

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: P157980

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157980
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
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-RW
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6230.8 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

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

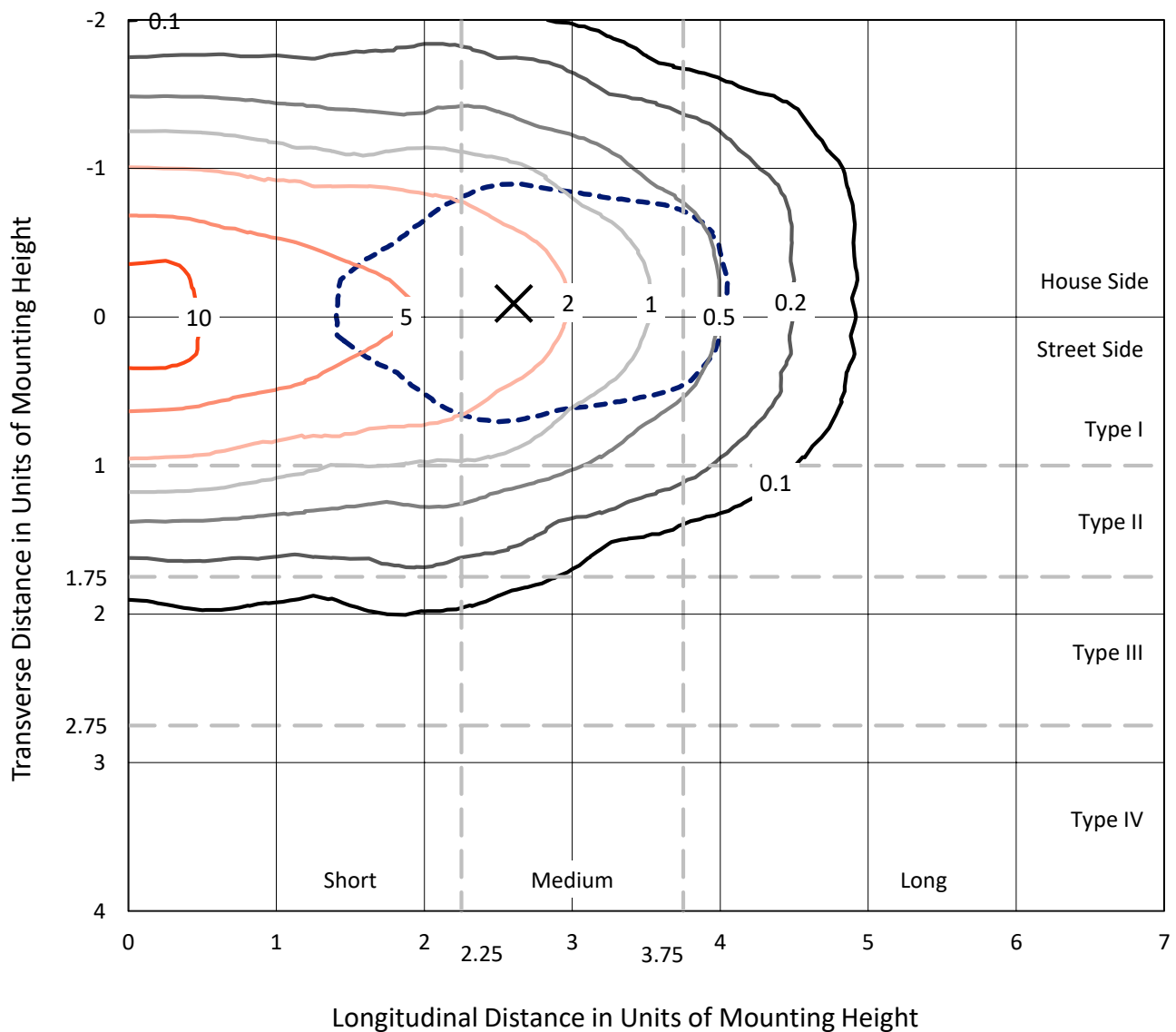


REPORT NUMBER: P157980

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

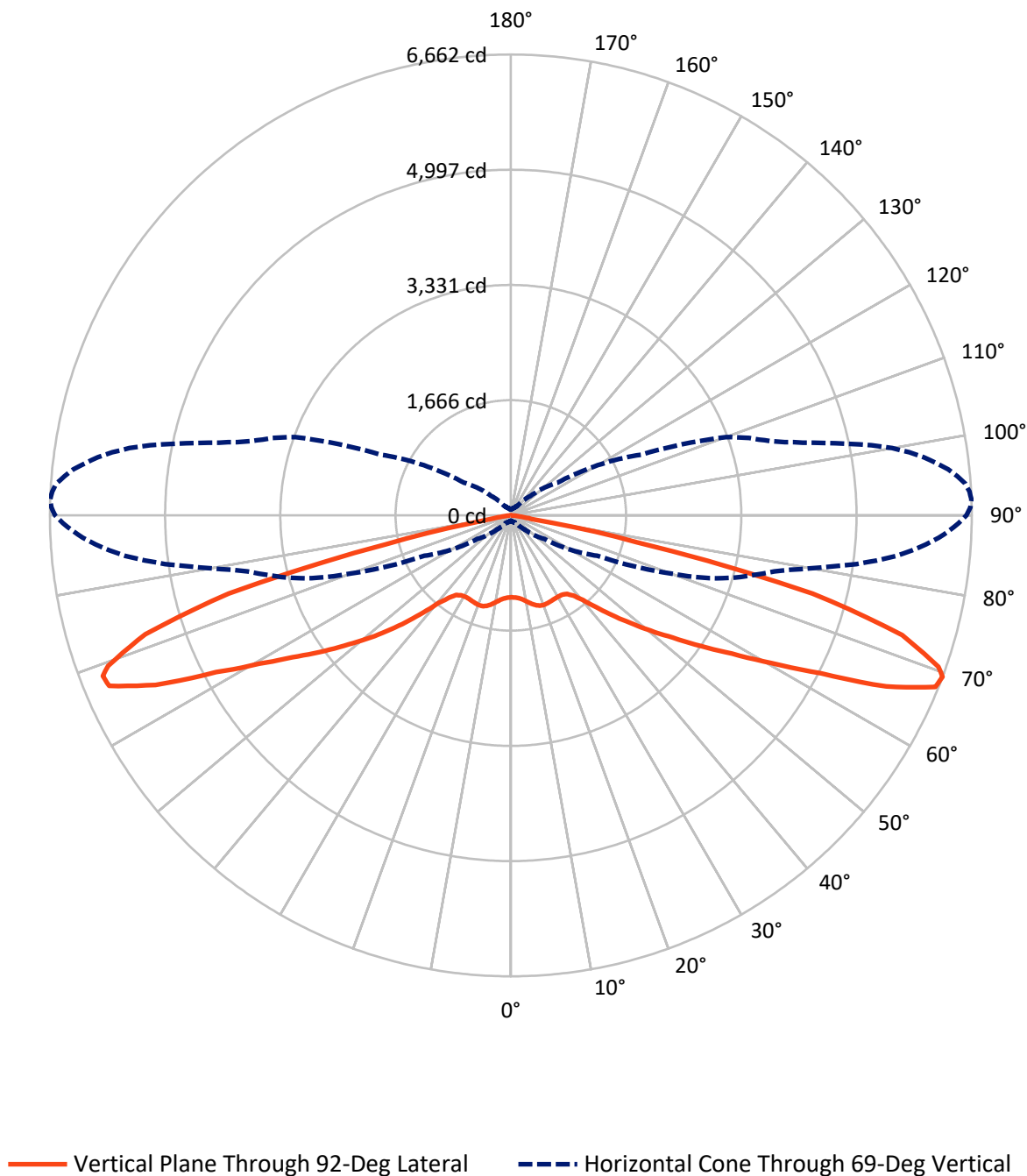


Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
 Type I - Medium - Full Cutoff

REPORT NUMBER: P157980

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

Luminous Intensity Polar Plot



REPORT NUMBER: P157980

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3304.5	0.0	3304.5
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	2926.3	0.0	2926.3
	% Fixture	47.0	0.0	47.0
Total	Lumens	6230.8	0.0	6230.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.8	1.9
10°-20°	365.9	5.9
20°-30°	593.6	9.5
30°-40°	739.8	11.9
40°-50°	921.1	14.8
50°-60°	1135.9	18.2
60°-70°	1410.7	22.6
70°-80°	866.8	13.9
80°-90°	81.2	1.3
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°	6230.8	100.0
0°-180°	6230.8	100.0

