

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: P158966

Luminaire Tested: **VST-F12-LED-E-U-SLL-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158966
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33715)
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-SLL-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27316 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

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



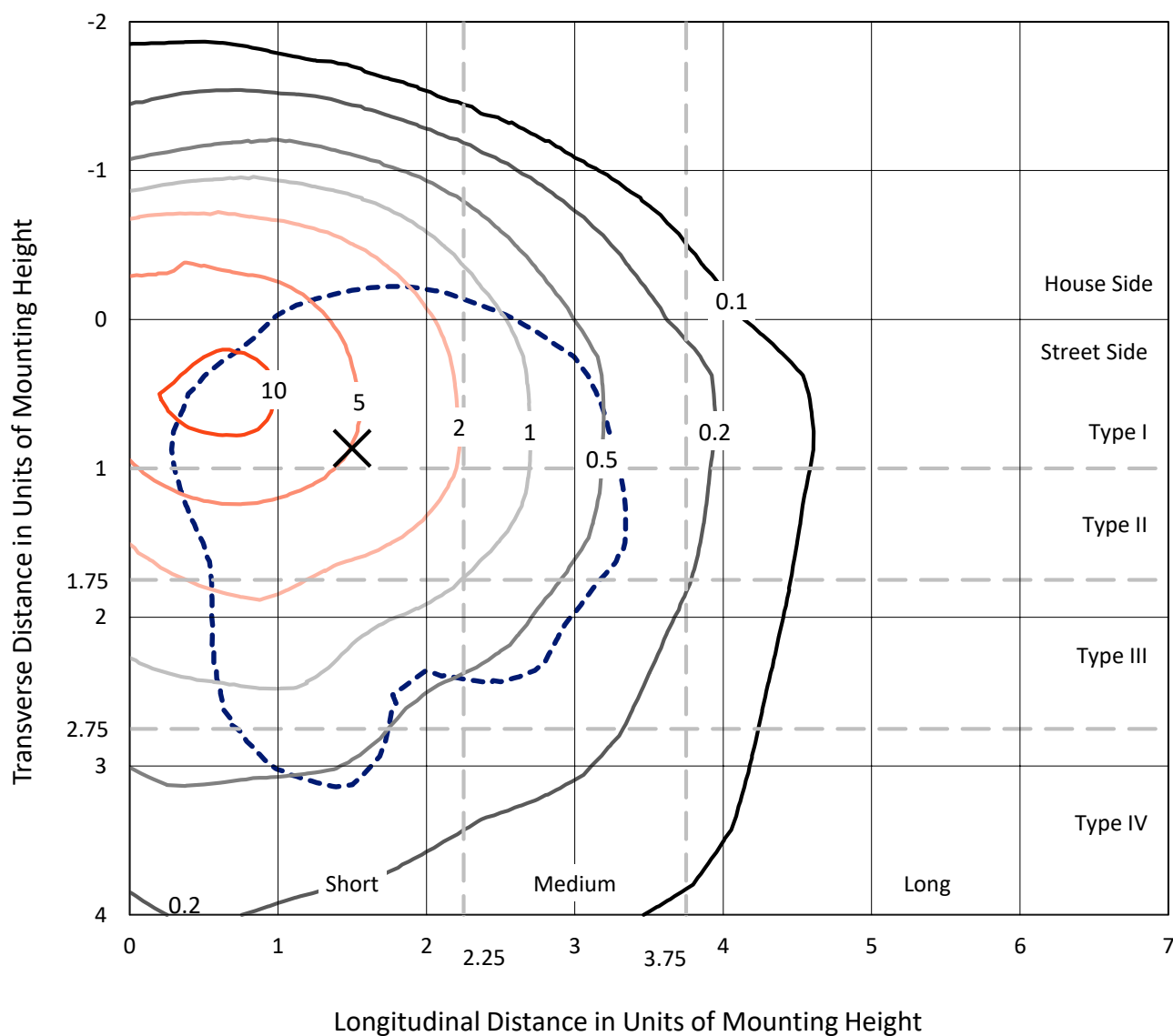
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

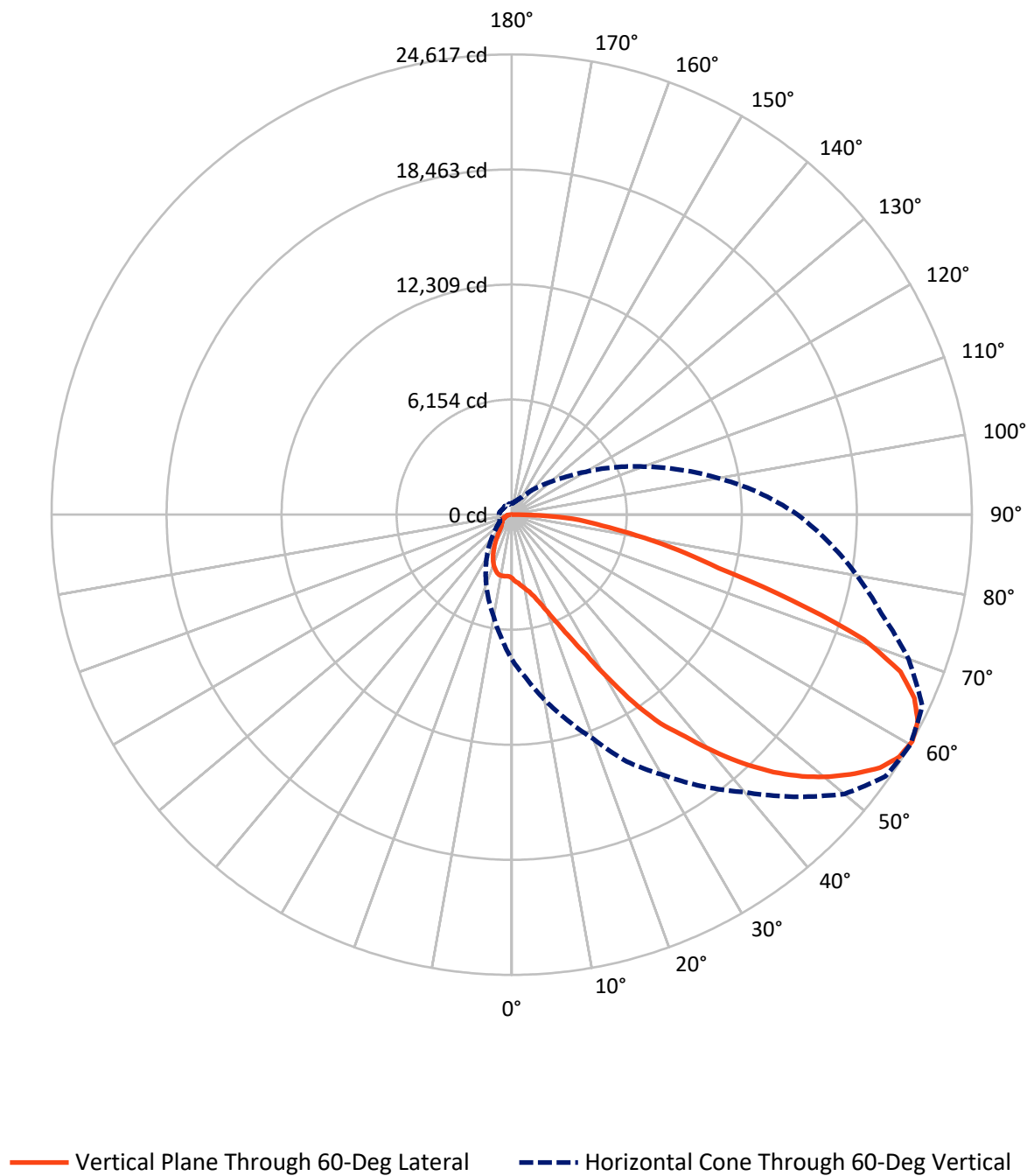


Based on 25 foot mounting height. Maximum calculated value = 12.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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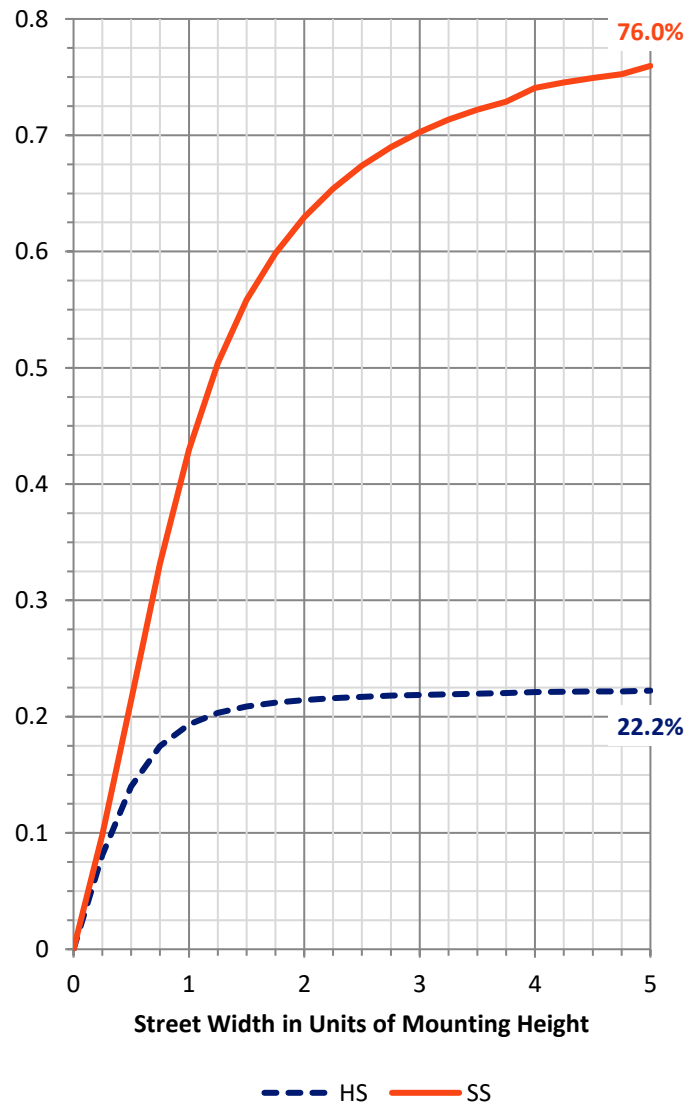
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6150.7	0.0	6150.7
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	21165.3	0.0	21165.3
	% Fixture	77.5	0.0	77.5
Total	Lumens	27316.0	0.0	27316.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.2	1.2
10°-20°	1082.1	4.0
20°-30°	2053.4	7.5
30°-40°	3233.8	11.8
40°-50°	4513.6	16.5
50°-60°	5582.3	20.4
60°-70°	5786.3	21.2
70°-80°	3641.0	13.3
80°-90°	1088.4	4.0
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°	27316.0	100.0
0°-180°	27316.0	100.0

Coefficient of Utilization



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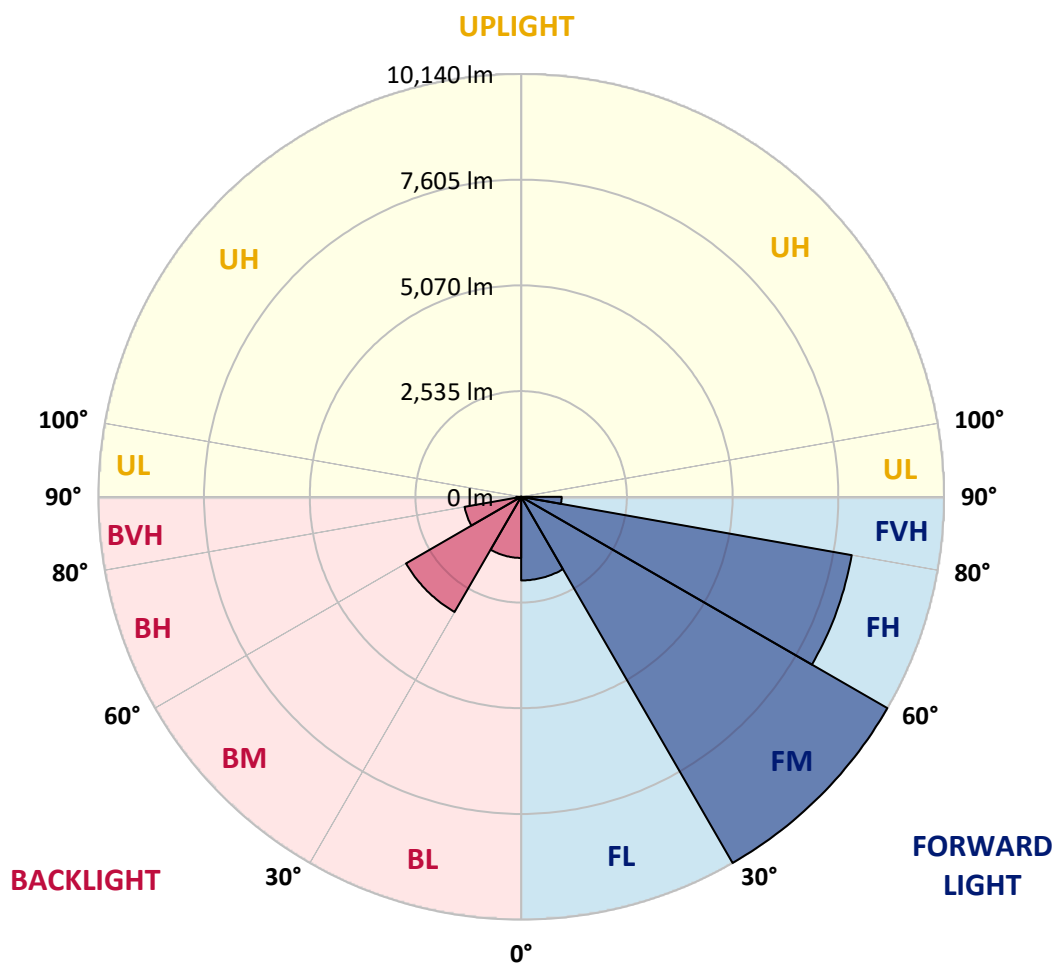
CATALOG NUMBER: VST-F12-LED-E-U-SLL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2005.4	7.3			
FM	(30°-60°)	10140.1	37.1			
FH	(60°-80°)	8049.8	29.5			G4/12000
FVH	(80°-90°)	970.0	3.6			G5
BL	(0°-30°)	1465.3	5.4	B3/2500		
BM	(30°-60°)	3189.5	11.7	B3/5000		
BH	(60°-80°)	1377.5	5.0	B3/2500		G3/2500
BVH	(80°-90°)	118.4	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3598.4	3594.3	3594.3	3594.3	3592.3	3588.2	3594.3	3592.3	3582.1	3576.0	3582.1
5°	3645.1	3647.2	3653.3	3655.3	3655.3	3661.4	3677.7	3679.7	3677.7	3681.7	3691.9
7.5°	3689.9	3700.0	3706.1	3716.3	3728.5	3738.7	3767.1	3795.6	3813.9	3828.1	3832.2
10°	3763.0	3779.3	3797.6	3824.0	3852.5	3903.3	3927.7	3956.2	3974.5	4002.9	4009.0
12.5°	3950.1	3970.4	3982.6	4023.3	4059.9	4108.7	4143.2	4151.3	4194.0	4218.4	4246.9
15°	4265.2	4295.7	4338.4	4362.8	4403.4	4446.1	4476.6	4517.3	4523.4	4555.9	4578.3
17.5°	4651.5	4694.2	4781.6	4840.5	4893.4	4936.1	4997.1	5043.8	5054.0	5090.6	5043.8
20°	5192.2	5295.9	5310.1	5428.1	5474.8	5560.2	5682.2	5704.5	5763.5	5704.5	5670.0
22.5°	5924.1	6086.7	6131.5	6245.3	6302.2	6432.4	6468.9	6588.9	6629.6	6584.8	6491.3
25°	6765.8	7017.9	7148.0	7322.8	7351.3	7617.6	7646.0	7786.3	7711.1	7603.4	7605.4
