

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: P145916

Luminaire Tested: **VPL-F02-LED-E1-CPL-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145916
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33704)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VPL-F02-LED-E1-CPL-7050
Description: VALET LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - 90° FORWARD THROW PERIMETER LEFT
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4563.1 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

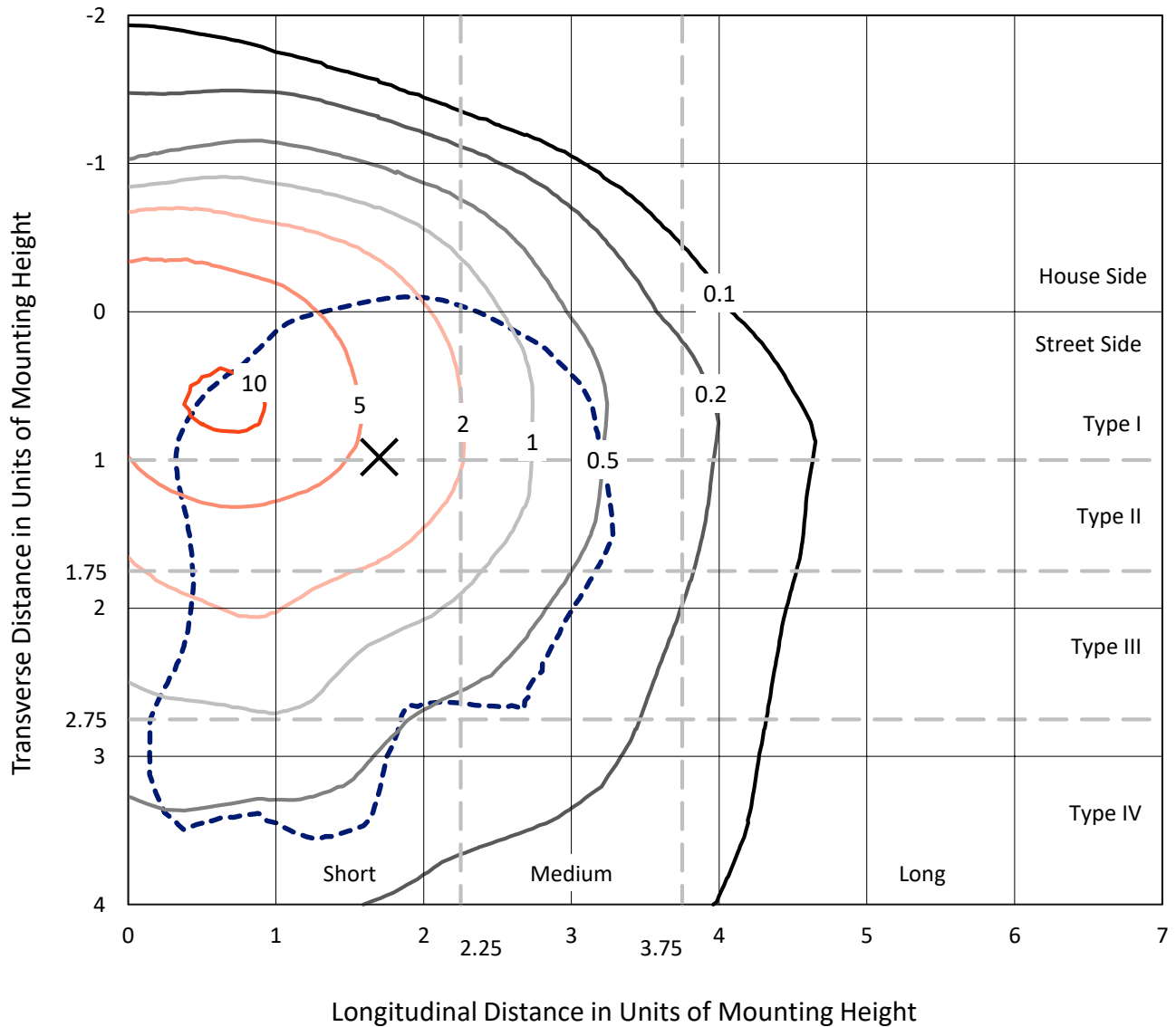
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P145916
 CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

Iso-Footcandle Lines of Horizontal Illumination

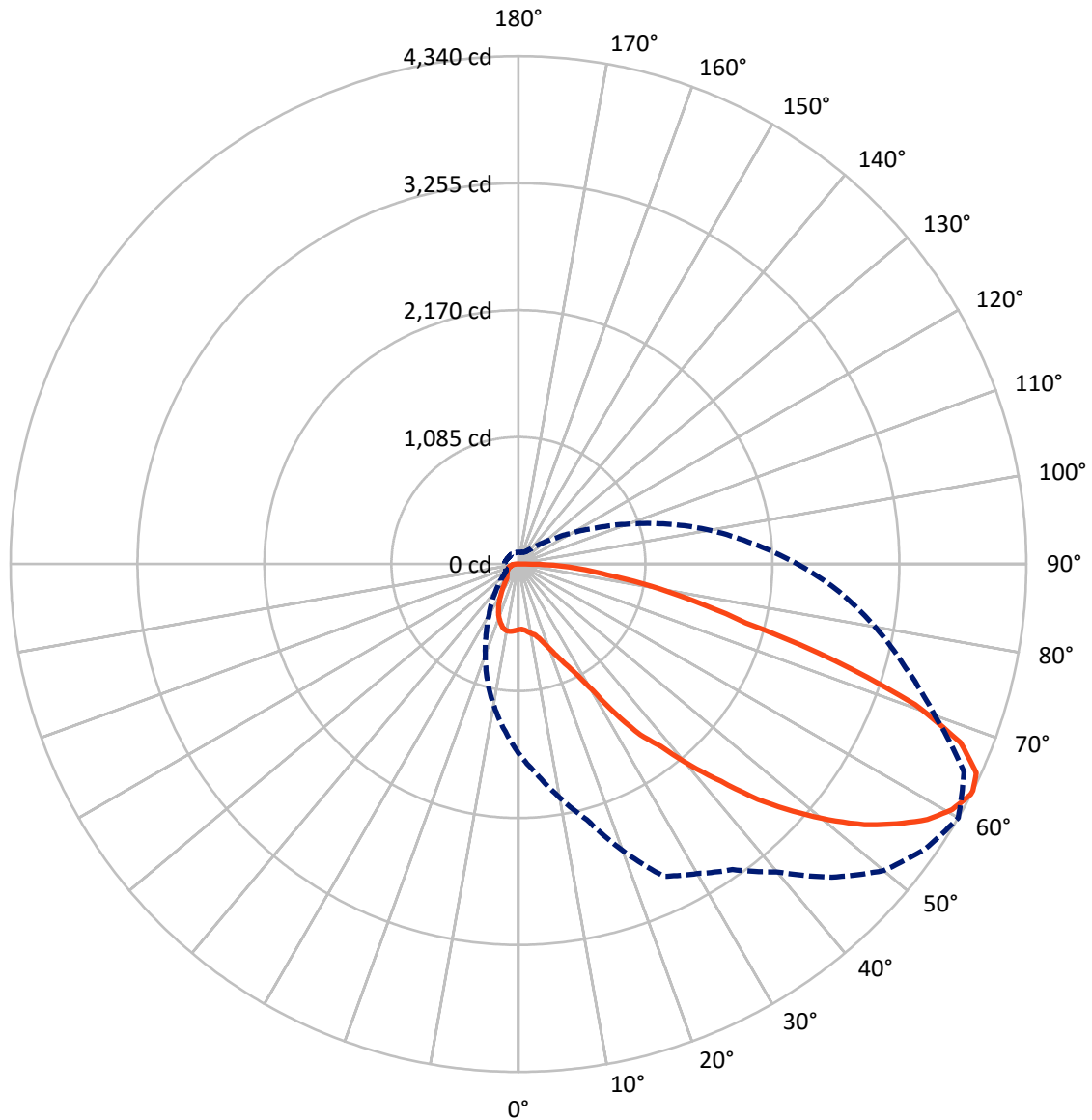
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P145916
CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	955.2	0.0	955.2
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	3607.9	0.0	3607.9
	% Fixture	79.1	0.0	79.1
Total	Lumens	4563.1	0.0	4563.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	1.2
10°-20°	171.8	3.8
20°-30°	303.8	6.7
30°-40°	479.6	10.5
40°-50°	705.2	15.5
50°-60°	929.0	20.4
60°-70°	1035.5	22.7
70°-80°	680.3	14.9
80°-90°	202.9	4.4
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°	4563.1	100.0
0°-180°	4563.1	100.0



REPORT NUMBER: P145916

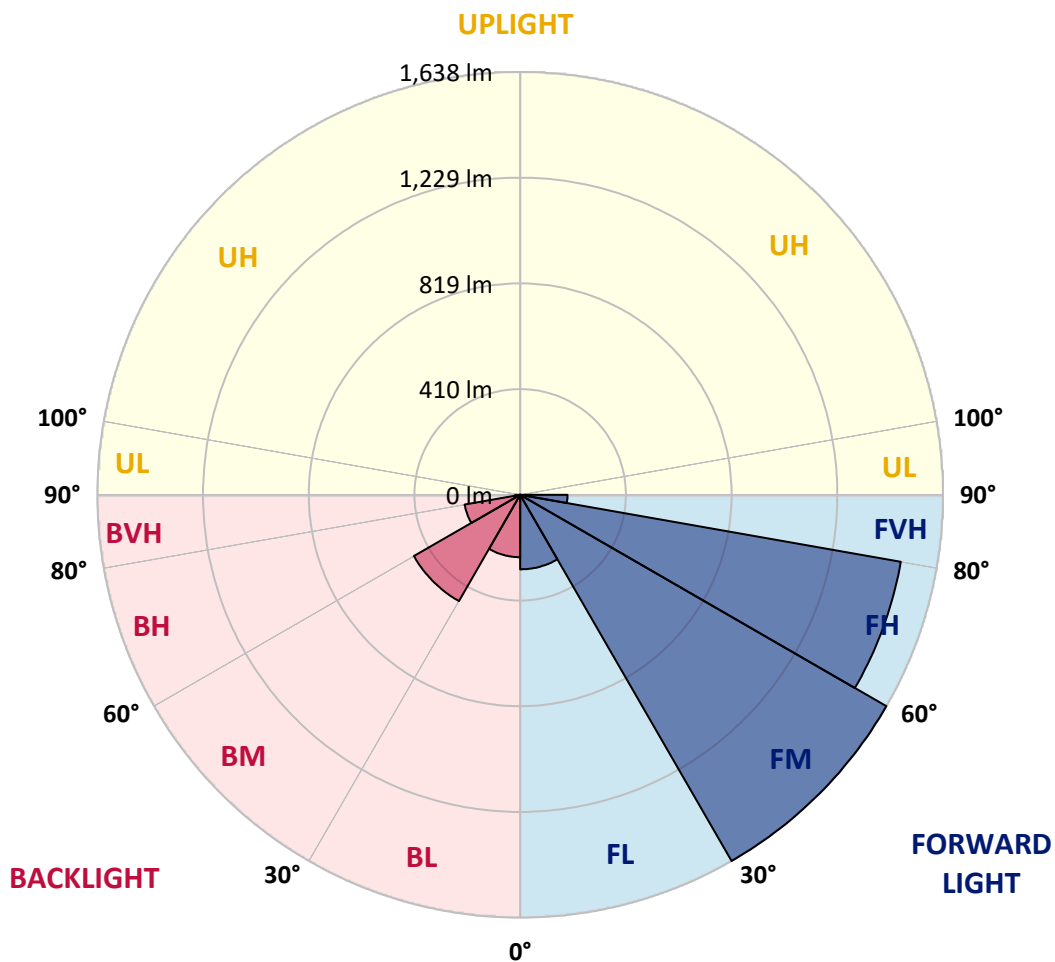
CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	288.8	6.3			
FM	(30°-60°)	1638.3	35.9			
FH	(60°-80°)	1497.5	32.8			G1/1800
FVH	(80°-90°)	183.4	4.0			G2/225
BL	(0°-30°)	241.8	5.3	B1/500		
BM	(30°-60°)	475.6	10.4	B1/1000		
BH	(60°-80°)	218.3	4.8	B1/500		G1/500
BVH	(80°-90°)	19.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





REPORT NUMBER: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	559.7	560.1	559.1	558.7	558.1	558.4	558.4	557.7	557.7	558.1	557.0
5°	557.0	557.7	557.4	558.1	558.7	559.7	560.8	561.8	562.8	564.2	564.5
7.5°	554.0	556.0	556.4	558.4	560.8	563.5	566.9	570.6	575.7	577.0	580.1
10°	555.7	559.4	561.4	565.5	569.2	574.3	580.4	584.1	590.6	593.0	597.4
12.5°	568.9	571.6	574.3	579.1	584.5	590.9	597.7	603.5	610.2	612.6	614.3
15°	594.0	596.7	599.7	604.5	610.2	618.0	627.9	635.0	643.1	649.2	653.6
17.5°	628.9	628.9	636.0	637.3	648.5	660.4	672.6	686.5	694.9	700.0	708.2
20°	679.0	679.0	688.5	692.9	702.4	717.6	734.2	749.5	761.7	771.9	779.3
22.5°	765.8	762.0	770.2	769.1	780.7	803.4	819.6	828.1	844.4	850.5	860.3
25°	866.4	879.6	888.4	888.4	893.2	916.5	930.1	936.5	951.4	947.0	957.2
