

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: P154385

Luminaire Tested: **VXS-F02-LED-E1-T2**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P154385
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: VXS-F02-LED-E1-T2
Description: VISION SITE SMALL LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5058.6 lumens
Efficiency: N/A
Efficacy: 92.0 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): 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

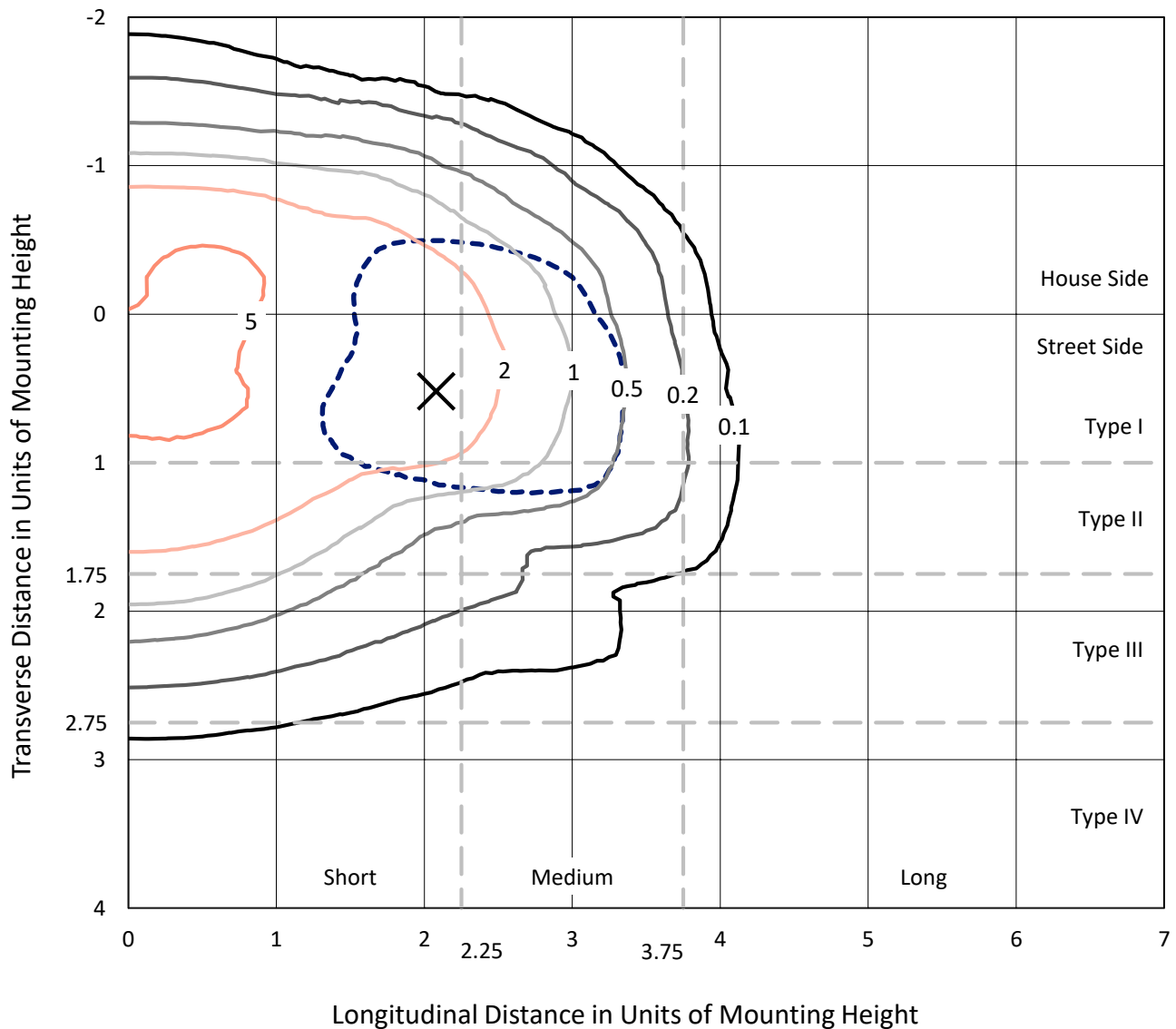


REPORT NUMBER: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

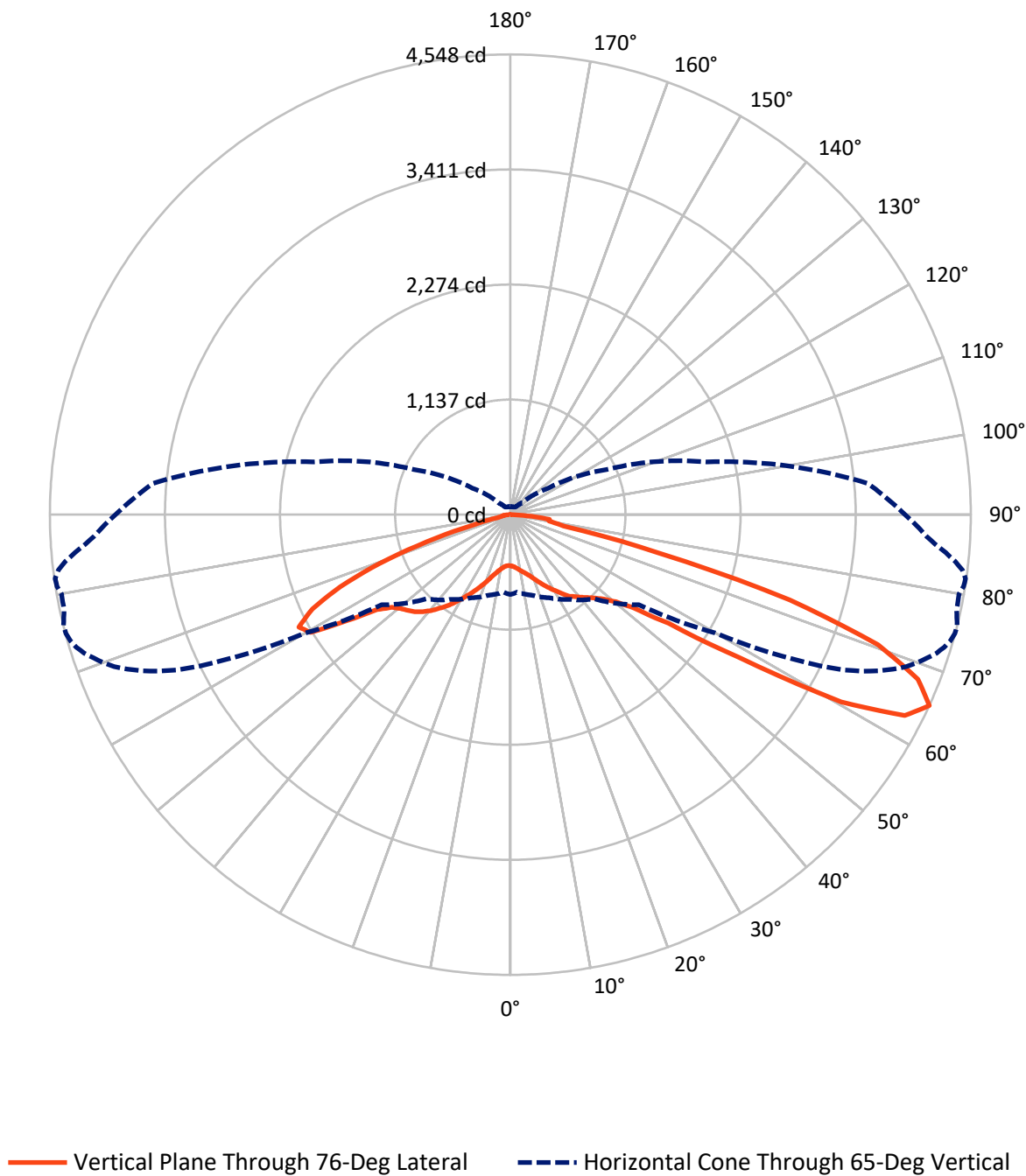


Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Short - Semi-Cutoff

REPORT NUMBER: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1771.4	0.0	1771.4
	% Fixture	35.0	0.0	35.0
Street Side	Lumens	3287.2	0.0	3287.2
	% Fixture	65.0	0.0	65.0
Total	Lumens	5058.6	0.0	5058.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.0
10°-20°	174.0	3.4
20°-30°	341.8	6.8
30°-40°	567.9	11.2
40°-50°	834.4	16.5
50°-60°	1155.2	22.8
60°-70°	1378.9	27.3
70°-80°	487.7	9.6
80°-90°	68.1	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°	5058.6	100.0
0°-180°	5058.6	100.0

Coefficient of Utilization



REPORT NUMBER: P154385

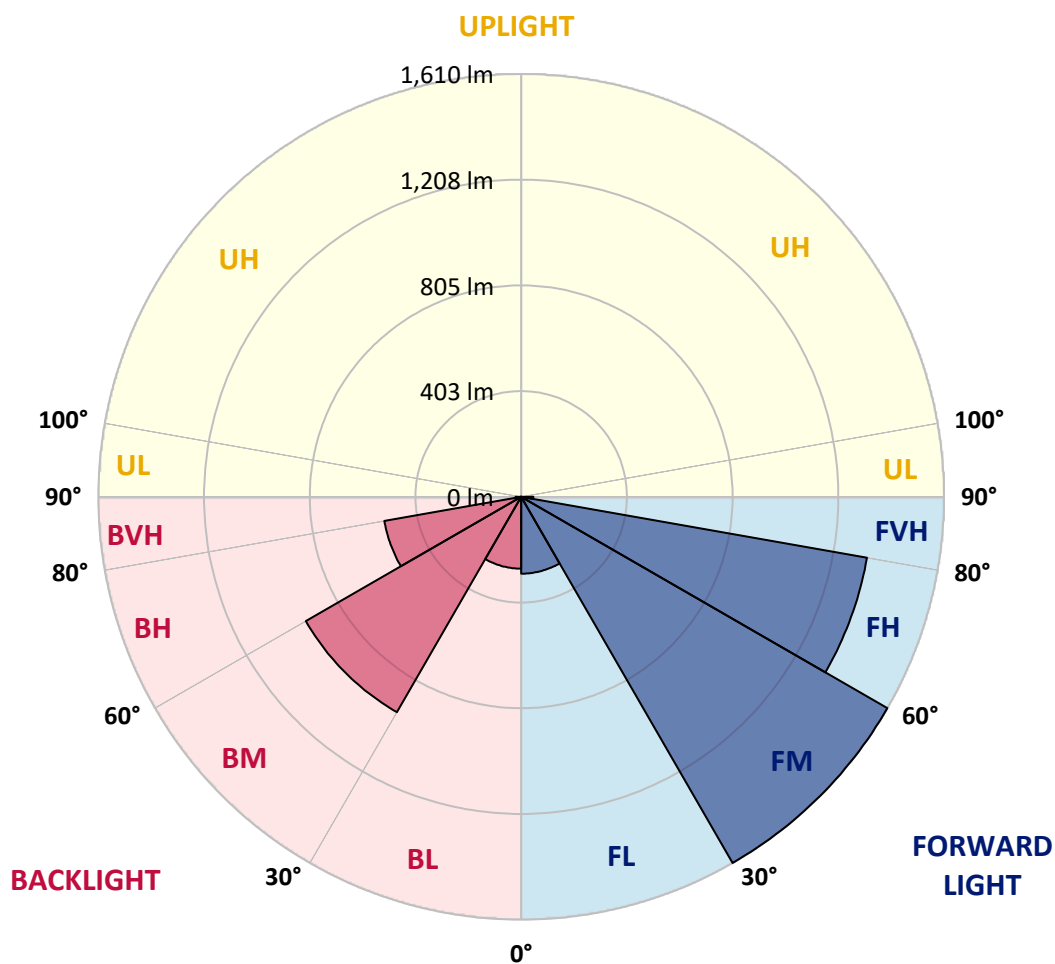
CATALOG NUMBER: VXS-F02-LED-E1-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	292.7	5.8			
FM	(30°-60°)	1610.5	31.8			
FH	(60°-80°)	1337.4	26.4			G1/1800
FVH	(80°-90°)	46.6	0.9			G1/100
BL	(0°-30°)	273.7	5.4	B1/500		
BM	(30°-60°)	947.0	18.7	B1/1000		
BH	(60°-80°)	529.1	10.5	B2/1000		G2/1000
BVH	(80°-90°)	21.6	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: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8
