

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: P401383

Luminaire Tested: **ENV-SA1C-827-U-SLL-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-8)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1C-827-U-SLL-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2493 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - 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

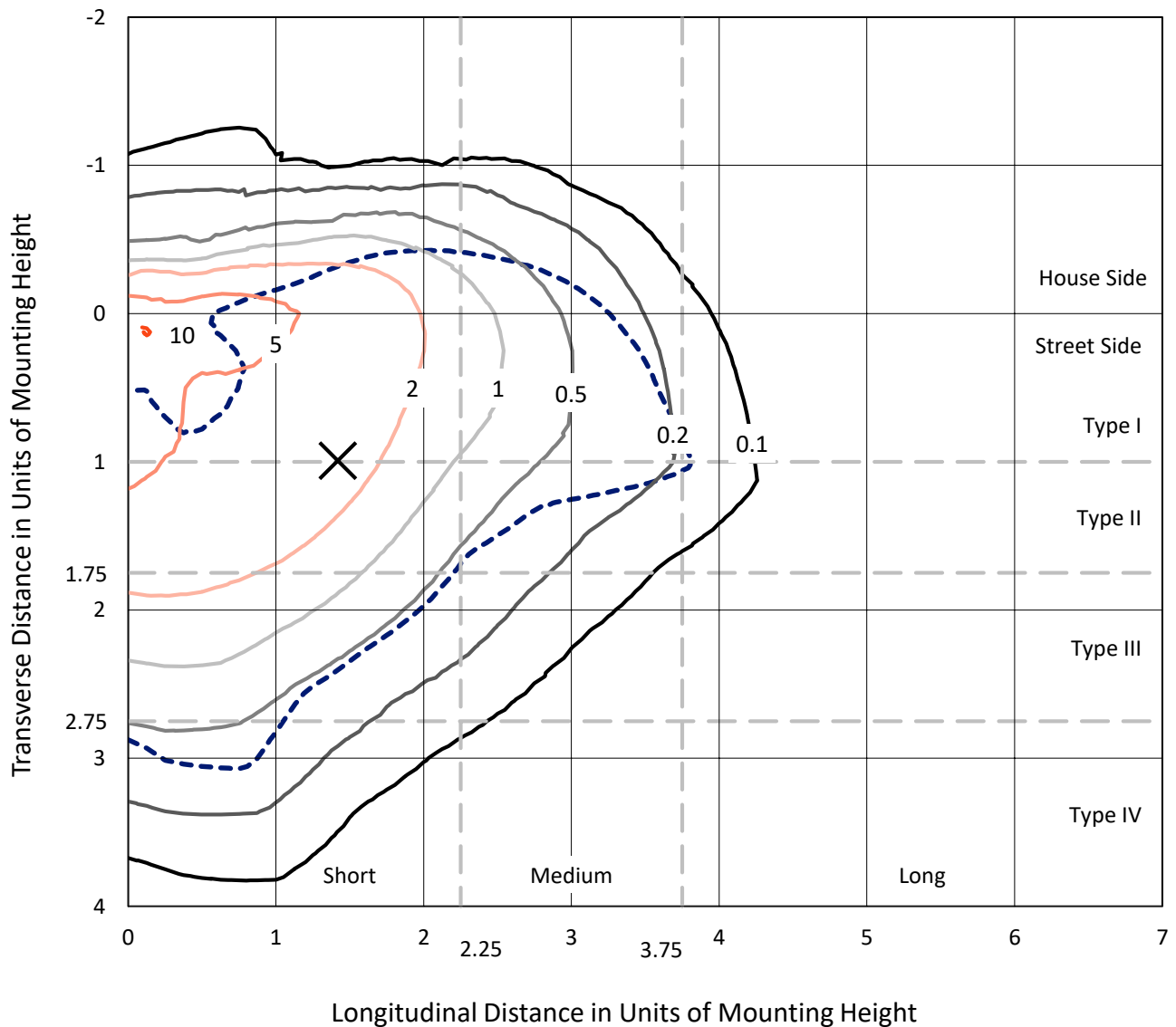


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Iso-Footcandle Lines of Horizontal Illumination

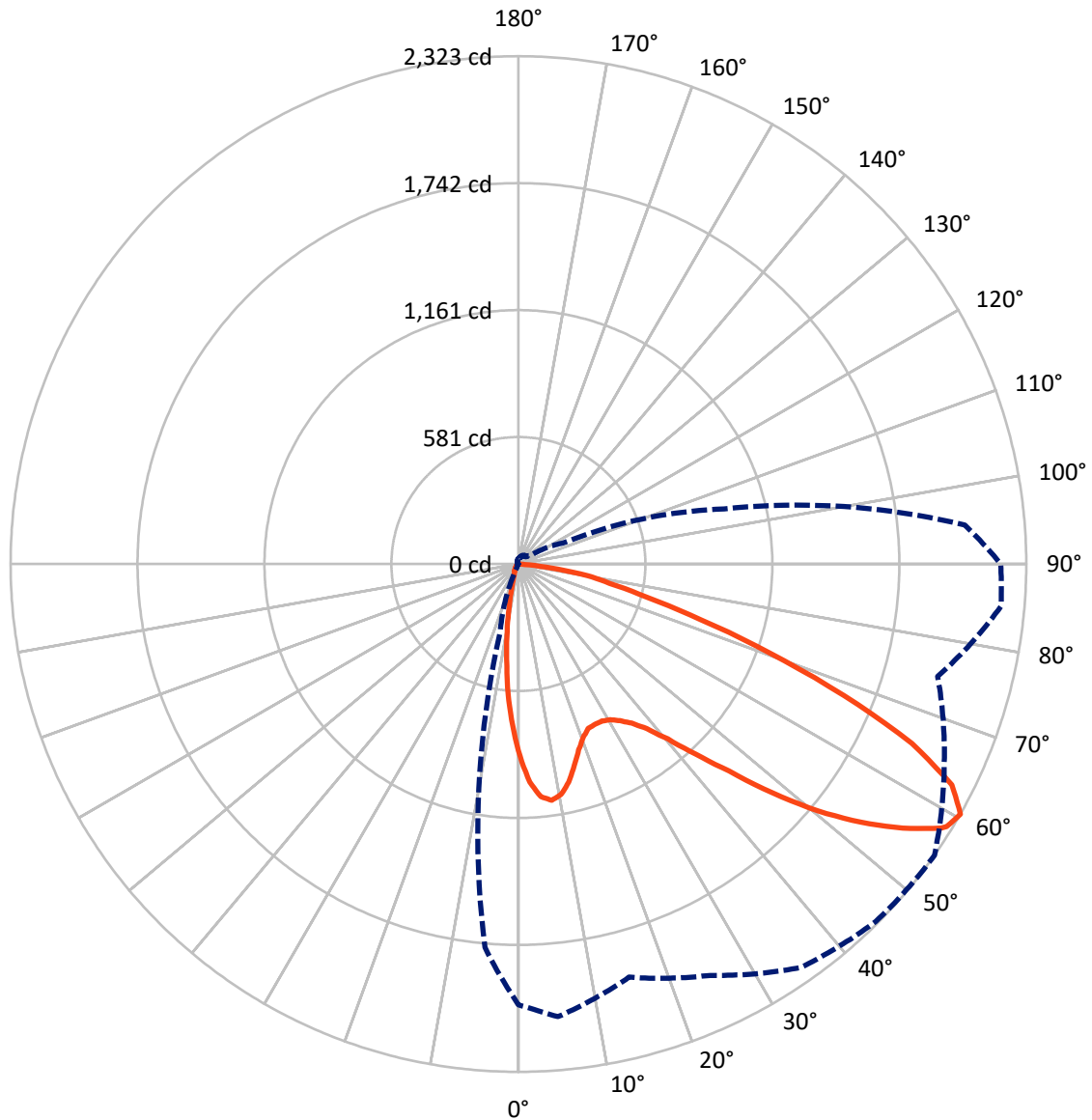
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	441.5	0.0	441.5
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	2051.5	0.0	2051.5
	% Fixture	82.3	0.0	82.3
Total	Lumens	2493.0	0.0	2493.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	2.7
10°-20°	126.0	5.1
20°-30°	179.7	7.2
30°-40°	263.6	10.6
40°-50°	388.7	15.6
50°-60°	575.9	23.1
60°-70°	613.7	24.6
70°-80°	254.6	10.2
80°-90°	24.5	1.0
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°	2493.0	100.0
0°-180°	2493.0	100.0



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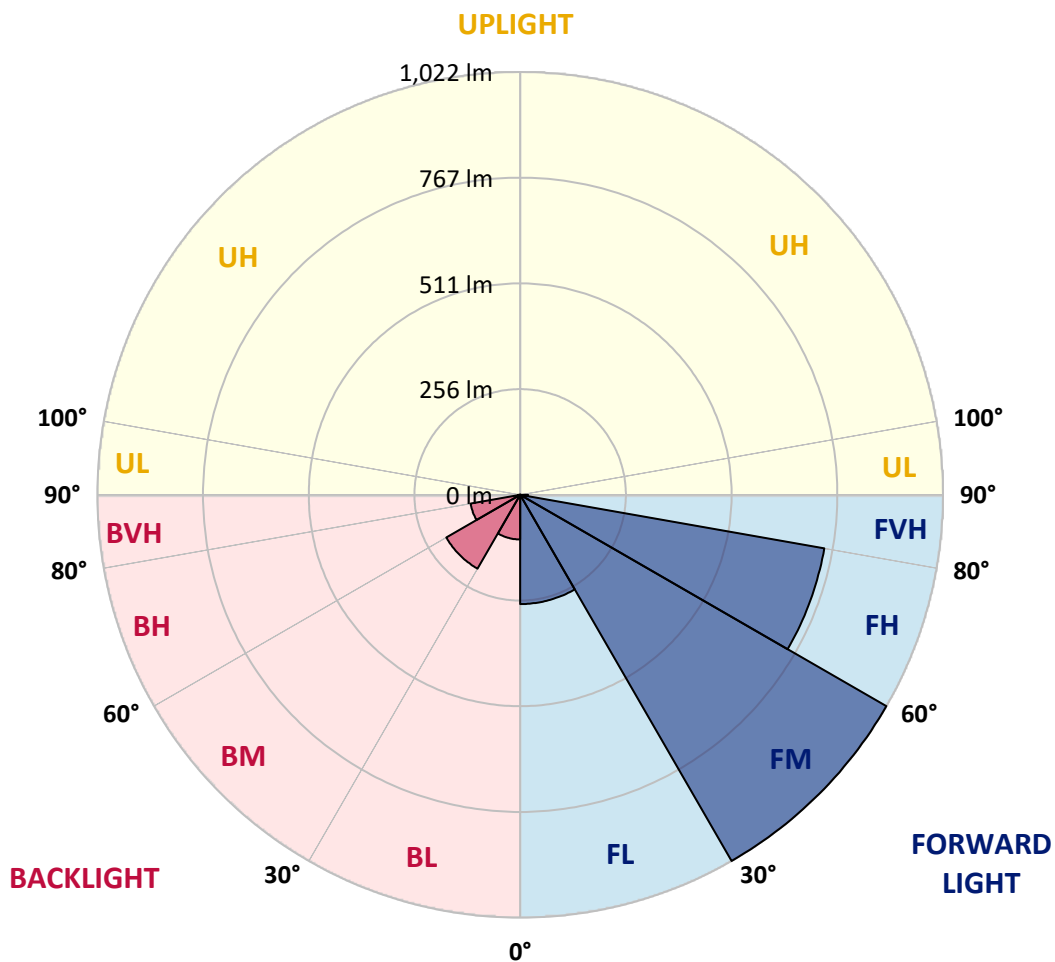
CATALOG NUMBER: ENV-SA1C-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.1	10.6			
FM	(30°-60°)	1022.2	41.0			
FH	(60°-80°)	746.6	29.9			G1/1800
FVH	(80°-90°)	18.7	0.8			G1/100
BL	(0°-30°)	107.9	4.3	B0/110		
BM	(30°-60°)	206.1	8.3	B0/220		
BH	(60°-80°)	121.7	4.9	B1/500		G1/500
BVH	(80°-90°)	5.7	0.2			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4
2.5°	919.5	918.1	931.3	958.7	975.6	986.0	987.9	998.7	987.9	982.2	962.0
