

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: P159518

Luminaire Tested: **VST-E02-LED-E-U-T3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159518
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-T3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5162.5 lumens
Efficiency: N/A
Efficacy: 99.1 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

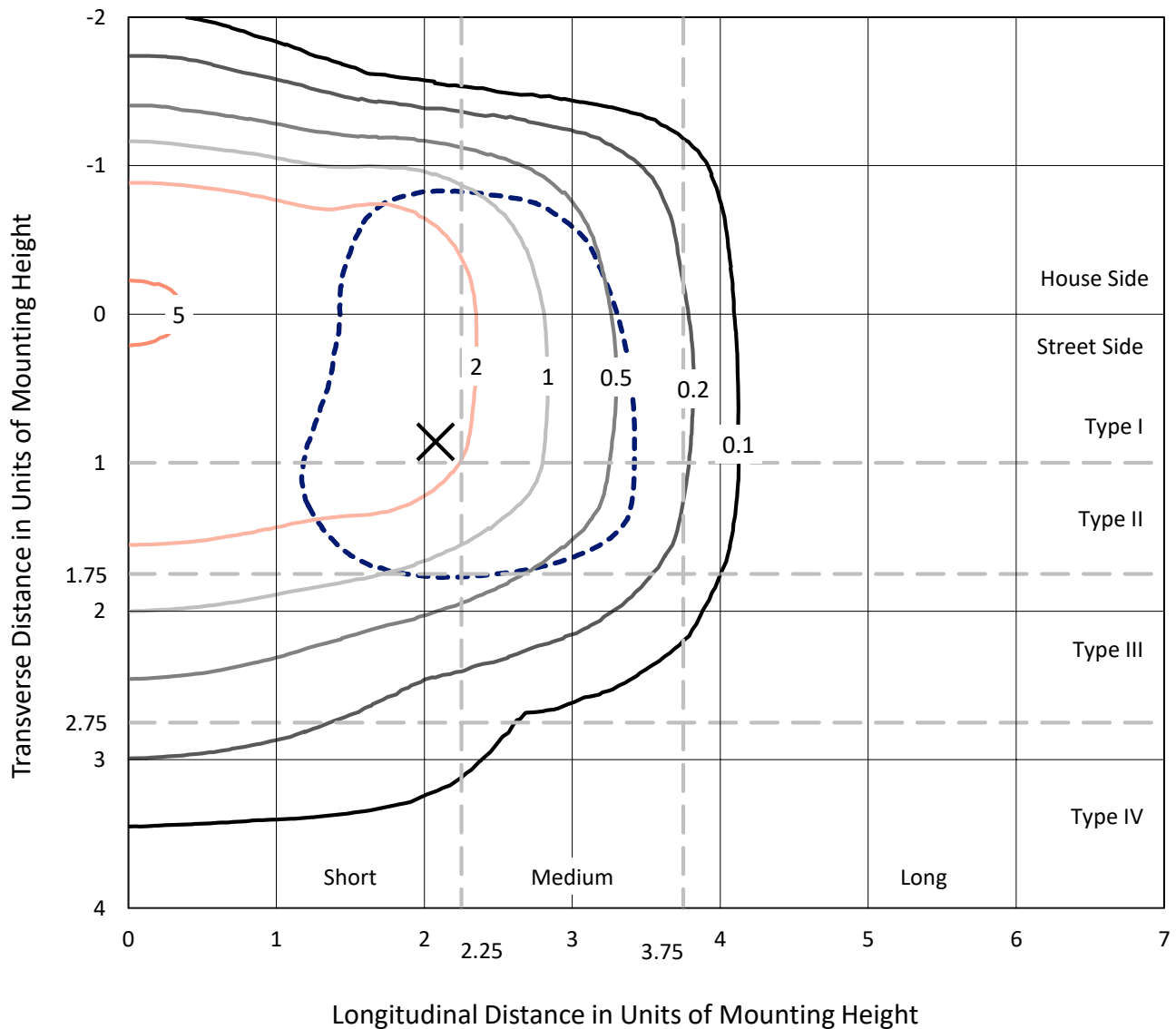


REPORT NUMBER: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

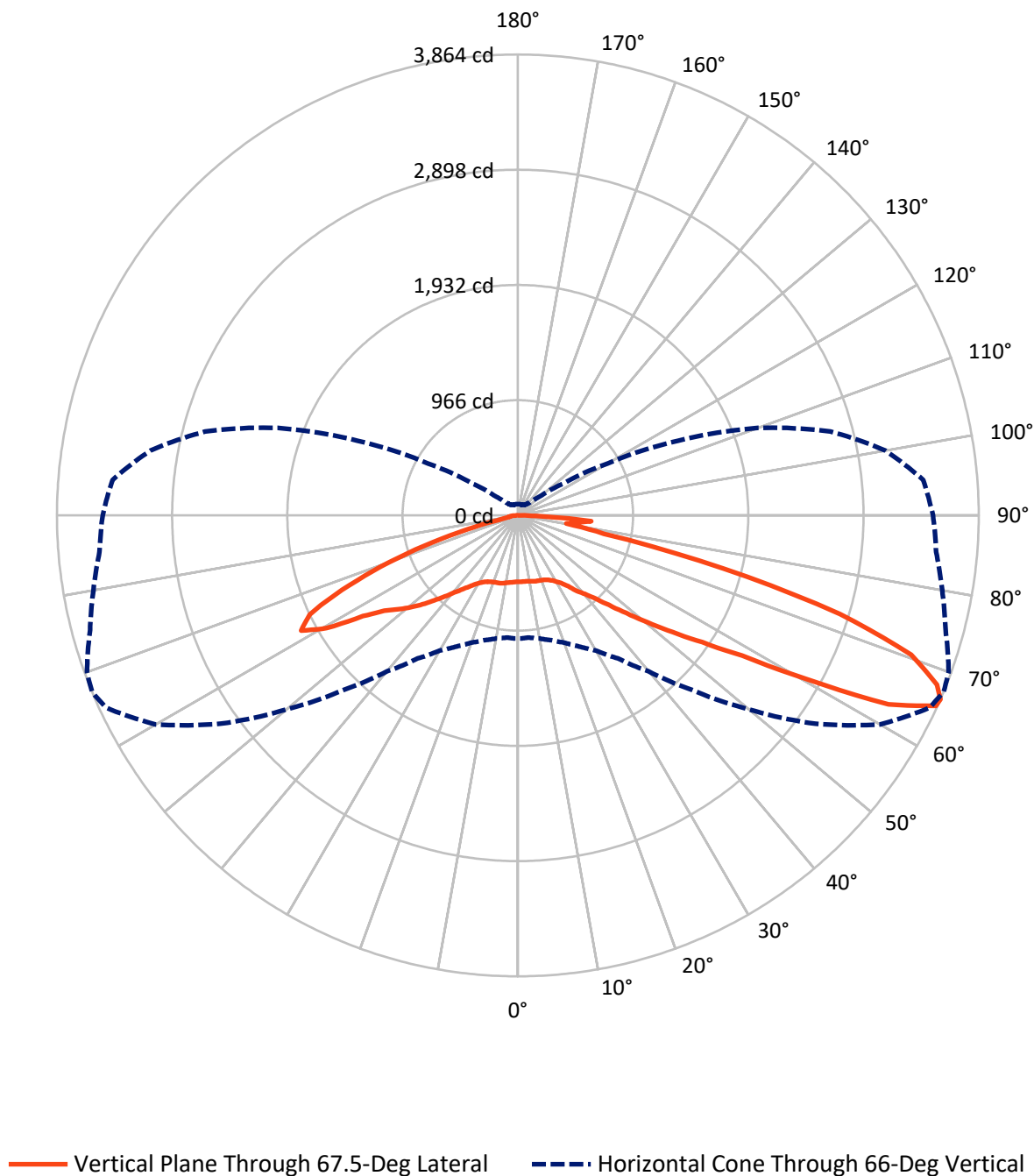


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

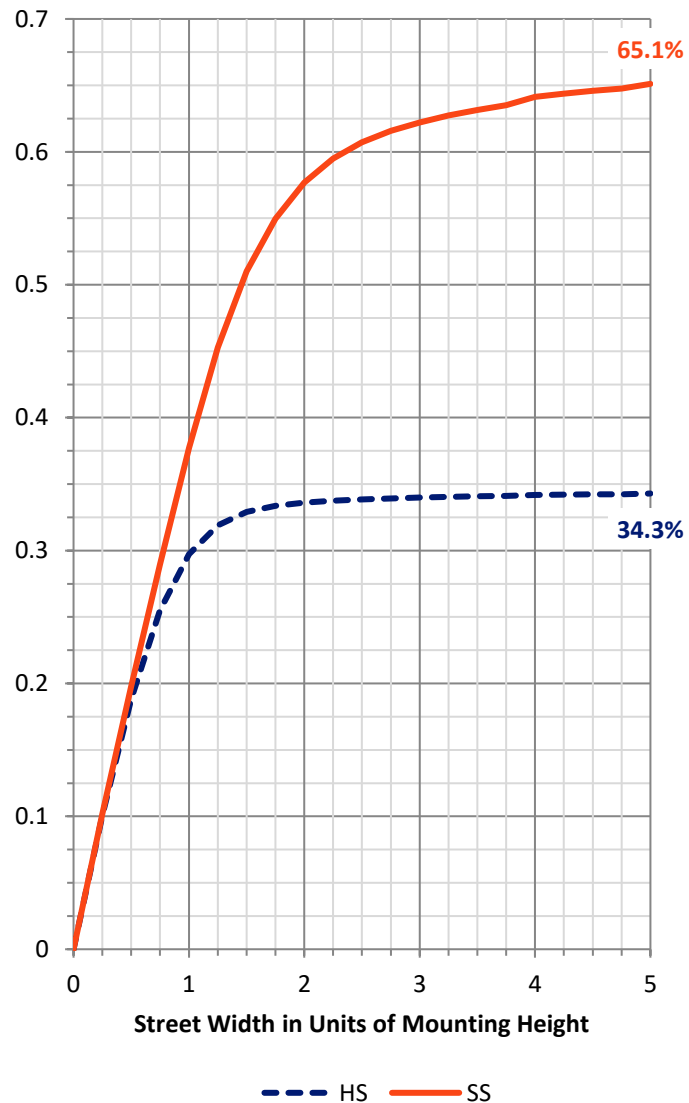
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1786.4	0.0	1786.4
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	3376.0	0.0	3376.0
	% Fixture	65.4	0.0	65.4
Total	Lumens	5162.5	0.0	5162.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	1.0
10°-20°	158.3	3.1
20°-30°	272.1	5.3
30°-40°	439.7	8.5
40°-50°	728.8	14.1
50°-60°	1143.7	22.2
60°-70°	1563.7	30.3
70°-80°	687.6	13.3
80°-90°	115.1	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°	5162.5	100.0
0°-180°	5162.5	100.0

Coefficient of Utilization



REPORT NUMBER: P159518

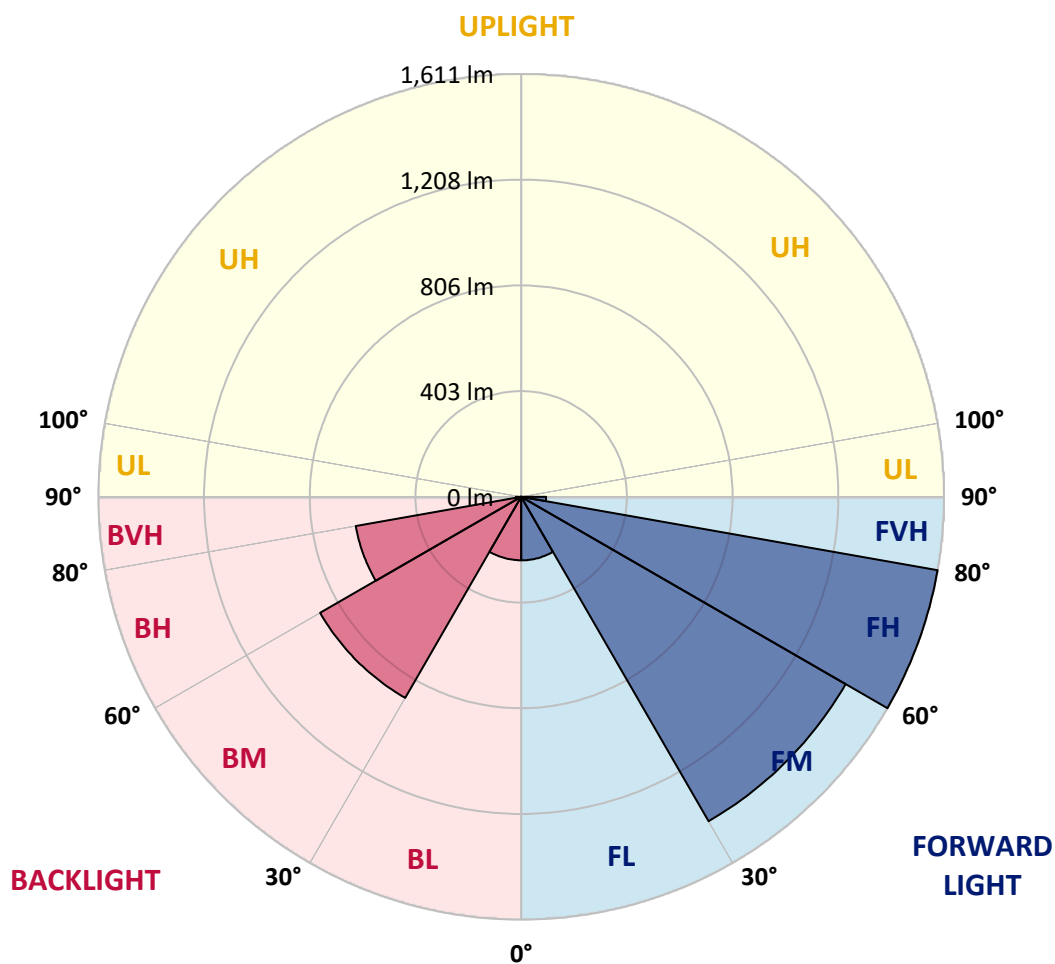
CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	242.2	4.7			
FM	(30°-60°)	1427.6	27.7			
FH	(60°-80°)	1611.3	31.2			G1/1800
FVH	(80°-90°)	95.0	1.8			G1/100
BL	(0°-30°)	241.7	4.7	B1/500		
