

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: P333535-940

Luminaire Tested: **S125RDIP-S610D810U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333535-940
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-S610D810U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5010.0 lumens
Efficiency: N/A
Efficacy: 130.5 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

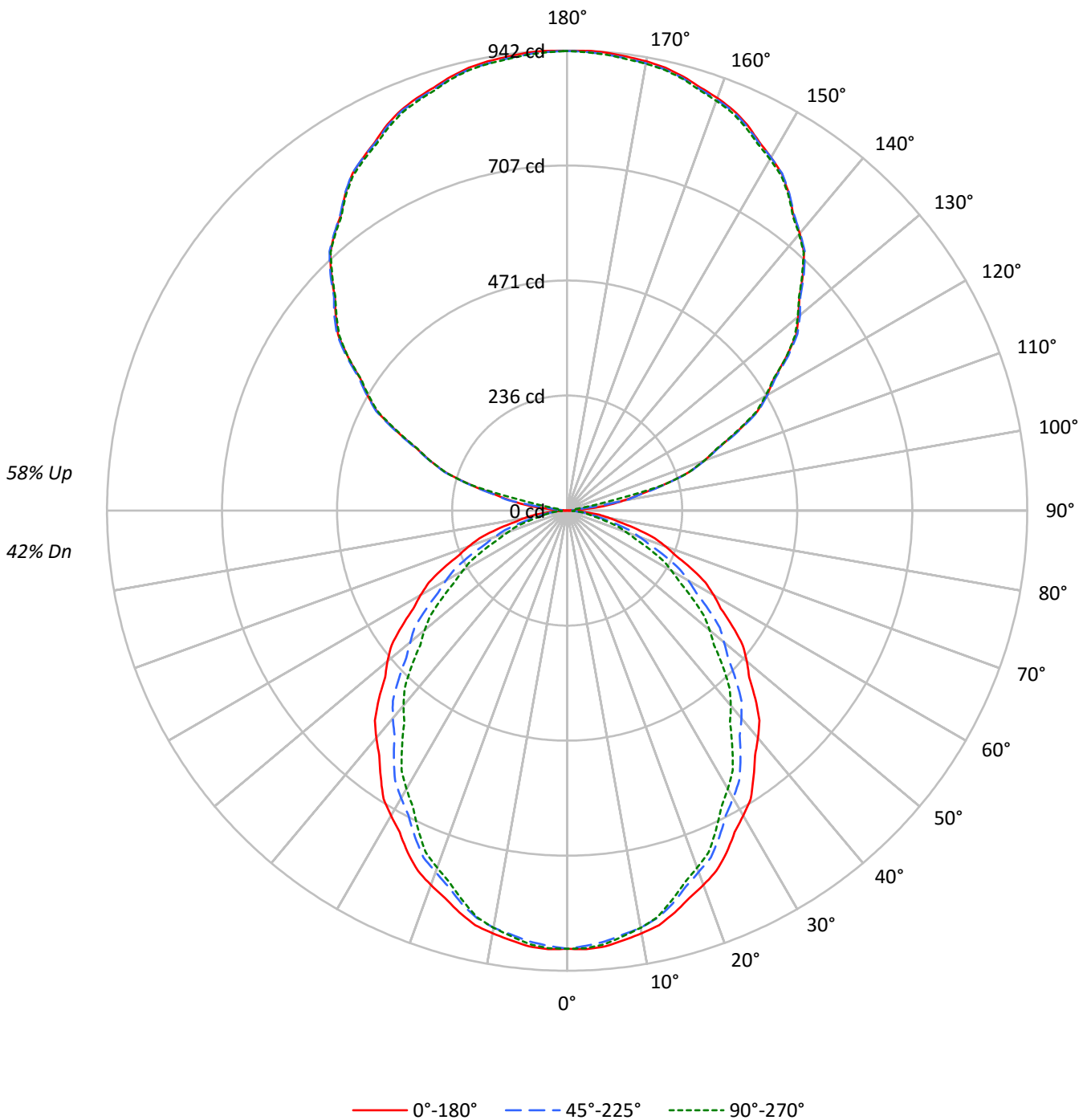
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333535-940

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36																				
2	88	81	75	70	80	74	69	64	61	57	54	49	47	45	39	37	35	30																				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	30	26																				
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26	22																				
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23	20																				
6	62	50	42	37	57	46	39	34	39	33	29	32	28	25	25	22	20	17																				
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15																				
8	53	41	34	28	49	38	31	27	32	27	23	26	23	20	21	18	16	14																				
9	50	38	30	25	45	35	28	24	29	24	21	24	20	18	20	17	15	12																				
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11																				

