

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: P158079

Luminaire Tested: **VST-E12-LED-E-U-RW-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158079
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
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-RW-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (252) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34145.6 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B5 - U0 - 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

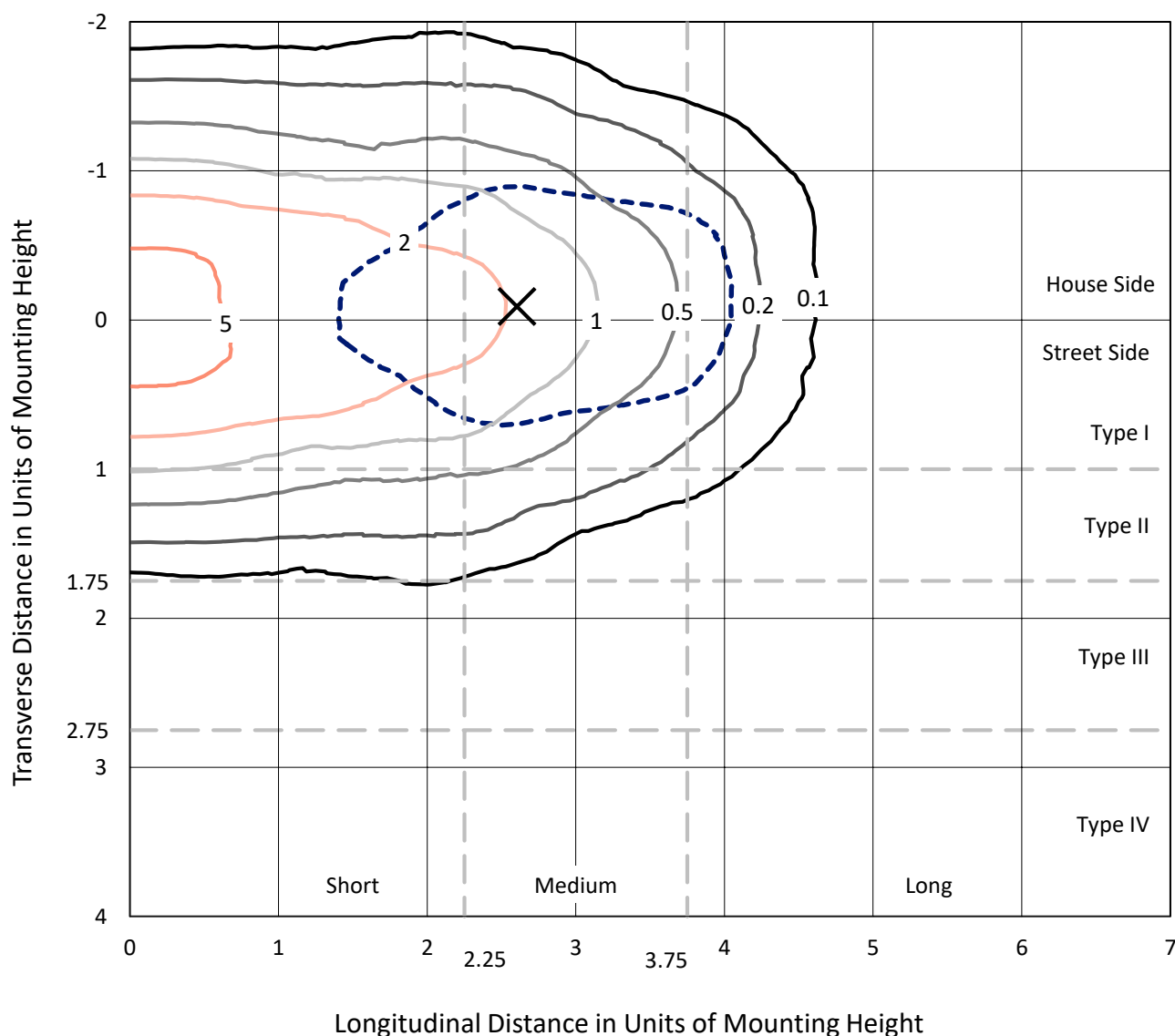


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

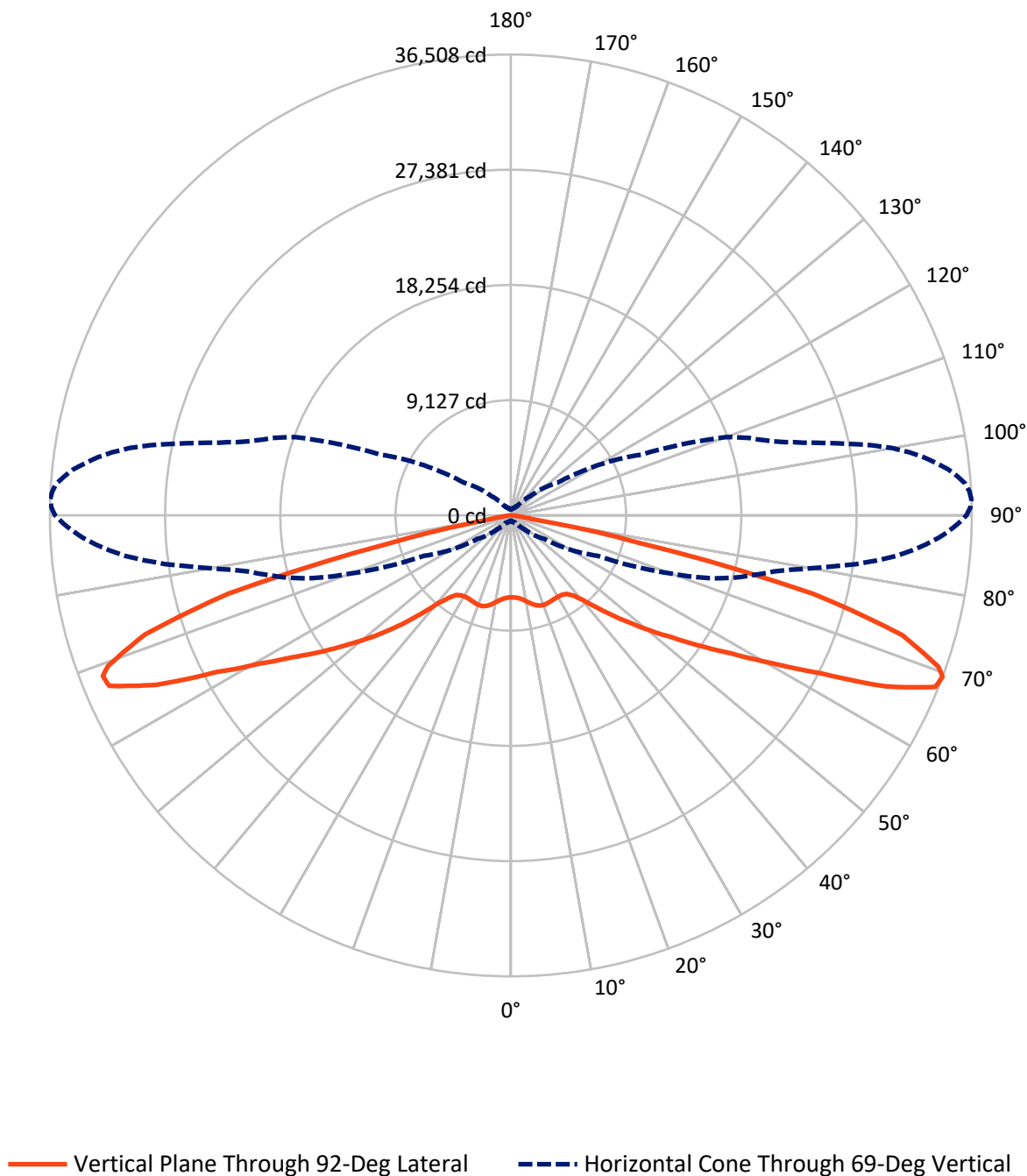


Based on 30 foot mounting height. Maximum calculated value = 7.4 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18109.2	0.0	18109.2
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	16036.4	0.0	16036.4
	% Fixture	47.0	0.0	47.0
Total	Lumens	34145.6	0.0	34145.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	634.7	1.9
10°-20°	2005.0	5.9
20°-30°	3252.9	9.5
30°-40°	4054.0	11.9
40°-50°	5047.6	14.8
50°-60°	6225.0	18.2
60°-70°	7731.0	22.6
70°-80°	4750.3	13.9
80°-90°	445.2	1.3
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°	34145.6	100.0
0°-180°	34145.6	100.0

Coefficient of Utilization



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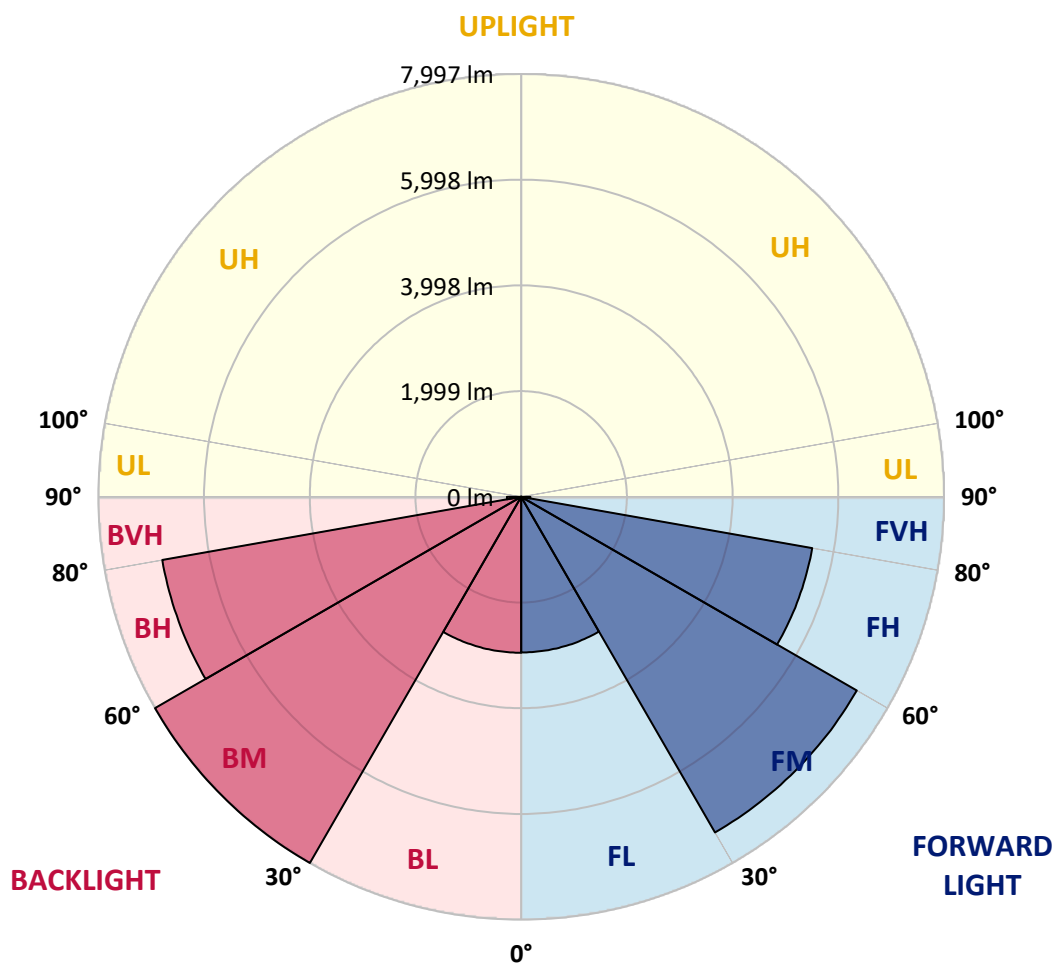
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2943.2	8.6			
FM	(30°-60°)	7329.7	21.5			
FH	(60°-80°)	5589.2	16.4			G3/7500
FVH	(80°-90°)	174.3	0.5			G2/225
BL	(0°-30°)	2949.4	8.6	B4/5000		
BM	(30°-60°)	7996.8	23.4	B4/8500		
BH	(60°-80°)	6892.1	20.2	B5		G5
BVH	(80°-90°)	270.9	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2
2.5°	6589.3	6571.7	6587.1	6589.3	6587.1	6587.1	6567.4	6563.0	6536.7	6543.2	6541.0
5°	6679.1	6672.6	6683.5	6687.9	6692.3	6683.5	6668.2	6661.6	6644.1	6637.5	6635.3
7.5°	6762.4	6751.5	6769.0	6784.4	6795.3	6797.5	6799.7	6788.8	6788.8	6780.0	6780.0
10°	6832.6	6823.8	6852.3	6872.0	6907.1	6926.8	6948.8	6964.1	6972.9	6975.1	6972.9
12.5°	6863.3	6856.7	6902.7	6961.9	7027.7	7073.7	7128.5	7168.0	7178.9	7176.7	7187.7
15°	6810.7	6815.1	6885.2	7001.4	7141.7	7257.8	7334.6	7367.4	7376.2	7380.6	7382.8
17.5°	6668.2	6677.0	6777.8	6966.3	7211.8	7422.3	7536.2	7536.2	7518.7	7518.7	7516.5
