

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: P141868

Luminaire Tested: **ECM-E02-LED-E1-T3-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141868  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33683)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E02-LED-E1-T3-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4956.3 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

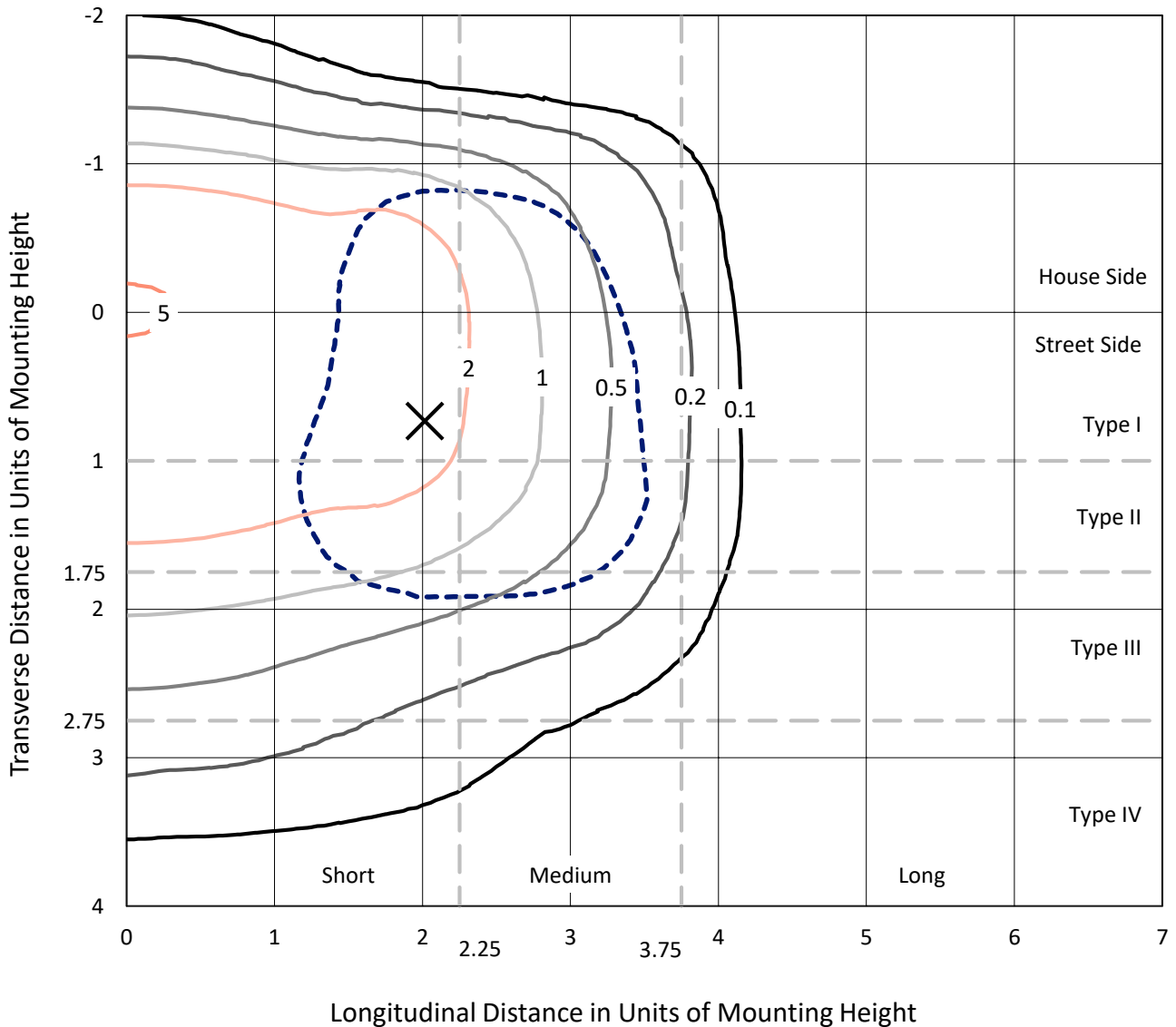
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

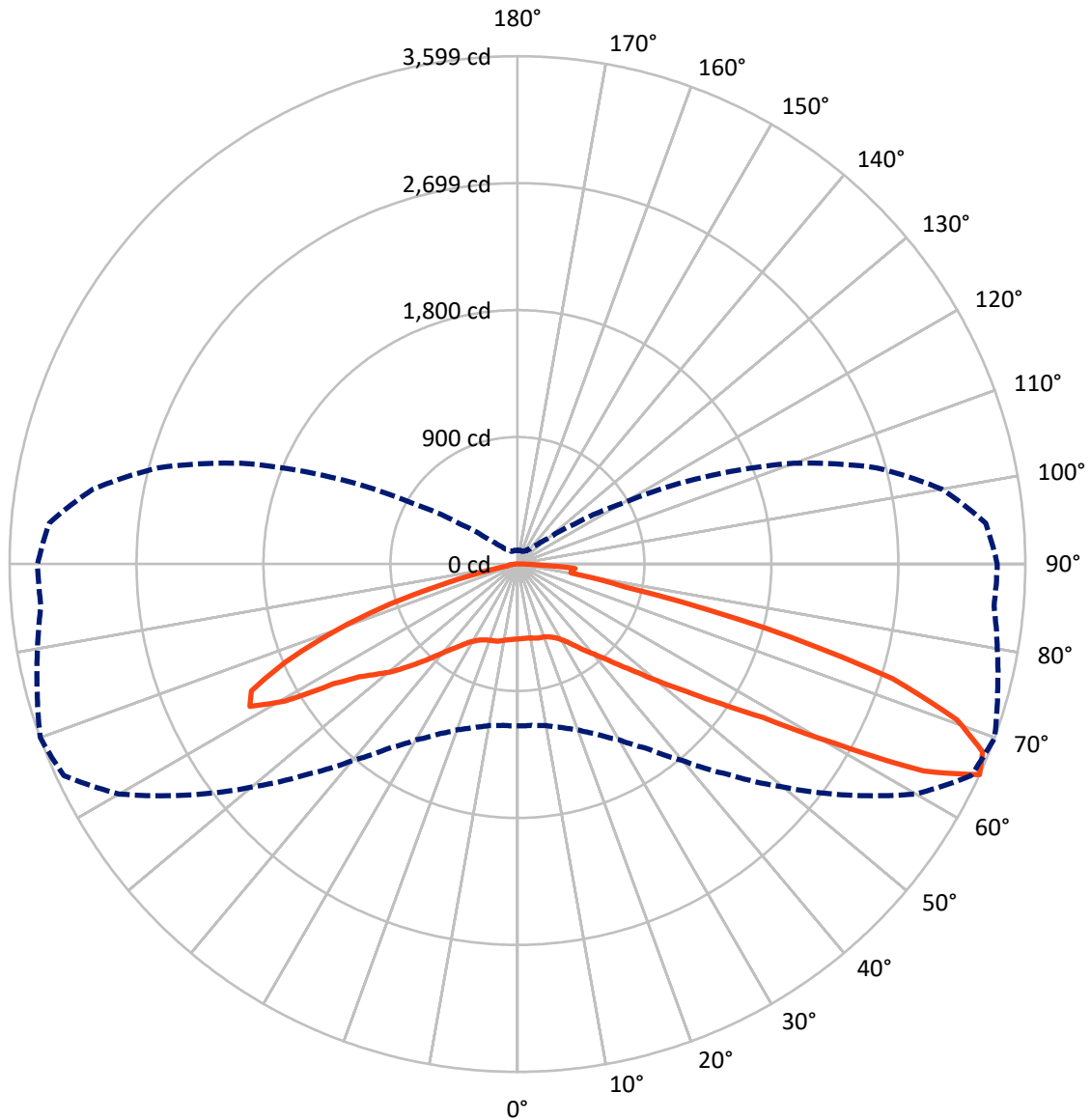


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1673.1	0.0	1673.1
	% Fixture	33.8	0.0	33.8
<b>Street Side</b>	Lumens	3283.2	0.0	3283.2
	% Fixture	66.2	0.0	66.2
<b>Total</b>	Lumens	4956.3	0.0	4956.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.1	1.0
10°-20°	151.4	3.1
20°-30°	260.3	5.3
30°-40°	417.3	8.4
40°-50°	683.2	13.8
50°-60°	1069.4	21.6
60°-70°	1502.9	30.3
70°-80°	711.2	14.4
80°-90°	109.3	2.2
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°	4956.3	100.0
0°-180°	4956.3	100.0



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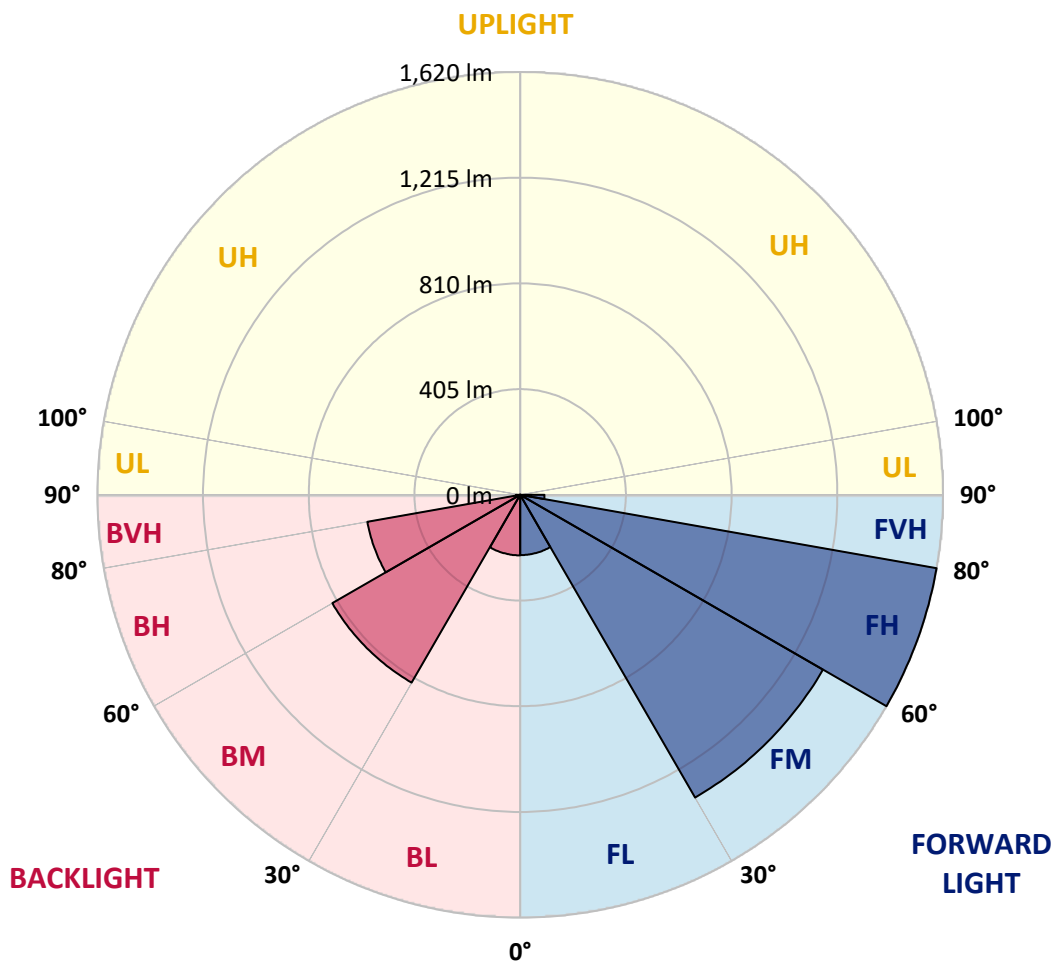
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	230.9	4.7			
FM (30°-60°)	1339.3	27.0			
FH (60°-80°)	1619.8	32.7			G1/1800
FVH (80°-90°)	93.1	1.9			G1/100
BL (0°-30°)	232.0	4.7	B1/500		
BM (30°-60°)	830.7	16.8	B1/1000		
BH (60°-80°)	594.3	12.0	B2/1000		G2/1000
BVH (80°-90°)	16.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2
