

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: P165252

Luminaire Tested: **VST-F03-LED-E-U-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165252
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-F03-LED-E-U-SL3-HSS
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4242.6 lumens
Efficiency: N/A
Efficacy: 54.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 78.3
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

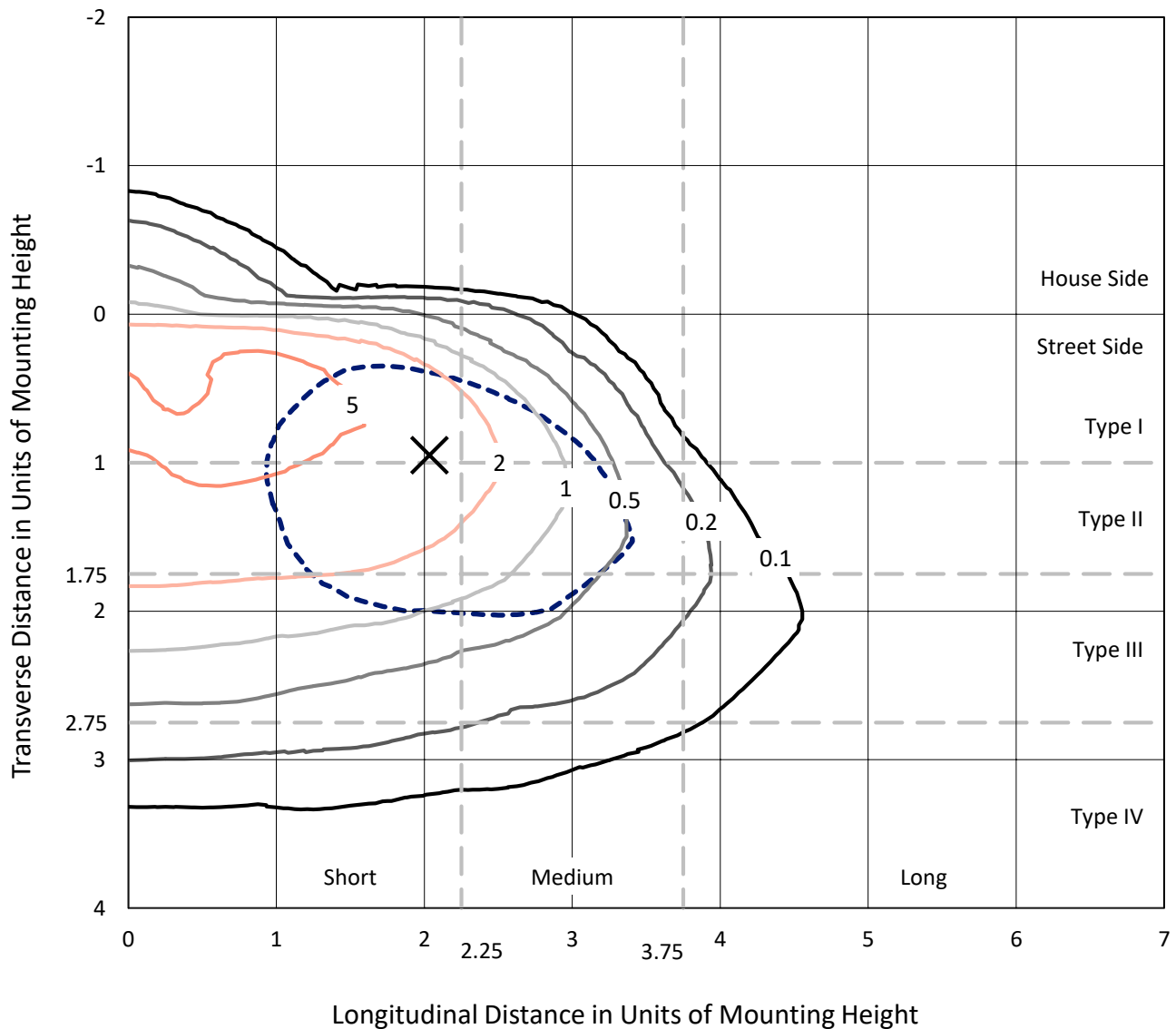


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

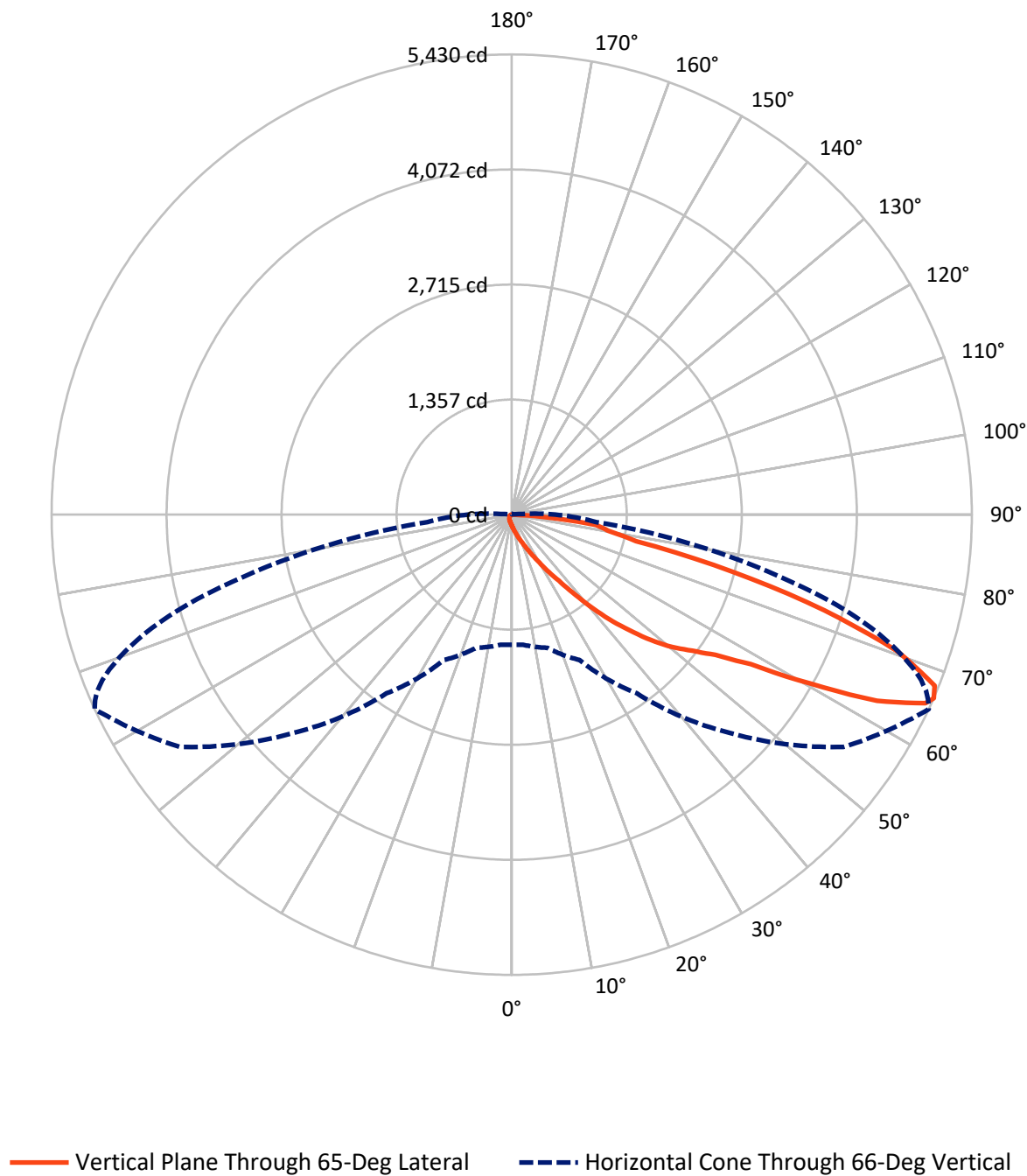


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	91.9	0.0	91.9
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	4150.7	0.0	4150.7
	% Fixture	97.8	0.0	97.8
Total	Lumens	4242.6	0.0	4242.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.3	0.3
10°-20°	60.8	1.4
20°-30°	131.1	3.1
30°-40°	280.0	6.6
40°-50°	619.2	14.6
50°-60°	1049.3	24.7
60°-70°	1400.2	33.0
70°-80°	616.7	14.5
80°-90°	71.0	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°	4242.6	100.0
0°-180°	4242.6	100.0

Coefficient of Utilization



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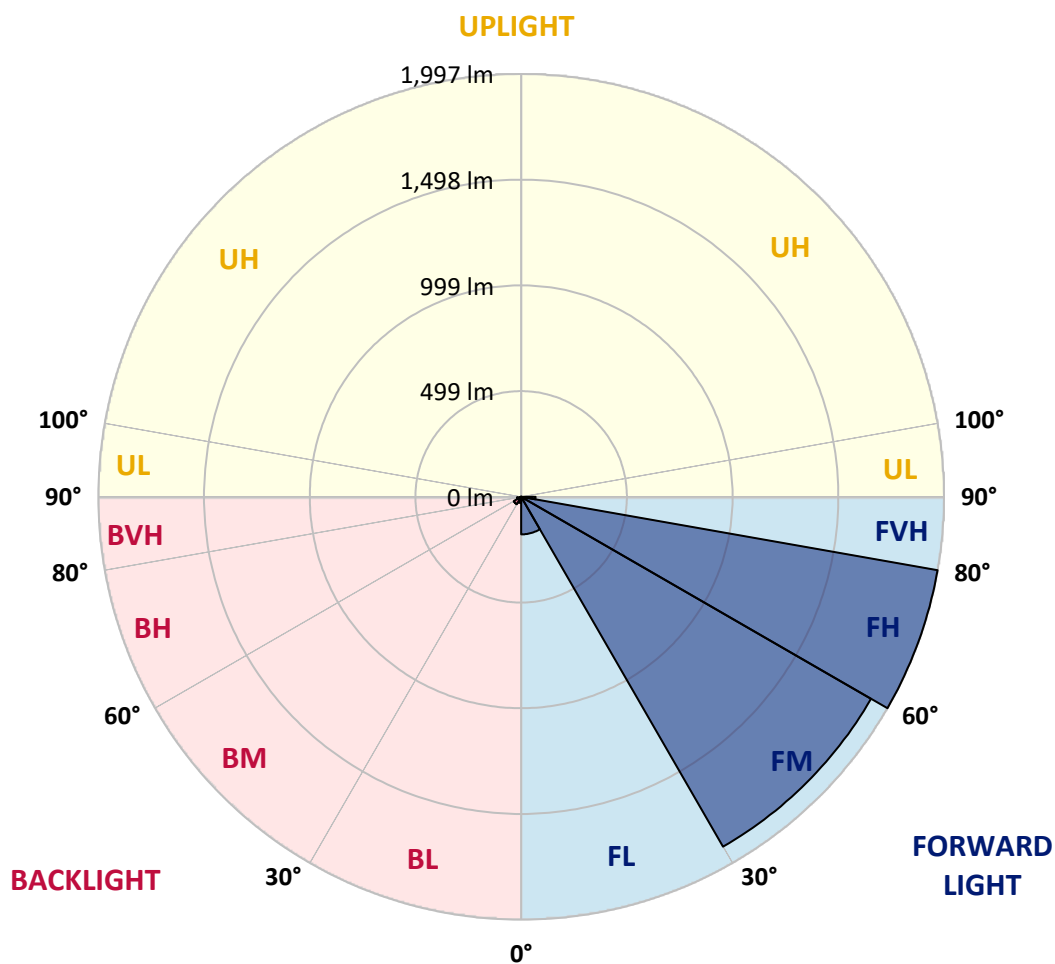
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	177.2	4.2			
FM	(30°-60°)	1908.0	45.0			
FH	(60°-80°)	1997.2	47.1			G2/5000
FVH	(80°-90°)	68.2	1.6			G1/100
BL	(0°-30°)	29.0	0.7	B0/110		
BM	(30°-60°)	40.4	1.0	B0/220		
BH	(60°-80°)	19.7	0.5	B0/110		G0/110
BVH	(80°-90°)	2.8	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°	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0
