

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: P333211-930

Luminaire Tested: **S125DIP-S850D365U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333211-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3979.7 lumens
Efficiency: N/A
Efficacy: 113.7 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

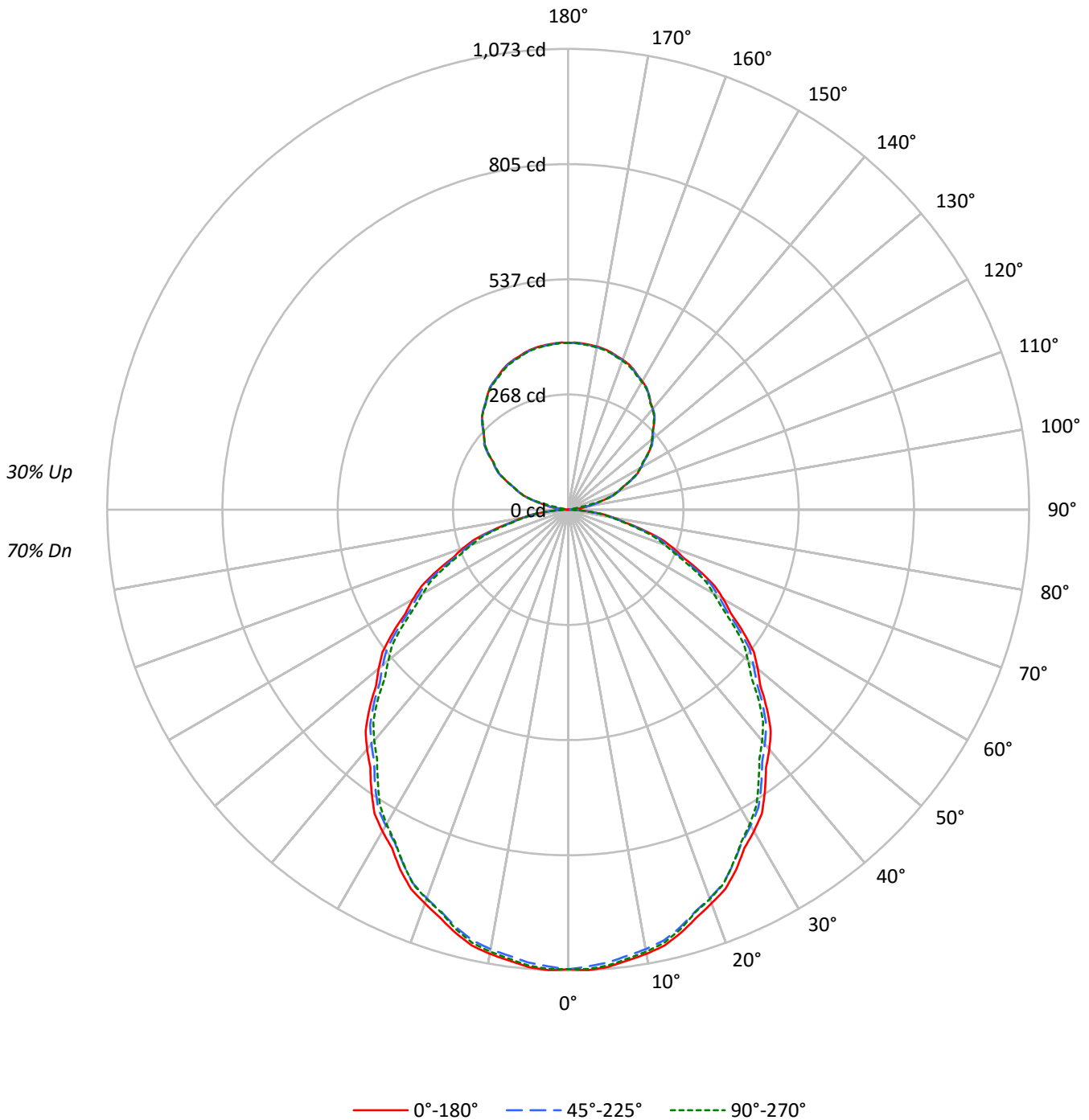
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	102	98	94	90	96	93	89	86	83	80	78	74	72	70	66	64	63	59
2	93	85	79	73	88	81	75	70	73	68	64	65	61	58	58	55	53	49
3	85	75	67	61	80	71	64	59	64	59	54	57	53	49	51	48	45	42
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36
5	71	59	51	45	67	56	49	43	51	45	40	46	41	37	41	37	34	31
6	66	53	45	39	62	51	43	38	46	40	35	42	36	32	37	33	30	27
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	34	30	26	24
8	57	44	36	30	54	42	35	29	38	32	27	35	29	26	31	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	19
10	50	37	30	25	47	35	28	24	32	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6912	6912	6912
5°	6928	6862	6906
10°	6885	6813	6852
15°	6811	6731	6760
20°	6704	6616	6628
25°	6589	6480	6475
30°	6447	6334	6302
35°	6296	6176	6089
40°	6139	6004	5918
45°	5971	5847	5731
50°	5785	5657	5488
55°	5606	5444	5291
60°	5391	5227	5043
65°	5136	4968	4800
70°	4893	4670	4509
75°	4457	4312	4162
80°	3968	3905	3812
85°	3453	3520	3320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	2.5
10°-20°	285.1	7.2
20°-30°	420.9	10.6
30°-40°	491.1	12.3
40°-50°	493.3	12.4
50°-60°	433.0	10.9
60°-70°	322.6	8.1
70°-80°	184.5	4.6
80°-90°	54.5	1.4
90°-100°	14.1	0.4
100°-110°	87.1	2.2
110°-120°	157.9	4.0
120°-130°	202.7	5.1
130°-140°	218.0	5.5
140°-150°	204.6	5.1
150°-160°	165.5	4.2
160°-170°	107.0	2.7
170°-180°	36.9	0.9
0°-30°	806.9	20.3
0°-40°	1298.0	32.6
0°-60°	2224.3	55.9
0°-90°	2785.9	70.0
90°-120°	259.1	6.5
90°-150°	884.4	22.2
90°-180°	1194.0	30.0
0°-180°	3979.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1066	1058	1066	1065	101
15°	1019	1016	1007	1011	1011	287
25°	925	920	909	911	909	425
35°	798	795	783	779	772	499
45°	654	650	640	630	628	504
55°	498	495	484	476	470	444
65°	336	334	325	318	314	333
75°	179	177	173	170	167	190
85°	47	47	48	46	45	52
90°	0	3	5	6	7	3
95°	16	15	5	6	6	21
105°	85	86	86	86	86	90
115°	159	160	161	160	158	158
125°	226	228	228	227	226	202
