

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: P333667-940

Luminaire Tested: **S125RDIW-S610D770U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333667-940  
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-S610D770U940-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4494.6 lumens  
Efficiency: N/A  
Efficacy: 119.5 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: General Diffuse

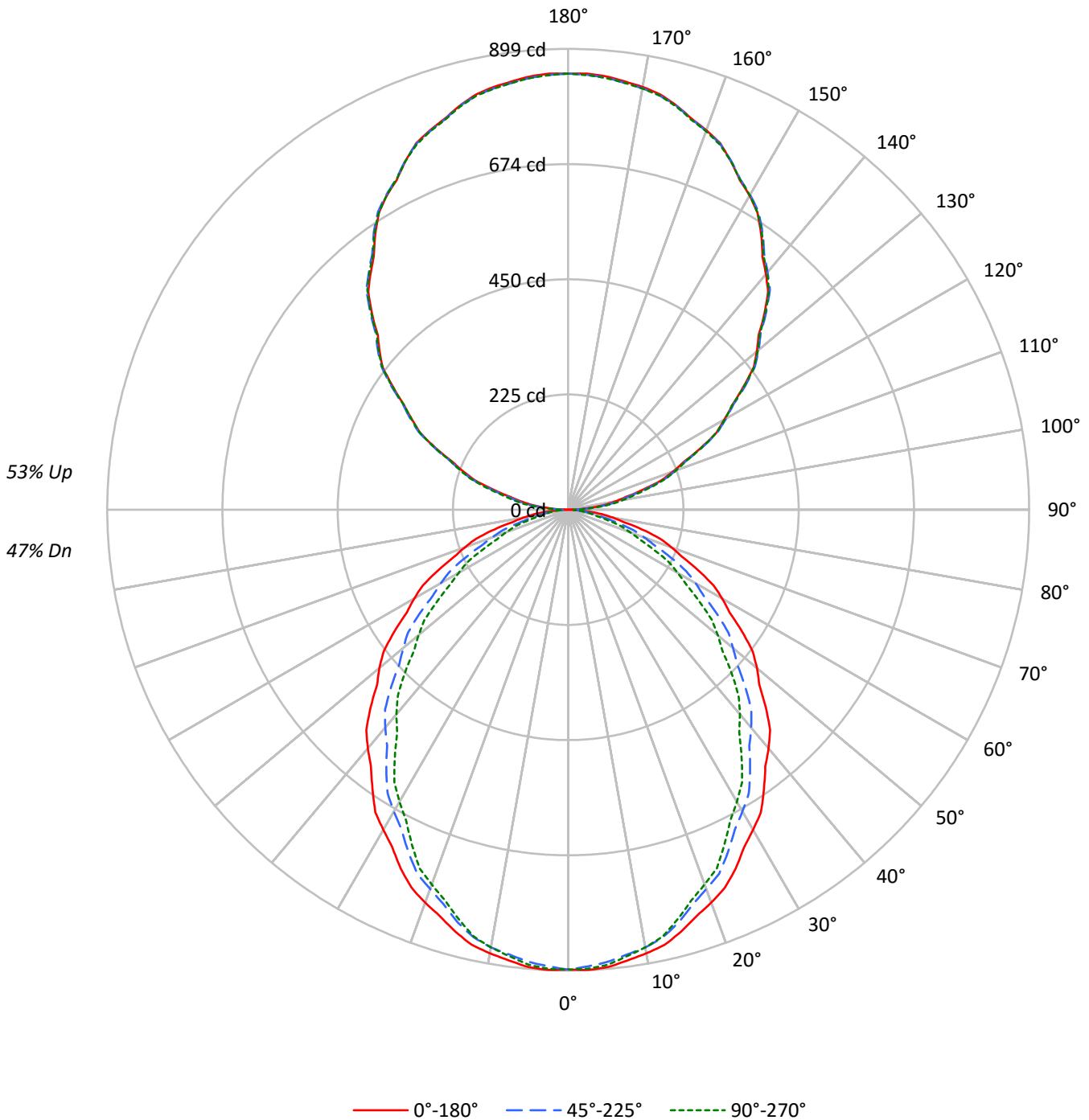
Input Watts (W): 37.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47					47			
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46					40				
2	89	82	76	70	81	75	70	66	63	60	56	52	50	47	42	40	39					34				
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	38	35	33					29				
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29					25				
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	30	27	25					22				
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22					19				
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20					17				
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18					15				
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16					14				
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15					13				

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

	0°	45°	90°
0°	5794	5794	5794
5°	5806	5741	5776
10°	5762	5687	5687
15°	5695	5572	5526
20°	5606	5411	5346
25°	5504	5253	5137
30°	5376	5068	4906
35°	5245	4877	4647
40°	5123	4678	4392
45°	4975	4455	4116
50°	4827	4214	3826
55°	4654	3983	3518
60°	4481	3702	3185
65°	4276	3376	2806
70°	4043	2968	2417
75°	3721	2500	2011
80°	3277	1967	1689
85°	2764	1608	1504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	1.9
10°-20°	235.7	5.2
20°-30°	341.8	7.6
30°-40°	389.6	8.7
40°-50°	379.7	8.4
50°-60°	319.6	7.1
60°-70°	224.1	5.0
70°-80°	115.2	2.6
80°-90°	30.9	0.7
90°-100°	57.0	1.3
100°-110°	168.2	3.7
110°-120°	285.0	6.3
120°-130°	375.0	8.3
130°-140°	420.2	9.3
140°-150°	411.8	9.2
150°-160°	345.9	7.7
160°-170°	229.9	5.1
170°-180°	80.5	1.8
0°-30°	661.9	14.7
0°-40°	1051.5	23.4
0°-60°	1750.9	39.0
0°-90°	2121.0	47.2
90°-120°	510.2	11.4
90°-150°	1717.2	38.2
90°-180°	2374.0	52.8
0°-180°	4494.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	896	893	886	892	891	85
15°	852	847	833	832	826	240
25°	772	761	737	728	721	355
35°	665	648	619	600	589	416
45°	545	524	488	462	451	420
