

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: P165468

Luminaire Tested: **VST-E03-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165468
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-E03-LED-E-U-SL4-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6188.9 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 75.2
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

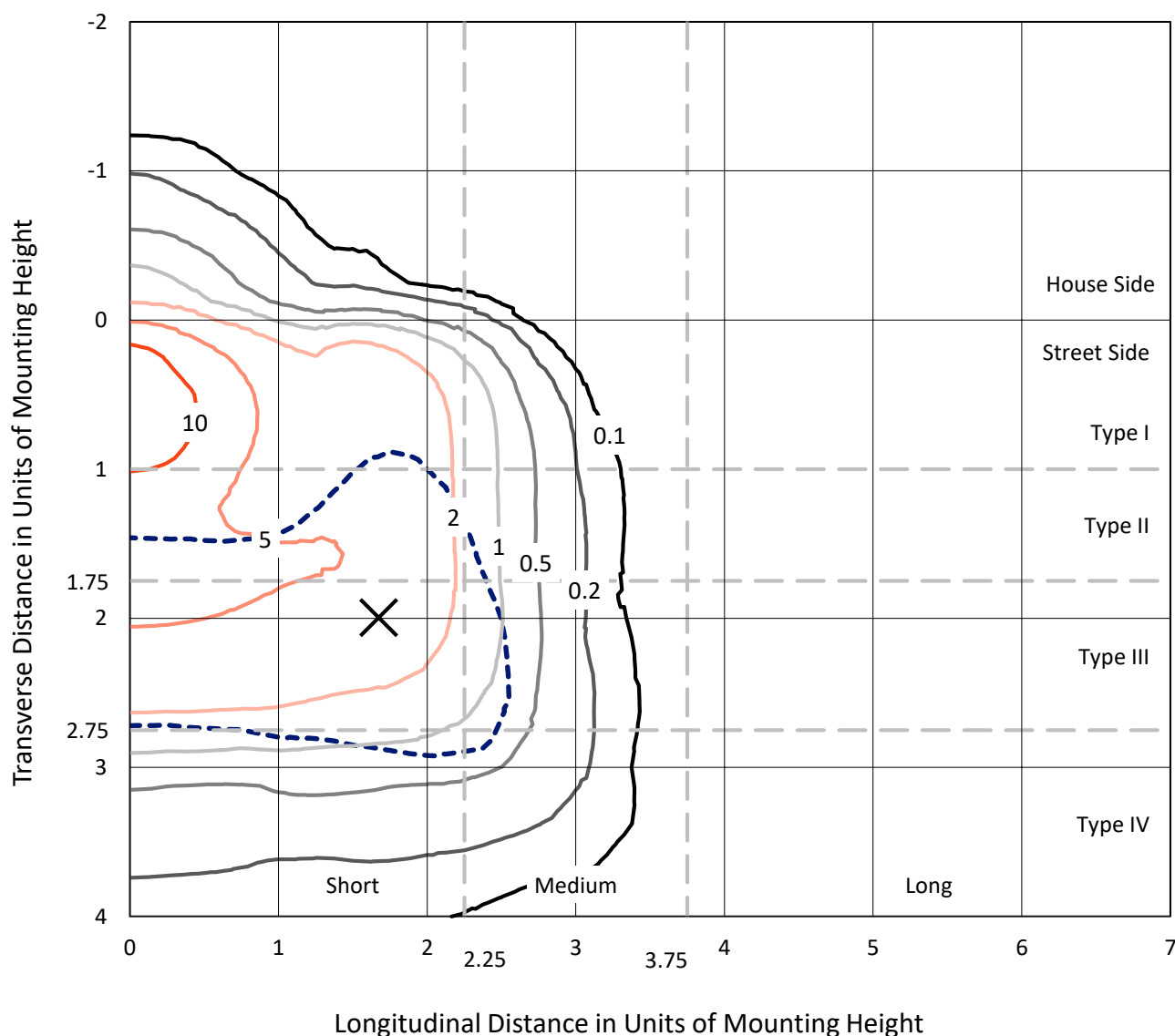


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

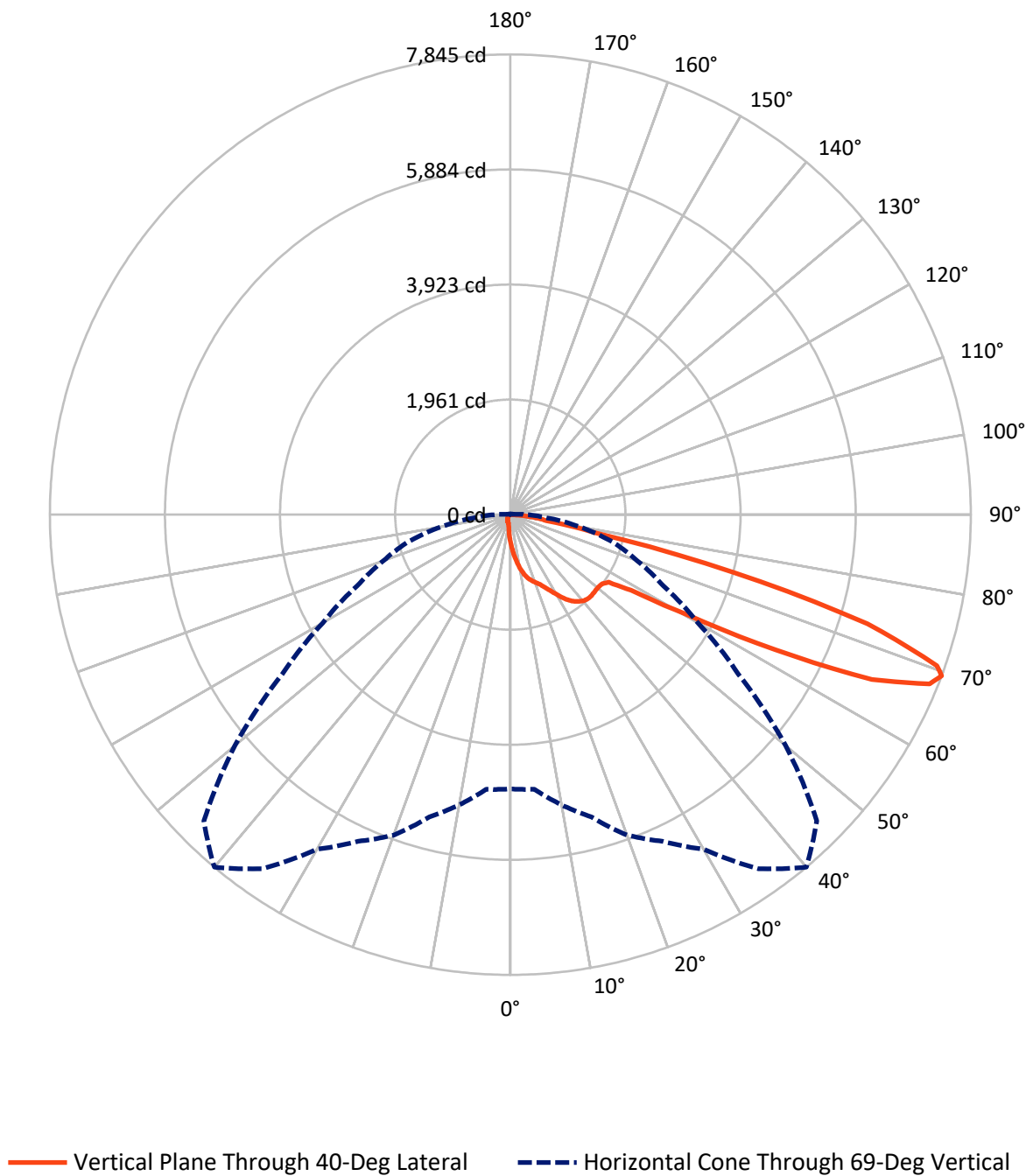


Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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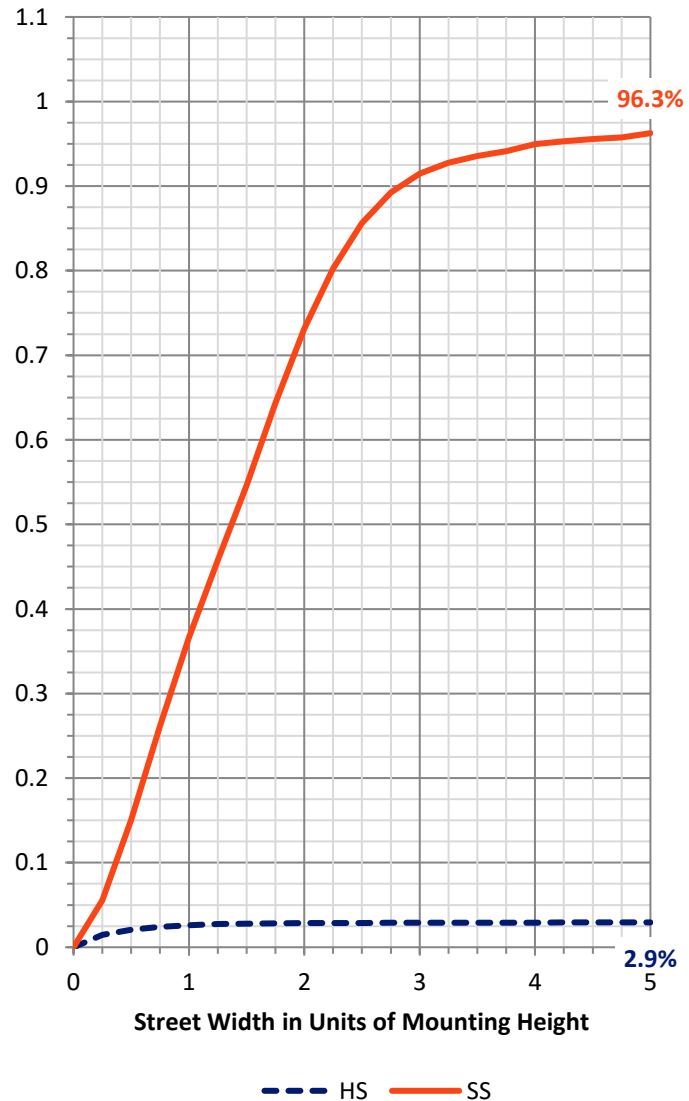
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	184.3	0.0	184.3
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	6004.6	0.0	6004.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	6188.9	0.0	6188.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	0.8
10°-20°	165.6	2.7
20°-30°	317.0	5.1
30°-40°	527.2	8.5
40°-50°	713.4	11.5
50°-60°	1115.6	18.0
60°-70°	2293.7	37.1
70°-80°	922.9	14.9
80°-90°	85.4	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°	6188.9	100.0
0°-180°	6188.9	100.0

Coefficient of Utilization



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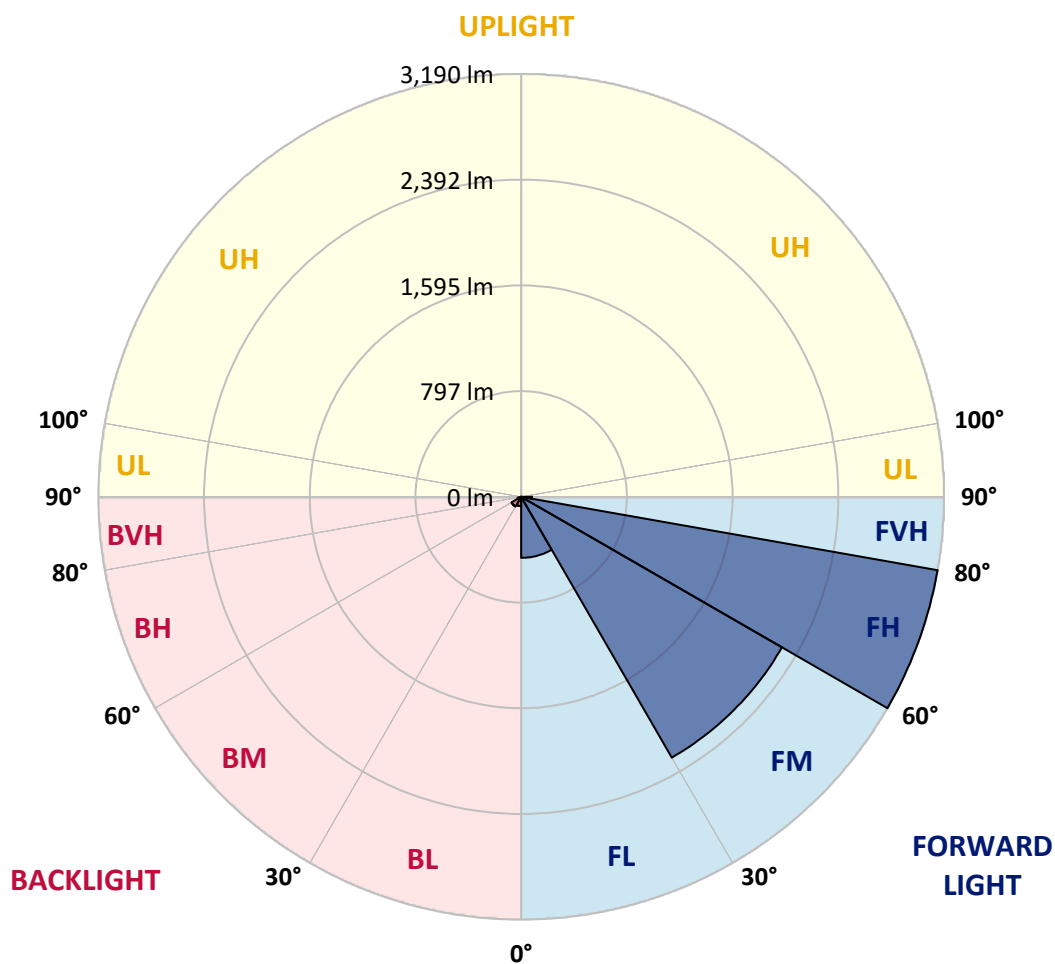
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	460.6	7.4			
FM	(30°-60°)	2272.1	36.7			
FH	(60°-80°)	3189.8	51.5			G2/5000
FVH	(80°-90°)	82.2	1.3			G1/100
BL	(0°-30°)	70.1	1.1	B0/110		
