

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: P165550

Luminaire Tested: **VST-F11-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165550
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F11-LED-E-U-SL4-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (77) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15408.6 lumens
Efficiency: N/A
Efficacy: 54.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 282.7
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



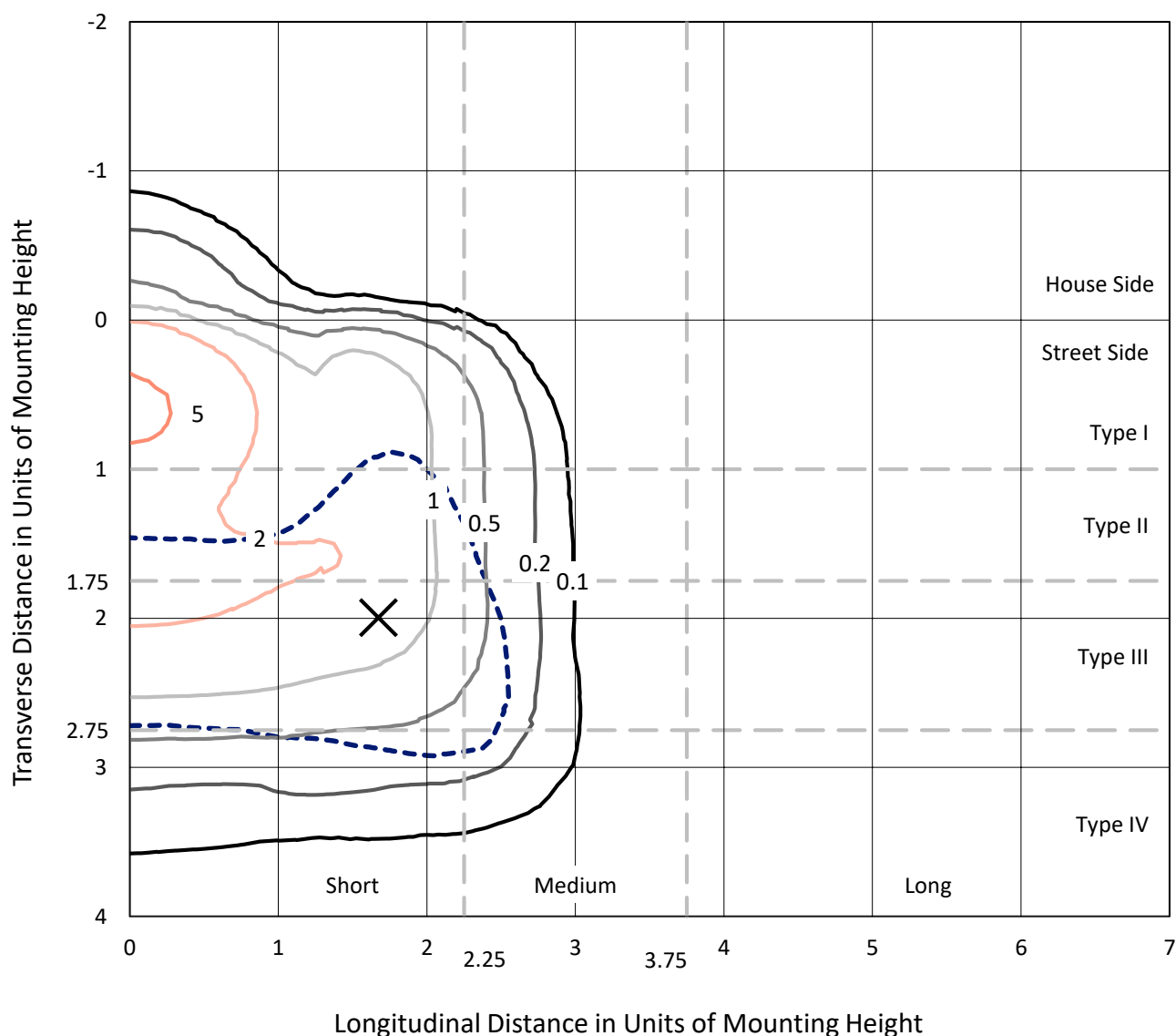
REPORT NUMBER: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

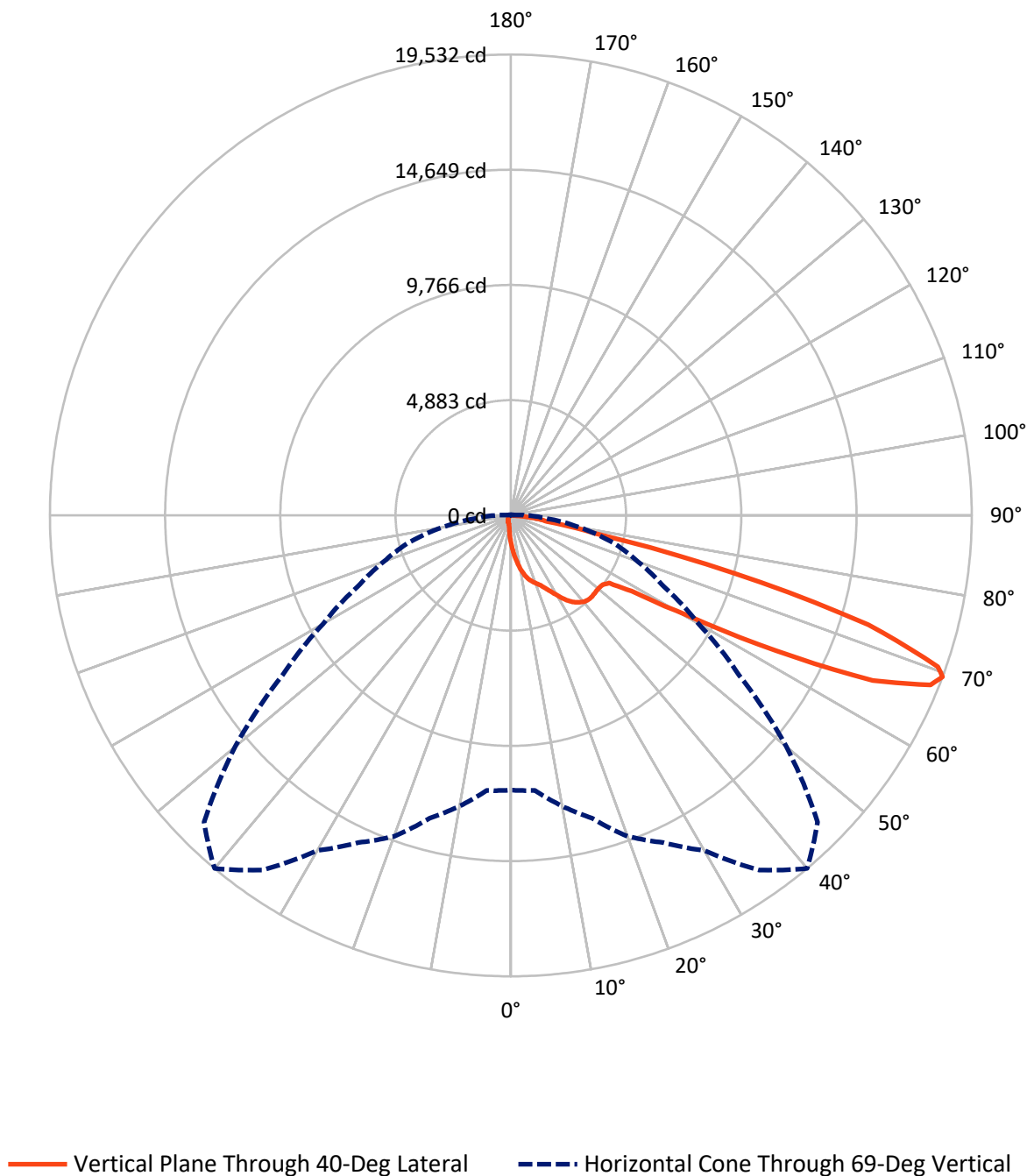


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

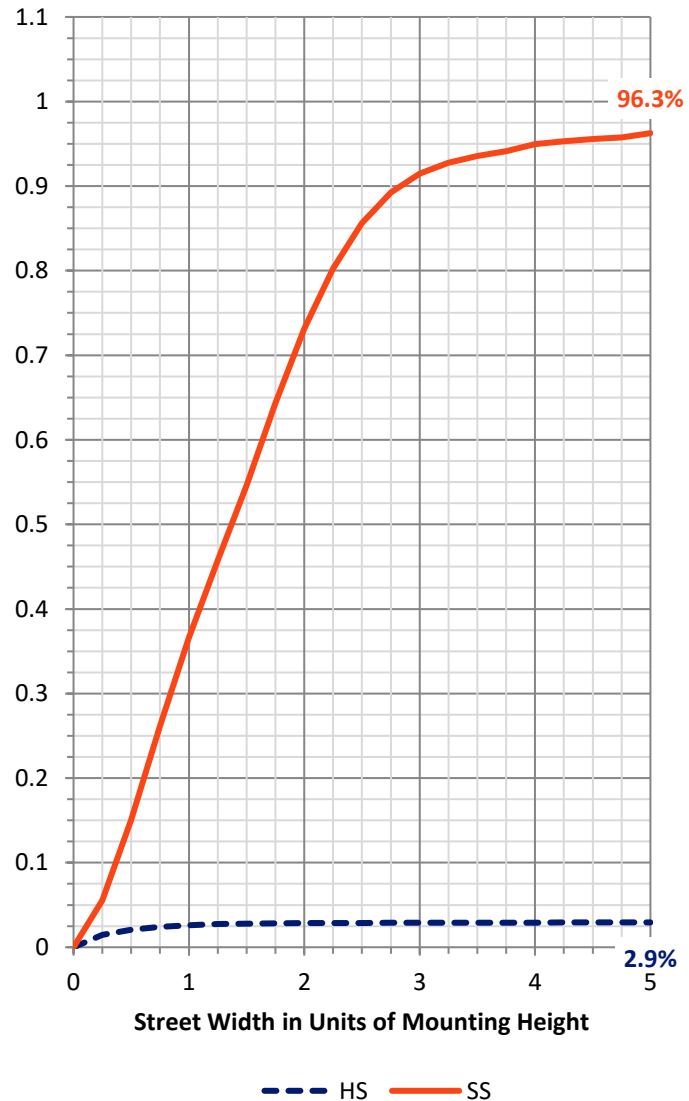
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	458.8	0.0	458.8
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	14949.7	0.0	14949.7
	% Fixture	97.0	0.0	97.0
Total	Lumens	15408.6	0.0	15408.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	0.8
10°-20°	412.4	2.7
20°-30°	789.2	5.1
30°-40°	1312.6	8.5
40°-50°	1776.1	11.5
50°-60°	2777.6	18.0
60°-70°	5710.7	37.1
70°-80°	2297.9	14.9
80°-90°	212.6	1.4
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°	15408.6	100.0
0°-180°	15408.6	100.0

Coefficient of Utilization



REPORT NUMBER: P165550

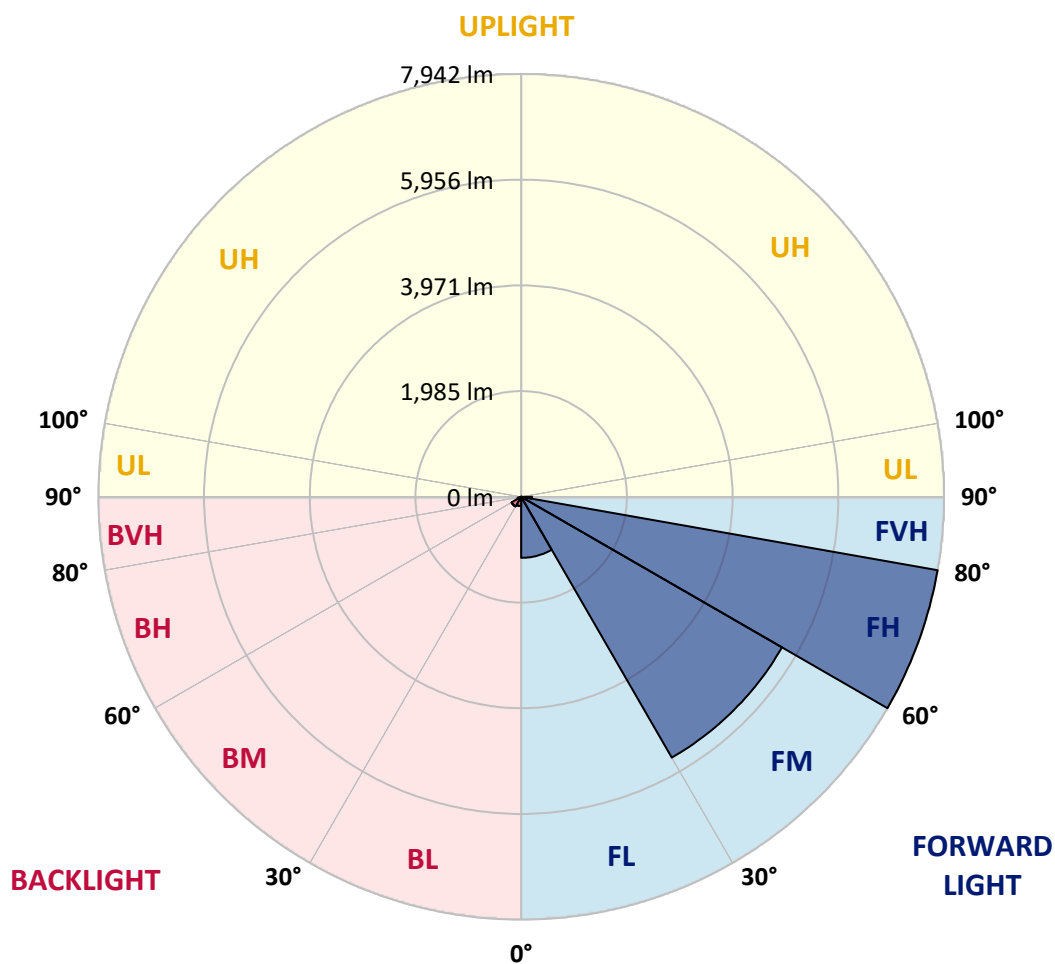
CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1146.7	7.4			
