

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: P149809

Luminaire Tested: **VXM-E02-LED-E1-SL2-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P149809
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-E02-LED-E1-SL2-7030
Description: VISION SITE MEDIUM LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5580.8 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - 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



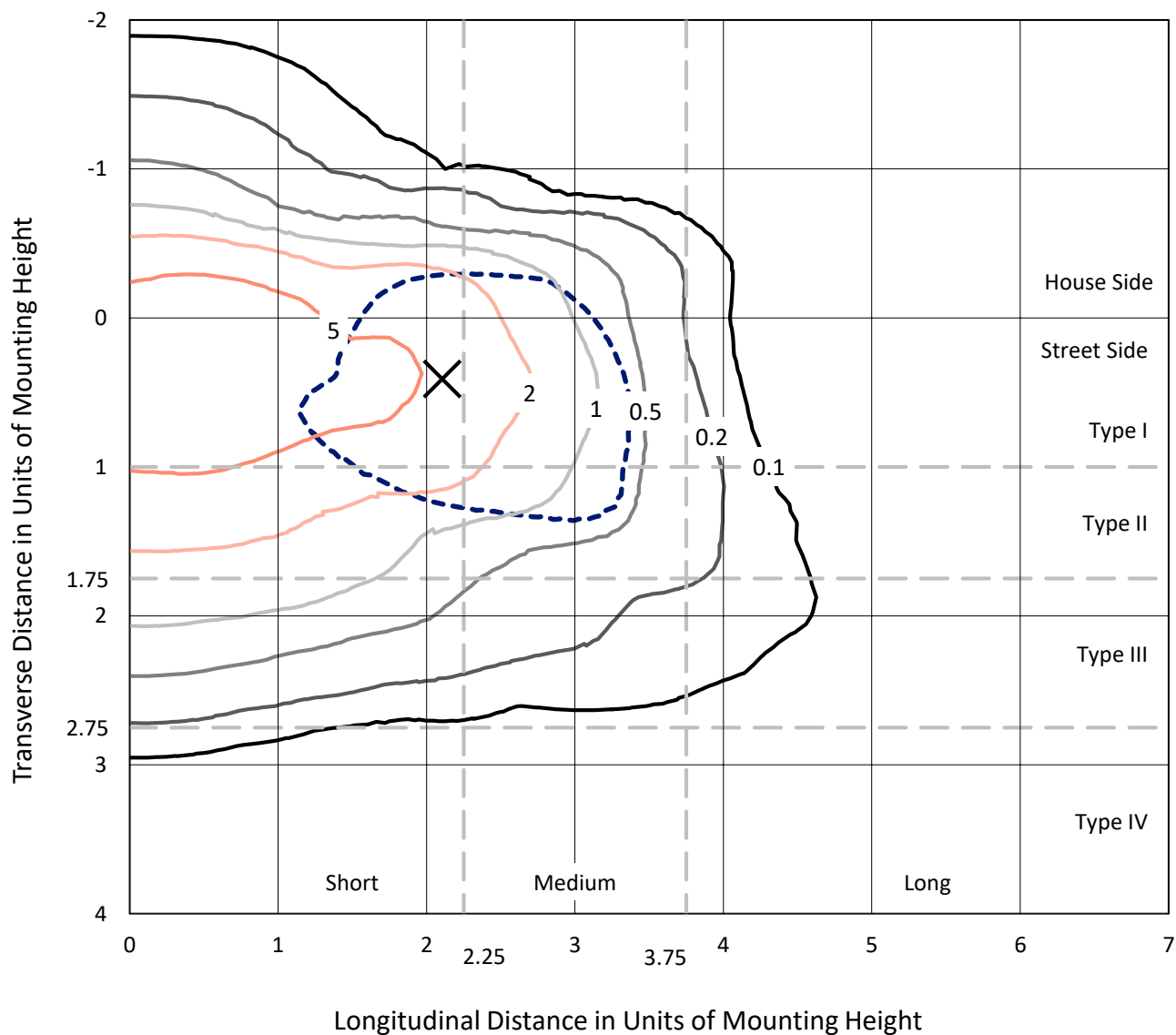
REPORT NUMBER: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

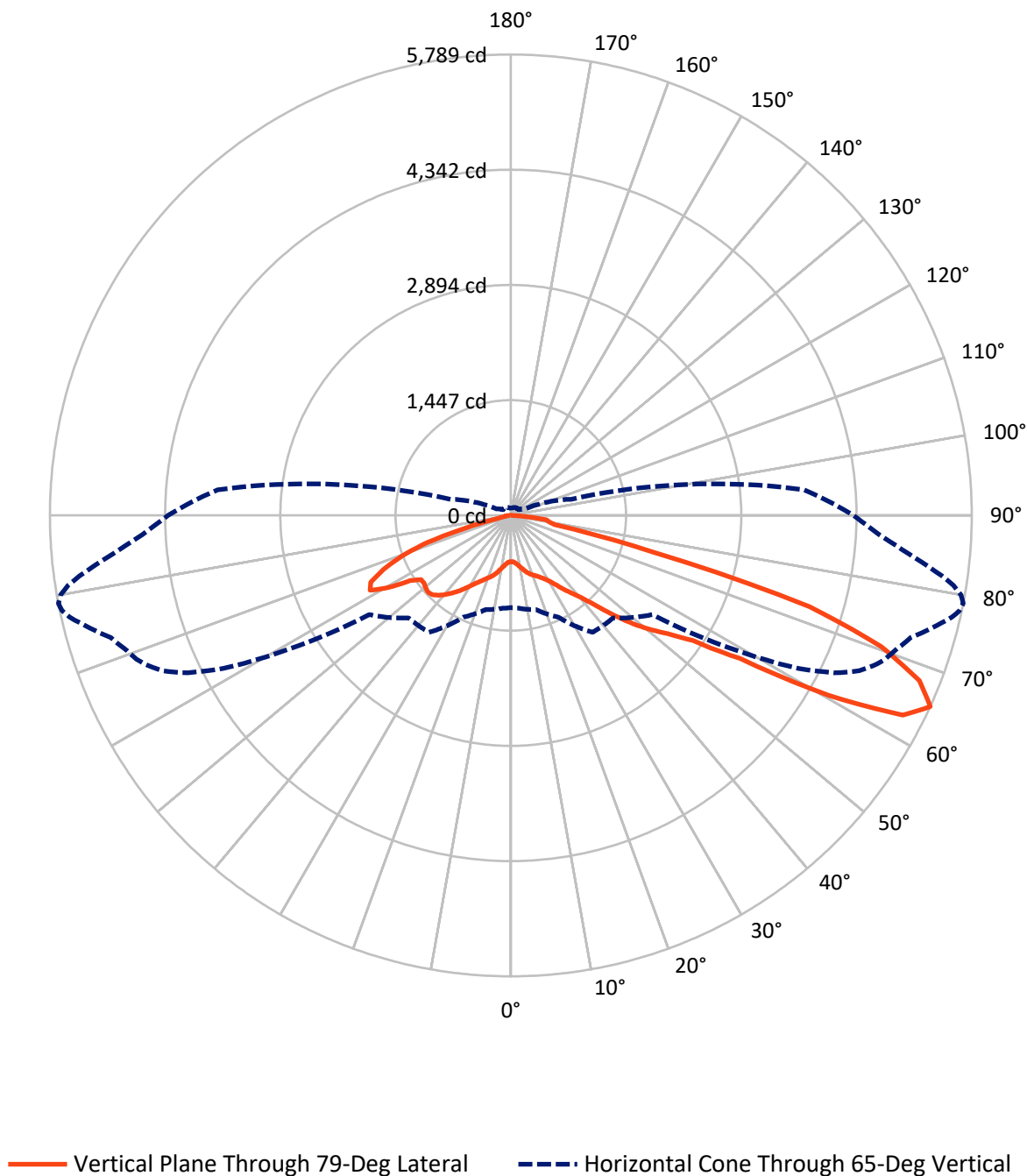


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P149809

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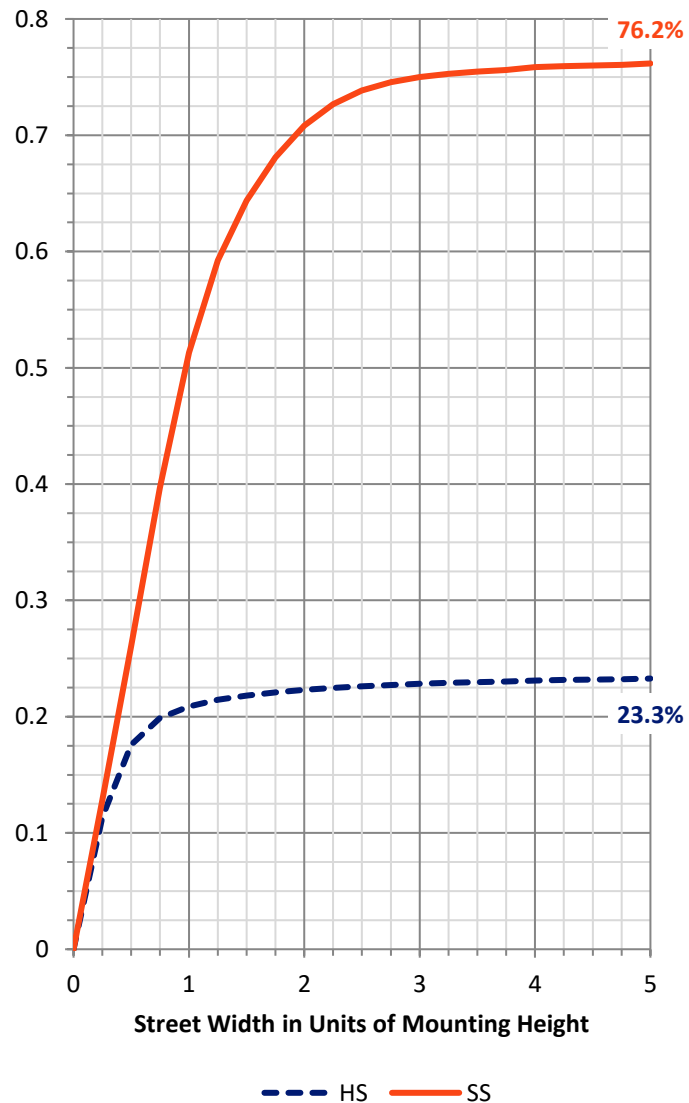
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1319.3	0.0	1319.3
	% Fixture	23.6	0.0	23.6
Street Side	Lumens	4261.5	0.0	4261.5
	% Fixture	76.4	0.0	76.4
Total	Lumens	5580.8	0.0	5580.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	1.0
10°-20°	188.8	3.4
20°-30°	326.1	5.8
30°-40°	539.8	9.7
40°-50°	915.5	16.4
50°-60°	1216.4	21.8
60°-70°	1571.4	28.2
70°-80°	659.0	11.8
80°-90°	105.9	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°	5580.8	100.0
0°-180°	5580.8	100.0

Coefficient of Utilization



REPORT NUMBER: P149809

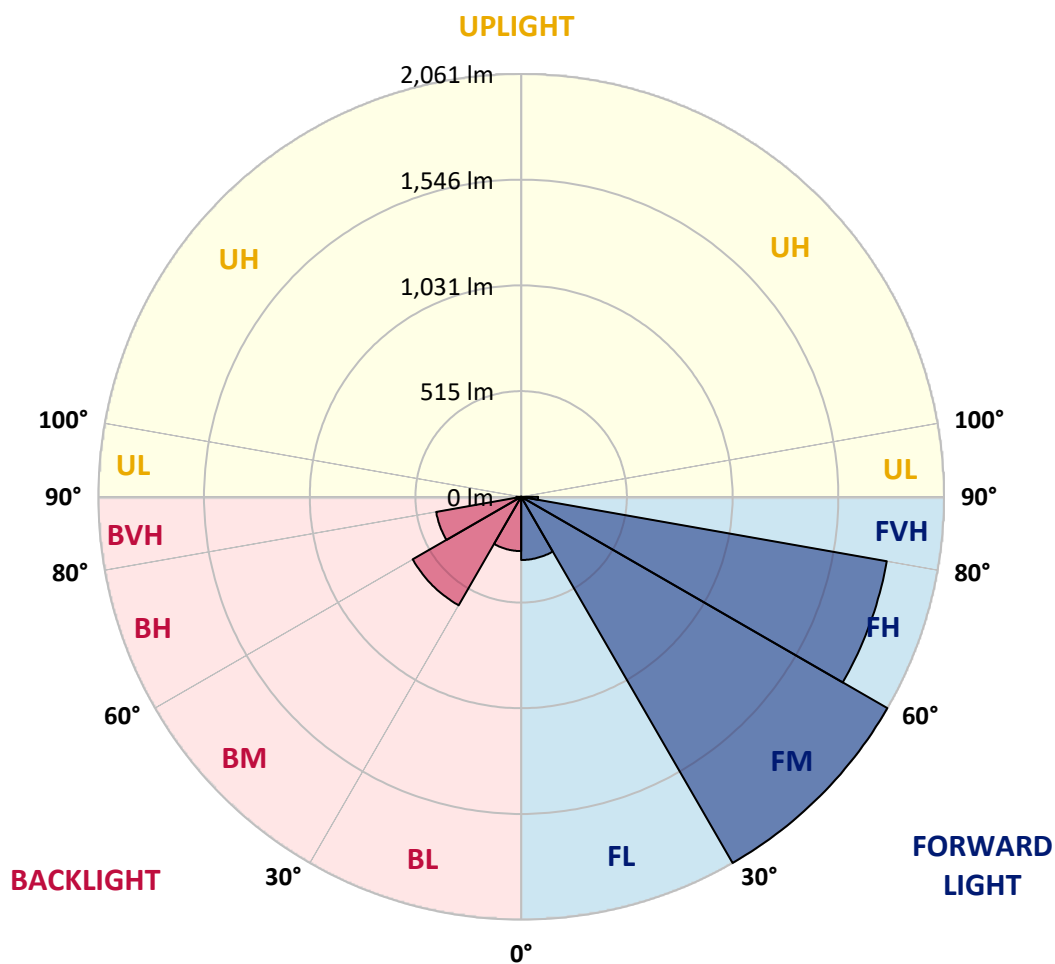
CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	307.9	5.5			
FM	(30°-60°)	2061.1	36.9			
FH	(60°-80°)	1809.6	32.4			G2/5000
FVH	(80°-90°)	82.8	1.5			G1/100
BL	(0°-30°)	264.7	4.7	B1/500		
BM	(30°-60°)	610.7	10.9	B1/1000		
BH	(60°-80°)	420.8	7.5	B1/500		G1/500
BVH	(80°-90°)	23.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



