

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: P165335

Luminaire Tested: **VST-E12-LED-E-U-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165335
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-E12-LED-E-U-SL3-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (252) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17350.1 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

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



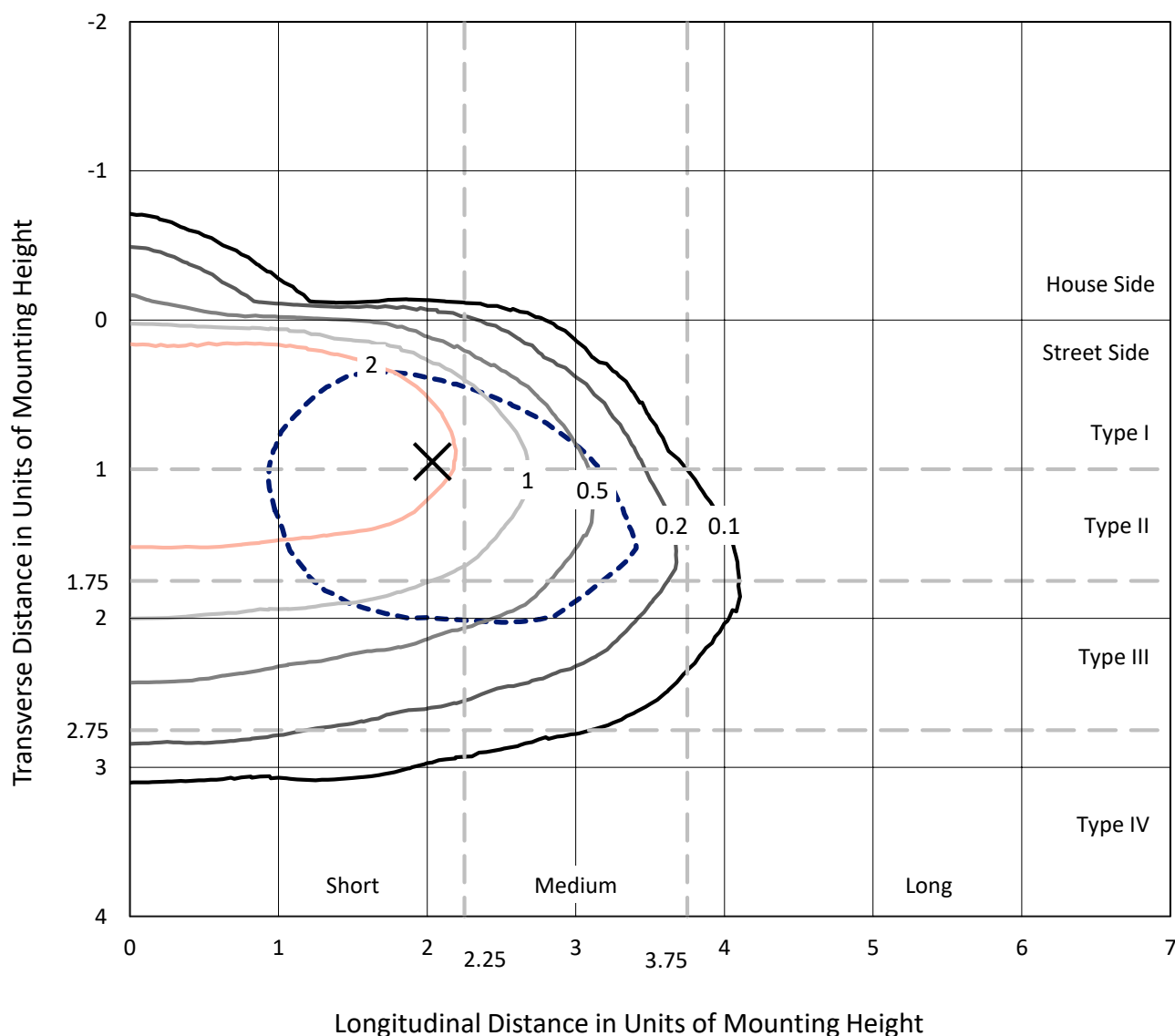
REPORT NUMBER: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

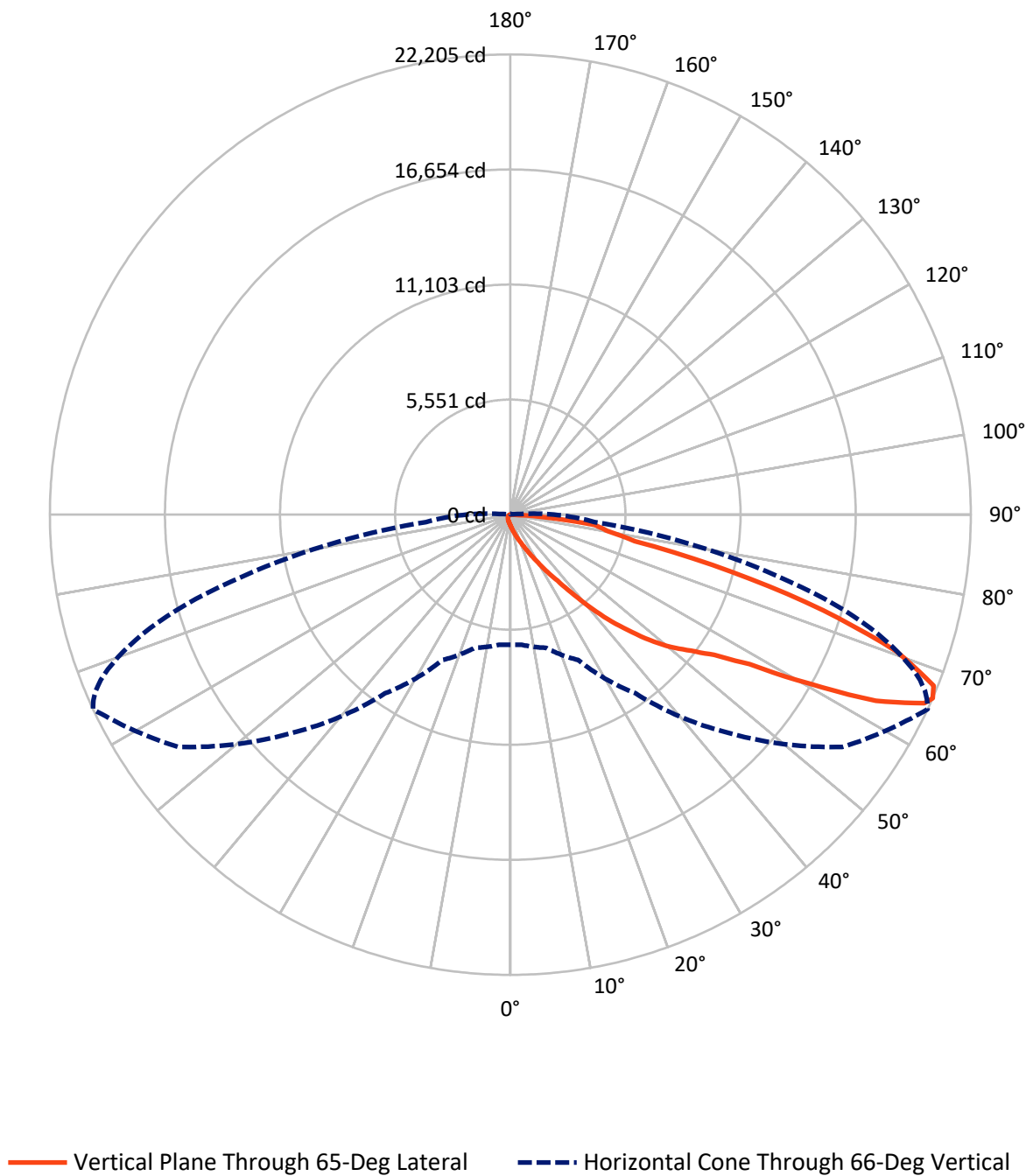


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

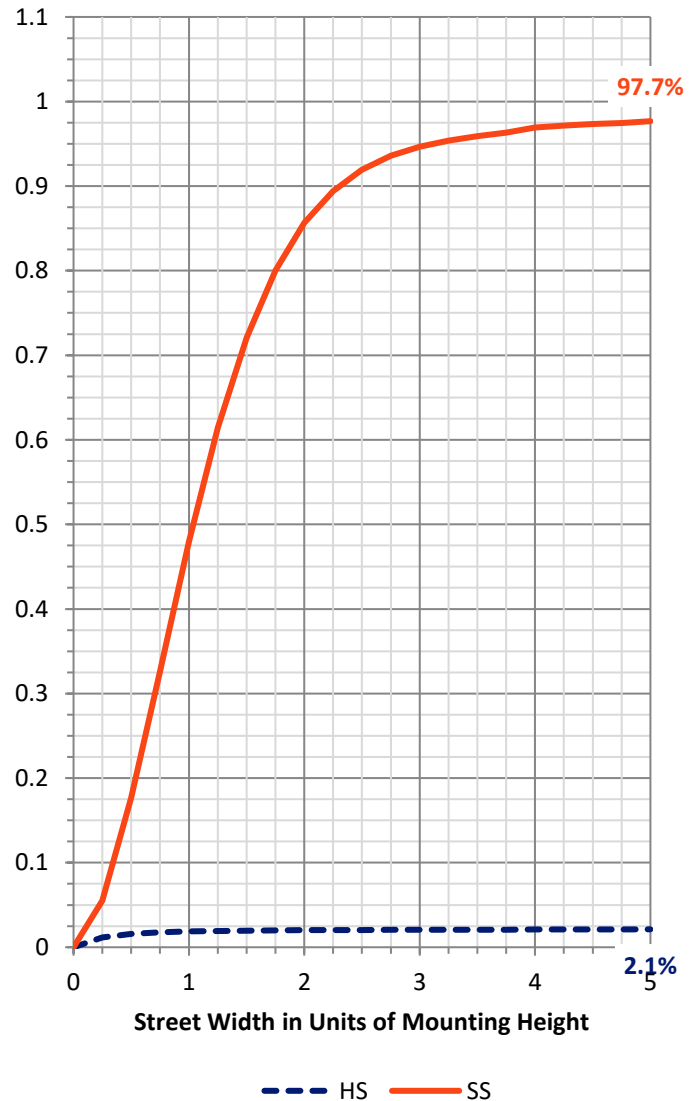
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	376.0	0.0	376.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	16974.1	0.0	16974.1
	% Fixture	97.8	0.0	97.8
Total	Lumens	17350.1	0.0	17350.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	0.3
10°-20°	248.6	1.4
20°-30°	536.1	3.1
30°-40°	1144.9	6.6
40°-50°	2532.1	14.6
50°-60°	4291.0	24.7
60°-70°	5726.0	33.0
70°-80°	2522.2	14.5
80°-90°	290.5	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°	17350.1	100.0
0°-180°	17350.1	100.0

Coefficient of Utilization



REPORT NUMBER: P165335

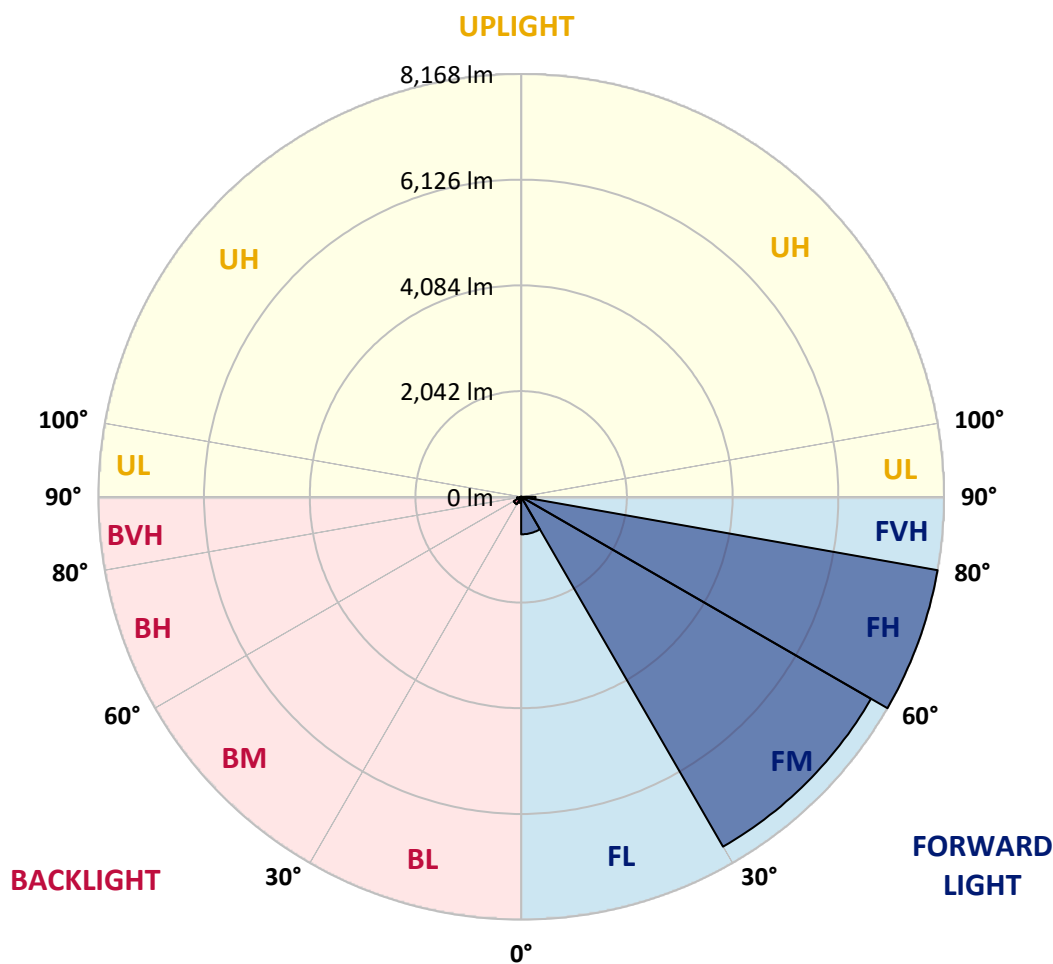
CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	724.7	4.2			
FM	(30°-60°)	7802.9	45.0			
FH	(60°-80°)	8167.6	47.1			G4/12000
FVH	(80°-90°)	278.9	1.6			G3/500