5°	892.7	892.2	917.6	977.5	1026.5	1063.3	1081.2	1068.9	1050.1	1012.9	967.6
7.5°	818.2	818.2	866.3	946.4	1028.4	1092.0	1113.7	1091.1	1046.3	971.4	890.3
10°	757.4	763.1	809.2	904.9	995.9	1065.6	1089.7	1072.2	1013.8	916.7	821.5
12.5°	721.1	724.4	775.8	871.9	956.8	1013.3	1027.9	1022.8	980.3	874.8	773.9
15°	724.4	729.1	788.0	866.7	921.9	944.5	949.7	956.3	938.9	857.8	758.3
17.5°	776.3	779.6	838.9	889.8	887.5	880.4	882.3	893.1	913.9	871.9	789.9
20°	859.2	867.7	927.5	928.5	869.6	836.6	828.1	846.0	902.1	909.2	857.3
22.5°	965.7	969.0	1029.8	993.5	871.5	806.4	796.5	816.8	905.9	969.5	950.6
25°	1089.2	1101.0	1134.0	1077.9	898.8	802.2	795.6	812.5	919.5	1033.6	1046.8
27.5°	1172.6	1182.1	1213.6	1135.4	923.3	804.5	792.3	813.0	936.0	1093.9	1149.5
30°	1247.1	1253.7	1265.5	1165.6	951.1	816.3	796.5	826.2	945.0	1106.6	1216.0
32.5°	1317.3	1325.3	1318.3	1201.9	981.7	838.5	804.5	854.0	964.3	1132.1	1274.0
35°	1407.8	1408.3	1384.2	1238.1	1016.6	864.9	828.1	893.6	1002.0	1171.7	1336.2
37.5°	1515.3	1516.2	1455.4	1275.4	1056.2	909.2	883.7	954.9	1056.7	1217.4	1425.3
40°	1609.1	1612.8	1532.2	1318.3	1104.8	995.4	993.1	1052.0	1126.9	1278.2	1520.9
42.5°	1690.6	1701.4	1602.9	1354.1	1173.6	1127.9	1133.5	1187.2	1212.2	1329.1	1580.3
45°	1773.1	1772.6	1660.9	1389.9	1288.6	1298.5	1352.2	1349.8	1308.8	1356.4	1627.0
47.5°	1824.5	1822.1	1696.3	1448.3	1443.6	1538.4	1595.4	1564.3	1415.8	1385.7	1685.4
50°	1844.3	1843.3	1724.1	1522.8	1601.5	1755.6	1837.2	1775.0	1546.9	1434.7	1755.2
52.5°	1900.3	1895.6	1788.2	1607.7	1744.3	1964.9	2032.3	1963.0	1677.4	1522.8	1836.2
