

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: P145905

Luminaire Tested: **VPL-F01-LED-E1-CPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145905
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-F01-LED-E1-CPL
Description: VALET LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - 90° FORWARD THROW PERIMETER LEFT
Light Source: (7) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2223.5 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

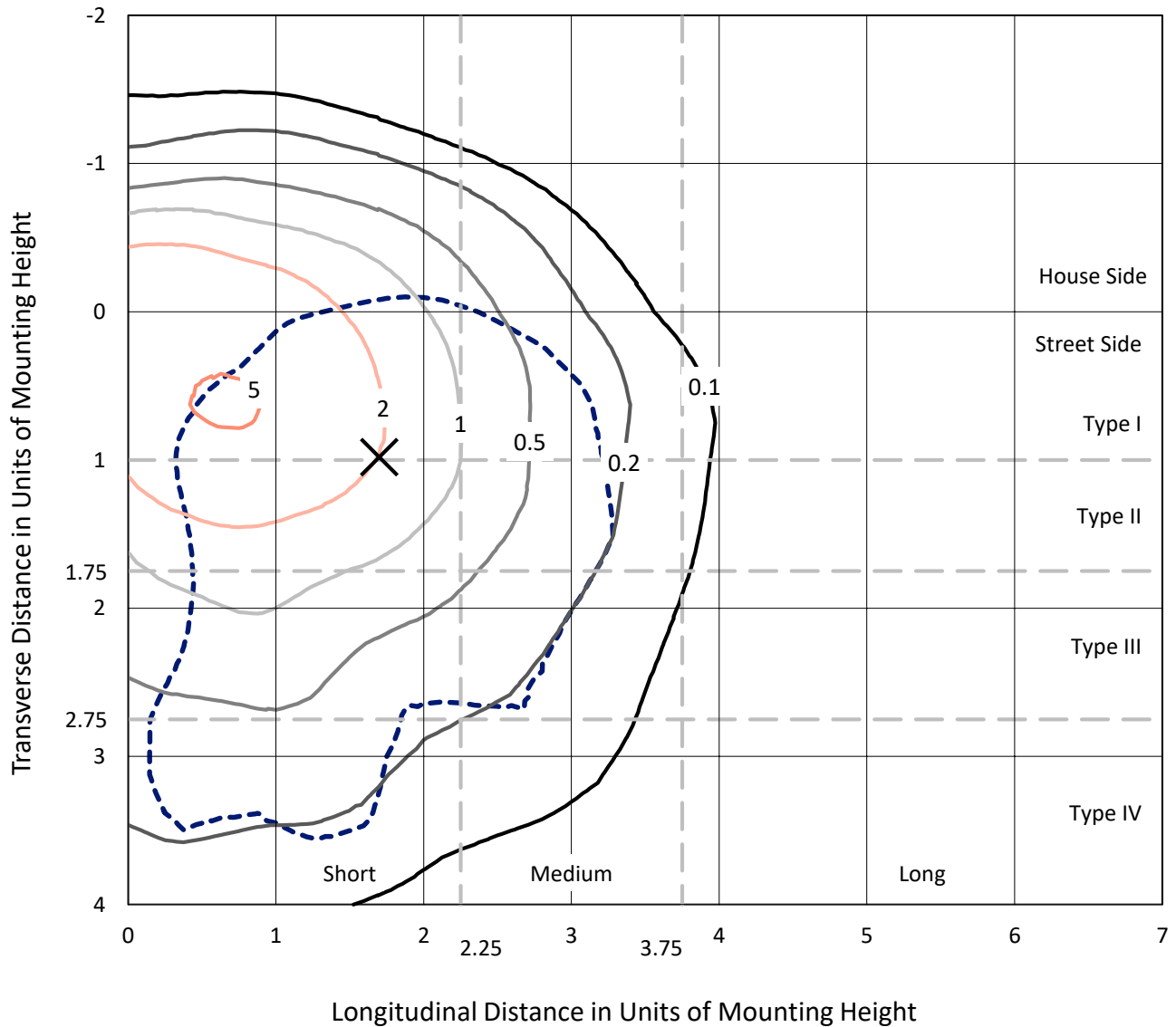
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P145905
 CATALOG NUMBER: VPL-F01-LED-E1-CPL

