

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: P165476

Luminaire Tested: **VST-E04-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165476
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
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-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7345.1 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-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

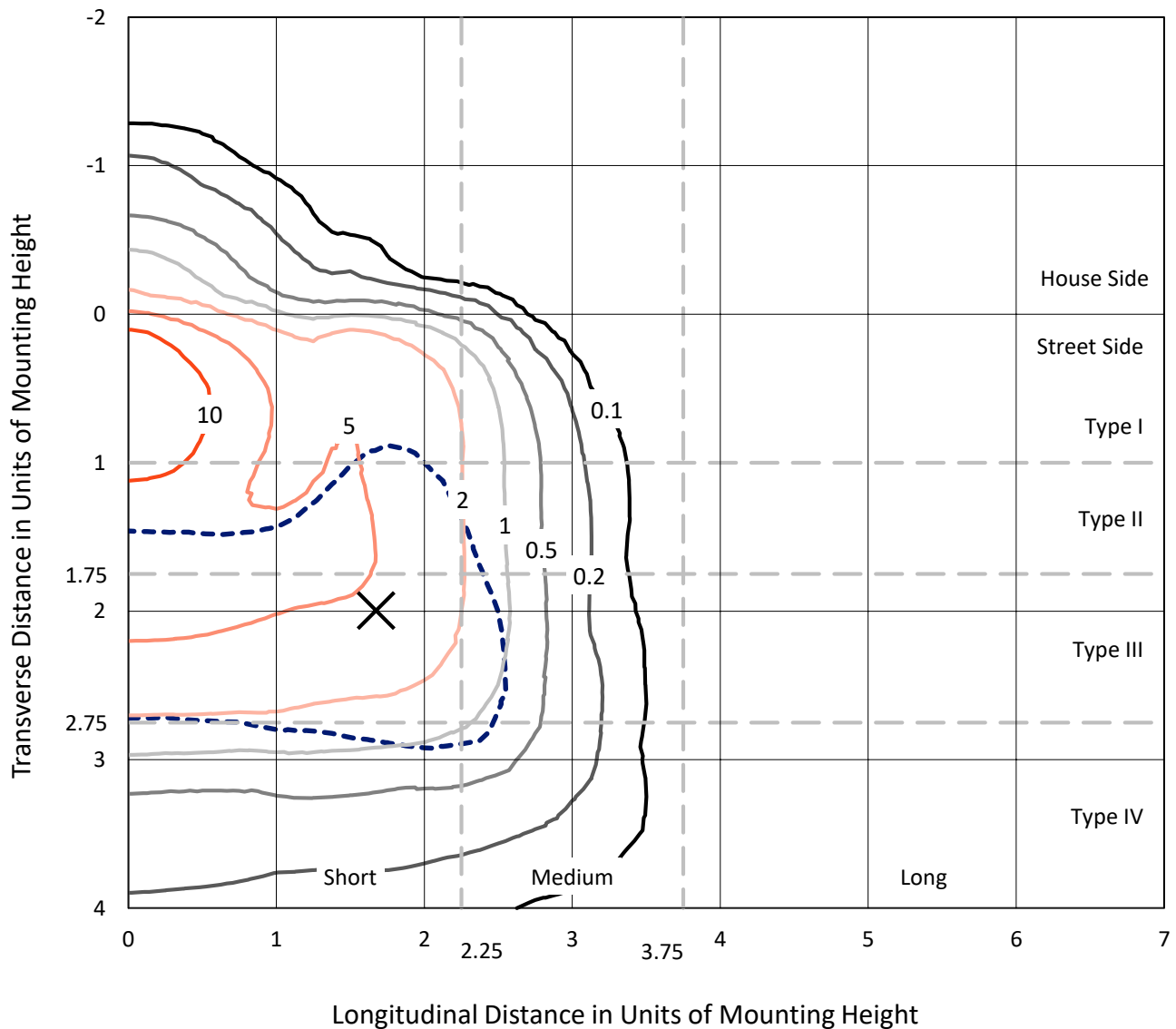


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

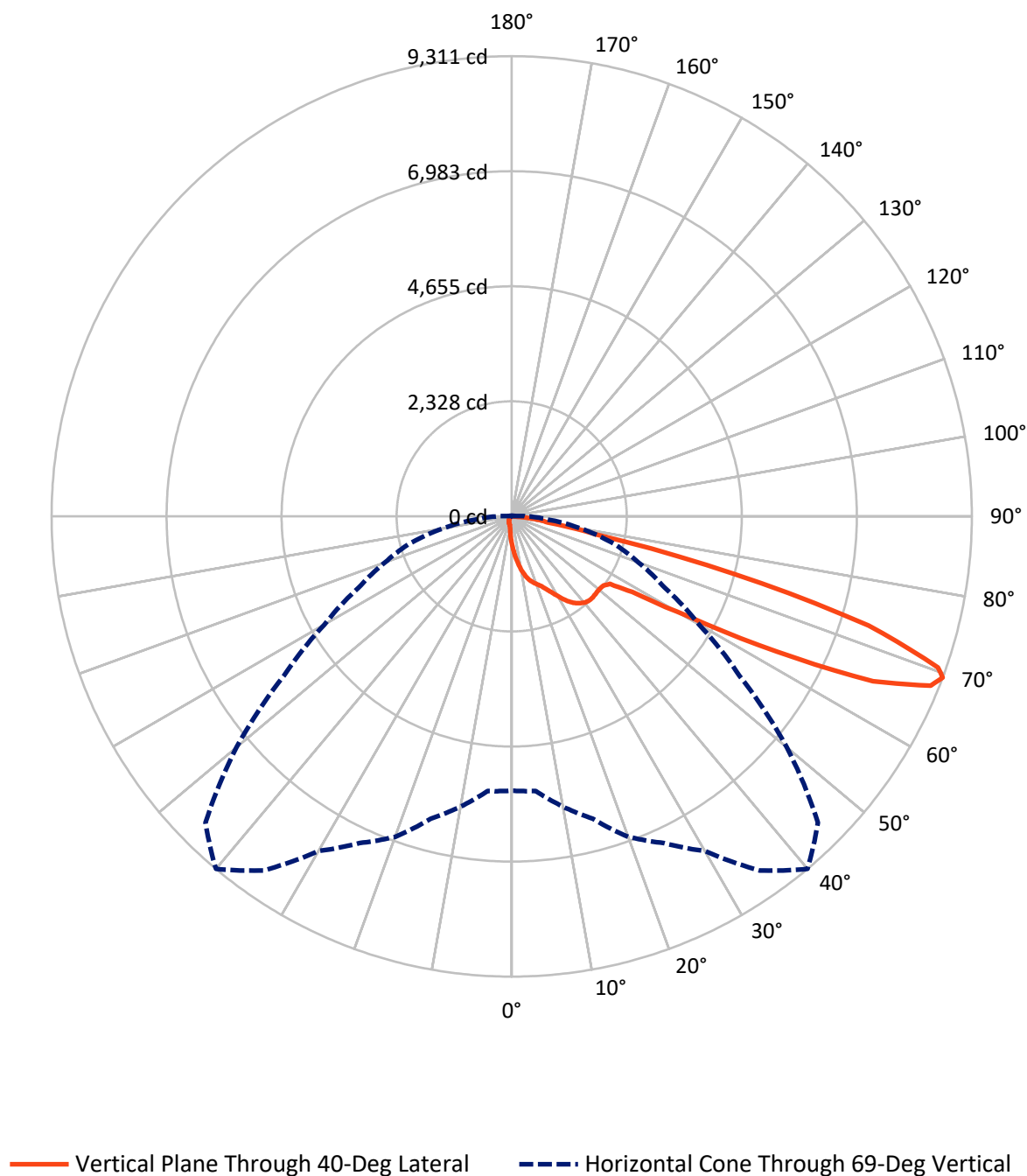


Based on 10 foot mounting height. Maximum calculated value = 16.4 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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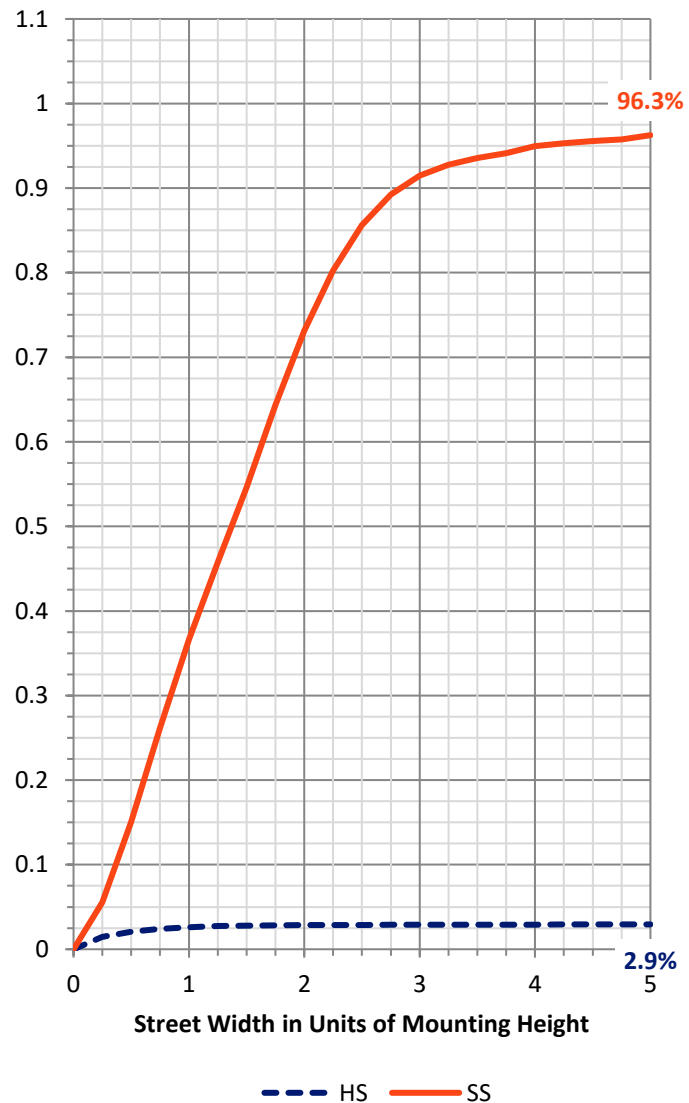
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	218.7	0.0	218.7
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	7126.4	0.0	7126.4
	% Fixture	97.0	0.0	97.0
Total	Lumens	7345.1	0.0	7345.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	0.8
10°-20°	196.6	2.7
20°-30°	376.2	5.1
30°-40°	625.7	8.5
40°-50°	846.6	11.5
50°-60°	1324.1	18.0
60°-70°	2722.2	37.1
70°-80°	1095.4	14.9
80°-90°	101.3	1.4
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°	7345.1	100.0
0°-180°	7345.1	100.0

Coefficient of Utilization



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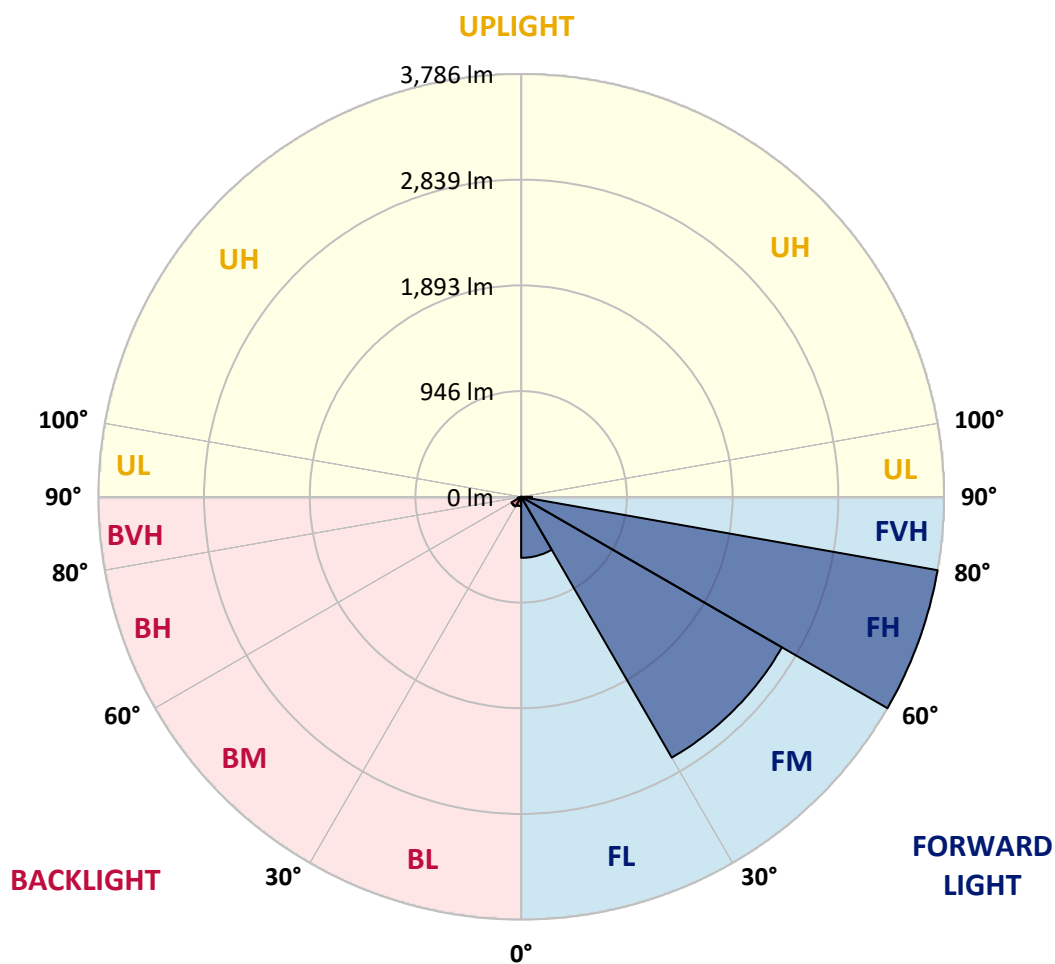
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	546.6	7.4			
FM	(30°-60°)	2696.5	36.7			
FH	(60°-80°)	3785.7	51.5			G2/5000
