

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: P333344-830

Luminaire Tested: **S125DIW-S375D470U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333344-830
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-S375D470U830-4F0-1E-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: 3200.4 lumens
Efficiency: N/A
Efficacy: 139.1 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

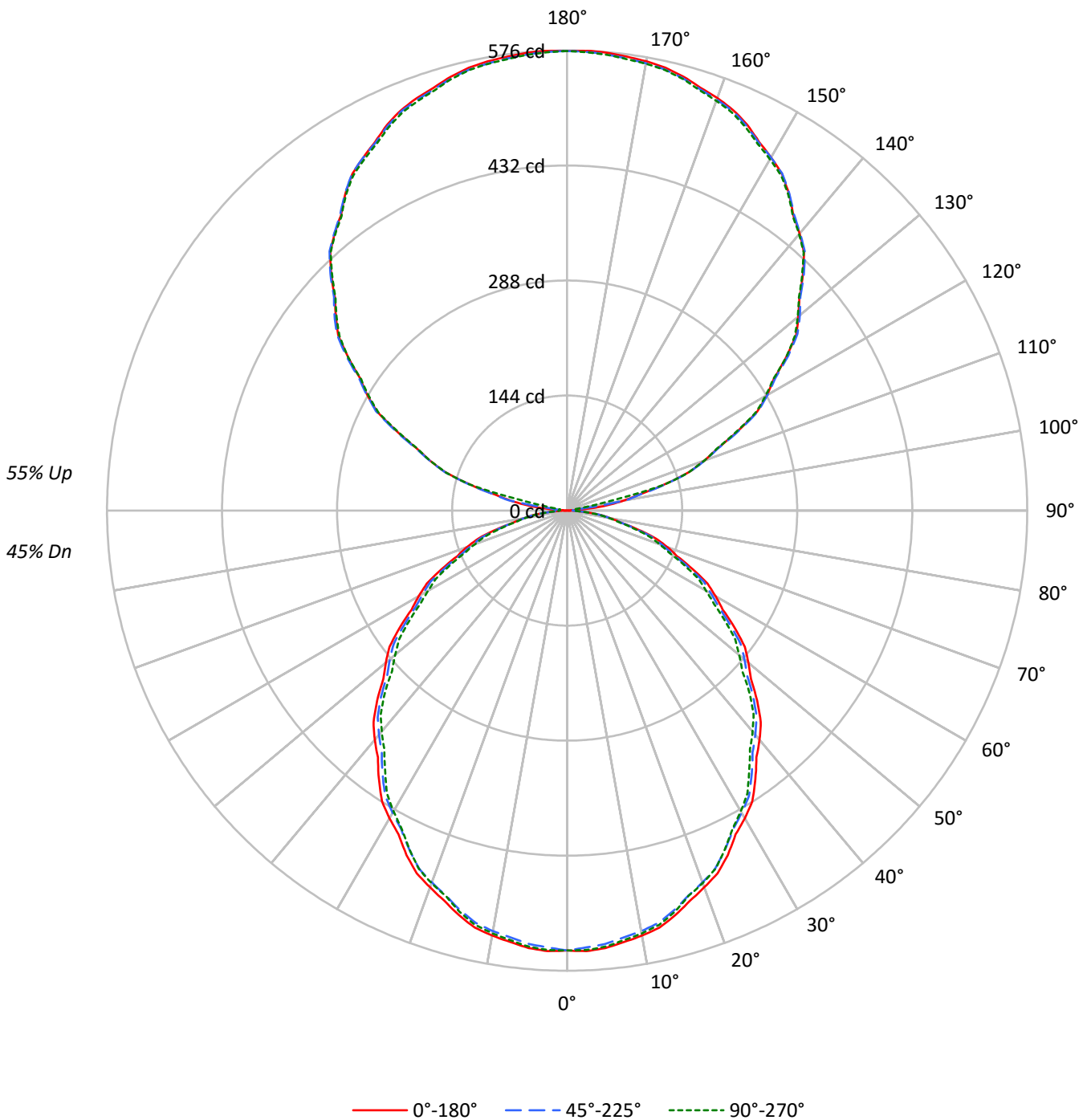
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	1.6
10°-20°	146.6	4.6
20°-30°	216.5	6.8
30°-40°	252.7	7.9
40°-50°	253.8	7.9
50°-60°	222.8	7.0
60°-70°	166.0	5.2
70°-80°	94.9	3.0
80°-90°	28.8	0.9
90°-100°	20.9	0.7
100°-110°	128.8	4.0
110°-120°	233.6	7.3
120°-130°	299.9	9.4
130°-140°	322.5	10.1
140°-150°	302.7	9.5
150°-160°	244.9	7.7
160°-170°	158.4	4.9
170°-180°	54.6	1.7
0°-30°	415.1	13.0
0°-40°	667.8	20.9
0°-60°	1144.3	35.8
0°-90°	1434.0	44.8
90°-120°	383.4	12.0
90°-150°	1308.5	40.9
90°-180°	1766.0	55.2
0°-180°	3200.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	0	4	7	9	10	2
95°	24	22	7	9	9	31
105°	125	127	127	127	127	133
115°	235	237	238	236	234	233
125°	335	338	338	336	335	299
135°	418	420	419	418	416	322
145°	484	485	485	485	483	303
155°	533	531	531	532	529	245
165°	562	560	560	563	559	159
175°	575	573	573	576	573	55
180°	575	575	575	575	575	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.5	9.6	9.8	10.0	10.1	10.2	10.3	10.3	10.4	10.5	10.6
90°	0.5	1.2	2.0	2.7	3.5	4.1	4.8	5.5	6.1	6.8	7.3
92.5°	6.6	6.0	5.5	5.0	4.4	4.4	5.1	5.7	6.2	6.8	7.3
95°	24.3	24.0	23.8	23.5	23.2	21.2	17.6	14.0	10.5	6.8	7.3
97.5°	50.7	51.3	51.7	52.3	52.8	49.5	42.3	35.3	28.1	21.0	18.3
100°	71.2	71.5	71.8	72.1	72.4	72.7	73.0	73.4	73.8	74.2	60.0
102.5°	92.0	92.4	92.7	93.1	93.5	93.8	94.0	94.2	94.4	94.6	92.0
105°	125.4	125.7	126.1	126.5	126.9	127.1	127.1	127.1	127.1	127.1	127.1
107.5°	159.9	159.9	159.9	159.9	159.9	160.0	160.2	160.4	160.6	160.8	160.9
110°	182.5	182.5	182.5	182.5	182.5	182.6	182.8	182.9	183.1	183.3	183.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.7	203.9	204.1	204.3	204.5	204.7	204.8	205.0	205.1	205.2	204.8
