

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: P333374

Luminaire Tested: **S125DIW-S610D470U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333374
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: S125DIW-S610D470U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4374.4 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

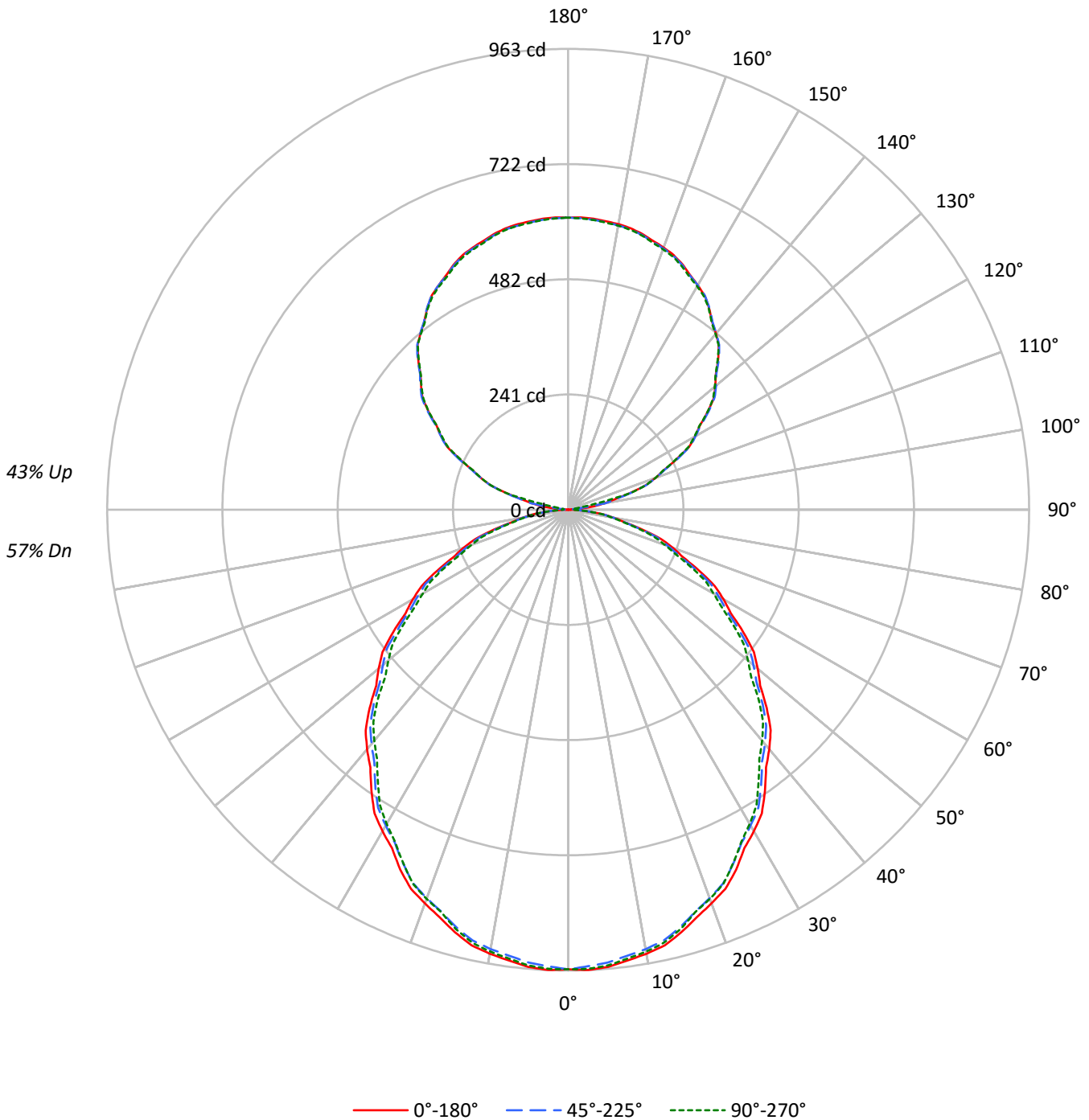
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	49	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38	34
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	33	29
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28	25
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25	22
7	59	47	39	33	55	44	36	31	38	33	28	33	29	25	29	25	22	20
8	55	42	34	29	51	40	33	28	35	29	25	31	26	22	26	23	20	18
9	51	39	31	26	48	36	30	25	32	26	22	28	24	20	24	21	18	16
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	2.1
10°-20°	255.8	5.8
20°-30°	377.7	8.6
30°-40°	440.7	10.1
40°-50°	442.6	10.1
50°-60°	388.5	8.9
60°-70°	289.5	6.6
70°-80°	165.5	3.8
80°-90°	49.4	1.1
90°-100°	22.2	0.5
100°-110°	136.7	3.1
110°-120°	247.9	5.7
120°-130°	318.1	7.3
130°-140°	342.2	7.8
140°-150°	321.2	7.3
150°-160°	259.8	5.9
160°-170°	168.0	3.8
170°-180°	58.0	1.3
0°-30°	724.0	16.6
0°-40°	1164.7	26.6
0°-60°	1995.9	45.6
0°-90°	2500.3	57.2
90°-120°	406.7	9.3
90°-150°	1388.2	31.7
90°-180°	1874.0	42.8
0°-180°	4374.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	0	4	7	9	11	3
95°	26	24	7	9	10	33
105°	133	135	135	135	134	141
115°	250	252	252	251	248	247
125°	355	358	358	356	355	317
135°	443	445	445	444	441	341
145°	514	514	514	515	512	321
155°	566	563	564	565	561	260
165°	597	594	594	597	594	168
175°	610	608	608	611	608	58
180°	610	610	610	610	610	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.5	16.7	16.8	17.0	17.1	17.2	17.2	17.2	17.2	17.3	17.4
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.2	7.7
92.5°	7.0	6.4	5.8	5.3	4.7	4.7	5.4	6.0	6.6	7.2	7.7
95°	25.8	25.5	25.2	24.9	24.6	22.5	18.7	14.9	11.1	7.2	7.7
97.5°	53.8	54.4	54.9	55.5	56.0	52.5	44.9	37.4	29.8	22.3	19.4
100°	75.5	75.9	76.2	76.5	76.8	77.1	77.5	77.9	78.3	78.7	63.7
102.5°	97.6	98.0	98.4	98.8	99.2	99.5	99.7	99.9	100.2	100.4	97.6
