

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: P333219-940

Luminaire Tested: **S125DIP-S850D590U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333219-940
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-S850D590U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4819.2 lumens
Efficiency: N/A
Efficacy: 119.6 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: General Diffuse

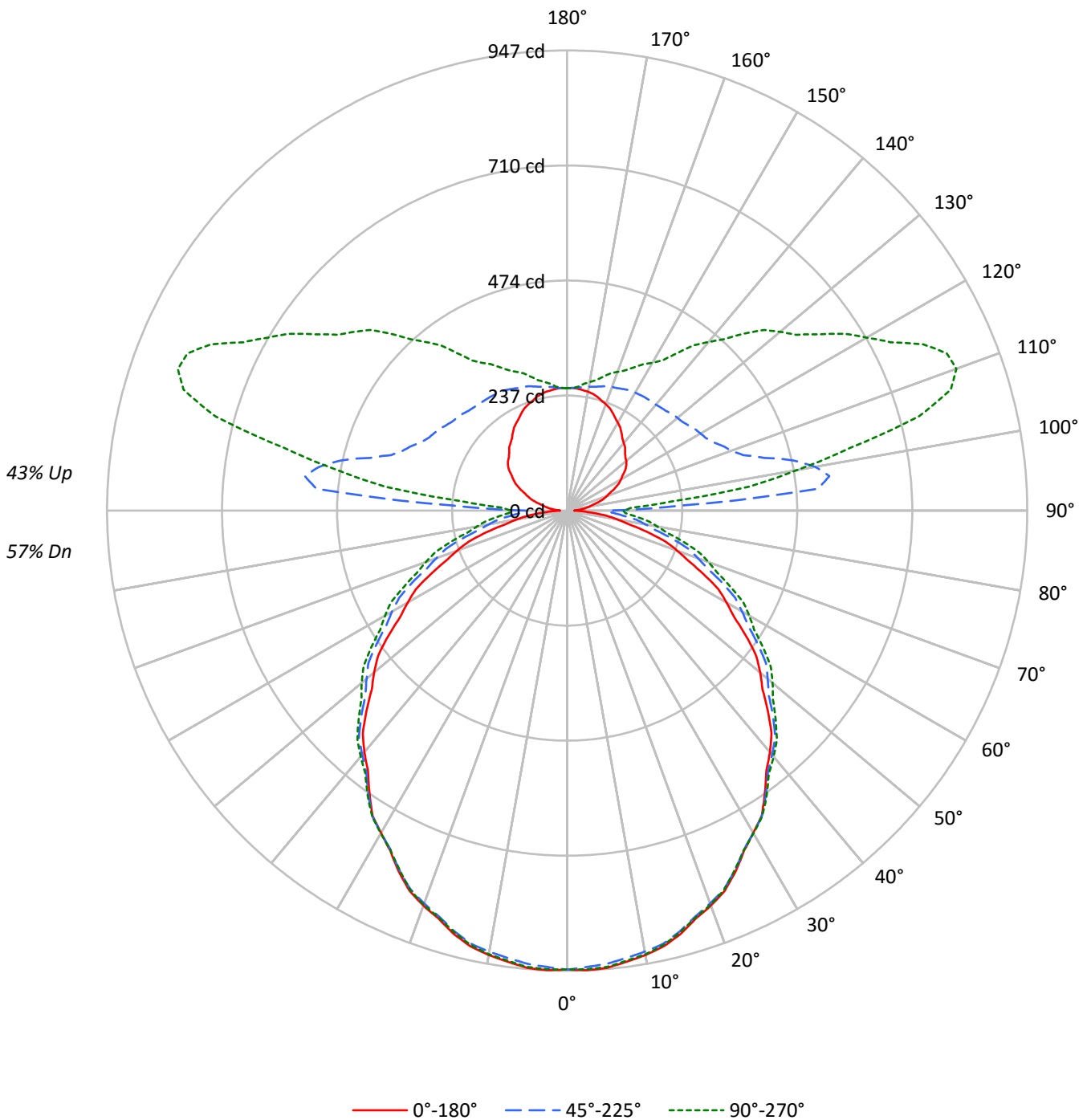
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57
1	99	94	90	86	91	87	84	80	75	72	70	64	62	60	54	53	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	53	50	47	45	42	38
3	81	71	64	57	75	67	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	41	44	39	35	37	33	31	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	27	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	25	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6101	6101	6101
5°	6113	5988	6007
10°	6069	5881	5872
15°	5998	5753	5701
20°	5900	5595	5529
25°	5784	5425	5318
30°	5644	5239	5126
35°	5513	5068	4951
40°	5379	4888	4773
45°	5228	4733	4617
50°	5084	4566	4479
55°	4912	4408	4315
60°	4722	4227	4149
65°	4525	4039	3961
70°	4301	3780	3769
75°	3945	3533	3533
80°	3483	3233	3276
85°	3046	3031	3195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.9
10°-20°	253.6	5.3
20°-30°	377.1	7.8
30°-40°	446.7	9.3
40°-50°	461.8	9.6
50°-60°	425.4	8.8
60°-70°	343.9	7.1
70°-80°	230.3	4.8
80°-90°	120.8	2.5
90°-100°	249.9	5.2
100°-110°	442.5	9.2
110°-120°	402.1	8.3
120°-130°	317.8	6.6
130°-140°	248.2	5.1
140°-150°	182.7	3.8
150°-160°	127.5	2.6
160°-170°	75.1	1.6
170°-180°	24.4	0.5
0°-30°	720.0	14.9
0°-40°	1166.7	24.2
0°-60°	2053.9	42.6
0°-90°	2749.0	57.0
90°-120°	1094.5	22.7
90°-150°	1843.2	38.2
90°-180°	2070.0	43.0
0°-180°	4819.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	942	936	943	943	90
15°	902	903	896	902	898	254
25°	820	822	817	820	816	377
35°	709	715	713	716	716	444
45°	584	594	599	605	607	451
55°	449	464	479	489	493	401
65°	309	331	353	366	370	307
75°	170	195	224	242	247	181
85°	51	82	114	134	142	54
90°	15	49	84	107	115	11
95°	29	86	518	292	214	27
105°	66	104	420	795	750	69
115°	108	137	332	690	809	107
125°	146	171	305	543	632	129
135°	169	202	289	444	515	131
145°	195	223	283	357	396	122
155°	222	239	276	312	325	102
165°	242	249	264	281	285	68
