

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: P159373

Luminaire Tested: **VST-F09-LED-E-U-T2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159373
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-T2-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (63) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19355.6 lumens
Efficiency: N/A
Efficacy: 82.4 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



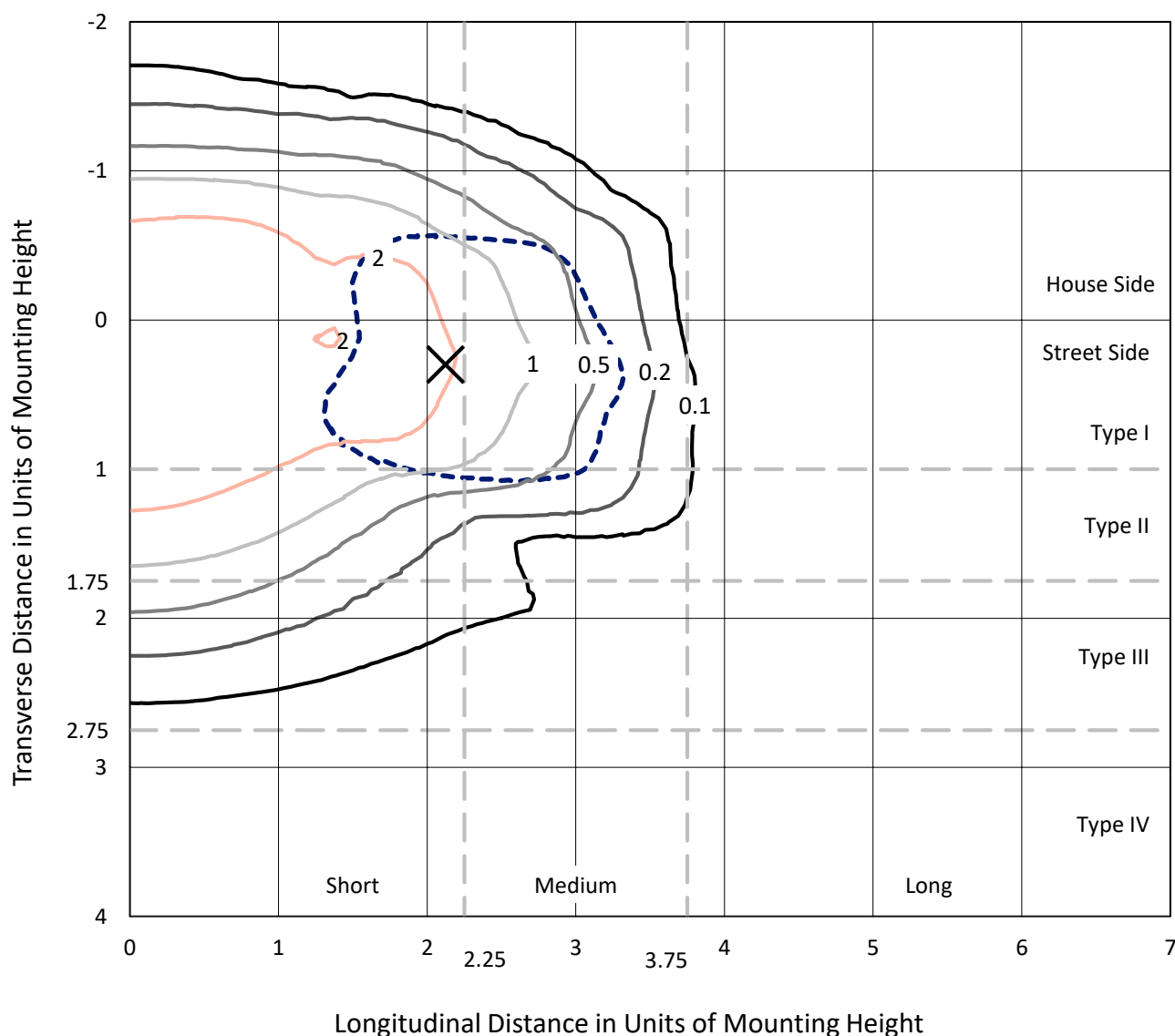
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

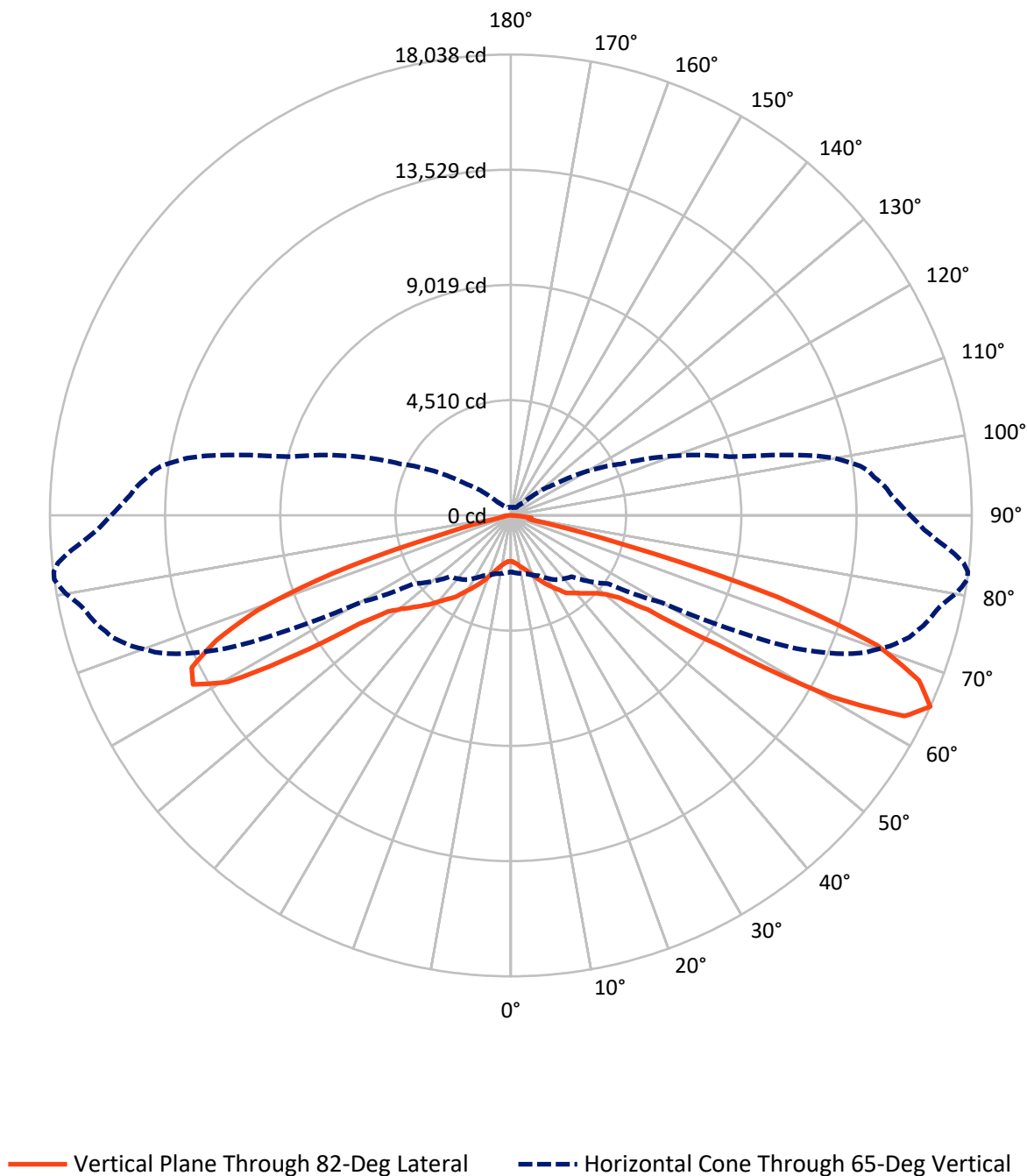


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7206.7	0.0	7206.7
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	12148.9	0.0	12148.9
	% Fixture	62.8	0.0	62.8
Total	Lumens	19355.6	0.0	19355.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.3	0.9
10°-20°	640.6	3.3
20°-30°	1269.4	6.6
30°-40°	2176.0	11.2
40°-50°	3268.8	16.9
50°-60°	4541.5	23.5
60°-70°	5181.1	26.8
70°-80°	1784.8	9.2
80°-90°	311.1	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°	19355.6	100.0
0°-180°	19355.6	100.0

Coefficient of Utilization



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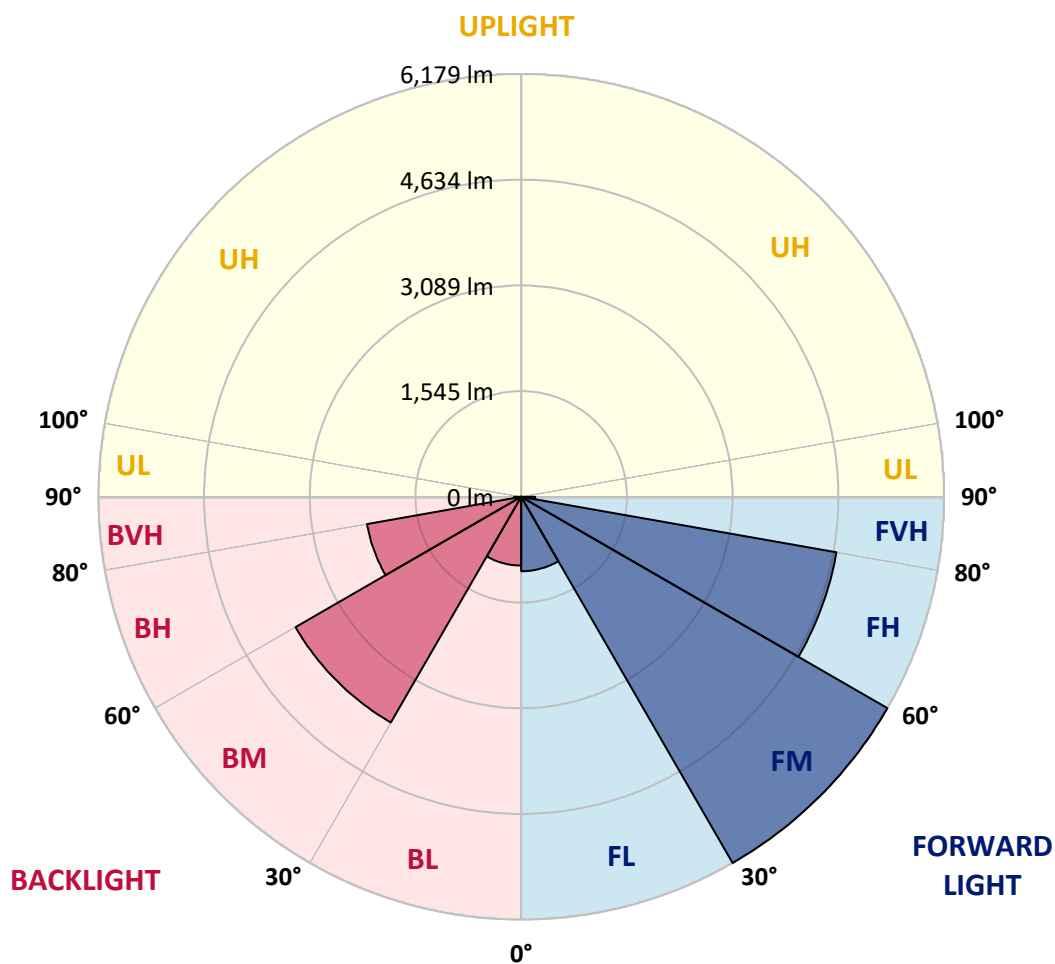
CATALOG NUMBER: VST-F09-LED-E-U-T2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1087.4	5.6			
FM	(30°-60°)	6178.7	31.9			
FH	(60°-80°)	4678.0	24.2			G2/5000
FVH	(80°-90°)	204.8	1.1			G2/225
BL	(0°-30°)	1004.9	5.2	B3/2500		
BM	(30°-60°)	3807.6	19.7	B3/5000		
BH	(60°-80°)	2287.9	11.8	B3/2500		G3/2500
BVH	(80°-90°)	106.3	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°	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1898.7	1900.0	1898.7	1895.0	1893.7	1882.4	1869.9	1863.6	1862.4	1857.4	1858.6
5°	2016.6	2012.9	2007.9	2001.6	1995.3	1976.5	1955.2	1943.9	1940.1	1936.4	1931.4
7.5°	2122.0	2124.5	2122.0	2113.2	2096.9	2073.1	2045.5	2027.9	2026.7	2022.9	2019.1
10°	2257.4	2263.7	2248.6	2233.6	2211.0	2174.7	2143.3	2120.7	2117.0	2111.9	2109.4
12.5°	2404.2	2405.4	2400.4	2366.5	2328.9	2278.7	2233.6	2211.0	2206.0	2199.7	2197.2
15°	2560.9	2562.2	2534.6	2502.0	2444.3	2384.1	2321.4	2296.3	2290.0	2291.3	2281.3
17.5°	2685.1	2687.6	2661.3	2619.9	2550.9	2479.4	2411.7	2391.6	2387.9	2389.1	2384.1
