

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: INVUE

Report Number: P401296

Luminaire Tested: **ENT-SA1C-735-U-SLR**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1C-735-U-SLR
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3747 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 33.3
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: 25 FT

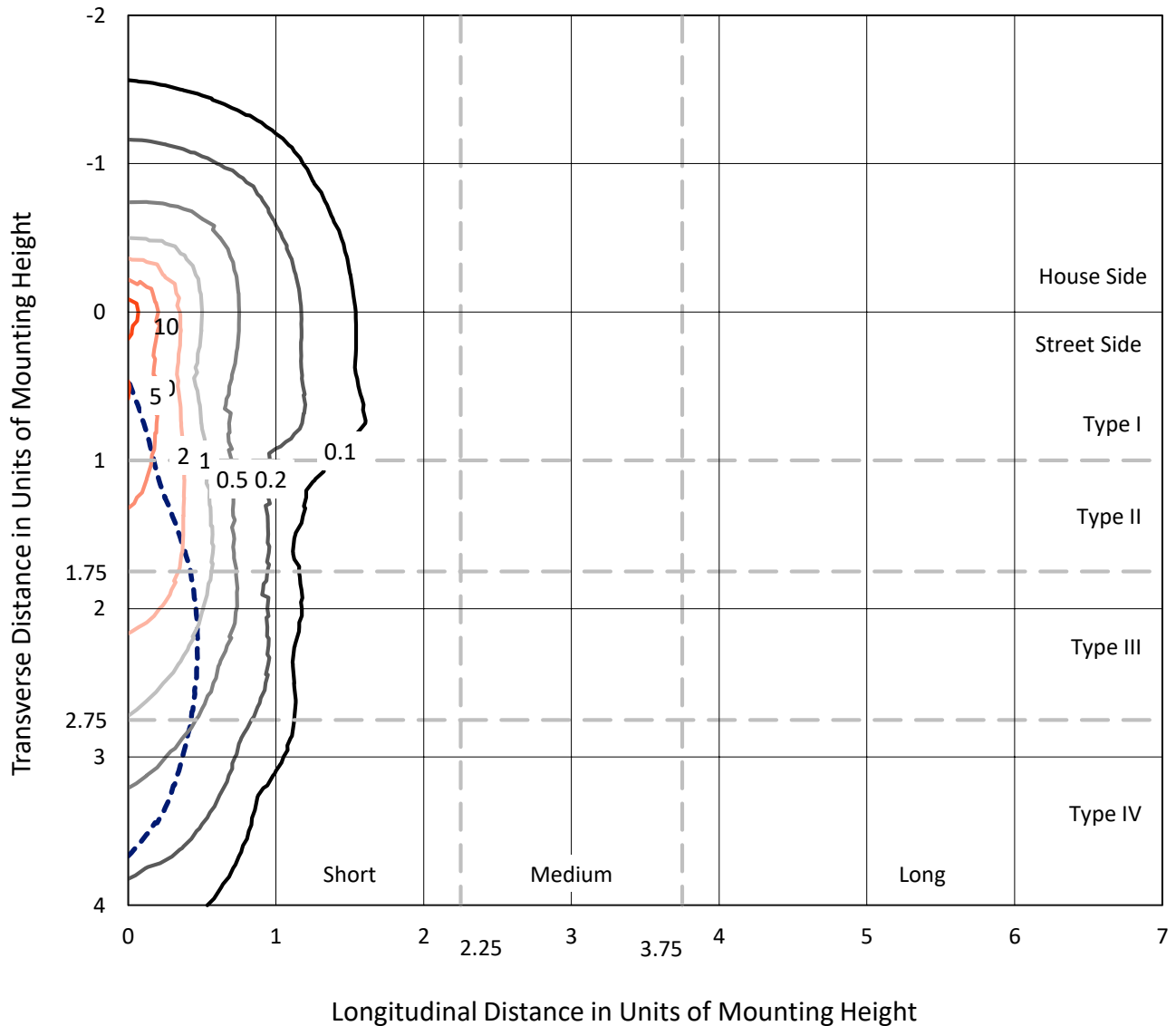


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Iso-Footcandle Lines of Horizontal Illumination

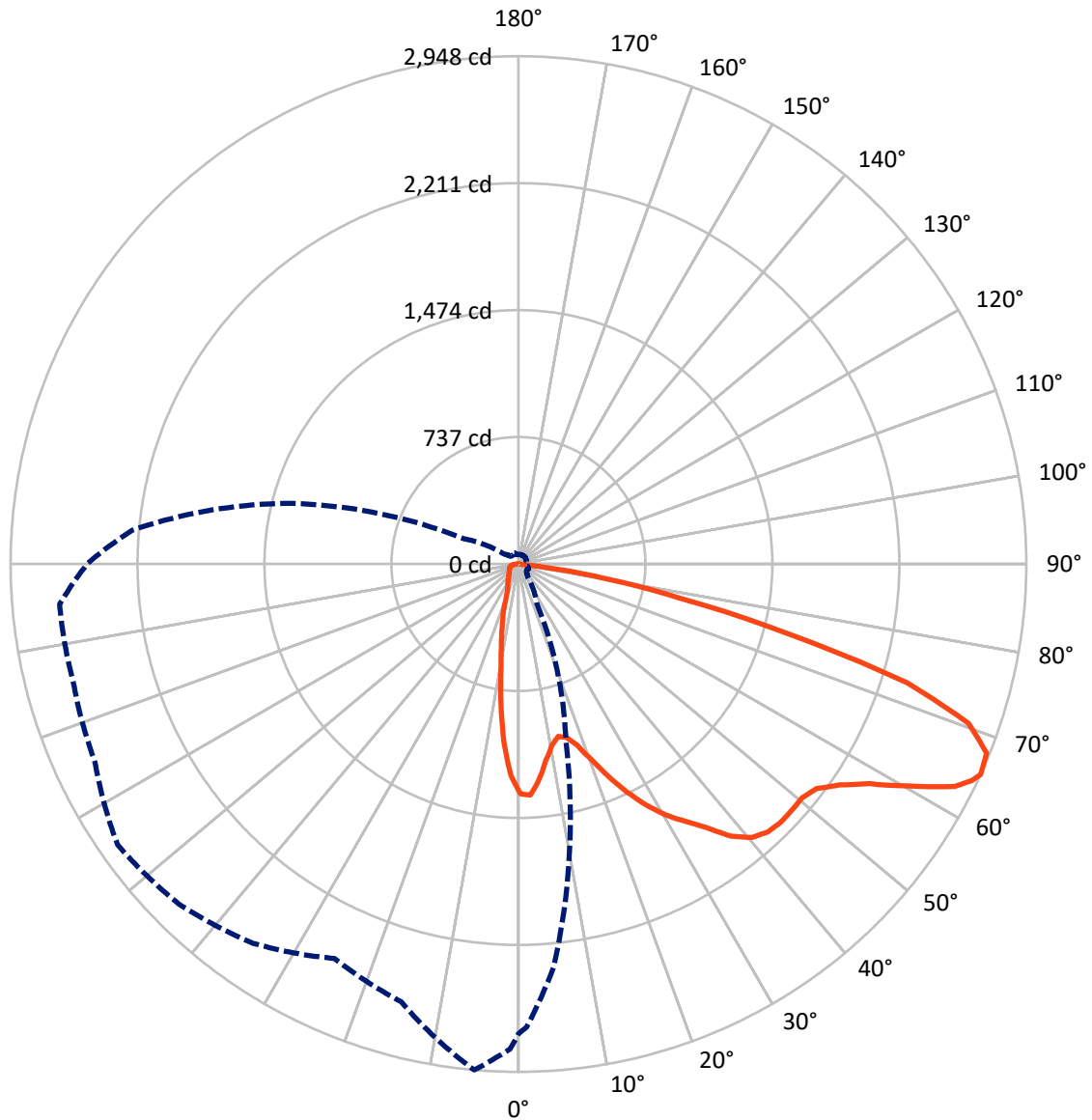
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	768.8	0.0	768.8
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	2978.2	0.0	2978.2
	% Fixture	79.5	0.0	79.5
Total	Lumens	3747.0	0.0	3747.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	2.7
10°-20°	202.6	5.4
20°-30°	280.9	7.5
30°-40°	392.7	10.5
40°-50°	534.4	14.3
50°-60°	730.7	19.5
60°-70°	893.4	23.8
70°-80°	539.4	14.4
80°-90°	71.1	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°	3747.0	100.0
0°-180°	3747.0	100.0



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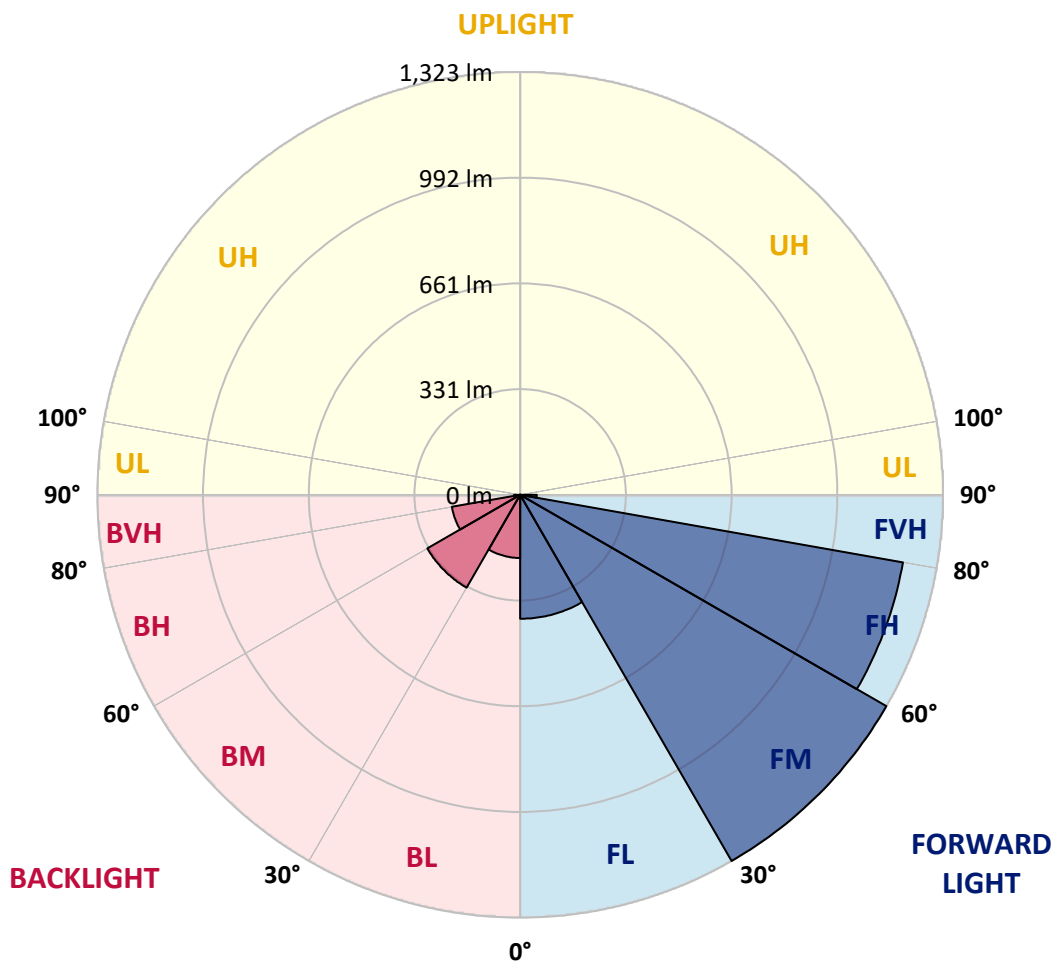
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	387.7	10.3			
FM	(30°-60°)	1322.6	35.3			
FH	(60°-80°)	1215.9	32.4			G1/1800
FVH	(80°-90°)	52.0	1.4			G1/100
BL	(0°-30°)	197.6	5.3	B1/500		
BM	(30°-60°)	335.1	8.9	B1/1000		
BH	(60°-80°)	217.0	5.8	B1/500		G1/500
BVH	(80°-90°)	19.1	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4
2.5°	1330.2	1326.5	1317.1	1292.0	1265.1	1233.1	1227.5	1193.0	1196.8	1186.8	1189.3
5°	1215.0	1209.9	1184.2	1134.1	1065.8	1026.3	995.6	977.5	962.4	954.9	964.3
