

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: P333141-927

Luminaire Tested: **S125DIP-S375D810U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333141-927
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-S375D810U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3509.8 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

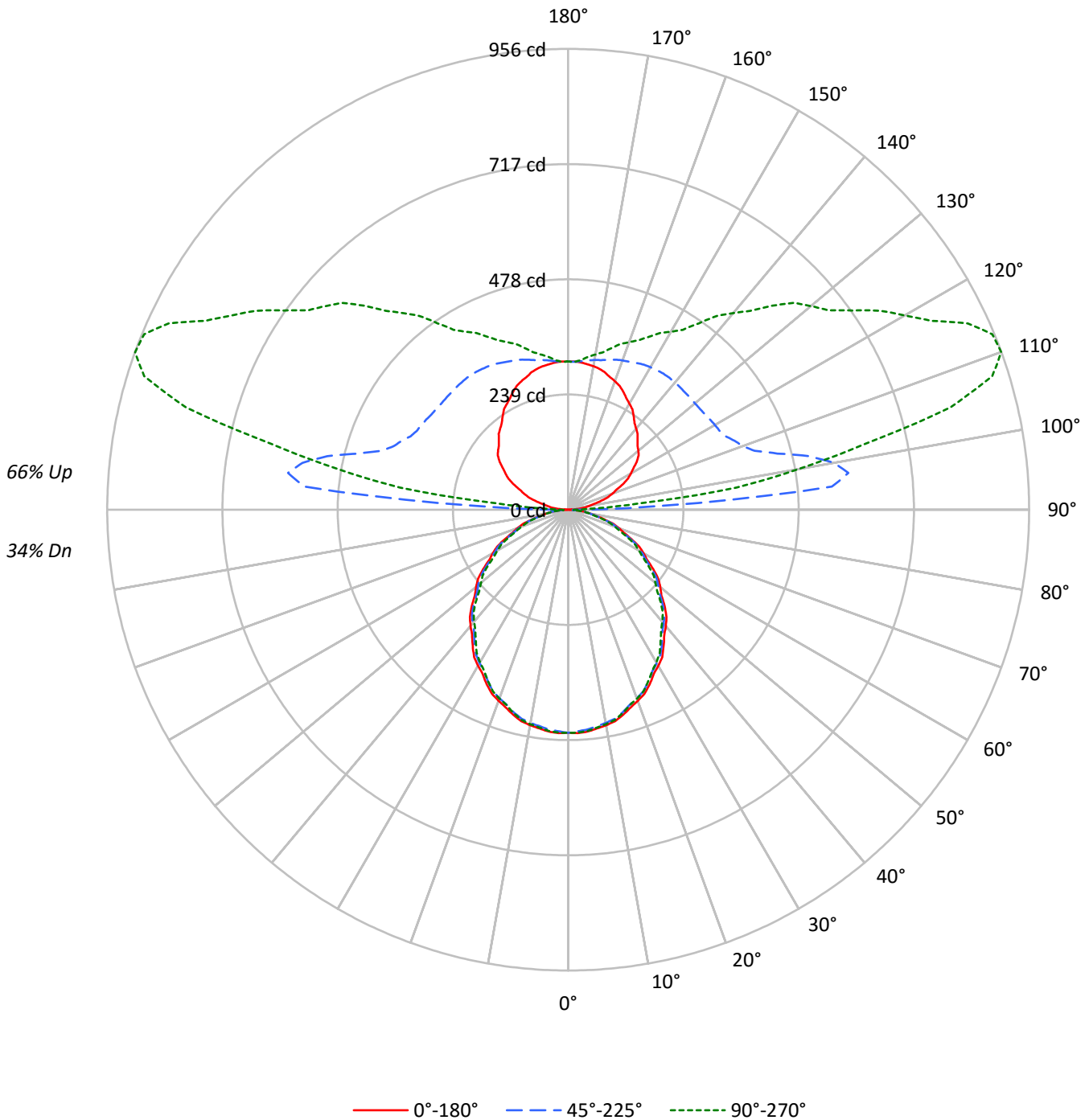
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29
2	86	79	73	67	77	71	66	62	57	54	50	44	42	40	32	31	30	24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	34	29	27	25	20
4	71	61	53	47	64	55	49	43	45	40	36	35	31	29	26	23	22	17
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	17	15	12
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2989	2989	2989
5°	2995	2967	2986
10°	2977	2946	2963
15°	2945	2910	2923
20°	2899	2861	2866
25°	2849	2802	2799
30°	2788	2738	2725
35°	2722	2670	2633
40°	2655	2596	2559
45°	2582	2528	2478
50°	2502	2446	2372
55°	2423	2354	2288
60°	2331	2260	2180
65°	2222	2149	2077
70°	2115	2019	1949
75°	1926	1864	1799
80°	1715	1689	1648
85°	1489	1519	1438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	1.2
10°-20°	123.3	3.5
20°-30°	182.0	5.2
30°-40°	212.4	6.1
40°-50°	213.3	6.1
50°-60°	187.2	5.3
60°-70°	139.5	4.0
70°-80°	79.8	2.3
80°-90°	24.9	0.7
90°-100°	222.7	6.3
100°-110°	478.7	13.6
110°-120°	449.3	12.8
120°-130°	364.1	10.4
130°-140°	292.2	8.3
140°-150°	220.5	6.3
150°-160°	155.2	4.4
160°-170°	91.5	2.6
170°-180°	29.8	0.8
0°-30°	348.9	9.9
0°-40°	561.2	16.0
0°-60°	961.7	27.4
0°-90°	1205.9	34.4
90°-120°	1150.7	32.8
90°-150°	2027.5	57.8
90°-180°	2304.0	65.6
0°-180°	3509.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	458	461	461	44
15°	440	439	435	437	437	124
25°	400	398	393	394	393	184
35°	345	344	339	337	334	216
45°	283	281	277	273	271	218
55°	215	214	209	206	203	192
65°	145	144	141	137	136	144
75°	77	76	75	74	72	82
85°	20	20	20	20	19	23
90°	1	6	10	13	14	2
95°	20	60	549	249	146	22
105°	70	98	449	884	821	74
115°	125	151	360	777	914	123
125°	173	203	346	618	720	154
135°	203	244	343	518	598	158
145°	237	271	344	429	472	148
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	463.9	463.7	463.6	463.3	463.2	462.7	462.1	461.4	460.8	460.1	460.8
5°	462.0	461.8	461.7	461.5	461.4	460.9	460.1	459.3	458.4	457.6	458.4
7.5°	457.8	457.6	457.5	457.3	457.2	456.6	455.7	454.8	453.9	453.0	453.8
10°	454.0	453.8	453.7	453.5	453.4	452.8	451.9	451.0	450.1	449.2	449.9