135°	282	284	283	283	281	217
145°	327	328	328	328	326	204
155°	360	359	359	360	358	166
165°	380	379	379	380	378	107
175°	389	387	387	389	387	37
180°	389	389	389	389	389	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1073.0	1072.5	1072.1	1071.6	1071.1	1070.2	1068.7	1067.2	1065.7	1064.2	1065.7
5°	1068.6	1068.2	1067.8	1067.5	1067.1	1065.9	1064.0	1062.2	1060.3	1058.4	1060.1
7.5°	1058.7	1058.4	1058.0	1057.6	1057.3	1056.1	1053.9	1051.9	1049.9	1047.7	1049.4
10°	1049.9	1049.6	1049.2	1048.8	1048.5	1047.3	1045.1	1043.1	1041.1	1038.9	1040.5
12.5°	1039.1	1038.4	1037.8	1037.1	1036.4	1035.1	1033.2	1031.3	1029.3	1027.4	1028.7
15°	1018.6	1018.1	1017.5	1016.9	1016.4	1015.0	1013.0	1010.9	1008.9	1006.7	1007.7
17.5°	995.1	994.3	993.4	992.6	991.8	990.3	988.1	986.0	983.8	981.7	982.8
20°	975.4	975.1	974.7	974.3	974.0	972.5	970.0	967.6	965.2	962.7	964.1
22.5°	955.8	955.1	954.5	953.7	953.1	951.6	949.3	947.0	944.7	942.4	943.3
25°	924.6	923.7	922.8	921.8	920.9	919.2	916.7	914.3	911.8	909.4	909.8
27.5°	888.2	887.7	887.1	886.6	886.0	884.4	881.9	879.4	876.9	874.3	874.4
30°	864.5	864.0	863.4	862.8	862.3	860.5	857.8	854.9	852.1	849.3	848.9
32.5°	838.8	837.9	837.1	836.2	835.4	833.6	831.1	828.6	826.1	823.5	822.9
35°	798.5	797.7	797.0	796.2	795.5	793.8	791.2	788.5	785.9	783.3	782.3
37.5°	756.7	755.7	754.7	753.8	752.8	751.1	748.7	746.2	743.7	741.3	739.8
40°	728.2	727.2	726.4	725.4	724.4	722.7	720.0	717.4	714.8	712.1	710.5
42.5°	697.7	696.9	696.1	695.4	694.6	692.8	690.2	687.5	684.9	682.3	680.8
45°	653.7	652.9	652.2	651.4	650.7	649.1	646.9	644.7	642.4	640.2	637.9
47.5°	606.3	606.3	606.3	606.3	606.4	605.1	602.3	599.7	597.0	594.3	591.9
50°	575.8	575.2	574.6	574.1	573.6	572.1	569.9	567.6	565.3	563.0	560.6
52.5°	544.6	544.2	543.8	543.4	543.0	541.5	539.2	536.7	534.3	531.9	529.8
55°	497.9	497.3	496.8	496.2	495.6	494.0	491.4	488.8	486.1	483.5	481.8
57.5°	448.6	448.3	448.0	447.7	447.4	446.1	443.9	441.7	439.4	437.2	435.0
60°	417.4	416.7	416.0	415.2	414.4	413.0	410.9	408.9	406.8	404.7	402.8
62.5°	384.9	384.3	383.8	383.1	382.5	381.3	379.6	377.8	376.0	374.2	372.3
65°	336.1	335.7	335.4	335.0	334.7	333.5	331.3	329.3	327.2	325.1	323.4
67.5°	288.9	288.1	287.3	286.5	285.8	284.5	283.1	281.5	280.0	278.4	277.0
70°	259.1	258.1	257.2	256.2	255.4	254.0	252.3	250.6	248.9	247.3	246.1
