

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: P226224

Luminaire Tested: **MLA-B3-LED-XX-T4-7030-XX**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P226224
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-B3-LED-XX-T4-7030-XX
Description: METROLINE ARCHITECTURAL LED LUMINAIRE
70 CRI, 3000K LEDS AND TYPE IV DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10657 lumens
Efficiency: N/A
Efficacy: 113.7 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): 93.7
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

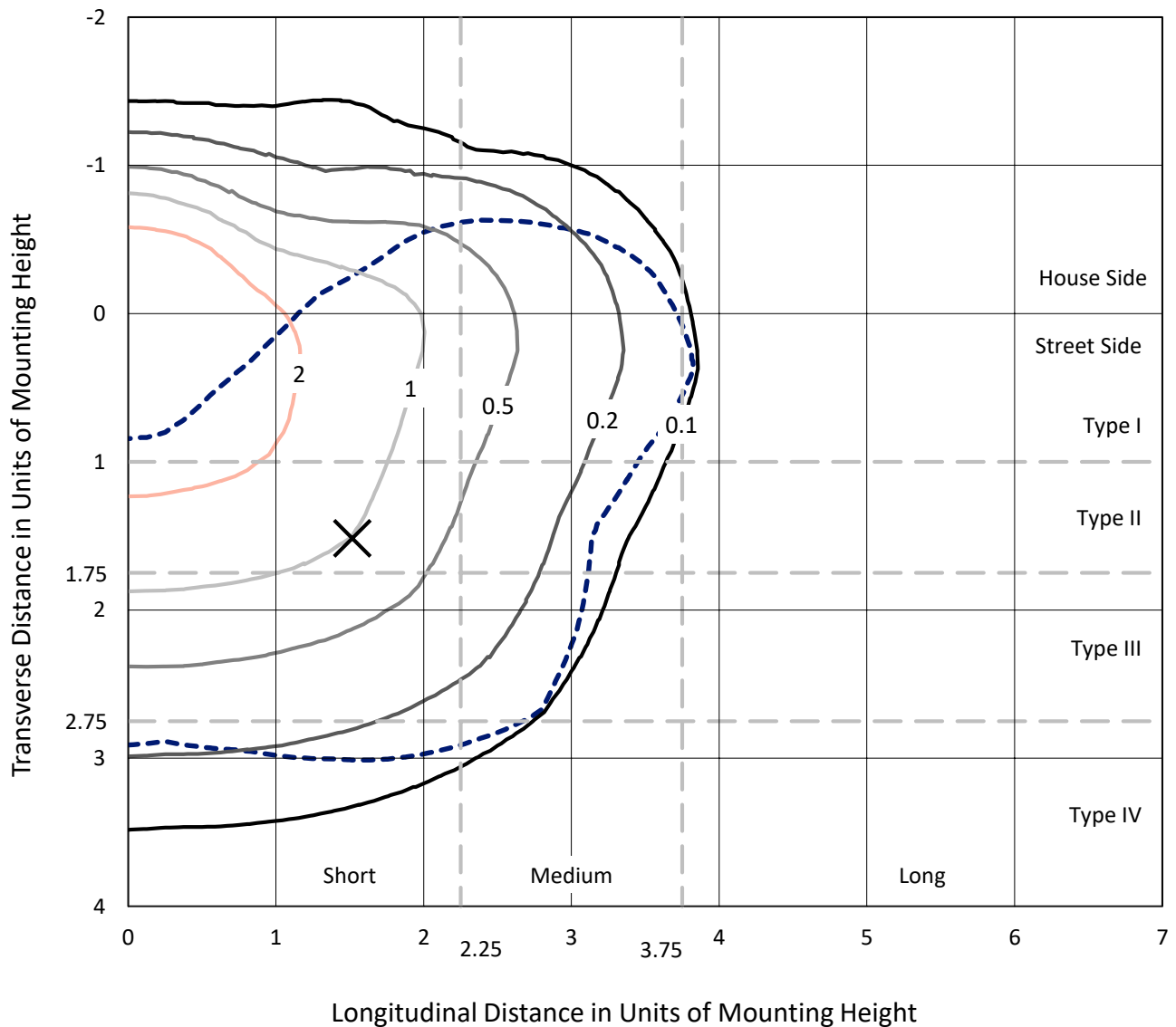


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Iso-Footcandle Lines of Horizontal Illumination

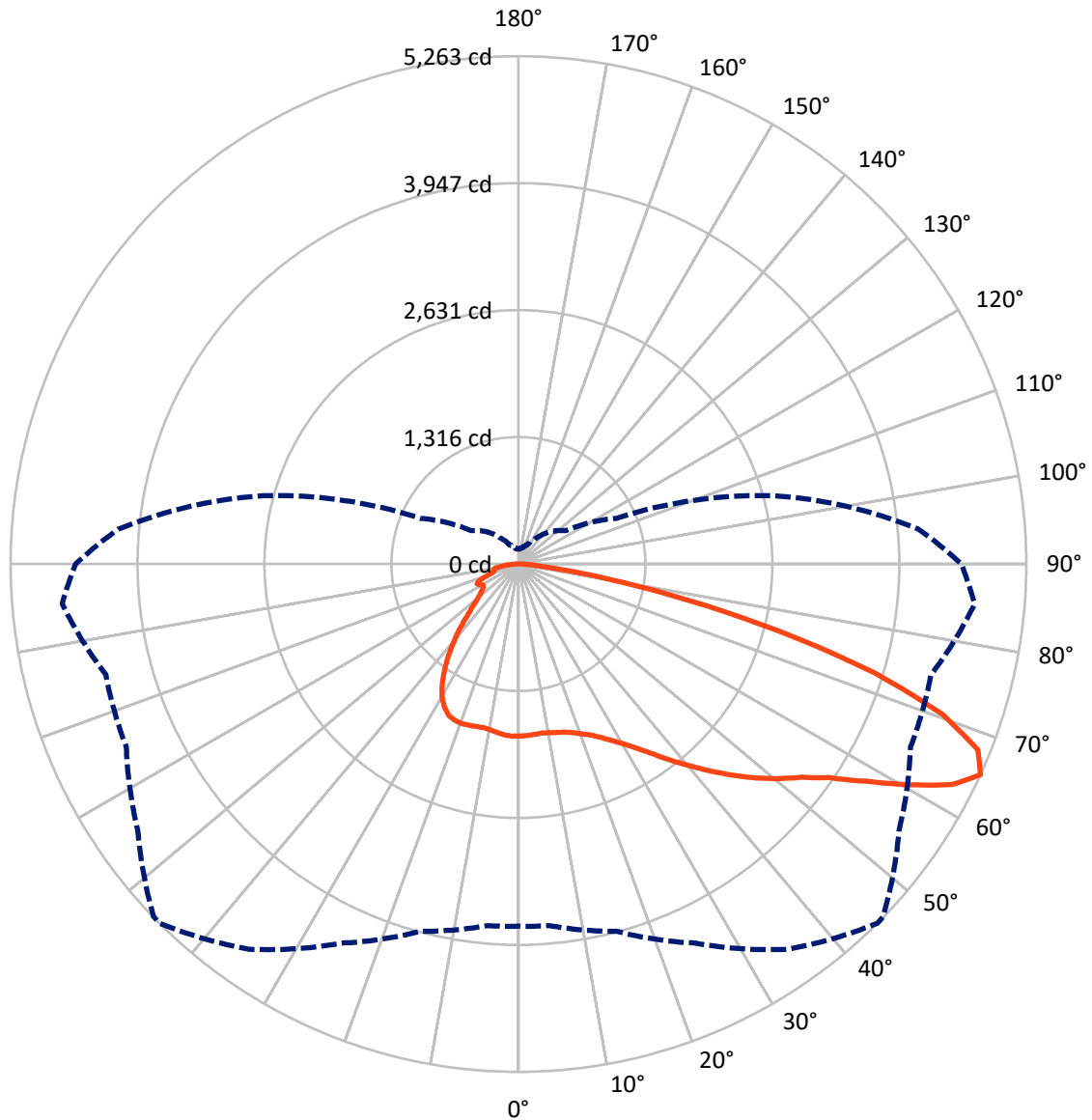
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 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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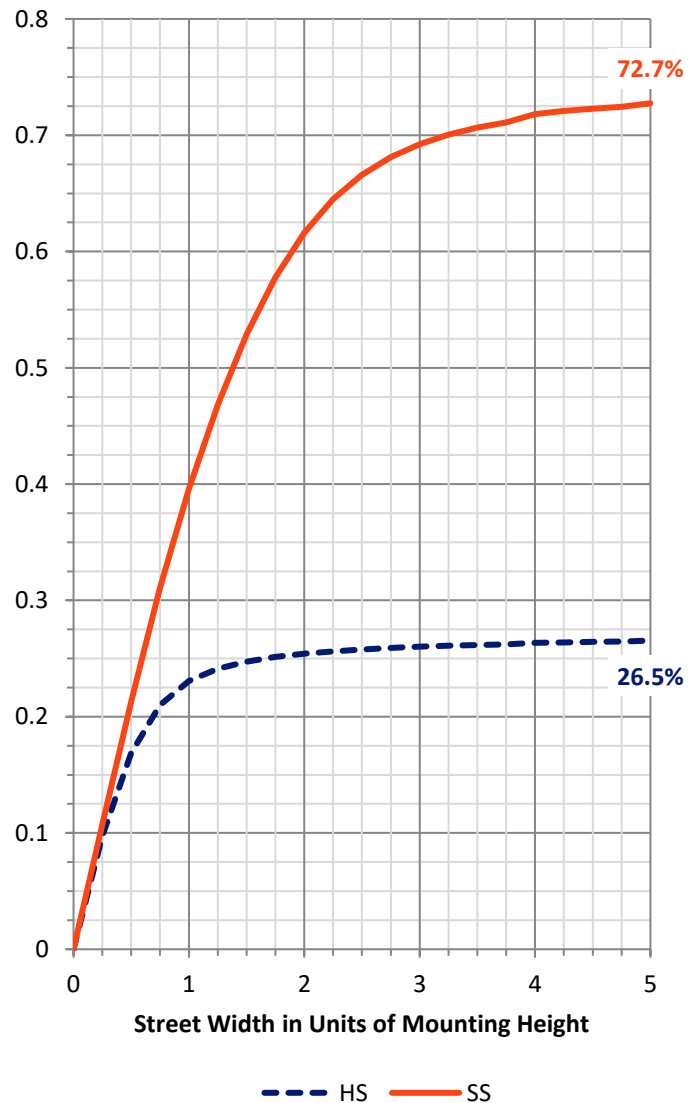
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2868.0	4.4	2872.4
	% Fixture	26.9	0.0	27.0
Street Side	Lumens	7779.5	5.2	7784.6
	% Fixture	73.0	0.0	73.0
Total	Lumens	10647.5	9.5	10657.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	1.6
10°-20°	499.4	4.7
20°-30°	832.8	7.8
30°-40°	1176.5	11.0
40°-50°	1529.6	14.4
50°-60°	2056.6	19.3
60°-70°	2673.0	25.1
70°-80°	1519.1	14.3
80°-90°	191.8	1.8
90°-100°	9.3	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°	10647.5	99.9