Coefficient of Utilization



REPORT NUMBER: P157980

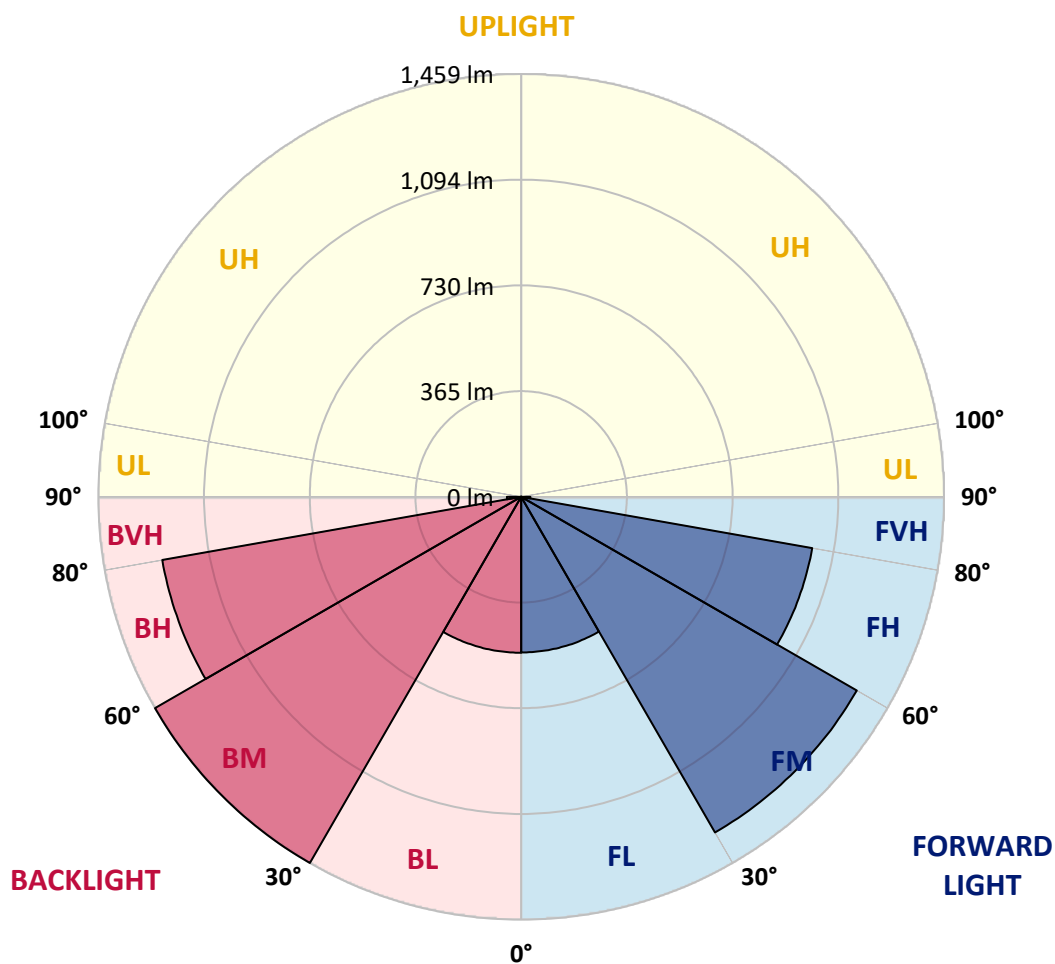
CATALOG NUMBER: VST-E02-LED-E-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	537.1	8.6			
FM	(30°-60°)	1337.5	21.5			
FH	(60°-80°)	1019.9	16.4			G1/1800
FVH	(80°-90°)	31.8	0.5			G1/100
BL	(0°-30°)	538.2	8.6	B2/1000		
BM	(30°-60°)	1459.2	23.4	B2/2500		
BH	(60°-80°)	1257.7	20.2	B3/2500		G3/2500
BVH	(80°-90°)	49.4	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Medium





