

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: P157999

Luminaire Tested: **VST-E04-LED-E-U-RW-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157999
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-E04-LED-E-U-RW-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11381.9 lumens
Efficiency: N/A
Efficacy: 117.1 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

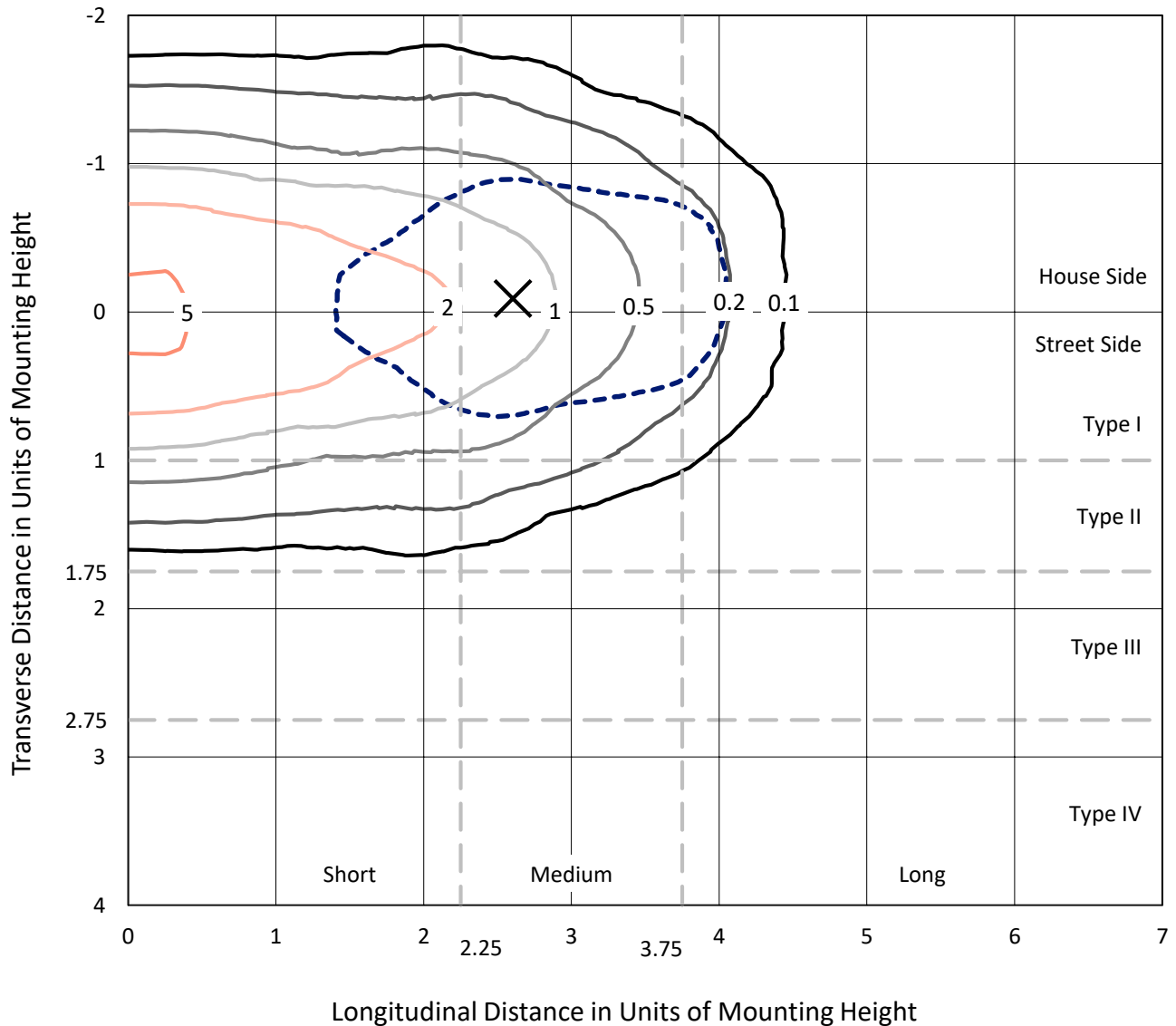
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P157999
 CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

Iso-Footcandle Lines of Horizontal Illumination

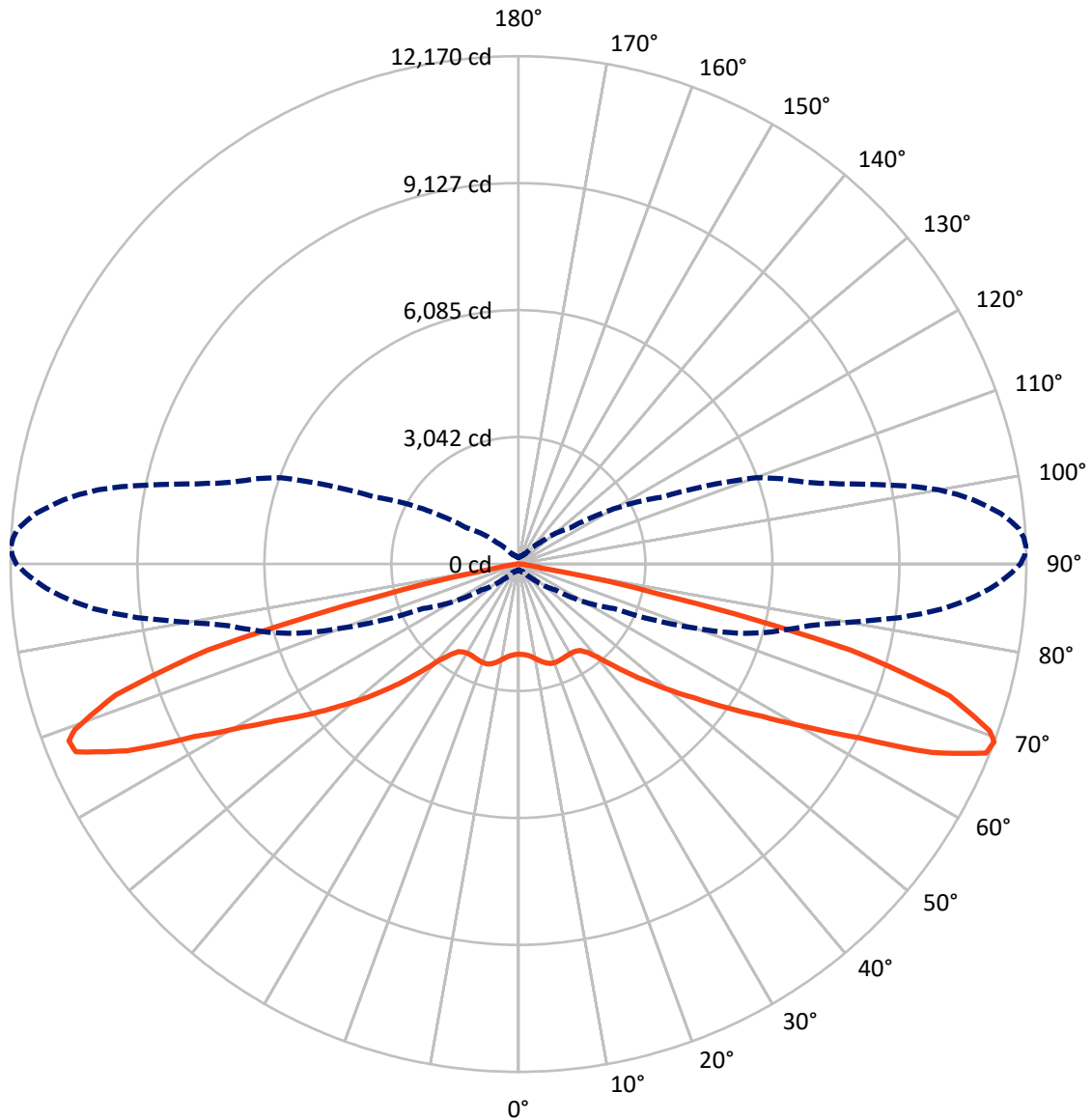
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.6 fc
 Type I - Medium - Full Cutoff

REPORT NUMBER: P157999
CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

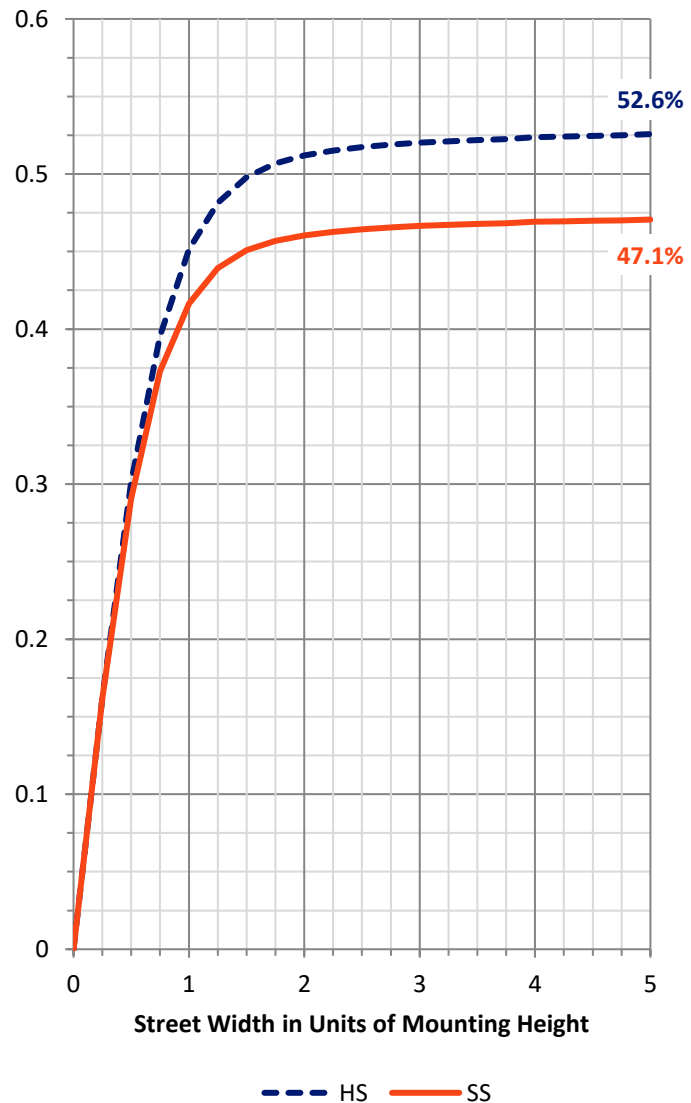
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6036.4	0.0	6036.4
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	5345.5	0.0	5345.5
	% Fixture	47.0	0.0	47.0
Total	Lumens	11381.9	0.0	11381.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.6	1.9
10°-20°	668.3	5.9
20°-30°	1084.3	9.5
30°-40°	1351.3	11.9
40°-50°	1682.5	14.8
50°-60°	2075.0	18.2
60°-70°	2577.0	22.6
70°-80°	1583.4	13.9
80°-90°	148.4	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°	11381.9	100.0
0°-180°	11381.9	100.0



REPORT NUMBER: P157999

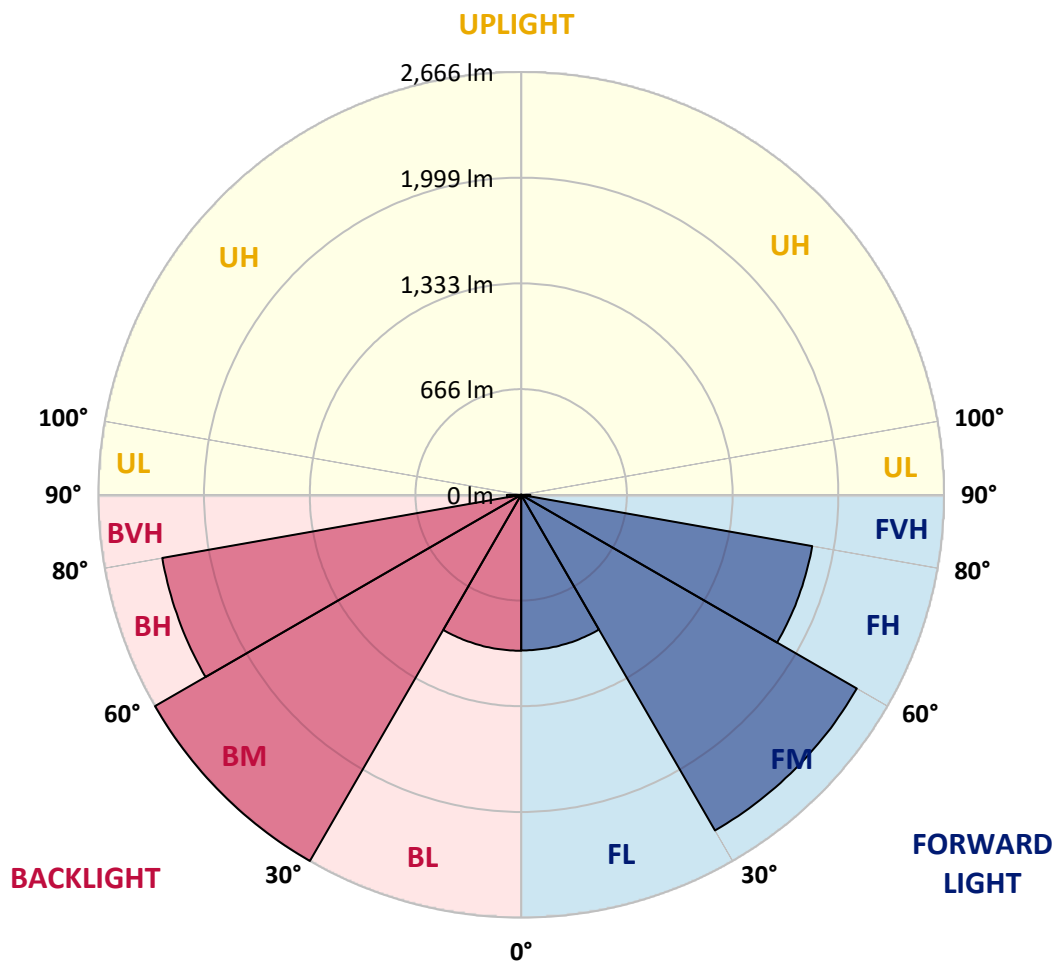
CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	981.1	8.6			
FM	(30°-60°)	2443.2	21.5			
FH	(60°-80°)	1863.1	16.4			G2/5000
FVH	(80°-90°)	58.1	0.5			G1/100
BL	(0°-30°)	983.1	8.6	B2/1000		
BM	(30°-60°)	2665.6	23.4	B3/5000		
BH	(60°-80°)	2297.4	20.2	B3/2500		G3/2500
BVH	(80°-90°)	90.3	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





REPORT NUMBER: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1
2.5°	2196.4	2190.6	2195.7	2196.4	2195.7	2195.7	2189.1	2187.7	2178.9	2181.1	2180.3
5°	2226.4	2224.2	2227.8	2229.3	2230.8	2227.8	2222.7	2220.5	2214.7	2212.5	2211.8
7.5°	2254.1	2250.5	2256.3	2261.5	2265.1	2265.8	2266.6	2262.9	2262.9	2260.0	2260.0
10°	2277.5	2274.6	2284.1	2290.7	2302.4	2308.9	2316.3	2321.4	2324.3	2325.0	2324.3