BM	(30°-60°)	884.6	17.1	B1/1000		
BH	(60°-80°)	640.0	12.4	B2/1000		G2/1000
BVH	(80°-90°)	20.1	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: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0
2.5°	556.0	556.0	556.4	556.0	556.0	555.7	557.0	557.0	557.0	556.7	557.7
5°	554.7	554.7	555.0	555.0	555.4	555.0	556.0	556.4	556.4	556.4	557.4
7.5°	551.3	552.3	551.6	552.0	552.3	553.3	554.7	555.4	556.0	557.0	557.4
10°	544.2	545.9	545.6	546.5	546.9	550.0	551.0	552.3	554.7	556.0	557.0
12.5°	534.4	535.4	535.7	537.1	538.4	542.2	544.9	547.3	550.6	554.0	557.4
15°	526.7	527.3	527.3	528.7	530.7	534.1	537.5	541.5	546.5	552.3	557.7
17.5°	529.0	530.7	529.4	529.0	529.7	531.7	534.8	538.1	544.2	550.6	557.0
20°	544.6	544.9	544.2	542.5	541.1	541.5	541.5	542.2	545.9	551.0	556.0
22.5°	557.4	558.7	558.4	558.7	558.4	559.7	559.1	557.7	556.4	556.7	559.1
25°	568.5	569.9	569.9	570.9	572.6	575.3	577.3	577.0	574.9	572.2	571.2
27.5°	586.7	586.7	586.7	587.8	590.1	593.5	596.9	598.9	600.6	597.9	592.1
30°	615.4	615.8	614.8	615.1	616.8	621.2	625.2	628.3	631.6	631.3	623.9
32.5°	646.9	648.2	647.8	649.2	651.5	655.6	660.0	664.7	669.1	671.8	667.1
35°	687.4	688.7	689.0	691.1	693.8	699.8	705.9	712.0	716.7	718.7	717.7
37.5°	753.8	754.2	752.8	749.8	750.8	755.5	762.7	772.4	775.4	777.5	782.2
40°	853.4	852.4	847.0	844.3	842.6	844.7	843.3	851.1	858.2	858.5	858.2
42.5°	974.3	971.3	966.2	965.5	964.9	964.2	960.5	960.8	967.2	968.9	966.9
