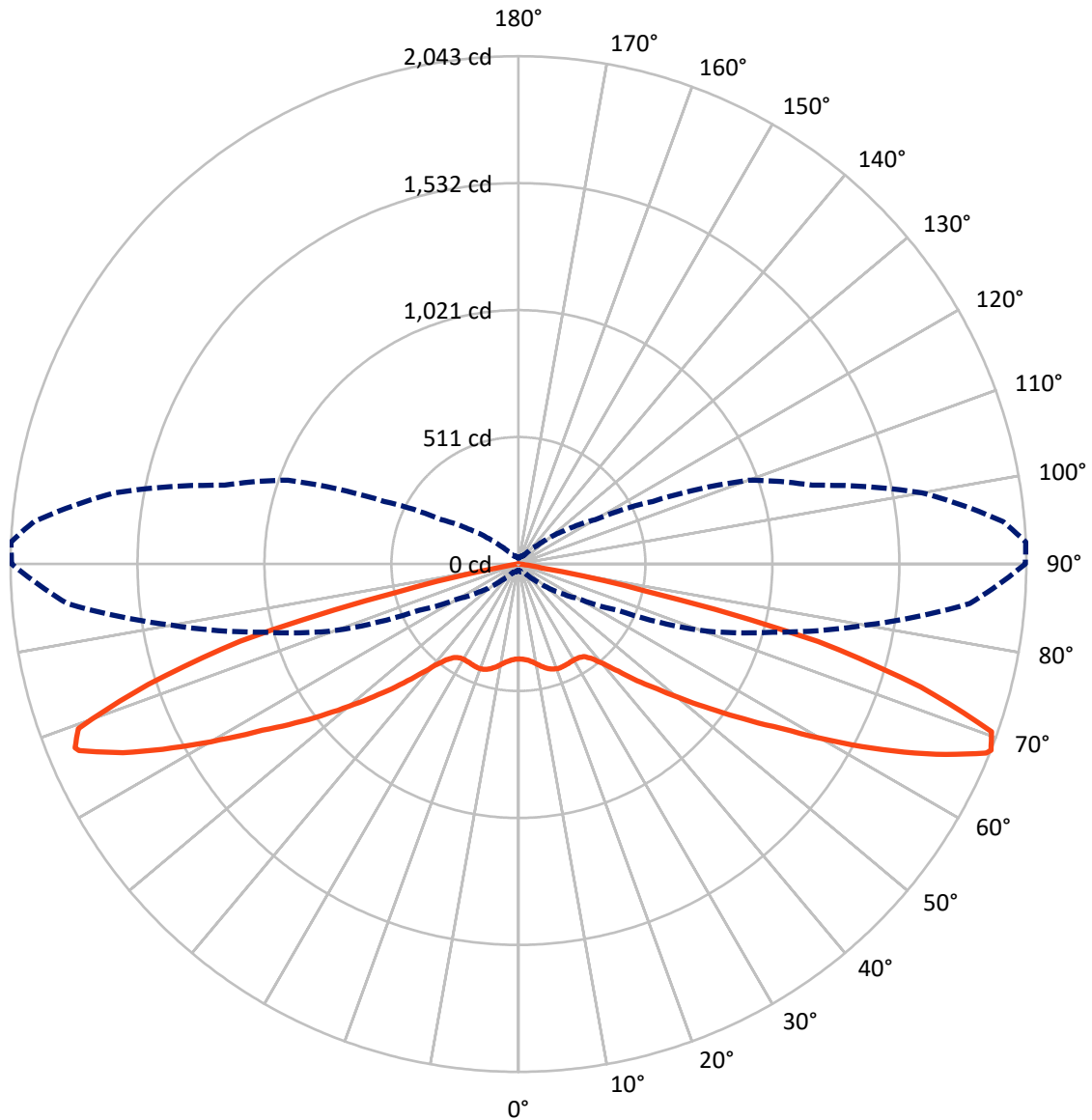
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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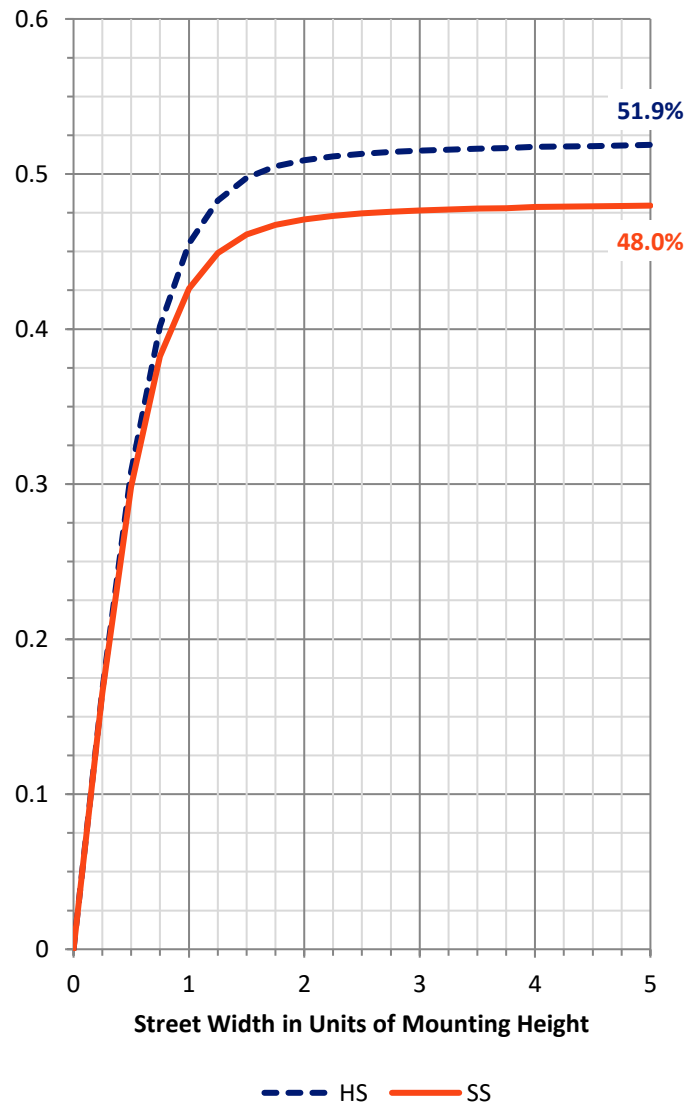
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1013.6	0.0	1013.6
	% Fixture	52.2	0.0	52.2
Street Side	Lumens	926.7	0.0	926.7
	% Fixture	47.8	0.0	47.8
Total	Lumens	1940.3	0.0	1940.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.9
10°-20°	118.6	6.1
20°-30°	192.4	9.9
30°-40°	239.2	12.3
40°-50°	297.4	15.3
50°-60°	365.8	18.9
60°-70°	432.5	22.3
70°-80°	242.2	12.5
80°-90°	14.7	0.8
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°	1940.3	100.0
0°-180°	1940.3	100.0



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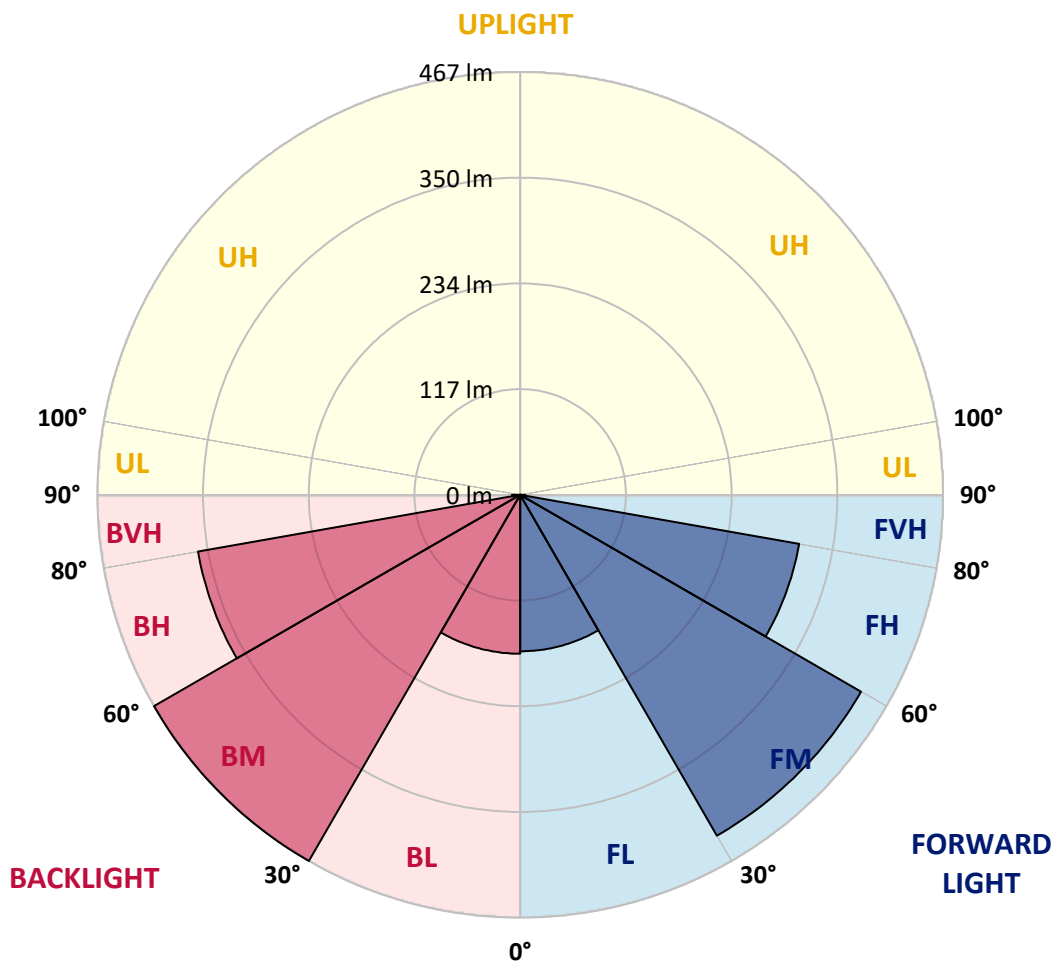
CATALOG NUMBER: ENT-F01-LED-E1-GZW-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	172.9	8.9			
FM	(30°-60°)	435.0	22.4			
FH	(60°-80°)	313.1	16.1			G0/660
FVH	(80°-90°)	5.6	0.3			G0/10
BL	(0°-30°)	175.6	9.1	B1/500		
BM	(30°-60°)	467.3	24.1	B1/1000		
BH	(60°-80°)	361.6	18.6	B1/500		G1/500
BVH	(80°-90°)	9.1	0.5			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
2.5°	383.2	383.2	383.2	383.6	383.9	384.6	384.2	384.9	383.9	385.3	385.3
5°	387.7	388.1	388.4	388.4	389.1	389.5	389.1	390.2	389.1	390.5	390.9
7.5°	391.9	391.9	392.3	392.6	393.3	394.0	394.4	395.4	395.0	396.4	397.8
10°	395.0	394.7	395.0	395.7	397.5	398.5	399.9	401.3	402.0	403.4	405.5
12.5°	396.4	396.1	397.1	398.9	400.6	402.7	404.8	407.9	410.0	412.1	415.3
15°	395.7	395.7	397.1	399.2	402.7	406.5	410.4	414.6	418.4	422.9	426.1
17.5°	389.1	389.8	391.9	395.4	400.6	406.5	412.8	419.8	426.1	432.3	436.5
