

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: P154320

Luminaire Tested: **VXM-E02-LED-E1-T2**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P154320
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33671)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VXM-E02-LED-E1-T2
Description: VISION SITE MEDIUM LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6127.7 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 52.1
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

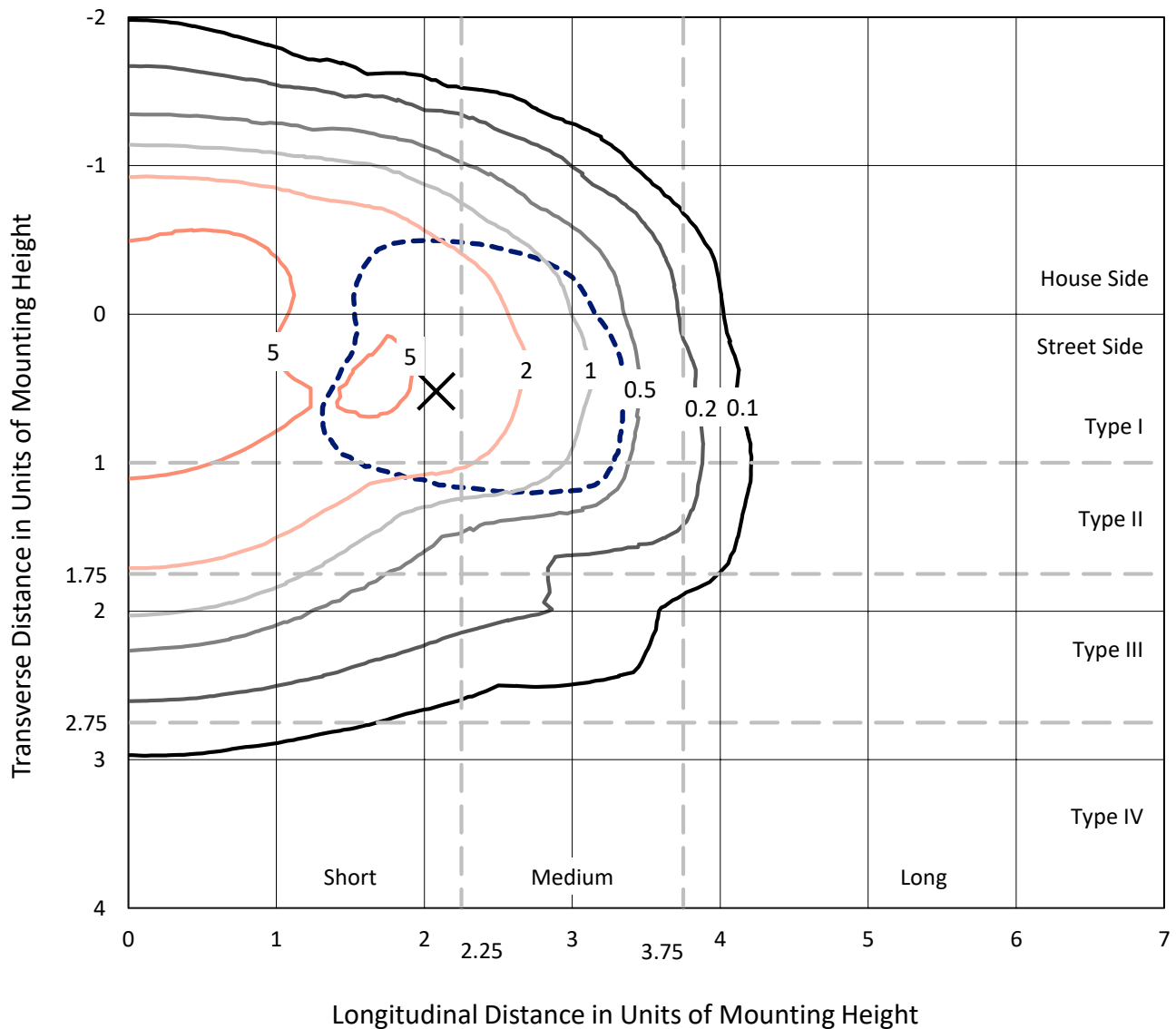


REPORT NUMBER: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

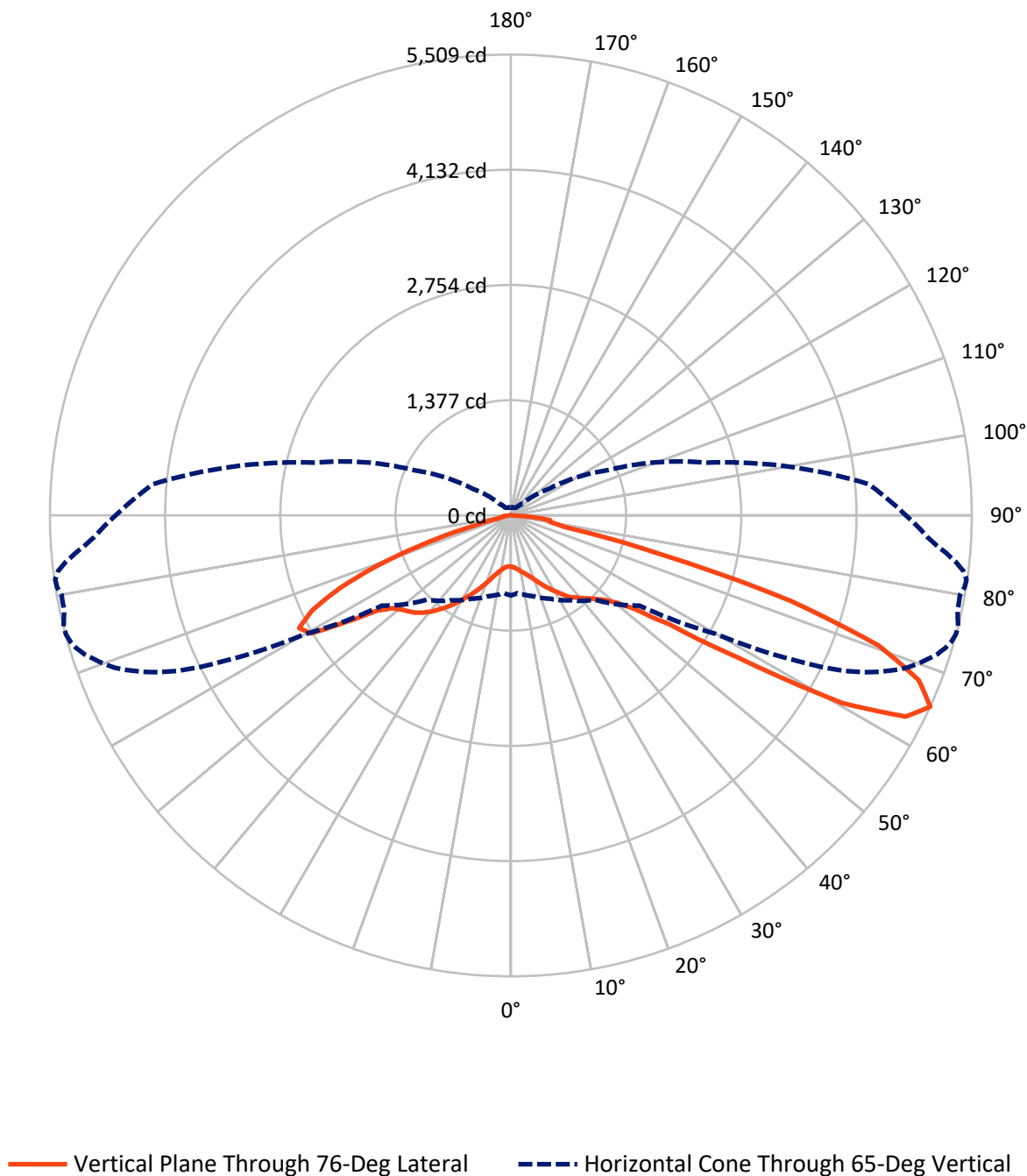


Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2145.8	0.0	2145.8
	% Fixture	35.0	0.0	35.0
Street Side	Lumens	3981.9	0.0	3981.9
	% Fixture	65.0	0.0	65.0
Total	Lumens	6127.7	0.0	6127.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	1.0
10°-20°	210.7	3.4
20°-30°	414.0	6.8
30°-40°	687.9	11.2
40°-50°	1010.8	16.5
50°-60°	1399.4	22.8
60°-70°	1670.3	27.3
70°-80°	590.7	9.6
80°-90°	82.5	1.3
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°	6127.7	100.0
0°-180°	6127.7	100.0

Coefficient of Utilization



REPORT NUMBER: P154320

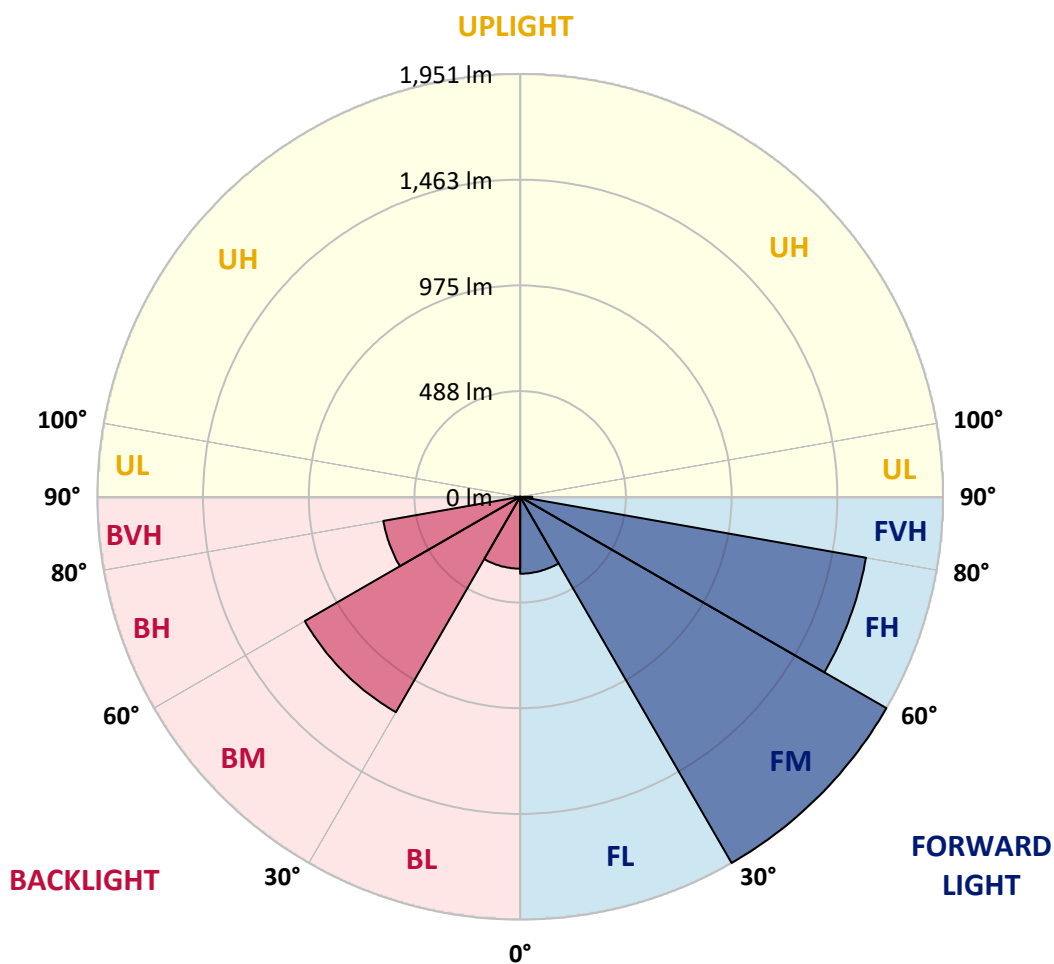
CATALOG NUMBER: VXM-E02-LED-E1-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	354.6	5.8			
FM	(30°-60°)	1950.9	31.8			
FH	(60°-80°)	1620.1	26.4			G1/1800
FVH	(80°-90°)	56.4	0.9			G1/100
BL	(0°-30°)	331.5	5.4	B1/500		
BM	(30°-60°)	1147.2	18.7	B2/2500		
BH	(60°-80°)	640.9	10.5	B2/1000		G2/1000
BVH	(80°-90°)	26.1	0.4			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



REPORT NUMBER: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7