REPORT NUMBER: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	579.1	580.9	579.7	580.9	582.1	582.7	583.9	583.3	583.3	583.9	582.7
5°	579.1	579.1	580.9	583.9	585.2	588.8	593.1	592.5	593.1	592.5	593.7
7.5°	591.2	590.6	592.5	596.1	597.3	602.8	610.1	611.3	612.6	612.6	614.4
10°	612.6	611.9	613.8	615.6	617.4	621.7	632.0	636.3	636.9	637.5	640.0
12.5°	639.3	638.7	636.3	636.3	635.7	643.6	657.6	665.5	666.7	669.2	671.0
15°	658.2	656.4	652.7	650.3	653.3	666.1	686.8	696.0	697.2	699.0	703.9
17.5°	676.5	674.7	666.7	660.7	664.9	685.6	713.6	723.4	725.8	727.6	733.1
20°	702.1	700.8	689.3	674.7	673.4	700.2	734.3	747.1	748.9	751.4	756.9
22.5°	741.0	735.6	722.2	694.8	681.4	708.8	748.9	766.6	769.0	771.5	778.8
25°	789.7	787.3	764.2	722.2	694.1	717.3	764.8	786.7	790.4	793.4	803.1
27.5°	840.3	836.6	811.7	756.9	716.7	734.3	789.7	814.7	819.6	824.5	833.6
30°	885.3	884.1	863.4	803.7	753.2	766.6	829.9	860.4	865.9	871.9	880.5
32.5°	991.3	991.9	970.6	909.7	841.5	825.1	887.8	933.4	935.9	943.2	958.4
35°	1194.1	1196.5	1188.6	1140.5	1063.7	996.2	1002.2	1047.3	1049.7	1055.8	1070.4
37.5°	1329.8	1334.7	1359.1	1374.3	1335.3	1304.3	1226.9	1209.3	1211.1	1207.4	1204.4
40°	1404.7	1412.0	1476.0	1555.1	1597.8	1598.4	1564.9	1486.9	1457.1	1448.6	1412.0
42.5°	1447.4	1459.5	1550.3	1685.4	1807.8	1891.9	1912.6	1826.1	1804.2	1765.2	1695.2
45°	1475.4	1490.0	1597.1	1782.3	1962.5	2105.6	2213.4	2175.0	2160.4	2136.6	2072.1
47.5°	1470.5	1482.1	1593.5	1815.1	2043.5	2246.8	2438.0	2477.6	2460.0	2453.9	2410.0
50°	1381.6	1391.9	1505.2	1733.5	1999.0	2300.4	2580.5	2692.6	2692.6	2704.1	2690.7
52.5°	1286.6	1295.1	1398.0	1603.2	1855.3	2248.1	2659.7	2845.4	2869.7	2889.8	2921.5
55°	1250.7	1261.0	1339.0	1514.3	1732.9	2098.3	2686.5	2959.9	3004.9	3039.0	3110.9
