

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: STREETWORKS

Report Number: P158443

Luminaire Tested: **VST-F04-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158443
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F04-LED-E-U-SL3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8407.8 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 102.2
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: 28.75 FT

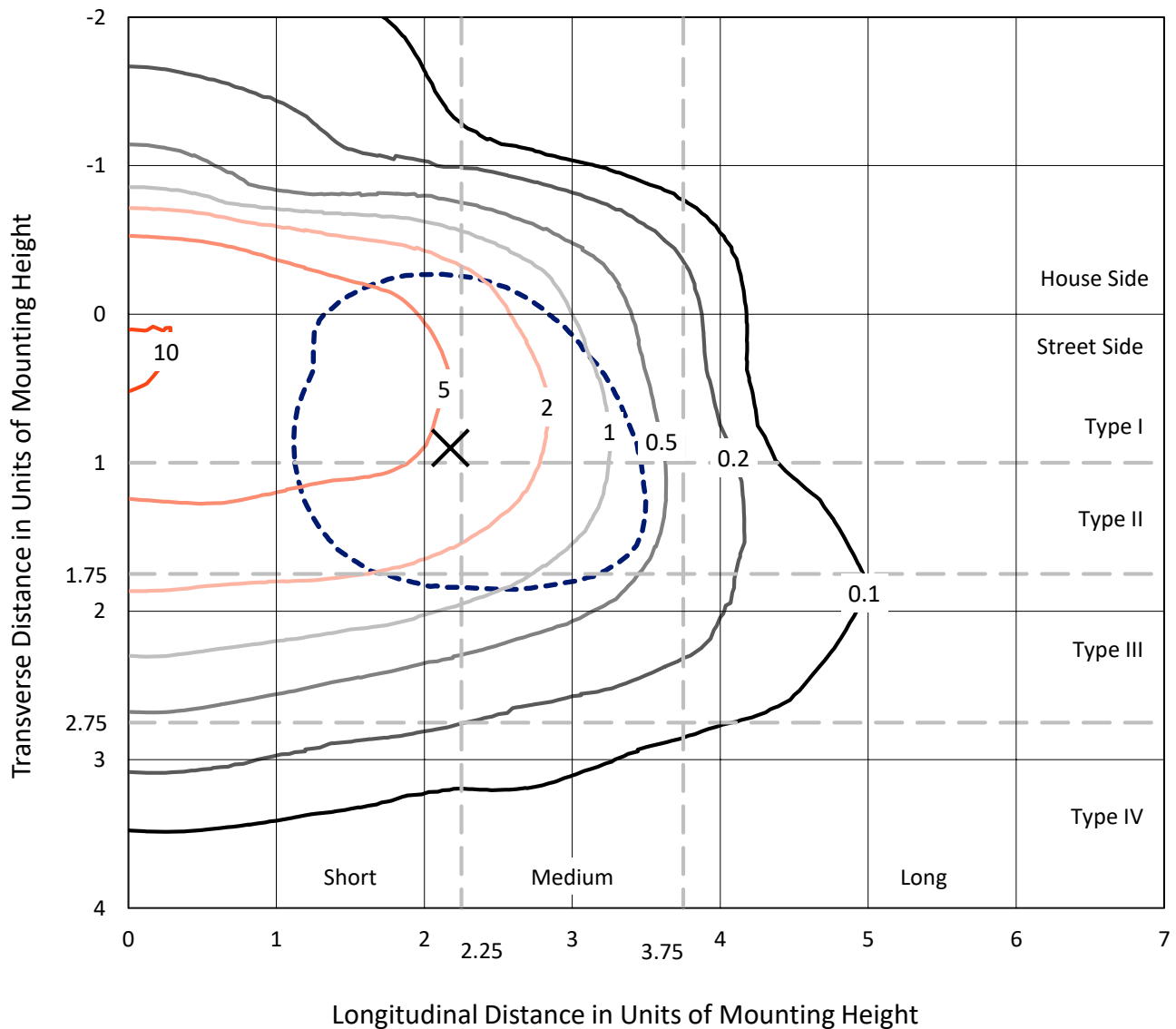


REPORT NUMBER: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

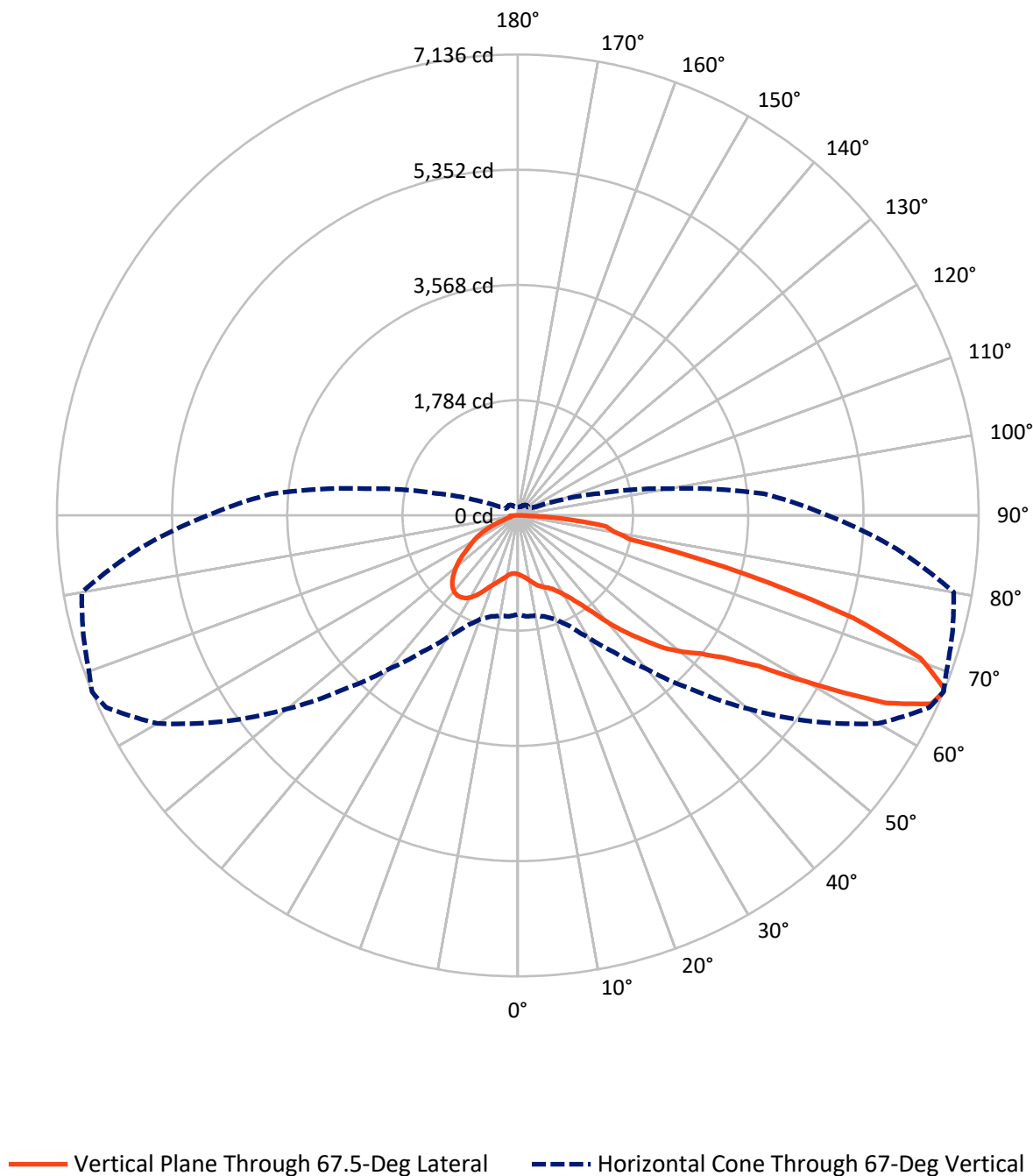


Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2017.1	0.0	2017.1
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	6390.8	0.0	6390.8
	% Fixture	76.0	0.0	76.0
Total	Lumens	8407.8	0.0	8407.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.1
10°-20°	308.6	3.7
20°-30°	550.9	6.6
30°-40°	807.4	9.6
40°-50°	1247.6	14.8
50°-60°	1816.7	21.6
60°-70°	2366.5	28.1
70°-80°	1059.3	12.6
80°-90°	160.2	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°	8407.8	100.0
0°-180°	8407.8	100.0

Coefficient of Utilization



REPORT NUMBER: P158443

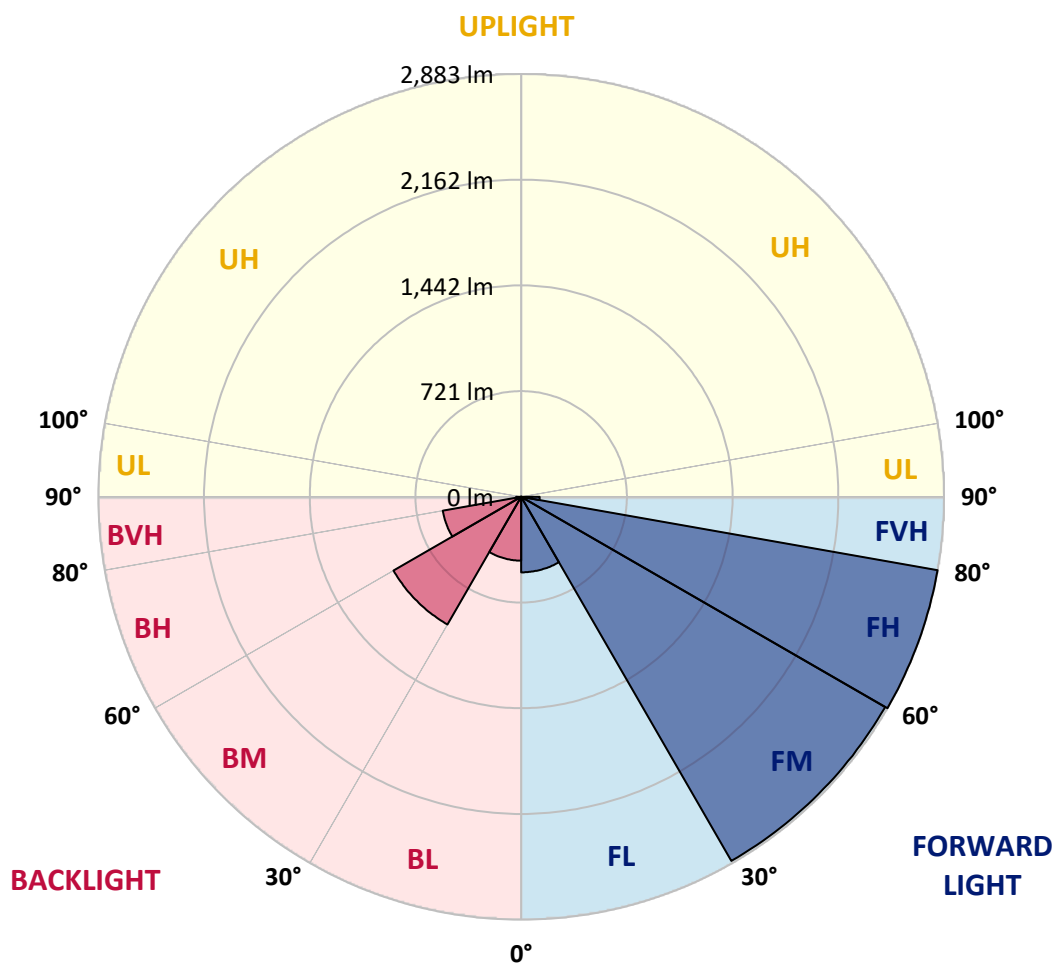
CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	515.1	6.1			
FM	(30°-60°)	2866.6	34.1			
FH	(60°-80°)	2883.2	34.3			G2/5000
FVH	(80°-90°)	125.8	1.5			G2/225
BL	(0°-30°)	434.9	5.2	B1/500		
BM	(30°-60°)	1005.1	12.0	B2/2500		
BH	(60°-80°)	542.7	6.5	B2/1000		G2/1000
BVH	(80°-90°)	34.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3
2.5°	947.0	949.2	949.8	949.2	949.8	947.6	947.0	943.7	945.3	940.9	939.8
5°	998.3	1000.0	1001.1	996.6	997.7	995.5	992.7	989.4	984.9	978.8	974.9