55°	413	391	354	324	312	370
65°	280	256	221	195	184	277
75°	149	128	100	86	81	158
85°	37	26	22	21	20	42
90°	1	6	11	14	16	4
95°	43	45	51	55	57	46
105°	151	154	158	162	164	161
115°	285	288	289	289	288	282
125°	416	420	421	420	419	373
135°	541	545	546	546	544	417
145°	656	659	661	661	659	410
155°	751	751	751	754	751	346
165°	816	815	816	818	814	230
175°	849	846	846	849	845	81
180°	851	851	851	851	851	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	898.7	898.3	898.0	897.6	897.2	896.4	895.2	894.0	892.8	891.6	892.8
5°	895.6	895.1	894.5	893.9	893.2	892.2	890.5	888.9	887.2	885.5	887.0
7.5°	886.9	886.3	885.7	885.1	884.6	883.3	881.3	879.3	877.4	875.3	876.4
10°	878.7	878.2	877.8	877.4	876.9	875.7	873.5	871.5	869.3	867.2	867.6
12.5°	869.5	869.0	868.3	867.8	867.2	865.5	862.7	859.9	857.0	854.2	854.5
15°	851.7	850.7	849.8	848.9	848.0	846.0	842.8	839.6	836.5	833.3	833.2
17.5°	831.4	830.1	828.7	827.3	825.9	823.2	819.2	815.3	811.3	807.4	806.6
20°	815.7	814.2	812.7	811.2	809.7	806.6	801.7	796.9	792.1	787.3	786.5
22.5°	798.3	796.8	795.4	793.9	792.4	789.1	784.0	779.0	773.9	768.8	767.4
25°	772.4	770.1	767.9	765.6	763.3	759.4	753.9	748.2	742.7	737.1	735.2
27.5°	742.5	739.9	737.1	734.3	731.6	727.3	721.3	715.3	709.4	703.4	700.6
30°	720.9	718.0	715.2	712.3	709.4	704.8	698.5	692.2	685.9	679.6	676.1
32.5°	699.7	696.4	693.0	689.7	686.3	681.4	675.0	668.6	662.1	655.7	651.8
35°	665.3	661.7	658.1	654.5	650.9	645.7	638.9	632.1	625.4	618.6	614.2
37.5°	631.6	627.1	622.8	618.4	614.0	608.3	601.3	594.3	587.4	580.3	575.2
40°	607.7	603.2	598.7	594.1	589.7	583.8	576.6	569.4	562.1	554.9	549.2
42.5°	582.8	578.2	573.5	568.9	564.3	558.2	550.7	543.2	535.8	528.3	522.8
45°	544.7	540.4	536.0	531.6	527.3	520.9	512.6	504.4	496.1	487.8	481.8
47.5°	505.3	500.7	496.1	491.5	486.9	480.4	472.1	463.7	455.4	447.0	440.9
50°	480.4	475.4	470.4	465.5	460.5	453.7	445.1	436.6	427.9	419.4	413.0
52.5°	453.3	448.2	443.1	438.0	432.9	426.3	418.2	410.1	402.0	393.9	387.1
55°	413.3	408.5	403.7	398.9	394.0	387.4	379.0	370.5	362.1	353.7	346.9
57.5°	372.9	367.7	362.6	357.5	352.3	345.6	337.5	329.4	321.3	313.2	306.5
60°	346.9	341.6	336.4	331.1	325.8	319.1	310.9	302.8	294.7	286.6	280.0
62.5°	319.2	314.2	309.2	304.2	299.2	292.5	284.3	276.0	267.8	259.5	253.3
65°	279.8	274.7	269.6	264.5	259.3	252.8	244.8	236.8	228.8	220.9	214.8
67.5°	240.7	235.5	230.4	225.3	220.2	213.8	206.2	198.5	190.8	183.2	177.7
