

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: P141700

Luminaire Tested: **ECM-E01-LED-E1-T2**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141700  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33682)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E01-LED-E1-T2  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (21) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2948.1 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

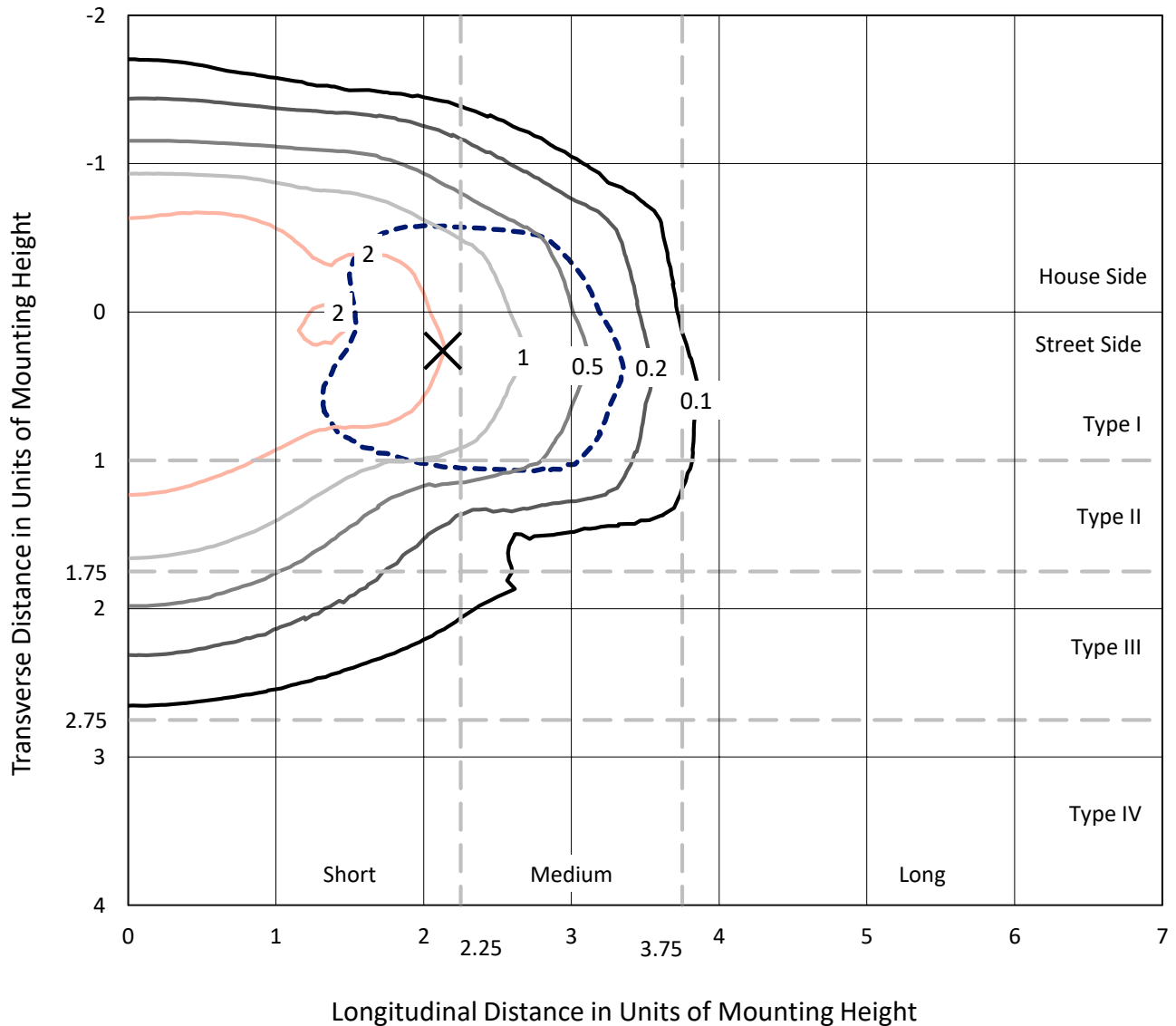
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

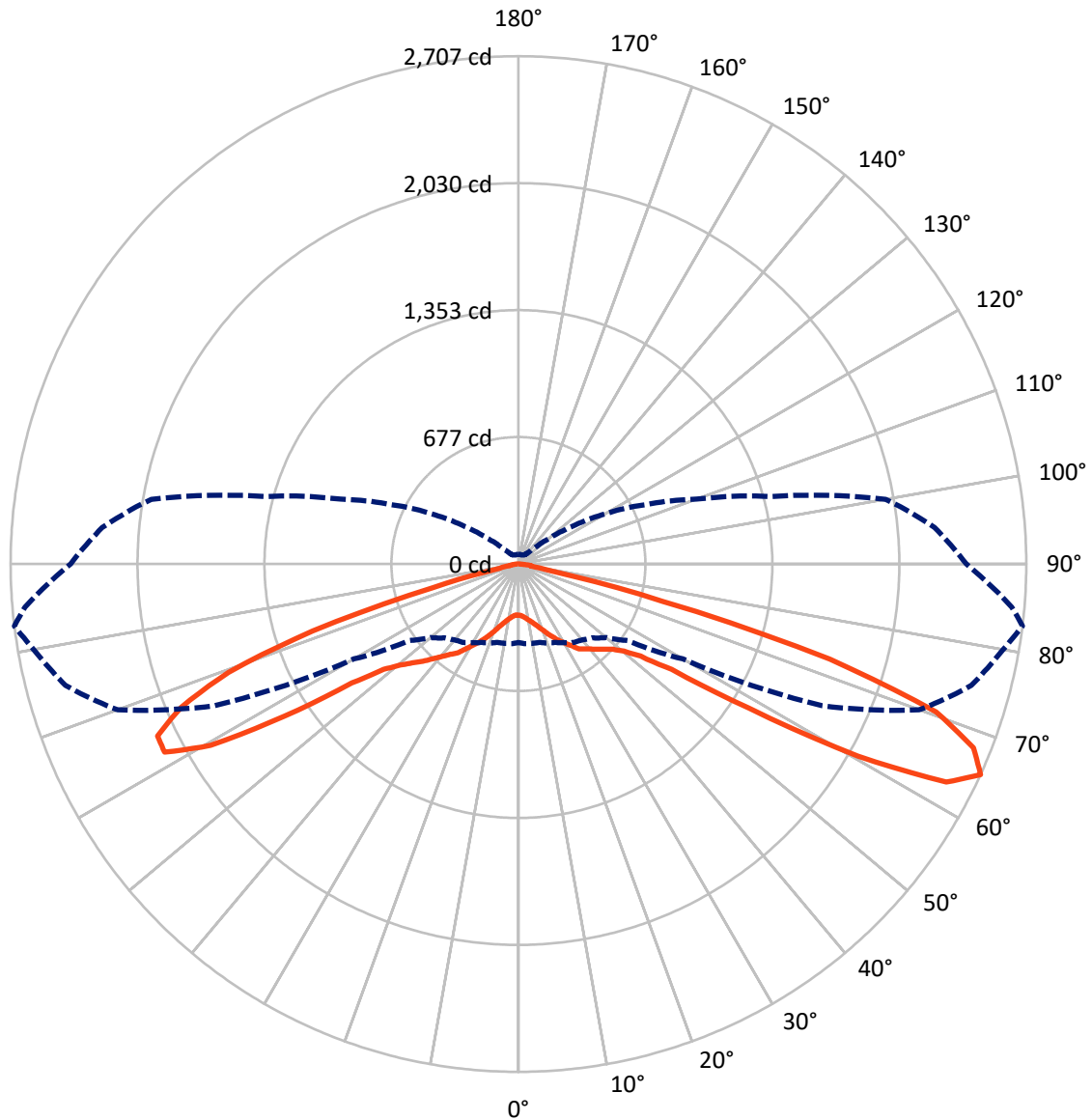
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 83-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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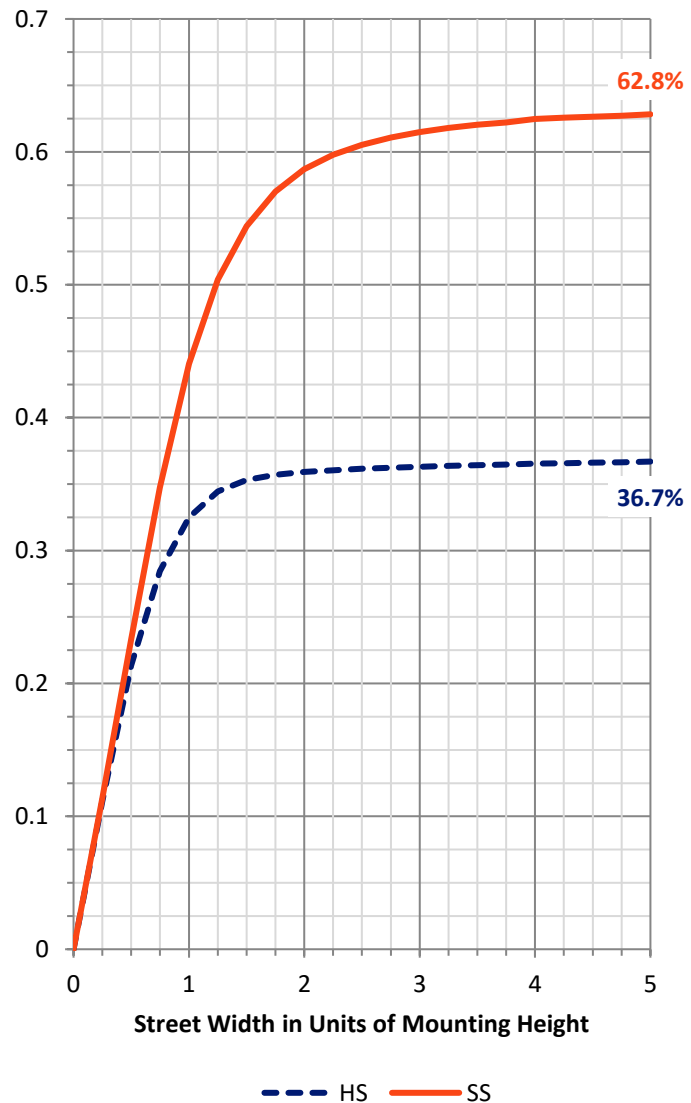
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1093.5	0.0	1093.5
	% Fixture	37.1	0.0	37.1
<b>Street Side</b>	Lumens	1854.6	0.0	1854.6
	% Fixture	62.9	0.0	62.9
<b>Total</b>	Lumens	2948.1	0.0	2948.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	0.9
10°-20°	96.2	3.3
20°-30°	190.1	6.4
30°-40°	327.2	11.1
40°-50°	493.6	16.7
50°-60°	686.9	23.3
60°-70°	792.8	26.9
70°-80°	288.1	9.8
80°-90°	45.8	1.6
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°	2948.1	100.0
0°-180°	2948.1	100.0



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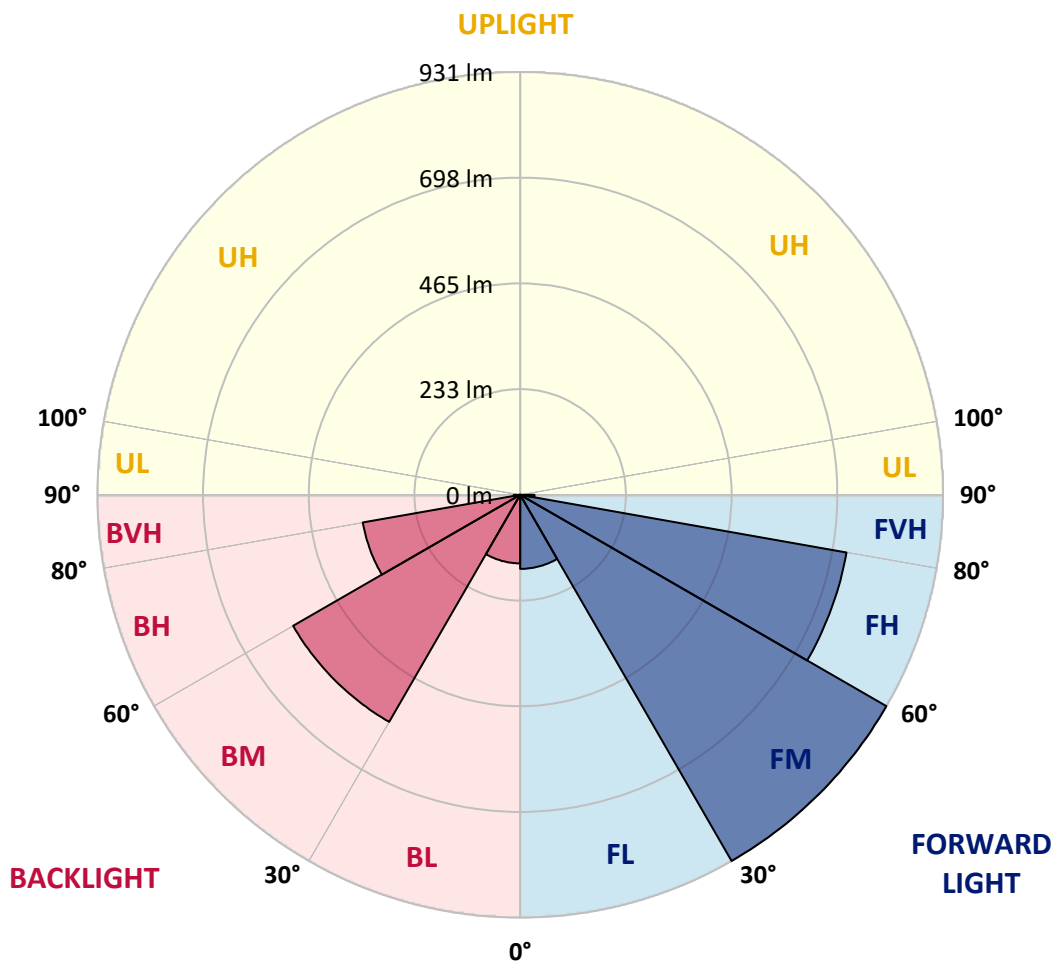
CATALOG NUMBER: ECM-E01-LED-E1-T2

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	163.0	5.5			
FM	(30°-60°)	930.6	31.6			
