

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: P159520

Luminaire Tested: **VST-E02-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159520
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E02-LED-E-U-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6116.7 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 52.1
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



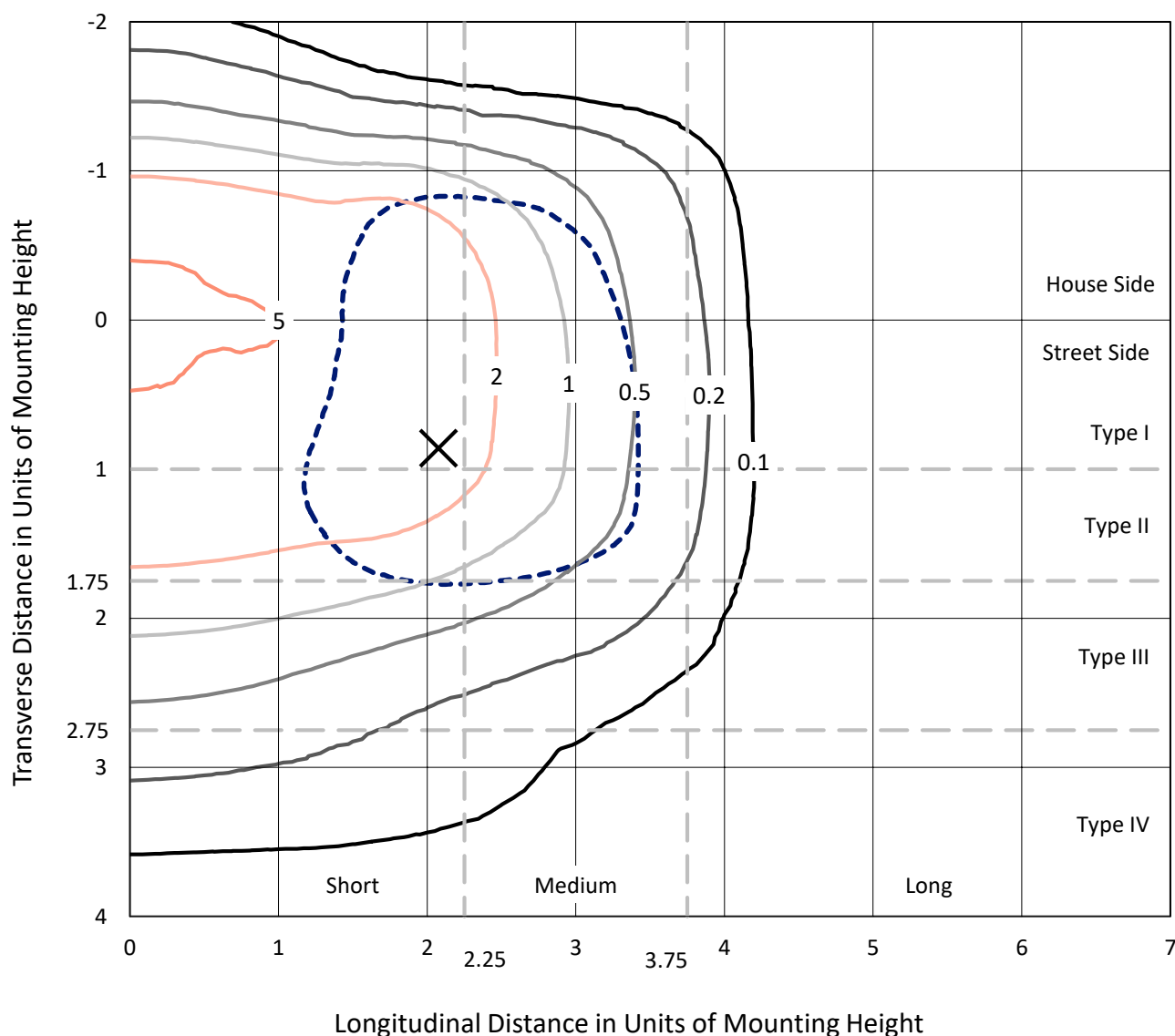
REPORT NUMBER: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

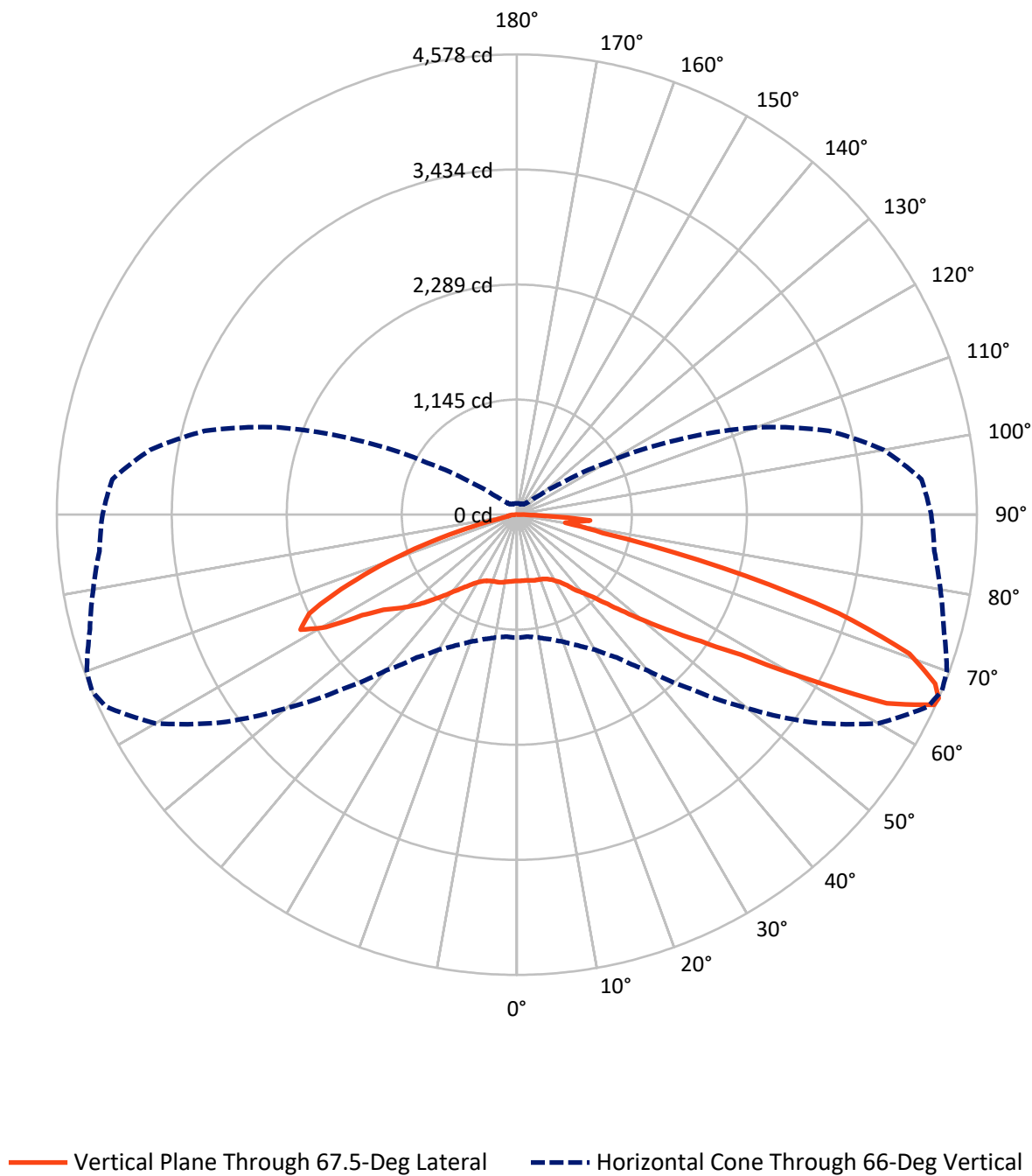


Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

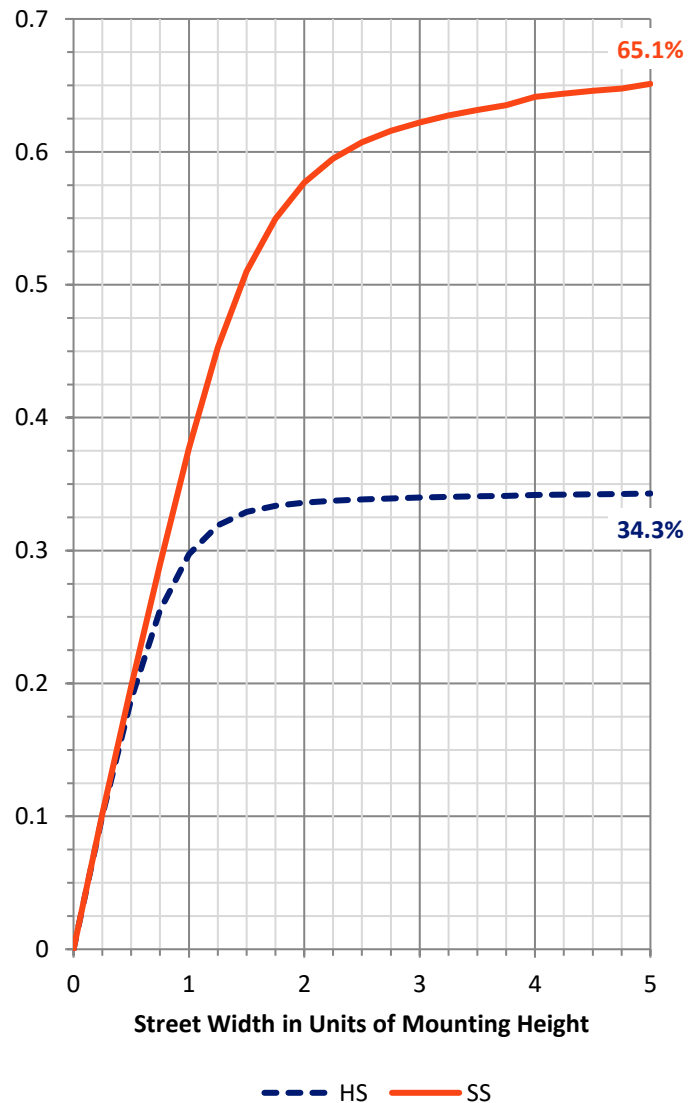
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2116.7	0.0	2116.7
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	4000.1	0.0	4000.1
	% Fixture	65.4	0.0	65.4
Total	Lumens	6116.7	0.0	6116.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	1.0
10°-20°	187.5	3.1
20°-30°	322.4	5.3
30°-40°	521.0	8.5
40°-50°	863.5	14.1
50°-60°	1355.1	22.2
60°-70°	1852.7	30.3
70°-80°	814.7	13.3
80°-90°	136.4	2.2
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°	6116.7	100.0
0°-180°	6116.7	100.0

Coefficient of Utilization



REPORT NUMBER: P159520

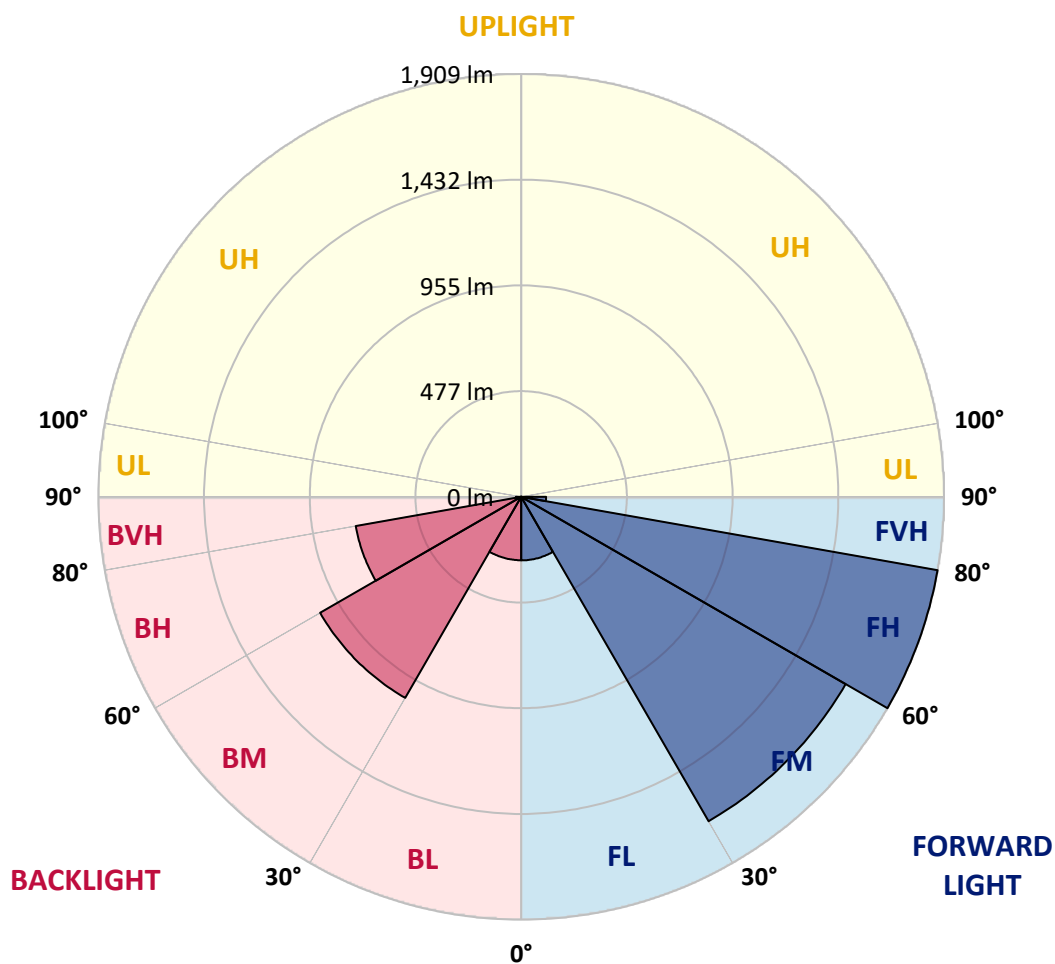
CATALOG NUMBER: VST-E02-LED-E-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	286.9	4.7			
FM	(30°-60°)	1691.5	27.7			
FH	(60°-80°)	1909.2	31.2			G2/5000
