

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: P333138-940

Luminaire Tested: **S125DIP-S375D810U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333138-940
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-S375D810U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3897.3 lumens
Efficiency: N/A
Efficacy: 124.9 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

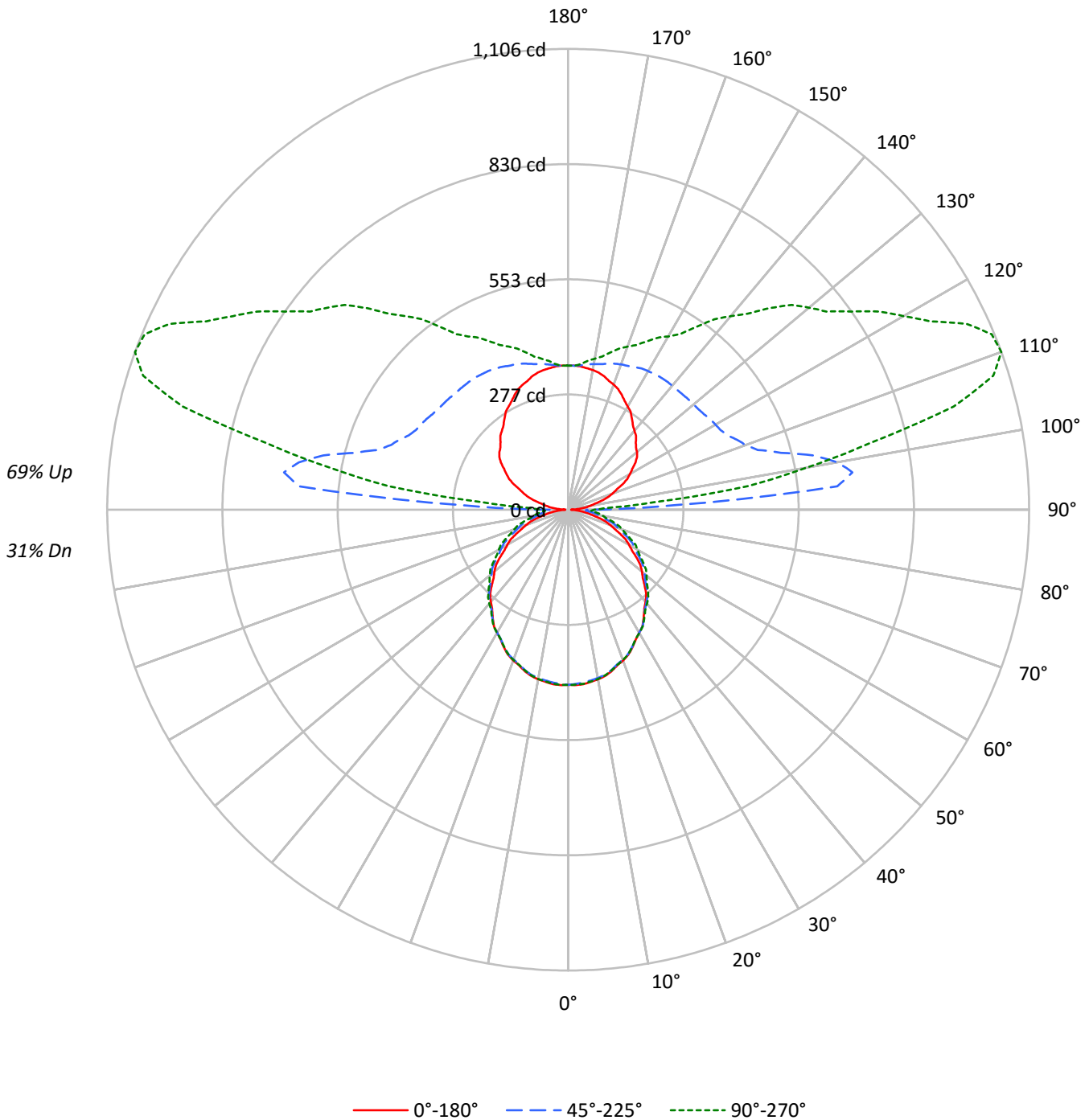
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	93	89	85	81	84	80	76	73	63	61	59	48	46	45	34	33	32	25
2	85	77	71	66	76	69	64	60	55	51	48	42	39	37	29	28	27	21
3	77	68	60	55	69	61	55	50	48	44	40	37	34	31	26	24	22	18
4	70	60	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	18	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	16	14	11
7	55	43	35	29	49	39	32	27	31	26	22	24	20	17	17	15	13	10
8	51	38	31	26	45	35	28	24	28	23	20	22	18	15	16	13	11	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	24	19	15	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.0
10°-20°	112.8	2.9
20°-30°	167.8	4.3
30°-40°	198.8	5.1
40°-50°	205.5	5.3
50°-60°	189.3	4.9
60°-70°	153.0	3.9
70°-80°	102.5	2.6
80°-90°	55.1	1.4
90°-100°	280.5	7.2
100°-110°	560.9	14.4
110°-120°	520.5	13.4
120°-130°	418.2	10.7
130°-140°	332.6	8.5
140°-150°	248.9	6.4
150°-160°	174.7	4.5
160°-170°	103.0	2.6
170°-180°	33.5	0.9
0°-30°	320.4	8.2
0°-40°	519.2	13.3
0°-60°	914.0	23.5
0°-90°	1224.6	31.4
90°-120°	1361.8	34.9
90°-150°	2361.5	60.6
90°-180°	2673.0	68.6
0°-180°	3897.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	7	26	45	58	62	6
95°	28	84	648	319	206	29
105°	82	121	528	1026	958	87
115°	143	176	422	898	1055	141
125°	197	230	398	712	829	175
135°	230	276	390	592	684	178
145°	267	305	388	485	535	167
155°	304	327	378	427	446	140
165°	332	341	363	385	390	93
175°	345	345	348	352	351	33
180°	346	346	346	346	346	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.0	16.1	19.3	22.5	25.7	29.0	32.3	35.7	38.9	42.3	44.5
90°	7.3	10.9	15.2	19.5	23.9	28.3	32.1	36.6	40.5	44.9	47.8
92.5°	14.4	19.0	27.6	38.9	53.6	76.9	118.2	185.2	257.7	257.3	216.5
95°	28.4	31.5	39.4	49.5	67.1	101.3	179.1	335.6	531.1	647.8	636.6
97.5°	43.1	46.0	52.1	61.9	77.8	103.0	155.4	270.8	475.1	687.8	794.8
100°	53.3	56.6	61.3	71.0	86.1	109.5	152.8	246.4	425.1	655.9	832.2
