

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: P333350-930

Luminaire Tested: **S125DIW-S375D770U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333350-930
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-S375D770U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3743.6 lumens
Efficiency: N/A
Efficacy: 123.1 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: Semi-Indirect

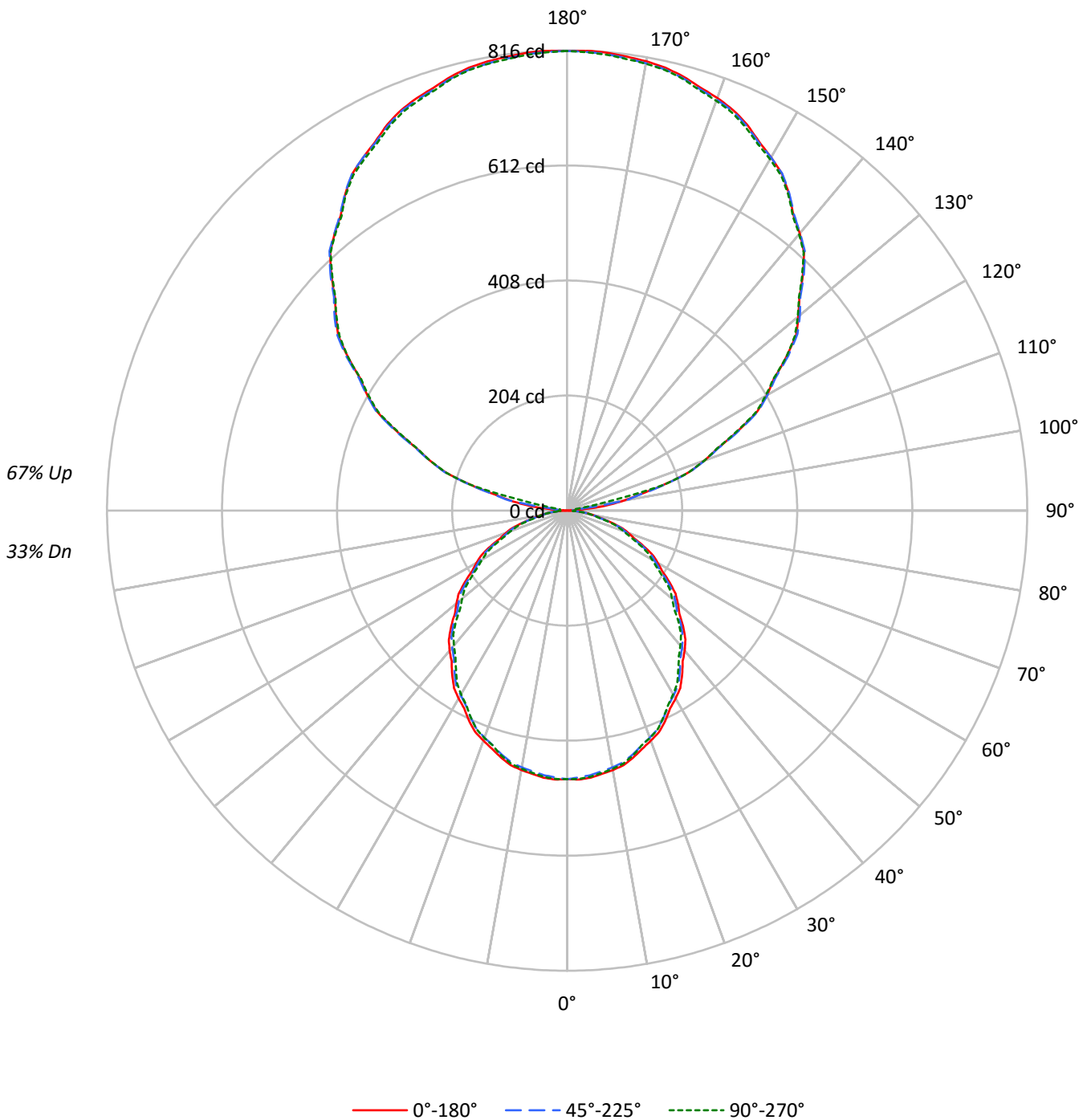
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.2
10°-20°	126.9	3.4
20°-30°	187.3	5.0
30°-40°	218.5	5.8
40°-50°	219.5	5.9
50°-60°	192.7	5.1
60°-70°	143.6	3.8
70°-80°	82.1	2.2
80°-90°	25.6	0.7
90°-100°	29.6	0.8
100°-110°	182.5	4.9
110°-120°	331.0	8.8
120°-130°	424.8	11.3
130°-140°	456.9	12.2
140°-150°	428.9	11.5
150°-160°	346.9	9.3
160°-170°	224.4	6.0
170°-180°	77.4	2.1
0°-30°	359.1	9.6
0°-40°	577.6	15.4
0°-60°	989.8	26.4
0°-90°	1241.0	33.2
90°-120°	543.2	14.5
90°-150°	1853.8	49.5
90°-180°	2503.0	66.9
0°-180°	3743.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	1	5	10	13	14	3
95°	34	32	10	12	13	44
105°	178	180	180	180	179	188
115°	334	336	337	335	331	330
125°	474	478	478	476	474	423
135°	591	595	594	592	589	456
145°	686	687	687	687	684	429
155°	755	752	753	754	750	348
165°	797	793	794	797	793	225
175°	815	812	812	816	811	78
180°	815	815	815	815	815	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.2	8.5	8.7	8.9	9.1	9.3	9.4	9.5	9.6	9.8	9.9
90°	0.6	1.7	2.8	3.8	4.9	5.9	6.8	7.8	8.7	9.7	10.4
92.5°	9.3	8.6	7.8	7.0	6.3	6.4	7.2	8.0	8.8	9.7	10.4
95°	34.4	34.0	33.6	33.3	32.9	30.1	24.9	19.9	14.8	9.7	10.4
97.5°	71.9	72.6	73.4	74.0	74.8	70.1	60.0	49.9	39.8	29.8	25.9
100°	100.9	101.3	101.7	102.1	102.5	103.0	103.5	104.0	104.6	105.1	85.1
102.5°	130.4	130.9	131.4	131.9	132.4	132.8	133.1	133.5	133.8	134.1	130.4
105°	177.6	178.1	178.7	179.2	179.8	180.0	180.0	180.0	180.0	180.0	180.0
107.5°	226.7	226.7	226.7	226.7	226.7	226.8	227.1	227.3	227.6	227.9	227.9
110°	258.5	258.5	258.5	258.5	258.5	258.7	258.9	259.3	259.5	259.8	259.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	288.5	288.9	289.2	289.5	289.8	290.1	290.2	290.4	290.6	290.7	290.2
