

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: P333175

Luminaire Tested: **S125DIP-S610D590U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333175
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: S125DIP-S610D590U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4864.1 lumens
Efficiency: N/A
Efficacy: 148.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

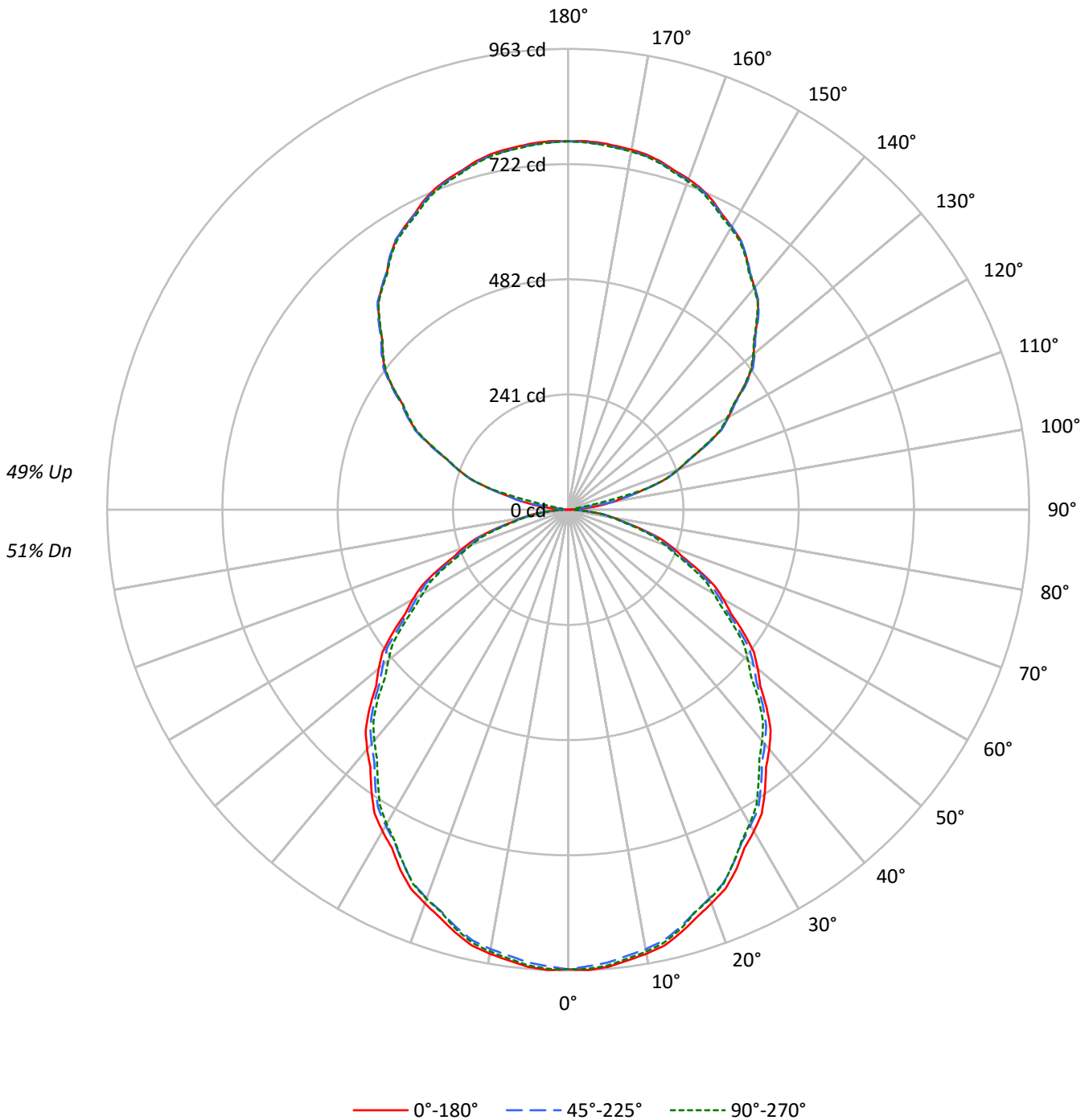
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	49	48	43
2	89	82	76	70	82	76	70	66	65	60	57	54	51	49	45	42	41	36
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	39	37	35	31
4	74	64	56	50	68	59	52	47	51	45	41	43	39	35	35	32	30	26
5	68	57	48	42	63	53	45	40	45	40	35	38	34	31	32	29	26	23
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	25	23	20
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16
9	50	38	30	25	46	36	29	24	31	25	22	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.9
10°-20°	255.8	5.3
20°-30°	377.7	7.8
30°-40°	440.7	9.1
40°-50°	442.6	9.1
50°-60°	388.5	8.0
60°-70°	289.5	6.0
70°-80°	165.5	3.4
80°-90°	49.8	1.0
90°-100°	28.0	0.6
100°-110°	172.4	3.5
110°-120°	312.6	6.4
120°-130°	401.2	8.2
130°-140°	431.5	8.9
140°-150°	405.1	8.3
150°-160°	327.7	6.7
160°-170°	211.9	4.4
170°-180°	73.1	1.5
0°-30°	724.0	14.9
0°-40°	1164.7	23.9
0°-60°	1995.9	41.0
0°-90°	2500.6	51.4
90°-120°	513.0	10.5
90°-150°	1750.8	36.0
90°-180°	2364.0	48.6
0°-180°	4864.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	1	5	9	12	14	4
95°	32	30	9	12	12	41
105°	168	170	170	170	169	178
115°	315	318	318	316	313	312
125°	448	452	452	450	448	400
135°	559	562	561	560	556	430
145°	648	649	649	649	646	405
155°	713	710	711	712	708	328
165°	752	749	750	753	748	212
175°	770	766	767	771	766	73
180°	770	770	770	770	770	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.5	16.7	16.9	17.1	17.3	17.5	17.5	17.5	17.6	17.6	17.8
90°	0.6	1.6	2.6	3.6	4.6	5.6	6.5	7.4	8.2	9.1	9.8
92.5°	8.8	8.1	7.4	6.7	5.9	6.0	6.8	7.6	8.3	9.1	9.8
95°	32.5	32.1	31.8	31.4	31.0	28.4	23.6	18.8	13.9	9.1	9.8
97.5°	67.9	68.6	69.3	69.9	70.6	66.2	56.7	47.1	37.6	28.1	24.5
100°	95.3	95.7	96.0	96.4	96.8	97.2	97.8	98.3	98.8	99.3	80.4
102.5°	123.1	123.6	124.1	124.6	125.0	125.4	125.7	126.1	126.4	126.7	123.1
