

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: P333500-840

Luminaire Tested: **S125RDIP-S375D590U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333500-840
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: S125RDIP-S375D590U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3527.2 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

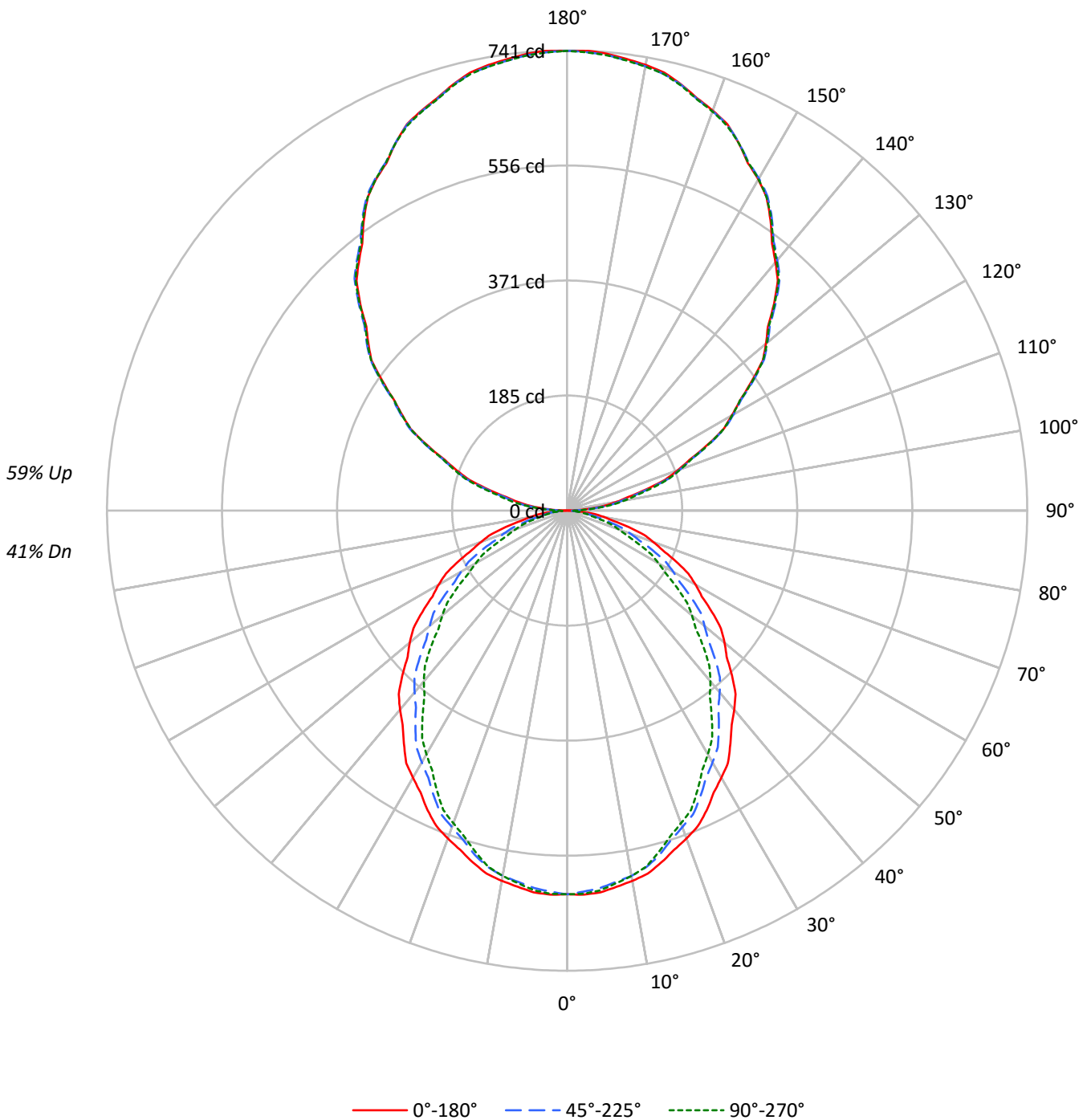
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41	35
2	88	80	74	69	80	74	68	64	61	57	54	49	46	44	38	36	35	30
3	80	71	64	58	73	65	59	54	54	49	45	43	40	38	34	32	30	25
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	30	28	26	22
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	27	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	31	28	25	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	13
9	49	37	30	25	45	35	28	24	29	24	20	24	20	17	19	16	14	12
10	46	34	27	23	42	32	25	21	27	22	18	22	18	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.6
10°-20°	162.4	4.6
20°-30°	235.5	6.7
30°-40°	268.4	7.6
40°-50°	261.6	7.4
50°-60°	220.2	6.2
60°-70°	154.3	4.4
70°-80°	79.3	2.2
80°-90°	21.7	0.6
90°-100°	49.6	1.4
100°-110°	146.4	4.2
110°-120°	248.0	7.0
120°-130°	326.4	9.3
130°-140°	365.7	10.4
140°-150°	358.4	10.2
150°-160°	301.1	8.5
160°-170°	200.1	5.7
170°-180°	70.0	2.0
0°-30°	456.0	12.9
0°-40°	724.3	20.5
0°-60°	1206.1	34.2
0°-90°	1461.5	41.4
90°-120°	444.0	12.6
90°-150°	1494.5	42.4
90°-180°	2066.0	58.6
0°-180°	3527.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	5	9	12	14	3
95°	38	39	44	48	50	40
105°	131	134	138	141	143	140
115°	248	250	252	251	251	245
125°	362	366	366	365	365	324
135°	471	474	475	475	473	363
145°	571	573	575	575	573	357
155°	653	653	654	656	653	301
165°	710	709	710	712	709	200
175°	738	736	736	739	736	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.7	8.3	8.0	7.6	7.2	7.1	7.2	7.3	7.4	7.5	7.6
90°	0.6	1.6	2.6	3.6	4.6	5.7	6.6	7.5	8.3	9.2	9.9
92.5°	13.9	14.6	15.3	16.1	16.8	17.7	18.8	19.9	21.0	22.1	22.9
95°	37.5	37.7	38.0	38.2	38.5	39.3	40.5	41.8	43.1	44.3	45.2
97.5°	62.2	62.3	62.4	62.5	62.6	63.5	65.3	67.1	68.9	70.6	71.5
100°	80.7	80.7	80.7	80.7	80.7	81.5	83.1	84.8	86.4	88.2	89.3