20°	377.3	378.0	381.8	386.0	393.0	401.7	411.4	421.5	431.3	439.6	445.6
22.5°	362.7	362.0	365.4	371.0	380.4	390.9	403.4	418.4	431.6	443.5	451.8
25°	340.0	340.0	343.8	350.8	360.9	373.8	389.1	408.3	426.1	441.4	453.2
27.5°	316.0	316.3	321.2	327.1	338.6	350.8	368.6	390.9	412.5	432.7	450.1
30°	291.9	293.0	297.2	303.1	315.3	328.2	346.3	368.2	391.6	416.6	440.3
32.5°	267.2	268.6	272.1	279.0	292.3	306.6	325.0	344.5	366.8	394.4	425.0
35°	243.9	244.9	247.7	256.1	269.6	285.0	305.5	324.3	347.0	372.4	406.2
37.5°	221.9	223.0	226.1	234.8	248.4	263.7	283.9	305.2	328.5	353.6	387.0
40°	198.2	200.7	204.8	213.2	225.7	243.2	263.7	286.0	310.7	339.3	373.5
42.5°	176.6	178.7	182.5	189.9	202.4	220.9	242.5	265.5	292.3	324.7	363.3
45°	156.8	158.5	162.3	169.0	182.2	196.8	216.3	240.4	268.2	305.5	352.5
47.5°	137.6	139.3	143.5	151.5	162.3	176.6	194.0	215.3	241.1	279.0	332.0
50°	118.4	120.2	124.4	132.4	142.8	156.8	172.8	192.0	217.4	250.1	302.0
52.5°	97.5	99.3	103.5	111.5	121.6	134.8	151.2	171.0	194.7	225.7	268.6
55°	74.9	77.3	81.2	87.8	98.6	111.8	128.2	149.8	173.8	204.1	243.9
57.5°	54.0	55.7	60.3	65.5	74.6	88.5	103.1	125.4	152.2	183.2	222.6
60°	39.4	41.1	44.2	48.4	54.7	64.8	77.7	98.6	128.2	163.0	203.4
62.5°	32.7	34.1	37.3	41.5	44.9	49.8	57.5	73.5	102.4	141.1	183.6
65°	28.9	30.0	32.7	36.9	39.7	41.8	44.9	55.7	79.4	117.4	164.1
67.5°	25.8	26.8	28.9	32.4	35.5	36.6	38.3	45.6	62.4	95.5	143.5
68°	25.4	26.5	28.2	31.4	34.5	35.5	37.3	44.6	60.6	90.9	138.0
70°	23.7	24.4	26.1	28.6	31.0	31.7	33.8	41.1	56.8	79.4	111.8
72.5°	21.6	21.9	23.0	25.1	27.5	27.9	30.0	35.9	44.6	58.5	83.3
75°	18.1	18.5	19.9	21.6	23.0	23.7	24.4	27.2	30.3	36.2	49.1
77.5°	13.9	14.6	15.7	16.7	18.8	19.5	18.8	20.9	22.3	24.7	30.0