REPORT NUMBER: P157980

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6
2.5°	1202.4	1199.2	1202.0	1202.4	1202.0	1202.0	1198.4	1197.6	1192.8	1194.0	1193.6
5°	1218.8	1217.6	1219.6	1220.4	1221.2	1219.6	1216.8	1215.6	1212.4	1211.2	1210.8
7.5°	1234.0	1232.0	1235.2	1238.0	1240.0	1240.4	1240.8	1238.8	1238.8	1237.2	1237.2
10°	1246.8	1245.2	1250.4	1254.0	1260.4	1264.0	1268.0	1270.8	1272.4	1272.8	1272.4
12.5°	1252.4	1251.2	1259.6	1270.4	1282.4	1290.8	1300.8	1308.0	1310.0	1309.6	1311.6
15°	1242.8	1243.6	1256.4	1277.6	1303.2	1324.4	1338.4	1344.4	1346.0	1346.8	1347.2
17.5°	1216.8	1218.4	1236.8	1271.2	1316.0	1354.4	1375.2	1375.2	1372.0	1372.0	1371.6
20°	1175.2	1176.8	1200.8	1250.4	1316.4	1375.2	1404.8	1398.8	1386.8	1384.4	1382.0
22.5°	1117.6	1124.0	1150.4	1208.0	1299.2	1381.2	1423.2	1414.4	1395.6	1390.4	1386.8
25°	1052.4	1051.6	1083.2	1148.0	1257.6	1366.8	1428.4	1426.8	1406.8	1401.2	1394.8
27.5°	978.0	980.4	1009.6	1075.2	1194.0	1325.2	1419.6	1440.8	1424.4	1418.8	1412.8
30°	901.6	904.0	931.6	1008.0	1121.6	1265.6	1401.6	1454.4	1448.0	1443.6	1439.6
32.5°	824.8	825.6	858.4	940.4	1060.4	1194.4	1374.4	1466.8	1475.6	1473.6	1472.0
35°	752.8	753.6	789.2	872.4	1000.0	1133.6	1341.6	1484.8	1513.2	1515.6	1517.2
37.5°	682.8	684.0	720.4	807.6	940.4	1087.6	1305.2	1512.4	1566.0	1574.8	1576.4
40°	613.2	614.4	649.2	741.6	880.0	1047.2	1277.2	1551.2	1637.2	1649.2	1661.6
42.5°	546.8	551.2	580.8	669.2	812.8	997.2	1265.2	1598.4	1721.6	1740.4	1754.4
45°	484.8	485.2	518.8	601.6	733.2	929.6	1257.2	1652.0	1816.0	1844.4	1863.6
47.5°	418.4	423.2	458.4	538.8	658.8	846.0	1231.6	1714.8	1918.8	1952.0	1990.8
50°	354.0	360.8	394.8	474.4	590.8	759.6	1162.8	1788.4	2034.4	2077.6	2122.4
52.5°	292.0	291.6	327.6	410.4	522.4	686.4	1051.2	1865.6	2168.0	2214.4	2262.8
55°	220.8	220.8	256.4	332.0	448.4	621.2	931.6	1913.6	2292.0	2348.0	2400.8
57.5°	151.6	155.6	189.2	254.4	371.2	561.6	840.0	1886.0	2386.8	2456.4	2519.2
60°	112.4	116.4	141.2	182.8	290.4	491.2	771.2	1756.0	2444.0	2536.4	2618.0
62.5°	97.2	100.0	123.6	146.4	209.2	416.4	710.4	1590.8	2526.4	2652.8	2766.4
65°	86.8	89.6	113.2	126.4	163.6	334.8	676.4	1496.4	2624.8	2818.0	2982.8
67.5°	80.4	83.6	103.6	113.2	142.8	302.8	650.0	1474.4	2624.0	2858.4	3068.8
69°	77.2	79.6	96.0	106.4	138.0	293.2	592.8	1378.8	2450.8	2702.4	2913.6
70°	75.2	77.6	91.6	102.0	136.4	276.0	540.0	1252.4	2253.6	2506.8	2721.2
72.5°	68.8	71.2	81.6	91.2	113.6	184.4	376.4	801.6	1610.4	1791.2	2036.4
75°	60.8	63.6	71.6	79.6	86.0	106.8	217.2	416.0	920.8	1058.0	1276.4
77.5°	49.6	52.4	60.8	73.6	72.8	81.2	141.2	255.6	431.2	534.8	615.6
80°	40.8	42.8	50.0	74.4	59.6	68.0	114.4	209.6	303.6	335.6	354.8
82.5°	27.2	30.0	38.8	58.4	45.6	48.4	85.6	196.0	256.8	281.6	304.8
85°	12.8	14.0	23.6	31.2	27.6	26.0	48.8	138.4	191.2	202.8	211.6
87.5°	0.0	0.0	1.2	2.4	3.6	3.6	8.8	29.2	53.6	64.8	64.0
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: P157980