2.5°	639.3	640.0	638.7	638.0	636.0	632.7	630.0	627.3	627.3	627.3	625.3
5°	667.3	668.7	666.0	664.0	658.0	654.7	650.0	646.7	645.3	644.7	642.7
7.5°	702.7	700.7	696.7	695.3	690.7	683.3	674.7	668.0	668.0	667.3	668.0
10°	738.0	732.7	730.7	728.7	721.3	712.0	702.0	694.7	694.0	693.3	691.3
12.5°	773.3	771.3	769.3	762.0	754.7	740.0	728.7	721.3	720.7	721.3	718.7
15°	820.0	815.3	813.3	800.7	784.7	768.7	754.7	748.0	746.0	746.7	744.7
17.5°	856.0	856.0	851.3	837.3	816.7	794.7	780.0	776.0	775.3	775.3	776.0
20°	884.7	884.0	879.3	868.0	843.3	821.3	814.0	812.7	812.0	812.0	814.0
22.5°	900.7	899.3	897.3	884.7	865.3	850.7	851.3	855.3	856.7	858.0	860.7
25°	908.7	906.7	906.0	897.3	883.3	881.3	893.3	904.0	906.7	909.3	912.7
27.5°	922.0	918.7	920.0	916.7	913.3	919.3	944.0	955.3	957.3	960.7	962.7
30°	958.7	957.3	962.7	964.0	966.7	975.3	998.0	1008.7	1013.3	1013.3	1022.7
32.5°	1028.7	1029.3	1030.7	1044.7	1049.3	1055.3	1067.3	1076.0	1076.7	1077.3	1086.0
35°	1122.7	1126.7	1138.0	1150.0	1161.3	1160.7	1153.3	1158.0	1154.7	1158.7	1159.3
37.5°	1241.3	1236.0	1252.7	1280.0	1297.3	1292.7	1260.0	1238.7	1244.7	1242.0	1240.0
40°	1332.7	1338.7	1370.7	1406.7	1420.0	1434.7	1392.0	1355.3	1350.0	1340.0	1334.0
42.5°	1458.7	1459.3	1485.3	1512.0	1550.7	1582.7	1555.3	1502.7	1486.7	1474.7	1448.7
45°	1575.3	1573.3	1594.7	1627.3	1673.3	1719.3	1729.3	1672.0	1666.0	1644.7	1610.7
47.5°	1653.3	1650.7	1665.3	1708.0	1782.7	1858.0	1899.3	1882.0	1870.7	1862.0	1808.7
50°	1706.0	1700.7	1717.3	1762.7	1846.0	1962.0	2070.0	2084.7	2080.0	2080.0	2046.0
52.5°	1745.3	1745.3	1757.3	1794.0	1878.7	2023.3	2216.7	2290.7	2296.7	2303.3	2301.3
55°	1723.3	1726.7	1756.7	1810.0	1899.3	2066.0	2338.0	2500.0	2533.3	2561.3	2593.3
