

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: P159374

Luminaire Tested: **VST-F09-LED-E-U-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159374
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33705)
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-T2-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (63) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20946.3 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

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

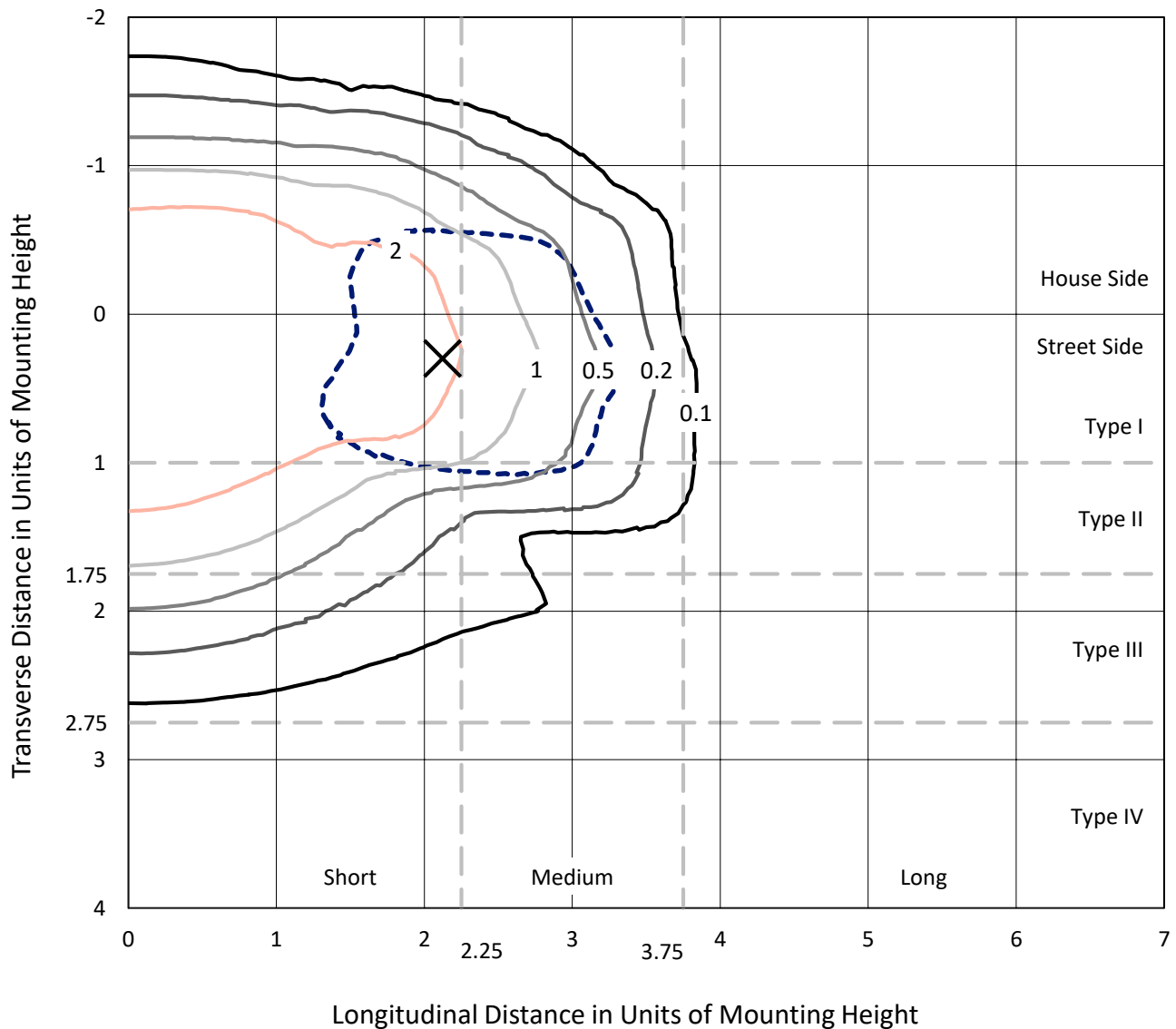


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

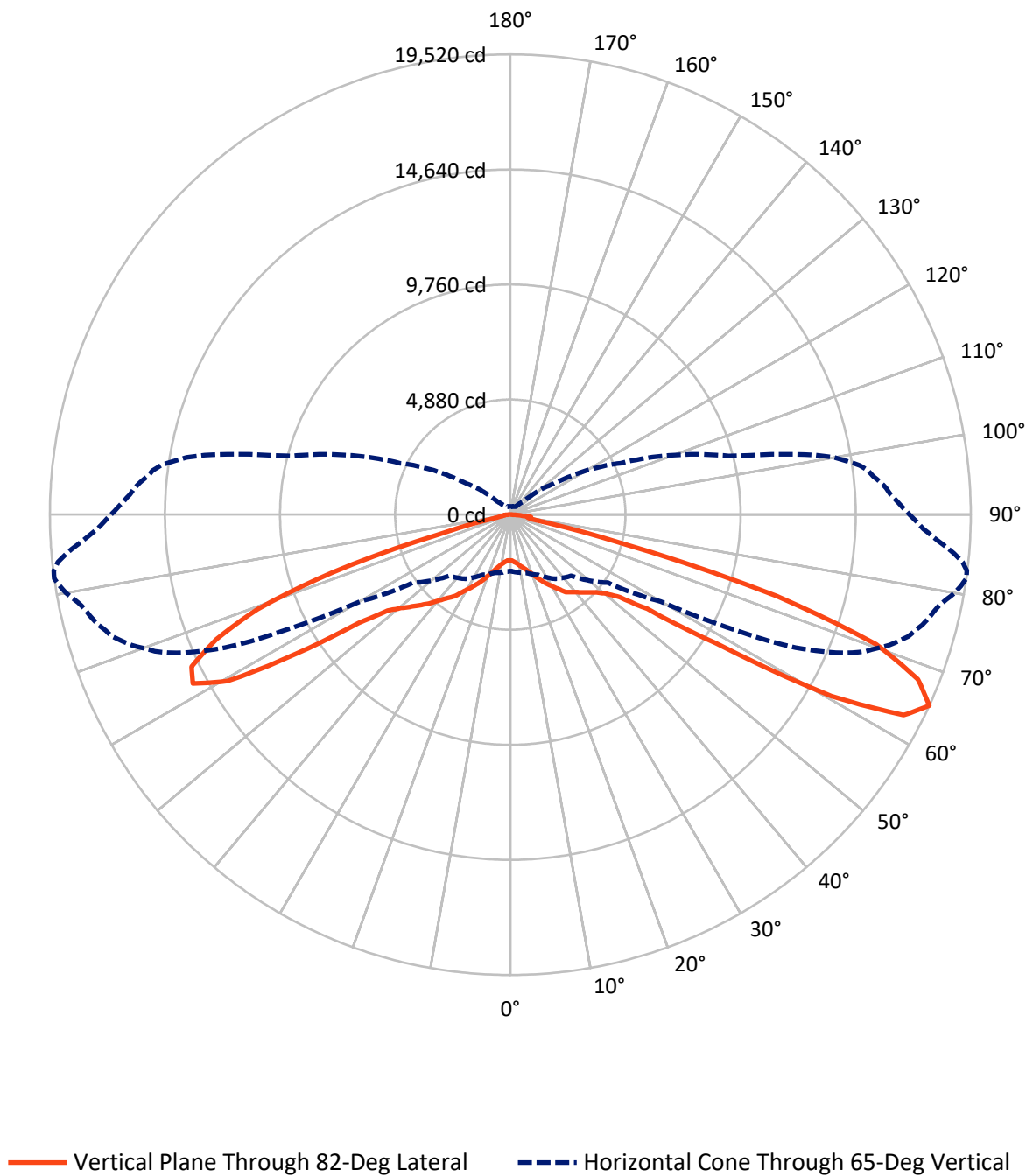


Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7799.0	0.0	7799.0
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	13147.3	0.0	13147.3
	% Fixture	62.8	0.0	62.8
Total	Lumens	20946.3	0.0	20946.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.3	0.9
10°-20°	693.3	3.3
20°-30°	1373.7	6.6
30°-40°	2354.8	11.2
40°-50°	3537.5	16.9
50°-60°	4914.7	23.5
60°-70°	5606.9	26.8
70°-80°	1931.5	9.2
80°-90°	336.6	1.6
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°	20946.3	100.0
0°-180°	20946.3	100.0

Coefficient of Utilization



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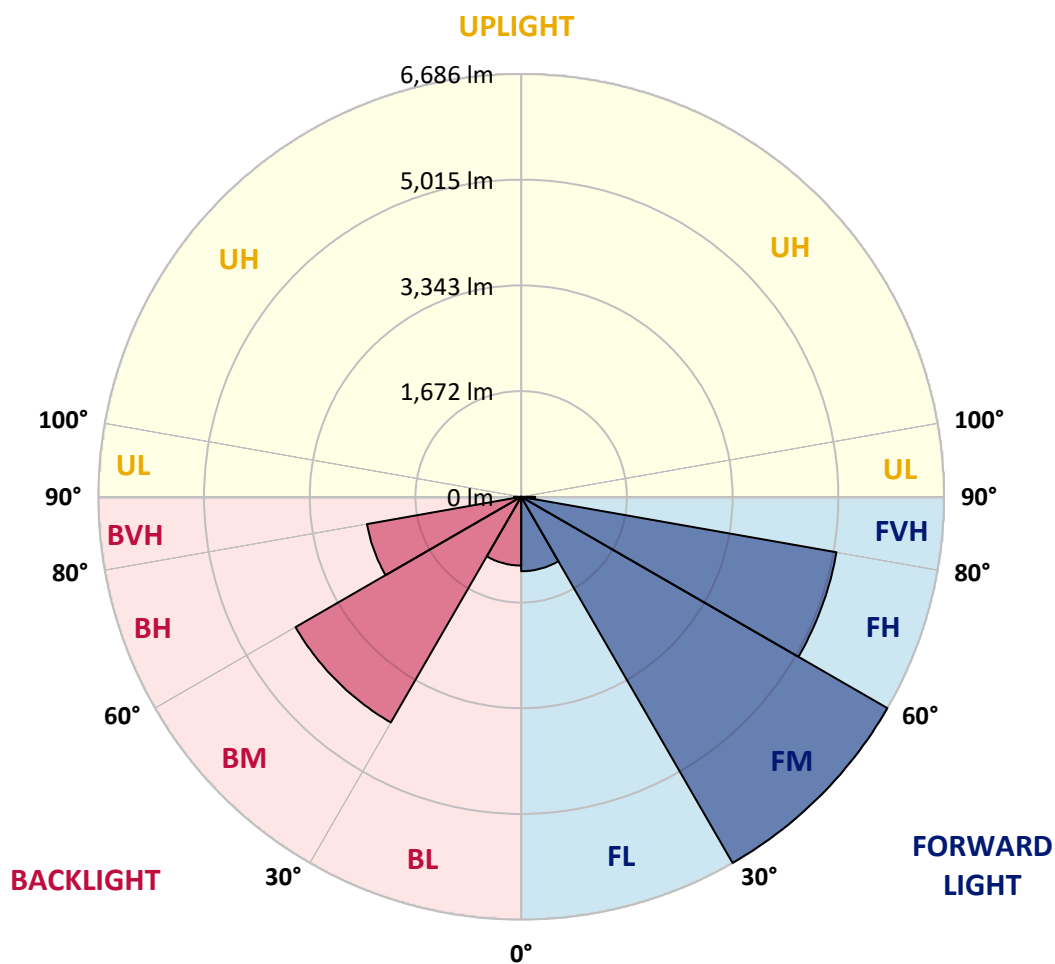
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1176.7	5.6			
FM	(30°-60°)	6686.5	31.9			
FH	(60°-80°)	5062.5	24.2			G3/7500
FVH	(80°-90°)	221.6	1.1			G2/225
BL	(0°-30°)	1087.5	5.2	B3/2500		
BM	(30°-60°)	4120.5	19.7	B3/5000		
BH	(60°-80°)	2475.9	11.8	B3/2500		G3/2500
BVH	(80°-90°)	115.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	2054.8	2056.1	2054.8	2050.7	2049.4	2037.1	2023.6	2016.8	2015.4	2010.0	2011.4
5°	2182.4	2178.3	2172.9	2166.1	2159.3	2138.9	2115.9	2103.6	2099.6	2095.5	2090.1
7.5°	2296.4	2299.1	2296.4	2286.9	2269.2	2243.4	2213.6	2194.6	2193.2	2189.1	2185.1
10°	2442.9	2449.7	2433.4	2417.2	2392.7	2353.4	2319.4	2295.0	2290.9	2285.5	2282.8
12.5°	2601.7	2603.1	2597.7	2561.0	2520.3	2466.0	2417.2	2392.7	2387.3	2380.5	2377.8
15°	2771.4	2772.7	2742.9	2707.6	2645.2	2580.0	2512.2	2485.0	2478.2	2479.6	2468.7
17.5°	2905.7	2908.5	2880.0	2835.2	2760.5	2683.2	2609.9	2588.2	2584.1	2585.4	2580.0
20°	2964.1	2968.2	2950.5	2916.6	2846.0	2778.2	2725.2	2711.7	2710.3	2707.6	2718.4