BL	(0°-30°)	118.6	0.7	B1/500		
BM	(30°-60°)	165.1	1.0	B0/220		
BH	(60°-80°)	80.7	0.5	B0/110		G0/110
BVH	(80°-90°)	11.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





REPORT NUMBER: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6
2.5°	660.5	657.1	643.7	643.7	623.7	610.5	593.7	577.1	577.1	573.6	570.4
5°	873.8	854.0	850.5	813.9	783.9	740.6	700.4	647.2	640.5	633.8	630.4
7.5°	1110.8	1107.4	1077.4	1034.1	974.1	893.9	813.9	727.2	713.8	707.1	693.8
10°	1417.7	1400.9	1361.0	1287.5	1197.5	1090.8	960.7	823.8	807.2	793.8	787.1
12.5°	1711.2	1681.2	1657.7	1564.4	1450.9	1294.1	1137.4	940.7	927.3	910.7	884.0
15°	1984.7	1957.9	1918.0	1838.0	1711.2	1514.3	1331.0	1090.8	1057.4	1034.1	1014.0
17.5°	2198.2	2181.5	2134.8	2044.8	1907.9	1734.5	1514.3	1244.1	1217.6	1187.4	1150.7
20°	2401.7	2378.2	2304.9	2181.5	2034.7	1901.2	1731.3	1444.2	1407.6	1370.9	1331.0
22.5°	2595.2	2571.7	2451.8	2248.2	2091.4	2034.7	1974.7	1671.1	1614.4	1584.4	1544.3
25°	2865.4	2815.4	2628.4	2304.9	2094.9	2138.2	2241.5	1964.6	1911.3	1868.0	1804.6
27.5°	3229.0	3162.1	2868.6	2388.4	2108.0	2251.6	2548.4	2321.5	2264.8	2214.8	2144.9
30°	3639.2	3595.8	3245.6	2588.5	2204.8	2418.3	2891.9	2775.2	2708.6	2648.4	2565.2
32.5°	4052.8	3992.8	3645.8	2968.7	2464.9	2741.8	3322.4	3302.3	3215.6	3158.9	3068.8
35°	4416.4	4386.4	4129.5	3592.4	3058.8	3309.0	3896.0	3919.3	3842.7	3782.6	3682.5
37.5°	4663.3	4663.3	4613.3	4262.8	4002.7	4189.5	4739.9	4743.3	4666.5	4529.8	4479.8
