

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: P165236

Luminaire Tested: **VST-E02-LED-E-U-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165236
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-E02-LED-E-U-SL3-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3129.3 lumens
Efficiency: N/A
Efficacy: 60.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 52.1
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



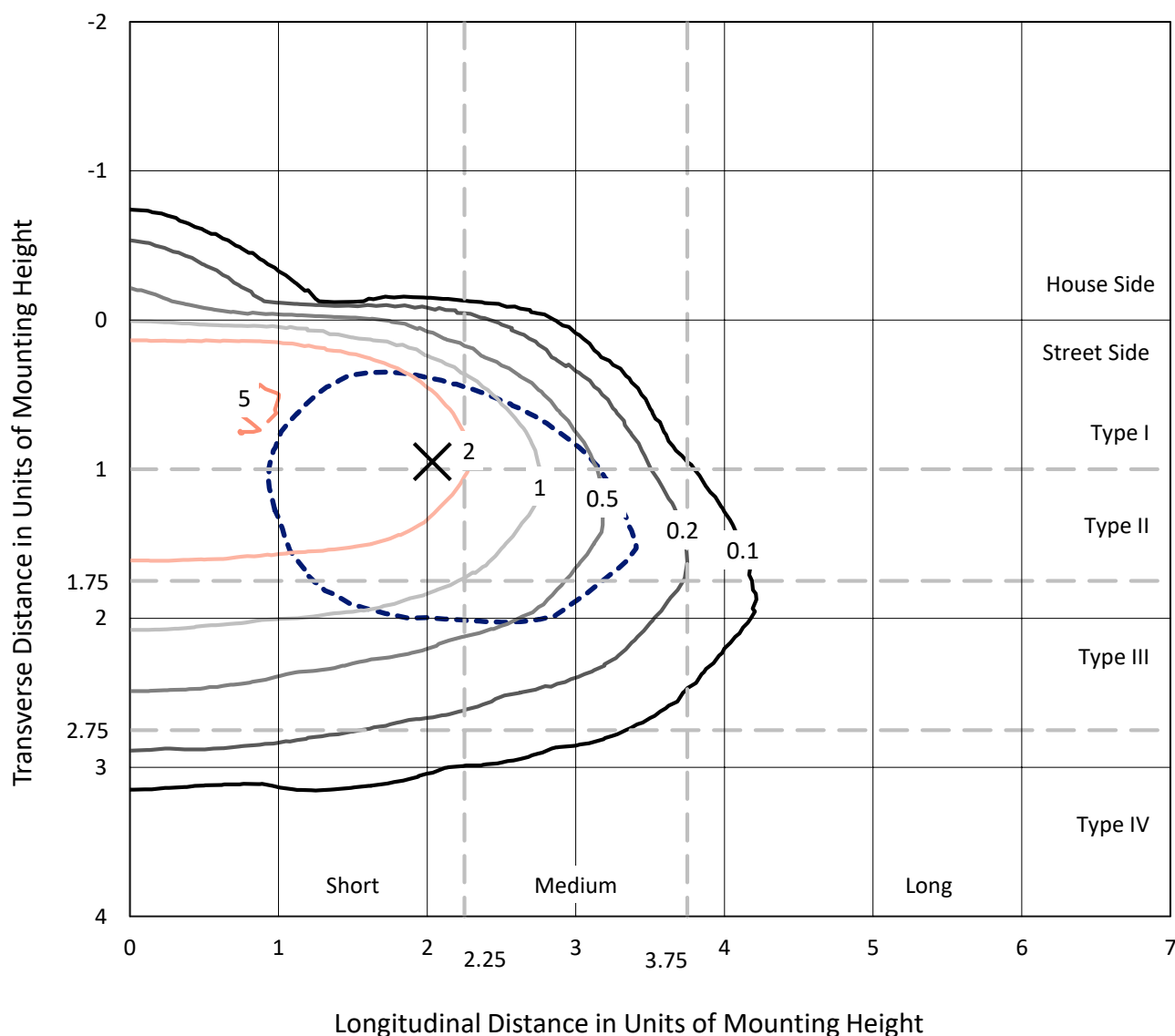
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

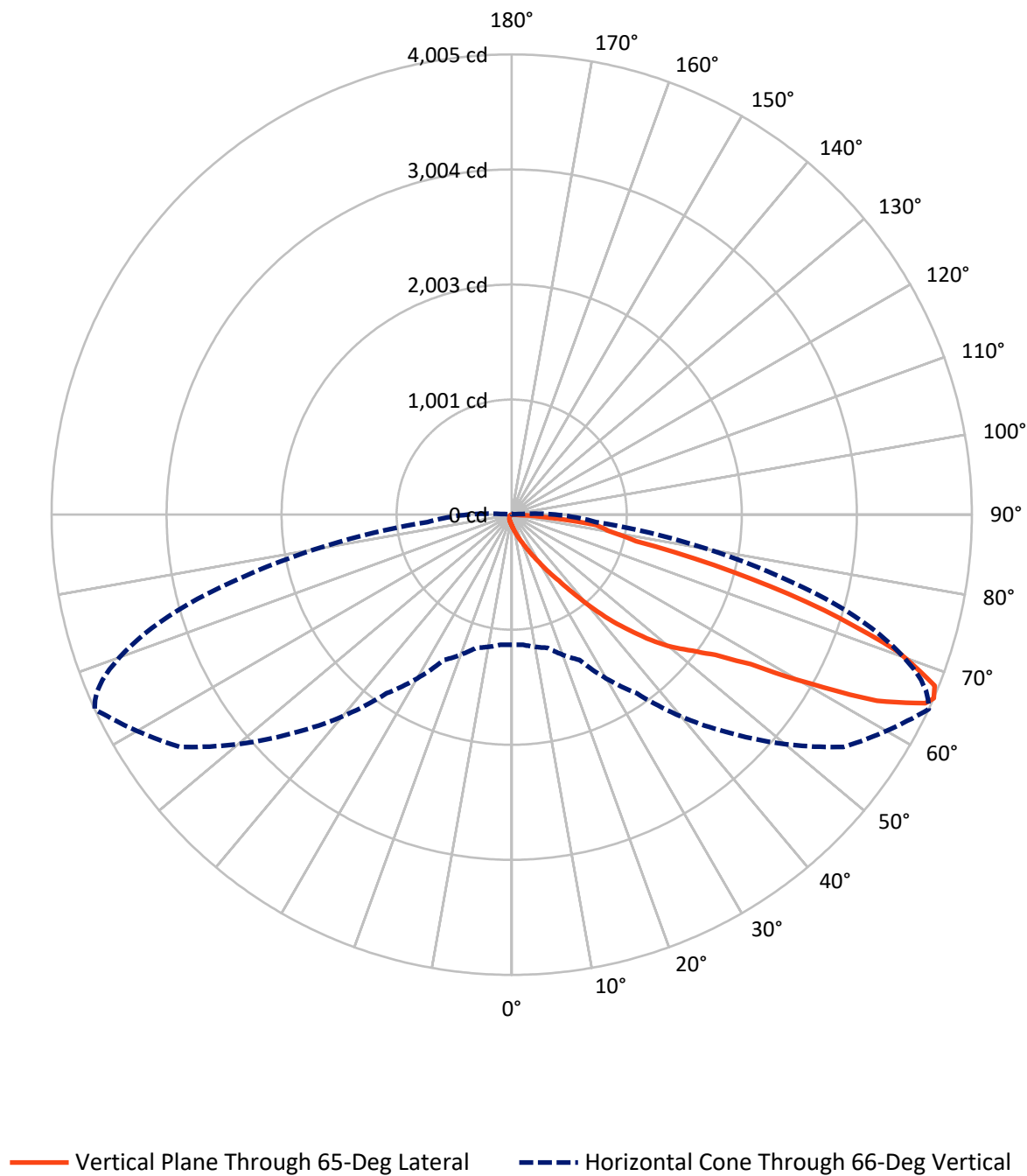


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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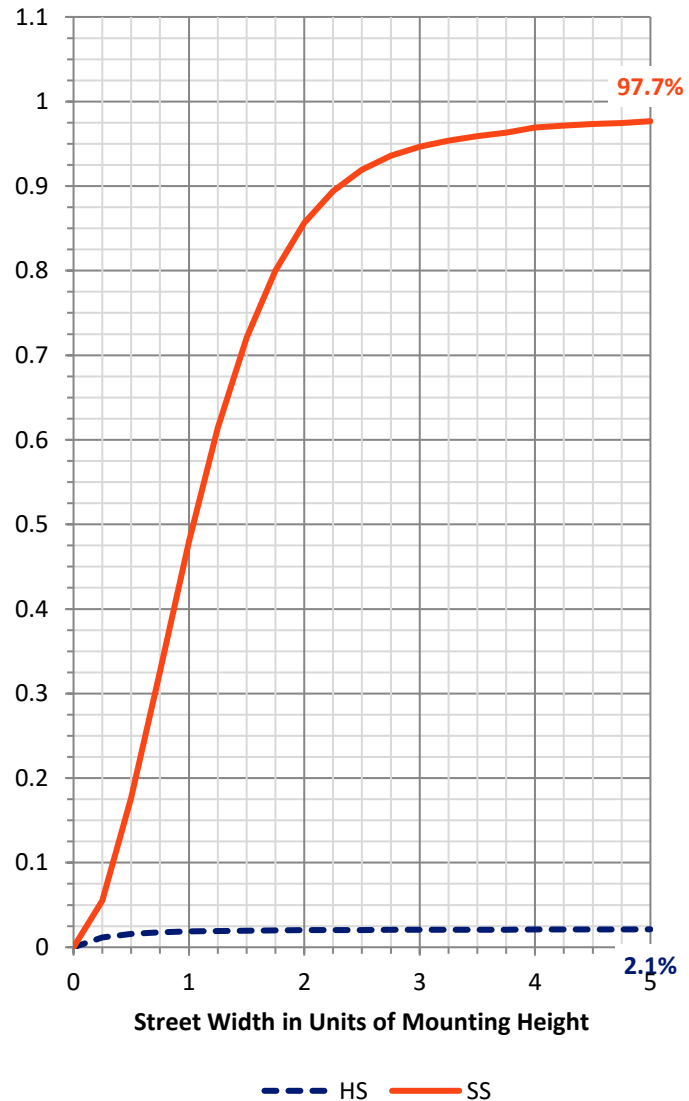
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	67.8	0.0	67.8
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	3061.5	0.0	3061.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	3129.3	0.0	3129.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.6	0.3
10°-20°	44.8	1.4
20°-30°	96.7	3.1
30°-40°	206.5	6.6
40°-50°	456.7	14.6
50°-60°	773.9	24.7
60°-70°	1032.8	33.0
70°-80°	454.9	14.5
80°-90°	52.4	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°	3129.3	100.0
0°-180°	3129.3	100.0

Coefficient of Utilization



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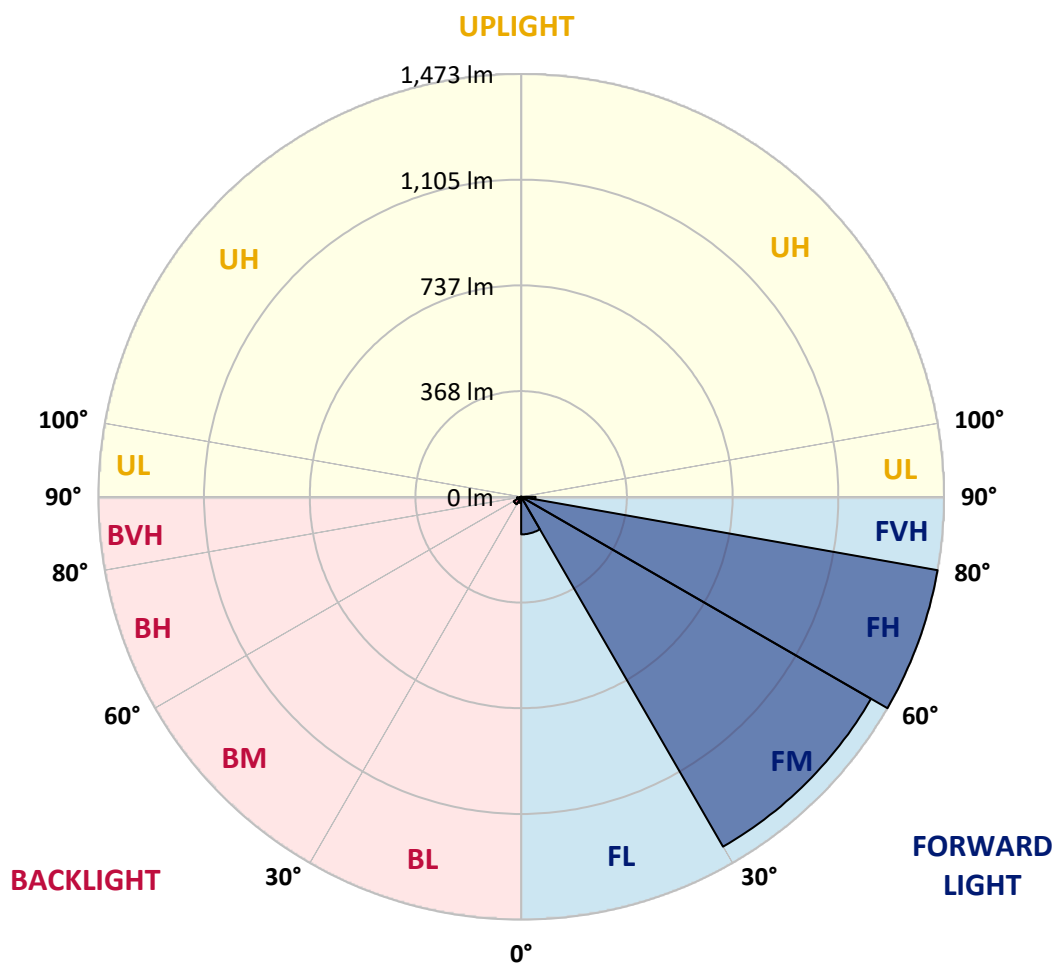
