

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: P157789

Luminaire Tested: **VST-E05-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157789
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-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (105) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14442.6 lumens
Efficiency: N/A
Efficacy: 113.5 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

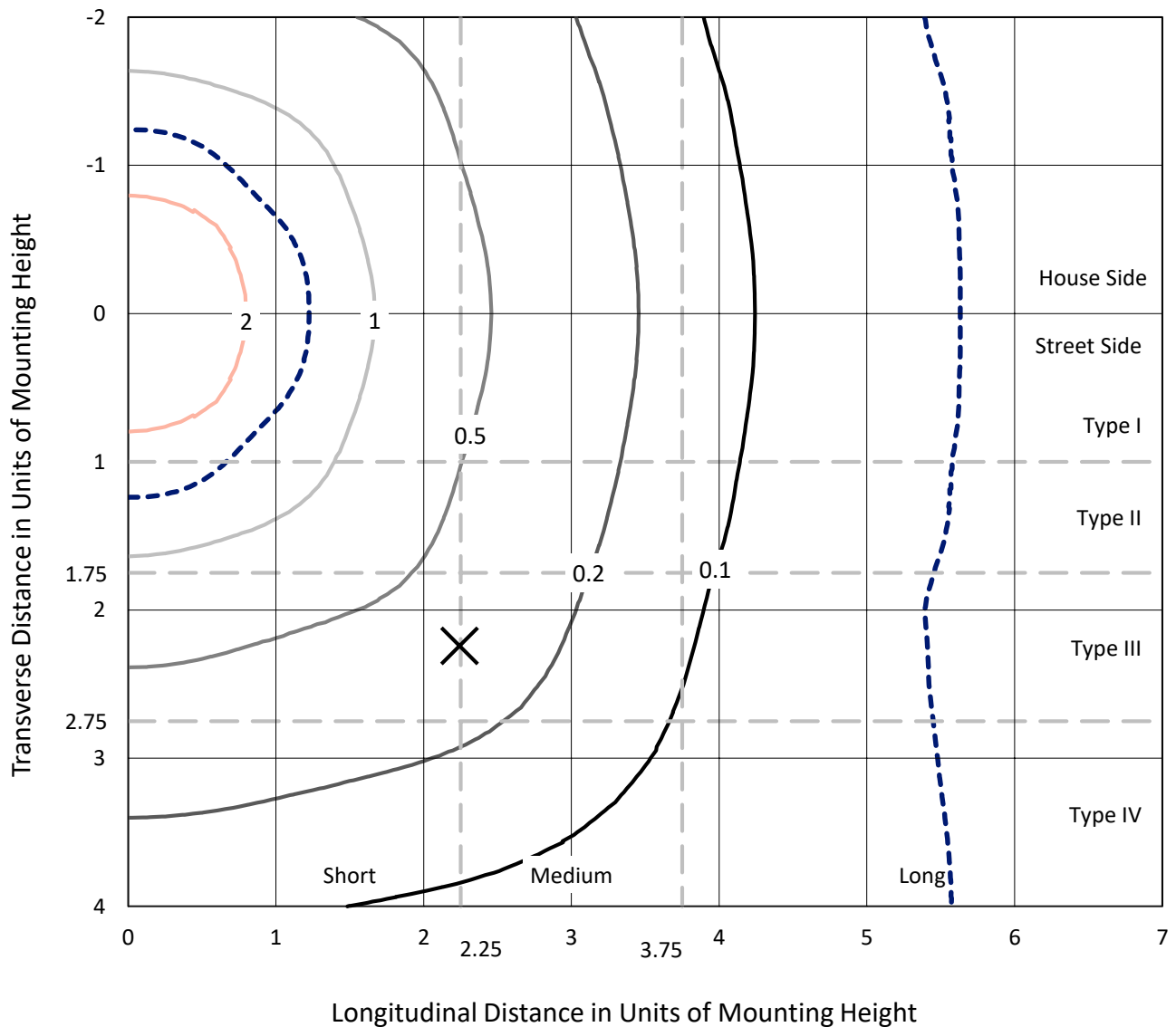
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P157789
 CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