40°	4789.9	4826.5	5006.8	5073.5	5060.1	5300.3	5847.4	5787.3	5723.9	5653.8	5487.1
42.5°	5050.2	5083.4	5467.0	5927.4	6227.6	6544.4	6921.4	6901.3	6824.8	6698.0	6544.4
45°	5490.5	5533.9	5990.9	6721.3	7338.3	7788.8	8028.8	7935.4	7858.6	7738.7	7658.5
47.5°	6050.8	6134.3	6651.2	7555.2	8299.0	9042.8	9292.9	9046.2	8979.6	8886.0	8756.0
50°	6647.9	6728.0	7278.3	8312.4	9153.0	10040.2	10457.3	10040.2	9943.6	9913.4	9766.7
52.5°	7164.9	7231.7	7762.0	8896.1	9806.6	10847.4	11454.4	10904.1	10834.0	10733.9	10627.2
55°	7471.8	7525.2	8022.1	9176.3	10250.4	11574.6	12418.6	11934.9	11831.4	11791.5	11638.0
57.5°	7575.3	7628.5	8075.6	9212.9	10490.5	12238.3	13589.4	13606.0	13482.7	13339.2	13292.5
60°	7575.3	7635.2	8012.2	9123.0	10724.0	12945.5	15150.3	16541.3	16274.5	16247.8	16077.6
62.5°	7261.7	7318.4	7698.6	8846.1	11037.6	13899.5	17325.2	19780.2	19703.6	19530.0	19249.9
65°	6581.1	6614.5	6988.0	8139.0	10917.5	14776.8	19209.8	21935.0	21811.6	21471.3	21111.2
66°	6274.2	6301.0	6651.2	7735.3	10523.9	14896.9	19543.4	22205.2	22001.8	21714.8	21307.9
67.5°	5830.6	5877.4	6124.1	6984.8	9580.0	14479.8	19333.3	22015.2	21838.4	21491.4	21084.4
70°	3892.8	3859.3	4729.9	5360.3	7298.4	11798.2	17345.2	19766.8	19770.3	19606.8	19443.3
72.5°	1847.9	1868.0	2121.4	3298.9	4776.5	7882.1	13806.1	15777.4	16004.3	15710.8	15507.2
75°	1327.6	1357.5	1511.1	2018.1	2848.6	4729.9	8949.4	11034.1	11040.8	10520.4	10057.0
77.5°	386.9	403.7	567.0	1244.1	2134.8	3192.1	5140.1	6134.3	5990.9	5617.1	5266.9
