

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: P162269

Luminaire Tested: **ECM-E01-LED-E1-SL2-HSS-7060**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162269  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)  
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-SL2-HSS-7060  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (21) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

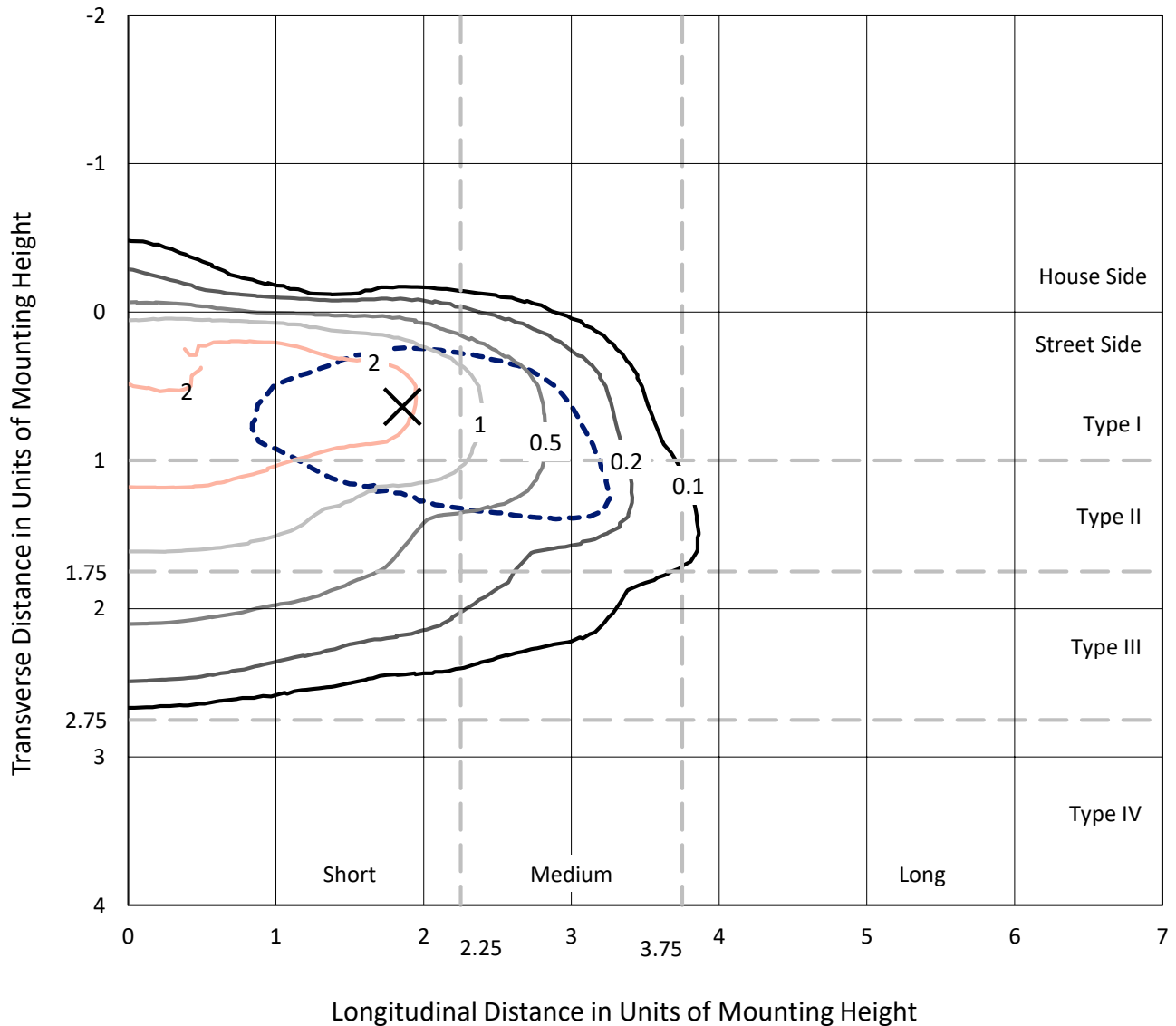
Lumens per Lamp: N/A  
Luminaire Lumens: 1788.8 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 24.7  
Input Voltage (V): NR  
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