12.5°	2287.8	2285.6	2300.9	2320.6	2342.6	2357.9	2376.2	2389.3	2393.0	2392.2	2395.9
15°	2270.2	2271.7	2295.1	2333.8	2380.6	2419.3	2444.9	2455.8	2458.7	2460.2	2460.9
17.5°	2222.7	2225.7	2259.3	2322.1	2403.9	2474.1	2512.1	2512.1	2506.2	2506.2	2505.5
20°	2146.7	2149.7	2193.5	2284.1	2404.7	2512.1	2566.1	2555.2	2533.3	2528.9	2524.5
22.5°	2041.5	2053.2	2101.4	2206.7	2373.2	2523.0	2599.8	2583.7	2549.3	2539.8	2533.3
25°	1922.4	1921.0	1978.7	2097.1	2297.3	2496.7	2609.3	2606.3	2569.8	2559.6	2547.9
27.5°	1786.5	1790.9	1844.2	1964.1	2181.1	2420.7	2593.2	2631.9	2602.0	2591.7	2580.8
30°	1647.0	1651.3	1701.8	1841.3	2048.8	2311.9	2560.3	2656.8	2645.1	2637.0	2629.7
32.5°	1506.7	1508.1	1568.0	1717.8	1937.0	2181.8	2510.6	2679.4	2695.5	2691.8	2688.9
35°	1375.1	1376.6	1441.6	1593.6	1826.7	2070.7	2450.7	2712.3	2764.2	2768.5	2771.5
37.5°	1247.3	1249.5	1316.0	1475.2	1717.8	1986.7	2384.2	2762.7	2860.6	2876.7	2879.6
40°	1120.1	1122.3	1185.9	1354.7	1607.5	1912.9	2333.1	2833.6	2990.7	3012.6	3035.2
42.5°	998.8	1006.9	1060.9	1222.4	1484.7	1821.6	2311.1	2919.8	3144.8	3179.2	3204.8
45°	885.6	886.3	947.7	1098.9	1339.3	1698.1	2296.5	3017.7	3317.3	3369.2	3404.2
47.5°	764.3	773.1	837.4	984.2	1203.4	1545.4	2249.8	3132.4	3505.1	3565.7	3636.6
50°	646.7	659.1	721.2	866.6	1079.2	1387.6	2124.1	3266.9	3716.2	3795.2	3877.0
52.5°	533.4	532.7	598.4	749.7	954.3	1253.8	1920.2	3407.9	3960.3	4045.0	4133.5
55°	403.3	403.3	468.4	606.5	819.1	1134.7	1701.8	3495.6	4186.8	4289.1	4385.5
57.5°	276.9	284.2	345.6	464.7	678.1	1025.9	1534.4	3445.2	4360.0	4487.1	4601.8
60°	205.3	212.6	257.9	333.9	530.5	897.3	1408.8	3207.7	4464.5	4633.2	4782.3
62.5°	177.6	182.7	225.8	267.4	382.1	760.6	1297.7	2905.9	4615.0	4845.9	5053.4
65°	158.6	163.7	206.8	230.9	298.8	611.6	1235.6	2733.5	4794.7	5147.6	5448.7
67.5°	146.9	152.7	189.2	206.8	260.9	553.1	1187.4	2693.3	4793.3	5221.4	5605.8
69°	141.0	145.4	175.4	194.4	252.1	535.6	1082.9	2518.7	4476.9	4936.5	5322.3
70°	137.4	141.8	167.3	186.3	249.2	504.2	986.4	2287.8	4116.7	4579.2	4970.8
72.5°	125.7	130.1	149.1	166.6	207.5	336.8	687.6	1464.3	2941.7	3272.0	3719.9
75°	111.1	116.2	130.8	145.4	157.1	195.1	396.8	759.9	1682.0	1932.6	2331.6
77.5°	90.6	95.7	111.1	134.4	133.0	148.3	257.9	466.9	787.7	976.9	1124.5
