

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: P159788

Luminaire Tested: **VST-E07-LED-E-U-T4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159788
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E07-LED-E-U-T4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (147) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17584.1 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 172.5
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



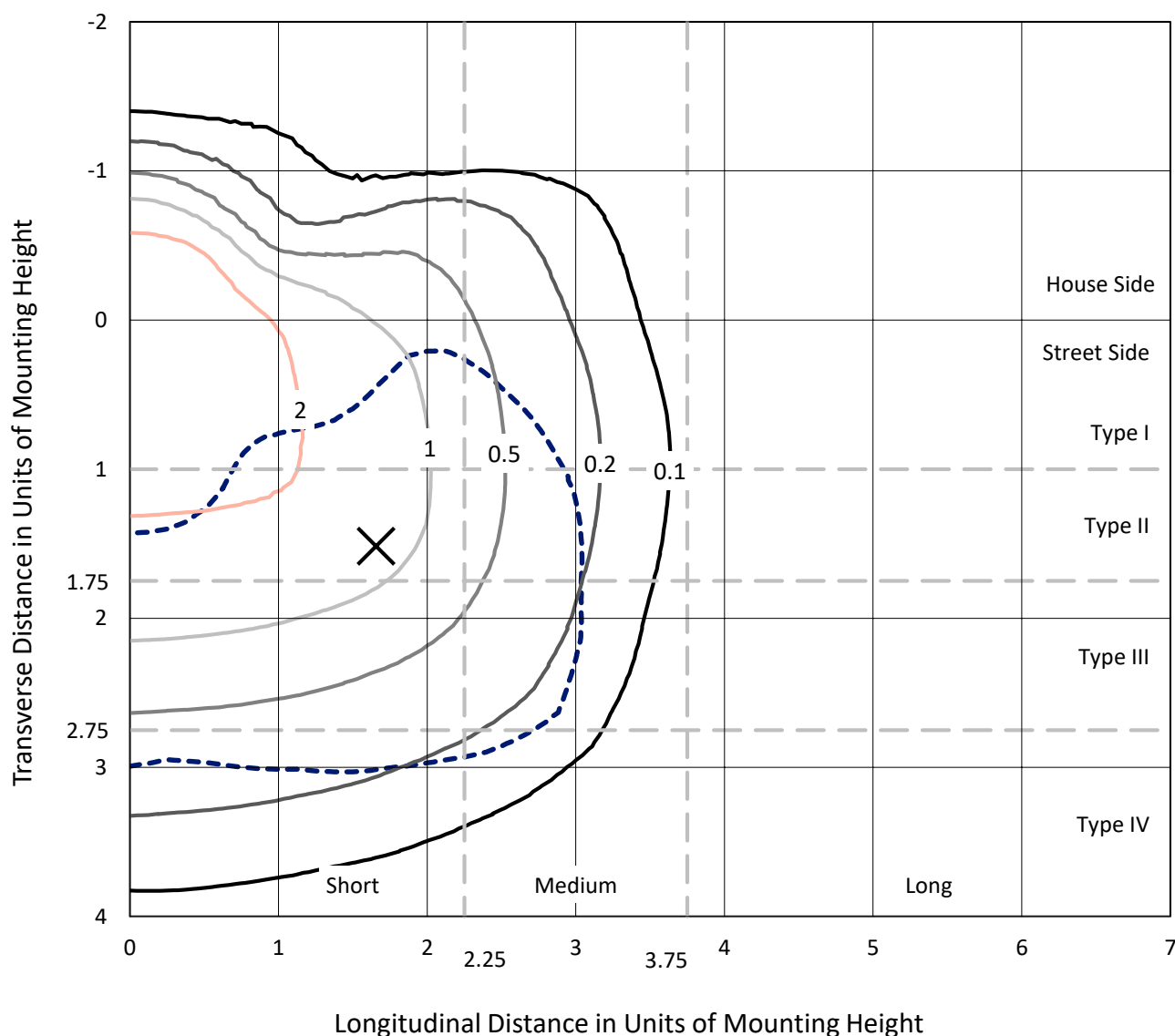
REPORT NUMBER: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

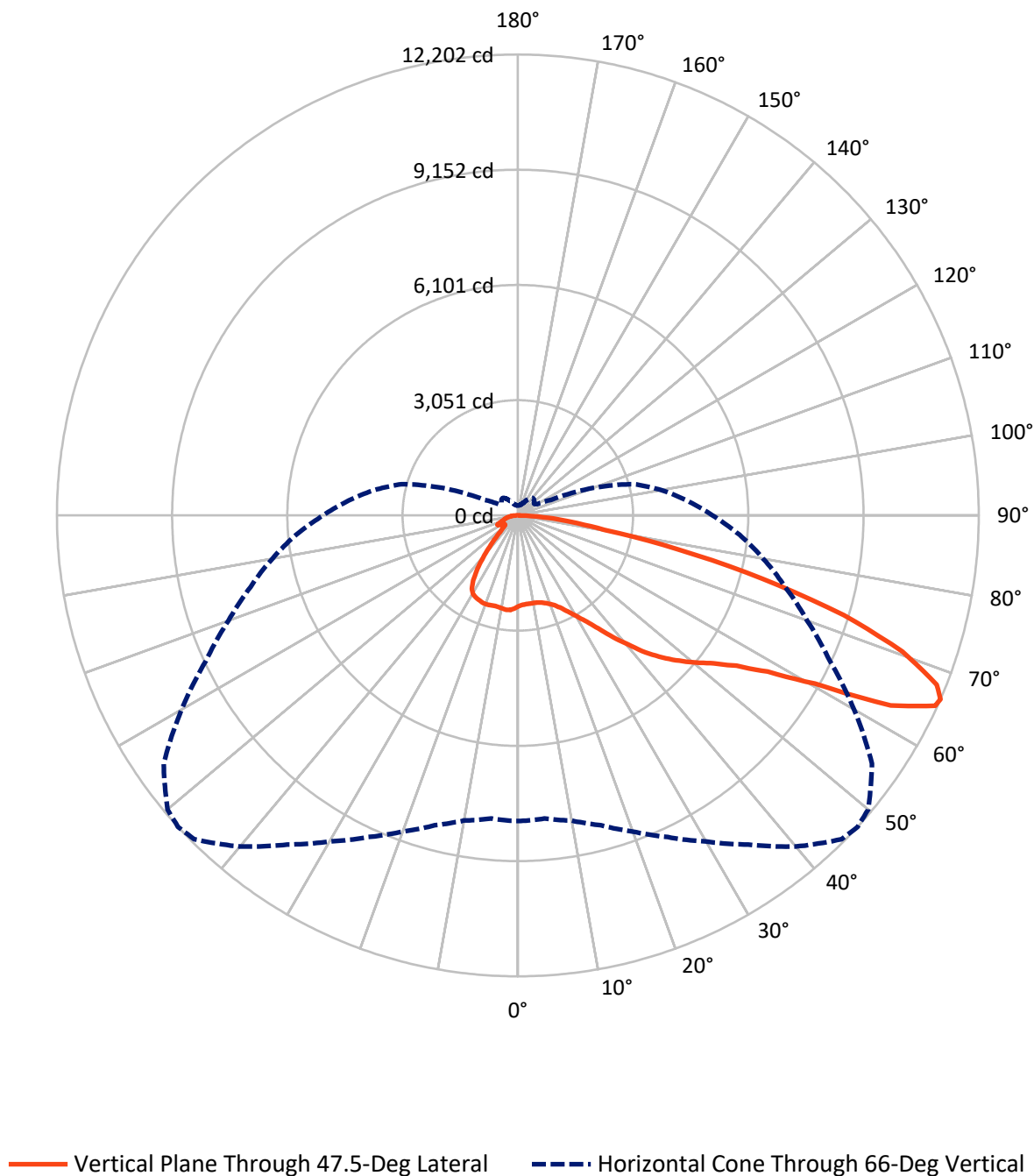


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3640.7	0.0	3640.7
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	13943.4	0.0	13943.4
	% Fixture	79.3	0.0	79.3
Total	Lumens	17584.1	0.0	17584.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.9	1.3
10°-20°	695.3	4.0
20°-30°	1186.4	6.7
30°-40°	1790.7	10.2
40°-50°	2327.5	13.2
50°-60°	3193.1	18.2
60°-70°	4912.0	27.9
70°-80°	2839.4	16.1
80°-90°	407.9	2.3
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°	17584.1	100.0
0°-180°	17584.1	100.0

Coefficient of Utilization



REPORT NUMBER: P159788

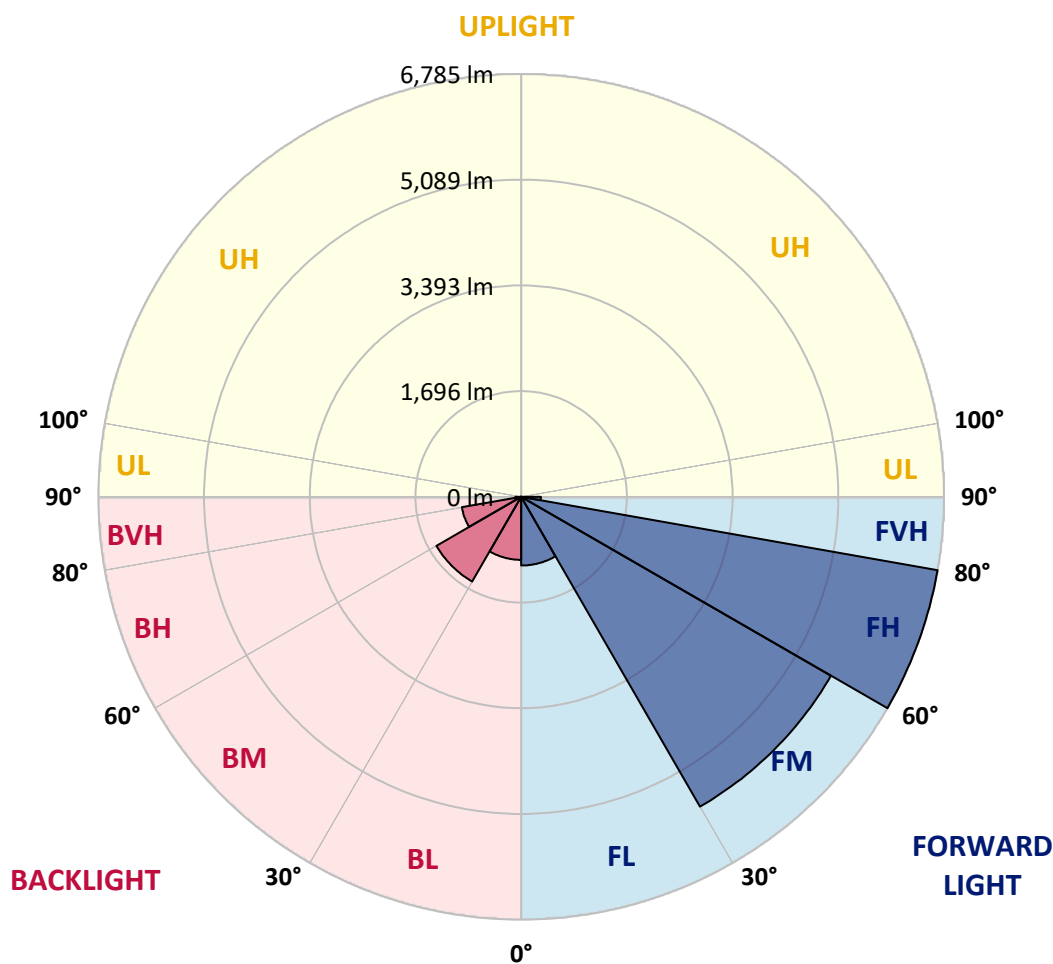
CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1102.2	6.3			
FM	(30°-60°)	5740.5	32.6			
FH	(60°-80°)	6785.1	38.6			G3/7500
FVH	(80°-90°)	315.7	1.8			G3/500
BL	(0°-30°)	1011.4	5.8	B3/2500		
BM	(30°-60°)	1570.8	8.9	B2/2500		
BH	(60°-80°)	966.3	5.5	B2/1000		G2/1000
BVH	(80°-90°)	92.2	0.5			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 IV Short





REPORT NUMBER: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7
2.5°	2344.3	2345.5	2346.6	2346.6	2350.2	2350.2	2356.1	2359.6	2360.8	2367.9	2372.6