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

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6
2.5°	1192.0	1192.4	1192.0	1192.0	1191.6	1190.8	1190.8	1190.0	1190.4	1190.0	1190.8
5°	1210.4	1210.4	1209.2	1208.4	1209.6	1208.4	1208.8	1206.8	1206.8	1205.6	1204.0
7.5°	1236.8	1236.8	1237.2	1234.8	1236.4	1236.8	1235.6	1234.8	1234.0	1232.0	1232.4
10°	1272.0	1272.0	1273.2	1270.0	1271.6	1272.4	1272.8	1272.8	1272.0	1268.4	1268.8
12.5°	1311.2	1310.4	1310.8	1309.2	1310.8	1311.6	1312.4	1311.6	1311.6	1310.8	1310.4
15°	1346.8	1346.4	1347.2	1346.0	1346.4	1347.2	1349.6	1349.2	1348.8	1346.4	1346.4
17.5°	1371.2	1370.0	1369.2	1368.8	1368.8	1368.4	1368.8	1368.8	1367.6	1367.2	1367.2
20°	1380.4	1377.2	1375.2	1374.0	1372.4	1371.6	1370.8	1371.2	1370.4	1369.2	1369.6
22.5°	1382.0	1377.6	1373.6	1370.0	1366.8	1364.8	1362.8	1362.0	1360.0	1358.8	1358.8
25°	1389.6	1382.8	1376.4	1370.4	1365.6	1361.2	1356.8	1353.6	1351.2	1348.4	1347.6
27.5°	1406.4	1399.2	1391.6	1384.0	1377.6	1368.8	1362.8	1356.4	1350.8	1346.4	1343.2
30°	1432.4	1425.2	1417.6	1408.8	1400.4	1391.2	1381.2	1373.6	1365.6	1356.8	1352.0
32.5°	1466.8	1462.0	1454.4	1446.0	1438.4	1428.8	1416.8	1405.2	1397.6	1387.2	1379.6
35°	1516.0	1510.4	1508.0	1504.4	1496.8	1490.8	1477.6	1466.8	1459.6	1445.2	1439.6
37.5°	1583.2	1582.8	1584.8	1583.6	1584.8	1577.2	1571.2	1570.8	1560.4	1546.4	1532.8
40°	1674.8	1679.6	1690.4	1698.0	1705.2	1706.0	1714.4	1705.6	1706.8	1704.8	1690.8
42.5°	1779.2	1795.6	1808.4	1830.8	1848.0	1864.0	1874.8	1889.6	1900.8	1910.8	1913.2
45°	1895.6	1920.0	1949.6	1969.6	2003.2	2030.0	2066.8	2095.2	2124.8	2154.0	2164.4
47.5°	2022.0	2052.4	2085.2	2122.4	2164.8	2206.8	2263.6	2307.2	2354.8	2394.4	2429.6
50°	2161.6	2193.2	2237.2	2280.0	2338.4	2386.8	2461.2	2518.4	2595.2	2648.0	2693.6
52.5°	2307.2	2346.8	2396.0	2443.2	2502.8	2564.8	2647.6	2732.0	2824.4	2904.4	2970.8
55°	2449.6	2498.4	2545.6	2600.8	2666.8	2738.8	2832.4	2943.6	3058.8	3150.4	3238.4
57.5°	2576.4	2632.8	2688.4	2744.4	2812.0	2895.6	3000.8	3120.8	3252.8	3374.8	3495.6
60°	2694.0	2761.6	2829.6	2899.6	2977.2	3080.4	3206.8	3354.4	3525.2	3692.0	3850.0
62.5°	2880.0	2968.8	3053.2	3143.6	3237.2	3358.4	3507.6	3701.2	3897.2	4105.6	4267.6
65°	3132.0	3256.8	3367.2	3484.4	3605.6	3767.6	3946.0	4177.6	4458.4	4672.0	4932.0
67.5°	3257.2	3421.6	3563.6	3694.0	3844.0	4007.6	4219.6	4493.6	4793.2	5102.8	5392.8
69°	3110.0	3279.6	3436.8	3582.8	3734.4	3893.2	4114.8	4396.0	4712.8	5047.6	5330.8
70°	2919.2	3088.8	3256.4	3422.8	3561.2	3716.0	3938.4	4228.4	4544.8	4892.8	5173.6
72.5°	2236.4	2440.4	2592.0	2748.0	2908.4	3039.6	3296.4	3540.8	3870.4	4223.6	4532.8
75°	1430.8	1618.4	1784.0	1916.8	2073.6	2230.8	2420.4	2692.0	2898.4	3188.4	3439.2
77.5°	735.2	790.8	950.4	998.0	1106.8	1192.4	1296.8	1364.8	1532.8	1568.4	1716.4
80°	348.4	314.0	295.6	278.8	283.6	281.6	273.2	262.0	276.0	270.0	267.6
82.5°	303.6	270.8	216.0	183.6	158.8	134.8	116.0	106.4	107.6	110.8	112.0
85°	212.8	200.0	156.0	118.4	92.4	71.6	57.6	55.2	56.8	61.2	59.6
87.5°	61.6	64.4	56.8	39.6	27.6	20.0	15.6	17.6	16.8	16.4	17.2
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: P157980