57.5°	1648.0	1659.3	1699.3	1786.7	1904.7	2098.0	2472.7	2793.3	2887.3	2968.7	3095.3
60°	1538.0	1552.7	1610.7	1722.0	1865.3	2046.0	2520.0	3041.3	3190.7	3368.0	3698.7
62.5°	1349.3	1364.0	1420.7	1532.0	1654.7	1846.7	2324.0	3078.0	3316.7	3568.0	4068.0
65°	956.0	932.7	998.0	1098.0	1238.7	1424.7	1878.0	2832.0	3175.3	3516.0	4133.3
67.5°	532.7	530.7	570.7	645.3	780.0	980.0	1294.0	2172.0	2488.0	2874.0	3632.0
70°	367.3	371.3	396.7	477.3	588.7	761.3	922.0	1364.0	1591.3	1853.3	2598.7
72.5°	258.0	266.7	280.7	328.7	442.7	641.3	942.0	815.3	928.7	1107.3	1562.7
75°	151.3	157.3	167.3	190.7	252.0	428.7	975.3	716.7	716.7	758.7	945.3
77.5°	93.3	93.3	99.3	108.7	134.0	210.0	694.7	805.3	782.7	758.7	760.7
80°	48.0	51.3	60.0	64.7	74.7	96.0	312.0	751.3	824.0	872.7	838.7
82.5°	22.0	24.7	36.7	39.3	43.3	50.7	107.3	427.3	572.7	754.0	942.0
85°	11.3	11.3	19.3	24.0	26.0	23.3	39.3	172.7	261.3	398.7	624.0
87.5°	2.0	2.0	3.3	4.0	6.0	5.3	6.7	10.0	16.7	18.0	18.7
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: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7
2.5°	624.7	625.3	624.7	624.0	622.7	622.7	622.7	622.0	622.0	622.0	621.3
5°	642.7	640.0	640.7	639.3	638.7	638.0	638.7	637.3	636.0	636.7	636.0
7.5°	665.3	664.0	661.3	661.3	660.7	659.3	659.3	657.3	656.7	655.3	654.7
10°	690.7	687.3	688.7	687.3	688.0	685.3	684.0	682.7	681.3	681.3	682.0
12.5°	716.7	716.0	714.0	712.7	712.7	710.7	711.3	710.7	708.7	708.0	706.0
15°	743.3	743.3	741.3	742.0	741.3	740.0	738.7	738.7	737.3	736.0	736.7
17.5°	774.7	774.7	774.7	774.7	775.3	773.3	774.0	772.7	771.3	774.0	774.0
20°	815.3	818.0	818.0	817.3	820.7	818.7	818.0	821.3	818.0	822.7	822.0
22.5°	862.0	864.7	864.7	867.3	868.0	870.0	871.3	870.0	872.7	875.3	875.3
