

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: P165333

Luminaire Tested: **VST-F11-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165333
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-F11-LED-E-U-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (77) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15962.4 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.83' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - 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

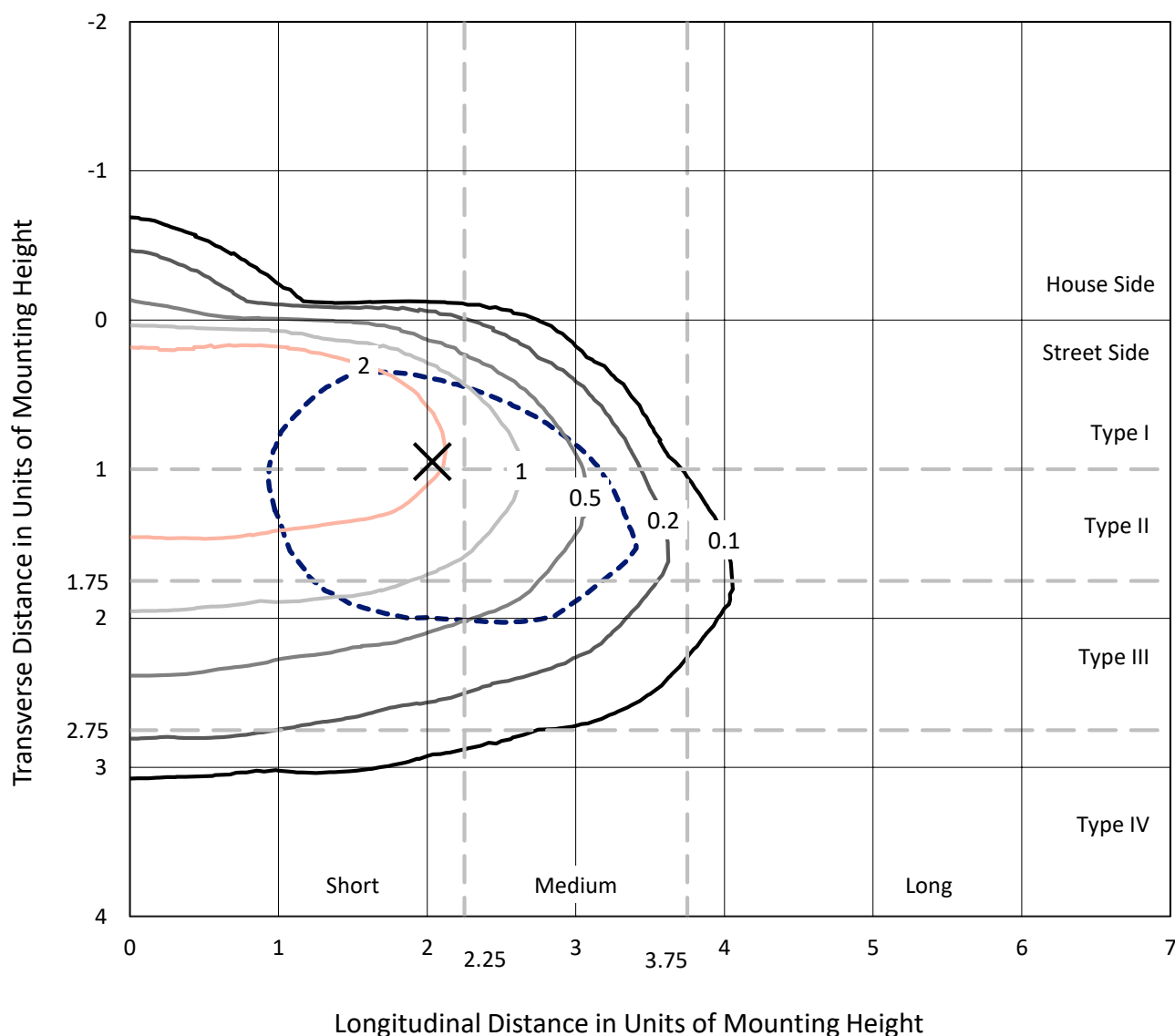


REPORT NUMBER: P165333

CATALOG NUMBER: VST-F11-LED-E-U-SL3-HSS-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