115°	235.4	235.8	236.3	236.8	237.2	237.5	237.6	237.7	237.8	237.9	237.5
117.5°	268.2	268.2	268.2	268.2	268.2	268.3	268.6	269.0	269.4	269.8	269.3
120°	288.7	288.6	288.5	288.4	288.3	288.4	288.7	289.0	289.3	289.5	289.4
122.5°	306.8	307.1	307.5	307.8	308.2	308.4	308.6	308.7	308.9	309.0	308.8
125°	334.7	335.4	336.0	336.7	337.3	337.7	337.7	337.7	337.7	337.7	337.3
127.5°	361.4	361.9	362.4	362.9	363.4	363.5	363.4	363.4	363.4	363.3	363.1
130°	377.8	378.2	378.7	379.2	379.7	379.9	380.0	380.1	380.2	380.3	380.0
132.5°	394.2	394.7	395.3	395.8	396.3	396.5	396.3	396.2	395.9	395.7	395.7
135°	417.5	418.0	418.6	419.1	419.7	419.9	419.7	419.5	419.3	419.1	419.0
137.5°	438.8	439.3	439.8	440.4	440.8	441.0	440.8	440.6	440.5	440.3	440.4
140°	452.8	453.0	453.2	453.4	453.6	453.6	453.6	453.5	453.4	453.3	453.5
142.5°	465.4	465.6	465.7	465.8	465.9	466.0	466.2	466.3	466.5	466.6	466.6
145°	484.0	484.2	484.4	484.6	484.7	484.8	484.8	484.8	484.8	484.8	484.9
147.5°	500.2	500.1	500.1	500.0	500.0	500.0	500.2	500.3	500.4	500.5	500.6
150°	510.4	510.2	510.0	509.8	509.6	509.6	509.8	510.0	510.2	510.4	510.6
152.5°	520.3	519.9	519.4	519.1	518.6	518.5	518.7	518.9	519.1	519.2	519.4
155°	533.0	532.4	531.9	531.3	530.7	530.6	530.7	530.9	531.1	531.3	531.6
157.5°	542.8	542.4	542.2	541.8	541.4	541.3	541.3	541.3	541.3	541.4	541.7
160°	549.6	549.0	548.5	547.9	547.3	547.1	547.2	547.3	547.4	547.5	547.9
162.5°	555.1	554.5	553.9	553.4	552.8	552.6	552.7	552.8	552.9	553.0	553.5
165°	562.4	561.8	561.3	560.7	560.2	559.9	560.0	560.1	560.2	560.2	560.8
167.5°	567.9	567.3	566.8	566.1	565.5	565.2	565.3	565.4	565.5	565.6	566.4
170°	571.0	570.3	569.6	568.9	568.3	568.0	568.1	568.2	568.3	568.4	569.1
172.5°	573.0	572.3	571.7	571.0	570.3	570.1	570.2	570.4	570.6	570.8	571.5
175°	575.2	574.7	574.1	573.5	573.0	572.7	572.8	572.9	573.0	573.1	573.8
177.5°	576.3	575.8	575.3	574.9	574.4	574.2	574.3	574.4	574.5	574.6	575.0
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	10.7	10.7	10.8	10.8	10.7	10.7	10.5	10.4