FVH	(80°-90°)	112.5	1.8			G2/225
BL	(0°-30°)	286.3	4.7	B1/500		
BM	(30°-60°)	1048.2	17.1	B2/2500		
BH	(60°-80°)	758.3	12.4	B2/1000		G2/1000
BVH	(80°-90°)	23.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0
2.5°	658.8	658.8	659.2	658.8	658.8	658.4	660.0	660.0	660.0	659.6	660.8
5°	657.2	657.2	657.6	657.6	658.0	657.6	658.8	659.2	659.2	659.2	660.4
7.5°	653.2	654.4	653.6	654.0	654.4	655.6	657.2	658.0	658.8	660.0	660.4
10°	644.8	646.8	646.4	647.6	648.0	651.6	652.8	654.4	657.2	658.8	660.0
12.5°	633.2	634.4	634.8	636.4	638.0	642.4	645.6	648.4	652.4	656.4	660.4
15°	624.0	624.8	624.8	626.4	628.8	632.8	636.8	641.6	647.6	654.4	660.8
17.5°	626.8	628.8	627.2	626.8	627.6	630.0	633.6	637.6	644.8	652.4	660.0
20°	645.2	645.6	644.8	642.8	641.2	641.6	641.6	642.4	646.8	652.8	658.8
22.5°	660.4	662.0	661.6	662.0	661.6	663.2	662.4	660.8	659.2	659.6	662.4
25°	673.6	675.2	675.2	676.4	678.4	681.6	684.0	683.6	681.2	678.0	676.8
27.5°	695.2	695.2	695.2	696.4	699.2	703.2	707.2	709.6	711.6	708.4	701.6
30°	729.2	729.6	728.4	728.8	730.8	736.0	740.8	744.4	748.4	748.0	739.2
32.5°	766.4	768.0	767.6	769.2	772.0	776.8	782.0	787.6	792.8	796.0	790.4
35°	814.4	816.0	816.4	818.8	822.0	829.2	836.4	843.6	849.2	851.6	850.4
37.5°	893.2	893.6	892.0	888.4	889.6	895.2	903.6	915.2	918.8	921.2	926.8
40°	1011.2	1010.0	1003.6	1000.4	998.4	1000.8	999.2	1008.4	1016.8	1017.2	1016.8
42.5°	1154.4	1150.8	1144.8	1144.0	1143.2	1142.4	1138.0	1138.4	1146.0	1148.0	1145.6
