

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: McGRAW-EDISON

Report Number: P159293

Luminaire Tested: **VTS-F12-LED-E1-T2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159293
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33705)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-F12-LED-E1-T2-8030
Description: VENTUS LED SITE LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25807.5 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

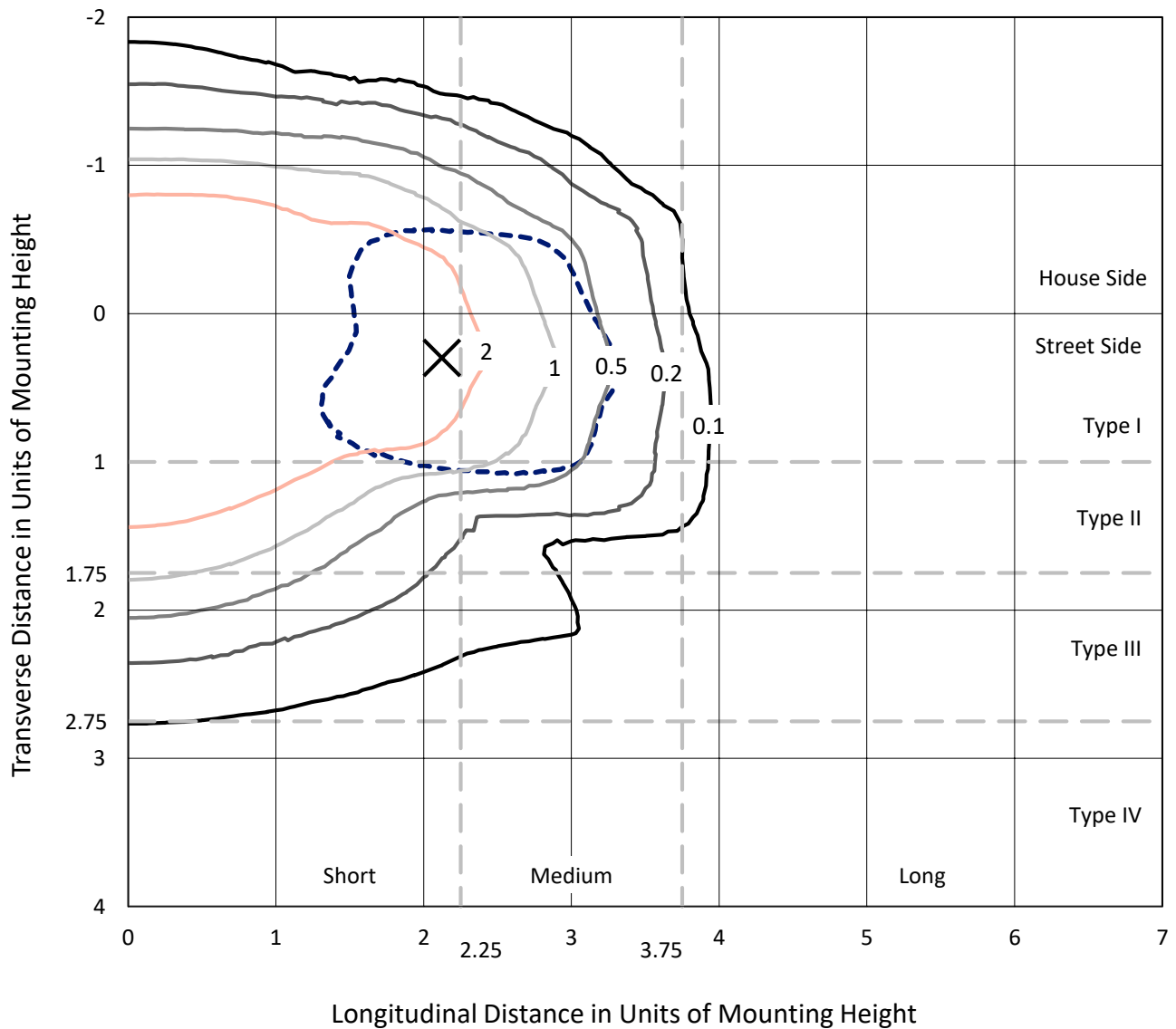
Input Watts (W): 306.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

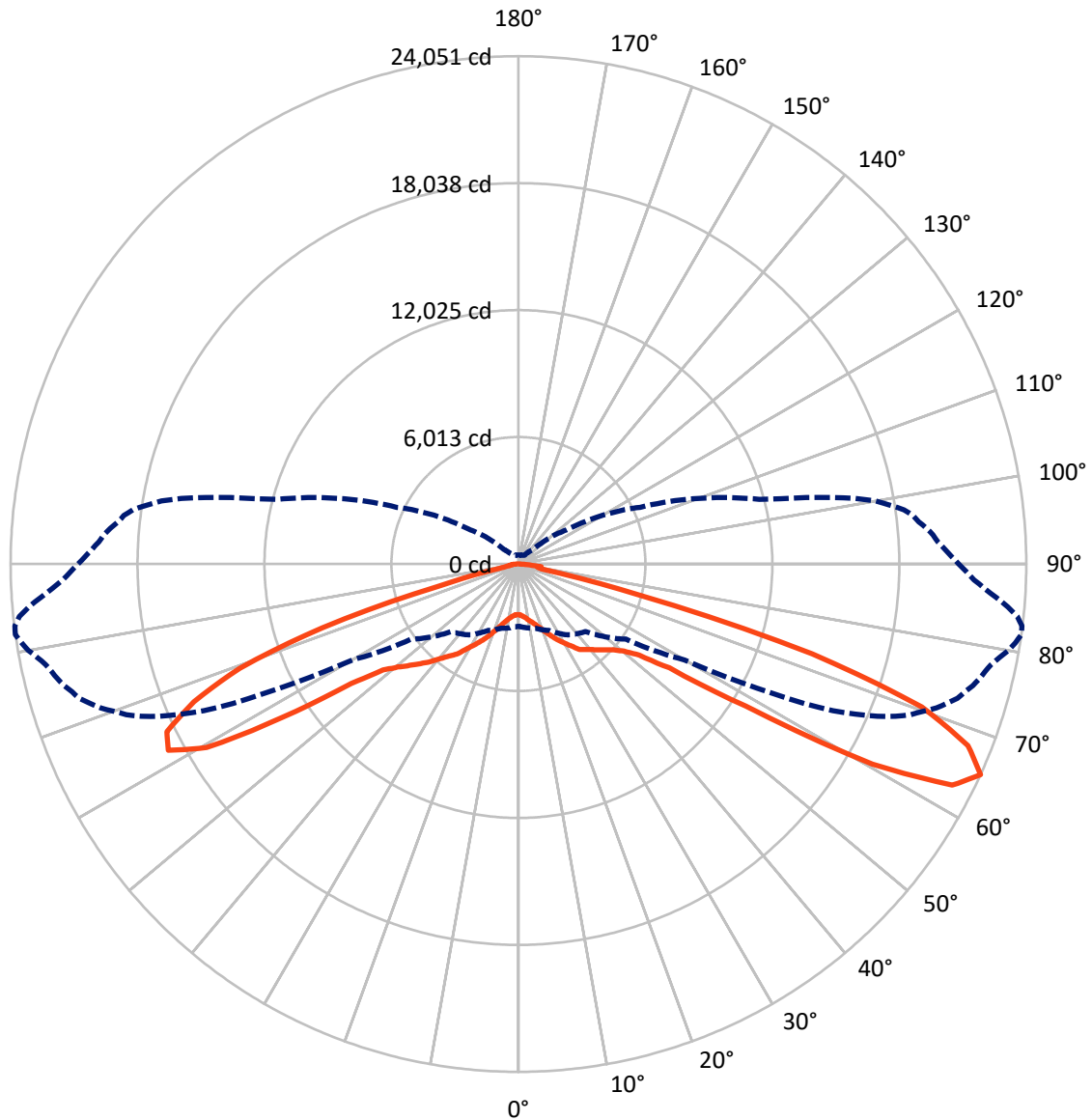


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9609.0	0.0	9609.0
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	16198.5	0.0	16198.5
	% Fixture	62.8	0.0	62.8
Total	Lumens	25807.5	0.0	25807.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.1	0.9
10°-20°	854.2	3.3
20°-30°	1692.5	6.6
30°-40°	2901.3	11.2
40°-50°	4358.5	16.9
50°-60°	6055.3	23.5
60°-70°	6908.2	26.8
70°-80°	2379.8	9.2
80°-90°	414.8	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	25807.5	100.0
0°-180°	25807.5	100.0



REPORT NUMBER: P159293

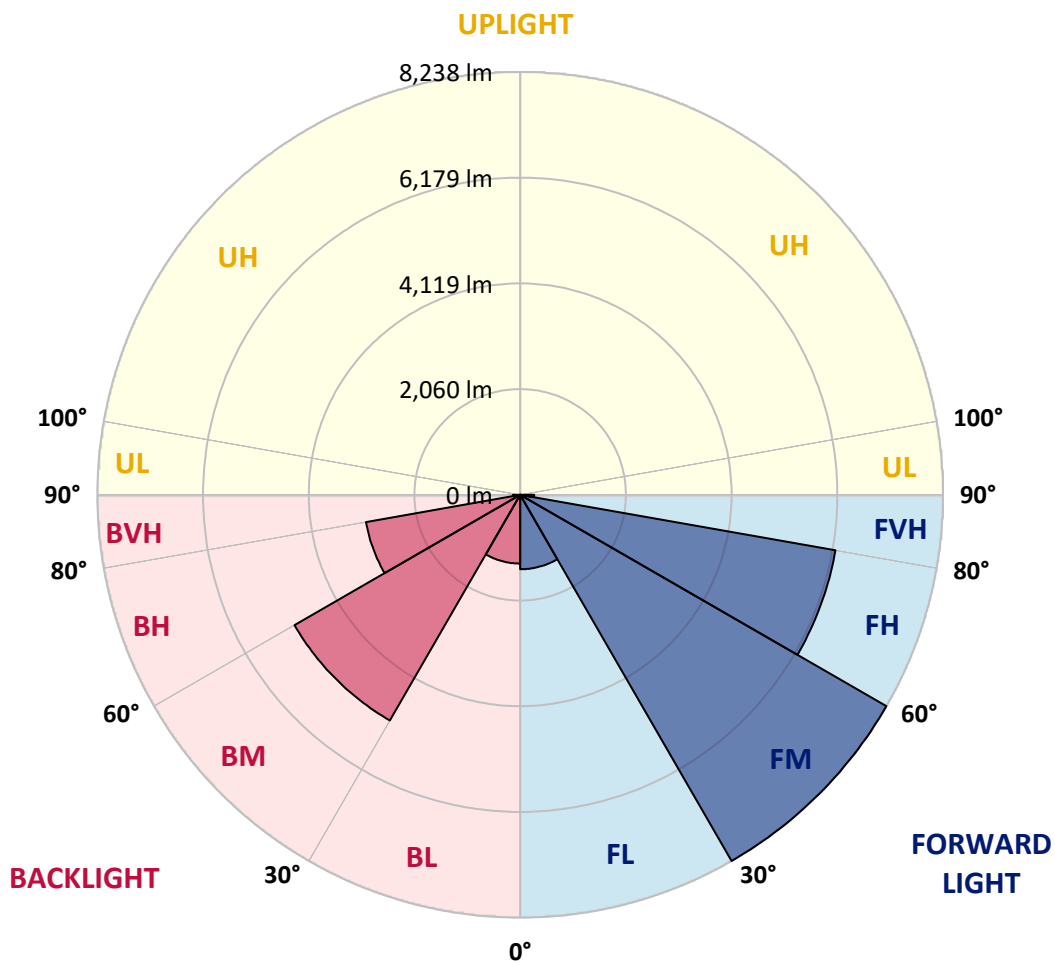
CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1449.8	5.6			
FM	(30°-60°)	8238.3	31.9			
FH	(60°-80°)	6237.4	24.2			G3/7500
FVH	(80°-90°)	273.0	1.1			G3/500
BL	(0°-30°)	1339.9	5.2	B3/2500		
BM	(30°-60°)	5076.8	19.7	B4/8500		
BH	(60°-80°)	3050.6	11.8	B4/5000		G4/5000
BVH	(80°-90°)	141.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2531.7	2533.3	2531.7	2526.6	2525.0	2509.9	2493.2	2484.8	2483.2	2476.5	2478.1
5°	2688.8	2683.8	2677.1	2668.8	2660.4	2635.3	2606.9	2591.9	2586.8	2581.8	2575.1
7.5°	2829.3	2832.6	2829.3	2817.6	2795.9	2764.1	2727.3	2703.9	2702.2	2697.2	2692.2
10°	3009.9	3018.3	2998.2	2978.1	2948.0	2899.5	2857.7	2827.6	2822.6	2815.9	2812.6
12.5°	3205.5	3207.2	3200.5	3155.4	3105.2	3038.3	2978.1	2948.0	2941.3	2933.0	2929.6
15°	3414.6	3416.2	3379.4	3336.0	3259.1	3178.8	3095.2	3061.7	3053.4	3055.0	3041.7
17.5°	3580.1	3583.5	3548.3	3493.2	3401.2	3305.9	3215.6	3188.8	3183.8	3185.5	3178.8
20°	3652.0	3657.0	3635.3	3593.5	3506.5	3422.9	3357.7	3341.0	3339.3	3336.0	3349.3