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	130.7	4.2			
FM	(30°-60°)	1407.4	45.0			
FH	(60°-80°)	1473.1	47.1			G1/1800
FVH	(80°-90°)	50.3	1.6			G1/100
BL	(0°-30°)	21.4	0.7	B0/110		
BM	(30°-60°)	29.8	1.0	B0/220		
BH	(60°-80°)	14.5	0.5	B0/110		G0/110
BVH	(80°-90°)	2.1	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
2.5°	119.2	118.5	116.1	116.1	112.5	110.1	107.1	104.1	104.1	103.4	102.9
5°	157.6	154.0	153.4	146.8	141.4	133.6	126.4	116.7	115.5	114.3	113.7
7.5°	200.3	199.7	194.3	186.5	175.7	161.2	146.8	131.2	128.8	127.6	125.1
10°	255.7	252.7	245.5	232.2	216.0	196.7	173.3	148.6	145.6	143.2	142.0
12.5°	308.6	303.2	299.0	282.2	261.7	233.4	205.1	169.7	167.3	164.3	159.4
15°	358.0	353.2	346.0	331.5	308.6	273.1	240.1	196.7	190.7	186.5	182.9
17.5°	396.5	393.5	385.0	368.8	344.1	312.8	273.1	224.4	219.6	214.1	207.5
20°	433.2	428.9	415.7	393.5	367.0	342.9	312.2	260.5	253.9	247.3	240.1
22.5°	468.1	463.9	442.2	405.5	377.2	367.0	356.2	301.4	291.2	285.8	278.5
25°	516.8	507.8	474.1	415.7	377.8	385.7	404.3	354.4	344.8	336.9	325.5
27.5°	582.4	570.4	517.4	430.8	380.2	406.1	459.7	418.7	408.5	399.5	386.9
30°	656.4	648.5	585.4	466.9	397.7	436.2	521.6	500.6	488.5	477.7	462.7
32.5°	731.0	720.2	657.6	535.4	444.6	494.5	599.2	595.6	580.0	569.8	553.5
35°	796.6	791.2	744.8	647.9	551.7	596.8	702.7	706.9	693.1	682.3	664.2