70°	214.1	209.0	203.8	198.8	193.6	187.3	179.8	172.3	164.7	157.2	152.5
72.5°	188.1	183.1	178.1	173.1	168.1	162.0	155.0	147.9	140.9	133.8	129.6
75°	149.1	144.5	140.0	135.5	131.0	125.6	119.2	112.9	106.6	100.2	96.9
77.5°	110.3	106.6	103.1	99.4	95.9	91.5	86.4	81.4	76.3	71.2	68.9
80°	88.1	84.4	80.9	77.2	73.7	69.7	65.5	61.3	57.1	52.9	51.5
82.5°	66.4	63.1	59.9	56.6	53.4	50.3	47.4	44.5	41.6	38.8	38.2
85°	37.3	34.5	31.8	29.2	26.4	24.7	23.9	23.2	22.5	21.7	21.5
87.5°	12.6	11.9	11.4	10.8	10.2	9.9	10.0	10.1	10.2	10.3	10.4
90°	0.6	1.9	3.0	4.2	5.4	6.5	7.5	8.6	9.5	10.6	11.3
92.5°	16.1	16.9	17.7	18.5	19.4	20.3	21.7	22.9	24.2	25.4	26.4
95°	43.1	43.3	43.6	43.9	44.2	45.1	46.5	48.1	49.5	51.0	52.0
97.5°	71.5	71.6	71.7	71.9	72.0	73.0	75.1	77.1	79.1	81.1	82.1
100°	92.6	92.6	92.6	92.6	92.6	93.6	95.5	97.5	99.3	101.3	102.6
102.5°	115.5	116.0	116.6	117.2	117.8	118.6	119.6	120.6	121.5	122.4	123.9
105°	151.0	151.7	152.4	153.1	153.9	154.7	155.6	156.4	157.3	158.2	159.1
107.5°	190.1	190.8	191.6	192.3	193.1	193.8	194.5	195.1	195.8	196.4	196.9
110°	217.1	217.8	218.6	219.4	220.1	220.6	221.1	221.5	221.9	222.4	222.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	244.7	245.0	245.4	245.8	246.2	246.6	247.2	247.8	248.3	248.9	249.1
115°	285.3	285.9	286.5	287.0	287.7	288.1	288.4	288.6	289.0	289.3	289.1
117.5°	326.1	326.4	326.6	326.9	327.2	327.4	327.7	328.0	328.2	328.5	328.6
120°	351.5	352.2	352.9	353.7	354.5	354.9	355.0	355.2	355.3	355.4	355.4
122.5°	379.1	379.3	379.6	379.9	380.1	380.4	380.8	381.2	381.6	381.9	381.8
125°	416.3	417.2	418.1	419.0	419.9	420.4	420.5	420.7	420.9	421.0	420.7
127.5°	456.1	456.6	457.1	457.6	458.1	458.4	458.6	458.8	459.0	459.1	459.0
130°	479.9	480.6	481.4	482.1	482.9	483.4	483.7	483.9	484.3	484.6	484.4
132.5°	503.7	505.0	506.1	507.4	508.5	509.2	509.1	509.0	509.0	508.9	508.8
135°	541.4	542.3	543.2	544.1	545.0	545.5	545.6	545.8	546.0	546.1	546.1
137.5°	576.9	577.8	578.6	579.5	580.4	580.9	581.3	581.6	581.9	582.3	582.5
140°	599.8	600.5	601.2	601.9	602.7	603.2	603.7	604.1	604.6	605.0	605.3
142.5°	622.5	623.1	623.8	624.4	625.0	625.5	626.2	626.7	627.2	627.8	627.9
145°	656.0	656.6	657.2	657.7	658.4	658.9	659.3	659.8	660.2	660.7	660.7
147.5°	687.0	687.3	687.6	688.0	688.3	688.6	688.9	689.3	689.6	690.0	690.4
150°	707.7	707.5	707.3	707.2	707.0	707.3	707.8	708.5	709.0	709.6	709.6
152.5°	724.6	724.8	725.0	725.2	725.4	725.6	725.9	726.1	726.3	726.6	726.9
