

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: P165475

Luminaire Tested: **VST-E04-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165475
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-8030
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, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6787.3 lumens
Efficiency: N/A
Efficacy: 69.8 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

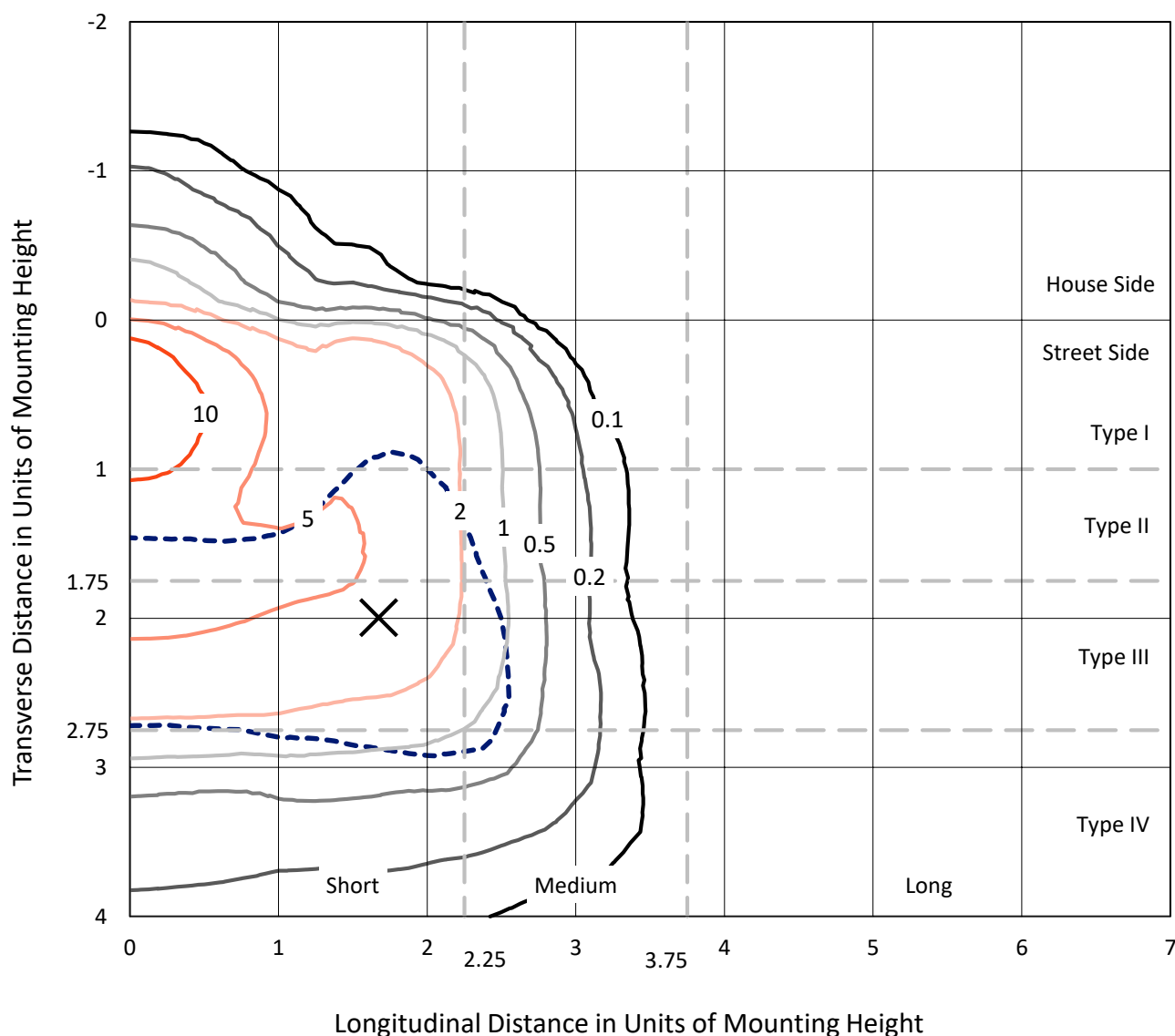


REPORT NUMBER: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

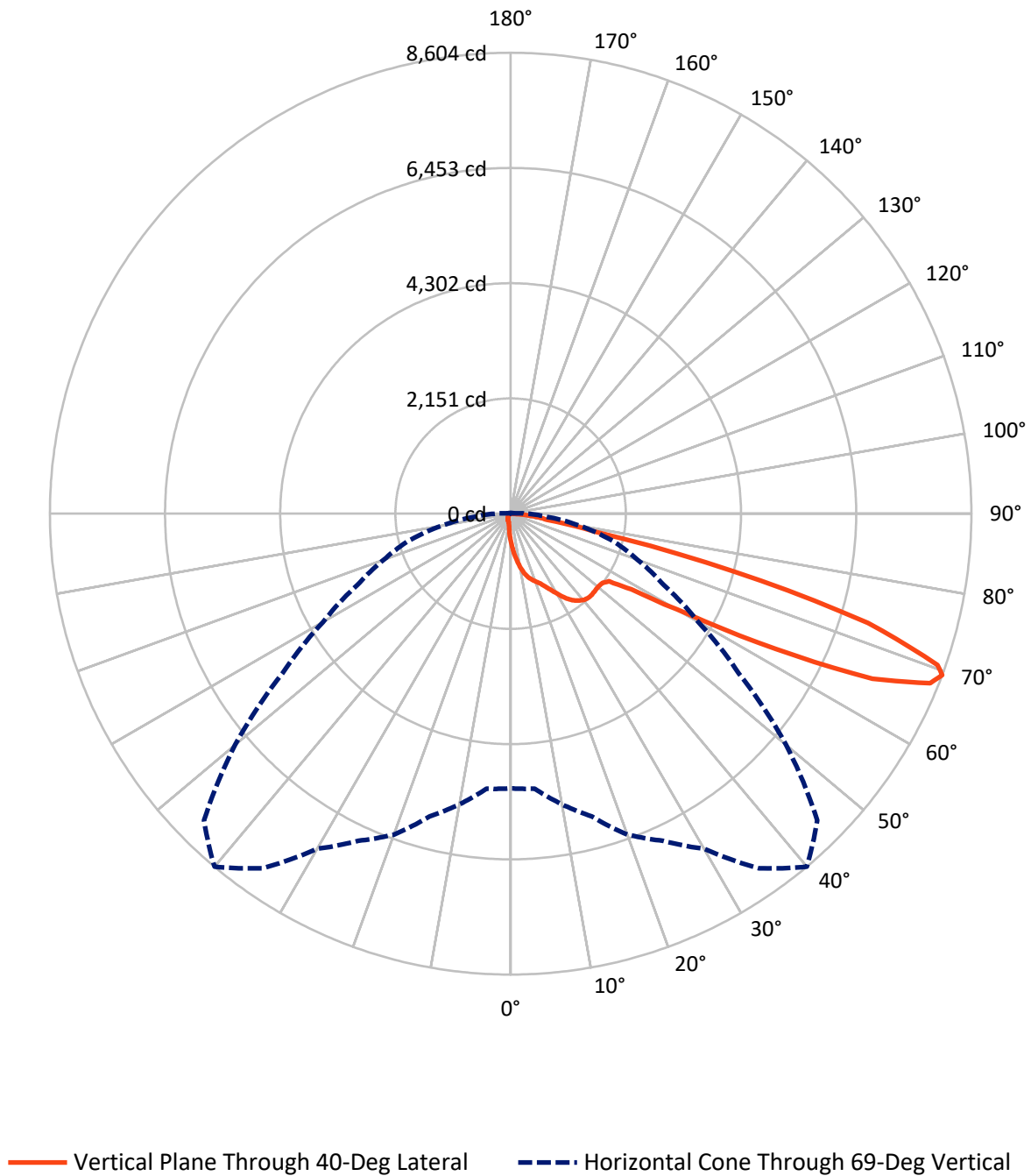


Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	202.1	0.0	202.1
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	6585.2	0.0	6585.2
	% Fixture	97.0	0.0	97.0
Total	Lumens	6787.3	0.0	6787.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	0.8
10°-20°	181.6	2.7
20°-30°	347.7	5.1
30°-40°	578.2	8.5
40°-50°	782.3	11.5
50°-60°	1223.5	18.0
60°-70°	2515.5	37.1
70°-80°	1012.2	14.9
80°-90°	93.6	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°	6787.3	100.0
0°-180°	6787.3	100.0

Coefficient of Utilization



REPORT NUMBER: P165475

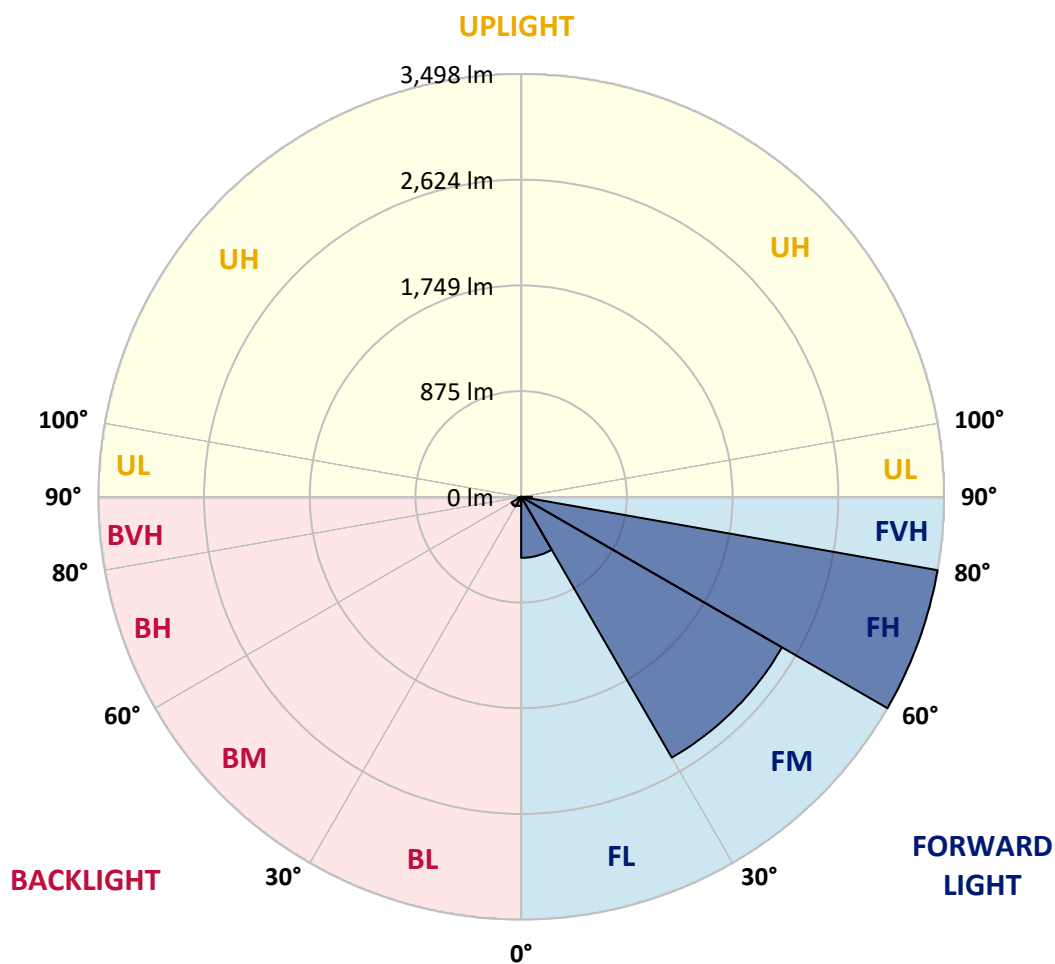
CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	505.1	7.4			
FM	(30°-60°)	2491.7	36.7			
FH	(60°-80°)	3498.2	51.5			G2/5000
FVH	(80°-90°)	90.1	1.3			G1/100
BL	(0°-30°)	76.9	1.1	B0/110		
BM	(30°-60°)	92.3	1.4	B0/220		
BH	(60°-80°)	29.5	0.4	B0/110		G0/110
BVH	(80°-90°)	3.5	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





