

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: P165465

Luminaire Tested: **VST-E03-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165465
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E03-LED-E-U-SL4-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (63) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5090.5 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

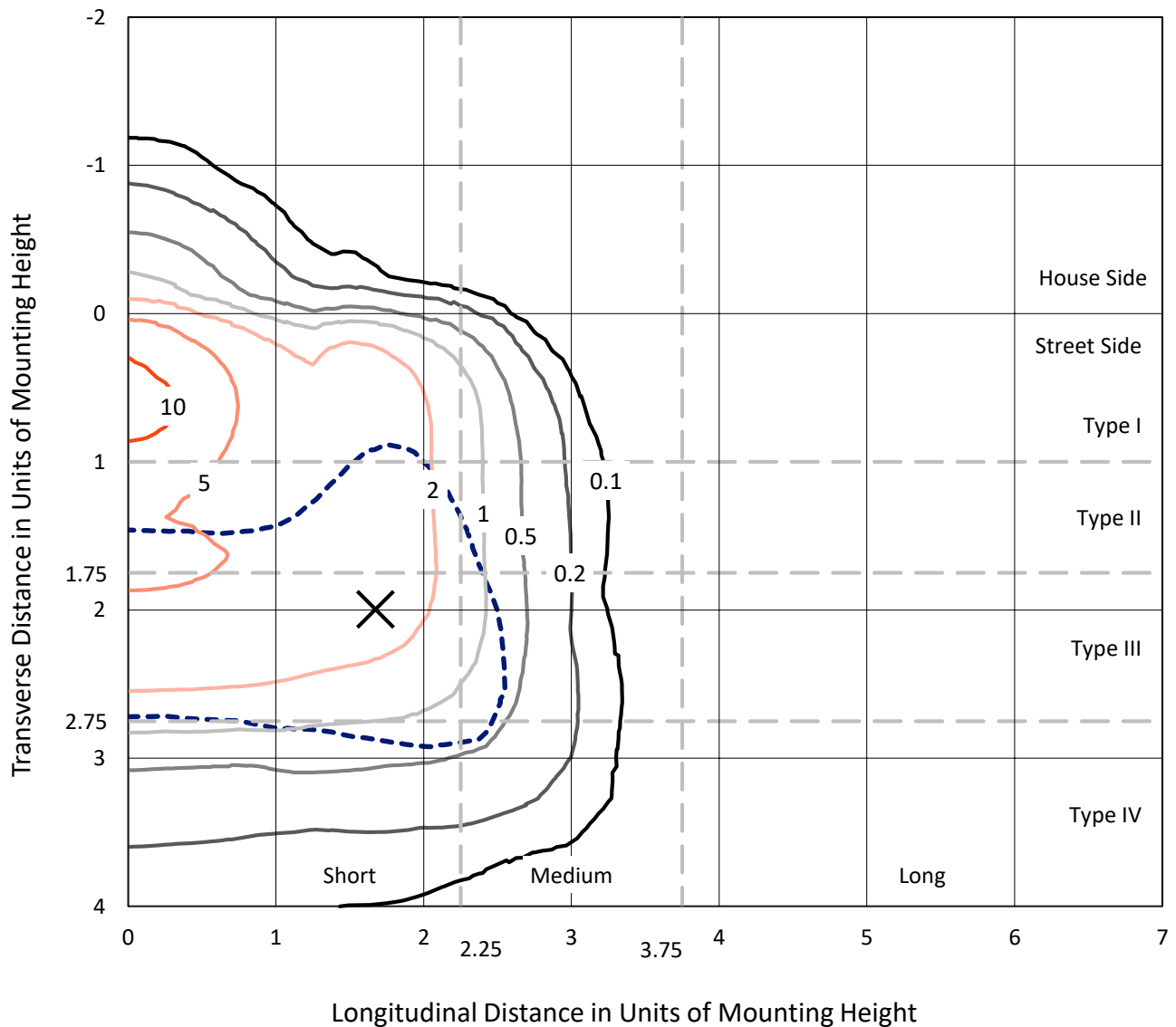
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

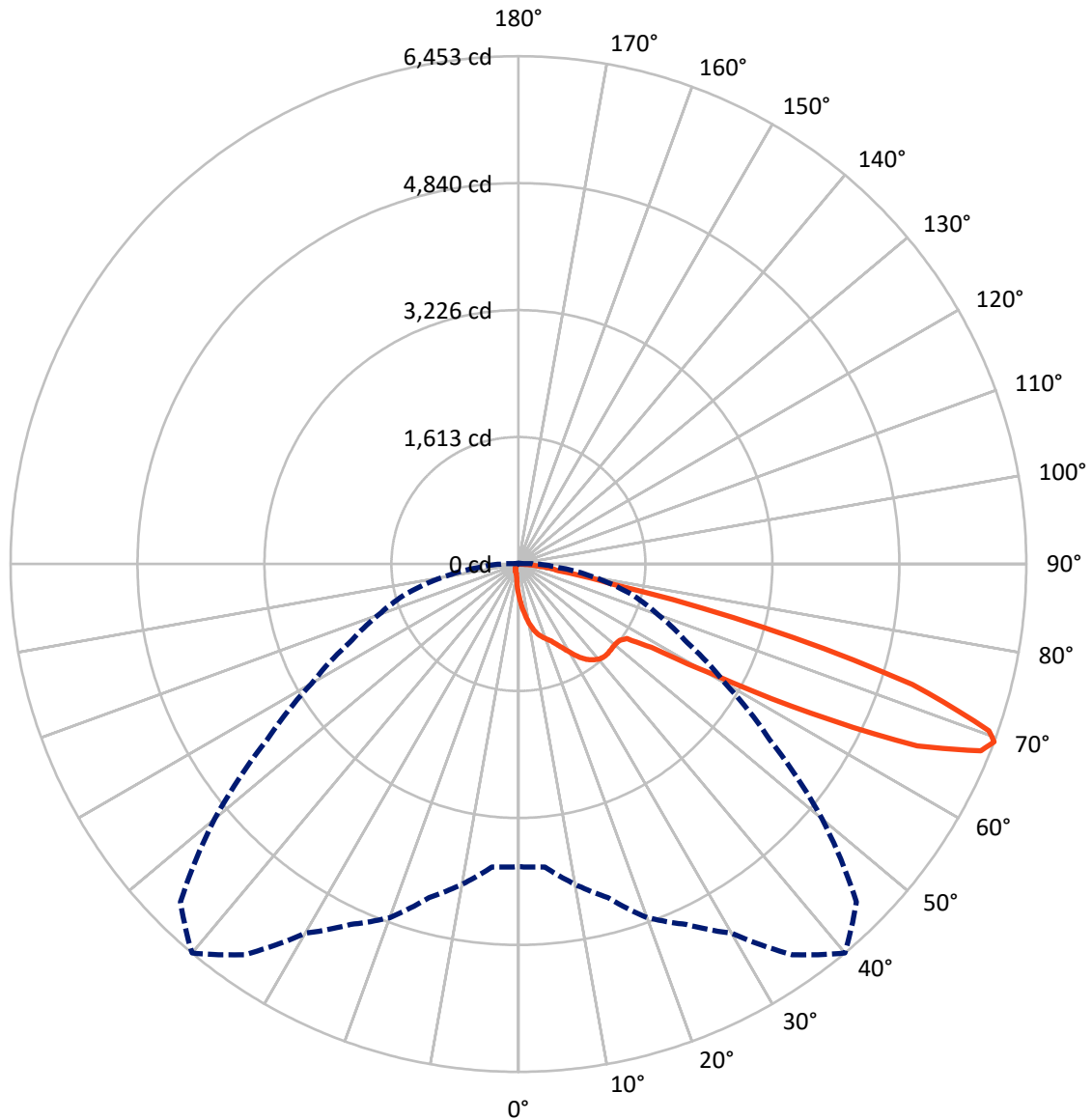
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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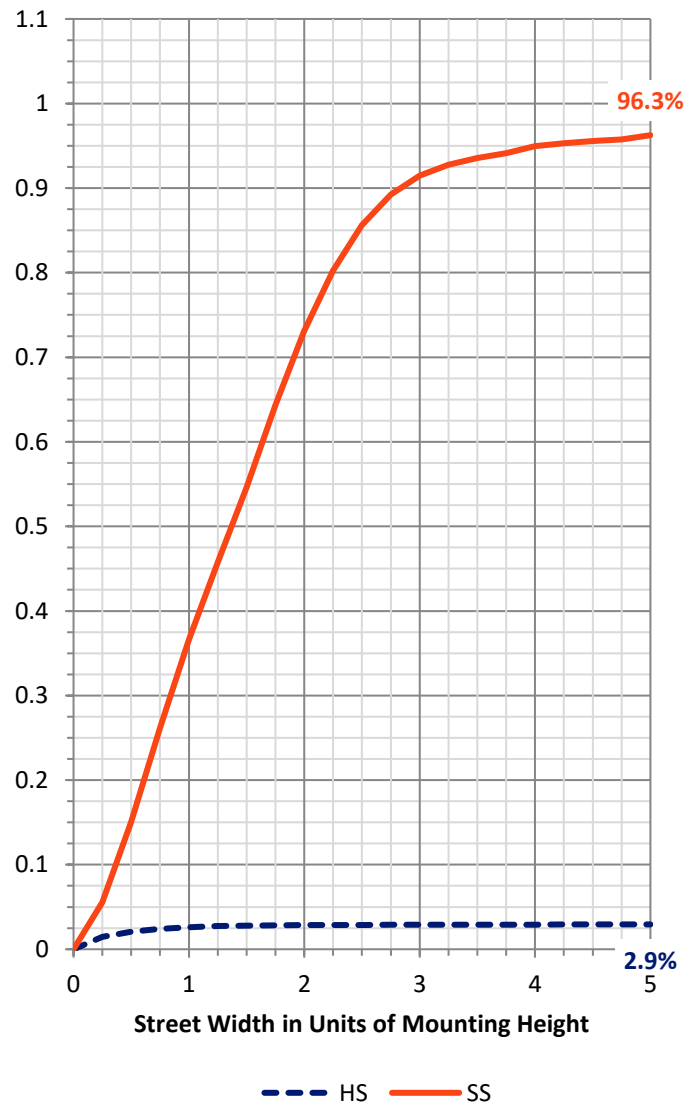
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	151.6	0.0	151.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	4938.9	0.0	4938.9
	% Fixture	97.0	0.0	97.0
Total	Lumens	5090.5	0.0	5090.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	0.8
10°-20°	136.2	2.7
20°-30°	260.7	5.1
30°-40°	433.6	8.5
40°-50°	586.8	11.5
50°-60°	917.6	18.0
60°-70°	1886.6	37.1
70°-80°	759.1	14.9
80°-90°	70.2	1.4
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°	5090.5	100.0
0°-180°	5090.5	100.0



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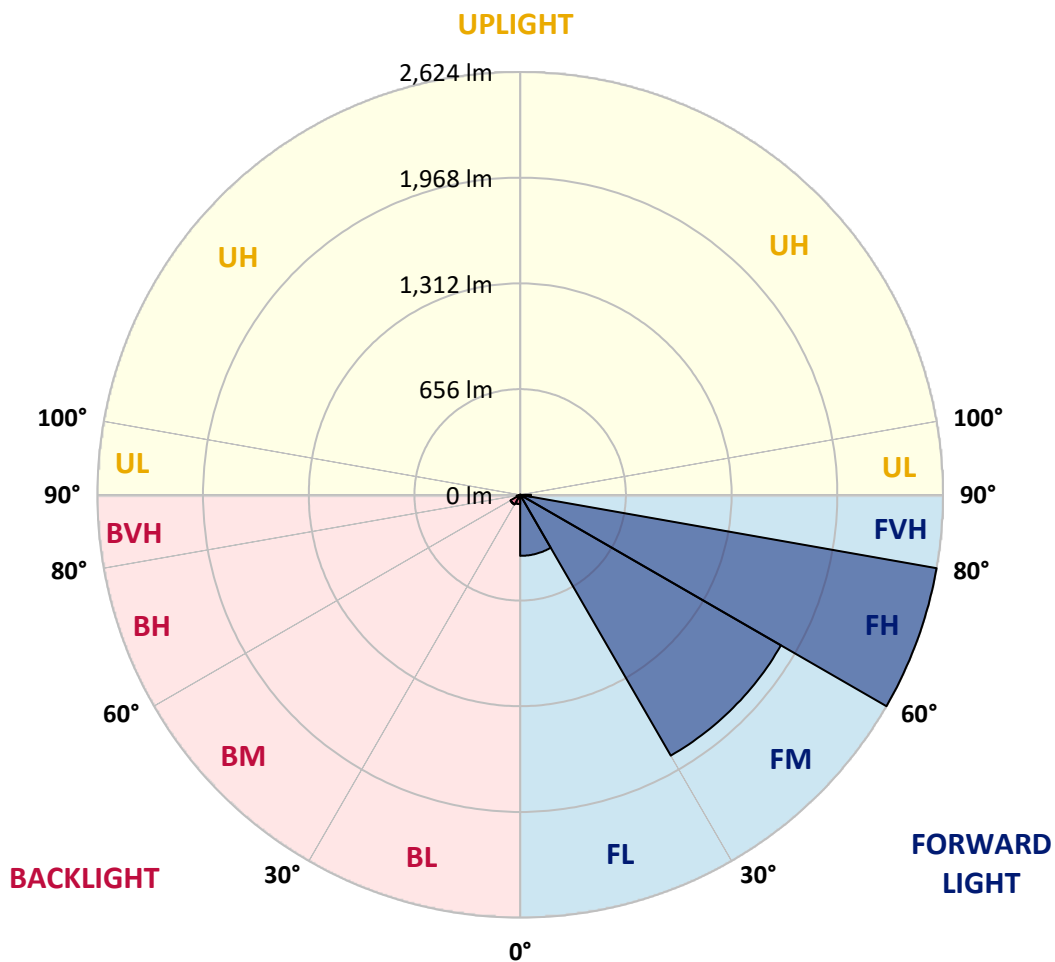
CATALOG NUMBER: VST-E03-LED-E-U-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	378.8	7.4			
FM	(30°-60°)	1868.8	36.7			
FH	(60°-80°)	2623.7	51.5			G2/5000
FVH	(80°-90°)	67.6	1.3			G1/100
BL	(0°-30°)	57.7	1.1	B0/110		