7.5°	1048.4	1051.2	1050.7	1049.0	1045.1	1042.9	1037.3	1032.3	1024.5	1017.2	1012.2
10°	1115.9	1115.3	1115.3	1105.9	1100.3	1095.3	1085.2	1077.4	1069.6	1059.0	1053.5
12.5°	1193.9	1190.0	1188.4	1181.7	1170.0	1161.0	1146.5	1131.5	1117.6	1106.4	1097.5
15°	1269.2	1269.2	1264.7	1254.1	1243.0	1231.3	1210.6	1188.9	1166.1	1148.2	1139.3
17.5°	1337.7	1331.6	1327.7	1313.8	1302.1	1283.1	1260.3	1236.8	1208.4	1183.3	1166.1
20°	1387.9	1382.9	1374.5	1357.2	1337.2	1314.9	1288.1	1260.8	1230.2	1202.8	1183.3
22.5°	1416.9	1410.8	1397.9	1375.1	1347.8	1316.6	1285.3	1259.7	1231.8	1211.2	1195.0
25°	1431.9	1425.8	1408.5	1378.4	1341.6	1300.4	1264.7	1239.6	1223.5	1218.5	1216.2
27.5°	1431.4	1426.4	1408.0	1373.4	1326.0	1278.6	1240.2	1219.0	1217.3	1236.8	1251.3
30°	1416.9	1413.5	1396.8	1362.3	1312.6	1263.0	1227.4	1216.2	1233.5	1274.7	1310.4
32.5°	1402.4	1400.7	1389.0	1357.8	1315.4	1273.6	1249.1	1250.2	1285.9	1349.4	1406.8
35°	1404.1	1406.3	1404.6	1387.9	1361.1	1339.4	1327.7	1352.2	1408.0	1484.9	1561.8
37.5°	1418.6	1426.9	1437.5	1439.2	1439.7	1436.4	1460.9	1512.8	1594.1	1694.5	1814.9
40°	1450.3	1459.8	1490.5	1517.2	1551.8	1593.0	1642.6	1714.5	1815.4	1939.2	2086.9
42.5°	1549.0	1562.4	1600.3	1649.9	1713.4	1778.1	1852.2	1950.3	2074.0	2204.5	2359.4
45°	1677.7	1705.6	1747.4	1802.6	1897.9	1988.8	2084.6	2194.4	2326.0	2489.3	2645.4
47.5°	1838.3	1866.1	1926.9	1986.0	2098.6	2211.7	2316.5	2431.3	2574.0	2741.2	2914.0
50°	1978.7	2010.5	2064.6	2144.3	2274.7	2413.5	2529.4	2653.7	2773.6	2949.7	3124.2
52.5°	2089.1	2111.9	2163.8	2236.8	2382.3	2534.4	2681.0	2819.3	2961.4	3137.5	3299.2
55°	2103.0	2124.2	2174.9	2258.5	2406.2	2575.1	2744.0	2907.9	3109.1	3301.4	3515.4
