

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: P158448

Luminaire Tested: **VST-E05-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158448
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E05-LED-E-U-SL3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (105) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12731 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 127.3
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



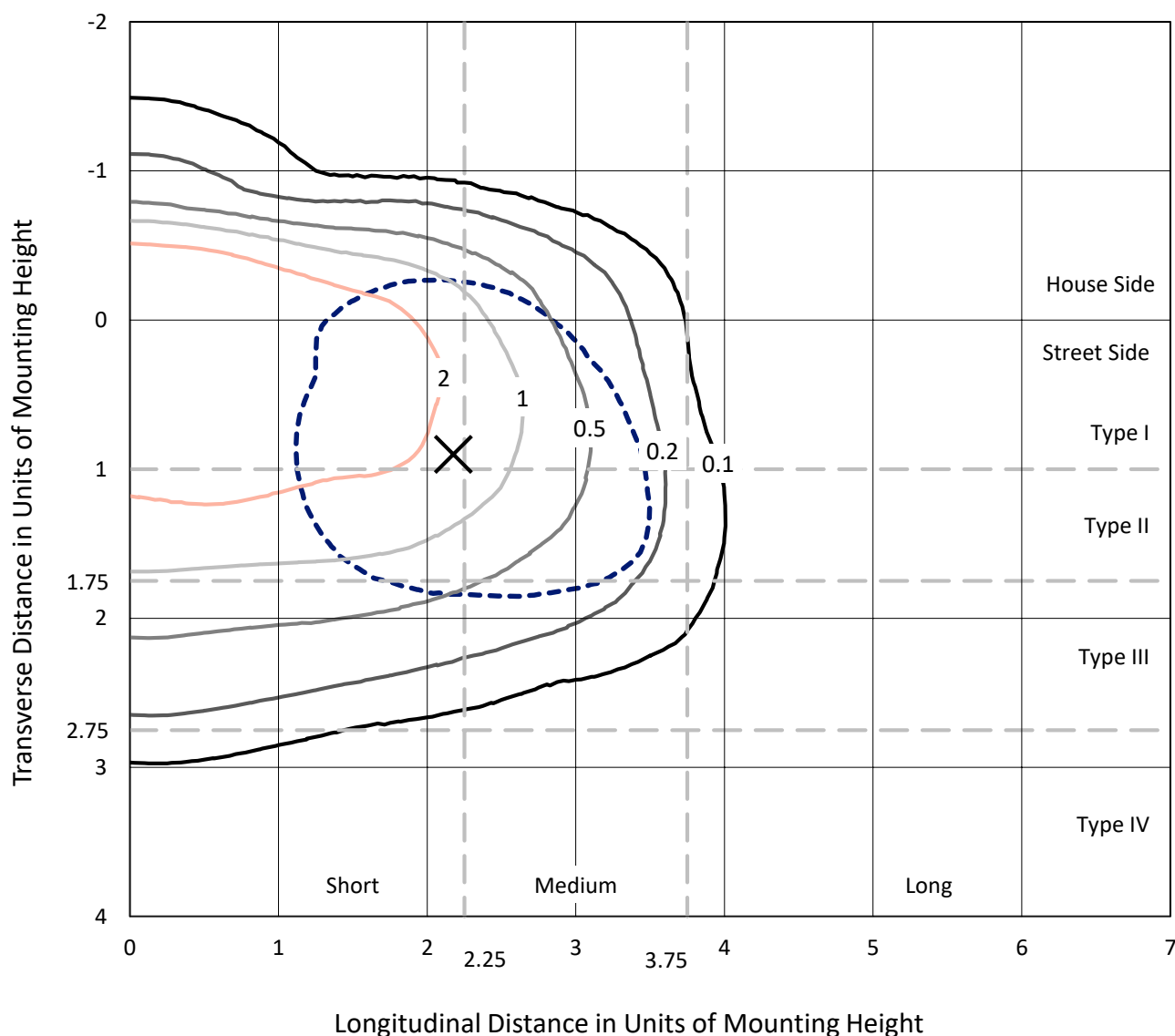
REPORT NUMBER: P158448

CATALOG NUMBER: VST-E05-LED-E-U-SL3-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

