

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: McGRAW-EDISON

Report Number: P228713

Luminaire Tested: **ISS-AF-450-LED-E1-RW-7050-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29765)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-450-LED-E1-RW-7050-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I, WITH UPLIGHT
GLOW
Light Source: (16) 5000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4414.2 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B2 - U5 - G2

Input Watts (W): 42.01
Input Voltage (V): 120
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

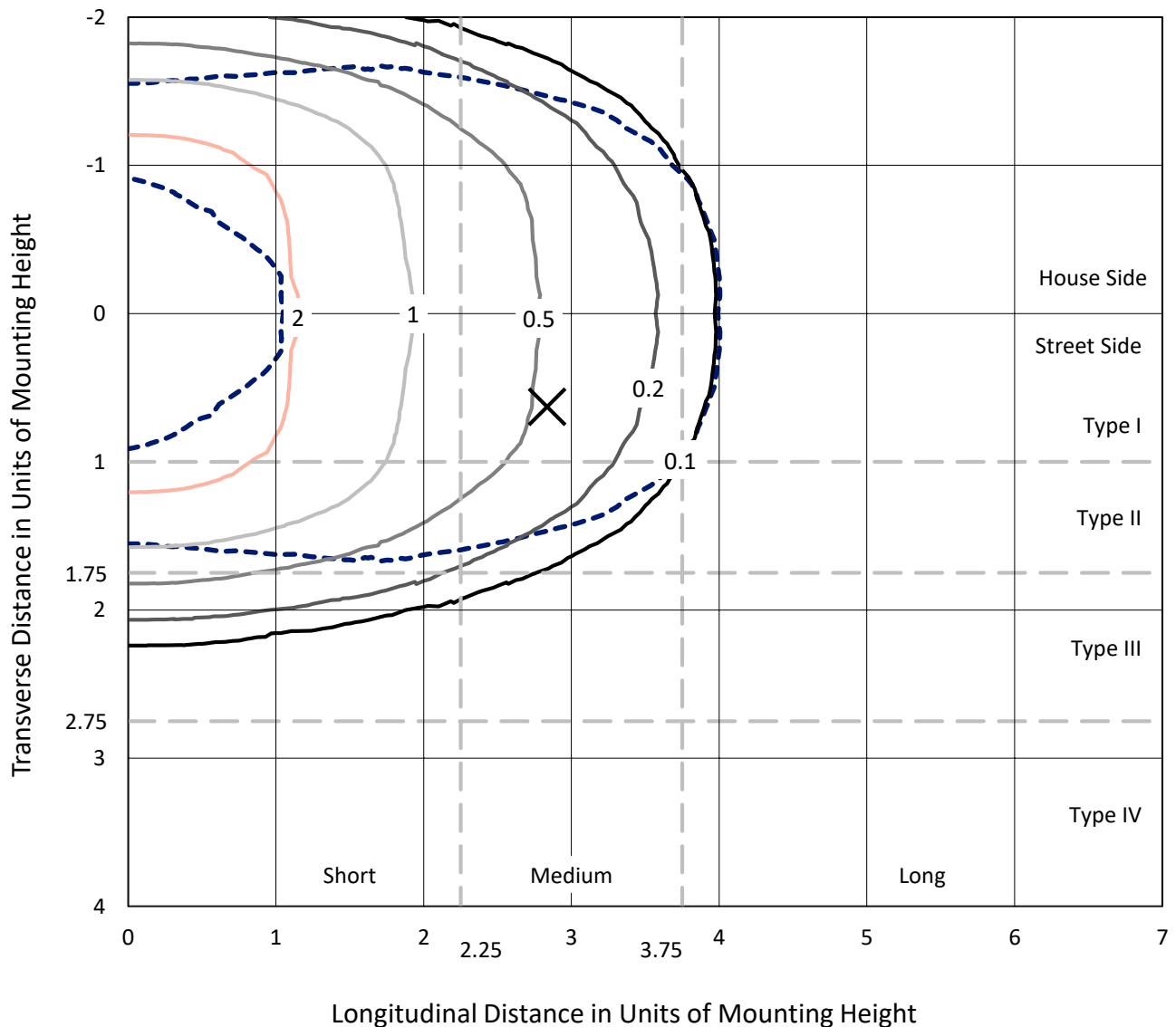


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

