

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: P158693

Luminaire Tested: **VST-F07-LED-E-U-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158693
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F07-LED-E-U-SL4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (49) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14148.3 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 180.5
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

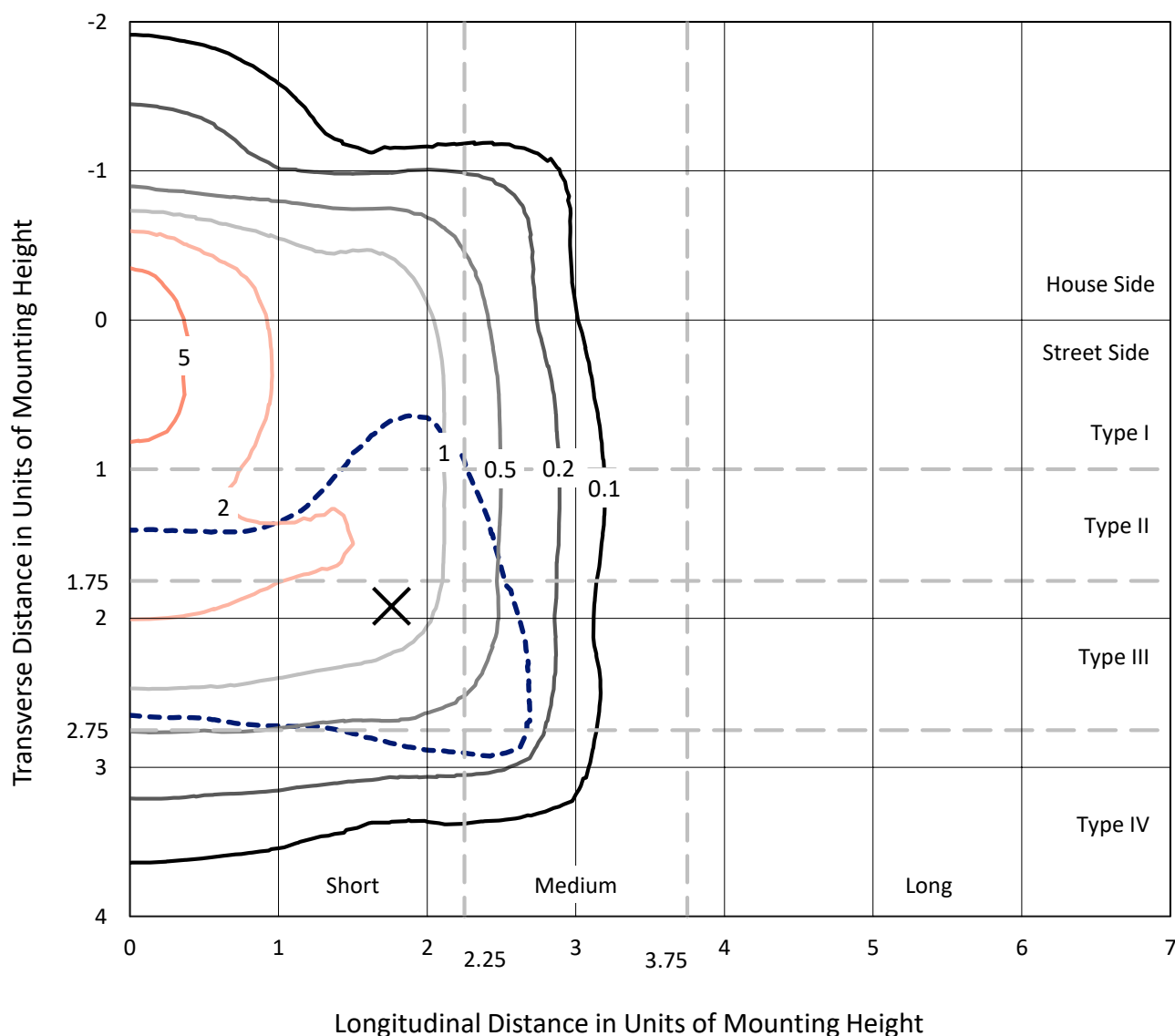


REPORT NUMBER: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

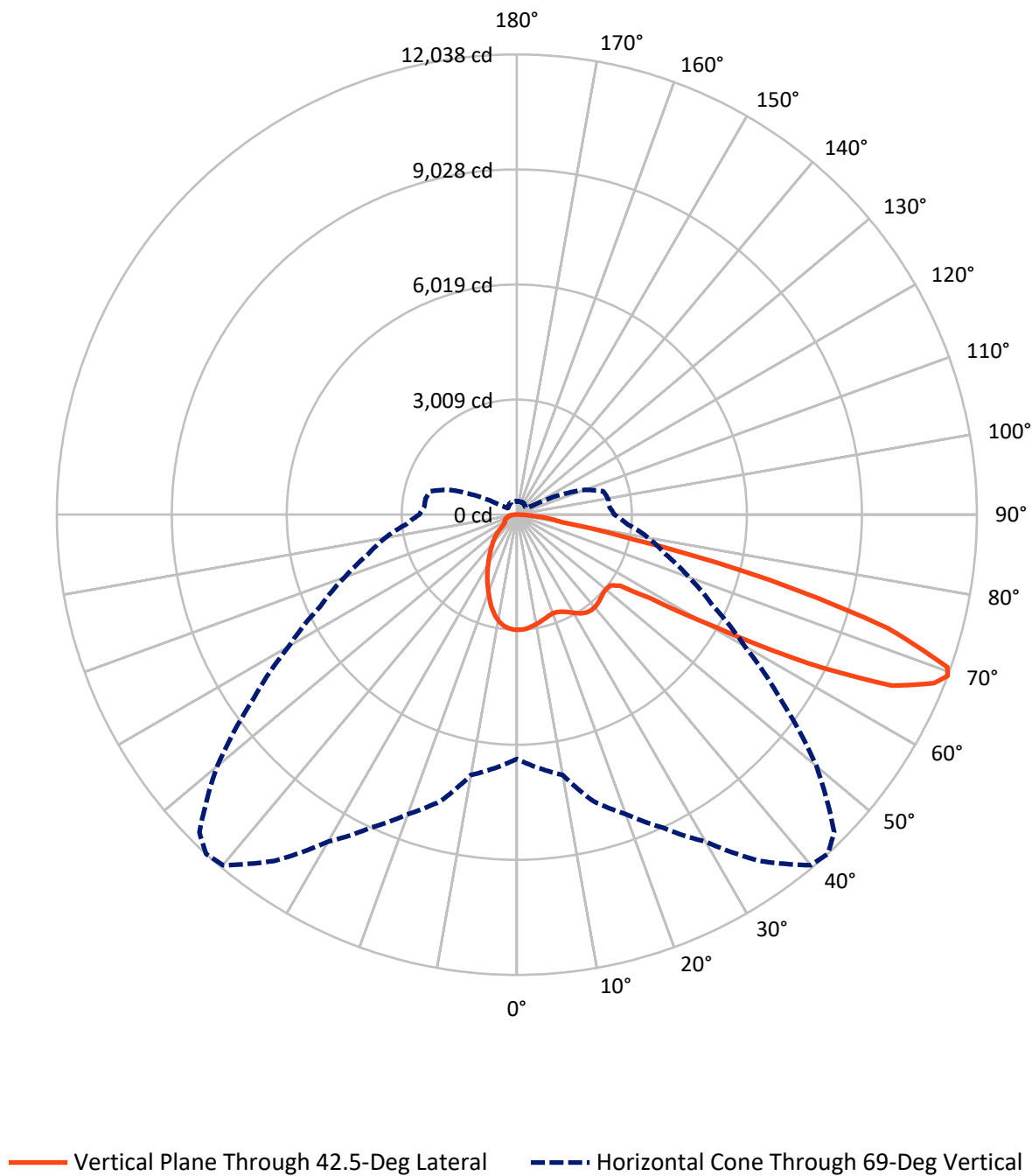


Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

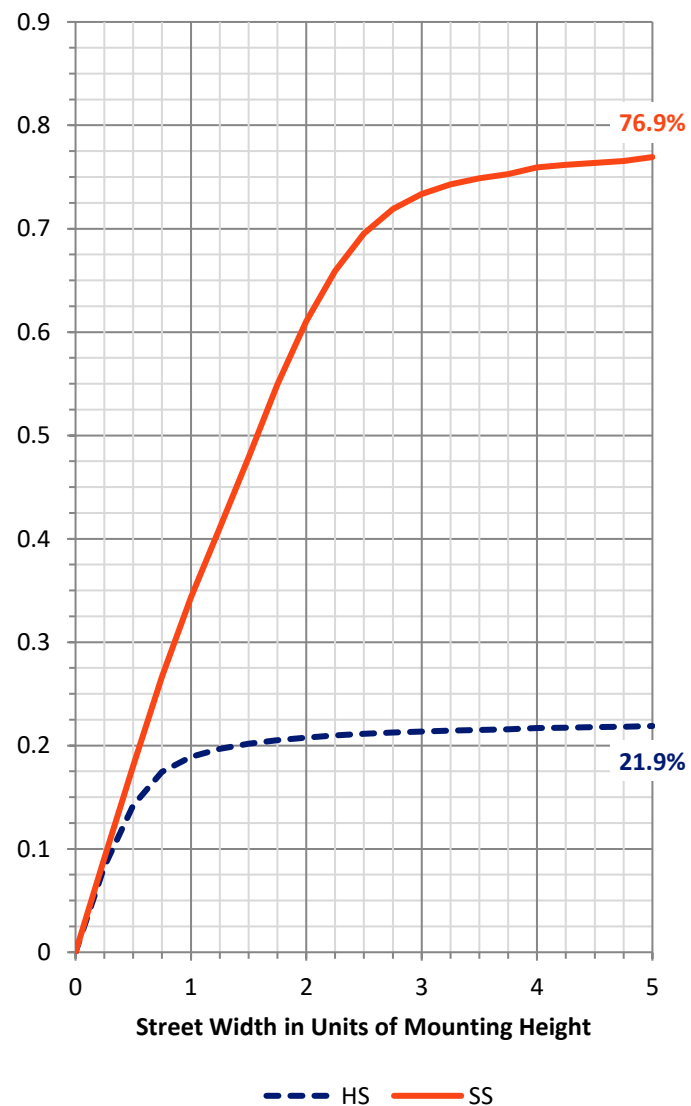
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3145.4	0.0	3145.4
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	11002.9	0.0	11002.9
	% Fixture	77.8	0.0	77.8
Total	Lumens	14148.3	0.0	14148.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.5	2.0
10°-20°	755.9	5.3
20°-30°	1102.3	7.8
30°-40°	1405.2	9.9
40°-50°	1635.0	11.6
50°-60°	2487.7	17.6
60°-70°	4394.4	31.1
70°-80°	1813.4	12.8
80°-90°	273.8	1.9
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°	14148.3	100.0
0°-180°	14148.3	100.0

Coefficient of Utilization



REPORT NUMBER: P158693

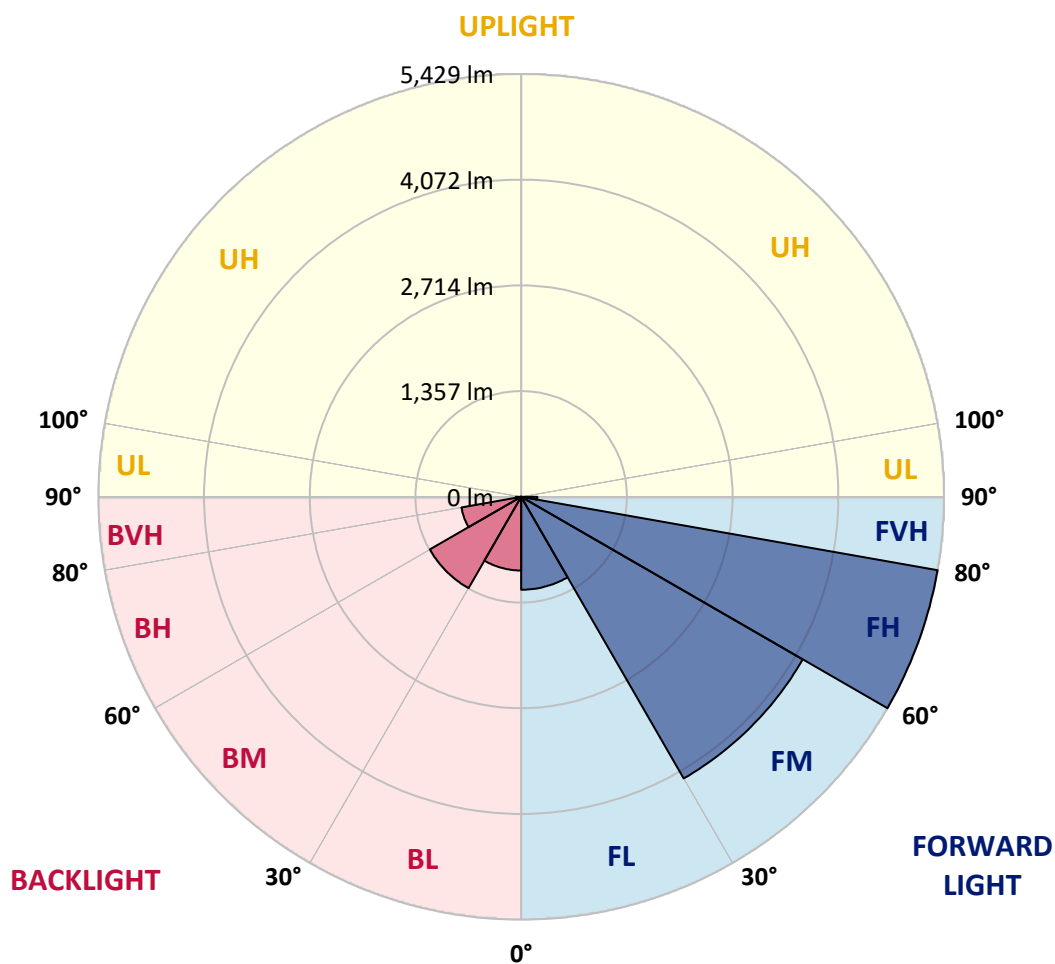
CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1193.0	8.4			
FM	(30°-60°)	4174.1	29.5			
FH	(60°-80°)	5428.7	38.4			G3/7500
FVH	(80°-90°)	207.1	1.5			G2/225
BL	(0°-30°)	945.7	6.7	B2/1000		