55°	1988.0	1989.4	1898.5	1707.1	1858.9	2112.4	2194.9	2133.2	1810.8	1643.9	1947.5
57.5°	2046.9	2051.2	2020.5	1817.9	1981.4	2215.6	2295.8	2278.3	1988.5	1788.6	2078.0
58°	2052.6	2055.9	2039.8	1839.1	1999.8	2227.4	2309.4	2297.2	2027.6	1834.8	2109.1
60°	2016.3	2026.2	2077.6	1956.0	2075.7	2252.4	2311.8	2322.6	2148.7	1984.7	2215.6
62.5°	1917.8	1921.1	2014.4	2087.0	2127.5	2190.7	2196.3	2224.6	2198.7	2160.5	2310.9
65°	1797.1	1797.1	1898.0	2093.1	1993.2	1982.8	1949.8	1978.1	2053.0	2270.8	2304.3
67.5°	1587.4	1588.8	1717.5	1864.5	1652.4	1616.6	1595.4	1605.8	1765.5	2178.9	2176.1
70°	1282.9	1282.0	1414.4	1509.6	1226.4	1195.7	1221.2	1217.9	1434.2	1936.2	1899.9
72.5°	907.3	915.3	1051.5	1166.0	832.8	717.8	830.0	873.3	1078.8	1632.2	1470.0
75°	510.9	521.7	633.0	810.2	525.5	485.5	543.0	604.7	780.0	1299.4	987.4
77.5°	256.4	260.6	324.3	389.8	318.6	370.0	366.7	425.6	534.9	876.6	564.6
80°	148.0	156.5	178.2	201.3	178.2	234.7	272.4	320.5	329.4	453.4	314.8
82.5°	59.4	66.5	83.4	94.7	74.0	69.8	47.6	149.9	198.4	219.2	120.7
85°	0.0	0.0	0.5	0.9	1.4	1.4	2.4	26.4	48.5	10.8	19.8
87.5°	0.0	0.0	0.5	0.5	0.9	1.4	1.9	3.3	4.2	5.2	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4
2.5°	954.4	949.2	931.8	905.4	888.9	863.4	853.1	829.0	816.8	796.5	796.5
5°	945.0	923.8	879.9	822.9	782.4	740.0	726.3	698.0	677.7	653.7	643.8
7.5°	859.2	829.5	761.2	694.7	630.1	587.3	544.8	516.1	488.8	469.0	471.8
10°	780.5	738.1	663.1	578.8	511.8	467.1	428.9	395.4	367.2	339.3	335.1
12.5°	729.1	680.6	591.0	500.5	450.6	417.6	382.2	345.5	310.6	280.0	267.7
15°	707.4	654.7	554.7	469.4	423.7	381.3	340.3	295.0	255.0	218.2	208.3
17.5°	731.0	667.9	551.4	448.7	385.1	331.8	274.8	225.3	178.2	151.8	143.8
