

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: P162306

Luminaire Tested: **EMM-E01-LED-E1-SL2-HSS-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162306
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: EMM-E01-LED-E1-SL2-HSS-7030
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1592.3 lumens
Efficiency: N/A
Efficacy: 64.5 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

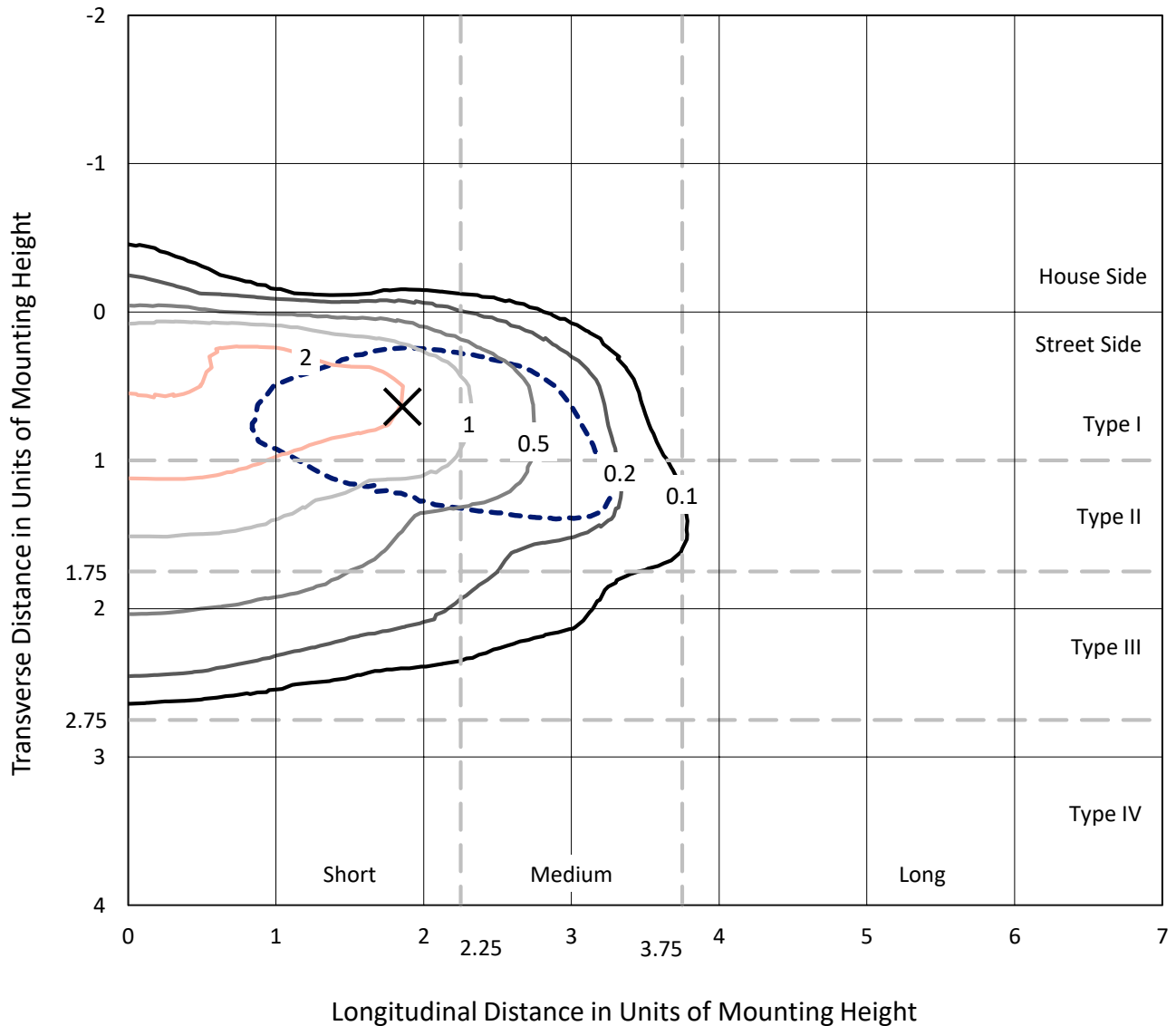
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P162306
 CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

Iso-Footcandle Lines of Horizontal Illumination

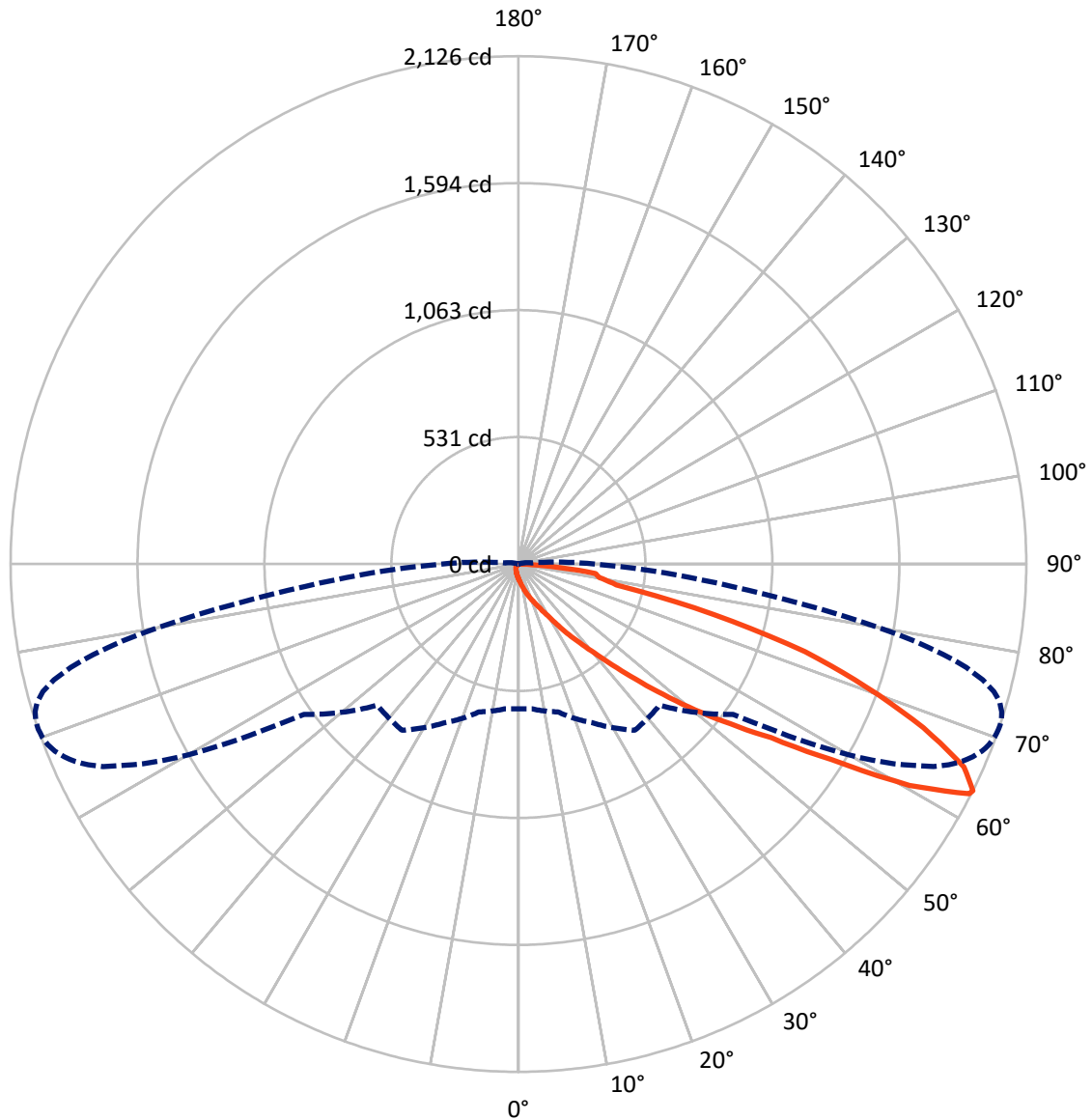
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P162306
CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P162306

CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

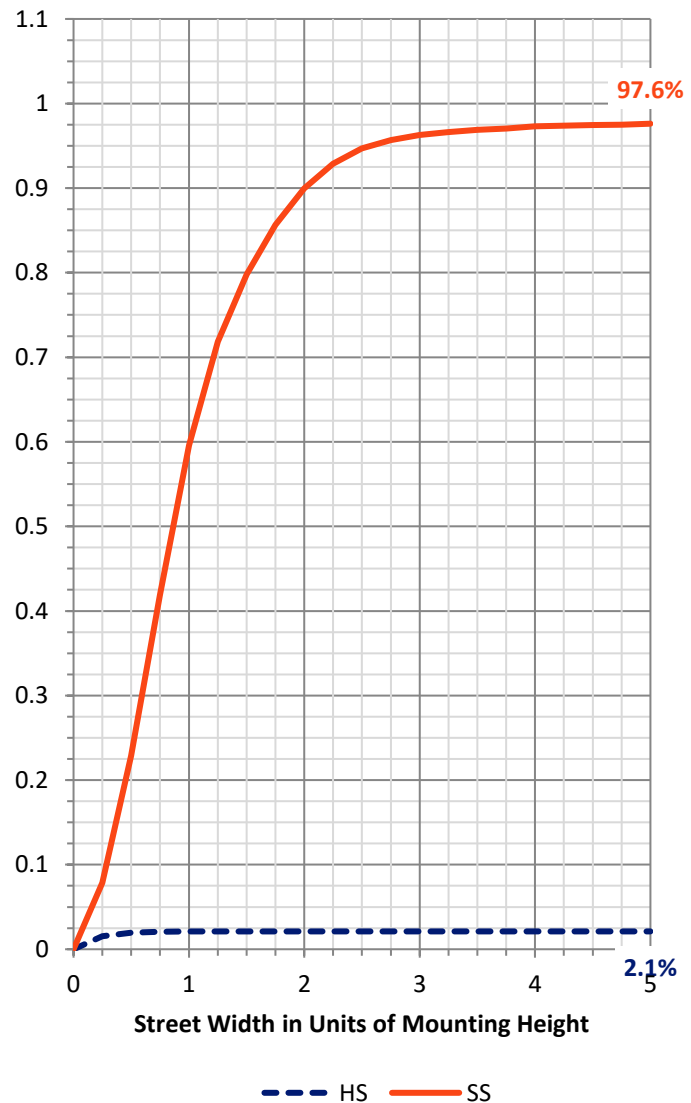
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	33.8	0.0	33.8
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	1558.4	0.0	1558.4
	% Fixture	97.9	0.0	97.9
Total	Lumens	1592.3	0.0	1592.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	0.4
10°-20°	26.2	1.6
20°-30°	53.2	3.3
30°-40°	129.9	8.2
40°-50°	290.6	18.2
50°-60°	408.6	25.7
60°-70°	480.4	30.2
70°-80°	173.5	10.9
80°-90°	23.2	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°	1592.3	100.0
0°-180°	1592.3	100.0



REPORT NUMBER: P162306

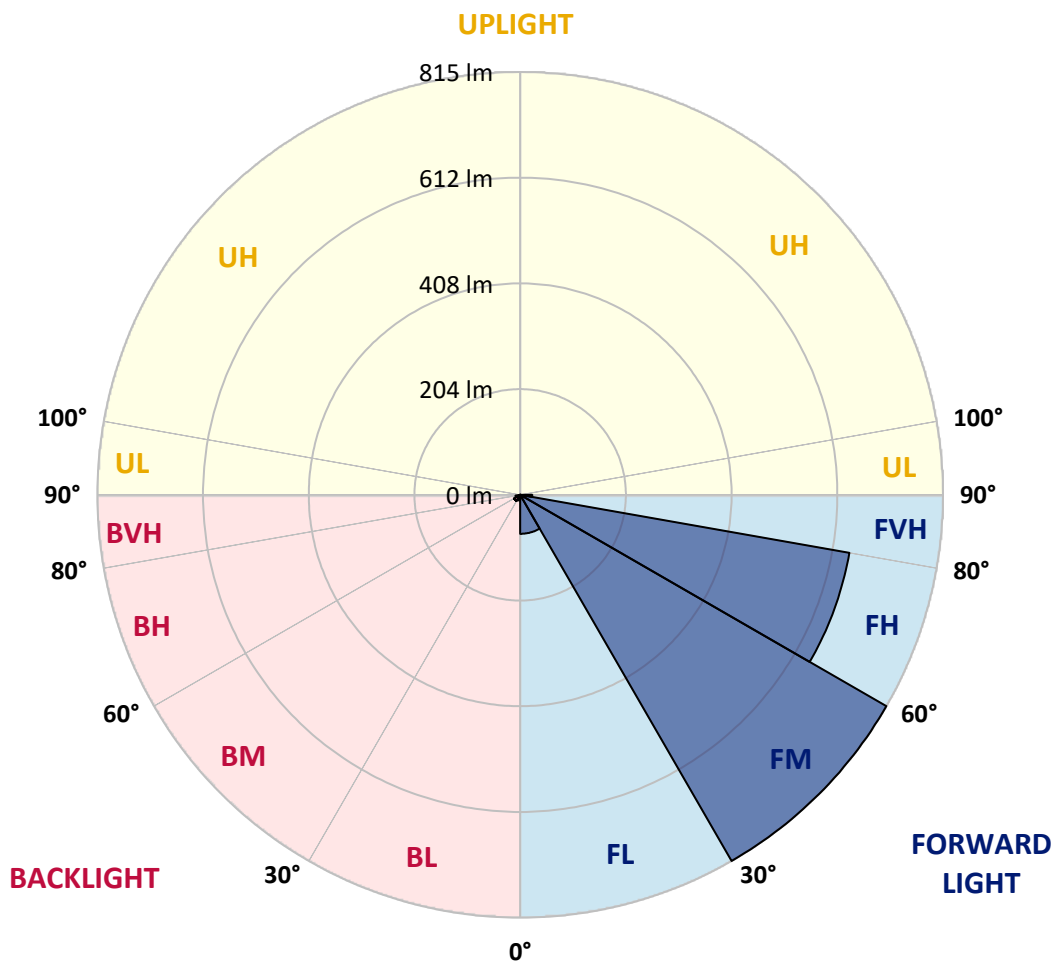
CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	75.2	4.7			
FM (30°-60°)	815.4	51.2			
FH (60°-80°)	644.6	40.5			G0/660
FVH (80°-90°)	23.2	1.5			G1/100
BL (0°-30°)	10.9	0.7	B0/110		
BM (30°-60°)	13.6	0.9	B0/220		