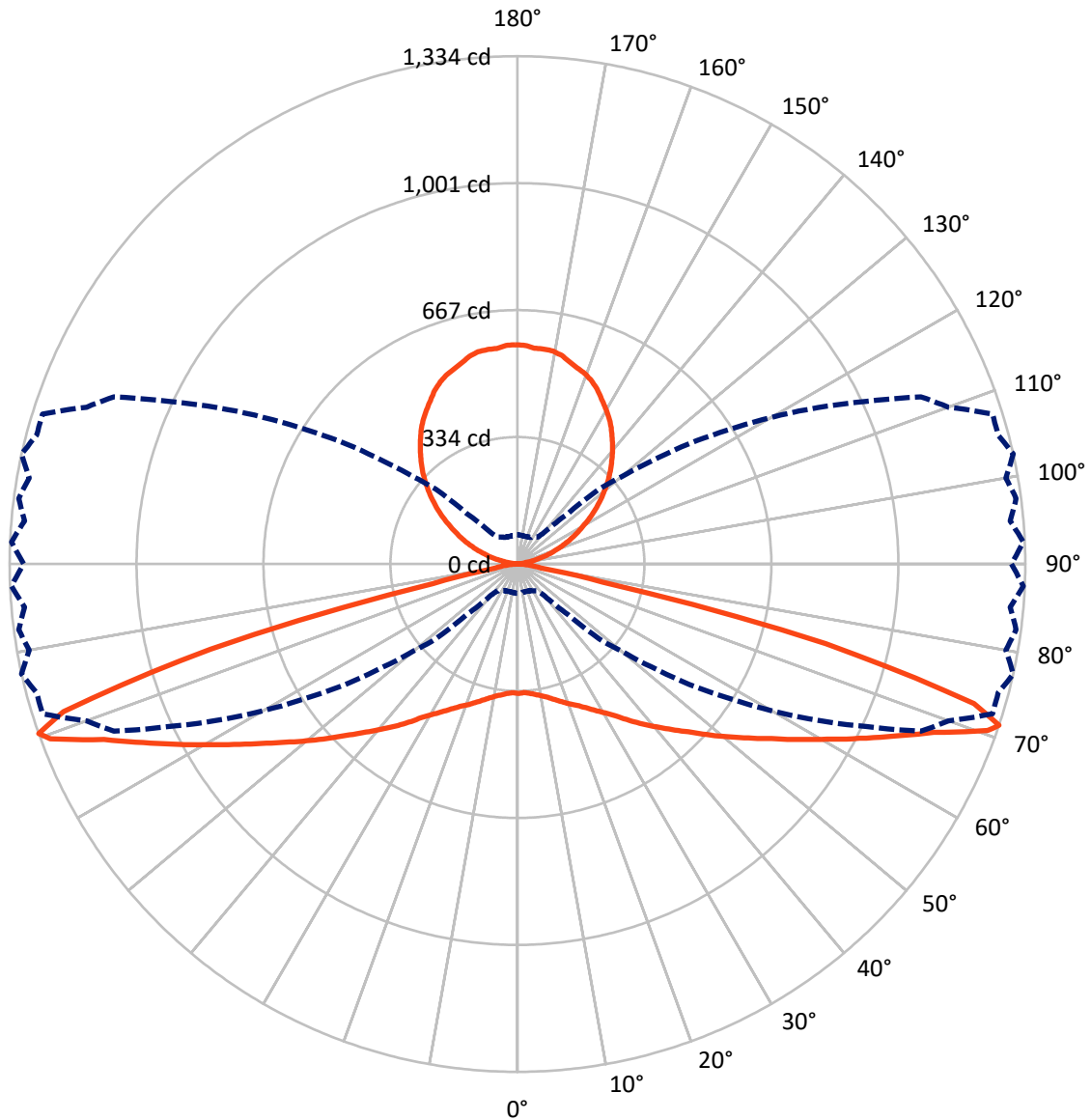


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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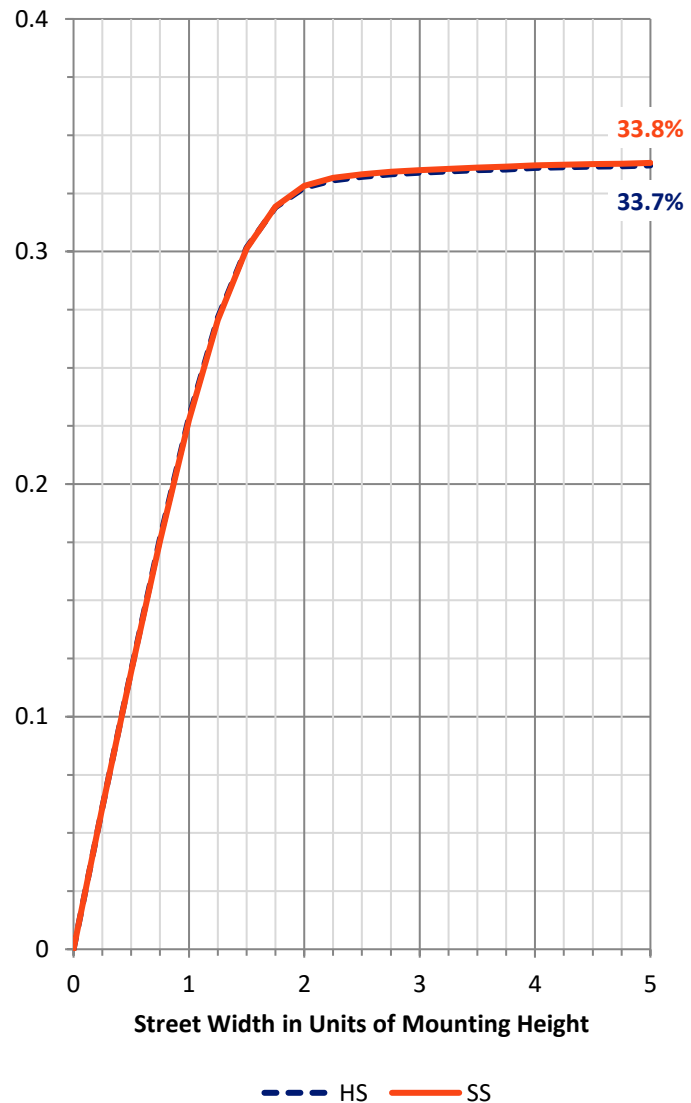
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1494.0	713.1	2207.1
	% Fixture	33.8	16.2	50.0
Street Side	Lumens	1494.0	713.1	2207.1
	% Fixture	33.8	16.2	50.0
Total	Lumens	2988.0	1426.2	4414.2
	% Fixture	67.7	32.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.9	0.7
10°-20°	102.7	2.3
20°-30°	192.2	4.4
30°-40°	334.6	7.6
40°-50°	545.9	12.4
50°-60°	753.3	17.1
60°-70°	714.6	16.2
70°-80°	294.1	6.7
80°-90°	17.8	0.4
90°-100°	4.7	0.1
100°-110°	69.0	1.6