22.5°	2961.4	2962.7	2956.0	2942.4	2900.3	2861.0	2854.2	2862.3	2861.0	2863.7	2873.2
25°	2937.0	2941.0	2939.7	2945.1	2938.3	2953.2	2984.5	3013.0	3017.0	3022.5	3040.1
27.5°	2999.4	3007.5	2998.0	3003.5	3014.3	3064.5	3128.3	3171.7	3179.9	3194.8	3209.8
30°	3243.7	3232.8	3220.6	3207.0	3213.8	3245.0	3317.0	3355.0	3359.0	3369.9	3390.3
32.5°	3606.0	3593.8	3583.0	3561.3	3555.8	3542.3	3566.7	3576.2	3574.8	3585.7	3591.1
35°	4014.6	4015.9	4013.2	4029.5	4043.1	3973.8	3888.3	3865.3	3874.8	3862.6	3865.3
37.5°	4363.4	4367.4	4439.4	4528.9	4554.7	4511.3	4324.0	4231.7	4200.5	4196.4	4165.2
40°	4750.2	4750.2	4858.7	4968.7	5040.6	5094.9	4872.3	4709.4	4642.9	4623.9	4546.6
42.5°	5175.0	5153.2	5252.3	5373.1	5506.1	5629.6	5514.3	5331.0	5236.0	5202.1	5066.4
45°	5523.8	5510.2	5559.0	5671.7	5887.5	6129.1	6145.3	6051.7	5994.7	5924.1	5799.3
47.5°	5738.2	5731.4	5759.9	5882.1	6152.1	6543.0	6761.5	6809.0	6775.1	6720.8	6600.0
50°	5822.3	5812.8	5833.2	5968.9	6271.6	6787.3	7270.5	7494.4	7510.7	7522.9	7484.9
52.5°	5792.5	5780.3	5822.3	5936.3	6251.2	6872.8	7668.1	8098.3	8170.3	8231.3	8356.2
55°	5506.1	5487.1	5601.1	5815.6	6163.0	6841.6	7958.6	8679.2	8831.2	8994.1	9271.0
57.5°	5067.7	5051.5	5215.7	5510.2	6006.9	6756.1	8154.0	9413.5	9755.5	10048.6	10834.4
60°	4645.7	4632.1	4728.4	5013.5	5500.7	6339.4	7912.4	9660.5	10234.6	10867.0	12301.6
62.5°	3891.1	3854.4	3983.3	4223.6	4531.7	5244.2	6857.9	9110.8	9995.7	10925.4	12870.2
65°	2391.4	2444.3	2555.6	2821.6	3326.5	3665.8	5036.5	7370.9	8538.1	9703.9	12226.9
67.5°	1518.7	1533.6	1616.4	1801.0	2191.9	2532.5	3052.3	4625.3	5525.1	6671.9	9599.4
70°	1301.5	1311.0	1381.6	1574.3	1844.4	2263.8	2309.9	2415.8	2738.8	3469.0	5643.2
72.5°	1026.0	1042.3	1098.0	1264.9	1590.6	2041.2	2851.5	1909.6	1844.4	1905.5	2753.7
75°	610.7	629.7	675.9	766.8	1022.0	1560.8	2987.2	2221.7	2071.1	1953.0	1900.1
77.5°	323.0	309.4	340.7	393.6	525.2	832.0	2244.8	2722.5	2616.7	2475.5	2175.6
80°	160.1	165.6	175.1	185.9	234.8	337.9	1122.4	2816.2	3121.5	3257.3	2991.2
82.5°	63.8	71.9	101.8	108.6	128.9	143.9	361.0	1560.8	2235.3	3032.0	3958.9
85°	32.6	31.2	54.3	65.1	76.0	67.9	127.6	582.2	1047.7	1632.7	2645.2
87.5°	4.1	5.4	12.2	16.3	23.1	21.7	36.6	126.2	200.9	285.0	400.4
