

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: P157795

Luminaire Tested: **VST-F05-LED-E-U-5XQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157795
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-F05-LED-E-U-5XQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13054 lumens
Efficiency: N/A
Efficacy: 97.9 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): 133.3
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

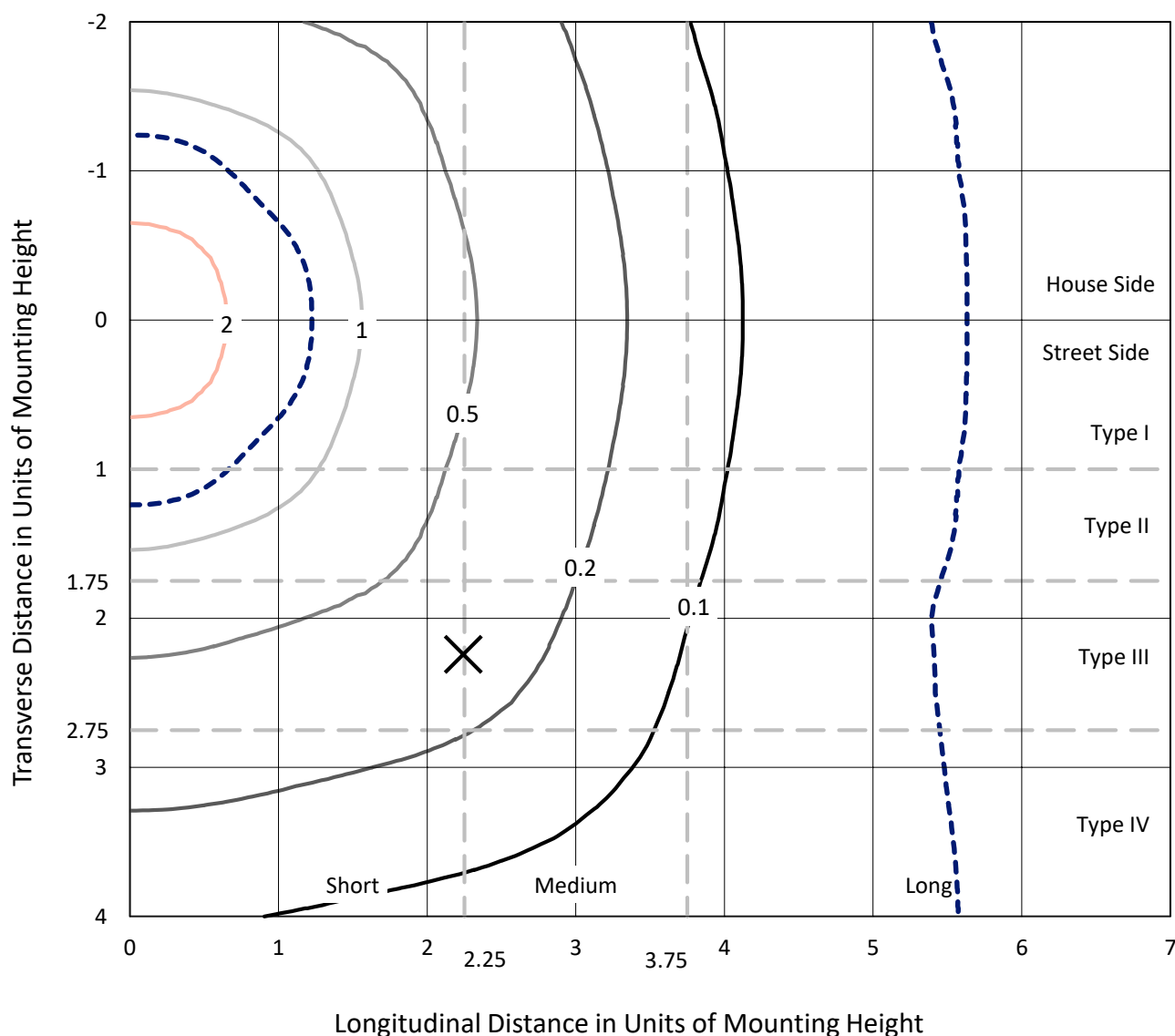


REPORT NUMBER: P157795

CATALOG NUMBER: VST-F05-LED-E-U-5XQ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

