

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: P333129-930

Luminaire Tested: **S125DIP-S375D590U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129-930
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-S375D590U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2921.6 lumens
Efficiency: N/A
Efficacy: 114.1 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: Semi-Indirect

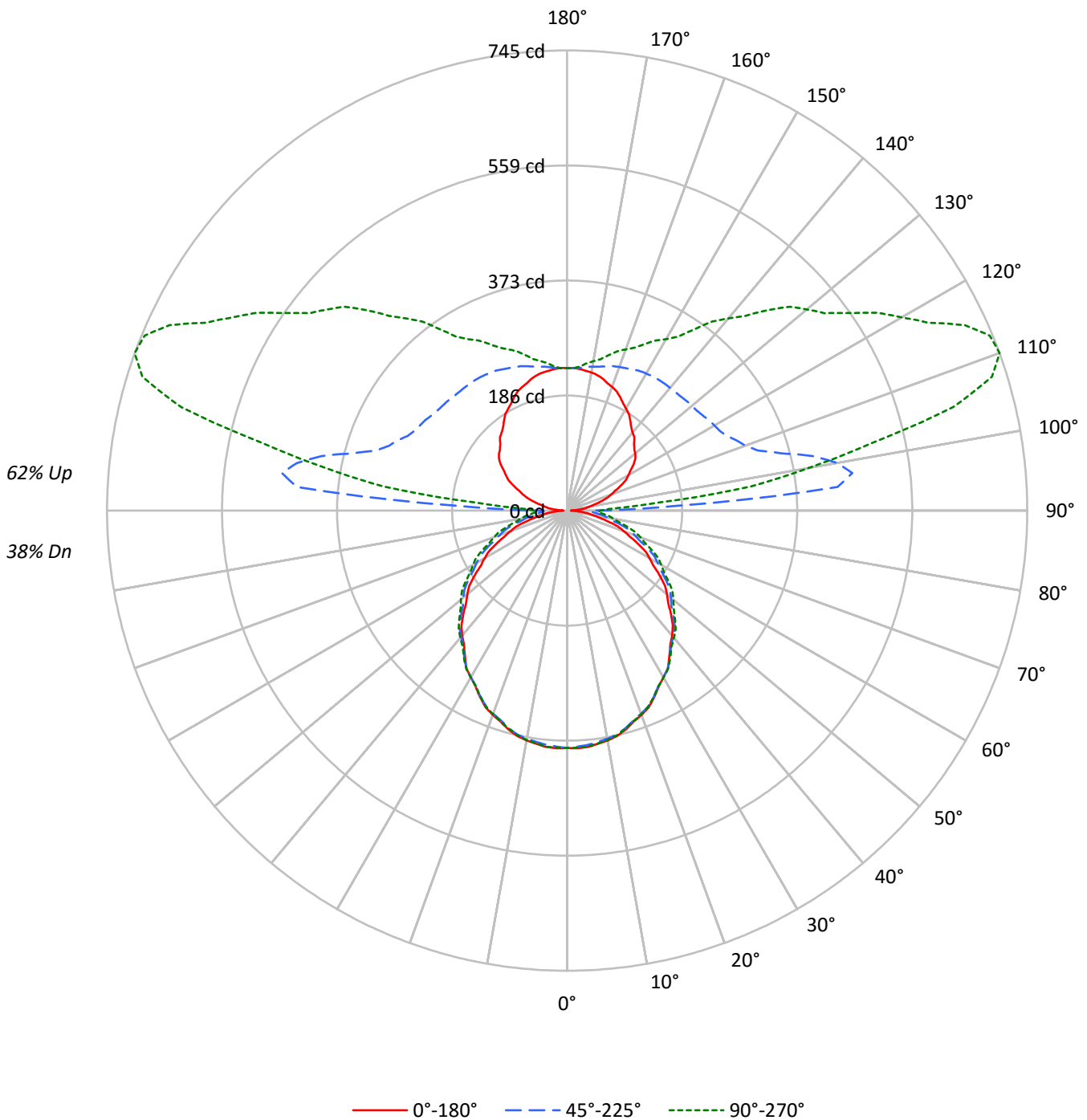
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	32	31	26
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	36	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	1.2
10°-20°	103.2	3.5
20°-30°	153.4	5.3
30°-40°	181.7	6.2
40°-50°	187.9	6.4
50°-60°	173.1	5.9
60°-70°	139.9	4.8
70°-80°	93.7	3.2
80°-90°	49.9	1.7
90°-100°	194.5	6.7
100°-110°	379.5	13.0
110°-120°	350.8	12.0
120°-130°	281.0	9.6
130°-140°	222.7	7.6
140°-150°	166.2	5.7
150°-160°	116.5	4.0
160°-170°	68.7	2.4
170°-180°	22.3	0.8
0°-30°	292.9	10.0
0°-40°	474.7	16.2
0°-60°	835.7	28.6
0°-90°	1119.2	38.3
90°-120°	924.8	31.7
90°-150°	1594.8	54.6
90°-180°	1802.0	61.7
0°-180°	2921.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	6	22	38	49	53	5
95°	20	60	440	222	148	20
105°	56	83	358	692	647	59
115°	96	119	285	605	710	95
125°	132	154	268	479	557	117
135°	153	184	261	397	459	119
145°	178	204	259	324	358	111
155°	203	218	252	285	297	93
165°	221	227	242	256	260	62
175°	230	230	232	235	234	22
180°	231	231	231	231	231	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	11.8	14.6	17.4	20.4	23.2	26.2	29.1	32.1	35.1	38.1	40.1
90°	6.5	9.6	13.2	16.9	20.5	24.1	27.5	31.2	34.6	38.3	40.8
92.5°	11.1	14.8	21.2	29.4	39.9	56.2	84.5	130.0	179.1	179.6	153.0
95°	20.2	22.9	28.8	36.1	48.5	71.9	124.5	229.7	360.9	439.5	432.6
97.5°	29.9	32.4	37.0	44.1	55.3	72.6	108.4	186.1	323.1	465.7	537.5
100°	36.7	39.4	43.0	49.9	60.5	76.6	106.3	169.4	289.3	444.1	562.1
102.5°	44.2	46.4	49.5	56.6	66.4	82.0	108.7	162.1	263.6	407.5	545.2
105°	55.9	57.3	61.0	66.9	75.7	90.7	113.7	157.5	237.7	357.9	493.0
107.5°	67.4	69.5	72.8	77.8	86.7	100.1	122.4	160.2	226.0	323.4	440.3