20°	2739.0	2742.8	2726.5	2695.1	2629.9	2567.2	2518.3	2505.7	2504.5	2502.0	2512.0
22.5°	2736.5	2737.8	2731.5	2718.9	2680.1	2643.7	2637.4	2644.9	2643.7	2646.2	2655.0
25°	2713.9	2717.7	2716.4	2721.4	2715.2	2729.0	2757.8	2784.2	2787.9	2792.9	2809.2
27.5°	2771.6	2779.1	2770.4	2775.4	2785.4	2831.8	2890.8	2930.9	2938.4	2952.2	2966.0
30°	2997.4	2987.3	2976.0	2963.5	2969.8	2998.6	3065.1	3100.2	3104.0	3114.0	3132.8
32.5°	3332.2	3320.9	3310.9	3290.8	3285.8	3273.3	3295.8	3304.6	3303.4	3313.4	3318.4
35°	3709.7	3711.0	3708.4	3723.5	3736.0	3672.1	3593.1	3571.7	3580.5	3569.2	3571.7
37.5°	4032.0	4035.8	4102.2	4185.0	4208.8	4168.7	3995.6	3910.4	3881.5	3877.8	3848.9
40°	4389.4	4389.4	4489.8	4591.3	4657.8	4708.0	4502.3	4351.8	4290.4	4272.8	4201.3
42.5°	4782.0	4761.9	4853.5	4965.1	5088.0	5202.1	5095.5	4926.2	4838.4	4807.1	4681.6
45°	5104.3	5091.7	5136.9	5241.0	5440.4	5663.6	5678.7	5592.1	5539.5	5474.3	5358.9
47.5°	5302.4	5296.2	5322.5	5435.4	5684.9	6046.1	6248.0	6291.9	6260.6	6210.4	6098.8
50°	5380.2	5371.4	5390.2	5515.6	5795.3	6271.9	6718.3	6925.3	6940.3	6951.6	6916.5
52.5°	5352.6	5341.3	5380.2	5485.5	5776.5	6350.9	7085.8	7483.4	7549.8	7606.3	7721.6
55°	5088.0	5070.4	5175.8	5373.9	5695.0	6322.0	7354.2	8020.1	8160.6	8311.1	8566.9
57.5°	4682.9	4667.8	4819.6	5091.7	5550.8	6243.0	7534.8	8698.6	9014.6	9285.5	10011.7
60°	4292.9	4280.3	4369.4	4632.7	5083.0	5858.0	7311.5	8926.9	9457.3	10041.8	11367.4
62.5°	3595.6	3561.7	3680.9	3902.8	4187.5	4845.9	6337.1	8418.9	9236.6	10095.7	11892.9
65°	2209.8	2258.7	2361.5	2607.3	3073.9	3387.4	4654.1	6811.1	7889.7	8967.0	11298.4
67.5°	1403.4	1417.2	1493.7	1664.2	2025.4	2340.2	2820.5	4274.1	5105.5	6165.3	8870.4
70°	1202.7	1211.5	1276.7	1454.8	1704.4	2091.9	2134.5	2232.3	2530.8	3205.5	5214.6
72.5°	948.1	963.2	1014.6	1168.8	1469.8	1886.2	2634.9	1764.6	1704.4	1760.8	2544.6
75°	564.4	581.9	624.6	708.6	944.4	1442.2	2760.3	2053.0	1913.8	1804.7	1755.8
77.5°	298.5	285.9	314.8	363.7	485.3	768.8	2074.3	2515.8	2418.0	2287.5	2010.4
80°	148.0	153.0	161.8	171.8	217.0	312.3	1037.2	2602.3	2884.5	3009.9	2764.1
82.5°	58.9	66.5	94.1	100.3	119.1	132.9	333.6	1442.2	2065.5	2801.7	3658.3
85°	30.1	28.8	50.2	60.2	70.2	62.7	117.9	538.0	968.2	1508.7	2444.3
87.5°	3.8	5.0	11.3	15.0	21.3	20.1	33.9	116.6	185.6	263.4	370.0
