

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: P265916

Luminaire Tested: **ARCH-AF24-20-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T2U-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2475.3 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

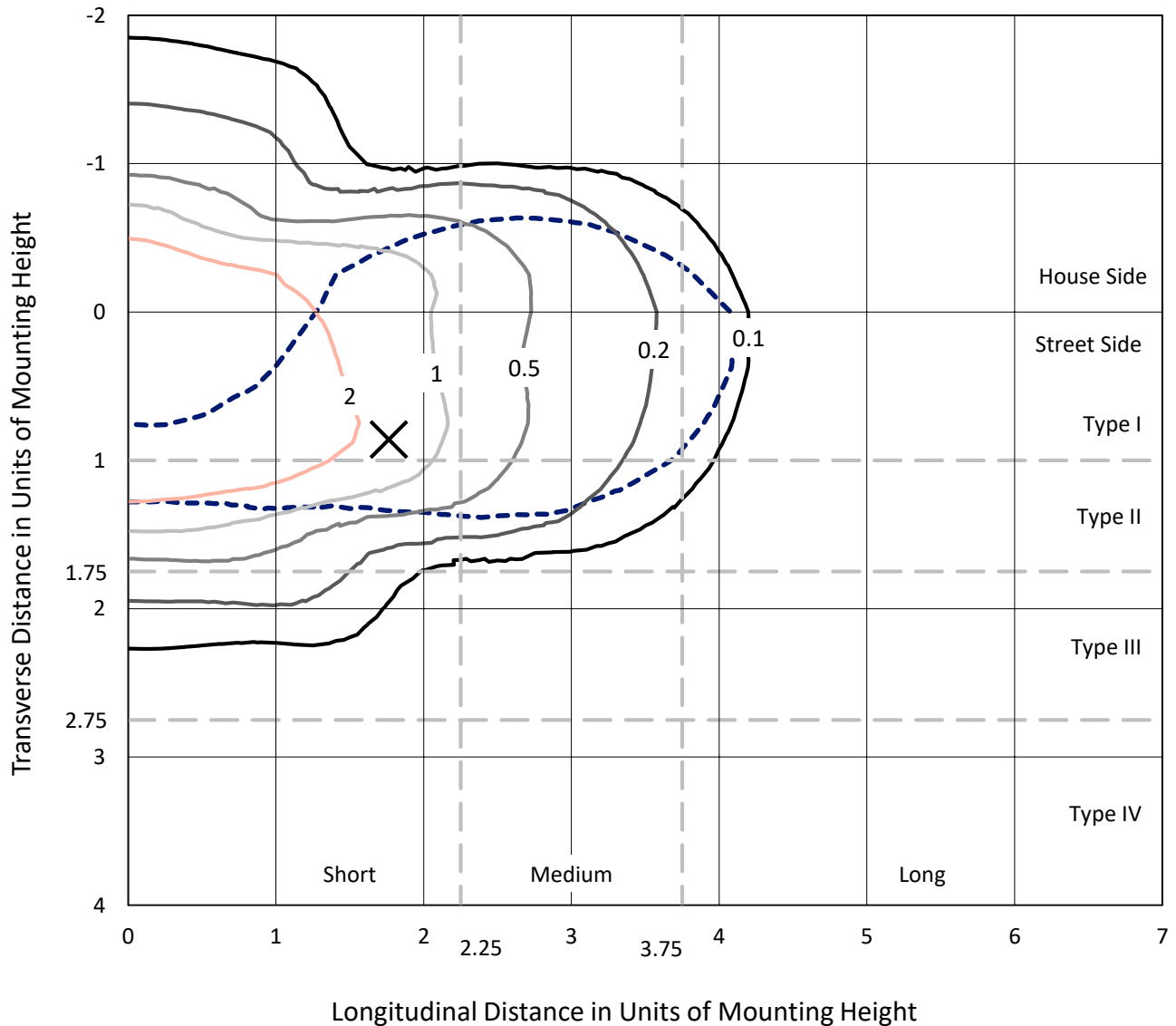
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

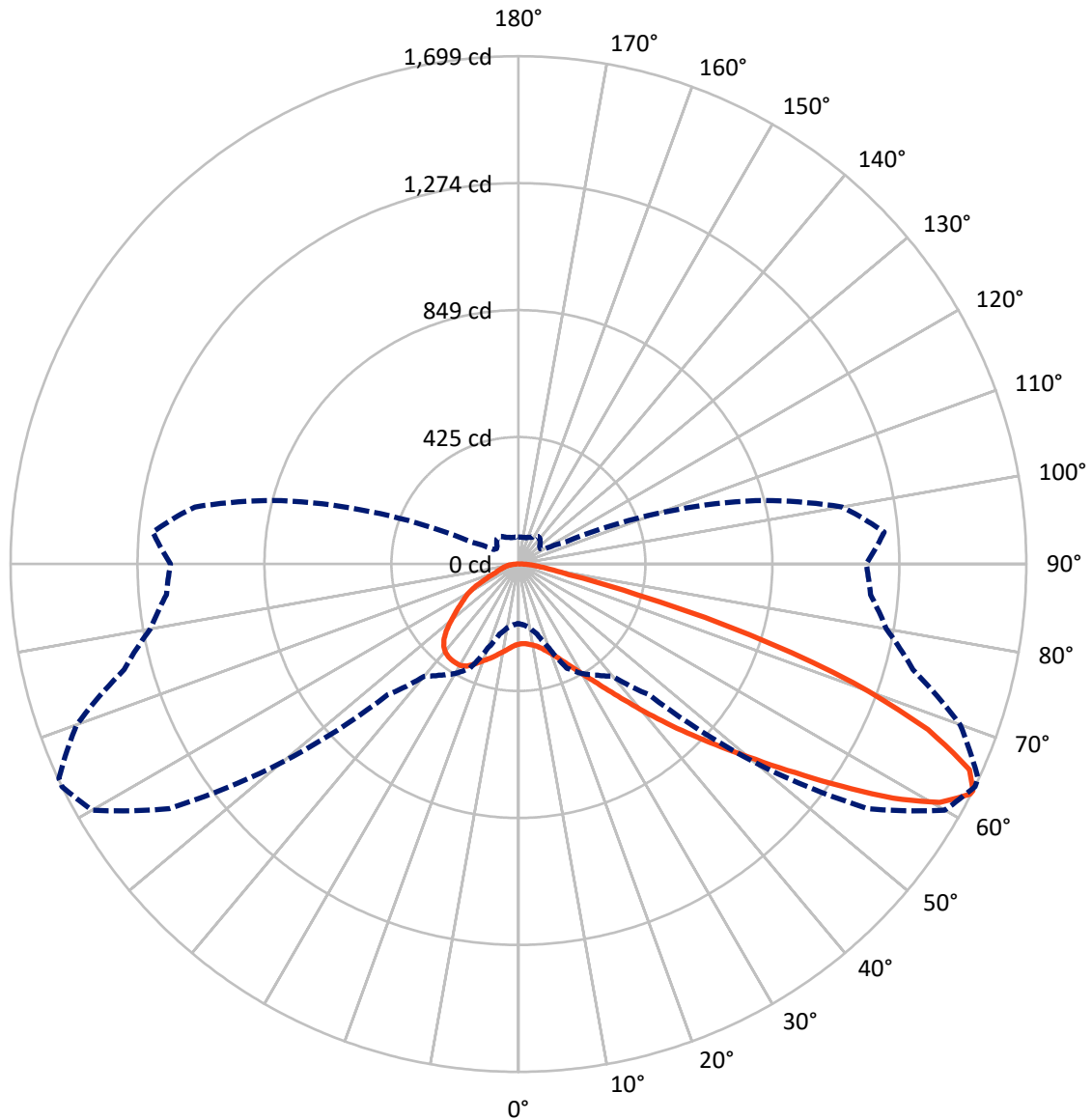
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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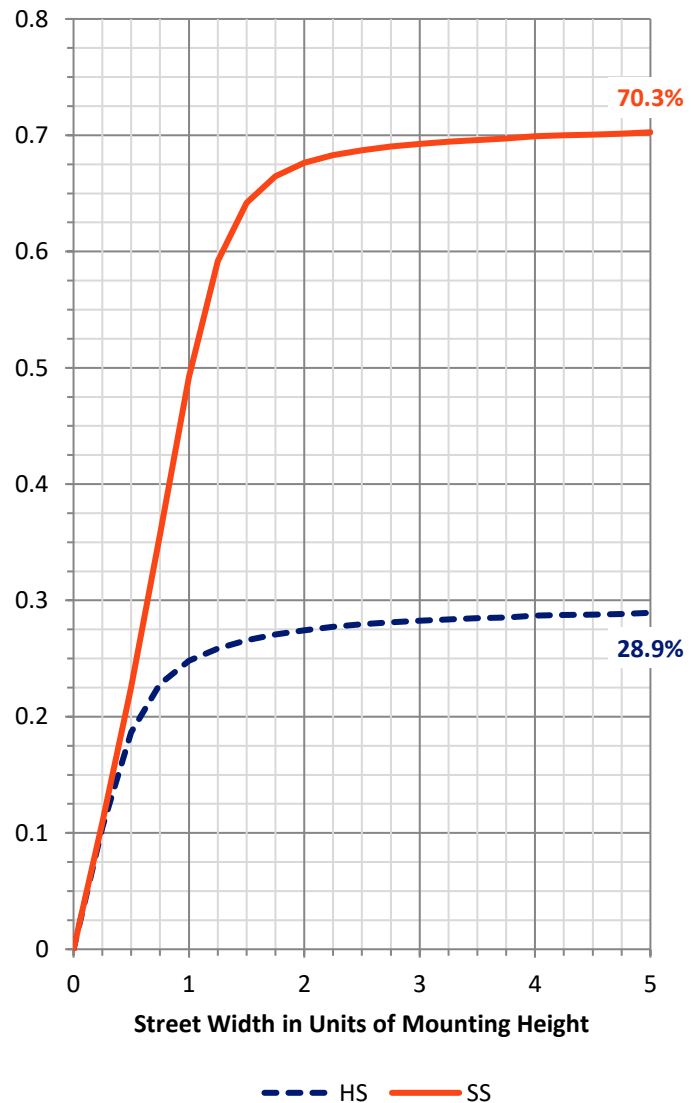
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	727.6	0.0	727.6
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	1747.7	0.0	1747.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	2475.3	0.0	2475.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.8	1.1
10°-20°	89.1	3.6
20°-30°	167.3	6.8
30°-40°	280.5	11.3
40°-50°	470.6	19.0
50°-60°	596.6	24.1
60°-70°	526.3	21.3
70°-80°	271.7	11.0
80°-90°	46.5	1.9
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°	2475.3	100.0
0°-180°	2475.3	100.0



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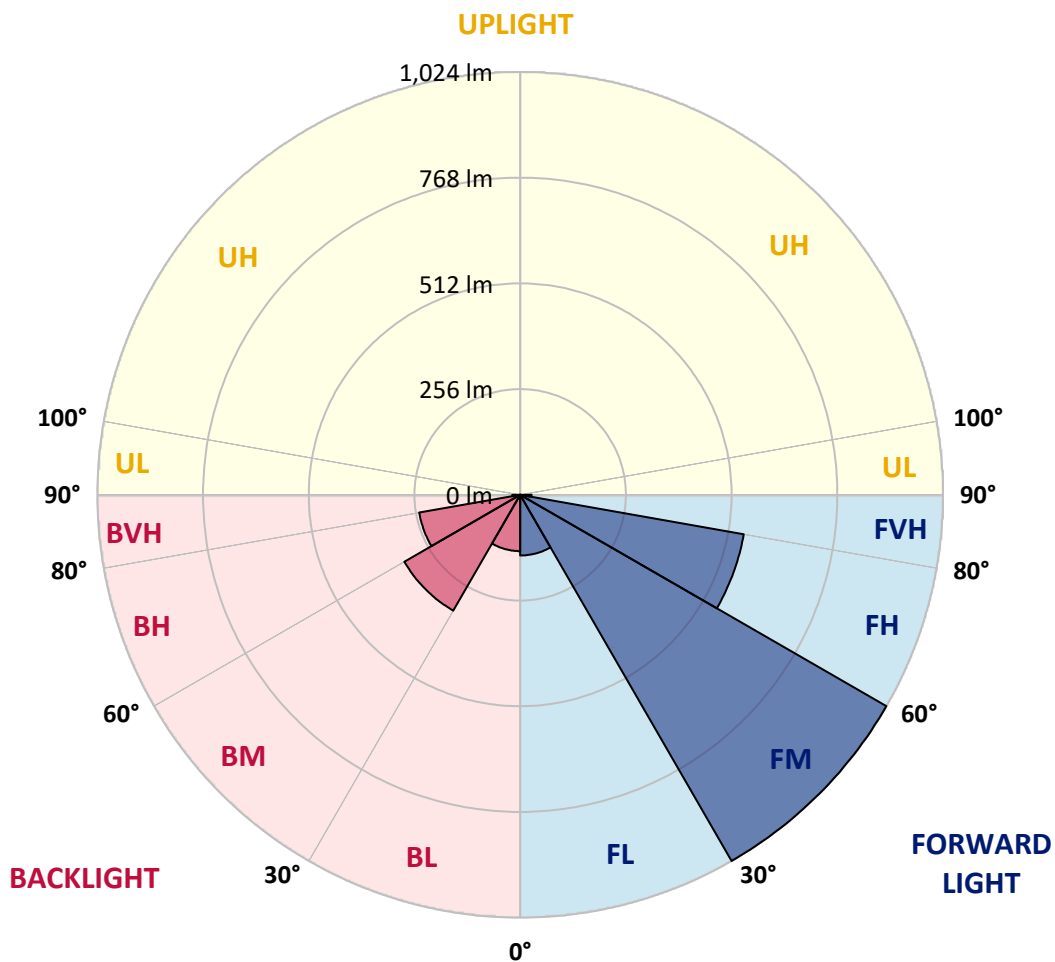
CATALOG NUMBER: ARCH-AF24-20-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	146.9	5.9			
FM	(30°-60°)	1023.7	41.4			
FH	(60°-80°)	549.7	22.2			G0/660
FVH	(80°-90°)	27.4	1.1			G1/100
BL	(0°-30°)	136.3	5.5	B1/500		
BM	(30°-60°)	323.9	13.1	B1/1000		
BH	(60°-80°)	248.3	10.0	B1/500		G1/500
BVH	(80°-90°)	19.1	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1