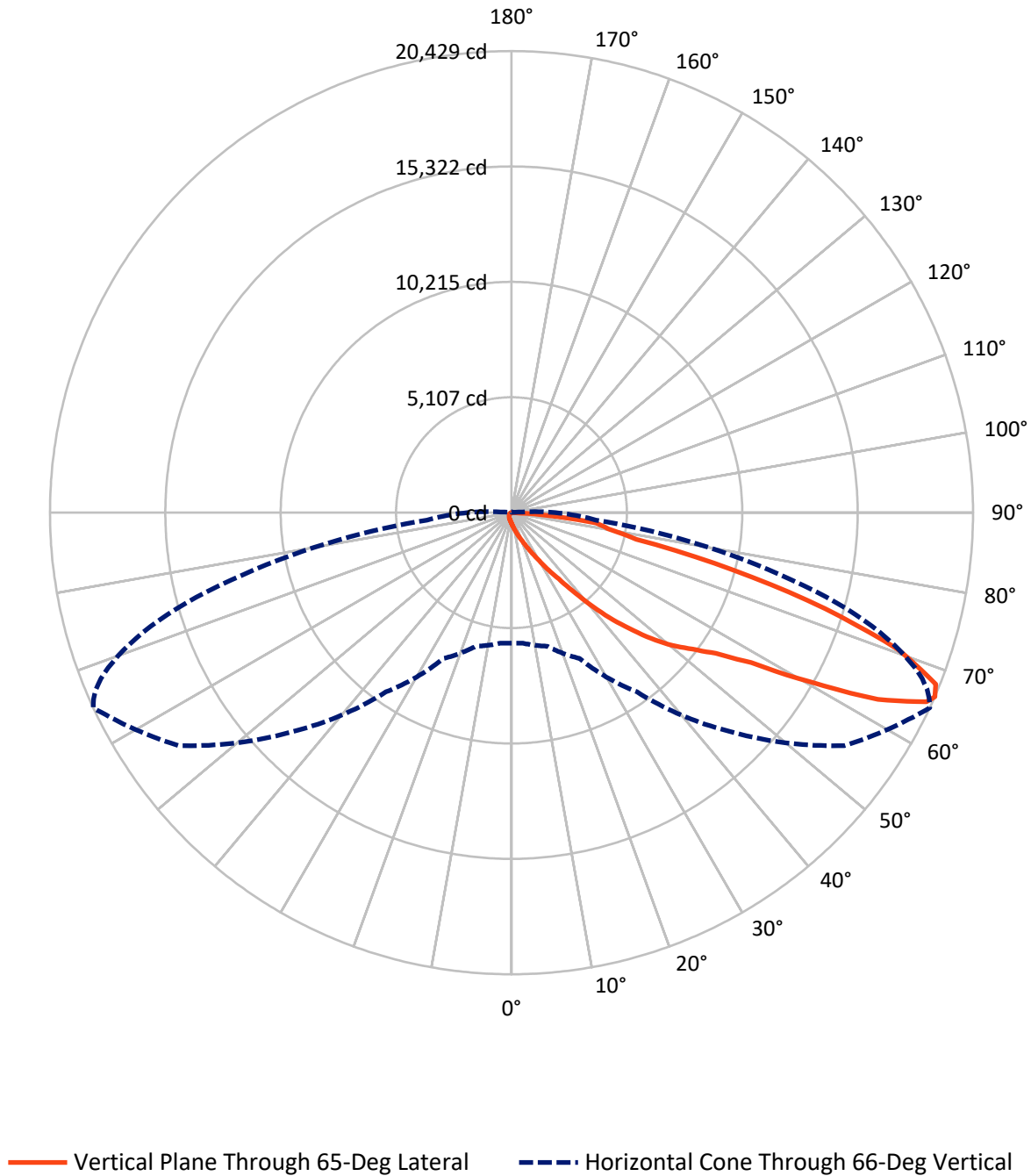


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P165333

CATALOG NUMBER: VST-F11-LED-E-U-SL3-HSS-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P165333