FVH	(80°-90°)	97.6	1.3			G1/100
BL	(0°-30°)	83.2	1.1	B0/110		
BM	(30°-60°)	99.9	1.4	B0/220		
BH	(60°-80°)	31.9	0.4	B0/110		G0/110
BVH	(80°-90°)	3.8	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7
2.5°	740.0	731.6	721.9	721.9	709.9	709.9	702.7	683.5	681.1	670.2	659.4
5°	944.6	937.3	925.3	914.4	904.9	888.0	875.9	853.1	827.9	803.7	782.1
7.5°	1144.3	1140.7	1119.0	1115.4	1099.7	1072.1	1048.0	1014.3	971.0	937.3	897.6
10°	1329.6	1321.1	1316.3	1295.9	1273.1	1243.0	1205.6	1164.8	1114.2	1061.2	1004.7
12.5°	1476.4	1471.6	1449.9	1441.5	1417.4	1387.3	1340.4	1287.5	1237.0	1168.4	1102.2
15°	1585.9	1577.5	1563.0	1549.8	1520.9	1494.5	1451.1	1393.3	1332.0	1257.4	1178.0
17.5°	1677.3	1661.7	1658.1	1637.6	1607.6	1576.2	1528.1	1475.2	1403.0	1328.4	1241.7
20°	1800.0	1778.4	1771.2	1741.1	1706.2	1662.9	1607.6	1541.4	1465.5	1383.8	1294.7
22.5°	1944.4	1928.8	1913.1	1886.7	1842.2	1780.8	1700.2	1628.0	1531.7	1441.5	1345.3
25°	2149.0	2135.8	2110.5	2074.4	2019.0	1945.7	1848.2	1742.3	1629.2	1513.7	1400.6
27.5°	2347.5	2335.5	2317.4	2289.8	2227.2	2146.6	2026.2	1891.5	1748.3	1608.7	1483.6
30°	2534.1	2523.2	2505.1	2477.5	2422.1	2342.7	2206.7	2062.3	1884.3	1721.8	1571.5
32.5°	2735.0	2731.4	2710.9	2671.2	2623.1	2516.0	2368.0	2212.8	2032.3	1844.6	1668.9
35°	2962.4	2934.7	2915.5	2875.7	2794.0	2679.6	2506.4	2336.7	2146.6	1954.1	1757.9
37.5°	3154.9	3128.5	3104.4	3053.9	2954.0	2808.4	2612.3	2425.7	2229.6	2033.5	1833.7
40°	3295.7	3282.4	3253.6	3187.4	3075.5	2902.3	2690.4	2487.1	2289.8	2092.4	1895.1
42.5°	3400.4	3379.9	3347.5	3278.9	3146.5	2949.2	2721.7	2512.4	2317.4	2128.5	1934.8