27.5°	7385.8	7814.8	8150.2	8449.1	8658.5	8959.3	9193.1	9258.2	9187.0	9046.8	8998.0
30°	7739.6	8225.4	8707.3	9120.0	9607.9	10067.3	10545.1	10782.9	10823.6	10896.8	10602.0
32.5°	7967.3	8591.4	9164.7	9675.0	10175.1	10766.7	11407.1	12019.0	12533.3	12921.6	12738.7
35°	8158.4	8928.9	9662.8	10280.8	10872.4	11516.8	12163.3	12885.0	13736.9	14234.9	14338.6
37.5°	8235.6	9176.9	10075.5	10868.3	11699.8	12425.6	13068.0	13710.4	14604.9	15493.4	15767.8
40°	8221.4	9298.9	10321.4	11317.6	12336.1	13242.8	13995.0	14755.4	15802.4	16841.2	17288.5
42.5°	8125.8	9317.2	10478.0	11616.5	12777.3	13982.8	14944.4	15820.7	16825.0	18156.6	18788.8
45°	8005.9	9254.1	10510.5	11768.9	13104.6	14499.2	15714.9	16798.5	17975.6	19291.0	20055.4
47.5°	7843.2	9154.5	10469.9	11821.8	13251.0	14830.6	16259.8	17562.9	18857.9	20372.5	21342.2
50°	7666.4	9012.2	10386.5	11783.2	13287.6	15011.5	16570.8	18054.9	19567.4	21202.0	22427.9
52.5°	7542.4	8859.7	10311.3	11703.9	13251.0	15066.4	16684.7	18319.2	20002.5	21691.9	23155.7
55°	7389.9	8656.4	10110.0	11518.9	13116.8	15035.9	16672.5	18410.7	20122.5	21881.0	23552.1
57.5°	7400.1	8562.9	9939.2	11297.3	12842.3	14753.3	16442.8	18319.2	19933.4	21759.0	23566.3
60°	7721.3	8764.2	10028.7	11342.0	12761.0	14574.4	16052.4	17729.6	19378.4	21338.2	23237.0
62.5°	8384.0	9339.5	10488.2	11789.3	13218.4	14932.2	15875.6	16749.7	18213.5	20563.6	22675.9
65°	9174.8	10036.8	11033.0	12271.1	13873.1	15513.7	15775.9	15952.8	16692.8	19057.2	21622.8
67.5°	9965.7	10736.2	11518.9	12545.5	14245.1	15680.4	15369.3	14948.5	15347.0	17306.8	19553.2
70°	10250.3	11272.9	11787.2	12492.7	13962.5	15292.1	14712.7	13653.5	13791.7	15572.6	17215.3
72.5°	9823.4	11281.0	11451.8	11714.0	12704.1	13954.4	13342.5	11980.4	11951.9	13312.0	14639.5
75°	8239.7	10291.0	10288.9	10191.3	10415.0	11126.5	10809.4	9988.0	10335.7	11407.1	11844.2
77.5°	5873.3	8030.3	8131.9	7475.3	7459.0	7780.2	7971.3	8926.8	10187.3	10789.0	10650.8
80°	3689.9	5417.9	5855.0	5043.8	4871.0	5326.4	6507.6	7898.1	9449.3	9990.1	9524.5
82.5°	2222.0	3490.6	4421.7	3962.3	3921.6	4751.1	6056.3	6597.0	7062.6	7637.9	6859.3
85°	1508.5	2325.7	3025.1	3116.6	3472.3	4330.3	4897.5	4657.6	4669.8	4519.3	4116.8
87.5°	288.7	634.3	1036.8	1264.5	1402.8	1884.6	2049.2	1856.1	1959.8	1433.3	1567.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3571.9	3571.9	3571.9	3561.8	3563.8	3549.6	3543.5	3543.5	3537.4	3537.4	3535.4
5°	3683.8	3671.6	3677.7	3675.6	3675.6	3655.3	3645.1	3645.1	3618.7	3620.7	3612.6
7.5°	3850.5	3848.4	3854.5	3842.3	3826.1	3809.8	3793.5	3785.4	3748.8	3726.5	3712.2
10°	4039.5	4037.5	4043.6	4041.6	4013.1	3982.6	3937.9	3905.4	3860.6	3826.1	3791.5
12.5°	4246.9	4244.9	4240.8	4222.5	4192.0	4143.2	4086.3	4031.4	3964.3	3919.6	3868.8