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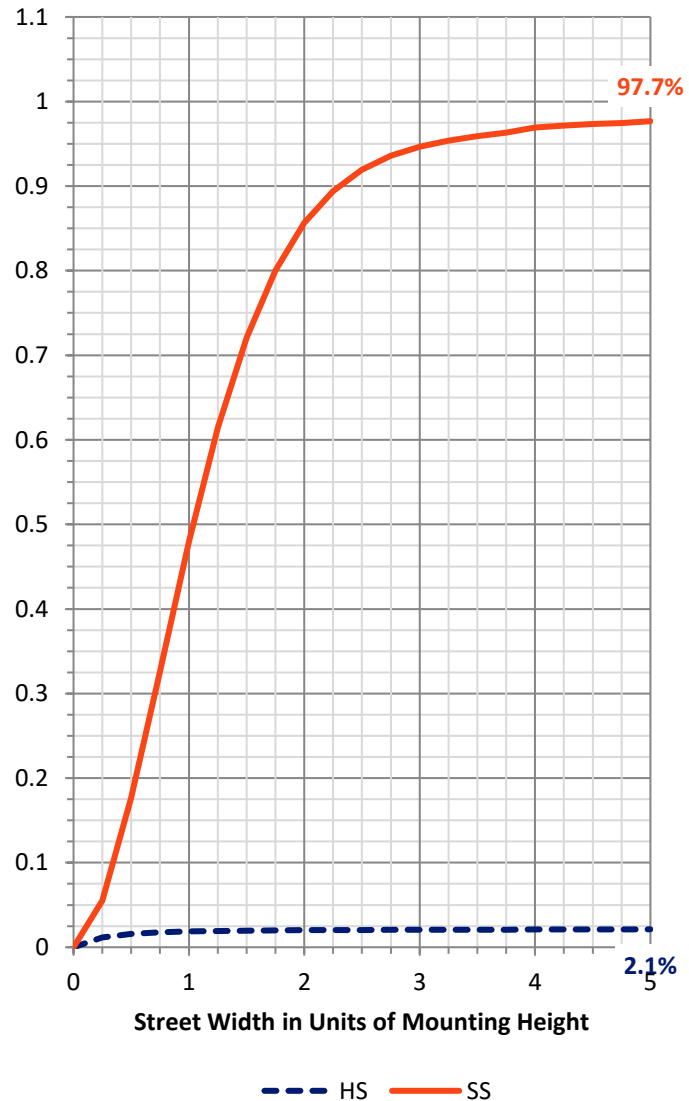
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	345.9	0.0	345.9
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	15616.5	0.0	15616.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	15962.4	0.0	15962.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	0.3
10°-20°	228.7	1.4
20°-30°	493.3	3.1
30°-40°	1053.4	6.6
40°-50°	2329.5	14.6
50°-60°	3947.8	24.7
60°-70°	5268.0	33.0
70°-80°	2320.5	14.5
80°-90°	267.3	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°	15962.4	100.0
0°-180°	15962.4	100.0