22.5°	3648.7	3650.3	3642.0	3625.3	3573.4	3524.9	3516.6	3526.6	3524.9	3528.3	3540.0
25°	3618.6	3623.6	3621.9	3628.6	3620.2	3638.6	3677.1	3712.2	3717.2	3723.9	3745.7
27.5°	3695.5	3705.5	3693.8	3700.5	3713.9	3775.7	3854.3	3907.9	3917.9	3936.3	3954.7
30°	3996.5	3983.1	3968.0	3951.3	3959.7	3998.1	4086.8	4133.6	4138.6	4152.0	4177.1
32.5°	4442.9	4427.9	4414.5	4387.8	4381.1	4364.4	4394.5	4406.2	4404.5	4417.9	4424.5
35°	4946.3	4947.9	4944.6	4964.7	4981.4	4896.1	4790.8	4762.3	4774.0	4759.0	4762.3
37.5°	5376.0	5381.0	5469.7	5580.0	5611.8	5558.3	5327.5	5213.8	5175.4	5170.3	5131.9
40°	5852.6	5852.6	5986.4	6121.8	6210.4	6277.3	6003.1	5802.4	5720.5	5697.1	5601.8
42.5°	6376.0	6349.2	6471.3	6620.1	6784.0	6936.1	6794.0	6568.3	6451.2	6409.4	6242.2
45°	6805.7	6789.0	6849.2	6988.0	7253.9	7551.5	7571.6	7456.2	7386.0	7299.0	7145.2
47.5°	7069.9	7061.6	7096.7	7247.2	7579.9	8061.5	8330.7	8389.3	8347.4	8280.6	8131.7
50°	7173.6	7161.9	7187.0	7354.2	7727.1	8362.5	8957.8	9233.7	9253.8	9268.8	9222.0
52.5°	7136.8	7121.8	7173.6	7314.1	7702.0	8467.8	9447.7	9977.8	10066.4	10141.7	10295.5
55°	6784.0	6760.6	6901.0	7165.2	7593.3	8429.4	9805.6	10693.5	10880.8	11081.4	11422.6
57.5°	6243.9	6223.8	6426.1	6789.0	7401.0	8324.0	10046.4	11598.1	12019.5	12380.7	13348.9
60°	5723.8	5707.1	5825.8	6177.0	6777.3	7810.7	9748.7	11902.5	12609.8	13389.0	15156.5
62.5°	4794.1	4748.9	4907.8	5203.8	5583.4	6461.2	8449.5	11225.2	12315.5	13460.9	15857.1
65°	2946.4	3011.6	3148.7	3476.4	4098.5	4516.5	6205.4	9081.5	10519.6	11956.0	15064.5
67.5°	1871.2	1889.5	1991.5	2219.0	2700.5	3120.3	3760.7	5698.7	6807.4	8220.4	11827.2
70°	1603.6	1615.3	1702.3	1939.7	2272.5	2789.2	2846.0	2976.5	3374.4	4274.1	6952.9
72.5°	1264.2	1284.2	1352.8	1558.5	1959.8	2514.9	3513.2	2352.7	2272.5	2347.7	3392.8
75°	752.5	775.9	832.7	944.8	1259.1	1923.0	3680.4	2737.3	2551.7	2406.2	2341.0
77.5°	398.0	381.3	419.7	484.9	647.1	1025.0	2765.8	3354.4	3223.9	3050.0	2680.5
80°	197.3	204.0	215.7	229.1	289.3	416.4	1382.9	3469.7	3846.0	4013.2	3685.5
82.5°	78.6	88.6	125.4	133.8	158.9	177.2	444.8	1923.0	2754.1	3735.6	4877.7
85°	40.1	38.5	66.9	80.3	93.6	83.6	157.2	717.4	1290.9	2011.6	3259.1
87.5°	5.0	6.7	15.0	20.1	28.4	26.8	45.1	155.5	247.5	351.2	493.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2469.8	2468.1	2468.1	2461.4	2461.4	2463.1	2458.1	2454.7	2454.7	2456.4	2449.7
