

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: P333647-930

Luminaire Tested: **S125RDIW-S375D770U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333647-930
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: S125RDIW-S375D770U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3350.5 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

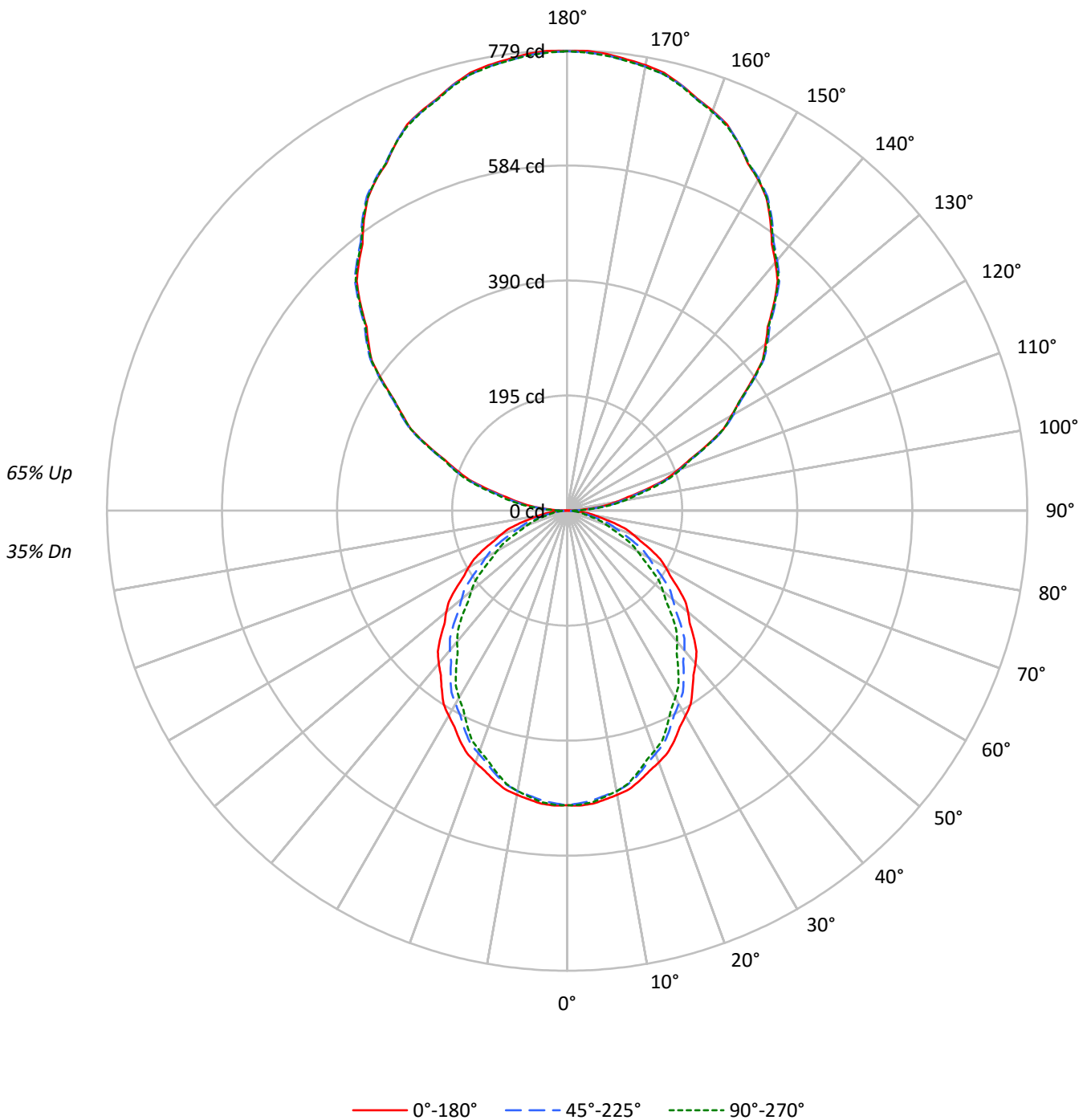
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30
2	86	79	73	68	78	72	67	63	58	54	51	45	43	41	33	32	31	25
3	79	70	63	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	62	54	48	65	56	49	44	46	41	37	36	32	30	27	24	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	36	55	45	38	33	37	32	28	29	25	23	22	19	18	14
7	56	44	37	31	51	40	34	29	33	28	24	26	23	20	20	17	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	18	16	14	11
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	14	13	10
10	45	33	26	22	41	31	25	20	25	21	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.4
10°-20°	131.1	3.9
20°-30°	190.1	5.7
30°-40°	216.7	6.5
40°-50°	211.2	6.3
50°-60°	177.8	5.3
60°-70°	124.6	3.7
70°-80°	64.1	1.9
80°-90°	17.9	0.5
90°-100°	52.1	1.6
100°-110°	153.8	4.6
110°-120°	260.5	7.8
120°-130°	342.9	10.2
130°-140°	384.2	11.5
140°-150°	376.6	11.2
150°-160°	316.3	9.4
160°-170°	210.2	6.3
170°-180°	73.6	2.2
0°-30°	368.1	11.0
0°-40°	584.8	17.5
0°-60°	973.7	29.1
0°-90°	1180.3	35.2
90°-120°	466.4	13.9
90°-150°	1570.1	46.9
90°-180°	2170.0	64.8
0°-180°	3350.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	1	5	10	13	14	3
95°	39	41	47	51	52	42
105°	138	141	145	148	150	147
115°	261	263	264	264	263	258
125°	381	384	385	384	383	341
135°	495	499	499	499	497	381
145°	600	602	604	604	602	375
155°	686	686	687	689	686	316
165°	746	745	746	748	744	210
175°	776	774	774	777	773	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.1	6.8	6.5	6.3	6.0	6.0	6.1	6.2	6.4	6.4	6.6
90°	0.6	1.7	2.8	3.8	4.9	6.0	6.8	7.8	8.7	9.7	10.4
92.5°	14.7	15.4	16.1	16.9	17.7	18.6	19.8	21.0	22.1	23.2	24.1
95°	39.4	39.6	39.9	40.1	40.4	41.3	42.6	43.9	45.2	46.6	47.5
97.5°	65.4	65.5	65.6	65.7	65.8	66.8	68.6	70.5	72.3	74.2	75.1
100°	84.7	84.7	84.7	84.7	84.7	85.6	87.3	89.1	90.8	92.6	93.8
