

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: P159176

Luminaire Tested: **VST-F11-LED-E-U-SLR-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159176
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33715)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F11-LED-E-U-SLR-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (77) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25039.6 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 282.7
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

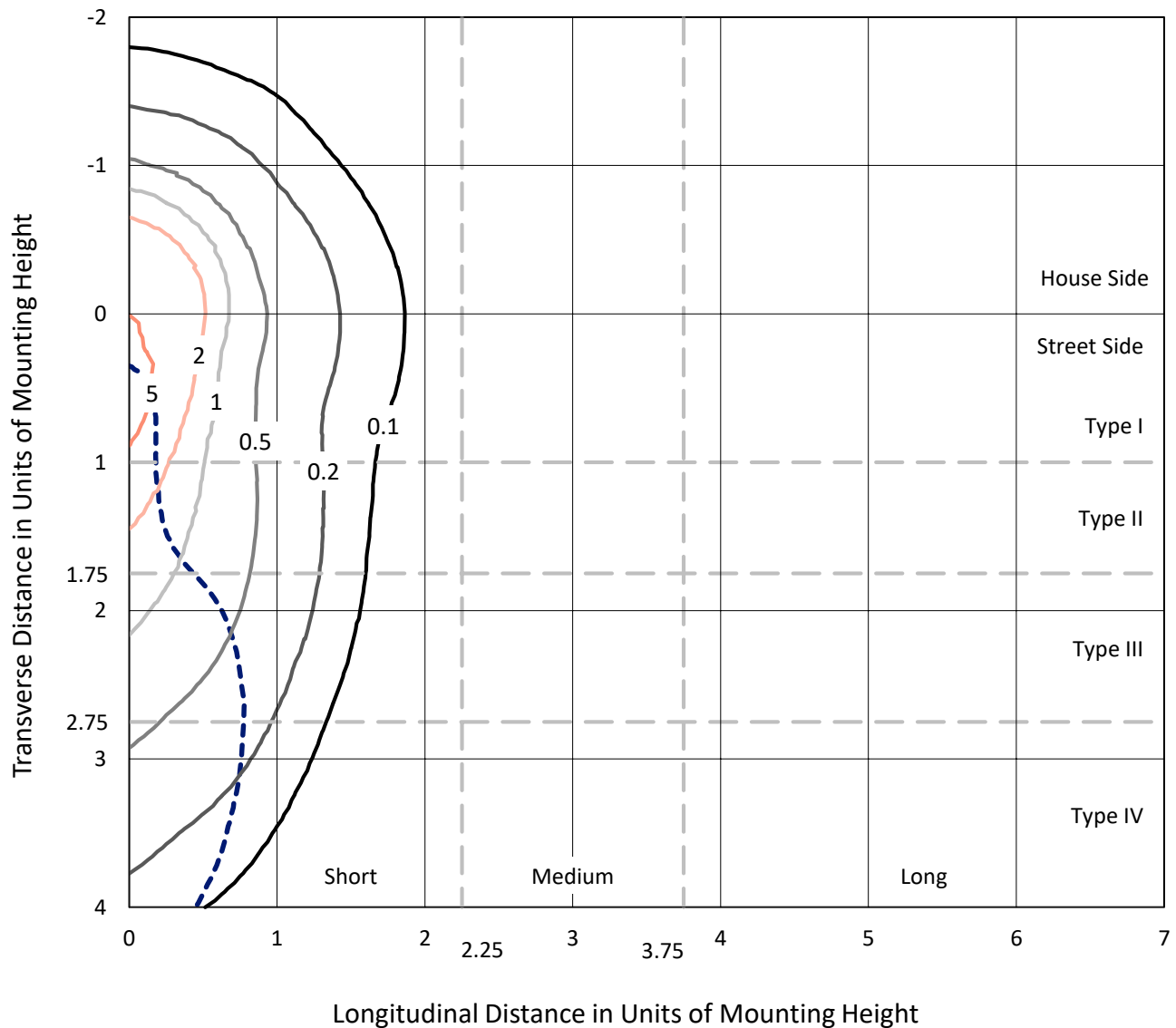


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

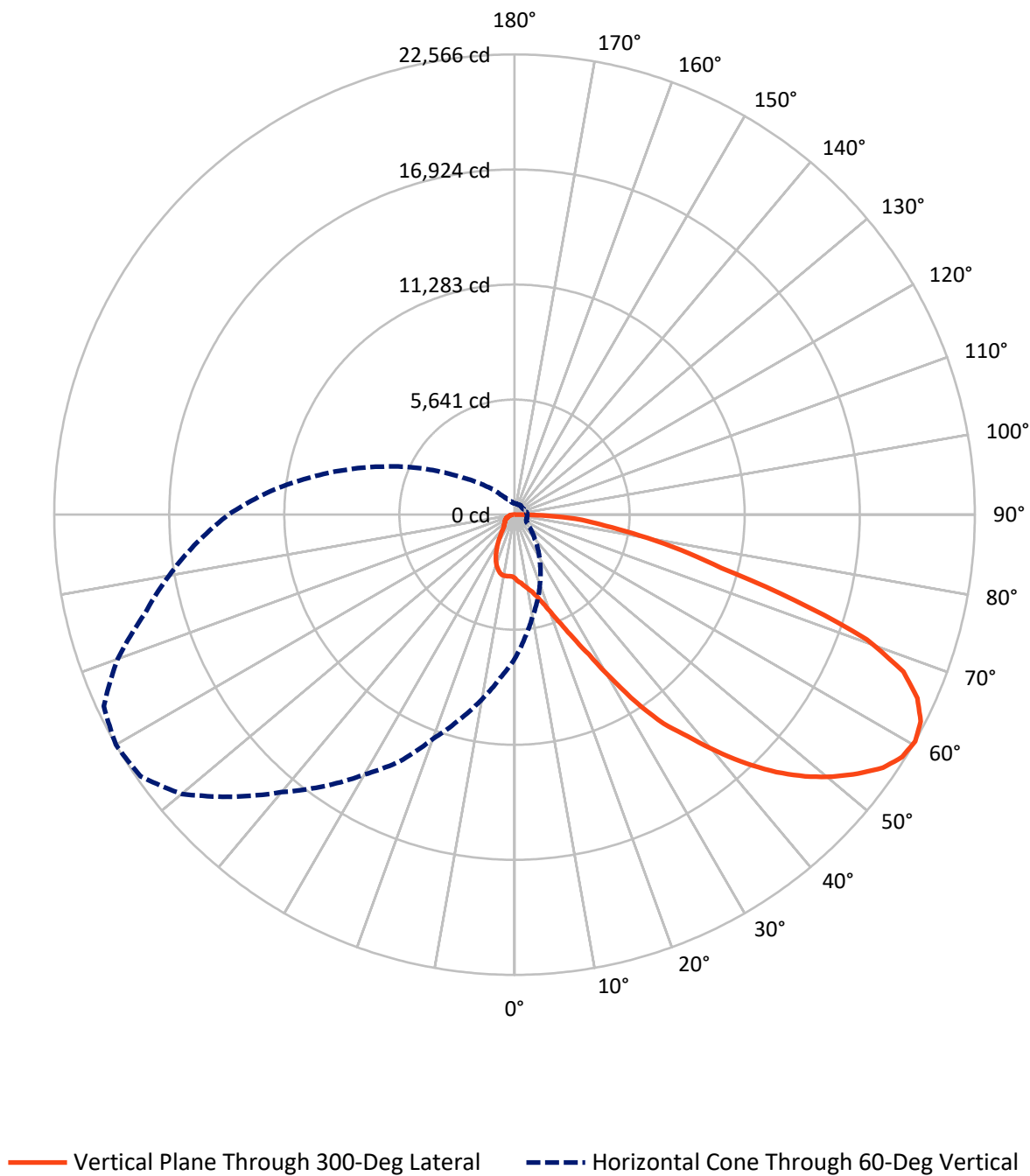


Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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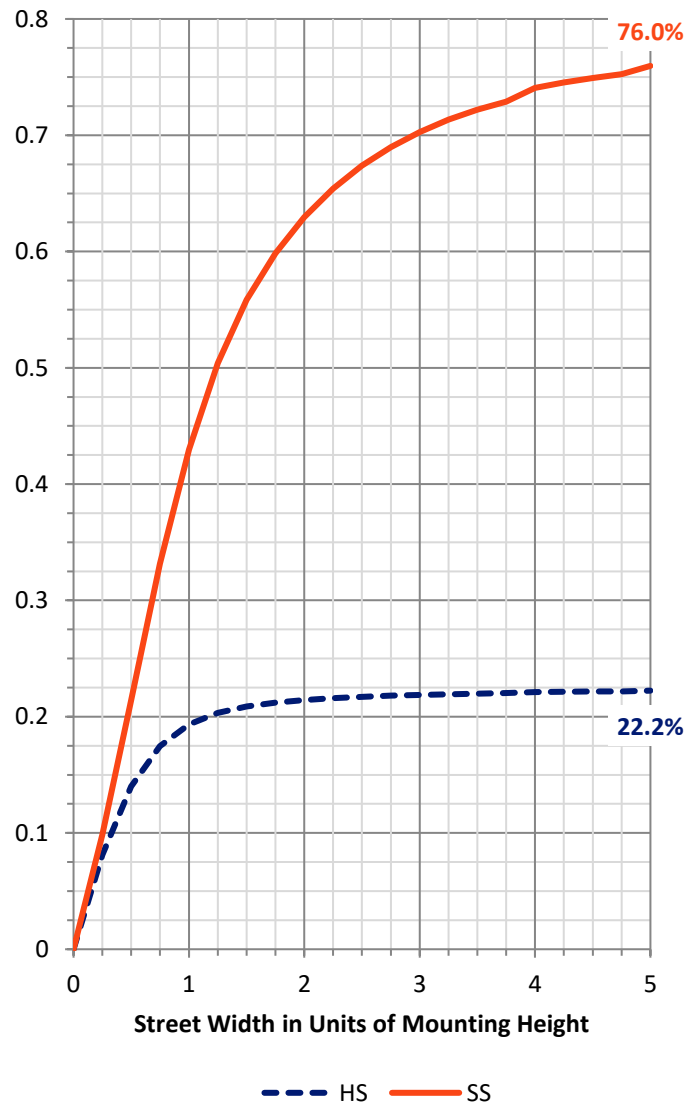
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5638.1	0.0	5638.1
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	19401.5	0.0	19401.5
	% Fixture	77.5	0.0	77.5
Total	Lumens	25039.6	0.0	25039.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.2	1.2
10°-20°	992.0	4.0
20°-30°	1882.3	7.5
30°-40°	2964.3	11.8
40°-50°	4137.5	16.5
50°-60°	5117.1	20.4
60°-70°	5304.1	21.2
70°-80°	3337.5	13.3
80°-90°	997.7	4.0
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°	25039.6	100.0
0°-180°	25039.6	100.0

Coefficient of Utilization



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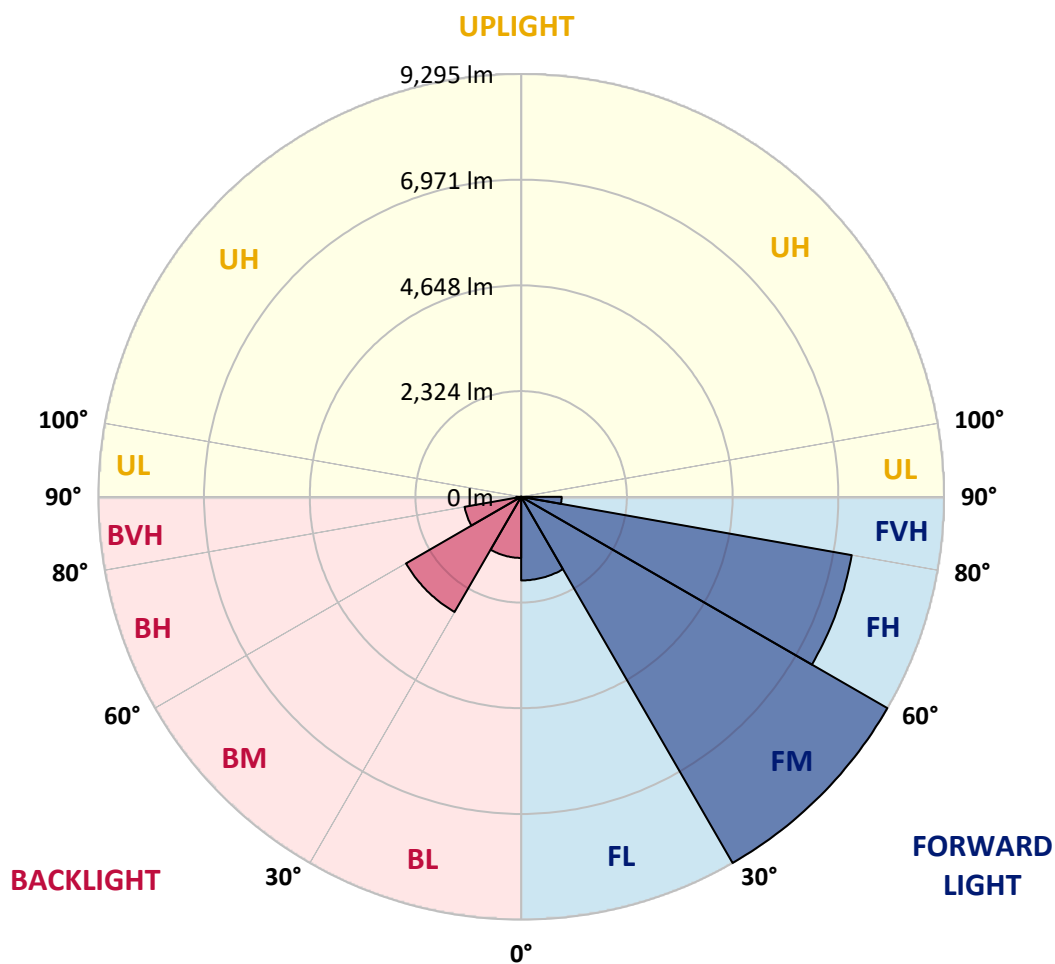
CATALOG NUMBER: VST-F11-LED-E-U-SLR-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1838.3	7.3			
FM	(30°-60°)	9295.1	37.1			
FH	(60°-80°)	7379.0	29.5			G3/7500
FVH	(80°-90°)	889.1	3.6			G5
BL	(0°-30°)	1343.2	5.4	B3/2500		
BM	(30°-60°)	2923.7	11.7	B3/5000		
BH	(60°-80°)	1262.7	5.0	B3/2500		G3/2500
BVH	(80°-90°)	108.5	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
2.5°	3298.5	3101.0	3104.7	3099.1	3099.1	3095.4	3099.1	3095.4	3091.7	3091.7	3093.5
5°	3341.4	3123.3	3123.3	3117.7	3114.0	3110.3	3114.0	3110.3	3108.4	3104.7	3106.6
7.5°	3382.4	3136.4	3128.9	3121.5	3112.2	3115.9	3115.9	3114.0	3115.9	3114.0	3117.7
10°	3449.5	3179.2	3160.6	3143.8	3142.0	3138.2	3138.2	3132.7	3132.7	3128.9	3130.8
12.5°	3620.9	3311.6	3291.1	3261.2	3255.7	3238.9	3229.6	3218.4	3199.7	3183.0	3169.9
15°	3909.8	3531.5	3492.3	3466.2	3455.1	3421.5	3369.3	3328.3	3274.3	3227.7	3179.2
17.5°	4263.8	3825.9	3779.3	3745.8	3689.9	3598.5	3511.0	3410.3	3306.0	3210.9	3123.3
20°	4759.5	4248.9	4157.6	4077.5	3937.7	3781.2	3617.2	3442.0	3281.7	3132.7	3004.1
22.5°	5430.4	4795.0	4625.4	4411.1	4152.0	3887.4	3626.5	3384.2	3169.9	2976.1	2804.7
25°	6201.9	5316.8	5011.1	4642.1	4245.2	3879.9	3537.0	3225.8	2976.1	2726.4	2540.0
