

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: P149823

Luminaire Tested: **VXM-F03-LED-E1-SL2-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P149823
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33678)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VXM-F03-LED-E1-SL2-8030
Description: VISION SITE MEDIUM LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6385.8 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 78.3
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

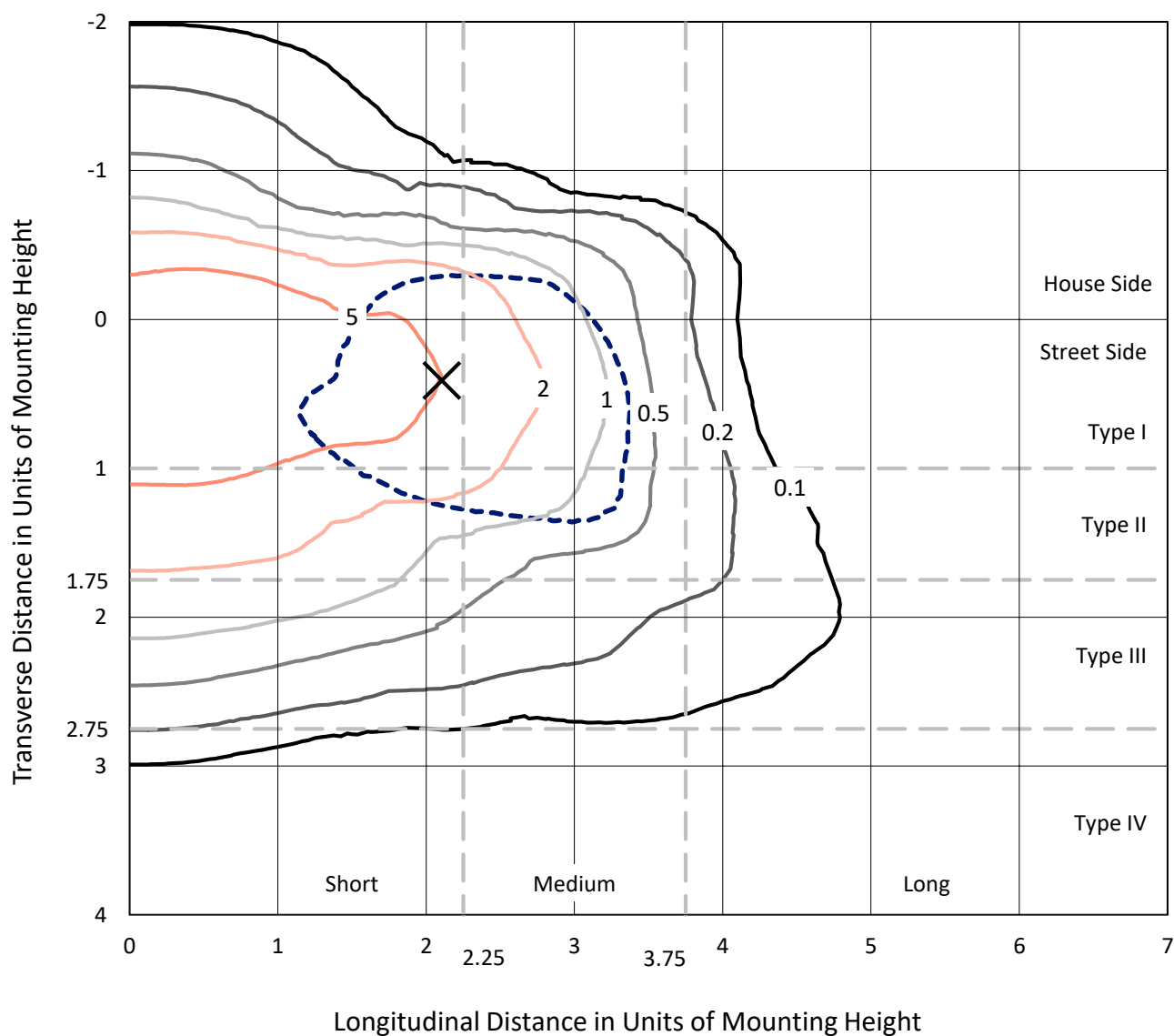


REPORT NUMBER: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

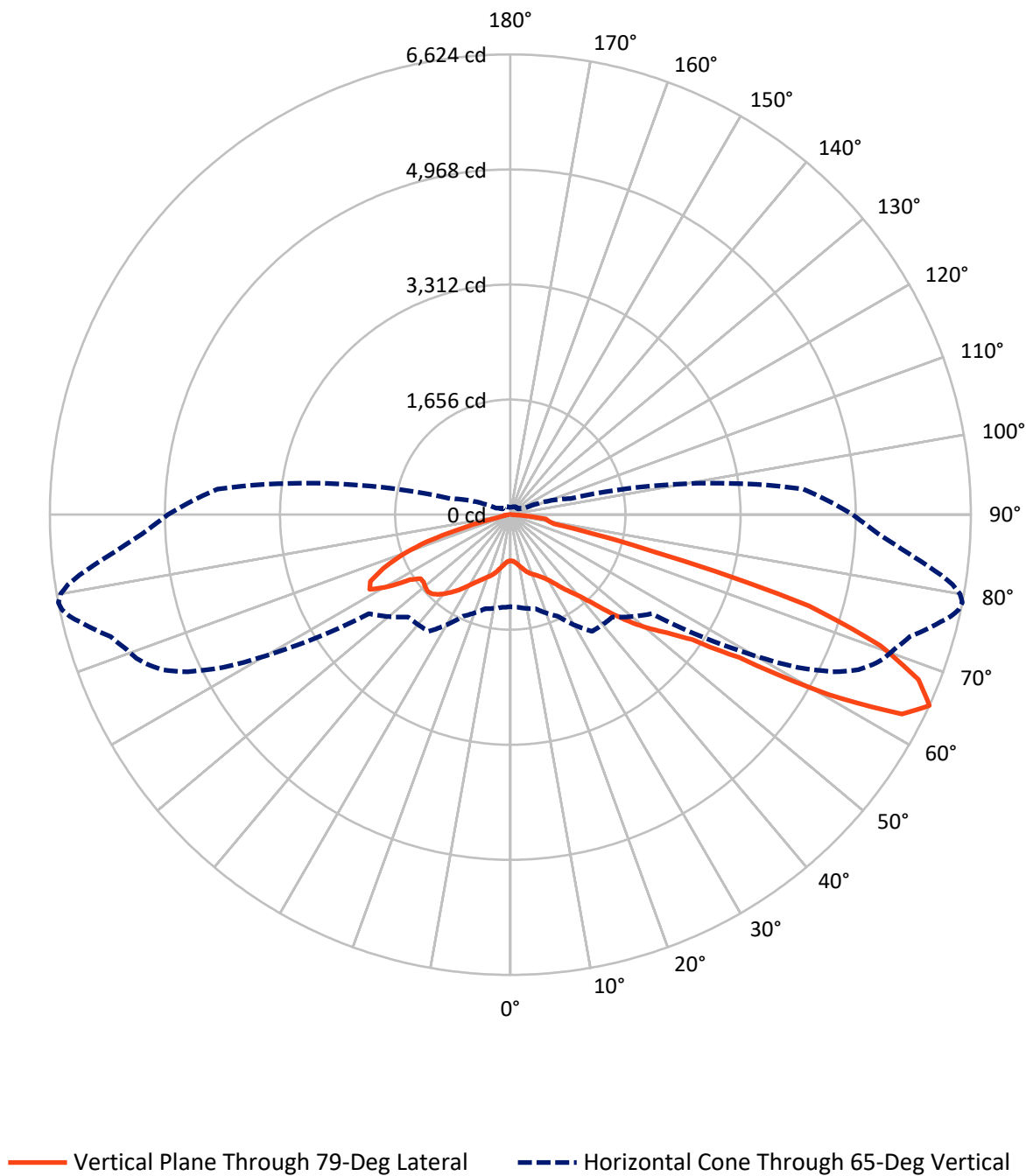


Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1509.6	0.0	1509.6
	% Fixture	23.6	0.0	23.6
Street Side	Lumens	4876.2	0.0	4876.2
	% Fixture	76.4	0.0	76.4
Total	Lumens	6385.8	0.0	6385.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	1.0
10°-20°	216.0	3.4
20°-30°	373.2	5.8
30°-40°	617.7	9.7
40°-50°	1047.6	16.4
50°-60°	1391.9	21.8
60°-70°	1798.0	28.2
70°-80°	754.1	11.8
80°-90°	121.1	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°	6385.8	100.0
0°-180°	6385.8	100.0

Coefficient of Utilization



REPORT NUMBER: P149823

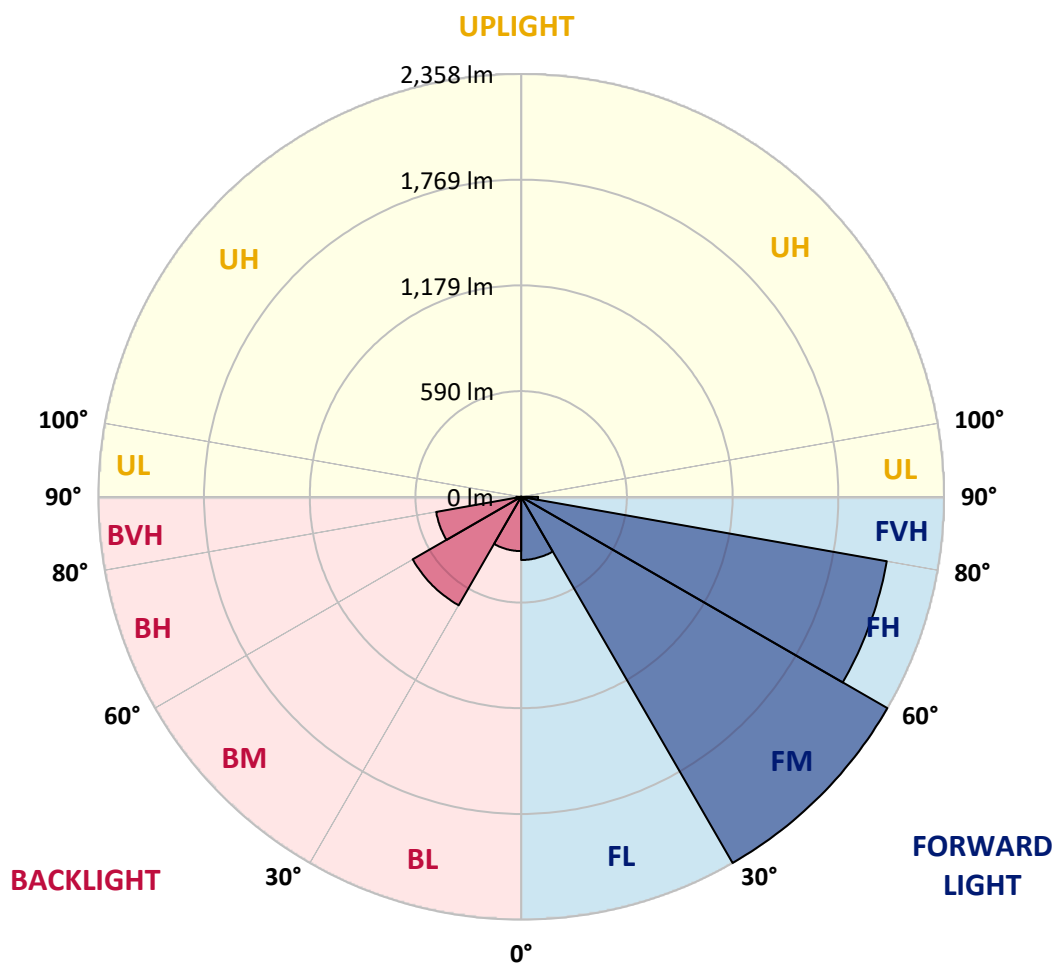
CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	352.3	5.5			
FM	(30°-60°)	2358.5	36.9			
FH	(60°-80°)	2070.7	32.4			G2/5000
FVH	(80°-90°)	94.7	1.5			G1/100
BL	(0°-30°)	302.9	4.7	B1/500		
BM	(30°-60°)	698.8	10.9	B1/1000		
BH	(60°-80°)	481.4	7.5	B1/500		G1/500
BVH	(80°-90°)	26.4	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 II Short



REPORT NUMBER: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7
2.5°	662.6	664.7	663.3	664.7	666.1	666.8	668.2	667.5	667.5	668.2	666.8