80°	74.5	78.2	91.3	135.9	108.9	124.2	209.0	382.9	554.6	613.0	648.1
82.5°	49.7	54.8	70.9	106.7	83.3	88.4	156.4	358.0	469.1	514.4	556.8
85°	23.4	25.6	43.1	57.0	50.4	47.5	89.1	252.8	349.3	370.5	386.5
87.5°	0.0	0.0	2.2	4.4	6.6	6.6	16.1	53.3	97.9	118.4	116.9
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: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1
2.5°	2177.4	2178.2	2177.4	2177.4	2176.7	2175.2	2175.2	2173.8	2174.5	2173.8	2175.2
5°	2211.0	2211.0	2208.8	2207.4	2209.6	2207.4	2208.1	2204.5	2204.5	2202.3	2199.3
7.5°	2259.3	2259.3	2260.0	2255.6	2258.5	2259.3	2257.1	2255.6	2254.1	2250.5	2251.2
10°	2323.6	2323.6	2325.8	2319.9	2322.8	2324.3	2325.0	2325.0	2323.6	2317.0	2317.7
12.5°	2395.2	2393.7	2394.4	2391.5	2394.4	2395.9	2397.4	2395.9	2395.9	2394.4	2393.7
15°	2460.2	2459.5	2460.9	2458.7	2459.5	2460.9	2465.3	2464.6	2463.9	2459.5	2459.5
17.5°	2504.8	2502.6	2501.1	2500.4	2500.4	2499.7	2500.4	2500.4	2498.2	2497.5	2497.5
20°	2521.6	2515.7	2512.1	2509.9	2507.0	2505.5	2504.0	2504.8	2503.3	2501.1	2501.8
22.5°	2524.5	2516.5	2509.2	2502.6	2496.7	2493.1	2489.4	2488.0	2484.3	2482.1	2482.1
25°	2538.4	2526.0	2514.3	2503.3	2494.5	2486.5	2478.5	2472.6	2468.2	2463.1	2461.7
27.5°	2569.1	2555.9	2542.0	2528.2	2516.5	2500.4	2489.4	2477.7	2467.5	2459.5	2453.6
30°	2616.6	2603.4	2589.5	2573.5	2558.1	2541.3	2523.0	2509.2	2494.5	2478.5	2469.7
32.5°	2679.4	2670.6	2656.8	2641.4	2627.5	2610.0	2588.1	2566.9	2553.0	2534.0	2520.1
35°	2769.3	2759.0	2754.7	2748.1	2734.2	2723.2	2699.1	2679.4	2666.3	2639.9	2629.7
37.5°	2892.0	2891.3	2895.0	2892.8	2895.0	2881.1	2870.1	2869.4	2850.4	2824.8	2800.0
40°	3059.4	3068.1	3087.9	3101.7	3114.9	3116.4	3131.7	3115.6	3117.8	3114.2	3088.6
42.5°	3250.1	3280.0	3303.4	3344.3	3375.7	3405.0	3424.7	3451.7	3472.2	3490.5	3494.8
45°	3462.7	3507.3	3561.3	3597.9	3659.2	3708.2	3775.4	3827.3	3881.4	3934.7	3953.7
47.5°	3693.6	3749.1	3809.0	3877.0	3954.4	4031.2	4134.9	4214.6	4301.5	4373.9	4438.2
50°	3948.6	4006.3	4086.7	4164.9	4271.6	4360.0	4495.9	4600.4	4740.7	4837.1	4920.4
52.5°	4214.6	4286.9	4376.8	4463.0	4571.9	4685.1	4836.4	4990.5	5159.3	5305.5	5426.8
55°	4474.7	4563.8	4650.0	4750.9	4871.4	5003.0	5173.9	5377.1	5587.5	5754.8	5915.6