45°	1296.8	1292.4	1288.0	1292.0	1287.2	1299.6	1303.2	1312.8	1314.0	1318.0	1312.0
47.5°	1413.6	1414.0	1414.0	1419.6	1429.2	1452.8	1474.0	1492.4	1499.2	1508.8	1510.0
50°	1502.0	1504.4	1512.0	1530.0	1550.4	1590.0	1625.6	1658.8	1688.8	1700.0	1729.6
52.5°	1553.6	1560.0	1576.0	1606.0	1642.4	1693.6	1749.6	1806.0	1858.0	1902.0	1937.2
55°	1544.4	1549.2	1577.2	1624.0	1680.8	1749.6	1828.0	1909.6	1990.8	2065.2	2122.8
57.5°	1485.2	1488.4	1516.4	1569.2	1640.0	1732.4	1843.2	1964.4	2078.4	2198.4	2296.8
60°	1407.6	1412.4	1438.4	1480.0	1554.0	1652.4	1780.8	1945.2	2127.2	2316.0	2500.0
62.5°	1358.0	1356.8	1379.6	1416.8	1472.4	1561.6	1685.2	1880.0	2132.0	2451.2	2814.8
65°	1275.6	1272.0	1295.6	1338.0	1398.4	1484.8	1602.0	1789.2	2081.6	2502.4	3018.0
66°	1224.4	1217.2	1240.8	1283.6	1344.0	1436.0	1548.4	1733.2	2020.4	2452.4	2996.4
67.5°	1134.8	1131.2	1142.4	1176.0	1220.8	1307.2	1424.4	1610.4	1875.6	2302.0	2838.0
70°	922.4	914.4	923.2	938.4	955.6	976.8	1048.8	1196.4	1420.8	1834.0	2286.4
72.5°	628.4	624.4	640.8	664.0	710.0	731.6	760.0	784.0	863.2	1156.0	1594.8
75°	478.0	480.4	501.2	539.6	598.8	662.8	725.2	748.0	721.6	698.8	905.2
77.5°	268.0	282.0	307.2	356.0	418.8	509.2	618.0	738.0	798.0	783.2	732.4
80°	110.4	108.4	120.8	147.6	169.2	243.2	372.0	522.4	691.2	798.0	781.2
82.5°	30.8	31.6	40.8	52.4	67.6	86.0	134.4	216.0	352.0	547.6	716.8
85°	9.6	9.6	13.2	19.6	23.2	26.8	34.0	56.0	95.6	190.8	386.8
