

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: P158499

Luminaire Tested: **VST-E10-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158499
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E10-LED-E-U-SL3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (210) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27554.6 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 247.7
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

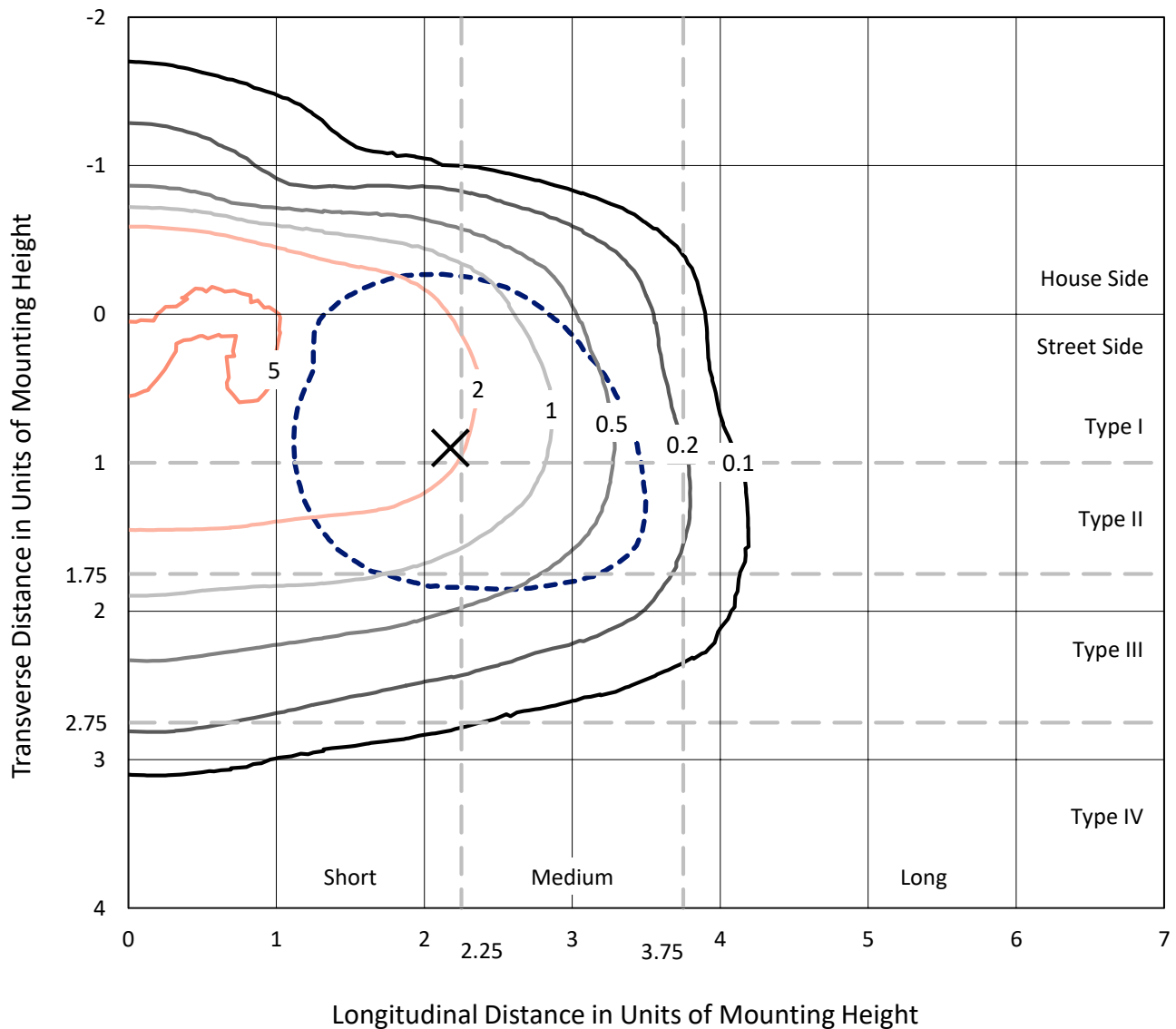


REPORT NUMBER: P158499

CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

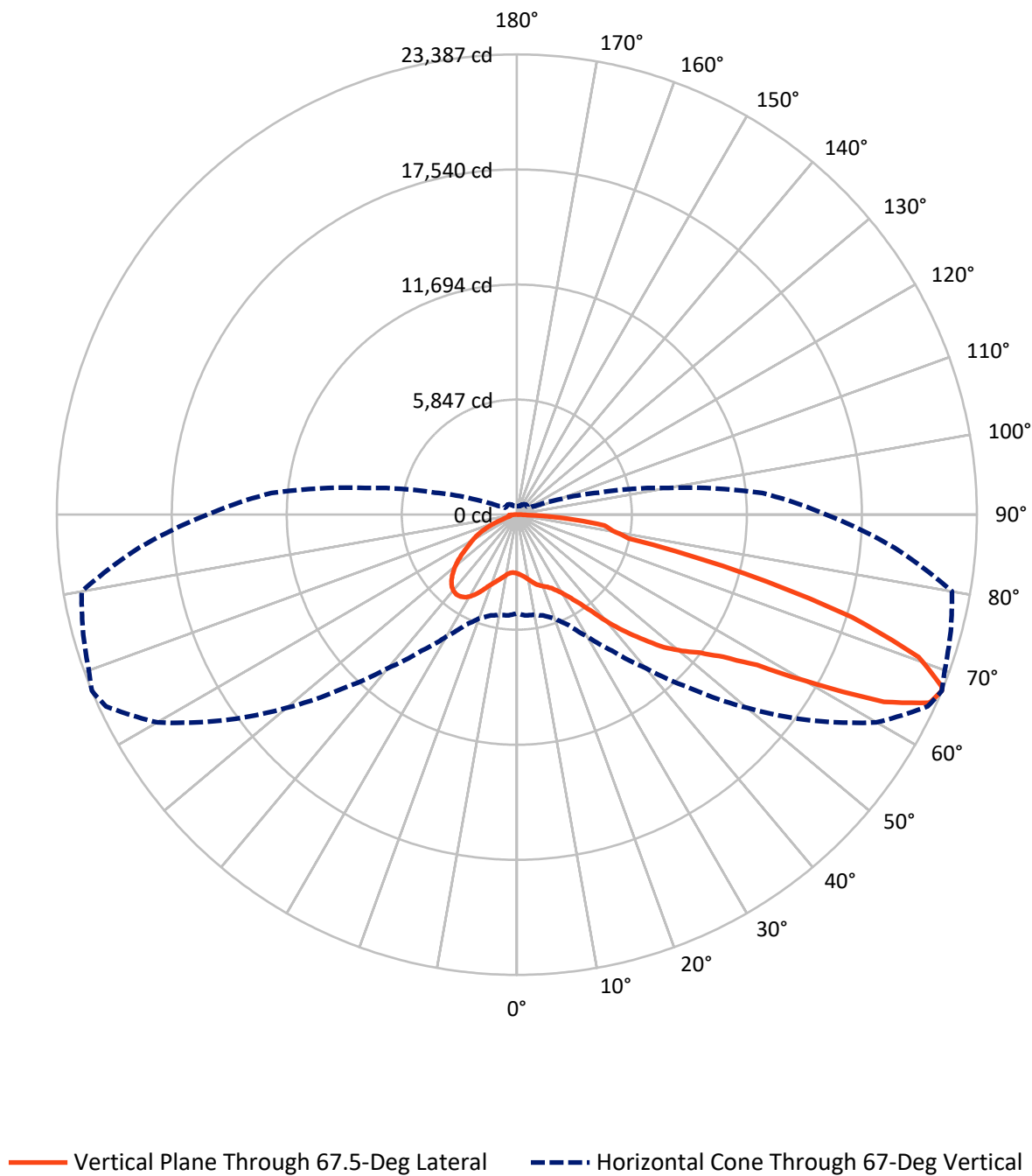


Based on 25 foot mounting height. Maximum calculated value = 6 fc
Type III - Short - Semi-Cutoff

REPORT NUMBER: P158499

CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6610.4	0.0	6610.4
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	20944.2	0.0	20944.2
	% Fixture	76.0	0.0	76.0
Total	Lumens	27554.6	0.0	27554.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.8	1.1
10°-20°	1011.3	3.7
20°-30°	1805.5	6.6
30°-40°	2646.1	9.6
40°-50°	4088.6	14.8
50°-60°	5953.7	21.6
60°-70°	7755.7	28.1
70°-80°	3471.7	12.6
80°-90°	524.9	1.9
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°	27554.6	100.0
0°-180°	27554.6	100.0