REPORT NUMBER: P162269  
 CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

### Iso-Footcandle Lines of Horizontal Illumination

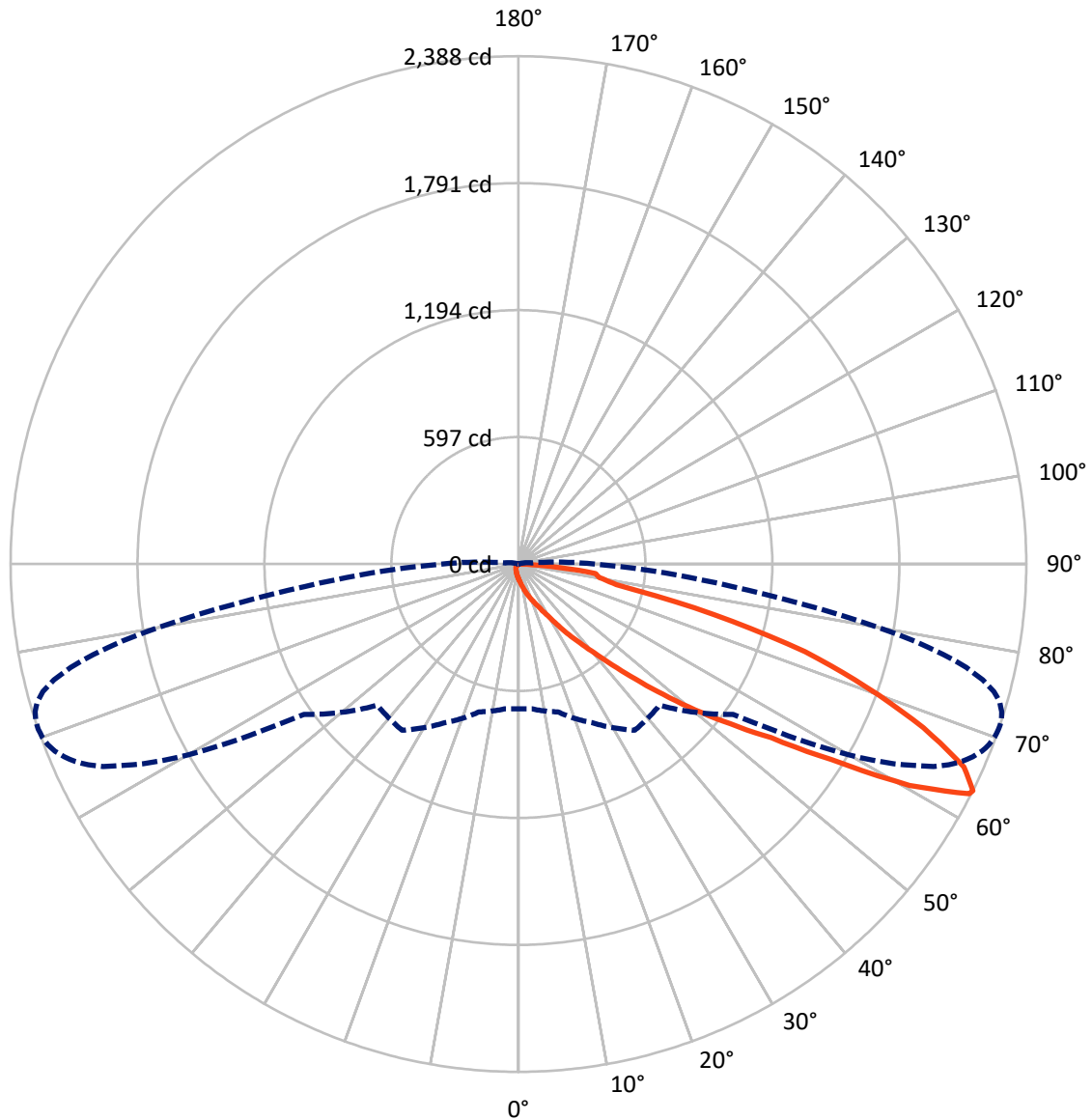
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P162269  
CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P162269

CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

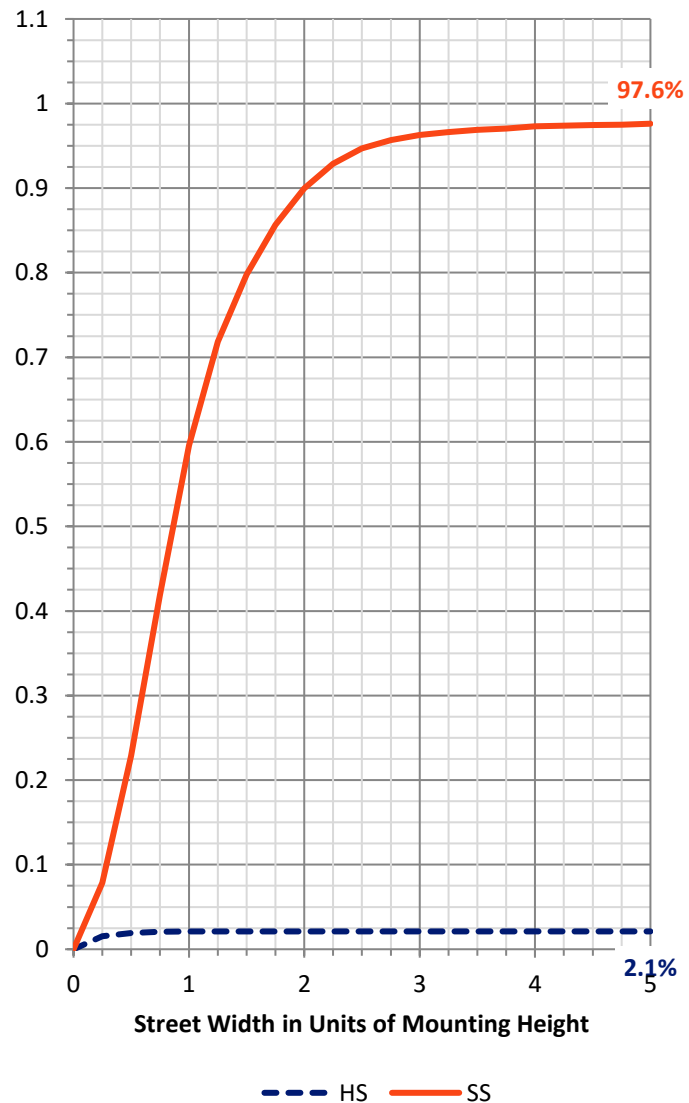
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	38.0	0.0	38.0
	% Fixture	2.1	0.0	2.1
<b>Street Side</b>	Lumens	1750.8	0.0	1750.8
	% Fixture	97.9	0.0	97.9
<b>Total</b>	Lumens	1788.8	0.0	1788.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.6	0.4
10°-20°	29.4	1.6
20°-30°	59.7	3.3
30°-40°	146.0	8.2
40°-50°	326.4	18.2
50°-60°	459.0	25.7
60°-70°	539.7	30.2
70°-80°	194.9	10.9
80°-90°	26.1	1.5
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°	1788.8	100.0
0°-180°	1788.8	100.0