105°	133.0	133.4	133.8	134.2	134.6	134.8	134.8	134.8	134.8	134.8	134.8
107.5°	169.7	169.7	169.7	169.7	169.7	169.8	170.0	170.2	170.4	170.6	170.7
110°	193.6	193.6	193.6	193.6	193.6	193.7	193.9	194.1	194.3	194.5	194.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	216.1	216.3	216.5	216.8	217.0	217.2	217.3	217.5	217.6	217.7	217.3
115°	249.7	250.2	250.7	251.2	251.7	252.0	252.1	252.2	252.3	252.4	252.0
117.5°	284.6	284.5	284.5	284.5	284.5	284.7	285.0	285.4	285.8	286.2	285.7
120°	306.3	306.2	306.1	306.0	305.9	306.0	306.3	306.6	306.9	307.2	307.0
122.5°	325.5	325.8	326.2	326.6	327.0	327.2	327.4	327.5	327.7	327.8	327.6
125°	355.1	355.8	356.5	357.2	357.9	358.3	358.3	358.3	358.3	358.3	357.9
127.5°	383.4	384.0	384.5	385.0	385.5	385.7	385.6	385.6	385.5	385.4	385.2
130°	400.8	401.3	401.8	402.3	402.8	403.1	403.2	403.3	403.4	403.5	403.2
132.5°	418.2	418.8	419.4	419.9	420.5	420.7	420.5	420.3	420.0	419.8	419.8
135°	442.9	443.5	444.1	444.7	445.3	445.5	445.3	445.1	444.9	444.7	444.5
137.5°	465.6	466.1	466.6	467.2	467.7	467.9	467.7	467.5	467.3	467.1	467.2
140°	480.4	480.6	480.8	481.0	481.2	481.3	481.2	481.1	481.0	480.9	481.1
142.5°	493.8	494.0	494.1	494.2	494.3	494.4	494.6	494.7	494.9	495.0	495.0
145°	513.5	513.7	513.9	514.1	514.3	514.4	514.4	514.4	514.4	514.4	514.5
147.5°	530.7	530.6	530.6	530.5	530.5	530.5	530.7	530.8	530.9	531.0	531.1
150°	541.5	541.3	541.1	540.9	540.7	540.7	540.9	541.1	541.3	541.5	541.7
152.5°	552.0	551.6	551.1	550.7	550.2	550.1	550.3	550.5	550.7	550.9	551.1
155°	565.5	564.9	564.3	563.7	563.1	562.9	563.1	563.3	563.5	563.7	564.0
157.5°	575.9	575.5	575.2	574.8	574.4	574.3	574.3	574.3	574.3	574.4	574.7
160°	583.1	582.5	581.9	581.3	580.7	580.5	580.6	580.7	580.8	580.9	581.3
162.5°	588.9	588.3	587.7	587.1	586.5	586.3	586.4	586.5	586.6	586.7	587.2
165°	596.7	596.1	595.5	594.9	594.3	594.0	594.1	594.2	594.3	594.4	595.0
167.5°	602.5	601.9	601.3	600.6	600.0	599.7	599.8	599.9	600.0	600.1	600.9
170°	605.8	605.1	604.3	603.6	602.9	602.6	602.7	602.8	602.9	603.0	603.8
172.5°	607.9	607.2	606.5	605.8	605.1	604.9	605.0	605.2	605.4	605.6	606.3
175°	610.3	609.7	609.1	608.5	607.9	607.6	607.7	607.8	607.9	608.0	608.8