5°	2300.6	2299.4	2300.6	2302.9	2308.8	2313.5	2325.4	2333.6	2340.7	2352.5	2358.4
7.5°	2281.6	2284.0	2286.4	2287.6	2292.3	2304.1	2314.7	2323.0	2337.2	2351.4	2357.3
10°	2306.5	2310.0	2306.5	2308.8	2308.8	2319.5	2324.2	2330.1	2340.7	2353.7	2357.3
12.5°	2364.4	2371.4	2364.4	2358.4	2353.7	2363.2	2360.8	2356.1	2362.0	2365.5	2365.5
15°	2460.1	2460.1	2455.3	2447.1	2435.3	2436.4	2425.8	2415.2	2410.4	2402.2	2396.3
17.5°	2553.4	2551.0	2540.4	2529.8	2521.5	2518.0	2502.6	2488.4	2471.9	2458.9	2444.7
20°	2644.4	2653.8	2640.8	2625.5	2612.5	2604.2	2592.4	2564.0	2544.0	2522.7	2508.5
22.5°	2801.5	2793.3	2779.1	2756.6	2743.6	2729.5	2704.7	2673.9	2643.2	2617.2	2599.5
25°	2963.4	2955.1	2935.1	2918.5	2899.6	2887.8	2860.6	2822.8	2793.3	2753.1	2729.5
27.5°	3137.1	3130.0	3106.4	3093.4	3080.4	3066.2	3042.6	3003.6	2976.4	2930.3	2905.5
30°	3333.3	3332.1	3300.2	3297.8	3278.9	3263.5	3247.0	3213.9	3186.7	3140.7	3111.1
32.5°	3542.4	3537.7	3515.2	3508.1	3521.1	3510.5	3486.9	3452.6	3417.2	3390.0	3356.9
35°	3840.2	3831.9	3818.9	3824.8	3833.1	3862.6	3826.0	3796.4	3753.9	3718.5	3672.4
37.5°	4057.6	4045.8	4061.1	4094.2	4141.5	4163.9	4195.8	4197.0	4176.9	4129.6	4089.5
40°	4257.3	4252.5	4288.0	4334.1	4421.5	4485.3	4545.6	4575.1	4582.2	4551.5	4491.2
42.5°	4426.2	4440.4	4487.7	4558.6	4681.4	4778.3	4890.6	4960.3	5004.0	4987.5	4960.3
45°	4627.1	4634.2	4692.1	4781.9	4898.9	5059.6	5207.3	5325.4	5402.2	5401.0	5370.3
47.5°	4878.8	4880.0	4929.6	5034.7	5160.0	5323.1	5509.7	5666.9	5768.5	5773.2	5749.6
50°	5177.7	5175.4	5229.7	5329.0	5462.5	5619.6	5818.1	6014.3	6156.1	6156.1	6121.8
52.5°	5562.9	5558.2	5587.7	5675.2	5804.0	5969.4	6166.7	6393.6	6547.2	6580.3	6505.8
55°	6076.9	6084.0	6091.1	6167.9	6277.8	6408.9	6635.8	6844.9	7050.5	7069.4	7025.7