7.5°	1102.8	1095.9	1065.2	976.8	901.0	838.4	788.2	757.5	727.5	703.7	692.4
10°	1011.9	1009.4	968.7	869.1	773.8	697.4	664.8	632.2	606.5	572.7	545.1
12.5°	966.2	958.7	910.4	794.5	701.8	654.8	624.1	582.7	547.6	506.3	470.6
15°	968.1	959.3	899.2	777.6	676.7	619.7	572.7	523.2	471.8	429.8	393.5
17.5°	1022.0	1015.7	942.4	793.3	655.4	576.5	503.1	439.2	382.8	330.2	297.6
20°	1112.8	1103.4	1001.9	812.1	628.5	527.0	427.3	339.6	278.8	232.5	206.8
22.5°	1231.2	1213.7	1086.5	835.2	601.5	470.6	345.2	247.5	193.6	170.4	163.5
25°	1357.8	1344.0	1188.6	864.7	572.7	409.2	255.6	179.8	161.0	151.6	146.6
27.5°	1474.4	1451.8	1298.3	897.3	534.5	347.8	194.2	154.8	142.2	137.8	134.7
30°	1557.7	1538.3	1374.1	934.9	501.3	283.8	166.0	140.4	130.3	123.4	122.2
32.5°	1637.3	1609.7	1429.2	952.4	473.7	249.4	153.5	130.3	120.9	114.0	111.5
35°	1731.3	1703.7	1492.5	954.9	453.0	235.0	141.6	122.8	112.8	106.5	103.4
37.5°	1842.2	1804.6	1564.0	956.8	432.3	229.3	131.6	116.5	106.5	99.6	97.1
40°	1947.4	1918.6	1637.3	953.7	418.6	221.2	125.3	109.7	100.3	94.0	90.9
42.5°	2027.0	1996.3	1699.9	944.3	410.4	207.4	127.8	104.6	95.9	89.0	85.2
45°	2067.7	2040.2	1756.9	935.5	406.0	195.5	125.3	102.8	92.7	84.6	80.8
47.5°	2098.4	2071.5	1815.2	931.7	398.5	186.7	115.3	109.7	89.6	80.2	76.4
50°	2147.9	2124.8	1894.2	930.0	386.6	181.1	105.9	117.2	88.3	76.4	72.1
52.5°	2236.9	2221.9	2024.5	1002.5	374.1	171.7	96.5	112.2	89.6	73.9	68.9
55°	2403.0	2393.6	2203.7	1067.7	362.2	159.8	86.5	101.5	89.0	69.6	65.8
57.5°	2582.2	2579.7	2421.1	1124.7	344.6	139.7	80.2	85.8	84.6	65.8	61.4
60°	2702.5	2694.3	2521.4	1156.7	322.1	115.3	75.2	72.7	86.5	62.0	57.0
62.5°	2743.8	2716.9	2491.3	1144.8	288.2	99.6	69.6	66.4	80.2	58.3	52.6
64°	2741.3	2701.8	2413.0	1099.7	266.3	96.5	66.4	62.0	70.8	55.8	50.8