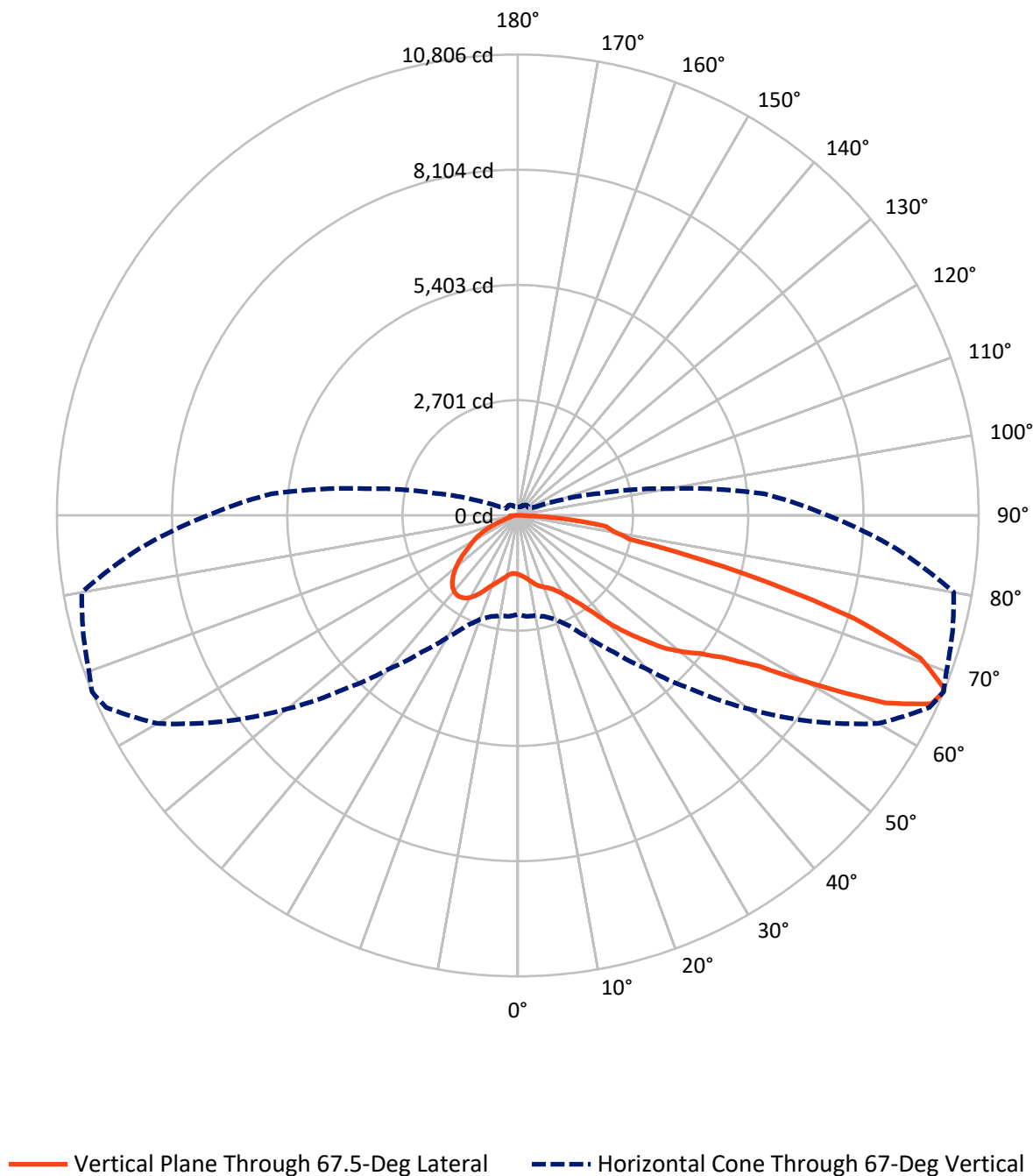


Based on 20 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158448

CATALOG NUMBER: VST-E05-LED-E-U-SL3-8030

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3054.2	0.0	3054.2
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	9676.8	0.0	9676.8
	% Fixture	76.0	0.0	76.0
Total	Lumens	12731.0	0.0	12731.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	1.1
10°-20°	467.3	3.7
20°-30°	834.2	6.6
30°-40°	1222.6	9.6
40°-50°	1889.1	14.8
50°-60°	2750.8	21.6
60°-70°	3583.4	28.1
70°-80°	1604.0	12.6
80°-90°	242.5	1.9
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°	12731.0	100.0
0°-180°	12731.0	100.0

