

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: P165491

Luminaire Tested: **VST-F05-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165491
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-F05-LED-E-U-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (35) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7579.5 lumens
Efficiency: N/A
Efficacy: 56.9 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): 133.3
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



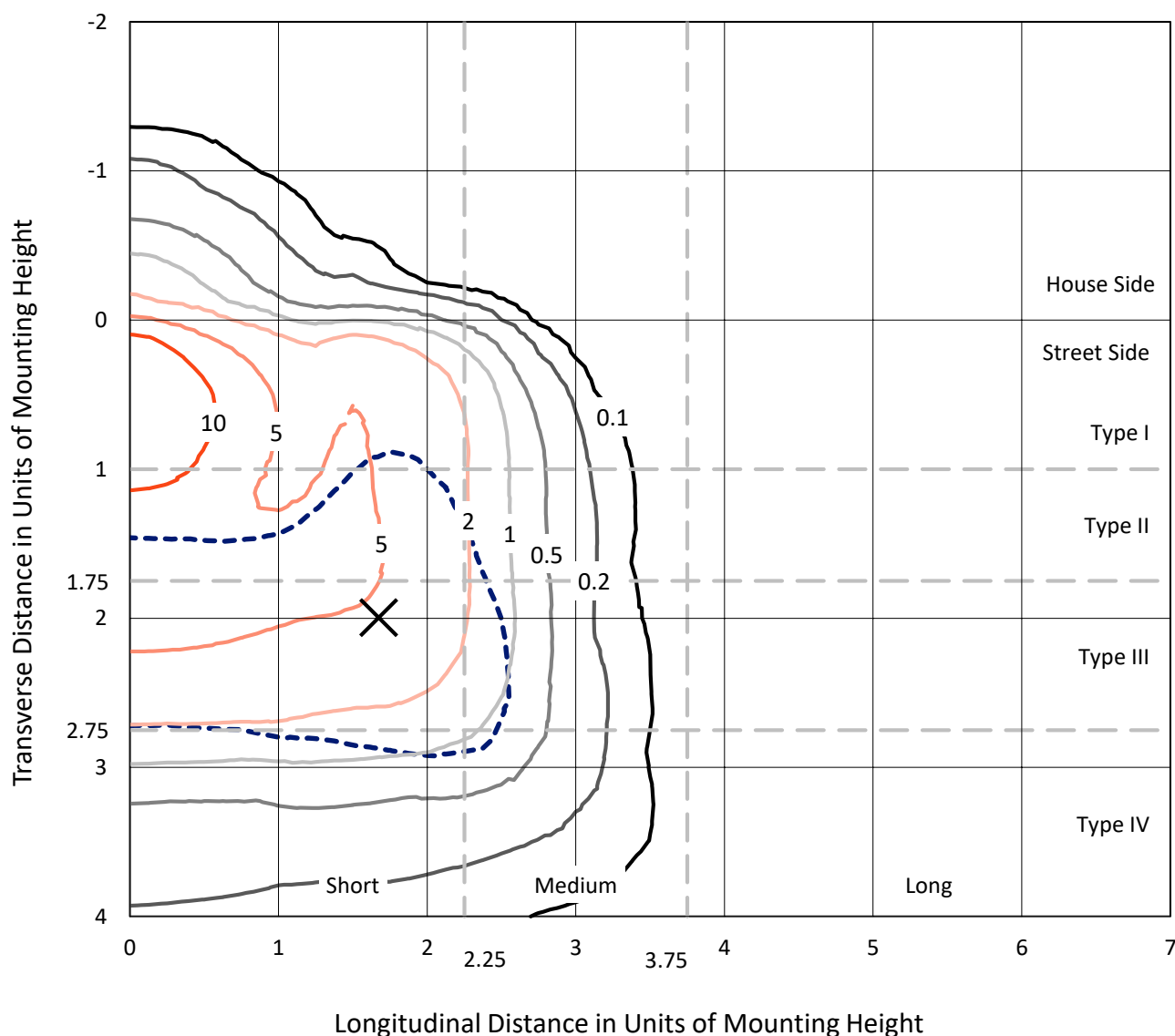
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

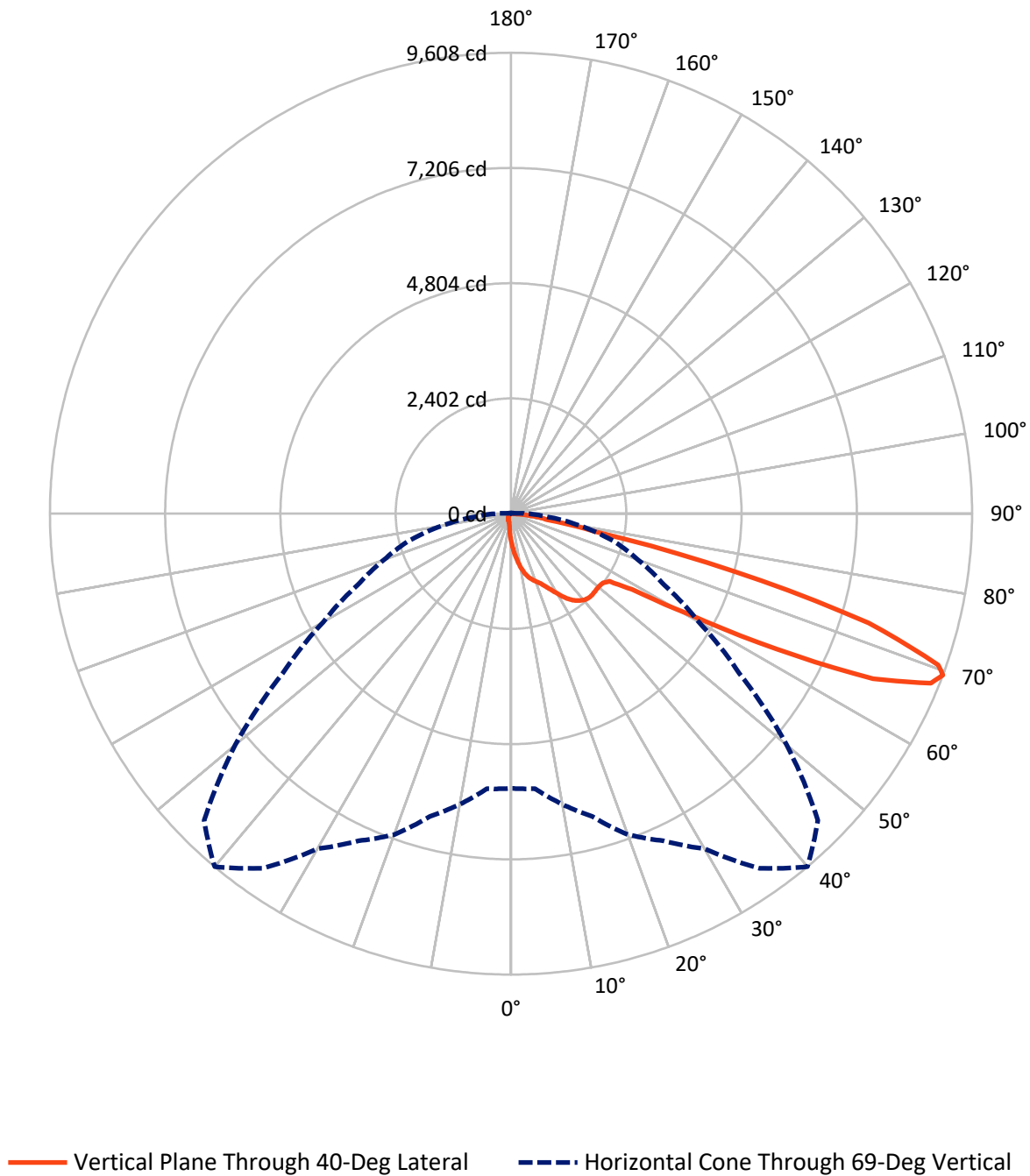


Based on 10 foot mounting height. Maximum calculated value = 17 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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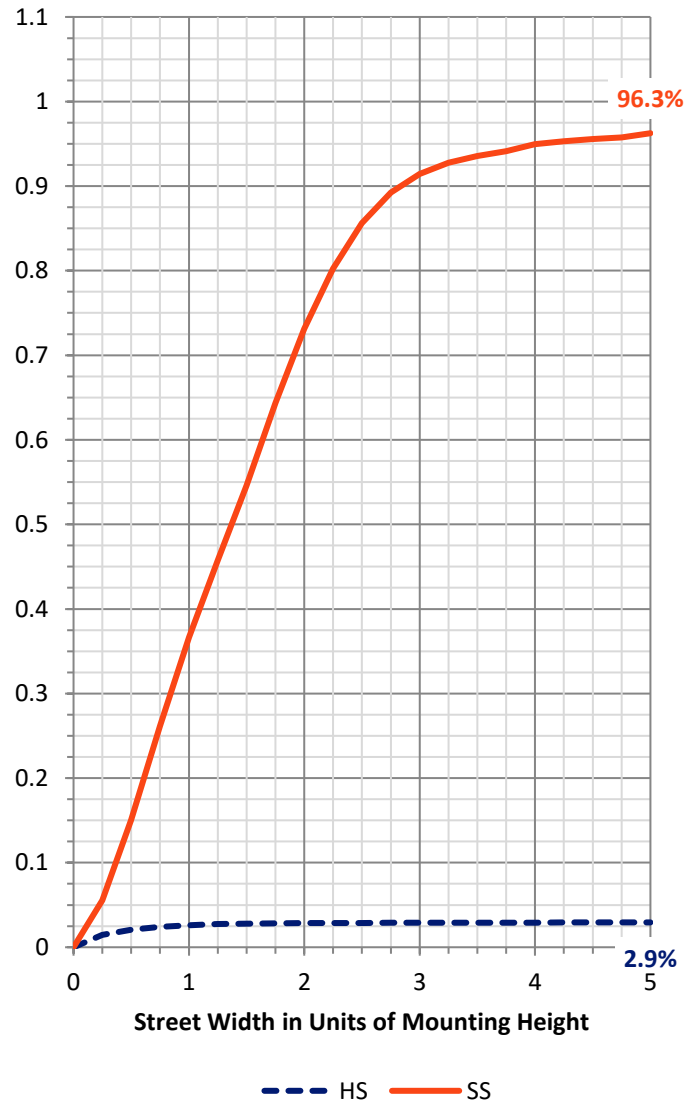
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	225.7	0.0	225.7
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	7353.8	0.0	7353.8
	% Fixture	97.0	0.0	97.0
Total	Lumens	7579.5	0.0	7579.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	0.8
10°-20°	202.8	2.7
20°-30°	388.2	5.1
30°-40°	645.6	8.5
40°-50°	873.7	11.5
50°-60°	1366.3	18.0
60°-70°	2809.1	37.1
70°-80°	1130.3	14.9
80°-90°	104.6	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°	7579.5	100.0
0°-180°	7579.5	100.0

Coefficient of Utilization



