

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: P142018

Luminaire Tested: **ECM-E01-LED-E1-T4-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P142018
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33685)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E01-LED-E1-T4-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2427.1 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

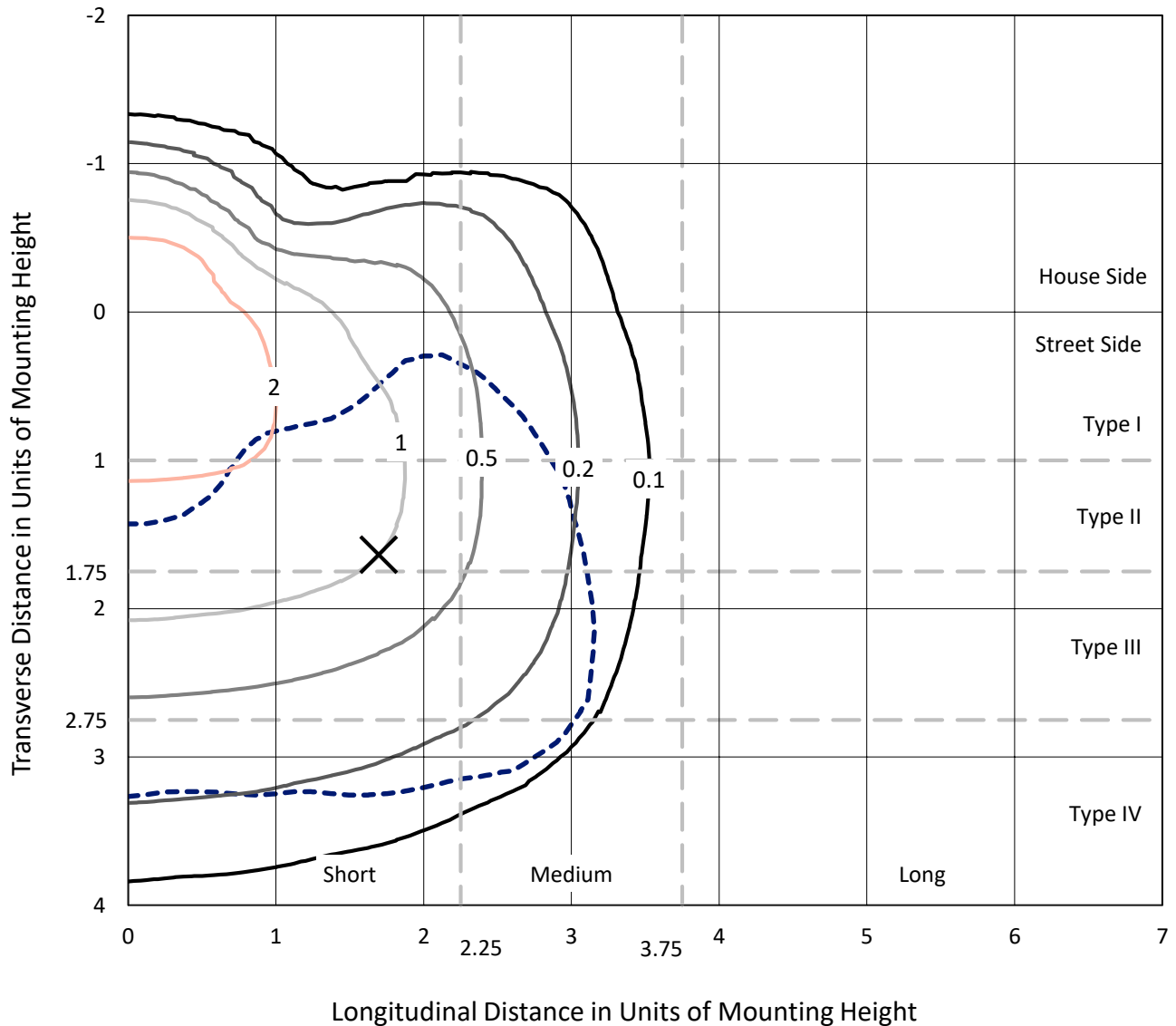
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

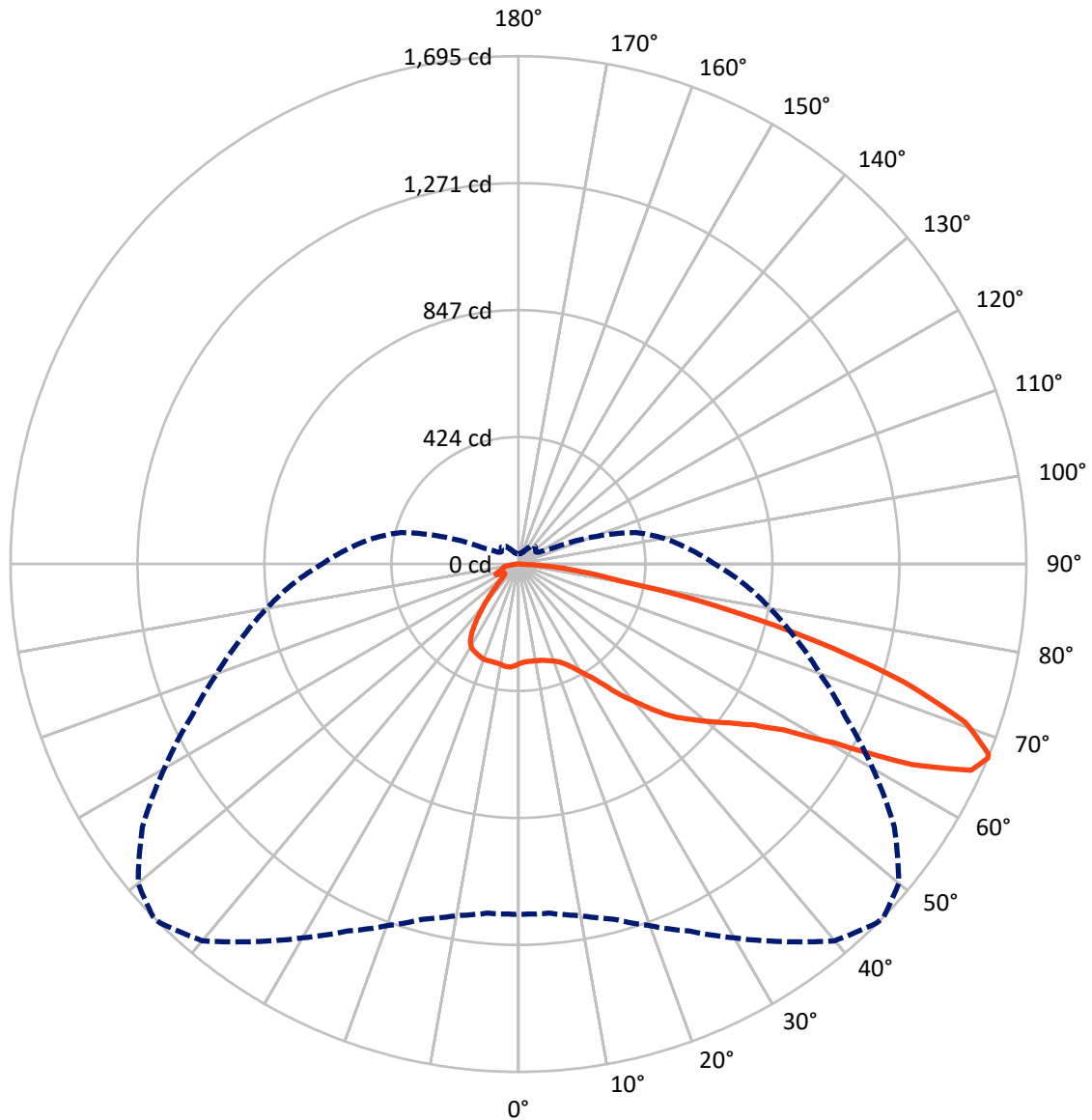
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	482.3	0.0	482.3
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	1944.8	0.0	1944.8
	% Fixture	80.1	0.0	80.1
Total	Lumens	2427.1	0.0	2427.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	1.3
10°-20°	95.5	3.9
20°-30°	160.6	6.6
30°-40°	240.2	9.9
40°-50°	312.9	12.9
50°-60°	428.5	17.7
60°-70°	677.4	27.9
70°-80°	420.2	17.3
80°-90°	59.9	2.5
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°	2427.1	100.0
0°-180°	2427.1	100.0



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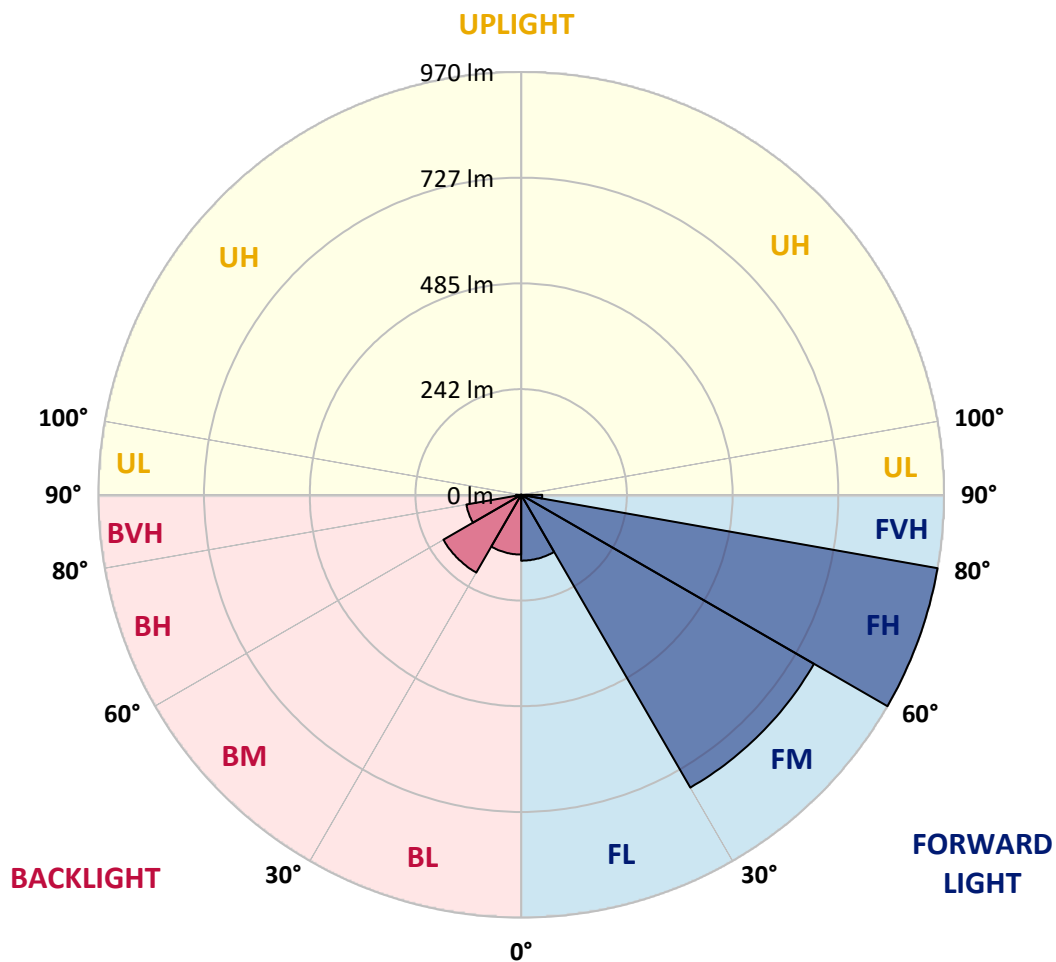
CATALOG NUMBER: ECM-E01-LED-E1-T4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	151.1	6.2			
FM (30°-60°)	775.6	32.0			
FH (60°-80°)	969.9	40.0			G1/1800
FVH (80°-90°)	48.2	2.0			G1/100
BL (0°-30°)	137.0	5.6	B1/500		
BM (30°-60°)	206.0	8.5	B0/220		
BH (60°-80°)	127.7	5.3	B1/500		G1/500
BVH (80°-90°)	11.7	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°	5°	10°	15°	20°	25°	30°	35°	40°	45°	46°
