

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: P165554

Luminaire Tested: **VST-F11-LED-E-U-SL4-HSS-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165554
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-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (77) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18733.4 lumens
Efficiency: N/A
Efficacy: 66.3 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

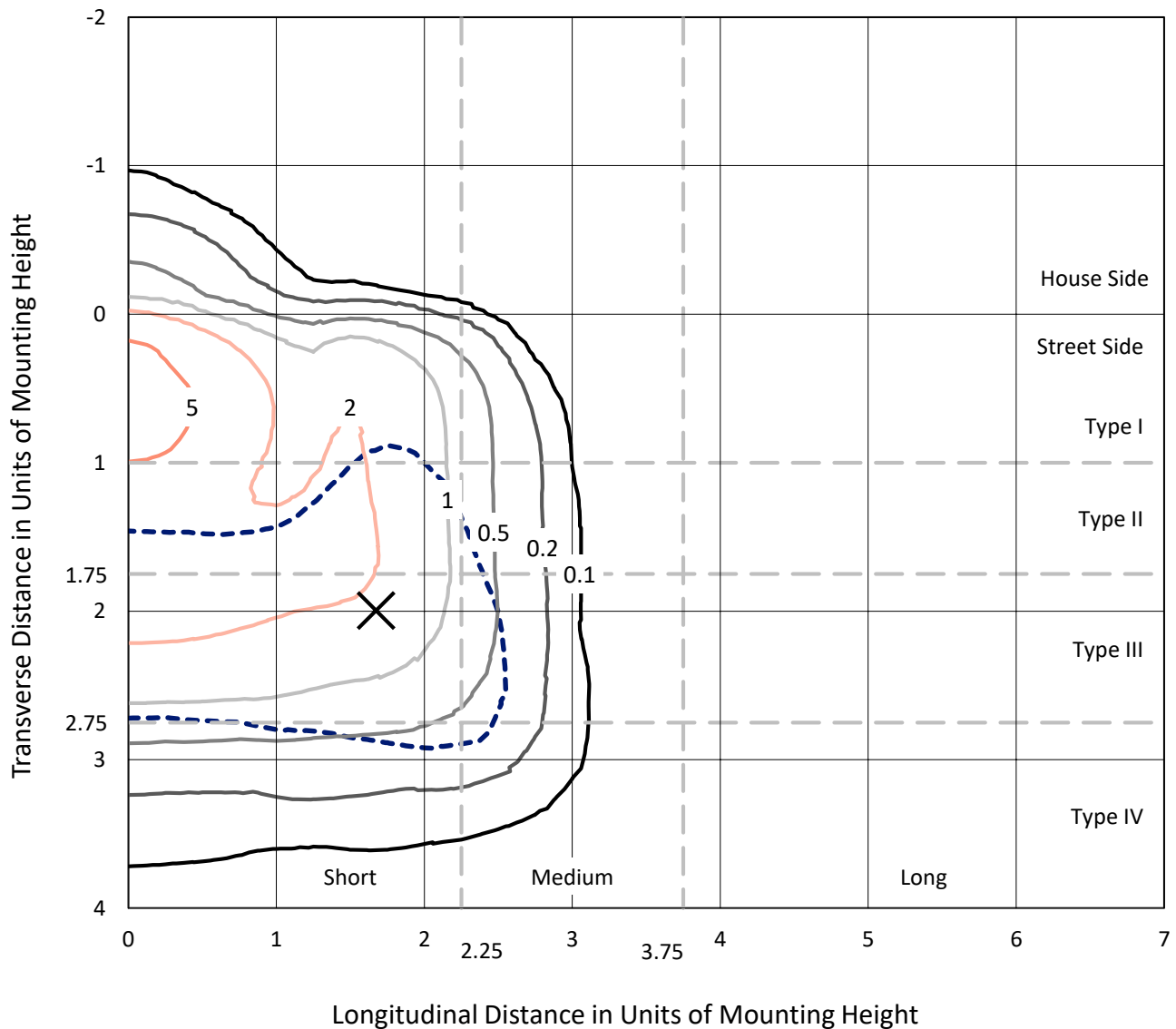


REPORT NUMBER: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

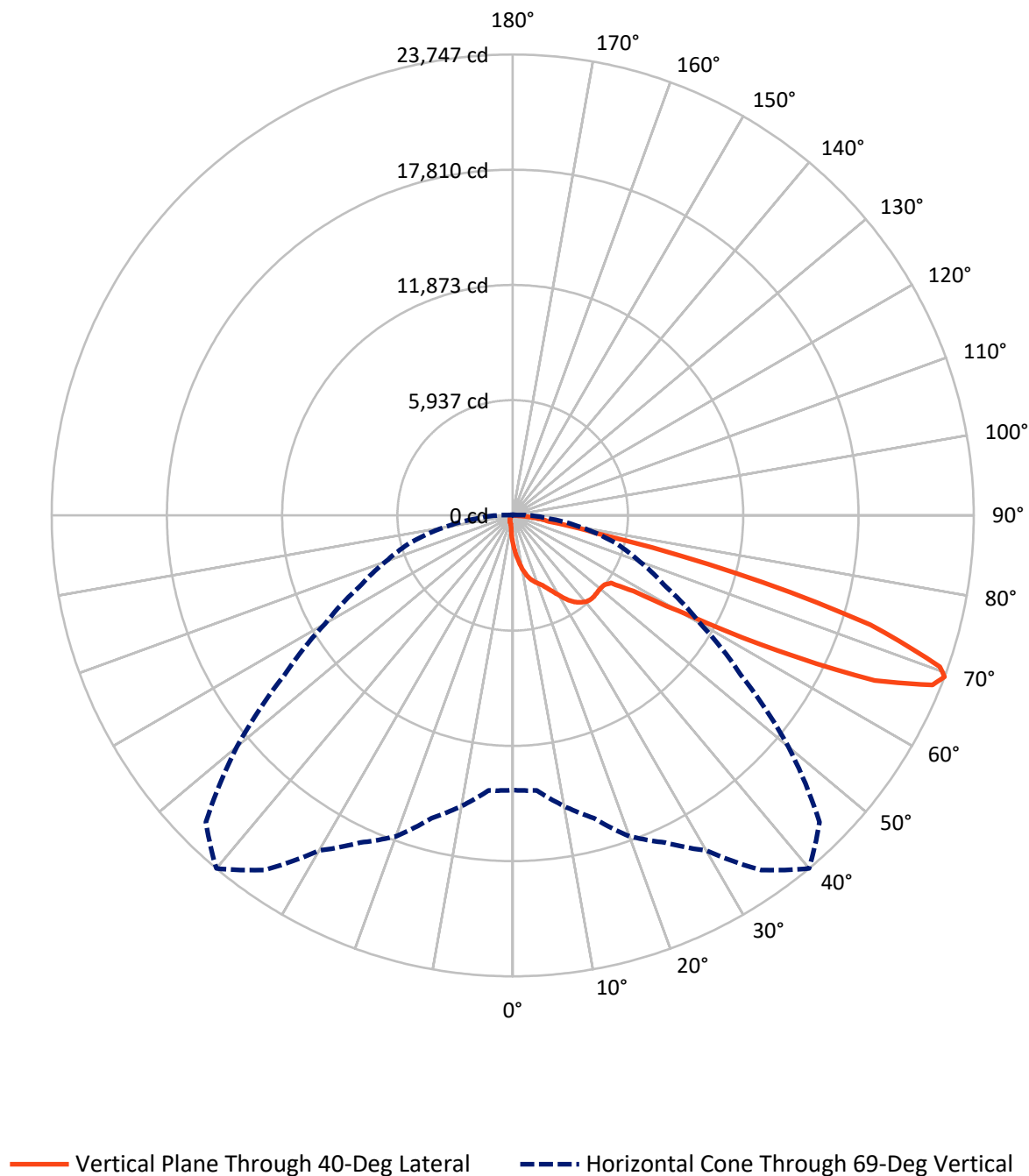


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type IV - Short - Semi-Cutoff

