

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: P162434

Luminaire Tested: **ECM-F01-LED-E1-SL3-HSS-7060**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162434
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F01-LED-E1-SL3-HSS-7060
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (7) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1396.4 lumens
Efficiency: N/A
Efficacy: 53.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

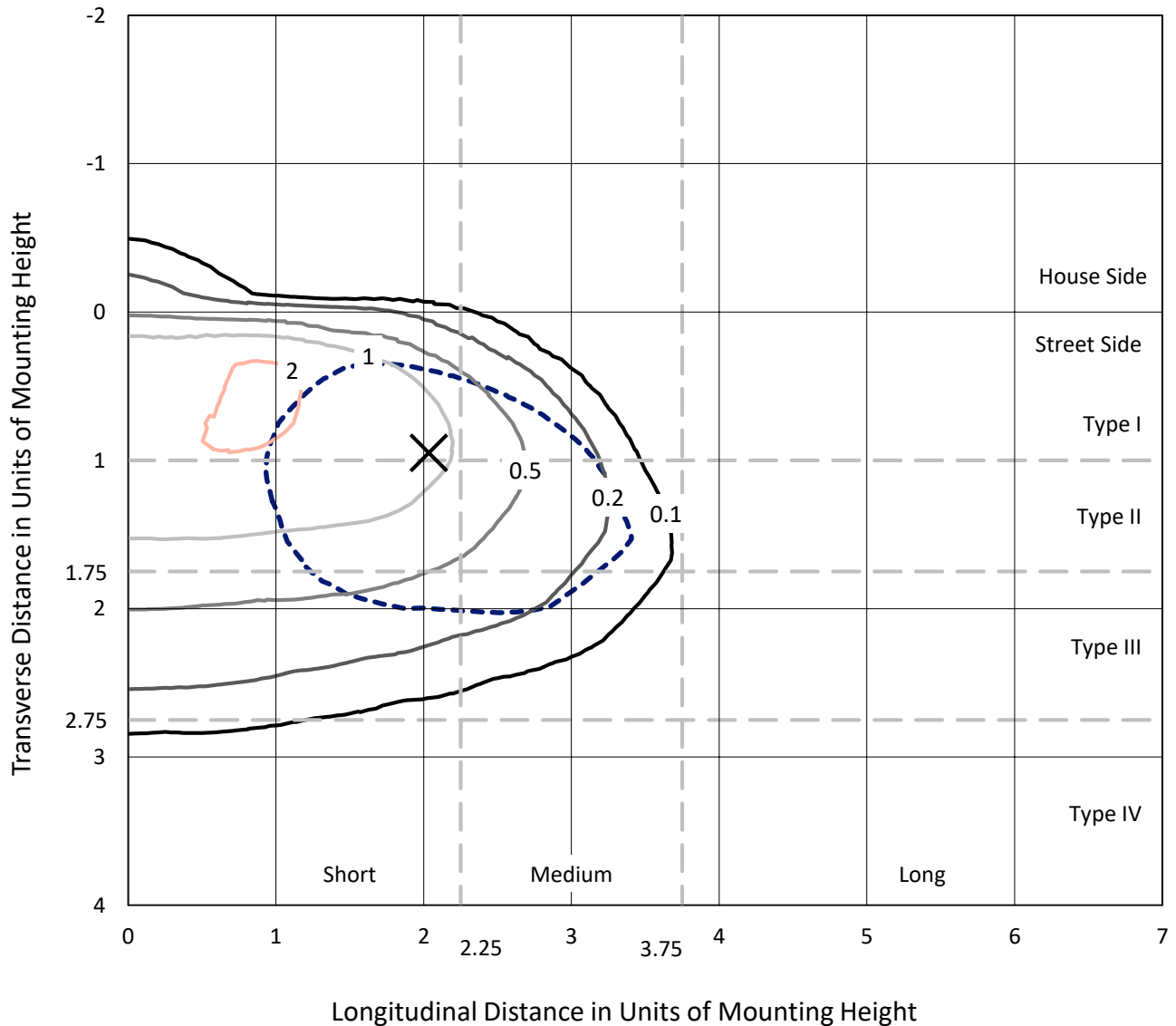
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

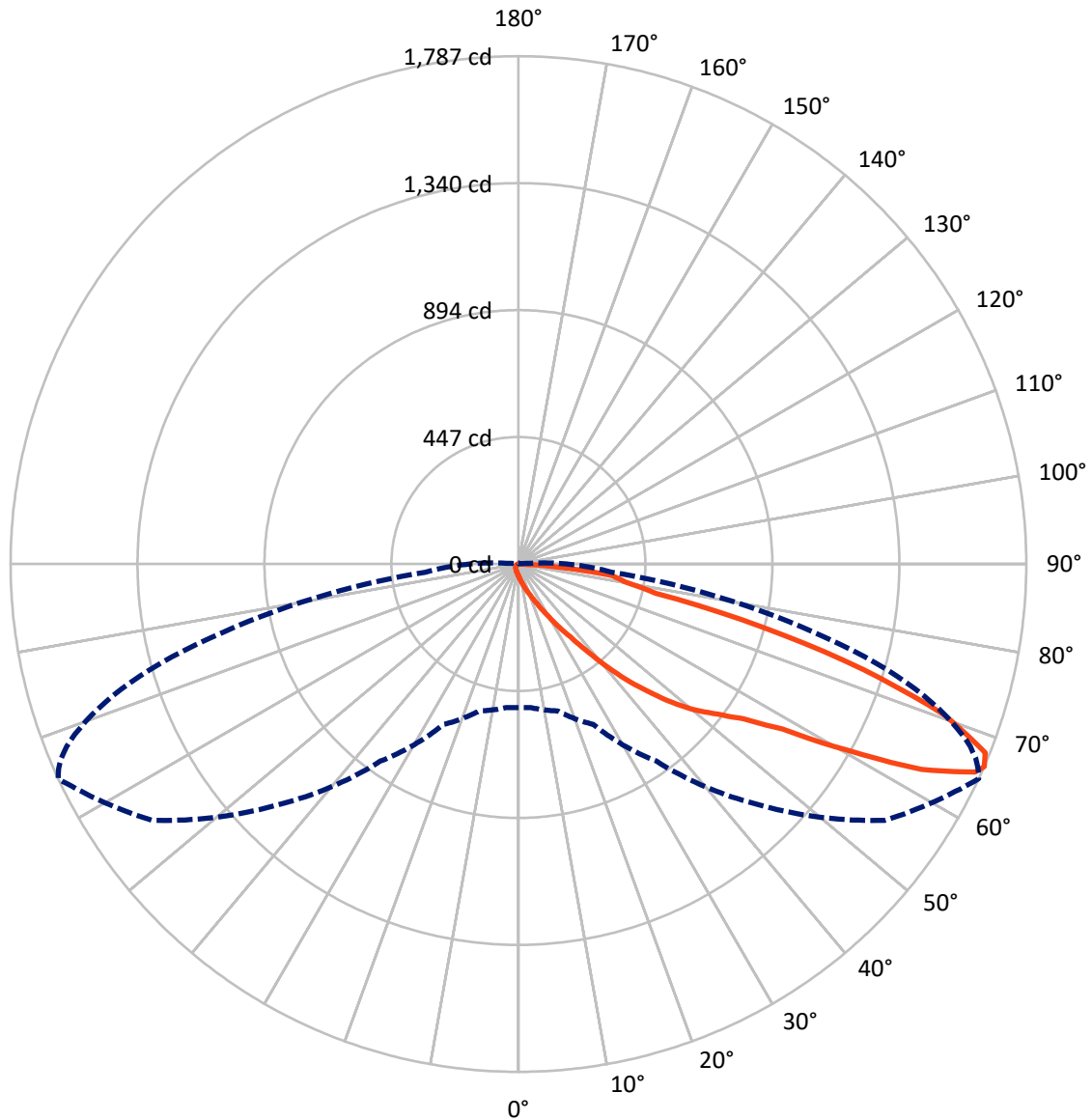
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	30.3	0.0	30.3
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	1366.1	0.0	1366.1
	% Fixture	97.8	0.0	97.8
Total	Lumens	1396.4	0.0	1396.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.7	0.3
10°-20°	20.0	1.4
20°-30°	43.1	3.1
30°-40°	92.1	6.6
40°-50°	203.8	14.6
50°-60°	345.3	24.7
60°-70°	460.8	33.0
70°-80°	203.0	14.5
80°-90°	23.4	1.7
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°	1396.4	100.0
0°-180°	1396.4	100.0



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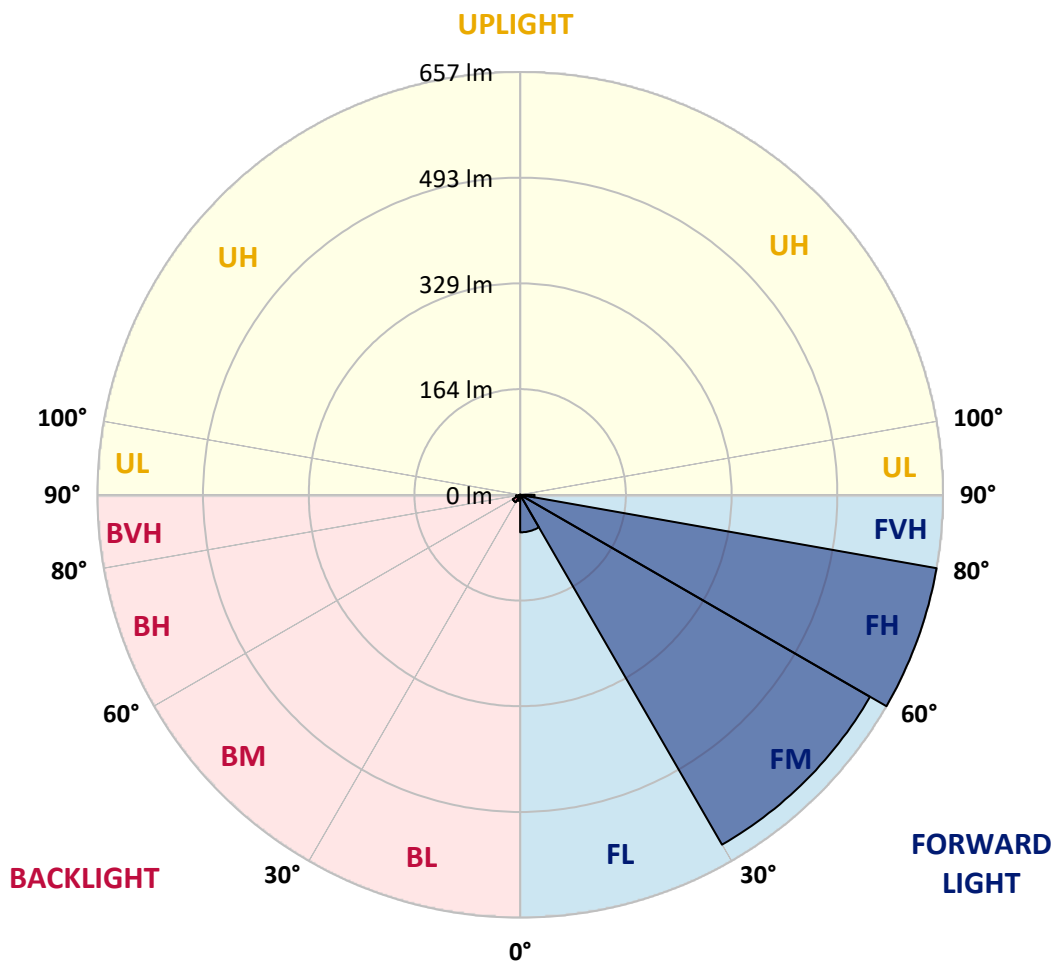
CATALOG NUMBER: ECM-F01-LED-E1-SL3-HSS-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	58.3	4.2			
FM	(30°-60°)	628.0	45.0			
FH	(60°-80°)	657.3	47.1			G0/660
FVH	(80°-90°)	22.4	1.6			G1/100
BL	(0°-30°)	9.5	0.7	B0/110		
BM	(30°-60°)	13.3	1.0	B0/220		