45°	1094.5	1090.8	1087.1	1090.4	1086.4	1096.9	1099.9	1108.0	1109.0	1112.4	1107.3
47.5°	1193.0	1193.4	1193.4	1198.1	1206.2	1226.2	1244.0	1259.6	1265.3	1273.4	1274.4
50°	1267.7	1269.7	1276.1	1291.3	1308.5	1342.0	1372.0	1400.0	1425.4	1434.8	1459.7
52.5°	1311.2	1316.6	1330.1	1355.5	1386.2	1429.4	1476.7	1524.2	1568.2	1605.3	1635.0
55°	1303.4	1307.5	1331.2	1370.6	1418.6	1476.7	1542.8	1611.7	1680.2	1743.0	1791.6
57.5°	1253.5	1256.2	1279.8	1324.4	1384.1	1462.1	1555.6	1657.9	1754.2	1855.4	1938.5
60°	1188.0	1192.1	1214.0	1249.1	1311.5	1394.6	1503.0	1641.7	1795.3	1954.7	2110.0
62.5°	1146.1	1145.1	1164.4	1195.7	1242.7	1318.0	1422.3	1586.7	1799.4	2068.8	2375.6
65°	1076.6	1073.6	1093.5	1129.3	1180.3	1253.2	1352.1	1510.1	1756.9	2112.0	2547.2
66°	1033.4	1027.3	1047.2	1083.4	1134.3	1212.0	1306.9	1462.8	1705.2	2069.8	2528.9
67.5°	957.8	954.7	964.2	992.5	1030.3	1103.3	1202.2	1359.2	1583.0	1942.9	2395.3
70°	778.5	771.7	779.2	792.0	806.5	824.4	885.2	1009.7	1199.2	1547.9	1929.7
72.5°	530.3	527.0	540.8	560.4	599.2	617.5	641.5	661.7	728.5	975.7	1346.0
75°	403.4	405.5	423.0	455.4	505.4	559.4	612.1	631.3	609.0	589.8	764.0
77.5°	226.2	238.0	259.3	300.5	353.5	429.8	521.6	622.9	673.5	661.0	618.1
80°	93.2	91.5	101.9	124.6	142.8	205.3	314.0	440.9	583.4	673.5	659.3
82.5°	26.0	26.7	34.4	44.2	57.1	72.6	113.5	182.3	297.1	462.2	605.0
85°	8.1	8.1	11.2	16.6	19.6	22.6	28.7	47.3	80.7	161.0	326.5
