

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: P158073

Luminaire Tested: **VST-F11-LED-E-U-RW-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158073
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
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-RW-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (77) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23876.8 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B4 - 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

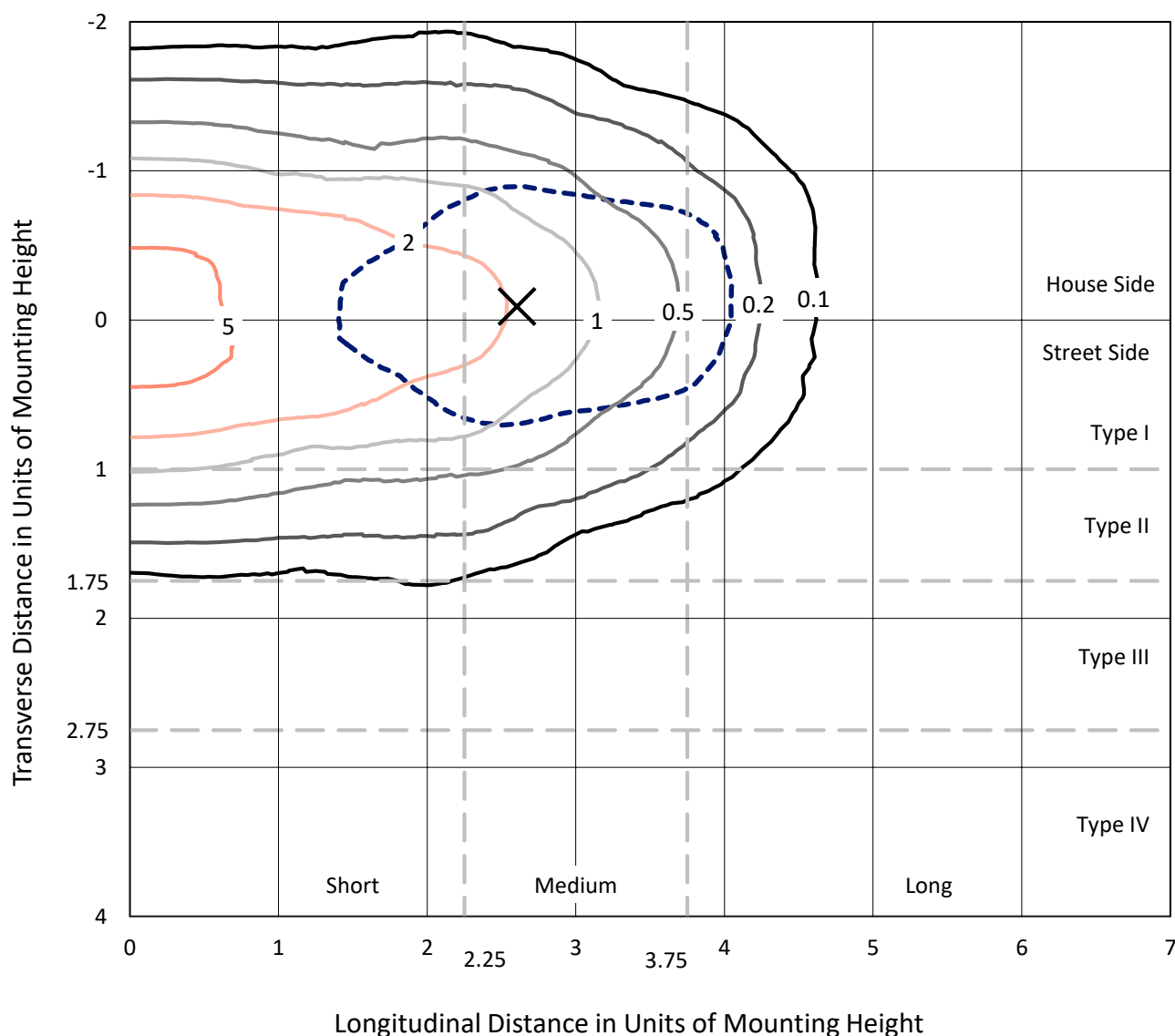


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

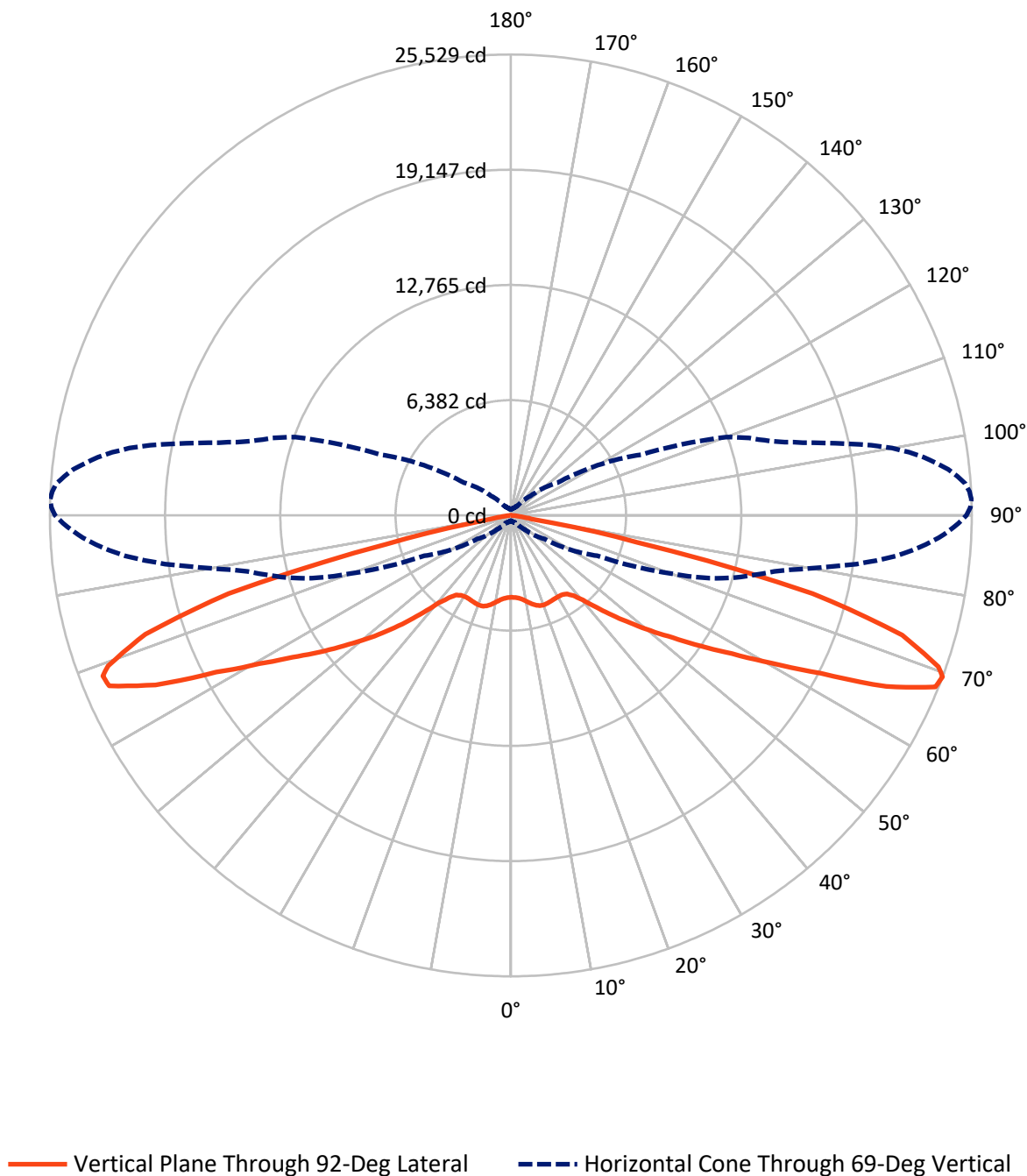


Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12663.1	0.0	12663.1
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	11213.7	0.0	11213.7
	% Fixture	47.0	0.0	47.0
Total	Lumens	23876.8	0.0	23876.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.8	1.9
10°-20°	1402.0	5.9
20°-30°	2274.6	9.5
30°-40°	2834.8	11.9
40°-50°	3529.6	14.8
50°-60°	4352.9	18.2
60°-70°	5406.0	22.6
70°-80°	3321.7	13.9
80°-90°	311.3	1.3
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°	23876.8	100.0
0°-180°	23876.8	100.0

Coefficient of Utilization



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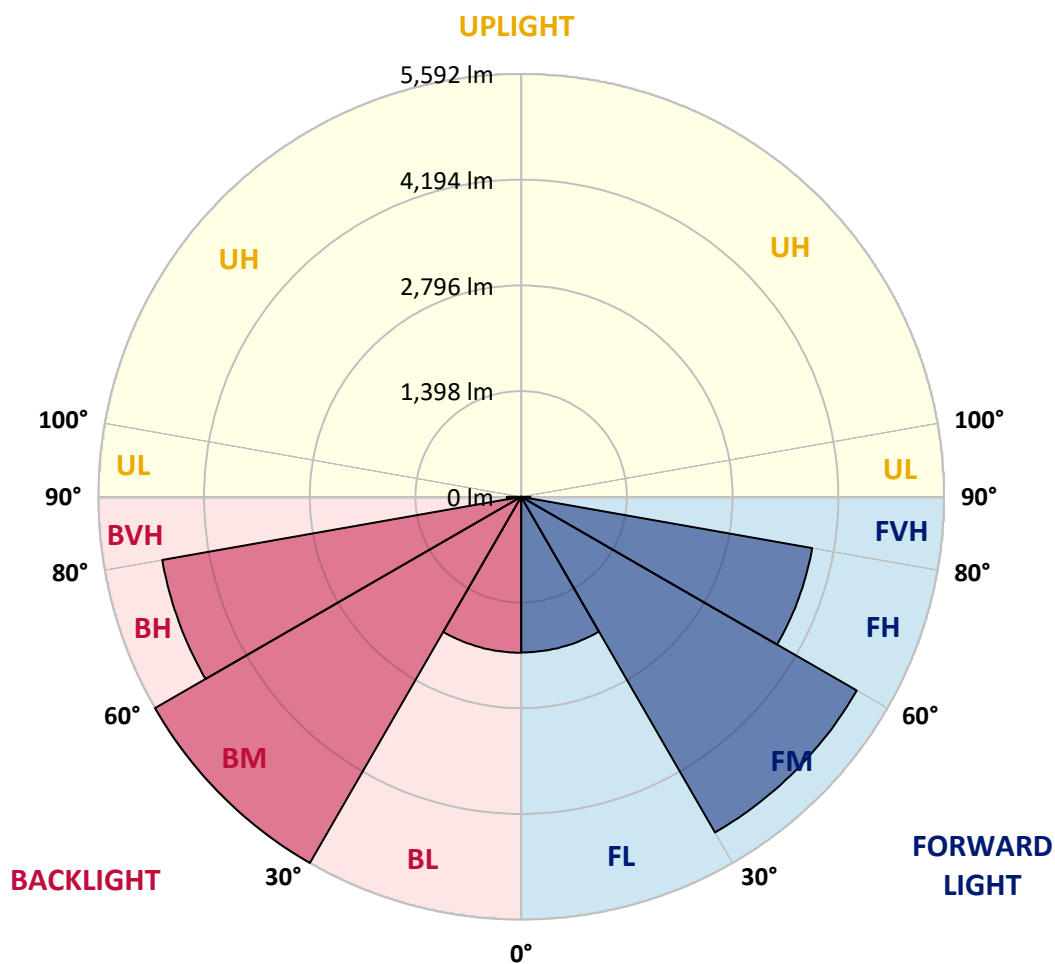
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2058.0	8.6			
FM	(30°-60°)	5125.4	21.5			
FH	(60°-80°)	3908.3	16.4			G2/5000
FVH	(80°-90°)	121.9	0.5			G2/225
BL	(0°-30°)	2062.4	8.6	B3/2500		
BM	(30°-60°)	5591.9	23.4	B4/8500		
BH	(60°-80°)	4819.4	20.2	B4/5000		G4/5000
BVH	(80°-90°)	189.4	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6
2.5°	4607.7	4595.4	4606.1	4607.7	4606.1	4606.1	4592.3	4589.3	4570.9	4575.5	4573.9
5°	4670.5	4665.9	4673.6	4676.6	4679.7	4673.6	4662.8	4658.2	4646.0	4641.4	4639.8
7.5°	4728.7	4721.1	4733.3	4744.1	4751.7	4753.3	4754.8	4747.1	4747.1	4741.0	4741.0
10°	4777.8	4771.7	4791.6	4805.4	4829.9	4843.7	4859.0	4869.8	4875.9	4877.4	4875.9
12.5°	4799.3	4794.7	4826.8	4868.2	4914.2	4946.4	4984.7	5012.3	5020.0	5018.4	5026.1
15°	4762.5	4765.5	4814.6	4895.8	4993.9	5075.2	5128.8	5151.8	5157.9	5161.0	5162.5
17.5°	4662.8	4669.0	4739.5	4871.3	5043.0	5190.1	5269.8	5269.8	5257.6	5257.6	5256.0