20°	6440.2	6449.0	6580.5	6852.3	7214.0	7536.2	7698.4	7665.6	7599.8	7586.7	7573.5
22.5°	6124.6	6159.6	6304.3	6620.0	7119.7	7569.1	7799.3	7751.1	7648.0	7619.5	7599.8
25°	5767.3	5762.9	5936.0	6291.2	6891.8	7490.2	7827.8	7819.0	7709.4	7678.7	7643.6
27.5°	5359.5	5372.7	5532.7	5892.2	6543.2	7262.2	7779.6	7895.7	7805.9	7775.2	7742.3
30°	4940.9	4954.0	5105.3	5523.9	6146.5	6935.6	7680.9	7970.3	7935.2	7911.1	7889.2
32.5°	4520.0	4524.4	4704.1	5153.5	5811.1	6545.4	7531.9	8038.2	8086.4	8075.5	8066.7
35°	4125.4	4129.8	4324.9	4780.8	5480.1	6212.2	7352.1	8136.9	8292.5	8305.6	8314.4
37.5°	3741.8	3748.4	3947.9	4425.7	5153.5	5960.2	7152.6	8288.1	8581.8	8630.1	8638.8
40°	3360.4	3367.0	3557.7	4064.0	4822.5	5738.8	6999.2	8500.7	8972.0	9037.8	9105.7
42.5°	2996.5	3020.6	3182.8	3667.3	4454.2	5464.8	6933.4	8759.4	9434.5	9537.6	9614.3
45°	2656.8	2658.9	2843.1	3296.8	4018.0	5094.3	6889.6	9053.1	9951.9	10107.5	10212.7
47.5°	2292.9	2319.2	2512.1	2952.7	3610.3	4636.2	6749.3	9397.3	10515.2	10697.2	10909.8
50°	1940.0	1977.2	2163.5	2599.8	3237.6	4162.7	6372.3	9800.6	11148.7	11385.5	11631.0
52.5°	1600.2	1598.0	1795.3	2249.0	2862.8	3761.5	5760.7	10223.7	11880.9	12135.1	12400.4
55°	1210.0	1210.0	1405.1	1819.4	2457.3	3404.2	5105.3	10486.7	12560.4	12867.3	13156.6
57.5°	830.8	852.7	1036.8	1394.1	2034.2	3077.6	4603.3	10335.5	13079.9	13461.3	13805.5
60°	616.0	637.9	773.8	1001.8	1591.4	2691.8	4226.3	9623.1	13393.4	13899.7	14346.9
62.5°	532.7	548.0	677.3	802.3	1146.4	2281.9	3893.1	8717.7	13844.9	14537.6	15160.2
65°	475.7	491.0	620.3	692.7	896.5	1834.7	3706.7	8200.4	14384.2	15442.9	16346.0
67.5°	440.6	458.1	567.7	620.3	782.6	1659.4	3562.1	8079.9	14379.8	15664.3	16817.3
69°	423.1	436.2	526.1	583.1	756.3	1606.8	3248.6	7556.0	13430.6	14809.4	15966.8
70°	412.1	425.3	502.0	559.0	747.5	1512.5	2959.3	6863.3	12350.0	13737.5	14912.5
72.5°	377.0	390.2	447.2	499.8	622.5	1010.5	2062.7	4392.8	8825.2	9816.0	11159.7
75°	333.2	348.5	392.4	436.2	471.3	585.3	1190.3	2279.7	5046.1	5797.9	6994.8
77.5°	271.8	287.2	333.2	403.3	399.0	445.0	773.8	1400.7	2363.0	2930.8	3373.6
80°	223.6	234.5	274.0	407.7	326.6	372.6	626.9	1148.6	1663.8	1839.1	1944.3
82.5°	149.1	164.4	212.6	320.0	249.9	265.2	469.1	1074.1	1407.3	1543.2	1670.3
85°	70.1	76.7	129.3	171.0	151.3	142.5	267.4	758.4	1047.8	1111.4	1159.6
