

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: P158054

Luminaire Tested: **VST-F09-LED-E-U-RW-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158054
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-F09-LED-E-U-RW-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (63) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21141 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 234.8
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

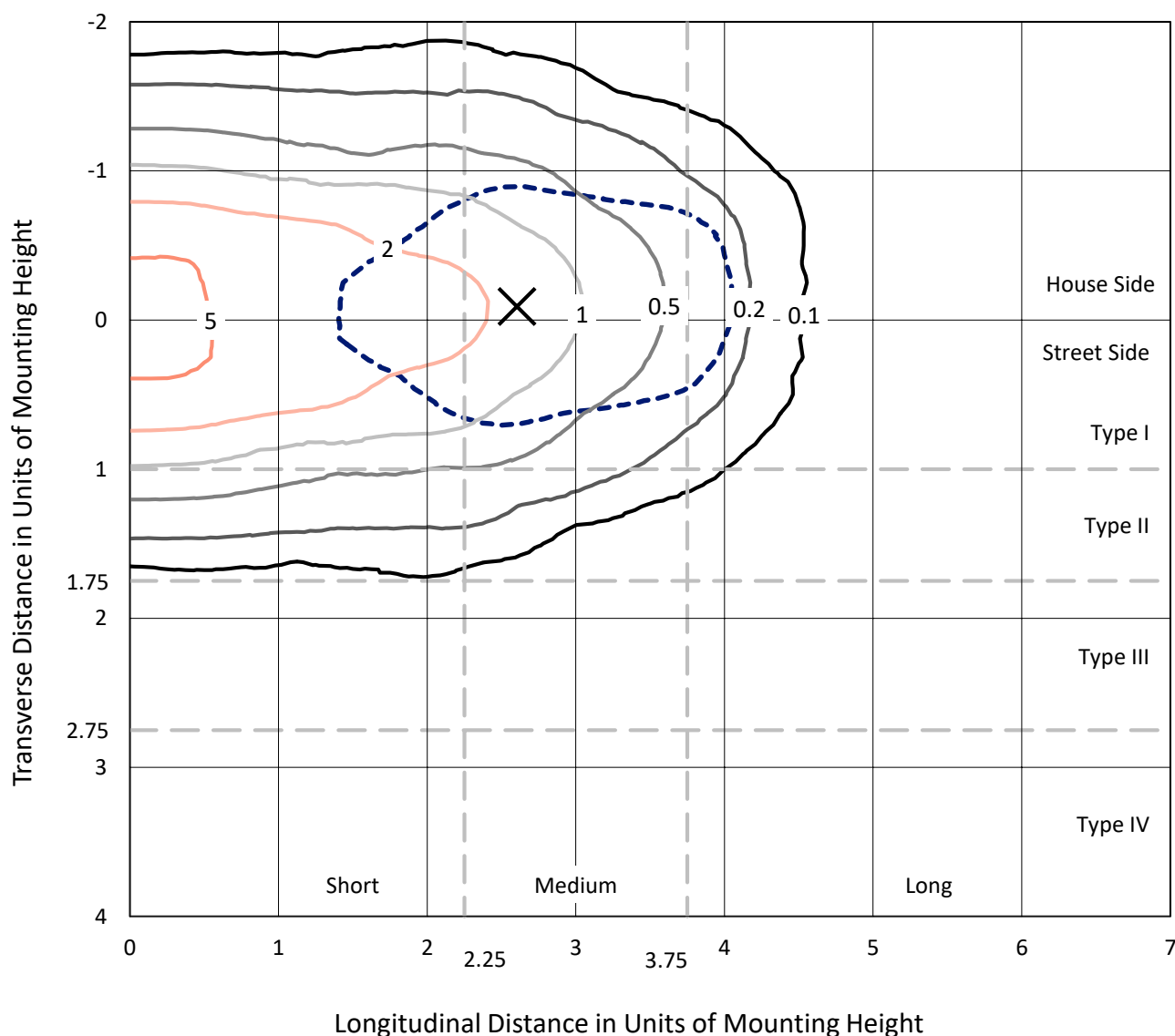


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

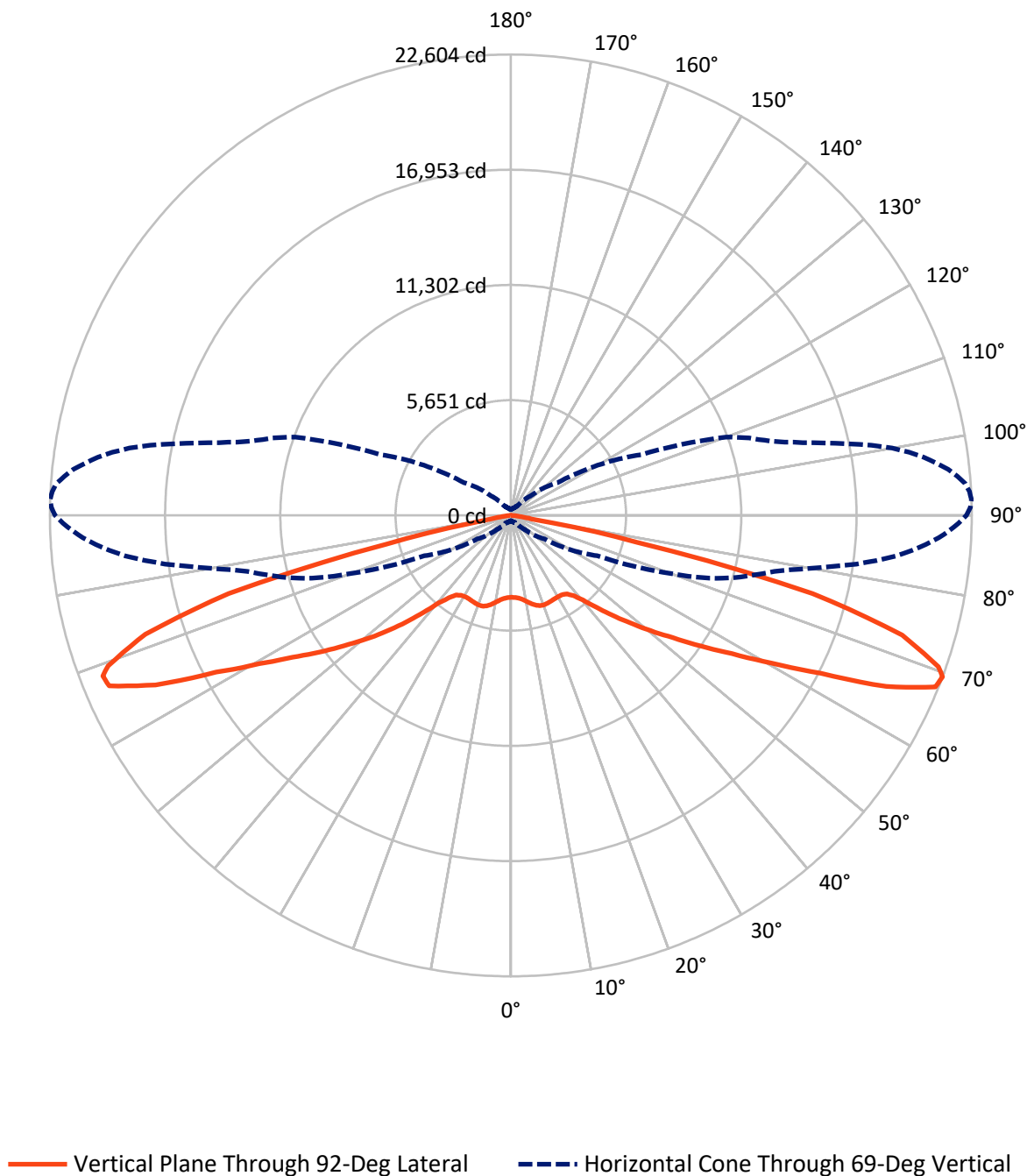


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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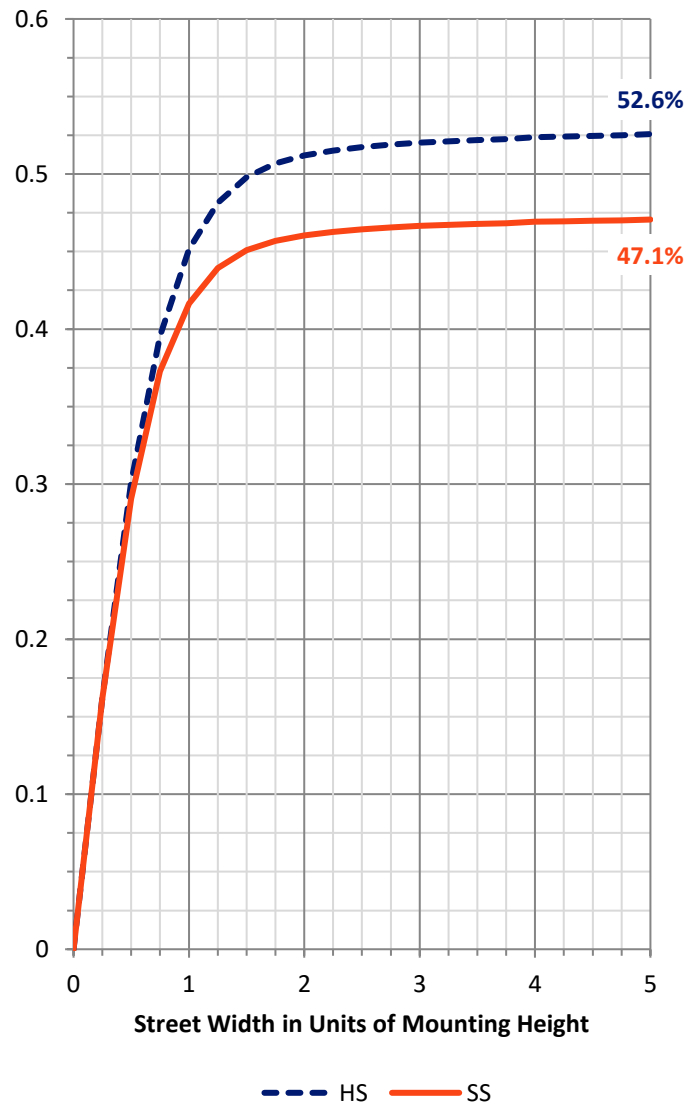
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11212.2	0.0	11212.2
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	9928.8	0.0	9928.8
	% Fixture	47.0	0.0	47.0
Total	Lumens	21141.0	0.0	21141.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.0	1.9
10°-20°	1241.4	5.9
20°-30°	2014.0	9.5
30°-40°	2510.0	11.9
40°-50°	3125.2	14.8
50°-60°	3854.2	18.2
60°-70°	4786.6	22.6
70°-80°	2941.1	13.9
80°-90°	275.7	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°	21141.0	100.0
0°-180°	21141.0	100.0

Coefficient of Utilization



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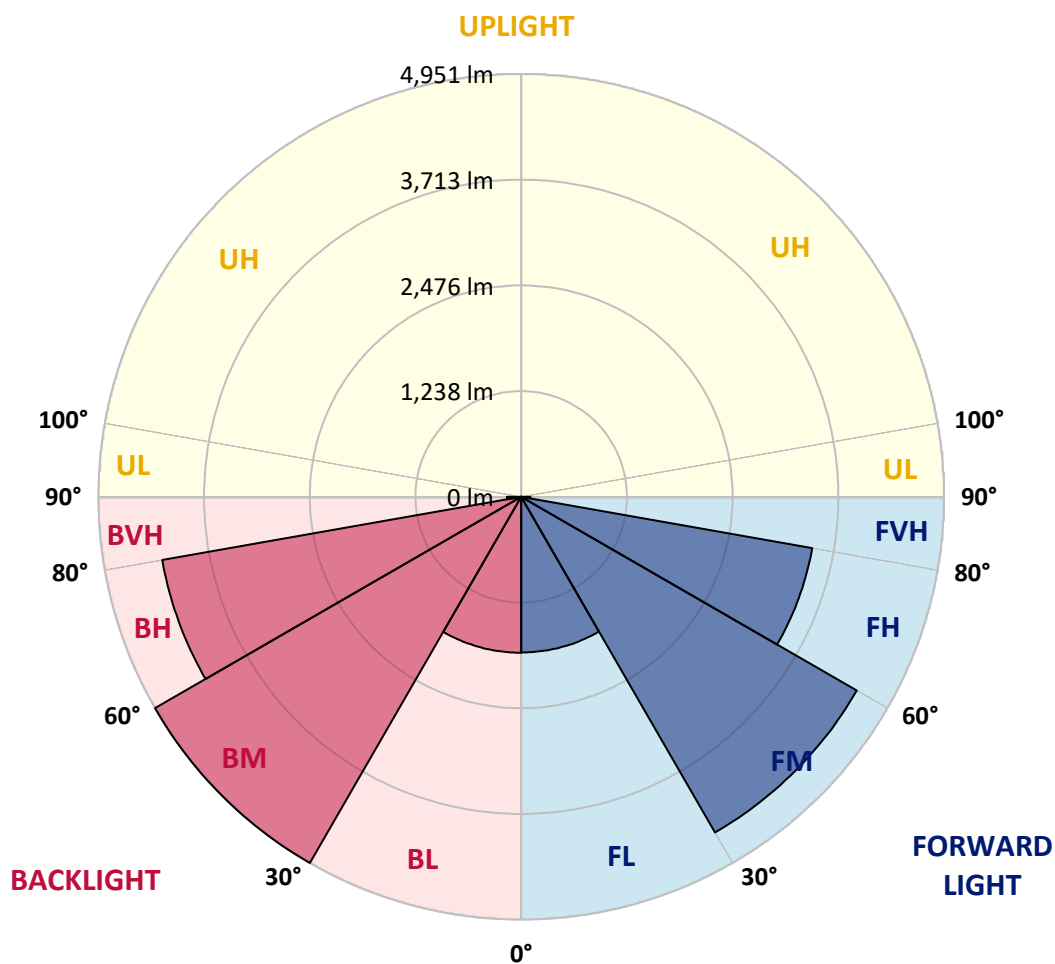
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1822.2	8.6			
FM	(30°-60°)	4538.2	21.5			
FH	(60°-80°)	3460.5	16.4			G2/5000
FVH	(80°-90°)	107.9	0.5			G2/225
BL	(0°-30°)	1826.1	8.6	B3/2500		
BM	(30°-60°)	4951.2	23.4	B3/5000		
BH	(60°-80°)	4267.2	20.2	B4/5000		G4/5000
BVH	(80°-90°)	167.7	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°	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9
2.5°	4079.7	4068.9	4078.4	4079.7	4078.4	4078.4	4066.1	4063.4	4047.1	4051.2	4049.8
5°	4135.4	4131.3	4138.1	4140.8	4143.5	4138.1	4128.6	4124.5	4113.6	4109.6	4108.2
7.5°	4186.9	4180.1	4191.0	4200.5	4207.3	4208.6	4210.0	4203.2	4203.2	4197.8	4197.8
10°	4230.4	4224.9	4242.6	4254.8	4276.5	4288.7	4302.3	4311.8	4317.2	4318.6	4317.2
12.5°	4249.4	4245.3	4273.8	4310.4	4351.1	4379.6	4413.6	4438.0	4444.8	4443.4	4450.2
