

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: P333130

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333130
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-S375D590U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3885.2 lumens
Efficiency: N/A
Efficacy: 151.8 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-Indirect

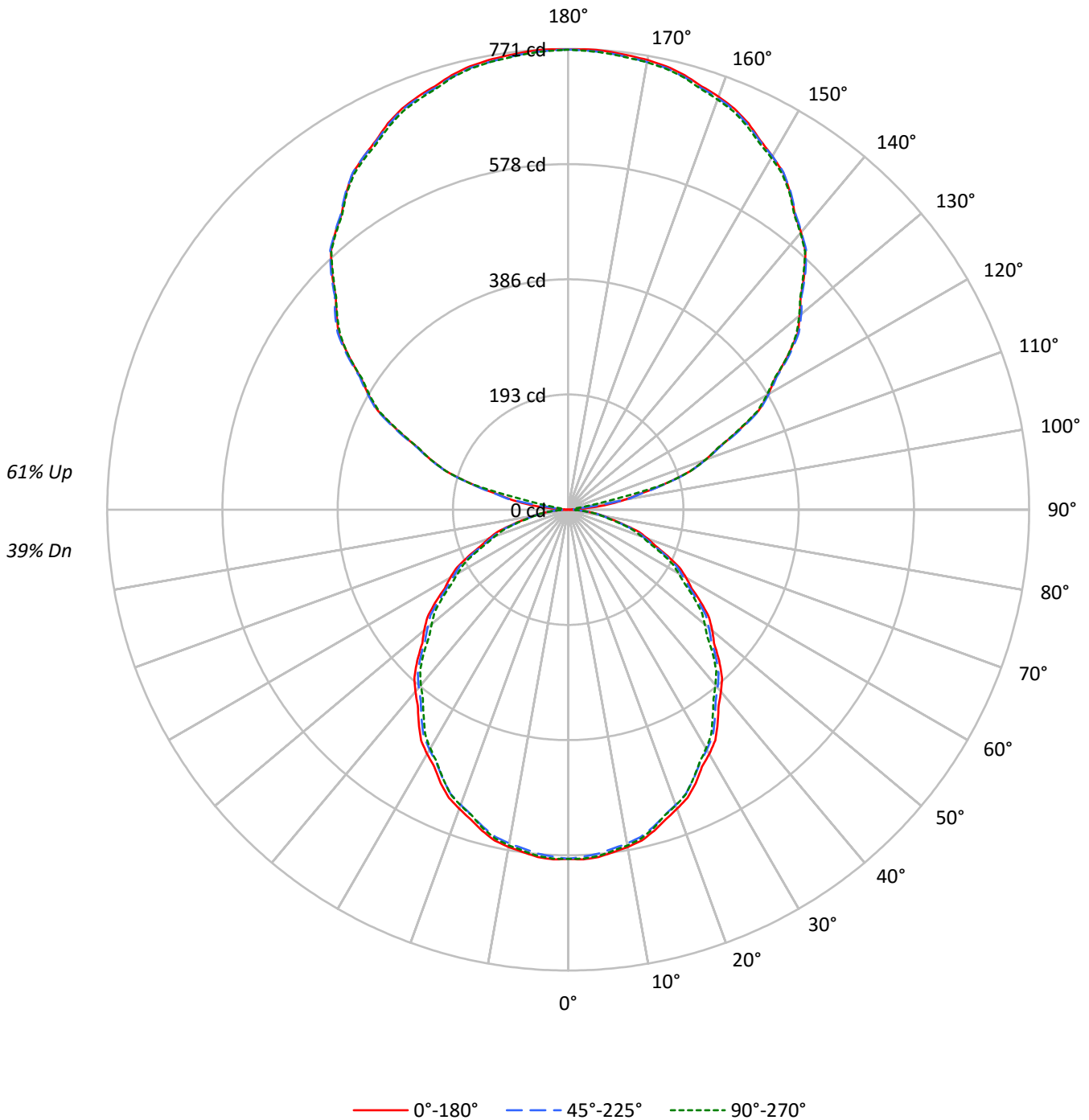
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	87	84	86	83	80	77	68	65	63	54	52	51	41	40	39	33
2	87	79	73	68	79	72	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	57	52	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	18	16	13
8	52	40	33	27	47	37	30	25	31	25	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.4
10°-20°	155.6	4.0
20°-30°	229.7	5.9
30°-40°	268.1	6.9
40°-50°	269.2	6.9
50°-60°	236.3	6.1
60°-70°	176.1	4.5
70°-80°	100.7	2.6
80°-90°	30.9	0.8
90°-100°	28.0	0.7
100°-110°	172.4	4.4
110°-120°	312.6	8.0
120°-130°	401.2	10.3
130°-140°	431.5	11.1
140°-150°	405.1	10.4
150°-160°	327.7	8.4
160°-170°	211.9	5.5
170°-180°	73.1	1.9
0°-30°	440.4	11.3
0°-40°	708.5	18.2
0°-60°	1214.0	31.2
0°-90°	1521.7	39.2
90°-120°	513.0	13.2
90°-150°	1750.8	45.1
90°-180°	2364.0	60.8
0°-180°	3885.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	1	5	9	12	14	3
95°	32	30	9	12	12	41
105°	168	170	170	170	169	178
115°	315	318	318	316	313	312
125°	448	452	452	450	448	400
135°	559	562	561	560	556	430
145°	648	649	649	649	646	405
155°	713	710	711	712	708	328
165°	752	749	750	753	748	212
175°	770	766	767	771	766	73
180°	770	770	770	770	770	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.1	10.3	10.5	10.7	10.9	11.1	11.2	11.2	11.3	11.4	11.6
90°	0.6	1.6	2.6	3.6	4.6	5.6	6.5	7.4	8.2	9.1	9.8
92.5°	8.8	8.1	7.4	6.7	5.9	6.0	6.8	7.6	8.3	9.1	9.8
95°	32.5	32.1	31.8	31.4	31.0	28.4	23.6	18.8	13.9	9.1	9.8
97.5°	67.9	68.6	69.3	69.9	70.6	66.2	56.7	47.1	37.6	28.1	24.5
100°	95.3	95.7	96.0	96.4	96.8	97.2	97.8	98.3	98.8	99.3	80.4
102.5°	123.1	123.6	124.1	124.6	125.0	125.4	125.7	126.1	126.4	126.7	123.1
105°	167.7	168.2	168.8	169.3	169.8	170.0	170.0	170.0	170.0	170.0	170.0
