

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: P333184-930

Luminaire Tested: **S125DIP-S610D810U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333184-930
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: S125DIP-S610D810U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4680.6 lumens
Efficiency: N/A
Efficacy: 121.9 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

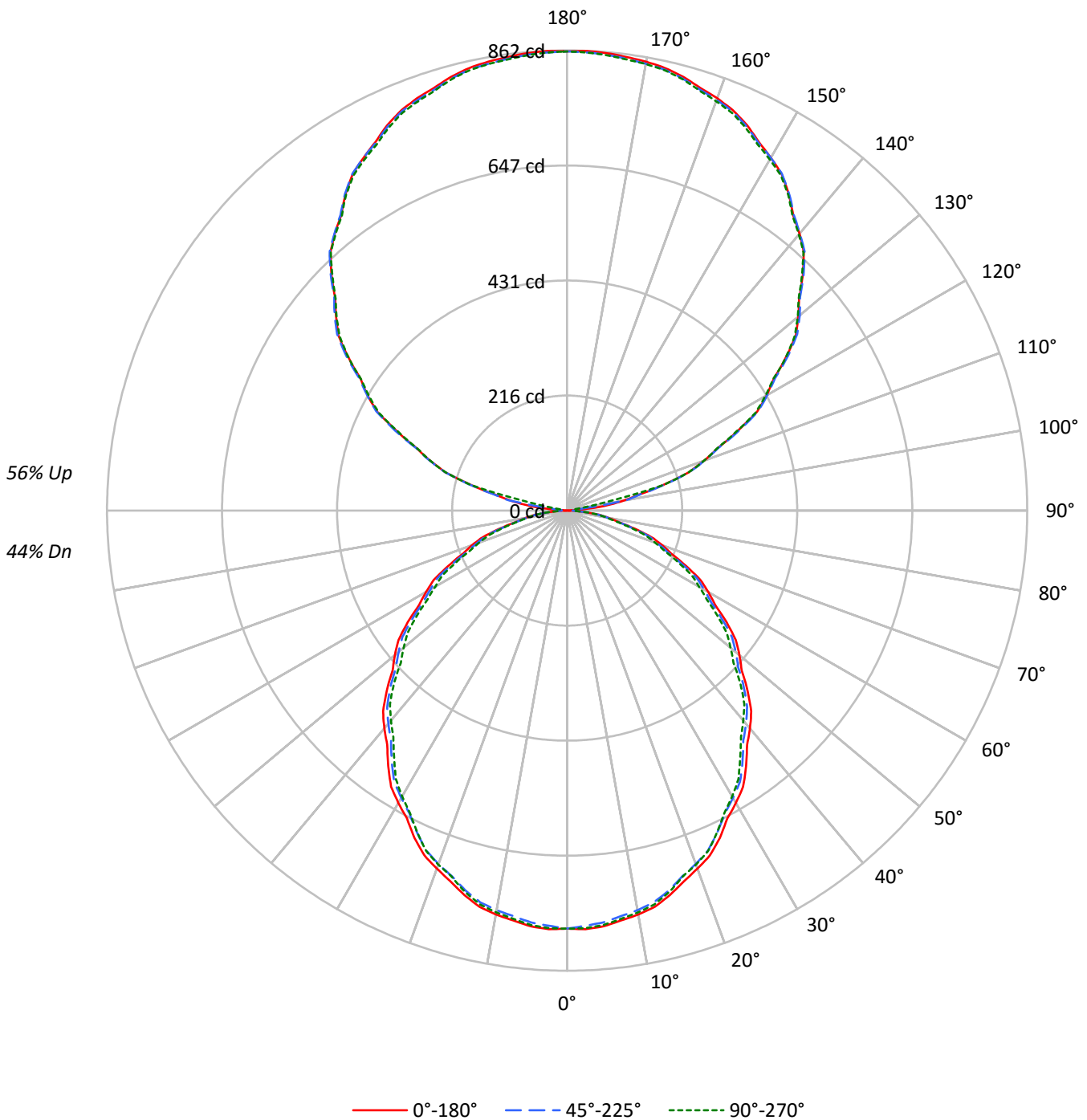
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	96	92	88	85	88	84	81	78	70	67	65	57	55	53	44	43	42	37
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36	31
3	80	71	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	38	33	29	32	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.6
10°-20°	208.5	4.5
20°-30°	307.9	6.6
30°-40°	359.3	7.7
40°-50°	360.9	7.7
50°-60°	316.8	6.8
60°-70°	236.0	5.0
70°-80°	135.0	2.9
80°-90°	41.0	0.9
90°-100°	31.3	0.7
100°-110°	192.6	4.1
110°-120°	349.4	7.5
120°-130°	448.4	9.6
130°-140°	482.3	10.3
140°-150°	452.7	9.7
150°-160°	366.2	7.8
160°-170°	236.8	5.1
170°-180°	81.7	1.7
0°-30°	590.3	12.6
0°-40°	949.6	20.3
0°-60°	1627.2	34.8
0°-90°	2039.3	43.6
90°-120°	573.3	12.2
90°-150°	1956.6	41.8
90°-180°	2641.0	56.4
0°-180°	4680.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	38
90°	1	6	10	13	15	3
95°	36	33	10	13	13	46
105°	187	190	190	190	189	199
115°	352	355	356	353	349	349
125°	500	505	505	502	500	447
135°	624	628	627	625	622	481
145°	724	725	725	725	722	452
155°	797	793	794	796	791	367
165°	841	837	838	841	836	237
175°	860	857	857	861	856	82
180°	860	860	860	860	860	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.5	13.7	13.9	14.2	14.4	14.6	14.7	14.8	14.8	14.9	15.1
90°	0.7	1.8	2.9	4.1	5.1	6.2	7.3	8.2	9.2	10.2	10.9
92.5°	9.8	9.0	8.2	7.4	6.7	6.7	7.6	8.5	9.3	10.2	10.9
95°	36.4	36.0	35.5	35.1	34.7	31.7	26.3	21.0	15.6	10.2	10.9
97.5°	75.9	76.6	77.4	78.2	78.9	74.0	63.3	52.7	42.0	31.4	27.4
100°	106.5	106.9	107.3	107.8	108.2	108.7	109.3	109.8	110.4	111.0	89.8
102.5°	137.6	138.1	138.7	139.2	139.7	140.1	140.6	140.9	141.2	141.5	137.5
105°	187.4	188.0	188.6	189.1	189.7	190.0	190.0	190.0	190.0	190.0	190.0
