

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: P157783

Luminaire Tested: **VST-F04-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157783
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33710)
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-5XQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8814.1 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U1 - 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

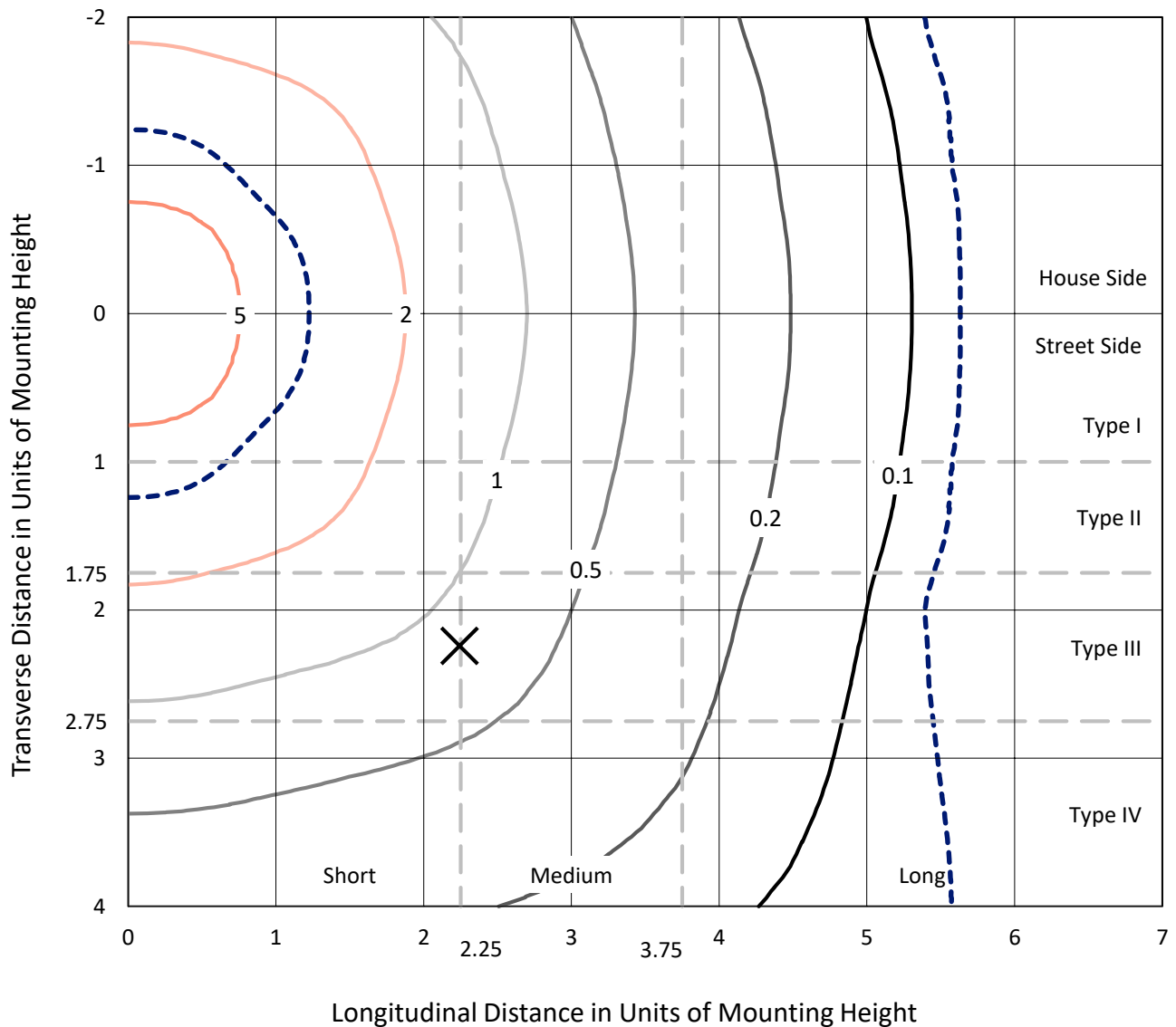


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

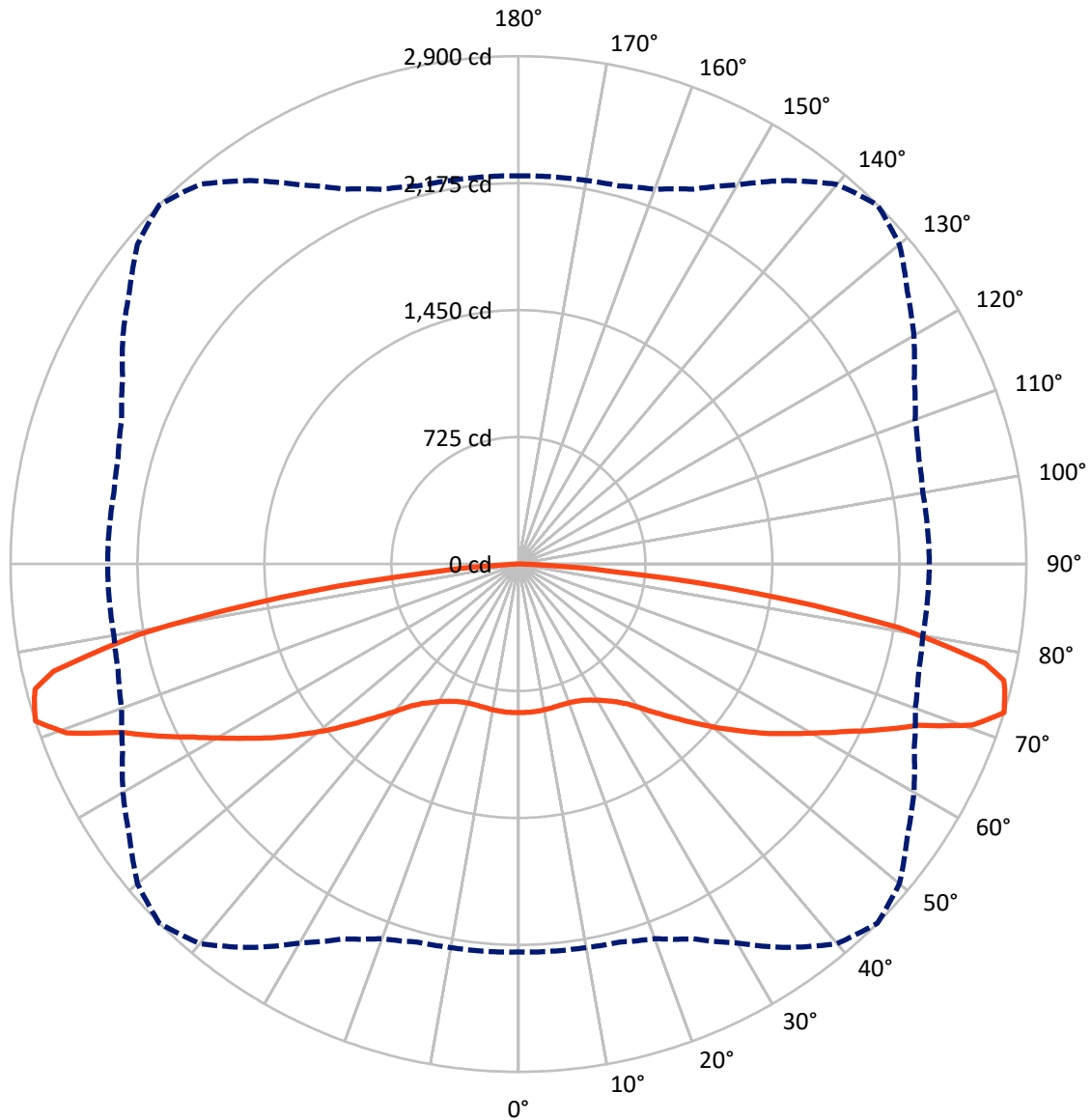


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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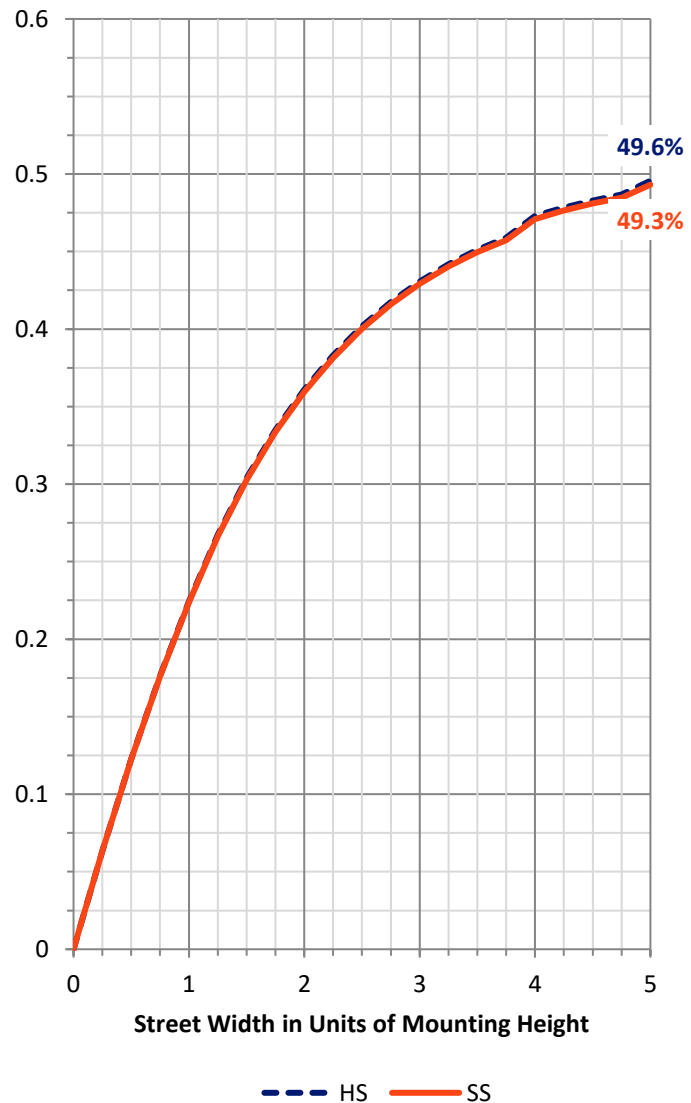
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4404.8	2.2	4407.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4404.8	2.2	4407.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	8809.6	4.4	8814.1
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	0.9
10°-20°	239.1	2.7
20°-30°	399.8	4.5
30°-40°	607.6	6.9
40°-50°	962.3	10.9
50°-60°	1472.0	16.7
60°-70°	2106.7	23.9
70°-80°	2410.6	27.3
80°-90°	530.5	6.0
90°-100°	0.5	0.0
100°-110°	0.9	0.0
110°-120°	0.7	0.0
120°-130°	0.7	0.0
130°-140°	0.7	0.0
140°-150°	0.5	0.0
150°-160°	0.3	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	8809.6	99.9
0°-180°	8814.1	100.0



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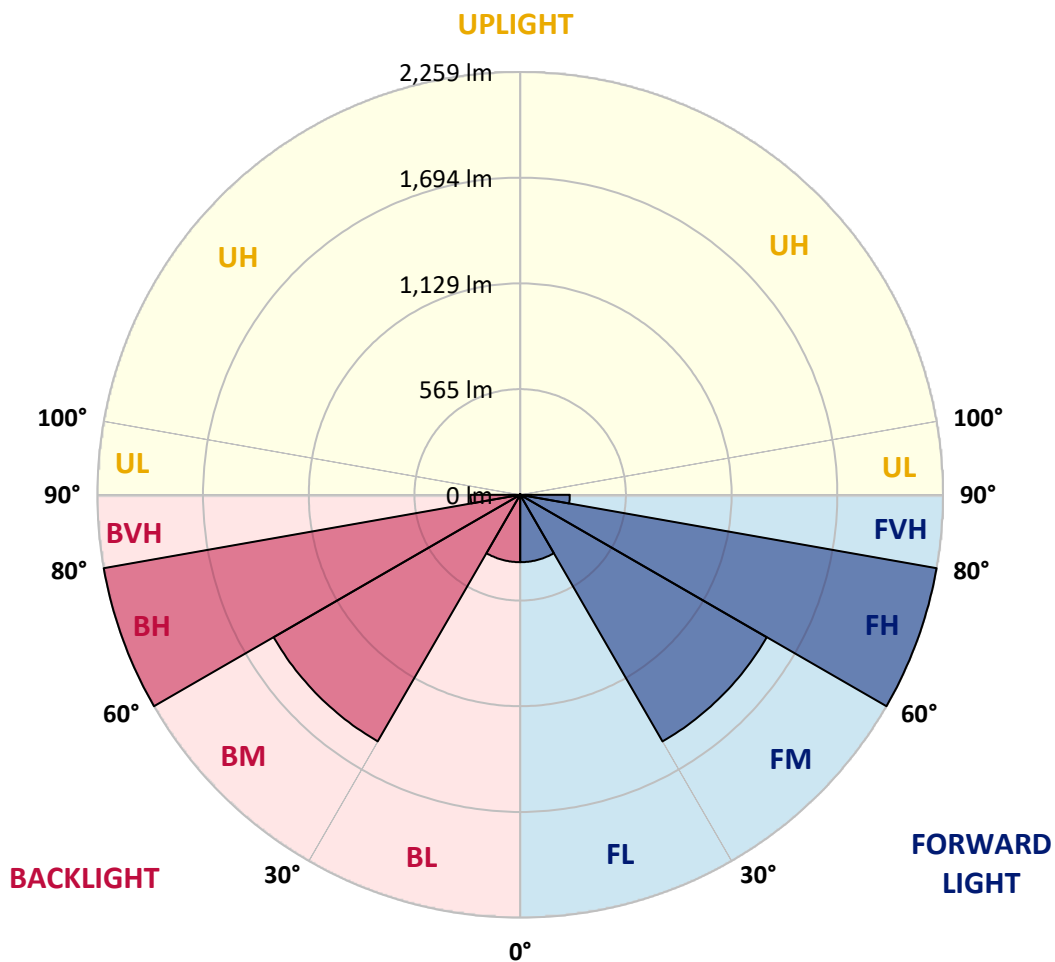
CATALOG NUMBER: VST-F04-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	359.9	4.1			
FM	(30°-60°)	1521.0	17.3			
FH	(60°-80°)	2258.7	25.6			G2/5000
FVH	(80°-90°)	265.3	3.0			G3/500
BL	(0°-30°)	359.9	4.1	B1/500		
