

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: P333344

Luminaire Tested: **S125DIW-S375D470U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333344
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: S125DIW-S375D470U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3395.4 lumens
Efficiency: N/A
Efficacy: 147.6 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

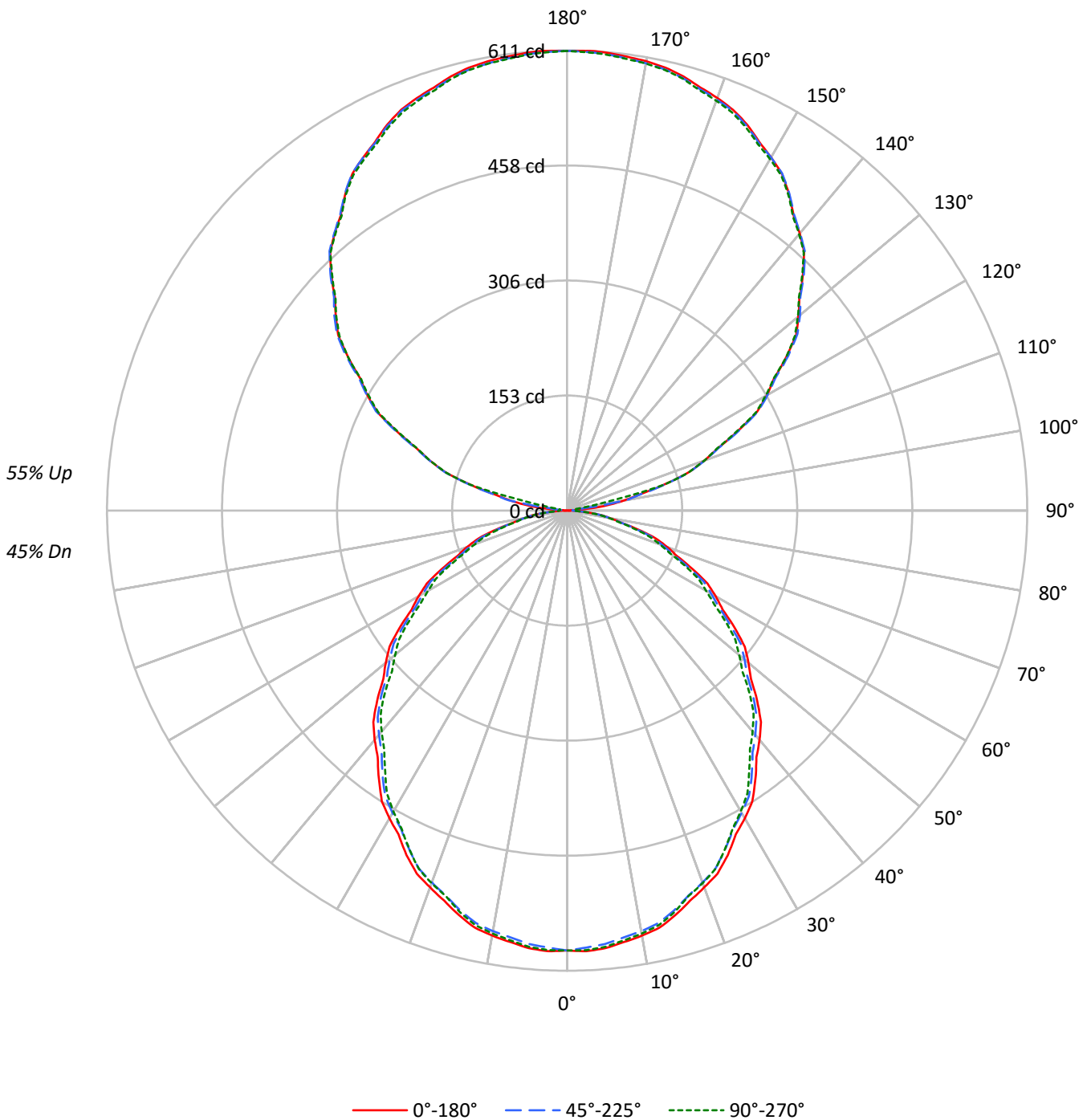
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	38
2	88	80	74	69	80	74	69	64	62	58	54	50	48	45	40	38	36	31
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	31	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	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	49	38	31	26	32	27	23	27	22	19	22	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