102.5°	105.6	106.1	106.6	107.1	107.7	108.4	109.3	110.2	111.0	111.9	113.3
105°	138.0	138.7	139.3	140.0	140.7	141.5	142.3	143.0	143.8	144.6	145.4
107.5°	173.8	174.5	175.2	175.9	176.5	177.2	177.8	178.4	179.0	179.6	180.0
110°	198.5	199.2	199.8	200.6	201.2	201.7	202.1	202.5	202.9	203.3	203.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	223.7	224.0	224.4	224.8	225.1	225.5	226.0	226.6	227.1	227.6	227.8
115°	260.9	261.4	262.0	262.4	263.0	263.4	263.7	263.9	264.2	264.5	264.3
117.5°	298.2	298.4	298.6	298.9	299.1	299.4	299.6	299.9	300.1	300.4	300.4
120°	321.4	322.0	322.7	323.4	324.1	324.5	324.6	324.7	324.9	325.0	325.0
122.5°	346.6	346.8	347.1	347.3	347.6	347.8	348.1	348.5	348.9	349.2	349.1
125°	380.7	381.5	382.3	383.1	383.9	384.4	384.5	384.7	384.8	384.9	384.7
127.5°	417.0	417.4	417.9	418.4	418.8	419.1	419.3	419.5	419.6	419.8	419.6
130°	438.8	439.4	440.2	440.8	441.5	442.0	442.2	442.5	442.8	443.0	442.9
132.5°	460.6	461.7	462.8	463.9	465.0	465.5	465.5	465.4	465.4	465.3	465.2
135°	495.0	495.9	496.7	497.5	498.3	498.8	498.9	499.0	499.2	499.3	499.3
137.5°	527.5	528.3	529.0	529.9	530.7	531.2	531.5	531.7	532.1	532.4	532.6
140°	548.4	549.0	549.7	550.3	551.1	551.5	552.0	552.4	552.8	553.2	553.4
142.5°	569.2	569.7	570.3	570.9	571.4	571.9	572.5	573.0	573.5	574.0	574.1
145°	599.8	600.3	600.9	601.4	601.9	602.4	602.8	603.2	603.6	604.1	604.1
147.5°	628.1	628.4	628.7	629.0	629.3	629.6	629.9	630.2	630.6	630.9	631.2
150°	647.0	646.9	646.7	646.6	646.5	646.7	647.2	647.8	648.2	648.8	648.8
152.5°	662.5	662.7	662.8	663.1	663.2	663.4	663.7	663.9	664.1	664.3	664.6
155°	686.3	686.3	686.3	686.3	686.3	686.4	686.6	686.6	686.8	687.0	687.5
157.5°	707.7	707.4	707.0	706.8	706.5	706.4	706.5	706.6	706.8	706.9	707.4
160°	720.2	719.8	719.4	719.0	718.6	718.4	718.6	718.8	718.8	719.0	719.6
162.5°	731.4	731.1	730.8	730.5	730.2	730.0	730.1	730.1	730.1	730.2	730.8
165°	746.2	746.0	745.8	745.4	745.2	745.1	745.3	745.3	745.5	745.7	746.2
167.5°	758.9	758.3	757.7	757.2	756.7	756.4	756.4	756.4	756.4	756.4	757.2
170°	765.6	765.1	764.5	764.0	763.4	763.2	763.2	763.2	763.2	763.2	764.0
172.5°	770.5	769.9	769.4	768.8	768.3	768.0	768.0	768.0	768.0	768.0	768.8
175°	775.9	775.3	774.9	774.3	773.7	773.5	773.5	773.5	773.5	773.5	774.3