87.5°	0.0	0.0	6.6	13.2	19.7	19.7	48.2	160.0	293.7	355.1	350.7
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2
2.5°	6532.3	6534.5	6532.3	6532.3	6530.1	6525.7	6525.7	6521.3	6523.5	6521.3	6525.7
5°	6633.1	6633.1	6626.5	6622.2	6628.7	6622.2	6624.3	6613.4	6613.4	6606.8	6598.0
7.5°	6777.8	6777.8	6780.0	6766.8	6775.6	6777.8	6771.2	6766.8	6762.4	6751.5	6753.7
10°	6970.7	6970.7	6977.3	6959.7	6968.5	6972.9	6975.1	6975.1	6970.7	6951.0	6953.2
12.5°	7185.5	7181.1	7183.3	7174.5	7183.3	7187.7	7192.1	7187.7	7187.7	7183.3	7181.1
15°	7380.6	7378.4	7382.8	7376.2	7378.4	7382.8	7395.9	7393.8	7391.6	7378.4	7378.4
17.5°	7514.3	7507.7	7503.4	7501.2	7501.2	7499.0	7501.2	7501.2	7494.6	7492.4	7492.4
20°	7564.7	7547.2	7536.2	7529.7	7520.9	7516.5	7512.1	7514.3	7509.9	7503.4	7505.5
22.5°	7573.5	7549.4	7527.5	7507.7	7490.2	7479.2	7468.3	7463.9	7452.9	7446.4	7446.4
25°	7615.1	7577.9	7542.8	7509.9	7483.6	7459.5	7435.4	7417.9	7404.7	7389.4	7385.0
27.5°	7707.2	7667.8	7626.1	7584.5	7549.4	7501.2	7468.3	7433.2	7402.5	7378.4	7360.9
30°	7849.7	7810.2	7768.6	7720.4	7674.3	7623.9	7569.1	7527.5	7483.6	7435.4	7409.1
32.5°	8038.2	8011.9	7970.3	7924.2	7882.6	7830.0	7764.2	7700.6	7659.0	7602.0	7560.3
35°	8307.8	8277.1	8264.0	8244.3	8202.6	8169.7	8097.4	8038.2	7998.8	7919.8	7889.2
37.5°	8676.1	8673.9	8684.9	8678.3	8684.9	8643.2	8610.3	8608.1	8551.2	8474.4	8399.9
40°	9178.1	9204.4	9263.6	9305.2	9344.7	9349.1	9395.1	9346.9	9353.4	9342.5	9265.8
42.5°	9750.2	9840.1	9910.2	10033.0	10127.2	10214.9	10274.1	10355.2	10416.6	10471.4	10484.5
45°	10388.1	10521.8	10684.0	10793.6	10977.7	11124.6	11326.3	11481.9	11644.1	11804.1	11861.1
47.5°	11080.8	11247.4	11427.1	11631.0	11863.3	12093.5	12404.8	12643.7	12904.5	13121.6	13314.5
50°	11845.8	12019.0	12260.1	12494.6	12814.7	13079.9	13487.6	13801.1	14222.0	14511.3	14761.2
52.5°	12643.7	12860.7	13130.3	13389.0	13715.6	14055.4	14509.1	14971.6	15478.0	15916.4	16280.3
55°	13424.1	13691.5	13950.1	14252.6	14614.3	15008.9	15521.8	16131.2	16762.5	17264.5	17746.8
57.5°	14118.9	14428.0	14732.7	15039.6	15410.0	15868.2	16444.7	17102.3	17825.7	18494.2	19156.2
60°	14763.4	15133.8	15506.5	15890.1	16315.4	16880.9	17573.6	18382.5	19318.5	20232.5	21098.4
62.5°	15782.7	16269.3	16731.8	17227.2	17740.2	18404.4	19222.0	20283.0	21357.1	22499.1	23386.9