FM	(30°-60°)	5656.7	36.7			
FH	(60°-80°)	7941.6	51.5			G4/12000
FVH	(80°-90°)	204.7	1.3			G2/225
BL	(0°-30°)	174.5	1.1	B1/500		
BM	(30°-60°)	209.5	1.4	B0/220		
BH	(60°-80°)	66.9	0.4	B0/110		G0/110
BVH	(80°-90°)	7.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short



REPORT NUMBER: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7
2.5°	1552.4	1534.7	1514.4	1514.4	1489.3	1489.3	1474.1	1433.8	1428.7	1405.9	1383.2
5°	1981.5	1966.3	1941.2	1918.3	1898.2	1862.8	1837.5	1789.6	1736.7	1686.1	1640.7
7.5°	2400.5	2392.9	2347.5	2339.8	2307.0	2249.1	2198.5	2127.9	2037.0	1966.3	1883.1
10°	2789.3	2771.5	2761.4	2718.5	2670.6	2607.5	2529.2	2443.5	2337.4	2226.3	2107.6
12.5°	3097.2	3087.1	3041.6	3023.9	2973.5	2910.4	2812.0	2700.8	2594.9	2451.0	2312.1
15°	3326.8	3309.2	3278.9	3251.1	3190.6	3135.1	3044.2	2922.9	2794.3	2637.8	2471.2
17.5°	3518.7	3485.9	3478.3	3435.4	3372.4	3306.6	3205.7	3094.6	2943.2	2786.7	2604.9
20°	3776.1	3730.7	3715.6	3652.4	3579.3	3488.4	3372.4	3233.5	3074.4	2902.9	2716.0
22.5°	4079.0	4046.2	4013.4	3957.9	3864.5	3735.8	3566.7	3415.3	3213.2	3023.9	2822.1
25°	4508.2	4480.4	4427.4	4351.7	4235.5	4081.6	3877.1	3655.0	3417.7	3175.4	2938.1
27.5°	4924.6	4899.3	4861.5	4803.5	4672.2	4503.1	4250.7	3968.0	3667.6	3374.8	3112.2
30°	5316.0	5293.1	5255.3	5197.3	5081.1	4914.5	4629.3	4326.4	3952.8	3612.1	3296.6
32.5°	5737.5	5729.8	5686.9	5603.7	5502.7	5278.1	4967.6	4642.0	4263.4	3869.6	3501.0
