

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: P333218-935

Luminaire Tested: **S125DIP-S850D590U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333218-935
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: S125DIP-S850D590U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4587.6 lumens
Efficiency: N/A
Efficacy: 113.8 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: General Diffuse

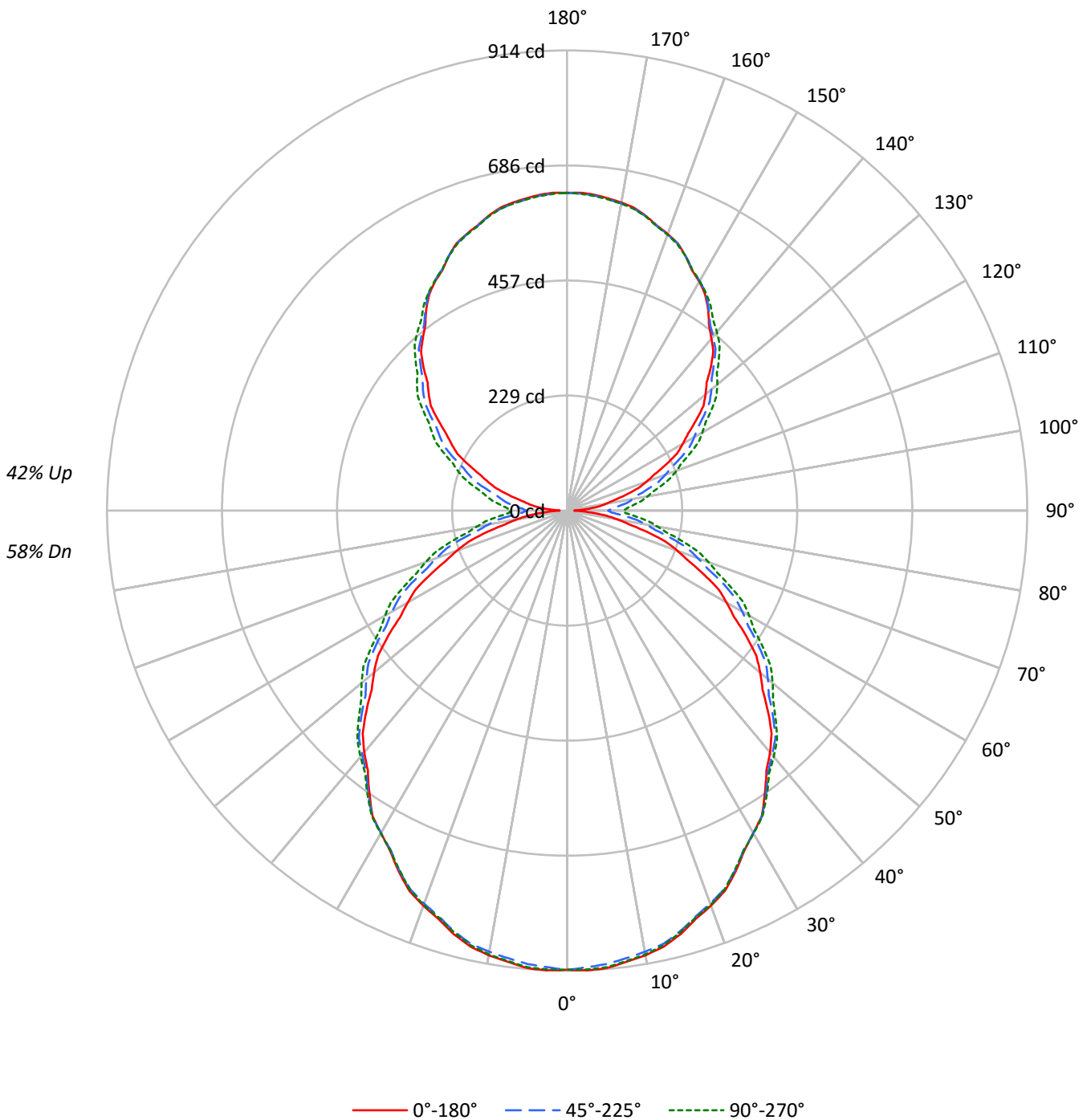
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333218-935