37.5°	841.1	841.1	832.1	768.8	721.9	755.6	854.9	855.5	841.7	817.0	808.0
40°	863.9	870.5	903.1	915.1	912.7	956.0	1054.7	1043.8	1032.4	1019.8	989.6
42.5°	910.9	916.9	986.0	1069.1	1123.3	1180.4	1248.4	1244.8	1231.0	1208.1	1180.4
45°	990.3	998.1	1080.5	1212.3	1323.5	1404.8	1448.1	1431.2	1417.4	1395.8	1381.3
47.5°	1091.3	1106.4	1199.6	1362.7	1496.8	1631.0	1676.1	1631.6	1619.6	1602.7	1579.3
50°	1199.0	1213.5	1312.7	1499.2	1650.8	1810.9	1886.1	1810.9	1793.5	1788.0	1761.5
52.5°	1292.3	1304.3	1400.0	1604.5	1768.7	1956.5	2066.0	1966.7	1954.1	1936.0	1916.8
55°	1347.7	1357.3	1446.9	1655.0	1848.8	2087.6	2239.9	2152.6	2134.0	2126.8	2099.0
57.5°	1366.3	1375.9	1456.6	1661.7	1892.1	2207.3	2451.1	2454.0	2431.8	2405.9	2397.5
60°	1366.3	1377.1	1445.1	1645.4	1934.2	2334.9	2732.6	2983.4	2935.3	2930.5	2899.8
62.5°	1309.7	1320.0	1388.5	1595.5	1990.8	2507.0	3124.8	3567.6	3553.8	3522.5	3472.0
65°	1187.0	1193.0	1260.4	1468.0	1969.1	2665.2	3464.8	3956.3	3934.0	3872.6	3807.7
66°	1131.7	1136.5	1199.6	1395.2	1898.1	2686.9	3524.9	4005.0	3968.3	3916.6	3843.2
67.5°	1051.6	1060.1	1104.5	1259.8	1727.9	2611.6	3487.0	3970.7	3938.8	3876.2	3802.9
70°	702.1	696.1	853.1	966.8	1316.3	2128.0	3128.5	3565.2	3565.8	3536.3	3506.9
72.5°	333.3	336.9	382.6	595.0	861.5	1421.6	2490.1	2845.7	2886.6	2833.7	2797.0
75°	239.5	244.9	272.5	364.0	513.8	853.1	1614.1	1990.1	1991.3	1897.5	1813.9
