

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: NEO-RAY

Report Number: P333355-840

Luminaire Tested: **S125DIW-S375D1050U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333355-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D1050U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5146.4 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

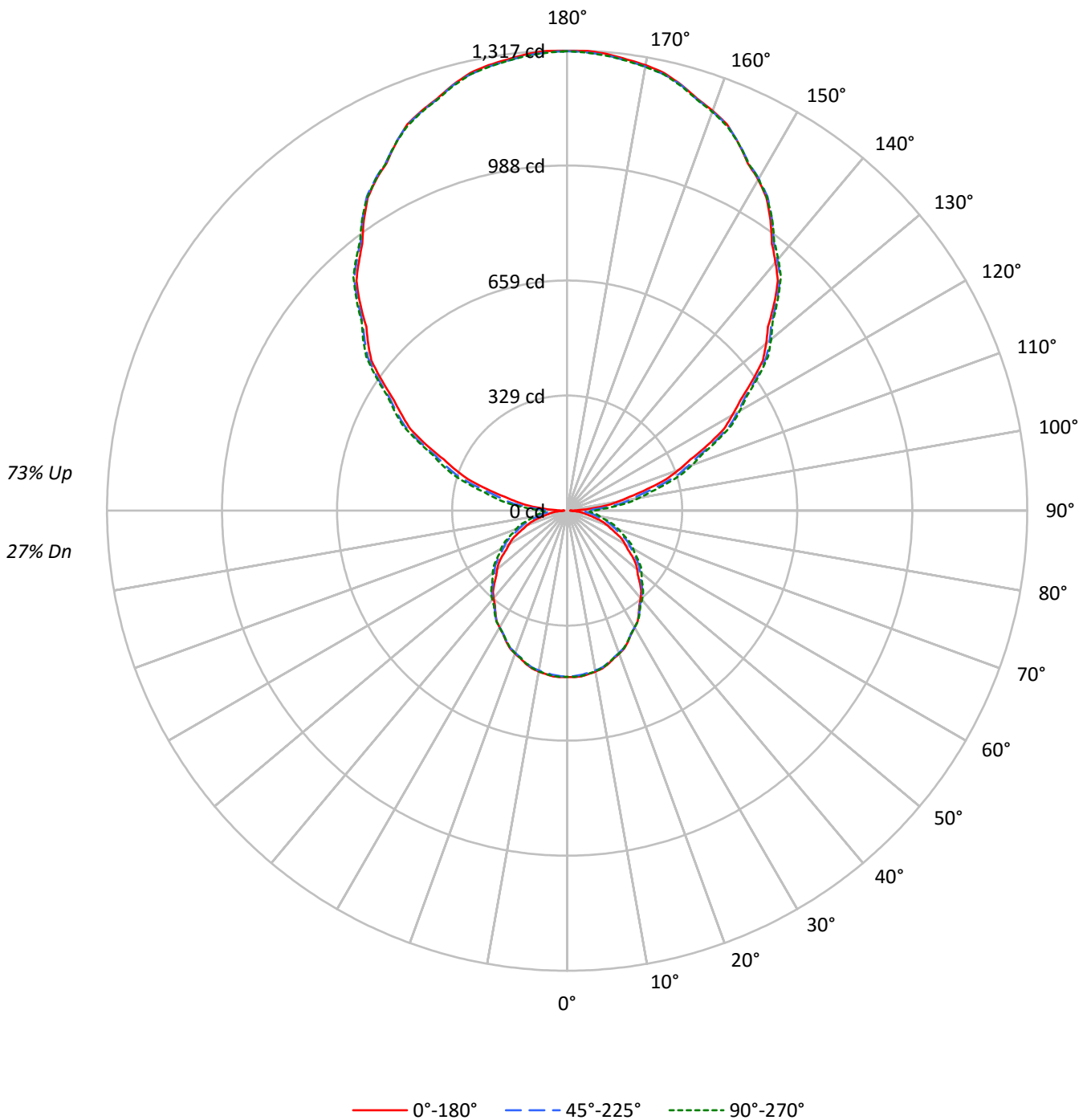
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27
1	92	88	84	80	82	79	75	72	61	59	57	45	44	42	30	29	29	22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	21	20	15
4	70	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17	13
5	64	52	45	39	57	47	40	35	37	32	28	27	24	21	18	16	15	11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	9
8	50	38	31	25	44	34	28	23	27	22	19	20	17	14	14	12	10	8
9	46	35	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9	7
10	43	32	25	20	39	28	22	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.9
10°-20°	127.8	2.5
20°-30°	190.0	3.7
30°-40°	225.1	4.4
40°-50°	232.7	4.5
50°-60°	214.4	4.2
60°-70°	173.3	3.4
70°-80°	116.1	2.3
80°-90°	63.1	1.2
90°-100°	121.8	2.4
100°-110°	285.0	5.5
110°-120°	457.2	8.9
120°-130°	589.2	11.4
130°-140°	653.7	12.7
140°-150°	637.5	12.4
150°-160°	534.7	10.4
160°-170°	355.4	6.9
170°-180°	124.4	2.4
0°-30°	362.8	7.1
0°-40°	587.9	11.4
0°-60°	1035.1	20.1
0°-90°	1387.5	27.0
90°-120°	864.0	16.8
90°-150°	2744.4	53.3
90°-180°	3759.0	73.0
0°-180°	5146.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	32	55	70	77	9
95°	73	87	113	130	136	76
105°	238	251	270	285	292	254
115°	444	452	465	472	474	439
125°	646	651	662	667	668	578
135°	838	844	848	854	852	646
145°	1014	1018	1021	1023	1022	634
155°	1160	1160	1161	1165	1160	534
165°	1262	1260	1261	1264	1259	356
175°	1312	1308	1308	1313	1307	125
180°	1315	1315	1315	1315	1315	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.7	18.5	22.1	25.9	29.5	33.2	37.1	41.0	44.8	48.7	51.3
90°	8.5	13.6	18.8	23.9	29.1	34.1	39.3	44.4	49.5	54.6	58.2
92.5°	31.5	35.9	40.2	44.5	48.9	53.8	59.4	64.9	70.5	76.0	79.9
95°	72.6	75.7	78.9	82.0	85.2	89.7	95.4	101.3	107.0	112.9	116.7
97.5°	116.0	118.7	121.3	123.8	126.4	131.0	137.5	144.1	150.7	157.2	160.9
100°	148.3	150.6	152.8	154.9	157.1	161.4	167.6	173.9	180.2	186.4	190.7
102.5°	183.2	186.1	189.0	192.0	194.9	198.7	203.5	208.2	213.0	217.7	222.0
