

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: P333123-840

Luminaire Tested: **S125DIP-S375D365U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333123-840
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: S125DIP-S375D365U840-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2863.6 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

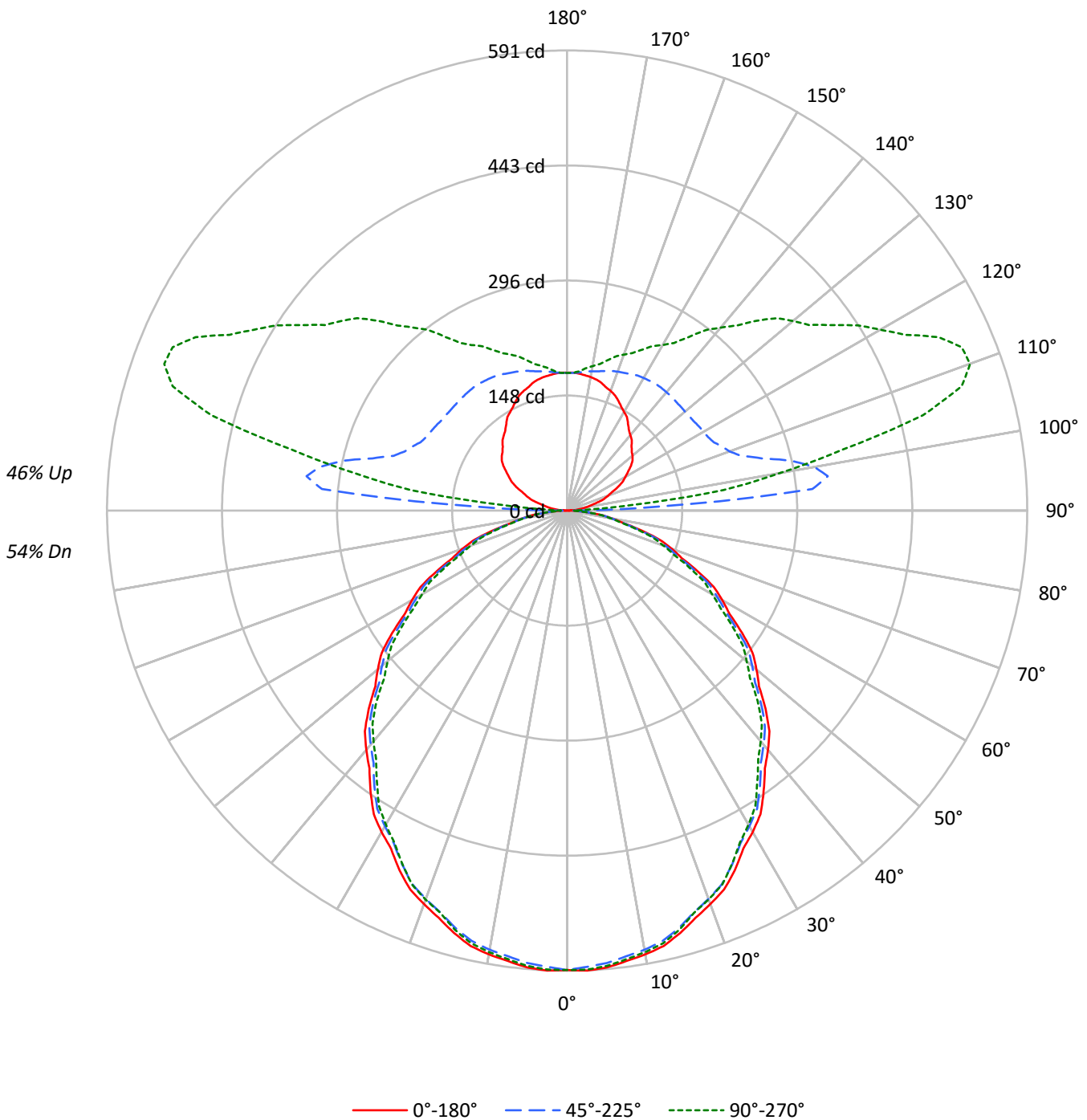
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.9
10°-20°	157.1	5.5
20°-30°	232.0	8.1
30°-40°	270.7	9.5
40°-50°	271.9	9.5
50°-60°	238.7	8.3
60°-70°	177.8	6.2
70°-80°	101.7	3.6
80°-90°	30.6	1.1
90°-100°	128.3	4.5
100°-110°	275.8	9.6
110°-120°	258.9	9.0
120°-130°	209.8	7.3
130°-140°	168.4	5.9
140°-150°	127.0	4.4
150°-160°	89.4	3.1
160°-170°	52.7	1.8
170°-180°	17.1	0.6
0°-30°	444.7	15.5
0°-40°	715.5	25.0
0°-60°	1226.0	42.8
0°-90°	1536.1	53.6
90°-120°	663.0	23.2
90°-150°	1168.2	40.8
90°-180°	1328.0	46.4
0°-180°	2863.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	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°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.2	10.2	10.4	10.5	10.6	10.7	10.7	10.8	10.8	10.8	10.9
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°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	11.0	11.1	11.1	11.2	11.0	10.9	10.8	10.6
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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