FH	(60°-80°)	729.3	24.7			G1/1800
FVH	(80°-90°)	31.6	1.1			G1/100
BL	(0°-30°)	150.8	5.1	B1/500		
BM	(30°-60°)	577.0	19.6	B1/1000		
BH	(60°-80°)	351.6	11.9	B1/500		G1/500
BVH	(80°-90°)	14.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0
2.5°	286.3	287.0	286.3	286.3	286.0	285.7	285.7	285.3	284.7	284.0	283.7
5°	302.0	302.3	301.3	301.3	301.7	301.3	300.3	300.7	298.0	297.0	296.3
7.5°	319.3	320.3	319.0	318.3	318.0	317.3	316.3	314.7	312.7	311.0	310.0
10°	339.0	340.0	339.3	338.0	336.0	335.0	334.0	331.3	329.0	326.3	324.3
12.5°	362.3	362.7	362.0	359.3	358.0	355.0	351.7	348.7	345.3	341.3	338.0
15°	385.3	385.7	384.7	382.0	380.3	376.7	372.0	368.0	362.3	357.7	353.3
17.5°	403.0	403.7	401.7	399.7	397.3	392.7	388.3	383.7	377.7	372.7	368.3
20°	409.0	410.0	408.7	407.7	406.3	404.0	399.7	395.7	390.3	386.7	383.3
22.5°	406.3	407.3	406.7	406.7	406.7	406.3	404.3	403.3	400.0	398.3	397.7
25°	402.3	403.3	402.7	403.3	404.7	406.3	406.3	408.3	408.0	410.7	412.3
27.5°	412.7	413.3	411.7	411.7	413.0	415.7	415.0	419.0	419.7	425.0	430.0
30°	448.7	448.7	446.0	443.3	444.3	443.7	443.0	445.7	445.7	450.7	453.0
32.5°	502.3	498.7	498.3	498.0	495.7	497.3	492.0	492.3	490.0	490.7	489.7
35°	561.3	561.0	559.7	559.0	558.0	563.0	559.0	562.3	554.0	551.0	545.3
37.5°	613.0	614.3	615.3	620.3	622.7	632.7	635.0	636.7	628.0	628.3	615.7
40°	665.0	666.7	670.3	679.3	686.0	695.3	699.7	706.7	707.3	708.7	699.3
42.5°	721.7	719.0	724.0	735.3	743.7	753.0	758.7	771.7	779.0	782.7	784.0
45°	767.3	764.3	766.7	773.3	781.0	793.0	805.3	824.7	840.3	857.3	866.7