65°	2726.9	2689.3	2347.8	1064.6	254.4	96.5	64.5	60.2	64.5	54.5	49.5
67.5°	2634.8	2585.3	2125.4	901.7	223.7	97.7	60.2	55.1	53.9	50.1	46.4
70°	2424.9	2360.4	1820.2	709.3	207.4	98.4	55.1	50.1	48.2	45.7	42.6
72.5°	1947.4	1861.0	1448.7	506.9	190.5	96.5	50.1	45.7	43.9	41.4	38.2
75°	1305.8	1211.2	1067.7	334.0	156.0	86.5	43.2	39.5	38.8	36.3	33.8
77.5°	736.2	696.8	630.3	183.6	107.8	59.5	34.5	32.0	32.6	31.3	28.8
80°	384.7	366.6	337.1	89.0	52.0	28.8	21.9	21.9	25.1	25.1	23.8
82.5°	136.0	136.6	132.2	20.1	10.7	8.8	7.5	10.7	14.4	17.5	17.5
85°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	4.4
87.5°	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4
2.5°	1168.0	1171.7	1181.7	1179.9	1189.9	1185.5	1198.7	1205.6	1209.3	1228.7	1238.1
5°	956.8	958.1	993.8	1001.3	1020.1	1010.1	1033.2	1024.5	1043.3	1045.8	1077.1
7.5°	703.0	705.5	723.1	764.4	805.2	822.1	829.0	839.6	830.9	827.7	832.1
10°	534.5	536.4	538.2	567.7	603.4	639.1	639.1	639.7	624.1	608.4	605.3
12.5°	456.8	444.9	426.1	426.7	451.8	468.7	481.8	468.1	465.6	473.1	481.2
15°	376.0	364.0	351.5	336.5	337.1	349.0	355.9	355.3	367.8	373.4	390.4
17.5°	292.0	275.1	275.7	266.9	255.0	262.5	264.4	275.7	292.0	299.5	302.6
20°	196.1	196.1	201.1	211.8	206.1	211.2	211.8	220.6	228.1	223.7	228.1
22.5°	162.3	161.7	163.5	170.4	176.1	180.5	181.7	181.1	173.6	170.4	176.7
25°	147.2	146.6	147.2	151.0	157.3	162.9	160.4	156.6	147.9	147.2	148.5
27.5°	134.7	135.3	136.6	139.1	142.9	149.8	147.2	139.7	135.3	134.1	134.1
30°	124.1	124.1	126.6	129.1	133.5	139.7	135.3	129.1	124.7	123.4	122.8
32.5°	113.4	115.3	117.2	119.7	123.4	129.7	125.9	120.3	115.9	113.4	111.5
35°	102.8	104.0	107.8	111.5	114.7	119.7	117.2	112.2	107.8	102.1	99.6
