

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: P157981

Luminaire Tested: **VST-E02-LED-E-U-RW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157981
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6393.5 lumens
Efficiency: N/A
Efficacy: 122.7 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

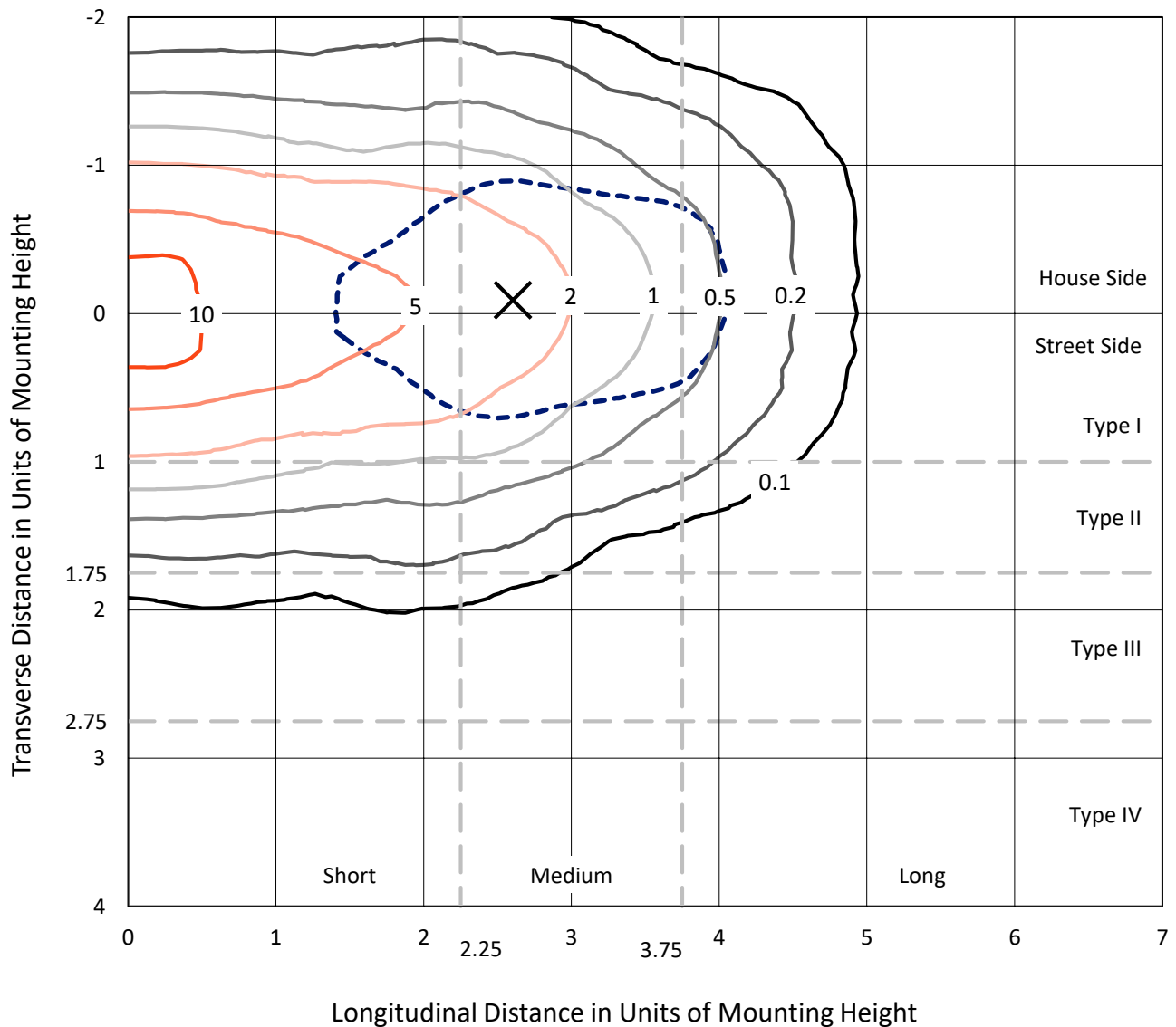
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

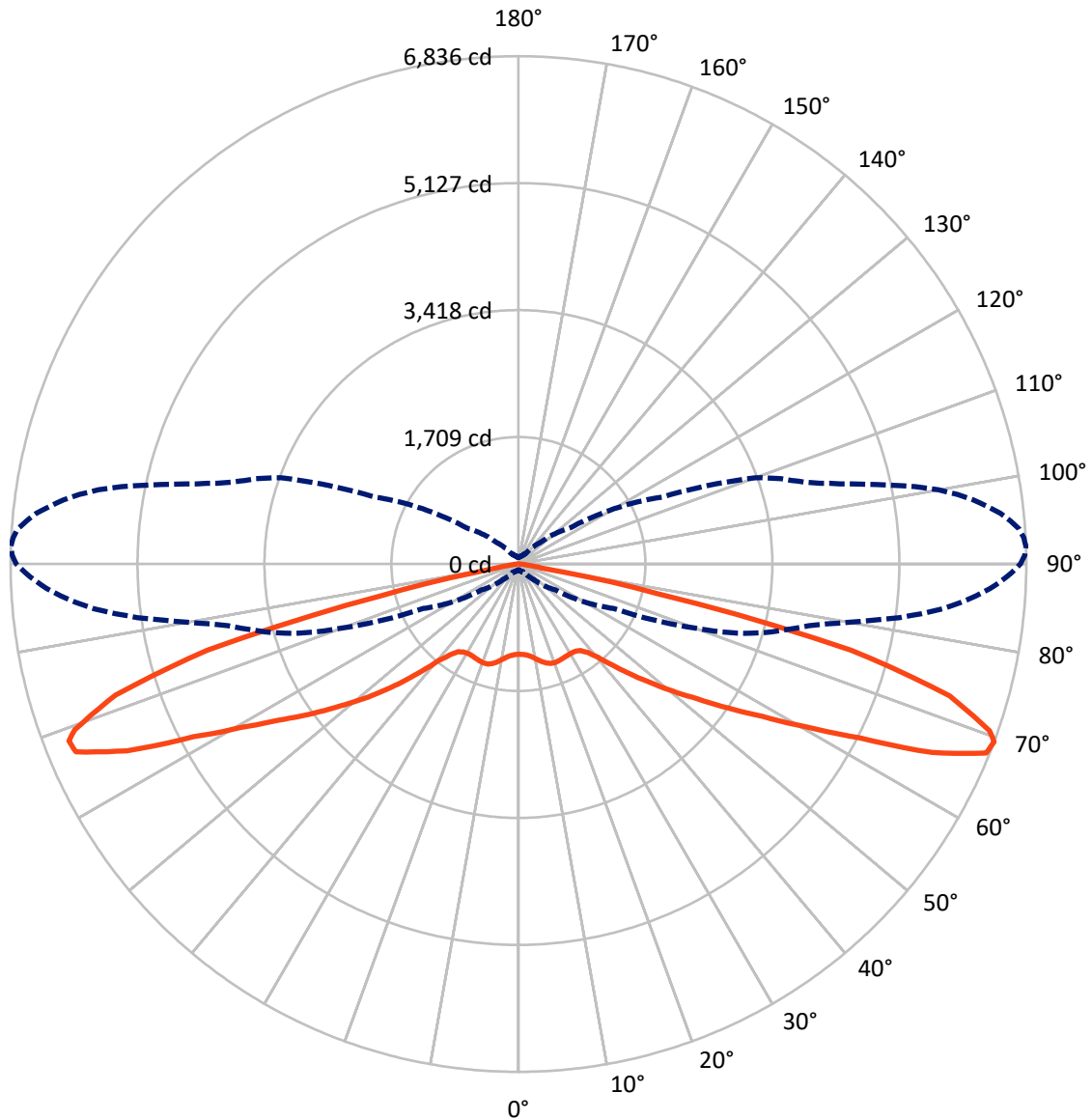
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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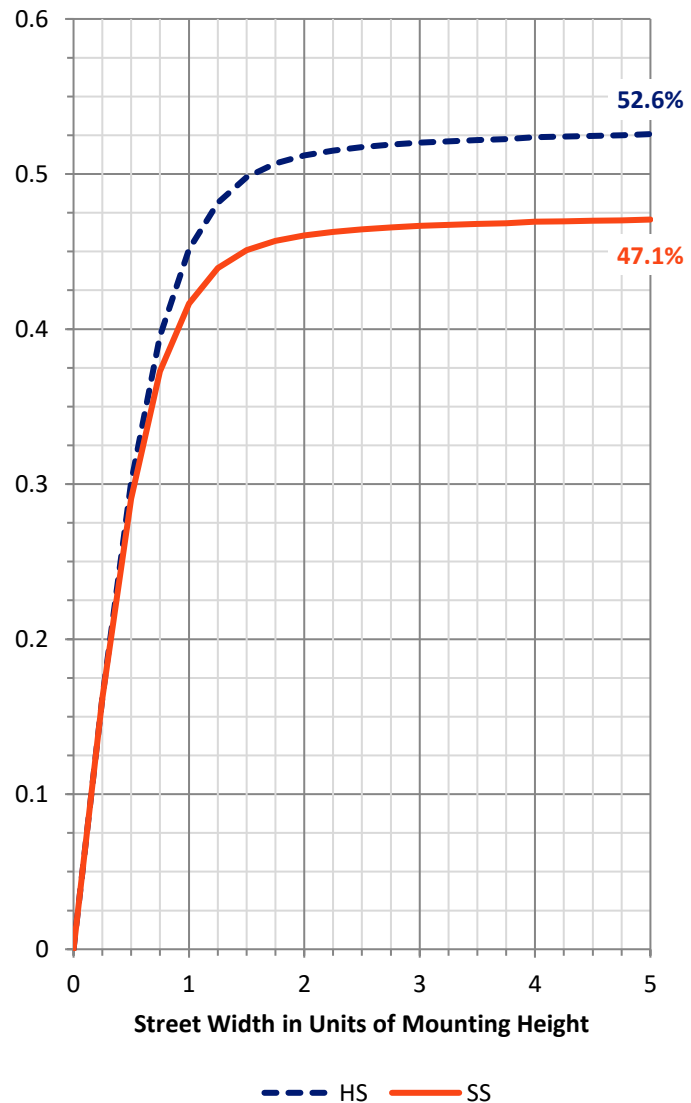
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3390.8	0.0	3390.8
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	3002.7	0.0	3002.7
	% Fixture	47.0	0.0	47.0
Total	Lumens	6393.5	0.0	6393.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	1.9
10°-20°	375.4	5.9
20°-30°	609.1	9.5
30°-40°	759.1	11.9
40°-50°	945.1	14.8
50°-60°	1165.6	18.2
60°-70°	1447.6	22.6
70°-80°	889.5	13.9
80°-90°	83.4	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°	6393.5	100.0
0°-180°	6393.5	100.0



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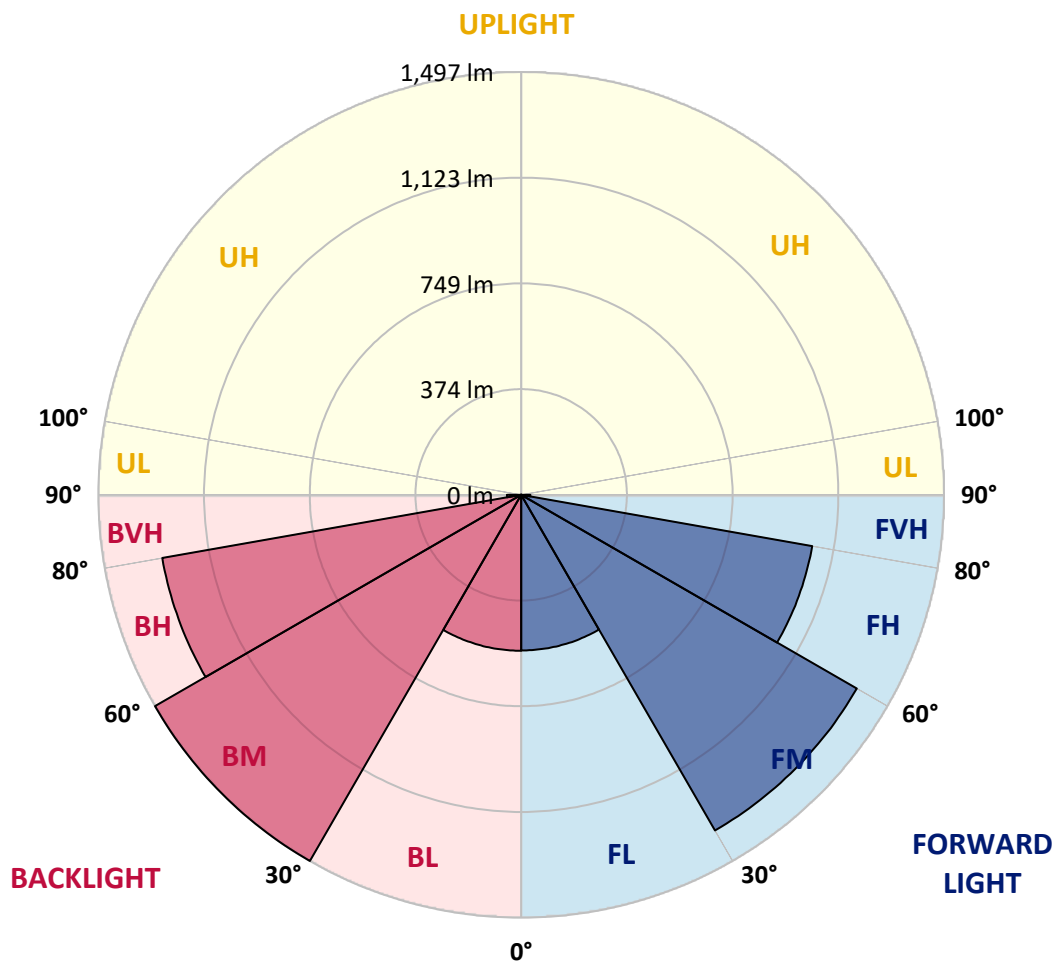
CATALOG NUMBER: VST-E02-LED-E-U-RW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	551.1	8.6			
FM	(30°-60°)	1372.4	21.5			
FH	(60°-80°)	1046.5	16.4			G1/1800
FVH	(80°-90°)	32.6	0.5			G1/100
BL	(0°-30°)	552.2	8.6	B2/1000		
BM	(30°-60°)	1497.3	23.4	B2/2500		
BH	(60°-80°)	1290.5	20.2	B3/2500		G3/2500
BVH	(80°-90°)	50.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1233.8	1230.5	1233.4	1233.8	1233.4	1233.4	1229.7	1228.9	1223.9	1225.1	1224.8
5°	1250.6	1249.4	1251.4	1252.3	1253.1	1251.4	1248.5	1247.3	1244.0	1242.8	1242.4
7.5°	1266.2	1264.1	1267.4	1270.3	1272.4	1272.8	1273.2	1271.2	1271.2	1269.5	1269.5
10°	1279.3	1277.7	1283.0	1286.8	1293.3	1297.0	1301.1	1304.0	1305.6	1306.0	1305.6
12.5°	1285.1	1283.9	1292.5	1303.6	1315.9	1324.5	1334.8	1342.1	1344.2	1343.8	1345.9
15°	1275.2	1276.1	1289.2	1310.9	1337.2	1359.0	1373.3	1379.5	1381.1	1382.0	1382.3
17.5°	1248.5	1250.2	1269.1	1304.4	1350.4	1389.8	1411.1	1411.1	1407.8	1407.8	1407.4