110°-120°	153.0	3.5
120°-130°	223.9	5.1
130°-140°	265.6	6.0
140°-150°	269.3	6.1
150°-160°	231.1	5.2
160°-170°	155.1	3.5
170°-180°	54.3	1.2
0°-90°	2988.0	67.7
0°-180°	4414.2	100.0



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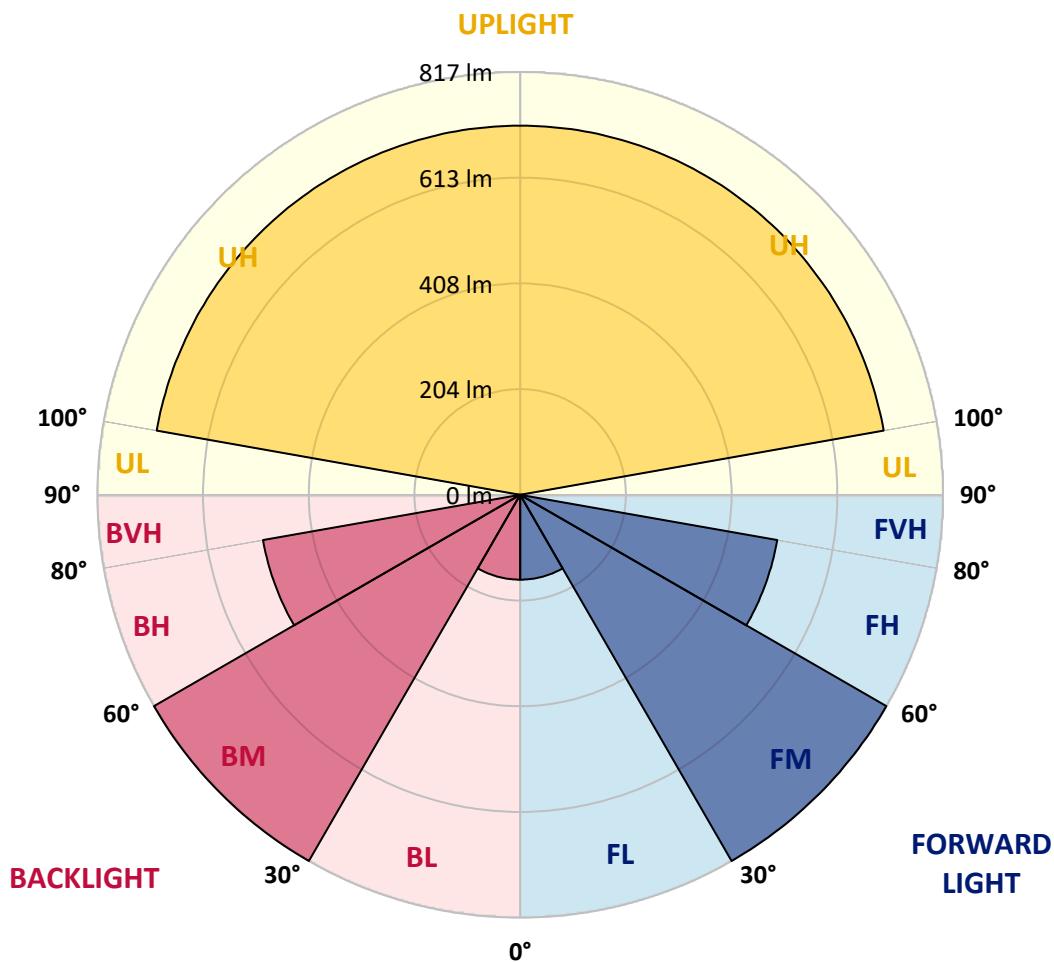
CATALOG NUMBER: ISS-AF-450-LED-E1-RW-7050-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	163.9	3.7			
FM	(30°-60°)	816.9	18.5			
FH	(60°-80°)	504.4	11.4			G0/660
FVH	(80°-90°)	8.9	0.2			G0/10
BL	(0°-30°)	163.9	3.7	B1/500		
BM	(30°-60°)	816.9	18.5	B1/1000		
BH	(60°-80°)	504.4	11.4	B2/1000		G2/1000
BVH	(80°-90°)	8.9	0.2			G0/10
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	16.2		U4/1000	