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	1.6
10°-20°	155.6	4.6
20°-30°	229.7	6.8
30°-40°	268.1	7.9
40°-50°	269.2	7.9
50°-60°	236.3	7.0
60°-70°	176.1	5.2
70°-80°	100.7	3.0
80°-90°	30.6	0.9
90°-100°	22.2	0.7
100°-110°	136.7	4.0
110°-120°	247.9	7.3
120°-130°	318.1	9.4
130°-140°	342.2	10.1
140°-150°	321.2	9.5
150°-160°	259.8	7.7
160°-170°	168.0	4.9
170°-180°	58.0	1.7
0°-30°	440.4	13.0
0°-40°	708.5	20.9
0°-60°	1214.0	35.8
0°-90°	1521.4	44.8
90°-120°	406.7	12.0
90°-150°	1388.2	40.9
90°-180°	1874.0	55.2
0°-180°	3395.4	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°	0	4	7	9	11	2
95°	26	24	7	9	10	33
105°	133	135	135	135	134	141
115°	250	252	252	251	248	247
125°	355	358	358	356	355	317
135°	443	445	445	444	441	341
145°	514	514	514	515	512	321
155°	566	563	564	565	561	260
165°	597	594	594	597	594	168
175°	610	608	608	611	608	58
180°	610	610	610	610	610	



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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	10.2	10.4	10.6	10.7	10.8	10.9	10.9	11.0	11.1	11.2
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.2	7.7
92.5°	7.0	6.4	5.8	5.3	4.7	4.7	5.4	6.0	6.6	7.2	7.7
95°	25.8	25.5	25.2	24.9	24.6	22.5	18.7	14.9	11.1	7.2	7.7
97.5°	53.8	54.4	54.9	55.5	56.0	52.5	44.9	37.4	29.8	22.3	19.4
100°	75.5	75.9	76.2	76.5	76.8	77.1	77.5	77.9	78.3	78.7	63.7
102.5°	97.6	98.0	98.4	98.8	99.2	99.5	99.7	99.9	100.2	100.4	97.6
105°	133.0	133.4	133.8	134.2	134.6	134.8	134.8	134.8	134.8	134.8	134.8
107.5°	169.7	169.7	169.7	169.7	169.7	169.8	170.0	170.2	170.4	170.6	170.7
110°	193.6	193.6	193.6	193.6	193.6	193.7	193.9	194.1	194.3	194.5	194.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	216.1	216.3	216.5	216.8	217.0	217.2	217.3	217.5	217.6	217.7	217.3
115°	249.7	250.2	250.7	251.2	251.7	252.0	252.1	252.2	252.3	252.4	252.0
117.5°	284.6	284.5	284.5	284.5	284.5	284.7	285.0	285.4	285.8	286.2	285.7
120°	306.3	306.2	306.1	306.0	305.9	306.0	306.3	306.6	306.9	307.2	307.0
122.5°	325.5	325.8	326.2	326.6	327.0	327.2	327.4	327.5	327.7	327.8	327.6
125°	355.1	355.8	356.5	357.2	357.9	358.3	358.3	358.3	358.3	358.3	357.9
127.5°	383.4	384.0	384.5	385.0	385.5	385.7	385.6	385.6	385.5	385.4	385.2
130°	400.8	401.3	401.8	402.3	402.8	403.1	403.2	403.3	403.4	403.5	403.2
132.5°	418.2	418.8	419.4	419.9	420.5	420.7	420.5	420.3	420.0	419.8	419.8
135°	442.9	443.5	444.1	444.7	445.3	445.5	445.3	445.1	444.9	444.7	444.5
137.5°	465.6	466.1	466.6	467.2	467.7	467.9	467.7	467.5	467.3	467.1	467.2
140°	480.4	480.6	480.8	481.0	481.2	481.3	481.2	481.1	481.0	480.9	481.1
142.5°	493.8	494.0	494.1	494.2	494.3	494.4	494.6	494.7	494.9	495.0	495.0
145°	513.5	513.7	513.9	514.1	514.3	514.4	514.4	514.4	514.4	514.4	514.5
147.5°	530.7	530.6	530.6	530.5	530.5	530.5	530.7	530.8	530.9	531.0	531.1
150°	541.5	541.3	541.1	540.9	540.7	540.7	540.9	541.1	541.3	541.5	541.7
152.5°	552.0	551.6	551.1	550.7	550.2	550.1	550.3	550.5	550.7	550.9	551.1
155°	565.5	564.9	564.3	563.7	563.1	562.9	563.1	563.3	563.5	563.7	564.0
157.5°	575.9	575.5	575.2	574.8	574.4	574.3	574.3	574.3	574.3	574.4	574.7
160°	583.1	582.5	581.9	581.3	580.7	580.5	580.6	580.7	580.8	580.9	581.3
162.5°	588.9	588.3	587.7	587.1	586.5	586.3	586.4	586.5	586.6	586.7	587.2
165°	596.7	596.1	595.5	594.9	594.3	594.0	594.1	594.2	594.3	594.4	595.0
167.5°	602.5	601.9	601.3	600.6	600.0	599.7	599.8	599.9	600.0	600.1	600.9
170°	605.8	605.1	604.3	603.6	602.9	602.6	602.7	602.8	602.9	603.0	603.8
172.5°	607.9	607.2	606.5	605.8	605.1	604.9	605.0	605.2	605.4	605.6	606.3
175°	610.3	609.7	609.1	608.5	607.9	607.6	607.7	607.8	607.9	608.0	608.8
177.5°	611.4	610.9	610.4	609.9	609.4	609.2	609.3	609.4	609.5	609.6	610.1
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3