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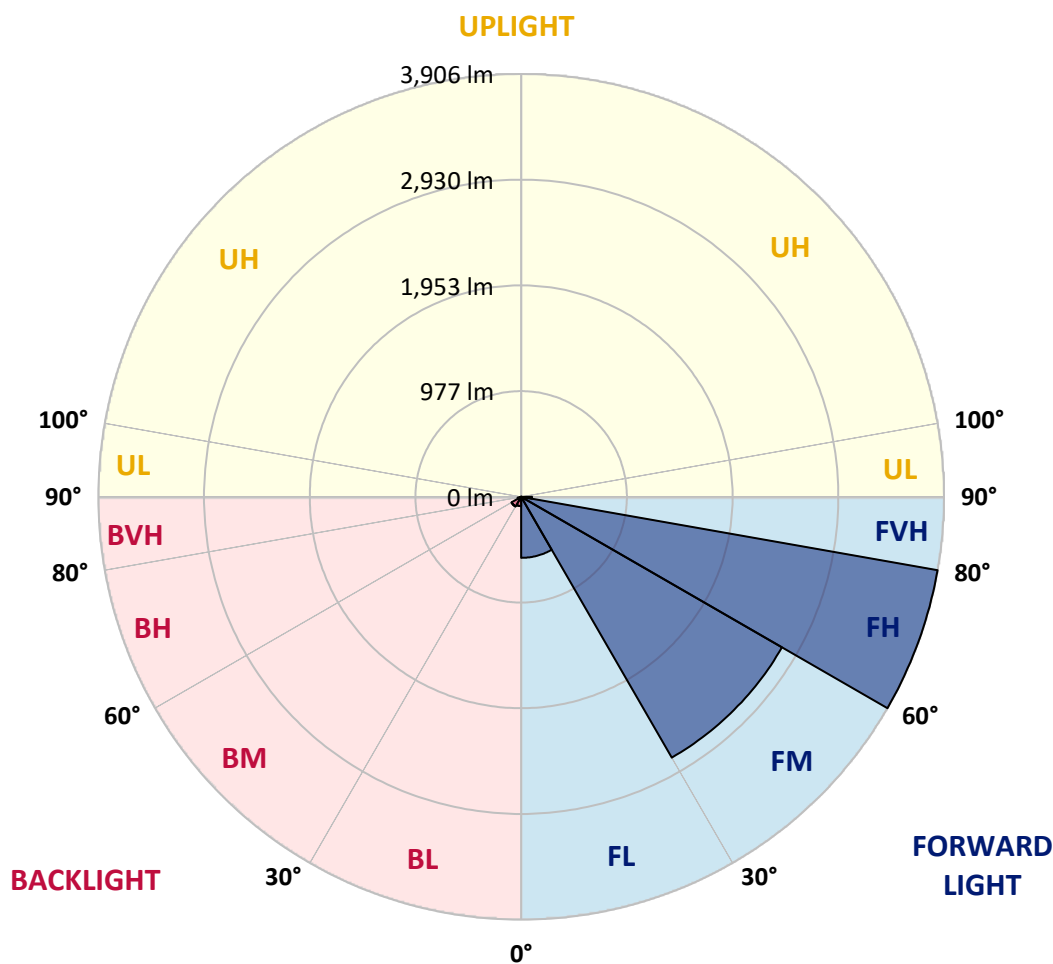
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	564.1	7.4			
FM	(30°-60°)	2782.5	36.7			
FH	(60°-80°)	3906.5	51.5			G2/5000
FVH	(80°-90°)	100.7	1.3			G2/225
BL	(0°-30°)	85.8	1.1	B0/110		
BM	(30°-60°)	103.1	1.4	B0/220		
BH	(60°-80°)	32.9	0.4	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4
2.5°	763.6	754.9	744.9	744.9	732.6	732.6	725.1	705.3	702.8	691.6	680.4
5°	974.7	967.2	954.9	943.6	933.7	916.3	903.9	880.3	854.3	829.4	807.1
7.5°	1180.8	1177.1	1154.7	1151.0	1134.8	1106.3	1081.5	1046.7	1002.0	967.2	926.3
10°	1372.0	1363.3	1358.3	1337.2	1313.7	1282.6	1244.1	1201.9	1149.8	1095.1	1036.7
12.5°	1523.5	1518.5	1496.1	1487.5	1462.7	1431.6	1383.2	1328.5	1276.4	1205.6	1137.3
15°	1636.5	1627.8	1612.9	1599.2	1569.4	1542.1	1497.4	1437.8	1374.5	1297.5	1215.6
17.5°	1730.9	1714.7	1711.0	1689.9	1658.9	1626.5	1576.9	1522.2	1447.7	1370.8	1281.3
20°	1857.5	1835.1	1827.7	1796.6	1760.7	1715.9	1658.9	1590.5	1512.3	1427.9	1336.0
22.5°	2006.5	1990.3	1974.2	1946.9	1901.0	1837.6	1754.5	1680.0	1580.6	1487.5	1388.2
25°	2217.6	2203.9	2177.8	2140.6	2083.4	2007.7	1907.2	1797.9	1681.2	1562.0	1445.3
27.5°	2422.4	2410.0	2391.4	2362.9	2298.2	2215.1	2090.9	1951.9	1804.1	1660.1	1530.9
30°	2614.9	2603.7	2585.1	2556.6	2499.4	2417.5	2277.1	2128.1	1944.4	1776.8	1621.6
