

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: P157815

Luminaire Tested: **VST-F07-LED-E-U-5XQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157815
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-F07-LED-E-U-5XQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (49) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18275.7 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U1 - G4

Input Watts (W): 180.5
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

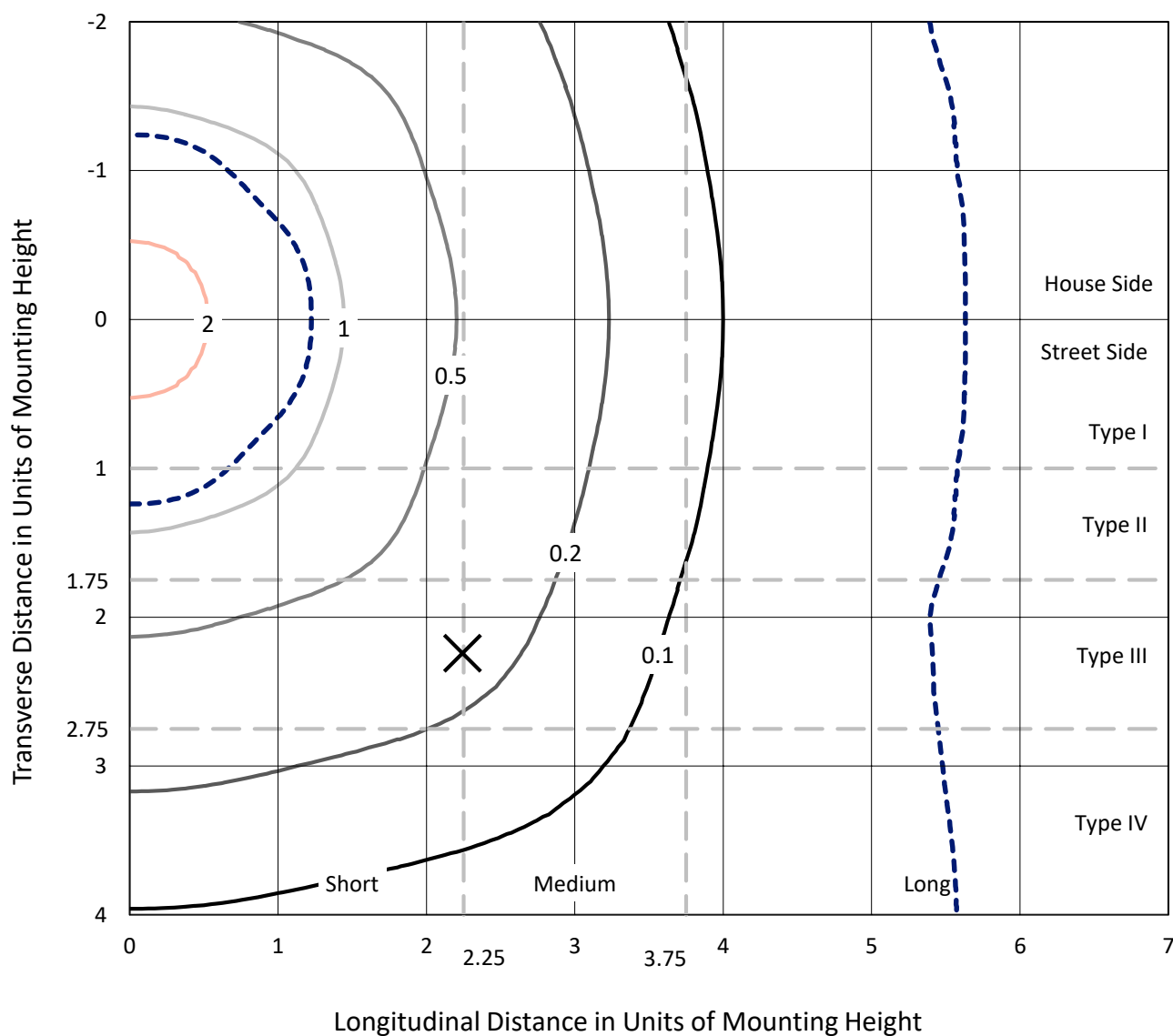


REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

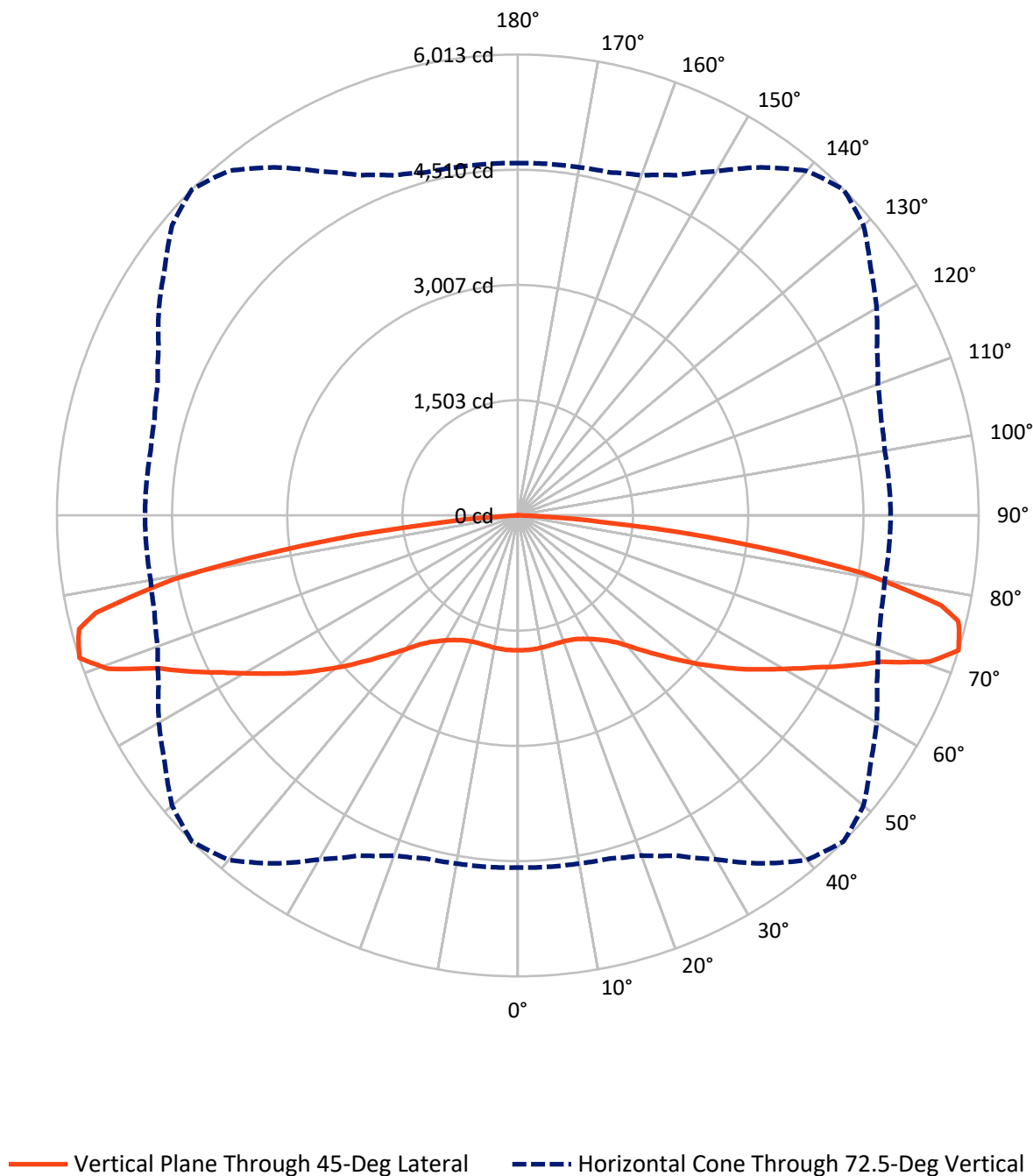


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

Luminous Intensity Polar Plot



REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

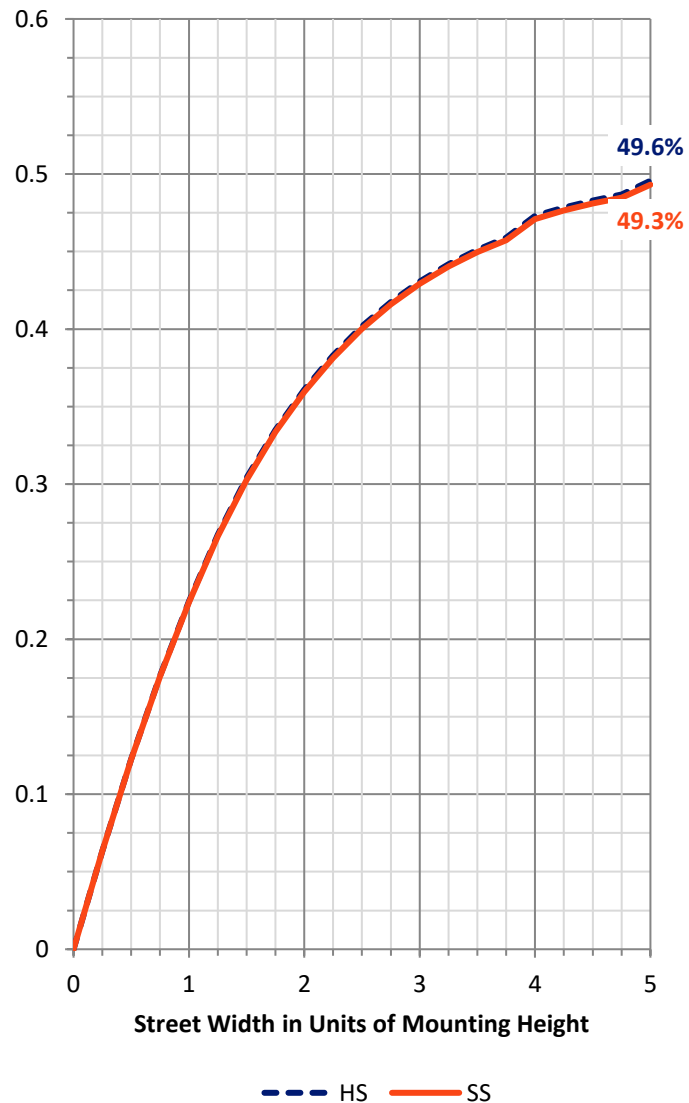
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9133.3	4.5	9137.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9133.3	4.5	9137.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	18266.6	9.0	18275.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	0.9
10°-20°	495.7	2.7
20°-30°	828.9	4.5
30°-40°	1259.9	6.9
40°-50°	1995.4	10.9
50°-60°	3052.3	16.7
60°-70°	4368.3	23.9
70°-80°	4998.3	27.3
80°-90°	1100.1	6.0
90°-100°	0.9	0.0
100°-110°	1.9	0.0
110°-120°	1.3	0.0
120°-130°	1.5	0.0
130°-140°	1.3	0.0
140°-150°	1.1	0.0
150°-160°	0.7	0.0
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-90°	18266.6	100.0
0°-180°	18275.7	100.0

