

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: P332610-930

Luminaire Tested: **S124DIP-S795D1035U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332610-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S795D1035U930-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6009.1 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

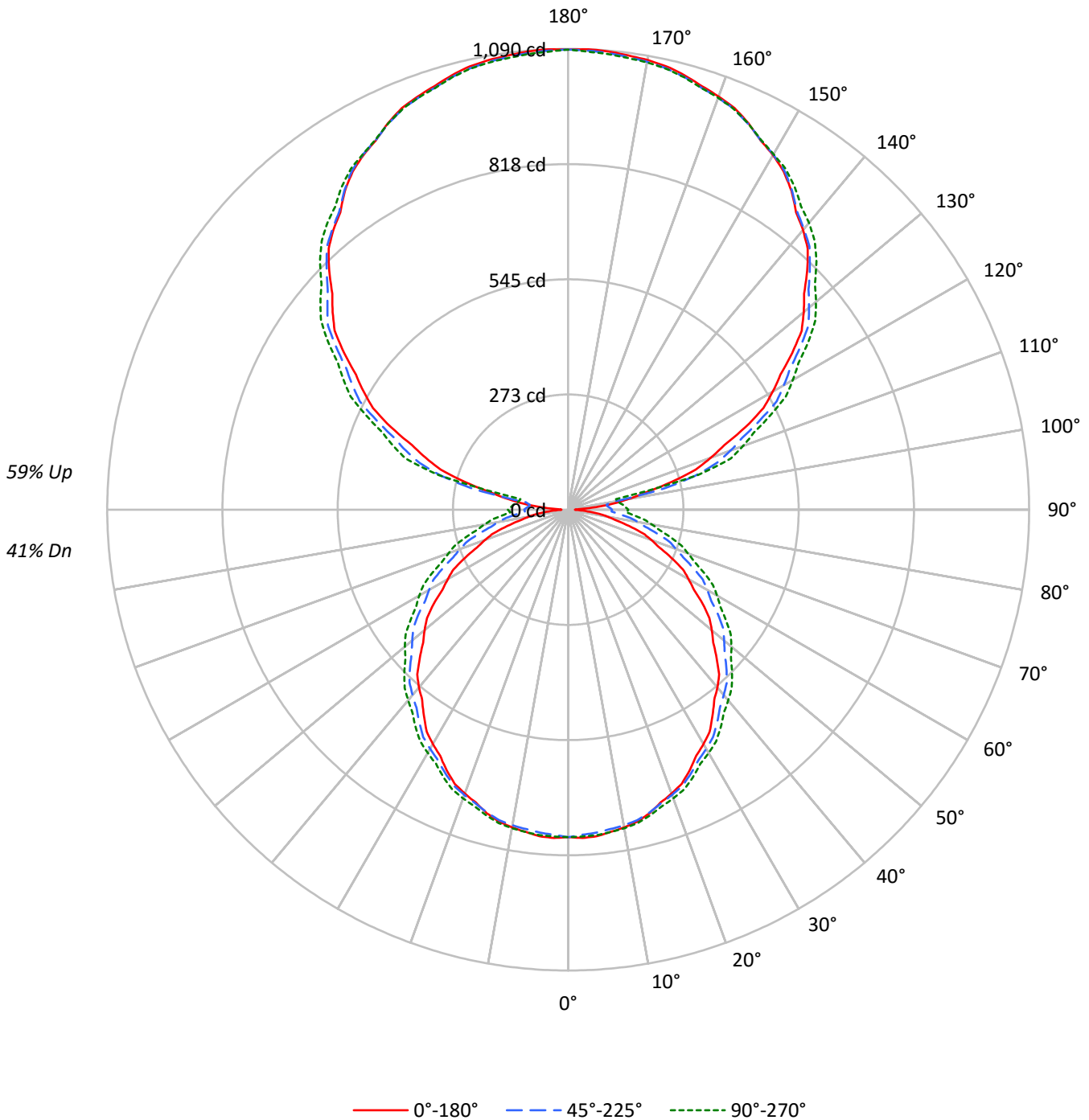
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	95	90	86	82	86	82	79	75	67	65	62	53	52	50	41	40	38	33
2	86	78	72	67	78	71	66	61	58	54	51	46	44	41	35	33	32	27
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	28	25	23	19
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20	16
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17	14
7	55	43	35	29	50	40	32	27	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13	11
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6252	6252	6252
5°	6271	6110	6128
10°	6233	6010	6006
15°	6177	5894	5862
20°	6093	5766	5723
25°	5998	5624	5569
30°	5895	5481	5411
35°	5779	5336	5274
40°	5685	5196	5129
45°	5547	5069	5005
50°	5430	4922	4876
55°	5310	4783	4722
60°	5121	4605	4583
65°	4915	4414	4411
70°	4666	4197	4210
75°	4318	3960	4029
80°	3929	3731	3851
85°	3441	3526	3748



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.2
10°-20°	210.1	3.5
20°-30°	317.7	5.3
30°-40°	384.4	6.4
40°-50°	406.4	6.8
50°-60°	382.5	6.4
60°-70°	317.3	5.3
70°-80°	222.9	3.7
80°-90°	129.2	2.1
90°-100°	112.0	1.9
100°-110°	292.7	4.9
110°-120°	491.1	8.2
120°-130°	597.2	9.9
130°-140°	625.6	10.4
140°-150°	578.4	9.6
150°-160°	465.0	7.7
160°-170°	299.9	5.0
170°-180°	103.4	1.7
0°-30°	601.2	10.0
0°-40°	985.6	16.4
0°-60°	1774.4	29.5
0°-90°	2443.8	40.7
90°-120°	895.8	14.9
90°-150°	2697.1	44.9
90°-180°	3565.0	59.3
0°-180°	6009.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	775	772	767	773	773	74
15°	743	744	741	749	748	209
25°	680	685	688	697	698	313
35°	595	605	614	626	629	372
45°	496	513	529	543	548	383
55°	388	407	433	449	455	346
65°	269	297	326	347	355	266
75°	149	182	218	241	250	159
85°	46	83	121	146	156	49
90°	16	60	104	133	142	11
95°	56	59	93	121	130	66
105°	253	276	311	337	318	265
115°	463	474	500	520	527	455
125°	646	650	669	687	694	577
135°	799	799	808	823	830	616
145°	921	922	922	928	933	575
155°	1008	1009	1007	1010	1008	465
165°	1064	1060	1060	1065	1059	300
175°	1088	1084	1084	1090	1082	104