110°	75.7	77.6	80.5	85.6	93.6	107.4	128.8	163.2	221.8	307.0	409.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	84.2	85.9	88.2	93.2	101.0	114.3	134.9	167.4	220.7	296.9	387.1
115°	96.2	97.8	99.7	104.4	112.0	125.1	144.4	173.6	220.4	285.4	361.7
117.5°	107.0	108.8	110.6	115.2	123.5	136.0	154.3	180.9	221.8	278.8	345.8
120°	114.5	116.1	118.2	122.6	130.8	143.5	161.7	186.0	223.7	275.4	336.8
122.5°	122.0	123.1	124.7	129.0	137.8	150.3	168.5	191.6	225.2	272.3	328.8
125°	131.8	132.6	134.9	138.9	147.7	160.5	177.6	199.3	227.9	268.2	317.9
127.5°	139.1	140.4	143.2	148.5	157.8	170.6	186.7	206.5	231.4	265.3	307.7
130°	143.9	145.2	148.9	154.8	164.5	177.2	192.7	211.6	233.7	263.7	301.1
132.5°	147.3	149.0	153.5	160.3	170.4	183.0	198.3	215.7	236.1	262.4	295.5
135°	153.3	155.1	160.5	168.0	177.6	190.5	205.5	221.4	239.1	260.7	288.3
137.5°	160.9	162.2	167.3	174.7	184.2	197.2	210.7	225.6	242.3	259.8	282.1
140°	165.0	166.4	172.0	179.4	188.3	200.9	214.4	228.4	243.4	259.3	278.8
142.5°	170.2	171.2	176.3	183.7	192.1	203.9	216.6	229.8	244.0	259.1	276.2
145°	178.1	178.9	183.4	189.9	198.2	208.8	220.9	232.5	245.1	258.6	273.0
147.5°	185.8	186.4	190.4	196.4	203.7	213.1	223.7	234.2	245.6	257.4	269.8
150°	190.7	191.6	194.9	200.9	207.4	215.3	225.6	235.3	245.6	256.2	267.4
152.5°	195.9	196.4	199.3	204.6	210.8	217.9	227.4	236.0	245.2	254.8	264.8
155°	202.8	202.8	205.5	210.2	214.8	221.4	229.3	236.7	244.2	252.1	260.4
157.5°	208.9	208.8	211.1	215.1	219.2	224.0	230.9	237.2	243.0	249.2	256.3
160°	213.0	212.5	214.4	217.7	221.4	225.6	231.6	237.2	241.8	247.4	253.0
162.5°	216.4	215.9	217.8	220.6	223.6	227.1	232.4	236.8	240.8	245.2	250.1
165°	221.4	220.5	221.8	224.1	226.0	228.9	232.5	236.3	239.0	241.8	245.6
167.5°	224.7	224.3	225.1	226.4	227.7	229.4	232.5	235.1	236.4	238.6	241.2
170°	227.0	226.5	227.0	227.9	228.9	230.2	232.5	234.4	235.3	236.7	238.6
172.5°	228.4	227.6	228.0	229.0	229.6	230.2	232.2	233.7	233.8	234.5	235.9
175°	230.2	229.3	229.8	230.2	230.2	230.2	231.6	232.5	232.0	232.0	232.5
177.5°	231.1	230.3	230.3	230.6	230.3	230.3	231.1	231.4	230.6	230.6	231.1
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	42.2	44.2	46.2	47.6	48.2	48.8	49.5	50.1