77.5°	69.8	72.8	102.2	224.4	385.0	575.8	927.1	1106.4	1080.5	1013.1	950.0
80°	28.9	28.9	30.1	71.6	154.6	391.1	648.5	851.9	848.9	823.0	785.8
82.5°	10.8	11.5	14.5	29.5	36.7	96.2	432.5	739.4	737.6	700.9	674.4
85°	1.2	1.2	3.6	12.7	13.9	18.1	86.6	326.0	324.3	326.0	285.8
87.5°	0.0	0.0	0.6	1.2	1.8	2.4	3.6	12.7	13.9	13.2	12.0
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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CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
2.5°	102.9	101.7	101.7	101.1	101.1	101.1	100.4	99.9	99.9	99.2	98.7
5°	112.5	111.3	110.7	109.5	108.9	108.3	107.1	106.5	105.3	104.6	104.1
7.5°	123.9	121.5	120.9	119.2	117.3	116.1	114.9	113.1	111.9	109.5	108.9
10°	138.4	135.4	133.0	130.6	128.8	125.8	123.9	121.5	119.2	117.3	115.5
12.5°	157.0	152.8	149.2	146.8	142.6	139.0	135.4	133.6	128.8	126.4	123.4
15°	177.5	172.7	168.5	163.6	160.6	154.6	149.8	144.4	142.0	137.8	133.0
17.5°	203.9	196.1	189.5	184.7	178.7	172.7	167.3	161.8	154.6	149.8	143.8
20°	232.2	225.6	216.6	208.2	200.9	193.7	185.9	178.7	172.1	164.3	157.0
22.5°	268.3	258.7	247.9	239.5	229.9	222.0	211.1	201.5	190.7	180.5	172.1
25°	314.0	301.4	291.2	279.2	267.7	255.7	242.5	230.4	216.6	206.9	192.5
27.5°	370.6	358.6	344.8	329.1	317.6	299.6	282.2	267.1	250.9	235.8	219.6
30°	442.8	425.3	410.9	395.9	373.0	355.6	335.1	314.6	292.4	277.4	252.7
32.5°	529.4	510.8	489.1	467.5	446.4	421.7	396.5	371.2	346.5	318.8	293.6
