

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: P401277

Luminaire Tested: **ENV-SA1C-730-U-SLR-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1C-730-U-SLR-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3089 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-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

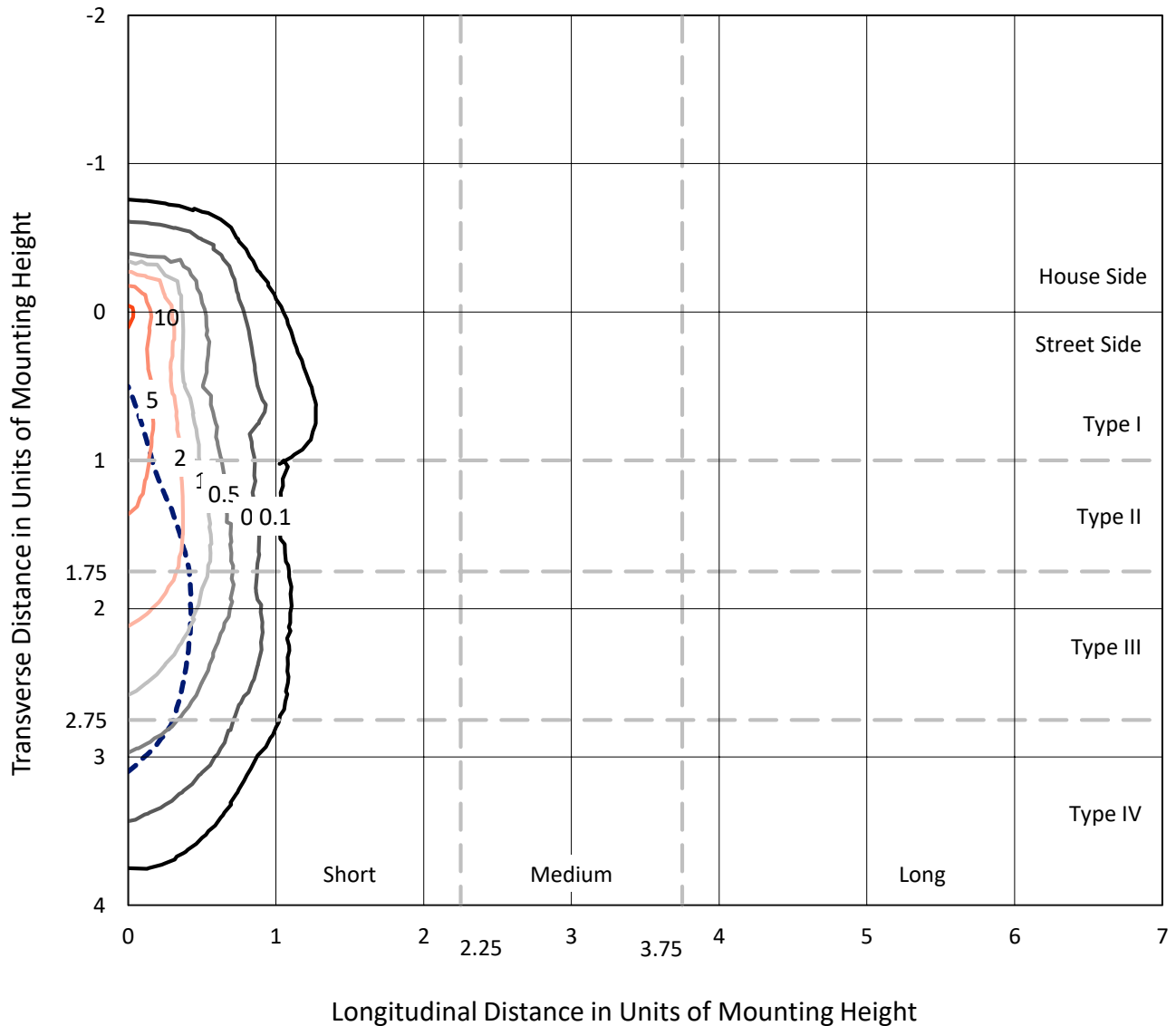


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Iso-Footcandle Lines of Horizontal Illumination

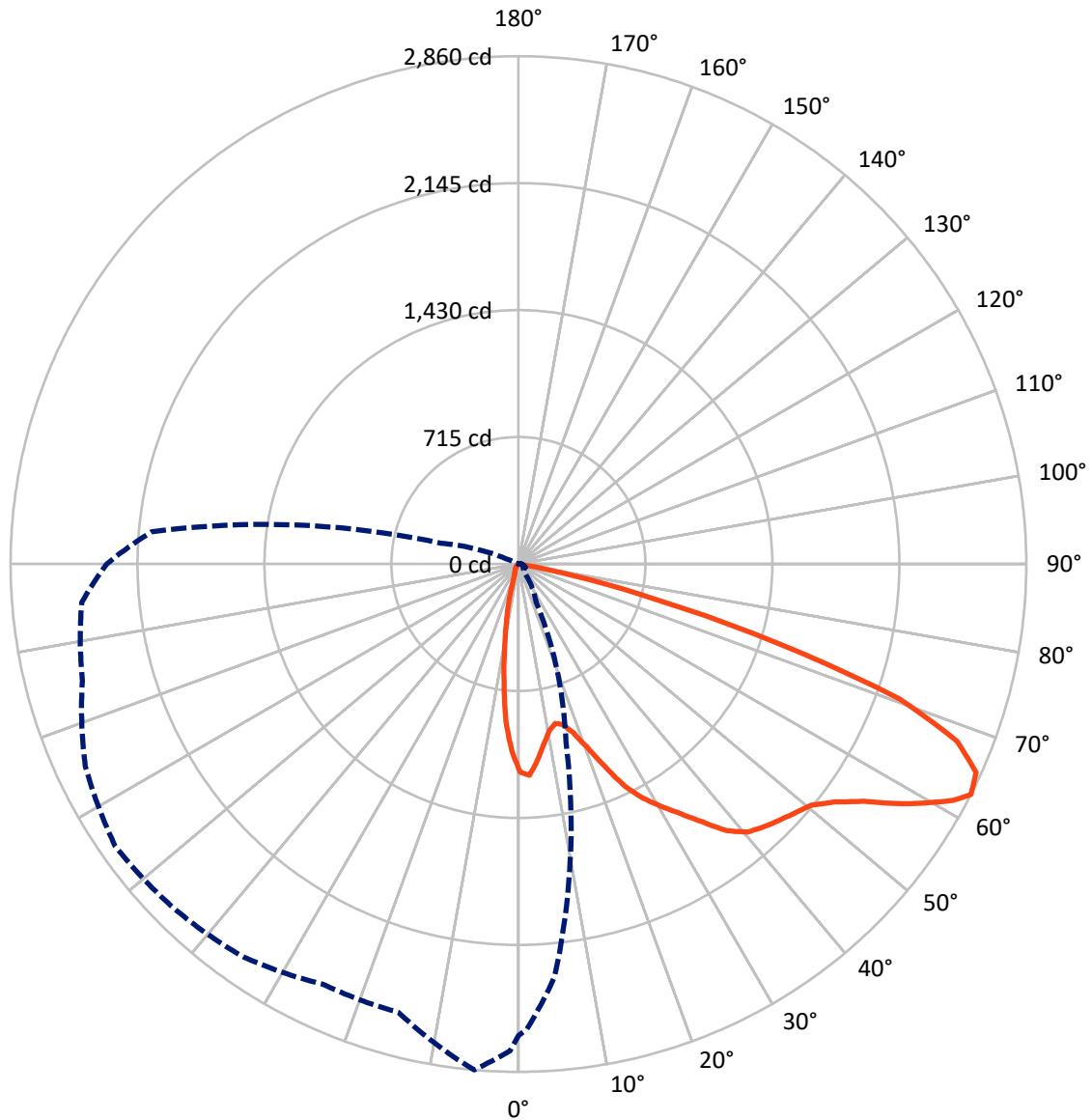
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	434.5	0.0	434.5
	% Fixture	14.1	0.0	14.1
Street Side	Lumens	2654.5	0.0	2654.5
	% Fixture	85.9	0.0	85.9
Total	Lumens	3089.0	0.0	3089.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	2.8
10°-20°	167.0	5.4
20°-30°	232.4	7.5
30°-40°	336.1	10.9
40°-50°	481.9	15.6
50°-60°	699.1	22.6
60°-70°	756.4	24.5
70°-80°	305.5	9.9
80°-90°	22.6	0.7
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°	3089.0	100.0
0°-180°	3089.0	100.0



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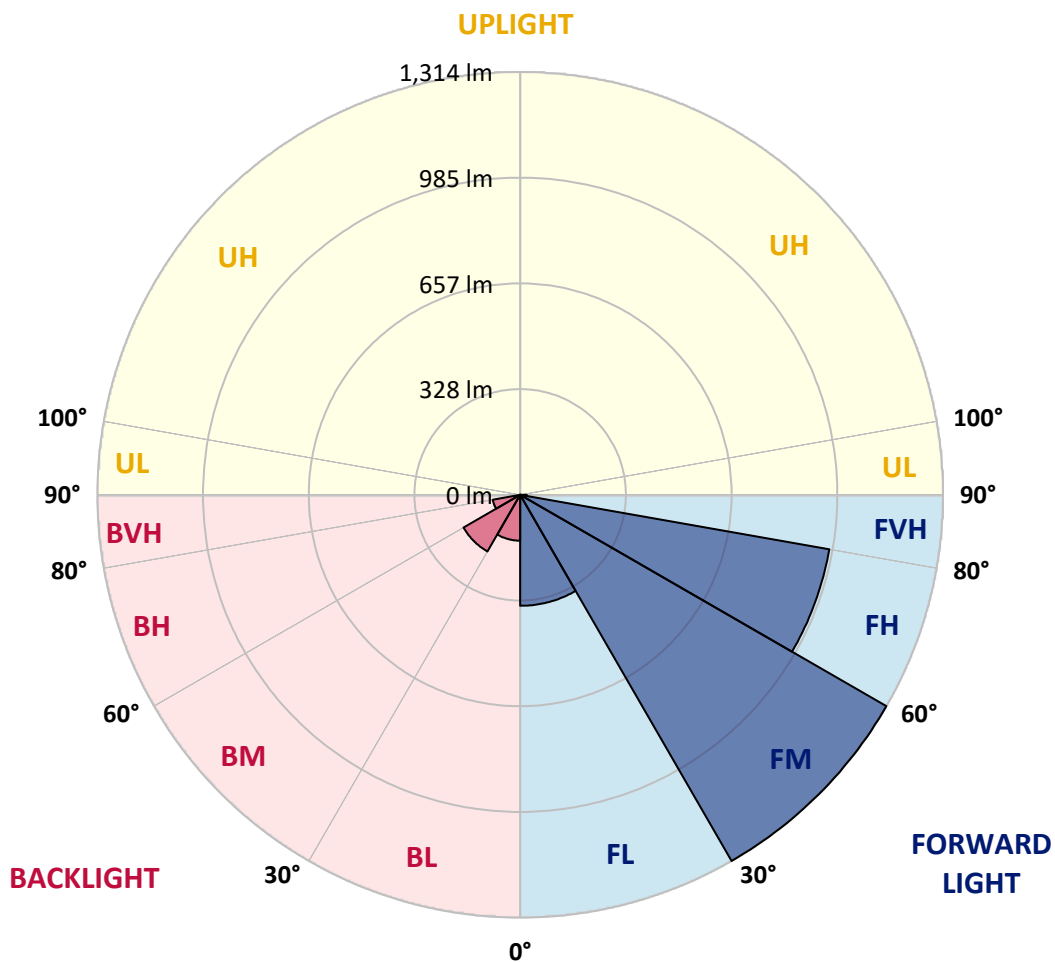
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	344.8	11.2			
FM	(30°-60°)	1313.8	42.5			
FH	(60°-80°)	975.5	31.6			G1/1800
FVH	(80°-90°)	20.3	0.7			G1/100
BL	(0°-30°)	142.5	4.6	B1/500		
BM	(30°-60°)	203.3	6.6	B0/220		
BH	(60°-80°)	86.4	2.8	B0/110		G0/110
BVH	(80°-90°)	2.3	0.1			G0/10
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°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1176.6	1171.7	1160.7	1136.9	1102.7	1080.6	1066.6	1048.3	1029.3	1023.2	1011.0
