

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

Luminaire Tested: **S125RDIW-S375D770U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333647  
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-S375D770U835-4F0-1E-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: 4109.5 lumens  
Efficiency: N/A  
Efficacy: 135.2 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

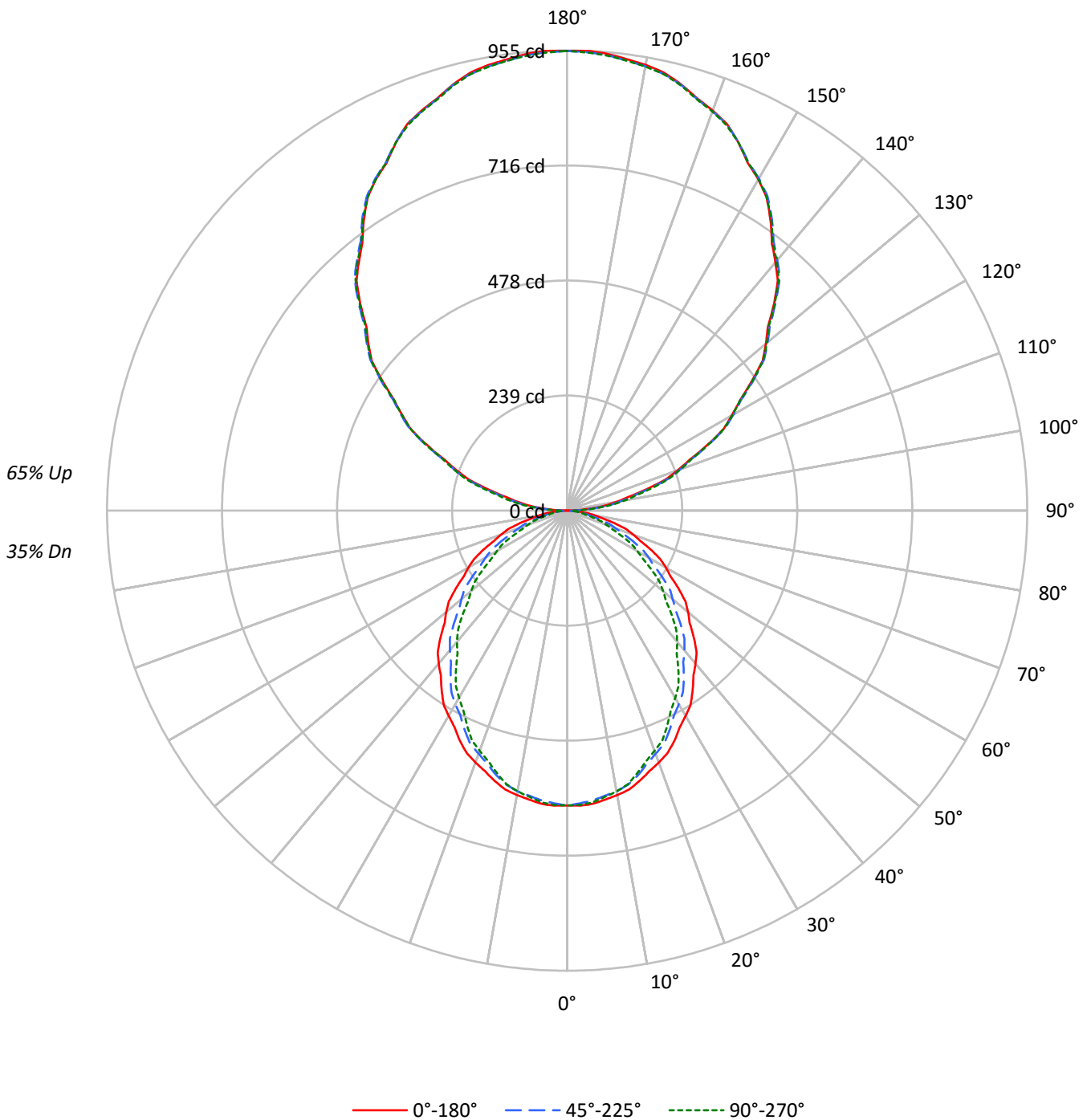
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	1.4
10°-20°	160.8	3.9
20°-30°	233.2	5.7
30°-40°	265.7	6.5
40°-50°	259.0	6.3
50°-60°	218.0	5.3
60°-70°	152.8	3.7
70°-80°	78.6	1.9
80°-90°	21.9	0.5
90°-100°	63.9	1.6
100°-110°	188.7	4.6
110°-120°	319.6	7.8
120°-130°	420.6	10.2
130°-140°	471.2	11.5
140°-150°	461.9	11.2
150°-160°	387.9	9.4
160°-170°	257.9	6.3
170°-180°	90.2	2.2
0°-30°	451.5	11.0
0°-40°	717.3	17.5
0°-60°	1194.3	29.1
0°-90°	1447.7	35.2
90°-120°	572.1	13.9
90°-150°	1925.8	46.9
90°-180°	2662.0	64.8
0°-180°	4109.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	1	7	12	16	18	4
95°	48	50	57	62	64	52
105°	169	173	177	182	184	181
115°	320	323	324	324	323	316
125°	467	471	472	471	470	418
135°	607	612	612	612	610	468
145°	736	739	741	741	739	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.7	8.3	8.0	7.7	7.4	7.3	7.5	7.6	7.8	7.9	8.1
90°	0.7	2.1	3.4	4.7	6.0	7.3	8.4	9.6	10.7	11.9	12.7
92.5°	18.0	18.9	19.8	20.7	21.7	22.8	24.3	25.7	27.1	28.5	29.6
95°	48.3	48.6	48.9	49.2	49.6	50.6	52.2	53.9	55.5	57.2	58.3
97.5°	80.2	80.3	80.4	80.6	80.7	81.9	84.2	86.5	88.7	91.0	92.1
100°	103.9	103.9	103.9	103.9	103.9	105.0	107.1	109.3	111.4	113.6	115.1
102.5°	129.5	130.1	130.8	131.4	132.1	133.0	134.1	135.2	136.2	137.3	139.0
105°	169.3	170.1	170.9	171.7	172.6	173.5	174.5	175.4	176.4	177.4	178.4
107.5°	213.2	214.0	214.9	215.7	216.5	217.3	218.1	218.8	219.6	220.3	220.8
110°	243.5	244.3	245.1	246.0	246.8	247.4	247.9	248.4	248.9	249.4	249.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	274.4	274.8	275.2	275.7	276.1	276.6	277.2	277.9	278.5	279.1	279.4
115°	320.0	320.6	321.3	321.9	322.6	323.1	323.4	323.7	324.1	324.4	324.2
117.5°	365.7	366.0	366.3	366.6	366.9	367.2	367.5	367.8	368.1	368.4	368.5
120°	394.2	395.0	395.8	396.7	397.5	398.0	398.1	398.3	398.5	398.6	398.6
122.5°	425.1	425.4	425.7	426.0	426.3	426.6	427.0	427.5	427.9	428.3	428.2