Iso-Footcandle Lines of Horizontal Illumination

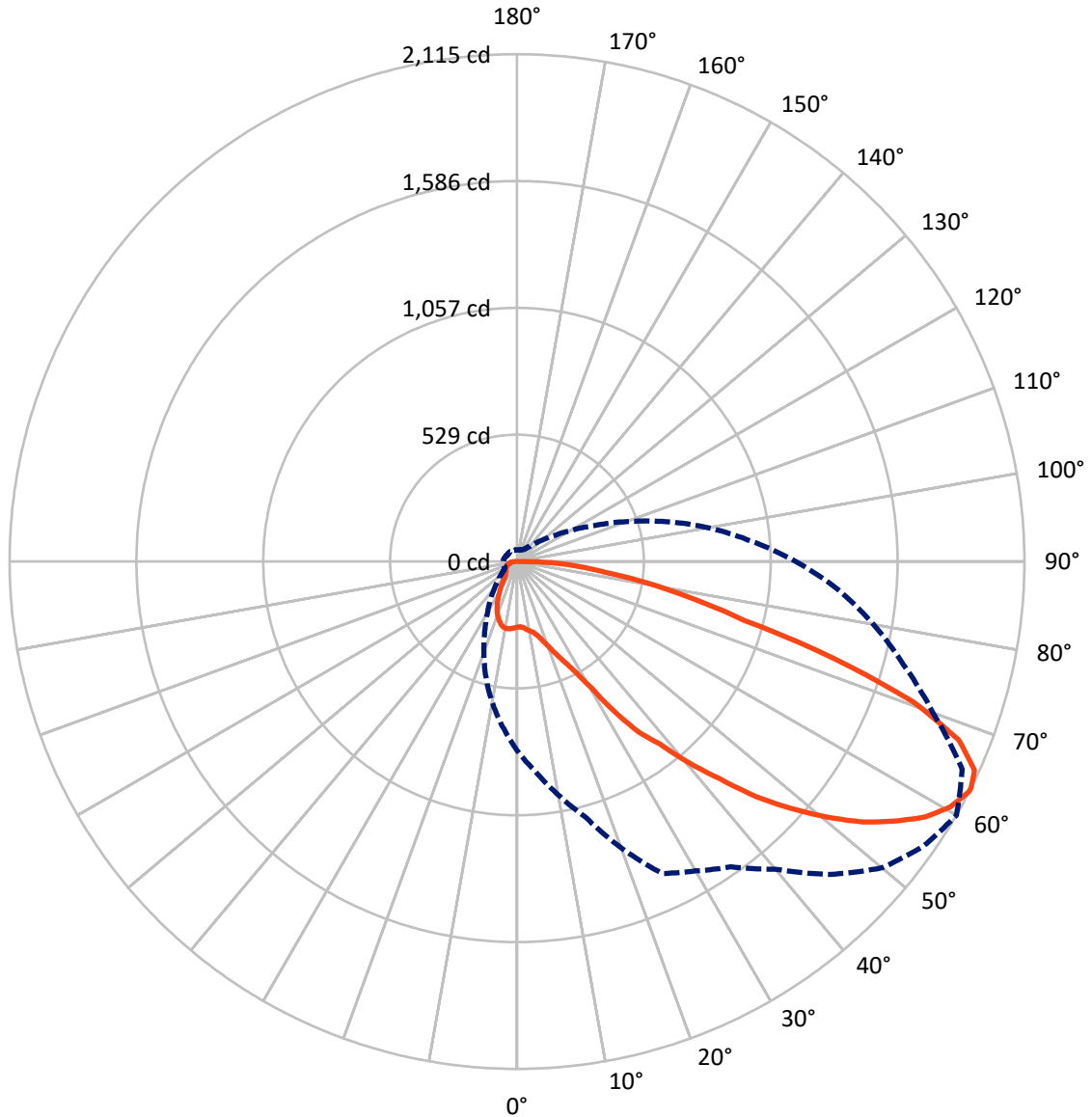
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P145905
CATALOG NUMBER: VPL-F01-LED-E1-CPL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P145905

CATALOG NUMBER: VPL-F01-LED-E1-CPL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	465.4	0.0	465.4
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	1758.1	0.0	1758.1
	% Fixture	79.1	0.0	79.1
Total	Lumens	2223.5	0.0	2223.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	1.2
10°-20°	83.7	3.8
20°-30°	148.0	6.7
30°-40°	233.7	10.5
40°-50°	343.7	15.5
50°-60°	452.7	20.4
60°-70°	504.6	22.7
70°-80°	331.5	14.9
80°-90°	98.9	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°	2223.5	100.0
0°-180°	2223.5	100.0

