

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: P157787

Luminaire Tested: **VST-F04-LED-E-U-5XQ-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157787
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-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (28) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10715.9 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - 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

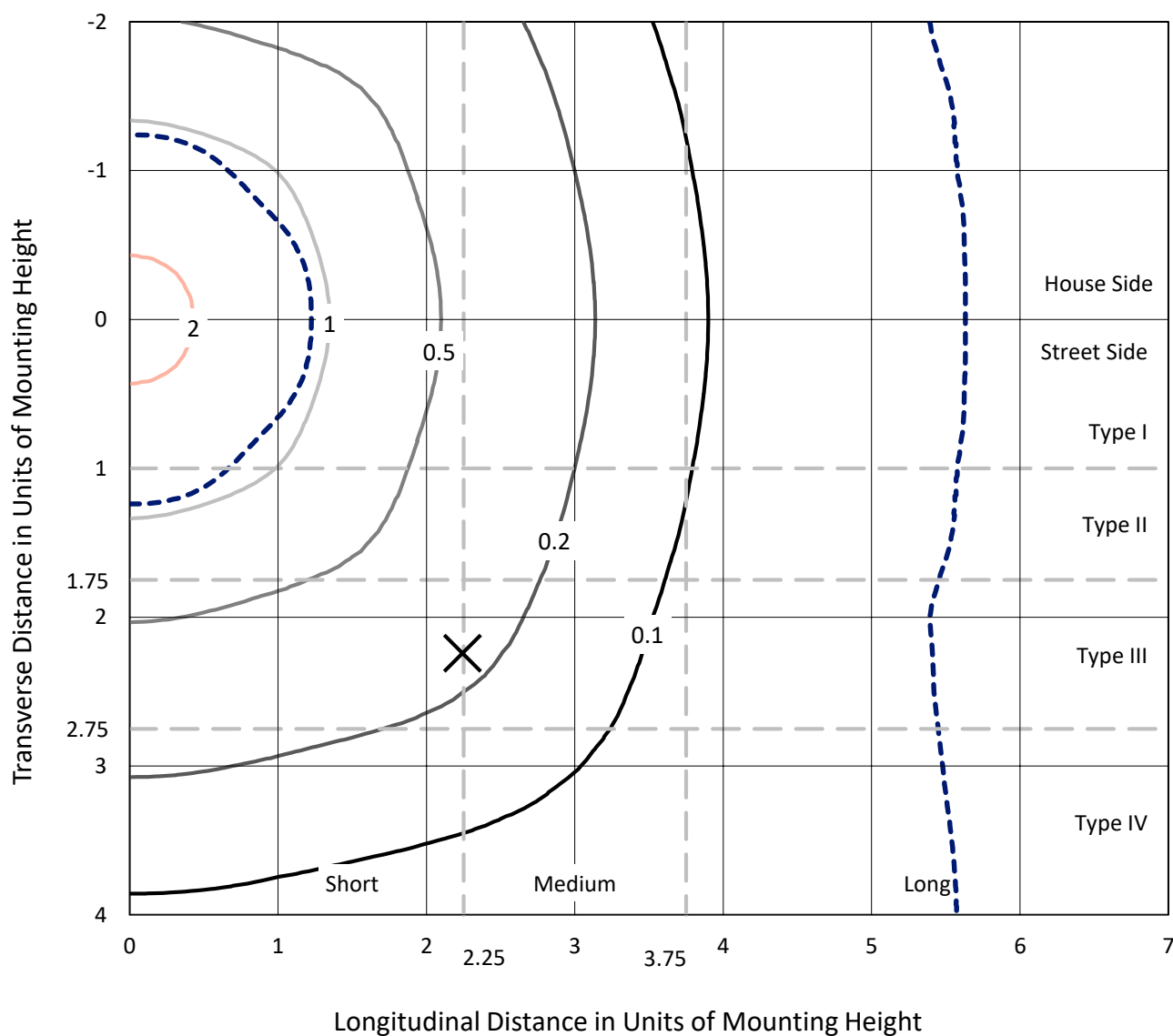


REPORT NUMBER: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

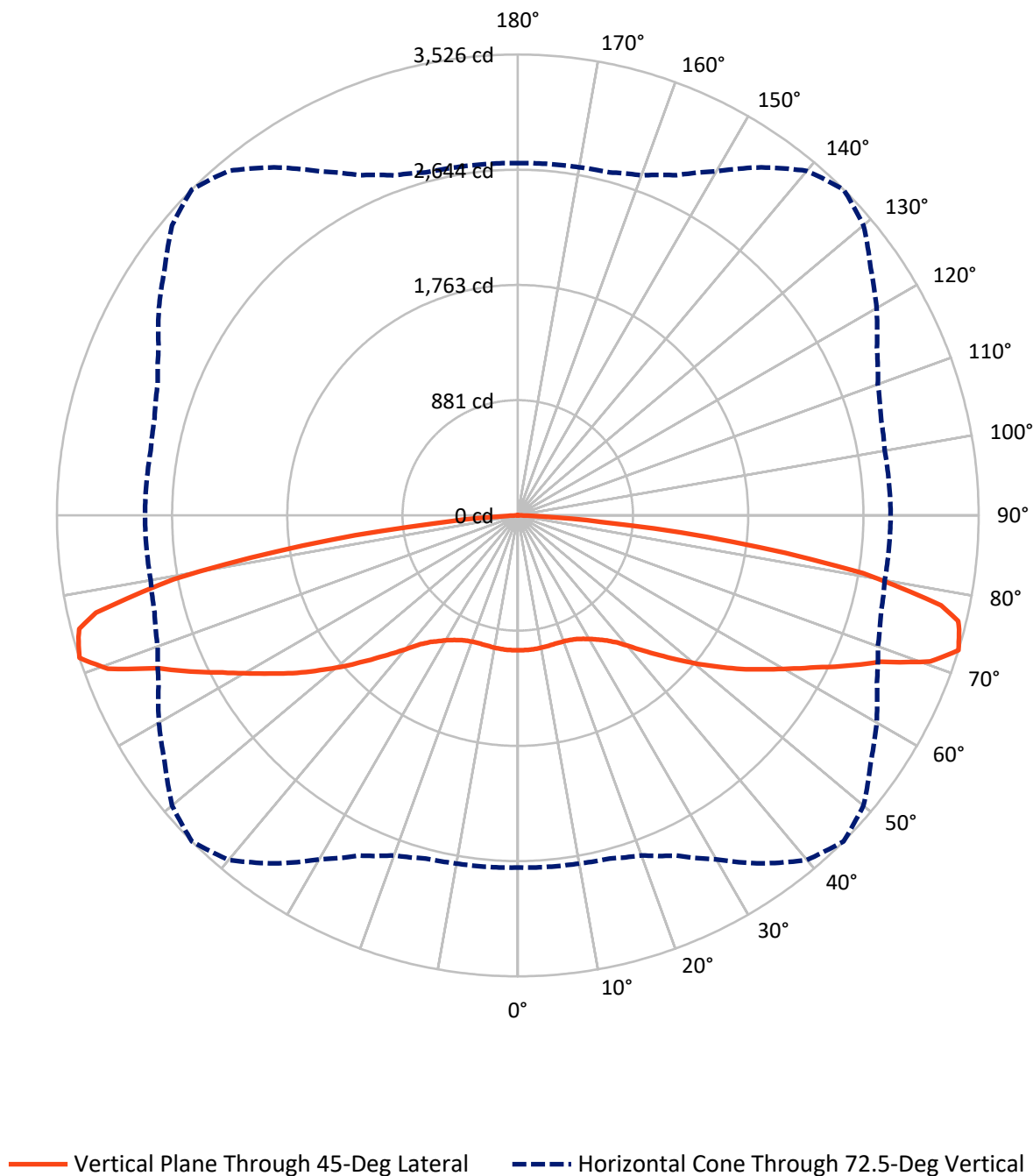


Based on 20 foot mounting height. Maximum calculated value = 2.6 fc
Type V - Short - Non-Cutoff

