

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: P158005

Luminaire Tested: **VST-F04-LED-E-U-RW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158005
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-F04-LED-E-U-RW
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (28) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10287.4 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 102.2
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

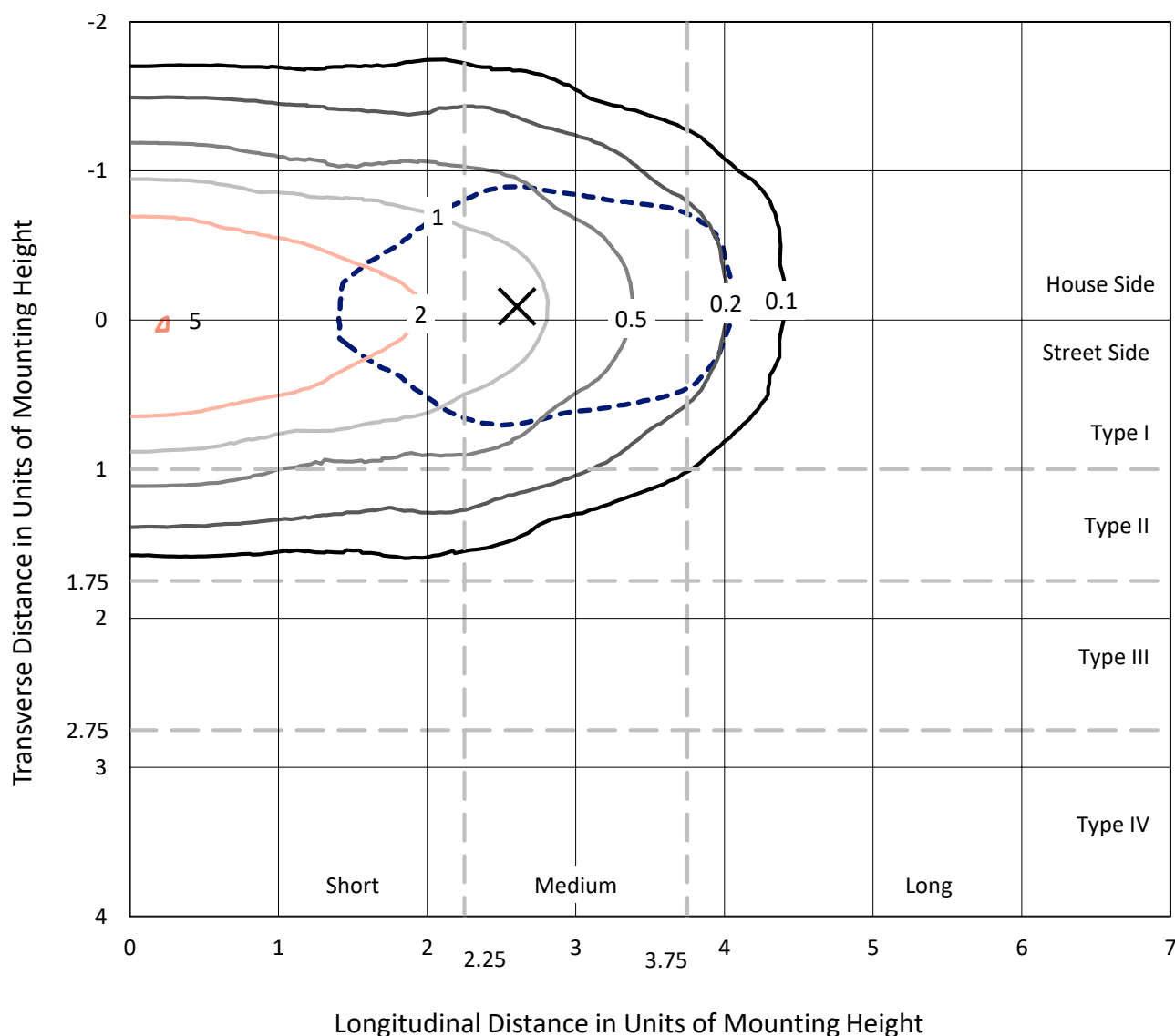


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

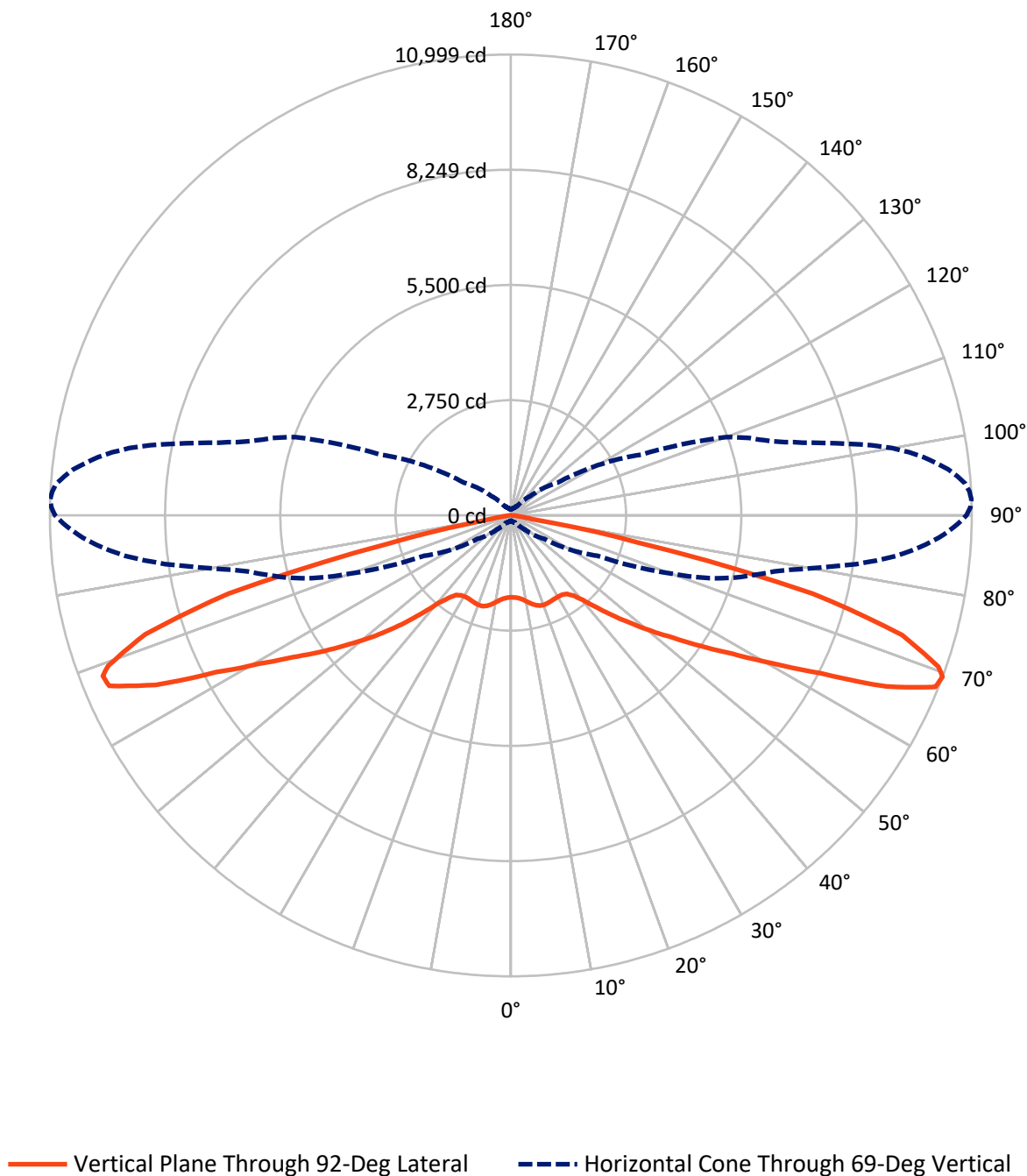


Based on 20 foot mounting height. Maximum calculated value = 5 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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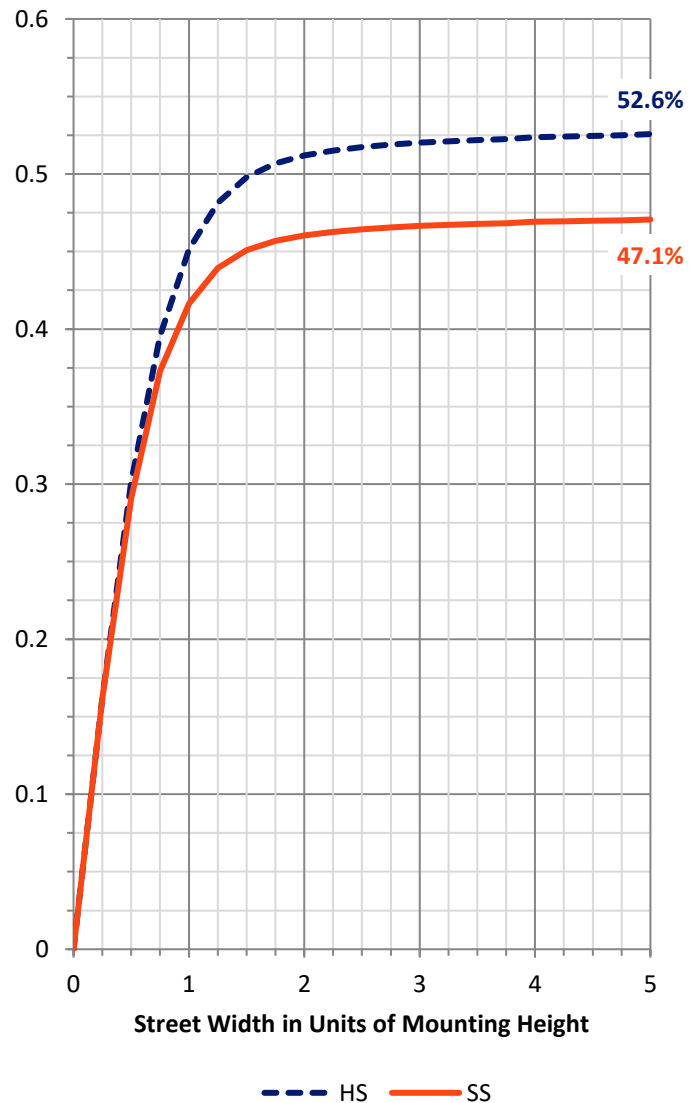
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5456.0	0.0	5456.0
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	4831.5	0.0	4831.5
	% Fixture	47.0	0.0	47.0
Total	Lumens	10287.4	0.0	10287.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.2	1.9
10°-20°	604.1	5.9
20°-30°	980.0	9.5
30°-40°	1221.4	11.9
40°-50°	1520.7	14.8
50°-60°	1875.5	18.2
60°-70°	2329.2	22.6
70°-80°	1431.2	13.9
80°-90°	134.1	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°	10287.4	100.0
0°-180°	10287.4	100.0

Coefficient of Utilization



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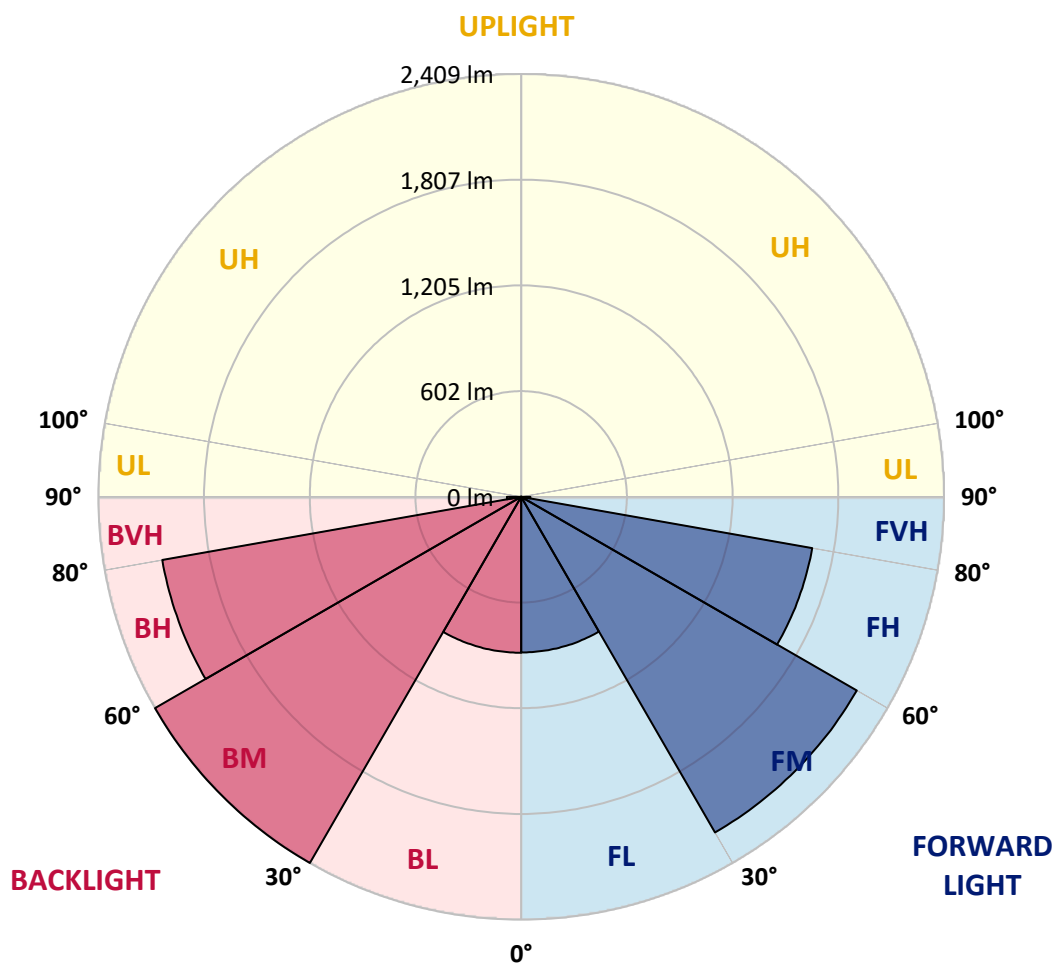
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	886.7	8.6			
FM	(30°-60°)	2208.3	21.5			
FH	(60°-80°)	1683.9	16.4			G1/1800
FVH	(80°-90°)	52.5	0.5			G1/100
BL	(0°-30°)	888.6	8.6	B2/1000		
BM	(30°-60°)	2409.3	23.4	B2/2500		
BH	(60°-80°)	2076.5	20.2	B3/2500		G3/2500
BVH	(80°-90°)	81.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2
2.5°	1985.2	1979.9	1984.6	1985.2	1984.6	1984.6	1978.6	1977.3	1969.4	1971.4	1970.7
5°	2012.3	2010.3	2013.6	2014.9	2016.3	2013.6	2009.0	2007.0	2001.7	1999.8	1999.1
7.5°	2037.4	2034.1	2039.4	2044.0	2047.3	2048.0	2048.6	2045.3	2045.3	2042.7	2042.7
10°	2058.5	2055.9	2064.5	2070.4	2081.0	2086.9	2093.5	2098.2	2100.8	2101.5	2100.8
12.5°	2067.8	2065.8	2079.7	2097.5	2117.3	2131.2	2147.7	2159.6	2162.9	2162.2	2165.5