35°	6214.5	6156.4	6116.1	6032.7	5861.2	5621.3	5257.9	4902.0	4503.1	4099.2	3687.8
37.5°	6618.4	6562.9	6512.3	6406.4	6196.9	5891.4	5480.0	5088.6	4677.2	4265.8	3846.8
40°	6913.6	6885.9	6825.3	6686.5	6451.8	6088.4	5644.0	5217.4	4803.5	4389.5	3975.5
42.5°	7133.3	7090.4	7022.3	6878.4	6600.8	6186.8	5709.6	5270.4	4861.5	4465.3	4058.9
45°	7214.1	7178.8	7115.6	6959.1	6658.7	6214.5	5707.1	5255.3	4864.1	4487.9	4114.4
47.5°	7166.1	7130.8	7075.2	6928.8	6633.6	6181.7	5661.8	5212.3	4838.8	4495.6	4164.8
50°	7007.1	6986.9	6944.0	6820.3	6555.3	6118.6	5621.3	5189.7	4833.7	4533.5	4235.5
52.5°	6992.0	6979.4	6926.3	6802.6	6532.6	6098.3	5616.2	5202.4	4876.7	4581.4	4286.1
55°	8544.2	8365.0	7963.8	7623.0	7062.6	6396.3	5871.2	5406.7	5058.5	4770.7	4563.7
57.5°	12143.8	11876.3	11348.7	10700.0	9412.6	8148.0	7135.9	6403.8	6042.8	5911.6	5989.8
60°	13829.9	13782.0	13698.6	13390.7	12731.9	11644.1	10432.4	9122.4	8597.3	8551.9	8710.9
62.5°	14630.1	14599.8	14625.1	14587.2	14382.7	14064.7	13716.3	13151.0	12630.9	12295.2	11583.4
65°	14998.6	15018.9	15162.6	15276.2	15301.5	15384.7	15639.8	16344.0	16858.9	15993.1	14016.7
67.5°	14062.1	14180.7	14511.5	14925.4	15410.0	15879.5	16636.7	18121.0	19178.6	18161.4	15354.5
69°	11641.4	11699.5	12507.2	13287.2	14471.0	15299.1	16397.0	18343.1	19532.1	18383.5	15248.5
70°	9165.2	9218.2	10084.1	11144.2	13145.9	14211.1	15647.3	17967.1	19201.3	18088.2	14703.3
