

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: P333541-927

Luminaire Tested: **S125RDIP-S610D1035U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333541-927
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: S125RDIP-S610D1035U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5161.5 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

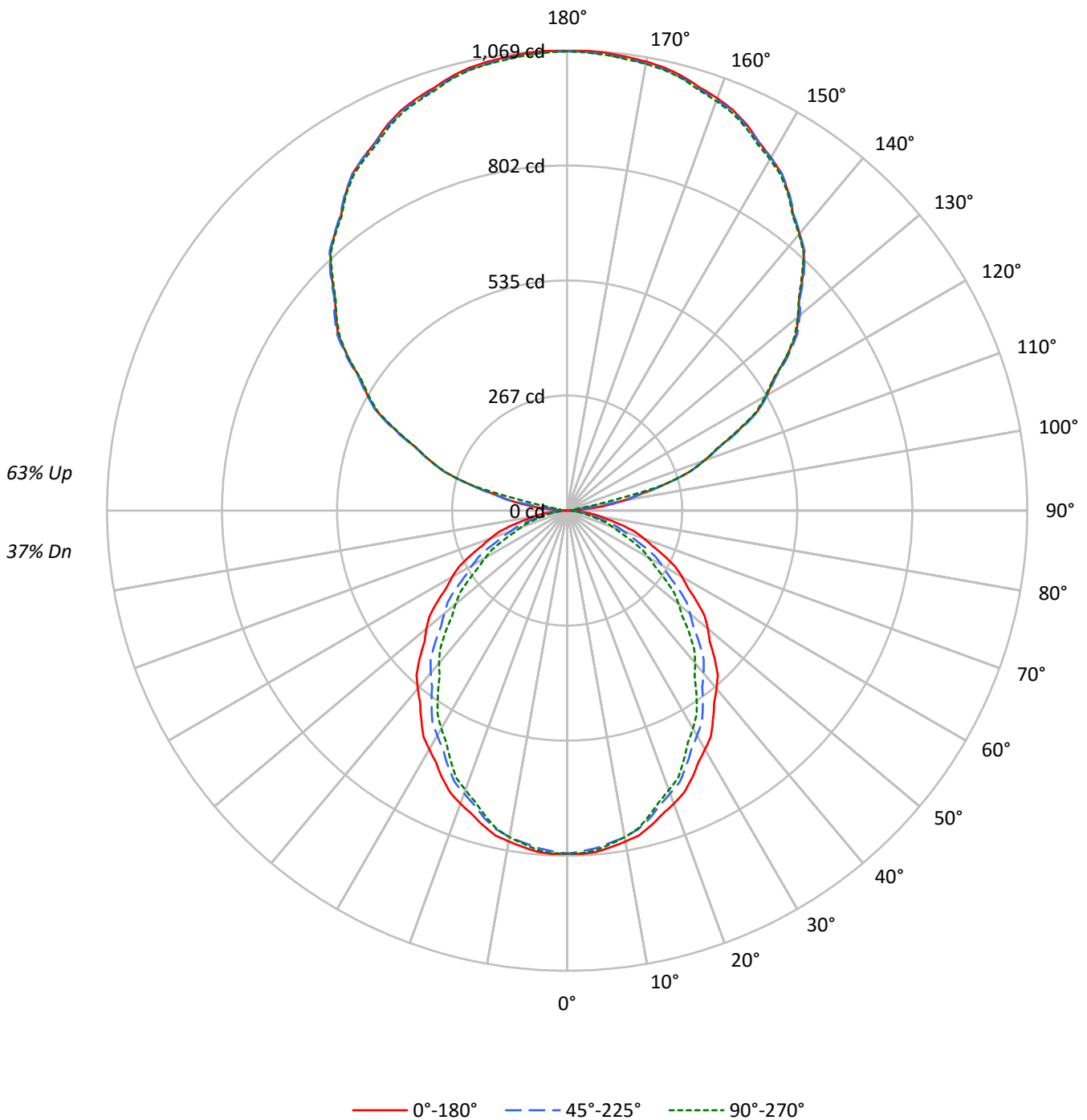
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	87	79	73	69	78	72	67	63	59	55	52	46	44	42	34	33	32	26
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	31	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25	27	23	20	21	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22	25	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20	23	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.5
10°-20°	209.4	4.1
20°-30°	303.7	5.9
30°-40°	346.1	6.7
40°-50°	337.4	6.5
50°-60°	284.0	5.5
60°-70°	199.1	3.9
70°-80°	102.3	2.0
80°-90°	28.1	0.5
90°-100°	38.8	0.8
100°-110°	239.0	4.6
110°-120°	433.4	8.4
120°-130°	556.2	10.8
130°-140°	598.3	11.6
140°-150°	561.6	10.9
150°-160°	454.3	8.8
160°-170°	293.8	5.7
170°-180°	101.3	2.0
0°-30°	588.0	11.4
0°-40°	934.1	18.1
0°-60°	1555.4	30.1
0°-90°	1884.9	36.5
90°-120°	711.2	13.8
90°-150°	2427.2	47.0
90°-180°	3277.0	63.5
0°-180°	5161.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	7	13	17	19	3
95°	45	41	13	16	17	57
105°	232	236	236	236	235	246
115°	437	440	441	438	434	433
125°	621	626	626	623	621	554
135°	774	779	778	776	771	597
145°	898	899	899	900	895	561
155°	989	984	986	987	982	455
165°	1043	1039	1039	1043	1038	295
175°	1067	1063	1063	1069	1062	102
180°	1067	1067	1067	1067	1067	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.8	10.3	9.8	9.3	9.2	9.3	9.5	9.6	9.7	9.9
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	12.2	11.2	10.2	9.2	8.2	8.3	9.3	10.5	11.6	12.7	13.5
95°	45.1	44.5	44.0	43.5	43.0	39.4	32.7	26.0	19.3	12.7	13.5
97.5°	94.1	95.1	96.0	97.0	97.9	91.8	78.6	65.4	52.1	38.9	34.0
100°	132.1	132.6	133.2	133.6	134.2	134.8	135.5	136.3	136.9	137.6	111.5
102.5°	170.7	171.3	172.1	172.7	173.3	173.9	174.4	174.8	175.2	175.6	170.6
105°	232.5	233.2	233.9	234.6	235.4	235.7	235.7	235.7	235.7	235.7	235.7