5°	1073.9	1066.0	1050.7	990.8	937.0	883.2	844.7	808.0	795.8	771.4	786.0
7.5°	974.9	971.2	935.8	858.2	772.6	703.5	659.5	605.7	589.8	564.8	544.6
10°	897.3	894.2	851.4	750.0	657.7	600.2	565.4	530.5	495.7	460.3	432.1
12.5°	858.2	851.4	801.9	692.5	606.9	559.3	522.6	476.1	438.9	391.2	357.0
15°	864.3	858.2	801.3	683.4	582.5	516.5	462.1	407.1	354.5	307.4	273.8
17.5°	913.2	910.7	841.7	691.3	553.2	465.8	393.0	319.1	256.7	206.0	177.3
20°	1008.5	1001.2	900.9	708.4	522.6	407.1	307.4	216.4	164.4	129.6	117.4
22.5°	1126.5	1110.0	994.5	733.5	493.3	344.1	222.5	145.5	117.4	103.9	95.4
25°	1265.2	1265.9	1110.6	767.1	463.9	285.4	155.9	115.5	99.0	89.2	81.9
27.5°	1377.7	1369.1	1215.1	800.7	432.1	234.1	130.8	100.9	86.8	76.4	72.1
30°	1460.8	1448.0	1284.2	823.9	391.2	198.0	117.4	96.0	81.9	70.3	64.8
32.5°	1546.4	1530.5	1346.5	836.8	366.7	180.9	103.9	83.7	73.3	68.5	61.1
35°	1646.6	1632.6	1415.6	835.5	353.9	171.1	94.1	75.8	62.3	54.4	49.5
37.5°	1758.5	1729.8	1487.1	830.0	344.7	166.3	85.6	70.3	58.1	49.5	43.4
40°	1854.5	1825.7	1553.1	822.7	338.6	161.4	80.7	66.6	55.0	45.8	39.7
42.5°	1929.6	1902.1	1614.9	813.5	335.6	151.0	83.1	64.2	52.6	43.4	36.7
45°	1994.4	1966.3	1688.2	812.3	334.3	143.6	81.9	63.6	51.3	40.3	34.2
47.5°	2069.6	2054.9	1784.8	832.5	329.5	138.1	75.2	68.5	50.7	39.1	32.4
50°	2180.9	2168.0	1911.3	892.4	322.1	132.6	68.5	75.2	50.7	37.9	30.6
52.5°	2336.7	2322.1	2110.6	970.6	315.4	126.5	61.7	72.7	51.3	36.1	29.3
55°	2498.1	2495.6	2298.8	1053.8	309.3	113.1	54.4	65.4	50.1	33.6	27.5
57.5°	2624.6	2622.8	2440.0	1110.0	297.7	91.1	49.5	54.4	46.5	30.6	25.1
60°	2676.6	2661.3	2455.3	1110.0	270.8	75.2	45.2	42.8	47.1	27.5	22.0
