

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: P333506-840

Luminaire Tested: **S125RDIP-S375D810U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333506-840
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: S125RDIP-S375D810U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4293.6 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

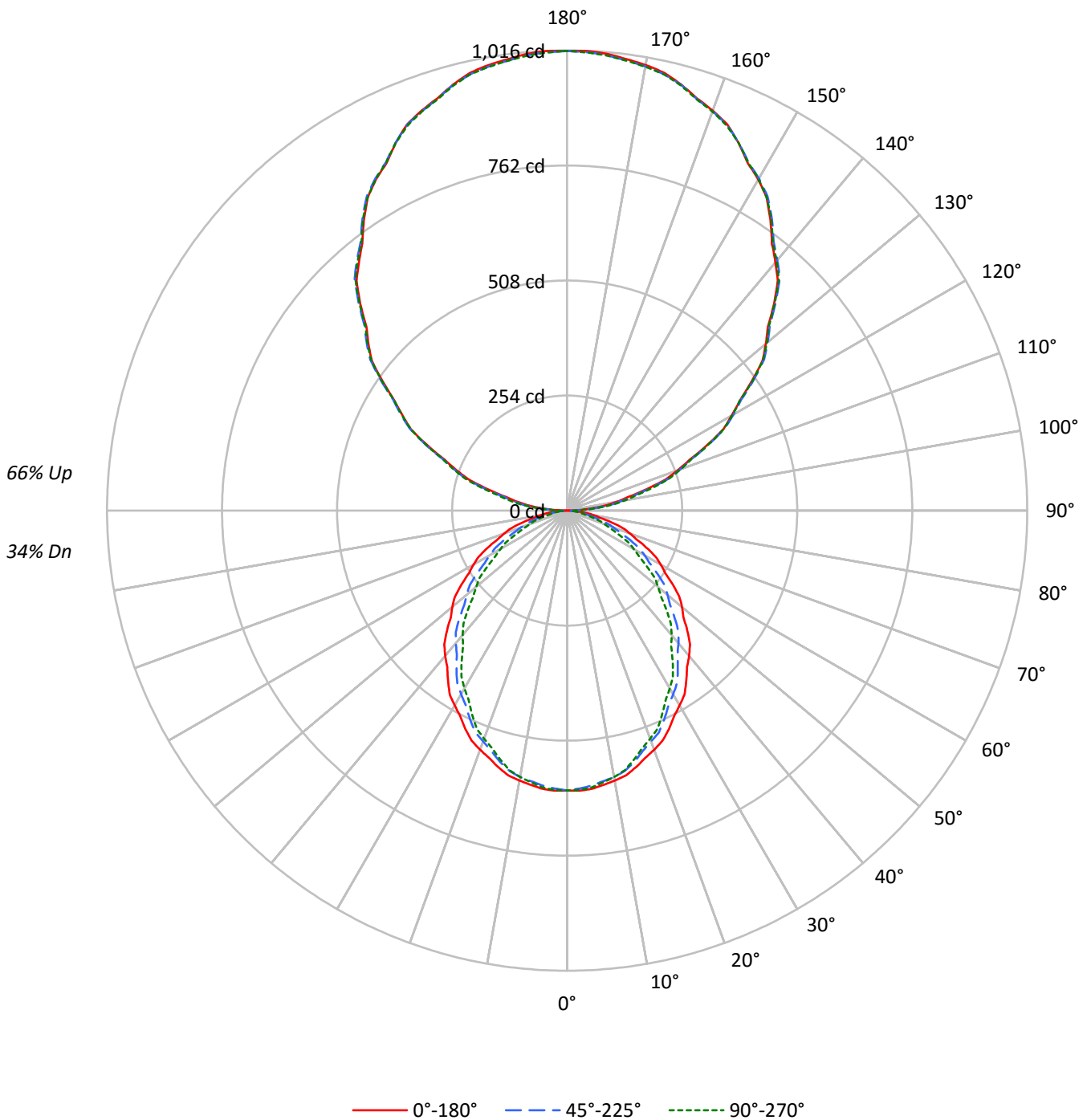
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	82	78	76	65	63	61	51	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	37	34	29	27	26	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	29	25	22	21	19	17	14
7	56	44	36	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	27	47	37	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.4
10°-20°	162.4	3.8
20°-30°	235.5	5.5
30°-40°	268.4	6.3
40°-50°	261.6	6.1
50°-60°	220.2	5.1
60°-70°	154.3	3.6
70°-80°	79.3	1.8
80°-90°	22.3	0.5
90°-100°	68.0	1.6
100°-110°	200.7	4.7
110°-120°	339.9	7.9
120°-130°	447.4	10.4
130°-140°	501.3	11.7
140°-150°	491.3	11.4
150°-160°	412.7	9.6
160°-170°	274.3	6.4
170°-180°	96.0	2.2
0°-30°	456.0	10.6
0°-40°	724.3	16.9
0°-60°	1206.1	28.1
0°-90°	1462.1	34.1
90°-120°	608.6	14.2
90°-150°	2048.6	47.7
90°-180°	2832.0	66.0
0°-180°	4293.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	7	13	17	19	4
95°	51	53	61	66	68	55
105°	180	184	189	193	196	192
115°	340	343	345	344	344	336
125°	497	501	502	501	500	445
135°	646	650	652	651	648	498
145°	782	786	788	788	786	489
155°	895	895	896	899	895	412
165°	974	972	973	976	971	275
175°	1012	1009	1009	1013	1008	96
180°	1015	1015	1015	1015	1015	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.5	8.2	7.9	7.6	7.5	7.7	7.8	8.0	8.1	8.3
90°	0.8	2.2	3.6	5.0	6.4	7.7	9.0	10.2	11.4	12.6	13.5
92.5°	19.1	20.1	21.1	22.0	23.0	24.2	25.8	27.3	28.8	30.3	31.5
95°	51.3	51.7	52.0	52.4	52.7	53.8	55.5	57.3	59.1	60.8	62.0
97.5°	85.3	85.4	85.5	85.7	85.8	87.2	89.6	92.0	94.4	96.8	98.0
100°	110.6	110.6	110.6	110.6	110.6	111.7	114.0	116.2	118.6	120.8	122.4
102.5°	137.7	138.5	139.2	139.9	140.6	141.5	142.6	143.8	144.9	146.1	147.8
105°	180.1	181.0	181.8	182.7	183.6	184.5	185.6	186.6	187.6	188.7	189.8
107.5°	226.8	227.6	228.5	229.4	230.4	231.2	232.0	232.8	233.6	234.4	234.9