BH (60°-80°)	9.3	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: P162306
 CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
2.5°	79.9	80.8	80.2	78.7	77.0	74.7	72.6	72.6	72.4	71.5	71.8
5°	104.8	105.1	103.9	100.4	97.3	92.3	86.8	86.3	85.7	84.8	84.5
7.5°	129.1	130.2	129.1	125.3	119.0	111.4	102.8	101.9	100.2	100.2	99.0
10°	154.0	154.0	152.8	148.5	142.7	132.0	121.0	119.6	117.5	116.9	115.2
12.5°	171.6	171.6	171.1	168.8	164.1	154.6	141.3	139.8	137.2	136.3	134.3
15°	178.6	178.6	178.9	180.9	181.2	176.9	163.0	161.8	159.2	156.9	156.0
17.5°	182.9	182.6	182.6	185.5	190.8	193.7	184.7	183.5	180.6	179.5	176.6
20°	192.5	191.9	190.2	190.2	195.1	205.2	205.2	204.9	201.8	200.9	199.4
22.5°	206.7	206.1	200.9	196.6	198.9	211.6	223.5	222.9	221.7	220.6	219.7
25°	229.8	227.8	218.8	206.1	204.1	217.7	237.3	238.8	239.7	239.7	240.2
27.5°	264.8	262.3	246.3	222.6	213.6	227.5	252.7	255.6	258.2	258.8	261.4
30°	313.5	308.9	286.0	251.3	230.7	242.0	275.3	278.5	282.2	283.4	287.4
32.5°	393.4	390.8	368.8	316.7	272.7	270.4	306.8	310.9	315.8	317.8	322.7
35°	514.9	515.5	497.6	450.7	389.9	358.1	363.3	366.7	368.5	374.6	377.2
37.5°	597.5	598.9	602.9	584.4	541.0	508.6	467.8	471.5	462.6	463.4	463.7
40°	642.6	647.2	671.0	688.9	685.4	666.6	633.9	635.9	619.2	615.4	597.1
42.5°	672.7	678.8	716.7	772.3	800.6	817.7	810.2	809.3	796.3	791.4	776.0
45°	691.5	697.0	744.8	826.7	892.1	941.9	962.5	964.8	953.8	948.8	936.1
47.5°	690.6	697.0	748.2	846.9	943.3	1023.0	1080.8	1083.7	1090.4	1086.1	1086.9
50°	652.4	658.5	710.0	812.5	928.3	1060.0	1166.0	1175.2	1185.9	1193.1	1196.6
52.5°	606.1	610.5	656.2	753.5	864.0	1044.7	1216.3	1232.2	1248.2	1261.8	1271.3
