

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: P333200-830

Luminaire Tested: **S125DIP-S610D1205U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333200-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D1205U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6192.9 lumens
Efficiency: N/A
Efficacy: 125.4 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-Indirect

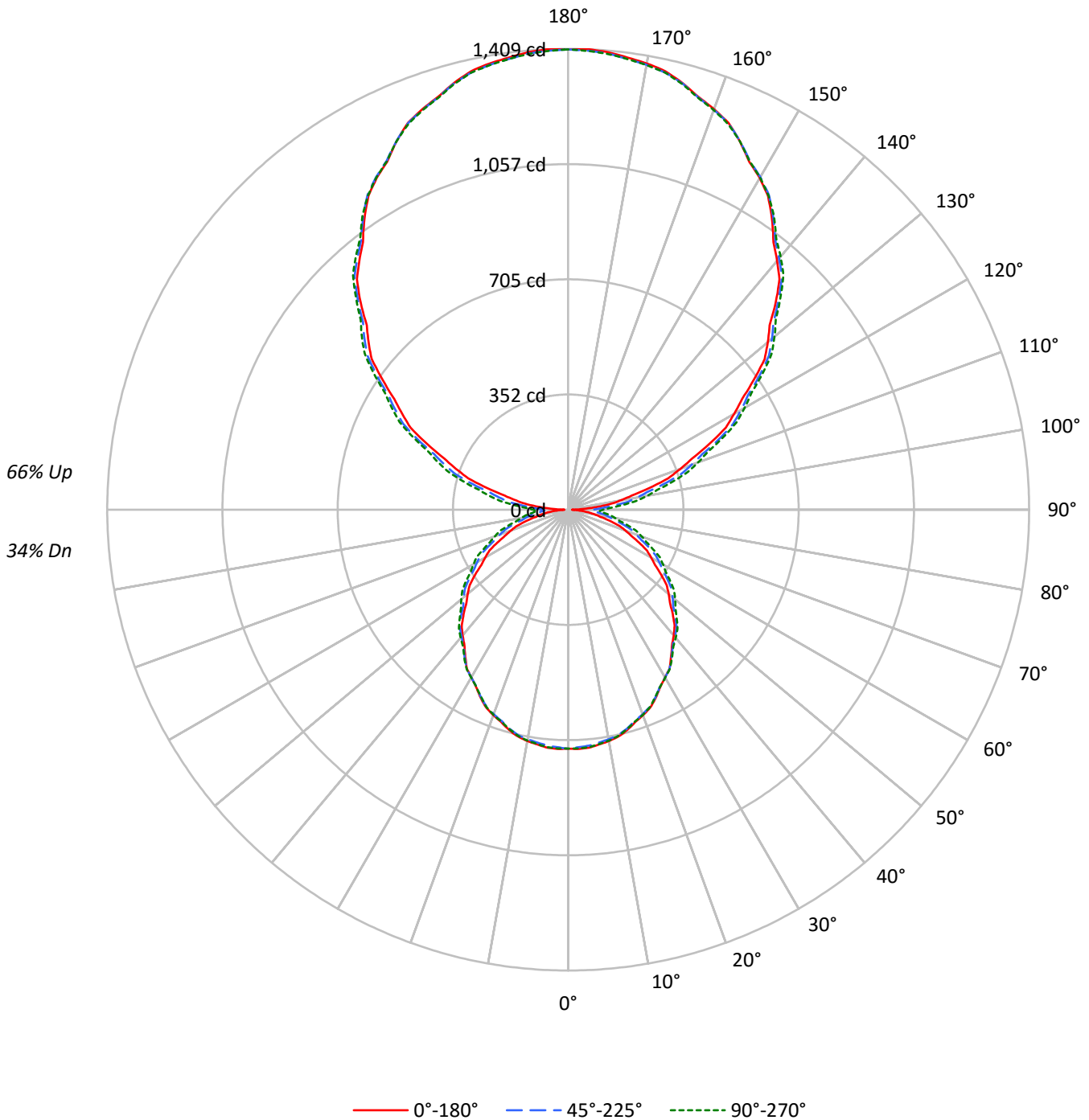
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	34
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28
2	85	78	71	66	77	70	65	60	56	52	49	43	41	39	31	30	28	23
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	64	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26	27	23	21	20	17	16	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.1
10°-20°	196.1	3.2
20°-30°	291.6	4.7
30°-40°	345.4	5.6
40°-50°	357.1	5.8
50°-60°	329.0	5.3
60°-70°	265.9	4.3
70°-80°	178.1	2.9
80°-90°	95.4	1.5
90°-100°	146.1	2.4
100°-110°	316.6	5.1
110°-120°	497.1	8.0
120°-130°	635.1	10.3
130°-140°	701.6	11.3
140°-150°	682.7	11.0
150°-160°	572.4	9.2
160°-170°	380.5	6.1
170°-180°	133.1	2.2
0°-30°	556.7	9.0
0°-40°	902.2	14.6
0°-60°	1588.2	25.6
0°-90°	2127.7	34.4
90°-120°	959.8	15.5
90°-150°	2979.2	48.1
90°-180°	4065.0	65.6
0°-180°	6192.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	44	76	98	106	12
95°	80	102	137	159	167	83
105°	256	274	301	321	330	274
115°	476	486	506	518	522	471
125°	692	698	713	722	725	619
135°	897	903	909	918	918	691
145°	1086	1090	1093	1096	1096	679
155°	1242	1242	1243	1247	1242	572
165°	1350	1348	1349	1353	1347	381
175°	1404	1400	1400	1406	1399	133
180°	1407	1407	1407	1407	1407	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.5	28.1	33.6	39.0	44.5	50.1	55.9	61.6	67.4	73.1	77.0
90°	12.5	19.6	26.7	33.6	40.7	47.8	55.0	62.0	69.1	76.3	81.2
92.5°	36.9	42.9	49.0	55.0	61.1	68.0	75.6	83.2	90.9	98.5	103.6
95°	80.5	85.1	89.7	94.3	99.0	105.3	113.1	120.9	128.8	136.6	141.9
97.5°	126.8	130.6	134.6	138.5	142.4	148.6	157.2	165.8	174.4	182.9	187.9
100°	161.2	164.6	167.9	171.3	174.6	180.4	188.6	196.9	205.2	213.4	219.0
102.5°	198.3	202.4	206.4	210.5	214.5	219.9	226.5	233.0	239.6	246.2	251.8
105°	256.2	260.0	263.7	267.5	271.3	276.3	282.5	288.7	294.9	301.1	305.8
107.5°	320.2	323.6	326.9	330.3	333.7	338.2	343.9	349.6	355.3	361.0	365.0
