

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: P158526

Luminaire Tested: **VST-F12-LED-E-U-SL3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158526
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
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-SL3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30666.2 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

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



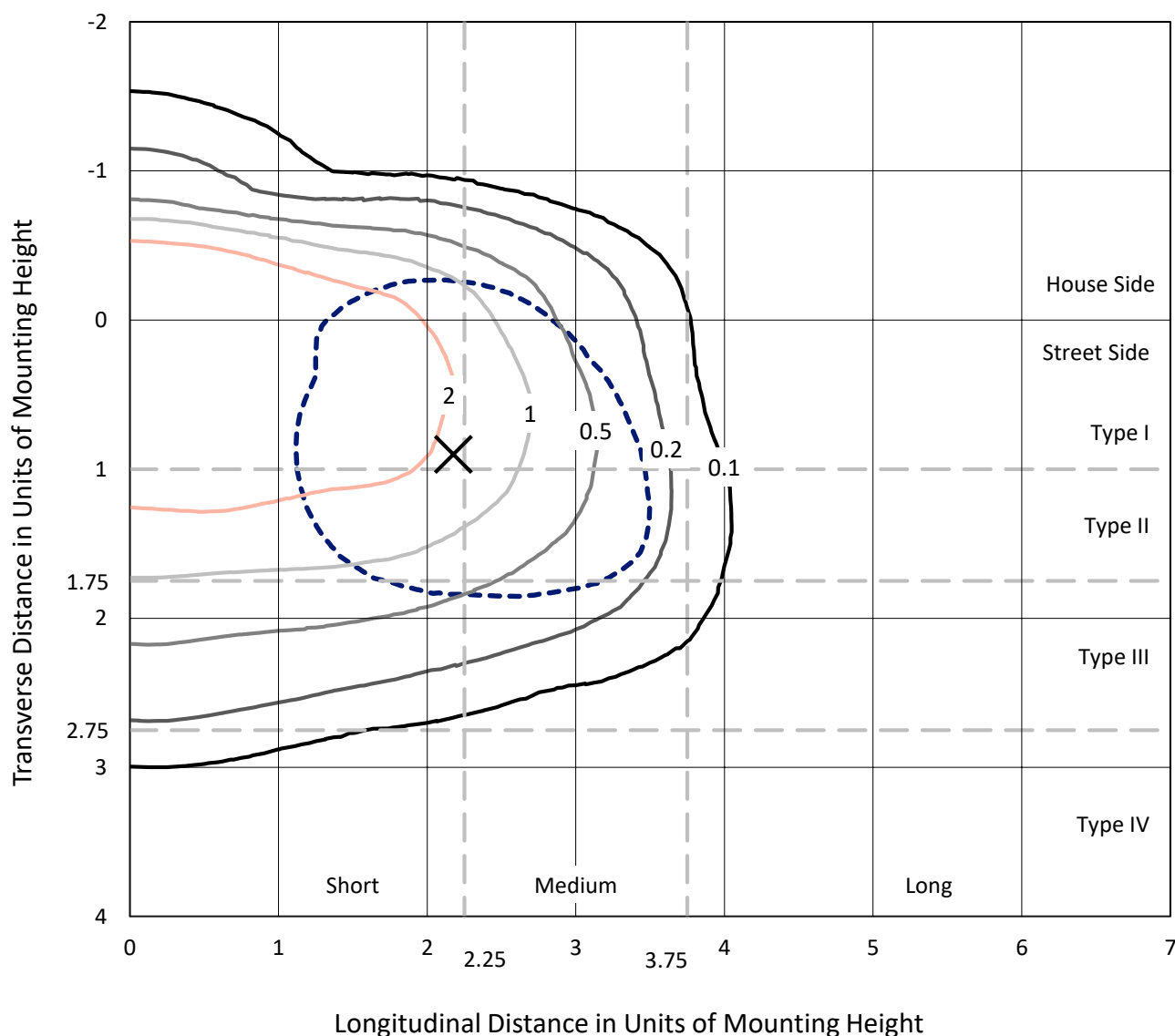
REPORT NUMBER: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

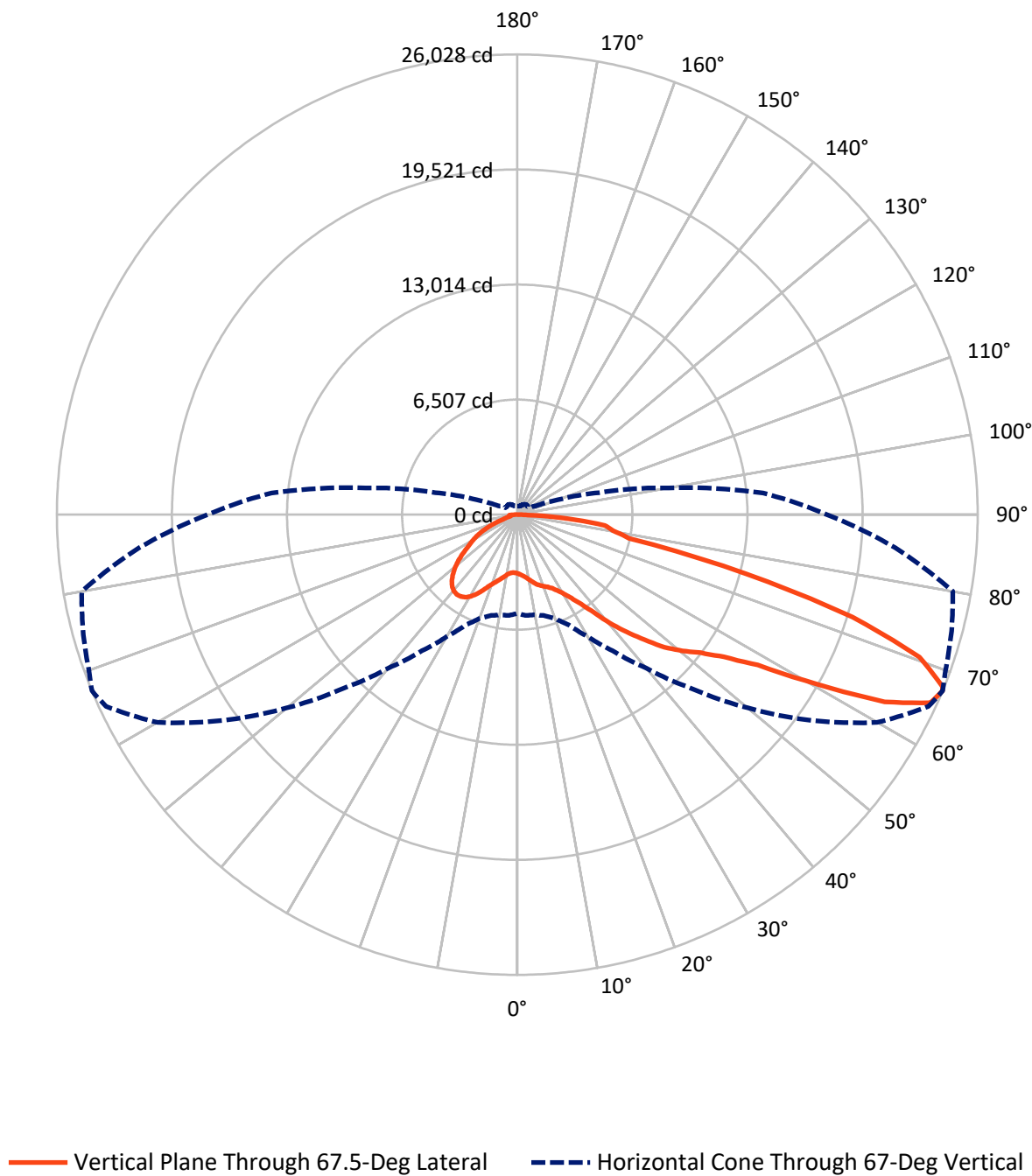


Based on 30 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7356.9	0.0	7356.9
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	23309.3	0.0	23309.3
	% Fixture	76.0	0.0	76.0
Total	Lumens	30666.2	0.0	30666.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.3	1.1
10°-20°	1125.5	3.7
20°-30°	2009.4	6.6
30°-40°	2944.9	9.6
40°-50°	4550.3	14.8
50°-60°	6626.1	21.6
60°-70°	8631.6	28.1
70°-80°	3863.8	12.6
80°-90°	584.2	1.9
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°	30666.2	100.0
0°-180°	30666.2	100.0

Coefficient of Utilization



REPORT NUMBER: P158526

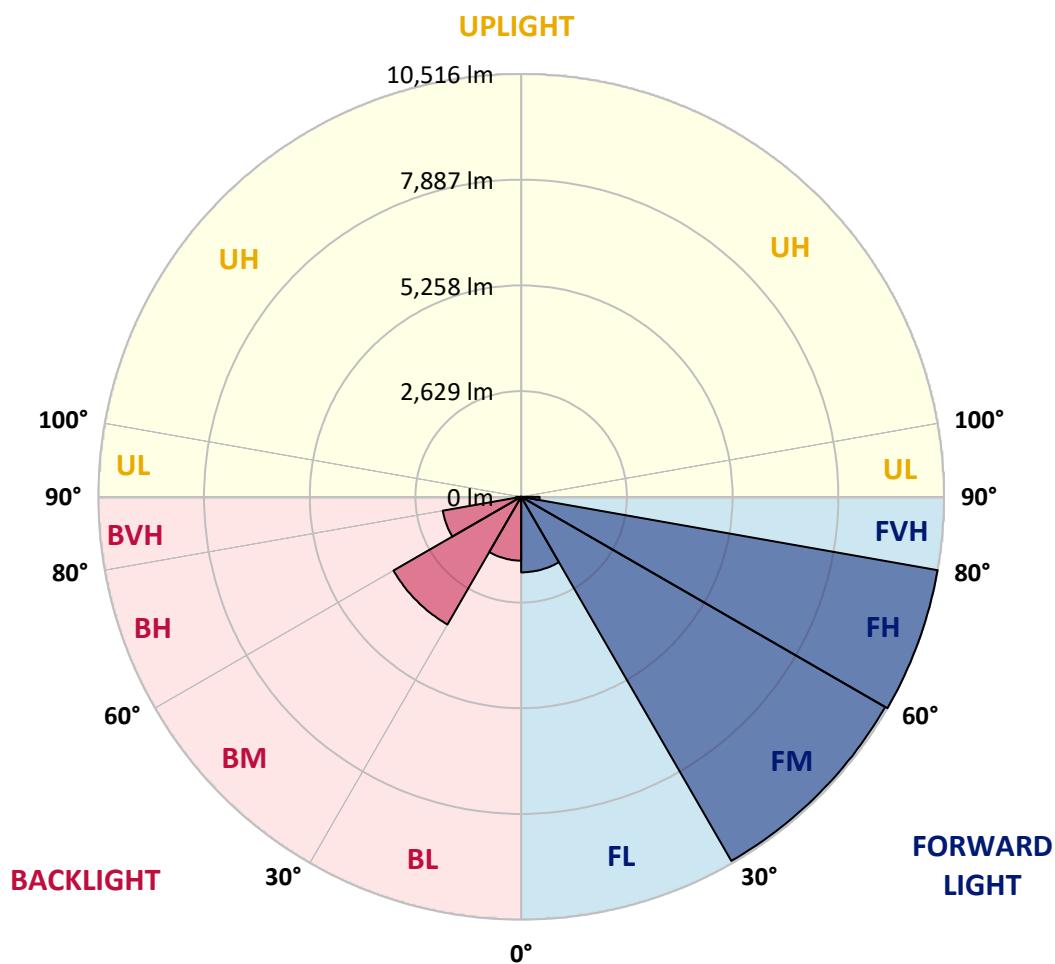
CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1878.9	6.1			
FM	(30°-60°)	10455.6	34.1			
FH	(60°-80°)	10516.0	34.3			G4/12000
FVH	(80°-90°)	458.8	1.5			G3/500
BL	(0°-30°)	1586.4	5.2	B3/2500		
BM	(30°-60°)	3665.8	12.0	B3/5000		
BH	(60°-80°)	1979.3	6.5	B3/2500		G3/2500
BVH	(80°-90°)	125.4	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-G4

Type III Short





REPORT NUMBER: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9
2.5°	3454.0	3462.2	3464.2	3462.2	3464.2	3456.1	3454.0	3441.8	3447.9	3431.7	3427.6