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):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	2004.6	2003.2	2003.2	1997.8	1997.8	1999.1	1995.1	1992.4	1992.4	1993.7	1988.3
5°	2086.0	2081.9	2081.9	2076.5	2069.7	2069.7	2064.3	2062.9	2060.2	2054.8	2050.7
7.5°	2181.0	2176.9	2170.1	2166.1	2163.4	2159.3	2152.5	2149.8	2144.4	2138.9	2133.5
10°	2278.7	2273.3	2270.6	2263.8	2261.1	2252.9	2248.9	2250.2	2239.4	2235.3	2236.6
12.5°	2376.4	2371.0	2361.5	2358.8	2357.4	2349.3	2345.2	2342.5	2334.4	2333.0	2328.9
15°	2463.3	2466.0	2461.9	2455.2	2449.7	2448.4	2444.3	2441.6	2436.2	2430.7	2425.3
17.5°	2575.9	2580.0	2574.6	2565.1	2565.1	2563.7	2565.1	2563.7	2554.2	2558.3	2555.6
20°	2719.8	2722.5	2708.9	2713.0	2715.7	2714.4	2718.4	2722.5	2719.8	2719.8	2723.9
22.5°	2885.4	2889.5	2881.3	2886.7	2894.9	2888.1	2900.3	2899.0	2901.7	2905.7	2907.1
25°	3055.0	3063.2	3056.4	3071.3	3065.9	3071.3	3086.2	3082.2	3089.0	3099.8	3103.9
27.5°	3224.7	3230.1	3231.5	3241.0	3250.5	3258.6	3277.6	3277.6	3283.0	3302.0	3302.0
30°	3402.5	3407.9	3413.3	3426.9	3432.3	3447.3	3466.3	3471.7	3469.0	3496.1	3504.3
32.5°	3607.4	3612.8	3622.3	3638.6	3645.4	3660.3	3660.3	3675.3	3686.1	3709.2	3710.6
35°	3880.2	3884.3	3880.2	3878.8	3888.3	3908.7	3910.1	3931.8	3941.3	3964.3	3971.1
37.5°	4153.0	4151.6	4134.0	4115.0	4116.4	4108.2	4102.8	4112.3	4116.4	4117.7	4132.6
40°	4520.8	4485.5	4458.4	4410.9	4389.1	4355.2	4334.9	4333.5	4311.8	4309.1	4313.1
42.5°	5002.6	4961.9	4898.1	4818.0	4756.9	4694.5	4648.4	4621.2	4573.7	4549.3	4528.9
45°	5675.8	5575.3	5499.3	5404.3	5286.2	5177.7	5063.7	5012.1	4921.2	4865.5	4803.1
47.5°	6498.2	6399.1	6282.4	6184.7	6030.0	5879.3	5723.3	5586.2	5427.4	5301.2	5198.0
50°	7391.2	7332.9	7248.7	7157.8	6958.3	6859.2	6662.4	6476.5	6305.5	6080.2	5883.4
52.5°	8307.3	8341.3	8322.3	8289.7	8163.5	8125.5	7955.8	7729.2	7556.8	7402.1	7060.1
55°	9436.5	9477.2	9558.7	9606.2	9591.2	9687.6	9645.5	9469.1	9399.9	9328.0	9085.0
57.5°	11164.2	11454.7	11765.5	12038.3	12102.0	12444.1	12370.8	12547.2	12672.1	12582.5	12503.8
60°	13005.9	13592.2	14120.2	14672.6	15121.8	15458.4	15903.5	16203.5	16392.1	16731.4	16758.6
62.5°	13748.3	14545.0	15215.4	15856.0	16389.4	16856.3	17258.0	17671.9	18011.2	18318.0	18539.2
65°	13341.2	14173.1	14986.1	15636.2	16149.2	16550.9	16987.9	17316.4	17650.2	17847.0	18079.1
