

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: P333172

Luminaire Tested: **S125DIP-S610D590U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333172
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D590U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4765.5 lumens
Efficiency: N/A
Efficacy: 145.3 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: General Diffuse

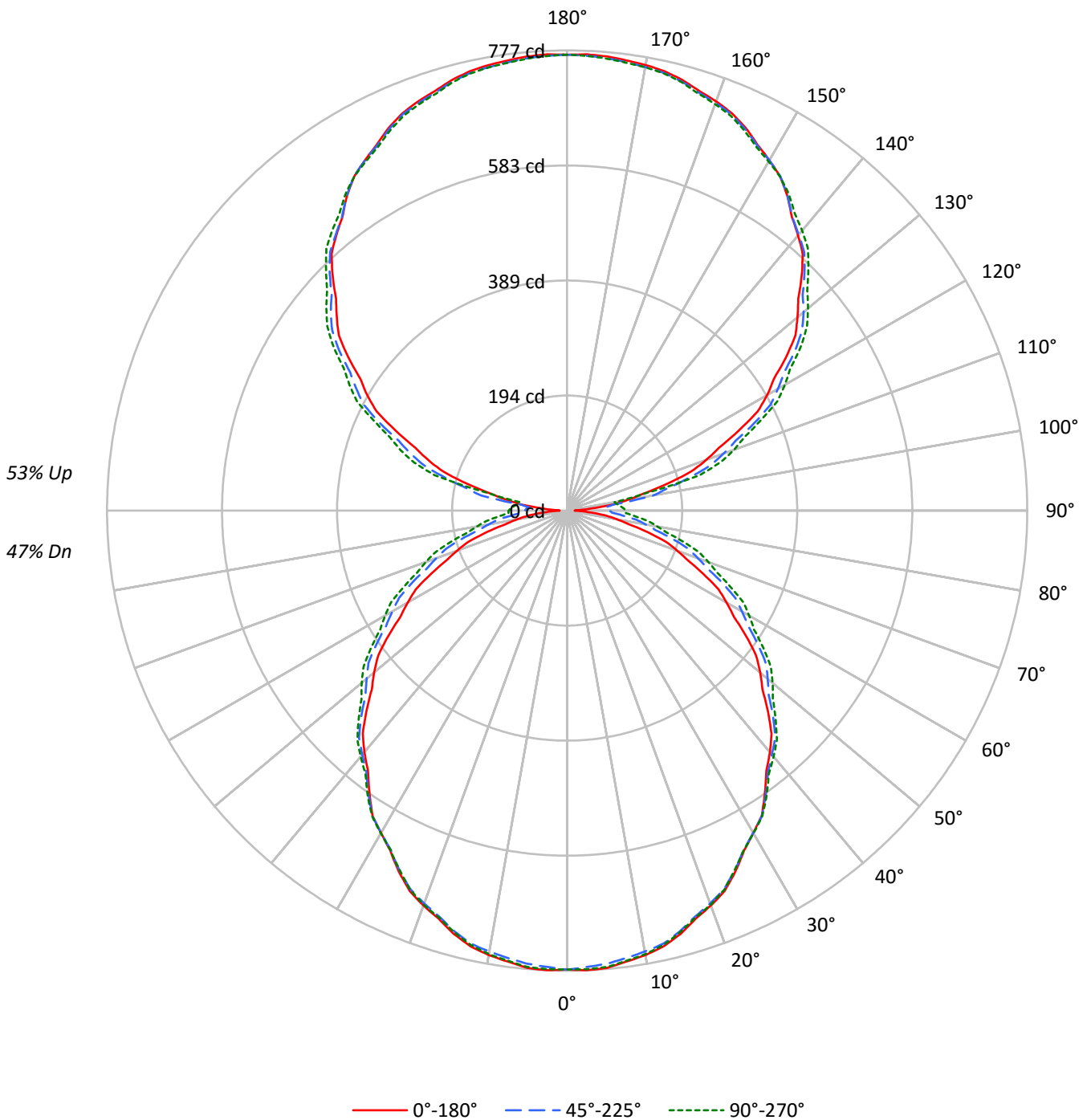
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S125DIP-S610D590U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333172

