

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: P165258

Luminaire Tested: **VST-E04-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165258
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
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-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7031.3 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

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



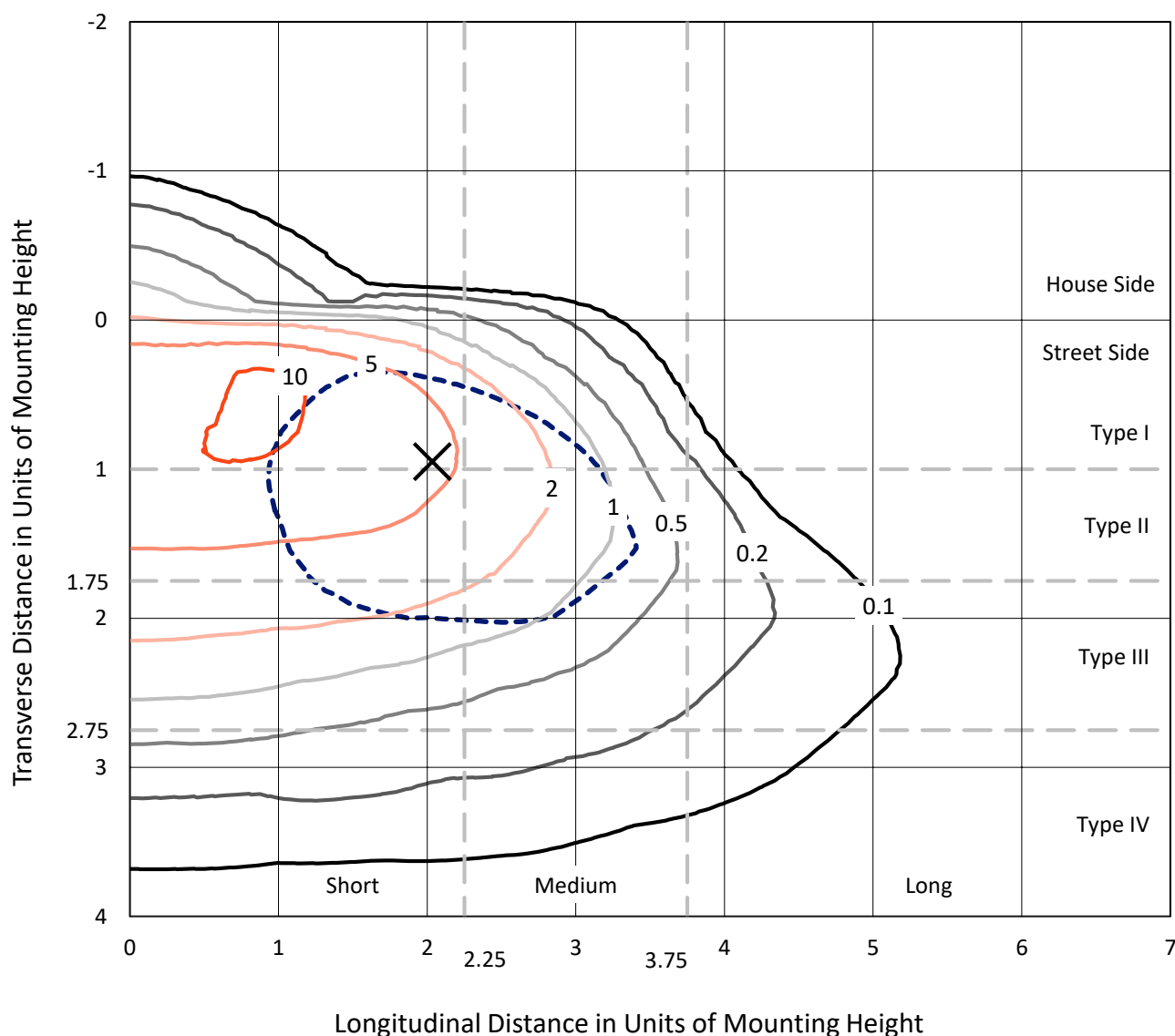
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

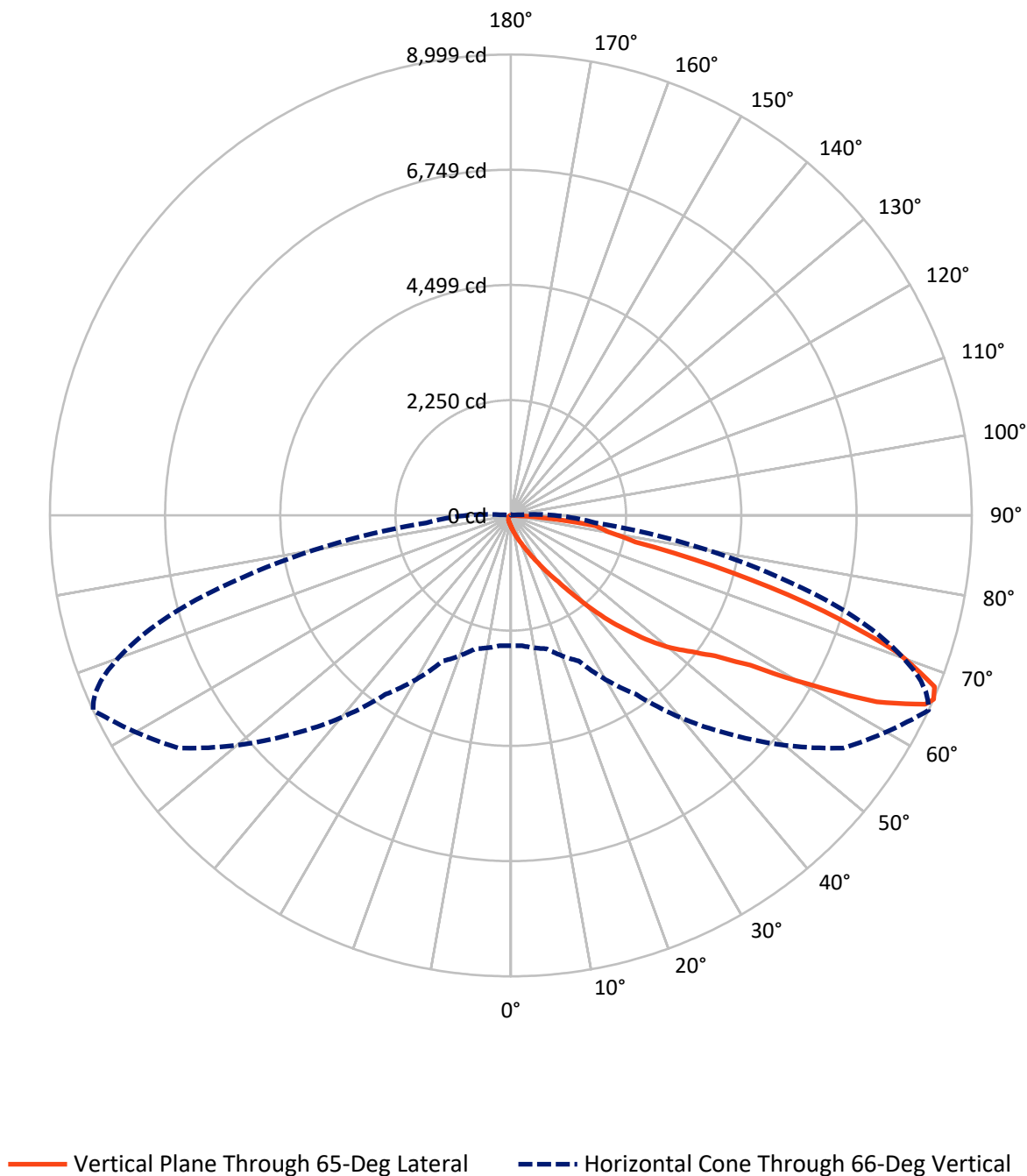


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	152.4	0.0	152.4
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	6878.9	0.0	6878.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	7031.3	0.0	7031.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	0.3
10°-20°	100.7	1.4
20°-30°	217.3	3.1
30°-40°	464.0	6.6
40°-50°	1026.1	14.6
50°-60°	1739.0	24.7
60°-70°	2320.5	33.0
70°-80°	1022.1	14.5
80°-90°	117.7	1.7
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°	7031.3	100.0
0°-180°	7031.3	100.0

Coefficient of Utilization



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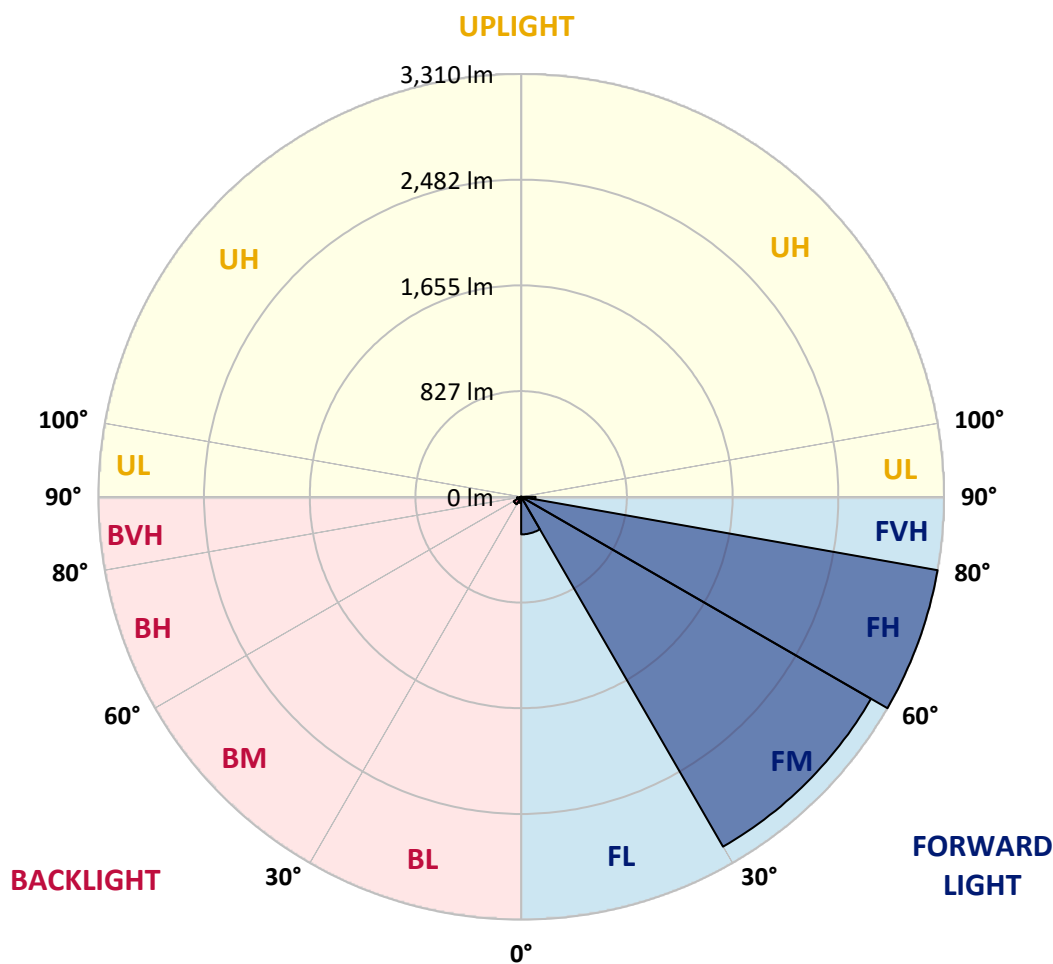
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.7	4.2			
FM	(30°-60°)	3162.2	45.0			
FH	(60°-80°)	3310.0	47.1			G2/5000
FVH	(80°-90°)	113.0	1.6			G2/225
BL	(0°-30°)	48.1	0.7	B0/110		
BM	(30°-60°)	66.9	1.0	B0/220		
BH	(60°-80°)	32.7	0.5	B0/110		G0/110
BVH	(80°-90°)	4.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
