

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: P165021

Luminaire Tested: **VST-F02-LED-E-U-SL2-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165021
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F02-LED-E-U-SL2-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (14) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2732 lumens
Efficiency: N/A
Efficacy: 49.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 55
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

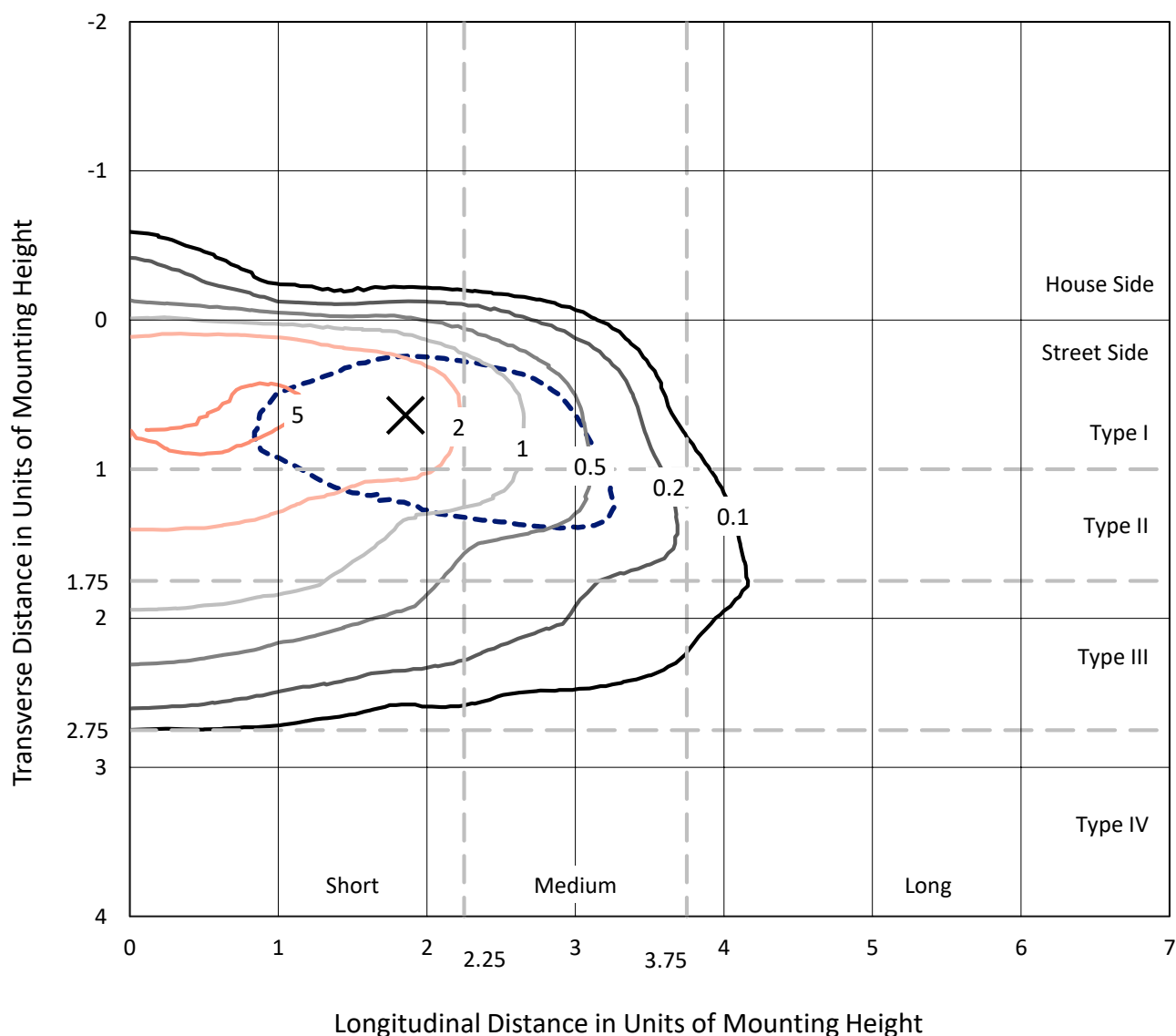


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

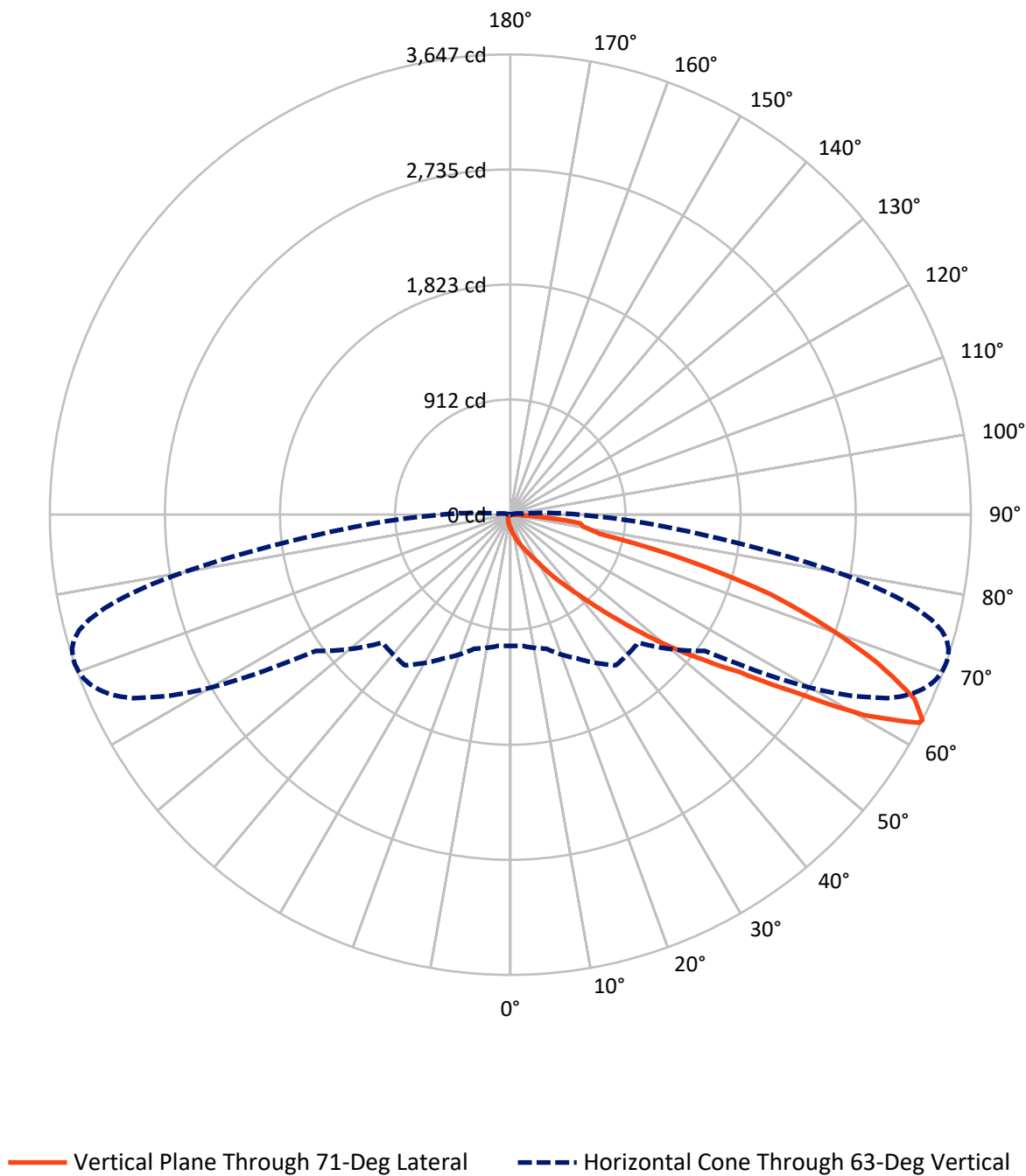


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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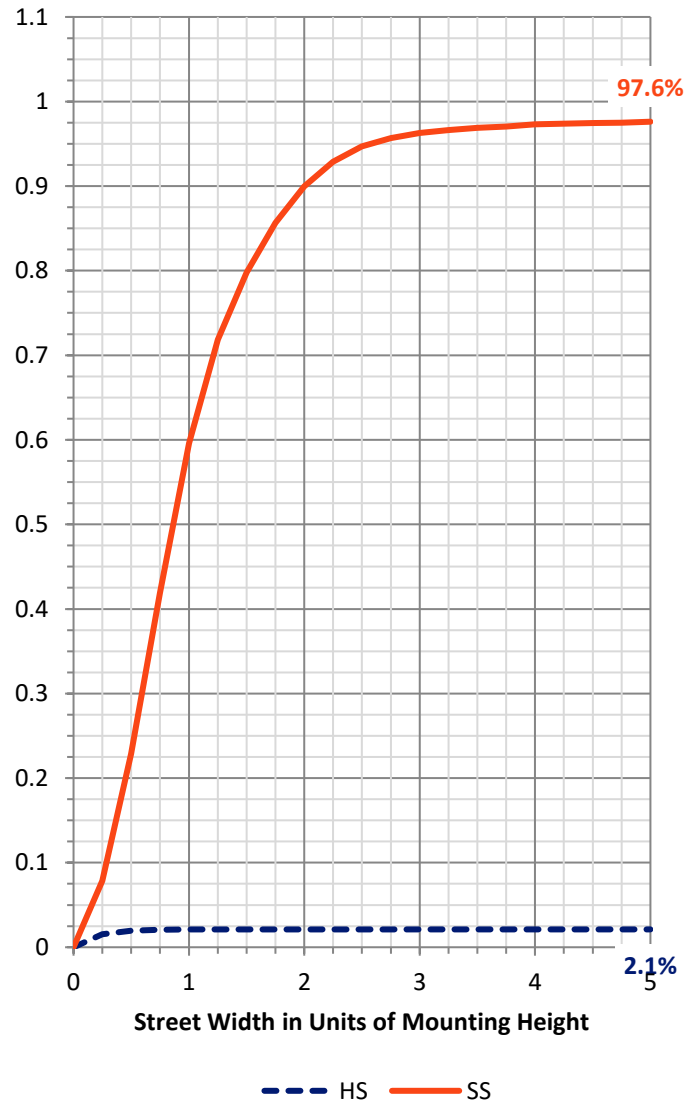
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	58.0	0.0	58.0
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	2674.0	0.0	2674.0
	% Fixture	97.9	0.0	97.9
Total	Lumens	2732.0	0.0	2732.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.6	0.4
10°-20°	44.9	1.6
20°-30°	91.2	3.3
30°-40°	222.9	8.2
40°-50°	498.5	18.2
50°-60°	701.0	25.7
60°-70°	824.3	30.2
70°-80°	297.7	10.9
80°-90°	39.8	1.5
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°	2732.0	100.0
0°-180°	2732.0	100.0

Coefficient of Utilization



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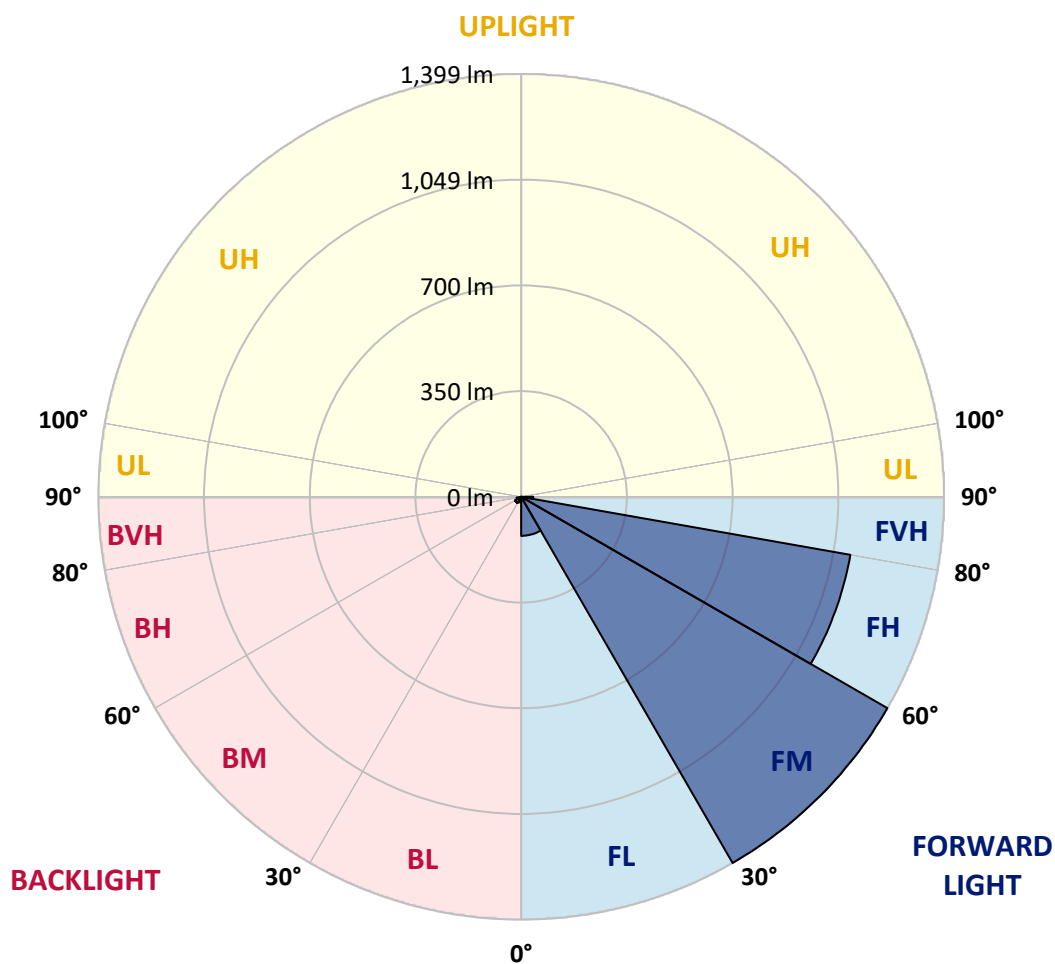
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	129.1	4.7			
FM	(30°-60°)	1399.1	51.2			
FH	(60°-80°)	1106.1	40.5			G1/1800
FVH	(80°-90°)	39.7	1.5			G1/100
BL	(0°-30°)	18.6	0.7	B0/110		
BM	(30°-60°)	23.4	0.9	B0/220		
BH	(60°-80°)	15.9	0.6	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