5°	662.6	662.6	664.7	668.2	669.6	673.7	678.6	677.9	678.6	677.9	679.3
7.5°	676.5	675.8	677.9	682.1	683.5	689.8	698.1	699.5	700.9	700.9	703.0
10°	700.9	700.2	702.3	704.4	706.5	711.4	723.2	728.1	728.8	729.5	732.3
12.5°	731.6	730.9	728.1	728.1	727.4	736.4	752.5	761.5	762.9	765.7	767.8
15°	753.2	751.1	746.9	744.1	747.6	762.2	785.9	796.4	797.8	799.9	805.4
17.5°	774.1	772.0	762.9	756.0	760.8	784.5	816.6	827.7	830.5	832.6	838.9
20°	803.3	801.9	788.7	772.0	770.6	801.2	840.3	854.9	857.0	859.8	866.0
22.5°	847.9	841.7	826.3	795.0	779.6	811.0	857.0	877.2	880.0	882.8	891.1
25°	903.7	900.9	874.4	826.3	794.3	820.8	875.1	900.2	904.4	907.8	919.0
27.5°	961.5	957.3	928.7	866.0	820.1	840.3	903.7	932.2	937.8	943.4	953.8
30°	1013.1	1011.7	988.0	919.7	861.9	877.2	949.7	984.5	990.8	997.7	1007.5
32.5°	1134.3	1135.0	1110.6	1040.9	962.9	944.1	1015.8	1068.1	1070.9	1079.2	1096.7
35°	1366.3	1369.1	1360.0	1305.0	1217.2	1139.9	1146.8	1198.4	1201.2	1208.1	1224.9
37.5°	1521.7	1527.2	1555.1	1572.5	1527.9	1492.4	1403.9	1383.7	1385.8	1381.6	1378.1
40°	1607.4	1615.7	1688.9	1779.5	1828.2	1828.9	1790.6	1701.4	1667.3	1657.5	1615.7
42.5°	1656.1	1670.1	1773.9	1928.6	2068.6	2164.8	2188.4	2089.5	2064.4	2019.8	1939.7
45°	1688.2	1704.9	1827.5	2039.3	2245.6	2409.3	2532.6	2488.7	2472.0	2444.8	2371.0
47.5°	1682.6	1695.9	1823.4	2077.0	2338.2	2571.0	2789.7	2835.0	2814.8	2807.8	2757.7
50°	1580.9	1592.7	1722.3	1983.6	2287.4	2632.3	2952.8	3081.0	3081.0	3094.2	3078.9
52.5°	1472.2	1482.0	1599.7	1834.5	2123.0	2572.3	3043.3	3255.8	3283.7	3306.7	3342.9
55°	1431.1	1442.9	1532.1	1732.8	1982.9	2401.0	3074.0	3386.8	3438.4	3477.4	3559.6
57.5°	1450.6	1462.4	1525.9	1677.7	1900.7	2226.1	3075.4	3563.1	3662.7	3742.9	3909.4
