

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: P333192-935

Luminaire Tested: **S125DIP-S610D1035U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333192-935
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-S610D1035U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5266.1 lumens
Efficiency: N/A
Efficacy: 118.3 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: Semi-Indirect

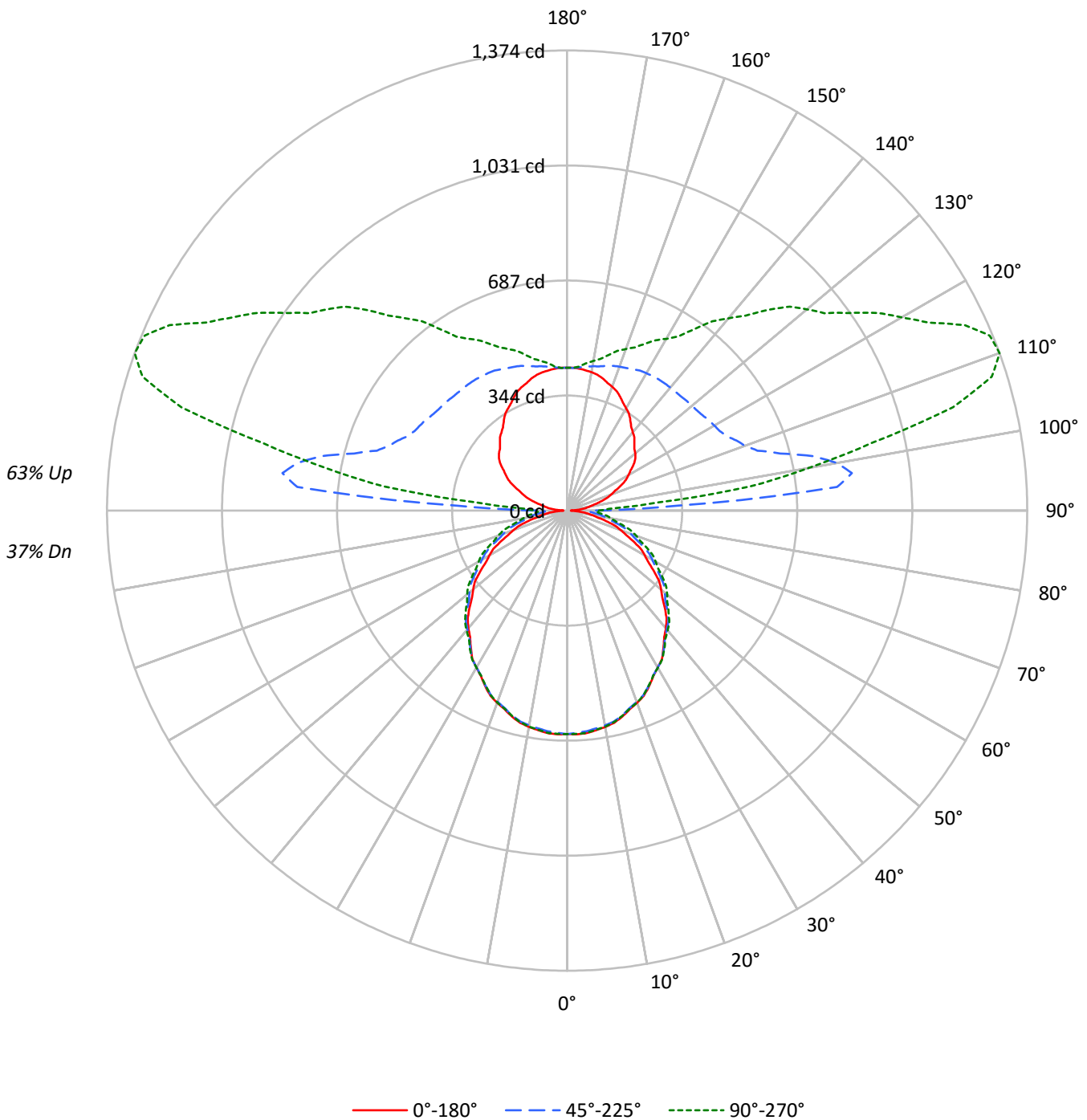
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30
2	86	78	72	67	77	71	66	61	57	53	50	45	42	40	33	31	30	25
3	78	68	61	55	70	62	56	51	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	43	45	39	35	35	31	28	26	24	22	18
5	65	54	46	40	59	49	42	36	40	34	30	31	27	24	23	21	19	15
6	60	48	40	34	54	44	37	31	36	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	26	22	19	19	17	14	12
8	51	39	31	26	46	36	29	24	29	24	20	23	19	17	18	15	13	10
9	48	36	28	23	43	33	26	21	27	22	18	21	18	15	16	14	12	9
10	44	33	25	21	40	30	23	19	25	20	16	20	16	13	15	12	11	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.2
10°-20°	179.1	3.4
20°-30°	266.4	5.1
30°-40°	315.5	6.0
40°-50°	326.2	6.2
50°-60°	300.5	5.7
60°-70°	242.9	4.6
70°-80°	162.7	3.1
80°-90°	86.7	1.6
90°-100°	356.4	6.8
100°-110°	699.2	13.3
110°-120°	646.8	12.3
120°-130°	518.5	9.8
130°-140°	411.3	7.8
140°-150°	307.2	5.8
150°-160°	215.4	4.1
160°-170°	126.9	2.4
170°-180°	41.3	0.8
0°-30°	508.6	9.7
0°-40°	824.1	15.6
0°-60°	1450.8	27.6
0°-90°	1943.2	36.9
90°-120°	1702.4	32.3
90°-150°	2939.3	55.8
90°-180°	3323.0	63.1
0°-180°	5266.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	39	67	86	93	9
95°	37	110	809	407	269	37
105°	103	153	659	1276	1192	109
115°	178	218	526	1115	1310	175
125°	243	285	495	883	1028	216
135°	283	340	481	732	847	220
145°	329	376	478	598	661	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.4	30.4	35.4	40.4	45.5	50.6	56.0	61.0	66.3	69.8
90°	11.4	16.9	23.2	29.6	36.0	42.4	48.3	54.9	60.7	67.4	71.6
92.5°	19.9	26.4	38.0	53.0	72.0	101.8	153.8	237.5	328.0	328.6	279.1
95°	36.9	41.5	52.2	65.4	88.1	131.1	228.1	422.1	664.3	809.3	796.2
97.5°	54.8	59.2	67.5	80.3	100.7	132.7	198.3	341.6	594.6	857.7	990.4
100°	67.3	72.2	78.6	91.1	110.6	140.2	194.7	311.1	532.3	818.0	1036.0
102.5°	81.3	85.2	90.7	103.7	121.4	150.2	199.1	297.5	484.9	750.6	1004.9
105°	103.0	105.3	111.9	122.9	139.0	166.3	208.5	289.4	437.3	659.1	908.7
107.5°	124.2	127.9	134.1	143.0	159.3	184.1	224.8	294.5	415.8	595.6	811.3
110°	139.5	143.0	148.2	157.6	172.3	197.5	236.9	300.2	408.3	565.3	755.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	155.3	158.4	162.6	171.8	186.0	210.3	248.1	308.0	406.3	546.7	713.4
115°	177.5	180.3	183.9	192.6	206.6	230.4	266.0	319.6	406.0	525.7	666.8
