

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: P333166-830

Luminaire Tested: **S125DIP-S610D365U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333166-830
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-S610D365U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3736.6 lumens
Efficiency: N/A
Efficacy: 135.9 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: Semi-Direct

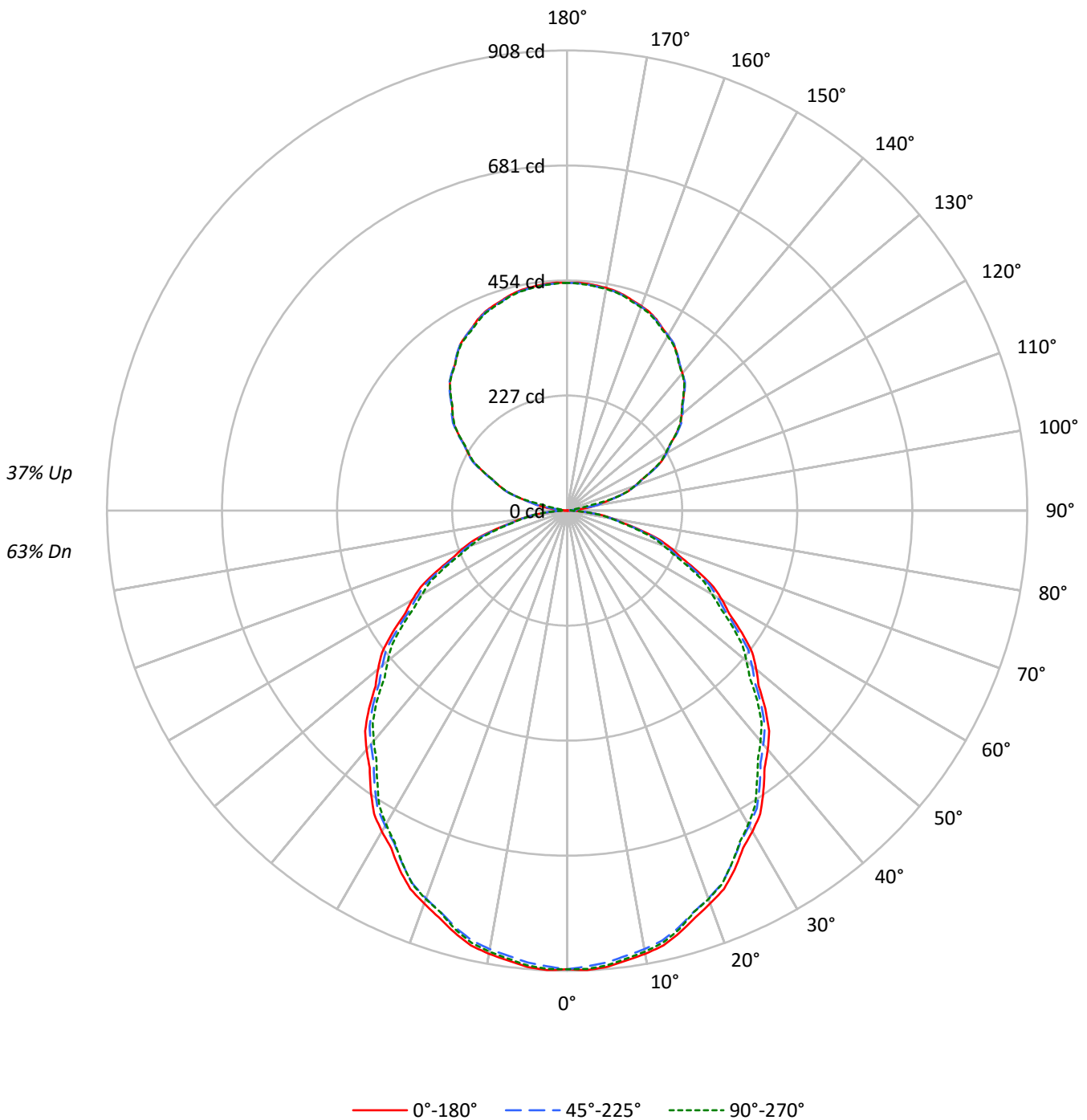
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48	44
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	44	41	37
4	76	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35	32
5	70	58	50	44	66	55	48	42	49	43	38	43	38	34	38	34	31	28
6	65	52	44	38	61	50	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	19
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20	17
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	2.3
10°-20°	241.1	6.5
20°-30°	356.0	9.5
30°-40°	415.4	11.1
40°-50°	417.2	11.2
50°-60°	366.2	9.8
60°-70°	272.9	7.3
70°-80°	156.0	4.2
80°-90°	46.3	1.2
90°-100°	16.3	0.4
100°-110°	100.7	2.7
110°-120°	182.6	4.9
120°-130°	234.3	6.3
130°-140°	252.0	6.7
140°-150°	236.5	6.3
150°-160°	191.3	5.1
160°-170°	123.8	3.3
170°-180°	42.7	1.1
0°-30°	682.4	18.3
0°-40°	1097.8	29.4
0°-60°	1881.2	50.3
0°-90°	2356.4	63.1
90°-120°	299.6	8.0
90°-150°	1022.4	27.4
90°-180°	1380.0	36.9
0°-180°	3736.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	0	3	5	7	8	3
95°	19	17	5	7	7	24
105°	98	99	99	99	99	104
115°	184	186	186	185	183	182
125°	262	264	264	263	262	234
135°	326	328	328	327	325	251
145°	378	379	379	379	377	236
155°	416	415	415	416	414	192
165°	439	438	438	440	437	124
175°	449	448	448	450	447	43
180°	449	449	449	449	449	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.6	15.6	15.7	15.9	16.0	16.0	16.0	16.0	16.0	15.9	16.0
90°	0.4	0.9	1.5	2.1	2.7	3.3	3.8	4.3	4.8	5.4	5.7
92.5°	5.1	4.7	4.3	3.9	3.5	3.5	4.0	4.4	4.9	5.4	5.7
95°	18.9	18.8	18.6	18.3	18.1	16.6	13.8	10.9	8.1	5.4	5.7
97.5°	39.7	40.1	40.4	40.8	41.3	38.6	33.1	27.5	22.0	16.4	14.3
100°	55.6	55.9	56.1	56.3	56.6	56.7	57.1	57.4	57.7	58.0	46.9
102.5°	71.9	72.2	72.5	72.8	73.0	73.2	73.4	73.6	73.8	74.0	71.9
