

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: P158003

Luminaire Tested: **VST-F04-LED-E-U-RW-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158003
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-F04-LED-E-U-RW-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8682.5 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 102.2
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

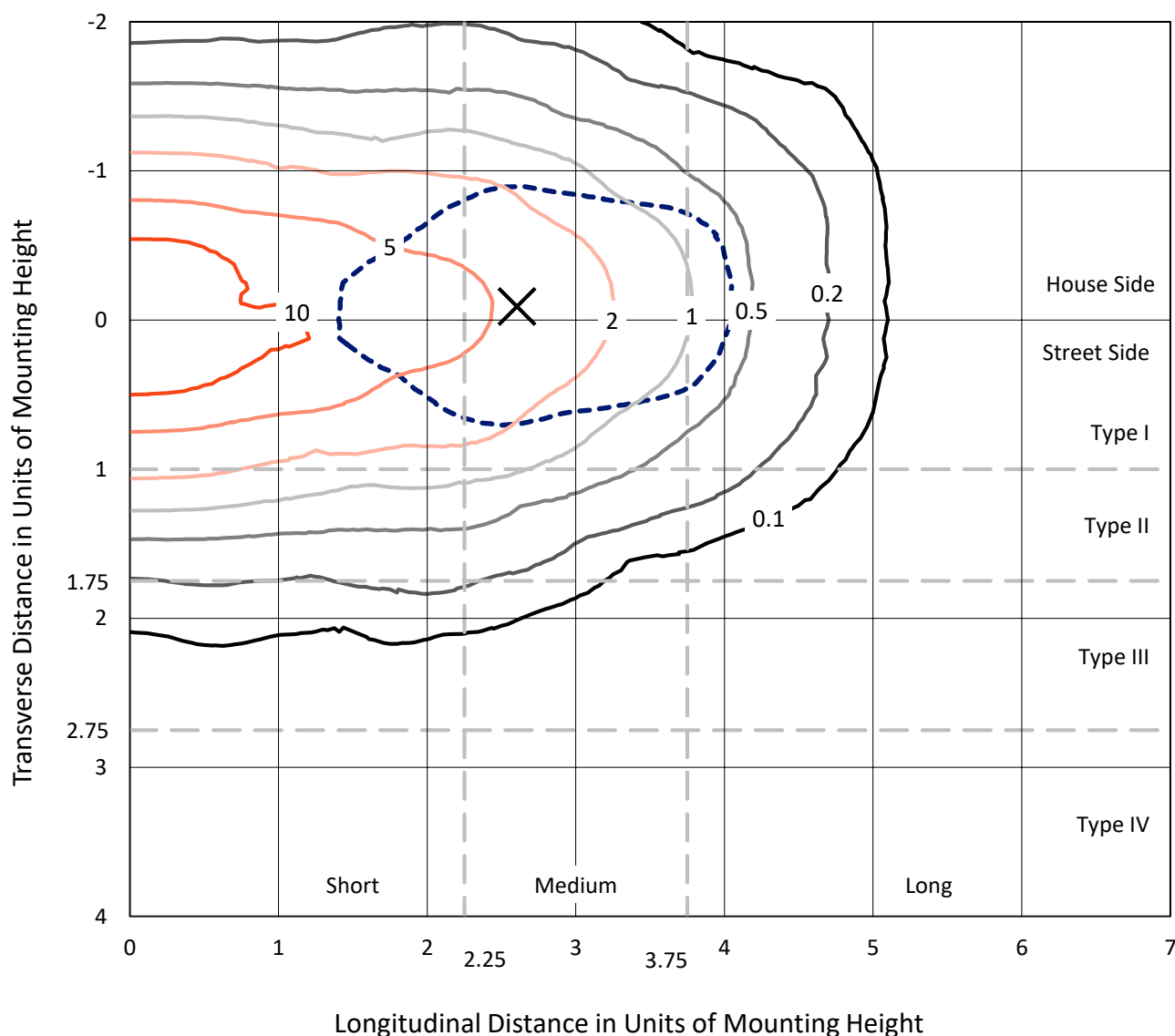


REPORT NUMBER: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

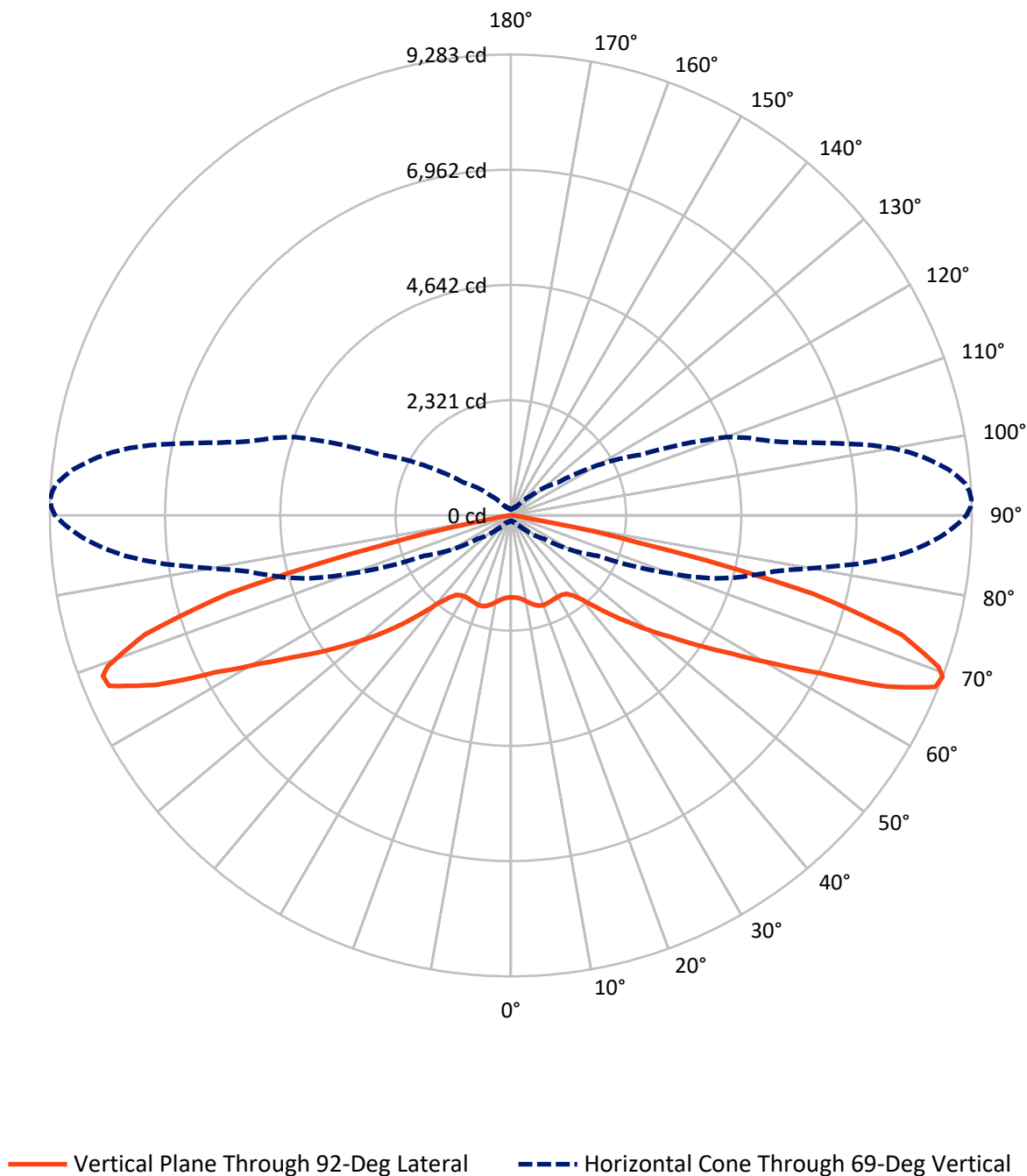


Based on 10 foot mounting height. Maximum calculated value = 17 fc
 Type I - Medium - Full Cutoff

REPORT NUMBER: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P158003

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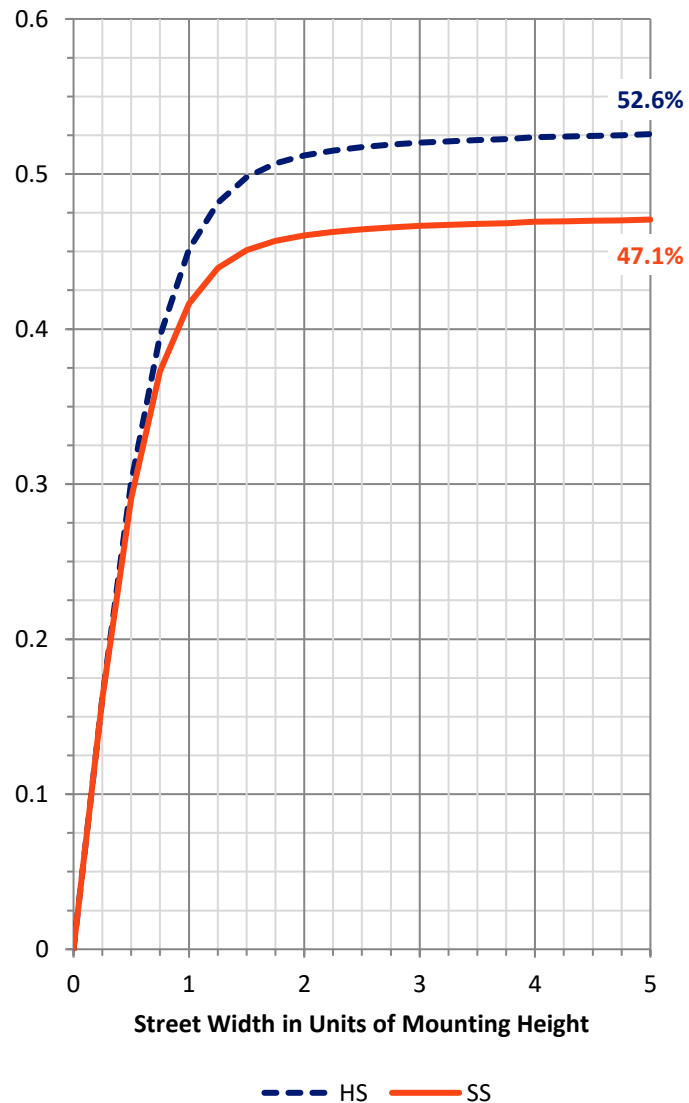
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4604.8	0.0	4604.8
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	4077.7	0.0	4077.7
	% Fixture	47.0	0.0	47.0
Total	Lumens	8682.5	0.0	8682.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.9
10°-20°	509.8	5.9
20°-30°	827.1	9.5
30°-40°	1030.8	11.9
40°-50°	1283.5	14.8
50°-60°	1582.9	18.2
60°-70°	1965.8	22.6
70°-80°	1207.9	13.9
80°-90°	113.2	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°	8682.5	100.0
0°-180°	8682.5	100.0

Coefficient of Utilization



REPORT NUMBER: P158003

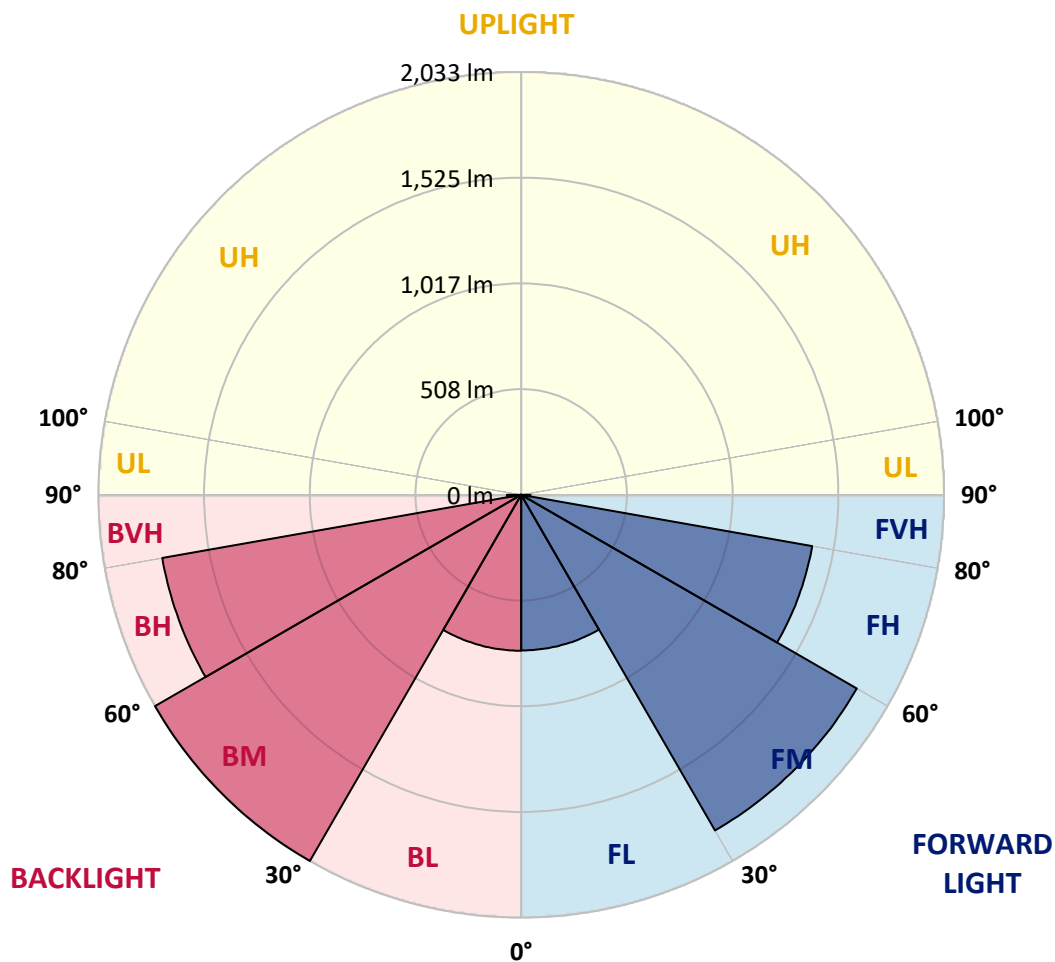
CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	748.4	8.6			
FM	(30°-60°)	1863.8	21.5			
FH	(60°-80°)	1421.2	16.4			G1/1800
FVH	(80°-90°)	44.3	0.5			G1/100
BL	(0°-30°)	750.0	8.6	B2/1000		
BM	(30°-60°)	2033.4	23.4	B2/2500		
BH	(60°-80°)	1752.5	20.2	B3/2500		G3/2500
BVH	(80°-90°)	68.9	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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1675.5	1671.1	1675.0	1675.5	1675.0	1675.0	1669.9	1668.8	1662.1	1663.8	1663.2
5°	1698.4	1696.7	1699.5	1700.6	1701.7	1699.5	1695.6	1693.9	1689.4	1687.8	1687.2
7.5°	1719.5	1716.8	1721.2	1725.1	1727.9	1728.5	1729.0	1726.2	1726.2	1724.0	1724.0
10°	1737.4	1735.2	1742.4	1747.4	1756.3	1761.3	1766.9	1770.8	1773.1	1773.6	1773.1
