

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: P165265

Luminaire Tested: **VST-E05-LED-E-U-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165265
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
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-SL3-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (105) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7229.2 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

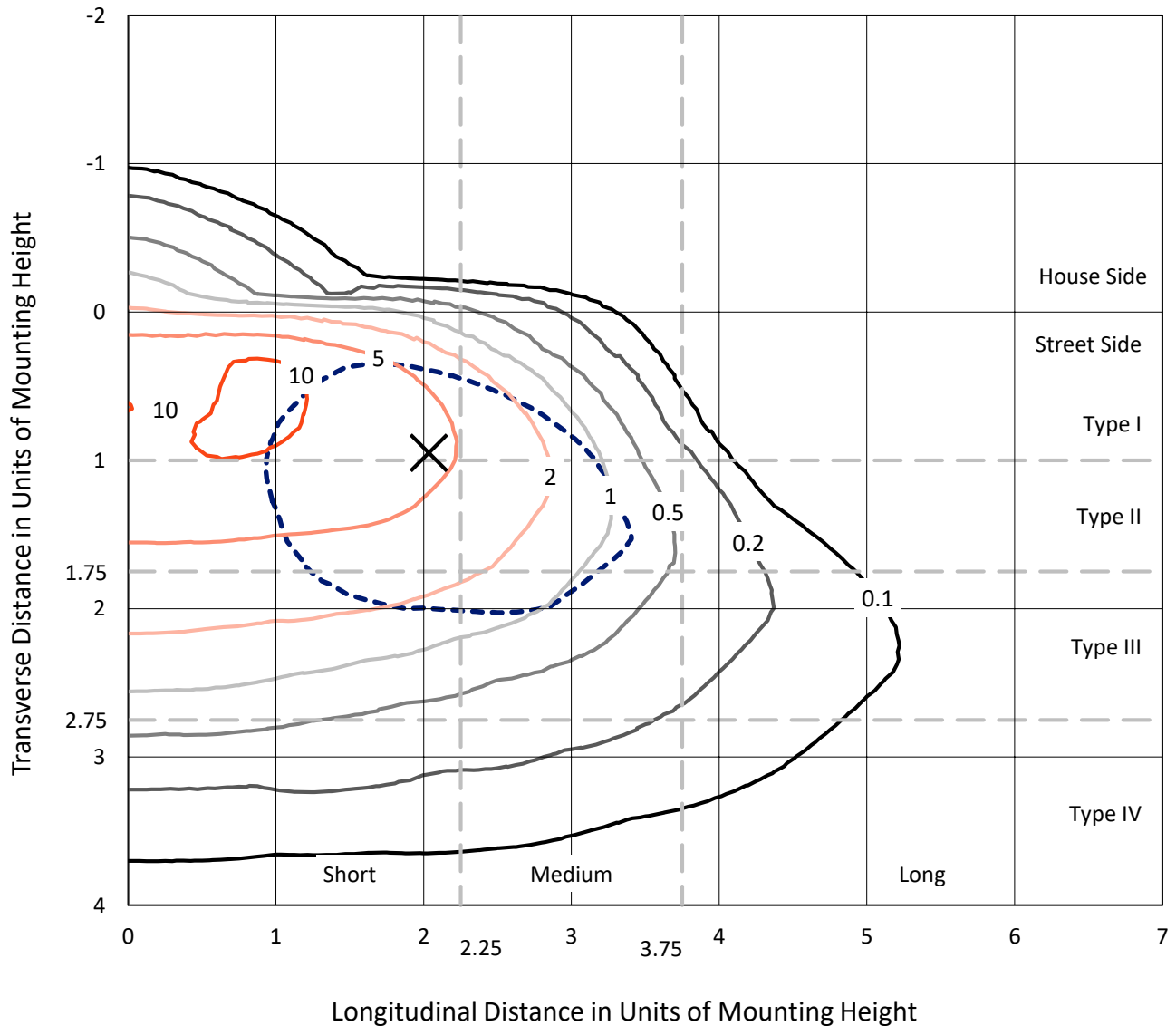
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P165265
 CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

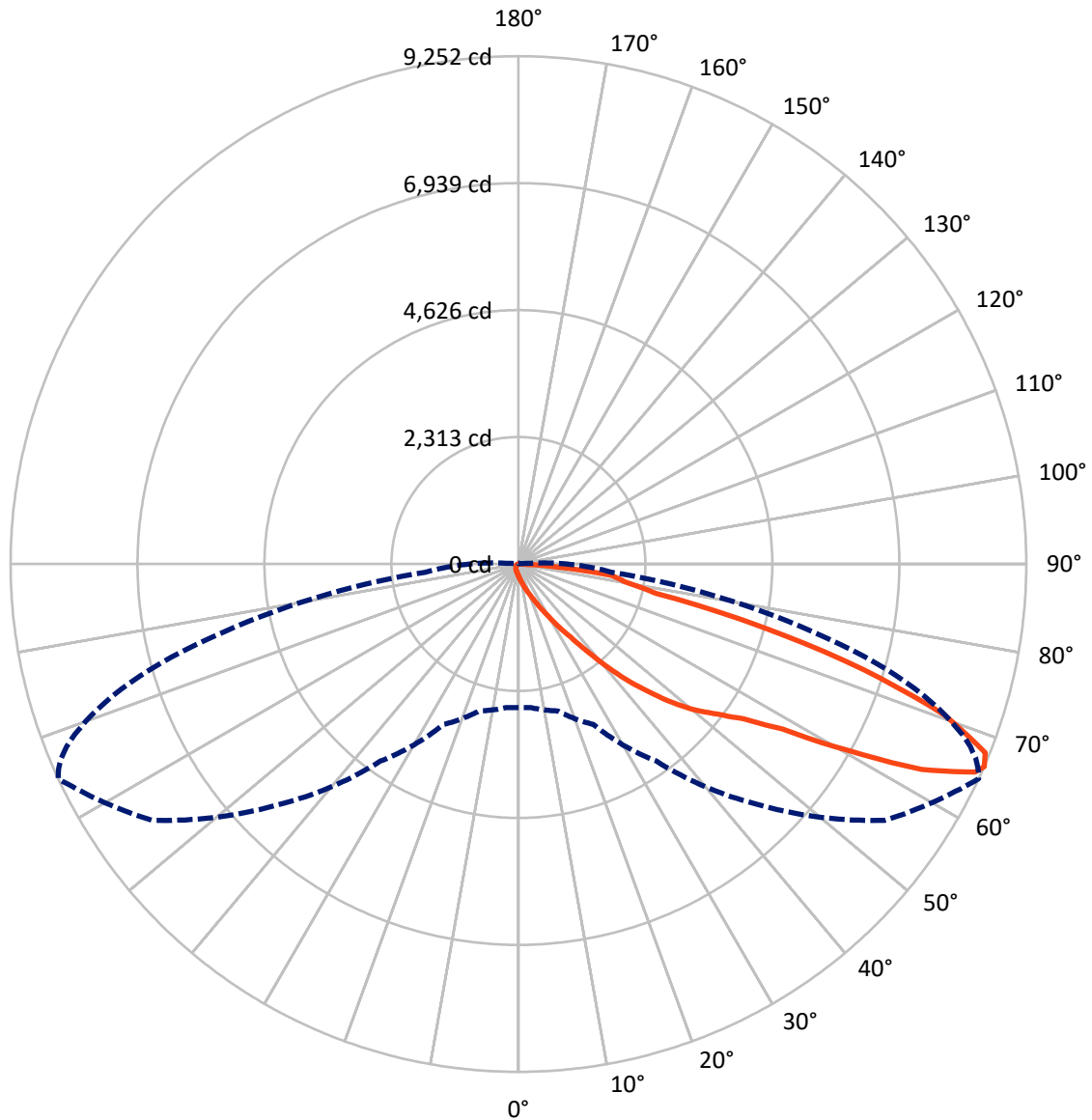
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.9 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P165265
CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical



REPORT NUMBER: P165265

CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	156.7	0.0	156.7
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	7072.5	0.0	7072.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	7229.2	0.0	7229.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	0.3
10°-20°	103.6	1.4
20°-30°	223.4	3.1
30°-40°	477.1	6.6
40°-50°	1055.0	14.6
50°-60°	1787.9	24.7
60°-70°	2385.8	33.0
70°-80°	1050.9	14.5
80°-90°	121.1	1.7
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°	7229.2	100.0
0°-180°	7229.2	100.0



REPORT NUMBER: P165265

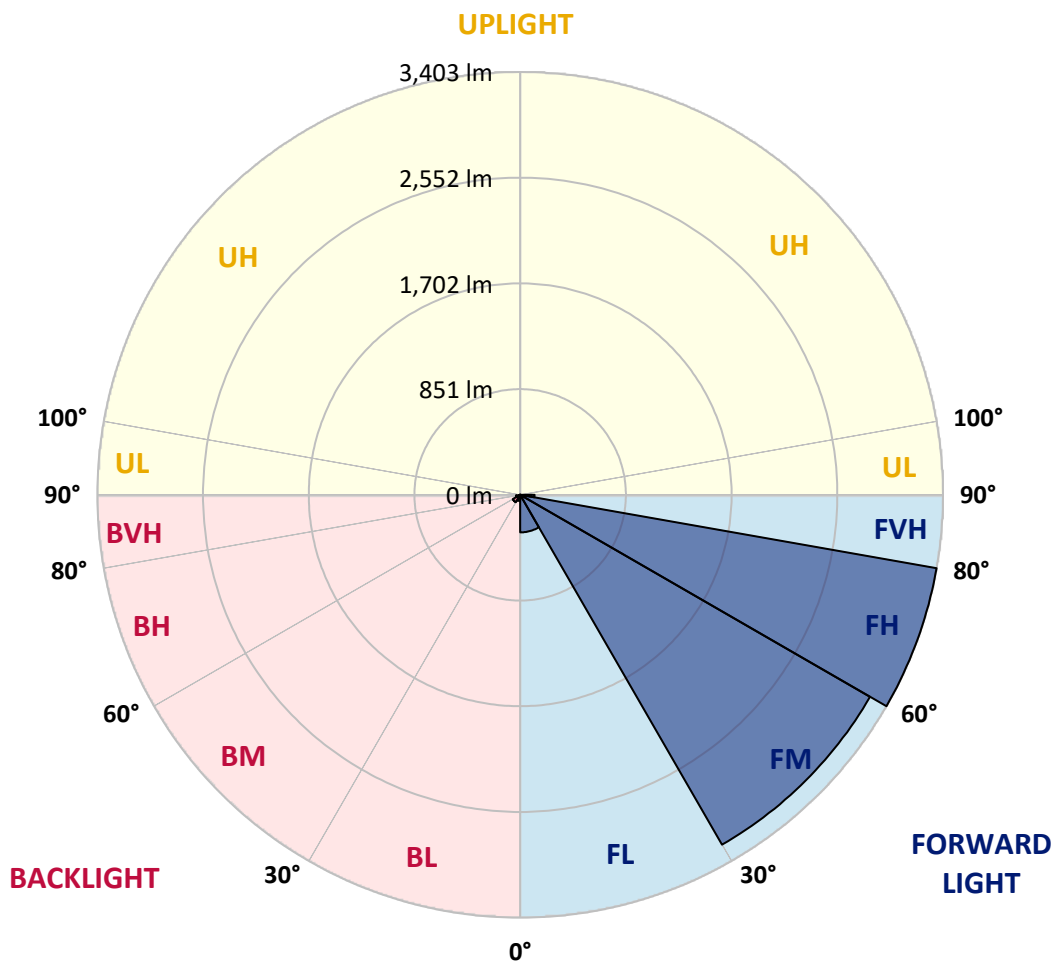
CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	302.0	4.2			
FM	(30°-60°)	3251.2	45.0			
FH	(60°-80°)	3403.2	47.1			G2/5000
FVH	(80°-90°)	116.2	1.6			G2/225
BL	(0°-30°)	49.4	0.7	B0/110		