105°	97.9	98.2	98.6	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.2
107.5°	125.0	125.0	125.0	125.0	125.0	125.1	125.3	125.4	125.5	125.6	125.6
110°	142.6	142.6	142.6	142.6	142.6	142.7	142.8	143.0	143.1	143.3	143.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	159.1	159.3	159.5	159.7	159.9	159.9	160.0	160.1	160.2	160.3	160.0
115°	183.9	184.3	184.6	185.0	185.4	185.6	185.7	185.8	185.9	185.9	185.6
117.5°	209.5	209.5	209.5	209.5	209.5	209.6	209.9	210.2	210.5	210.8	210.4
120°	225.6	225.5	225.5	225.4	225.3	225.4	225.6	225.7	226.0	226.2	226.1
122.5°	239.7	240.0	240.3	240.5	240.8	241.0	241.1	241.2	241.3	241.4	241.3
125°	261.6	262.0	262.6	263.1	263.6	263.9	263.9	263.9	263.9	263.9	263.5
127.5°	282.4	282.8	283.1	283.5	283.9	284.1	284.0	284.0	283.9	283.9	283.7
130°	295.2	295.6	296.0	296.3	296.7	296.9	297.0	297.0	297.1	297.2	297.0
132.5°	308.0	308.4	308.9	309.2	309.7	309.8	309.7	309.5	309.3	309.2	309.2
135°	326.2	326.6	327.1	327.5	327.9	328.1	327.9	327.8	327.6	327.5	327.3
137.5°	342.9	343.3	343.7	344.0	344.4	344.6	344.4	344.3	344.1	344.0	344.0
140°	353.8	354.0	354.1	354.3	354.4	354.5	354.4	354.3	354.2	354.2	354.3
142.5°	363.7	363.8	363.9	363.9	364.0	364.1	364.3	364.4	364.5	364.6	364.6
145°	378.1	378.3	378.4	378.6	378.7	378.8	378.8	378.8	378.8	378.8	378.9
147.5°	390.8	390.8	390.8	390.7	390.7	390.7	390.8	390.9	391.0	391.1	391.2
150°	398.8	398.7	398.5	398.3	398.2	398.2	398.3	398.5	398.7	398.8	399.0
152.5°	406.5	406.2	405.9	405.6	405.2	405.1	405.3	405.5	405.6	405.8	405.9
155°	416.5	416.0	415.6	415.1	414.7	414.5	414.7	414.8	415.0	415.1	415.4
157.5°	424.1	423.9	423.6	423.3	423.1	422.9	422.9	423.0	423.0	423.0	423.2
160°	429.4	429.0	428.6	428.1	427.7	427.5	427.5	427.6	427.7	427.8	428.1
162.5°	433.8	433.3	432.8	432.3	432.0	431.8	431.9	431.9	432.0	432.1	432.4
165°	439.4	439.0	438.6	438.1	437.7	437.5	437.5	437.6	437.7	437.8	438.2
167.5°	443.7	443.3	442.8	442.3	441.9	441.7	441.8	441.9	442.0	442.0	442.5
170°	446.1	445.6	445.1	444.6	444.0	443.8	443.9	443.9	444.0	444.1	444.7
172.5°	447.7	447.2	446.7	446.2	445.6	445.4	445.5	445.7	445.8	446.0	446.5
175°	449.4	449.0	448.6	448.1	447.7	447.5	447.5	447.6	447.7	447.8	448.4