61°	2676.6	2657.0	2427.8	1093.5	257.3	71.5	42.8	39.7	48.3	26.3	20.8
62.5°	2655.8	2623.4	2333.7	1034.2	235.9	71.5	39.1	35.5	44.0	25.1	18.9
65°	2563.5	2510.3	2113.0	899.1	213.9	73.3	33.6	30.0	31.8	21.4	16.5
67.5°	2335.5	2275.6	1827.0	711.5	196.2	77.6	28.1	26.3	24.4	18.9	14.7
70°	1924.1	1873.4	1490.8	533.0	182.1	78.8	24.4	22.0	20.8	16.5	12.8
72.5°	1229.8	1146.1	930.9	361.2	146.1	68.5	20.2	20.8	18.9	13.4	10.4
75°	594.1	617.3	541.5	182.1	98.4	44.6	15.9	17.1	15.3	12.2	9.2
77.5°	265.9	261.0	258.5	46.5	25.1	15.3	9.8	11.6	12.2	11.0	7.9
80°	27.5	37.3	22.0	14.1	9.2	6.7	5.5	6.1	7.3	7.9	4.3
82.5°	1.2	0.6	0.6	1.8	1.8	1.2	0.0	0.0	1.2	1.2	0.6
85°	0.0	0.0	0.0	0.0	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	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°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1000.0	1016.5	1009.1	1007.3	1017.1	1012.2	1026.9	1027.5	1038.5	1053.1	1062.3
5°	786.0	773.2	798.9	816.0	837.4	830.7	856.3	853.3	867.3	890.6	881.4
7.5°	545.8	547.7	561.1	576.4	633.8	645.5	654.0	660.7	660.1	665.6	675.4
10°	417.5	407.1	397.9	419.3	441.9	467.0	470.6	479.8	454.8	465.1	470.0
12.5°	341.7	329.5	309.3	298.3	303.8	318.4	324.6	330.1	315.4	316.0	327.0
15°	259.2	242.7	234.7	220.0	214.5	213.3	216.4	208.4	206.6	199.9	204.1
17.5°	168.7	163.8	159.5	156.5	152.2	151.0	140.0	121.0	110.0	107.6	107.6
20°	112.5	108.8	108.8	114.9	113.1	108.2	93.5	77.6	69.7	67.2	68.5
22.5°	92.3	89.9	86.2	86.2	88.6	85.0	71.5	59.9	54.4	54.4	54.4
25°	80.1	78.8	75.2	71.5	72.7	69.7	58.1	50.7	47.1	46.5	47.1
27.5°	70.3	69.7	65.4	61.7	61.7	59.3	50.1	43.4	41.0	39.7	40.3
30°	63.6	62.3	57.5	54.4	53.8	51.3	42.8	37.9	35.5	34.8	34.8