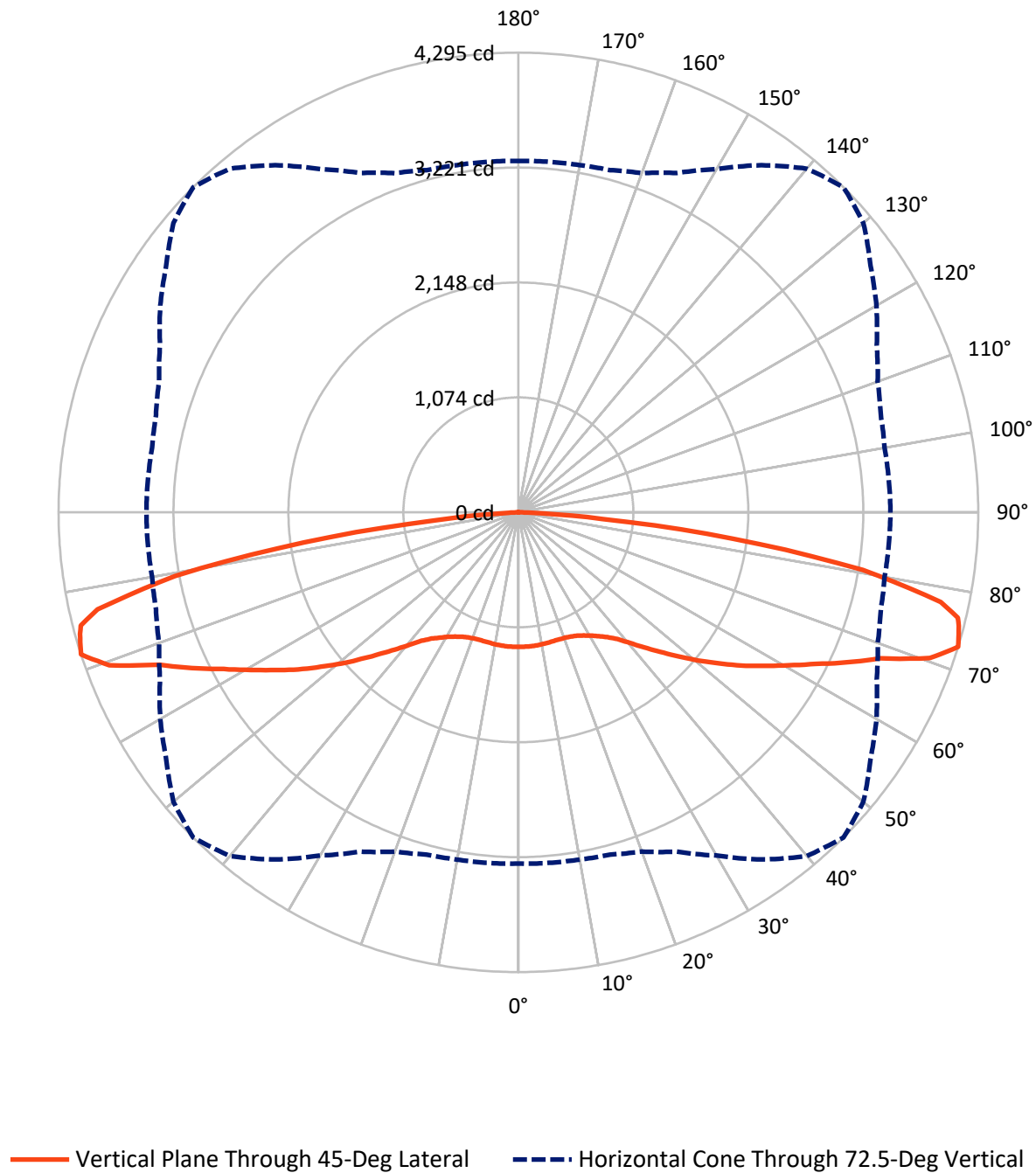


Based on 20 foot mounting height. Maximum calculated value = 3.1 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P157795

