

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: P165485

Luminaire Tested: **VST-E05-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165485
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-E05-LED-E-U-SL4-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 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: 8484.2 lumens
Efficiency: N/A
Efficacy: 66.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

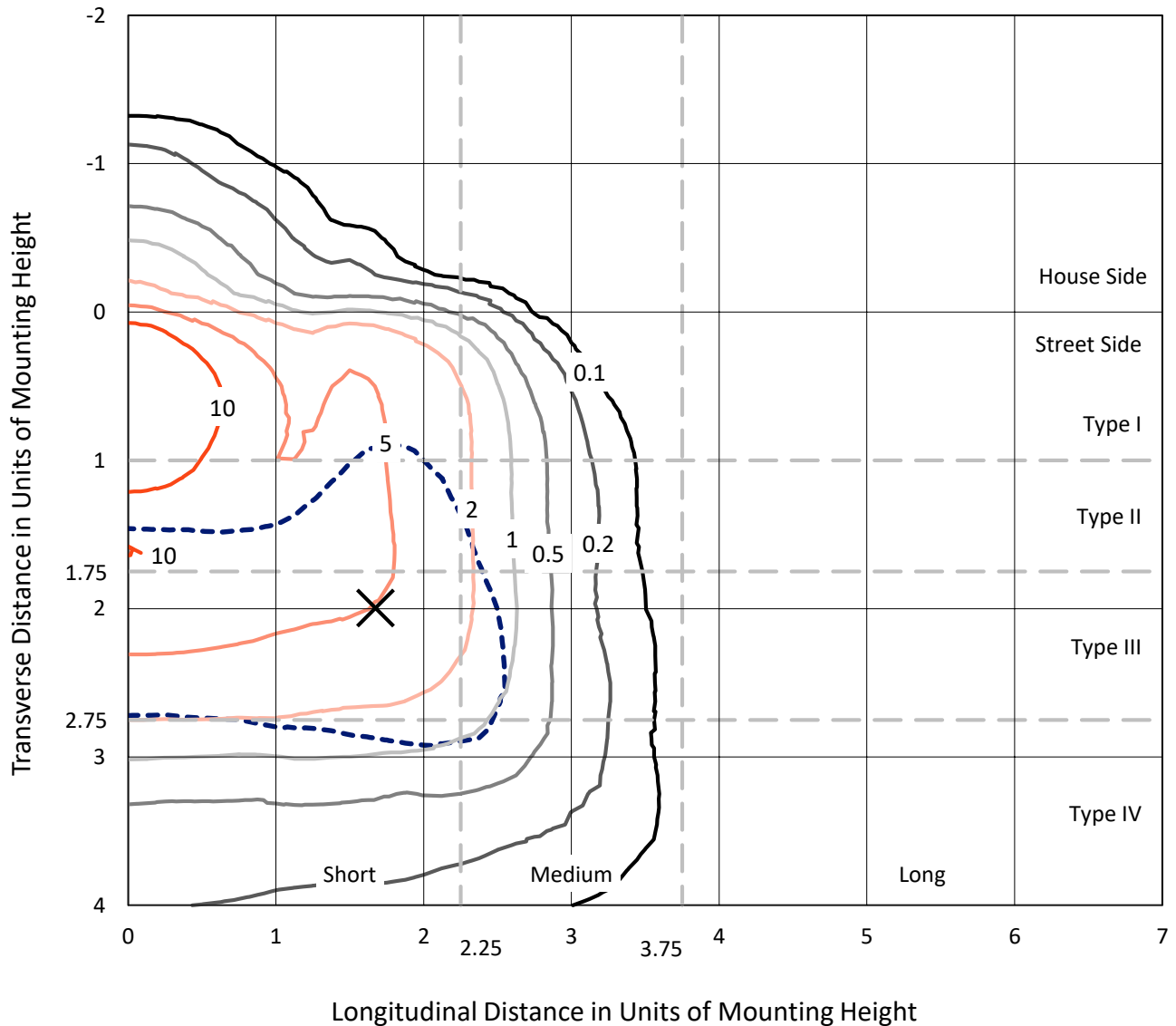
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

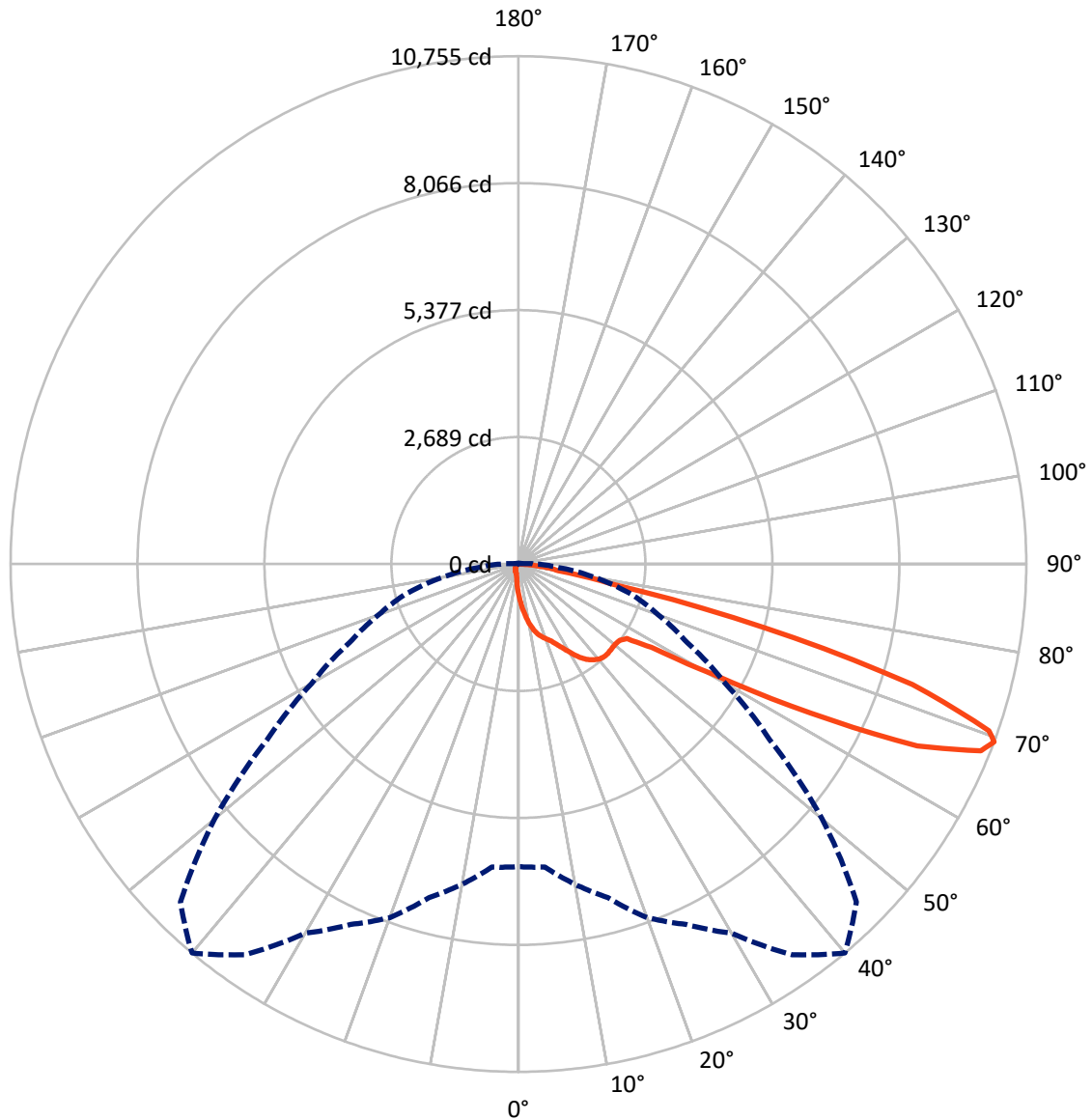
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 19 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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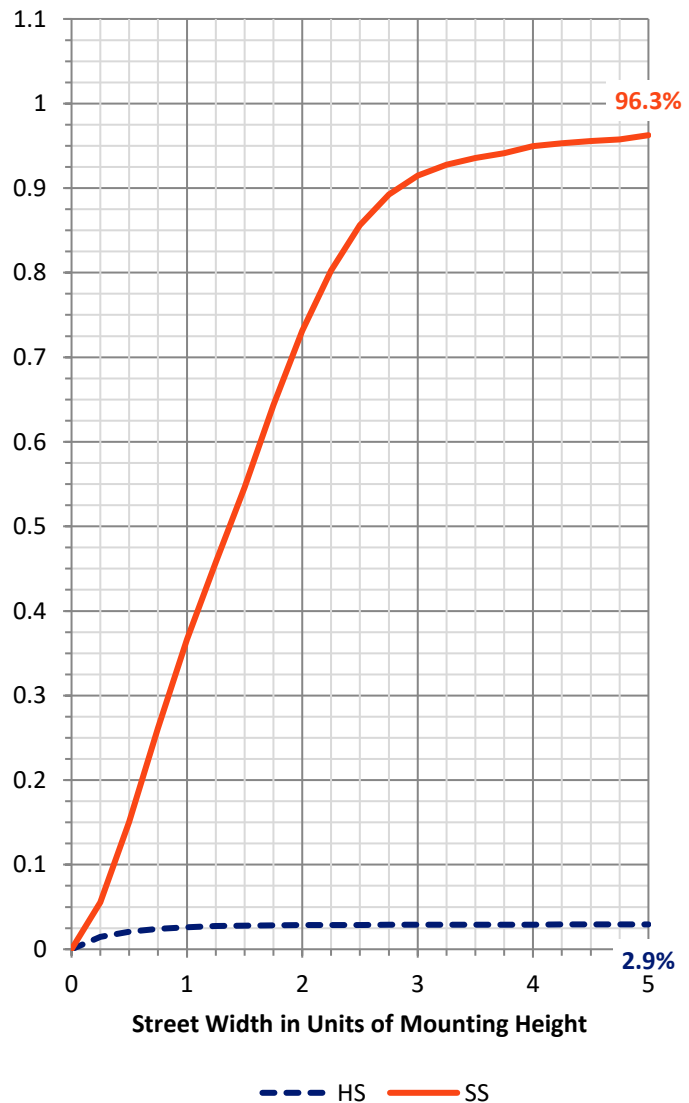
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	252.6	0.0	252.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	8231.5	0.0	8231.5
	% Fixture	97.0	0.0	97.0
Total	Lumens	8484.2	0.0	8484.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	0.8
10°-20°	227.1	2.7
20°-30°	434.6	5.1
30°-40°	722.7	8.5
40°-50°	977.9	11.5
50°-60°	1529.4	18.0
60°-70°	3144.4	37.1
70°-80°	1265.2	14.9
80°-90°	117.0	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°	8484.2	100.0
0°-180°	8484.2	100.0



REPORT NUMBER: P165485

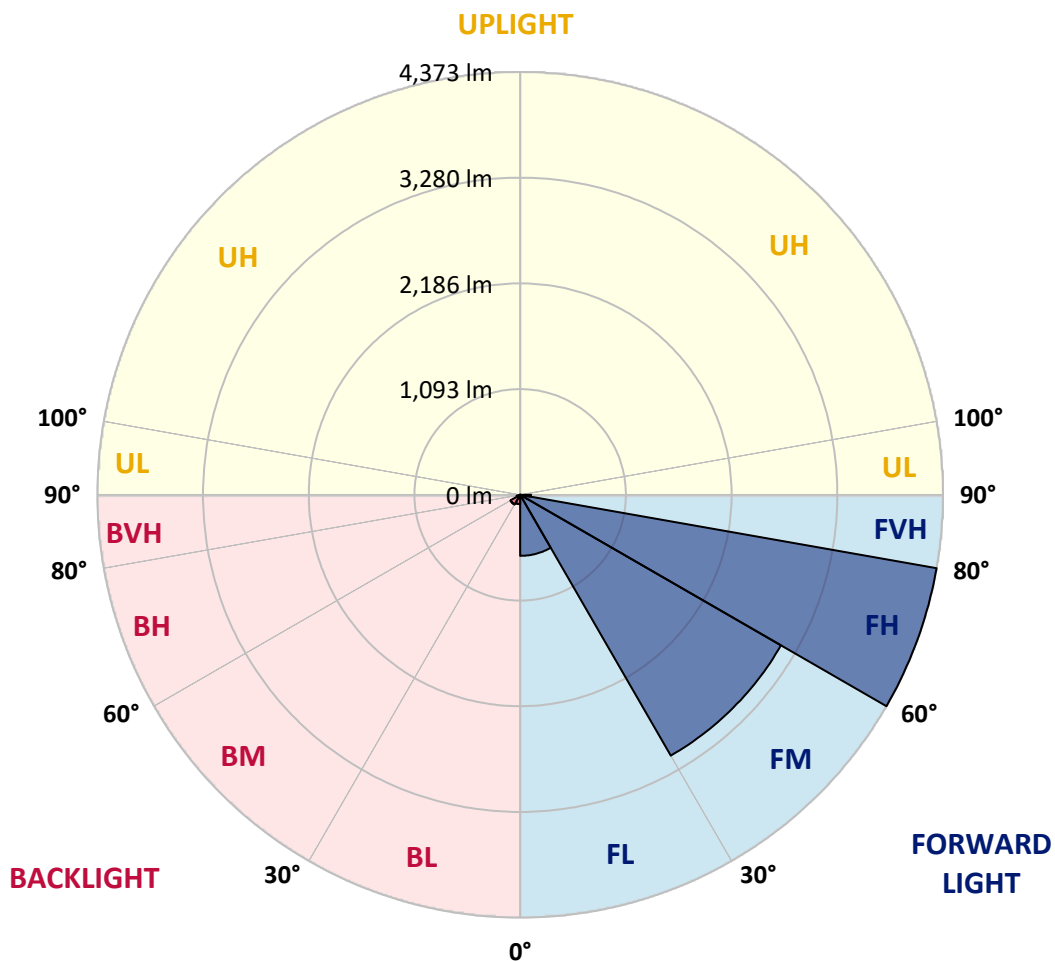