27.5°	6770.3	5752.8	5301.8	4817.3	4310.4	3844.5	3423.4	3046.9	2745.0	2489.7	2264.2
30°	7094.6	6002.5	5460.2	4891.9	4321.6	3784.9	3279.9	2843.8	2495.3	2191.6	1975.4
32.5°	7303.3	6136.7	5477.0	4817.3	4187.4	3607.9	3061.8	2609.0	2230.7	1906.4	1677.2
35°	7478.5	6190.8	5398.8	4651.5	3934.0	3339.5	2782.3	2329.5	1928.8	1630.6	1395.8
37.5°	7549.3	6181.4	5273.9	4429.7	3686.1	3046.9	2497.2	2033.2	1675.3	1412.6	1211.3
40°	7536.3	6095.7	5104.3	4193.0	3395.4	2741.3	2195.3	1787.2	1496.4	1274.7	1127.5
42.5°	7448.7	5982.0	4916.1	3952.6	3128.9	2487.9	1990.3	1628.8	1393.9	1226.2	1097.6
45°	7338.7	5846.0	4744.6	3732.7	2918.3	2307.1	1871.0	1584.0	1380.9	1220.6	1082.7
47.5°	7189.6	5695.1	4571.3	3576.2	2806.5	2253.1	1869.2	1610.1	1392.1	1207.6	1056.6
50°	7027.5	5585.1	4476.3	3509.1	2793.5	2286.6	1934.4	1651.1	1399.5	1194.5	1021.2
52.5°	6913.8	5536.7	4474.4	3533.3	2862.4	2379.8	2010.8	1703.3	1427.5	1202.0	1013.8
55°	6774.1	5529.2	4522.9	3637.7	3013.4	2538.2	2131.9	1792.8	1485.3	1230.0	1019.4
57.5°	6783.4	5676.4	4711.1	3894.9	3285.5	2752.5	2286.6	1902.7	1541.2	1246.7	1010.1
60°	7077.8	6019.3	5081.9	4334.7	3641.4	3004.1	2445.0	1962.3	1537.4	1209.5	965.3
62.5°	7685.3	6533.7	5637.3	4850.9	4002.9	3197.9	2502.8	1945.6	1481.5	1129.3	892.6
65°	8410.3	7135.6	6177.7	5251.5	4222.8	3242.6	2452.5	1852.4	1369.7	1025.0	805.1
67.5°	9135.2	7562.4	6488.9	5365.2	4133.4	3061.8	2266.1	1643.7	1179.6	883.3	706.3
70°	9396.1	7649.9	6464.7	5109.9	3727.1	2612.7	1865.4	1323.1	946.7	723.1	594.5
72.5°	9004.8	7102.1	5747.2	4342.1	3030.2	2025.7	1367.9	976.5	723.1	566.5	484.5
75°	7553.0	5719.3	4543.4	3270.6	2187.8	1433.1	987.7	711.9	544.2	449.1	387.6
77.5°	5383.8	3982.4	3095.4	2148.7	1420.0	993.3	708.2	534.8	432.3	359.7	314.9
80°	3382.4	2445.0	1885.9	1289.6	885.2	674.6	508.8	423.0	348.5	292.6	262.8
82.5°	2036.9	1423.8	1110.7	801.3	581.4	462.2	374.6	331.7	277.7	242.3	225.5
85°	1382.8	1047.3	728.7	473.3	350.4	272.1	255.3	229.2	206.9	173.3	167.7
87.5°	264.6	374.6	326.1	193.8	128.6	110.0	96.9	93.2	83.9	67.1	76.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
2.5°	3082.3	3078.6	3071.2	3071.2	3065.6	3054.4	3052.5	3045.1	3035.7	3037.6	3035.7
5°	3093.5	3086.1	3076.7	3073.0	3065.6	3054.4	3048.8	3039.5	3030.2	3030.2	3030.2
7.5°	3106.6	3097.2	3089.8	3076.7	3061.8	3050.7	3035.7	3024.6	3019.0	3017.1	3019.0
10°	3117.7	3112.2	3101.0	3082.3	3061.8	3039.5	3024.6	3009.7	2994.8	2996.6	2998.5
12.5°	3142.0	3123.3	3093.5	3065.6	3033.9	3005.9	2979.8	2961.2	2942.6	2942.6	2944.4
15°	3125.2	3071.2	3030.2	2976.1	2940.7	2896.0	2866.2	2849.4	2838.2	2834.5	2836.3
17.5°	3026.4	2961.2	2899.7	2851.3	2802.8	2767.4	2754.4	2743.2	2728.3	2735.7	2728.3
20°	2877.3	2797.2	2709.6	2651.9	2594.1	2569.9	2547.5	2536.3	2527.0	2560.5	2560.5
