

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: P331406-940

Luminaire Tested: **S122DIP-S865D925U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331406-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S865D925U940-4F0-1E-UDD-D1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 925 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6067.6 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: General Diffuse

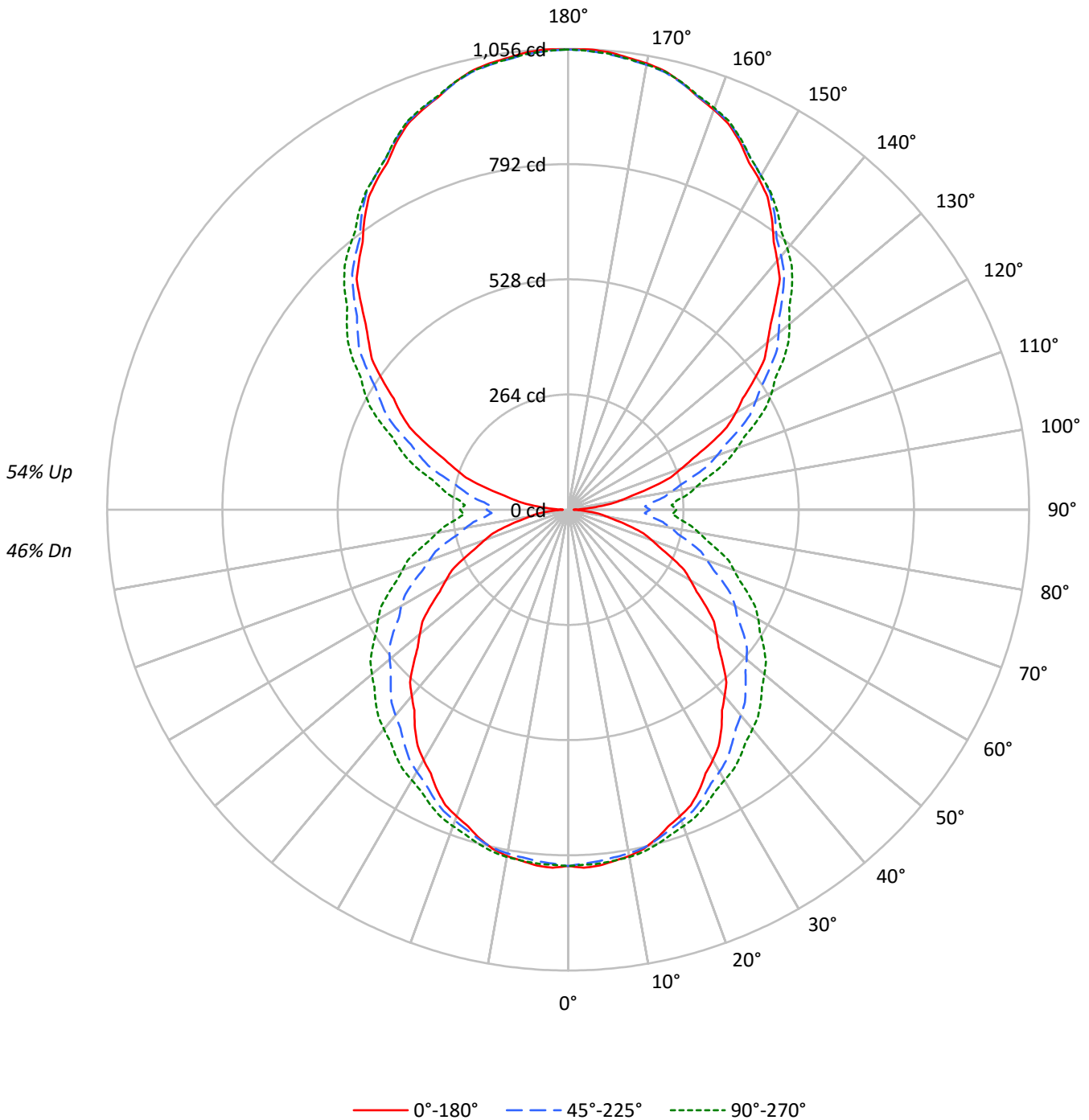
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	95	91	86	82	87	83	79	76	69	66	64	56	54	52	44	43	41	36
2	86	78	72	66	79	72	66	61	60	55	51	48	45	42	38	36	34	29
3	78	68	61	54	71	63	56	50	52	47	43	42	38	35	33	30	28	24
4	71	60	52	45	65	55	48	42	46	40	36	37	33	30	29	26	24	20
5	65	53	45	39	60	49	42	36	41	35	31	33	29	26	26	23	21	17
6	60	48	39	33	55	44	36	31	37	31	27	30	26	22	24	20	18	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	22	18	16	13
8	51	39	31	25	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13183	13183	13183
5°	13247	12690	12640
10°	13163	12315	12177
15°	12982	11917	11686
20°	12752	11492	11215
25°	12527	11082	10786
30°	12206	10661	10357
35°	11884	10253	10054
40°	11544	9907	9750
45°	11222	9597	9493
50°	10875	9317	9238
55°	10513	9015	8977
60°	10070	8702	8703
65°	9607	8336	8376
70°	9087	7940	8025
75°	8422	7553	7701
80°	7376	7159	7372
85°	6374	6817	7118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	1.3
10°-20°	221.8	3.7
20°-30°	336.2	5.5
30°-40°	409.5	6.7
40°-50°	440.5	7.3
50°-60°	427.8	7.1
60°-70°	373.5	6.2
70°-80°	287.6	4.7
80°-90°	197.2	3.3
90°-100°	199.8	3.3
100°-110°	304.6	5.0
110°-120°	418.9	6.9
120°-130°	502.3	8.3
130°-140°	538.6	8.9
140°-150°	516.0	8.5
150°-160°	430.6	7.1
160°-170°	285.6	4.7
170°-180°	99.8	1.6
0°-30°	635.4	10.5
0°-40°	1044.8	17.2
0°-60°	1913.1	31.5
0°-90°	2771.4	45.7
90°-120°	923.3	15.2
90°-150°	2480.2	40.9
90°-180°	3296.0	54.3
0°-180°	6067.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	819	815	808	815	814	78
15°	781	783	783	793	793	220
25°	710	718	729	742	747	326
35°	612	632	654	679	689	382
45°	502	534	575	610	624	387
55°	385	428	489	530	547	344
65°	263	321	390	437	454	261
75°	146	212	288	336	354	154
85°	43	116	192	240	258	46
90°	13	93	187	231	248	10
95°	56	121	193	236	250	61
105°	197	236	298	339	354	209
115°	361	381	430	464	476	356
125°	520	530	564	592	602	465
135°	671	681	695	718	725	519