32.5°	2822.3	2818.5	2797.4	2756.4	2706.8	2596.3	2443.5	2283.4	2097.2	1903.5	1722.1
35°	3056.9	3028.3	3008.5	2967.5	2883.1	2765.1	2586.3	2411.3	2215.1	2016.4	1814.0
37.5°	3255.6	3228.3	3203.4	3151.3	3048.2	2898.0	2695.6	2503.1	2300.7	2098.4	1892.2
40°	3400.8	3387.2	3357.4	3289.1	3173.6	2994.9	2776.3	2566.4	2362.9	2159.2	1955.6
42.5°	3508.9	3487.7	3454.3	3383.5	3246.9	3043.3	2808.6	2592.5	2391.4	2196.5	1996.6
45°	3548.6	3531.3	3500.2	3423.2	3275.4	3056.9	2807.3	2585.1	2392.6	2207.6	2023.9
47.5°	3525.0	3507.7	3480.3	3408.3	3263.1	3040.8	2785.0	2564.0	2380.2	2211.4	2048.7
50°	3446.8	3436.9	3415.7	3354.9	3224.5	3009.7	2765.1	2552.8	2377.7	2230.0	2083.4
52.5°	3439.3	3433.2	3407.1	3346.2	3213.4	2999.8	2762.6	2559.1	2398.8	2253.6	2108.3
55°	4202.9	4114.8	3917.4	3749.8	3474.1	3146.3	2888.0	2659.6	2488.3	2346.7	2244.9
57.5°	5973.5	5841.9	5582.4	5263.3	4630.0	4008.0	3510.1	3150.0	2972.5	2907.9	2946.4
60°	6802.9	6779.4	6738.4	6586.9	6262.8	5727.7	5131.7	4487.3	4229.0	4206.7	4284.9
62.5°	7196.6	7181.6	7194.1	7175.5	7074.9	6918.4	6747.0	6469.0	6213.1	6048.0	5697.9
65°	7377.8	7387.8	7458.5	7514.4	7526.8	7567.8	7693.2	8039.6	8292.9	7867.0	6894.8
67.5°	6917.1	6975.5	7138.2	7341.8	7580.2	7811.1	8183.6	8913.7	9434.0	8933.6	7552.9
69°	5726.4	5755.0	6152.3	6536.0	7118.3	7525.6	8065.7	9023.0	9607.8	9042.9	7500.7
70°	4508.4	4534.4	4960.4	5481.8	6466.5	6990.4	7696.9	8838.0	9445.1	8897.6	7232.5
