

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: P157858

Luminaire Tested: **VST-E12-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157858
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-E12-LED-E-U-5XQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (252) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32030.3 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U2 - G5

Input Watts (W): 291.7
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

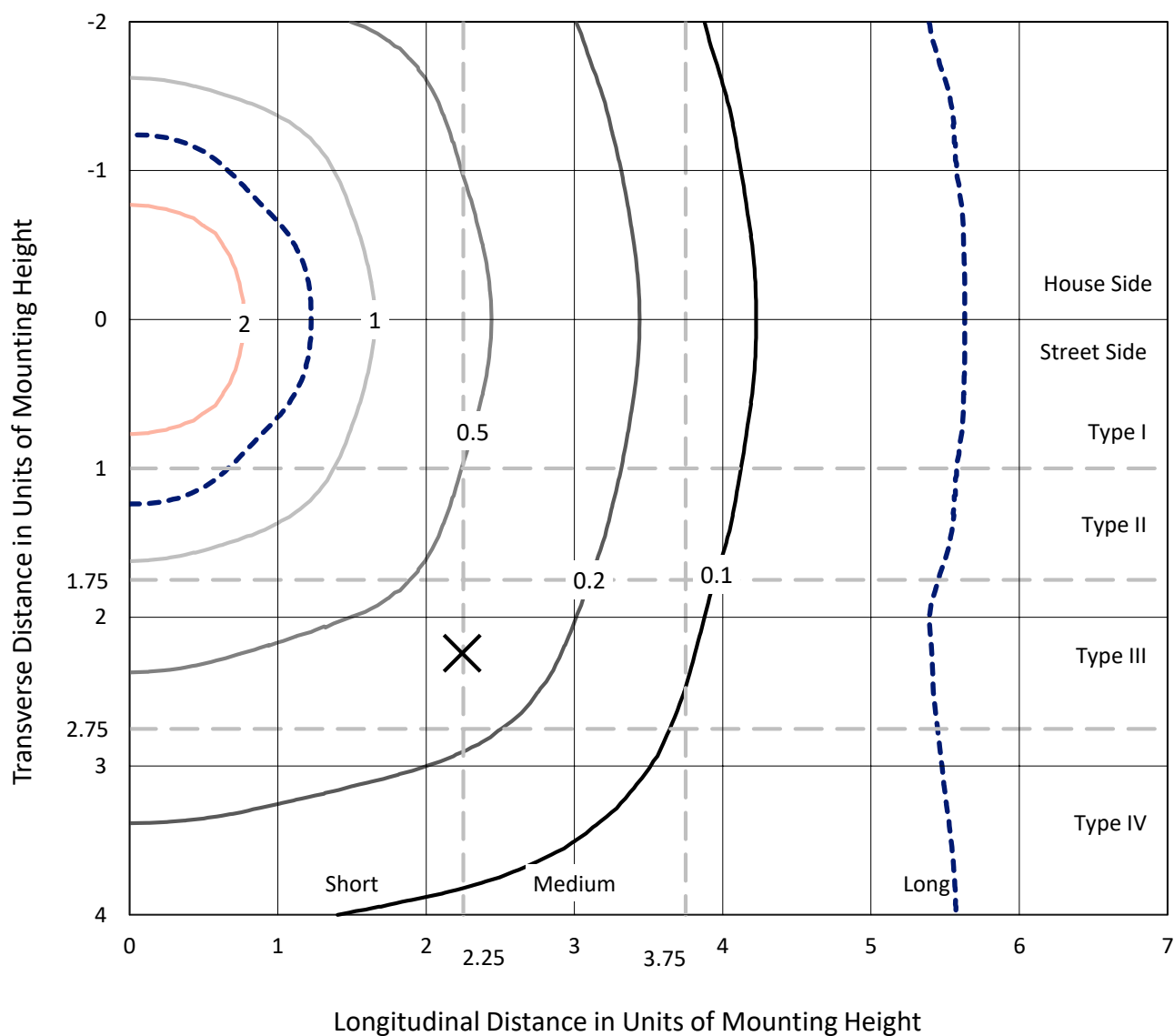


REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

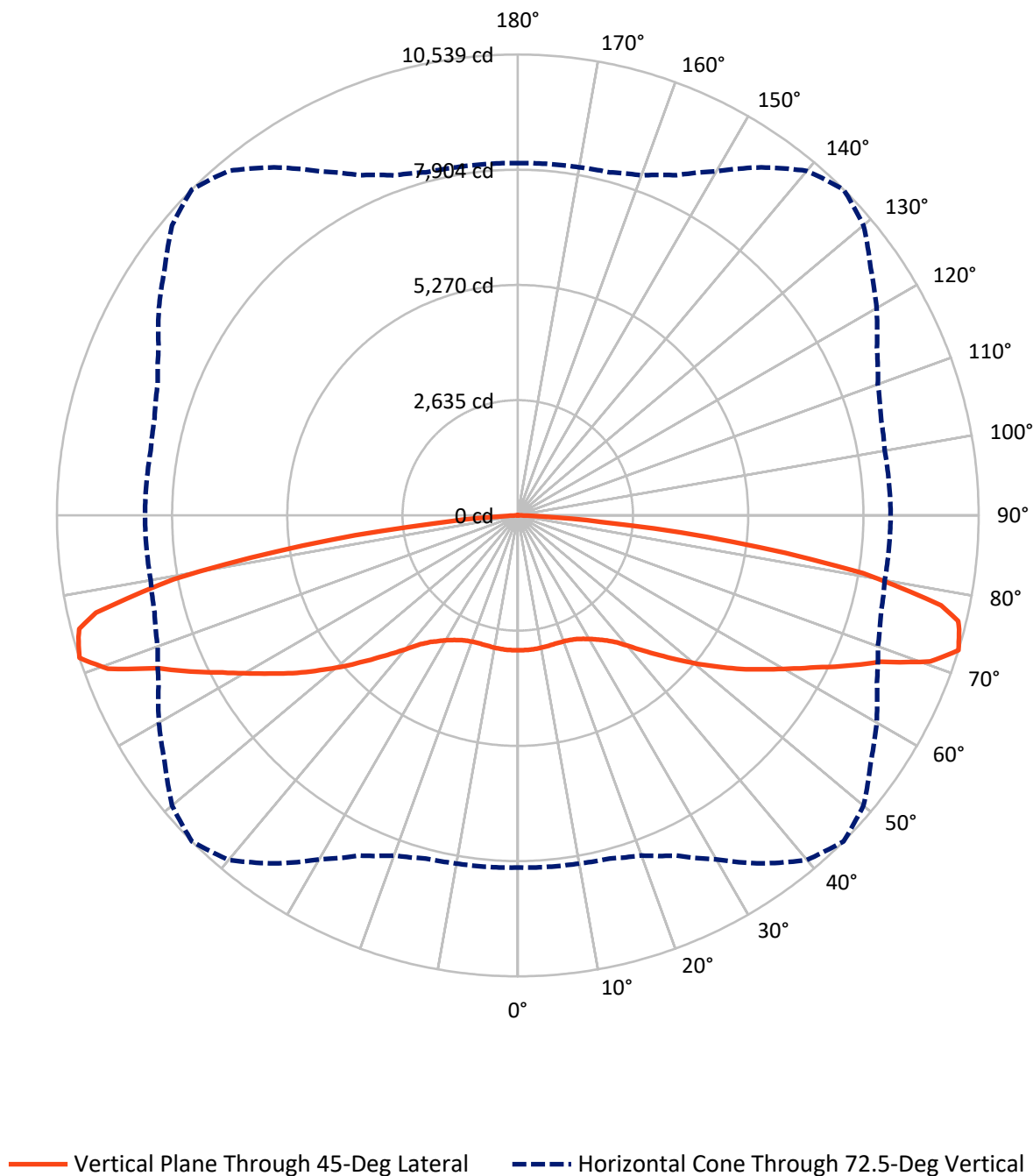


Based on 30 foot mounting height. Maximum calculated value = 3.4 fc
Type V - Short - Non-Cutoff

REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

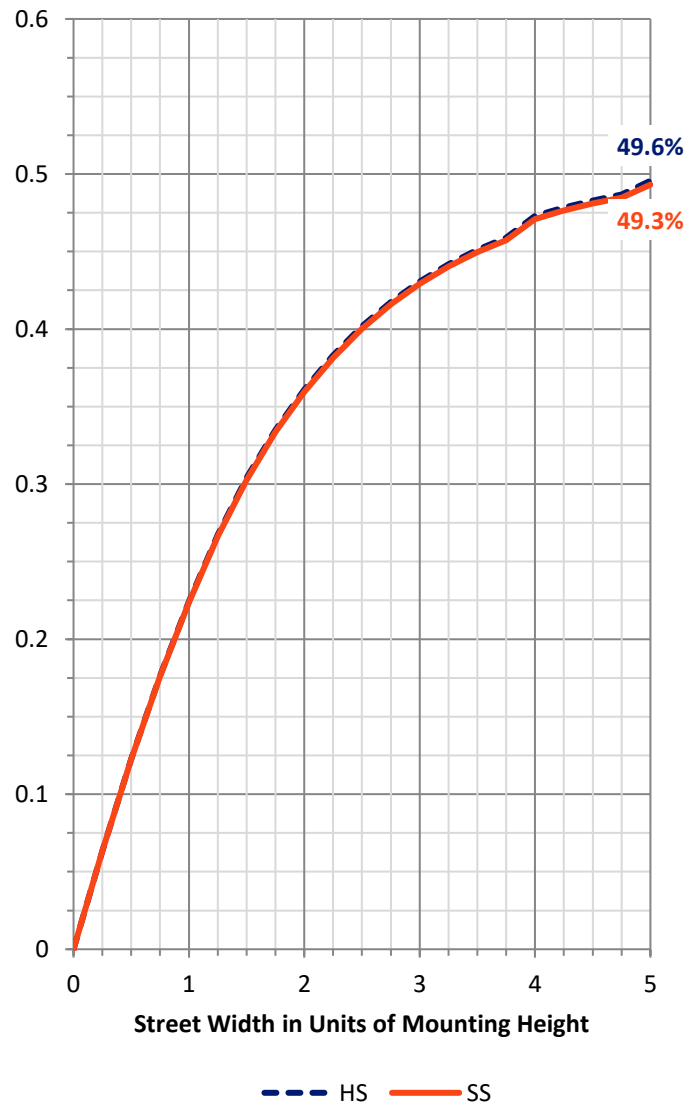
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16007.3	7.8	16015.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16007.3	7.8	16015.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	32014.7	15.6	32030.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.1	0.9
10°-20°	868.8	2.7
20°-30°	1452.7	4.5
30°-40°	2208.1	6.9
40°-50°	3497.2	10.9
50°-60°	5349.5	16.7
60°-70°	7656.0	23.9
70°-80°	8760.2	27.3
80°-90°	1928.0	6.0
90°-100°	1.6	0.0
100°-110°	3.3	0.0
110°-120°	2.3	0.0
120°-130°	2.5	0.0
130°-140°	2.3	0.0
140°-150°	1.8	0.0
150°-160°	1.2	0.0
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-90°	32014.7	100.0
0°-180°	32030.3	100.0