12.5°	1745.2	1743.5	1755.2	1770.3	1787.0	1798.7	1812.6	1822.7	1825.4	1824.9	1827.7
15°	1731.8	1732.9	1750.8	1780.3	1816.0	1845.5	1865.0	1873.4	1875.6	1876.7	1877.3
17.5°	1695.6	1697.8	1723.4	1771.4	1833.8	1887.3	1916.3	1916.3	1911.8	1911.8	1911.3
20°	1637.6	1639.8	1673.3	1742.4	1834.4	1916.3	1957.5	1949.2	1932.5	1929.1	1925.8
22.5°	1557.3	1566.3	1603.0	1683.3	1810.4	1924.7	1983.2	1970.9	1944.7	1937.5	1932.5
25°	1466.5	1465.4	1509.4	1599.7	1752.4	1904.6	1990.4	1988.2	1960.3	1952.5	1943.6
27.5°	1362.8	1366.2	1406.8	1498.3	1663.8	1846.6	1978.2	2007.7	1984.9	1977.1	1968.7
30°	1256.4	1259.7	1298.2	1404.6	1562.9	1763.6	1953.1	2026.7	2017.7	2011.6	2006.0
32.5°	1149.3	1150.4	1196.2	1310.4	1477.6	1664.4	1915.2	2043.9	2056.2	2053.4	2051.2
35°	1049.0	1050.1	1099.7	1215.7	1393.5	1579.6	1869.5	2069.0	2108.6	2111.9	2114.2
37.5°	951.5	953.1	1003.9	1125.4	1310.4	1515.5	1818.8	2107.5	2182.2	2194.4	2196.7
40°	854.5	856.1	904.6	1033.4	1226.3	1459.2	1779.7	2161.6	2281.4	2298.1	2315.4
42.5°	761.9	768.1	809.3	932.5	1132.6	1389.6	1763.0	2227.3	2399.0	2425.2	2444.7
45°	675.6	676.1	722.9	838.3	1021.7	1295.4	1751.9	2302.0	2530.5	2570.1	2596.9
47.5°	583.0	589.7	638.8	750.8	918.0	1178.9	1716.2	2389.5	2673.8	2720.1	2774.1
50°	493.3	502.8	550.1	661.1	823.3	1058.5	1620.3	2492.1	2834.9	2895.1	2957.5
52.5°	406.9	406.3	456.5	571.9	727.9	956.5	1464.8	2599.7	3021.0	3085.7	3153.1
55°	307.7	307.7	357.3	462.6	624.8	865.6	1298.2	2666.5	3193.8	3271.9	3345.4
57.5°	211.3	216.8	263.6	354.5	517.3	782.6	1170.5	2628.1	3325.9	3422.9	3510.4
60°	156.6	162.2	196.8	254.7	404.7	684.5	1074.6	2446.9	3405.6	3534.4	3648.1
62.5°	135.4	139.3	172.2	204.0	291.5	580.2	989.9	2216.7	3520.5	3696.6	3854.9
65°	121.0	124.9	157.7	176.1	228.0	466.5	942.5	2085.2	3657.6	3926.8	4156.4
67.5°	112.0	116.5	144.4	157.7	199.0	421.9	905.8	2054.5	3656.5	3983.1	4276.3
69°	107.6	110.9	133.8	148.3	192.3	408.6	826.0	1921.3	3415.1	3765.7	4060.0
70°	104.8	108.1	127.6	142.1	190.1	384.6	752.5	1745.2	3140.3	3493.2	3791.9
72.5°	95.9	99.2	113.7	127.1	158.3	257.0	524.5	1117.0	2244.0	2496.0	2837.7
75°	84.7	88.6	99.8	110.9	119.8	148.8	302.7	579.7	1283.1	1474.3	1778.6
77.5°	69.1	73.0	84.7	102.6	101.4	113.1	196.8	356.2	600.9	745.2	857.8