25°	914.0	916.7	918.7	922.7	924.7	923.3	924.0	927.3	928.7	931.3	934.0
27.5°	968.7	969.3	972.0	976.7	980.0	981.3	982.0	987.3	988.0	989.3	992.0
30°	1022.0	1028.7	1027.3	1033.3	1035.3	1037.3	1041.3	1043.3	1048.0	1050.7	1050.7
32.5°	1084.7	1083.3	1088.7	1093.3	1096.7	1100.0	1103.3	1106.0	1108.7	1110.0	1116.7
35°	1162.7	1165.3	1165.3	1166.0	1174.0	1174.7	1177.3	1183.3	1185.3	1189.3	1192.0
37.5°	1240.0	1235.3	1234.7	1234.7	1232.0	1234.0	1234.7	1235.3	1238.0	1238.7	1241.3
40°	1326.7	1320.7	1315.3	1312.0	1306.7	1299.3	1298.0	1294.7	1296.7	1296.0	1296.7
42.5°	1445.3	1428.7	1416.0	1406.7	1396.0	1388.0	1382.0	1373.3	1367.3	1360.0	1358.7
45°	1596.7	1565.3	1544.0	1528.7	1513.3	1491.3	1478.7	1465.3	1453.3	1441.3	1431.3
47.5°	1795.3	1762.0	1728.0	1700.0	1676.0	1640.7	1604.7	1584.7	1561.3	1540.7	1526.0
50°	2029.3	1989.3	1973.3	1934.0	1904.0	1850.7	1806.0	1773.3	1726.7	1695.3	1668.0
52.5°	2268.7	2258.7	2250.0	2216.7	2181.3	2150.7	2111.3	2054.0	2006.7	1970.7	1914.7
55°	2594.7	2599.3	2596.0	2578.0	2565.3	2536.0	2520.0	2470.0	2448.7	2396.7	2338.0
57.5°	3143.3	3180.7	3228.0	3246.7	3272.0	3248.0	3276.0	3310.0	3225.3	3254.7	3202.0
60°	3844.0	4015.3	4117.3	4242.7	4324.7	4439.3	4460.0	4490.0	4481.3	4498.0	4532.0
62.5°	4272.0	4475.3	4670.7	4812.7	4964.7	5048.7	5150.0	5220.7	5294.0	5343.3	5329.3
65°	4398.0	4607.3	4784.7	4940.0	5076.0	5178.7	5272.7	5361.3	5428.7	5476.0	5504.0
67.5°	3935.3	4208.7	4395.3	4577.3	4752.7	4860.7	4939.3	5025.3	5124.0	5206.0	5222.0
70°	2961.3	3371.3	3636.0	3854.0	4060.0	4205.3	4315.3	4395.3	4472.0	4530.7	4594.7
72.5°	1852.0	2210.7	2513.3	2796.0	3014.7	3214.7	3307.3	3484.7	3461.3	3506.0	3554.0
75°	1110.0	1284.7	1451.3	1650.7	1765.3	1932.0	1962.0	1991.3	1976.0	1926.0	1963.3