5°	2570.1	2565.1	2565.1	2558.4	2550.1	2550.1	2543.4	2541.7	2538.3	2531.7	2526.6
7.5°	2687.2	2682.2	2673.8	2668.8	2665.4	2660.4	2652.1	2648.7	2642.0	2635.3	2628.6
10°	2807.6	2800.9	2797.5	2789.2	2785.8	2775.8	2770.8	2772.5	2759.1	2754.1	2755.7
12.5°	2928.0	2921.3	2909.6	2906.2	2904.6	2894.5	2889.5	2886.2	2876.1	2874.5	2869.4
15°	3035.0	3038.3	3033.3	3024.9	3018.3	3016.6	3011.6	3008.2	3001.5	2994.8	2988.2
17.5°	3173.8	3178.8	3172.1	3160.4	3160.4	3158.7	3160.4	3158.7	3147.0	3152.0	3148.7
20°	3351.0	3354.4	3337.6	3342.7	3346.0	3344.3	3349.3	3354.4	3351.0	3351.0	3356.0
22.5°	3555.0	3560.0	3550.0	3556.7	3566.7	3558.4	3573.4	3571.7	3575.1	3580.1	3581.8
25°	3764.0	3774.1	3765.7	3784.1	3777.4	3784.1	3802.5	3797.5	3805.8	3819.2	3824.2
27.5°	3973.1	3979.8	3981.4	3993.1	4004.8	4014.9	4038.3	4038.3	4045.0	4068.4	4068.4
30°	4192.1	4198.8	4205.5	4222.2	4228.9	4247.3	4270.7	4277.4	4274.1	4307.5	4317.5
32.5°	4444.6	4451.3	4463.0	4483.1	4491.4	4509.8	4509.8	4528.2	4541.6	4570.0	4571.7
35°	4780.7	4785.7	4780.7	4779.0	4790.8	4815.8	4817.5	4844.3	4856.0	4884.4	4892.8
37.5°	5116.8	5115.2	5093.4	5070.0	5071.7	5061.6	5055.0	5066.7	5071.7	5073.3	5091.7
40°	5570.0	5526.5	5493.1	5434.5	5407.8	5366.0	5340.9	5339.2	5312.5	5309.1	5314.1
42.5°	6163.6	6113.4	6034.8	5936.2	5860.9	5784.0	5727.2	5693.7	5635.2	5605.1	5580.0
45°	6993.0	6869.3	6775.6	6658.6	6513.1	6379.3	6238.8	6175.3	6063.3	5994.7	5917.8
47.5°	8006.3	7884.3	7740.5	7620.1	7429.4	7243.8	7051.5	6882.6	6687.0	6531.5	6404.4
50°	9106.6	9034.7	8931.0	8819.0	8573.2	8451.1	8208.7	7979.6	7768.9	7491.3	7248.8
52.5°	10235.3	10277.1	10253.7	10213.6	10058.1	10011.3	9802.2	9523.0	9310.6	9120.0	8698.6
55°	11626.6	11676.7	11777.1	11835.6	11817.2	11935.9	11884.1	11666.7	11581.4	11492.8	11193.5
57.5°	13755.2	14113.1	14496.0	14832.1	14910.7	15332.1	15241.8	15459.2	15613.0	15502.6	15405.7
60°	16024.4	16746.7	17397.2	18077.8	18631.3	19046.0	19594.4	19964.0	20196.4	20614.5	20647.9
62.5°	16939.0	17920.6	18746.6	19535.9	20193.1	20768.3	21263.3	21773.3	22191.3	22569.2	22841.8
65°	16437.4	17462.4	18464.0	19265.0	19897.1	20392.1	20930.5	21335.2	21746.5	21989.0	22274.9