20°	4503.4	4509.6	4601.5	4791.6	5044.5	5269.8	5383.3	5360.3	5314.3	5305.1	5295.9
22.5°	4282.7	4307.2	4408.4	4629.1	4978.6	5292.8	5453.8	5420.0	5348.0	5328.1	5314.3
25°	4032.8	4029.8	4150.9	4399.2	4819.2	5237.6	5473.7	5467.6	5390.9	5369.5	5344.9
27.5°	3747.7	3756.9	3868.8	4120.2	4575.5	5078.2	5440.0	5521.2	5458.4	5436.9	5413.9
30°	3455.0	3464.2	3569.9	3862.7	4298.0	4849.8	5371.0	5573.3	5548.8	5531.9	5516.6
32.5°	3160.7	3163.7	3289.4	3603.7	4063.5	4577.0	5266.8	5620.8	5654.6	5646.9	5640.8
35°	2884.8	2887.8	3024.3	3343.1	3832.0	4344.0	5141.1	5689.8	5798.7	5807.8	5814.0
37.5°	2616.5	2621.1	2760.6	3094.8	3603.7	4167.7	5001.6	5795.6	6001.0	6034.7	6040.8
40°	2349.8	2354.4	2487.8	2841.8	3372.2	4012.9	4894.3	5944.3	6273.8	6319.8	6367.3
42.5°	2095.4	2112.2	2225.7	2564.4	3114.7	3821.3	4848.3	6125.1	6597.2	6669.3	6722.9
45°	1857.8	1859.3	1988.1	2305.4	2809.7	3562.3	4817.6	6330.5	6959.0	7067.8	7141.4
47.5°	1603.3	1621.7	1756.6	2064.7	2524.6	3241.9	4719.5	6571.2	7352.9	7480.2	7628.8
50°	1356.5	1382.6	1512.9	1817.9	2264.0	2910.8	4455.9	6853.2	7795.9	7961.5	8133.1
52.5°	1119.0	1117.4	1255.4	1572.7	2001.9	2630.3	4028.2	7149.1	8307.9	8485.7	8671.2
55°	846.1	846.1	982.5	1272.2	1718.3	2380.5	3569.9	7333.0	8783.0	8997.6	9200.0
57.5°	580.9	596.3	725.0	974.9	1422.5	2152.1	3218.9	7227.2	9146.3	9413.0	9653.7
60°	430.7	446.1	541.1	700.5	1112.8	1882.3	2955.3	6729.1	9365.5	9719.6	10032.3
62.5°	372.5	383.2	473.6	561.0	801.7	1595.7	2722.3	6096.0	9681.3	10165.7	10601.0
65°	332.6	343.4	433.8	484.4	626.9	1283.0	2592.0	5734.3	10058.4	10798.7	11430.2
67.5°	308.1	320.4	397.0	433.8	547.2	1160.3	2490.8	5650.0	10055.3	10953.5	11759.8
69°	295.8	305.0	367.9	407.7	528.8	1123.6	2271.6	5283.6	9391.6	10355.7	11165.0
70°	288.2	297.4	351.0	390.9	522.7	1057.6	2069.3	4799.3	8635.9	9606.2	10427.8
72.5°	263.6	272.8	312.7	349.5	435.3	706.6	1442.4	3071.8	6171.1	6864.0	7803.6
75°	233.0	243.7	274.4	305.0	329.6	409.3	832.3	1594.1	3528.5	4054.3	4891.2
77.5°	190.1	200.8	233.0	282.0	279.0	311.2	541.1	979.5	1652.4	2049.4	2359.0
80°	156.3	164.0	191.6	285.1	228.4	260.6	438.4	803.2	1163.4	1286.0	1359.6
82.5°	104.2	115.0	148.7	223.8	174.7	185.5	328.0	751.1	984.1	1079.1	1168.0
85°	49.1	53.6	90.4	119.6	105.8	99.6	187.0	530.4	732.7	777.1	810.9