BM	(30°-60°)	69.2	1.4	B0/220		
BH	(60°-80°)	22.1	0.4	B0/110		G0/110
BVH	(80°-90°)	2.6	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5
2.5°	512.9	507.0	500.3	500.3	492.0	492.0	487.0	473.7	472.0	464.5	457.0
5°	654.6	649.6	641.3	633.8	627.1	615.4	607.1	591.2	573.7	557.0	542.0
7.5°	793.1	790.6	775.6	773.0	762.2	743.0	726.3	703.0	673.0	649.6	622.1
10°	921.5	915.6	912.2	898.1	882.3	861.4	835.6	807.2	772.2	735.5	696.3
12.5°	1023.2	1019.9	1004.8	999.0	982.4	961.5	929.0	892.3	857.3	809.7	763.9
15°	1099.1	1093.3	1083.2	1074.1	1054.1	1035.7	1005.7	965.6	923.2	871.4	816.4
17.5°	1162.5	1151.6	1149.1	1135.0	1114.1	1092.4	1059.1	1022.3	972.3	920.6	860.6
20°	1247.5	1232.5	1227.5	1206.7	1182.5	1152.5	1114.1	1068.2	1015.7	959.0	897.3
22.5°	1347.5	1336.7	1325.9	1307.6	1276.7	1234.2	1178.3	1128.3	1061.6	999.0	932.3
25°	1489.4	1480.2	1462.7	1437.7	1399.3	1348.4	1280.9	1207.5	1129.1	1049.0	970.7
27.5°	1627.0	1618.6	1606.1	1586.9	1543.6	1487.7	1404.3	1310.9	1211.6	1114.9	1028.2
30°	1756.2	1748.7	1736.2	1717.0	1678.6	1623.6	1529.3	1429.3	1305.9	1193.3	1089.1
32.5°	1895.5	1892.9	1878.8	1851.3	1817.9	1743.7	1641.1	1533.5	1408.5	1278.4	1156.6
35°	2053.1	2033.9	2020.6	1993.0	1936.4	1857.1	1737.1	1619.5	1487.7	1354.3	1218.4
37.5°	2186.5	2168.2	2151.5	2116.5	2047.3	1946.3	1810.4	1681.1	1545.2	1409.3	1270.9
40°	2284.0	2274.9	2254.9	2209.0	2131.4	2011.4	1864.6	1723.7	1586.9	1450.1	1313.4
42.5°	2356.6	2342.4	2320.0	2272.4	2180.7	2043.9	1886.3	1741.2	1606.1	1475.2	1340.9