BM	(30°-60°)	68.8	1.0	B0/220		
BH	(60°-80°)	33.6	0.5	B0/110		G0/110
BVH	(80°-90°)	4.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





REPORT NUMBER: P165265
 CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2
2.5°	275.2	273.8	268.2	268.2	259.9	254.4	247.4	240.5	240.5	239.0	237.7
5°	364.1	355.8	354.4	339.1	326.6	308.6	291.9	269.7	266.9	264.1	262.6
7.5°	462.8	461.4	448.9	430.9	405.9	372.5	339.1	303.0	297.4	294.6	289.1
10°	590.7	583.7	567.1	536.4	499.0	454.5	400.3	343.3	336.3	330.8	328.0
12.5°	713.0	700.5	690.7	651.8	604.6	539.2	473.9	391.9	386.4	379.5	368.3
15°	826.9	815.8	799.2	765.8	713.0	631.0	554.6	454.5	440.6	430.9	422.5
17.5°	915.9	909.0	889.5	852.0	795.0	722.7	631.0	518.4	507.3	494.7	479.5
20°	1000.7	990.9	960.4	909.0	847.8	792.2	721.4	601.8	586.5	571.2	554.6
22.5°	1081.3	1071.5	1021.6	936.7	871.4	847.8	822.8	696.3	672.7	660.2	643.5
25°	1193.9	1173.1	1095.2	960.4	872.9	890.9	934.0	818.6	796.4	778.3	751.9
27.5°	1345.4	1317.6	1195.3	995.1	878.3	938.2	1061.8	967.3	943.7	922.8	893.7
30°	1516.3	1498.3	1352.3	1078.5	918.7	1007.6	1205.0	1156.4	1128.6	1103.5	1068.8
32.5°	1688.7	1663.7	1519.1	1237.0	1027.1	1142.4	1384.3	1376.0	1339.8	1316.2	1278.6
35°	1840.2	1827.7	1720.6	1496.8	1274.5	1378.7	1623.3	1633.0	1601.1	1576.1	1534.4
37.5°	1943.0	1943.0	1922.2	1776.2	1667.8	1745.6	1974.9	1976.4	1944.4	1887.4	1866.6
40°	1995.8	2011.1	2086.2	2113.9	2108.4	2208.5	2436.4	2411.4	2384.9	2355.7	2286.3
42.5°	2104.2	2118.1	2277.9	2469.8	2594.9	2726.9	2883.9	2875.6	2843.7	2790.8	2726.9
45°	2287.7	2305.8	2496.2	2800.5	3057.6	3245.3	3345.3	3306.4	3274.4	3224.5	3191.0
47.5°	2521.2	2555.9	2771.3	3148.0	3457.9	3767.8	3872.1	3769.3	3741.5	3702.5	3648.3
