

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: McGRAW-EDISON

Report Number: P145036

Luminaire Tested: **VPL-F04-LED-E1-GL2-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P145036  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33701)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: VPL-F04-LED-E1-GL2-7050  
Description: VALET LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ GLARE CONTROL  
Light Source: (28) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9920.9 lumens  
Efficiency: N/A  
Efficacy: 97.1 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type II - Short - Non-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

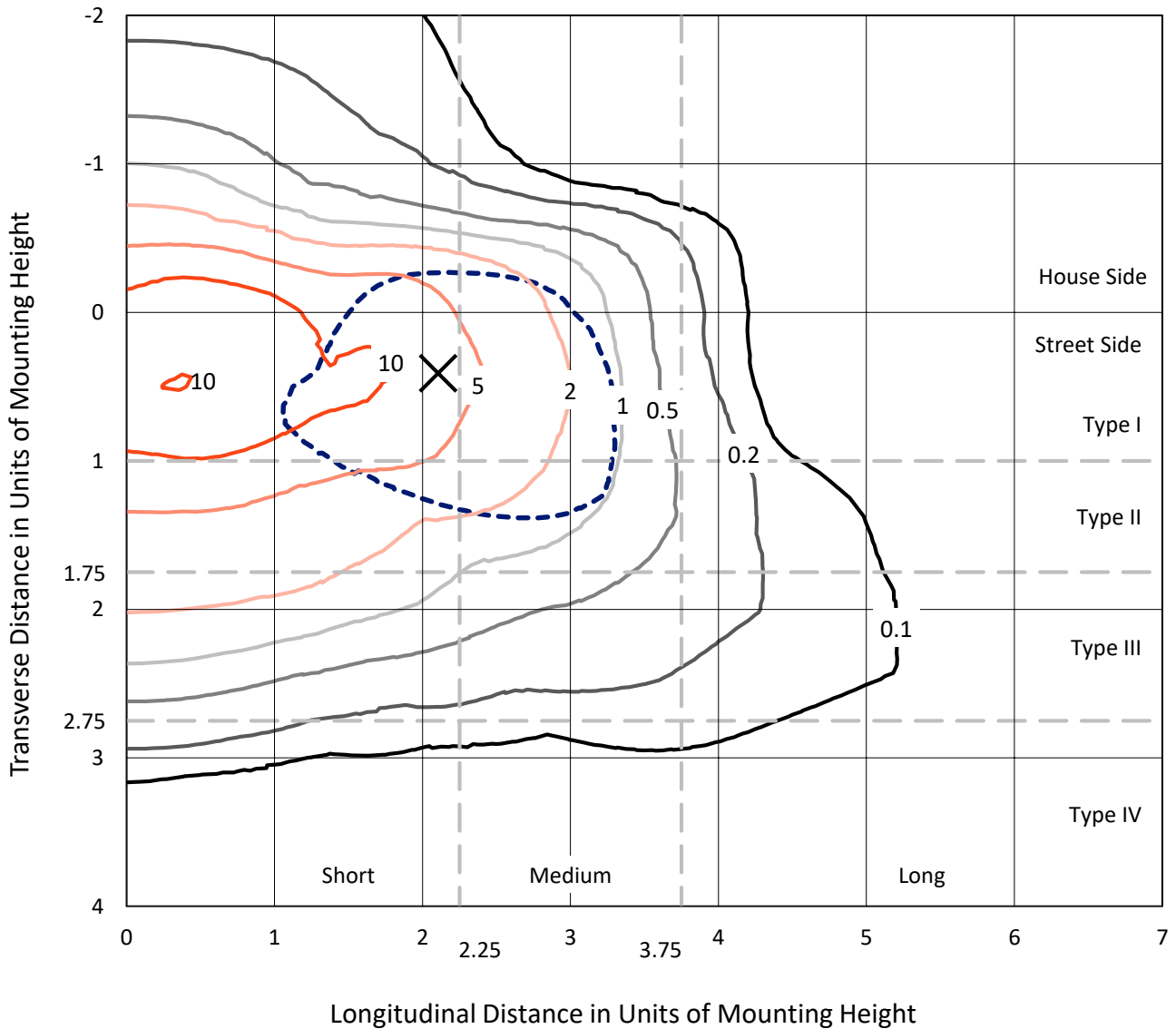


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### Iso-Footcandle Lines of Horizontal Illumination