45°	2383.3	2371.6	2350.8	2299.1	2199.8	2053.1	1885.4	1736.2	1606.9	1482.7	1359.2
47.5°	2367.4	2355.8	2337.4	2289.1	2191.5	2042.2	1870.4	1722.0	1598.6	1485.2	1375.9
50°	2314.9	2308.3	2294.0	2253.2	2165.6	2021.4	1857.1	1714.5	1596.9	1497.7	1399.3
52.5°	2309.9	2305.7	2288.2	2247.4	2158.1	2014.7	1855.4	1718.7	1611.1	1513.6	1416.0
55°	2822.8	2763.5	2631.0	2518.4	2333.3	2113.1	1939.6	1786.2	1671.2	1576.1	1507.7
57.5°	4011.9	3923.5	3749.2	3535.0	3109.6	2691.8	2357.5	2115.6	1996.4	1953.0	1978.9
60°	4568.9	4553.2	4525.6	4423.9	4206.2	3846.8	3446.5	3013.7	2840.3	2825.3	2877.8
62.5°	4833.4	4823.3	4831.7	4819.1	4751.6	4646.5	4531.4	4344.7	4172.8	4061.9	3826.8
65°	4955.1	4961.8	5009.3	5046.8	5055.1	5082.7	5166.9	5399.5	5569.6	5283.6	4630.7
67.5°	4645.7	4684.9	4794.1	4930.9	5091.0	5246.1	5496.2	5986.6	6336.0	5999.9	5072.6
69°	3845.9	3865.1	4132.0	4389.7	4780.7	5054.3	5417.0	6060.0	6452.8	6073.3	5037.6
70°	3027.9	3045.4	3331.4	3681.7	4343.0	4694.9	5169.4	5935.7	6343.5	5975.8	4857.5
72.5°	1366.0	1340.9	1441.8	1629.4	2348.3	2907.0	3736.7	4809.1	5233.6	4787.5	3634.1
75°	954.0	943.1	954.0	954.8	1066.6	1375.9	1736.2	2606.8	3223.9	2781.9	1736.2
77.5°	738.8	731.3	723.8	715.5	728.9	816.4	851.4	924.8	1200.8	1135.8	662.1
80°	584.6	577.9	596.2	590.4	590.4	600.4	593.8	566.2	514.5	477.0	427.0
82.5°	271.9	273.5	273.5	296.8	357.8	417.8	437.0	409.5	363.6	309.4	249.4
85°	25.8	29.2	49.2	75.9	151.0	170.1	170.9	141.7	141.7	111.8	90.1
87.5°	0.0	0.8	0.8	0.8	7.5	20.9	17.5	5.0	2.5	2.5	4.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5
