

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: P157990

Luminaire Tested: **VST-E03-LED-E-U-RW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157990
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-E03-LED-E-U-RW
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9346.2 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 75.2
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

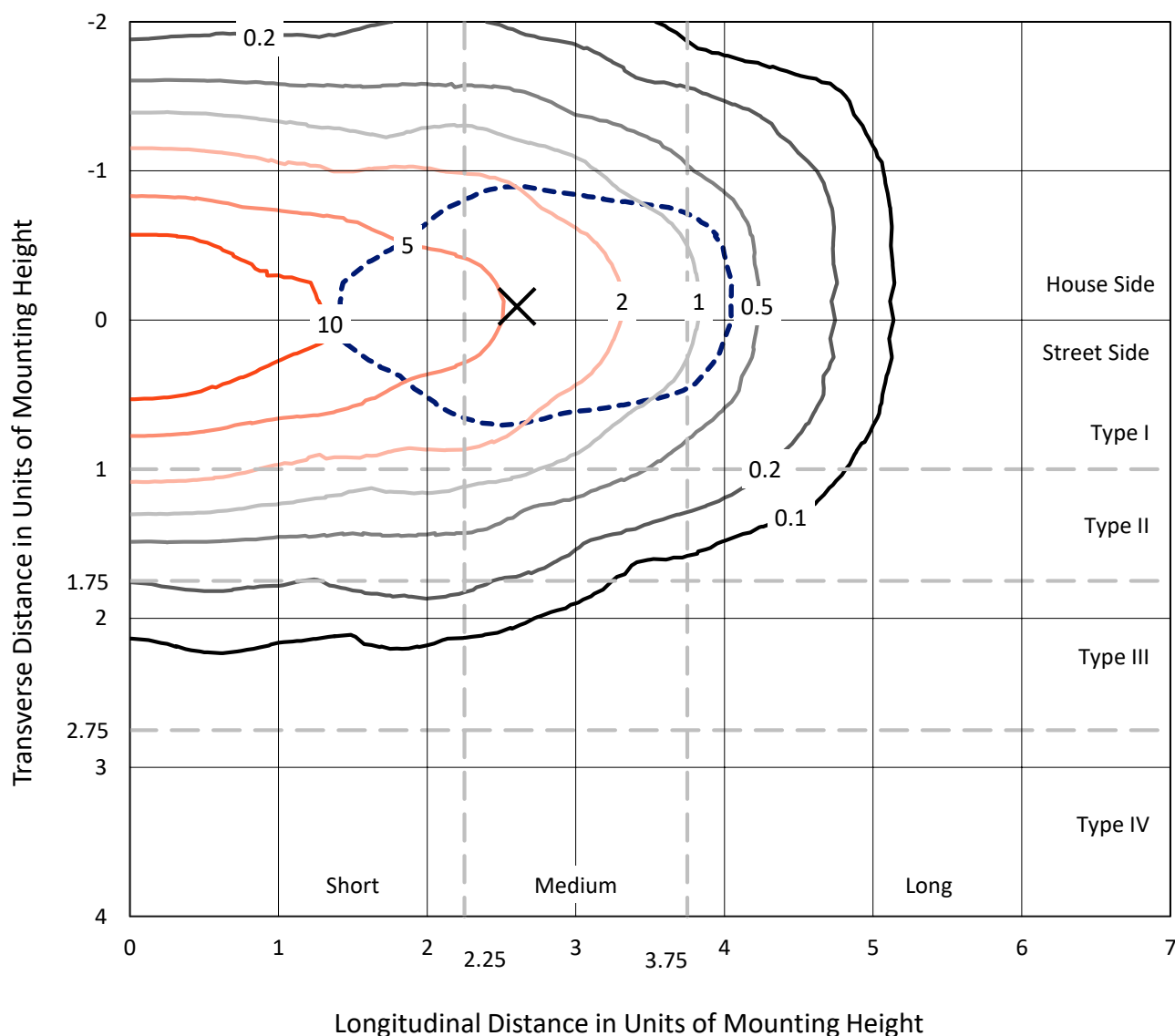


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

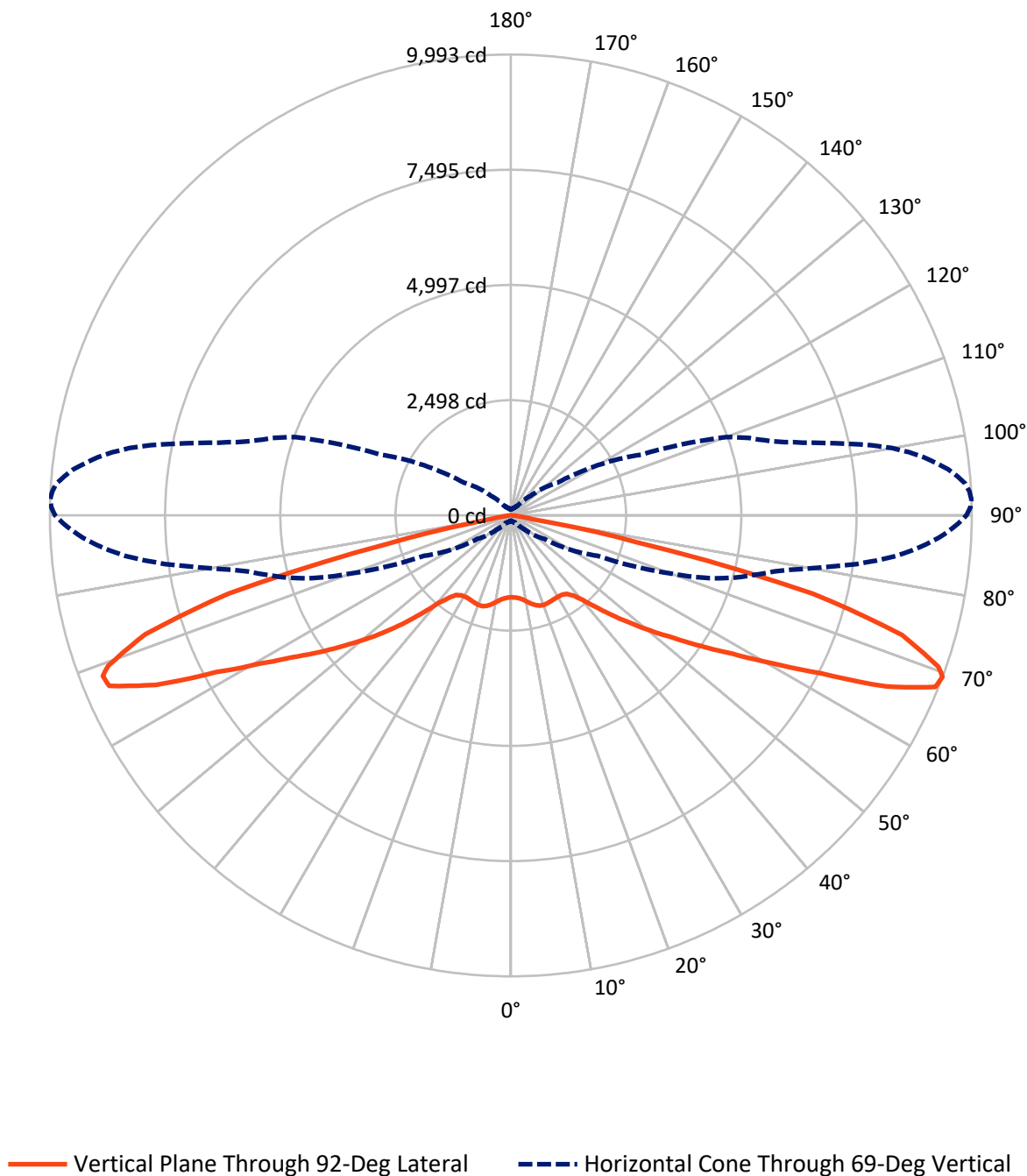


Based on 10 foot mounting height. Maximum calculated value = 18.3 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4956.8	0.0	4956.8
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	4389.4	0.0	4389.4
	% Fixture	47.0	0.0	47.0
Total	Lumens	9346.2	0.0	9346.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.7	1.9
10°-20°	548.8	5.9
20°-30°	890.4	9.5
30°-40°	1109.6	11.9
40°-50°	1381.6	14.8
50°-60°	1703.9	18.2
60°-70°	2116.1	22.6
70°-80°	1300.2	13.9
80°-90°	121.9	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°	9346.2	100.0
0°-180°	9346.2	100.0

Coefficient of Utilization



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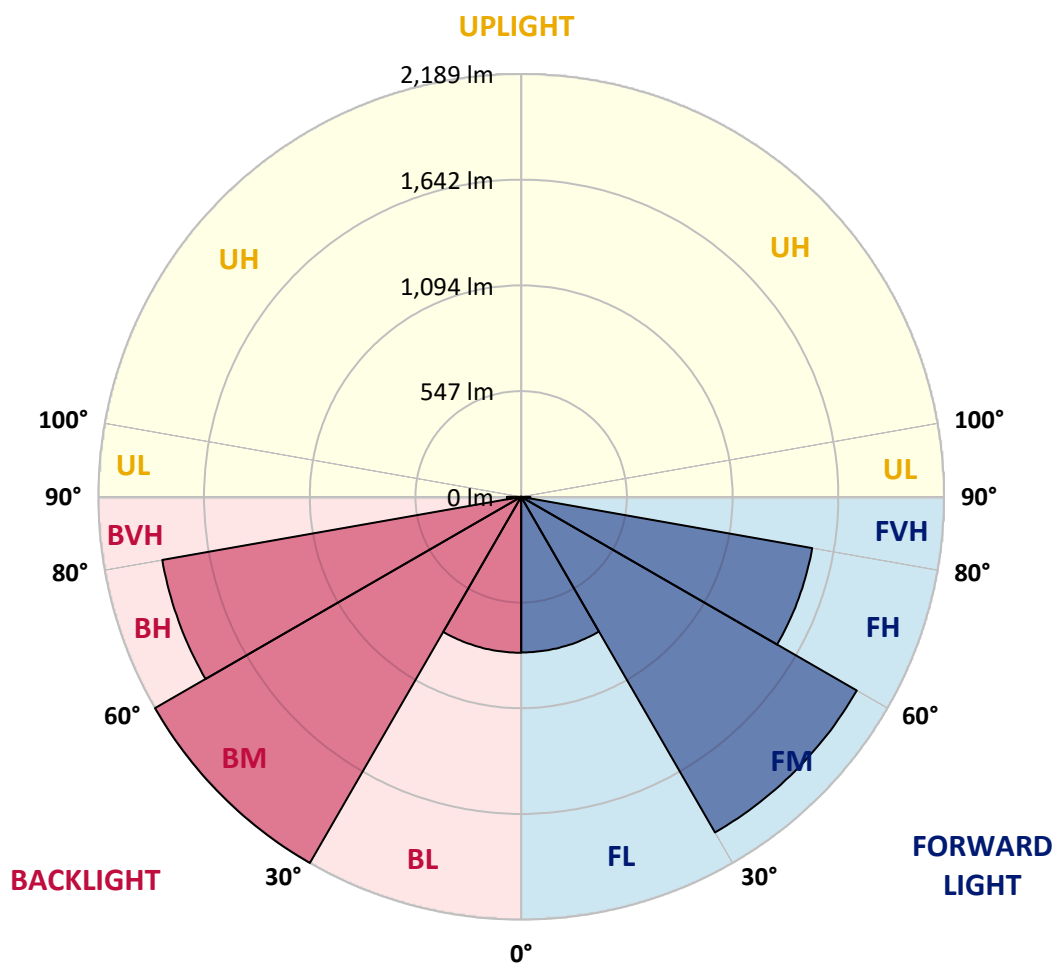
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	805.6	8.6			
FM	(30°-60°)	2006.3	21.5			
FH	(60°-80°)	1529.9	16.4			G1/1800
FVH	(80°-90°)	47.7	0.5			G1/100
BL	(0°-30°)	807.3	8.6	B2/1000		
BM	(30°-60°)	2188.9	23.4	B2/2500		
BH	(60°-80°)	1886.5	20.2	B3/2500		G3/2500
BVH	(80°-90°)	74.1	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°	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4
2.5°	1803.6	1798.8	1803.0	1803.6	1803.0	1803.0	1797.6	1796.4	1789.2	1791.0	1790.4
5°	1828.2	1826.4	1829.4	1830.6	1831.8	1829.4	1825.2	1823.4	1818.6	1816.8	1816.2
7.5°	1851.0	1848.0	1852.8	1857.0	1860.0	1860.6	1861.2	1858.2	1858.2	1855.8	1855.8
10°	1870.2	1867.8	1875.6	1881.0	1890.6	1896.0	1902.0	1906.2	1908.6	1909.2	1908.6
12.5°	1878.6	1876.8	1889.4	1905.6	1923.6	1936.2	1951.2	1962.0	1965.0	1964.4	1967.4
15°	1864.2	1865.4	1884.6	1916.4	1954.8	1986.6	2007.6	2016.6	2019.0	2020.2	2020.8