2.5°	528.3	528.9	528.9	527.8	527.8	528.3	528.3	528.9	528.9	528.9	529.5
5°	528.3	528.9	528.9	528.3	527.8	528.9	528.3	528.9	528.9	528.9	528.9
7.5°	527.2	527.8	527.8	527.2	527.8	528.3	528.3	529.5	530.0	530.0	530.6
10°	521.6	522.1	522.7	522.7	523.8	525.5	526.1	528.3	528.9	530.6	531.7
12.5°	511.5	511.5	512.6	513.7	515.4	518.8	520.5	523.8	526.7	528.9	532.8
15°	502.5	502.5	503.6	504.1	507.5	509.8	513.1	517.1	522.1	526.7	532.8
17.5°	507.0	507.0	506.4	505.8	506.4	506.4	509.2	513.1	517.6	523.8	531.7
20°	524.4	523.8	521.6	520.5	519.9	517.6	516.0	515.4	517.6	522.1	530.0
22.5°	539.6	538.5	537.9	536.8	538.5	537.3	535.1	532.3	528.9	527.2	531.7
25°	548.6	549.2	549.2	549.2	552.5	553.7	554.8	551.4	547.5	541.8	542.4
27.5°	561.0	561.5	560.4	562.7	566.6	569.4	572.2	574.5	572.2	568.8	564.9
30°	587.4	587.4	585.7	587.4	590.8	593.6	597.5	601.5	601.5	598.1	594.2
32.5°	615.0	615.6	615.6	616.7	621.7	624.0	629.6	633.6	636.4	634.1	636.4
35°	648.2	647.6	649.3	649.9	657.8	660.6	671.8	674.6	679.1	680.3	681.9
37.5°	703.3	704.5	701.1	698.8	705.6	705.6	720.2	728.1	727.0	734.8	740.5
40°	792.2	787.2	785.5	784.3	788.3	787.7	787.2	797.9	802.9	804.0	806.9
42.5°	890.7	892.4	890.7	894.6	894.6	891.8	889.6	887.9	897.4	903.6	904.8
45°	1006.0	1008.3	1004.9	1002.1	1009.4	1013.4	1013.4	1017.9	1025.7	1028.5	1026.9
47.5°	1098.3	1104.5	1101.7	1105.6	1117.4	1130.9	1149.0	1160.8	1169.2	1177.1	1189.5
50°	1181.6	1184.4	1191.2	1204.1	1221.5	1242.9	1272.2	1301.4	1318.3	1338.0	1352.6
52.5°	1232.2	1240.7	1250.8	1272.2	1301.4	1331.3	1376.3	1424.1	1466.9	1488.8	1506.2
