

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: P333210-840

Luminaire Tested: **S125DIP-S850D365U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333210-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D365U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4642.0 lumens
Efficiency: N/A
Efficacy: 132.6 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-Direct

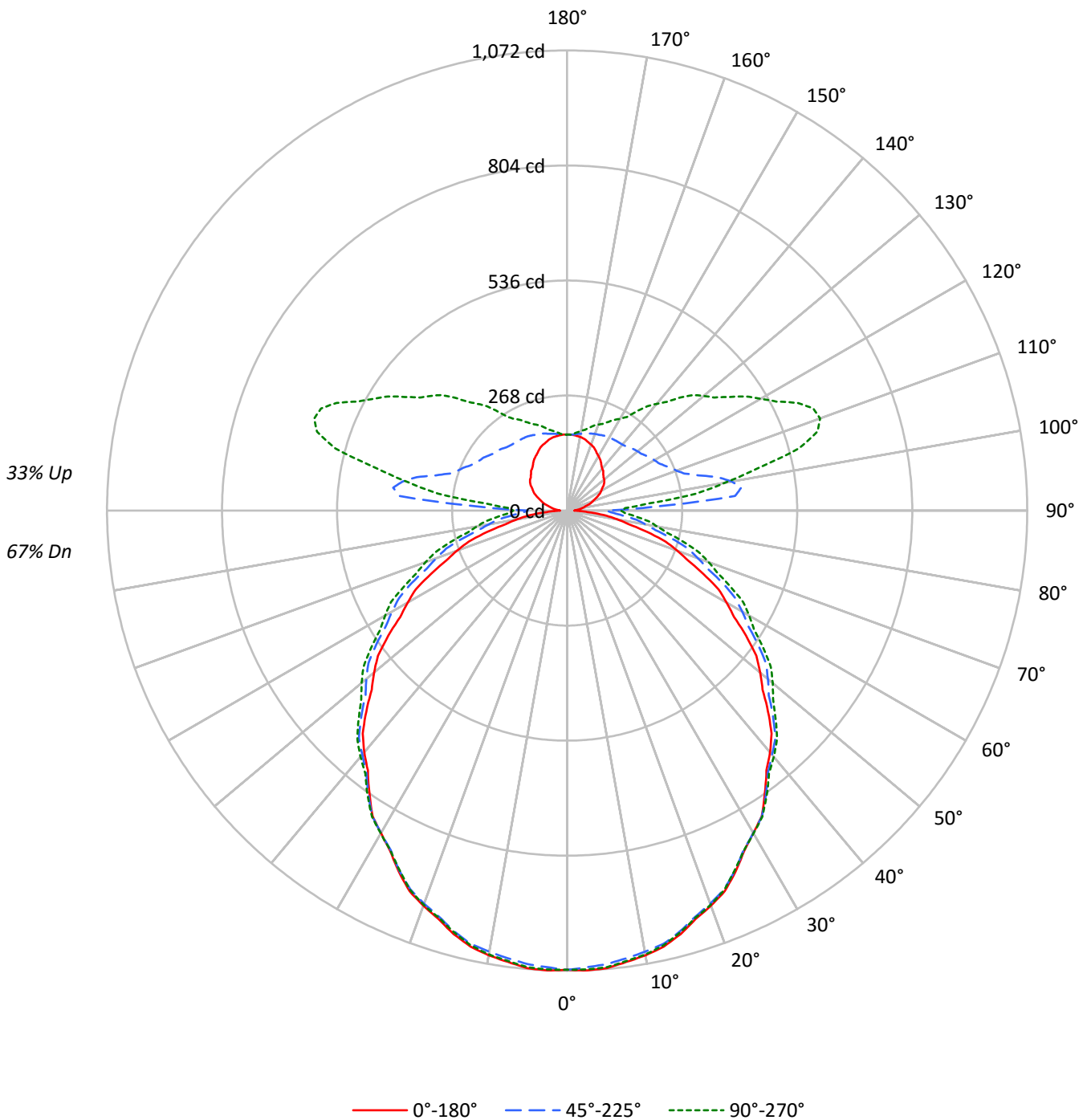
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	91	87	95	90	86	83	80	77	74	71	68	66	62	60	59	54
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	73	65	58	78	69	62	56	61	55	51	54	50	46	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	49	42	65	54	46	40	48	42	37	43	38	34	38	34	30	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	29	34	30	27	24
7	59	46	38	32	56	44	36	31	40	33	28	35	30	26	31	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	32	27	23	29	24	21	19
9	51	39	31	25	48	37	29	24	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	20	28	22	19	25	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6909	6909	6909
5°	6923	6782	6803
10°	6874	6661	6651
15°	6793	6515	6456
20°	6682	6336	6262
25°	6551	6144	6023
30°	6392	5934	5806
35°	6242	5740	5607
40°	6092	5535	5406
45°	5921	5360	5229
50°	5758	5171	5072
55°	5562	4992	4887
60°	5348	4788	4699
65°	5124	4575	4486
70°	4871	4283	4269
75°	4469	4001	4001
80°	3945	3661	3710
85°	3453	3433	3619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	2.2
10°-20°	287.2	6.2
20°-30°	427.1	9.2
30°-40°	505.9	10.9
40°-50°	523.0	11.3
50°-60°	481.8	10.4
60°-70°	389.5	8.4
70°-80°	260.8	5.6
80°-90°	136.3	2.9
90°-100°	204.2	4.4
100°-110°	331.8	7.1
110°-120°	296.4	6.4
120°-130°	231.1	5.0
130°-140°	177.7	3.8
140°-150°	128.9	2.8
150°-160°	89.4	1.9
160°-170°	52.7	1.1
170°-180°	17.1	0.4
0°-30°	815.4	17.6
0°-40°	1321.2	28.5
0°-60°	2326.0	50.1
0°-90°	3112.6	67.1
90°-120°	832.4	17.9
90°-150°	1370.1	29.5
90°-180°	1529.0	32.9
0°-180°	4642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1070	1067	1060	1068	1068	101
15°	1022	1022	1015	1021	1017	288
25°	928	931	925	929	924	427
35°	803	810	808	811	811	503
45°	662	673	678	686	687	511
55°	509	526	542	553	558	455
65°	350	374	400	415	420	347
75°	193	221	254	274	280	205
85°	58	92	129	151	160	61
90°	17	54	92	117	126	12
95°	25	76	393	242	191	23
105°	50	83	316	587	559	53
115°	78	102	249	507	593	77