BM	(30°-60°)	84.2	1.4	B0/220		
BH	(60°-80°)	26.9	0.4	B0/110		G0/110
BVH	(80°-90°)	3.2	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°	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4
2.5°	623.5	616.4	608.3	608.3	598.2	598.2	592.1	575.9	573.8	564.7	555.6
5°	795.8	789.8	779.7	770.5	762.4	748.2	738.1	718.8	697.6	677.2	659.0
7.5°	964.2	961.1	942.9	939.8	926.6	903.4	883.0	854.6	818.2	789.8	756.4
10°	1120.3	1113.2	1109.1	1091.9	1072.7	1047.3	1015.9	981.4	938.8	894.2	846.5
12.5°	1244.0	1240.0	1221.7	1214.6	1194.3	1169.0	1129.4	1084.8	1042.3	984.4	928.7
15°	1336.3	1329.2	1316.9	1305.8	1281.5	1259.2	1222.7	1174.0	1122.4	1059.5	992.6
17.5°	1413.3	1400.2	1397.0	1379.8	1354.5	1328.1	1287.6	1243.0	1182.1	1119.3	1046.3
20°	1516.7	1498.4	1492.4	1467.0	1437.7	1401.1	1354.5	1298.8	1234.9	1165.9	1090.9
22.5°	1638.4	1625.2	1612.0	1589.7	1552.2	1500.5	1432.6	1371.8	1290.6	1214.6	1133.5
25°	1810.7	1799.6	1778.3	1747.9	1701.2	1639.4	1557.2	1468.0	1372.7	1275.4	1180.1
27.5°	1978.0	1967.8	1952.6	1929.4	1876.6	1808.7	1707.3	1593.8	1473.1	1355.5	1250.0
30°	2135.2	2126.0	2110.8	2087.5	2040.8	1973.9	1859.3	1737.7	1587.7	1450.8	1324.1
32.5°	2304.5	2301.4	2284.2	2250.7	2210.2	2120.0	1995.2	1864.5	1712.4	1554.2	1406.2
35°	2496.1	2472.7	2456.6	2423.0	2354.2	2257.8	2111.8	1968.9	1808.7	1646.5	1481.2
37.5°	2658.3	2636.0	2615.7	2573.2	2489.0	2366.3	2201.0	2043.9	1878.7	1713.4	1545.1
40°	2776.9	2765.8	2741.4	2685.7	2591.4	2445.4	2266.9	2095.6	1929.4	1763.1	1596.8
42.5°	2865.1	2847.9	2820.5	2762.7	2651.2	2485.0	2293.3	2116.9	1952.6	1793.5	1630.3