55°	1262.6	1268.8	1282.3	1311.6	1352.6	1397.1	1453.4	1519.2	1576.0	1624.4	1662.1
57.5°	1261.5	1266.5	1285.1	1317.2	1366.1	1421.8	1492.2	1574.3	1658.2	1738.6	1809.5
60°	1237.3	1241.8	1260.4	1294.7	1348.1	1414.5	1498.9	1599.6	1713.3	1834.3	1958.6
62.5°	1200.2	1203.5	1219.8	1254.2	1308.2	1379.1	1478.1	1610.3	1771.8	1962.6	2203.9
65°	1147.8	1147.8	1163.0	1198.5	1250.2	1329.6	1438.7	1594.0	1817.4	2107.7	2458.8
67.5°	1070.7	1070.7	1083.1	1112.4	1152.9	1208.0	1317.2	1478.7	1714.4	2062.2	2472.9
70°	925.0	927.3	927.3	945.3	963.3	988.0	1039.8	1163.6	1384.7	1724.6	2128.5
72.5°	678.0	636.9	669.0	698.3	718.5	732.0	761.8	800.7	912.1	1167.0	1532.7
75°	427.1	437.7	461.9	495.1	545.2	597.0	653.8	678.0	667.9	698.3	944.1
77.5°	258.8	249.8	273.5	323.0	379.2	449.6	555.9	648.2	701.1	697.7	668.4
80°	112.0	109.2	124.9	148.5	176.1	239.7	337.0	463.6	604.3	685.9	673.5
82.5°	39.9	40.5	51.2	60.8	73.1	94.0	133.4	213.2	338.2	481.6	595.3
85°	11.8	12.9	18.0	25.3	28.7	32.6	45.0	67.0	114.2	182.3	324.1
87.5°	3.4	3.9	5.1	9.0	8.4	7.9	9.0	14.1	10.7	9.0	45.0
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°	95°	100°	105°
0°	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2
2.5°	528.9	528.9	528.9	529.5	528.9	528.9	529.5	529.5	530.0	530.6	531.7
5°	528.3	528.3	528.9	528.9	528.9	529.5	530.0	530.6	531.7	533.4	535.1
7.5°	530.0	530.0	529.5	530.0	530.0	530.6	531.7	532.3	534.5	536.2	539.0
10°	531.7	531.7	532.3	532.8	532.8	534.0	535.7	536.2	538.5	541.8	544.7
12.5°	534.0	535.7	537.9	539.0	540.2	541.3	543.0	544.1	546.9	551.4	554.8
