

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: P333646-840

Luminaire Tested: **S125RDIW-S375D770U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333646-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S375D770U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4561.7 lumens
Efficiency: N/A
Efficacy: 150.1 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

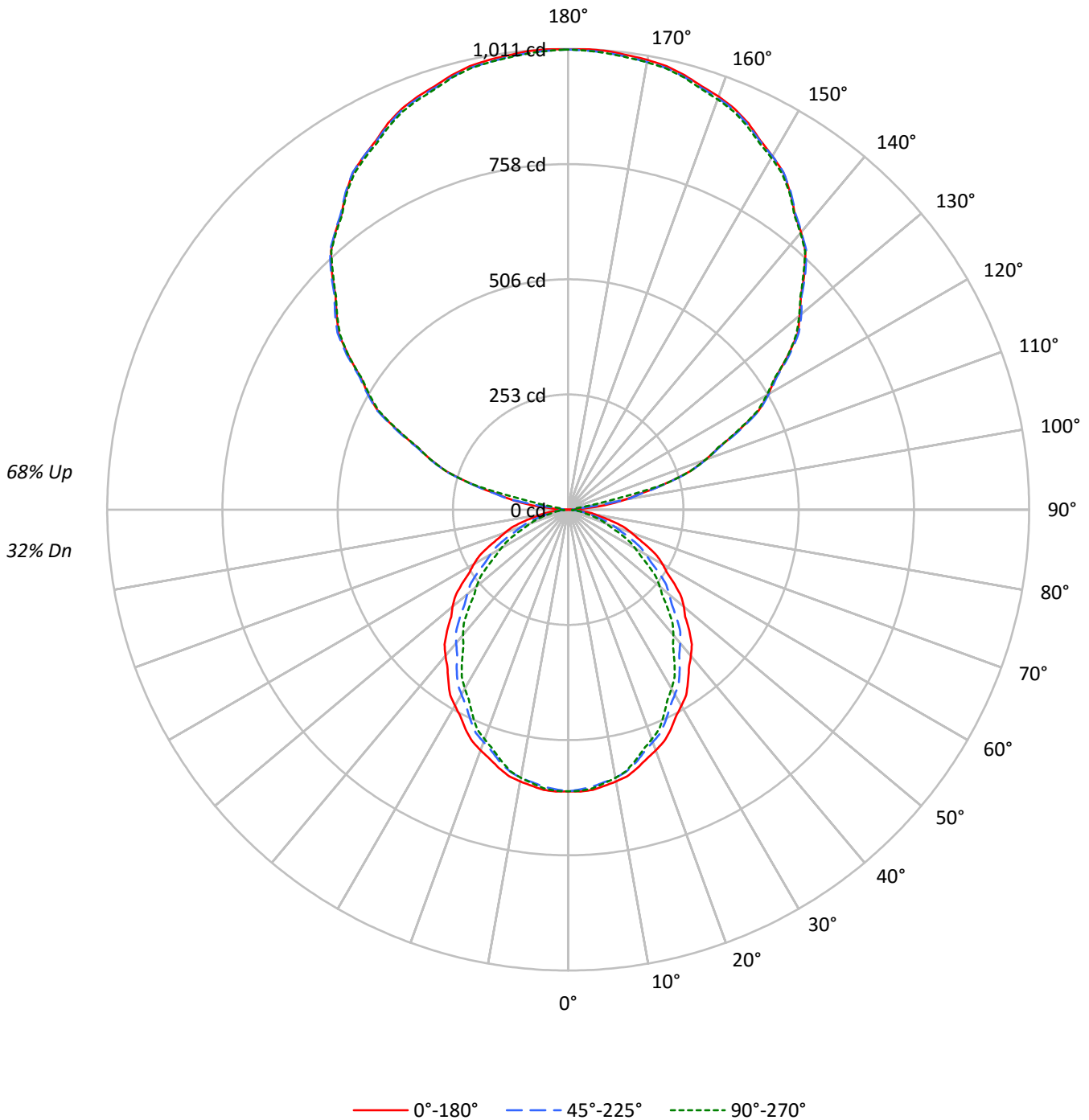
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	78	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	52	50	46	42	38	36	33	28	26	24	20
4	71	61	53	48	64	55	49	44	44	40	36	34	31	28	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	22	20	18	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	14	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	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	1.3
10°-20°	162.4	3.6
20°-30°	235.5	5.2
30°-40°	268.4	5.9
40°-50°	261.6	5.7
50°-60°	220.2	4.8
60°-70°	154.3	3.4
70°-80°	79.3	1.7
80°-90°	22.1	0.5
90°-100°	36.7	0.8
100°-110°	226.1	5.0
110°-120°	410.0	9.0
120°-130°	526.2	11.5
130°-140°	566.0	12.4
140°-150°	531.3	11.6
150°-160°	429.7	9.4
160°-170°	277.9	6.1
170°-180°	95.9	2.1
0°-30°	456.0	10.0
0°-40°	724.3	15.9
0°-60°	1206.1	26.4
0°-90°	1461.9	32.0
90°-120°	672.8	14.7
90°-150°	2296.2	50.3
90°-180°	3100.0	68.0
0°-180°	4561.7	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	12	16	18	3
95°	43	39	12	16	16	54
105°	220	223	223	223	222	233
115°	413	417	418	414	410	409
125°	587	592	593	590	587	524
135°	733	737	736	734	730	564
145°	849	851	851	851	847	531
155°	935	931	932	934	929	431
165°	987	983	983	987	982	279
175°	1010	1005	1006	1011	1005	96
180°	1010	1010	1010	1010	1010	