2.5°	161.5	160.7	157.4	157.4	152.5	149.3	145.2	141.1	141.1	140.3	139.5
5°	213.7	208.8	208.0	199.0	191.7	181.1	171.3	158.3	156.6	155.0	154.1
7.5°	271.6	270.8	263.5	252.8	238.2	218.6	199.0	177.8	174.5	172.9	169.6
10°	346.7	342.5	332.8	314.8	292.9	266.7	234.9	201.4	197.4	194.1	192.5
12.5°	418.4	411.1	405.4	382.6	354.8	316.4	278.1	230.0	226.7	222.7	216.2
15°	485.3	478.8	469.0	449.5	418.4	370.3	325.5	266.7	258.5	252.8	248.0
17.5°	537.5	533.5	522.0	500.0	466.6	424.1	370.3	304.2	297.7	290.3	281.4
20°	587.3	581.5	563.6	533.5	497.5	464.9	423.4	353.2	344.2	335.2	325.5
22.5°	634.6	628.9	599.5	549.8	511.4	497.5	482.9	408.7	394.7	387.4	377.6
25°	700.7	688.4	642.7	563.6	512.3	522.8	548.1	480.4	467.4	456.8	441.3
27.5°	789.6	773.2	701.5	584.0	515.5	550.6	623.2	567.7	553.8	541.6	524.5
30°	889.9	879.3	793.6	632.9	539.2	591.4	707.2	678.7	662.3	647.6	627.2
32.5°	991.0	976.4	891.5	725.9	602.8	670.4	812.4	807.5	786.3	772.4	750.4
35°	1079.9	1072.6	1009.8	878.5	748.0	809.2	952.7	958.4	939.7	925.0	900.5
37.5°	1140.3	1140.3	1128.1	1042.4	978.8	1024.4	1159.0	1159.9	1141.1	1107.7	1095.4
40°	1171.3	1180.3	1224.3	1240.6	1237.3	1296.1	1429.9	1415.2	1399.7	1382.5	1341.8
42.5°	1234.9	1243.0	1336.9	1449.4	1522.9	1600.3	1692.5	1687.6	1668.8	1637.9	1600.3
45°	1342.6	1353.2	1465.0	1643.6	1794.4	1904.6	1963.3	1940.5	1921.7	1892.3	1872.7
47.5°	1479.6	1500.0	1626.4	1847.5	2029.4	2211.2	2272.4	2212.1	2195.8	2172.9	2141.1
50°	1625.6	1645.2	1779.8	2032.6	2238.2	2455.1	2557.1	2455.1	2431.5	2424.1	2388.2