BUG Rating: B2-U5-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2
2.5°	339.2	338.3	339.2	339.2	340.2	340.2	340.2	340.2	339.2	341.2	341.2
5°	339.2	339.2	340.2	340.2	342.2	344.2	341.2	342.2	343.2	342.2	344.2
7.5°	339.2	339.2	339.2	341.2	344.2	346.2	344.2	345.2	347.2	347.2	349.1
10°	336.3	335.3	337.3	341.2	346.2	349.1	348.1	352.1	351.1	352.1	354.1
12.5°	331.3	331.3	335.3	341.2	350.1	352.1	353.1	355.1	358.0	357.1	360.0
15°	332.3	333.3	337.3	345.2	356.1	358.0	359.0	359.0	364.0	362.0	367.9
17.5°	339.2	340.2	344.2	352.1	365.0	365.0	366.0	367.9	374.9	370.9	378.8
20°	350.1	351.1	355.1	364.0	375.8	374.9	376.8	378.8	387.7	383.8	391.7
22.5°	363.0	365.0	369.9	379.8	392.7	386.7	390.7	394.6	403.5	396.6	407.5
25°	380.8	383.8	388.7	399.6	413.4	406.5	410.5	413.4	423.3	413.4	424.3
27.5°	406.5	408.5	412.4	424.3	436.2	431.2	433.2	435.2	447.1	436.2	448.0
30°	437.2	440.1	444.1	455.0	466.8	458.9	462.9	464.9	474.7	463.9	473.8
32.5°	475.7	478.7	483.7	493.5	503.4	491.6	492.6	495.5	505.4	494.5	505.4
35°	521.2	523.2	530.1	542.0	548.9	530.1	531.1	531.1	544.0	529.1	541.0
37.5°	568.7	570.7	578.6	590.5	598.4	577.6	577.6	578.6	590.5	573.7	584.5
40°	618.2	624.1	633.0	644.9	650.8	627.1	629.0	628.1	641.9	622.1	633.0
42.5°	667.6	672.6	685.4	699.3	706.2	682.5	683.4	680.5	694.3	673.5	682.5
45°	710.1	714.1	729.9	749.7	760.6	735.9	735.9	735.9	749.7	724.0	734.9
47.5°	744.8	747.7	764.5	793.2	811.0	786.3	788.3	784.3	805.1	773.4	788.3
50°	769.5	770.5	792.2	824.9	855.5	832.8	835.8	837.7	857.5	829.8	842.7
52.5°	777.4	779.4	804.1	843.7	888.2	873.3	884.2	888.2	906.0	876.3	894.1
55°	749.7	754.7	792.2	850.6	910.9	906.0	918.8	926.7	949.5	924.8	943.6
57.5°	656.7	662.7	715.1	811.0	915.9	923.8	941.6	954.4	987.1	972.2	993.0
60°	524.2	529.1	582.6	698.3	853.6	902.0	942.6	979.2	1012.8	1015.8	1042.5
62.5°	360.0	366.9	418.4	529.1	718.1	782.3	840.7	901.0	957.4	1025.7	1060.3
65°	176.1	180.0	223.5	330.3	527.2	609.3	677.5	762.6	815.0	912.9	969.3
67.5°	96.9	96.9	103.9	137.5	281.9	363.0	436.2	543.0	596.4	717.1	789.3
70°	81.1	81.1	79.1	84.1	106.8	126.6	164.2	225.5	299.7	421.3	486.6
71°	77.1	76.2	75.2	77.1	86.0	90.0	105.8	138.5	187.9	290.8	355.1
72.5°	72.2	70.2	67.3	68.2	73.2	73.2	76.2	81.1	99.9	136.5	183.0
75°	62.3	60.3	57.4	57.4	58.4	59.3	60.3	62.3	63.3	65.3	73.2
77.5°	51.4	49.5	46.5	46.5	45.5	46.5	48.5	49.5	47.5	51.4	52.4
80°	39.6	36.6	35.6	35.6	34.6	33.6	33.6	33.6	34.6	36.6	37.6
82.5°	24.7	22.7	23.7	22.7	21.8	21.8	21.8	21.8	22.7	22.7	24.7
85°	11.9	11.9	12.9	11.9	9.9	9.9	8.9	7.9	8.9	7.9	9.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.0	4.0	5.2	6.5	7.8	9.0	10.0	11.0
100°	8.0	8.0	10.0	14.0	22.0	24.0	26.0	28.0	30.0	30.5	31.0
102.5°	28.0	28.0	32.0	38.0	45.0	46.2	47.5	48.8	50.0	50.2	50.5
105°	54.0	54.0	56.0	61.0	66.0	67.0	68.0	69.0	70.0	70.2	70.5
107.5°	78.0	77.0	80.0	84.0	88.0	88.8	89.5	90.2	91.0	91.5	92.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
110°	101.0	102.0	103.0	106.0	110.0	110.5	111.0	111.5	112.0	112.5	113.0
112.5°	124.0	124.0	126.0	129.0	132.0	132.5	133.0	133.5	134.0	134.5	135.0
115°	146.0	147.0	149.0	151.0	154.0	154.5	155.0	155.5	156.0	156.5	157.0
117.5°	169.0	170.0	172.0	174.0	177.0	177.5	178.0	178.5	179.0	179.2	179.5
120°	193.0	195.0	196.0	198.0	201.0	201.2	201.5	201.8	202.0	202.5	203.0
122.5°	219.0	220.0	221.0	223.0	226.0	226.2	226.5	226.8	227.0	227.2	227.5
125°	244.0	246.0	247.0	248.0	251.0	251.2	251.5	251.8	252.0	252.2	252.5
127.5°	267.0	269.0	270.0	272.0	274.0	274.5	275.0	275.5	276.0	276.5	277.0
130°	290.0	292.0	293.0	294.0	298.0	298.2	298.5	298.8	299.0	299.5	300.0
132.5°	313.0	314.0	317.0	318.0	321.0	321.2	321.5	321.8	322.0	322.8	323.5
135°	336.0	337.0	339.0	341.0	345.0	345.0	345.0	345.0	345.0	345.8	346.5
137.5°	359.0	360.0	363.0	364.0	367.0	367.0	367.0	367.0	367.0	367.5	368.0
140°	382.0	383.0	385.0	386.0	388.0	388.2	388.5	388.8	389.0	389.2	389.5
142.5°	404.0	406.0	408.0	407.0	410.0	410.0	410.0	410.0	410.0	410.5	411.0
145°	425.0	426.0	428.0	428.0	431.0	431.2	431.5	431.8	432.0	432.5	433.0