CATALOG NUMBER: VST-F05-LED-E-U-5XQ

Luminous Intensity Polar Plot



REPORT NUMBER: P157795

CATALOG NUMBER: VST-F05-LED-E-U-5XQ

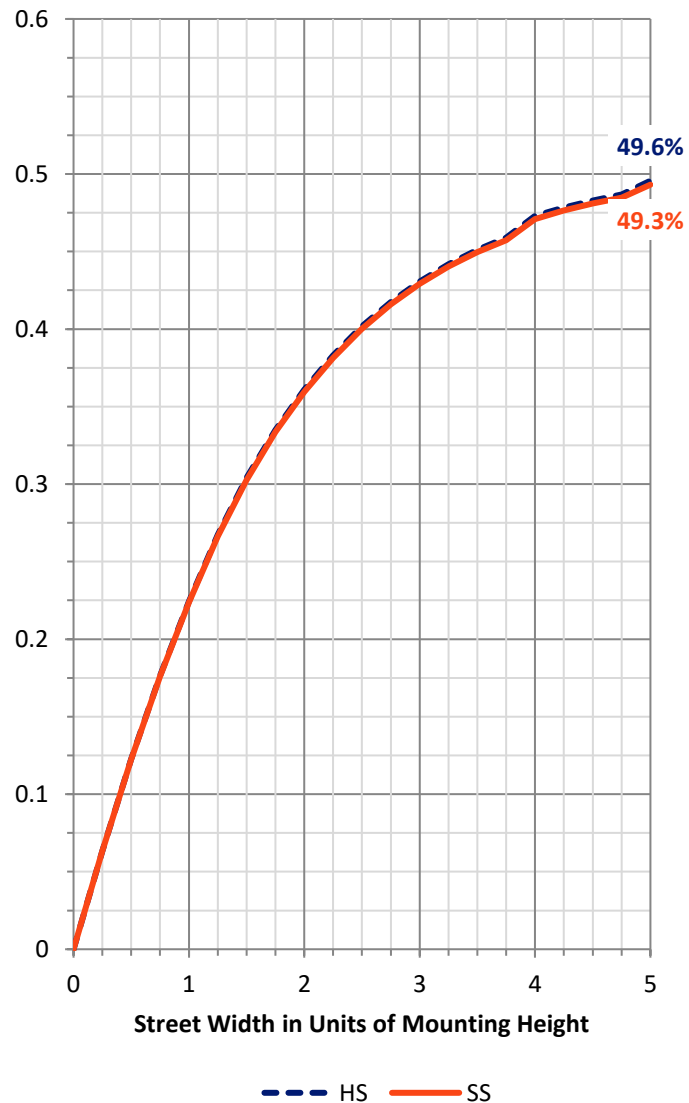
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6523.8	3.2	6527.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6523.8	3.2	6527.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	13047.6	6.4	13054.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	0.9
10°-20°	354.1	2.7
20°-30°	592.1	4.5
30°-40°	899.9	6.9
40°-50°	1425.3	10.9
50°-60°	2180.2	16.7
60°-70°	3120.2	23.9
70°-80°	3570.2	27.3
80°-90°	785.8	6.0
90°-100°	0.6	0.0
100°-110°	1.4	0.0
110°-120°	0.9	0.0
120°-130°	1.0	0.0
130°-140°	1.0	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°	13047.6	100.0
0°-180°	13054.0	100.0