22.5°	2663.0	2566.1	2476.7	2405.9	2340.6	2314.5	2292.2	2279.1	2284.7	2325.7	2329.5
25°	2392.8	2275.4	2158.0	2115.1	2049.9	2029.4	2016.4	2014.5	2020.1	2061.1	2070.4
27.5°	2105.8	1982.8	1882.2	1783.4	1753.6	1736.8	1712.6	1740.6	1746.2	1790.9	1809.5
30°	1800.2	1667.9	1561.7	1496.4	1433.1	1442.4	1421.9	1455.4	1470.4	1516.9	1531.9
32.5°	1487.1	1362.3	1256.0	1190.8	1146.1	1151.7	1136.8	1166.6	1181.5	1237.4	1265.4
35°	1230.0	1123.7	1038.0	982.1	961.6	941.1	937.4	941.1	956.0	998.9	1049.2
37.5°	1082.7	995.1	933.6	892.6	864.7	851.6	844.2	844.2	844.2	853.5	877.7
40°	1019.4	941.1	887.1	847.9	829.3	821.8	816.2	810.7	801.3	797.6	799.5
42.5°	991.4	902.0	844.2	814.4	803.2	803.2	803.2	799.5	790.2	780.8	771.5
45°	963.5	866.6	808.8	788.3	782.7	784.6	784.6	784.6	777.1	765.9	749.2
47.5°	928.1	827.4	769.7	756.6	756.6	762.2	764.1	764.1	756.6	745.4	732.4
50°	885.2	777.1	724.9	713.7	708.2	708.2	708.2	708.2	702.6	695.1	685.8
52.5°	862.8	749.2	695.1	683.9	683.9	678.3	676.5	670.9	665.3	659.7	646.7
55°	855.4	738.0	682.1	672.7	672.7	667.2	661.6	656.0	646.7	637.3	624.3
57.5°	834.9	713.7	665.3	657.8	657.8	654.1	648.5	642.9	633.6	620.6	603.8
60°	788.3	672.7	631.7	629.9	629.9	628.0	624.3	624.3	615.0	601.9	581.4
62.5°	728.7	629.9	590.8	590.8	588.9	587.0	579.6	577.7	566.5	549.8	531.1
65°	670.9	592.6	566.5	559.1	555.3	549.8	546.0	536.7	527.4	512.5	493.8
67.5°	598.2	536.7	519.9	512.5	505.0	499.4	493.8	488.3	477.1	465.9	451.0
70°	519.9	475.2	465.9	464.0	454.7	449.1	447.3	441.7	430.5	419.3	400.7
72.5°	445.4	419.3	411.8	411.8	400.7	393.2	389.5	387.6	380.2	370.8	354.1
75°	359.7	341.0	339.2	348.5	348.5	342.9	339.2	342.9	331.7	326.1	309.4
77.5°	294.4	285.1	279.5	283.3	294.4	288.9	281.4	281.4	281.4	272.1	266.5
80°	249.7	242.3	236.7	240.4	238.5	236.7	232.9	225.5	225.5	225.5	223.6
82.5°	225.5	223.6	203.1	203.1	195.7	190.1	186.4	182.6	178.9	178.9	188.2
85°	169.6	175.2	164.0	162.1	152.8	145.4	137.9	134.2	130.4	136.0	154.7
87.5°	82.0	82.0	78.3	87.6	80.1	76.4	70.8	67.1	70.8	87.6	104.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
2.5°	3032.0	3030.2	3028.3	3024.6	3017.1	3015.3	3011.5	3011.5	3009.7	3005.9	3009.7
5°	3026.4	3030.2	3030.2	3028.3	3022.7	3026.4	3026.4	3032.0	3032.0	3035.7	3045.1
7.5°	3019.0	3028.3	3035.7	3041.3	3048.8	3054.4	3065.6	3082.3	3089.8	3102.8	3108.4
10°	3004.1	3020.8	3033.9	3050.7	3069.3	3089.8	3106.6	3132.7	3142.0	3160.6	3169.9
12.5°	2961.2	2989.2	3011.5	3045.1	3076.7	3108.4	3138.2	3171.8	3188.6	3209.1	3222.1
15°	2856.8	2888.5	2920.2	2950.0	3005.9	3067.4	3115.9	3160.6	3184.8	3210.9	3224.0
17.5°	2732.0	2752.5	2778.6	2817.7	2871.8	2925.8	3004.1	3067.4	3104.7	3134.5	3138.2