15°	2051.9	2053.2	2074.4	2109.4	2151.6	2186.7	2209.8	2219.7	2222.3	2223.6	2224.3
17.5°	2009.0	2011.6	2042.0	2098.8	2172.8	2236.2	2270.5	2270.5	2265.2	2265.2	2264.6
20°	1940.3	1943.0	1982.6	2064.5	2173.4	2270.5	2319.4	2309.5	2289.7	2285.7	2281.8
22.5°	1845.2	1855.8	1899.4	1994.5	2145.0	2280.4	2349.8	2335.2	2304.2	2295.6	2289.7
25°	1737.6	1736.2	1788.4	1895.4	2076.4	2256.7	2358.4	2355.7	2322.7	2313.5	2302.9
27.5°	1614.7	1618.7	1666.9	1775.2	1971.4	2188.0	2343.8	2378.8	2351.8	2342.5	2332.6
30°	1488.6	1492.5	1538.1	1664.3	1851.8	2089.6	2314.1	2401.3	2390.7	2383.5	2376.9
32.5°	1361.8	1363.1	1417.3	1552.6	1750.8	1972.0	2269.2	2421.8	2436.3	2433.0	2430.3
35°	1242.9	1244.2	1303.0	1440.4	1651.0	1871.6	2215.0	2451.5	2498.4	2502.3	2505.0
37.5°	1127.3	1129.3	1189.4	1333.4	1552.6	1795.7	2155.0	2497.0	2585.5	2600.1	2602.7
40°	1012.4	1014.4	1071.9	1224.4	1452.9	1729.0	2108.7	2561.1	2703.1	2722.9	2743.4
42.5°	902.8	910.1	958.9	1104.9	1342.0	1646.4	2088.9	2639.0	2842.4	2873.5	2896.6
45°	800.4	801.1	856.6	993.3	1210.5	1534.8	2075.7	2727.5	2998.3	3045.2	3076.9
47.5°	690.8	698.7	756.8	889.6	1087.7	1396.8	2033.4	2831.2	3168.0	3222.8	3286.9
50°	584.5	595.7	651.8	783.3	975.4	1254.1	1919.8	2952.7	3358.9	3430.2	3504.2
52.5°	482.1	481.4	540.9	677.6	862.5	1133.3	1735.6	3080.2	3579.5	3656.1	3736.0
55°	364.6	364.6	423.3	548.1	740.3	1025.6	1538.1	3159.4	3784.2	3876.7	3963.8
57.5°	250.3	256.9	312.4	420.0	612.9	927.2	1386.9	3113.9	3940.7	4055.6	4159.3
60°	185.6	192.2	233.1	301.8	479.5	811.0	1273.3	2899.2	4035.2	4187.7	4322.4
62.5°	160.5	165.1	204.1	241.7	345.4	687.5	1172.9	2626.5	4171.2	4379.9	4567.5
65°	143.3	147.9	186.9	208.7	270.1	552.8	1116.8	2470.6	4333.7	4652.7	4924.8
67.5°	132.7	138.0	171.0	186.9	235.8	499.9	1073.2	2434.3	4332.4	4719.4	5066.7
69°	127.5	131.4	158.5	175.7	227.8	484.1	978.7	2276.5	4046.4	4461.8	4810.5
70°	124.2	128.1	151.2	168.4	225.2	455.7	891.6	2067.8	3720.8	4138.9	4492.8
72.5°	113.6	117.6	134.7	150.6	187.6	304.5	621.5	1323.5	2658.9	2957.4	3362.2
75°	100.4	105.0	118.2	131.4	142.0	176.3	358.6	686.8	1520.3	1746.8	2107.4
77.5°	81.9	86.5	100.4	121.5	120.2	134.1	233.1	422.0	711.9	883.0	1016.4
80°	67.4	70.7	82.6	122.8	98.4	112.3	188.9	346.1	501.3	554.1	585.8