57.5°	6671.2	6647.6	6698.4	6823.7	6948.9	7113.2	7273.9	7520.8	7764.2	7805.6	7799.7
60°	7600.0	7569.2	7621.2	7780.8	7919.0	8177.8	8453.1	8772.1	9060.4	9145.5	9042.7
62.5°	8454.3	8492.1	8563.0	8748.5	8949.3	9294.4	9707.9	10255.0	10802.1	11099.8	11078.6
65°	8377.5	8342.0	8477.9	8730.7	9094.7	9534.2	10048.2	10707.5	11495.7	12093.5	12146.7
66°	8092.7	8056.1	8202.6	8492.1	8908.0	9397.2	9967.9	10639.0	11444.9	12120.7	12202.3
67.5°	7622.4	7585.8	7751.2	8014.7	8443.6	9059.2	9676.0	10409.8	11247.5	11895.0	11961.2
70°	6715.0	6665.3	6794.1	7091.9	7439.3	8034.8	8622.0	9399.5	10259.7	10777.3	10802.1
72.5°	5688.2	5572.4	5709.4	5938.7	6186.8	6679.5	7191.1	7722.9	8408.2	8886.7	9023.8
75°	4127.3	4187.5	4227.7	4379.0	4543.2	4950.9	5251.0	5696.4	6227.0	6573.2	6683.1
77.5°	2189.5	2280.5	2337.2	2488.4	2760.2	3070.9	3395.9	3671.2	4019.8	4213.5	4348.2
80°	1228.9	1292.7	1384.8	1504.2	1636.5	1875.2	2067.8	2209.6	2259.2	2293.5	2324.2
82.5°	675.9	837.7	974.8	1057.5	1135.5	1231.2	1345.8	1464.0	1501.8	1445.1	1415.5
85°	105.2	154.8	471.5	575.4	626.2	699.5	782.2	869.6	870.8	749.1	817.7
87.5°	29.5	33.1	67.4	101.6	99.3	80.3	99.3	180.8	106.3	53.2	61.4
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: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7
2.5°	2375.0	2377.4	2383.3	2389.2	2395.1	2401.0	2404.5	2410.4	2415.2	2422.3	2430.5
5°	2365.5	2371.4	2382.1	2395.1	2406.9	2417.5	2425.8	2437.6	2448.2	2457.7	2471.9
7.5°	2365.5	2377.4	2395.1	2409.3	2419.9	2432.9	2445.9	2457.7	2469.5	2479.0	2488.4
10°	2366.7	2378.5	2396.3	2412.8	2424.6	2438.8	2449.4	2460.1	2473.1	2479.0	2490.8
12.5°	2371.4	2376.2	2389.2	2405.7	2419.9	2434.1	2444.7	2455.3	2469.5	2471.9	2480.2
15°	2395.1	2388.0	2391.5	2403.3	2418.7	2430.5	2442.3	2450.6	2460.1	2457.7	2464.8