72.5°	2033.8	1996.6	2146.8	2426.1	3496.4	4328.4	5563.8	7160.5	7792.5	7128.3	5411.0
75°	1420.4	1404.3	1420.4	1421.7	1588.1	2048.7	2585.1	3881.3	4800.1	4142.1	2585.1
77.5°	1100.1	1088.9	1077.8	1065.3	1085.2	1215.6	1267.7	1376.9	1787.9	1691.1	985.8
80°	870.4	860.5	887.8	879.1	879.1	894.0	884.1	843.0	766.1	710.2	635.7
82.5°	404.7	407.2	407.2	442.0	532.7	622.0	650.6	609.7	541.4	460.6	371.3
85°	38.5	43.4	73.3	113.0	224.8	253.3	254.5	211.0	211.0	166.4	134.1
87.5°	0.0	1.2	1.2	1.2	11.2	31.1	26.1	7.5	3.7	3.7	6.2
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°	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4
2.5°	660.6	656.8	642.0	627.0	613.4	598.4	584.8	571.2	556.2	545.1	531.4
5°	772.3	744.9	714.0	684.2	654.3	623.3	591.1	562.5	532.7	505.3	479.2
7.5°	885.3	831.9	789.7	736.3	687.9	639.5	594.8	548.8	506.6	466.9	429.6
10°	980.9	916.3	850.5	782.3	712.7	648.1	586.1	531.4	475.5	427.1	381.2
12.5°	1059.1	977.2	896.5	810.8	732.6	650.6	573.6	507.8	442.0	387.4	340.2
15°	1129.9	1035.5	938.6	839.3	740.0	646.9	561.2	479.2	412.2	350.2	296.8
17.5°	1187.0	1079.0	969.7	858.0	751.2	642.0	545.1	459.4	381.2	316.6	264.5
20°	1236.7	1123.7	1005.8	880.3	758.7	640.7	531.4	434.6	353.8	285.6	234.6
22.5°	1282.6	1169.6	1043.0	908.9	769.8	639.5	519.0	416.0	330.2	262.0	211.0
25°	1334.8	1215.6	1082.7	938.6	789.7	644.4	511.6	401.0	309.1	239.6	192.4