57.5°	1267.7	1278.1	1333.5	1466.2	1661.1	1945.4	2687.7	3113.9	3201.0	3271.0	3416.5
60°	1341.4	1351.1	1397.4	1510.7	1642.2	1857.1	2635.9	3359.3	3498.1	3629.7	3872.0
62.5°	1307.3	1319.5	1387.1	1584.4	1782.9	1790.2	2449.0	3549.3	3772.7	3967.0	4352.4
65°	1158.1	1170.9	1223.9	1408.4	1791.4	1819.4	2171.9	3552.9	3830.6	4093.0	4508.9
67.5°	879.3	884.1	926.1	1074.1	1432.7	1851.7	1887.0	3132.2	3396.4	3689.3	4118.6
70°	449.4	457.9	470.1	593.1	922.5	1530.2	1621.5	2308.3	2645.1	2947.7	3463.4
72.5°	155.9	158.9	171.1	226.5	449.4	1004.1	1419.3	1581.9	1785.3	2068.4	2665.8
75°	93.8	93.8	98.0	114.5	205.2	523.0	1262.9	1292.1	1319.5	1414.5	1805.4
77.5°	74.3	75.5	75.5	78.5	113.9	268.5	959.0	1201.4	1205.0	1214.1	1279.9
80°	53.0	55.4	60.3	62.7	73.7	147.4	538.3	1054.6	1126.5	1161.2	1209.3
82.5°	39.6	42.0	51.1	54.2	57.2	82.2	241.7	727.6	858.5	928.0	1097.2
85°	17.7	20.7	34.7	38.4	40.2	43.8	113.3	207.0	238.1	267.3	352.6
87.5°	3.0	3.0	5.5	7.9	11.6	11.0	25.0	35.3	35.9	42.0	46.9
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: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	582.7	582.7	582.7	582.1	582.7	582.7	582.7	582.7	583.3	583.3	583.3
5°	595.5	594.3	594.9	594.9	594.9	594.3	595.5	594.9	595.5	597.3	596.7
7.5°	614.4	615.6	616.2	616.8	616.8	616.8	617.4	618.6	618.6	620.5	619.9
10°	642.4	641.8	642.4	644.2	646.0	646.7	648.5	647.9	649.1	651.5	654.0
12.5°	672.2	673.4	675.3	677.1	680.1	680.8	682.6	683.2	686.8	686.8	689.3
15°	705.7	706.3	710.0	710.6	714.2	715.5	718.5	719.7	724.0	724.6	727.0
17.5°	736.2	737.4	739.2	741.0	745.3	747.1	749.6	752.0	755.6	756.9	761.1
20°	760.5	763.0	763.6	767.2	770.9	773.3	775.7	778.2	781.8	783.7	787.9
22.5°	782.4	784.9	786.7	789.7	792.2	795.8	797.1	801.3	805.0	808.0	811.7