17.5°	2438.8	2421.1	2414.0	2415.2	2422.3	2430.5	2435.3	2436.4	2437.6	2427.0	2428.2
20°	2497.9	2473.1	2456.5	2448.2	2438.8	2430.5	2417.5	2402.2	2388.0	2366.7	2364.4
22.5°	2586.5	2549.9	2532.1	2509.7	2481.3	2445.9	2414.0	2376.2	2345.5	2313.5	2301.7
25°	2715.3	2677.5	2658.6	2623.1	2572.3	2521.5	2475.4	2424.6	2379.7	2341.9	2324.2
27.5°	2887.8	2850.0	2829.9	2793.3	2730.6	2679.8	2616.0	2561.7	2507.3	2451.8	2429.3
30°	3096.9	3063.9	3041.4	3011.9	2957.5	2902.0	2827.5	2743.6	2657.4	2568.8	2525.1
32.5°	3343.9	3307.3	3290.7	3256.5	3199.7	3141.8	3059.1	2951.6	2807.5	2668.0	2580.6
35°	3652.3	3610.9	3592.0	3547.1	3481.0	3395.9	3307.3	3163.1	2968.1	2774.4	2631.4
37.5°	4064.7	3972.5	3909.9	3807.1	3700.7	3581.4	3455.0	3307.3	3076.9	2837.0	2638.5
40°	4429.8	4336.4	4215.9	4068.2	3902.8	3738.5	3594.4	3426.6	3176.1	2881.9	2616.0
42.5°	4883.5	4718.1	4525.5	4325.8	4106.0	3904.0	3732.6	3535.3	3243.5	2893.7	2553.4
45°	5298.2	5100.9	4843.3	4577.5	4304.5	4050.5	3857.9	3638.1	3301.4	2893.7	2477.8
47.5°	5676.3	5440.0	5131.6	4800.8	4482.9	4205.3	3986.7	3743.3	3382.9	2930.3	2455.3
50°	6026.1	5754.3	5403.4	5019.4	4662.5	4366.0	4130.8	3878.0	3507.0	3024.9	2509.7
52.5°	6394.8	6106.4	5678.7	5271.1	4877.6	4559.7	4309.2	4044.6	3667.6	3173.7	2605.4
55°	6878.0	6540.1	6054.5	5605.5	5173.0	4822.1	4537.3	4244.3	3843.7	3341.5	2722.4
57.5°	7640.1	7149.8	6664.2	6080.4	5672.8	5210.8	4898.9	4562.1	4129.6	3560.1	2898.4
60°	8974.2	8371.5	7787.8	7116.7	6613.3	6130.1	5658.6	5219.1	4698.0	4054.0	3284.8
62.5°	10878.9	10266.8	9349.9	8528.7	7768.9	7128.5	6514.1	5955.2	5286.4	4582.2	3761.0
65°	12016.7	11316.1	10223.1	9119.5	8196.7	7402.6	6699.6	6015.5	5293.5	4607.0	3905.1
66°	12107.7	11444.9	10277.4	9111.2	8153.0	7329.4	6598.0	5890.2	5150.5	4493.6	3857.9
