

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: P181654

Luminaire Tested: **ICM-F04-LED-E1-T4**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P181654  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33673)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ICM-F04-LED-E1-T4  
Description: ICON SITE MEDIUM LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4  
Light Source: (28) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9282.9 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

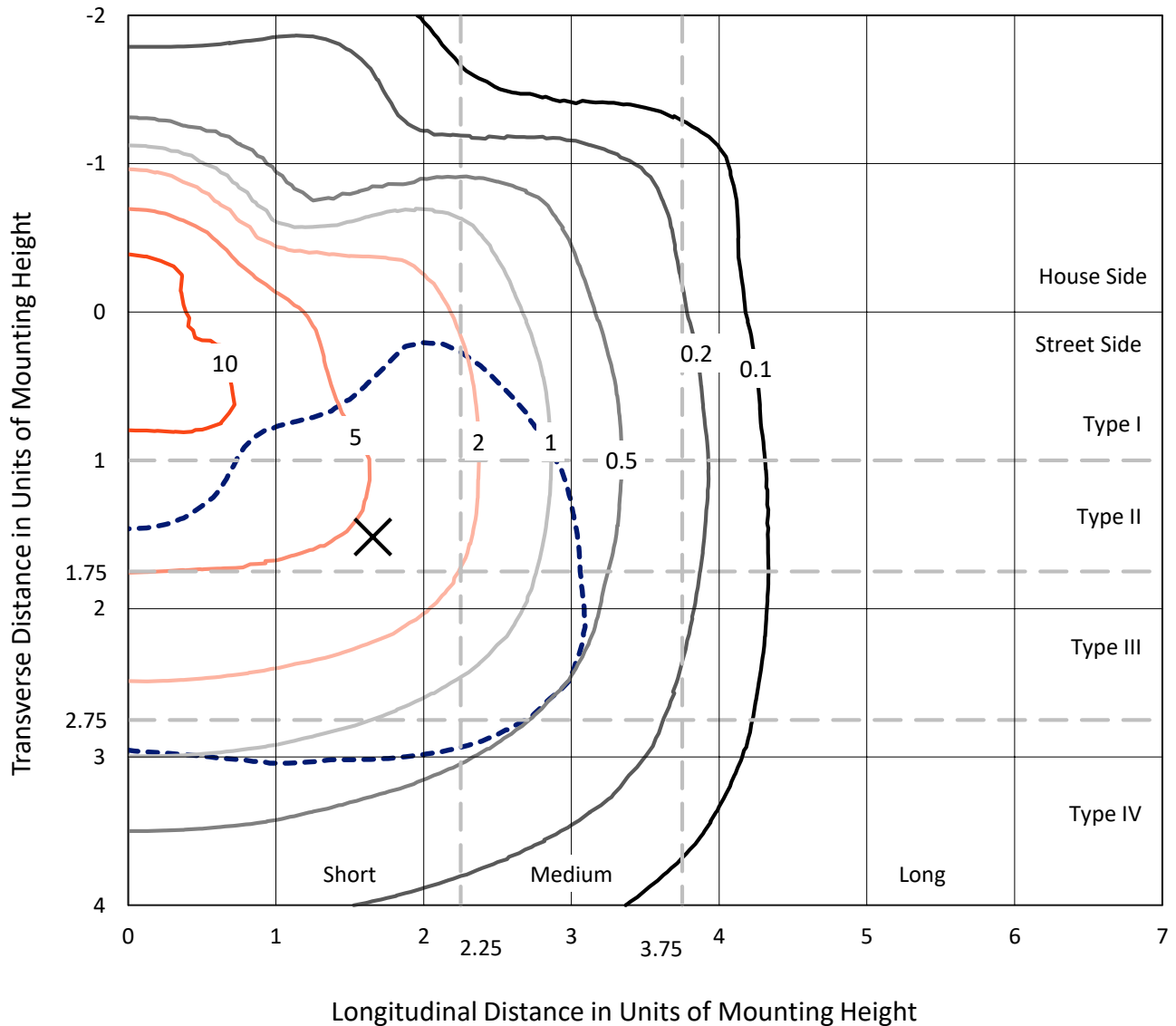
Input Watts (W): 102.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P181654  
 CATALOG NUMBER: ICM-F04-LED-E1-T4

