

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: P333227-830

Luminaire Tested: **S125DIP-S850D810U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333227-830
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-S850D810U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5737.4 lumens
Efficiency: N/A
Efficacy: 125.0 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

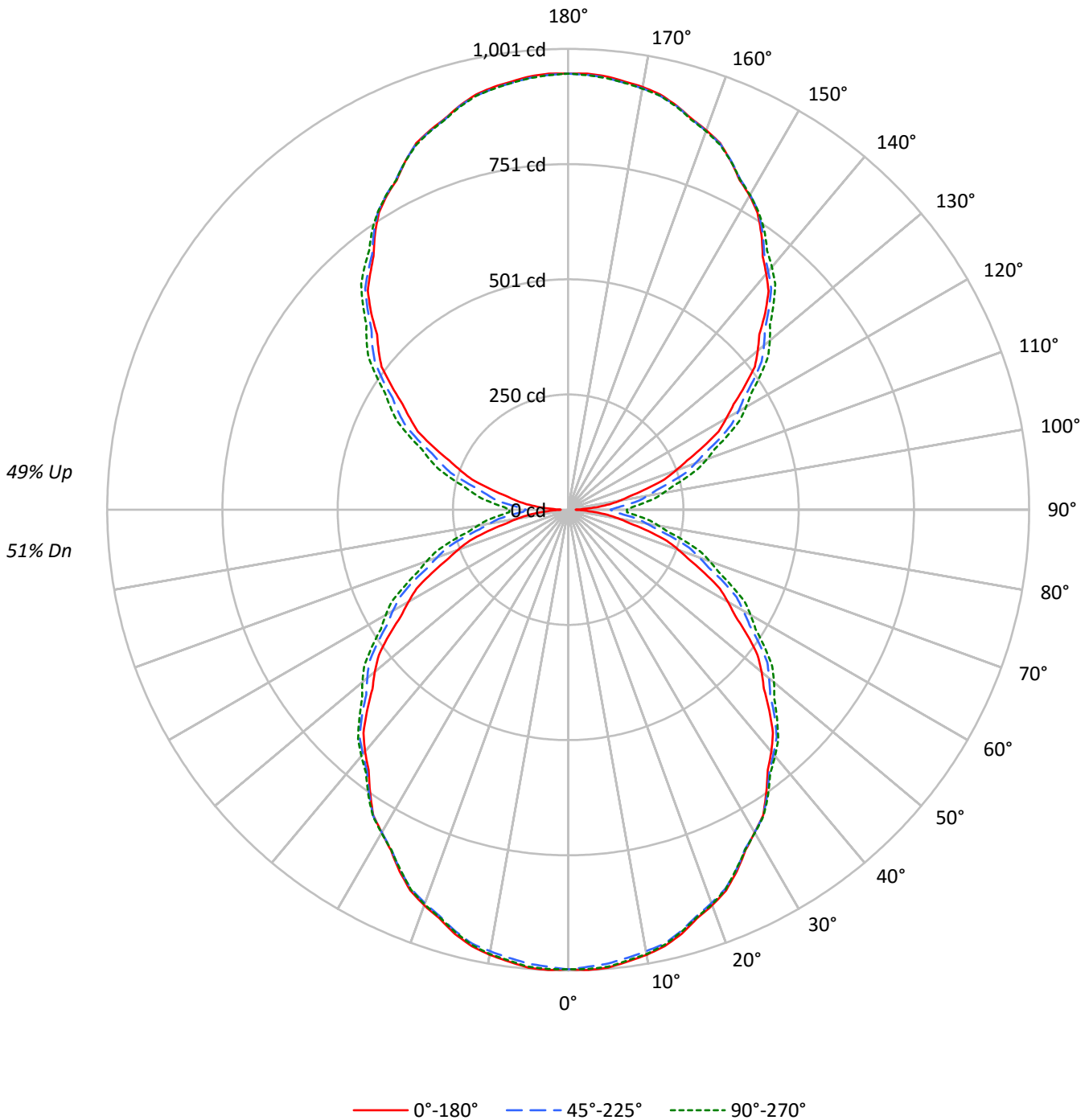
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333227-830

CATALOG NUMBER: S125DIP-S850D810U830-4F0-1E-UDD-D1

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	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6448	6448	6448
5°	6461	6330	6350
10°	6415	6216	6207
15°	6340	6081	6026
20°	6237	5914	5845
25°	6114	5735	5621
30°	5965	5538	5419
35°	5827	5357	5233
40°	5686	5166	5046
45°	5526	5003	4880
50°	5375	4826	4733
55°	5192	4659	4561
60°	4992	4468	4385
65°	4783	4270	4187
70°	4546	3997	3985
75°	4170	3735	3735
80°	3682	3416	3463
85°	3220	3204	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	1.6
10°-20°	268.0	4.7
20°-30°	398.6	6.9
30°-40°	472.1	8.2
40°-50°	488.1	8.5
50°-60°	449.7	7.8
60°-70°	363.5	6.3
70°-80°	243.4	4.2
80°-90°	128.3	2.2
90°-100°	134.3	2.3
100°-110°	239.6	4.2
110°-120°	352.3	6.1
120°-130°	437.4	7.6
130°-140°	476.6	8.3
140°-150°	460.3	8.0
150°-160°	385.2	6.7
160°-170°	256.0	4.5
170°-180°	89.6	1.6
0°-30°	761.0	13.3
0°-40°	1233.2	21.5
0°-60°	2171.0	37.8
0°-90°	2906.2	50.7
90°-120°	726.1	12.7
90°-150°	2100.4	36.6
90°-180°	2831.0	49.3
0°-180°	5737.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	996	990	997	997	95
15°	954	954	948	953	950	268
25°	866	869	863	867	862	399
35°	750	756	754	757	757	469
45°	618	628	633	640	641	477
55°	475	490	506	516	521	424
65°	327	349	373	387	392	324
75°	180	206	237	256	261	191
85°	54	86	120	141	150	57
90°	16	54	92	117	127	13
95°	61	88	128	154	163	61
105°	177	197	230	253	263	189
115°	324	334	360	376	382	320
125°	468	472	491	505	510	418
135°	605	609	616	628	631	466
145°	731	733	736	740	742	457
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1000.8	1000.5	1000.1	999.8	999.4	998.6	997.4	996.2	994.9	993.7	994.9
5°	998.4	998.1	997.6	997.1	996.7	995.7	994.2	992.7	991.2	989.7	991.4
7.5°	989.7	989.5	989.3	989.1	988.9	988.1	986.6	985.0	983.4	981.8	983.4
10°	981.8	981.8	981.8	981.8	981.8	981.0	979.2	977.5	975.7	974.0	975.5
12.5°	970.8	971.0	971.2	971.4	971.6	970.9	969.6	968.2	966.8	965.4	966.6