Coefficient of Utilization



REPORT NUMBER: P165333

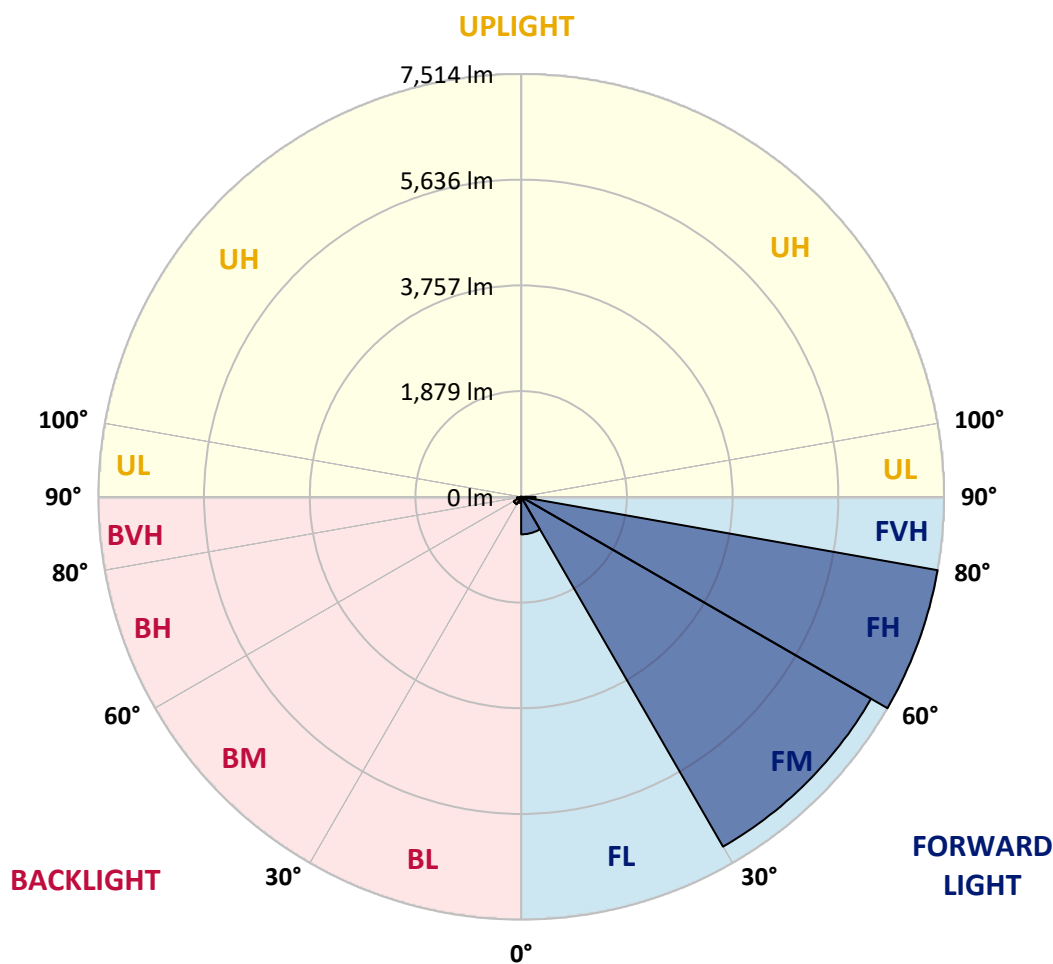
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	666.7	4.2			
FM	(30°-60°)	7178.8	45.0			
FH	(60°-80°)	7514.3	47.1			G4/12000
FVH	(80°-90°)	256.6	1.6			G3/500
BL	(0°-30°)	109.1	0.7	B0/110		
BM	(30°-60°)	151.9	1.0	B0/220		
BH	(60°-80°)	74.2	0.5	B0/110		G0/110
BVH	(80°-90°)	10.7	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-G4