65°	17163.7	17847.6	18452.6	19094.9	19759.1	20646.8	21624.5	22893.7	24432.5	25603.0	27027.9
67.5°	17849.8	18750.7	19528.9	20243.5	21065.5	21962.1	23123.8	24625.4	26267.2	27963.9	29553.1
69°	17043.1	17972.5	18834.0	19634.1	20464.9	21335.1	22549.5	24090.5	25826.6	27661.4	29213.3
70°	15997.5	16926.9	17845.4	18757.3	19515.7	20364.1	21582.8	23172.1	24906.0	26813.0	28351.9
72.5°	12255.7	13373.6	14204.4	15059.3	15938.3	16657.3	18064.6	19403.9	21210.2	23145.8	24840.2
75°	7840.9	8869.0	9776.5	10504.3	11363.5	12225.0	13264.0	14752.4	15883.5	17472.8	18847.2
77.5°	4029.0	4333.7	5208.3	5469.1	6065.4	6534.5	7106.6	7479.2	8399.9	8595.0	9406.0
80°	1909.3	1720.8	1619.9	1527.9	1554.2	1543.2	1497.2	1435.8	1512.5	1479.6	1466.5
82.5°	1663.8	1484.0	1183.7	1006.1	870.2	738.7	635.7	583.1	589.7	607.2	613.8
85°	1166.2	1096.0	854.9	648.8	506.4	392.4	315.7	302.5	311.3	335.4	326.6
87.5°	337.6	352.9	311.3	217.0	151.3	109.6	85.5	96.4	92.1	89.9	94.3
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2
2.5°	6525.7	6523.5	6516.9	6510.4	6510.4	6506.0	6510.4	6512.6	6510.4	6510.4	6506.0
5°	6600.2	6602.4	6609.0	6595.9	6593.7	6595.9	6587.1	6584.9	6578.3	6584.9	6576.1
7.5°	6742.7	6749.3	6749.3	6740.5	6738.3	6744.9	6731.8	6727.4	6720.8	6718.6	6716.4
10°	6955.3	6961.9	6951.0	6944.4	6937.8	6946.6	6935.6	6935.6	6929.0	6922.5	6920.3
12.5°	7192.1	7187.7	7183.3	7187.7	7181.1	7181.1	7174.5	7170.2	7168.0	7165.8	7161.4
15°	7376.2	7391.6	7391.6	7395.9	7391.6	7391.6	7382.8	7385.0	7380.6	7378.4	7380.6
17.5°	7494.6	7499.0	7509.9	7516.5	7516.5	7518.7	7514.3	7518.7	7514.3	7514.3	7523.1
20°	7509.9	7514.3	7525.3	7536.2	7542.8	7547.2	7547.2	7553.8	7558.2	7562.5	7573.5
22.5°	7448.6	7455.1	7468.3	7488.0	7499.0	7503.4	7512.1	7523.1	7534.0	7542.8	7558.2
25°	7385.0	7387.2	7400.3	7420.1	7433.2	7444.2	7459.5	7472.7	7488.0	7505.5	7523.1
27.5°	7349.9	7347.7	7358.7	7378.4	7389.4	7404.7	7417.9	7437.6	7455.1	7477.1	7492.4
30°	7380.6	7363.1	7365.3	7374.0	7382.8	7393.8	7409.1	7426.6	7446.4	7466.1	7483.6
32.5°	7516.5	7477.1	7450.7	7444.2	7446.4	7448.6	7457.3	7468.3	7483.6	7499.0	7505.5
35°	7810.2	7742.3	7707.2	7678.7	7654.6	7634.9	7639.3	7637.1	7637.1	7650.2	7634.9
37.5°	8369.2	8283.7	8246.5	8196.0	8167.5	8095.2	8075.5	8071.1	8042.6	8042.6	8009.7