REPORT NUMBER: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

Luminous Intensity Polar Plot



REPORT NUMBER: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	557.9	0.0	557.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	18175.5	0.0	18175.5
	% Fixture	97.0	0.0	97.0
Total	Lumens	18733.4	0.0	18733.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.4	0.8
10°-20°	501.3	2.7
20°-30°	959.5	5.1
30°-40°	1595.8	8.5
40°-50°	2159.3	11.5
50°-60°	3376.9	18.0
60°-70°	6942.9	37.1
70°-80°	2793.7	14.9
80°-90°	258.4	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°	18733.4	100.0
0°-180°	18733.4	100.0

Coefficient of Utilization



REPORT NUMBER: P165554

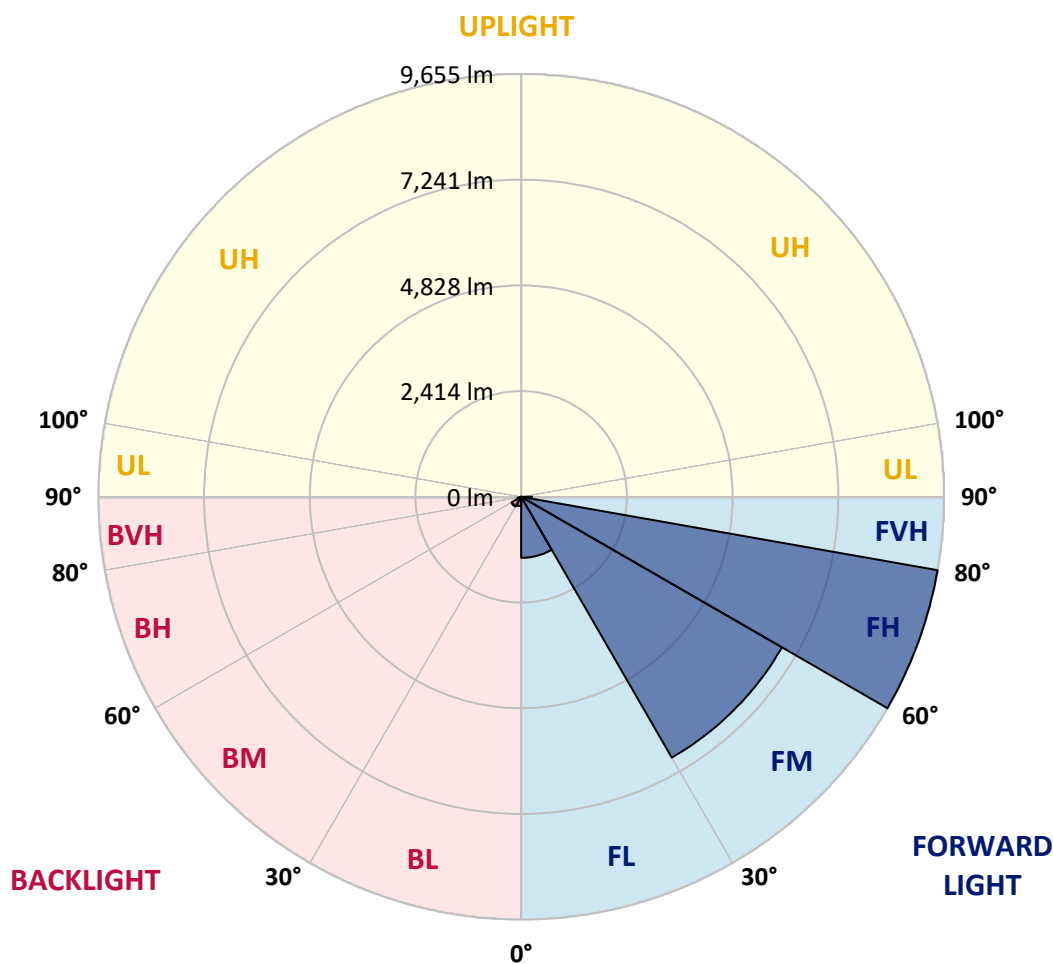
CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1394.1	7.4			
FM	(30°-60°)	6877.3	36.7			
FH	(60°-80°)	9655.3	51.5			G4/12000
FVH	(80°-90°)	248.8	1.3			G3/500
BL	(0°-30°)	212.2	1.1	B1/500		
BM	(30°-60°)	254.7	1.4	B1/1000		
BH	(60°-80°)	81.4	0.4	B0/110		G0/110
BVH	(80°-90°)	9.6	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: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8
2.5°	1887.4	1865.8	1841.2	1841.2	1810.6	1810.6	1792.2	1743.2	1737.0	1709.3	1681.7
5°	2409.0	2390.6	2360.0	2332.3	2307.8	2264.8	2234.0	2175.7	2111.4	2049.9	1994.8
7.5°	2918.5	2909.2	2854.1	2844.7	2804.9	2734.4	2672.9	2587.0	2476.5	2390.6	2289.4
10°	3391.1	3369.5	3357.2	3305.0	3246.9	3170.1	3074.9	2970.7	2841.8	2706.6	2562.4
12.5°	3765.5	3753.2	3697.9	3676.4	3615.1	3538.4	3418.7	3283.6	3154.8	2979.8	2811.0
15°	4044.7	4023.3	3986.4	3952.6	3879.0	3811.6	3701.0	3553.6	3397.3	3207.0	3004.4
17.5°	4278.0	4238.1	4228.8	4176.6	4100.0	4020.1	3897.5	3762.4	3578.2	3388.0	3166.9
20°	4590.9	4535.7	4517.3	4440.5	4351.6	4241.1	4100.0	3931.2	3737.8	3529.2	3302.1
22.5°	4959.1	4919.3	4879.4	4811.9	4698.4	4541.9	4336.3	4152.2	3906.6	3676.4	3431.0
25°	5480.9	5447.2	5382.7	5290.7	5149.4	4962.3	4713.7	4443.7	4155.2	3860.6	3572.1
27.5°	5987.3	5956.5	5910.5	5840.0	5680.3	5474.8	5167.9	4824.2	4459.0	4103.0	3783.8
30°	6463.0	6435.3	6389.2	6318.8	6177.5	5975.0	5628.2	5259.9	4805.8	4391.5	4008.0
32.5°	6975.5	6966.2	6914.0	6812.8	6690.0	6417.0	6039.4	5643.6	5183.3	4704.6	4256.4
35°	7555.5	7484.8	7435.8	7334.4	7125.9	6834.3	6392.4	5959.7	5474.8	4983.7	4483.6
37.5°	8046.5	7979.0	7917.5	7788.8	7534.0	7162.6	6662.4	6186.7	5686.5	5186.3	4676.8
40°	8405.4	8371.7	8298.1	8129.2	7843.9	7402.1	6861.8	6343.2	5840.0	5336.7	4833.3
