

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: P333671-927

Luminaire Tested: **S125RDIW-S610D1050U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333671-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-S610D1050U927-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4763.1 lumens  
Efficiency: N/A  
Efficacy: 105.4 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

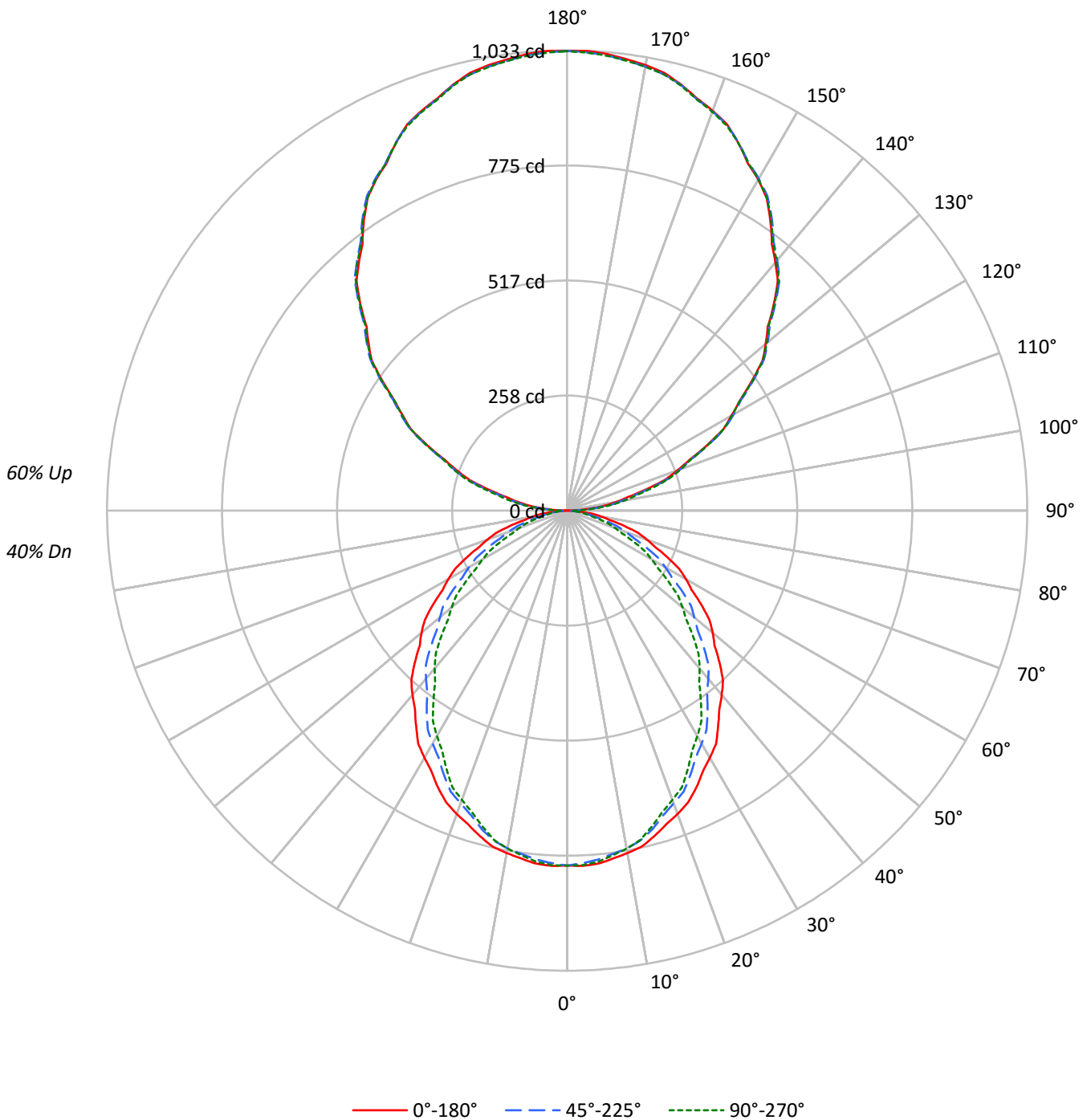
Input Watts (W): 45.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34	28
3	80	70	63	58	72	64	58	53	53	48	45	42	39	37	33	31	29	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	22	18	22	18	15	17	15	13	11