67.5°	13664.9	15022.7	16255.1	17158.1	18022.6	18525.9	19163.0	19561.0	19997.4	20253.3	20437.2
70°	8909.3	10676.8	12360.6	13730.1	14897.3	15484.3	16253.4	16796.9	17322.0	17335.3	17641.3
72.5°	4807.5	6285.7	7695.3	9094.9	10426.0	11206.9	11966.0	12626.5	13148.2	12925.8	13230.2
75°	2677.1	3369.4	4140.3	4981.4	5792.4	6238.8	6805.7	6809.1	7078.3	6655.2	6762.2
77.5°	2575.1	2543.4	2555.1	2578.5	2618.6	2533.3	2531.7	2479.8	2399.6	2254.1	2279.2
80°	3382.8	2978.1	2687.2	2230.7	1795.9	1464.8	1372.8	1394.6	1459.8	1590.2	1755.8
82.5°	4891.1	4550.0	4061.7	3342.7	2623.6	2023.3	1662.1	1474.8	1466.5	1596.9	1847.7
85°	3561.7	3767.4	3735.6	3118.6	2571.8	2088.5	1520.0	1284.2	1063.5	1011.7	1100.3
87.5°	525.1	434.8	489.9	409.7	297.6	230.8	202.3	162.2	155.5	158.9	173.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2451.4	2444.7	2438.0	2443.0	2438.0	2436.3	2431.3	2428.0	2426.3	2426.3	2426.3
5°	2526.6	2518.3	2513.3	2511.6	2506.6	2501.6	2499.9	2491.5	2489.9	2489.9	2484.8
7.5°	2628.6	2622.0	2613.6	2608.6	2605.2	2596.9	2588.5	2586.8	2585.2	2578.5	2573.5
10°	2747.4	2737.3	2727.3	2727.3	2720.6	2718.9	2710.6	2698.9	2697.2	2687.2	2683.8
12.5°	2859.4	2856.1	2844.4	2841.0	2836.0	2831.0	2826.0	2820.9	2815.9	2807.6	2810.9
15°	2993.2	2984.8	2974.8	2976.5	2974.8	2968.1	2961.4	2956.4	2953.0	2949.7	2949.7
17.5°	3153.7	3150.4	3148.7	3140.3	3133.6	3138.7	3138.7	3138.7	3130.3	3132.0	3133.6
20°	3357.7	3361.1	3357.7	3351.0	3349.3	3354.4	3342.7	3361.1	3351.0	3344.3	3347.7
22.5°	3583.5	3595.2	3581.8	3583.5	3591.8	3595.2	3583.5	3598.5	3593.5	3583.5	3591.8
25°	3829.3	3837.6	3830.9	3829.3	3834.3	3846.0	3844.3	3842.6	3854.3	3844.3	3849.3
27.5°	4081.8	4086.8	4090.1	4095.1	4098.5	4096.8	4103.5	4103.5	4110.2	4098.5	4103.5
30°	4332.6	4332.6	4339.3	4346.0	4346.0	4346.0	4359.3	4361.0	4351.0	4354.3	4342.6
32.5°	4600.1	4601.8	4608.5	4608.5	4621.9	4623.5	4638.6	4618.5	4638.6	4621.9	4625.2
35°	4914.5	4936.2	4939.6	4956.3	4969.7	4974.7	4974.7	4976.4	4994.8	4981.4	4986.4
37.5°	5098.4	5103.4	5116.8	5125.2	5125.2	5131.9	5136.9	5131.9	5136.9	5135.2	5140.2
40°	5315.8	5310.8	5325.8	5329.2	5322.5	5330.9	5329.2	5324.2	5337.6	5327.5	5334.2
42.5°	5580.0	5551.6	5549.9	5563.3	5549.9	5556.6	5554.9	5543.2	5559.9	5565.0	5559.9
45°	5862.6	5847.6	5817.5	5817.5	5804.1	5799.1	5800.7	5799.1	5800.7	5820.8	5827.5