2.5°	266.3	266.0	266.0	266.0	266.0	265.5	266.0	266.8	266.3	266.0	266.8
5°	267.2	266.8	266.8	266.8	267.2	266.8	267.2	268.6	267.6	267.6	268.6
7.5°	269.3	269.0	269.3	269.0	269.0	269.0	269.3	270.6	270.1	270.6	271.7
10°	271.7	271.7	271.7	271.7	271.7	271.7	272.6	273.4	273.9	274.3	276.0
12.5°	279.3	279.3	279.3	278.8	278.8	277.5	279.3	280.1	280.9	281.8	283.0
15°	295.1	295.1	294.6	292.9	292.9	290.4	290.8	291.3	291.3	292.0	292.9
17.5°	315.8	315.3	314.4	313.1	311.6	308.7	307.8	307.0	305.8	305.3	305.3
20°	344.7	344.3	342.7	339.3	337.3	332.7	329.4	326.1	324.8	322.9	322.3
22.5°	386.1	386.1	382.9	377.8	376.2	366.7	357.2	350.1	347.6	344.7	344.7
25°	436.2	435.9	431.4	425.4	418.5	408.5	397.0	387.3	381.2	374.6	372.1
27.5°	496.4	495.1	488.9	481.9	468.6	456.2	442.5	432.5	421.8	413.5	406.0
30°	566.8	565.6	554.9	541.6	527.8	515.4	495.5	483.5	466.5	456.6	448.3
32.5°	648.4	647.1	627.7	614.9	600.3	585.1	561.4	542.3	520.7	506.7	495.1
35°	752.4	747.5	719.7	701.8	679.1	663.8	639.0	613.3	587.9	568.1	551.1
37.5°	864.7	858.9	834.4	807.9	785.6	767.0	731.7	699.4	669.5	642.2	621.1
40°	981.9	966.7	940.5	921.0	905.8	888.0	851.1	817.1	770.2	739.6	707.7
42.5°	1063.1	1048.2	1030.0	1017.2	1009.8	996.1	975.3	945.9	904.1	905.0	820.8
45°	1116.7	1094.7	1082.3	1083.0	1086.1	1086.1	1082.3	1077.6	1059.5	1071.9	1001.4
47.5°	1097.5	1083.0	1075.2	1091.8	1112.6	1133.2	1157.2	1183.3	1213.3	1248.4	1161.8
50°	985.7	991.1	994.9	1030.0	1074.4	1121.7	1176.7	1247.9	1331.3	1347.4	1305.5
52.5°	807.0	818.7	831.1	885.0	943.4	1025.1	1121.7	1239.3	1351.1	1417.0	1412.9