0°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	325.2	326.1	325.8	325.5	325.8	326.1	326.3	327.2	327.5	327.7	328.0
5°	319.3	320.2	319.9	320.4	320.7	321.8	322.7	324.1	324.9	326.1	326.6
7.5°	317.6	318.2	318.2	318.7	319.0	320.2	321.6	323.2	324.9	326.6	327.2
10°	322.1	322.4	322.4	322.1	322.4	323.0	323.5	324.9	326.3	327.7	328.3
12.5°	332.8	332.0	331.7	330.8	331.1	330.0	330.0	329.7	329.7	330.0	330.0
15°	344.1	343.5	342.9	341.5	341.5	339.8	339.3	338.2	335.3	334.2	333.9
17.5°	354.2	353.6	352.5	351.4	350.8	348.6	348.0	346.0	342.7	340.1	339.3
20°	366.3	364.9	362.4	361.8	360.4	357.9	357.0	354.5	350.0	346.3	346.0
22.5°	384.9	382.6	380.1	378.1	374.5	371.9	369.7	366.3	360.9	356.7	355.6
25°	403.4	402.6	400.3	397.5	395.0	392.2	389.4	384.3	377.3	371.9	370.8
27.5°	429.6	427.6	424.8	420.3	418.9	414.1	411.9	407.6	400.6	393.9	392.7
30°	456.9	454.9	450.4	446.5	445.6	440.6	439.2	434.7	428.5	421.7	420.9
32.5°	488.1	486.1	482.8	480.5	477.4	474.6	471.2	467.0	459.1	453.5	452.4
35°	528.1	526.4	522.4	524.1	521.3	520.5	518.5	511.5	502.7	496.0	497.1
37.5°	559.6	559.3	560.1	559.3	562.9	566.6	566.6	567.2	562.9	555.6	554.2
40°	589.1	588.8	591.1	593.6	603.5	609.4	616.1	618.6	614.1	608.5	606.5
42.5°	616.7	616.1	619.2	628.5	640.6	651.6	663.1	672.9	675.2	669.0	667.6
45°	644.0	644.8	648.7	659.2	675.2	689.5	709.2	720.8	728.1	724.7	727.0
47.5°	676.9	677.7	681.9	694.3	708.4	726.4	749.5	769.2	777.9	777.9	775.1
50°	716.0	719.9	724.4	732.9	749.2	766.9	795.0	814.7	828.8	828.2	826.0