0°-180°	10657.0	100.0



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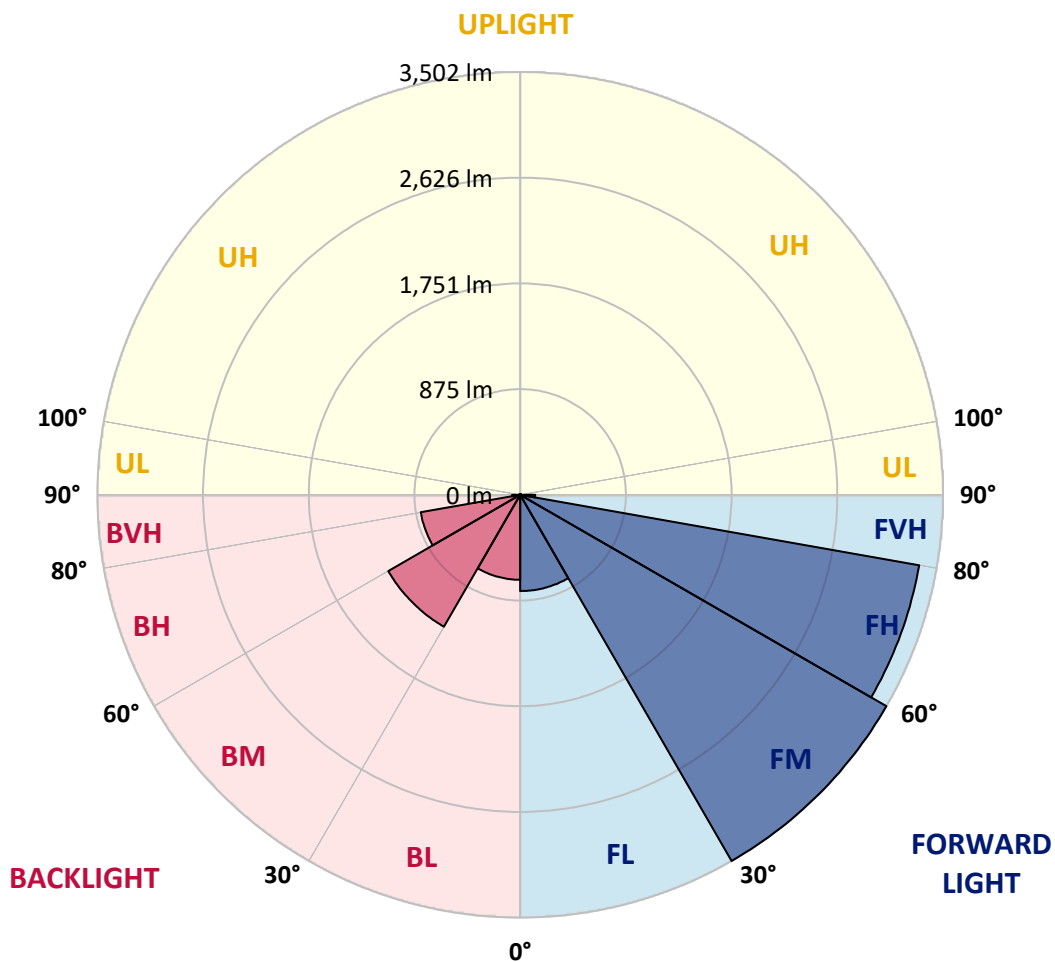
CATALOG NUMBER: MLA-B3-LED-XX-T4-7030-XX

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	797.1	7.5			
FM	(30°-60°)	3501.6	32.9			
FH	(60°-80°)	3355.9	31.5			G2/5000
FVH	(80°-90°)	125.0	1.2			G2/225
BL	(0°-30°)	703.8	6.6	B2/1000		
BM	(30°-60°)	1261.1	11.8	B2/2500		
BH	(60°-80°)	836.2	7.8	B2/1000		G2/1000
BVH	(80°-90°)	66.9	0.6			G1/100
UL	(90°-100°)	9.3	0.1		U1/10	
UH	(100°-180°)	4.4	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°	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9
2.5°	1790.8	1787.2	1774.8	1771.3	1767.7	1779.2	1785.4	1783.7	1785.4	1777.5	1773.0
5°	1765.1	1763.3	1750.9	1753.6	1753.6	1773.0	1777.5	1781.0	1788.1	1786.3	1789.0
7.5°	1750.0	1746.5	1736.8	1739.4	1744.7	1768.6	1773.0	1782.8	1794.3	1799.6	1800.5
10°	1750.9	1746.5	1736.8	1741.2	1745.6	1777.5	1780.1	1795.2	1806.7	1808.5	1805.8
12.5°	1768.6	1765.1	1752.7	1756.2	1759.8	1790.8	1795.2	1808.5	1820.9	1819.1	1811.1
15°	1801.4	1797.8	1781.9	1783.7	1782.8	1806.7	1816.4	1820.0	1834.1	1825.3	1805.8
17.5°	1850.1	1849.2	1831.5	1830.6	1822.6	1837.7	1843.0	1834.1	1841.2	1821.7	1791.6
20°	1909.4	1908.5	1888.1	1881.0	1872.2	1878.4	1881.0	1856.3	1843.9	1813.8	1774.8
22.5°	1974.0	1971.3	1951.9	1942.1	1928.0	1925.3	1927.1	1881.0	1850.9	1812.0	1768.6
25°	2058.1	2055.4	2028.0	2017.4	1995.2	1990.8	1993.5	1934.2	1888.1	1836.8	1784.6
