

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: P181634

Luminaire Tested: **ICM-F02-LED-E1-T4**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P181634
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-F02-LED-E1-T4
Description: ICON SITE MEDIUM LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4641.5 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

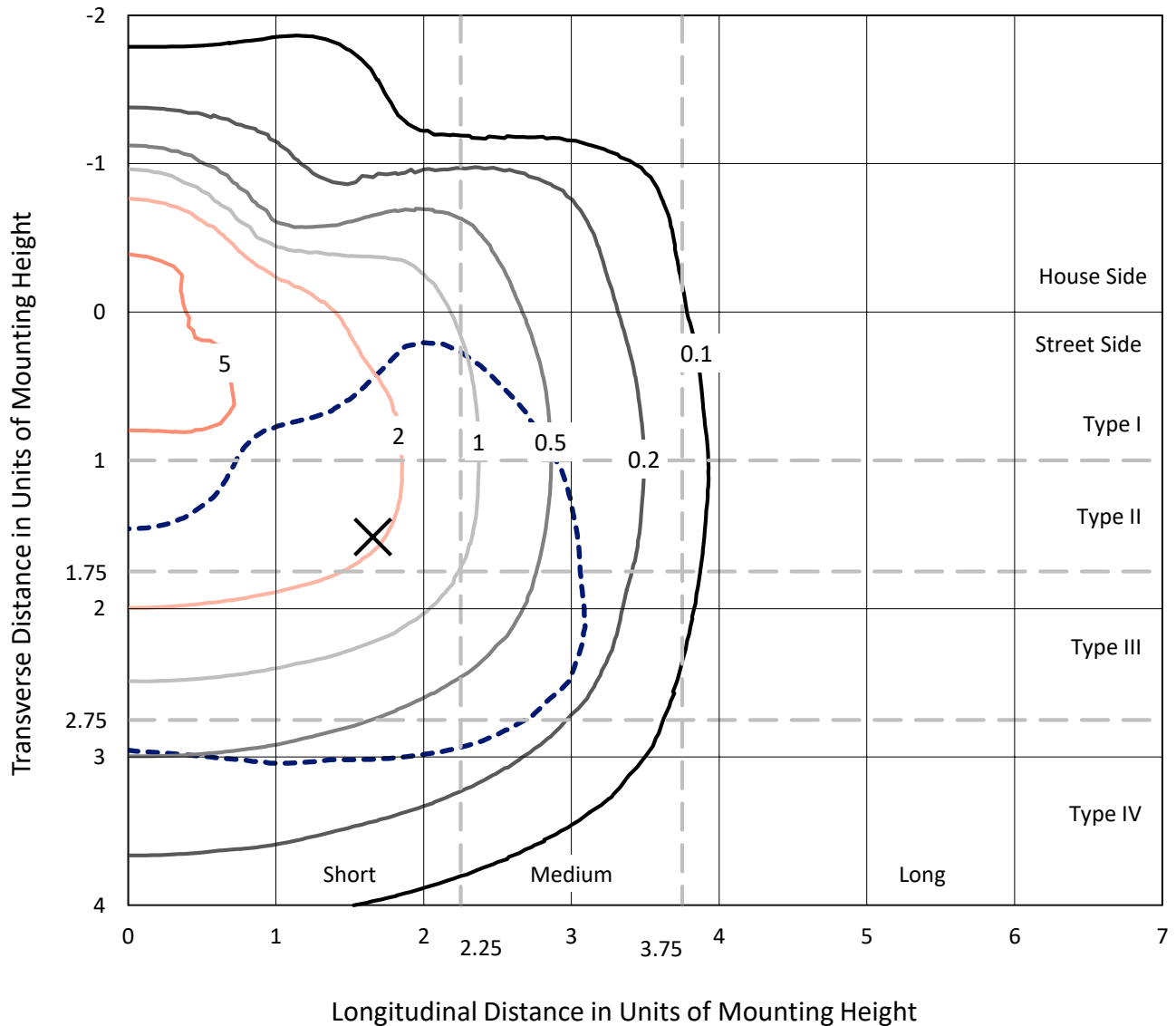
Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

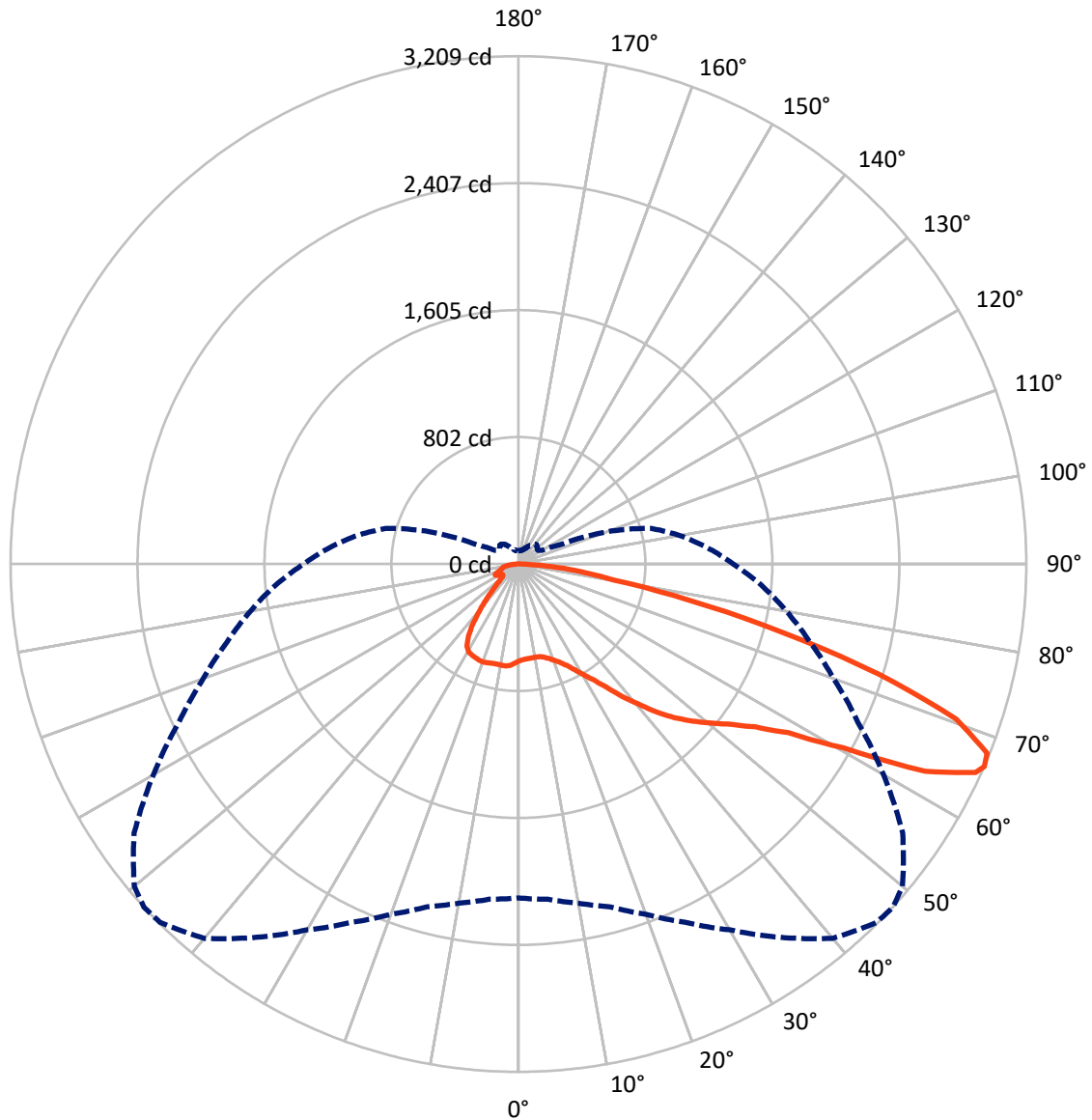
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	990.4	0.0	990.4
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	3651.1	0.0	3651.1
	% Fixture	78.7	0.0	78.7
Total	Lumens	4641.5	0.0	4641.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	1.3
10°-20°	180.4	3.9
20°-30°	310.7	6.7
30°-40°	470.0	10.1
40°-50°	609.2	13.1
50°-60°	840.0	18.1
60°-70°	1305.0	28.1
70°-80°	758.9	16.3
80°-90°	107.9	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°	4641.5	100.0
0°-180°	4641.5	100.0



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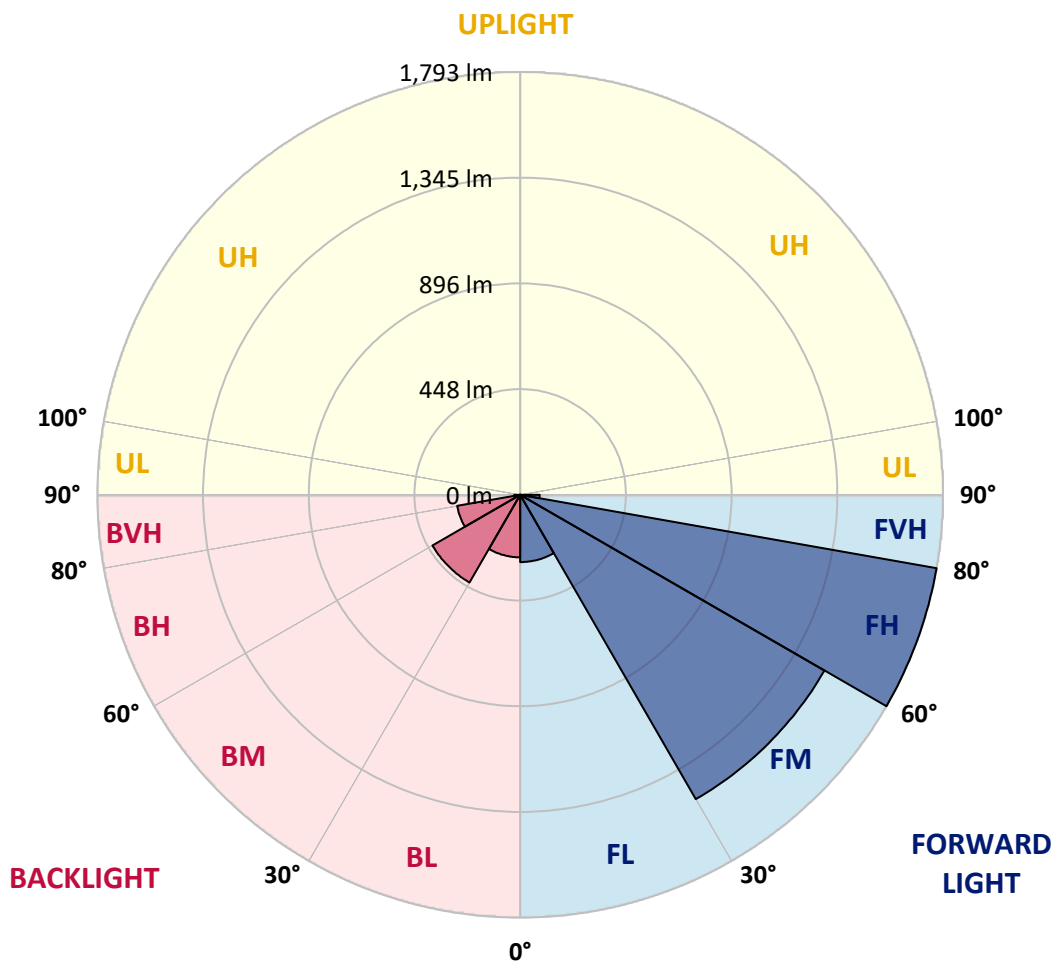
CATALOG NUMBER: ICM-F02-LED-E1-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	285.4	6.1			
FM	(30°-60°)	1489.9	32.1			
FH	(60°-80°)	1793.0	38.6			G1/1800
FVH	(80°-90°)	82.8	1.8			G1/100
BL	(0°-30°)	265.1	5.7	B1/500		
BM	(30°-60°)	429.3	9.2	B1/1000		
BH	(60°-80°)	270.9	5.8	B1/500		G1/500
BVH	(80°-90°)	25.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8
2.5°	600.6	602.6	601.0	601.6	601.6	602.1	602.1	602.6	602.1	603.6	604.7