52.5°	768.0	768.9	776.2	782.9	797.0	815.0	840.3	867.3	885.1	883.4	880.8
55°	838.1	834.7	839.5	846.0	861.2	876.9	904.5	935.7	953.7	948.4	946.7
57.5°	926.4	923.6	927.0	934.9	954.0	966.9	989.2	1017.9	1043.2	1047.7	1043.7
60°	1053.9	1053.9	1060.6	1077.5	1096.9	1116.3	1144.7	1179.3	1205.5	1212.0	1211.7
62.5°	1204.9	1214.5	1215.9	1237.9	1275.0	1308.5	1352.6	1413.7	1452.8	1480.6	1473.3
65°	1229.1	1232.2	1244.6	1278.6	1329.0	1388.4	1457.0	1537.2	1618.5	1658.7	1659.8
67°	1168.4	1169.5	1191.2	1226.9	1284.6	1351.5	1440.4	1538.0	1641.0	1693.0	1694.7
67.5°	1149.5	1147.3	1166.7	1204.1	1267.1	1342.5	1426.1	1528.7	1635.1	1690.8	1691.6
70°	1023.2	1024.3	1039.5	1081.2	1147.8	1218.4	1311.8	1417.3	1529.3	1580.2	1582.8
72.5°	882.3	874.9	888.7	933.2	965.0	1033.9	1119.7	1199.3	1297.8	1345.9	1344.8
75°	672.9	652.7	676.9	702.8	720.5	788.9	842.3	897.2	988.0	1024.6	1022.6
77.5°	362.6	361.8	388.2	408.5	434.9	496.5	543.5	578.1	654.7	672.7	674.9
80°	196.9	204.2	220.0	242.5	263.9	293.4	320.7	342.4	367.4	355.9	353.4
82.5°	118.7	130.8	155.0	172.2	180.6	193.8	213.2	225.6	235.5	214.1	209.9
85°	18.8	34.0	87.5	104.7	113.7	119.8	124.1	132.2	120.7	113.1	115.1
87.5°	6.2	7.0	13.5	29.8	26.2	18.0	23.6	34.3	16.3	8.7	8.4
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	328.3	328.6	329.4	330.6	331.1	332.5	332.5	333.7	333.7	334.5	335.3
5°	327.5	328.9	330.0	331.7	332.5	334.5	335.3	337.0	337.9	339.0	340.1
7.5°	328.9	330.8	332.3	334.2	335.6	337.6	338.4	339.8	340.7	342.1	342.7
10°	330.0	332.0	333.7	335.9	337.0	338.4	339.3	340.4	340.7	341.5	342.1