87.5°	1.7	1.7	2.3	4.7	5.0	5.0	6.4	8.8	7.7	7.1	31.7
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: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0
2.5°	556.7	556.0	556.4	556.7	556.4	556.4	556.0	555.7	556.0	556.0	557.0
5°	556.4	556.0	556.4	556.4	556.4	556.7	556.7	556.7	557.7	557.7	559.4
7.5°	557.0	557.0	557.7	557.7	557.7	557.7	558.1	558.7	560.4	560.1	563.1
10°	558.4	559.1	560.8	561.1	561.1	562.1	562.8	564.1	565.8	566.5	569.2
12.5°	560.1	563.5	566.5	567.2	568.2	569.9	570.9	571.6	574.6	575.6	579.0
15°	562.1	566.8	570.5	571.9	573.2	575.3	576.6	577.6	580.3	581.7	585.7
17.5°	562.4	567.8	572.2	574.3	575.9	578.3	580.3	582.4	585.4	587.4	591.5
20°	562.1	569.2	575.9	578.6	580.3	584.7	587.8	590.5	594.2	596.2	600.2
22.5°	565.8	573.9	583.0	586.4	589.1	595.2	599.2	603.6	608.3	609.7	612.7
25°	574.6	583.0	594.5	599.2	604.0	612.1	617.8	624.2	628.9	629.6	630.7
27.5°	589.4	597.2	611.0	618.1	625.9	637.4	645.8	652.3	659.0	659.0	658.3
30°	619.5	621.2	635.7	644.8	656.3	673.1	685.7	692.8	697.8	697.8	692.1
32.5°	658.3	656.3	669.5	679.3	695.1	718.7	735.6	741.0	746.4	744.7	734.9
35°	714.4	708.6	716.0	730.9	748.8	781.2	798.8	810.9	814.3	809.6	794.0
37.5°	784.9	784.3	787.9	804.5	824.4	866.3	884.2	891.9	889.2	880.8	853.4
40°	859.5	857.5	855.1	866.3	888.5	938.9	970.6	974.6	970.9	958.4	924.0
42.5°	959.1	959.1	948.0	951.0	969.6	1025.9	1063.4	1076.3	1076.6	1058.3	1012.4
