

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: P157791

Luminaire Tested: **VST-E05-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157791
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-E05-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (105) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16225.7 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U1 - G3

Input Watts (W): 127.3
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

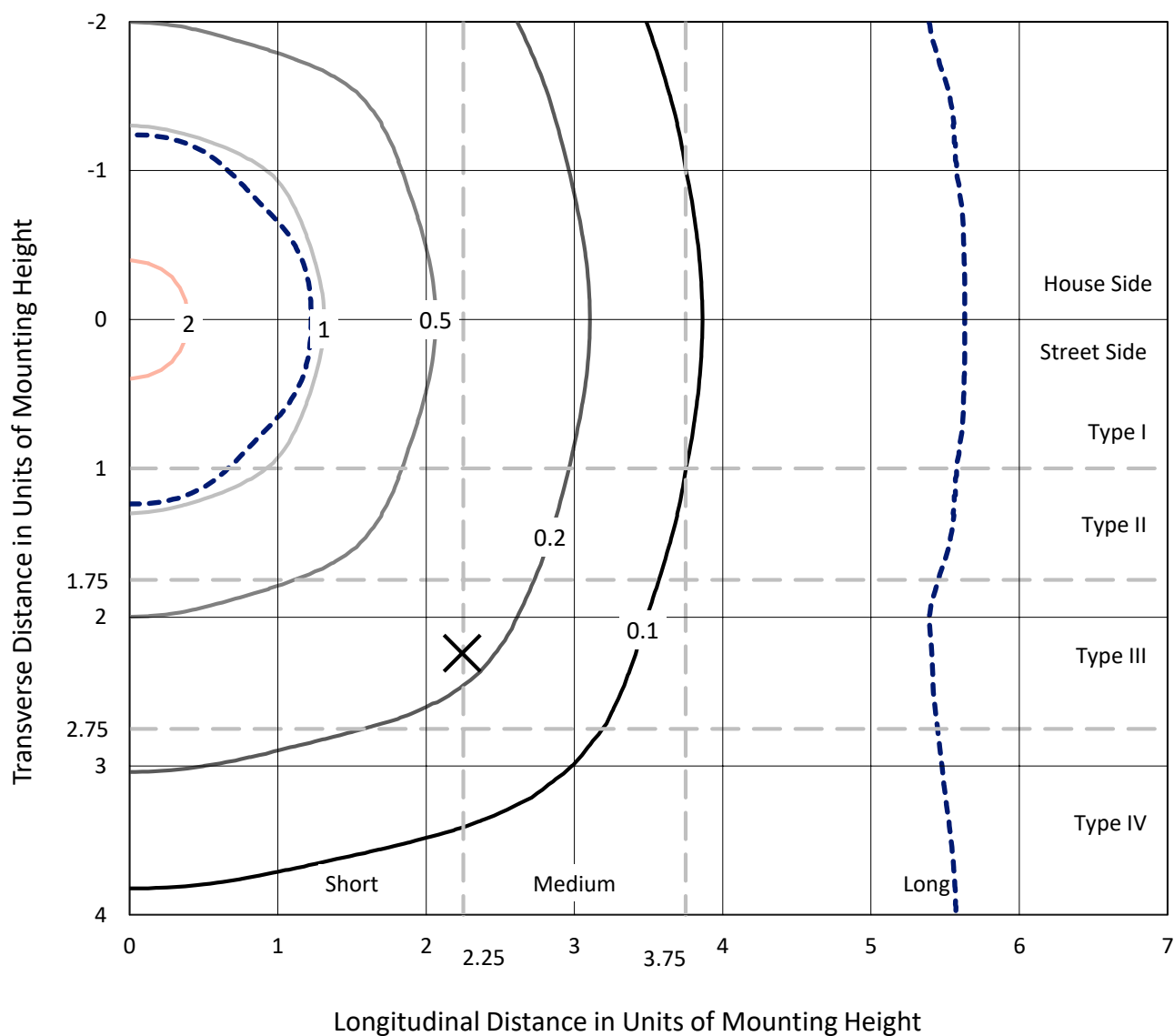


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

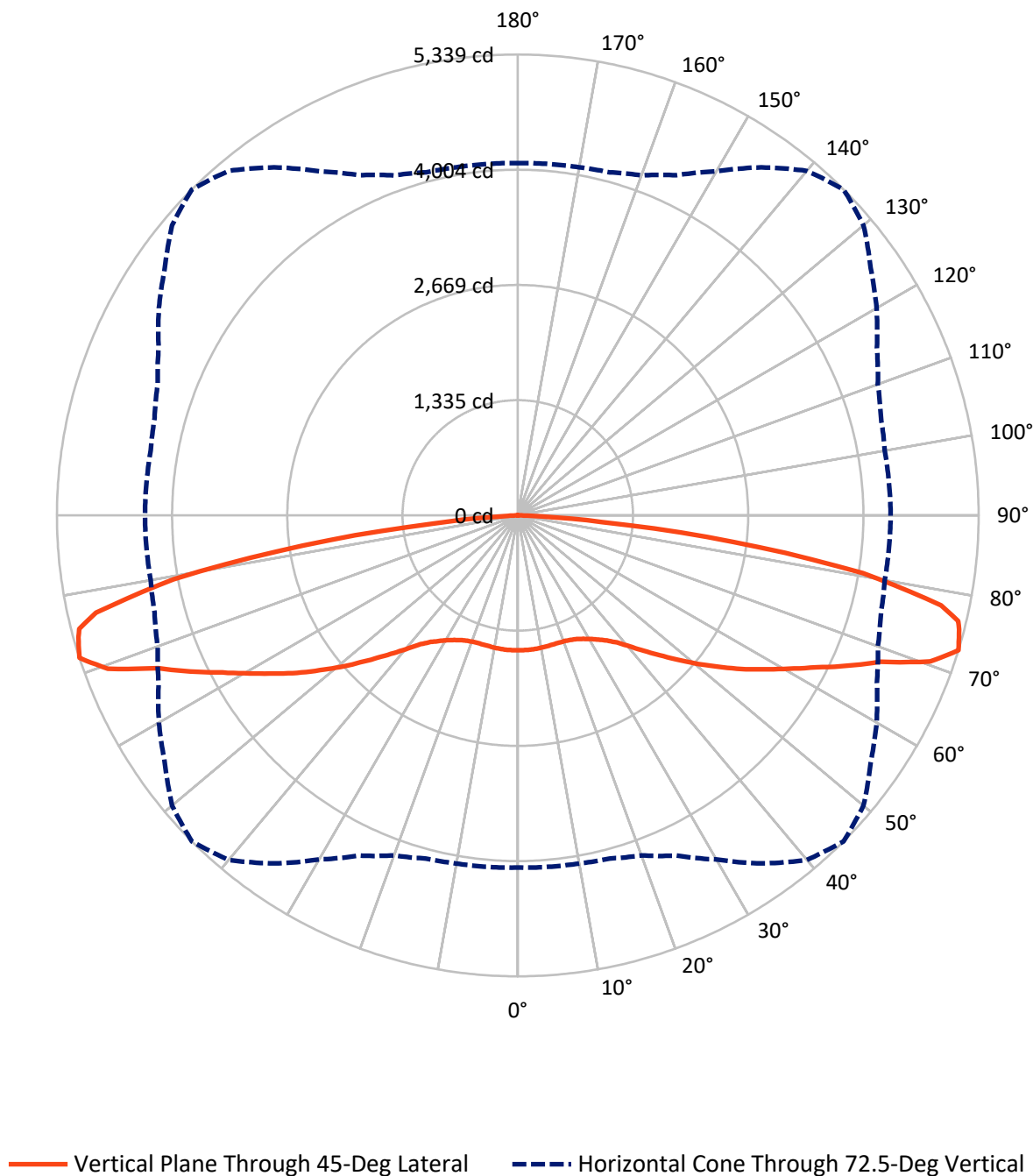


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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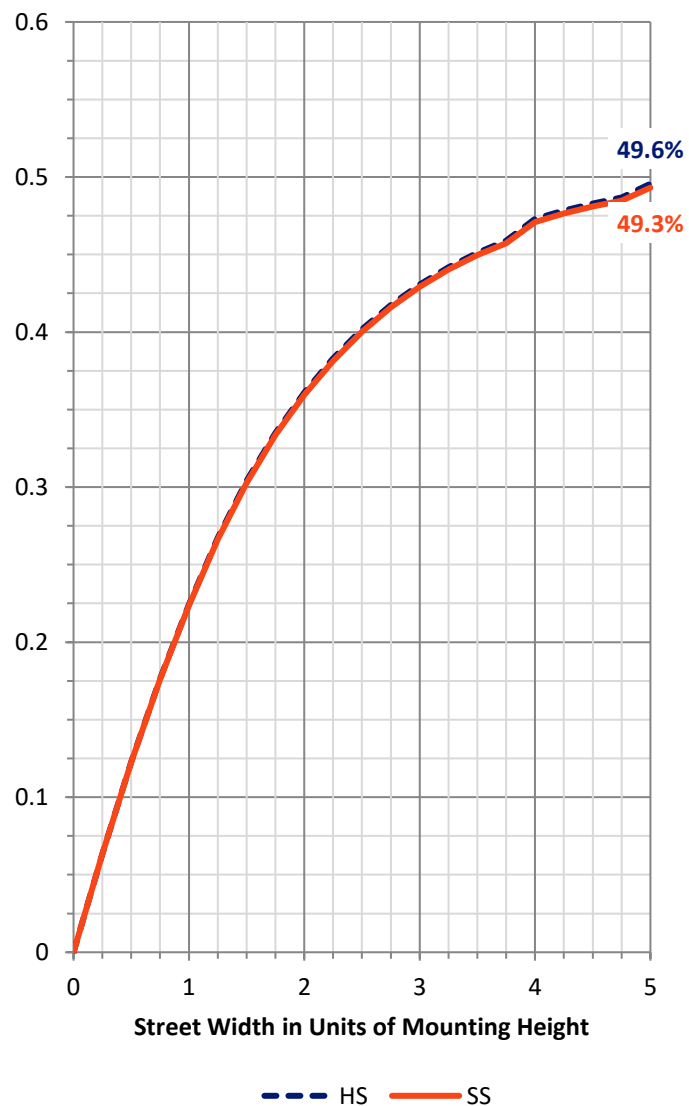
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8108.9	4.0	8112.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8108.9	4.0	8112.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	16217.8	7.9	16225.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.0	0.9
10°-20°	440.1	2.7
20°-30°	735.9	4.5
30°-40°	1118.6	6.9
40°-50°	1771.6	10.9
50°-60°	2709.9	16.7
60°-70°	3878.4	23.9
70°-80°	4437.7	27.3
80°-90°	976.7	6.0
90°-100°	0.8	0.0
100°-110°	1.7	0.0
110°-120°	1.1	0.0
120°-130°	1.3	0.0
130°-140°	1.2	0.0
140°-150°	0.9	0.0
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-90°	16217.8	100.0
0°-180°	16225.7	100.0