20°	2586.6	2616.4	2635.1	2650.0	2692.9	2730.1	2814.0	2886.7	2935.1	2970.5	2979.8
22.5°	2364.9	2396.5	2428.2	2439.4	2473.0	2521.4	2568.0	2646.3	2715.2	2767.4	2799.1
25°	2111.4	2141.2	2184.1	2217.6	2225.1	2264.2	2310.8	2400.3	2471.1	2554.9	2592.2
27.5°	1858.0	1884.1	1930.7	1949.3	1971.7	2010.8	2048.1	2122.6	2197.1	2294.1	2335.0
30°	1561.7	1617.6	1671.6	1707.0	1725.7	1772.3	1798.3	1871.0	1940.0	2010.8	2070.4
32.5°	1308.2	1358.5	1420.0	1464.8	1487.1	1522.5	1563.5	1625.0	1679.1	1748.0	1817.0
35°	1075.3	1144.2	1185.2	1224.4	1282.1	1298.9	1339.9	1395.8	1427.5	1502.0	1580.3
37.5°	911.3	952.3	993.3	1032.4	1080.9	1103.2	1142.4	1189.0	1226.2	1271.0	1341.8
40°	810.7	833.0	862.8	888.9	924.3	952.3	972.8	1011.9	1039.9	1084.6	1134.9
42.5°	764.1	769.7	773.4	792.0	810.7	829.3	851.6	868.4	902.0	935.5	967.2
45°	738.0	726.8	721.2	723.1	730.5	741.7	760.3	779.0	801.3	821.8	840.5
47.5°	715.6	700.7	683.9	674.6	676.5	680.2	695.1	710.0	721.2	738.0	745.4
50°	663.4	650.4	635.5	622.4	624.3	626.2	639.2	650.4	657.8	663.4	672.7
52.5°	629.9	611.2	598.2	585.2	583.3	588.9	600.1	611.2	615.0	618.7	620.6
55°	605.7	587.0	570.3	557.2	551.6	564.7	568.4	583.3	588.9	588.9	590.8
57.5°	587.0	564.7	547.9	534.8	525.5	534.8	544.2	560.9	562.8	559.1	559.1
60°	559.1	542.3	525.5	512.5	503.2	510.6	518.1	536.7	536.7	527.4	525.5
62.5°	510.6	501.3	490.1	484.5	482.7	490.1	495.7	510.6	505.0	493.8	490.1
65°	475.2	467.8	456.6	452.8	451.0	462.2	464.0	473.3	465.9	460.3	458.4
67.5°	432.3	426.8	421.2	419.3	413.7	413.7	417.4	423.0	419.3	419.3	421.2
70°	383.9	376.4	370.8	372.7	369.0	369.0	370.8	374.6	372.7	376.4	380.2
72.5°	339.2	329.9	328.0	328.0	324.3	326.1	326.1	328.0	331.7	333.6	342.9
75°	296.3	287.0	287.0	285.1	285.1	285.1	287.0	290.7	294.4	296.3	300.0
77.5°	257.2	251.6	253.4	251.6	251.6	251.6	251.6	257.2	259.0	260.9	266.5
80°	221.8	221.8	223.6	223.6	221.8	219.9	221.8	225.5	227.4	229.2	231.1
82.5°	201.3	203.1	203.1	203.1	193.8	190.1	195.7	199.4	203.1	205.0	208.7
85°	173.3	165.9	173.3	171.4	158.4	156.5	156.5	158.4	162.1	158.4	158.4
87.5°	111.8	100.6	106.2	106.2	93.2	76.4	96.9	104.4	93.2	98.8	98.8
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: P159176

CATALOG NUMBER: VST-F11-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
2.5°	3015.3	3011.5	3013.4	3013.4	3017.1	3011.5	3019.0	3026.4	3028.3	3028.3	3030.2
5°	3054.4	3050.7	3063.7	3058.1	3071.2	3069.3	3078.6	3086.1	3089.8	3089.8	3089.8
7.5°	3115.9	3128.9	3136.4	3156.9	3158.7	3169.9	3179.2	3188.6	3184.8	3186.7	3184.8
10°	3184.8	3201.6	3220.2	3240.7	3242.6	3255.7	3270.6	3279.9	3276.1	3274.3	3268.7
12.5°	3244.5	3255.7	3278.0	3298.5	3309.7	3330.2	3345.1	3352.6	3352.6	3347.0	3341.4
15°	3240.7	3257.5	3281.7	3311.6	3332.1	3361.9	3388.0	3404.7	3406.6	3401.0	3399.1