BM	(30°-60°)	1521.0	17.3	B2/2500		
BH	(60°-80°)	2258.7	25.6	B3/2500		G2/5000
BVH	(80°-90°)	265.3	3.0			G3/500
UL	(90°-100°)	0.5	0.0		U1/10	
UH	(100°-180°)	2.2	0.0		U1/10	

BUG Rating: B3-U1-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	848.3	848.3	848.3	848.3	848.3	848.3	848.3	848.3	848.3	848.3	848.3
2.5°	848.9	847.8	848.3	849.5	848.9	848.9	848.3	848.3	849.5	848.3	848.9
5°	849.5	848.3	848.9	849.5	848.9	849.5	848.9	848.9	848.9	848.3	849.5
7.5°	847.2	847.2	847.8	847.8	847.2	847.8	847.8	847.8	847.2	847.2	848.3
10°	846.1	845.6	845.6	846.1	845.6	845.6	846.1	846.1	845.0	845.0	846.1
12.5°	844.4	843.9	843.9	843.9	843.3	843.3	843.9	843.9	843.3	842.8	844.4
15°	843.3	842.8	842.8	842.8	841.7	842.2	842.2	842.2	841.7	841.1	842.8
17.5°	842.8	842.2	842.2	842.2	841.7	841.7	841.7	841.7	841.1	841.1	842.2
20°	843.9	843.9	843.9	843.9	843.3	843.3	843.3	843.9	843.9	843.9	845.0
22.5°	846.7	846.7	847.2	847.8	847.8	848.9	849.5	850.0	850.0	850.6	851.7
25°	853.9	853.9	854.5	855.0	856.7	857.8	860.1	861.2	861.7	861.7	862.3
27.5°	867.3	867.9	869.0	870.1	872.3	874.0	876.2	878.4	879.0	879.6	880.1
30°	884.0	884.6	886.8	887.9	890.7	894.1	896.8	899.1	900.7	901.9	901.3
32.5°	908.0	909.1	911.9	913.6	917.5	920.8	924.7	928.1	929.7	931.4	930.8
35°	941.4	944.2	947.0	948.7	952.6	955.4	960.4	963.7	967.1	966.0	966.5
37.5°	991.0	993.3	993.8	994.9	998.8	1001.1	1006.6	1011.1	1012.8	1013.9	1014.4
40°	1057.9	1057.9	1060.7	1058.5	1063.5	1064.1	1070.7	1076.9	1078.5	1083.0	1079.7
42.5°	1136.0	1135.4	1137.1	1135.4	1135.4	1141.0	1146.5	1157.7	1158.8	1164.4	1161.0
45°	1220.7	1220.7	1219.0	1219.6	1220.7	1226.8	1233.5	1245.8	1251.3	1254.7	1252.5
47.5°	1312.6	1310.4	1309.9	1309.3	1312.6	1319.3	1329.4	1341.1	1355.0	1356.1	1355.0