Coefficient of Utilization



REPORT NUMBER: P158448

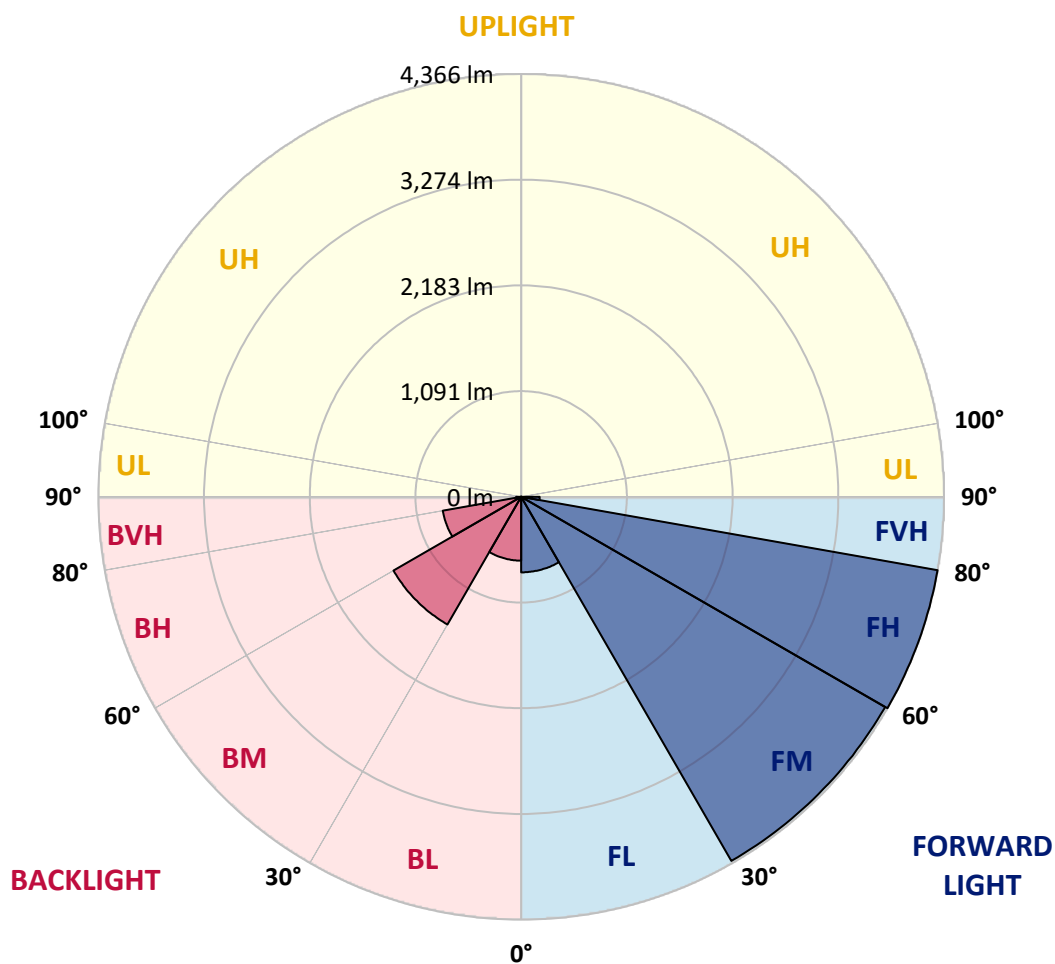
CATALOG NUMBER: VST-E05-LED-E-U-SL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	780.0	6.1			
FM	(30°-60°)	4340.6	34.1			
FH	(60°-80°)	4365.7	34.3			G2/5000
FVH	(80°-90°)	190.5	1.5			G2/225
BL	(0°-30°)	658.6	5.2	B2/1000		
BM	(30°-60°)	1521.8	12.0	B2/2500		
BH	(60°-80°)	821.7	6.5	B2/1000		G2/1000
BVH	(80°-90°)	52.1	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 III Short