27.5°	2130.7	2129.8	2113.0	2097.0	2077.6	2072.2	2074.9	2012.9	1954.5	1896.1	1835.0
30°	2224.5	2217.4	2190.0	2178.5	2172.3	2167.0	2164.3	2116.5	2053.7	1983.7	1915.6
32.5°	2312.1	2306.8	2281.2	2275.8	2279.4	2280.3	2275.8	2231.6	2168.7	2089.1	2006.7
35°	2418.4	2412.2	2384.7	2389.1	2409.5	2422.8	2424.6	2373.2	2295.3	2193.5	2090.8
37.5°	2513.1	2510.4	2501.6	2521.9	2560.0	2586.5	2578.6	2541.4	2434.3	2299.7	2159.9
40°	2614.0	2613.1	2612.2	2660.9	2729.9	2753.0	2749.4	2714.9	2582.1	2426.3	2256.4
42.5°	2720.2	2721.1	2725.5	2803.4	2901.7	2934.4	2929.1	2885.7	2737.9	2583.9	2381.2
45°	2838.8	2848.6	2856.5	2949.5	3074.3	3122.1	3116.8	3059.2	2890.2	2748.5	2517.5
47.5°	2966.3	2979.6	2985.8	3094.6	3240.7	3312.4	3300.0	3226.5	3030.9	2906.1	2660.0
50°	3128.3	3139.8	3143.3	3253.1	3412.4	3494.8	3485.0	3393.8	3171.7	3064.6	2844.1
52.5°	3308.9	3327.5	3333.7	3445.2	3592.1	3670.9	3663.8	3566.5	3333.7	3235.4	3066.3
55°	3522.2	3548.8	3565.6	3687.7	3830.2	3907.3	3895.8	3774.5	3556.7	3439.0	3332.8
57.5°	3740.8	3748.8	3810.8	3974.5	4153.3	4247.2	4224.2	4034.7	3826.7	3681.5	3639.9
60°	3811.7	3813.4	3925.0	4168.4	4470.2	4644.6	4618.1	4339.2	4178.1	3988.7	4018.8
62.5°	3840.9	3851.5	4007.3	4347.2	4773.9	5036.8	5020.8	4644.6	4435.7	4294.1	4441.9
65°	3752.4	3762.1	3940.0	4333.9	4873.0	5262.5	5255.4	4814.6	4483.5	4426.9	4745.5
67.5°	3400.9	3455.8	3665.6	4088.7	4674.7	5132.4	5132.4	4704.8	4299.4	4387.0	4791.6