Coefficient of Utilization



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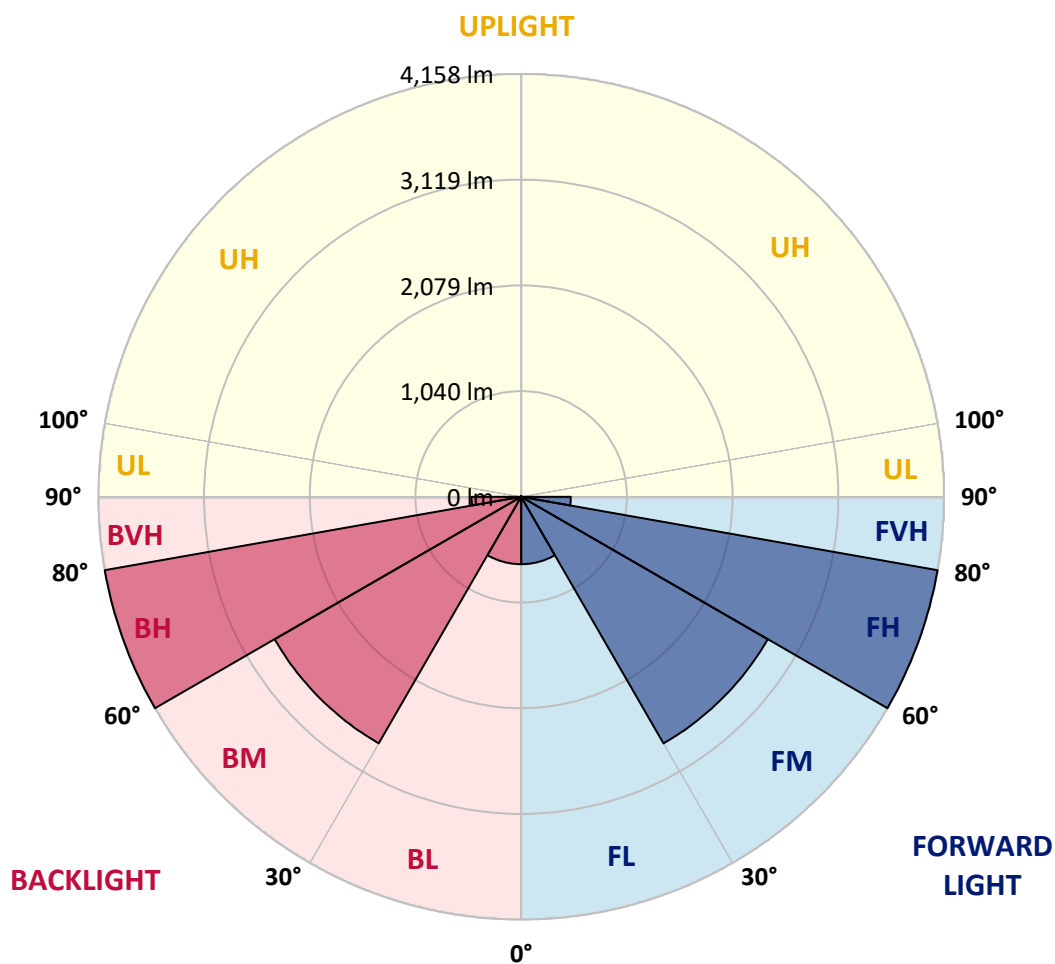
CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	662.5	4.1			
FM	(30°-60°)	2800.0	17.3			
FH	(60°-80°)	4158.0	25.6			G2/5000
FVH	(80°-90°)	488.3	3.0			G3/500
BL	(0°-30°)	662.5	4.1	B2/1000		
BM	(30°-60°)	2800.0	17.3	B3/5000		
BH	(60°-80°)	4158.0	25.6	B4/5000		G2/5000
BVH	(80°-90°)	488.3	3.0			G3/500
UL	(90°-100°)	0.8	0.0		U1/10	
UH	(100°-180°)	4.0	0.0		U1/10	