55°	589.1	594.0	629.9	710.6	812.5	980.4	1239.8	1263.2	1285.8	1308.1	1326.3
57.5°	598.0	602.7	628.4	690.4	781.8	912.7	1246.4	1282.9	1319.9	1356.1	1392.0
60°	631.0	635.9	657.9	709.2	773.7	873.6	1220.4	1280.9	1342.5	1405.6	1465.0
62.5°	618.0	620.0	652.4	742.2	831.6	840.3	1125.7	1210.2	1304.3	1401.6	1497.4
63°	605.6	607.9	640.9	733.2	849.3	835.4	1096.5	1185.6	1284.9	1389.7	1493.9
65°	549.1	549.4	574.6	647.5	829.6	844.1	966.2	1051.3	1165.4	1291.0	1422.7
67.5°	409.9	407.8	432.2	487.7	651.3	844.4	829.3	877.1	956.4	1067.8	1185.9
70°	145.3	142.1	181.5	258.5	405.8	690.6	712.7	715.8	737.8	798.0	872.1
72.5°	47.2	48.0	57.9	94.7	187.0	464.9	645.2	635.4	629.6	629.3	639.1
75°	18.8	19.1	23.2	42.0	83.9	224.0	565.0	570.5	572.5	575.4	578.6
77.5°	9.0	9.8	13.0	23.4	41.7	110.9	404.4	451.0	477.6	498.2	510.6
80°	3.2	3.8	7.2	14.5	19.4	50.9	213.1	257.0	296.1	346.5	389.9
82.5°	0.0	0.0	1.5	10.1	10.7	20.6	87.4	102.5	117.2	152.0	195.1
85°	0.0	0.0	0.0	2.9	3.2	3.5	29.5	35.6	39.9	46.6	53.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.7	4.4	6.7
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: P162306
 CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
2.5°	71.2	70.9	70.9	70.3	70.1	69.5	69.2	68.3	68.0	68.0	68.0
5°	84.2	83.1	82.5	81.0	80.2	79.9	78.5	77.9	77.0	77.3	75.8
7.5°	98.7	96.7	95.8	93.8	93.2	91.2	90.6	89.1	88.3	86.6	86.0
10°	114.6	112.0	110.6	107.4	106.5	105.1	103.3	101.6	100.2	98.4	97.5
12.5°	132.9	130.5	129.4	125.0	123.0	121.0	118.7	116.4	114.0	112.6	110.6
15°	154.3	150.5	149.4	145.3	141.8	139.2	136.1	133.1	131.4	128.5	126.5
17.5°	175.4	171.6	170.8	164.7	160.9	159.2	155.7	152.0	148.8	145.9	142.7
20°	196.6	193.9	191.6	185.8	181.8	178.9	174.3	170.5	167.9	163.8	159.8