20°	1205.9	1207.5	1232.2	1283.0	1350.8	1411.1	1441.5	1435.3	1423.0	1420.6	1418.1
22.5°	1146.8	1153.3	1180.4	1239.5	1333.1	1417.3	1460.3	1451.3	1432.0	1426.7	1423.0
25°	1079.9	1079.0	1111.5	1178.0	1290.4	1402.5	1465.7	1464.1	1443.5	1437.8	1431.2
27.5°	1003.6	1006.0	1036.0	1103.3	1225.1	1359.8	1456.7	1478.4	1461.6	1455.8	1449.7
30°	925.1	927.6	955.9	1034.3	1150.9	1298.6	1438.2	1492.4	1485.8	1481.3	1477.2
32.5°	846.4	847.1	880.8	964.9	1088.1	1225.6	1410.3	1505.1	1514.1	1512.1	1510.4
35°	772.4	773.3	809.8	895.2	1026.1	1163.2	1376.6	1523.6	1552.7	1555.1	1556.8
37.5°	700.6	701.9	739.2	828.7	964.9	1116.0	1339.3	1551.9	1606.9	1615.9	1617.5
40°	629.2	630.4	666.1	761.0	903.0	1074.5	1310.5	1591.7	1679.9	1692.2	1705.0
42.5°	561.1	565.6	596.0	686.6	834.0	1023.2	1298.2	1640.1	1766.5	1785.8	1800.2
45°	497.5	497.9	532.3	617.3	752.3	953.9	1290.0	1695.1	1863.4	1892.5	1912.3
47.5°	429.3	434.2	470.3	552.8	676.0	868.1	1263.8	1759.6	1968.9	2003.0	2042.8
50°	363.2	370.2	405.1	486.8	606.2	779.4	1193.2	1835.1	2087.5	2131.9	2177.8
52.5°	299.6	299.2	336.2	421.1	536.0	704.3	1078.6	1914.3	2224.6	2272.2	2321.9
55°	226.6	226.6	263.1	340.7	460.1	637.4	955.9	1963.6	2351.8	2409.3	2463.5
57.5°	155.6	159.7	194.2	261.1	380.9	576.2	861.9	1935.2	2449.1	2520.5	2585.0
60°	115.3	119.5	144.9	187.6	298.0	504.0	791.3	1801.9	2507.8	2602.6	2686.3
62.5°	99.7	102.6	126.8	150.2	214.7	427.3	728.9	1632.3	2592.4	2722.1	2838.6
65°	89.0	91.9	116.2	129.7	167.9	343.6	694.1	1535.5	2693.3	2891.6	3060.7
67.5°	82.5	85.8	106.3	116.2	146.5	310.7	667.0	1512.9	2692.5	2933.0	3148.9
69°	79.2	81.7	98.5	109.2	141.6	300.8	608.3	1414.8	2514.8	2773.0	2989.7
70°	77.2	79.6	94.0	104.6	140.0	283.2	554.1	1285.1	2312.5	2572.3	2792.2
72.5°	70.6	73.1	83.8	93.6	116.6	189.2	386.2	822.5	1652.5	1838.0	2089.6
75°	62.4	65.3	73.4	81.7	88.3	109.6	222.9	426.8	944.8	1085.6	1309.7
77.5°	50.9	53.8	62.4	75.5	74.7	83.3	144.9	262.3	442.4	548.8	631.7
80°	41.9	43.9	51.3	76.3	61.1	69.8	117.4	215.1	311.5	344.3	364.1
82.5°	27.9	30.8	39.8	59.9	46.8	49.7	87.8	201.1	263.5	289.0	312.8
85°	13.1	14.3	24.2	32.0	28.3	26.7	50.1	142.0	196.2	208.1	217.1