2.5°	137.1	138.5	137.6	135.1	132.1	128.2	124.7	124.7	124.1	122.6	123.2
5°	179.8	180.3	178.3	172.3	166.9	158.4	149.0	148.0	147.0	145.5	145.0
7.5°	221.5	223.5	221.5	215.0	204.1	191.2	176.3	174.8	171.8	171.8	169.9
10°	264.2	264.2	262.3	254.8	244.9	226.4	207.6	205.1	201.7	200.6	197.6
12.5°	294.5	294.5	293.5	289.6	281.6	265.2	242.3	239.9	235.4	233.9	230.5
15°	306.4	306.4	307.0	310.4	310.9	303.5	279.6	277.6	273.2	269.2	267.7
17.5°	313.9	313.4	313.4	318.4	327.3	332.3	316.9	314.9	309.9	307.9	302.9
20°	330.3	329.3	326.3	326.3	334.7	352.1	352.1	351.7	346.2	344.6	342.2
22.5°	354.6	353.6	344.6	337.2	341.2	363.1	383.4	382.4	380.5	378.4	377.0
25°	394.3	390.9	375.5	353.6	350.2	373.5	407.2	409.7	411.2	411.2	412.2
27.5°	454.4	450.0	422.6	382.0	366.5	390.4	433.6	438.5	443.0	444.0	448.5
30°	537.8	529.9	490.7	431.1	395.8	415.2	472.3	477.8	484.3	486.2	493.2
32.5°	674.9	670.5	632.8	543.3	467.8	463.9	526.4	533.4	541.9	545.3	553.7
35°	883.6	884.6	853.7	773.3	669.0	614.3	623.3	629.3	632.2	642.7	647.2
37.5°	1025.1	1027.6	1034.5	1002.8	928.3	872.6	802.6	809.0	793.7	795.1	795.7
40°	1102.6	1110.5	1151.3	1182.1	1176.1	1143.8	1087.7	1091.2	1062.4	1055.9	1024.6
42.5°	1154.2	1164.7	1229.8	1325.0	1373.8	1403.0	1390.1	1388.6	1366.3	1357.9	1331.5
45°	1186.5	1196.0	1277.9	1418.5	1530.7	1616.1	1651.4	1655.3	1636.4	1628.0	1606.2
47.5°	1185.0	1196.0	1283.8	1453.2	1618.6	1755.2	1854.5	1859.5	1870.9	1863.4	1864.9
50°	1119.5	1129.9	1218.3	1394.1	1592.8	1818.8	2000.5	2016.4	2034.8	2047.2	2053.2
52.5°	1040.0	1047.4	1125.9	1292.8	1482.5	1792.4	2086.9	2114.3	2141.6	2164.9	2181.3
55°	1010.7	1019.1	1080.7	1219.3	1394.1	1682.2	2127.2	2167.4	2206.1	2244.4	2275.7
57.5°	1026.1	1034.0	1078.3	1184.5	1341.5	1565.9	2138.6	2201.2	2264.8	2326.8	2388.4