BUG Rating: B4-U1-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7
2.5°	1562.8	1560.7	1561.7	1563.8	1562.8	1562.8	1561.7	1561.7	1563.8	1561.7	1562.8
5°	1563.8	1561.7	1562.8	1563.8	1562.8	1563.8	1562.8	1562.8	1562.8	1561.7	1563.8
7.5°	1559.7	1559.7	1560.7	1560.7	1559.7	1560.7	1560.7	1560.7	1559.7	1559.7	1561.7
10°	1557.6	1556.6	1556.6	1557.6	1556.6	1556.6	1557.6	1557.6	1555.6	1555.6	1557.6
12.5°	1554.5	1553.5	1553.5	1553.5	1552.5	1552.5	1553.5	1553.5	1552.5	1551.5	1554.5
15°	1552.5	1551.5	1551.5	1551.5	1549.4	1550.4	1550.4	1550.4	1549.4	1548.4	1551.5
17.5°	1551.5	1550.4	1550.4	1550.4	1549.4	1549.4	1549.4	1549.4	1548.4	1548.4	1550.4
20°	1553.5	1553.5	1553.5	1553.5	1552.5	1552.5	1552.5	1553.5	1553.5	1553.5	1555.6
22.5°	1558.7	1558.7	1559.7	1560.7	1560.7	1562.8	1563.8	1564.8	1564.8	1565.8	1567.9
25°	1572.0	1572.0	1573.0	1574.0	1577.1	1579.2	1583.3	1585.3	1586.4	1586.4	1587.4
27.5°	1596.6	1597.6	1599.7	1601.8	1605.9	1608.9	1613.0	1617.1	1618.2	1619.2	1620.2
30°	1627.4	1628.4	1632.5	1634.6	1639.7	1645.9	1651.0	1655.1	1658.2	1660.2	1659.2
32.5°	1671.5	1673.6	1678.7	1681.8	1689.0	1695.1	1702.3	1708.5	1711.5	1714.6	1713.6
35°	1733.1	1738.2	1743.4	1746.4	1753.6	1758.7	1768.0	1774.1	1780.3	1778.2	1779.3
37.5°	1824.4	1828.5	1829.5	1831.6	1838.8	1842.9	1853.1	1861.4	1864.4	1866.5	1867.5
40°	1947.5	1947.5	1952.7	1948.6	1957.8	1958.8	1971.1	1982.4	1985.5	1993.7	1987.6
42.5°	2091.2	2090.2	2093.3	2090.2	2090.2	2100.4	2110.7	2131.2	2133.3	2143.5	2137.4
45°	2247.2	2247.2	2244.1	2245.1	2247.2	2258.5	2270.8	2293.3	2303.6	2309.8	2305.7
47.5°	2416.5	2412.4	2411.3	2410.3	2416.5	2428.8	2447.3	2468.8	2494.5	2496.5	2494.5
50°	2587.8	2586.8	2579.6	2585.8	2589.9	2596.0	2630.9	2659.7	2686.3	2702.8	2697.6
52.5°	2768.4	2759.2	2759.2	2759.2	2769.5	2789.0	2819.7	2858.7	2894.6	2912.1	2909.0
55°	2951.1	2948.0	2938.8	2934.7	2948.0	2975.7	3019.8	3067.0	3114.2	3140.9	3130.6
57.5°	3118.3	3113.2	3114.2	3115.3	3130.6	3167.6	3218.9	3281.5	3332.8	3361.5	3354.3
60°	3249.7	3243.5	3254.8	3257.9	3285.6	3347.2	3429.2	3508.3	3576.0	3604.7	3593.4
62.5°	3398.5	3394.4	3401.5	3400.5	3430.3	3499.0	3608.8	3735.0	3837.6	3874.6	3858.2
65°	3638.6	3626.3	3623.2	3611.9	3631.4	3684.7	3794.5	3941.3	4105.4	4199.8	4177.3
67.5°	3925.9	3922.8	3912.5	3906.4	3913.6	3980.3	4086.0	4227.6	4394.8	4525.1	4553.9
70°	4115.7	4119.8	4130.1	4145.5	4205.0	4334.3	4527.2	4741.6	4971.5	5069.0	5051.5
72.5°	4079.8	4086.0	4094.2	4113.7	4191.6	4346.6	4601.1	4921.2	5209.5	5338.8	5228.0
75°	3904.3	3909.5	3927.9	3957.7	4053.1	4240.9	4514.9	4854.5	5152.1	5281.4	5165.4
76°	3742.2	3758.6	3792.5	3827.4	3942.3	4146.5	4438.9	4801.1	5116.2	5247.5	5135.7
77.5°	3374.9	3389.2	3416.9	3477.5	3607.8	3869.4	4211.1	4567.2	4895.5	5013.6	4919.1
80°	2539.6	2551.9	2577.6	2650.4	2763.3	2925.4	3190.2	3538.0	3898.2	4053.1	3991.6
82.5°	1072.3	1086.6	1188.2	1293.9	1418.1	1593.5	1765.9	2073.8	2338.5	2515.0	2420.6
85°	118.0	145.7	179.6	244.2	299.6	399.2	496.6	683.4	864.0	973.8	860.9
87.5°	20.5	23.6	33.9	43.1	48.2	55.4	66.7	93.4	127.2	109.8	111.8
90°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.1	2.1	2.1	2.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
97.5°	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
100°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1
102.5°	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1
105°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
107.5°	1.0	1.0	1.0	1.0	2.1	2.1	1.0	1.0	1.0	2.1	1.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
112.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
115°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
117.5°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
120°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
122.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
125°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
127.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
130°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0
132.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
135°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0
137.5°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0
140°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0
142.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
145°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	1.0
147.5°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0	1.0
150°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	0.0	0.0	0.0