60°	1534.9	1546.1	1599.0	1728.6	1879.1	2125.0	3016.2	3843.9	4002.7	4153.2	4430.5
62.5°	1495.9	1509.8	1587.2	1812.9	2040.0	2048.4	2802.3	4061.3	4317.0	4539.2	4980.3
65°	1325.2	1339.8	1400.4	1611.5	2049.8	2081.8	2485.3	4065.5	4383.2	4683.5	5159.3
67.5°	1006.1	1011.7	1059.7	1229.0	1639.4	2118.8	2159.2	3584.0	3886.4	4221.5	4712.7
70°	514.2	523.9	537.9	678.6	1055.6	1750.9	1855.4	2641.3	3026.6	3372.9	3963.0
72.5°	178.4	181.8	195.8	259.2	514.2	1148.9	1624.1	1810.1	2042.8	2366.8	3050.3
75°	107.3	107.3	112.2	131.0	234.8	598.5	1445.0	1478.5	1509.8	1618.5	2065.8
77.5°	85.0	86.4	86.4	89.9	130.3	307.3	1097.4	1374.7	1378.8	1389.3	1464.5
80°	60.6	63.4	69.0	71.8	84.3	168.6	615.9	1206.7	1289.0	1328.7	1383.7
82.5°	45.3	48.1	58.5	62.0	65.5	94.1	276.6	832.6	982.4	1061.8	1255.5
85°	20.2	23.7	39.7	43.9	46.0	50.2	129.6	236.9	272.4	305.9	403.4
87.5°	3.5	3.5	6.3	9.1	13.2	12.5	28.6	40.4	41.1	48.1	53.6
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: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7
2.5°	666.8	666.8	666.8	666.1	666.8	666.8	666.8	666.8	667.5	667.5	667.5
5°	681.4	680.0	680.7	680.7	680.7	680.0	681.4	680.7	681.4	683.5	682.8
7.5°	703.0	704.4	705.1	705.8	705.8	705.8	706.5	707.9	707.9	710.0	709.3
10°	735.1	734.4	735.1	737.1	739.2	739.9	742.0	741.3	742.7	745.5	748.3
12.5°	769.2	770.6	772.7	774.8	778.3	779.0	781.0	781.7	785.9	785.9	788.7
15°	807.5	808.2	812.4	813.1	817.3	818.7	822.1	823.5	828.4	829.1	831.9
17.5°	842.4	843.7	845.8	847.9	852.8	854.9	857.7	860.5	864.6	866.0	870.9
20°	870.2	873.0	873.7	877.9	882.1	884.9	887.6	890.4	894.6	896.7	901.6
22.5°	895.3	898.1	900.2	903.7	906.5	910.6	912.0	916.9	921.1	924.6	928.7
25°	922.5	926.7	928.7	935.0	937.1	941.3	944.8	949.7	955.2	959.4	965.0
