

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: P141071

Luminaire Tested: **ECM-E02-LED-E1-SL3-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141071
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33691)
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-SL3-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5938.8 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

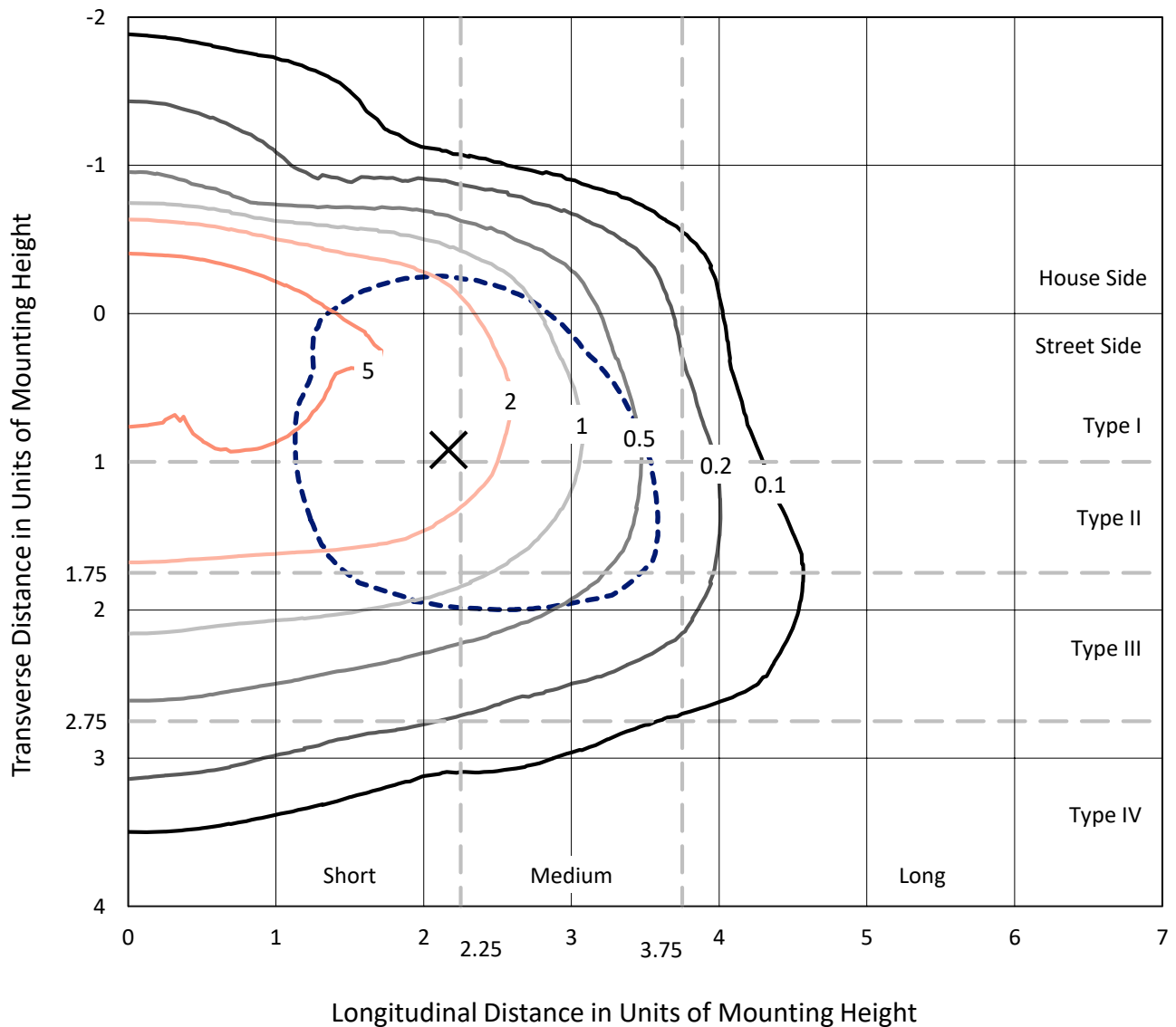
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P141071
 CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

Iso-Footcandle Lines of Horizontal Illumination

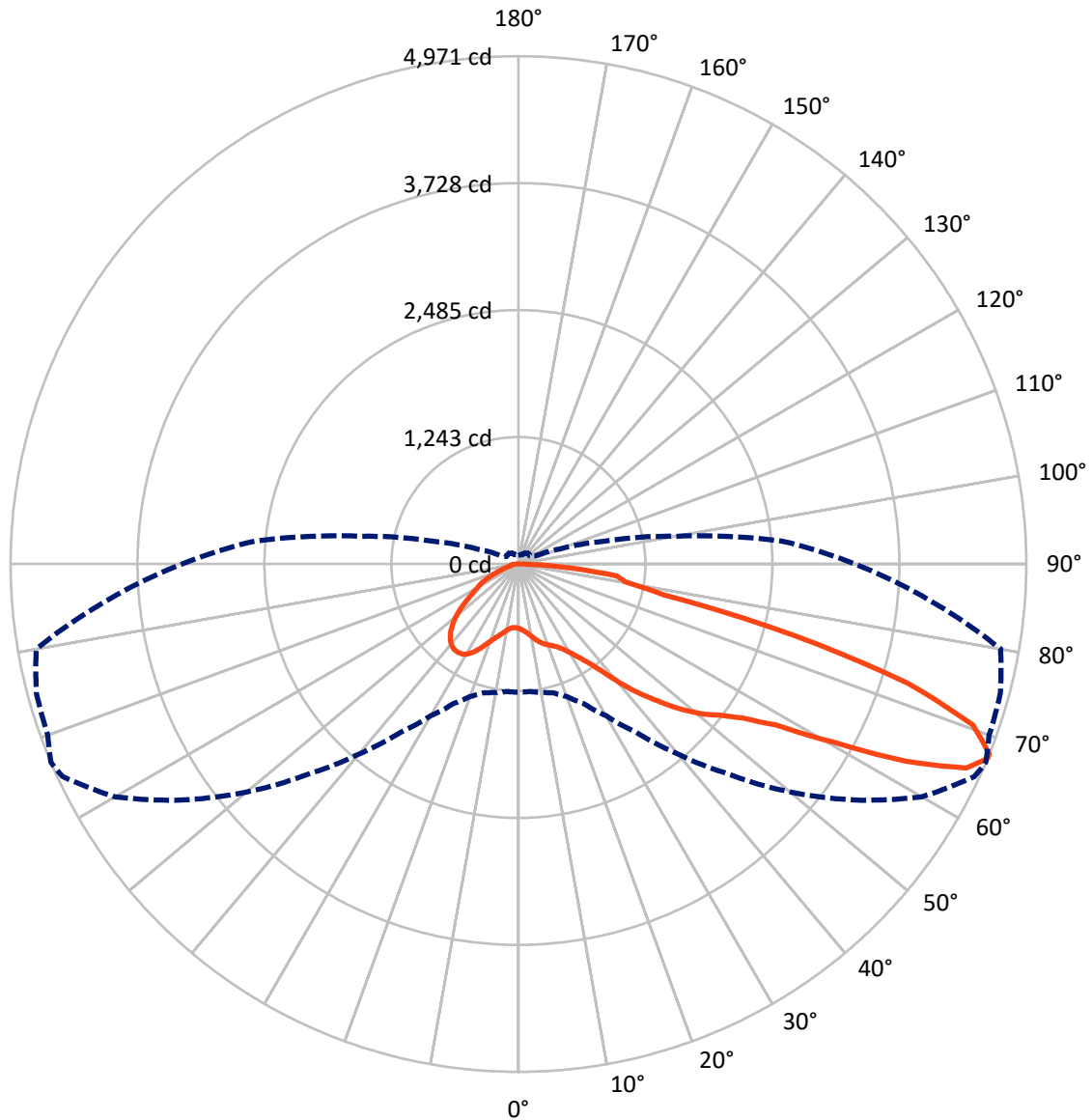
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.3 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P141071
CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P141071

CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

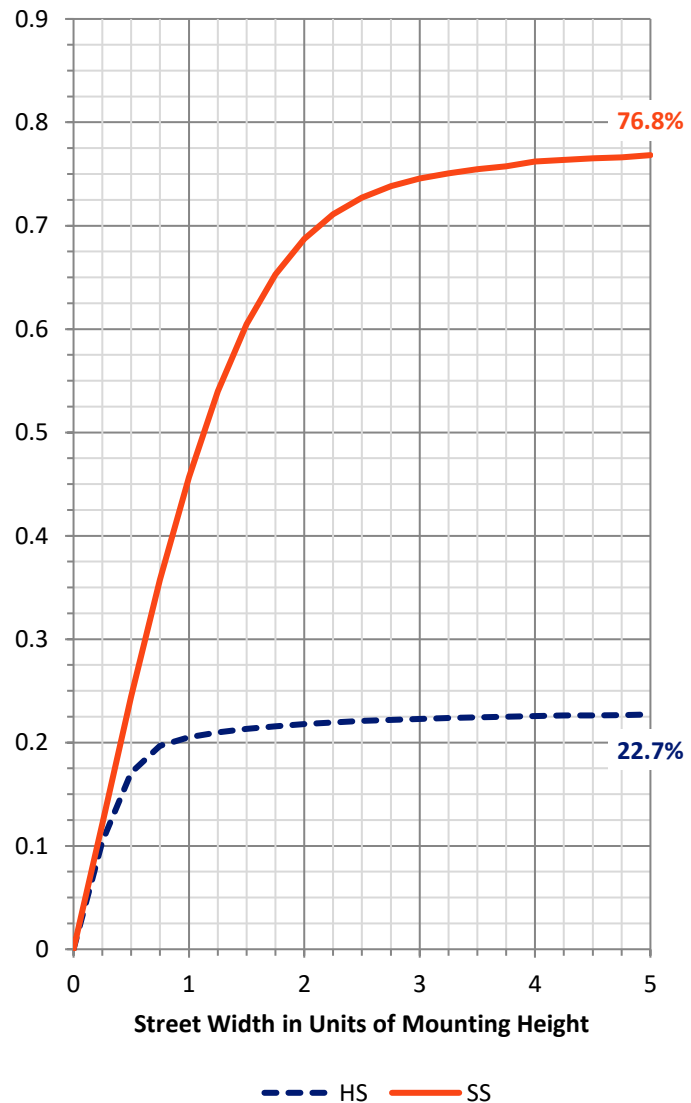
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1366.2	0.0	1366.2
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	4572.6	0.0	4572.6
	% Fixture	77.0	0.0	77.0
Total	Lumens	5938.8	0.0	5938.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.1
10°-20°	218.4	3.7
20°-30°	388.7	6.5
30°-40°	558.9	9.4
40°-50°	851.7	14.3
50°-60°	1244.1	20.9
60°-70°	1676.4	28.2
70°-80°	823.0	13.9
80°-90°	114.4	1.9
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°	5938.8	100.0
0°-180°	5938.8	100.0



REPORT NUMBER: P141071