15°	535.7	539.6	541.8	544.7	546.3	546.9	548.6	550.8	553.7	558.2	562.1
17.5°	535.7	540.7	544.1	546.9	549.7	551.4	553.1	555.3	559.3	563.8	567.7
20°	535.1	542.4	546.9	551.4	556.5	558.2	561.0	563.2	567.7	573.4	576.2
22.5°	537.9	546.3	552.5	560.4	566.0	570.5	573.9	577.9	581.2	585.2	586.3
25°	546.3	554.8	564.9	574.5	582.4	589.1	593.6	597.0	600.9	602.6	600.4
27.5°	560.4	566.6	580.7	594.7	607.1	615.6	620.6	625.1	626.2	629.6	621.2
30°	585.7	588.5	603.2	623.4	637.5	651.6	658.3	662.8	663.4	661.1	646.5
32.5°	627.4	622.3	635.2	662.3	683.6	695.4	706.1	709.0	707.3	699.9	676.3
35°	678.0	670.1	676.3	715.7	739.3	756.8	766.9	769.7	765.8	752.8	720.2
37.5°	740.5	737.6	740.5	778.2	819.2	835.6	840.1	843.4	833.9	810.2	767.5
40°	809.7	810.2	806.9	841.2	892.9	916.6	927.3	920.0	908.1	874.4	827.1
42.5°	905.3	901.9	890.1	921.1	987.5	1011.7	1021.2	1015.6	1003.8	961.0	905.9
45°	1031.9	1020.7	1009.4	1025.7	1089.9	1121.4	1135.4	1131.5	1110.7	1058.9	1007.2
47.5°	1186.7	1174.8	1154.0	1151.2	1215.9	1253.0	1258.1	1251.9	1236.2	1184.4	1120.8
50°	1349.3	1345.9	1336.3	1313.8	1371.8	1408.9	1405.5	1401.0	1383.6	1317.8	1252.5
52.5°	1517.5	1524.2	1518.1	1502.3	1564.2	1579.4	1580.5	1567.0	1546.8	1486.0	1397.1
55°	1694.2	1719.5	1729.1	1741.4	1790.4	1788.1	1775.2	1743.1	1748.2	1679.0	1555.8
57.5°	1881.5	1959.2	2020.5	2048.1	2094.8	2108.3	2075.7	2086.3	2081.8	2010.4	1816.3
60°	2128.5	2314.2	2474.0	2572.5	2635.5	2611.3	2656.9	2659.1	2736.2	2579.2	2276.5
62.5°	2522.4	2863.4	3147.0	3231.9	3248.2	3242.6	3188.6	3242.6	3228.0	3036.7	2644.5