80°	56.9	59.6	69.7	103.7	83.1	94.8	159.4	292.1	423.1	467.6	494.4
82.5°	37.9	41.8	54.1	81.4	63.5	67.4	119.3	273.1	357.8	392.4	424.7
85°	17.8	19.5	32.9	43.5	38.5	36.2	68.0	192.9	266.4	282.6	294.9
87.5°	0.0	0.0	1.7	3.3	5.0	5.0	12.3	40.7	74.7	90.3	89.2
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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1661.0	1661.6	1661.0	1661.0	1660.5	1659.3	1659.3	1658.2	1658.8	1658.2	1659.3
5°	1686.7	1686.7	1685.0	1683.9	1685.5	1683.9	1684.4	1681.6	1681.6	1680.0	1677.7
7.5°	1723.4	1723.4	1724.0	1720.7	1722.9	1723.4	1721.8	1720.7	1719.5	1716.8	1717.3
10°	1772.5	1772.5	1774.2	1769.7	1771.9	1773.1	1773.6	1773.6	1772.5	1767.5	1768.0
12.5°	1827.1	1826.0	1826.6	1824.3	1826.6	1827.7	1828.8	1827.7	1827.7	1826.6	1826.0
15°	1876.7	1876.2	1877.3	1875.6	1876.2	1877.3	1880.6	1880.1	1879.5	1876.2	1876.2
17.5°	1910.7	1909.1	1907.9	1907.4	1907.4	1906.8	1907.4	1907.4	1905.7	1905.2	1905.2
20°	1923.5	1919.1	1916.3	1914.6	1912.4	1911.3	1910.2	1910.7	1909.6	1907.9	1908.5
22.5°	1925.8	1919.6	1914.1	1909.1	1904.6	1901.8	1899.0	1897.9	1895.1	1893.4	1893.4
25°	1936.4	1926.9	1918.0	1909.6	1902.9	1896.8	1890.7	1886.2	1882.9	1879.0	1877.8
27.5°	1959.8	1949.7	1939.2	1928.6	1919.6	1907.4	1899.0	1890.1	1882.3	1876.2	1871.7
30°	1996.0	1986.0	1975.4	1963.1	1951.4	1938.6	1924.7	1914.1	1902.9	1890.7	1884.0
32.5°	2043.9	2037.3	2026.7	2015.0	2004.4	1991.0	1974.3	1958.1	1947.5	1933.0	1922.4
35°	2112.5	2104.7	2101.4	2096.3	2085.7	2077.4	2059.0	2043.9	2033.9	2013.8	2006.0
37.5°	2206.1	2205.6	2208.4	2206.7	2208.4	2197.8	2189.4	2188.9	2174.4	2154.9	2135.9
40°	2333.8	2340.5	2355.5	2366.1	2376.1	2377.3	2389.0	2376.7	2378.4	2375.6	2356.1
42.5°	2479.3	2502.1	2520.0	2551.2	2575.1	2597.4	2612.5	2633.1	2648.7	2662.6	2666.0
45°	2641.5	2675.5	2716.7	2744.6	2791.4	2828.7	2880.0	2919.6	2960.8	3001.5	3016.0
47.5°	2817.6	2860.0	2905.7	2957.5	3016.6	3075.1	3154.3	3215.0	3281.3	3336.5	3385.6
50°	3012.1	3056.2	3117.5	3177.1	3258.5	3325.9	3429.6	3509.3	3616.3	3689.9	3753.5
52.5°	3215.0	3270.2	3338.8	3404.5	3487.6	3574.0	3689.4	3807.0	3935.7	4047.2	4139.7
55°	3413.4	3481.4	3547.2	3624.1	3716.1	3816.4	3946.9	4101.8	4262.3	4390.0	4512.6