72.5°	226.6	225.9	225.3	224.7	224.0	223.1	222.1	220.9	219.9	218.8	217.5
75°	178.6	178.3	177.9	177.6	177.2	176.5	175.5	174.6	173.7	172.8	172.2
77.5°	134.4	134.3	134.2	134.0	133.9	133.5	133.0	132.5	131.9	131.4	131.1
80°	106.7	106.7	106.7	106.7	106.7	106.5	106.2	105.7	105.3	105.0	104.8
82.5°	82.3	82.0	81.7	81.4	81.1	80.9	80.8	80.8	80.7	80.6	80.3
85°	46.6	46.8	47.0	47.1	47.3	47.5	47.5	47.5	47.5	47.5	47.2
87.5°	18.3	18.4	18.6	18.7	18.8	18.8	18.8	18.7	18.6	18.5	18.6
90°	0.3	0.8	1.3	1.8	2.4	2.9	3.3	3.8	4.2	4.6	4.9
92.5°	4.4	4.1	3.8	3.3	3.0	3.0	3.4	3.8	4.2	4.6	4.9
95°	16.4	16.2	16.1	15.8	15.7	14.3	11.9	9.5	7.0	4.6	4.9
97.5°	34.3	34.7	35.0	35.3	35.7	33.4	28.6	23.8	19.0	14.2	12.4
100°	48.1	48.3	48.5	48.7	48.9	49.1	49.4	49.7	49.9	50.1	40.6
102.5°	62.2	62.5	62.7	62.9	63.2	63.3	63.5	63.7	63.8	64.0	62.2
105°	84.7	85.0	85.3	85.5	85.8	85.9	85.9	85.9	85.9	85.9	85.9
107.5°	108.1	108.1	108.1	108.1	108.1	108.2	108.4	108.4	108.6	108.7	108.7
110°	123.4	123.4	123.4	123.4	123.4	123.4	123.5	123.7	123.8	123.9	123.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.6	137.8	137.9	138.1	138.3	138.4	138.4	138.5	138.6	138.7	138.4
115°	159.1	159.4	159.7	160.0	160.4	160.5	160.6	160.7	160.8	160.8	160.5
117.5°	181.2	181.2	181.2	181.2	181.2	181.3	181.6	181.8	182.1	182.3	182.0
120°	195.1	195.0	195.0	194.9	194.9	194.9	195.1	195.3	195.5	195.7	195.6
122.5°	207.3	207.6	207.8	208.1	208.3	208.5	208.6	208.6	208.7	208.8	208.7
125°	226.2	226.7	227.1	227.6	228.0	228.3	228.3	228.3	228.3	228.3	228.0
127.5°	244.3	244.6	244.9	245.2	245.6	245.7	245.6	245.6	245.6	245.6	245.4
130°	255.4	255.7	256.0	256.3	256.7	256.8	256.9	256.9	257.0	257.1	256.9
132.5°	266.4	266.8	267.2	267.5	267.9	268.0	267.9	267.7	267.6	267.4	267.4
135°	282.2	282.5	282.9	283.3	283.6	283.8	283.6	283.6	283.4	283.3	283.2
137.5°	296.6	296.9	297.3	297.6	297.9	298.1	297.9	297.8	297.7	297.6	297.6
140°	306.1	306.2	306.3	306.5	306.6	306.6	306.6	306.5	306.4	306.4	306.5
142.5°	314.6	314.7	314.8	314.8	314.9	315.0	315.1	315.2	315.3	315.4	315.4
145°	327.1	327.3	327.3	327.5	327.6	327.7	327.7	327.7	327.7	327.7	327.8
147.5°	338.0	338.0	338.0	337.9	337.9	337.9	338.0	338.1	338.2	338.3	338.3
150°	345.0	344.9	344.7	344.5	344.5	344.5	344.5	344.7	344.9	345.0	345.1
152.5°	351.6	351.4	351.1	350.8	350.5	350.4	350.6	350.7	350.8	351.0	351.1
155°	360.3	359.9	359.5	359.1	358.7	358.6	358.7	358.8	359.0	359.1	359.3