107.5°	296.8	296.8	296.8	296.8	296.8	296.9	297.3	297.6	298.0	298.3	298.4
110°	338.5	338.5	338.5	338.5	338.5	338.7	339.1	339.5	339.8	340.1	339.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.8	378.2	378.6	379.1	379.5	379.8	380.0	380.2	380.4	380.6	379.9
115°	436.7	437.5	438.4	439.3	440.1	440.7	440.8	441.0	441.2	441.3	440.7
117.5°	497.5	497.5	497.4	497.4	497.4	497.7	498.4	499.0	499.7	500.3	499.5
120°	535.5	535.3	535.1	535.0	534.8	535.0	535.5	536.0	536.5	537.1	536.7
122.5°	569.0	569.7	570.4	571.0	571.7	572.1	572.4	572.7	572.9	573.1	572.7
125°	620.9	622.1	623.4	624.6	625.8	626.5	626.5	626.5	626.5	626.5	625.7
127.5°	670.4	671.3	672.2	673.0	673.9	674.3	674.2	674.1	674.0	673.9	673.5
130°	700.8	701.7	702.6	703.5	704.3	704.8	705.0	705.2	705.4	705.5	705.0
132.5°	731.2	732.2	733.2	734.2	735.2	735.5	735.1	734.8	734.4	734.0	733.9
135°	774.4	775.4	776.5	777.5	778.6	779.0	778.6	778.2	777.8	777.5	777.1
137.5°	814.0	815.0	815.9	816.8	817.7	818.0	817.7	817.4	817.1	816.7	816.8
140°	840.0	840.3	840.7	841.1	841.4	841.5	841.3	841.1	841.0	840.8	841.1
142.5°	863.4	863.6	863.9	864.0	864.3	864.5	864.7	865.0	865.2	865.5	865.5
145°	897.8	898.1	898.4	898.8	899.1	899.4	899.4	899.4	899.4	899.4	899.5
147.5°	927.8	927.7	927.6	927.6	927.5	927.6	927.8	928.0	928.2	928.4	928.7
150°	946.8	946.4	946.1	945.7	945.4	945.4	945.7	946.1	946.4	946.8	947.1
152.5°	965.1	964.4	963.6	962.8	962.0	961.9	962.2	962.5	962.9	963.2	963.6
155°	988.7	987.7	986.6	985.6	984.5	984.1	984.5	984.8	985.2	985.6	986.1
157.5°	1006.9	1006.2	1005.7	1005.0	1004.4	1004.1	1004.1	1004.2	1004.2	1004.2	1004.8
160°	1019.5	1018.5	1017.5	1016.4	1015.3	1014.9	1015.1	1015.3	1015.4	1015.6	1016.3
162.5°	1029.7	1028.6	1027.5	1026.5	1025.5	1025.0	1025.2	1025.4	1025.6	1025.7	1026.7
165°	1043.3	1042.2	1041.2	1040.1	1039.1	1038.6	1038.8	1038.9	1039.2	1039.3	1040.4
167.5°	1053.4	1052.3	1051.2	1050.1	1049.1	1048.6	1048.8	1048.9	1049.1	1049.3	1050.6
170°	1059.1	1057.9	1056.6	1055.4	1054.2	1053.7	1053.8	1054.0	1054.2	1054.4	1055.7
172.5°	1062.9	1061.7	1060.4	1059.2	1058.0	1057.6	1057.8	1058.1	1058.4	1058.8	1060.0
175°	1067.0	1066.0	1064.9	1063.8	1062.8	1062.4	1062.6	1062.7	1062.9	1063.0	1064.5
177.5°	1068.9	1068.1	1067.2	1066.4	1065.6	1065.2	1065.3	1065.5	1065.6	1065.7	1066.8
