

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: P158006

Luminaire Tested: **VST-F04-LED-E-U-RW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158006
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (28) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10556 lumens
Efficiency: N/A
Efficacy: 103.3 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

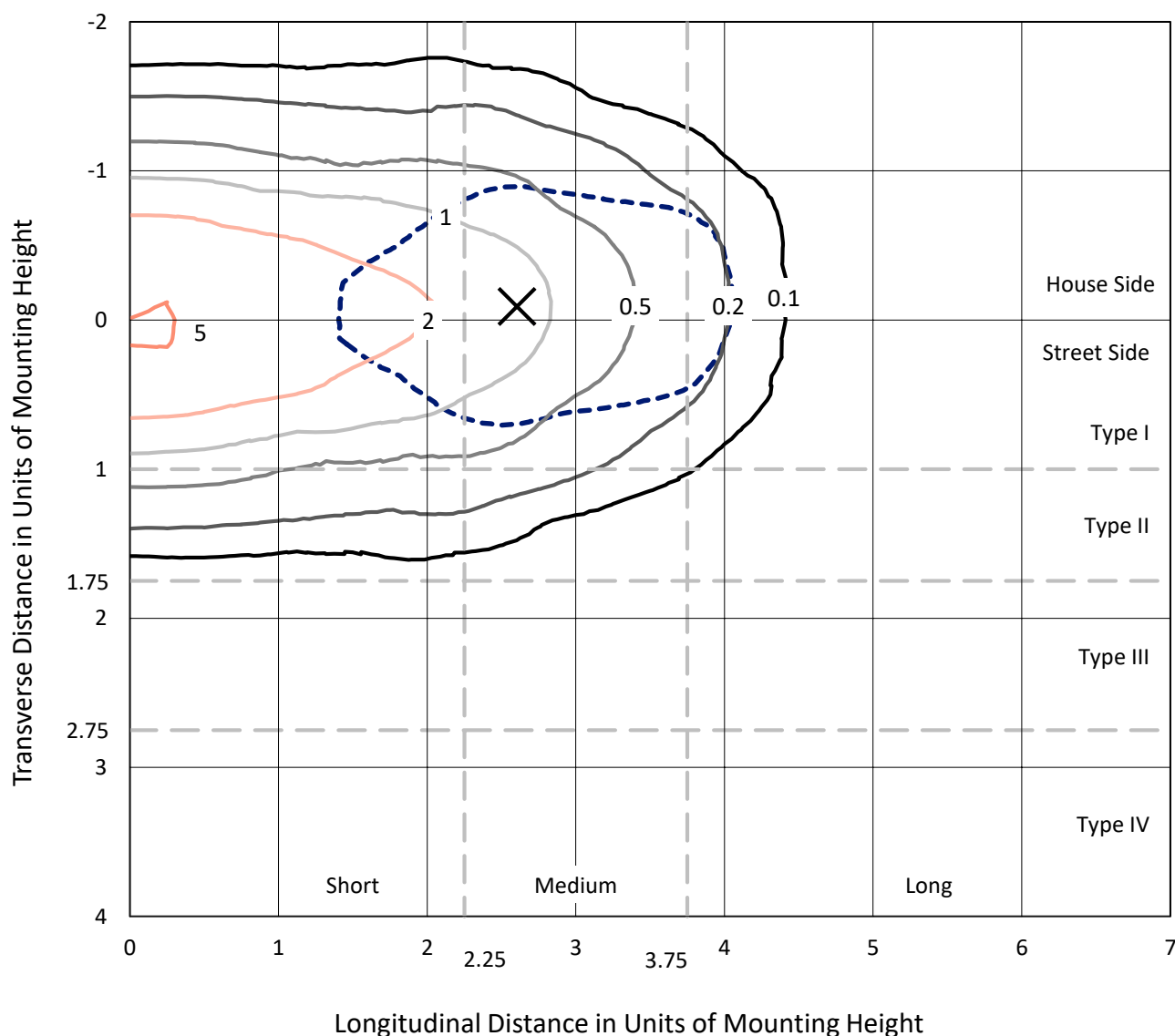


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

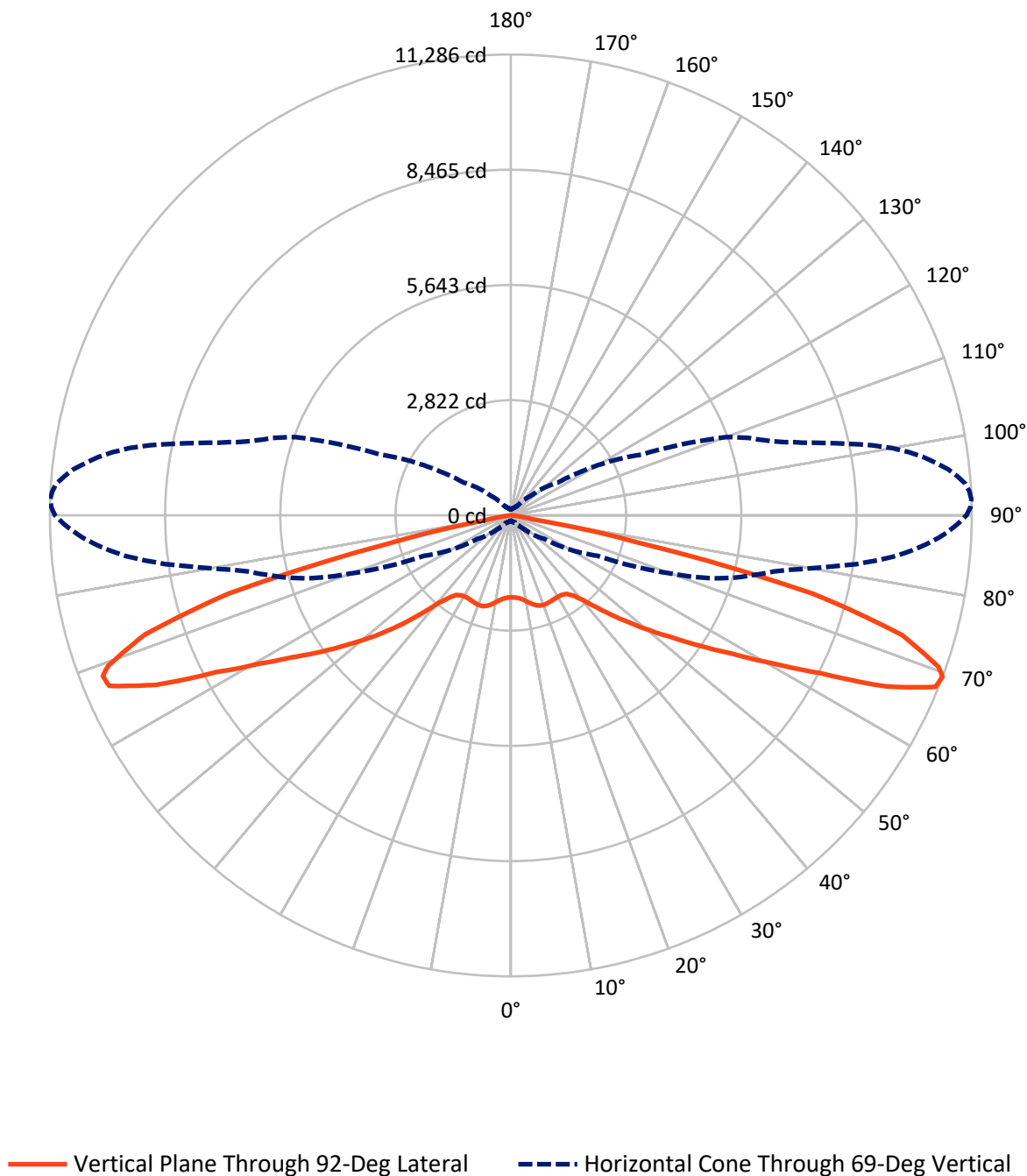


Based on 20 foot mounting height. Maximum calculated value = 5.2 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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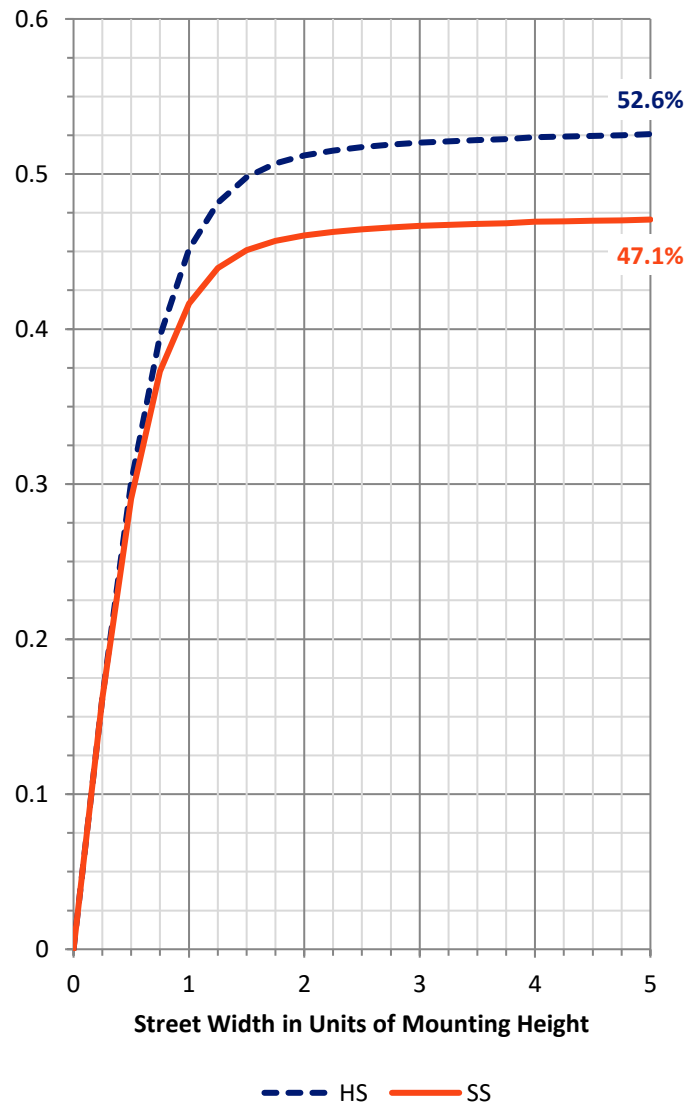
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5598.4	0.0	5598.4
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	4957.6	0.0	4957.6
	% Fixture	47.0	0.0	47.0
Total	Lumens	10556.0	0.0	10556.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.2	1.9
10°-20°	619.8	5.9
20°-30°	1005.6	9.5
30°-40°	1253.3	11.9
40°-50°	1560.4	14.8
50°-60°	1924.4	18.2
60°-70°	2390.0	22.6
70°-80°	1468.5	13.9
80°-90°	137.6	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°	10556.0	100.0
0°-180°	10556.0	100.0

Coefficient of Utilization



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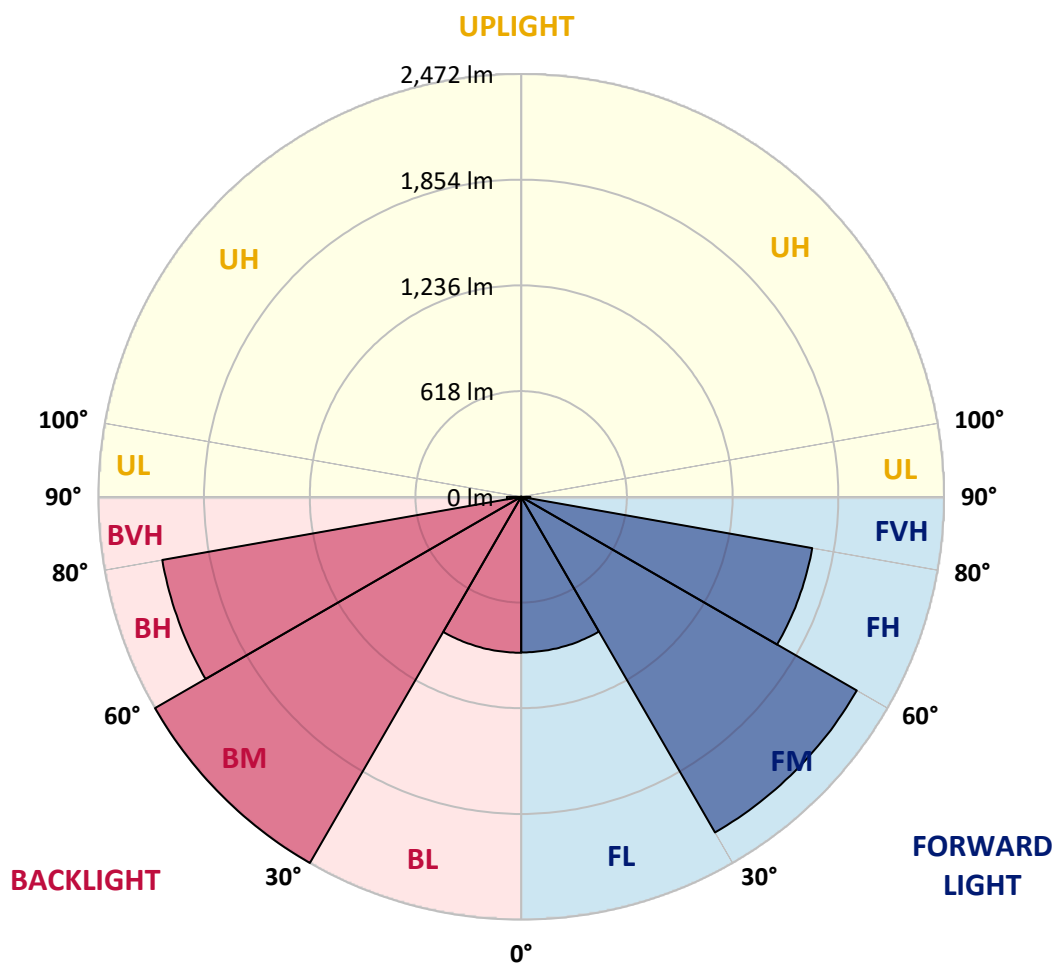
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	909.9	8.6			
FM	(30°-60°)	2266.0	21.5			
FH	(60°-80°)	1727.9	16.4			G1/1800
FVH	(80°-90°)	53.9	0.5			G1/100
BL	(0°-30°)	911.8	8.6	B2/1000		
BM	(30°-60°)	2472.2	23.4	B2/2500		
BH	(60°-80°)	2130.7	20.2	B3/2500		G3/2500
BVH	(80°-90°)	83.7	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°	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2
2.5°	2037.0	2031.6	2036.4	2037.0	2036.4	2036.4	2030.3	2028.9	2020.8	2022.8	2022.1
5°	2064.8	2062.8	2066.2	2067.5	2068.9	2066.2	2061.4	2059.4	2054.0	2052.0	2051.3
7.5°	2090.6	2087.2	2092.6	2097.4	2100.7	2101.4	2102.1	2098.7	2098.7	2096.0	2096.0
10°	2112.3	2109.6	2118.4	2124.5	2135.3	2141.4	2148.2	2152.9	2155.6	2156.3	2155.6
12.5°	2121.8	2119.7	2134.0	2152.2	2172.6	2186.8	2203.8	2215.9	2219.3	2218.7	2222.0