55°	626.8	641.4	667.9	708.1	754.4	831.7	950.9	1132.4	1306.9	1411.6	1475.5
57.5°	446.3	467.4	502.2	558.0	599.1	642.6	731.0	932.3	1123.3	1318.4	1465.0
60°	296.7	306.6	329.4	398.9	468.1	513.8	576.4	649.3	805.5	1074.4	1358.1
62.5°	210.6	217.1	231.3	262.7	325.2	407.7	445.4	478.9	529.1	691.1	1090.5
63°	198.9	204.6	216.3	242.8	299.1	384.6	423.0	453.7	490.1	618.2	1031.8
65°	164.8	167.4	173.6	186.5	216.8	287.5	350.5	369.2	375.4	397.3	646.4
67.5°	139.1	140.9	142.9	146.7	158.7	191.3	261.4	285.0	278.0	263.2	319.4
70°	121.0	122.2	125.6	130.2	134.2	142.6	179.8	215.1	207.1	186.8	195.7
72.5°	96.6	98.6	102.3	110.2	118.4	129.3	138.3	160.3	155.3	136.0	138.0
75°	76.3	77.4	80.8	86.5	94.5	106.9	124.8	132.2	118.4	100.3	100.3
77.5°	60.5	61.8	64.7	69.2	74.2	82.9	95.3	114.8	106.4	75.4	75.0
80°	45.5	46.8	49.8	53.9	58.7	65.0	72.6	81.1	97.7	70.4	56.4
82.5°	33.5	34.0	38.9	41.9	43.5	48.5	54.6	59.6	67.2	65.0	50.1
85°	25.3	24.9	28.1	30.3	30.6	31.9	35.7	40.7	43.8	42.3	38.9
87.5°	14.2	12.4	14.6	16.6	16.6	17.0	17.8	20.8	23.6	22.7	20.8
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1
2.5°	266.8	266.8	266.3	266.3	266.8	266.8	266.3	267.6	268.6	268.6	269.0
5°	268.1	268.6	268.1	268.1	268.6	268.6	269.0	270.1	271.4	272.2	273.4
7.5°	271.7	272.2	271.7	271.7	272.2	272.6	273.4	275.2	276.0	277.5	279.7
10°	276.0	276.4	276.0	276.4	276.8	277.1	278.5	279.7	280.9	282.5	285.9
12.5°	283.4	283.9	283.0	283.4	284.7	284.7	285.5	286.3	288.4	290.4	293.7
15°	293.7	293.7	292.9	293.3	294.6	294.6	295.1	295.8	298.2	300.8	304.2