BH	(60°-80°)	6.5	0.5	B0/110		G0/110
BVH	(80°-90°)	0.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
2.5°	53.2	52.9	51.8	51.8	50.2	49.1	47.8	46.4	46.4	46.2	45.9
5°	70.3	68.7	68.4	65.5	63.1	59.6	56.4	52.1	51.5	51.0	50.7
7.5°	89.4	89.1	86.7	83.2	78.4	71.9	65.5	58.5	57.5	56.9	55.9
10°	114.1	112.7	109.5	103.6	96.4	87.8	77.3	66.3	65.0	63.9	63.4
12.5°	137.7	135.3	133.4	125.9	116.8	104.2	91.5	75.7	74.6	73.3	71.2
15°	159.7	157.6	154.4	147.9	137.7	121.9	107.1	87.8	85.1	83.2	81.6
17.5°	176.9	175.6	171.8	164.6	153.5	139.6	121.9	100.1	98.0	95.6	92.6
20°	193.3	191.4	185.5	175.6	163.8	153.0	139.3	116.2	113.3	110.3	107.1
22.5°	208.9	207.0	197.3	180.9	168.3	163.8	158.9	134.5	129.9	127.5	124.3
25°	230.6	226.6	211.5	185.5	168.6	172.1	180.4	158.1	153.8	150.3	145.2
27.5°	259.9	254.5	230.9	192.2	169.7	181.2	205.1	186.8	182.3	178.3	172.6
30°	292.9	289.4	261.2	208.3	177.5	194.6	232.7	223.3	218.0	213.2	206.4
32.5°	326.2	321.4	293.4	238.9	198.4	220.7	267.4	265.8	258.8	254.2	247.0
35°	355.4	353.0	332.3	289.1	246.2	266.3	313.6	315.4	309.3	304.4	296.4
37.5°	375.3	375.3	371.3	343.1	322.1	337.2	381.5	381.7	375.6	364.6	360.5
40°	385.5	388.4	403.0	408.3	407.2	426.6	470.6	465.8	460.7	455.0	441.6
42.5°	406.5	409.1	440.0	477.0	501.2	526.7	557.0	555.4	549.3	539.1	526.7
45°	441.9	445.4	482.2	540.9	590.6	626.8	646.2	638.7	632.5	622.8	616.4
47.5°	487.0	493.7	535.3	608.1	667.9	727.8	747.9	728.1	722.7	715.2	704.7