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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	8.4	8.1	7.8	7.5	7.4	7.6	7.7	7.9	8.0	8.2
90°	0.7	2.1	3.4	4.7	6.1	7.3	8.5	9.7	10.8	12.0	12.8
92.5°	11.5	10.6	9.7	8.7	7.8	7.9	8.9	9.9	10.9	12.0	12.8
95°	42.6	42.1	41.6	41.2	40.7	37.3	30.9	24.6	18.3	12.0	12.8
97.5°	89.1	90.0	90.9	91.7	92.6	86.8	74.3	61.8	49.3	36.9	32.1
100°	124.9	125.4	125.9	126.4	126.9	127.5	128.3	128.9	129.6	130.2	105.4
102.5°	161.5	162.1	162.8	163.4	164.0	164.5	164.9	165.3	165.7	166.1	161.5
105°	219.9	220.7	221.4	222.0	222.7	223.0	223.0	223.0	223.0	223.0	223.0
107.5°	280.7	280.7	280.7	280.7	280.7	280.9	281.2	281.6	282.0	282.3	282.3
110°	320.2	320.2	320.2	320.2	320.2	320.4	320.7	321.1	321.4	321.7	321.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	357.4	357.8	358.2	358.6	359.0	359.3	359.5	359.7	359.9	360.1	359.4
115°	413.0	413.8	414.8	415.6	416.4	416.9	417.1	417.2	417.4	417.6	416.9
117.5°	470.7	470.6	470.6	470.6	470.5	470.8	471.5	472.1	472.7	473.3	472.5
120°	506.5	506.4	506.2	506.0	505.9	506.0	506.5	507.1	507.6	508.1	507.8
122.5°	538.3	539.0	539.6	540.2	540.9	541.3	541.5	541.7	542.0	542.2	541.9
125°	587.4	588.5	589.8	590.9	592.1	592.6	592.6	592.6	592.6	592.6	592.0
127.5°	634.2	635.1	635.9	636.7	637.5	637.9	637.8	637.7	637.6	637.5	637.1
130°	663.0	663.8	664.6	665.5	666.3	666.8	666.9	667.1	667.3	667.4	666.9
132.5°	691.7	692.7	693.7	694.6	695.6	695.9	695.5	695.1	694.8	694.4	694.3
135°	732.6	733.6	734.6	735.6	736.6	736.9	736.6	736.2	735.9	735.6	735.2
137.5°	770.1	771.0	771.8	772.7	773.6	773.9	773.6	773.3	773.0	772.6	772.7
140°	794.7	795.0	795.4	795.7	796.0	796.1	795.9	795.8	795.6	795.4	795.8
142.5°	816.8	817.0	817.2	817.4	817.6	817.8	818.1	818.3	818.5	818.8	818.8
145°	849.3	849.6	850.0	850.3	850.6	850.8	850.8	850.8	850.8	850.8	850.9
147.5°	877.8	877.7	877.6	877.6	877.5	877.6	877.8	877.9	878.1	878.3	878.5
150°	895.6	895.3	895.0	894.6	894.3	894.3	894.6	895.0	895.3	895.6	896.1
152.5°	913.0	912.3	911.6	910.9	910.1	909.9	910.3	910.6	910.9	911.2	911.6
155°	935.3	934.3	933.3	932.3	931.4	931.0	931.4	931.7	932.0	932.3	932.8
157.5°	952.5	952.0	951.4	950.8	950.2	949.9	949.9	950.0	950.0	950.0	950.6
160°	964.5	963.5	962.5	961.5	960.6	960.1	960.3	960.5	960.6	960.8	961.5
162.5°	974.1	973.1	972.1	971.1	970.1	969.7	969.9	970.1	970.2	970.4	971.3
165°	986.9	985.9	985.0	984.0	983.0	982.6	982.7	982.9	983.1	983.2	984.2
167.5°	996.5	995.5	994.5	993.5	992.4	992.0	992.2	992.3	992.5	992.7	993.8
170°	1002.0	1000.8	999.6	998.5	997.2	996.7	996.9	997.1	997.2	997.4	998.8
172.5°	1005.5	1004.4	1003.2	1002.0	1000.9	1000.5	1000.8	1001.1	1001.4	1001.7	1002.8
175°	1009.5	1008.5	1007.4	1006.4	1005.4	1005.0	1005.2	1005.3	1005.5	1005.7	1007.0
177.5°	1011.2	1010.4	1009.7	1008.9	1008.0	1007.6	1007.8	1007.9	1008.0	1008.2	1009.2
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5