17.5°	305.8	306.6	306.2	306.6	307.4	307.8	307.8	308.7	310.4	312.0	315.3
20°	322.0	322.3	321.6	322.3	323.2	322.3	321.6	321.1	322.0	322.9	326.5
22.5°	344.0	343.5	341.4	341.4	341.4	339.7	337.8	335.2	335.2	334.0	336.9
25°	370.0	368.8	365.9	366.2	363.4	360.8	357.2	353.5	350.1	348.9	349.4
27.5°	400.6	398.2	395.3	394.4	391.5	387.0	380.8	373.8	368.3	364.3	363.4
30°	439.2	433.8	428.9	428.0	423.5	415.9	406.0	396.5	387.3	380.3	377.8
32.5°	484.7	476.6	468.6	467.7	460.3	450.4	438.4	425.1	411.9	400.6	395.3
35°	538.3	525.8	518.3	516.3	505.4	493.1	479.9	462.7	444.1	428.4	418.5
37.5°	603.3	590.5	577.6	578.0	563.1	548.5	530.8	510.1	486.4	464.5	450.4
40°	683.6	665.5	648.8	645.2	632.2	611.9	592.5	568.4	539.4	510.4	490.1
42.5°	781.0	751.3	728.3	725.1	708.1	683.3	659.6	627.7	598.4	563.1	538.7
45°	891.7	844.0	816.6	811.7	784.3	759.1	730.5	696.5	660.4	620.6	591.7
47.5°	1029.2	961.2	914.8	906.6	868.9	835.8	805.9	768.2	725.1	680.7	648.8
50°	1189.5	1089.3	1026.8	1013.8	963.3	924.4	886.3	839.0	793.1	746.6	709.8
52.5°	1350.3	1242.5	1159.4	1143.5	1069.0	1016.8	966.7	919.4	865.2	819.2	777.4
55°	1479.6	1408.0	1311.3	1289.3	1182.4	1111.7	1045.7	991.9	938.0	901.5	852.3
57.5°	1557.5	1553.8	1477.5	1447.3	1301.0	1196.2	1122.8	1061.5	1009.3	994.0	928.5
60°	1555.4	1652.0	1619.3	1596.4	1420.8	1282.8	1187.5	1121.2	1078.1	1095.6	1005.2
62.5°	1460.6	1656.0	1695.5	1689.3	1548.4	1352.4	1240.5	1172.2	1149.3	1201.2	1084.8
63°	1426.1	1646.6	1698.8	1696.3	1572.8	1365.7	1249.6	1182.1	1163.5	1228.2	1099.3
65°	1205.3	1563.3	1658.6	1669.8	1625.5	1411.1	1270.7	1207.3	1205.3	1288.2	1133.7