45°	2897.6	2883.4	2858.0	2795.2	2674.5	2496.1	2292.3	2110.8	1953.7	1802.6	1652.6
47.5°	2878.3	2864.1	2841.8	2783.0	2664.4	2482.9	2274.1	2093.6	1943.5	1805.7	1672.8
50°	2814.4	2806.3	2789.1	2739.4	2632.9	2457.5	2257.8	2084.5	1941.5	1820.9	1701.2
52.5°	2808.4	2803.3	2782.0	2732.3	2623.9	2449.4	2255.8	2089.6	1958.8	1840.1	1721.5
55°	3431.8	3359.9	3198.7	3061.8	2836.7	2569.1	2358.2	2171.6	2031.8	1916.2	1833.0
57.5°	4877.6	4770.2	4558.3	4297.7	3780.6	3272.7	2866.1	2572.1	2427.1	2374.4	2405.8
60°	5554.8	5535.6	5502.1	5378.5	5113.8	4676.9	4190.2	3664.1	3453.1	3434.9	3498.8
62.5°	5876.3	5864.0	5874.2	5859.0	5776.9	5649.1	5509.2	5282.2	5073.2	4938.4	4652.5
65°	6024.2	6032.4	6090.1	6135.8	6145.9	6179.3	6281.8	6564.7	6771.4	6423.7	5629.9
67.5°	5648.1	5695.7	5828.6	5994.8	6189.5	6378.1	6682.2	7278.4	7703.2	7294.6	6167.2
69°	4675.9	4699.2	5023.6	5336.9	5812.4	6145.0	6586.0	7367.6	7845.2	7383.8	6124.6
70°	3681.2	3702.5	4050.3	4476.1	5280.1	5707.9	6284.8	7216.6	7712.3	7265.2	5905.6
72.5°	1660.7	1630.3	1752.9	1981.0	2855.0	3534.3	4543.0	5846.8	6362.9	5820.5	4418.3
75°	1159.9	1146.7	1159.9	1160.8	1296.7	1672.8	2110.8	3169.3	3919.5	3382.2	2110.8
77.5°	898.3	889.1	880.0	869.9	886.1	992.6	1035.1	1124.3	1459.9	1380.9	805.0
80°	710.7	702.6	724.9	717.8	717.8	730.0	721.9	688.4	625.5	579.9	519.1
82.5°	330.5	332.5	332.5	360.9	434.9	507.9	531.2	497.8	442.0	376.1	303.2
85°	31.4	35.5	59.8	92.3	183.5	206.8	207.8	172.3	172.3	135.9	109.4
87.5°	0.0	1.0	1.0	1.0	9.1	25.4	21.3	6.1	3.0	3.0	5.0