REPORT NUMBER: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6
2.5°	683.8	676.0	667.1	667.1	656.0	656.0	649.3	631.6	629.3	619.3	609.3
5°	872.8	866.1	855.1	845.0	836.2	820.6	809.4	788.3	765.0	742.7	722.7
7.5°	1057.4	1054.0	1034.1	1030.7	1016.2	990.7	968.4	937.3	897.3	866.1	829.5
10°	1228.6	1220.8	1216.4	1197.5	1176.4	1148.6	1114.1	1076.3	1029.6	980.6	928.4
12.5°	1364.3	1359.8	1339.8	1332.0	1309.8	1282.0	1238.6	1189.7	1143.0	1079.6	1018.5
15°	1465.4	1457.7	1444.3	1432.1	1405.4	1381.0	1340.9	1287.5	1230.9	1161.9	1088.5
17.5°	1550.0	1535.5	1532.1	1513.2	1485.5	1456.5	1412.1	1363.1	1296.4	1227.5	1147.4
20°	1663.3	1643.4	1636.7	1608.8	1576.6	1536.6	1485.5	1424.3	1354.2	1278.7	1196.4
22.5°	1796.8	1782.3	1767.9	1743.4	1702.3	1645.6	1571.1	1504.4	1415.4	1332.0	1243.1
25°	1985.8	1973.6	1950.2	1916.9	1865.7	1797.9	1707.8	1610.0	1505.5	1398.7	1294.2
27.5°	2169.3	2158.1	2141.4	2115.9	2058.1	1983.6	1872.4	1747.9	1615.5	1486.6	1370.9
30°	2341.6	2331.6	2314.9	2289.4	2238.2	2164.8	2039.1	1905.7	1741.2	1591.1	1452.1
32.5°	2527.3	2523.9	2505.0	2468.4	2423.9	2325.0	2188.2	2044.8	1878.0	1704.5	1542.1
35°	2737.4	2711.8	2694.1	2657.4	2581.8	2476.1	2316.0	2159.3	1983.6	1805.7	1624.4
37.5°	2915.3	2890.9	2868.6	2822.0	2729.7	2595.1	2413.9	2241.5	2060.3	1879.1	1694.5
40°	3045.4	3033.2	3006.5	2945.3	2842.0	2681.9	2486.1	2298.2	2115.9	1933.5	1751.2
42.5°	3142.1	3123.2	3093.3	3029.9	2907.6	2725.2	2515.0	2321.6	2141.4	1966.9	1787.9
45°	3177.7	3162.2	3134.4	3065.4	2933.1	2737.4	2513.9	2314.9	2142.6	1976.9	1812.4