17.5°	1825.2	1827.6	1855.2	1906.8	1974.0	2031.6	2062.8	2062.8	2058.0	2058.0	2057.4
20°	1762.8	1765.2	1801.2	1875.6	1974.6	2062.8	2107.2	2098.2	2080.2	2076.6	2073.0
22.5°	1676.4	1686.0	1725.6	1812.0	1948.8	2071.8	2134.8	2121.6	2093.4	2085.6	2080.2
25°	1578.6	1577.4	1624.8	1722.0	1886.4	2050.2	2142.6	2140.2	2110.2	2101.8	2092.2
27.5°	1467.0	1470.6	1514.4	1612.8	1791.0	1987.8	2129.4	2161.2	2136.6	2128.2	2119.2
30°	1352.4	1356.0	1397.4	1512.0	1682.4	1898.4	2102.4	2181.6	2172.0	2165.4	2159.4
32.5°	1237.2	1238.4	1287.6	1410.6	1590.6	1791.6	2061.6	2200.2	2213.4	2210.4	2208.0
35°	1129.2	1130.4	1183.8	1308.6	1500.0	1700.4	2012.4	2227.2	2269.8	2273.4	2275.8
37.5°	1024.2	1026.0	1080.6	1211.4	1410.6	1631.4	1957.8	2268.6	2349.0	2362.2	2364.6
40°	919.8	921.6	973.8	1112.4	1320.0	1570.8	1915.8	2326.8	2455.8	2473.8	2492.4
42.5°	820.2	826.8	871.2	1003.8	1219.2	1495.8	1897.8	2397.6	2582.4	2610.6	2631.6
45°	727.2	727.8	778.2	902.4	1099.8	1394.4	1885.8	2478.0	2724.0	2766.6	2795.4
47.5°	627.6	634.8	687.6	808.2	988.2	1269.0	1847.4	2572.2	2878.2	2928.0	2986.2
50°	531.0	541.2	592.2	711.6	886.2	1139.4	1744.2	2682.6	3051.6	3116.4	3183.6
52.5°	438.0	437.4	491.4	615.6	783.6	1029.6	1576.8	2798.4	3252.0	3321.6	3394.2
55°	331.2	331.2	384.6	498.0	672.6	931.8	1397.4	2870.4	3438.0	3522.0	3601.2
57.5°	227.4	233.4	283.8	381.6	556.8	842.4	1260.0	2829.0	3580.2	3684.6	3778.8
60°	168.6	174.6	211.8	274.2	435.6	736.8	1156.8	2634.0	3666.0	3804.6	3927.0
62.5°	145.8	150.0	185.4	219.6	313.8	624.6	1065.6	2386.2	3789.6	3979.2	4149.6
65°	130.2	134.4	169.8	189.6	245.4	502.2	1014.6	2244.6	3937.2	4227.0	4474.2
67.5°	120.6	125.4	155.4	169.8	214.2	454.2	975.0	2211.6	3936.0	4287.6	4603.2
69°	115.8	119.4	144.0	159.6	207.0	439.8	889.2	2068.2	3676.2	4053.6	4370.4
70°	112.8	116.4	137.4	153.0	204.6	414.0	810.0	1878.6	3380.4	3760.2	4081.8
72.5°	103.2	106.8	122.4	136.8	170.4	276.6	564.6	1202.4	2415.6	2686.8	3054.6
75°	91.2	95.4	107.4	119.4	129.0	160.2	325.8	624.0	1381.2	1587.0	1914.6
77.5°	74.4	78.6	91.2	110.4	109.2	121.8	211.8	383.4	646.8	802.2	923.4
80°	61.2	64.2	75.0	111.6	89.4	102.0	171.6	314.4	455.4	503.4	532.2
82.5°	40.8	45.0	58.2	87.6	68.4	72.6	128.4	294.0	385.2	422.4	457.2