42.5°	8672.5	8620.3	8537.6	8362.6	8025.1	7521.7	6941.6	6407.7	5910.5	5428.8	4934.7
45°	8770.7	8727.8	8651.0	8460.8	8095.5	7555.5	6938.6	6389.2	5913.7	5456.3	5002.2
47.5°	8712.4	8669.5	8601.8	8423.9	8065.0	7515.6	6883.5	6337.1	5882.9	5465.7	5063.5
50°	8519.1	8494.5	8442.3	8291.9	7969.7	7438.8	6834.3	6309.5	5876.8	5511.7	5149.4
52.5°	8500.7	8485.4	8420.9	8270.5	7942.1	7414.2	6828.1	6324.9	5928.9	5570.0	5210.9
55°	10387.9	10170.0	9682.2	9267.9	8586.6	7776.5	7138.0	6573.4	6150.0	5800.2	5548.4
57.5°	14764.1	14438.9	13797.5	13008.8	11443.6	9906.2	8675.6	7785.6	7346.7	7187.2	7282.3
60°	16814.0	16755.9	16654.5	16280.1	15479.2	14156.6	12683.4	11090.8	10452.4	10397.2	10590.5
62.5°	17787.0	17750.1	17780.8	17734.8	17486.2	17099.5	16675.9	15988.7	15356.3	14948.2	14082.8
65°	18235.0	18259.6	18434.4	18572.5	18603.2	18704.4	19014.5	19870.6	20496.6	19444.1	17041.2
67.5°	17096.4	17240.6	17642.8	18145.9	18735.2	19306.0	20226.6	22031.1	23316.9	22080.3	18667.7
69°	14153.4	14224.0	15206.0	16154.3	17593.6	18600.3	19935.1	22301.1	23746.7	22350.3	18538.8
70°	11142.8	11207.3	12260.0	13548.9	15982.5	17277.5	19023.7	21844.0	23344.5	21991.2	17875.9
72.5°	5026.8	4934.7	5305.9	5996.4	8641.7	10698.0	13751.4	17697.9	19260.0	17618.2	13373.9
75°	3510.8	3470.9	3510.8	3513.8	3925.0	5063.5	6389.2	9593.1	11864.0	10237.7	6389.2
77.5°	2718.9	2691.4	2663.8	2633.0	2682.2	3004.4	3133.2	3403.2	4419.1	4179.8	2436.6
80°	2151.3	2126.7	2194.2	2172.7	2172.7	2209.6	2185.0	2083.7	1893.4	1755.3	1571.2
82.5°	1000.4	1006.5	1006.5	1092.4	1316.6	1537.4	1608.1	1506.9	1338.0	1138.5	917.6
85°	95.0	107.3	181.1	279.3	555.5	626.0	629.1	521.6	521.6	411.3	331.3
87.5°	0.0	3.0	3.0	3.0	27.6	76.8	64.5	18.4	9.1	9.1	15.3
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: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8
2.5°	1632.7	1623.4	1586.6	1549.7	1516.0	1479.1	1445.4	1411.7	1374.8	1347.2	1313.4
5°	1908.9	1841.2	1764.6	1691.0	1617.2	1540.6	1460.8	1390.2	1316.6	1249.0	1184.5
7.5°	2188.0	2056.1	1951.7	1819.8	1700.1	1580.5	1470.0	1356.5	1252.1	1153.9	1061.9
10°	2424.3	2264.8	2102.1	1933.5	1761.4	1601.9	1448.6	1313.4	1175.4	1055.7	942.2
12.5°	2617.8	2415.2	2215.8	2003.9	1810.6	1608.1	1417.8	1255.1	1092.4	957.5	840.8
15°	2792.6	2559.4	2320.0	2074.5	1829.1	1598.9	1387.1	1184.5	1018.8	865.4	733.5
17.5°	2933.8	2666.8	2396.7	2120.6	1856.7	1586.6	1347.2	1135.5	942.2	782.5	653.7