12.5°	449.3	449.0	448.7	448.5	448.1	447.6	446.7	445.9	445.0	444.3	444.7
15°	440.5	440.2	440.0	439.7	439.4	438.9	438.0	437.1	436.2	435.3	435.7
17.5°	430.2	429.9	429.5	429.2	428.8	428.2	427.2	426.4	425.4	424.5	425.0
20°	421.8	421.6	421.4	421.3	421.1	420.5	419.5	418.4	417.3	416.3	416.8
22.5°	413.3	413.0	412.6	412.4	412.1	411.5	410.4	409.5	408.4	407.5	407.9
25°	399.8	399.4	398.9	398.5	398.2	397.4	396.4	395.3	394.3	393.2	393.4
27.5°	384.0	383.8	383.6	383.3	383.1	382.4	381.4	380.2	379.1	378.0	378.1
30°	373.8	373.6	373.3	373.0	372.8	372.1	370.9	369.6	368.4	367.2	367.0
32.5°	362.7	362.3	361.9	361.6	361.2	360.4	359.3	358.2	357.2	356.1	355.8
35°	345.2	344.9	344.6	344.3	344.0	343.2	342.1	341.0	339.8	338.7	338.3
37.5°	327.2	326.8	326.4	325.9	325.5	324.8	323.7	322.7	321.5	320.5	319.9
40°	314.9	314.4	314.0	313.6	313.2	312.4	311.3	310.2	309.0	307.9	307.2
42.5°	301.7	301.3	301.0	300.6	300.3	299.6	298.4	297.3	296.1	295.0	294.4
45°	282.7	282.3	282.0	281.7	281.3	280.7	279.7	278.8	277.7	276.8	275.8
47.5°	262.1	262.1	262.1	262.2	262.2	261.7	260.5	259.3	258.1	256.9	256.0
50°	249.0	248.7	248.5	248.2	248.0	247.4	246.4	245.4	244.5	243.4	242.4
52.5°	235.5	235.3	235.1	235.0	234.8	234.2	233.1	232.1	231.0	230.0	229.1
55°	215.2	215.0	214.8	214.5	214.3	213.6	212.5	211.4	210.2	209.1	208.3
57.5°	194.0	193.8	193.7	193.6	193.5	192.9	191.9	191.0	190.0	189.1	188.1
60°	180.5	180.1	179.8	179.5	179.2	178.6	177.7	176.8	175.9	175.0	174.2
62.5°	166.4	166.2	165.9	165.6	165.4	164.9	164.1	163.3	162.6	161.8	161.0
65°	145.4	145.2	145.0	144.9	144.7	144.2	143.3	142.4	141.5	140.6	139.8
67.5°	124.9	124.6	124.2	123.9	123.6	123.0	122.4	121.7	121.0	120.4	119.8
70°	112.0	111.6	111.2	110.8	110.4	109.8	109.1	108.4	107.7	106.9	106.4
72.5°	98.0	97.7	97.4	97.1	96.9	96.5	96.0	95.5	95.1	94.6	94.0
75°	77.2	77.1	76.9	76.8	76.6	76.3	75.9	75.5	75.1	74.7	74.5
77.5°	58.1	58.1	58.0	57.9	57.9	57.8	57.5	57.3	57.0	56.8	56.6
80°	46.1	46.1	46.1	46.1	46.1	46.0	45.9	45.7	45.6	45.4	45.3
82.5°	35.6	35.5	35.3	35.2	35.1	35.0	34.9	34.9	34.9	34.9	34.7
85°	20.1	20.2	20.3	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.4
87.5°	8.0	8.2	8.4	8.6	8.9	9.1	9.2	9.3	9.4	9.6	9.7
90°	0.6	1.3	2.5	3.7	5.0	6.2	6.8	8.1	8.6	9.9	10.5
92.5°	7.5	9.2	14.3	22.0	32.7	50.8	84.6	141.3	202.9	199.7	161.7
95°	20.4	21.1	26.0	32.8	46.4	74.3	140.6	276.9	447.8	548.8	537.0
97.5°	33.9	34.7	38.2	45.0	57.2	77.3	121.1	221.0	399.9	586.1	679.5