50°	1405.7	1405.2	1401.3	1404.6	1406.8	1410.2	1429.1	1444.8	1459.2	1468.2	1465.4
52.5°	1503.8	1498.8	1498.8	1498.8	1504.4	1515.0	1531.7	1552.9	1572.4	1581.9	1580.2
55°	1603.0	1601.4	1596.4	1594.1	1601.4	1616.4	1640.4	1666.0	1691.7	1706.2	1700.6
57.5°	1693.9	1691.1	1691.7	1692.2	1700.6	1720.7	1748.5	1782.5	1810.4	1826.0	1822.1
60°	1765.2	1761.9	1768.0	1769.7	1784.8	1818.2	1862.8	1905.7	1942.5	1958.1	1952.0
62.5°	1846.1	1843.8	1847.7	1847.2	1863.3	1900.7	1960.3	2028.9	2084.6	2104.7	2095.8
65°	1976.5	1969.8	1968.1	1962.0	1972.6	2001.6	2061.2	2140.9	2230.1	2281.4	2269.1
67.5°	2132.6	2130.9	2125.3	2122.0	2125.9	2162.1	2219.5	2296.4	2387.3	2458.1	2473.7
70°	2235.7	2237.9	2243.5	2251.8	2284.2	2354.4	2459.2	2575.7	2700.5	2753.5	2744.0
72.5°	2216.2	2219.5	2224.0	2234.6	2276.9	2361.1	2499.3	2673.2	2829.9	2900.1	2839.9
75°	2120.9	2123.6	2133.7	2149.8	2201.7	2303.7	2452.5	2637.0	2798.6	2868.9	2805.9
76°	2032.8	2041.7	2060.1	2079.1	2141.5	2252.4	2411.3	2608.0	2779.1	2850.5	2789.7
77.5°	1833.3	1841.1	1856.1	1889.0	1959.8	2101.9	2287.5	2480.9	2659.3	2723.4	2672.1
80°	1379.5	1386.2	1400.2	1439.7	1501.0	1589.1	1732.9	1921.9	2117.5	2201.7	2168.2
82.5°	582.5	590.3	645.5	702.9	770.3	865.6	959.3	1126.5	1270.3	1366.2	1314.9
85°	64.1	79.1	97.5	132.7	162.8	216.8	269.8	371.2	469.3	529.0	467.6
87.5°	11.1	12.8	18.4	23.4	26.2	30.1	36.2	50.7	69.1	59.6	60.8
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.1	1.1	1.1	1.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6
97.5°	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1
102.5°	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1	1.1
105°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