117.5°	197.5	200.8	204.2	212.6	227.9	250.8	284.5	333.4	408.6	513.8	637.5
120°	211.3	214.3	218.2	226.4	241.4	264.8	298.2	342.8	412.3	507.6	621.0
122.5°	225.2	227.3	230.2	238.2	254.3	277.6	310.9	353.3	415.2	502.1	606.4
125°	243.3	244.9	249.0	256.6	272.8	296.5	327.8	367.6	420.4	494.6	586.3
127.5°	256.9	259.3	264.7	274.3	291.5	315.0	344.7	381.2	427.1	489.6	567.7
130°	265.8	268.3	275.0	286.0	303.9	327.2	355.9	390.6	431.3	486.6	555.7
132.5°	272.2	275.4	283.6	296.2	314.9	338.0	366.2	398.4	435.8	484.6	545.4
135°	283.3	286.5	296.7	310.3	328.2	351.8	379.5	408.9	441.7	481.4	532.3
137.5°	297.2	299.6	309.2	322.8	340.4	364.5	389.2	416.9	447.6	480.1	521.0
140°	304.9	307.5	317.8	331.6	347.9	371.2	396.2	422.1	449.8	479.2	515.1
142.5°	314.5	316.3	325.8	339.5	355.0	376.8	400.4	424.8	451.0	478.8	510.5
145°	329.0	330.5	339.0	350.9	366.2	385.9	408.3	429.7	453.0	477.9	504.4
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.6
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	73.4	76.9	80.4	82.9	83.9	85.0	86.2	87.1
90°	75.8	80.0	84.2	88.1	89.1	90.1	92.0	93.1
92.5°	210.3	171.8	147.7	137.1	127.1	126.1	125.9	125.4
95°	672.2	544.7	442.2	372.0	312.1	287.3	281.5	268.7
97.5°	970.9	882.4	782.5	684.1	632.0	584.8	560.9	550.9
100°	1105.2	1066.1	980.6	893.2	834.7	773.8	742.9	730.0
102.5°	1148.9	1177.8	1138.3	1079.7	1017.1	974.0	940.3	930.8
105°	1117.9	1238.5	1279.3	1271.8	1245.4	1218.0	1201.8	1192.5
107.5°	1017.8	1177.8	1277.7	1324.5	1339.4	1340.1	1335.3	1329.3
110°	943.9	1110.0	1233.9	1308.9	1348.6	1365.9	1373.0	1374.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	885.2	1042.9	1168.1	1256.1	1313.6	1342.7	1358.7	1365.9
115°	811.1	947.0	1067.4	1162.9	1230.7	1272.9	1297.8	1309.8
117.5°	762.0	879.3	983.3	1070.9	1138.9	1182.6	1207.5	1215.3
120°	735.2	840.8	937.8	1015.1	1079.6	1121.7	1145.8	1153.6
122.5°	714.3	812.2	898.8	971.2	1028.8	1067.6	1091.6	1098.6
125°	684.1	774.1	851.2	914.6	963.5	999.4	1019.1	1028.4
127.5°	653.2	737.2	809.2	868.6	913.1	945.0	963.8	968.4
130°	634.2	712.0	781.0	838.3	881.9	911.0	928.9	934.9
132.5°	614.9	687.9	750.7	805.8	849.5	878.4	894.8	901.3
135°	589.2	650.4	707.3	757.6	796.2	825.2	841.5	847.3
137.5°	567.6	617.3	664.7	707.4	741.9	768.3	783.1	789.4
140°	555.4	597.4	638.6	675.8	708.2	731.1	744.6	749.4
142.5°	545.0	580.6	616.0	648.2	675.8	695.3	708.1	712.3
145°	531.8	559.1	586.5	610.4	631.6	646.8	656.9	660.8
147.5°	519.8	541.7	562.4	580.1	596.8	608.7	614.4	616.2
150°	513.2	532.0	548.4	564.0	577.0	587.4	591.0	592.0
152.5°	506.3	523.1	538.0	550.1	560.9	569.2	572.7	573.6
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

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