145°	813	820	825	833	835	508
155°	930	933	935	939	937	428
165°	1012	1011	1011	1017	1013	285
175°	1053	1050	1048	1054	1049	100
180°	1054	1054	1054	1054	1054	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5
2.5°	821.2	820.6	819.9	819.3	818.7	817.6	816.1	814.7	813.2	811.7	812.8
5°	818.8	818.1	817.3	816.5	815.6	814.5	812.9	811.3	809.8	808.2	809.8
7.5°	811.5	810.9	810.4	809.9	809.4	808.5	807.3	806.1	804.9	803.7	805.6
10°	805.8	805.3	804.8	804.2	803.7	803.1	802.3	801.5	800.7	799.9	802.0
12.5°	796.3	796.5	796.6	796.7	796.7	796.5	795.9	795.3	794.8	794.2	796.3
15°	781.0	781.5	782.0	782.6	783.0	783.3	783.3	783.3	783.3	783.3	785.7
17.5°	761.1	762.1	763.3	764.4	765.4	766.4	767.3	768.1	769.0	769.8	772.3
20°	747.8	749.1	750.5	751.8	753.0	754.3	755.3	756.3	757.4	758.5	761.3
22.5°	733.6	735.1	736.6	738.2	739.7	741.2	742.7	744.1	745.6	747.1	750.0
25°	710.0	711.8	713.6	715.5	717.3	719.4	721.8	724.2	726.5	728.9	732.0
27.5°	681.5	684.6	687.5	690.5	693.6	696.4	699.2	702.0	704.8	707.6	711.6
30°	662.6	666.0	669.5	672.9	676.3	679.8	683.1	686.5	690.0	693.4	697.6
32.5°	641.8	645.6	649.4	653.4	657.2	661.1	665.1	669.2	673.2	677.3	682.2
35°	611.7	616.2	620.7	625.2	629.6	634.4	639.4	644.4	649.3	654.3	660.1
37.5°	579.1	584.2	589.4	594.5	599.7	605.5	612.0	618.5	624.9	631.4	637.8
40°	557.3	563.1	568.9	574.7	580.4	586.9	594.0	601.1	608.2	615.3	622.1
42.5°	536.5	542.2	548.0	553.8	559.6	566.6	574.7	582.9	591.0	599.2	606.6
45°	501.7	508.8	515.9	523.0	530.1	538.2	547.4	556.7	565.9	575.1	583.2
47.5°	467.3	475.1	482.9	490.6	498.3	507.6	518.4	529.1	539.9	550.7	559.2
50°	443.7	451.8	460.0	468.1	476.4	486.3	498.1	510.0	521.8	533.7	542.6
52.5°	421.0	429.5	438.2	446.7	455.3	465.8	478.3	490.7	503.2	515.7	524.8
55°	384.6	394.0	403.5	413.0	422.4	434.0	447.6	461.4	475.0	488.7	498.1
57.5°	348.6	359.3	370.0	380.6	391.3	403.6	417.5	431.5	445.4	459.3	469.6
60°	323.1	334.3	345.6	357.0	368.3	381.4	396.4	411.3	426.3	441.4	451.4
62.5°	300.3	312.0	323.8	335.5	347.2	360.6	375.6	390.6	405.6	420.5	431.1
65°	262.7	275.5	288.5	301.3	314.2	328.4	343.9	359.4	375.0	390.5	401.3
67.5°	228.1	241.6	255.0	268.5	282.0	296.7	312.5	328.4	344.3	360.2	371.0
70°	203.5	217.2	230.9	244.5	258.2	273.2	289.5	305.8	322.1	338.4	349.7
72.5°	180.8	194.9	209.0	223.1	237.2	252.4	269.0	285.5	302.0	318.5	329.7
75°	145.5	160.2	175.0	189.8	204.5	220.3	237.0	253.9	270.7	287.5	298.8