27.5°	960.8	967.1	969.9	976.8	981.7	983.8	989.4	996.3	1001.2	1006.1	1011.7
30°	1013.8	1025.6	1027.7	1032.6	1041.6	1043.0	1050.0	1055.6	1063.2	1068.1	1073.0
32.5°	1096.0	1110.6	1112.0	1117.6	1125.2	1128.0	1133.6	1139.9	1151.7	1153.8	1161.5
35°	1222.1	1228.3	1233.9	1236.0	1242.3	1245.8	1249.9	1256.9	1268.8	1267.4	1275.7
37.5°	1373.3	1375.4	1376.1	1369.1	1370.5	1364.2	1371.9	1373.3	1377.4	1380.9	1389.3
40°	1589.3	1567.7	1564.9	1548.1	1531.4	1522.4	1518.9	1504.9	1508.4	1509.8	1516.8
42.5°	1904.9	1863.1	1828.2	1804.5	1763.4	1743.2	1716.1	1694.5	1677.7	1684.0	1686.8
45°	2304.8	2244.9	2189.1	2116.7	2063.0	2024.7	1976.6	1933.4	1913.9	1904.9	1916.0
47.5°	2704.0	2651.1	2585.6	2511.0	2426.0	2362.6	2282.5	2212.1	2163.4	2145.2	2155.0
50°	3048.9	3000.1	2950.7	2906.8	2807.8	2738.9	2629.5	2538.2	2461.6	2422.5	2412.1
52.5°	3335.3	3309.5	3283.0	3246.1	3166.7	3097.7	3010.6	2920.7	2819.0	2739.6	2712.4
55°	3591.0	3606.3	3593.1	3593.8	3562.4	3518.5	3444.7	3377.8	3306.7	3216.8	3179.2
57.5°	3963.7	4054.3	4072.4	4117.7	4140.0	4163.7	4184.6	4144.9	4126.8	4059.9	4060.6
60°	4551.1	4683.5	4798.4	4902.9	4988.6	5072.2	5160.0	5199.0	5242.2	5262.4	5331.4
62.5°	5176.0	5302.2	5473.6	5613.6	5692.3	5801.0	5896.5	5958.5	6034.4	6115.2	6220.5
65°	5330.7	5482.6	5590.6	5684.0	5762.0	5819.8	5872.1	5945.9	6009.3	6137.5	6261.6
67.5°	4934.3	5055.5	5154.4	5246.4	5307.0	5355.8	5402.5	5451.3	5559.9	5676.3	5801.0
70°	4235.5	4381.8	4545.5	4664.6	4694.6	4736.4	4781.0	4844.4	4898.7	5020.7	5115.4
72.5°	3402.9	3613.3	3751.9	3917.0	3952.6	4016.0	4041.1	4090.5	4100.3	4166.5	4191.6
75°	2371.7	2612.8	2752.1	2873.3	2897.0	2862.2	2876.1	2701.2	2656.7	2620.4	2591.2