17.5°	3158.7	3183.0	3205.3	3246.3	3283.6	3324.6	3367.5	3391.7	3414.1	3427.1	3434.6
20°	3011.5	3041.3	3073.0	3127.1	3177.4	3231.4	3281.7	3317.1	3350.7	3389.8	3436.4
22.5°	2838.2	2882.9	2927.7	2996.6	3058.1	3119.6	3177.4	3220.2	3272.4	3339.5	3427.1
25°	2635.1	2681.7	2737.6	2817.7	2896.0	2985.4	3071.2	3156.9	3257.5	3373.1	3509.1
27.5°	2394.7	2446.9	2519.5	2616.4	2705.9	2797.2	2931.4	3067.4	3231.4	3380.5	3535.2
30°	2156.1	2223.2	2301.5	2398.4	2487.9	2618.3	2752.5	2920.2	3093.5	3261.2	3445.7
32.5°	1899.0	1982.8	2079.7	2159.9	2260.5	2392.8	2527.0	2705.9	2890.4	3087.9	3291.1
35°	1651.1	1731.3	1807.7	1897.1	1997.7	2122.6	2253.1	2424.5	2657.4	2868.0	3110.3
37.5°	1399.5	1474.1	1528.1	1598.9	1686.5	1824.4	1964.2	2161.7	2381.6	2640.7	2882.9
40°	1179.6	1241.1	1302.6	1358.5	1433.1	1563.5	1712.6	1906.4	2122.6	2374.2	2644.4
42.5°	1004.5	1051.1	1118.1	1185.2	1248.6	1360.4	1500.2	1690.3	1904.6	2161.7	2432.0
45°	857.2	888.9	943.0	998.9	1077.1	1170.3	1304.5	1498.3	1716.3	1975.4	2260.5
47.5°	751.0	765.9	803.2	861.0	933.6	1025.0	1140.5	1315.7	1528.1	1789.0	2089.1
50°	678.3	695.1	713.7	762.2	827.4	920.6	1015.6	1168.5	1362.3	1617.6	1915.7
52.5°	628.0	635.5	642.9	672.7	732.4	810.7	911.3	1026.8	1222.5	1466.6	1735.0
55°	598.2	600.1	605.7	620.6	665.3	738.0	825.6	935.5	1088.3	1319.4	1593.3
57.5°	562.8	566.5	572.1	581.4	609.4	674.6	749.2	838.6	965.3	1159.1	1421.9
60°	529.3	538.6	547.9	553.5	568.4	607.5	670.9	741.7	844.2	989.6	1198.3
62.5°	493.8	505.0	512.5	518.1	523.7	547.9	594.5	641.1	704.4	799.5	956.0
65°	462.2	469.6	475.2	478.9	482.7	490.1	510.6	529.3	547.9	605.7	719.3
67.5°	426.8	430.5	432.3	434.2	432.3	432.3	434.2	441.7	449.1	471.5	525.5
70°	385.8	391.3	391.3	393.2	393.2	387.6	387.6	387.6	387.6	393.2	423.0
72.5°	346.6	354.1	354.1	355.9	354.1	352.2	352.2	352.2	357.8	361.5	372.7
75°	309.4	316.8	314.9	316.8	318.7	318.7	322.4	324.3	329.9	331.7	339.2
77.5°	272.1	277.7	279.5	277.7	281.4	285.1	292.6	296.3	298.2	300.0	301.9
80°	236.7	240.4	238.5	232.9	242.3	247.9	259.0	272.1	268.4	270.2	273.9
82.5°	195.7	190.1	186.4	190.1	195.7	203.1	214.3	231.1	232.9	242.3	240.4
85°	150.9	134.2	132.3	141.6	139.8	149.1	167.7	180.8	191.9	201.3	191.9
87.5°	89.5	80.1	67.1	63.4	69.0	91.3	95.0	115.5	124.9	128.6	115.5
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: P159176

CATALOG NUMBER: VST-F11-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
2.5°	3199.7	3209.1	3209.1	3212.8	3218.4	3220.2	3227.7	3240.7	3242.6	3242.6	3248.2
5°	3259.4	3268.7	3268.7	3276.1	3278.0	3287.3	3296.6	3311.6	3319.0	3317.1	3341.4
7.5°	3356.3	3348.8	3343.2	3354.4	3360.0	3371.2	3389.8	3402.9	3415.9	3436.4	3470.0
10°	3438.3	3427.1	3421.5	3429.0	3432.7	3445.7	3456.9	3475.6	3507.2	3538.9	3579.9