Coefficient of Utilization



REPORT NUMBER: P145905

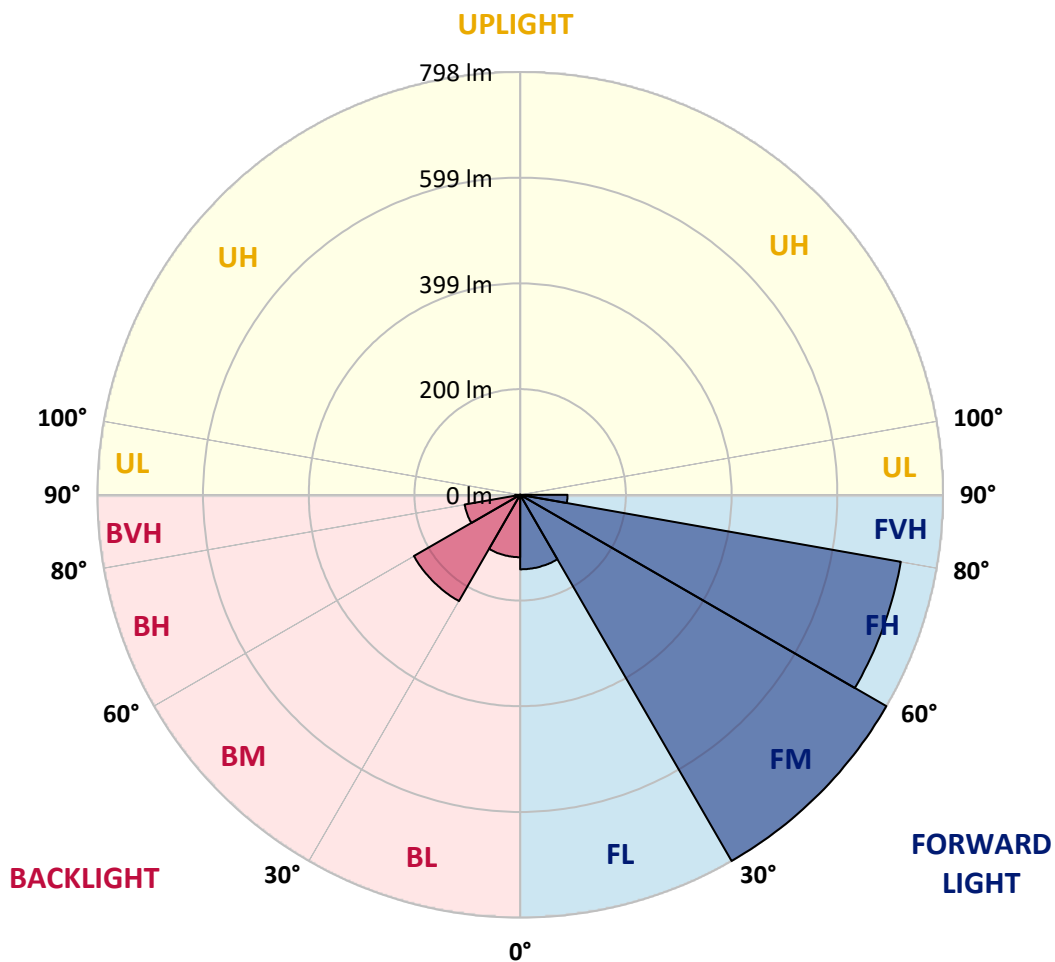
CATALOG NUMBER: VPL-F01-LED-E1-CPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	140.7	6.3			
FM	(30°-60°)	798.3	35.9			
FH	(60°-80°)	729.7	32.8			G1/1800
FVH	(80°-90°)	89.3	4.0			G1/100
BL	(0°-30°)	117.8	5.3	B1/500		
BM	(30°-60°)	231.7	10.4	B1/1000		
BH	(60°-80°)	106.4	4.8	B0/110		G0/110
BVH	(80°-90°)	9.5	0.4			G0/10
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