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°	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4
2.5°	539.4	536.3	524.2	512.0	500.8	488.6	477.5	466.4	454.2	445.1	433.9
5°	630.6	608.3	583.0	558.7	534.3	509.0	482.6	459.3	434.9	412.6	391.3
7.5°	722.9	679.3	644.8	601.2	561.7	522.1	485.6	448.1	413.6	381.2	350.8
10°	800.9	748.2	694.4	638.8	581.9	529.2	478.6	433.9	388.3	348.8	311.3
12.5°	864.8	797.9	732.0	662.0	598.2	531.2	468.4	414.7	360.9	316.3	277.8
15°	922.6	845.6	766.4	685.4	604.3	528.2	458.2	391.3	336.6	285.9	242.3
17.5°	969.2	881.0	791.8	700.6	613.4	524.2	445.1	375.1	311.3	258.5	216.0
20°	1009.8	917.5	821.2	718.8	619.5	523.1	433.9	354.8	289.0	233.2	191.6
22.5°	1047.3	955.0	851.6	742.1	628.6	522.1	423.8	339.7	269.6	214.0	172.3
25°	1089.9	992.6	884.1	766.4	644.8	526.2	417.7	327.5	252.4	195.7	157.1
27.5°	1137.5	1035.1	922.6	796.9	666.1	534.3	415.7	314.3	237.2	178.4	145.0
30°	1204.4	1085.8	961.1	827.3	685.4	543.4	413.6	306.2	222.0	165.2	132.8
32.5°	1263.3	1135.5	1003.7	858.7	706.7	552.5	412.6	295.0	207.8	152.0	123.7
35°	1325.1	1181.2	1040.2	889.1	724.9	562.7	411.7	286.9	194.7	138.9	114.6
37.5°	1378.9	1219.6	1068.6	915.5	745.2	571.8	412.6	279.8	182.5	127.7	106.4
40°	1424.5	1259.2	1100.0	939.8	766.4	586.0	413.6	272.8	170.3	117.6	99.4
42.5°	1465.0	1296.7	1133.5	967.2	790.8	602.2	419.8	266.6	160.2	108.5	92.3
45°	1496.5	1331.2	1169.9	1005.7	830.3	628.6	430.9	262.6	150.1	100.4	86.2
47.5°	1528.9	1381.9	1231.8	1066.6	888.2	670.1	450.2	261.6	141.9	94.3	81.1
50°	1573.5	1432.6	1286.6	1128.4	940.9	712.7	473.5	262.6	131.8	88.2	76.0