37.5°	96.5	96.5	98.4	104.0	106.5	110.3	109.0	104.6	97.7	93.4	92.7
40°	90.9	90.9	91.5	94.6	99.0	103.4	100.9	94.0	89.6	87.7	87.1
42.5°	85.2	85.2	85.8	85.8	91.5	99.0	92.7	85.8	84.0	82.7	82.1
45°	80.2	80.2	80.2	79.6	82.7	92.1	85.2	79.6	78.3	78.3	77.7
47.5°	76.4	75.8	75.2	73.9	75.8	83.3	77.7	74.6	73.9	74.6	73.9
50°	71.4	70.8	70.2	69.6	70.8	73.9	72.7	69.6	70.2	70.2	70.8
52.5°	67.0	66.4	65.8	65.2	66.4	68.9	68.9	66.4	66.4	67.0	67.7
55°	64.5	63.3	62.7	62.7	63.3	66.4	65.8	63.9	63.9	65.2	65.8
57.5°	60.8	59.5	59.5	58.9	60.2	63.9	63.3	61.4	61.4	62.0	63.3
60°	57.0	56.4	55.8	57.0	57.6	61.4	60.8	59.5	58.9	60.8	60.8
62.5°	52.6	52.6	52.6	53.9	54.5	58.9	58.3	57.6	57.6	58.3	57.6
64°	50.1	50.1	50.8	51.4	52.6	56.4	56.4	56.4	56.4	56.4	55.8
65°	48.9	48.9	50.1	50.8	51.4	55.8	55.1	55.8	56.4	55.8	54.5
67.5°	45.7	45.7	47.6	47.6	48.2	53.3	52.6	53.9	55.1	53.9	52.6
70°	42.0	42.6	44.5	43.9	45.1	50.8	48.9	51.4	53.9	52.0	50.8
72.5°	38.2	38.8	41.4	40.1	40.7	47.6	45.1	47.6	51.4	50.1	48.9
75°	34.5	35.1	37.0	36.3	37.6	43.9	41.4	43.9	47.6	47.6	47.0
77.5°	29.4	30.7	32.0	31.3	33.8	39.5	37.0	38.8	42.0	44.5	43.2
80°	23.8	25.7	26.3	26.9	29.4	33.8	32.0	32.6	35.7	37.6	38.2
82.5°	16.3	19.4	20.7	21.3	25.1	26.3	26.9	26.3	28.2	30.7	28.8
85°	5.0	6.3	11.9	15.0	18.8	18.8	21.9	20.7	21.9	19.4	16.3
87.5°	0.0	0.0	0.0	4.4	11.3	11.3	15.7	14.4	15.0	11.3	10.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4
2.5°	1240.0	1250.7	1274.5	1302.0	1317.1	1349.7	1369.7	1391.0	1412.3	1416.7	1423.6
5°	1083.4	1095.9	1122.8	1159.8	1196.8	1240.0	1290.1	1343.4	1402.3	1427.4	1451.8
7.5°	844.0	846.5	884.7	951.8	984.4	1045.8	1117.2	1199.3	1290.1	1337.1	1387.3
10°	623.5	649.1	678.0	733.7	815.8	886.6	975.0	1070.8	1165.5	1233.7	1285.8