52.5°	1752.0	1768.4	1898.0	2175.4	2398.0	2652.5	2801.0	2666.4	2649.2	2624.8	2598.7
55°	1827.1	1840.1	1961.6	2243.9	2506.6	2830.3	3036.7	2918.5	2893.1	2883.4	2845.9
57.5°	1852.4	1865.4	1974.7	2252.8	2565.2	2992.6	3323.0	3327.1	3296.9	3261.8	3250.4
60°	1852.4	1867.0	1959.2	2230.9	2622.4	3165.5	3704.7	4044.8	3979.6	3973.1	3931.4
62.5°	1775.7	1789.6	1882.6	2163.1	2699.0	3398.9	4236.5	4836.8	4818.1	4775.7	4707.2
65°	1609.3	1617.5	1708.8	1990.2	2669.6	3613.4	4697.3	5363.8	5333.6	5250.4	5162.3
66°	1534.3	1540.8	1626.4	1891.5	2573.4	3642.7	4778.9	5429.8	5380.1	5309.9	5210.4
67.5°	1425.8	1437.2	1497.5	1708.0	2342.6	3540.8	4727.6	5383.4	5340.1	5255.3	5155.8
70°	951.9	943.7	1156.6	1310.8	1784.6	2885.0	4241.5	4833.6	4834.4	4794.5	4754.5
72.5°	451.9	456.8	518.8	806.6	1168.0	1927.4	3376.0	3858.1	3913.6	3841.7	3792.0
75°	324.6	332.0	369.5	493.5	696.5	1156.6	2188.4	2698.2	2699.8	2572.6	2459.2
77.5°	94.6	98.7	138.7	304.2	522.0	780.5	1256.9	1500.0	1465.0	1373.6	1287.9
80°	39.1	39.1	40.7	97.1	209.6	530.2	879.3	1155.0	1150.9	1115.8	1065.3
82.5°	14.6	15.5	19.6	40.0	49.8	130.5	586.4	1002.5	1000.0	950.3	914.3
85°	1.6	1.6	4.9	17.2	18.8	24.5	117.4	442.1	439.6	442.1	387.4
87.5°	0.0	0.0	0.8	1.6	2.4	3.2	4.9	17.2	18.8	17.9	16.3
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°	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0
2.5°	139.5	137.8	137.8	137.0	137.0	137.0	136.2	135.4	135.4	134.6	133.8
5°	152.5	150.9	150.1	148.4	147.7	146.8	145.2	144.4	142.7	141.9	141.1
7.5°	168.0	164.8	163.9	161.5	159.1	157.4	155.8	153.4	151.7	148.4	147.7
