

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: P333501-830

Luminaire Tested: **S125RDIP-S375D590U830-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333501-830
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-S375D590U830-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3363.8 lumens
Efficiency: N/A
Efficacy: 131.4 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

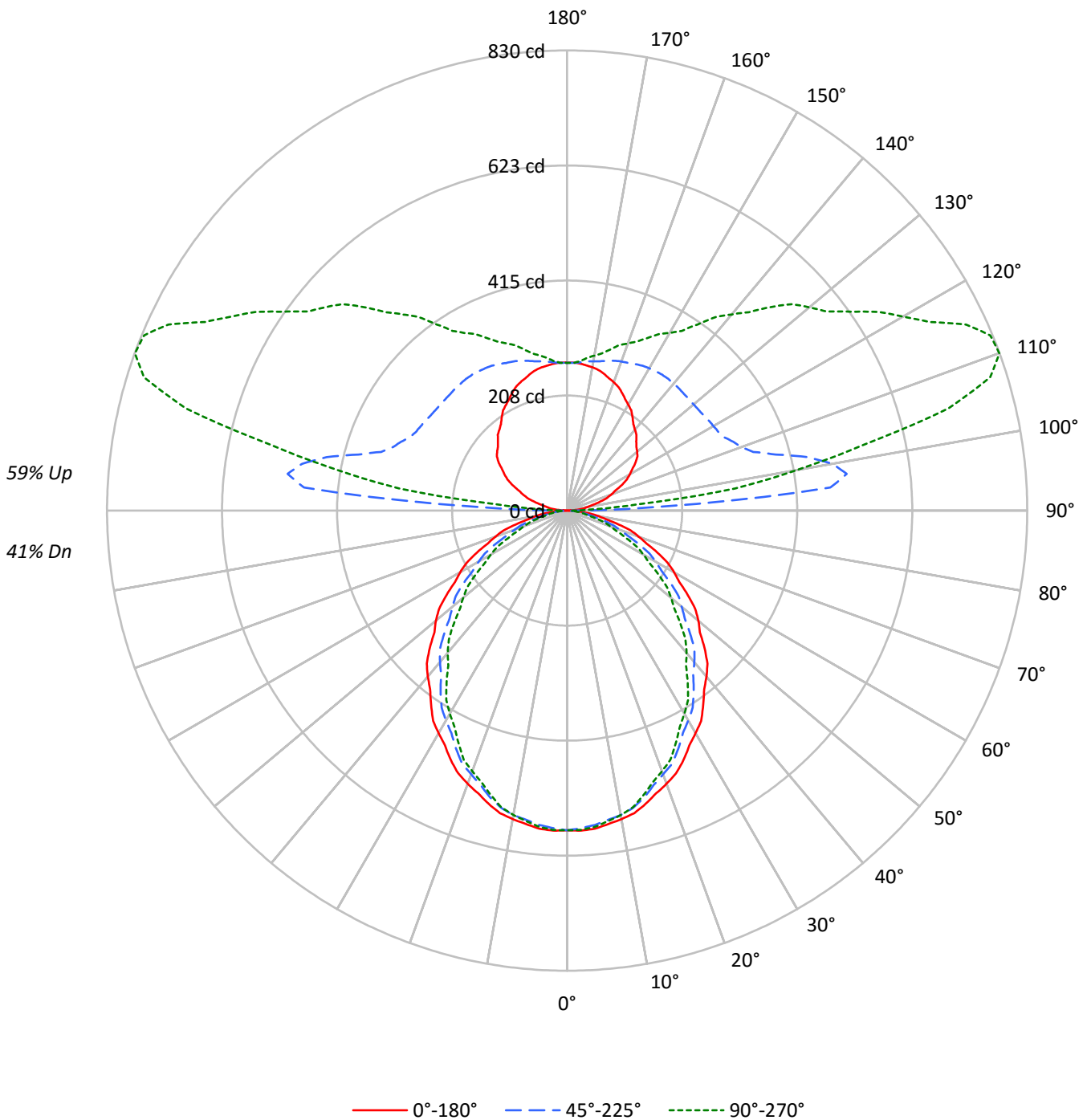
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41																				
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	35																				
2	87	80	74	69	79	73	68	64	60	57	54	48	46	44	37	36	34	29																				
3	80	71	63	58	72	65	58	54	53	49	45	43	40	37	33	31	29	25																				
4	73	63	55	49	66	57	51	45	47	42	39	38	35	32	30	27	25	21																				
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19																				
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	20	17																				
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	20	17	15																				
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13																				
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12																				
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.6
10°-20°	151.6	4.5
20°-30°	219.8	6.5
30°-40°	250.5	7.4
40°-50°	244.1	7.3
50°-60°	205.5	6.1
60°-70°	144.1	4.3
70°-80°	74.1	2.2
80°-90°	20.2	0.6
90°-100°	193.3	5.7
100°-110°	415.5	12.4
110°-120°	390.0	11.6
120°-130°	316.0	9.4
130°-140°	253.6	7.5
140°-150°	191.4	5.7
150°-160°	134.7	4.0
160°-170°	79.4	2.4
170°-180°	25.8	0.8
0°-30°	425.6	12.7
0°-40°	676.0	20.1
0°-60°	1125.7	33.5
0°-90°	1364.0	40.5
90°-120°	998.8	29.7
90°-150°	1759.9	52.3
90°-180°	2000.0	59.5
0°-180°	3363.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	5	9	11	12	2
95°	18	52	476	216	126	19
105°	61	85	390	767	712	64
115°	109	131	313	674	794	107
125°	150	176	300	537	625	134
135°	176	212	298	450	519	137
145°	205	235	299	372	410	129
155°	234	252	291	329	344	108
165°	256	263	280	296	301	72
175°	266	266	268	272	270	25
180°	267	267	267	267	267	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.1	7.7	7.4	7.1	6.7	6.6	6.6	6.8	6.8	7.0	7.1
90°	0.6	1.0	2.2	3.2	4.3	5.4	5.9	7.0	7.5	8.6	9.1
92.5°	6.6	7.9	12.4	19.1	28.4	44.1	73.4	122.7	176.2	173.3	140.3