80°	160.0	160.0	166.7	397.0	857.2	2168.2	3595.8	4723.2	4706.6	4563.2	4356.4
82.5°	60.0	63.4	80.0	163.5	203.6	533.7	2398.3	4099.6	4089.4	3886.1	3739.2
85°	6.7	6.7	20.1	70.1	76.8	100.1	480.3	1807.8	1797.9	1807.8	1584.4
87.5°	0.0	0.0	3.2	6.7	9.9	13.4	20.1	70.1	76.8	73.3	66.6
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: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6
2.5°	570.4	563.7	563.7	560.5	560.5	560.5	557.0	553.8	553.8	550.3	547.1
5°	623.7	617.0	613.8	607.1	603.8	600.4	593.7	590.5	583.8	580.3	577.1
7.5°	687.1	673.7	670.5	660.5	650.4	643.7	637.0	627.1	620.4	607.1	603.8
10°	767.3	750.5	737.1	723.7	713.8	697.2	687.1	673.7	660.5	650.4	640.5
12.5°	870.6	847.3	827.2	813.9	790.6	770.5	750.5	740.6	713.8	700.4	683.8
15°	984.0	957.3	934.0	907.3	890.6	857.2	830.5	800.5	787.1	763.8	737.1
17.5°	1130.7	1087.3	1050.7	1024.1	990.7	957.3	927.3	897.3	857.2	830.5	797.3
20°	1287.5	1250.8	1200.8	1154.2	1114.1	1074.2	1030.6	990.7	954.0	910.7	870.6
22.5°	1487.8	1434.3	1374.4	1327.6	1274.3	1230.9	1170.8	1117.5	1057.4	1000.6	954.0
25°	1741.2	1671.1	1614.4	1547.7	1484.3	1417.7	1344.2	1277.5	1200.8	1147.5	1067.5
27.5°	2054.7	1988.1	1911.3	1824.6	1761.2	1661.2	1564.4	1481.1	1391.0	1307.5	1217.6
30°	2455.0	2358.4	2278.2	2194.9	2068.1	1971.3	1857.9	1744.6	1621.1	1537.8	1400.9
32.5°	2935.3	2832.0	2711.8	2591.7	2475.1	2338.3	2198.2	2058.0	1921.3	1767.9	1627.8
35°	3522.5	3398.9	3262.2	3132.2	2952.1	2805.2	2628.4	2434.9	2281.6	2104.8	1927.9
37.5°	4299.7	4096.1	3976.0	3839.3	3595.8	3395.7	3198.8	3005.4	2735.1	2548.4	2298.2