82.5°	44.9	49.5	64.1	96.4	75.3	79.9	141.3	323.6	424.0	464.9	503.2
85°	21.1	23.1	39.0	51.5	45.6	42.9	80.6	228.5	315.7	334.8	349.4
87.5°	0.0	0.0	2.0	4.0	5.9	5.9	14.5	48.2	88.5	107.0	105.7
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°	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2
2.5°	1968.1	1968.7	1968.1	1968.1	1967.4	1966.1	1966.1	1964.7	1965.4	1964.7	1966.1
5°	1998.4	1998.4	1996.4	1995.1	1997.1	1995.1	1995.8	1992.5	1992.5	1990.5	1987.9
7.5°	2042.0	2042.0	2042.7	2038.7	2041.4	2042.0	2040.0	2038.7	2037.4	2034.1	2034.8
10°	2100.1	2100.1	2102.1	2096.8	2099.5	2100.8	2101.5	2101.5	2100.1	2094.2	2094.9
12.5°	2164.9	2163.5	2164.2	2161.6	2164.2	2165.5	2166.8	2165.5	2165.5	2164.2	2163.5
15°	2223.6	2223.0	2224.3	2222.3	2223.0	2224.3	2228.3	2227.6	2226.9	2223.0	2223.0
17.5°	2263.9	2261.9	2260.6	2260.0	2260.0	2259.3	2260.0	2260.0	2258.0	2257.3	2257.3
20°	2279.1	2273.8	2270.5	2268.5	2265.9	2264.6	2263.3	2263.9	2262.6	2260.6	2261.3
22.5°	2281.8	2274.5	2267.9	2261.9	2256.7	2253.4	2250.1	2248.7	2245.4	2243.4	2243.4
25°	2294.3	2283.1	2272.5	2262.6	2254.7	2247.4	2240.1	2234.9	2230.9	2226.3	2225.0
27.5°	2322.0	2310.1	2297.6	2285.1	2274.5	2260.0	2250.1	2239.5	2230.2	2223.0	2217.7
30°	2365.0	2353.1	2340.5	2326.0	2312.1	2296.9	2280.4	2267.9	2254.7	2240.1	2232.2
32.5°	2421.8	2413.8	2401.3	2387.4	2374.9	2359.0	2339.2	2320.1	2307.5	2290.3	2277.8
35°	2503.0	2493.7	2489.8	2483.8	2471.3	2461.4	2439.6	2421.8	2409.9	2386.1	2376.9
37.5°	2613.9	2613.3	2616.6	2614.6	2616.6	2604.0	2594.1	2593.5	2576.3	2553.2	2530.7
40°	2765.2	2773.1	2790.9	2803.5	2815.4	2816.7	2830.6	2816.0	2818.0	2814.7	2791.6
42.5°	2937.5	2964.6	2985.8	3022.7	3051.1	3077.6	3095.4	3119.8	3138.3	3154.8	3158.8
45°	3129.7	3170.0	3218.9	3251.9	3307.4	3351.6	3412.4	3459.3	3508.2	3556.4	3573.5
47.5°	3338.4	3388.6	3442.8	3504.2	3574.2	3643.5	3737.3	3809.3	3887.9	3953.3	4011.4
50°	3568.9	3621.1	3693.7	3764.4	3860.8	3940.7	4063.6	4158.0	4284.8	4372.0	4447.3
52.5°	3809.3	3874.7	3955.9	4033.8	4132.2	4234.6	4371.3	4510.7	4663.2	4795.3	4904.9
55°	4044.4	4125.0	4202.9	4294.1	4403.0	4521.9	4676.4	4860.0	5050.2	5201.5	5346.8
57.5°	4253.8	4346.9	4438.7	4531.1	4642.8	4780.8	4954.5	5152.6	5370.5	5572.0	5771.4
