

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: P333237-935

Luminaire Tested: **S125DIP-S850D1035U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D1035U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6024.4 lumens
Efficiency: N/A
Efficacy: 115.9 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

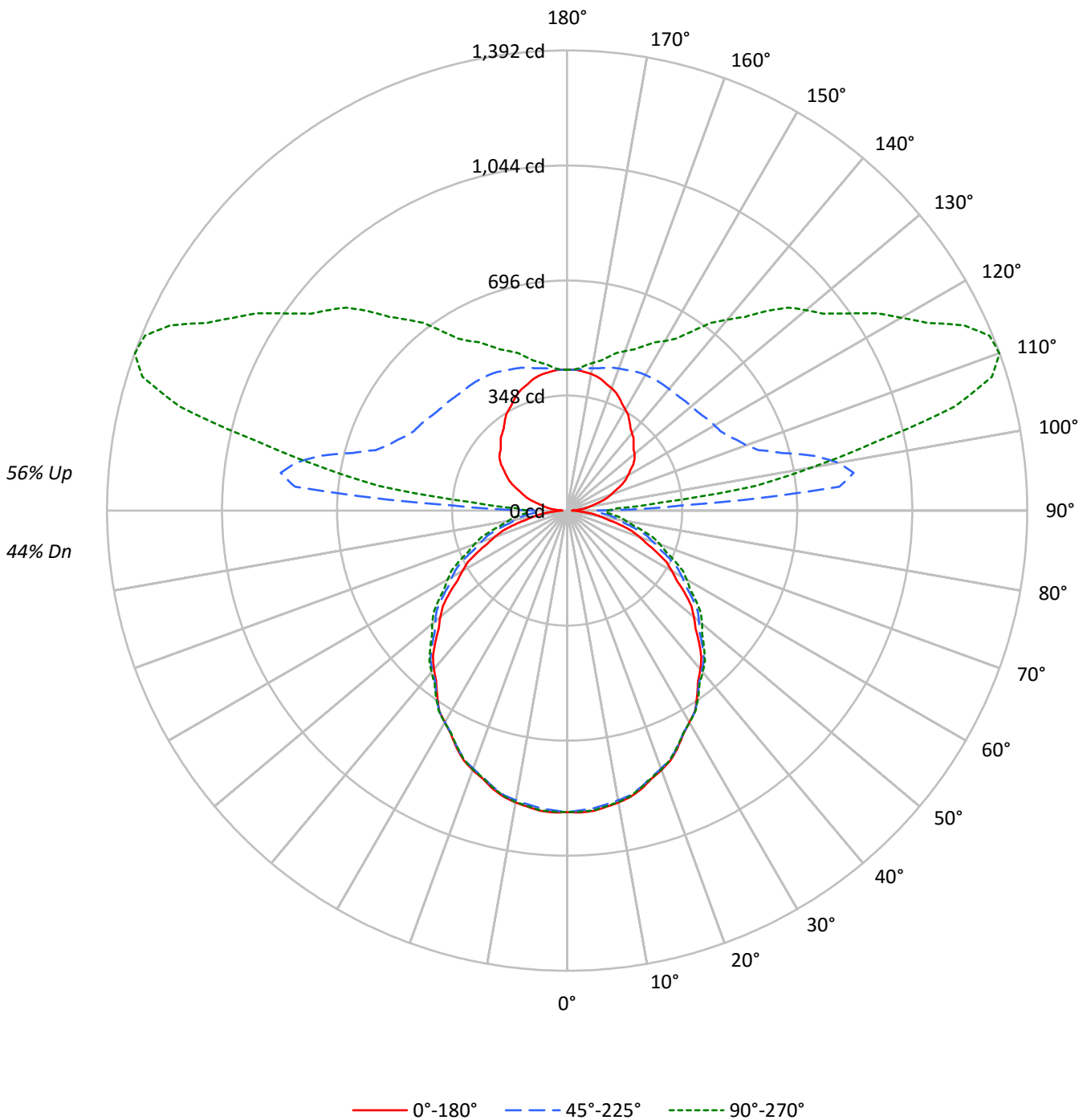
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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	1.4
10°-20°	244.8	4.1
20°-30°	364.1	6.0
30°-40°	431.3	7.2
40°-50°	445.9	7.4
50°-60°	410.8	6.8
60°-70°	332.0	5.5
70°-80°	222.4	3.7
80°-90°	117.7	2.0
90°-100°	373.7	6.2
100°-110°	712.0	11.8
110°-120°	655.4	10.9
120°-130°	523.4	8.7
130°-140°	413.4	6.9
140°-150°	307.6	5.1
150°-160°	215.4	3.6
160°-170°	126.9	2.1
170°-180°	41.3	0.7
0°-30°	695.2	11.5
0°-40°	1126.5	18.7
0°-60°	1983.2	32.9
0°-90°	2655.3	44.1
90°-120°	1741.1	28.9
90°-150°	2985.5	49.6
90°-180°	3369.0	55.9
0°-180°	6024.4	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	51	87	111	120	11
95°	40	119	827	430	293	39
105°	105	159	672	1293	1212	111
115°	179	222	535	1129	1325	176
125°	244	286	500	892	1039	217
135°	284	340	483	737	854	220
145°	329	376	478	600	663	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