CATALOG NUMBER: VST-E05-LED-E-U-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	631.4	7.4			
FM	(30°-60°)	3114.7	36.7			
FH	(60°-80°)	4372.8	51.5			G2/5000
FVH	(80°-90°)	112.7	1.3			G2/225
BL	(0°-30°)	96.1	1.1	B0/110		
BM	(30°-60°)	115.4	1.4	B0/220		
BH	(60°-80°)	36.8	0.4	B0/110		G0/110
BVH	(80°-90°)	4.3	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°	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8
2.5°	854.8	845.0	833.9	833.9	820.0	820.0	811.7	789.5	786.7	774.1	761.6
5°	1091.0	1082.7	1068.8	1056.3	1045.2	1025.7	1011.8	985.4	956.2	928.4	903.4
7.5°	1321.8	1317.6	1292.6	1288.4	1270.3	1238.4	1210.5	1171.6	1121.6	1082.7	1036.8
10°	1535.8	1526.0	1520.4	1496.8	1470.5	1435.7	1392.6	1345.4	1287.0	1225.8	1160.5
12.5°	1705.4	1699.8	1674.7	1665.0	1637.3	1602.5	1548.3	1487.1	1428.8	1349.5	1273.1
15°	1831.8	1822.1	1805.4	1790.1	1756.8	1726.2	1676.2	1609.4	1538.6	1452.4	1360.7
17.5°	1937.5	1919.4	1915.2	1891.6	1856.9	1820.7	1765.1	1703.9	1620.5	1534.4	1434.3
20°	2079.2	2054.2	2045.8	2011.1	1970.8	1920.8	1856.9	1780.4	1692.8	1598.4	1495.5
22.5°	2245.9	2227.9	2209.8	2179.3	2127.9	2057.0	1963.9	1880.5	1769.3	1665.0	1553.9
25°	2482.3	2467.0	2437.8	2396.1	2332.1	2247.4	2134.8	2012.5	1881.8	1748.4	1617.8
27.5°	2711.6	2697.6	2676.8	2644.9	2572.6	2479.5	2340.5	2184.8	2019.4	1858.2	1713.6
30°	2927.0	2914.5	2893.6	2861.7	2797.7	2706.0	2548.9	2382.2	2176.5	1988.9	1815.2