REPORT NUMBER: P145905

CATALOG NUMBER: VPL-F01-LED-E1-CPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1
2.5°	272.8	272.9	272.4	272.3	271.9	272.1	272.1	271.8	271.8	271.9	271.4
5°	271.4	271.8	271.6	271.9	272.3	272.8	273.2	273.7	274.2	274.9	275.1
7.5°	269.9	270.9	271.1	272.1	273.2	274.6	276.2	278.0	280.5	281.2	282.7
10°	270.8	272.6	273.6	275.6	277.4	279.9	282.8	284.6	287.8	288.9	291.1
12.5°	277.2	278.5	279.9	282.2	284.8	287.9	291.2	294.1	297.4	298.5	299.3
15°	289.4	290.7	292.2	294.5	297.4	301.2	305.9	309.4	313.4	316.3	318.5
17.5°	306.4	306.4	309.9	310.6	316.0	321.8	327.7	334.5	338.6	341.1	345.1
20°	330.9	330.9	335.5	337.6	342.3	349.7	357.8	365.2	371.2	376.1	379.7
22.5°	373.1	371.3	375.3	374.8	380.4	391.5	399.4	403.5	411.4	414.4	419.2
25°	422.2	428.6	432.9	432.9	435.2	446.6	453.2	456.4	463.6	461.5	466.4
27.5°	482.3	499.6	515.6	522.2	519.1	531.6	533.9	536.9	536.1	531.0	529.5
30°	541.4	571.9	596.9	612.0	629.5	653.8	653.8	657.8	649.2	635.0	626.6
32.5°	582.3	621.6	659.8	691.3	721.0	758.2	773.8	795.6	799.3	804.7	785.9
35°	616.0	671.2	712.1	759.5	795.8	833.4	875.2	913.0	938.1	934.0	926.6
37.5°	639.1	710.0	767.1	822.7	878.0	921.1	960.7	1010.1	1058.2	1067.7	1047.6
40°	655.3	737.4	815.9	884.3	953.8	1018.5	1066.7	1119.7	1195.0	1226.9	1210.4
42.5°	663.1	758.8	846.5	933.5	1021.5	1103.2	1163.7	1236.3	1325.6	1380.1	1362.0
45°	666.4	772.0	871.3	970.3	1076.0	1176.9	1254.8	1337.2	1437.7	1525.2	1528.5
47.5°	665.5	779.1	888.3	996.6	1118.8	1236.1	1340.7	1434.1	1548.0	1640.0	1674.2
50°	663.2	781.6	898.5	1012.4	1145.7	1279.6	1397.3	1508.4	1635.7	1752.1	1804.1
52.5°	663.1	782.1	903.6	1021.2	1161.5	1306.1	1432.8	1564.0	1703.6	1825.2	1906.3
55°	667.0	785.1	909.2	1027.3	1170.1	1321.2	1452.8	1598.9	1733.1	1871.3	1976.0
57.5°	683.0	798.9	922.6	1037.7	1179.7	1333.1	1468.3	1608.9	1741.9	1890.5	2016.4
60°	718.2	824.9	945.9	1056.8	1204.6	1364.3	1483.0	1594.7	1725.3	1885.0	2022.2
62.5°	773.0	866.5	978.4	1092.2	1255.3	1423.5	1489.1	1562.2	1684.6	1853.6	1997.3
63°	787.1	877.5	987.0	1101.9	1270.0	1434.8	1488.6	1553.6	1673.3	1844.4	1986.0
65°	845.7	928.7	1027.0	1148.5	1336.9	1470.4	1470.6	1503.1	1616.0	1793.4	1940.0
67.5°	933.8	1013.1	1089.0	1209.9	1410.8	1488.3	1417.3	1392.7	1492.5	1685.4	1823.1
70°	992.6	1090.5	1133.1	1226.1	1420.9	1466.6	1332.9	1250.8	1333.7	1494.9	1617.2
72.5°	994.1	1105.7	1118.1	1157.1	1326.6	1363.3	1187.6	1076.5	1126.3	1261.6	1326.0
75°	887.9	1028.3	1002.8	988.5	1080.3	1096.0	960.6	914.4	978.2	1058.2	1026.0
77.5°	660.1	846.7	795.0	733.9	767.2	769.6	773.8	861.0	939.4	972.1	925.2
80°	409.6	622.0	582.3	481.6	494.5	532.5	646.4	800.4	886.3	909.7	815.9
82.5°	247.0	457.5	436.4	367.5	383.7	478.3	604.3	646.9	675.8	673.6	576.7
85°	181.0	310.7	339.5	344.6	402.0	464.4	461.8	430.3	412.6	363.1	309.9
87.5°	57.0	160.3	190.2	221.7	242.9	229.8	226.0	195.3	139.8	118.2	129.9
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: P145905
 CATALOG NUMBER: VPL-F01-LED-E1-CPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1
2.5°	271.4	272.1	272.4	272.3	272.4	272.4	273.4	273.1	273.4	273.2	274.2
5°	275.6	276.6	277.4	277.4	277.5	277.9	279.2	279.2	279.9	281.2	281.8
7.5°	283.7	285.0	285.1	285.5	286.5	286.0	286.8	287.1	287.6	288.3	289.1
10°	292.1	293.9	293.9	293.7	293.9	292.6	293.1	292.1	292.2	293.2	294.2
12.5°	301.5	302.5	301.8	301.3	301.3	298.8	298.5	297.2	296.5	296.7	297.0
15°	320.3	319.5	319.3	318.5	315.5	313.7	312.4	308.3	306.1	304.9	303.0
17.5°	345.4	345.9	345.1	344.2	340.0	333.8	331.2	326.7	323.8	320.8	317.2
20°	382.1	378.8	378.4	375.8	369.8	361.2	354.8	347.5	343.4	339.1	335.3
22.5°	422.5	419.0	416.7	411.6	402.9	392.0	381.2	372.0	365.7	362.6	359.9
25°	467.4	465.4	461.6	448.6	441.7	429.1	417.4	408.3	401.2	398.6	393.9
27.5°	521.2	522.7	515.6	503.4	494.7	477.0	466.9	451.2	445.3	435.7	429.8
30°	619.3	609.7	597.7	579.0	561.4	537.6	520.9	504.6	495.8	482.9	467.1
32.5°	779.6	743.1	710.8	671.2	633.7	603.3	579.2	558.6	545.2	523.9	497.0
35°	908.9	873.7	820.2	762.6	713.4	674.5	644.1	624.6	597.8	563.8	524.9
37.5°	1003.7	963.2	913.2	869.1	815.5	772.0	730.9	690.5	652.8	601.3	551.6
40°	1157.6	1102.7	1020.3	968.3	924.4	865.6	827.2	772.7	715.4	649.0	577.0
42.5°	1309.8	1237.1	1162.5	1102.7	1040.3	976.6	923.8	850.6	774.5	688.5	599.8
45°	1486.6	1397.6	1300.0	1216.5	1152.4	1077.5	1009.8	920.0	822.9	720.8	619.6
47.5°	1626.0	1537.8	1427.7	1343.5	1257.1	1172.6	1084.7	974.0	858.9	747.3	638.1
50°	1759.5	1674.5	1557.4	1454.1	1354.9	1252.8	1146.7	1012.3	887.1	767.9	652.8
52.5°	1879.4	1803.8	1677.3	1553.8	1442.9	1325.3	1193.7	1048.1	914.2	789.2	664.4
55°	1980.9	1910.1	1796.7	1643.0	1517.0	1386.9	1238.1	1080.8	942.7	811.5	672.8
57.5°	2049.1	2008.2	1887.0	1721.4	1577.9	1439.4	1271.6	1113.6	969.5	825.4	676.4
60°	2080.8	2075.4	1972.8	1792.2	1632.1	1480.3	1313.9	1148.5	987.2	831.6	671.3
62.5°	2074.2	2113.2	2038.2	1840.8	1666.6	1505.9	1341.0	1163.5	982.7	816.4	648.7
63°	2068.1	2114.8	2047.5	1845.5	1669.4	1508.4	1343.6	1161.7	978.6	809.7	640.9
65°	2023.4	2095.3	2049.8	1837.0	1656.5	1501.3	1331.7	1133.1	937.5	767.1	597.0
67.5°	1913.7	1985.9	1960.6	1742.4	1573.1	1425.0	1248.7	1035.9	836.8	676.6	515.6
70°	1687.4	1751.9	1721.7	1529.7	1372.5	1267.5	1099.9	861.5	681.7	543.9	392.5
72.5°	1334.7	1380.1	1386.7	1234.2	1113.8	1050.7	886.1	649.9	498.0	378.8	254.8
75°	988.3	977.8	979.9	894.7	845.7	819.1	662.4	445.8	335.5	231.5	151.1
77.5°	830.6	754.7	690.0	666.4	609.2	592.7	436.9	273.6	195.8	138.5	86.0
80°	675.4	560.4	466.3	424.5	402.2	405.5	241.7	145.8	102.5	75.5	53.8
82.5°	461.8	374.3	295.2	256.4	252.4	256.2	125.6	71.5	54.2	43.4	33.8
85°	273.1	257.1	229.5	203.7	194.8	183.9	93.4	51.2	27.9	23.1	19.0
87.5°	118.1	145.0	148.4	147.8	137.5	110.5	34.3	13.2	11.7	5.9	4.8
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: P145905

