

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: P158425

Luminaire Tested: **VST-F02-LED-E-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158425
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-F02-LED-E-U-SL3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4981 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

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: 28.75 FT

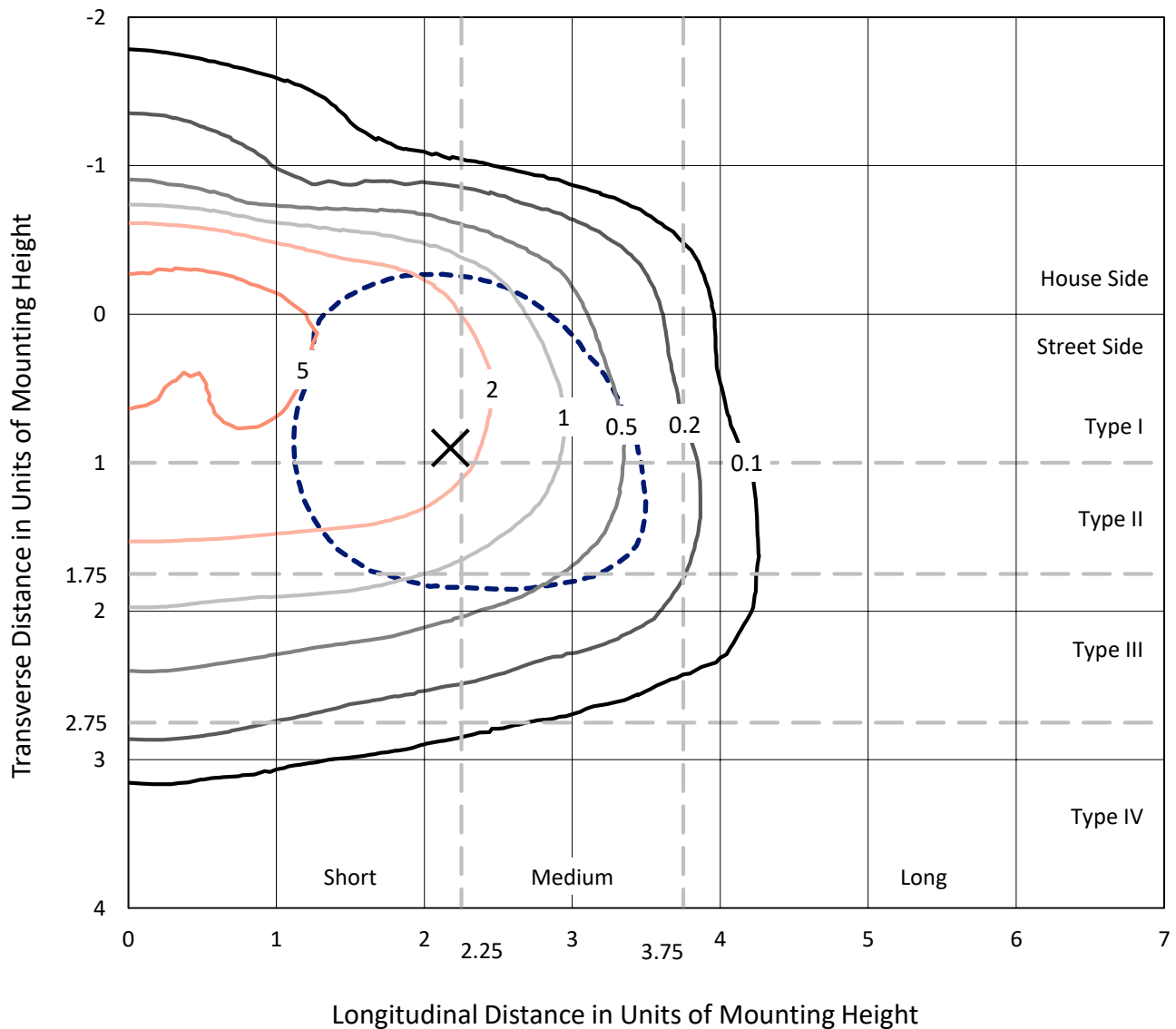


REPORT NUMBER: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

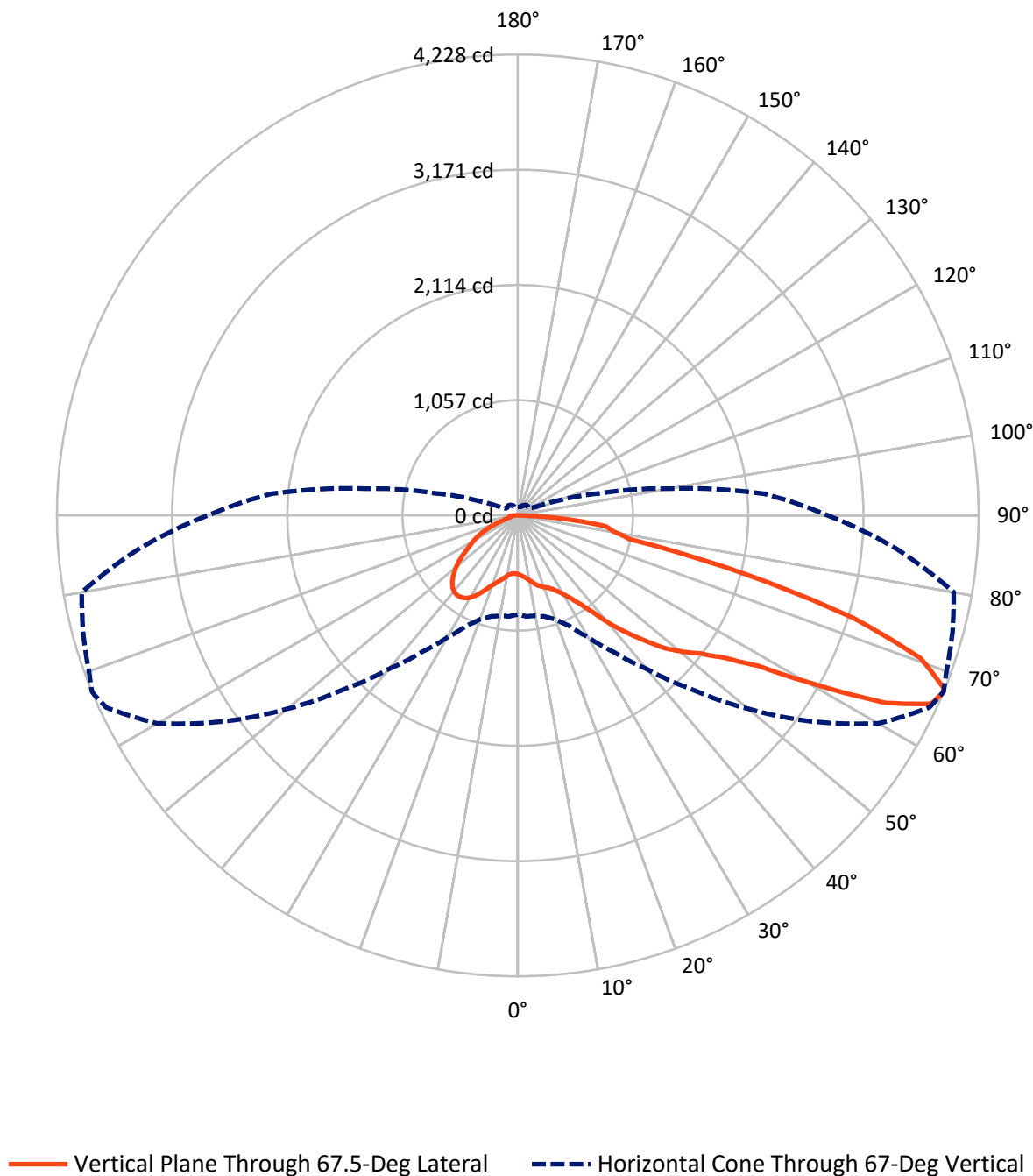


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

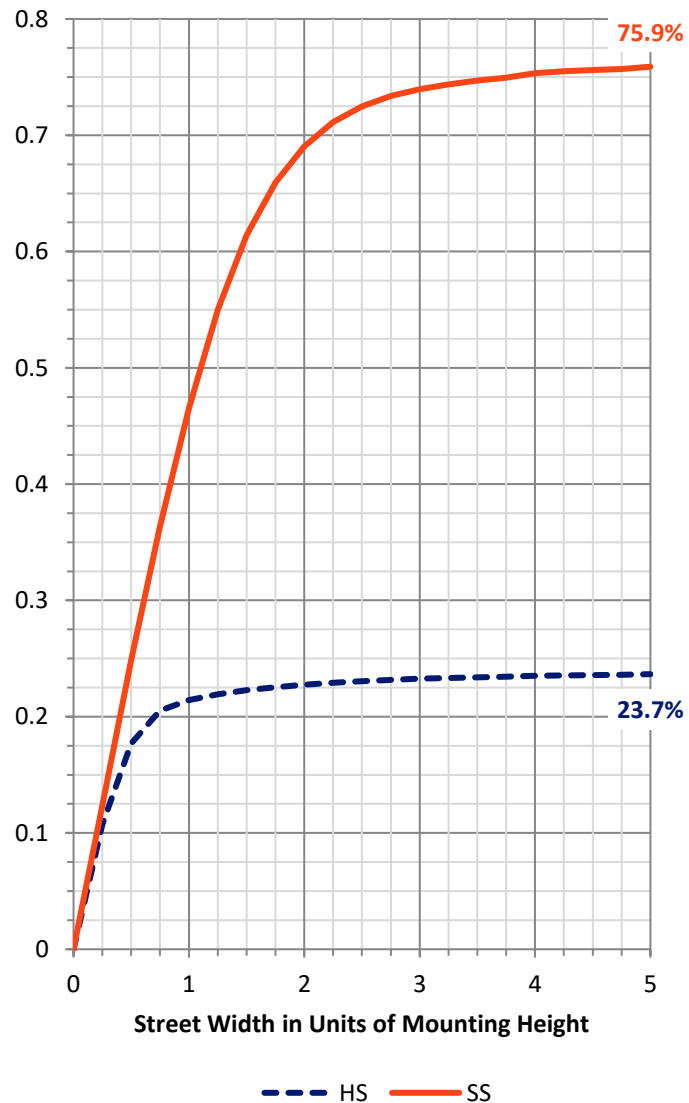
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1194.9	0.0	1194.9
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	3786.0	0.0	3786.0
	% Fixture	76.0	0.0	76.0
Total	Lumens	4981.0	0.0	4981.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.1
10°-20°	182.8	3.7
20°-30°	326.4	6.6
30°-40°	478.3	9.6
40°-50°	739.1	14.8
50°-60°	1076.3	21.6
60°-70°	1402.0	28.1
70°-80°	627.6	12.6
80°-90°	94.9	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°	4981.0	100.0
0°-180°	4981.0	100.0

Coefficient of Utilization



REPORT NUMBER: P158425

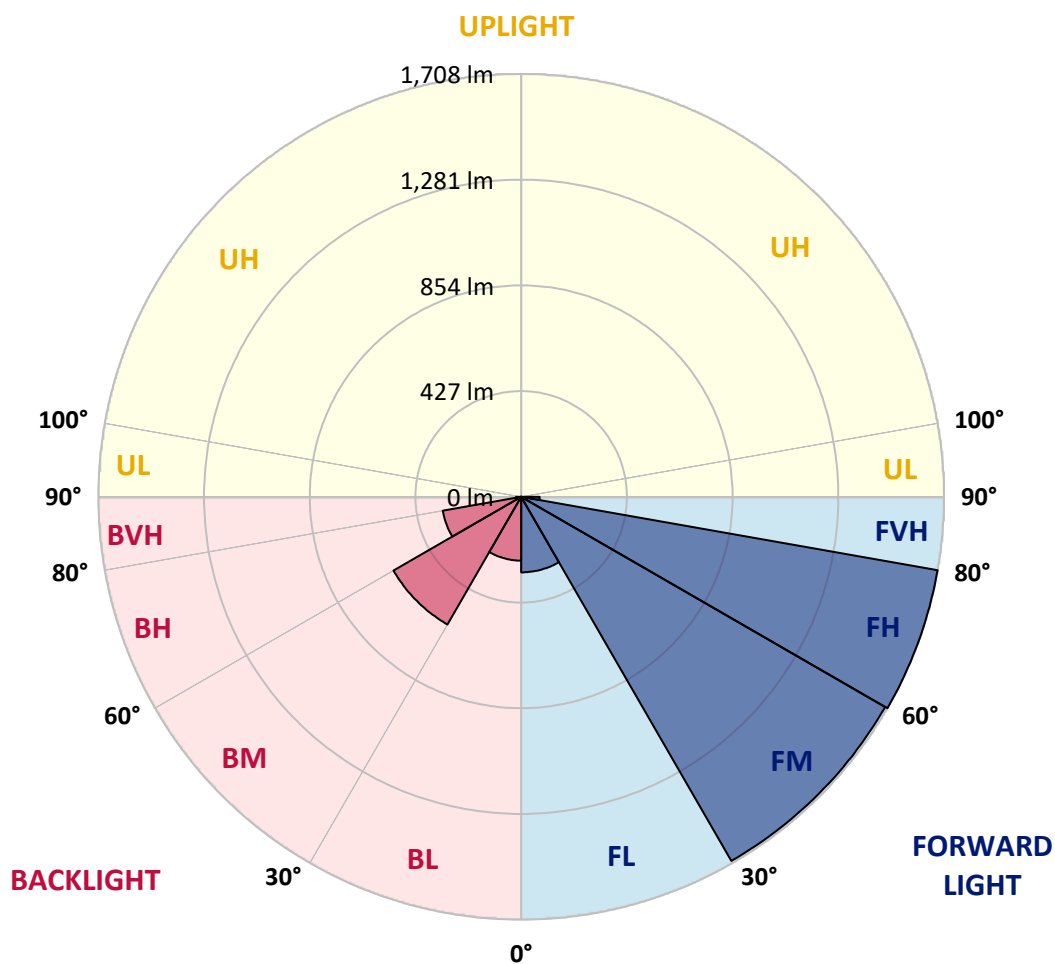
CATALOG NUMBER: VST-F02-LED-E-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	305.2	6.1			
FM	(30°-60°)	1698.3	34.1			
FH	(60°-80°)	1708.1	34.3			G1/1800