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-T2-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1852.3	1851.1	1851.1	1846.1	1846.1	1847.3	1843.6	1841.1	1841.1	1842.3	1837.3
5°	1927.6	1923.8	1923.8	1918.8	1912.5	1912.5	1907.5	1906.3	1903.8	1898.7	1895.0
7.5°	2015.4	2011.6	2005.3	2001.6	1999.1	1995.3	1989.0	1986.5	1981.5	1976.5	1971.5
10°	2105.7	2100.7	2098.1	2091.9	2089.4	2081.8	2078.1	2079.3	2069.3	2065.5	2066.8
12.5°	2196.0	2191.0	2182.2	2179.7	2178.4	2170.9	2167.1	2164.6	2157.1	2155.8	2152.1
15°	2276.2	2278.7	2275.0	2268.7	2263.7	2262.4	2258.7	2256.2	2251.2	2246.1	2241.1
17.5°	2380.3	2384.1	2379.1	2370.3	2370.3	2369.0	2370.3	2369.0	2360.3	2364.0	2361.5
20°	2513.3	2515.8	2503.2	2507.0	2509.5	2508.2	2512.0	2515.8	2513.3	2513.3	2517.0
22.5°	2666.3	2670.0	2662.5	2667.5	2675.0	2668.8	2680.1	2678.8	2681.3	2685.1	2686.3
25°	2823.0	2830.6	2824.3	2838.1	2833.1	2838.1	2851.9	2848.1	2854.4	2864.4	2868.2
27.5°	2979.8	2984.8	2986.1	2994.8	3003.6	3011.2	3028.7	3028.7	3033.7	3051.3	3051.3
30°	3144.1	3149.1	3154.1	3166.7	3171.7	3185.5	3203.0	3208.0	3205.5	3230.6	3238.1
32.5°	3333.5	3338.5	3347.3	3362.3	3368.6	3382.4	3382.4	3396.2	3406.2	3427.5	3428.8
35°	3585.5	3589.3	3585.5	3584.3	3593.1	3611.9	3613.1	3633.2	3642.0	3663.3	3669.6
37.5°	3837.6	3836.4	3820.1	3802.5	3803.8	3796.2	3791.2	3800.0	3803.8	3805.0	3818.8
40°	4177.5	4144.9	4119.8	4075.9	4055.8	4024.5	4005.7	4004.4	3984.4	3981.8	3985.6
42.5°	4622.7	4585.1	4526.1	4452.1	4395.7	4338.0	4295.4	4270.3	4226.4	4203.8	4185.0
45°	5244.7	5151.9	5081.7	4993.9	4884.8	4784.5	4679.1	4631.5	4547.5	4496.0	4438.3
47.5°	6004.7	5913.2	5805.3	5715.0	5572.1	5432.9	5288.6	5162.0	5015.2	4898.6	4803.3
50°	6830.0	6776.0	6698.3	6614.2	6429.9	6338.3	6156.5	5984.7	5826.7	5618.5	5436.6
52.5°	7676.5	7707.8	7690.3	7660.2	7543.6	7508.4	7351.7	7142.2	6983.0	6840.0	6524.0
55°	8719.9	8757.5	8832.8	8876.7	8862.9	8951.9	8913.1	8750.0	8686.1	8619.6	8395.1
57.5°	10316.4	10584.8	10872.0	11124.1	11183.0	11499.1	11431.3	11594.4	11709.8	11627.0	11554.2
60°	12018.3	12560.1	13047.9	13558.3	13973.4	14284.5	14695.8	14973.0	15147.3	15460.8	15485.9
62.5°	12704.3	13440.4	14060.0	14651.9	15144.8	15576.2	15947.4	16329.9	16643.5	16926.9	17131.3
65°	12328.0	13096.8	13848.0	14448.8	14922.8	15294.0	15697.9	16001.4	16309.9	16491.7	16706.2
