

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: P165341

Luminaire Tested: **VST-F12-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P165341  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F12-LED-E-U-SL3-HSS-7030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (84) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

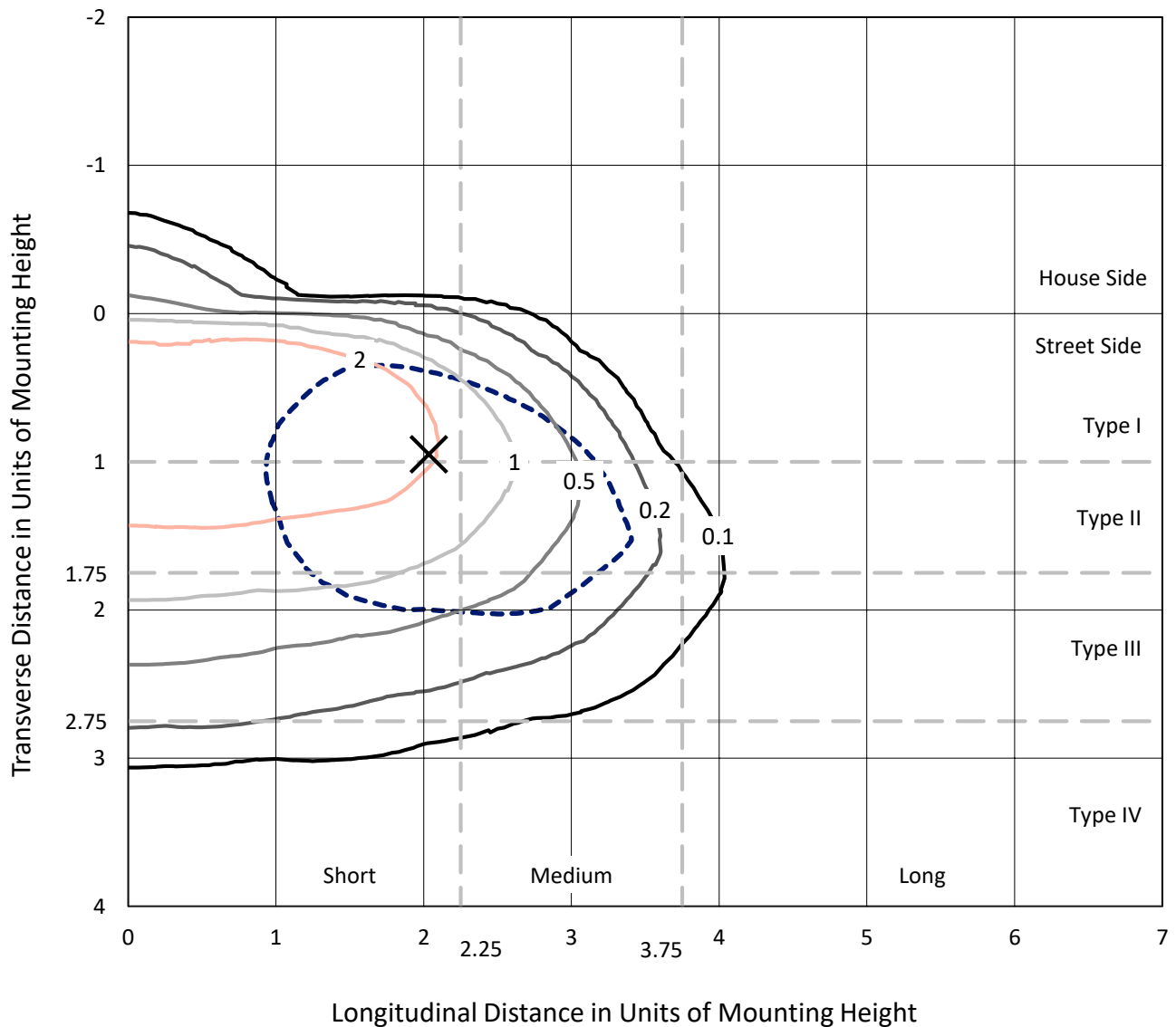
Lumens per Lamp: N/A  
Luminaire Lumens: 15500 lumens  
Efficiency: N/A  
Efficacy: 50.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G3  
  
Input Watts (W): 306.6  
Input Voltage (V): NR  
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: P165341  
 CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

### Iso-Footcandle Lines of Horizontal Illumination

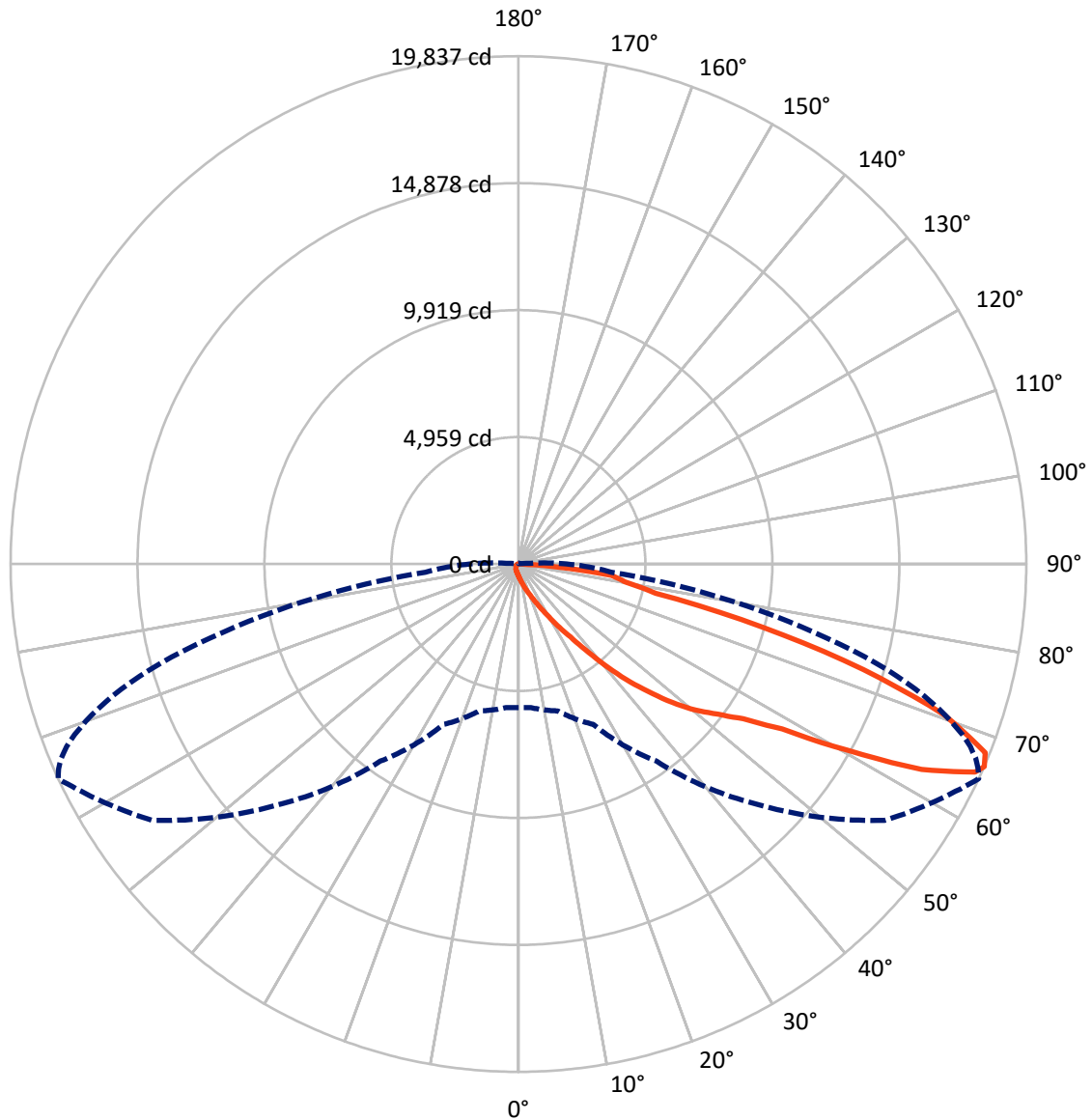
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P165341  
CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical



REPORT NUMBER: P165341

CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

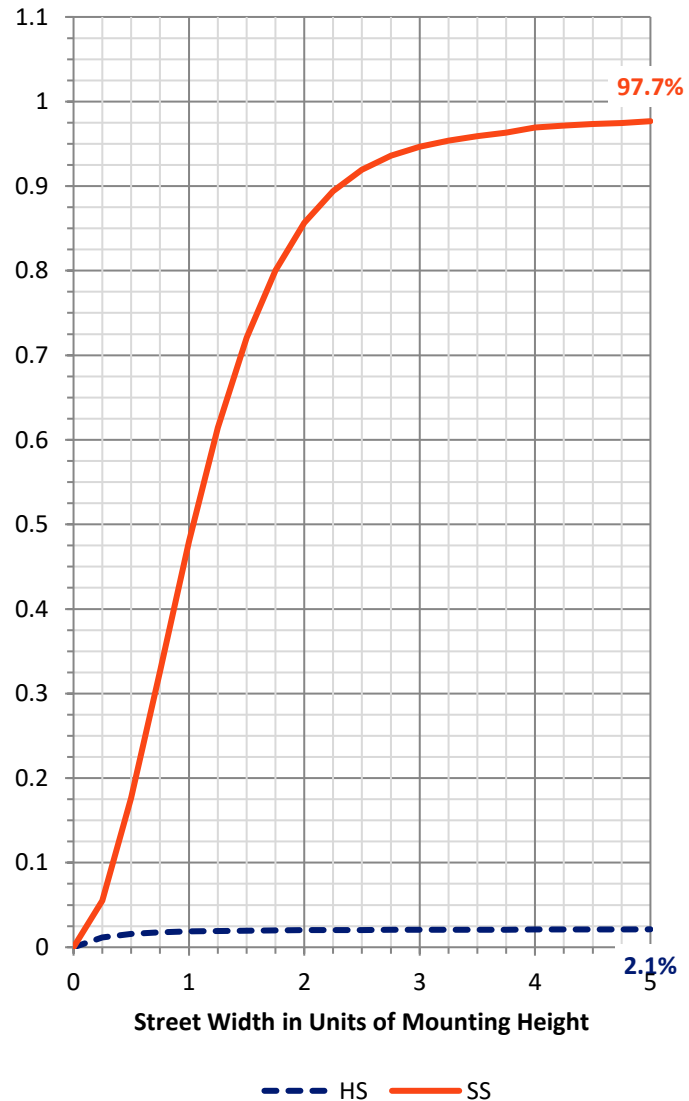
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	335.9	0.0	335.9
	% Fixture	2.2	0.0	2.2
<b>Street Side</b>	Lumens	15164.1	0.0	15164.1
	% Fixture	97.8	0.0	97.8
<b>Total</b>	Lumens	15500.0	0.0	15500.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.4	0.3
10°-20°	222.1	1.4
20°-30°	479.0	3.1
30°-40°	1022.9	6.6
40°-50°	2262.1	14.6
50°-60°	3833.4	24.7
60°-70°	5115.4	33.0
70°-80°	2253.3	14.5
80°-90°	259.5	1.7
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°	15500.0	100.0