125°	466.9	467.9	468.9	469.9	470.9	471.5	471.6	471.8	472.0	472.1	471.8
127.5°	511.5	512.0	512.6	513.2	513.7	514.1	514.3	514.5	514.7	514.9	514.7
130°	538.2	539.0	539.9	540.7	541.5	542.1	542.4	542.7	543.1	543.4	543.2
132.5°	564.9	566.3	567.6	569.0	570.3	571.0	570.9	570.8	570.8	570.7	570.6
135°	607.2	608.2	609.2	610.2	611.2	611.8	611.9	612.1	612.3	612.4	612.4
137.5°	647.0	648.0	648.9	649.9	650.9	651.5	651.9	652.2	652.6	653.0	653.2
140°	672.6	673.4	674.2	675.0	675.9	676.5	677.0	677.5	678.0	678.5	678.8
142.5°	698.1	698.8	699.5	700.2	700.9	701.5	702.2	702.8	703.4	704.0	704.2
145°	735.7	736.3	737.0	737.6	738.3	738.9	739.4	739.9	740.4	740.9	740.9
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.2
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	8.3	8.4	8.6	8.7	8.7	8.7	8.7	8.7
90°	13.5	14.4	15.2	15.8	16.3	16.8	17.3	17.8
92.5°	30.7	31.8	32.9	33.6	34.0	34.3	34.7	35.0
95°	59.5	60.6	61.8	62.5	62.9	63.2	63.5	63.8
97.5°	93.2	94.3	95.4	96.0	96.2	96.4	96.6	96.8
100°	116.5	118.0	119.5	120.4	120.8	121.1	121.4	121.7
102.5°	140.6	142.2	143.8	144.8	145.3	145.8	146.2	146.7
105°	179.4	180.4	181.4	182.1	182.6	183.1	183.6	184.1
107.5°	221.3	221.8	222.3	222.5	222.5	222.5	222.4	222.4
110°	250.4	250.9	251.4	251.6	251.4	251.2	251.1	250.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	279.6	279.8	280.0	280.0	279.7	279.4	279.1	278.8
115°	324.1	323.9	323.7	323.6	323.4	323.3	323.1	322.9
117.5°	368.6	368.7	368.9	368.6	368.0	367.3	366.6	366.0
120°	398.6	398.6	398.6	398.3	397.7	397.0	396.3	395.7
122.5°	428.1	427.9	427.8	427.5	426.9	426.4	425.9	425.4
125°	471.5	471.1	470.8	470.6	470.4	470.2	470.1	469.9
127.5°	514.6	514.4	514.2	514.0	513.7	513.3	513.0	512.7
130°	543.1	542.9	542.7	542.5	542.2	541.8	541.5	541.2
132.5°	570.4	570.2	570.1	569.7	569.3	568.8	568.4	567.9
135°	612.4	612.4	612.4	612.1	611.4	610.8	610.1	609.5
137.5°	653.4	653.6	653.8	653.4	652.6	651.8	651.0	650.1
140°	679.2	679.5	679.8	679.6	678.8	677.9	677.1	676.3
142.5°	704.4	704.6	704.8	704.5	703.7	702.9	702.0	701.2
145°	740.9	740.9	740.9	740.6	740.1	739.6	739.1	738.6
147.5°	774.6	775.0	775.4	775.0	773.9	772.8	771.7	770.6
150°	795.8	795.8	795.8	795.6	795.3	795.0	794.6	794.3
152.5°	815.6	816.0	816.4	816.3	815.7	815.1	814.5	813.9
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

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