45°	3438.9	3422.1	3392.0	3317.4	3174.1	2962.4	2720.5	2505.1	2318.7	2139.4	1961.3
47.5°	3416.0	3399.2	3372.7	3302.9	3162.2	2946.8	2698.9	2484.7	2306.6	2143.0	1985.3
50°	3340.2	3330.6	3310.1	3251.2	3124.8	2916.7	2679.6	2473.9	2304.2	2161.1	2019.0
52.5°	3333.0	3327.0	3301.7	3242.8	3114.0	2907.0	2677.2	2479.9	2324.7	2183.9	2043.1
55°	4073.0	3987.5	3796.2	3633.8	3366.7	3049.1	2798.7	2577.3	2411.3	2274.2	2175.5
57.5°	5788.8	5661.3	5409.8	5100.6	4486.9	3884.1	3401.6	3052.6	2880.6	2818.0	2855.3
60°	6592.6	6569.8	6530.0	6383.2	6069.2	5550.6	4973.0	4348.6	4098.2	4076.6	4152.4
62.5°	6974.1	6959.6	6971.6	6953.6	6856.1	6704.5	6538.4	6268.9	6021.0	5861.0	5521.7
65°	7149.7	7159.4	7227.9	7282.0	7294.1	7333.8	7455.4	7791.0	8036.5	7623.8	6681.6
67.5°	6703.3	6759.8	6917.5	7114.8	7345.8	7569.6	7930.6	8638.1	9142.3	8657.4	7319.4
69°	5549.4	5577.1	5962.1	6333.9	6898.2	7292.9	7816.3	8744.0	9310.8	8763.3	7268.8
70°	4369.0	4394.2	4807.0	5312.3	6266.5	6774.3	7458.9	8564.7	9153.1	8622.5	7008.9
72.5°	1970.9	1934.8	2080.4	2351.1	3388.3	4194.5	5391.8	6939.1	7551.6	6907.9	5243.7
75°	1376.5	1360.9	1376.5	1377.7	1539.0	1985.3	2505.1	3761.3	4651.7	4014.1	2505.1
77.5°	1066.1	1055.2	1044.4	1032.4	1051.7	1178.0	1228.5	1334.4	1732.7	1638.8	955.4
80°	843.5	833.9	860.3	851.9	851.9	866.4	856.7	817.0	742.4	688.2	616.0
82.5°	392.2	394.6	394.6	428.3	516.2	602.8	630.5	590.8	524.6	446.4	359.8
85°	37.3	42.1	71.0	109.5	217.8	245.4	246.7	204.5	204.5	161.3	129.9
87.5°	0.0	1.2	1.2	1.2	10.8	30.1	25.3	7.2	3.6	3.6	6.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7
