

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: P333128

Luminaire Tested: **S125DIP-S375D590U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333128
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-S375D590U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 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: 3507.2 lumens
Efficiency: N/A
Efficacy: 137.0 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: Semi-Indirect

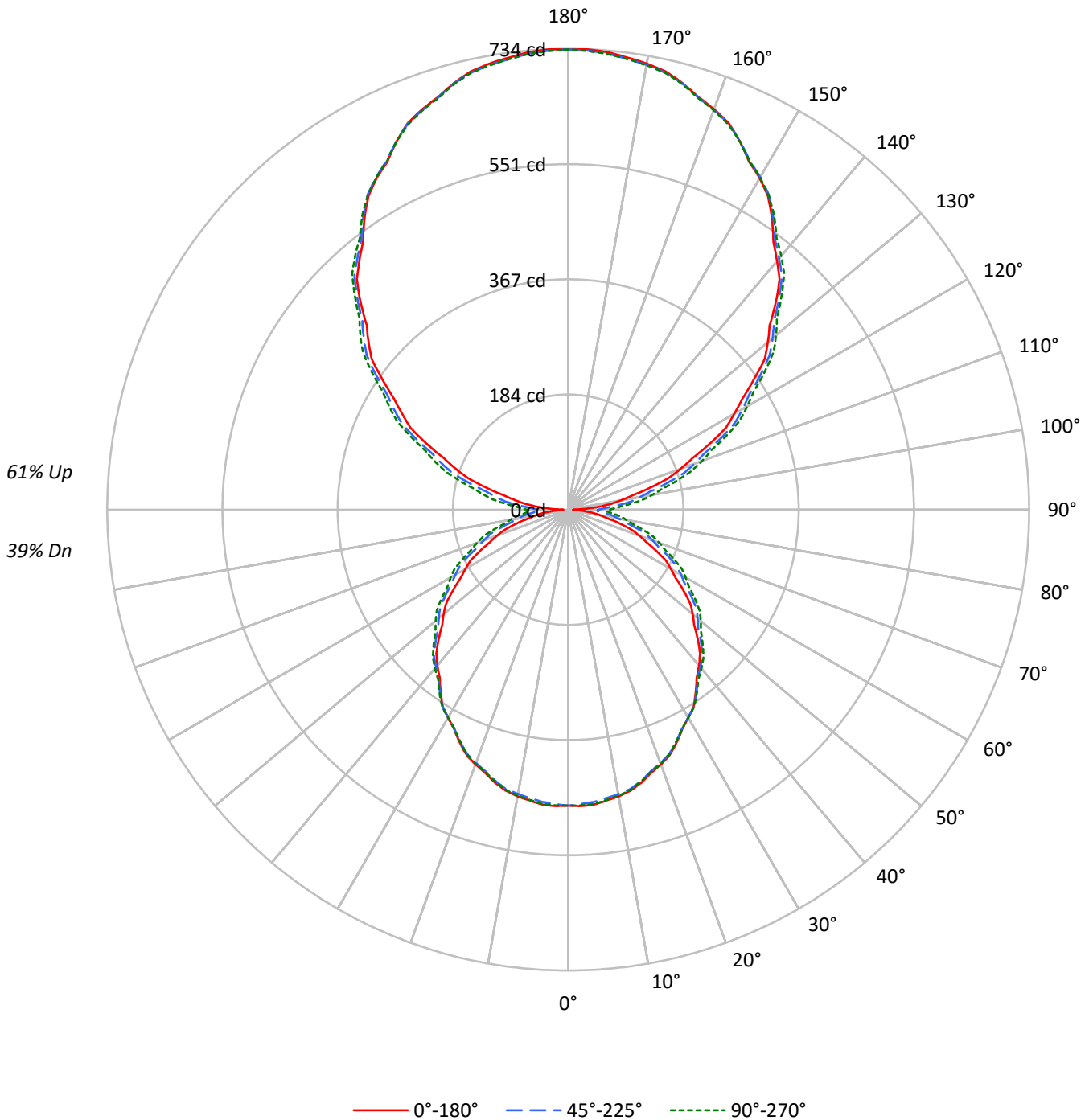
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	64	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	43	40	37	34	31	28	26	22
4	72	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	18	16	14	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	1.3
10°-20°	126.5	3.6
20°-30°	188.2	5.4
30°-40°	222.9	6.4
40°-50°	230.5	6.6
50°-60°	212.3	6.1
60°-70°	171.6	4.9
70°-80°	114.9	3.3
80°-90°	61.2	1.7
90°-100°	82.5	2.4
100°-110°	169.6	4.8
110°-120°	262.1	7.5
120°-130°	332.6	9.5
130°-140°	366.2	10.4
140°-150°	355.8	10.1
150°-160°	298.1	8.5
160°-170°	198.2	5.7
170°-180°	69.4	2.0
0°-30°	359.3	10.2
0°-40°	582.2	16.6
0°-60°	1025.0	29.2
0°-90°	1372.7	39.1
90°-120°	514.3	14.7
90°-150°	1568.9	44.7
90°-180°	2135.0	60.9
0°-180°	3507.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	27	47	60	66	7
95°	43	57	78	91	96	44
105°	134	145	162	174	179	143
115°	249	255	267	275	277	246
125°	361	364	374	379	381	323
135°	468	471	474	480	480	360
145°	566	568	569	572	572	353
155°	647	647	648	650	647	298
165°	703	702	703	705	702	198
175°	731	729	729	732	728	69
180°	733	733	733	733	733	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.5	18.0	21.5	25.0	28.5	32.1	35.7	39.4	43.1	46.7	49.2
90°	8.0	12.3	16.6	20.9	25.2	29.5	33.9	38.3	42.6	47.0	50.0
92.5°	20.5	24.2	28.0	31.7	35.5	39.7	44.3	49.0	53.7	58.3	61.4
95°	43.1	46.0	48.9	51.9	54.8	58.6	63.4	68.1	72.9	77.7	80.8
97.5°	67.1	69.6	72.1	74.6	77.1	80.9	86.0	91.1	96.2	101.4	104.4
100°	84.9	87.1	89.3	91.4	93.6	97.1	102.1	107.0	111.9	116.9	120.2
102.5°	104.2	106.7	109.2	111.7	114.2	117.5	121.5	125.6	129.6	133.6	137.0
105°	134.2	136.5	138.8	141.1	143.3	146.4	150.2	154.1	157.9	161.8	164.6