47.5°	791.0	791.7	793.3	797.3	802.7	814.3	831.7	856.3	881.7	909.0	933.3
50°	798.7	799.0	801.3	805.3	810.3	822.7	840.7	868.7	899.3	937.7	975.0
52.5°	801.0	799.7	802.0	804.0	807.3	817.7	834.7	864.0	898.7	945.0	1000.3
55°	792.3	790.7	794.7	797.3	800.0	808.3	821.3	848.3	884.3	937.0	1009.3
57.5°	759.0	759.3	765.0	772.0	779.0	790.3	807.3	833.0	868.7	920.7	1001.7
60°	702.7	701.7	708.7	717.3	729.3	747.3	768.3	794.3	824.0	867.3	947.0
62.5°	600.3	604.3	606.7	619.7	620.3	646.0	659.7	685.7	711.0	744.3	816.0
65°	418.0	426.7	429.0	432.3	448.0	461.3	483.3	510.7	527.3	556.7	610.0
67.5°	260.3	266.7	267.0	275.7	289.3	304.7	321.7	349.3	374.7	379.3	406.0
70°	216.0	216.3	221.0	227.3	238.0	253.7	270.3	289.7	312.7	327.3	324.7
72.5°	179.0	181.0	184.3	190.7	202.3	216.3	237.7	262.3	291.0	320.3	346.3
75°	120.0	123.3	124.3	127.3	133.0	145.7	161.7	185.0	222.0	265.7	321.0
77.5°	63.7	64.3	66.7	69.0	72.0	79.7	90.0	102.0	126.3	164.0	229.0
80°	32.3	33.7	35.3	37.0	36.7	38.7	41.7	47.0	55.3	72.0	103.7
82.5°	11.7	15.0	19.7	22.0	22.0	22.7	23.7	24.7	24.0	26.7	33.3
85°	5.3	6.0	7.7	12.0	12.3	12.3	12.3	13.0	12.3	11.0	13.0
87.5°	0.0	1.0	1.0	3.0	3.3	3.0	3.3	4.3	3.3	2.7	2.3
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°	83°	85°	90°	95°	100°
0°	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0
2.5°	282.0	281.3	279.7	279.0	277.0	275.7	275.0	274.3	273.3	272.0	271.0
5°	294.3	292.3	290.0	288.7	286.0	283.3	282.3	281.0	278.7	276.7	274.3
7.5°	307.3	305.0	302.3	299.3	296.7	293.7	292.3	291.0	287.7	285.0	281.7
10°	321.3	318.0	315.0	312.3	310.0	306.7	304.3	303.3	300.3	296.3	293.0
