

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: P333246-927

Luminaire Tested: **S125DIP-S850D1205U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333246-927
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-S850D1205U927-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6025.6 lumens
Efficiency: N/A
Efficacy: 105.9 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

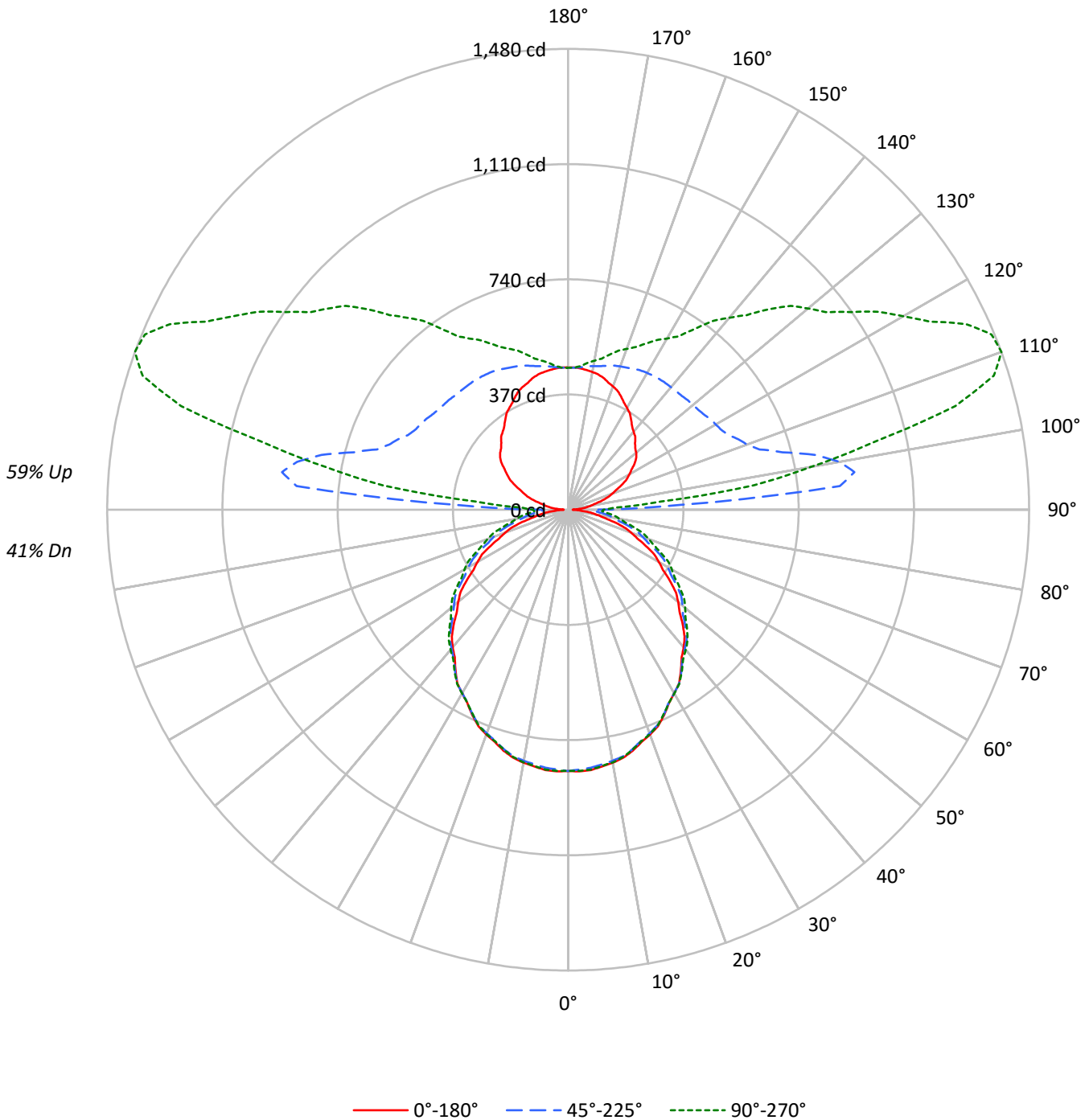
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	78	78	78		62	62	62		47	47	47	41
1	95	91	86	83	86	83	79	76	67	65	63		54	52	50		41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	51		47	44	42		36	34	32	27
3	79	69	61	56	71	63	56	51	52	47	43		41	38	35		31	29	27	23
4	72	61	53	47	65	56	49	43	46	40	36		37	33	30		28	25	23	19
5	66	54	46	40	60	49	42	37	41	35	31		33	29	26		25	22	20	17
6	60	48	40	34	55	44	37	32	37	31	27		29	25	22		23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21		24	20	17		19	16	14	11
9	48	36	28	23	44	33	26	22	28	22	19		22	18	16		18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17		21	17	14		16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.3
10°-20°	225.3	3.7
20°-30°	335.0	5.6
30°-40°	396.8	6.6
40°-50°	410.3	6.8
50°-60°	377.9	6.3
60°-70°	305.5	5.1
70°-80°	204.6	3.4
80°-90°	108.7	1.8
90°-100°	390.5	6.5
100°-110°	755.3	12.5
110°-120°	697.1	11.6
120°-130°	557.8	9.3
130°-140°	441.5	7.3
140°-150°	329.2	5.5
150°-160°	230.7	3.8
160°-170°	136.0	2.3
170°-180°	44.2	0.7
0°-30°	639.6	10.6
0°-40°	1036.4	17.2
0°-60°	1824.7	30.3
0°-90°	2443.4	40.6
90°-120°	1842.8	30.6
90°-150°	3171.3	52.6
90°-180°	3582.0	59.4
0°-180°	6025.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	48	82	105	113	11
95°	41	122	876	448	300	41
105°	111	167	713	1375	1287	118
115°	191	236	568	1201	1410	188
125°	261	305	533	950	1107	231
135°	304	364	516	787	911	236
145°	352	403	512	642	709	221
155°	401	432	499	564	588	185
165°	438	450	479	508	516	123
175°	456	456	459	465	463	43
180°	456	456	456	456	456	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.9	38.1	44.4	50.5	57.0	63.4	69.9	76.4	82.9	87.3
90°	14.1	20.8	28.5	36.2	44.0	51.8	58.9	67.0	74.1	82.2	87.3
92.5°	23.1	30.9	44.0	60.8	82.1	114.9	171.5	262.1	360.0	361.6	309.1
95°	41.0	46.7	58.9	73.8	98.8	145.7	250.3	459.1	719.4	875.6	862.1
97.5°	60.1	65.5	74.9	89.4	111.9	146.9	218.0	372.4	644.2	926.9	1069.5