155°	750.6	750.6	750.6	750.6	750.6	750.7	750.9	751.0	751.2	751.4	751.9
157.5°	774.0	773.6	773.3	773.0	772.7	772.6	772.8	772.8	773.0	773.2	773.7
160°	787.7	787.3	786.8	786.4	786.0	785.8	786.0	786.1	786.2	786.4	787.0
162.5°	800.0	799.6	799.2	799.0	798.6	798.4	798.5	798.5	798.5	798.6	799.3
165°	816.2	815.9	815.6	815.3	815.0	814.9	815.1	815.2	815.4	815.6	816.1
167.5°	830.0	829.4	828.8	828.2	827.6	827.3	827.3	827.3	827.3	827.3	828.2
170°	837.4	836.8	836.2	835.6	835.0	834.7	834.7	834.7	834.7	834.7	835.6
172.5°	842.7	842.0	841.5	840.9	840.3	840.0	840.0	840.0	840.0	840.0	840.9
175°	848.6	848.0	847.5	846.9	846.2	846.0	846.0	846.0	846.0	846.0	846.9
177.5°	851.7	851.2	850.7	850.2	849.8	849.5	849.4	849.3	849.2	849.0	849.7
180°	850.6	850.6	850.6	850.6	850.6	850.6	850.6	850.6	850.6	850.6	850.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	894.0	895.2	896.4	897.0	896.9	896.7	896.6	896.5
5°	888.5	890.0	891.5	892.2	891.8	891.5	891.3	890.9
7.5°	877.4	878.5	879.6	879.9	879.6	879.2	879.0	878.6
10°	868.1	868.5	869.1	869.1	868.5	868.1	867.6	867.2
12.5°	854.9	855.2	855.5	855.3	854.6	854.0	853.3	852.6
15°	833.0	832.9	832.8	832.0	830.6	829.3	828.0	826.5
17.5°	805.8	805.0	804.3	803.3	802.3	801.1	800.0	798.9
20°	785.8	785.0	784.3	783.2	781.9	780.5	779.2	777.8
22.5°	765.9	764.4	762.9	761.6	760.5	759.4	758.3	757.2
25°	733.3	731.3	729.3	727.5	725.9	724.2	722.6	720.9
27.5°	697.9	695.2	692.4	690.3	688.7	687.1	685.5	683.9
30°	672.6	669.1	665.7	663.3	661.9	660.6	659.2	657.9
32.5°	648.0	644.3	640.4	637.7	635.9	634.2	632.5	630.8
35°	609.8	605.5	601.1	597.9	595.8	593.6	591.6	589.4
37.5°	569.9	564.6	559.4	555.7	553.7	551.7	549.7	547.6
40°	543.4	537.7	532.0	528.2	526.5	524.6	522.8	521.0
42.5°	517.4	511.8	506.4	502.3	499.7	497.0	494.4	491.8
45°	475.7	469.8	463.7	459.6	457.4	455.0	452.8	450.6
47.5°	434.6	428.4	422.2	417.9	415.4	412.9	410.4	407.9
50°	406.7	400.4	394.0	389.8	387.5	385.3	383.0	380.8
52.5°	380.3	373.4	366.7	362.1	359.9	357.7	355.3	353.1
55°	340.1	333.3	326.5	322.0	319.6	317.2	314.8	312.4
57.5°	299.9	293.3	286.7	282.2	280.1	277.9	275.9	273.8
60°	273.3	266.7	260.1	255.7	253.4	251.1	248.9	246.6
62.5°	247.2	241.0	234.9	230.7	228.5	226.2	223.9	221.7
65°	208.8	202.8	196.8	192.6	190.4	188.2	185.8	183.6
67.5°	172.2	166.7	161.1	157.5	155.7	153.9	152.0	150.3
70°	147.8	143.2	138.5	135.3	133.5	131.7	129.8	128.0