FVH	(80°-90°)	74.5	1.5			G1/100
BL	(0°-30°)	257.7	5.2	B1/500		
BM	(30°-60°)	595.4	12.0	B1/1000		
BH	(60°-80°)	321.5	6.5	B1/500		G1/500
BVH	(80°-90°)	20.4	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-G1

Type III Short





REPORT NUMBER: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9
2.5°	561.0	562.3	562.7	562.3	562.7	561.4	561.0	559.0	560.0	557.4	556.7
5°	591.4	592.4	593.0	590.4	591.1	589.7	588.1	586.1	583.5	579.8	577.6
7.5°	621.1	622.8	622.4	621.5	619.1	617.8	614.5	611.5	606.9	602.6	599.6
10°	661.1	660.8	660.8	655.1	651.8	648.8	642.9	638.3	633.7	627.4	624.1
12.5°	707.3	705.0	704.0	700.0	693.1	687.8	679.3	670.3	662.1	655.4	650.2
15°	751.9	751.9	749.2	743.0	736.4	729.4	717.2	704.3	690.8	680.2	674.9
17.5°	792.5	788.9	786.5	778.3	771.4	760.1	746.6	732.7	715.9	701.0	690.8
20°	822.2	819.2	814.3	804.1	792.2	779.0	763.1	746.9	728.8	712.6	701.0
22.5°	839.4	835.7	828.2	814.6	798.4	779.9	761.5	746.3	729.8	717.5	708.0
25°	848.3	844.7	834.4	816.6	794.8	770.4	749.2	734.4	724.8	721.9	720.5
27.5°	848.0	845.0	834.1	813.7	785.6	757.5	734.7	722.2	721.2	732.7	741.3
30°	839.4	837.4	827.5	807.1	777.7	748.3	727.1	720.5	730.7	755.2	776.3
32.5°	830.8	829.8	822.9	804.4	779.3	754.5	740.0	740.6	761.8	799.4	833.5
35°	831.8	833.1	832.1	822.2	806.4	793.5	786.5	801.1	834.1	879.7	925.3
37.5°	840.4	845.3	851.6	852.6	853.0	851.0	865.5	896.2	944.4	1003.9	1075.1