32.5°	3159.1	3154.9	3131.3	3085.5	3029.8	2906.2	2735.2	2555.9	2347.5	2130.7	1927.7
35°	3421.8	3389.8	3367.6	3321.7	3227.3	3095.2	2895.1	2699.1	2479.5	2257.1	2030.6
37.5°	3644.2	3613.6	3585.8	3527.5	3412.1	3243.9	3017.4	2801.9	2575.4	2348.8	2118.1
40°	3806.7	3791.5	3758.1	3681.7	3552.4	3352.3	3107.7	2872.8	2644.9	2416.9	2189.0
42.5°	3927.7	3904.0	3866.6	3787.3	3634.5	3406.5	3143.8	2902.0	2676.8	2458.6	2234.9
45°	3972.2	3952.7	3918.0	3831.8	3666.4	3421.8	3142.4	2893.6	2678.2	2471.1	2265.4
47.5°	3945.7	3926.3	3895.7	3815.1	3652.5	3403.7	3117.4	2870.0	2664.3	2475.3	2293.2
50°	3858.2	3847.1	3823.4	3755.3	3609.4	3369.0	3095.2	2857.5	2661.5	2496.2	2332.1
52.5°	3849.9	3842.9	3813.7	3745.6	3596.9	3357.8	3092.4	2864.5	2685.2	2522.6	2360.0
55°	4704.6	4605.9	4385.0	4197.3	3888.8	3521.9	3232.7	2977.0	2785.3	2626.8	2512.8
57.5°	6686.5	6539.2	6248.7	5891.6	5182.7	4486.4	3929.1	3526.0	3327.3	3255.0	3298.1
60°	7614.9	7588.6	7542.7	7373.1	7010.4	6411.4	5744.2	5022.9	4733.8	4708.8	4796.3
62.5°	8055.6	8038.8	8052.8	8031.9	7919.3	7744.2	7552.4	7241.1	6954.7	6769.9	6378.0
65°	8258.5	8269.6	8348.8	8411.3	8425.2	8471.1	8611.5	8999.2	9282.7	8806.0	7717.8
67.5°	7742.8	7808.1	7990.2	8218.1	8485.0	8743.5	9160.4	9977.7	10560.0	9999.9	8454.4
69°	6409.9	6441.9	6886.6	7316.1	7967.9	8423.9	9028.4	10100.0	10754.6	10122.2	8396.0