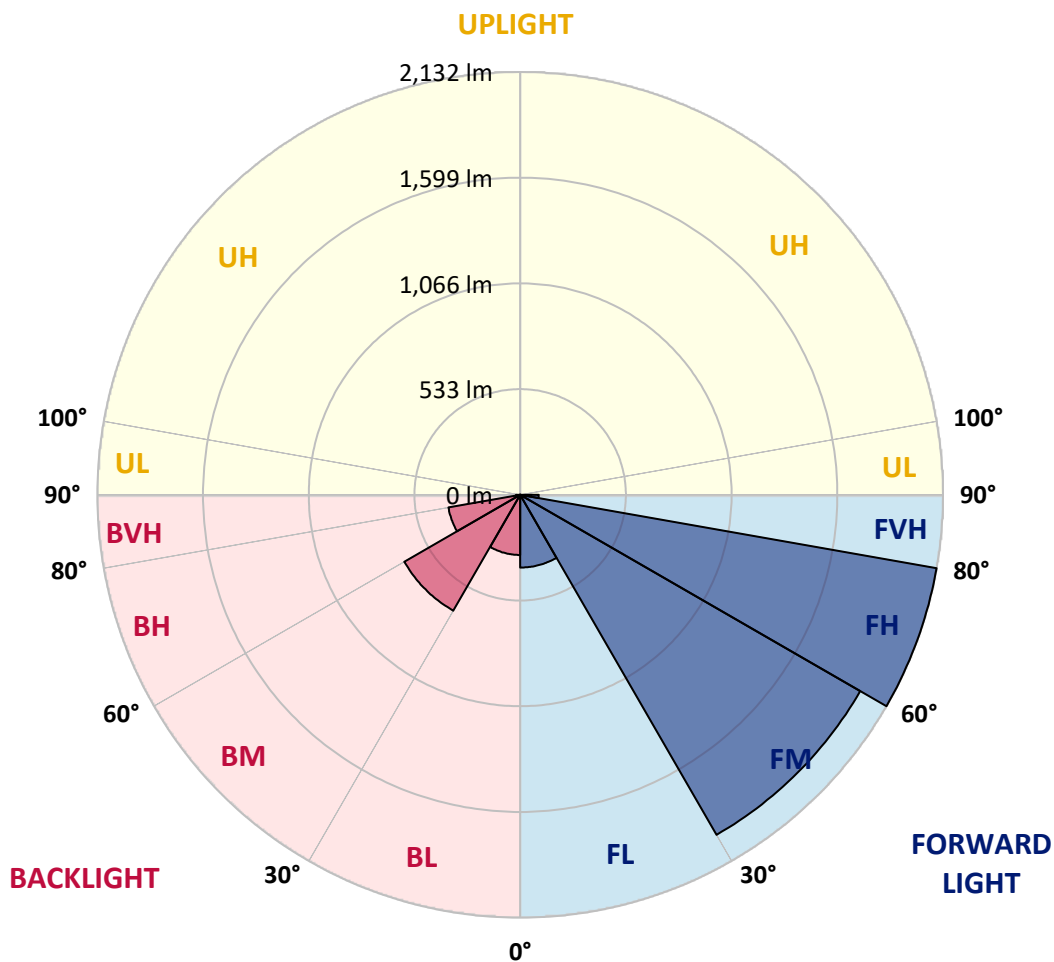
CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	366.8	6.2			
FM	(30°-60°)	1979.9	33.3			
FH	(60°-80°)	2132.0	35.9			G2/5000
FVH	(80°-90°)	93.8	1.6			G1/100
BL	(0°-30°)	303.4	5.1	B1/500		
BM	(30°-60°)	674.8	11.4	B1/1000		
BH	(60°-80°)	367.4	6.2	B1/500		G1/500
BVH	(80°-90°)	20.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P141071

CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
2.5°	662.9	659.4	662.2	661.5	659.4	656.7	658.1	656.0	654.7	652.6	650.6
5°	706.0	703.9	702.5	700.5	699.1	697.1	695.7	692.3	687.5	684.1	681.3
7.5°	748.4	747.7	745.6	742.9	737.4	736.1	731.3	727.9	723.7	716.9	711.4
10°	798.3	797.6	794.2	790.1	783.9	777.8	772.3	764.1	755.9	749.7	745.0
12.5°	858.5	855.1	848.2	842.8	835.9	826.4	817.5	807.9	796.3	786.7	781.2
15°	918.7	914.6	909.1	901.6	891.3	878.3	865.3	851.0	833.2	820.9	813.4
17.5°	968.0	965.2	959.1	948.8	938.5	922.8	905.7	885.9	864.0	845.5	833.9
20°	1003.5	1000.8	991.2	978.9	965.2	947.4	929.0	907.1	881.1	858.5	845.5
22.5°	1018.6	1014.5	1003.5	987.1	968.6	946.8	926.9	908.4	884.5	867.4	853.7
25°	1023.4	1018.6	1004.2	983.7	959.8	931.7	909.1	894.8	880.4	874.2	869.5
27.5°	1020.6	1016.5	1000.8	975.5	943.3	910.5	886.6	876.3	877.0	888.6	894.1
30°	1011.1	1006.3	991.9	963.9	929.7	894.1	872.9	869.5	885.2	914.6	936.5
32.5°	995.3	991.9	980.3	956.3	925.5	894.8	879.7	887.2	914.6	960.4	998.1
35°	991.2	990.5	985.1	972.1	949.5	929.7	923.5	944.7	989.8	1052.8	1100.7