25°	806.2	809.8	811.7	817.1	819.0	822.6	825.7	829.9	834.8	838.5	843.3
27.5°	839.7	845.2	847.6	853.7	857.9	859.8	864.6	870.7	875.0	879.3	884.1
30°	885.9	896.3	898.1	902.4	910.3	911.5	917.6	922.5	929.2	933.4	937.7
32.5°	957.8	970.6	971.8	976.7	983.4	985.8	990.7	996.2	1006.5	1008.3	1015.0
35°	1068.0	1073.5	1078.4	1080.2	1085.7	1088.7	1092.4	1098.5	1108.8	1107.6	1114.9
37.5°	1200.1	1202.0	1202.6	1196.5	1197.7	1192.2	1198.9	1200.1	1203.8	1206.8	1214.1
40°	1388.9	1370.0	1367.6	1353.0	1338.4	1330.4	1327.4	1315.2	1318.3	1319.5	1325.6
42.5°	1664.7	1628.2	1597.8	1577.1	1541.1	1523.5	1499.7	1480.8	1466.2	1471.7	1474.1
45°	2014.2	1961.9	1913.2	1849.8	1803.0	1769.5	1727.4	1689.7	1672.6	1664.7	1674.5
47.5°	2363.1	2316.9	2259.6	2194.5	2120.2	2064.8	1994.8	1933.3	1890.6	1874.8	1883.3
50°	2664.5	2621.9	2578.7	2540.3	2453.9	2393.6	2298.0	2218.2	2151.2	2117.1	2108.0
52.5°	2914.8	2892.3	2869.1	2836.9	2767.5	2707.2	2631.1	2552.5	2463.6	2394.2	2370.4
55°	3138.3	3151.7	3140.1	3140.7	3113.3	3074.9	3010.4	2951.9	2889.8	2811.3	2778.4
57.5°	3464.0	3543.2	3559.0	3598.6	3618.1	3638.8	3657.1	3622.3	3606.5	3548.1	3548.7
60°	3977.3	4093.0	4193.5	4284.8	4359.7	4432.8	4509.5	4543.6	4581.4	4599.0	4659.3
62.5°	4523.5	4633.7	4783.5	4905.9	4974.7	5069.7	5153.1	5207.3	5273.7	5344.3	5436.3
65°	4658.7	4791.4	4885.8	4967.4	5035.6	5086.1	5131.8	5196.4	5251.8	5363.8	5472.2
67.5°	4312.2	4418.2	4504.6	4585.0	4638.0	4680.6	4721.4	4764.0	4859.0	4960.7	5069.7
70°	3701.5	3829.4	3972.5	4076.6	4102.8	4139.3	4178.3	4233.7	4281.2	4387.7	4470.5
72.5°	2973.9	3157.8	3278.9	3423.2	3454.3	3509.7	3531.6	3574.9	3583.4	3641.2	3663.1
75°	2072.7	2283.4	2405.2	2511.1	2531.8	2501.4	2513.5	2360.7	2321.7	2290.1	2264.5