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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	109	109	109	109	102	102	102	102	88	88	88		75	75	75		63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70		65	63	61		55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58		56	53	50		48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48		50	45	42		42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41		44	39	36		37	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35		39	35	31		34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30		36	31	27		30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27		32	27	24		28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24		30	25	21		25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21		27	22	19		23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19		25	20	17		22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.9
10°-20°	244.8	5.3
20°-30°	364.1	7.9
30°-40°	431.3	9.4
40°-50°	445.9	9.7
50°-60°	410.8	9.0
60°-70°	332.0	7.2
70°-80°	222.4	4.8
80°-90°	116.7	2.5
90°-100°	107.0	2.3
100°-110°	172.5	3.8
110°-120°	243.4	5.3
120°-130°	296.4	6.5
130°-140°	319.7	7.0
140°-150°	307.2	6.7
150°-160°	256.7	5.6
160°-170°	170.6	3.7
170°-180°	59.7	1.3
0°-30°	695.2	15.2
0°-40°	1126.5	24.6
0°-60°	1983.2	43.2
0°-90°	2654.3	57.9
90°-120°	523.0	11.4
90°-150°	1446.3	31.5
90°-180°	1933.0	42.1
0°-180°	4587.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	15	47	81	103	112	11
95°	44	68	103	125	134	43
105°	120	138	167	187	195	128
115°	217	226	250	265	270	215
125°	312	316	333	346	350	280
135°	404	406	412	424	426	311
145°	488	489	490	494	497	305
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.0	34.5	41.1	47.6	54.2	60.9	67.8	74.6	81.5	88.5	93.2
90°	14.8	22.0	29.3	36.5	43.7	51.1	58.6	66.1	73.7	81.2	86.3
92.5°	24.8	31.3	37.7	44.3	50.7	57.9	65.8	73.6	81.5	89.3	94.5
95°	43.6	48.9	54.3	59.7	65.1	71.7	79.6	87.4	95.2	103.1	108.2
97.5°	63.6	68.4	73.1	77.8	82.6	88.9	96.9	105.0	113.0	121.1	125.9
100°	78.6	82.7	87.0	91.1	95.3	101.3	109.1	116.8	124.6	132.4	137.5
102.5°	94.8	99.1	103.4	107.6	111.9	117.5	124.5	131.4	138.3	145.3	150.3
105°	120.0	123.7	127.5	131.2	134.9	140.1	146.7	153.3	160.0	166.6	171.2
107.5°	148.0	151.3	154.5	157.8	161.0	165.7	172.0	178.2	184.4	190.7	194.9
110°	167.4	170.3	173.2	176.2	179.1	183.5	189.4	195.3	201.1	207.1	211.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	187.8	190.0	192.2	194.4	196.6	200.5	206.4	212.2	218.0	223.9	227.6
115°	217.1	218.9	220.8	222.6	224.4	228.0	233.3	238.8	244.1	249.5	253.0
117.5°	246.4	247.5	248.7	249.8	250.9	254.0	259.1	264.2	269.2	274.3	277.8
120°	265.3	266.4	267.6	268.7	269.8	272.8	277.4	282.1	286.8	291.4	294.9
122.5°	285.0	285.5	285.9	286.5	286.9	289.5	294.2	298.9	303.6	308.2	311.4
125°	312.5	313.0	313.4	313.9	314.4	316.6	320.7	324.8	328.9	332.9	335.9
127.5°	341.1	341.3	341.5	341.6	341.8	343.5	347.0	350.3	353.8	357.1	360.0
130°	358.8	359.1	359.5	359.8	360.2	361.9	364.8	367.8	370.8	373.8	376.5
132.5°	375.7	376.6	377.5	378.3	379.2	380.6	382.7	384.9	386.9	389.1	391.8
135°	403.6	404.1	404.5	404.9	405.4	406.4	407.9	409.4	410.9	412.3	414.9
137.5°	429.7	430.2	430.7	431.1	431.6	432.3	433.3	434.1	435.1	436.0	438.4
140°	445.9	446.4	447.0	447.5	448.1	448.6	449.2	449.7	450.2	450.7	453.1
142.5°	462.8	463.1	463.4	463.7	464.0	464.3	464.9	465.3	465.7	466.2	468.2
145°	487.7	487.9	488.1	488.4	488.6	488.9	489.2	489.6	489.9	490.2	491.2
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.6
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	97.8	102.5	107.2	110.3	111.8	113.2	114.7	116.1
90°	91.4	96.5	101.7	105.0	106.8	108.5	110.2	111.9
92.5°	99.6	104.7	109.9	113.2	114.9	116.5	118.1	119.8
95°	113.4	118.5	123.6	127.0	128.6	130.3	131.8	133.5
97.5°	130.8	135.7	140.6	143.8	145.3	146.7	148.3	149.7
100°	142.7	147.8	153.0	156.3	157.7	159.1	160.5	162.0
102.5°	155.4	160.5	165.6	168.8	170.4	171.9	173.3	174.9
105°	175.8	180.5	185.1	188.3	190.0	191.7	193.4	195.1
107.5°	199.2	203.5	207.8	210.4	211.6	212.8	214.0	215.3
110°	215.2	219.4	223.5	226.2	227.5	228.8	230.0	231.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	231.4	235.1	238.9	241.4	242.6	243.8	245.0	246.2
115°	256.5	259.9	263.4	265.7	266.7	267.9	268.9	270.0
117.5°	281.2	284.7	288.2	290.3	291.3	292.2	293.1	294.0
120°	298.3	301.6	305.0	307.0	307.8	308.6	309.4	310.0
122.5°	314.5	317.6	320.8	322.8	323.6	324.5	325.3	326.1
125°	338.9	341.8	344.8	346.7	347.6	348.5	349.4	350.3
127.5°	362.8	365.7	368.4	370.3	371.3	372.2	373.2	374.1
130°	379.2	381.9	384.5	386.2	387.0	387.8	388.6	389.3
132.5°	394.4	397.1	399.8	401.3	401.9	402.4	402.9	403.5
135°	417.5	420.1	422.7	424.3	424.8	425.4	425.9	426.5
137.5°	440.9	443.4	445.9	447.2	447.5	447.7	448.0	448.2
140°	455.6	458.0	460.4	461.7	461.9	462.2	462.4	462.7
142.5°	470.2	472.2	474.2	475.3	475.5	475.8	476.0	476.3
145°	492.1	493.2	494.1	494.9	495.3	495.8	496.3	496.8
147.5°	513.2	513.8	514.4	514.4	514.0	513.7	513.2	512.9
150°	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.4
152.5°	539.7	539.9	540.2	540.1	539.8	539.4	539.1	538.7
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)