CATALOG NUMBER: VPL-F01-LED-E1-CPL

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1
2.5°	274.2	274.4	274.1	274.4	275.6	275.6	275.4	275.7	275.9	276.9	276.6
5°	282.5	282.7	282.8	284.0	284.8	285.8	285.5	285.8	286.5	286.6	287.0
7.5°	290.1	291.1	292.4	292.9	294.4	294.7	296.2	296.4	296.7	296.0	295.4
10°	295.4	296.4	298.0	298.8	301.5	301.8	303.0	303.3	304.0	303.5	303.0
12.5°	298.0	298.8	300.7	302.3	305.9	307.1	309.1	310.2	311.1	310.6	308.9
15°	303.5	303.3	304.3	305.6	308.9	311.1	313.9	315.4	316.3	315.5	313.4
17.5°	316.0	313.7	313.7	312.9	315.4	315.8	317.0	317.8	317.5	315.0	311.6
20°	333.3	329.9	327.7	325.8	324.9	320.8	318.7	315.7	313.0	308.6	304.6
22.5°	355.8	353.3	348.4	343.9	337.6	329.2	320.1	312.4	306.6	300.5	293.7
25°	389.8	384.2	377.1	366.5	358.4	343.6	328.4	313.7	301.3	291.7	280.3
27.5°	421.8	410.0	396.6	380.1	365.2	345.4	326.1	309.1	292.9	277.5	264.5
30°	448.6	428.0	406.2	383.0	361.9	338.0	315.5	296.2	277.9	259.7	247.3
32.5°	468.7	439.0	410.0	380.4	354.3	326.2	300.5	279.9	259.0	239.9	225.5
35°	486.9	446.8	408.8	373.3	342.4	311.4	283.7	260.5	237.8	217.3	200.8
37.5°	499.9	449.4	403.8	363.1	327.2	293.2	263.2	238.6	214.1	193.3	175.2
40°	510.0	448.1	394.4	347.4	306.4	271.1	241.7	216.0	191.5	170.7	151.7
42.5°	516.8	443.1	380.2	329.5	289.1	252.1	223.4	196.3	171.9	150.1	129.1
45°	525.5	441.2	371.5	316.2	273.4	236.1	205.4	179.0	153.5	130.8	110.8
47.5°	533.8	440.0	364.4	305.1	259.2	221.6	191.2	163.5	137.9	115.6	97.4
50°	538.7	438.2	357.0	291.7	243.4	206.7	177.7	149.6	123.8	102.5	86.3
52.5°	540.2	434.6	347.2	276.6	229.7	194.0	163.8	135.7	111.0	91.8	76.8
55°	539.1	427.5	334.0	264.2	215.6	180.0	149.8	122.5	100.1	82.1	70.0
57.5°	533.5	413.3	317.0	248.5	199.6	162.3	132.6	107.6	87.7	73.3	64.1
60°	520.9	392.8	296.2	226.5	176.7	141.3	113.3	91.8	75.0	64.6	58.4
62.5°	493.5	363.2	266.0	195.5	146.0	113.4	89.0	73.1	61.7	56.3	52.7
63°	485.4	353.0	257.1	187.2	140.7	107.2	83.5	69.2	58.9	54.5	51.5
65°	442.8	305.8	217.3	150.6	109.0	81.2	63.7	54.3	48.9	47.2	46.4
67.5°	362.9	237.9	152.9	101.0	73.1	56.1	47.1	43.4	41.4	41.3	41.8
70°	256.4	157.8	94.6	64.7	50.4	42.4	39.0	37.3	36.3	36.7	37.6
72.5°	166.8	92.6	59.8	47.4	40.9	37.3	34.8	34.3	34.0	33.7	34.0
75°	88.2	58.0	45.2	39.6	35.8	32.9	31.2	30.5	30.7	30.7	30.7
77.5°	54.6	44.1	38.6	35.0	32.0	29.1	27.4	26.9	27.1	27.4	27.6
80°	41.9	38.5	34.0	31.4	27.1	24.6	23.8	23.6	23.9	23.9	24.4
82.5°	30.7	29.7	28.1	24.8	21.5	19.8	19.6	20.3	19.6	19.5	19.8
85°	18.0	16.8	18.3	15.7	14.4	13.4	14.0	15.4	16.0	15.2	14.9
87.5°	5.8	4.0	5.8	6.4	5.8	5.0	6.3	7.4	7.6	7.3	8.3
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: P145905