107.5°	239.2	239.2	239.2	239.2	239.2	239.4	239.6	239.9	240.2	240.5	240.5
110°	272.9	272.9	272.9	272.9	272.9	273.0	273.3	273.6	273.9	274.2	273.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.5	304.8	305.2	305.6	305.9	306.1	306.3	306.5	306.6	306.8	306.3
115°	352.0	352.7	353.4	354.1	354.8	355.2	355.4	355.5	355.6	355.8	355.2
117.5°	401.0	401.0	401.0	401.0	401.0	401.2	401.7	402.3	402.8	403.3	402.6
120°	431.6	431.5	431.4	431.2	431.0	431.2	431.6	432.1	432.5	432.9	432.7
122.5°	458.7	459.3	459.7	460.3	460.8	461.2	461.4	461.6	461.8	462.0	461.7
125°	500.5	501.5	502.5	503.5	504.5	505.0	505.0	505.0	505.0	505.0	504.4
127.5°	540.5	541.1	541.8	542.6	543.2	543.6	543.5	543.4	543.3	543.2	542.9
130°	564.9	565.7	566.3	567.0	567.8	568.2	568.3	568.4	568.6	568.8	568.3
132.5°	589.4	590.2	591.0	591.8	592.7	593.0	592.6	592.3	592.0	591.7	591.6
135°	624.2	625.1	625.9	626.8	627.6	627.9	627.6	627.3	627.0	626.8	626.5
137.5°	656.2	657.0	657.7	658.4	659.2	659.4	659.2	658.9	658.7	658.4	658.4
140°	677.1	677.4	677.7	678.0	678.2	678.3	678.2	678.1	677.9	677.8	678.1
142.5°	696.0	696.2	696.3	696.5	696.7	696.8	697.1	697.2	697.5	697.7	697.7
145°	723.7	724.0	724.2	724.6	724.8	725.0	725.0	725.0	725.0	725.0	725.1
147.5°	747.9	747.9	747.8	747.7	747.7	747.7	747.9	748.0	748.3	748.4	748.6
150°	763.2	763.0	762.6	762.4	762.1	762.1	762.4	762.6	763.0	763.2	763.5
152.5°	778.0	777.4	776.7	776.2	775.5	775.3	775.6	775.9	776.2	776.5	776.7
155°	797.0	796.1	795.3	794.4	793.6	793.3	793.6	793.9	794.2	794.4	794.8
157.5°	811.6	811.1	810.7	810.2	809.6	809.3	809.4	809.4	809.4	809.5	809.9
160°	821.9	821.0	820.2	819.3	818.5	818.2	818.2	818.4	818.6	818.6	819.2
162.5°	830.1	829.2	828.3	827.4	826.6	826.3	826.4	826.6	826.7	826.9	827.6
165°	841.0	840.2	839.3	838.5	837.6	837.2	837.4	837.6	837.6	837.8	838.7
167.5°	849.1	848.3	847.4	846.5	845.6	845.3	845.4	845.5	845.7	845.9	846.9
170°	853.8	852.7	851.7	850.8	849.8	849.4	849.5	849.6	849.8	849.9	851.1
172.5°	856.8	855.8	854.8	853.9	852.8	852.5	852.7	853.0	853.2	853.5	854.5
175°	860.1	859.2	858.4	857.6	856.7	856.4	856.5	856.6	856.8	857.0	858.1
177.5°	861.7	861.0	860.3	859.7	858.9	858.7	858.8	858.8	859.0	859.1	859.9