67.5°	11938.8	11368.1	10166.4	8950.5	7971.0	7081.3	6329.8	5587.7	4844.5	4236.0	3700.7
70°	10746.5	10334.2	9303.8	8164.8	7187.6	6403.0	5610.2	4896.5	4192.3	3680.6	3283.6
72.5°	8809.9	8287.7	7566.9	6801.2	6032.0	5336.0	4615.3	4007.9	3417.2	3045.0	2763.7
75°	6471.6	6001.3	5207.3	4729.9	4221.8	3784.6	3299.0	2723.6	2304.1	2117.4	2048.9
77.5°	4102.5	3592.0	2922.1	2395.1	2059.5	1770.0	1395.5	1109.5	888.6	925.2	1024.4
80°	2072.5	1785.4	1336.4	1055.2	912.2	758.6	600.2	454.9	332.0	379.3	428.9
82.5°	1330.5	1110.7	885.0	697.1	588.4	518.7	414.7	301.3	224.5	252.9	309.6
85°	801.1	677.0	540.0	441.9	384.0	320.2	235.1	166.6	165.4	177.2	218.6
87.5°	121.7	173.7	100.4	107.5	113.4	121.7	107.5	91.0	79.2	102.8	130.0
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: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7	2405.7
2.5°	2438.8	2441.2	2445.9	2451.8	2450.6	2458.9	2463.6	2458.9	2469.5	2469.5	2475.4
5°	2483.7	2487.2	2495.5	2501.4	2503.8	2510.9	2513.2	2512.1	2514.4	2515.6	2518.0
7.5°	2496.7	2506.1	2509.7	2513.2	2514.4	2516.8	2516.8	2514.4	2514.4	2513.2	2515.6
10°	2493.1	2496.7	2499.1	2497.9	2497.9	2495.5	2494.3	2493.1	2493.1	2490.8	2494.3
12.5°	2481.3	2481.3	2481.3	2479.0	2479.0	2477.8	2477.8	2477.8	2480.2	2481.3	2487.2
15°	2457.7	2457.7	2460.1	2458.9	2462.4	2468.3	2475.4	2480.2	2486.1	2487.2	2490.8
17.5°	2421.1	2422.3	2429.3	2444.7	2460.1	2477.8	2490.8	2494.3	2489.6	2477.8	2469.5
20°	2357.3	2372.6	2401.0	2437.6	2471.9	2494.3	2500.2	2486.1	2463.6	2432.9	2416.3
22.5°	2300.6	2331.3	2382.1	2442.3	2484.9	2500.2	2482.5	2449.4	2409.3	2373.8	2349.0
25°	2323.0	2358.4	2411.6	2463.6	2490.8	2482.5	2447.1	2399.8	2357.3	2315.9	2275.7
27.5°	2417.5	2453.0	2490.8	2506.1	2496.7	2466.0	2416.3	2365.5	2308.8	2249.7	2200.1