57.5°	2042.8	2060.1	2111.4	2186.1	2329.9	2522.2	2735.7	2945.8	3203.3	3463.1	3724.5
60°	1957.5	1974.8	2015.0	2074.6	2204.5	2411.8	2661.0	2948.6	3290.8	3665.9	4050.5
62.5°	1863.9	1879.0	1911.3	1953.6	2067.9	2259.1	2544.5	2930.2	3362.2	3867.7	4460.8
65°	1706.2	1742.4	1756.3	1799.8	1914.1	2094.7	2385.1	2805.9	3333.2	3957.5	4718.3
67°	1531.7	1568.5	1575.7	1619.8	1711.2	1884.5	2179.9	2575.7	3103.5	3802.5	4661.4
67.5°	1476.0	1507.2	1518.3	1562.4	1648.8	1812.1	2092.4	2492.6	3033.3	3717.8	4592.9
70°	1085.2	1119.8	1132.1	1150.4	1212.3	1348.3	1533.9	1881.2	2418.5	3033.9	3874.4
72.5°	580.8	608.7	620.4	647.7	679.5	753.6	895.7	1144.9	1484.3	2030.0	2756.3
75°	393.0	404.1	412.5	431.4	464.3	523.4	585.8	673.3	878.4	1145.4	1568.5
77.5°	224.1	229.1	230.2	233.5	259.7	316.0	418.6	566.9	726.8	830.0	1003.3
80°	97.0	107.0	114.8	109.8	108.1	119.8	149.9	223.5	438.1	695.6	825.5
82.5°	52.4	56.9	63.5	64.1	67.4	71.3	77.5	92.0	129.3	260.9	569.1
85°	27.3	28.4	37.9	43.5	46.3	48.5	49.6	55.2	63.5	80.8	141.6
87.5°	3.9	5.6	6.7	8.9	10.0	10.6	12.3	15.6	18.4	22.3	37.9
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: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3
2.5°	934.7	933.6	930.3	928.1	925.8	923.6	920.8	918.6	914.7	911.9	908.5
5°	969.3	962.6	958.2	952.0	950.9	943.7	936.4	933.1	926.4	920.8	914.1
7.5°	1004.4	996.6	989.4	984.3	981.6	971.5	964.3	955.9	948.1	940.9	933.1
10°	1045.7	1037.9	1030.1	1026.7	1021.7	1012.2	1006.1	995.5	987.7	978.8	968.2
12.5°	1088.6	1083.0	1077.4	1073.0	1070.7	1066.3	1057.4	1048.4	1037.9	1028.9	1016.7
15°	1126.5	1122.6	1120.4	1119.2	1119.2	1116.4	1108.1	1099.7	1088.6	1078.5	1065.2