57.5°	3590.1	3668.7	3746.2	3824.2	3918.4	4034.9	4181.5	4348.7	4532.7	4702.7	4871.0
60°	3754.0	3848.2	3943.0	4040.5	4148.6	4292.4	4468.6	4674.3	4912.3	5144.7	5364.9
62.5°	4013.2	4136.9	4254.5	4380.5	4510.9	4679.8	4887.7	5157.5	5430.6	5721.0	5946.8
65°	4364.4	4538.3	4692.1	4855.4	5024.3	5250.0	5498.6	5821.4	6212.7	6510.3	6872.6
67.5°	4538.8	4767.9	4965.8	5147.5	5356.5	5584.5	5879.9	6261.7	6679.2	7110.6	7514.7
69°	4333.7	4570.0	4789.1	4992.5	5203.8	5425.1	5733.9	6125.7	6567.2	7033.7	7428.3
70°	4067.8	4304.2	4537.7	4769.6	4962.4	5178.1	5488.0	5892.2	6333.0	6818.0	7209.3
72.5°	3116.4	3400.6	3611.9	3829.3	4052.8	4235.6	4593.4	4934.0	5393.3	5885.5	6316.3
75°	1993.8	2255.2	2486.0	2671.0	2889.5	3108.6	3372.8	3751.2	4038.8	4442.9	4792.4
77.5°	1024.5	1102.0	1324.4	1390.7	1542.3	1661.6	1807.1	1901.8	2135.9	2185.5	2391.8
80°	485.5	437.5	411.9	388.5	395.2	392.4	380.7	365.1	384.6	376.2	372.9
82.5°	423.1	377.4	301.0	255.8	221.3	187.8	161.6	148.3	149.9	154.4	156.1
85°	296.5	278.7	217.4	165.0	128.8	99.8	80.3	76.9	79.1	85.3	83.1
87.5°	85.8	89.7	79.1	55.2	38.5	27.9	21.7	24.5	23.4	22.9	24.0
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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1659.3	1658.8	1657.1	1655.4	1655.4	1654.3	1655.4	1656.0	1655.4	1655.4	1654.3
5°	1678.3	1678.9	1680.5	1677.2	1676.6	1677.2	1675.0	1674.4	1672.7	1674.4	1672.2
7.5°	1714.5	1716.2	1716.2	1714.0	1713.4	1715.1	1711.7	1710.6	1709.0	1708.4	1707.8
10°	1768.6	1770.3	1767.5	1765.8	1764.1	1766.4	1763.6	1763.6	1761.9	1760.2	1759.7
12.5°	1828.8	1827.7	1826.6	1827.7	1826.0	1826.0	1824.3	1823.2	1822.7	1822.1	1821.0
15°	1875.6	1879.5	1879.5	1880.6	1879.5	1879.5	1877.3	1877.8	1876.7	1876.2	1876.7
17.5°	1905.7	1906.8	1909.6	1911.3	1911.3	1911.8	1910.7	1911.8	1910.7	1910.7	1913.0
20°	1909.6	1910.7	1913.5	1916.3	1918.0	1919.1	1919.1	1920.8	1921.9	1923.0	1925.8
22.5°	1894.0	1895.7	1899.0	1904.0	1906.8	1907.9	1910.2	1913.0	1915.7	1918.0	1921.9
25°	1877.8	1878.4	1881.7	1886.8	1890.1	1892.9	1896.8	1900.1	1904.0	1908.5	1913.0
27.5°	1868.9	1868.4	1871.2	1876.2	1879.0	1882.9	1886.2	1891.2	1895.7	1901.3	1905.2
30°	1876.7	1872.3	1872.8	1875.1	1877.3	1880.1	1884.0	1888.4	1893.4	1898.5	1902.9