102.5°	100.5	101.0	101.5	102.0	102.5	103.2	104.0	104.9	105.7	106.5	107.9
105°	131.4	132.0	132.6	133.3	133.9	134.6	135.4	136.1	136.9	137.6	138.5
107.5°	165.4	166.1	166.7	167.3	168.0	168.6	169.3	169.8	170.4	171.0	171.4
110°	188.9	189.6	190.3	190.9	191.6	192.1	192.4	192.8	193.2	193.6	194.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	212.9	213.3	213.6	213.9	214.3	214.7	215.2	215.6	216.1	216.6	216.8
115°	248.3	248.8	249.3	249.8	250.3	250.7	251.0	251.3	251.5	251.8	251.7
117.5°	283.8	284.0	284.3	284.5	284.7	285.0	285.2	285.4	285.6	285.9	286.0
120°	305.9	306.6	307.2	307.8	308.5	308.8	309.0	309.1	309.2	309.3	309.3
122.5°	329.9	330.1	330.3	330.5	330.8	331.0	331.4	331.7	332.0	332.4	332.3
125°	362.3	363.1	363.9	364.7	365.5	365.9	366.0	366.2	366.3	366.4	366.2
127.5°	397.0	397.4	397.8	398.2	398.7	399.0	399.1	399.3	399.4	399.6	399.5
130°	417.7	418.3	419.0	419.6	420.2	420.7	420.9	421.2	421.4	421.7	421.6
132.5°	438.4	439.5	440.5	441.5	442.6	443.1	443.0	443.0	442.9	442.9	442.8
135°	471.2	472.0	472.8	473.5	474.3	474.7	474.9	475.0	475.1	475.2	475.2
137.5°	502.1	502.9	503.6	504.3	505.1	505.6	505.9	506.1	506.4	506.8	506.9
140°	521.9	522.6	523.2	523.8	524.5	525.0	525.4	525.8	526.1	526.5	526.8
142.5°	541.8	542.3	542.8	543.4	543.9	544.4	544.9	545.4	545.9	546.3	546.5
145°	570.9	571.4	572.0	572.5	573.0	573.4	573.8	574.2	574.6	574.9	574.9
147.5°	597.8	598.1	598.4	598.7	599.1	599.3	599.6	600.0	600.3	600.6	600.9
150°	615.8	615.7	615.6	615.5	615.3	615.5	616.0	616.5	617.0	617.5	617.5
152.5°	630.6	630.8	631.0	631.2	631.3	631.5	631.7	631.9	632.1	632.4	632.7
155°	653.3	653.3	653.3	653.3	653.3	653.4	653.5	653.6	653.8	653.9	654.4
157.5°	673.6	673.3	673.0	672.8	672.5	672.4	672.5	672.7	672.8	672.9	673.4
160°	685.6	685.2	684.8	684.4	684.0	683.9	684.0	684.2	684.3	684.4	684.9
162.5°	696.2	695.9	695.6	695.3	695.0	694.9	694.9	695.0	695.0	695.0	695.6
165°	710.3	710.0	709.8	709.5	709.3	709.2	709.3	709.5	709.6	709.7	710.2
167.5°	722.4	721.9	721.2	720.7	720.2	720.0	720.0	720.0	720.0	720.0	720.7
170°	728.7	728.2	727.7	727.2	726.7	726.5	726.5	726.5	726.5	726.5	727.2
172.5°	733.4	732.9	732.4	731.8	731.3	731.0	731.0	731.0	731.0	731.0	731.8
175°	738.5	738.0	737.5	737.0	736.5	736.3	736.3	736.3	736.3	736.3	737.0