15°	953.5	953.7	953.9	954.0	954.3	953.7	952.2	950.6	949.0	947.5	948.9
17.5°	930.8	931.1	931.6	932.0	932.5	931.9	930.4	928.9	927.4	925.9	926.8
20°	914.3	914.7	915.1	915.6	916.1	915.5	914.0	912.5	910.9	909.4	910.0
22.5°	895.5	896.3	897.0	897.9	898.6	898.1	896.5	894.8	893.1	891.4	892.2
25°	866.3	867.0	867.6	868.3	868.9	868.6	867.3	866.0	864.7	863.4	864.2
27.5°	833.8	834.8	835.8	836.7	837.6	837.4	835.9	834.4	832.9	831.5	832.1
30°	809.5	810.9	812.2	813.4	814.7	814.7	813.4	812.2	810.9	809.5	810.0
32.5°	787.6	788.7	789.9	791.0	792.1	792.2	791.3	790.3	789.4	788.4	788.8
35°	749.8	751.4	752.9	754.4	755.9	756.4	755.7	755.1	754.4	753.8	754.4
37.5°	712.0	713.4	714.8	716.2	717.7	718.2	717.9	717.7	717.6	717.4	718.2
40°	686.2	688.0	689.7	691.4	693.1	693.9	693.7	693.5	693.2	693.1	693.9
42.5°	658.0	660.3	662.5	664.8	667.0	668.5	668.9	669.4	669.9	670.3	671.4
45°	617.6	620.1	622.5	624.8	627.3	629.0	630.1	631.1	632.3	633.3	634.9
47.5°	576.4	578.6	580.8	583.1	585.2	587.3	589.2	591.1	592.9	594.7	597.0
50°	548.2	550.5	553.0	555.3	557.7	560.2	562.5	565.0	567.3	569.7	572.1
52.5°	518.4	521.3	524.2	527.2	530.1	533.0	535.9	538.9	541.8	544.7	547.2
55°	474.8	478.2	481.7	485.2	488.7	492.2	495.7	499.2	502.6	506.1	508.5
57.5°	430.1	434.3	438.5	442.6	446.9	450.9	455.0	458.9	462.9	466.9	469.7
60°	400.4	404.7	409.1	413.4	417.7	422.2	426.5	430.8	435.2	439.5	442.8
62.5°	371.4	375.7	380.1	384.5	388.8	393.3	398.0	402.7	407.4	412.1	415.8
65°	327.0	332.0	337.0	342.0	346.9	352.0	357.3	362.5	367.8	373.0	376.3
67.5°	285.0	289.9	294.7	299.5	304.3	309.4	314.7	320.1	325.4	330.6	334.6
70°	254.5	259.5	264.5	269.6	274.6	279.8	285.5	291.2	296.8	302.5	306.6
72.5°	224.8	229.9	235.1	240.3	245.4	251.1	257.3	263.5	269.7	275.9	280.3
75°	180.1	185.8	191.4	197.1	202.7	209.1	216.0	223.0	229.9	236.9	241.2
77.5°	137.2	143.7	150.3	156.8	163.3	169.9	176.6	183.3	190.0	196.8	201.5
80°	110.7	117.2	123.7	130.2	136.8	143.6	151.1	158.4	165.9	173.2	178.0
82.5°	86.3	93.2	100.1	107.0	113.9	121.0	128.7	136.2	143.7	151.4	156.0
85°	53.8	61.0	68.2	75.4	82.6	89.9	97.6	105.2	112.8	120.4	125.2
87.5°	30.7	37.9	45.1	52.3	59.6	67.0	74.6	82.3	89.9	97.6	102.6
90°	16.4	24.7	32.9	41.2	49.5	57.9	66.4	74.9	83.5	92.1	97.9
92.5°	32.0	39.3	46.7	54.0	61.4	69.6	78.5	87.5	96.4	105.5	111.3
95°	60.6	66.6	72.6	78.6	84.5	92.1	101.1	110.2	119.1	128.2	134.1
97.5°	91.1	96.3	101.6	106.8	112.1	119.3	128.8	138.2	147.5	156.9	162.6
100°	114.0	118.5	123.1	127.6	132.2	139.0	148.2	157.2	166.4	175.4	181.4