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

CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6
2.5°	1190.8	1190.4	1189.2	1188.0	1188.0	1187.2	1188.0	1188.4	1188.0	1188.0	1187.2
5°	1204.4	1204.8	1206.0	1203.6	1203.2	1203.6	1202.0	1201.6	1200.4	1201.6	1200.0
7.5°	1230.4	1231.6	1231.6	1230.0	1229.6	1230.8	1228.4	1227.6	1226.4	1226.0	1225.6
10°	1269.2	1270.4	1268.4	1267.2	1266.0	1267.6	1265.6	1265.6	1264.4	1263.2	1262.8
12.5°	1312.4	1311.6	1310.8	1311.6	1310.4	1310.4	1309.2	1308.4	1308.0	1307.6	1306.8
15°	1346.0	1348.8	1348.8	1349.6	1348.8	1348.8	1347.2	1347.6	1346.8	1346.4	1346.8
17.5°	1367.6	1368.4	1370.4	1371.6	1371.6	1372.0	1371.2	1372.0	1371.2	1371.2	1372.8
20°	1370.4	1371.2	1373.2	1375.2	1376.4	1377.2	1377.2	1378.4	1379.2	1380.0	1382.0
22.5°	1359.2	1360.4	1362.8	1366.4	1368.4	1369.2	1370.8	1372.8	1374.8	1376.4	1379.2
25°	1347.6	1348.0	1350.4	1354.0	1356.4	1358.4	1361.2	1363.6	1366.4	1369.6	1372.8
27.5°	1341.2	1340.8	1342.8	1346.4	1348.4	1351.2	1353.6	1357.2	1360.4	1364.4	1367.2
30°	1346.8	1343.6	1344.0	1345.6	1347.2	1349.2	1352.0	1355.2	1358.8	1362.4	1365.6
32.5°	1371.6	1364.4	1359.6	1358.4	1358.8	1359.2	1360.8	1362.8	1365.6	1368.4	1369.6
35°	1425.2	1412.8	1406.4	1401.2	1396.8	1393.2	1394.0	1393.6	1393.6	1396.0	1393.2
37.5°	1527.2	1511.6	1504.8	1495.6	1490.4	1477.2	1473.6	1472.8	1467.6	1467.6	1461.6
40°	1687.2	1678.0	1672.8	1664.4	1639.2	1642.4	1624.4	1624.8	1610.0	1611.6	1601.2
42.5°	1914.8	1916.0	1909.6	1904.0	1884.4	1875.6	1858.8	1834.8	1816.0	1815.6	1794.8
45°	2178.0	2192.4	2172.0	2179.2	2162.0	2138.4	2118.8	2088.0	2058.8	2049.6	2028.4
47.5°	2453.2	2476.8	2461.2	2464.0	2455.6	2422.0	2395.6	2357.6	2319.6	2294.0	2281.2
50°	2747.2	2762.8	2762.4	2754.8	2750.8	2718.0	2675.6	2646.8	2618.8	2584.4	2573.2
52.5°	3013.6	3050.0	3074.4	3068.8	3057.2	3037.6	3000.0	2975.2	2934.0	2929.2	2934.0
55°	3298.8	3346.0	3370.8	3400.8	3401.2	3397.6	3382.0	3372.8	3334.4	3338.8	3333.2
57.5°	3568.8	3638.0	3676.0	3740.0	3762.0	3791.2	3780.4	3792.4	3769.2	3784.4	3780.0
60°	3934.8	4030.8	4094.0	4181.6	4222.4	4295.6	4310.0	4318.8	4331.6	4362.8	4345.2
62.5°	4395.2	4536.0	4667.2	4786.4	4825.6	4935.6	4953.6	5022.4	5026.0	5047.2	5008.4
65°	5148.8	5320.4	5464.8	5607.6	5690.0	5818.8	5870.8	6004.4	5963.6	5980.8	5898.0
67.5°	5642.4	5842.0	6035.6	6170.8	6307.6	6439.2	6534.0	6620.4	6619.6	6602.8	6529.2
69°	5598.8	5821.2	6012.0	6193.2	6337.2	6472.4	6586.4	6642.4	6662.0	6637.6	6585.2
70°	5448.0	5676.4	5910.0	6059.2	6216.0	6364.4	6482.0	6543.2	6556.8	6539.6	6494.4
72.5°	4751.2	4970.4	5228.0	5363.6	5553.2	5660.4	5822.4	5901.6	5915.6	5893.6	5864.0
75°	3708.0	3747.6	4010.0	4096.4	4234.0	4357.6	4458.4	4432.8	4504.4	4490.4	4479.2
77.5°	1746.8	1641.2	1811.2	1890.4	1848.8	1738.0	1899.2	1782.8	1860.0	1960.4	1934.8
80°	288.0	287.2	294.8	311.6	291.6	309.6	309.2	300.4	301.2	322.8	311.6
82.5°	110.8	113.2	114.4	117.6	117.6	118.0	120.0	122.4	120.4	124.4	123.6
85°	60.0	64.0	60.4	57.6	59.6	60.8	62.4	64.4	62.4	68.4	65.2
87.5°	15.6	16.4	14.4	14.4	14.0	12.8	12.8	13.6	14.8	17.6	19.2
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: P157980