85°	19.2	21.0	35.4	46.8	41.4	39.0	73.2	207.6	286.8	304.2	317.4
87.5°	0.0	0.0	1.8	3.6	5.4	5.4	13.2	43.8	80.4	97.2	96.0
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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CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4
2.5°	1788.0	1788.6	1788.0	1788.0	1787.4	1786.2	1786.2	1785.0	1785.6	1785.0	1786.2
5°	1815.6	1815.6	1813.8	1812.6	1814.4	1812.6	1813.2	1810.2	1810.2	1808.4	1806.0
7.5°	1855.2	1855.2	1855.8	1852.2	1854.6	1855.2	1853.4	1852.2	1851.0	1848.0	1848.6
10°	1908.0	1908.0	1909.8	1905.0	1907.4	1908.6	1909.2	1909.2	1908.0	1902.6	1903.2
12.5°	1966.8	1965.6	1966.2	1963.8	1966.2	1967.4	1968.6	1967.4	1967.4	1966.2	1965.6
15°	2020.2	2019.6	2020.8	2019.0	2019.6	2020.8	2024.4	2023.8	2023.2	2019.6	2019.6
17.5°	2056.8	2055.0	2053.8	2053.2	2053.2	2052.6	2053.2	2053.2	2051.4	2050.8	2050.8
20°	2070.6	2065.8	2062.8	2061.0	2058.6	2057.4	2056.2	2056.8	2055.6	2053.8	2054.4
22.5°	2073.0	2066.4	2060.4	2055.0	2050.2	2047.2	2044.2	2043.0	2040.0	2038.2	2038.2
25°	2084.4	2074.2	2064.6	2055.6	2048.4	2041.8	2035.2	2030.4	2026.8	2022.6	2021.4
27.5°	2109.6	2098.8	2087.4	2076.0	2066.4	2053.2	2044.2	2034.6	2026.2	2019.6	2014.8
30°	2148.6	2137.8	2126.4	2113.2	2100.6	2086.8	2071.8	2060.4	2048.4	2035.2	2028.0
32.5°	2200.2	2193.0	2181.6	2169.0	2157.6	2143.2	2125.2	2107.8	2096.4	2080.8	2069.4
35°	2274.0	2265.6	2262.0	2256.6	2245.2	2236.2	2216.4	2200.2	2189.4	2167.8	2159.4
37.5°	2374.8	2374.2	2377.2	2375.4	2377.2	2365.8	2356.8	2356.2	2340.6	2319.6	2299.2
40°	2512.2	2519.4	2535.6	2547.0	2557.8	2559.0	2571.6	2558.4	2560.2	2557.2	2536.2
42.5°	2668.8	2693.4	2712.6	2746.2	2772.0	2796.0	2812.2	2834.4	2851.2	2866.2	2869.8
45°	2843.4	2880.0	2924.4	2954.4	3004.8	3045.0	3100.2	3142.8	3187.2	3231.0	3246.6
47.5°	3033.0	3078.6	3127.8	3183.6	3247.2	3310.2	3395.4	3460.8	3532.2	3591.6	3644.4
50°	3242.4	3289.8	3355.8	3420.0	3507.6	3580.2	3691.8	3777.6	3892.8	3972.0	4040.4
52.5°	3460.8	3520.2	3594.0	3664.8	3754.2	3847.2	3971.4	4098.0	4236.6	4356.6	4456.2
55°	3674.4	3747.6	3818.4	3901.2	4000.2	4108.2	4248.6	4415.4	4588.2	4725.6	4857.6
57.5°	3864.6	3949.2	4032.6	4116.6	4218.0	4343.4	4501.2	4681.2	4879.2	5062.2	5243.4