90°	43.1	45.5	47.9	50.1	50.7	51.3	52.3	52.9
92.5°	115.9	95.1	82.2	76.5	71.1	70.6	70.5	70.4
95°	365.6	296.7	241.3	203.5	171.0	157.7	154.6	147.7
97.5°	527.2	479.3	425.3	372.2	344.1	318.5	305.7	300.3
100°	599.7	578.6	532.5	485.3	453.6	420.7	404.0	397.1
102.5°	623.2	639.0	617.7	586.0	552.3	529.0	510.7	505.6
105°	606.3	671.7	693.9	689.9	675.6	660.8	652.1	647.1
107.5°	552.0	638.7	692.9	718.3	726.4	726.8	724.2	721.1
110°	512.0	601.9	669.1	709.7	731.2	740.7	744.5	745.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	480.1	565.6	633.4	681.1	712.2	728.0	736.7	740.6
115°	440.0	513.6	578.8	630.5	667.3	690.1	703.6	710.2
117.5°	413.3	476.9	533.1	580.7	617.5	641.2	654.6	658.9
120°	398.7	455.9	508.5	550.4	585.3	608.1	621.2	625.4
122.5°	387.3	440.3	487.3	526.5	557.7	578.7	591.7	595.7
125°	370.9	419.6	461.5	495.8	522.3	541.8	552.4	557.4
127.5°	354.0	399.6	438.5	470.8	494.9	512.2	522.4	524.9
130°	343.6	385.8	423.2	454.3	477.9	493.7	503.4	506.6
132.5°	333.2	372.7	406.8	436.7	460.2	476.0	484.9	488.4
135°	319.1	352.3	383.1	410.4	431.3	447.0	455.8	459.0
137.5°	307.3	334.3	360.0	383.2	401.9	416.1	424.2	427.5
140°	300.7	323.5	345.8	366.0	383.5	395.9	403.2	405.9
142.5°	295.0	314.3	333.5	351.0	365.9	376.5	383.4	385.7
145°	287.8	302.6	317.5	330.4	341.9	350.1	355.6	357.8
147.5°	281.3	293.1	304.4	314.0	322.9	329.4	332.6	333.5
150°	277.6	287.9	296.7	305.2	312.2	317.9	319.8	320.3
152.5°	273.9	283.1	291.1	297.7	303.5	308.0	309.9	310.4
155°	268.3	275.8	282.3	287.4	292.0	295.3	296.7	297.2
157.5°	262.8	268.9	273.9	277.9	281.5	284.2	285.5	285.4
160°	259.0	263.7	268.3	271.6	274.8	277.2	278.1	277.6
162.5°	254.9	259.3	263.1	266.0	268.6	270.5	270.7	270.6
165°	249.2	252.5	255.4	257.6	259.5	260.4	260.4	260.4
167.5°	243.9	246.1	248.2	249.8	250.8	251.6	251.2	251.1
170°	240.9	242.3	243.7	244.6	245.6	246.1	246.1	245.6
172.5°	237.6	239.0	239.9	240.5	240.8	241.6	240.8	240.4
175°	233.9	233.9	234.9	234.9	234.9	235.3	234.4	233.9
177.5°	231.4	231.8	231.8	231.8	231.4	231.8	230.6	230.6
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6

(END OF REPORT)