90°	7.7	8.2	8.7	9.1	9.4	9.7	10.0	10.3
92.5°	7.7	8.2	8.7	9.0	9.1	9.3	9.4	9.5
95°	7.7	8.2	8.7	9.0	9.0	9.0	9.0	9.0
97.5°	15.6	13.0	10.3	9.0	9.0	9.0	9.0	9.0
100°	46.0	31.9	17.7	10.5	10.1	9.7	9.3	9.0
102.5°	89.4	86.6	84.0	79.5	73.0	66.5	60.0	53.6
105°	127.1	127.1	127.1	127.1	127.0	126.9	126.8	126.7
107.5°	160.9	160.9	160.9	160.8	160.5	160.2	159.9	159.7
110°	182.8	182.5	182.2	182.1	182.2	182.3	182.4	182.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	204.4	204.1	203.8	203.5	203.4	203.2	203.1	202.9
115°	237.1	236.8	236.4	235.9	235.4	234.8	234.2	233.7
117.5°	268.7	268.2	267.8	267.4	267.1	266.9	266.6	266.5
120°	289.2	289.0	288.8	288.4	287.9	287.5	287.0	286.5
122.5°	308.6	308.4	308.2	307.8	307.3	306.7	306.2	305.7
125°	337.0	336.6	336.2	335.8	335.5	335.3	335.0	334.7
127.5°	362.9	362.7	362.5	362.0	361.3	360.6	359.9	359.2
130°	379.8	379.5	379.2	378.8	378.3	377.9	377.4	376.9
132.5°	395.6	395.5	395.5	395.2	394.7	394.3	393.8	393.3
135°	418.8	418.6	418.4	418.0	417.5	416.9	416.3	415.8
137.5°	440.4	440.5	440.5	440.3	439.7	439.2	438.8	438.3
140°	453.6	453.8	454.0	453.8	453.3	452.7	452.1	451.6
142.5°	466.7	466.7	466.7	466.5	465.9	465.3	464.8	464.2
145°	485.0	485.1	485.2	484.9	484.4	483.8	483.2	482.7
147.5°	500.8	500.9	501.0	500.7	500.0	499.4	498.6	497.9
150°	510.8	511.0	511.1	510.9	510.1	509.3	508.6	507.8
152.5°	519.6	519.8	520.0	519.8	519.1	518.4	517.7	517.1
155°	531.9	532.2	532.4	532.2	531.4	530.7	529.9	529.1
157.5°	542.0	542.2	542.5	542.3	541.6	540.8	540.1	539.3
160°	548.3	548.7	549.0	548.8	548.1	547.3	546.6	545.8
162.5°	554.0	554.6	555.1	555.0	554.1	553.3	552.4	551.6
165°	561.5	562.0	562.6	562.5	561.8	560.9	560.2	559.4
167.5°	567.0	567.7	568.4	568.4	567.4	566.6	565.7	564.9
170°	569.9	570.7	571.5	571.4	570.5	569.7	568.8	568.0
172.5°	572.1	572.8	573.5	573.4	572.6	571.7	570.9	570.0
175°	574.6	575.3	576.1	576.1	575.2	574.4	573.5	572.7
177.5°	575.6	576.1	576.6	576.6	576.0	575.4	574.8	574.2
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2

(END OF REPORT)