37.5°	990.5	994.0	996.7	996.7	991.9	990.5	1009.0	1038.4	1105.5	1184.1	1262.1
40°	1004.2	1010.4	1024.1	1041.8	1058.9	1083.6	1121.2	1176.6	1246.4	1342.1	1439.3
42.5°	1046.6	1060.3	1083.6	1114.4	1158.8	1204.6	1265.5	1334.6	1424.2	1520.7	1617.1
45°	1129.4	1149.2	1166.3	1214.9	1273.7	1327.8	1407.1	1498.1	1596.6	1717.7	1821.7
47.5°	1238.9	1253.2	1288.8	1340.1	1411.9	1489.2	1565.8	1645.2	1763.5	1890.1	2016.0
50°	1348.3	1359.2	1396.9	1457.1	1551.5	1636.3	1723.9	1802.5	1904.5	2038.5	2161.7
52.5°	1429.7	1444.8	1477.6	1536.4	1642.5	1738.9	1838.8	1925.7	2040.6	2161.0	2289.6
55°	1485.8	1495.4	1525.5	1582.9	1682.8	1792.9	1905.8	2012.5	2149.3	2285.5	2413.4
57.5°	1494.7	1504.3	1531.6	1582.3	1679.4	1795.0	1924.3	2054.9	2220.5	2400.4	2568.0
60°	1484.4	1492.0	1515.9	1557.6	1649.3	1775.8	1929.8	2093.9	2297.8	2529.7	2769.1
62.5°	1438.6	1446.1	1468.0	1502.2	1583.6	1720.4	1913.3	2151.4	2407.9	2699.3	3050.3
65°	1352.4	1357.2	1377.7	1405.1	1487.2	1626.0	1838.8	2139.8	2494.8	2891.6	3345.8
67°	1254.6	1252.5	1275.8	1303.2	1378.4	1506.3	1714.3	2010.5	2425.7	2906.6	3469.6
67.5°	1224.5	1230.0	1252.5	1271.7	1344.9	1468.7	1667.8	1960.5	2366.9	2872.4	3467.6
70°	1011.1	1021.3	1033.6	1045.9	1110.2	1201.2	1347.6	1630.8	1959.2	2438.0	3148.1
72.5°	693.6	673.1	682.0	677.9	697.8	755.2	857.1	1106.1	1366.8	1778.6	2336.8
75°	351.6	374.2	371.5	388.6	416.6	452.9	500.1	593.1	797.6	1039.8	1446.1
77.5°	197.0	191.5	210.7	214.8	231.2	269.5	353.0	475.4	569.1	668.3	817.5