72.5°	4134.6	4058.9	4364.2	4932.1	7108.0	8799.3	11310.8	14556.9	15841.7	14491.3	11000.3
75°	2887.7	2854.9	2887.7	2890.1	3228.4	4164.8	5255.3	7890.5	9758.4	8420.7	5255.3
77.5°	2236.4	2213.7	2191.0	2165.7	2206.2	2471.2	2577.1	2799.2	3634.8	3438.0	2004.2
80°	1769.5	1749.3	1804.7	1787.1	1787.1	1817.5	1797.2	1713.8	1557.3	1443.8	1292.3
82.5°	822.8	827.9	827.9	898.5	1082.9	1264.6	1322.7	1239.4	1100.6	936.4	754.8
85°	78.2	88.3	149.0	229.8	456.9	514.9	517.5	429.0	429.0	338.3	272.5
87.5°	0.0	2.5	2.5	2.5	22.7	63.2	53.0	15.2	7.5	7.5	12.6
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: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7
2.5°	1342.9	1335.2	1305.0	1274.7	1246.9	1216.6	1188.9	1161.1	1130.8	1108.1	1080.3
5°	1570.1	1514.4	1451.4	1390.9	1330.2	1267.2	1201.6	1143.5	1082.9	1027.3	974.3
7.5°	1799.7	1691.2	1605.3	1496.8	1398.4	1300.0	1209.1	1115.7	1029.9	949.1	873.4
10°	1994.0	1862.8	1729.0	1590.3	1448.8	1317.6	1191.5	1080.3	966.7	868.3	775.0
12.5°	2153.1	1986.5	1822.5	1648.2	1489.3	1322.7	1166.2	1032.4	898.5	787.6	691.6
15°	2296.9	2105.2	1908.2	1706.3	1504.5	1315.2	1140.9	974.3	838.0	711.8	603.3
17.5°	2413.1	2193.5	1971.4	1744.2	1527.1	1305.0	1108.1	933.9	775.0	643.6	537.7
20°	2514.1	2284.4	2044.6	1789.6	1542.3	1302.4	1080.3	883.5	719.4	580.6	477.0
22.5°	2607.5	2377.7	2120.3	1847.7	1565.0	1300.0	1055.0	845.7	671.4	532.7	429.0
25°	2713.5	2471.2	2201.1	1908.2	1605.3	1310.1	1040.0	815.3	628.5	487.1	391.2