5°	3641.1	3647.2	3651.2	3635.0	3639.0	3630.9	3620.7	3608.5	3592.3	3569.9	3555.7
7.5°	3824.0	3834.2	3832.2	3826.1	3811.8	3803.7	3783.4	3765.1	3736.6	3710.2	3691.9
10°	4070.0	4068.0	4068.0	4033.4	4013.1	3994.8	3958.2	3929.8	3901.3	3862.7	3842.3
12.5°	4354.6	4340.4	4334.3	4309.9	4267.2	4234.7	4181.8	4127.0	4076.1	4035.5	4002.9
15°	4629.1	4629.1	4612.8	4574.2	4533.5	4490.9	4415.6	4336.3	4253.0	4187.9	4155.4
17.5°	4879.2	4856.8	4842.6	4791.7	4749.0	4679.9	4596.6	4511.2	4407.5	4316.0	4253.0
20°	5062.1	5043.8	5013.3	4950.3	4877.1	4795.8	4698.2	4598.6	4486.8	4387.2	4316.0
22.5°	5167.8	5145.5	5098.7	5015.4	4915.7	4801.9	4688.1	4594.5	4492.9	4417.7	4358.7
25°	5222.7	5200.4	5137.3	5027.6	4893.4	4742.9	4612.8	4521.4	4462.4	4444.1	4436.0
27.5°	5220.7	5202.4	5135.3	5009.3	4836.5	4663.7	4523.4	4446.1	4440.0	4511.2	4564.0
30°	5167.8	5155.6	5094.7	4968.6	4787.7	4606.7	4476.6	4436.0	4499.0	4649.4	4779.5
32.5°	5115.0	5108.9	5066.2	4952.3	4797.8	4645.4	4555.9	4560.0	4690.1	4921.8	5131.2
35°	5121.1	5129.2	5123.1	5062.1	4964.5	4885.3	4842.6	4932.0	5135.3	5415.9	5696.4
37.5°	5173.9	5204.4	5243.1	5249.2	5251.2	5239.0	5328.4	5517.5	5814.3	6180.3	6619.4
40°	5289.8	5324.4	5436.2	5533.8	5659.8	5810.3	5991.2	6253.5	6621.4	7072.7	7611.5
42.5°	5649.7	5698.4	5836.7	6017.6	6249.4	6485.2	6755.6	7113.4	7564.7	8040.4	8605.6
45°	6119.3	6220.9	6373.4	6574.7	6922.3	7253.7	7603.4	8003.8	8483.6	9079.3	9648.5
47.5°	6704.8	6806.4	7028.0	7243.5	7654.2	8066.9	8449.1	8867.9	9388.3	9998.2	10628.4
50°	7217.1	7333.0	7530.2	7820.9	8296.6	8802.8	9225.7	9679.0	10116.1	10758.5	11394.9
52.5°	7619.6	7703.0	7892.0	8158.4	8689.0	9244.0	9778.6	10282.8	10801.2	11443.7	12033.2
55°	7670.4	7747.7	7932.7	8237.6	8776.4	9392.4	10008.4	10606.1	11340.0	12041.3	12822.0