2.5°	267.7	266.3	260.9	260.9	252.8	247.4	240.6	233.9	233.9	232.5	231.2
5°	354.1	346.1	344.7	329.8	317.7	300.1	283.9	262.3	259.6	256.9	255.5
7.5°	450.2	448.8	436.6	419.1	394.8	362.3	329.8	294.7	289.3	286.6	281.2
10°	574.5	567.7	551.6	521.8	485.3	442.0	389.3	333.9	327.1	321.7	319.0
12.5°	693.5	681.3	671.8	634.0	588.0	524.5	460.9	381.2	375.8	369.1	358.2
15°	804.3	793.5	777.3	744.9	693.5	613.7	539.4	442.0	428.5	419.1	410.9
17.5°	890.8	884.1	865.1	828.7	773.2	702.9	613.7	504.2	493.4	481.2	466.3
20°	973.3	963.8	934.1	884.1	824.6	770.5	701.6	585.3	570.4	555.6	539.4
22.5°	1051.7	1042.2	993.6	911.1	847.6	824.6	800.3	677.2	654.2	642.1	625.8
25°	1161.2	1140.9	1065.2	934.1	849.0	866.5	908.4	796.2	774.6	757.0	731.3
27.5°	1308.6	1281.5	1162.5	967.9	854.3	912.5	1032.8	940.8	917.8	897.6	869.2
30°	1474.8	1457.2	1315.3	1049.0	893.5	980.1	1172.0	1124.7	1097.7	1073.3	1039.6
32.5°	1642.4	1618.1	1477.5	1203.1	998.9	1111.1	1346.4	1338.3	1303.2	1280.2	1243.6
35°	1789.8	1777.6	1673.5	1455.8	1239.6	1341.0	1578.9	1588.3	1557.3	1532.9	1492.4
37.5°	1889.8	1889.8	1869.6	1727.6	1622.1	1697.8	1920.9	1922.3	1891.2	1835.7	1815.5
40°	1941.1	1956.0	2029.1	2056.1	2050.7	2148.0	2369.7	2345.3	2319.7	2291.3	2223.7
42.5°	2046.6	2060.1	2215.6	2402.2	2523.8	2652.2	2805.0	2796.8	2765.8	2714.4	2652.2
45°	2225.1	2242.7	2427.8	2723.9	2973.9	3156.5	3253.7	3215.9	3184.8	3136.2	3103.7
47.5°	2452.1	2486.0	2695.5	3061.8	3363.2	3664.7	3766.1	3666.1	3639.1	3601.1	3548.4
50°	2694.1	2726.6	2949.6	3368.7	3709.3	4068.9	4237.9	4068.9	4029.7	4017.5	3958.1
52.5°	2903.6	2930.7	3145.6	3605.2	3974.2	4396.0	4642.0	4419.0	4390.6	4350.0	4306.8