80°	8.4	8.4	9.4	10.5	11.5	13.2	12.5	14.6	15.7	17.1	20.2
82.5°	1.4	1.7	1.7	2.4	3.1	3.8	4.2	5.2	6.6	8.0	10.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
2.5°	383.2	384.2	384.2	383.9	383.9	383.9	382.9	383.2	383.6	384.6	383.2
5°	388.8	389.8	389.5	389.1	389.1	389.1	387.7	388.1	388.4	389.1	387.7
7.5°	396.1	397.1	397.5	397.5	397.5	398.2	396.1	396.1	396.8	397.5	395.4
10°	406.9	406.9	407.9	408.6	409.3	410.0	408.6	407.9	409.3	409.3	406.9
12.5°	417.0	417.7	419.4	420.8	421.2	422.6	422.6	422.2	423.3	422.9	420.1
15°	428.5	429.2	430.6	432.3	432.7	434.1	434.1	434.4	435.5	436.2	432.0
17.5°	439.3	440.3	440.3	440.7	441.4	442.4	443.1	443.5	444.5	445.2	441.0
20°	448.3	449.4	447.7	446.3	444.9	445.6	447.0	448.3	449.0	449.4	444.2
22.5°	455.3	455.7	452.9	449.0	445.2	444.9	446.6	449.0	449.7	449.4	442.1
25°	459.1	460.2	457.4	451.5	444.5	442.1	443.8	447.0	448.3	447.0	438.2
27.5°	459.1	463.0	461.6	455.3	445.9	439.3	440.3	445.2	446.3	444.5	434.4
30°	455.7	463.7	465.4	461.6	451.8	440.3	438.9	444.5	445.9	442.8	432.7
32.5°	448.7	463.3	470.3	470.6	463.0	448.7	441.7	447.3	448.3	444.5	436.2
35°	438.9	463.0	476.6	483.2	480.7	466.5	454.3	457.8	457.1	452.9	449.7
37.5°	428.1	463.0	485.6	501.0	506.5	499.2	483.2	481.4	483.2	476.9	475.2
40°	416.3	464.0	498.5	525.7	542.4	544.8	530.6	525.7	527.8	521.9	524.3
42.5°	409.3	465.4	515.6	554.6	587.0	611.7	605.5	590.8	589.8	590.5	595.7
45°	405.8	468.9	532.7	587.3	632.6	687.7	693.6	667.5	668.9	672.7	680.7
47.5°	402.0	475.5	552.5	621.5	682.5	759.8	788.7	753.5	750.7	765.0	767.5
50°	388.1	483.5	575.2	659.8	734.7	841.0	886.6	850.7	851.4	864.6	859.8
52.5°	356.0	483.9	599.2	698.1	787.0	921.1	990.4	966.7	965.0	977.9	952.1