REPORT NUMBER: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

Luminous Intensity Polar Plot



REPORT NUMBER: P157787

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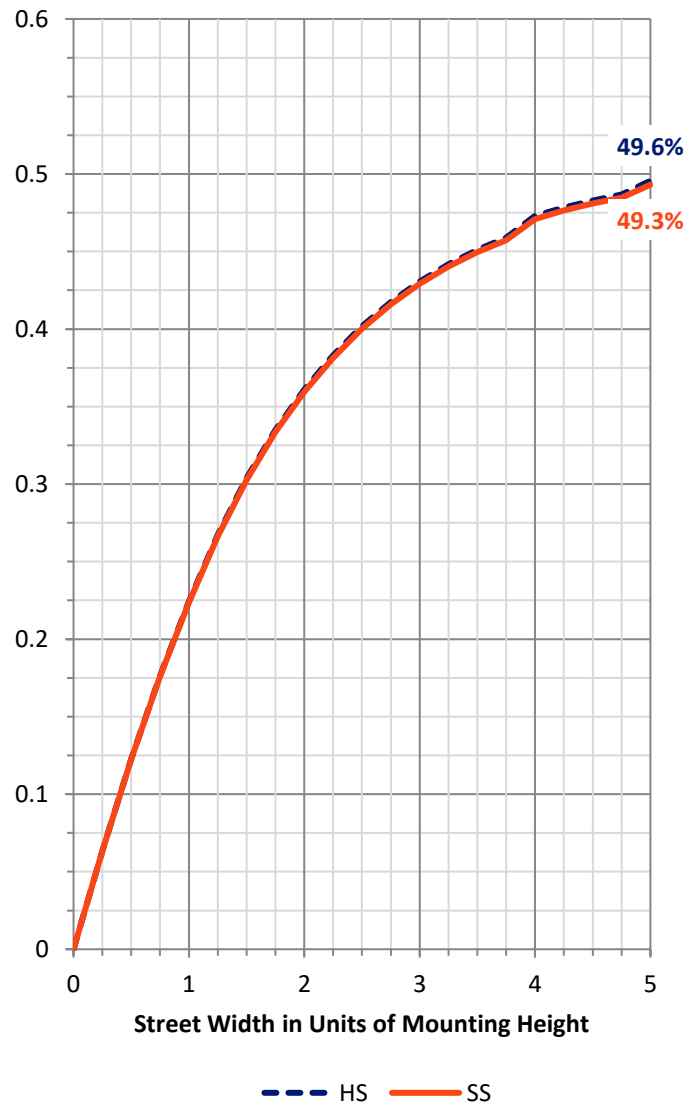
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5355.3	2.7	5358.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5355.3	2.7	5358.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	10710.6	5.4	10715.9
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	0.9
10°-20°	290.6	2.7
20°-30°	486.0	4.5
30°-40°	738.7	6.9
40°-50°	1170.0	10.9
50°-60°	1789.7	16.7
60°-70°	2561.3	23.9
70°-80°	2930.7	27.3
80°-90°	645.0	6.0
90°-100°	0.6	0.0
100°-110°	1.1	0.0
110°-120°	0.8	0.0
120°-130°	0.9	0.0
130°-140°	0.8	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°	10710.6	99.9
0°-180°	10715.9	100.0