70°	2903.4	2874.2	3118.5	3557.6	4173.7	4657.9	4672.1	4310.0	3877.2	4024.1	4457.0
72.5°	2222.7	2210.3	2442.3	2830.0	3357.6	3856.8	3881.6	3592.1	3150.4	3323.0	3844.4
75°	1679.2	1652.7	1823.5	2097.0	2443.1	2803.4	2837.1	2586.5	2206.8	2452.0	2876.0
77.5°	989.7	1018.0	1155.2	1352.6	1652.7	1780.1	1808.5	1590.7	1265.8	1448.2	1462.3
80°	444.4	446.1	578.9	703.7	867.5	930.3	910.0	806.4	607.2	655.9	388.6
82.5°	152.3	175.3	274.4	328.4	393.9	371.8	362.9	350.5	329.3	357.6	177.9
85°	48.7	75.2	145.2	173.5	185.9	161.1	158.5	173.5	224.8	267.3	119.5
87.5°	8.9	29.2	83.2	98.3	100.0	75.2	72.6	91.2	141.6	169.1	68.2
90°	0.0	16.8	43.4	47.8	44.3	31.9	30.1	38.1	62.0	63.7	22.1
92.5°	0.0	6.2	19.5	20.4	15.0	8.9	8.0	8.0	8.9	6.2	5.3
95°	0.0	0.9	6.2	4.4	3.5	2.7	2.7	2.7	2.7	2.7	2.7
97.5°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7
100°	0.0	0.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7
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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CATALOG NUMBER: MLA-B3-LED-XX-T4-7030-XX

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°	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9	1781.9
2.5°	1774.8	1773.9	1776.6	1784.6	1784.6	1785.4	1769.5	1768.6	1773.0	1790.8	1790.8
5°	1792.5	1790.8	1785.4	1784.6	1782.8	1777.5	1760.7	1755.3	1758.9	1773.9	1773.9
7.5°	1801.4	1796.1	1786.3	1776.6	1768.6	1760.7	1738.5	1732.3	1735.9	1750.9	1750.0
