

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: P333445-927

Luminaire Tested: **S125DIW-S1090D1050U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333445-927
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-S1090D1050U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 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: 6259.0 lumens
Efficiency: N/A
Efficacy: 102.3 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

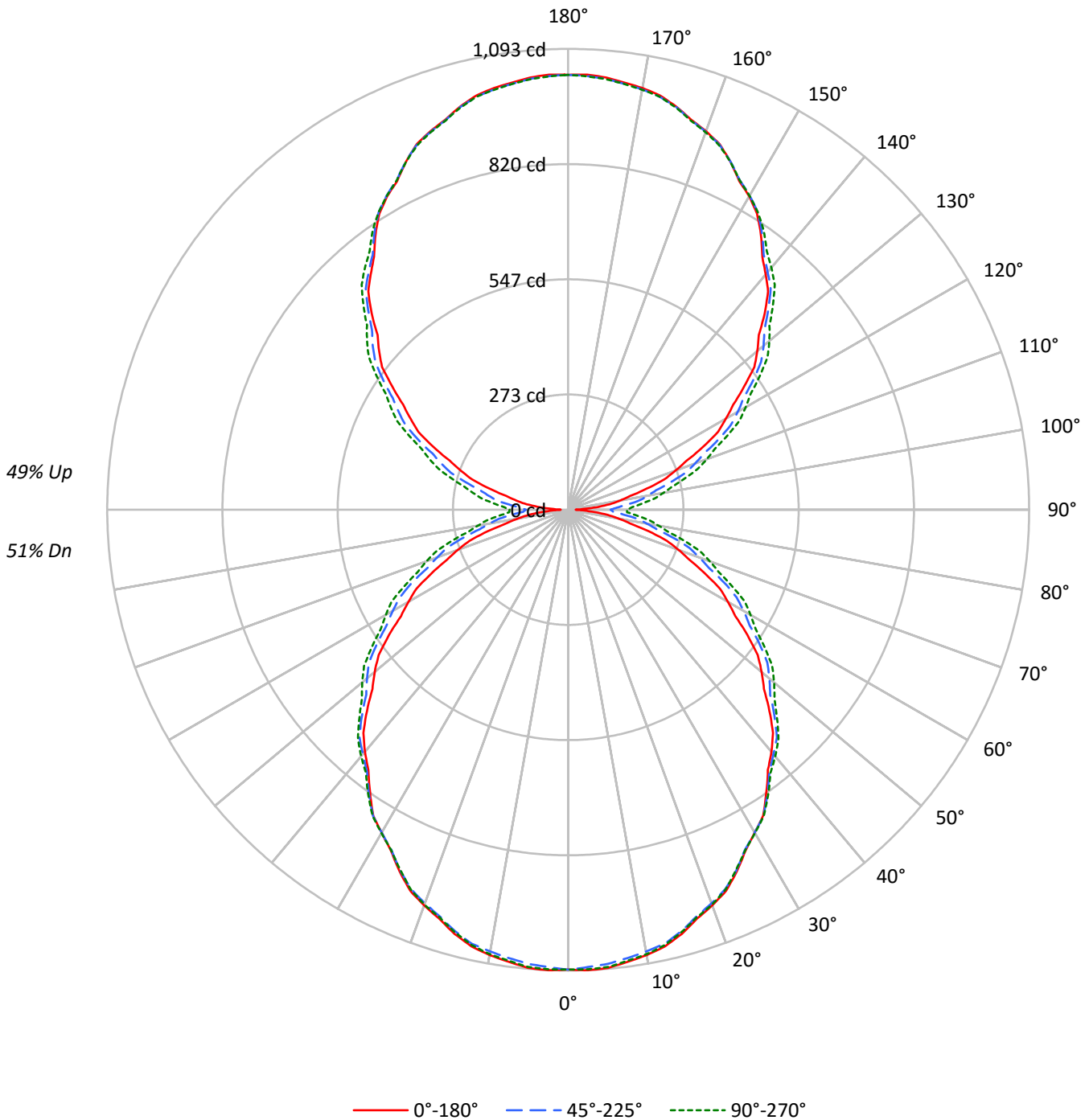
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	56	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	40	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	49	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.6
10°-20°	292.8	4.7
20°-30°	435.5	7.0
30°-40°	515.8	8.2
40°-50°	533.3	8.5
50°-60°	491.3	7.8
60°-70°	397.1	6.3
70°-80°	265.9	4.2
80°-90°	140.2	2.2
90°-100°	146.5	2.3
100°-110°	261.1	4.2
110°-120°	383.8	6.1
120°-130°	476.5	7.6
130°-140°	519.0	8.3
140°-150°	501.3	8.0
150°-160°	419.5	6.7
160°-170°	278.8	4.5
170°-180°	97.6	1.6
0°-30°	831.4	13.3
0°-40°	1347.2	21.5
0°-60°	2371.8	37.9
0°-90°	3175.0	50.7
90°-120°	791.3	12.6
90°-150°	2288.1	36.6
90°-180°	3084.0	49.3
0°-180°	6259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	18	59	100	128	139	14
95°	66	96	140	168	178	67
105°	193	215	251	276	287	206
115°	352	364	392	410	416	348
125°	509	514	535	550	555	456
135°	659	663	671	684	687	508
145°	796	799	801	806	808	498
155°	910	910	911	914	910	419
165°	990	988	989	992	987	279
175°	1029	1026	1026	1030	1025	98
180°	1031	1031	1031	1031	1031	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.5	41.4	49.3	57.2	65.1	73.2	81.5	89.8	98.2	106.5	112.2
90°	17.9	26.9	36.0	45.0	54.0	63.2	72.6	81.9	91.2	100.5	106.9
92.5°	34.9	42.9	50.9	58.9	66.9	75.9	85.7	95.5	105.3	115.1	121.5
95°	66.1	72.6	79.1	85.7	92.2	100.4	110.3	120.2	130.0	139.9	146.3
97.5°	99.3	105.0	110.7	116.5	122.2	130.1	140.4	150.6	160.9	171.1	177.3
100°	124.1	129.1	134.1	139.1	144.1	151.5	161.4	171.4	181.3	191.2	197.9
102.5°	150.9	156.2	161.5	166.8	172.2	179.1	187.7	196.3	204.9	213.5	220.1
105°	192.7	197.3	202.0	206.8	211.4	217.9	226.1	234.2	242.5	250.6	256.5