125°	104	121	223	396	461	92
135°	119	142	206	320	372	93
145°	137	156	198	252	281	86
155°	156	167	194	219	228	72
165°	170	175	186	197	200	48
175°	177	177	178	180	180	17
180°	177	177	177	177	177	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1072.3	1072.0	1071.6	1071.2	1070.8	1070.0	1068.6	1067.3	1066.0	1064.7	1066.0
5°	1069.8	1069.3	1068.8	1068.3	1067.9	1066.8	1065.2	1063.6	1062.0	1060.4	1062.2
7.5°	1060.4	1060.2	1060.0	1059.8	1059.6	1058.6	1057.0	1055.3	1053.6	1052.0	1053.6
10°	1052.0	1052.0	1052.0	1052.0	1052.0	1051.1	1049.1	1047.3	1045.4	1043.6	1045.2
12.5°	1040.2	1040.4	1040.6	1040.8	1041.0	1040.3	1038.8	1037.3	1035.8	1034.3	1035.6
15°	1021.6	1021.8	1022.0	1022.2	1022.5	1021.8	1020.2	1018.5	1016.8	1015.2	1016.6
17.5°	997.2	997.6	998.2	998.6	999.1	998.5	996.8	995.2	993.6	992.0	993.0
20°	979.6	980.1	980.5	981.0	981.5	980.9	979.3	977.7	975.9	974.3	975.0
22.5°	959.5	960.3	961.1	962.0	962.8	962.3	960.5	958.7	956.8	955.0	955.9
25°	928.2	928.9	929.6	930.3	931.0	930.6	929.3	927.9	926.5	925.0	925.9
27.5°	893.3	894.4	895.4	896.5	897.5	897.2	895.6	894.0	892.4	890.9	891.5
30°	867.4	868.8	870.2	871.5	872.9	872.9	871.5	870.2	868.8	867.4	867.9
32.5°	843.8	845.1	846.3	847.5	848.7	848.8	847.8	846.8	845.8	844.8	845.2
35°	803.3	805.1	806.7	808.3	809.9	810.4	809.7	809.0	808.3	807.6	808.3
37.5°	762.9	764.4	765.9	767.4	768.9	769.5	769.2	769.0	768.8	768.6	769.5
40°	735.2	737.1	738.9	740.8	742.7	743.5	743.3	743.1	742.8	742.6	743.5
42.5°	705.0	707.4	709.8	712.3	714.7	716.2	716.7	717.2	717.7	718.2	719.3
45°	661.8	664.4	666.9	669.4	672.1	673.9	675.1	676.2	677.4	678.5	680.2
47.5°	617.5	620.0	622.3	624.7	627.0	629.2	631.3	633.3	635.2	637.2	639.6
50°	587.3	589.9	592.5	595.0	597.5	600.2	602.7	605.3	607.8	610.4	613.0
52.5°	555.4	558.6	561.7	564.8	567.9	571.1	574.2	577.3	580.5	583.6	586.3
55°	508.7	512.4	516.1	519.9	523.6	527.4	531.1	534.8	538.5	542.2	544.8
57.5°	460.8	465.3	469.8	474.2	478.8	483.1	487.5	491.7	495.9	500.3	503.2
60°	429.0	433.6	438.3	442.9	447.6	452.3	457.0	461.6	466.3	470.9	474.4
62.5°	397.9	402.5	407.3	411.9	416.6	421.4	426.5	431.5	436.5	441.5	445.5
65°	350.3	355.7	361.0	366.4	371.7	377.2	382.8	388.4	394.0	399.6	403.1
67.5°	305.4	310.6	315.8	320.9	326.1	331.5	337.2	343.0	348.6	354.3	358.5
70°	272.7	278.0	283.4	288.8	294.2	299.8	305.9	311.9	318.0	324.1	328.5
72.5°	240.9	246.3	251.9	257.4	263.0	269.0	275.7	282.4	288.9	295.6	300.3
