

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: P333165-940

Luminaire Tested: **S125DIP-S610D365U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333165-940
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-S610D365U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3313.5 lumens
Efficiency: N/A
Efficacy: 120.5 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-Direct

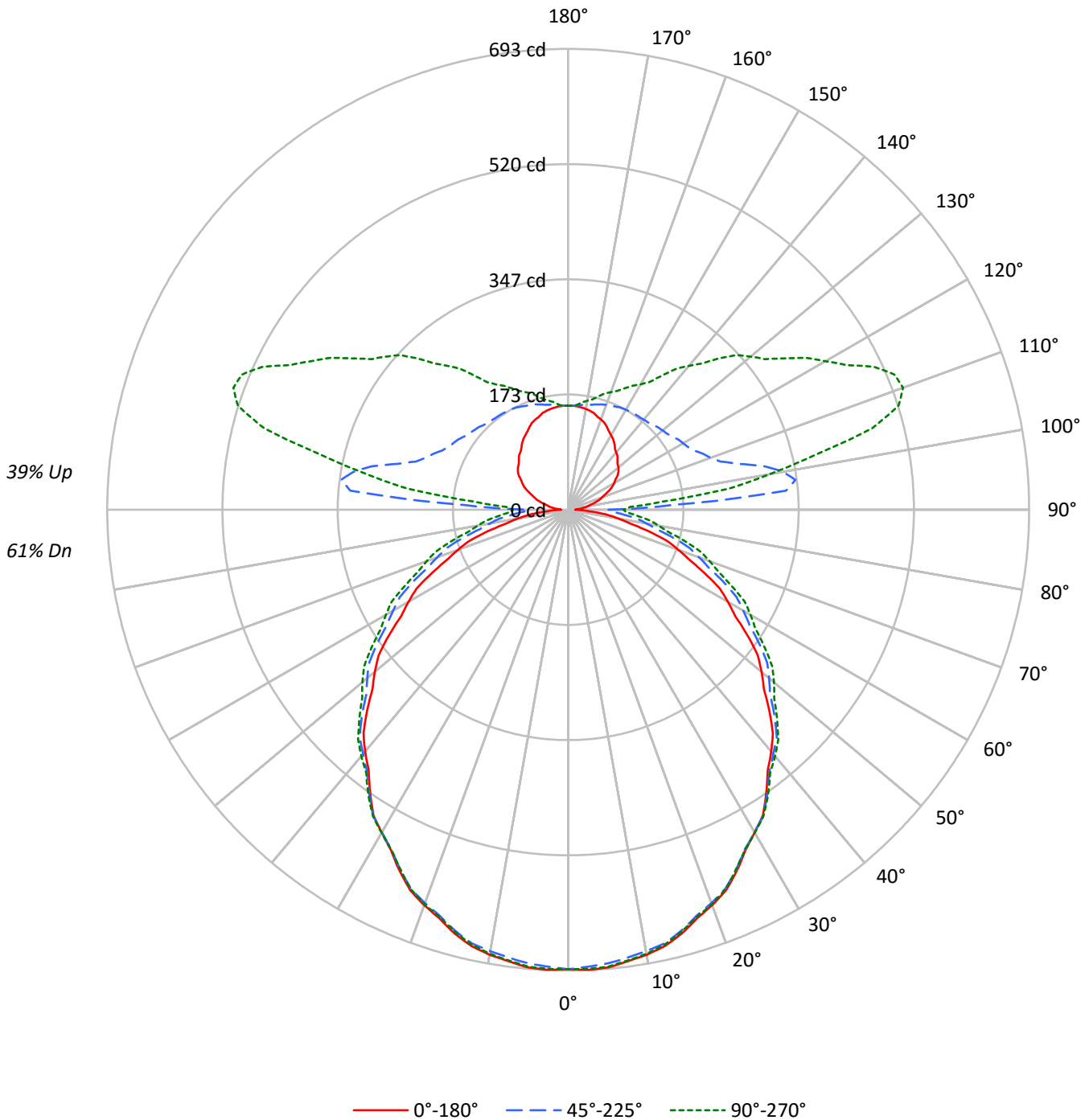
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	99	94	90	86	93	88	85	81	77	74	72	67	64	62	57	55	54	49
2	90	82	75	70	84	77	71	66	67	62	59	58	54	51	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	40	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	54	43	35	30	38	32	27	33	28	24	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	30	25	22	26	22	19	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	2.0
10°-20°	185.5	5.6
20°-30°	275.9	8.3
30°-40°	326.8	9.9
40°-50°	337.9	10.2
50°-60°	311.2	9.4
60°-70°	251.6	7.6
70°-80°	168.5	5.1
80°-90°	88.2	2.7
90°-100°	162.3	4.9
100°-110°	279.7	8.4
110°-120°	252.8	7.6
120°-130°	199.0	6.0
130°-140°	154.7	4.7
140°-150°	113.4	3.4
150°-160°	79.0	2.4
160°-170°	46.5	1.4
170°-180°	15.1	0.5
0°-30°	526.7	15.9
0°-40°	853.5	25.8
0°-60°	1502.6	45.3
0°-90°	2010.9	60.7
90°-120°	694.8	21.0
90°-150°	1161.9	35.1
90°-180°	1303.0	39.3
0°-180°	3313.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	11	35	61	77	83	8
95°	19	57	329	190	143	18
105°	42	67	266	500	473	44
115°	68	86	210	434	508	67
125°	91	106	192	341	396	81
135°	105	125	180	278	322	81
145°	121	138	175	222	246	76
155°	137	148	171	193	201	63
165°	150	154	164	174	176	42
175°	156	156	157	159	158	15
180°	156	156	156	156	156	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.2	26.0	31.0	35.9	40.9	46.0	51.2	56.4	61.6	66.9	70.4
90°	11.1	16.3	21.8	27.2	32.6	38.3	43.7	49.4	54.8	60.6	64.4
92.5°	13.6	18.9	25.9	34.3	44.2	58.2	80.7	114.9	151.4	155.0	139.0
95°	19.2	23.5	29.9	37.3	48.1	66.8	105.7	180.1	272.2	328.7	326.0
97.5°	25.2	29.2	34.4	41.5	51.2	65.6	92.9	148.6	244.6	344.3	394.9
100°	29.5	33.3	37.7	44.3	53.5	67.0	90.1	135.8	220.1	328.0	409.9
102.5°	34.2	37.5	41.5	48.2	56.5	69.6	90.5	129.7	201.3	301.8	397.0