95°	17.7	18.3	22.6	28.5	40.3	64.6	122.1	240.3	388.7	476.4	466.2
97.5°	29.5	30.1	33.1	39.0	49.7	67.1	105.2	191.8	347.1	508.7	589.8
100°	37.6	38.7	40.9	46.8	57.0	73.1	104.3	174.2	309.7	485.5	619.9
102.5°	46.7	47.3	49.0	55.4	64.8	80.4	108.2	166.9	281.3	444.6	601.8
105°	60.8	60.8	63.4	68.8	77.4	92.5	116.1	164.0	253.7	389.8	544.1
107.5°	74.6	75.6	78.1	82.6	91.5	105.1	128.0	168.9	242.1	352.0	485.2
110°	84.5	85.5	87.7	92.5	100.6	114.5	136.6	173.6	238.7	334.4	451.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	94.3	95.4	97.1	102.0	110.0	123.6	144.8	179.6	238.7	324.1	426.7
115°	108.6	109.7	111.3	116.1	124.2	137.6	157.5	188.7	240.3	312.9	399.4
117.5°	121.5	123.1	124.9	129.7	138.8	151.8	170.7	199.1	243.8	307.5	383.2
120°	130.1	131.8	133.8	138.7	147.9	161.3	180.1	205.9	247.3	304.8	374.2
122.5°	139.1	140.3	142.0	146.8	156.9	170.3	189.2	213.7	250.3	302.7	366.5
125°	150.5	151.7	154.3	159.1	169.4	183.3	201.0	224.2	255.4	300.0	355.9
127.5°	159.5	161.1	164.6	170.7	181.5	195.5	212.5	233.8	261.1	298.7	346.3
130°	165.0	166.6	171.0	178.0	189.3	203.2	219.9	240.3	264.6	297.8	339.8
132.5°	169.4	171.4	176.5	184.5	196.1	210.1	226.8	245.9	268.4	297.8	334.6
135°	176.3	178.5	184.9	193.6	204.8	219.3	236.0	253.7	273.6	297.8	328.5
137.5°	185.2	186.8	192.8	201.4	212.4	227.4	242.6	259.6	278.5	298.5	323.0
140°	190.3	191.9	198.4	207.0	217.3	231.8	247.3	263.4	280.7	299.0	320.5
142.5°	196.3	197.6	203.6	212.2	222.0	235.6	250.3	265.6	281.9	299.4	318.3
145°	205.4	206.4	211.8	219.3	229.0	241.4	255.4	268.8	283.3	299.0	315.1
147.5°	214.8	215.5	220.1	227.1	235.4	246.4	258.6	270.8	283.9	297.6	311.7
150°	220.5	221.5	225.3	232.2	239.8	248.9	260.8	272.0	283.9	296.2	309.2
152.5°	226.5	227.1	230.5	236.6	243.6	251.9	262.9	272.9	283.4	294.5	306.1
155°	234.4	234.4	237.6	243.0	248.4	255.9	265.0	273.6	282.3	291.4	301.0
157.5°	241.5	241.4	244.0	248.6	253.4	259.0	266.9	274.2	280.9	288.1	296.3
160°	246.3	245.7	247.9	251.7	255.9	260.8	267.8	274.2	279.6	286.1	292.5
162.5°	250.2	249.6	251.8	255.1	258.5	262.5	268.6	273.8	278.3	283.4	289.1
165°	255.9	254.9	256.5	259.1	261.3	264.6	268.8	273.1	276.4	279.6	283.9
167.5°	259.8	259.3	260.2	261.7	263.3	265.2	268.8	271.8	273.3	275.8	278.8
170°	262.4	261.8	262.4	263.4	264.6	266.2	268.8	271.0	272.0	273.6	275.8
172.5°	264.1	263.2	263.6	264.8	265.4	266.2	268.4	270.1	270.3	271.1	272.8