30°	2507.3	2527.4	2529.8	2514.4	2480.2	2430.5	2372.6	2313.5	2241.5	2170.6	2108.0
32.5°	2535.7	2512.1	2469.5	2425.8	2378.5	2327.7	2260.4	2182.4	2105.6	2025.2	1955.5
35°	2527.4	2431.7	2326.5	2233.2	2176.5	2118.6	2057.1	1953.2	1866.9	1798.4	1753.5
37.5°	2453.0	2278.1	2116.2	1980.3	1891.7	1823.2	1732.2	1646.0	1571.5	1540.8	1504.2
40°	2349.0	2082.0	1857.5	1667.2	1575.1	1487.6	1386.0	1319.8	1298.6	1270.2	1271.4
42.5°	2200.1	1852.7	1563.2	1344.6	1244.2	1148.5	1076.4	1037.4	1038.6	1015.0	1019.7
45°	2043.0	1622.3	1258.4	1041.0	941.7	860.2	820.0	808.2	809.4	810.6	803.5
47.5°	1947.3	1442.7	1009.1	789.3	701.9	655.8	634.5	628.6	629.8	631.0	622.7
50°	1933.1	1349.4	842.5	603.8	547.1	521.1	510.4	504.5	504.5	499.8	492.7
52.5°	1973.3	1325.7	760.9	523.4	469.1	445.5	437.2	432.5	425.4	415.9	402.9
55°	2037.1	1347.0	736.1	496.3	443.1	419.5	408.8	406.5	394.7	376.9	355.7
57.5°	2155.2	1423.8	752.7	503.4	447.8	426.6	419.5	417.1	400.6	373.4	346.2
60°	2494.3	1647.1	835.4	543.5	482.1	464.4	464.4	460.8	438.4	399.4	360.4
62.5°	2962.2	1974.4	947.6	599.1	529.4	527.0	547.1	548.3	508.1	445.5	384.0
65°	3187.9	2128.0	986.6	610.9	542.3	569.5	609.7	609.7	553.0	466.7	387.6
66°	3189.1	2124.5	974.8	596.7	528.2	563.6	605.0	605.0	545.9	460.8	381.7
67.5°	3107.6	2058.3	935.8	570.7	496.3	529.4	566.0	564.8	511.6	437.2	365.1
70°	2787.4	1820.8	824.7	528.2	458.5	459.6	472.6	464.4	428.9	378.1	332.0
72.5°	2403.3	1523.1	714.9	501.0	428.9	406.5	395.8	388.7	366.3	335.6	307.2
75°	1843.3	1182.8	622.7	476.2	402.9	363.9	349.7	343.8	328.5	310.8	288.3
77.5°	1129.6	810.6	528.2	436.0	373.4	337.9	322.6	310.8	295.4	278.9	263.5
80°	486.8	489.2	423.0	369.8	324.9	283.6	263.5	249.3	241.0	235.1	226.9
82.5°	340.3	350.9	322.6	287.1	248.1	218.6	200.9	197.3	198.5	198.5	196.1
