

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: P333212-927

Luminaire Tested: **S125DIP-S850D365U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333212-927
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: S125DIP-S850D365U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3710.8 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

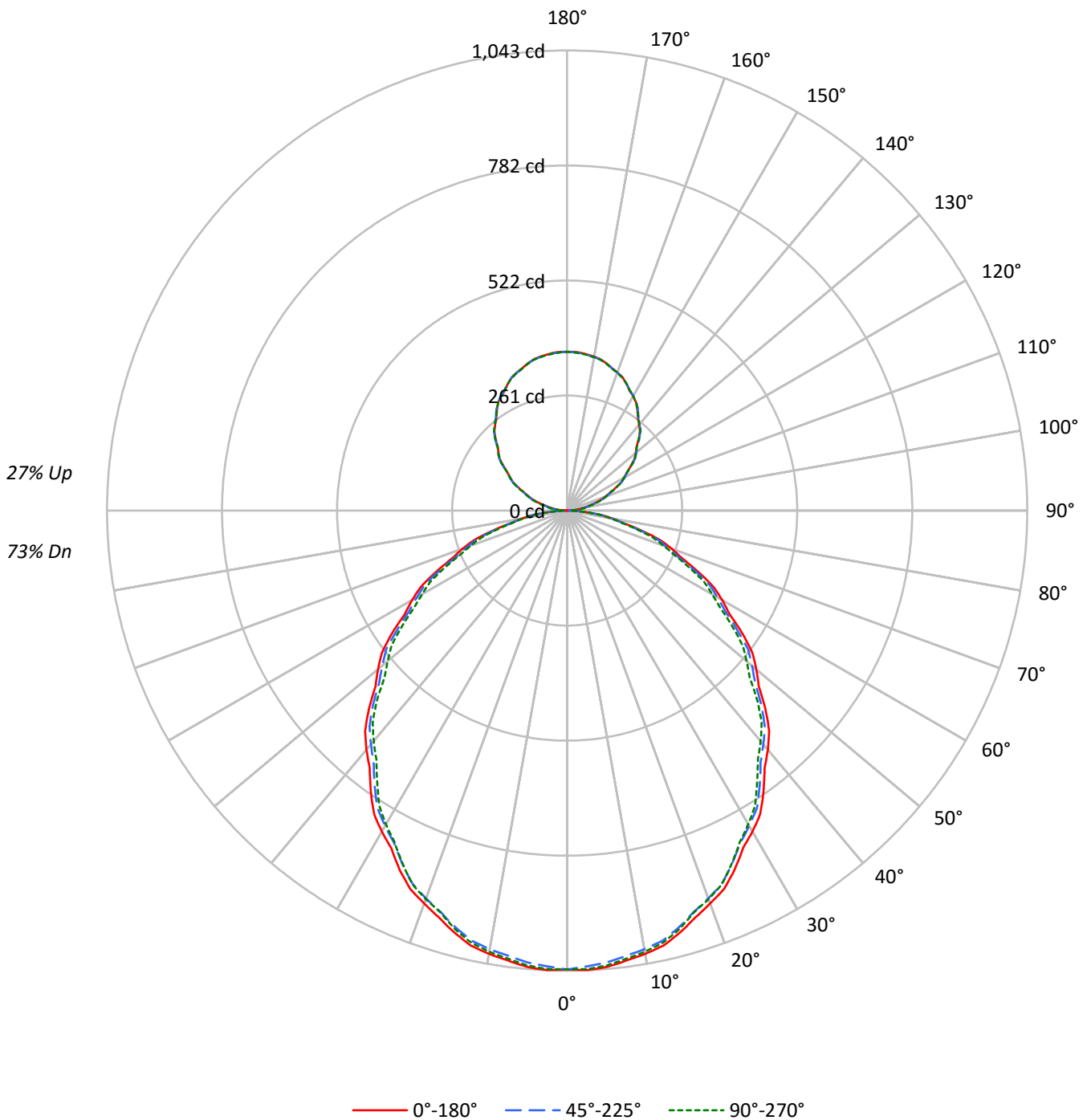
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	103	98	94	91	97	93	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	79	74	89	82	76	71	74	69	65	67	63	60	60	57	55	51
3	85	75	68	62	81	72	65	59	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	48	43	47	43	40	37
5	72	60	51	45	68	57	49	43	52	46	41	47	42	38	43	38	35	32
6	66	54	45	39	63	51	44	38	47	40	36	43	37	33	39	34	31	28
7	61	49	40	35	58	47	39	33	43	36	31	39	33	29	35	31	27	25
8	57	44	36	31	54	42	35	30	39	33	28	36	30	26	33	28	25	22
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	22	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	2.6
10°-20°	277.0	7.5
20°-30°	409.0	11.0
30°-40°	477.2	12.9
40°-50°	479.3	12.9
50°-60°	420.7	11.3
60°-70°	313.5	8.4
70°-80°	179.3	4.8
80°-90°	52.9	1.4
90°-100°	24.1	0.6
100°-110°	71.2	1.9
110°-120°	120.5	3.2
120°-130°	158.6	4.3
130°-140°	177.7	4.8
140°-150°	174.2	4.7
150°-160°	146.3	3.9
160°-170°	97.3	2.6
170°-180°	34.0	0.9
0°-30°	784.0	21.1
0°-40°	1261.2	34.0
0°-60°	2161.2	58.2
0°-90°	2706.9	72.9
90°-120°	215.8	5.8
90°-150°	726.3	19.6
90°-180°	1004.0	27.1
0°-180°	3710.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	0	3	4	6	7	3
95°	18	19	22	23	24	19
105°	64	65	67	69	70	68
115°	121	122	122	122	122	119
125°	176	178	178	178	177	158
135°	229	231	231	231	230	176
145°	278	279	279	279	279	173
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	17.8	17.9	18.1	18.1	18.2	18.2	18.2	18.1	18.1	18.0	18.1
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	6.8	7.1	7.4	7.8	8.2	8.6	9.1	9.7	10.2	10.8	11.2
95°	18.2	18.3	18.5	18.5	18.7	19.1	19.7	20.3	20.9	21.5	22.0
97.5°	30.3	30.3	30.3	30.4	30.4	30.9	31.8	32.6	33.4	34.3	34.8
100°	39.2	39.2	39.2	39.2	39.2	39.6	40.4	41.2	42.1	42.9	43.4
102.5°	48.8	49.1	49.4	49.6	49.8	50.1	50.5	50.9	51.4	51.8	52.4
105°	63.8	64.2	64.5	64.8	65.1	65.4	65.8	66.1	66.5	66.9	67.3
107.5°	80.4	80.7	81.0	81.4	81.7	82.0	82.2	82.5	82.8	83.1	83.3
110°	91.8	92.1	92.4	92.8	93.1	93.3	93.5	93.7	93.9	94.1	94.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.5	103.6	103.8	103.9	104.1	104.3	104.6	104.8	105.0	105.3	105.4
115°	120.6	120.9	121.2	121.4	121.7	121.8	122.0	122.1	122.2	122.4	122.3