20°	795.1	713.1	562.3	428.0	342.2	273.4	203.6	147.5	121.1	105.1	99.9
22.5°	888.0	788.0	580.7	407.7	298.8	203.6	140.5	106.5	91.0	82.5	80.1
25°	988.8	884.7	614.6	390.7	255.5	151.3	104.2	87.2	77.8	71.6	69.3
27.5°	1102.4	980.3	656.1	378.0	215.4	121.1	89.5	76.8	69.3	65.0	63.2
30°	1173.6	1049.1	687.6	355.4	188.1	110.3	85.3	72.6	64.6	61.3	59.9
32.5°	1239.1	1103.3	717.8	329.4	167.3	97.6	83.0	76.4	66.9	60.3	57.5
35°	1311.2	1159.0	732.4	313.9	153.6	84.8	68.3	59.4	54.2	53.3	51.8
37.5°	1418.7	1224.9	741.8	305.4	145.2	77.3	63.6	53.7	47.6	41.9	39.6
40°	1520.5	1293.3	746.6	297.4	140.9	72.6	60.8	50.9	44.3	39.1	36.8
42.5°	1600.1	1355.5	749.4	291.7	133.4	69.8	58.4	49.0	41.9	36.8	34.4
45°	1665.2	1427.6	747.0	289.9	127.3	71.6	57.5	47.6	40.1	34.9	32.5
47.5°	1728.8	1505.8	756.0	287.5	121.1	68.8	58.0	47.1	38.6	33.5	31.1
50°	1812.2	1600.6	788.5	280.9	116.9	64.6	62.7	47.6	38.2	32.5	30.6
52.5°	1920.1	1731.6	847.4	273.8	111.7	60.8	65.5	47.6	37.2	31.6	29.2
55°	2051.2	1878.7	912.5	263.5	102.7	56.1	62.7	47.6	36.3	31.1	28.3
57.5°	2158.1	2009.7	963.8	251.2	86.3	50.4	57.5	45.7	33.9	29.2	26.9
58°	2167.6	2024.8	970.9	247.9	84.4	49.5	56.1	45.2	33.0	28.8	26.4
60°	2205.7	2049.3	973.7	230.0	70.2	47.1	48.5	43.8	31.1	26.9	25.0
62.5°	2192.6	1968.2	913.9	198.4	62.7	42.9	40.5	44.8	28.8	24.5	22.6
65°	2127.0	1808.9	800.8	177.7	63.2	38.2	34.9	39.1	26.4	22.2	20.3
67.5°	1971.0	1567.1	650.4	166.4	66.0	33.9	30.2	29.2	23.6	19.8	18.4
70°	1681.2	1284.3	493.0	156.5	69.8	30.2	27.8	25.9	21.7	18.4	16.5
72.5°	1238.1	951.1	358.7	146.6	67.9	26.9	25.9	23.6	19.8	16.5	15.6
