

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: P165264

Luminaire Tested: **VST-F04-LED-E-U-SL3-HSS-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165264
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-F04-LED-E-U-SL3-HSS-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5804.5 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

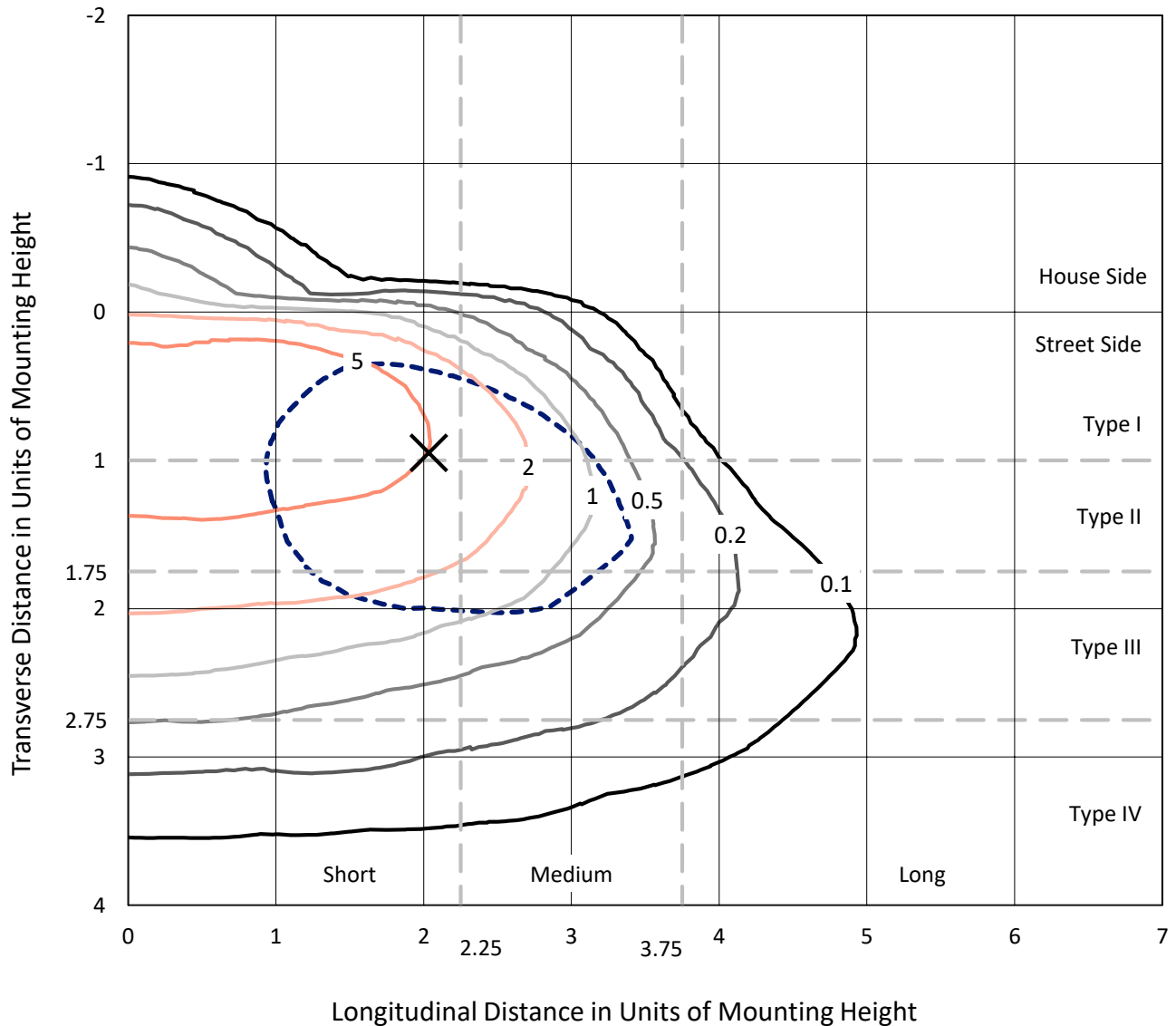
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

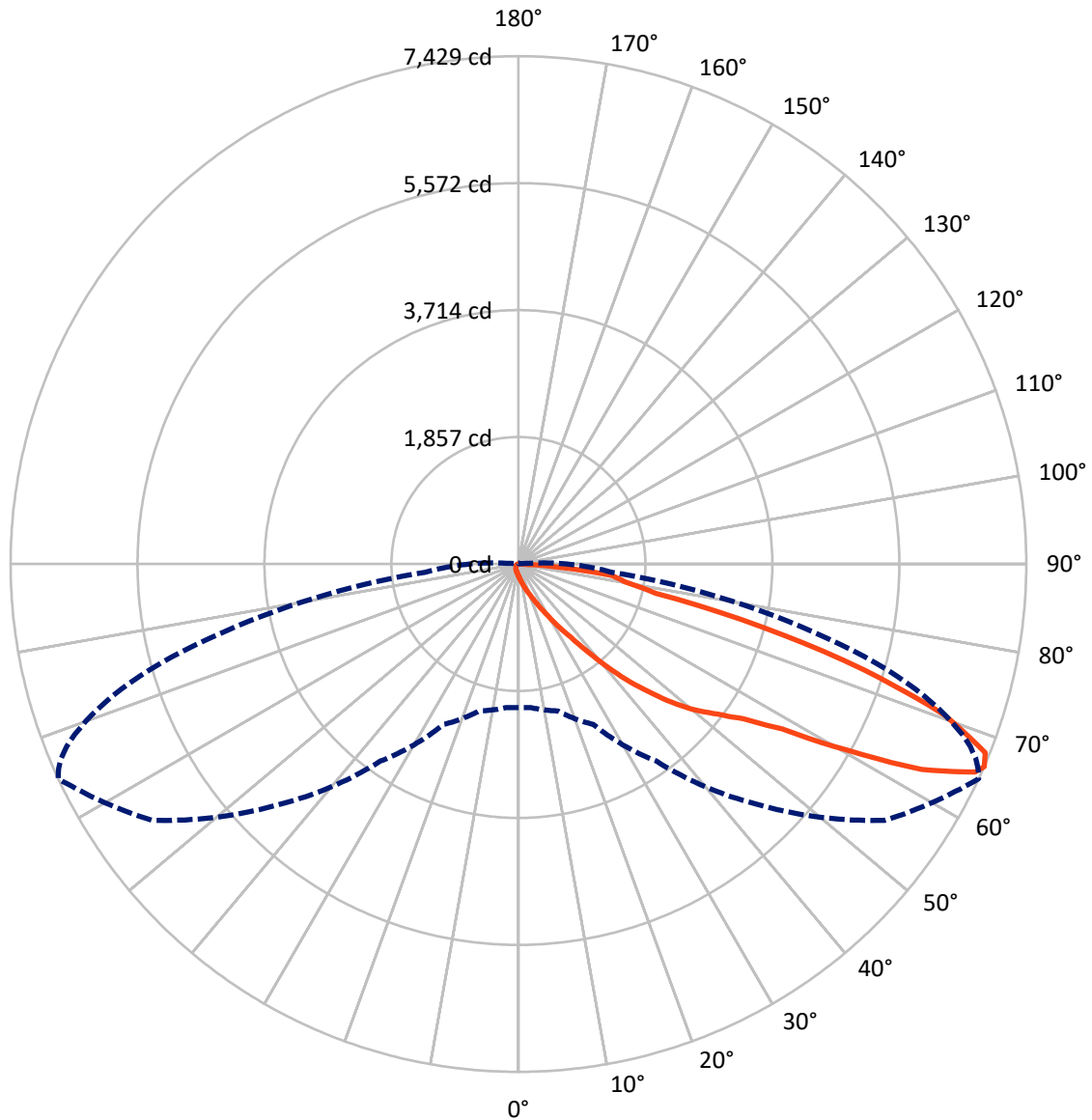
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	125.8	0.0	125.8
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	5678.7	0.0	5678.7
	% Fixture	97.8	0.0	97.8
Total	Lumens	5804.5	0.0	5804.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.6	0.3
10°-20°	83.2	1.4
20°-30°	179.4	3.1
30°-40°	383.0	6.6
40°-50°	847.1	14.6
50°-60°	1435.6	24.7
60°-70°	1915.6	33.0
70°-80°	843.8	14.5
80°-90°	97.2	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°	5804.5	100.0
0°-180°	5804.5	100.0



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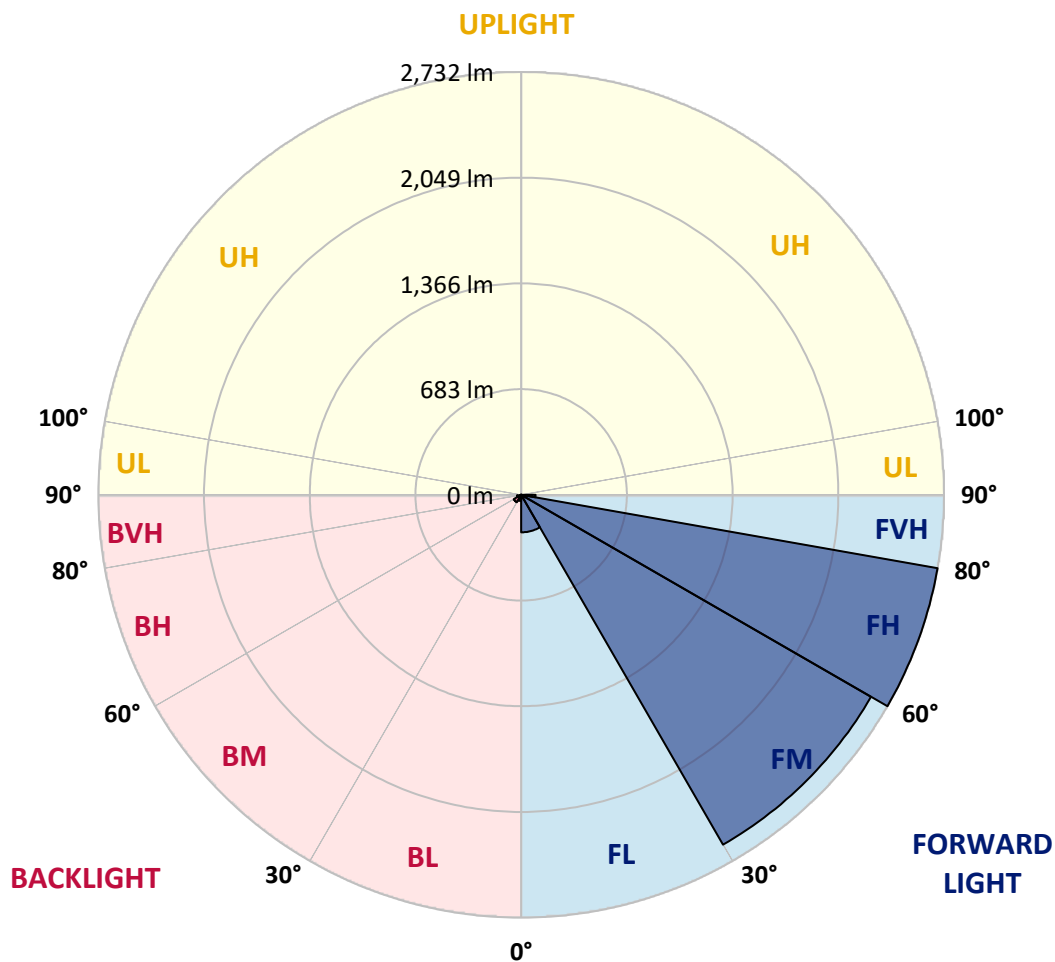
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	242.5	4.2			
FM	(30°-60°)	2610.5	45.0			
FH	(60°-80°)	2732.5	47.1			G2/5000
FVH	(80°-90°)	93.3	1.6			G1/100
BL	(0°-30°)	39.7	0.7	B0/110		
BM	(30°-60°)	55.2	1.0	B0/220		
BH	(60°-80°)	27.0	0.5	B0/110		G0/110
BVH	(80°-90°)	3.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2
2.5°	221.0	219.8	215.4	215.4	208.7	204.2	198.6	193.1	193.1	191.9	190.8
5°	292.3	285.7	284.5	272.3	262.3	247.8	234.3	216.5	214.3	212.0	210.9