47.5°	3156.6	3141.1	3116.6	3052.1	2922.0	2723.0	2494.0	2296.0	2131.4	1980.3	1834.6
50°	3086.6	3077.7	3058.8	3004.3	2887.5	2695.2	2476.1	2286.0	2129.2	1997.0	1865.7
52.5°	3079.9	3074.4	3051.0	2996.5	2877.5	2686.3	2473.9	2291.6	2148.1	2018.1	1888.0
55°	3763.7	3684.7	3508.0	3357.9	3111.0	2817.5	2586.2	2381.6	2228.2	2101.5	2010.3
57.5°	5349.2	5231.4	4999.0	4713.3	4146.2	3589.1	3143.3	2820.8	2661.8	2604.0	2638.5
60°	6091.9	6070.9	6034.1	5898.5	5608.3	5129.1	4595.4	4018.3	3787.0	3767.0	3837.1
62.5°	6444.4	6431.1	6442.2	6425.5	6335.5	6195.4	6041.9	5792.9	5563.8	5415.9	5102.4
65°	6606.8	6615.7	6679.0	6729.0	6740.2	6776.8	6889.2	7199.4	7426.2	7044.8	6174.2
67.5°	6194.2	6246.5	6392.2	6574.5	6788.0	6994.8	7328.3	7982.1	8448.0	8000.0	6763.5
69°	5128.0	5153.5	5509.3	5852.9	6374.4	6739.1	7222.7	8080.0	8603.7	8097.8	6716.8
70°	4037.2	4060.5	4442.0	4908.9	5790.7	6259.8	6892.5	7914.3	8458.0	7967.7	6476.7
72.5°	1821.3	1787.9	1922.4	2172.6	3131.0	3876.0	4982.3	6412.2	6978.1	6383.3	4845.5
75°	1272.0	1257.5	1272.0	1273.1	1422.1	1834.6	2314.9	3475.7	4298.5	3709.2	2314.9
77.5°	985.1	975.1	965.1	954.0	971.8	1088.5	1135.2	1233.0	1601.1	1514.4	882.8
80°	779.4	770.5	795.0	787.2	787.2	800.6	791.7	754.9	686.0	636.0	569.3
82.5°	362.4	364.7	364.7	395.8	477.0	557.0	582.6	546.0	484.8	412.5	332.5
85°	34.4	38.9	65.6	101.2	201.3	226.8	227.9	189.0	189.0	149.0	120.0
87.5°	0.0	1.1	1.1	1.1	10.0	27.8	23.4	6.7	3.3	3.3	5.5
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: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6
