

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: P157770

Luminaire Tested: **VST-E03-LED-E-U-5XQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157770
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-E03-LED-E-U-5XQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9487.7 lumens
Efficiency: N/A
Efficacy: 126.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U1 - 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



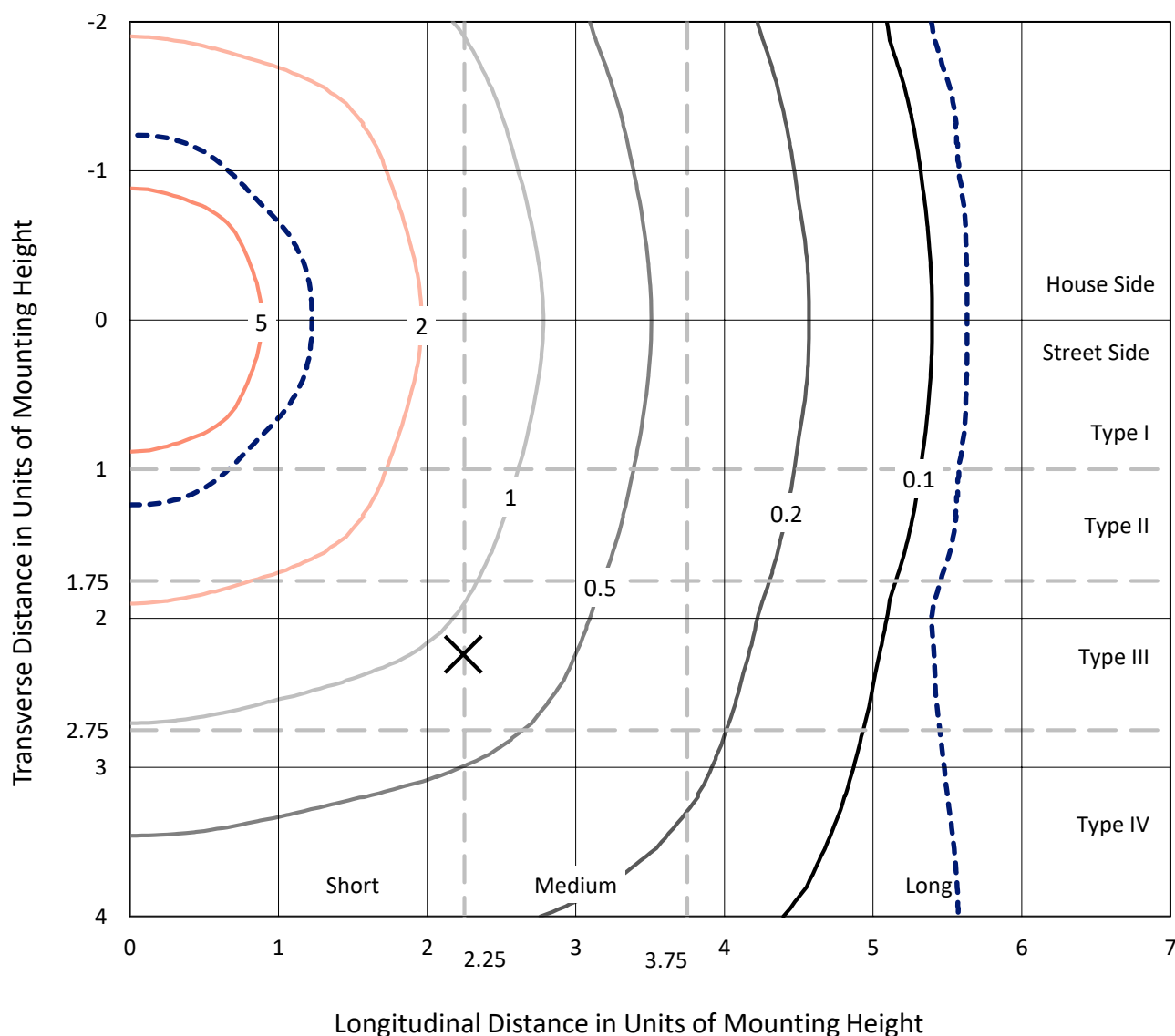
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

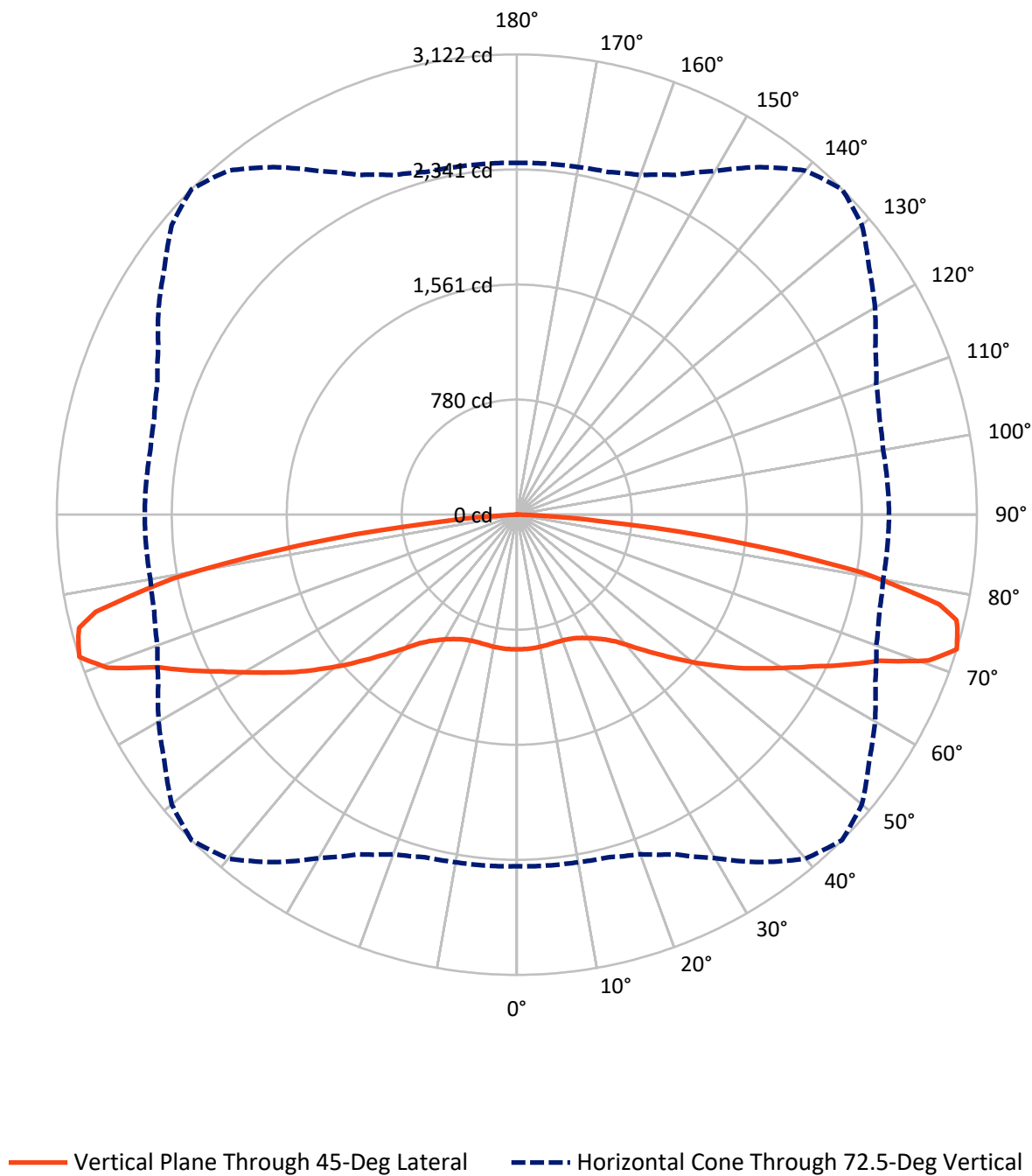


Based on 10 foot mounting height. Maximum calculated value = 9.1 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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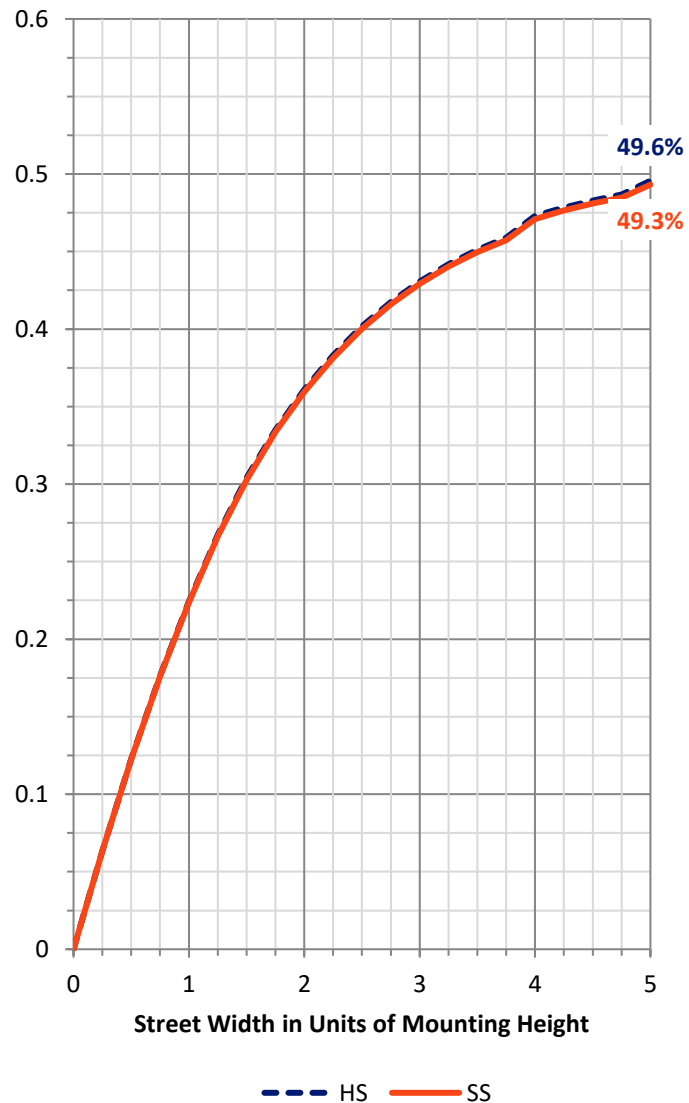
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4741.6	2.3	4743.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4741.6	2.3	4743.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	9483.1	4.6	9487.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	0.9
10°-20°	257.3	2.7
20°-30°	430.3	4.5
30°-40°	654.1	6.9
40°-50°	1035.9	10.9
50°-60°	1584.6	16.7
60°-70°	2267.8	23.9
70°-80°	2594.9	27.3
80°-90°	571.1	6.0
90°-100°	0.5	0.0
100°-110°	1.0	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°	0.4	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	9483.1	100.0
0°-180°	9487.7	100.0

Coefficient of Utilization



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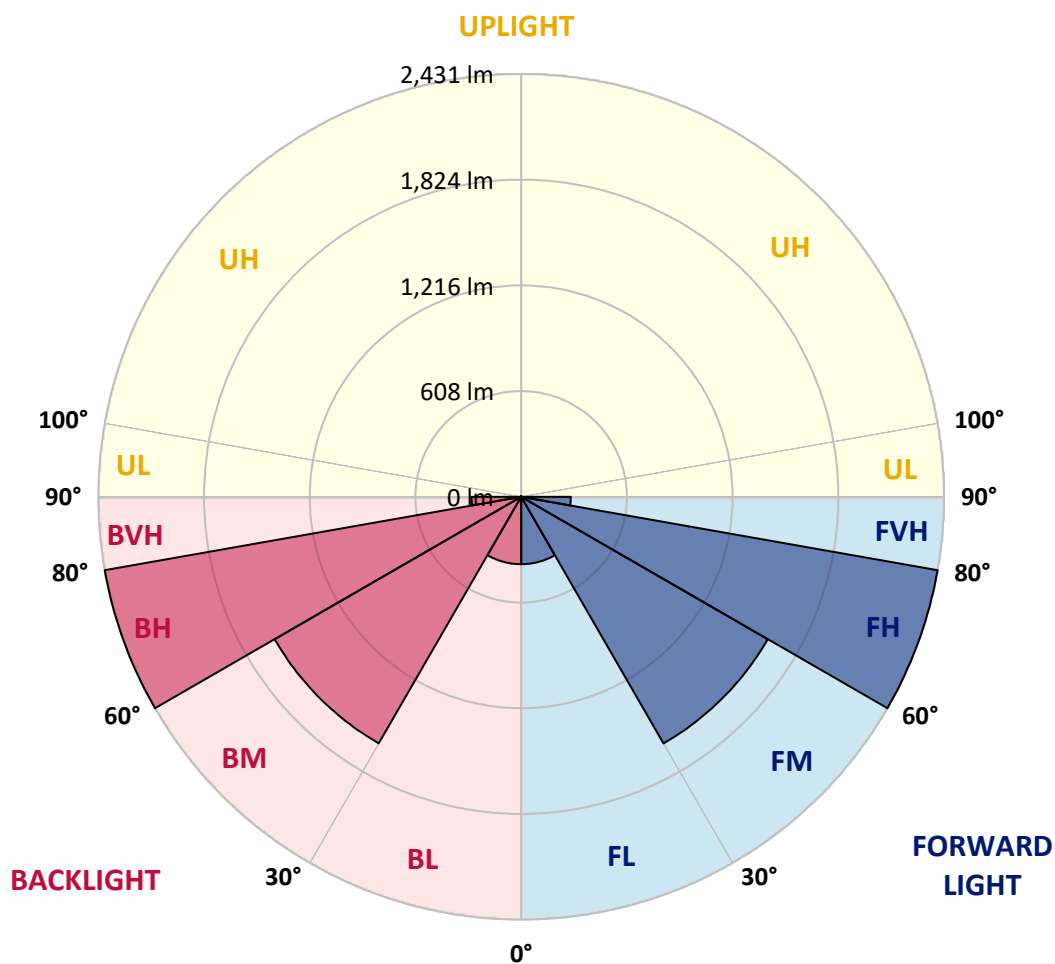
CATALOG NUMBER: VST-E03-LED-E-U-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	387.4	4.1			
FM	(30°-60°)	1637.3	17.3			
FH	(60°-80°)	2431.3	25.6			G2/5000
