

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: P333495-840

Luminaire Tested: **S125RDIP-S375D365U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333495-840  
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: S125RDIP-S375D365U840-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2788.3 lumens  
Efficiency: N/A  
Efficacy: 137.4 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: General Diffuse

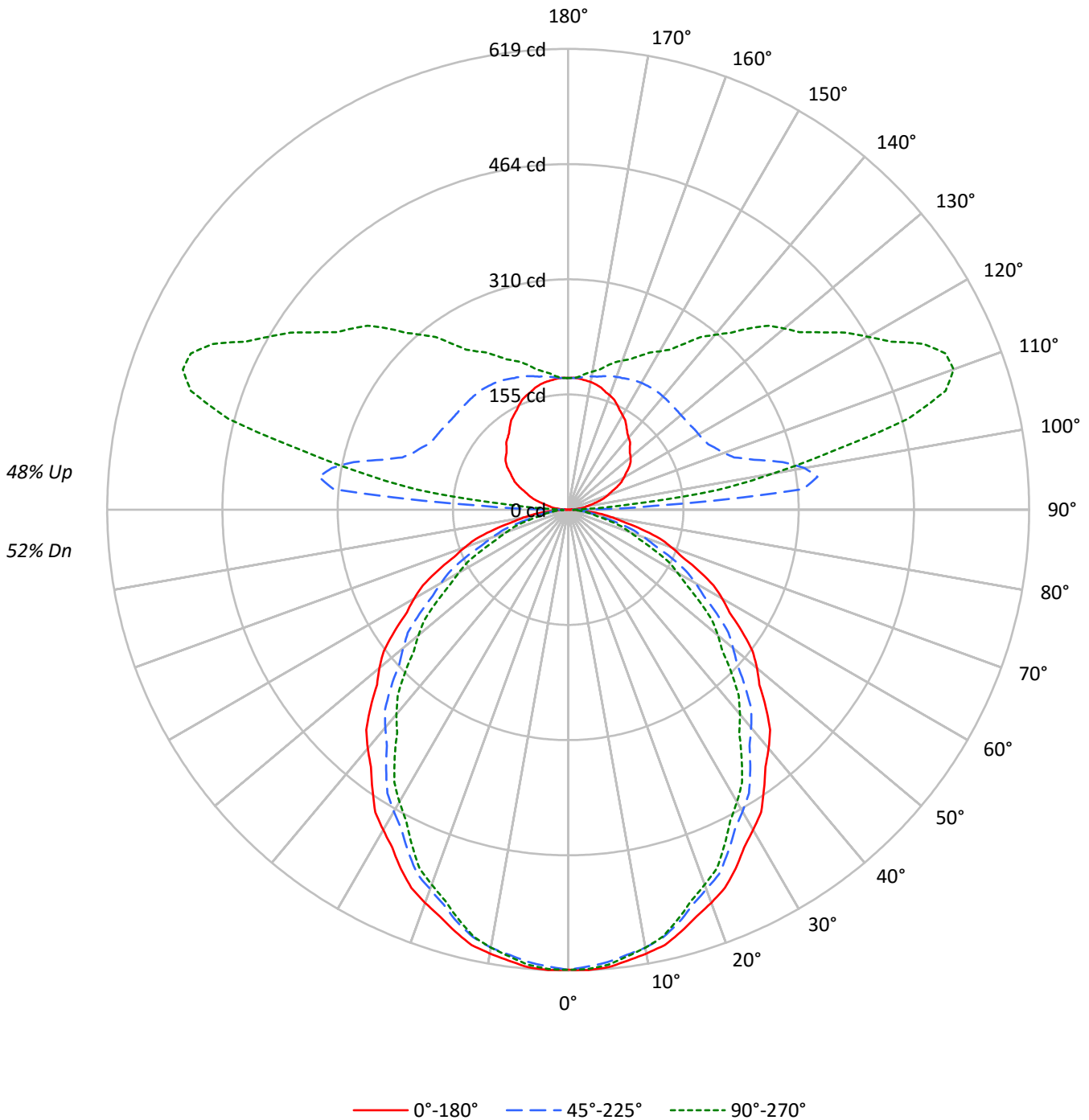
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45
2	90	83	77	71	83	77	71	67	66	62	58	55	53	50	46	44	42	38
3	82	73	66	60	76	68	61	56	58	53	49	49	46	43	41	38	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	37	34	31	28
5	69	58	50	44	64	54	47	41	46	41	36	40	35	32	33	30	27	24
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	55	44	37	32	38	32	28	33	28	25	28	24	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	23	28	23	20	23	20	18	15
10	48	36	29	24	44	34	27	23	29	24	20	25	21	18	22	18	16	14