12.5°	490.0	522.6	570.2	631.6	693.6	760.7	862.8	965.6	1082.1	1143.5	1207.4
15°	403.5	444.9	506.9	571.4	629.1	688.6	779.5	905.4	1054.5	1117.2	1174.2
17.5°	319.6	365.3	431.7	499.4	568.3	641.0	746.3	902.3	1084.0	1156.7	1215.6
20°	245.0	280.7	336.5	404.8	485.6	585.2	719.9	926.1	1171.1	1261.9	1300.8
22.5°	181.7	202.4	246.2	317.7	412.9	535.7	693.6	959.9	1278.9	1385.4	1414.8
25°	150.4	156.0	176.1	238.1	336.5	480.0	673.6	1003.8	1386.6	1506.3	1527.6
27.5°	135.3	138.5	147.9	171.1	263.2	434.2	647.3	1054.5	1500.0	1626.0	1624.1
30°	122.2	122.8	128.5	144.7	213.7	393.5	616.6	1110.9	1600.9	1711.8	1706.2
32.5°	110.3	110.3	117.8	130.3	182.3	356.5	579.6	1151.7	1688.7	1782.0	1763.8
35°	99.6	101.5	108.4	120.9	161.7	315.2	545.1	1166.7	1763.8	1866.6	1815.2
37.5°	92.1	94.6	101.5	113.4	144.1	284.5	516.9	1184.2	1856.6	1968.7	1872.9
40°	87.1	89.0	95.2	105.3	130.3	258.8	486.2	1196.2	1948.7	2077.8	1933.6
42.5°	82.1	84.0	90.2	99.6	124.1	228.7	456.8	1203.0	2044.6	2172.4	1984.4
45°	77.7	80.2	86.5	95.2	124.7	201.8	432.3	1200.5	2102.2	2240.7	2023.9
47.5°	74.6	77.1	84.0	95.2	120.9	186.1	411.7	1191.8	2144.8	2285.2	2042.0
50°	71.4	73.9	82.1	105.3	114.7	181.7	396.0	1190.5	2189.3	2293.9	2042.0
52.5°	68.3	72.7	82.7	105.9	105.3	179.8	383.5	1223.7	2250.7	2309.0	2060.2
55°	66.4	70.2	85.2	97.7	92.1	173.6	376.0	1269.5	2354.1	2391.7	2151.7
57.5°	63.9	67.0	84.0	91.5	82.1	159.2	369.7	1313.3	2490.1	2545.2	2334.0
60°	60.8	64.5	81.5	78.3	74.6	135.3	365.9	1349.7	2540.8	2644.2	2530.2
62.5°	57.6	62.0	89.0	68.3	68.9	112.8	359.0	1384.8	2433.7	2620.4	2656.1
64°	55.8	60.2	82.7	63.9	65.8	102.8	352.1	1386.6	2339.0	2564.0	2679.9
65°	54.5	58.3	77.1	61.4	63.3	100.3	345.9	1360.3	2250.1	2503.8	2673.0