2.5°	640.1	636.5	622.1	607.6	594.4	579.9	566.7	553.5	539.0	528.2	515.0
5°	748.4	721.9	691.9	663.0	634.1	604.1	572.8	545.1	516.2	489.7	464.4
7.5°	857.9	806.2	765.2	713.5	666.6	619.7	576.4	531.9	490.9	452.4	416.3
10°	950.5	888.0	824.2	758.1	690.6	628.1	568.0	515.0	460.8	413.9	369.4
12.5°	1026.4	947.0	868.8	785.7	709.9	630.5	555.9	492.1	428.3	375.4	329.7
15°	1094.9	1003.5	909.6	813.4	717.2	626.9	543.8	464.4	399.5	339.3	287.6
17.5°	1150.3	1045.6	939.7	831.4	728.0	622.1	528.2	445.2	369.4	306.8	256.3
20°	1198.5	1088.9	974.7	853.1	735.2	620.9	515.0	421.2	342.9	276.8	227.4
22.5°	1243.0	1133.4	1010.8	880.8	746.0	619.7	502.9	403.1	320.0	253.9	204.5
25°	1293.5	1178.0	1049.3	909.6	765.2	624.5	495.8	388.6	299.6	232.2	186.5
27.5°	1350.1	1228.5	1094.9	945.7	790.5	634.1	493.4	373.0	281.5	211.8	172.1
30°	1429.4	1288.7	1140.7	981.8	813.4	645.0	490.9	363.4	263.5	196.1	157.6
32.5°	1499.3	1347.7	1191.2	1019.2	838.7	655.8	489.7	350.1	246.7	180.5	146.8
35°	1572.6	1401.8	1234.6	1055.2	860.3	667.8	488.5	340.5	231.0	164.8	136.0
37.5°	1636.4	1447.5	1268.2	1086.5	884.4	678.7	489.7	332.1	216.6	151.6	126.3
40°	1690.6	1494.5	1305.5	1115.4	909.6	695.5	490.9	323.7	202.2	139.6	117.9
42.5°	1738.7	1539.0	1345.3	1147.9	938.6	714.8	498.2	316.5	190.1	128.7	109.5
45°	1776.0	1579.9	1388.5	1193.6	985.5	746.0	511.4	311.6	178.1	119.1	102.3
47.5°	1814.5	1640.0	1461.9	1265.8	1054.1	795.3	534.3	310.5	168.4	111.9	96.2
50°	1867.5	1700.2	1526.9	1339.2	1116.6	845.9	561.9	311.6	156.4	104.7	90.2