115°	333.5	334.1	334.8	335.5	336.1	336.6	336.7	336.8	337.0	337.1	336.6
117.5°	380.0	379.9	379.9	379.9	379.8	380.1	380.7	381.2	381.6	382.1	381.5
120°	409.0	408.9	408.7	408.5	408.5	408.5	409.0	409.4	409.8	410.2	409.9
122.5°	434.6	435.1	435.6	436.1	436.7	437.0	437.2	437.3	437.6	437.7	437.5
125°	474.3	475.2	476.1	477.0	478.0	478.4	478.4	478.4	478.4	478.4	477.9
127.5°	512.0	512.7	513.4	514.0	514.7	515.0	514.9	514.9	514.8	514.7	514.4
130°	535.2	535.9	536.5	537.3	537.9	538.3	538.4	538.6	538.7	538.8	538.4
132.5°	558.4	559.2	560.0	560.8	561.6	561.8	561.5	561.2	560.9	560.6	560.5
135°	591.4	592.2	593.0	593.9	594.7	594.9	594.7	594.4	594.1	593.9	593.5
137.5°	621.7	622.5	623.1	623.9	624.5	624.8	624.5	624.3	624.0	623.8	623.9
140°	641.6	641.8	642.1	642.4	642.6	642.7	642.5	642.5	642.3	642.1	642.5
142.5°	659.4	659.6	659.7	659.9	660.1	660.2	660.5	660.6	660.8	661.0	661.0
145°	685.7	685.9	686.2	686.5	686.7	686.9	686.9	686.9	686.9	686.9	687.0
147.5°	708.7	708.6	708.5	708.5	708.4	708.5	708.7	708.7	708.9	709.1	709.2
150°	723.1	722.8	722.6	722.3	722.0	722.0	722.3	722.6	722.8	723.1	723.4
152.5°	737.1	736.5	736.0	735.4	734.7	734.6	734.9	735.2	735.4	735.6	736.0
155°	755.1	754.3	753.5	752.7	752.0	751.6	752.0	752.2	752.4	752.7	753.1
157.5°	769.0	768.6	768.1	767.6	767.1	766.9	766.9	767.0	767.0	767.0	767.4
160°	778.7	777.9	777.1	776.2	775.5	775.1	775.3	775.4	775.5	775.7	776.2
162.5°	786.4	785.6	784.8	784.0	783.2	782.9	783.0	783.2	783.3	783.4	784.2
165°	796.8	796.0	795.2	794.4	793.6	793.3	793.4	793.5	793.7	793.8	794.6
167.5°	804.5	803.7	802.9	802.1	801.2	800.9	801.0	801.1	801.3	801.4	802.3
170°	808.9	808.0	807.0	806.1	805.1	804.7	804.9	805.0	805.1	805.3	806.3
172.5°	811.8	810.9	809.9	808.9	808.0	807.7	808.0	808.2	808.5	808.7	809.6
175°	815.0	814.2	813.3	812.5	811.7	811.4	811.5	811.6	811.8	812.0	813.0
177.5°	816.4	815.7	815.1	814.5	813.8	813.5	813.7	813.8	813.8	814.0	814.7
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	10.0	10.2	10.3	10.4	10.3	10.3	10.2	10.1