Coefficient of Utilization



REPORT NUMBER: P157795

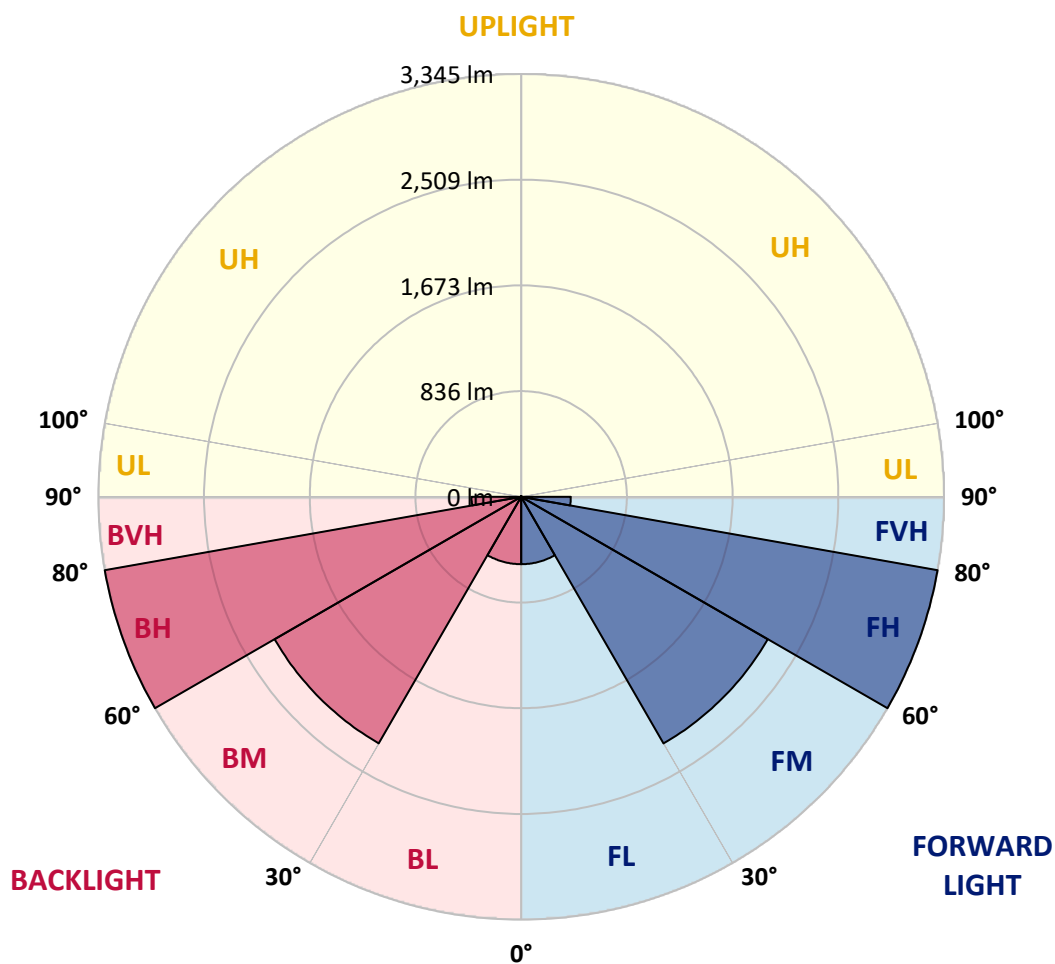
CATALOG NUMBER: VST-F05-LED-E-U-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	533.0	4.1			
FM	(30°-60°)	2252.7	17.3			
FH	(60°-80°)	3345.2	25.6			G2/5000
FVH	(80°-90°)	392.9	3.0			G3/500
BL	(0°-30°)	533.0	4.1	B2/1000		
BM	(30°-60°)	2252.7	17.3	B2/2500		
BH	(60°-80°)	3345.2	25.6	B4/5000		G2/5000
BVH	(80°-90°)	392.9	3.0			G3/500
UL	(90°-100°)	0.6	0.0		U1/10	
UH	(100°-180°)	3.2	0.0		U1/10	