27.5°	989.7	1025.3	1058.2	1071.7	1065.3	1091.0	1095.8	1101.9	1100.2	1089.7	1086.6
30°	1111.0	1173.7	1224.9	1256.0	1292.0	1341.8	1341.8	1349.9	1332.3	1303.1	1285.9
32.5°	1195.1	1275.7	1354.0	1418.7	1479.7	1555.9	1588.1	1632.8	1640.3	1651.5	1612.8
35°	1264.2	1377.3	1461.4	1558.6	1633.2	1710.4	1796.1	1873.7	1925.2	1916.8	1901.5
37.5°	1311.6	1457.0	1574.2	1688.4	1801.9	1890.3	1971.7	2073.0	2171.6	2191.2	2149.9
40°	1344.8	1513.2	1674.5	1814.8	1957.4	2090.2	2189.2	2297.9	2452.5	2517.8	2484.0
42.5°	1360.7	1557.3	1737.2	1915.7	2096.3	2264.1	2388.1	2537.2	2720.5	2832.3	2795.0
45°	1367.5	1584.4	1788.0	1991.3	2208.2	2415.2	2575.1	2744.2	2950.5	3130.1	3136.9
47.5°	1365.8	1598.9	1822.9	2045.2	2295.9	2536.8	2751.3	2943.1	3176.9	3365.6	3435.7
50°	1361.1	1604.0	1843.9	2077.7	2351.1	2625.9	2867.5	3095.6	3356.8	3595.7	3702.4
52.5°	1360.7	1605.0	1854.4	2095.7	2383.7	2680.5	2940.4	3209.7	3496.1	3745.8	3912.1
55°	1368.9	1611.1	1865.9	2108.2	2401.3	2711.3	2981.4	3281.2	3556.7	3840.3	4055.1
57.5°	1401.7	1639.6	1893.4	2129.5	2420.9	2735.7	3013.2	3301.9	3574.7	3879.6	4138.1
60°	1473.9	1692.8	1941.2	2168.9	2472.1	2799.8	3043.4	3272.8	3540.8	3868.4	4150.0
62.5°	1586.4	1778.2	2007.9	2241.4	2576.1	2921.4	3055.9	3206.0	3457.1	3804.0	4098.8
63°	1615.2	1800.9	2025.5	2261.4	2606.3	2944.4	3054.9	3188.4	3434.0	3785.1	4075.8
65°	1735.5	1905.9	2107.5	2356.9	2743.5	3017.6	3018.0	3084.7	3316.5	3680.4	3981.3
67.5°	1916.4	2079.1	2234.9	2482.9	2895.3	3054.2	2908.5	2858.0	3063.0	3458.8	3741.4
70°	2037.0	2238.0	2325.4	2516.2	2916.0	3009.8	2735.4	2567.0	2737.1	3067.8	3318.8
72.5°	2040.1	2269.1	2294.6	2374.5	2722.5	2797.7	2437.2	2209.2	2311.5	2589.0	2721.1
75°	1822.2	2110.2	2058.1	2028.6	2217.0	2249.2	1971.3	1876.4	2007.6	2171.6	2105.5
77.5°	1354.6	1737.5	1631.5	1506.1	1574.5	1579.3	1588.1	1767.0	1927.9	1995.0	1898.8
80°	840.6	1276.4	1195.1	988.4	1014.8	1092.7	1326.5	1642.6	1818.8	1867.0	1674.5
82.5°	506.9	938.9	895.5	754.2	787.4	981.6	1240.1	1327.5	1386.8	1382.4	1183.5
85°	371.4	637.7	696.6	707.1	825.1	953.1	947.7	883.0	846.7	745.1	636.0
87.5°	116.9	329.0	390.3	455.0	498.4	471.7	463.9	400.8	287.0	242.6	266.7
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: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	557.0	558.4	559.1	558.7	559.1	559.1	561.1	560.4	561.1	560.8	562.8
5°	565.5	567.5	569.2	569.2	569.6	570.3	573.0	573.0	574.3	577.0	578.4
7.5°	582.1	584.8	585.2	585.8	587.9	586.9	588.5	589.2	590.2	591.6	593.3