67.5°	10248.7	11267.0	12191.3	12868.6	13516.9	13894.4	14372.3	14670.7	14998.1	15189.9	15327.9
70°	6682.0	8007.6	9270.5	10297.6	11173.0	11613.2	12190.1	12597.7	12991.5	13001.5	13231.0
72.5°	3605.6	4714.3	5771.5	6821.2	7819.5	8405.1	8974.5	9469.9	9861.2	9694.4	9922.6
75°	2007.9	2527.1	3105.2	3736.0	4344.3	4679.1	5104.3	5106.8	5308.7	4991.4	5071.7
77.5°	1931.4	1907.5	1916.3	1933.9	1964.0	1900.0	1898.7	1859.9	1799.7	1690.6	1709.4
80°	2537.1	2233.6	2015.4	1673.0	1346.9	1098.6	1029.6	1045.9	1094.9	1192.7	1316.8
82.5°	3668.3	3412.5	3046.3	2507.0	1967.7	1517.5	1246.6	1106.1	1099.9	1197.7	1385.8
85°	2671.3	2825.5	2801.7	2338.9	1928.8	1566.4	1140.0	963.2	797.6	758.7	825.2
87.5°	393.8	326.1	367.5	307.3	223.2	173.1	151.7	121.7	116.6	119.1	130.4
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1838.5	1833.5	1828.5	1832.3	1828.5	1827.3	1823.5	1821.0	1819.7	1819.7	1819.7
5°	1895.0	1888.7	1884.9	1883.7	1879.9	1876.2	1874.9	1868.6	1867.4	1867.4	1863.6
7.5°	1971.5	1966.5	1960.2	1956.4	1953.9	1947.7	1941.4	1940.1	1938.9	1933.9	1930.1
10°	2060.5	2053.0	2045.5	2045.5	2040.5	2039.2	2032.9	2024.2	2022.9	2015.4	2012.9
12.5°	2144.6	2142.0	2133.3	2130.8	2127.0	2123.2	2119.5	2115.7	2111.9	2105.7	2108.2
15°	2244.9	2238.6	2231.1	2232.3	2231.1	2226.1	2221.1	2217.3	2214.8	2212.3	2212.3
17.5°	2365.3	2362.8	2361.5	2355.2	2350.2	2354.0	2354.0	2354.0	2347.7	2349.0	2350.2
20°	2518.3	2520.8	2518.3	2513.3	2512.0	2515.8	2507.0	2520.8	2513.3	2508.2	2510.8
22.5°	2687.6	2696.4	2686.3	2687.6	2693.9	2696.4	2687.6	2698.9	2695.1	2687.6	2693.9
25°	2871.9	2878.2	2873.2	2871.9	2875.7	2884.5	2883.2	2882.0	2890.8	2883.2	2887.0
27.5°	3061.3	3065.1	3067.6	3071.3	3073.9	3072.6	3077.6	3077.6	3082.6	3073.9	3077.6
30°	3249.4	3249.4	3254.5	3259.5	3259.5	3259.5	3269.5	3270.8	3263.2	3265.7	3257.0
32.5°	3450.1	3451.3	3456.4	3456.4	3466.4	3467.7	3478.9	3463.9	3478.9	3466.4	3468.9
35°	3685.9	3702.2	3704.7	3717.2	3727.3	3731.0	3731.0	3732.3	3746.1	3736.0	3739.8
37.5°	3823.8	3827.6	3837.6	3843.9	3843.9	3848.9	3852.7	3848.9	3852.7	3851.4	3855.2
40°	3986.9	3983.1	3994.4	3996.9	3991.9	3998.1	3996.9	3993.1	4003.2	3995.6	4000.7
42.5°	4185.0	4163.7	4162.4	4172.5	4162.4	4167.5	4166.2	4157.4	4170.0	4173.7	4170.0
45°	4397.0	4385.7	4363.1	4363.1	4353.1	4349.3	4350.6	4349.3	4350.6	4365.6	4370.6
