

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: P333120

Luminaire Tested: **S125DIP-S375D365U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333120  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S375D365U835-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2775.6 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

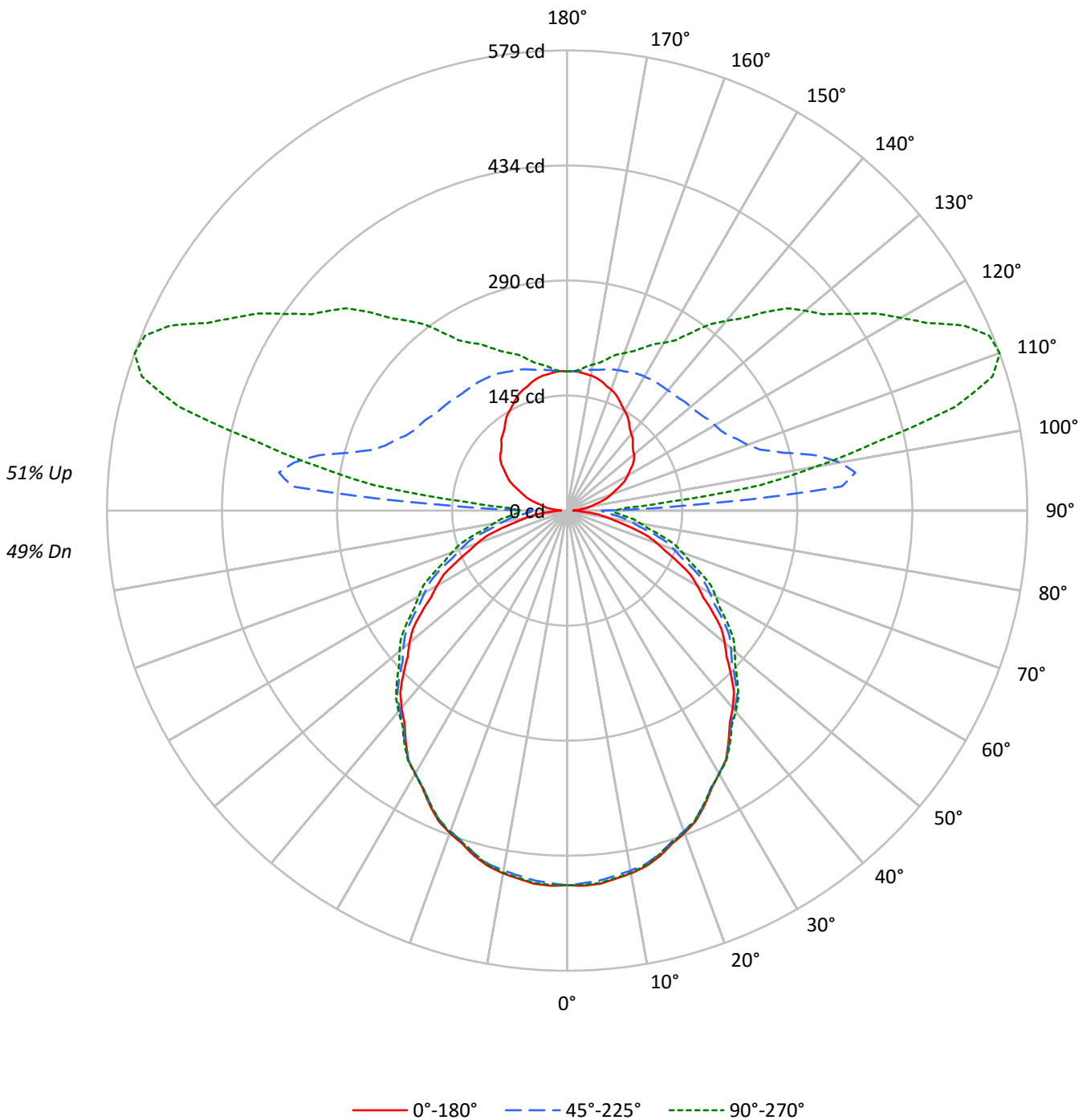
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	97	92	88	84	89	85	82	78	72	69	67	59	57	56	48	47	45	40
2	88	80	74	68	81	74	68	64	62	58	55	52	49	46	42	40	38	33
3	80	70	63	57	73	65	58	53	55	50	46	45	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	40	36	33	33	30	27	23
5	67	55	47	41	61	51	44	38	43	38	33	36	32	28	29	26	24	20
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	23	21	18
7	57	44	36	31	52	41	34	29	35	30	25	30	25	22	24	21	18	16
8	53	40	32	27	49	38	30	26	32	26	22	27	23	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	21	17	15	13
10	46	34	26	22	42	31	25	20	27	22	18	23	19	16	19	16	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	1.6
10°-20°	126.5	4.6
20°-30°	188.2	6.8
30°-40°	222.9	8.0
40°-50°	230.5	8.3
50°-60°	212.3	7.6
60°-70°	171.6	6.2
70°-80°	114.9	4.1
80°-90°	60.6	2.2
90°-100°	160.5	5.8
100°-110°	297.8	10.7
110°-120°	272.9	9.8
120°-130°	217.1	7.8
130°-140°	170.8	6.2
140°-150°	126.6	4.6
150°-160°	88.6	3.2
160°-170°	52.2	1.9
170°-180°	17.0	0.6
0°-30°	359.3	12.9
0°-40°	582.2	21.0
0°-60°	1025.0	36.9
0°-90°	1372.1	49.4
90°-120°	731.2	26.3
90°-150°	1245.8	44.9
90°-180°	1403.0	50.5
0°-180°	2775.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	25	44	56	60	6
95°	18	53	347	186	130	17
105°	44	68	282	539	506	47
115°	74	93	224	469	551	73
125°	101	118	208	370	431	89
135°	117	140	200	305	353	91
145°	136	155	196	247	274	85
155°	154	166	192	216	226	71
165°	168	173	184	195	198	47
175°	175	175	176	178	178	17
180°	175	175	175	175	175	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.5	17.8	21.3	24.7	28.1	31.7	35.2	38.9	42.4	46.1	48.5
90°	7.7	11.4	15.4	19.4	23.4	27.5	31.3	35.5	39.4	43.6	46.3
92.5°	11.0	14.9	20.9	28.4	37.5	51.1	74.0	109.9	148.6	150.4	130.9
95°	17.7	20.7	26.2	32.7	43.2	62.2	103.5	184.7	285.8	346.9	342.4
97.5°	24.8	27.6	32.0	38.3	47.7	62.1	90.4	150.8	256.2	365.8	421.3
100°	29.8	32.7	36.3	42.3	51.2	64.5	88.3	137.5	229.9	348.7	439.2
102.5°	35.4	37.8	40.9	47.1	55.2	68.2	89.6	131.4	209.8	320.4	425.8
105°	44.1	45.7	49.1	54.3	61.6	73.9	92.5	127.0	189.1	281.6	385.1
107.5°	52.6	54.7	57.8	62.1	69.3	80.4	98.4	128.3	179.4	254.6	344.2