0°-180°	15500.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P165341

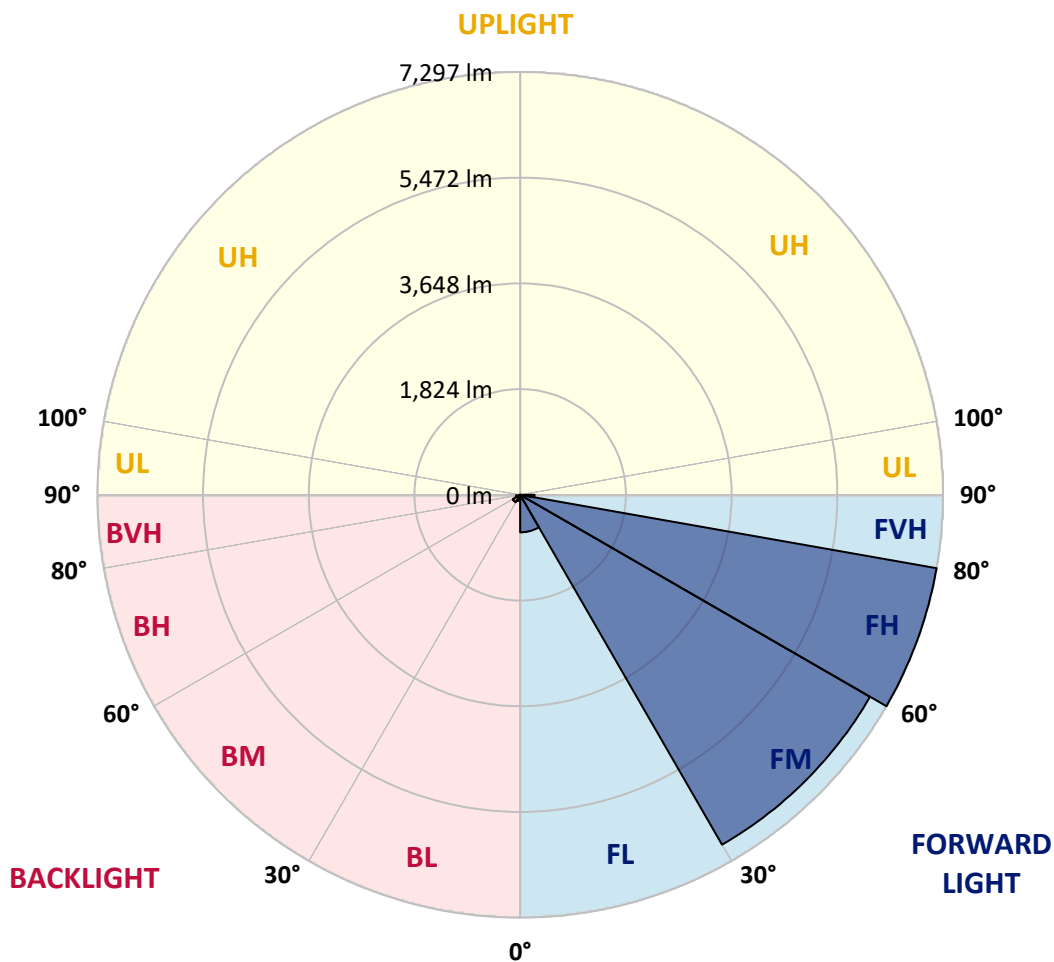
CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	647.4	4.2			
FM	(30°-60°)	6970.8	45.0			
FH	(60°-80°)	7296.6	47.1			G3/7500
FVH	(80°-90°)	249.2	1.6			G3/500
BL	(0°-30°)	106.0	0.7	B0/110		
BM	(30°-60°)	147.5	1.0	B0/220		
BH	(60°-80°)	72.1	0.5	B0/110		G0/110
BVH	(80°-90°)	10.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G3**

Type III Short





REPORT NUMBER: P165341  
 CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8
2.5°	590.1	587.0	575.1	575.1	557.2	545.4	530.4	515.6	515.6	512.5	509.6
5°	780.7	762.9	759.8	727.1	700.3	661.6	625.8	578.2	572.2	566.2	563.1
7.5°	992.4	989.3	962.5	923.8	870.2	798.6	727.1	649.6	637.7	631.7	619.8
10°	1266.5	1251.5	1215.9	1150.2	1069.8	974.5	858.3	736.0	721.1	709.2	703.2
12.5°	1528.7	1502.0	1481.0	1397.5	1296.2	1156.1	1016.1	840.4	828.4	813.6	789.7
15°	1773.0	1749.1	1713.5	1642.0	1528.7	1352.8	1189.1	974.5	944.6	923.8	905.9
17.5°	1963.8	1948.9	1907.1	1826.8	1704.4	1549.5	1352.8	1111.4	1087.7	1060.8	1028.0
20°	2145.6	2124.6	2059.1	1948.9	1817.7	1698.5	1546.7	1290.2	1257.5	1224.7	1189.1
22.5°	2318.4	2297.4	2190.3	2008.5	1868.4	1817.7	1764.2	1492.9	1442.2	1415.5	1379.6
25°	2559.8	2515.1	2348.1	2059.1	1871.5	1910.2	2002.5	1755.1	1707.5	1668.8	1612.2
27.5°	2884.7	2824.9	2562.7	2133.7	1883.2	2011.5	2276.6	2074.0	2023.3	1978.6	1916.2
30°	3251.1	3212.4	2899.5	2312.5	1969.7	2160.5	2583.5	2479.3	2419.8	2366.0	2291.7