47.5°	4741.8	4672.9	4634.0	4597.6	4567.5	4566.3	4552.5	4560.0	4570.0	4595.1	4617.7
50°	5320.0	5160.7	5062.9	4972.6	4907.4	4884.8	4858.5	4856.0	4864.7	4893.6	4932.5
52.5°	6350.9	6130.2	5922.0	5728.8	5560.8	5431.6	5367.7	5333.8	5321.2	5350.1	5387.7
55°	8237.1	7820.7	7527.3	7331.6	6914.0	6737.2	6510.2	6406.1	6304.5	6314.5	6378.5
57.5°	11460.2	11235.7	10989.9	10647.5	10391.7	10083.2	9516.3	9200.3	9214.0	9288.0	9057.3
60°	15684.1	15457.1	15355.5	15044.5	14866.4	14742.2	14441.2	13917.0	13731.4	13696.3	13272.4
62.5°	17288.1	17342.0	17422.3	17510.1	17505.1	17559.0	17295.6	17125.1	16910.6	16632.2	16213.3
65°	16869.2	17005.9	17169.0	17404.7	17673.1	17871.3	18038.1	18018.0	17817.3	17446.1	17003.4
67.5°	15450.8	15586.3	15705.4	16021.4	16461.6	16864.2	17220.4	17462.4	17328.2	17021.0	16504.3
70°	13318.8	13416.6	13491.9	13766.5	14249.4	14741.0	15206.3	15612.6	15571.2	15198.7	14786.1
72.5°	9650.5	9887.5	10015.4	9996.6	10295.1	10845.7	10910.9	11258.3	11354.8	10953.5	10296.4
75°	4701.7	4705.5	4557.5	4508.6	4523.6	4618.9	4437.1	4448.4	4385.7	4101.0	3866.5
77.5°	1642.9	1597.8	1489.9	1362.0	1178.9	1007.1	832.7	757.5	732.4	658.4	607.0
80°	1415.9	1482.4	1461.1	1355.7	1162.6	926.8	692.3	512.9	437.7	411.4	386.3
82.5°	1607.8	1863.6	2026.7	2017.9	1753.3	1316.8	821.5	471.6	336.1	294.7	270.9
85°	896.7	964.4	983.2	895.4	743.7	507.9	283.4	199.4	169.3	154.3	139.2
87.5°	143.0	130.4	127.9	111.6	105.3	96.6	85.3	80.3	74.0	70.2	70.2
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-T2-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1818.5	1817.2	1813.5	1809.7	1807.2	1805.9	1804.7	1802.2	1800.9	1799.7	1797.2
5°	1861.1	1858.6	1852.3	1846.1	1843.6	1839.8	1836.0	1833.5	1831.0	1829.8	1824.8
7.5°	1927.6	1925.1	1917.6	1912.5	1911.3	1901.3	1900.0	1896.2	1890.0	1888.7	1881.2
10°	2007.9	2006.6	2000.3	1996.6	1994.1	1989.0	1981.5	1975.2	1969.0	1969.0	1964.0
12.5°	2100.7	2095.6	2099.4	2090.6	2088.1	2083.1	2079.3	2078.1	2070.6	2064.3	2063.0
15°	2209.8	2203.5	2203.5	2201.0	2198.5	2193.5	2192.2	2193.5	2185.9	2188.4	2180.9
17.5°	2345.2	2347.7	2346.5	2346.5	2340.2	2340.2	2330.2	2342.7	2333.9	2340.2	2337.7
20°	2514.5	2515.8	2513.3	2517.0	2519.5	2518.3	2517.0	2515.8	2519.5	2524.6	2520.8