105°	41.7	44.1	48.1	53.7	61.1	73.4	91.8	124.3	181.5	265.7	359.2
107.5°	49.0	51.6	55.2	59.8	67.1	78.2	96.0	124.4	171.7	240.4	321.4
110°	54.2	56.6	59.7	64.4	70.9	82.1	99.2	125.2	167.6	227.8	299.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	60.0	62.1	64.6	68.8	75.0	85.7	102.2	126.8	165.5	219.6	282.5
115°	67.7	69.4	71.4	75.3	81.1	91.4	107.0	129.2	163.4	209.8	263.3
117.5°	74.6	76.2	77.9	81.5	87.6	97.4	112.1	132.4	162.4	203.4	250.4
120°	79.6	81.1	82.8	86.1	91.8	101.7	116.2	134.7	162.5	199.7	242.9
122.5°	84.4	85.3	86.5	89.6	95.7	105.3	119.7	137.4	162.2	196.3	236.0
125°	91.0	91.4	92.8	95.5	101.4	111.0	124.4	141.0	162.3	191.5	226.6
127.5°	95.5	96.3	98.2	101.6	107.8	117.2	129.7	144.6	163.0	187.5	217.7
130°	98.8	99.6	101.9	105.9	112.4	121.5	133.4	147.5	163.8	185.4	212.1
132.5°	100.8	101.9	105.0	109.5	116.4	125.3	136.7	149.5	164.3	183.2	207.0
135°	104.7	105.8	109.5	114.3	120.8	129.7	140.6	152.0	164.8	180.0	199.9
137.5°	109.8	110.6	114.0	119.0	125.3	134.2	143.7	154.1	165.7	178.0	194.1
140°	112.3	113.2	117.0	122.0	128.0	136.6	145.9	155.5	165.7	176.6	190.8
142.5°	115.7	116.4	119.8	124.7	130.3	138.2	147.0	155.9	165.5	175.8	188.2
145°	121.1	121.5	124.6	128.8	134.3	141.5	149.7	157.6	166.0	175.2	185.4
147.5°	125.9	126.3	129.0	133.1	138.0	144.4	151.6	158.7	166.4	174.4	183.0
150°	129.2	129.8	132.1	136.2	140.5	145.9	152.8	159.4	166.4	173.6	181.2
152.5°	132.8	133.1	135.1	138.7	142.9	147.7	154.1	160.0	166.1	172.6	179.4
155°	137.4	137.4	139.3	142.4	145.6	150.0	155.3	160.4	165.4	170.9	176.5
157.5°	141.6	141.5	143.0	145.7	148.5	151.9	156.4	160.7	164.6	168.9	173.7
160°	144.4	144.0	145.3	147.5	150.0	152.8	156.9	160.7	163.9	167.6	171.5
162.5°	146.6	146.3	147.6	149.5	151.5	153.8	157.5	160.5	163.1	166.1	169.4
165°	150.0	149.4	150.3	151.9	153.2	155.1	157.6	160.1	162.0	163.9	166.4
167.5°	152.3	151.9	152.6	153.4	154.3	155.5	157.6	159.3	160.2	161.7	163.5
170°	153.8	153.5	153.8	154.4	155.1	156.0	157.6	158.8	159.4	160.4	161.7
172.5°	154.8	154.3	154.5	155.2	155.5	156.0	157.3	158.4	158.5	158.9	159.9
175°	156.0	155.3	155.7	156.0	156.0	156.0	156.9	157.6	157.3	157.3	157.6
177.5°	156.6	156.0	156.0	156.3	156.0	156.0	156.6	156.9	156.3	156.3	156.6