75°	193.0	199.0	205.1	211.2	217.2	224.0	231.5	238.9	246.3	253.8	258.4
77.5°	147.0	154.0	161.1	168.0	175.0	182.1	189.2	196.4	203.6	210.9	215.9
80°	118.6	125.5	132.5	139.5	146.5	153.9	161.9	169.8	177.7	185.6	190.8
82.5°	92.5	99.9	107.2	114.6	122.0	129.7	137.8	145.9	154.0	162.2	167.1
85°	57.7	65.3	73.1	80.8	88.5	96.3	104.5	112.7	120.9	129.0	134.1
87.5°	32.8	40.3	48.0	55.5	63.1	71.0	79.0	87.1	95.0	103.1	108.6
90°	17.2	24.9	33.1	41.3	49.5	57.9	66.1	74.8	83.1	91.7	97.5
92.5°	19.5	27.3	37.2	48.5	61.5	79.5	107.0	147.8	191.5	197.7	181.0
95°	25.4	31.8	40.7	50.7	64.6	87.7	133.8	220.3	326.7	392.7	391.1
97.5°	31.9	37.8	45.2	54.6	67.2	85.2	118.2	183.4	294.1	409.0	467.8
100°	36.6	42.1	48.5	57.3	69.0	85.8	114.0	167.8	265.2	389.4	483.5
102.5°	41.7	46.7	52.3	61.0	71.8	88.1	113.7	160.0	243.3	358.9	468.0
105°	49.8	53.5	59.0	66.3	75.7	91.1	113.8	152.6	219.1	316.4	423.5
107.5°	57.7	61.5	66.4	72.5	81.6	95.5	117.4	151.4	206.7	286.4	379.3
110°	63.4	66.9	71.1	77.2	85.2	99.2	120.4	151.5	201.3	271.2	353.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	70.0	72.9	76.2	81.7	89.3	102.6	123.0	152.5	198.0	261.1	333.5
115°	78.4	80.7	83.4	88.3	95.2	108.1	127.3	154.1	194.4	248.6	310.2
117.5°	85.9	88.1	90.3	94.5	101.7	113.7	132.0	156.5	192.0	239.9	294.3
120°	91.6	93.4	95.5	99.5	106.2	118.2	136.0	158.4	191.4	234.9	284.9
122.5°	96.7	97.9	99.4	102.9	109.9	121.5	139.2	160.7	190.2	230.0	276.2
125°	104.1	104.6	106.1	109.2	115.7	127.1	143.6	163.6	188.9	223.3	264.1
127.5°	109.0	109.9	111.9	115.7	122.7	133.8	149.0	166.9	188.7	217.6	252.6
130°	112.7	113.5	116.1	120.6	127.8	138.7	153.0	169.8	189.1	214.5	245.6
132.5°	114.7	116.0	119.5	124.6	132.3	142.8	156.4	171.7	189.0	211.2	238.8
135°	119.2	120.4	124.4	129.9	137.1	147.4	160.2	173.6	188.4	206.1	229.4
137.5°	124.8	125.7	129.5	135.0	142.2	152.4	163.3	175.3	188.7	202.8	221.8
140°	127.3	128.5	132.7	138.5	145.2	155.0	165.6	176.5	188.1	200.6	217.4
142.5°	131.4	132.0	135.8	141.3	147.6	156.6	166.4	176.6	187.5	199.1	213.9
145°	137.3	137.8	141.2	145.9	152.2	160.3	169.6	178.4	188.0	198.4	210.4
147.5°	142.6	143.0	146.1	150.8	156.3	163.5	171.7	179.8	188.4	197.5	207.3
150°	146.3	147.0	149.6	154.2	159.2	165.2	173.1	180.6	188.4	196.6	205.2
152.5°	150.4	150.8	153.0	157.0	161.8	167.2	174.5	181.2	188.1	195.5	203.2
155°	155.6	155.6	157.7	161.3	164.9	169.9	175.9	181.7	187.3	193.5	199.9