85°	255.2	250.5	225.7	205.6	187.9	169.0	154.8	153.6	158.3	158.3	154.8
87.5°	147.7	148.9	127.6	119.3	124.1	106.3	96.9	98.1	109.9	108.7	106.3
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: P159788

CATALOG NUMBER: VST-E07-LED-E-U-T4-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2405.7	2405.7	2405.7	2405.7	2405.7
2.5°	2475.4	2479.0	2477.8	2481.3	2477.8
5°	2521.5	2520.3	2519.1	2523.9	2518.0
7.5°	2514.4	2515.6	2515.6	2515.6	2514.4
10°	2496.7	2501.4	2503.8	2508.5	2507.3
12.5°	2490.8	2497.9	2505.0	2512.1	2513.2
15°	2492.0	2496.7	2500.2	2503.8	2505.0
17.5°	2461.2	2460.1	2456.5	2454.2	2451.8
20°	2398.6	2392.7	2386.8	2377.4	2382.1
22.5°	2320.6	2304.1	2285.2	2269.8	2268.6
25°	2229.7	2198.9	2168.2	2148.1	2141.0
27.5°	2149.3	2112.7	2080.8	2063.1	2058.3
30°	2053.6	2020.5	1992.2	1976.8	1967.3
32.5°	1911.8	1885.8	1850.4	1838.5	1837.4
35°	1714.5	1694.4	1669.6	1664.9	1658.9
37.5°	1491.2	1484.1	1472.3	1458.1	1455.7
40°	1252.5	1257.2	1253.7	1245.4	1232.4
42.5°	1022.1	1030.3	1031.5	1037.4	1043.3
45°	814.1	821.2	821.2	827.1	834.2
47.5°	625.1	620.3	623.9	629.8	633.3
50°	472.6	469.1	463.2	458.5	453.7
52.5°	380.5	373.4	356.8	352.1	347.4
55°	335.6	322.6	310.8	306.0	306.0
57.5°	322.6	306.0	293.0	287.1	284.8
60°	324.9	301.3	284.8	275.3	271.8
62.5°	335.6	302.5	280.0	269.4	265.9
65°	334.4	300.1	278.9	267.0	263.5
66°	328.5	296.6	276.5	265.9	263.5
67.5°	319.0	291.9	274.1	264.7	261.1
70°	300.1	282.4	269.4	261.1	257.6
72.5°	284.8	272.9	261.1	251.7	249.3
75°	270.6	258.8	248.1	243.4	239.9
77.5°	249.3	238.7	232.8	228.0	225.7
80°	221.0	213.9	206.8	202.1	198.5
82.5°	192.6	183.1	176.1	172.5	170.1
85°	157.2	151.2	140.6	133.5	132.3
87.5°	105.2	99.3	95.7	89.8	83.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)