12.5°	3505.4	3492.3	3477.4	3481.1	3486.7	3503.5	3522.1	3546.4	3593.0	3634.0	3695.5
15°	3561.3	3542.6	3527.7	3535.2	3548.2	3570.6	3602.3	3645.1	3721.5	3792.4	3874.4
17.5°	3615.3	3611.6	3606.0	3630.2	3639.5	3691.7	3738.3	3816.6	3920.9	4027.2	4144.6
20°	3667.5	3708.5	3729.0	3777.4	3807.3	3878.1	3948.9	4043.9	4176.3	4321.6	4481.9
22.5°	3740.2	3852.0	3920.9	4019.7	4070.0	4146.4	4250.8	4375.7	4522.9	4709.2	4914.2
25°	3913.5	4077.5	4215.4	4370.1	4496.8	4614.2	4739.0	4890.0	5102.4	5272.0	5540.4
27.5°	3989.9	4221.0	4427.8	4645.9	4836.0	5016.7	5214.3	5396.9	5648.5	5877.7	6201.9
30°	3917.2	4178.1	4446.5	4731.6	5009.3	5283.2	5570.2	5849.7	6140.5	6461.0	6805.7
32.5°	3783.0	4075.6	4377.5	4713.0	5057.7	5413.7	5786.4	6192.6	6602.6	7001.4	7353.6
35°	3647.0	3961.9	4297.4	4681.3	5087.5	5529.2	5991.4	6505.7	7048.0	7553.0	8013.3
37.5°	3449.5	3796.1	4180.0	4623.5	5106.2	5650.3	6244.8	6878.4	7564.2	8259.3	8863.1
40°	3210.9	3578.0	3997.3	4508.0	5087.5	5775.2	6548.6	7361.1	8242.6	9090.5	9832.2
42.5°	2992.9	3350.7	3797.9	4353.3	5039.1	5885.1	6837.4	7849.3	8892.9	9841.5	10810.5
45°	2800.9	3196.0	3645.1	4245.2	5014.9	5978.3	7051.7	8214.6	9409.1	10538.5	11682.7
47.5°	2625.8	3035.7	3538.9	4185.6	5003.7	6034.2	7200.8	8453.1	9776.3	11073.3	12402.0
50°	2445.0	2843.8	3382.4	4120.3	4975.7	6032.4	7279.1	8615.3	10033.4	11488.9	12897.7
52.5°	2251.2	2651.9	3192.3	4001.1	4916.1	5998.8	7299.6	8725.2	10236.6	11744.2	13318.9
55°	2074.1	2448.7	2989.2	3801.7	4791.2	5916.8	7253.0	8771.8	10380.1	11997.6	13615.2
57.5°	1871.0	2260.5	2774.9	3527.7	4556.4	5771.5	7120.7	8706.6	10421.1	12167.2	13850.0
60°	1591.5	1973.5	2502.8	3203.5	4189.3	5464.0	6874.7	8509.0	10290.6	12197.0	14017.7
62.5°	1271.0	1600.8	2111.4	2756.2	3673.1	4981.3	6420.0	8065.5	9884.4	11917.5	13932.0
65°	944.8	1164.7	1604.5	2171.1	3074.9	4254.5	5687.6	7322.0	9090.5	11140.4	13393.5
67.5°	657.8	816.2	1086.5	1507.6	2236.3	3285.5	4642.1	6161.0	7862.4	9701.7	12275.3
70°	497.6	570.3	717.5	952.3	1448.0	2238.1	3374.9	4727.9	6306.3	8078.6	10503.1
72.5°	424.9	462.2	544.2	652.2	887.1	1360.4	2118.9	3253.8	4653.3	6095.7	8058.1
75°	382.0	413.7	465.9	534.8	628.0	825.6	1243.0	2059.2	3082.3	4083.1	5622.4
77.5°	346.6	374.6	421.2	456.6	506.9	594.5	792.0	1231.8	1846.8	2523.3	3488.6
80°	309.4	326.1	369.0	404.4	443.5	493.8	568.4	773.4	1060.4	1494.6	2057.4
82.5°	264.6	277.7	309.4	357.8	387.6	408.1	430.5	512.5	635.5	810.7	1142.4
85°	205.0	214.3	242.3	277.7	290.7	292.6	296.3	318.7	395.1	607.5	984.0
87.5°	104.4	115.5	145.4	156.5	132.3	143.5	145.4	154.7	205.0	333.6	339.2
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: P159176
CATALOG NUMBER: VST-F11-LED-E-U-SLR-7050