105°	167.7	168.2	168.8	169.3	169.8	170.0	170.0	170.0	170.0	170.0	170.0
107.5°	214.1	214.1	214.1	214.1	214.1	214.2	214.4	214.7	215.0	215.2	215.2
110°	244.2	244.2	244.2	244.2	244.2	244.3	244.6	244.8	245.1	245.3	245.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	272.5	272.8	273.1	273.4	273.7	273.9	274.1	274.2	274.4	274.5	274.1
115°	314.9	315.6	316.2	316.8	317.5	317.9	318.0	318.1	318.2	318.4	317.9
117.5°	358.9	358.8	358.8	358.8	358.8	359.0	359.5	360.0	360.4	360.9	360.3
120°	386.3	386.1	386.0	385.9	385.7	385.9	386.3	386.6	387.0	387.4	387.1
122.5°	410.4	410.9	411.4	411.9	412.4	412.7	412.9	413.1	413.2	413.4	413.2
125°	447.9	448.8	449.6	450.5	451.4	451.9	451.9	451.9	451.9	451.9	451.4
127.5°	483.6	484.2	484.9	485.5	486.1	486.4	486.3	486.3	486.2	486.1	485.8
130°	505.5	506.1	506.8	507.4	508.0	508.4	508.5	508.7	508.8	508.9	508.5
132.5°	527.4	528.1	528.9	529.6	530.3	530.6	530.3	530.0	529.7	529.5	529.4
135°	558.6	559.3	560.1	560.8	561.6	561.9	561.6	561.3	561.1	560.8	560.6
137.5°	587.2	587.9	588.5	589.2	589.8	590.1	589.8	589.6	589.4	589.1	589.2
140°	605.9	606.2	606.4	606.7	606.9	607.0	606.9	606.7	606.6	606.5	606.7
142.5°	622.8	623.0	623.1	623.3	623.4	623.6	623.8	623.9	624.1	624.3	624.3
145°	647.6	647.8	648.1	648.3	648.6	648.7	648.7	648.7	648.7	648.7	648.8
147.5°	669.2	669.2	669.1	669.1	669.0	669.1	669.2	669.4	669.5	669.7	669.9
150°	682.9	682.7	682.4	682.2	681.9	681.9	682.2	682.4	682.7	682.9	683.2
152.5°	696.2	695.6	695.1	694.5	693.9	693.8	694.0	694.3	694.5	694.8	695.1
155°	713.2	712.4	711.7	710.9	710.1	709.9	710.1	710.4	710.6	710.9	711.3
157.5°	726.3	725.8	725.4	724.9	724.5	724.3	724.3	724.3	724.3	724.4	724.8
160°	735.4	734.7	733.9	733.1	732.4	732.1	732.2	732.3	732.4	732.6	733.1
162.5°	742.7	742.0	741.2	740.4	739.7	739.4	739.5	739.6	739.7	739.9	740.6
165°	752.5	751.8	751.0	750.3	749.5	749.2	749.3	749.4	749.6	749.7	750.4
167.5°	759.8	759.1	758.3	757.5	756.7	756.4	756.5	756.6	756.7	756.9	757.8
170°	764.0	763.1	762.2	761.3	760.4	760.0	760.1	760.3	760.4	760.5	761.5
172.5°	766.7	765.8	764.9	764.0	763.1	762.8	763.0	763.3	763.5	763.7	764.6
175°	769.7	768.9	768.1	767.4	766.6	766.3	766.4	766.6	766.7	766.8	767.8