40°	859.2	864.8	883.0	898.9	919.3	943.7	973.1	1015.7	1075.5	1148.8	1236.3
42.5°	917.6	925.6	948.1	977.4	1015.1	1053.4	1097.3	1155.4	1228.7	1306.0	1397.8
45°	994.0	1010.5	1035.2	1067.9	1124.3	1178.2	1235.0	1300.0	1378.0	1474.7	1567.2
47.5°	1089.1	1105.6	1141.6	1176.5	1243.3	1310.3	1372.4	1440.4	1524.9	1624.0	1726.3
50°	1172.2	1191.1	1223.1	1270.3	1347.6	1429.8	1498.5	1572.1	1643.1	1747.5	1850.8
52.5°	1237.6	1251.2	1281.9	1325.2	1411.3	1501.4	1588.3	1670.2	1754.4	1858.7	1954.5
55°	1245.9	1258.4	1288.5	1338.0	1425.5	1525.6	1625.6	1722.7	1841.9	1955.8	2082.7
57.5°	1210.2	1220.5	1250.8	1295.1	1380.3	1494.2	1620.7	1745.2	1897.7	2051.6	2206.4
60°	1159.7	1169.9	1193.7	1229.0	1306.0	1428.8	1576.4	1746.8	1949.6	2171.8	2399.6
62.5°	1104.2	1113.1	1132.3	1157.4	1225.1	1338.4	1507.4	1735.9	1991.8	2291.3	2642.7
65°	1010.8	1032.2	1040.5	1066.3	1133.9	1240.9	1412.9	1662.3	1974.7	2344.5	2795.2
67°	907.4	929.2	933.5	959.6	1013.8	1116.4	1291.4	1525.9	1838.6	2252.7	2761.6
67.5°	874.4	892.9	899.5	925.6	976.7	1073.5	1239.6	1476.7	1797.0	2202.5	2720.9
70°	642.9	663.4	670.7	681.5	718.2	798.8	908.8	1114.4	1432.8	1797.4	2295.3
72.5°	344.1	360.6	367.5	383.7	402.5	446.5	530.6	678.2	879.4	1202.6	1632.9
75°	232.8	239.4	244.4	255.6	275.0	310.1	347.0	398.9	520.4	678.6	929.2
77.5°	132.7	135.7	136.4	138.4	153.9	187.2	248.0	335.8	430.6	491.7	594.4
80°	57.5	63.4	68.0	65.0	64.1	71.0	88.8	132.4	259.6	412.1	489.1
