

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: P157771

Luminaire Tested: **VST-E03-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157771
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9735.5 lumens
Efficiency: N/A
Efficacy: 129.5 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

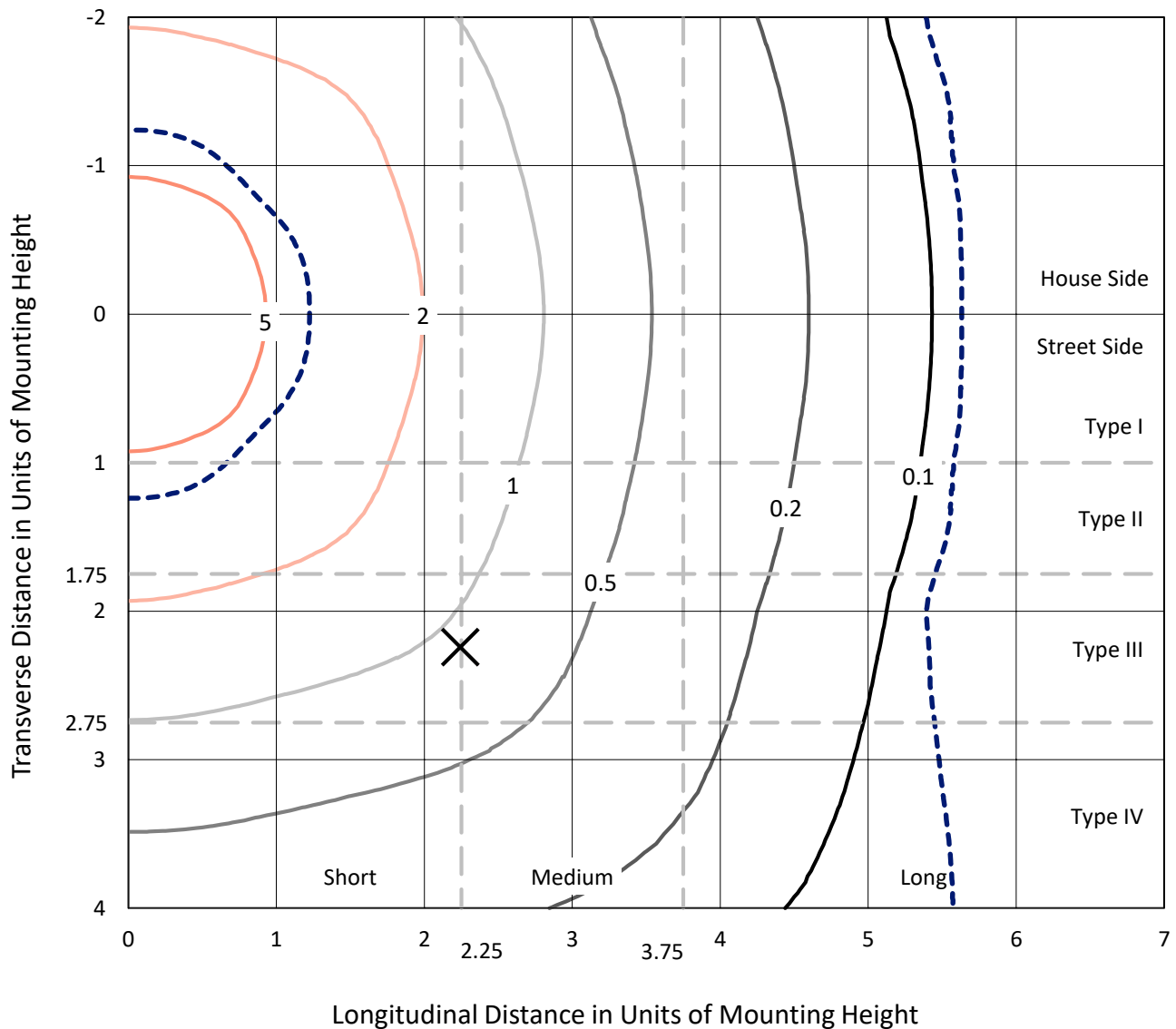


REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