60°	1082.7	1091.2	1128.9	1216.8	1327.6	1498.9	2093.9	2197.7	2303.5	2411.8	2513.6
62.5°	1060.4	1063.8	1119.5	1273.4	1426.9	1441.8	1931.5	2076.5	2237.9	2404.8	2569.2
63°	1039.0	1043.0	1099.6	1258.0	1457.2	1433.3	1881.4	2034.3	2204.6	2384.4	2563.3
65°	942.2	942.7	985.9	1111.0	1423.4	1448.2	1657.9	1803.8	1999.6	2215.1	2441.0
67.5°	703.3	699.8	741.5	836.9	1117.5	1448.8	1422.9	1504.9	1640.9	1832.2	2034.8
70°	249.4	243.9	311.4	443.5	696.3	1185.0	1222.7	1228.2	1266.0	1369.3	1496.5
72.5°	80.9	82.4	99.3	162.4	320.8	797.6	1107.1	1090.1	1080.2	1079.7	1096.6
75°	32.3	32.8	39.7	72.0	144.1	384.4	969.5	978.9	982.4	987.4	992.8
77.5°	15.4	16.9	22.3	40.3	71.5	190.2	693.8	773.8	819.5	854.8	876.1
80°	5.5	6.5	12.4	24.8	33.2	87.4	365.5	441.0	508.1	594.5	669.0
82.5°	0.0	0.0	2.5	17.4	18.4	35.3	150.0	175.8	201.1	260.8	334.7
85°	0.0	0.0	0.0	5.0	5.5	6.0	50.6	61.1	68.6	80.0	92.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	3.0	7.4	11.5
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
2.5°	122.2	121.7	121.7	120.7	120.2	119.2	118.7	117.2	116.7	116.7	116.7
5°	144.5	142.6	141.5	139.1	137.6	137.1	134.6	133.6	132.1	132.6	130.1
7.5°	169.3	165.9	164.4	160.9	160.0	156.4	155.5	153.0	151.5	148.5	147.5
10°	196.7	192.2	189.7	184.3	182.8	180.3	177.3	174.3	171.8	168.8	167.4
12.5°	228.0	224.0	222.0	214.6	211.1	207.6	203.6	199.7	195.7	193.2	189.7
15°	264.7	258.2	256.3	249.4	243.4	238.9	233.5	228.5	225.5	220.5	217.0
17.5°	301.0	294.5	293.0	282.6	276.1	273.2	267.2	260.8	255.3	250.3	244.9
20°	337.2	332.8	328.8	318.8	311.9	307.0	299.0	292.5	288.1	281.1	274.1
22.5°	373.5	369.0	366.1	355.6	349.1	342.2	335.3	328.3	321.8	313.4	305.5
25°	410.8	407.8	406.3	396.8	390.9	384.4	377.5	369.5	361.6	352.1	343.7
