

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: P333121-830

Luminaire Tested: **S125DIP-S375D365U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333121-830
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-S375D365U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 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: 2813.9 lumens
Efficiency: N/A
Efficacy: 138.6 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

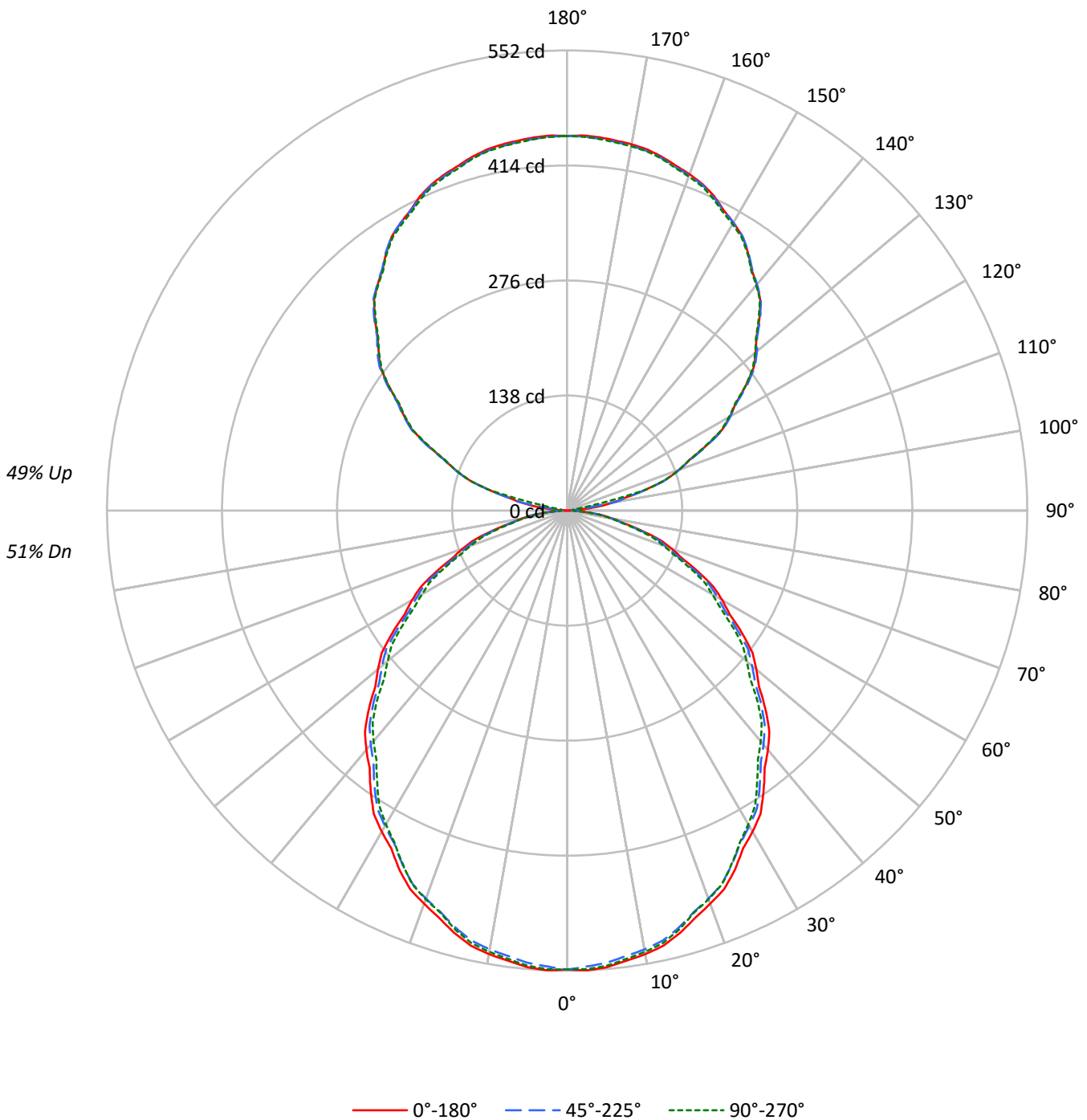
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	73	71	69	61	60	58	50	49	48	43
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40	36
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30
4	74	63	56	49	68	59	52	46	50	45	41	42	38	35	35	32	30	26
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	31	28	26	23
6	63	51	43	37	58	47	40	35	41	35	31	34	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	28	50	39	32	27	34	28	24	29	24	21	24	21	18	16
9	50	38	30	25	46	35	29	24	31	25	21	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°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	1.8
10°-20°	146.6	5.2
20°-30°	216.5	7.7
30°-40°	252.7	9.0
40°-50°	253.8	9.0
50°-60°	222.8	7.9
60°-70°	166.0	5.9
70°-80°	94.9	3.4
80°-90°	28.5	1.0
90°-100°	16.3	0.6
100°-110°	100.7	3.6
110°-120°	182.6	6.5
120°-130°	234.3	8.3
130°-140°	252.0	9.0
140°-150°	236.5	8.4
150°-160°	191.3	6.8
160°-170°	123.8	4.4
170°-180°	42.7	1.5
0°-30°	415.1	14.8
0°-40°	667.8	23.7
0°-60°	1144.3	40.7
0°-90°	1433.7	51.0
90°-120°	299.6	10.6
90°-150°	1022.4	36.3
90°-180°	1380.0	49.0
0°-180°	2813.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	0	3	5	7	8	2
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°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.5	9.6	9.7	9.8	10.0	10.0	10.1	10.1	10.1	10.1	10.2
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°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	10.3	10.4	10.5	10.4	10.3	10.2	10.1	10.0
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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