60°	4447.9	4559.5	4671.8	4787.4	4915.5	5085.9	5294.6	5538.3	5820.3	6095.7	6356.5
62.5°	4755.0	4901.6	5041.0	5190.2	5344.8	5544.9	5791.2	6110.9	6434.5	6778.6	7046.0
65°	5171.1	5377.1	5559.4	5752.9	5953.0	6220.5	6515.0	6897.4	7361.0	7713.7	8143.0
67.5°	5377.8	5649.2	5883.7	6099.0	6346.6	6616.7	6966.8	7419.2	7913.8	8425.0	8903.8
69°	5134.8	5414.8	5674.3	5915.4	6165.7	6427.9	6793.7	7258.0	7781.1	8333.8	8801.4
70°	4819.7	5099.8	5376.5	5651.2	5879.7	6135.3	6502.5	6981.3	7503.7	8078.3	8541.9
72.5°	3692.4	4029.2	4279.5	4537.1	4801.9	5018.5	5442.5	5846.0	6390.2	6973.4	7483.9
75°	2362.3	2672.1	2945.5	3164.7	3423.6	3683.2	3996.2	4444.6	4785.4	5264.2	5678.3
77.5°	1213.9	1305.7	1569.2	1647.7	1827.4	1968.7	2141.1	2253.4	2530.7	2589.5	2833.9
80°	575.2	518.4	488.1	460.3	468.2	464.9	451.1	432.6	455.7	445.8	441.8
82.5°	501.3	447.1	356.6	303.1	262.2	222.6	191.5	175.7	177.7	182.9	184.9
85°	351.3	330.2	257.6	195.5	152.6	118.2	95.1	91.1	93.8	101.0	98.4
87.5°	101.7	106.3	93.8	65.4	45.6	33.0	25.8	29.1	27.7	27.1	28.4
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°	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2
2.5°	1966.1	1965.4	1963.4	1961.4	1961.4	1960.1	1961.4	1962.1	1961.4	1961.4	1960.1
5°	1988.5	1989.2	1991.2	1987.2	1986.5	1987.2	1984.6	1983.9	1983.9	1983.9	1981.3
7.5°	2031.5	2033.4	2033.4	2030.8	2030.1	2032.1	2028.1	2026.8	2024.8	2024.2	2023.5
10°	2095.5	2097.5	2094.2	2092.2	2090.2	2092.9	2089.6	2089.6	2087.6	2085.6	2084.9
12.5°	2166.8	2165.5	2164.2	2165.5	2163.5	2163.5	2161.6	2160.2	2159.6	2158.9	2157.6
15°	2222.3	2226.9	2226.9	2228.3	2226.9	2226.9	2224.3	2225.0	2223.6	2223.0	2223.6
17.5°	2258.0	2259.3	2262.6	2264.6	2264.6	2265.2	2263.9	2265.2	2263.9	2263.9	2266.6
20°	2262.6	2263.9	2267.2	2270.5	2272.5	2273.8	2273.8	2275.8	2277.1	2278.4	2281.8
22.5°	2244.1	2246.1	2250.1	2256.0	2259.3	2260.6	2263.3	2266.6	2269.9	2272.5	2277.1
25°	2225.0	2225.6	2229.6	2235.5	2239.5	2242.8	2247.4	2251.4	2256.0	2261.3	2266.6
27.5°	2214.4	2213.7	2217.0	2223.0	2226.3	2230.9	2234.9	2240.8	2246.1	2252.7	2257.3
30°	2223.6	2218.4	2219.0	2221.7	2224.3	2227.6	2232.2	2237.5	2243.4	2249.4	2254.7