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

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	2.1
10°-20°	162.4	5.8
20°-30°	235.5	8.4
30°-40°	268.4	9.6
40°-50°	261.6	9.4
50°-60°	220.2	7.9
60°-70°	154.3	5.5
70°-80°	79.3	2.8
80°-90°	21.0	0.8
90°-100°	128.3	4.6
100°-110°	275.8	9.9
110°-120°	258.9	9.3
120°-130°	209.8	7.5
130°-140°	168.4	6.0
140°-150°	127.0	4.6
150°-160°	89.4	3.2
160°-170°	52.7	1.9
170°-180°	17.1	0.6
0°-30°	456.0	16.4
0°-40°	724.3	26.0
0°-60°	1206.1	43.3
0°-90°	1460.8	52.4
90°-120°	663.0	23.8
90°-150°	1168.2	41.9
90°-180°	1328.0	47.6
0°-180°	2788.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	0	3	6	8	8	2
95°	12	35	316	143	84	13
105°	40	56	259	510	473	43
115°	72	87	208	448	527	71
125°	100	117	199	356	415	89
135°	117	141	198	299	345	91
145°	136	156	198	247	272	85
155°	156	167	194	219	228	72
165°	170	175	186	197	200	48
175°	177	177	178	180	180	17
180°	177	177	177	177	177	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.7	8.2	7.7	7.3	6.9	6.7	6.7	6.7	6.7	6.8	6.8
90°	0.4	0.7	1.4	2.1	2.8	3.5	3.9	4.6	4.9	5.8	6.1
92.5°	4.3	5.3	8.3	12.7	18.9	29.3	48.8	81.4	116.9	115.0	93.1
95°	11.8	12.1	14.9	18.9	26.8	42.8	81.0	159.6	258.0	316.2	309.4
97.5°	19.6	20.0	22.0	26.0	33.0	44.5	69.8	127.3	230.5	337.7	391.5
100°	24.9	25.7	27.2	31.0	37.9	48.6	69.3	115.6	205.6	322.2	411.5
102.5°	31.0	31.4	32.5	36.8	43.0	53.4	71.8	110.8	186.7	295.2	399.5
105°	40.3	40.3	42.1	45.6	51.4	61.4	77.1	108.9	168.4	258.7	361.2
107.5°	49.5	50.2	51.9	54.8	60.8	69.8	84.9	112.1	160.8	233.7	322.0
110°	56.0	56.8	58.2	61.4	66.8	76.0	90.7	115.3	158.4	222.0	299.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	62.6	63.3	64.4	67.7	73.0	82.0	96.0	119.3	158.4	215.1	283.3
115°	72.1	72.8	73.9	77.1	82.4	91.4	104.6	125.2	159.6	207.7	265.2
117.5°	80.7	81.7	82.9	86.0	92.2	100.8	113.3	132.1	161.9	204.1	254.4
120°	86.3	87.5	88.9	92.1	98.2	107.0	119.6	136.7	164.2	202.4	248.4
122.5°	92.4	93.1	94.3	97.6	104.1	113.1	125.5	141.8	166.1	201.0	243.3
125°	100.0	100.7	102.4	105.6	112.4	121.7	133.5	148.9	169.6	199.1	236.3
127.5°	105.8	106.9	109.2	113.3	120.5	129.8	141.1	155.2	173.3	198.3	229.8
130°	109.6	110.7	113.5	118.2	125.6	134.9	145.9	159.6	175.6	197.7	225.6
132.5°	112.4	113.8	117.2	122.4	130.2	139.5	150.6	163.3	178.1	197.7	222.2
135°	117.0	118.5	122.8	128.5	136.0	145.6	156.6	168.4	181.7	197.7	218.0
137.5°	122.9	124.0	127.9	133.7	141.1	151.0	161.1	172.3	184.9	198.1	214.4
140°	126.3	127.4	131.7	137.4	144.2	153.8	164.2	174.9	186.3	198.4	212.7
142.5°	130.4	131.1	135.1	140.9	147.3	156.4	166.1	176.3	187.1	198.7	211.3
145°	136.3	137.0	140.6	145.6	152.1	160.3	169.6	178.4	188.0	198.4	209.1
147.5°	142.6	143.0	146.1	150.8	156.3	163.5	171.7	179.8	188.4	197.5	206.9
150°	146.3	147.0	149.6	154.2	159.2	165.2	173.1	180.6	188.4	196.6	205.2
152.5°	150.4	150.8	153.0	157.0	161.8	167.2	174.5	181.2	188.1	195.5	203.2