12.5°	334.7	331.0	328.0	324.7	322.3	319.7	317.3	316.3	314.0	310.3	307.7
15°	348.7	345.0	341.7	339.3	336.7	335.0	333.7	332.0	331.0	328.0	326.7
17.5°	363.7	360.3	357.3	355.3	354.3	354.0	353.7	353.0	352.0	350.0	349.0
20°	380.7	377.7	376.7	376.3	376.7	377.0	377.7	377.7	378.0	376.7	376.3
22.5°	397.0	397.0	398.7	400.7	402.7	404.0	405.0	403.7	404.0	406.0	407.7
25°	415.0	418.0	422.3	425.7	428.7	431.0	432.3	433.0	433.7	436.7	439.7
27.5°	434.3	439.0	445.3	449.7	455.3	459.0	461.7	461.3	462.3	466.3	471.7
30°	458.3	463.0	469.7	475.7	483.3	488.7	489.7	489.0	490.3	494.0	504.7
32.5°	492.0	493.0	497.3	503.3	511.7	517.0	518.0	519.7	522.7	529.3	542.3
35°	539.3	535.0	534.7	537.3	545.3	555.7	556.7	557.7	559.0	567.7	585.0
37.5°	603.3	585.7	575.0	566.7	567.7	571.3	573.3	574.0	577.3	590.7	620.0
40°	683.7	650.7	627.0	603.3	594.7	595.3	596.0	595.3	602.0	622.7	661.0
42.5°	771.7	742.7	701.3	652.3	627.7	619.7	620.7	621.3	631.7	661.7	704.3
45°	865.0	846.3	798.3	721.7	668.7	648.3	647.7	649.0	666.0	708.3	753.3
47.5°	947.0	951.7	916.3	826.3	735.3	683.7	679.3	681.7	709.3	754.7	800.3
50°	1012.0	1042.7	1040.0	968.7	843.3	744.7	729.3	732.7	765.3	812.3	853.3
52.5°	1061.0	1123.3	1163.3	1135.0	1026.0	855.3	815.7	810.0	851.0	900.7	926.0
55°	1093.7	1194.7	1299.7	1348.7	1304.3	1094.3	990.7	978.3	1022.7	1086.0	1097.0
57.5°	1115.3	1281.3	1507.3	1696.7	1757.0	1577.0	1447.0	1395.3	1427.7	1494.7	1480.3
60°	1079.3	1315.7	1758.0	2097.3	2269.0	2224.3	2079.7	2001.7	1941.3	1936.3	1856.7
62.5°	941.3	1234.0	1859.7	2288.0	2529.3	2585.0	2559.3	2467.0	2300.0	2207.3	2027.3
