

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: P157781

Luminaire Tested: **VST-E04-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157781
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-E04-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12980.4 lumens
Efficiency: N/A
Efficacy: 133.5 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): 97.2
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

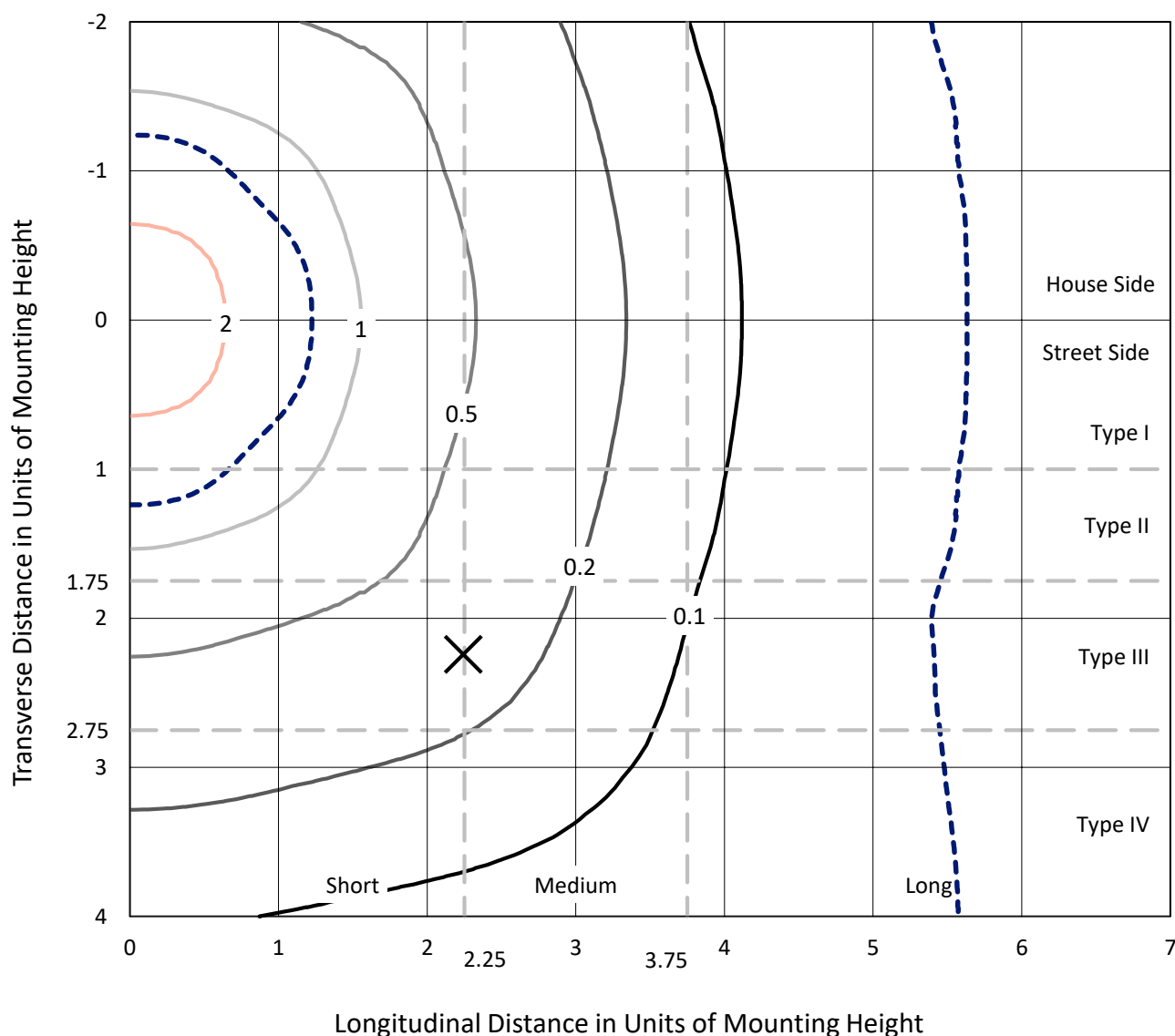


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

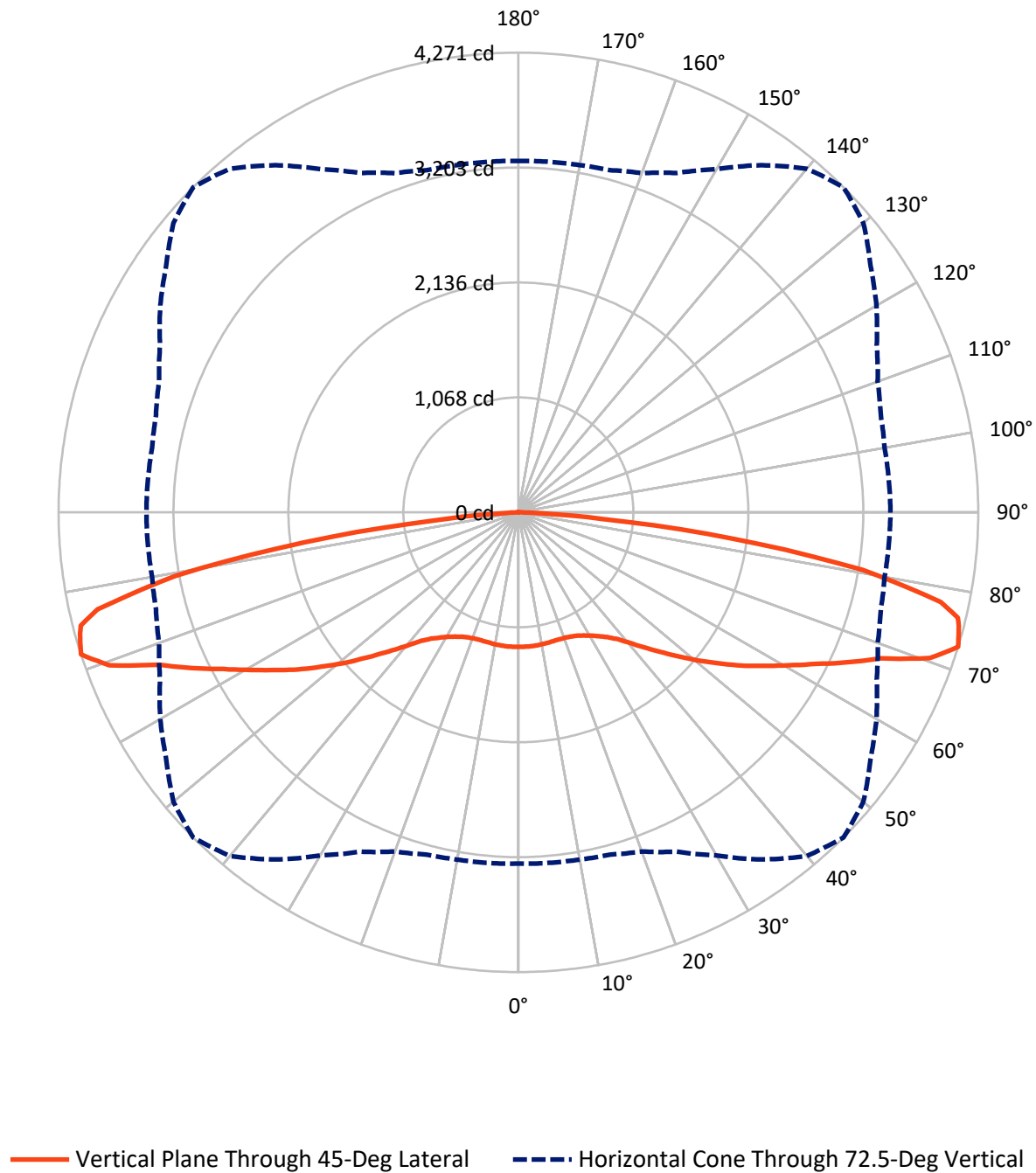


Based on 20 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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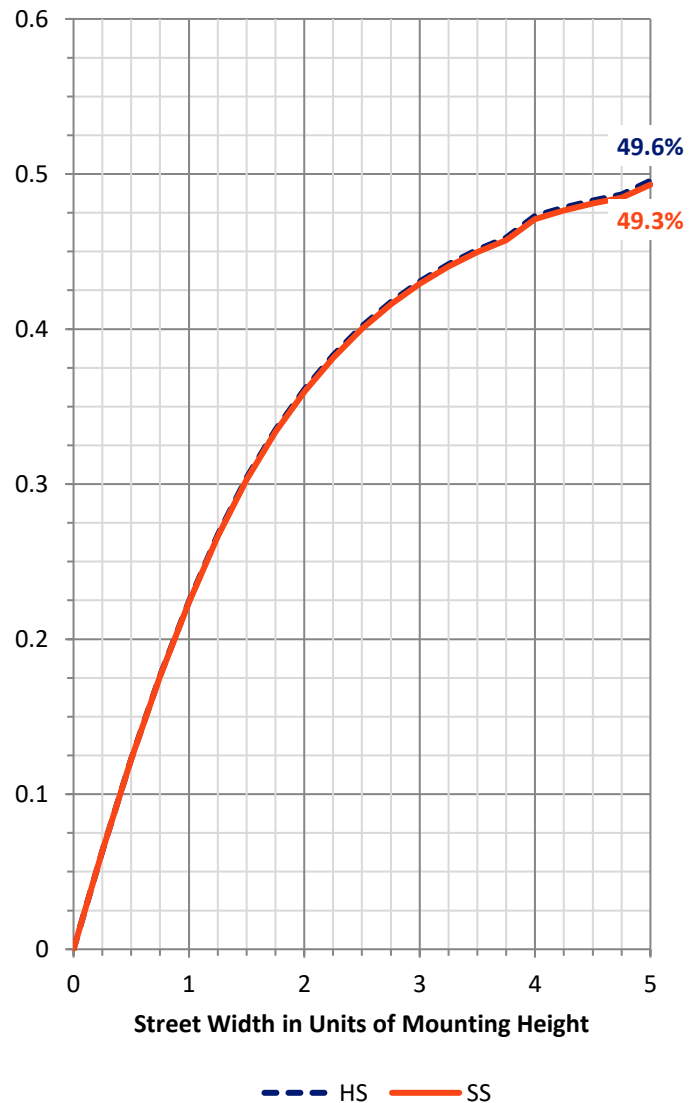
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6487.1	3.1	6490.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6487.1	3.1	6490.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	12974.2	6.2	12980.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.2	0.9
10°-20°	352.1	2.7
20°-30°	588.7	4.5
30°-40°	894.8	6.9
40°-50°	1417.3	10.9
50°-60°	2167.9	16.7
60°-70°	3102.7	23.9
70°-80°	3550.2	27.4
80°-90°	781.4	6.0
90°-100°	0.6	0.0
100°-110°	1.3	0.0
110°-120°	0.9	0.0
120°-130°	1.0	0.0
130°-140°	0.9	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-90°	12974.2	100.0
0°-180°	12980.4	100.0

Coefficient of Utilization



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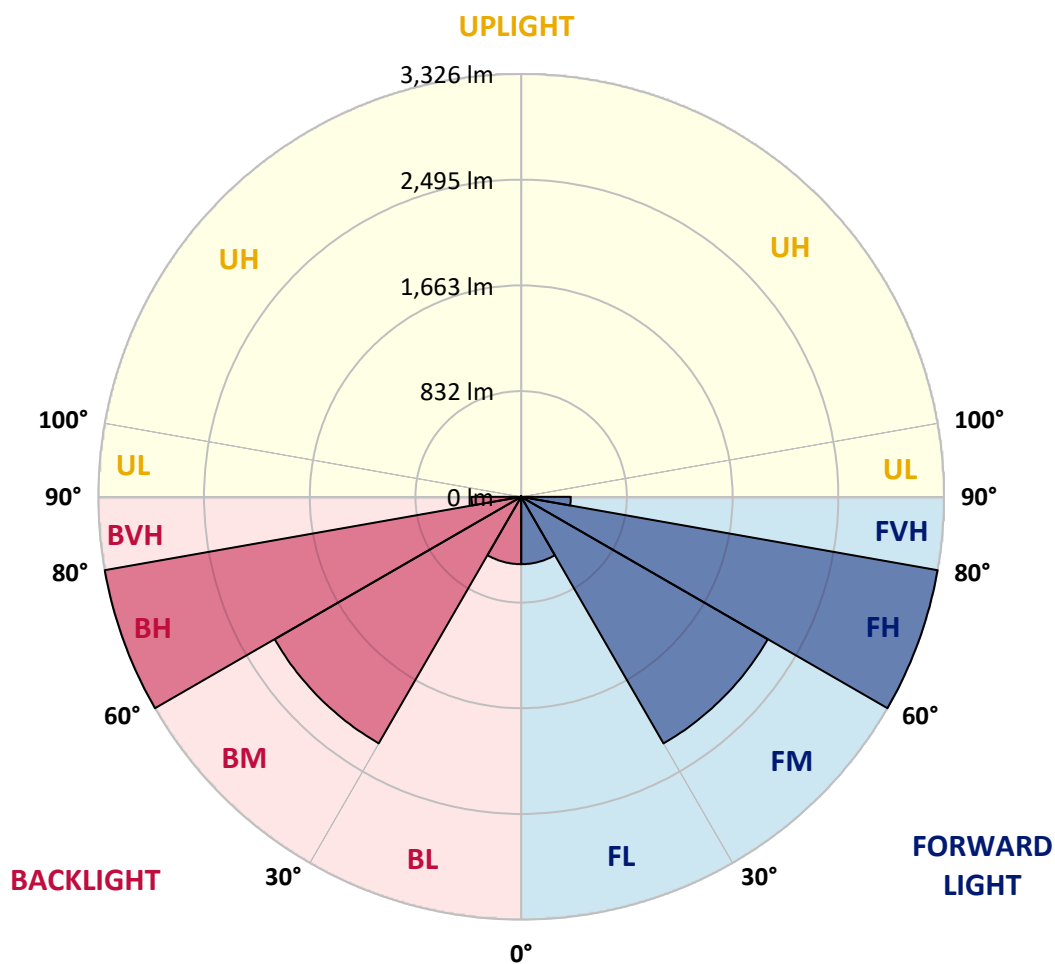
CATALOG NUMBER: VST-E04-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	530.0	4.1			
FM	(30°-60°)	2240.0	17.3			
FH	(60°-80°)	3326.4	25.6			G2/5000
FVH	(80°-90°)	390.7	3.0			G3/500
BL	(0°-30°)	530.0	4.1	B2/1000		
BM	(30°-60°)	2240.0	17.3	B2/2500		