27.5°	2832.2	2577.1	2296.9	1983.9	1658.4	1330.2	1035.0	782.5	590.6	444.2	361.0
30°	2998.7	2703.4	2392.9	2059.6	1706.3	1353.0	1029.9	762.3	552.7	411.4	330.6
32.5°	3145.2	2827.1	2499.0	2138.0	1759.4	1375.7	1027.3	734.5	517.5	378.6	307.9
35°	3299.1	2940.7	2589.8	2213.7	1804.7	1400.8	1024.8	714.3	484.7	345.8	285.3
37.5°	3432.9	3036.5	2660.5	2279.3	1855.3	1423.7	1027.3	696.7	454.3	318.1	265.0
40°	3546.5	3135.1	2738.7	2339.8	1908.2	1458.9	1029.9	679.0	424.1	292.8	247.4
42.5°	3647.5	3228.4	2822.1	2408.1	1968.9	1499.4	1045.1	663.9	398.8	270.1	229.8
45°	3725.7	3314.3	2912.8	2504.0	2067.3	1565.0	1072.8	653.7	373.5	249.8	214.6
47.5°	3806.4	3440.4	3066.9	2655.5	2211.2	1668.5	1120.8	651.3	353.3	234.7	201.9
50°	3917.6	3566.7	3203.1	2809.3	2342.5	1774.5	1178.7	653.7	328.2	219.7	189.3
52.5°	3998.4	3695.3	3379.9	3077.0	2655.5	2097.5	1403.4	699.1	315.5	206.9	174.1
55°	4475.4	4422.3	4429.8	4480.4	4154.9	3569.2	2347.5	1009.7	371.1	234.7	171.7
57.5°	6310.5	6497.2	6605.7	6603.2	6065.5	5030.7	3152.7	1297.4	414.0	272.5	204.5
60°	8723.6	8582.2	8382.8	7890.5	7176.2	5742.6	3526.2	1395.9	358.4	217.0	186.9
62.5°	10856.5	10028.5	9293.9	8496.4	7559.9	5989.8	3602.0	1388.3	313.0	164.0	131.2
65°	12186.7	10697.4	9511.1	8511.4	7408.4	5782.9	3407.6	1274.7	265.0	133.8	108.5
67.5°	12504.7	10336.4	8658.0	7383.1	6189.2	4500.7	2501.4	959.2	206.9	111.1	96.0
69°	11810.5	9188.0	7173.7	5727.4	4503.1	2986.1	1547.4	605.8	159.0	101.0	88.3