15°	4216.8	4219.5	4262.9	4334.9	4421.7	4493.7	4541.2	4561.5	4566.9	4569.7	4571.0
17.5°	4128.6	4134.0	4196.4	4313.1	4465.1	4595.4	4666.0	4666.0	4655.2	4655.2	4653.8
20°	3987.4	3992.8	4074.3	4242.6	4466.5	4666.0	4766.4	4746.1	4705.4	4697.2	4689.1
22.5°	3792.0	3813.7	3903.3	4098.7	4408.1	4686.4	4828.9	4799.0	4735.2	4717.6	4705.4
25°	3570.8	3568.0	3675.3	3895.1	4267.0	4637.5	4846.5	4841.1	4773.2	4754.2	4732.5
27.5°	3318.3	3326.5	3425.5	3648.1	4051.2	4496.4	4816.7	4888.6	4832.9	4813.9	4793.6
30°	3059.1	3067.2	3160.9	3420.1	3805.6	4294.1	4755.6	4934.7	4913.0	4898.1	4884.5
32.5°	2798.5	2801.2	2912.5	3190.7	3597.9	4052.6	4663.3	4976.8	5006.7	4999.9	4994.5
35°	2554.2	2556.9	2677.7	2960.0	3393.0	3846.3	4552.0	5037.9	5134.2	5142.4	5147.8
37.5°	2316.7	2320.8	2444.3	2740.2	3190.7	3690.2	4428.5	5131.5	5313.4	5343.3	5348.7
40°	2080.6	2084.6	2202.7	2516.2	2985.8	3553.1	4333.5	5263.2	5555.0	5595.7	5637.8
42.5°	1855.3	1870.2	1970.6	2270.6	2757.8	3383.5	4292.8	5423.3	5841.3	5905.1	5952.6
45°	1644.9	1646.3	1760.3	2041.2	2487.7	3154.1	4265.6	5605.2	6161.6	6258.0	6323.1
47.5°	1419.6	1435.9	1555.3	1828.1	2235.3	2870.5	4178.8	5818.3	6510.4	6623.1	6754.7
50°	1201.1	1224.2	1339.5	1609.6	2004.6	2577.3	3945.3	6068.0	6902.7	7049.2	7201.2
52.5°	990.7	989.4	1111.5	1392.5	1772.5	2328.9	3566.7	6329.9	7356.0	7513.4	7677.6
55°	749.2	749.2	870.0	1126.5	1521.4	2107.7	3160.9	6492.8	7776.7	7966.7	8145.8
57.5°	514.4	527.9	642.0	863.2	1259.5	1905.5	2850.1	6399.1	8098.3	8334.5	8547.6
60°	381.4	394.9	479.1	620.2	985.3	1666.6	2616.7	5958.1	8292.4	8605.9	8882.8
62.5°	329.8	339.3	419.4	496.7	709.8	1412.8	2410.4	5397.5	8572.0	9000.9	9386.3
65°	294.5	304.0	384.1	428.9	555.1	1136.0	2295.0	5077.2	8905.9	9561.4	10120.6
67.5°	272.8	283.7	351.5	384.1	484.5	1027.4	2205.4	5002.6	8903.2	9698.5	10412.3
69°	261.9	270.1	325.7	361.0	468.2	994.8	2011.4	4678.2	8315.5	9169.2	9885.8
70°	255.2	263.3	310.8	346.1	462.8	936.5	1832.2	4249.4	7646.4	8505.5	9233.0
72.5°	233.4	241.6	276.9	309.4	385.4	625.7	1277.1	2719.8	5464.0	6077.5	6909.4
75°	206.3	215.8	242.9	270.1	291.8	362.4	737.0	1411.5	3124.2	3589.8	4330.8
77.5°	168.3	177.8	206.3	249.7	247.0	275.5	479.1	867.2	1463.0	1814.6	2088.7
80°	138.4	145.2	169.6	252.4	202.2	230.7	388.2	711.2	1030.1	1138.7	1203.8