100°	43.3	44.6	47.1	53.9	65.7	84.2	120.2	200.7	356.8	559.4	714.2
102.5°	53.8	54.5	56.5	63.8	74.5	92.7	124.6	192.3	324.1	512.2	693.4
105°	70.0	70.0	73.1	79.3	89.2	106.5	133.8	188.9	292.4	449.1	626.9
107.5°	85.9	87.1	90.1	95.1	105.4	121.0	147.4	194.6	279.0	405.6	559.0
110°	97.3	98.5	100.9	106.5	115.8	131.9	157.3	200.1	275.0	385.2	520.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	108.6	109.9	111.9	117.4	126.7	142.4	166.8	207.0	275.0	373.4	491.5
115°	125.1	126.4	128.3	133.8	143.1	158.6	181.5	217.4	276.9	360.5	460.2
117.5°	140.0	141.9	143.9	149.4	159.9	174.9	196.6	229.3	281.0	354.2	441.5
120°	149.9	151.8	154.2	159.8	170.3	185.8	207.5	237.3	284.9	351.2	431.1
122.5°	160.3	161.7	163.7	169.2	180.8	196.2	217.9	246.1	288.4	348.7	422.2
125°	173.4	174.7	177.8	183.3	195.1	211.2	231.6	258.3	294.2	345.6	410.0
127.5°	183.7	185.6	189.6	196.6	209.1	225.2	244.9	269.4	300.8	344.1	398.9
130°	190.1	192.0	196.9	205.0	218.0	234.2	253.3	276.9	304.8	343.2	391.5
132.5°	195.1	197.5	203.4	212.5	225.9	242.1	261.3	283.3	309.2	343.2	385.6
135°	203.2	205.7	213.1	223.0	236.0	252.7	272.0	292.4	315.3	343.2	378.4
137.5°	213.3	215.2	222.1	232.0	244.8	262.0	279.5	299.0	320.8	343.9	372.2
140°	219.3	221.1	228.5	238.4	250.3	267.0	284.9	303.5	323.3	344.4	369.2
142.5°	226.2	227.6	234.5	244.4	255.7	271.4	288.4	306.0	324.8	344.9	366.7
145°	236.6	237.8	244.1	252.7	263.9	278.1	294.2	309.7	326.5	344.4	363.0
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.1
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	461.4	462.1	462.7	463.0	463.0	462.9	462.9	462.8
5°	459.1	459.9	460.6	460.9	460.8	460.7	460.7	460.6
7.5°	454.5	455.2	455.9	456.2	456.1	456.1	456.0	455.9
10°	450.5	451.1	451.9	452.1	452.0	451.9	451.9	451.8
12.5°	445.3	445.8	446.3	446.6	446.6	446.6	446.6	446.5
15°	436.1	436.5	437.0	437.1	437.1	437.1	437.1	437.1
17.5°	425.5	426.0	426.5	426.5	426.1	425.7	425.3	424.9
20°	417.4	418.0	418.5	418.7	418.2	417.8	417.4	417.0
22.5°	408.2	408.6	409.0	409.0	408.8	408.4	408.2	407.9
25°	393.6	393.7	393.9	393.8	393.6	393.3	393.1	392.8
27.5°	378.1	378.1	378.2	378.1	377.8	377.6	377.3	377.1
30°	366.9	366.7	366.5	366.4	366.1	365.9	365.6	365.4
32.5°	355.5	355.2	354.9	354.6	354.1	353.6	353.2	352.8
35°	337.9	337.5	337.0	336.5	335.9	335.2	334.5	333.9
37.5°	319.3	318.7	318.1	317.6	317.2	316.9	316.5	316.1
40°	306.4	305.7	305.0	304.5	304.3	304.0	303.7	303.5
42.5°	293.7	293.0	292.3	291.8	291.4	291.0	290.7	290.3