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	0°
2.5°	3248.2	3253.8	3266.8	3265.0	3274.3	3274.3	3274.3	3283.6	3278.0	3283.6	3292.9	2.5°
5°	3341.4	3350.7	3369.3	3369.3	3371.2	3365.6	3376.8	3384.2	3374.9	3371.2	3373.1	5°
7.5°	3477.4	3492.3	3507.2	3522.1	3533.3	3527.7	3529.6	3512.8	3509.1	3496.1	3479.3	7.5°
10°	3609.7	3650.7	3678.7	3704.8	3706.6	3701.0	3702.9	3675.0	3669.4	3643.3	3626.5	10°
12.5°	3745.8	3797.9	3842.7	3870.6	3887.4	3891.1	3893.0	3893.0	3866.9	3844.5	3805.4	12.5°
15°	3947.0	4038.3	4107.3	4137.1	4161.3	4183.7	4189.3	4196.8	4176.3	4146.4	4140.8	15°
17.5°	4265.7	4351.4	4442.7	4522.9	4576.9	4580.6	4627.2	4623.5	4666.4	4632.8	4623.5	17.5°
20°	4644.0	4830.4	4925.4	5031.6	5093.1	5122.9	5231.0	5197.5	5229.2	5283.2	5229.2	20°
22.5°	5117.4	5354.0	5491.9	5637.3	5737.9	5810.6	5888.9	5950.4	6036.1	6077.1	6039.8	22.5°
25°	5745.4	6015.6	6179.6	6380.9	6541.1	6671.6	6807.6	6971.6	6969.7	7068.5	7137.5	25°
27.5°	6466.6	6811.3	7049.9	7403.9	7541.9	7761.8	7994.7	8248.1	8292.9	8421.5	8486.7	27.5°
30°	7144.9	7571.7	8045.0	8466.2	8943.3	9269.4	9539.6	9718.5	9988.7	9921.6	9884.4	30°
32.5°	7771.1	8339.5	9014.1	9705.5	10462.1	10978.3	11455.3	11677.1	11844.8	11488.9	11017.4	32.5°
35°	8583.6	9263.8	10035.3	10888.8	11850.4	12582.8	13074.8	13143.7	13048.7	12592.1	11811.3	35°
37.5°	9589.9	10303.7	11181.4	12083.4	13104.6	13792.3	14353.2	14453.8	14202.2	13387.9	12567.9	37.5°
40°	10583.2	11419.9	12372.2	13440.0	14498.5	15255.2	15818.0	15847.8	15437.8	14485.5	13525.8	40°
42.5°	11669.7	12584.7	13645.0	14828.4	15922.3	16688.2	17094.5	17223.1	16643.5	15422.9	14502.3	42.5°
45°	12607.0	13700.9	14882.4	16140.3	17284.6	18011.4	18425.1	18384.1	17683.4	16477.7	15398.6	45°
47.5°	13520.2	14724.0	15968.9	17305.1	18441.9	19176.1	19601.0	19563.7	18674.8	17286.4	16099.3	47.5°
50°	14332.7	15639.0	16969.6	18397.1	19530.2	20202.9	20722.9	20558.9	19435.1	17936.8	16550.3	50°
52.5°	14897.3	16354.7	17744.9	19287.9	20454.5	21091.8	21753.4	21226.0	19884.3	18335.6	16792.6	52.5°
55°	15255.2	16846.6	18296.5	20003.5	21149.6	21911.8	22338.6	21589.4	20057.6	18445.6	16876.5	55°
57.5°	15497.4	17116.9	18620.8	20417.2	21775.8	22415.0	22519.3	21602.5	19945.8	18272.3	16792.6	57.5°
60°	15616.7	17197.0	18768.0	20707.9	22215.6	22565.9	22375.8	21300.6	19560.0	17763.5	16252.2	60°
62.5°	15603.6	17096.4	18691.6	20804.9	22303.2	22347.9	21915.5	20786.2	18850.0	16695.7	15353.9	62.5°
65°	15271.9	16729.2	18261.1	20445.2	21895.0	21703.1	21158.9	19820.9	17469.1	15301.7	14623.4	65°
67.5°	14315.9	15713.6	17135.5	19267.4	20745.2	20558.9	19735.2	17923.8	15864.5	14068.1	13702.8	67.5°
70°	12717.0	13902.2	15150.8	17023.7	18574.2	18322.6	16882.0	15780.7	14274.9	12642.4	12515.7	70°