87.5°	2.0	2.0	2.8	5.6	6.0	6.0	7.6	10.4	9.2	8.4	37.6
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: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0
2.5°	659.6	658.8	659.2	659.6	659.2	659.2	658.8	658.4	658.8	658.8	660.0
5°	659.2	658.8	659.2	659.2	659.2	659.6	659.6	659.6	660.8	660.8	662.8
7.5°	660.0	660.0	660.8	660.8	660.8	660.8	661.2	662.0	664.0	663.6	667.2
10°	661.6	662.4	664.4	664.8	664.8	666.0	666.8	668.4	670.4	671.2	674.4
12.5°	663.6	667.6	671.2	672.0	673.2	675.2	676.4	677.2	680.8	682.0	686.0
15°	666.0	671.6	676.0	677.6	679.2	681.6	683.2	684.4	687.6	689.2	694.0
17.5°	666.4	672.8	678.0	680.4	682.4	685.2	687.6	690.0	693.6	696.0	700.8
20°	666.0	674.4	682.4	685.6	687.6	692.8	696.4	699.6	704.0	706.4	711.2
22.5°	670.4	680.0	690.8	694.8	698.0	705.2	710.0	715.2	720.8	722.4	726.0
25°	680.8	690.8	704.4	710.0	715.6	725.2	732.0	739.6	745.2	746.0	747.2
27.5°	698.4	707.6	724.0	732.4	741.6	755.2	765.2	772.8	780.8	780.8	780.0
30°	734.0	736.0	753.2	764.0	777.6	797.6	812.4	820.8	826.8	826.8	820.0
32.5°	780.0	777.6	793.2	804.8	823.6	851.6	871.6	878.0	884.4	882.4	870.8
35°	846.4	839.6	848.4	866.0	887.2	925.6	946.4	960.8	964.8	959.2	940.8
37.5°	930.0	929.2	933.6	953.2	976.8	1026.4	1047.6	1056.8	1053.6	1043.6	1011.2
40°	1018.4	1016.0	1013.2	1026.4	1052.8	1112.4	1150.0	1154.8	1150.4	1135.6	1094.8
42.5°	1136.4	1136.4	1123.2	1126.8	1148.8	1215.6	1260.0	1275.2	1275.6	1254.0	1199.6