32.5°	58.7	56.2	52.0	48.9	47.1	43.4	37.3	32.4	30.0	29.3	29.3
35°	47.1	47.1	45.2	43.4	41.0	35.5	31.2	26.9	24.4	23.8	23.8
37.5°	41.0	38.5	35.5	36.1	34.8	30.0	25.7	21.4	19.6	18.9	18.9
40°	37.3	34.2	30.0	28.1	28.7	26.3	21.4	16.5	14.1	14.7	14.1
42.5°	33.6	31.2	26.3	22.0	21.4	22.0	16.5	11.6	9.8	9.8	9.8
45°	31.2	28.7	23.2	18.3	15.3	17.1	12.8	7.9	6.1	6.1	6.1
47.5°	29.3	26.9	20.8	15.3	11.0	11.6	9.2	4.9	3.7	2.4	3.1
50°	28.1	25.1	18.9	12.2	7.9	6.7	6.1	2.4	0.6	0.6	0.0
52.5°	26.3	23.8	17.1	10.4	6.1	4.3	3.1	0.6	0.0	0.0	0.0
55°	25.1	22.0	15.3	9.2	4.9	2.4	0.6	0.0	0.0	0.0	0.0
57.5°	22.6	20.2	13.4	7.3	3.7	1.2	0.0	0.0	0.0	0.0	0.0
60°	20.2	18.3	11.6	5.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0
61°	18.9	17.1	11.0	4.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	17.7	15.9	9.8	3.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	15.3	13.4	8.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	13.4	12.2	7.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	11.6	10.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	9.8	9.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	8.6	7.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.7	6.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.6	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1070.9	1092.3	1112.4	1138.1	1152.2	1190.7	1218.2	1241.4	1259.7	1263.4	1278.1
5°	905.8	935.8	955.3	1009.1	1039.1	1103.3	1152.8	1211.5	1264.0	1292.7	1319.0
7.5°	682.1	696.8	730.4	784.2	855.1	910.7	994.5	1068.4	1163.2	1215.1	1264.0
10°	481.6	495.1	544.6	600.8	665.6	759.1	860.6	957.8	1053.8	1120.4	1177.8