2.5°	591.5	588.2	574.9	561.5	549.3	535.9	523.7	511.5	498.1	488.1	475.9
5°	691.6	667.1	639.3	612.7	585.9	558.2	529.3	503.7	477.0	452.5	429.2
7.5°	792.7	744.9	707.1	659.3	616.0	572.6	532.6	491.5	453.7	418.1	384.7
10°	878.4	820.6	761.6	700.5	638.2	580.4	524.8	475.9	425.8	382.5	341.4
12.5°	948.4	875.0	802.8	726.0	656.0	582.6	513.7	454.7	395.8	346.9	304.6
15°	1011.8	927.3	840.5	751.6	662.7	579.3	502.5	429.2	369.1	313.6	265.8
17.5°	1063.0	966.2	868.4	768.3	672.7	574.9	488.1	411.4	341.4	283.5	236.9
20°	1107.5	1006.2	900.6	788.3	679.4	573.7	475.9	389.2	316.9	255.8	210.1
22.5°	1148.6	1047.4	934.0	813.9	689.4	572.6	464.7	372.5	295.7	234.6	189.0
25°	1195.3	1088.5	969.6	840.5	707.1	577.1	458.1	359.1	276.8	214.6	172.3
27.5°	1247.6	1135.2	1011.8	873.9	730.5	585.9	455.9	344.7	260.2	195.7	159.0
30°	1320.9	1190.8	1054.0	907.3	751.6	596.0	453.7	335.8	243.5	181.2	145.6
32.5°	1385.4	1245.3	1100.8	941.8	775.0	606.0	452.5	323.6	227.9	166.8	135.6
35°	1453.2	1295.4	1140.8	975.1	795.0	617.1	451.4	314.6	213.5	152.3	125.7
37.5°	1512.2	1337.6	1171.9	1004.0	817.3	627.1	452.5	306.9	200.1	140.1	116.7
40°	1562.2	1381.0	1206.4	1030.7	840.5	642.6	453.7	299.1	186.8	129.0	109.0
42.5°	1606.7	1422.1	1243.1	1060.7	867.3	660.5	460.3	292.4	175.7	119.0	101.2
45°	1641.1	1459.9	1283.1	1103.0	910.6	689.4	472.6	288.0	164.5	110.1	94.5
47.5°	1676.7	1515.5	1350.9	1169.7	974.0	734.9	493.7	286.9	155.6	103.4	88.9
50°	1725.7	1571.1	1411.0	1237.5	1031.8	781.7	519.2	288.0	144.6	96.8	83.4
52.5°	1761.2	1627.8	1488.8	1355.4	1169.7	923.9	618.2	308.0	139.0	91.2	76.7