2.5°	443.6	441.1	431.2	421.1	412.0	401.9	392.8	383.6	373.6	366.1	356.9
5°	518.7	500.3	479.5	459.5	439.4	418.6	397.0	377.8	357.8	339.4	321.8
7.5°	594.5	558.7	530.3	494.5	462.0	429.5	399.4	368.6	340.3	313.6	288.5
10°	658.7	615.4	571.2	525.4	478.6	435.3	393.6	356.9	319.4	286.9	256.0
12.5°	711.4	656.3	602.1	544.5	492.0	437.0	385.3	341.0	296.8	260.2	228.5
15°	758.8	695.5	630.4	563.7	497.0	434.5	376.9	321.8	276.8	235.1	199.3
17.5°	797.2	724.7	651.3	576.2	504.5	431.2	366.1	308.5	256.0	212.6	177.7
20°	830.6	754.7	675.5	591.2	509.5	430.3	356.9	291.9	237.7	191.8	157.6
22.5°	861.4	785.5	700.5	610.4	517.0	429.5	348.5	279.4	221.8	176.0	141.7
25°	896.5	816.4	727.2	630.4	530.3	432.8	343.6	269.3	207.6	160.9	129.2
27.5°	935.6	851.4	758.8	655.4	547.9	439.4	341.9	258.5	195.1	146.8	119.3
30°	990.7	893.1	790.6	680.5	563.7	447.0	340.3	251.8	182.6	135.9	109.2
32.5°	1039.1	934.0	825.6	706.3	581.2	454.5	339.4	242.6	170.9	125.1	101.8
35°	1089.9	971.5	855.6	731.3	596.2	462.8	338.6	236.0	160.1	114.2	94.3
37.5°	1134.1	1003.1	878.9	753.0	613.0	470.3	339.4	230.2	150.1	105.1	87.5
40°	1171.6	1035.7	904.8	773.0	630.4	482.0	340.3	224.3	140.1	96.7	81.7
42.5°	1205.0	1066.6	932.3	795.5	650.5	495.4	345.2	219.3	131.8	89.2	75.9
45°	1230.8	1094.9	962.3	827.2	683.0	517.0	354.4	216.0	123.4	82.6	70.9
47.5°	1257.5	1136.6	1013.2	877.3	730.5	551.2	370.3	215.2	116.7	77.5	66.7
50°	1294.3	1178.3	1058.2	928.1	773.9	586.3	389.4	216.0	108.4	72.5	62.5
52.5°	1321.0	1220.8	1116.6	1016.5	877.3	692.9	463.7	230.9	104.2	68.3	57.5