22.5°	2695.1	2695.1	2693.9	2707.7	2692.6	2703.9	2707.7	2700.1	2720.2	2717.7	2721.4
25°	2890.8	2890.8	2900.8	2912.1	2914.6	2905.8	2910.8	2904.6	2917.1	2927.1	2929.6
27.5°	3072.6	3088.9	3096.4	3088.9	3095.2	3109.0	3107.7	3107.7	3116.5	3114.0	3137.8
30°	3259.5	3269.5	3279.5	3274.5	3277.0	3294.6	3295.8	3297.1	3308.4	3324.7	3342.2
32.5°	3472.7	3482.7	3477.7	3494.0	3492.7	3514.1	3517.8	3521.6	3556.7	3550.4	3586.8
35°	3734.8	3744.8	3739.8	3757.4	3754.8	3762.4	3776.2	3791.2	3797.5	3833.9	3862.7
37.5°	3857.7	3857.7	3869.0	3889.0	3896.6	3909.1	3930.4	3949.2	3980.6	4019.5	4064.6
40°	4005.7	4009.4	4024.5	4045.8	4059.6	4088.4	4127.3	4153.7	4201.3	4244.0	4296.6
42.5°	4185.0	4201.3	4218.9	4247.7	4277.8	4323.0	4378.1	4412.0	4474.7	4529.9	4595.1
45°	4394.5	4410.8	4452.1	4504.8	4548.7	4598.9	4644.0	4724.3	4780.7	4838.4	4894.8
47.5°	4647.8	4695.4	4729.3	4792.0	4845.9	4912.4	4968.8	5044.1	5105.5	5175.8	5223.4
50°	4972.6	5031.5	5075.4	5157.0	5209.6	5283.6	5355.1	5411.5	5474.3	5543.2	5582.1
52.5°	5439.1	5499.3	5554.5	5656.1	5721.3	5771.5	5866.8	5937.0	5994.7	6044.9	6087.5
55°	6450.0	6432.4	6585.4	6782.3	6804.9	6986.7	7020.6	7079.5	7186.1	7201.2	7320.3
57.5°	9338.2	9247.9	9469.9	9758.3	9708.2	9616.6	9999.1	10023.0	9969.0	10113.3	9950.2
60°	13335.1	13177.1	13237.3	13316.3	13202.2	13148.2	13167.0	13221.0	13168.3	13110.6	12952.6
62.5°	16003.9	15760.6	15586.3	15439.5	15253.9	15119.7	14969.2	14783.6	14733.4	14522.8	14345.9
65°	16573.2	16194.5	15918.6	15641.4	15385.6	15148.6	14921.6	14762.3	14551.6	14302.0	14117.7
67.5°	15947.4	15478.4	15074.6	14672.0	14382.3	14033.6	13863.1	13603.5	13343.9	13057.9	12888.6
70°	14129.0	13639.9	13131.9	12738.1	12344.3	11912.9	11828.9	11521.6	11372.4	10982.4	10914.6
72.5°	9752.1	9426.0	9199.0	8712.4	8472.9	8252.1	8181.9	7897.2	7927.3	7499.7	7655.2
75°	3467.7	3421.3	3354.8	3080.1	3031.2	2945.9	2923.4	2903.3	3106.5	2824.3	3028.7
77.5°	595.7	591.9	558.1	541.8	573.1	553.1	558.1	548.1	607.0	615.8	602.0
80°	370.0	359.9	348.6	341.1	342.4	334.9	336.1	338.6	342.4	341.1	344.9
82.5°	253.3	244.6	239.5	234.5	242.0	244.6	250.8	257.1	267.1	273.4	280.9
85°	138.0	126.7	126.7	125.4	135.4	143.0	153.0	165.5	183.1	198.2	214.5
87.5°	70.2	67.7	69.0	71.5	80.3	86.5	99.1	110.4	125.4	141.7	156.8
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-F09-LED-E-U-T2-8030