180°	1088	1088	1088	1088	1088	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5
2.5°	777.2	776.7	776.2	775.8	775.3	774.5	773.2	772.0	770.8	769.6	770.6
5°	775.3	774.7	774.1	773.6	773.0	772.0	770.6	769.3	767.9	766.6	768.2
7.5°	768.7	768.3	768.0	767.7	767.3	766.5	765.5	764.3	763.2	762.1	763.9
10°	763.1	763.0	762.8	762.5	762.4	761.8	760.8	759.9	758.9	757.9	759.7
12.5°	755.5	755.5	755.5	755.4	755.4	755.0	754.4	753.7	753.0	752.4	754.0
15°	743.2	743.4	743.6	743.8	744.0	743.8	743.2	742.7	742.0	741.4	743.2
17.5°	726.4	726.9	727.5	728.1	728.7	728.9	728.8	728.7	728.6	728.5	730.3
20°	714.6	715.2	715.8	716.3	716.9	717.3	717.5	717.6	717.9	718.0	720.0
22.5°	701.4	702.1	702.9	703.6	704.3	704.9	705.2	705.6	705.9	706.3	708.2
25°	679.9	681.0	682.2	683.4	684.5	685.4	686.0	686.6	687.1	687.7	689.8
27.5°	656.0	657.6	659.3	661.0	662.8	664.1	665.0	665.8	666.7	667.6	669.5
30°	640.0	641.6	643.1	644.7	646.2	647.6	649.0	650.3	651.7	653.0	655.1
32.5°	622.6	624.5	626.4	628.2	630.1	631.7	633.2	634.7	636.3	637.7	640.2
35°	594.9	597.2	599.6	601.9	604.1	606.3	608.2	610.2	612.0	614.0	616.7
37.5°	567.0	569.6	572.3	574.9	577.6	580.2	582.5	584.9	587.3	589.7	592.5
40°	548.9	551.5	553.9	556.4	559.0	561.6	564.3	567.0	569.6	572.3	575.3
42.5°	528.2	530.9	533.8	536.5	539.4	542.3	545.5	548.7	551.9	555.0	558.2
45°	496.0	499.7	503.4	507.0	510.7	514.4	518.0	521.7	525.3	529.0	532.3
47.5°	465.4	469.1	472.9	476.7	480.5	484.5	488.7	492.9	497.2	501.4	504.8
50°	443.1	447.4	451.6	455.8	460.1	464.3	468.6	472.8	477.0	481.3	485.2
52.5°	420.9	425.2	429.4	433.7	437.9	442.5	447.3	452.2	457.1	461.9	465.7
55°	388.5	392.6	396.6	400.6	404.7	409.6	415.4	421.2	427.0	432.8	436.6
57.5°	352.3	357.3	362.3	367.3	372.3	377.6	383.4	389.1	394.9	400.6	405.2
60°	328.6	333.7	338.7	343.7	348.7	354.4	360.8	367.1	373.5	379.8	384.3
62.5°	305.7	311.3	316.7	322.2	327.7	333.6	340.0	346.3	352.7	359.1	363.5
65°	268.8	275.0	281.2	287.3	293.5	299.9	306.4	313.0	319.5	326.0	330.8
67.5°	233.3	239.9	246.4	252.9	259.5	266.3	273.3	280.3	287.3	294.3	299.2
70°	209.0	215.6	222.1	228.7	235.2	242.1	249.5	256.8	264.1	271.4	276.6
72.5°	185.4	192.1	198.9	205.5	212.2	219.5	227.3	235.1	242.9	250.6	255.7
75°	149.2	156.3	163.4	170.6	177.7	185.3	193.4	201.5	209.6	217.7	223.1
77.5°	115.4	122.9	130.4	138.0	145.5	153.6	162.1	170.6	179.0	187.5	193.0
80°	94.5	102.2	109.9	117.6	125.4	133.5	141.9	150.4	158.9	167.4	173.2