32.5°	1911.3	1901.3	1894.6	1892.9	1893.4	1894.0	1896.2	1899.0	1902.9	1906.8	1908.5
35°	1986.0	1968.7	1959.8	1952.5	1946.4	1941.4	1942.5	1941.9	1941.9	1945.3	1941.4
37.5°	2128.1	2106.4	2096.9	2084.1	2076.8	2058.4	2053.4	2052.3	2045.1	2045.1	2036.7
40°	2351.1	2338.2	2331.0	2319.3	2284.2	2288.6	2263.6	2264.1	2243.5	2245.7	2231.2
42.5°	2668.2	2669.9	2661.0	2653.2	2625.9	2613.6	2590.2	2556.7	2530.5	2530.0	2501.0
45°	3035.0	3055.0	3026.6	3036.7	3012.7	2979.8	2952.5	2909.6	2868.9	2856.1	2826.5
47.5°	3418.5	3451.3	3429.6	3433.5	3421.8	3375.0	3338.2	3285.2	3232.3	3196.6	3178.8
50°	3828.1	3849.9	3849.3	3838.7	3833.2	3787.5	3728.4	3688.2	3649.2	3601.3	3585.7
52.5°	4199.4	4250.1	4284.1	4276.3	4260.1	4232.8	4180.4	4145.9	4088.4	4081.8	4088.4
55°	4596.8	4662.6	4697.1	4738.9	4739.5	4734.5	4712.7	4699.9	4646.4	4652.5	4644.7
57.5°	4973.0	5069.4	5122.4	5211.6	5242.2	5282.9	5267.9	5284.6	5252.3	5273.5	5267.3
60°	5483.0	5616.8	5704.9	5826.9	5883.8	5985.8	6005.9	6018.1	6036.0	6079.4	6054.9
62.5°	6124.6	6320.8	6503.6	6669.7	6724.3	6877.6	6902.7	6998.6	7003.6	7033.1	6979.1
65°	7174.7	7413.8	7615.0	7814.0	7928.9	8108.3	8180.8	8367.0	8310.1	8334.1	8218.7
67.5°	7862.5	8140.7	8410.4	8598.8	8789.5	8972.8	9104.9	9225.3	9224.2	9200.8	9098.3
69°	7801.8	8111.7	8377.5	8630.0	8830.7	9019.1	9178.0	9256.0	9283.3	9249.3	9176.3
70°	7591.6	7909.9	8235.4	8443.3	8661.8	8868.6	9032.5	9117.8	9136.7	9112.7	9049.8
72.5°	6620.7	6926.1	7285.1	7474.0	7738.2	7887.6	8113.3	8223.7	8243.2	8212.6	8171.3
75°	5167.0	5222.2	5587.8	5708.2	5900.0	6072.2	6212.7	6177.0	6276.8	6257.2	6241.6
77.5°	2434.1	2287.0	2523.9	2634.2	2576.2	2421.9	2646.5	2484.3	2591.9	2731.8	2696.1
80°	401.3	400.2	410.8	434.2	406.3	431.4	430.9	418.6	419.7	449.8	434.2
82.5°	154.4	157.7	159.4	163.9	163.9	164.4	167.2	170.6	167.8	173.3	172.2
85°	83.6	89.2	84.2	80.3	83.1	84.7	87.0	89.7	87.0	95.3	90.9
87.5°	21.7	22.9	20.1	20.1	19.5	17.8	17.8	19.0	20.6	24.5	26.8
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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1652.1	1652.7	1653.2	1651.5	1650.4	1650.4	1649.9	1648.8	1648.2	1648.2	1648.2
5°	1671.1	1672.2	1669.4	1668.8	1667.7	1666.6	1666.6	1665.5	1666.0	1666.0	1663.2