57.5°	7450.9	7513.9	7700.9	7973.4	8497.9	9199.2	9977.9	10744.3	11683.5	12630.9	13584.4
60°	7139.8	7202.9	7349.2	7566.8	8040.4	8796.7	9705.5	10754.5	12002.7	13370.9	14773.7
62.5°	6798.3	6853.2	6971.1	7125.6	7542.4	8239.7	9280.6	10687.4	12262.9	14106.9	16270.0
65°	6223.0	6355.1	6405.9	6564.5	6981.3	7639.9	8699.1	10234.0	12157.2	14434.2	17209.2
67°	5586.6	5720.8	5747.2	5907.8	6241.3	6873.5	7951.0	9394.4	11319.6	13869.0	17001.8
67.5°	5383.3	5497.2	5537.8	5698.4	6013.6	6609.2	7631.8	9091.5	11063.5	13560.0	16751.8
70°	3958.2	4084.3	4129.0	4196.1	4421.7	4917.8	5594.8	6861.3	8821.1	11065.5	14131.3
72.5°	2118.4	2220.0	2262.7	2362.3	2478.2	2748.6	3267.0	4175.7	5413.8	7404.1	10053.1
75°	1433.3	1473.9	1504.4	1573.5	1693.5	1909.0	2136.7	2455.8	3204.0	4177.8	5720.8
77.5°	817.3	835.6	839.6	851.8	947.4	1152.7	1526.8	2067.5	2651.0	3027.1	3659.4
80°	353.7	390.3	418.8	400.5	394.4	437.1	546.9	815.2	1597.9	2537.2	3010.8
82.5°	191.1	207.4	231.8	233.8	246.0	260.2	282.6	335.4	471.7	951.4	2075.7
85°	99.6	103.7	138.2	158.6	168.7	176.9	180.9	201.3	231.8	294.8	516.4
87.5°	14.2	20.3	24.4	32.5	36.6	38.6	44.7	56.9	67.1	81.3	138.2
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: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9
2.5°	3409.3	3405.2	3393.0	3384.9	3376.8	3368.7	3358.5	3350.4	3336.1	3326.0	3313.8
5°	3535.4	3511.0	3494.7	3472.3	3468.3	3441.8	3415.4	3403.2	3378.8	3358.5	3334.1
7.5°	3663.4	3635.0	3608.5	3590.2	3580.1	3543.5	3517.1	3486.6	3458.1	3431.7	3403.2
10°	3813.9	3785.4	3756.9	3744.8	3726.5	3691.9	3669.5	3630.9	3602.4	3569.9	3531.3
12.5°	3970.4	3950.1	3929.8	3913.5	3905.4	3889.1	3856.6	3824.0	3785.4	3752.9	3708.2
15°	4108.7	4094.4	4086.3	4082.2	4082.2	4072.1	4041.6	4011.1	3970.4	3933.8	3885.0
17.5°	4206.2	4200.1	4206.2	4212.3	4220.5	4212.3	4206.2	4171.7	4145.2	4100.5	4051.7