17.5°	1153.2	1151.6	1153.2	1154.9	1157.1	1154.9	1153.2	1143.8	1136.5	1124.3	1110.9
20°	1168.8	1172.2	1180.5	1186.1	1191.1	1195.0	1196.7	1188.9	1179.4	1170.5	1161.6
22.5°	1185.6	1195.0	1209.5	1217.9	1226.3	1240.2	1243.5	1238.0	1230.7	1225.1	1215.7
25°	1213.4	1227.4	1252.5	1265.8	1277.5	1298.2	1300.9	1302.1	1300.4	1295.9	1284.2
27.5°	1256.9	1284.2	1317.7	1334.9	1347.8	1374.5	1385.1	1385.1	1380.7	1385.7	1385.7
30°	1332.7	1368.9	1412.4	1422.5	1442.5	1465.9	1483.2	1485.4	1486.0	1496.6	1512.2
32.5°	1449.2	1483.8	1532.3	1543.4	1560.7	1583.0	1602.5	1600.3	1605.3	1628.1	1648.8
35°	1618.7	1653.8	1685.5	1700.6	1708.4	1728.5	1735.7	1748.0	1763.0	1791.4	1788.7
37.5°	1869.5	1900.7	1905.2	1914.6	1905.2	1909.1	1914.6	1929.1	1969.3	1994.9	1953.6
40°	2171.6	2223.4	2218.4	2207.3	2186.1	2157.7	2167.7	2190.0	2233.5	2211.2	2100.2
42.5°	2456.4	2509.9	2499.9	2487.1	2440.2	2429.7	2428.5	2446.9	2470.3	2406.8	2215.1
45°	2736.8	2791.4	2774.1	2766.9	2735.7	2712.8	2731.8	2732.9	2726.7	2590.7	2315.4
47.5°	3026.1	3076.2	3065.1	3071.2	3038.9	3023.8	3025.5	3017.7	2960.3	2746.8	2393.4
50°	3259.6	3327.1	3333.7	3319.8	3302.5	3279.7	3338.2	3317.0	3189.4	2898.4	2468.7
52.5°	3441.3	3532.2	3566.7	3557.8	3543.9	3546.7	3656.5	3680.4	3469.2	3089.6	2551.7
55°	3656.5	3799.7	3856.0	3889.5	3875.0	3930.7	4182.1	4194.3	3858.2	3339.3	2659.9
57.5°	3966.9	4172.1	4349.9	4397.2	4442.9	4624.1	5032.1	4907.8	4363.2	3717.2	2797.0
60°	4439.0	4888.3	5177.0	5328.6	5435.7	5688.7	6076.6	5761.7	4992.5	4167.0	2969.2
62.5°	5100.1	5756.7	6239.4	6391.6	6435.6	6581.1	6862.0	6259.5	5335.3	4368.8	2984.3
65°	5592.3	6379.9	6957.9	7035.9	6983.5	6986.3	7059.9	6233.3	5207.7	4192.7	2725.6
