

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: P333173-935

Luminaire Tested: **S125DIP-S610D590U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333173-935
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-S610D590U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3829.3 lumens
Efficiency: N/A
Efficacy: 116.7 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

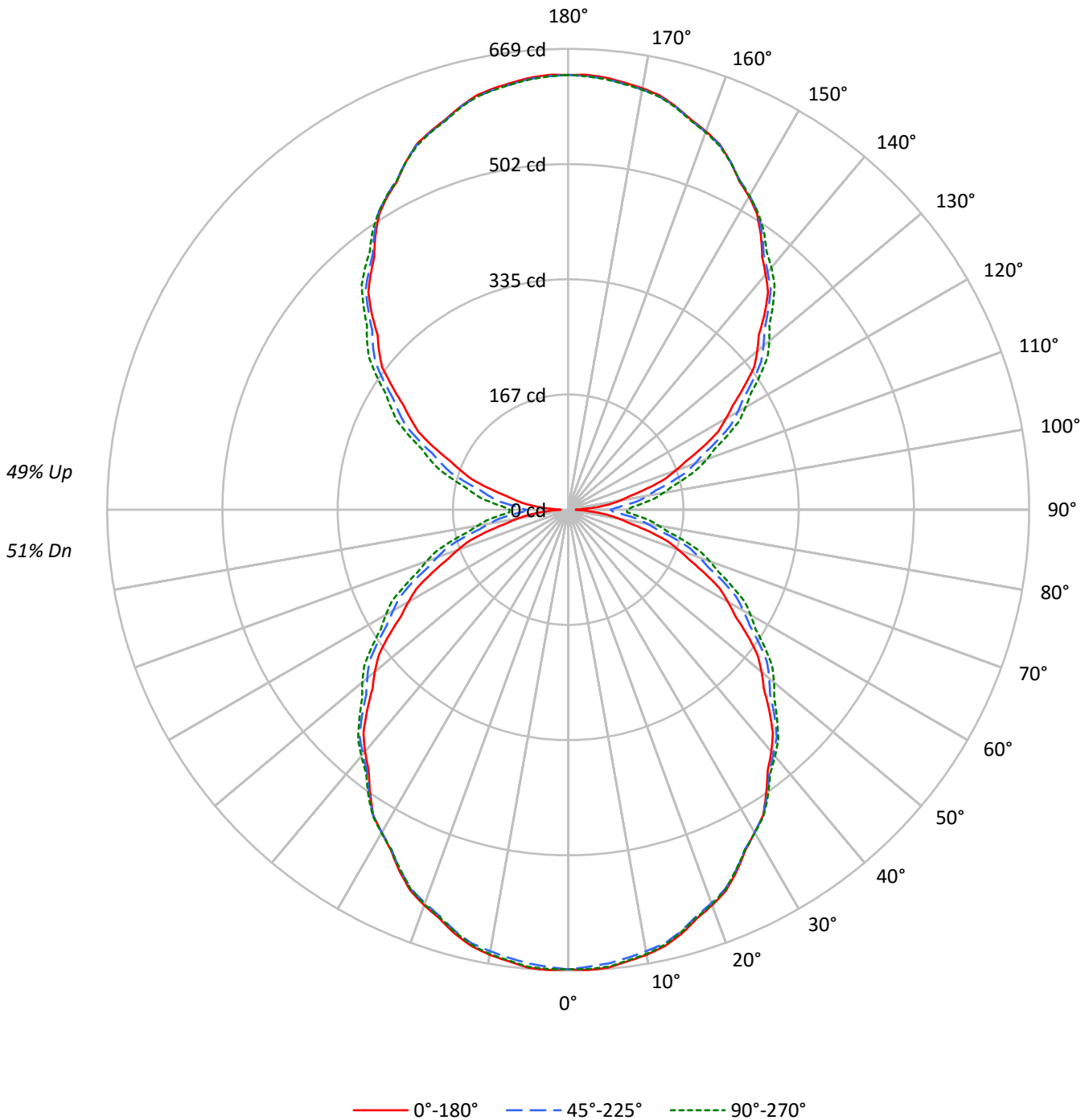
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	39	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	29	25	27	24	21	18
7	57	45	37	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°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.6
10°-20°	179.1	4.7
20°-30°	266.4	7.0
30°-40°	315.5	8.2
40°-50°	326.2	8.5
50°-60°	300.5	7.8
60°-70°	242.9	6.3
70°-80°	162.7	4.2
80°-90°	85.7	2.2
90°-100°	89.6	2.3
100°-110°	159.7	4.2
110°-120°	234.8	6.1
120°-130°	291.6	7.6
130°-140°	317.6	8.3
140°-150°	306.8	8.0
150°-160°	256.7	6.7
160°-170°	170.6	4.5
170°-180°	59.7	1.6
0°-30°	508.6	13.3
0°-40°	824.1	21.5
0°-60°	1450.8	37.9
0°-90°	1942.2	50.7
90°-120°	484.2	12.6
90°-150°	1400.1	36.6
90°-180°	1887.0	49.3
0°-180°	3829.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	36	62	78	85	9
95°	40	59	86	103	109	41
105°	118	131	153	169	176	126
115°	216	223	240	251	255	213
125°	312	314	327	337	340	279
135°	403	406	410	419	420	311
145°	487	489	490	493	495	304
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.5	25.3	30.1	35.0	39.8	44.8	49.9	54.9	60.1	65.2	68.6
90°	10.9	16.4	22.0	27.6	33.1	38.7	44.3	50.1	55.8	61.5	65.3
92.5°	21.3	26.3	31.2	36.1	41.0	46.4	52.4	58.4	64.4	70.4	74.4
95°	40.5	44.4	48.4	52.4	56.4	61.5	67.5	73.5	79.6	85.6	89.5
97.5°	60.8	64.2	67.8	71.2	74.7	79.6	85.8	92.1	98.4	104.7	108.5
100°	75.9	79.0	82.1	85.2	88.2	92.7	98.8	104.9	111.0	117.0	121.1
102.5°	92.3	95.6	98.8	102.1	105.4	109.6	114.9	120.1	125.4	130.6	134.7
105°	117.9	120.7	123.6	126.5	129.3	133.3	138.4	143.4	148.4	153.3	157.0
107.5°	146.2	148.7	151.2	153.8	156.3	159.9	164.5	169.3	173.9	178.7	181.8
110°	165.7	168.0	170.3	172.5	174.9	178.2	182.6	187.0	191.4	195.8	198.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	186.1	187.8	189.5	191.1	192.9	195.9	200.3	204.6	209.0	213.4	216.1
115°	215.6	217.1	218.5	220.0	221.4	224.2	228.2	232.1	236.2	240.1	242.6
117.5°	245.2	246.1	246.9	247.8	248.7	251.0	254.8	258.6	262.3	266.1	268.6
120°	264.1	265.1	266.0	267.0	268.0	270.3	273.7	277.2	280.6	284.0	286.5