BM	(30°-60°)	1353.8	9.6	B2/2500		
BH	(60°-80°)	779.1	5.5	B2/1000		G2/1000
BVH	(80°-90°)	66.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





REPORT NUMBER: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3003.3	3014.1	3010.2	3010.2	3013.1	3008.2	3008.2	3010.2	3005.3	3008.2	3007.2
5°	2992.6	2998.5	2996.5	2996.5	2996.5	2992.6	2990.7	2989.7	2982.9	2982.9	2979.9
7.5°	2969.2	2971.2	2974.1	2970.2	2969.2	2968.2	2961.4	2957.5	2949.7	2942.9	2944.8
10°	2938.0	2937.0	2941.9	2939.0	2935.1	2932.1	2926.3	2919.5	2910.7	2901.9	2900.9
12.5°	2902.9	2901.9	2905.8	2903.9	2900.9	2895.1	2890.2	2878.5	2864.8	2854.1	2853.1
15°	2880.4	2877.5	2881.4	2877.5	2872.6	2866.8	2858.0	2843.4	2819.0	2808.3	2799.5
17.5°	2901.9	2897.0	2899.0	2894.1	2887.3	2871.7	2851.2	2820.0	2784.9	2766.3	2752.7
20°	2977.0	2968.2	2970.2	2965.3	2949.7	2929.2	2890.2	2835.6	2776.1	2745.8	2724.4
22.5°	3084.3	3077.5	3080.4	3075.5	3059.9	3028.7	2970.2	2892.1	2807.3	2763.4	2729.3
25°	3247.2	3253.1	3255.0	3232.6	3223.8	3166.2	3085.3	2977.0	2863.9	2812.2	2765.3
27.5°	3430.6	3430.6	3439.4	3430.6	3413.0	3345.7	3231.6	3100.9	2955.6	2885.3	2828.7
30°	3609.1	3607.1	3623.7	3621.8	3593.5	3517.4	3387.7	3228.7	3062.8	2983.8	2911.7
32.5°	3798.3	3804.2	3814.9	3811.0	3773.9	3668.6	3512.5	3339.9	3165.3	3078.5	2997.5
35°	4003.2	4006.1	4010.0	4008.0	3932.9	3800.3	3604.2	3411.1	3229.6	3143.8	3059.9
37.5°	4208.0	4205.1	4200.2	4158.3	4072.4	3888.1	3659.8	3452.0	3261.8	3169.2	3082.4
40°	4391.4	4374.8	4359.2	4293.8	4162.2	3937.8	3681.3	3461.8	3258.9	3163.3	3078.5