82.5°	92.3	101.8	131.6	198.1	154.7	164.2	290.4	665.0	871.3	955.5	1034.2
85°	43.4	47.5	80.1	105.9	93.6	88.2	165.6	469.6	648.7	688.1	718.0
87.5°	0.0	0.0	4.1	8.1	12.2	12.2	29.9	99.1	181.9	219.9	217.2
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°	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9
2.5°	4044.4	4045.8	4044.4	4044.4	4043.1	4040.3	4040.3	4037.6	4039.0	4037.6	4040.3
5°	4106.9	4106.9	4102.8	4100.1	4104.1	4100.1	4101.4	4094.6	4094.6	4090.6	4085.1
7.5°	4196.4	4196.4	4197.8	4189.6	4195.1	4196.4	4192.4	4189.6	4186.9	4180.1	4181.5
10°	4315.9	4315.9	4319.9	4309.1	4314.5	4317.2	4318.6	4318.6	4315.9	4303.6	4305.0
12.5°	4448.9	4446.1	4447.5	4442.1	4447.5	4450.2	4452.9	4450.2	4450.2	4447.5	4446.1
15°	4569.7	4568.3	4571.0	4566.9	4568.3	4571.0	4579.2	4577.8	4576.4	4568.3	4568.3
17.5°	4652.4	4648.4	4645.7	4644.3	4644.3	4642.9	4644.3	4644.3	4640.2	4638.9	4638.9
20°	4683.7	4672.8	4666.0	4661.9	4656.5	4653.8	4651.1	4652.4	4649.7	4645.7	4647.0
22.5°	4689.1	4674.2	4660.6	4648.4	4637.5	4630.7	4623.9	4621.2	4614.4	4610.4	4610.4
25°	4714.9	4691.8	4670.1	4649.7	4633.4	4618.5	4603.6	4592.7	4584.6	4575.1	4572.4
27.5°	4771.9	4747.4	4721.7	4695.9	4674.2	4644.3	4623.9	4602.2	4583.2	4568.3	4557.4
30°	4860.1	4835.7	4809.9	4780.0	4751.5	4720.3	4686.4	4660.6	4633.4	4603.6	4587.3
32.5°	4976.8	4960.5	4934.7	4906.2	4880.4	4847.9	4807.2	4767.8	4742.0	4706.7	4680.9
35°	5143.7	5124.7	5116.6	5104.4	5078.6	5058.2	5013.5	4976.8	4952.4	4903.5	4884.5
37.5°	5371.8	5370.4	5377.2	5373.1	5377.2	5351.4	5331.0	5329.7	5294.4	5246.9	5200.7
40°	5682.5	5698.8	5735.5	5761.3	5785.7	5788.4	5816.9	5787.1	5791.1	5784.3	5736.8
42.5°	6036.8	6092.4	6135.8	6211.9	6270.2	6324.5	6361.1	6411.4	6449.4	6483.3	6491.4
45°	6431.7	6514.5	6614.9	6682.8	6796.8	6887.7	7012.6	7109.0	7209.4	7308.5	7343.7
47.5°	6860.6	6963.7	7075.0	7201.2	7345.1	7487.6	7680.3	7828.3	7989.8	8124.1	8243.6
50°	7334.2	7441.5	7590.8	7736.0	7934.1	8098.3	8350.8	8544.9	8805.4	8984.6	9139.3
52.5°	7828.3	7962.6	8129.6	8289.7	8491.9	8702.3	8983.2	9269.6	9583.1	9854.5	10079.8
55°	8311.4	8477.0	8637.1	8824.4	9048.4	9292.7	9610.2	9987.5	10378.4	10689.2	10987.8
57.5°	8741.6	8933.0	9121.7	9311.7	9541.0	9824.7	10181.6	10588.8	11036.7	11450.6	11860.5