60°	4041.0	4142.4	4244.4	4349.4	4465.8	4620.6	4810.2	5031.6	5287.8	5538.0	5775.0
62.5°	4320.0	4453.2	4579.8	4715.4	4855.8	5037.6	5261.4	5551.8	5845.8	6158.4	6401.4
65°	4698.0	4885.2	5050.8	5226.6	5408.4	5651.4	5919.0	6266.4	6687.6	7008.0	7398.0
67.5°	4885.8	5132.4	5345.4	5541.0	5766.0	6011.4	6329.4	6740.4	7189.8	7654.2	8089.2
69°	4665.0	4919.4	5155.2	5374.2	5601.6	5839.8	6172.2	6594.0	7069.2	7571.4	7996.2
70°	4378.8	4633.2	4884.6	5134.2	5341.8	5574.0	5907.6	6342.6	6817.2	7339.2	7760.4
72.5°	3354.6	3660.6	3888.0	4122.0	4362.6	4559.4	4944.6	5311.2	5805.6	6335.4	6799.2
75°	2146.2	2427.6	2676.0	2875.2	3110.4	3346.2	3630.6	4038.0	4347.6	4782.6	5158.8
77.5°	1102.8	1186.2	1425.6	1497.0	1660.2	1788.6	1945.2	2047.2	2299.2	2352.6	2574.6
80°	522.6	471.0	443.4	418.2	425.4	422.4	409.8	393.0	414.0	405.0	401.4
82.5°	455.4	406.2	324.0	275.4	238.2	202.2	174.0	159.6	161.4	166.2	168.0
85°	319.2	300.0	234.0	177.6	138.6	107.4	86.4	82.8	85.2	91.8	89.4
87.5°	92.4	96.6	85.2	59.4	41.4	30.0	23.4	26.4	25.2	24.6	25.8
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°	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4
2.5°	1786.2	1785.6	1783.8	1782.0	1782.0	1780.8	1782.0	1782.6	1782.0	1782.0	1780.8
5°	1806.6	1807.2	1809.0	1805.4	1804.8	1805.4	1803.0	1802.4	1800.6	1802.4	1800.0
7.5°	1845.6	1847.4	1847.4	1845.0	1844.4	1846.2	1842.6	1841.4	1839.6	1839.0	1838.4
10°	1903.8	1905.6	1902.6	1900.8	1899.0	1901.4	1898.4	1898.4	1896.6	1894.8	1894.2
12.5°	1968.6	1967.4	1966.2	1967.4	1965.6	1965.6	1963.8	1962.6	1962.0	1961.4	1960.2
15°	2019.0	2023.2	2023.2	2024.4	2023.2	2023.2	2020.8	2021.4	2020.2	2019.6	2020.2
17.5°	2051.4	2052.6	2055.6	2057.4	2057.4	2058.0	2056.8	2058.0	2056.8	2056.8	2059.2
20°	2055.6	2056.8	2059.8	2062.8	2064.6	2065.8	2065.8	2067.6	2068.8	2070.0	2073.0
22.5°	2038.8	2040.6	2044.2	2049.6	2052.6	2053.8	2056.2	2059.2	2062.2	2064.6	2068.8
25°	2021.4	2022.0	2025.6	2031.0	2034.6	2037.6	2041.8	2045.4	2049.6	2054.4	2059.2
27.5°	2011.8	2011.2	2014.2	2019.6	2022.6	2026.8	2030.4	2035.8	2040.6	2046.6	2050.8
30°	2020.2	2015.4	2016.0	2018.4	2020.8	2023.8	2028.0	2032.8	2038.2	2043.6	2048.4
32.5°	2057.4	2046.6	2039.4	2037.6	2038.2	2038.8	2041.2	2044.2	2048.4	2052.6	2054.4
