

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: P333506-830

Luminaire Tested: **S125RDIP-S375D810U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333506-830
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: S125RDIP-S375D810U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4007.4 lumens
Efficiency: N/A
Efficacy: 128.4 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

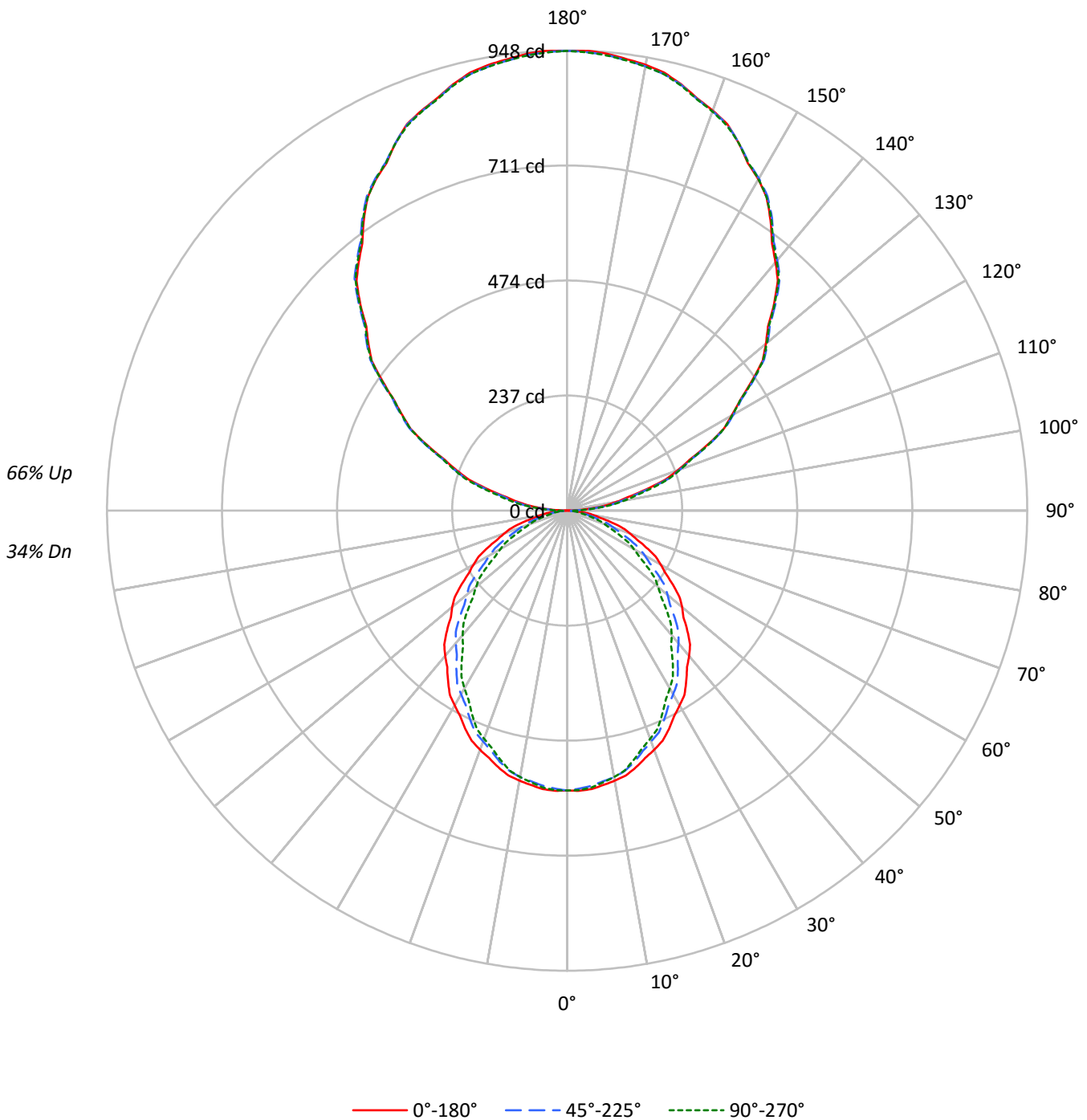
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	82	78	76	65	63	61	51	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	37	34	29	27	26	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	29	25	22	21	19	17	14
7	56	44	36	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	27	47	37	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.4
10°-20°	151.6	3.8
20°-30°	219.8	5.5
30°-40°	250.5	6.3
40°-50°	244.1	6.1
50°-60°	205.5	5.1
60°-70°	144.1	3.6
70°-80°	74.1	1.8
80°-90°	20.8	0.5
90°-100°	63.4	1.6
100°-110°	187.3	4.7
110°-120°	317.3	7.9
120°-130°	417.5	10.4
130°-140°	467.9	11.7
140°-150°	458.6	11.4
150°-160°	385.1	9.6
160°-170°	256.0	6.4
170°-180°	89.6	2.2
0°-30°	425.6	10.6
0°-40°	676.0	16.9
0°-60°	1125.7	28.1
0°-90°	1364.6	34.1
90°-120°	568.0	14.2
90°-150°	1912.0	47.7
90°-180°	2643.0	66.0
0°-180°	4007.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	7	12	15	18	4
95°	48	50	57	62	63	51
105°	168	172	176	180	183	180
115°	318	320	322	321	321	314
125°	464	468	469	467	467	415
135°	603	607	608	608	605	465
145°	730	733	736	735	733	456
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.2	7.9	7.6	7.4	7.1	7.0	7.2	7.3	7.4	7.5	7.7
90°	0.8	2.1	3.4	4.7	5.9	7.2	8.4	9.5	10.7	11.8	12.6
92.5°	17.8	18.8	19.7	20.5	21.5	22.6	24.0	25.4	26.9	28.3	29.4
95°	47.9	48.3	48.5	48.9	49.2	50.2	51.8	53.4	55.1	56.7	57.9
97.5°	79.6	79.7	79.8	80.0	80.1	81.3	83.6	85.9	88.1	90.4	91.4
100°	103.2	103.2	103.2	103.2	103.2	104.2	106.4	108.5	110.7	112.7	114.2
102.5°	128.6	129.2	129.9	130.5	131.2	132.1	133.1	134.2	135.3	136.4	138.0
105°	168.1	168.9	169.7	170.5	171.4	172.2	173.2	174.2	175.1	176.2	177.1
107.5°	211.7	212.4	213.3	214.1	215.0	215.7	216.5	217.3	218.0	218.8	219.2
110°	241.8	242.6	243.4	244.2	245.1	245.7	246.2	246.7	247.1	247.6	248.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	272.4	272.9	273.2	273.7	274.1	274.7	275.2	275.9	276.5	277.1	277.4
115°	317.6	318.3	319.0	319.6	320.3	320.7	321.1	321.4	321.8	322.1	321.9
117.5°	363.1	363.4	363.6	363.9	364.2	364.6	364.9	365.1	365.4	365.7	365.8