155°	155.6	155.6	157.7	161.3	164.9	169.9	175.9	181.7	187.3	193.5	199.9
157.5°	160.4	160.3	162.0	165.0	168.1	172.0	177.1	182.0	186.4	191.3	196.7
160°	163.5	163.1	164.5	167.0	169.9	173.1	177.7	182.0	185.6	189.9	194.2
162.5°	166.0	165.7	167.1	169.4	171.6	174.2	178.3	181.8	184.7	188.1	191.9
165°	169.9	169.2	170.3	172.0	173.5	175.6	178.4	181.3	183.5	185.6	188.4
167.5°	172.5	172.1	172.8	173.7	174.7	176.1	178.4	180.5	181.5	183.1	185.1
170°	174.2	173.8	174.2	174.9	175.6	176.6	178.4	179.9	180.6	181.7	183.1
172.5°	175.3	174.7	175.0	175.7	176.1	176.6	178.1	179.4	179.5	180.0	181.1
175°	176.6	175.9	176.3	176.6	176.6	176.6	177.7	178.4	178.1	178.1	178.4
177.5°	177.3	176.7	176.7	177.0	176.7	176.7	177.3	177.6	177.0	177.0	177.3
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	6.9	7.0	7.1	7.2	7.1	7.0	7.0	6.9
90°	6.5	6.8	7.2	7.9	7.9	7.9	8.2	8.2
92.5°	63.2	45.8	34.5	29.3	24.7	23.8	23.3	22.7
95°	256.6	202.4	158.4	128.5	103.1	92.4	89.6	83.9
97.5°	382.1	344.2	301.3	259.6	237.6	217.6	207.3	202.7
100°	439.0	421.5	384.8	347.6	323.0	297.3	284.1	278.4
102.5°	458.1	468.9	451.3	426.2	399.8	381.5	367.2	362.9
105°	446.9	495.7	511.4	507.6	496.0	484.3	477.2	472.9
107.5°	406.6	471.8	512.1	530.8	536.5	536.5	534.1	531.3
110°	376.9	444.7	495.0	525.3	541.4	548.2	550.7	550.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	353.5	417.9	468.8	504.5	528.0	539.7	545.8	548.5
115°	324.1	379.4	428.3	467.2	495.0	512.1	522.1	526.7
117.5°	305.1	352.7	394.9	430.6	458.4	476.2	486.0	488.9
120°	294.8	337.6	376.9	408.3	434.7	451.8	461.5	464.3
122.5°	287.1	326.8	361.7	391.1	414.8	430.4	440.1	442.6
125°	275.9	312.3	343.4	369.0	389.0	403.6	411.5	415.1
127.5°	264.5	298.4	327.4	351.4	369.6	382.5	389.9	391.5
130°	257.3	288.7	316.6	339.8	357.6	369.4	376.6	378.7
132.5°	250.1	279.6	304.9	327.2	345.1	356.8	363.3	365.8
135°	241.0	265.5	288.4	308.7	324.5	336.2	342.6	344.8
137.5°	233.1	253.0	272.0	289.2	303.3	314.0	319.9	322.2
140°	228.7	245.5	262.0	276.9	290.1	299.4	304.8	306.6
142.5°	225.1	239.2	253.4	266.4	277.6	285.5	290.5	292.1
145°	220.3	231.3	242.4	252.0	260.5	266.6	270.5	272.0
147.5°	215.6	224.6	233.2	240.4	247.2	252.1	254.3	255.0
150°	213.1	221.0	227.7	234.1	239.4	243.8	245.2	245.5
152.5°	210.3	217.2	223.4	228.4	232.9	236.3	237.7	238.1
155°	205.9	211.7	216.6	220.6	224.1	226.6	227.7	228.0
157.5°	201.7	206.3	210.3	213.3	216.1	218.1	219.1	219.0
160°	198.8	202.4	205.9	208.4	211.0	212.7	213.4	213.1
162.5°	195.6	198.9	202.0	204.2	206.1	207.5	207.7	207.6
165°	191.3	193.8	195.9	197.7	199.1	199.9	199.9	199.9
167.5°	187.1	188.8	190.5	191.8	192.5	193.1	192.8	192.7
170°	184.9	185.9	187.0	187.7	188.4	188.8	188.8	188.4
172.5°	182.3	183.4	184.2	184.6	184.7	185.4	184.8	184.4
175°	179.6	179.6	180.3	180.3	180.3	180.6	179.9	179.6
177.5°	177.6	177.8	177.8	177.8	177.6	177.8	177.0	177.0
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0

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