

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: P333120-830

Luminaire Tested: **S125DIP-S375D365U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333120-830
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-S375D365U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 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: 2616.1 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

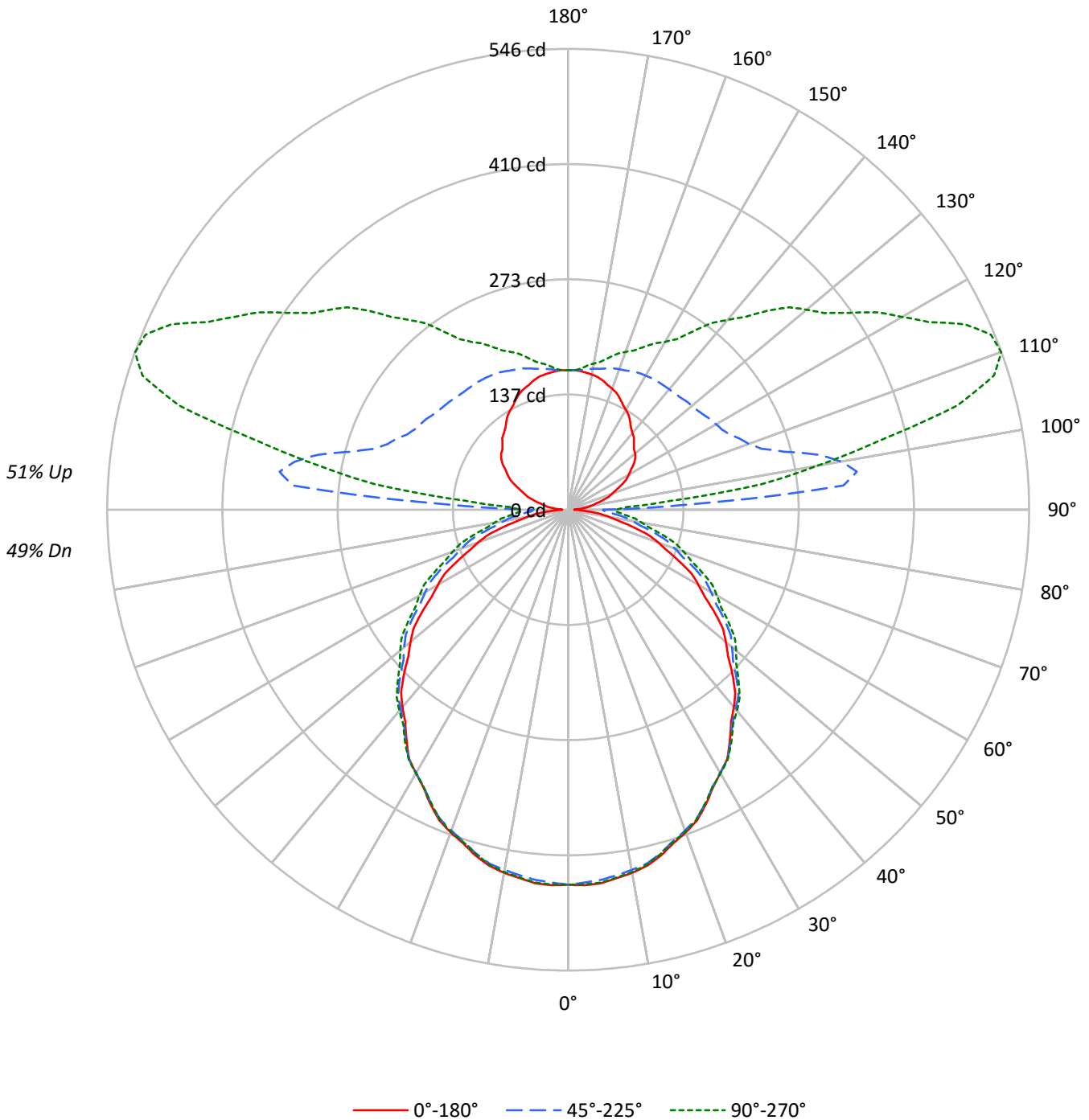
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	97	92	88	84	89	85	82	78	72	69	67	59	57	56	48	47	45	40
2	88	80	74	68	81	74	68	64	62	58	55	52	49	46	42	40	38	33
3	80	70	63	57	73	65	58	53	55	50	46	45	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	40	36	33	33	30	27	23
5	67	55	47	41	61	51	44	38	43	38	33	36	32	28	29	26	24	20
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	23	21	18
7	57	44	36	31	52	41	34	29	35	30	25	30	25	22	24	21	18	16
8	53	40	32	27	49	38	30	26	32	26	22	27	23	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	21	17	15	13
10	46	34	26	22	42	31	25	20	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.6
10°-20°	119.3	4.6
20°-30°	177.4	6.8
30°-40°	210.1	8.0
40°-50°	217.2	8.3
50°-60°	200.1	7.6
60°-70°	161.8	6.2
70°-80°	108.3	4.1
80°-90°	57.1	2.2
90°-100°	151.3	5.8
100°-110°	280.7	10.7
110°-120°	257.2	9.8
120°-130°	204.7	7.8
130°-140°	161.0	6.2
140°-150°	119.4	4.6
150°-160°	83.5	3.2
160°-170°	49.2	1.9
170°-180°	16.0	0.6
0°-30°	338.7	12.9
0°-40°	548.8	21.0
0°-60°	966.1	36.9
0°-90°	1293.3	49.4
90°-120°	689.2	26.3
90°-150°	1174.2	44.9
90°-180°	1323.0	50.6
0°-180°	2616.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	7	24	41	52	56	5
95°	17	50	327	175	123	16
105°	42	64	265	508	477	44
115°	70	87	211	442	519	69
125°	95	111	196	349	407	84
135°	110	132	188	288	333	85
145°	128	146	185	233	258	80
155°	145	156	181	204	213	67
165°	158	163	173	184	186	45
175°	165	165	166	168	168	16
180°	165	165	165	165	165	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.7	16.8	20.1	23.3	26.5	29.9	33.2	36.7	40.0	43.5	45.7
90°	7.3	10.7	14.5	18.3	22.1	25.9	29.5	33.5	37.1	41.1	43.6
92.5°	10.4	14.0	19.7	26.8	35.3	48.2	69.7	103.6	140.1	141.8	123.4
95°	16.7	19.5	24.7	30.8	40.7	58.6	97.6	174.1	269.4	327.0	322.7
97.5°	23.4	26.0	30.2	36.1	45.0	58.5	85.2	142.1	241.5	344.8	397.1