15°	2105.5	2106.8	2128.5	2164.4	2207.8	2243.7	2267.5	2277.6	2280.3	2281.7	2282.4
17.5°	2061.4	2064.2	2095.3	2153.6	2229.5	2294.6	2329.8	2329.8	2324.4	2324.4	2323.7
20°	1991.0	1993.7	2034.3	2118.4	2230.2	2329.8	2379.9	2369.8	2349.4	2345.4	2341.3
22.5°	1893.4	1904.2	1949.0	2046.5	2201.0	2340.0	2411.1	2396.2	2364.4	2355.5	2349.4
25°	1782.9	1781.6	1835.1	1944.9	2130.6	2315.6	2419.9	2417.2	2383.3	2373.8	2363.0
27.5°	1656.9	1660.9	1710.4	1821.6	2022.8	2245.1	2405.0	2440.9	2413.1	2403.7	2393.5
30°	1527.4	1531.5	1578.3	1707.7	1900.2	2144.1	2374.5	2464.0	2453.1	2445.7	2438.9
32.5°	1397.3	1398.7	1454.3	1593.2	1796.5	2023.5	2328.4	2485.0	2499.9	2496.5	2493.8
35°	1275.4	1276.7	1337.0	1478.0	1694.2	1920.5	2272.9	2515.5	2563.6	2567.7	2570.4
37.5°	1156.8	1158.8	1220.5	1368.2	1593.2	1842.6	2211.2	2562.2	2653.0	2667.9	2670.7
40°	1038.9	1040.9	1099.8	1256.4	1490.9	1774.1	2163.8	2628.0	2773.7	2794.0	2815.0
42.5°	926.4	933.8	984.0	1133.7	1377.0	1689.4	2143.4	2707.9	2916.7	2948.5	2972.2
45°	821.3	822.0	878.9	1019.2	1242.2	1574.9	2129.9	2798.7	3076.6	3124.7	3157.2
47.5°	708.8	717.0	776.6	912.8	1116.1	1433.3	2086.5	2905.1	3250.7	3307.0	3372.7
50°	599.7	611.2	668.9	803.7	1000.9	1286.9	1970.0	3029.8	3446.6	3519.8	3595.7
52.5°	494.7	494.0	555.0	695.3	885.0	1162.9	1780.9	3160.6	3672.9	3751.5	3833.5
55°	374.1	374.1	434.4	562.5	759.7	1052.4	1578.3	3241.9	3883.0	3977.9	4067.3
57.5°	256.8	263.6	320.5	431.0	628.9	951.4	1423.1	3195.2	4043.6	4161.5	4267.9
60°	190.4	197.2	239.2	309.7	492.0	832.2	1306.5	2974.9	4140.5	4297.0	4435.3
62.5°	164.7	169.4	209.4	248.0	354.4	705.4	1203.5	2695.1	4280.1	4494.2	4686.7
65°	147.1	151.8	191.8	214.1	277.2	567.2	1145.9	2535.1	4446.8	4774.1	5053.3
67.5°	136.2	141.6	175.5	191.8	241.9	513.0	1101.2	2497.9	4445.5	4842.6	5199.0
69°	130.8	134.9	162.6	180.3	233.8	496.7	1004.3	2335.9	4152.0	4578.3	4936.1
70°	127.4	131.5	155.2	172.8	231.1	467.6	914.8	2121.8	3817.9	4246.9	4610.1
72.5°	116.6	120.6	138.2	154.5	192.5	312.4	637.7	1358.0	2728.3	3034.6	3450.0
75°	103.0	107.7	121.3	134.9	145.7	180.9	368.0	704.8	1560.0	1792.4	2162.4
77.5°	84.0	88.8	103.0	124.7	123.3	137.6	239.2	433.0	730.5	906.0	1042.9
80°	69.1	72.5	84.7	126.0	101.0	115.2	193.8	355.1	514.3	568.6	601.1