147.5°	444.0	444.0	447.0	448.0	452.0	452.2	452.5	452.8	453.0	453.2	453.5
150°	461.0	462.0	464.0	465.0	469.0	469.2	469.5	469.8	470.0	470.2	470.5
152.5°	479.0	480.0	483.0	482.0	485.0	485.2	485.5	485.8	486.0	486.2	486.5
155°	499.0	500.0	502.0	501.0	503.0	503.0	503.0	503.0	503.0	503.2	503.5
157.5°	513.0	515.0	517.0	516.0	519.0	519.0	519.0	519.0	519.0	519.0	519.0
160°	525.0	527.0	529.0	529.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0
162.5°	535.0	536.0	539.0	538.0	541.0	541.0	541.0	541.0	541.0	541.2	541.5
165°	546.0	547.0	549.0	548.0	552.0	552.0	552.0	552.0	552.0	552.2	552.5
167.5°	555.0	556.0	559.0	558.0	561.0	560.8	560.5	560.2	560.0	560.0	560.0
170°	562.0	563.0	566.0	565.0	567.0	566.8	566.5	566.2	566.0	565.8	565.5
172.5°	565.0	566.0	569.0	567.0	569.0	568.8	568.5	568.2	568.0	568.2	568.5
175°	567.0	569.0	570.0	569.0	572.0	572.0	572.0	572.0	572.0	572.2	572.5
177.5°	572.0	573.0	575.0	574.0	578.0	577.8	577.5	577.2	577.0	577.0	577.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°
0°	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2	340.2
2.5°	338.3	340.2	339.2	340.2	338.3	340.2	337.3	340.2	339.2	340.2	338.3
5°	341.2	344.2	341.2	345.2	341.2	345.2	341.2	345.2	342.2	345.2	341.2
7.5°	344.2	350.1	346.2	351.1	346.2	352.1	346.2	352.1	348.1	353.1	346.2
10°	350.1	357.1	351.1	357.1	351.1	358.0	351.1	359.0	353.1	361.0	352.1
12.5°	355.1	363.0	357.1	365.0	356.1	366.9	358.0	369.9	360.0	371.9	360.0
15°	362.0	371.9	366.0	374.9	366.0	377.8	366.9	380.8	369.9	382.8	369.9
17.5°	371.9	382.8	374.9	385.7	375.8	388.7	376.8	391.7	380.8	393.6	380.8
20°	385.7	394.6	386.7	398.6	387.7	399.6	389.7	401.6	392.7	404.5	392.7
22.5°	401.6	409.5	403.5	410.5	400.6	410.5	400.6	410.5	403.5	413.4	403.5
25°	419.4	425.3	418.4	425.3	416.4	424.3	415.4	423.3	416.4	425.3	418.4
27.5°	443.1	446.1	438.2	444.1	433.2	441.1	431.2	439.1	432.2	440.1	435.2
30°	468.8	471.8	463.9	467.8	456.0	460.9	450.0	456.9	451.0	456.9	454.0
32.5°	497.5	501.5	492.6	494.5	484.6	485.6	476.7	479.7	474.7	476.7	475.7
35°	530.1	535.1	525.2	528.2	517.3	517.3	509.4	508.4	506.4	504.4	504.4
37.5°	571.7	573.7	565.7	565.7	552.9	552.9	543.0	543.0	539.0	535.1	533.1
40°	617.2	618.2	605.3	604.3	591.5	591.5	580.6	577.6	570.7	565.7	562.8
42.5°	665.6	664.6	645.9	647.8	629.0	630.0	616.2	613.2	606.3	600.4	594.4
45°	715.1	711.1	692.3	691.4	669.6	670.6	653.8	651.8	641.9	636.0	629.0
47.5°	765.5	763.6	742.8	737.8	715.1	714.1	692.3	692.3	682.5	676.5	669.6
50°	818.0	817.0	793.2	790.3	766.5	762.6	736.8	736.8	725.0	723.0	713.1
52.5°	875.3	871.4	845.6	844.7	821.9	818.9	791.2	789.3	771.5	770.5	759.6
55°	931.7	924.8	908.0	900.0	877.3	876.3	851.6	846.6	823.9	823.9	810.0
57.5°	983.1	977.2	963.3	956.4	934.7	931.7	905.0	905.0	885.2	884.2	869.4
60°	1036.5	1038.5	1023.7	1020.7	999.9	999.0	972.2	972.2	952.5	951.5	934.7
62.5°	1082.0	1101.8	1095.9	1097.9	1080.1	1077.1	1050.4	1048.4	1025.7	1022.7	1008.8
65°	1037.5	1106.8	1151.3	1180.9	1179.0	1178.0	1152.3	1148.3	1119.6	1111.7	1089.0
67.5°	871.4	961.4	1042.5	1131.5	1196.8	1246.2	1261.1	1255.1	1230.4	1207.6	1179.9
70°	583.5	687.4	790.3	901.0	1012.8	1121.6	1233.4	1281.8	1333.3	1315.4	1310.5
71°	444.1	550.9	653.8	770.5	889.2	1009.8	1147.3	1204.7	1308.5	1307.5	1334.2
72.5°	250.2	345.2	455.0	556.8	668.6	793.2	934.7	998.0	1147.3	1177.0	1254.1
75°	80.1	109.8	145.4	229.5	298.7	412.4	517.3	580.6	679.5	728.9	836.7
77.5°	53.4	59.3	61.3	71.2	80.1	113.7	154.3	188.9	207.7	217.6	228.5
80°	38.6	41.5	43.5	48.5	49.5	55.4	55.4	61.3	60.3	64.3	61.3
82.5°	24.7	27.7	28.7	30.7	31.6	35.6	37.6	41.5	41.5	43.5	42.5
85°	11.9	13.8	13.8	15.8	15.8	18.8	18.8	21.8	21.8	24.7	23.7
87.5°	1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	12.0	13.0	11.5	10.0	8.5	7.0	6.5	6.0	5.5	5.0	4.8
100°	31.5	32.0	31.5	31.0	30.5	30.0	29.2	28.5	27.8	27.0	26.8
102.5°	50.8	51.0	50.8	50.5	50.2	50.0	49.5	49.0	48.5	48.0	48.2
105°	70.8	71.0	71.0	71.0	71.0	71.0	70.5	70.0	69.5	69.0	69.5
107.5°	92.5	93.0	92.8	92.5	92.2	92.0	91.8	91.5	91.2	91.0	91.2