67°	5559.9	6441.7	7033.7	7136.2	7063.8	6968.5	6853.6	5878.2	4797.4	3823.7	2386.7
67.5°	5510.3	6382.1	7000.8	7108.9	7042.6	6933.9	6766.1	5740.5	4669.8	3708.9	2317.6
70°	4763.4	5629.1	6462.4	6614.5	6642.4	6543.2	6072.2	4840.4	3791.4	3017.1	1799.8
72.5°	3707.7	4478.6	5303.0	5435.1	5542.1	5256.2	4419.5	3343.2	2763.5	2174.4	1303.2
75°	2448.1	3232.3	3648.1	3667.6	3531.1	3001.5	2159.3	1674.4	1541.2	1278.1	806.5
77.5°	1309.9	1900.7	1912.4	1770.8	1706.2	1272.0	516.1	284.8	317.2	360.1	321.1
80°	977.1	1210.6	1402.9	1508.3	1539.5	1090.8	267.0	151.1	132.1	120.4	118.7
82.5°	881.2	1169.4	1311.0	1368.4	1353.9	897.4	149.9	101.4	84.2	91.4	104.2
85°	345.6	624.3	821.0	794.8	667.8	334.4	81.9	54.6	54.6	79.1	102.6
87.5°	70.8	128.2	173.9	166.1	149.4	64.7	40.1	32.9	33.4	64.1	97.0
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: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3	911.3
2.5°	905.2	901.9	899.6	897.4	895.2	894.1	892.4	892.4	889.0	887.9	886.8
5°	909.1	903.5	899.6	894.6	890.7	887.4	882.9	881.8	877.9	875.1	874.0
7.5°	925.8	917.5	909.1	903.0	897.4	890.1	885.1	880.7	876.8	874.0	870.6
10°	957.6	948.7	937.0	925.8	918.6	907.4	899.6	891.8	887.4	884.0	879.6
12.5°	1004.4	991.6	977.7	964.3	952.0	937.5	929.7	920.2	914.7	911.9	908.5
15°	1052.3	1038.4	1021.1	1008.3	994.4	983.2	976.0	967.6	963.2	959.8	957.6
17.5°	1101.4	1085.2	1073.0	1060.2	1053.5	1045.1	1035.6	1025.0	1012.2	1004.4	993.8
20°	1151.6	1139.3	1132.1	1124.8	1117.0	1105.3	1086.4	1064.6	1040.6	1017.8	996.1
22.5°	1210.1	1202.8	1201.7	1195.0	1178.9	1151.0	1115.9	1075.2	1034.5	996.6	967.1
25°	1292.6	1292.6	1287.0	1259.7	1221.8	1171.6	1112.5	1054.0	1000.0	948.1	909.1
27.5°	1396.3	1392.4	1365.0	1308.7	1240.7	1162.7	1083.6	1009.4	940.3	883.5	833.3