50°	535.0	541.5	585.8	669.0	736.6	808.1	841.6	808.1	800.3	797.9	786.0
52.5°	576.6	582.0	624.7	716.0	789.2	873.0	921.9	877.6	872.0	863.9	855.3
55°	601.3	605.6	645.6	738.5	825.0	931.5	999.5	960.5	952.2	949.0	936.6
57.5°	609.7	614.0	649.9	741.5	844.3	985.0	1093.7	1095.0	1085.1	1073.6	1069.8
60°	609.7	614.5	644.8	734.2	863.1	1041.9	1219.3	1331.3	1309.8	1307.7	1294.0
62.5°	584.4	589.0	619.6	711.9	888.3	1118.6	1394.3	1591.9	1585.8	1571.8	1549.2
65°	529.6	532.4	562.4	655.0	878.6	1189.3	1546.0	1765.4	1755.4	1728.0	1699.1
66°	505.0	507.1	535.3	622.5	847.0	1198.9	1572.9	1787.1	1770.7	1747.6	1714.9
67.5°	469.3	473.0	492.9	562.1	771.0	1165.4	1556.0	1771.8	1757.6	1729.6	1696.9
70°	313.3	310.6	380.7	431.4	587.4	949.5	1396.0	1590.9	1591.1	1578.0	1564.8
72.5°	148.7	150.3	170.7	265.5	384.4	634.3	1111.1	1269.8	1288.0	1264.4	1248.1
75°	106.8	109.3	121.6	162.4	229.2	380.7	720.3	888.0	888.6	846.7	809.4
77.5°	31.1	32.5	45.6	100.1	171.8	256.9	413.7	493.7	482.2	452.1	423.9
80°	12.9	12.9	13.4	31.9	69.0	174.5	289.4	380.1	378.8	367.2	350.6
82.5°	4.8	5.1	6.4	13.2	16.4	42.9	193.0	329.9	329.1	312.7	300.9
85°	0.5	0.5	1.6	5.6	6.2	8.0	38.7	145.5	144.7	145.5	127.5
87.5°	0.0	0.0	0.3	0.5	0.8	1.1	1.6	5.6	6.2	5.9	5.4
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
2.5°	45.9	45.4	45.4	45.1	45.1	45.1	44.8	44.6	44.6	44.3	44.0
5°	50.2	49.7	49.4	48.8	48.6	48.3	47.8	47.5	47.0	46.7	46.4
7.5°	55.3	54.2	54.0	53.2	52.3	51.8	51.3	50.5	49.9	48.8	48.6