57.5°	4706.3	4809.3	4910.9	5013.2	5136.7	5289.4	5481.6	5700.8	5941.9	6164.7	6385.4
60°	4921.1	5044.6	5168.8	5296.7	5438.5	5627.0	5857.9	6127.5	6439.5	6744.2	7032.8
62.5°	5260.9	5423.1	5577.3	5742.4	5913.4	6134.8	6407.3	6761.0	7119.0	7499.7	7795.6
65°	5721.2	5949.2	6150.9	6365.0	6586.4	6882.3	7208.2	7631.2	8144.2	8534.3	9009.3
67.5°	5949.9	6250.2	6509.6	6747.8	7021.8	7320.7	7707.9	8208.5	8755.7	9321.3	9851.0
69°	5681.0	5990.8	6278.0	6544.7	6821.6	7111.7	7516.5	8030.2	8608.9	9220.5	9737.8
70°	5332.5	5642.3	5948.5	6252.4	6505.2	6788.0	7194.3	7724.0	8302.0	8937.7	9450.6
72.5°	4085.2	4457.9	4734.8	5019.8	5312.8	5552.4	6021.5	6468.0	7070.1	7715.3	8280.1
75°	2613.6	2956.3	3258.8	3501.4	3787.8	4075.0	4421.3	4917.5	5294.5	5824.3	6282.4
77.5°	1343.0	1444.6	1736.1	1823.0	2021.8	2178.2	2368.9	2493.1	2800.0	2865.0	3135.3
80°	636.4	573.6	540.0	509.3	518.1	514.4	499.1	478.6	504.2	493.2	488.8
82.5°	554.6	494.7	394.6	335.4	290.1	246.2	211.9	194.4	196.6	202.4	204.6
85°	388.7	365.3	285.0	216.3	168.8	130.8	105.2	100.8	103.8	111.8	108.9
87.5°	112.5	117.6	103.8	72.3	50.4	36.5	28.5	32.1	30.7	30.0	31.4
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: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1
2.5°	2175.2	2174.5	2172.3	2170.1	2170.1	2168.7	2170.1	2170.9	2170.1	2170.1	2168.7
5°	2200.1	2200.8	2203.0	2198.6	2197.9	2198.6	2195.7	2195.0	2192.8	2195.0	2192.0
7.5°	2247.6	2249.8	2249.8	2246.8	2246.1	2248.3	2243.9	2242.5	2240.3	2239.5	2238.8
10°	2318.4	2320.6	2317.0	2314.8	2312.6	2315.5	2311.9	2311.9	2309.7	2307.5	2306.8
12.5°	2397.4	2395.9	2394.4	2395.9	2393.7	2393.7	2391.5	2390.1	2389.3	2388.6	2387.1
15°	2458.7	2463.9	2463.9	2465.3	2463.9	2463.9	2460.9	2461.7	2460.2	2459.5	2460.2
17.5°	2498.2	2499.7	2503.3	2505.5	2505.5	2506.2	2504.8	2506.2	2504.8	2504.8	2507.7
20°	2503.3	2504.8	2508.4	2512.1	2514.3	2515.7	2515.7	2517.9	2519.4	2520.8	2524.5
22.5°	2482.9	2485.0	2489.4	2496.0	2499.7	2501.1	2504.0	2507.7	2511.3	2514.3	2519.4
25°	2461.7	2462.4	2466.8	2473.4	2477.7	2481.4	2486.5	2490.9	2496.0	2501.8	2507.7
27.5°	2450.0	2449.2	2452.9	2459.5	2463.1	2468.2	2472.6	2479.2	2485.0	2492.4	2497.5
30°	2460.2	2454.4	2455.1	2458.0	2460.9	2464.6	2469.7	2475.5	2482.1	2488.7	2494.5