5°	589.8	590.8	590.3	591.4	592.4	594.4	593.9	596.5	596.9	598.5	601.0
7.5°	585.7	584.7	585.1	586.7	587.7	588.7	589.8	591.8	593.4	596.9	599.0
10°	589.8	589.3	589.8	590.8	590.8	591.4	590.3	592.4	593.4	596.5	598.5
12.5°	606.7	606.7	605.7	605.7	604.7	603.6	601.0	599.5	599.0	599.5	600.6
15°	633.8	632.7	630.7	629.2	627.2	623.5	620.0	616.9	614.9	611.8	610.8
17.5°	660.5	658.9	656.8	654.8	652.2	648.7	643.0	639.4	633.8	630.2	628.2
20°	691.2	688.1	685.5	683.0	677.9	676.8	671.2	665.0	658.4	650.1	649.1
22.5°	731.1	726.0	722.9	721.3	716.2	714.7	705.5	696.7	688.6	677.9	675.3
25°	771.5	766.4	764.8	762.8	759.3	757.2	748.5	738.8	728.0	713.1	710.1
27.5°	811.0	811.4	807.4	808.9	807.9	804.3	795.5	785.9	777.7	760.3	756.7
30°	860.1	857.0	855.0	858.1	854.4	855.0	847.3	842.1	828.8	818.6	811.4
32.5°	911.3	910.8	913.9	915.9	915.4	914.3	908.2	903.1	891.4	876.5	873.4
35°	981.4	984.5	987.1	996.3	996.3	1002.9	996.8	990.6	976.8	958.9	952.8
37.5°	1029.0	1030.1	1040.3	1052.6	1067.9	1082.2	1086.3	1087.9	1082.2	1068.9	1059.7
40°	1072.6	1074.6	1091.0	1110.0	1132.5	1160.6	1177.5	1185.2	1186.7	1180.6	1160.6
42.5°	1116.1	1119.2	1136.0	1163.6	1194.9	1230.7	1260.5	1279.4	1290.1	1290.1	1278.3
45°	1166.7	1170.9	1189.3	1219.4	1255.8	1300.8	1341.9	1378.1	1395.6	1396.7	1385.3
47.5°	1226.6	1230.2	1251.7	1282.4	1319.8	1365.4	1417.1	1458.5	1490.8	1492.8	1483.6
50°	1303.9	1309.0	1327.0	1354.6	1393.0	1439.1	1490.8	1548.7	1582.4	1590.6	1580.9
52.5°	1406.3	1407.4	1422.2	1447.8	1485.2	1529.2	1584.0	1647.0	1691.5	1698.1	1682.2
55°	1547.6	1546.1	1555.8	1583.5	1611.6	1646.0	1702.8	1773.4	1823.1	1833.3	1816.9