107.5°	0.6	0.6	0.6	0.6	1.1	1.1	0.6	0.6	0.6	1.1	0.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
112.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
115°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
117.5°	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120°	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
122.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
125°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
127.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
130°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
132.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
135°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
137.5°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
140°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
142.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
147.5°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6	0.6
150°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.0	0.0	0.0
152.5°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.0
155°	1.1	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.6
157.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.0	0.0
160°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.0	0.0
162.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.0	0.0
165°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	848.3	848.3	848.3	848.3	848.3	848.3	848.3	848.3
2.5°	848.3	848.3	849.5	848.9	848.9	849.5	850.6	850.0
5°	848.9	849.5	848.3	848.9	849.5	849.5	850.0	849.5
7.5°	847.8	847.8	847.8	848.3	848.9	848.3	848.9	848.9
10°	845.6	846.1	845.6	846.7	847.2	847.2	847.8	847.8
12.5°	843.9	843.9	843.9	845.0	845.6	845.6	846.1	845.6
15°	842.2	842.2	841.7	842.8	843.9	843.9	844.4	844.4
17.5°	841.7	841.7	841.1	842.2	843.3	843.3	843.9	843.9
20°	843.3	843.9	842.8	843.9	845.0	845.6	845.6	845.6
22.5°	850.0	849.5	847.8	848.3	848.9	848.9	848.9	848.9
25°	860.1	858.9	857.3	856.7	856.1	855.6	855.6	855.6
27.5°	877.3	875.7	872.9	872.3	871.8	870.6	870.6	870.6
30°	898.0	895.7	892.4	891.3	889.6	888.5	887.9	887.4
32.5°	927.5	923.0	919.1	916.3	914.7	911.3	910.8	909.7
35°	961.5	958.2	952.6	950.9	948.1	946.4	945.9	943.1
37.5°	1008.3	1004.4	999.4	998.3	997.7	996.1	996.1	995.5
40°	1073.5	1069.6	1065.2	1060.7	1061.8	1062.4	1062.4	1060.2
42.5°	1153.2	1147.1	1138.2	1141.0	1139.3	1137.1	1141.5	1138.7
45°	1244.1	1235.7	1229.0	1226.3	1226.3	1223.5	1227.9	1227.9
47.5°	1345.0	1331.6	1319.3	1319.9	1315.4	1316.6	1319.3	1323.2
50°	1451.4	1433.6	1421.9	1416.3	1411.9	1413.5	1418.6	1419.7
52.5°	1561.8	1540.1	1524.5	1516.1	1510.5	1512.8	1516.7	1520.0
55°	1676.6	1652.7	1629.2	1620.3	1613.6	1618.1	1618.7	1623.1
57.5°	1796.5	1763.6	1736.3	1722.9	1716.2	1720.7	1724.0	1728.5
60°	1917.4	1879.5	1847.2	1831.6	1822.1	1828.2	1836.0	1838.3
62.5°	2057.9	2005.5	1969.3	1947.0	1942.5	1948.6	1950.9	1957.5
65°	2224.0	2161.0	2110.8	2083.5	2082.4	2085.7	2090.8	2092.4
67.5°	2413.5	2343.3	2275.8	2248.5	2237.9	2247.9	2253.0	2259.7
70°	2681.0	2584.6	2487.1	2426.3	2400.7	2392.9	2395.1	2402.3
72.5°	2711.1	2607.5	2493.8	2411.3	2366.1	2345.5	2344.9	2346.0
75°	2645.4	2479.8	2399.6	2304.8	2240.7	2207.3	2202.8	2202.2
76°	2612.5	2416.8	2300.9	2225.7	2148.7	2114.7	2109.7	2106.9
77.5°	2473.7	2263.6	2089.1	2043.4	1969.8	1926.9	1935.8	1928.6
80°	1983.2	1774.7	1610.3	1481.5	1485.4	1454.2	1441.4	1437.5
82.5°	1168.8	997.7	816.0	709.6	608.1	581.4	500.5	482.1
85°	373.5	264.8	160.5	116.5	79.1	66.3	51.8	47.4
87.5°	49.6	39.0	31.8	30.7	27.9	24.0	15.6	11.1
90°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
97.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6
102.5°	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6
105°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
107.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



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CATALOG NUMBER: VST-F04-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1
112.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1
115°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1
117.5°	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1
120°	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.1
122.5°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
125°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
127.5°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
130°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
132.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
135°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
137.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
140°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
142.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
145°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
150°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
152.5°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
155°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
157.5°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
160°	0.6	0.6	0.6	0.6	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.1
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)