REPORT NUMBER: P162269

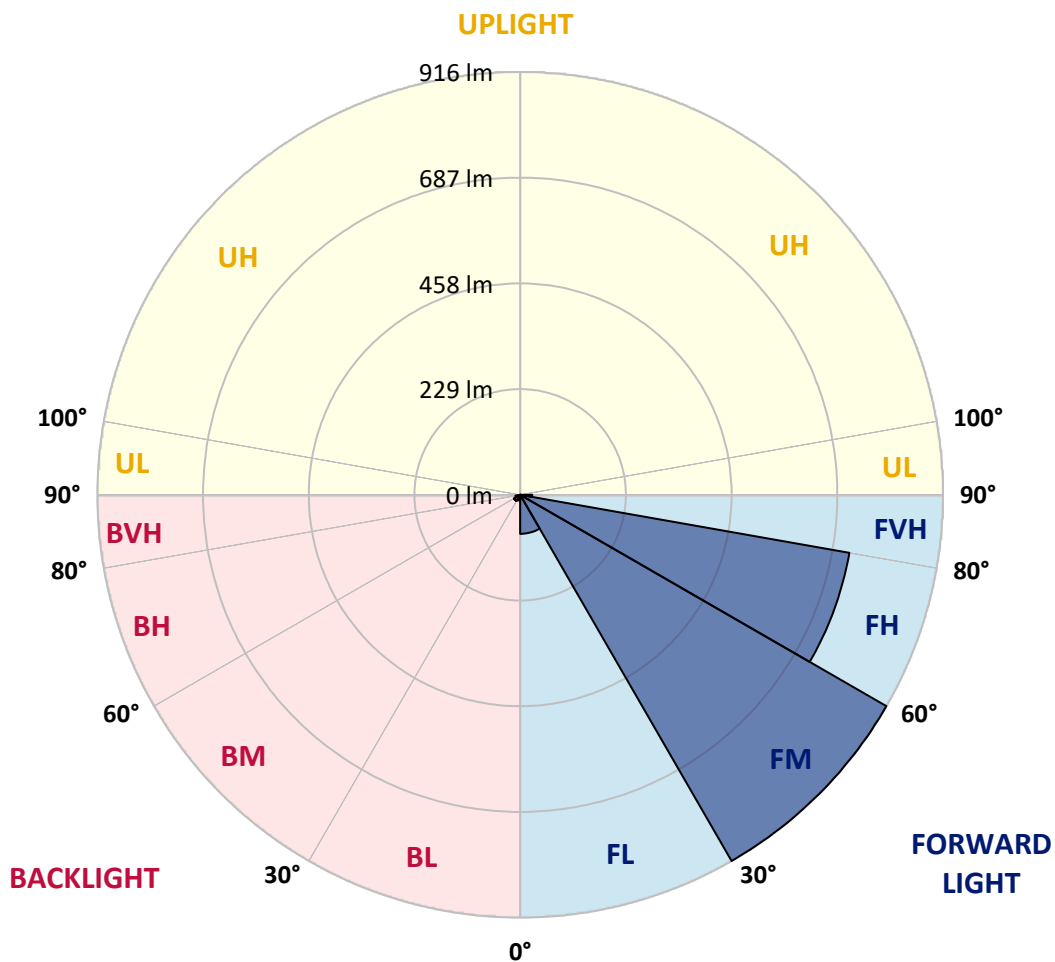
CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	84.5	4.7			
FM (30°-60°)	916.1	51.2			
FH (60°-80°)	724.2	40.5			G1/1800
FVH (80°-90°)	26.0	1.5			G1/100
BL (0°-30°)	12.2	0.7	B0/110		
BM (30°-60°)	15.3	0.9	B0/220		
BH (60°-80°)	10.4	0.6	B0/110		G0/110
BVH (80°-90°)	0.1	0.0			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 II Short