70°	5046.5	5075.7	5552.4	6136.2	7238.3	7824.8	8615.6	9892.9	10572.5	9959.6	8095.8
72.5°	2276.6	2234.9	2403.0	2715.7	3913.8	4845.0	6227.9	8015.2	8722.6	7979.1	6056.9
75°	1590.0	1571.9	1590.0	1591.3	1777.6	2293.2	2893.6	4344.6	5373.1	4636.5	2893.6
77.5°	1231.4	1218.9	1206.4	1192.5	1214.8	1360.7	1419.0	1541.3	2001.4	1893.0	1103.5
80°	974.3	963.2	993.7	984.0	984.0	1000.7	989.6	943.7	857.5	795.0	711.6
82.5°	453.1	455.8	455.8	494.7	596.3	696.3	728.3	682.5	606.0	515.6	415.6
85°	43.0	48.6	82.0	126.5	251.6	283.5	284.9	236.2	236.2	186.3	150.1
87.5°	0.0	1.4	1.4	1.4	12.5	34.8	29.2	8.4	4.1	4.1	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8
2.5°	739.4	735.2	718.6	701.9	686.6	669.9	654.6	639.3	622.6	610.1	594.8
5°	864.5	833.9	799.2	765.8	732.4	697.7	661.6	629.6	596.3	565.6	536.4
7.5°	990.9	931.2	883.9	824.2	770.0	715.8	665.7	614.3	567.1	522.6	480.9
10°	1097.9	1025.7	952.0	875.6	797.7	725.5	656.0	594.8	532.3	478.1	426.7
12.5°	1185.6	1093.8	1003.5	907.5	820.0	728.3	642.1	568.4	494.7	433.6	380.8
15°	1264.7	1159.1	1050.7	939.5	828.4	724.1	628.2	536.4	461.4	391.9	332.2
17.5°	1328.7	1207.8	1085.5	960.4	840.9	718.6	610.1	514.2	426.7	354.4	296.1
20°	1384.3	1257.8	1125.8	985.4	849.2	717.1	594.8	486.5	396.1	319.7	262.6
22.5°	1435.7	1309.2	1167.5	1017.3	861.7	715.8	580.9	465.6	369.7	293.3	236.2
25°	1494.1	1360.7	1212.0	1050.7	883.9	721.4	572.6	448.9	346.0	268.2	215.4
