

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: P226222

Luminaire Tested: **MLA-B2-LED-XX-T4-8030-XX**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P226222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29663)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MLA-B2-LED-XX-T4-8030-XX
Description: METROLINE ARCHITECTURAL LED LUMINAIRE
80 CRI, 3000K LEDS AND TYPE IV DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7618 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3.75' x H: 0.17')
IES Classification: Type IV - Short - Cutoff
BUG Rating: B2 - U1 - G2

Input Watts (W): 71
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

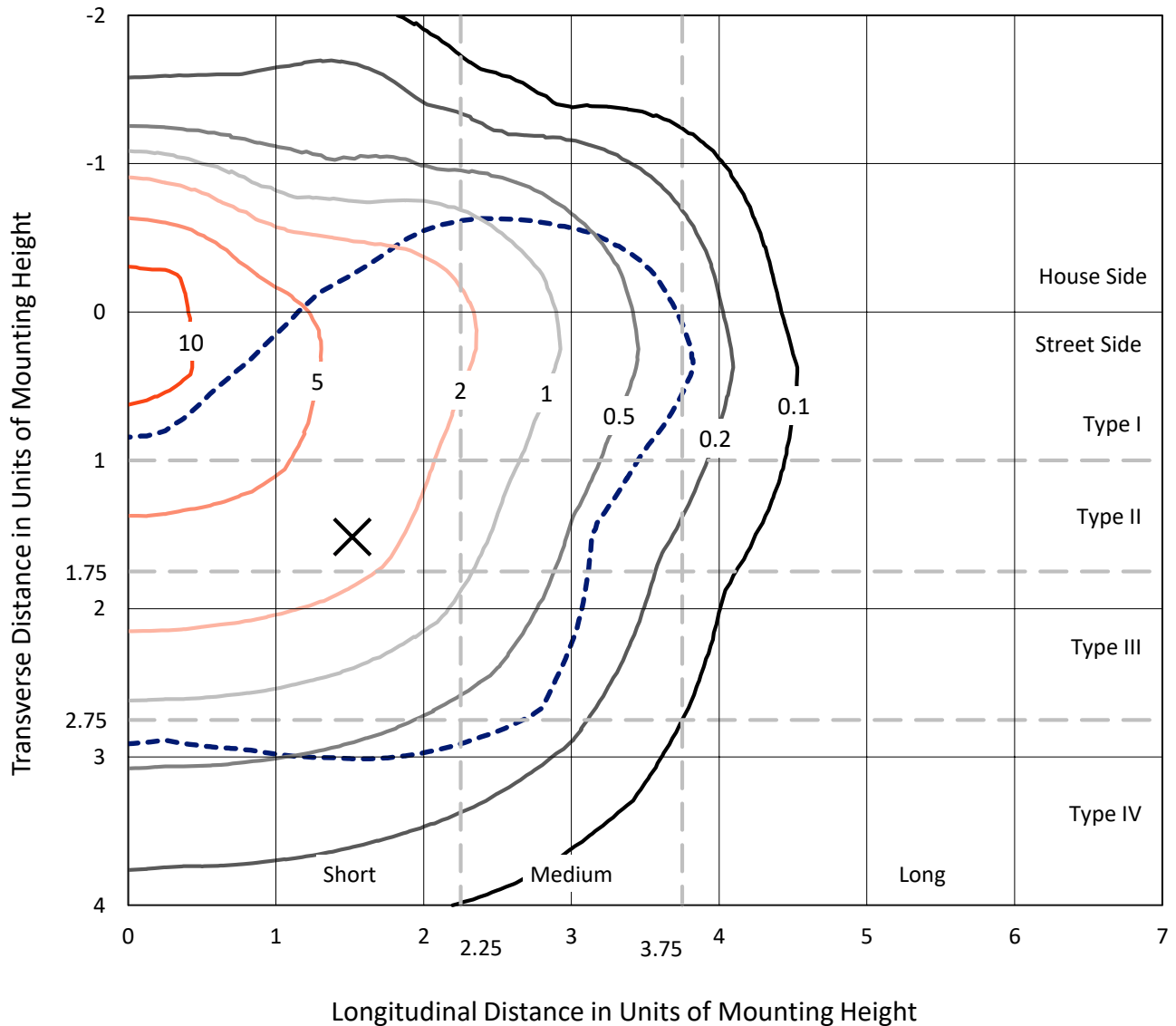


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Iso-Footcandle Lines of Horizontal Illumination