80°	89.6	99.2	105.3	95.8	99.2	107.4	139.6	218.9	368.0	560.3	644.4
82.5°	49.9	53.4	62.3	62.9	65.7	67.7	73.2	84.8	114.2	231.2	454.9
85°	31.5	32.8	41.7	45.8	47.9	47.9	47.9	50.6	58.1	68.4	117.7
87.5°	11.6	12.3	19.2	25.3	26.0	24.6	23.3	26.7	24.6	25.3	38.3
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: P141071

CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67°	70°	75°	80°	85°	90°	95°	100°
0°	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
2.5°	649.2	646.4	643.7	643.0	641.0	639.6	636.2	633.4	630.7	628.7	626.6
5°	675.2	669.7	664.9	662.9	660.1	656.7	649.9	645.1	641.0	636.9	632.8
7.5°	704.6	697.8	690.9	688.2	684.1	677.9	670.4	664.9	658.1	651.9	646.4
10°	737.4	729.9	724.4	721.7	718.3	709.4	704.6	695.0	687.5	679.3	672.4
12.5°	773.0	769.6	762.1	759.3	755.9	749.7	742.9	734.7	725.1	716.2	708.0
15°	805.2	799.7	794.9	794.2	792.2	788.7	779.8	770.9	762.7	751.1	744.3
17.5°	825.0	822.9	822.3	821.6	820.2	818.1	814.0	804.5	796.9	787.4	777.8
20°	837.3	839.4	842.8	845.5	846.9	848.2	846.2	836.6	829.1	820.9	812.7
22.5°	850.3	855.8	864.7	868.8	873.6	880.4	879.0	872.9	868.8	859.2	853.0
25°	868.8	879.7	894.8	900.2	909.1	918.0	920.1	916.7	912.5	905.7	905.7
27.5°	900.2	916.0	935.8	947.4	956.3	968.6	972.7	970.7	971.4	967.3	976.9
30°	949.5	971.4	998.1	1010.4	1021.3	1035.7	1038.4	1042.5	1039.8	1047.3	1058.9
32.5°	1024.1	1051.4	1078.8	1090.4	1100.0	1115.0	1123.9	1121.2	1130.8	1135.6	1152.0
35°	1139.0	1166.3	1187.5	1189.6	1200.5	1208.8	1217.0	1214.2	1240.2	1250.5	1259.4