100°	73.5	79.1	86.7	100.7	122.0	154.5	213.7	339.2	577.0	883.8	1117.8
102.5°	88.3	92.9	99.4	113.8	133.4	164.9	218.1	324.3	525.9	811.3	1084.1
105°	111.4	114.3	121.8	134.0	151.6	181.6	227.6	315.1	474.2	712.6	980.4
107.5°	134.0	138.3	145.2	155.3	173.0	200.1	244.5	320.0	450.6	644.0	875.6
110°	150.3	154.3	160.2	170.6	186.6	214.3	257.1	325.7	442.3	611.2	815.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.2	170.8	175.5	185.5	201.1	227.7	268.9	333.7	439.7	590.9	769.8
115°	190.8	194.0	198.0	207.6	222.7	248.7	287.6	345.6	438.8	567.8	719.3
117.5°	212.1	215.7	219.5	228.6	245.2	270.1	306.8	359.9	441.2	554.4	687.4
120°	226.9	230.2	234.4	243.3	259.4	284.8	321.2	369.6	444.7	547.4	669.2
122.5°	241.7	244.0	247.2	255.7	273.1	298.3	334.5	380.6	447.4	541.1	653.2
125°	261.0	262.7	267.1	275.2	292.5	318.2	352.2	395.5	452.5	532.6	631.2
127.5°	275.5	278.1	283.8	294.1	312.5	337.9	370.1	409.6	459.1	526.6	610.6
130°	285.0	287.6	294.9	306.6	325.7	350.9	382.0	419.5	463.5	523.1	597.5
132.5°	291.8	295.2	304.0	317.4	337.5	362.3	392.8	427.6	468.1	520.5	586.0
135°	303.6	307.0	317.9	332.5	351.6	377.0	406.9	438.5	473.8	516.5	571.4
137.5°	318.5	321.1	331.3	345.9	364.6	390.5	417.1	446.8	479.8	514.7	558.8
140°	326.7	329.5	340.5	355.2	372.7	397.7	424.5	452.3	482.0	513.4	552.2
142.5°	337.0	338.9	349.0	363.6	380.2	403.5	428.8	455.0	483.0	512.9	547.0
145°	352.4	354.1	363.1	375.8	392.2	413.3	437.2	460.3	485.1	511.7	540.3
147.5°	367.8	368.9	376.8	388.8	403.1	421.8	442.8	463.6	486.0	509.4	534.0
150°	377.4	379.2	385.7	397.7	410.5	426.2	446.4	465.8	486.0	507.2	529.3
152.5°	387.7	388.8	394.5	405.0	417.2	431.3	450.1	467.2	485.3	504.2	524.1
155°	401.3	401.3	406.9	416.1	425.2	438.2	453.8	468.5	483.2	498.9	515.5
157.5°	413.5	413.3	417.7	425.6	433.7	443.5	456.9	469.4	480.9	493.4	507.4
160°	421.6	420.6	424.4	430.8	438.2	446.4	458.4	469.4	478.6	489.7	500.7
162.5°	428.2	427.3	430.9	436.7	442.6	449.4	459.9	468.7	476.4	485.3	494.9
165°	438.2	436.3	439.1	443.7	447.3	452.9	460.3	467.6	473.1	478.6	486.0
167.5°	444.8	443.9	445.5	448.1	450.7	454.2	460.3	465.4	467.9	472.2	477.4
170°	449.2	448.3	449.2	451.1	452.9	455.7	460.3	463.9	465.8	468.5	472.2
172.5°	452.2	450.5	451.4	453.2	454.3	455.7	459.5	462.5	462.8	464.1	467.1
175°	455.7	453.8	454.7	455.7	455.7	455.7	458.4	460.3	459.3	459.3	460.3