12.5°	338.6	382.6	431.5	503.0	566.6	635.1	743.3	856.9	976.7	1040.3	1102.7
15°	222.5	261.6	329.5	419.3	498.8	565.4	666.2	799.5	951.7	1022.6	1081.9
17.5°	110.0	138.7	198.6	295.2	401.0	506.1	627.7	789.1	984.1	1064.1	1119.8
20°	69.1	77.6	99.6	166.9	288.5	443.8	599.0	809.9	1072.1	1160.7	1196.8
22.5°	55.6	58.1	66.6	88.6	176.0	366.7	573.9	838.0	1168.7	1276.9	1314.1
25°	47.7	49.5	54.4	65.4	102.1	275.1	543.4	887.5	1281.1	1411.9	1421.1
27.5°	41.0	42.8	47.1	55.6	72.7	185.2	499.4	945.6	1415.6	1530.5	1524.4
30°	34.8	37.3	41.6	47.7	57.5	125.3	417.5	1004.2	1514.6	1606.9	1597.1
32.5°	30.0	31.8	35.5	41.0	47.7	86.2	313.6	1042.8	1597.1	1679.0	1657.6
35°	24.4	26.3	29.3	34.2	38.5	61.1	237.2	1044.0	1682.1	1768.3	1714.5
37.5°	19.6	20.8	23.8	28.1	31.8	47.7	174.2	1023.8	1787.2	1884.4	1779.3
40°	14.7	16.5	19.6	23.2	26.9	40.3	130.2	974.9	1889.9	2000.5	1857.5
42.5°	9.8	12.2	15.3	18.9	25.7	32.4	91.7	893.6	1973.0	2103.8	1933.9
45°	6.1	7.9	11.6	15.9	26.3	25.7	61.1	796.4	2032.3	2182.7	1985.9
47.5°	3.1	4.9	8.6	15.3	23.2	18.9	37.9	703.5	2086.1	2228.5	2009.7
50°	0.6	1.8	6.1	18.9	19.6	14.1	25.1	645.5	2114.2	2216.9	2007.3
52.5°	0.0	0.0	4.3	18.3	14.1	11.0	19.6	636.9	2158.2	2232.2	2049.4
55°	0.0	0.0	1.8	7.9	7.9	9.2	17.1	625.3	2236.5	2323.3	2176.6
57.5°	0.0	0.0	0.0	3.7	4.9	7.3	15.9	594.7	2319.0	2419.8	2331.2
60°	0.0	0.0	0.0	1.8	3.1	6.1	14.1	525.0	2243.2	2420.5	2459.6
61°	0.0	0.0	0.0	1.8	2.4	5.5	12.8	500.6	2175.4	2381.3	2475.5
62.5°	0.0	0.0	0.0	0.6	1.8	4.3	11.0	452.3	2073.9	2318.4	2468.1
65°	0.0	0.0	0.0	0.0	0.6	2.4	8.6	365.5	1904.6	2160.1	2383.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.6	5.5	257.3	1661.3	1981.0	2203.5