37.5°	1297.7	1320.9	1333.9	1329.1	1316.2	1331.9	1342.8	1359.2	1375.7	1394.1	1361.3
40°	1503.6	1540.5	1535.1	1528.2	1503.6	1507.0	1511.8	1520.7	1548.1	1541.9	1448.2
42.5°	1699.2	1736.9	1730.7	1723.2	1690.3	1673.2	1686.2	1702.0	1717.0	1658.9	1519.3
45°	1896.9	1931.1	1901.7	1912.0	1882.6	1875.0	1900.3	1909.2	1892.1	1785.4	1579.5
47.5°	2102.1	2139.1	2124.7	2114.5	2093.3	2091.2	2105.6	2119.2	2051.5	1877.1	1624.7
50°	2259.5	2314.2	2306.7	2300.5	2277.3	2274.5	2308.7	2318.3	2196.5	1974.2	1669.8
52.5°	2380.6	2451.7	2465.4	2457.2	2451.7	2453.1	2551.6	2537.2	2368.9	2091.9	1722.5
55°	2523.5	2597.4	2647.4	2657.6	2671.3	2691.1	2886.1	2864.9	2607.0	2261.5	1777.9
57.5°	2713.0	2849.8	2925.1	2971.6	3009.2	3137.8	3385.5	3304.1	2936.7	2480.4	1843.6
60°	2992.1	3263.7	3419.7	3538.0	3612.6	3837.0	4137.3	3837.6	3319.8	2743.1	1929.8
62.5°	3440.2	3883.5	4181.7	4248.8	4280.2	4493.7	4708.5	4246.0	3596.2	2916.9	1943.4
65°	3874.6	4428.7	4776.9	4815.9	4792.6	4850.1	4910.3	4258.3	3531.9	2834.8	1783.4
67°	4027.8	4557.3	4923.3	4970.5	4902.0	4883.6	4791.9	4034.0	3291.7	2583.0	1560.4
67.5°	4019.6	4542.2	4921.9	4969.8	4902.0	4872.6	4737.9	3943.7	3197.3	2521.5	1517.3
70°	3704.9	4207.0	4629.8	4719.4	4681.8	4603.8	4245.3	3340.3	2649.4	2068.6	1169.8
72.5°	3007.9	3550.3	3885.5	3984.7	4011.4	3811.0	3161.8	2338.2	1909.9	1478.3	848.2
75°	2019.4	2558.4	2832.7	2782.8	2620.7	2279.3	1669.1	1233.4	1046.6	859.9	524.7
77.5°	1145.1	1561.0	1539.8	1453.6	1316.8	974.8	473.4	256.5	244.9	285.9	222.3
