

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: P333168-840

Luminaire Tested: **S125DIP-S610D365U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333168-840
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-S610D365U840-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 3852.2 lumens
Efficiency: N/A
Efficacy: 140.1 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: Semi-Direct

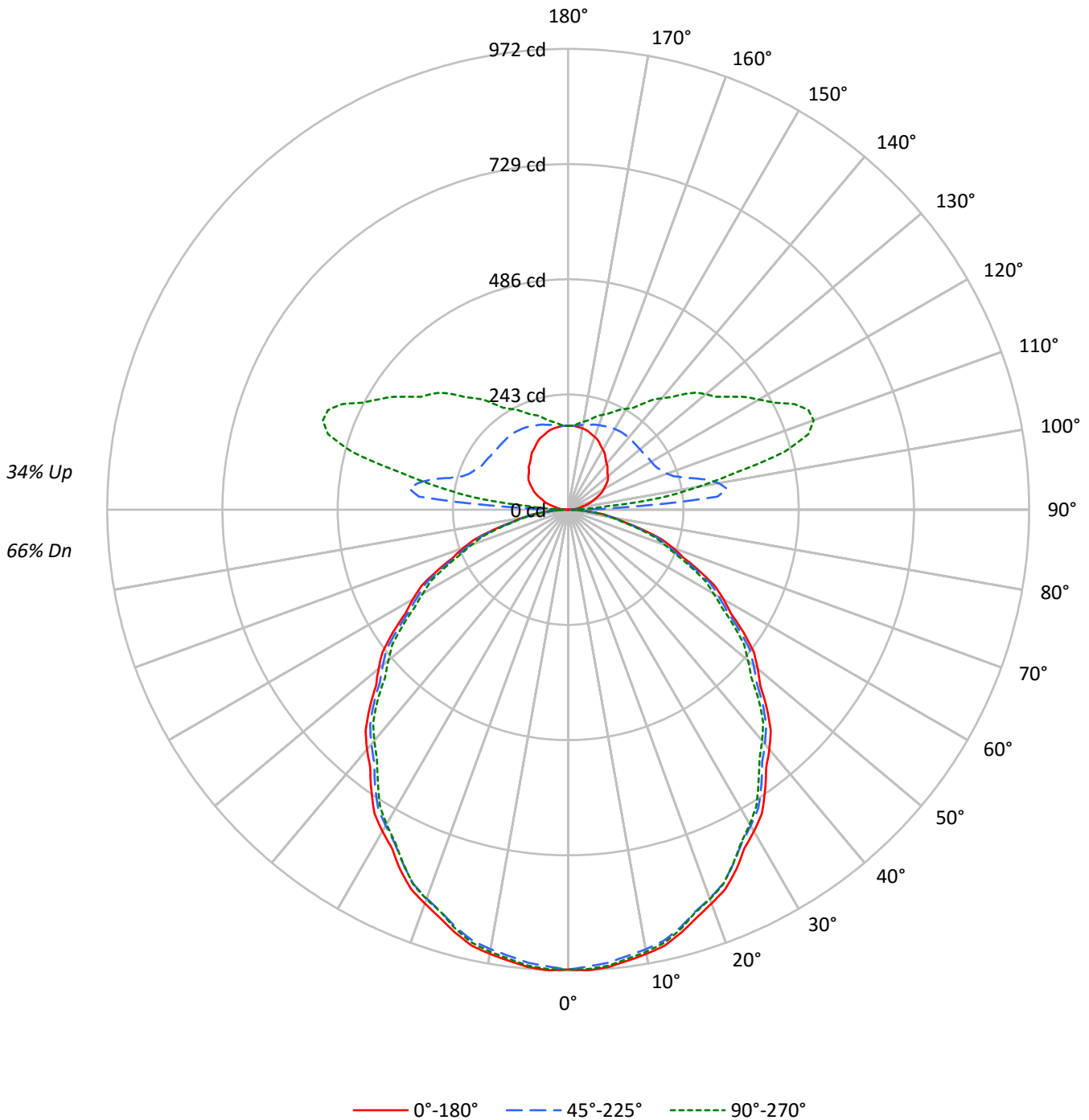
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59	55
2	92	84	78	73	86	80	74	69	71	66	62	62	59	56	55	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	51	72	62	55	49	55	49	45	49	44	41	43	40	37	33
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	2.4
10°-20°	258.3	6.7
20°-30°	381.4	9.9
30°-40°	445.0	11.6
40°-50°	447.0	11.6
50°-60°	392.4	10.2
60°-70°	292.4	7.6
70°-80°	167.2	4.3
80°-90°	49.6	1.3
90°-100°	128.3	3.3
100°-110°	275.8	7.2
110°-120°	258.9	6.7
120°-130°	209.8	5.4
130°-140°	168.4	4.4
140°-150°	127.0	3.3
150°-160°	89.4	2.3
160°-170°	52.7	1.4
170°-180°	17.1	0.4
0°-30°	731.2	19.0
0°-40°	1176.2	30.5
0°-60°	2015.6	52.3
0°-90°	2524.7	65.5
90°-120°	663.0	17.2
90°-150°	1168.2	30.3
90°-180°	1328.0	34.5
0°-180°	3852.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	0	3	6	8	8	3
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°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.7	16.8	16.9	17.0	17.2	17.3	17.2	17.2	17.1	17.1	17.2
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°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	17.3	17.3	17.4	17.4	17.2	16.9	16.7	16.4
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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