77.5°	111.5	126.9	142.3	157.7	173.1	189.3	206.4	223.6	240.6	257.7	268.9
80°	88.7	104.8	120.8	136.9	152.9	169.4	186.5	203.7	220.7	237.8	248.9
82.5°	69.8	85.6	101.5	117.3	133.1	149.7	167.0	184.3	201.6	218.9	230.0
85°	42.6	58.9	75.2	91.5	107.8	124.4	141.2	158.0	174.9	191.7	202.8
87.5°	23.4	39.5	55.6	71.8	87.9	104.9	122.6	140.3	158.0	175.7	186.3
90°	12.8	30.3	48.0	65.6	83.2	102.6	123.8	145.0	166.1	187.3	197.4
92.5°	26.8	42.6	58.6	74.5	90.5	107.1	124.3	141.5	158.7	175.9	186.4
95°	55.7	70.1	84.4	98.7	113.1	128.3	144.5	160.7	176.8	193.1	203.0
97.5°	92.8	105.6	118.2	131.0	143.7	158.1	174.0	189.8	205.7	221.7	231.4
100°	121.3	132.6	143.9	155.2	166.6	179.9	195.2	210.5	225.8	241.1	250.8
102.5°	150.3	160.4	170.6	180.7	190.8	203.5	218.6	233.5	248.6	263.7	273.4
105°	197.2	205.5	213.7	221.9	230.2	241.3	255.3	269.4	283.5	297.6	307.1
107.5°	245.8	252.7	259.8	266.7	273.7	283.7	296.8	309.9	323.0	336.1	345.1
110°	276.2	282.6	289.0	295.5	301.9	311.6	324.5	337.3	350.3	363.1	371.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	310.3	315.9	321.6	327.2	332.7	341.6	353.7	365.8	377.9	389.9	397.9
115°	360.7	364.8	368.8	372.9	377.0	384.8	396.2	407.6	419.1	430.5	438.2
117.5°	409.7	413.1	416.6	420.1	423.6	430.3	440.1	449.9	459.8	469.6	476.9
120°	443.2	445.8	448.4	451.0	453.7	459.5	468.4	477.3	486.2	495.3	502.6
122.5°	473.8	476.1	478.4	480.7	483.0	488.6	497.4	506.1	515.0	523.7	530.4
125°	520.3	522.1	523.9	525.6	527.4	532.2	540.0	547.9	555.6	563.5	570.0
127.5°	566.8	568.7	570.7	572.7	574.7	578.7	584.8	590.8	596.9	603.0	608.9
130°	595.9	598.2	600.6	602.9	605.1	608.9	614.0	619.1	624.3	629.4	635.3
132.5°	628.7	630.5	632.3	634.2	636.0	639.1	643.5	647.7	652.1	656.5	661.6
135°	671.3	673.4	675.6	677.8	679.9	682.6	685.6	688.6	691.6	694.6	700.0
137.5°	717.4	719.1	720.9	722.6	724.2	725.9	727.6	729.3	731.0	732.6	737.4
140°	745.1	746.6	748.1	749.7	751.2	752.7	754.2	755.7	757.2	758.8	762.9
142.5°	773.6	775.2	776.7	778.2	779.7	780.8	781.6	782.4	783.2	783.9	787.5
145°	813.3	814.8	816.1	817.5	818.9	820.2	821.4	822.5	823.8	824.9	826.7
147.5°	849.8	851.5	853.2	854.8	856.5	857.7	858.5	859.3	860.1	860.9	861.5
150°	874.8	875.9	877.1	878.3	879.5	880.5	881.3	882.1	882.9	883.7	884.2
152.5°	896.8	898.0	899.2	900.4	901.6	902.7	903.6	904.6	905.4	906.4	907.2
155°	930.0	930.5	931.1	931.7	932.3	932.9	933.5	934.1	934.7	935.2	936.3
157.5°	958.2	958.6	959.0	959.4	959.8	960.2	960.6	960.9	961.3	961.6	963.0