Coefficient of Utilization



REPORT NUMBER: P157787

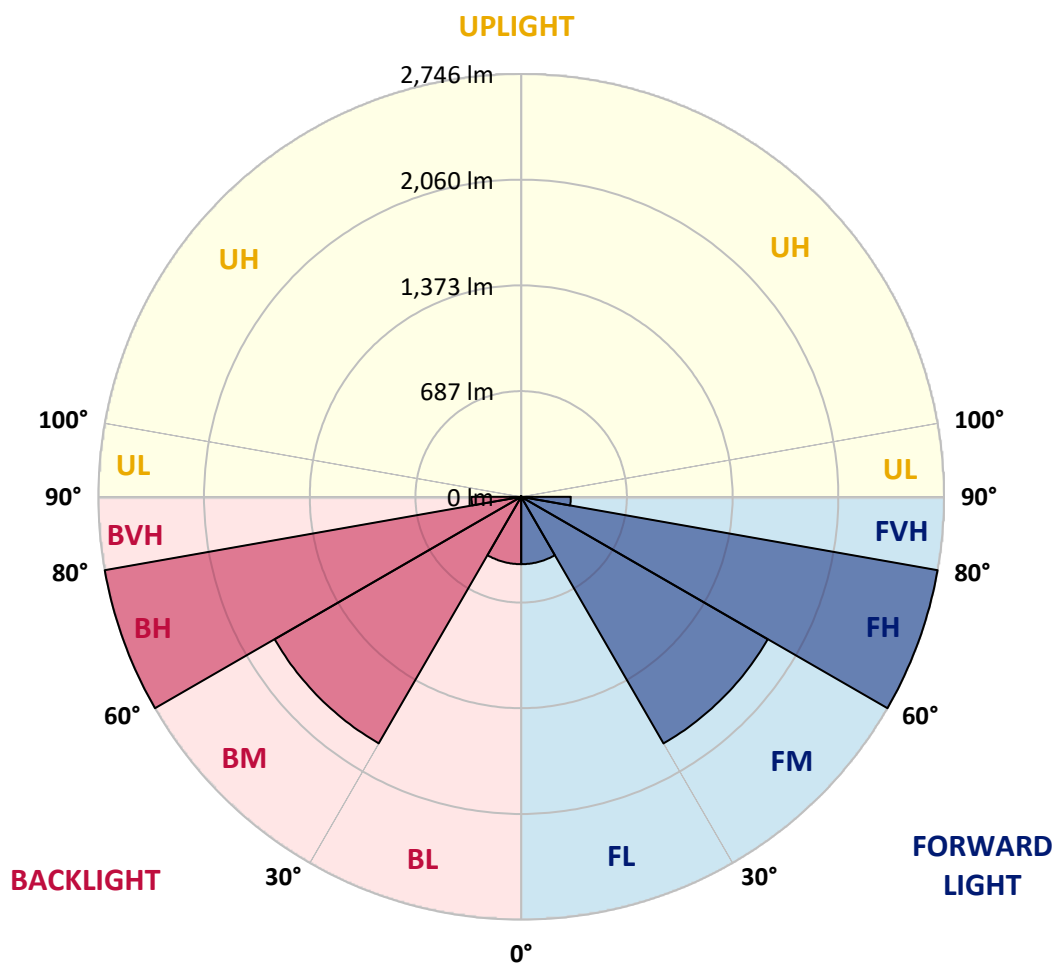
CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	437.5	4.1			
FM	(30°-60°)	1849.2	17.3			
FH	(60°-80°)	2746.0	25.6			G2/5000
FVH	(80°-90°)	322.5	3.0			G3/500
BL	(0°-30°)	437.5	4.1	B1/500		
BM	(30°-60°)	1849.2	17.3	B2/2500		
BH	(60°-80°)	2746.0	25.6	B4/5000		G2/5000
BVH	(80°-90°)	322.5	3.0			G3/500
UL	(90°-100°)	0.6	0.0		U1/10	
UH	(100°-180°)	2.7	0.0		U1/10	