Coefficient of Utilization



REPORT NUMBER: P157815

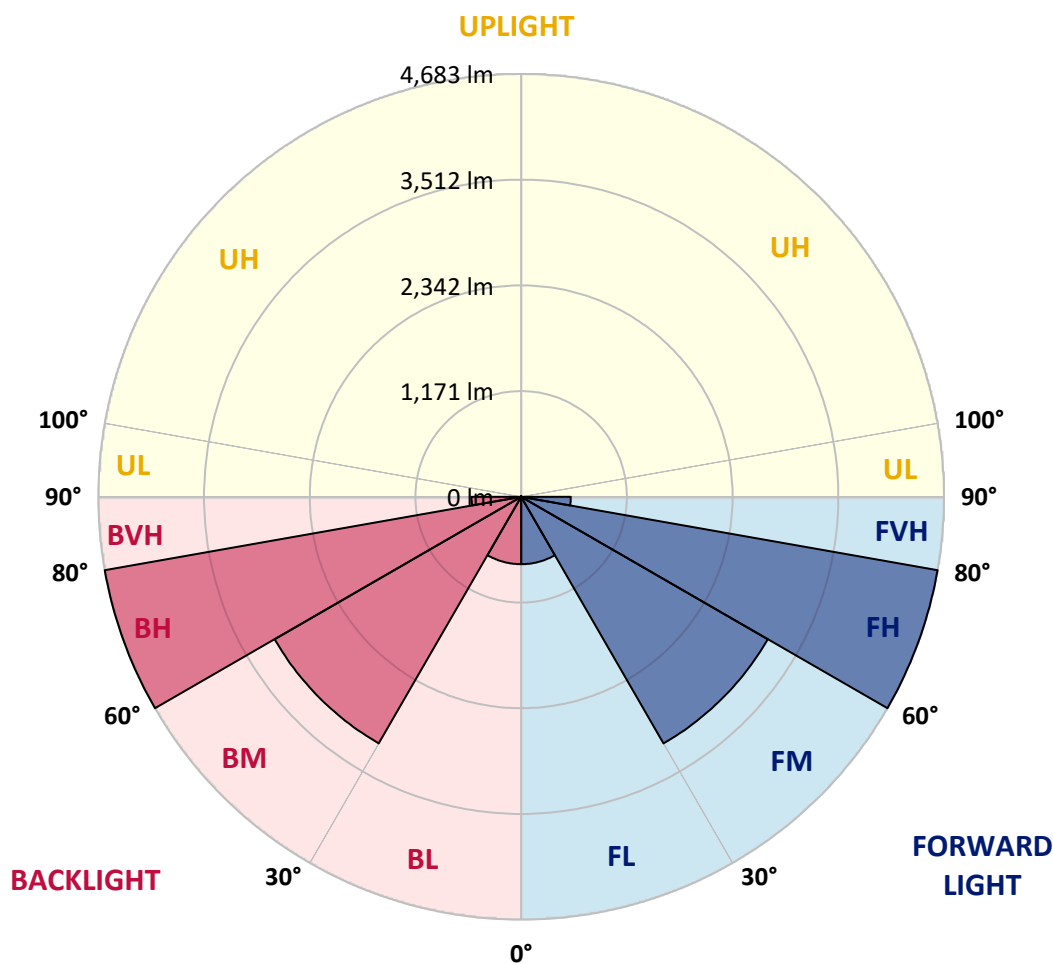
CATALOG NUMBER: VST-F07-LED-E-U-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	746.2	4.1			
FM	(30°-60°)	3153.8	17.3			
FH	(60°-80°)	4683.3	25.6			G2/5000
FVH	(80°-90°)	550.0	3.0			G4/750
BL	(0°-30°)	746.2	4.1	B2/1000		
BM	(30°-60°)	3153.8	17.3	B3/5000		
BH	(60°-80°)	4683.3	25.6	B4/5000		G2/5000
BVH	(80°-90°)	550.0	3.0			G4/750
UL	(90°-100°)	0.9	0.0		U1/10	
UH	(100°-180°)	4.5	0.0		U1/10	