2.5°	527.8	528.3	527.3	526.7	525.1	522.3	520.1	517.9	517.9	517.9	516.3
5°	550.9	552.0	549.8	548.2	543.2	540.4	536.6	533.9	532.7	532.2	530.6
7.5°	580.1	578.4	575.1	574.0	570.2	564.1	557.0	551.4	551.4	550.9	551.4
10°	609.2	604.9	603.2	601.6	595.4	587.8	579.5	573.5	573.0	572.3	570.7
12.5°	638.4	636.8	635.1	629.0	623.0	610.9	601.6	595.4	594.9	595.4	593.3
15°	676.9	673.1	671.4	660.9	647.8	634.5	623.0	617.5	615.9	616.4	614.7
17.5°	706.6	706.6	702.8	691.2	674.2	656.1	643.9	640.6	640.1	640.1	640.6
20°	730.4	729.7	725.9	716.6	696.2	678.0	672.0	670.9	670.4	670.4	672.0
22.5°	743.5	742.4	740.7	730.4	714.4	702.3	702.8	706.1	707.2	708.3	710.5
25°	750.2	748.5	747.9	740.7	729.2	727.6	737.5	746.3	748.5	750.7	753.5
27.5°	761.1	758.3	759.5	756.7	754.0	759.0	779.3	788.6	790.3	793.1	794.7
30°	791.4	790.3	794.7	795.9	798.0	805.2	823.8	832.6	836.6	836.6	844.2
32.5°	849.2	849.7	850.9	862.4	866.2	871.2	881.1	888.3	888.8	889.3	896.5
35°	926.8	930.1	939.5	949.3	958.8	958.1	952.1	956.0	953.2	956.5	957.1
37.5°	1024.8	1020.3	1034.1	1056.7	1071.0	1067.2	1040.2	1022.6	1027.5	1025.3	1023.6
40°	1100.1	1105.1	1131.5	1161.2	1172.2	1184.4	1149.1	1118.9	1114.5	1106.2	1101.2
42.5°	1204.1	1204.8	1226.2	1248.2	1280.1	1306.5	1283.9	1240.5	1227.3	1217.4	1196.0
45°	1300.5	1298.9	1316.5	1343.4	1381.3	1419.4	1427.6	1380.3	1375.3	1357.7	1329.6
47.5°	1364.9	1362.7	1374.8	1409.9	1471.6	1533.8	1568.0	1553.7	1544.2	1537.1	1493.1
50°	1408.4	1403.9	1417.7	1455.1	1523.9	1619.7	1708.8	1720.9	1717.1	1717.1	1689.0
52.5°	1440.8	1440.8	1450.7	1481.0	1550.9	1670.4	1829.9	1891.0	1896.0	1901.5	1899.8
55°	1422.7	1425.4	1450.2	1494.2	1568.0	1705.5	1930.1	2063.8	2091.3	2114.4	2140.8