60°	9140.7	9370.0	9600.7	9838.3	10101.6	10451.7	10880.6	11381.4	11960.9	12526.8	13062.9
62.5°	9771.8	10073.1	10359.4	10666.1	10983.7	11395.0	11901.2	12558.1	13223.1	13930.2	14479.8
65°	10626.8	11050.2	11424.8	11822.5	12233.7	12783.4	13388.7	14174.5	15127.2	15852.0	16734.1
67.5°	11051.6	11609.4	12091.2	12533.6	13042.6	13597.7	14317.0	15246.7	16263.2	17313.7	18297.6
69°	10552.1	11127.6	11661.0	12156.3	12670.7	13209.5	13961.4	14915.5	15990.4	17126.4	18087.2
70°	9904.8	10480.2	11048.9	11613.5	12083.0	12608.3	13362.9	14346.8	15420.4	16601.1	17553.9
72.5°	7588.0	8280.2	8794.6	9323.9	9868.1	10313.3	11184.6	12013.8	13132.2	14330.6	15379.7
75°	4854.7	5491.2	6053.1	6503.6	7035.7	7569.0	8212.3	9133.9	9834.2	10818.1	11669.1
77.5°	2494.5	2683.2	3224.7	3386.2	3755.3	4045.8	4400.0	4630.7	5200.7	5321.5	5823.7
80°	1182.1	1065.4	1003.0	946.0	962.2	955.5	927.0	889.0	936.5	916.1	908.0
82.5°	1030.1	918.8	732.9	622.9	538.8	457.4	393.6	361.0	365.1	375.9	380.0
85°	722.0	678.6	529.3	401.7	313.5	242.9	195.4	187.3	192.7	207.6	202.2
87.5°	209.0	218.5	192.7	134.4	93.6	67.9	52.9	59.7	57.0	55.6	58.4
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9
2.5°	4040.3	4039.0	4034.9	4030.8	4030.8	4028.1	4030.8	4032.2	4030.8	4030.8	4028.1
5°	4086.5	4087.9	4091.9	4083.8	4082.4	4083.8	4078.4	4077.0	4072.9	4077.0	4071.6
7.5°	4174.7	4178.8	4178.8	4173.4	4172.0	4176.1	4167.9	4165.2	4161.1	4159.8	4158.4
10°	4306.4	4310.4	4303.6	4299.6	4295.5	4300.9	4294.1	4294.1	4290.1	4286.0	4284.6
12.5°	4452.9	4450.2	4447.5	4450.2	4446.1	4446.1	4442.1	4439.4	4438.0	4436.6	4433.9
15°	4566.9	4576.4	4576.4	4579.2	4576.4	4576.4	4571.0	4572.4	4569.7	4568.3	4569.7
17.5°	4640.2	4642.9	4649.7	4653.8	4653.8	4655.2	4652.4	4655.2	4652.4	4652.4	4657.9
20°	4649.7	4652.4	4659.2	4666.0	4670.1	4672.8	4672.8	4676.9	4679.6	4682.3	4689.1
22.5°	4611.7	4615.8	4623.9	4636.2	4642.9	4645.7	4651.1	4657.9	4664.7	4670.1	4679.6
25°	4572.4	4573.7	4581.9	4594.1	4602.2	4609.0	4618.5	4626.7	4636.2	4647.0	4657.9
27.5°	4550.7	4549.3	4556.1	4568.3	4575.1	4584.6	4592.7	4604.9	4615.8	4629.4	4638.9
30°	4569.7	4558.8	4560.2	4565.6	4571.0	4577.8	4587.3	4598.2	4610.4	4622.6	4633.4
32.5°	4653.8	4629.4	4613.1	4609.0	4610.4	4611.7	4617.2	4623.9	4633.4	4642.9	4647.0