32.5°	3620.6	3567.1	3257.1	2652.1	2202.1	2449.5	2968.1	2950.2	2872.7	2822.0	2741.5
35°	3945.4	3918.7	3689.2	3209.3	2732.7	2956.1	3480.6	3501.4	3433.0	3379.2	3289.8
37.5°	4166.0	4166.0	4121.3	3808.3	3575.9	3742.8	4234.4	4237.5	4168.9	4046.8	4002.1
40°	4279.1	4311.9	4472.9	4532.5	4520.5	4735.1	5223.9	5170.2	5113.5	5050.9	4902.0
42.5°	4511.7	4541.3	4884.1	5295.4	5563.6	5846.6	6183.3	6165.4	6097.0	5983.8	5846.6
45°	4905.1	4943.8	5352.0	6004.6	6555.8	6958.2	7172.6	7089.2	7020.6	6913.5	6841.9
47.5°	5405.6	5480.1	5942.0	6749.6	7414.0	8078.5	8302.0	8081.6	8022.1	7938.5	7822.3
50°	5939.1	6010.5	6502.2	7426.0	8177.0	8969.6	9342.2	8969.6	8883.2	8856.3	8725.3
52.5°	6400.9	6460.6	6934.3	7947.5	8760.9	9690.7	10233.0	9741.4	9678.7	9589.3	9494.0
55°	6675.0	6722.8	7166.7	8197.8	9157.4	10340.3	11094.4	10662.3	10569.8	10534.1	10397.0
57.5°	6767.5	6815.1	7214.5	8230.5	9371.8	10933.3	12140.3	12155.2	12045.0	11916.8	11875.0
60°	6767.5	6821.0	7157.8	8150.2	9580.5	11565.1	13534.8	14777.4	14539.1	14515.2	14363.2
62.5°	6487.4	6538.0	6877.7	7902.8	9860.6	12417.4	15477.7	17671.0	17602.6	17447.5	17197.2
65°	5879.3	5909.2	6242.9	7271.1	9753.3	13201.1	17161.4	19596.0	19485.8	19181.8	18860.0
66°	5605.2	5629.1	5942.0	6910.4	9401.7	13308.4	17459.4	19837.4	19655.7	19399.3	19035.7
67.5°	5208.9	5250.7	5471.1	6240.0	8558.4	12935.8	17271.8	19667.6	19509.7	19199.7	18836.1
70°	3477.7	3447.8	4225.6	4788.7	6520.1	10540.1	15495.7	17659.0	17662.1	17516.1	17370.0
72.5°	1650.9	1668.8	1895.2	2947.1	4267.2	7041.6	12333.9	14095.0	14297.7	14035.5	13853.6