82.5°	31.0	33.7	37.6	38.0	40.0	42.2	45.9	54.5	76.6	154.6	337.1
85°	16.2	16.9	22.4	25.7	27.4	28.7	29.4	32.7	37.6	47.9	83.9
87.5°	2.3	3.3	4.0	5.3	5.9	6.3	7.3	9.2	10.9	13.2	22.4
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: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9
2.5°	553.7	553.1	551.1	549.8	548.5	547.1	545.5	544.2	541.9	540.2	538.3
5°	574.3	570.3	567.7	564.0	563.3	559.0	554.8	552.8	548.8	545.5	541.6
7.5°	595.0	590.4	586.1	583.1	581.5	575.6	571.3	566.3	561.7	557.4	552.8
10°	619.5	614.9	610.2	608.2	605.3	599.6	596.0	589.7	585.1	579.8	573.6
12.5°	644.9	641.6	638.3	635.6	634.3	631.7	626.4	621.1	614.9	609.5	602.3
15°	667.4	665.0	663.7	663.1	663.1	661.4	656.5	651.5	644.9	638.9	631.0
17.5°	683.2	682.2	683.2	684.2	685.5	684.2	683.2	677.6	673.3	666.1	658.1
20°	692.5	694.4	699.4	702.7	705.7	708.0	709.0	704.3	698.7	693.4	688.1
22.5°	702.4	708.0	716.6	721.5	726.5	734.7	736.7	733.4	729.1	725.8	720.2
25°	718.9	727.1	742.0	749.9	756.8	769.1	770.7	771.4	770.4	767.8	760.8
27.5°	744.6	760.8	780.6	790.9	798.4	814.3	820.6	820.6	817.9	820.9	820.9
30°	789.5	811.0	836.8	842.7	854.6	868.4	878.7	880.0	880.3	886.6	895.9
32.5°	858.5	879.0	907.7	914.3	924.6	937.8	949.4	948.1	951.0	964.6	976.7
35°	958.9	979.7	998.6	1007.5	1012.1	1024.0	1028.3	1035.5	1044.5	1061.3	1059.7
37.5°	1107.5	1126.0	1128.7	1134.3	1128.7	1130.9	1134.3	1142.9	1166.6	1181.8	1157.4
40°	1286.5	1317.2	1314.2	1307.6	1295.1	1278.2	1284.2	1297.4	1323.2	1309.9	1244.2