12.5°	331.4	332.3	333.7	335.6	336.8	337.6	338.4	339.3	340.1	340.1	340.1
15°	333.4	332.5	332.8	334.5	335.6	336.2	337.0	337.6	337.9	337.9	337.3
17.5°	337.6	335.3	333.9	333.9	334.5	335.1	335.1	334.2	333.7	332.8	331.7
20°	343.8	340.1	337.3	335.9	334.8	333.4	331.1	328.3	325.8	323.5	322.1
22.5°	352.5	348.8	345.5	342.4	338.7	333.9	329.2	323.2	318.5	314.8	313.4
25°	368.8	363.5	360.9	356.2	350.5	342.9	335.6	327.5	321.8	316.8	314.5
27.5°	390.8	386.5	380.9	378.4	371.1	362.4	354.2	344.3	336.5	330.3	326.1
30°	418.6	415.8	411.0	406.8	399.8	391.9	379.8	368.8	355.0	344.1	337.9
32.5°	450.7	446.5	442.3	436.9	431.8	421.4	410.2	393.6	374.5	355.6	344.1
35°	490.9	486.7	483.9	475.4	467.0	455.8	440.6	420.9	394.1	368.8	349.1
37.5°	546.3	537.3	523.6	511.5	496.3	479.1	461.9	438.3	408.5	375.6	348.6
40°	594.5	581.2	565.8	544.9	523.6	501.0	480.8	455.2	420.3	381.2	344.6
42.5°	656.9	634.1	608.0	580.4	551.1	524.1	499.1	469.8	429.0	381.5	335.3
45°	713.2	685.0	650.4	613.0	577.3	544.4	515.7	483.3	436.3	380.4	324.7
47.5°	763.2	730.3	688.1	643.1	600.9	563.8	532.3	498.2	445.9	384.0	320.7
50°	811.6	773.9	726.4	671.8	624.8	584.3	551.4	514.8	461.9	396.4	326.9
52.5°	863.4	817.5	763.8	702.2	651.0	609.1	572.2	534.8	481.1	413.0	338.2
55°	926.7	874.7	813.3	745.2	686.4	639.7	598.1	558.7	503.9	433.5	351.4
57.5°	1011.1	958.5	887.9	809.4	747.8	692.4	642.3	597.8	538.5	461.9	371.1
60°	1173.7	1108.7	1014.8	929.5	862.8	797.6	737.1	676.3	604.9	519.3	421.7
62.5°	1434.8	1344.2	1227.7	1109.0	1019.0	932.6	852.7	773.7	684.5	588.5	481.9