### Iso-Footcandle Lines of Horizontal Illumination

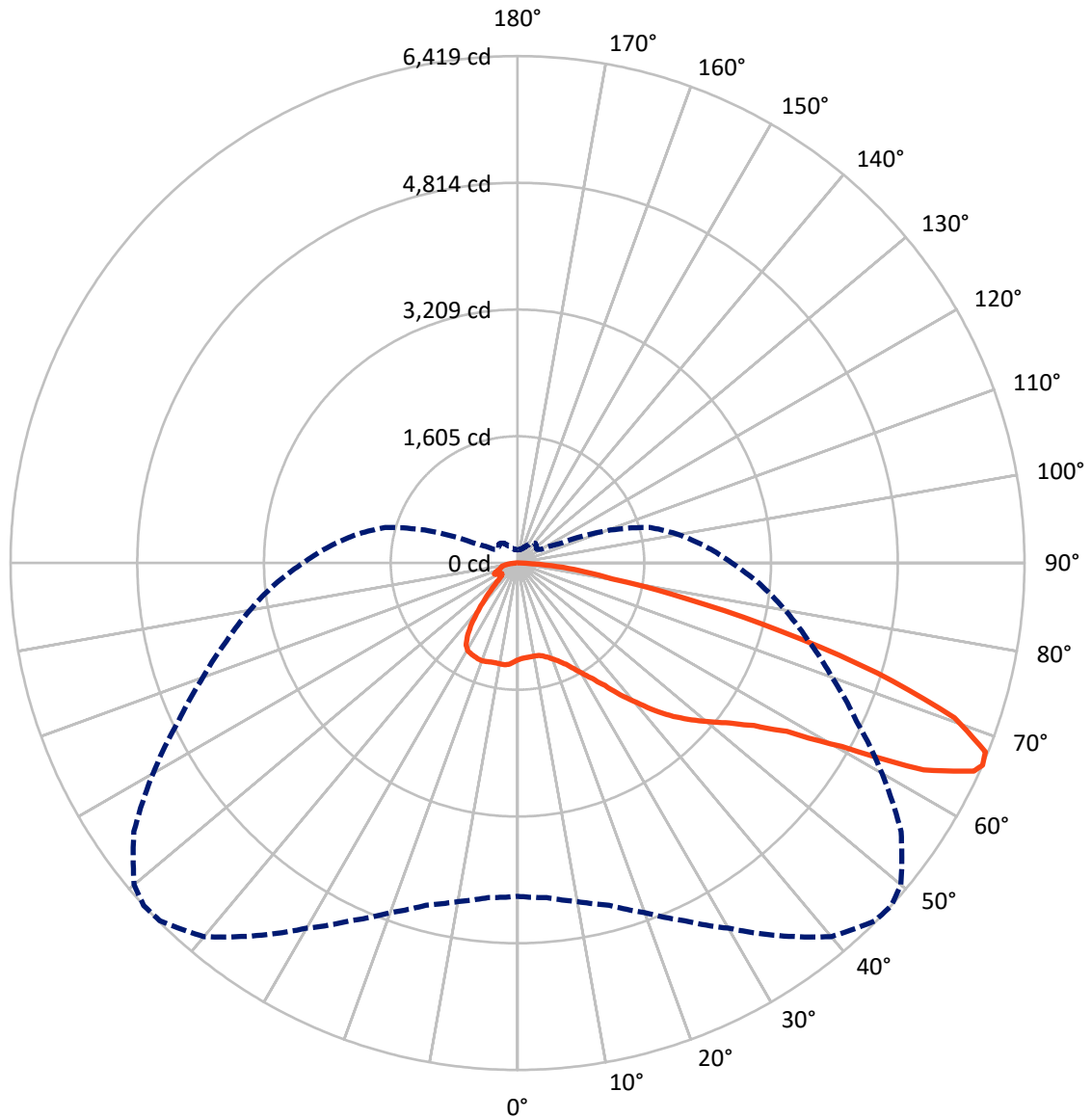
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.8 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P181654  
CATALOG NUMBER: ICM-F04-LED-E1-T4

### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P181654

CATALOG NUMBER: ICM-F04-LED-E1-T4

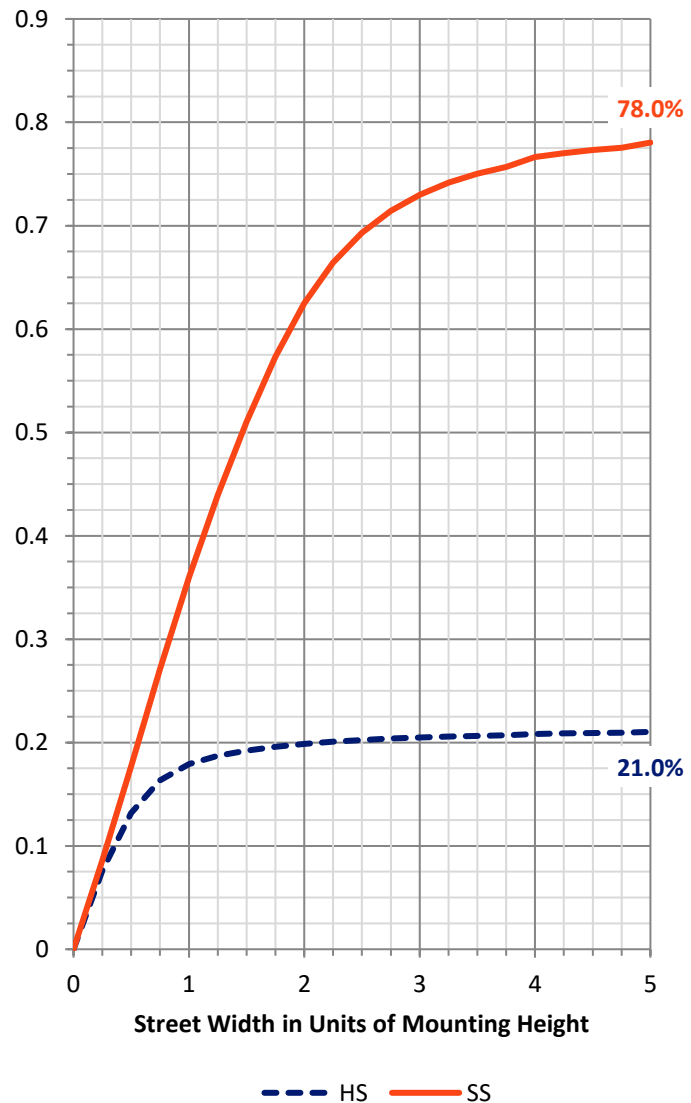
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1980.7	0.0	1980.7
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	7302.2	0.0	7302.2
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	9282.9	0.0	9282.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.8	1.3
10°-20°	360.7	3.9
20°-30°	621.4	6.7
30°-40°	940.1	10.1
40°-50°	1218.5	13.1
50°-60°	1679.9	18.1
60°-70°	2610.0	28.1
70°-80°	1517.7	16.3
80°-90°	215.8	2.3
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°	9282.9	100.0
0°-180°	9282.9	100.0