42.5°	4491.9	4473.3	4441.1	4359.2	4199.2	3942.7	3666.6	3432.5	3228.7	3134.1	3050.2
45°	4510.4	4496.7	4465.5	4373.8	4190.4	3911.5	3621.8	3384.7	3183.8	3089.2	3010.2
47.5°	4466.5	4455.8	4425.5	4334.8	4152.4	3864.7	3570.1	3334.0	3139.9	3051.1	2975.1
50°	4399.2	4389.4	4366.0	4283.1	4109.5	3832.5	3543.7	3307.7	3125.3	3044.3	2974.1
52.5°	4508.4	4516.2	4448.0	4357.2	4155.3	3860.8	3573.0	3335.0	3151.6	3071.6	2998.5
55°	6206.7	6195.9	5785.3	5440.9	4825.5	4267.5	3851.0	3551.5	3355.5	3275.5	3207.2
57.5°	8064.9	8027.8	7859.0	7537.1	6875.8	5993.0	5190.3	4507.5	4238.2	4123.1	4130.9
60°	8671.6	8685.2	8649.1	8535.0	8298.0	7838.6	7227.9	6714.9	6209.6	5962.8	5991.1
62.5°	9008.1	9032.5	9063.7	9038.3	8961.3	8855.0	8777.9	8824.7	8754.5	8577.0	8435.5
65°	9054.9	9104.7	9208.1	9290.0	9330.0	9430.5	9666.5	10232.3	10749.2	10783.4	10534.6
67.5°	8128.3	8265.8	8490.1	8869.6	9194.4	9551.4	10121.1	10981.4	11744.2	11769.5	11537.4
69°	6391.0	6655.4	6917.7	7765.4	8336.0	9035.4	9878.2	11053.6	11967.5	12037.8	11745.1
70°	5121.0	5278.1	5504.4	6355.9	7208.4	8100.0	9321.2	10815.6	11814.4	11955.8	11633.0
72.5°	3074.6	3135.0	3213.1	3518.4	3957.3	4751.3	6370.5	8817.9	9966.0	10155.2	9744.5
75°	1987.9	1984.0	1990.9	2075.7	2101.1	2253.2	2763.4	4536.7	6501.2	6844.6	6353.0
77.5°	1497.3	1510.9	1489.5	1497.3	1490.5	1531.4	1547.0	1624.1	2566.4	3161.4	2826.8
80°	1321.7	1328.5	1329.5	1325.6	1277.8	1273.9	1299.3	1255.4	1166.6	1184.2	1134.4
82.5°	754.0	753.0	761.8	828.1	855.5	945.2	982.3	1002.7	925.7	868.1	785.2