177.5°	611.4	610.9	610.4	609.9	609.4	609.2	609.3	609.4	609.5	609.6	610.1
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	17.5	17.6	17.7	17.6	17.4	17.2	17.0	16.8
90°	8.2	8.7	9.2	9.7	10.0	10.3	10.6	10.9
92.5°	8.2	8.7	9.2	9.6	9.7	9.9	10.0	10.1
95°	8.2	8.7	9.2	9.5	9.5	9.5	9.5	9.5
97.5°	16.6	13.8	10.9	9.5	9.5	9.5	9.5	9.5
100°	48.8	33.8	18.8	11.1	10.7	10.3	9.9	9.5
102.5°	94.8	91.9	89.1	84.3	77.4	70.6	63.7	56.9
105°	134.8	134.8	134.8	134.8	134.7	134.6	134.5	134.4
107.5°	170.7	170.7	170.7	170.6	170.3	170.0	169.7	169.4
110°	193.9	193.6	193.3	193.2	193.3	193.4	193.5	193.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.9	216.5	216.2	215.9	215.8	215.6	215.5	215.3
115°	251.6	251.2	250.8	250.3	249.7	249.1	248.5	247.9
117.5°	285.1	284.6	284.1	283.7	283.4	283.2	282.9	282.7
120°	306.8	306.6	306.4	306.0	305.5	305.0	304.5	304.0
122.5°	327.4	327.2	327.0	326.6	326.0	325.4	324.9	324.3
125°	357.5	357.1	356.7	356.3	356.0	355.7	355.4	355.1
127.5°	385.0	384.8	384.6	384.1	383.3	382.6	381.8	381.1
130°	402.9	402.6	402.3	401.9	401.4	400.9	400.4	399.9
132.5°	419.7	419.6	419.6	419.3	418.8	418.3	417.8	417.3
135°	444.3	444.1	443.9	443.5	442.9	442.3	441.7	441.1
137.5°	467.2	467.3	467.3	467.1	466.5	466.0	465.5	465.0
140°	481.3	481.5	481.7	481.5	480.9	480.3	479.7	479.1
142.5°	495.1	495.1	495.2	494.9	494.3	493.7	493.1	492.5
145°	514.6	514.7	514.8	514.5	513.9	513.3	512.7	512.1
147.5°	531.3	531.4	531.5	531.2	530.5	529.8	529.0	528.3
150°	541.9	542.1	542.3	542.0	541.2	540.4	539.6	538.8
152.5°	551.3	551.5	551.7	551.5	550.7	550.0	549.3	548.6
155°	564.3	564.6	564.9	564.6	563.8	563.0	562.2	561.4
157.5°	575.0	575.3	575.6	575.4	574.6	573.8	573.0	572.2
160°	581.7	582.1	582.5	582.3	581.5	580.7	579.9	579.1
162.5°	587.8	588.4	588.9	588.8	587.9	587.0	586.1	585.2
165°	595.7	596.3	596.9	596.8	596.0	595.1	594.3	593.5
167.5°	601.6	602.3	603.0	603.0	602.0	601.1	600.2	599.3
170°	604.6	605.5	606.3	606.2	605.3	604.4	603.5	602.6
172.5°	607.0	607.7	608.5	608.4	607.5	606.6	605.7	604.8
175°	609.6	610.4	611.2	611.2	610.3	609.4	608.5	607.6
177.5°	610.7	611.2	611.8	611.8	611.1	610.5	609.8	609.2
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3

(END OF REPORT)