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	1.7
10°-20°	235.7	4.7
20°-30°	341.8	6.8
30°-40°	389.6	7.8
40°-50°	379.7	7.6
50°-60°	319.6	6.4
60°-70°	224.1	4.5
70°-80°	115.2	2.3
80°-90°	31.1	0.6
90°-100°	34.2	0.7
100°-110°	210.7	4.2
110°-120°	382.1	7.6
120°-130°	490.4	9.8
130°-140°	527.5	10.5
140°-150°	495.1	9.9
150°-160°	400.5	8.0
160°-170°	259.0	5.2
170°-180°	89.3	1.8
0°-30°	661.9	13.2
0°-40°	1051.5	21.0
0°-60°	1750.9	34.9
0°-90°	2121.1	42.3
90°-120°	627.0	12.5
90°-150°	2140.0	42.7
90°-180°	2889.0	57.7
0°-180°	5010.0	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	15	17	3
95°	40	36	11	14	15	51
105°	205	208	208	208	207	217
115°	385	388	389	386	382	381
125°	547	552	552	550	547	489
135°	683	687	686	684	680	526
145°	792	793	793	793	789	495
155°	872	868	869	871	865	401
165°	920	916	916	920	915	260
175°	941	937	937	942	937	90
180°	941	941	941	941	941	



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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	12.0	11.4	10.8	10.3	10.0	10.1	10.2	10.3	10.3	10.5
90°	0.7	2.0	3.2	4.5	5.6	6.8	7.9	9.0	10.1	11.1	11.9
92.5°	10.7	9.9	9.0	8.1	7.3	7.3	8.3	9.3	10.2	11.1	11.9
95°	39.8	39.3	38.8	38.3	37.9	34.7	28.8	22.9	17.0	11.1	11.9
97.5°	83.0	83.8	84.6	85.5	86.3	81.0	69.3	57.6	45.9	34.3	30.0
100°	116.5	116.9	117.3	117.9	118.3	118.9	119.5	120.1	120.7	121.4	98.3
102.5°	150.5	151.1	151.7	152.2	152.8	153.3	153.7	154.1	154.4	154.8	150.4
105°	205.0	205.6	206.3	206.9	207.5	207.8	207.8	207.8	207.8	207.8	207.8
107.5°	261.6	261.6	261.6	261.6	261.6	261.8	262.1	262.4	262.7	263.1	263.1
110°	298.5	298.5	298.5	298.5	298.5	298.6	298.9	299.3	299.5	299.9	299.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	333.1	333.4	333.8	334.2	334.6	334.8	335.0	335.2	335.4	335.6	335.0
115°	385.0	385.8	386.5	387.3	388.1	388.5	388.7	388.8	389.0	389.1	388.5
117.5°	438.6	438.6	438.5	438.5	438.5	438.8	439.3	440.0	440.6	441.1	440.3
120°	472.1	472.0	471.8	471.6	471.4	471.6	472.1	472.6	473.1	473.5	473.2
122.5°	501.7	502.3	502.8	503.5	504.0	504.4	504.6	504.9	505.1	505.3	505.0
125°	547.4	548.5	549.6	550.7	551.8	552.3	552.3	552.3	552.3	552.3	551.7
127.5°	591.1	591.8	592.6	593.4	594.1	594.5	594.4	594.3	594.2	594.1	593.8
130°	617.9	618.7	619.4	620.2	621.0	621.4	621.6	621.7	621.9	622.1	621.6
132.5°	644.6	645.5	646.4	647.3	648.3	648.5	648.2	647.8	647.5	647.1	647.0
135°	682.7	683.7	684.6	685.5	686.4	686.7	686.4	686.1	685.8	685.5	685.2
137.5°	717.7	718.5	719.3	720.1	720.9	721.2	720.9	720.7	720.4	720.1	720.1
140°	740.6	740.9	741.2	741.5	741.8	741.9	741.7	741.6	741.5	741.3	741.6
142.5°	761.3	761.4	761.6	761.8	762.0	762.1	762.4	762.6	762.9	763.0	763.1
145°	791.5	791.8	792.1	792.5	792.7	792.9	792.9	792.9	792.9	792.9	793.1
147.5°	818.0	818.0	817.9	817.8	817.8	817.8	818.0	818.1	818.4	818.6	818.8
150°	834.7	834.5	834.1	833.8	833.5	833.5	833.8	834.1	834.5	834.7	835.1
152.5°	851.0	850.2	849.5	848.9	848.2	848.0	848.3	848.6	848.9	849.3	849.5
155°	871.7	870.8	869.9	868.9	868.0	867.6	868.0	868.3	868.6	868.9	869.3
157.5°	887.7	887.2	886.6	886.1	885.5	885.2	885.3	885.3	885.3	885.4	885.8
160°	898.9	898.0	897.1	896.1	895.2	894.8	894.9	895.1	895.3	895.4	896.0
162.5°	907.9	906.9	906.0	905.0	904.1	903.7	903.8	904.0	904.2	904.4	905.2
165°	919.8	918.9	917.9	917.0	916.1	915.7	915.9	916.1	916.1	916.3	917.3
167.5°	928.7	927.8	926.8	925.9	924.9	924.5	924.6	924.8	925.0	925.1	926.2
170°	933.8	932.6	931.6	930.5	929.4	929.0	929.1	929.3	929.4	929.6	930.9
172.5°	937.1	936.0	935.0	933.9	932.7	932.4	932.6	932.9	933.2	933.4	934.6
175°	940.8	939.8	938.9	938.0	937.0	936.7	936.7	936.9	937.1	937.3	938.5
177.5°	942.4	941.6	940.9	940.2	939.4	939.1	939.2	939.3	939.5	939.6	940.5
180°	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8