77.5°	1565.6	1630.4	1652.7	1633.1	1539.8	1466.6	1388.6	1312.0	1320.3	1258.3	1149.6
80°	1392.1	1406.7	1386.5	1367.0	1313.3	1236.7	1166.3	1094.6	1059.0	1021.4	965.7
82.5°	1354.5	1410.9	1417.2	1393.5	1351.0	1267.4	1182.4	1075.8	985.2	901.6	816.6
85°	452.9	551.1	595.0	636.1	648.7	663.3	613.1	544.8	462.6	407.6	319.1
87.5°	57.8	71.8	82.9	71.1	82.9	97.5	70.4	78.7	79.4	49.5	36.9
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: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7
2.5°	668.2	667.5	667.5	667.5	666.8	667.5	667.5	667.5	667.5	667.5	666.8
5°	683.5	683.5	685.6	686.3	684.9	684.2	684.9	685.6	685.6	684.9	685.6
7.5°	712.1	712.8	714.2	716.2	714.9	715.5	716.2	715.5	717.6	718.3	717.6
10°	748.3	749.7	753.2	753.9	753.2	756.0	756.7	755.3	756.7	756.7	759.4
12.5°	790.1	791.5	795.7	797.1	798.5	799.2	801.2	801.9	804.0	805.4	807.5
15°	835.4	836.8	839.6	844.4	845.8	847.2	848.6	852.8	853.5	856.3	858.4
17.5°	873.7	875.8	880.0	883.5	885.6	889.0	890.4	895.3	896.7	900.9	904.4
20°	904.4	907.8	911.3	915.5	919.0	923.2	924.6	929.4	932.2	934.3	938.5
22.5°	932.2	936.4	941.3	946.2	949.0	954.5	956.6	958.7	965.0	967.8	971.9
25°	968.5	972.6	978.2	984.5	987.3	994.2	996.3	999.8	1006.8	1009.6	1015.8
27.5°	1017.9	1023.5	1027.7	1034.0	1037.4	1042.3	1047.2	1051.4	1057.6	1061.8	1068.8
30°	1079.9	1084.1	1091.1	1096.0	1101.5	1108.5	1114.1	1118.3	1121.7	1128.0	1135.7
32.5°	1171.2	1171.9	1174.0	1185.8	1191.4	1197.0	1204.7	1208.1	1213.7	1220.0	1228.3
35°	1284.8	1291.1	1295.9	1301.5	1307.8	1314.0	1316.8	1327.3	1332.2	1340.5	1348.9
37.5°	1397.7	1398.3	1409.5	1413.0	1418.6	1424.8	1434.6	1445.0	1457.6	1465.9	1479.2
40°	1518.9	1524.5	1538.4	1545.4	1552.3	1567.7	1575.3	1592.0	1612.9	1624.8	1647.1
42.5°	1694.5	1702.8	1727.9	1739.1	1755.8	1780.9	1796.9	1819.9	1828.2	1856.8	1867.3