105°	237.5	240.3	243.1	245.9	248.7	252.4	256.8	261.3	265.8	270.2	273.7
107.5°	297.5	300.0	302.7	305.2	307.7	311.0	315.1	319.0	323.1	327.1	329.8
110°	338.9	341.2	343.7	346.1	348.4	351.4	355.0	358.6	362.1	365.8	368.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	381.4	383.0	384.7	386.3	387.8	390.4	394.2	397.8	401.5	405.2	407.4
115°	443.8	445.5	447.1	448.7	450.4	452.7	456.0	459.1	462.2	465.3	467.0
117.5°	506.3	507.3	508.2	509.1	510.0	511.9	514.8	517.8	520.8	523.7	525.6
120°	545.7	547.1	548.6	550.1	551.5	553.5	556.1	558.8	561.4	563.9	565.7
122.5°	587.8	588.4	589.0	589.6	590.1	591.8	594.7	597.6	600.5	603.4	604.9
125°	645.5	646.7	648.0	649.2	650.6	652.3	654.6	656.9	659.2	661.6	662.8
127.5°	706.4	707.1	707.7	708.4	709.1	710.4	712.4	714.4	716.3	718.3	719.6
130°	743.3	744.3	745.3	746.4	747.4	748.8	750.7	752.7	754.6	756.5	757.7
132.5°	779.7	781.5	783.5	785.3	787.1	788.5	789.6	790.6	791.6	792.6	793.9
135°	838.0	839.2	840.5	841.7	843.0	844.1	845.1	846.0	847.0	847.9	849.3
137.5°	892.7	893.9	895.1	896.5	897.7	898.7	899.6	900.4	901.3	902.1	903.6
140°	927.6	928.7	929.8	931.0	932.1	933.0	933.8	934.6	935.4	936.1	937.8
142.5°	962.7	963.6	964.5	965.3	966.2	967.1	968.0	968.9	969.8	970.7	971.9
145°	1014.5	1015.3	1016.1	1016.9	1017.7	1018.4	1019.2	1019.9	1020.6	1021.2	1021.7
147.5°	1062.0	1062.5	1063.0	1063.4	1063.9	1064.5	1065.0	1065.5	1066.1	1066.6	1067.3
150°	1093.9	1093.7	1093.4	1093.2	1093.0	1093.3	1094.2	1095.1	1096.0	1096.9	1096.9
152.5°	1120.0	1120.3	1120.6	1121.1	1121.4	1121.7	1122.1	1122.4	1122.8	1123.2	1123.7
155°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.4	1160.7	1160.9	1161.1	1161.4	1162.4
157.5°	1196.4	1195.9	1195.4	1194.9	1194.4	1194.3	1194.5	1194.7	1195.0	1195.2	1196.1
160°	1217.7	1217.0	1216.3	1215.7	1215.0	1214.8	1215.0	1215.2	1215.4	1215.7	1216.6
162.5°	1236.5	1236.0	1235.5	1235.0	1234.5	1234.3	1234.4	1234.4	1234.5	1234.5	1235.6
165°	1261.7	1261.2	1260.7	1260.3	1259.8	1259.7	1260.0	1260.2	1260.4	1260.6	1261.5
167.5°	1282.9	1282.0	1281.1	1280.2	1279.3	1278.9	1278.9	1278.9	1278.9	1278.9	1280.2
170°	1294.4	1293.5	1292.6	1291.7	1290.8	1290.3	1290.3	1290.3	1290.3	1290.3	1291.7
172.5°	1302.6	1301.7	1300.8	1299.9	1299.0	1298.5	1298.5	1298.5	1298.5	1298.5	1299.9
175°	1311.8	1310.9	1310.0	1309.1	1308.2	1307.7	1307.7	1307.7	1307.7	1307.7	1309.1
177.5°	1316.6	1315.8	1315.0	1314.3	1313.6	1313.1	1312.9	1312.8	1312.6	1312.4	1313.5