102.5°	64.7	67.3	71.3	81.3	95.2	118.0	156.8	235.8	387.0	601.6	807.4
105°	82.5	84.0	88.9	97.4	109.9	131.6	165.1	229.8	349.0	528.2	730.0
107.5°	99.9	102.5	107.1	114.0	126.9	146.4	178.7	234.5	332.1	477.2	651.7
110°	112.4	114.9	118.7	126.1	137.7	157.7	188.8	239.4	326.4	453.1	606.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	125.2	127.4	130.5	137.7	149.1	168.3	198.2	246.1	325.1	438.4	573.0
115°	143.3	145.3	148.1	155.0	166.1	185.0	213.2	256.0	325.4	421.9	535.7
117.5°	159.6	162.1	164.8	171.5	183.8	202.0	228.6	267.7	328.1	412.8	512.6
120°	170.8	173.2	176.2	182.8	194.9	213.5	240.0	275.6	331.4	408.1	499.6
122.5°	182.2	183.9	186.2	192.6	205.7	224.2	250.7	284.5	334.0	404.0	488.2
125°	196.9	198.1	201.5	207.8	220.9	239.9	264.7	296.6	338.9	398.5	472.5
127.5°	208.0	210.0	214.4	222.3	236.2	255.1	278.7	307.9	344.6	394.9	458.0
130°	215.3	217.3	222.7	231.8	246.3	265.0	287.9	315.7	348.3	392.9	448.5
132.5°	220.5	223.2	229.8	240.0	255.2	273.8	296.4	322.2	352.3	391.6	440.5
135°	229.5	232.2	240.5	251.6	266.1	285.2	307.5	331.1	357.6	389.6	430.5
137.5°	240.9	242.9	250.7	261.7	276.0	295.5	315.5	337.8	362.7	388.9	421.8
140°	247.3	249.3	257.7	268.9	282.0	301.0	321.3	342.2	364.7	388.5	417.4
142.5°	255.0	256.5	264.2	275.4	287.9	305.6	324.8	344.6	365.8	388.3	413.8
145°	266.7	268.0	274.9	284.6	297.0	313.1	331.2	348.6	367.5	387.6	409.0
147.5°	278.6	279.5	285.4	294.5	305.4	319.5	335.4	351.2	368.1	385.8	404.4
150°	285.9	287.2	292.1	301.2	310.9	322.8	338.1	352.8	368.1	384.1	400.9
152.5°	293.6	294.5	298.8	306.7	316.0	326.7	340.9	353.9	367.6	381.9	397.0
155°	304.0	304.0	308.2	315.1	322.1	331.9	343.8	354.9	366.0	377.9	390.5
157.5°	313.2	313.1	316.4	322.4	328.5	335.9	346.1	355.6	364.3	373.7	384.3
160°	319.3	318.6	321.5	326.3	331.9	338.1	347.2	355.6	362.6	371.0	379.3
162.5°	324.3	323.7	326.5	330.7	335.2	340.4	348.3	355.0	360.9	367.6	374.8
165°	331.9	330.5	332.6	336.1	338.9	343.0	348.6	354.2	358.4	362.6	368.1
167.5°	336.9	336.2	337.4	339.4	341.3	344.0	348.6	352.5	354.5	357.7	361.6
170°	340.3	339.6	340.3	341.6	343.0	345.1	348.6	351.4	352.8	354.9	357.7
172.5°	342.5	341.3	341.9	343.3	344.1	345.1	348.0	350.3	350.5	351.5	353.7
175°	345.1	343.8	344.5	345.1	345.1	345.1	347.2	348.6	347.9	347.9	348.6