82.5°	73.7	81.7	89.8	97.8	105.7	114.1	122.5	131.0	139.5	148.0	153.8
85°	46.0	54.1	62.1	70.3	78.4	86.7	95.4	104.0	112.8	121.4	127.2
87.5°	26.2	34.4	42.6	51.0	59.2	67.7	76.4	85.1	93.9	102.6	108.4
90°	16.3	26.0	35.7	45.4	55.1	64.8	74.5	84.3	94.0	103.8	110.5
92.5°	23.4	30.5	37.5	44.6	51.6	60.0	69.7	79.5	89.2	99.0	105.5
95°	56.0	56.3	56.4	56.7	56.9	61.0	69.1	77.2	85.3	93.4	99.6
97.5°	105.3	114.6	123.9	133.2	142.5	141.0	128.7	116.3	104.0	91.6	96.7
100°	143.0	151.3	159.6	167.8	176.1	171.5	154.0	136.6	119.2	101.7	103.9
102.5°	186.0	192.7	199.6	206.4	213.1	218.6	222.7	226.7	230.9	235.0	206.8
105°	252.8	257.7	262.7	267.6	272.6	279.0	287.1	295.1	303.1	311.2	317.6
107.5°	316.3	319.9	323.7	327.3	331.1	336.9	344.9	352.9	360.9	368.8	374.4
110°	358.6	361.7	365.0	368.3	371.5	377.1	384.9	392.7	400.6	408.4	413.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	399.5	402.9	406.3	409.6	412.9	418.2	425.1	432.0	439.0	445.9	450.1
115°	462.6	464.9	467.2	469.4	471.7	475.8	481.8	487.8	493.8	499.8	504.4
117.5°	520.2	522.0	523.7	525.5	527.3	531.2	537.4	543.5	549.7	555.8	559.7
120°	558.6	559.9	561.2	562.5	563.8	567.1	572.6	578.0	583.3	588.8	593.0
122.5°	595.1	595.6	596.1	596.7	597.3	600.3	605.8	611.4	616.9	622.4	626.5
125°	646.5	646.9	647.5	648.0	648.6	651.0	655.5	660.0	664.4	668.9	673.1
127.5°	695.8	695.8	695.7	695.7	695.7	698.0	702.5	707.0	711.6	716.1	719.4
130°	727.0	726.9	726.9	726.9	726.9	728.7	732.4	736.0	739.6	743.2	746.9
132.5°	756.3	756.4	756.5	756.7	756.8	758.5	761.6	764.8	767.9	771.0	774.5
135°	799.3	799.2	799.0	798.8	798.6	799.6	801.6	803.7	805.8	807.9	811.3
137.5°	838.2	838.1	838.0	837.9	837.8	838.5	839.9	841.3	842.8	844.2	847.4
140°	863.6	863.8	864.0	864.1	864.3	864.7	865.2	865.8	866.3	866.9	869.9
142.5°	885.7	886.3	887.0	887.5	888.2	888.5	888.7	888.8	888.8	888.9	891.5
145°	920.6	920.9	921.3	921.6	921.9	922.1	922.1	922.1	922.1	922.1	923.5
147.5°	948.4	949.3	950.1	950.9	951.7	952.0	951.8	951.6	951.5	951.3	951.5
150°	968.6	969.1	969.6	970.2	970.7	970.9	970.7	970.5	970.4	970.1	970.1
152.5°	984.8	985.4	985.9	986.4	987.0	987.1	986.8	986.4	986.1	985.8	986.1
155°	1008.4	1008.6	1008.8	1008.9	1009.1	1008.9	1008.4	1007.9	1007.3	1006.8	1007.5
157.5°	1028.4	1028.3	1028.2	1028.1	1028.0	1027.6	1027.0	1026.4	1025.8	1025.2	1026.1
160°	1040.2	1039.6	1039.1	1038.5	1038.0	1037.6	1037.5	1037.2	1037.1	1036.9	1038.0