REPORT NUMBER: P181654

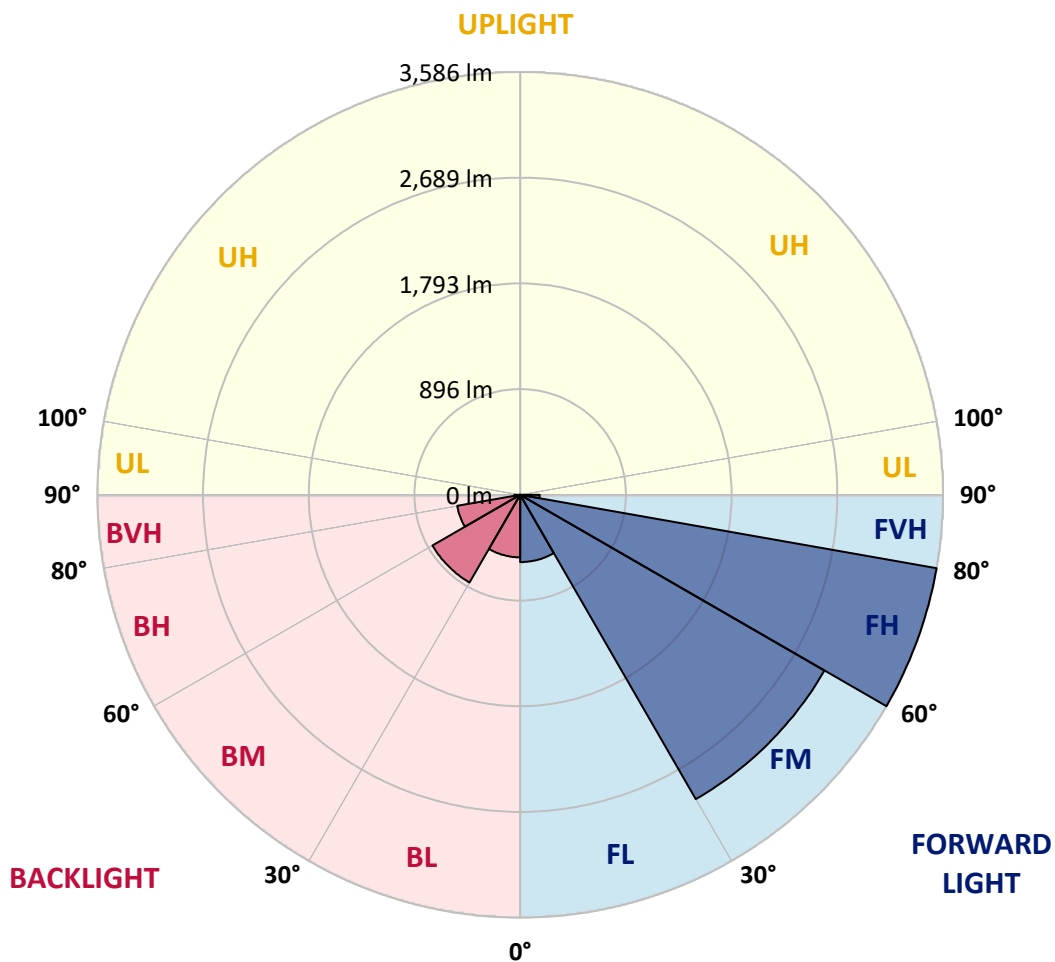
CATALOG NUMBER: ICM-F04-LED-E1-T4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	570.7	6.1			
FM	(30°-60°)	2979.8	32.1			
FH	(60°-80°)	3586.0	38.6			G2/5000
FVH	(80°-90°)	165.6	1.8			G2/225
BL	(0°-30°)	530.2	5.7	B2/1000		
BM	(30°-60°)	858.6	9.2	B1/1000		
BH	(60°-80°)	541.7	5.8	B2/1000		G2/1000
BVH	(80°-90°)	50.2	0.5			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 IV Short