177.5°	778.7	778.3	777.8	777.4	777.0	776.7	776.6	776.5	776.4	776.2	776.9
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	6.8	6.8	7.0	7.1	7.1	7.1	7.1	7.1
90°	11.0	11.7	12.4	12.9	13.3	13.7	14.1	14.5
92.5°	25.0	25.9	26.8	27.4	27.7	28.0	28.3	28.5
95°	48.5	49.4	50.4	51.0	51.3	51.5	51.8	52.0
97.5°	76.0	76.9	77.8	78.3	78.4	78.6	78.8	78.9
100°	95.0	96.2	97.4	98.2	98.5	98.7	99.0	99.2
102.5°	114.6	115.9	117.2	118.1	118.5	118.9	119.2	119.6
105°	146.3	147.1	147.9	148.5	148.9	149.3	149.7	150.1
107.5°	180.4	180.8	181.2	181.4	181.4	181.4	181.3	181.3
110°	204.2	204.6	205.0	205.1	205.0	204.8	204.7	204.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	228.0	228.1	228.3	228.3	228.0	227.8	227.6	227.3
115°	264.2	264.1	263.9	263.8	263.7	263.6	263.4	263.3
117.5°	300.5	300.6	300.8	300.5	300.0	299.5	298.9	298.4
120°	325.0	325.0	325.0	324.7	324.2	323.7	323.1	322.6
122.5°	349.0	348.9	348.8	348.5	348.1	347.6	347.2	346.8
125°	384.4	384.1	383.8	383.7	383.5	383.4	383.3	383.1
127.5°	419.6	419.4	419.2	419.1	418.8	418.5	418.2	418.0
130°	442.8	442.6	442.5	442.3	442.1	441.7	441.5	441.2
132.5°	465.0	464.9	464.8	464.5	464.1	463.7	463.4	463.0
135°	499.3	499.3	499.3	499.0	498.5	498.0	497.4	496.9
137.5°	532.7	532.9	533.0	532.7	532.1	531.4	530.8	530.0
140°	553.8	554.0	554.2	554.1	553.4	552.7	552.0	551.4
142.5°	574.3	574.5	574.6	574.4	573.7	573.1	572.3	571.7
145°	604.1	604.1	604.1	603.8	603.4	603.0	602.6	602.2
147.5°	631.5	631.9	632.2	631.9	631.0	630.1	629.2	628.3
150°	648.8	648.8	648.8	648.7	648.4	648.2	647.8	647.6
152.5°	665.0	665.3	665.6	665.5	665.0	664.6	664.1	663.6
155°	688.0	688.5	689.1	689.0	688.4	687.7	687.0	686.3
157.5°	708.0	708.5	709.1	708.9	708.0	707.1	706.2	705.3
160°	720.1	720.6	721.1	721.1	720.4	719.7	719.1	718.4
162.5°	731.5	732.1	732.7	732.7	731.9	731.1	730.3	729.5
165°	746.7	747.3	747.8	747.6	746.9	746.1	745.3	744.4
167.5°	758.1	758.9	759.6	759.6	758.8	758.0	757.2	756.3
170°	764.8	765.6	766.5	766.4	765.4	764.5	763.5	762.6
172.5°	769.6	770.5	771.3	771.3	770.5	769.6	768.7	767.9
175°	775.1	775.9	776.7	776.7	775.7	774.8	773.8	772.9
177.5°	777.6	778.2	778.9	778.8	778.0	777.3	776.6	775.8
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7

(END OF REPORT)