BUG Rating: B4-U1-G3

Type V Short





REPORT NUMBER: P157795

CATALOG NUMBER: VST-F05-LED-E-U-5XQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4
2.5°	1257.3	1255.6	1256.4	1258.1	1257.3	1257.3	1256.4	1256.4	1258.1	1256.4	1257.3
5°	1258.1	1256.4	1257.3	1258.1	1257.3	1258.1	1257.3	1257.3	1257.3	1256.4	1258.1
7.5°	1254.8	1254.8	1255.6	1255.6	1254.8	1255.6	1255.6	1255.6	1254.8	1254.8	1256.4
10°	1253.1	1252.3	1252.3	1253.1	1252.3	1252.3	1253.1	1253.1	1251.5	1251.5	1253.1
12.5°	1250.7	1249.8	1249.8	1249.8	1249.0	1249.0	1249.8	1249.8	1249.0	1248.2	1250.7
15°	1249.0	1248.2	1248.2	1248.2	1246.5	1247.4	1247.4	1247.4	1246.5	1245.7	1248.2
17.5°	1248.2	1247.4	1247.4	1247.4	1246.5	1246.5	1246.5	1246.5	1245.7	1245.7	1247.4
20°	1249.8	1249.8	1249.8	1249.8	1249.0	1249.0	1249.0	1249.8	1249.8	1249.8	1251.5
22.5°	1254.0	1254.0	1254.8	1255.6	1255.6	1257.3	1258.1	1258.9	1258.9	1259.8	1261.4
25°	1264.7	1264.7	1265.5	1266.4	1268.8	1270.5	1273.8	1275.4	1276.3	1276.3	1277.1
27.5°	1284.5	1285.3	1287.0	1288.6	1291.9	1294.4	1297.7	1301.0	1301.9	1302.7	1303.5
30°	1309.3	1310.1	1313.4	1315.1	1319.2	1324.1	1328.3	1331.6	1334.0	1335.7	1334.9
32.5°	1344.8	1346.4	1350.6	1353.0	1358.8	1363.8	1369.5	1374.5	1377.0	1379.5	1378.6
35°	1394.3	1398.4	1402.6	1405.0	1410.8	1414.9	1422.4	1427.3	1432.3	1430.6	1431.5
37.5°	1467.8	1471.1	1471.9	1473.6	1479.3	1482.6	1490.9	1497.5	1500.0	1501.6	1502.5
40°	1566.8	1566.8	1571.0	1567.7	1575.1	1575.9	1585.8	1594.9	1597.4	1604.0	1599.0
42.5°	1682.4	1681.6	1684.1	1681.6	1681.6	1689.8	1698.1	1714.6	1716.3	1724.5	1719.6
45°	1807.9	1807.9	1805.4	1806.2	1807.9	1817.0	1826.9	1845.0	1853.3	1858.3	1855.0
47.5°	1944.1	1940.8	1940.0	1939.2	1944.1	1954.0	1968.9	1986.2	2006.9	2008.5	2006.9
50°	2082.0	2081.1	2075.4	2080.3	2083.6	2088.6	2116.6	2139.8	2161.2	2174.4	2170.3
52.5°	2227.3	2219.8	2219.8	2219.8	2228.1	2243.8	2268.5	2299.9	2328.8	2342.8	2340.4
55°	2374.2	2371.7	2364.3	2361.0	2371.7	2394.0	2429.5	2467.5	2505.5	2526.9	2518.7
57.5°	2508.8	2504.6	2505.5	2506.3	2518.7	2548.4	2589.7	2640.0	2681.3	2704.4	2698.6
60°	2614.4	2609.5	2618.6	2621.0	2643.3	2692.9	2758.9	2822.5	2877.0	2900.1	2891.0
62.5°	2734.1	2730.8	2736.6	2735.8	2759.7	2815.0	2903.4	3004.9	3087.5	3117.2	3104.0
65°	2927.3	2917.4	2914.9	2905.8	2921.5	2964.5	3052.8	3170.8	3302.9	3378.9	3360.7
67.5°	3158.5	3156.0	3147.7	3142.8	3148.6	3202.2	3287.2	3401.2	3535.7	3640.6	3663.7
70°	3311.2	3314.5	3322.7	3335.1	3383.0	3487.0	3642.2	3814.8	3999.7	4078.1	4064.1
72.5°	3282.3	3287.2	3293.8	3309.5	3372.3	3496.9	3701.7	3959.2	4191.2	4295.2	4206.0
75°	3141.1	3145.2	3160.1	3184.0	3260.8	3411.9	3632.3	3905.6	4145.0	4249.0	4155.7
76°	3010.7	3023.9	3051.1	3079.2	3171.7	3335.9	3571.2	3862.6	4116.1	4221.7	4131.8
77.5°	2715.2	2726.7	2749.0	2797.7	2902.5	3113.1	3388.0	3674.4	3938.6	4033.5	3957.6
80°	2043.2	2053.1	2073.7	2132.3	2223.1	2353.6	2566.6	2846.4	3136.2	3260.8	3211.3
82.5°	862.7	874.2	956.0	1041.0	1140.9	1282.0	1420.7	1668.4	1881.4	2023.4	1947.4
85°	94.9	117.2	144.5	196.5	241.1	321.1	399.6	549.8	695.1	783.4	692.6
87.5°	16.5	19.0	27.2	34.7	38.8	44.6	53.7	75.1	102.4	88.3	90.0
90°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7	1.7	1.7
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	1.7	1.7	1.7
102.5°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7
105°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
107.5°	0.8	0.8	0.8	0.8	1.7	1.7	0.8	0.8	0.8	1.7	0.8