15°	4570.1	4564.0	4539.6	4513.2	4480.7	4405.5	4305.9	4226.6	4137.1	4059.9	3976.5
17.5°	5047.9	4997.1	4993.0	4934.0	4846.6	4747.0	4653.5	4521.4	4393.3	4277.4	4163.5
20°	5706.6	5588.7	5556.1	5489.1	5373.2	5269.5	5066.2	4889.3	4714.5	4555.9	4411.6
22.5°	6424.2	6338.8	6259.5	6149.8	5991.2	5840.8	5582.6	5361.0	5137.3	4934.0	4773.4
25°	7426.5	7278.1	7135.8	6960.9	6741.4	6562.5	6267.7	6044.1	5751.3	5566.3	5334.5
27.5°	8721.5	8467.4	8227.5	8077.0	7690.8	7430.5	7054.4	6765.8	6412.0	6162.0	5887.5
30°	10406.8	10112.0	9756.3	9235.8	8776.4	8260.0	7794.5	7424.4	7048.3	6698.7	6381.5
32.5°	12496.7	11976.3	11413.2	10587.8	9833.5	9097.6	8477.5	8022.1	7637.9	7202.9	6755.6
35°	14263.4	13726.7	12927.7	11878.7	10947.6	10106.0	9363.9	8741.8	8239.7	7688.7	7097.1
37.5°	15658.0	15046.1	14295.9	13181.9	12197.9	11240.4	10461.7	9668.9	9010.2	8251.9	7503.7
40°	17255.9	16642.0	15816.6	14661.9	13497.0	12458.1	11545.3	10726.0	9916.9	8991.9	8030.3
42.5°	18648.5	18205.3	17369.8	16176.4	14885.5	13728.7	12730.5	11793.3	10736.2	9701.4	8562.9
45°	20100.1	19648.8	18855.9	17607.7	16235.4	14946.5	13753.1	12744.8	11496.5	10264.5	8961.4
47.5°	21382.9	20919.4	20118.4	18878.3	17420.6	16062.6	14749.3	13529.5	12080.0	10665.0	9221.6
50°	22606.8	22039.6	21305.6	20069.6	18512.3	17060.8	15635.7	14070.3	12533.3	10945.6	9398.5
52.5°	23731.0	23009.3	22314.0	21041.4	19358.0	17841.4	16251.7	14529.7	12811.8	11167.2	9518.4
55°	24369.3	23903.8	23072.3	21822.0	19959.8	18378.2	16642.0	14853.0	13088.3	11323.7	9569.2
57.5°	24566.5	24452.7	23755.4	22273.3	20313.6	18672.9	16906.3	15109.1	13273.3	11368.4	9498.1
60°	24410.0	24617.4	24235.2	22590.5	20474.2	18760.4	17036.4	15292.1	13305.9	11226.1	9282.6
62.5°	23907.9	24379.5	24330.7	22696.2	20390.8	18650.6	17022.2	15198.6	13000.9	10782.9	8798.7
65°	23082.5	23676.1	23885.5	22303.8	19921.2	18250.1	16660.3	14611.0	12153.2	9916.9	7987.6
67.5°	21529.3	22427.9	22631.1	21019.0	18693.3	17142.1	15617.4	13391.2	10583.7	8577.1	6721.0
70°	18416.8	19988.3	20262.7	18571.3	16528.1	15166.0	13873.1	11457.9	8813.0	6879.6	5157.7
72.5°	14702.5	15690.6	16251.7	15086.8	13566.1	12578.1	11598.2	8790.6	6649.9	5076.4	3549.6
75°	11494.5	11435.5	11937.7	11163.1	10268.6	9807.1	9071.2	6133.5	4454.3	3362.6	2246.4
77.5°	9827.4	9071.2	8499.9	7955.1	7424.4	7278.1	6572.6	3805.7	2752.7	2014.7	1343.8
80°	8168.5	6788.1	5745.2	4978.8	4789.7	5078.4	4301.8	2244.4	1630.5	1156.8	843.7
82.5°	5836.7	4883.2	3974.5	3488.6	3165.4	3624.8	2537.2	1246.2	884.3	693.2	559.1
85°	3783.4	3616.7	3578.0	3419.5	3027.1	2858.4	1927.3	1073.4	662.8	431.0	347.6
87.5°	1455.6	1866.3	2152.9	2307.4	2494.5	2222.0	1004.3	370.0	363.9	223.6	168.7