57.5°	1360.4	1369.8	1402.8	1474.9	1572.3	1731.9	2041.2	2306.0	2383.5	2450.7	2555.2
60°	1269.6	1281.8	1329.6	1421.6	1539.9	1689.0	2080.3	2510.7	2634.0	2780.4	3053.4
62.5°	1113.9	1126.0	1172.7	1264.7	1366.0	1524.5	1918.5	2540.9	2738.0	2945.5	3358.2
65°	789.2	769.9	823.8	906.4	1022.6	1176.1	1550.4	2337.9	2621.3	2902.6	3412.1
67.5°	439.7	438.0	471.1	532.7	643.9	809.0	1068.2	1793.1	2053.9	2372.5	2998.3
70°	303.2	306.5	327.5	394.1	486.0	628.5	761.1	1126.0	1313.7	1529.9	2145.3
72.5°	213.0	220.1	231.7	271.3	365.4	529.4	777.6	673.1	766.6	914.1	1290.1
75°	125.0	129.8	138.1	157.4	208.1	353.9	805.2	591.6	591.6	626.3	780.4
77.5°	77.1	77.1	82.0	89.7	110.6	173.4	573.5	664.9	646.1	626.3	628.0
80°	39.6	42.4	49.5	53.4	61.7	79.3	257.5	620.2	680.2	720.4	692.3
82.5°	18.1	20.4	30.3	32.4	35.8	41.9	88.6	352.7	472.7	622.5	777.6
85°	9.3	9.3	16.0	19.8	21.5	19.3	32.4	142.6	215.8	329.1	515.1
87.5°	1.7	1.7	2.8	3.3	5.0	4.4	5.5	8.3	13.8	14.8	15.4
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: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8
2.5°	515.6	516.3	515.6	515.1	514.0	514.0	514.0	513.5	513.5	513.5	513.0
5°	530.6	528.3	528.9	527.8	527.3	526.7	527.3	526.1	525.1	525.6	525.1
7.5°	549.2	548.2	545.9	545.9	545.4	544.2	544.2	542.7	542.1	541.0	540.4
10°	570.2	567.5	568.5	567.5	568.0	565.8	564.7	563.5	562.5	562.5	563.0
12.5°	591.6	591.1	589.4	588.3	588.3	586.6	587.3	586.6	585.0	584.5	582.8
15°	613.7	613.7	612.0	612.5	612.0	610.9	609.7	609.7	608.7	607.6	608.2
17.5°	639.5	639.5	639.5	639.5	640.1	638.4	639.0	637.8	636.8	639.0	639.0
20°	673.1	675.2	675.2	674.7	677.5	675.9	675.2	678.0	675.2	679.2	678.5
22.5°	711.6	713.8	713.8	716.0	716.6	718.2	719.3	718.2	720.4	722.6	722.6