87.5°	0.0	0.0	1.3	2.5	3.7	3.7	9.0	29.9	55.0	66.5	65.7
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1223.1	1223.5	1223.1	1223.1	1222.7	1221.9	1221.9	1221.1	1221.5	1221.1	1221.9
5°	1242.0	1242.0	1240.7	1240.0	1241.2	1240.0	1240.4	1238.3	1238.3	1237.1	1235.5
7.5°	1269.1	1269.1	1269.5	1267.0	1268.7	1269.1	1267.9	1267.0	1266.2	1264.1	1264.6
10°	1305.2	1305.2	1306.4	1303.1	1304.8	1305.6	1306.0	1306.0	1305.2	1301.5	1301.9
12.5°	1345.4	1344.6	1345.0	1343.4	1345.0	1345.9	1346.6	1345.9	1345.9	1345.0	1344.6
15°	1382.0	1381.6	1382.3	1381.1	1381.6	1382.3	1384.9	1384.4	1384.0	1381.6	1381.6
17.5°	1407.0	1405.7	1405.0	1404.5	1404.5	1404.1	1404.5	1404.5	1403.3	1402.9	1402.9
20°	1416.4	1413.2	1411.1	1409.9	1408.2	1407.4	1406.6	1407.0	1406.2	1405.0	1405.4
22.5°	1418.1	1413.5	1409.5	1405.7	1402.5	1400.4	1398.4	1397.6	1395.5	1394.3	1394.3
25°	1425.9	1418.9	1412.3	1406.2	1401.2	1396.7	1392.2	1388.9	1386.5	1383.6	1382.8
27.5°	1443.1	1435.7	1427.9	1420.1	1413.5	1404.5	1398.4	1391.8	1386.1	1381.6	1378.3
30°	1469.8	1462.4	1454.6	1445.6	1436.9	1427.5	1417.3	1409.5	1401.2	1392.2	1387.3
32.5°	1505.1	1500.2	1492.4	1483.7	1475.9	1466.1	1453.8	1441.9	1434.1	1423.4	1415.6
35°	1555.6	1549.8	1547.3	1543.7	1535.9	1529.7	1516.2	1505.1	1497.7	1482.9	1477.2
37.5°	1624.6	1624.1	1626.2	1624.9	1626.2	1618.4	1612.2	1611.8	1601.2	1586.8	1572.8
40°	1718.5	1723.4	1734.5	1742.3	1749.7	1750.6	1759.1	1750.1	1751.3	1749.3	1735.0
42.5°	1825.6	1842.5	1855.6	1878.6	1896.2	1912.7	1923.7	1938.9	1950.4	1960.7	1963.1
45°	1945.1	1970.1	2000.5	2021.0	2055.5	2083.0	2120.8	2149.9	2180.3	2210.2	2220.9
47.5°	2074.8	2106.0	2139.7	2177.8	2221.3	2264.4	2322.7	2367.4	2416.3	2456.9	2493.0
50°	2218.0	2250.5	2295.6	2339.5	2399.5	2449.1	2525.5	2584.1	2662.9	2717.1	2763.9
52.5°	2367.4	2408.0	2458.6	2507.0	2568.1	2631.8	2716.7	2803.3	2898.1	2980.2	3048.4
55°	2513.5	2563.6	2612.0	2668.7	2736.4	2810.3	2906.3	3020.5	3138.7	3232.6	3322.9
57.5°	2643.7	2701.6	2758.6	2816.0	2885.4	2971.2	3079.1	3202.3	3337.7	3462.9	3586.9
60°	2764.3	2833.7	2903.5	2975.3	3054.9	3160.8	3290.5	3442.0	3617.2	3788.4	3950.5
62.5°	2955.2	3046.3	3132.9	3225.7	3321.7	3446.1	3599.2	3797.8	3998.9	4212.8	4379.0