102.5°	138.6	143.4	148.3	153.2	158.1	164.4	172.3	180.1	188.0	195.9	201.9
105°	176.8	181.2	185.5	189.7	194.1	199.9	207.5	215.0	222.4	230.0	235.4
107.5°	219.3	223.1	226.9	230.6	234.4	239.8	246.9	253.8	260.9	267.9	272.7
110°	248.6	252.0	255.4	258.9	262.3	267.3	273.9	280.5	287.1	293.6	298.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	279.3	281.7	284.3	286.8	289.3	293.9	300.4	306.9	313.5	320.0	324.1
115°	323.6	325.7	327.9	330.1	332.2	336.3	342.3	348.3	354.3	360.2	364.0
117.5°	368.0	369.3	370.5	371.8	373.2	376.6	382.3	387.9	393.5	399.2	403.0
120°	396.2	397.8	399.2	400.7	402.2	405.5	410.7	415.8	420.9	426.1	429.8
122.5°	426.1	426.7	427.3	427.9	428.6	431.5	436.7	442.0	447.2	452.5	455.9
125°	467.5	468.3	469.0	469.8	470.6	473.3	477.7	482.2	486.7	491.3	494.5
127.5°	510.8	511.0	511.4	511.8	512.1	514.2	517.9	521.7	525.5	529.2	532.3
130°	537.2	537.9	538.5	539.0	539.7	541.7	545.1	548.5	551.8	555.2	558.1
132.5°	563.1	564.3	565.6	566.9	568.3	570.0	572.3	574.6	576.8	579.2	582.0
135°	604.8	605.6	606.3	607.2	607.9	609.2	610.9	612.5	614.2	615.9	618.7
137.5°	644.1	644.9	645.7	646.5	647.2	648.2	649.3	650.4	651.5	652.6	655.3
140°	668.7	669.6	670.3	671.2	672.0	672.8	673.4	674.2	674.9	675.6	678.3
142.5°	694.1	694.6	695.1	695.6	696.2	696.7	697.4	698.0	698.7	699.4	701.6
145°	731.4	731.8	732.3	732.6	733.1	733.6	734.1	734.5	735.1	735.6	736.6
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	769.0
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	996.2	997.4	998.6	999.2	999.0	998.8	998.6	998.4
5°	993.2	994.9	996.6	997.4	997.1	996.9	996.7	996.6
7.5°	984.9	986.4	987.9	988.5	988.4	988.2	987.9	987.7
10°	977.0	978.5	980.1	980.7	980.5	980.3	980.1	979.9
12.5°	967.7	968.9	970.1	970.3	969.8	969.2	968.7	968.1
15°	950.2	951.5	952.8	953.0	952.2	951.2	950.4	949.5
17.5°	927.8	928.9	929.8	930.1	929.5	929.1	928.5	928.0
20°	910.7	911.3	912.0	912.3	912.3	912.3	912.3	912.3
22.5°	893.1	893.8	894.7	894.8	894.3	893.8	893.2	892.8
25°	865.2	866.0	866.9	866.8	865.6	864.6	863.5	862.4
27.5°	832.6	833.3	833.9	834.1	833.6	833.2	832.8	832.5
30°	810.4	810.9	811.2	811.4	811.2	811.0	810.8	810.5
32.5°	789.3	789.7	790.1	790.2	790.0	789.9	789.6	789.4
35°	755.1	755.7	756.4	756.7	756.7	756.7	756.7	756.7
37.5°	719.1	719.9	720.8	721.2	721.1	721.0	721.0	720.9
40°	694.7	695.7	696.5	697.2	697.6	698.0	698.5	698.9
42.5°	672.4	673.4	674.5	675.0	675.1	675.2	675.3	675.4
45°	636.4	637.9	639.4	640.3	640.6	640.7	640.9	641.2