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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°
110°	113.5	114.0	114.0	114.0	114.0	114.0	113.8	113.5	113.2	113.0	113.2
112.5°	135.5	136.0	136.0	136.0	136.0	136.0	135.8	135.5	135.2	135.0	135.5
115°	157.5	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.5
117.5°	179.8	180.0	180.2	180.5	180.8	181.0	180.8	180.5	180.2	180.0	180.5
120°	203.5	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.5
122.5°	227.8	228.0	228.0	228.0	228.0	228.0	228.2	228.5	228.8	229.0	230.0
125°	252.8	253.0	253.2	253.5	253.8	254.0	254.0	254.0	254.0	254.0	254.8
127.5°	277.5	278.0	277.8	277.5	277.2	277.0	277.2	277.5	277.8	278.0	278.8
130°	300.5	301.0	301.0	301.0	301.0	301.0	301.2	301.5	301.8	302.0	302.8
132.5°	324.2	325.0	325.0	325.0	325.0	325.0	325.2	325.5	325.8	326.0	326.8
135°	347.2	348.0	348.0	348.0	348.0	348.0	348.2	348.5	348.8	349.0	349.5
137.5°	368.5	369.0	369.0	369.0	369.0	369.0	369.2	369.5	369.8	370.0	371.0
140°	389.8	390.0	390.0	390.0	390.0	390.0	390.5	391.0	391.5	392.0	393.0
142.5°	411.5	412.0	412.0	412.0	412.0	412.0	412.2	412.5	412.8	413.0	413.8
145°	433.5	434.0	433.8	433.5	433.2	433.0	433.2	433.5	433.8	434.0	434.8
147.5°	453.8	454.0	453.5	453.0	452.5	452.0	452.2	452.5	452.8	453.0	453.8
150°	470.8	471.0	470.5	470.0	469.5	469.0	469.0	469.0	469.0	469.0	470.0
152.5°	486.8	487.0	486.8	486.5	486.2	486.0	486.0	486.0	486.0	486.0	486.8
155°	503.8	504.0	503.8	503.5	503.2	503.0	503.2	503.5	503.8	504.0	504.8
157.5°	519.0	519.0	518.5	518.0	517.5	517.0	517.2	517.5	517.8	518.0	519.2
160°	532.0	532.0	531.5	531.0	530.5	530.0	530.0	530.0	530.0	530.0	530.8
162.5°	541.8	542.0	541.5	541.0	540.5	540.0	539.5	539.0	538.5	538.0	538.5
165°	552.8	553.0	552.2	551.5	550.8	550.0	549.5	549.0	548.5	548.0	548.5
167.5°	560.0	560.0	559.5	559.0	558.5	558.0	558.2	558.5	558.8	559.0	560.0
170°	565.2	565.0	564.8	564.5	564.2	564.0	564.5	565.0	565.5	566.0	567.2
172.5°	568.8	569.0	568.5	568.0	567.5	567.0	567.2	567.5	567.8	568.0	568.8
175°	572.8	573.0	572.2	571.5	570.8	570.0	569.5	569.0	568.5	568.0	568.8
177.5°	577.0	577.0	576.2	575.5	574.8	574.0	574.0	574.0	574.0	574.0	574.8
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0