157.5°	366.9	366.6	366.4	366.2	366.0	365.8	365.8	365.9	365.9	365.9	366.1
160°	371.5	371.1	370.7	370.3	370.0	369.8	369.8	369.9	370.0	370.1	370.3
162.5°	375.2	374.8	374.4	374.0	373.7	373.5	373.6	373.6	373.7	373.7	374.1
165°	380.1	379.8	379.4	379.0	378.6	378.5	378.5	378.5	378.6	378.7	379.0
167.5°	383.8	383.4	383.0	382.6	382.2	382.0	382.1	382.2	382.3	382.3	382.8
170°	385.9	385.5	385.0	384.6	384.1	383.9	384.0	384.0	384.1	384.2	384.7
172.5°	387.3	386.9	386.4	386.0	385.5	385.3	385.4	385.6	385.6	385.8	386.2
175°	388.7	388.4	388.0	387.6	387.3	387.1	387.1	387.2	387.3	387.3	387.8
177.5°	389.5	389.1	388.8	388.6	388.2	388.1	388.2	388.2	388.2	388.3	388.7
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1067.2	1068.7	1070.2	1070.9	1070.7	1070.6	1070.4	1070.2
5°	1061.8	1063.5	1065.2	1065.9	1065.8	1065.6	1065.4	1065.2
7.5°	1051.1	1052.7	1054.3	1055.1	1054.9	1054.8	1054.5	1054.3
10°	1042.0	1043.5	1045.0	1045.6	1045.5	1045.2	1045.1	1044.9
12.5°	1029.8	1031.0	1032.3	1032.8	1032.8	1032.7	1032.7	1032.7
15°	1008.7	1009.6	1010.6	1011.0	1011.0	1011.0	1011.0	1011.0
17.5°	984.1	985.2	986.3	986.5	985.5	984.6	983.7	982.8
20°	965.4	966.7	968.0	968.2	967.3	966.3	965.4	964.4
22.5°	944.1	945.0	945.9	946.0	945.3	944.7	944.0	943.5
25°	910.1	910.5	910.9	910.8	910.3	909.7	909.1	908.6
27.5°	874.5	874.6	874.7	874.4	873.8	873.3	872.7	872.1
30°	848.6	848.2	847.7	847.3	846.8	846.2	845.6	845.1
32.5°	822.1	821.5	820.8	819.9	819.0	817.9	816.9	816.0
35°	781.4	780.4	779.5	778.3	776.7	775.3	773.7	772.3
37.5°	738.4	737.0	735.6	734.5	733.7	732.8	732.0	731.1
40°	708.7	707.0	705.3	704.2	703.6	703.1	702.5	702.0
42.5°	679.2	677.7	676.1	674.9	674.1	673.2	672.3	671.5
45°	635.6	633.3	631.1	629.7	629.2	628.6	628.0	627.5
47.5°	589.6	587.3	585.1	583.3	582.0	580.7	579.3	578.0
50°	558.2	555.7	553.3	551.4	550.1	548.8	547.5	546.2
52.5°	527.7	525.5	523.3	521.5	520.1	518.6	517.1	515.7
55°	480.1	478.4	476.7	475.2	473.9	472.5	471.2	469.9
57.5°	432.9	430.7	428.5	427.1	426.3	425.7	424.9	424.2
60°	401.0	399.1	397.2	395.6	394.3	393.0	391.7	390.4
62.5°	370.2	368.2	366.2	364.6	363.6	362.6	361.6	360.5
65°	321.8	320.1	318.4	317.2	316.4	315.7	314.9	314.1
67.5°	275.6	274.1	272.7	271.7	271.3	270.8	270.4	269.9
70°	245.0	243.9	242.7	241.8	241.0	240.3	239.5	238.8