117.5°	137.9	138.0	138.2	138.2	138.4	138.5	138.6	138.7	138.8	138.9	138.9
120°	148.7	149.0	149.3	149.6	149.9	150.1	150.2	150.2	150.3	150.4	150.4
122.5°	160.3	160.4	160.6	160.7	160.7	160.9	161.1	161.2	161.4	161.5	161.5
125°	176.1	176.5	176.9	177.2	177.6	177.8	177.9	177.9	178.0	178.1	177.9
127.5°	192.9	193.1	193.4	193.5	193.8	193.9	194.0	194.1	194.2	194.2	194.2
130°	203.0	203.3	203.6	203.9	204.2	204.5	204.5	204.7	204.9	204.9	204.9
132.5°	213.1	213.6	214.1	214.6	215.1	215.4	215.3	215.3	215.3	215.2	215.2
135°	229.0	229.4	229.8	230.1	230.5	230.8	230.8	230.8	230.9	231.0	231.0
137.5°	244.1	244.4	244.8	245.1	245.5	245.7	245.9	246.0	246.1	246.3	246.4
140°	253.7	254.0	254.3	254.6	254.9	255.2	255.3	255.6	255.7	255.9	256.0
142.5°	263.3	263.6	263.8	264.1	264.4	264.6	264.8	265.1	265.3	265.5	265.6
145°	277.5	277.7	278.0	278.2	278.5	278.7	278.8	279.1	279.2	279.4	279.4
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.0
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	18.1	18.2	18.2	18.1	17.9	17.7	17.4	17.1
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	11.6	12.0	12.4	12.7	12.8	12.9	13.1	13.2
95°	22.4	22.9	23.3	23.6	23.7	23.8	23.9	24.1
97.5°	35.2	35.6	36.0	36.2	36.3	36.4	36.4	36.5
100°	44.0	44.5	45.1	45.4	45.6	45.7	45.8	45.9
102.5°	53.0	53.6	54.3	54.7	54.8	55.0	55.1	55.3
105°	67.7	68.0	68.4	68.7	68.8	69.1	69.2	69.5
107.5°	83.5	83.7	83.8	84.0	83.9	83.9	83.9	83.9
110°	94.4	94.7	94.8	94.9	94.8	94.7	94.7	94.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	105.4	105.5	105.6	105.6	105.5	105.4	105.3	105.2
115°	122.2	122.2	122.1	122.1	122.0	121.9	121.8	121.8
117.5°	139.0	139.1	139.1	139.0	138.8	138.6	138.3	138.0
120°	150.4	150.4	150.4	150.2	150.0	149.7	149.5	149.2
122.5°	161.4	161.4	161.4	161.2	161.1	160.8	160.7	160.4
125°	177.8	177.7	177.6	177.4	177.4	177.4	177.3	177.2
127.5°	194.1	194.0	193.9	193.8	193.8	193.6	193.5	193.4
130°	204.9	204.8	204.7	204.6	204.5	204.4	204.2	204.1
132.5°	215.2	215.1	215.0	214.9	214.7	214.5	214.4	214.2
135°	231.0	231.0	231.0	230.8	230.6	230.4	230.1	229.9
137.5°	246.4	246.5	246.6	246.4	246.1	245.8	245.5	245.2
140°	256.2	256.3	256.4	256.4	256.0	255.7	255.4	255.1
142.5°	265.7	265.8	265.9	265.7	265.4	265.1	264.8	264.5
145°	279.4	279.4	279.4	279.3	279.2	278.9	278.8	278.6
147.5°	292.2	292.3	292.5	292.3	291.9	291.4	291.0	290.7
150°	300.2	300.2	300.2	300.1	300.0	299.8	299.7	299.6
152.5°	307.6	307.8	307.9	307.8	307.7	307.4	307.2	307.0
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

(END OF REPORT)