57.5°	1739.6	1738.1	1746.2	1752.9	1805.7	1839.0	1894.7	1962.3	2010.4	2040.1	2012.0
60°	2037.0	2035.5	2048.8	2087.7	2127.2	2175.8	2230.1	2311.0	2378.5	2387.3	2359.6
62.5°	2252.6	2260.3	2289.5	2335.0	2414.9	2510.2	2609.4	2715.9	2854.7	2898.7	2885.4
65°	2177.3	2192.7	2233.1	2302.2	2408.8	2540.3	2695.9	2888.9	3074.8	3178.7	3175.6
66°	2109.8	2126.7	2176.3	2242.9	2355.5	2499.4	2669.3	2879.7	3087.6	3202.3	3209.4
67.5°	1986.9	2005.9	2054.5	2133.3	2242.9	2395.9	2578.7	2807.6	3042.5	3176.2	3195.1
70°	1747.8	1769.3	1804.7	1869.7	1977.7	2114.3	2306.9	2511.6	2757.9	2911.0	2934.1
72.5°	1461.1	1480.1	1519.5	1572.8	1661.3	1747.3	1898.3	2049.4	2225.5	2400.0	2383.2
75°	1049.0	1057.2	1080.8	1138.6	1186.2	1263.5	1384.8	1508.8	1629.0	1708.9	1720.2
77.5°	545.2	566.7	600.0	664.0	715.7	785.3	864.2	957.4	1045.4	1118.6	1098.7
80°	356.8	366.0	395.7	428.5	466.4	510.9	563.6	598.5	609.8	605.1	609.8
82.5°	205.8	222.7	262.1	287.2	315.4	330.7	372.7	412.7	435.2	407.0	396.7
85°	26.1	33.8	106.5	134.1	153.6	176.7	189.4	213.5	199.2	178.1	217.0
87.5°	5.7	5.1	7.2	15.3	15.9	13.3	25.1	26.6	16.4	8.2	10.2
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8
2.5°	605.7	606.1	607.2	608.7	609.8	610.8	611.8	613.3	614.3	615.4	617.4
5°	603.1	605.1	607.2	609.2	611.8	615.9	618.4	620.5	622.5	626.6	628.2
7.5°	601.6	605.1	608.2	611.8	615.9	619.4	624.1	626.6	629.7	632.3	635.4
10°	600.6	605.7	608.7	613.9	618.4	622.1	627.2	630.2	633.8	636.8	638.4
12.5°	602.6	605.1	608.2	613.3	619.0	624.1	629.7	632.3	635.4	637.9	638.4
15°	611.3	611.3	611.8	615.9	621.5	625.6	630.2	632.7	634.3	635.8	635.8