107.5°	214.1	214.1	214.1	214.1	214.1	214.2	214.4	214.7	215.0	215.2	215.2
110°	244.2	244.2	244.2	244.2	244.2	244.3	244.6	244.8	245.1	245.3	245.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	272.5	272.8	273.1	273.4	273.7	273.9	274.1	274.2	274.4	274.5	274.1
115°	314.9	315.6	316.2	316.8	317.5	317.9	318.0	318.1	318.2	318.4	317.9
117.5°	358.9	358.8	358.8	358.8	358.8	359.0	359.5	360.0	360.4	360.9	360.3
120°	386.3	386.1	386.0	385.9	385.7	385.9	386.3	386.6	387.0	387.4	387.1
122.5°	410.4	410.9	411.4	411.9	412.4	412.7	412.9	413.1	413.2	413.4	413.2
125°	447.9	448.8	449.6	450.5	451.4	451.9	451.9	451.9	451.9	451.9	451.4
127.5°	483.6	484.2	484.9	485.5	486.1	486.4	486.3	486.3	486.2	486.1	485.8
130°	505.5	506.1	506.8	507.4	508.0	508.4	508.5	508.7	508.8	508.9	508.5
132.5°	527.4	528.1	528.9	529.6	530.3	530.6	530.3	530.0	529.7	529.5	529.4
135°	558.6	559.3	560.1	560.8	561.6	561.9	561.6	561.3	561.1	560.8	560.6
137.5°	587.2	587.9	588.5	589.2	589.8	590.1	589.8	589.6	589.4	589.1	589.2
140°	605.9	606.2	606.4	606.7	606.9	607.0	606.9	606.7	606.6	606.5	606.7
142.5°	622.8	623.0	623.1	623.3	623.4	623.6	623.8	623.9	624.1	624.3	624.3
145°	647.6	647.8	648.1	648.3	648.6	648.7	648.7	648.7	648.7	648.7	648.8
147.5°	669.2	669.2	669.1	669.1	669.0	669.1	669.2	669.4	669.5	669.7	669.9
150°	682.9	682.7	682.4	682.2	681.9	681.9	682.2	682.4	682.7	682.9	683.2
152.5°	696.2	695.6	695.1	694.5	693.9	693.8	694.0	694.3	694.5	694.8	695.1
155°	713.2	712.4	711.7	710.9	710.1	709.9	710.1	710.4	710.6	710.9	711.3
157.5°	726.3	725.8	725.4	724.9	724.5	724.3	724.3	724.3	724.3	724.4	724.8
160°	735.4	734.7	733.9	733.1	732.4	732.1	732.2	732.3	732.4	732.6	733.1
162.5°	742.7	742.0	741.2	740.4	739.7	739.4	739.5	739.6	739.7	739.9	740.6
165°	752.5	751.8	751.0	750.3	749.5	749.2	749.3	749.4	749.6	749.7	750.4
167.5°	759.8	759.1	758.3	757.5	756.7	756.4	756.5	756.6	756.7	756.9	757.8
170°	764.0	763.1	762.2	761.3	760.4	760.0	760.1	760.3	760.4	760.5	761.5
172.5°	766.7	765.8	764.9	764.0	763.1	762.8	763.0	763.3	763.5	763.7	764.6
175°	769.7	768.9	768.1	767.4	766.6	766.3	766.4	766.6	766.7	766.8	767.8
177.5°	771.0	770.4	769.8	769.2	768.6	768.3	768.4	768.5	768.6	768.7	769.5