77.5°	771.3	800.0	798.7	787.3	775.3	746.0	708.0	687.3	673.3	653.3	661.3
80°	776.0	714.0	619.3	520.7	430.0	370.0	346.0	346.0	370.7	406.0	441.3
82.5°	927.3	861.3	768.0	642.7	509.3	414.7	351.3	326.0	330.7	366.7	412.0
85°	625.3	640.0	561.3	513.3	406.7	316.7	265.3	215.3	190.7	196.7	222.7
87.5°	22.7	27.3	10.0	13.3	9.3	8.0	8.0	8.7	6.0	7.3	6.7
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: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7
2.5°	620.7	620.0	620.0	618.7	618.7	618.0	618.0	617.3	616.7	616.7	616.0
5°	635.3	634.7	633.3	632.7	631.3	631.3	630.7	629.3	629.3	628.0	627.3
7.5°	656.0	654.7	653.3	652.7	652.0	650.0	650.0	648.7	648.7	647.3	646.7
10°	680.7	679.3	678.0	678.7	676.7	676.0	674.7	674.7	672.7	672.0	672.0
12.5°	707.3	706.7	706.7	704.7	704.0	703.3	700.7	700.7	700.7	699.3	700.0
15°	736.0	736.7	734.7	736.7	736.0	734.0	734.0	734.0	731.3	734.7	732.0
17.5°	774.7	776.7	775.3	776.0	774.7	774.7	775.3	774.7	776.0	776.0	780.0
20°	822.7	823.3	826.7	825.3	825.3	824.7	826.0	826.7	829.3	828.0	830.7
22.5°	875.3	878.7	879.3	882.0	882.0	881.3	882.7	885.3	886.7	888.7	888.0
25°	935.3	937.3	940.0	936.7	942.0	942.0	943.3	946.7	947.3	947.3	952.0
27.5°	991.3	996.7	997.3	1000.7	998.7	1000.0	1004.7	1006.7	1009.3	1009.3	1010.7
30°	1054.7	1056.7	1058.0	1062.0	1061.3	1062.0	1062.7	1066.0	1066.0	1069.3	1072.7
32.5°	1120.0	1121.3	1122.7	1126.7	1128.0	1130.7	1129.3	1132.0	1135.3	1136.0	1138.0
35°	1198.0	1199.3	1200.7	1206.7	1207.3	1212.0	1213.3	1212.0	1217.3	1214.0	1217.3
37.5°	1243.3	1249.3	1250.7	1254.7	1253.3	1256.7	1258.7	1261.3	1262.7	1265.3	1270.7
40°	1298.7	1300.7	1304.7	1306.7	1309.3	1310.0	1312.7	1314.7	1316.7	1322.7	1328.7
42.5°	1355.3	1358.0	1360.0	1362.7	1366.0	1368.7	1370.7	1376.7	1378.0	1382.0	1393.3