177.5°	741.2	740.8	740.4	740.0	739.5	739.3	739.2	739.1	739.0	738.9	739.5
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0
90°	10.5	11.1	11.8	12.3	12.7	13.0	13.4	13.8
92.5°	23.8	24.6	25.5	26.1	26.4	26.7	26.9	27.2
95°	46.2	47.1	48.0	48.5	48.8	49.1	49.3	49.6
97.5°	72.3	73.2	74.0	74.5	74.6	74.8	74.9	75.1
100°	90.5	91.6	92.7	93.4	93.7	94.0	94.2	94.5
102.5°	109.1	110.4	111.6	112.4	112.8	113.1	113.5	113.8
105°	139.3	140.0	140.8	141.4	141.7	142.1	142.5	142.9
107.5°	171.8	172.2	172.5	172.7	172.7	172.7	172.6	172.6
110°	194.3	194.7	195.1	195.2	195.1	195.0	194.8	194.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	217.0	217.1	217.3	217.3	217.1	216.8	216.6	216.4
115°	251.5	251.4	251.3	251.2	251.0	250.9	250.7	250.6
117.5°	286.1	286.2	286.3	286.1	285.6	285.1	284.6	284.0
120°	309.3	309.3	309.3	309.1	308.6	308.1	307.6	307.1
122.5°	332.2	332.1	332.0	331.7	331.3	330.9	330.5	330.1
125°	365.9	365.7	365.4	365.2	365.1	365.0	364.8	364.7
127.5°	399.3	399.2	399.1	398.9	398.6	398.4	398.1	397.9
130°	421.4	421.3	421.2	421.0	420.7	420.5	420.2	420.0
132.5°	442.6	442.5	442.4	442.1	441.8	441.4	441.1	440.7
135°	475.2	475.2	475.2	475.0	474.5	474.0	473.5	473.0
137.5°	507.1	507.2	507.4	507.2	506.4	505.8	505.2	504.5
140°	527.0	527.4	527.6	527.4	526.7	526.1	525.4	524.8
142.5°	546.6	546.8	546.9	546.7	546.1	545.4	544.8	544.2
145°	574.9	574.9	574.9	574.7	574.4	574.0	573.6	573.2
147.5°	601.2	601.5	601.8	601.5	600.6	599.8	598.8	598.0
150°	617.5	617.5	617.5	617.4	617.2	616.9	616.7	616.4
152.5°	633.0	633.3	633.6	633.5	633.0	632.6	632.1	631.7
155°	654.9	655.4	655.9	655.9	655.2	654.6	653.9	653.3
157.5°	673.9	674.4	674.9	674.8	673.9	673.1	672.3	671.4
160°	685.4	685.9	686.4	686.4	685.8	685.1	684.5	683.9
162.5°	696.2	696.8	697.5	697.4	696.7	695.9	695.2	694.4
165°	710.7	711.2	711.9	711.7	710.9	710.1	709.3	708.6
167.5°	721.5	722.4	723.1	723.1	722.3	721.4	720.6	719.9
170°	728.0	728.7	729.5	729.4	728.6	727.7	726.8	725.9
172.5°	732.7	733.4	734.2	734.2	733.4	732.6	731.7	730.9
175°	737.8	738.5	739.3	739.2	738.4	737.5	736.6	735.7
177.5°	740.1	740.7	741.3	741.3	740.6	739.9	739.1	738.4
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3

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