22.5°	217.7	215.1	213.3	207.2	203.5	199.4	195.4	191.3	187.6	182.6	178.0
25°	239.4	237.7	236.8	231.3	227.8	224.0	220.0	215.4	210.7	205.2	200.3
27.5°	261.9	262.5	260.8	259.6	255.9	253.3	246.9	243.7	240.2	233.6	227.5
30°	290.6	292.4	291.8	292.6	290.3	288.6	283.7	279.6	275.6	269.2	262.3
32.5°	326.8	329.1	330.3	333.5	332.3	331.7	330.3	324.5	321.6	310.6	307.7
35°	382.7	381.5	386.4	389.0	387.9	387.3	385.6	382.4	378.9	371.1	363.8
37.5°	455.3	456.5	458.2	453.0	449.5	449.2	444.0	440.8	435.9	427.2	418.6
40°	588.5	581.2	573.1	551.1	541.6	536.1	520.7	516.4	508.0	496.1	487.2
42.5°	761.6	754.3	730.0	693.3	673.6	646.3	633.9	618.6	606.7	587.3	576.9
45°	933.5	912.7	909.8	866.9	842.6	806.7	784.4	758.7	731.7	706.3	687.8
47.5°	1078.5	1073.9	1059.7	1033.7	1011.1	981.0	952.3	912.7	884.9	848.7	815.4
50°	1194.6	1194.3	1189.1	1174.1	1155.2	1130.9	1105.7	1072.2	1040.6	996.3	960.7
52.5°	1281.4	1286.1	1287.8	1283.2	1276.0	1254.5	1241.8	1213.7	1187.1	1149.5	1110.9
55°	1345.1	1362.2	1370.9	1380.7	1378.7	1371.2	1370.6	1352.4	1340.2	1310.4	1283.2
57.5°	1423.9	1451.9	1478.8	1526.6	1528.3	1545.1	1553.8	1562.5	1564.8	1552.9	1544.0
60°	1524.0	1581.3	1632.2	1732.1	1758.2	1799.3	1825.9	1854.9	1879.5	1881.5	1880.9
62.5°	1594.6	1682.9	1765.1	1913.3	1964.0	2011.4	2047.1	2075.1	2092.2	2109.6	2117.7
63°	1596.7	1693.3	1780.8	1933.6	1986.8	2032.0	2065.9	2091.9	2109.9	2120.3	2125.5
65°	1547.7	1665.0	1769.2	1921.4	1971.5	2017.0	2034.6	2051.7	2060.4	2064.4	2049.1
67.5°	1311.8	1426.4	1548.0	1718.2	1761.1	1815.5	1830.0	1838.6	1842.7	1841.8	1828.8
70°	981.0	1077.1	1212.3	1406.8	1463.5	1516.8	1549.8	1564.0	1568.6	1567.1	1547.7