45°	1298.8	1297.2	1274.0	1268.4	1285.2	1350.8	1408.0	1416.4	1416.4	1388.0	1328.4
47.5°	1494.0	1492.0	1469.2	1449.6	1452.8	1523.6	1571.2	1584.0	1572.8	1551.6	1480.8
50°	1714.0	1710.4	1687.2	1668.8	1660.8	1732.4	1772.8	1778.8	1762.4	1737.2	1660.4
52.5°	1937.2	1948.0	1934.4	1924.4	1927.2	1973.6	2015.2	1986.8	1978.4	1951.2	1874.0
55°	2169.6	2202.8	2232.8	2224.0	2234.4	2279.6	2287.6	2250.0	2234.8	2215.2	2129.2
57.5°	2403.6	2500.4	2598.8	2626.4	2652.0	2716.8	2707.6	2646.0	2657.6	2686.8	2590.0
60°	2730.4	3010.0	3259.6	3305.6	3385.2	3440.4	3452.8	3440.8	3494.8	3479.6	3394.0
62.5°	3232.4	3698.4	4045.6	4132.0	4212.0	4209.2	4167.2	4124.0	4177.2	4177.2	3953.6
65°	3590.8	4119.6	4491.2	4562.8	4559.6	4463.2	4364.0	4277.6	4270.0	4210.8	3884.0
66°	3607.6	4152.0	4516.0	4578.4	4554.4	4399.2	4280.4	4170.8	4124.0	4041.6	3706.8
67.5°	3456.4	4060.4	4435.2	4489.6	4426.4	4204.0	4040.4	3893.6	3825.6	3686.8	3371.6
70°	2835.2	3489.6	4034.8	4146.0	4074.4	3792.8	3568.8	3370.4	3240.4	3040.0	2812.8
72.5°	2069.6	2576.4	3166.8	3347.6	3336.4	3077.2	2896.8	2715.2	2544.4	2362.0	2196.0
75°	1345.2	1676.0	2005.2	2110.8	2060.0	1910.0	1780.8	1674.8	1512.8	1386.0	1355.2
77.5°	768.0	938.4	887.6	874.4	810.8	654.4	435.2	305.2	275.6	344.0	377.2
80°	730.8	662.4	542.4	489.2	449.6	306.4	160.8	113.2	99.2	101.6	109.2
82.5°	824.0	858.8	702.4	586.8	510.8	372.8	203.6	94.8	69.2	82.0	92.0