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

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6
2.5°	1185.6	1186.0	1186.4	1185.2	1184.4	1184.4	1184.0	1183.2	1182.8	1182.8	1182.8
5°	1199.2	1200.0	1198.0	1197.6	1196.8	1196.0	1196.0	1195.2	1195.6	1195.6	1193.6
7.5°	1226.4	1225.2	1222.8	1221.2	1222.8	1220.0	1218.8	1219.6	1218.8	1219.2	1218.4
10°	1262.8	1262.8	1260.0	1261.6	1259.6	1256.4	1257.6	1256.4	1255.6	1252.8	1254.4
12.5°	1308.0	1306.8	1305.2	1301.6	1300.4	1300.0	1296.4	1296.8	1295.6	1294.8	1293.6
15°	1347.6	1347.2	1343.6	1341.6	1341.2	1339.6	1338.0	1337.2	1335.2	1334.8	1334.0
17.5°	1374.0	1372.8	1371.2	1369.2	1369.2	1366.8	1366.0	1364.0	1363.6	1362.4	1361.2
20°	1382.8	1383.2	1381.6	1380.0	1379.2	1377.6	1376.4	1374.8	1374.0	1372.4	1371.2
22.5°	1380.8	1380.8	1379.2	1378.8	1377.2	1374.8	1373.2	1371.2	1369.2	1367.2	1364.8
25°	1374.4	1374.0	1372.8	1370.8	1368.8	1365.2	1362.0	1358.8	1356.0	1353.6	1350.0
27.5°	1368.8	1368.0	1365.6	1362.8	1358.8	1354.8	1348.8	1344.4	1340.8	1337.6	1333.6
30°	1366.8	1364.0	1360.4	1356.0	1351.2	1345.2	1338.8	1333.2	1329.2	1326.0	1324.4
32.5°	1369.2	1365.6	1360.0	1354.4	1348.4	1341.2	1334.8	1330.0	1326.4	1325.6	1325.6
35°	1391.2	1385.2	1377.6	1369.6	1362.0	1356.0	1351.6	1351.2	1348.8	1351.6	1356.0
37.5°	1455.6	1450.4	1438.8	1428.4	1423.2	1420.4	1416.4	1417.2	1411.6	1420.4	1427.6
40°	1592.4	1586.0	1572.4	1564.0	1553.6	1543.6	1551.6	1549.2	1553.2	1551.6	1559.2
42.5°	1792.0	1785.6	1764.0	1760.8	1756.4	1752.4	1752.4	1749.2	1747.6	1753.2	1746.8
45°	2034.8	2022.0	2014.0	2023.6	2010.4	2014.4	2028.4	2009.6	2014.0	1988.0	1964.0
47.5°	2286.8	2285.6	2283.6	2295.2	2297.2	2303.2	2310.8	2291.6	2256.8	2237.2	2188.4
50°	2576.8	2589.2	2594.0	2605.2	2610.0	2614.4	2602.4	2574.0	2515.2	2463.2	2405.6
52.5°	2929.2	2907.6	2937.2	2948.0	2943.2	2925.6	2882.4	2847.6	2766.4	2691.6	2602.4
55°	3339.6	3344.8	3324.0	3315.6	3299.2	3250.4	3190.8	3112.4	3009.6	2912.0	2799.2
57.5°	3757.6	3755.6	3723.2	3677.6	3622.0	3563.2	3474.4	3362.0	3242.0	3110.8	2974.4
60°	4266.0	4264.0	4198.4	4120.4	4041.2	3946.4	3807.2	3672.0	3511.2	3338.8	3176.4
62.5°	4934.0	4848.0	4783.6	4667.2	4544.8	4420.8	4232.4	4052.8	3838.0	3620.4	3430.8
65°	5790.0	5648.4	5575.2	5406.4	5216.8	5023.2	4831.6	4595.6	4306.4	4043.2	3811.6
67.5°	6423.2	6293.6	6159.6	5991.2	5783.2	5567.2	5304.8	5007.6	4679.2	4384.0	4131.6
69°	6478.8	6357.6	6196.8	6028.0	5831.2	5596.4	5310.0	4977.2	4644.4	4345.6	4097.2
70°	6394.4	6265.6	6096.4	5920.8	5700.8	5479.2	5179.2	4832.4	4499.2	4199.6	3957.2
72.5°	5764.8	5639.2	5459.2	5249.2	5023.6	4834.0	4549.2	4187.6	3825.2	3548.4	3359.6
75°	4383.6	4356.0	4228.4	4106.0	3928.4	3716.8	3456.4	3213.2	2916.0	2623.2	2447.2
77.5°	1870.4	1934.0	2000.4	2010.0	2016.4	1951.2	1910.8	1849.6	1650.8	1560.4	1467.2
80°	345.6	308.8	329.6	332.0	345.6	352.8	379.2	449.6	457.6	474.8	496.0
82.5°	122.8	124.8	128.0	129.2	130.4	135.2	153.2	183.6	211.2	247.2	295.2
85°	69.6	70.8	73.6	76.0	77.6	82.4	92.4	110.4	137.6	178.8	242.4
87.5°	21.2	24.0	25.6	28.8	30.0	30.8	35.2	47.2	60.8	90.0	131.2
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: P157980