65°	3213.8	3341.8	3455.1	3575.3	3699.7	3866.0	4049.0	4286.6	4574.8	4793.9	5060.8
67.5°	3342.2	3510.9	3656.6	3790.4	3944.3	4112.2	4329.8	4610.9	4918.3	5236.0	5533.6
69°	3191.2	3365.2	3526.5	3676.3	3831.9	3994.9	4222.2	4510.7	4835.8	5179.4	5470.0
70°	2995.4	3169.4	3341.4	3512.2	3654.2	3813.0	4041.2	4338.8	4663.4	5020.5	5308.7
72.5°	2294.8	2504.1	2659.7	2819.8	2984.3	3119.0	3382.4	3633.2	3971.5	4333.9	4651.1
75°	1468.1	1660.6	1830.6	1966.9	2127.7	2289.1	2483.6	2762.3	2974.1	3271.6	3529.0
77.5°	754.4	811.4	975.2	1024.1	1135.7	1223.5	1330.7	1400.4	1572.8	1609.3	1761.2
80°	357.5	322.2	303.3	286.1	291.0	289.0	280.3	268.9	283.2	277.0	274.6
82.5°	311.5	277.9	221.6	188.4	163.0	138.3	119.0	109.2	110.4	113.7	114.9
85°	218.3	205.2	160.1	121.5	94.8	73.4	59.1	56.6	58.3	62.8	61.1
87.5°	63.2	66.1	58.3	40.6	28.3	20.5	16.0	18.1	17.2	16.8	17.6
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1221.9	1221.5	1220.2	1219.0	1219.0	1218.2	1219.0	1219.4	1219.0	1219.0	1218.2
5°	1235.8	1236.2	1237.5	1235.0	1234.6	1235.0	1233.4	1232.9	1231.7	1232.9	1231.3
7.5°	1262.5	1263.8	1263.8	1262.1	1261.7	1262.9	1260.5	1259.6	1258.4	1258.0	1257.6
10°	1302.4	1303.6	1301.5	1300.3	1299.1	1300.7	1298.6	1298.6	1297.4	1296.2	1295.8
12.5°	1346.6	1345.9	1345.0	1345.9	1344.6	1344.6	1343.4	1342.6	1342.1	1341.7	1340.9
15°	1381.1	1384.0	1384.0	1384.9	1384.0	1384.0	1382.3	1382.8	1382.0	1381.6	1382.0
17.5°	1403.3	1404.1	1406.2	1407.4	1407.4	1407.8	1407.0	1407.8	1407.0	1407.0	1408.6
20°	1406.2	1407.0	1409.0	1411.1	1412.3	1413.2	1413.2	1414.4	1415.2	1416.0	1418.1
22.5°	1394.7	1395.9	1398.4	1402.1	1404.1	1405.0	1406.6	1408.6	1410.7	1412.3	1415.2
25°	1382.8	1383.2	1385.6	1389.4	1391.8	1393.9	1396.7	1399.2	1402.1	1405.4	1408.6
27.5°	1376.2	1375.8	1377.8	1381.6	1383.6	1386.5	1388.9	1392.7	1395.9	1400.0	1402.9
30°	1382.0	1378.7	1379.1	1380.7	1382.3	1384.4	1387.3	1390.6	1394.3	1397.9	1401.2
32.5°	1407.4	1400.0	1395.1	1393.9	1394.3	1394.7	1396.3	1398.4	1401.2	1404.1	1405.4
35°	1462.4	1449.7	1443.1	1437.8	1433.3	1429.6	1430.4	1430.0	1430.0	1432.4	1429.6
37.5°	1567.1	1551.1	1544.1	1534.6	1529.3	1515.8	1512.1	1511.2	1505.9	1505.9	1499.8