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	15.2	15.3	15.5	15.5	15.3	15.2	15.1	14.9
90°	11.7	12.3	13.0	13.6	14.0	14.4	14.8	15.3
92.5°	11.7	12.3	13.0	13.5	13.7	13.9	14.1	14.3
95°	11.7	12.3	13.0	13.4	13.4	13.4	13.4	13.4
97.5°	23.4	19.4	15.4	13.4	13.4	13.4	13.4	13.4
100°	68.7	47.6	26.5	15.7	15.1	14.5	13.9	13.4
102.5°	133.5	129.6	125.6	118.8	109.1	99.5	89.8	80.2
105°	190.0	190.0	190.0	190.0	189.8	189.6	189.5	189.4
107.5°	240.6	240.6	240.6	240.4	240.0	239.5	239.1	238.7
110°	273.3	272.9	272.5	272.3	272.5	272.6	272.7	272.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	305.7	305.2	304.7	304.3	304.1	303.9	303.7	303.5
115°	354.7	354.1	353.5	352.8	352.0	351.1	350.3	349.4
117.5°	401.9	401.1	400.4	399.8	399.5	399.1	398.8	398.4
120°	432.4	432.1	431.8	431.3	430.6	429.9	429.2	428.4
122.5°	461.5	461.1	460.9	460.3	459.5	458.7	457.9	457.1
125°	503.9	503.3	502.7	502.2	501.8	501.3	500.9	500.5
127.5°	542.6	542.3	542.0	541.3	540.3	539.2	538.2	537.1
130°	567.9	567.4	567.0	566.5	565.7	565.1	564.4	563.6
132.5°	591.5	591.4	591.3	590.9	590.3	589.5	588.8	588.2
135°	626.2	625.9	625.7	625.1	624.2	623.4	622.5	621.7
137.5°	658.5	658.5	658.6	658.3	657.5	656.8	656.1	655.3
140°	678.3	678.7	678.9	678.7	677.8	676.9	676.0	675.2
142.5°	697.8	697.8	697.9	697.5	696.7	695.8	695.0	694.1
145°	725.2	725.4	725.5	725.1	724.3	723.5	722.6	721.8
147.5°	748.8	748.9	749.1	748.7	747.6	746.7	745.6	744.6
150°	763.8	764.1	764.3	763.9	762.8	761.7	760.5	759.4
152.5°	777.1	777.3	777.6	777.2	776.2	775.2	774.2	773.1
155°	795.3	795.7	796.1	795.8	794.7	793.5	792.4	791.2
157.5°	810.4	810.9	811.3	811.0	809.8	808.7	807.6	806.4
160°	819.8	820.4	820.9	820.7	819.5	818.4	817.3	816.1
162.5°	828.4	829.2	830.0	829.8	828.5	827.3	826.1	824.8
165°	839.5	840.3	841.2	841.1	839.9	838.8	837.6	836.5
167.5°	847.9	848.9	849.9	849.8	848.5	847.3	846.0	844.7
170°	852.2	853.3	854.4	854.4	853.1	851.8	850.5	849.3
172.5°	855.5	856.6	857.6	857.5	856.1	854.9	853.6	852.3
175°	859.2	860.3	861.4	861.4	860.1	858.8	857.6	856.3
177.5°	860.7	861.4	862.3	862.3	861.3	860.4	859.5	858.6
180°	860.1	860.1	860.1	860.1	860.1	860.1	860.1	860.1

(END OF REPORT)