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	10.1	10.3	10.5	10.5	10.5	10.5	10.5	10.5
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	14.4	15.3	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.3	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.1	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.2	59.1	32.9	19.4	18.7	18.0	17.3	16.6
102.5°	165.6	160.7	155.7	147.3	135.4	123.4	111.5	99.5
105°	235.7	235.7	235.7	235.6	235.4	235.3	235.1	234.9
107.5°	298.4	298.5	298.5	298.3	297.7	297.2	296.7	296.1
110°	339.1	338.5	338.0	337.9	338.0	338.2	338.3	338.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.3	378.6	378.0	377.5	377.2	377.0	376.8	376.5
115°	440.0	439.3	438.6	437.7	436.7	435.5	434.5	433.5
117.5°	498.5	497.6	496.7	496.0	495.6	495.1	494.6	494.2
120°	536.4	536.0	535.7	535.0	534.2	533.3	532.4	531.6
122.5°	572.4	572.1	571.7	571.0	570.1	569.0	568.0	567.0
125°	625.0	624.3	623.6	623.1	622.5	621.9	621.5	620.9
127.5°	673.1	672.7	672.3	671.5	670.2	668.9	667.7	666.3
130°	704.5	703.9	703.5	702.7	701.9	701.0	700.1	699.2
132.5°	733.8	733.7	733.6	733.1	732.2	731.3	730.5	729.6
135°	776.8	776.5	776.1	775.4	774.4	773.3	772.2	771.2
137.5°	816.9	817.0	817.1	816.6	815.7	814.8	813.9	812.9
140°	841.5	841.9	842.2	841.9	840.8	839.7	838.7	837.7
142.5°	865.6	865.7	865.8	865.3	864.2	863.2	862.1	861.0
145°	899.7	899.8	900.0	899.6	898.6	897.5	896.4	895.4
147.5°	928.8	929.1	929.3	928.8	927.5	926.2	925.0	923.7
150°	947.5	947.8	948.2	947.7	946.3	944.8	943.4	942.1
152.5°	963.9	964.3	964.6	964.2	962.9	961.6	960.4	959.1
155°	986.6	987.1	987.7	987.2	985.8	984.4	983.0	981.6
157.5°	1005.4	1005.9	1006.5	1006.1	1004.6	1003.2	1001.8	1000.4
160°	1017.0	1017.7	1018.4	1018.0	1016.7	1015.3	1013.8	1012.4
162.5°	1027.7	1028.6	1029.7	1029.4	1027.9	1026.3	1024.8	1023.2
165°	1041.4	1042.5	1043.5	1043.4	1042.0	1040.5	1039.2	1037.8
167.5°	1051.9	1053.1	1054.4	1054.2	1052.7	1051.1	1049.5	1047.9
170°	1057.2	1058.6	1060.0	1059.9	1058.3	1056.8	1055.2	1053.6
172.5°	1061.3	1062.6	1063.8	1063.7	1062.1	1060.5	1058.9	1057.4
175°	1065.9	1067.3	1068.7	1068.6	1067.0	1065.4	1063.8	1062.2
177.5°	1067.7	1068.7	1069.7	1069.6	1068.5	1067.4	1066.3	1065.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0

(END OF REPORT)