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°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3521.1	3513.0	3511.0	3504.9	3500.8	3500.8	3490.6	3305.6	3303.6	3303.6	3301.6
5°	3596.3	3586.2	3576.0	3574.0	3565.8	3565.8	3555.7	3370.7	3370.7	3370.7	3366.6
7.5°	3698.0	3677.7	3665.5	3659.4	3647.2	3653.3	3661.4	3474.4	3476.4	3474.4	3478.4
10°	3771.2	3759.0	3744.8	3740.7	3732.6	3738.7	3750.9	3565.8	3571.9	3574.0	3578.0
12.5°	3842.3	3822.0	3803.7	3797.6	3793.5	3809.8	3824.0	3645.1	3651.2	3657.3	3657.3
15°	3929.8	3895.2	3870.8	3856.6	3848.4	3864.7	3885.0	3708.2	3710.2	3716.3	3714.3
17.5°	4078.2	4027.3	3970.4	3960.2	3933.8	3939.9	3944.0	3746.8	3738.7	3724.4	3700.0
20°	4307.9	4230.6	4153.4	4120.9	4068.0	4045.6	4000.9	3748.8	3698.0	3655.3	3618.7
22.5°	4637.2	4523.4	4440.0	4385.1	4277.4	4202.2	4080.2	3738.7	3643.1	3569.9	3513.0
25°	5169.9	5033.7	4905.6	4767.3	4598.6	4448.2	4269.3	3828.1	3679.7	3553.7	3443.9
27.5°	5688.3	5472.8	5275.6	5068.2	4830.4	4604.7	4352.6	3856.6	3687.8	3525.2	3346.3
30°	6076.6	5763.5	5464.7	5161.7	4850.7	4557.9	4273.3	3759.0	3557.7	3374.7	3185.7
32.5°	6312.4	5905.8	5517.5	5141.4	4775.5	4446.1	4127.0	3590.2	3368.7	3153.2	2951.9
35°	6536.0	6031.9	5550.0	5106.8	4688.1	4322.1	3978.5	3393.0	3128.8	2899.0	2644.9
37.5°	6812.5	6164.0	5570.4	5043.8	4560.0	4141.2	3763.0	3145.0	2880.7	2598.2	2358.3
40°	7143.9	6300.2	5550.0	4917.8	4360.7	3903.3	3502.8	2884.8	2590.0	2315.6	2079.7
42.5°	7459.0	6420.2	5497.2	4749.0	4143.2	3655.3	3265.0	2653.0	2358.3	2077.7	1843.9
45°	7692.8	6521.8	5470.8	4631.1	3976.5	3486.6	3055.6	2466.0	2155.0	1872.4	1634.5
47.5°	7855.4	6582.8	5458.6	4566.1	3860.6	3311.7	2864.5	2279.0	1951.7	1667.0	1435.3
50°	7940.8	6580.8	5428.1	4494.9	3689.9	3102.3	2667.3	2089.9	1764.6	1486.1	1274.7
52.5°	7963.2	6544.2	5363.0	4364.8	3482.5	2892.9	2455.8	1892.7	1600.0	1333.6	1120.2
55°	7912.4	6454.7	5226.8	4147.3	3260.9	2671.3	2262.7	1738.2	1439.4	1187.3	1020.6
57.5°	7768.0	6296.1	4970.6	3848.4	3027.1	2466.0	2041.1	1551.2	1264.5	1053.1	914.8
60°	7499.7	5960.7	4570.1	3494.7	2730.3	2152.9	1736.2	1307.2	1079.5	920.9	809.1
62.5°	7003.6	5434.2	4007.0	3006.8	2303.4	1746.3	1386.5	1042.9	872.1	768.5	699.3
65°	6204.7	4641.3	3354.4	2368.4	1750.4	1270.6	1030.7	784.7	660.7	597.7	577.4
67.5°	5064.2	3584.1	2439.6	1644.7	1185.2	890.4	717.6	573.3	514.3	489.9	481.8
70°	3681.7	2441.6	1579.6	1038.9	782.7	622.1	542.8	461.5	429.0	422.9	422.9
72.5°	2311.5	1484.1	967.7	711.5	593.6	504.2	463.5	406.6	394.4	390.3	384.2
75°	1356.0	900.6	685.1	583.5	508.2	451.3	416.8	370.0	361.9	359.8	353.7
77.5°	864.0	648.5	553.0	498.1	459.5	408.6	378.1	329.3	327.3	325.3	323.2
80°	620.1	538.7	483.8	441.2	402.5	355.8	337.5	298.8	294.8	292.7	296.8
82.5°	469.6	445.2	422.9	390.3	337.5	302.9	288.7	262.3	264.3	254.1	252.1