85°	488.7	492.6	502.3	522.8	502.3	510.1	501.4	518.9	476.0	441.9	395.0
87.5°	200.0	200.0	212.6	231.2	215.6	211.7	181.4	179.5	152.2	137.5	107.3
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: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3001.4	3007.2	3004.3	3008.2	3005.3	3005.3	3001.4	3000.4	3003.3	2999.4	3000.4
5°	2975.1	2976.0	2971.2	2973.1	2967.3	2965.3	2962.4	2954.6	2959.5	2954.6	2956.5
7.5°	2937.0	2934.1	2927.3	2917.5	2910.7	2907.8	2901.9	2891.2	2893.1	2884.3	2889.2
10°	2888.2	2878.5	2866.8	2852.2	2842.4	2833.6	2820.9	2808.3	2801.4	2793.6	2792.7
12.5°	2833.6	2821.9	2806.3	2783.9	2762.4	2747.8	2728.3	2705.8	2699.0	2686.3	2679.5
15°	2774.1	2755.6	2737.1	2711.7	2688.3	2665.8	2639.5	2611.2	2592.7	2573.2	2558.6
17.5°	2720.5	2699.0	2674.6	2650.2	2624.9	2597.6	2564.4	2529.3	2502.0	2465.9	2436.6
20°	2678.5	2651.2	2626.8	2601.5	2573.2	2540.0	2500.0	2455.2	2409.3	2369.3	2335.2
22.5°	2661.9	2619.0	2589.8	2564.4	2536.1	2497.1	2448.3	2395.7	2340.1	2284.5	2239.6
25°	2675.6	2612.2	2566.4	2536.1	2511.7	2471.7	2417.1	2352.7	2288.4	2222.0	2161.6
27.5°	2715.6	2634.6	2568.3	2520.5	2492.2	2452.2	2394.7	2326.4	2250.3	2176.2	2102.1
30°	2778.0	2672.7	2588.8	2521.5	2477.6	2431.7	2371.3	2292.3	2215.2	2130.3	2049.4
32.5°	2838.5	2712.7	2612.2	2525.4	2458.1	2398.6	2331.3	2253.2	2170.3	2081.6	1997.7
35°	2881.4	2739.0	2621.0	2516.6	2427.8	2353.7	2281.5	2203.5	2122.5	2031.8	1946.0
37.5°	2901.9	2753.6	2622.0	2493.2	2387.9	2305.9	2228.9	2151.8	2075.7	1989.9	1908.9
40°	2900.9	2752.7	2608.3	2463.0	2340.1	2253.2	2177.2	2102.1	2030.8	1955.7	1882.6