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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°	28.1	34.6	41.3	48.0	54.7	61.6	68.5	75.6	82.6	89.6	94.5
90°	15.2	22.4	30.5	38.6	46.6	54.9	62.5	70.9	78.6	87.0	92.5
92.5°	23.3	31.5	44.6	61.1	81.8	113.3	167.1	252.8	345.1	347.6	299.2
95°	40.0	46.0	58.0	72.7	96.8	141.4	240.1	435.9	679.9	826.8	814.9
97.5°	57.7	63.4	72.8	86.9	108.6	142.0	209.4	354.5	609.2	874.1	1007.9
100°	70.0	75.9	83.5	97.1	117.6	148.7	204.9	323.0	546.0	833.4	1052.4
102.5°	83.7	88.6	95.2	109.2	128.0	158.2	208.7	308.8	497.8	765.2	1020.5
105°	105.2	108.3	115.8	127.6	144.6	173.1	217.0	299.4	448.9	672.4	923.0
107.5°	126.1	130.5	137.3	147.1	164.1	189.9	232.3	303.5	426.3	607.7	824.4
110°	141.2	145.3	151.1	161.3	176.5	202.9	243.7	308.5	418.1	576.6	767.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	157.0	160.7	165.3	175.0	189.8	215.1	254.3	315.6	415.3	557.2	724.9
115°	179.0	182.1	186.1	195.2	209.5	234.3	271.2	326.2	413.9	535.1	677.1
117.5°	198.7	202.2	205.9	214.6	230.1	253.7	288.7	339.0	415.6	522.0	646.6
120°	212.5	215.7	219.6	228.0	243.2	267.3	302.0	347.8	418.5	515.1	629.3
122.5°	226.2	228.3	231.4	239.4	255.7	279.5	314.0	357.6	420.6	508.8	613.9
125°	244.3	245.7	249.9	257.4	273.5	297.7	330.1	371.0	424.9	500.2	592.7
127.5°	257.6	260.0	265.3	274.9	292.1	315.9	346.6	383.8	430.6	494.0	572.9
130°	266.6	268.9	275.6	286.6	304.4	328.0	357.5	393.0	434.4	490.5	560.3
132.5°	272.7	276.0	284.1	296.7	315.4	338.7	367.6	400.3	438.3	487.6	549.2
135°	283.7	287.0	297.0	310.6	328.5	352.2	380.3	410.1	443.2	483.4	534.9
137.5°	297.6	300.1	309.5	323.1	340.6	364.8	389.7	417.6	448.5	481.1	522.7
140°	305.1	307.7	318.1	331.8	348.1	371.4	396.6	422.6	450.2	479.7	516.3
142.5°	314.8	316.5	326.0	339.6	355.1	376.9	400.5	424.9	451.1	479.0	511.1
145°	329.2	330.7	339.1	350.9	366.3	385.9	408.3	429.7	453.0	477.9	504.6
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.7
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



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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°	99.2	103.9	108.7	111.9	113.4	114.8	116.3	117.7
90°	97.9	103.4	108.8	113.5	114.9	116.2	118.6	119.9
92.5°	231.6	194.2	171.3	161.5	151.9	151.2	151.4	151.4
95°	692.0	565.8	464.4	395.0	335.4	311.1	305.6	293.2
97.5°	989.5	902.1	803.3	705.7	653.8	607.1	583.5	573.9
100°	1122.7	1084.9	1000.5	913.8	855.7	795.0	764.3	751.8
102.5°	1165.7	1195.7	1157.2	1099.3	1037.1	994.2	960.9	951.7
105°	1133.2	1255.0	1296.8	1290.0	1263.9	1236.9	1221.1	1212.2
107.5°	1031.9	1193.0	1294.0	1341.4	1356.6	1357.7	1353.2	1347.6
110°	957.3	1124.3	1249.3	1324.9	1364.9	1382.7	1390.1	1391.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	897.7	1056.4	1182.5	1271.2	1329.1	1358.5	1374.8	1382.4
115°	822.4	959.2	1080.6	1176.6	1244.9	1287.4	1312.6	1325.0
117.5°	772.1	890.3	995.1	1083.4	1151.8	1195.8	1221.0	1229.2
120°	744.4	850.9	948.9	1026.8	1091.6	1134.0	1158.5	1166.5
122.5°	722.7	821.5	909.0	982.0	1039.9	1078.9	1103.3	1110.7
125°	691.3	782.2	860.1	924.1	973.3	1009.4	1029.4	1039.0
127.5°	659.3	744.0	816.7	876.7	921.5	953.8	972.8	977.8
130°	639.6	718.0	787.8	845.6	889.6	918.9	937.1	943.2
132.5°	619.5	693.1	756.7	812.4	856.2	885.4	902.1	908.7
135°	592.5	654.4	712.0	762.8	801.6	831.0	847.4	853.5
137.5°	569.9	620.2	668.2	711.4	746.1	772.7	787.7	794.2
140°	557.1	599.7	641.4	679.0	711.6	734.8	748.5	753.5
142.5°	546.1	582.2	618.1	650.7	678.5	698.2	711.2	715.6
145°	532.3	559.9	587.5	611.7	633.1	648.5	658.8	663.0
147.5°	520.0	541.9	562.7	580.6	597.3	609.3	615.2	617.1
150°	513.2	532.0	548.4	564.0	577.0	587.5	591.2	592.3
152.5°	506.3	523.1	538.0	550.1	560.9	569.3	572.7	573.7
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

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