67.5°	11090.9	12193.0	13193.2	13926.1	14627.8	15036.3	15553.4	15876.4	16230.6	16438.3	16587.6
70°	7231.1	8665.6	10032.3	11143.9	12091.2	12567.6	13191.9	13633.0	14059.1	14070.0	14318.3
72.5°	3901.9	5101.7	6245.8	7381.7	8462.1	9095.9	9712.0	10248.1	10671.6	10491.1	10738.1
75°	2172.9	2734.7	3360.4	4043.1	4701.3	5063.7	5523.8	5526.5	5745.0	5401.6	5488.5
77.5°	2090.1	2064.3	2073.8	2092.8	2125.4	2056.1	2054.8	2012.7	1947.6	1829.5	1849.8
80°	2745.6	2417.2	2181.0	1810.5	1457.6	1188.9	1114.3	1131.9	1184.8	1290.7	1425.0
82.5°	3969.8	3692.9	3296.6	2713.0	2129.4	1642.2	1349.0	1197.0	1190.3	1296.1	1499.7
85°	2890.8	3057.7	3032.0	2531.2	2087.4	1695.1	1233.7	1042.3	863.2	821.1	893.0
87.5°	426.2	352.9	397.7	332.5	241.6	187.3	164.2	131.6	126.2	128.9	141.1
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	1989.6	1984.2	1978.8	1982.9	1978.8	1977.4	1973.4	1970.6	1969.3	1969.3	1969.3
5°	2050.7	2043.9	2039.9	2038.5	2034.4	2030.4	2029.0	2022.2	2020.9	2020.9	2016.8
7.5°	2133.5	2128.1	2121.3	2117.2	2114.5	2107.7	2100.9	2099.6	2098.2	2092.8	2088.7
10°	2229.9	2221.7	2213.6	2213.6	2208.1	2206.8	2200.0	2190.5	2189.1	2181.0	2178.3
12.5°	2320.8	2318.1	2308.6	2305.9	2301.8	2297.7	2293.6	2289.6	2285.5	2278.7	2281.4
15°	2429.4	2422.6	2414.4	2415.8	2414.4	2409.0	2403.6	2399.5	2396.8	2394.1	2394.1
17.5°	2559.7	2556.9	2555.6	2548.8	2543.4	2547.4	2547.4	2547.4	2540.7	2542.0	2543.4
20°	2725.2	2727.9	2725.2	2719.8	2718.4	2722.5	2713.0	2727.9	2719.8	2714.4	2717.1
22.5°	2908.5	2918.0	2907.1	2908.5	2915.2	2918.0	2908.5	2920.7	2916.6	2908.5	2915.2
25°	3108.0	3114.7	3109.3	3108.0	3112.0	3121.5	3120.2	3118.8	3128.3	3120.2	3124.2
27.5°	3312.9	3317.0	3319.7	3323.8	3326.5	3325.1	3330.5	3330.5	3336.0	3326.5	3330.5
30°	3516.5	3516.5	3521.9	3527.3	3527.3	3527.3	3538.2	3539.5	3531.4	3534.1	3524.6
32.5°	3733.6	3735.0	3740.4	3740.4	3751.3	3752.6	3764.8	3748.6	3764.8	3751.3	3754.0
35°	3988.8	4006.4	4009.1	4022.7	4033.6	4037.6	4037.6	4039.0	4053.9	4043.1	4047.1
37.5°	4138.1	4142.1	4153.0	4159.8	4159.8	4165.2	4169.3	4165.2	4169.3	4167.9	4172.0
40°	4314.5	4310.4	4322.6	4325.4	4319.9	4326.7	4325.4	4321.3	4332.1	4324.0	4329.4
42.5°	4528.9	4505.9	4504.5	4515.4	4504.5	4509.9	4508.6	4499.1	4512.7	4516.7	4512.7
45°	4758.3	4746.1	4721.7	4721.7	4710.8	4706.7	4708.1	4706.7	4708.1	4724.4	4729.8