87.5°	0.0	0.0	4.6	9.2	13.8	13.8	33.7	111.9	205.4	248.3	245.3
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6
2.5°	4567.8	4569.3	4567.8	4567.8	4566.3	4563.2	4563.2	4560.1	4561.7	4560.1	4563.2
5°	4638.3	4638.3	4633.7	4630.6	4635.2	4630.6	4632.2	4624.5	4624.5	4619.9	4613.8
7.5°	4739.5	4739.5	4741.0	4731.8	4737.9	4739.5	4734.9	4731.8	4728.7	4721.1	4722.6
10°	4874.4	4874.4	4879.0	4866.7	4872.8	4875.9	4877.4	4877.4	4874.4	4860.6	4862.1
12.5°	5024.6	5021.5	5023.0	5016.9	5023.0	5026.1	5029.2	5026.1	5026.1	5023.0	5021.5
15°	5161.0	5159.5	5162.5	5157.9	5159.5	5162.5	5171.7	5170.2	5168.7	5159.5	5159.5
17.5°	5254.5	5249.9	5246.8	5245.3	5245.3	5243.8	5245.3	5245.3	5240.7	5239.2	5239.2
20°	5289.8	5277.5	5269.8	5265.2	5259.1	5256.0	5253.0	5254.5	5251.4	5246.8	5248.4
22.5°	5295.9	5279.0	5263.7	5249.9	5237.6	5230.0	5222.3	5219.2	5211.6	5207.0	5207.0
25°	5325.0	5299.0	5274.4	5251.4	5233.0	5216.2	5199.3	5187.1	5177.9	5167.1	5164.1
27.5°	5389.4	5361.8	5332.7	5303.6	5279.0	5245.3	5222.3	5197.8	5176.3	5159.5	5147.2
30°	5489.0	5461.4	5432.3	5398.6	5366.4	5331.1	5292.8	5263.7	5233.0	5199.3	5180.9
32.5°	5620.8	5602.5	5573.3	5541.1	5512.0	5475.2	5429.2	5384.8	5355.7	5315.8	5286.7
35°	5809.4	5787.9	5778.7	5764.9	5735.8	5712.8	5662.2	5620.8	5593.3	5538.1	5516.6
37.5°	6066.9	6065.4	6073.0	6068.4	6073.0	6043.9	6020.9	6019.4	5979.5	5925.9	5873.8
40°	6417.9	6436.3	6477.7	6506.8	6534.4	6537.5	6569.7	6535.9	6540.5	6532.9	6479.2
42.5°	6818.0	6880.8	6929.9	7015.7	7081.6	7142.9	7184.3	7241.0	7284.0	7322.3	7331.5
45°	7264.0	7357.5	7471.0	7547.6	7676.4	7779.1	7920.1	8028.9	8142.3	8254.2	8294.1
47.5°	7748.4	7864.9	7990.6	8133.1	8295.6	8456.6	8674.2	8841.3	9023.7	9175.4	9310.3
50°	8283.3	8404.4	8573.1	8737.1	8960.9	9146.3	9431.4	9650.6	9944.9	10147.3	10322.0
52.5°	8841.3	8993.0	9181.6	9362.5	9590.8	9828.4	10145.7	10469.1	10823.2	11129.8	11384.2
55°	9387.0	9574.0	9754.9	9966.4	10219.3	10495.2	10853.9	11280.0	11721.5	12072.5	12409.7
57.5°	9872.9	10089.0	10302.1	10516.7	10775.7	11096.1	11499.2	11959.0	12464.9	12932.4	13395.3
60°	10323.5	10582.6	10843.2	11111.4	11408.8	11804.2	12288.6	12854.2	13508.7	14147.9	14753.4
62.5°	11036.3	11376.6	11700.0	12046.4	12405.1	12869.5	13441.3	14183.2	14934.2	15732.8	16353.6