CATALOG NUMBER: VPL-F01-LED-E1-CPL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1
2.5°	276.4	277.5	276.4	276.9	276.7	276.4	276.9	276.2	275.9	276.9	276.7
5°	286.8	287.0	285.5	285.6	285.5	284.1	284.1	283.5	282.7	282.8	282.5
7.5°	295.2	294.9	293.7	293.2	291.7	290.7	290.1	289.1	288.4	287.8	287.4
10°	301.6	300.8	300.0	298.5	297.0	296.2	294.4	292.9	292.4	291.4	290.7
12.5°	307.3	305.8	304.5	302.6	300.8	299.5	297.4	296.2	295.4	294.1	293.1
15°	310.4	307.6	305.1	302.3	300.3	298.3	295.9	295.4	294.2	292.9	291.1
17.5°	306.6	302.6	298.0	295.0	292.1	289.1	286.6	286.6	286.1	284.6	281.5
20°	298.8	292.9	287.4	282.7	279.7	275.4	273.9	271.6	269.9	267.3	263.3
22.5°	286.1	279.9	272.8	268.0	262.8	258.1	255.1	251.5	250.1	245.8	240.6
25°	271.9	262.8	255.3	249.0	241.9	236.3	232.1	227.2	223.9	219.8	213.2
27.5°	255.1	245.7	237.1	230.2	222.7	215.0	207.4	201.6	195.6	190.9	187.1
30°	236.9	227.2	216.6	208.5	199.9	190.2	183.9	176.2	171.5	166.3	161.3
32.5°	213.2	204.6	192.2	182.8	172.2	164.6	159.5	152.1	146.6	142.2	139.3
35°	187.1	174.2	161.8	154.7	147.4	141.3	134.2	128.5	124.8	120.2	117.7
37.5°	158.7	143.6	133.1	126.8	119.4	116.4	111.9	108.5	105.2	102.0	100.1
40°	133.2	119.4	109.8	104.5	99.6	96.3	93.4	92.0	89.8	87.3	85.9
42.5°	112.1	101.0	91.6	86.7	82.9	82.6	80.7	79.6	78.8	77.3	75.0
45°	95.6	85.5	77.4	73.5	71.8	72.0	72.0	71.0	71.0	70.5	69.0
47.5°	84.5	75.5	69.5	66.9	66.2	66.4	65.9	65.5	65.7	65.5	64.7
50°	75.9	68.2	63.2	62.2	62.1	61.9	61.3	60.8	60.6	60.9	60.8
52.5°	67.2	60.8	58.0	57.6	57.8	57.8	57.6	57.5	57.8	58.1	57.6
55°	62.2	57.6	55.8	55.8	55.8	55.8	55.6	55.5	56.0	56.5	55.6
57.5°	57.6	54.3	53.7	53.7	53.7	53.3	53.3	53.5	54.2	55.1	54.2
60°	54.2	52.5	52.5	52.7	52.5	51.8	51.3	51.3	52.2	53.5	52.7
62.5°	50.9	50.0	50.4	50.2	49.9	49.0	48.4	48.4	49.4	50.7	51.0
63°	50.0	49.4	49.7	49.5	49.2	48.5	47.9	47.9	48.7	50.0	50.5
65°	46.4	46.6	46.7	46.9	46.7	46.6	45.7	45.4	46.1	47.1	47.7
67.5°	42.1	42.4	42.8	43.6	43.3	43.3	42.8	42.4	42.6	43.1	43.6
70°	38.1	38.5	39.0	39.3	39.5	39.6	39.3	38.8	39.0	39.1	39.5
72.5°	34.3	34.7	35.0	35.7	35.7	35.7	35.3	35.0	35.2	35.5	35.8
75°	30.9	31.0	31.4	31.9	32.0	31.7	31.7	31.4	31.5	32.0	32.4
77.5°	27.4	27.1	27.2	27.6	28.1	28.1	28.2	28.1	28.4	28.7	29.1
80°	23.4	23.1	22.8	22.9	23.6	24.4	25.3	25.3	25.8	25.9	26.4
82.5°	18.7	18.3	18.2	18.7	18.5	19.6	21.5	22.5	23.1	23.8	24.1
85°	14.5	13.7	14.0	14.0	13.7	15.5	17.2	18.5	18.7	19.6	19.8
87.5°	8.6	8.3	7.9	7.6	8.8	10.6	12.1	12.5	12.9	13.4	13.9
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: P145905