55°	311.8	461.9	618.7	735.8	836.4	995.6	1097.7	1102.9	1099.4	1101.5	1045.8
57.5°	276.3	407.9	620.8	767.5	878.2	1066.4	1207.8	1245.4	1245.8	1236.7	1137.8
60°	253.3	347.3	593.6	793.6	927.0	1156.6	1351.3	1435.6	1440.5	1403.6	1260.7
62.5°	234.1	316.7	537.5	820.4	983.1	1247.9	1506.0	1644.6	1645.0	1583.3	1396.3
65°	219.1	299.9	475.9	810.3	1026.3	1336.3	1669.7	1855.1	1846.0	1778.1	1524.8
67.5°	202.4	285.0	447.3	794.6	1063.2	1418.2	1814.0	2026.8	2029.2	1945.6	1643.9
68°	198.9	279.4	440.0	781.4	1059.0	1415.4	1821.6	2038.3	2042.5	1956.4	1649.2
70°	171.4	243.9	382.9	682.5	983.8	1339.8	1772.8	2005.9	2018.8	1922.6	1591.0
72.5°	114.3	168.6	255.7	482.1	758.0	1064.6	1451.3	1680.2	1691.0	1626.2	1321.4
75°	72.5	102.4	135.9	278.0	509.3	764.0	1094.2	1227.6	1245.4	1224.2	989.4
77.5°	43.9	71.8	83.6	134.8	268.2	357.4	494.3	503.0	523.2	510.7	512.8
80°	28.9	49.8	61.0	91.6	93.0	77.0	87.4	88.1	93.4	99.3	103.5
82.5°	16.4	30.3	42.5	62.7	55.4	28.6	24.4	25.4	26.1	26.8	31.7
85°	2.4	5.6	11.8	19.5	19.9	9.4	8.7	8.0	8.4	9.1	11.5
87.5°	0.0	0.0	0.0	0.0	0.3	0.7	1.0	1.0	1.0	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
2.5°	382.9	382.5	382.9	381.8	382.9	382.5	382.5	382.5	382.2	382.5	382.5
5°	387.0	387.0	387.0	386.3	387.0	387.0	387.0	387.0	386.7	387.0	387.4
7.5°	395.0	395.0	394.7	393.7	394.4	394.4	394.0	393.3	392.6	393.0	392.6
10°	405.8	406.5	404.5	404.5	403.4	402.0	401.0	399.9	399.6	398.9	397.5
12.5°	419.1	418.7	416.0	414.9	414.2	411.4	409.3	408.3	406.9	405.2	403.1
15°	430.9	429.5	427.4	426.4	425.4	422.2	419.4	417.0	415.3	412.8	409.7
17.5°	438.9	437.5	436.5	436.2	436.2	433.4	430.9	427.8	424.0	419.4	414.2
20°	440.7	440.7	441.0	443.1	445.2	444.2	441.4	437.5	432.0	424.7	416.6