45°	1096.2	1094.8	1075.3	1070.5	1084.7	1140.1	1188.4	1195.4	1195.4	1171.4	1121.2
47.5°	1260.9	1259.2	1240.0	1223.5	1226.2	1285.9	1326.1	1336.9	1327.4	1309.6	1249.8
50°	1446.6	1443.5	1424.0	1408.4	1401.7	1462.1	1496.2	1501.3	1487.5	1466.2	1401.4
52.5°	1635.0	1644.1	1632.6	1624.2	1626.5	1665.7	1700.8	1676.8	1669.7	1646.8	1581.7
55°	1831.1	1859.2	1884.5	1877.0	1885.8	1924.0	1930.7	1899.0	1886.2	1869.6	1797.0
57.5°	2028.6	2110.3	2193.4	2216.6	2238.2	2293.0	2285.2	2233.2	2243.0	2267.6	2185.9
60°	2304.4	2540.4	2751.1	2789.9	2857.1	2903.6	2914.1	2904.0	2949.6	2936.8	2864.5
62.5°	2728.1	3121.4	3414.4	3487.4	3554.9	3552.5	3517.1	3480.6	3525.5	3525.5	3336.8
65°	3030.6	3476.9	3790.6	3851.0	3848.3	3766.9	3683.2	3610.3	3603.8	3553.9	3278.0
66°	3044.8	3504.2	3811.4	3864.1	3843.9	3712.9	3612.6	3520.1	3480.6	3411.1	3128.5
67.5°	2917.2	3427.0	3743.3	3789.2	3735.8	3548.2	3410.0	3286.1	3228.8	3111.6	2845.6
70°	2392.9	2945.2	3405.4	3499.2	3438.8	3201.1	3012.1	2844.6	2734.9	2565.7	2374.0
72.5°	1746.7	2174.5	2672.8	2825.3	2815.9	2597.1	2444.9	2291.6	2147.5	1993.5	1853.4
75°	1135.3	1414.5	1692.4	1781.5	1738.6	1612.0	1503.0	1413.5	1276.8	1169.8	1143.8
77.5°	648.2	792.0	749.1	738.0	684.3	552.3	367.3	257.6	232.6	290.3	318.4
80°	616.8	559.1	457.8	412.9	379.4	258.6	135.7	95.5	83.7	85.7	92.2
82.5°	695.5	724.8	592.8	495.2	431.1	314.6	171.8	80.0	58.4	69.2	77.6
85°	521.2	733.9	727.5	616.4	505.7	362.6	203.2	61.1	35.1	48.6	63.5