90°	11.0	11.7	12.3	12.9	13.3	13.7	14.1	14.5
92.5°	11.0	11.7	12.3	12.8	13.0	13.1	13.4	13.5
95°	11.0	11.7	12.3	12.7	12.7	12.7	12.7	12.7
97.5°	22.2	18.3	14.6	12.7	12.7	12.7	12.7	12.7
100°	65.1	45.1	25.1	14.8	14.3	13.8	13.2	12.7
102.5°	126.5	122.8	119.0	112.5	103.4	94.2	85.1	76.0
105°	180.0	180.0	180.0	179.9	179.9	179.7	179.5	179.4
107.5°	228.0	228.0	228.0	227.8	227.4	227.0	226.6	226.2
110°	258.9	258.5	258.1	258.0	258.1	258.3	258.4	258.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	289.7	289.2	288.6	288.3	288.1	288.0	287.7	287.6
115°	336.0	335.5	334.9	334.3	333.5	332.6	331.8	331.0
117.5°	380.7	380.1	379.4	378.9	378.5	378.1	377.8	377.5
120°	409.7	409.4	409.1	408.6	408.0	407.3	406.7	405.9
122.5°	437.2	436.9	436.7	436.1	435.4	434.6	433.8	433.0
125°	477.4	476.9	476.3	475.8	475.4	475.0	474.7	474.3
127.5°	514.1	513.8	513.6	512.9	511.8	510.9	509.9	508.9
130°	538.1	537.7	537.3	536.7	536.1	535.4	534.7	534.0
132.5°	560.4	560.4	560.3	559.9	559.2	558.6	557.9	557.3
135°	593.3	593.0	592.8	592.2	591.4	590.6	589.8	589.0
137.5°	623.9	623.9	624.0	623.7	623.0	622.3	621.6	620.9
140°	642.7	642.9	643.3	642.9	642.1	641.4	640.6	639.8
142.5°	661.1	661.2	661.2	660.9	660.1	659.3	658.4	657.6
145°	687.1	687.3	687.4	687.1	686.2	685.4	684.7	683.9
147.5°	709.4	709.6	709.7	709.3	708.4	707.4	706.5	705.5
150°	723.7	723.9	724.2	723.8	722.7	721.6	720.6	719.5
152.5°	736.2	736.5	736.8	736.4	735.4	734.5	733.5	732.5
155°	753.5	753.9	754.3	754.0	752.9	751.9	750.8	749.7
157.5°	767.8	768.3	768.7	768.3	767.3	766.2	765.2	764.1
160°	776.7	777.3	777.8	777.6	776.5	775.4	774.4	773.2
162.5°	784.9	785.6	786.4	786.2	785.1	783.8	782.7	781.5
165°	795.4	796.2	797.0	796.9	795.8	794.8	793.7	792.6
167.5°	803.3	804.3	805.3	805.2	804.0	802.7	801.5	800.3
170°	807.4	808.5	809.6	809.5	808.3	807.1	805.8	804.7
172.5°	810.6	811.5	812.5	812.4	811.2	810.0	808.8	807.6
175°	814.1	815.1	816.2	816.1	815.0	813.8	812.5	811.3
177.5°	815.5	816.2	817.0	816.9	816.0	815.2	814.3	813.5
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0

(END OF REPORT)