85°	323.2	319.2	317.1	302.9	264.3	233.8	223.6	209.4	219.6	209.4	197.2
87.5°	158.6	156.5	144.3	170.8	158.6	126.0	113.8	126.0	140.3	136.2	126.0
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: P158966

CATALOG NUMBER: VST-F12-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3293.4	3285.3	3291.4	3287.3	3287.3	3285.3	3289.4	3283.3	3279.2	3283.3	3285.3
5°	3358.5	3348.3	3350.4	3336.1	3342.2	3328.0	3332.1	3321.9	3311.7	3307.7	3307.7
7.5°	3468.3	3458.1	3445.9	3443.9	3421.5	3413.4	3399.1	3391.0	3384.9	3370.7	3362.6
10°	3567.9	3551.6	3537.4	3535.4	3513.0	3492.7	3474.4	3458.1	3447.9	3427.6	3417.4
12.5°	3649.2	3632.9	3610.6	3598.4	3576.0	3551.6	3539.4	3515.0	3500.8	3478.4	3460.1
15°	3696.0	3667.5	3635.0	3612.6	3580.1	3553.7	3535.4	3517.1	3502.8	3474.4	3447.9
17.5°	3673.6	3626.8	3582.1	3541.5	3496.7	3472.3	3445.9	3423.5	3419.5	3386.9	3346.3
20°	3580.1	3525.2	3466.2	3411.3	3352.4	3317.8	3285.3	3250.7	3240.6	3201.9	3149.1
22.5°	3466.2	3403.2	3336.1	3269.0	3193.8	3145.0	3096.2	3053.5	3019.0	2962.1	2886.8
25°	3350.4	3256.8	3159.3	3073.9	2986.4	2925.5	2874.6	2827.9	2787.2	2695.7	2618.5
27.5°	3197.9	3051.5	2951.9	2854.3	2748.6	2669.3	2612.4	2547.3	2502.6	2396.9	2315.6
30°	3002.7	2856.3	2714.0	2616.4	2510.7	2425.3	2352.2	2258.6	2193.6	2116.3	2041.1
32.5°	2756.7	2610.3	2466.0	2356.2	2268.8	2163.1	2071.6	1982.2	1906.9	1831.7	1772.8
35°	2457.9	2315.6	2179.4	2069.6	1972.0	1888.6	1801.2	1724.0	1638.6	1557.3	1522.7
37.5°	2142.8	1990.3	1839.8	1744.3	1667.0	1608.1	1526.8	1463.7	1386.5	1337.7	1297.0
40°	1868.3	1705.7	1563.4	1482.0	1421.1	1354.0	1286.9	1238.1	1183.2	1134.4	1103.9
42.5°	1636.6	1484.1	1362.1	1293.0	1219.8	1146.6	1095.8	1055.1	1020.6	984.0	947.4
45°	1423.1	1276.7	1175.1	1089.7	1028.7	969.7	935.2	916.9	896.5	874.2	849.8
47.5°	1244.2	1118.1	1018.5	939.2	876.2	835.6	819.3	813.2	805.1	786.8	774.6
50°	1108.0	1004.3	902.6	831.5	778.6	758.3	740.0	733.9	723.7	717.6	709.5
52.5°	994.1	884.3	799.0	733.9	701.4	693.2	685.1	677.0	674.9	670.9	666.8
55°	900.6	805.1	725.8	677.0	660.7	654.6	652.6	644.5	642.4	642.4	636.3
57.5°	817.3	735.9	664.8	634.3	624.1	618.0	614.0	609.9	609.9	614.0	611.9
60°	731.9	662.8	620.1	603.8	597.7	587.5	577.4	573.3	575.3	585.5	585.5
62.5°	648.5	597.7	571.3	565.2	559.1	550.9	538.7	534.7	538.7	550.9	557.0
65°	557.0	534.7	526.5	522.5	518.4	512.3	504.2	500.1	502.1	508.2	516.4
67.5°	473.7	471.7	471.7	473.7	471.7	469.6	465.6	459.5	457.4	457.4	461.5
70°	422.9	422.9	429.0	429.0	426.9	426.9	420.8	414.7	410.7	406.6	408.6
72.5°	384.2	384.2	386.3	388.3	386.3	386.3	378.1	374.1	363.9	361.9	357.8
75°	351.7	347.6	347.6	345.6	343.6	345.6	337.5	327.3	323.2	321.2	317.1
77.5°	319.2	311.0	307.0	302.9	304.9	302.9	296.8	290.7	284.6	282.6	280.6