45°	1924.4	1950.2	1986.4	2010.1	2040.0	2067.2	2081.1	2091.6	2104.1	2126.4	2123.6
47.5°	2173.1	2206.6	2247.0	2295.7	2315.3	2347.3	2365.4	2385.6	2374.5	2368.9	2363.3
50°	2428.1	2467.1	2520.8	2564.7	2594.6	2614.2	2629.5	2626.7	2603.0	2590.5	2555.6
52.5°	2711.7	2734.7	2785.5	2823.2	2841.3	2845.5	2842.0	2821.1	2798.8	2759.1	2718.0
55°	3146.5	3136.0	3156.2	3173.6	3168.1	3187.6	3137.4	3117.9	3062.8	3011.3	2956.2
57.5°	4029.9	4043.9	3931.0	3880.1	3871.1	3889.2	3800.7	3789.5	3656.5	3639.7	3547.1
60°	5321.7	5389.9	5301.5	5252.0	5118.2	5074.3	4975.4	4934.3	4806.8	4703.7	4573.4
62.5°	6292.9	6354.9	6391.9	6321.5	6243.4	6128.5	5978.7	5812.9	5677.7	5519.5	5381.6
65°	6380.7	6506.1	6591.1	6623.9	6568.8	6442.7	6258.1	6049.1	5842.1	5643.6	5469.4
67.5°	5970.3	6082.5	6214.2	6331.9	6338.9	6256.7	6099.2	5886.7	5647.7	5402.5	5198.3
70°	5265.2	5406.0	5520.9	5645.0	5731.3	5684.0	5605.2	5410.2	5162.1	4971.2	4736.4
72.5°	4282.1	4341.4	4369.2	4491.2	4492.6	4406.2	4350.4	4242.4	4042.5	3907.3	3728.2
75°	2500.6	2370.3	2231.6	2111.1	2012.9	1971.8	1789.2	1758.6	1635.9	1560.0	1448.5
77.5°	1031.2	914.8	765.0	640.3	517.0	461.2	380.4	344.9	298.9	278.7	265.5
80°	884.2	774.1	661.2	553.2	457.1	360.9	280.8	218.1	171.4	145.6	135.2
82.5°	721.8	655.6	576.9	518.4	443.1	371.4	313.5	243.2	181.8	133.8	102.4
85°	260.6	213.9	172.1	158.2	126.1	103.8	87.1	74.6	61.3	48.8	43.2
87.5°	29.3	27.9	16.0	15.3	17.4	12.5	14.6	13.2	11.1	9.8	10.5
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: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7	664.7
2.5°	666.8	666.8	667.5	667.5	668.2	668.9	670.3	669.6	669.6	670.3	670.3
5°	685.6	687.7	687.0	687.0	687.0	687.7	688.4	685.6	682.8	680.0	678.6