65°	2853.8	3259.5	3547.6	3599.3	3523.4	3453.6	3390.6	3401.3	3331.5	3054.7	2633.8
67.5°	2898.8	3302.8	3570.1	3555.5	3389.5	3260.1	3155.4	3073.3	2930.9	2680.5	2313.7
70°	2542.7	2970.8	3315.2	3303.9	3073.3	2900.5	2730.6	2606.8	2461.6	2268.1	1920.9
72.5°	1977.8	2359.2	2692.9	2779.5	2552.2	2361.5	2205.6	2048.1	1898.4	1714.4	1495.6
75°	1346.4	1633.4	1788.7	1812.3	1604.1	1461.2	1401.0	1272.2	1113.5	1074.1	912.1
77.5°	782.1	892.4	845.1	782.1	629.6	462.5	353.4	302.1	303.3	348.3	333.7
80°	635.8	605.4	477.7	383.2	260.5	132.8	88.9	76.5	77.1	89.5	86.6
82.5°	655.5	672.9	553.1	387.1	266.7	140.7	67.5	50.1	58.5	63.6	62.5
85°	485.6	636.4	570.5	410.7	286.4	149.7	43.9	27.6	38.8	47.3	50.6
87.5°	136.2	213.8	166.0	109.7	79.9	27.0	17.4	14.6	18.0	24.8	24.8
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2	531.2
2.5°	532.3	534.5	534.0	535.1	535.7	537.3	538.5	537.9	537.9	539.0	540.2
5°	536.8	539.6	539.6	541.3	543.0	545.2	546.9	545.8	546.3	547.5	548.6
7.5°	541.3	544.7	545.2	546.9	548.0	549.2	550.3	548.6	548.0	548.0	547.5
10°	546.9	550.3	549.7	549.7	549.2	548.0	545.8	541.8	539.0	537.3	536.2
12.5°	556.5	558.7	555.3	552.0	546.3	542.4	537.3	532.8	529.5	526.7	525.5
15°	564.9	563.8	559.8	553.7	545.8	539.6	534.5	528.3	524.4	521.0	519.3
17.5°	569.4	565.5	559.8	554.2	547.5	541.8	535.7	528.3	522.1	517.6	515.4
20°	573.9	567.7	560.4	554.8	549.7	545.2	540.7	531.7	523.8	517.1	513.7
22.5°	580.7	572.2	564.9	559.8	554.8	550.3	545.8	537.3	528.9	519.9	514.8
25°	590.2	579.0	573.9	568.8	563.2	558.7	552.5	544.7	535.7	525.0	517.6