42.5°	1455.2	1486.9	1481.0	1473.4	1445.6	1439.4	1438.7	1449.6	1463.5	1425.8	1312.3
45°	1621.3	1653.7	1643.5	1639.1	1620.7	1607.2	1618.4	1619.0	1615.4	1534.8	1371.7
47.5°	1792.7	1822.4	1815.8	1819.4	1800.3	1791.4	1792.4	1787.8	1753.7	1627.3	1417.9
50°	1931.0	1971.0	1975.0	1966.7	1956.5	1943.0	1977.6	1965.1	1889.5	1717.1	1462.5
52.5°	2038.7	2092.6	2113.0	2107.7	2099.5	2101.1	2166.2	2180.4	2055.2	1830.4	1511.7
55°	2166.2	2251.0	2284.4	2304.2	2295.6	2328.7	2477.6	2484.8	2285.7	1978.3	1575.8
57.5°	2350.1	2471.6	2576.9	2605.0	2632.1	2739.4	2981.2	2907.5	2584.9	2202.2	1657.0
60°	2629.8	2896.0	3067.0	3156.8	3220.2	3370.1	3599.9	3413.4	2957.7	2468.6	1759.0
62.5°	3021.4	3410.4	3696.4	3786.5	3812.6	3898.8	4065.2	3708.2	3160.7	2588.2	1768.0
65°	3313.0	3779.6	4122.0	4168.3	4137.2	4138.9	4182.4	3692.8	3085.1	2483.8	1614.7
67°	3293.8	3816.2	4166.9	4227.7	4184.8	4128.3	4060.3	3482.4	2842.1	2265.2	1414.0
67.5°	3264.5	3780.9	4147.4	4211.5	4172.2	4107.8	4008.4	3400.9	2766.5	2197.2	1373.0
70°	2822.0	3334.8	3828.5	3918.6	3935.1	3876.4	3597.3	2867.5	2246.1	1787.4	1066.3
72.5°	2196.5	2653.3	3141.6	3219.9	3283.3	3113.9	2618.2	1980.6	1637.2	1288.1	772.0
75°	1450.3	1914.9	2161.2	2172.8	2091.9	1778.2	1279.3	992.0	913.0	757.2	477.8
77.5°	776.0	1126.0	1133.0	1049.1	1010.8	753.5	305.8	168.7	187.9	213.3	190.2
80°	578.9	717.2	831.1	893.5	912.1	646.2	158.2	89.5	78.2	71.3	70.3