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CANDELA DISTRIBUTION (continued):

	80°	82.5°	85°	87.5°	90°
0°	340.2	340.2	340.2	340.2	340.2
2.5°	341.2	340.2	341.2	339.2	341.2
5°	346.2	342.2	347.2	342.2	347.2
7.5°	354.1	349.1	355.1	347.2	354.1
10°	361.0	354.1	362.0	354.1	361.0
12.5°	372.9	362.0	374.9	362.0	374.9
15°	384.7	371.9	387.7	373.9	386.7
17.5°	395.6	383.8	398.6	384.7	397.6
20°	405.5	394.6	407.5	393.6	407.5
22.5°	415.4	408.5	418.4	408.5	418.4
25°	428.3	423.3	430.2	423.3	430.2
27.5°	443.1	441.1	445.1	440.1	446.1
30°	459.9	460.9	461.9	460.9	462.9
32.5°	480.7	485.6	483.7	483.7	483.7
35°	509.4	518.3	512.3	514.3	513.3
37.5°	536.1	548.9	541.0	544.0	542.0
40°	565.7	574.6	572.7	572.7	570.7
42.5°	598.4	609.3	606.3	607.3	605.3
45°	634.0	643.9	639.9	638.9	639.9
47.5°	674.5	685.4	680.5	679.5	680.5
50°	717.1	729.9	726.0	724.0	726.0
52.5°	763.6	779.4	777.4	775.4	778.4
55°	818.0	832.8	830.8	832.8	833.8
57.5°	872.4	889.2	885.2	890.2	892.1
60°	940.6	950.5	951.5	952.5	953.5
62.5°	1009.8	1013.8	1016.8	1019.7	1020.7
65°	1089.9	1090.9	1092.9	1089.9	1092.9
67.5°	1167.1	1160.2	1159.2	1162.1	1164.1
70°	1286.8	1286.8	1276.9	1290.7	1278.9
71°	1302.6	1321.4	1299.6	1330.3	1297.6
72.5°	1225.4	1260.1	1235.3	1263.0	1230.4
75°	852.6	932.7	931.7	971.3	939.6
77.5°	236.4	221.5	236.4	203.7	194.8
80°	64.3	58.4	63.3	53.4	60.3
82.5°	42.5	36.6	35.6	28.7	30.7
85°	24.7	18.8	18.8	14.8	15.8
87.5°	4.0	1.0	4.0	2.0	3.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0
97.5°	4.5	4.2	4.0	4.0	4.0
100°	26.5	26.2	26.0	25.5	25.0
102.5°	48.5	48.8	49.0	48.5	48.0
105°	70.0	70.5	71.0	70.0	69.0
107.5°	91.5	91.8	92.0	91.5	91.0