10°	599.4	603.1	603.1	602.8	603.1	600.4	601.4	599.4	599.7	601.8	603.8
12.5°	618.7	620.7	619.4	618.4	618.4	613.3	612.6	609.9	608.5	608.9	609.6
15°	657.3	655.6	655.3	653.6	647.5	643.8	641.1	632.6	628.2	625.8	621.8
17.5°	708.8	709.8	708.2	706.5	697.7	685.1	679.7	670.5	664.4	658.3	650.9
20°	784.1	777.3	776.6	771.2	759.0	741.4	728.1	713.2	704.8	696.0	688.2
22.5°	867.1	860.0	855.2	844.7	826.7	804.4	782.4	763.4	750.5	744.1	738.6
25°	959.2	955.2	947.4	920.6	906.4	880.6	856.6	837.9	823.4	817.9	808.4
27.5°	1069.7	1072.7	1058.2	1033.1	1015.1	978.9	958.2	926.0	913.8	894.2	882.0
30°	1271.0	1251.3	1226.6	1188.3	1152.0	1103.2	1069.0	1035.5	1017.5	991.1	958.6
32.5°	1600.0	1525.1	1458.7	1377.3	1300.4	1238.1	1188.6	1146.3	1118.8	1075.1	1019.9
35°	1865.3	1793.1	1683.3	1565.1	1464.1	1384.1	1321.8	1281.8	1226.9	1157.1	1077.1
37.5°	2059.7	1976.7	1874.1	1783.6	1673.5	1584.4	1500.0	1417.0	1339.7	1234.0	1132.0
40°	2375.5	2263.0	2094.0	1987.2	1897.1	1776.5	1697.5	1585.7	1468.2	1331.9	1184.2
42.5°	2687.9	2538.9	2385.7	2263.0	2135.0	2004.2	1895.8	1745.7	1589.5	1412.9	1231.0
45°	3050.8	2868.2	2667.9	2496.5	2365.0	2211.2	2072.3	1888.0	1688.7	1479.3	1271.6
47.5°	3336.8	3155.9	2929.9	2757.1	2579.9	2406.4	2226.1	1998.8	1762.6	1533.5	1309.6
50°	3610.9	3436.4	3196.2	2984.1	2780.4	2571.0	2353.2	2077.4	1820.5	1575.9	1339.7
52.5°	3856.9	3701.7	3442.2	3188.7	2961.0	2719.8	2449.7	2150.9	1876.1	1619.6	1363.5
55°	4065.3	3919.9	3687.2	3371.7	3113.2	2846.2	2540.9	2218.0	1934.7	1665.4	1380.7
57.5°	4205.2	4121.2	3872.5	3532.6	3238.2	2953.9	2609.7	2285.4	1989.6	1693.8	1388.2
60°	4270.3	4259.1	4048.7	3678.0	3349.3	3038.0	2696.4	2356.9	2025.9	1706.7	1377.7
62.5°	4256.7	4336.7	4182.9	3777.6	3420.2	3090.5	2752.0	2387.7	2016.7	1675.5	1331.3
63°	4244.2	4340.1	4201.8	3787.4	3425.9	3095.6	2757.4	2384.0	2008.2	1661.6	1315.3
65°	4152.4	4300.1	4206.6	3769.8	3399.5	3081.0	2733.0	2325.4	1923.9	1574.2	1225.2
67.5°	3927.4	4075.5	4023.6	3575.7	3228.4	2924.4	2562.6	2125.8	1717.2	1388.5	1058.2
70°	3462.8	3595.3	3533.3	3139.3	2816.7	2601.2	2257.3	1768.0	1399.0	1116.1	805.4
72.5°	2739.1	2832.3	2845.8	2532.8	2285.7	2156.3	1818.5	1333.6	1021.9	777.3	522.8
75°	2028.2	2006.6	2011.0	1836.1	1735.5	1680.9	1359.4	914.8	688.5	475.0	310.0
77.5°	1704.7	1548.8	1416.0	1367.5	1250.3	1216.4	896.5	561.4	401.9	284.3	176.5
80°	1386.2	1150.0	956.9	871.1	825.4	832.2	496.0	299.2	210.4	154.8	110.5
82.5°	947.7	768.1	605.8	526.2	518.1	525.9	257.8	146.7	111.1	89.1	69.5
85°	560.4	527.6	471.0	418.1	399.8	377.5	191.8	105.0	57.3	47.4	39.0