40°	5273.6	5153.5	4956.8	4736.6	4516.4	4252.9	3986.1	3729.3	3415.7	3155.4	2865.4
42.5°	6417.6	6241.0	6040.9	5723.9	5500.5	5190.1	4886.7	4546.4	4162.8	3829.4	3489.1
45°	7491.8	7281.8	7128.2	6811.4	6577.9	6210.8	5844.0	5483.8	5040.0	4609.8	4216.2
47.5°	8652.7	8479.1	8225.7	7968.8	7732.0	7318.4	6921.4	6484.5	6017.4	5507.1	4996.7
50°	9673.4	9536.6	9363.0	9052.9	8789.4	8442.4	7975.5	7498.5	6908.0	6401.0	5820.7
52.5°	10540.5	10433.8	10190.3	9970.1	9733.3	9406.4	8989.5	8532.5	7895.5	7338.3	6677.9
55°	11564.6	11487.9	11274.4	11137.6	10927.6	10614.0	10223.7	9800.2	9126.2	8519.2	7771.9
57.5°	13242.4	13182.5	12995.5	12938.8	12732.0	12458.5	11978.3	11524.5	10737.4	9983.5	9129.7
60°	16020.9	15901.0	15627.3	15487.4	15050.2	14683.4	14059.7	13435.9	12485.3	11524.5	10497.2
62.5°	18996.3	18659.4	18139.1	17692.2	17071.8	16434.5	15600.6	14646.8	13532.7	12391.9	11211.0
65°	20600.7	20027.1	19370.0	18659.4	17855.7	16918.2	15867.6	14723.5	13526.0	12321.8	11074.2
66°	20784.3	20137.1	19440.1	18649.5	17755.6	16758.2	15690.7	14490.0	13245.7	12071.6	10824.1
67.5°	20554.1	19877.0	19139.9	18262.6	17295.2	16261.1	15140.4	13892.8	12695.3	11504.5	10290.3
70°	18943.0	18269.1	17612.0	16688.1	15657.3	14616.8	13556.0	12161.8	11027.7	9933.4	8852.8
72.5°	15127.0	14670.0	14019.6	13229.1	12225.0	11004.2	10120.2	8872.8	7888.8	6828.0	5990.9
75°	9453.2	8809.4	8005.5	6998.2	6230.9	5240.2	4723.2	3775.9	3215.6	2725.2	2251.6