REPORT NUMBER: P162269  
 CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
2.5°	89.8	90.7	90.1	88.5	86.5	83.9	81.6	81.6	81.3	80.3	80.7
5°	117.7	118.0	116.7	112.8	109.3	103.7	97.5	96.9	96.2	95.3	94.9
7.5°	145.0	146.3	145.0	140.8	133.7	125.2	115.4	114.5	112.5	112.5	111.2
10°	173.0	173.0	171.7	166.8	160.3	148.3	135.9	134.3	132.0	131.4	129.4
12.5°	192.8	192.8	192.2	189.6	184.4	173.7	158.7	157.1	154.2	153.2	150.9
15°	200.6	200.6	201.0	203.2	203.6	198.7	183.1	181.8	178.9	176.3	175.3
17.5°	205.5	205.2	205.2	208.4	214.3	217.6	207.5	206.2	202.9	201.6	198.4
20°	216.3	215.6	213.6	213.6	219.2	230.6	230.6	230.2	226.7	225.7	224.1
22.5°	232.2	231.5	225.7	220.8	223.4	237.7	251.1	250.4	249.1	247.8	246.8
25°	258.2	255.9	245.9	231.5	229.3	244.6	266.7	268.3	269.3	269.3	269.9
27.5°	297.5	294.6	276.7	250.1	240.0	255.6	283.9	287.1	290.1	290.7	293.6
30°	352.2	347.0	321.3	282.3	259.2	271.8	309.3	312.8	317.1	318.4	322.9
32.5°	441.9	439.0	414.3	355.8	306.3	303.7	344.7	349.3	354.8	357.1	362.6
35°	578.5	579.2	559.0	506.3	438.0	402.3	408.1	412.0	414.0	420.8	423.7
37.5°	671.2	672.8	677.4	656.6	607.8	571.4	525.5	529.7	519.7	520.6	521.0
40°	721.9	727.1	753.8	774.0	770.1	748.9	712.2	714.4	695.6	691.4	670.9
42.5°	755.8	762.6	805.2	867.6	899.5	918.7	910.2	909.2	894.6	889.1	871.8
45°	776.9	783.1	836.7	928.8	1002.2	1058.2	1081.3	1083.9	1071.5	1066.0	1051.7
47.5°	775.9	783.1	840.6	951.5	1059.8	1149.2	1214.3	1217.5	1225.0	1220.1	1221.1
50°	733.0	739.8	797.7	912.8	1042.9	1190.9	1309.9	1320.3	1332.3	1340.4	1344.3
52.5°	681.0	685.8	737.2	846.5	970.7	1173.6	1366.5	1384.4	1402.2	1417.5	1428.2
55°	661.8	667.3	707.6	798.3	912.8	1101.4	1392.8	1419.1	1444.5	1469.6	1490.0
57.5°	671.9	677.1	706.0	775.6	878.3	1025.3	1400.3	1441.3	1482.9	1523.5	1563.9
60°	708.9	714.4	739.2	796.7	869.2	981.4	1371.0	1439.0	1508.2	1579.1	1645.8
62.5°	694.3	696.6	733.0	833.8	934.3	944.1	1264.7	1359.6	1465.3	1574.6	1682.2
63°	680.3	682.9	720.0	823.7	954.1	938.5	1231.8	1332.0	1443.5	1561.3	1678.3
65°	616.9	617.2	645.5	727.5	932.0	948.3	1085.5	1181.1	1309.2	1450.4	1598.3
67.5°	460.5	458.2	485.5	547.9	731.7	948.6	931.7	985.3	1074.4	1199.7	1332.3
70°	163.3	159.7	203.9	290.4	455.9	775.9	800.6	804.2	828.9	896.5	979.8
72.5°	53.0	54.0	65.1	106.3	210.1	522.3	724.8	713.8	707.3	707.0	718.0
75°	21.1	21.5	26.0	47.2	94.3	251.7	634.8	640.9	643.2	646.5	650.1
77.5°	10.1	11.0	14.6	26.3	46.8	124.5	454.3	506.7	536.6	559.7	573.6
80°	3.6	4.2	8.1	16.2	21.8	57.2	239.4	288.8	332.7	389.3	438.0
82.5°	0.0	0.0	1.6	11.4	12.0	23.1	98.2	115.1	131.7	170.7	219.2
85°	0.0	0.0	0.0	3.2	3.6	3.9	33.2	40.0	44.9	52.4	60.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.9	4.9	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P162269  
 CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