Type III Short





REPORT NUMBER: P165333

CATALOG NUMBER: VST-F11-LED-E-U-SL3-HSS-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7
2.5°	607.7	604.5	592.2	592.2	573.8	561.7	546.2	530.9	530.9	527.8	524.8
5°	803.9	785.7	782.5	748.8	721.2	681.3	644.4	595.4	589.3	583.1	579.9
7.5°	1022.0	1018.8	991.2	951.4	896.2	822.4	748.8	669.0	656.7	650.6	638.3
10°	1304.3	1288.8	1252.1	1184.5	1101.7	1003.5	883.9	757.9	742.6	730.3	724.2
12.5°	1574.3	1546.8	1525.1	1439.2	1334.9	1190.6	1046.4	865.4	853.1	837.9	813.3
15°	1825.9	1801.3	1764.6	1691.0	1574.3	1393.2	1224.5	1003.5	972.8	951.4	932.9
17.5°	2022.3	2007.1	1964.0	1881.3	1755.3	1595.8	1393.2	1144.6	1120.2	1092.4	1058.7
20°	2209.6	2188.0	2120.6	2007.1	1872.0	1749.1	1592.8	1328.7	1295.0	1261.3	1224.5
22.5°	2387.6	2366.0	2255.7	2068.4	1924.1	1872.0	1816.8	1537.4	1485.3	1457.7	1420.8
25°	2636.2	2590.2	2418.2	2120.6	1927.3	1967.2	2062.2	1807.5	1758.5	1718.6	1660.3
27.5°	2970.7	2909.2	2639.2	2197.3	1939.4	2071.5	2344.6	2135.8	2083.7	2037.6	1973.3
30°	3348.1	3308.2	2986.0	2381.5	2028.5	2224.9	2660.6	2553.3	2492.0	2436.6	2360.0
32.5°	3728.6	3673.5	3354.2	2731.2	2267.8	2522.5	3056.6	3038.2	2958.4	2906.2	2823.3
35°	4063.1	4035.6	3799.3	3305.0	2814.2	3044.3	3584.4	3605.8	3535.4	3480.0	3388.0
37.5°	4290.3	4290.3	4244.3	3921.9	3682.6	3854.4	4360.7	4363.9	4293.3	4167.5	4121.5
40°	4406.8	4440.5	4606.4	4667.7	4655.4	4876.4	5379.7	5324.4	5266.1	5201.6	5048.2
42.5°	4646.2	4676.8	5029.8	5453.4	5729.5	6021.0	6367.8	6349.4	6278.9	6162.3	6021.0
45°	5051.4	5091.3	5511.7	6183.7	6751.3	7165.8	7386.6	7300.7	7230.1	7119.8	7046.0
47.5°	5566.8	5643.6	6119.2	6950.9	7635.2	8319.5	8549.7	8322.7	8261.4	8175.3	8055.6
50°	6116.2	6189.8	6696.2	7647.5	8420.9	9237.1	9620.8	9237.1	9148.2	9120.5	8985.6
52.5°	6591.8	6653.3	7141.2	8184.6	9022.3	9979.8	10538.3	10032.0	9967.5	9875.4	9777.2
55°	6874.1	6923.3	7380.5	8442.3	9430.6	10648.8	11425.3	10980.3	10885.1	10848.4	10707.1
57.5°	6969.4	7018.4	7429.7	8476.1	9651.4	11259.5	12502.5	12517.8	12404.3	12272.3	12229.3
60°	6969.4	7024.5	7371.3	8393.3	9866.3	11910.1	13938.5	15218.3	14972.8	14948.2	14791.7
62.5°	6680.9	6733.1	7082.9	8138.6	10154.8	12787.8	15939.5	18198.1	18127.7	17967.9	17710.2
65°	6054.7	6085.5	6429.1	7488.0	10044.2	13594.9	17673.3	20180.6	20067.1	19754.0	19422.6
66°	5772.4	5797.0	6119.2	7116.6	9682.2	13705.4	17980.2	20429.2	20242.1	19978.0	19603.6
67.5°	5364.3	5407.3	5634.3	6426.1	8813.7	13321.7	17787.0	20254.4	20091.7	19772.4	19398.0
70°	3581.4	3550.7	4351.6	4931.6	6714.6	10854.5	15957.9	18185.8	18189.0	18038.6	17888.2
72.5°	1700.1	1718.6	1951.7	3035.0	4394.5	7251.7	12701.9	14515.5	14724.2	14454.2	14266.9
75°	1221.4	1249.0	1390.2	1856.7	2620.7	4351.6	8233.6	10151.6	10157.7	9679.0	9252.6
77.5°	355.9	371.4	521.6	1144.6	1964.0	2936.8	4729.0	5643.6	5511.7	5167.9	4845.6
80°	147.2	147.2	153.4	365.3	788.7	1994.8	3308.2	4345.5	4330.2	4198.2	4008.0
82.5°	55.2	58.3	73.6	150.4	187.3	491.0	2206.5	3771.7	3762.4	3575.3	3440.1
85°	6.1	6.1	18.4	64.5	70.6	92.1	441.9	1663.2	1654.1	1663.2	1457.7
87.5°	0.0	0.0	3.0	6.1	9.1	12.3	18.4	64.5	70.6	67.5	61.3
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: P165333