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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°	10.7	10.8	11.0	11.1	11.1	11.0	11.0	11.0
90°	12.8	13.5	14.3	14.9	15.3	15.8	16.2	16.8
92.5°	12.8	13.5	14.3	14.7	15.0	15.2	15.4	15.6
95°	12.8	13.5	14.3	14.6	14.6	14.6	14.6	14.6
97.5°	25.6	21.2	16.9	14.6	14.6	14.6	14.6	14.6
100°	75.2	52.1	29.0	17.1	16.5	15.9	15.2	14.6
102.5°	146.1	141.7	137.3	129.9	119.3	108.8	98.3	87.7
105°	207.8	207.8	207.8	207.8	207.6	207.4	207.2	207.1
107.5°	263.1	263.1	263.1	263.0	262.5	262.0	261.5	261.1
110°	298.9	298.5	298.0	297.8	298.0	298.2	298.3	298.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	334.4	333.8	333.2	332.8	332.6	332.3	332.2	332.0
115°	387.9	387.3	386.6	385.8	385.0	384.0	383.1	382.2
117.5°	439.5	438.7	437.9	437.3	436.9	436.5	436.1	435.7
120°	472.9	472.6	472.3	471.7	470.9	470.2	469.4	468.6
122.5°	504.7	504.4	504.1	503.5	502.6	501.7	500.8	499.9
125°	551.1	550.5	549.8	549.3	548.8	548.3	547.9	547.4
127.5°	593.4	593.2	592.8	592.0	590.9	589.8	588.6	587.5
130°	621.1	620.6	620.2	619.6	618.8	618.0	617.2	616.4
132.5°	646.9	646.8	646.8	646.3	645.6	644.8	644.0	643.3
135°	684.9	684.6	684.3	683.7	682.7	681.8	680.8	679.9
137.5°	720.2	720.2	720.3	720.0	719.2	718.4	717.6	716.8
140°	741.9	742.3	742.5	742.3	741.3	740.4	739.4	738.5
142.5°	763.2	763.2	763.3	762.9	762.0	761.0	760.1	759.1
145°	793.2	793.4	793.5	793.1	792.2	791.3	790.3	789.4
147.5°	818.9	819.1	819.3	818.9	817.7	816.6	815.5	814.4
150°	835.4	835.7	836.0	835.5	834.3	833.0	831.8	830.5
152.5°	849.9	850.2	850.5	850.1	849.0	847.8	846.8	845.6
155°	869.9	870.3	870.8	870.4	869.2	867.9	866.7	865.4
157.5°	886.4	886.9	887.3	887.0	885.7	884.5	883.2	882.0
160°	896.6	897.2	897.9	897.6	896.3	895.1	893.9	892.6
162.5°	906.1	907.0	907.8	907.6	906.2	904.8	903.5	902.1
165°	918.2	919.1	920.1	919.9	918.6	917.4	916.1	914.9
167.5°	927.4	928.4	929.6	929.4	928.0	926.7	925.2	923.9
170°	932.0	933.3	934.5	934.4	933.1	931.7	930.2	928.9
172.5°	935.7	936.8	938.0	937.8	936.4	935.0	933.6	932.2
175°	939.7	940.9	942.2	942.1	940.8	939.3	938.0	936.6
177.5°	941.4	942.2	943.1	943.1	942.0	941.0	940.0	939.1
180°	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8

(END OF REPORT)