87.5°	242.3	297.5	304.6	303.3	282.2	226.7	70.5	27.1	24.1	12.2	9.8
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: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	562.8	563.1	562.5	563.1	565.5	565.5	565.2	565.8	566.2	568.2	567.5
5°	579.7	580.1	580.4	582.8	584.5	586.5	585.8	586.5	587.9	588.2	588.9
7.5°	595.3	597.4	600.1	601.1	604.1	604.8	607.9	608.2	608.9	607.5	606.2
10°	606.2	608.2	611.6	613.3	618.7	619.4	621.8	622.4	623.8	622.8	621.8
12.5°	611.6	613.3	617.0	620.4	627.9	630.2	634.3	636.7	638.4	637.3	634.0
15°	622.8	622.4	624.5	627.2	634.0	638.4	644.1	647.2	649.2	647.5	643.1
17.5°	648.5	643.8	643.8	642.1	647.2	648.2	650.6	652.2	651.6	646.5	639.4
20°	684.1	677.0	672.6	668.5	666.8	658.3	653.9	647.8	642.4	633.3	625.1
22.5°	730.2	725.1	714.9	705.8	692.9	675.6	657.0	641.1	629.2	616.7	602.8
25°	800.0	788.5	773.9	752.2	735.6	705.1	673.9	643.8	618.4	598.7	575.3
27.5°	865.7	841.3	813.9	780.0	749.5	708.8	669.2	634.3	601.1	569.6	542.8
30°	920.6	878.2	833.5	786.1	742.7	693.6	647.5	607.9	570.3	533.0	507.6
32.5°	961.9	900.9	841.3	780.7	727.1	669.5	616.7	574.3	531.6	492.3	462.8
35°	999.2	916.9	838.9	766.1	702.7	639.0	582.1	534.7	487.9	445.9	412.0
37.5°	1026.0	922.3	828.8	745.1	671.6	601.8	540.1	489.6	439.5	396.8	359.5
40°	1046.6	919.6	809.5	712.9	628.9	556.4	496.0	443.2	393.0	350.4	311.4
42.5°	1060.5	909.4	780.3	676.3	593.3	517.4	458.4	402.9	352.7	308.0	265.0
45°	1078.5	905.4	762.4	648.9	561.1	484.5	421.5	367.3	315.1	268.4	227.4
47.5°	1095.4	903.0	747.8	626.2	532.0	454.7	392.4	335.4	282.9	237.2	199.9
50°	1105.6	899.3	732.6	598.7	499.4	424.2	364.6	307.0	254.1	210.4	177.2
52.5°	1108.7	891.8	712.6	567.5	471.3	398.1	336.1	278.5	227.7	188.4	157.6
55°	1106.3	877.2	685.5	542.1	442.5	369.3	307.3	251.4	205.3	168.4	143.7
57.5°	1094.8	848.1	650.6	509.9	409.6	333.1	272.1	220.9	179.9	150.4	131.5
60°	1069.0	806.1	607.9	464.9	362.5	290.0	232.4	188.4	153.8	132.5	119.9
62.5°	1012.8	745.4	545.9	401.2	299.5	232.8	182.6	150.1	126.7	115.5	108.1
63°	996.2	724.4	527.6	384.2	288.7	219.9	171.4	142.0	121.0	111.8	105.7
65°	908.7	627.5	445.9	309.0	223.6	166.7	130.8	111.5	100.3	96.9	95.2
67.5°	744.7	488.3	313.8	207.4	150.1	115.2	96.6	89.1	85.0	84.7	85.7
70°	526.2	323.9	194.1	132.8	103.3	87.1	80.0	76.6	74.5	75.2	77.3
72.5°	342.2	190.1	122.7	97.2	84.0	76.6	71.5	70.5	69.8	69.1	69.8
75°	180.9	118.9	92.8	81.3	73.5	67.4	64.0	62.7	63.0	63.0	63.0
77.5°	112.2	90.5	79.3	71.8	65.7	59.6	56.2	55.2	55.6	56.2	56.6
80°	86.1	78.9	69.8	64.4	55.6	50.5	48.8	48.5	49.1	49.1	50.1