120°	391.3	392.2	393.0	393.8	394.6	395.1	395.3	395.5	395.6	395.8	395.8
122.5°	422.0	422.4	422.6	422.9	423.2	423.6	424.0	424.4	424.8	425.3	425.1
125°	463.5	464.6	465.5	466.6	467.5	468.1	468.3	468.4	468.5	468.7	468.4
127.5°	507.8	508.4	508.9	509.4	510.0	510.4	510.6	510.8	511.0	511.2	511.0
130°	534.3	535.2	536.0	536.8	537.6	538.2	538.5	538.9	539.1	539.5	539.3
132.5°	560.9	562.2	563.5	564.9	566.3	566.8	566.8	566.8	566.7	566.7	566.5
135°	602.9	603.9	604.8	605.9	606.8	607.4	607.6	607.8	607.8	608.0	608.0
137.5°	642.4	643.4	644.3	645.3	646.2	646.9	647.2	647.5	647.9	648.3	648.5
140°	667.8	668.5	669.4	670.2	671.0	671.7	672.1	672.7	673.2	673.6	674.0
142.5°	693.1	693.8	694.5	695.1	695.9	696.5	697.1	697.8	698.3	699.0	699.2
145°	730.4	731.0	731.7	732.4	733.0	733.6	734.1	734.5	735.1	735.6	735.6
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	768.6
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	7.9	8.1	8.2	8.3	8.4	8.4	8.4	8.4
90°	13.4	14.2	15.1	15.7	16.2	16.7	17.2	17.7
92.5°	30.4	31.6	32.6	33.4	33.7	34.0	34.4	34.8
95°	59.0	60.2	61.4	62.1	62.4	62.8	63.1	63.3
97.5°	92.6	93.6	94.7	95.3	95.5	95.7	96.0	96.1
100°	115.7	117.2	118.7	119.6	119.9	120.2	120.6	120.8
102.5°	139.6	141.2	142.8	143.8	144.3	144.7	145.2	145.6
105°	178.1	179.1	180.1	180.8	181.3	181.8	182.3	182.8
107.5°	219.7	220.2	220.7	220.9	220.9	220.8	220.8	220.8
110°	248.6	249.1	249.6	249.8	249.6	249.4	249.3	249.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.6	277.8	278.1	278.1	277.7	277.4	277.1	276.8
115°	321.8	321.6	321.4	321.2	321.1	320.9	320.7	320.7
117.5°	366.0	366.1	366.3	366.0	365.3	364.7	364.0	363.4
120°	395.8	395.8	395.8	395.5	394.8	394.2	393.5	392.9
122.5°	425.0	424.9	424.7	424.4	423.9	423.4	422.8	422.4
125°	468.1	467.8	467.4	467.2	467.0	466.8	466.7	466.6
127.5°	510.9	510.7	510.6	510.3	510.0	509.6	509.3	509.0
130°	539.1	539.0	538.9	538.6	538.3	537.9	537.6	537.2
132.5°	566.3	566.1	566.0	565.6	565.2	564.8	564.3	563.8
135°	608.0	608.0	608.0	607.8	607.1	606.4	605.8	605.1
137.5°	648.7	648.8	649.0	648.8	647.9	647.1	646.3	645.5
140°	674.3	674.6	675.0	674.7	673.9	673.1	672.2	671.5
142.5°	699.4	699.6	699.7	699.5	698.6	697.9	697.0	696.2
145°	735.6	735.6	735.6	735.3	734.8	734.3	733.9	733.3
147.5°	769.0	769.5	769.9	769.5	768.4	767.2	766.2	765.1
150°	790.1	790.1	790.1	789.9	789.6	789.3	788.9	788.6
152.5°	809.7	810.1	810.5	810.4	809.8	809.3	808.7	808.0
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

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