72.5°	684.9	741.3	852.7	1069.3	1146.6	1214.8	1255.7	1276.8	1281.2	1272.4	1254.5
75°	575.2	578.1	603.2	721.6	794.0	866.9	913.0	926.3	917.6	891.2	845.5
77.5°	513.5	519.9	519.9	537.5	551.7	572.0	576.3	543.9	506.3	457.6	418.3
80°	430.7	453.0	468.6	481.7	483.1	479.1	468.3	450.1	421.2	384.1	343.0
82.5°	261.7	305.7	323.6	390.8	423.8	446.0	444.3	420.0	398.0	359.5	324.5
85°	66.0	71.2	77.3	100.4	112.6	137.5	153.1	160.4	163.0	149.6	135.5
87.5°	6.4	4.4	7.2	5.5	7.8	5.8	7.8	7.2	9.0	9.6	10.4
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: P162306
 CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
2.5°	67.4	67.2	66.9	66.6	66.3	66.0	65.4	65.4	64.8	64.5	64.3
5°	75.0	74.4	74.1	73.5	72.6	72.1	71.2	70.1	69.2	68.9	68.3
7.5°	84.5	83.1	82.5	81.6	80.5	78.7	77.6	76.7	75.3	74.4	72.6
10°	95.2	93.8	92.0	90.3	88.6	86.6	85.1	83.9	81.6	80.5	78.5
12.5°	108.8	106.2	104.2	101.9	99.6	97.3	95.5	92.0	90.0	87.4	85.7
15°	122.7	120.4	118.1	115.2	111.7	108.0	106.2	103.1	100.4	96.4	94.1
17.5°	139.5	135.2	131.7	128.2	125.0	121.6	118.1	113.2	109.4	105.9	101.3
20°	156.0	150.8	147.0	142.4	137.8	132.3	128.2	124.8	119.6	114.9	110.0
22.5°	173.7	168.5	162.4	157.8	151.4	147.0	141.5	135.8	130.5	124.5	118.4
25°	195.1	189.6	182.6	176.6	169.3	163.2	156.6	149.9	143.6	136.6	128.8
27.5°	221.4	215.6	208.1	200.9	191.3	183.8	177.4	168.5	160.4	151.7	142.7
30°	254.7	248.4	239.1	228.7	219.1	210.7	201.8	189.9	180.9	170.5	158.9
32.5°	298.1	290.6	278.2	268.3	256.5	245.4	233.0	221.2	208.4	194.8	181.5
35°	352.9	345.9	331.4	317.0	303.9	290.9	275.3	261.7	243.7	227.2	210.2
37.5°	409.6	397.1	383.8	368.2	352.0	336.4	317.2	298.4	277.9	259.9	238.5
40°	474.4	459.4	448.4	431.6	408.7	386.4	368.8	345.3	319.6	295.5	270.4