40°	1731.2	1721.8	1716.5	1707.8	1682.0	1685.3	1666.8	1667.2	1652.0	1653.7	1643.0
42.5°	1964.8	1966.0	1959.5	1953.7	1933.6	1924.6	1907.3	1882.7	1863.4	1863.0	1841.6
45°	2234.9	2249.6	2228.7	2236.1	2218.4	2194.2	2174.1	2142.5	2112.5	2103.1	2081.3
47.5°	2517.2	2541.5	2525.5	2528.3	2519.7	2485.2	2458.1	2419.1	2380.1	2353.9	2340.8
50°	2818.9	2834.9	2834.5	2826.7	2822.6	2789.0	2745.4	2715.9	2687.2	2651.9	2640.4
52.5°	3092.3	3129.6	3154.7	3148.9	3137.0	3116.9	3078.3	3052.9	3010.6	3005.6	3010.6
55°	3384.9	3433.3	3458.8	3489.6	3490.0	3486.3	3470.3	3460.9	3421.4	3425.9	3420.2
57.5°	3662.0	3733.0	3772.0	3837.7	3860.2	3890.2	3879.1	3891.4	3867.6	3883.2	3878.7
60°	4037.5	4136.0	4200.9	4290.8	4332.6	4407.7	4422.5	4431.5	4444.7	4476.7	4458.7
62.5°	4510.0	4654.4	4789.0	4911.4	4951.6	5064.4	5082.9	5153.5	5157.2	5179.0	5139.1
65°	5283.2	5459.3	5607.5	5754.0	5838.5	5970.7	6024.1	6161.2	6119.3	6136.9	6052.0
67.5°	5789.7	5994.5	6193.1	6331.9	6472.3	6607.3	6704.6	6793.2	6792.4	6775.1	6699.7
69°	5744.9	5973.2	6169.0	6354.9	6502.6	6641.3	6758.3	6815.8	6835.9	6810.9	6757.1
70°	5590.2	5824.6	6064.3	6217.4	6378.3	6530.5	6651.2	6714.0	6728.0	6710.3	6664.0
72.5°	4875.2	5100.2	5364.5	5503.6	5698.1	5808.2	5974.4	6055.7	6070.0	6047.5	6017.1
75°	3804.8	3845.5	4114.7	4203.4	4344.5	4471.4	4574.8	4548.5	4622.0	4607.6	4596.1
77.5°	1792.4	1684.0	1858.5	1939.7	1897.1	1783.4	1948.8	1829.3	1908.5	2011.6	1985.3
80°	295.5	294.7	302.5	319.7	299.2	317.7	317.3	308.2	309.1	331.2	319.7
82.5°	113.7	116.2	117.4	120.7	120.7	121.1	123.1	125.6	123.5	127.6	126.8
85°	61.6	65.7	62.0	59.1	61.1	62.4	64.0	66.1	64.0	70.2	66.9
87.5°	16.0	16.8	14.8	14.8	14.3	13.1	13.1	14.0	15.2	18.1	19.7
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):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1216.6	1217.0	1217.4	1216.1	1215.3	1215.3	1214.9	1214.1	1213.7	1213.7	1213.7
5°	1230.5	1231.3	1229.3	1228.9	1228.0	1227.2	1227.2	1226.4	1226.8	1226.8	1224.8
7.5°	1258.4	1257.2	1254.7	1253.1	1254.7	1251.8	1250.6	1251.4	1250.6	1251.0	1250.2
10°	1295.8	1295.8	1292.9	1294.6	1292.5	1289.2	1290.4	1289.2	1288.4	1285.5	1287.1