50°	2770.0	2803.3	3032.6	3463.5	3813.7	4183.4	4357.2	4183.4	4143.2	4130.6	4069.5
52.5°	2985.4	3013.2	3234.2	3706.7	4086.1	4519.7	4772.7	4543.4	4514.2	4472.5	4428.0
55°	3113.2	3135.5	3342.5	3823.4	4271.0	4822.7	5174.4	4972.9	4929.8	4913.1	4849.1
57.5°	3156.4	3178.6	3364.8	3838.7	4371.0	5099.3	5662.3	5669.2	5617.8	5558.0	5538.5
60°	3156.4	3181.3	3338.4	3801.3	4468.3	5393.9	6312.6	6892.2	6781.0	6769.9	6699.0
62.5°	3025.7	3049.3	3207.8	3685.9	4599.0	5791.5	7218.8	8241.7	8209.8	8137.5	8020.8
65°	2742.1	2756.1	2911.7	3391.2	4548.9	6157.0	8004.1	9139.6	9088.2	8946.4	8796.3
66°	2614.3	2625.4	2771.3	3223.0	4385.0	6207.0	8143.1	9252.2	9167.4	9047.8	8878.3
67.5°	2429.4	2448.9	2551.7	2910.3	3991.7	6033.3	8055.6	9173.0	9099.3	8954.7	8785.2
70°	1622.0	1608.1	1970.8	2233.5	3041.0	4915.9	7227.2	8236.2	8237.6	8169.5	8101.4
72.5°	770.0	778.3	883.9	1374.5	1990.2	3284.2	5752.6	6573.9	6668.5	6546.2	6461.3
75°	553.2	565.6	629.6	840.9	1186.9	1970.8	3728.9	4597.6	4600.3	4383.5	4190.4
77.5°	161.2	168.2	236.2	518.4	889.5	1330.0	2141.7	2555.9	2496.2	2340.5	2194.5
80°	66.7	66.7	69.5	165.4	357.2	903.4	1498.3	1968.0	1961.1	1901.3	1815.2
82.5°	25.0	26.4	33.3	68.1	84.8	222.4	999.3	1708.2	1703.9	1619.2	1558.0
85°	2.8	2.8	8.4	29.2	32.0	41.7	200.1	753.3	749.1	753.3	660.2
87.5°	0.0	0.0	1.4	2.8	4.1	5.6	8.4	29.2	32.0	30.6	27.8
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: P165265
 CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2
2.5°	237.7	234.9	234.9	233.5	233.5	233.5	232.1	230.7	230.7	229.3	228.0
5°	259.9	257.1	255.7	252.9	251.6	250.2	247.4	246.0	243.2	241.8	240.5