27.5°	605.4	595.3	589.7	584.6	577.9	570.5	563.8	553.1	544.7	532.3	522.7
30°	627.4	616.7	611.6	606.5	598.7	589.1	579.5	566.0	554.2	540.2	527.8
32.5°	654.9	649.3	643.1	634.7	624.0	612.2	598.1	580.1	563.2	545.8	530.0
35°	697.7	688.1	678.0	669.6	653.8	637.5	616.1	589.7	567.2	545.8	526.7
37.5°	746.7	736.5	723.0	707.8	684.2	658.3	628.5	595.3	565.5	539.6	518.2
40°	805.7	792.8	774.8	746.1	711.2	672.4	632.4	590.8	555.9	526.1	501.3
42.5°	883.9	857.5	822.6	780.4	730.9	678.0	627.4	579.0	539.6	507.0	482.2
45°	972.3	930.1	873.8	810.8	742.1	675.8	616.1	559.8	515.4	479.4	453.5
47.5°	1067.4	1001.5	918.8	829.9	743.3	663.4	594.2	531.2	481.1	442.8	410.7
50°	1174.8	1066.2	950.3	839.5	736.0	641.4	562.7	490.1	438.3	392.7	363.5
52.5°	1267.1	1123.1	972.3	835.6	710.1	603.2	510.9	440.6	379.8	339.3	310.6
55°	1376.3	1178.2	984.1	815.9	668.4	543.5	455.2	377.0	319.6	283.6	258.8
57.5°	1560.3	1271.6	994.2	775.9	599.8	468.7	378.1	305.0	259.9	228.4	211.0
60°	1915.3	1452.8	1035.9	716.3	512.6	378.7	292.0	238.6	199.7	178.9	166.5
62.5°	2147.7	1576.0	1017.3	624.6	400.6	283.6	213.8	172.2	149.7	134.5	128.8
65°	2088.6	1451.7	863.1	495.1	279.1	188.5	143.5	118.2	108.0	100.2	96.8
67.5°	1793.8	1170.9	625.7	320.2	176.7	114.8	94.0	83.8	79.3	76.0	75.4
70°	1429.2	825.4	371.9	169.9	97.9	76.0	67.0	63.0	61.3	61.3	61.3
72.5°	1037.0	475.4	182.9	91.7	65.8	58.0	54.0	52.9	52.3	52.3	52.9
75°	592.5	205.9	94.0	63.0	54.0	50.1	47.8	47.8	47.8	47.8	48.4
77.5°	206.5	94.0	66.4	52.9	46.7	44.5	43.3	44.5	45.0	45.0	45.0