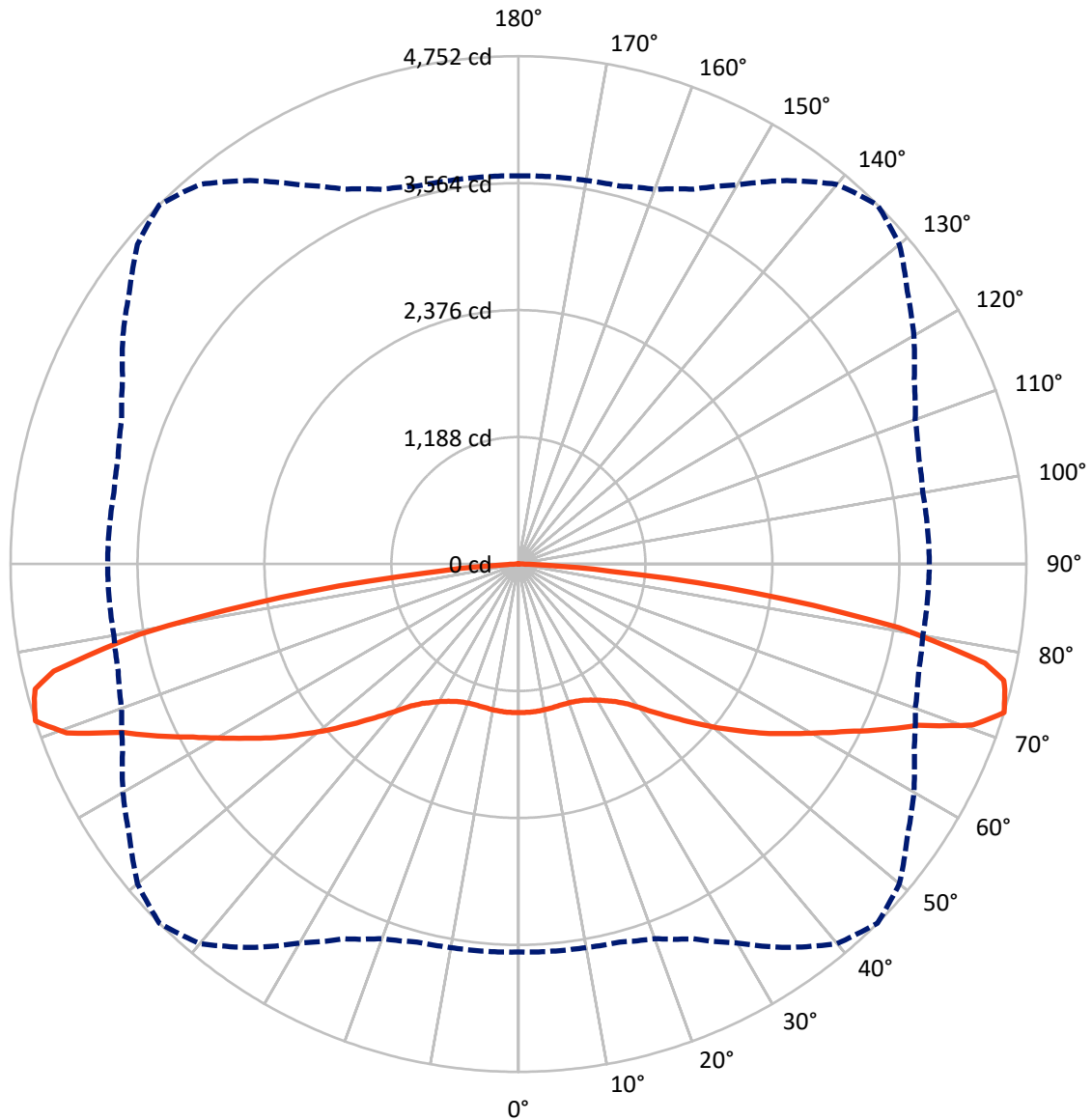


Based on 20 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

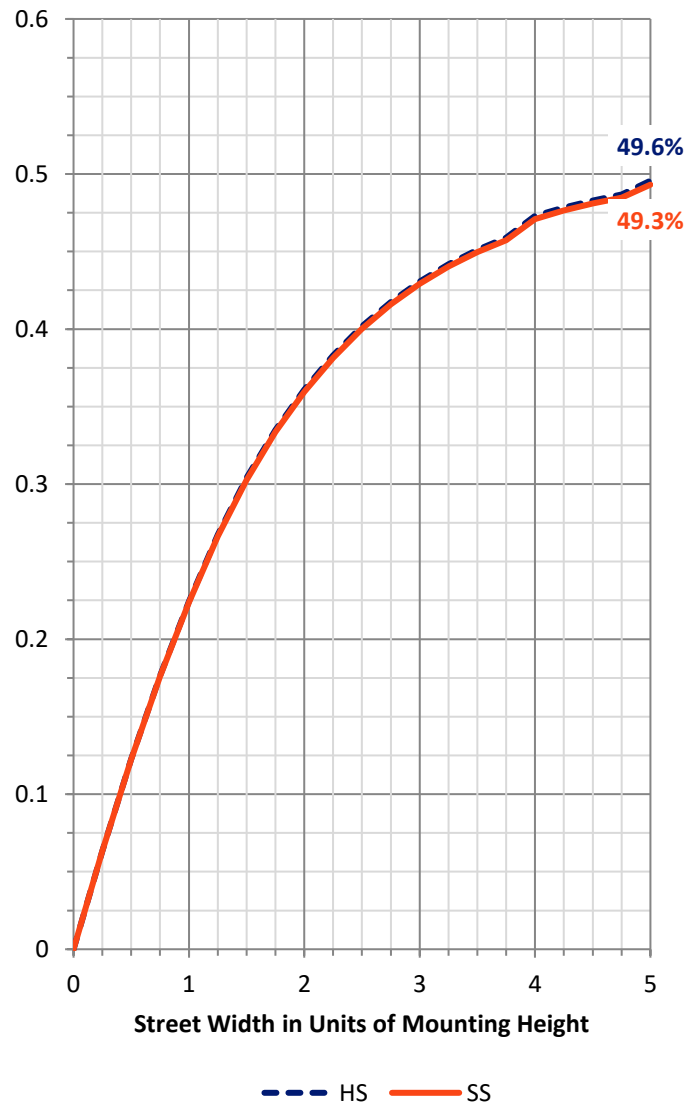
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7217.8	3.5	7221.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7217.8	3.5	7221.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	14435.7	6.9	14442.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	0.9
10°-20°	391.7	2.7
20°-30°	655.1	4.5
30°-40°	995.6	6.9
40°-50°	1576.9	10.9
50°-60°	2412.1	16.7
60°-70°	3452.2	23.9
70°-80°	3950.1	27.3
80°-90°	869.4	6.0
90°-100°	0.7	0.0
100°-110°	1.5	0.0
110°-120°	1.0	0.0
120°-130°	1.1	0.0
130°-140°	1.0	0.0
140°-150°	0.8	0.0
150°-160°	0.5	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-90°	14435.7	100.0
0°-180°	14442.6	100.0