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CANDELA DISTRIBUTION (continued):

	80°	82.5°	85°	87.5°	90°
110°	113.5	113.8	114.0	113.5	113.0
112.5°	136.0	136.5	137.0	136.0	135.0
115°	159.0	159.5	160.0	159.5	159.0
117.5°	181.0	181.5	182.0	181.0	180.0
120°	205.0	205.5	206.0	205.0	204.0
122.5°	231.0	232.0	233.0	232.5	232.0
125°	255.5	256.2	257.0	256.5	256.0
127.5°	279.5	280.2	281.0	279.5	278.0
130°	303.5	304.2	305.0	304.0	303.0
132.5°	327.5	328.2	329.0	328.0	327.0
135°	350.0	350.5	351.0	350.5	350.0
137.5°	372.0	373.0	374.0	373.0	372.0
140°	394.0	395.0	396.0	395.0	394.0
142.5°	414.5	415.2	416.0	415.5	415.0
145°	435.5	436.2	437.0	436.0	435.0
147.5°	454.5	455.2	456.0	454.5	453.0
150°	471.0	472.0	473.0	471.5	470.0
152.5°	487.5	488.2	489.0	487.5	486.0
155°	505.5	506.2	507.0	506.0	505.0
157.5°	520.5	521.8	523.0	521.5	520.0
160°	531.5	532.2	533.0	532.0	531.0
162.5°	539.0	539.5	540.0	538.5	537.0
165°	549.0	549.5	550.0	549.0	548.0
167.5°	561.0	562.0	563.0	562.0	561.0
170°	568.5	569.8	571.0	570.0	569.0
172.5°	569.5	570.2	571.0	569.5	568.0
175°	569.5	570.2	571.0	569.5	568.0
177.5°	575.5	576.2	577.0	575.5	574.0
180°	576.0	576.0	576.0	576.0	576.0

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