70°	10864.0	7991.5	5843.4	4596.5	3334.5	2097.5	1082.9	426.6	128.8	93.3	80.8
72.5°	6989.5	4197.6	2872.5	1999.1	1375.7	835.5	424.1	191.9	98.4	78.2	65.6
75°	2710.9	1552.4	1125.9	855.6	668.9	464.4	257.5	123.7	83.2	65.6	50.4
77.5°	1335.2	1022.2	835.5	573.0	333.2	206.9	138.9	96.0	68.2	48.0	32.8
80°	1055.0	701.7	419.1	260.0	196.8	149.0	106.1	78.2	50.4	30.3	22.7
82.5°	540.2	295.4	217.0	176.7	146.4	116.2	85.8	55.5	32.8	20.2	17.6
85°	169.1	123.7	111.1	108.5	101.0	83.2	60.5	35.4	20.2	12.6	12.6
87.5°	12.6	17.6	22.7	17.6	20.2	17.6	22.7	15.2	10.1	10.1	7.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7	1163.7
2.5°	1060.1	1029.9	1002.2	984.4	951.6	939.0	926.4	921.4	898.5	903.6	883.5
5°	926.4	873.4	832.9	792.6	754.8	727.0	704.2	676.4	653.7	643.6	623.4
7.5°	805.2	737.1	684.1	641.2	595.7	560.4	530.0	509.8	489.7	469.5	459.4
10°	699.1	626.0	565.5	522.5	479.6	449.3	426.6	411.4	398.8	391.2	388.7
12.5°	600.7	530.0	474.6	436.7	403.9	388.7	378.6	371.1	368.5	366.0	366.0
15°	525.0	454.3	411.4	383.7	368.5	361.0	358.4	353.3	348.4	345.8	345.8
17.5°	454.3	401.3	371.1	355.9	348.4	343.4	338.3	333.2	328.2	325.6	325.6
20°	406.4	363.4	348.4	338.3	330.6	325.6	318.1	313.0	310.5	307.9	305.5
22.5°	368.5	340.7	330.6	323.1	313.0	305.5	300.4	295.4	290.3	287.7	285.3
25°	340.7	323.1	315.5	305.5	295.4	287.7	280.2	272.5	267.6	265.0	260.0
27.5°	320.5	307.9	297.8	285.3	275.1	267.6	260.0	252.5	247.4	242.3	239.7