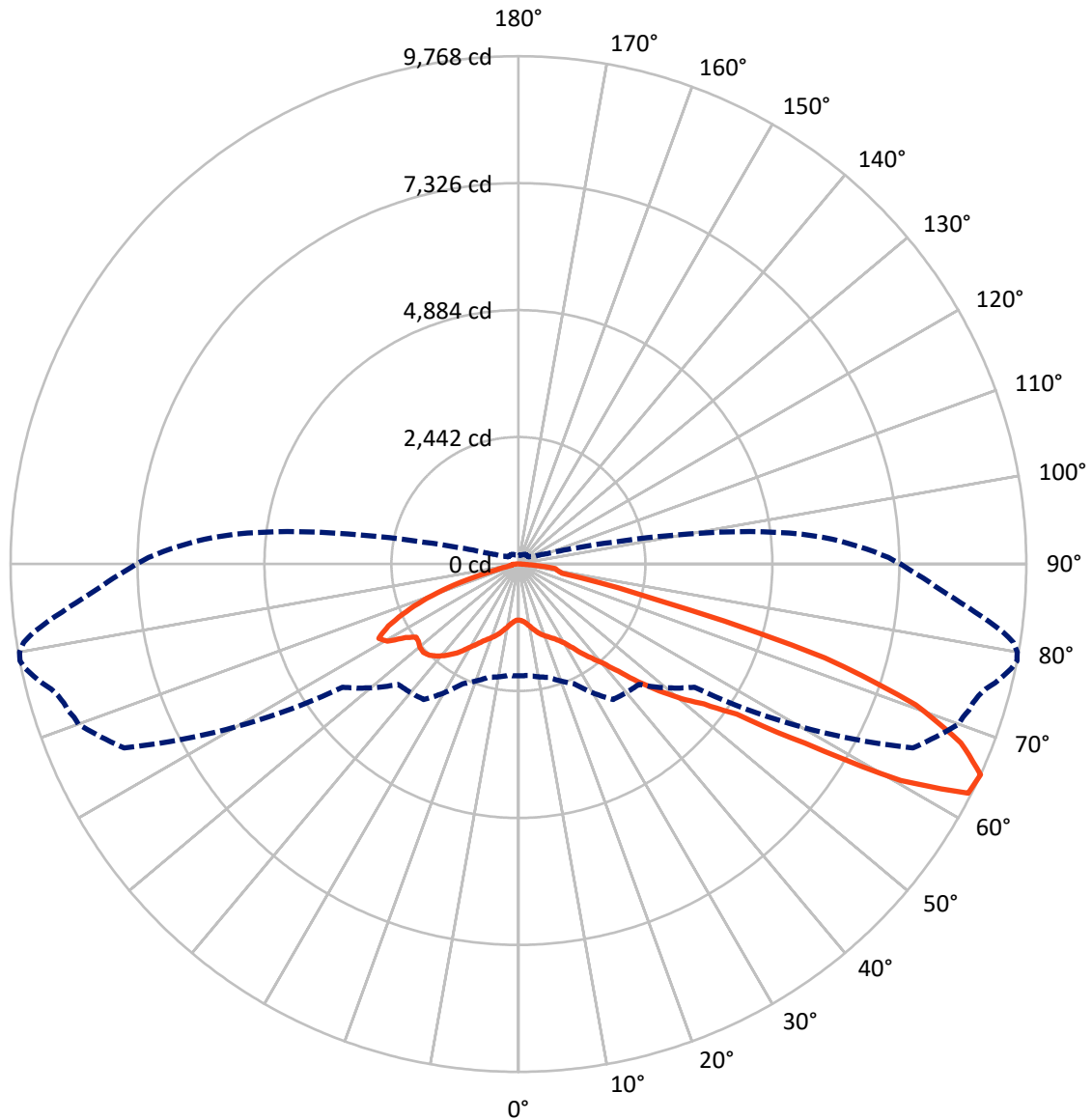
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.9 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2251.9	0.0	2251.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	7669.0	0.0	7669.0
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	9920.9	0.0	9920.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.1	1.1
10°-20°	348.4	3.5
20°-30°	600.6	6.1
30°-40°	979.4	9.9
40°-50°	1635.0	16.5
50°-60°	2210.8	22.3
60°-70°	2746.6	27.7
70°-80°	1099.8	11.1
80°-90°	193.2	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°	9920.9	100.0
0°-180°	9920.9	100.0