110°	259.0	259.9	260.7	261.7	262.6	263.3	263.8	264.3	264.8	265.3	265.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	291.9	292.4	292.8	293.3	293.7	294.3	294.9	295.6	296.3	296.9	297.2
115°	340.3	341.0	341.7	342.4	343.2	343.7	344.1	344.4	344.8	345.1	344.9
117.5°	389.0	389.3	389.6	389.9	390.2	390.6	390.9	391.2	391.5	391.8	391.9
120°	419.3	420.2	421.1	421.9	422.8	423.3	423.5	423.7	423.8	424.0	424.0
122.5°	452.1	452.5	452.8	453.1	453.4	453.8	454.2	454.7	455.1	455.7	455.4
125°	496.7	497.8	498.8	499.9	500.9	501.5	501.7	501.9	502.0	502.2	501.9
127.5°	544.1	544.7	545.2	545.8	546.4	546.8	547.0	547.2	547.5	547.8	547.5
130°	572.5	573.4	574.3	575.1	576.0	576.6	576.9	577.3	577.6	578.0	577.8
132.5°	601.0	602.4	603.8	605.2	606.7	607.3	607.3	607.2	607.1	607.1	606.9
135°	645.9	647.0	648.0	649.1	650.2	650.8	651.0	651.2	651.3	651.5	651.5
137.5°	688.3	689.3	690.3	691.4	692.4	693.1	693.5	693.8	694.2	694.6	694.8
140°	715.5	716.3	717.2	718.1	718.9	719.6	720.1	720.7	721.2	721.8	722.2
142.5°	742.7	743.4	744.1	744.8	745.6	746.3	746.9	747.6	748.2	748.9	749.1
145°	782.5	783.3	784.0	784.7	785.4	786.0	786.5	787.0	787.6	788.1	788.1
147.5°	819.5	819.9	820.3	820.7	821.0	821.4	821.9	822.3	822.7	823.1	823.5
150°	844.1	843.9	843.8	843.6	843.4	843.7	844.4	845.2	845.9	846.6	846.6
152.5°	864.3	864.6	864.8	865.2	865.4	865.7	865.9	866.2	866.5	866.8	867.2
155°	895.4	895.4	895.4	895.4	895.4	895.5	895.8	896.0	896.1	896.3	897.0
157.5°	923.3	922.9	922.5	922.1	921.7	921.6	921.8	922.0	922.1	922.3	923.0
160°	939.7	939.2	938.7	938.2	937.6	937.5	937.6	937.8	938.0	938.2	938.9
162.5°	954.2	953.8	953.4	953.1	952.7	952.5	952.5	952.6	952.6	952.7	953.5
165°	973.7	973.3	973.0	972.6	972.3	972.2	972.3	972.5	972.7	972.9	973.6
167.5°	990.1	989.4	988.7	988.0	987.2	986.9	986.9	986.9	986.9	986.9	988.0
170°	999.0	998.3	997.5	996.8	996.1	995.7	995.7	995.7	995.7	995.7	996.8
172.5°	1005.2	1004.5	1003.8	1003.1	1002.4	1002.1	1002.1	1002.1	1002.1	1002.1	1003.1
175°	1012.4	1011.7	1011.0	1010.3	1009.6	1009.2	1009.2	1009.2	1009.2	1009.2	1010.3
177.5°	1016.0	1015.4	1014.9	1014.3	1013.7	1013.4	1013.3	1013.1	1013.0	1012.8	1013.7