152.5°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	0.0
155°	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	1.0
157.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0
160°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0
162.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	0.0	0.0	0.0
165°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	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°	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7	1561.7
2.5°	1561.7	1561.7	1563.8	1562.8	1562.8	1563.8	1565.8	1564.8
5°	1562.8	1563.8	1561.7	1562.8	1563.8	1563.8	1564.8	1563.8
7.5°	1560.7	1560.7	1560.7	1561.7	1562.8	1561.7	1562.8	1562.8
10°	1556.6	1557.6	1556.6	1558.7	1559.7	1559.7	1560.7	1560.7
12.5°	1553.5	1553.5	1553.5	1555.6	1556.6	1556.6	1557.6	1556.6
15°	1550.4	1550.4	1549.4	1551.5	1553.5	1553.5	1554.5	1554.5
17.5°	1549.4	1549.4	1548.4	1550.4	1552.5	1552.5	1553.5	1553.5
20°	1552.5	1553.5	1551.5	1553.5	1555.6	1556.6	1556.6	1556.6
22.5°	1564.8	1563.8	1560.7	1561.7	1562.8	1562.8	1562.8	1562.8
25°	1583.3	1581.2	1578.2	1577.1	1576.1	1575.1	1575.1	1575.1
27.5°	1615.1	1612.0	1606.9	1605.9	1604.8	1602.8	1602.8	1602.8
30°	1653.1	1649.0	1642.8	1640.7	1637.7	1635.6	1634.6	1633.6
32.5°	1707.4	1699.2	1692.0	1686.9	1683.8	1677.7	1676.7	1674.6
35°	1770.0	1763.9	1753.6	1750.5	1745.4	1742.3	1741.3	1736.2
37.5°	1856.2	1849.0	1839.8	1837.8	1836.7	1833.7	1833.7	1832.6
40°	1976.3	1969.1	1960.9	1952.7	1954.7	1955.8	1955.8	1951.7
42.5°	2123.0	2111.7	2095.3	2100.4	2097.4	2093.3	2101.5	2096.3
45°	2290.3	2274.9	2262.6	2257.4	2257.4	2252.3	2260.5	2260.5
47.5°	2476.0	2451.4	2428.8	2429.8	2421.6	2423.7	2428.8	2436.0
50°	2672.0	2639.1	2617.6	2607.3	2599.1	2602.2	2611.4	2613.5
52.5°	2875.1	2835.1	2806.4	2791.0	2780.7	2784.9	2792.0	2798.2
55°	3086.5	3042.4	2999.3	2982.9	2970.6	2978.8	2979.8	2988.0
57.5°	3307.1	3246.6	3196.3	3171.7	3159.4	3167.6	3173.7	3182.0
60°	3529.8	3460.0	3400.5	3371.8	3354.3	3365.6	3380.0	3384.1
62.5°	3788.4	3691.9	3625.2	3584.2	3576.0	3587.3	3591.4	3603.7
65°	4094.2	3978.2	3885.9	3835.6	3833.5	3839.7	3848.9	3852.0
67.5°	4443.0	4313.7	4189.6	4139.3	4119.8	4138.3	4147.5	4159.8
70°	4935.6	4758.1	4578.5	4466.6	4419.4	4405.1	4409.2	4422.5
72.5°	4991.0	4800.1	4590.8	4438.9	4355.8	4317.9	4316.8	4318.9
75°	4869.9	4565.1	4417.4	4242.9	4124.9	4063.4	4055.2	4054.1
76°	4809.4	4449.2	4235.8	4097.2	3955.6	3893.0	3883.8	3878.7
77.5°	4553.9	4167.0	3845.8	3761.7	3626.3	3547.2	3563.7	3550.3
80°	3650.9	3267.1	2964.4	2727.4	2734.6	2677.1	2653.5	2646.3
82.5°	2151.7	1836.7	1502.2	1306.2	1119.5	1070.2	921.4	887.6
85°	687.5	487.4	295.5	214.5	145.7	122.1	95.4	87.2
87.5°	91.3	71.8	58.5	56.4	51.3	44.1	28.7	20.5
90°	1.0	1.0	1.0	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°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
100°	2.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
102.5°	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
105°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
107.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1



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CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1
112.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
115°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
117.5°	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1
120°	1.0	1.0	1.0	1.0	1.0	2.1	2.1	2.1
122.5°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
125°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
127.5°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
130°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
132.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
135°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
137.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
140°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
142.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
145°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
147.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
150°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
152.5°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
155°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
157.5°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
160°	1.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1
162.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
165°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
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)