2.5°	80.0	79.7	79.7	79.0	78.7	78.1	77.7	76.8	76.4	76.4	76.4
5°	94.6	93.3	92.7	91.0	90.1	89.8	88.1	87.5	86.5	86.8	85.2
7.5°	110.9	108.6	107.6	105.3	104.7	102.4	101.8	100.1	99.2	97.2	96.6
10°	128.8	125.8	124.2	120.6	119.7	118.0	116.1	114.1	112.5	110.6	109.6
12.5°	149.3	146.7	145.4	140.5	138.2	135.9	133.3	130.7	128.1	126.5	124.2
15°	173.3	169.1	167.8	163.3	159.4	156.4	152.9	149.6	147.6	144.4	142.1
17.5°	197.1	192.8	191.8	185.0	180.8	178.9	175.0	170.7	167.2	163.9	160.3
20°	220.8	217.9	215.3	208.8	204.2	201.0	195.8	191.5	188.6	184.0	179.5
22.5°	244.6	241.6	239.7	232.8	228.6	224.1	219.5	215.0	210.7	205.2	200.0
25°	268.9	267.0	266.0	259.8	255.9	251.7	247.2	242.0	236.8	230.6	225.0
27.5°	294.3	294.9	293.0	291.7	287.5	284.5	277.4	273.8	269.9	262.4	255.6
30°	326.5	328.5	327.8	328.8	326.2	324.2	318.7	314.1	309.6	302.4	294.6
32.5°	367.1	369.7	371.0	374.6	373.3	372.7	371.0	364.5	361.3	348.9	345.7
35°	429.9	428.6	434.1	437.1	435.8	435.1	433.2	429.6	425.7	416.9	408.8
37.5°	511.5	512.8	514.8	508.9	505.0	504.7	498.9	495.3	489.7	480.0	470.2
40°	661.1	653.0	643.9	619.2	608.4	602.3	585.0	580.2	570.7	557.4	547.3
42.5°	855.6	847.5	820.1	778.8	756.7	726.1	712.2	694.9	681.6	659.8	648.1
45°	1048.7	1025.3	1022.1	973.9	946.7	906.3	881.3	852.3	822.1	793.5	772.7
47.5°	1211.7	1206.5	1190.5	1161.3	1135.9	1102.1	1069.9	1025.3	994.1	953.5	916.1
50°	1342.1	1341.7	1335.9	1319.0	1297.9	1270.5	1242.2	1204.5	1169.1	1119.3	1079.3
52.5°	1439.6	1444.8	1446.8	1441.6	1433.5	1409.4	1395.1	1363.5	1333.6	1291.4	1248.1
55°	1511.2	1530.4	1540.1	1551.2	1548.9	1540.5	1539.8	1519.3	1505.6	1472.2	1441.6
57.5°	1599.6	1631.2	1661.4	1715.1	1717.0	1735.9	1745.6	1755.4	1758.0	1744.7	1734.6
60°	1712.2	1776.5	1833.8	1945.9	1975.2	2021.4	2051.3	2083.8	2111.5	2113.7	2113.1
62.5°	1791.5	1890.7	1983.0	2149.5	2206.4	2259.8	2299.8	2331.3	2350.5	2370.0	2379.1
63°	1793.8	1902.4	2000.6	2172.3	2232.1	2282.8	2320.9	2350.2	2370.3	2382.0	2387.9
65°	1738.8	1870.5	1987.6	2158.6	2214.9	2265.9	2285.8	2305.0	2314.7	2319.3	2302.0
67.5°	1473.8	1602.5	1739.1	1930.3	1978.5	2039.6	2055.9	2065.6	2070.2	2069.2	2054.6
70°	1102.1	1210.1	1361.9	1580.4	1644.2	1704.0	1741.1	1757.0	1762.2	1760.6	1738.8
72.5°	769.4	832.8	958.0	1201.3	1288.1	1364.8	1410.7	1434.4	1439.3	1429.5	1409.4
75°	646.2	649.4	677.7	810.7	892.0	973.9	1025.7	1040.6	1030.9	1001.3	949.9
77.5°	576.9	584.1	584.1	603.9	619.8	642.6	647.5	611.0	568.8	514.1	469.9
80°	483.9	508.9	526.5	541.1	542.7	538.2	526.2	505.7	473.2	431.5	385.4
82.5°	294.0	343.4	363.5	439.0	476.1	501.1	499.2	471.9	447.1	403.9	364.5
85°	74.2	80.0	86.8	112.8	126.5	154.5	172.0	180.1	183.1	168.1	152.2
87.5°	7.1	4.9	8.1	6.2	8.8	6.5	8.8	8.1	10.1	10.7	11.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P162269  
 CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