35°	635.3	613.0	588.4	564.9	532.4	506.0	474.1	439.2	411.5	379.6	347.8
37.5°	775.5	738.8	717.1	692.5	648.5	612.5	577.0	542.0	493.3	459.7	414.5
40°	951.2	929.5	894.0	854.3	814.6	767.0	719.0	672.6	616.1	569.1	516.8
42.5°	1157.5	1125.7	1089.5	1032.4	992.1	936.1	881.4	820.0	750.8	690.7	629.3
45°	1351.3	1313.3	1285.7	1228.5	1186.4	1120.2	1054.0	989.1	909.1	831.4	760.4
47.5°	1560.6	1529.3	1483.6	1437.3	1394.6	1320.0	1248.4	1169.6	1085.3	993.3	901.2
50°	1744.7	1720.1	1688.8	1632.8	1585.3	1522.7	1438.5	1352.5	1246.0	1154.5	1049.8
52.5°	1901.1	1881.8	1838.0	1798.3	1755.5	1696.6	1621.4	1538.9	1424.0	1323.5	1204.4
55°	2085.8	2072.0	2033.5	2008.8	1970.9	1914.4	1844.0	1767.6	1646.0	1536.5	1401.8
57.5°	2388.4	2377.6	2343.9	2333.7	2296.4	2247.1	2160.4	2078.6	1936.6	1800.7	1646.6
60°	2889.6	2867.9	2818.6	2793.4	2714.5	2648.3	2535.8	2423.3	2251.9	2078.6	1893.3
62.5°	3426.2	3365.5	3271.6	3191.0	3079.1	2964.2	2813.8	2641.7	2440.8	2235.1	2022.1
65°	3715.6	3612.2	3493.6	3365.5	3220.5	3051.4	2861.9	2655.6	2439.6	2222.4	1997.4
66°	3748.7	3632.0	3506.3	3363.7	3202.4	3022.6	2830.0	2613.5	2389.0	2177.3	1952.3
67.5°	3707.2	3585.1	3452.2	3293.9	3119.4	2932.9	2730.8	2505.8	2289.8	2075.0	1856.0
70°	3416.6	3295.1	3176.6	3009.9	2824.0	2636.3	2445.0	2193.5	1989.0	1791.6	1596.7
72.5°	2728.4	2645.9	2528.6	2386.0	2204.9	1984.7	1825.3	1600.3	1422.8	1231.5	1080.5