CATALOG NUMBER: S125DIP-S610D590U835-4F0-1E-UDD-D

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	84	81	78	71	68	66	58	56	54	46	45	44	38
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	36	33	31	26
4	73	62	54	47	67	57	50	44	48	42	38	39	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.5
10°-20°	208.0	4.4
20°-30°	309.4	6.5
30°-40°	366.5	7.7
40°-50°	378.9	8.0
50°-60°	349.0	7.3
60°-70°	282.1	5.9
70°-80°	189.0	4.0
80°-90°	99.6	2.1
90°-100°	82.9	1.7
100°-110°	212.9	4.5
110°-120°	339.8	7.1
120°-130°	416.6	8.7
130°-140°	438.3	9.2
140°-150°	406.4	8.5
150°-160°	327.7	6.9
160°-170°	211.9	4.4
170°-180°	73.1	1.5
0°-30°	590.7	12.4
0°-40°	957.1	20.1
0°-60°	1685.1	35.4
0°-90°	2255.7	47.3
90°-120°	635.7	13.3
90°-150°	1897.0	39.8
90°-180°	2510.0	52.7
0°-180°	4765.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	42	71	91	99	9
95°	42	60	65	83	90	49
105°	175	189	212	226	232	185
115°	320	328	348	359	360	317
125°	451	455	469	479	481	402
135°	560	563	567	575	576	432
145°	648	649	649	653	653	405
155°	713	710	711	712	708	328
165°	752	749	750	753	748	212
175°	770	766	767	771	766	73
180°	770	770	770	770	770	



TEST NUMBER: P333172

CATALOG NUMBER: S125DIP-S610D590U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.8	29.4	35.0	40.6	46.2	52.0	57.9	63.8	69.8	75.7	79.7
90°	12.7	19.1	25.6	32.0	38.4	44.9	51.5	58.2	64.8	71.4	75.9
92.5°	19.7	24.0	28.3	32.6	36.9	42.4	49.0	55.7	62.3	69.0	73.4
95°	42.4	46.4	50.4	54.4	58.4	60.9	61.8	62.7	63.7	64.6	68.9
97.5°	76.9	81.5	86.1	90.8	95.4	95.7	91.7	87.7	83.7	79.7	79.7
100°	103.6	107.6	111.5	115.4	119.3	124.3	130.2	136.1	142.0	147.9	132.6
102.5°	130.9	134.6	138.4	142.1	145.9	150.6	156.1	161.7	167.3	172.9	172.7
105°	174.6	177.8	181.0	184.2	187.4	191.5	196.6	201.7	206.7	211.8	215.2
107.5°	220.0	222.3	224.6	226.9	229.2	232.9	238.0	243.1	248.2	253.3	256.7
110°	249.5	251.5	253.6	255.6	257.6	261.1	266.1	271.1	276.1	281.0	283.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	277.8	279.7	281.7	283.6	285.5	288.8	293.6	298.3	303.1	307.8	310.4
115°	319.5	321.3	323.1	324.9	326.8	329.9	334.4	339.0	343.5	348.0	350.5
117.5°	362.7	363.4	364.2	364.9	365.7	368.4	373.0	377.6	382.3	386.9	389.1
120°	390.1	390.4	390.8	391.2	391.6	393.9	398.2	402.4	406.7	410.9	413.6
122.5°	413.6	414.4	415.1	415.8	416.5	418.8	422.8	426.7	430.6	434.5	437.0
125°	450.9	451.6	452.3	453.1	453.8	455.8	459.2	462.6	466.0	469.3	471.5
127.5°	485.9	486.3	486.8	487.3	487.7	489.3	492.0	494.7	497.4	500.1	502.3
130°	507.8	508.2	508.7	509.2	509.6	511.1	513.6	516.1	518.6	521.1	523.1
132.5°	529.1	529.8	530.5	531.2	531.9	533.0	534.6	536.1	537.6	539.2	541.5
135°	560.1	560.7	561.3	561.9	562.4	563.2	564.1	565.1	566.0	566.9	568.9
137.5°	588.6	589.1	589.6	590.1	590.7	591.1	591.4	591.8	592.1	592.5	594.5
140°	606.7	606.9	607.2	607.4	607.7	607.8	607.9	607.9	608.0	608.0	610.1
142.5°	623.6	623.6	623.6	623.6	623.6	623.7	624.0	624.2	624.4	624.6	626.2
145°	648.3	648.4	648.5	648.6	648.7	648.7	648.7	648.7	648.7	648.7	649.7
147.5°	669.2	669.2	669.1	669.1	669.0	669.1	669.2	669.4	669.5	669.7	670.1
150°	682.9	682.7	682.4	682.2	681.9	681.9	682.2	682.4	682.7	682.9	683.2
152.5°	696.2	695.6	695.1	694.5	693.9	693.8	694.0	694.3	694.5	694.8	695.1
155°	713.2	712.4	711.7	710.9	710.1	709.9	710.1	710.4	710.6	710.9	711.3
157.5°	726.3	725.8	725.4	724.9	724.5	724.3	724.3	724.3	724.3	724.4	724.8
160°	735.4	734.7	733.9	733.1	732.4	732.1	732.2	732.3	732.4	732.6	733.1
162.5°	742.7	742.0	741.2	740.4	739.7	739.4	739.5	739.6	739.7	739.9	740.6
165°	752.5	751.8	751.0	750.3	749.5	749.2	749.3	749.4	749.6	749.7	750.4
167.5°	759.8	759.1	758.3	757.5	756.7	756.4	756.5	756.6	756.7	756.9	757.8
170°	764.0	763.1	762.2	761.3	760.4	760.0	760.1	760.3	760.4	760.5	761.5
172.5°	766.7	765.8	764.9	764.0	763.1	762.8	763.0	763.3	763.5	763.7	764.6
175°	769.7	768.9	768.1	767.4	766.6	766.3	766.4	766.6	766.7	766.8	767.8
177.5°	771.0	770.4	769.8	769.2	768.6	768.3	768.4	768.5	768.6	768.7	769.5
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	83.7	87.7	91.7	94.4	95.6	96.9	98.1	99.4
90°	80.5	85.0	89.5	92.5	94.1	95.7	97.2	98.8
92.5°	77.8	82.1	86.5	89.4	90.8	92.1	93.5	94.8
95°	73.3	77.6	82.0	84.8	85.9	87.1	88.3	89.5
97.5°	79.7	79.6	79.6	80.2	81.3	82.5	83.6	84.8
100°	117.2	101.9	86.5	79.1	79.6	80.1	80.6	81.1
102.5°	172.5	172.4	172.2	168.3	160.7	153.1	145.5	137.9
105°	218.6	221.9	225.3	227.5	228.6	229.6	230.7	231.8
107.5°	260.1	263.5	266.8	268.8	269.5	270.2	270.8	271.5
110°	286.7	289.5	292.4	294.4	295.7	297.0	298.3	299.7