BH	(60°-80°)	3326.4	25.6	B4/5000		G2/5000
BVH	(80°-90°)	390.7	3.0			G3/500
UL	(90°-100°)	0.6	0.0		U1/10	
UH	(100°-180°)	3.1	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°	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4
2.5°	1250.2	1248.6	1249.4	1251.0	1250.2	1250.2	1249.4	1249.4	1251.0	1249.4	1250.2
5°	1251.0	1249.4	1250.2	1251.0	1250.2	1251.0	1250.2	1250.2	1250.2	1249.4	1251.0
7.5°	1247.7	1247.7	1248.6	1248.6	1247.7	1248.6	1248.6	1248.6	1247.7	1247.7	1249.4
10°	1246.1	1245.3	1245.3	1246.1	1245.3	1245.3	1246.1	1246.1	1244.5	1244.5	1246.1
12.5°	1243.6	1242.8	1242.8	1242.8	1242.0	1242.0	1242.8	1242.8	1242.0	1241.2	1243.6
15°	1242.0	1241.2	1241.2	1241.2	1239.5	1240.4	1240.4	1240.4	1239.5	1238.7	1241.2
17.5°	1241.2	1240.4	1240.4	1240.4	1239.5	1239.5	1239.5	1239.5	1238.7	1238.7	1240.4
20°	1242.8	1242.8	1242.8	1242.8	1242.0	1242.0	1242.0	1242.8	1242.8	1242.8	1244.5
22.5°	1246.9	1246.9	1247.7	1248.6	1248.6	1250.2	1251.0	1251.8	1251.8	1252.7	1254.3
25°	1257.6	1257.6	1258.4	1259.2	1261.7	1263.3	1266.6	1268.3	1269.1	1269.1	1269.9
27.5°	1277.3	1278.1	1279.8	1281.4	1284.7	1287.1	1290.4	1293.7	1294.5	1295.4	1296.2
30°	1301.9	1302.7	1306.0	1307.7	1311.8	1316.7	1320.8	1324.1	1326.5	1328.2	1327.4
32.5°	1337.2	1338.9	1343.0	1345.4	1351.2	1356.1	1361.8	1366.8	1369.2	1371.7	1370.9
35°	1386.5	1390.6	1394.7	1397.1	1402.9	1407.0	1414.4	1419.3	1424.2	1422.6	1423.4
37.5°	1459.5	1462.8	1463.6	1465.3	1471.0	1474.3	1482.5	1489.1	1491.5	1493.2	1494.0
40°	1558.0	1558.0	1562.1	1558.9	1566.2	1567.1	1576.9	1585.9	1588.4	1595.0	1590.1
42.5°	1673.0	1672.1	1674.6	1672.1	1672.1	1680.4	1688.6	1705.0	1706.6	1714.8	1709.9
45°	1797.7	1797.7	1795.3	1796.1	1797.7	1806.8	1816.6	1834.7	1842.9	1847.8	1844.5