107.5°	238.8	243.0	247.1	251.3	255.4	261.3	268.9	276.6	284.2	291.9	297.1
110°	270.8	274.5	278.3	282.0	285.7	291.2	298.4	305.6	312.8	320.0	325.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.2	306.9	309.7	312.4	315.1	320.1	327.3	334.4	341.5	348.6	353.2
115°	352.4	354.7	357.1	359.5	361.9	366.3	372.9	379.4	386.0	392.4	396.6
117.5°	400.8	402.2	403.6	405.0	406.4	410.2	416.4	422.6	428.7	434.8	439.0
120°	431.6	433.2	434.7	436.4	438.0	441.6	447.3	452.9	458.5	464.2	468.3
122.5°	464.1	464.8	465.4	466.0	466.8	469.9	475.6	481.4	487.1	492.9	496.6
125°	509.1	510.0	510.8	511.7	512.5	515.4	520.3	525.2	530.2	535.1	538.5
127.5°	556.3	556.7	557.0	557.4	557.7	560.0	564.1	568.2	572.3	576.4	579.8
130°	585.2	585.8	586.5	587.1	587.8	589.9	593.7	597.3	601.0	604.7	607.8
132.5°	613.2	614.6	616.0	617.4	618.9	620.8	623.3	625.8	628.3	630.8	633.9
135°	658.7	659.6	660.4	661.2	662.1	663.4	665.3	667.1	668.9	670.7	673.8
137.5°	701.6	702.4	703.2	704.1	705.0	705.9	707.2	708.4	709.6	710.7	713.8
140°	728.3	729.2	730.1	730.9	731.9	732.7	733.5	734.3	735.0	735.8	738.8
142.5°	755.9	756.5	757.0	757.6	758.1	758.8	759.5	760.3	761.0	761.7	764.1
145°	796.5	797.0	797.5	798.0	798.4	798.9	799.5	800.0	800.6	801.1	802.2
147.5°	833.1	833.5	833.9	834.2	834.6	835.0	835.4	835.8	836.3	836.7	837.5
150°	858.1	857.9	857.7	857.5	857.4	857.6	858.3	859.0	859.8	860.5	860.5
152.5°	878.6	878.8	879.1	879.4	879.6	879.9	880.2	880.4	880.7	881.1	881.5
155°	910.2	910.2	910.2	910.2	910.2	910.3	910.5	910.7	910.9	911.1	911.8
157.5°	938.5	938.1	937.7	937.3	936.9	936.8	937.0	937.2	937.4	937.5	938.3
160°	955.2	954.7	954.1	953.6	953.1	952.9	953.1	953.2	953.4	953.6	954.3
162.5°	969.9	969.6	969.2	968.8	968.4	968.2	968.3	968.3	968.4	968.4	969.2
165°	989.8	989.4	989.0	988.6	988.2	988.2	988.4	988.6	988.7	988.9	989.6
167.5°	1006.4	1005.7	1005.0	1004.2	1003.5	1003.2	1003.2	1003.2	1003.2	1003.2	1004.2
170°	1015.4	1014.7	1014.0	1013.3	1012.6	1012.2	1012.2	1012.2	1012.2	1012.2	1013.3
172.5°	1021.8	1021.1	1020.4	1019.7	1019.0	1018.6	1018.6	1018.6	1018.6	1018.6	1019.7
175°	1029.0	1028.3	1027.6	1026.9	1026.2	1025.8	1025.8	1025.8	1025.8	1025.8	1026.9
177.5°	1032.8	1032.1	1031.6	1031.0	1030.5	1030.1	1029.9	1029.8	1029.7	1029.5	1030.4