CATALOG NUMBER: VST-F11-LED-E-U-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7
2.5°	524.8	518.6	518.6	515.6	515.6	515.6	512.5	509.5	509.5	506.3	503.3
5°	573.8	567.6	564.7	558.5	555.5	552.4	546.2	543.2	537.1	533.9	530.9
7.5°	632.1	619.8	616.8	607.7	598.4	592.2	586.1	577.0	570.8	558.5	555.5
10°	705.9	690.5	678.2	665.9	656.7	641.4	632.1	619.8	607.7	598.4	589.3
12.5°	801.0	779.5	761.1	748.8	727.3	708.9	690.5	681.3	656.7	644.4	629.1
15°	905.3	880.7	859.3	834.7	819.4	788.7	764.1	736.5	724.2	702.8	678.2
17.5°	1040.2	1000.4	966.6	942.2	911.5	880.7	853.1	825.6	788.7	764.1	733.5
20°	1184.5	1150.8	1104.7	1061.9	1025.0	988.2	948.2	911.5	877.7	837.9	801.0
22.5°	1368.8	1319.6	1264.4	1221.4	1172.4	1132.5	1077.1	1028.1	972.8	920.6	877.7
25°	1601.9	1537.4	1485.3	1424.0	1365.6	1304.3	1236.7	1175.4	1104.7	1055.7	982.1
27.5°	1890.4	1829.1	1758.5	1678.7	1620.4	1528.3	1439.2	1362.6	1279.7	1202.9	1120.2
30°	2258.6	2169.8	2096.0	2019.4	1902.7	1813.6	1709.3	1605.1	1491.4	1414.8	1288.8
32.5°	2700.5	2605.5	2494.9	2384.4	2277.1	2151.3	2022.3	1893.4	1767.6	1626.5	1497.6
35°	3240.7	3127.1	3001.3	2881.6	2716.0	2580.9	2418.2	2240.2	2099.1	1936.4	1773.7
37.5°	3955.8	3768.5	3658.0	3532.2	3308.2	3124.1	2942.9	2765.0	2516.4	2344.6	2114.4
40°	4851.8	4741.3	4560.3	4357.8	4155.2	3912.7	3667.3	3431.0	3142.5	2903.1	2636.2
42.5°	5904.3	5741.8	5557.7	5266.1	5060.5	4775.0	4495.9	4182.8	3829.8	3523.1	3210.0
45°	6892.6	6699.3	6558.1	6266.6	6051.7	5714.1	5376.6	5045.2	4636.9	4241.1	3879.0
47.5°	7960.6	7800.9	7567.8	7331.5	7113.6	6733.1	6367.8	5965.8	5536.1	5066.7	4597.0
50°	8899.6	8773.9	8614.1	8328.8	8086.4	7767.2	7337.6	6898.7	6355.5	5889.1	5355.1
52.5°	9697.4	9599.2	9375.2	9172.7	8954.8	8654.0	8270.5	7850.1	7264.0	6751.3	6143.8
55°	10639.7	10569.0	10372.6	10246.8	10053.6	9765.1	9406.0	9016.3	8396.3	7837.8	7150.3
57.5°	12183.3	12128.1	11956.1	11903.9	11713.6	11462.1	11020.2	10602.8	9878.6	9185.0	8399.5
60°	14739.5	14629.2	14377.4	14248.6	13846.5	13509.0	12935.2	12361.2	11486.7	10602.8	9657.6
62.5°	17476.9	17167.0	16688.2	16277.1	15706.3	15120.0	14352.8	13475.3	12450.3	11400.7	10314.3
65°	18953.0	18425.3	17820.7	17167.0	16427.5	15565.1	14598.4	13545.9	12444.2	11336.3	10188.5
66°	19121.9	18526.5	17885.2	17157.9	16335.5	15417.8	14435.7	13331.0	12186.2	11106.1	9958.3
67.5°	18910.2	18287.2	17609.0	16801.9	15911.9	14960.5	13929.4	12781.6	11679.9	10584.3	9467.3
70°	17427.9	16807.9	16203.3	15353.4	14405.0	13447.7	12471.7	11189.0	10145.6	9138.9	8144.7
72.5°	13917.1	13496.7	12898.3	12171.0	11247.2	10124.0	9310.8	8163.2	7257.8	6281.9	5511.7
75°	8697.1	8104.8	7365.2	6438.4	5732.5	4821.0	4345.5	3473.9	2958.4	2507.2	2071.5
77.5°	4446.7	4001.8	3483.2	2961.4	2461.2	1964.0	1519.0	1074.2	724.2	503.3	374.4
80°	3673.5	3280.6	2850.9	2375.3	1933.5	1500.7	1080.3	736.5	469.6	306.9	239.3
82.5°	3035.0	2703.7	2320.0	1878.1	1494.6	1178.5	819.4	533.9	331.3	214.9	168.8
85°	1292.0	1172.4	905.3	718.0	540.1	399.0	279.3	187.3	131.9	107.3	98.2
87.5°	55.2	61.3	58.3	46.0	33.7	33.7	30.7	24.6	24.6	24.6	24.6
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: P165333