75°	772.5	552.4	245.6	119.7	60.8	23.6	24.0	22.2	17.9	15.6	14.1
77.5°	451.0	387.9	121.1	89.1	41.9	20.7	21.2	20.3	18.4	14.6	13.7
80°	270.1	241.3	51.8	38.2	23.1	18.4	17.9	18.9	17.4	13.7	12.7
82.5°	116.9	104.6	25.0	21.2	18.9	16.0	15.6	16.0	15.1	11.3	10.8
85°	6.6	17.4	11.8	15.6	14.1	11.8	11.8	12.3	10.8	9.0	9.0
87.5°	6.1	13.2	7.5	9.4	10.4	9.0	9.4	9.4	9.0	8.0	7.5
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4
2.5°	785.7	780.5	764.9	759.3	734.8	740.9	742.8	740.4	741.4	743.3	750.3
5°	650.9	642.4	622.1	608.9	601.9	597.2	575.0	575.5	578.8	566.0	582.5
7.5°	462.4	471.8	473.7	461.4	453.9	437.9	417.6	406.3	386.9	397.8	400.1
10°	330.9	326.1	335.1	330.9	319.1	313.0	291.3	289.4	287.5	286.1	299.8
12.5°	252.2	238.0	227.6	230.0	221.0	206.0	202.2	202.7	204.6	204.6	208.3
15°	199.8	178.2	161.7	151.8	153.2	138.1	133.9	119.7	117.8	113.6	114.5
17.5°	140.0	131.0	121.1	109.8	105.1	91.4	74.9	67.4	61.7	62.7	65.5
20°	96.6	92.8	90.0	84.4	79.7	63.6	53.3	50.0	49.5	50.4	51.4
22.5°	77.8	74.0	71.2	69.3	63.2	51.4	45.7	43.4	43.4	43.4	43.8
25°	66.9	63.2	59.4	59.4	53.7	44.8	40.5	38.6	38.2	37.7	38.6
27.5°	62.2	57.0	53.3	50.9	46.7	39.6	35.8	33.9	33.5	33.5	33.9
30°	57.5	52.3	48.5	45.2	40.5	35.3	31.6	30.2	29.2	29.2	29.7
32.5°	54.7	49.5	44.8	40.5	35.3	31.1	27.8	25.9	25.0	25.5	25.9
35°	48.5	44.3	40.1	35.8	31.1	27.3	24.0	22.2	21.7	21.7	22.2
37.5°	38.2	34.9	33.9	31.6	27.3	23.6	20.3	18.4	17.9	17.9	18.4
40°	34.4	30.2	28.3	27.3	25.0	20.3	16.5	14.6	14.6	14.1	15.1
42.5°	31.6	27.3	24.0	23.1	21.7	17.4	13.2	11.8	11.3	11.3	11.8
45°	29.7	25.0	20.7	18.4	18.4	14.1	10.8	9.0	8.5	8.5	9.0
47.5°	28.8	23.6	18.4	15.1	14.6	11.8	8.5	6.6	6.1	6.1	6.1