10°	61.8	60.4	59.3	58.3	57.5	56.1	55.3	54.2	53.2	52.3	51.5
12.5°	70.1	68.2	66.6	65.5	63.6	62.0	60.4	59.6	57.5	56.4	55.0
15°	79.2	77.1	75.2	73.0	71.7	69.0	66.8	64.4	63.4	61.5	59.3
17.5°	91.0	87.5	84.6	82.4	79.7	77.1	74.6	72.2	69.0	66.8	64.2
20°	103.6	100.7	96.7	92.9	89.7	86.4	83.0	79.7	76.8	73.3	70.1
22.5°	119.7	115.4	110.6	106.8	102.6	99.1	94.2	89.9	85.1	80.5	76.8
25°	140.1	134.5	129.9	124.6	119.5	114.1	108.2	102.8	96.7	92.4	85.9
27.5°	165.4	160.0	153.8	146.9	141.7	133.7	125.9	119.2	112.0	105.2	98.0
30°	197.6	189.8	183.4	176.6	166.5	158.7	149.5	140.4	130.5	123.8	112.7
32.5°	236.2	227.9	218.3	208.6	199.2	188.2	176.9	165.6	154.6	142.3	131.0
35°	283.5	273.5	262.5	252.1	237.6	225.8	211.5	196.0	183.6	169.4	155.2
37.5°	346.0	329.7	320.0	309.0	289.4	273.3	257.5	241.9	220.1	205.1	185.0
40°	424.4	414.8	398.9	381.2	363.5	342.3	320.8	300.1	274.9	254.0	230.6
42.5°	516.5	502.3	486.2	460.7	442.7	417.7	393.3	365.9	335.0	308.2	280.8
45°	602.9	586.0	573.7	548.2	529.4	499.9	470.3	441.3	405.6	371.0	339.3
47.5°	696.4	682.4	662.0	641.3	622.3	589.0	557.0	521.9	484.3	443.2	402.1
50°	778.5	767.5	753.6	728.6	707.4	679.5	641.9	603.5	556.0	515.2	468.5
52.5°	848.3	839.7	820.1	802.4	783.3	757.0	723.5	686.7	635.4	590.6	537.4
55°	930.7	924.6	907.4	896.4	879.5	854.2	822.8	788.7	734.5	685.6	625.5
57.5°	1065.8	1060.9	1045.9	1041.3	1024.7	1002.7	964.0	927.5	864.2	803.5	734.8
60°	1289.4	1279.7	1257.7	1246.4	1211.3	1181.7	1131.6	1081.3	1004.8	927.5	844.8