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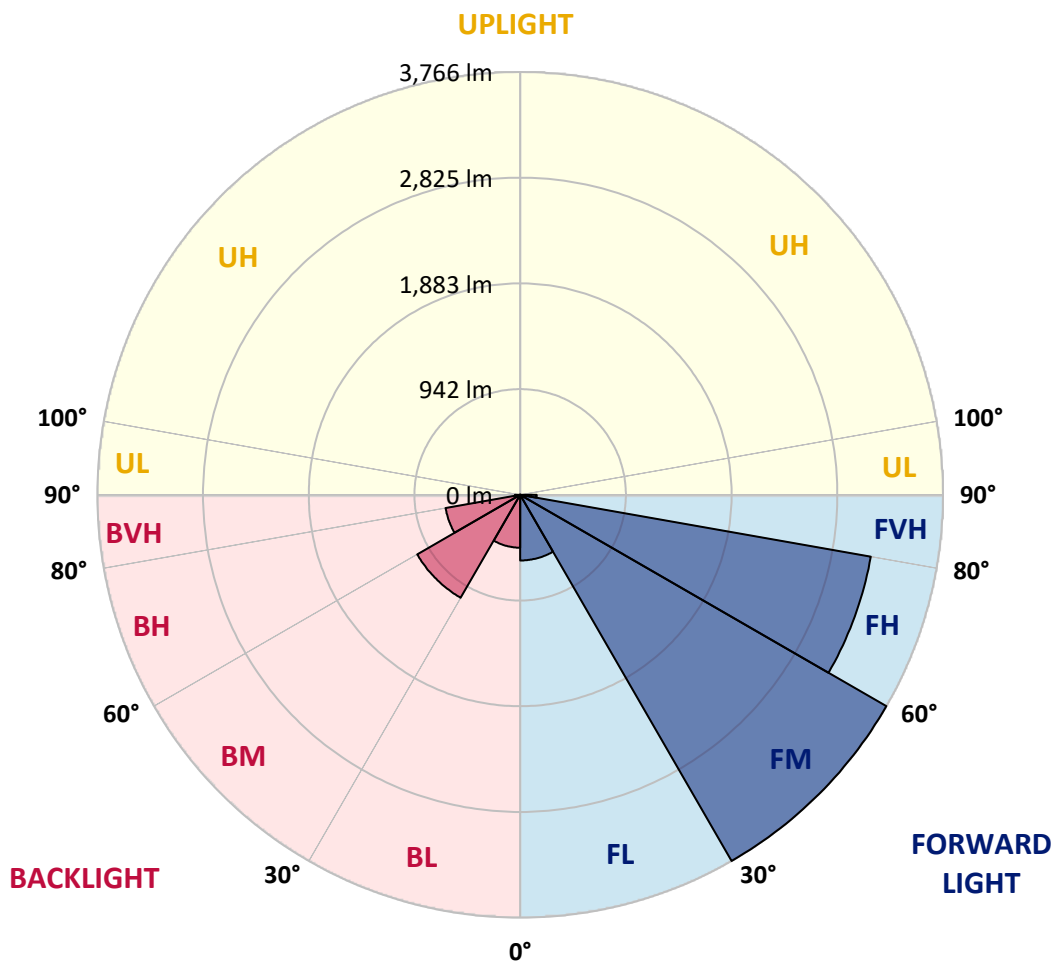
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	585.0	5.9			
FM (30°-60°)	3766.1	38.0			
FH (60°-80°)	3171.3	32.0			G2/5000
FVH (80°-90°)	146.6	1.5			G2/225
BL (0°-30°)	471.0	4.7	B1/500		
BM (30°-60°)	1059.2	10.7	B2/2500		
BH (60°-80°)	675.1	6.8	B2/1000		G2/1000
BVH (80°-90°)	46.7	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1086.3	1085.6	1089.0	1091.7	1091.7	1093.1	1092.4	1088.3	1089.0	1090.4	1089.0
5°	1098.5	1095.8	1099.2	1103.2	1105.9	1109.3	1112.7	1113.4	1116.1	1116.1	1115.4
7.5°	1124.9	1122.9	1127.6	1129.0	1135.1	1140.5	1147.3	1152.0	1154.7	1156.1	1158.1
10°	1170.3	1169.0	1170.3	1173.0	1175.7	1181.8	1193.4	1203.5	1209.6	1209.6	1212.3
12.5°	1225.2	1219.8	1221.1	1215.7	1217.1	1230.0	1243.5	1260.4	1270.6	1272.0	1273.3
15°	1267.9	1265.2	1263.2	1255.7	1261.1	1278.1	1299.1	1323.5	1332.3	1339.7	1339.1
17.5°	1307.9	1304.5	1299.8	1289.6	1295.0	1322.1	1354.0	1381.1	1396.0	1397.3	1398.7
20°	1355.3	1351.3	1342.4	1321.4	1320.1	1358.0	1400.7	1429.9	1443.4	1449.5	1451.5
22.5°	1415.6	1410.2	1393.9	1353.3	1342.4	1387.2	1438.0	1473.9	1488.1	1494.2	1497.6
25°	1492.9	1482.0	1456.3	1392.6	1370.2	1417.0	1478.0	1521.3	1541.0	1547.1	1551.2
27.5°	1562.7	1554.6	1523.4	1448.2	1409.5	1457.0	1526.8	1582.3	1609.4	1616.9	1623.0
30°	1644.0	1632.5	1607.4	1527.4	1475.9	1518.0	1606.7	1677.2	1710.4	1711.1	1724.6
32.5°	1835.1	1827.7	1804.6	1716.5	1629.8	1632.5	1715.2	1812.1	1845.3	1850.7	1862.9
35°	2118.4	2115.7	2115.0	2066.2	2001.8	1935.4	1941.5	2015.4	2037.7	2046.5	2050.6
37.5°	2304.7	2328.4	2386.0	2421.3	2405.0	2419.2	2344.7	2254.6	2241.7	2232.2	2236.3