12.5°	1342.1	1340.9	1339.3	1335.6	1334.3	1333.9	1330.3	1330.7	1329.4	1328.6	1327.4
15°	1382.8	1382.3	1378.7	1376.6	1376.2	1374.6	1372.9	1372.1	1370.0	1369.6	1368.8
17.5°	1409.9	1408.6	1407.0	1405.0	1405.0	1402.5	1401.7	1399.6	1399.2	1397.9	1396.7
20°	1418.9	1419.3	1417.7	1416.0	1415.2	1413.5	1412.3	1410.7	1409.9	1408.2	1407.0
22.5°	1416.8	1416.8	1415.2	1414.8	1413.2	1410.7	1409.0	1407.0	1405.0	1402.9	1400.4
25°	1410.3	1409.9	1408.6	1406.6	1404.5	1400.8	1397.6	1394.3	1391.4	1388.9	1385.2
27.5°	1404.5	1403.7	1401.2	1398.4	1394.3	1390.1	1384.0	1379.5	1375.8	1372.5	1368.4
30°	1402.5	1399.6	1395.9	1391.4	1386.5	1380.3	1373.8	1368.0	1363.9	1360.6	1359.0
32.5°	1405.0	1401.2	1395.5	1389.8	1383.6	1376.2	1369.6	1364.7	1361.0	1360.2	1360.2
35°	1427.5	1421.3	1413.5	1405.4	1397.6	1391.4	1386.9	1386.5	1384.0	1386.9	1391.4
37.5°	1493.6	1488.2	1476.4	1465.7	1460.3	1457.5	1453.4	1454.2	1448.5	1457.5	1464.8
40°	1634.0	1627.4	1613.5	1604.8	1594.1	1583.9	1592.1	1589.6	1593.7	1592.1	1599.9
42.5°	1838.8	1832.2	1810.1	1806.8	1802.3	1798.1	1798.1	1794.8	1793.2	1799.0	1792.4
45°	2087.9	2074.8	2066.6	2076.4	2062.9	2067.0	2081.3	2062.1	2066.6	2039.9	2015.3
47.5°	2346.5	2345.3	2343.2	2355.1	2357.2	2363.3	2371.1	2351.4	2315.7	2295.6	2245.5
50°	2644.1	2656.8	2661.7	2673.2	2678.2	2682.7	2670.4	2641.2	2580.8	2527.5	2468.4
52.5°	3005.6	2983.5	3013.9	3025.0	3020.0	3002.0	2957.6	2921.9	2838.6	2761.9	2670.4
55°	3426.8	3432.1	3410.8	3402.2	3385.3	3335.3	3274.1	3193.7	3088.1	2988.0	2872.3
57.5°	3855.7	3853.6	3820.4	3773.6	3716.6	3656.2	3565.1	3449.8	3326.6	3192.0	3052.0
60°	4377.4	4375.3	4308.0	4228.0	4146.7	4049.4	3906.6	3767.9	3602.9	3425.9	3259.3
62.5°	5062.8	4974.5	4908.5	4789.0	4663.4	4536.2	4342.9	4158.6	3938.2	3714.9	3520.4
65°	5941.1	5795.9	5720.8	5547.5	5353.0	5154.4	4957.7	4715.6	4418.8	4148.8	3911.1
67.5°	6590.9	6457.9	6320.4	6147.6	5934.2	5712.5	5443.3	5138.3	4801.4	4498.4	4239.5
69°	6647.9	6523.6	6358.6	6185.3	5983.4	5742.5	5448.6	5107.1	4765.6	4459.0	4204.1
70°	6561.3	6429.2	6255.5	6075.4	5849.6	5622.2	5314.4	4958.6	4616.6	4309.3	4060.5
72.5°	5915.3	5786.4	5601.7	5386.3	5154.7	4960.2	4667.9	4296.9	3925.1	3641.0	3447.3