40°	9246.0	9195.6	9167.1	9121.1	8983.0	9000.5	8901.9	8904.1	8823.0	8831.7	8774.7
42.5°	10493.3	10499.9	10464.8	10434.1	10326.7	10278.5	10186.4	10054.9	9951.9	9949.7	9835.7
45°	11935.7	12014.6	11902.8	11942.2	11848.0	11718.7	11611.2	11442.5	11282.4	11232.0	11115.8
47.5°	13443.8	13573.1	13487.6	13503.0	13456.9	13272.8	13128.1	12919.9	12711.6	12571.4	12501.2
50°	15054.9	15140.4	15138.2	15096.6	15074.7	14894.9	14662.6	14504.7	14351.3	14162.8	14101.4
52.5°	16514.8	16714.3	16848.0	16817.3	16753.8	16646.4	16440.3	16304.4	16078.6	16052.3	16078.6
55°	18077.8	18336.4	18472.3	18636.7	18638.9	18619.2	18533.7	18483.3	18272.9	18297.0	18266.3
57.5°	19557.4	19936.6	20144.9	20495.6	20616.1	20776.2	20717.0	20782.7	20655.6	20738.9	20714.8
60°	21563.1	22089.2	22435.5	22915.6	23139.2	23540.3	23619.2	23667.5	23737.6	23908.6	23812.1
62.5°	24086.1	24857.7	25576.7	26230.0	26444.8	27047.6	27146.2	27523.3	27543.0	27659.2	27446.5
65°	28215.9	29156.3	29947.7	30730.2	31181.8	31887.6	32172.6	32904.7	32681.1	32775.4	32321.6
67.5°	30920.9	32014.8	33075.7	33816.6	34566.3	35287.5	35807.0	36280.5	36276.1	36184.0	35780.7
69°	30682.0	31900.8	32946.4	33939.4	34728.5	35469.4	36094.1	36401.0	36508.4	36374.7	36087.6
70°	29855.6	31107.3	32387.4	33205.0	34064.3	34877.6	35522.0	35857.4	35931.9	35837.7	35590.0
72.5°	26037.1	27238.3	28650.0	29393.1	30432.1	31019.6	31907.3	32341.4	32418.1	32297.5	32135.3
75°	20320.2	20537.2	21975.2	22448.7	23202.8	23880.1	24432.5	24292.2	24684.6	24607.9	24546.5
77.5°	9572.6	8993.9	9925.6	10359.6	10131.6	9524.4	10407.8	9769.9	10193.0	10743.2	10602.9
80°	1578.3	1573.9	1615.5	1707.6	1598.0	1696.6	1694.4	1646.2	1650.6	1769.0	1707.6
82.5°	607.2	620.3	626.9	644.5	644.5	646.7	657.6	670.8	659.8	681.7	677.3
85°	328.8	350.7	331.0	315.7	326.6	333.2	342.0	352.9	342.0	374.8	357.3
87.5°	85.5	89.9	78.9	78.9	76.7	70.1	70.1	74.5	81.1	96.4	105.2
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):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2
2.5°	6497.2	6499.4	6501.6	6495.0	6490.6	6490.6	6488.4	6484.1	6481.9	6481.9	6481.9
5°	6571.7	6576.1	6565.2	6563.0	6558.6	6554.2	6554.2	6549.8	6552.0	6552.0	6541.0
7.5°	6720.8	6714.2	6701.1	6692.3	6701.1	6685.7	6679.1	6683.5	6679.1	6681.3	6677.0
10°	6920.3	6920.3	6904.9	6913.7	6902.7	6885.2	6891.8	6885.2	6880.8	6865.5	6874.2