65°	710.0	1011.0	1787.3	2273.3	2499.7	2623.0	2706.7	2640.3	2387.0	2226.7	1987.3
67.5°	453.7	652.7	1486.7	2097.0	2309.7	2448.3	2615.7	2585.3	2261.7	2057.0	1796.7
70°	331.3	361.7	1008.7	1775.0	2009.0	2131.0	2361.0	2347.7	1983.3	1753.3	1495.3
72.5°	381.7	269.7	553.0	1326.0	1507.0	1603.0	1734.7	1702.3	1385.7	1226.0	1043.3
75°	430.3	301.7	311.7	786.7	842.0	774.7	792.7	688.3	537.0	476.0	469.0
77.5°	362.3	378.3	282.7	338.0	311.3	224.3	168.0	131.7	103.0	110.7	123.0
80°	210.7	425.3	374.0	176.0	197.3	157.0	70.0	58.0	48.0	48.7	49.3
82.5°	65.0	265.7	526.3	215.0	195.3	221.3	64.3	39.3	31.7	35.7	40.3
85°	21.7	111.3	422.0	225.7	126.3	118.0	28.3	19.3	16.0	22.3	31.7
87.5°	5.3	27.0	78.3	29.7	18.7	11.3	9.7	7.0	7.7	14.0	19.7
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°	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0
2.5°	270.3	269.3	268.3	267.7	266.7	266.7	265.7	265.7	264.3	263.7	263.7
5°	272.3	270.3	268.7	267.0	265.3	264.7	263.3	262.7	261.3	260.3	259.7
7.5°	279.0	276.3	274.3	272.3	270.3	269.3	268.0	266.7	266.3	265.7	265.0
10°	290.3	286.7	285.0	283.7	281.0	280.3	279.0	278.0	277.0	276.0	276.3
12.5°	305.0	302.3	301.7	299.0	298.3	297.3	295.3	294.7	292.0	290.0	289.0
15°	323.7	322.7	322.7	321.3	319.3	317.7	314.7	313.0	308.3	305.3	302.0
17.5°	348.3	347.3	347.7	346.3	344.0	341.0	337.7	332.7	325.7	320.3	313.7
20°	377.0	376.7	377.3	376.3	373.3	369.3	361.3	354.0	344.3	334.7	327.3
22.5°	409.0	410.7	411.3	408.7	405.3	397.0	388.3	377.7	364.7	352.0	341.7
25°	443.0	447.0	449.3	445.7	441.7	431.0	418.0	403.7	385.3	370.0	356.3
