

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: P333385-830

Luminaire Tested: **S125DIW-S610D1050U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333385-830
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: S125DIW-S610D1050U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5689.6 lumens
Efficiency: N/A
Efficacy: 125.9 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: Semi-Indirect

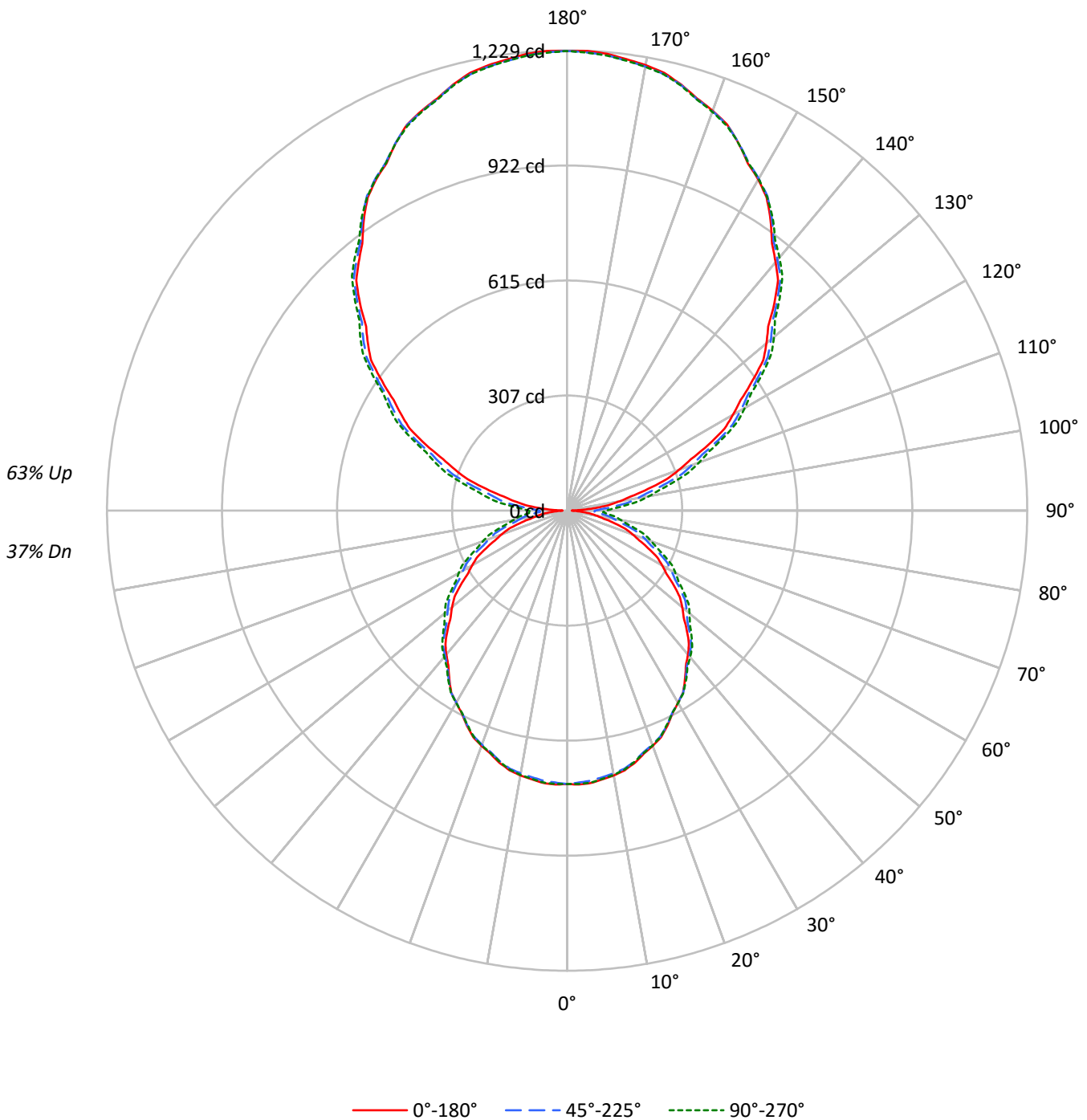
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	94	90	86	82	85	82	78	75	66	64	61	52	50	49	38	37	36	30
2	86	78	72	67	77	71	66	61	57	54	50	45	42	40	33	32	30	25
3	78	68	61	55	70	62	56	51	50	46	42	40	36	34	29	27	26	21
4	71	60	53	46	64	55	48	43	45	40	36	35	32	29	26	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	24	21	19	15
6	60	48	40	34	54	44	37	32	36	30	26	28	24	21	21	19	17	13
7	55	43	35	30	50	39	32	28	32	27	23	26	22	19	19	17	15	12
8	51	39	31	26	46	36	29	24	29	24	20	23	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	16	14	12	9
10	44	33	25	21	40	30	23	19	25	20	16	20	16	13	15	13	11	9