55°	3028.0	3049.7	3251.0	3718.8	4154.1	4690.7	5032.8	4836.7	4794.8	4778.6	4716.4
57.5°	3069.9	3091.5	3272.7	3733.6	4251.4	4959.7	5507.2	5514.0	5464.0	5405.9	5386.9
60°	3069.9	3094.2	3247.0	3697.2	4346.0	5246.3	6139.8	6703.5	6595.4	6584.6	6515.6
62.5°	2942.9	2965.9	3119.9	3585.0	4473.1	5632.9	7021.2	8016.1	7985.1	7914.7	7801.2
65°	2667.1	2680.6	2832.0	3298.4	4424.4	5988.4	7784.9	8889.4	8839.4	8701.5	8555.5
66°	2542.7	2553.5	2695.5	3134.8	4264.9	6037.1	7920.1	8998.9	8916.4	8800.1	8635.2
67.5°	2362.9	2381.9	2481.9	2830.7	3882.4	5868.1	7835.0	8921.9	8850.2	8709.6	8544.7
70°	1577.6	1564.0	1916.8	2172.3	2957.7	4781.3	7029.3	8010.7	8012.1	7945.8	7879.6
72.5°	748.9	757.0	859.7	1336.9	1935.7	3194.3	5595.1	6394.0	6485.9	6366.9	6284.4
75°	538.0	550.2	612.4	817.8	1154.4	1916.8	3626.8	4471.7	4474.4	4263.5	4075.7
77.5°	156.8	163.6	229.8	504.2	865.1	1293.6	2083.1	2486.0	2427.8	2276.4	2134.5
80°	64.8	64.8	67.6	160.9	347.4	878.7	1457.2	1914.1	1907.4	1849.3	1765.5
82.5°	24.3	25.7	32.4	66.2	82.5	216.3	971.9	1661.4	1657.3	1574.9	1515.4
85°	2.7	2.7	8.1	28.4	31.1	40.6	194.6	732.6	728.6	732.6	642.1
87.5°	0.0	0.0	1.3	2.7	4.0	5.4	8.1	28.4	31.1	29.7	27.0
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
2.5°	231.2	228.5	228.5	227.1	227.1	227.1	225.7	224.4	224.4	223.0	221.7
5°	252.8	250.0	248.7	246.0	244.7	243.3	240.6	239.3	236.6	235.2	233.9
7.5°	278.4	273.0	271.7	267.7	263.6	260.9	258.2	254.1	251.4	246.0	244.7
10°	311.0	304.1	298.7	293.3	289.3	282.5	278.4	273.0	267.7	263.6	259.6
12.5°	352.8	343.4	335.2	329.8	320.4	312.3	304.1	300.1	289.3	283.9	277.1