17.5°	627.2	623.5	621.0	621.5	625.1	627.6	630.2	630.2	629.2	628.7	627.6
20°	645.6	640.9	635.8	632.3	631.3	629.2	627.6	622.5	618.4	614.9	612.3
22.5°	672.2	665.0	657.9	651.2	645.0	637.4	628.7	618.4	608.7	602.1	598.0
25°	704.9	699.4	690.6	680.4	672.7	658.4	647.1	632.3	620.0	611.3	604.1
27.5°	751.5	744.9	736.7	727.4	716.2	700.4	686.5	669.1	654.2	641.5	632.3
30°	809.4	800.7	794.5	783.3	775.6	757.7	743.9	722.3	693.7	673.2	660.5
32.5°	868.7	859.1	854.0	845.2	836.6	825.8	804.8	771.5	734.7	701.4	679.4
35°	948.1	937.9	928.7	921.0	908.2	888.3	869.8	829.9	779.2	732.7	695.7
37.5°	1048.0	1031.1	1008.0	988.6	966.1	937.4	909.2	868.3	810.4	750.1	700.8
40°	1154.4	1124.8	1092.0	1055.6	1016.8	975.3	943.0	901.6	836.6	764.8	697.3
42.5°	1265.6	1218.4	1172.9	1121.7	1067.4	1018.2	976.3	930.7	856.0	768.9	683.0
45°	1375.6	1322.9	1253.8	1186.7	1118.1	1057.2	1010.1	958.9	873.9	770.5	664.0
47.5°	1466.8	1412.5	1333.7	1249.7	1168.3	1099.2	1043.9	988.6	898.0	781.2	659.4
50°	1563.0	1496.9	1409.4	1310.1	1218.0	1140.7	1081.8	1024.5	931.7	808.9	674.2
52.5°	1667.9	1592.2	1489.8	1378.7	1277.9	1191.4	1127.4	1068.5	974.8	847.8	702.4
55°	1795.9	1703.3	1592.2	1466.8	1358.7	1263.0	1192.4	1122.7	1026.0	893.9	737.8
57.5°	1991.5	1877.9	1752.9	1610.1	1490.3	1377.1	1292.7	1212.3	1105.3	962.5	785.9
60°	2345.3	2223.9	2061.7	1888.6	1747.8	1615.7	1491.8	1392.0	1260.5	1097.7	892.4
62.5°	2852.1	2690.8	2474.2	2232.1	2047.8	1857.4	1717.6	1569.1	1405.9	1230.2	1017.8
65°	3133.7	2938.2	2648.4	2367.3	2130.2	1923.5	1745.8	1573.8	1392.6	1224.6	1047.0