52.5°	1906.0	1761.5	1611.2	1466.8	1265.8	999.9	669.0	333.3	150.4	98.6	83.0
55°	2133.4	2108.1	2111.7	2135.8	1980.6	1701.4	1119.0	481.3	176.9	111.9	81.8
57.5°	3008.1	3097.1	3148.9	3147.7	2891.4	2398.1	1502.9	618.4	197.4	129.9	97.5
60°	4158.4	4091.1	3996.0	3761.3	3420.8	2737.4	1680.9	665.4	170.8	103.5	89.1
62.5°	5175.2	4780.5	4430.3	4050.2	3603.7	2855.3	1717.0	661.8	149.2	78.2	62.5
65°	5809.3	5099.3	4533.9	4057.3	3531.5	2756.6	1624.4	607.6	126.3	63.8	51.7
67.5°	5960.9	4927.3	4127.2	3519.5	2950.3	2145.4	1192.4	457.3	98.6	53.0	45.7
69°	5630.0	4379.8	3419.7	2730.2	2146.6	1423.4	737.6	288.8	75.8	48.2	42.1
70°	5178.8	3809.5	2785.5	2191.1	1589.5	999.9	516.2	203.3	61.4	44.5	38.5
72.5°	3331.8	2001.0	1369.3	953.0	655.8	398.3	202.2	91.5	46.9	37.3	31.3
75°	1292.3	740.0	536.7	407.9	318.9	221.4	122.8	59.0	39.7	31.3	24.0
77.5°	636.5	487.3	398.3	273.1	158.8	98.6	66.2	45.7	32.5	22.9	15.6
80°	502.9	334.5	199.8	123.9	93.8	71.0	50.6	37.3	24.0	14.5	10.8
82.5°	257.5	140.8	103.5	84.2	69.8	55.4	40.9	26.5	15.6	9.6	8.4
85°	80.6	59.0	53.0	51.7	48.2	39.7	28.9	16.9	9.6	6.0	6.0
87.5°	6.0	8.4	10.8	8.4	9.6	8.4	10.8	7.2	4.8	4.8	3.6
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°	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7
2.5°	505.3	490.9	477.7	469.2	453.6	447.6	441.6	439.2	428.3	430.7	421.2
5°	441.6	416.3	397.1	377.8	359.8	346.6	335.7	322.4	311.6	306.8	297.2
7.5°	383.8	351.4	326.1	305.6	283.9	267.1	252.7	243.0	233.5	223.8	219.0
10°	333.3	298.4	269.5	249.1	228.6	214.2	203.3	196.1	190.1	186.5	185.3
12.5°	286.4	252.7	226.2	208.2	192.5	185.3	180.5	176.9	175.7	174.5	174.5