**CANDELA DISTRIBUTION (continued):**

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
2.5°	75.8	75.5	75.1	74.8	74.5	74.2	73.5	73.5	72.9	72.5	72.2
5°	84.2	83.6	83.3	82.6	81.6	81.0	80.0	78.7	77.7	77.4	76.8
7.5°	94.9	93.3	92.7	91.7	90.4	88.5	87.2	86.2	84.6	83.6	81.6
10°	107.0	105.3	103.4	101.4	99.5	97.2	95.6	94.3	91.7	90.4	88.1
12.5°	122.3	119.3	117.1	114.5	111.9	109.3	107.3	103.4	101.1	98.2	96.2
15°	137.9	135.3	132.7	129.4	125.5	121.3	119.3	115.8	112.8	108.3	105.7
17.5°	156.8	151.9	148.0	144.1	140.5	136.6	132.7	127.1	122.9	119.0	113.8
20°	175.3	169.4	165.2	160.0	154.8	148.6	144.1	140.2	134.3	129.1	123.6
22.5°	195.1	189.2	182.4	177.2	170.1	165.2	159.0	152.5	146.7	139.8	133.0
25°	219.2	213.0	205.2	198.4	190.2	183.4	175.9	168.5	161.3	153.5	144.7
27.5°	248.8	242.3	233.8	225.7	215.0	206.5	199.3	189.2	180.1	170.4	160.3
30°	286.2	279.0	268.6	256.9	246.2	236.8	226.7	213.3	203.2	191.5	178.5
32.5°	335.0	326.5	312.5	301.5	288.1	275.7	261.8	248.5	234.1	218.9	203.9
35°	396.4	388.6	372.3	356.1	341.5	326.8	309.3	294.0	273.8	255.3	236.1
37.5°	460.1	446.2	431.2	413.7	395.4	377.9	356.4	335.3	312.2	292.0	268.0
40°	533.0	516.1	503.7	484.9	459.2	434.1	414.3	388.0	359.0	332.0	303.7
42.5°	632.8	614.0	591.9	563.2	544.7	515.4	489.7	458.5	420.5	390.2	356.1
45°	748.3	722.6	701.1	673.5	651.0	614.6	584.7	543.1	505.0	465.3	423.7
47.5°	880.0	848.1	816.9	789.6	753.8	718.0	680.0	635.7	587.0	543.4	494.0
50°	1031.2	986.0	942.8	907.6	858.5	817.2	775.9	726.1	672.2	622.1	565.8
52.5°	1199.3	1146.9	1089.7	1035.8	978.8	925.8	876.1	818.8	758.7	697.5	634.8
55°	1402.2	1362.9	1295.6	1226.9	1150.8	1080.0	1015.9	945.0	871.8	791.5	725.5
57.5°	1720.0	1700.8	1644.5	1575.9	1476.7	1390.5	1281.9	1195.1	1089.1	978.5	893.3
60°	2150.5	2126.8	2095.2	2039.6	1960.9	1843.8	1724.2	1589.2	1427.9	1274.8	1129.4
62.5°	2380.1	2371.6	2346.0	2307.6	2234.1	2141.7	2021.1	1872.8	1690.7	1504.7	1319.3
63°	2386.9	2376.2	2354.1	2315.1	2250.4	2160.9	2042.5	1898.5	1720.3	1530.7	1341.4
65°	2294.6	2290.3	2267.9	2225.3	2181.1	2112.8	2021.1	1897.2	1747.6	1568.4	1380.1
67.5°	2035.1	2022.4	1987.9	1974.9	1944.0	1896.5	1826.6	1741.4	1634.4	1493.6	1331.0
70°	1721.3	1702.4	1659.1	1636.1	1598.3	1568.4	1525.8	1465.0	1399.0	1300.8	1179.5
72.5°	1388.6	1349.6	1309.9	1249.7	1197.0	1143.7	1096.6	1053.6	981.1	941.5	849.4
75°	901.8	830.9	762.9	671.9	589.9	517.4	446.8	411.1	336.6	306.3	263.1
77.5°	428.0	388.3	335.0	293.6	241.0	196.7	160.7	120.6	94.6	74.2	56.6
80°	345.4	311.9	279.7	242.3	202.6	161.6	123.9	92.7	65.7	45.5	32.2
82.5°	308.0	271.5	231.9	206.2	179.2	146.7	120.3	98.2	72.5	53.0	36.1
85°	119.7	100.8	77.7	63.4	49.4	40.6	36.7	25.4	19.8	15.6	12.0
87.5°	10.4	8.4	6.8	4.5	4.9	2.6	2.9	1.9	1.6	1.6	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P162269  
 CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