45°	1424.0	1422.7	1423.3	1424.0	1425.3	1428.7	1434.7	1440.7	1444.7	1454.0	1463.3
47.5°	1509.3	1500.7	1497.3	1492.0	1493.3	1500.7	1502.0	1512.0	1520.0	1528.7	1540.0
50°	1638.7	1615.3	1601.3	1587.3	1586.0	1590.0	1595.3	1606.0	1615.3	1626.7	1642.7
52.5°	1856.0	1811.3	1783.3	1744.7	1734.0	1732.0	1728.0	1734.0	1736.7	1752.0	1782.0
55°	2296.0	2213.3	2160.0	2100.0	2044.0	2027.3	1995.3	2002.0	1995.3	2004.7	2049.3
57.5°	3214.7	3148.7	3096.7	3020.0	2924.0	2822.0	2796.7	2692.0	2712.7	2772.7	2734.0
60°	4548.7	4524.7	4487.3	4450.7	4319.3	4245.3	4124.7	4111.3	4026.7	4027.3	3972.0
62.5°	5295.3	5326.0	5303.3	5292.7	5285.3	5262.0	5202.0	5130.0	5022.0	4944.0	4829.3
65°	5508.7	5482.7	5458.0	5454.7	5452.7	5490.7	5499.3	5448.7	5350.7	5229.3	5097.3
67.5°	5260.0	5245.3	5246.7	5218.7	5236.0	5302.0	5348.0	5334.0	5244.0	5097.3	4929.3
70°	4668.0	4639.3	4668.7	4705.3	4731.3	4769.3	4815.3	4826.7	4744.7	4594.0	4422.7
72.5°	3495.3	3500.0	3528.0	3538.0	3642.7	3632.0	3673.3	3538.7	3479.3	3336.0	3248.0
75°	1839.3	1809.3	1887.3	1722.0	1654.0	1701.3	1568.7	1441.3	1468.0	1490.0	1331.3
77.5°	650.0	608.0	536.7	508.0	422.7	358.0	292.7	264.0	248.7	240.7	230.7
80°	466.7	480.0	465.3	430.7	366.0	293.3	231.3	182.7	156.7	142.7	133.3
82.5°	472.0	524.7	548.0	538.0	479.3	362.7	239.3	152.7	113.3	94.7	88.0
85°	253.3	277.3	266.7	224.7	202.0	120.7	82.7	55.3	46.7	42.7	39.3
87.5°	10.0	8.0	6.7	6.7	7.3	8.0	6.7	7.3	6.7	6.7	6.7
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: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7	612.7
2.5°	614.7	614.7	614.7	614.0	612.7	609.3	606.0	603.3	601.3	599.3	596.7
5°	626.7	625.3	625.3	625.3	620.0	614.7	610.0	605.3	601.3	598.0	595.3