82.5°	63.0	61.0	57.6	50.8	44.0	40.7	40.3	41.7	40.3	40.0	40.7
85°	36.9	34.6	37.6	32.2	29.5	27.4	28.8	31.5	32.9	31.2	30.5
87.5°	11.9	8.1	11.9	13.2	11.9	10.2	12.9	15.2	15.6	14.9	16.9
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: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	567.2	569.6	567.2	568.2	567.9	567.2	568.2	566.9	566.2	568.2	567.9
5°	588.5	588.9	585.8	586.2	585.8	583.1	583.1	581.8	580.1	580.4	579.7
7.5°	605.8	605.2	602.8	601.8	598.7	596.7	595.3	593.3	591.9	590.6	589.9
10°	619.0	617.3	615.7	612.6	609.6	607.9	604.1	601.1	600.1	598.0	596.7
12.5°	630.6	627.5	624.8	621.1	617.3	614.6	610.2	607.9	606.2	603.5	601.4
15°	637.0	631.2	626.2	620.4	616.3	612.3	607.2	606.2	603.8	601.1	597.4
17.5°	629.2	621.1	611.6	605.5	599.4	593.3	588.2	588.2	587.2	584.1	577.7
20°	613.3	601.1	589.9	580.1	574.0	565.2	562.1	557.4	554.0	548.6	540.4
22.5°	587.2	574.3	559.7	549.9	539.4	529.6	523.5	516.0	513.3	504.5	493.7
25°	558.1	539.4	523.8	511.0	496.4	484.9	476.4	466.2	459.5	451.0	437.4
27.5°	523.5	504.2	486.6	472.3	457.1	441.2	425.6	413.7	401.5	391.7	383.9
30°	486.2	466.2	444.5	427.9	410.3	390.3	377.5	361.5	352.0	341.2	331.0
32.5°	437.4	419.8	394.4	375.1	353.4	337.8	327.3	312.1	300.9	291.7	286.0
35°	383.9	357.5	332.1	317.5	302.6	290.0	275.5	263.6	256.2	246.7	241.6
37.5°	325.6	294.8	273.1	260.2	245.0	238.9	229.7	222.6	215.8	209.4	205.3
40°	273.4	245.0	225.3	214.5	204.3	197.5	191.8	188.7	184.3	179.2	176.2
42.5°	230.1	207.4	188.1	177.9	170.1	169.4	165.7	163.3	161.6	158.6	153.8
45°	196.2	175.5	158.9	150.8	147.4	147.7	147.7	145.7	145.7	144.7	141.6
47.5°	173.5	154.8	142.6	137.2	135.9	136.2	135.2	134.5	134.9	134.5	132.8
50°	155.9	139.9	129.8	127.7	127.4	127.1	125.7	124.7	124.4	125.0	124.7
52.5°	137.9	124.7	118.9	118.3	118.6	118.6	118.3	117.9	118.6	119.3	118.3
55°	127.7	118.3	114.5	114.5	114.5	114.5	114.2	113.8	114.9	115.9	114.2
57.5°	118.3	111.5	110.1	110.1	110.1	109.4	109.4	109.8	111.1	113.2	111.1
60°	111.1	107.7	107.7	108.1	107.7	106.4	105.4	105.4	107.1	109.8	108.1
62.5°	104.4	102.7	103.3	103.0	102.3	100.6	99.3	99.3	101.3	104.0	104.7
63°	102.7	101.3	102.0	101.6	101.0	99.6	98.3	98.3	100.0	102.7	103.7
65°	95.2	95.6	95.9	96.2	95.9	95.6	93.9	93.2	94.5	96.6	97.9
67.5°	86.4	87.1	87.8	89.5	88.8	88.8	87.8	87.1	87.4	88.4	89.5
70°	78.3	78.9	80.0	80.6	81.0	81.3	80.6	79.6	80.0	80.3	81.0
72.5°	70.5	71.2	71.8	73.2	73.2	73.2	72.5	71.8	72.2	72.8	73.5
75°	63.4	63.7	64.4	65.4	65.7	65.1	65.1	64.4	64.7	65.7	66.4
77.5°	56.2	55.6	55.9	56.6	57.6	57.6	57.9	57.6	58.3	59.0	59.6