65°	1615.4	1503.4	1357.1	1208.3	1086.5	981.0	885.6	791.7	692.4	600.9	508.1
67°	1656.8	1531.6	1365.0	1203.5	1071.0	956.5	852.7	754.8	654.9	571.9	492.6
67.5°	1655.1	1530.2	1358.8	1193.4	1060.6	947.8	843.1	740.2	642.0	560.7	485.0
70°	1554.9	1429.4	1257.3	1092.7	964.7	852.4	746.9	657.2	557.0	491.2	434.4
72.5°	1317.5	1208.3	1069.3	921.4	811.6	711.2	626.8	538.7	451.8	407.9	363.2
75°	1001.8	905.0	777.6	669.3	585.7	516.0	431.3	373.3	312.3	282.2	266.1
77.5°	662.0	550.8	462.8	359.5	298.2	243.4	191.9	152.2	127.2	133.6	146.0
80°	350.3	278.0	205.7	159.2	122.9	95.7	76.0	56.8	41.4	48.4	60.8
82.5°	190.7	162.6	120.1	95.7	78.2	64.7	49.8	34.9	25.9	28.7	41.4
85°	108.9	95.7	74.3	58.0	50.6	41.4	28.4	19.1	18.6	20.0	25.6
87.5°	18.0	24.2	19.7	13.5	15.2	14.9	13.2	10.1	7.6	10.7	13.8
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5	332.5
2.5°	335.9	336.8	337.9	338.2	337.9	338.7	340.1	341.3	340.4	339.8	341.3
5°	341.3	341.8	343.2	343.2	343.5	344.1	344.9	345.8	344.6	344.6	345.2
7.5°	343.5	343.5	344.9	344.3	344.3	344.1	344.9	345.2	343.5	343.2	343.5
10°	342.1	342.1	342.7	341.5	341.3	341.0	341.0	341.3	339.6	339.0	339.8
12.5°	340.1	340.1	339.6	339.0	338.4	337.9	338.4	338.7	337.6	337.6	337.9
15°	336.8	335.9	335.6	335.6	335.9	336.2	337.3	338.2	337.3	336.8	336.8
17.5°	331.1	330.6	331.4	333.1	335.1	336.5	338.2	338.7	336.8	334.5	332.8
20°	322.7	324.1	327.2	332.0	336.2	338.4	338.4	336.5	332.0	327.5	325.2
22.5°	314.0	317.9	324.7	332.0	337.0	337.9	334.8	330.6	324.4	319.6	315.4
25°	315.1	319.9	326.6	332.8	336.2	334.8	329.2	323.8	316.5	311.4	305.2