40°	2465.3	2486.3	2602.9	2765.5	2864.5	2934.3	2868.5	2592.1	2489.0	2459.2	2447.7
42.5°	2560.2	2583.9	2750.6	3010.8	3262.9	3428.3	3445.9	3061.7	2800.1	2796.7	2753.3
45°	2611.7	2635.4	2834.7	3185.0	3541.5	3839.6	3994.1	3639.7	3255.5	3227.0	3166.7
47.5°	2601.5	2623.9	2831.3	3249.4	3706.1	4112.7	4421.7	4223.9	3780.7	3712.2	3628.9
50°	2477.5	2493.8	2711.3	3144.3	3662.1	4226.6	4714.5	4759.9	4375.0	4282.1	4157.4
52.5°	2349.4	2378.6	2558.8	2958.0	3462.2	4156.1	4889.3	5247.8	4930.0	4866.3	4706.4
55°	2280.3	2303.4	2450.4	2791.3	3251.4	3915.5	4961.8	5707.9	5604.3	5578.5	5465.3
57.5°	2277.6	2300.0	2417.2	2690.3	3080.0	3664.8	4982.8	6418.8	6723.1	6729.8	6697.3
60°	2388.8	2411.8	2510.1	2739.1	3027.1	3450.0	4907.6	7427.2	8099.4	8159.0	8258.6
62.5°	2404.3	2415.2	2533.8	2842.8	3219.6	3289.4	4597.9	8266.8	9045.4	9100.3	9155.2
65°	2150.9	2150.2	2255.3	2539.9	3179.6	3273.1	4132.4	8369.8	9007.5	9040.7	9109.1
67.5°	1604.0	1590.5	1650.1	1910.3	2522.9	3277.2	3580.8	7592.5	8305.4	8368.4	8391.5
70°	826.7	847.8	888.4	1047.7	1602.0	2638.1	3075.9	6405.9	7290.9	7314.7	7396.7
72.5°	339.5	330.7	358.5	440.5	801.7	1743.6	2544.6	5055.3	6021.7	6005.4	6020.3
75°	189.1	191.8	199.9	229.7	389.7	875.5	2186.1	3578.7	4095.1	3814.6	3729.8
77.5°	151.8	153.2	153.8	159.3	212.8	466.9	1677.9	2356.9	2059.4	1912.4	1856.1
80°	111.1	118.6	126.7	128.1	146.4	265.0	920.3	1984.2	1738.2	1616.2	1515.9
82.5°	89.5	92.8	110.5	113.2	116.6	157.9	416.8	1863.6	1731.4	1606.7	1468.5
85°	53.5	59.6	90.1	90.8	92.2	96.2	230.4	759.0	944.0	834.2	763.7
87.5°	19.0	24.4	44.7	37.3	47.4	39.3	101.0	254.1	313.1	297.5	263.6
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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**CANDELA DISTRIBUTION (continued):**