7.5°	371.6	370.5	360.4	345.9	325.9	299.1	272.3	243.3	238.8	236.6	232.1
10°	474.3	468.7	455.3	430.7	400.6	364.9	321.4	275.6	270.0	265.6	263.3
12.5°	572.5	562.5	554.6	523.4	485.4	433.0	380.5	314.7	310.2	304.7	295.7
15°	664.0	655.0	641.7	614.9	572.5	506.6	445.3	364.9	353.7	345.9	339.2
17.5°	735.4	729.8	714.2	684.1	638.3	580.3	506.6	416.2	407.3	397.2	385.0
20°	803.5	795.6	771.1	729.8	680.7	636.1	579.2	483.2	470.9	458.6	445.3
22.5°	868.2	860.4	820.2	752.1	699.7	680.7	660.7	559.1	540.1	530.1	516.6
25°	958.6	941.9	879.3	771.1	700.8	715.3	749.9	657.3	639.4	624.9	603.7
27.5°	1080.3	1057.9	959.7	799.0	705.2	753.3	852.6	776.7	757.7	741.0	717.6
30°	1217.5	1203.0	1085.8	866.0	737.6	809.1	967.5	928.5	906.2	886.0	858.2
32.5°	1355.9	1335.8	1219.7	993.2	824.6	917.3	1111.5	1104.8	1075.8	1056.8	1026.7
35°	1477.5	1467.5	1381.5	1201.8	1023.3	1107.0	1303.4	1311.2	1285.6	1265.5	1232.0
37.5°	1560.1	1560.1	1543.4	1426.1	1339.1	1401.6	1585.7	1586.9	1561.2	1515.5	1498.7
40°	1602.5	1614.7	1675.0	1697.3	1692.9	1773.2	1956.3	1936.1	1914.9	1891.5	1835.7
42.5°	1689.5	1700.7	1829.0	1983.0	2083.5	2189.5	2315.6	2308.9	2283.2	2240.8	2189.5
45°	1836.9	1851.4	2004.2	2248.6	2455.0	2605.7	2686.0	2654.8	2629.1	2589.0	2562.2
47.5°	2024.3	2052.2	2225.2	2527.6	2776.4	3025.3	3109.0	3026.4	3004.1	2972.8	2929.3
50°	2224.1	2250.8	2435.0	2780.9	3062.1	3359.0	3498.5	3359.0	3326.6	3316.5	3267.5
52.5°	2397.0	2419.4	2596.8	2976.2	3280.8	3629.0	3832.1	3648.0	3624.5	3591.1	3555.3
55°	2499.7	2517.6	2683.8	3069.9	3429.3	3872.3	4154.7	3992.8	3958.2	3944.9	3893.5