20°	3056.6	2777.3	2485.8	2175.7	1875.1	1583.5	1313.4	1074.2	874.6	705.9	579.9
22.5°	3170.1	2890.8	2577.9	2246.3	1902.7	1580.5	1282.7	1028.1	816.2	647.6	521.6
25°	3299.1	3004.4	2676.1	2320.0	1951.7	1592.8	1264.4	991.2	764.1	592.2	475.6
27.5°	3443.3	3133.2	2792.6	2412.0	2016.2	1617.2	1258.3	951.4	718.0	540.1	438.9
30°	3645.7	3286.8	2909.2	2504.1	2074.5	1645.0	1252.1	926.8	672.0	500.2	402.0
32.5°	3823.9	3437.2	3038.2	2599.3	2139.0	1672.6	1249.0	893.0	629.1	460.3	374.4
35°	4011.0	3575.3	3148.7	2691.4	2194.2	1703.1	1246.0	868.4	589.3	420.4	346.8
37.5°	4173.6	3691.7	3234.6	2771.1	2255.7	1730.9	1249.0	847.0	552.4	386.7	322.2
40°	4311.7	3811.6	3329.6	2844.7	2320.0	1773.7	1252.1	825.6	515.6	355.9	300.8
42.5°	4434.5	3925.0	3431.0	2927.7	2393.8	1822.9	1270.6	807.1	484.9	328.4	279.3
45°	4529.6	4029.4	3541.3	3044.3	2513.4	1902.7	1304.3	794.8	454.2	303.8	260.9
47.5°	4627.8	4182.8	3728.6	3228.4	2688.4	2028.5	1362.6	791.8	429.6	285.3	245.4
50°	4762.9	4336.3	3894.3	3415.5	2847.9	2157.5	1433.1	794.8	399.0	267.0	230.2
52.5°	4861.1	4492.7	4109.2	3740.9	3228.4	2550.1	1706.3	850.0	383.5	251.6	211.7
55°	5441.1	5376.6	5385.7	5447.2	5051.4	4339.3	2854.1	1227.5	451.2	285.3	208.7
57.5°	7672.1	7899.1	8031.0	8028.1	7374.3	6116.2	3833.0	1577.3	503.3	331.3	248.6
60°	10605.9	10434.1	10191.7	9593.1	8724.7	6981.7	4287.1	1697.1	435.7	263.9	227.2
62.5°	13199.1	12192.4	11299.4	10329.7	9191.1	7282.3	4379.2	1687.8	380.5	199.4	159.5
65°	14816.3	13005.6	11563.4	10348.0	9007.0	7030.7	4142.9	1549.7	322.2	162.7	131.9
67.5°	15203.0	12566.8	10526.2	8976.2	7524.7	5471.8	3041.2	1166.2	251.6	135.1	116.7
69°	14359.0	11170.6	8721.7	6963.2	5474.8	3630.4	1881.3	736.5	193.3	122.8	107.3
70°	13208.2	9715.9	7104.3	5588.3	4054.0	2550.1	1316.6	518.6	156.5	113.5	98.2
72.5°	8497.7	5103.4	3492.3	2430.5	1672.6	1015.8	515.6	233.3	119.6	95.0	79.8
75°	3295.9	1887.4	1368.8	1040.2	813.3	564.7	313.1	150.4	101.2	79.8	61.3
77.5°	1623.4	1242.8	1015.8	696.6	405.1	251.6	168.8	116.7	82.9	58.3	39.9
80°	1282.7	853.1	509.5	316.1	239.3	181.1	129.0	95.0	61.3	36.9	27.6
82.5°	656.7	359.1	263.9	214.9	178.0	141.3	104.4	67.5	39.9	24.6	21.4
85°	205.6	150.4	135.1	131.9	122.8	101.2	73.6	43.0	24.6	15.3	15.3
87.5°	15.3	21.4	27.6	21.4	24.6	21.4	27.6	18.4	12.3	12.3	9.1
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: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8	1414.8
2.5°	1288.8	1252.1	1218.4	1196.8	1156.9	1141.6	1126.3	1120.2	1092.4	1098.6	1074.2