20°	4263.2	4275.4	4305.9	4326.2	4344.5	4358.7	4364.8	4336.3	4301.8	4269.3	4236.7
22.5°	4324.2	4358.7	4411.6	4442.1	4472.6	4523.4	4535.6	4515.3	4488.8	4468.5	4433.9
25°	4425.8	4476.6	4568.1	4616.9	4659.6	4734.8	4745.0	4749.0	4742.9	4726.7	4684.0
27.5°	4584.4	4684.0	4806.0	4869.0	4915.7	5013.3	5052.0	5052.0	5035.7	5054.0	5054.0
30°	4860.9	4993.0	5151.6	5188.2	5261.4	5346.7	5409.8	5417.9	5419.9	5458.6	5515.5
32.5°	5285.8	5411.8	5588.7	5629.3	5692.3	5773.7	5844.8	5836.7	5855.0	5938.3	6013.6
35°	5903.8	6031.9	6147.7	6202.6	6231.1	6304.3	6330.7	6375.4	6430.3	6534.0	6523.8
37.5°	6818.6	6932.5	6948.7	6983.3	6948.7	6963.0	6983.3	7036.1	7182.5	7276.0	7125.6
40°	7920.5	8109.6	8091.3	8050.6	7973.4	7869.7	7906.3	7987.6	8146.2	8064.8	7660.3
42.5°	8959.3	9154.5	9117.9	9071.2	8900.4	8861.8	8857.7	8924.8	9010.2	8778.4	8079.1
45°	9981.9	10181.2	10118.1	10091.7	9977.9	9894.5	9963.6	9967.7	9945.3	9449.3	8445.0
47.5°	11037.1	11220.0	11179.4	11201.7	11083.8	11028.9	11035.0	11006.6	10797.2	10018.5	8729.6
50°	11888.9	12134.9	12159.3	12108.4	12045.4	11962.1	12175.5	12098.3	11632.7	10571.5	9004.1
52.5°	12551.6	12883.0	13009.0	12976.5	12925.7	12935.9	13336.4	13423.8	12653.3	11268.8	9307.0
55°	13336.4	13858.8	14064.2	14186.1	14133.3	14336.6	15253.5	15298.2	14072.3	12179.6	9701.4
57.5°	14468.7	15216.9	15865.4	16038.2	16204.9	16865.6	18353.8	17900.4	15914.2	13558.0	10201.5
60°	16190.7	17829.2	18882.3	19435.3	19825.6	20748.6	22163.6	21014.9	18209.4	15198.6	10829.7
62.5°	18601.8	20996.6	22757.2	23312.2	23472.8	24003.4	25028.0	22830.4	19459.7	15934.5	10884.6
65°	20396.9	23269.5	25377.7	25662.3	25471.2	25481.4	25749.7	22734.8	18994.1	15292.1	9941.3
67°	20279.0	23495.2	25654.2	26028.3	25764.0	25416.3	24997.5	21439.8	17497.9	13946.3	8705.2