82.5°	522.1	692.8	776.6	810.7	802.1	531.7	88.8	60.1	49.9	54.2	61.7
85°	204.7	369.8	486.4	470.9	395.6	198.1	48.5	32.3	32.3	46.9	60.8
87.5°	41.9	76.0	103.0	98.4	88.5	38.3	23.8	19.5	19.8	38.0	57.5
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: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9	539.9
2.5°	536.3	534.3	533.0	531.7	530.3	529.7	528.7	528.7	526.7	526.0	525.4
5°	538.6	535.3	533.0	530.0	527.7	525.7	523.1	522.4	520.1	518.4	517.7
7.5°	548.5	543.5	538.6	535.0	531.7	527.3	524.4	521.8	519.4	517.7	515.8
10°	567.3	562.0	555.1	548.5	544.2	537.6	533.0	528.4	525.7	523.7	521.1
12.5°	595.0	587.5	579.2	571.3	564.0	555.4	550.8	545.2	541.9	540.2	538.3
15°	623.5	615.2	604.9	597.4	589.1	582.5	578.2	573.2	570.6	568.6	567.3
17.5°	652.5	642.9	635.6	628.1	624.1	619.1	613.6	607.3	599.6	595.0	588.8
20°	682.2	674.9	670.7	666.4	661.7	654.8	643.6	630.7	616.5	602.9	590.1
22.5°	716.9	712.6	712.0	708.0	698.4	681.9	661.1	637.0	612.8	590.4	572.9
25°	765.8	765.8	762.5	746.3	723.8	694.1	659.1	624.4	592.4	561.7	538.6
27.5°	827.2	824.9	808.7	775.3	735.1	688.8	641.9	598.0	557.0	523.4	493.7
30°	894.8	878.7	844.0	791.5	731.1	671.6	614.2	563.3	515.1	473.9	438.8
32.5°	965.2	925.9	863.5	791.5	717.2	645.9	579.5	517.1	461.9	415.7	374.1
35°	1028.9	957.3	868.1	778.6	690.1	607.9	531.0	460.3	394.3	344.4	298.9
37.5°	1086.7	978.1	863.2	753.5	650.8	554.4	464.3	386.3	311.7	263.5	224.5