55°	1971.4	1948.0	1951.3	1973.6	1830.2	1572.2	1034.1	444.7	163.5	103.4	75.6
57.5°	2779.7	2861.9	2909.7	2908.7	2671.8	2216.0	1388.7	571.5	182.4	120.0	90.1
60°	3842.7	3780.4	3692.6	3475.7	3161.0	2529.5	1553.3	614.9	157.9	95.6	82.3
62.5°	4782.2	4417.4	4093.9	3742.6	3330.1	2638.5	1586.6	611.5	137.9	72.2	57.8
65°	5368.1	4712.1	4189.6	3749.2	3263.3	2547.3	1501.0	561.5	116.7	58.9	47.8
67.5°	5508.2	4553.1	3813.8	3252.2	2726.3	1982.5	1101.8	422.5	91.2	49.0	42.3
69°	5202.4	4047.2	3160.0	2522.9	1983.6	1315.3	681.6	266.8	70.0	44.5	38.9
70°	4785.5	3520.2	2574.0	2024.7	1468.8	923.9	477.0	187.9	56.7	41.1	35.6
72.5°	3078.8	1849.0	1265.3	880.6	606.0	368.0	186.8	84.5	43.3	34.4	28.9
75°	1194.1	683.8	495.9	376.9	294.7	204.6	113.4	54.5	36.7	28.9	22.2
77.5°	588.2	450.3	368.0	252.4	146.8	91.2	61.2	42.3	30.0	21.1	14.4
80°	464.7	309.1	184.6	114.5	86.7	65.6	46.7	34.4	22.2	13.4	10.0
82.5°	237.9	130.1	95.6	77.8	64.5	51.2	37.8	24.4	14.4	8.9	7.8
85°	74.5	54.5	49.0	47.8	44.5	36.7	26.7	15.6	8.9	5.5	5.5
87.5°	5.5	7.8	10.0	7.8	8.9	7.8	10.0	6.7	4.5	4.5	3.3
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: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6	512.6
2.5°	467.0	453.7	441.4	433.6	419.2	413.6	408.1	405.9	395.8	398.0	389.2
5°	408.1	384.7	366.9	349.1	332.5	320.2	310.2	298.0	288.0	283.5	274.6
7.5°	354.7	324.7	301.3	282.4	262.4	246.9	233.5	224.6	215.7	206.8	202.4
10°	308.0	275.7	249.1	230.2	211.3	197.9	187.9	181.2	175.7	172.3	171.2
12.5°	264.6	233.5	209.0	192.4	177.9	171.2	166.8	163.5	162.3	161.2	161.2