67.5°	52.6	55.1	59.5	57.0	58.9	95.9	303.3	1244.4	2060.8	2349.1	2565.9
70°	50.1	52.0	52.6	52.0	55.1	92.7	256.3	1079.6	1854.1	2186.8	2399.2
72.5°	47.6	47.6	47.6	47.0	50.8	88.3	230.6	872.2	1602.2	1973.7	2191.8
75°	45.7	43.9	43.2	42.0	46.4	85.8	208.0	654.8	1238.1	1644.2	1836.5
77.5°	42.0	40.1	38.2	37.0	41.4	76.4	173.6	462.4	912.9	1196.2	1417.3
80°	36.3	35.1	32.6	30.7	34.5	60.2	131.6	285.7	667.9	807.7	929.9
82.5°	29.4	28.8	26.3	23.8	25.1	43.2	89.6	145.4	445.5	438.6	519.4
85°	18.2	22.6	19.4	15.7	16.9	25.1	36.3	46.4	136.6	82.1	127.2
87.5°	10.7	14.4	11.9	8.1	6.3	11.3	10.0	9.4	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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4	1333.4
2.5°	1439.9	1448.0	1452.4	1436.1	1418.6	1402.9	1372.9	1342.8	1327.1	1330.2
5°	1498.8	1512.6	1516.3	1492.5	1443.0	1392.3	1319.0	1255.7	1217.5	1215.0
7.5°	1476.2	1521.4	1528.9	1503.2	1432.4	1337.8	1238.1	1149.8	1111.6	1102.8
10°	1396.0	1465.0	1487.5	1478.7	1409.8	1301.4	1180.5	1068.3	1030.1	1011.9
12.5°	1314.0	1386.0	1399.8	1408.6	1366.6	1275.1	1142.3	1027.0	981.2	966.2
15°	1260.1	1309.6	1313.3	1321.5	1312.7	1262.6	1159.8	1043.9	988.8	968.1
17.5°	1252.5	1235.0	1223.1	1240.0	1250.7	1263.2	1205.6	1107.2	1048.3	1022.0
20°	1253.8	1199.3	1165.5	1164.2	1209.9	1279.5	1298.3	1213.7	1137.3	1112.8
22.5°	1299.5	1180.5	1124.1	1117.2	1173.0	1307.1	1392.9	1340.3	1263.8	1231.2
25°	1367.8	1169.2	1094.6	1096.5	1152.3	1325.2	1473.7	1466.8	1399.8	1357.8
27.5°	1433.6	1188.0	1090.9	1095.9	1159.2	1337.1	1540.8	1585.9	1510.7	1474.4
30°	1486.3	1230.0	1102.2	1106.6	1180.5	1353.4	1574.0	1691.8	1600.9	1557.7
32.5°	1532.0	1269.5	1119.1	1122.2	1214.3	1376.6	1605.3	1780.8	1688.7	1637.3