47.5°	5131.5	5056.9	5014.8	4975.5	4942.9	4941.5	4926.6	4934.7	4945.6	4972.7	4997.2
50°	5757.2	5584.8	5479.0	5381.3	5310.7	5286.2	5257.7	5255.0	5264.5	5295.7	5337.8
52.5°	6872.8	6633.9	6408.6	6199.6	6017.8	5878.0	5808.8	5772.1	5758.5	5789.8	5830.5
55°	8914.0	8463.4	8145.8	7934.1	7482.2	7290.8	7045.2	6932.5	6822.6	6833.4	6902.7
57.5°	12402.0	12159.0	11893.0	11522.5	11245.7	10911.8	10298.3	9956.3	9971.3	10051.3	9801.6
60°	16973.0	16727.3	16617.4	16280.8	16088.1	15953.7	15628.0	15060.7	14859.9	14821.9	14363.1
62.5°	18708.8	18767.2	18854.1	18949.1	18943.6	19002.0	18717.0	18532.4	18300.3	17999.0	17545.7
65°	18255.5	18403.5	18579.9	18835.1	19125.5	19339.9	19520.4	19498.7	19281.6	18879.8	18400.8
67.5°	16720.6	16867.1	16996.1	17338.1	17814.5	18250.1	18635.6	18897.5	18752.3	18419.8	17860.6
70°	14413.3	14519.2	14600.6	14897.9	15420.4	15952.4	16455.9	16895.6	16850.8	16447.8	16001.2
72.5°	10443.6	10700.1	10838.5	10818.1	11141.2	11737.0	11807.5	12183.5	12288.0	11853.7	11142.5
75°	5088.1	5092.2	4932.0	4879.1	4895.4	4998.5	4801.7	4813.9	4746.1	4438.0	4184.2
77.5°	1777.9	1729.1	1612.3	1473.9	1275.8	1089.8	901.2	819.7	792.6	712.5	656.9
80°	1532.3	1604.2	1581.1	1467.1	1258.1	1003.0	749.2	555.1	473.7	445.2	418.0
82.5°	1739.9	2016.8	2193.2	2183.7	1897.3	1425.0	889.0	510.3	363.7	318.9	293.2
85°	970.4	1043.7	1064.0	969.0	804.8	549.7	306.7	215.8	183.2	166.9	150.6
87.5°	154.7	141.1	138.4	120.8	114.0	104.5	92.3	86.9	80.1	76.0	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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CATALOG NUMBER: VST-F09-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	1967.9	1966.6	1962.5	1958.4	1955.7	1954.4	1953.0	1950.3	1948.9	1947.6	1944.9
5°	2014.1	2011.4	2004.6	1997.8	1995.1	1991.0	1986.9	1984.2	1981.5	1980.1	1974.7
7.5°	2086.0	2083.3	2075.1	2069.7	2068.4	2057.5	2056.1	2052.1	2045.3	2043.9	2035.8
10°	2172.9	2171.5	2164.7	2160.6	2157.9	2152.5	2144.4	2137.6	2130.8	2130.8	2125.4
12.5°	2273.3	2267.9	2271.9	2262.4	2259.7	2254.3	2250.2	2248.9	2240.7	2233.9	2232.6
15°	2391.4	2384.6	2384.6	2381.9	2379.2	2373.7	2372.4	2373.7	2365.6	2368.3	2360.2
17.5°	2537.9	2540.7	2539.3	2539.3	2532.5	2532.5	2521.7	2535.2	2525.7	2532.5	2529.8
20°	2721.2	2722.5	2719.8	2723.9	2726.6	2725.2	2723.9	2722.5	2726.6	2732.0	2727.9