77.5°	1368.2	1424.8	1444.3	1427.3	1345.7	1281.7	1213.5	1146.6	1153.9	1099.7	1004.7
80°	1216.6	1229.4	1211.7	1194.7	1147.8	1080.8	1019.3	956.6	925.5	892.6	843.9
82.5°	1183.7	1233.0	1238.5	1217.8	1180.7	1107.6	1033.3	940.1	861.0	787.9	713.6
85°	395.8	481.6	520.0	555.9	566.9	579.7	535.8	476.2	404.3	356.2	278.9
87.5°	50.5	62.7	72.5	62.1	72.5	85.2	61.5	68.8	69.4	43.2	32.3
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: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	583.9	583.3	583.3	583.3	582.7	583.3	583.3	583.3	583.3	583.3	582.7
5°	597.3	597.3	599.2	599.8	598.5	597.9	598.5	599.2	599.2	598.5	599.2
7.5°	622.3	622.9	624.1	625.9	624.7	625.3	625.9	625.3	627.2	627.8	627.2
10°	654.0	655.2	658.2	658.8	658.2	660.7	661.3	660.0	661.3	661.3	663.7
12.5°	690.5	691.7	695.4	696.6	697.8	698.4	700.2	700.8	702.7	703.9	705.7
15°	730.1	731.3	733.7	738.0	739.2	740.4	741.6	745.3	745.9	748.3	750.2
17.5°	763.6	765.4	769.0	772.1	773.9	777.0	778.2	782.4	783.7	787.3	790.4
20°	790.4	793.4	796.4	800.1	803.1	806.8	808.0	812.3	814.7	816.5	820.2
22.5°	814.7	818.4	822.6	826.9	829.3	834.2	836.0	837.8	843.3	845.8	849.4
25°	846.4	850.0	854.9	860.4	862.8	868.9	870.7	873.8	879.9	882.3	887.8
27.5°	889.6	894.5	898.1	903.6	906.7	910.9	915.2	918.8	924.3	928.0	934.1
30°	943.8	947.4	953.5	957.8	962.7	968.8	973.6	977.3	980.3	985.8	992.5
32.5°	1023.6	1024.2	1026.0	1036.3	1041.2	1046.1	1052.8	1055.8	1060.7	1066.2	1073.5
35°	1122.8	1128.3	1132.6	1137.4	1142.9	1148.4	1150.8	1160.0	1164.2	1171.5	1178.8
37.5°	1221.5	1222.1	1231.8	1234.8	1239.7	1245.2	1253.7	1262.9	1273.8	1281.1	1292.7
40°	1327.4	1332.3	1344.5	1350.5	1356.6	1370.0	1376.7	1391.3	1409.6	1420.0	1439.4