BUG Rating: B4-U1-G3

Type V Short



REPORT NUMBER: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4
2.5°	1032.1	1030.7	1031.4	1032.8	1032.1	1032.1	1031.4	1031.4	1032.8	1031.4	1032.1
5°	1032.8	1031.4	1032.1	1032.8	1032.1	1032.8	1032.1	1032.1	1032.1	1031.4	1032.8
7.5°	1030.0	1030.0	1030.7	1030.7	1030.0	1030.7	1030.7	1030.7	1030.0	1030.0	1031.4
10°	1028.7	1028.0	1028.0	1028.7	1028.0	1028.0	1028.7	1028.7	1027.3	1027.3	1028.7
12.5°	1026.7	1026.0	1026.0	1026.0	1025.3	1025.3	1026.0	1026.0	1025.3	1024.6	1026.7
15°	1025.3	1024.6	1024.6	1024.6	1023.3	1023.9	1023.9	1023.9	1023.3	1022.6	1024.6
17.5°	1024.6	1023.9	1023.9	1023.9	1023.3	1023.3	1023.3	1023.3	1022.6	1022.6	1023.9
20°	1026.0	1026.0	1026.0	1026.0	1025.3	1025.3	1025.3	1026.0	1026.0	1026.0	1027.3
22.5°	1029.4	1029.4	1030.0	1030.7	1030.7	1032.1	1032.8	1033.4	1033.4	1034.1	1035.5
25°	1038.2	1038.2	1038.9	1039.5	1041.6	1042.9	1045.6	1047.0	1047.7	1047.7	1048.3
27.5°	1054.4	1055.1	1056.5	1057.8	1060.5	1062.6	1065.3	1068.0	1068.7	1069.3	1070.0
30°	1074.8	1075.4	1078.2	1079.5	1082.9	1087.0	1090.4	1093.1	1095.1	1096.5	1095.8
32.5°	1103.9	1105.3	1108.7	1110.7	1115.4	1119.5	1124.2	1128.3	1130.3	1132.4	1131.7
35°	1144.6	1148.0	1151.3	1153.4	1158.1	1161.5	1167.6	1171.7	1175.7	1174.4	1175.1
37.5°	1204.9	1207.6	1208.3	1209.6	1214.4	1217.1	1223.9	1229.3	1231.3	1232.7	1233.3
40°	1286.2	1286.2	1289.6	1286.9	1293.0	1293.7	1301.8	1309.2	1311.3	1316.7	1312.6
42.5°	1381.1	1380.4	1382.4	1380.4	1380.4	1387.2	1393.9	1407.5	1408.9	1415.6	1411.6
45°	1484.1	1484.1	1482.0	1482.7	1484.1	1491.5	1499.7	1514.6	1521.3	1525.4	1522.7
47.5°	1595.9	1593.2	1592.5	1591.8	1595.9	1604.0	1616.2	1630.5	1647.4	1648.7	1647.4
50°	1709.1	1708.4	1703.6	1707.7	1710.4	1714.5	1737.5	1756.5	1774.1	1785.0	1781.6
52.5°	1828.3	1822.2	1822.2	1822.2	1829.0	1841.9	1862.2	1888.0	1911.7	1923.2	1921.2
55°	1949.0	1946.9	1940.8	1938.1	1946.9	1965.2	1994.4	2025.5	2056.7	2074.3	2067.5
57.5°	2059.4	2056.0	2056.7	2057.4	2067.5	2091.9	2125.8	2167.2	2201.0	2220.0	2215.3
60°	2146.2	2142.1	2149.5	2151.6	2169.9	2210.5	2264.7	2316.9	2361.6	2380.6	2373.2
62.5°	2244.4	2241.7	2246.4	2245.8	2265.4	2310.8	2383.3	2466.7	2534.5	2558.8	2548.0
65°	2403.0	2394.9	2392.8	2385.4	2398.2	2433.5	2506.0	2602.9	2711.3	2773.7	2758.8
67.5°	2592.7	2590.7	2583.9	2579.9	2584.6	2628.6	2698.4	2792.0	2902.4	2988.5	3007.5
70°	2718.1	2720.8	2727.6	2737.7	2777.1	2862.4	2989.8	3131.5	3283.3	3347.6	3336.1
72.5°	2694.4	2698.4	2703.9	2716.7	2768.2	2870.6	3038.6	3250.1	3440.5	3525.9	3452.7
75°	2578.5	2581.9	2594.1	2613.7	2676.8	2800.8	2981.7	3206.0	3402.5	3487.9	3411.3
76°	2471.4	2482.3	2504.6	2527.7	2603.6	2738.4	2931.6	3170.8	3378.8	3465.6	3391.7
77.5°	2228.8	2238.3	2256.6	2296.6	2382.7	2555.5	2781.1	3016.3	3233.1	3311.0	3248.7
80°	1677.2	1685.3	1702.3	1750.4	1824.9	1932.0	2106.8	2336.6	2574.4	2676.8	2636.1
82.5°	708.2	717.6	784.7	854.5	936.5	1052.4	1166.3	1369.6	1544.4	1660.9	1598.6
85°	77.9	96.2	118.6	161.3	197.9	263.6	328.0	451.3	570.6	643.1	568.6
87.5°	13.6	15.6	22.4	28.5	31.9	36.6	44.0	61.7	84.0	72.5	73.9
90°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.4	1.4	1.4	1.4
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
97.5°	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
100°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
102.5°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4
105°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
107.5°	0.7	0.7	0.7	0.7	1.4	1.4	0.7	0.7	0.7	1.4	0.7