75°	1705.0	1588.9	1443.9	1262.2	1123.8	945.1	851.9	681.1	580.0	491.5	406.1
77.5°	871.7	784.6	682.9	580.6	482.5	385.0	297.8	210.6	142.0	98.7	73.4
80°	720.2	643.1	558.9	465.7	379.0	294.2	211.8	144.4	92.0	60.2	46.9
82.5°	595.0	530.0	454.8	368.2	293.0	231.1	160.6	104.6	65.0	42.1	33.1
85°	253.3	229.9	177.5	140.8	105.9	78.2	54.8	36.7	25.9	21.1	19.3
87.5°	10.8	12.0	11.5	9.0	6.6	6.6	6.0	4.8	4.8	4.8	4.8
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°	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
2.5°	98.7	98.0	97.5	97.5	96.8	96.2	92.6	89.6	86.0	83.6	81.2
5°	102.9	102.2	101.1	100.4	99.2	98.7	90.8	84.2	78.8	74.6	71.6
7.5°	107.1	106.5	104.6	102.9	102.2	101.1	88.4	80.0	72.8	68.0	65.0
10°	112.5	110.7	108.9	106.5	104.6	102.9	86.0	75.2	67.4	63.2	60.2
12.5°	120.3	117.3	114.3	111.3	108.9	105.9	84.8	71.0	63.2	58.3	55.3
15°	129.4	125.1	121.5	118.0	113.7	110.7	82.4	67.4	59.6	54.8	51.1
17.5°	137.8	133.0	127.6	122.2	118.0	113.7	80.0	63.8	55.9	51.1	47.5
20°	149.8	142.6	136.0	129.4	123.4	118.0	76.4	60.2	52.9	47.5	43.9
22.5°	163.1	154.6	146.2	137.2	129.4	122.2	73.4	57.1	49.9	44.5	40.3
25°	179.9	169.7	158.2	146.8	137.8	128.2	70.4	54.1	46.9	41.5	37.3
27.5°	203.3	188.9	176.3	161.8	148.0	137.2	68.0	51.7	43.9	38.5	34.3
30°	235.3	214.1	194.3	178.7	162.4	146.8	65.6	48.7	41.5	35.5	30.7
32.5°	270.7	246.1	223.2	199.7	179.3	161.2	63.2	46.3	38.5	32.5	28.3