27.5°	476.3	484.7	488.0	486.0	479.7	464.7	447.3	428.3	406.0	385.7	368.0
30°	516.0	527.0	533.0	530.0	517.7	498.0	477.0	451.3	423.0	398.7	377.3
32.5°	557.7	571.3	575.7	569.3	551.3	526.7	499.3	468.0	436.0	408.0	384.0
35°	604.0	616.7	617.7	605.3	581.7	550.3	516.3	478.7	442.0	410.7	384.3
37.5°	644.3	657.0	656.0	637.7	609.0	570.0	526.7	481.0	438.3	402.7	374.0
40°	686.7	700.7	693.0	669.3	632.3	582.7	528.0	473.0	424.3	385.3	354.0
42.5°	731.3	737.3	723.7	694.0	646.3	582.3	516.7	454.0	402.3	359.0	326.0
45°	772.3	767.7	748.0	708.3	645.3	568.0	494.3	430.3	373.0	329.7	297.3
47.5°	809.0	794.3	764.0	708.3	629.7	542.7	465.7	399.7	342.7	299.0	267.0
50°	848.7	818.0	770.7	696.0	601.3	512.0	435.3	369.0	310.3	265.7	230.7
52.5°	901.3	846.3	770.7	673.7	572.0	481.0	403.3	333.3	272.7	226.0	191.3
55°	1024.7	905.7	784.0	661.3	546.0	448.3	365.3	287.3	228.3	183.7	155.0
57.5°	1267.0	1035.7	851.0	684.0	536.3	413.0	316.3	236.3	180.3	143.0	119.0
60°	1468.7	1140.7	905.3	701.3	520.7	367.3	256.3	181.0	134.0	105.7	90.0
62.5°	1520.7	1142.0	883.0	656.3	457.3	299.0	189.0	124.7	92.0	76.7	68.3
65°	1390.7	1010.0	751.0	535.3	348.3	207.7	118.3	75.7	61.3	56.0	52.7
67.5°	1169.0	804.7	556.7	373.3	219.7	114.3	66.3	52.0	46.7	45.0	43.3
70°	896.7	565.3	362.3	218.7	115.0	59.3	47.3	42.7	40.3	39.3	38.0
72.5°	552.7	334.0	197.0	105.0	57.3	45.3	42.3	40.7	37.7	36.3	35.0
75°	234.7	143.3	81.7	53.3	46.0	43.3	41.0	39.0	36.7	34.7	33.3
77.5°	79.0	54.7	48.3	46.7	46.0	43.3	40.3	37.7	35.3	33.0	31.7
80°	48.0	43.7	44.7	44.3	46.0	43.0	39.0	36.0	33.3	31.0	29.3
82.5°	41.7	41.3	42.3	43.3	45.7	41.3	36.7	32.3	29.0	26.7	25.0