110°	58.7	60.7	63.3	67.7	74.3	85.5	102.9	130.1	175.8	241.5	320.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	65.2	66.9	69.0	73.2	79.5	90.3	107.0	132.8	174.4	233.3	302.6
115°	74.2	75.6	77.4	81.3	87.3	97.8	113.6	136.7	173.3	223.7	282.5
117.5°	82.2	83.7	85.3	89.0	95.5	105.5	120.4	141.6	173.6	217.9	269.5
120°	87.8	89.2	90.9	94.4	100.7	110.9	125.6	145.0	174.5	214.7	262.0
122.5°	93.4	94.3	95.6	98.9	105.6	115.7	130.3	148.7	175.1	211.8	255.4
125°	100.8	101.4	103.1	106.2	112.8	122.9	136.6	153.9	176.4	207.8	246.2
127.5°	106.2	107.2	109.3	113.3	120.3	130.3	143.2	158.9	178.4	204.9	237.6
130°	109.9	110.8	113.6	118.1	125.4	135.2	147.6	162.5	179.8	203.2	232.2
132.5°	112.3	113.7	117.0	122.2	129.9	139.6	151.7	165.3	181.2	201.7	227.3
135°	116.8	118.2	122.3	127.8	135.2	145.0	156.7	169.1	182.9	199.5	221.0
137.5°	122.5	123.5	127.4	133.0	140.2	150.1	160.4	172.0	184.8	198.2	215.6
140°	125.6	126.6	130.9	136.5	143.2	152.8	163.2	173.9	185.3	197.4	212.7
142.5°	129.5	130.2	134.1	139.7	146.0	155.0	164.7	174.7	185.5	197.0	210.4
145°	135.5	136.1	139.5	144.3	150.6	158.7	167.9	176.7	186.2	196.5	207.6
147.5°	141.2	141.6	144.7	149.3	154.8	161.9	170.0	178.0	186.6	195.6	205.1
150°	144.9	145.6	148.1	152.7	157.6	163.6	171.4	178.8	186.6	194.7	203.2
152.5°	148.9	149.3	151.5	155.5	160.2	165.6	172.8	179.4	186.3	193.6	201.2
155°	154.1	154.1	156.2	159.7	163.3	168.2	174.2	179.9	185.5	191.6	197.9
157.5°	158.8	158.7	160.4	163.4	166.5	170.3	175.4	180.2	184.6	189.4	194.8
160°	161.9	161.5	162.9	165.4	168.2	171.4	176.0	180.2	183.8	188.0	192.3
162.5°	164.4	164.1	165.5	167.7	169.9	172.5	176.6	180.0	182.9	186.3	190.0
165°	168.2	167.5	168.6	170.3	171.8	173.9	176.7	179.5	181.7	183.8	186.6
167.5°	170.8	170.4	171.1	172.0	173.0	174.4	176.7	178.7	179.7	181.3	183.3
170°	172.5	172.1	172.5	173.2	173.9	174.9	176.7	178.1	178.8	179.9	181.3
172.5°	173.6	173.0	173.3	174.0	174.4	174.9	176.4	177.6	177.7	178.2	179.3
175°	174.9	174.2	174.6	174.9	174.9	174.9	176.0	176.7	176.4	176.4	176.7
177.5°	175.6	175.0	175.0	175.3	175.0	175.0	175.6	175.9	175.3	175.3	175.6
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	50.9	53.4	55.8	57.5	58.2	58.9	59.7	60.4
90°	49.0	51.7	54.4	56.7	57.4	58.1	59.2	59.9
92.5°	103.6	88.7	79.7	76.0	72.2	72.1	72.3	72.5
95°	292.4	240.9	199.7	171.5	147.1	137.2	135.1	130.2
97.5°	414.2	378.7	338.5	298.6	277.5	258.4	248.8	245.0
100°	468.6	453.4	419.2	383.8	360.0	335.2	322.8	317.7
102.5°	485.9	498.6	483.3	459.7	434.3	416.8	403.2	399.6
105°	472.0	522.5	540.1	537.6	527.0	516.0	509.7	506.2
107.5°	429.9	496.5	538.5	558.3	564.6	565.2	563.5	561.3
110°	398.8	467.9	519.7	551.1	567.7	575.1	578.3	579.1