122.5°	284.0	284.4	284.8	285.2	285.6	287.6	291.1	294.5	298.1	301.6	303.8
125°	311.6	312.1	312.5	313.1	313.6	315.4	318.4	321.4	324.4	327.4	329.5
127.5°	340.4	340.6	340.9	341.0	341.3	342.7	345.2	347.7	350.2	352.8	354.7
130°	358.1	358.4	358.9	359.3	359.6	361.0	363.3	365.5	367.7	370.0	372.0
132.5°	375.2	376.1	376.9	377.8	378.7	379.9	381.4	383.0	384.4	386.0	387.9
135°	403.1	403.6	404.1	404.6	405.1	406.0	407.1	408.2	409.3	410.4	412.3
137.5°	429.3	429.8	430.3	430.8	431.4	432.0	432.7	433.4	434.2	434.9	436.8
140°	445.7	446.2	446.8	447.3	447.8	448.3	448.8	449.3	449.8	450.2	452.0
142.5°	462.5	462.9	463.2	463.6	463.9	464.3	464.8	465.2	465.6	466.1	467.6
145°	487.4	487.7	488.0	488.3	488.6	488.9	489.2	489.6	489.9	490.2	490.9
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.5
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.1	75.5	79.0	81.3	82.3	83.4	84.5	85.6
90°	69.3	73.2	77.1	79.6	81.0	82.4	83.7	85.1
92.5°	78.3	82.2	86.2	88.8	90.1	91.4	92.6	93.8
95°	93.5	97.5	101.4	104.0	105.3	106.5	107.7	109.0
97.5°	112.3	116.1	119.8	122.3	123.4	124.5	125.6	126.7
100°	125.1	129.2	133.2	135.7	136.8	137.9	139.0	140.1
102.5°	138.6	142.7	146.6	149.3	150.4	151.6	152.8	153.9
105°	160.5	164.0	167.6	170.0	171.4	172.8	174.1	175.5
107.5°	185.0	188.2	191.5	193.5	194.3	195.3	196.1	197.0
110°	202.0	205.1	208.1	210.2	211.0	212.0	212.8	213.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	219.0	221.7	224.5	226.4	227.1	228.0	228.8	229.6
115°	245.2	247.7	250.2	251.8	252.6	253.3	254.1	254.9
117.5°	271.2	273.8	276.3	277.8	278.4	279.0	279.6	280.1
120°	289.0	291.4	293.9	295.4	295.8	296.3	296.7	297.1
122.5°	306.2	308.4	310.6	312.0	312.5	313.1	313.7	314.2
125°	331.7	333.7	335.9	337.3	337.9	338.5	339.1	339.7
127.5°	356.8	358.9	360.8	362.2	362.8	363.4	364.1	364.7
130°	373.8	375.8	377.7	378.9	379.4	380.0	380.5	381.0
132.5°	389.9	391.8	393.7	394.8	395.1	395.5	395.7	396.1
135°	414.2	416.1	418.0	419.1	419.4	419.7	420.0	420.3
137.5°	438.6	440.5	442.3	443.2	443.2	443.3	443.3	443.4
140°	453.9	455.7	457.5	458.5	458.5	458.5	458.6	458.6
142.5°	469.1	470.6	472.1	472.9	472.9	472.9	472.9	473.0
145°	491.6	492.4	493.1	493.6	493.9	494.1	494.4	494.6
147.5°	513.0	513.5	514.0	514.0	513.5	513.1	512.6	512.0
150°	526.5	526.5	526.5	526.5	526.4	526.3	526.3	526.2
152.5°	539.7	539.9	540.2	540.1	539.8	539.4	539.0	538.6
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)