62.5°	1528.9	1501.8	1459.9	1423.9	1374.0	1322.7	1255.6	1178.8	1089.1	997.3	902.3
65°	1658.0	1611.8	1558.9	1501.8	1437.0	1361.6	1277.1	1185.0	1088.6	991.7	891.3
66°	1672.7	1620.7	1564.5	1500.9	1429.0	1348.7	1262.8	1166.2	1066.0	971.5	871.1
67.5°	1654.2	1599.7	1540.4	1469.8	1391.9	1308.7	1218.5	1118.1	1021.7	925.9	828.2
70°	1524.6	1470.3	1417.4	1343.1	1260.1	1176.4	1091.0	978.8	887.5	799.5	712.5
72.5°	1217.4	1180.7	1128.3	1064.7	983.9	885.6	814.5	714.1	634.9	549.5	482.2
75°	760.8	709.0	644.3	563.2	501.5	421.7	380.1	303.9	258.8	219.3	181.2
77.5°	389.0	350.1	304.7	259.1	215.3	171.8	132.9	94.0	63.4	44.0	32.8
80°	321.4	287.0	249.4	207.8	169.1	131.3	94.5	64.4	41.1	26.9	21.0
82.5°	265.5	236.5	203.0	164.3	130.7	103.1	71.7	46.7	29.0	18.8	14.8
85°	113.0	102.6	79.2	62.8	47.2	34.9	24.4	16.4	11.5	9.4	8.6
87.5°	4.8	5.4	5.1	4.0	3.0	3.0	2.7	2.1	2.1	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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
2.5°	44.0	43.8	43.5	43.5	43.2	42.9	41.3	40.0	38.4	37.3	36.3
5°	45.9	45.6	45.1	44.8	44.3	44.0	40.5	37.6	35.2	33.3	31.9
7.5°	47.8	47.5	46.7	45.9	45.6	45.1	39.5	35.7	32.5	30.3	29.0
10°	50.2	49.4	48.6	47.5	46.7	45.9	38.4	33.5	30.1	28.2	26.9
12.5°	53.7	52.3	51.0	49.7	48.6	47.2	37.9	31.7	28.2	26.0	24.7
15°	57.7	55.9	54.2	52.6	50.7	49.4	36.8	30.1	26.6	24.4	22.8
17.5°	61.5	59.3	56.9	54.5	52.6	50.7	35.7	28.5	25.0	22.8	21.2
20°	66.8	63.6	60.7	57.7	55.0	52.6	34.1	26.9	23.6	21.2	19.6