177.5°	346.3	345.3	345.3	345.8	345.3	345.3	346.3	347.0	345.8	345.8	346.3
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	46.8	49.0	51.3	53.0	53.6	54.2	55.0	55.6
90°	50.6	53.3	56.2	58.9	59.6	60.2	61.5	62.2
92.5°	160.1	128.2	108.1	99.2	90.9	89.8	89.4	89.0
95°	535.4	431.4	347.7	290.4	241.7	221.3	216.4	205.9
97.5°	778.5	706.1	624.5	544.3	501.9	463.4	443.8	435.5
100°	887.8	855.6	785.7	714.4	666.8	617.2	591.9	581.3
102.5°	923.7	946.6	914.0	866.1	815.2	780.1	752.6	744.8
105°	899.3	996.6	1029.1	1022.7	1001.0	978.7	965.4	957.6
107.5°	818.6	947.9	1028.5	1066.0	1077.9	1078.3	1074.3	1069.3
110°	759.1	893.3	993.4	1053.8	1085.8	1099.7	1105.3	1105.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	711.9	839.4	940.5	1011.5	1058.0	1081.4	1094.1	1099.7
115°	652.5	762.1	859.3	936.5	991.4	1025.4	1045.4	1055.1
117.5°	613.2	707.9	791.8	862.6	917.6	952.8	972.8	978.9
120°	591.8	677.0	755.3	817.7	869.9	903.8	923.2	929.3
122.5°	575.2	654.2	724.1	782.6	829.1	860.3	879.8	885.3
125°	551.3	623.9	686.1	737.3	776.8	805.7	821.5	829.0
127.5°	526.9	594.7	652.6	700.6	736.6	762.3	777.3	781.0
130°	511.8	574.5	630.2	676.4	711.7	735.1	749.6	754.2
132.5°	496.6	555.4	606.0	650.4	685.7	709.1	722.3	727.5
135°	476.3	525.6	571.4	612.0	643.1	666.6	679.6	684.2
137.5°	459.2	499.3	537.4	571.9	599.8	621.0	632.9	637.9
140°	449.8	483.6	516.7	546.6	572.7	591.2	602.1	605.9
142.5°	441.6	470.2	498.6	524.6	546.9	562.6	572.8	576.1
145°	431.1	453.2	475.3	494.5	511.6	523.8	531.8	535.0
147.5°	421.5	439.3	456.0	470.4	483.8	493.5	498.1	499.5
150°	416.3	431.6	444.8	457.4	468.0	476.4	479.3	480.1
152.5°	410.6	424.4	436.5	446.2	455.0	461.7	464.6	465.3
155°	402.3	413.5	423.2	430.9	437.8	442.7	444.8	445.5
157.5°	394.0	403.1	410.6	416.7	422.1	426.1	428.1	427.9
160°	388.3	395.3	402.3	407.2	412.1	415.5	417.0	416.3
162.5°	382.2	388.6	394.5	398.8	402.6	405.5	405.8	405.6
165°	373.7	378.6	382.8	386.3	389.1	390.5	390.5	390.5
167.5°	365.6	368.8	372.0	374.5	375.9	377.2	376.7	376.5
170°	361.1	363.3	365.3	366.8	368.1	368.8	368.8	368.1
172.5°	356.1	358.2	359.8	360.6	360.9	362.1	361.1	360.3
175°	350.7	350.7	352.1	352.1	352.1	352.8	351.4	350.7
177.5°	347.0	347.5	347.5	347.5	347.0	347.5	345.8	345.8
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8

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