50°	27.8	21.7	16.5	12.7	11.3	9.9	6.6	5.2	4.7	4.7	4.7
52.5°	26.4	20.7	15.1	11.3	9.0	7.5	5.2	3.8	3.3	2.8	3.3
55°	25.5	19.3	14.6	10.4	7.5	5.7	3.8	2.8	2.4	2.4	2.4
57.5°	24.0	17.9	13.2	9.9	7.1	4.2	2.8	1.9	1.4	1.4	1.9
58°	23.6	17.9	12.7	9.4	6.6	4.2	2.8	1.9	1.4	1.4	1.9
60°	22.2	16.5	12.3	8.5	6.1	3.8	2.4	1.4	0.9	0.9	1.4
62.5°	20.7	15.1	10.8	7.5	5.2	3.3	1.9	0.9	0.5	0.5	0.5
65°	18.4	13.7	9.4	7.1	4.2	2.4	1.4	0.5	0.0	0.0	0.0
67.5°	16.5	12.7	8.5	6.1	3.8	1.9	0.9	0.0	0.0	0.0	0.0
70°	15.1	11.8	7.5	5.2	3.3	1.4	0.5	0.0	0.0	0.0	0.0
72.5°	14.1	10.8	7.1	4.7	2.4	1.4	0.5	0.0	0.0	0.0	0.0
75°	13.7	10.4	7.1	4.2	2.4	1.4	0.9	0.5	0.0	0.0	0.5
77.5°	13.2	10.4	7.1	4.2	2.8	1.4	1.4	0.9	0.9	0.5	1.4
80°	12.3	9.4	6.1	3.8	2.4	1.9	1.4	0.9	0.0	0.0	0.0
82.5°	10.4	7.5	5.2	3.8	2.4	1.4	0.5	0.0	0.0	0.0	0.0
85°	8.5	6.1	4.2	2.4	1.4	0.5	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	4.7	3.3	1.9	0.9	0.5	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°	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4	880.4
2.5°	756.5	778.1	787.1	817.3	830.5	857.8	881.4	901.6	911.5	919.5
5°	586.8	607.5	629.7	674.5	713.1	754.6	806.4	860.1	875.7	892.7
7.5°	409.6	440.2	477.4	517.5	572.6	635.3	709.8	776.3	809.7	818.2
10°	318.1	354.4	394.0	433.6	479.3	546.3	621.2	707.0	742.8	757.4
12.5°	239.0	287.5	334.6	381.3	420.9	478.9	560.4	662.7	702.3	721.1
15°	143.8	198.4	256.4	319.1	374.2	442.1	534.0	653.2	703.2	724.4
17.5°	71.6	98.0	151.3	245.6	327.1	411.5	533.5	687.2	748.9	776.3
20°	53.3	60.3	80.6	153.2	271.9	386.0	539.2	745.1	836.1	859.2
22.5°	45.7	50.9	58.0	89.5	203.6	362.4	559.0	822.0	935.1	965.7
25°	40.1	44.3	50.0	61.7	139.5	334.6	596.2	930.4	1047.3	1089.2