72.5°	216.2	215.0	213.7	212.6	211.9	211.2	210.4	209.6
75°	171.6	171.0	170.5	169.8	169.1	168.3	167.5	166.8
77.5°	130.8	130.4	130.0	129.6	129.1	128.6	128.1	127.5
80°	104.6	104.4	104.3	104.0	103.6	103.2	102.8	102.5
82.5°	79.9	79.6	79.2	79.1	79.0	78.9	78.8	78.8
85°	47.0	46.9	46.6	46.4	46.0	45.7	45.2	44.8
87.5°	18.7	18.8	18.8	18.7	18.4	18.2	17.9	17.6
90°	5.2	5.5	5.9	6.1	6.4	6.5	6.7	6.9
92.5°	5.2	5.5	5.9	6.1	6.2	6.3	6.4	6.4
95°	5.2	5.5	5.9	6.0	6.0	6.0	6.0	6.0
97.5°	10.6	8.7	6.9	6.0	6.0	6.0	6.0	6.0
100°	31.1	21.5	12.0	7.1	6.8	6.6	6.3	6.0
102.5°	60.3	58.5	56.7	53.6	49.3	45.0	40.6	36.3
105°	85.9	85.9	85.9	85.9	85.8	85.7	85.7	85.6
107.5°	108.8	108.8	108.8	108.7	108.5	108.3	108.1	107.9
110°	123.5	123.4	123.2	123.1	123.2	123.2	123.3	123.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	138.2	137.9	137.7	137.5	137.5	137.4	137.3	137.2
115°	160.3	160.0	159.8	159.5	159.1	158.7	158.3	157.9
117.5°	181.6	181.3	181.0	180.8	180.6	180.4	180.3	180.1
120°	195.4	195.3	195.2	194.9	194.6	194.3	194.0	193.6
122.5°	208.6	208.5	208.3	208.1	207.7	207.3	206.9	206.6
125°	227.7	227.5	227.2	227.0	226.8	226.7	226.4	226.2
127.5°	245.2	245.1	245.0	244.7	244.2	243.7	243.3	242.8
130°	256.7	256.5	256.3	256.0	255.8	255.4	255.1	254.8
132.5°	267.3	267.3	267.3	267.1	266.8	266.4	266.1	265.9
135°	283.1	282.9	282.7	282.5	282.2	281.8	281.4	281.0
137.5°	297.7	297.7	297.7	297.5	297.2	296.9	296.5	296.2
140°	306.6	306.7	306.9	306.7	306.4	306.0	305.6	305.2
142.5°	315.4	315.4	315.4	315.3	314.9	314.5	314.1	313.7
145°	327.8	327.8	327.9	327.8	327.4	327.0	326.6	326.2
147.5°	338.4	338.5	338.6	338.4	337.9	337.5	337.0	336.6
150°	345.2	345.4	345.4	345.3	344.8	344.3	343.7	343.2
152.5°	351.2	351.3	351.5	351.3	350.8	350.4	349.9	349.4
155°	359.5	359.6	359.9	359.7	359.2	358.7	358.2	357.7
157.5°	366.3	366.5	366.7	366.6	366.1	365.5	365.0	364.5
160°	370.6	370.8	371.0	371.0	370.4	369.9	369.4	368.9
162.5°	374.5	374.8	375.2	375.0	374.5	373.9	373.4	372.8
165°	379.4	379.8	380.3	380.2	379.7	379.1	378.6	378.1
167.5°	383.3	383.7	384.2	384.1	383.5	382.9	382.4	381.8
170°	385.1	385.7	386.2	386.2	385.6	385.1	384.4	383.8
172.5°	386.7	387.2	387.6	387.6	387.0	386.4	385.8	385.2
175°	388.3	388.9	389.4	389.4	388.7	388.2	387.6	387.0
177.5°	389.1	389.4	389.7	389.7	389.3	388.9	388.5	388.1
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7

(END OF REPORT)