7.5°	286.3	280.7	279.4	275.2	271.0	268.2	265.4	261.3	258.5	252.9	251.6
10°	319.7	312.7	307.1	301.6	297.4	290.5	286.3	280.7	275.2	271.0	266.9
12.5°	362.7	353.0	344.7	339.1	329.4	321.1	312.7	308.6	297.4	291.9	284.9
15°	410.0	398.9	389.2	378.0	371.1	357.2	346.0	333.5	328.0	318.3	307.1
17.5°	471.1	453.1	437.8	426.7	412.8	398.9	386.4	373.9	357.2	346.0	332.2
20°	536.4	521.2	500.3	480.9	464.2	447.6	429.4	412.8	397.5	379.5	362.7
22.5°	619.9	597.6	572.6	553.2	531.0	512.9	487.8	465.6	440.6	416.9	397.5
25°	725.5	696.3	672.7	644.9	618.5	590.7	560.1	532.3	500.3	478.1	444.8
27.5°	856.1	828.4	796.4	760.3	733.9	692.2	651.8	617.1	579.6	544.8	507.3
30°	1022.9	982.7	949.2	914.5	861.7	821.4	774.1	726.9	675.4	640.8	583.7
32.5°	1223.0	1180.0	1129.9	1079.9	1031.3	974.3	915.9	857.5	800.5	736.6	678.2
35°	1467.7	1416.2	1359.2	1305.1	1230.0	1168.8	1095.2	1014.6	950.7	877.0	803.3
37.5°	1791.5	1706.7	1656.7	1599.7	1498.3	1414.9	1332.8	1252.2	1139.6	1061.8	957.6
40°	2197.3	2147.3	2065.3	1973.6	1881.8	1772.0	1660.9	1553.9	1423.2	1314.8	1193.9
42.5°	2674.0	2600.4	2517.0	2384.9	2291.9	2162.6	2036.1	1894.3	1734.5	1595.6	1453.8
45°	3121.6	3034.1	2970.1	2838.1	2740.8	2587.8	2435.0	2284.9	2100.0	1920.8	1756.8
47.5°	3605.3	3532.9	3427.4	3320.3	3221.7	3049.3	2883.9	2701.9	2507.2	2294.6	2082.0
50°	4030.6	3973.6	3901.3	3772.0	3662.2	3517.7	3323.1	3124.4	2878.3	2667.1	2425.3
52.5°	4391.9	4347.4	4245.9	4154.2	4055.5	3919.3	3745.6	3555.2	3289.8	3057.6	2782.5
55°	4818.6	4786.6	4697.7	4640.7	4553.2	4422.5	4259.9	4083.4	3802.6	3549.7	3238.3
57.5°	5517.7	5492.7	5414.8	5391.2	5305.0	5191.1	4990.9	4801.9	4473.9	4159.8	3804.0