47.5°	6322.5	6230.5	6178.7	6130.2	6090.0	6088.4	6070.0	6080.0	6093.4	6126.8	6156.9
50°	7093.3	6881.0	6750.5	6630.1	6543.2	6513.1	6478.0	6474.6	6486.3	6524.8	6576.6
52.5°	8467.8	8173.5	7896.0	7638.5	7414.4	7242.1	7156.9	7111.7	7095.0	7133.5	7183.6
55°	10982.8	10427.6	10036.3	9775.5	9218.6	8982.9	8680.2	8541.4	8406.0	8419.4	8504.6
57.5°	15280.2	14980.9	14653.2	14196.7	13855.6	13444.2	12688.4	12267.0	12285.4	12384.1	12076.4
60°	20912.1	20609.4	20474.0	20059.3	19821.8	19656.3	19255.0	18556.0	18308.5	18261.7	17696.5
62.5°	23050.8	23122.7	23229.7	23346.8	23340.1	23412.0	23060.8	22833.4	22547.5	22176.3	21617.8
65°	22492.3	22674.6	22891.9	23206.3	23564.2	23828.4	24050.8	24024.0	23756.5	23261.5	22671.2
67.5°	20601.1	20781.7	20940.5	21361.9	21948.8	22485.6	22960.5	23283.2	23104.3	22694.6	22005.7
70°	17758.4	17888.8	17989.2	18355.4	18999.1	19654.6	20275.0	20816.8	20761.6	20265.0	19714.8
72.5°	12867.3	13183.4	13353.9	13328.8	13726.8	14460.9	14547.8	15011.0	15139.8	14604.7	13728.5
75°	6268.9	6274.0	6076.6	6011.4	6031.5	6158.6	5916.1	5931.2	5847.6	5468.0	5155.3
77.5°	2190.5	2130.3	1986.5	1816.0	1571.8	1342.7	1110.3	1010.0	976.5	877.9	809.3
80°	1887.9	1976.5	1948.1	1807.6	1550.1	1235.7	923.0	683.9	583.6	548.5	515.0
82.5°	2143.7	2484.8	2702.2	2690.5	2337.7	1755.8	1095.3	628.7	448.1	393.0	361.2
85°	1195.6	1285.9	1311.0	1193.9	991.6	677.2	377.9	265.9	225.7	205.7	185.6
87.5°	190.6	173.9	170.6	148.8	140.5	128.8	113.7	107.0	98.7	93.6	93.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2424.6	2423.0	2418.0	2412.9	2409.6	2407.9	2406.2	2402.9	2401.2	2399.6	2396.2
5°	2481.5	2478.1	2469.8	2461.4	2458.1	2453.1	2448.1	2444.7	2441.4	2439.7	2433.0
7.5°	2570.1	2566.8	2556.7	2550.1	2548.4	2535.0	2533.3	2528.3	2520.0	2518.3	2508.2
10°	2677.1	2675.5	2667.1	2662.1	2658.7	2652.1	2642.0	2633.7	2625.3	2625.3	2618.6
12.5°	2800.9	2794.2	2799.2	2787.5	2784.2	2777.5	2772.5	2770.8	2760.7	2752.4	2750.7
15°	2946.4	2938.0	2938.0	2934.7	2931.3	2924.6	2922.9	2924.6	2914.6	2917.9	2907.9
17.5°	3126.9	3130.3	3128.6	3128.6	3120.3	3120.3	3106.9	3123.6	3111.9	3120.3	3116.9
20°	3352.7	3354.4	3351.0	3356.0	3359.4	3357.7	3356.0	3354.4	3359.4	3366.1	3361.1
22.5°	3593.5	3593.5	3591.8	3610.2	3590.1	3605.2	3610.2	3600.2	3626.9	3623.6	3628.6