32.5°	2264.6	2252.7	2244.8	2242.8	2243.4	2244.1	2246.7	2250.1	2254.7	2259.3	2261.3
35°	2353.1	2332.6	2322.0	2313.5	2306.2	2300.2	2301.6	2300.9	2300.9	2304.9	2300.2
37.5°	2521.5	2495.7	2484.5	2469.3	2460.7	2438.9	2433.0	2431.7	2423.1	2423.1	2413.2
40°	2785.7	2770.5	2761.9	2748.0	2706.4	2711.7	2682.0	2682.6	2658.2	2660.8	2643.7
42.5°	3161.4	3163.4	3152.8	3143.6	3111.2	3096.7	3069.0	3029.3	2998.3	2997.6	2963.3
45°	3596.0	3619.8	3586.1	3598.0	3569.6	3530.6	3498.2	3447.4	3399.2	3384.0	3349.0
47.5°	4050.4	4089.3	4063.6	4068.2	4054.3	3998.8	3955.3	3892.5	3829.8	3787.5	3766.4
50°	4535.8	4561.5	4560.9	4548.3	4541.7	4487.6	4417.5	4370.0	4323.8	4267.0	4248.5
52.5°	4975.6	5035.7	5076.0	5066.7	5047.6	5015.2	4953.1	4912.2	4844.2	4836.3	4844.2
55°	5446.5	5524.4	5565.4	5614.9	5615.6	5609.6	5583.9	5568.7	5505.3	5512.5	5503.3
57.5°	5892.3	6006.5	6069.3	6174.9	6211.2	6259.5	6241.6	6261.4	6223.1	6248.2	6241.0
60°	6496.6	6655.1	6759.4	6904.0	6971.4	7092.2	7116.0	7130.6	7151.7	7203.2	7174.1
62.5°	7256.7	7489.2	7705.8	7902.6	7967.3	8148.9	8178.6	8292.2	8298.2	8333.2	8269.1
65°	8500.9	8784.2	9022.7	9258.4	9394.5	9607.1	9693.0	9913.6	9846.2	9874.6	9737.9
67.5°	9315.9	9645.4	9965.1	10188.3	10414.2	10631.4	10788.0	10930.6	10929.3	10901.6	10780.0
69°	9243.9	9611.1	9926.1	10225.3	10463.0	10686.3	10874.5	10966.9	10999.3	10959.0	10872.5
70°	8994.9	9372.0	9757.7	10004.0	10262.9	10507.9	10702.1	10803.1	10825.6	10797.2	10722.6
72.5°	7844.5	8206.4	8631.7	8855.6	9168.6	9345.6	9613.1	9743.8	9767.0	9730.6	9681.8
75°	6122.1	6187.5	6620.7	6763.4	6990.5	7194.6	7361.0	7318.8	7437.0	7413.9	7395.4
77.5°	2884.1	2709.7	2990.4	3121.1	3052.5	2869.5	3135.7	2943.5	3071.0	3236.7	3194.5
80°	475.5	474.2	486.7	514.5	481.4	511.2	510.5	496.0	497.3	533.0	514.5
82.5°	182.9	186.9	188.9	194.2	194.2	194.8	198.1	202.1	198.8	205.4	204.1
85°	99.1	105.7	99.7	95.1	98.4	100.4	103.0	106.3	103.0	112.9	107.6
87.5°	25.8	27.1	23.8	23.8	23.1	21.1	21.1	22.5	24.4	29.1	31.7
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-F04-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2
2.5°	1957.5	1958.1	1958.8	1956.8	1955.5	1955.5	1954.8	1953.5	1952.9	1952.9	1952.9
5°	1979.9	1981.3	1978.0	1977.3	1976.0	1974.7	1974.7	1973.3	1974.0	1974.0	1970.7