80°	48.1	47.4	46.8	47.1	48.5	50.1	51.8	51.8	52.9	53.2	54.2
82.5°	38.3	37.6	37.3	38.3	37.9	40.3	44.0	46.1	47.4	48.8	49.5
85°	29.8	28.1	28.8	28.8	28.1	31.9	35.2	37.9	38.3	40.3	40.7
87.5°	17.6	16.9	16.3	15.6	18.0	21.7	24.7	25.8	26.4	27.4	28.5
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: P145916

CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4
2.5°	565.2	567.9	567.2	566.9	567.2	566.9	565.8	566.2	565.5	565.8	565.2
5°	576.0	577.4	576.4	574.7	574.7	572.3	570.6	569.2	567.5	566.9	565.5
7.5°	586.5	585.5	584.1	581.1	579.4	576.4	574.0	571.3	569.6	567.5	565.2
10°	593.0	590.9	588.2	584.5	579.7	577.0	573.6	569.6	567.5	566.5	564.2
12.5°	596.0	590.6	586.2	579.4	572.6	567.5	563.8	559.7	558.7	557.4	555.7
15°	588.9	581.1	569.9	560.8	552.0	544.8	541.8	537.4	536.4	536.0	535.7
17.5°	564.8	553.0	542.1	529.9	522.1	515.7	513.0	512.0	510.3	509.6	509.9
20°	526.2	516.0	505.2	501.1	492.0	490.3	486.2	483.5	480.5	479.4	477.8
22.5°	481.1	468.6	461.8	458.8	455.0	446.2	444.2	441.5	437.4	434.4	433.7
25°	428.6	418.5	418.1	411.0	408.0	403.2	397.8	394.4	392.0	388.3	385.6
27.5°	375.1	371.4	364.9	359.5	357.5	354.8	346.6	344.9	342.2	339.2	336.1
30°	325.3	322.6	316.5	311.4	308.3	302.9	295.1	295.8	290.4	286.3	283.6
32.5°	276.8	274.8	269.0	267.7	257.8	255.1	247.0	240.9	235.5	231.4	228.0
35°	233.1	227.7	228.0	221.9	216.5	208.4	199.9	192.1	187.7	185.7	182.6
37.5°	201.6	196.5	191.4	184.7	178.6	172.8	167.7	165.3	162.6	163.3	163.7
40°	173.1	169.4	165.7	160.9	157.2	154.8	153.5	153.5	153.8	155.5	156.9
42.5°	152.8	149.8	147.7	146.0	146.7	146.7	147.7	149.4	151.1	153.5	154.8
45°	139.3	137.6	136.9	137.6	139.6	141.3	143.7	146.4	149.1	151.5	152.5
47.5°	131.1	130.1	130.1	131.8	134.9	137.6	141.3	144.0	147.1	149.1	149.8
50°	122.3	122.0	122.0	123.3	126.0	129.4	133.2	135.9	138.6	140.3	141.0
52.5°	117.2	116.2	115.9	117.6	119.9	123.3	127.1	129.8	131.8	133.2	133.5
55°	112.8	111.8	111.1	113.2	115.9	118.9	123.3	126.4	128.4	130.1	131.5
57.5°	109.1	108.1	107.4	109.8	112.5	116.2	119.9	123.3	126.0	128.1	129.4
60°	106.1	104.7	104.0	106.7	109.4	113.2	116.9	120.6	124.4	126.7	127.4
62.5°	102.3	101.3	100.3	102.0	103.3	106.1	109.4	113.2	116.6	118.9	118.9
63°	101.3	101.0	99.6	101.0	102.3	104.7	108.1	111.5	114.9	117.6	117.2
65°	96.9	96.9	96.2	97.6	98.9	101.3	104.0	107.7	110.8	112.8	113.2
67.5°	89.8	90.1	90.8	92.2	94.9	97.2	100.3	103.7	106.4	107.7	108.4
70°	81.7	82.3	83.7	85.7	88.1	90.1	92.2	95.6	97.9	99.3	100.0
72.5°	73.9	75.6	76.6	78.3	79.6	81.7	83.4	86.7	88.8	89.8	91.5
75°	66.7	68.1	68.8	69.8	71.2	71.8	73.9	75.2	77.9	79.3	81.3