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1088.3	1088.3	1089.7	1089.0	1089.0	1089.0	1089.0	1087.6	1087.6	1085.6	1087.0
5°	1115.4	1114.8	1115.4	1116.1	1115.4	1116.8	1116.1	1115.4	1116.1	1115.4	1116.1
7.5°	1158.8	1155.4	1160.2	1157.4	1156.8	1160.8	1158.8	1160.8	1161.5	1160.8	1160.2
10°	1213.7	1215.7	1215.7	1215.7	1214.4	1218.4	1219.1	1220.5	1221.1	1223.9	1223.9
12.5°	1276.7	1277.4	1280.1	1279.4	1280.8	1285.5	1288.9	1289.6	1290.3	1292.3	1289.6
15°	1344.5	1345.8	1345.8	1351.9	1349.9	1356.7	1358.7	1358.7	1359.4	1367.5	1368.2
17.5°	1404.8	1404.8	1410.2	1410.2	1415.6	1417.0	1423.1	1423.8	1426.5	1433.9	1434.6
20°	1455.6	1458.3	1461.7	1465.8	1467.8	1471.9	1475.9	1480.0	1483.4	1489.5	1490.2
22.5°	1503.7	1506.4	1511.9	1514.6	1519.3	1522.0	1525.4	1530.2	1535.6	1543.7	1545.7
25°	1559.3	1562.0	1568.1	1572.2	1577.6	1581.7	1587.8	1593.9	1597.2	1605.4	1611.5
27.5°	1629.8	1637.9	1646.0	1648.1	1652.1	1661.6	1669.8	1677.9	1685.3	1689.4	1696.9
30°	1732.8	1732.8	1749.7	1749.7	1757.2	1766.0	1771.4	1780.2	1793.8	1797.8	1807.3
32.5°	1871.0	1874.4	1880.5	1898.8	1912.4	1916.4	1920.5	1933.4	1941.5	1951.7	1963.2
35°	2068.2	2071.6	2075.0	2092.6	2108.2	2112.3	2116.3	2124.5	2138.0	2155.6	2150.2
37.5°	2245.1	2247.1	2258.0	2277.6	2286.4	2297.3	2300.7	2315.6	2323.0	2339.3	2340.0
40°	2457.9	2453.1	2459.2	2481.6	2495.1	2494.5	2505.3	2532.4	2537.8	2545.3	2564.3
42.5°	2754.7	2737.1	2756.0	2763.5	2783.8	2796.7	2818.4	2836.7	2849.6	2878.0	2891.6
45°	3138.2	3119.9	3135.5	3138.9	3180.9	3193.8	3226.3	3250.7	3278.5	3311.0	3320.5
47.5°	3575.3	3541.5	3522.5	3543.5	3593.6	3614.6	3646.5	3669.5	3698.7	3715.6	3710.2
50°	4081.5	4000.2	3962.3	3951.4	3987.4	4017.2	4066.6	4077.5	4091.0	4090.4	4091.0
52.5°	4646.0	4561.3	4482.0	4427.2	4421.7	4461.7	4473.9	4476.6	4472.6	4442.1	4423.1
55°	5383.3	5377.2	5293.9	5180.0	5172.6	5167.8	5096.7	5087.9	5071.6	5024.9	4960.5
57.5°	6721.0	6788.8	6733.9	6731.2	6671.6	6632.3	6501.5	6436.4	6368.0	6241.3	6140.3
60°	8267.5	8365.7	8419.9	8443.6	8560.2	8560.2	8453.1	8361.0	8249.8	8056.7	7868.3
62.5°	9198.6	9284.6	9364.6	9490.0	9638.4	9704.1	9709.5	9627.5	9487.2	9267.0	9000.7
65°	9139.6	9203.3	9300.2	9447.9	9570.6	9688.5	9767.8	9742.7	9635.7	9415.4	9125.4
67.5°	8472.1	8565.0	8690.3	8826.5	8940.4	9051.5	9179.6	9189.1	9160.6	8951.2	8689.0
70°	7442.1	7561.3	7640.6	7812.1	7863.6	7976.1	8104.8	8166.5	8120.4	7959.1	7805.3
72.5°	6046.1	6140.3	6153.8	6079.3	6105.0	6132.8	6164.0	6019.7	5964.1	5748.6	5649.7
75°	3666.1	3542.1	3437.8	3334.1	3024.4	2914.6	2745.9	2413.1	2375.2	2146.8	1988.3
77.5°	1743.6	1691.4	1597.2	1439.4	1229.3	1028.0	853.2	693.2	633.6	521.8	444.5
80°	1459.7	1397.3	1312.6	1195.4	1048.3	902.0	763.7	645.1	525.9	428.3	342.2
82.5°	1339.1	1230.6	1111.4	1010.4	906.7	807.1	714.3	607.2	544.2	439.1	358.5
85°	677.0	593.0	480.5	404.6	341.5	277.8	240.6	205.3	183.0	145.7	126.7
87.5°	227.0	185.7	138.2	117.2	105.7	90.8	83.4	79.3	77.3	68.4	61.0
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):**