32.5°	2505.5	2492.4	2483.6	2481.4	2482.1	2482.9	2485.8	2489.4	2494.5	2499.7	2501.8
35°	2603.4	2580.8	2569.1	2559.6	2551.5	2545.0	2546.4	2545.7	2545.7	2550.1	2545.0
37.5°	2789.7	2761.2	2748.8	2732.0	2722.5	2698.4	2691.8	2690.4	2680.9	2680.9	2669.9
40°	3082.0	3065.2	3055.7	3040.4	2994.3	3000.2	2967.3	2968.0	2941.0	2943.9	2924.9
42.5°	3497.8	3500.0	3488.3	3478.0	3442.2	3426.2	3395.5	3351.6	3317.3	3316.6	3278.6
45°	3978.6	4004.9	3967.6	3980.7	3949.3	3906.2	3870.4	3814.2	3760.8	3744.0	3705.3
47.5°	4481.3	4524.4	4495.9	4501.0	4485.6	4424.3	4376.0	4306.6	4237.2	4190.5	4167.1
50°	5018.3	5046.8	5046.1	5032.2	5024.9	4965.0	4887.5	4834.9	4783.8	4720.9	4700.5
52.5°	5504.9	5571.4	5616.0	5605.8	5584.6	5548.8	5480.1	5434.8	5359.5	5350.8	5359.5
55°	6025.9	6112.1	6157.4	6212.2	6213.0	6206.4	6177.9	6161.1	6091.0	6099.0	6088.8
57.5°	6519.1	6645.5	6715.0	6831.9	6872.0	6925.4	6905.7	6927.6	6885.2	6913.0	6904.9
60°	7187.7	7363.1	7478.5	7638.5	7713.1	7846.8	7873.1	7889.2	7912.5	7969.5	7937.4
62.5°	8028.7	8285.9	8525.6	8743.3	8814.9	9015.9	9048.7	9174.4	9181.0	9219.7	9148.8
65°	9405.3	9718.8	9982.6	10243.4	10393.9	10629.2	10724.2	10968.2	10893.7	10925.1	10773.9
67.5°	10307.0	10671.6	11025.2	11272.2	11522.1	11762.5	11935.7	12093.5	12092.0	12061.3	11926.9
69°	10227.3	10633.6	10982.1	11313.1	11576.2	11823.1	12031.4	12133.7	12169.5	12124.9	12029.2
70°	9951.9	10369.1	10795.8	11068.3	11354.8	11625.9	11840.7	11952.5	11977.3	11945.9	11863.3
72.5°	8679.0	9079.4	9550.0	9797.7	10144.0	10339.9	10635.8	10780.5	10806.0	10765.8	10711.8
75°	6773.4	6845.7	7325.1	7482.9	7734.3	7960.0	8144.2	8097.4	8228.2	8202.6	8182.2
77.5°	3190.9	2998.0	3308.5	3453.2	3377.2	3174.8	3469.3	3256.6	3397.7	3581.1	3534.3
80°	526.1	524.6	538.5	569.2	532.7	565.5	564.8	548.7	550.2	589.7	569.2
82.5°	202.4	206.8	209.0	214.8	214.8	215.6	219.2	223.6	219.9	227.2	225.8
85°	109.6	116.9	110.3	105.2	108.9	111.1	114.0	117.6	114.0	124.9	119.1
87.5°	28.5	30.0	26.3	26.3	25.6	23.4	23.4	24.8	27.0	32.1	35.1
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: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1
2.5°	2165.7	2166.5	2167.2	2165.0	2163.5	2163.5	2162.8	2161.4	2160.6	2160.6	2160.6
5°	2190.6	2192.0	2188.4	2187.7	2186.2	2184.7	2184.7	2183.3	2184.0	2184.0	2180.3