FVH	(80°-90°)	285.6	3.0			G3/500
BL	(0°-30°)	387.4	4.1	B1/500		
BM	(30°-60°)	1637.3	17.3	B2/2500		
BH	(60°-80°)	2431.3	25.6	B3/2500		G2/5000
BVH	(80°-90°)	285.6	3.0			G3/500
UL	(90°-100°)	0.5	0.0		U1/10	
UH	(100°-180°)	2.3	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°	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2
2.5°	913.8	912.6	913.2	914.4	913.8	913.8	913.2	913.2	914.4	913.2	913.8
5°	914.4	913.2	913.8	914.4	913.8	914.4	913.8	913.8	913.8	913.2	914.4
7.5°	912.0	912.0	912.6	912.6	912.0	912.6	912.6	912.6	912.0	912.0	913.2
10°	910.8	910.2	910.2	910.8	910.2	910.2	910.8	910.8	909.6	909.6	910.8
12.5°	909.0	908.4	908.4	908.4	907.8	907.8	908.4	908.4	907.8	907.2	909.0
15°	907.8	907.2	907.2	907.2	906.0	906.6	906.6	906.6	906.0	905.4	907.2
17.5°	907.2	906.6	906.6	906.6	906.0	906.0	906.0	906.0	905.4	905.4	906.6
20°	908.4	908.4	908.4	908.4	907.8	907.8	907.8	908.4	908.4	908.4	909.6
22.5°	911.4	911.4	912.0	912.6	912.6	913.8	914.4	915.0	915.0	915.6	916.8
25°	919.2	919.2	919.8	920.4	922.2	923.4	925.8	927.0	927.6	927.6	928.2
27.5°	933.6	934.2	935.4	936.6	939.0	940.8	943.2	945.6	946.2	946.8	947.4
30°	951.6	952.2	954.6	955.8	958.8	962.4	965.4	967.8	969.6	970.8	970.2
32.5°	977.4	978.6	981.6	983.4	987.6	991.2	995.4	999.0	1000.8	1002.6	1002.0
35°	1013.4	1016.4	1019.4	1021.2	1025.4	1028.4	1033.8	1037.4	1041.0	1039.8	1040.4
37.5°	1066.8	1069.2	1069.8	1071.0	1075.2	1077.6	1083.6	1088.4	1090.2	1091.4	1092.0
40°	1138.8	1138.8	1141.8	1139.4	1144.8	1145.4	1152.6	1159.2	1161.0	1165.8	1162.2
42.5°	1222.8	1222.2	1224.0	1222.2	1222.2	1228.2	1234.2	1246.2	1247.4	1253.4	1249.8
45°	1314.0	1314.0	1312.2	1312.8	1314.0	1320.6	1327.8	1341.0	1347.0	1350.6	1348.2