15°	250.3	216.6	196.1	182.9	175.7	172.1	170.8	168.4	166.1	164.8	164.8
17.5°	216.6	191.3	176.9	169.7	166.1	163.7	161.3	158.8	156.4	155.2	155.2
20°	193.7	173.2	166.1	161.3	157.6	155.2	151.6	149.2	148.0	146.8	145.6
22.5°	175.7	162.4	157.6	154.0	149.2	145.6	143.2	140.8	138.4	137.1	136.0
25°	162.4	154.0	150.4	145.6	140.8	137.1	133.6	129.9	127.6	126.3	123.9
27.5°	152.8	146.8	142.0	136.0	131.2	127.6	123.9	120.3	117.9	115.5	114.3
30°	144.4	138.4	132.3	127.6	121.5	117.9	113.1	109.5	108.3	105.9	103.5
32.5°	136.0	129.9	123.9	117.9	111.9	107.1	104.7	99.9	97.5	96.2	93.8
35°	126.3	120.3	113.1	108.3	102.3	97.5	93.8	90.2	87.8	85.4	84.2
37.5°	117.9	110.7	103.5	97.5	92.7	87.8	84.2	80.6	78.2	75.8	74.6
40°	108.3	101.1	93.8	87.8	83.0	79.4	75.8	72.2	69.8	68.6	68.6
42.5°	99.9	91.5	84.2	79.4	75.8	71.0	67.4	63.8	62.5	61.4	62.5
45°	91.5	83.0	77.0	72.2	68.6	63.8	60.1	57.7	56.6	57.7	59.0
47.5°	84.2	75.8	69.8	66.2	62.5	59.0	55.4	53.0	53.0	55.4	57.7
50°	77.0	68.6	63.8	61.4	57.7	54.1	49.3	48.2	49.3	51.7	54.1
52.5°	69.8	60.1	56.6	55.4	51.7	48.2	44.5	43.3	44.5	46.9	45.7
55°	62.5	53.0	51.7	50.6	46.9	42.1	38.5	38.5	38.5	37.3	34.9
57.5°	60.1	46.9	45.7	44.5	40.9	36.1	33.7	31.3	30.1	26.5	25.3
60°	62.5	42.1	42.1	39.7	36.1	31.3	27.7	24.0	21.6	19.2	19.2
62.5°	50.6	38.5	37.3	34.9	30.1	25.3	21.6	18.0	16.9	15.6	15.6
65°	40.9	34.9	32.5	28.9	25.3	20.5	16.9	14.5	13.2	13.2	14.5
67.5°	37.3	31.3	27.7	24.0	20.5	15.6	13.2	12.1	12.1	13.2	13.2
69°	34.9	28.9	25.3	21.6	18.0	14.5	12.1	12.1	12.1	12.1	13.2
70°	32.5	27.7	24.0	20.5	15.6	12.1	10.8	10.8	12.1	12.1	13.2