22.5°	2916.6	2916.6	2915.2	2930.2	2913.9	2926.1	2930.2	2922.0	2943.7	2941.0	2945.1
25°	3128.3	3128.3	3139.2	3151.4	3154.1	3144.6	3150.0	3143.2	3156.8	3167.7	3170.4
27.5°	3325.1	3342.8	3350.9	3342.8	3349.5	3364.5	3363.1	3363.1	3372.6	3369.9	3395.7
30°	3527.3	3538.2	3549.0	3543.6	3546.3	3565.3	3566.7	3568.0	3580.3	3597.9	3616.9
32.5°	3758.1	3768.9	3763.5	3781.1	3779.8	3802.8	3806.9	3811.0	3849.0	3842.2	3881.6
35°	4041.7	4052.6	4047.1	4066.1	4063.4	4071.6	4086.5	4102.8	4109.6	4148.9	4180.1
37.5°	4174.7	4174.7	4186.9	4208.6	4216.8	4230.4	4253.4	4273.8	4307.7	4349.8	4398.6
40°	4334.9	4338.9	4355.2	4378.3	4393.2	4424.4	4466.5	4495.0	4546.6	4592.7	4649.7
42.5°	4528.9	4546.6	4565.6	4596.8	4629.4	4678.2	4737.9	4774.6	4842.4	4902.2	4972.7
45°	4755.6	4773.2	4818.0	4875.0	4922.5	4976.8	5025.7	5112.5	5173.6	5236.0	5297.1
47.5°	5029.7	5081.3	5118.0	5185.8	5244.2	5316.1	5377.2	5458.6	5525.1	5601.1	5652.7
50°	5381.3	5445.0	5492.5	5580.8	5637.8	5717.8	5795.2	5856.3	5924.1	5998.8	6040.8
52.5°	5886.1	5951.3	6011.0	6120.9	6191.5	6245.8	6348.9	6424.9	6487.4	6541.6	6587.8
55°	6980.0	6961.0	7126.6	7339.7	7364.1	7560.9	7597.5	7661.3	7776.7	7793.0	7921.9
57.5°	10105.6	10007.9	10248.1	10560.3	10506.0	10406.9	10820.9	10846.6	10788.3	10944.4	10767.9
60°	14431.0	14260.0	14325.1	14410.6	14287.1	14228.8	14249.1	14307.5	14250.5	14188.0	14017.0
62.5°	17319.1	17055.8	16867.1	16708.3	16507.5	16362.3	16199.4	15998.5	15944.2	15716.2	15524.9
65°	17935.2	17525.4	17226.8	16926.9	16650.0	16393.5	16147.8	15975.5	15747.5	15477.4	15277.9
67.5°	17258.0	16750.4	16313.4	15877.7	15564.2	15186.9	15002.4	14721.4	14440.5	14131.0	13947.8
70°	15290.1	14760.8	14211.1	13785.0	13358.8	12891.9	12801.0	12468.5	12307.0	11884.9	11811.6
72.5°	10553.5	10200.6	9955.0	9428.4	9169.2	8930.3	8854.3	8546.2	8578.8	8116.0	8284.3
75°	3752.6	3702.4	3630.5	3333.3	3280.3	3188.0	3163.6	3141.9	3361.8	3056.4	3277.6
77.5°	644.7	640.6	603.9	586.3	620.2	598.5	603.9	593.1	656.9	666.4	651.5
80°	400.4	389.5	377.3	369.2	370.5	362.4	363.7	366.4	370.5	369.2	373.2
82.5°	274.2	264.7	259.2	253.8	261.9	264.7	271.4	278.2	289.1	295.9	304.0
85°	149.3	137.1	137.1	135.7	146.6	154.7	165.6	179.1	198.1	214.4	232.1
87.5°	76.0	73.3	74.6	77.4	86.9	93.6	107.2	119.4	135.7	153.4	169.6