82.5°	46.1	50.8	65.7	98.9	77.3	82.0	145.0	332.1	435.1	477.1	516.4
85°	21.7	23.7	40.0	52.9	46.8	44.0	82.7	234.5	323.9	343.6	358.5
87.5°	0.0	0.0	2.0	4.1	6.1	6.1	14.9	49.5	90.8	109.8	108.4
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2
2.5°	2019.4	2020.1	2019.4	2019.4	2018.8	2017.4	2017.4	2016.0	2016.7	2016.0	2017.4
5°	2050.6	2050.6	2048.6	2047.2	2049.2	2047.2	2047.9	2044.5	2044.5	2042.5	2039.8
7.5°	2095.3	2095.3	2096.0	2091.9	2094.6	2095.3	2093.3	2091.9	2090.6	2087.2	2087.9
10°	2155.0	2155.0	2157.0	2151.6	2154.3	2155.6	2156.3	2156.3	2155.0	2148.9	2149.5
12.5°	2221.4	2220.0	2220.7	2218.0	2220.7	2222.0	2223.4	2222.0	2222.0	2220.7	2220.0
15°	2281.7	2281.0	2282.4	2280.3	2281.0	2282.4	2286.4	2285.7	2285.1	2281.0	2281.0
17.5°	2323.0	2321.0	2319.6	2319.0	2319.0	2318.3	2319.0	2319.0	2316.9	2316.2	2316.2
20°	2338.6	2333.2	2329.8	2327.8	2325.1	2323.7	2322.3	2323.0	2321.7	2319.6	2320.3
22.5°	2341.3	2333.9	2327.1	2321.0	2315.6	2312.2	2308.8	2307.4	2304.0	2302.0	2302.0
25°	2354.2	2342.7	2331.8	2321.7	2313.5	2306.1	2298.6	2293.2	2289.1	2284.4	2283.0
27.5°	2382.7	2370.5	2357.6	2344.7	2333.9	2319.0	2308.8	2297.9	2288.5	2281.0	2275.6
30°	2426.7	2414.5	2401.6	2386.7	2372.5	2356.9	2340.0	2327.1	2313.5	2298.6	2290.5
32.5°	2485.0	2476.8	2464.0	2449.7	2436.9	2420.6	2400.3	2380.6	2367.7	2350.1	2337.3
35°	2568.3	2558.8	2554.8	2548.7	2535.8	2525.6	2503.3	2485.0	2472.8	2448.4	2438.9
37.5°	2682.2	2681.5	2684.9	2682.9	2684.9	2672.0	2661.9	2661.2	2643.6	2619.8	2596.8
40°	2837.4	2845.5	2863.8	2876.7	2888.9	2890.2	2904.5	2889.5	2891.6	2888.2	2864.5
42.5°	3014.2	3042.0	3063.7	3101.7	3130.8	3157.9	3176.2	3201.3	3220.2	3237.2	3241.3
45°	3211.4	3252.8	3302.9	3336.8	3393.7	3439.1	3501.5	3549.6	3599.7	3649.2	3666.8
47.5°	3425.6	3477.1	3532.6	3595.7	3667.5	3738.7	3834.9	3908.7	3989.4	4056.5	4116.1
50°	3662.1	3715.6	3790.2	3862.7	3961.6	4043.6	4169.6	4266.6	4396.7	4486.1	4563.4
52.5°	3908.7	3975.8	4059.2	4139.2	4240.1	4345.2	4485.4	4628.4	4785.0	4920.5	5033.0
55°	4150.0	4232.7	4312.6	4406.1	4518.0	4639.9	4798.5	4986.9	5182.1	5337.3	5486.3
57.5°	4364.8	4460.4	4554.6	4649.4	4764.0	4905.6	5083.8	5287.1	5510.7	5717.4	5922.1
60°	4564.0	4678.6	4793.8	4912.4	5043.8	5218.7	5432.8	5682.9	5972.2	6254.8	6522.5