65°	12002.0	12480.2	12903.3	13352.4	13816.8	14437.6	15121.3	16008.8	17084.8	17903.3	18899.6
67.5°	12481.7	13111.7	13655.9	14155.6	14730.4	15357.3	16169.7	17219.7	18367.8	19554.2	20665.5
69°	11917.7	12567.6	13170.0	13729.5	14310.4	14918.9	15768.1	16845.7	18059.7	19342.6	20427.9
70°	11186.5	11836.4	12478.7	13116.3	13646.7	14239.9	15092.1	16203.4	17415.9	18749.4	19825.5
72.5°	8570.0	9351.7	9932.7	10530.5	11145.1	11647.9	12632.0	13568.5	14831.5	16185.0	17369.9
75°	5482.9	6201.8	6836.4	7345.3	7946.1	8548.5	9275.1	10315.9	11106.8	12218.1	13179.2
77.5°	2817.3	3030.4	3642.0	3824.4	4241.3	4569.3	4969.4	5230.0	5873.8	6010.2	6577.3
80°	1335.1	1203.3	1132.8	1068.4	1086.8	1079.1	1046.9	1004.0	1057.6	1034.7	1025.5
82.5°	1163.4	1037.7	827.7	703.6	608.5	516.6	444.5	407.7	412.3	424.6	429.2
85°	815.5	766.4	597.8	453.7	354.1	274.4	220.7	211.5	217.7	234.5	228.4
87.5°	236.1	246.8	217.7	151.7	105.8	76.6	59.8	67.4	64.4	62.8	65.9
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6
2.5°	4563.2	4561.7	4557.1	4552.5	4552.5	4549.4	4552.5	4554.0	4552.5	4552.5	4549.4
5°	4615.3	4616.8	4621.4	4612.2	4610.7	4612.2	4606.1	4604.6	4600.0	4604.6	4598.5
7.5°	4714.9	4719.5	4719.5	4713.4	4711.9	4716.5	4707.3	4704.2	4699.6	4698.1	4696.6
10°	4863.6	4868.2	4860.6	4856.0	4851.4	4857.5	4849.8	4849.8	4845.2	4840.6	4839.1
12.5°	5029.2	5026.1	5023.0	5026.1	5021.5	5021.5	5016.9	5013.8	5012.3	5010.8	5007.7
15°	5157.9	5168.7	5168.7	5171.7	5168.7	5168.7	5162.5	5164.1	5161.0	5159.5	5161.0
17.5°	5240.7	5243.8	5251.4	5256.0	5256.0	5257.6	5254.5	5257.6	5254.5	5254.5	5260.6
20°	5251.4	5254.5	5262.2	5269.8	5274.4	5277.5	5277.5	5282.1	5285.2	5288.2	5295.9
22.5°	5208.5	5213.1	5222.3	5236.1	5243.8	5246.8	5253.0	5260.6	5268.3	5274.4	5285.2
25°	5164.1	5165.6	5174.8	5188.6	5197.8	5205.5	5216.2	5225.4	5236.1	5248.4	5260.6
27.5°	5139.5	5138.0	5145.7	5159.5	5167.1	5177.9	5187.1	5200.9	5213.1	5228.4	5239.2
30°	5161.0	5148.7	5150.3	5156.4	5162.5	5170.2	5180.9	5193.2	5207.0	5220.8	5233.0
32.5°	5256.0	5228.4	5210.0	5205.5	5207.0	5208.5	5214.6	5222.3	5233.0	5243.8	5248.4
35°	5461.4	5413.9	5389.4	5369.5	5352.6	5338.8	5341.9	5340.3	5340.3	5349.5	5338.8
37.5°	5852.3	5792.5	5766.5	5731.2	5711.3	5660.7	5646.9	5643.8	5623.9	5623.9	5600.9
40°	6465.4	6430.2	6410.2	6378.1	6281.5	6293.8	6224.8	6226.3	6169.6	6175.7	6135.9