REPORT NUMBER: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
112.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
115°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
117.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
120°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
122.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
125°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
127.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
130°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
132.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
135°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
137.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
140°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
142.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
145°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.7
147.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
150°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.0	0.0	0.0
152.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0
155°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.7
157.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
160°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
162.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
165°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	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: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4
2.5°	1031.4	1031.4	1032.8	1032.1	1032.1	1032.8	1034.1	1033.4
5°	1032.1	1032.8	1031.4	1032.1	1032.8	1032.8	1033.4	1032.8
7.5°	1030.7	1030.7	1030.7	1031.4	1032.1	1031.4	1032.1	1032.1
10°	1028.0	1028.7	1028.0	1029.4	1030.0	1030.0	1030.7	1030.7
12.5°	1026.0	1026.0	1026.0	1027.3	1028.0	1028.0	1028.7	1028.0
15°	1023.9	1023.9	1023.3	1024.6	1026.0	1026.0	1026.7	1026.7
17.5°	1023.3	1023.3	1022.6	1023.9	1025.3	1025.3	1026.0	1026.0
20°	1025.3	1026.0	1024.6	1026.0	1027.3	1028.0	1028.0	1028.0
22.5°	1033.4	1032.8	1030.7	1031.4	1032.1	1032.1	1032.1	1032.1
25°	1045.6	1044.3	1042.2	1041.6	1040.9	1040.2	1040.2	1040.2
27.5°	1066.6	1064.6	1061.2	1060.5	1059.9	1058.5	1058.5	1058.5
30°	1091.7	1089.0	1084.9	1083.6	1081.5	1080.2	1079.5	1078.8
32.5°	1127.6	1122.2	1117.5	1114.1	1112.0	1108.0	1107.3	1105.9
35°	1169.0	1164.9	1158.1	1156.1	1152.7	1150.7	1150.0	1146.6
37.5°	1225.9	1221.1	1215.0	1213.7	1213.0	1211.0	1211.0	1210.3
40°	1305.2	1300.4	1295.0	1289.6	1290.9	1291.6	1291.6	1288.9
42.5°	1402.1	1394.6	1383.8	1387.2	1385.1	1382.4	1387.8	1384.5
45°	1512.5	1502.4	1494.2	1490.9	1490.9	1487.5	1492.9	1492.9
47.5°	1635.2	1618.9	1604.0	1604.7	1599.3	1600.6	1604.0	1608.8
50°	1764.6	1742.9	1728.7	1721.9	1716.5	1718.5	1724.6	1726.0
52.5°	1898.8	1872.4	1853.4	1843.2	1836.5	1839.2	1843.9	1848.0
55°	2038.4	2009.3	1980.8	1970.0	1961.8	1967.2	1967.9	1973.3
57.5°	2184.1	2144.1	2110.9	2094.6	2086.5	2091.9	2096.0	2101.4
60°	2331.2	2285.1	2245.8	2226.8	2215.3	2222.7	2232.2	2234.9
62.5°	2501.9	2438.2	2394.2	2367.1	2361.6	2369.1	2371.8	2379.9
65°	2703.9	2627.3	2566.3	2533.1	2531.7	2535.8	2541.9	2543.9
67.5°	2934.3	2848.9	2766.9	2733.7	2720.8	2733.0	2739.1	2747.2
70°	3259.5	3142.3	3023.7	2949.9	2918.7	2909.2	2911.9	2920.7
72.5°	3296.1	3170.1	3031.9	2931.6	2876.7	2851.6	2850.9	2852.3
75°	3216.2	3014.9	2917.3	2802.1	2724.2	2683.5	2678.1	2677.4
76°	3176.2	2938.3	2797.4	2705.9	2612.4	2571.0	2564.9	2561.6
77.5°	3007.5	2752.0	2539.9	2484.3	2394.9	2342.7	2353.5	2344.7
80°	2411.1	2157.7	1957.8	1801.2	1806.0	1768.0	1752.4	1747.7
82.5°	1421.1	1213.0	992.1	862.7	739.3	706.8	608.5	586.2
85°	454.0	321.9	195.2	141.6	96.2	80.6	63.0	57.6
87.5°	60.3	47.4	38.6	37.3	33.9	29.1	19.0	13.6
90°	0.7	0.7	0.7	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°	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
97.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
100°	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
102.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
105°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
107.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



REPORT NUMBER: P157787

CATALOG NUMBER: VST-F04-LED-E-U-5XQ-7060

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
112.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
115°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
117.5°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
120°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
122.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
125°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
127.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
130°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
132.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
135°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
137.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
140°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
142.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
145°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
150°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
152.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
157.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
160°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
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)