80°	75.4	66.4	56.8	46.1	41.6	39.4	39.4	41.1	42.2	41.1	40.5
82.5°	59.6	52.3	46.1	39.9	36.6	35.4	36.0	37.1	36.6	36.0	34.3
85°	45.6	34.3	32.1	29.8	29.3	29.3	31.5	32.1	29.8	28.7	27.0
87.5°	22.5	18.0	16.3	19.1	18.6	16.9	17.4	17.4	14.6	13.5	14.1
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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CATALOG NUMBER: ECM-E02-LED-E1-T3-8030

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	531.2	531.2	531.2	531.2
2.5°	540.2	540.7	542.4	541.8
5°	548.0	548.6	549.7	549.7
7.5°	546.3	546.9	546.9	546.9
10°	533.4	533.4	534.5	534.5
12.5°	523.3	522.7	522.7	521.6
15°	517.1	516.0	516.5	514.8
17.5°	512.6	512.0	512.0	510.9
20°	510.9	509.8	509.2	508.1
22.5°	509.8	509.2	508.1	507.0
25°	512.6	509.8	509.2	508.1
27.5°	515.4	512.6	510.3	509.8
30°	518.2	513.1	510.3	509.2
32.5°	517.6	510.9	507.0	505.3
35°	511.5	503.0	498.0	496.3
37.5°	499.6	490.1	482.2	479.4
40°	482.8	470.4	463.1	459.1
42.5°	462.5	448.4	442.3	438.9
45°	429.3	418.1	410.7	407.9
47.5°	392.2	377.0	370.2	367.4
50°	344.3	332.0	326.3	322.4
52.5°	293.7	282.5	277.4	275.1
55°	244.8	239.1	231.3	229.6
57.5°	198.6	196.9	191.3	190.7
60°	161.5	158.7	154.7	154.7
62.5°	127.2	124.3	122.7	122.7
65°	97.9	97.3	96.2	95.7
67.5°	75.4	77.1	77.6	76.5
70°	63.0	63.6	63.6	63.6
72.5°	54.6	54.6	54.6	54.0
75°	49.5	49.5	48.4	47.8
77.5°	45.6	45.0	45.6	45.0
80°	39.9	39.4	38.3	37.1
82.5°	33.2	32.6	29.8	29.8
85°	25.9	24.2	21.9	19.7
87.5°	14.6	12.9	9.6	6.8
90°	0.0	0.0	0.0	0.0

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