REPORT NUMBER: P181654

CATALOG NUMBER: ICM-F04-LED-E1-T4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5
2.5°	1201.0	1205.1	1202.1	1203.1	1203.1	1204.1	1204.1	1205.1	1204.1	1207.2	1209.2
5°	1179.5	1181.6	1180.6	1182.6	1184.7	1188.8	1187.7	1192.8	1193.9	1196.9	1202.1
7.5°	1171.4	1169.3	1170.3	1173.4	1175.4	1177.5	1179.5	1183.6	1186.7	1193.9	1198.0
10°	1179.5	1178.5	1179.5	1181.6	1181.6	1182.6	1180.6	1184.7	1186.7	1192.8	1196.9
12.5°	1213.3	1213.3	1211.3	1211.3	1209.2	1207.2	1202.1	1199.0	1198.0	1199.0	1201.0
15°	1267.6	1265.6	1261.5	1258.4	1254.3	1247.2	1239.9	1233.8	1229.7	1223.5	1221.5
17.5°	1320.8	1317.8	1313.7	1309.6	1304.5	1297.3	1286.1	1278.9	1267.6	1260.5	1256.4
20°	1382.2	1376.1	1371.0	1365.9	1355.6	1353.6	1342.3	1330.1	1316.8	1300.4	1298.3
22.5°	1462.1	1451.9	1445.8	1442.7	1432.5	1429.4	1411.0	1393.6	1377.1	1355.6	1350.5
25°	1543.1	1532.8	1529.7	1525.6	1518.4	1514.3	1496.9	1477.5	1456.0	1426.3	1420.2
27.5°	1621.9	1622.9	1614.7	1617.8	1615.7	1608.6	1591.2	1571.7	1555.4	1520.5	1513.3
30°	1720.2	1714.1	1710.0	1716.1	1708.9	1710.0	1694.6	1684.4	1657.7	1637.2	1622.9
32.5°	1822.5	1821.5	1827.6	1831.8	1830.8	1828.8	1816.4	1806.2	1782.6	1752.9	1746.8
35°	1962.8	1968.9	1974.1	1992.6	1992.6	2005.9	1993.6	1981.3	1953.6	1917.8	1905.5
37.5°	2058.1	2060.1	2080.6	2105.1	2135.9	2164.6	2172.8	2175.8	2164.6	2138.0	2119.5
40°	2145.1	2149.2	2182.0	2219.8	2264.9	2321.2	2355.0	2370.3	2373.4	2361.1	2321.2
42.5°	2232.1	2238.2	2272.1	2327.4	2389.8	2461.5	2520.9	2558.7	2580.3	2580.3	2556.7
45°	2333.5	2341.7	2378.5	2439.0	2511.6	2601.8	2683.6	2756.4	2791.2	2793.2	2770.7
47.5°	2453.3	2460.5	2503.5	2564.9	2639.6	2730.8	2834.2	2917.1	2981.6	2985.7	2967.3
50°	2607.9	2618.2	2654.0	2709.3	2786.1	2878.3	2981.6	3097.3	3164.9	3181.3	3161.9
52.5°	2812.7	2814.7	2844.4	2895.6	2970.3	3058.4	3168.0	3294.0	3383.0	3396.3	3364.6
55°	3095.3	3092.2	3111.6	3167.0	3223.3	3291.9	3405.5	3546.8	3646.2	3666.6	3633.9
57.5°	3479.3	3476.2	3492.6	3505.9	3611.4	3677.9	3789.5	3924.7	4020.9	4080.3	4024.0
60°	4074.2	4071.1	4097.7	4175.6	4254.4	4351.7	4460.1	4622.0	4757.1	4774.5	4719.2
62.5°	4505.2	4520.6	4578.9	4670.1	4829.8	5020.2	5218.9	5431.8	5709.3	5797.4	5770.7
65°	4354.7	4385.4	4466.4	4604.5	4817.5	5080.7	5391.9	5777.9	6149.6	6357.4	6351.3
66°	4219.6	4253.3	4352.7	4485.8	4711.0	4998.7	5338.6	5759.5	6175.2	6404.6	6418.9
67.5°	3973.8	4011.7	4109.0	4266.6	4485.8	4791.9	5157.4	5615.1	6085.2	6352.3	6390.3
70°	3495.6	3538.6	3609.3	3739.4	3955.4	4228.8	4613.8	5023.3	5515.8	5822.0	5868.0
72.5°	2922.3	2960.1	3039.0	3145.5	3322.6	3494.6	3796.7	4098.7	4450.9	4800.1	4766.4
75°	2098.0	2114.3	2161.5	2277.2	2372.4	2527.0	2769.7	3017.5	3258.1	3417.8	3440.4
77.5°	1090.4	1133.5	1200.0	1328.0	1431.5	1570.7	1728.4	1914.7	2090.8	2237.2	2197.3
80°	713.7	732.1	791.4	857.0	932.7	1021.9	1127.4	1196.9	1219.4	1210.2	1219.4
82.5°	411.6	445.4	524.3	574.4	630.7	661.5	745.4	825.3	870.3	814.1	793.5
85°	52.2	67.5	212.9	268.3	307.2	353.2	378.9	427.0	398.3	356.3	434.1
87.5°	11.3	10.2	14.3	30.7	31.7	26.6	50.1	53.2	32.7	16.4	20.5
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: P181654