35°	4835.7	4793.6	4771.9	4754.2	4739.3	4727.1	4729.8	4728.4	4728.4	4736.6	4727.1
37.5°	5181.7	5128.8	5105.7	5074.5	5056.9	5012.1	4999.9	4997.2	4979.5	4979.5	4959.2
40°	5724.6	5693.4	5675.8	5647.3	5561.8	5572.6	5511.5	5512.9	5462.7	5468.1	5432.8
42.5°	6496.9	6500.9	6479.2	6460.2	6393.7	6363.9	6306.9	6225.4	6161.6	6160.3	6089.7
45°	7389.9	7438.7	7369.5	7394.0	7335.6	7255.5	7189.0	7084.5	6985.4	6954.2	6882.3
47.5°	8323.6	8403.7	8350.8	8360.3	8331.8	8217.8	8128.2	7999.3	7870.3	7783.5	7740.0
50°	9321.2	9374.1	9372.7	9347.0	9333.4	9222.1	9078.2	8980.5	8885.5	8768.8	8730.8
52.5°	10225.1	10348.6	10431.3	10412.3	10373.0	10306.5	10178.9	10094.8	9955.0	9938.7	9955.0
55°	11192.7	11352.9	11437.0	11538.8	11540.2	11528.0	11475.0	11443.8	11313.5	11328.5	11309.4
57.5°	12108.8	12343.6	12472.6	12689.7	12764.4	12863.4	12826.8	12867.5	12788.8	12840.4	12825.4
60°	13350.7	13676.4	13890.8	14188.0	14326.5	14574.8	14623.7	14653.6	14697.0	14802.9	14743.1
62.5°	14912.8	15390.5	15835.7	16240.1	16373.1	16746.3	16807.4	17040.9	17053.1	17125.0	16993.4
65°	17469.7	18052.0	18541.9	19026.4	19306.0	19743.0	19919.5	20372.8	20234.3	20292.7	20011.7
67.5°	19144.5	19821.7	20478.6	20937.3	21401.5	21848.0	22169.7	22462.8	22460.1	22403.1	22153.4
69°	18996.6	19751.2	20398.5	21013.3	21501.9	21960.7	22347.5	22537.5	22604.0	22521.2	22343.4
70°	18484.9	19259.9	20052.5	20558.7	21090.7	21594.2	21993.2	22200.9	22247.0	22188.7	22035.3
72.5°	16120.7	16864.4	17738.5	18198.5	18841.8	19205.6	19755.2	20024.0	20071.5	19996.8	19896.4
75°	12581.1	12715.5	13605.8	13899.0	14365.8	14785.2	15127.2	15040.4	15283.3	15235.8	15197.8
77.5°	5926.8	5568.5	6145.3	6414.1	6272.9	5897.0	6443.9	6049.0	6310.9	6651.6	6564.7
80°	977.2	974.5	1000.2	1057.2	989.4	1050.5	1049.1	1019.2	1022.0	1095.3	1057.2
82.5°	375.9	384.1	388.2	399.0	399.0	400.4	407.2	415.3	408.5	422.1	419.4
85°	203.6	217.2	204.9	195.4	202.2	206.3	211.7	218.5	211.7	232.1	221.2
87.5°	52.9	55.6	48.9	48.9	47.5	43.4	43.4	46.1	50.2	59.7	65.1
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):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9
2.5°	4022.7	4024.1	4025.4	4021.3	4018.6	4018.6	4017.3	4014.6	4013.2	4013.2	4013.2
5°	4068.9	4071.6	4064.8	4063.4	4060.7	4058.0	4058.0	4055.3	4056.6	4056.6	4049.8