60°	6675.4	6625.4	6511.4	6453.1	6270.9	6118.1	5858.2	5598.3	5202.2	4801.9	4373.8
62.5°	7915.1	7774.8	7557.9	7371.8	7113.2	6847.7	6500.2	6102.8	5638.6	5163.3	4671.2
65°	8583.6	8344.6	8070.8	7774.8	7439.9	7049.3	6611.5	6134.8	5635.8	5134.1	4614.3
66°	8660.1	8390.5	8100.0	7770.6	7398.2	6982.6	6537.8	6037.5	5519.0	5029.8	4510.0
67.5°	8564.2	8282.1	7975.0	7609.4	7206.3	6775.5	6308.5	5788.7	5289.7	4793.5	4287.6
70°	7892.9	7612.1	7338.3	6953.4	6523.9	6090.3	5648.3	5067.4	4594.9	4138.9	3688.7
72.5°	6302.9	6112.5	5841.5	5512.1	5093.7	4585.1	4216.7	3697.0	3287.0	2845.0	2496.2
75°	3938.8	3670.6	3335.6	2915.9	2596.2	2183.4	1968.0	1573.3	1339.8	1135.5	938.2
77.5°	2013.8	1812.4	1577.5	1341.2	1114.7	889.5	687.9	486.5	328.0	228.0	169.6
80°	1663.7	1485.8	1291.1	1075.8	875.6	679.7	489.3	333.5	212.7	139.0	108.4
82.5°	1374.5	1224.5	1050.7	850.6	676.9	533.7	371.1	241.8	150.1	97.3	76.5
85°	585.1	531.0	410.0	325.2	244.6	180.7	126.5	84.8	59.8	48.6	44.5
87.5°	25.0	27.8	26.4	20.8	15.3	15.3	13.9	11.1	11.1	11.1	11.1
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: P165265
 CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2	218.2
2.5°	228.0	226.5	225.2	225.2	223.7	222.4	214.0	207.1	198.8	193.2	187.6
5°	237.7	236.2	233.5	232.1	229.3	228.0	209.9	194.5	182.0	172.3	165.4
7.5°	247.4	246.0	241.8	237.7	236.2	233.5	204.3	184.8	168.2	157.1	150.1
10°	259.9	255.7	251.6	246.0	241.8	237.7	198.8	173.7	155.6	145.9	139.0
12.5°	277.9	271.0	264.1	257.1	251.6	244.6	196.0	164.0	145.9	134.8	127.9
15°	298.9	289.1	280.7	272.4	262.6	255.7	190.4	155.6	137.6	126.5	118.2
17.5°	318.3	307.1	294.6	282.1	272.4	262.6	184.8	147.4	129.2	118.2	109.8
20°	346.0	329.4	314.1	298.9	284.9	272.4	176.5	139.0	122.3	109.8	101.4