35°	1573.4	1303.3	1144.8	1155.4	1257.6	1409.8	1637.3	1877.3	1795.8	1731.3
37.5°	1609.7	1344.7	1195.5	1213.1	1320.8	1458.1	1678.6	2004.5	1915.5	1842.2
40°	1630.4	1381.6	1270.7	1297.0	1402.9	1520.7	1731.3	2087.2	2030.1	1947.4
42.5°	1646.0	1432.4	1391.6	1439.3	1530.1	1579.6	1756.3	2124.1	2097.8	2027.0
45°	1654.2	1532.6	1573.4	1617.8	1673.6	1644.2	1742.5	2136.7	2128.5	2067.7
47.5°	1691.2	1683.6	1783.9	1845.3	1842.2	1741.3	1716.2	2135.4	2148.6	2098.4
50°	1766.3	1859.7	2000.1	2060.2	2037.0	1832.1	1711.2	2133.5	2188.7	2147.9
52.5°	1855.9	2035.8	2233.8	2258.8	2210.0	1924.2	1748.8	2166.1	2263.9	2236.9
55°	1973.7	2201.2	2417.4	2425.5	2356.6	2013.8	1829.0	2262.0	2404.2	2403.0
57.5°	2137.9	2349.7	2571.5	2561.5	2464.4	2137.9	1958.1	2405.5	2560.2	2582.2
60°	2316.5	2506.3	2696.2	2690.6	2587.2	2280.8	2135.4	2617.9	2696.8	2702.5
62.5°	2487.5	2651.7	2816.5	2789.6	2673.0	2428.7	2381.0	2843.5	2785.8	2743.8
64°	2599.1	2700.6	2847.2	2804.6	2693.7	2499.5	2522.6	2916.8	2810.9	2741.3
65°	2673.0	2712.5	2840.3	2788.9	2686.8	2525.8	2629.8	2947.5	2815.3	2726.9
67.5°	2805.9	2644.2	2653.6	2612.9	2521.4	2501.3	2805.2	2930.5	2767.0	2634.8
70°	2768.9	2369.1	2240.0	2214.4	2104.7	2217.5	2783.3	2771.4	2585.9	2424.9
72.5°	2453.1	1902.3	1716.8	1693.7	1541.4	1680.5	2401.7	2360.4	2080.9	1947.4
75°	2021.4	1441.8	1226.2	1245.7	1129.7	1258.2	1910.5	1617.2	1385.4	1305.8
77.5°	1569.0	1018.8	847.1	824.0	800.8	814.6	1313.3	971.2	809.6	736.2
80°	1000.0	640.4	635.4	580.8	562.0	473.7	674.8	516.9	406.7	384.7
82.5°	531.3	369.1	419.2	335.9	270.1	194.2	228.7	153.5	129.7	136.0
85°	145.4	76.4	21.3	0.0	0.0	0.0	0.0	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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