30°	1510.5	1483.2	1424.7	1336.1	1234.1	1133.7	1036.7	950.9	869.5	799.9	740.8
32.5°	1629.2	1562.9	1457.6	1336.1	1210.6	1090.3	978.2	872.9	779.8	701.8	631.5
35°	1736.8	1615.9	1465.4	1314.3	1164.9	1026.2	896.3	777.0	665.5	581.4	504.4
37.5°	1834.4	1651.0	1457.0	1272.0	1098.6	935.9	783.7	652.1	526.2	444.8	379.0
40°	1897.9	1658.2	1422.5	1205.6	1003.9	813.8	645.5	498.3	398.5	324.4	280.4
42.5°	1937.5	1644.3	1366.7	1114.8	876.2	660.5	484.4	357.3	283.2	241.9	225.2
45°	1959.8	1608.1	1284.2	990.5	721.8	502.2	343.9	258.1	217.9	203.4	197.9
47.5°	1958.7	1549.5	1181.1	846.7	551.3	350.0	243.6	201.2	190.1	185.6	184.5
50°	1947.0	1477.6	1060.2	690.6	398.0	244.1	192.9	180.6	177.8	175.0	173.9
52.5°	1930.8	1388.5	926.4	538.4	282.6	195.1	175.0	171.7	169.4	166.7	165.5
55°	1900.7	1278.6	781.5	405.2	221.3	176.1	168.9	167.8	165.0	161.1	158.9
57.5°	1863.9	1167.2	642.7	316.6	195.6	171.7	167.8	166.1	162.2	157.7	153.3
60°	1850.5	1075.2	534.0	267.0	189.5	173.3	170.6	168.3	162.8	156.1	151.1
62.5°	1766.9	971.5	455.9	247.5	192.9	180.6	179.5	176.1	167.8	160.0	152.2
65°	1550.7	821.6	386.3	234.1	199.5	192.9	194.0	189.0	180.6	170.0	156.1
67°	1311.5	670.0	321.6	221.3	204.6	205.7	209.6	205.7	195.1	180.0	161.1
67.5°	1248.0	631.5	305.4	217.4	205.7	209.0	213.5	210.7	200.1	182.8	163.3
70°	927.5	444.8	228.0	196.8	205.7	219.1	229.1	231.9	220.2	196.2	167.8
72.5°	653.3	287.1	175.0	170.6	186.7	204.6	223.5	233.0	219.6	193.4	161.6
75°	392.4	179.5	142.1	144.9	157.2	175.6	190.6	194.5	177.8	161.1	139.9
77.5°	181.7	119.3	111.5	115.4	127.1	135.4	135.4	127.6	114.8	104.8	100.3
80°	107.0	97.5	97.0	104.2	112.0	105.9	96.4	85.8	79.1	75.8	74.1