7.5°	2240.3	2238.1	2233.7	2230.8	2233.7	2228.6	2226.4	2227.8	2226.4	2227.1	2225.7
10°	2306.8	2306.8	2301.6	2304.6	2300.9	2295.1	2297.3	2295.1	2293.6	2288.5	2291.4
12.5°	2389.3	2387.1	2384.2	2377.6	2375.4	2374.7	2368.1	2368.9	2366.7	2365.2	2363.0
15°	2461.7	2460.9	2454.4	2450.7	2450.0	2447.0	2444.1	2442.7	2439.0	2438.3	2436.8
17.5°	2509.9	2507.7	2504.8	2501.1	2501.1	2496.7	2495.3	2491.6	2490.9	2488.7	2486.5
20°	2526.0	2526.7	2523.8	2520.8	2519.4	2516.5	2514.3	2511.3	2509.9	2507.0	2504.8
22.5°	2522.3	2522.3	2519.4	2518.7	2515.7	2511.3	2508.4	2504.8	2501.1	2497.5	2493.1
25°	2510.6	2509.9	2507.7	2504.0	2500.4	2493.8	2488.0	2482.1	2477.0	2472.6	2466.0
27.5°	2500.4	2498.9	2494.5	2489.4	2482.1	2474.8	2463.9	2455.8	2449.2	2443.4	2436.1
30°	2496.7	2491.6	2485.0	2477.0	2468.2	2457.3	2445.6	2435.4	2428.1	2422.2	2419.3
32.5°	2501.1	2494.5	2484.3	2474.1	2463.1	2450.0	2438.3	2429.5	2422.9	2421.5	2421.5
35°	2541.3	2530.3	2516.5	2501.8	2488.0	2477.0	2469.0	2468.2	2463.9	2469.0	2477.0
37.5°	2658.9	2649.4	2628.3	2609.3	2599.8	2594.6	2587.3	2588.8	2578.6	2594.6	2607.8
40°	2908.8	2897.1	2872.3	2857.0	2838.0	2819.7	2834.3	2829.9	2837.2	2834.3	2848.2
42.5°	3273.4	3261.8	3222.3	3216.5	3208.4	3201.1	3201.1	3195.3	3192.3	3202.6	3190.9
45°	3717.0	3693.6	3679.0	3696.5	3672.4	3679.7	3705.3	3670.9	3679.0	3631.5	3587.6
47.5°	4177.3	4175.1	4171.5	4192.6	4196.3	4207.3	4221.1	4186.1	4122.5	4086.7	3997.6
50°	4707.0	4729.7	4738.5	4758.9	4767.7	4775.7	4753.8	4701.9	4594.5	4499.5	4394.3
52.5°	5350.8	5311.3	5365.4	5385.1	5376.3	5344.2	5265.3	5201.7	5053.4	4916.7	4753.8
55°	6100.4	6109.9	6072.0	6056.6	6026.7	5937.5	5828.6	5685.4	5497.6	5319.4	5113.3
57.5°	6864.0	6860.4	6801.2	6717.9	6616.3	6508.9	6346.7	6141.4	5922.2	5682.5	5433.3
60°	7792.7	7789.1	7669.2	7526.7	7382.1	7208.9	6954.6	6707.6	6413.9	6099.0	5802.3
62.5°	9012.9	8855.8	8738.2	8525.6	8302.0	8075.5	7731.3	7403.3	7010.9	6613.4	6267.0
65°	10576.6	10317.9	10184.2	9875.9	9529.5	9175.9	8825.9	8394.8	7866.5	7385.7	6962.7
67.5°	11733.3	11496.5	11251.7	10944.1	10564.2	10169.6	9690.3	9147.4	8547.5	8008.3	7547.2
69°	11834.8	11613.4	11319.7	11011.4	10651.9	10222.9	9699.8	9091.9	8483.9	7938.1	7484.4