52.5°	1606.0	1484.2	1357.6	1235.9	1066.6	842.5	563.7	280.8	126.7	83.1	70.0
55°	1797.5	1776.2	1779.2	1799.6	1668.8	1433.6	942.9	405.5	149.0	94.3	68.9
57.5°	2534.6	2609.6	2653.2	2652.2	2436.2	2020.6	1266.3	521.1	166.3	109.4	82.1
60°	3503.9	3447.1	3367.0	3169.3	2882.3	2306.5	1416.4	560.7	143.9	87.2	75.1
62.5°	4360.6	4028.0	3733.0	3412.6	3036.5	2405.8	1446.7	557.6	125.7	65.9	52.7
65°	4894.9	4296.7	3820.2	3418.7	2975.6	2322.7	1368.7	512.0	106.4	53.8	43.6
67.5°	5022.6	4151.6	3477.5	2965.4	2485.9	1807.7	1004.7	385.3	83.1	44.6	38.5
69°	4743.7	3690.4	2881.4	2300.4	1808.7	1199.4	621.5	243.3	63.8	40.6	35.5
70°	4363.6	3209.8	2347.0	1846.2	1339.3	842.5	434.9	171.4	51.7	37.5	32.5
72.5°	2807.3	1686.0	1153.7	802.9	552.5	335.6	170.3	77.1	39.5	31.4	26.3
75°	1088.9	623.5	452.2	343.7	268.7	186.5	103.4	49.7	33.4	26.3	20.3
77.5°	536.3	410.6	335.6	230.2	133.9	83.1	55.8	38.5	27.4	19.3	13.2
80°	423.8	281.9	168.3	104.4	79.1	59.8	42.6	31.4	20.3	12.2	9.1
82.5°	217.0	118.6	87.2	71.0	58.8	46.7	34.5	22.3	13.2	8.1	7.1
85°	67.9	49.7	44.6	43.6	40.6	33.4	24.3	14.2	8.1	5.0	5.0
87.5°	5.0	7.1	9.1	7.1	8.1	7.1	9.1	6.1	4.1	4.1	3.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4	467.4
2.5°	425.8	413.6	402.5	395.4	382.2	377.2	372.1	370.1	360.9	362.9	354.8
5°	372.1	350.8	334.6	318.4	303.2	292.0	282.8	271.7	262.6	258.5	250.4
7.5°	323.4	296.1	274.8	257.5	239.2	225.1	212.9	204.8	196.7	188.6	184.5
10°	280.8	251.5	227.1	209.9	192.7	180.5	171.4	165.2	160.2	157.1	156.1
12.5°	241.3	212.9	190.6	175.4	162.2	156.1	152.0	149.0	148.0	147.0	147.0