Coefficient of Utilization



REPORT NUMBER: P158499

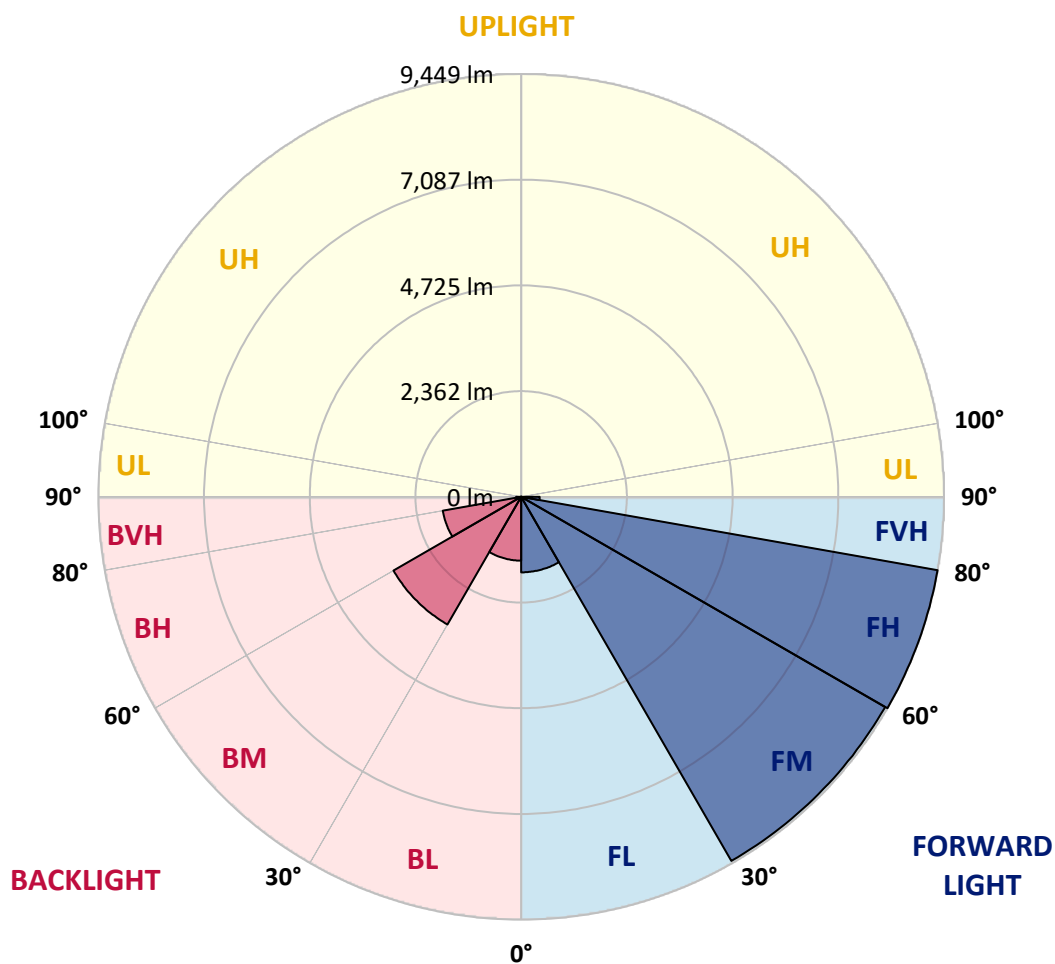
CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1688.3	6.1			
FM	(30°-60°)	9394.7	34.1			
FH	(60°-80°)	9449.0	34.3			G4/12000
FVH	(80°-90°)	412.2	1.5			G3/500
BL	(0°-30°)	1425.4	5.2	B3/2500		
BM	(30°-60°)	3293.8	12.0	B3/5000		
BH	(60°-80°)	1778.4	6.5	B3/2500		G3/2500
BVH	(80°-90°)	112.7	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P158499

CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7
2.5°	3103.6	3110.9	3112.7	3110.9	3112.7	3105.4	3103.6	3092.6	3098.1	3083.5	3079.8
5°	3271.6	3277.1	3280.8	3266.1	3269.8	3262.5	3253.4	3242.4	3227.8	3207.7	3194.9
7.5°	3436.0	3445.2	3443.3	3437.9	3425.1	3417.8	3399.5	3383.0	3357.5	3333.7	3317.3
10°	3657.1	3655.2	3655.2	3624.2	3605.9	3589.5	3556.6	3531.0	3505.4	3470.7	3452.5
12.5°	3912.8	3900.0	3894.5	3872.6	3834.2	3805.0	3757.5	3708.2	3662.5	3626.0	3596.8
15°	4159.4	4159.4	4144.8	4110.1	4073.5	4035.2	3967.6	3896.4	3821.5	3763.0	3733.8
17.5°	4384.1	4364.0	4351.2	4305.5	4267.2	4205.1	4130.2	4053.4	3960.3	3878.1	3821.5
20°	4548.5	4532.0	4504.6	4448.0	4382.3	4309.2	4221.5	4132.0	4031.5	3942.0	3878.1
22.5°	4643.5	4623.4	4581.4	4506.5	4417.0	4314.7	4212.4	4128.3	4037.0	3969.4	3916.4
25°	4692.8	4672.7	4616.1	4517.4	4396.9	4261.7	4144.8	4062.6	4009.6	3993.2	3985.9
27.5°	4691.0	4674.5	4614.2	4501.0	4345.7	4190.5	4064.4	3995.0	3989.5	4053.4	4100.9
30°	4643.5	4632.5	4577.7	4464.5	4301.9	4139.3	4022.4	3985.9	4042.5	4177.7	4294.6
32.5°	4596.0	4590.5	4552.1	4449.8	4311.0	4174.0	4093.6	4097.3	4214.2	4422.4	4610.6
35°	4601.5	4608.8	4603.3	4548.5	4460.8	4389.6	4351.2	4431.6	4614.2	4866.3	5118.4
37.5°	4649.0	4676.4	4711.1	4716.5	4718.4	4707.4	4787.8	4957.7	5224.4	5553.2	5947.7
40°	4753.1	4784.1	4884.6	4972.3	5085.5	5220.7	5383.3	5618.9	5949.6	6355.1	6839.2
42.5°	5076.4	5120.2	5244.5	5407.0	5615.3	5827.2	6070.1	6391.6	6797.2	7224.6	7732.4
45°	5498.4	5589.7	5726.7	5907.6	6219.9	6517.7	6831.9	7191.7	7622.8	8158.0	8669.5
47.5°	6024.5	6115.8	6314.9	6508.5	6877.5	7248.3	7591.8	7968.1	8435.7	8983.7	9550.0
50°	6484.8	6588.9	6766.1	7027.3	7454.8	7909.6	8289.6	8696.9	9089.7	9666.9	10238.7
52.5°	6846.5	6921.4	7091.3	7330.5	7807.3	8306.0	8786.4	9239.5	9705.3	10282.5	10812.2
55°	6892.1	6961.6	7127.8	7401.8	7885.9	8439.4	8992.8	9529.9	10189.3	10819.5	11521.0
57.5°	6694.9	6751.5	6919.5	7164.3	7635.6	8265.8	8965.4	9654.1	10498.0	11349.3	12206.0
60°	6415.4	6472.0	6603.5	6799.0	7224.6	7904.1	8720.7	9663.2	10784.8	12014.2	13274.6
62.5°	6108.5	6157.8	6263.8	6402.6	6777.1	7403.6	8338.9	9603.0	11018.7	12675.5	14619.1
65°	5591.5	5710.3	5755.9	5898.4	6272.9	6864.7	7816.5	9195.6	10923.7	12969.6	15463.0
67°	5019.8	5140.3	5164.1	5308.4	5608.0	6176.1	7144.2	8441.2	10171.1	12461.8	15276.7
67.5°	4837.1	4939.4	4975.9	5120.2	5403.4	5938.6	6857.4	8169.0	9940.9	12184.1	15052.0
70°	3556.6	3669.8	3710.0	3770.3	3973.1	4418.8	5027.1	6165.1	7926.1	9942.7	12697.4
72.5°	1903.4	1994.8	2033.1	2122.6	2226.7	2469.7	2935.5	3752.0	4864.5	6652.8	9033.0
75°	1287.8	1324.4	1351.8	1413.9	1521.6	1715.3	1919.9	2206.7	2878.9	3753.9	5140.3
77.5°	734.3	750.8	754.4	765.4	851.2	1035.7	1371.9	1857.8	2382.0	2720.0	3288.1
80°	317.8	350.7	376.3	359.9	354.4	392.7	491.4	732.5	1435.8	2279.7	2705.3
82.5°	171.7	186.3	208.2	210.1	221.0	233.8	253.9	301.4	423.8	854.9	1865.1
85°	89.5	93.2	124.2	142.5	151.6	158.9	162.6	180.8	208.2	264.9	464.0
87.5°	12.8	18.3	21.9	29.2	32.9	34.7	40.2	51.1	60.3	73.1	124.2
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: P158499

CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7
2.5°	3063.4	3059.7	3048.8	3041.5	3034.1	3026.8	3017.7	3010.4	2997.6	2988.5	2977.5
5°	3176.6	3154.7	3140.1	3120.0	3116.4	3092.6	3068.9	3057.9	3036.0	3017.7	2995.8
7.5°	3291.7	3266.1	3242.4	3226.0	3216.8	3183.9	3160.2	3132.8	3107.2	3083.5	3057.9
10°	3426.9	3401.3	3375.7	3364.8	3348.3	3317.3	3297.2	3262.5	3236.9	3207.7	3173.0
12.5°	3567.5	3549.3	3531.0	3516.4	3509.1	3494.5	3465.3	3436.0	3401.3	3372.1	3331.9
15°	3691.8	3679.0	3671.7	3668.0	3668.0	3658.9	3631.5	3604.1	3567.5	3534.7	3490.8
17.5°	3779.4	3774.0	3779.4	3784.9	3792.2	3784.9	3779.4	3748.4	3724.6	3684.5	3640.6
20°	3830.6	3841.6	3869.0	3887.2	3903.7	3916.4	3921.9	3896.4	3865.3	3836.1	3806.8
22.5°	3885.4	3916.4	3963.9	3991.3	4018.7	4064.4	4075.4	4057.1	4033.4	4015.1	3984.0
25°	3976.7	4022.4	4104.6	4148.4	4186.8	4254.4	4263.5	4267.2	4261.7	4247.1	4208.7
27.5°	4119.2	4208.7	4318.3	4374.9	4417.0	4504.6	4539.4	4539.4	4524.7	4541.2	4541.2
30°	4367.6	4486.4	4628.9	4661.7	4727.5	4804.2	4860.9	4868.2	4870.0	4904.7	4955.8
32.5°	4749.4	4862.7	5021.6	5058.1	5114.8	5187.8	5251.8	5244.5	5260.9	5335.8	5403.4
35°	5304.7	5419.8	5523.9	5573.3	5598.8	5664.6	5688.3	5728.5	5777.9	5871.0	5861.9
37.5°	6126.8	6229.0	6243.7	6274.7	6243.7	6256.4	6274.7	6322.2	6453.7	6537.8	6402.6
40°	7116.8	7286.7	7270.3	7233.7	7164.3	7071.2	7104.0	7177.1	7319.6	7246.5	6883.0
42.5°	8050.3	8225.6	8192.8	8150.7	7997.3	7962.6	7958.9	8019.2	8095.9	7887.7	7259.3
45°	8969.1	9148.1	9091.5	9067.7	8965.4	8890.6	8952.7	8956.3	8936.2	8490.5	7588.1
47.5°	9917.2	10081.6	10045.0	10065.1	9959.2	9909.9	9915.3	9889.8	9701.6	9002.0	7843.9
50°	10682.5	10903.6	10925.5	10879.8	10823.2	10748.3	10940.1	10870.7	10452.4	9498.8	8090.5
52.5°	11278.0	11575.8	11689.1	11659.8	11614.2	11623.3	11983.2	12061.7	11369.4	10125.4	8362.6
55°	11983.2	12452.6	12637.1	12746.7	12699.2	12881.9	13705.7	13745.9	12644.4	10943.8	8717.0
57.5°	13000.6	13672.9	14255.6	14410.8	14560.6	15154.3	16491.5	16084.1	14299.4	12182.3	9166.4
60°	14547.8	16020.2	16966.4	17463.3	17814.0	18643.3	19914.7	18882.6	16361.8	13656.4	9730.8
62.5°	16714.3	18866.2	20448.1	20946.8	21091.1	21567.9	22488.5	20513.8	17485.2	14317.7	9780.2
65°	18327.3	20908.4	22802.7	23058.4	22886.7	22895.9	23137.0	20428.0	17066.9	13740.4	8932.6
67°	18221.3	21111.2	23051.1	23387.2	23149.8	22837.4	22461.1	19264.4	15722.4	12531.2	7821.9
67.5°	18058.8	20915.7	22943.4	23297.7	23080.4	22724.2	22174.3	18813.2	15304.1	12154.9	7595.4
70°	15611.0	18447.9	21178.8	21677.5	21768.8	21443.6	19900.1	15863.1	12425.2	9887.9	5898.4
72.5°	12151.2	14677.5	17379.2	17812.2	18162.9	17225.8	14483.9	10956.6	9056.8	7126.0	4270.8
75°	8022.9	10593.0	11955.8	12019.7	11572.1	9836.8	7076.6	5487.4	5050.8	4188.6	2643.2
77.5°	4292.7	6229.0	6267.4	5803.4	5591.5	4168.5	1691.5	933.4	1039.4	1180.0	1052.2
80°	3202.2	3967.6	4597.8	4943.1	5045.3	3574.9	875.0	495.0	432.9	394.6	389.1
82.5°	2888.0	3832.4	4296.4	4484.6	4437.1	2941.0	491.4	332.5	275.8	299.6	341.6
85°	1132.6	2045.9	2690.7	2604.9	2188.4	1096.0	268.5	179.0	179.0	259.4	336.1