35°	2137.8	2119.2	2109.6	2101.8	2095.2	2089.8	2091.0	2090.4	2090.4	2094.0	2089.8
37.5°	2290.8	2267.4	2257.2	2243.4	2235.6	2215.8	2210.4	2209.2	2201.4	2201.4	2192.4
40°	2530.8	2517.0	2509.2	2496.6	2458.8	2463.6	2436.6	2437.2	2415.0	2417.4	2401.8
42.5°	2872.2	2874.0	2864.4	2856.0	2826.6	2813.4	2788.2	2752.2	2724.0	2723.4	2692.2
45°	3267.0	3288.6	3258.0	3268.8	3243.0	3207.6	3178.2	3132.0	3088.2	3074.4	3042.6
47.5°	3679.8	3715.2	3691.8	3696.0	3683.4	3633.0	3593.4	3536.4	3479.4	3441.0	3421.8
50°	4120.8	4144.2	4143.6	4132.2	4126.2	4077.0	4013.4	3970.2	3928.2	3876.6	3859.8
52.5°	4520.4	4575.0	4611.6	4603.2	4585.8	4556.4	4500.0	4462.8	4401.0	4393.8	4401.0
55°	4948.2	5019.0	5056.2	5101.2	5101.8	5096.4	5073.0	5059.2	5001.6	5008.2	4999.8
57.5°	5353.2	5457.0	5514.0	5610.0	5643.0	5686.8	5670.6	5688.6	5653.8	5676.6	5670.0
60°	5902.2	6046.2	6141.0	6272.4	6333.6	6443.4	6465.0	6478.2	6497.4	6544.2	6517.8
62.5°	6592.8	6804.0	7000.8	7179.6	7238.4	7403.4	7430.4	7533.6	7539.0	7570.8	7512.6
65°	7723.2	7980.6	8197.2	8411.4	8535.0	8728.2	8806.2	9006.6	8945.4	8971.2	8847.0
67.5°	8463.6	8763.0	9053.4	9256.2	9461.4	9658.8	9801.0	9930.6	9929.4	9904.2	9793.8
69°	8398.2	8731.8	9018.0	9289.8	9505.8	9708.6	9879.6	9963.6	9993.0	9956.4	9877.8
70°	8172.0	8514.6	8865.0	9088.8	9324.0	9546.6	9723.0	9814.8	9835.2	9809.4	9741.6
72.5°	7126.8	7455.6	7842.0	8045.4	8329.8	8490.6	8733.6	8852.4	8873.4	8840.4	8796.0
75°	5562.0	5621.4	6015.0	6144.6	6351.0	6536.4	6687.6	6649.2	6756.6	6735.6	6718.8
77.5°	2620.2	2461.8	2716.8	2835.6	2773.2	2607.0	2848.8	2674.2	2790.0	2940.6	2902.2
80°	432.0	430.8	442.2	467.4	437.4	464.4	463.8	450.6	451.8	484.2	467.4
82.5°	166.2	169.8	171.6	176.4	176.4	177.0	180.0	183.6	180.6	186.6	185.4
85°	90.0	96.0	90.6	86.4	89.4	91.2	93.6	96.6	93.6	102.6	97.8
87.5°	23.4	24.6	21.6	21.6	21.0	19.2	19.2	20.4	22.2	26.4	28.8
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-E03-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4
2.5°	1778.4	1779.0	1779.6	1777.8	1776.6	1776.6	1776.0	1774.8	1774.2	1774.2	1774.2
5°	1798.8	1800.0	1797.0	1796.4	1795.2	1794.0	1794.0	1792.8	1793.4	1793.4	1790.4
7.5°	1839.6	1837.8	1834.2	1831.8	1834.2	1830.0	1828.2	1829.4	1828.2	1828.8	1827.6