77.5°	4833.2	4349.7	3786.0	3218.8	2675.2	2134.8	1651.0	1167.5	787.1	547.1	406.9
80°	3992.8	3565.8	3098.7	2581.8	2101.5	1631.2	1174.2	800.5	510.4	333.6	260.1
82.5°	3298.9	2938.7	2521.6	2041.4	1624.5	1281.0	890.6	580.3	360.1	233.5	183.5
85°	1404.3	1274.3	984.0	780.5	587.0	433.7	303.6	203.6	143.4	116.7	106.7
87.5°	60.0	66.6	63.4	50.0	36.7	36.7	33.4	26.7	26.7	26.7	26.7
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: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6	523.6
2.5°	547.1	543.7	540.4	540.4	537.0	533.7	513.7	497.1	477.0	463.7	450.3
5°	570.4	567.0	560.5	557.0	550.3	547.1	503.8	466.9	436.9	413.6	397.0
7.5°	593.7	590.5	580.3	570.4	567.0	560.5	490.4	443.6	403.7	377.0	360.1
10°	623.7	613.8	603.8	590.5	580.3	570.4	477.0	416.9	373.5	350.2	333.6
12.5°	667.0	650.4	633.8	617.0	603.8	587.0	470.3	393.6	350.2	323.5	306.9
15°	717.3	693.8	673.7	653.9	630.4	613.8	457.0	373.5	330.2	303.6	283.6
17.5°	763.8	737.1	707.1	677.2	653.9	630.4	443.6	353.7	310.1	283.6	263.5
20°	830.5	790.6	753.9	717.3	683.8	653.9	423.5	333.6	293.5	263.5	243.5
22.5°	904.0	857.2	810.6	760.6	717.3	677.2	406.9	316.8	276.9	246.9	223.4
25°	997.4	940.7	877.3	813.9	763.8	710.6	390.3	300.2	260.1	230.1	206.8
27.5°	1127.4	1047.4	977.3	897.3	820.6	760.6	377.0	286.8	243.5	213.5	190.2
30°	1304.3	1187.4	1077.4	990.7	900.6	813.9	363.6	270.2	230.1	196.9	170.1
32.5°	1501.0	1364.2	1237.4	1107.4	994.0	893.9	350.2	256.8	213.5	180.1	156.8
35°	1744.6	1571.0	1400.9	1250.8	1114.1	980.6	336.9	243.5	200.1	163.5	140.2