70°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	149.1	1338.6	1677.2	1887.5
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	67.8	868.6	1295.2	1488.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	534.8	935.8	1112.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	362.5	622.8	748.8
80°	0.0	1.2	0.6	0.0	0.0	0.0	0.0	4.9	223.1	388.7	422.4
82.5°	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	115.5	274.4	279.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	58.1
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1291.5	1295.2	1297.6	1293.4	1267.1	1252.4	1223.1	1190.7	1179.7	1176.6
5°	1366.7	1387.5	1383.8	1355.7	1309.9	1253.6	1183.9	1111.8	1084.3	1073.9
7.5°	1352.0	1406.4	1416.8	1387.5	1309.9	1211.5	1110.6	1025.0	985.3	974.9
10°	1277.5	1345.9	1378.9	1369.8	1297.0	1183.3	1059.3	954.1	910.7	897.3
12.5°	1205.3	1271.4	1292.1	1299.5	1259.7	1161.3	1033.6	920.5	875.3	858.2
15°	1157.1	1198.0	1196.8	1210.2	1207.2	1152.8	1050.1	937.6	886.9	864.3
17.5°	1141.2	1128.9	1113.0	1124.0	1145.4	1155.2	1103.9	998.7	939.5	913.2
20°	1150.9	1091.0	1056.2	1055.6	1100.8	1175.4	1182.7	1099.6	1044.0	1008.5
22.5°	1201.1	1072.1	1018.3	1019.5	1075.1	1205.3	1273.8	1231.6	1170.5	1126.5
25°	1275.0	1075.8	1003.6	1011.0	1072.7	1231.6	1372.2	1382.0	1303.7	1265.2
27.5°	1350.2	1107.5	1004.2	1012.2	1083.1	1245.7	1428.4	1492.6	1425.4	1377.7
30°	1402.8	1146.7	1015.2	1023.8	1099.6	1256.7	1449.8	1583.7	1514.0	1460.8
32.5°	1452.3	1187.0	1033.0	1041.5	1132.6	1279.3	1490.2	1675.4	1599.0	1546.4
35°	1500.6	1226.7	1066.0	1081.3	1185.8	1320.3	1531.1	1782.9	1719.4	1646.6