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1795.9	1795.9	1794.7	1794.7	1793.4	1792.1	1790.9	1787.1	1773.3	1760.8	1752.0
5°	1823.5	1819.7	1818.5	1814.7	1813.5	1811.0	1807.2	1803.4	1778.3	1755.8	1739.5
7.5°	1879.9	1874.9	1872.4	1868.6	1864.9	1859.9	1854.8	1851.1	1821.0	1794.7	1774.6
10°	1953.9	1951.4	1950.2	1945.1	1945.1	1937.6	1936.4	1927.6	1895.0	1871.2	1853.6
12.5°	2056.8	2051.7	2050.5	2044.2	2046.7	2044.2	2041.7	2036.7	2012.9	1985.3	1961.4
15°	2184.7	2184.7	2178.4	2173.4	2174.7	2172.1	2177.2	2170.9	2155.8	2130.8	2091.9
17.5°	2338.9	2336.4	2338.9	2335.2	2337.7	2340.2	2333.9	2335.2	2327.7	2296.3	2238.6
20°	2518.3	2514.5	2529.6	2523.3	2537.1	2524.6	2527.1	2530.8	2530.8	2489.4	2411.7
22.5°	2724.0	2721.4	2721.4	2734.0	2739.0	2740.3	2745.3	2749.0	2759.1	2706.4	2582.2
25°	2929.6	2938.4	2939.7	2956.0	2963.5	2963.5	2967.3	2981.1	3011.2	2938.4	2777.9
27.5°	3139.1	3160.4	3165.4	3176.7	3188.0	3199.3	3208.0	3218.1	3267.0	3188.0	2978.5
30°	3348.5	3372.3	3389.9	3402.4	3416.2	3443.8	3448.8	3468.9	3550.4	3453.9	3169.2
32.5°	3594.3	3628.2	3650.8	3667.1	3688.4	3714.7	3729.8	3754.8	3833.9	3675.8	3308.4
35°	3887.8	3907.9	3940.5	3968.0	3980.6	4025.7	4049.6	4055.8	4116.0	3867.7	3411.2
37.5°	4091.0	4124.8	4181.2	4220.1	4242.7	4267.8	4307.9	4334.3	4391.9	4042.0	3462.6
40°	4349.3	4400.7	4445.9	4503.6	4539.9	4558.7	4598.9	4620.2	4627.7	4191.3	3446.3
42.5°	4664.1	4710.5	4770.7	4817.1	4844.7	4866.0	4898.6	4907.4	4809.6	4261.5	3358.5
45°	4960.1	5031.5	5083.0	5116.8	5136.9	5148.2	5168.2	5169.5	4960.1	4226.4	3208.0
47.5°	5278.6	5330.0	5377.7	5401.5	5399.0	5401.5	5394.0	5389.0	5035.3	4104.7	3014.9
50°	5631.0	5664.9	5684.9	5696.2	5702.5	5678.7	5644.8	5622.2	5041.6	3931.7	2819.3
52.5°	6103.8	6146.5	6142.7	6141.4	6091.3	6068.7	5978.4	5932.0	5005.2	3728.5	2598.5
55°	7301.5	7260.1	7178.6	7218.7	7014.3	6907.7	6767.3	6636.8	5052.9	3535.4	2342.7
57.5°	10015.4	10031.7	9799.7	9675.6	9330.7	8899.3	8551.9	8214.5	5481.8	3417.5	2009.1
60°	12847.2	12634.0	12339.3	11890.3	11446.4	10805.5	10187.2	9602.8	5909.4	3294.6	1614.1
62.5°	14083.8	13780.3	13335.1	12754.4	12057.1	11273.3	10503.3	9790.9	5702.5	2897.0	1173.9
65°	13833.0	13369.0	12877.3	12197.6	11349.8	10490.7	9591.5	8864.1	4770.7	2160.9	723.6