25°	3854.3	3854.3	3867.7	3882.8	3886.1	3874.4	3881.1	3872.7	3889.5	3902.8	3906.2
27.5°	4096.8	4118.5	4128.6	4118.5	4126.9	4145.3	4143.6	4143.6	4155.3	4152.0	4183.8
30°	4346.0	4359.3	4372.7	4366.0	4369.4	4392.8	4394.5	4396.1	4411.2	4432.9	4456.3
32.5°	4630.2	4643.6	4636.9	4658.7	4657.0	4685.4	4690.4	4695.4	4742.3	4733.9	4782.4
35°	4979.7	4993.1	4986.4	5009.8	5006.5	5016.5	5034.9	5055.0	5063.3	5111.8	5150.3
37.5°	5143.6	5143.6	5158.6	5185.4	5195.4	5212.1	5240.6	5265.6	5307.5	5359.3	5419.5
40°	5340.9	5345.9	5366.0	5394.4	5412.8	5451.3	5503.1	5538.2	5601.8	5658.6	5728.8
42.5°	5580.0	5601.8	5625.2	5663.6	5703.8	5764.0	5837.5	5882.7	5966.3	6039.9	6126.8
45°	5859.3	5881.0	5936.2	6006.4	6064.9	6131.8	6192.0	6299.0	6374.3	6451.2	6526.5
47.5°	6197.0	6260.6	6305.7	6389.3	6461.2	6549.9	6625.1	6725.4	6807.4	6901.0	6964.6
50°	6630.1	6708.7	6767.3	6875.9	6946.2	7044.8	7140.1	7215.4	7299.0	7391.0	7442.8
52.5°	7252.2	7332.4	7406.0	7541.5	7628.4	7695.3	7822.4	7916.0	7993.0	8059.8	8116.7
55°	8599.9	8576.5	8780.5	9043.1	9073.2	9315.6	9360.8	9439.4	9581.5	9601.6	9760.4
57.5°	12450.9	12330.5	12626.5	13011.1	12944.2	12822.2	13332.2	13363.9	13292.0	13484.3	13267.0
60°	17780.1	17569.4	17649.7	17755.1	17602.9	17531.0	17556.1	17628.0	17557.7	17480.8	17270.1
62.5°	21338.5	21014.1	20781.7	20586.0	20338.5	20159.6	19959.0	19711.5	19644.6	19363.7	19127.9
65°	22097.7	21592.7	21224.8	20855.2	20514.1	20198.1	19895.4	19683.1	19402.1	19069.4	18823.6
67.5°	21263.3	20637.9	20099.4	19562.7	19176.4	18711.5	18484.1	18138.0	17791.8	17410.6	17184.8
70°	18838.6	18186.5	17509.2	16984.2	16459.1	15883.9	15771.9	15362.2	15163.2	14643.2	14552.9
72.5°	13002.8	12568.0	12265.3	11616.5	11297.1	11002.8	10909.2	10529.6	10569.8	9999.5	10206.9
75°	4623.5	4561.7	4473.0	4106.8	4041.6	3927.9	3897.8	3871.1	4142.0	3765.7	4038.3
77.5°	794.3	789.3	744.1	722.4	764.2	737.4	744.1	730.7	809.3	821.0	802.6
80°	493.3	479.9	464.9	454.8	456.5	446.5	448.1	451.5	456.5	454.8	459.8
82.5°	337.8	326.1	319.4	312.7	322.7	326.1	334.4	342.8	356.2	364.5	374.6
85°	183.9	168.9	168.9	167.2	180.6	190.6	204.0	220.7	244.1	264.2	285.9
87.5°	93.6	90.3	92.0	95.3	107.0	115.4	132.1	147.2	167.2	189.0	209.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2394.5	2394.5	2392.9	2392.9	2391.2	2389.5	2387.9	2382.8	2364.4	2347.7	2336.0