10°	187.6	183.5	180.2	177.0	174.5	170.5	168.0	164.8	161.5	159.1	156.6
12.5°	212.9	207.2	202.3	199.0	193.3	188.4	183.5	181.1	174.5	171.3	167.2
15°	240.6	234.1	228.4	221.9	217.8	209.6	203.1	195.7	192.5	186.8	180.2
17.5°	276.5	265.9	256.9	250.4	242.3	234.1	226.7	219.4	209.6	203.1	194.9
20°	314.8	305.9	293.6	282.2	272.4	262.7	252.0	242.3	233.3	222.7	212.9
22.5°	363.8	350.8	336.1	324.6	311.6	301.0	286.3	273.2	258.5	244.7	233.3
25°	425.8	408.7	394.7	378.5	362.9	346.7	328.7	312.4	293.6	280.6	261.1
27.5°	502.4	486.2	467.4	446.2	430.7	406.2	382.6	362.2	340.1	319.7	297.7
30°	600.3	576.7	557.1	536.7	505.7	482.0	454.3	426.6	396.4	376.0	342.5
32.5°	717.8	692.5	663.1	633.8	605.2	571.8	537.5	503.2	469.8	432.3	398.0
35°	861.4	831.1	797.7	765.9	721.9	686.0	642.7	595.4	557.9	514.7	471.4
37.5°	1051.4	1001.6	972.2	938.8	879.3	830.3	782.2	734.9	668.8	623.2	562.0
40°	1289.6	1260.2	1212.1	1158.2	1104.4	1040.0	974.8	911.9	835.3	771.6	700.7
42.5°	1569.3	1526.1	1477.2	1399.7	1345.0	1269.1	1195.0	1111.7	1017.9	936.4	853.2
45°	1832.0	1780.6	1743.1	1665.6	1608.5	1518.7	1429.0	1340.9	1232.5	1127.2	1031.0
47.5°	2115.8	2073.4	2011.4	1948.6	1890.7	1789.6	1692.5	1585.7	1471.4	1346.6	1221.8
50°	2365.4	2332.0	2289.5	2213.7	2149.3	2064.4	1950.2	1833.6	1689.2	1565.2	1423.3
52.5°	2577.5	2551.4	2491.9	2438.0	2380.1	2300.2	2198.2	2086.4	1930.7	1794.4	1633.0
55°	2827.9	2809.1	2756.9	2723.5	2672.1	2595.5	2500.0	2396.5	2231.6	2083.2	1900.5
57.5°	3238.2	3223.5	3177.8	3163.9	3113.3	3046.5	2929.0	2818.1	2625.6	2441.3	2232.5