27.5°	1393.2	1267.7	1129.9	975.9	815.7	654.3	509.1	384.9	290.5	218.5	177.6
30°	1475.0	1329.8	1177.1	1013.1	839.3	665.6	506.6	375.0	271.9	202.4	162.6
32.5°	1547.1	1390.7	1229.2	1051.7	865.4	676.7	505.3	361.3	254.5	186.2	151.5
35°	1622.8	1446.5	1273.9	1088.9	887.8	689.1	504.1	351.4	238.4	170.1	140.3
37.5°	1688.6	1493.7	1308.7	1121.2	912.6	700.3	505.3	342.7	223.5	156.5	130.4
40°	1744.5	1542.1	1347.2	1151.0	938.6	717.7	506.6	334.0	208.6	144.0	121.7
42.5°	1794.2	1588.1	1388.2	1184.5	968.5	737.6	514.1	326.6	196.2	132.9	113.0
45°	1832.7	1630.3	1432.8	1231.7	1016.9	769.8	527.7	321.6	183.7	122.9	105.6
47.5°	1872.4	1692.3	1508.6	1306.2	1087.7	820.7	551.3	320.4	173.8	115.4	99.3
50°	1927.1	1754.5	1575.6	1381.9	1152.3	872.9	579.8	321.6	161.4	108.0	93.1
52.5°	1966.8	1817.7	1662.6	1513.6	1306.2	1031.8	690.4	343.9	155.2	101.8	85.7
55°	2201.4	2175.3	2179.0	2203.9	2043.8	1755.7	1154.7	496.7	182.5	115.4	84.4
57.5°	3104.1	3196.0	3249.3	3248.1	2983.6	2474.6	1550.8	638.2	203.7	134.1	100.6
60°	4291.1	4221.6	4123.5	3881.3	3530.0	2824.8	1734.6	686.7	176.3	106.8	91.9
62.5°	5340.3	4933.0	4571.7	4179.4	3718.7	2946.4	1771.8	682.9	154.0	80.7	64.5
65°	5994.6	5262.0	4678.5	4186.8	3644.2	2844.6	1676.2	627.0	130.4	65.8	53.4
67.5°	6151.1	5084.5	4258.9	3631.8	3044.5	2213.9	1230.4	471.8	101.8	54.7	47.2
69°	5809.6	4519.6	3528.8	2817.3	2215.1	1468.9	761.2	298.0	78.2	49.7	43.4