15°	398.8	387.9	378.5	367.7	360.9	347.4	336.6	324.4	319.0	309.6	298.7
17.5°	458.2	440.7	425.8	415.0	401.5	387.9	375.8	363.7	347.4	336.6	323.1
20°	521.8	506.9	486.6	467.7	451.5	435.3	417.7	401.5	386.6	369.1	352.8
22.5°	602.9	581.3	557.0	538.0	516.4	498.9	474.5	452.9	428.5	405.5	386.6
25°	705.6	677.2	654.2	627.2	601.5	574.5	544.7	517.7	486.6	465.0	432.6
27.5°	832.7	805.7	774.6	739.5	713.8	673.2	634.0	600.2	563.7	529.9	493.4
30°	994.9	955.8	923.2	889.5	838.1	798.9	752.9	707.0	657.0	623.2	567.7
32.5°	1189.5	1147.7	1099.0	1050.3	1003.0	947.6	890.8	834.0	778.6	716.5	659.7
35°	1427.5	1377.4	1322.0	1269.3	1196.4	1136.8	1065.2	986.8	924.6	853.0	781.3
37.5°	1742.5	1660.0	1611.3	1555.9	1457.2	1376.1	1296.3	1217.9	1108.4	1032.8	931.4
40°	2137.2	2088.5	2008.8	1919.6	1830.3	1723.5	1615.4	1511.3	1384.3	1278.8	1161.2
42.5°	2600.8	2529.2	2448.1	2319.7	2229.1	2103.4	1980.4	1842.5	1687.0	1551.9	1414.0
45°	3036.1	2951.0	2888.8	2760.4	2665.7	2517.0	2368.3	2222.4	2042.5	1868.2	1708.7
47.5°	3506.6	3436.2	3333.5	3229.4	3133.5	2965.9	2805.0	2627.9	2438.6	2231.8	2025.0
50°	3920.2	3864.8	3794.5	3668.8	3562.0	3421.4	3232.2	3038.8	2799.5	2594.1	2358.9
52.5°	4271.6	4228.4	4129.7	4040.5	3944.5	3812.0	3643.1	3457.9	3199.7	2973.9	2706.3
55°	4686.7	4655.6	4569.0	4513.6	4428.5	4301.4	4143.2	3971.6	3698.5	3452.5	3149.7
57.5°	5366.6	5342.3	5266.5	5243.6	5159.8	5048.9	4854.3	4670.4	4351.4	4045.9	3699.9
60°	6492.6	6444.0	6333.1	6276.4	6099.3	5950.6	5697.8	5445.0	5059.8	4670.4	4254.1
62.5°	7698.4	7561.9	7351.0	7169.9	6918.5	6660.2	6322.3	5935.7	5484.2	5021.9	4543.3