35°	314.6	283.4	252.7	225.6	200.9	176.9	60.8	43.9	36.1	29.5	25.3
37.5°	377.8	338.7	298.4	263.5	231.6	199.7	59.0	41.5	33.1	26.5	22.3
40°	464.5	413.9	364.6	317.0	275.5	235.8	56.6	39.1	30.7	24.1	19.9
42.5°	558.3	496.9	432.0	378.4	321.3	271.3	54.1	36.7	28.3	21.7	17.5
45°	675.1	598.6	519.8	447.0	377.2	312.8	51.7	34.3	25.3	19.3	15.1
47.5°	802.6	705.1	616.1	524.6	441.6	364.6	48.7	32.5	22.9	16.9	13.2
50°	933.7	830.9	718.3	614.2	515.6	416.3	45.7	29.5	20.5	15.1	10.8
52.5°	1075.1	953.6	838.7	709.3	594.4	484.3	42.7	27.1	18.7	13.2	9.0
55°	1255.0	1119.1	984.2	839.3	700.9	563.2	39.7	24.1	16.3	11.5	7.3
57.5°	1481.2	1320.0	1154.5	990.9	823.0	666.6	37.3	21.1	13.9	9.6	6.0
60°	1694.8	1506.5	1306.1	1117.9	928.3	746.0	33.7	18.7	12.0	7.8	6.0
62.5°	1805.5	1590.7	1374.7	1167.2	965.0	774.3	30.1	15.7	10.2	6.6	5.4
65°	1778.4	1559.4	1350.1	1140.7	942.8	756.2	26.5	13.9	9.0	6.0	5.4
66°	1739.3	1522.7	1312.1	1113.0	924.1	737.0	24.7	13.2	8.5	6.0	4.8
67.5°	1653.8	1444.5	1243.6	1058.2	872.9	700.3	22.3	12.0	7.8	5.4	4.8
70°	1412.6	1222.5	1061.9	897.0	746.0	590.2	18.1	10.2	6.6	4.8	4.8
72.5°	934.9	805.6	698.5	601.0	502.3	389.9	15.1	8.5	5.4	4.8	4.2
75°	352.6	318.8	273.7	246.1	214.8	188.3	12.0	5.4	4.2	4.2	4.2
77.5°	62.6	57.8	51.1	46.9	43.3	39.7	9.6	3.6	3.6	4.2	4.2
80°	42.1	39.1	35.5	32.5	30.1	27.1	6.6	3.0	3.6	3.6	4.2
82.5°	30.1	28.3	26.5	24.1	22.3	19.9	4.2	3.0	3.6	3.6	3.6