87.5°	232.0	420.1	569.9	544.4	489.6	211.9	131.5	107.8	109.6	210.1	317.8
90°	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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7	2986.7
2.5°	2966.6	2955.6	2948.3	2941.0	2933.7	2930.0	2924.5	2924.5	2913.6	2909.9	2906.3
5°	2979.3	2961.1	2948.3	2931.9	2919.1	2908.1	2893.5	2889.8	2877.1	2867.9	2864.3
7.5°	3034.1	3006.7	2979.3	2959.3	2941.0	2917.2	2900.8	2886.2	2873.4	2864.3	2853.3
10°	3138.3	3109.0	3070.7	3034.1	3010.4	2973.9	2948.3	2922.7	2908.1	2897.1	2882.5
12.5°	3291.7	3249.7	3204.0	3160.2	3120.0	3072.5	3046.9	3015.9	2997.6	2988.5	2977.5
15°	3448.8	3403.1	3346.5	3304.5	3258.8	3222.3	3198.6	3171.2	3156.5	3145.6	3138.3
17.5°	3609.6	3556.6	3516.4	3474.4	3452.5	3425.1	3394.0	3359.3	3317.3	3291.7	3257.0
20°	3774.0	3733.8	3710.0	3686.3	3660.7	3622.3	3560.2	3489.0	3410.5	3335.6	3264.3
22.5°	3965.8	3942.0	3938.4	3916.4	3863.5	3772.1	3657.1	3523.7	3390.4	3266.1	3169.3
25°	4236.1	4236.1	4217.9	4128.3	4004.1	3839.7	3646.1	3454.3	3277.1	3107.2	2979.3
27.5°	4575.9	4563.1	4473.6	4289.1	4066.2	3810.5	3551.1	3308.2	3081.6	2895.3	2730.9
30°	4950.4	4860.9	4669.0	4378.6	4044.3	3715.5	3397.7	3116.4	2849.7	2621.3	2427.7
32.5°	5339.4	5122.1	4776.8	4378.6	3967.6	3573.0	3205.9	2860.6	2555.6	2299.8	2069.7
35°	5692.0	5295.6	4802.4	4307.4	3817.8	3363.0	2937.3	2546.4	2181.1	1905.2	1653.2
37.5°	6011.7	5410.7	4775.0	4168.5	3600.4	3067.0	2568.3	2137.2	1724.4	1457.7	1242.2
40°	6219.9	5434.4	4661.7	3951.2	3289.9	2667.0	2115.3	1633.1	1306.1	1063.1	918.8
42.5°	6349.6	5388.8	4479.1	3653.4	2871.6	2164.6	1587.4	1170.9	928.0	792.8	738.0
45°	6422.7	5270.0	4208.7	3246.0	2365.6	1645.9	1127.1	845.8	714.2	666.7	648.5
47.5°	6419.0	5078.2	3870.8	2774.8	1806.6	1147.2	798.3	659.4	622.9	608.3	604.6
50°	6380.7	4842.6	3474.4	2263.3	1304.3	800.1	632.0	591.9	582.7	573.6	569.9
52.5°	6327.7	4550.3	3036.0	1764.6	926.1	639.3	573.6	562.6	555.3	546.2	542.5
55°	6229.0	4190.5	2561.0	1328.0	725.2	577.2	553.5	549.8	540.7	527.9	520.6
57.5°	6108.5	3825.1	2106.2	1037.6	641.2	562.6	549.8	544.4	531.6	517.0	502.3
60°	6064.6	3523.7	1750.0	875.0	621.1	568.1	559.0	551.7	533.4	511.5	495.0
62.5°	5790.6	3183.9	1494.2	811.1	632.0	591.9	588.2	577.2	549.8	524.3	498.7
65°	5081.9	2692.6	1265.9	767.2	654.0	632.0	635.7	619.3	591.9	557.1	511.5
67°	4298.2	2195.7	1054.0	725.2	670.4	674.1	686.8	674.1	639.3	590.0	527.9
67.5°	4090.0	2069.7	1001.0	712.4	674.1	685.0	699.6	690.5	655.8	599.2	535.2
70°	3039.6	1457.7	747.1	644.8	674.1	717.9	750.8	759.9	721.5	643.0	549.8
72.5°	2140.9	940.8	573.6	559.0	611.9	670.4	732.5	763.6	719.7	633.9	529.7
75°	1286.0	588.2	465.8	474.9	515.1	575.4	624.7	637.5	582.7	527.9	458.5
77.5°	595.5	390.9	365.3	378.1	416.5	443.9	443.9	418.3	376.3	343.4	328.8
80°	350.7	319.7	317.8	341.6	367.2	347.1	316.0	281.3	259.4	248.4	243.0
82.5°	328.8	341.6	363.5	369.0	348.9	299.6	261.2	226.5	215.6	210.1	204.6
85°	387.3	414.7	378.1	348.9	308.7	252.1	204.6	175.4	169.9	164.4	157.1
87.5°	358.0	341.6	297.8	255.7	211.9	153.4	111.4	100.5	107.8	105.9	102.3
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: P158499