67.5°	734.6	1320.9	1477.5	1499.0	1551.3	1425.7	1258.7	1198.7	1228.5	1296.9	1123.3
70°	314.0	871.7	1187.5	1222.2	1350.0	1353.7	1224.4	1163.0	1223.1	1228.9	1049.5
72.5°	185.9	411.1	808.4	884.2	1068.2	1164.7	1145.6	1101.0	1152.3	1079.4	893.8
75°	131.7	192.2	410.6	491.5	743.7	889.1	962.5	983.3	981.2	856.1	670.9
77.5°	94.5	123.4	173.3	204.3	415.1	571.0	660.4	720.9	701.4	572.9	413.5
80°	65.8	85.3	106.1	112.6	192.6	293.3	348.1	374.6	362.9	286.3	185.2
82.5°	47.6	56.0	68.5	72.6	96.9	135.5	161.2	142.1	136.4	105.6	79.9
85°	36.9	36.0	42.7	44.3	56.8	70.8	72.6	56.4	49.2	43.8	44.7
87.5°	26.1	22.4	22.7	23.6	29.5	37.6	36.9	23.1	19.9	21.1	24.1
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1	268.1
2.5°	269.8	270.1	271.0	271.4	272.2	272.2	273.1	273.4	274.3	275.2	275.5
5°	274.7	276.0	277.5	278.5	280.1	281.3	283.0	283.9	285.5	286.6	288.4
7.5°	282.2	284.3	286.3	288.7	291.3	293.3	295.1	297.1	299.9	302.0	303.3
10°	289.3	292.0	295.8	298.7	302.5	305.3	307.8	311.6	314.9	317.8	319.4
12.5°	298.2	302.0	305.8	310.4	315.3	319.1	322.9	327.7	332.4	335.5	337.3
15°	309.0	313.7	317.8	323.2	329.0	334.0	339.3	344.7	348.1	348.1	347.3
17.5°	320.2	324.0	329.0	335.2	343.1	349.4	352.1	353.0	351.7	348.9	346.7
20°	331.5	334.8	340.2	347.6	355.9	357.2	354.2	350.5	346.7	341.9	338.5
22.5°	340.5	345.2	353.5	362.1	362.6	355.5	347.6	341.4	335.5	329.8	323.6
25°	351.3	357.5	368.8	372.1	361.3	348.1	336.9	327.7	318.2	308.7	301.7
27.5°	364.6	373.8	385.0	375.4	354.2	335.5	320.2	306.6	294.1	280.9	273.1