7.5°	718.3	719.7	721.1	719.7	721.1	720.4	719.0	711.4	702.3	691.2	683.5
10°	760.8	760.8	762.2	761.5	764.3	762.2	758.0	740.6	721.1	697.4	680.0
12.5°	806.8	811.7	809.6	810.3	815.9	810.3	800.5	774.8	739.9	701.6	671.0
15°	861.2	863.3	864.6	862.6	866.0	861.2	843.7	802.6	751.8	698.1	652.8
17.5°	905.8	906.5	907.1	908.5	913.4	907.8	877.9	822.1	754.6	682.1	622.2
20°	940.6	944.1	946.9	946.9	953.8	945.5	905.8	831.9	745.5	655.6	583.2
22.5°	976.8	979.6	983.1	983.8	992.8	984.5	928.7	829.8	721.8	618.0	537.9
25°	1021.4	1024.2	1027.0	1030.5	1043.0	1031.2	951.7	821.5	689.1	573.4	489.1
27.5°	1073.0	1079.2	1081.3	1086.9	1101.5	1083.4	971.2	808.9	652.8	521.9	437.5
30°	1141.9	1149.6	1152.4	1160.1	1180.3	1140.6	982.4	787.3	606.9	469.6	382.5
32.5°	1234.6	1245.1	1253.4	1261.8	1284.8	1197.7	983.8	756.0	553.2	411.1	329.6
35°	1355.8	1371.9	1378.1	1383.7	1405.3	1259.7	977.5	709.3	487.7	351.2	287.8
37.5°	1491.7	1507.7	1511.9	1514.7	1518.9	1312.6	962.2	638.2	413.9	298.9	254.3
40°	1658.9	1672.9	1678.4	1674.3	1652.0	1353.8	928.1	555.3	342.1	263.4	233.4
42.5°	1863.1	1884.0	1886.1	1867.3	1793.4	1376.7	859.8	457.8	285.7	237.6	217.4
45°	2116.0	2114.6	2102.7	2089.5	1947.4	1367.7	764.3	372.8	250.1	217.4	202.8
47.5°	2343.1	2319.4	2301.3	2262.3	2083.2	1314.7	641.0	308.7	228.5	202.1	190.2
50°	2529.2	2486.0	2447.6	2405.1	2184.3	1220.7	518.4	262.0	208.3	188.8	178.4
52.5°	2676.2	2623.9	2579.3	2537.5	2281.8	1116.2	425.0	227.8	188.8	175.6	165.1
55°	2906.1	2853.8	2782.8	2736.8	2430.9	1020.0	364.4	200.7	170.0	161.6	151.2
57.5°	3487.9	3441.9	3356.9	3237.7	2814.1	983.8	330.3	179.8	154.7	149.8	141.4
60°	4503.7	4429.1	4318.4	4197.1	3593.1	1008.2	303.1	165.1	144.2	140.0	133.8
62.5°	5270.1	5139.1	5013.7	4901.5	4215.9	1007.5	267.5	154.0	136.6	134.5	128.2