80°	764.8	962.5	1028.2	1061.7	1054.2	721.0	195.6	99.2	85.5	85.5	84.1
82.5°	638.2	831.8	942.0	971.4	905.0	547.9	117.0	65.0	52.0	58.1	65.0
85°	268.8	419.3	554.8	533.6	424.1	213.4	59.5	34.2	34.2	45.1	56.8
87.5°	65.0	96.5	136.1	132.0	106.0	49.3	30.1	21.2	21.2	34.9	49.3
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: P141071

CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
2.5°	625.9	623.2	623.2	620.5	619.1	617.7	617.0	617.7	615.7	613.6	614.3
5°	629.3	625.2	623.2	618.4	615.7	612.9	610.9	610.2	606.8	604.7	604.7
7.5°	641.0	635.5	631.4	625.9	620.5	616.3	612.9	610.9	606.1	602.7	602.0
10°	664.9	657.4	651.2	643.0	635.5	630.0	623.9	620.5	615.0	611.6	610.2
12.5°	700.5	689.5	680.0	667.7	658.8	650.6	647.1	641.7	639.6	637.6	638.2
15°	734.0	721.0	712.1	702.5	692.3	687.5	680.6	680.0	680.6	677.2	677.2
17.5°	768.2	757.9	747.7	744.3	734.7	731.3	726.5	723.7	717.6	711.4	703.9
20°	803.8	798.3	794.2	790.1	788.0	779.8	767.5	753.2	733.3	715.5	700.5
22.5°	849.6	846.2	846.9	843.5	832.5	812.0	783.9	753.8	721.7	693.0	670.4
25°	907.8	911.2	907.1	890.0	858.5	816.8	773.7	731.3	688.9	654.7	623.9
27.5°	981.6	978.9	959.8	916.0	861.9	802.4	747.0	696.4	645.8	606.1	567.8
30°	1062.4	1042.5	992.6	924.2	848.2	776.4	708.0	649.2	590.4	543.8	500.7
32.5°	1143.8	1087.0	1006.3	914.6	824.3	739.5	662.9	593.8	526.1	474.1	424.1
35°	1205.3	1114.4	1004.2	894.1	788.0	690.9	602.0	516.5	437.8	375.6	324.9
37.5°	1262.1	1129.4	990.5	862.6	738.1	626.6	515.8	423.4	344.1	281.8	238.1