30°	302.9	290.3	277.6	267.6	254.9	247.4	237.3	229.8	227.2	222.1	217.0
32.5°	285.3	272.5	260.0	247.4	234.7	224.7	219.7	209.5	204.5	201.9	196.8
35°	265.0	252.5	237.3	227.2	214.6	204.5	196.8	189.3	184.2	179.2	176.7
37.5°	247.4	232.2	217.0	204.5	194.4	184.2	176.7	169.1	164.0	159.0	156.5
40°	227.2	212.0	196.8	184.2	174.1	166.6	159.0	151.4	146.4	143.9	143.9
42.5°	209.5	191.9	176.7	166.6	159.0	149.0	141.3	133.8	131.2	128.8	131.2
45°	191.9	174.1	161.6	151.4	143.9	133.8	126.2	121.1	118.6	121.1	123.7
47.5°	176.7	159.0	146.4	138.9	131.2	123.7	116.2	111.1	111.1	116.2	121.1
50°	161.6	143.9	133.8	128.8	121.1	113.6	103.5	101.0	103.5	108.5	113.6
52.5°	146.4	126.2	118.6	116.2	108.5	101.0	93.3	90.9	93.3	98.4	96.0
55°	131.2	111.1	108.5	106.1	98.4	88.3	80.8	80.8	80.8	78.2	73.3
57.5°	126.2	98.4	96.0	93.3	85.8	75.7	70.7	65.6	63.2	55.5	53.0
60°	131.2	88.3	88.3	83.2	75.7	65.6	58.1	50.4	45.4	40.3	40.3
62.5°	106.1	80.8	78.2	73.3	63.2	53.0	45.4	37.9	35.4	32.8	32.8
65°	85.8	73.3	68.2	60.5	53.0	42.9	35.4	30.3	27.7	27.7	30.3
67.5°	78.2	65.6	58.1	50.4	42.9	32.8	27.7	25.3	25.3	27.7	27.7
69°	73.3	60.5	53.0	45.4	37.9	30.3	25.3	25.3	25.3	25.3	27.7
70°	68.2	58.1	50.4	42.9	32.8	25.3	22.7	22.7	25.3	25.3	27.7
72.5°	53.0	45.4	42.9	35.4	25.3	22.7	20.2	22.7	22.7	25.3	25.3
75°	40.3	32.8	32.8	27.7	20.2	17.6	17.6	20.2	20.2	22.7	22.7
77.5°	27.7	22.7	22.7	20.2	17.6	15.2	15.2	17.6	20.2	20.2	22.7