47.5°	1933.2	1929.9	1929.1	1928.3	1933.2	1943.0	1957.8	1975.0	1995.6	1997.2	1995.6
50°	2070.3	2069.4	2063.7	2068.6	2071.9	2076.8	2104.7	2127.7	2149.1	2162.2	2158.1
52.5°	2214.7	2207.4	2207.4	2207.4	2215.6	2231.2	2255.8	2287.0	2315.7	2329.7	2327.2
55°	2360.9	2358.4	2351.0	2347.7	2358.4	2380.6	2415.9	2453.6	2491.4	2512.7	2504.5
57.5°	2494.7	2490.6	2491.4	2492.2	2504.5	2534.1	2575.1	2625.2	2666.2	2689.2	2683.5
60°	2599.7	2594.8	2603.8	2606.3	2628.5	2677.7	2743.4	2806.6	2860.8	2883.8	2874.7
62.5°	2718.8	2715.5	2721.2	2720.4	2744.2	2799.2	2887.1	2988.0	3070.1	3099.7	3086.5
65°	2910.9	2901.0	2898.5	2889.5	2905.1	2947.8	3035.6	3153.0	3284.4	3359.9	3341.8
67.5°	3140.7	3138.2	3130.0	3125.1	3130.9	3184.2	3268.8	3382.0	3515.8	3620.1	3643.1
70°	3292.6	3295.9	3304.1	3316.4	3364.0	3467.4	3621.7	3793.3	3977.2	4055.2	4041.2
72.5°	3263.8	3268.8	3275.3	3290.9	3353.3	3477.3	3680.8	3937.0	4167.6	4271.1	4182.4
75°	3123.5	3127.6	3142.3	3166.2	3242.5	3392.7	3611.9	3883.6	4121.7	4225.1	4132.3
76°	2993.8	3006.9	3034.0	3061.9	3153.8	3317.2	3551.1	3840.9	4092.9	4198.0	4108.5
77.5°	2699.9	2711.4	2733.5	2782.0	2886.2	3095.6	3368.9	3653.8	3916.4	4010.8	3935.3
80°	2031.7	2041.5	2062.1	2120.3	2210.6	2340.3	2552.1	2830.4	3118.5	3242.5	3193.2
82.5°	857.8	869.3	950.6	1035.1	1134.5	1274.8	1412.7	1659.0	1870.8	2012.0	1936.5
85°	94.4	116.6	143.7	195.4	239.7	319.3	397.3	546.7	691.2	779.0	688.7
87.5°	16.4	18.9	27.1	34.5	38.6	44.3	53.4	74.7	101.8	87.8	89.5
90°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.6	1.6	1.6	1.6
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
97.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
102.5°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6	1.6