42.5°	563.3	546.5	526.8	501.3	484.8	458.8	435.9	408.1	374.3	347.3	317.0
45°	666.0	643.2	624.1	599.5	579.5	547.1	520.5	483.4	449.5	414.2	377.2
47.5°	783.3	754.9	727.1	702.8	671.0	639.1	605.2	565.9	522.5	483.7	439.7
50°	917.9	877.6	839.2	807.9	764.2	727.4	690.6	646.3	598.3	553.7	503.7
52.5°	1067.5	1020.9	970.0	921.9	871.3	824.1	779.8	728.9	675.3	620.9	565.0
55°	1248.2	1213.1	1153.2	1092.1	1024.4	961.3	904.3	841.2	776.0	704.5	645.8
57.5°	1531.0	1513.9	1463.8	1402.7	1314.4	1237.7	1141.0	1063.7	969.4	871.0	795.1
60°	1914.2	1893.1	1865.0	1815.5	1745.4	1641.2	1534.7	1414.6	1271.0	1134.7	1005.3
62.5°	2118.5	2111.0	2088.2	2054.0	1988.6	1906.4	1799.0	1667.0	1504.9	1339.3	1174.3
63°	2124.6	2115.1	2095.4	2060.7	2003.1	1923.5	1818.1	1689.9	1531.2	1362.5	1194.0
65°	2042.4	2038.7	2018.7	1980.8	1941.4	1880.6	1799.0	1688.7	1555.6	1396.1	1228.5
67.5°	1811.4	1800.2	1769.5	1757.9	1730.4	1688.1	1625.9	1550.0	1454.8	1329.5	1184.8
70°	1532.1	1515.3	1476.8	1456.3	1422.7	1396.1	1358.2	1304.0	1245.3	1157.8	1049.9
72.5°	1236.0	1201.3	1166.0	1112.4	1065.5	1018.0	976.1	937.9	873.3	838.0	756.1
75°	802.7	739.6	679.1	598.0	525.1	460.5	397.7	365.9	299.6	272.7	234.2
77.5°	380.9	345.6	298.1	261.4	214.5	175.1	143.0	107.4	84.2	66.0	50.4
80°	307.4	277.6	248.9	215.6	180.3	143.9	110.3	82.5	58.5	40.5	28.6
82.5°	274.1	241.7	206.4	183.5	159.5	130.5	107.1	87.4	64.5	47.2	32.1
85°	106.5	89.7	69.2	56.4	44.0	36.2	32.7	22.6	17.7	13.9	10.7
87.5°	9.3	7.5	6.1	4.0	4.4	2.3	2.6	1.7	1.5	1.5	1.2
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: P162306
 CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
2.5°	64.0	63.7	63.4	62.8	62.8	62.2	62.0	61.7	60.2	57.0	54.4