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1087.0	1087.0	1087.0	1087.0	1086.3	1086.3	1086.3	1086.3	1086.3	1086.3	1087.0
5°	1114.8	1114.8	1115.4	1117.5	1113.4	1114.8	1116.1	1114.1	1116.1	1114.1	1116.8
7.5°	1159.5	1161.5	1160.2	1162.9	1161.5	1165.6	1162.9	1160.8	1162.2	1162.2	1162.9
10°	1222.5	1225.2	1223.2	1224.5	1224.5	1227.2	1223.9	1224.5	1225.2	1223.9	1224.5
12.5°	1292.3	1293.7	1293.0	1297.0	1295.0	1297.0	1295.0	1297.7	1299.1	1300.4	1300.4
15°	1368.2	1369.6	1373.6	1372.9	1377.0	1375.7	1376.3	1372.9	1379.7	1375.7	1377.0
17.5°	1438.0	1437.3	1442.7	1444.8	1445.4	1446.1	1448.2	1445.4	1446.1	1448.2	1446.8
20°	1492.2	1497.0	1498.3	1503.7	1507.8	1509.1	1508.5	1510.5	1513.2	1510.5	1510.5
22.5°	1549.8	1556.6	1558.6	1562.0	1566.1	1566.8	1570.8	1572.9	1574.2	1573.5	1574.2
25°	1618.9	1623.7	1628.4	1635.2	1639.9	1640.6	1644.0	1646.7	1647.4	1646.7	1650.8
27.5°	1703.6	1709.7	1715.8	1724.0	1729.4	1730.7	1738.2	1738.2	1742.3	1744.3	1745.7
30°	1812.7	1814.8	1830.4	1838.5	1836.5	1845.9	1856.1	1855.4	1860.2	1861.5	1864.9
32.5°	1971.3	1971.3	1984.9	1995.0	2005.9	2002.5	2018.1	2015.4	2022.8	2026.9	2024.8
35°	2163.8	2170.5	2180.7	2186.8	2198.3	2204.4	2215.3	2221.4	2224.8	2224.1	2216.6
37.5°	2362.3	2373.2	2377.2	2392.1	2403.7	2413.8	2415.2	2408.4	2411.1	2397.6	2393.5
40°	2589.3	2604.9	2614.4	2636.8	2635.4	2648.3	2649.7	2630.0	2626.6	2609.0	2590.7
42.5°	2906.5	2928.2	2935.6	2952.6	2939.0	2945.1	2911.2	2903.1	2876.0	2847.5	2806.2
45°	3334.1	3323.2	3328.0	3323.2	3287.3	3260.9	3233.1	3193.1	3153.2	3098.3	3039.3
47.5°	3710.2	3715.6	3680.4	3658.0	3599.7	3562.5	3511.6	3441.8	3393.0	3319.2	3241.3
50°	4075.5	4015.1	3965.7	3914.2	3862.7	3794.2	3717.6	3656.0	3584.8	3492.7	3397.1
52.5°	4372.3	4294.3	4234.7	4161.5	4091.7	4015.8	3935.9	3846.4	3752.9	3660.7	3542.8
55°	4898.1	4785.0	4708.4	4580.3	4501.0	4394.6	4332.3	4216.4	4086.3	3964.3	3838.9
57.5°	6026.4	5857.0	5769.6	5697.1	5573.8	5398.9	5287.8	5097.4	4911.7	4781.6	4572.9
60°	7726.0	7553.9	7408.9	7237.4	7048.3	6811.2	6705.5	6481.1	6215.5	6000.7	5724.9
62.5°	8785.2	8547.3	8312.2	8071.6	7881.9	7696.2	7477.3	7251.0	6988.0	6696.0	6394.4
65°	8827.9	8542.6	8261.4	8016.0	7793.8	7552.5	7347.2	7117.5	6841.0	6540.1	6227.0
67.5°	8384.7	8065.5	7764.0	7494.9	7240.8	7017.2	6802.4	6586.2	6290.0	6038.0	5717.4
70°	7501.7	7210.3	6937.2	6630.9	6436.4	6185.0	5975.6	5747.9	5535.8	5300.0	4999.8
72.5°	5510.1	5290.5	4978.8	4848.7	4744.3	4478.0	4322.1	4303.1	4167.6	3885.0	3660.7
75°	2049.2	1744.3	1652.1	1707.0	1615.5	1646.0	1634.5	1569.5	1572.2	1524.1	1467.1
77.5°	401.2	372.7	350.4	356.4	331.4	320.5	343.6	336.8	324.6	328.0	322.6
80°	273.1	231.1	209.4	201.3	191.1	186.4	185.0	183.0	178.9	176.9	170.8
82.5°	269.0	199.9	157.9	135.5	127.4	123.3	119.9	119.3	117.9	117.2	119.3
85°	107.1	86.7	79.3	72.5	70.5	68.4	68.4	67.8	67.1	68.4	71.2
87.5°	52.2	44.0	40.0	36.6	35.2	34.6	34.6	35.2	35.9	38.6	44.0
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):**