175°	252	252	254	257	256	24
180°	252	252	252	252	252	



TEST NUMBER: P333219-940

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	946.8	946.6	946.2	945.8	945.5	944.8	943.6	942.4	941.3	940.1	941.3
5°	944.6	944.2	943.8	943.3	943.0	942.0	940.6	939.1	937.7	936.3	937.9
7.5°	936.3	936.1	935.9	935.8	935.6	934.8	933.4	931.8	930.3	928.9	930.3
10°	928.9	928.9	928.9	928.9	928.9	928.1	926.4	924.8	923.1	921.5	922.9
12.5°	918.5	918.6	918.8	919.0	919.2	918.6	917.3	916.0	914.6	913.3	914.4
15°	902.1	902.2	902.4	902.6	902.9	902.2	900.8	899.4	897.9	896.4	897.7
17.5°	880.6	880.9	881.4	881.7	882.2	881.6	880.2	878.8	877.4	875.9	876.8
20°	865.0	865.4	865.8	866.2	866.7	866.1	864.7	863.3	861.7	860.3	860.9
22.5°	847.2	847.9	848.6	849.4	850.2	849.7	848.1	846.5	844.9	843.3	844.1
25°	819.6	820.2	820.8	821.4	822.1	821.7	820.6	819.3	818.1	816.8	817.6
27.5°	788.8	789.8	790.7	791.6	792.5	792.2	790.9	789.4	788.0	786.7	787.2
30°	765.9	767.1	768.4	769.5	770.8	770.8	769.5	768.4	767.1	765.9	766.3
32.5°	745.1	746.2	747.3	748.3	749.4	749.5	748.6	747.7	746.8	745.9	746.3
35°	709.4	710.9	712.3	713.7	715.2	715.6	715.0	714.3	713.7	713.1	713.7
37.5°	673.6	674.9	676.3	677.6	678.9	679.5	679.2	679.0	678.9	678.7	679.5
40°	649.2	650.9	652.5	654.2	655.8	656.5	656.3	656.1	655.9	655.7	656.5
42.5°	622.5	624.6	626.8	628.9	631.1	632.4	632.8	633.3	633.7	634.2	635.2
45°	584.3	586.7	588.9	591.1	593.4	595.0	596.1	597.1	598.2	599.1	600.7
47.5°	545.3	547.4	549.5	551.6	553.7	555.6	557.4	559.2	560.9	562.7	564.8
50°	518.6	520.8	523.2	525.4	527.6	529.9	532.2	534.5	536.7	539.0	541.3
52.5°	490.4	493.2	496.0	498.7	501.5	504.3	507.0	509.8	512.6	515.3	517.7
55°	449.2	452.5	455.8	459.1	462.4	465.7	469.0	472.3	475.5	478.8	481.1
57.5°	406.9	410.9	414.8	418.7	422.8	426.6	430.4	434.2	437.9	441.8	444.3
60°	378.8	382.9	387.0	391.1	395.2	399.4	403.5	407.6	411.7	415.8	418.9
62.5°	351.3	355.4	359.6	363.7	367.8	372.1	376.6	381.0	385.4	389.9	393.3
65°	309.3	314.1	318.8	323.5	328.2	333.1	338.0	343.0	347.9	352.8	356.0
67.5°	269.7	274.3	278.8	283.4	287.9	292.7	297.7	302.8	307.8	312.8	316.6
70°	240.8	245.5	250.2	255.0	259.8	264.7	270.1	275.4	280.8	286.1	290.1
72.5°	212.7	217.5	222.4	227.3	232.2	237.6	243.4	249.3	255.1	261.0	265.2
75°	170.4	175.8	181.1	186.5	191.8	197.8	204.4	211.0	217.5	224.1	228.2