10°	1803.1	1793.4	1777.5	1761.5	1750.9	1742.1	1712.0	1706.7	1709.3	1725.2	1726.1
12.5°	1801.4	1787.2	1765.1	1750.9	1742.1	1734.1	1698.7	1684.5	1677.4	1691.6	1690.7
15°	1791.6	1775.7	1755.3	1751.8	1749.1	1738.5	1689.8	1657.1	1638.5	1647.4	1646.5
17.5°	1775.7	1762.4	1750.0	1763.3	1769.5	1748.3	1679.2	1626.1	1598.7	1600.4	1596.9
20°	1758.0	1742.1	1743.8	1775.7	1787.2	1753.6	1665.1	1589.8	1551.8	1544.7	1539.4
22.5°	1744.7	1728.8	1743.0	1789.9	1797.0	1749.1	1637.6	1542.0	1489.8	1479.2	1478.3
25°	1752.7	1736.8	1761.5	1801.4	1796.1	1728.8	1594.2	1492.4	1426.1	1412.8	1411.0
27.5°	1789.0	1766.9	1791.6	1808.5	1776.6	1677.4	1536.7	1426.1	1356.1	1337.5	1335.8
30°	1850.9	1812.9	1814.7	1798.7	1729.7	1603.1	1458.8	1338.4	1268.5	1245.5	1249.0
32.5°	1923.5	1865.1	1823.5	1755.3	1642.9	1495.1	1347.3	1226.9	1168.5	1149.0	1149.9
35°	1992.6	1918.2	1820.0	1686.3	1527.0	1357.9	1213.6	1113.6	1056.9	1041.0	1044.5
37.5°	2059.0	1972.2	1802.3	1588.0	1384.4	1214.5	1077.3	979.0	930.3	914.4	916.2
40°	2149.3	2042.1	1776.6	1476.5	1238.4	1057.8	928.6	838.3	799.3	785.2	789.6
42.5°	2261.7	2128.9	1752.7	1366.7	1103.0	912.6	780.7	706.4	670.1	659.5	663.0
45°	2379.4	2229.8	1734.1	1265.8	978.1	761.3	659.5	589.5	551.5	540.0	541.7
47.5°	2516.6	2341.3	1746.5	1193.2	864.8	647.1	555.0	485.1	444.4	429.3	430.2
50°	2684.8	2497.1	1793.4	1154.3	748.9	562.1	473.6	399.2	352.3	332.8	327.5
52.5°	2908.8	2681.3	1867.8	1146.3	663.0	501.0	402.8	328.4	281.5	260.2	257.6