10°	1894.2	1894.2	1890.0	1892.4	1889.4	1884.6	1886.4	1884.6	1883.4	1879.2	1881.6
12.5°	1962.0	1960.2	1957.8	1952.4	1950.6	1950.0	1944.6	1945.2	1943.4	1942.2	1940.4
15°	2021.4	2020.8	2015.4	2012.4	2011.8	2009.4	2007.0	2005.8	2002.8	2002.2	2001.0
17.5°	2061.0	2059.2	2056.8	2053.8	2053.8	2050.2	2049.0	2046.0	2045.4	2043.6	2041.8
20°	2074.2	2074.8	2072.4	2070.0	2068.8	2066.4	2064.6	2062.2	2061.0	2058.6	2056.8
22.5°	2071.2	2071.2	2068.8	2068.2	2065.8	2062.2	2059.8	2056.8	2053.8	2050.8	2047.2
25°	2061.6	2061.0	2059.2	2056.2	2053.2	2047.8	2043.0	2038.2	2034.0	2030.4	2025.0
27.5°	2053.2	2052.0	2048.4	2044.2	2038.2	2032.2	2023.2	2016.6	2011.2	2006.4	2000.4
30°	2050.2	2046.0	2040.6	2034.0	2026.8	2017.8	2008.2	1999.8	1993.8	1989.0	1986.6
32.5°	2053.8	2048.4	2040.0	2031.6	2022.6	2011.8	2002.2	1995.0	1989.6	1988.4	1988.4
35°	2086.8	2077.8	2066.4	2054.4	2043.0	2034.0	2027.4	2026.8	2023.2	2027.4	2034.0
37.5°	2183.4	2175.6	2158.2	2142.6	2134.8	2130.6	2124.6	2125.8	2117.4	2130.6	2141.4
40°	2388.6	2379.0	2358.6	2346.0	2330.4	2315.4	2327.4	2323.8	2329.8	2327.4	2338.8
42.5°	2688.0	2678.4	2646.0	2641.2	2634.6	2628.6	2628.6	2623.8	2621.4	2629.8	2620.2
45°	3052.2	3033.0	3021.0	3035.4	3015.6	3021.6	3042.6	3014.4	3021.0	2982.0	2946.0
47.5°	3430.2	3428.4	3425.4	3442.8	3445.8	3454.8	3466.2	3437.4	3385.2	3355.8	3282.6
50°	3865.2	3883.8	3891.0	3907.8	3915.0	3921.6	3903.6	3861.0	3772.8	3694.8	3608.4
52.5°	4393.8	4361.4	4405.8	4422.0	4414.8	4388.4	4323.6	4271.4	4149.6	4037.4	3903.6
55°	5009.4	5017.2	4986.0	4973.4	4948.8	4875.6	4786.2	4668.6	4514.4	4368.0	4198.8
57.5°	5636.4	5633.4	5584.8	5516.4	5433.0	5344.8	5211.6	5043.0	4863.0	4666.2	4461.6
60°	6399.0	6396.0	6297.6	6180.6	6061.8	5919.6	5710.8	5508.0	5266.8	5008.2	4764.6
62.5°	7401.0	7272.0	7175.4	7000.8	6817.2	6631.2	6348.6	6079.2	5757.0	5430.6	5146.2
65°	8685.0	8472.6	8362.8	8109.6	7825.2	7534.8	7247.4	6893.4	6459.6	6064.8	5717.4
67.5°	9634.8	9440.4	9239.4	8986.8	8674.8	8350.8	7957.2	7511.4	7018.8	6576.0	6197.4
69°	9718.2	9536.4	9295.2	9042.0	8746.8	8394.6	7965.0	7465.8	6966.6	6518.4	6145.8
70°	9591.6	9398.4	9144.6	8881.2	8551.2	8218.8	7768.8	7248.6	6748.8	6299.4	5935.8