CATALOG NUMBER: VPL-F01-LED-E1-CPL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1
2.5°	275.4	276.7	276.4	276.2	276.4	276.2	275.7	275.9	275.6	275.7	275.4
5°	280.7	281.3	280.8	280.0	280.0	278.9	278.0	277.4	276.6	276.2	275.6
7.5°	285.8	285.3	284.6	283.2	282.3	280.8	279.7	278.4	277.5	276.6	275.4
10°	288.9	287.9	286.6	284.8	282.5	281.2	279.5	277.5	276.6	276.1	274.9
12.5°	290.4	287.8	285.6	282.3	279.0	276.6	274.7	272.8	272.3	271.6	270.8
15°	287.0	283.2	277.7	273.2	269.0	265.5	264.0	261.9	261.4	261.2	261.0
17.5°	275.2	269.5	264.2	258.2	254.4	251.3	250.0	249.5	248.6	248.3	248.5
20°	256.4	251.5	246.2	244.2	239.7	238.9	236.9	235.6	234.1	233.6	232.8
22.5°	234.4	228.3	225.0	223.6	221.7	217.4	216.5	215.1	213.2	211.7	211.3
25°	208.9	203.9	203.7	200.3	198.8	196.5	193.8	192.2	191.0	189.2	187.9
27.5°	182.8	181.0	177.8	175.2	174.2	172.9	168.9	168.1	166.8	165.3	163.8
30°	158.5	157.2	154.2	151.7	150.2	147.6	143.8	144.1	141.5	139.5	138.2
32.5°	134.9	133.9	131.1	130.4	125.6	124.3	120.4	117.4	114.7	112.8	111.1
35°	113.6	111.0	111.1	108.1	105.5	101.5	97.4	93.6	91.5	90.5	89.0
37.5°	98.2	95.8	93.3	90.0	87.0	84.2	81.7	80.6	79.3	79.6	79.7
40°	84.4	82.6	80.7	78.4	76.6	75.5	74.8	74.8	75.0	75.8	76.4
42.5°	74.5	73.0	72.0	71.2	71.5	71.5	72.0	72.8	73.6	74.8	75.5
45°	67.9	67.0	66.7	67.0	68.0	68.8	70.0	71.3	72.6	73.8	74.3
47.5°	63.9	63.4	63.4	64.2	65.7	67.0	68.8	70.2	71.7	72.6	73.0
50°	59.6	59.4	59.4	60.1	61.4	63.1	64.9	66.2	67.5	68.4	68.7
52.5°	57.1	56.6	56.5	57.3	58.4	60.1	61.9	63.2	64.2	64.9	65.1
55°	55.0	54.5	54.2	55.1	56.5	58.0	60.1	61.6	62.6	63.4	64.1
57.5°	53.2	52.7	52.3	53.5	54.8	56.6	58.4	60.1	61.4	62.4	63.1
60°	51.7	51.0	50.7	52.0	53.3	55.1	57.0	58.8	60.6	61.7	62.1
62.5°	49.9	49.4	48.9	49.7	50.4	51.7	53.3	55.1	56.8	58.0	58.0
63°	49.4	49.2	48.5	49.2	49.9	51.0	52.7	54.3	56.0	57.3	57.1
65°	47.2	47.2	46.9	47.6	48.2	49.4	50.7	52.5	54.0	55.0	55.1
67.5°	43.8	43.9	44.2	44.9	46.2	47.4	48.9	50.5	51.8	52.5	52.8
70°	39.8	40.1	40.8	41.8	42.9	43.9	44.9	46.6	47.7	48.4	48.7
72.5°	36.0	36.8	37.3	38.1	38.8	39.8	40.6	42.3	43.3	43.8	44.6
75°	32.5	33.2	33.5	34.0	34.7	35.0	36.0	36.7	38.0	38.6	39.6
77.5°	29.2	29.6	30.0	30.9	31.0	31.5	31.9	32.9	33.5	34.2	35.0
80°	26.3	26.6	27.2	27.7	27.9	28.2	28.4	28.2	28.1	27.6	28.2
82.5°	23.6	23.9	24.8	25.3	25.8	25.8	25.6	23.8	22.9	23.3	23.8
85°	19.5	19.8	20.6	21.6	21.8	21.6	21.8	20.0	18.8	18.3	18.8
87.5°	12.2	11.9	14.7	16.0	15.0	15.4	15.5	14.5	13.5	11.6	12.1
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: P145905
 CATALOG NUMBER: VPL-F01-LED-E1-CPL