40°	1297.0	1128.0	963.9	810.6	669.0	532.2	411.8	316.7	246.9	201.1	177.2
42.5°	1317.5	1113.7	918.0	741.5	573.9	426.2	303.7	218.2	175.8	156.0	145.0
45°	1327.8	1082.9	861.2	649.2	459.0	304.4	209.3	157.3	140.2	134.8	132.0
47.5°	1321.6	1039.8	779.8	545.2	342.0	208.6	149.8	132.7	127.2	124.5	123.8
50°	1307.3	983.7	694.3	432.3	242.8	149.8	125.9	121.1	119.0	118.3	117.0
52.5°	1286.7	917.3	596.5	335.2	172.4	124.5	117.7	115.6	114.2	112.2	111.5
55°	1252.5	835.2	496.6	246.9	138.2	117.7	114.2	113.6	110.8	108.8	107.4
57.5°	1211.5	747.7	402.2	193.6	127.2	114.9	112.9	112.2	109.5	106.7	104.0
60°	1191.0	686.1	331.1	167.6	125.2	116.3	114.9	113.6	110.1	106.0	102.6
62.5°	1140.3	619.8	285.3	159.4	127.9	121.1	120.4	117.7	112.9	108.8	103.3
65°	1009.7	526.1	242.8	151.2	132.0	128.6	130.0	126.6	121.1	114.2	105.3
67°	853.0	427.5	205.2	145.0	136.8	138.9	140.9	138.9	130.0	119.7	108.1
67.5°	810.6	398.1	195.0	143.0	138.2	140.9	144.3	142.3	132.7	121.1	109.5
70°	609.5	285.3	154.6	135.4	143.0	150.5	157.3	156.7	147.1	132.7	114.2
72.5°	421.4	195.0	125.2	126.6	138.9	152.5	161.4	165.5	156.0	138.9	117.0
75°	253.8	124.5	105.3	114.2	126.6	140.2	154.6	156.0	145.0	127.9	109.5
77.5°	124.5	89.6	86.9	90.3	101.9	113.6	119.7	112.2	105.3	93.7	86.9
80°	75.2	70.5	69.1	76.6	83.5	81.4	76.6	70.5	67.0	64.3	61.6
82.5°	62.9	63.6	65.0	66.4	65.0	57.5	49.3	45.1	42.4	42.4	43.1
85°	64.3	65.7	60.2	55.4	49.3	41.0	33.5	28.7	29.4	30.1	30.1
87.5°	49.9	47.9	42.4	34.9	28.0	20.5	16.4	13.7	15.0	14.4	15.7