37.5°	1542.1	1270.7	1122.8	1155.2	1257.9	1383.2	1586.7	1905.2	1839.8	1758.5
40°	1577.0	1322.7	1240.2	1276.2	1367.9	1449.8	1648.5	1985.3	1941.9	1854.5
42.5°	1605.1	1414.4	1408.3	1459.0	1523.2	1526.2	1666.2	2023.8	2007.3	1929.6
45°	1652.1	1578.8	1628.9	1712.0	1707.8	1617.9	1661.3	2059.2	2060.4	1994.4
47.5°	1729.2	1784.8	1929.6	1985.9	1957.1	1743.2	1666.2	2094.1	2121.6	2069.6
50°	1839.2	2018.3	2207.8	2282.3	2198.6	1869.1	1709.6	2135.6	2218.8	2180.9
52.5°	1933.3	2194.9	2464.5	2531.1	2416.8	2003.6	1811.1	2225.5	2348.9	2336.7
55°	2067.8	2347.1	2647.2	2698.6	2606.9	2155.8	1947.4	2357.5	2492.0	2498.1
57.5°	2205.3	2484.6	2766.4	2818.4	2748.7	2345.3	2141.1	2547.0	2626.4	2624.6
60°	2358.1	2613.0	2820.2	2848.9	2809.2	2534.8	2349.6	2720.6	2718.7	2676.6
61°	2445.5	2653.9	2816.5	2825.1	2786.6	2590.4	2457.1	2787.2	2732.2	2676.6
62.5°	2542.1	2691.2	2771.3	2742.6	2701.0	2609.9	2613.0	2859.9	2741.4	2655.8
65°	2639.9	2597.7	2562.9	2425.3	2386.2	2430.2	2744.4	2832.4	2685.7	2563.5
67.5°	2472.4	2226.1	2150.9	2012.8	1858.1	2037.8	2619.7	2664.3	2498.1	2335.5
70°	2020.7	1635.6	1546.4	1541.5	1430.3	1627.7	2310.4	2278.0	2073.3	1924.1
72.5°	1583.7	1116.1	994.5	1022.6	1000.6	1213.3	1889.9	1528.7	1329.4	1229.8
75°	1241.4	793.4	684.6	679.7	655.8	826.4	1383.8	805.6	665.0	594.1
77.5°	819.0	571.5	569.7	526.3	507.9	448.0	621.0	322.7	263.4	265.9
80°	471.9	350.2	410.7	325.8	326.4	262.8	251.2	47.1	37.9	27.5
82.5°	270.8	168.1	127.1	50.1	105.1	105.1	20.2	0.6	0.6	1.2
85°	26.3	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
87.5°	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

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