22.5°	376.7	357.2	337.8	316.9	298.9	282.1	169.6	132.0	115.4	102.9	93.1
25°	415.6	391.9	365.5	339.1	318.3	296.1	162.6	125.1	108.4	95.9	86.2
27.5°	469.8	436.4	407.2	373.9	341.9	316.9	157.1	119.5	101.4	89.0	79.3
30°	543.4	494.7	448.9	412.8	375.2	339.1	151.5	112.6	95.9	82.0	70.9
32.5°	625.4	568.4	515.6	461.4	414.1	372.5	145.9	107.0	89.0	75.0	65.3
35°	726.9	654.6	583.7	521.2	464.2	408.6	140.4	101.4	83.4	68.1	58.4
37.5°	872.9	782.5	689.4	608.8	535.1	461.4	136.2	95.9	76.5	61.2	51.4
40°	1073.0	956.2	842.2	732.4	636.5	544.8	130.6	90.3	70.9	55.6	45.8
42.5°	1289.8	1148.0	997.9	874.2	742.2	626.8	125.1	84.8	65.3	50.0	40.3
45°	1559.4	1382.9	1200.8	1032.6	871.4	722.7	119.5	79.3	58.4	44.5	34.8
47.5°	1854.1	1628.9	1423.2	1212.0	1020.1	842.2	112.6	75.0	52.8	38.9	30.6
50°	2157.1	1919.4	1659.5	1419.0	1191.1	961.8	105.7	68.1	47.3	34.8	25.0
52.5°	2483.6	2202.9	1937.5	1638.6	1373.2	1118.8	98.7	62.5	43.0	30.6	20.8
55°	2899.2	2585.1	2273.8	1938.8	1619.2	1300.9	91.7	55.6	37.6	26.4	16.7
57.5°	3421.8	3049.3	2667.1	2289.1	1901.3	1539.9	86.2	48.6	32.0	22.2	13.9
60°	3915.2	3480.2	3017.4	2582.4	2144.5	1723.4	77.8	43.0	27.8	18.1	13.9
62.5°	4170.9	3674.7	3175.8	2696.3	2229.3	1788.8	69.5	36.1	23.6	15.3	12.5
65°	4108.4	3602.5	3118.8	2635.1	2177.9	1747.1	61.2	32.0	20.8	13.9	12.5
66°	4018.1	3517.7	3031.3	2571.2	2134.8	1702.6	57.0	30.6	19.5	13.9	11.1
67.5°	3820.7	3337.0	2872.8	2444.7	2016.6	1617.8	51.4	27.8	18.1	12.5	11.1
70°	3263.4	2824.2	2453.1	2072.3	1723.4	1363.5	41.7	23.6	15.3	11.1	11.1
72.5°	2159.8	1861.0	1613.6	1388.4	1160.5	900.6	34.8	19.5	12.5	11.1	9.7
75°	814.5	736.6	632.4	568.4	496.2	435.0	27.8	12.5	9.7	9.7	9.7