CATALOG NUMBER: ICM-F04-LED-E1-T4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5
2.5°	1211.3	1212.3	1214.3	1217.4	1219.4	1221.5	1223.5	1226.6	1228.7	1230.7	1234.8
5°	1206.1	1210.2	1214.3	1218.4	1223.5	1231.7	1236.8	1240.9	1245.1	1253.3	1256.4
7.5°	1203.1	1210.2	1216.4	1223.5	1231.7	1238.9	1248.2	1253.3	1259.4	1264.6	1270.7
10°	1201.0	1211.3	1217.4	1227.6	1236.8	1244.1	1254.3	1260.5	1267.6	1273.8	1276.8
12.5°	1205.1	1210.2	1216.4	1226.6	1237.9	1248.2	1259.4	1264.6	1270.7	1275.8	1276.8
15°	1222.5	1222.5	1223.5	1231.7	1243.0	1251.3	1260.5	1265.6	1268.7	1271.7	1271.7
17.5°	1254.3	1247.2	1242.0	1243.0	1250.2	1255.4	1260.5	1260.5	1258.4	1257.4	1255.4
20°	1291.2	1282.0	1271.7	1264.6	1262.5	1258.4	1255.4	1245.1	1236.8	1229.7	1224.6
22.5°	1344.4	1330.1	1315.7	1302.4	1290.1	1274.8	1257.4	1236.8	1217.4	1204.1	1195.9
25°	1410.0	1398.7	1381.2	1360.8	1345.4	1316.8	1294.2	1264.6	1239.9	1222.5	1208.2
27.5°	1503.1	1489.8	1473.4	1455.0	1432.5	1400.8	1373.0	1338.2	1308.6	1283.0	1264.6
30°	1618.8	1601.4	1589.1	1566.6	1551.3	1515.4	1487.7	1444.8	1387.4	1346.4	1320.8
32.5°	1737.6	1718.2	1707.9	1690.5	1673.0	1651.5	1609.6	1543.1	1469.3	1402.8	1358.7
35°	1896.3	1875.8	1857.4	1842.1	1816.4	1776.5	1739.6	1659.7	1558.4	1465.2	1391.5
37.5°	2095.9	2062.2	2016.1	1977.2	1932.1	1874.8	1818.4	1736.6	1620.8	1500.0	1401.8
40°	2308.9	2249.5	2184.0	2111.3	2033.5	1950.5	1886.1	1803.1	1673.0	1529.7	1394.6
42.5°	2531.1	2436.9	2345.8	2243.4	2134.9	2036.6	1952.6	1861.5	1712.0	1538.0	1365.9
45°	2751.3	2645.8	2507.6	2373.4	2236.2	2114.3	2020.2	1917.8	1747.8	1541.0	1328.0
47.5°	2933.5	2824.9	2667.3	2499.4	2336.6	2198.3	2087.7	1977.2	1795.9	1562.5	1318.8
50°	3126.0	2993.9	2818.8	2620.2	2435.9	2281.3	2163.5	2048.8	1863.5	1617.8	1348.5
52.5°	3335.9	3184.4	2979.6	2757.4	2555.6	2382.6	2254.6	2136.9	1949.5	1695.6	1404.8
55°	3591.9	3406.5	3184.4	2933.5	2717.5	2526.0	2384.7	2245.4	2051.9	1787.7	1475.5
57.5°	3983.0	3755.7	3505.9	3220.2	2980.6	2754.3	2585.4	2424.7	2210.6	1924.9	1571.7
60°	4690.5	4447.8	4123.3	3777.2	3495.6	3231.5	2983.6	2784.0	2520.9	2195.3	1784.7
62.5°	5704.2	5381.7	4948.6	4464.3	4095.7	3714.7	3435.2	3138.3	2811.6	2460.5	2035.5
65°	6267.4	5876.2	5296.7	4734.5	4260.5	3846.8	3491.6	3147.6	2785.0	2449.2	2093.9
66°	6337.0	5929.5	5327.4	4735.6	4238.0	3813.0	3439.4	3083.0	2712.4	2391.8	2069.3
67.5°	6308.3	5891.6	5271.1	4646.5	4140.7	3684.0	3298.1	2928.4	2558.7	2259.7	1987.5
70°	5838.4	5443.1	4833.9	4228.8	3748.6	3298.1	2929.4	2566.0	2227.0	1971.0	1770.3
72.5°	4848.2	4510.4	3981.0	3505.9	3129.0	2757.4	2445.1	2098.0	1811.3	1621.9	1503.1
75°	3499.7	3295.0	2812.7	2540.3	2209.6	1962.8	1659.7	1454.0	1248.2	1156.0	1135.5
77.5°	2210.6	1935.2	1629.0	1341.3	1102.8	914.3	711.6	604.1	503.7	493.5	595.9
80°	1119.2	1007.5	776.1	618.4	520.2	420.8	332.7	251.9	176.1	211.9	254.0
82.5°	733.1	611.3	479.2	394.2	343.0	284.7	221.2	153.6	112.7	127.0	174.0
85°	396.3	337.9	272.4	215.0	174.0	155.6	104.5	73.8	72.7	77.9	99.3
87.5°	28.7	28.7	22.5	20.5	24.6	20.5	18.4	18.4	17.4	18.4	24.6
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: P181654