67.5°	12521.2	12127.4	11608.2	10801.8	9895.0	9000.8	8176.9	7361.7	3544.2	1346.9	405.1
70°	10568.5	10183.5	9656.8	8831.5	7926.1	7070.8	6197.9	5533.2	2258.7	649.6	292.2
72.5°	7331.6	7019.3	6646.9	6058.7	5264.8	4487.3	3896.6	3386.1	1251.6	344.9	267.1
75°	2977.3	2978.5	2910.8	2662.5	2249.9	1940.1	1654.2	1403.4	523.0	293.5	263.4
77.5°	674.7	686.0	750.0	711.1	640.9	599.5	536.8	474.1	318.5	302.2	265.9
80°	341.1	342.4	338.6	339.9	336.1	337.4	332.3	328.6	298.5	311.0	265.9
82.5°	284.7	291.0	289.7	289.7	291.0	291.0	291.0	289.7	309.8	327.3	257.1
85°	225.7	238.3	248.3	258.3	269.6	277.2	280.9	284.7	301.0	322.3	233.3
87.5°	170.6	185.6	198.2	208.2	225.7	225.7	238.3	247.1	247.1	252.1	122.9
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: P159373

CATALOG NUMBER: VST-F09-LED-E-U-T2-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	1800.9	1800.9	1800.9	1800.9	1800.9
2.5°	1739.5	1734.5	1729.4	1726.9	1721.9
5°	1726.9	1716.9	1710.6	1710.6	1705.6
7.5°	1763.3	1759.5	1750.8	1745.7	1750.8
10°	1841.1	1834.8	1824.8	1817.2	1821.0
12.5°	1945.1	1920.1	1900.0	1891.2	1884.9
15°	2053.0	2002.8	1962.7	1940.1	1933.9
17.5°	2168.4	2080.6	2020.4	1986.5	1980.3
20°	2286.3	2177.2	2091.9	2048.0	2046.7
22.5°	2428.0	2282.5	2173.4	2115.7	2111.9
25°	2577.2	2376.6	2232.3	2158.3	2150.8
27.5°	2706.4	2451.8	2268.7	2180.9	2173.4
30°	2814.3	2508.2	2298.8	2197.2	2187.2
32.5°	2892.0	2540.9	2311.4	2202.2	2191.0
35°	2917.1	2528.3	2276.2	2157.1	2144.6
37.5°	2883.2	2446.8	2178.4	2046.7	2031.7
40°	2781.6	2303.8	2019.1	1883.7	1864.9
42.5°	2626.1	2128.2	1827.3	1698.1	1674.3
45°	2434.3	1930.1	1636.6	1492.4	1481.1
47.5°	2233.6	1721.9	1422.2	1291.7	1278.0
50°	2016.6	1481.1	1212.7	1071.0	1071.0
52.5°	1758.3	1246.6	969.4	862.8	854.1
55°	1461.1	982.0	772.5	691.0	679.7
57.5°	1141.3	755.0	617.0	569.4	556.8
60°	839.0	566.9	496.6	470.3	465.3
62.5°	569.4	431.4	400.1	388.8	387.5
65°	385.0	336.1	327.3	323.6	324.8
67.5°	296.0	279.7	275.9	274.7	274.7
70°	257.1	247.1	243.3	244.6	243.3
72.5°	242.0	228.3	229.5	232.0	230.8
75°	237.0	219.5	224.5	225.7	220.7
77.5°	233.3	209.4	222.0	225.7	211.9
80°	225.7	200.7	230.8	232.0	208.2
82.5°	206.9	178.1	230.8	213.2	188.1
85°	175.6	135.4	260.9	185.6	139.2
87.5°	111.6	80.3	176.8	126.7	84.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)