65°	8348.6	8116.2	7849.9	7561.9	7236.2	6856.3	6430.5	5966.8	5481.5	4993.5	4487.9
66°	8423.0	8160.7	7878.3	7557.9	7195.6	6791.4	6358.8	5872.2	5367.9	4892.1	4386.6
67.5°	8329.8	8055.3	7756.6	7401.1	7009.0	6590.0	6135.8	5630.2	5144.9	4662.3	4170.3
70°	7676.8	7403.7	7137.4	6763.0	6345.3	5923.6	5493.7	4928.7	4469.1	4025.6	3587.7
72.5°	6130.4	5945.2	5681.6	5361.2	4954.3	4459.5	4101.3	3595.8	3197.0	2767.1	2427.8
75°	3831.0	3570.1	3244.3	2836.1	2525.1	2123.6	1914.1	1530.2	1303.2	1104.4	912.5
77.5°	1958.7	1762.8	1534.3	1304.5	1084.1	865.1	669.1	473.2	319.0	221.7	164.9
80°	1618.1	1445.1	1255.8	1046.3	851.7	661.1	475.9	324.4	206.9	135.2	105.4
82.5°	1336.9	1190.9	1021.9	827.3	658.3	519.1	360.9	235.2	146.0	94.6	74.4
85°	569.1	516.4	398.8	316.3	237.9	175.8	123.1	82.5	58.1	47.3	43.3
87.5°	24.3	27.0	25.7	20.3	14.9	14.9	13.5	10.8	10.8	10.8	10.8
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2	212.2
2.5°	221.7	220.3	219.0	219.0	217.6	216.3	208.2	201.4	193.3	187.9	182.5
5°	231.2	229.8	227.1	225.7	223.0	221.7	204.2	189.2	177.1	167.6	160.9
7.5°	240.6	239.3	235.2	231.2	229.8	227.1	198.7	179.8	163.6	152.8	146.0
10°	252.8	248.7	244.7	239.3	235.2	231.2	193.3	168.9	151.4	141.9	135.2
12.5°	270.3	263.6	256.9	250.0	244.7	237.9	190.6	159.5	141.9	131.1	124.4
15°	290.7	281.2	273.0	265.0	255.5	248.7	185.2	151.4	133.8	123.1	114.9
17.5°	309.6	298.7	286.6	274.4	265.0	255.5	179.8	143.3	125.7	114.9	106.8
20°	336.6	320.4	305.5	290.7	277.1	265.0	171.6	135.2	118.9	106.8	98.7
22.5°	366.4	347.4	328.5	308.2	290.7	274.4	164.9	128.4	112.2	100.1	90.5