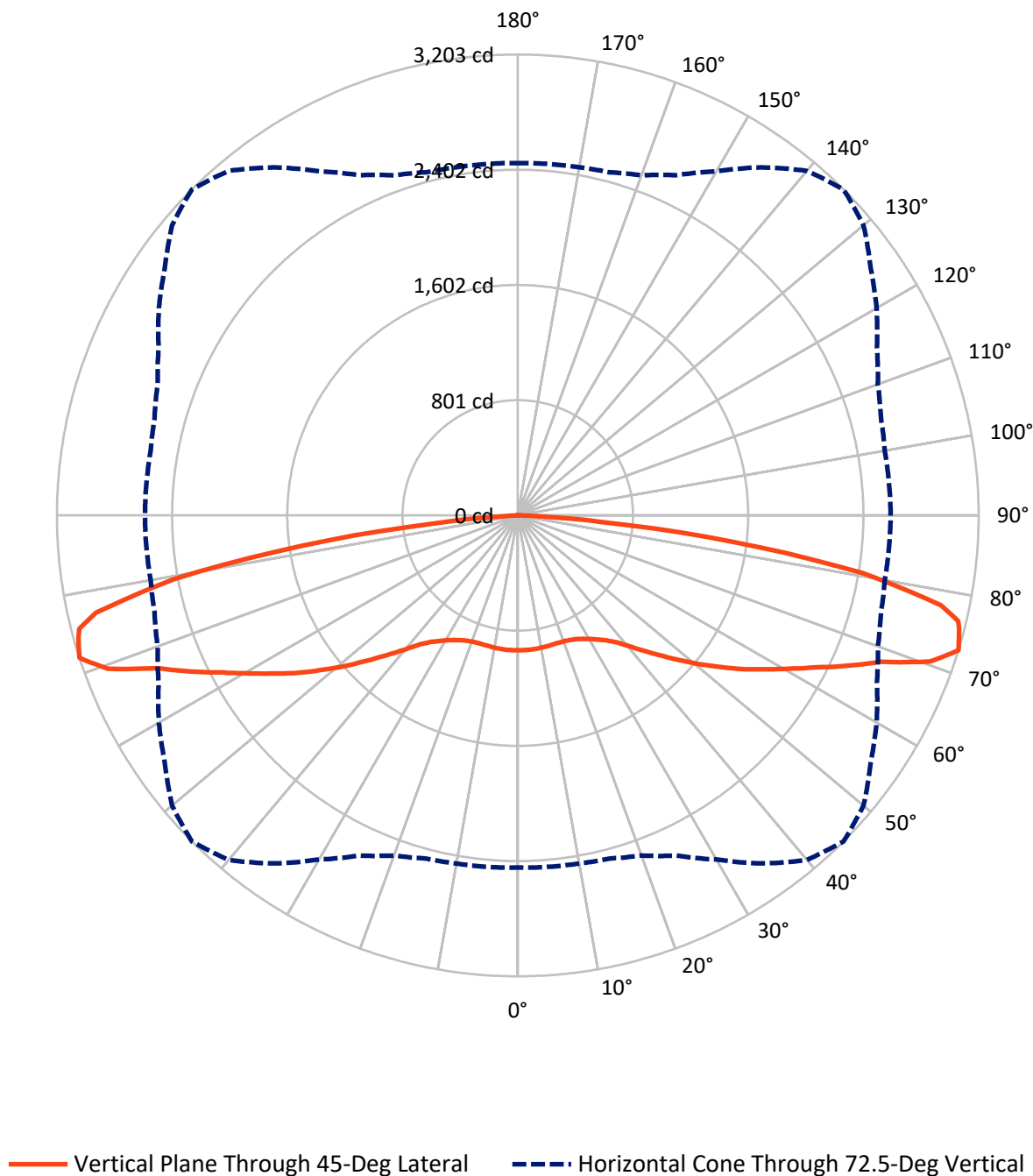


Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P157771

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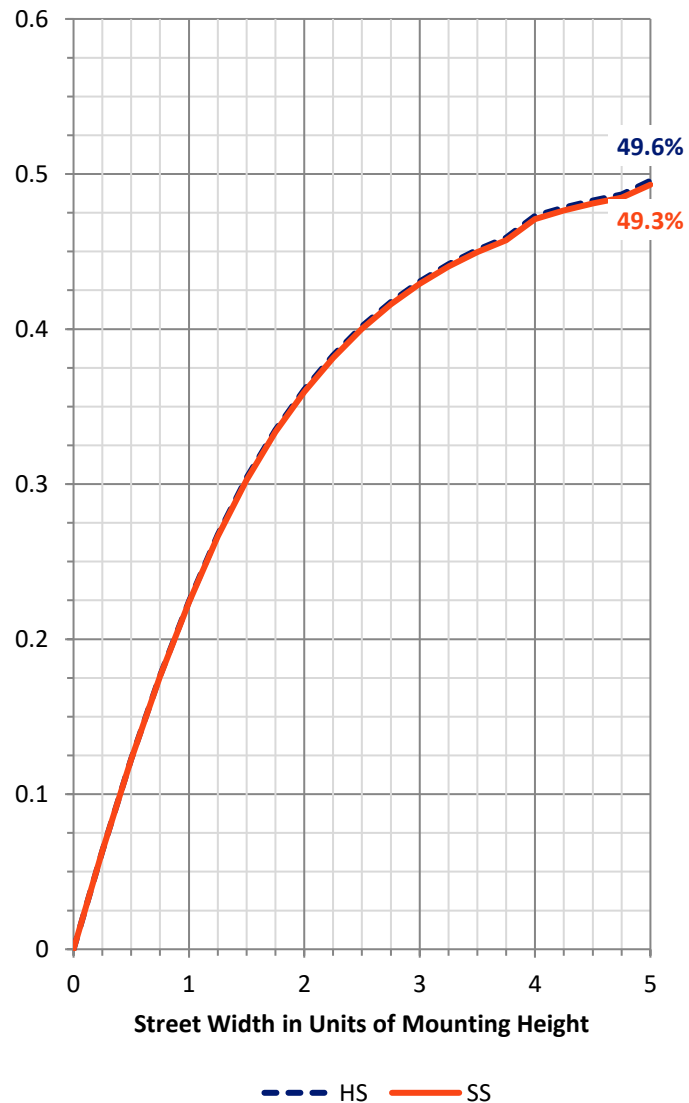
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4865.3	2.4	4867.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4865.3	2.4	4867.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	9730.7	4.8	9735.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.4	0.9
10°-20°	264.1	2.7
20°-30°	441.6	4.5
30°-40°	671.1	6.9
40°-50°	1063.0	10.9
50°-60°	1625.9	16.7
60°-70°	2327.0	23.9
70°-80°	2662.6	27.3
80°-90°	586.0	6.0
90°-100°	0.5	0.0
100°-110°	1.0	0.0
110°-120°	0.7	0.0
120°-130°	0.8	0.0
130°-140°	0.7	0.0
140°-150°	0.6	0.0
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-90°	9730.7	100.0
0°-180°	9735.5	100.0