5°	1126.3	1061.9	1012.7	963.7	917.6	883.9	856.1	822.4	794.8	782.5	757.9
7.5°	978.9	896.2	831.7	779.5	724.2	681.3	644.4	619.8	595.4	570.8	558.5
10°	850.0	761.1	687.5	635.3	583.1	546.2	518.6	500.2	484.9	475.6	472.6
12.5°	730.3	644.4	577.0	530.9	491.0	472.6	460.3	451.2	448.0	445.0	445.0
15°	638.3	552.4	500.2	466.5	448.0	438.9	435.7	429.6	423.6	420.4	420.4
17.5°	552.4	487.9	451.2	432.7	423.6	417.4	411.3	405.1	399.0	395.8	395.8
20°	494.0	441.9	423.6	411.3	402.0	395.8	386.7	380.5	377.6	374.4	371.4
22.5°	448.0	414.3	402.0	392.8	380.5	371.4	365.3	359.1	353.0	349.8	346.8
25°	414.3	392.8	383.5	371.4	359.1	349.8	340.7	331.3	325.4	322.2	316.1
27.5°	389.7	374.4	362.1	346.8	334.5	325.4	316.1	306.9	300.8	294.6	291.5
30°	368.2	353.0	337.5	325.4	309.9	300.8	288.5	279.3	276.2	270.0	263.9
32.5°	346.8	331.3	316.1	300.8	285.3	273.2	267.0	254.7	248.6	245.4	239.3
35°	322.2	306.9	288.5	276.2	260.9	248.6	239.3	230.2	224.0	217.9	214.9
37.5°	300.8	282.3	263.9	248.6	236.3	224.0	214.9	205.6	199.4	193.3	190.3
40°	276.2	257.7	239.3	224.0	211.7	202.6	193.3	184.1	178.0	175.0	175.0
42.5°	254.7	233.3	214.9	202.6	193.3	181.1	171.8	162.7	159.5	156.5	159.5
45°	233.3	211.7	196.4	184.1	175.0	162.7	153.4	147.2	144.2	147.2	150.4
47.5°	214.9	193.3	178.0	168.8	159.5	150.4	141.3	135.1	135.1	141.3	147.2
50°	196.4	175.0	162.7	156.5	147.2	138.1	125.8	122.8	125.8	131.9	138.1
52.5°	178.0	153.4	144.2	141.3	131.9	122.8	113.5	110.5	113.5	119.6	116.7
55°	159.5	135.1	131.9	129.0	119.6	107.3	98.2	98.2	98.2	95.0	89.1
57.5°	153.4	119.6	116.7	113.5	104.4	92.1	85.9	79.8	76.8	67.5	64.5
60°	159.5	107.3	107.3	101.2	92.1	79.8	70.6	61.3	55.2	49.0	49.0
62.5°	129.0	98.2	95.0	89.1	76.8	64.5	55.2	46.0	43.0	39.9	39.9
65°	104.4	89.1	82.9	73.6	64.5	52.2	43.0	36.9	33.7	33.7	36.9
67.5°	95.0	79.8	70.6	61.3	52.2	39.9	33.7	30.7	30.7	33.7	33.7
69°	89.1	73.6	64.5	55.2	46.0	36.9	30.7	30.7	30.7	30.7	33.7
70°	82.9	70.6	61.3	52.2	39.9	30.7	27.6	27.6	30.7	30.7	33.7
72.5°	64.5	55.2	52.2	43.0	30.7	27.6	24.6	27.6	27.6	30.7	30.7
75°	49.0	39.9	39.9	33.7	24.6	21.4	21.4	24.6	24.6	27.6	27.6
77.5°	33.7	27.6	27.6	24.6	21.4	18.4	18.4	21.4	24.6	24.6	27.6
80°	24.6	21.4	18.4	21.4	18.4	15.3	18.4	21.4	21.4	24.6	24.6
82.5°	18.4	18.4	18.4	18.4	15.3	15.3	18.4	18.4	21.4	24.6	24.6
85°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	18.4	18.4	21.4	21.4
87.5°	9.1	9.1	9.1	12.3	12.3	15.3	15.3	15.3	15.3	18.4	18.4
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: P165554