62.5°	4879.2	5029.6	5172.6	5325.7	5484.3	5689.6	5942.4	6270.4	6602.4	6955.5	7230.0
65°	5306.1	5517.5	5704.5	5903.1	6108.4	6382.9	6685.1	7077.5	7553.2	7915.1	8355.6
67.5°	5518.2	5796.7	6037.3	6258.2	6512.3	6789.5	7148.6	7612.8	8120.4	8644.9	9136.2
69°	5268.8	5556.1	5822.5	6069.8	6326.6	6595.7	6971.1	7447.5	7984.2	8551.4	9031.2
70°	4945.6	5232.9	5516.8	5798.7	6033.2	6295.5	6672.2	7163.5	7699.6	8289.1	8764.9
72.5°	3788.8	4134.4	4391.2	4655.5	4927.3	5149.5	5584.6	5998.7	6557.0	7155.4	7679.2
75°	2424.0	2741.8	3022.4	3247.3	3513.0	3779.3	4100.5	4560.7	4910.3	5401.6	5826.5
77.5°	1245.5	1339.7	1610.1	1690.8	1875.1	2020.1	2197.0	2312.2	2596.8	2657.1	2907.8
80°	590.2	532.0	500.8	472.3	480.5	477.1	462.8	443.9	467.6	457.4	453.4
82.5°	514.3	458.8	365.9	311.0	269.0	228.4	196.5	180.3	182.3	187.7	189.7
85°	360.5	338.8	264.3	200.6	156.5	121.3	97.6	93.5	96.2	103.7	101.0
87.5°	104.4	109.1	96.2	67.1	46.8	33.9	26.4	29.8	28.5	27.8	29.1
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2
2.5°	2017.4	2016.7	2014.7	2012.7	2012.7	2011.3	2012.7	2013.3	2012.7	2012.7	2011.3
5°	2040.4	2041.1	2043.1	2039.1	2038.4	2039.1	2036.4	2035.7	2035.7	2035.7	2033.0
7.5°	2084.5	2086.5	2086.5	2083.8	2083.1	2085.2	2081.1	2079.7	2077.7	2077.0	2076.4
10°	2150.2	2152.2	2148.9	2146.8	2144.8	2147.5	2144.1	2144.1	2142.1	2140.1	2139.4
12.5°	2223.4	2222.0	2220.7	2222.0	2220.0	2220.0	2218.0	2216.6	2215.9	2215.3	2213.9
15°	2280.3	2285.1	2285.1	2286.4	2285.1	2285.1	2282.4	2283.0	2281.7	2281.0	2281.7
17.5°	2316.9	2318.3	2321.7	2323.7	2323.7	2324.4	2323.0	2324.4	2323.0	2323.0	2325.7
20°	2321.7	2323.0	2326.4	2329.8	2331.8	2333.2	2333.2	2335.2	2336.6	2337.9	2341.3
22.5°	2302.7	2304.7	2308.8	2314.9	2318.3	2319.6	2322.3	2325.7	2329.1	2331.8	2336.6
25°	2283.0	2283.7	2287.8	2293.9	2297.9	2301.3	2306.1	2310.1	2314.9	2320.3	2325.7
27.5°	2272.2	2271.5	2274.9	2281.0	2284.4	2289.1	2293.2	2299.3	2304.7	2311.5	2316.2
30°	2281.7	2276.3	2276.9	2279.6	2282.4	2285.7	2290.5	2295.9	2302.0	2308.1	2313.5
32.5°	2323.7	2311.5	2303.4	2301.3	2302.0	2302.7	2305.4	2308.8	2313.5	2318.3	2320.3
35°	2414.5	2393.5	2382.7	2373.8	2366.4	2360.3	2361.6	2361.0	2361.0	2365.0	2360.3