7.5°	1709.0	1707.3	1703.9	1701.7	1703.9	1700.0	1698.4	1699.5	1698.4	1698.9	1697.8
10°	1759.7	1759.7	1755.8	1758.0	1755.2	1750.8	1752.4	1750.8	1749.6	1745.7	1748.0
12.5°	1822.7	1821.0	1818.8	1813.7	1812.1	1811.5	1806.5	1807.1	1805.4	1804.3	1802.6
15°	1877.8	1877.3	1872.3	1869.5	1868.9	1866.7	1864.5	1863.3	1860.6	1860.0	1858.9
17.5°	1914.6	1913.0	1910.7	1907.9	1907.9	1904.6	1903.5	1900.7	1900.1	1898.5	1896.8
20°	1926.9	1927.4	1925.2	1923.0	1921.9	1919.6	1918.0	1915.7	1914.6	1912.4	1910.7
22.5°	1924.1	1924.1	1921.9	1921.3	1919.1	1915.7	1913.5	1910.7	1907.9	1905.2	1901.8
25°	1915.2	1914.6	1913.0	1910.2	1907.4	1902.4	1897.9	1893.4	1889.5	1886.2	1881.2
27.5°	1907.4	1906.3	1902.9	1899.0	1893.4	1887.9	1879.5	1873.4	1868.4	1863.9	1858.3
30°	1904.6	1900.7	1895.7	1889.5	1882.9	1874.5	1865.6	1857.8	1852.2	1847.7	1845.5
32.5°	1907.9	1902.9	1895.1	1887.3	1879.0	1868.9	1860.0	1853.3	1848.3	1847.2	1847.2
35°	1938.6	1930.2	1919.6	1908.5	1897.9	1889.5	1883.4	1882.9	1879.5	1883.4	1889.5
37.5°	2028.3	2021.1	2004.9	1990.4	1983.2	1979.3	1973.7	1974.8	1967.0	1979.3	1989.3
40°	2219.0	2210.0	2191.1	2179.4	2164.9	2151.0	2162.1	2158.8	2164.3	2162.1	2172.7
42.5°	2497.1	2488.2	2458.1	2453.6	2447.5	2441.9	2441.9	2437.5	2435.2	2443.0	2434.1
45°	2835.4	2817.6	2806.5	2819.8	2801.4	2807.0	2826.5	2800.3	2806.5	2770.2	2736.8
47.5°	3186.6	3184.9	3182.1	3198.3	3201.1	3209.4	3220.0	3193.3	3144.8	3117.5	3049.5
50°	3590.7	3608.0	3614.7	3630.3	3637.0	3643.1	3626.4	3586.8	3504.9	3432.4	3352.1
52.5°	4081.8	4051.7	4092.9	4108.0	4101.3	4076.7	4016.5	3968.0	3854.9	3750.7	3626.4
55°	4653.6	4660.9	4631.9	4620.2	4597.3	4529.3	4446.3	4337.0	4193.8	4057.8	3900.6
57.5°	5236.1	5233.3	5188.2	5124.6	5047.2	4965.2	4841.5	4684.8	4517.6	4334.8	4144.7
60°	5944.5	5941.8	5850.3	5741.7	5631.3	5499.2	5305.2	5116.8	4892.8	4652.5	4426.2
62.5°	6875.4	6755.5	6665.8	6503.6	6333.0	6160.3	5897.7	5647.5	5348.1	5044.9	4780.7
65°	8068.2	7870.9	7768.9	7533.7	7269.5	6999.7	6732.7	6403.8	6000.8	5634.1	5311.4
67.5°	8950.5	8769.9	8583.2	8348.6	8058.7	7757.7	7392.1	6977.9	6520.3	6109.0	5757.3
69°	9028.0	8859.1	8635.1	8399.8	8125.6	7798.4	7399.3	6935.6	6471.8	6055.5	5709.3
70°	8910.4	8730.9	8495.2	8250.5	7943.9	7635.1	7217.1	6733.8	6269.5	5852.0	5514.2