55°	3159.3	2884.9	1962.5	1143.7	605.5	458.5	349.7	273.5	230.2	208.9	206.3
57.5°	3442.5	3124.7	2070.5	1126.9	575.4	431.1	315.1	240.8	204.5	184.1	180.6
60°	3827.6	3450.5	2266.1	1126.0	571.8	426.7	304.5	232.8	193.9	170.8	168.2
62.5°	4287.9	3863.9	2552.0	1141.9	598.4	452.3	319.6	231.0	186.8	163.8	161.1
65°	4589.7	4157.8	2733.5	1117.1	601.9	475.4	333.7	223.1	178.8	157.6	154.9
67.5°	4600.4	4153.3	2646.7	970.2	517.8	435.5	316.9	210.7	170.8	151.4	149.6
70°	4260.5	3831.1	2340.5	750.6	415.2	347.0	273.5	192.1	160.2	142.5	140.7
72.5°	3634.6	3254.0	1916.5	563.0	331.9	282.4	239.0	178.8	148.7	131.9	131.0
75°	2597.2	2320.1	1393.3	440.8	287.7	258.5	220.4	177.0	140.7	123.9	121.3
77.5°	1155.2	985.2	773.7	387.7	276.2	258.5	211.6	172.6	132.8	109.8	107.1
80°	297.4	311.6	399.2	365.6	268.2	248.7	197.4	157.6	122.2	92.9	90.3
82.5°	166.4	169.1	247.9	288.6	224.0	191.2	168.2	129.2	104.5	77.9	74.4
85°	116.0	110.6	148.7	159.3	129.2	130.1	121.3	95.6	79.7	55.8	49.6
87.5°	62.8	66.4	78.8	69.0	62.8	62.8	79.7	66.4	57.5	31.9	22.1
90°	18.6	24.8	39.8	34.5	31.0	26.6	40.7	38.1	35.4	16.8	0.0
92.5°	5.3	4.4	7.1	8.0	8.9	8.9	15.0	16.8	17.7	5.3	0.0
95°	2.7	1.8	1.8	0.9	2.7	3.5	5.3	6.2	7.1	1.8	0.0
97.5°	2.7	2.7	1.8	1.8	0.9	0.9	1.8	1.8	1.8	0.0	0.0
100°	2.7	2.7	1.8	1.8	1.8	0.9	0.9	0.9	0.9	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: P226224

CATALOG NUMBER: MLA-B3-LED-XX-T4-7030-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)