80°	20.2	17.6	15.2	17.6	15.2	12.6	15.2	17.6	17.6	20.2	20.2
82.5°	15.2	15.2	15.2	15.2	12.6	12.6	15.2	15.2	17.6	20.2	20.2
85°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	15.2	15.2	17.6	17.6
87.5°	7.5	7.5	7.5	10.1	10.1	12.6	12.6	12.6	12.6	15.2	15.2
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: P165550

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1163.7	1163.7	1163.7	1163.7
2.5°	878.5	875.9	865.7	868.3
5°	615.9	600.7	610.8	608.4
7.5°	451.9	449.3	446.8	451.9
10°	386.3	386.3	383.7	386.3
12.5°	363.4	363.4	363.4	363.4
15°	345.8	345.8	343.4	343.4
17.5°	325.6	325.6	325.6	323.1
20°	305.5	302.9	302.9	302.9
22.5°	282.7	280.2	280.2	280.2
25°	260.0	257.5	257.5	257.5
27.5°	237.3	234.7	232.2	232.2
30°	214.6	212.0	209.5	209.5
32.5°	191.9	189.3	186.9	186.9
35°	171.7	171.7	169.1	166.6
37.5°	154.0	154.0	154.0	154.0
40°	141.3	143.9	143.9	143.9
42.5°	133.8	136.3	138.9	141.3
45°	128.8	133.8	136.3	136.3
47.5°	126.2	128.8	131.2	131.2
50°	116.2	113.6	113.6	113.6
52.5°	93.3	88.3	85.8	83.2
55°	68.2	65.6	60.5	60.5
57.5°	48.0	48.0	45.4	45.4
60°	37.9	37.9	35.4	37.9
62.5°	32.8	32.8	32.8	32.8
65°	30.3	30.3	30.3	30.3
67.5°	30.3	30.3	30.3	30.3
69°	27.7	27.7	27.7	27.7
70°	27.7	27.7	27.7	27.7
72.5°	25.3	25.3	25.3	25.3
75°	22.7	25.3	25.3	25.3
77.5°	22.7	22.7	22.7	22.7
80°	20.2	20.2	22.7	22.7
82.5°	20.2	20.2	20.2	20.2
85°	17.6	17.6	20.2	20.2
87.5°	15.2	15.2	17.6	17.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)