110°	364.3	367.4	370.5	373.6	376.7	380.9	386.2	391.3	396.5	401.7	405.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	409.8	412.0	414.2	416.3	418.5	422.2	427.4	432.7	437.9	443.2	446.4
115°	476.4	478.4	480.5	482.6	484.7	488.0	492.7	497.3	501.9	506.5	509.2
117.5°	543.1	544.3	545.4	546.6	547.8	550.5	554.9	559.3	563.6	568.0	570.9
120°	585.1	586.8	588.5	590.2	591.9	594.7	598.6	602.6	606.4	610.4	613.0
122.5°	630.2	630.8	631.5	632.2	632.8	635.2	639.4	643.6	647.7	651.9	654.3
125°	691.8	693.1	694.4	695.7	697.0	699.4	702.8	706.2	709.6	713.0	715.1
127.5°	756.8	757.4	758.1	758.8	759.5	761.3	764.1	767.0	770.0	772.9	775.0
130°	796.3	797.3	798.3	799.4	800.5	802.4	805.0	807.8	810.5	813.2	815.2
132.5°	835.1	837.1	839.1	840.9	842.9	844.7	846.3	848.0	849.6	851.2	853.2
135°	897.4	898.7	899.9	901.3	902.6	903.9	905.2	906.6	908.0	909.4	911.4
137.5°	955.9	957.2	958.5	959.8	961.1	962.2	963.4	964.4	965.4	966.6	968.7
140°	993.1	994.3	995.5	996.6	997.9	999.0	999.8	1000.7	1001.6	1002.5	1004.8
142.5°	1030.7	1031.6	1032.5	1033.4	1034.3	1035.2	1036.1	1037.2	1038.1	1039.1	1040.8
145°	1086.1	1086.9	1087.8	1088.5	1089.4	1090.1	1090.9	1091.7	1092.3	1093.1	1093.9
147.5°	1136.7	1137.2	1137.7	1138.3	1138.8	1139.3	1140.0	1140.6	1141.1	1141.7	1142.6
150°	1170.8	1170.6	1170.4	1170.2	1169.9	1170.3	1171.2	1172.1	1173.2	1174.1	1174.1
152.5°	1198.9	1199.2	1199.6	1200.0	1200.2	1200.6	1201.0	1201.4	1201.8	1202.2	1202.8
155°	1242.1	1242.1	1242.1	1242.1	1242.1	1242.2	1242.5	1242.6	1242.9	1243.1	1244.2
157.5°	1280.6	1280.1	1279.5	1279.0	1278.5	1278.3	1278.6	1278.8	1279.0	1279.3	1280.3
160°	1303.3	1302.7	1301.9	1301.2	1300.4	1300.2	1300.4	1300.7	1301.0	1301.2	1302.1
162.5°	1323.5	1323.0	1322.5	1321.9	1321.4	1321.2	1321.2	1321.3	1321.3	1321.4	1322.5
165°	1350.5	1350.0	1349.5	1349.1	1348.5	1348.4	1348.7	1348.9	1349.2	1349.3	1350.4
167.5°	1373.3	1372.2	1371.3	1370.4	1369.3	1368.9	1368.9	1368.9	1368.9	1368.9	1370.4
170°	1385.5	1384.6	1383.6	1382.6	1381.7	1381.1	1381.1	1381.1	1381.1	1381.1	1382.6
172.5°	1394.3	1393.4	1392.3	1391.4	1390.4	1389.9	1389.9	1389.9	1389.9	1389.9	1391.4
175°	1404.1	1403.2	1402.2	1401.2	1400.2	1399.8	1399.8	1399.8	1399.8	1399.8	1401.2
177.5°	1409.2	1408.4	1407.6	1406.8	1406.1	1405.6	1405.4	1405.2	1405.0	1404.8	1406.0