27.5°	1559.4	1419.0	1264.7	1092.4	913.1	732.4	569.9	430.9	325.2	244.6	198.8
30°	1651.1	1488.5	1317.6	1134.1	939.5	745.0	567.1	419.7	304.3	226.5	182.0
32.5°	1731.8	1556.7	1376.0	1177.2	968.7	757.5	565.6	404.4	284.9	208.5	169.6
35°	1816.5	1619.2	1426.0	1218.9	993.7	771.3	564.3	393.3	266.9	190.4	157.1
37.5°	1890.2	1671.9	1464.9	1255.0	1021.6	783.9	565.6	383.6	250.2	175.1	145.9
40°	1952.7	1726.2	1508.0	1288.4	1050.7	803.3	567.1	373.9	233.5	161.2	136.2
42.5°	2008.4	1777.6	1553.9	1325.9	1084.1	825.6	575.4	365.5	219.6	148.7	126.5
45°	2051.4	1824.9	1603.8	1378.7	1138.3	861.7	590.7	360.0	205.7	137.6	118.2
47.5°	2095.9	1894.3	1688.7	1462.1	1217.5	918.7	617.1	358.6	194.5	129.2	111.2
50°	2157.1	1963.9	1763.7	1546.9	1289.8	977.1	649.0	360.0	180.7	120.9	104.2
52.5°	2201.6	2034.7	1861.0	1694.2	1462.1	1154.9	772.8	384.9	173.7	113.9	95.9
55°	2464.2	2435.0	2439.1	2467.0	2287.7	1965.2	1292.6	555.9	204.3	129.2	94.5
57.5°	3474.6	3577.4	3637.2	3635.8	3339.8	2770.0	1735.9	714.4	228.0	150.1	112.6
60°	4803.3	4725.5	4615.7	4344.6	3951.3	3161.9	1941.6	768.6	197.3	119.5	102.9
62.5°	5977.7	5521.8	5117.4	4678.2	4162.6	3298.1	1983.3	764.4	172.3	90.3	72.2
65°	6710.1	5890.1	5237.0	4686.5	4079.2	3184.1	1876.3	701.9	145.9	73.7	59.8
67.5°	6885.3	5691.4	4767.2	4065.3	3407.9	2478.1	1377.3	528.2	113.9	61.2	52.8
69°	6503.0	5059.1	3950.0	3153.6	2479.5	1644.2	852.0	333.5	87.5	55.6	48.6