12.5°	7168.0	7161.4	7152.6	7132.9	7126.3	7124.1	7104.4	7106.6	7100.0	7095.6	7089.1
15°	7385.0	7382.8	7363.1	7352.1	7349.9	7341.1	7332.4	7328.0	7317.0	7314.8	7310.5
17.5°	7529.7	7523.1	7514.3	7503.4	7503.4	7490.2	7485.8	7474.9	7472.7	7466.1	7459.5
20°	7577.9	7580.1	7571.3	7562.5	7558.2	7549.4	7542.8	7534.0	7529.7	7520.9	7514.3
22.5°	7566.9	7566.9	7558.2	7556.0	7547.2	7534.0	7525.3	7514.3	7503.4	7492.4	7479.2
25°	7531.9	7529.7	7523.1	7512.1	7501.2	7481.4	7463.9	7446.4	7431.0	7417.9	7398.1
27.5°	7501.2	7496.8	7483.6	7468.3	7446.4	7424.4	7391.6	7367.4	7347.7	7330.2	7308.3
30°	7490.2	7474.9	7455.1	7431.0	7404.7	7371.8	7336.8	7306.1	7284.2	7266.6	7257.8
32.5°	7503.4	7483.6	7452.9	7422.3	7389.4	7349.9	7314.8	7288.5	7268.8	7264.4	7264.4
35°	7623.9	7591.0	7549.4	7505.5	7463.9	7431.0	7406.9	7404.7	7391.6	7406.9	7431.0
37.5°	7976.8	7948.3	7884.8	7827.8	7799.3	7783.9	7762.0	7766.4	7735.7	7783.9	7823.4
40°	8726.5	8691.4	8616.9	8570.9	8513.9	8459.1	8502.9	8489.8	8511.7	8502.9	8544.6
42.5°	9820.3	9785.3	9666.9	9649.4	9625.3	9603.3	9603.3	9585.8	9577.0	9607.7	9572.6
45°	11150.9	11080.8	11036.9	11089.5	11017.2	11039.1	11115.8	11012.8	11036.9	10894.4	10762.9
47.5°	12531.9	12525.3	12514.4	12577.9	12588.9	12621.8	12663.4	12558.2	12367.5	12260.1	11992.7
50°	14121.1	14189.1	14215.4	14276.8	14303.1	14327.2	14261.4	14105.8	13783.6	13498.6	13182.9
52.5°	16052.3	15933.9	16096.2	16155.3	16129.0	16032.6	15795.8	15605.1	15160.2	14750.2	14261.4
55°	18301.3	18329.8	18215.9	18169.8	18080.0	17812.5	17485.9	17056.3	16492.9	15958.1	15339.9
57.5°	20592.0	20581.1	20403.5	20153.6	19848.9	19526.7	19040.1	18424.1	17766.5	17047.5	16300.0
60°	23378.1	23367.2	23007.7	22580.2	22146.2	21626.7	20863.8	20122.9	19241.7	18297.0	17407.0
62.5°	27038.8	26567.5	26214.6	25576.7	24906.0	24226.4	23194.0	22209.8	21032.6	19840.2	18801.1
65°	31729.8	30953.8	30552.7	29627.6	28588.6	27527.6	26477.7	25184.4	23599.5	22157.1	20888.0
67.5°	35199.8	34489.6	33755.2	32832.4	31692.5	30508.8	29070.8	27442.2	25642.5	24024.8	22641.6
69°	35504.5	34840.3	33959.1	33034.1	31955.6	30668.8	29099.3	27275.6	25451.8	23814.3	22453.1
70°	35042.0	34336.1	33408.9	32446.6	31241.0	30026.6	28382.5	26482.0	24656.1	23014.2	21685.9
72.5°	31591.7	30903.4	29917.0	28766.2	27529.8	26490.8	24930.1	22948.5	20962.5	19445.6	18411.0