70°	11680.7	11445.4	11136.3	10815.5	10413.7	10008.9	9460.8	8827.3	8218.7	7671.4	7228.6
72.5°	10530.6	10301.1	9972.3	9588.7	9176.6	8830.3	8310.0	7649.5	6987.5	6481.9	6137.0
75°	8007.5	7957.1	7724.0	7500.4	7176.0	6789.5	6313.8	5869.6	5326.7	4791.8	4470.3
77.5°	3416.7	3532.8	3654.1	3671.7	3683.4	3564.3	3490.5	3378.7	3015.5	2850.4	2680.1
80°	631.3	564.1	602.1	606.5	631.3	644.5	692.7	821.3	835.9	867.3	906.0
82.5°	224.3	228.0	233.8	236.0	238.2	247.0	279.9	335.4	385.8	451.6	539.2
85°	127.1	129.3	134.4	138.8	141.8	150.5	168.8	201.7	251.4	326.6	442.8
87.5°	38.7	43.8	46.8	52.6	54.8	56.3	64.3	86.2	111.1	164.4	239.7
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: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1	2162.1
2.5°	2160.6	2159.9	2158.4	2157.0	2157.7	2156.2	2151.9	2150.4	2145.3	2141.6	2138.7
5°	2180.3	2179.6	2176.7	2177.4	2176.7	2169.4	2164.3	2155.5	2150.4	2142.4	2139.4
7.5°	2221.3	2220.5	2215.4	2217.6	2216.2	2205.2	2196.4	2182.5	2175.2	2165.0	2157.0
10°	2282.6	2282.6	2276.8	2277.5	2277.5	2262.9	2247.6	2224.2	2207.4	2191.3	2177.4
12.5°	2357.2	2354.3	2353.5	2349.9	2346.9	2330.9	2307.5	2276.1	2244.6	2218.3	2199.3
15°	2432.4	2428.1	2425.9	2421.5	2417.8	2403.2	2371.8	2333.1	2290.7	2248.3	2216.9
17.5°	2481.4	2478.5	2474.1	2472.6	2467.5	2452.9	2431.0	2392.2	2339.6	2280.5	2233.0
20°	2499.7	2494.5	2491.6	2488.7	2485.8	2475.5	2475.5	2450.7	2392.2	2308.9	2236.6
22.5°	2488.0	2485.0	2480.7	2478.5	2475.5	2477.0	2505.5	2501.8	2434.6	2315.5	2210.3
25°	2460.9	2457.3	2453.6	2453.6	2452.9	2468.2	2536.9	2546.4	2447.0	2283.4	2152.6
27.5°	2433.2	2428.1	2429.5	2430.2	2433.9	2466.8	2571.3	2558.1	2413.4	2205.9	2053.2
30°	2416.4	2416.4	2420.0	2425.9	2433.2	2490.9	2598.3	2531.8	2326.5	2089.0	1921.7
32.5°	2423.7	2431.0	2439.0	2453.6	2464.6	2544.2	2607.8	2463.9	2200.1	1944.3	1784.3
35°	2488.7	2497.5	2512.8	2535.5	2548.6	2621.0	2607.8	2364.5	2053.2	1820.1	1642.6
37.5°	2630.4	2639.2	2657.5	2675.0	2688.2	2717.4	2596.8	2238.1	1930.5	1691.5	1515.4
40°	2858.4	2870.8	2884.0	2881.1	2872.3	2843.8	2574.9	2120.4	1817.2	1579.0	1390.5
42.5°	3179.2	3167.5	3166.0	3137.5	3108.3	2986.3	2558.8	2043.7	1720.0	1460.6	1266.3
45°	3549.6	3502.2	3453.2	3415.2	3370.6	3142.7	2554.5	1981.6	1612.6	1329.1	1131.1