77.5°	60.0	60.7	61.7	63.4	63.7	64.7	65.4	67.4	68.8	70.1	71.8
80°	53.9	54.6	55.9	56.9	57.3	57.9	58.3	57.9	57.6	56.6	57.9
82.5°	48.5	49.1	50.8	51.8	52.9	52.9	52.5	48.8	47.1	47.8	48.8
85°	40.0	40.7	42.4	44.4	44.7	44.4	44.7	41.0	38.6	37.6	38.6
87.5°	25.1	24.4	30.2	32.9	30.8	31.5	31.9	29.8	27.8	23.7	24.7
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: P145916
 CATALOG NUMBER: VPL-F02-LED-E1-CPL-7050

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	560.4	0°
2.5°	565.8	563.5	563.8	564.5	564.5	565.5	564.2	562.5	563.5	561.8	561.4	2.5°
5°	565.5	562.5	562.5	563.1	562.5	563.1	562.1	560.4	561.4	559.4	559.1	5°
7.5°	564.2	562.5	563.1	563.8	562.8	563.1	562.8	560.4	560.8	559.7	557.4	7.5°
10°	563.5	562.5	563.8	565.8	565.8	566.2	565.2	562.5	560.8	559.7	557.7	10°
12.5°	556.4	557.7	560.4	565.2	566.9	569.6	570.9	569.6	570.3	568.9	568.2	12.5°
15°	536.0	539.4	543.8	550.9	556.0	562.1	569.6	573.0	579.4	584.5	587.9	15°
17.5°	511.6	514.0	518.7	526.9	533.3	545.5	555.7	567.2	579.7	593.3	605.2	17.5°
20°	481.5	479.8	487.2	496.0	507.2	520.8	535.7	553.0	573.6	595.3	616.0	20°
22.5°	437.1	437.1	444.9	455.4	468.9	484.5	505.2	523.8	550.9	582.4	612.9	22.5°
25°	386.3	387.3	392.7	404.6	414.1	436.4	455.7	479.8	512.3	546.9	587.5	25°
27.5°	332.1	338.8	337.5	350.0	362.5	384.6	411.0	435.4	471.7	508.6	555.0	27.5°
30°	282.9	281.9	281.6	296.5	309.0	329.0	350.7	381.5	418.1	465.6	519.1	30°
32.5°	221.9	225.7	228.4	237.2	250.7	269.4	292.7	324.9	369.0	416.8	477.1	32.5°
35°	183.3	184.3	188.1	193.1	205.0	220.6	245.0	273.4	312.1	361.5	425.6	35°
37.5°	164.3	165.3	169.4	174.2	182.6	194.1	210.8	232.8	268.4	314.4	374.1	37.5°
40°	158.2	159.3	161.6	166.0	173.8	183.6	196.9	213.8	239.6	275.5	327.6	40°
42.5°	155.5	155.5	155.9	159.3	167.0	178.6	192.8	208.0	227.0	254.1	296.5	42.5°
45°	152.5	152.5	152.1	154.5	160.6	173.8	191.1	209.7	230.4	253.8	287.0	45°
47.5°	149.8	149.1	148.4	149.4	154.5	168.1	188.1	210.8	237.2	266.3	299.9	47.5°
50°	140.3	140.3	139.9	140.3	145.0	159.3	182.3	209.7	243.3	280.9	321.5	50°
52.5°	133.5	133.8	134.2	134.2	137.9	152.5	177.9	210.1	250.1	295.1	346.6	52.5°
55°	131.8	132.5	132.5	131.8	134.9	148.1	173.8	209.1	254.8	311.0	373.4	55°
57.5°	129.8	130.1	130.4	129.8	131.8	143.3	168.1	204.3	253.4	317.1	393.4	57.5°
60°	127.1	125.7	125.4	124.4	125.7	134.9	157.9	194.1	245.3	314.4	400.2	60°
62.5°	119.6	118.6	117.6	116.6	117.6	124.4	146.7	181.6	231.8	303.6	394.7	62.5°
63°	117.9	117.2	116.2	115.2	115.2	122.7	143.0	178.6	228.4	300.5	392.7	63°