57.5°	2534.3	2552.1	2701.7	3082.2	3509.6	4094.4	4546.4	4551.9	4510.6	4462.7	4447.0
60°	2534.3	2554.4	2680.5	3052.1	3587.7	4330.9	5068.6	5533.9	5444.7	5435.7	5378.8
62.5°	2429.4	2448.4	2575.6	2959.5	3692.6	4650.1	5796.2	6617.5	6591.9	6533.8	6440.1
65°	2201.7	2212.9	2337.9	2722.9	3652.5	4943.6	6426.7	7338.4	7297.1	7183.3	7062.8
66°	2099.1	2108.0	2225.2	2587.8	3520.8	4983.8	6538.3	7428.8	7360.7	7264.7	7128.6
67.5°	1950.6	1966.3	2048.8	2336.8	3205.0	4844.3	6468.0	7365.2	7306.1	7190.0	7053.8
70°	1302.3	1291.1	1582.4	1793.3	2441.7	3947.1	5802.9	6613.0	6614.2	6559.5	6504.8
72.5°	618.2	624.9	709.7	1103.6	1598.0	2637.0	4618.9	5278.4	5354.3	5256.1	5188.0
75°	444.1	454.2	505.5	675.2	953.0	1582.4	2994.0	3691.5	3693.7	3519.6	3364.6
77.5°	129.4	135.1	189.7	416.2	714.2	1067.9	1719.6	2052.2	2004.2	1879.2	1762.1
80°	53.5	53.5	55.8	132.8	286.8	725.4	1203.0	1580.2	1574.6	1526.6	1457.4
82.5°	20.1	21.2	26.8	54.7	68.1	178.6	802.4	1371.5	1368.1	1300.1	1251.0
85°	2.2	2.2	6.7	23.4	25.7	33.5	160.7	604.8	601.5	604.8	530.1
87.5°	0.0	0.0	1.1	2.2	3.3	4.5	6.7	23.4	25.7	24.5	22.3
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2
2.5°	190.8	188.6	188.6	187.5	187.5	187.5	186.4	185.3	185.3	184.1	183.0
5°	208.7	206.4	205.3	203.1	202.0	200.9	198.6	197.5	195.3	194.1	193.1
7.5°	229.9	225.4	224.3	221.0	217.6	215.4	213.1	209.8	207.6	203.1	202.0
10°	256.7	251.1	246.6	242.1	238.8	233.3	229.9	225.4	221.0	217.6	214.3
12.5°	291.3	283.5	276.8	272.3	264.5	257.8	251.1	247.8	238.8	234.3	228.8
15°	329.2	320.3	312.5	303.5	298.0	286.8	277.8	267.8	263.3	255.5	246.6