42.5°	7337.6	7342.2	7317.7	7296.2	7221.1	7187.4	7123.0	7031.0	6959.0	6957.5	6877.8
45°	8346.2	8401.4	8323.2	8350.8	8284.9	8194.4	8119.3	8001.3	7889.4	7854.2	7772.9
47.5°	9400.8	9491.2	9431.4	9442.2	9410.0	9281.2	9180.0	9034.4	8888.8	8790.7	8741.7
50°	10527.4	10587.2	10585.6	10556.5	10541.2	10415.5	10253.0	10142.7	10035.4	9903.5	9860.6
52.5°	11548.3	11687.7	11781.2	11759.8	11715.3	11640.2	11496.1	11401.1	11243.2	11224.8	11243.2
55°	12641.2	12822.0	12917.1	13032.0	13033.6	13019.8	12960.0	12924.7	12777.6	12794.4	12773.0
57.5°	13675.8	13941.0	14086.6	14331.9	14416.2	14528.1	14486.7	14532.6	14443.7	14502.0	14485.1
60°	15078.3	15446.2	15688.4	16024.1	16180.4	16460.9	16516.1	16549.8	16598.9	16718.4	16651.0
62.5°	16842.6	17382.2	17884.9	18341.7	18491.9	18913.4	18982.4	19246.1	19259.9	19341.1	19192.4
65°	19730.4	20388.0	20941.4	21488.6	21804.3	22297.9	22497.2	23009.1	22852.8	22918.7	22601.4
67.5°	21621.9	22386.8	23128.7	23646.8	24171.0	24675.3	25038.6	25369.7	25366.6	25302.2	25020.2
69°	21454.9	22307.1	23038.3	23732.6	24284.4	24802.5	25239.4	25454.0	25529.1	25435.6	25234.8
70°	20877.0	21752.2	22647.4	23219.1	23820.0	24388.7	24839.3	25073.8	25126.0	25060.0	24886.8
72.5°	18206.8	19046.8	20033.9	20553.6	21280.1	21690.9	22311.7	22615.2	22668.8	22584.5	22471.1
75°	14209.2	14361.0	15366.5	15697.6	16224.9	16698.5	17084.8	16986.7	17261.1	17207.4	17164.5
77.5°	6693.8	6289.2	6940.6	7244.1	7084.7	6660.1	7277.8	6831.8	7127.6	7512.3	7414.2
80°	1103.6	1100.6	1129.7	1194.1	1117.4	1186.4	1184.9	1151.1	1154.2	1237.0	1194.1
82.5°	424.6	433.8	438.4	450.6	450.6	452.2	459.8	469.0	461.4	476.7	473.6
85°	229.9	245.3	231.5	220.7	228.4	233.0	239.1	246.8	239.1	262.1	249.8
87.5°	59.8	62.8	55.2	55.2	53.6	49.1	49.1	52.1	56.7	67.4	73.6
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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CATALOG NUMBER: VST-F11-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6
2.5°	4543.3	4544.8	4546.3	4541.7	4538.7	4538.7	4537.1	4534.1	4532.5	4532.5	4532.5
5°	4595.4	4598.5	4590.8	4589.3	4586.2	4583.1	4583.1	4580.1	4581.6	4581.6	4573.9
7.5°	4699.6	4695.0	4685.8	4679.7	4685.8	4675.1	4670.5	4673.6	4670.5	4672.0	4669.0