55°	1478.5	1461.0	1463.5	1480.2	1372.6	1179.1	775.6	333.5	122.6	77.5	56.7
57.5°	2084.8	2146.4	2182.3	2181.5	2003.9	1662.0	1041.5	428.6	136.8	90.1	67.6
60°	2882.0	2835.3	2769.4	2606.8	2370.8	1897.1	1165.0	461.2	118.4	71.7	61.7
62.5°	3586.6	3313.1	3070.4	2806.9	2497.6	1978.9	1190.0	458.6	103.4	54.2	43.3
65°	4026.1	3534.1	3142.2	2811.9	2447.5	1910.5	1125.8	421.1	87.5	44.2	35.9
67.5°	4131.2	3414.8	2860.3	2439.2	2044.7	1486.9	826.4	316.9	68.3	36.7	31.7
69°	3901.8	3035.5	2370.0	1892.2	1487.7	986.5	511.2	200.1	52.5	33.4	29.2
70°	3589.1	2640.1	1930.5	1518.5	1101.6	692.9	357.8	140.9	42.5	30.8	26.7
72.5°	2309.1	1386.8	949.0	660.4	454.5	276.1	140.1	63.4	32.5	25.8	21.7
75°	895.6	512.9	371.9	282.7	221.0	153.4	85.1	40.9	27.5	21.7	16.7
77.5°	441.1	337.7	276.1	189.3	110.1	68.3	45.9	31.7	22.6	15.8	10.9
80°	348.5	231.8	138.4	85.9	65.0	49.2	35.0	25.8	16.7	10.0	7.5
82.5°	178.4	97.6	71.7	58.4	48.4	38.4	28.4	18.4	10.9	6.7	5.8
85°	55.9	40.9	36.7	35.9	33.4	27.5	20.0	11.7	6.7	4.1	4.1
87.5°	4.1	5.8	7.5	5.8	6.7	5.8	7.5	5.0	3.4	3.4	2.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5	384.5
2.5°	350.2	340.3	331.1	325.2	314.3	310.2	306.1	304.4	296.8	298.5	291.9
5°	306.1	288.5	275.2	261.8	249.4	240.2	232.6	223.5	216.0	212.6	206.0
7.5°	266.0	243.5	226.0	211.8	196.8	185.2	175.1	168.4	161.8	155.1	151.7
10°	230.9	206.8	186.8	172.6	158.5	148.4	140.9	135.9	131.8	129.2	128.4
12.5°	198.5	175.1	156.8	144.3	133.4	128.4	125.1	122.6	121.7	120.9	120.9