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-F09-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	1943.5	1943.5	1942.1	1942.1	1940.8	1939.4	1938.1	1934.0	1919.1	1905.5	1896.0
5°	1973.4	1969.3	1967.9	1963.9	1962.5	1959.8	1955.7	1951.6	1924.5	1900.1	1882.4
7.5°	2034.4	2029.0	2026.3	2022.2	2018.1	2012.7	2007.3	2003.2	1970.6	1942.1	1920.4
10°	2114.5	2111.8	2110.4	2105.0	2105.0	2096.9	2095.5	2086.0	2050.7	2024.9	2005.9
12.5°	2225.8	2220.4	2219.0	2212.2	2214.9	2212.2	2209.5	2204.1	2178.3	2148.4	2122.6
15°	2364.2	2364.2	2357.4	2352.0	2353.4	2350.7	2356.1	2349.3	2333.0	2305.9	2263.8
17.5°	2531.2	2528.4	2531.2	2527.1	2529.8	2532.5	2525.7	2527.1	2518.9	2485.0	2422.6
20°	2725.2	2721.2	2737.4	2730.7	2745.6	2732.0	2734.7	2738.8	2738.8	2694.0	2609.9
22.5°	2947.8	2945.1	2945.1	2958.7	2964.1	2965.5	2970.9	2975.0	2985.8	2928.8	2794.5
25°	3170.4	3179.9	3181.2	3198.9	3207.0	3207.0	3211.1	3226.0	3258.6	3179.9	3006.2
27.5°	3397.0	3420.1	3425.5	3437.8	3450.0	3462.2	3471.7	3482.5	3535.5	3450.0	3223.3
30°	3623.7	3649.5	3668.5	3682.1	3697.0	3726.8	3732.3	3754.0	3842.2	3737.7	3429.6
32.5°	3889.7	3926.3	3950.8	3968.4	3991.5	4020.0	4036.3	4063.4	4148.9	3977.9	3580.3
35°	4207.3	4229.0	4264.3	4294.1	4307.7	4356.6	4382.4	4389.1	4454.3	4185.6	3691.6
37.5°	4427.1	4463.8	4524.9	4566.9	4591.4	4618.5	4661.9	4690.4	4752.9	4374.2	3747.2
40°	4706.7	4762.4	4811.2	4873.7	4913.0	4933.4	4976.8	4999.9	5008.0	4535.7	3729.6
42.5°	5047.4	5097.6	5162.7	5213.0	5242.8	5265.9	5301.2	5310.7	5204.8	4611.7	3634.6
45°	5367.7	5445.0	5500.7	5537.3	5559.0	5571.3	5593.0	5594.3	5367.7	4573.7	3471.7
47.5°	5712.4	5768.1	5819.6	5845.4	5842.7	5845.4	5837.3	5831.8	5449.1	4442.1	3262.7
50°	6093.8	6130.4	6152.1	6164.3	6171.1	6145.3	6108.7	6084.3	5455.9	4254.8	3051.0
52.5°	6605.4	6651.6	6647.5	6646.2	6591.9	6567.4	6469.7	6419.5	5416.5	4034.9	2812.1
55°	7901.5	7856.8	7768.5	7812.0	7590.8	7475.4	7323.4	7182.2	5468.1	3825.9	2535.2
57.5°	10838.5	10856.1	10605.1	10470.7	10097.5	9630.6	9254.7	8889.6	5932.3	3698.3	2174.2
60°	13903.0	13672.3	13353.4	12867.5	12387.1	11693.5	11024.4	10392.0	6395.1	3565.3	1746.7
62.5°	15241.2	14912.8	14431.0	13802.6	13048.0	12199.8	11366.5	10595.6	6171.1	3135.1	1270.3
65°	14969.8	14467.6	13935.6	13200.0	12282.6	11352.9	10379.8	9592.6	5162.7	2338.4	783.1