80°	282.6	270.4	264.3	254.1	260.2	262.3	258.2	252.1	250.1	248.0	246.0
82.5°	233.8	221.6	213.5	207.4	203.3	207.4	213.5	227.7	223.6	221.6	217.5
85°	183.0	162.6	152.5	154.5	144.3	146.4	164.7	172.8	172.8	176.9	172.8
87.5°	103.7	99.6	75.2	69.1	73.2	87.4	97.6	107.7	107.7	101.6	113.8
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: P158966

CATALOG NUMBER: VST-F12-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3285.3	3289.4	3291.4	3299.5	3303.6	3305.6	3307.7	3311.7	3313.8	3311.7	3321.9
5°	3301.6	3301.6	3297.5	3303.6	3305.6	3305.6	3301.6	3305.6	3305.6	3305.6	3315.8
7.5°	3344.3	3332.1	3326.0	3317.8	3311.7	3303.6	3293.4	3293.4	3291.4	3293.4	3299.5
10°	3389.0	3370.7	3348.3	3328.0	3309.7	3295.5	3277.2	3271.1	3269.0	3267.0	3283.3
12.5°	3423.5	3391.0	3356.5	3321.9	3285.3	3260.9	3230.4	3212.1	3210.1	3210.1	3230.4
15°	3399.1	3346.3	3279.2	3218.2	3185.7	3151.1	3116.6	3094.2	3092.2	3096.2	3108.4
17.5°	3277.2	3191.8	3132.8	3073.9	3031.2	3002.7	2980.4	2976.3	2984.4	2976.3	2992.5
20°	3069.8	2978.3	2937.7	2890.9	2874.6	2854.3	2821.8	2793.3	2793.3	2756.7	2766.9
22.5°	2801.4	2750.6	2697.8	2661.2	2649.0	2614.4	2579.9	2541.2	2537.2	2492.4	2486.3
25°	2520.9	2470.1	2427.4	2419.2	2382.7	2335.9	2303.4	2258.6	2248.5	2203.8	2197.7
27.5°	2234.2	2193.6	2150.9	2126.5	2106.2	2055.3	2026.9	1974.0	1953.7	1904.9	1898.8
30°	1961.8	1933.4	1882.5	1862.2	1823.6	1764.6	1703.6	1671.1	1654.8	1604.0	1587.8
32.5°	1705.7	1660.9	1622.3	1597.9	1549.1	1482.0	1427.2	1380.4	1349.9	1288.9	1272.6
35°	1461.7	1417.0	1398.7	1335.7	1293.0	1248.3	1173.0	1144.6	1089.7	1042.9	1026.7
37.5°	1246.2	1203.5	1179.1	1126.3	1083.6	1038.9	994.1	957.5	931.1	920.9	920.9
40°	1061.2	1038.9	1008.4	969.7	941.3	908.7	884.3	872.1	870.1	874.2	884.3
42.5°	929.1	904.7	884.3	864.0	843.7	839.6	833.5	841.7	851.8	862.0	872.1
45°	829.5	809.1	796.9	788.8	786.8	792.9	805.1	817.3	835.6	847.8	855.9
47.5°	758.3	742.0	738.0	735.9	746.1	764.4	780.7	799.0	813.2	825.4	833.5
50°	697.3	683.1	681.0	679.0	693.2	709.5	723.7	748.1	758.3	766.4	772.5
52.5°	654.6	642.4	636.3	638.4	652.6	666.8	687.1	705.4	719.7	725.8	731.9
55°	620.1	616.0	601.8	607.9	622.1	640.4	660.7	681.0	695.3	705.4	715.6
57.5°	593.6	583.5	573.3	583.5	597.7	616.0	640.4	658.7	677.0	691.2	701.4
60°	565.2	557.0	548.9	559.1	573.3	591.6	609.9	634.3	656.7	670.9	681.0
62.5°	540.8	534.7	526.5	528.6	534.7	546.9	557.0	579.4	599.7	618.0	630.2
65°	506.2	504.2	492.0	494.0	498.1	510.3	518.4	538.7	559.1	575.3	585.5
67.5°	455.4	451.3	451.3	457.4	459.5	465.6	471.7	492.0	508.2	520.4	532.6
70°	404.6	402.5	402.5	406.6	404.6	410.7	418.8	437.1	457.4	469.6	481.8
72.5°	355.8	355.8	353.7	357.8	357.8	359.8	370.0	386.3	404.6	414.7	422.9