65°	113.2	112.8	112.2	111.1	110.8	116.6	134.5	164.7	212.4	287.0	379.8	65°
67.5°	107.7	107.7	107.4	106.1	104.4	107.7	120.3	144.0	184.7	252.1	348.0	67.5°
70°	100.0	100.0	99.6	98.9	96.9	99.3	107.4	123.0	152.1	206.0	291.7	70°
72.5°	92.2	92.2	93.2	92.8	93.2	93.5	97.6	106.1	123.7	160.3	220.6	72.5°
75°	82.0	83.7	84.0	84.7	85.0	84.7	86.7	91.8	102.0	123.0	160.9	75°
77.5°	73.5	75.9	75.6	74.9	74.5	74.9	74.5	76.9	84.4	97.6	119.3	77.5°
80°	60.7	63.0	63.0	62.7	62.0	62.7	62.0	64.4	70.5	82.0	94.9	80°
82.5°	49.8	51.5	52.5	53.2	52.5	55.2	55.2	54.6	59.3	69.5	80.0	82.5°
85°	40.0	41.7	42.7	44.0	44.7	44.0	43.7	43.0	45.7	53.9	61.0	85°
87.5°	25.4	26.8	26.8	27.1	27.1	28.1	26.1	23.7	21.7	30.8	32.2	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



NUMBER: P145916

NUMBER: VPL-F02-LED-E1-CPL-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
560.4	560.4	560.4	560.4	560.4	560.4	560.4
560.4	560.4	560.8	559.7	560.8	560.8	559.7
558.1	557.4	557.4	557.0	557.7	557.4	557.0
556.0	556.0	554.7	553.6	553.3	554.7	554.0
555.3	554.7	554.3	553.6	554.0	555.0	555.7
567.5	565.2	565.8	565.5	565.8	566.9	568.9
589.9	589.9	591.6	587.9	589.6	591.3	594.0
615.0	621.1	624.1	623.8	624.5	625.8	628.9
636.3	655.6	669.2	672.6	681.7	683.8	679.0
645.8	680.4	710.9	731.2	753.9	763.0	765.8
626.5	676.3	726.5	773.2	817.9	843.7	866.4
606.5	665.5	732.2	802.0	874.9	940.6	989.7
578.7	656.7	746.8	841.0	937.5	1029.0	1111.0
548.2	642.4	748.1	862.7	981.9	1095.8	1195.1
504.5	609.2	726.5	859.3	997.5	1140.2	1264.2
454.4	556.4	687.8	839.6	996.5	1162.9	1311.6
400.8	505.2	643.4	806.1	983.3	1170.0	1344.8
360.5	463.9	599.4	774.2	963.6	1165.2	1360.7
339.8	428.3	563.5	743.1	941.6	1153.7	1367.5
343.9	418.8	542.1	717.3	922.0	1141.2	1365.8
366.6	433.0	541.8	707.8	909.4	1129.7	1361.1
400.8	465.2	561.4	719.0	916.2	1128.6	1360.7
439.5	510.3	608.9	749.2	945.0	1146.9	1368.9
476.7	565.2	669.9	816.6	999.5	1192.7	1401.7
498.8	615.3	748.1	911.8	1083.6	1273.0	1473.9
503.8	645.5	817.6	1005.3	1198.8	1389.2	1586.4
503.5	648.5	829.5	1024.6	1222.2	1416.0	1615.2
495.7	654.6	861.3	1088.3	1316.0	1530.8	1735.5
471.3	643.8	878.9	1147.6	1409.2	1657.6	1916.4
415.4	594.3	858.3	1166.9	1464.8	1741.6	2037.0
325.3	490.3	741.0	1066.6	1389.5	1666.4	2040.1
228.7	346.6	570.3	875.9	1135.8	1408.2	1822.2
159.3	224.6	370.3	589.2	819.6	1027.3	1354.6
116.6	149.4	221.9	352.4	497.4	642.1	840.6
89.8	107.7	142.0	212.8	280.9	359.5	506.9
63.0	71.2	87.8	131.5	188.4	257.2	371.4
27.4	32.2	42.4	77.6	127.4	122.7	116.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)