37.5°	2094.9	1877.9	1654.5	1461.0	1284.2	1107.4	326.9	230.1	183.5	146.9	123.4
40°	2575.1	2295.0	2021.3	1757.8	1527.7	1307.5	313.6	216.7	170.1	133.5	110.0
42.5°	3095.5	2755.2	2395.0	2098.1	1781.3	1504.4	300.2	203.6	156.8	120.1	96.8
45°	3742.7	3318.9	2882.0	2478.3	2091.4	1734.5	286.8	190.2	140.2	106.7	83.5
47.5°	4449.8	3909.4	3415.7	2908.7	2448.3	2021.3	270.2	180.1	126.8	93.4	73.3
50°	5177.0	4606.6	3982.7	3405.6	2858.7	2308.3	253.6	163.5	113.4	83.5	60.0
52.5°	5960.7	5287.0	4649.9	3932.7	3295.6	2685.1	236.8	150.1	103.3	73.3	50.0
55°	6958.1	6204.3	5457.1	4653.2	3886.1	3122.2	220.2	133.5	90.1	63.4	40.1
57.5°	8212.3	7318.4	6401.0	5493.8	4563.2	3695.9	206.8	116.7	76.8	53.3	33.4
60°	9396.5	8352.5	7241.6	6197.7	5146.8	4136.2	186.8	103.3	66.6	43.3	33.4
62.5°	10010.2	8819.4	7621.8	6471.1	5350.4	4293.0	166.7	86.7	56.7	36.7	30.0
65°	9860.1	8646.0	7485.1	6324.3	5227.0	4192.9	146.9	76.8	50.0	33.4	30.0
66°	9643.4	8442.4	7275.1	6170.9	5123.5	4086.2	136.7	73.3	46.8	33.4	26.7
67.5°	9169.6	8008.7	6894.7	5867.3	4839.9	3882.6	123.4	66.6	43.3	30.0	26.7
70°	7832.1	6778.0	5887.3	4973.4	4136.2	3272.3	100.1	56.7	36.7	26.7	26.7
72.5°	5183.5	4466.4	3872.7	3332.3	2785.2	2161.5	83.5	46.8	30.0	26.7	23.3
75°	1954.7	1767.9	1517.8	1364.2	1190.8	1044.0	66.6	30.0	23.3	23.3	23.3
77.5°	347.0	320.2	283.6	260.1	240.2	220.2	53.3	20.1	20.1	23.3	23.3
80°	233.5	216.7	196.9	180.1	166.7	150.1	36.7	16.6	20.1	20.1	23.3
82.5°	166.7	156.8	146.9	133.5	123.4	110.0	23.3	16.6	20.1	20.1	20.1