42.5°	2879.5	2737.1	2588.8	2433.7	2305.9	2209.3	2130.3	2058.2	1997.7	1931.4	1869.9
45°	2846.3	2710.7	2568.3	2420.0	2296.2	2199.6	2115.7	2045.5	1991.8	1931.4	1878.7
47.5°	2820.9	2696.1	2571.2	2444.4	2326.4	2225.9	2137.2	2060.1	2014.3	1965.5	1928.4
50°	2824.8	2702.9	2581.0	2459.1	2347.9	2246.4	2160.6	2090.3	2057.2	2044.5	2035.7
52.5°	2845.3	2713.6	2610.3	2537.1	2499.1	2423.0	2372.2	2328.4	2352.7	2304.9	2248.4
55°	3106.7	3063.8	3164.3	3258.9	3378.9	3423.8	3380.8	3373.0	3412.1	3250.1	2878.5
57.5°	4186.5	4297.7	4452.8	4534.8	4634.3	4607.9	4508.4	4425.5	4328.0	4138.7	3675.4
60°	6023.3	5939.4	5869.2	5671.1	5509.2	5320.0	5109.3	4928.8	4756.2	4484.1	3982.7
62.5°	7915.6	7333.3	6846.5	6376.4	5997.9	5683.8	5378.5	5107.4	4845.9	4466.5	3927.1
65°	9552.4	8326.3	7412.3	6722.7	6169.6	5692.6	5300.5	4925.9	4593.3	4148.5	3614.9
67.5°	10287.9	8751.6	7422.0	6433.9	5668.2	5020.5	4513.3	3947.6	3575.0	3290.1	2989.7
69°	10233.2	8426.7	6892.4	5676.0	4796.2	4041.2	3496.9	2906.8	2549.8	2428.8	2422.0
70°	9973.8	7876.6	6274.0	5060.5	4053.9	3303.8	2781.9	2252.3	1919.6	1836.7	1984.0
72.5°	8142.9	5565.8	3932.0	3002.4	2308.8	1825.0	1488.5	1181.2	943.2	817.4	844.7
75°	4599.2	2577.1	1666.0	1259.3	1064.2	879.8	755.0	643.8	582.3	473.1	374.6
77.5°	1671.9	1106.1	879.8	760.8	539.4	371.6	311.2	272.1	246.8	246.8	235.1
80°	1057.4	833.0	581.4	398.0	294.6	256.5	224.3	197.0	181.4	177.5	181.4
82.5°	660.4	510.1	325.8	249.7	209.7	188.3	163.9	143.4	130.7	127.8	133.6