37.5°	2587.3	2560.9	2549.4	2533.8	2525.0	2502.6	2496.5	2495.1	2486.3	2486.3	2476.2
40°	2858.4	2842.8	2834.0	2819.7	2777.1	2782.5	2752.0	2752.7	2727.6	2730.3	2712.7
42.5°	3244.0	3246.0	3235.2	3225.7	3192.5	3177.6	3149.1	3108.4	3076.6	3075.9	3040.7
45°	3689.9	3714.3	3679.7	3691.9	3662.8	3622.8	3589.6	3537.4	3487.9	3472.3	3436.4
47.5°	4156.1	4196.1	4169.6	4174.4	4160.2	4103.2	4058.5	3994.1	3929.8	3886.4	3864.7
50°	4654.2	4680.6	4679.9	4667.0	4660.3	4604.7	4532.9	4484.1	4436.6	4378.4	4359.4
52.5°	5105.5	5167.2	5208.5	5199.0	5179.4	5146.2	5082.5	5040.4	4970.6	4962.5	4970.6
55°	5588.7	5668.6	5710.6	5761.5	5762.1	5756.0	5729.6	5714.0	5649.0	5656.4	5646.9
57.5°	6046.1	6163.3	6227.7	6336.1	6373.4	6422.9	6404.6	6424.9	6385.6	6411.3	6403.9
60°	6666.1	6828.8	6935.9	7084.3	7153.4	7277.4	7301.8	7316.7	7338.4	7391.2	7361.4
62.5°	7446.1	7684.7	7906.9	8108.9	8175.3	8361.7	8392.1	8508.7	8514.8	8550.7	8485.0
65°	8722.8	9013.6	9258.2	9500.1	9639.7	9857.9	9946.0	10172.4	10103.2	10132.4	9992.1
67.5°	9559.1	9897.2	10225.2	10454.3	10686.0	10909.0	11069.6	11216.0	11214.6	11186.1	11061.5
69°	9485.2	9862.0	10185.2	10492.2	10736.2	10965.2	11158.4	11253.2	11286.4	11245.1	11156.3
70°	9229.7	9616.7	10012.4	10265.2	10530.8	10782.3	10981.5	11085.2	11108.2	11079.1	11002.5
72.5°	8049.3	8420.6	8857.0	9086.7	9408.0	9589.6	9864.0	9998.2	10021.9	9984.6	9934.5
75°	6281.9	6349.0	6793.5	6939.9	7173.0	7382.4	7553.2	7509.8	7631.1	7607.4	7588.4
77.5°	2959.3	2780.4	3068.4	3202.6	3132.1	2944.4	3217.5	3020.3	3151.1	3321.2	3277.8
80°	487.9	486.6	499.4	527.9	494.0	524.5	523.8	508.9	510.3	546.9	527.9
82.5°	187.7	191.8	193.8	199.2	199.2	199.9	203.3	207.4	204.0	210.8	209.4
85°	101.6	108.4	102.3	97.6	101.0	103.0	105.7	109.1	105.7	115.9	110.5
87.5°	26.4	27.8	24.4	24.4	23.7	21.7	21.7	23.0	25.1	29.8	32.5
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-7050

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2
2.5°	2008.6	2009.3	2009.9	2007.9	2006.6	2006.6	2005.9	2004.5	2003.8	2003.8	2003.8
5°	2031.6	2033.0	2029.6	2028.9	2027.6	2026.2	2026.2	2024.8	2025.5	2025.5	2022.1
7.5°	2077.7	2075.7	2071.6	2068.9	2071.6	2066.9	2064.8	2066.2	2064.8	2065.5	2064.2
10°	2139.4	2139.4	2134.6	2137.3	2134.0	2128.5	2130.6	2128.5	2127.2	2122.4	2125.1