67.5°	20098.1	23277.6	25534.2	25928.6	25686.7	25290.3	24678.4	20937.7	17032.3	13527.5	8453.1
70°	17373.9	20531.1	23570.4	24125.4	24227.0	23865.2	22147.3	17654.4	13828.3	11004.5	6564.5
72.5°	13523.4	16335.0	19341.8	19823.6	20213.9	19171.0	16119.5	12193.8	10079.5	7930.7	4753.1
75°	8928.9	11789.3	13305.9	13377.0	12878.9	10947.6	7875.8	6107.1	5621.2	4661.6	2941.7
77.5°	4777.5	6932.5	6975.2	6458.8	6223.0	4639.3	1882.5	1038.9	1156.8	1313.3	1171.0
80°	3563.8	4415.6	5117.0	5501.2	5615.1	3978.5	973.8	550.9	481.8	439.1	433.0
82.5°	3214.1	4265.2	4781.6	4991.0	4938.1	3273.1	546.9	370.0	307.0	333.4	380.2
85°	1260.4	2276.9	2994.6	2899.0	2435.5	1219.8	298.8	199.2	199.2	288.7	374.1
87.5°	258.2	467.6	634.3	605.8	544.8	235.8	146.4	119.9	122.0	233.8	353.7
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: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9	3323.9
2.5°	3301.6	3289.4	3281.2	3273.1	3265.0	3260.9	3254.8	3254.8	3242.6	3238.5	3234.5
5°	3315.8	3295.5	3281.2	3262.9	3248.7	3236.5	3220.2	3216.2	3201.9	3191.8	3187.7
7.5°	3376.8	3346.3	3315.8	3293.4	3273.1	3246.7	3228.4	3212.1	3197.9	3187.7	3175.5
10°	3492.7	3460.1	3417.4	3376.8	3350.4	3309.7	3281.2	3252.8	3236.5	3224.3	3208.0
12.5°	3663.4	3616.7	3565.8	3517.1	3472.3	3419.5	3391.0	3356.5	3336.1	3326.0	3313.8
15°	3838.3	3787.4	3724.4	3677.7	3626.8	3586.2	3559.8	3529.3	3513.0	3500.8	3492.7
17.5°	4017.2	3958.2	3913.5	3866.7	3842.3	3811.8	3777.3	3738.7	3691.9	3663.4	3624.8
20°	4200.1	4155.4	4129.0	4102.6	4074.1	4031.4	3962.3	3883.0	3795.6	3712.2	3632.9
22.5°	4413.6	4387.2	4383.1	4358.7	4299.8	4198.1	4070.0	3921.6	3773.2	3635.0	3527.2
25°	4714.5	4714.5	4694.2	4594.5	4456.3	4273.3	4057.8	3844.4	3647.2	3458.1	3315.8