25°	754.5	756.7	758.3	761.7	763.3	762.3	762.8	765.5	766.6	768.8	771.1
27.5°	799.7	800.2	802.4	806.2	809.0	810.2	810.7	815.0	815.6	816.7	819.0
30°	843.7	849.2	848.1	853.1	854.7	856.4	859.7	861.3	865.2	867.4	867.4
32.5°	895.4	894.3	898.8	902.6	905.3	908.1	910.9	913.1	915.2	916.4	921.9
35°	959.8	962.0	962.0	962.6	969.1	969.7	971.9	976.9	978.5	981.9	984.0
37.5°	1023.6	1019.8	1019.3	1019.3	1017.1	1018.7	1019.3	1019.8	1022.0	1022.6	1024.8
40°	1095.2	1090.3	1085.8	1083.1	1078.7	1072.6	1071.5	1068.8	1070.5	1069.8	1070.5
42.5°	1193.2	1179.4	1168.9	1161.2	1152.4	1145.8	1140.8	1133.7	1128.8	1122.7	1121.7
45°	1318.1	1292.2	1274.6	1262.0	1249.3	1231.1	1220.7	1209.6	1199.8	1189.8	1181.6
47.5°	1482.1	1454.6	1426.5	1403.4	1383.6	1354.4	1324.7	1308.2	1288.9	1271.8	1259.8
50°	1675.2	1642.3	1629.0	1596.6	1571.8	1527.8	1490.9	1463.9	1425.4	1399.6	1377.0
52.5°	1872.8	1864.6	1857.4	1829.9	1800.7	1775.4	1743.0	1695.6	1656.6	1626.8	1580.6
55°	2142.0	2145.8	2143.1	2128.2	2117.7	2093.6	2080.3	2039.1	2021.5	1978.5	1930.1
57.5°	2594.9	2625.7	2664.8	2680.2	2701.1	2681.3	2704.5	2732.5	2662.6	2686.8	2643.3
60°	3173.4	3314.7	3399.0	3502.4	3570.2	3664.8	3681.9	3706.6	3699.5	3713.2	3741.2
62.5°	3526.6	3694.5	3855.8	3973.0	4098.4	4167.8	4251.5	4309.7	4370.4	4411.1	4399.5
65°	3630.7	3803.4	3949.8	4078.1	4190.4	4275.1	4352.7	4425.9	4481.5	4520.6	4543.7
67.5°	3248.7	3474.4	3628.5	3778.7	3923.4	4012.6	4077.5	4148.5	4229.9	4297.7	4310.9
70°	2444.7	2783.1	3001.7	3181.6	3351.6	3471.6	3562.4	3628.5	3691.7	3740.2	3793.1
72.5°	1528.9	1825.0	2074.8	2308.2	2488.7	2653.8	2730.3	2876.7	2857.4	2894.3	2933.9
75°	916.4	1060.5	1198.1	1362.7	1457.3	1594.9	1619.7	1643.9	1631.2	1589.9	1620.8