70°	5981.9	4400.2	3217.5	2530.9	1836.0	1154.9	596.3	234.9	70.9	51.4	44.5
72.5°	3848.5	2311.3	1581.6	1100.7	757.5	460.1	233.5	105.7	54.2	43.0	36.1
75°	1492.7	854.8	619.9	471.1	368.3	255.7	141.8	68.1	45.8	36.1	27.8
77.5°	735.2	562.9	460.1	315.5	183.5	113.9	76.5	52.8	37.6	26.4	18.1
80°	580.9	386.4	230.7	143.1	108.4	82.0	58.4	43.0	27.8	16.7	12.5
82.5°	297.4	162.6	119.5	97.3	80.6	64.0	47.3	30.6	18.1	11.1	9.7
85°	93.1	68.1	61.2	59.8	55.6	45.8	33.3	19.5	11.1	6.9	6.9
87.5°	6.9	9.7	12.5	9.7	11.1	9.7	12.5	8.4	5.6	5.6	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8	640.8
2.5°	583.7	567.1	551.8	542.0	523.9	517.0	510.1	507.3	494.7	497.5	486.5
5°	510.1	480.9	458.6	436.4	415.6	400.3	387.7	372.5	360.0	354.4	343.3
7.5°	443.3	405.9	376.7	353.0	328.0	308.6	291.9	280.7	269.7	258.5	252.9
10°	384.9	344.7	311.3	287.7	264.1	247.4	234.9	226.5	219.6	215.4	214.0
12.5°	330.8	291.9	261.3	240.5	222.4	214.0	208.5	204.3	202.9	201.5	201.5
15°	289.1	250.2	226.5	211.3	202.9	198.8	197.3	194.5	191.8	190.4	190.4
17.5°	250.2	221.0	204.3	196.0	191.8	189.1	186.3	183.5	180.7	179.3	179.3
20°	223.7	200.1	191.8	186.3	182.0	179.3	175.1	172.3	171.0	169.6	168.2
22.5°	202.9	187.6	182.0	177.9	172.3	168.2	165.4	162.6	159.9	158.4	157.1
25°	187.6	177.9	173.7	168.2	162.6	158.4	154.3	150.1	147.4	145.9	143.1
27.5°	176.5	169.6	164.0	157.1	151.5	147.4	143.1	139.0	136.2	133.4	132.0