75°	4498.0	4469.7	4338.8	4213.2	4031.0	3813.8	3546.7	3297.1	2992.1	2691.7	2511.1
77.5°	1919.2	1984.5	2052.6	2062.5	2069.0	2002.1	1960.7	1897.9	1693.9	1601.2	1505.5
80°	354.6	316.9	338.2	340.7	354.6	362.0	389.1	461.3	469.6	487.2	508.9
82.5°	126.0	128.0	131.3	132.6	133.8	138.7	157.2	188.4	216.7	253.7	302.9
85°	71.4	72.7	75.5	78.0	79.6	84.5	94.8	113.3	141.2	183.5	248.7
87.5°	21.8	24.6	26.3	29.6	30.8	31.6	36.1	48.4	62.4	92.3	134.6
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-E02-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5	1214.5
2.5°	1213.7	1213.3	1212.4	1211.6	1212.1	1211.2	1208.8	1207.9	1205.0	1203.0	1201.4
5°	1224.8	1224.4	1222.7	1223.1	1222.7	1218.6	1215.7	1210.8	1207.9	1203.4	1201.8
7.5°	1247.8	1247.3	1244.5	1245.7	1244.9	1238.7	1233.8	1226.0	1221.9	1216.1	1211.6
10°	1282.2	1282.2	1279.0	1279.3	1279.3	1271.2	1262.5	1249.4	1240.0	1230.9	1223.1
12.5°	1324.1	1322.5	1322.0	1320.0	1318.3	1309.3	1296.2	1278.5	1260.9	1246.1	1235.5
15°	1366.4	1363.9	1362.7	1360.2	1358.2	1349.9	1332.3	1310.5	1286.8	1262.9	1245.3
17.5°	1393.9	1392.2	1389.8	1388.9	1386.1	1377.8	1365.5	1343.8	1314.2	1281.0	1254.3
20°	1404.1	1401.2	1399.6	1397.9	1396.3	1390.6	1390.6	1376.6	1343.8	1297.0	1256.3
22.5°	1397.6	1395.9	1393.4	1392.2	1390.6	1391.4	1407.4	1405.4	1367.6	1300.7	1241.6
25°	1382.3	1380.3	1378.3	1378.3	1377.8	1386.5	1425.1	1430.4	1374.6	1282.6	1209.2
27.5°	1366.8	1363.9	1364.7	1365.1	1367.2	1385.6	1444.3	1436.9	1355.7	1239.1	1153.3
30°	1357.3	1357.3	1359.4	1362.7	1366.8	1399.2	1459.6	1422.2	1306.9	1173.5	1079.5
32.5°	1361.5	1365.5	1370.0	1378.3	1384.4	1429.1	1464.8	1384.0	1235.8	1092.2	1002.3
35°	1397.9	1402.9	1411.5	1424.2	1431.6	1472.3	1464.8	1328.2	1153.3	1022.4	922.7
37.5°	1477.6	1482.5	1492.8	1502.6	1510.0	1526.5	1458.7	1257.2	1084.4	950.2	851.3
40°	1605.7	1612.6	1620.0	1618.4	1613.5	1597.4	1446.4	1191.1	1020.8	887.0	781.1
42.5°	1785.8	1779.2	1778.5	1762.4	1746.0	1677.5	1437.4	1148.0	966.2	820.5	711.3
45°	1993.9	1967.2	1939.7	1918.4	1893.4	1765.3	1434.9	1113.1	905.8	746.6	635.3
47.5°	2203.3	2160.5	2107.2	2074.0	2033.3	1858.9	1442.3	1066.3	828.3	666.1	564.4