42.5°	1480.8	1488.2	1510.1	1519.8	1534.4	1556.3	1570.4	1590.4	1597.8	1622.7	1631.9
45°	1681.8	1704.3	1736.0	1756.7	1782.9	1806.6	1818.8	1827.9	1838.9	1858.4	1855.9
47.5°	1899.2	1928.4	1963.7	2006.3	2023.4	2051.4	2067.2	2084.9	2075.1	2070.3	2065.4
50°	2122.0	2156.1	2203.0	2241.4	2267.5	2284.6	2298.0	2295.6	2274.9	2263.9	2233.4
52.5°	2369.8	2389.9	2434.4	2467.3	2483.1	2486.7	2483.7	2465.4	2446.0	2411.2	2375.3
55°	2749.8	2740.7	2758.3	2773.5	2768.7	2785.7	2741.9	2724.8	2676.7	2631.7	2583.6
57.5°	3521.9	3534.1	3435.4	3391.0	3383.0	3398.9	3321.6	3311.8	3195.5	3180.9	3099.9
60°	4650.8	4710.5	4633.1	4589.9	4473.0	4434.6	4348.2	4312.2	4200.8	4110.7	3996.8
62.5°	5499.6	5553.8	5586.1	5524.6	5456.4	5355.9	5225.0	5080.1	4961.9	4823.7	4703.1
65°	5576.3	5685.9	5760.2	5788.8	5740.7	5630.5	5469.1	5286.5	5105.6	4932.1	4779.9
67.5°	5217.7	5315.7	5430.8	5533.7	5539.8	5467.9	5330.3	5144.6	4935.7	4721.4	4543.0
70°	4601.5	4724.5	4824.9	4933.3	5008.8	4967.4	4898.6	4728.1	4511.3	4344.5	4139.3
72.5°	3742.3	3794.1	3818.4	3925.0	3926.2	3850.7	3802.0	3707.6	3532.8	3414.7	3258.2
75°	2185.3	2071.5	1950.3	1845.0	1759.1	1723.2	1563.7	1536.9	1429.7	1363.3	1265.9
77.5°	901.2	799.5	668.6	559.6	451.8	403.1	332.5	301.4	261.2	243.6	232.0
80°	772.7	676.5	577.8	483.5	399.4	315.4	245.4	190.6	149.8	127.3	118.1
82.5°	630.8	573.0	504.2	453.0	387.3	324.5	274.0	212.5	158.9	116.9	89.5
85°	227.7	186.9	150.4	138.2	110.2	90.7	76.1	65.2	53.6	42.6	37.8
87.5°	25.6	24.4	14.0	13.4	15.2	11.0	12.8	11.6	9.7	8.5	9.1
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: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	582.7	582.7	583.3	583.3	583.9	584.5	585.8	585.2	585.2	585.8	585.8
5°	599.2	601.0	600.4	600.4	600.4	601.0	601.6	599.2	596.7	594.3	593.1