5°	67.2	66.6	66.0	65.1	64.5	63.7	63.1	62.2	59.1	53.0	47.8
7.5°	71.8	70.6	69.7	68.0	67.2	66.0	65.1	63.7	58.5	49.2	42.0
10°	77.3	75.3	73.8	71.8	70.1	68.6	67.2	65.1	57.9	45.1	36.7
12.5°	83.9	81.6	78.7	76.4	74.1	72.1	70.1	67.4	57.0	41.7	32.7
15°	90.6	87.1	85.1	81.9	78.7	75.8	72.9	70.6	57.3	37.9	29.2
17.5°	98.1	94.7	90.3	86.8	83.4	79.6	76.1	71.5	55.9	35.0	26.6
20°	105.4	100.4	96.4	92.0	87.1	82.5	78.2	74.1	54.7	32.1	24.3
22.5°	113.2	107.4	102.2	96.7	90.6	85.4	80.2	75.0	52.7	29.5	22.3
25°	122.7	116.1	108.5	101.9	95.5	89.1	82.5	76.1	50.7	27.2	20.9
27.5°	134.3	125.6	118.1	109.7	100.7	92.6	85.4	78.5	48.6	25.5	19.4
30°	149.1	139.0	128.2	117.5	108.0	98.7	88.6	79.9	46.6	23.7	17.9
32.5°	168.8	156.0	143.0	130.5	117.8	105.9	95.2	83.9	45.5	22.3	16.5
35°	194.8	178.3	162.4	146.7	131.4	116.9	103.1	90.3	45.5	20.6	14.8
37.5°	219.4	200.3	180.1	160.7	142.4	125.6	109.1	93.8	43.1	19.1	13.3
40°	246.0	223.2	199.4	176.6	154.6	133.7	114.9	97.3	41.1	17.4	11.9
42.5°	286.9	257.9	226.9	200.3	174.0	148.2	124.8	103.9	38.5	15.6	10.4
45°	340.4	303.6	267.2	234.8	201.2	169.6	141.8	116.1	37.9	14.2	9.0
47.5°	397.7	354.3	311.5	270.1	230.7	193.9	160.7	129.7	37.9	12.7	7.8
50°	454.7	400.3	354.6	306.6	262.3	218.8	179.2	143.9	38.2	11.6	6.4
52.5°	506.3	448.1	396.9	341.3	292.4	242.0	198.9	157.8	37.6	10.1	5.2
55°	577.8	509.4	450.1	388.8	331.4	274.7	225.8	178.6	37.9	9.0	4.4
57.5°	709.5	629.3	557.8	477.3	411.3	338.1	278.8	221.4	41.4	7.5	3.2
60°	898.5	794.3	693.8	595.7	511.8	424.6	347.7	280.2	48.6	6.1	2.3
62.5°	1025.5	889.2	769.4	661.1	563.6	472.4	388.4	311.8	53.6	4.9	1.5
63°	1038.6	897.6	777.2	665.5	565.9	474.7	390.2	314.1	53.8	4.6	1.5