75°	1186.0	1212.8	1349.9	1802.9	2544.8	4225.6	7995.1	9857.5	9863.5	9398.6	8984.6
77.5°	345.6	360.7	506.5	1111.4	1907.1	2851.7	4592.0	5480.1	5352.0	5018.2	4705.3
80°	143.0	143.0	148.9	354.7	765.8	1937.0	3212.4	4219.6	4204.8	4076.6	3891.9
82.5°	53.6	56.6	71.5	146.0	181.9	476.8	2142.5	3662.4	3653.4	3471.7	3340.5
85°	6.0	6.0	17.9	62.6	68.6	89.4	429.1	1615.1	1606.2	1615.1	1415.5
87.5°	0.0	0.0	2.9	6.0	8.9	11.9	17.9	62.6	68.6	65.5	59.5
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: P165341  
 CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8
2.5°	509.6	503.6	503.6	500.7	500.7	500.7	497.6	494.7	494.7	491.7	488.8
5°	557.2	551.2	548.3	542.3	539.4	536.4	530.4	527.5	521.5	518.4	515.6
7.5°	613.8	601.9	599.0	590.1	581.1	575.1	569.1	560.2	554.3	542.3	539.4
10°	685.5	670.5	658.5	646.6	637.7	622.9	613.8	601.9	590.1	581.1	572.2
12.5°	777.8	756.9	739.0	727.1	706.3	688.4	670.5	661.6	637.7	625.8	610.9
15°	879.1	855.2	834.4	810.5	795.7	765.8	741.9	715.1	703.2	682.4	658.5
17.5°	1010.1	971.4	938.6	914.9	885.1	855.2	828.4	801.6	765.8	741.9	712.3
20°	1150.2	1117.4	1072.7	1031.1	995.3	959.6	920.7	885.1	852.3	813.6	777.8
22.5°	1329.1	1281.4	1227.8	1186.0	1138.4	1099.7	1045.9	998.3	944.6	893.9	852.3
25°	1555.5	1492.9	1442.2	1382.7	1326.1	1266.5	1200.8	1141.3	1072.7	1025.1	953.7
27.5°	1835.6	1776.1	1707.5	1630.1	1573.4	1484.0	1397.5	1323.2	1242.6	1168.1	1087.7
30°	2193.2	2106.9	2035.2	1960.9	1847.6	1761.1	1659.8	1558.6	1448.2	1373.8	1251.5