67.5°	13550.2	13124.0	12562.1	11689.5	10708.2	9740.5	8848.9	7966.7	3835.4	1457.6	438.4
70°	11437.0	11020.4	10450.3	9557.3	8577.4	7651.8	6707.2	5987.9	2444.3	703.0	316.2
72.5°	7934.1	7596.2	7193.1	6556.6	5697.5	4856.0	4216.8	3664.4	1354.5	373.2	289.1
75°	3222.0	3223.3	3150.0	2881.3	2434.8	2099.6	1790.1	1518.7	565.9	317.6	285.0
77.5°	730.2	742.4	811.6	769.5	693.5	648.7	580.9	513.0	344.7	327.1	287.7
80°	369.2	370.5	366.4	367.8	363.7	365.1	359.7	355.6	323.0	336.6	287.7
82.5°	308.1	314.9	313.5	313.5	314.9	314.9	314.9	313.5	335.2	354.2	278.2
85°	244.3	257.9	268.7	279.6	291.8	299.9	304.0	308.1	325.7	348.8	252.4
87.5°	184.6	200.9	214.4	225.3	244.3	244.3	257.9	267.4	267.4	272.8	133.0
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: P159374

CATALOG NUMBER: VST-F09-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	1948.9	1948.9	1948.9	1948.9	1948.9
2.5°	1882.4	1877.0	1871.6	1868.8	1863.4
5°	1868.8	1858.0	1851.2	1851.2	1845.8
7.5°	1908.2	1904.1	1894.6	1889.2	1894.6
10°	1992.4	1985.6	1974.7	1966.6	1970.6
12.5°	2105.0	2077.9	2056.1	2046.6	2039.9
15°	2221.7	2167.4	2124.0	2099.6	2092.8
17.5°	2346.6	2251.6	2186.4	2149.8	2143.0
20°	2474.2	2356.1	2263.8	2216.3	2214.9
22.5°	2627.5	2470.1	2352.0	2289.6	2285.5
25°	2789.0	2571.9	2415.8	2335.7	2327.6
27.5°	2928.8	2653.3	2455.2	2360.2	2352.0
30°	3045.5	2714.4	2487.7	2377.8	2366.9
32.5°	3129.7	2749.7	2501.3	2383.2	2371.0
35°	3156.8	2736.1	2463.3	2334.4	2320.8
37.5°	3120.2	2647.9	2357.4	2214.9	2198.6
40°	3010.2	2493.2	2185.1	2038.5	2018.1
42.5°	2842.0	2303.1	1977.4	1837.6	1811.8
45°	2634.3	2088.7	1771.1	1615.1	1602.8
47.5°	2417.2	1863.4	1539.1	1397.9	1383.0
50°	2182.4	1602.8	1312.4	1159.0	1159.0
52.5°	1902.8	1349.0	1049.1	933.7	924.2
55°	1581.1	1062.7	836.0	747.8	735.6
57.5°	1235.0	817.0	667.7	616.2	602.6
60°	908.0	613.4	537.4	508.9	503.5
62.5°	616.2	466.9	432.9	420.7	419.4
65°	416.7	363.7	354.2	350.2	351.5
67.5°	320.3	302.7	298.6	297.2	297.2
70°	278.2	267.4	263.3	264.7	263.3
72.5°	261.9	247.0	248.4	251.1	249.7
75°	256.5	237.5	242.9	244.3	238.9
77.5°	252.4	226.7	240.2	244.3	229.4
80°	244.3	217.2	249.7	251.1	225.3
82.5°	223.9	192.7	249.7	230.7	203.6
85°	190.0	146.6	282.3	200.9	150.6
87.5°	120.8	86.9	191.4	137.1	90.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)