REPORT NUMBER: P158448

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9
2.5°	1433.9	1437.3	1438.2	1437.3	1438.2	1434.8	1433.9	1428.9	1431.4	1424.7	1423.0
5°	1511.6	1514.1	1515.8	1509.1	1510.7	1507.4	1503.1	1498.1	1491.3	1482.0	1476.1
7.5°	1587.5	1591.8	1590.9	1588.4	1582.5	1579.1	1570.7	1563.1	1551.3	1540.3	1532.7
10°	1689.7	1688.8	1688.8	1674.5	1666.0	1658.4	1643.3	1631.4	1619.6	1603.6	1595.1
12.5°	1807.8	1801.9	1799.4	1789.3	1771.5	1758.0	1736.1	1713.3	1692.2	1675.3	1661.8
15°	1921.8	1921.8	1915.0	1899.0	1882.1	1864.4	1833.1	1800.2	1765.6	1738.6	1725.1
17.5°	2025.6	2016.3	2010.4	1989.3	1971.6	1942.9	1908.3	1872.8	1829.8	1791.8	1765.6
20°	2101.5	2093.9	2081.3	2055.1	2024.7	1991.0	1950.5	1909.1	1862.7	1821.3	1791.8
22.5°	2145.4	2136.1	2116.7	2082.1	2040.8	1993.5	1946.2	1907.4	1865.2	1834.0	1809.5
25°	2168.2	2158.9	2132.8	2087.2	2031.5	1969.0	1915.0	1877.0	1852.6	1845.0	1841.6
27.5°	2167.4	2159.8	2131.9	2079.6	2007.9	1936.1	1877.9	1845.8	1843.3	1872.8	1894.8
30°	2145.4	2140.4	2115.0	2062.7	1987.6	1912.5	1858.5	1841.6	1867.8	1930.2	1984.2
32.5°	2123.5	2120.9	2103.2	2056.0	1991.8	1928.5	1891.4	1893.1	1947.1	2043.3	2130.2
35°	2126.0	2129.4	2126.9	2101.5	2061.0	2028.1	2010.4	2047.5	2131.9	2248.4	2364.9
37.5°	2148.0	2160.6	2176.7	2179.2	2180.0	2175.0	2212.1	2290.6	2413.8	2565.7	2748.0
40°	2196.1	2210.4	2256.8	2297.3	2349.7	2412.1	2487.2	2596.1	2748.9	2936.2	3159.9
42.5°	2345.5	2365.7	2423.1	2498.2	2594.4	2692.3	2804.6	2953.1	3140.5	3338.0	3572.6
45°	2540.4	2582.6	2645.9	2729.5	2873.8	3011.4	3156.5	3322.8	3522.0	3769.3	4005.6
47.5°	2783.5	2825.7	2917.7	3007.1	3177.6	3349.0	3507.6	3681.5	3897.6	4150.7	4412.4
50°	2996.2	3044.3	3126.1	3246.8	3444.3	3654.5	3830.0	4018.2	4199.7	4466.4	4730.6
52.5°	3163.3	3197.9	3276.4	3386.9	3607.2	3837.6	4059.6	4268.9	4484.1	4750.8	4995.6
55°	3184.4	3216.4	3293.3	3419.9	3643.5	3899.2	4155.0	4403.1	4707.8	4999.0	5323.1
57.5°	3093.2	3119.4	3197.0	3310.1	3527.9	3819.1	4142.3	4460.5	4850.4	5243.7	5639.5
60°	2964.1	2990.3	3051.0	3141.3	3338.0	3651.9	4029.2	4464.7	4982.9	5550.9	6133.3
62.5°	2822.3	2845.1	2894.0	2958.2	3131.2	3420.7	3852.8	4436.9	5091.0	5856.5	6754.5
65°	2583.5	2638.3	2659.4	2725.2	2898.3	3171.7	3611.4	4248.7	5047.1	5992.3	7144.4
67°	2319.3	2375.0	2386.0	2452.6	2591.1	2853.5	3300.8	3900.1	4699.3	5757.7	7058.3
67.5°	2234.9	2282.2	2299.0	2365.7	2496.5	2743.8	3168.3	3774.3	4593.0	5629.4	6954.5
70°	1643.3	1695.6	1714.1	1742.0	1835.7	2041.6	2322.7	2848.5	3662.1	4593.8	5866.6
72.5°	879.4	921.6	939.4	980.7	1028.8	1141.1	1356.3	1733.6	2247.5	3073.8	4173.5
75°	595.0	611.9	624.6	653.2	703.0	792.5	887.0	1019.5	1330.1	1734.4	2375.0
77.5°	339.3	346.9	348.6	353.6	393.3	478.5	633.8	858.3	1100.6	1256.7	1519.2
80°	146.9	162.0	173.9	166.3	163.7	181.5	227.0	338.4	663.4	1053.3	1250.0
82.5°	79.3	86.1	96.2	97.1	102.1	108.0	117.3	139.3	195.8	395.0	861.7
85°	41.4	43.0	57.4	65.8	70.1	73.4	75.1	83.6	96.2	122.4	214.4
87.5°	5.9	8.4	10.1	13.5	15.2	16.0	18.6	23.6	27.9	33.8	57.4
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: P158448