157.5°	160.4	160.3	162.0	165.0	168.1	172.0	177.1	182.0	186.4	191.3	196.7
160°	163.5	163.1	164.5	167.0	169.9	173.1	177.7	182.0	185.6	189.9	194.2
162.5°	166.0	165.7	167.1	169.4	171.6	174.2	178.3	181.8	184.7	188.1	191.9
165°	169.9	169.2	170.3	172.0	173.5	175.6	178.4	181.3	183.5	185.6	188.4
167.5°	172.5	172.1	172.8	173.7	174.7	176.1	178.4	180.5	181.5	183.1	185.1
170°	174.2	173.8	174.2	174.9	175.6	176.6	178.4	179.9	180.6	181.7	183.1
172.5°	175.3	174.7	175.0	175.7	176.1	176.6	178.1	179.4	179.5	180.0	181.1
175°	176.6	175.9	176.3	176.6	176.6	176.6	177.7	178.4	178.1	178.1	178.4
177.5°	177.3	176.7	176.7	177.0	176.7	176.7	177.3	177.6	177.0	177.0	177.3
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1067.3	1068.6	1070.0	1070.6	1070.4	1070.2	1070.0	1069.8
5°	1064.1	1065.9	1067.8	1068.6	1068.3	1068.1	1067.9	1067.7
7.5°	1055.2	1056.8	1058.4	1059.1	1058.9	1058.7	1058.4	1058.2
10°	1046.8	1048.4	1050.1	1050.8	1050.6	1050.4	1050.1	1049.9
12.5°	1036.8	1038.1	1039.4	1039.7	1039.1	1038.4	1037.8	1037.2
15°	1018.0	1019.5	1020.9	1021.1	1020.2	1019.2	1018.2	1017.3
17.5°	994.1	995.2	996.2	996.5	995.9	995.4	994.8	994.3
20°	975.7	976.4	977.1	977.4	977.4	977.4	977.4	977.4
22.5°	956.8	957.7	958.6	958.8	958.2	957.7	957.0	956.5
25°	927.0	927.9	928.8	928.7	927.5	926.3	925.1	924.0
27.5°	892.1	892.8	893.4	893.6	893.1	892.7	892.3	891.9
30°	868.3	868.8	869.2	869.4	869.1	868.9	868.7	868.4
32.5°	845.7	846.1	846.6	846.7	846.5	846.3	846.0	845.8
35°	809.0	809.7	810.4	810.7	810.7	810.7	810.7	810.7
37.5°	770.4	771.3	772.2	772.7	772.6	772.5	772.4	772.3
40°	744.4	745.4	746.3	747.0	747.4	747.9	748.4	748.8
42.5°	720.4	721.5	722.7	723.3	723.4	723.5	723.6	723.7
45°	681.9	683.5	685.1	686.0	686.3	686.5	686.7	687.0
47.5°	642.0	644.4	646.7	648.2	648.7	649.2	649.7	650.3
50°	615.5	618.1	620.7	622.3	623.0	623.7	624.4	625.1
52.5°	589.1	591.8	594.5	596.2	596.7	597.2	597.7	598.2
55°	547.3	550.0	552.5	554.2	555.1	556.1	557.0	558.0
57.5°	506.1	509.1	512.0	513.8	514.5	515.2	515.9	516.6
60°	477.9	481.4	484.9	487.0	487.7	488.4	489.1	489.8
62.5°	449.3	453.1	457.1	459.4	460.3	461.2	462.0	462.9
65°	406.6	410.1	413.5	415.8	416.8	417.7	418.6	419.5
67.5°	362.7	367.0	371.2	374.0	375.2	376.4	377.6	378.8
70°	333.0	337.4	341.8	344.7	346.1	347.5	348.9	350.3
72.5°	305.2	309.9	314.8	317.7	318.7	319.7	320.7	321.7
75°	263.2	267.8	272.5	275.4	276.5	277.7	278.8	280.0