77.5°	636.8	660.4	659.3	649.9	640.1	615.9	584.5	567.5	555.9	539.4	545.9
80°	640.6	589.4	511.3	429.8	355.0	305.5	285.6	285.6	306.0	335.1	364.4
82.5°	765.5	711.1	634.0	530.6	420.5	342.3	290.1	269.1	273.0	302.7	340.1
85°	516.3	528.3	463.4	423.7	335.8	261.5	219.1	177.7	157.4	162.4	183.8
87.5°	18.8	22.6	8.3	11.0	7.7	6.6	6.6	7.2	5.0	6.0	5.5
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: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8
2.5°	512.3	511.8	511.8	510.7	510.7	510.2	510.2	509.6	509.1	509.1	508.5
5°	524.5	523.9	522.8	522.3	521.1	521.1	520.6	519.5	519.5	518.4	517.9
7.5°	541.6	540.4	539.4	538.8	538.2	536.6	536.6	535.4	535.4	534.4	533.9
10°	561.9	560.8	559.7	560.2	558.7	558.0	557.0	557.0	555.3	554.7	554.7
12.5°	583.9	583.4	583.4	581.8	581.1	580.6	578.4	578.4	578.4	577.3	577.8
15°	607.6	608.2	606.5	608.2	607.6	605.9	605.9	605.9	603.7	606.5	604.2
17.5°	639.5	641.1	640.1	640.6	639.5	639.5	640.1	639.5	640.6	640.6	643.9
20°	679.2	679.7	682.4	681.3	681.3	680.8	681.9	682.4	684.7	683.5	685.7
22.5°	722.6	725.4	725.9	728.1	728.1	727.6	728.7	730.9	731.9	733.6	733.1
25°	772.1	773.8	776.0	773.3	777.6	777.6	778.8	781.5	782.1	782.1	785.9
27.5°	818.3	822.8	823.3	826.1	824.5	825.5	829.3	831.0	833.3	833.3	834.3
30°	870.7	872.3	873.4	876.7	876.2	876.7	877.3	880.0	880.0	882.8	885.5
32.5°	924.6	925.7	926.8	930.1	931.2	933.4	932.3	934.5	937.2	937.8	939.5
35°	989.0	990.1	991.2	996.2	996.7	1000.5	1001.7	1000.5	1005.0	1002.2	1005.0
37.5°	1026.4	1031.4	1032.4	1035.8	1034.6	1037.4	1039.1	1041.2	1042.4	1044.6	1049.0
40°	1072.1	1073.8	1077.0	1078.7	1080.9	1081.5	1083.6	1085.3	1086.9	1091.9	1096.9
42.5°	1118.9	1121.0	1122.7	1124.9	1127.7	1129.8	1131.5	1136.5	1137.6	1140.8	1150.3
