

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: P333523-935

Luminaire Tested: **S125RDIP-S610D365U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333523-935  
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-S610D365U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3307.8 lumens  
Efficiency: N/A  
Efficacy: 120.3 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-Direct

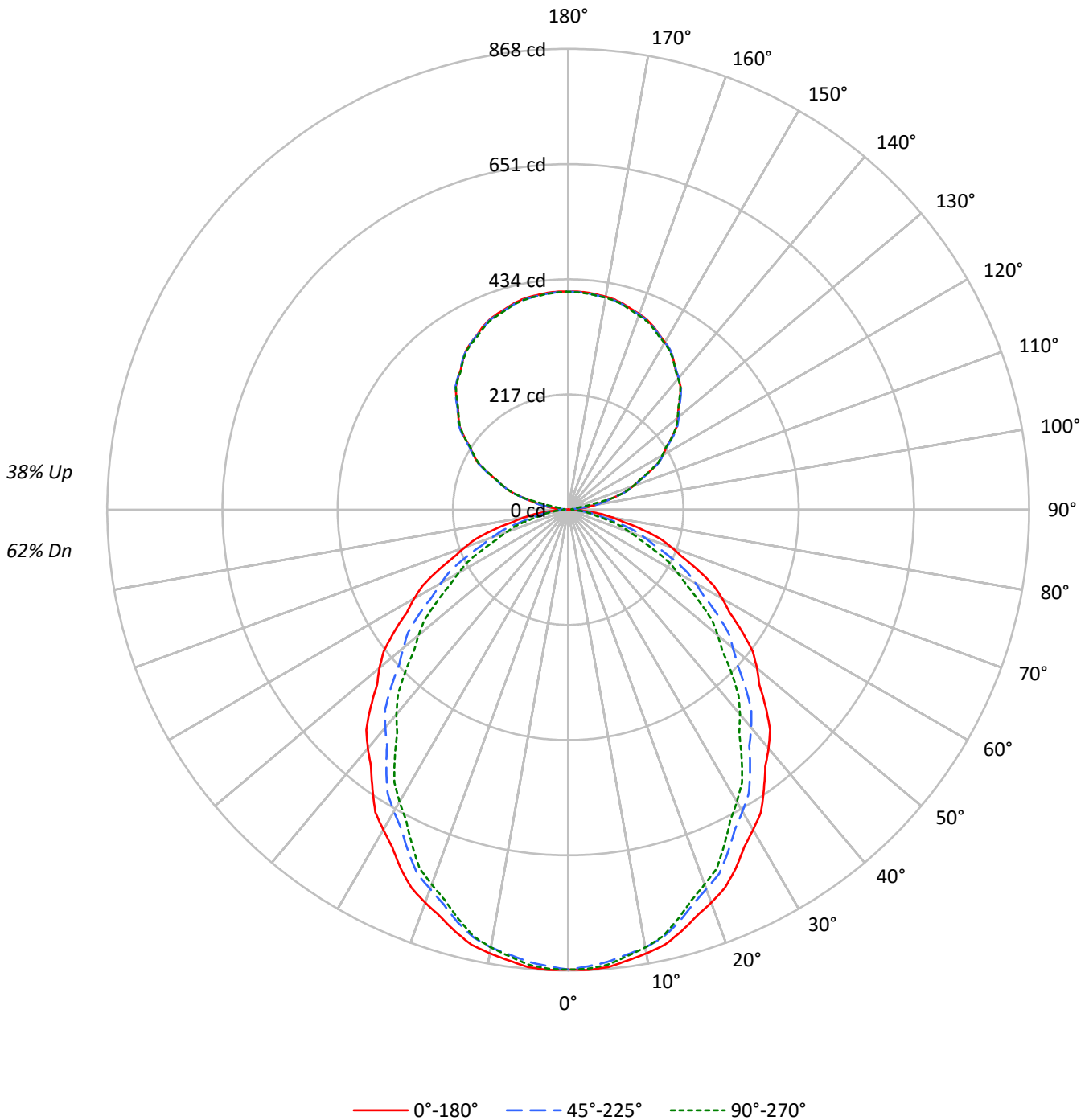
Input Watts (W): 27.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	101	96	93	89	94	90	87	84	79	77	75	69	67	66	60	58	57	53
2	92	85	78	73	86	79	74	69	70	66	62	61	58	55	53	51	49	45
3	84	75	67	61	78	70	64	58	62	57	53	54	50	47	47	44	42	38
4	77	66	58	52	72	62	55	50	55	50	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	50	44	39	44	39	35	38	35	32	29
6	65	53	45	39	61	50	43	38	45	39	34	40	35	31	35	31	28	25
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	22
8	56	44	36	31	53	42	34	29	37	31	27	33	28	25	29	25	22	20
9	53	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	18	17