180°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	8.5	8.7	8.8	8.9	9.0	9.0	9.0	9.0
90°	14.3	15.2	16.2	16.9	17.4	17.9	18.4	19.0
92.5°	32.6	33.8	34.9	35.7	36.2	36.5	36.9	37.3
95°	63.2	64.5	65.7	66.6	66.9	67.3	67.6	67.9
97.5°	99.2	100.3	101.5	102.1	102.3	102.5	102.8	103.0
100°	124.0	125.5	127.1	128.2	128.5	128.8	129.2	129.5
102.5°	149.6	151.3	153.0	154.1	154.6	155.0	155.5	156.0
105°	190.9	191.9	193.0	193.7	194.3	194.8	195.3	195.8
107.5°	235.4	235.9	236.5	236.7	236.7	236.6	236.6	236.6
110°	266.4	266.9	267.4	267.6	267.4	267.2	267.1	266.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.4	297.6	297.9	297.9	297.5	297.2	296.9	296.6
115°	344.8	344.6	344.4	344.2	344.1	343.9	343.7	343.6
117.5°	392.1	392.2	392.4	392.1	391.4	390.7	390.0	389.3
120°	424.0	424.0	424.0	423.7	423.0	422.3	421.6	420.9
122.5°	455.3	455.2	455.0	454.7	454.1	453.6	453.0	452.5
125°	501.5	501.2	500.8	500.6	500.4	500.2	500.1	499.9
127.5°	547.3	547.1	547.0	546.7	546.4	546.0	545.7	545.3
130°	577.6	577.5	577.3	577.0	576.7	576.3	576.0	575.6
132.5°	606.7	606.5	606.4	606.0	605.6	605.1	604.6	604.1
135°	651.5	651.5	651.5	651.2	650.5	649.7	649.0	648.3
137.5°	695.0	695.2	695.4	695.1	694.2	693.4	692.5	691.6
140°	722.5	722.8	723.2	722.9	722.1	721.1	720.2	719.4
142.5°	749.3	749.5	749.7	749.4	748.5	747.7	746.8	745.9
145°	788.1	788.1	788.1	787.8	787.3	786.8	786.3	785.7
147.5°	823.9	824.5	824.9	824.5	823.2	822.0	820.9	819.7
150°	846.6	846.6	846.6	846.4	846.0	845.7	845.3	845.0
152.5°	867.6	868.0	868.4	868.3	867.7	867.1	866.5	865.8
155°	897.7	898.4	899.1	899.0	898.1	897.3	896.4	895.4
157.5°	923.7	924.4	925.1	924.9	923.7	922.6	921.4	920.3
160°	939.6	940.2	940.9	940.9	940.0	939.1	938.2	937.4
162.5°	954.3	955.2	956.0	955.9	954.9	953.9	952.9	951.9
165°	974.3	975.0	975.6	975.5	974.4	973.4	972.3	971.3
167.5°	989.1	990.1	991.2	991.1	990.1	989.0	987.8	986.7
170°	997.8	999.0	1000.0	999.9	998.7	997.4	996.2	995.0
172.5°	1004.2	1005.2	1006.3	1006.3	1005.2	1004.1	1003.0	1001.9
175°	1011.3	1012.4	1013.4	1013.3	1012.1	1010.9	1009.7	1008.5
177.5°	1014.5	1015.3	1016.2	1016.1	1015.1	1014.2	1013.2	1012.2
180°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7

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