177.5°	450.3	449.9	449.5	449.2	448.8	448.7	448.7	448.8	448.8	448.9	449.3
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	16.1	16.2	16.2	16.2	16.0	15.7	15.6	15.4
90°	6.0	6.4	6.8	7.1	7.4	7.5	7.7	8.0
92.5°	6.0	6.4	6.8	7.1	7.2	7.3	7.4	7.4
95°	6.0	6.4	6.8	7.0	7.0	7.0	7.0	7.0
97.5°	12.3	10.1	8.0	7.0	7.0	7.0	7.0	7.0
100°	35.9	24.9	13.9	8.2	7.9	7.6	7.3	7.0
102.5°	69.7	67.7	65.6	62.0	57.0	52.0	46.9	41.9
105°	99.2	99.2	99.2	99.2	99.2	99.1	99.1	99.0
107.5°	125.7	125.7	125.7	125.6	125.5	125.2	125.0	124.7
110°	142.8	142.6	142.4	142.3	142.4	142.4	142.5	142.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	159.8	159.5	159.2	159.0	158.9	158.8	158.7	158.6
115°	185.3	185.0	184.7	184.4	183.9	183.5	183.0	182.6
117.5°	210.0	209.6	209.2	209.0	208.8	208.6	208.4	208.2
120°	225.9	225.7	225.6	225.4	225.0	224.6	224.2	223.9
122.5°	241.1	241.0	240.8	240.5	240.1	239.7	239.2	238.8
125°	263.3	263.0	262.7	262.4	262.2	262.0	261.7	261.6
127.5°	283.5	283.3	283.2	282.9	282.3	281.7	281.3	280.7
130°	296.7	296.5	296.3	296.0	295.7	295.3	294.9	294.5
132.5°	309.1	309.1	309.0	308.8	308.4	308.0	307.6	307.4
135°	327.3	327.1	326.9	326.6	326.2	325.7	325.3	324.8
137.5°	344.1	344.1	344.1	343.9	343.6	343.2	342.8	342.4
140°	354.5	354.6	354.8	354.6	354.2	353.7	353.3	352.8
142.5°	364.6	364.7	364.7	364.5	364.0	363.5	363.2	362.7
145°	379.0	379.0	379.1	378.9	378.5	378.1	377.6	377.1
147.5°	391.2	391.3	391.4	391.2	390.7	390.1	389.6	389.1
150°	399.1	399.3	399.4	399.2	398.6	398.0	397.4	396.8
152.5°	406.0	406.1	406.3	406.1	405.6	405.1	404.5	404.0
155°	415.6	415.8	416.0	415.8	415.3	414.6	414.1	413.5
157.5°	423.5	423.7	424.0	423.8	423.2	422.5	422.0	421.4
160°	428.4	428.7	429.0	428.9	428.2	427.6	427.1	426.5
162.5°	432.9	433.3	433.8	433.6	432.9	432.3	431.7	431.0
165°	438.7	439.1	439.6	439.5	438.9	438.3	437.7	437.2
167.5°	443.1	443.6	444.1	444.0	443.4	442.7	442.1	441.4
170°	445.3	445.9	446.5	446.5	445.8	445.2	444.4	443.7
172.5°	447.0	447.6	448.1	448.1	447.4	446.7	446.0	445.4
175°	448.9	449.6	450.2	450.2	449.4	448.7	448.1	447.4
177.5°	449.8	450.2	450.5	450.5	450.1	449.6	449.1	448.7
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4

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