72.5°	8033.1	7858.1	7607.2	7314.6	7000.2	6736.0	6339.2	5835.3	5330.3	4944.6	4681.5
75°	6108.4	6070.0	5892.2	5721.6	5474.1	5179.3	4816.4	4477.5	4063.4	3655.4	3410.1
77.5°	2606.3	2695.0	2787.5	2800.9	2809.8	2718.9	2662.6	2577.4	2300.3	2174.4	2044.5
80°	481.6	430.3	459.3	462.6	481.6	491.6	528.4	626.5	637.7	661.6	691.2
82.5°	171.1	173.9	178.4	180.0	181.7	188.4	213.5	255.8	294.3	344.5	411.4
85°	97.0	98.7	102.6	105.9	108.1	114.8	128.8	153.8	191.7	249.2	337.8
87.5°	29.5	33.4	35.7	40.1	41.8	42.9	49.1	65.8	84.7	125.4	182.8
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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3	1649.3
2.5°	1648.2	1647.6	1646.5	1645.4	1646.0	1644.9	1641.5	1640.4	1636.5	1633.7	1631.5
5°	1663.2	1662.7	1660.5	1661.0	1660.5	1654.9	1651.0	1644.3	1640.4	1634.3	1632.0
7.5°	1694.5	1693.9	1690.0	1691.7	1690.6	1682.2	1675.5	1664.9	1659.3	1651.5	1645.4
10°	1741.3	1741.3	1736.8	1737.4	1737.4	1726.2	1714.5	1696.7	1683.9	1671.6	1661.0
12.5°	1798.1	1795.9	1795.3	1792.6	1790.3	1778.1	1760.2	1736.3	1712.3	1692.2	1677.7
15°	1855.5	1852.2	1850.5	1847.2	1844.4	1833.3	1809.3	1779.7	1747.4	1715.1	1691.1
17.5°	1892.9	1890.7	1887.3	1886.2	1882.3	1871.2	1854.4	1824.9	1784.8	1739.6	1703.4
20°	1906.8	1902.9	1900.7	1898.5	1896.2	1888.4	1888.4	1869.5	1824.9	1761.3	1706.2
22.5°	1897.9	1895.7	1892.3	1890.7	1888.4	1889.5	1911.3	1908.5	1857.2	1766.4	1686.1
25°	1877.3	1874.5	1871.7	1871.7	1871.2	1882.9	1935.3	1942.5	1866.7	1741.8	1642.1
27.5°	1856.1	1852.2	1853.3	1853.9	1856.7	1881.7	1961.4	1951.4	1841.1	1682.8	1566.3
30°	1843.3	1843.3	1846.1	1850.5	1856.1	1900.1	1982.1	1931.4	1774.7	1593.6	1465.9
32.5°	1848.9	1854.4	1860.6	1871.7	1880.1	1940.8	1989.3	1879.5	1678.3	1483.2	1361.1
35°	1898.5	1905.2	1916.9	1934.1	1944.2	1999.4	1989.3	1803.7	1566.3	1388.5	1253.0
37.5°	2006.6	2013.3	2027.2	2040.6	2050.6	2072.9	1981.0	1707.3	1472.6	1290.4	1156.0
40°	2180.5	2190.0	2200.0	2197.8	2191.1	2169.4	1964.2	1617.5	1386.2	1204.5	1060.7
42.5°	2425.2	2416.3	2415.2	2393.4	2371.1	2278.0	1952.0	1559.0	1312.1	1114.2	966.0
45°	2707.8	2671.6	2634.2	2605.2	2571.2	2397.3	1948.6	1511.6	1230.2	1013.9	862.8