**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	1.6
10°-20°	209.4	4.4
20°-30°	303.7	6.4
30°-40°	346.1	7.3
40°-50°	337.4	7.1
50°-60°	284.0	6.0
60°-70°	199.1	4.2
70°-80°	102.3	2.1
80°-90°	28.1	0.6
90°-100°	69.1	1.5
100°-110°	204.0	4.3
110°-120°	345.5	7.3
120°-130°	454.7	9.5
130°-140°	509.6	10.7
140°-150°	499.4	10.5
150°-160°	419.5	8.8
160°-170°	278.8	5.9
170°-180°	97.6	2.0
0°-30°	588.0	12.3
0°-40°	934.1	19.6
0°-60°	1555.4	32.7
0°-90°	1884.9	39.6
90°-120°	618.6	13.0
90°-150°	2082.3	43.7
90°-180°	2878.0	60.4
0°-180°	4763.1	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	4
95°	52	54	62	67	69	56
105°	183	187	192	196	199	195
115°	346	349	351	350	349	342
125°	505	509	510	509	508	452
135°	657	661	662	662	659	506
145°	795	799	801	801	799	497
155°	910	910	911	914	910	419
165°	990	988	989	992	987	279
175°	1029	1026	1026	1030	1025	98
180°	1031	1031	1031	1031	1031	



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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	9.7	9.8	10.0
90°	0.8	2.2	3.6	5.1	6.5	7.8	9.1	10.4	11.6	12.8	13.7
92.5°	19.4	20.4	21.4	22.4	23.4	24.7	26.2	27.7	29.3	30.8	32.0
95°	52.2	52.5	52.9	53.2	53.6	54.7	56.5	58.2	60.0	61.8	63.1
97.5°	86.7	86.8	87.0	87.1	87.3	88.6	91.0	93.5	95.9	98.4	99.6
100°	112.4	112.4	112.4	112.4	112.4	113.5	115.8	118.2	120.5	122.8	124.5
102.5°	140.0	140.7	141.4	142.1	142.8	143.8	145.0	146.2	147.3	148.5	150.3
105°	183.0	183.9	184.8	185.7	186.6	187.6	188.6	189.7	190.8	191.9	192.9
107.5°	230.5	231.4	232.3	233.2	234.1	235.0	235.8	236.6	237.4	238.2	238.8
110°	263.2	264.2	265.1	265.9	266.9	267.6	268.1	268.6	269.2	269.7	270.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.7	297.1	297.6	298.1	298.5	299.1	299.8	300.5	301.1	301.8	302.1
115°	345.9	346.7	347.4	348.1	348.8	349.4	349.7	350.1	350.4	350.8	350.6
117.5°	395.4	395.7	396.0	396.3	396.7	397.0	397.4	397.7	398.0	398.3	398.5
120°	426.2	427.1	428.0	428.9	429.8	430.3	430.5	430.7	430.9	431.0	431.0
122.5°	459.6	459.9	460.3	460.6	460.9	461.3	461.8	462.2	462.7	463.2	463.0
125°	504.9	506.0	507.0	508.1	509.1	509.8	510.0	510.2	510.3	510.5	510.2
127.5°	553.0	553.7	554.3	554.8	555.5	555.9	556.1	556.3	556.5	556.7	556.6
130°	581.9	582.8	583.8	584.6	585.5	586.1	586.5	586.8	587.2	587.6	587.4
132.5°	610.9	612.3	613.8	615.2	616.7	617.4	617.3	617.3	617.2	617.1	617.0
135°	656.6	657.7	658.7	659.8	660.9	661.5	661.7	661.9	662.0	662.2	662.2
137.5°	699.7	700.7	701.7	702.7	703.8	704.5	704.9	705.3	705.7	706.1	706.2
140°	727.2	728.1	729.0	729.9	730.8	731.5	732.1	732.6	733.1	733.6	734.0
142.5°	754.9	755.6	756.4	757.1	757.9	758.6	759.2	759.9	760.6	761.3	761.4
145°	795.4	796.1	796.9	797.6	798.3	798.9	799.5	800.0	800.6	801.1	801.1
147.5°	833.1	833.5	833.9	834.2	834.6	835.0	835.4	835.8	836.3	836.7	837.2
150°	858.1	857.9	857.7	857.5	857.4	857.6	858.3	859.0	859.8	860.5	860.5
152.5°	878.6	878.8	879.1	879.4	879.6	879.9	880.2	880.4	880.7	881.1	881.5
155°	910.2	910.2	910.2	910.2	910.2	910.3	910.5	910.7	910.9	911.1	911.8
157.5°	938.5	938.1	937.7	937.3	936.9	936.8	937.0	937.2	937.4	937.5	938.3
160°	955.2	954.7	954.1	953.6	953.1	952.9	953.1	953.2	953.4	953.6	954.3
162.5°	969.9	969.6	969.2	968.8	968.4	968.2	968.3	968.3	968.4	968.4	969.2
165°	989.8	989.4	989.0	988.6	988.2	988.2	988.4	988.6	988.7	988.9	989.6
167.5°	1006.4	1005.7	1005.0	1004.2	1003.5	1003.2	1003.2	1003.2	1003.2	1003.2	1004.2
170°	1015.4	1014.7	1014.0	1013.3	1012.6	1012.2	1012.2	1012.2	1012.2	1012.2	1013.3
172.5°	1021.8	1021.1	1020.4	1019.7	1019.0	1018.6	1018.6	1018.6	1018.6	1018.6	1019.7
175°	1029.0	1028.3	1027.6	1026.9	1026.2	1025.8	1025.8	1025.8	1025.8	1025.8	1026.9
177.5°	1032.8	1032.1	1031.6	1031.0	1030.5	1030.1	1029.9	1029.8	1029.7	1029.5	1030.4
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4