CATALOG NUMBER: VST-E05-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9
2.5°	1415.4	1413.7	1408.6	1405.2	1401.9	1398.5	1394.3	1390.9	1385.0	1380.8	1375.7
5°	1467.7	1457.6	1450.8	1441.5	1439.8	1428.9	1417.9	1412.8	1402.7	1394.3	1384.1
7.5°	1520.9	1509.1	1498.1	1490.5	1486.3	1471.1	1460.1	1447.4	1435.6	1424.7	1412.8
10°	1583.3	1571.5	1559.7	1554.6	1547.0	1532.7	1523.4	1507.4	1495.6	1482.0	1466.0
12.5°	1648.3	1639.9	1631.4	1624.7	1621.3	1614.6	1601.1	1587.5	1571.5	1558.0	1539.4
15°	1705.7	1699.8	1696.4	1694.7	1694.7	1690.5	1677.9	1665.2	1648.3	1633.1	1612.9
17.5°	1746.2	1743.7	1746.2	1748.7	1752.1	1748.7	1746.2	1731.9	1720.9	1702.3	1682.1
20°	1769.8	1774.9	1787.6	1796.0	1803.6	1809.5	1812.0	1800.2	1785.9	1772.4	1758.9
22.5°	1795.2	1809.5	1831.5	1844.1	1856.8	1877.9	1882.9	1874.5	1863.5	1855.1	1840.7
25°	1837.4	1858.5	1896.4	1916.7	1934.4	1965.7	1969.9	1971.6	1969.0	1962.3	1944.6
27.5°	1903.2	1944.6	1995.2	2021.4	2040.8	2081.3	2097.3	2097.3	2090.6	2098.2	2098.2
30°	2018.0	2072.8	2138.7	2153.9	2184.2	2219.7	2245.9	2249.2	2250.1	2266.1	2289.7
32.5°	2194.4	2246.7	2320.1	2337.0	2363.2	2396.9	2426.5	2423.1	2430.7	2465.3	2496.5
35°	2450.9	2504.1	2552.2	2575.0	2586.8	2617.2	2628.2	2646.8	2669.5	2712.6	2708.4
37.5°	2830.7	2878.0	2884.8	2899.1	2884.8	2890.7	2899.1	2921.1	2981.8	3020.6	2958.2
40°	3288.2	3366.7	3359.1	3342.2	3310.1	3267.1	3282.3	3316.0	3381.9	3348.1	3180.2
42.5°	3719.5	3800.5	3785.3	3765.9	3695.0	3679.0	3677.3	3705.1	3740.6	3644.4	3354.0
45°	4144.0	4226.7	4200.5	4189.6	4142.3	4107.7	4136.4	4138.1	4128.8	3922.9	3505.9
47.5°	4582.0	4658.0	4641.1	4650.4	4601.4	4578.7	4581.2	4569.4	4482.4	4159.2	3624.1
50°	4935.7	5037.8	5047.9	5026.8	5000.6	4966.0	5054.7	5022.6	4829.3	4388.8	3738.0
52.5°	5210.8	5348.4	5400.7	5387.2	5366.1	5370.3	5536.6	5572.9	5253.0	4678.2	3863.8
55°	5536.6	5753.5	5838.7	5889.4	5867.4	5951.8	6332.5	6351.0	5842.1	5056.3	4027.5
57.5°	6006.7	6317.3	6586.5	6658.2	6727.5	7001.7	7619.6	7431.3	6606.8	5628.6	4235.1
60°	6721.5	7401.8	7839.0	8068.6	8230.6	8613.8	9201.2	8724.3	7559.6	6309.7	4495.9
62.5°	7722.5	8716.7	9447.6	9678.0	9744.7	9965.0	10390.4	9478.0	8078.7	6615.2	4518.7
65°	8467.8	9660.3	10535.5	10653.7	10574.4	10578.6	10690.0	9438.4	7885.4	6348.5	4127.1
67°	8418.8	9754.0	10650.3	10805.6	10695.9	10551.6	10377.7	8900.7	7264.2	5789.8	3614.0
67.5°	8343.7	9663.7	10600.5	10764.3	10663.8	10499.2	10245.2	8692.3	7071.0	5615.9	3509.3
70°	7212.7	8523.5	9785.2	10015.6	10057.8	9907.6	9194.4	7329.2	5740.8	4568.5	2725.2
72.5°	5614.2	6781.5	8029.7	8229.8	8391.8	7958.8	6692.0	5062.3	4184.5	3292.4	1973.3
75°	3706.8	4894.3	5523.9	5553.5	5346.7	4544.9	3269.6	2535.3	2333.6	1935.3	1221.3
77.5°	1983.4	2878.0	2895.7	2681.4	2583.5	1926.0	781.5	431.3	480.2	545.2	486.1
80°	1479.5	1833.1	2124.3	2283.8	2331.1	1651.7	404.3	228.7	200.0	182.3	179.8
82.5°	1334.3	1770.7	1985.1	2072.0	2050.1	1358.8	227.0	153.6	127.4	138.4	157.8
85°	523.3	945.3	1243.2	1203.5	1011.1	506.4	124.1	82.7	82.7	119.8	155.3