75°	24022.6	23871.3	23172.1	22501.3	21528.0	20368.4	18941.4	17608.7	15980.0	14375.4	13410.9
77.5°	10250.0	10598.5	10962.4	11015.0	11050.1	10692.8	10471.4	10136.0	9046.6	8551.2	8040.4
80°	1893.9	1692.3	1806.2	1819.4	1893.9	1933.4	2078.1	2463.9	2507.7	2602.0	2718.1
82.5°	673.0	683.9	701.5	708.0	714.6	740.9	839.6	1006.1	1157.4	1354.7	1617.7
85°	381.4	388.0	403.3	416.5	425.3	451.6	506.4	605.0	754.1	979.8	1328.4
87.5°	116.2	131.5	140.3	157.8	164.4	168.8	192.9	258.7	333.2	493.2	719.0
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):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2	6486.2
2.5°	6481.9	6479.7	6475.3	6470.9	6473.1	6468.7	6455.6	6451.2	6435.8	6424.9	6416.1
5°	6541.0	6538.9	6530.1	6532.3	6530.1	6508.2	6492.8	6466.5	6451.2	6427.1	6418.3
7.5°	6663.8	6661.6	6646.3	6652.8	6648.5	6615.6	6589.3	6547.6	6525.7	6495.0	6470.9
10°	6847.9	6847.9	6830.4	6832.6	6832.6	6788.8	6742.7	6672.6	6622.2	6573.9	6532.3
12.5°	7071.5	7062.8	7060.6	7049.6	7040.8	6992.6	6922.5	6828.2	6733.9	6655.0	6598.0
15°	7297.3	7284.2	7277.6	7264.4	7253.5	7209.6	7115.4	6999.2	6872.0	6744.9	6650.7
17.5°	7444.2	7435.4	7422.3	7417.9	7402.5	7358.7	7292.9	7176.7	7018.9	6841.4	6698.9
20°	7499.0	7483.6	7474.9	7466.1	7457.3	7426.6	7426.6	7352.1	7176.7	6926.8	6709.8
22.5°	7463.9	7455.1	7442.0	7435.4	7426.6	7431.0	7516.5	7505.5	7303.9	6946.6	6630.9
25°	7382.8	7371.8	7360.9	7360.9	7358.7	7404.7	7610.8	7639.3	7341.1	6850.1	6457.8
27.5°	7299.5	7284.2	7288.5	7290.7	7301.7	7400.3	7713.8	7674.3	7240.3	6617.8	6159.6
30°	7249.1	7249.1	7260.0	7277.6	7299.5	7472.7	7794.9	7595.4	6979.5	6267.0	5765.1
32.5°	7271.0	7292.9	7317.0	7360.9	7393.8	7632.7	7823.4	7391.6	6600.2	5833.0	5353.0
35°	7466.1	7492.4	7538.4	7606.4	7645.8	7862.9	7823.4	7093.4	6159.6	5460.4	4927.7
37.5°	7891.3	7917.7	7972.5	8025.1	8064.5	8152.2	7790.5	6714.2	5791.4	5074.6	4546.3
40°	8575.3	8612.5	8652.0	8643.2	8616.9	8531.4	7724.8	6361.3	5451.6	4737.0	4171.5
42.5°	9537.6	9502.5	9498.1	9412.6	9324.9	8958.9	7676.5	6131.1	5160.1	4381.9	3798.8
45°	10648.9	10506.5	10359.6	10245.6	10111.9	9428.0	7663.4	5944.8	4837.8	3987.3	3393.3
47.5°	11766.9	11538.9	11253.9	11076.4	10859.4	9927.8	7702.8	5694.9	4423.5	3557.7	3014.1
50°	12862.9	12490.2	12137.3	11924.7	11679.2	10502.1	7766.4	5274.1	3928.1	3167.5	2667.7