22.5°	438.2	439.6	442.8	448.0	452.5	452.9	450.1	444.5	435.1	424.7	412.8
25°	434.1	437.9	444.5	451.8	458.1	458.1	453.2	445.2	432.3	417.3	401.7
27.5°	432.0	439.6	449.0	456.7	460.9	458.5	449.7	438.2	420.5	401.3	383.2
30°	434.4	446.3	456.4	461.6	462.3	454.3	439.3	422.2	401.3	378.3	359.9
32.5°	443.5	457.8	465.4	466.5	461.6	446.6	423.3	399.6	376.2	355.0	336.2
35°	461.9	474.1	476.9	472.7	460.5	435.5	402.0	374.1	353.2	333.0	313.5
37.5°	491.9	497.5	492.2	480.1	457.1	421.9	382.5	355.3	333.0	313.2	291.6
40°	534.4	528.1	513.1	489.1	453.2	406.9	367.2	340.0	315.3	293.3	271.7
42.5°	587.3	565.4	534.4	499.6	449.0	397.1	356.0	324.7	297.5	273.1	250.5
45°	646.6	605.8	563.7	511.4	447.7	391.2	342.8	305.9	274.2	249.8	227.5
47.5°	706.8	648.7	593.3	524.3	449.4	380.8	322.6	281.1	248.0	224.3	203.4
50°	767.8	696.7	627.8	541.0	448.3	359.5	295.1	252.9	222.3	201.0	182.2
52.5°	829.1	747.9	663.3	556.0	434.4	326.1	264.8	228.9	199.3	178.7	160.2
55°	889.4	797.8	698.1	560.5	394.0	290.9	239.3	204.8	175.6	154.7	134.5
57.5°	946.5	842.7	722.5	534.0	344.2	263.4	216.7	182.9	151.9	127.9	108.0
60°	1017.6	885.6	729.5	469.9	304.5	240.4	196.1	157.5	122.6	97.2	79.1
62.5°	1095.3	943.7	718.7	408.6	281.1	220.2	170.7	127.5	93.7	69.0	55.4
65°	1152.4	967.8	664.0	375.9	266.5	200.3	143.5	98.9	64.8	47.4	42.2
67.5°	1228.3	991.5	607.6	359.9	250.5	174.5	110.8	71.4	50.2	39.4	36.2
68°	1223.1	984.8	595.7	355.7	245.6	165.5	104.5	70.0	48.8	38.3	35.2
70°	1152.4	903.7	517.3	315.3	203.4	128.9	89.9	63.8	44.9	34.8	32.0
72.5°	945.5	700.9	371.0	207.6	132.4	94.4	66.5	48.1	37.3	30.7	28.6
75°	669.2	438.2	186.0	119.5	83.3	54.7	37.6	31.0	27.5	24.4	24.4