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	11.7	11.8	11.9	12.0	11.9	11.8	11.7	11.6
90°	10.4	11.0	11.7	12.2	12.6	12.9	13.3	13.7
92.5°	10.4	11.0	11.7	12.1	12.2	12.4	12.6	12.8
95°	10.4	11.0	11.7	12.0	12.0	12.0	12.0	12.0
97.5°	20.9	17.3	13.8	12.0	12.0	12.0	12.0	12.0
100°	61.5	42.6	23.7	14.0	13.5	13.0	12.5	12.0
102.5°	119.5	115.9	112.4	106.3	97.6	89.0	80.4	71.8
105°	170.0	170.0	170.0	170.0	169.8	169.7	169.6	169.4
107.5°	215.3	215.3	215.3	215.1	214.8	214.4	214.0	213.6
110°	244.6	244.2	243.8	243.7	243.8	243.9	244.1	244.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	273.6	273.1	272.6	272.3	272.1	271.9	271.8	271.6
115°	317.3	316.8	316.3	315.7	314.9	314.2	313.4	312.7
117.5°	359.6	358.9	358.3	357.8	357.5	357.1	356.8	356.5
120°	386.9	386.6	386.4	385.9	385.3	384.7	384.0	383.4
122.5°	412.9	412.7	412.4	411.9	411.2	410.4	409.7	409.0
125°	450.9	450.3	449.8	449.4	449.0	448.6	448.3	447.9
127.5°	485.5	485.3	485.0	484.4	483.4	482.5	481.6	480.6
130°	508.2	507.8	507.4	506.9	506.3	505.6	505.0	504.4
132.5°	529.3	529.2	529.2	528.8	528.2	527.5	526.9	526.3
135°	560.3	560.1	559.8	559.3	558.6	557.8	557.0	556.3
137.5°	589.2	589.3	589.3	589.0	588.4	587.7	587.1	586.4
140°	607.0	607.2	607.5	607.2	606.5	605.7	605.0	604.2
142.5°	624.4	624.4	624.5	624.1	623.4	622.6	621.8	621.1
145°	649.0	649.1	649.2	648.9	648.1	647.4	646.6	645.8
147.5°	670.0	670.2	670.3	669.9	669.0	668.1	667.2	666.3
150°	683.4	683.7	683.9	683.6	682.6	681.5	680.5	679.5
152.5°	695.3	695.6	695.8	695.5	694.6	693.7	692.7	691.8
155°	711.7	712.0	712.4	712.1	711.1	710.1	709.1	708.0
157.5°	725.2	725.6	726.0	725.7	724.7	723.6	722.6	721.6
160°	733.6	734.1	734.6	734.3	733.3	732.3	731.3	730.3
162.5°	741.3	742.0	742.7	742.5	741.4	740.3	739.2	738.0
165°	751.2	752.0	752.7	752.6	751.6	750.6	749.6	748.5
167.5°	758.7	759.6	760.5	760.4	759.3	758.1	757.0	755.8
170°	762.6	763.6	764.6	764.5	763.4	762.2	761.1	760.0
172.5°	765.5	766.5	767.4	767.3	766.1	765.0	763.8	762.7
175°	768.8	769.8	770.9	770.8	769.7	768.5	767.4	766.2
177.5°	770.2	770.9	771.6	771.5	770.7	769.9	769.1	768.3
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7

(END OF REPORT)