177.5°	457.3	455.8	455.8	456.5	455.8	455.8	457.3	458.0	456.5	456.5	457.3
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	91.7	96.1	100.4	103.6	104.9	106.2	107.6	108.8
90°	92.4	97.6	102.7	107.3	108.5	109.9	112.0	113.3
92.5°	236.1	195.4	170.2	159.2	148.7	147.8	147.7	147.6
95°	729.9	594.1	484.8	410.2	346.1	319.7	313.7	300.2
97.5°	1049.2	955.0	848.6	743.6	687.9	637.6	612.2	601.7
100°	1192.6	1151.3	1060.3	967.0	904.6	839.4	806.4	792.8
102.5°	1239.0	1270.4	1228.7	1166.3	1099.4	1053.4	1017.5	1007.5
105°	1205.0	1334.7	1379.0	1371.3	1343.1	1314.0	1296.9	1287.1
107.5°	1097.2	1269.1	1376.7	1427.1	1443.1	1444.1	1439.2	1432.9
110°	1017.6	1196.0	1329.3	1409.9	1452.6	1471.4	1479.1	1480.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	954.3	1123.7	1258.3	1352.8	1414.7	1446.0	1463.2	1471.2
115°	874.5	1020.4	1149.9	1252.4	1325.2	1370.6	1397.4	1410.5
117.5°	821.2	947.3	1059.0	1153.2	1226.2	1273.1	1300.0	1308.6
120°	792.0	905.6	1010.0	1093.1	1162.3	1207.6	1233.5	1242.0
122.5°	769.2	874.6	967.7	1045.6	1107.5	1149.1	1175.0	1182.7
125°	736.3	833.1	916.2	984.3	1036.8	1075.5	1096.6	1106.8
127.5°	702.7	793.0	870.4	934.3	982.1	1016.5	1036.7	1041.9
130°	682.0	765.5	839.9	901.4	948.4	979.7	999.0	1005.4
132.5°	660.9	739.3	807.1	866.3	913.1	944.3	961.9	969.0
135°	632.6	698.5	759.9	814.0	855.4	886.7	904.1	910.6
137.5°	609.0	662.5	713.7	759.6	796.6	825.0	841.0	847.8
140°	595.7	641.0	685.3	725.3	760.2	784.8	799.3	804.7
142.5°	584.2	622.6	660.8	695.5	725.1	746.1	759.9	764.5
145°	569.7	599.2	628.7	654.3	677.2	693.6	704.4	708.8
147.5°	556.7	580.2	602.5	621.5	639.4	652.2	658.4	660.4
150°	549.5	569.8	587.2	604.0	617.9	629.2	633.0	634.1
152.5°	542.2	560.2	576.2	589.1	600.8	609.7	613.4	614.3
155°	531.1	545.8	558.7	568.9	578.1	584.5	587.2	588.2
157.5°	520.1	532.2	542.2	550.1	557.2	562.6	565.1	565.0
160°	512.7	521.9	531.1	537.6	544.0	548.6	550.5	549.5
162.5°	504.6	513.1	520.8	526.5	531.5	535.4	535.8	535.5
165°	493.4	499.8	505.3	509.9	513.7	515.5	515.5	515.5
167.5°	482.7	487.0	491.2	494.5	496.3	498.0	497.3	497.1
170°	476.8	479.6	482.4	484.2	486.0	487.0	487.0	486.0
172.5°	470.2	472.9	475.0	476.1	476.4	478.1	476.7	475.7
175°	463.0	463.0	464.9	464.9	464.9	465.8	463.9	463.0
177.5°	458.0	458.8	458.8	458.8	458.0	458.8	456.5	456.5
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5

(END OF REPORT)