15°	231.3	200.1	181.2	169.0	162.3	159.0	157.9	155.6	153.5	152.3	152.3
17.5°	200.1	176.8	163.5	156.8	153.5	151.2	149.0	146.8	144.6	143.4	143.4
20°	179.0	160.1	153.5	149.0	145.6	143.4	140.1	137.9	136.8	135.6	134.6
22.5°	162.3	150.1	145.6	142.3	137.9	134.6	132.3	130.1	127.9	126.7	125.7
25°	150.1	142.3	139.0	134.6	130.1	126.7	123.4	120.0	117.9	116.7	114.5
27.5°	141.2	135.6	131.2	125.7	121.2	117.9	114.5	111.2	109.0	106.7	105.6
30°	133.4	127.9	122.3	117.9	112.3	109.0	104.5	101.2	100.1	97.8	95.6
32.5°	125.7	120.0	114.5	109.0	103.4	99.0	96.8	92.3	90.1	88.9	86.7
35°	116.7	111.2	104.5	100.1	94.5	90.1	86.7	83.4	81.2	78.9	77.8
37.5°	109.0	102.3	95.6	90.1	85.6	81.2	77.8	74.5	72.2	70.0	68.9
40°	100.1	93.4	86.7	81.2	76.7	73.4	70.0	66.7	64.5	63.4	63.4
42.5°	92.3	84.5	77.8	73.4	70.0	65.6	62.3	58.9	57.8	56.7	57.8
45°	84.5	76.7	71.2	66.7	63.4	58.9	55.6	53.3	52.3	53.3	54.5
47.5°	77.8	70.0	64.5	61.2	57.8	54.5	51.2	49.0	49.0	51.2	53.3
50°	71.2	63.4	58.9	56.7	53.3	50.0	45.6	44.5	45.6	47.8	50.0
52.5°	64.5	55.6	52.3	51.2	47.8	44.5	41.1	40.0	41.1	43.3	42.3
55°	57.8	49.0	47.8	46.7	43.3	38.9	35.6	35.6	35.6	34.4	32.3
57.5°	55.6	43.3	42.3	41.1	37.8	33.4	31.1	28.9	27.8	24.4	23.4
60°	57.8	38.9	38.9	36.7	33.4	28.9	25.6	22.2	20.0	17.8	17.8
62.5°	46.7	35.6	34.4	32.3	27.8	23.4	20.0	16.7	15.6	14.4	14.4
65°	37.8	32.3	30.0	26.7	23.4	18.9	15.6	13.4	12.2	12.2	13.4
67.5°	34.4	28.9	25.6	22.2	18.9	14.4	12.2	11.1	11.1	12.2	12.2
69°	32.3	26.7	23.4	20.0	16.7	13.4	11.1	11.1	11.1	11.1	12.2
70°	30.0	25.6	22.2	18.9	14.4	11.1	10.0	10.0	11.1	11.1	12.2