85°	617.6	869.6	862.0	730.4	599.2	429.6	240.8	72.4	41.6	57.6	75.2
87.5°	125.2	206.0	198.4	174.4	148.4	103.6	40.4	22.8	20.8	28.4	43.2
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: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0
2.5°	660.8	660.8	661.6	662.8	663.2	663.2	664.0	663.2	664.8	665.2	665.6
5°	664.4	665.6	666.4	668.4	669.6	670.4	671.6	670.8	672.4	672.8	673.6
7.5°	668.4	670.4	672.0	672.8	674.4	674.4	674.8	674.0	673.6	672.4	672.0
10°	675.6	676.8	678.8	678.0	677.2	674.4	672.0	668.4	666.4	662.8	660.8
12.5°	687.2	688.0	688.0	684.4	679.2	672.8	666.8	660.8	656.0	652.0	649.6
15°	695.2	696.8	694.8	689.6	682.0	673.2	665.2	657.2	650.8	645.6	642.4
17.5°	701.2	700.8	697.2	690.0	682.8	675.2	668.0	659.6	651.6	644.0	639.2
20°	710.4	706.4	700.0	692.4	684.8	678.4	672.8	664.8	656.4	646.0	638.8
22.5°	722.8	715.6	706.4	698.4	691.2	685.2	678.8	672.0	663.2	651.6	641.6
25°	740.4	728.0	717.6	709.6	703.2	696.4	689.2	680.4	671.6	659.6	647.6
27.5°	767.2	748.8	735.6	728.4	722.4	713.2	704.0	693.6	682.4	670.0	656.4
30°	799.6	777.6	762.4	756.0	748.8	738.4	728.4	714.0	698.4	683.6	666.8
32.5°	837.6	815.2	800.0	795.2	783.6	771.6	757.6	738.4	718.0	696.0	676.0
35°	895.2	866.8	852.8	841.6	825.6	811.2	787.6	762.4	733.2	704.0	679.2
37.5°	954.4	925.6	911.2	895.6	874.8	848.4	816.8	780.8	742.0	706.0	675.6
40°	1033.6	1002.4	984.0	960.0	926.4	885.2	838.4	789.2	742.0	697.2	660.4
42.5°	1126.0	1097.2	1068.8	1029.2	975.2	915.2	849.6	786.4	729.2	677.6	638.8