27.5°	449.5	450.5	447.5	445.5	439.0	434.6	423.7	418.2	412.2	400.8	390.4
30°	498.7	501.6	500.6	502.1	498.1	495.2	486.7	479.8	472.8	461.9	450.0
32.5°	560.7	564.7	566.7	572.2	570.2	569.2	566.7	556.7	551.8	532.9	527.9
35°	656.6	654.6	663.1	667.5	665.5	664.6	661.6	656.1	650.1	636.7	624.3
37.5°	781.2	783.2	786.2	777.3	771.3	770.8	761.9	756.4	748.0	733.1	718.1
40°	1009.7	997.3	983.4	945.6	929.3	919.8	893.5	886.0	871.6	851.3	835.9
42.5°	1306.7	1294.3	1252.6	1189.5	1155.7	1109.0	1087.7	1061.3	1041.0	1007.7	989.8
45°	1601.7	1565.9	1561.0	1487.5	1445.8	1384.2	1345.9	1301.7	1255.6	1211.8	1180.1
47.5°	1850.5	1842.6	1818.3	1773.5	1734.8	1683.2	1634.0	1565.9	1518.3	1456.2	1399.1
50°	2049.7	2049.2	2040.2	2014.4	1982.2	1940.5	1897.2	1839.6	1785.5	1709.5	1648.4
52.5°	2198.7	2206.6	2209.6	2201.6	2189.3	2152.5	2130.7	2082.5	2036.8	1972.2	1906.1
55°	2308.0	2337.2	2352.2	2369.0	2365.6	2352.7	2351.7	2320.4	2299.5	2248.3	2201.6
57.5°	2443.1	2491.2	2537.4	2619.4	2622.3	2651.2	2666.0	2681.0	2684.9	2664.5	2649.2
60°	2614.9	2713.3	2800.6	2972.0	3016.7	3087.2	3132.9	3182.6	3224.8	3228.2	3227.3
62.5°	2736.1	2887.6	3028.6	3282.9	3369.8	3451.3	3512.3	3560.5	3589.8	3619.6	3633.5
63°	2739.5	2905.4	3055.4	3317.6	3409.0	3486.5	3544.6	3589.3	3620.2	3638.0	3646.9
65°	2655.6	2856.8	3035.5	3296.8	3382.7	3460.7	3491.0	3520.3	3535.2	3542.2	3515.8
67.5°	2250.8	2447.5	2656.1	2948.2	3021.7	3115.0	3139.9	3154.7	3161.7	3160.2	3137.9
70°	1683.2	1848.1	2080.0	2413.7	2511.1	2602.5	2659.1	2683.4	2691.4	2688.9	2655.6
72.5°	1175.1	1271.9	1463.2	1834.6	1967.3	2084.5	2154.5	2190.7	2198.2	2183.3	2152.5
75°	986.9	991.9	1035.0	1238.2	1362.3	1487.5	1566.4	1589.3	1574.4	1529.2	1450.7