47.5°	2992.1	2934.1	2861.6	2816.5	2761.3	2524.4	1958.7	1448.1	1124.8	904.6	766.4
50°	3270.8	3176.0	3086.3	3032.2	2969.8	2670.4	1974.8	1341.1	998.8	805.4	678.3
52.5°	3528.8	3406.8	3314.8	3251.2	3174.9	2840.5	1960.3	1200.6	889.6	710.1	594.7
55°	3774.1	3639.2	3543.9	3477.0	3387.2	3011.0	1855.5	1073.0	785.4	617.0	500.5
57.5°	3988.7	3859.4	3760.1	3669.3	3593.5	3159.3	1648.8	967.6	685.0	510.6	398.5
60°	4239.5	4094.0	3976.4	3879.4	3790.2	3235.6	1416.9	874.0	578.0	395.2	288.2
62.5°	4577.8	4410.6	4274.6	4163.7	4047.2	3252.4	1258.6	780.3	458.7	285.9	209.6
65°	5079.5	4873.2	4703.2	4550.5	4392.8	3183.2	1180.5	678.3	341.1	212.4	175.6
67.5°	5478.0	5264.0	5067.2	4871.0	4669.2	3055.0	1163.3	584.1	262.0	180.6	157.7
69°	5429.5	5225.5	5044.9	4832.6	4609.0	2894.0	1146.0	547.9	239.1	167.8	149.4
70°	5242.8	5049.4	4866.0	4693.2	4419.5	2714.5	1100.3	527.8	230.2	161.6	143.2
72.5°	4430.1	4206.1	4028.2	3813.1	3524.9	2017.2	834.4	427.0	211.3	147.7	129.3
75°	3231.2	3045.6	2868.3	2630.3	2349.9	1167.2	519.5	244.1	155.0	133.8	117.1
77.5°	1886.8	1845.0	1673.8	1517.2	1239.6	594.2	298.2	146.0	120.4	121.5	103.1
80°	710.1	756.4	773.7	719.6	665.0	410.2	216.8	118.7	104.8	119.8	87.5
82.5°	517.8	600.9	610.9	585.3	544.6	382.4	173.3	95.3	85.3	128.8	75.2
85°	432.0	478.2	485.5	458.7	445.4	323.8	121.0	66.9	62.4	92.5	56.3
87.5°	218.5	230.2	236.3	214.0	215.2	151.1	48.5	28.4	34.0	39.6	31.2
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: P158003

CATALOG NUMBER: VST-F04-LED-E-U-RW-8030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1649.3	1649.3
2.5°	1626.5	1629.8
5°	1628.7	1628.7
7.5°	1641.5	1641.5
10°	1655.4	1656.0
12.5°	1668.3	1667.7
15°	1678.3	1676.6
17.5°	1684.4	1682.8
20°	1678.3	1675.5
22.5°	1647.1	1639.3
25°	1590.2	1580.2
27.5°	1515.0	1508.3
30°	1416.9	1406.8
32.5°	1302.1	1297.0
35°	1192.3	1186.1
37.5°	1091.9	1090.3
40°	1007.2	998.3
42.5°	908.0	904.1
45°	807.1	804.9
47.5°	712.3	710.1
50°	624.8	620.4
52.5°	539.0	531.7
55°	443.7	438.7
57.5°	340.6	336.1
60°	239.7	234.7
62.5°	170.6	165.0
65°	142.1	137.7
67.5°	128.8	123.7
69°	122.6	118.2
70°	118.7	115.4
72.5°	110.4	108.1
75°	100.9	99.2
77.5°	88.6	85.8
80°	74.1	71.3
82.5°	62.4	59.6
85°	41.8	37.9
87.5°	19.0	16.7
90°	0.0	0.0

(END OF REPORT)