160°	975.4	975.7	976.1	976.5	976.9	977.2	977.4	977.6	977.8	977.9	979.2
162.5°	991.0	991.0	991.1	991.2	991.3	991.4	991.7	991.8	992.0	992.2	993.5
165°	1011.8	1011.6	1011.4	1011.2	1011.0	1010.9	1010.9	1010.9	1010.9	1010.9	1012.3
167.5°	1029.2	1028.7	1028.1	1027.4	1026.9	1026.5	1026.5	1026.4	1026.4	1026.4	1027.8
170°	1038.5	1037.9	1037.3	1036.7	1036.1	1035.7	1035.5	1035.4	1035.1	1034.9	1036.3
172.5°	1044.9	1044.3	1043.7	1043.1	1042.5	1042.1	1042.0	1041.7	1041.5	1041.3	1042.8
175°	1052.8	1052.1	1051.5	1051.0	1050.3	1049.9	1049.5	1049.1	1048.7	1048.3	1049.6
177.5°	1056.0	1055.4	1055.0	1054.5	1054.0	1053.6	1053.3	1053.0	1052.7	1052.4	1053.3
180°	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5
2.5°	813.8	814.8	815.9	816.3	815.8	815.4	814.9	814.6
5°	811.3	812.9	814.5	815.1	814.8	814.6	814.3	814.0
7.5°	807.4	809.3	811.3	812.1	811.8	811.5	811.3	811.0
10°	804.1	806.2	808.3	809.2	809.0	808.7	808.4	808.2
12.5°	798.4	800.5	802.6	803.5	803.3	803.0	802.7	802.5
15°	788.0	790.4	792.8	793.8	793.5	793.3	793.0	792.8
17.5°	774.8	777.2	779.7	781.0	781.0	781.0	781.0	781.0
20°	764.3	767.1	770.0	771.5	771.5	771.5	771.5	771.5
22.5°	752.9	755.8	758.7	760.4	760.7	761.2	761.6	762.1
25°	735.2	738.3	741.5	743.5	744.2	745.0	745.8	746.6
27.5°	715.6	719.6	723.5	725.9	726.5	727.0	727.6	728.2
30°	701.8	706.0	710.2	712.7	713.5	714.3	715.1	715.9
32.5°	687.0	691.8	696.6	699.8	701.2	702.6	704.0	705.4
35°	665.9	671.7	677.5	681.3	683.1	685.0	686.8	688.7
37.5°	644.2	650.6	657.0	661.2	663.2	665.1	667.1	669.1
40°	628.9	635.8	642.7	647.2	649.6	651.9	654.3	656.7
42.5°	614.1	621.6	629.1	634.0	636.3	638.7	641.1	643.5
45°	591.4	599.5	607.7	613.1	615.7	618.3	621.0	623.6
47.5°	567.8	576.2	584.8	590.5	593.3	596.3	599.1	602.1
50°	551.5	560.4	569.4	575.3	578.2	581.1	584.0	586.9
52.5°	534.0	543.1	552.2	558.4	561.5	564.6	567.7	570.8
55°	507.7	517.1	526.6	533.0	536.4	539.8	543.2	546.6
57.5°	479.7	489.9	500.2	507.0	510.4	513.9	517.4	520.8
60°	461.4	471.4	481.3	488.1	491.9	495.5	499.2	502.9
62.5°	441.8	452.4	463.0	470.1	473.5	477.0	480.5	483.9
65°	412.1	422.8	433.6	440.7	444.1	447.5	450.9	454.3
67.5°	381.9	392.8	403.8	411.0	414.6	418.1	421.7	425.3
70°	361.1	372.3	383.6	390.8	394.0	397.2	400.4	403.5
72.5°	340.7	351.8	362.9	370.3	374.2	377.9	381.7	385.5
75°	310.1	321.5	332.8	340.1	343.6	347.0	350.4	353.8
77.5°	280.3	291.5	302.7	310.2	313.9	317.5	321.3	324.9