85°	18.1	16.9	15.7	14.5	12.7	12.0	3.0	3.0	3.0	3.6	3.6
87.5°	4.8	4.2	4.8	4.8	3.6	4.2	2.4	2.4	2.4	3.0	3.0
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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CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	94.4	94.4	94.4	94.4	94.4
2.5°	80.0	80.0	78.8	80.6	80.6
5°	69.2	69.2	68.6	69.2	69.2
7.5°	63.2	62.6	62.6	62.6	63.2
10°	57.8	57.1	57.1	57.1	57.1
12.5°	52.9	52.4	51.7	52.4	52.4
15°	48.7	47.5	47.5	47.5	47.5
17.5°	45.1	43.9	43.3	43.3	43.3
20°	41.5	39.7	39.7	39.7	39.7
22.5°	37.9	36.1	36.1	36.1	36.1
25°	34.3	32.5	32.5	32.5	32.5
27.5°	31.3	29.5	29.5	29.5	29.5
30°	27.7	26.5	26.5	27.1	26.5
32.5°	25.3	23.5	23.5	24.1	24.1
35°	22.3	21.1	21.1	21.1	21.1
37.5°	19.3	18.1	18.1	18.1	18.1
40°	16.9	15.7	15.1	15.7	15.7
42.5°	14.5	13.2	12.7	12.7	12.7
45°	12.7	10.8	10.2	10.8	10.8
47.5°	10.2	9.0	9.0	9.6	9.6
50°	7.8	7.8	8.5	9.6	9.6
52.5°	7.3	7.3	8.5	9.6	9.6
55°	6.6	7.3	8.5	9.0	9.6
57.5°	6.0	7.3	8.5	9.0	9.0
60°	6.0	6.6	7.8	9.0	9.0
62.5°	5.4	6.0	7.3	8.5	8.5
65°	5.4	6.0	7.3	8.5	8.5
66°	5.4	6.0	7.3	8.5	8.5
67.5°	5.4	6.0	7.3	8.5	8.5
70°	5.4	6.0	7.3	7.8	7.8
72.5°	4.8	5.4	6.6	7.8	7.8
75°	4.8	5.4	6.6	7.8	7.8
77.5°	4.8	5.4	6.6	7.8	7.8
80°	4.8	5.4	6.6	7.3	7.8
82.5°	4.2	5.4	6.0	7.3	7.3
85°	4.2	4.8	6.0	6.6	7.3
87.5°	3.6	4.2	4.8	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)