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	53.8	56.5	59.1	60.8	61.7	62.5	63.4	64.3
90°	61.7	65.2	68.8	71.2	72.6	74.0	75.4	76.9
92.5°	83.7	87.5	91.3	93.8	95.0	96.2	97.5	98.7
95°	120.6	124.5	128.4	130.9	132.1	133.2	134.4	135.6
97.5°	164.5	168.2	171.9	174.2	175.2	176.2	177.1	178.1
100°	194.9	199.1	203.3	206.0	207.0	208.1	209.2	210.3
102.5°	226.3	230.7	235.0	237.7	239.0	240.2	241.6	242.8
105°	277.1	280.5	284.0	286.4	287.8	289.2	290.6	292.1
107.5°	332.6	335.4	338.1	339.7	340.3	340.9	341.5	342.1
110°	371.0	373.8	376.4	377.9	378.4	378.9	379.4	379.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	409.6	411.8	414.0	415.3	415.6	415.9	416.3	416.6
115°	468.7	470.3	471.9	472.9	473.3	473.7	474.1	474.5
117.5°	527.6	529.6	531.5	532.4	532.1	531.9	531.7	531.5
120°	567.4	569.3	571.0	571.8	571.5	571.2	570.9	570.6
122.5°	606.4	607.9	609.4	610.1	610.0	609.9	609.8	609.7
125°	663.9	665.1	666.3	667.1	667.4	667.7	667.9	668.2
127.5°	720.9	722.3	723.6	724.3	724.4	724.6	724.7	724.9
130°	758.9	760.1	761.4	762.0	762.1	762.1	762.2	762.2
132.5°	795.1	796.3	797.6	798.1	797.9	797.7	797.5	797.3
135°	850.6	851.9	853.3	853.8	853.4	853.0	852.6	852.2
137.5°	905.1	906.6	908.1	908.5	907.8	907.1	906.4	905.5
140°	939.4	941.0	942.6	943.0	942.3	941.6	940.9	940.1
142.5°	973.1	974.4	975.6	975.9	975.1	974.4	973.7	973.0
145°	1022.3	1022.8	1023.3	1023.4	1023.1	1022.9	1022.6	1022.4
147.5°	1068.0	1068.7	1069.4	1069.1	1067.8	1066.4	1065.1	1063.7
150°	1096.9	1096.9	1096.9	1096.7	1096.4	1096.0	1095.7	1095.4
152.5°	1124.2	1124.8	1125.3	1125.2	1124.4	1123.6	1122.8	1122.0
155°	1163.3	1164.2	1165.1	1164.9	1163.8	1162.7	1161.5	1160.3
157.5°	1197.0	1197.9	1198.8	1198.5	1197.0	1195.5	1194.0	1192.5
160°	1217.5	1218.4	1219.3	1219.1	1218.0	1216.9	1215.8	1214.6
162.5°	1236.7	1237.7	1238.8	1238.7	1237.4	1236.1	1234.8	1233.4
165°	1262.4	1263.3	1264.3	1264.0	1262.7	1261.3	1260.0	1258.6
167.5°	1281.6	1282.9	1284.3	1284.3	1282.9	1281.5	1280.1	1278.7
170°	1293.0	1294.4	1295.8	1295.7	1294.0	1292.5	1290.9	1289.3
172.5°	1301.2	1302.6	1303.9	1303.9	1302.5	1301.1	1299.7	1298.3
175°	1310.4	1311.8	1313.2	1313.0	1311.5	1309.9	1308.3	1306.7
177.5°	1314.6	1315.8	1316.8	1316.7	1315.5	1314.1	1312.9	1311.6
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8

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