85°	36.0	36.7	37.3	38.0	39.3	35.0	29.7	25.7	23.0	20.0	18.7
87.5°	24.0	26.0	27.3	27.7	26.7	16.7	9.7	11.3	11.7	10.0	9.0
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: ECM-E01-LED-E1-T2

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	273.0	273.0	273.0	273.0	273.0
2.5°	262.7	262.3	263.3	262.3	262.3
5°	259.3	259.0	259.0	259.0	258.3
7.5°	264.7	264.3	264.0	264.0	263.7
10°	275.0	274.7	274.7	274.3	274.3
12.5°	287.3	286.0	285.7	285.0	285.3
15°	299.3	295.7	294.7	293.7	292.7
17.5°	308.7	304.3	302.0	300.0	300.0
20°	320.3	314.7	311.7	308.7	308.7
22.5°	333.7	326.0	322.0	318.7	317.3
25°	344.7	335.0	329.3	325.3	324.3
27.5°	353.0	340.7	333.3	328.7	327.3
30°	359.7	345.7	337.0	332.0	330.0
32.5°	364.0	348.7	339.3	334.3	332.3
35°	361.7	345.3	334.0	328.0	326.7
37.5°	350.0	332.7	319.3	313.0	310.7
40°	328.7	310.0	296.0	288.3	287.0
42.5°	300.7	282.0	268.7	260.7	257.0
45°	270.7	251.3	238.7	231.3	227.0
47.5°	238.3	219.3	206.3	199.0	196.0
50°	204.3	186.0	175.0	167.0	164.0
52.5°	169.0	152.7	141.7	135.0	131.7
55°	135.3	122.0	112.7	108.3	106.0
57.5°	105.7	97.0	91.7	89.0	87.3
60°	82.0	77.7	75.7	73.7	74.0
62.5°	64.0	63.0	62.3	61.3	61.7
65°	51.7	51.0	51.3	51.0	51.3
67.5°	42.3	42.7	43.3	43.3	43.7
70°	37.3	37.7	38.3	38.3	38.3
72.5°	34.7	35.3	36.0	35.7	35.7
75°	32.7	34.3	35.7	34.3	33.0
77.5°	30.7	34.7	38.3	35.3	31.7
80°	28.0	36.7	41.0	35.7	30.3
82.5°	26.7	35.3	36.0	31.0	26.7
85°	24.7	40.0	41.7	28.3	20.3
87.5°	12.7	24.0	27.7	19.0	10.3
90°	0.0	0.0	0.0	0.0	0.0

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