30°	378.6	392.7	395.3	370.5	342.3	318.2	297.5	276.8	261.0	249.0	244.5
32.5°	395.8	413.8	398.9	361.7	326.1	294.6	266.8	242.0	228.7	221.3	219.1
35°	421.3	436.2	401.1	352.7	307.4	266.3	231.7	211.7	203.5	198.4	196.0
37.5°	458.2	457.9	400.6	341.4	285.9	235.7	203.5	189.4	182.7	178.6	174.0
40°	501.3	474.5	398.2	325.2	256.8	206.3	184.0	170.7	164.5	159.4	154.1
42.5°	544.1	485.7	391.1	301.2	220.9	185.2	169.9	157.8	151.3	145.9	138.3
45°	580.9	490.1	377.5	268.1	188.6	168.6	160.7	150.3	142.6	134.2	128.5
47.5°	609.9	489.3	355.5	229.1	166.9	157.1	153.3	146.2	136.7	126.4	118.9
50°	634.4	483.1	325.6	194.8	152.5	146.7	145.4	143.4	128.0	119.4	114.8
52.5°	656.8	473.9	293.7	171.5	140.0	135.0	137.6	135.5	124.8	117.3	112.6
55°	687.4	467.7	262.2	153.7	125.6	124.2	126.4	129.3	122.7	115.6	110.6
57.5°	723.5	471.2	238.2	133.8	111.8	112.6	119.7	123.8	120.6	113.0	108.2
60°	764.8	481.0	217.1	114.8	100.7	102.8	113.0	118.9	118.4	109.9	104.1
62.5°	811.3	491.5	183.6	100.3	91.2	94.5	105.2	112.6	113.9	106.4	99.4
63°	820.4	492.2	174.8	97.3	89.6	93.2	103.1	111.0	112.6	105.6	98.6
65°	842.8	484.7	140.9	89.6	82.9	87.0	96.9	104.1	107.3	101.1	95.3
67.5°	824.1	423.9	106.1	79.9	77.4	80.4	89.1	95.7	98.6	95.7	89.9
70°	753.7	308.3	82.9	71.2	71.7	73.8	80.4	86.5	89.9	89.1	83.7
72.5°	607.1	174.8	69.2	63.8	65.0	67.6	72.1	78.0	80.8	80.4	76.6
75°	399.8	89.6	58.4	57.2	58.0	60.0	63.4	67.9	71.2	70.8	69.2
77.5°	198.0	62.2	50.1	50.6	50.9	52.6	55.1	59.3	61.4	61.8	61.4
80°	81.7	48.5	43.1	43.5	43.8	45.2	46.8	50.6	51.8	52.6	53.0
82.5°	48.9	36.9	34.3	35.3	35.7	36.9	38.1	41.4	42.7	43.8	43.8