**CANDELA DISTRIBUTION (continued):**

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
2.5°	71.9	71.6	71.2	70.6	70.6	69.9	69.6	69.3	67.7	64.1	61.1
5°	75.5	74.8	74.2	73.2	72.5	71.6	70.9	69.9	66.4	59.5	53.7
7.5°	80.7	79.4	78.4	76.4	75.5	74.2	73.2	71.6	65.7	55.3	47.2
10°	86.8	84.6	82.9	80.7	78.7	77.1	75.5	73.2	65.1	50.7	41.3
12.5°	94.3	91.7	88.5	85.9	83.3	81.0	78.7	75.8	64.1	46.8	36.7
15°	101.8	97.9	95.6	92.0	88.5	85.2	82.0	79.4	64.4	42.6	32.8
17.5°	110.2	106.3	101.4	97.5	93.6	89.4	85.5	80.3	62.8	39.3	29.9
20°	118.4	112.8	108.3	103.4	97.9	92.7	87.8	83.3	61.5	36.1	27.3
22.5°	127.1	120.6	114.8	108.6	101.8	95.9	90.1	84.2	59.2	33.2	25.0
25°	137.9	130.4	121.9	114.5	107.3	100.1	92.7	85.5	56.9	30.6	23.4
27.5°	150.9	141.1	132.7	123.2	113.2	104.0	95.9	88.1	54.6	28.6	21.8
30°	167.5	156.1	144.1	132.0	121.3	110.9	99.5	89.8	52.4	26.7	20.1
32.5°	189.6	175.3	160.7	146.7	132.4	119.0	107.0	94.3	51.1	25.0	18.5
35°	218.9	200.3	182.4	164.9	147.6	131.4	115.8	101.4	51.1	23.1	16.6
37.5°	246.5	225.0	202.3	180.5	160.0	141.1	122.6	105.3	48.5	21.5	14.9
40°	276.4	250.7	224.1	198.4	173.7	150.3	129.1	109.3	46.2	19.5	13.3
42.5°	322.3	289.7	255.0	225.0	195.4	166.5	140.2	116.7	43.3	17.5	11.7
45°	382.4	341.1	300.2	263.7	226.0	190.5	159.4	130.4	42.6	15.9	10.1
47.5°	446.8	398.0	349.9	303.4	259.2	217.9	180.5	145.7	42.6	14.3	8.8
50°	510.9	449.7	398.4	344.4	294.6	245.9	201.3	161.6	42.9	13.0	7.1
52.5°	568.8	503.4	445.8	383.4	328.5	271.8	223.4	177.2	42.3	11.4	5.8
55°	649.1	572.3	505.7	436.7	372.3	308.6	253.7	200.6	42.6	10.1	4.9
57.5°	797.0	707.0	626.6	536.2	462.1	379.8	313.2	248.8	46.5	8.4	3.6
60°	1009.4	892.3	779.5	669.3	574.9	477.1	390.6	314.8	54.6	6.8	2.6
62.5°	1152.1	999.0	864.4	742.7	633.1	530.7	436.4	350.2	60.2	5.5	1.6
63°	1166.8	1008.4	873.1	747.6	635.7	533.3	438.4	352.8	60.5	5.2	1.6
65°	1194.4	1024.7	878.0	748.6	633.1	529.7	437.1	352.5	61.1	4.2	1.3
67.5°	1162.9	999.6	849.7	720.6	610.4	508.6	420.8	339.5	60.8	2.9	1.0
70°	1040.0	904.7	773.0	652.7	552.5	460.5	383.1	309.6	55.9	1.9	0.6
72.5°	763.6	671.5	569.4	482.6	416.3	345.7	294.9	232.5	43.3	1.3	0.3
75°	226.3	206.2	173.3	152.9	135.0	111.5	99.2	77.4	22.1	0.6	0.0
77.5°	45.2	41.0	36.7	33.5	31.5	27.0	25.7	21.1	9.1	0.3	0.0
80°	23.7	19.5	16.6	14.6	12.7	10.4	8.8	7.1	1.6	0.0	0.0
82.5°	22.8	15.3	11.0	9.1	7.8	6.2	4.9	3.6	1.0	0.0	0.0
85°	8.4	6.5	4.9	3.9	3.2	2.9	2.3	1.9	0.0	0.0	0.0
87.5°	1.3	1.0	1.0	0.6	0.6	0.3	0.3	0.3	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



REPORT NUMBER: P162269

CATALOG NUMBER: ECM-E01-LED-E1-SL2-HSS-7060

**CANDELA DISTRIBUTION (continued):**

	125°	135°	145°	155°	165°	175°	180°
0°	68.6	68.6	68.6	68.6	68.6	68.6	68.6
2.5°	58.2	55.6	54.3	52.7	52.7	52.4	53.0
5°	48.5	44.9	42.3	40.3	40.6	39.7	40.0
7.5°	41.0	37.4	35.1	33.8	33.5	33.2	33.2
10°	35.4	32.2	30.2	29.3	28.9	28.9	28.9
12.5°	31.5	28.3	26.7	26.0	26.0	25.7	25.7
15°	28.3	25.7	24.1	23.4	23.4	23.1	23.4
17.5°	25.7	23.1	21.8	21.1	21.1	20.8	20.8
20°	23.4	21.1	19.8	18.8	18.8	18.5	18.8
22.5°	21.5	19.2	17.5	16.9	16.6	16.2	16.6
25°	19.5	17.2	15.6	14.6	14.3	14.3	14.0
27.5°	17.9	15.6	13.6	12.7	12.3	12.3	12.0
30°	16.2	13.6	11.7	10.7	10.4	10.4	10.4
32.5°	14.6	11.7	10.1	9.1	8.8	8.8	8.8
35°	13.0	10.1	8.4	7.5	7.1	7.1	7.1
37.5°	11.0	8.4	6.5	5.8	5.5	5.2	5.2
40°	9.4	6.5	4.9	4.2	3.6	3.6	3.6
42.5°	7.8	5.2	3.6	2.6	2.3	1.9	2.3
45°	6.5	3.9	2.3	1.3	1.0	1.0	1.0
47.5°	5.2	2.6	1.0	0.3	0.3	0.3	0.3
50°	3.9	1.6	0.3	0.0	0.0	0.3	0.3
52.5°	2.9	1.0	0.0	0.0	0.0	0.0	0.0
55°	1.6	0.3	0.0	0.0	0.0	0.0	0.0
57.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.6	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.3	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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

(END OF REPORT)