25°	404.2	381.2	355.5	329.8	309.6	288.0	158.2	121.7	105.4	93.3	83.8
27.5°	456.9	424.5	396.1	363.7	332.5	308.2	152.8	116.2	98.7	86.5	77.1
30°	528.6	481.2	436.6	401.5	365.0	329.8	147.3	109.5	93.3	79.8	69.0
32.5°	608.3	552.9	501.5	448.8	402.8	362.3	141.9	104.1	86.5	73.0	63.5
35°	707.0	636.7	567.7	506.9	451.5	397.4	136.5	98.7	81.1	66.2	56.8
37.5°	849.0	761.0	670.5	592.1	520.4	448.8	132.5	93.3	74.4	59.5	50.0
40°	1043.6	930.1	819.2	712.4	619.1	529.9	127.1	87.8	69.0	54.1	44.6
42.5°	1254.5	1116.6	970.6	850.3	721.9	609.7	121.7	82.5	63.5	48.7	39.2
45°	1516.7	1345.0	1168.0	1004.4	847.6	702.9	116.2	77.1	56.8	43.3	33.8
47.5°	1803.3	1584.3	1384.3	1178.8	992.2	819.2	109.5	73.0	51.4	37.8	29.7
50°	2098.0	1866.9	1614.0	1380.2	1158.5	935.5	102.8	66.2	46.0	33.8	24.3
52.5°	2415.6	2142.6	1884.4	1593.7	1335.6	1088.2	96.0	60.8	41.9	29.7	20.3
55°	2819.8	2514.4	2211.5	1885.7	1574.9	1265.3	89.2	54.1	36.5	25.7	16.3
57.5°	3328.1	2965.9	2594.1	2226.4	1849.3	1497.8	83.8	47.3	31.1	21.6	13.5
60°	3808.0	3384.9	2934.7	2511.7	2085.8	1676.2	75.7	41.9	27.0	17.6	13.5
62.5°	4056.7	3574.1	3088.8	2622.5	2168.3	1739.8	67.6	35.1	23.0	14.9	12.1
65°	3995.9	3503.9	3033.4	2563.0	2118.3	1699.2	59.5	31.1	20.3	13.5	12.1
66°	3908.1	3421.4	2948.3	2500.8	2076.3	1656.0	55.4	29.7	19.0	13.5	10.8
67.5°	3716.1	3245.6	2794.1	2377.8	1961.4	1573.5	50.0	27.0	17.6	12.1	10.8
70°	3174.0	2746.8	2385.9	2015.5	1676.2	1326.1	40.6	23.0	14.9	10.8	10.8
72.5°	2100.6	1810.0	1569.4	1350.4	1128.7	876.0	33.8	19.0	12.1	10.8	9.4
75°	792.2	716.5	615.1	552.9	482.6	423.1	27.0	12.1	9.4	9.4	9.4