22.5°	72.8	69.0	65.2	61.2	57.7	54.5	32.8	25.5	22.3	19.9	18.0
25°	80.3	75.7	70.6	65.5	61.5	57.2	31.4	24.2	21.0	18.5	16.6
27.5°	90.8	84.3	78.7	72.2	66.0	61.2	30.3	23.1	19.6	17.2	15.3
30°	105.0	95.6	86.7	79.7	72.5	65.5	29.3	21.7	18.5	15.8	13.7
32.5°	120.8	109.8	99.6	89.1	80.0	71.9	28.2	20.7	17.2	14.5	12.6
35°	140.4	126.4	112.7	100.7	89.7	78.9	27.1	19.6	16.1	13.2	11.3
37.5°	168.6	151.1	133.2	117.6	103.3	89.1	26.3	18.5	14.8	11.8	9.9
40°	207.3	184.7	162.7	141.5	122.9	105.2	25.2	17.4	13.7	10.7	8.9
42.5°	249.1	221.7	192.7	168.9	143.4	121.1	24.2	16.4	12.6	9.7	7.8
45°	301.2	267.1	232.0	199.5	168.3	139.6	23.1	15.3	11.3	8.6	6.7
47.5°	358.1	314.6	274.9	234.1	197.1	162.7	21.7	14.5	10.2	7.5	5.9
50°	416.6	370.7	320.5	274.1	230.1	185.8	20.4	13.2	9.1	6.7	4.8
52.5°	479.7	425.5	374.2	316.5	265.2	216.1	19.1	12.1	8.3	5.9	4.0
55°	560.0	499.3	439.2	374.5	312.7	251.3	17.7	10.7	7.3	5.1	3.2
57.5°	660.9	589.0	515.2	442.1	367.2	297.4	16.6	9.4	6.2	4.3	2.7
60°	756.2	672.2	582.8	498.8	414.2	332.9	15.0	8.3	5.4	3.5	2.7
62.5°	805.6	709.8	613.4	520.8	430.6	345.5	13.4	7.0	4.6	3.0	2.4
65°	793.5	695.8	602.4	509.0	420.7	337.4	11.8	6.2	4.0	2.7	2.4
66°	776.1	679.5	585.5	496.6	412.4	328.9	11.0	5.9	3.8	2.7	2.1
67.5°	738.0	644.6	554.9	472.2	389.5	312.5	9.9	5.4	3.5	2.4	2.1
70°	630.3	545.5	473.8	400.3	332.9	263.4	8.0	4.6	3.0	2.1	2.1
72.5°	417.2	359.5	311.7	268.2	224.2	174.0	6.7	3.8	2.4	2.1	1.9
75°	157.3	142.3	122.1	109.8	95.8	84.0	5.4	2.4	1.9	1.9	1.9