REPORT NUMBER: P157795

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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°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
120°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
122.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
125°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
127.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
130°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
132.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
135°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
137.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
140°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
142.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
145°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.8
147.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
150°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.0	0.0	0.0
152.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0
155°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.8
157.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
160°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
162.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
165°	1.7	1.7	1.7	1.7	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°	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4	1256.4
2.5°	1256.4	1256.4	1258.1	1257.3	1257.3	1258.1	1259.8	1258.9
5°	1257.3	1258.1	1256.4	1257.3	1258.1	1258.1	1258.9	1258.1
7.5°	1255.6	1255.6	1255.6	1256.4	1257.3	1256.4	1257.3	1257.3
10°	1252.3	1253.1	1252.3	1254.0	1254.8	1254.8	1255.6	1255.6
12.5°	1249.8	1249.8	1249.8	1251.5	1252.3	1252.3	1253.1	1252.3
15°	1247.4	1247.4	1246.5	1248.2	1249.8	1249.8	1250.7	1250.7
17.5°	1246.5	1246.5	1245.7	1247.4	1249.0	1249.0	1249.8	1249.8
20°	1249.0	1249.8	1248.2	1249.8	1251.5	1252.3	1252.3	1252.3
22.5°	1258.9	1258.1	1255.6	1256.4	1257.3	1257.3	1257.3	1257.3
25°	1273.8	1272.1	1269.7	1268.8	1268.0	1267.2	1267.2	1267.2
27.5°	1299.4	1296.9	1292.8	1291.9	1291.1	1289.5	1289.5	1289.5
30°	1329.9	1326.6	1321.7	1320.0	1317.5	1315.9	1315.1	1314.2
32.5°	1373.7	1367.1	1361.3	1357.2	1354.7	1349.7	1348.9	1347.3
35°	1424.0	1419.1	1410.8	1408.3	1404.2	1401.7	1400.9	1396.8
37.5°	1493.4	1487.6	1480.2	1478.5	1477.7	1475.2	1475.2	1474.4
40°	1590.0	1584.2	1577.6	1571.0	1572.6	1573.5	1573.5	1570.1
42.5°	1708.0	1698.9	1685.7	1689.8	1687.4	1684.1	1690.7	1686.5
45°	1842.6	1830.2	1820.3	1816.2	1816.2	1812.0	1818.6	1818.6
47.5°	1992.0	1972.2	1954.0	1954.8	1948.2	1949.9	1954.0	1959.8
50°	2149.7	2123.3	2105.9	2097.7	2091.1	2093.5	2101.0	2102.6
52.5°	2313.1	2280.9	2257.8	2245.4	2237.2	2240.5	2246.3	2251.2
55°	2483.2	2447.7	2413.0	2399.8	2389.9	2396.5	2397.3	2403.9
57.5°	2660.7	2612.0	2571.5	2551.7	2541.8	2548.4	2553.3	2560.0
60°	2839.8	2783.7	2735.8	2712.7	2698.6	2707.7	2719.3	2722.6
62.5°	3047.8	2970.2	2916.6	2883.6	2877.0	2886.0	2889.3	2899.2
65°	3293.8	3200.6	3126.3	3085.8	3084.2	3089.1	3096.5	3099.0
67.5°	3574.5	3470.5	3370.6	3330.2	3314.5	3329.3	3336.8	3346.7
70°	3970.8	3828.0	3683.5	3593.5	3555.5	3544.0	3547.3	3558.0
72.5°	4015.4	3861.8	3693.4	3571.2	3504.4	3473.8	3473.0	3474.6
75°	3917.9	3672.8	3553.9	3413.5	3318.6	3269.1	3262.5	3261.6
76°	3869.2	3579.5	3407.8	3296.3	3182.4	3132.0	3124.6	3120.5
77.5°	3663.7	3352.5	3094.1	3026.4	2917.4	2853.8	2867.0	2856.3
80°	2937.2	2628.5	2384.9	2194.2	2200.0	2153.8	2134.8	2129.0
82.5°	1731.1	1477.7	1208.6	1050.9	900.6	861.0	741.3	714.1
85°	553.1	392.1	237.8	172.5	117.2	98.2	76.8	70.2
87.5°	73.5	57.8	47.1	45.4	41.3	35.5	23.1	16.5
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°	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
102.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8
105°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
107.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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CATALOG NUMBER: VST-F05-LED-E-U-5XQ

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
112.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
117.5°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
120°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
122.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
125°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
127.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
130°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
132.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
135°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
137.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
140°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
142.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
145°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
150°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
152.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
157.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
160°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
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)