105°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107.5°	0.8	0.8	0.8	0.8	1.6	1.6	0.8	0.8	0.8	1.6	0.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
112.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
117.5°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
120°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
122.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
125°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
127.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
130°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
132.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
135°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
137.5°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
140°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
142.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
145°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.8
147.5°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8
150°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.0	0.0	0.0
152.5°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0
155°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.8
157.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0
160°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0
162.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0
165°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	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°	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4
2.5°	1249.4	1249.4	1251.0	1250.2	1250.2	1251.0	1252.7	1251.8
5°	1250.2	1251.0	1249.4	1250.2	1251.0	1251.0	1251.8	1251.0
7.5°	1248.6	1248.6	1248.6	1249.4	1250.2	1249.4	1250.2	1250.2
10°	1245.3	1246.1	1245.3	1246.9	1247.7	1247.7	1248.6	1248.6
12.5°	1242.8	1242.8	1242.8	1244.5	1245.3	1245.3	1246.1	1245.3
15°	1240.4	1240.4	1239.5	1241.2	1242.8	1242.8	1243.6	1243.6
17.5°	1239.5	1239.5	1238.7	1240.4	1242.0	1242.0	1242.8	1242.8
20°	1242.0	1242.8	1241.2	1242.8	1244.5	1245.3	1245.3	1245.3
22.5°	1251.8	1251.0	1248.6	1249.4	1250.2	1250.2	1250.2	1250.2
25°	1266.6	1265.0	1262.5	1261.7	1260.9	1260.1	1260.1	1260.1
27.5°	1292.1	1289.6	1285.5	1284.7	1283.9	1282.2	1282.2	1282.2
30°	1322.4	1319.2	1314.2	1312.6	1310.1	1308.5	1307.7	1306.8
32.5°	1366.0	1359.4	1353.6	1349.5	1347.1	1342.1	1341.3	1339.7
35°	1416.0	1411.1	1402.9	1400.4	1396.3	1393.9	1393.0	1388.9
37.5°	1485.0	1479.2	1471.8	1470.2	1469.4	1466.9	1466.9	1466.1
40°	1581.0	1575.3	1568.7	1562.1	1563.8	1564.6	1564.6	1561.3
42.5°	1698.4	1689.4	1676.2	1680.4	1677.9	1674.6	1681.2	1677.1
45°	1832.2	1819.9	1810.0	1805.9	1805.9	1801.8	1808.4	1808.4
47.5°	1980.8	1961.1	1943.0	1943.9	1937.3	1938.9	1943.0	1948.8
50°	2137.6	2111.3	2094.1	2085.9	2079.3	2081.8	2089.2	2090.8
52.5°	2300.1	2268.1	2245.1	2232.8	2224.6	2227.9	2233.6	2238.6
55°	2469.2	2433.9	2399.4	2386.3	2376.5	2383.0	2383.8	2390.4
57.5°	2645.7	2597.3	2557.1	2537.4	2527.5	2534.1	2539.0	2545.6
60°	2823.8	2768.0	2720.4	2697.4	2683.5	2692.5	2704.0	2707.3
62.5°	3030.7	2953.5	2900.2	2867.3	2860.8	2869.8	2873.1	2882.9
65°	3275.3	3182.6	3108.7	3068.5	3066.8	3071.7	3079.1	3081.6
67.5°	3554.4	3451.0	3351.7	3311.4	3295.9	3310.6	3318.0	3327.9
70°	3948.5	3806.4	3662.8	3573.3	3535.5	3524.1	3527.3	3538.0
72.5°	3992.8	3840.1	3672.6	3551.1	3484.7	3454.3	3453.5	3455.1
75°	3895.9	3652.1	3533.9	3394.4	3300.0	3250.7	3244.1	3243.3
76°	3847.5	3559.4	3388.6	3277.8	3164.5	3114.4	3107.0	3102.9
77.5°	3643.1	3333.6	3076.7	3009.4	2901.0	2837.8	2850.9	2840.3
80°	2920.7	2613.7	2371.5	2181.9	2187.7	2141.7	2122.8	2117.1
82.5°	1721.4	1469.4	1201.8	1045.0	895.6	856.2	737.2	710.1
85°	550.0	389.9	236.4	171.6	116.6	97.7	76.3	69.8
87.5°	73.1	57.5	46.8	45.1	41.0	35.3	23.0	16.4
90°	0.8	0.8	0.8	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°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
97.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
102.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
105°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
107.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



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CATALOG NUMBER: VST-E04-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
112.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
117.5°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
120°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
122.5°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
125°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
127.5°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
130°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
132.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
135°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
137.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
140°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
142.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
145°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
150°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
152.5°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
157.5°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
160°	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
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)