REPORT NUMBER: P157789

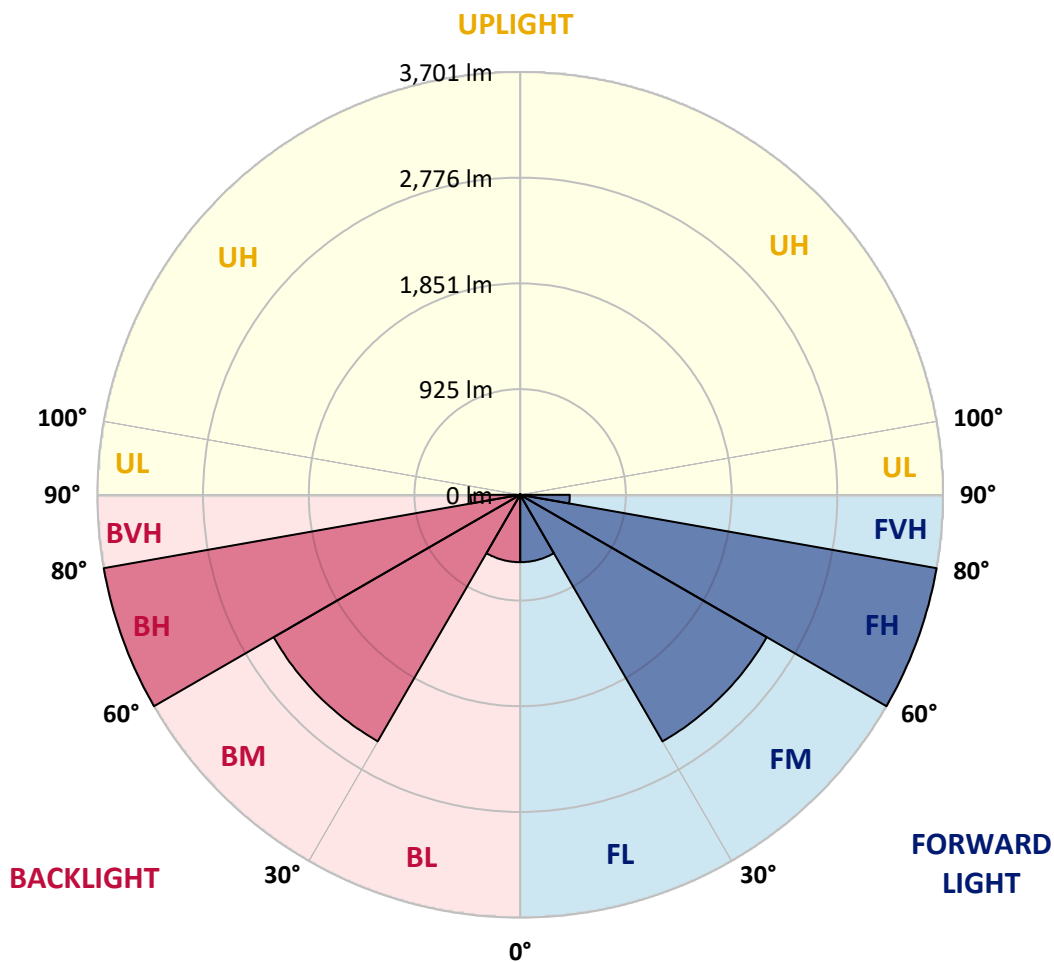
CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	589.7	4.1			
FM	(30°-60°)	2492.3	17.3			
FH	(60°-80°)	3701.1	25.6			G2/5000
FVH	(80°-90°)	434.7	3.0			G3/500
BL	(0°-30°)	589.7	4.1	B2/1000		
BM	(30°-60°)	2492.3	17.3	B2/2500		
BH	(60°-80°)	3701.1	25.6	B4/5000		G2/5000
BVH	(80°-90°)	434.7	3.0			G3/500
UL	(90°-100°)	0.7	0.0		U1/10	
UH	(100°-180°)	3.5	0.0		U1/10	