162.5°	1050.6	1049.9	1049.2	1048.5	1047.8	1047.4	1047.2	1047.0	1046.8	1046.7	1047.7
165°	1063.7	1062.8	1061.9	1061.0	1060.1	1059.6	1059.6	1059.6	1059.6	1059.6	1061.1
167.5°	1074.2	1073.3	1072.3	1071.4	1070.4	1069.9	1069.8	1069.7	1069.6	1069.4	1071.1
170°	1080.0	1079.0	1077.8	1076.8	1075.7	1075.2	1075.4	1075.6	1075.8	1076.0	1077.4
172.5°	1083.9	1082.9	1081.7	1080.7	1079.6	1079.1	1079.3	1079.5	1079.7	1079.9	1081.3
175°	1088.2	1087.1	1086.0	1084.9	1083.9	1083.4	1083.5	1083.8	1083.9	1084.1	1085.7
177.5°	1090.1	1089.1	1088.1	1087.1	1086.1	1085.7	1086.0	1086.3	1086.5	1086.9	1088.0
180°	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5
2.5°	771.7	772.8	773.9	774.4	774.2	774.0	773.9	773.7
5°	769.7	771.3	772.7	773.5	773.2	773.1	772.9	772.7
7.5°	765.6	767.3	769.1	769.8	769.6	769.4	769.2	769.1
10°	761.4	763.1	764.9	765.6	765.5	765.2	765.1	764.9
12.5°	755.5	757.2	758.7	759.5	759.5	759.4	759.4	759.3
15°	744.9	746.7	748.4	749.2	749.0	748.8	748.6	748.4
17.5°	732.0	733.8	735.6	736.4	736.2	736.1	735.9	735.7
20°	721.9	723.8	725.8	726.8	726.8	726.8	726.8	726.8
22.5°	710.1	712.0	714.0	715.1	715.4	715.7	716.0	716.3
25°	691.9	694.1	696.2	697.3	697.5	697.7	697.9	698.1
27.5°	671.5	673.4	675.5	676.5	676.8	677.0	677.3	677.4
30°	657.2	659.3	661.5	662.8	663.2	663.5	663.9	664.3
32.5°	642.6	645.1	647.4	648.9	649.2	649.6	650.0	650.4
35°	619.4	622.1	624.8	626.4	627.0	627.5	628.2	628.8
37.5°	595.2	597.9	600.6	602.3	602.9	603.6	604.1	604.8
40°	578.1	581.1	583.9	585.7	586.5	587.3	588.1	588.8
42.5°	561.4	564.6	567.8	569.7	570.3	571.0	571.6	572.2
45°	535.6	538.8	542.1	544.2	545.2	546.2	547.1	548.0
47.5°	508.2	511.6	515.0	517.2	518.4	519.6	520.7	521.9
50°	489.0	492.8	496.7	499.2	500.3	501.6	502.7	503.9
52.5°	469.6	473.4	477.3	479.8	480.9	482.1	483.2	484.5
55°	440.4	444.3	448.2	450.7	451.8	453.0	454.1	455.3
57.5°	409.9	414.4	419.0	421.8	422.9	424.0	425.1	426.2
60°	388.7	393.1	397.5	400.6	402.1	403.7	405.2	406.8
62.5°	367.9	372.3	376.7	379.8	381.3	382.9	384.3	385.9
65°	335.7	340.6	345.4	348.5	350.1	351.6	353.1	354.7
67.5°	304.1	309.0	313.9	317.1	318.6	320.1	321.6	323.1
70°	281.8	287.1	292.3	295.5	296.9	298.2	299.5	300.9
72.5°	260.7	265.8	270.8	274.1	275.6	277.1	278.6	280.1
75°	228.4	233.8	239.3	242.8	244.6	246.3	248.0	249.7
77.5°	198.4	203.9	209.4	213.0	214.9	216.7	218.6	220.5
80°	179.0	184.7	190.5	194.1	195.7	197.2	198.8	200.3