Coefficient of Utilization



REPORT NUMBER: P157858

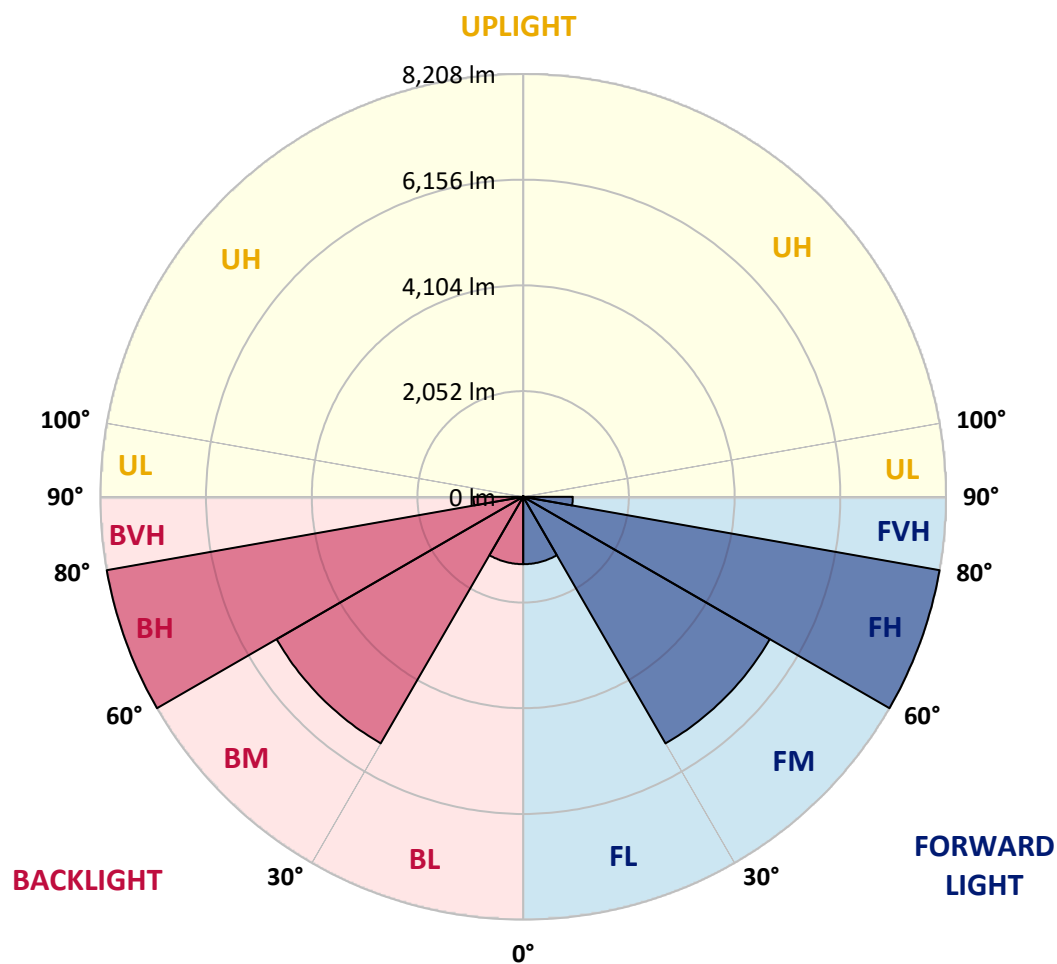
CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1307.8	4.1			
FM	(30°-60°)	5527.4	17.3			
FH	(60°-80°)	8208.1	25.6			G4/12000
FVH	(80°-90°)	964.0	3.0			G5
BL	(0°-30°)	1307.8	4.1	B3/2500		
BM	(30°-60°)	5527.4	17.3	B4/8500		
BH	(60°-80°)	8208.1	25.6	B5		G4/12000
BVH	(80°-90°)	964.0	3.0			G5
UL	(90°-100°)	1.6	0.0		U1/10	
UH	(100°-180°)	7.8	0.0		U1/10	