45°	1254.0	1204.8	1159.6	1096.0	1017.2	932.8	850.8	773.2	707.2	650.0	606.8
47.5°	1398.0	1334.4	1254.4	1154.8	1047.2	939.6	839.2	748.4	672.4	610.4	563.2
50°	1564.0	1466.4	1343.6	1201.6	1062.4	930.4	811.6	706.8	624.4	553.2	502.8
52.5°	1754.0	1605.2	1424.4	1234.8	1060.0	902.4	766.0	652.0	560.0	484.4	434.8
55°	1964.8	1756.4	1501.6	1256.0	1038.4	848.0	694.4	574.8	480.0	405.6	362.0
57.5°	2336.4	2021.6	1648.8	1284.4	993.2	765.6	603.6	477.2	391.6	328.4	286.8
60°	3026.8	2485.2	1927.6	1351.2	925.2	662.4	489.2	374.4	302.8	256.8	226.0
62.5°	3454.0	2811.6	2063.6	1341.6	814.8	521.2	363.2	277.6	221.2	190.8	171.6
65°	3352.8	2683.6	1897.6	1152.4	634.0	369.6	240.4	181.6	152.0	136.4	127.2
66°	3215.2	2540.4	1757.2	1032.0	552.4	308.8	198.4	152.4	130.8	119.2	114.4
67.5°	2926.8	2278.8	1515.6	826.4	414.0	230.0	146.4	119.6	106.4	100.4	97.2
70°	2449.6	1836.0	1072.0	488.0	224.4	124.8	93.6	83.2	80.0	78.0	76.8
72.5°	1894.0	1329.2	626.4	240.0	113.2	80.8	71.2	66.8	65.6	65.6	66.0
75°	1193.2	764.0	280.4	115.6	76.8	65.2	60.8	58.8	59.2	59.6	59.2
77.5°	396.4	263.6	116.8	82.0	66.8	59.2	55.6	54.8	55.6	56.0	56.0
80°	114.0	99.6	84.4	72.4	61.2	55.2	52.0	51.6	53.6	54.0	53.2
82.5°	87.6	82.0	76.4	70.0	58.8	52.0	50.8	51.2	52.4	51.6	48.0
85°	80.4	79.6	57.2	56.8	51.2	49.6	48.4	48.8	47.6	43.2	39.2
87.5°	45.2	42.0	32.4	32.8	38.0	39.2	32.4	34.4	32.0	28.0	25.6
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: P159520