175°	266.2	265.0	265.6	266.2	266.2	266.2	267.8	268.8	268.2	268.2	268.8
177.5°	267.1	266.3	266.3	266.6	266.3	266.3	267.1	267.5	266.6	266.6	267.1
180°	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	7.2	7.3	7.4	7.5	7.4	7.4	7.4	7.4
90°	9.7	10.2	10.7	11.8	11.8	11.8	12.3	12.3
92.5°	95.3	69.2	52.0	44.1	37.2	35.9	35.2	34.3
95°	386.5	304.8	238.7	193.6	155.4	139.2	135.0	126.4
97.5°	575.7	518.4	454.0	391.2	358.0	327.8	312.3	305.4
100°	661.3	635.0	579.6	523.7	486.5	447.9	428.0	419.3
102.5°	690.1	706.3	679.8	642.0	602.3	574.8	553.2	546.7
105°	673.2	746.8	770.4	764.5	747.3	729.6	718.9	712.4
107.5°	612.5	710.8	771.6	799.6	808.3	808.2	804.6	800.3
110°	567.8	670.0	745.7	791.5	815.6	825.9	829.6	829.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	532.5	629.5	706.2	760.1	795.4	812.9	822.3	826.1
115°	488.1	571.6	645.2	703.8	745.7	771.6	786.6	793.6
117.5°	459.6	531.4	594.8	648.7	690.6	717.3	732.2	736.5
120°	444.1	508.6	567.8	615.1	654.9	680.7	695.2	699.5
122.5°	432.5	492.3	545.0	589.3	624.7	648.4	662.9	666.8
125°	415.6	470.4	517.3	555.9	586.1	608.1	619.9	625.3
127.5°	398.4	449.6	493.2	529.5	556.8	576.3	587.4	589.8
130°	387.7	435.0	476.9	511.8	538.8	556.5	567.2	570.4
132.5°	376.9	421.2	459.3	492.9	519.8	537.5	547.4	551.1
135°	362.9	400.0	434.4	465.1	488.7	506.4	516.1	519.3
137.5°	351.1	381.1	409.7	435.7	456.9	473.1	481.9	485.5
140°	344.6	369.9	394.6	417.3	437.2	451.1	459.1	461.8
142.5°	339.0	360.4	381.7	401.3	418.2	430.0	437.6	439.9
145°	331.8	348.4	365.0	379.6	392.5	401.6	407.6	409.7
147.5°	324.9	338.4	351.2	362.1	372.4	379.7	383.1	384.1
150°	320.9	332.8	343.0	352.7	360.8	367.2	369.4	369.9
152.5°	316.7	327.3	336.6	344.1	350.9	356.0	358.2	358.7
155°	310.2	318.9	326.3	332.2	337.6	341.4	343.0	343.6
157.5°	303.8	310.9	316.7	321.3	325.5	328.6	330.1	330.0
160°	299.4	304.8	310.2	314.0	317.7	320.5	321.5	320.9
162.5°	294.7	299.7	304.2	307.6	310.5	312.7	312.9	312.8
165°	288.1	291.9	295.2	297.8	300.0	301.0	301.0	301.0
167.5°	281.9	284.5	286.9	288.8	289.9	290.9	290.4	290.3
170°	278.5	280.1	281.7	282.8	283.9	284.5	284.5	283.9
172.5°	274.7	276.3	277.4	278.1	278.3	279.3	278.4	277.9
175°	270.4	270.4	271.5	271.5	271.5	272.0	271.0	270.4
177.5°	267.5	268.0	268.0	268.0	267.5	268.0	266.6	266.6
180°	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6

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