70°	5344.0	3931.0	2874.4	2261.0	1640.2	1031.8	532.7	209.8	63.3	45.9	39.7
72.5°	3438.1	2064.8	1413.0	983.4	676.7	411.0	208.6	94.4	48.4	38.5	32.3
75°	1333.5	763.6	553.8	420.9	329.0	228.5	126.7	60.8	40.9	32.3	24.8
77.5°	656.8	502.8	411.0	281.8	163.9	101.8	68.3	47.2	33.6	23.6	16.1
80°	519.0	345.2	206.1	127.9	96.8	73.3	52.2	38.5	24.8	14.9	11.2
82.5°	265.7	145.3	106.8	86.9	72.0	57.2	42.2	27.3	16.1	10.0	8.7
85°	83.2	60.8	54.7	53.4	49.7	40.9	29.8	17.4	10.0	6.2	6.2
87.5°	6.2	8.7	11.2	8.7	10.0	8.7	11.2	7.5	5.0	5.0	3.7
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°	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4	572.4
2.5°	521.5	506.6	493.0	484.2	468.1	461.9	455.7	453.2	442.0	444.5	434.6
5°	455.7	429.6	409.7	389.9	371.3	357.6	346.4	332.7	321.6	316.6	306.6
7.5°	396.1	362.6	336.5	315.4	293.0	275.7	260.7	250.8	240.9	230.9	226.0
10°	343.9	307.9	278.1	257.0	235.9	221.0	209.8	202.4	196.2	192.4	191.2
12.5°	295.5	260.7	233.4	214.8	198.7	191.2	186.2	182.5	181.3	180.1	180.1
15°	258.2	223.5	202.4	188.7	181.3	177.6	176.3	173.8	171.4	170.1	170.1
17.5°	223.5	197.4	182.5	175.1	171.4	168.9	166.4	163.9	161.4	160.1	160.1
20°	199.9	178.8	171.4	166.4	162.6	160.1	156.5	154.0	152.8	151.5	150.3
22.5°	181.3	167.6	162.6	158.9	154.0	150.3	147.8	145.3	142.8	141.5	140.3
25°	167.6	158.9	155.2	150.3	145.3	141.5	137.8	134.1	131.6	130.4	127.9
27.5°	157.7	151.5	146.5	140.3	135.3	131.6	127.9	124.2	121.7	119.2	117.9