72.5°	10631.6	11529.9	12435.6	13829.5	14897.3	14383.0	13477.3	13419.5	12202.6	10955.9	10982.0	72.5°
75°	8315.2	8989.8	9412.9	10232.8	10942.9	10482.6	10536.6	10857.1	10456.5	9474.4	9155.7	75°
77.5°	6024.9	6671.6	6805.7	7292.1	7791.6	8315.2	9008.5	9763.2	9889.9	9338.3	8182.9	77.5°
80°	3943.3	4655.2	4390.6	4563.9	5266.4	6222.4	7487.8	8730.8	9157.6	8661.9	7240.0	80°
82.5°	2325.7	3322.7	2901.6	3197.9	3643.3	4476.3	5350.3	6287.7	7001.4	6474.0	6047.3	82.5°
85°	1766.7	2620.2	2774.9	3134.5	3279.9	3315.3	3468.1	3773.7	4142.7	4280.6	4269.4	85°
87.5°	920.6	2036.9	2286.6	2115.1	1973.5	1710.8	1334.3	1436.8	1313.8	1796.5	1701.4	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



NUMBER: P159176

NUMBER: VST-F11-LED-E-U-SLR-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3114.0	3114.0	3114.0	3114.0	3114.0	3114.0	3114.0
3294.8	3289.2	3292.9	3294.8	3294.8	3294.8	3298.5
3371.2	3356.3	3350.7	3350.7	3348.8	3343.2	3341.4
3453.2	3427.1	3417.8	3406.6	3397.3	3391.7	3382.4
3600.4	3578.0	3531.5	3505.4	3481.1	3464.4	3449.5
3797.9	3766.3	3721.5	3688.0	3650.7	3639.5	3620.9
4103.6	4075.6	4036.5	3999.2	3976.9	3937.7	3909.8
4580.6	4524.7	4485.6	4437.2	4383.1	4303.0	4263.8
5208.7	5096.9	5018.6	4975.7	4867.6	4854.6	4759.5
5929.9	5896.3	5777.1	5724.9	5620.5	5579.5	5430.4
7008.9	6982.8	6738.7	6712.6	6552.3	6433.0	6201.9
8427.0	8212.7	7936.9	7745.0	7471.0	7163.5	6770.3
9666.3	9228.4	8807.2	8360.0	7981.7	7540.0	7094.6
10456.5	9869.4	9327.1	8868.7	8401.0	7875.4	7303.3
11149.7	10557.1	9966.4	9424.1	8857.5	8184.8	7478.5
11979.0	11390.1	10724.8	9962.6	9235.8	8412.1	7549.3
12828.8	12139.3	11308.1	10374.5	9461.3	8524.0	7536.3
13699.1	12817.6	11712.5	10648.4	9604.8	8540.7	7448.7
14405.4	13291.0	12012.5	10788.2	9634.6	8483.0	7338.7
14904.8	13594.7	12146.7	10836.6	9597.4	8391.6	7189.6
15189.9	13760.6	12180.3	10801.2	9521.0	8261.2	7027.5
15294.3	13810.9	12146.7	10728.6	9452.0	8121.4	6913.8
15283.1	13782.9	12023.7	10559.0	9267.5	7935.1	6774.1
15072.5	13523.9	11772.1	10355.8	9111.0	7849.3	6783.4
14714.7	13359.9	11697.6	10396.8	9193.0	8033.8	7077.8
14552.6	13687.9	12116.9	10806.8	9614.1	8561.2	7685.3
14461.3	14220.9	12717.0	11248.5	10113.6	9200.4	8410.3
14088.6	14373.7	13058.0	11500.1	10559.0	9841.5	9135.2
13486.6	14017.7	12799.0	11451.6	10805.0	10333.5	9396.1
12230.6	12791.5	11645.4	10737.9	10497.5	10340.9	9004.8
9908.6	10199.3	9547.1	9342.1	9431.5	9433.4	7553.0
7307.0	7131.9	6837.4	6852.3	7454.3	7361.1	5383.8
5965.3	4882.5	4465.1	4623.5	5367.1	4966.4	3382.4
5551.6	4355.2	3594.8	3632.1	4053.3	3199.7	2036.9
4489.3	3969.4	3183.0	2856.8	2773.0	2131.9	1382.8
1878.5	1727.5	1285.9	1159.1	950.4	581.4	264.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)