77.5°	881.0	892.0	892.0	922.3	946.6	981.4	988.9	933.2	868.7	785.2	717.7
80°	739.0	777.3	804.1	826.4	828.9	822.0	803.6	772.3	722.6	659.0	588.5
82.5°	449.0	524.5	555.3	670.5	727.1	765.4	762.4	720.7	682.9	616.9	556.7
85°	113.2	122.2	132.6	172.3	193.2	235.9	262.7	275.2	279.6	256.8	232.4
87.5°	10.9	7.4	12.4	9.4	13.4	9.9	13.4	12.4	15.4	16.4	17.9
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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
2.5°	115.7	115.2	114.7	114.2	113.8	113.2	112.3	112.3	111.2	110.8	110.3
5°	128.6	127.6	127.1	126.2	124.7	123.7	122.2	120.2	118.7	118.2	117.2
7.5°	145.0	142.6	141.5	140.0	138.1	135.1	133.1	131.6	129.1	127.6	124.7
10°	163.4	160.9	157.9	155.0	152.0	148.5	146.0	144.1	140.0	138.1	134.6
12.5°	186.7	182.3	178.8	174.8	170.9	166.9	163.9	157.9	154.4	150.0	147.0
15°	210.6	206.6	202.6	197.6	191.7	185.2	182.3	176.8	172.3	165.4	161.4
17.5°	239.4	231.9	226.0	220.0	214.6	208.6	202.6	194.2	187.7	181.8	173.8
20°	267.7	258.8	252.3	244.4	236.4	227.0	220.0	214.0	205.1	197.2	188.8
22.5°	298.0	289.1	278.6	270.7	259.7	252.3	242.9	232.9	224.0	213.5	203.1
25°	334.7	325.3	313.4	302.9	290.5	280.1	268.7	257.3	246.4	234.4	221.0
27.5°	380.0	370.0	357.1	344.6	328.3	315.4	304.4	289.1	275.2	260.2	244.9
30°	437.0	426.1	410.2	392.3	376.0	361.6	346.2	325.8	310.4	292.5	272.7
32.5°	511.6	498.7	477.3	460.4	440.0	421.1	399.8	379.4	357.6	334.3	311.4
35°	605.4	593.5	568.7	543.8	521.5	499.1	472.3	449.0	418.2	389.9	360.5
37.5°	702.8	681.4	658.6	631.7	603.9	577.1	544.3	512.0	476.8	446.0	409.3
40°	814.0	788.2	769.3	740.5	701.3	663.1	632.8	592.5	548.3	507.1	463.9
42.5°	966.5	937.7	903.9	860.2	831.9	787.2	748.0	700.3	642.2	596.0	543.8
45°	1142.8	1103.6	1070.8	1028.6	994.3	938.7	893.0	829.4	771.3	710.7	647.2