7.5°	646.7	646.0	643.3	642.7	638.7	630.0	624.7	616.7	612.0	607.3	606.0
10°	670.7	670.0	669.3	668.7	663.3	654.7	648.0	640.7	634.0	627.3	620.7
12.5°	698.7	698.0	697.3	695.3	693.3	688.7	681.3	673.3	665.3	651.3	644.0
15°	733.3	734.7	733.3	732.7	731.3	732.0	727.3	716.0	703.3	685.3	670.0
17.5°	779.3	778.0	777.3	780.0	779.3	782.7	781.3	766.7	747.3	718.7	692.0
20°	830.0	830.0	832.7	834.7	840.7	849.3	845.3	827.3	792.0	752.0	717.3
22.5°	890.7	892.0	894.7	893.3	902.7	916.7	918.0	892.7	846.7	791.3	742.7
25°	954.0	955.3	952.7	956.7	972.0	992.0	996.0	960.0	899.3	827.3	764.0
27.5°	1014.0	1015.3	1015.3	1020.7	1035.3	1069.3	1073.3	1033.3	952.7	858.7	779.3
30°	1072.7	1078.0	1079.3	1080.7	1102.7	1150.0	1158.7	1100.7	999.3	882.0	790.0
32.5°	1146.7	1148.7	1151.3	1154.7	1180.0	1238.0	1238.0	1158.7	1029.3	896.7	792.0
35°	1226.0	1226.7	1232.7	1233.3	1269.3	1327.3	1316.0	1206.7	1050.7	893.3	777.3
37.5°	1274.0	1276.7	1282.7	1290.7	1328.7	1410.7	1384.7	1248.0	1054.7	871.3	744.0
40°	1333.3	1338.7	1344.7	1352.7	1409.3	1495.3	1442.7	1274.0	1038.0	828.0	694.0
42.5°	1397.3	1404.7	1414.0	1428.7	1496.0	1570.0	1486.7	1278.0	1000.0	779.3	634.7
45°	1469.3	1482.7	1493.3	1510.7	1586.7	1634.7	1513.3	1254.7	952.0	715.3	571.3
47.5°	1552.7	1563.3	1582.0	1600.7	1676.7	1678.7	1516.0	1209.3	886.7	651.3	504.0
50°	1655.3	1662.0	1690.0	1701.3	1772.7	1724.7	1496.7	1148.0	818.0	579.3	429.3
52.5°	1792.0	1801.3	1837.3	1854.7	1905.3	1787.3	1469.3	1081.3	739.3	498.7	352.7
55°	2062.0	2102.7	2128.0	2158.0	2190.7	1929.3	1457.3	1010.0	650.7	405.3	279.3
57.5°	2820.0	2806.7	2862.7	2930.7	2930.0	2254.0	1529.3	948.7	546.0	310.0	214.7
60°	3949.3	3962.0	3933.3	3974.0	3844.7	2656.7	1628.0	884.0	428.0	230.7	164.0