100°	28.1	30.8	34.2	39.9	48.3	60.8	83.2	129.6	216.7	328.7	414.0
102.5°	33.4	35.6	38.5	44.4	52.0	64.3	84.5	123.9	197.7	302.0	401.3
105°	41.6	43.1	46.3	51.2	58.1	69.7	87.2	119.7	178.2	265.4	363.0
107.5°	49.6	51.6	54.5	58.5	65.3	75.8	92.7	120.9	169.1	240.0	324.4
110°	55.3	57.2	59.7	63.8	70.0	80.6	97.0	122.6	165.7	227.6	302.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	61.5	63.1	65.0	69.0	74.9	85.1	100.9	125.2	164.4	219.9	285.2
115°	69.9	71.3	73.0	76.6	82.3	92.2	107.1	128.8	163.3	210.8	266.3
117.5°	77.5	78.9	80.4	83.9	90.0	99.4	113.5	133.5	163.6	205.4	254.0
120°	82.8	84.1	85.7	89.0	94.9	104.5	118.4	136.7	164.5	202.4	246.9
122.5°	88.0	88.9	90.1	93.2	99.5	109.1	122.8	140.2	165.0	199.6	240.7
125°	95.0	95.6	97.2	100.1	106.3	115.8	128.8	145.1	166.3	195.9	232.1
127.5°	100.1	101.0	103.0	106.8	113.4	122.8	135.0	149.8	168.1	193.1	223.9
130°	103.6	104.4	107.1	111.3	118.2	127.4	139.1	153.2	169.5	191.5	218.9
132.5°	105.8	107.2	110.3	115.2	122.4	131.6	143.0	155.8	170.8	190.1	214.2
135°	110.1	111.4	115.3	120.5	127.4	136.7	147.7	159.4	172.4	188.0	208.3
137.5°	115.5	116.4	120.1	125.4	132.1	141.5	151.2	162.1	174.2	186.8	203.2
140°	118.4	119.3	123.4	128.7	135.0	144.0	153.8	163.9	174.7	186.1	200.5
142.5°	122.1	122.7	126.4	131.7	137.6	146.1	155.2	164.7	174.8	185.7	198.3
145°	127.7	128.3	131.5	136.0	141.9	149.6	158.3	166.5	175.5	185.2	195.7
147.5°	133.1	133.5	136.4	140.7	145.9	152.6	160.2	167.8	175.9	184.4	193.3
150°	136.6	137.2	139.6	143.9	148.5	154.2	161.6	168.5	175.9	183.5	191.5
152.5°	140.3	140.7	142.8	146.6	151.0	156.1	162.9	169.1	175.6	182.5	189.6
155°	145.2	145.2	147.2	150.5	153.9	158.5	164.2	169.6	174.8	180.6	186.5
157.5°	149.7	149.6	151.2	154.0	156.9	160.5	165.3	169.8	174.0	178.5	183.6
160°	152.6	152.2	153.5	155.9	158.5	161.6	165.9	169.8	173.2	177.2	181.3
162.5°	155.0	154.7	156.0	158.1	160.1	162.6	166.5	169.7	172.4	175.6	179.1
165°	158.5	157.9	158.9	160.5	161.9	163.9	166.5	169.2	171.3	173.2	175.9
167.5°	161.0	160.6	161.3	162.1	163.1	164.4	166.5	168.4	169.4	170.9	172.8
170°	162.6	162.2	162.6	163.2	163.9	164.9	166.5	167.9	168.5	169.6	170.9
172.5°	163.6	163.1	163.3	164.0	164.4	164.9	166.3	167.4	167.5	168.0	169.0
175°	164.9	164.2	164.6	164.9	164.9	164.9	165.9	166.5	166.3	166.3	166.5