87.5°	105.7	173.9	167.5	147.2	125.2	87.4	34.1	19.3	17.6	23.9	36.5
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: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0	557.0
2.5°	557.7	557.7	558.4	559.4	559.7	559.7	560.4	559.7	561.1	561.4	561.8
5°	560.8	561.8	562.4	564.1	565.1	565.8	566.8	566.2	567.5	567.8	568.5
7.5°	564.1	565.8	567.2	567.8	569.2	569.2	569.5	568.9	568.5	567.5	567.2
10°	570.2	571.2	572.9	572.2	571.6	569.2	567.2	564.1	562.4	559.4	557.7
12.5°	580.0	580.7	580.7	577.6	573.2	567.8	562.8	557.7	553.7	550.3	548.3
15°	586.7	588.1	586.4	582.0	575.6	568.2	561.4	554.7	549.2	544.9	542.2
17.5°	591.8	591.5	588.4	582.4	576.3	569.9	563.8	556.7	550.0	543.5	539.5
20°	599.6	596.2	590.8	584.4	578.0	572.6	567.8	561.1	554.0	545.2	539.2
22.5°	610.0	604.0	596.2	589.4	583.4	578.3	572.9	567.2	559.7	550.0	541.5
25°	624.9	614.4	605.6	598.9	593.5	587.8	581.7	574.3	566.8	556.7	546.5
27.5°	647.5	632.0	620.8	614.8	609.7	601.9	594.2	585.4	575.9	565.5	554.0
30°	674.9	656.3	643.4	638.0	632.0	623.2	614.8	602.6	589.4	577.0	562.8
32.5°	706.9	688.0	675.2	671.2	661.4	651.2	639.4	623.2	606.0	587.4	570.5
35°	755.5	731.6	719.8	710.3	696.8	684.7	664.7	643.4	618.8	594.2	573.2
37.5°	805.5	781.2	769.0	755.9	738.3	716.0	689.4	659.0	626.2	595.9	570.2
40°	872.3	846.0	830.5	810.2	781.9	747.1	707.6	666.1	626.2	588.4	557.4
42.5°	950.3	926.0	902.0	868.6	823.1	772.4	717.1	663.7	615.4	571.9	539.2