87.5°	107.2	194.1	263.3	251.5	226.2	97.9	60.8	49.8	50.6	97.1	146.9
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9	1379.9
2.5°	1370.6	1365.6	1362.2	1358.8	1355.4	1353.8	1351.2	1351.2	1346.2	1344.5	1342.8
5°	1376.5	1368.1	1362.2	1354.6	1348.7	1343.6	1336.9	1335.2	1329.3	1325.1	1323.4
7.5°	1401.9	1389.2	1376.5	1367.3	1358.8	1347.9	1340.3	1333.5	1327.6	1323.4	1318.3
10°	1450.0	1436.5	1418.7	1401.9	1390.9	1374.0	1362.2	1350.4	1343.6	1338.6	1331.8
12.5°	1520.9	1501.5	1480.4	1460.1	1441.5	1419.6	1407.8	1393.4	1385.0	1380.8	1375.7
15°	1593.5	1572.4	1546.2	1526.8	1505.7	1488.8	1477.8	1465.2	1458.4	1453.4	1450.0
17.5°	1667.7	1643.3	1624.7	1605.3	1595.1	1582.5	1568.1	1552.1	1532.7	1520.9	1504.8
20°	1743.7	1725.1	1714.1	1703.2	1691.4	1673.6	1644.9	1612.0	1575.7	1541.1	1508.2
22.5°	1832.3	1821.3	1819.6	1809.5	1785.0	1742.8	1689.7	1628.1	1566.4	1509.1	1464.3
25°	1957.2	1957.2	1948.8	1907.4	1850.0	1774.1	1684.6	1596.0	1514.1	1435.6	1376.5
27.5°	2114.2	2108.3	2066.9	1981.7	1878.7	1760.6	1640.7	1528.5	1423.8	1337.7	1261.8
30°	2287.2	2245.9	2157.2	2023.0	1868.6	1716.7	1569.8	1439.8	1316.6	1211.1	1121.7
32.5°	2467.0	2366.6	2207.0	2023.0	1833.1	1650.8	1481.2	1321.7	1180.7	1062.6	956.2
35°	2629.9	2446.7	2218.9	1990.1	1763.9	1553.8	1357.1	1176.5	1007.7	880.3	763.8
37.5°	2777.6	2499.9	2206.2	1926.0	1663.5	1417.1	1186.7	987.5	796.7	673.5	573.9
40°	2873.8	2510.9	2153.9	1825.6	1520.0	1232.2	977.3	754.5	603.5	491.2	424.5
42.5°	2933.7	2489.8	2069.5	1688.0	1326.8	1000.1	733.4	541.0	428.7	366.3	341.0
45°	2967.5	2434.9	1944.6	1499.8	1093.0	760.4	520.7	390.8	330.0	308.1	299.6
47.5°	2965.8	2346.3	1788.4	1282.0	834.7	530.0	368.8	304.7	287.8	281.0	279.4
50°	2948.1	2237.4	1605.3	1045.7	602.6	369.7	292.0	273.5	269.2	265.0	263.3
52.5°	2923.6	2102.4	1402.7	815.3	427.9	295.4	265.0	259.9	256.6	252.4	250.7
55°	2878.0	1936.1	1183.3	613.6	335.1	266.7	255.7	254.0	249.8	243.9	240.5
57.5°	2822.3	1767.3	973.1	479.4	296.2	259.9	254.0	251.5	245.6	238.8	232.1
60°	2802.0	1628.1	808.5	404.3	287.0	262.5	258.3	254.9	246.4	236.3	228.7
62.5°	2675.5	1471.1	690.4	374.7	292.0	273.5	271.8	266.7	254.0	242.2	230.4
65°	2348.0	1244.0	584.9	354.5	302.1	292.0	293.7	286.1	273.5	257.4	236.3
67°	1985.9	1014.5	487.0	335.1	309.7	311.4	317.3	311.4	295.4	272.6	243.9
67.5°	1889.7	956.2	462.5	329.2	311.4	316.5	323.2	319.0	303.0	276.8	247.3
70°	1404.4	673.5	345.2	297.9	311.4	331.7	346.9	351.1	333.4	297.1	254.0
72.5°	989.2	434.7	265.0	258.3	282.7	309.7	338.4	352.8	332.5	292.9	244.8
75°	594.2	271.8	215.2	219.4	238.0	265.9	288.6	294.6	269.2	243.9	211.8
77.5°	275.1	180.6	168.8	174.7	192.4	205.1	205.1	193.3	173.9	158.7	151.9
80°	162.0	147.7	146.9	157.8	169.6	160.4	146.0	130.0	119.8	114.8	112.3
82.5°	151.9	157.8	168.0	170.5	161.2	138.4	120.7	104.7	99.6	97.1	94.5
85°	178.9	191.6	174.7	161.2	142.6	116.5	94.5	81.0	78.5	76.0	72.6
87.5°	165.4	157.8	137.6	118.2	97.9	70.9	51.5	46.4	49.8	49.0	47.3
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: P158448