40°	1124.3	982.4	842.7	714.2	594.7	482.1	382.4	295.2	236.1	192.2	166.1
42.5°	1147.8	974.1	809.7	660.4	519.1	391.3	287.0	211.7	167.8	143.3	133.4
45°	1161.0	952.7	760.8	586.8	427.6	297.5	203.8	152.9	129.1	120.5	117.2
47.5°	1160.3	918.0	699.7	501.6	326.6	207.4	144.3	119.2	112.6	110.0	109.3
50°	1153.4	875.4	628.1	409.1	235.7	144.7	114.2	107.0	105.4	103.7	103.0
52.5°	1143.8	822.5	548.8	319.0	167.4	115.6	103.7	101.7	100.4	98.8	98.1
55°	1126.0	757.5	463.0	240.1	131.1	104.3	100.1	99.4	97.7	95.5	94.1
57.5°	1104.2	691.4	380.8	187.6	115.9	101.7	99.4	98.4	96.1	93.4	90.8
60°	1096.3	637.0	316.3	158.2	112.3	102.7	101.0	99.7	96.4	92.5	89.5
62.5°	1046.8	575.6	270.1	146.6	114.2	107.0	106.3	104.3	99.4	94.8	90.1
65°	918.7	486.7	228.8	138.7	118.2	114.2	114.9	112.0	107.0	100.7	92.5
67°	777.0	396.9	190.6	131.1	121.2	121.9	124.1	121.9	115.6	106.7	95.5
67.5°	739.3	374.1	181.0	128.8	121.9	123.8	126.5	124.8	118.6	108.3	96.8
70°	549.5	263.5	135.1	116.6	121.9	129.8	135.7	137.3	130.4	116.2	99.4
72.5°	387.0	170.0	103.7	101.0	110.6	121.2	132.4	138.0	130.1	114.6	95.8
75°	232.4	106.3	84.2	85.9	93.1	104.0	112.9	115.3	105.4	95.5	82.9
77.5°	107.6	70.7	66.1	68.3	75.3	80.2	80.2	75.6	68.0	62.1	59.5
80°	63.4	57.8	57.5	61.7	66.4	62.8	57.1	50.9	46.9	44.9	43.9
82.5°	59.5	61.7	65.7	66.7	63.1	54.2	47.2	40.9	38.9	38.0	37.0
85°	70.0	74.9	68.3	63.1	55.8	45.5	37.0	31.7	30.7	29.7	28.4
87.5°	64.7	61.7	53.8	46.2	38.3	27.7	20.2	18.2	19.5	19.1	18.5