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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°	11.3	11.4	11.5	11.5	11.4	11.3	11.1	11.0
90°	8.2	8.7	9.2	9.7	10.0	10.3	10.6	10.9
92.5°	8.2	8.7	9.2	9.6	9.7	9.9	10.0	10.1
95°	8.2	8.7	9.2	9.5	9.5	9.5	9.5	9.5
97.5°	16.6	13.8	10.9	9.5	9.5	9.5	9.5	9.5
100°	48.8	33.8	18.8	11.1	10.7	10.3	9.9	9.5
102.5°	94.8	91.9	89.1	84.3	77.4	70.6	63.7	56.9
105°	134.8	134.8	134.8	134.8	134.7	134.6	134.5	134.4
107.5°	170.7	170.7	170.7	170.6	170.3	170.0	169.7	169.4
110°	193.9	193.6	193.3	193.2	193.3	193.4	193.5	193.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.9	216.5	216.2	215.9	215.8	215.6	215.5	215.3
115°	251.6	251.2	250.8	250.3	249.7	249.1	248.5	247.9
117.5°	285.1	284.6	284.1	283.7	283.4	283.2	282.9	282.7
120°	306.8	306.6	306.4	306.0	305.5	305.0	304.5	304.0
122.5°	327.4	327.2	327.0	326.6	326.0	325.4	324.9	324.3
125°	357.5	357.1	356.7	356.3	356.0	355.7	355.4	355.1
127.5°	385.0	384.8	384.6	384.1	383.3	382.6	381.8	381.1
130°	402.9	402.6	402.3	401.9	401.4	400.9	400.4	399.9
132.5°	419.7	419.6	419.6	419.3	418.8	418.3	417.8	417.3
135°	444.3	444.1	443.9	443.5	442.9	442.3	441.7	441.1
137.5°	467.2	467.3	467.3	467.1	466.5	466.0	465.5	465.0
140°	481.3	481.5	481.7	481.5	480.9	480.3	479.7	479.1
142.5°	495.1	495.1	495.2	494.9	494.3	493.7	493.1	492.5
145°	514.6	514.7	514.8	514.5	513.9	513.3	512.7	512.1
147.5°	531.3	531.4	531.5	531.2	530.5	529.8	529.0	528.3
150°	541.9	542.1	542.3	542.0	541.2	540.4	539.6	538.8
152.5°	551.3	551.5	551.7	551.5	550.7	550.0	549.3	548.6
155°	564.3	564.6	564.9	564.6	563.8	563.0	562.2	561.4
157.5°	575.0	575.3	575.6	575.4	574.6	573.8	573.0	572.2
160°	581.7	582.1	582.5	582.3	581.5	580.7	579.9	579.1
162.5°	587.8	588.4	588.9	588.8	587.9	587.0	586.1	585.2
165°	595.7	596.3	596.9	596.8	596.0	595.1	594.3	593.5
167.5°	601.6	602.3	603.0	603.0	602.0	601.1	600.2	599.3
170°	604.6	605.5	606.3	606.2	605.3	604.4	603.5	602.6
172.5°	607.0	607.7	608.5	608.4	607.5	606.6	605.7	604.8
175°	609.6	610.4	611.2	611.2	610.3	609.4	608.5	607.6
177.5°	610.7	611.2	611.8	611.8	611.1	610.5	609.8	609.2
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3

(END OF REPORT)