12.5°	2215.9	2213.9	2211.2	2205.1	2203.1	2202.4	2196.3	2197.0	2194.9	2193.6	2191.6
15°	2283.0	2282.4	2276.3	2272.9	2272.2	2269.5	2266.8	2265.4	2262.0	2261.4	2260.0
17.5°	2327.8	2325.7	2323.0	2319.6	2319.6	2315.6	2314.2	2310.8	2310.1	2308.1	2306.1
20°	2342.7	2343.3	2340.6	2337.9	2336.6	2333.9	2331.8	2329.1	2327.8	2325.1	2323.0
22.5°	2339.3	2339.3	2336.6	2335.9	2333.2	2329.1	2326.4	2323.0	2319.6	2316.2	2312.2
25°	2328.4	2327.8	2325.7	2322.3	2319.0	2312.9	2307.4	2302.0	2297.3	2293.2	2287.1
27.5°	2319.0	2317.6	2313.5	2308.8	2302.0	2295.2	2285.1	2277.6	2271.5	2266.1	2259.3
30°	2315.6	2310.8	2304.7	2297.3	2289.1	2279.0	2268.1	2258.6	2251.9	2246.4	2243.7
32.5°	2319.6	2313.5	2304.0	2294.6	2284.4	2272.2	2261.4	2253.2	2247.1	2245.8	2245.8
35°	2356.9	2346.7	2333.9	2320.3	2307.4	2297.3	2289.8	2289.1	2285.1	2289.8	2297.3
37.5°	2466.0	2457.2	2437.5	2419.9	2411.1	2406.4	2399.6	2401.0	2391.5	2406.4	2418.6
40°	2697.8	2686.9	2663.9	2649.7	2632.0	2615.1	2628.6	2624.6	2631.4	2628.6	2641.5
42.5°	3035.9	3025.1	2988.5	2983.1	2975.6	2968.8	2968.8	2963.4	2960.7	2970.2	2959.3
45°	3447.3	3425.6	3412.0	3428.3	3405.9	3412.7	3436.4	3404.6	3412.0	3368.0	3327.3
47.5°	3874.2	3872.2	3868.8	3888.4	3891.8	3902.0	3914.8	3882.3	3823.4	3790.2	3707.5
50°	4365.5	4386.5	4394.6	4413.6	4421.7	4429.2	4408.9	4360.7	4261.1	4173.0	4075.5
52.5°	4962.5	4925.9	4976.1	4994.4	4986.2	4956.4	4883.2	4824.3	4686.7	4560.0	4408.9
55°	5657.8	5666.6	5631.4	5617.1	5589.3	5506.7	5405.7	5272.9	5098.7	4933.4	4742.3
57.5°	6365.9	6362.6	6307.7	6230.4	6136.2	6036.6	5886.2	5695.7	5492.4	5270.2	5039.1
60°	7227.2	7223.9	7112.7	6980.6	6846.4	6685.8	6450.0	6220.9	5948.5	5656.4	5381.3
62.5°	8358.9	8213.2	8104.1	7906.9	7699.6	7489.5	7170.3	6866.1	6502.2	6133.5	5812.3
65°	9809.1	9569.2	9445.2	9159.3	8838.0	8510.1	8185.5	7785.6	7295.7	6849.8	6457.4
67.5°	10881.9	10662.3	10435.3	10150.0	9797.6	9431.7	8987.1	8483.6	7927.3	7427.2	6999.6
69°	10976.1	10770.7	10498.3	10212.3	9878.9	9481.1	8995.9	8432.1	7868.3	7362.1	6941.3
70°	10833.1	10614.9	10328.2	10030.7	9658.0	9282.6	8774.3	8186.8	7622.3	7114.8	6704.1
72.5°	9766.4	9553.7	9248.7	8892.9	8510.7	8189.5	7707.0	7094.4	6480.5	6011.5	5691.7