CATALOG NUMBER: VST-E02-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	660.0	660.0	660.0	660.0	660.0
2.5°	666.4	666.0	666.0	667.2	665.6
5°	674.0	673.6	673.6	674.8	673.6
7.5°	670.4	669.2	668.4	668.0	668.0
10°	658.4	657.2	654.8	654.0	653.2
12.5°	646.0	644.8	642.0	642.0	641.2
15°	638.4	636.8	634.8	633.6	632.8
17.5°	634.4	632.0	629.6	628.4	627.6
20°	632.8	629.6	626.8	624.8	624.8
22.5°	633.2	629.2	626.0	623.6	622.8
25°	637.2	631.2	627.2	624.8	624.0
27.5°	642.8	635.6	630.4	627.2	626.0
30°	650.4	640.4	633.2	629.2	627.6
32.5°	655.6	641.6	632.4	626.8	624.8
35°	655.2	637.2	626.0	618.8	616.4
37.5°	648.0	626.8	612.0	603.2	599.2
40°	632.0	607.6	592.0	583.6	578.8
42.5°	608.8	582.4	568.4	559.2	554.0
45°	572.4	546.4	529.2	522.0	515.2
47.5°	522.0	495.6	480.8	470.4	466.0
50°	462.8	436.4	420.8	412.4	408.4
52.5°	398.0	372.8	361.6	353.6	348.0
55°	330.8	307.6	302.8	294.0	288.8
57.5°	267.6	254.0	249.6	240.8	236.4
60°	209.2	204.8	200.0	194.4	192.0
62.5°	162.0	158.0	156.8	153.2	152.8
65°	123.6	124.0	123.2	122.4	121.6
66°	112.4	112.0	112.4	111.6	111.2
67.5°	95.6	97.2	98.4	98.0	98.0
70°	77.6	78.8	80.4	80.0	80.0
72.5°	66.4	68.4	69.2	68.8	68.8
75°	60.0	62.0	62.0	61.2	60.8
77.5°	56.0	56.8	56.0	55.2	54.4
80°	52.0	51.2	50.0	48.8	48.0
82.5°	45.2	43.2	42.0	40.0	40.0
85°	36.4	34.8	32.0	30.0	28.0
87.5°	23.6	22.8	20.8	15.6	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)