17.5°	378.3	363.8	351.5	342.6	331.4	320.3	310.2	300.2	286.8	277.8	266.7
20°	430.7	418.5	401.7	386.1	372.7	359.4	344.8	331.4	319.2	304.7	291.3
22.5°	497.7	479.9	459.8	444.1	426.3	411.8	391.7	373.9	353.7	334.8	319.2
25°	582.5	559.1	540.1	517.8	496.6	474.3	449.7	427.4	401.7	383.9	357.1
27.5°	687.4	665.1	639.4	610.4	589.2	555.7	523.4	495.5	465.3	437.4	407.3
30°	821.3	789.0	762.2	734.3	691.9	659.5	621.6	583.7	542.3	514.5	468.7
32.5°	982.0	947.4	907.3	867.1	828.0	782.3	735.4	688.5	642.8	591.5	544.6
35°	1178.5	1137.1	1091.4	1047.9	987.6	938.5	879.3	814.6	763.3	704.2	645.0
37.5°	1438.5	1370.4	1330.2	1284.4	1203.0	1136.0	1070.2	1005.4	915.0	852.6	768.9
40°	1764.3	1724.1	1658.3	1584.6	1511.0	1422.8	1333.6	1247.6	1142.7	1055.7	958.6
42.5°	2147.0	2087.9	2021.0	1914.9	1840.2	1736.4	1634.9	1521.0	1392.7	1281.1	1167.3
45°	2506.4	2436.1	2384.8	2278.8	2200.6	2077.8	1955.1	1834.6	1686.2	1542.2	1410.6
47.5°	2894.8	2836.7	2751.9	2666.0	2586.8	2448.4	2315.6	2169.4	2013.1	1842.4	1671.7
50°	3236.2	3190.5	3132.4	3028.7	2940.5	2824.4	2668.2	2508.6	2311.1	2141.5	1947.3
52.5°	3526.3	3490.6	3409.2	3335.5	3256.3	3146.9	3007.5	2854.6	2641.5	2455.0	2234.1
55°	3869.0	3843.3	3771.9	3726.1	3655.8	3550.9	3420.4	3278.7	3053.2	2850.1	2600.1
57.5°	4430.3	4410.2	4347.7	4328.7	4259.5	4168.0	4007.3	3855.5	3592.2	3340.0	3054.4
60°	5359.8	5319.7	5228.2	5181.3	5035.1	4912.4	4703.7	4495.0	4177.0	3855.5	3511.8
62.5°	6355.2	6242.5	6068.4	5919.0	5711.4	5498.2	5219.2	4900.1	4527.4	4145.7	3750.6