85°	100.1	93.4	86.7	80.0	70.1	66.6	16.6	16.6	16.6	20.1	20.1
87.5°	26.7	23.3	26.7	26.7	20.1	23.3	13.4	13.4	13.4	16.6	16.6
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: P165335

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	523.6	523.6	523.6	523.6	523.6
2.5°	443.6	443.6	436.9	447.0	447.0
5°	383.6	383.6	380.2	383.6	383.6
7.5°	350.2	347.0	347.0	347.0	350.2
10°	320.2	316.8	316.8	316.8	316.8
12.5°	293.5	290.3	286.8	290.3	290.3
15°	270.2	263.5	263.5	263.5	263.5
17.5°	250.2	243.5	240.2	240.2	240.2
20°	230.1	220.2	220.2	220.2	220.2
22.5°	210.1	200.1	200.1	200.1	200.1
25°	190.2	180.1	180.1	180.1	180.1
27.5°	173.4	163.5	163.5	163.5	163.5
30°	153.5	146.9	146.9	150.1	146.9
32.5°	140.2	130.0	130.0	133.5	133.5
35°	123.4	116.7	116.7	116.7	116.7
37.5°	106.7	100.1	100.1	100.1	100.1
40°	93.4	86.7	83.5	86.7	86.7
42.5°	80.0	73.3	70.1	70.1	70.1
45°	70.1	60.0	56.7	60.0	60.0
47.5°	56.7	50.0	50.0	53.3	53.3
50°	43.3	43.3	46.8	53.3	53.3
52.5°	40.1	40.1	46.8	53.3	53.3
55°	36.7	40.1	46.8	50.0	53.3
57.5°	33.4	40.1	46.8	50.0	50.0
60°	33.4	36.7	43.3	50.0	50.0
62.5°	30.0	33.4	40.1	46.8	46.8
65°	30.0	33.4	40.1	46.8	46.8
66°	30.0	33.4	40.1	46.8	46.8
67.5°	30.0	33.4	40.1	46.8	46.8
70°	30.0	33.4	40.1	43.3	43.3
72.5°	26.7	30.0	36.7	43.3	43.3
75°	26.7	30.0	36.7	43.3	43.3
77.5°	26.7	30.0	36.7	43.3	43.3
80°	26.7	30.0	36.7	40.1	43.3
82.5°	23.3	30.0	33.4	40.1	40.1
85°	23.3	26.7	33.4	36.7	40.1
87.5°	20.1	23.3	26.7	33.4	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)