77.5°	376.2	229.2	98.2	81.9	47.0	31.7	25.1	23.3	21.6	19.9	21.9
80°	122.6	119.5	72.5	56.1	32.7	23.3	19.5	18.5	17.4	15.7	19.5
82.5°	66.2	81.9	52.3	40.1	24.0	16.7	14.6	15.0	13.6	12.2	14.6
85°	29.6	39.0	34.8	27.9	15.0	9.4	7.7	9.1	8.0	7.3	7.0
87.5°	11.5	19.2	13.9	8.0	3.5	2.1	2.1	1.7	1.4	1.4	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ENT-F01-LED-E1-GZW-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	381.5	381.5	381.5	381.5	381.5
2.5°	381.5	381.5	381.1	380.8	380.1
5°	386.3	386.3	386.0	385.6	384.9
7.5°	391.6	391.2	390.9	390.5	389.8
10°	397.1	396.4	396.4	396.8	396.4
12.5°	402.7	401.7	400.6	400.3	401.3
15°	408.3	406.2	404.5	404.1	404.1
17.5°	411.4	407.9	404.8	403.8	403.8
20°	410.7	404.5	400.3	398.2	398.5
22.5°	404.1	395.4	389.8	387.0	386.0
25°	390.2	379.7	372.8	368.9	369.3
27.5°	369.3	358.1	350.5	348.4	346.3
30°	344.5	333.4	325.7	321.2	321.5
32.5°	320.1	308.0	301.0	295.8	295.1
35°	296.8	283.6	275.2	271.4	270.7
37.5°	273.8	259.9	252.2	248.7	246.3
40°	252.6	240.0	231.0	225.7	224.7
42.5°	231.7	217.4	208.3	204.5	203.4
45°	208.0	194.4	186.4	183.2	182.5
47.5°	186.7	173.8	167.2	163.0	161.6
50°	166.2	154.0	146.3	142.5	141.8
52.5°	144.6	132.4	124.4	121.2	118.4
55°	120.9	108.0	100.0	94.4	92.3
57.5°	93.4	81.9	73.5	69.7	65.8
60°	66.9	56.8	50.2	47.0	44.2
62.5°	47.4	40.8	36.6	33.4	31.7
65°	39.0	35.9	31.4	28.6	27.2
67.5°	34.5	31.4	27.9	25.4	24.4
68°	33.8	30.7	27.2	24.7	24.0
70°	31.0	27.9	24.7	23.0	22.3
72.5°	27.5	25.1	22.3	20.6	19.9
75°	23.7	21.3	19.5	18.1	17.1
77.5°	20.9	17.4	16.7	15.3	14.6
80°	17.4	15.7	14.3	13.2	12.5
82.5°	14.3	11.8	10.1	9.1	8.7
85°	8.0	7.3	5.9	4.5	4.2
87.5°	0.7	0.3	0.3	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)