10°	4839.1	4839.1	4828.4	4834.5	4826.8	4814.6	4819.2	4814.6	4811.5	4800.8	4806.9
12.5°	5012.3	5007.7	5001.6	4987.8	4983.2	4981.7	4967.9	4969.4	4964.8	4961.7	4957.1
15°	5164.1	5162.5	5148.7	5141.1	5139.5	5133.4	5127.3	5124.2	5116.5	5115.0	5111.9
17.5°	5265.2	5260.6	5254.5	5246.8	5246.8	5237.6	5234.6	5226.9	5225.4	5220.8	5216.2
20°	5299.0	5300.5	5294.4	5288.2	5285.2	5279.0	5274.4	5268.3	5265.2	5259.1	5254.5
22.5°	5291.3	5291.3	5285.2	5283.6	5277.5	5268.3	5262.2	5254.5	5246.8	5239.2	5230.0
25°	5266.8	5265.2	5260.6	5253.0	5245.3	5231.5	5219.2	5207.0	5196.3	5187.1	5173.3
27.5°	5245.3	5242.2	5233.0	5222.3	5207.0	5191.7	5168.7	5151.8	5138.0	5125.7	5110.4
30°	5237.6	5226.9	5213.1	5196.3	5177.9	5154.9	5130.3	5108.9	5093.6	5081.3	5075.2
32.5°	5246.8	5233.0	5211.6	5190.1	5167.1	5139.5	5115.0	5096.6	5082.8	5079.8	5079.8
35°	5331.1	5308.1	5279.0	5248.4	5219.2	5196.3	5179.4	5177.9	5168.7	5179.4	5196.3
37.5°	5577.9	5558.0	5513.5	5473.7	5453.8	5443.0	5427.7	5430.8	5409.3	5443.0	5470.6
40°	6102.1	6077.6	6025.5	5993.3	5953.5	5915.1	5945.8	5936.6	5951.9	5945.8	5974.9
42.5°	6867.0	6842.5	6759.7	6747.5	6730.6	6715.3	6715.3	6703.0	6696.9	6718.3	6693.8
45°	7797.4	7748.4	7717.7	7754.5	7703.9	7719.3	7772.9	7700.9	7717.7	7618.1	7526.1
47.5°	8763.1	8758.5	8750.9	8795.3	8803.0	8826.0	8855.1	8781.5	8648.2	8573.1	8386.0
50°	9874.4	9921.9	9940.3	9983.2	10001.6	10018.5	9972.5	9863.7	9638.4	9439.1	9218.4
52.5°	11224.8	11142.1	11255.5	11296.9	11278.5	11211.0	11045.5	10912.1	10601.0	10314.3	9972.5
55°	12797.5	12817.4	12737.7	12705.5	12642.7	12455.7	12227.3	11926.9	11532.9	11158.9	10726.7
57.5°	14399.3	14391.6	14267.5	14092.7	13879.7	13654.3	13314.1	12883.3	12423.5	11920.7	11398.0
60°	16347.5	16339.8	16088.5	15789.6	15486.1	15122.8	14589.4	14071.3	13455.1	12794.4	12172.1
62.5°	18907.3	18577.8	18331.0	17884.9	17415.9	16940.7	16218.7	15530.5	14707.4	13873.5	13147.0
65°	22187.5	21644.9	21364.4	20717.6	19991.0	19249.1	18514.9	17610.5	16502.3	15493.7	14606.2
67.5°	24614.0	24117.4	23603.9	22958.6	22161.5	21333.8	20328.2	19189.4	17930.9	16799.7	15832.5
69°	24827.1	24362.6	23746.4	23099.6	22345.4	21445.7	20348.2	19072.9	17797.6	16652.5	15700.7
70°	24503.6	24010.1	23361.7	22688.8	21845.7	20996.5	19846.9	18518.0	17241.1	16093.1	15164.2