Coefficient of Utilization



REPORT NUMBER: P157771

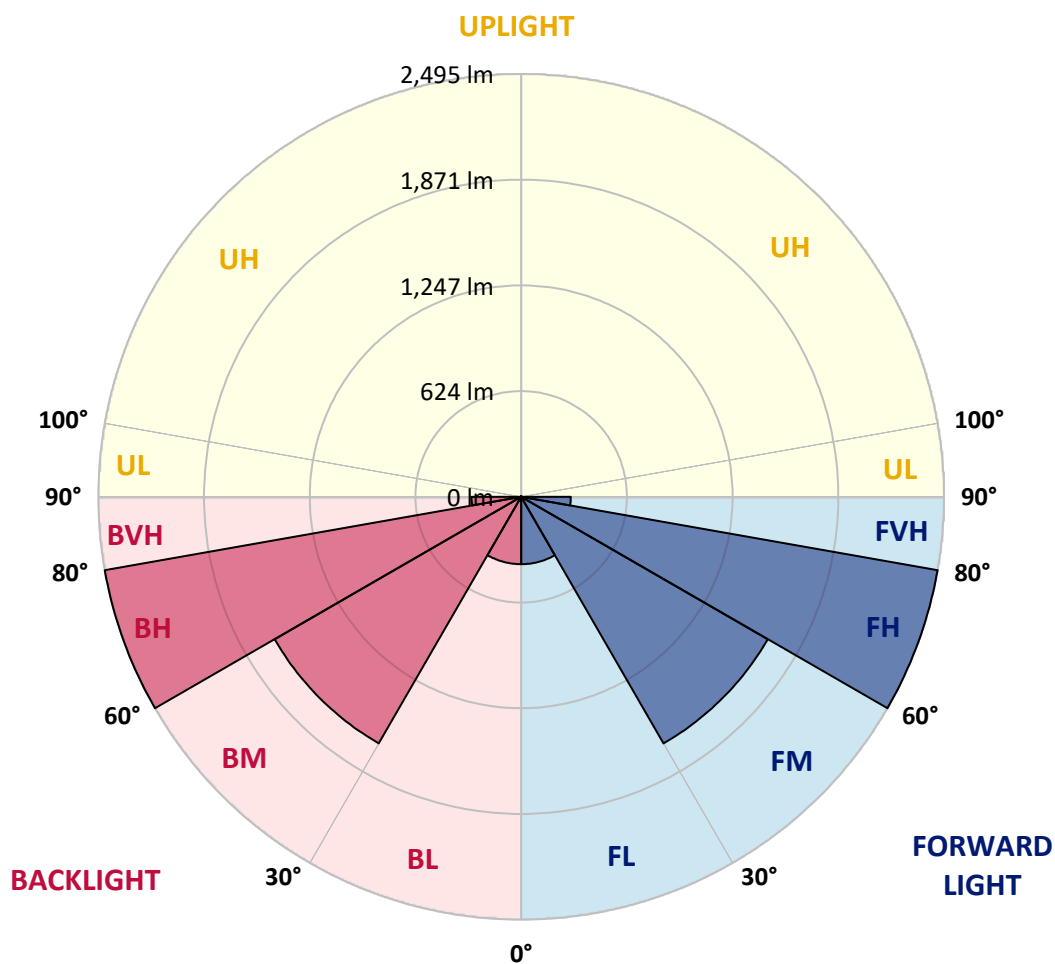
CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	397.5	4.1			
FM	(30°-60°)	1680.0	17.3			
FH	(60°-80°)	2494.8	25.6			G2/5000
FVH	(80°-90°)	293.0	3.0			G3/500
BL	(0°-30°)	397.5	4.1	B1/500		
BM	(30°-60°)	1680.0	17.3	B2/2500		
BH	(60°-80°)	2494.8	25.6	B3/2500		G2/5000
BVH	(80°-90°)	293.0	3.0			G3/500
UL	(90°-100°)	0.5	0.0		U1/10	
UH	(100°-180°)	2.4	0.0		U1/10	