47.5°	3922.3	3846.3	3751.3	3692.1	3619.8	3309.3	2567.6	1898.3	1474.5	1185.9	1004.7
50°	4287.6	4163.4	4045.8	3974.9	3893.1	3500.7	2588.8	1758.0	1309.4	1055.8	889.2
52.5°	4625.9	4465.9	4345.4	4262.1	4162.0	3723.5	2569.8	1573.9	1166.2	930.9	779.6
55°	4947.4	4770.6	4645.7	4558.0	4440.3	3947.1	2432.4	1406.6	1029.5	808.9	656.2
57.5°	5228.7	5059.2	4929.2	4810.1	4710.7	4141.5	2161.4	1268.5	898.0	669.3	522.4
60°	5557.6	5366.8	5212.7	5085.5	4968.6	4241.6	1857.4	1145.7	757.7	518.1	377.8
62.5°	6001.1	5781.9	5603.6	5458.2	5305.5	4263.5	1649.9	1023.0	601.3	374.8	274.7
65°	6658.7	6388.3	6165.5	5965.3	5758.5	4172.9	1547.6	889.2	447.2	278.4	230.2
67.5°	7181.1	6900.5	6642.6	6385.4	6120.9	4004.9	1524.9	765.8	343.4	236.7	206.8
69°	7117.6	6850.1	6613.4	6335.0	6042.0	3793.7	1502.3	718.3	313.5	219.9	195.8
70°	6872.8	6619.2	6378.8	6152.3	5793.6	3558.4	1442.4	692.0	301.8	211.9	187.8
72.5°	5807.4	5513.7	5280.6	4998.6	4620.8	2644.3	1093.8	559.7	276.9	193.6	169.5
75°	4235.8	3992.4	3760.1	3448.1	3080.5	1530.0	681.0	320.0	203.1	175.4	153.4
77.5°	2473.4	2418.6	2194.2	1988.9	1625.0	778.9	390.9	191.4	157.8	159.3	135.2
80°	930.9	991.5	1014.2	943.3	871.7	537.8	284.2	155.6	137.4	157.1	114.7
82.5°	678.8	787.7	800.8	767.2	713.9	501.2	227.2	124.9	111.8	168.8	98.6
85°	566.3	626.9	636.4	601.3	583.8	424.5	158.6	87.7	81.8	121.3	73.8
87.5°	286.4	301.8	309.8	280.6	282.0	198.0	63.6	37.3	44.6	51.9	40.9
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: P157999

CATALOG NUMBER: VST-E04-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	2162.1	2162.1
2.5°	2132.1	2136.5
5°	2135.0	2135.0
7.5°	2151.9	2151.9
10°	2170.1	2170.9
12.5°	2186.9	2186.2
15°	2200.1	2197.9
17.5°	2208.1	2205.9
20°	2200.1	2196.4
22.5°	2159.2	2148.9
25°	2084.6	2071.5
27.5°	1986.0	1977.2
30°	1857.4	1844.2
32.5°	1706.9	1700.3
35°	1562.9	1554.9
37.5°	1431.4	1429.2
40°	1320.3	1308.6
42.5°	1190.3	1185.2
45°	1058.0	1055.1
47.5°	933.8	930.9
50°	819.1	813.2
52.5°	706.6	697.1
55°	581.6	575.0
57.5°	446.4	440.6
60°	314.2	307.6
62.5°	223.6	216.3
65°	186.3	180.5
67.5°	168.8	162.2
69°	160.7	154.9
70°	155.6	151.3
72.5°	144.7	141.8
75°	132.3	130.1
77.5°	116.2	112.5
80°	97.2	93.5
82.5°	81.8	78.2
85°	54.8	49.7
87.5°	24.8	21.9
90°	0.0	0.0

(END OF REPORT)