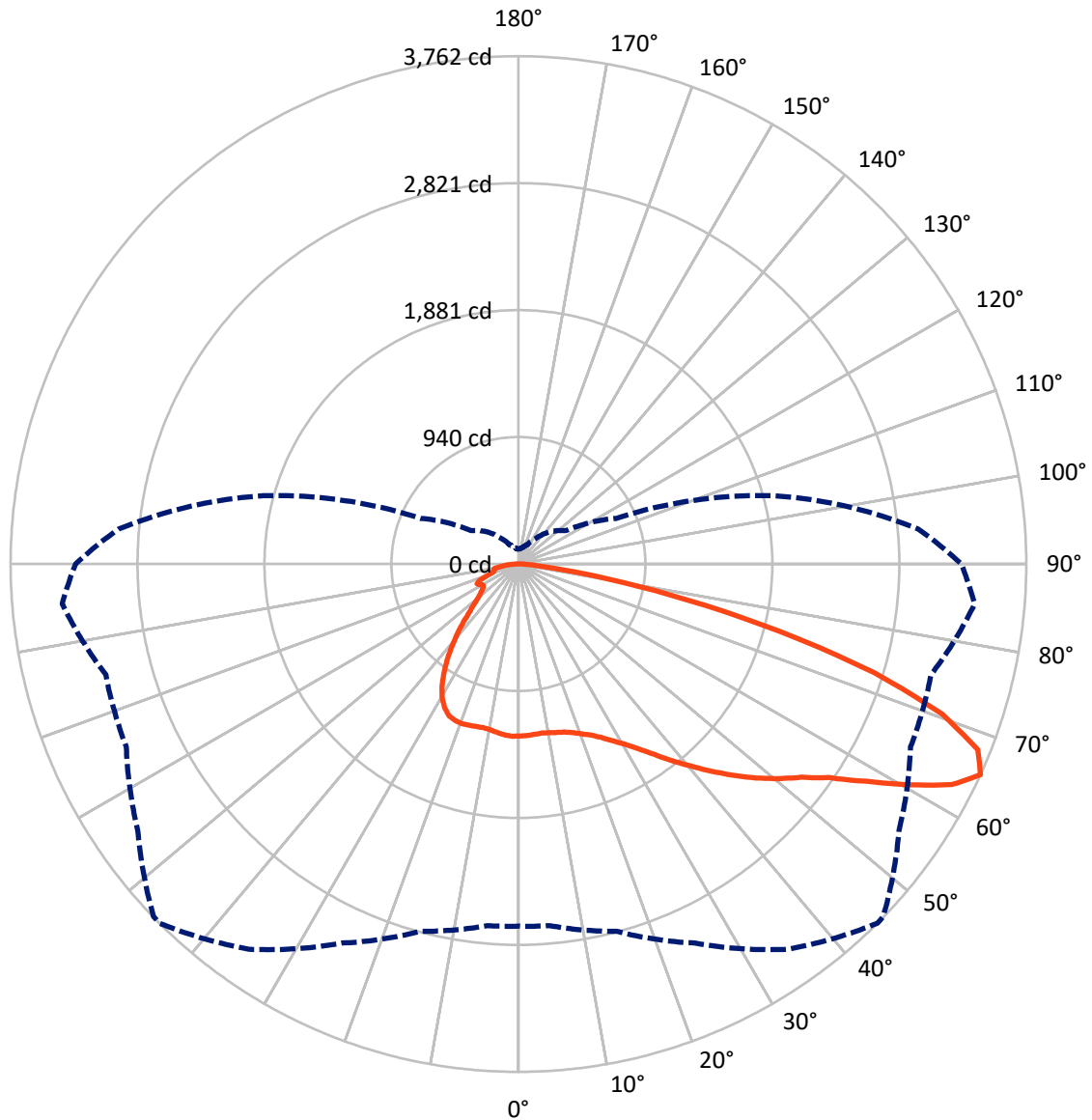
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.7 fc
 Type IV - Short - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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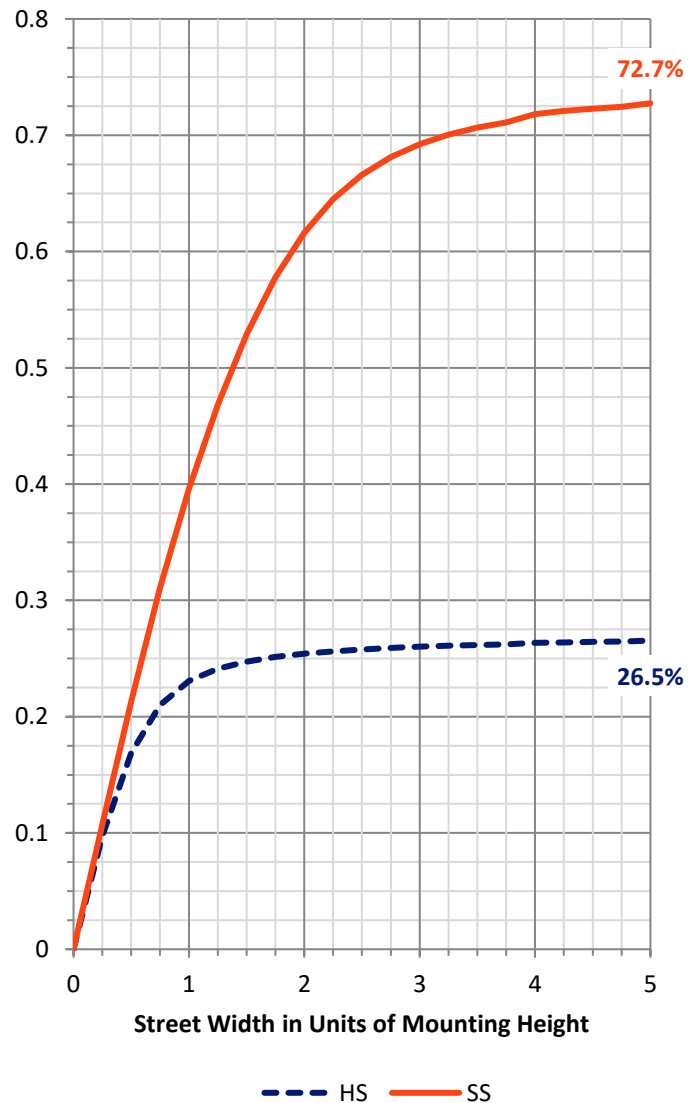
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2050.2	3.1	2053.3
	% Fixture	26.9	0.0	27.0
Street Side	Lumens	5561.0	3.7	5564.7
	% Fixture	73.0	0.0	73.0
Total	Lumens	7611.2	6.8	7618.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.6	1.6
10°-20°	357.0	4.7
20°-30°	595.3	7.8
30°-40°	841.0	11.0
40°-50°	1093.4	14.4
50°-60°	1470.1	19.3
60°-70°	1910.7	25.1
70°-80°	1085.9	14.3
80°-90°	137.1	1.8
90°-100°	6.7	0.1
100°-110°	0.2	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°	7611.2	99.9
0°-180°	7618.0	100.0