77.5°	129.8	136.0	142.2	148.4	154.5	160.8	167.1	173.4	179.8	186.2	190.6
80°	104.7	110.8	117.0	123.1	129.4	135.9	142.9	149.9	156.9	163.9	168.4
82.5°	81.7	88.2	94.7	101.2	107.7	114.5	121.7	128.9	136.0	143.2	147.6
85°	50.9	57.7	64.6	71.3	78.1	85.1	92.3	99.5	106.7	113.9	118.4
87.5°	29.0	35.7	42.4	49.2	56.1	63.0	70.2	77.3	84.4	91.7	96.5
90°	15.3	22.4	30.1	37.6	45.2	53.1	60.5	68.6	76.1	84.1	89.3
92.5°	19.5	26.9	37.4	49.8	64.6	86.1	121.0	174.7	232.5	236.9	210.3
95°	28.8	34.7	44.1	55.0	71.6	100.7	162.1	281.0	428.4	518.3	513.2
97.5°	38.8	44.2	51.9	62.3	77.2	99.4	142.2	231.0	384.6	544.3	625.3
100°	45.8	51.1	57.5	67.4	81.4	102.1	138.2	210.9	345.6	518.6	650.1
102.5°	53.6	58.2	63.8	73.8	86.7	106.7	139.4	201.3	316.0	477.0	629.8
105°	65.8	69.1	74.9	83.3	94.8	113.7	142.3	193.8	284.8	419.7	569.8
107.5°	77.8	81.5	86.8	93.7	105.0	122.2	149.8	194.5	269.7	379.6	509.6
110°	86.3	89.8	94.3	101.4	111.5	128.9	155.4	196.3	263.6	359.9	474.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	95.7	98.7	102.3	108.9	118.4	135.1	160.7	199.4	260.8	347.1	448.0
115°	108.3	110.8	113.7	119.8	128.9	144.9	169.1	203.9	258.2	332.2	417.8
117.5°	119.6	122.1	124.7	130.2	139.7	155.1	177.9	209.8	257.3	322.5	397.7
120°	127.7	129.8	132.5	137.7	147.0	162.4	184.9	214.1	258.0	317.1	386.2
122.5°	135.5	137.0	138.8	143.7	153.5	168.6	191.0	218.7	258.0	312.1	375.8
125°	146.2	147.0	149.3	153.6	163.1	178.3	199.2	225.2	258.8	305.1	361.3
127.5°	153.6	155.0	158.0	163.6	173.7	188.5	208.0	231.6	260.6	299.6	347.7
130°	158.9	160.2	164.2	170.5	181.0	195.6	214.2	236.4	262.2	296.6	339.2
132.5°	162.3	164.2	169.0	176.4	187.4	201.7	219.7	240.0	263.6	293.6	331.4
135°	168.7	170.5	176.4	184.3	194.8	209.2	226.4	244.6	264.8	289.2	320.8
137.5°	176.8	178.3	183.8	191.7	202.1	216.4	231.5	248.3	266.9	286.5	312.1
140°	181.0	182.5	188.6	196.8	206.4	220.3	235.2	250.7	267.2	284.6	307.3
142.5°	186.7	187.6	193.1	201.2	210.3	223.1	237.1	251.6	267.1	283.6	303.4
145°	195.2	196.1	200.9	207.9	216.8	228.4	241.7	254.3	268.0	282.9	299.1
147.5°	203.2	203.8	208.2	214.8	222.7	233.1	244.7	256.2	268.6	281.5	295.2
150°	208.6	209.6	213.1	219.7	226.9	235.5	246.7	257.3	268.6	280.3	292.5
152.5°	214.3	214.8	218.0	223.8	230.5	238.4	248.7	258.2	268.1	278.7	289.6
155°	221.8	221.8	224.8	229.9	235.0	242.1	250.7	258.9	267.1	275.7	284.8
157.5°	228.5	228.4	230.9	235.2	239.7	245.0	252.5	259.4	265.7	272.6	280.4