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: P141071

CATALOG NUMBER: ECM-E02-LED-E1-SL3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	630.0	630.0	630.0	630.0	630.0
2.5°	614.3	613.6	614.3	614.3	615.0
5°	603.4	602.0	602.0	602.7	602.7
7.5°	600.6	599.2	599.2	599.9	599.2
10°	610.2	609.5	610.9	610.2	610.2
12.5°	638.9	638.9	641.7	643.0	641.7
15°	677.9	676.5	678.6	679.3	680.0
17.5°	699.8	693.6	691.6	693.0	690.2
20°	687.5	677.2	673.1	672.4	667.7
22.5°	652.6	637.6	631.4	628.7	623.2
25°	603.4	585.6	577.4	570.5	567.1
27.5°	544.5	522.6	511.0	505.5	503.5
30°	470.6	449.4	432.3	423.4	420.7
32.5°	388.6	357.8	340.0	329.0	321.5
35°	290.0	260.6	247.6	239.4	229.8
37.5°	210.7	192.9	182.0	176.5	174.4
40°	162.8	153.9	148.4	147.8	147.1
42.5°	140.9	136.8	136.1	134.8	133.4
45°	130.0	128.6	129.3	127.2	125.9
47.5°	122.4	121.8	121.8	120.4	119.7
50°	116.3	116.3	115.6	114.9	114.9
52.5°	110.8	111.5	111.5	110.1	110.1
55°	106.0	106.0	106.7	106.0	106.0
57.5°	102.6	101.9	102.6	102.6	102.6
60°	100.6	99.2	98.5	99.2	99.2
62.5°	98.5	96.5	95.8	95.8	96.5
65°	98.5	95.1	93.7	93.7	93.0
67°	99.2	93.7	91.0	89.6	88.9
67.5°	99.2	93.0	89.6	88.9	88.2
70°	99.2	90.3	85.5	82.1	82.1
72.5°	98.5	87.6	80.0	76.6	75.2
75°	93.7	82.8	75.9	71.8	70.5
77.5°	78.7	71.8	68.4	65.0	64.3
80°	59.5	56.1	53.4	45.8	42.4
82.5°	42.4	40.4	35.6	32.8	30.8
85°	30.1	28.0	26.0	23.3	23.3
87.5°	16.4	15.7	15.0	13.7	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)