62.5°	4788.7	4715.3	4674.7	4626.7	4342.0	2700.7	1556.0	751.3	311.3	162.0	126.0
65°	4987.3	4901.3	4814.0	4722.7	4293.3	2434.7	1276.7	551.3	201.3	111.3	100.0
67.5°	4791.3	4653.3	4542.0	4448.0	3934.0	2018.0	933.3	338.7	115.3	90.0	85.3
70°	4283.3	4130.7	3950.7	3845.3	3312.7	1487.3	598.0	182.7	88.7	80.0	78.0
72.5°	3135.3	3010.0	2813.3	2692.7	2378.7	904.0	334.0	102.7	82.7	76.7	74.0
75°	1221.3	1156.0	1074.0	1080.7	964.7	400.0	151.3	88.7	80.7	75.3	72.7
77.5°	210.0	204.7	189.3	189.3	215.3	146.0	100.7	89.3	80.0	74.0	69.3
80°	126.0	123.3	117.3	116.0	112.0	102.7	96.7	90.7	78.7	70.0	64.0
82.5°	82.7	79.3	77.3	76.7	83.3	90.0	90.7	90.0	74.7	60.7	52.0
85°	35.3	35.3	35.3	36.0	48.0	72.7	74.7	80.0	61.3	47.3	37.3
87.5°	6.0	7.3	7.3	8.0	8.7	16.0	20.0	26.0	20.7	20.0	18.0
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: P154320

CATALOG NUMBER: VXM-E02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	612.7	612.7	612.7
2.5°	596.0	594.7	594.7
5°	594.0	592.7	593.3
7.5°	602.0	599.3	600.0
10°	616.7	614.0	612.7
12.5°	635.3	632.0	632.0
15°	654.7	646.7	646.0
17.5°	670.7	660.7	659.3
20°	688.7	675.3	673.3
22.5°	705.3	687.3	684.7
25°	717.3	695.3	692.0
27.5°	722.7	696.7	694.0
30°	726.7	697.3	693.3
32.5°	722.7	691.3	688.0
35°	700.7	666.7	664.7
37.5°	662.7	624.7	622.0
40°	612.7	572.7	566.0
42.5°	548.7	511.3	504.0
45°	486.7	444.0	440.7
47.5°	420.0	379.3	381.3
50°	350.0	313.3	312.7
52.5°	283.3	251.3	249.3
55°	223.3	200.7	198.7
57.5°	176.7	164.7	162.7
60°	144.0	138.0	136.0
62.5°	116.0	114.0	113.3
65°	96.7	96.7	96.7
67.5°	84.0	84.7	84.7
70°	77.3	78.0	77.3
72.5°	74.7	76.7	76.7
75°	72.7	74.0	71.3
77.5°	71.3	72.0	67.3
80°	70.7	70.0	61.3
82.5°	61.3	59.3	52.0
85°	56.0	42.7	36.0
87.5°	28.7	20.0	15.3
90°	0.0	0.0	0.0

(END OF REPORT)