TEST NUMBER: P333172

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	313.0	315.6	318.2	320.0	321.0	322.0	323.0	324.0
115°	353.1	355.6	358.1	359.5	359.8	360.0	360.3	360.5
117.5°	391.3	393.5	395.8	397.3	398.1	398.9	399.7	400.5
120°	416.2	418.8	421.4	422.9	423.3	423.7	424.1	424.4
122.5°	439.5	442.0	444.5	445.8	446.1	446.4	446.7	447.0
125°	473.7	475.9	478.1	479.4	479.9	480.4	480.8	481.3
127.5°	504.5	506.7	509.0	510.1	510.1	510.2	510.2	510.3
130°	525.0	527.0	529.0	530.1	530.3	530.5	530.7	530.9
132.5°	543.8	546.0	548.3	549.5	549.6	549.7	549.7	549.8
135°	570.8	572.7	574.7	575.7	575.8	575.9	575.9	576.0
137.5°	596.6	598.6	600.7	601.7	601.7	601.7	601.7	601.7
140°	612.2	614.3	616.4	617.5	617.4	617.3	617.2	617.1
142.5°	627.9	629.5	631.1	631.9	631.8	631.7	631.7	631.6
145°	650.6	651.6	652.6	653.0	652.9	652.9	652.8	652.7
147.5°	670.5	671.0	671.4	671.3	670.7	670.1	669.5	668.9
150°	683.4	683.7	683.9	683.7	682.8	682.0	681.1	680.3
152.5°	695.3	695.6	695.8	695.5	694.6	693.7	692.9	692.0
155°	711.7	712.0	712.4	712.1	711.1	710.1	709.1	708.0
157.5°	725.2	725.6	726.0	725.7	724.7	723.6	722.6	721.6
160°	733.6	734.1	734.6	734.3	733.3	732.3	731.3	730.3
162.5°	741.3	742.0	742.7	742.5	741.4	740.3	739.2	738.0
165°	751.2	752.0	752.7	752.6	751.6	750.6	749.6	748.5
167.5°	758.7	759.6	760.5	760.4	759.3	758.1	757.0	755.8
170°	762.6	763.6	764.6	764.5	763.4	762.2	761.1	760.0
172.5°	765.5	766.5	767.4	767.3	766.1	765.0	763.8	762.7
175°	768.8	769.8	770.9	770.8	769.7	768.5	767.4	766.2
177.5°	770.2	770.9	771.6	771.5	770.7	769.9	769.1	768.3
180°	769.7	769.7	769.7	769.7	769.7	769.7	769.7	769.7

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