45°	1058.3	1016.8	978.7	925.0	858.5	787.3	718.1	652.6	596.9	548.6	512.2
47.5°	1179.9	1126.2	1058.7	974.6	883.8	793.0	708.3	631.6	567.5	515.2	475.3
50°	1320.0	1237.6	1134.0	1014.1	896.6	785.2	685.0	596.5	527.0	466.9	424.4
52.5°	1480.4	1354.8	1202.2	1042.1	894.7	761.6	646.5	550.3	472.6	408.8	367.0
55°	1658.3	1482.4	1267.3	1060.1	876.4	715.7	586.1	485.1	405.1	342.3	305.5
57.5°	1971.9	1706.2	1391.6	1084.0	838.3	646.1	509.5	402.8	330.5	277.1	242.0
60°	2554.6	2097.5	1626.9	1140.4	780.8	559.1	412.9	316.0	255.5	216.7	190.7
62.5°	2915.2	2372.9	1741.7	1132.3	687.7	439.9	306.5	234.3	186.7	161.0	144.8
65°	2829.7	2264.9	1601.6	972.6	535.1	311.9	202.9	153.2	128.3	115.1	107.3
66°	2713.6	2144.1	1483.1	871.0	466.2	260.6	167.5	128.6	110.4	100.6	96.5
67.5°	2470.2	1923.3	1279.1	697.5	349.4	194.1	123.5	100.9	89.8	84.7	82.0
70°	2067.4	1549.6	904.7	411.8	189.4	105.4	79.0	70.2	67.5	65.8	64.8
72.5°	1598.5	1121.8	528.7	202.6	95.5	68.2	60.1	56.4	55.4	55.4	55.7
75°	1007.0	644.8	236.6	97.6	64.8	55.0	51.3	49.6	50.0	50.3	50.0
77.5°	334.6	222.5	98.6	69.2	56.4	50.0	46.9	46.3	46.9	47.3	47.3
80°	96.2	84.1	71.2	61.1	51.7	46.6	43.9	43.6	45.2	45.6	44.9
82.5°	73.9	69.2	64.5	59.1	49.6	43.9	42.9	43.2	44.2	43.6	40.5
85°	67.9	67.2	48.3	47.9	43.2	41.9	40.9	41.2	40.2	36.5	33.1
87.5°	38.2	35.5	27.4	27.7	32.1	33.1	27.4	29.0	27.0	23.6	21.6
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: P159518