47.5°	1343.9	1295.3	1247.6	1205.9	1151.3	1096.6	1038.5	971.0	896.5	829.9	754.4
50°	1574.9	1505.8	1439.8	1386.2	1311.2	1248.1	1185.0	1109.0	1026.6	950.1	864.2
52.5°	1831.7	1751.7	1664.3	1581.8	1494.9	1414.0	1338.0	1250.6	1158.7	1065.4	969.5
55°	2141.6	2081.5	1978.7	1873.9	1757.6	1649.4	1551.5	1443.3	1331.5	1208.9	1108.0
57.5°	2626.8	2597.5	2511.6	2406.8	2255.3	2123.7	1957.8	1825.2	1663.3	1494.4	1364.3
60°	3284.4	3248.1	3199.9	3115.0	2994.8	2816.0	2633.3	2427.2	2180.8	1946.9	1724.9
62.5°	3635.0	3622.1	3582.9	3524.3	3412.0	3271.0	3086.7	2860.2	2582.1	2298.0	2014.9
63°	3645.4	3629.0	3595.3	3535.7	3436.9	3300.3	3119.5	2899.4	2627.3	2337.8	2048.7
65°	3504.4	3497.9	3463.7	3398.6	3331.1	3226.7	3086.7	2897.5	2669.0	2395.4	2107.8
67.5°	3108.1	3088.7	3036.1	3016.2	2969.0	2896.5	2789.7	2659.6	2496.2	2281.1	2032.8
70°	2628.8	2600.0	2533.9	2498.7	2441.0	2395.4	2330.3	2237.5	2136.6	1986.6	1801.4
72.5°	2120.7	2061.1	2000.5	1908.7	1828.2	1746.7	1674.7	1609.2	1498.4	1437.8	1297.3
75°	1377.2	1268.9	1165.1	1026.1	901.0	790.2	682.4	627.8	514.0	467.8	401.8
77.5°	653.6	593.0	511.6	448.5	368.0	300.5	245.3	184.3	144.5	113.2	86.4
80°	527.5	476.3	427.1	370.0	309.4	246.8	189.2	141.5	100.3	69.5	49.1
82.5°	470.3	414.7	354.1	314.9	273.7	224.0	183.8	150.0	110.8	80.9	55.1
85°	182.8	154.0	118.7	96.8	75.5	62.0	56.1	38.7	30.3	23.8	18.4
87.5°	15.9	12.9	10.4	7.0	7.4	4.0	4.4	3.0	2.5	2.5	2.0
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):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
2.5°	109.7	109.3	108.8	107.8	107.8	106.8	106.3	105.8	103.3	97.9	93.4
5°	115.2	114.2	113.2	111.7	110.8	109.3	108.3	106.8	101.3	90.9	82.0
7.5°	123.2	121.2	119.7	116.7	115.2	113.2	111.7	109.3	100.3	84.4	72.0