27.5°	326.9	331.4	334.8	336.8	335.6	331.1	324.7	317.3	309.2	302.1	294.8
30°	336.5	338.4	338.2	336.5	332.3	325.2	317.6	308.9	299.1	291.5	281.9
32.5°	338.2	334.5	328.9	322.7	317.1	309.2	300.5	290.3	279.4	269.5	259.9
35°	335.1	321.3	308.9	296.5	288.1	278.2	270.6	258.8	246.7	238.3	231.3
37.5°	323.5	299.6	279.9	262.5	250.1	238.8	227.3	215.8	205.7	201.7	199.7
40°	308.9	272.9	242.8	218.6	205.4	194.4	182.6	173.3	168.5	164.9	163.5
42.5°	287.5	242.5	205.1	179.2	162.3	152.2	140.7	135.6	133.4	134.2	133.1
45°	267.5	210.7	163.7	135.0	123.5	113.9	108.3	106.1	104.9	104.4	105.2
47.5°	253.5	186.2	131.9	102.7	93.1	86.4	84.1	83.3	83.0	81.9	81.6
50°	250.1	171.9	108.0	79.9	72.6	68.9	67.8	67.0	66.4	65.5	63.6
52.5°	254.0	168.0	96.2	68.6	62.5	59.6	58.8	57.4	56.8	54.6	52.0
55°	260.8	169.4	92.6	65.5	59.4	56.3	55.1	54.6	52.6	50.1	47.0
57.5°	274.9	178.1	94.2	66.4	59.9	57.1	56.5	56.0	53.5	49.8	45.9
60°	315.7	203.4	103.0	72.3	64.4	62.5	62.7	61.6	58.0	53.2	47.3
62.5°	378.7	242.8	119.0	79.6	71.7	71.7	73.4	72.6	67.0	59.1	50.6
65°	411.3	266.4	125.8	81.9	74.0	77.6	83.0	82.1	74.0	62.2	50.9
67°	406.2	261.9	121.8	78.5	69.8	74.6	79.9	80.2	71.2	59.4	48.7
67.5°	401.5	258.8	119.8	77.1	68.6	73.4	78.5	77.6	70.1	58.2	48.1
70°	360.7	227.3	106.9	72.0	63.6	65.0	66.4	65.3	59.4	51.5	44.5
72.5°	311.4	188.8	94.2	68.9	60.8	58.5	58.5	56.5	52.6	47.3	42.2
75°	237.4	146.9	82.7	65.5	57.4	54.0	53.5	52.0	48.7	44.7	40.2
77.5°	144.9	105.2	71.7	60.5	53.2	50.4	50.6	49.8	46.4	42.8	38.5
80°	72.6	68.1	60.2	52.6	48.1	45.3	45.6	43.9	41.1	38.3	34.9