27.5°	5092.6	5078.4	4978.8	4773.4	4525.4	4240.8	3952.1	3681.7	3429.6	3222.3	3039.3
30°	5509.4	5409.8	5196.3	4873.1	4501.0	4135.1	3781.3	3468.3	3171.5	2917.3	2701.8
32.5°	5942.4	5700.5	5316.2	4873.1	4415.6	3976.5	3567.9	3183.6	2844.1	2559.5	2303.4
35°	6334.8	5893.6	5344.7	4793.8	4248.9	3742.7	3269.0	2834.0	2427.4	2120.4	1839.8
37.5°	6690.5	6021.7	5314.2	4639.3	4007.0	3413.4	2858.4	2378.6	1919.1	1622.3	1382.4
40°	6922.3	6048.1	5188.2	4397.3	3661.4	2968.2	2354.2	1817.5	1453.6	1183.2	1022.6
42.5°	7066.6	5997.3	4984.9	4066.0	3195.8	2409.1	1766.7	1303.1	1032.8	882.3	821.3
45°	7148.0	5865.2	4684.0	3612.6	2632.7	1831.7	1254.3	941.3	794.9	742.0	721.7
47.5°	7143.9	5651.7	4307.9	3088.1	2010.6	1276.7	888.4	733.9	693.2	677.0	672.9
50°	7101.2	5389.4	3866.7	2518.9	1451.5	890.4	703.4	658.7	648.5	638.4	634.3
52.5°	7042.2	5064.2	3378.8	1963.9	1030.7	711.5	638.4	626.2	618.0	607.9	603.8
55°	6932.5	4663.7	2850.2	1478.0	807.1	642.4	616.0	611.9	601.8	587.5	579.4
57.5°	6798.3	4257.1	2344.0	1154.7	713.6	626.2	611.9	605.8	591.6	575.3	559.1
60°	6749.5	3921.6	1947.6	973.8	691.2	632.3	622.1	614.0	593.6	569.2	550.9
62.5°	6444.6	3543.5	1663.0	902.6	703.4	658.7	654.6	642.4	611.9	583.5	555.0
65°	5655.8	2996.6	1408.9	853.9	727.8	703.4	707.5	689.2	658.7	620.1	569.2
67°	4783.6	2443.6	1173.0	807.1	746.1	750.2	764.4	750.2	711.5	656.7	587.5
67.5°	4551.8	2303.4	1114.1	792.9	750.2	762.4	778.6	768.5	729.8	666.8	595.7
70°	3382.9	1622.3	831.5	717.6	750.2	799.0	835.6	845.7	803.0	715.6	611.9
72.5°	2382.7	1047.0	638.4	622.1	681.0	746.1	815.2	849.8	801.0	705.4	589.6
75°	1431.2	654.6	518.4	528.6	573.3	640.4	695.3	709.5	648.5	587.5	510.3
77.5°	662.8	435.1	406.6	420.8	463.5	494.0	494.0	465.6	418.8	382.2	365.9
80°	390.3	355.8	353.7	380.2	408.6	386.3	351.7	313.1	288.7	276.5	270.4