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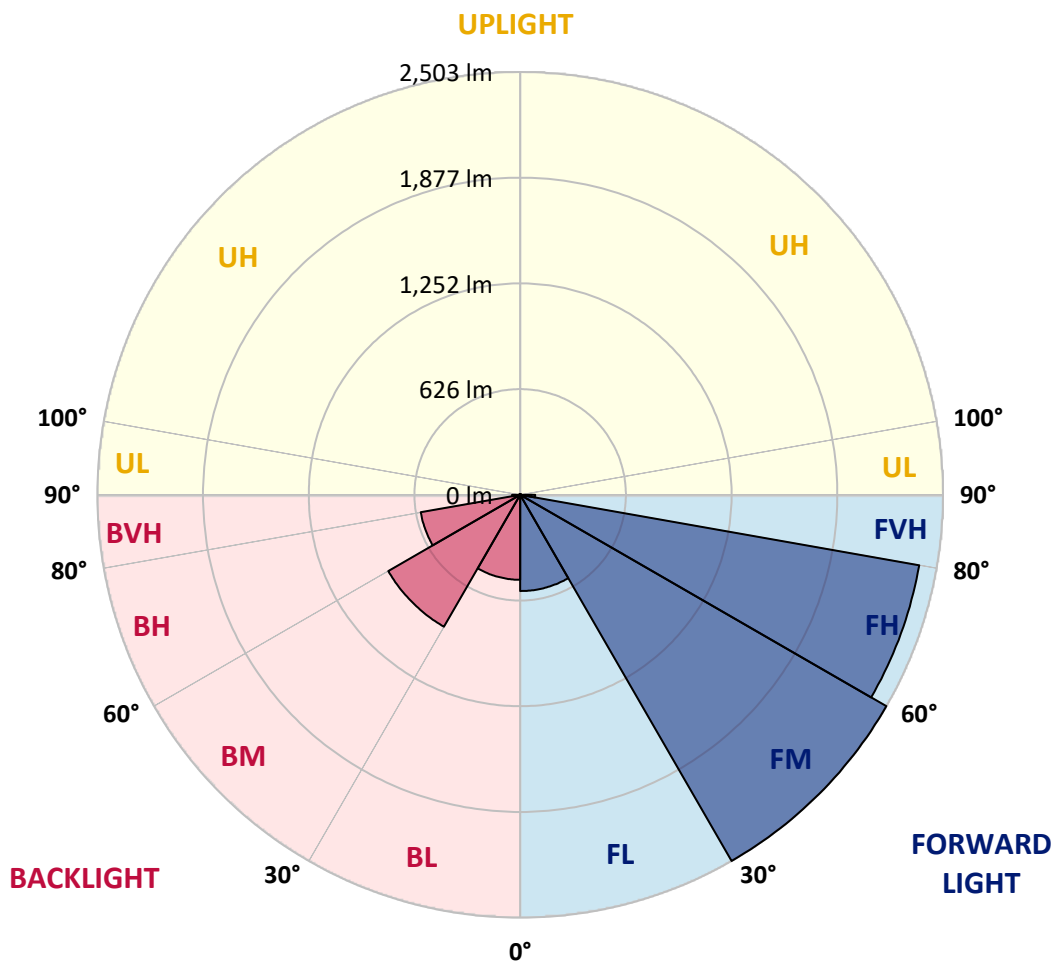
CATALOG NUMBER: MLA-B2-LED-XX-T4-8030-XX