10°	132.6	129.1	126.7	123.2	120.2	117.7	115.2	111.7	99.3	77.5	63.1
12.5°	144.1	140.0	135.1	131.1	127.1	123.7	120.2	115.7	97.9	71.5	56.1
15°	155.5	149.5	146.0	140.5	135.1	130.1	125.2	121.2	98.3	65.0	50.2
17.5°	168.4	162.4	155.0	149.0	143.0	136.6	130.6	122.6	95.8	60.1	45.7
20°	180.8	172.3	165.4	157.9	149.5	141.5	134.1	127.1	93.8	55.1	41.7
22.5°	194.2	184.3	175.3	165.9	155.5	146.5	137.6	128.6	90.4	50.6	38.2
25°	210.6	199.1	186.2	174.8	163.9	153.0	141.5	130.6	86.9	46.7	35.8
27.5°	230.5	215.6	202.6	188.2	172.9	158.9	146.5	134.6	83.5	43.7	33.2
30°	255.8	238.4	220.0	201.7	185.2	169.3	152.0	137.1	80.0	40.7	30.8
32.5°	289.6	267.7	245.3	224.0	202.1	181.8	163.4	144.1	77.9	38.2	28.3
35°	334.3	305.9	278.6	251.8	225.5	200.6	176.8	155.0	77.9	35.3	25.3
37.5°	376.4	343.7	308.9	275.6	244.4	215.6	187.3	160.9	74.0	32.8	22.9
40°	422.2	382.9	342.2	302.9	265.2	229.4	197.2	166.9	70.5	29.8	20.3
42.5°	492.2	442.6	389.4	343.7	298.5	254.3	214.0	178.3	66.1	26.8	17.9
45°	584.1	521.0	458.4	402.8	345.2	291.1	243.4	199.1	65.0	24.4	15.4
47.5°	682.4	607.9	534.4	463.4	395.8	332.8	275.6	222.5	65.0	21.8	13.4
50°	780.2	686.9	608.4	526.0	450.0	375.5	307.4	246.8	65.6	19.9	10.9
52.5°	868.7	768.8	680.9	585.5	501.6	415.2	341.2	270.7	64.6	17.4	8.9
55°	991.3	874.1	772.3	667.0	568.7	471.4	387.4	306.4	65.0	15.4	7.4
57.5°	1217.3	1079.7	957.1	819.0	705.7	580.1	478.3	380.0	71.0	12.9	5.5
60°	1541.6	1362.8	1190.5	1022.1	878.1	728.6	596.5	480.8	83.5	10.4	4.0
62.5°	1759.6	1525.7	1320.1	1134.4	967.0	810.5	666.5	534.9	91.9	8.5	2.5
63°	1782.0	1540.1	1333.5	1141.8	971.0	814.5	669.5	538.9	92.4	7.9	2.5
65°	1824.2	1565.0	1340.9	1143.3	967.0	809.0	667.5	538.4	93.4	6.5	2.0
67.5°	1776.1	1526.7	1297.8	1100.6	932.2	776.8	642.7	518.5	92.9	4.4	1.5