7.5°	2024.8	2022.9	2018.9	2016.3	2018.9	2014.3	2012.3	2013.6	2012.3	2013.0	2011.6
10°	2084.9	2084.9	2080.3	2083.0	2079.7	2074.4	2076.4	2074.4	2073.1	2068.4	2071.1
12.5°	2159.6	2157.6	2155.0	2149.0	2147.0	2146.4	2140.4	2141.1	2139.1	2137.8	2135.8
15°	2225.0	2224.3	2218.4	2215.0	2214.4	2211.7	2209.1	2207.8	2204.5	2203.8	2202.5
17.5°	2268.5	2266.6	2263.9	2260.6	2260.6	2256.7	2255.3	2252.0	2251.4	2249.4	2247.4
20°	2283.1	2283.7	2281.1	2278.4	2277.1	2274.5	2272.5	2269.9	2268.5	2265.9	2263.9
22.5°	2279.8	2279.8	2277.1	2276.5	2273.8	2269.9	2267.2	2263.9	2260.6	2257.3	2253.4
25°	2269.2	2268.5	2266.6	2263.3	2260.0	2254.0	2248.7	2243.4	2238.8	2234.9	2228.9
27.5°	2260.0	2258.6	2254.7	2250.1	2243.4	2236.8	2226.9	2219.7	2213.7	2208.4	2201.8
30°	2256.7	2252.0	2246.1	2238.8	2230.9	2221.0	2210.4	2201.2	2194.6	2189.3	2186.7
32.5°	2260.6	2254.7	2245.4	2236.2	2226.3	2214.4	2203.8	2195.9	2190.0	2188.6	2188.6
35°	2296.9	2287.0	2274.5	2261.3	2248.7	2238.8	2231.6	2230.9	2226.9	2231.6	2238.8
37.5°	2403.3	2394.7	2375.5	2358.4	2349.8	2345.2	2338.5	2339.9	2330.6	2345.2	2357.0
40°	2629.1	2618.6	2596.1	2582.2	2565.1	2548.6	2561.8	2557.8	2564.4	2561.8	2574.3
42.5°	2958.7	2948.1	2912.5	2907.2	2899.9	2893.3	2893.3	2888.0	2885.4	2894.6	2884.1
45°	3359.6	3338.4	3325.2	3341.1	3319.3	3325.9	3349.0	3317.9	3325.2	3282.3	3242.7
47.5°	3775.6	3773.6	3770.3	3789.5	3792.8	3802.7	3815.2	3783.5	3726.1	3693.7	3613.2
50°	4254.4	4274.9	4282.8	4301.3	4309.2	4316.5	4296.7	4249.8	4152.7	4066.9	3971.8
52.5°	4836.3	4800.6	4849.5	4867.3	4859.4	4830.3	4759.0	4701.5	4567.5	4444.0	4296.7
55°	5513.8	5522.4	5488.1	5474.2	5447.1	5366.6	5268.2	5138.7	4969.0	4807.9	4621.6
57.5°	6204.0	6200.7	6147.2	6071.9	5980.1	5883.0	5736.4	5550.8	5352.7	5136.1	4910.9
60°	7043.4	7040.1	6931.8	6803.0	6672.2	6515.7	6285.9	6062.7	5797.2	5512.5	5244.4
62.5°	8146.3	8004.3	7898.0	7705.8	7503.7	7299.0	6987.9	6691.4	6336.7	5977.5	5664.4
65°	9559.6	9325.8	9204.9	8926.2	8613.2	8293.6	7977.2	7587.6	7110.1	6675.5	6293.1
67.5°	10605.0	10391.0	10169.8	9891.8	9548.4	9191.7	8758.5	8267.8	7725.6	7238.2	6821.5
69°	10696.8	10496.7	10231.2	9952.5	9627.6	9239.9	8767.1	8217.6	7668.1	7174.8	6764.7
70°	10557.5	10344.8	10065.5	9775.5	9412.3	9046.4	8551.1	7978.5	7428.4	6933.7	6533.5