66°	3168.5	2964.8	2663.7	2367.8	2119.0	1906.5	1719.6	1541.5	1356.2	1195.9	1034.7
67.5°	3154.2	2945.8	2635.6	2323.3	2070.3	1842.1	1649.0	1464.2	1279.4	1129.9	993.7
70°	2919.2	2721.6	2416.9	2114.3	1874.2	1649.0	1464.8	1283.0	1113.5	985.5	885.2
72.5°	2424.1	2255.2	1990.5	1752.9	1564.6	1378.7	1222.5	1049.0	905.7	811.0	751.5
75°	1749.9	1647.5	1406.3	1270.1	1104.8	981.4	829.9	727.0	624.1	578.0	567.7
77.5°	1105.3	967.6	814.5	670.7	551.4	457.2	355.8	302.0	251.9	246.8	298.0
80°	559.5	503.7	388.1	309.2	260.1	210.4	166.4	126.0	88.1	106.0	127.0
82.5°	366.6	305.7	239.6	197.1	171.5	142.3	110.6	76.8	56.3	63.4	87.1
85°	198.1	168.9	136.2	107.5	87.1	77.9	52.2	36.8	36.4	38.9	49.7
87.5°	14.3	14.3	11.3	10.2	12.3	10.2	9.2	9.2	8.7	9.2	12.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8	611.8
2.5°	618.4	620.0	620.5	623.1	624.6	625.6	626.6	626.6	627.2	628.7	629.2
5°	630.2	632.7	635.8	637.9	638.9	642.0	643.0	643.0	644.0	646.1	647.6
7.5°	637.4	640.9	644.0	645.0	647.1	648.1	649.7	650.7	650.7	652.7	653.8
10°	639.9	642.0	645.0	645.0	647.1	647.1	648.7	649.1	649.1	651.2	652.7
12.5°	639.9	640.9	643.5	643.5	645.0	645.6	647.6	649.1	649.7	652.2	654.2
15°	636.8	637.9	639.9	640.5	644.0	646.1	650.7	653.8	653.8	656.3	657.3
17.5°	628.2	630.7	634.8	638.9	645.6	650.1	655.8	658.4	656.3	654.8	653.2
20°	613.9	618.4	628.2	638.4	650.1	656.3	659.4	656.8	649.7	642.5	637.9
22.5°	599.5	608.7	625.1	640.5	653.8	657.9	656.3	647.1	635.4	626.6	620.5
25°	606.1	616.9	632.7	646.6	655.3	654.2	648.1	635.4	622.5	611.3	601.0
27.5°	633.8	645.6	654.2	658.9	657.9	650.7	640.9	626.6	611.3	596.5	582.1