30°	166.8	159.9	152.8	147.4	140.4	136.2	130.6	126.5	125.1	122.3	119.5
32.5°	157.1	150.1	143.1	136.2	129.2	123.7	120.9	115.4	112.6	111.2	108.4
35°	145.9	139.0	130.6	125.1	118.2	112.6	108.4	104.2	101.4	98.7	97.3
37.5°	136.2	127.9	119.5	112.6	107.0	101.4	97.3	93.1	90.3	87.5	86.2
40°	125.1	116.7	108.4	101.4	95.9	91.7	87.5	83.4	80.6	79.3	79.3
42.5°	115.4	105.7	97.3	91.7	87.5	82.0	77.8	73.7	72.2	70.9	72.2
45°	105.7	95.9	89.0	83.4	79.3	73.7	69.5	66.7	65.3	66.7	68.1
47.5°	97.3	87.5	80.6	76.5	72.2	68.1	64.0	61.2	61.2	64.0	66.7
50°	89.0	79.3	73.7	70.9	66.7	62.5	57.0	55.6	57.0	59.8	62.5
52.5°	80.6	69.5	65.3	64.0	59.8	55.6	51.4	50.0	51.4	54.2	52.8
55°	72.2	61.2	59.8	58.4	54.2	48.6	44.5	44.5	44.5	43.0	40.3
57.5°	69.5	54.2	52.8	51.4	47.3	41.7	38.9	36.1	34.8	30.6	29.2
60°	72.2	48.6	48.6	45.8	41.7	36.1	32.0	27.8	25.0	22.2	22.2
62.5°	58.4	44.5	43.0	40.3	34.8	29.2	25.0	20.8	19.5	18.1	18.1
65°	47.3	40.3	37.6	33.3	29.2	23.6	19.5	16.7	15.3	15.3	16.7
67.5°	43.0	36.1	32.0	27.8	23.6	18.1	15.3	13.9	13.9	15.3	15.3
69°	40.3	33.3	29.2	25.0	20.8	16.7	13.9	13.9	13.9	13.9	15.3
70°	37.6	32.0	27.8	23.6	18.1	13.9	12.5	12.5	13.9	13.9	15.3
72.5°	29.2	25.0	23.6	19.5	13.9	12.5	11.1	12.5	12.5	13.9	13.9
75°	22.2	18.1	18.1	15.3	11.1	9.7	9.7	11.1	11.1	12.5	12.5
77.5°	15.3	12.5	12.5	11.1	9.7	8.4	8.4	9.7	11.1	11.1	12.5
80°	11.1	9.7	8.4	9.7	8.4	6.9	8.4	9.7	9.7	11.1	11.1