72.5°	23.4	20.0	18.9	15.6	11.1	10.0	8.9	10.0	10.0	11.1	11.1
75°	17.8	14.4	14.4	12.2	8.9	7.8	7.8	8.9	8.9	10.0	10.0
77.5°	12.2	10.0	10.0	8.9	7.8	6.7	6.7	7.8	8.9	8.9	10.0
80°	8.9	7.8	6.7	7.8	6.7	5.5	6.7	7.8	7.8	8.9	8.9
82.5°	6.7	6.7	6.7	6.7	5.5	5.5	6.7	6.7	7.8	8.9	8.9
85°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.7	6.7	7.8	7.8
87.5°	3.3	3.3	3.3	4.5	4.5	5.5	5.5	5.5	5.5	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

REPORT NUMBER: P165475

CATALOG NUMBER: VST-E04-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	512.6	512.6	512.6	512.6
2.5°	387.0	385.8	381.3	382.5
5°	271.3	264.6	269.1	268.0
7.5°	199.0	197.9	196.8	199.0
10°	170.1	170.1	169.0	170.1
12.5°	160.1	160.1	160.1	160.1
15°	152.3	152.3	151.2	151.2
17.5°	143.4	143.4	143.4	142.3
20°	134.6	133.4	133.4	133.4
22.5°	124.5	123.4	123.4	123.4
25°	114.5	113.4	113.4	113.4
27.5°	104.5	103.4	102.3	102.3
30°	94.5	93.4	92.3	92.3
32.5°	84.5	83.4	82.3	82.3
35°	75.6	75.6	74.5	73.4
37.5°	67.9	67.9	67.9	67.9
40°	62.3	63.4	63.4	63.4
42.5°	58.9	60.0	61.2	62.3
45°	56.7	58.9	60.0	60.0
47.5°	55.6	56.7	57.8	57.8
50°	51.2	50.0	50.0	50.0
52.5°	41.1	38.9	37.8	36.7
55°	30.0	28.9	26.7	26.7
57.5°	21.1	21.1	20.0	20.0
60°	16.7	16.7	15.6	16.7
62.5°	14.4	14.4	14.4	14.4
65°	13.4	13.4	13.4	13.4
67.5°	13.4	13.4	13.4	13.4
69°	12.2	12.2	12.2	12.2
70°	12.2	12.2	12.2	12.2
72.5°	11.1	11.1	11.1	11.1
75°	10.0	11.1	11.1	11.1
77.5°	10.0	10.0	10.0	10.0
80°	8.9	8.9	10.0	10.0
82.5°	8.9	8.9	8.9	8.9
85°	7.8	7.8	8.9	8.9
87.5°	6.7	6.7	7.8	7.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)