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	1.2
10°-20°	196.1	3.4
20°-30°	291.6	5.1
30°-40°	345.4	6.1
40°-50°	357.1	6.3
50°-60°	329.0	5.8
60°-70°	265.9	4.7
70°-80°	178.1	3.1
80°-90°	95.0	1.7
90°-100°	134.0	2.4
100°-110°	280.9	4.9
110°-120°	436.7	7.7
120°-130°	555.6	9.8
130°-140°	612.6	10.8
140°-150°	595.5	10.5
150°-160°	499.1	8.8
160°-170°	331.7	5.8
170°-180°	116.1	2.0
0°-30°	556.7	9.8
0°-40°	902.2	15.9
0°-60°	1588.2	27.9
0°-90°	2127.3	37.4
90°-120°	851.7	15.0
90°-150°	2615.4	46.0
90°-180°	3562.0	62.6
0°-180°	5689.6	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	43	74	94	103	11
95°	71	93	126	147	155	74
105°	224	241	268	287	296	239
115°	416	425	445	457	460	411
125°	604	609	624	633	636	540
135°	783	788	794	802	803	603
145°	947	950	953	956	957	592
155°	1083	1083	1084	1087	1083	499
165°	1178	1176	1177	1180	1175	332
175°	1224	1221	1220	1226	1220	116
180°	1227	1227	1227	1227	1227	



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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	28.0	33.4	38.8	44.3	49.9	55.5	61.3	66.9	72.7	76.5
90°	12.4	19.2	26.0	32.8	39.6	46.4	53.3	60.2	67.1	74.0	78.7
92.5°	33.5	39.3	45.2	51.1	57.0	63.6	71.0	78.4	85.8	93.1	98.0
95°	71.4	76.0	80.5	85.1	89.6	95.7	103.2	110.7	118.3	125.8	130.8
97.5°	111.6	115.5	119.4	123.3	127.1	133.2	141.4	149.5	157.6	165.8	170.5
100°	141.6	145.0	148.3	151.7	155.0	160.5	168.4	176.3	184.1	192.0	197.2
102.5°	173.9	177.8	181.7	185.7	189.6	194.7	201.1	207.5	213.9	220.2	225.6
105°	224.2	227.8	231.4	235.0	238.7	243.5	249.5	255.5	261.6	267.7	272.1
107.5°	279.8	283.1	286.3	289.5	292.8	297.2	302.7	308.3	313.9	319.4	323.2
110°	318.3	321.2	324.2	327.2	330.2	334.2	339.3	344.4	349.5	354.6	358.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	358.0	360.1	362.1	364.2	366.3	369.9	375.0	380.2	385.3	390.5	393.7
115°	415.9	417.9	419.8	421.8	423.8	427.1	431.6	436.1	440.7	445.3	447.9
117.5°	474.0	475.1	476.3	477.4	478.5	481.2	485.5	489.7	494.1	498.4	501.2
120°	510.7	512.3	513.8	515.3	516.9	519.5	523.4	527.4	531.2	535.1	537.7
122.5°	549.9	550.4	551.1	551.7	552.3	554.6	558.7	562.8	566.8	571.0	573.3
125°	603.6	604.7	605.8	606.9	608.0	610.3	613.7	617.1	620.5	623.9	626.0
127.5°	660.2	660.7	661.3	661.9	662.4	664.1	667.0	669.9	672.7	675.6	677.8
130°	694.6	695.5	696.4	697.3	698.1	699.9	702.6	705.2	707.8	710.6	712.6
132.5°	728.4	730.1	731.8	733.5	735.2	736.9	738.5	740.2	741.8	743.4	745.5
135°	782.7	783.7	784.9	786.0	787.1	788.3	789.7	791.0	792.3	793.6	795.7
137.5°	833.7	834.8	835.9	837.0	838.1	839.1	840.2	841.2	842.2	843.2	845.4
140°	866.0	867.0	868.1	869.2	870.2	871.2	871.9	872.8	873.5	874.3	876.5
142.5°	898.8	899.6	900.4	901.2	901.9	902.7	903.5	904.4	905.2	906.1	907.8
145°	947.2	947.8	948.6	949.2	949.9	950.6	951.2	951.9	952.5	953.1	953.9
147.5°	991.2	991.6	992.1	992.5	993.0	993.5	994.0	994.5	995.0	995.5	996.3
150°	1021.0	1020.8	1020.5	1020.3	1020.1	1020.4	1021.2	1022.1	1022.9	1023.8	1023.8
152.5°	1045.4	1045.7	1045.9	1046.3	1046.6	1046.9	1047.3	1047.5	1047.9	1048.3	1048.8
155°	1083.0	1083.0	1083.0	1083.0	1083.0	1083.1	1083.4	1083.5	1083.7	1084.0	1084.9
157.5°	1116.6	1116.2	1115.7	1115.2	1114.7	1114.7	1114.8	1115.0	1115.3	1115.5	1116.3
160°	1136.5	1135.9	1135.2	1134.6	1134.0	1133.8	1134.0	1134.2	1134.3	1134.6	1135.5
162.5°	1154.0	1153.6	1153.1	1152.6	1152.2	1152.0	1152.1	1152.1	1152.2	1152.2	1153.2
165°	1177.6	1177.1	1176.7	1176.3	1175.8	1175.7	1176.0	1176.2	1176.4	1176.6	1177.4
167.5°	1197.4	1196.6	1195.7	1194.9	1194.0	1193.6	1193.6	1193.6	1193.6	1193.6	1194.9
170°	1208.2	1207.3	1206.5	1205.6	1204.8	1204.3	1204.3	1204.3	1204.3	1204.3	1205.6
172.5°	1215.8	1214.9	1214.1	1213.2	1212.4	1211.9	1211.9	1211.9	1211.9	1211.9	1213.2
175°	1224.4	1223.5	1222.7	1221.8	1221.0	1220.5	1220.5	1220.5	1220.5	1220.5	1221.8
177.5°	1228.8	1228.0	1227.4	1226.7	1226.1	1225.6	1225.4	1225.3	1225.1	1224.9	1226.0
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2