82.5°	8.4	8.4	8.4	8.4	6.9	6.9	8.4	8.4	9.7	11.1	11.1
85°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	8.4	8.4	9.7	9.7
87.5°	4.1	4.1	4.1	5.6	5.6	6.9	6.9	6.9	6.9	8.4	8.4
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: P165485

CATALOG NUMBER: VST-E05-LED-E-U-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	640.8	640.8	640.8	640.8
2.5°	483.7	482.3	476.7	478.1
5°	339.1	330.8	336.3	335.0
7.5°	248.8	247.4	246.0	248.8
10°	212.7	212.7	211.3	212.7
12.5°	200.1	200.1	200.1	200.1
15°	190.4	190.4	189.1	189.1
17.5°	179.3	179.3	179.3	177.9
20°	168.2	166.8	166.8	166.8
22.5°	155.6	154.3	154.3	154.3
25°	143.1	141.8	141.8	141.8
27.5°	130.6	129.2	127.9	127.9
30°	118.2	116.7	115.4	115.4
32.5°	105.7	104.2	102.9	102.9
35°	94.5	94.5	93.1	91.7
37.5°	84.8	84.8	84.8	84.8
40°	77.8	79.3	79.3	79.3
42.5°	73.7	75.0	76.5	77.8
45°	70.9	73.7	75.0	75.0
47.5°	69.5	70.9	72.2	72.2
50°	64.0	62.5	62.5	62.5
52.5°	51.4	48.6	47.3	45.8
55°	37.6	36.1	33.3	33.3
57.5°	26.4	26.4	25.0	25.0
60°	20.8	20.8	19.5	20.8
62.5°	18.1	18.1	18.1	18.1
65°	16.7	16.7	16.7	16.7
67.5°	16.7	16.7	16.7	16.7
69°	15.3	15.3	15.3	15.3
70°	15.3	15.3	15.3	15.3
72.5°	13.9	13.9	13.9	13.9
75°	12.5	13.9	13.9	13.9
77.5°	12.5	12.5	12.5	12.5
80°	11.1	11.1	12.5	12.5
82.5°	11.1	11.1	11.1	11.1
85°	9.7	9.7	11.1	11.1
87.5°	8.4	8.4	9.7	9.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)