47.5°	599.2	601.4	603.6	605.0	605.5	606.0	606.4	606.9
50°	574.5	576.9	579.3	580.8	581.5	582.1	582.8	583.4
52.5°	549.8	552.3	554.9	556.5	556.9	557.4	557.9	558.4
55°	510.9	513.3	515.7	517.3	518.1	519.1	519.9	520.8
57.5°	472.4	475.1	477.9	479.6	480.2	480.9	481.5	482.2
60°	446.0	449.3	452.6	454.5	455.2	455.8	456.5	457.1
62.5°	419.3	422.9	426.6	428.8	429.6	430.5	431.2	432.1
65°	379.5	382.8	386.0	388.0	389.0	389.8	390.7	391.5
67.5°	338.6	342.5	346.5	349.0	350.2	351.3	352.4	353.5
70°	310.8	314.9	319.1	321.7	323.0	324.3	325.6	327.0
72.5°	284.8	289.3	293.8	296.5	297.5	298.4	299.4	300.3
75°	245.6	250.0	254.3	257.0	258.1	259.2	260.2	261.4
77.5°	206.3	211.1	215.9	218.8	219.6	220.5	221.3	222.3
80°	182.9	187.7	192.4	195.2	196.1	197.0	197.8	198.7
82.5°	160.5	165.1	169.8	172.9	174.5	176.0	177.6	179.2
85°	130.0	134.8	139.6	142.8	144.6	146.3	148.1	149.8
87.5°	107.8	113.0	118.2	121.6	123.2	124.8	126.4	128.1
90°	103.7	109.5	115.4	119.2	121.3	123.3	125.3	127.3
92.5°	117.3	123.2	129.0	133.0	134.9	136.8	138.6	140.5
95°	140.1	146.0	151.9	155.8	157.7	159.6	161.4	163.2
97.5°	168.2	173.9	179.6	183.1	184.8	186.5	188.2	189.9
100°	187.5	193.5	199.5	203.4	205.1	206.7	208.3	209.9
102.5°	207.8	213.9	219.9	223.8	225.6	227.2	229.0	230.8
105°	240.6	246.0	251.3	255.0	257.0	259.0	261.0	263.1
107.5°	277.5	282.3	287.1	290.1	291.4	292.8	294.1	295.4
110°	302.9	307.6	312.2	315.1	316.5	317.8	319.2	320.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	328.4	332.5	336.8	339.5	340.7	342.0	343.2	344.4
115°	367.8	371.6	375.2	377.7	378.8	380.0	381.2	382.3
117.5°	406.8	410.7	414.5	416.8	417.6	418.5	419.3	420.1
120°	433.6	437.2	440.9	443.1	443.7	444.4	445.1	445.7
122.5°	459.3	462.7	466.1	468.2	468.9	469.7	470.5	471.3
125°	497.6	500.7	503.9	506.0	506.8	507.7	508.7	509.6
127.5°	535.4	538.4	541.4	543.5	544.3	545.3	546.2	547.1
130°	560.9	563.8	566.7	568.5	569.3	570.0	570.8	571.6
132.5°	584.9	587.8	590.7	592.4	592.8	593.2	593.7	594.2
135°	621.5	624.3	627.2	628.9	629.2	629.7	630.1	630.6
137.5°	658.1	660.9	663.6	665.1	665.2	665.2	665.2	665.2
140°	681.1	683.7	686.5	687.9	688.0	688.0	688.1	688.1
142.5°	703.9	706.2	708.3	709.5	709.5	709.6	709.6	709.7
145°	737.7	738.9	739.9	740.6	741.0	741.4	741.8	742.2
147.5°	769.8	770.5	771.3	771.3	770.5	769.8	769.1	768.4
150°	790.1	790.1	790.1	790.0	789.9	789.9	789.7	789.6
152.5°	809.7	810.1	810.5	810.5	809.9	809.4	808.8	808.2
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

(END OF REPORT)