65°	5301.5	5168.4	5042.3	4924.5	4229.9	896.7	225.7	144.2	135.2	134.5	124.0
67.5°	5020.0	4875.8	4753.8	4605.4	3915.7	700.9	181.2	138.0	140.7	139.3	122.6
70°	4560.1	4372.0	4271.7	4125.4	3446.1	490.5	149.1	140.0	152.6	148.4	124.7
72.5°	3579.1	3437.0	3284.4	3182.7	2697.8	310.0	125.4	141.4	157.5	150.5	130.3
75°	1332.2	1370.5	1307.8	1285.5	1370.5	181.8	111.5	131.7	140.7	130.3	118.4
77.5°	268.9	257.1	243.9	241.1	311.4	112.2	102.4	114.3	108.0	95.5	96.1
80°	128.9	125.4	121.2	120.5	115.7	93.4	94.8	97.5	81.5	73.9	78.7
82.5°	85.7	80.8	79.4	76.6	78.0	83.6	89.9	83.6	62.7	58.5	71.1
85°	39.7	38.3	37.6	37.6	41.8	75.2	74.6	61.3	43.2	41.8	71.1
87.5°	9.8	9.8	10.5	9.8	11.1	22.3	19.5	18.8	16.0	18.1	33.4
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: P149823

CATALOG NUMBER: VXM-F03-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	664.7	664.7	664.7
2.5°	669.6	670.3	669.6
5°	675.8	675.8	675.8
7.5°	675.8	673.7	673.0
10°	666.1	659.8	659.8
12.5°	649.4	638.9	637.5
15°	618.0	604.1	602.0
17.5°	578.3	559.5	556.0
20°	533.7	510.0	505.8
22.5°	484.9	457.8	455.7
25°	436.9	409.0	403.4
27.5°	383.2	356.0	353.2
30°	329.6	305.9	304.5
32.5°	284.3	269.6	266.8
35°	252.2	243.9	240.4
37.5°	231.3	225.0	224.3
40°	215.3	209.7	209.0
42.5°	202.1	197.2	196.5
45°	188.8	184.6	183.2
47.5°	175.6	171.4	170.7
50°	163.7	158.2	157.5
52.5°	152.6	147.0	145.6
55°	142.1	136.6	136.6
57.5°	133.1	127.5	126.8
60°	124.7	119.1	118.4
62.5°	118.4	111.5	110.8
65°	113.6	106.6	105.2
67.5°	110.8	102.4	100.3
70°	115.7	100.3	96.8
72.5°	116.4	98.2	93.4
75°	112.2	92.7	89.2
77.5°	98.2	82.9	79.4
80°	85.0	64.1	59.2
82.5°	80.8	52.3	45.3
85°	62.7	34.1	32.0
87.5°	35.5	18.8	15.3
90°	0.0	0.0	0.0

(END OF REPORT)