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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	10.6	10.6	10.6	10.6	10.6
90°	14.7	15.5	16.4	17.1	17.7	18.2	18.7	19.3
92.5°	33.2	34.4	35.6	36.3	36.7	37.1	37.5	37.9
95°	64.3	65.5	66.8	67.6	68.0	68.3	68.7	69.0
97.5°	100.8	102.0	103.1	103.8	104.0	104.3	104.5	104.6
100°	126.0	127.6	129.2	130.2	130.6	130.9	131.3	131.7
102.5°	152.0	153.8	155.5	156.6	157.1	157.6	158.1	158.6
105°	194.0	195.0	196.1	196.9	197.5	198.0	198.5	199.1
107.5°	239.3	239.9	240.3	240.7	240.6	240.6	240.5	240.5
110°	270.8	271.3	271.9	272.0	271.9	271.6	271.5	271.3





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	302.3	302.5	302.8	302.8	302.5	302.1	301.8	301.5
115°	350.4	350.2	350.1	349.9	349.7	349.5	349.4	349.2
117.5°	398.5	398.7	398.9	398.5	397.8	397.1	396.4	395.7
120°	431.0	431.0	431.0	430.7	430.0	429.3	428.6	427.9
122.5°	462.9	462.7	462.6	462.2	461.7	461.1	460.5	459.9
125°	509.8	509.5	509.1	508.8	508.7	508.4	508.3	508.1
127.5°	556.3	556.2	556.0	555.8	555.4	555.1	554.7	554.4
130°	587.2	587.0	586.8	586.6	586.2	585.9	585.5	585.2
132.5°	616.7	616.6	616.4	616.1	615.5	615.1	614.6	614.0
135°	662.2	662.2	662.2	661.9	661.2	660.4	659.7	659.0
137.5°	706.5	706.7	706.9	706.5	705.7	704.8	703.9	703.0
140°	734.4	734.7	735.1	734.8	734.0	733.0	732.1	731.3
142.5°	761.7	761.9	762.2	761.8	760.9	760.0	759.1	758.2
145°	801.1	801.1	801.1	800.8	800.3	799.7	799.2	798.7
147.5°	837.6	838.0	838.4	838.0	836.9	835.6	834.4	833.2
150°	860.5	860.5	860.5	860.3	859.9	859.6	859.2	858.9
152.5°	881.9	882.3	882.7	882.6	882.0	881.4	880.7	880.0
155°	912.5	913.2	913.9	913.8	912.9	912.0	911.2	910.2
157.5°	939.0	939.7	940.4	940.2	939.0	937.8	936.6	935.5
160°	955.1	955.8	956.5	956.3	955.5	954.6	953.7	952.8
162.5°	970.1	970.9	971.8	971.7	970.7	969.6	968.6	967.6
165°	990.3	991.0	991.7	991.6	990.5	989.4	988.4	987.3
167.5°	1005.4	1006.4	1007.5	1007.5	1006.4	1005.3	1004.2	1003.1
170°	1014.3	1015.4	1016.4	1016.4	1015.1	1013.9	1012.6	1011.4
172.5°	1020.7	1021.8	1022.9	1022.9	1021.8	1020.6	1019.5	1018.4
175°	1027.9	1029.0	1030.2	1030.0	1028.8	1027.5	1026.3	1025.0
177.5°	1031.3	1032.1	1032.9	1032.8	1031.9	1030.9	1029.9	1028.9
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4

(END OF REPORT)