30°	149.0	142.8	136.5	131.6	125.4	121.7	116.7	113.0	111.7	109.3	106.8
32.5°	140.3	134.1	127.9	121.7	115.4	110.5	108.0	103.1	100.6	99.3	96.8
35°	130.4	124.2	116.7	111.7	105.6	100.6	96.8	93.1	90.6	88.1	86.9
37.5°	121.7	114.2	106.8	100.6	95.6	90.6	86.9	83.2	80.7	78.2	77.0
40°	111.7	104.3	96.8	90.6	85.7	82.0	78.2	74.5	72.0	70.8	70.8
42.5°	103.1	94.4	86.9	82.0	78.2	73.3	69.5	65.8	64.5	63.3	64.5
45°	94.4	85.7	79.5	74.5	70.8	65.8	62.1	59.6	58.4	59.6	60.8
47.5°	86.9	78.2	72.0	68.3	64.5	60.8	57.2	54.7	54.7	57.2	59.6
50°	79.5	70.8	65.8	63.3	59.6	55.9	50.9	49.7	50.9	53.4	55.9
52.5°	72.0	62.1	58.4	57.2	53.4	49.7	45.9	44.7	45.9	48.4	47.2
55°	64.5	54.7	53.4	52.2	48.4	43.4	39.7	39.7	39.7	38.5	36.0
57.5°	62.1	48.4	47.2	45.9	42.2	37.2	34.8	32.3	31.1	27.3	26.1
60°	64.5	43.4	43.4	40.9	37.2	32.3	28.6	24.8	22.3	19.8	19.8
62.5°	52.2	39.7	38.5	36.0	31.1	26.1	22.3	18.6	17.4	16.1	16.1
65°	42.2	36.0	33.6	29.8	26.1	21.1	17.4	14.9	13.6	13.6	14.9
67.5°	38.5	32.3	28.6	24.8	21.1	16.1	13.6	12.4	12.4	13.6	13.6
69°	36.0	29.8	26.1	22.3	18.6	14.9	12.4	12.4	12.4	12.4	13.6
70°	33.6	28.6	24.8	21.1	16.1	12.4	11.2	11.2	12.4	12.4	13.6
72.5°	26.1	22.3	21.1	17.4	12.4	11.2	10.0	11.2	11.2	12.4	12.4
75°	19.8	16.1	16.1	13.6	10.0	8.7	8.7	10.0	10.0	11.2	11.2
77.5°	13.6	11.2	11.2	10.0	8.7	7.5	7.5	8.7	10.0	10.0	11.2
80°	10.0	8.7	7.5	8.7	7.5	6.2	7.5	8.7	8.7	10.0	10.0