CATALOG NUMBER: VST-F11-LED-E-U-SL4-HSS-7060

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1414.8	1414.8	1414.8	1414.8
2.5°	1068.0	1064.8	1052.5	1055.7
5°	748.8	730.3	742.6	739.6
7.5°	549.4	546.2	543.2	549.4
10°	469.6	469.6	466.5	469.6
12.5°	441.9	441.9	441.9	441.9
15°	420.4	420.4	417.4	417.4
17.5°	395.8	395.8	395.8	392.8
20°	371.4	368.2	368.2	368.2
22.5°	343.6	340.7	340.7	340.7
25°	316.1	313.1	313.1	313.1
27.5°	288.5	285.3	282.3	282.3
30°	260.9	257.7	254.7	254.7
32.5°	233.3	230.2	227.2	227.2
35°	208.7	208.7	205.6	202.6
37.5°	187.3	187.3	187.3	187.3
40°	171.8	175.0	175.0	175.0
42.5°	162.7	165.7	168.8	171.8
45°	156.5	162.7	165.7	165.7
47.5°	153.4	156.5	159.5	159.5
50°	141.3	138.1	138.1	138.1
52.5°	113.5	107.3	104.4	101.2
55°	82.9	79.8	73.6	73.6
57.5°	58.3	58.3	55.2	55.2
60°	46.0	46.0	43.0	46.0
62.5°	39.9	39.9	39.9	39.9
65°	36.9	36.9	36.9	36.9
67.5°	36.9	36.9	36.9	36.9
69°	33.7	33.7	33.7	33.7
70°	33.7	33.7	33.7	33.7
72.5°	30.7	30.7	30.7	30.7
75°	27.6	30.7	30.7	30.7
77.5°	27.6	27.6	27.6	27.6
80°	24.6	24.6	27.6	27.6
82.5°	24.6	24.6	24.6	24.6
85°	21.4	21.4	24.6	24.6
87.5°	18.4	18.4	21.4	21.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)