30°	659.9	666.1	668.1	664.6	656.3	644.6	632.3	615.9	595.4	576.9	560.6
32.5°	671.7	665.6	655.8	646.1	632.7	622.5	605.7	587.7	562.1	540.1	523.7
35°	671.7	647.1	622.5	602.1	582.1	569.3	549.9	525.8	502.2	483.8	471.0
37.5°	656.8	609.8	569.3	536.0	510.9	497.1	467.9	446.4	426.4	420.3	412.1
40°	629.7	560.1	501.7	458.2	426.4	406.0	376.8	362.0	354.2	351.2	349.7
42.5°	593.4	504.7	427.0	373.2	338.9	315.9	296.5	287.2	286.7	286.1	286.1
45°	554.4	445.4	354.2	290.2	260.1	239.6	230.4	226.8	229.9	229.4	229.9
47.5°	530.4	400.4	287.7	219.6	196.6	183.3	178.7	180.2	182.8	181.8	181.8
50°	527.4	377.3	243.2	171.0	153.6	147.0	145.9	145.9	147.4	146.4	145.9
52.5°	538.6	373.8	220.2	147.0	133.1	127.4	126.4	126.0	125.4	122.3	119.8
55°	558.0	382.0	213.5	140.7	126.4	120.3	118.8	117.8	115.7	111.6	107.0
57.5°	596.9	407.5	219.6	143.8	128.5	123.3	121.9	121.9	117.8	111.1	104.5
60°	690.6	472.6	244.7	155.6	138.2	133.1	134.1	133.6	127.4	117.8	107.5
62.5°	811.4	557.5	277.5	172.0	150.5	149.5	154.6	153.6	143.3	128.5	113.7
65°	867.3	597.5	286.7	175.6	153.1	157.7	167.9	166.9	154.1	133.6	114.7
66°	868.3	597.5	282.6	172.6	149.5	155.2	165.4	164.8	152.1	131.5	112.7
67.5°	847.3	581.0	270.8	166.4	142.3	146.4	155.6	155.2	143.3	126.4	108.6
70°	768.5	520.2	240.7	155.6	132.6	130.5	133.6	131.5	123.9	112.1	99.8
72.5°	658.4	436.7	209.9	147.4	126.0	117.8	115.7	114.1	108.0	101.4	93.7
75°	518.6	345.6	184.3	141.3	119.8	109.0	105.5	103.4	99.3	94.7	88.6
77.5°	320.0	247.3	160.7	133.1	115.2	104.5	101.9	98.8	92.7	87.1	82.4
80°	142.8	153.1	132.1	116.2	102.9	93.2	89.1	84.5	78.3	74.8	72.2
82.5°	95.3	98.8	95.7	87.1	77.9	70.1	64.0	64.0	63.0	59.9	58.9