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1085.6	1086.3	1084.9	1085.6	1084.9	1083.6	1082.9	1084.9	1084.3	1083.6	1083.6
5°	1113.4	1116.1	1114.8	1113.4	1113.4	1112.7	1112.7	1112.7	1112.0	1112.7	1110.7
7.5°	1161.5	1160.8	1160.8	1159.5	1158.1	1159.5	1158.8	1156.8	1157.4	1156.1	1154.1
10°	1223.2	1221.1	1224.5	1224.5	1221.8	1221.1	1219.8	1217.8	1217.8	1215.7	1215.7
12.5°	1296.4	1294.3	1299.1	1295.7	1291.6	1290.9	1286.9	1285.5	1287.6	1286.9	1285.5
15°	1370.9	1371.6	1373.6	1372.9	1368.2	1368.2	1362.8	1363.5	1359.4	1358.0	1354.6
17.5°	1443.4	1444.1	1442.1	1442.1	1438.7	1436.6	1430.5	1431.2	1428.5	1423.1	1419.0
20°	1508.5	1507.8	1503.1	1507.1	1500.3	1499.0	1493.6	1488.1	1489.5	1484.1	1475.9
22.5°	1572.2	1570.8	1569.5	1567.4	1564.0	1562.7	1556.6	1555.9	1549.1	1541.0	1534.2
25°	1646.0	1645.4	1643.3	1644.0	1637.2	1637.9	1627.1	1624.4	1620.3	1611.5	1606.1
27.5°	1741.6	1741.6	1736.2	1734.1	1732.1	1729.4	1719.9	1713.1	1703.0	1692.8	1682.0
30°	1858.8	1857.5	1856.1	1850.7	1843.2	1839.2	1822.2	1811.4	1797.8	1778.9	1762.6
32.5°	2026.2	2014.7	2005.2	1993.0	1980.8	1967.9	1941.5	1923.2	1901.5	1871.0	1845.3
35°	2212.6	2192.9	2182.7	2157.7	2134.6	2108.9	2077.0	2039.8	2009.9	1970.0	1927.9
37.5°	2366.4	2351.5	2324.4	2295.9	2263.4	2214.6	2178.7	2138.7	2086.5	2042.5	1991.6
40°	2556.1	2522.3	2483.6	2436.2	2391.5	2336.6	2287.1	2229.5	2165.8	2102.1	2035.7
42.5°	2755.4	2703.2	2639.5	2584.6	2516.8	2445.0	2380.6	2302.7	2221.4	2136.0	2047.2
45°	2958.7	2894.3	2809.6	2731.6	2637.5	2547.3	2455.2	2348.8	2237.6	2123.8	2012.0
47.5°	3145.0	3050.8	2954.6	2849.6	2741.1	2625.3	2494.5	2354.9	2208.5	2058.7	1919.1
50°	3291.4	3173.5	3052.2	2930.9	2798.1	2647.6	2482.9	2300.7	2120.4	1940.8	1780.2
52.5°	3420.8	3288.7	3139.6	2989.2	2825.2	2640.2	2434.2	2219.3	1999.8	1801.2	1621.0
55°	3671.6	3505.5	3309.0	3115.2	2907.8	2674.7	2417.9	2155.0	1902.2	1686.0	1494.2
57.5°	4352.6	4128.3	3824.0	3555.0	3292.1	2952.6	2590.7	2266.8	1944.9	1689.4	1475.9
60°	5425.3	5060.1	4711.8	4301.8	3876.2	3410.7	2925.5	2489.0	2096.7	1776.1	1519.3
62.5°	6047.4	5661.9	5213.9	4717.2	4165.6	3598.4	3041.3	2531.7	2101.4	1752.4	1467.8
65°	5879.4	5491.8	4999.1	4490.9	3904.0	3323.9	2771.0	2281.7	1864.2	1541.7	1269.3
67.5°	5380.6	4975.4	4512.5	3948.7	3387.6	2850.2	2346.1	1885.3	1515.9	1215.0	974.5
70°	4654.8	4294.3	3848.4	3328.7	2784.5	2301.3	1876.4	1461.0	1148.6	872.8	683.1
72.5°	3454.7	3135.5	2857.0	2422.6	2024.2	1645.4	1299.1	1016.5	747.5	565.2	435.1
75°	1450.2	1342.4	1297.0	1137.8	989.4	811.2	610.6	486.6	394.4	335.4	266.3
77.5°	351.7	351.7	330.7	309.7	284.6	257.5	227.7	203.3	191.1	180.3	171.4
80°	170.8	169.4	164.0	163.3	158.6	152.5	149.1	144.3	142.3	139.6	138.2
82.5°	119.9	119.3	117.2	119.9	119.3	122.0	123.3	124.0	124.0	124.7	125.4
85°	75.9	78.6	84.0	90.8	96.9	104.4	111.1	116.6	120.6	124.0	126.7
87.5°	48.1	54.9	59.0	69.1	79.3	90.8	103.7	109.1	113.8	114.5	110.5
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: VPL-F04-LED-E1-GL2-7050