32.5°	2622.3	2530.0	2422.7	2315.4	2211.1	2089.0	1963.8	1838.5	1716.4	1579.4	1454.2
35°	3146.9	3036.5	2914.3	2798.2	2637.3	2506.1	2348.1	2175.3	2038.3	1880.3	1722.4
37.5°	3841.2	3659.3	3552.0	3429.9	3212.4	3033.6	2857.7	2684.9	2443.5	2276.6	2053.2
40°	4711.3	4603.9	4428.2	4231.5	4034.8	3799.4	3561.1	3331.6	3051.5	2819.0	2559.8
42.5°	5733.3	5575.5	5396.7	5113.5	4913.9	4636.7	4365.6	4061.6	3718.9	3421.0	3117.0
45°	6692.9	6505.3	6368.1	6085.1	5876.4	5548.5	5220.8	4899.1	4502.6	4118.3	3766.6
47.5°	7730.0	7574.9	7348.5	7119.1	6907.5	6538.0	6183.3	5793.0	5375.7	4919.9	4463.9
50°	8641.9	8519.7	8364.6	8087.6	7852.1	7542.2	7125.1	6698.9	6171.4	5718.5	5200.0
52.5°	9416.5	9321.2	9103.7	8907.0	8695.4	8403.3	8030.9	7622.7	7053.6	6555.8	5965.8
55°	10331.5	10262.9	10072.1	9950.0	9762.3	9482.2	9133.5	8755.1	8153.1	7610.7	6943.2
57.5°	11830.3	11776.8	11609.8	11559.1	11374.3	11130.0	10701.0	10295.6	9592.4	8918.9	8156.2
60°	14312.5	14205.4	13960.9	13835.9	13445.4	13117.7	12560.5	12003.2	11153.9	10295.6	9377.8
62.5°	16970.6	16669.7	16204.8	15805.6	15251.4	14682.1	13937.1	13084.9	12089.7	11070.5	10015.5
65°	18404.0	17891.5	17304.5	16669.7	15951.7	15114.2	14175.6	13153.5	12083.7	11007.9	9893.4
66°	18568.0	17989.8	17367.1	16660.8	15862.3	14971.2	14017.6	12944.9	11833.2	10784.4	9669.9
67.5°	18362.4	17757.5	17098.9	16315.2	15451.0	14527.2	13525.9	12411.4	11341.6	10277.7	9193.1
70°	16923.1	16321.0	15734.0	14908.6	13987.7	13058.1	12110.5	10864.9	9851.7	8874.2	7908.8
72.5°	13514.0	13105.7	12524.7	11818.4	10921.4	9830.7	9041.0	7926.7	7047.6	6099.9	5352.0