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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°	80.4	84.3	88.1	90.7	92.0	93.2	94.4	95.7
90°	83.4	88.1	92.9	96.1	97.8	99.6	101.4	103.1
92.5°	102.9	107.9	112.8	116.1	117.7	119.2	120.8	122.4
95°	135.8	140.8	145.7	149.0	150.5	152.1	153.6	155.1
97.5°	175.3	180.0	184.7	187.8	189.2	190.5	191.8	193.1
100°	202.5	207.7	212.9	216.3	217.6	219.0	220.5	221.8
102.5°	230.8	236.1	241.4	244.8	246.4	247.9	249.5	251.0
105°	276.5	281.0	285.5	288.6	290.3	292.1	293.8	295.6
107.5°	327.0	330.7	334.6	337.0	337.9	338.8	339.8	340.7
110°	361.8	365.5	369.2	371.5	372.4	373.2	374.2	375.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	396.8	400.0	403.2	405.2	406.0	406.7	407.4	408.1
115°	450.6	453.3	455.9	457.6	458.4	459.1	459.8	460.5
117.5°	504.2	507.0	509.9	511.4	511.7	511.9	512.2	512.4
120°	540.5	543.2	545.9	547.2	547.4	547.5	547.6	547.7
122.5°	575.8	578.2	580.6	581.9	582.2	582.5	582.8	583.1
125°	628.1	630.3	632.4	633.7	634.3	634.9	635.5	636.0
127.5°	679.9	682.0	684.2	685.5	686.0	686.5	687.0	687.5
130°	714.5	716.6	718.6	719.8	720.2	720.6	721.0	721.3
132.5°	747.4	749.4	751.5	752.5	752.6	752.6	752.7	752.8
135°	797.8	799.8	801.9	803.0	802.9	802.9	802.8	802.7
137.5°	847.4	849.6	851.8	852.6	852.2	851.8	851.3	850.9
140°	878.7	880.9	883.1	883.9	883.4	883.1	882.6	882.2
142.5°	909.6	911.3	913.0	913.7	913.3	912.9	912.5	912.0
145°	954.7	955.5	956.3	956.7	956.7	956.7	956.7	956.7
147.5°	997.0	997.9	998.6	998.4	997.2	996.1	994.9	993.7
150°	1023.8	1023.8	1023.8	1023.7	1023.4	1023.1	1022.8	1022.6
152.5°	1049.2	1049.8	1050.3	1050.2	1049.4	1048.7	1048.0	1047.3
155°	1085.7	1086.6	1087.4	1087.2	1086.2	1085.1	1084.1	1083.0
157.5°	1117.2	1118.0	1118.9	1118.6	1117.2	1115.8	1114.4	1113.0
160°	1136.3	1137.2	1138.0	1137.8	1136.8	1135.8	1134.7	1133.6
162.5°	1154.2	1155.2	1156.2	1156.1	1154.9	1153.7	1152.4	1151.2
165°	1178.3	1179.1	1180.0	1179.8	1178.6	1177.2	1176.0	1174.7
167.5°	1196.2	1197.4	1198.7	1198.7	1197.4	1196.1	1194.8	1193.4
170°	1206.8	1208.2	1209.4	1209.3	1207.8	1206.4	1204.9	1203.3
172.5°	1214.5	1215.8	1217.0	1217.0	1215.7	1214.4	1213.1	1211.7
175°	1223.0	1224.4	1225.7	1225.5	1224.1	1222.6	1221.1	1219.6
177.5°	1227.0	1228.0	1229.0	1228.9	1227.8	1226.5	1225.4	1224.2
180°	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2	1227.2

(END OF REPORT)