BUG Rating: B3-U1-G3

Type V Short



REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	937.0	937.0	937.0	937.0	937.0	937.0	937.0	937.0	937.0	937.0	937.0
2.5°	937.7	936.4	937.0	938.3	937.7	937.7	937.0	937.0	938.3	937.0	937.7
5°	938.3	937.0	937.7	938.3	937.7	938.3	937.7	937.7	937.7	937.0	938.3
7.5°	935.8	935.8	936.4	936.4	935.8	936.4	936.4	936.4	935.8	935.8	937.0
10°	934.6	934.0	934.0	934.6	934.0	934.0	934.6	934.6	933.4	933.4	934.6
12.5°	932.7	932.1	932.1	932.1	931.5	931.5	932.1	932.1	931.5	930.9	932.7
15°	931.5	930.9	930.9	930.9	929.6	930.2	930.2	930.2	929.6	929.0	930.9
17.5°	930.9	930.2	930.2	930.2	929.6	929.6	929.6	929.6	929.0	929.0	930.2
20°	932.1	932.1	932.1	932.1	931.5	931.5	931.5	932.1	932.1	932.1	933.4
22.5°	935.2	935.2	935.8	936.4	936.4	937.7	938.3	938.9	938.9	939.5	940.7
25°	943.2	943.2	943.8	944.4	946.3	947.5	950.0	951.2	951.8	951.8	952.4
27.5°	958.0	958.6	959.8	961.1	963.5	965.3	967.8	970.3	970.9	971.5	972.1
30°	976.4	977.0	979.5	980.8	983.8	987.5	990.6	993.1	994.9	996.1	995.5
32.5°	1002.9	1004.2	1007.2	1009.1	1013.4	1017.1	1021.4	1025.1	1026.9	1028.8	1028.2
35°	1039.9	1042.9	1046.0	1047.8	1052.2	1055.2	1060.8	1064.5	1068.2	1066.9	1067.6
37.5°	1094.6	1097.1	1097.7	1099.0	1103.3	1105.7	1111.9	1116.8	1118.6	1119.9	1120.5
40°	1168.5	1168.5	1171.6	1169.2	1174.7	1175.3	1182.7	1189.4	1191.3	1196.2	1192.6
42.5°	1254.7	1254.1	1256.0	1254.1	1254.1	1260.2	1266.4	1278.7	1280.0	1286.1	1282.4
45°	1348.3	1348.3	1346.5	1347.1	1348.3	1355.1	1362.5	1376.0	1382.2	1385.9	1383.4
47.5°	1449.9	1447.4	1446.8	1446.2	1449.9	1457.3	1468.4	1481.3	1496.7	1497.9	1496.7
50°	1552.7	1552.1	1547.8	1551.5	1553.9	1557.6	1578.5	1595.8	1611.8	1621.7	1618.6
52.5°	1661.0	1655.5	1655.5	1655.5	1661.7	1673.4	1691.8	1715.2	1736.8	1747.3	1745.4
55°	1770.7	1768.8	1763.3	1760.8	1768.8	1785.4	1811.9	1840.2	1868.5	1884.5	1878.4
57.5°	1871.0	1867.9	1868.5	1869.2	1878.4	1900.6	1931.3	1968.9	1999.7	2016.9	2012.6
60°	1949.8	1946.1	1952.9	1954.7	1971.4	2008.3	2057.5	2105.0	2145.6	2162.8	2156.0
62.5°	2039.1	2036.6	2040.9	2040.3	2058.2	2099.4	2165.3	2241.0	2302.6	2324.8	2314.9
65°	2183.2	2175.8	2173.9	2167.1	2178.8	2210.8	2276.7	2364.8	2463.2	2519.9	2506.4
67.5°	2355.5	2353.7	2347.5	2343.8	2348.2	2388.2	2451.6	2536.6	2636.9	2715.1	2732.3
70°	2469.4	2471.9	2478.1	2487.3	2523.0	2600.6	2716.3	2845.0	2982.9	3041.4	3030.9
72.5°	2447.9	2451.6	2456.5	2468.2	2515.0	2608.0	2760.7	2952.7	3125.7	3203.3	3136.8
75°	2342.6	2345.7	2356.7	2374.6	2431.9	2544.5	2708.9	2912.7	3091.3	3168.8	3099.2
76°	2245.3	2255.2	2275.5	2296.4	2365.4	2487.9	2663.3	2880.7	3069.7	3148.5	3081.4
77.5°	2024.9	2033.5	2050.1	2086.5	2164.7	2321.6	2526.7	2740.3	2937.3	3008.2	2951.5
80°	1523.8	1531.1	1546.6	1590.2	1658.0	1755.2	1914.1	2122.8	2338.9	2431.9	2395.0
82.5°	643.4	652.0	712.9	776.3	850.9	956.1	1059.5	1244.3	1403.1	1509.0	1452.4
85°	70.8	87.4	107.8	146.5	179.8	239.5	298.0	410.0	518.4	584.3	516.5
87.5°	12.3	14.2	20.3	25.9	28.9	33.2	40.0	56.0	76.3	65.9	67.1
90°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.3	1.3	1.3	1.3
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	1.3	1.3	1.3
102.5°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3	1.3
105°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
107.5°	0.6	0.6	0.6	0.6	1.3	1.3	0.6	0.6	0.6	1.3	0.6



REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

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°	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120°	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
122.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
125°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
127.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
130°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6
132.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
135°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6
137.5°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6
140°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6
142.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.6
147.5°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6
150°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0
152.5°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0
155°	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.6
157.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0	0.0
160°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0	0.0
162.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0	0.0
165°	1.3	1.3	1.3	1.3	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

REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	937.0	937.0	937.0	937.0	937.0	937.0	937.0	937.0
2.5°	937.0	937.0	938.3	937.7	937.7	938.3	939.5	938.9
5°	937.7	938.3	937.0	937.7	938.3	938.3	938.9	938.3
7.5°	936.4	936.4	936.4	937.0	937.7	937.0	937.7	937.7
10°	934.0	934.6	934.0	935.2	935.8	935.8	936.4	936.4
12.5°	932.1	932.1	932.1	933.4	934.0	934.0	934.6	934.0
15°	930.2	930.2	929.6	930.9	932.1	932.1	932.7	932.7
17.5°	929.6	929.6	929.0	930.2	931.5	931.5	932.1	932.1
20°	931.5	932.1	930.9	932.1	933.4	934.0	934.0	934.0
22.5°	938.9	938.3	936.4	937.0	937.7	937.7	937.7	937.7
25°	950.0	948.7	946.9	946.3	945.7	945.1	945.1	945.1
27.5°	969.1	967.2	964.1	963.5	962.9	961.7	961.7	961.7
30°	991.9	989.4	985.7	984.4	982.6	981.4	980.8	980.2
32.5°	1024.4	1019.5	1015.2	1012.1	1010.3	1006.6	1006.0	1004.8
35°	1062.0	1058.3	1052.2	1050.3	1047.2	1045.4	1044.8	1041.7
37.5°	1113.7	1109.4	1103.9	1102.7	1102.0	1100.2	1100.2	1099.6
40°	1185.8	1181.5	1176.5	1171.6	1172.8	1173.5	1173.5	1171.0
42.5°	1273.8	1267.0	1257.2	1260.2	1258.4	1256.0	1260.9	1257.8
45°	1374.2	1364.9	1357.6	1354.4	1354.4	1351.4	1356.3	1356.3
47.5°	1485.6	1470.8	1457.3	1457.9	1453.0	1454.2	1457.3	1461.6
50°	1603.2	1583.5	1570.6	1564.4	1559.5	1561.3	1566.8	1568.1
52.5°	1725.1	1701.1	1683.8	1674.6	1668.4	1670.9	1675.2	1678.9
55°	1851.9	1825.4	1799.6	1789.7	1782.4	1787.3	1787.9	1792.8
57.5°	1984.3	1948.0	1917.8	1903.0	1895.6	1900.6	1904.2	1909.2
60°	2117.9	2076.0	2040.3	2023.1	2012.6	2019.4	2028.0	2030.5
62.5°	2273.0	2215.1	2175.1	2150.5	2145.6	2152.4	2154.8	2162.2
65°	2456.5	2386.9	2331.5	2301.4	2300.1	2303.8	2309.3	2311.2
67.5°	2665.8	2588.2	2513.8	2483.6	2471.9	2483.0	2488.5	2495.9
70°	2961.4	2854.9	2747.1	2680.0	2651.6	2643.1	2645.5	2653.5
72.5°	2994.6	2880.1	2754.5	2663.3	2613.5	2590.7	2590.1	2591.3
75°	2921.9	2739.1	2650.4	2545.7	2474.9	2438.0	2433.1	2432.5
76°	2885.6	2669.5	2541.5	2458.3	2373.4	2335.8	2330.3	2327.2
77.5°	2732.3	2500.2	2307.5	2257.0	2175.8	2128.3	2138.2	2130.2
80°	2190.5	1960.3	1778.6	1636.4	1640.8	1606.3	1592.1	1587.8
82.5°	1291.0	1102.0	901.3	783.7	671.7	642.1	552.8	532.6
85°	412.5	292.4	177.3	128.7	87.4	73.3	57.2	52.3
87.5°	54.8	43.1	35.1	33.8	30.8	26.5	17.2	12.3
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°	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
102.5°	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6
105°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
107.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



REPORT NUMBER: P157771

CATALOG NUMBER: VST-E03-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.3
112.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3
115°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3
117.5°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.3
120°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.3
122.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
125°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
127.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
130°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
132.5°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
135°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
137.5°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
140°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
142.5°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
145°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
147.5°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
150°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
152.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
155°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
157.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
160°	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3
162.5°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
165°	0.6	0.6	0.6	1.3	1.3	1.3	1.3	1.3
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)