85°	325.8	252.6	198.0	176.6	165.8	154.1	135.6	116.1	112.2	120.0	140.5
87.5°	97.5	86.8	71.2	74.1	78.0	76.1	60.5	52.7	49.7	65.4	102.4
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: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3002.4	3001.4	3003.3	3000.4	3002.4	3003.3	3001.4	3010.2	3004.3	3005.3	3009.2
5°	2958.5	2956.5	2964.3	2962.4	2966.3	2970.2	2968.2	2980.9	2976.0	2979.9	2987.7
7.5°	2885.3	2889.2	2890.2	2890.2	2898.0	2910.7	2913.6	2921.4	2921.4	2932.1	2939.9
10°	2787.8	2788.8	2794.6	2793.6	2803.4	2817.0	2819.0	2832.6	2837.5	2855.1	2865.8
12.5°	2674.6	2669.8	2668.8	2667.8	2680.5	2695.1	2697.1	2720.5	2730.2	2745.8	2763.4
15°	2547.8	2535.1	2531.2	2539.0	2536.1	2544.9	2553.7	2566.4	2580.0	2611.2	2626.8
17.5°	2423.9	2398.6	2391.8	2383.0	2374.2	2374.2	2378.1	2393.7	2422.0	2438.6	2473.7
20°	2297.1	2266.9	2242.5	2219.1	2198.6	2190.8	2191.8	2211.3	2231.8	2259.1	2292.3
22.5°	2190.8	2145.0	2103.0	2071.8	2029.9	2028.9	2023.0	2028.9	2051.3	2058.2	2076.7
25°	2099.1	2037.7	1981.1	1930.4	1889.4	1867.9	1862.1	1860.1	1849.4	1846.5	1832.8
27.5°	2027.9	1953.8	1880.6	1819.2	1768.5	1739.2	1702.1	1675.8	1637.7	1628.0	1603.6
30°	1969.4	1889.4	1809.4	1729.4	1671.9	1619.2	1556.8	1510.9	1452.4	1414.4	1381.2
32.5°	1912.8	1831.9	1750.9	1671.9	1583.1	1501.2	1419.3	1348.0	1282.7	1224.2	1175.4
35°	1866.0	1788.9	1707.0	1611.4	1498.3	1380.2	1281.7	1200.8	1111.0	1049.6	988.1
37.5°	1835.8	1765.5	1683.6	1551.9	1406.6	1279.8	1167.6	1069.1	977.4	884.7	815.5
40°	1822.1	1760.7	1658.2	1497.3	1326.6	1186.1	1062.2	953.0	835.9	731.6	657.4