CATALOG NUMBER: ICM-F04-LED-E1-T4

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5	1223.5
2.5°	1236.8	1239.9	1240.9	1246.1	1249.2	1251.3	1253.3	1253.3	1254.3	1257.4	1258.4
5°	1260.5	1265.6	1271.7	1275.8	1277.9	1284.0	1286.1	1286.1	1288.1	1292.2	1295.3
7.5°	1274.8	1282.0	1288.1	1290.1	1294.2	1296.3	1299.4	1301.4	1301.4	1305.5	1307.5
10°	1279.9	1284.0	1290.1	1290.1	1294.2	1294.2	1297.3	1298.3	1298.3	1302.4	1305.5
12.5°	1279.9	1282.0	1287.1	1287.1	1290.1	1291.2	1295.3	1298.3	1299.4	1304.5	1308.6
15°	1273.8	1275.8	1279.9	1280.9	1288.1	1292.2	1301.4	1307.5	1307.5	1312.7	1314.7
17.5°	1256.4	1261.5	1269.7	1277.9	1291.2	1300.4	1311.6	1316.8	1312.7	1309.6	1306.5
20°	1227.6	1236.8	1256.4	1276.8	1300.4	1312.7	1318.8	1313.7	1299.4	1285.0	1275.8
22.5°	1199.0	1217.4	1250.2	1280.9	1307.5	1315.7	1312.7	1294.2	1270.7	1253.3	1240.9
25°	1212.3	1233.8	1265.6	1293.2	1310.6	1308.6	1296.3	1270.7	1245.1	1222.5	1202.1
27.5°	1267.6	1291.2	1308.6	1317.8	1315.7	1301.4	1282.0	1253.3	1222.5	1192.8	1164.2
30°	1319.8	1332.1	1336.2	1329.0	1312.7	1289.1	1264.6	1231.7	1190.8	1154.0	1121.2
32.5°	1343.4	1331.1	1311.6	1292.2	1265.6	1245.1	1211.3	1175.4	1124.3	1080.2	1047.4
35°	1343.4	1294.2	1245.1	1204.1	1164.2	1138.6	1099.7	1051.5	1004.5	967.6	942.0
37.5°	1313.7	1219.4	1138.6	1072.0	1021.9	994.2	935.8	892.8	852.9	840.7	824.3
40°	1259.4	1120.2	1003.4	916.4	852.9	812.0	753.6	723.9	708.6	702.4	699.4
42.5°	1186.7	1009.6	854.0	746.4	677.9	631.7	592.8	574.4	573.4	572.4	572.4
45°	1108.9	890.8	708.6	580.6	520.2	479.2	460.7	453.6	459.7	458.7	459.7
47.5°	1060.8	800.7	575.4	439.3	393.2	366.6	357.3	360.4	365.5	363.4	363.4
50°	1054.6	754.6	486.3	342.0	307.2	293.9	291.8	291.8	294.9	292.8	291.8
52.5°	1077.1	747.4	440.3	293.9	266.2	255.0	252.9	251.9	250.9	244.7	239.6
55°	1116.1	763.8	427.0	281.6	252.9	240.7	237.6	235.5	231.4	223.3	214.0
57.5°	1193.9	815.1	439.3	287.7	257.0	246.8	243.7	243.7	235.5	222.2	208.8
60°	1381.2	945.0	489.4	311.3	276.5	266.2	268.3	267.3	255.0	235.5	215.0
62.5°	1622.9	1115.1	555.0	344.0	301.0	299.0	309.2	307.2	286.7	257.0	227.4
65°	1734.5	1194.9	573.4	351.2	306.1	315.4	335.8	333.8	308.2	267.3	229.4
66°	1736.6	1194.9	565.2	345.0	299.0	310.2	330.7	329.7	304.1	263.2	225.3
67.5°	1694.6	1162.1	541.7	332.7	284.7	292.8	311.3	310.2	286.7	252.9	217.0
70°	1536.9	1040.3	481.2	311.3	265.2	261.1	267.3	263.2	247.8	224.3	199.6
72.5°	1316.8	873.4	419.8	294.9	251.9	235.5	231.4	228.4	216.0	202.7	187.3
75°	1037.2	691.2	368.7	282.6	239.6	218.0	210.9	206.8	198.6	189.4	177.1
77.5°	639.9	494.5	321.5	266.2	230.4	208.8	203.7	197.6	185.3	174.0	164.8
80°	285.7	306.1	264.2	232.5	205.8	186.3	178.1	168.9	156.7	149.5	144.4
82.5°	190.4	197.6	191.4	174.0	155.6	140.3	128.0	128.0	126.0	119.8	117.8
85°	121.9	122.9	118.8	107.5	100.4	91.2	86.0	87.1	91.2	90.1	89.1
87.5°	27.6	27.6	32.7	30.7	35.8	37.9	40.9	44.0	50.1	50.1	53.2
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: P181654