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	569.8	7.5			
FM	(30°-60°)	2503.1	32.9			
FH	(60°-80°)	2398.9	31.5			G2/5000
FVH	(80°-90°)	89.3	1.2			G1/100
BL	(0°-30°)	503.1	6.6	B2/1000		
BM	(30°-60°)	901.5	11.8	B1/1000		
BH	(60°-80°)	597.8	7.8	B2/1000		G2/1000
BVH	(80°-90°)	47.8	0.6			G1/100
UL	(90°-100°)	6.7	0.1		U1/10	
UH	(100°-180°)	3.1	0.0		U1/10	

BUG Rating: B2-U1-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8
2.5°	1280.1	1277.6	1268.7	1266.2	1263.6	1271.9	1276.3	1275.0	1276.3	1270.6	1267.4
5°	1261.7	1260.5	1251.6	1253.5	1253.5	1267.4	1270.6	1273.1	1278.2	1276.9	1278.8
7.5°	1251.0	1248.5	1241.5	1243.4	1247.2	1264.3	1267.4	1274.4	1282.6	1286.4	1287.1
10°	1251.6	1248.5	1241.5	1244.7	1247.8	1270.6	1272.5	1283.3	1291.5	1292.7	1290.9
12.5°	1264.3	1261.7	1252.9	1255.4	1257.9	1280.1	1283.3	1292.7	1301.6	1300.3	1294.6
15°	1287.7	1285.2	1273.8	1275.0	1274.4	1291.5	1298.4	1301.0	1311.1	1304.8	1290.9
17.5°	1322.5	1321.9	1309.2	1308.6	1302.9	1313.6	1317.4	1311.1	1316.2	1302.2	1280.7
20°	1364.9	1364.3	1349.7	1344.6	1338.3	1342.7	1344.6	1326.9	1318.1	1296.5	1268.7
22.5°	1411.1	1409.2	1395.3	1388.3	1378.2	1376.3	1377.5	1344.6	1323.1	1295.3	1264.3
25°	1471.2	1469.3	1449.7	1442.1	1426.3	1423.1	1425.0	1382.6	1349.7	1313.0	1275.7
27.5°	1523.1	1522.4	1510.4	1499.0	1485.1	1481.3	1483.2	1438.9	1397.2	1355.4	1311.7
30°	1590.2	1585.1	1565.5	1557.2	1552.8	1549.0	1547.1	1513.0	1468.0	1418.0	1369.3
32.5°	1652.8	1649.0	1630.6	1626.9	1629.4	1630.0	1626.9	1595.2	1550.3	1493.3	1434.5
35°	1728.7	1724.3	1704.7	1707.8	1722.4	1731.9	1733.2	1696.5	1640.8	1568.0	1494.6
37.5°	1796.4	1794.5	1788.2	1802.8	1830.0	1849.0	1843.3	1816.7	1740.1	1643.9	1544.0
40°	1868.6	1867.9	1867.3	1902.1	1951.5	1967.9	1965.4	1940.7	1845.8	1734.4	1612.9
42.5°	1944.5	1945.1	1948.3	2004.0	2074.2	2097.6	2093.8	2062.8	1957.2	1847.1	1702.2
45°	2029.3	2036.3	2041.9	2108.4	2197.6	2231.8	2228.0	2186.9	2066.0	1964.8	1799.6
47.5°	2120.4	2129.9	2134.3	2212.2	2316.6	2367.8	2359.0	2306.4	2166.6	2077.4	1901.5
50°	2236.2	2244.4	2247.0	2325.4	2439.3	2498.2	2491.2	2426.0	2267.2	2190.7	2033.1
52.5°	2365.3	2378.6	2383.0	2462.7	2567.8	2624.1	2619.0	2549.4	2383.0	2312.8	2191.9
55°	2517.8	2536.8	2548.8	2636.1	2738.0	2793.0	2784.8	2698.1	2542.5	2458.3	2382.4
57.5°	2674.1	2679.8	2724.1	2841.1	2969.0	3036.0	3019.6	2884.2	2735.5	2631.7	2602.0
60°	2724.7	2726.0	2805.7	2979.7	3195.5	3320.1	3301.2	3101.8	2986.7	2851.3	2872.8
62.5°	2745.6	2753.2	2864.6	3107.5	3412.5	3600.5	3589.1	3320.1	3170.8	3069.6	3175.2
65°	2682.3	2689.3	2816.5	3098.0	3483.4	3761.8	3756.8	3441.6	3205.0	3164.5	3392.3
67.5°	2431.1	2470.3	2620.3	2922.8	3341.7	3668.8	3668.8	3363.2	3073.4	3136.0	3425.2
70°	2075.5	2054.6	2229.2	2543.1	2983.5	3329.6	3339.8	3081.0	2771.5	2876.6	3186.0
72.5°	1588.9	1580.0	1745.8	2023.0	2400.1	2757.0	2774.7	2567.8	2252.0	2375.4	2748.1
75°	1200.4	1181.4	1303.5	1499.0	1746.4	2004.0	2028.0	1849.0	1577.5	1752.8	2055.9
77.5°	707.4	727.7	825.8	966.9	1181.4	1272.5	1292.7	1137.1	904.9	1035.2	1045.3
80°	317.7	318.9	413.8	503.1	620.1	665.0	650.5	576.5	434.1	468.9	277.8
82.5°	108.8	125.3	196.2	234.8	281.6	265.8	259.4	250.6	235.4	255.6	127.2
85°	34.8	53.8	103.8	124.0	132.9	115.2	113.3	124.0	160.7	191.1	85.4
87.5°	6.3	20.9	59.5	70.2	71.5	53.8	51.9	65.2	101.2	120.9	48.7
90°	0.0	12.0	31.0	34.2	31.6	22.8	21.5	27.2	44.3	45.6	15.8