82.5°	7.5	7.5	7.5	7.5	6.2	6.2	7.5	7.5	8.7	10.0	10.0
85°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	7.5	7.5	8.7	8.7
87.5°	3.7	3.7	3.7	5.0	5.0	6.2	6.2	6.2	6.2	7.5	7.5
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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CATALOG NUMBER: VST-F05-LED-E-U-SL4-HSS-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	572.4	572.4	572.4	572.4
2.5°	432.1	430.8	425.9	427.1
5°	303.0	295.5	300.5	299.3
7.5°	222.3	221.0	219.8	222.3
10°	190.0	190.0	188.7	190.0
12.5°	178.8	178.8	178.8	178.8
15°	170.1	170.1	168.9	168.9
17.5°	160.1	160.1	160.1	158.9
20°	150.3	149.0	149.0	149.0
22.5°	139.0	137.8	137.8	137.8
25°	127.9	126.7	126.7	126.7
27.5°	116.7	115.4	114.2	114.2
30°	105.6	104.3	103.1	103.1
32.5°	94.4	93.1	91.9	91.9
35°	84.4	84.4	83.2	82.0
37.5°	75.8	75.8	75.8	75.8
40°	69.5	70.8	70.8	70.8
42.5°	65.8	67.0	68.3	69.5
45°	63.3	65.8	67.0	67.0
47.5°	62.1	63.3	64.5	64.5
50°	57.2	55.9	55.9	55.9
52.5°	45.9	43.4	42.2	40.9
55°	33.6	32.3	29.8	29.8
57.5°	23.6	23.6	22.3	22.3
60°	18.6	18.6	17.4	18.6
62.5°	16.1	16.1	16.1	16.1
65°	14.9	14.9	14.9	14.9
67.5°	14.9	14.9	14.9	14.9
69°	13.6	13.6	13.6	13.6
70°	13.6	13.6	13.6	13.6
72.5°	12.4	12.4	12.4	12.4
75°	11.2	12.4	12.4	12.4
77.5°	11.2	11.2	11.2	11.2
80°	10.0	10.0	11.2	11.2
82.5°	10.0	10.0	10.0	10.0
85°	8.7	8.7	10.0	10.0
87.5°	7.5	7.5	8.7	8.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)