65°	1063.2	912.1	781.6	666.3	563.6	471.5	389.0	313.8	54.4	3.8	1.2
67.5°	1035.1	889.8	756.3	641.4	543.3	452.7	374.6	302.2	54.1	2.6	0.9
70°	925.7	805.3	688.1	581.0	491.8	409.9	341.0	275.6	49.8	1.7	0.6
72.5°	679.7	597.7	506.8	429.5	370.5	307.7	262.5	207.0	38.5	1.2	0.3
75°	201.5	183.5	154.3	136.1	120.1	99.3	88.3	68.9	19.7	0.6	0.0
77.5°	40.2	36.5	32.7	29.8	28.1	24.0	22.9	18.8	8.1	0.3	0.0
80°	21.1	17.4	14.8	13.0	11.3	9.3	7.8	6.4	1.5	0.0	0.0
82.5°	20.3	13.6	9.8	8.1	6.9	5.5	4.4	3.2	0.9	0.0	0.0
85°	7.5	5.8	4.4	3.5	2.9	2.6	2.0	1.7	0.0	0.0	0.0
87.5°	1.2	0.9	0.9	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: P162306

CATALOG NUMBER: EMM-E01-LED-E1-SL2-HSS-7030

CANDELA DISTRIBUTION (continued):

	125°	135°	145°	155°	165°	175°	180°
0°	61.1	61.1	61.1	61.1	61.1	61.1	61.1
2.5°	51.8	49.5	48.3	46.9	46.9	46.6	47.2
5°	43.1	39.9	37.6	35.9	36.2	35.3	35.6
7.5°	36.5	33.3	31.3	30.1	29.8	29.5	29.5
10°	31.5	28.6	26.9	26.1	25.8	25.8	25.8
12.5°	28.1	25.2	23.7	23.2	23.2	22.9	22.9
15°	25.2	22.9	21.4	20.9	20.9	20.6	20.9
17.5°	22.9	20.6	19.4	18.8	18.8	18.5	18.5
20°	20.9	18.8	17.7	16.8	16.8	16.5	16.8
22.5°	19.1	17.1	15.6	15.0	14.8	14.5	14.8
25°	17.4	15.3	13.9	13.0	12.7	12.7	12.5
27.5°	15.9	13.9	12.1	11.3	11.0	11.0	10.7
30°	14.5	12.1	10.4	9.6	9.3	9.3	9.3
32.5°	13.0	10.4	9.0	8.1	7.8	7.8	7.8
35°	11.6	9.0	7.5	6.7	6.4	6.4	6.4
37.5°	9.8	7.5	5.8	5.2	4.9	4.6	4.6
40°	8.4	5.8	4.4	3.8	3.2	3.2	3.2
42.5°	6.9	4.6	3.2	2.3	2.0	1.7	2.0
45°	5.8	3.5	2.0	1.2	0.9	0.9	0.9
47.5°	4.6	2.3	0.9	0.3	0.3	0.3	0.3
50°	3.5	1.5	0.3	0.0	0.0	0.3	0.3
52.5°	2.6	0.9	0.0	0.0	0.0	0.0	0.0
55°	1.5	0.3	0.0	0.0	0.0	0.0	0.0
57.5°	0.9	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)