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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°	8.3	8.5	8.7	8.8	8.8	8.8	8.8	8.8
90°	13.6	14.4	15.2	16.0	16.5	17.0	17.5	18.0
92.5°	13.6	14.4	15.2	15.9	16.1	16.3	16.6	16.8
95°	13.6	14.4	15.2	15.8	15.8	15.8	15.8	15.8
97.5°	27.5	22.7	18.1	15.8	15.8	15.8	15.8	15.8
100°	80.7	55.8	31.1	18.4	17.7	17.1	16.4	15.8
102.5°	156.7	152.1	147.3	139.4	128.1	116.7	105.4	94.1
105°	223.0	223.0	223.0	222.9	222.8	222.6	222.4	222.3
107.5°	282.4	282.4	282.4	282.2	281.7	281.1	280.6	280.1
110°	320.7	320.2	319.7	319.6	319.7	319.9	320.1	320.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	358.8	358.2	357.5	357.1	356.9	356.7	356.4	356.2
115°	416.2	415.6	414.9	414.0	413.0	412.0	411.0	410.0
117.5°	471.6	470.8	469.9	469.3	468.8	468.4	468.0	467.6
120°	507.5	507.1	506.8	506.1	505.3	504.5	503.7	502.8
122.5°	541.5	541.2	540.9	540.2	539.3	538.3	537.3	536.3
125°	591.3	590.7	590.0	589.4	588.9	588.3	587.9	587.4
127.5°	636.8	636.4	636.1	635.3	634.0	632.8	631.6	630.4
130°	666.5	666.0	665.5	664.8	664.0	663.2	662.3	661.5
132.5°	694.2	694.1	694.0	693.6	692.7	691.9	691.1	690.2
135°	734.9	734.6	734.3	733.6	732.6	731.5	730.5	729.5
137.5°	772.8	772.8	773.0	772.5	771.6	770.8	769.9	769.1
140°	796.1	796.4	796.8	796.4	795.4	794.5	793.5	792.4
142.5°	818.9	819.0	819.0	818.6	817.6	816.6	815.6	814.6
145°	851.1	851.3	851.4	851.0	850.0	849.0	848.1	847.1
147.5°	878.7	878.9	879.1	878.6	877.5	876.3	875.0	873.8
150°	896.4	896.7	897.1	896.6	895.1	893.8	892.5	891.2
152.5°	911.9	912.2	912.6	912.1	910.9	909.8	908.6	907.4
155°	933.3	933.8	934.3	933.9	932.6	931.3	930.0	928.6
157.5°	951.1	951.6	952.1	951.7	950.4	949.1	947.8	946.4
160°	962.1	962.8	963.4	963.1	961.8	960.5	959.2	957.8
162.5°	972.2	973.1	974.1	973.8	972.4	970.9	969.5	968.0
165°	985.2	986.2	987.2	987.0	985.7	984.4	983.1	981.7
167.5°	995.0	996.2	997.4	997.3	995.8	994.3	992.8	991.3
170°	1000.1	1001.5	1002.8	1002.7	1001.2	999.7	998.2	996.7
172.5°	1004.0	1005.2	1006.4	1006.2	1004.8	1003.3	1001.8	1000.3
175°	1008.4	1009.7	1011.0	1010.9	1009.5	1007.9	1006.4	1004.9
177.5°	1010.1	1011.0	1012.0	1011.9	1010.8	1009.8	1008.7	1007.6
180°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5

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