BUG Rating: B4-U1-G3

Type V Short





REPORT NUMBER: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1391.0	1389.2	1390.1	1391.9	1391.0	1391.0	1390.1	1390.1	1391.9	1390.1	1391.0
5°	1391.9	1390.1	1391.0	1391.9	1391.0	1391.9	1391.0	1391.0	1391.0	1390.1	1391.9
7.5°	1388.3	1388.3	1389.2	1389.2	1388.3	1389.2	1389.2	1389.2	1388.3	1388.3	1390.1
10°	1386.5	1385.6	1385.6	1386.5	1385.6	1385.6	1386.5	1386.5	1384.6	1384.6	1386.5
12.5°	1383.7	1382.8	1382.8	1382.8	1381.9	1381.9	1382.8	1382.8	1381.9	1381.0	1383.7
15°	1381.9	1381.0	1381.0	1381.0	1379.2	1380.1	1380.1	1380.1	1379.2	1378.2	1381.0
17.5°	1381.0	1380.1	1380.1	1380.1	1379.2	1379.2	1379.2	1379.2	1378.2	1378.2	1380.1
20°	1382.8	1382.8	1382.8	1382.8	1381.9	1381.9	1381.9	1382.8	1382.8	1382.8	1384.6
22.5°	1387.4	1387.4	1388.3	1389.2	1389.2	1391.0	1391.9	1392.9	1392.9	1393.8	1395.6
25°	1399.3	1399.3	1400.2	1401.1	1403.8	1405.6	1409.3	1411.1	1412.0	1412.0	1413.0
27.5°	1421.2	1422.1	1423.9	1425.7	1429.4	1432.1	1435.8	1439.4	1440.4	1441.3	1442.2
30°	1448.6	1449.5	1453.1	1455.0	1459.5	1465.0	1469.6	1473.2	1476.0	1477.8	1476.9
32.5°	1487.8	1489.7	1494.2	1497.0	1503.4	1508.9	1515.2	1520.7	1523.5	1526.2	1525.3
35°	1542.6	1547.2	1551.8	1554.5	1560.9	1565.5	1573.7	1579.2	1584.7	1582.8	1583.7
37.5°	1623.9	1627.6	1628.5	1630.3	1636.7	1640.4	1649.5	1656.8	1659.6	1661.4	1662.3
40°	1733.5	1733.5	1738.1	1734.5	1742.7	1743.6	1754.5	1764.6	1767.3	1774.6	1769.2
42.5°	1861.4	1860.5	1863.2	1860.5	1860.5	1869.6	1878.8	1897.0	1898.9	1908.0	1902.5
45°	2000.2	2000.2	1997.5	1998.4	2000.2	2010.3	2021.2	2041.3	2050.5	2056.0	2052.3
47.5°	2150.9	2147.3	2146.4	2145.5	2150.9	2161.9	2178.3	2197.5	2220.4	2222.2	2220.4
50°	2303.5	2302.6	2296.2	2301.6	2305.3	2310.8	2341.8	2367.4	2391.2	2405.8	2401.2
52.5°	2464.2	2456.0	2456.0	2456.0	2465.1	2482.5	2509.9	2544.6	2576.6	2592.1	2589.3
55°	2626.8	2624.1	2615.8	2612.2	2624.1	2648.7	2688.0	2730.0	2772.0	2795.8	2786.6
57.5°	2775.7	2771.1	2772.0	2772.9	2786.6	2819.5	2865.2	2920.9	2966.6	2992.1	2985.7
60°	2892.6	2887.1	2897.1	2899.9	2924.5	2979.3	3052.4	3122.7	3183.0	3208.6	3198.6
62.5°	3025.0	3021.4	3027.8	3026.8	3053.3	3114.5	3212.3	3324.6	3415.9	3448.8	3434.2
65°	3238.7	3227.8	3225.0	3215.0	3232.3	3279.8	3377.6	3508.2	3654.3	3738.3	3718.2
67.5°	3494.5	3491.7	3482.6	3477.1	3483.5	3542.9	3637.0	3763.0	3911.9	4027.9	4053.4
70°	3663.4	3667.1	3676.2	3689.9	3742.9	3858.0	4029.7	4220.6	4425.2	4512.0	4496.4
72.5°	3631.5	3637.0	3644.3	3661.6	3731.0	3869.0	4095.5	4380.4	4637.1	4752.2	4653.5
75°	3475.3	3479.9	3496.3	3522.8	3607.7	3774.9	4018.7	4321.1	4585.9	4701.0	4597.8
76°	3331.0	3345.6	3375.7	3406.8	3509.1	3690.8	3951.2	4273.6	4554.0	4670.9	4571.3
77.5°	3004.0	3016.8	3041.5	3095.3	3211.3	3444.2	3748.4	4065.3	4357.6	4462.6	4378.6
80°	2260.5	2271.5	2294.3	2359.2	2459.7	2604.0	2839.6	3149.2	3469.8	3607.7	3552.9
82.5°	954.5	967.2	1057.7	1151.7	1262.3	1418.4	1571.9	1845.9	2081.5	2238.6	2154.6
85°	105.0	129.7	159.8	217.4	266.7	355.3	442.1	608.3	769.0	866.8	766.3
87.5°	18.3	21.0	30.1	38.4	42.9	49.3	59.4	83.1	113.3	97.7	99.6
90°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
97.5°	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
100°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
102.5°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8	1.8
105°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
107.5°	0.9	0.9	0.9	0.9	1.8	1.8	0.9	0.9	0.9	1.8	0.9