50°	2408.5	2338.7	2272.6	2232.8	2186.8	1966.4	1454.2	987.5	735.5	593.1	499.5
52.5°	2598.5	2508.6	2440.9	2394.1	2337.9	2091.6	1443.5	884.1	655.1	522.9	437.9
55°	2779.1	2679.8	2609.6	2560.3	2494.3	2217.2	1366.4	790.1	578.3	454.4	368.6
57.5°	2937.1	2841.9	2768.8	2701.9	2646.1	2326.4	1214.1	712.5	504.4	376.0	293.5
60°	3121.8	3014.7	2928.1	2856.7	2791.0	2382.6	1043.3	643.6	425.6	291.0	212.2
62.5°	3371.0	3247.8	3147.7	3066.0	2980.2	2395.0	926.8	574.6	337.8	210.5	154.3
65°	3740.3	3588.5	3463.3	3350.8	3234.7	2344.0	869.3	499.5	251.2	156.4	129.3
67.5°	4033.8	3876.2	3731.3	3586.9	3438.3	2249.6	856.6	430.1	192.9	133.0	116.2
69°	3998.1	3847.9	3714.9	3558.5	3394.0	2131.0	843.8	403.4	176.1	123.5	110.0
70°	3860.6	3718.2	3583.1	3455.9	3254.4	1998.8	810.2	388.7	169.5	119.0	105.5
72.5°	3262.2	3097.2	2966.3	2807.8	2595.7	1485.4	614.5	314.4	155.6	108.8	95.2
75°	2379.4	2242.7	2112.1	1936.9	1730.4	859.4	382.6	179.8	114.1	98.5	86.2
77.5°	1389.4	1358.6	1232.6	1117.2	912.8	437.5	219.6	107.5	88.7	89.5	76.0
80°	522.9	557.0	569.7	529.9	489.7	302.1	159.7	87.4	77.2	88.3	64.4
82.5°	381.3	442.4	449.8	431.0	401.0	281.6	127.6	70.2	62.8	94.8	55.4
85°	318.1	352.1	357.5	337.8	328.0	238.4	89.0	49.3	46.0	68.2	41.5
87.5°	160.9	169.5	174.0	157.6	158.5	111.2	35.7	20.9	25.0	29.2	23.0
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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CATALOG NUMBER: VST-E02-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1214.5	1214.5
2.5°	1197.7	1200.1
5°	1199.3	1199.3
7.5°	1208.8	1208.8
10°	1219.0	1219.4
12.5°	1228.4	1228.0
15°	1235.8	1234.6
17.5°	1240.4	1239.1
20°	1235.8	1233.8
22.5°	1212.8	1207.1
25°	1171.0	1163.6
27.5°	1115.6	1110.7
30°	1043.3	1036.0
32.5°	958.8	955.1
35°	877.9	873.4
37.5°	804.1	802.8
40°	741.7	735.1
42.5°	668.6	665.8
45°	594.3	592.7
47.5°	524.5	522.9
50°	460.1	456.8
52.5°	396.9	391.6
55°	326.7	323.0
57.5°	250.8	247.5
60°	176.5	172.8
62.5°	125.6	121.5
65°	104.6	101.4
67.5°	94.8	91.1
69°	90.3	87.0
70°	87.4	85.0
72.5°	81.2	79.6
75°	74.3	73.1
77.5°	65.3	63.2
80°	54.6	52.6
82.5°	46.0	43.9
85°	30.8	27.9
87.5°	14.0	12.3
90°	0.0	0.0

(END OF REPORT)