7.5°	627.8	629.0	630.2	629.0	630.2	629.6	628.4	621.7	613.8	604.0	597.3
10°	664.9	664.9	666.1	665.5	668.0	666.1	662.5	647.3	630.2	609.5	594.3
12.5°	705.1	709.4	707.5	708.2	713.0	708.2	699.6	677.1	646.7	613.2	586.4
15°	752.6	754.4	755.6	753.8	756.9	752.6	737.4	701.5	657.0	610.1	570.5
17.5°	791.6	792.2	792.8	794.0	798.3	793.4	767.2	718.5	659.4	596.1	543.7
20°	822.0	825.1	827.5	827.5	833.6	826.3	791.6	727.0	651.5	573.0	509.6
22.5°	853.7	856.1	859.2	859.8	867.7	860.4	811.7	725.2	630.8	540.1	470.1
25°	892.6	895.1	897.5	900.6	911.5	901.2	831.8	717.9	602.2	501.1	427.4
27.5°	937.7	943.2	945.0	949.9	962.7	946.8	848.8	706.9	570.5	456.1	382.4
30°	998.0	1004.7	1007.1	1013.8	1031.5	996.8	858.5	688.1	530.4	410.4	334.3
32.5°	1079.0	1088.1	1095.4	1102.7	1122.8	1046.7	859.8	660.7	483.5	359.3	288.0
35°	1184.9	1198.9	1204.4	1209.3	1228.2	1100.9	854.3	619.9	426.2	306.9	251.5
37.5°	1303.7	1317.7	1321.3	1323.7	1327.4	1147.2	840.9	557.8	361.7	261.2	222.2
40°	1449.8	1462.0	1466.8	1463.2	1443.7	1183.1	811.1	485.3	299.0	230.2	204.0
42.5°	1628.2	1646.5	1648.3	1631.9	1567.3	1203.2	751.4	400.0	249.6	207.6	190.0
45°	1849.2	1848.0	1837.7	1826.1	1701.9	1195.3	668.0	325.8	218.6	190.0	177.2
47.5°	2047.7	2027.0	2011.2	1977.1	1820.6	1149.0	560.2	269.7	199.7	176.6	166.2
50°	2210.3	2172.6	2139.1	2101.9	1908.9	1066.8	453.0	228.9	182.1	165.0	155.9
52.5°	2338.8	2293.1	2254.1	2217.6	1994.1	975.5	371.4	199.1	165.0	153.4	144.3
55°	2539.7	2494.1	2431.9	2391.8	2124.5	891.4	318.5	175.4	148.6	141.3	132.1
57.5°	3048.2	3008.0	2933.7	2829.6	2459.3	859.8	288.6	157.1	135.2	130.9	123.6
60°	3935.9	3870.8	3774.0	3668.0	3140.1	881.1	264.9	144.3	126.0	122.4	116.9