75°	7426.5	7379.7	7163.5	6956.2	6655.3	6296.8	5855.7	5443.6	4940.1	4444.1	4145.9
77.5°	3168.7	3276.5	3389.0	3405.2	3416.1	3305.6	3237.2	3133.5	2796.7	2643.6	2485.7
80°	585.5	523.2	558.4	562.5	585.5	597.7	642.4	761.7	775.2	804.4	840.3
82.5°	208.0	211.4	216.9	218.9	220.9	229.0	259.5	311.0	357.8	418.8	500.1
85°	117.9	119.9	124.7	128.8	131.5	139.6	156.5	187.0	233.1	302.9	410.7
87.5°	35.9	40.7	43.4	48.8	50.8	52.2	59.6	80.0	103.0	152.5	222.3
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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CATALOG NUMBER: VST-F04-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2	2005.2
2.5°	2003.8	2003.2	2001.8	2000.5	2001.1	1999.8	1995.7	1994.4	1989.6	1986.2	1983.5
5°	2022.1	2021.5	2018.8	2019.4	2018.8	2012.0	2007.2	1999.1	1994.4	1986.9	1984.2
7.5°	2060.1	2059.4	2054.7	2056.7	2055.3	2045.2	2037.0	2024.2	2017.4	2007.9	2000.5
10°	2117.0	2117.0	2111.6	2112.3	2112.3	2098.7	2084.5	2062.8	2047.2	2032.3	2019.4
12.5°	2186.1	2183.4	2182.7	2179.4	2176.6	2161.7	2140.1	2110.9	2081.8	2057.4	2039.8
15°	2255.9	2251.9	2249.8	2245.8	2242.4	2228.8	2199.7	2163.8	2124.5	2085.2	2056.0
17.5°	2301.3	2298.6	2294.6	2293.2	2288.5	2274.9	2254.6	2218.7	2169.9	2115.0	2070.9
20°	2318.3	2313.5	2310.8	2308.1	2305.4	2295.9	2295.9	2272.9	2218.7	2141.4	2074.3
22.5°	2307.4	2304.7	2300.7	2298.6	2295.9	2297.3	2323.7	2320.3	2258.0	2147.5	2049.9
25°	2282.4	2279.0	2275.6	2275.6	2274.9	2289.1	2352.8	2361.6	2269.5	2117.7	1996.4
27.5°	2256.6	2251.9	2253.2	2253.9	2257.3	2287.8	2384.7	2372.5	2238.3	2045.9	1904.2
30°	2241.0	2241.0	2244.4	2249.8	2256.6	2310.1	2409.8	2348.1	2157.7	1937.4	1782.2
32.5°	2247.8	2254.6	2262.0	2275.6	2285.7	2359.6	2418.6	2285.1	2040.4	1803.3	1654.8
35°	2308.1	2316.2	2330.5	2351.5	2363.7	2430.8	2418.6	2192.9	1904.2	1688.1	1523.4
37.5°	2439.6	2447.7	2464.7	2480.9	2493.1	2520.2	2408.4	2075.7	1790.4	1568.8	1405.5
40°	2651.0	2662.5	2674.7	2672.0	2663.9	2637.5	2388.1	1966.6	1685.3	1464.4	1289.6
42.5°	2948.5	2937.7	2936.3	2909.9	2882.8	2769.6	2373.2	1895.4	1595.2	1354.6	1174.4
45°	3292.1	3248.0	3202.6	3167.4	3126.0	2914.6	2369.1	1837.8	1495.6	1232.7	1049.0
47.5°	3637.7	3567.2	3479.1	3424.2	3357.1	3069.1	2381.3	1760.6	1367.5	1099.8	931.8