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	73.9	77.4	81.0	83.4	84.4	85.4	86.6	87.7
90°	68.1	72.0	75.7	78.6	79.6	80.7	82.0	83.1
92.5°	115.9	104.0	97.3	94.8	91.8	92.1	92.7	93.3
95°	282.7	238.1	202.6	178.3	157.0	148.6	147.1	143.2
97.5°	389.9	359.4	324.9	290.1	271.6	255.0	246.9	243.9
100°	437.3	425.0	395.7	365.0	344.1	322.4	311.6	307.5
102.5°	451.8	464.3	451.8	431.6	409.3	394.0	382.3	379.4
105°	437.8	484.0	500.9	499.4	490.4	481.1	475.8	473.1
107.5°	399.0	459.6	498.2	516.6	522.6	523.5	522.4	520.8
110°	370.3	433.1	480.4	509.2	524.3	531.4	534.7	535.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	347.2	406.9	454.5	488.0	509.8	521.1	527.7	531.0
115°	318.0	369.5	415.4	451.6	477.1	493.1	502.8	507.8
117.5°	297.7	342.3	382.1	415.4	441.0	457.6	467.4	471.0
120°	286.4	326.8	364.0	393.5	417.7	433.7	443.2	446.6
122.5°	277.2	314.7	348.0	375.7	397.3	412.1	421.5	424.7
125°	264.0	298.5	328.4	352.7	371.0	384.8	392.4	396.4
127.5°	250.5	282.7	310.5	333.3	350.2	362.5	369.9	372.1
130°	242.3	272.2	298.8	320.7	337.2	348.4	355.4	358.1
132.5°	233.8	261.9	286.3	307.4	323.8	334.8	341.3	344.0
135°	222.0	245.8	267.9	287.2	301.8	313.0	319.4	322.1
137.5°	212.3	231.7	250.2	266.7	279.7	289.7	295.6	298.3
140°	206.7	223.1	239.3	253.7	265.9	274.7	280.1	282.2
142.5°	201.8	215.8	229.7	242.2	252.6	260.2	265.3	267.2
145°	195.9	206.4	217.0	226.1	234.3	240.3	244.4	246.2
147.5°	190.9	199.0	206.8	213.5	219.7	224.4	226.6	227.5
150°	188.2	195.1	201.1	206.8	211.7	215.6	217.0	217.5
152.5°	185.7	191.8	197.2	201.7	205.7	208.7	210.1	210.4
155°	181.8	186.9	191.3	194.7	197.9	200.1	201.1	201.3
157.5°	178.1	182.2	185.7	188.3	190.8	192.6	193.5	193.4
160°	175.6	178.7	181.8	184.0	186.3	187.8	188.4	188.2
162.5°	172.7	175.7	178.3	180.3	182.0	183.2	183.4	183.3
165°	168.9	171.1	173.0	174.6	175.8	176.5	176.5	176.5
167.5°	165.2	166.7	168.2	169.3	170.0	170.5	170.2	170.1
170°	163.3	164.2	165.1	165.8	166.4	166.7	166.7	166.4
172.5°	161.0	161.9	162.6	163.0	163.1	163.7	163.2	162.8
175°	158.5	158.5	159.2	159.2	159.2	159.4	158.8	158.5
177.5°	156.9	157.0	157.0	157.0	156.9	157.0	156.3	156.3
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3

(END OF REPORT)