72.5°	9518.0	9310.6	9013.4	8666.7	8294.2	7981.2	7511.0	6913.9	6315.6	5858.6	5546.9
75°	7237.5	7192.0	6981.3	6779.2	6486.0	6136.6	5706.7	5305.2	4814.5	4331.0	4040.4
77.5°	3088.1	3193.1	3302.8	3318.6	3329.2	3221.5	3154.8	3053.8	2725.6	2576.3	2422.4
80°	570.6	509.8	544.2	548.1	570.6	582.5	626.1	742.3	755.5	783.9	818.9
82.5°	202.7	206.1	211.3	213.3	215.3	223.2	252.9	303.1	348.7	408.1	487.4
85°	114.9	116.9	121.5	125.5	128.1	136.0	152.6	182.3	227.2	295.2	400.2
87.5°	35.0	39.6	42.3	47.6	49.5	50.9	58.1	77.9	100.4	148.6	216.6
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-F04-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2	1954.2
2.5°	1952.9	1952.2	1950.9	1949.6	1950.2	1948.9	1944.9	1943.6	1939.0	1935.7	1933.0
5°	1970.7	1970.0	1967.4	1968.1	1967.4	1960.8	1956.2	1948.2	1943.6	1936.4	1933.7
7.5°	2007.7	2007.0	2002.4	2004.4	2003.1	1993.1	1985.2	1972.7	1966.1	1956.8	1949.6
10°	2063.2	2063.2	2057.9	2058.5	2058.5	2045.3	2031.5	2010.3	1995.1	1980.6	1968.1
12.5°	2130.5	2127.9	2127.2	2123.9	2121.3	2106.7	2085.6	2057.2	2028.8	2005.0	1987.9
15°	2198.5	2194.6	2192.6	2188.6	2185.3	2172.1	2143.7	2108.7	2070.4	2032.1	2003.7
17.5°	2242.8	2240.1	2236.2	2234.9	2230.2	2217.0	2197.2	2162.2	2114.7	2061.2	2018.2
20°	2259.3	2254.7	2252.0	2249.4	2246.7	2237.5	2237.5	2215.0	2162.2	2086.9	2021.5
22.5°	2248.7	2246.1	2242.1	2240.1	2237.5	2238.8	2264.6	2261.3	2200.5	2092.9	1997.8
25°	2224.3	2221.0	2217.7	2217.7	2217.0	2230.9	2293.0	2301.6	2211.7	2063.8	1945.6
27.5°	2199.2	2194.6	2195.9	2196.6	2199.9	2229.6	2324.0	2312.1	2181.4	1993.8	1855.8
30°	2184.0	2184.0	2187.3	2192.6	2199.2	2251.4	2348.5	2288.4	2102.8	1888.1	1736.9
32.5°	2190.6	2197.2	2204.5	2217.7	2227.6	2299.6	2357.0	2226.9	1988.5	1757.4	1612.7
35°	2249.4	2257.3	2271.2	2291.7	2303.5	2368.9	2357.0	2137.1	1855.8	1645.1	1484.6
37.5°	2377.5	2385.4	2401.9	2417.8	2429.7	2456.1	2347.1	2022.9	1744.8	1528.9	1369.7
40°	2583.6	2594.8	2606.7	2604.0	2596.1	2570.4	2327.3	1916.5	1642.5	1427.2	1256.8
42.5°	2873.5	2862.9	2861.6	2835.8	2809.4	2699.1	2312.8	1847.2	1554.6	1320.2	1144.5
45°	3208.3	3165.4	3121.1	3086.8	3046.5	2840.5	2308.8	1791.1	1457.5	1201.3	1022.3