27.5°	35.3	39.1	43.8	51.8	93.3	282.3	617.4	1021.3	1137.8	1172.6
30°	31.1	33.9	38.6	44.3	68.8	218.2	637.2	1101.5	1219.8	1247.1
32.5°	27.3	29.7	33.5	37.7	52.3	165.4	638.2	1170.3	1291.4	1317.3
35°	23.1	25.9	28.8	32.5	41.5	129.1	618.8	1238.6	1376.2	1407.8
37.5°	19.3	21.7	25.0	28.3	37.7	99.9	578.8	1318.7	1479.5	1515.3
40°	16.5	18.9	21.7	25.5	33.5	72.6	514.7	1391.3	1576.1	1609.1
42.5°	13.2	15.6	18.9	25.0	27.8	52.3	450.1	1461.1	1660.0	1690.6
45°	10.4	13.2	17.4	24.0	23.1	36.8	394.5	1522.8	1732.1	1773.1
47.5°	7.5	10.8	17.4	21.7	18.9	26.4	366.2	1582.2	1796.6	1824.5
50°	5.7	9.0	18.9	18.4	16.0	22.6	370.5	1648.2	1826.3	1844.3
52.5°	4.2	7.5	14.6	13.2	13.7	19.8	386.9	1735.4	1887.6	1900.3
55°	3.8	5.7	9.0	9.9	12.3	18.9	382.7	1817.9	1965.9	1988.0
57.5°	3.3	4.7	7.1	8.0	10.8	17.9	358.7	1854.1	2016.3	2046.9
58°	2.8	4.7	6.6	8.0	10.8	17.4	352.5	1844.3	2013.9	2052.6
60°	2.4	4.2	6.1	7.1	9.4	15.6	322.9	1760.4	1962.1	2016.3
62.5°	1.9	2.8	4.7	5.2	7.5	12.7	265.8	1624.6	1850.9	1917.8
65°	0.9	1.9	2.8	3.8	5.2	9.4	189.0	1463.9	1731.6	1797.1
67.5°	0.0	0.9	1.9	2.4	3.3	7.1	108.9	1242.4	1535.5	1587.4
70°	0.0	0.5	0.9	1.4	1.9	4.7	57.5	912.0	1189.6	1282.9
72.5°	0.5	0.5	0.5	0.0	0.9	3.8	25.5	541.1	811.1	907.3
75°	0.5	0.5	0.0	0.0	0.0	1.9	10.8	285.1	465.2	510.9
77.5°	1.9	0.9	0.0	0.0	0.0	0.5	5.2	153.6	241.3	256.4
80°	0.5	0.0	0.0	0.0	0.0	0.0	1.9	51.4	144.7	148.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	62.2	59.4
85°	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
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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