45°	1175.5	1174.4	1175.0	1175.5	1176.7	1179.4	1184.4	1189.3	1192.6	1200.3	1208.0
47.5°	1246.0	1238.9	1236.1	1231.7	1232.7	1238.9	1239.9	1248.2	1254.8	1262.0	1271.3
50°	1352.7	1333.5	1322.0	1310.4	1309.3	1312.5	1317.0	1325.8	1333.5	1342.9	1356.1
52.5°	1532.1	1495.3	1472.2	1440.3	1431.5	1429.8	1426.5	1431.5	1433.7	1446.3	1471.1
55°	1895.4	1827.2	1783.1	1733.6	1687.4	1673.6	1647.2	1652.7	1647.2	1654.9	1691.8
57.5°	2653.8	2599.3	2556.4	2493.1	2413.9	2329.6	2308.7	2222.3	2239.4	2288.9	2257.0
60°	3755.0	3735.2	3704.5	3674.1	3565.7	3504.7	3405.0	3394.0	3324.1	3324.7	3279.0
62.5°	4371.4	4396.8	4378.0	4369.2	4363.2	4343.9	4294.4	4234.9	4145.8	4081.3	3986.7
65°	4547.6	4526.1	4505.7	4503.0	4501.3	4532.6	4539.8	4498.0	4417.1	4317.0	4208.0
67.5°	4342.3	4330.2	4331.3	4308.2	4322.5	4376.9	4414.9	4403.3	4329.0	4208.0	4069.3
70°	3853.6	3829.8	3854.1	3884.4	3905.8	3937.2	3975.1	3984.6	3916.9	3792.4	3651.0
72.5°	2885.5	2889.3	2912.4	2920.7	3007.2	2998.3	3032.4	2921.2	2872.2	2754.0	2681.3
75°	1518.4	1493.7	1558.0	1421.6	1365.4	1404.5	1294.9	1189.8	1211.9	1230.1	1099.1
77.5°	536.6	502.0	443.0	419.4	348.9	295.5	241.6	217.9	205.3	198.7	190.5
80°	385.3	396.3	384.1	355.5	302.2	242.2	191.0	150.8	129.3	117.8	110.1
82.5°	389.6	433.2	452.4	444.1	395.8	299.4	197.6	126.0	93.6	78.1	72.6
85°	209.1	228.9	220.1	185.5	166.7	99.6	68.3	45.7	38.5	35.2	32.4
87.5°	8.3	6.6	5.5	5.5	6.0	6.6	5.5	6.0	5.5	5.5	5.5
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: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8	505.8
2.5°	507.5	507.5	507.5	506.8	505.8	503.0	500.3	498.0	496.4	494.7	492.5
5°	517.3	516.3	516.3	516.3	511.8	507.5	503.5	499.7	496.4	493.7	491.5