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	273.1	0°
2.5°	275.7	274.6	274.7	275.1	275.1	275.6	274.9	274.1	274.6	273.7	273.6	2.5°
5°	275.6	274.1	274.1	274.4	274.1	274.4	273.9	273.1	273.6	272.6	272.4	5°
7.5°	274.9	274.1	274.4	274.7	274.2	274.4	274.2	273.1	273.2	272.8	271.6	7.5°
10°	274.6	274.1	274.7	275.7	275.7	275.9	275.4	274.1	273.2	272.8	271.8	10°
12.5°	271.1	271.8	273.1	275.4	276.2	277.5	278.2	277.5	277.9	277.2	276.9	12.5°
15°	261.2	262.8	265.0	268.5	270.9	273.9	277.5	279.2	282.3	284.8	286.5	15°
17.5°	249.3	250.5	252.8	256.7	259.9	265.8	270.8	276.4	282.5	289.1	294.9	17.5°
20°	234.6	233.8	237.4	241.7	247.2	253.8	261.0	269.5	279.5	290.1	300.2	20°
22.5°	213.0	213.0	216.8	221.9	228.5	236.1	246.2	255.3	268.5	283.8	298.7	22.5°
25°	188.2	188.7	191.4	197.1	201.8	212.7	222.1	233.8	249.6	266.5	286.3	25°
27.5°	161.8	165.1	164.4	170.6	176.7	187.4	200.3	212.2	229.8	247.8	270.4	27.5°
30°	137.9	137.4	137.2	144.5	150.6	160.3	170.9	185.9	203.7	226.9	252.9	30°
32.5°	108.1	110.0	111.3	115.6	122.2	131.3	142.7	158.3	179.8	203.1	232.5	32.5°
35°	89.3	89.8	91.6	94.1	99.9	107.5	119.4	133.2	152.1	176.2	207.4	35°
37.5°	80.1	80.6	82.6	84.9	89.0	94.6	102.7	113.4	130.8	153.2	182.3	37.5°
40°	77.1	77.6	78.8	80.9	84.7	89.5	95.9	104.2	116.7	134.2	159.7	40°
42.5°	75.8	75.8	75.9	77.6	81.4	87.0	93.9	101.4	110.6	123.8	144.5	42.5°
45°	74.3	74.3	74.1	75.3	78.3	84.7	93.1	102.2	112.3	123.7	139.8	45°
47.5°	73.0	72.6	72.3	72.8	75.3	81.9	91.6	102.7	115.6	129.8	146.1	47.5°
50°	68.4	68.4	68.2	68.4	70.7	77.6	88.8	102.2	118.5	136.9	156.7	50°
52.5°	65.1	65.2	65.4	65.4	67.2	74.3	86.7	102.4	121.8	143.8	168.9	52.5°
55°	64.2	64.6	64.6	64.2	65.7	72.2	84.7	101.9	124.2	151.6	181.9	55°
57.5°	63.2	63.4	63.6	63.2	64.2	69.8	81.9	99.6	123.5	154.5	191.7	57.5°
60°	61.9	61.3	61.1	60.6	61.3	65.7	76.9	94.6	119.5	153.2	195.0	60°
62.5°	58.3	57.8	57.3	56.8	57.3	60.6	71.5	88.5	112.9	147.9	192.3	62.5°
63°	57.5	57.1	56.6	56.1	56.1	59.8	69.7	87.0	111.3	146.4	191.4	63°
65°	55.1	55.0	54.6	54.2	54.0	56.8	65.5	80.2	103.5	139.8	185.1	65°
67.5°	52.5	52.5	52.3	51.7	50.9	52.5	58.6	70.2	90.0	122.8	169.6	67.5°
70°	48.7	48.7	48.5	48.2	47.2	48.4	52.3	59.9	74.1	100.4	142.2	70°
72.5°	44.9	44.9	45.4	45.2	45.4	45.6	47.6	51.7	60.3	78.1	107.5	72.5°
75°	40.0	40.8	40.9	41.3	41.4	41.3	42.3	44.7	49.7	59.9	78.4	75°
77.5°	35.8	37.0	36.8	36.5	36.3	36.5	36.3	37.5	41.1	47.6	58.1	77.5°
80°	29.6	30.7	30.7	30.5	30.2	30.5	30.2	31.4	34.3	40.0	46.2	80°
82.5°	24.3	25.1	25.6	25.9	25.6	26.9	26.9	26.6	28.9	33.8	39.0	82.5°
85°	19.5	20.3	20.8	21.5	21.8	21.5	21.3	21.0	22.3	26.3	29.7	85°
87.5°	12.4	13.0	13.0	13.2	13.2	13.7	12.7	11.6	10.6	15.0	15.7	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: P145905

NUMBER: VPL-F01-LED-E1-CPL

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
273.1	273.1	273.1	273.1	273.1	273.1	273.1
273.1	273.1	273.2	272.8	273.2	273.2	272.8
271.9	271.6	271.6	271.4	271.8	271.6	271.4
270.9	270.9	270.3	269.8	269.6	270.3	269.9
270.6	270.3	270.1	269.8	269.9	270.4	270.8
276.6	275.4	275.7	275.6	275.7	276.2	277.2
287.4	287.4	288.3	286.5	287.3	288.1	289.4
299.7	302.6	304.1	304.0	304.3	304.9	306.4
310.1	319.5	326.1	327.7	332.2	333.2	330.9
314.7	331.5	346.4	356.3	367.4	371.8	373.1
305.3	329.5	354.0	376.8	398.6	411.1	422.2
295.5	324.3	356.8	390.8	426.3	458.3	482.3
282.0	320.0	363.9	409.8	456.8	501.4	541.4
267.1	313.0	364.6	420.4	478.5	533.9	582.3
245.8	296.9	354.0	418.7	486.1	555.6	616.0
221.4	271.1	335.2	409.1	485.6	566.6	639.1
195.3	246.2	313.5	392.8	479.1	570.1	655.3
175.7	226.0	292.1	377.3	469.6	567.8	663.1
165.6	208.7	274.6	362.1	458.8	562.2	666.4
167.6	204.1	264.2	349.5	449.3	556.1	665.5
178.6	211.0	264.0	344.9	443.1	550.5	663.2
195.3	226.7	273.6	350.4	446.4	550.0	663.1
214.1	248.6	296.7	365.0	460.5	558.9	667.0
232.3	275.4	326.4	397.9	487.1	581.2	683.0
243.0	299.8	364.6	444.3	528.0	620.3	718.2
245.5	314.5	398.4	489.9	584.1	676.9	773.0
245.3	316.0	404.2	499.3	595.5	690.0	787.1
241.5	319.0	419.7	530.3	641.3	745.9	845.7
229.7	313.7	428.3	559.2	686.7	807.7	933.8
202.4	289.6	418.2	568.6	713.7	848.6	992.6
158.5	238.9	361.1	519.8	677.1	812.0	994.1
111.4	168.9	277.9	426.8	553.4	686.2	887.9
77.6	109.5	180.5	287.1	399.4	500.6	660.1
56.8	72.8	108.1	171.7	242.4	312.9	409.6
43.8	52.5	69.2	103.7	136.9	175.2	247.0
30.7	34.7	42.8	64.1	91.8	125.3	181.0
13.4	15.7	20.6	37.8	62.1	59.8	57.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)