72.5°	125.3	120.9	116.6	113.9	112.7	111.5	110.3	109.1
75°	93.6	90.3	87.0	84.8	83.8	82.8	81.7	80.6
77.5°	66.6	64.3	62.0	60.5	59.7	58.9	58.1	57.3
80°	50.1	48.8	47.4	46.6	46.3	46.0	45.7	45.4
82.5°	37.5	36.8	36.2	35.8	35.7	35.5	35.3	35.1
85°	21.4	21.2	21.0	21.0	20.8	20.6	20.5	20.3
87.5°	10.5	10.7	10.9	10.9	10.9	10.8	10.8	10.8
90°	12.0	12.8	13.6	14.1	14.5	15.0	15.4	15.9
92.5°	27.4	28.4	29.3	30.0	30.3	30.6	30.9	31.2
95°	53.1	54.0	55.1	55.7	56.1	56.4	56.6	56.9
97.5°	83.1	84.1	85.1	85.6	85.8	86.0	86.1	86.3
100°	103.9	105.2	106.6	107.4	107.7	108.0	108.3	108.5
102.5°	125.4	126.8	128.2	129.1	129.6	130.0	130.4	130.8
105°	160.0	160.9	161.8	162.4	162.8	163.3	163.7	164.2
107.5°	197.3	197.8	198.2	198.4	198.4	198.4	198.3	198.3
110°	223.3	223.7	224.2	224.4	224.2	224.0	223.9	223.7





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	249.3	249.5	249.7	249.7	249.4	249.1	248.9	248.6
115°	289.0	288.8	288.6	288.6	288.4	288.3	288.1	287.9
117.5°	328.7	328.8	329.0	328.7	328.1	327.5	326.9	326.4
120°	355.4	355.4	355.4	355.2	354.6	354.0	353.4	352.8
122.5°	381.7	381.6	381.5	381.2	380.7	380.2	379.8	379.3
125°	420.4	420.1	419.8	419.6	419.5	419.3	419.2	419.0
127.5°	458.9	458.7	458.5	458.3	458.1	457.7	457.4	457.2
130°	484.3	484.1	483.9	483.8	483.5	483.1	482.9	482.6
132.5°	508.6	508.5	508.4	508.0	507.7	507.2	506.8	506.4
135°	546.1	546.1	546.1	545.8	545.2	544.7	544.0	543.5
137.5°	582.6	582.8	583.0	582.6	581.9	581.2	580.5	579.7
140°	605.6	605.9	606.2	606.0	605.3	604.5	603.8	603.1
142.5°	628.1	628.3	628.5	628.2	627.5	626.8	626.0	625.3
145°	660.7	660.7	660.7	660.4	660.0	659.5	659.1	658.6
147.5°	690.7	691.1	691.4	691.1	690.1	689.1	688.1	687.2
150°	709.6	709.6	709.6	709.4	709.2	708.9	708.6	708.3
152.5°	727.3	727.6	728.0	727.9	727.4	726.8	726.3	725.8
155°	752.5	753.0	753.7	753.6	752.9	752.2	751.4	750.6
157.5°	774.4	774.9	775.5	775.3	774.4	773.4	772.4	771.4
160°	787.6	788.2	788.7	788.7	787.9	787.2	786.5	785.8
162.5°	800.0	800.7	801.4	801.4	800.5	799.6	798.8	797.9
165°	816.7	817.3	817.9	817.7	816.9	816.0	815.1	814.2
167.5°	829.1	830.0	830.8	830.8	829.9	829.0	828.1	827.2
170°	836.5	837.4	838.3	838.2	837.1	836.2	835.1	834.1
172.5°	841.8	842.7	843.6	843.6	842.7	841.7	840.8	839.9
175°	847.7	848.6	849.5	849.4	848.4	847.4	846.3	845.3
177.5°	850.4	851.1	851.9	851.8	851.0	850.2	849.4	848.5
180°	850.6	850.6	850.6	850.6	850.6	850.6	850.6	850.6

(END OF REPORT)