15°	173.5	150.1	135.9	126.8	121.7	119.3	118.4	116.7	115.1	114.2	114.2
17.5°	150.1	132.6	122.6	117.6	115.1	113.5	111.8	110.1	108.4	107.6	107.6
20°	134.2	120.1	115.1	111.8	109.2	107.6	105.1	103.4	102.6	101.8	100.9
22.5°	121.7	112.6	109.2	106.7	103.4	100.9	99.2	97.6	95.9	95.0	94.3
25°	112.6	106.7	104.2	100.9	97.6	95.0	92.6	90.1	88.4	87.5	85.9
27.5°	105.9	101.8	98.4	94.3	90.9	88.4	85.9	83.4	81.7	80.0	79.2
30°	100.1	95.9	91.7	88.4	84.2	81.7	78.4	75.9	75.1	73.4	71.7
32.5°	94.3	90.1	85.9	81.7	77.5	74.2	72.5	69.2	67.6	66.7	65.0
35°	87.5	83.4	78.4	75.1	70.9	67.6	65.0	62.5	60.8	59.2	58.4
37.5°	81.7	76.7	71.7	67.6	64.2	60.8	58.4	55.9	54.2	52.5	51.7
40°	75.1	70.0	65.0	60.8	57.5	55.0	52.5	50.0	48.4	47.6	47.6
42.5°	69.2	63.4	58.4	55.0	52.5	49.2	46.7	44.2	43.3	42.5	43.3
45°	63.4	57.5	53.4	50.0	47.6	44.2	41.7	40.0	39.2	40.0	40.9
47.5°	58.4	52.5	48.4	45.9	43.3	40.9	38.4	36.7	36.7	38.4	40.0
50°	53.4	47.6	44.2	42.5	40.0	37.5	34.2	33.4	34.2	35.9	37.5
52.5°	48.4	41.7	39.2	38.4	35.9	33.4	30.8	30.0	30.8	32.5	31.7
55°	43.3	36.7	35.9	35.0	32.5	29.2	26.7	26.7	26.7	25.8	24.2
57.5°	41.7	32.5	31.7	30.8	28.4	25.0	23.3	21.7	20.9	18.4	17.5
60°	43.3	29.2	29.2	27.5	25.0	21.7	19.2	16.7	15.0	13.3	13.3
62.5°	35.0	26.7	25.8	24.2	20.9	17.5	15.0	12.5	11.7	10.9	10.9
65°	28.4	24.2	22.6	20.0	17.5	14.2	11.7	10.0	9.2	9.2	10.0
67.5°	25.8	21.7	19.2	16.7	14.2	10.9	9.2	8.3	8.3	9.2	9.2
69°	24.2	20.0	17.5	15.0	12.5	10.0	8.3	8.3	8.3	8.3	9.2
70°	22.6	19.2	16.7	14.2	10.9	8.3	7.5	7.5	8.3	8.3	9.2
72.5°	17.5	15.0	14.2	11.7	8.3	7.5	6.7	7.5	7.5	8.3	8.3