5°	2431.3	2426.3	2424.6	2419.6	2418.0	2414.6	2409.6	2404.6	2371.1	2341.0	2319.3
7.5°	2506.6	2499.9	2496.5	2491.5	2486.5	2479.8	2473.1	2468.1	2428.0	2392.9	2366.1
10°	2605.2	2601.9	2600.2	2593.5	2593.5	2583.5	2581.8	2570.1	2526.6	2494.9	2471.5
12.5°	2742.4	2735.7	2734.0	2725.6	2729.0	2725.6	2722.3	2715.6	2683.8	2647.0	2615.3
15°	2912.9	2912.9	2904.6	2897.9	2899.5	2896.2	2902.9	2894.5	2874.5	2841.0	2789.2
17.5°	3118.6	3115.2	3118.6	3113.6	3116.9	3120.3	3111.9	3113.6	3103.5	3061.7	2984.8
20°	3357.7	3352.7	3372.8	3364.4	3382.8	3366.1	3369.4	3374.4	3374.4	3319.2	3215.6
22.5°	3631.9	3628.6	3628.6	3645.3	3652.0	3653.7	3660.4	3665.4	3678.8	3608.5	3443.0
25°	3906.2	3917.9	3919.6	3941.3	3951.3	3951.3	3956.3	3974.7	4014.9	3917.9	3703.8
27.5°	4185.4	4213.9	4220.5	4235.6	4250.6	4265.7	4277.4	4290.8	4356.0	4250.6	3971.4
30°	4464.7	4496.5	4519.9	4536.6	4555.0	4591.8	4598.5	4625.2	4733.9	4605.1	4225.6
32.5°	4792.4	4837.6	4867.7	4889.4	4917.8	4953.0	4973.0	5006.5	5111.8	4901.1	4411.2
35°	5183.7	5210.5	5253.9	5290.7	5307.5	5367.7	5399.4	5407.8	5488.0	5157.0	4548.3
37.5°	5454.6	5499.8	5575.0	5626.8	5656.9	5690.4	5743.9	5779.0	5855.9	5389.4	4616.8
40°	5799.1	5867.6	5927.8	6004.7	6053.2	6078.3	6131.8	6160.3	6170.3	5588.4	4595.1
42.5°	6218.8	6280.7	6360.9	6422.8	6459.6	6488.0	6531.5	6543.2	6412.8	5682.0	4478.1
45°	6613.4	6708.7	6777.3	6822.4	6849.2	6864.2	6891.0	6892.7	6613.4	5635.2	4277.4
47.5°	7038.1	7106.7	7170.2	7202.0	7198.7	7202.0	7192.0	7185.3	6713.7	5473.0	4019.9
50°	7508.0	7553.2	7579.9	7595.0	7603.3	7571.6	7526.4	7496.3	6722.1	5242.2	3759.0
52.5°	8138.4	8195.3	8190.3	8188.6	8121.7	8091.6	7971.2	7909.3	6673.6	4971.3	3464.7
55°	9735.3	9680.2	9571.5	9625.0	9352.4	9210.3	9023.0	8849.1	6737.2	4713.8	3123.6
57.5°	13353.9	13375.7	13066.3	12900.8	12440.9	11865.7	11402.5	10952.7	7309.0	4556.7	2678.8
60°	17129.7	16845.4	16452.4	15853.8	15261.9	14407.4	13583.0	12803.8	7879.2	4392.8	2152.1
62.5°	18778.4	18373.8	17780.1	17005.9	16076.2	15031.1	14004.4	13054.6	7603.3	3862.7	1565.1
65°	18444.0	17825.3	17169.8	16263.5	15133.1	13987.7	12788.7	11818.9	6360.9	2881.1	964.8