REPORT NUMBER: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
112.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
117.5°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
120°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
122.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
125°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
127.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
130°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
132.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
135°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
137.5°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
140°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
142.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
145°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
147.5°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
150°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.0	0.0	0.0
152.5°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0
155°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.9
157.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0
160°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0
162.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0
165°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	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: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1390.1	1390.1	1391.9	1391.0	1391.0	1391.9	1393.8	1392.9
5°	1391.0	1391.9	1390.1	1391.0	1391.9	1391.9	1392.9	1391.9
7.5°	1389.2	1389.2	1389.2	1390.1	1391.0	1390.1	1391.0	1391.0
10°	1385.6	1386.5	1385.6	1387.4	1388.3	1388.3	1389.2	1389.2
12.5°	1382.8	1382.8	1382.8	1384.6	1385.6	1385.6	1386.5	1385.6
15°	1380.1	1380.1	1379.2	1381.0	1382.8	1382.8	1383.7	1383.7
17.5°	1379.2	1379.2	1378.2	1380.1	1381.9	1381.9	1382.8	1382.8
20°	1381.9	1382.8	1381.0	1382.8	1384.6	1385.6	1385.6	1385.6
22.5°	1392.9	1391.9	1389.2	1390.1	1391.0	1391.0	1391.0	1391.0
25°	1409.3	1407.5	1404.7	1403.8	1402.9	1402.0	1402.0	1402.0
27.5°	1437.6	1434.9	1430.3	1429.4	1428.5	1426.7	1426.7	1426.7
30°	1471.4	1467.8	1462.3	1460.4	1457.7	1455.9	1455.0	1454.1
32.5°	1519.8	1512.5	1506.1	1501.5	1498.8	1493.3	1492.4	1490.6
35°	1575.5	1570.0	1560.9	1558.2	1553.6	1550.9	1550.0	1545.4
37.5°	1652.3	1645.9	1637.6	1635.8	1634.9	1632.2	1632.2	1631.2
40°	1759.1	1752.7	1745.4	1738.1	1739.9	1740.8	1740.8	1737.2
42.5°	1889.7	1879.7	1865.1	1869.6	1866.9	1863.2	1870.5	1866.0
45°	2038.6	2024.9	2013.9	2009.4	2009.4	2004.8	2012.1	2012.1
47.5°	2203.9	2182.0	2161.9	2162.8	2155.5	2157.3	2161.9	2168.3
50°	2378.4	2349.1	2330.0	2320.8	2313.5	2316.3	2324.5	2326.3
52.5°	2559.2	2523.6	2498.0	2484.3	2475.2	2478.8	2485.2	2490.7
55°	2747.4	2708.1	2669.7	2655.1	2644.1	2651.5	2652.4	2659.7
57.5°	2943.7	2889.8	2845.1	2823.2	2812.2	2819.5	2825.0	2832.3
60°	3141.9	3079.8	3026.8	3001.3	2985.7	2995.8	3008.6	3012.2
62.5°	3372.1	3286.2	3226.9	3190.3	3183.0	3193.1	3196.7	3207.7
65°	3644.3	3541.1	3458.9	3414.1	3412.3	3417.8	3426.0	3428.7
67.5°	3954.8	3839.7	3729.2	3684.5	3667.1	3683.5	3691.8	3702.7
70°	4393.2	4235.2	4075.4	3975.8	3933.8	3921.0	3924.7	3936.5
72.5°	4442.5	4272.7	4086.3	3951.2	3877.2	3843.4	3842.5	3844.3
75°	4334.8	4063.5	3932.0	3776.7	3671.7	3616.9	3609.6	3608.6
76°	4280.9	3960.3	3770.3	3647.0	3521.0	3465.3	3457.0	3452.5
77.5°	4053.4	3709.1	3423.2	3348.3	3227.8	3157.5	3172.1	3160.2
80°	3249.7	2908.1	2638.7	2427.7	2434.1	2382.9	2361.9	2355.5
82.5°	1915.3	1634.9	1337.1	1162.7	996.5	952.6	820.2	790.0
85°	611.9	433.8	263.0	190.9	129.7	108.7	84.9	77.6
87.5°	81.3	63.9	52.1	50.2	45.7	39.3	25.6	18.3
90°	0.9	0.9	0.9	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°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
97.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
100°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
102.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
105°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
107.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



REPORT NUMBER: P157789

CATALOG NUMBER: VST-E05-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
112.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
115°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
117.5°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
120°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
122.5°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
125°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
127.5°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
130°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
132.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
135°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
137.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
140°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
142.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
145°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
147.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
150°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
152.5°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
155°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
157.5°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
160°	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.8
162.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
165°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	1.8
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)