75°	313.1	311.0	311.0	311.0	313.1	313.1	323.2	337.5	355.8	361.9	374.1
77.5°	274.5	274.5	274.5	274.5	276.5	274.5	280.6	290.7	296.8	307.0	307.0
80°	241.9	239.9	241.9	244.0	244.0	241.9	241.9	244.0	246.0	246.0	246.0
82.5°	213.5	207.4	211.4	221.6	221.6	221.6	219.6	205.3	195.2	195.2	199.2
85°	170.8	170.8	172.8	187.0	189.1	180.9	189.1	168.7	148.4	142.3	146.4
87.5°	105.7	83.4	101.6	115.9	115.9	109.8	122.0	113.8	95.6	77.3	73.2
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: P158966
CATALOG NUMBER: VST-F12-LED-E-U-SLL-7050

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	0°
2.5°	3330.0	3332.1	3344.3	3350.4	3350.4	3358.5	3362.6	3374.7	3372.7	3372.7	3376.8	2.5°
5°	3326.0	3332.1	3344.3	3352.4	3356.5	3366.6	3374.7	3389.0	3386.9	3391.0	3393.0	5°
7.5°	3311.7	3328.0	3340.2	3356.5	3370.7	3378.8	3389.0	3401.2	3397.1	3399.1	3397.1	7.5°
10°	3299.5	3315.8	3340.2	3362.6	3382.9	3395.1	3401.2	3415.4	3413.4	3417.4	3417.4	10°
12.5°	3250.7	3279.2	3309.7	3344.3	3374.7	3407.3	3427.6	3458.1	3472.3	3490.6	3511.0	12.5°
15°	3126.7	3159.3	3208.0	3246.7	3305.6	3350.4	3409.3	3468.3	3521.1	3571.9	3630.9	15°
17.5°	3004.7	3019.0	3057.6	3110.5	3163.3	3230.4	3301.6	3407.3	3502.8	3606.5	3720.4	17.5°
20°	2779.1	2803.5	2829.9	2892.9	2956.0	3051.5	3138.9	3277.2	3417.4	3580.1	3754.9	20°
22.5°	2500.6	2525.0	2553.4	2624.6	2701.8	2799.4	2905.1	3059.6	3246.7	3458.1	3691.9	22.5°
25°	2199.7	2213.9	2236.3	2307.4	2354.2	2482.3	2610.3	2771.0	2974.3	3246.7	3519.1	25°
27.5°	1868.3	1894.7	1913.0	1945.6	2053.3	2163.1	2297.3	2470.1	2716.1	2994.6	3323.9	27.5°
30°	1551.2	1573.5	1563.4	1632.5	1703.6	1819.5	1963.9	2155.0	2390.8	2722.2	3102.3	30°
32.5°	1240.1	1256.4	1250.3	1299.1	1370.2	1486.1	1622.3	1829.7	2079.7	2433.5	2846.2	32.5°
35°	1022.6	1026.7	1049.0	1071.4	1132.4	1225.9	1341.8	1522.7	1778.9	2104.1	2541.2	35°
37.5°	920.9	929.1	943.3	973.8	1018.5	1085.6	1181.2	1321.4	1541.0	1827.7	2218.0	37.5°
40°	890.4	896.5	904.7	925.0	967.7	1026.7	1112.0	1230.0	1390.6	1632.5	1949.6	40°
42.5°	876.2	876.2	876.2	888.4	920.9	984.0	1081.5	1197.4	1337.7	1520.7	1776.8	42.5°
45°	855.9	855.9	853.9	860.0	882.3	945.3	1051.1	1181.2	1331.6	1506.4	1728.0	45°
47.5°	833.5	831.5	825.4	825.4	839.6	902.6	1012.4	1152.7	1317.4	1518.6	1756.5	47.5°
50°	772.5	772.5	772.5	778.6	790.8	847.8	965.7	1114.1	1303.1	1526.8	1801.2	50°
52.5°	738.0	740.0	746.1	746.1	758.3	817.3	941.3	1105.9	1311.3	1557.3	1858.1	52.5°
55°	721.7	727.8	733.9	733.9	744.1	805.1	933.1	1112.0	1341.8	1620.3	1955.7	55°
57.5°	707.5	713.6	717.6	717.6	725.8	778.6	910.8	1101.9	1360.1	1681.3	2075.7	57.5°
60°	681.0	685.1	687.1	687.1	689.2	733.9	860.0	1053.1	1319.4	1677.2	2140.7	60°
62.5°	632.3	640.4	642.4	644.5	644.5	687.1	794.9	973.8	1232.0	1616.2	2122.4	62.5°