67.5°	16694.9	16169.8	15477.6	14402.4	13193.4	12001.1	10902.5	9815.6	4725.5	1795.9	540.1
70°	14091.3	13578.0	12875.7	11775.4	10568.1	9427.7	8263.8	7377.6	3011.6	866.2	389.6
72.5°	9775.5	9359.1	8862.5	8078.2	7019.8	5983.0	5195.4	4514.8	1668.8	459.8	356.2
75°	3969.7	3971.4	3881.1	3550.0	2999.9	2586.8	2205.6	1871.2	697.3	391.3	351.2
77.5°	899.6	914.7	1000.0	948.1	854.5	799.3	715.7	632.1	424.7	403.0	354.5
80°	454.8	456.5	451.5	453.2	448.1	449.8	443.1	438.1	398.0	414.7	354.5
82.5°	379.6	387.9	386.3	386.3	387.9	387.9	387.9	386.3	413.0	436.4	342.8
85°	301.0	317.7	331.1	344.5	359.5	369.5	374.6	379.6	401.3	429.7	311.0
87.5°	227.4	247.5	264.2	277.6	301.0	301.0	317.7	329.4	329.4	336.1	163.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159293

CATALOG NUMBER: VTS-F12-LED-E1-T2-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	2401.2	2401.2	2401.2	2401.2	2401.2
2.5°	2319.3	2312.6	2305.9	2302.6	2295.9
5°	2302.6	2289.2	2280.8	2280.8	2274.1
7.5°	2351.1	2346.0	2334.3	2327.7	2334.3
10°	2454.7	2446.4	2433.0	2423.0	2428.0
12.5°	2593.5	2560.1	2533.3	2521.6	2513.3
15°	2737.3	2670.4	2616.9	2586.8	2578.5
17.5°	2891.2	2774.1	2693.9	2648.7	2640.3
20°	3048.4	2902.9	2789.2	2730.6	2729.0
22.5°	3237.3	3043.3	2897.9	2820.9	2815.9
25°	3436.3	3168.8	2976.5	2877.8	2867.8
27.5°	3608.5	3269.1	3024.9	2907.9	2897.9
30°	3752.3	3344.3	3065.1	2929.6	2916.3
32.5°	3856.0	3387.8	3081.8	2936.3	2921.3
35°	3889.5	3371.1	3035.0	2876.1	2859.4
37.5°	3844.3	3262.4	2904.6	2729.0	2708.9
40°	3708.9	3071.8	2692.2	2511.6	2486.5
42.5°	3501.5	2837.7	2436.3	2264.1	2232.3
45°	3245.7	2573.5	2182.2	1989.9	1974.8
47.5°	2978.1	2295.9	1896.2	1722.3	1703.9
50°	2688.8	1974.8	1617.0	1428.0	1428.0
52.5°	2344.4	1662.1	1292.6	1150.4	1138.7
55°	1948.1	1309.3	1030.1	921.4	906.3
57.5°	1521.7	1006.6	822.7	759.2	742.4
60°	1118.7	755.8	662.2	627.1	620.4
62.5°	759.2	575.2	533.4	518.4	516.7
65°	513.4	448.1	436.4	431.4	433.1
67.5°	394.6	372.9	367.9	366.2	366.2
70°	342.8	329.4	324.4	326.1	324.4
72.5°	322.7	304.3	306.0	309.4	307.7
75°	316.0	292.6	299.3	301.0	294.3
77.5°	311.0	279.3	296.0	301.0	282.6
80°	301.0	267.5	307.7	309.4	277.6
82.5°	275.9	237.4	307.7	284.3	250.8
85°	234.1	180.6	347.8	247.5	185.6
87.5°	148.8	107.0	235.8	168.9	112.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)