77.5°	140.6	129.8	114.9	105.4	97.4	89.2	21.6	8.1	8.1	9.4	9.4
80°	94.6	87.8	79.8	73.0	67.6	60.8	14.9	6.7	8.1	8.1	9.4
82.5°	67.6	63.5	59.5	54.1	50.0	44.6	9.4	6.7	8.1	8.1	8.1
85°	40.6	37.8	35.1	32.4	28.4	27.0	6.7	6.7	6.7	8.1	8.1
87.5°	10.8	9.4	10.8	10.8	8.1	9.4	5.4	5.4	5.4	6.7	6.7
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-E04-LED-E-U-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	212.2	212.2	212.2	212.2	212.2
2.5°	179.8	179.8	177.1	181.2	181.2
5°	155.5	155.5	154.1	155.5	155.5
7.5°	141.9	140.6	140.6	140.6	141.9
10°	129.8	128.4	128.4	128.4	128.4
12.5°	118.9	117.6	116.2	117.6	117.6
15°	109.5	106.8	106.8	106.8	106.8
17.5°	101.4	98.7	97.4	97.4	97.4
20°	93.3	89.2	89.2	89.2	89.2
22.5°	85.1	81.1	81.1	81.1	81.1
25°	77.1	73.0	73.0	73.0	73.0
27.5°	70.3	66.2	66.2	66.2	66.2
30°	62.2	59.5	59.5	60.8	59.5
32.5°	56.8	52.7	52.7	54.1	54.1
35°	50.0	47.3	47.3	47.3	47.3
37.5°	43.3	40.6	40.6	40.6	40.6
40°	37.8	35.1	33.8	35.1	35.1
42.5°	32.4	29.7	28.4	28.4	28.4
45°	28.4	24.3	23.0	24.3	24.3
47.5°	23.0	20.3	20.3	21.6	21.6
50°	17.6	17.6	19.0	21.6	21.6
52.5°	16.3	16.3	19.0	21.6	21.6
55°	14.9	16.3	19.0	20.3	21.6
57.5°	13.5	16.3	19.0	20.3	20.3
60°	13.5	14.9	17.6	20.3	20.3
62.5°	12.1	13.5	16.3	19.0	19.0
65°	12.1	13.5	16.3	19.0	19.0
66°	12.1	13.5	16.3	19.0	19.0
67.5°	12.1	13.5	16.3	19.0	19.0
70°	12.1	13.5	16.3	17.6	17.6
72.5°	10.8	12.1	14.9	17.6	17.6
75°	10.8	12.1	14.9	17.6	17.6
77.5°	10.8	12.1	14.9	17.6	17.6
80°	10.8	12.1	14.9	16.3	17.6
82.5°	9.4	12.1	13.5	16.3	16.3
85°	9.4	10.8	13.5	14.9	16.3
87.5°	8.1	9.4	10.8	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)