85°	32.2	25.7	24.9	25.7	26.5	27.4	27.8	29.9	31.9	33.5	34.3
87.5°	17.3	15.4	14.9	15.4	15.4	16.2	17.0	19.0	21.6	23.1	24.1
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):

	160°	165°	170°	175°	180°
0°	268.1	268.1	268.1	268.1	268.1
2.5°	274.7	275.2	274.7	275.2	275.5
5°	288.4	289.3	288.7	288.7	290.4
7.5°	304.2	305.8	305.8	306.6	307.4
10°	321.1	322.9	324.0	324.0	325.2
12.5°	338.1	338.9	340.2	340.2	340.2
15°	346.7	346.3	345.9	345.6	345.6
17.5°	345.6	344.0	343.1	342.3	342.7
20°	336.4	333.5	332.7	331.5	332.4
22.5°	320.6	316.6	314.9	312.8	313.7
25°	297.1	292.0	291.3	288.7	290.1
27.5°	269.8	267.2	266.8	266.3	268.6
30°	244.0	244.9	245.2	246.1	248.2
32.5°	220.4	222.2	222.5	222.9	225.8
35°	197.2	195.1	197.2	196.4	198.9
37.5°	171.9	170.3	168.6	166.5	168.3
40°	150.8	148.0	142.9	140.4	140.9
42.5°	134.2	130.6	126.4	123.8	123.8
45°	123.4	118.9	115.3	113.5	113.5
47.5°	115.3	113.0	111.0	109.9	109.9
50°	111.8	109.4	108.2	107.3	107.3
52.5°	109.4	106.9	105.6	104.8	104.1
55°	107.3	103.6	102.3	101.9	101.9
57.5°	104.5	101.1	99.4	99.1	99.1
60°	99.8	97.3	95.7	95.3	95.3
62.5°	95.3	92.9	91.2	91.2	91.2
63°	94.5	91.5	90.3	90.3	90.3
65°	90.8	87.9	86.5	86.5	86.1
67.5°	85.8	82.9	82.0	82.0	81.1
70°	79.9	77.4	76.6	77.1	75.4
72.5°	74.2	71.7	70.4	70.4	68.8
75°	67.6	65.0	63.4	63.1	61.4
77.5°	60.0	58.0	56.4	54.6	53.9
80°	52.2	50.6	48.5	47.3	46.1
82.5°	43.8	42.3	41.1	42.7	36.4
85°	34.3	32.7	31.1	33.5	26.1
87.5°	25.3	24.4	22.7	19.9	17.3
90°	0.0	0.0	0.0	0.0	0.0

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