7.5°	533.9	533.3	531.1	530.6	527.3	520.1	515.6	509.1	505.2	501.3	500.3
10°	553.7	553.1	552.5	552.0	547.6	540.4	534.9	528.9	523.4	517.9	512.3
12.5°	576.8	576.2	575.6	574.0	572.3	568.5	562.5	555.9	549.2	537.7	531.6
15°	605.4	606.5	605.4	604.9	603.7	604.2	600.4	591.1	580.6	565.8	553.1
17.5°	643.3	642.3	641.7	643.9	643.3	646.1	645.0	633.0	616.9	593.3	571.3
20°	685.2	685.2	687.4	689.0	694.0	701.1	697.8	683.0	653.8	620.8	592.2
22.5°	735.2	736.4	738.5	737.5	745.2	756.7	757.8	736.9	699.0	653.3	613.1
25°	787.6	788.6	786.4	789.7	802.4	819.0	822.2	792.5	742.4	683.0	630.7
27.5°	837.1	838.1	838.1	842.6	854.7	882.8	886.1	853.1	786.4	708.8	643.3
30°	885.5	889.9	891.0	892.1	910.3	949.3	956.5	908.6	825.0	728.1	652.1
32.5°	946.6	948.3	950.5	953.2	974.1	1022.0	1022.0	956.5	849.7	740.2	653.8
35°	1012.1	1012.6	1017.6	1018.1	1047.9	1095.8	1086.4	996.2	867.4	737.5	641.7
37.5°	1051.7	1053.9	1058.9	1065.5	1096.9	1164.6	1143.1	1030.3	870.7	719.3	614.2
40°	1100.7	1105.1	1110.1	1116.7	1163.4	1234.4	1191.0	1051.7	856.9	683.5	573.0
42.5°	1153.6	1159.6	1167.3	1179.4	1235.0	1296.1	1227.3	1055.0	825.5	643.3	523.9
45°	1213.0	1223.9	1232.7	1247.0	1309.8	1349.4	1249.3	1035.8	785.9	590.6	471.6
47.5°	1281.8	1290.6	1306.0	1321.3	1384.1	1385.8	1251.5	998.3	731.9	537.7	416.1
50°	1366.5	1372.0	1395.1	1404.5	1463.4	1423.7	1235.5	947.7	675.2	478.2	354.4
52.5°	1479.4	1487.0	1516.8	1531.1	1572.8	1475.4	1213.0	892.6	610.4	411.7	291.1
55°	1702.3	1735.9	1756.7	1781.5	1808.5	1592.7	1203.1	833.8	537.1	334.6	230.6
57.5°	2328.0	2317.0	2363.2	2419.4	2418.8	1860.7	1262.5	783.1	450.8	256.0	177.2
60°	3260.3	3270.8	3247.0	3280.6	3173.9	2193.2	1343.9	729.7	353.4	190.5	135.3
62.5°	3953.2	3892.6	3859.1	3819.4	3584.5	2229.4	1284.6	620.2	257.0	133.8	104.0