80°	259.9	271.0	282.0	289.4	293.0	296.8	300.4	304.1
82.5°	241.0	252.0	263.1	270.4	273.8	277.2	280.7	284.2
85°	213.7	224.8	235.9	243.3	246.9	250.6	254.2	258.0
87.5°	197.0	207.6	218.3	225.3	228.7	232.1	235.5	238.9
90°	207.6	217.7	227.8	234.5	237.9	241.3	244.6	248.0
92.5°	196.7	207.1	217.5	224.3	227.5	230.7	233.9	237.1
95°	213.0	223.0	233.0	239.3	242.1	244.9	247.6	250.4
97.5°	241.1	250.8	260.6	267.0	270.0	273.1	276.2	279.2
100°	260.6	270.3	280.1	286.2	288.9	291.7	294.4	297.0
102.5°	283.0	292.7	302.4	308.6	311.3	314.0	316.6	319.3
105°	316.7	326.4	335.9	342.1	345.1	347.9	350.9	353.7
107.5°	354.0	363.0	372.0	377.6	379.5	381.5	383.4	385.5
110°	380.0	388.3	396.8	402.2	404.5	406.7	409.0	411.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	405.8	413.8	421.7	427.0	429.4	431.9	434.3	436.8
115°	445.9	453.6	461.3	466.3	468.6	470.8	473.1	475.5
117.5°	484.2	491.5	498.8	503.5	505.6	507.7	509.8	511.8
120°	510.0	517.3	524.7	529.5	531.8	534.1	536.4	538.7
122.5°	537.1	543.8	550.5	554.7	556.8	558.8	560.9	562.9
125°	576.5	583.0	589.5	593.9	596.0	598.2	600.4	602.5
127.5°	614.7	620.5	626.2	630.0	631.7	633.4	635.1	636.7
130°	641.2	647.1	653.0	656.7	658.0	659.2	660.6	661.9
132.5°	666.9	672.2	677.3	680.7	682.2	683.7	685.1	686.6
135°	705.3	710.6	716.0	719.3	720.9	722.4	723.9	725.4
137.5°	742.0	746.7	751.4	754.2	755.2	756.2	757.2	758.2
140°	767.1	771.4	775.6	778.1	778.9	779.7	780.4	781.2
142.5°	790.9	794.5	798.0	800.0	800.7	801.2	801.8	802.4
145°	828.5	830.3	832.1	833.2	833.7	834.2	834.7	835.3
147.5°	862.2	862.8	863.4	863.7	863.6	863.4	863.4	863.3
150°	884.8	885.5	886.0	886.0	885.5	884.8	884.2	883.7
152.5°	907.9	908.7	909.5	909.5	908.7	907.9	907.2	906.4
155°	937.3	938.3	939.2	939.4	938.8	938.3	937.6	937.0
157.5°	964.3	965.6	967.0	967.1	966.3	965.3	964.3	963.4
160°	980.3	981.5	982.8	982.9	982.1	981.3	980.5	979.7
162.5°	994.9	996.2	997.6	997.8	996.8	995.9	995.0	994.0
165°	1013.7	1015.0	1016.5	1016.6	1015.7	1014.7	1013.7	1012.7
167.5°	1029.1	1030.6	1031.9	1032.1	1031.1	1030.0	1029.0	1028.0
170°	1037.7	1039.1	1040.4	1040.5	1039.4	1038.2	1037.0	1035.8
172.5°	1044.1	1045.5	1046.9	1047.0	1045.8	1044.6	1043.4	1042.2
175°	1051.1	1052.4	1053.8	1053.9	1052.8	1051.5	1050.3	1049.2
177.5°	1054.3	1055.3	1056.1	1056.1	1055.3	1054.3	1053.3	1052.4
180°	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5	1054.5

(END OF REPORT)