CATALOG NUMBER: ICM-F04-LED-E1-T4

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1223.5	1223.5	1223.5	1223.5	1223.5
2.5°	1259.4	1261.5	1263.5	1260.5	1261.5
5°	1295.3	1294.2	1299.4	1296.3	1298.3
7.5°	1306.5	1307.5	1311.6	1311.6	1312.7
10°	1307.5	1309.6	1314.7	1317.8	1319.8
12.5°	1312.7	1316.8	1324.9	1327.0	1327.0
15°	1316.8	1318.8	1323.9	1326.0	1328.0
17.5°	1302.4	1298.3	1300.4	1301.4	1300.4
20°	1266.6	1262.5	1261.5	1257.4	1259.4
22.5°	1227.6	1216.4	1209.2	1201.0	1201.0
25°	1180.6	1163.2	1148.8	1134.5	1137.6
27.5°	1136.6	1114.1	1099.7	1090.4	1088.4
30°	1093.5	1070.0	1056.7	1045.4	1045.4
32.5°	1021.9	1005.5	988.1	980.9	979.9
35°	922.5	912.3	898.0	894.9	889.8
37.5°	811.0	807.9	795.5	794.5	789.4
40°	694.2	696.3	692.2	690.1	687.1
42.5°	577.5	587.7	585.7	584.7	582.6
45°	465.9	473.0	474.0	477.1	482.2
47.5°	366.6	368.7	370.7	369.7	370.7
50°	286.7	281.6	280.6	277.5	280.6
52.5°	231.4	223.3	219.1	215.0	212.9
55°	203.7	195.5	191.4	189.4	187.3
57.5°	196.6	188.4	182.2	178.1	177.1
60°	198.6	186.3	178.1	173.0	172.0
62.5°	203.7	187.3	176.1	171.0	170.0
65°	202.7	185.3	175.1	168.9	167.9
66°	199.6	183.3	173.0	167.9	166.9
67.5°	194.5	180.2	171.0	166.9	164.8
70°	185.3	176.1	168.9	163.8	161.8
72.5°	177.1	170.0	163.8	158.7	157.7
75°	167.9	161.8	155.6	151.5	150.5
77.5°	156.7	150.5	146.4	143.3	142.3
80°	138.2	134.1	130.0	126.0	126.0
82.5°	114.7	111.6	107.5	104.5	103.4
85°	88.1	88.1	85.0	82.0	80.9
87.5°	52.2	51.2	51.2	48.1	48.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)