7.5°	4161.1	4157.1	4148.9	4143.5	4148.9	4139.4	4135.4	4138.1	4135.4	4136.7	4134.0
10°	4284.6	4284.6	4275.1	4280.6	4273.8	4262.9	4267.0	4262.9	4260.2	4250.7	4256.1
12.5°	4438.0	4433.9	4428.5	4416.3	4412.2	4410.9	4398.6	4400.0	4395.9	4393.2	4389.1
15°	4572.4	4571.0	4558.8	4552.0	4550.7	4545.2	4539.8	4537.1	4530.3	4528.9	4526.2
17.5°	4661.9	4657.9	4652.4	4645.7	4645.7	4637.5	4634.8	4628.0	4626.7	4622.6	4618.5
20°	4691.8	4693.2	4687.7	4682.3	4679.6	4674.2	4670.1	4664.7	4661.9	4656.5	4652.4
22.5°	4685.0	4685.0	4679.6	4678.2	4672.8	4664.7	4659.2	4652.4	4645.7	4638.9	4630.7
25°	4663.3	4661.9	4657.9	4651.1	4644.3	4632.1	4621.2	4610.4	4600.9	4592.7	4580.5
27.5°	4644.3	4641.6	4633.4	4623.9	4610.4	4596.8	4576.4	4561.5	4549.3	4538.4	4524.9
30°	4637.5	4628.0	4615.8	4600.9	4584.6	4564.2	4542.5	4523.5	4509.9	4499.1	4493.7
32.5°	4645.7	4633.4	4614.4	4595.4	4575.1	4550.7	4528.9	4512.7	4500.4	4497.7	4497.7
35°	4720.3	4699.9	4674.2	4647.0	4621.2	4600.9	4585.9	4584.6	4576.4	4585.9	4600.9
37.5°	4938.8	4921.2	4881.8	4846.5	4828.9	4819.4	4805.8	4808.5	4789.5	4819.4	4843.8
40°	5403.0	5381.3	5335.1	5306.6	5271.3	5237.4	5264.5	5256.4	5270.0	5264.5	5290.3
42.5°	6080.2	6058.5	5985.2	5974.3	5959.4	5945.8	5945.8	5935.0	5929.6	5948.6	5926.8
45°	6904.0	6860.6	6833.4	6866.0	6821.2	6834.8	6882.3	6818.5	6833.4	6745.2	6663.8
47.5°	7759.0	7755.0	7748.2	7787.5	7794.3	7814.7	7840.5	7775.3	7657.3	7590.8	7425.2
50°	8743.0	8785.1	8801.4	8839.4	8855.7	8870.6	8829.9	8733.5	8534.0	8357.6	8162.1
52.5°	9938.7	9865.4	9965.8	10002.5	9986.2	9926.5	9779.9	9661.8	9386.3	9132.5	8829.9
55°	11331.2	11348.8	11278.2	11249.7	11194.1	11028.5	10826.3	10560.3	10211.5	9880.3	9497.6
57.5°	12749.4	12742.6	12632.7	12478.0	12289.3	12089.8	11788.5	11407.2	11000.0	10554.9	10092.1
60°	14474.4	14467.6	14245.0	13980.4	13711.7	13390.0	12917.7	12459.0	11913.4	11328.5	10777.4
62.5°	16740.9	16449.1	16230.6	15835.7	15420.4	14999.6	14360.4	13751.0	13022.2	12283.9	11640.6
65°	19645.3	19164.9	18916.5	18343.8	17700.4	17043.6	16393.5	15592.7	14611.5	13718.5	12932.6
67.5°	21793.7	21354.0	20899.3	20328.0	19622.2	18889.3	17999.0	16990.6	15876.4	14874.8	14018.4
69°	21982.4	21571.2	21025.6	20452.8	19785.1	18988.4	18016.7	16887.5	15758.3	14744.5	13901.7