42.5°	1821.1	1758.7	1623.1	1436.8	1260.3	1107.1	969.6	838.9	709.1	601.8	528.7
45°	1838.7	1755.8	1586.0	1386.1	1201.7	1041.8	877.9	718.9	573.6	493.6	454.6
47.5°	1885.5	1760.7	1555.8	1339.3	1146.1	962.7	772.5	587.2	467.2	430.2	430.2
50°	1969.4	1788.9	1548.0	1306.1	1090.5	871.1	643.8	474.1	413.6	413.6	425.3
52.5°	2098.1	1848.4	1561.7	1282.7	1021.3	750.1	507.2	408.7	397.0	407.7	423.3
55°	2394.7	1953.8	1580.2	1242.7	915.9	595.0	418.5	386.3	391.1	403.8	418.5
57.5°	2939.0	2179.1	1599.7	1154.9	746.2	458.5	379.4	377.5	386.3	398.0	410.7
60°	3297.0	2465.9	1649.5	1022.3	564.8	378.5	359.9	371.6	382.4	392.1	401.9
62.5°	3297.0	2546.8	1686.5	874.0	424.3	344.3	347.3	365.8	378.5	383.3	389.2
65°	3086.3	2398.6	1560.7	712.1	345.3	324.8	335.5	354.1	365.8	369.7	374.6
67.5°	2697.1	2118.6	1314.9	536.5	308.2	308.2	321.9	335.5	345.3	353.1	360.9
69°	2344.9	1901.1	1157.8	454.6	293.6	295.6	309.2	320.9	332.6	342.4	352.1
70°	2091.3	1738.2	1048.6	412.6	284.8	285.8	299.5	312.1	322.9	333.6	345.3
72.5°	1119.8	1200.8	796.9	338.5	262.4	265.3	278.0	289.7	299.5	310.2	320.9
75°	381.4	516.0	507.2	277.0	237.0	244.8	252.6	263.4	276.0	282.9	288.7
77.5°	223.4	231.2	270.2	225.3	213.6	217.5	226.3	235.1	245.8	252.6	257.5
80°	187.3	186.3	187.3	183.4	186.3	195.1	200.9	212.6	222.4	224.3	223.4
82.5°	152.2	160.0	160.9	159.0	167.8	174.6	179.5	186.3	185.3	187.3	191.2
85°	135.6	134.6	141.4	142.4	142.4	137.5	138.5	138.5	138.5	141.4	142.4
87.5°	135.6	113.1	87.8	79.0	82.9	78.0	74.1	73.2	81.0	88.8	86.8
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: P158693