CATALOG NUMBER: VST-E05-LED-E-U-SL3-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1379.9	1379.9	1379.9	1379.9	1379.9
2.5°	1343.6	1343.6	1340.3	1338.6	1342.8
5°	1320.0	1320.8	1318.3	1317.5	1318.3
7.5°	1314.9	1314.1	1312.4	1310.7	1312.4
10°	1330.1	1329.3	1326.8	1328.4	1325.9
12.5°	1375.7	1380.8	1379.9	1381.6	1385.0
15°	1450.0	1449.1	1446.6	1448.3	1450.8
17.5°	1492.2	1485.4	1479.5	1477.0	1477.0
20°	1482.0	1462.6	1452.5	1446.6	1444.9
22.5°	1422.1	1394.3	1373.2	1368.1	1363.9
25°	1324.2	1289.6	1262.6	1256.7	1245.7
27.5°	1210.3	1163.9	1131.8	1125.0	1119.1
30°	1060.9	1007.7	970.6	947.0	954.6
32.5°	878.6	828.0	784.9	746.9	741.0
35°	678.6	622.9	584.9	568.0	557.0
37.5°	506.4	460.0	434.7	418.6	419.5
40°	387.4	362.9	349.4	338.4	339.3
42.5°	323.2	312.3	308.9	303.8	301.3
45°	292.9	289.5	290.3	285.3	283.6
47.5°	276.0	273.5	274.3	270.9	270.1
50°	262.5	260.8	261.6	259.1	258.3
52.5°	249.0	249.8	249.0	247.3	247.3
55°	237.2	236.3	238.0	235.5	235.5
57.5°	227.9	227.0	227.0	226.2	226.2
60°	222.8	219.4	218.6	218.6	219.4
62.5°	220.3	214.4	213.5	213.5	214.4
65°	221.1	211.8	208.5	207.6	206.8
67°	222.0	208.5	201.7	198.3	197.5
67.5°	222.8	206.8	199.2	195.8	194.1
70°	217.7	195.0	184.0	178.1	176.4
72.5°	205.1	180.6	167.1	159.5	157.8
75°	182.3	163.7	151.9	143.5	140.1
77.5°	140.9	132.5	128.3	123.2	121.5
80°	109.7	105.5	103.8	100.4	99.6
82.5°	91.2	86.9	84.4	80.2	77.6
85°	70.9	65.8	64.1	60.8	59.1
87.5°	46.4	43.9	43.0	38.8	37.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)