107.5°	167.4	169.5	171.5	173.5	175.6	178.4	181.9	185.4	189.0	192.5	194.9
110°	190.4	192.2	194.1	195.9	197.8	200.4	203.6	206.9	210.1	213.4	215.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	214.1	215.4	216.7	218.0	219.3	221.6	224.9	228.2	231.5	234.7	236.8
115°	248.6	249.9	251.1	252.3	253.6	255.6	258.5	261.5	264.4	267.3	269.0
117.5°	283.3	284.0	284.7	285.4	286.1	287.9	290.6	293.4	296.1	298.9	300.7
120°	305.2	306.2	307.1	308.1	309.0	310.7	313.2	315.7	318.2	320.7	322.4
122.5°	328.6	329.0	329.3	329.7	330.1	331.6	334.2	336.8	339.4	342.0	343.6
125°	360.7	361.3	362.0	362.6	363.3	364.7	366.9	369.1	371.3	373.5	374.8
127.5°	394.4	394.8	395.1	395.4	395.8	396.8	398.7	400.5	402.3	404.2	405.6
130°	415.0	415.5	416.0	416.6	417.1	418.2	419.9	421.6	423.3	425.0	426.3
132.5°	435.1	436.2	437.2	438.2	439.2	440.3	441.3	442.4	443.4	444.5	445.8
135°	467.6	468.2	468.9	469.5	470.2	471.0	471.8	472.6	473.5	474.3	475.7
137.5°	498.1	498.7	499.4	500.0	500.7	501.3	501.9	502.6	503.2	503.8	505.2
140°	517.3	517.9	518.6	519.2	519.8	520.4	520.9	521.4	521.9	522.3	523.7
142.5°	536.9	537.4	537.8	538.3	538.7	539.2	539.7	540.2	540.7	541.2	542.3
145°	565.8	566.2	566.6	567.0	567.4	567.8	568.2	568.6	569.0	569.3	569.8
147.5°	592.0	592.3	592.6	592.9	593.2	593.4	593.7	594.1	594.4	594.7	595.1
150°	609.8	609.7	609.6	609.5	609.3	609.5	610.0	610.5	611.0	611.5	611.5
152.5°	624.4	624.6	624.8	625.0	625.1	625.3	625.5	625.7	625.9	626.2	626.5
155°	646.9	646.9	646.9	646.9	646.9	647.0	647.1	647.2	647.4	647.5	648.0
157.5°	667.0	666.7	666.4	666.2	665.9	665.8	665.9	666.1	666.2	666.3	666.8
160°	678.9	678.5	678.1	677.7	677.3	677.2	677.3	677.5	677.6	677.7	678.2
162.5°	689.4	689.1	688.8	688.5	688.2	688.1	688.1	688.2	688.2	688.2	688.8
165°	703.4	703.1	702.9	702.6	702.4	702.3	702.4	702.6	702.7	702.8	703.3
167.5°	715.3	714.8	714.2	713.7	713.2	713.0	713.0	713.0	713.0	713.0	713.7
170°	721.6	721.1	720.6	720.1	719.6	719.4	719.4	719.4	719.4	719.4	720.1
172.5°	726.2	725.7	725.2	724.7	724.2	723.9	723.9	723.9	723.9	723.9	724.7
175°	731.3	730.8	730.3	729.8	729.3	729.1	729.1	729.1	729.1	729.1	729.8
177.5°	734.0	733.6	733.2	732.8	732.3	732.1	732.0	731.9	731.8	731.7	732.3