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	81.0	84.8	88.7	91.3	92.6	93.8	95.1	96.3
90°	86.0	90.9	95.8	99.2	100.9	102.8	104.6	106.5
92.5°	108.8	114.0	119.0	122.4	124.1	125.7	127.4	129.0
95°	147.0	152.2	157.4	160.8	162.4	164.0	165.6	167.2
97.5°	192.8	197.8	202.7	205.9	207.3	208.7	210.1	211.4
100°	224.5	230.0	235.5	239.0	240.4	242.0	243.4	244.8
102.5°	257.4	263.0	268.5	272.2	273.8	275.5	277.1	278.7
105°	310.5	315.1	319.7	323.0	324.8	326.7	328.5	330.4
107.5°	368.8	372.7	376.5	379.0	379.9	380.9	381.8	382.7
110°	409.2	412.9	416.7	419.0	419.9	420.8	421.6	422.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	449.7	452.9	456.1	458.1	458.7	459.5	460.1	460.8
115°	511.8	514.4	517.1	518.7	519.4	520.1	520.8	521.6
117.5°	573.7	576.6	579.6	581.1	581.2	581.3	581.4	581.5
120°	615.8	618.5	621.2	622.5	622.5	622.5	622.5	622.5
122.5°	656.7	659.0	661.4	662.7	662.9	663.1	663.3	663.4
125°	717.2	719.3	721.3	722.6	723.1	723.7	724.2	724.8
127.5°	777.1	779.2	781.3	782.6	783.1	783.4	783.9	784.3
130°	817.2	819.2	821.1	822.3	822.6	822.9	823.2	823.5
132.5°	855.2	857.1	859.1	860.2	860.2	860.1	860.1	860.1
135°	913.5	915.6	917.6	918.6	918.4	918.2	918.0	917.8
137.5°	970.9	973.1	975.2	976.0	975.4	974.9	974.3	973.7
140°	1007.0	1009.3	1011.4	1012.3	1011.7	1011.2	1010.6	1009.9
142.5°	1042.6	1044.4	1046.2	1046.8	1046.2	1045.7	1045.1	1044.5
145°	1094.7	1095.5	1096.3	1096.6	1096.6	1096.5	1096.4	1096.3
147.5°	1143.4	1144.2	1145.1	1144.8	1143.4	1142.1	1140.7	1139.3
150°	1174.1	1174.1	1174.1	1173.9	1173.7	1173.3	1173.0	1172.7
152.5°	1203.3	1203.9	1204.5	1204.4	1203.5	1202.7	1201.8	1201.0
155°	1245.1	1246.0	1247.1	1246.9	1245.7	1244.4	1243.3	1242.1
157.5°	1281.2	1282.2	1283.2	1282.9	1281.3	1279.7	1278.1	1276.5
160°	1303.2	1304.1	1305.0	1305.0	1303.7	1302.5	1301.3	1300.1
162.5°	1323.7	1324.8	1326.1	1325.9	1324.5	1323.0	1321.6	1320.2
165°	1351.3	1352.3	1353.3	1353.0	1351.6	1350.1	1348.7	1347.2
167.5°	1371.8	1373.3	1374.7	1374.7	1373.2	1371.7	1370.2	1368.7
170°	1384.0	1385.5	1387.0	1386.9	1385.2	1383.5	1381.8	1380.1
172.5°	1392.8	1394.3	1395.7	1395.7	1394.2	1392.7	1391.2	1389.7
175°	1402.7	1404.1	1405.6	1405.5	1403.8	1402.1	1400.3	1398.6
177.5°	1407.1	1408.3	1409.5	1409.4	1408.1	1406.7	1405.3	1403.9
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4

(END OF REPORT)