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CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7	481.7
2.5°	503.3	500.2	497.2	497.2	494.0	491.0	472.6	457.3	438.9	426.6	414.3
5°	524.8	521.6	515.6	512.5	506.3	503.3	463.5	429.6	402.0	380.5	365.3
7.5°	546.2	543.2	533.9	524.8	521.6	515.6	451.2	408.1	371.4	346.8	331.3
10°	573.8	564.7	555.5	543.2	533.9	524.8	438.9	383.5	343.6	322.2	306.9
12.5°	613.7	598.4	583.1	567.6	555.5	540.1	432.7	362.1	322.2	297.6	282.3
15°	659.9	638.3	619.8	601.6	579.9	564.7	420.4	343.6	303.8	279.3	260.9
17.5°	702.8	678.2	650.6	623.0	601.6	579.9	408.1	325.4	285.3	260.9	242.4
20°	764.1	727.3	693.6	659.9	629.1	601.6	389.7	306.9	270.0	242.4	224.0
22.5°	831.7	788.7	745.8	699.8	659.9	623.0	374.4	291.5	254.7	227.2	205.6
25°	917.6	865.4	807.1	748.8	702.8	653.7	359.1	276.2	239.3	211.7	190.3
27.5°	1037.3	963.7	899.2	825.6	754.9	699.8	346.8	263.9	224.0	196.4	175.0
30°	1200.0	1092.4	991.2	911.5	828.5	748.8	334.5	248.6	211.7	181.1	156.5
32.5°	1380.9	1255.1	1138.5	1018.8	914.5	822.4	322.2	236.3	196.4	165.7	144.2
35°	1605.1	1445.4	1288.8	1150.8	1025.0	902.2	309.9	224.0	184.1	150.4	129.0
37.5°	1927.3	1727.7	1522.2	1344.2	1181.5	1018.8	300.8	211.7	168.8	135.1	113.5
40°	2369.2	2111.4	1859.7	1617.2	1405.5	1202.9	288.5	199.4	156.5	122.8	101.2
42.5°	2847.9	2534.8	2203.5	1930.3	1638.8	1384.1	276.2	187.3	144.2	110.5	89.1
45°	3443.3	3053.5	2651.5	2280.1	1924.1	1595.8	263.9	175.0	129.0	98.2	76.8
47.5°	4093.9	3596.7	3142.5	2676.1	2252.5	1859.7	248.6	165.7	116.7	85.9	67.5
50°	4762.9	4238.1	3664.1	3133.2	2630.1	2123.7	233.3	150.4	104.4	76.8	55.2
52.5°	5483.9	4864.1	4278.0	3618.1	3032.0	2470.3	217.9	138.1	95.0	67.5	46.0
55°	6401.5	5708.1	5020.6	4281.0	3575.3	2872.5	202.6	122.8	82.9	58.3	36.9
57.5°	7555.5	6733.1	5889.1	5054.4	4198.2	3400.3	190.3	107.3	70.6	49.0	30.7
60°	8644.9	7684.4	6662.4	5702.0	4735.1	3805.4	171.8	95.0	61.3	39.9	30.7
62.5°	9209.6	8114.0	7012.2	5953.5	4922.4	3949.6	153.4	79.8	52.2	33.7	27.6
65°	9071.5	7954.4	6886.4	5818.4	4808.9	3857.6	135.1	70.6	46.0	30.7	27.6
66°	8872.1	7767.2	6693.2	5677.4	4713.7	3759.4	125.8	67.5	43.0	30.7	24.6
67.5°	8436.2	7368.2	6343.2	5398.0	4452.8	3572.1	113.5	61.3	39.9	27.6	24.6
70°	7205.7	6235.9	5416.5	4575.6	3805.4	3010.6	92.1	52.2	33.7	24.6	24.6
72.5°	4768.9	4109.2	3563.0	3065.8	2562.4	1988.6	76.8	43.0	27.6	24.6	21.4
75°	1798.3	1626.5	1396.4	1255.1	1095.6	960.5	61.3	27.6	21.4	21.4	21.4
77.5°	319.2	294.6	260.9	239.3	221.0	202.6	49.0	18.4	18.4	21.4	21.4
80°	214.9	199.4	181.1	165.7	153.4	138.1	33.7	15.3	18.4	18.4	21.4
82.5°	153.4	144.2	135.1	122.8	113.5	101.2	21.4	15.3	18.4	18.4	18.4
85°	92.1	85.9	79.8	73.6	64.5	61.3	15.3	15.3	15.3	18.4	18.4
87.5°	24.6	21.4	24.6	24.6	18.4	21.4	12.3	12.3	12.3	15.3	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: P165333