62.5°	4605.7	4491.2	4381.6	4283.6	3684.5	880.5	233.8	134.6	119.3	117.5	112.0
65°	4633.1	4516.8	4406.6	4303.7	3696.6	783.7	197.3	126.0	118.1	117.5	108.4
67.5°	4387.1	4261.1	4154.5	4024.8	3422.0	612.6	158.3	120.6	123.0	121.8	107.2
70°	3985.3	3820.8	3733.2	3605.3	3011.6	428.7	130.3	122.4	133.3	129.7	109.0
72.5°	3127.9	3003.7	2870.4	2781.5	2357.7	271.0	109.6	123.6	137.6	131.5	113.9
75°	1164.2	1197.7	1142.9	1123.4	1197.7	158.9	97.4	115.1	123.0	113.9	103.5
77.5°	235.0	224.7	213.1	210.7	272.2	98.0	89.5	99.9	94.4	83.4	84.0
80°	112.6	109.6	105.9	105.3	101.1	81.6	82.8	85.2	71.2	64.5	68.8
82.5°	74.9	70.6	69.4	67.0	68.2	73.1	78.5	73.1	54.8	51.1	62.1
85°	34.7	33.5	32.9	32.9	36.5	65.8	65.2	53.6	37.8	36.5	62.1
87.5°	8.5	8.5	9.1	8.5	9.7	19.5	17.0	16.4	14.0	15.8	29.2
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: P149809

CATALOG NUMBER: VXM-E02-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	580.9	580.9	580.9
2.5°	585.2	585.8	585.2
5°	590.6	590.6	590.6
7.5°	590.6	588.8	588.2
10°	582.1	576.6	576.6
12.5°	567.5	558.4	557.1
15°	540.1	527.9	526.1
17.5°	505.4	488.9	485.9
20°	466.4	445.7	442.1
22.5°	423.8	400.0	398.2
25°	381.8	357.4	352.6
27.5°	334.9	311.1	308.7
30°	288.0	267.3	266.1
32.5°	248.4	235.6	233.2
35°	220.4	213.1	210.1
37.5°	202.2	196.7	196.1
40°	188.2	183.3	182.7
42.5°	176.6	172.3	171.7
45°	165.0	161.4	160.1
47.5°	153.4	149.8	149.2
50°	143.1	138.2	137.6
52.5°	133.3	128.5	127.3
55°	124.2	119.3	119.3
57.5°	116.3	111.4	110.8
60°	109.0	104.1	103.5
62.5°	103.5	97.4	96.8
65°	99.3	93.2	91.9
67.5°	96.8	89.5	87.7
70°	101.1	87.7	84.6
72.5°	101.7	85.9	81.6
75°	98.0	81.0	77.9
77.5°	85.9	72.5	69.4
80°	74.3	56.0	51.8
82.5°	70.6	45.7	39.6
85°	54.8	29.8	28.0
87.5°	31.1	16.4	13.4
90°	0.0	0.0	0.0

(END OF REPORT)