**CANDELA DISTRIBUTION (continued):**

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1083.6	1082.9	1084.3	1082.9	1082.9	1082.2	1080.2	1078.2	1076.1	1075.4	1073.4
5°	1110.0	1110.0	1111.4	1108.7	1109.3	1106.6	1100.5	1093.7	1087.6	1082.2	1076.1
7.5°	1154.7	1152.7	1153.4	1152.7	1151.3	1145.9	1132.4	1115.4	1099.2	1082.2	1068.7
10°	1214.4	1210.3	1210.3	1208.9	1206.9	1199.5	1171.0	1137.1	1103.2	1072.7	1050.4
12.5°	1280.8	1281.5	1276.0	1272.6	1269.3	1253.7	1211.0	1156.8	1103.2	1054.4	1018.5
15°	1349.9	1349.2	1343.1	1341.1	1333.6	1310.6	1246.2	1166.9	1090.4	1018.5	965.0
17.5°	1412.2	1409.5	1403.4	1399.4	1391.2	1360.7	1269.9	1162.2	1056.5	962.3	895.2
20°	1469.2	1465.8	1460.4	1452.9	1444.8	1400.7	1278.7	1137.8	1002.9	895.2	827.4
22.5°	1528.1	1520.7	1514.6	1504.4	1495.6	1436.6	1272.6	1094.4	941.9	820.6	748.1
25°	1593.9	1585.0	1572.2	1560.0	1546.4	1465.8	1255.7	1040.2	868.8	740.0	666.8
27.5°	1665.0	1652.1	1635.2	1619.6	1597.9	1487.5	1226.6	979.9	788.8	660.0	584.1
30°	1740.2	1716.5	1695.5	1671.8	1644.0	1497.6	1184.6	905.4	700.7	578.7	502.8
32.5°	1813.4	1781.6	1750.4	1715.8	1677.9	1493.6	1124.9	817.3	612.6	502.8	439.1
35°	1888.0	1841.9	1798.5	1751.8	1705.7	1473.2	1042.9	719.7	529.3	439.8	393.7
37.5°	1938.8	1881.2	1823.6	1767.3	1711.8	1429.2	933.8	610.6	454.0	394.4	361.2
40°	1964.5	1894.1	1823.6	1753.8	1685.3	1356.0	806.4	511.0	400.5	360.5	336.8
42.5°	1957.1	1869.7	1782.2	1699.6	1615.5	1239.4	668.2	429.0	363.2	334.1	313.1
45°	1895.4	1791.1	1691.4	1604.0	1499.0	1089.7	548.9	378.1	334.8	312.4	292.7
47.5°	1779.5	1663.0	1541.0	1442.1	1343.8	916.2	456.7	346.3	309.7	291.4	271.7
50°	1631.8	1497.0	1375.0	1267.9	1171.7	754.2	393.7	319.2	289.4	273.8	252.8
52.5°	1469.2	1324.1	1213.0	1100.5	1006.3	629.5	349.7	289.4	269.7	253.4	236.5
55°	1334.3	1200.1	1087.0	973.8	878.9	550.9	313.1	266.3	251.4	234.5	220.9
57.5°	1298.4	1145.2	1021.9	914.8	817.3	502.8	286.7	245.3	235.1	222.3	207.4
60°	1313.3	1144.6	1006.3	889.1	786.8	464.2	267.0	231.1	223.0	211.4	195.8
62.5°	1259.8	1081.5	941.9	817.3	720.4	415.4	252.8	224.3	218.9	203.3	185.7
65°	1073.4	910.1	775.9	668.2	584.8	349.7	241.2	230.4	225.0	197.9	178.9
67.5°	817.3	681.0	573.3	492.7	432.3	289.4	238.5	250.7	239.9	200.6	176.9
70°	565.2	462.2	393.0	344.3	306.3	244.0	247.3	273.1	257.5	209.4	188.4
72.5°	358.5	299.5	265.6	247.3	229.0	206.0	245.3	270.4	249.4	210.8	188.4
75°	229.7	205.3	193.8	187.0	181.6	179.6	216.2	222.3	200.6	183.0	175.5
77.5°	162.6	158.6	156.5	155.9	156.5	161.3	178.9	167.4	145.7	146.4	150.4
80°	137.6	137.6	136.2	136.9	138.2	140.3	143.0	123.3	111.8	120.6	134.2
82.5°	126.0	128.1	129.4	130.8	132.8	130.1	121.3	93.5	90.1	117.2	131.5
85°	128.1	128.1	128.8	130.1	130.8	117.2	101.0	70.5	69.1	131.5	124.0
87.5°	109.8	108.4	103.7	100.3	95.6	80.6	67.1	39.3	40.7	81.3	86.7
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: P145036

CATALOG NUMBER: VPL-F04-LED-E1-GL2-7050

**CANDELA DISTRIBUTION (continued):**

	175°	180°
0°	1078.2	1078.2
2.5°	1072.7	1072.7
5°	1072.7	1072.7
7.5°	1063.9	1061.2
10°	1038.2	1034.8
12.5°	998.9	995.5
15°	938.6	934.5
17.5°	863.3	856.6
20°	784.7	775.2
22.5°	706.1	698.7
25°	625.5	618.7
27.5°	546.2	539.4
30°	473.0	470.3
32.5°	418.8	416.1
35°	378.8	377.5
37.5°	351.7	350.4
40°	328.0	326.6
42.5°	306.3	304.3
45°	284.6	285.3
47.5°	262.9	262.3
50°	244.0	244.0
52.5°	228.4	227.7
55°	214.1	213.5
57.5°	199.9	199.2
60°	187.7	185.7
62.5°	176.2	174.8
65°	168.7	168.1
67.5°	163.3	161.3
70°	162.0	156.5
72.5°	157.9	151.1
75°	148.4	145.0
77.5°	130.8	126.7
80°	101.0	93.5
82.5°	84.7	73.2
85°	62.3	57.6
87.5°	45.4	35.9
90°	0.0	0.0

(END OF REPORT)