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

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6	1183.6
2.5°	1182.8	1182.4	1181.6	1180.8	1181.2	1180.4	1178.0	1177.2	1174.4	1172.4	1170.8
5°	1193.6	1193.2	1191.6	1192.0	1191.6	1187.6	1184.8	1180.0	1177.2	1172.8	1171.2
7.5°	1216.0	1215.6	1212.8	1214.0	1213.2	1207.2	1202.4	1194.8	1190.8	1185.2	1180.8
10°	1249.6	1249.6	1246.4	1246.8	1246.8	1238.8	1230.4	1217.6	1208.4	1199.6	1192.0
12.5°	1290.4	1288.8	1288.4	1286.4	1284.8	1276.0	1263.2	1246.0	1228.8	1214.4	1204.0
15°	1331.6	1329.2	1328.0	1325.6	1323.6	1315.6	1298.4	1277.2	1254.0	1230.8	1213.6
17.5°	1358.4	1356.8	1354.4	1353.6	1350.8	1342.8	1330.8	1309.6	1280.8	1248.4	1222.4
20°	1368.4	1365.6	1364.0	1362.4	1360.8	1355.2	1355.2	1341.6	1309.6	1264.0	1224.4
22.5°	1362.0	1360.4	1358.0	1356.8	1355.2	1356.0	1371.6	1369.6	1332.8	1267.6	1210.0
25°	1347.2	1345.2	1343.2	1343.2	1342.8	1351.2	1388.8	1394.0	1339.6	1250.0	1178.4
27.5°	1332.0	1329.2	1330.0	1330.4	1332.4	1350.4	1407.6	1400.4	1321.2	1207.6	1124.0
30°	1322.8	1322.8	1324.8	1328.0	1332.0	1363.6	1422.4	1386.0	1273.6	1143.6	1052.0
32.5°	1326.8	1330.8	1335.2	1343.2	1349.2	1392.8	1427.6	1348.8	1204.4	1064.4	976.8
35°	1362.4	1367.2	1375.6	1388.0	1395.2	1434.8	1427.6	1294.4	1124.0	996.4	899.2
37.5°	1440.0	1444.8	1454.8	1464.4	1471.6	1487.6	1421.6	1225.2	1056.8	926.0	829.6
40°	1564.8	1571.6	1578.8	1577.2	1572.4	1556.8	1409.6	1160.8	994.8	864.4	761.2
42.5°	1740.4	1734.0	1733.2	1717.6	1701.6	1634.8	1400.8	1118.8	941.6	799.6	693.2
45°	1943.2	1917.2	1890.4	1869.6	1845.2	1720.4	1398.4	1084.8	882.8	727.6	619.2
47.5°	2147.2	2105.6	2053.6	2021.2	1981.6	1811.6	1405.6	1039.2	807.2	649.2	550.0
50°	2347.2	2279.2	2214.8	2176.0	2131.2	1916.4	1417.2	962.4	716.8	578.0	486.8
52.5°	2532.4	2444.8	2378.8	2333.2	2278.4	2038.4	1406.8	861.6	638.4	509.6	426.8
55°	2708.4	2611.6	2543.2	2495.2	2430.8	2160.8	1331.6	770.0	563.6	442.8	359.2
57.5°	2862.4	2769.6	2698.4	2633.2	2578.8	2267.2	1183.2	694.4	491.6	366.4	286.0
60°	3042.4	2938.0	2853.6	2784.0	2720.0	2322.0	1016.8	627.2	414.8	283.6	206.8
62.5°	3285.2	3165.2	3067.6	2988.0	2904.4	2334.0	903.2	560.0	329.2	205.2	150.4
65°	3645.2	3497.2	3375.2	3265.6	3152.4	2284.4	847.2	486.8	244.8	152.4	126.0
67.5°	3931.2	3777.6	3636.4	3495.6	3350.8	2192.4	834.8	419.2	188.0	129.6	113.2
69°	3896.4	3750.0	3620.4	3468.0	3307.6	2076.8	822.4	393.2	171.6	120.4	107.2
70°	3762.4	3623.6	3492.0	3368.0	3171.6	1948.0	789.6	378.8	165.2	116.0	102.8
72.5°	3179.2	3018.4	2890.8	2736.4	2529.6	1447.6	598.8	306.4	151.6	106.0	92.8
75°	2318.8	2185.6	2058.4	1887.6	1686.4	837.6	372.8	175.2	111.2	96.0	84.0
77.5°	1354.0	1324.0	1201.2	1088.8	889.6	426.4	214.0	104.8	86.4	87.2	74.0
80°	509.6	542.8	555.2	516.4	477.2	294.4	155.6	85.2	75.2	86.0	62.8
82.5°	371.6	431.2	438.4	420.0	390.8	274.4	124.4	68.4	61.2	92.4	54.0
85°	310.0	343.2	348.4	329.2	319.6	232.4	86.8	48.0	44.8	66.4	40.4
87.5°	156.8	165.2	169.6	153.6	154.4	108.4	34.8	20.4	24.4	28.4	22.4
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: P157980

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

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1183.6	1183.6
2.5°	1167.2	1169.6
5°	1168.8	1168.8
7.5°	1178.0	1178.0
10°	1188.0	1188.4
12.5°	1197.2	1196.8
15°	1204.4	1203.2
17.5°	1208.8	1207.6
20°	1204.4	1202.4
22.5°	1182.0	1176.4
25°	1141.2	1134.0
27.5°	1087.2	1082.4
30°	1016.8	1009.6
32.5°	934.4	930.8
35°	855.6	851.2
37.5°	783.6	782.4
40°	722.8	716.4
42.5°	651.6	648.8
45°	579.2	577.6
47.5°	511.2	509.6
50°	448.4	445.2
52.5°	386.8	381.6
55°	318.4	314.8
57.5°	244.4	241.2
60°	172.0	168.4
62.5°	122.4	118.4
65°	102.0	98.8
67.5°	92.4	88.8
69°	88.0	84.8
70°	85.2	82.8
72.5°	79.2	77.6
75°	72.4	71.2
77.5°	63.6	61.6
80°	53.2	51.2
82.5°	44.8	42.8
85°	30.0	27.2
87.5°	13.6	12.0
90°	0.0	0.0

(END OF REPORT)