BUG Rating: B4-U1-G4

Type V Short





REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0
2.5°	1760.2	1757.9	1759.0	1761.3	1760.2	1760.2	1759.0	1759.0	1761.3	1759.0	1760.2
5°	1761.3	1759.0	1760.2	1761.3	1760.2	1761.3	1760.2	1760.2	1760.2	1759.0	1761.3
7.5°	1756.7	1756.7	1757.9	1757.9	1756.7	1757.9	1757.9	1757.9	1756.7	1756.7	1759.0
10°	1754.4	1753.2	1753.2	1754.4	1753.2	1753.2	1754.4	1754.4	1752.1	1752.1	1754.4
12.5°	1750.9	1749.8	1749.8	1749.8	1748.6	1748.6	1749.8	1749.8	1748.6	1747.5	1750.9
15°	1748.6	1747.5	1747.5	1747.5	1745.2	1746.3	1746.3	1746.3	1745.2	1744.0	1747.5
17.5°	1747.5	1746.3	1746.3	1746.3	1745.2	1745.2	1745.2	1745.2	1744.0	1744.0	1746.3
20°	1749.8	1749.8	1749.8	1749.8	1748.6	1748.6	1748.6	1749.8	1749.8	1749.8	1752.1
22.5°	1755.6	1755.6	1756.7	1757.9	1757.9	1760.2	1761.3	1762.5	1762.5	1763.7	1766.0
25°	1770.6	1770.6	1771.7	1772.9	1776.4	1778.7	1783.3	1785.6	1786.8	1786.8	1787.9
27.5°	1798.3	1799.5	1801.8	1804.1	1808.7	1812.2	1816.8	1821.4	1822.6	1823.7	1824.9
30°	1833.0	1834.2	1838.8	1841.1	1846.9	1853.8	1859.6	1864.2	1867.7	1870.0	1868.8
32.5°	1882.7	1885.0	1890.8	1894.2	1902.3	1909.3	1917.4	1924.3	1927.8	1931.2	1930.1
35°	1952.0	1957.8	1963.6	1967.1	1975.2	1980.9	1991.3	1998.3	2005.2	2002.9	2004.0
37.5°	2054.9	2059.5	2060.7	2063.0	2071.1	2075.7	2087.3	2096.5	2100.0	2102.3	2103.4
40°	2193.6	2193.6	2199.4	2194.7	2205.1	2206.3	2220.2	2232.9	2236.3	2245.6	2238.7
42.5°	2355.4	2354.2	2357.7	2354.2	2354.2	2365.8	2377.3	2400.5	2402.8	2414.3	2407.4
45°	2531.1	2531.1	2527.6	2528.7	2531.1	2543.8	2557.6	2583.1	2594.6	2601.6	2596.9
47.5°	2721.8	2717.1	2716.0	2714.8	2721.8	2735.6	2756.4	2780.7	2809.6	2811.9	2809.6
50°	2914.8	2913.6	2905.5	2912.5	2917.1	2924.0	2963.3	2995.7	3025.7	3044.2	3038.4
52.5°	3118.2	3107.8	3107.8	3107.8	3119.3	3141.3	3176.0	3219.9	3260.3	3280.0	3276.5
55°	3323.9	3320.4	3310.0	3305.4	3320.4	3351.6	3401.3	3454.5	3507.7	3537.7	3526.1
57.5°	3512.3	3506.5	3507.7	3508.8	3526.1	3567.8	3625.5	3696.0	3753.8	3786.2	3778.1
60°	3660.2	3653.3	3666.0	3669.5	3700.7	3770.0	3862.5	3951.5	4027.7	4060.1	4047.4
62.5°	3827.8	3823.2	3831.3	3830.1	3863.6	3941.1	4064.7	4206.9	4322.4	4364.1	4345.6
65°	4098.2	4084.4	4080.9	4068.2	4090.1	4150.2	4273.9	4439.2	4624.1	4730.4	4705.0
67.5°	4421.8	4418.4	4406.8	4399.9	4408.0	4483.1	4602.1	4761.6	4950.0	5096.8	5129.2
70°	4635.7	4640.3	4651.8	4669.2	4736.2	4881.8	5099.1	5340.7	5599.5	5709.3	5689.7
72.5°	4595.2	4602.1	4611.4	4633.3	4721.2	4895.7	5182.3	5542.9	5867.7	6013.3	5888.5
75°	4397.6	4403.3	4424.2	4457.7	4565.2	4776.7	5085.2	5467.8	5802.9	5948.6	5818.0
76°	4215.0	4233.5	4271.6	4310.9	4440.3	4670.3	4999.7	5407.7	5762.5	5910.4	5784.5
77.5°	3801.2	3817.4	3848.6	3916.8	4063.6	4358.3	4743.1	5144.2	5514.0	5646.9	5540.6
80°	2860.4	2874.3	2903.2	2985.3	3112.4	3295.0	3593.2	3985.0	4390.6	4565.2	4495.8
82.5°	1207.7	1223.9	1338.3	1457.4	1597.2	1794.9	1989.0	2335.7	2633.9	2832.7	2726.4
85°	132.9	164.1	202.3	275.1	337.5	449.6	559.4	769.7	973.1	1096.8	969.7
87.5°	23.1	26.6	38.1	48.5	54.3	62.4	75.1	105.2	143.3	123.7	126.0
90°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.3	2.3	2.3	2.3
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
97.5°	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
100°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
102.5°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3	2.3
105°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
107.5°	1.2	1.2	1.2	1.2	2.3	2.3	1.2	1.2	1.2	2.3	1.2



REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
112.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
115°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
117.5°	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
120°	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
122.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
125°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
127.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
130°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2
132.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
135°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2
137.5°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2
140°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2
142.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
145°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	1.2
147.5°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	1.2	1.2
150°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	0.0	0.0	0.0
152.5°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	0.0
155°	2.3	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	1.2
157.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	0.0	0.0
160°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	0.0	0.0
162.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	0.0	0.0	0.0
165°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2	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: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0	1759.0
2.5°	1759.0	1759.0	1761.3	1760.2	1760.2	1761.3	1763.7	1762.5
5°	1760.2	1761.3	1759.0	1760.2	1761.3	1761.3	1762.5	1761.3
7.5°	1757.9	1757.9	1757.9	1759.0	1760.2	1759.0	1760.2	1760.2
10°	1753.2	1754.4	1753.2	1755.6	1756.7	1756.7	1757.9	1757.9
12.5°	1749.8	1749.8	1749.8	1752.1	1753.2	1753.2	1754.4	1753.2
15°	1746.3	1746.3	1745.2	1747.5	1749.8	1749.8	1750.9	1750.9
17.5°	1745.2	1745.2	1744.0	1746.3	1748.6	1748.6	1749.8	1749.8
20°	1748.6	1749.8	1747.5	1749.8	1752.1	1753.2	1753.2	1753.2
22.5°	1762.5	1761.3	1757.9	1759.0	1760.2	1760.2	1760.2	1760.2
25°	1783.3	1781.0	1777.5	1776.4	1775.2	1774.1	1774.1	1774.1
27.5°	1819.1	1815.7	1809.9	1808.7	1807.6	1805.3	1805.3	1805.3
30°	1861.9	1857.3	1850.3	1848.0	1844.6	1842.2	1841.1	1839.9
32.5°	1923.1	1913.9	1905.8	1900.0	1896.6	1889.6	1888.5	1886.2
35°	1993.6	1986.7	1975.2	1971.7	1965.9	1962.4	1961.3	1955.5
37.5°	2090.7	2082.6	2072.2	2069.9	2068.8	2065.3	2065.3	2064.1
40°	2225.9	2217.9	2208.6	2199.4	2201.7	2202.8	2202.8	2198.2
42.5°	2391.2	2378.5	2360.0	2365.8	2362.3	2357.7	2366.9	2361.2
45°	2579.6	2562.3	2548.4	2542.6	2542.6	2536.8	2546.1	2546.1
47.5°	2788.8	2761.1	2735.6	2736.8	2727.5	2729.8	2735.6	2743.7
50°	3009.5	2972.6	2948.3	2936.7	2927.5	2930.9	2941.3	2943.7
52.5°	3238.4	3193.3	3160.9	3143.6	3132.0	3136.7	3144.8	3151.7
55°	3476.5	3426.8	3378.2	3359.7	3345.9	3355.1	3356.3	3365.5
57.5°	3724.9	3656.7	3600.1	3572.4	3558.5	3567.8	3574.7	3583.9
60°	3975.7	3897.1	3830.1	3797.7	3778.1	3790.8	3807.0	3811.6
62.5°	4267.0	4158.3	4083.2	4037.0	4027.7	4040.4	4045.1	4058.9
65°	4611.4	4480.8	4376.8	4320.1	4317.8	4324.8	4335.2	4338.6
67.5°	5004.3	4858.7	4718.9	4662.2	4640.3	4661.1	4671.5	4685.3
70°	5559.1	5359.1	5156.9	5030.9	4977.8	4961.6	4966.2	4981.2
72.5°	5621.5	5406.5	5170.8	4999.7	4906.1	4863.3	4862.2	4864.5
75°	5485.1	5141.9	4975.4	4779.0	4646.1	4576.7	4567.5	4566.3
76°	5416.9	5011.3	4770.9	4614.8	4455.4	4384.9	4374.5	4368.7
77.5°	5129.2	4693.4	4331.7	4236.9	4084.4	3995.4	4013.9	3998.8
80°	4112.1	3679.9	3338.9	3071.9	3080.0	3015.3	2988.7	2980.6
82.5°	2423.6	2068.8	1692.0	1471.3	1260.9	1205.4	1037.8	999.7
85°	774.3	549.0	332.9	241.5	164.1	137.5	107.5	98.2
87.5°	102.9	80.9	65.9	63.6	57.8	49.7	32.4	23.1
90°	1.2	1.2	1.2	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°	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0
97.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
100°	2.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
102.5°	2.3	2.3	2.3	2.3	1.2	1.2	1.2	1.2
105°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
107.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3



REPORT NUMBER: P157815

CATALOG NUMBER: VST-F07-LED-E-U-5XQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
112.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
115°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3
117.5°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
120°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
122.5°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
125°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
127.5°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
130°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
132.5°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
135°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
137.5°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
140°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
142.5°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
145°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
147.5°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
150°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
152.5°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
155°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
157.5°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
160°	1.2	1.2	1.2	1.2	2.3	2.3	2.3	2.3
162.5°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
165°	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3
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)