47.5°	1413.0	1410.6	1410.0	1409.4	1413.0	1420.2	1431.0	1443.6	1458.6	1459.8	1458.6
50°	1513.2	1512.6	1508.4	1512.0	1514.4	1518.0	1538.4	1555.2	1570.8	1580.4	1577.4
52.5°	1618.8	1613.4	1613.4	1613.4	1619.4	1630.8	1648.8	1671.6	1692.6	1702.8	1701.0
55°	1725.6	1723.8	1718.4	1716.0	1723.8	1740.0	1765.8	1793.4	1821.0	1836.6	1830.6
57.5°	1823.4	1820.4	1821.0	1821.6	1830.6	1852.2	1882.2	1918.8	1948.8	1965.6	1961.4
60°	1900.2	1896.6	1903.2	1905.0	1921.2	1957.2	2005.2	2051.4	2091.0	2107.8	2101.2
62.5°	1987.2	1984.8	1989.0	1988.4	2005.8	2046.0	2110.2	2184.0	2244.0	2265.6	2256.0
65°	2127.6	2120.4	2118.6	2112.0	2123.4	2154.6	2218.8	2304.6	2400.6	2455.8	2442.6
67.5°	2295.6	2293.8	2287.8	2284.2	2288.4	2327.4	2389.2	2472.0	2569.8	2646.0	2662.8
70°	2406.6	2409.0	2415.0	2424.0	2458.8	2534.4	2647.2	2772.6	2907.0	2964.0	2953.8
72.5°	2385.6	2389.2	2394.0	2405.4	2451.0	2541.6	2690.4	2877.6	3046.2	3121.8	3057.0
75°	2283.0	2286.0	2296.8	2314.2	2370.0	2479.8	2640.0	2838.6	3012.6	3088.2	3020.4
76°	2188.2	2197.8	2217.6	2238.0	2305.2	2424.6	2595.6	2807.4	2991.6	3068.4	3003.0
77.5°	1973.4	1981.8	1998.0	2033.4	2109.6	2262.6	2462.4	2670.6	2862.6	2931.6	2876.4
80°	1485.0	1492.2	1507.2	1549.8	1615.8	1710.6	1865.4	2068.8	2279.4	2370.0	2334.0
82.5°	627.0	635.4	694.8	756.6	829.2	931.8	1032.6	1212.6	1367.4	1470.6	1415.4
85°	69.0	85.2	105.0	142.8	175.2	233.4	290.4	399.6	505.2	569.4	503.4
87.5°	12.0	13.8	19.8	25.2	28.2	32.4	39.0	54.6	74.4	64.2	65.4
90°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2
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	1.2	1.2	1.2
102.5°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2
105°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