82.5°	44.5	47.0	42.2	39.9	37.1	34.0	26.4	30.9	30.1	27.6	26.2
85°	29.5	29.3	26.4	23.4	21.4	18.6	16.6	16.9	18.6	19.1	19.1
87.5°	14.3	13.8	12.7	11.8	11.3	9.3	8.7	9.8	9.8	10.4	10.1
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°	332.5	332.5	332.5	332.5	332.5
2.5°	341.5	342.1	341.8	342.7	341.8
5°	345.5	345.5	345.8	346.0	345.8
7.5°	343.5	343.2	343.8	344.3	344.1
10°	339.8	340.1	340.7	341.5	341.5
12.5°	338.4	338.7	339.8	340.7	340.7
15°	337.3	337.6	338.2	339.3	338.4
17.5°	332.3	331.1	331.1	332.0	331.1
20°	323.2	321.6	321.6	321.3	321.0
22.5°	312.6	308.3	307.2	305.8	306.1
25°	299.3	293.7	290.6	288.9	288.4
27.5°	288.6	282.2	279.1	276.5	275.7
30°	275.1	267.8	265.3	263.9	263.3
32.5°	255.4	249.0	245.6	244.8	243.1
35°	225.6	222.8	221.4	219.4	219.7
37.5°	195.8	195.0	191.6	192.7	191.6
40°	163.7	163.5	164.0	163.2	165.1
42.5°	133.6	132.8	134.2	133.4	134.2
45°	103.5	105.2	107.2	106.3	107.5
47.5°	79.3	79.6	79.1	79.6	80.2
50°	61.0	60.5	59.9	58.8	59.4
52.5°	50.4	48.4	47.0	46.1	45.9
55°	44.5	42.5	41.4	40.2	40.2
57.5°	42.8	40.2	38.5	37.7	37.4
60°	43.0	39.7	37.4	36.0	35.7
62.5°	44.2	39.7	36.6	35.2	34.6
65°	43.9	39.1	36.0	34.6	34.0
67°	42.5	38.3	35.7	34.3	34.0
67.5°	41.9	38.0	35.7	34.3	33.8
70°	39.9	37.1	35.2	33.8	33.2
72.5°	38.3	36.0	33.8	32.6	32.1
75°	36.6	34.3	32.4	31.2	30.9
77.5°	34.9	32.4	30.9	29.5	28.4
80°	31.8	29.0	27.0	24.8	24.2
82.5°	26.2	23.9	21.9	20.0	19.7
85°	19.4	18.6	16.9	15.2	15.2
87.5°	10.7	11.8	10.4	9.6	9.0
90°	0.0	0.0	0.0	0.0	0.0

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