177.5°	165.5	164.9	164.9	165.2	164.9	164.9	165.5	165.8	165.2	165.2	165.5
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	48.0	50.3	52.6	54.2	54.9	55.5	56.3	56.9
90°	46.2	48.7	51.3	53.4	54.1	54.8	55.8	56.5
92.5°	97.6	83.6	75.1	71.6	68.1	68.0	68.1	68.3
95°	275.6	227.1	188.2	161.6	138.6	129.3	127.3	122.7
97.5°	390.4	356.9	319.1	281.4	261.6	243.6	234.5	230.9
100°	441.7	427.3	395.1	361.7	339.3	315.9	304.3	299.4
102.5°	458.0	470.0	455.5	433.3	409.3	392.9	380.0	376.6
105°	444.9	492.5	509.1	506.7	496.7	486.4	480.4	477.1
107.5°	405.2	468.0	507.6	526.2	532.2	532.7	531.1	529.0
110°	375.9	441.0	489.8	519.4	535.1	542.1	545.1	545.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	352.5	414.3	463.6	498.2	520.8	532.3	538.9	541.9
115°	322.9	376.3	423.7	461.2	487.8	504.3	514.2	519.2
117.5°	302.9	349.1	390.0	424.5	451.1	468.3	478.2	481.5
120°	291.9	333.6	371.8	402.3	427.5	444.0	453.6	456.9
122.5°	283.2	321.8	356.0	384.6	407.1	422.4	432.0	434.9
125°	270.6	306.1	336.7	361.7	380.8	394.9	402.7	406.6
127.5°	257.7	290.9	319.3	342.8	360.2	372.9	380.4	382.4
130°	249.9	280.5	307.8	330.5	347.6	359.0	366.2	368.6
132.5°	241.8	270.6	295.6	317.3	334.3	345.7	352.2	355.0
135°	230.8	255.1	277.7	297.6	312.6	324.1	330.6	333.1
137.5°	221.7	241.5	260.3	277.2	290.7	301.0	307.0	309.6
140°	216.5	233.3	249.6	264.4	277.1	286.1	291.5	293.5
142.5°	212.1	226.2	240.3	253.1	263.9	271.6	276.7	278.5
145°	206.5	217.4	228.1	237.5	245.9	251.9	256.0	257.8
147.5°	201.6	210.1	218.2	225.2	231.7	236.4	238.7	239.5
150°	198.9	206.2	212.5	218.6	223.7	227.7	229.2	229.6
152.5°	196.2	202.7	208.5	213.2	217.4	220.6	222.0	222.3
155°	192.2	197.6	202.2	205.9	209.2	211.5	212.5	212.8
157.5°	188.2	192.6	196.2	199.1	201.7	203.6	204.5	204.4
160°	185.6	188.9	192.2	194.5	196.9	198.5	199.2	198.9
162.5°	182.6	185.7	188.5	190.6	192.4	193.7	193.9	193.8
165°	178.5	180.9	182.9	184.5	185.9	186.5	186.5	186.5
167.5°	174.7	176.3	177.8	179.0	179.6	180.2	179.9	179.8
170°	172.6	173.5	174.6	175.2	175.9	176.3	176.3	175.9
172.5°	170.1	171.2	171.9	172.3	172.4	173.1	172.5	172.1
175°	167.6	167.6	168.2	168.2	168.2	168.5	167.9	167.6
177.5°	165.8	166.0	166.0	166.0	165.8	166.0	165.2	165.2
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2

(END OF REPORT)