15°	210.8	182.5	165.2	154.1	148.0	145.0	143.9	141.9	139.9	138.9	138.9
17.5°	182.5	161.2	149.0	143.0	139.9	137.9	135.9	133.9	131.8	130.7	130.7
20°	163.2	146.0	139.9	135.9	132.8	130.7	127.7	125.7	124.7	123.7	122.7
22.5°	148.0	136.9	132.8	129.8	125.7	122.7	120.7	118.6	116.6	115.6	114.6
25°	136.9	129.8	126.7	122.7	118.6	115.6	112.6	109.4	107.5	106.4	104.4
27.5°	128.8	123.7	119.6	114.6	110.5	107.5	104.4	101.4	99.4	97.3	96.3
30°	121.7	116.6	111.5	107.5	102.4	99.4	95.3	92.3	91.3	89.2	87.2
32.5°	114.6	109.4	104.4	99.4	94.3	90.2	88.2	84.2	82.1	81.1	79.1
35°	106.4	101.4	95.3	91.3	86.2	82.1	79.1	76.0	74.0	72.0	71.0
37.5°	99.4	93.3	87.2	82.1	78.1	74.0	71.0	67.9	65.9	63.8	62.9
40°	91.3	85.1	79.1	74.0	70.0	66.9	63.8	60.8	58.8	57.8	57.8
42.5°	84.2	77.1	71.0	66.9	63.8	59.8	56.8	53.8	52.7	51.7	52.7
45°	77.1	70.0	64.9	60.8	57.8	53.8	50.6	48.7	47.6	48.7	49.7
47.5°	71.0	63.8	58.8	55.8	52.7	49.7	46.7	44.6	44.6	46.7	48.7
50°	64.9	57.8	53.8	51.7	48.7	45.6	41.6	40.6	41.6	43.6	45.6
52.5°	58.8	50.6	47.6	46.7	43.6	40.6	37.5	36.5	37.5	39.5	38.5
55°	52.7	44.6	43.6	42.6	39.5	35.5	32.5	32.5	32.5	31.4	29.4
57.5°	50.6	39.5	38.5	37.5	34.5	30.4	28.4	26.3	25.4	22.3	21.3
60°	52.7	35.5	35.5	33.4	30.4	26.3	23.3	20.3	18.2	16.2	16.2
62.5°	42.6	32.5	31.4	29.4	25.4	21.3	18.2	15.2	14.2	13.2	13.2
65°	34.5	29.4	27.4	24.3	21.3	17.2	14.2	12.2	11.2	11.2	12.2
67.5°	31.4	26.3	23.3	20.3	17.2	13.2	11.2	10.1	10.1	11.2	11.2
69°	29.4	24.3	21.3	18.2	15.2	12.2	10.1	10.1	10.1	10.1	11.2
70°	27.4	23.3	20.3	17.2	13.2	10.1	9.1	9.1	10.1	10.1	11.2