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	374.0	439.6	491.9	528.6	552.6	564.8	571.7	574.9
115°	342.6	399.2	449.5	489.3	517.5	535.0	545.5	550.8
117.5°	321.4	370.4	413.8	450.4	478.6	496.9	507.4	510.9
120°	309.7	353.9	394.5	426.8	453.6	471.1	481.3	484.7
122.5°	300.5	341.4	377.7	408.0	431.9	448.1	458.3	461.4
125°	287.1	324.8	357.2	383.7	404.0	419.0	427.3	431.4
127.5°	273.4	308.6	338.8	363.7	382.2	395.6	403.6	405.7
130°	265.1	297.6	326.6	350.6	368.8	380.9	388.5	391.1
132.5°	256.5	287.1	313.6	336.6	354.7	366.8	373.7	376.6
135°	244.9	270.6	294.6	315.7	331.7	343.9	350.8	353.4
137.5°	235.2	256.2	276.2	294.1	308.4	319.4	325.7	328.5
140°	229.7	247.5	264.8	280.5	294.0	303.5	309.3	311.4
142.5°	225.0	240.0	255.0	268.5	280.0	288.2	293.6	295.5
145°	219.1	230.6	242.0	252.0	260.9	267.3	271.6	273.5
147.5°	213.9	222.9	231.5	238.9	245.8	250.8	253.2	254.1
150°	211.0	218.8	225.5	231.9	237.3	241.6	243.2	243.6
152.5°	208.2	215.1	221.2	226.2	230.7	234.1	235.5	235.9
155°	203.9	209.6	214.5	218.4	221.9	224.4	225.5	225.8
157.5°	199.7	204.3	208.2	211.2	214.0	216.0	217.0	216.9
160°	196.9	200.4	203.9	206.4	208.9	210.6	211.3	211.0
162.5°	193.7	197.0	200.0	202.2	204.1	205.5	205.7	205.6
165°	189.4	191.9	194.0	195.8	197.2	197.9	197.9	197.9
167.5°	185.3	187.0	188.6	189.9	190.6	191.2	190.9	190.8
170°	183.1	184.1	185.2	185.9	186.6	187.0	187.0	186.6
172.5°	180.5	181.6	182.4	182.8	182.9	183.6	183.0	182.6
175°	177.8	177.8	178.5	178.5	178.5	178.8	178.1	177.8
177.5°	175.9	176.1	176.1	176.1	175.9	176.1	175.3	175.3
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3

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