77.5°	27.9	25.8	22.8	21.0	19.3	17.7	4.3	1.6	1.6	1.9	1.9
80°	18.8	17.4	15.8	14.5	13.4	12.1	3.0	1.4	1.6	1.6	1.9
82.5°	13.4	12.6	11.8	10.7	9.9	8.9	1.9	1.4	1.6	1.6	1.6
85°	8.0	7.5	7.0	6.4	5.6	5.4	1.4	1.4	1.4	1.6	1.6
87.5°	2.1	1.9	2.1	2.1	1.6	1.9	1.1	1.1	1.1	1.4	1.4
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-F01-LED-E1-SL3-HSS-7060

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	42.2	42.2	42.2	42.2	42.2
2.5°	35.7	35.7	35.2	36.0	36.0
5°	30.9	30.9	30.6	30.9	30.9
7.5°	28.2	27.9	27.9	27.9	28.2
10°	25.8	25.5	25.5	25.5	25.5
12.5°	23.6	23.4	23.1	23.4	23.4
15°	21.7	21.2	21.2	21.2	21.2
17.5°	20.1	19.6	19.3	19.3	19.3
20°	18.5	17.7	17.7	17.7	17.7
22.5°	16.9	16.1	16.1	16.1	16.1
25°	15.3	14.5	14.5	14.5	14.5
27.5°	13.9	13.2	13.2	13.2	13.2
30°	12.3	11.8	11.8	12.1	11.8
32.5°	11.3	10.5	10.5	10.7	10.7
35°	9.9	9.4	9.4	9.4	9.4
37.5°	8.6	8.0	8.0	8.0	8.0
40°	7.5	7.0	6.7	7.0	7.0
42.5°	6.4	5.9	5.6	5.6	5.6
45°	5.6	4.8	4.6	4.8	4.8
47.5°	4.6	4.0	4.0	4.3	4.3
50°	3.5	3.5	3.8	4.3	4.3
52.5°	3.2	3.2	3.8	4.3	4.3
55°	3.0	3.2	3.8	4.0	4.3
57.5°	2.7	3.2	3.8	4.0	4.0
60°	2.7	3.0	3.5	4.0	4.0
62.5°	2.4	2.7	3.2	3.8	3.8
65°	2.4	2.7	3.2	3.8	3.8
66°	2.4	2.7	3.2	3.8	3.8
67.5°	2.4	2.7	3.2	3.8	3.8
70°	2.4	2.7	3.2	3.5	3.5
72.5°	2.1	2.4	3.0	3.5	3.5
75°	2.1	2.4	3.0	3.5	3.5
77.5°	2.1	2.4	3.0	3.5	3.5
80°	2.1	2.4	3.0	3.2	3.5
82.5°	1.9	2.4	2.7	3.2	3.2
85°	1.9	2.1	2.7	3.0	3.2
87.5°	1.6	1.9	2.1	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)