50°	3976.5	3861.3	3752.2	3686.5	3610.6	3246.7	2401.0	1630.5	1214.4	979.2	824.7
52.5°	4290.3	4141.9	4030.0	3952.8	3860.0	3453.4	2383.3	1459.7	1081.5	863.3	723.1
55°	4588.4	4424.4	4308.6	4227.2	4118.1	3660.7	2255.9	1304.5	954.8	750.2	608.5
57.5°	4849.3	4692.1	4571.5	4461.0	4368.9	3841.0	2004.5	1176.4	832.8	620.7	484.5
60°	5154.3	4977.4	4834.4	4716.5	4608.1	3933.8	1722.6	1062.6	702.7	480.5	350.4
62.5°	5565.6	5362.3	5197.0	5062.1	4920.5	3954.1	1530.2	948.7	557.7	347.6	254.8
65°	6175.5	5924.8	5718.1	5532.4	5340.6	3870.1	1435.3	824.7	414.7	258.2	213.5
67.5°	6660.0	6399.8	6160.6	5922.1	5676.8	3714.3	1414.3	710.2	318.5	219.6	191.8
69°	6601.1	6353.1	6133.5	5875.3	5603.6	3518.4	1393.3	666.1	290.7	204.0	181.6
70°	6374.1	6138.9	5916.0	5705.9	5373.2	3300.2	1337.7	641.7	279.9	196.5	174.2
72.5°	5386.0	5113.6	4897.5	4635.9	4285.5	2452.5	1014.5	519.1	256.8	179.6	157.2
75°	3928.4	3702.7	3487.2	3197.9	2857.0	1419.0	631.6	296.8	188.4	162.6	142.3
77.5°	2293.9	2243.1	2035.0	1844.6	1507.1	722.4	362.5	177.5	146.4	147.7	125.4
80°	863.3	919.6	940.6	874.9	808.4	498.8	263.6	144.3	127.4	145.7	106.4
82.5°	629.5	730.5	742.7	711.5	662.1	464.9	210.8	115.9	103.7	156.5	91.5
85°	525.2	581.4	590.2	557.7	541.5	393.7	147.1	81.3	75.9	112.5	68.4
87.5°	265.6	279.9	287.3	260.2	261.6	183.6	59.0	34.6	41.3	48.1	37.9
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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CATALOG NUMBER: VST-F04-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	2005.2	2005.2
2.5°	1977.4	1981.5
5°	1980.1	1980.1
7.5°	1995.7	1995.7
10°	2012.7	2013.3
12.5°	2028.2	2027.6
15°	2040.4	2038.4
17.5°	2047.9	2045.9
20°	2040.4	2037.0
22.5°	2002.5	1993.0
25°	1933.4	1921.2
27.5°	1841.9	1833.7
30°	1722.6	1710.4
32.5°	1583.0	1576.9
35°	1449.5	1442.1
37.5°	1327.5	1325.5
40°	1224.5	1213.7
42.5°	1103.9	1099.2
45°	981.3	978.5
47.5°	866.1	863.3
50°	759.7	754.2
52.5°	655.3	646.5
55°	539.4	533.3
57.5°	414.1	408.6
60°	291.4	285.3
62.5°	207.4	200.6
65°	172.8	167.4
67.5°	156.5	150.4
69°	149.1	143.7
70°	144.3	140.3
72.5°	134.2	131.5
75°	122.7	120.6
77.5°	107.7	104.4
80°	90.1	86.7
82.5°	75.9	72.5
85°	50.8	46.1
87.5°	23.0	20.3
90°	0.0	0.0

(END OF REPORT)