75°	8445.1	7870.1	7151.8	6251.9	5566.5	4681.4	4219.6	3373.2	2872.7	2434.6	2011.5
77.5°	4317.8	3885.9	3382.3	2875.6	2389.9	1907.1	1475.0	1043.0	703.2	488.8	363.5
80°	3567.1	3185.6	2768.3	2306.5	1877.4	1457.3	1049.0	715.1	456.0	298.0	232.4
82.5°	2947.1	2625.3	2252.8	1823.7	1451.3	1144.4	795.7	518.4	321.7	208.6	163.9
85°	1254.6	1138.4	879.1	697.2	524.4	387.4	271.3	181.9	128.1	104.2	95.4
87.5°	53.6	59.5	56.6	44.7	32.8	32.8	29.9	23.9	23.9	23.9	23.9
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: P165341  
 CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8	467.8
2.5°	488.8	485.7	482.8	482.8	479.7	476.8	458.9	444.1	426.2	414.2	402.3
5°	509.6	506.5	500.7	497.6	491.7	488.8	450.0	417.1	390.3	369.5	354.7
7.5°	530.4	527.5	518.4	509.6	506.5	500.7	438.1	396.3	360.7	336.8	321.7
10°	557.2	548.3	539.4	527.5	518.4	509.6	426.2	372.4	333.7	312.9	298.0
12.5°	595.9	581.1	566.2	551.2	539.4	524.4	420.2	351.6	312.9	289.0	274.2
15°	640.8	619.8	601.9	584.1	563.1	548.3	408.2	333.7	295.0	271.3	253.3
17.5°	682.4	658.5	631.7	604.9	584.1	563.1	396.3	316.0	277.0	253.3	235.4
20°	741.9	706.3	673.5	640.8	610.9	584.1	378.4	298.0	262.2	235.4	217.5
22.5°	807.6	765.8	724.2	679.5	640.8	604.9	363.5	283.0	247.4	220.6	199.6
25°	891.0	840.4	783.7	727.1	682.4	634.8	348.7	268.2	232.4	205.6	184.8
27.5°	1007.2	935.7	873.1	801.6	733.1	679.5	336.8	256.2	217.5	190.7	169.9
30°	1165.2	1060.8	962.5	885.1	804.5	727.1	324.8	241.4	205.6	175.9	152.0
32.5°	1340.9	1218.8	1105.5	989.3	888.0	798.6	312.9	229.5	190.7	160.9	140.1