CATALOG NUMBER: VST-F07-LED-E-U-SL4-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3013.1	3013.1	3013.1	3013.1	3013.1
2.5°	3011.2	3014.1	3012.1	3012.1	3014.1
5°	2990.7	2995.5	2993.6	2995.5	2995.5
7.5°	2943.8	2950.7	2955.6	2960.4	2957.5
10°	2876.5	2888.2	2896.1	2901.9	2899.0
12.5°	2776.1	2786.8	2803.4	2813.1	2805.3
15°	2638.5	2668.8	2678.5	2692.2	2684.4
17.5°	2495.1	2513.7	2525.4	2538.1	2545.9
20°	2304.0	2318.6	2334.2	2340.1	2331.3
22.5°	2073.8	2081.6	2078.6	2087.4	2069.9
25°	1821.1	1826.0	1823.1	1830.9	1816.3
27.5°	1582.1	1581.2	1582.1	1572.4	1562.6
30°	1351.9	1343.2	1339.3	1324.6	1321.7
32.5°	1146.1	1115.9	1100.3	1078.8	1073.9
35°	940.3	897.4	869.1	844.7	834.0
37.5°	756.0	704.3	671.1	649.6	646.7
40°	597.9	550.1	526.7	515.0	513.1
42.5°	487.7	467.2	461.4	461.4	461.4
45°	444.8	443.8	448.7	452.6	453.6
47.5°	436.0	441.9	448.7	454.6	456.5
50°	436.0	441.9	446.7	452.6	454.6
52.5°	434.1	438.9	440.9	444.8	446.7
55°	428.2	431.1	431.1	433.1	435.0
57.5°	418.5	420.4	417.5	419.4	424.3
60°	408.7	410.7	405.8	410.7	413.6
62.5°	398.0	399.0	397.0	400.9	400.9
65°	380.4	378.5	381.4	384.3	385.3
67.5°	362.9	358.0	360.9	361.9	363.8
69°	349.2	346.3	347.3	349.2	351.2
70°	339.4	337.5	339.4	342.4	345.3
72.5°	315.1	316.0	322.9	328.7	334.6
75°	292.6	299.5	308.2	320.9	327.7
77.5°	265.3	270.2	277.0	290.7	303.4
80°	229.2	232.2	233.1	238.0	237.0
82.5°	186.3	183.4	181.4	179.5	178.5
85°	133.6	132.7	124.9	119.0	119.0
87.5°	80.0	76.1	72.2	67.3	64.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)