47.5°	3545.1	3476.5	3390.6	3337.1	3271.7	2991.0	2320.7	1715.8	1332.7	1071.9	908.1
50°	3875.3	3763.1	3656.7	3592.7	3518.7	3164.1	2339.9	1589.0	1183.5	954.3	803.7
52.5°	4181.1	4036.5	3927.5	3852.2	3761.8	3365.5	2322.7	1422.5	1054.0	841.4	704.7
55°	4471.7	4311.9	4198.9	4119.7	4013.4	3567.6	2198.5	1271.3	930.5	731.1	593.1
57.5°	4726.0	4572.7	4455.2	4347.5	4257.7	3743.3	1953.5	1146.5	811.7	604.9	472.2
60°	5023.2	4850.8	4711.4	4596.5	4490.9	3833.7	1678.8	1035.5	684.9	468.2	341.4
62.5°	5424.0	5225.9	5064.8	4933.3	4795.3	3853.6	1491.2	924.6	543.5	338.8	248.3
65°	6018.4	5774.1	5572.6	5391.7	5204.8	3771.7	1398.8	803.7	404.2	251.6	208.0
67.5°	6490.6	6237.0	6003.9	5771.4	5532.3	3619.8	1378.3	692.1	310.4	214.0	186.9
69°	6433.2	6191.4	5977.5	5725.8	5461.0	3428.9	1357.8	649.2	283.3	198.8	177.0
70°	6211.9	5982.7	5765.5	5560.7	5236.5	3216.2	1303.7	625.4	272.8	191.5	169.7
72.5°	5249.0	4983.5	4772.9	4517.9	4176.5	2390.1	988.6	505.9	250.3	175.0	153.2
75°	3828.5	3608.5	3398.5	3116.5	2784.3	1382.9	615.5	289.3	183.6	158.5	138.7
77.5°	2235.5	2186.0	1983.2	1797.7	1468.8	704.0	353.3	173.0	142.7	144.0	122.2
80°	841.4	896.2	916.7	852.6	787.9	486.1	256.9	140.7	124.2	142.0	103.7
82.5°	613.5	711.9	723.8	693.4	645.2	453.0	205.4	112.9	101.0	152.6	89.2
85°	511.8	566.6	575.2	543.5	527.7	383.7	143.3	79.3	74.0	109.6	66.7
87.5°	258.9	272.8	280.0	253.6	254.9	179.0	57.5	33.7	40.3	46.9	37.0
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: P158005

CATALOG NUMBER: VST-F04-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1954.2	1954.2
2.5°	1927.1	1931.1
5°	1929.7	1929.7
7.5°	1944.9	1944.9
10°	1961.4	1962.1
12.5°	1976.6	1976.0
15°	1988.5	1986.5
17.5°	1995.8	1993.8
20°	1988.5	1985.2
22.5°	1951.5	1942.3
25°	1884.2	1872.3
27.5°	1795.0	1787.1
30°	1678.8	1666.9
32.5°	1542.7	1536.8
35°	1412.6	1405.4
37.5°	1293.8	1291.8
40°	1193.4	1182.8
42.5°	1075.8	1071.2
45°	956.3	953.6
47.5°	844.0	841.4
50°	740.3	735.0
52.5°	638.6	630.0
55°	525.7	519.8
57.5°	403.5	398.2
60°	284.0	278.0
62.5°	202.1	195.5
65°	168.4	163.1
67.5°	152.6	146.6
69°	145.3	140.0
70°	140.7	136.7
72.5°	130.8	128.1
75°	119.5	117.6
77.5°	105.0	101.7
80°	87.8	84.5
82.5°	74.0	70.7
85°	49.5	44.9
87.5°	22.5	19.8
90°	0.0	0.0

(END OF REPORT)