65°	595.7	599.7	605.8	609.9	618.0	646.5	731.9	878.2	1118.1	1494.2	2020.8	65°
67.5°	538.7	544.8	550.9	559.1	567.2	585.5	652.6	770.5	963.6	1286.9	1793.1	67.5°
70°	487.9	489.9	496.0	506.2	508.2	518.4	567.2	648.5	788.8	1032.8	1443.4	70°
72.5°	424.9	429.0	437.1	449.3	449.3	457.4	485.9	528.6	618.0	788.8	1065.3	72.5°
75°	370.0	374.1	380.2	380.2	370.0	372.0	392.4	422.9	489.9	593.6	776.6	75°
77.5°	307.0	315.1	321.2	309.0	304.9	311.0	321.2	343.6	392.4	471.7	583.5	77.5°
80°	254.1	258.2	260.2	262.3	258.2	264.3	272.4	286.7	319.2	380.2	461.5	80°
82.5°	203.3	207.4	213.5	221.6	221.6	244.0	246.0	246.0	264.3	302.9	361.9	82.5°
85°	150.4	158.6	166.7	176.9	178.9	191.1	185.0	183.0	189.1	225.7	250.1	85°
87.5°	77.3	83.4	87.4	95.6	85.4	89.5	89.5	83.4	73.2	91.5	101.6	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



NUMBER: P158966

NUMBER: VST-F12-LED-E-U-SLL-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
3380.8	3376.8	3380.8	3380.8	3386.9	3382.9	3598.4
3397.1	3393.0	3397.1	3401.2	3407.3	3407.3	3645.1
3399.1	3399.1	3395.1	3405.2	3413.4	3421.5	3689.9
3423.5	3423.5	3427.6	3429.6	3447.9	3468.3	3763.0
3523.2	3533.3	3551.6	3557.7	3590.2	3612.6	3950.1
3675.6	3732.6	3769.1	3781.3	3809.8	3852.5	4265.2
3830.1	3925.7	4025.3	4086.3	4122.9	4173.7	4651.5
3946.0	4124.9	4295.7	4448.2	4535.6	4635.2	5192.2
3956.2	4240.8	4529.5	4812.1	5045.9	5230.9	5924.1
3858.6	4232.7	4631.1	5064.2	5466.7	5800.1	6765.8
3734.6	4194.0	4702.3	5255.3	5783.8	6275.8	7385.8
3578.0	4129.0	4714.5	5336.6	5956.6	6548.2	7739.6
3340.2	3935.9	4568.1	5255.3	5974.9	6694.6	7967.3
3035.2	3643.1	4291.6	5074.3	5889.5	6753.6	8158.4
2724.2	3323.9	4021.2	4832.4	5753.3	6743.4	8235.6
2394.9	2990.5	3704.1	4574.2	5568.3	6649.9	8221.4
2171.2	2714.0	3413.4	4312.0	5363.0	6525.9	8125.8
2041.1	2516.8	3183.6	4072.1	5176.0	6377.5	8005.9
2039.1	2457.9	3061.7	3901.3	4986.9	6212.8	7843.2
2110.2	2494.5	3047.4	3828.1	4883.2	6092.8	7666.4
2193.6	2596.1	3122.7	3854.5	4881.2	6040.0	7542.4
2325.7	2768.9	3287.3	3968.4	4934.0	6031.9	7389.9
2494.5	3002.7	3584.1	4248.9	5139.4	6192.5	7400.1
2667.3	3277.2	3972.4	4728.7	5543.9	6566.5	7721.3
2730.3	3488.6	4366.8	5291.9	6149.8	7127.6	8384.0
2675.4	3537.4	4606.7	5728.9	6739.3	7784.3	9174.8
2472.1	3340.2	4509.2	5853.0	7078.8	8249.8	9965.7
2035.0	2850.2	4066.0	5574.4	7052.4	8345.4	10250.3
1492.2	2209.9	3305.6	4736.8	6269.7	7747.7	9823.4
1077.5	1563.4	2386.7	3567.9	4956.4	6239.2	8239.7
772.5	1083.6	1549.1	2344.0	3376.8	4344.5	5873.3
555.0	735.9	965.7	1406.8	2057.4	2667.3	3689.9
408.6	504.2	634.3	874.2	1211.7	1553.2	2222.0
278.5	296.8	382.2	516.4	794.9	1142.5	1508.5
105.7	119.9	140.3	211.4	355.8	408.6	288.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)