77.5°	144.6	133.4	118.2	108.4	100.1	91.7	22.2	8.4	8.4	9.7	9.7
80°	97.3	90.3	82.0	75.0	69.5	62.5	15.3	6.9	8.4	8.4	9.7
82.5°	69.5	65.3	61.2	55.6	51.4	45.8	9.7	6.9	8.4	8.4	8.4
85°	41.7	38.9	36.1	33.3	29.2	27.8	6.9	6.9	6.9	8.4	8.4
87.5°	11.1	9.7	11.1	11.1	8.4	9.7	5.6	5.6	5.6	6.9	6.9
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: P165265

CATALOG NUMBER: VST-E05-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	218.2	218.2	218.2	218.2	218.2
2.5°	184.8	184.8	182.0	186.3	186.3
5°	159.9	159.9	158.4	159.9	159.9
7.5°	145.9	144.6	144.6	144.6	145.9
10°	133.4	132.0	132.0	132.0	132.0
12.5°	122.3	120.9	119.5	120.9	120.9
15°	112.6	109.8	109.8	109.8	109.8
17.5°	104.2	101.4	100.1	100.1	100.1
20°	95.9	91.7	91.7	91.7	91.7
22.5°	87.5	83.4	83.4	83.4	83.4
25°	79.3	75.0	75.0	75.0	75.0
27.5°	72.2	68.1	68.1	68.1	68.1
30°	64.0	61.2	61.2	62.5	61.2
32.5°	58.4	54.2	54.2	55.6	55.6
35°	51.4	48.6	48.6	48.6	48.6
37.5°	44.5	41.7	41.7	41.7	41.7
40°	38.9	36.1	34.8	36.1	36.1
42.5°	33.3	30.6	29.2	29.2	29.2
45°	29.2	25.0	23.6	25.0	25.0
47.5°	23.6	20.8	20.8	22.2	22.2
50°	18.1	18.1	19.5	22.2	22.2
52.5°	16.7	16.7	19.5	22.2	22.2
55°	15.3	16.7	19.5	20.8	22.2
57.5°	13.9	16.7	19.5	20.8	20.8
60°	13.9	15.3	18.1	20.8	20.8
62.5°	12.5	13.9	16.7	19.5	19.5
65°	12.5	13.9	16.7	19.5	19.5
66°	12.5	13.9	16.7	19.5	19.5
67.5°	12.5	13.9	16.7	19.5	19.5
70°	12.5	13.9	16.7	18.1	18.1
72.5°	11.1	12.5	15.3	18.1	18.1
75°	11.1	12.5	15.3	18.1	18.1
77.5°	11.1	12.5	15.3	18.1	18.1
80°	11.1	12.5	15.3	16.7	18.1
82.5°	9.7	12.5	13.9	16.7	16.7
85°	9.7	11.1	13.9	15.3	16.7
87.5°	8.4	9.7	11.1	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)