CATALOG NUMBER: VST-E02-LED-E-U-T3-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	557.0	557.0	557.0	557.0	557.0
2.5°	562.4	562.1	562.1	563.1	561.8
5°	568.9	568.5	568.5	569.5	568.5
7.5°	565.8	564.8	564.1	563.8	563.8
10°	555.7	554.7	552.7	552.0	551.3
12.5°	545.2	544.2	541.9	541.9	541.1
15°	538.8	537.5	535.7	534.8	534.1
17.5°	535.4	533.4	531.4	530.3	529.7
20°	534.1	531.4	529.0	527.3	527.3
22.5°	534.4	531.1	528.4	526.3	525.7
25°	537.8	532.7	529.4	527.3	526.7
27.5°	542.5	536.5	532.1	529.4	528.4
30°	548.9	540.5	534.4	531.1	529.7
32.5°	553.3	541.5	533.8	529.0	527.3
35°	553.0	537.8	528.4	522.2	520.3
37.5°	546.9	529.0	516.5	509.1	505.7
40°	533.4	512.8	499.6	492.5	488.5
42.5°	513.8	491.5	479.7	472.0	467.6
45°	483.1	461.2	446.6	440.6	434.8
47.5°	440.6	418.3	405.8	397.0	393.3
50°	390.6	368.3	355.1	348.1	344.7
52.5°	335.9	314.6	305.2	298.4	293.7
55°	279.2	259.6	255.5	248.2	243.7
57.5°	225.8	214.4	210.7	203.2	199.5
60°	176.6	172.9	168.8	164.1	162.1
62.5°	136.7	133.4	132.4	129.3	128.9
65°	104.3	104.6	104.0	103.3	102.6
66°	94.9	94.5	94.9	94.2	93.8
67.5°	80.7	82.0	83.0	82.7	82.7
70°	65.5	66.5	67.9	67.5	67.5
72.5°	56.0	57.7	58.4	58.1	58.1
75°	50.6	52.3	52.3	51.7	51.3
77.5°	47.3	47.9	47.3	46.6	45.9
80°	43.9	43.2	42.2	41.2	40.5
82.5°	38.2	36.5	35.5	33.8	33.8
85°	30.7	29.4	27.0	25.3	23.6
87.5°	19.9	19.3	17.6	13.1	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)