70°	21696.0	21259.0	20684.9	20089.1	19342.6	18590.8	17572.9	16396.2	15265.7	14249.1	13426.7
72.5°	19559.8	19133.6	18522.9	17810.4	17044.9	16401.6	15435.3	14208.4	12978.8	12039.6	11399.0
75°	14873.4	14779.8	14346.8	13931.5	13328.9	12611.0	11727.5	10902.3	9893.9	8900.4	8303.3
77.5°	6346.2	6562.0	6787.3	6819.9	6841.6	6620.4	6483.3	6275.6	5601.1	5294.4	4978.2
80°	1172.6	1047.7	1118.3	1126.5	1172.6	1197.0	1286.6	1525.5	1552.6	1611.0	1682.9
82.5°	416.7	423.4	434.3	438.4	442.4	458.7	519.8	622.9	716.6	838.7	1001.6
85°	236.2	240.2	249.7	257.9	263.3	279.6	313.5	374.6	466.9	606.7	822.5
87.5°	71.9	81.4	86.9	97.7	101.8	104.5	119.4	160.1	206.3	305.4	445.2
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-F09-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9	4015.9
2.5°	4013.2	4011.8	4009.1	4006.4	4007.8	4005.1	3996.9	3994.2	3984.7	3977.9	3972.5
5°	4049.8	4048.5	4043.1	4044.4	4043.1	4029.5	4020.0	4003.7	3994.2	3979.3	3973.8
7.5°	4125.9	4124.5	4115.0	4119.1	4116.4	4096.0	4079.7	4053.9	4040.3	4021.3	4006.4
10°	4239.9	4239.9	4229.0	4230.4	4230.4	4203.2	4174.7	4131.3	4100.1	4070.2	4044.4
12.5°	4378.3	4372.9	4371.5	4364.7	4359.3	4329.4	4286.0	4227.6	4169.3	4120.4	4085.1
15°	4518.1	4509.9	4505.9	4497.7	4490.9	4463.8	4405.4	4333.5	4254.8	4176.1	4117.7
17.5°	4609.0	4603.6	4595.4	4592.7	4583.2	4556.1	4515.4	4443.4	4345.7	4235.8	4147.6
20°	4642.9	4633.4	4628.0	4622.6	4617.2	4598.2	4598.2	4552.0	4443.4	4288.7	4154.4
22.5°	4621.2	4615.8	4607.7	4603.6	4598.2	4600.9	4653.8	4647.0	4522.2	4300.9	4105.5
25°	4571.0	4564.2	4557.4	4557.4	4556.1	4584.6	4712.2	4729.8	4545.2	4241.2	3998.3
27.5°	4519.4	4509.9	4512.7	4514.0	4520.8	4581.9	4775.9	4751.5	4482.8	4097.4	3813.7
30°	4488.2	4488.2	4495.0	4505.9	4519.4	4626.7	4826.2	4702.7	4321.3	3880.2	3569.4
32.5°	4501.8	4515.4	4530.3	4557.4	4577.8	4725.7	4843.8	4576.4	4086.5	3611.5	3314.3
35°	4622.6	4638.9	4667.4	4709.4	4733.9	4868.2	4843.8	4391.9	3813.7	3380.8	3051.0
37.5°	4885.9	4902.2	4936.1	4968.7	4993.1	5047.4	4823.4	4157.1	3585.7	3141.9	2814.8
40°	5309.3	5332.4	5356.8	5351.4	5335.1	5282.2	4782.7	3938.6	3375.3	2932.9	2582.7
42.5°	5905.1	5883.4	5880.7	5827.8	5773.5	5546.8	4752.9	3796.1	3194.8	2713.0	2352.0
45°	6593.2	6505.0	6414.1	6343.5	6260.7	5837.3	4744.7	3680.7	2995.3	2468.7	2100.9