60°	3917.6	3888.3	3821.3	3787.1	3680.2	3590.5	3438.1	3285.5	3053.0	2818.1	2566.9
62.5°	4645.1	4562.8	4435.6	4326.3	4174.6	4018.7	3814.8	3581.6	3309.1	3030.2	2741.4
65°	5037.5	4897.2	4736.5	4562.8	4366.3	4137.0	3880.1	3600.4	3307.5	3013.1	2708.0
66°	5082.4	4924.1	4753.7	4560.4	4341.8	4097.9	3836.9	3543.2	3239.0	2951.9	2646.8
67.5°	5026.1	4860.5	4680.3	4465.7	4229.2	3976.3	3702.3	3397.2	3104.4	2813.2	2516.3
70°	4632.1	4467.4	4306.7	4080.8	3828.7	3574.3	3314.8	2973.9	2696.6	2429.0	2164.8
72.5°	3699.0	3587.3	3428.2	3234.9	2989.4	2690.8	2474.7	2169.7	1929.1	1669.7	1465.0
75°	2311.6	2154.2	1957.6	1711.3	1523.6	1281.4	1155.0	923.3	786.3	666.4	550.6
77.5°	1181.9	1063.6	925.8	787.1	654.2	522.0	403.7	285.5	192.5	133.8	99.5
80°	976.4	872.0	757.7	631.3	513.9	398.9	287.2	195.7	124.8	81.6	63.6
82.5°	806.6	718.6	616.6	499.2	397.3	313.3	217.8	141.9	88.1	57.1	44.9
85°	343.4	311.6	240.6	190.9	143.5	106.0	74.2	49.8	35.0	28.6	26.1
87.5°	14.6	16.3	15.5	12.2	8.9	8.9	8.2	6.5	6.5	6.5	6.5
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0	128.0
2.5°	133.8	133.0	132.2	132.2	131.3	130.5	125.6	121.6	116.6	113.4	110.1
5°	139.5	138.7	137.0	136.2	134.6	133.8	123.2	114.2	106.9	101.2	97.1
7.5°	145.2	144.4	141.9	139.5	138.7	137.0	119.9	108.5	98.7	92.2	88.1
10°	152.5	150.1	147.7	144.4	141.9	139.5	116.6	101.9	91.3	85.6	81.6
12.5°	163.1	159.1	155.0	150.9	147.7	143.5	115.0	96.2	85.6	79.1	75.1
15°	175.4	169.6	164.8	159.9	154.1	150.1	111.7	91.3	80.8	74.2	69.4
17.5°	186.8	180.2	172.9	165.6	159.9	154.1	108.5	86.5	75.8	69.4	64.4