65°	6892.0	6700.1	6480.3	6242.5	5973.6	5660.0	5308.5	4925.8	4525.1	4122.3	3704.9
66°	6953.4	6736.9	6503.7	6239.2	5940.2	5606.5	5249.4	4847.6	4431.4	4038.6	3621.2
67.5°	6876.4	6649.9	6403.3	6109.8	5786.1	5440.2	5065.2	4647.9	4247.2	3848.8	3442.7
70°	6337.4	6112.0	5892.1	5583.0	5238.2	4890.1	4535.2	4068.7	3689.3	3323.2	2961.7
72.5°	5060.8	4907.9	4690.3	4425.8	4089.9	3681.5	3385.7	2968.4	2639.2	2284.3	2004.2
75°	3162.6	2947.2	2678.2	2341.2	2084.6	1753.1	1580.2	1263.2	1075.8	911.7	753.3
77.5°	1617.0	1455.2	1266.6	1076.9	895.0	714.2	552.4	390.6	263.3	183.0	136.1
80°	1335.8	1193.0	1036.7	863.7	703.1	545.7	392.8	267.8	170.8	111.6	87.0
82.5°	1103.6	983.1	843.6	682.9	543.5	428.6	298.0	194.1	120.5	78.1	61.4
85°	469.8	426.3	329.2	261.1	196.4	145.1	101.6	68.1	48.0	39.0	35.7
87.5°	20.1	22.3	21.2	16.7	12.3	12.3	11.2	8.9	8.9	8.9	8.9
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2	175.2
2.5°	183.0	181.9	180.8	180.8	179.6	178.6	171.9	166.3	159.6	155.1	150.6
5°	190.8	189.7	187.5	186.4	184.1	183.0	168.5	156.2	146.2	138.4	132.8
7.5°	198.6	197.5	194.1	190.8	189.7	187.5	164.1	148.4	135.1	126.1	120.5
10°	208.7	205.3	202.0	197.5	194.1	190.8	159.6	139.5	125.0	117.2	111.6
12.5°	223.2	217.6	212.0	206.4	202.0	196.4	157.4	131.7	117.2	108.2	102.7
15°	240.0	232.1	225.4	218.7	210.9	205.3	152.9	125.0	110.5	101.6	94.9
17.5°	255.5	246.6	236.6	226.5	218.7	210.9	148.4	118.3	103.7	94.9	88.2
20°	277.8	264.5	252.2	240.0	228.8	218.7	141.7	111.6	98.2	88.2	81.5
22.5°	302.4	286.8	271.2	254.5	240.0	226.5	136.1	106.0	92.6	82.6	74.7
25°	333.7	314.7	293.5	272.3	255.5	237.7	130.6	100.4	87.0	77.0	69.2