82.5°	365.9	380.2	404.6	410.7	388.3	333.4	290.7	252.1	239.9	233.8	227.7
85°	431.0	461.5	420.8	388.3	343.6	280.6	227.7	195.2	189.1	183.0	174.8
87.5°	398.5	380.2	331.4	284.6	235.8	170.8	124.0	111.8	119.9	117.9	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: P158526

CATALOG NUMBER: VST-F12-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3323.9	3323.9	3323.9	3323.9	3323.9
2.5°	3236.5	3236.5	3228.4	3224.3	3234.5
5°	3179.6	3181.6	3175.5	3173.5	3175.5
7.5°	3167.4	3165.4	3161.3	3157.2	3161.3
10°	3204.0	3201.9	3195.8	3199.9	3193.8
12.5°	3313.8	3326.0	3323.9	3328.0	3336.1
15°	3492.7	3490.6	3484.5	3488.6	3494.7
17.5°	3594.3	3578.0	3563.8	3557.7	3557.7
20°	3569.9	3523.2	3498.8	3484.5	3480.5
22.5°	3425.6	3358.5	3307.7	3295.5	3285.3
25°	3189.7	3106.4	3041.3	3027.1	3000.7
27.5°	2915.3	2803.5	2726.2	2710.0	2695.7
30°	2555.5	2427.4	2337.9	2281.0	2299.3
32.5°	2116.3	1994.4	1890.7	1799.2	1785.0
35°	1634.5	1500.3	1408.9	1368.2	1341.8
37.5°	1219.8	1108.0	1047.0	1008.4	1010.4
40°	933.1	874.2	841.7	815.2	817.3
42.5°	778.6	752.2	744.1	731.9	725.8
45°	705.4	697.3	699.3	687.1	683.1
47.5°	664.8	658.7	660.7	652.6	650.6
50°	632.3	628.2	630.2	624.1	622.1
52.5°	599.7	601.8	599.7	595.7	595.7
55°	571.3	569.2	573.3	567.2	567.2
57.5°	548.9	546.9	546.9	544.8	544.8
60°	536.7	528.6	526.5	526.5	528.6
62.5°	530.6	516.4	514.3	514.3	516.4
65°	532.6	510.3	502.1	500.1	498.1
67°	534.7	502.1	485.9	477.8	475.7
67.5°	536.7	498.1	479.8	471.7	467.6
70°	524.5	469.6	443.2	429.0	424.9
72.5°	494.0	435.1	402.5	384.2	380.2
75°	439.1	394.4	365.9	345.6	337.5
77.5°	339.5	319.2	309.0	296.8	292.7
80°	264.3	254.1	250.1	241.9	239.9
82.5°	219.6	209.4	203.3	193.1	187.0
85°	170.8	158.6	154.5	146.4	142.3
87.5°	111.8	105.7	103.7	93.5	89.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)