70°	1588.3	1381.7	1180.6	996.8	843.8	703.3	585.1	472.8	85.4	3.0	1.0
72.5°	1166.2	1025.6	869.6	737.0	635.7	527.9	450.5	355.1	66.1	2.0	0.5
75°	345.7	314.9	264.7	233.5	206.1	170.3	151.5	118.2	33.8	1.0	0.0
77.5°	69.1	62.6	56.1	51.2	48.2	41.2	39.2	32.3	13.9	0.5	0.0
80°	36.2	29.8	25.3	22.3	19.4	15.9	13.4	10.9	2.5	0.0	0.0
82.5°	34.8	23.3	16.9	13.9	11.9	9.4	7.4	5.5	1.5	0.0	0.0
85°	12.9	9.9	7.4	6.0	5.0	4.4	3.5	3.0	0.0	0.0	0.0
87.5°	2.0	1.5	1.5	1.0	1.0	0.5	0.5	0.5	0.0	0.0	0.0
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):

	125°	135°	145°	155°	165°	175°	180°
0°	104.8	104.8	104.8	104.8	104.8	104.8	104.8
2.5°	88.9	84.9	82.9	80.5	80.5	80.0	80.9
5°	74.0	68.6	64.6	61.6	62.0	60.6	61.1
7.5°	62.6	57.1	53.6	51.7	51.2	50.6	50.6
10°	54.1	49.1	46.2	44.7	44.2	44.2	44.2
12.5°	48.2	43.2	40.7	39.7	39.7	39.2	39.2
15°	43.2	39.2	36.8	35.8	35.8	35.3	35.8
17.5°	39.2	35.3	33.2	32.3	32.3	31.8	31.8
20°	35.8	32.3	30.3	28.8	28.8	28.3	28.8
22.5°	32.8	29.3	26.8	25.8	25.3	24.8	25.3
25°	29.8	26.3	23.8	22.3	21.8	21.8	21.4
27.5°	27.3	23.8	20.9	19.4	18.9	18.9	18.4
30°	24.8	20.9	17.9	16.4	15.9	15.9	15.9
32.5°	22.3	17.9	15.4	13.9	13.4	13.4	13.4
35°	19.9	15.4	12.9	11.5	10.9	10.9	10.9
37.5°	16.9	12.9	9.9	8.9	8.5	7.9	7.9
40°	14.4	9.9	7.4	6.5	5.5	5.5	5.5
42.5°	11.9	7.9	5.5	4.0	3.5	3.0	3.5
45°	9.9	6.0	3.5	2.0	1.5	1.5	1.5
47.5°	7.9	4.0	1.5	0.5	0.5	0.5	0.5
50°	6.0	2.5	0.5	0.0	0.0	0.5	0.5
52.5°	4.4	1.5	0.0	0.0	0.0	0.0	0.0
55°	2.5	0.5	0.0	0.0	0.0	0.0	0.0
57.5°	1.5	0.0	0.0	0.0	0.0	0.0	0.0
60°	1.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.5	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.5	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.5	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)