35°	1558.6	1403.5	1251.5	1117.4	995.3	876.0	300.9	217.5	178.8	146.0	125.2
37.5°	1871.5	1677.7	1478.1	1305.3	1147.3	989.3	292.1	205.6	163.9	131.2	110.2
40°	2300.5	2050.3	1805.8	1570.4	1364.8	1168.1	280.1	193.6	152.0	119.3	98.3
42.5°	2765.4	2461.4	2139.7	1874.4	1591.3	1344.0	268.2	181.9	140.1	107.3	86.5
45°	3343.6	2965.0	2574.7	2214.0	1868.4	1549.5	256.2	169.9	125.2	95.4	74.6
47.5°	3975.3	3492.5	3051.5	2598.6	2187.2	1805.8	241.4	160.9	113.3	83.4	65.5
50°	4624.9	4115.4	3558.0	3042.5	2553.9	2062.2	226.6	146.0	101.3	74.6	53.6
52.5°	5325.1	4723.2	4154.1	3513.3	2944.2	2398.8	211.5	134.1	92.3	65.5	44.7
55°	6216.1	5542.8	4875.2	4157.0	3471.7	2789.3	196.7	119.3	80.5	56.6	35.8
57.5°	7336.6	6538.0	5718.5	4908.0	4076.6	3301.8	184.8	104.2	68.6	47.6	29.9
60°	8394.5	7461.8	6469.4	5536.8	4598.0	3695.2	166.8	92.3	59.5	38.7	29.9
62.5°	8942.8	7878.9	6809.1	5781.1	4779.8	3835.2	148.9	77.5	50.7	32.8	26.8
65°	8808.7	7724.0	6687.0	5649.9	4669.6	3745.8	131.2	68.6	44.7	29.9	26.8
66°	8615.1	7542.2	6499.3	5512.9	4577.2	3650.5	122.1	65.5	41.8	29.9	23.9
67.5°	8191.8	7154.7	6159.5	5241.6	4323.8	3468.6	110.2	59.5	38.7	26.8	23.9
70°	6996.9	6055.2	5259.6	4443.1	3695.2	2923.4	89.4	50.7	32.8	23.9	23.9
72.5°	4630.7	3990.1	3459.7	2976.9	2488.2	1931.0	74.6	41.8	26.8	23.9	20.8
75°	1746.2	1579.4	1355.9	1218.8	1063.9	932.7	59.5	26.8	20.8	20.8	20.8
77.5°	310.0	286.1	253.3	232.4	214.6	196.7	47.6	17.9	17.9	20.8	20.8
80°	208.6	193.6	175.9	160.9	148.9	134.1	32.8	14.8	17.9	17.9	20.8
82.5°	148.9	140.1	131.2	119.3	110.2	98.3	20.8	14.8	17.9	17.9	17.9