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: P158425

CATALOG NUMBER: VST-F02-LED-E-U-SL3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	539.9	539.9	539.9	539.9	539.9
2.5°	525.7	525.7	524.4	523.7	525.4
5°	516.4	516.8	515.8	515.5	515.8
7.5°	514.4	514.1	513.5	512.8	513.5
10°	520.4	520.1	519.1	519.8	518.8
12.5°	538.3	540.2	539.9	540.5	541.9
15°	567.3	567.0	566.0	566.6	567.7
17.5°	583.8	581.2	578.9	577.9	577.9
20°	579.8	572.3	568.3	566.0	565.3
22.5°	556.4	545.5	537.2	535.3	533.6
25°	518.1	504.5	494.0	491.7	487.4
27.5°	473.5	455.3	442.8	440.2	437.9
30°	415.1	394.3	379.7	370.5	373.4
32.5°	343.7	323.9	307.1	292.3	289.9
35°	265.5	243.7	228.8	222.2	217.9
37.5°	198.1	179.9	170.0	163.8	164.1
40°	151.6	142.0	136.7	132.4	132.7
42.5°	126.5	122.2	120.8	118.9	117.9
45°	114.6	113.3	113.6	111.6	110.9
47.5°	108.0	107.0	107.3	106.0	105.7
50°	102.7	102.1	102.4	101.4	101.0
52.5°	97.4	97.7	97.4	96.8	96.8
55°	92.8	92.5	93.1	92.1	92.1
57.5°	89.2	88.8	88.8	88.5	88.5
60°	87.2	85.9	85.5	85.5	85.9
62.5°	86.2	83.9	83.5	83.5	83.9
65°	86.5	82.9	81.5	81.2	80.9
67°	86.8	81.5	78.9	77.6	77.3
67.5°	87.2	80.9	77.9	76.6	76.0
70°	85.2	76.3	72.0	69.7	69.0
72.5°	80.2	70.7	65.4	62.4	61.7
75°	71.3	64.1	59.5	56.2	54.8
77.5°	55.1	51.8	50.2	48.2	47.6
80°	42.9	41.3	40.6	39.3	38.9
82.5°	35.6	34.0	33.0	31.4	30.4
85°	27.7	25.7	25.1	23.8	23.1
87.5°	18.2	17.2	16.9	15.2	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)