72.5°	22091.0	21609.7	20919.9	20115.2	19250.7	18524.1	17432.7	16047.1	14658.3	13597.6	12874.1
75°	16798.2	16692.4	16203.4	15734.4	15053.8	14242.9	13245.1	12313.1	11174.2	10052.2	9377.8
77.5°	7167.5	7411.2	7665.6	7702.4	7726.9	7477.1	7322.3	7087.8	6325.9	5979.5	5622.4
80°	1324.4	1183.3	1263.0	1272.2	1324.4	1351.9	1453.1	1722.9	1753.5	1819.5	1900.7
82.5°	470.6	478.2	490.5	495.1	499.7	518.1	587.1	703.6	809.3	947.3	1131.2
85°	266.7	271.3	282.0	291.2	297.4	315.8	354.1	423.1	527.3	685.2	928.9
87.5°	81.2	92.0	98.1	110.4	115.0	118.0	134.9	180.9	233.0	344.9	502.8
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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CATALOG NUMBER: VST-F11-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6	4535.6
2.5°	4532.5	4531.0	4527.9	4524.9	4526.4	4523.3	4514.1	4511.1	4500.4	4492.7	4486.6
5°	4573.9	4572.4	4566.3	4567.8	4566.3	4550.9	4540.2	4521.8	4511.1	4494.2	4488.1
7.5°	4659.8	4658.2	4647.5	4652.1	4649.0	4626.0	4607.7	4578.5	4563.2	4541.7	4524.9
10°	4788.5	4788.5	4776.3	4777.8	4777.8	4747.1	4714.9	4665.9	4630.6	4596.9	4567.8
12.5°	4944.9	4938.7	4937.2	4929.5	4923.4	4889.7	4840.6	4774.7	4708.8	4653.6	4613.8
15°	5102.8	5093.6	5089.0	5079.8	5072.1	5041.4	4975.5	4894.3	4805.4	4716.5	4650.6
17.5°	5205.5	5199.3	5190.1	5187.1	5176.3	5145.7	5099.7	5018.4	4908.1	4783.9	4684.3
20°	5243.8	5233.0	5226.9	5220.8	5214.6	5193.2	5193.2	5141.1	5018.4	4843.7	4692.0
22.5°	5219.2	5213.1	5203.9	5199.3	5193.2	5196.3	5256.0	5248.4	5107.4	4857.5	4636.8
25°	5162.5	5154.9	5147.2	5147.2	5145.7	5177.9	5321.9	5341.9	5133.4	4790.1	4515.7
27.5°	5104.3	5093.6	5096.6	5098.2	5105.8	5174.8	5394.0	5366.4	5062.9	4627.6	4307.2
30°	5069.0	5069.0	5076.7	5089.0	5104.3	5225.4	5450.7	5311.2	4880.5	4382.3	4031.3
32.5°	5084.4	5099.7	5116.5	5147.2	5170.2	5337.3	5470.6	5168.7	4615.3	4078.8	3743.1
35°	5220.8	5239.2	5271.4	5318.9	5346.5	5498.2	5470.6	4960.2	4307.2	3818.3	3445.8
37.5°	5518.1	5536.5	5574.9	5611.6	5639.2	5700.6	5447.6	4695.0	4049.7	3548.5	3179.1
40°	5996.4	6022.4	6050.0	6043.9	6025.5	5965.7	5401.7	4448.2	3812.1	3312.4	2917.0
42.5°	6669.3	6644.8	6641.7	6581.9	6520.6	6264.6	5367.9	4287.3	3608.3	3064.1	2656.4
45°	7446.4	7346.8	7244.1	7164.4	7070.9	6592.7	5358.7	4157.0	3382.9	2788.2	2372.8