72.5°	8647.2	8458.8	8188.8	7873.8	7535.4	7251.0	6823.8	6281.4	5737.8	5322.6	5039.4
75°	6575.4	6534.0	6342.6	6159.0	5892.6	5575.2	5184.6	4819.8	4374.0	3934.8	3670.8
77.5°	2805.6	2901.0	3000.6	3015.0	3024.6	2926.8	2866.2	2774.4	2476.2	2340.6	2200.8
80°	518.4	463.2	494.4	498.0	518.4	529.2	568.8	674.4	686.4	712.2	744.0
82.5°	184.2	187.2	192.0	193.8	195.6	202.8	229.8	275.4	316.8	370.8	442.8
85°	104.4	106.2	110.4	114.0	116.4	123.6	138.6	165.6	206.4	268.2	363.6
87.5°	31.8	36.0	38.4	43.2	45.0	46.2	52.8	70.8	91.2	135.0	196.8
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-E03-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4	1775.4
2.5°	1774.2	1773.6	1772.4	1771.2	1771.8	1770.6	1767.0	1765.8	1761.6	1758.6	1756.2
5°	1790.4	1789.8	1787.4	1788.0	1787.4	1781.4	1777.2	1770.0	1765.8	1759.2	1756.8
7.5°	1824.0	1823.4	1819.2	1821.0	1819.8	1810.8	1803.6	1792.2	1786.2	1777.8	1771.2
10°	1874.4	1874.4	1869.6	1870.2	1870.2	1858.2	1845.6	1826.4	1812.6	1799.4	1788.0
12.5°	1935.6	1933.2	1932.6	1929.6	1927.2	1914.0	1894.8	1869.0	1843.2	1821.6	1806.0
15°	1997.4	1993.8	1992.0	1988.4	1985.4	1973.4	1947.6	1915.8	1881.0	1846.2	1820.4
17.5°	2037.6	2035.2	2031.6	2030.4	2026.2	2014.2	1996.2	1964.4	1921.2	1872.6	1833.6
20°	2052.6	2048.4	2046.0	2043.6	2041.2	2032.8	2032.8	2012.4	1964.4	1896.0	1836.6
22.5°	2043.0	2040.6	2037.0	2035.2	2032.8	2034.0	2057.4	2054.4	1999.2	1901.4	1815.0
25°	2020.8	2017.8	2014.8	2014.8	2014.2	2026.8	2083.2	2091.0	2009.4	1875.0	1767.6
27.5°	1998.0	1993.8	1995.0	1995.6	1998.6	2025.6	2111.4	2100.6	1981.8	1811.4	1686.0
30°	1984.2	1984.2	1987.2	1992.0	1998.0	2045.4	2133.6	2079.0	1910.4	1715.4	1578.0
32.5°	1990.2	1996.2	2002.8	2014.8	2023.8	2089.2	2141.4	2023.2	1806.6	1596.6	1465.2
35°	2043.6	2050.8	2063.4	2082.0	2092.8	2152.2	2141.4	1941.6	1686.0	1494.6	1348.8
37.5°	2160.0	2167.2	2182.2	2196.6	2207.4	2231.4	2132.4	1837.8	1585.2	1389.0	1244.4
40°	2347.2	2357.4	2368.2	2365.8	2358.6	2335.2	2114.4	1741.2	1492.2	1296.6	1141.8
42.5°	2610.6	2601.0	2599.8	2576.4	2552.4	2452.2	2101.2	1678.2	1412.4	1199.4	1039.8
45°	2914.8	2875.8	2835.6	2804.4	2767.8	2580.6	2097.6	1627.2	1324.2	1091.4	928.8