72.5°	25.3	21.6	20.5	16.9	12.1	10.8	9.6	10.8	10.8	12.1	12.1
75°	19.2	15.6	15.6	13.2	9.6	8.4	8.4	9.6	9.6	10.8	10.8
77.5°	13.2	10.8	10.8	9.6	8.4	7.2	7.2	8.4	9.6	9.6	10.8
80°	9.6	8.4	7.2	8.4	7.2	6.0	7.2	8.4	8.4	9.6	9.6
82.5°	7.2	7.2	7.2	7.2	6.0	6.0	7.2	7.2	8.4	9.6	9.6
85°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.2	7.2	8.4	8.4
87.5°	3.6	3.6	3.6	4.8	4.8	6.0	6.0	6.0	6.0	7.2	7.2
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-SL4-HSS-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	554.7	554.7	554.7	554.7
2.5°	418.8	417.5	412.7	413.9
5°	293.6	286.4	291.2	290.0
7.5°	215.4	214.2	213.0	215.4
10°	184.1	184.1	182.9	184.1
12.5°	173.2	173.2	173.2	173.2
15°	164.8	164.8	163.7	163.7
17.5°	155.2	155.2	155.2	154.0
20°	145.6	144.4	144.4	144.4
22.5°	134.7	133.6	133.6	133.6
25°	123.9	122.8	122.8	122.8
27.5°	113.1	111.9	110.7	110.7
30°	102.3	101.1	99.9	99.9
32.5°	91.5	90.2	89.1	89.1
35°	81.8	81.8	80.6	79.4
37.5°	73.4	73.4	73.4	73.4
40°	67.4	68.6	68.6	68.6
42.5°	63.8	65.0	66.2	67.4
45°	61.4	63.8	65.0	65.0
47.5°	60.1	61.4	62.5	62.5
50°	55.4	54.1	54.1	54.1
52.5°	44.5	42.1	40.9	39.7
55°	32.5	31.3	28.9	28.9
57.5°	22.9	22.9	21.6	21.6
60°	18.0	18.0	16.9	18.0
62.5°	15.6	15.6	15.6	15.6
65°	14.5	14.5	14.5	14.5
67.5°	14.5	14.5	14.5	14.5
69°	13.2	13.2	13.2	13.2
70°	13.2	13.2	13.2	13.2
72.5°	12.1	12.1	12.1	12.1
75°	10.8	12.1	12.1	12.1
77.5°	10.8	10.8	10.8	10.8
80°	9.6	9.6	10.8	10.8
82.5°	9.6	9.6	9.6	9.6
85°	8.4	8.4	9.6	9.6
87.5°	7.2	7.2	8.4	8.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)