77.5°	221.1	226.2	231.4	234.4	235.3	236.2	237.1	238.1
80°	195.9	201.1	206.1	209.1	210.2	211.1	212.0	212.9
82.5°	172.0	176.9	181.9	185.2	186.9	188.5	190.3	192.0
85°	139.3	144.4	149.6	153.0	154.9	156.7	158.6	160.5
87.5°	113.9	119.4	124.8	128.5	130.1	131.7	133.4	135.0
90°	103.1	108.9	114.6	118.8	120.4	122.1	124.0	125.6
92.5°	156.2	144.1	137.8	136.0	133.1	133.8	135.0	136.0
95°	343.5	294.3	255.5	228.9	205.2	196.1	194.9	190.9
97.5°	463.3	430.1	392.2	353.9	333.4	315.0	306.2	303.2
100°	515.9	503.3	471.4	437.5	414.2	389.9	378.1	373.9
102.5°	531.3	546.7	533.8	511.8	486.9	470.0	457.1	454.1
105°	513.8	567.4	587.7	587.0	577.2	567.0	561.6	558.9
107.5°	468.5	538.4	583.3	604.9	612.2	613.5	612.6	611.2
110°	435.0	507.3	562.0	595.4	613.1	621.5	625.6	627.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	407.9	476.6	531.7	570.4	595.5	608.7	616.6	620.8
115°	373.3	432.8	485.9	527.7	556.9	575.4	586.8	592.9
117.5°	348.9	400.5	446.6	485.0	514.5	533.8	545.2	549.7
120°	335.3	382.0	425.3	459.3	487.2	505.6	516.7	521.0
122.5°	323.8	367.3	406.0	438.0	462.9	480.1	491.1	495.0
125°	307.5	347.6	382.3	410.5	431.7	447.5	456.5	461.2
127.5°	290.6	328.1	360.5	387.0	406.5	420.7	429.5	432.4
130°	280.6	315.3	346.4	371.8	390.8	403.7	412.0	415.4
132.5°	270.1	302.9	331.3	355.8	374.7	387.4	395.0	398.3
135°	255.4	283.0	308.9	331.3	348.2	361.1	368.7	372.0
137.5°	243.2	265.8	287.6	306.7	321.6	333.4	340.2	343.5
140°	236.0	255.3	274.3	291.0	305.2	315.4	321.6	324.4
142.5°	229.8	246.3	262.6	277.1	289.2	298.0	304.1	306.5
145°	222.6	234.8	247.0	257.7	267.2	274.2	279.0	281.3
147.5°	216.4	225.7	234.6	242.3	249.5	254.8	257.5	258.5
150°	213.1	221.0	227.7	234.3	239.8	244.4	246.0	246.6
152.5°	210.3	217.2	223.4	228.4	233.0	236.4	237.9	238.3
155°	205.9	211.7	216.6	220.6	224.1	226.6	227.7	228.0
157.5°	201.7	206.3	210.3	213.3	216.1	218.1	219.1	219.0
160°	198.8	202.4	205.9	208.4	211.0	212.7	213.4	213.1
162.5°	195.6	198.9	202.0	204.2	206.1	207.5	207.7	207.6
165°	191.3	193.8	195.9	197.7	199.1	199.9	199.9	199.9
167.5°	187.1	188.8	190.5	191.8	192.5	193.1	192.8	192.7
170°	184.9	185.9	187.0	187.7	188.4	188.8	188.8	188.4
172.5°	182.3	183.4	184.2	184.6	184.7	185.4	184.8	184.4
175°	179.6	179.6	180.3	180.3	180.3	180.6	179.9	179.6
177.5°	177.6	177.8	177.8	177.8	177.6	177.8	177.0	177.0
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0

(END OF REPORT)