47.5°	3220.8	3158.4	3080.4	3031.8	2972.4	2717.4	2108.4	1558.8	1210.8	973.8	825.0
50°	3520.8	3418.8	3322.2	3264.0	3196.8	2874.6	2125.8	1443.6	1075.2	867.0	730.2
52.5°	3798.6	3667.2	3568.2	3499.8	3417.6	3057.6	2110.2	1292.4	957.6	764.4	640.2
55°	4062.6	3917.4	3814.8	3742.8	3646.2	3241.2	1997.4	1155.0	845.4	664.2	538.8
57.5°	4293.6	4154.4	4047.6	3949.8	3868.2	3400.8	1774.8	1041.6	737.4	549.6	429.0
60°	4563.6	4407.0	4280.4	4176.0	4080.0	3483.0	1525.2	940.8	622.2	425.4	310.2
62.5°	4927.8	4747.8	4601.4	4482.0	4356.6	3501.0	1354.8	840.0	493.8	307.8	225.6
65°	5467.8	5245.8	5062.8	4898.4	4728.6	3426.6	1270.8	730.2	367.2	228.6	189.0
67.5°	5896.8	5666.4	5454.6	5243.4	5026.2	3288.6	1252.2	628.8	282.0	194.4	169.8
69°	5844.6	5625.0	5430.6	5202.0	4961.4	3115.2	1233.6	589.8	257.4	180.6	160.8
70°	5643.6	5435.4	5238.0	5052.0	4757.4	2922.0	1184.4	568.2	247.8	174.0	154.2
72.5°	4768.8	4527.6	4336.2	4104.6	3794.4	2171.4	898.2	459.6	227.4	159.0	139.2
75°	3478.2	3278.4	3087.6	2831.4	2529.6	1256.4	559.2	262.8	166.8	144.0	126.0
77.5°	2031.0	1986.0	1801.8	1633.2	1334.4	639.6	321.0	157.2	129.6	130.8	111.0
80°	764.4	814.2	832.8	774.6	715.8	441.6	233.4	127.8	112.8	129.0	94.2
82.5°	557.4	646.8	657.6	630.0	586.2	411.6	186.6	102.6	91.8	138.6	81.0
85°	465.0	514.8	522.6	493.8	479.4	348.6	130.2	72.0	67.2	99.6	60.6
87.5°	235.2	247.8	254.4	230.4	231.6	162.6	52.2	30.6	36.6	42.6	33.6
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: P157990

CATALOG NUMBER: VST-E03-LED-E-U-RW

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1775.4	1775.4
2.5°	1750.8	1754.4
5°	1753.2	1753.2
7.5°	1767.0	1767.0
10°	1782.0	1782.6
12.5°	1795.8	1795.2
15°	1806.6	1804.8
17.5°	1813.2	1811.4
20°	1806.6	1803.6
22.5°	1773.0	1764.6
25°	1711.8	1701.0
27.5°	1630.8	1623.6
30°	1525.2	1514.4
32.5°	1401.6	1396.2
35°	1283.4	1276.8
37.5°	1175.4	1173.6
40°	1084.2	1074.6
42.5°	977.4	973.2
45°	868.8	866.4
47.5°	766.8	764.4
50°	672.6	667.8
52.5°	580.2	572.4
55°	477.6	472.2
57.5°	366.6	361.8
60°	258.0	252.6
62.5°	183.6	177.6
65°	153.0	148.2
67.5°	138.6	133.2
69°	132.0	127.2
70°	127.8	124.2
72.5°	118.8	116.4
75°	108.6	106.8
77.5°	95.4	92.4
80°	79.8	76.8
82.5°	67.2	64.2
85°	45.0	40.8
87.5°	20.4	18.0
90°	0.0	0.0

(END OF REPORT)