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	51.7	54.2	56.7	58.3	59.1	59.9	60.7	61.5
90°	53.0	56.0	59.0	61.1	62.2	63.3	64.4	65.5
92.5°	64.6	67.7	70.8	72.8	73.8	74.8	75.8	76.8
95°	84.0	87.1	90.3	92.3	93.3	94.3	95.2	96.2
97.5°	107.4	110.3	113.3	115.3	116.1	117.0	117.8	118.7
100°	123.5	126.8	130.1	132.1	133.0	133.9	134.7	135.6
102.5°	140.3	143.6	146.9	149.0	150.0	151.0	152.0	152.9
105°	167.4	170.2	173.0	175.0	176.1	177.2	178.3	179.4
107.5°	197.3	199.8	202.2	203.7	204.3	204.9	205.5	206.1
110°	218.1	220.4	222.7	224.2	224.8	225.4	226.0	226.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	238.8	240.9	242.9	244.2	244.7	245.2	245.7	246.2
115°	270.8	272.5	274.2	275.3	275.8	276.3	276.8	277.3
117.5°	302.6	304.4	306.3	307.3	307.5	307.7	307.9	308.0
120°	324.2	325.9	327.7	328.6	328.7	328.8	328.9	329.0
122.5°	345.1	346.7	348.3	349.1	349.4	349.6	349.8	350.0
125°	376.2	377.6	379.0	379.9	380.3	380.7	381.1	381.4
127.5°	407.0	408.4	409.8	410.6	411.0	411.3	411.7	412.0
130°	427.6	428.9	430.2	431.0	431.3	431.5	431.8	432.1
132.5°	447.1	448.4	449.7	450.4	450.5	450.6	450.7	450.7
135°	477.0	478.3	479.7	480.3	480.4	480.4	480.4	480.4
137.5°	506.5	507.9	509.3	509.8	509.6	509.4	509.2	509.0
140°	525.1	526.5	527.9	528.4	528.2	528.0	527.8	527.6
142.5°	543.5	544.6	545.7	546.1	545.9	545.7	545.5	545.2
145°	570.4	570.9	571.4	571.7	571.7	571.7	571.7	571.8
147.5°	595.6	596.1	596.5	596.4	595.8	595.1	594.4	593.7
150°	611.5	611.5	611.5	611.5	611.3	611.2	611.0	610.9
152.5°	626.8	627.1	627.4	627.3	626.9	626.4	626.0	625.6
155°	648.5	649.0	649.5	649.5	648.8	648.2	647.5	646.9
157.5°	667.3	667.8	668.3	668.2	667.3	666.5	665.7	664.8
160°	678.7	679.2	679.7	679.7	679.1	678.4	677.8	677.2
162.5°	689.4	690.0	690.7	690.6	689.9	689.1	688.4	687.6
165°	703.8	704.3	704.9	704.7	704.0	703.2	702.4	701.7
167.5°	714.5	715.3	716.0	716.0	715.2	714.4	713.6	712.9
170°	720.9	721.6	722.4	722.3	721.5	720.6	719.7	718.8
172.5°	725.5	726.2	727.0	727.0	726.2	725.4	724.6	723.8
175°	730.6	731.3	732.1	732.0	731.2	730.3	729.4	728.5
177.5°	732.9	733.5	734.1	734.1	733.4	732.7	731.9	731.2
180°	733.1	733.1	733.1	733.1	733.1	733.1	733.1	733.1

(END OF REPORT)