92.5°	0.0	4.4	13.9	14.6	10.8	6.3	5.7	5.7	6.3	4.4	3.8
95°	0.0	0.6	4.4	3.2	2.5	1.9	1.9	1.9	1.9	1.9	1.9
97.5°	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.9	1.9
100°	0.0	0.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.9	1.9
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8	1273.8
2.5°	1268.7	1268.1	1270.0	1275.7	1275.7	1276.3	1264.9	1264.3	1267.4	1280.1	1280.1
5°	1281.4	1280.1	1276.3	1275.7	1274.4	1270.6	1258.6	1254.8	1257.3	1268.1	1268.1
7.5°	1287.7	1283.9	1276.9	1270.0	1264.3	1258.6	1242.8	1238.3	1240.9	1251.6	1251.0
10°	1289.0	1282.0	1270.6	1259.2	1251.6	1245.3	1223.8	1220.0	1221.9	1233.3	1233.9
12.5°	1287.7	1277.6	1261.7	1251.6	1245.3	1239.6	1214.3	1204.2	1199.1	1209.2	1208.6
15°	1280.7	1269.3	1254.8	1252.3	1250.4	1242.8	1208.0	1184.5	1171.3	1177.6	1177.0
17.5°	1269.3	1259.8	1251.0	1260.5	1264.9	1249.7	1200.4	1162.4	1142.8	1144.0	1141.5
20°	1256.7	1245.3	1246.6	1269.3	1277.6	1253.5	1190.2	1136.5	1109.2	1104.2	1100.4
22.5°	1247.2	1235.8	1245.9	1279.5	1284.5	1250.4	1170.6	1102.3	1065.0	1057.4	1056.7
25°	1252.9	1241.5	1259.2	1287.7	1283.9	1235.8	1139.6	1066.9	1019.4	1009.9	1008.6
27.5°	1278.8	1263.0	1280.7	1292.7	1270.0	1199.1	1098.5	1019.4	969.4	956.1	954.9
30°	1323.1	1295.9	1297.2	1285.8	1236.4	1145.9	1042.8	956.7	906.8	890.3	892.8
32.5°	1375.0	1333.2	1303.5	1254.8	1174.4	1068.7	963.1	877.0	835.3	821.3	822.0
35°	1424.4	1371.2	1301.0	1205.4	1091.5	970.7	867.5	796.0	755.5	744.1	746.7
37.5°	1471.8	1409.8	1288.3	1135.2	989.7	868.2	770.1	699.8	665.0	653.7	654.9
40°	1536.4	1459.8	1270.0	1055.5	885.2	756.2	663.8	599.2	571.4	561.3	564.4
42.5°	1616.7	1521.8	1252.9	977.0	788.4	652.4	558.1	505.0	479.0	471.4	473.9
45°	1700.9	1593.9	1239.6	904.9	699.2	544.2	471.4	421.4	394.2	386.0	387.3
47.5°	1799.0	1673.7	1248.5	853.0	618.2	462.6	396.7	346.8	317.7	306.9	307.5
50°	1919.2	1785.0	1282.0	825.1	535.3	401.8	338.5	285.4	251.8	237.9	234.1
52.5°	2079.3	1916.7	1335.1	819.4	473.9	358.1	287.9	234.8	201.2	186.0	184.1
55°	2258.4	2062.2	1402.9	817.5	432.8	327.8	249.9	195.5	164.5	149.3	147.4
57.5°	2460.8	2233.7	1480.0	805.5	411.3	308.2	225.3	172.1	146.2	131.6	129.1
60°	2736.1	2466.5	1619.9	804.9	408.8	305.0	217.7	166.4	138.6	122.1	120.2
62.5°	3065.1	2762.0	1824.3	816.3	427.8	323.3	228.4	165.2	133.5	117.1	115.2
65°	3280.9	2972.1	1954.0	798.6	430.3	339.8	238.6	159.5	127.8	112.6	110.7
67.5°	3288.5	2969.0	1892.0	693.5	370.2	311.3	226.5	150.6	122.1	108.2	106.9
70°	3045.5	2738.6	1673.0	536.6	296.8	248.0	195.5	137.3	114.5	101.9	100.6
72.5°	2598.2	2326.1	1369.9	402.4	237.3	201.9	170.8	127.8	106.3	94.3	93.6
75°	1856.5	1658.5	996.0	315.1	205.7	184.8	157.6	126.6	100.6	88.6	86.7
77.5°	825.8	704.3	553.0	277.2	197.4	184.8	151.2	123.4	94.9	78.5	76.6
80°	212.6	222.7	285.4	261.3	191.7	177.8	141.1	112.6	87.3	66.4	64.5
82.5°	119.0	120.9	177.2	206.3	160.1	136.7	120.2	92.4	74.7	55.7	53.2
85°	82.9	79.1	106.3	113.9	92.4	93.0	86.7	68.3	56.9	39.9	35.4
87.5°	44.9	47.5	56.3	49.4	44.9	44.9	56.9	47.5	41.1	22.8	15.8
90°	13.3	17.7	28.5	24.7	22.1	19.0	29.1	27.2	25.3	12.0	0.0
92.5°	3.8	3.2	5.1	5.7	6.3	6.3	10.8	12.0	12.7	3.8	0.0
95°	1.9	1.3	1.3	0.6	1.9	2.5	3.8	4.4	5.1	1.3	0.0
97.5°	1.9	1.9	1.3	1.3	0.6	0.6	1.3	1.3	1.3	0.0	0.0
100°	1.9	1.9	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226222

CATALOG NUMBER: MLA-B2-LED-XX-T4-8030-XX

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)