47.5°	7285.4	7144.2	6967.8	6857.9	6723.5	6146.7	4769.2	3526.0	2738.8	2202.7	1866.1
50°	7964.0	7733.3	7514.8	7383.1	7231.1	6502.3	4808.5	3265.4	2432.1	1961.1	1651.7
52.5°	8592.4	8295.1	8071.2	7916.5	7730.5	6916.2	4773.2	2923.4	2166.1	1729.1	1448.1
55°	9189.5	8861.1	8629.0	8466.1	8247.6	7331.5	4518.1	2612.6	1912.3	1502.4	1218.8
57.5°	9712.0	9397.2	9155.6	8934.4	8749.8	7692.5	4014.6	2356.1	1668.0	1243.2	970.4
60°	10322.8	9968.5	9682.2	9446.0	9228.9	7878.5	3450.0	2128.1	1407.4	962.2	701.7
62.5°	11146.6	10739.4	10408.3	10138.2	9854.5	7919.2	3064.5	1900.1	1117.0	696.2	510.3
65°	12368.1	11865.9	11452.0	11080.1	10696.0	7750.9	2874.5	1651.7	830.6	517.1	427.5
67.5°	13338.4	12817.3	12338.2	11860.5	11369.2	7438.7	2832.5	1422.3	637.9	439.7	384.1
69°	13220.4	12723.6	12283.9	11766.8	11222.6	7046.5	2790.4	1334.1	582.2	408.5	363.7
70°	12765.7	12294.8	11848.3	11427.5	10761.1	6609.5	2679.1	1285.3	560.5	393.6	348.8
72.5°	10786.9	10241.3	9808.4	9284.5	8582.9	4911.7	2031.7	1039.6	514.4	359.7	314.9
75°	7867.6	7415.7	6984.1	6404.6	5721.9	2842.0	1264.9	594.4	377.3	325.7	285.0
77.5°	4594.1	4492.3	4075.6	3694.3	3018.4	1446.8	726.1	355.6	293.2	295.9	251.1
80°	1729.1	1841.7	1883.8	1752.1	1619.1	998.9	527.9	289.1	255.2	291.8	213.1
82.5°	1260.8	1463.0	1487.5	1425.0	1326.0	931.0	422.1	232.1	207.6	313.5	183.2
85°	1051.8	1164.5	1182.1	1117.0	1084.4	788.5	294.5	162.9	152.0	225.3	137.1
87.5°	532.0	560.5	575.4	521.2	523.9	367.8	118.1	69.2	82.8	96.4	76.0
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°	4015.9	4015.9
2.5°	3960.3	3968.4
5°	3965.7	3965.7
7.5°	3996.9	3996.9
10°	4030.8	4032.2
12.5°	4062.1	4060.7
15°	4086.5	4082.4
17.5°	4101.4	4097.4
20°	4086.5	4079.7
22.5°	4010.5	3991.5
25°	3872.1	3847.6
27.5°	3688.8	3672.6
30°	3450.0	3425.5
32.5°	3170.4	3158.2
35°	2903.0	2888.1
37.5°	2658.7	2654.7
40°	2452.4	2430.7
42.5°	2210.9	2201.4
45°	1965.2	1959.8
47.5°	1734.5	1729.1
50°	1521.4	1510.6
52.5°	1312.4	1294.8
55°	1080.3	1068.1
57.5°	829.2	818.4
60°	583.6	571.4
62.5°	415.3	401.7
65°	346.1	335.2
67.5°	313.5	301.3
69°	298.6	287.7
70°	289.1	280.9
72.5°	268.7	263.3
75°	245.7	241.6
77.5°	215.8	209.0
80°	180.5	173.7
82.5°	152.0	145.2
85°	101.8	92.3
87.5°	46.1	40.7
90°	0.0	0.0

(END OF REPORT)