27.5°	377.2	350.4	327.0	300.2	274.5	254.5	126.1	96.0	81.5	71.4	63.6
30°	436.3	397.2	360.4	331.4	301.3	272.3	121.6	90.4	77.0	65.9	56.9
32.5°	502.1	456.4	414.0	370.5	332.5	299.1	117.2	85.9	71.4	60.2	52.5
35°	583.7	525.6	468.7	418.5	372.7	328.1	112.7	81.5	67.0	54.7	46.9
37.5°	700.8	628.3	553.5	488.8	429.6	370.5	109.4	77.0	61.4	49.1	41.3
40°	861.5	767.8	676.2	588.1	511.1	437.4	104.9	72.5	56.9	44.7	36.8
42.5°	1035.6	921.8	801.3	701.9	595.9	503.3	100.4	68.1	52.5	40.2	32.4
45°	1252.1	1110.3	964.2	829.1	699.7	580.3	96.0	63.6	46.9	35.7	27.9
47.5°	1488.7	1307.9	1142.7	973.1	819.1	676.2	90.4	60.2	42.4	31.2	24.5
50°	1732.0	1541.1	1332.4	1139.4	956.4	772.3	84.8	54.7	37.9	27.9	20.1
52.5°	1994.2	1768.8	1555.6	1315.7	1102.6	898.3	79.2	50.2	34.6	24.5	16.7
55°	2327.8	2075.7	1825.7	1556.7	1300.1	1044.5	73.7	44.7	30.2	21.2	13.4
57.5°	2747.4	2448.4	2141.5	1838.0	1526.6	1236.5	69.2	39.0	25.7	17.8	11.2
60°	3143.6	2794.3	2422.7	2073.4	1721.9	1383.8	62.5	34.6	22.3	14.5	11.2
62.5°	3348.9	2950.5	2549.9	2164.9	1790.0	1436.2	55.8	29.0	19.0	12.3	10.0
65°	3298.7	2892.5	2504.2	2115.8	1748.7	1402.8	49.1	25.7	16.7	11.2	10.0
66°	3226.2	2824.4	2433.9	2064.5	1714.1	1367.0	45.7	24.5	15.7	11.2	8.9
67.5°	3067.7	2679.3	2306.6	1962.9	1619.2	1298.9	41.3	22.3	14.5	10.0	8.9
70°	2620.2	2267.6	1969.6	1663.9	1383.8	1094.8	33.5	19.0	12.3	8.9	8.9
72.5°	1734.1	1494.2	1295.6	1114.8	931.8	723.1	27.9	15.7	10.0	8.9	7.8
75°	653.9	591.5	507.8	456.4	398.4	349.3	22.3	10.0	7.8	7.8	7.8
77.5°	116.1	107.1	94.9	87.0	80.4	73.7	17.8	6.7	6.7	7.8	7.8