160°	233.0	232.5	234.5	238.1	242.1	246.7	253.3	259.4	264.5	270.6	276.7
162.5°	236.7	236.1	238.2	241.3	244.6	248.3	254.1	259.0	263.3	268.1	273.5
165°	242.1	241.1	242.6	245.1	247.2	250.3	254.3	258.4	261.4	264.5	268.6
167.5°	245.8	245.3	246.2	247.6	249.1	250.9	254.3	257.2	258.6	260.9	263.8
170°	248.3	247.7	248.3	249.2	250.3	251.8	254.3	256.4	257.3	258.9	260.9
172.5°	249.9	249.0	249.4	250.5	251.1	251.8	254.0	255.6	255.7	256.5	258.1
175°	251.8	250.7	251.3	251.8	251.8	251.8	253.3	254.3	253.8	253.8	254.3
177.5°	252.7	251.9	251.9	252.3	251.9	251.9	252.7	253.1	252.3	252.3	252.7
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	942.4	943.6	944.8	945.3	945.1	944.9	944.8	944.6
5°	939.6	941.2	942.9	943.6	943.3	943.2	943.0	942.8
7.5°	931.7	933.2	934.6	935.2	935.0	934.9	934.6	934.4
10°	924.3	925.8	927.2	927.8	927.6	927.5	927.2	927.0
12.5°	915.5	916.7	917.7	918.0	917.5	916.9	916.4	915.9
15°	898.9	900.2	901.4	901.6	900.8	899.9	899.1	898.3
17.5°	877.8	878.8	879.7	879.9	879.4	879.0	878.4	878.0
20°	861.6	862.2	862.8	863.1	863.1	863.1	863.1	863.1
22.5°	844.9	845.6	846.4	846.6	846.1	845.6	845.1	844.6
25°	818.5	819.3	820.1	820.0	818.9	818.0	816.9	815.9
27.5°	787.7	788.4	788.9	789.1	788.6	788.3	787.9	787.6
30°	766.7	767.1	767.5	767.7	767.4	767.2	767.0	766.8
32.5°	746.7	747.1	747.5	747.6	747.4	747.3	747.0	746.8
35°	714.3	715.0	715.6	715.9	715.9	715.9	715.9	715.9
37.5°	680.3	681.1	681.9	682.3	682.2	682.2	682.1	682.0
40°	657.3	658.2	659.0	659.6	660.0	660.4	660.8	661.2
42.5°	636.1	637.1	638.1	638.6	638.7	638.8	638.9	639.0
45°	602.1	603.5	604.9	605.7	606.0	606.2	606.4	606.6
47.5°	566.9	569.0	571.1	572.4	572.8	573.3	573.7	574.2
50°	543.5	545.8	548.0	549.5	550.1	550.7	551.3	552.0
52.5°	520.1	522.5	525.0	526.5	526.9	527.4	527.8	528.2
55°	483.3	485.6	487.9	489.4	490.2	491.1	491.9	492.7
57.5°	446.9	449.5	452.1	453.7	454.3	455.0	455.6	456.2
60°	422.0	425.1	428.2	430.0	430.6	431.2	431.9	432.5
62.5°	396.7	400.1	403.6	405.6	406.4	407.2	408.0	408.8
65°	359.0	362.1	365.2	367.1	368.0	368.8	369.6	370.4
67.5°	320.3	324.0	327.8	330.2	331.3	332.3	333.4	334.5
70°	294.0	297.9	301.8	304.3	305.6	306.8	308.1	309.3
72.5°	269.5	273.7	277.9	280.5	281.4	282.3	283.2	284.1
75°	232.4	236.5	240.6	243.2	244.2	245.2	246.2	247.3
77.5°	195.2	199.7	204.3	207.0	207.8	208.6	209.4	210.3