47.5°	8228.2	8068.8	7869.5	7745.3	7593.6	6942.1	5386.3	3982.3	3093.2	2487.8	2107.6
50°	8994.6	8734.0	8487.2	8338.5	8166.9	7343.7	5430.8	3688.0	2746.8	2214.9	1865.4
52.5°	9704.3	9368.6	9115.7	8940.9	8730.9	7811.2	5390.9	3301.7	2446.4	1952.8	1635.5
55°	10378.7	10007.8	9745.7	9561.7	9314.9	8280.3	5102.8	2950.7	2159.7	1696.8	1376.5
57.5°	10968.8	10613.2	10340.4	10090.5	9882.1	8688.0	4534.1	2661.0	1883.8	1404.1	1096.0
60°	11658.6	11258.5	10935.1	10668.4	10423.2	8898.0	3896.4	2403.5	1589.5	1086.8	792.5
62.5°	12589.0	12129.2	11755.2	11450.2	11129.8	8944.0	3461.1	2145.9	1261.5	786.3	576.3
65°	13968.6	13401.4	12933.9	12513.9	12080.1	8753.9	3246.5	1865.4	938.1	584.0	482.8
67.5°	15064.5	14475.9	13934.9	13395.3	12840.4	8401.4	3199.0	1606.4	720.4	496.6	433.8
69°	14931.2	14370.2	13873.5	13289.5	12674.9	7958.4	3151.5	1506.8	657.6	461.4	410.8
70°	14417.7	13885.8	13381.5	12906.3	12153.7	7464.8	3025.8	1451.6	633.1	444.5	393.9
72.5°	12182.8	11566.6	11077.7	10486.0	9693.5	5547.3	2294.6	1174.1	580.9	406.2	355.6
75°	8885.7	8375.3	7887.9	7233.4	6462.4	3209.7	1428.6	671.4	426.1	367.9	321.9
77.5°	5188.6	5073.6	4603.1	4172.3	3409.0	1634.0	820.1	401.6	331.1	334.2	283.6
80°	1952.8	2080.0	2127.6	1978.9	1828.7	1128.2	596.3	326.5	288.2	329.6	240.7
82.5°	1424.0	1652.4	1680.0	1609.5	1497.6	1051.5	476.7	262.1	234.5	354.1	206.9
85°	1187.9	1315.2	1335.1	1261.5	1224.7	890.6	332.6	183.9	171.7	254.4	154.8
87.5°	600.9	633.1	649.9	588.6	591.7	415.4	133.4	78.2	93.5	108.8	85.8
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):

	175°	180°
0°	4535.6	4535.6
2.5°	4472.8	4482.0
5°	4478.9	4478.9
7.5°	4514.1	4514.1
10°	4552.5	4554.0
12.5°	4587.7	4586.2
15°	4615.3	4610.7
17.5°	4632.2	4627.6
20°	4615.3	4607.7
22.5°	4529.5	4508.0
25°	4373.1	4345.5
27.5°	4166.2	4147.8
30°	3896.4	3868.8
32.5°	3580.7	3566.9
35°	3278.7	3261.8
37.5°	3002.8	2998.2
40°	2769.8	2745.3
42.5°	2497.0	2486.2
45°	2219.5	2213.4
47.5°	1958.9	1952.8
50°	1718.3	1706.0
52.5°	1482.2	1462.3
55°	1220.1	1206.3
57.5°	936.6	924.3
60°	659.1	645.3
62.5°	469.0	453.7
65°	390.9	378.6
67.5°	354.1	340.3
69°	337.2	325.0
70°	326.5	317.3
72.5°	303.5	297.4
75°	277.4	272.8
77.5°	243.7	236.1
80°	203.9	196.2
82.5°	171.7	164.0
85°	115.0	104.2
87.5°	52.1	46.0
90°	0.0	0.0

(END OF REPORT)