80°	78.1	72.5	65.9	60.2	55.8	50.2	12.3	5.6	6.7	6.7	7.8
82.5°	55.8	52.5	49.1	44.7	41.3	36.8	7.8	5.6	6.7	6.7	6.7
85°	33.5	31.2	29.0	26.8	23.4	22.3	5.6	5.6	5.6	6.7	6.7
87.5°	8.9	7.8	8.9	8.9	6.7	7.8	4.5	4.5	4.5	5.6	5.6
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: P165264

CATALOG NUMBER: VST-F04-LED-E-U-SL3-HSS-7060

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	175.2	175.2	175.2	175.2	175.2
2.5°	148.4	148.4	146.2	149.6	149.6
5°	128.3	128.3	127.2	128.3	128.3
7.5°	117.2	116.1	116.1	116.1	117.2
10°	107.1	106.0	106.0	106.0	106.0
12.5°	98.2	97.1	96.0	97.1	97.1
15°	90.4	88.2	88.2	88.2	88.2
17.5°	83.7	81.5	80.4	80.4	80.4
20°	77.0	73.7	73.7	73.7	73.7
22.5°	70.3	67.0	67.0	67.0	67.0
25°	63.6	60.2	60.2	60.2	60.2
27.5°	58.0	54.7	54.7	54.7	54.7
30°	51.4	49.1	49.1	50.2	49.1
32.5°	46.9	43.5	43.5	44.7	44.7
35°	41.3	39.0	39.0	39.0	39.0
37.5°	35.7	33.5	33.5	33.5	33.5
40°	31.2	29.0	27.9	29.0	29.0
42.5°	26.8	24.5	23.4	23.4	23.4
45°	23.4	20.1	19.0	20.1	20.1
47.5°	19.0	16.7	16.7	17.8	17.8
50°	14.5	14.5	15.7	17.8	17.8
52.5°	13.4	13.4	15.7	17.8	17.8
55°	12.3	13.4	15.7	16.7	17.8
57.5°	11.2	13.4	15.7	16.7	16.7
60°	11.2	12.3	14.5	16.7	16.7
62.5°	10.0	11.2	13.4	15.7	15.7
65°	10.0	11.2	13.4	15.7	15.7
66°	10.0	11.2	13.4	15.7	15.7
67.5°	10.0	11.2	13.4	15.7	15.7
70°	10.0	11.2	13.4	14.5	14.5
72.5°	8.9	10.0	12.3	14.5	14.5
75°	8.9	10.0	12.3	14.5	14.5
77.5°	8.9	10.0	12.3	14.5	14.5
80°	8.9	10.0	12.3	13.4	14.5
82.5°	7.8	10.0	11.2	13.4	13.4
85°	7.8	8.9	11.2	12.3	13.4
87.5°	6.7	7.8	8.9	11.2	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)