65°	4117.2	4046.2	3974.1	3898.7	3544.2	2009.8	1053.9	455.1	166.2	91.9	82.6
67.5°	3955.3	3841.5	3749.5	3671.9	3247.6	1665.9	770.5	279.6	95.2	74.3	70.5
70°	3536.0	3409.9	3261.3	3174.4	2734.7	1227.9	493.7	150.8	73.2	66.0	64.4
72.5°	2588.3	2484.9	2322.5	2222.9	1963.6	746.3	275.8	84.8	68.3	63.3	61.1
75°	1008.3	954.3	886.6	892.1	796.4	330.3	125.0	73.2	66.6	62.2	60.0
77.5°	173.4	168.9	156.3	156.3	177.7	120.5	83.1	73.8	66.0	61.1	57.2
80°	104.0	101.9	96.9	95.8	92.4	84.8	79.8	74.8	65.0	57.8	52.8
82.5°	68.3	65.5	63.8	63.3	68.8	74.3	74.8	74.3	61.7	50.1	42.9
85°	29.1	29.1	29.1	29.7	39.6	60.0	61.7	66.0	50.7	39.1	30.8
87.5°	5.0	6.0	6.0	6.6	7.2	13.2	16.5	21.5	17.1	16.5	14.8
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: P154385

CATALOG NUMBER: VXS-F02-LED-E1-T2

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	505.8	505.8	505.8
2.5°	492.0	490.9	490.9
5°	490.4	489.2	489.8
7.5°	497.0	494.7	495.3
10°	509.1	506.8	505.8
12.5°	524.5	521.8	521.8
15°	540.4	533.9	533.3
17.5°	553.7	545.4	544.2
20°	568.5	557.5	555.9
22.5°	582.3	567.5	565.2
25°	592.2	574.0	571.3
27.5°	596.6	575.1	573.0
30°	599.9	575.6	572.3
32.5°	596.6	570.7	568.0
35°	578.4	550.4	548.7
37.5°	547.0	515.6	513.5
40°	505.8	472.7	467.3
42.5°	453.0	422.1	416.1
45°	401.8	366.5	363.7
47.5°	346.7	313.2	314.8
50°	288.9	258.7	258.1
52.5°	233.9	207.5	205.8
55°	184.4	165.7	164.0
57.5°	145.8	136.0	134.3
60°	118.9	113.9	112.2
62.5°	95.8	94.1	93.6
65°	79.8	79.8	79.8
67.5°	69.3	69.8	69.8
70°	63.8	64.4	63.8
72.5°	61.7	63.3	63.3
75°	60.0	61.1	58.9
77.5°	58.9	59.5	55.5
80°	58.3	57.8	50.7
82.5°	50.7	49.0	42.9
85°	46.2	35.2	29.7
87.5°	23.6	16.5	12.6
90°	0.0	0.0	0.0

(END OF REPORT)