52.5°	13877.8	13397.8	13036.1	12786.2	12485.9	11170.6	7709.4	4721.7	3498.5	2792.7	2338.9
55°	14842.3	14311.8	13937.0	13674.0	13321.0	11841.4	7297.3	4219.7	3088.6	2426.6	1968.5
57.5°	15686.2	15177.7	14787.5	14430.2	14132.1	12424.5	6484.1	3805.4	2694.0	2007.9	1567.3
60°	16672.7	16100.5	15638.0	15256.6	14905.9	12724.8	5572.2	3437.1	2273.1	1554.2	1133.3
62.5°	18003.2	17345.6	16810.8	16374.5	15916.4	12790.6	4949.6	3068.9	1804.0	1124.5	824.2
65°	19976.1	19165.0	18496.4	17895.8	17275.5	12518.7	4642.7	2667.7	1341.5	835.2	690.5
67.5°	21543.4	20701.6	19927.8	19156.2	18362.7	12014.6	4574.8	2297.3	1030.3	710.2	620.3
69°	21352.7	20550.4	19840.2	19005.0	18126.0	11381.1	4506.8	2154.8	940.4	659.8	587.5
70°	20618.3	19857.7	19136.5	18457.0	17380.7	10675.2	4327.1	2075.9	905.3	635.7	563.4
72.5°	17422.3	16541.1	15841.9	14995.8	13862.5	7933.0	3281.5	1679.1	830.8	580.9	508.6
75°	12707.3	11977.3	11280.2	10344.2	9241.6	4590.1	2043.0	960.1	609.4	526.1	460.3
77.5°	7420.1	7255.7	6582.7	5966.7	4875.1	2336.7	1172.7	574.3	473.5	477.9	405.5
80°	2792.7	2974.6	3042.6	2829.9	2615.1	1613.3	852.7	466.9	412.1	471.3	344.2
82.5°	2036.4	2363.0	2402.5	2301.6	2141.6	1503.7	681.7	374.8	335.4	506.4	295.9
85°	1698.8	1880.8	1909.3	1804.0	1751.4	1273.6	475.7	263.0	245.5	363.9	221.4
87.5°	859.3	905.3	929.4	841.7	846.1	594.0	190.7	111.8	133.7	155.6	122.8
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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CATALOG NUMBER: VST-E12-LED-E-U-RW-7030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	6486.2	6486.2
2.5°	6396.4	6409.5
5°	6405.1	6405.1
7.5°	6455.6	6455.6
10°	6510.4	6512.6
12.5°	6560.8	6558.6
15°	6600.2	6593.7
17.5°	6624.3	6617.8
20°	6600.2	6589.3
22.5°	6477.5	6446.8
25°	6253.9	6214.4
27.5°	5958.0	5931.7
30°	5572.2	5532.7
32.5°	5120.6	5100.9
35°	4688.8	4664.7
37.5°	4294.2	4287.6
40°	3961.0	3925.9
42.5°	3570.8	3555.5
45°	3174.1	3165.3
47.5°	2801.4	2792.7
50°	2457.3	2439.7
52.5°	2119.7	2091.2
55°	1744.9	1725.1
57.5°	1339.3	1321.8
60°	942.6	922.8
62.5°	670.8	648.8
65°	559.0	541.4
67.5°	506.4	486.6
69°	482.2	464.7
70°	466.9	453.8
72.5°	434.0	425.3
75°	396.8	390.2
77.5°	348.5	337.6
80°	291.5	280.6
82.5°	245.5	234.5
85°	164.4	149.1
87.5°	74.5	65.8
90°	0.0	0.0

(END OF REPORT)