85°	89.4	83.4	77.5	71.5	62.6	59.5	14.8	14.8	14.8	17.9	17.9
87.5°	23.9	20.8	23.9	23.9	17.9	20.8	11.9	11.9	11.9	14.8	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: P165341

CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	145°	155°	165°	175°	180°
0°	467.8	467.8	467.8	467.8	467.8
2.5°	396.3	396.3	390.3	399.4	399.4
5°	342.7	342.7	339.7	342.7	342.7
7.5°	312.9	310.0	310.0	310.0	312.9
10°	286.1	283.0	283.0	283.0	283.0
12.5°	262.2	259.3	256.2	259.3	259.3
15°	241.4	235.4	235.4	235.4	235.4
17.5°	223.5	217.5	214.6	214.6	214.6
20°	205.6	196.7	196.7	196.7	196.7
22.5°	187.7	178.8	178.8	178.8	178.8
25°	169.9	160.9	160.9	160.9	160.9
27.5°	154.9	146.0	146.0	146.0	146.0
30°	137.2	131.2	131.2	134.1	131.2
32.5°	125.2	116.2	116.2	119.3	119.3
35°	110.2	104.2	104.2	104.2	104.2
37.5°	95.4	89.4	89.4	89.4	89.4
40°	83.4	77.5	74.6	77.5	77.5
42.5°	71.5	65.5	62.6	62.6	62.6
45°	62.6	53.6	50.7	53.6	53.6
47.5°	50.7	44.7	44.7	47.6	47.6
50°	38.7	38.7	41.8	47.6	47.6
52.5°	35.8	35.8	41.8	47.6	47.6
55°	32.8	35.8	41.8	44.7	47.6
57.5°	29.9	35.8	41.8	44.7	44.7
60°	29.9	32.8	38.7	44.7	44.7
62.5°	26.8	29.9	35.8	41.8	41.8
65°	26.8	29.9	35.8	41.8	41.8
66°	26.8	29.9	35.8	41.8	41.8
67.5°	26.8	29.9	35.8	41.8	41.8
70°	26.8	29.9	35.8	38.7	38.7
72.5°	23.9	26.8	32.8	38.7	38.7
75°	23.9	26.8	32.8	38.7	38.7
77.5°	23.9	26.8	32.8	38.7	38.7
80°	23.9	26.8	32.8	35.8	38.7
82.5°	20.8	26.8	29.9	35.8	35.8
85°	20.8	23.9	29.9	32.8	35.8
87.5°	17.9	20.8	23.9	29.9	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)