82.5°	159.8	165.8	171.7	175.5	177.2	178.9	180.6	182.3
85°	133.0	138.8	144.6	148.4	150.3	152.2	154.2	156.1
87.5°	114.2	120.0	125.8	129.6	131.4	133.1	134.9	136.7
90°	117.1	123.8	130.4	134.8	136.6	138.5	140.5	142.4
92.5°	112.0	118.5	125.0	129.1	130.7	132.3	134.0	135.6
95°	105.9	112.2	118.5	122.6	124.5	126.5	128.3	130.3
97.5°	101.9	107.0	112.2	115.7	117.5	119.4	121.2	123.0
100°	106.0	108.1	110.2	112.0	113.6	115.1	116.7	118.2
102.5°	178.7	150.6	122.5	109.2	110.7	112.3	113.8	115.4
105°	324.1	330.5	337.0	337.7	332.7	327.8	322.8	317.8
107.5°	379.8	385.4	390.9	394.8	396.8	398.9	401.0	403.1
110°	417.9	422.7	427.5	431.0	433.1	435.1	437.2	439.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	454.3	458.5	462.8	465.9	468.1	470.4	472.6	474.8
115°	509.0	513.6	518.2	521.1	522.5	523.9	525.2	526.6
117.5°	563.7	567.6	571.5	574.2	575.7	577.2	578.6	580.1
120°	597.2	601.4	605.7	608.4	609.5	610.7	611.9	613.1
122.5°	630.6	634.6	638.7	641.2	642.3	643.4	644.3	645.4
125°	677.3	681.5	685.7	688.4	689.8	691.1	692.5	693.8
127.5°	722.8	726.2	729.5	731.8	733.0	734.1	735.3	736.5
130°	750.6	754.2	757.8	760.3	761.4	762.5	763.7	764.8
132.5°	778.0	781.5	785.1	787.3	788.3	789.3	790.4	791.3
135°	814.7	818.2	821.7	824.1	825.7	827.1	828.7	830.2
137.5°	850.7	853.9	857.0	859.1	860.0	860.8	861.7	862.5
140°	873.0	876.0	879.1	881.2	882.3	883.5	884.6	885.7
142.5°	894.1	896.7	899.4	901.1	901.9	902.8	903.6	904.4
145°	924.8	926.2	927.5	928.7	929.8	931.0	932.1	933.3
147.5°	951.9	952.2	952.4	953.0	953.8	954.6	955.4	956.2
150°	970.1	970.1	970.1	970.2	970.5	970.6	970.8	970.9
152.5°	986.3	986.7	986.9	987.0	986.9	986.8	986.7	986.6
155°	1008.2	1008.9	1009.7	1009.7	1009.3	1008.7	1008.1	1007.6
157.5°	1027.0	1028.0	1028.9	1028.9	1028.0	1027.0	1026.1	1025.2
160°	1039.1	1040.2	1041.2	1041.2	1040.2	1039.1	1038.0	1036.9
162.5°	1048.8	1049.9	1051.0	1050.9	1049.7	1048.5	1047.3	1046.0
165°	1062.6	1064.0	1065.4	1065.4	1063.7	1062.1	1060.5	1058.8
167.5°	1072.6	1074.2	1075.8	1075.7	1073.9	1072.1	1070.2	1068.4
170°	1078.9	1080.3	1081.7	1081.6	1079.8	1078.0	1076.1	1074.3
172.5°	1082.8	1084.2	1085.7	1085.4	1083.5	1081.5	1079.5	1077.6
175°	1087.4	1089.0	1090.6	1090.3	1088.2	1086.0	1083.9	1081.7
177.5°	1089.2	1090.3	1091.5	1091.2	1089.5	1087.8	1086.0	1084.3
180°	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2	1088.2

(END OF REPORT)