CATALOG NUMBER: VST-F11-LED-E-U-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	481.7	481.7	481.7	481.7	481.7
2.5°	408.1	408.1	402.0	411.3	411.3
5°	353.0	353.0	349.8	353.0	353.0
7.5°	322.2	319.2	319.2	319.2	322.2
10°	294.6	291.5	291.5	291.5	291.5
12.5°	270.0	267.0	263.9	267.0	267.0
15°	248.6	242.4	242.4	242.4	242.4
17.5°	230.2	224.0	221.0	221.0	221.0
20°	211.7	202.6	202.6	202.6	202.6
22.5°	193.3	184.1	184.1	184.1	184.1
25°	175.0	165.7	165.7	165.7	165.7
27.5°	159.5	150.4	150.4	150.4	150.4
30°	141.3	135.1	135.1	138.1	135.1
32.5°	129.0	119.6	119.6	122.8	122.8
35°	113.5	107.3	107.3	107.3	107.3
37.5°	98.2	92.1	92.1	92.1	92.1
40°	85.9	79.8	76.8	79.8	79.8
42.5°	73.6	67.5	64.5	64.5	64.5
45°	64.5	55.2	52.2	55.2	55.2
47.5°	52.2	46.0	46.0	49.0	49.0
50°	39.9	39.9	43.0	49.0	49.0
52.5°	36.9	36.9	43.0	49.0	49.0
55°	33.7	36.9	43.0	46.0	49.0
57.5°	30.7	36.9	43.0	46.0	46.0
60°	30.7	33.7	39.9	46.0	46.0
62.5°	27.6	30.7	36.9	43.0	43.0
65°	27.6	30.7	36.9	43.0	43.0
66°	27.6	30.7	36.9	43.0	43.0
67.5°	27.6	30.7	36.9	43.0	43.0
70°	27.6	30.7	36.9	39.9	39.9
72.5°	24.6	27.6	33.7	39.9	39.9
75°	24.6	27.6	33.7	39.9	39.9
77.5°	24.6	27.6	33.7	39.9	39.9
80°	24.6	27.6	33.7	36.9	39.9
82.5°	21.4	27.6	30.7	36.9	36.9
85°	21.4	24.6	30.7	33.7	36.9
87.5°	18.4	21.4	24.6	30.7	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)