75°	13.3	10.9	10.9	9.2	6.7	5.8	5.8	6.7	6.7	7.5	7.5
77.5°	9.2	7.5	7.5	6.7	5.8	5.0	5.0	5.8	6.7	6.7	7.5
80°	6.7	5.8	5.0	5.8	5.0	4.1	5.0	5.8	5.8	6.7	6.7
82.5°	5.0	5.0	5.0	5.0	4.1	4.1	5.0	5.0	5.8	6.7	6.7
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.0	5.0	5.8	5.8
87.5°	2.5	2.5	2.5	3.4	3.4	4.1	4.1	4.1	4.1	5.0	5.0
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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 CATALOG NUMBER: VST-E03-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	384.5	384.5	384.5	384.5
2.5°	290.2	289.4	286.0	286.9
5°	203.5	198.5	201.8	201.0
7.5°	149.3	148.4	147.6	149.3
10°	127.6	127.6	126.8	127.6
12.5°	120.1	120.1	120.1	120.1
15°	114.2	114.2	113.5	113.5
17.5°	107.6	107.6	107.6	106.7
20°	100.9	100.1	100.1	100.1
22.5°	93.4	92.6	92.6	92.6
25°	85.9	85.1	85.1	85.1
27.5°	78.4	77.5	76.7	76.7
30°	70.9	70.0	69.2	69.2
32.5°	63.4	62.5	61.7	61.7
35°	56.7	56.7	55.9	55.0
37.5°	50.9	50.9	50.9	50.9
40°	46.7	47.6	47.6	47.6
42.5°	44.2	45.0	45.9	46.7
45°	42.5	44.2	45.0	45.0
47.5°	41.7	42.5	43.3	43.3
50°	38.4	37.5	37.5	37.5
52.5°	30.8	29.2	28.4	27.5
55°	22.6	21.7	20.0	20.0
57.5°	15.8	15.8	15.0	15.0
60°	12.5	12.5	11.7	12.5
62.5°	10.9	10.9	10.9	10.9
65°	10.0	10.0	10.0	10.0
67.5°	10.0	10.0	10.0	10.0
69°	9.2	9.2	9.2	9.2
70°	9.2	9.2	9.2	9.2
72.5°	8.3	8.3	8.3	8.3
75°	7.5	8.3	8.3	8.3
77.5°	7.5	7.5	7.5	7.5
80°	6.7	6.7	7.5	7.5
82.5°	6.7	6.7	6.7	6.7
85°	5.8	5.8	6.7	6.7
87.5°	5.0	5.0	5.8	5.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)