BUG Rating: B5-U2-G5

Type V Short





REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9
2.5°	3085.0	3080.9	3082.9	3087.0	3085.0	3085.0	3082.9	3082.9	3087.0	3082.9	3085.0
5°	3087.0	3082.9	3085.0	3087.0	3085.0	3087.0	3085.0	3085.0	3085.0	3082.9	3087.0
7.5°	3078.9	3078.9	3080.9	3080.9	3078.9	3080.9	3080.9	3080.9	3078.9	3078.9	3082.9
10°	3074.8	3072.8	3072.8	3074.8	3072.8	3072.8	3074.8	3074.8	3070.8	3070.8	3074.8
12.5°	3068.8	3066.7	3066.7	3066.7	3064.7	3064.7	3066.7	3066.7	3064.7	3062.7	3068.8
15°	3064.7	3062.7	3062.7	3062.7	3058.6	3060.6	3060.6	3060.6	3058.6	3056.6	3062.7
17.5°	3062.7	3060.6	3060.6	3060.6	3058.6	3058.6	3058.6	3058.6	3056.6	3056.6	3060.6
20°	3066.7	3066.7	3066.7	3066.7	3064.7	3064.7	3064.7	3066.7	3066.7	3066.7	3070.8
22.5°	3076.9	3076.9	3078.9	3080.9	3080.9	3085.0	3087.0	3089.0	3089.0	3091.0	3095.1
25°	3103.2	3103.2	3105.2	3107.2	3113.3	3117.4	3125.5	3129.5	3131.5	3131.5	3133.6
27.5°	3151.8	3153.8	3157.9	3161.9	3170.0	3176.1	3184.2	3192.3	3194.3	3196.4	3198.4
30°	3212.6	3214.6	3222.7	3226.7	3236.9	3249.0	3259.2	3267.3	3273.3	3277.4	3275.4
32.5°	3299.7	3303.7	3313.8	3319.9	3334.1	3346.3	3360.4	3372.6	3378.7	3384.7	3382.7
35°	3421.2	3431.3	3441.5	3447.5	3461.7	3471.8	3490.1	3502.2	3514.4	3510.3	3512.4
37.5°	3601.5	3609.6	3611.6	3615.7	3629.8	3637.9	3658.2	3674.4	3680.5	3684.5	3686.6
40°	3844.5	3844.5	3854.7	3846.6	3864.8	3866.8	3891.1	3913.4	3919.5	3935.7	3923.5
42.5°	4128.1	4126.1	4132.2	4126.1	4126.1	4146.4	4166.6	4207.1	4211.2	4231.4	4219.3
45°	4436.0	4436.0	4429.9	4432.0	4436.0	4458.3	4482.6	4527.2	4547.4	4559.6	4551.5
47.5°	4770.2	4762.1	4760.1	4758.1	4770.2	4794.5	4831.0	4873.5	4924.2	4928.2	4924.2
50°	5108.5	5106.5	5092.3	5104.5	5112.6	5124.7	5193.6	5250.3	5303.0	5335.4	5325.2
52.5°	5465.0	5446.8	5446.8	5446.8	5467.0	5505.5	5566.3	5643.3	5714.2	5748.6	5742.5
55°	5825.6	5819.5	5801.3	5793.2	5819.5	5874.2	5961.3	6054.5	6147.6	6200.3	6180.0
57.5°	6155.7	6145.6	6147.6	6149.7	6180.0	6253.0	6354.2	6477.8	6579.1	6635.8	6621.6
60°	6415.0	6402.9	6425.1	6431.2	6485.9	6607.4	6769.5	6925.5	7059.1	7115.9	7093.6
62.5°	6708.7	6700.6	6714.8	6712.8	6771.5	6907.2	7124.0	7373.1	7575.7	7648.6	7616.2
65°	7182.7	7158.4	7152.3	7130.0	7168.5	7273.9	7490.6	7780.2	8104.3	8290.7	8246.1
67.5°	7749.9	7743.8	7723.5	7711.4	7725.6	7857.2	8065.9	8345.4	8675.6	8932.8	8989.5
70°	8124.6	8132.7	8153.0	8183.3	8300.8	8556.0	8936.9	9360.2	9813.9	10006.4	9971.9
72.5°	8053.7	8065.9	8082.1	8120.5	8274.5	8580.3	9082.7	9714.7	10283.9	10539.1	10320.3
75°	7707.3	7717.5	7753.9	7812.7	8001.0	8371.7	8912.5	9583.0	10170.4	10425.7	10196.8
76°	7387.3	7419.7	7486.5	7555.4	7782.3	8185.4	8762.7	9477.7	10099.5	10358.8	10138.0
77.5°	6662.1	6690.5	6745.2	6864.7	7121.9	7638.5	8313.0	9015.8	9664.0	9897.0	9710.6
80°	5013.3	5037.6	5088.3	5232.1	5454.9	5774.9	6297.5	6984.2	7695.2	8001.0	7879.5
82.5°	2116.7	2145.1	2345.6	2554.3	2799.3	3145.7	3486.0	4093.7	4616.3	4964.7	4778.3
85°	232.9	287.6	354.5	482.1	591.5	787.9	980.4	1349.0	1705.5	1922.3	1699.5
87.5°	40.5	46.6	66.8	85.1	95.2	109.4	131.7	184.3	251.2	216.7	220.8
90°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	4.1	4.1	4.1	4.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
97.5°	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
100°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1
102.5°	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1	4.1
105°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
107.5°	2.0	2.0	2.0	2.0	4.1	4.1	2.0	2.0	2.0	4.1	2.0



REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
112.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
115°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
117.5°	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
120°	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
122.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
125°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
127.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
130°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
132.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
135°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
137.5°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
140°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
142.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
145°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	2.0
147.5°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
150°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	0.0	0.0	0.0
152.5°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	0.0
155°	4.1	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	2.0
157.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	0.0	0.0
160°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	0.0	0.0
162.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	0.0	0.0	0.0
165°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0	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



REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9
2.5°	3082.9	3082.9	3087.0	3085.0	3085.0	3087.0	3091.0	3089.0
5°	3085.0	3087.0	3082.9	3085.0	3087.0	3087.0	3089.0	3087.0
7.5°	3080.9	3080.9	3080.9	3082.9	3085.0	3082.9	3085.0	3085.0
10°	3072.8	3074.8	3072.8	3076.9	3078.9	3078.9	3080.9	3080.9
12.5°	3066.7	3066.7	3066.7	3070.8	3072.8	3072.8	3074.8	3072.8
15°	3060.6	3060.6	3058.6	3062.7	3066.7	3066.7	3068.8	3068.8
17.5°	3058.6	3058.6	3056.6	3060.6	3064.7	3064.7	3066.7	3066.7
20°	3064.7	3066.7	3062.7	3066.7	3070.8	3072.8	3072.8	3072.8
22.5°	3089.0	3087.0	3080.9	3082.9	3085.0	3085.0	3085.0	3085.0
25°	3125.5	3121.4	3115.3	3113.3	3111.3	3109.3	3109.3	3109.3
27.5°	3188.3	3182.2	3172.1	3170.0	3168.0	3164.0	3164.0	3164.0
30°	3263.2	3255.1	3243.0	3238.9	3232.8	3228.8	3226.7	3224.7
32.5°	3370.6	3354.4	3340.2	3330.1	3324.0	3311.8	3309.8	3305.7
35°	3494.1	3482.0	3461.7	3455.6	3445.5	3439.4	3437.4	3427.3
37.5°	3664.3	3650.1	3631.9	3627.8	3625.8	3619.7	3619.7	3617.7
40°	3901.3	3887.1	3870.9	3854.7	3858.7	3860.8	3860.8	3852.6
42.5°	4190.9	4168.6	4136.2	4146.4	4140.3	4132.2	4148.4	4138.3
45°	4521.1	4490.7	4466.4	4456.3	4456.3	4446.1	4462.3	4462.3
47.5°	4887.7	4839.1	4794.5	4796.6	4780.4	4784.4	4794.5	4808.7
50°	5274.6	5209.8	5167.3	5147.0	5130.8	5136.9	5155.1	5159.1
52.5°	5675.7	5596.7	5540.0	5509.6	5489.3	5497.4	5511.6	5523.8
55°	6092.9	6005.8	5920.8	5888.4	5864.0	5880.3	5882.3	5898.5
57.5°	6528.4	6408.9	6309.7	6261.1	6236.8	6253.0	6265.1	6281.3
60°	6968.0	6830.2	6712.8	6656.1	6621.6	6643.9	6672.3	6680.4
62.5°	7478.4	7288.0	7156.4	7075.3	7059.1	7081.4	7089.5	7113.8
65°	8082.1	7853.2	7670.9	7571.6	7567.6	7579.7	7597.9	7604.0
67.5°	8770.8	8515.5	8270.4	8171.2	8132.7	8169.2	8187.4	8211.7
70°	9743.0	9392.6	9038.1	8817.3	8724.2	8695.8	8703.9	8730.2
72.5°	9852.4	9475.7	9062.4	8762.7	8598.6	8523.6	8521.6	8525.7
75°	9613.4	9011.8	8720.1	8375.8	8142.8	8021.3	8005.1	8003.1
76°	9493.9	8782.9	8361.6	8088.1	7808.6	7685.0	7666.8	7656.7
77.5°	8989.5	8225.9	7591.9	7425.8	7158.4	7002.4	7034.8	7008.5
80°	7207.0	6449.4	5851.9	5384.0	5398.2	5284.7	5238.1	5224.0
82.5°	4247.6	3625.8	2965.4	2578.6	2209.9	2112.7	1819.0	1752.1
85°	1357.1	962.1	583.4	423.3	287.6	241.0	188.4	172.2
87.5°	180.3	141.8	115.5	111.4	101.3	87.1	56.7	40.5
90°	2.0	2.0	2.0	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°	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
97.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
100°	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
102.5°	4.1	4.1	4.1	4.1	2.0	2.0	2.0	2.0
105°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
107.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1



REPORT NUMBER: P157858

CATALOG NUMBER: VST-E12-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1
112.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.1
115°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.1
117.5°	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1
120°	2.0	2.0	2.0	2.0	2.0	4.1	4.1	4.1
122.5°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
125°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
127.5°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
130°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
132.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
135°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
137.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
140°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
142.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
145°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
147.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
150°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
152.5°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
155°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
157.5°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
160°	2.0	2.0	2.0	2.0	4.1	4.1	4.1	4.1
162.5°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
165°	2.0	2.0	2.0	4.1	4.1	4.1	4.1	4.1
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)