20°	203.1	193.3	184.4	175.4	167.2	159.9	103.6	81.6	71.8	64.4	59.5
22.5°	221.0	209.6	198.2	186.0	175.4	165.6	99.5	77.5	67.7	60.4	54.7
25°	243.9	230.0	214.5	199.0	186.8	173.8	95.5	73.4	63.6	56.3	50.6
27.5°	275.7	256.1	239.0	219.4	200.6	186.0	92.2	70.1	59.5	52.2	46.5
30°	319.0	290.3	263.5	242.3	220.2	199.0	88.9	66.1	56.3	48.1	41.6
32.5°	367.0	333.6	302.6	270.8	243.1	218.6	85.6	62.8	52.2	44.0	38.3
35°	426.6	384.2	342.5	305.9	272.4	239.8	82.4	59.5	49.0	40.0	34.3
37.5°	512.3	459.2	404.6	357.3	314.0	270.8	79.9	56.3	44.9	35.9	30.2
40°	629.7	561.2	494.3	429.8	373.6	319.7	76.7	53.0	41.6	32.6	26.9
42.5°	757.0	673.7	585.7	513.1	435.6	367.9	73.4	49.8	38.3	29.4	23.7
45°	915.2	811.6	704.8	606.0	511.4	424.1	70.1	46.5	34.3	26.1	20.4
47.5°	1088.1	956.0	835.3	711.3	598.7	494.3	66.1	44.0	31.0	22.9	17.9
50°	1265.9	1126.4	973.9	832.8	699.1	564.5	62.0	40.0	27.7	20.4	14.6
52.5°	1457.6	1292.8	1137.1	961.7	805.9	656.6	57.9	36.7	25.3	17.9	12.2
55°	1701.5	1517.2	1334.4	1137.8	950.3	763.5	53.8	32.6	22.0	15.5	9.8
57.5°	2008.1	1789.6	1565.2	1343.4	1115.8	903.8	50.6	28.6	18.8	13.0	8.2
60°	2297.7	2042.5	1770.8	1515.5	1258.6	1011.4	45.7	25.3	16.3	10.6	8.2
62.5°	2447.8	2156.6	1863.8	1582.4	1308.3	1049.8	40.7	21.2	13.9	8.9	7.3
65°	2411.1	2114.2	1830.4	1546.5	1278.2	1025.3	35.9	18.8	12.2	8.2	7.3
66°	2358.1	2064.4	1779.0	1509.0	1252.9	999.2	33.4	17.9	11.5	8.2	6.5
67.5°	2242.3	1958.4	1685.9	1434.7	1183.5	949.4	30.2	16.3	10.6	7.3	6.5
70°	1915.2	1657.4	1439.6	1216.1	1011.4	800.2	24.5	13.9	8.9	6.5	6.5
72.5°	1267.5	1092.2	947.0	814.9	681.1	528.5	20.4	11.5	7.3	6.5	5.7