85°	60.9	61.4	59.3	53.8	50.1	45.6	43.0	43.5	45.6	45.0	44.6
87.5°	13.9	13.9	16.4	15.3	18.0	19.0	20.5	22.0	25.1	25.1	26.6
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: ICM-F02-LED-E1-T4

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	611.8	611.8	611.8	611.8	611.8
2.5°	629.7	630.7	631.7	630.2	630.7
5°	647.6	647.1	649.7	648.1	649.1
7.5°	653.2	653.8	655.8	655.8	656.3
10°	653.8	654.8	657.3	658.9	659.9
12.5°	656.3	658.4	662.5	663.5	663.5
15°	658.4	659.4	662.0	663.0	664.0
17.5°	651.2	649.1	650.1	650.7	650.1
20°	633.3	631.3	630.7	628.7	629.7
22.5°	613.9	608.2	604.7	600.6	600.6
25°	590.3	581.6	574.4	567.3	568.7
27.5°	568.3	557.0	549.9	545.2	544.2
30°	546.8	535.0	528.4	522.7	522.7
32.5°	510.9	502.7	494.0	490.4	490.0
35°	461.3	456.2	449.0	447.4	444.9
37.5°	405.5	403.9	397.8	397.3	394.7
40°	347.1	348.1	346.0	345.0	343.5
42.5°	288.7	293.9	292.8	292.3	291.3
45°	232.9	236.6	237.0	238.6	241.1
47.5°	183.3	184.3	185.3	184.8	185.3
50°	143.3	140.7	140.3	138.7	140.3
52.5°	115.7	111.6	109.6	107.5	106.5
55°	101.9	97.8	95.7	94.7	93.7
57.5°	98.3	94.2	91.2	89.1	88.6
60°	99.3	93.2	89.1	86.5	86.0
62.5°	101.9	93.7	88.1	85.5	85.0
65°	101.4	92.7	87.5	84.5	84.0
66°	99.8	91.6	86.5	84.0	83.4
67.5°	97.3	90.1	85.5	83.4	82.4
70°	92.7	88.1	84.5	82.0	80.9
72.5°	88.6	85.0	82.0	79.3	78.9
75°	84.0	80.9	77.9	75.8	75.3
77.5°	78.3	75.3	73.2	71.6	71.2
80°	69.1	67.1	65.0	63.0	63.0
82.5°	57.3	55.8	53.8	52.2	51.7
85°	44.0	44.0	42.5	40.9	40.5
87.5°	26.1	25.6	25.6	24.1	24.1
90°	0.0	0.0	0.0	0.0	0.0

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