45°	274.8	273.9	272.9	272.3	272.0	271.8	271.6	271.3
47.5°	254.9	254.0	252.9	252.2	251.6	251.0	250.5	249.9
50°	241.4	240.3	239.2	238.4	237.8	237.3	236.7	236.1
52.5°	228.1	227.2	226.2	225.5	224.9	224.3	223.6	223.0
55°	207.6	206.8	206.1	205.5	204.9	204.3	203.7	203.2
57.5°	187.2	186.2	185.3	184.7	184.3	184.0	183.7	183.4
60°	173.4	172.5	171.7	171.0	170.5	169.9	169.4	168.8
62.5°	160.1	159.1	158.3	157.6	157.2	156.8	156.3	155.9
65°	139.1	138.4	137.7	137.1	136.8	136.5	136.2	135.9
67.5°	119.1	118.5	117.9	117.5	117.3	117.1	116.9	116.7
70°	105.9	105.4	105.0	104.6	104.3	103.9	103.5	103.2
72.5°	93.5	92.9	92.4	92.0	91.7	91.3	90.9	90.6
75°	74.2	74.0	73.7	73.4	73.1	72.8	72.5	72.1
77.5°	56.6	56.4	56.2	56.1	55.8	55.6	55.4	55.1
80°	45.2	45.2	45.1	44.9	44.8	44.6	44.4	44.3
82.5°	34.5	34.4	34.3	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.3	20.2	20.0	19.9	19.7	19.6	19.4
87.5°	9.8	10.0	10.1	10.3	10.1	10.0	10.0	9.9
90°	11.2	11.8	12.4	13.6	13.6	13.6	14.3	14.3
92.5°	109.8	79.7	60.0	50.8	42.9	41.4	40.5	39.5
95°	445.4	351.2	275.0	223.0	179.0	160.4	155.5	145.5
97.5°	663.3	597.2	523.0	450.7	412.4	377.7	359.7	351.8
100°	761.8	731.5	667.7	603.3	560.5	515.9	493.1	483.2
102.5°	795.0	813.8	783.2	739.6	693.9	662.1	637.2	629.8
105°	775.5	860.4	887.6	880.8	860.9	840.5	828.1	820.7
107.5°	705.6	818.9	888.8	921.1	931.2	931.1	927.0	922.0
110°	654.1	771.7	859.1	911.7	939.6	951.4	955.8	955.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	613.5	725.2	813.5	875.6	916.3	936.5	947.3	951.8
115°	562.4	658.5	743.3	810.8	859.1	888.8	906.2	914.3
117.5°	529.5	612.2	685.3	747.3	795.6	826.2	843.5	848.4
120°	511.6	586.0	654.1	708.6	754.4	784.2	800.9	805.8
122.5°	498.3	567.1	627.8	678.9	719.8	747.0	763.7	768.2
125°	478.8	542.0	595.9	640.5	675.2	700.5	714.2	720.3
127.5°	459.0	517.9	568.2	610.0	641.4	663.8	676.8	679.5
130°	446.6	501.1	549.4	589.7	620.7	641.1	653.5	657.2
132.5°	434.2	485.2	529.1	567.8	598.8	619.2	630.7	634.9
135°	418.1	460.8	500.5	535.8	563.0	583.4	594.6	598.3
137.5°	404.5	439.0	472.0	501.9	526.4	544.9	555.2	559.4
140°	397.0	426.1	454.6	480.6	503.6	519.7	528.9	532.0
142.5°	390.6	415.3	439.7	462.3	481.8	495.4	504.2	506.8
145°	382.1	401.4	420.6	437.3	452.2	462.7	469.5	472.0
147.5°	374.2	389.8	404.6	417.2	429.0	437.4	441.4	442.5
150°	369.8	383.4	395.1	406.3	415.7	423.0	425.6	426.1
152.5°	364.8	377.0	387.8	396.4	404.3	410.2	412.6	413.3
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

(END OF REPORT)