75°	478.0	432.3	371.2	333.6	291.2	255.3	16.3	7.3	5.7	5.7	5.7
77.5°	84.8	78.3	69.4	63.6	58.7	53.8	13.0	4.9	4.9	5.7	5.7
80°	57.1	53.0	48.1	44.0	40.7	36.7	8.9	4.1	4.9	4.9	5.7
82.5°	40.7	38.3	35.9	32.6	30.2	26.9	5.7	4.1	4.9	4.9	4.9
85°	24.5	22.9	21.2	19.6	17.2	16.3	4.1	4.1	4.1	4.9	4.9
87.5°	6.5	5.7	6.5	6.5	4.9	5.7	3.2	3.2	3.2	4.1	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):

	145°	155°	165°	175°	180°
0°	128.0	128.0	128.0	128.0	128.0
2.5°	108.5	108.5	106.9	109.3	109.3
5°	93.8	93.8	93.0	93.8	93.8
7.5°	85.6	84.8	84.8	84.8	85.6
10°	78.3	77.5	77.5	77.5	77.5
12.5°	71.8	71.0	70.1	71.0	71.0
15°	66.1	64.4	64.4	64.4	64.4
17.5°	61.2	59.5	58.7	58.7	58.7
20°	56.3	53.8	53.8	53.8	53.8
22.5°	51.4	49.0	49.0	49.0	49.0
25°	46.5	44.0	44.0	44.0	44.0
27.5°	42.4	40.0	40.0	40.0	40.0
30°	37.6	35.9	35.9	36.7	35.9
32.5°	34.3	31.8	31.8	32.6	32.6
35°	30.2	28.6	28.6	28.6	28.6
37.5°	26.1	24.5	24.5	24.5	24.5
40°	22.9	21.2	20.4	21.2	21.2
42.5°	19.6	17.9	17.2	17.2	17.2
45°	17.2	14.6	13.9	14.6	14.6
47.5°	13.9	12.2	12.2	13.0	13.0
50°	10.6	10.6	11.5	13.0	13.0
52.5°	9.8	9.8	11.5	13.0	13.0
55°	8.9	9.8	11.5	12.2	13.0
57.5°	8.2	9.8	11.5	12.2	12.2
60°	8.2	8.9	10.6	12.2	12.2
62.5°	7.3	8.2	9.8	11.5	11.5
65°	7.3	8.2	9.8	11.5	11.5
66°	7.3	8.2	9.8	11.5	11.5
67.5°	7.3	8.2	9.8	11.5	11.5
70°	7.3	8.2	9.8	10.6	10.6
72.5°	6.5	7.3	8.9	10.6	10.6
75°	6.5	7.3	8.9	10.6	10.6
77.5°	6.5	7.3	8.9	10.6	10.6
80°	6.5	7.3	8.9	9.8	10.6
82.5°	5.7	7.3	8.2	9.8	9.8
85°	5.7	6.5	8.2	8.9	9.8
87.5°	4.9	5.7	6.5	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)