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	2.5
10°-20°	227.6	6.9
20°-30°	330.1	10.0
30°-40°	376.2	11.4
40°-50°	366.7	11.1
50°-60°	308.6	9.3
60°-70°	216.4	6.5
70°-80°	111.2	3.4
80°-90°	29.0	0.9
90°-100°	14.9	0.5
100°-110°	92.0	2.8
110°-120°	166.8	5.0
120°-130°	214.0	6.5
130°-140°	230.2	7.0
140°-150°	216.1	6.5
150°-160°	174.8	5.3
160°-170°	113.0	3.4
170°-180°	39.0	1.2
0°-30°	639.1	19.3
0°-40°	1015.3	30.7
0°-60°	1690.5	51.1
0°-90°	2047.1	61.9
90°-120°	273.7	8.3
90°-150°	934.0	28.2
90°-180°	1261.0	38.1
0°-180°	3307.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	0	3	5	6	7	2
95°	17	16	5	6	6	22
105°	90	91	91	91	90	95
115°	168	169	170	169	167	166
125°	239	241	241	240	239	213
135°	298	300	299	298	297	230
145°	345	346	346	346	344	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.1	11.4	10.7	10.0	9.3	8.9	8.9	8.9	8.9	8.8	8.9
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	4.6	4.3	4.0	3.5	3.2	3.2	3.6	4.0	4.5	4.9	5.2
95°	17.3	17.1	17.0	16.7	16.5	15.2	12.6	10.0	7.4	4.9	5.2
97.5°	36.2	36.6	36.9	37.3	37.7	35.3	30.2	25.1	20.1	15.0	13.1
100°	50.8	51.1	51.2	51.4	51.7	51.8	52.2	52.4	52.7	53.0	42.9
102.5°	65.7	66.0	66.2	66.5	66.7	66.9	67.1	67.2	67.4	67.6	65.7
105°	89.5	89.7	90.1	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.7
107.5°	114.2	114.2	114.2	114.2	114.2	114.3	114.4	114.5	114.7	114.8	114.8
110°	130.3	130.3	130.3	130.3	130.3	130.4	130.4	130.6	130.7	130.9	130.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.3	145.5	145.7	145.9	146.0	146.1	146.2	146.3	146.4	146.5	146.2
115°	168.0	168.3	168.7	169.0	169.4	169.5	169.6	169.7	169.8	169.8	169.5
117.5°	191.4	191.4	191.4	191.4	191.4	191.5	191.7	192.0	192.3	192.5	192.2
120°	206.0	206.0	206.0	205.9	205.8	205.9	206.0	206.2	206.5	206.6	206.6
122.5°	219.0	219.2	219.5	219.7	220.0	220.2	220.2	220.3	220.4	220.5	220.4
125°	238.9	239.4	239.9	240.3	240.8	241.1	241.1	241.1	241.1	241.1	240.7
127.5°	258.0	258.3	258.6	259.0	259.3	259.5	259.4	259.4	259.3	259.3	259.2
130°	269.7	270.0	270.4	270.7	271.0	271.2	271.3	271.3	271.4	271.5	271.3
132.5°	281.4	281.7	282.1	282.5	282.9	283.0	282.9	282.8	282.6	282.4	282.4
135°	298.0	298.3	298.8	299.2	299.5	299.7	299.5	299.5	299.3	299.2	299.0
137.5°	313.2	313.6	313.9	314.3	314.6	314.8	314.6	314.5	314.4	314.3	314.3
140°	323.2	323.4	323.5	323.6	323.7	323.8	323.7	323.6	323.6	323.6	323.6
142.5°	332.3	332.3	332.4	332.4	332.5	332.6	332.8	332.9	332.9	333.0	333.0
145°	345.4	345.6	345.7	345.9	345.9	346.0	346.0	346.0	346.0	346.0	346.1
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.3
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	9.0	9.0	9.1	9.1	9.0	9.0	8.9	8.8
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	5.5	5.9	6.2	6.5	6.5	6.6	6.7	6.8
95°	5.5	5.9	6.2	6.4	6.4	6.4	6.4	6.4
97.5°	11.2	9.2	7.3	6.4	6.4	6.4	6.4	6.4
100°	32.8	22.7	12.7	7.5	7.2	7.0	6.6	6.4
102.5°	63.7	61.8	59.9	56.7	52.1	47.5	42.9	38.3
105°	90.7	90.7	90.7	90.7	90.6	90.5	90.5	90.4
107.5°	114.9	114.9	114.9	114.8	114.6	114.3	114.2	113.9
110°	130.4	130.3	130.1	130.0	130.1	130.1	130.2	130.3





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	145.9	145.7	145.4	145.3	145.2	145.1	145.0	144.9
115°	169.3	169.0	168.8	168.4	168.0	167.6	167.2	166.8
117.5°	191.8	191.5	191.1	190.9	190.7	190.5	190.4	190.2
120°	206.4	206.2	206.1	205.9	205.5	205.2	204.8	204.5
122.5°	220.2	220.2	220.0	219.7	219.3	219.0	218.5	218.2
125°	240.5	240.2	240.0	239.7	239.5	239.4	239.1	238.9
127.5°	259.0	258.8	258.7	258.4	257.9	257.4	256.9	256.4
130°	271.0	270.9	270.7	270.4	270.1	269.8	269.4	269.1
132.5°	282.3	282.3	282.2	282.1	281.7	281.4	281.0	280.8
135°	298.9	298.8	298.6	298.3	298.0	297.6	297.1	296.7
137.5°	314.4	314.4	314.4	314.2	313.8	313.5	313.1	312.8
140°	323.8	323.9	324.1	323.9	323.6	323.1	322.7	322.3
142.5°	333.0	333.1	333.1	332.9	332.5	332.1	331.7	331.3
145°	346.2	346.2	346.3	346.1	345.8	345.3	344.9	344.5
147.5°	357.4	357.5	357.6	357.4	356.9	356.4	355.9	355.4
150°	364.5	364.7	364.8	364.6	364.1	363.6	363.0	362.5
152.5°	370.9	371.0	371.2	371.0	370.5	370.1	369.5	369.0
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)