177.5°	771.0	770.4	769.8	769.2	768.6	768.3	768.4	768.5	768.6	768.7	769.5
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	17.9	18.0	18.1	18.1	17.9	17.7	17.5	17.3
90°	10.4	11.0	11.7	12.2	12.6	12.9	13.3	13.7
92.5°	10.4	11.0	11.7	12.1	12.2	12.4	12.6	12.8
95°	10.4	11.0	11.7	12.0	12.0	12.0	12.0	12.0
97.5°	20.9	17.3	13.8	12.0	12.0	12.0	12.0	12.0
100°	61.5	42.6	23.7	14.0	13.5	13.0	12.5	12.0
102.5°	119.5	115.9	112.4	106.3	97.6	89.0	80.4	71.8
105°	170.0	170.0	170.0	170.0	169.8	169.7	169.6	169.4
107.5°	215.3	215.3	215.3	215.1	214.8	214.4	214.0	213.6
110°	244.6	244.2	243.8	243.7	243.8	243.9	244.1	244.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	273.6	273.1	272.6	272.3	272.1	271.9	271.8	271.6
115°	317.3	316.8	316.3	315.7	314.9	314.2	313.4	312.7
117.5°	359.6	358.9	358.3	357.8	357.5	357.1	356.8	356.5
120°	386.9	386.6	386.4	385.9	385.3	384.7	384.0	383.4
122.5°	412.9	412.7	412.4	411.9	411.2	410.4	409.7	409.0
125°	450.9	450.3	449.8	449.4	449.0	448.6	448.3	447.9
127.5°	485.5	485.3	485.0	484.4	483.4	482.5	481.6	480.6
130°	508.2	507.8	507.4	506.9	506.3	505.6	505.0	504.4
132.5°	529.3	529.2	529.2	528.8	528.2	527.5	526.9	526.3
135°	560.3	560.1	559.8	559.3	558.6	557.8	557.0	556.3
137.5°	589.2	589.3	589.3	589.0	588.4	587.7	587.1	586.4
140°	607.0	607.2	607.5	607.2	606.5	605.7	605.0	604.2
142.5°	624.4	624.4	624.5	624.1	623.4	622.6	621.8	621.1
145°	649.0	649.1	649.2	648.9	648.1	647.4	646.6	645.8
147.5°	670.0	670.2	670.3	669.9	669.0	668.1	667.2	666.3
150°	683.4	683.7	683.9	683.6	682.6	681.5	680.5	679.5
152.5°	695.3	695.6	695.8	695.5	694.6	693.7	692.7	691.8
155°	711.7	712.0	712.4	712.1	711.1	710.1	709.1	708.0
157.5°	725.2	725.6	726.0	725.7	724.7	723.6	722.6	721.6
160°	733.6	734.1	734.6	734.3	733.3	732.3	731.3	730.3
162.5°	741.3	742.0	742.7	742.5	741.4	740.3	739.2	738.0
165°	751.2	752.0	752.7	752.6	751.6	750.6	749.6	748.5
167.5°	758.7	759.6	760.5	760.4	759.3	758.1	757.0	755.8
170°	762.6	763.6	764.6	764.5	763.4	762.2	761.1	760.0
172.5°	765.5	766.5	767.4	767.3	766.1	765.0	763.8	762.7
175°	768.8	769.8	770.9	770.8	769.7	768.5	767.4	766.2
177.5°	770.2	770.9	771.6	771.5	770.7	769.9	769.1	768.3
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7

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