107.5°	0.6	0.6	0.6	0.6	1.2	1.2	0.6	0.6	0.6	1.2	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°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
122.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
125°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
127.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
130°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
132.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
135°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
137.5°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
140°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
142.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.6
147.5°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
150°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.0	0.0	0.0
152.5°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.0
155°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.6
157.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.0	0.0
160°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.0	0.0
162.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.0	0.0	0.0
165°	1.2	1.2	1.2	1.2	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°	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2
2.5°	913.2	913.2	914.4	913.8	913.8	914.4	915.6	915.0
5°	913.8	914.4	913.2	913.8	914.4	914.4	915.0	914.4
7.5°	912.6	912.6	912.6	913.2	913.8	913.2	913.8	913.8
10°	910.2	910.8	910.2	911.4	912.0	912.0	912.6	912.6
12.5°	908.4	908.4	908.4	909.6	910.2	910.2	910.8	910.2
15°	906.6	906.6	906.0	907.2	908.4	908.4	909.0	909.0
17.5°	906.0	906.0	905.4	906.6	907.8	907.8	908.4	908.4
20°	907.8	908.4	907.2	908.4	909.6	910.2	910.2	910.2
22.5°	915.0	914.4	912.6	913.2	913.8	913.8	913.8	913.8
25°	925.8	924.6	922.8	922.2	921.6	921.0	921.0	921.0
27.5°	944.4	942.6	939.6	939.0	938.4	937.2	937.2	937.2
30°	966.6	964.2	960.6	959.4	957.6	956.4	955.8	955.2
32.5°	998.4	993.6	989.4	986.4	984.6	981.0	980.4	979.2
35°	1035.0	1031.4	1025.4	1023.6	1020.6	1018.8	1018.2	1015.2
37.5°	1085.4	1081.2	1075.8	1074.6	1074.0	1072.2	1072.2	1071.6
40°	1155.6	1151.4	1146.6	1141.8	1143.0	1143.6	1143.6	1141.2
42.5°	1241.4	1234.8	1225.2	1228.2	1226.4	1224.0	1228.8	1225.8
45°	1339.2	1330.2	1323.0	1320.0	1320.0	1317.0	1321.8	1321.8
47.5°	1447.8	1433.4	1420.2	1420.8	1416.0	1417.2	1420.2	1424.4
50°	1562.4	1543.2	1530.6	1524.6	1519.8	1521.6	1527.0	1528.2
52.5°	1681.2	1657.8	1641.0	1632.0	1626.0	1628.4	1632.6	1636.2
55°	1804.8	1779.0	1753.8	1744.2	1737.0	1741.8	1742.4	1747.2
57.5°	1933.8	1898.4	1869.0	1854.6	1847.4	1852.2	1855.8	1860.6
60°	2064.0	2023.2	1988.4	1971.6	1961.4	1968.0	1976.4	1978.8
62.5°	2215.2	2158.8	2119.8	2095.8	2091.0	2097.6	2100.0	2107.2
65°	2394.0	2326.2	2272.2	2242.8	2241.6	2245.2	2250.6	2252.4
67.5°	2598.0	2522.4	2449.8	2420.4	2409.0	2419.8	2425.2	2432.4
70°	2886.0	2782.2	2677.2	2611.8	2584.2	2575.8	2578.2	2586.0
72.5°	2918.4	2806.8	2684.4	2595.6	2547.0	2524.8	2524.2	2525.4
75°	2847.6	2669.4	2583.0	2481.0	2412.0	2376.0	2371.2	2370.6
76°	2812.2	2601.6	2476.8	2395.8	2313.0	2276.4	2271.0	2268.0
77.5°	2662.8	2436.6	2248.8	2199.6	2120.4	2074.2	2083.8	2076.0
80°	2134.8	1910.4	1733.4	1594.8	1599.0	1565.4	1551.6	1547.4
82.5°	1258.2	1074.0	878.4	763.8	654.6	625.8	538.8	519.0
85°	402.0	285.0	172.8	125.4	85.2	71.4	55.8	51.0
87.5°	53.4	42.0	34.2	33.0	30.0	25.8	16.8	12.0
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°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6
102.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
105°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
107.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



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CATALOG NUMBER: VST-E03-LED-E-U-5XQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2
112.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
115°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
117.5°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2
120°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2
122.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
125°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
127.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
130°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
132.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
135°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
137.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
140°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
142.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
145°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
150°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
152.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
155°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
157.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
160°	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2
162.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
165°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2
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)