CATALOG NUMBER: VST-E10-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2986.7	2986.7	2986.7	2986.7	2986.7
2.5°	2908.1	2908.1	2900.8	2897.1	2906.3
5°	2857.0	2858.8	2853.3	2851.5	2853.3
7.5°	2846.0	2844.2	2840.5	2836.9	2840.5
10°	2878.9	2877.1	2871.6	2875.2	2869.7
12.5°	2977.5	2988.5	2986.7	2990.3	2997.6
15°	3138.3	3136.4	3131.0	3134.6	3140.1
17.5°	3229.6	3215.0	3202.2	3196.7	3196.7
20°	3207.7	3165.7	3143.8	3131.0	3127.3
22.5°	3078.0	3017.7	2972.0	2961.1	2951.9
25°	2866.1	2791.2	2732.7	2720.0	2696.2
27.5°	2619.5	2519.0	2449.6	2435.0	2422.2
30°	2296.2	2181.1	2100.7	2049.6	2066.0
32.5°	1901.6	1792.0	1698.8	1616.6	1603.8
35°	1468.7	1348.1	1265.9	1229.4	1205.6
37.5°	1096.0	995.6	940.8	906.0	907.9
40°	838.5	785.5	756.3	732.5	734.3
42.5°	699.6	675.9	668.6	657.6	652.1
45°	633.9	626.6	628.4	617.4	613.8
47.5°	597.3	591.9	593.7	586.4	584.5
50°	568.1	564.5	566.3	560.8	559.0
52.5°	538.9	540.7	538.9	535.2	535.2
55°	513.3	511.5	515.1	509.6	509.6
57.5°	493.2	491.4	491.4	489.6	489.6
60°	482.2	474.9	473.1	473.1	474.9
62.5°	476.8	464.0	462.2	462.2	464.0
65°	478.6	458.5	451.2	449.4	447.5
67°	480.4	451.2	436.6	429.3	427.4
67.5°	482.2	447.5	431.1	423.8	420.1
70°	471.3	422.0	398.2	385.4	381.8
72.5°	443.9	390.9	361.7	345.2	341.6
75°	394.6	354.4	328.8	310.5	303.2
77.5°	305.1	286.8	277.7	266.7	263.0
80°	237.5	228.3	224.7	217.4	215.6
82.5°	197.3	188.2	182.7	173.5	168.1
85°	153.4	142.5	138.8	131.5	127.9
87.5°	100.5	95.0	93.2	84.0	80.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)