82.5°	100.3	104.2	110.9	112.6	106.5	91.4	79.7	69.1	65.8	64.1	62.4
85°	118.2	126.5	115.4	106.5	94.2	76.9	62.4	53.5	51.8	50.2	47.9
87.5°	109.2	104.2	90.9	78.0	64.7	46.8	34.0	30.7	32.9	32.3	31.2
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: P158443

CATALOG NUMBER: VST-F04-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	911.3	911.3	911.3	911.3	911.3
2.5°	887.4	887.4	885.1	884.0	886.8
5°	871.8	872.3	870.6	870.1	870.6
7.5°	868.4	867.9	866.7	865.6	866.7
10°	878.4	877.9	876.2	877.3	875.7
12.5°	908.5	911.9	911.3	912.4	914.7
15°	957.6	957.0	955.4	956.5	958.2
17.5°	985.5	981.0	977.1	975.4	975.4
20°	978.8	966.0	959.3	955.4	954.2
22.5°	939.2	920.8	906.9	903.5	900.7
25°	874.5	851.7	833.9	830.0	822.7
27.5°	799.3	768.6	747.5	743.0	739.1
30°	700.6	665.5	641.0	625.4	630.4
32.5°	580.2	546.8	518.4	493.3	489.4
35°	448.1	411.4	386.3	375.1	367.9
37.5°	334.4	303.8	287.1	276.5	277.0
40°	255.8	239.7	230.8	223.5	224.1
42.5°	213.5	206.2	204.0	200.7	199.0
45°	193.4	191.2	191.7	188.4	187.3
47.5°	182.3	180.6	181.2	178.9	178.4
50°	173.3	172.2	172.8	171.1	170.6
52.5°	164.4	165.0	164.4	163.3	163.3
55°	156.6	156.1	157.2	155.5	155.5
57.5°	150.5	149.9	149.9	149.4	149.4
60°	147.2	144.9	144.4	144.4	144.9
62.5°	145.5	141.6	141.0	141.0	141.6
65°	146.0	139.9	137.7	137.1	136.6
67°	146.6	137.7	133.2	131.0	130.4
67.5°	147.2	136.6	131.5	129.3	128.2
70°	143.8	128.8	121.5	117.6	116.5
72.5°	135.4	119.3	110.4	105.3	104.2
75°	120.4	108.1	100.3	94.8	92.5
77.5°	93.1	87.5	84.7	81.4	80.3
80°	72.5	69.7	68.6	66.3	65.8
82.5°	60.2	57.4	55.7	53.0	51.3
85°	46.8	43.5	42.4	40.1	39.0
87.5°	30.7	29.0	28.4	25.6	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)