72.5°	21.3	18.2	17.2	14.2	10.1	9.1	8.1	9.1	9.1	10.1	10.1
75°	16.2	13.2	13.2	11.2	8.1	7.1	7.1	8.1	8.1	9.1	9.1
77.5°	11.2	9.1	9.1	8.1	7.1	6.1	6.1	7.1	8.1	8.1	9.1
80°	8.1	7.1	6.1	7.1	6.1	5.0	6.1	7.1	7.1	8.1	8.1
82.5°	6.1	6.1	6.1	6.1	5.0	5.0	6.1	6.1	7.1	8.1	8.1
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.1	6.1	7.1	7.1
87.5°	3.0	3.0	3.0	4.1	4.1	5.0	5.0	5.0	5.0	6.1	6.1
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-E03-LED-E-U-SL4-HSS-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	467.4	467.4	467.4	467.4
2.5°	352.9	351.8	347.7	348.8
5°	247.4	241.3	245.3	244.4
7.5°	181.5	180.5	179.5	181.5
10°	155.2	155.2	154.1	155.2
12.5°	146.0	146.0	146.0	146.0
15°	138.9	138.9	137.9	137.9
17.5°	130.7	130.7	130.7	129.8
20°	122.7	121.7	121.7	121.7
22.5°	113.5	112.6	112.6	112.6
25°	104.4	103.4	103.4	103.4
27.5°	95.3	94.3	93.3	93.3
30°	86.2	85.1	84.2	84.2
32.5°	77.1	76.0	75.1	75.1
35°	68.9	68.9	67.9	66.9
37.5°	61.9	61.9	61.9	61.9
40°	56.8	57.8	57.8	57.8
42.5°	53.8	54.7	55.8	56.8
45°	51.7	53.8	54.7	54.7
47.5°	50.6	51.7	52.7	52.7
50°	46.7	45.6	45.6	45.6
52.5°	37.5	35.5	34.5	33.4
55°	27.4	26.3	24.3	24.3
57.5°	19.3	19.3	18.2	18.2
60°	15.2	15.2	14.2	15.2
62.5°	13.2	13.2	13.2	13.2
65°	12.2	12.2	12.2	12.2
67.5°	12.2	12.2	12.2	12.2
69°	11.2	11.2	11.2	11.2
70°	11.2	11.2	11.2	11.2
72.5°	10.1	10.1	10.1	10.1
75°	9.1	10.1	10.1	10.1
77.5°	9.1	9.1	9.1	9.1
80°	8.1	8.1	9.1	9.1
82.5°	8.1	8.1	8.1	8.1
85°	7.1	7.1	8.1	8.1
87.5°	6.1	6.1	7.1	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)