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	117.8	123.4	129.1	132.8	134.6	136.3	138.1	139.9
90°	113.3	119.6	126.0	130.2	132.5	134.7	136.8	139.0
92.5°	128.0	134.4	140.9	145.1	147.2	149.2	151.3	153.4
95°	152.8	159.3	165.8	170.0	172.1	174.0	176.1	178.1
97.5°	183.5	189.6	195.8	199.8	201.6	203.4	205.3	207.2
100°	204.5	211.0	217.6	221.8	223.6	225.4	227.2	228.9
102.5°	226.6	233.1	239.7	243.9	245.9	247.8	249.7	251.7
105°	262.3	268.2	273.9	278.0	280.2	282.3	284.6	286.8
107.5°	302.4	307.6	312.9	316.2	317.7	319.1	320.5	321.9
110°	330.1	335.1	340.2	343.4	344.9	346.4	347.9	349.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	357.8	362.3	366.9	369.9	371.2	372.6	373.9	375.3
115°	400.7	404.8	408.8	411.5	412.8	414.1	415.3	416.5
117.5°	443.2	447.4	451.6	454.2	455.0	456.0	456.9	457.7
120°	472.3	476.3	480.4	482.8	483.5	484.2	484.9	485.6
122.5°	500.3	504.0	507.7	510.0	510.9	511.7	512.5	513.4
125°	542.0	545.4	548.9	551.1	552.2	553.1	554.1	555.2
127.5°	583.1	586.5	589.8	591.9	592.9	594.0	595.0	596.0
130°	611.0	614.1	617.3	619.2	620.1	620.9	621.8	622.6
132.5°	637.1	640.2	643.4	645.2	645.7	646.2	646.7	647.2
135°	676.9	680.0	683.1	684.9	685.4	685.9	686.3	686.8
137.5°	716.8	719.8	722.8	724.4	724.5	724.5	724.5	724.6
140°	741.7	744.7	747.7	749.2	749.2	749.3	749.4	749.4
142.5°	766.6	769.1	771.5	772.8	772.8	772.9	772.9	773.0
145°	803.4	804.6	805.8	806.6	807.1	807.5	807.9	808.3
147.5°	838.4	839.2	840.0	840.0	839.2	838.4	837.6	836.9
150°	860.5	860.5	860.5	860.4	860.3	860.2	860.1	859.9
152.5°	881.9	882.3	882.7	882.6	882.1	881.5	880.9	880.3
155°	912.5	913.2	913.9	913.8	912.9	912.0	911.2	910.2
157.5°	939.0	939.7	940.4	940.2	939.0	937.8	936.6	935.5
160°	955.1	955.8	956.5	956.3	955.5	954.6	953.7	952.8
162.5°	970.1	970.9	971.8	971.7	970.7	969.6	968.6	967.6
165°	990.3	991.0	991.7	991.6	990.5	989.4	988.4	987.3
167.5°	1005.4	1006.4	1007.5	1007.5	1006.4	1005.3	1004.2	1003.1
170°	1014.3	1015.4	1016.4	1016.4	1015.1	1013.9	1012.6	1011.4
172.5°	1020.7	1021.8	1022.9	1022.9	1021.8	1020.6	1019.5	1018.4
175°	1027.9	1029.0	1030.2	1030.0	1028.8	1027.5	1026.3	1025.0
177.5°	1031.3	1032.1	1032.9	1032.8	1031.9	1030.9	1029.9	1028.9
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4

(END OF REPORT)