80°	173.0	177.5	182.0	184.7	185.6	186.4	187.2	188.0
82.5°	151.9	156.2	160.6	163.5	165.1	166.5	168.0	169.5
85°	123.0	127.5	132.1	135.1	136.8	138.4	140.1	141.7
87.5°	101.3	106.1	111.0	114.3	115.7	117.2	118.7	120.1
90°	94.5	99.8	105.0	109.1	110.6	112.0	114.0	115.4
92.5°	172.3	152.1	140.5	136.0	130.9	131.1	131.9	132.5
95°	442.4	369.6	311.6	271.8	237.1	223.3	220.7	214.0
97.5°	616.3	566.4	509.8	453.3	423.2	396.1	382.7	377.6
100°	693.6	673.0	624.9	574.8	540.9	505.5	487.9	481.0
102.5°	717.6	737.1	716.0	683.0	646.7	621.9	602.6	597.8
105°	696.0	769.8	796.3	793.4	778.6	763.3	754.6	749.9
107.5°	634.1	731.2	792.7	822.0	831.4	832.6	830.5	827.8
110°	588.5	689.0	764.6	810.6	834.9	846.1	851.0	852.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	551.8	647.3	723.6	777.2	812.1	830.1	840.4	845.5
115°	505.4	587.9	661.3	719.3	760.2	785.8	801.3	809.1
117.5°	473.5	544.9	608.4	661.7	702.8	729.4	745.0	750.5
120°	455.8	520.4	579.9	627.0	665.8	691.5	706.5	711.8
122.5°	441.6	501.5	554.6	598.9	633.6	657.3	672.3	677.2
125°	421.1	476.3	523.8	562.6	592.1	613.9	626.2	632.3
127.5°	400.0	451.5	495.9	532.3	559.3	578.9	590.7	594.1
130°	387.4	435.0	477.5	512.6	539.0	556.8	568.0	572.1
132.5°	374.2	419.0	457.9	491.6	517.9	535.6	545.7	550.1
135°	356.1	393.9	429.1	459.9	483.4	501.1	511.4	515.4
137.5°	341.1	371.9	401.4	427.7	448.5	464.6	473.9	478.0
140°	332.4	358.6	384.2	407.2	426.8	440.9	449.3	452.7
142.5°	325.0	347.1	369.3	389.1	405.9	417.9	426.0	429.0
145°	315.9	332.7	349.5	364.2	377.2	386.6	393.1	395.9
147.5°	308.0	321.1	333.6	344.3	354.4	361.6	365.2	366.5
150°	303.6	314.9	324.5	333.8	341.6	347.9	350.2	350.9
152.5°	299.6	309.6	318.4	325.6	332.0	337.0	339.0	339.6
155°	293.5	301.7	308.7	314.3	319.4	323.0	324.5	325.0
157.5°	287.4	294.1	299.6	304.0	307.9	310.9	312.3	312.2
160°	283.3	288.4	293.5	297.0	300.6	303.2	304.2	303.6
162.5°	278.8	283.6	287.8	291.0	293.7	295.9	296.0	296.0
165°	272.6	276.2	279.3	281.8	283.8	284.8	284.8	284.8
167.5°	266.7	269.1	271.4	273.2	274.3	275.2	274.7	274.6
170°	263.5	265.0	266.5	267.5	268.6	269.1	269.1	268.6
172.5°	259.8	261.4	262.4	263.1	263.3	264.2	263.4	262.9
175°	255.8	255.8	256.9	256.9	256.9	257.3	256.4	255.8
177.5°	253.1	253.5	253.5	253.5	253.1	253.5	252.3	252.3
180°	252.3	252.3	252.3	252.3	252.3	252.3	252.3	252.3

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