

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1037293

Luminaire Tested: S123DS-B340DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037293
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B340DB2750-4F0-XX-W2A-A_3000K
Description: Define 3 Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

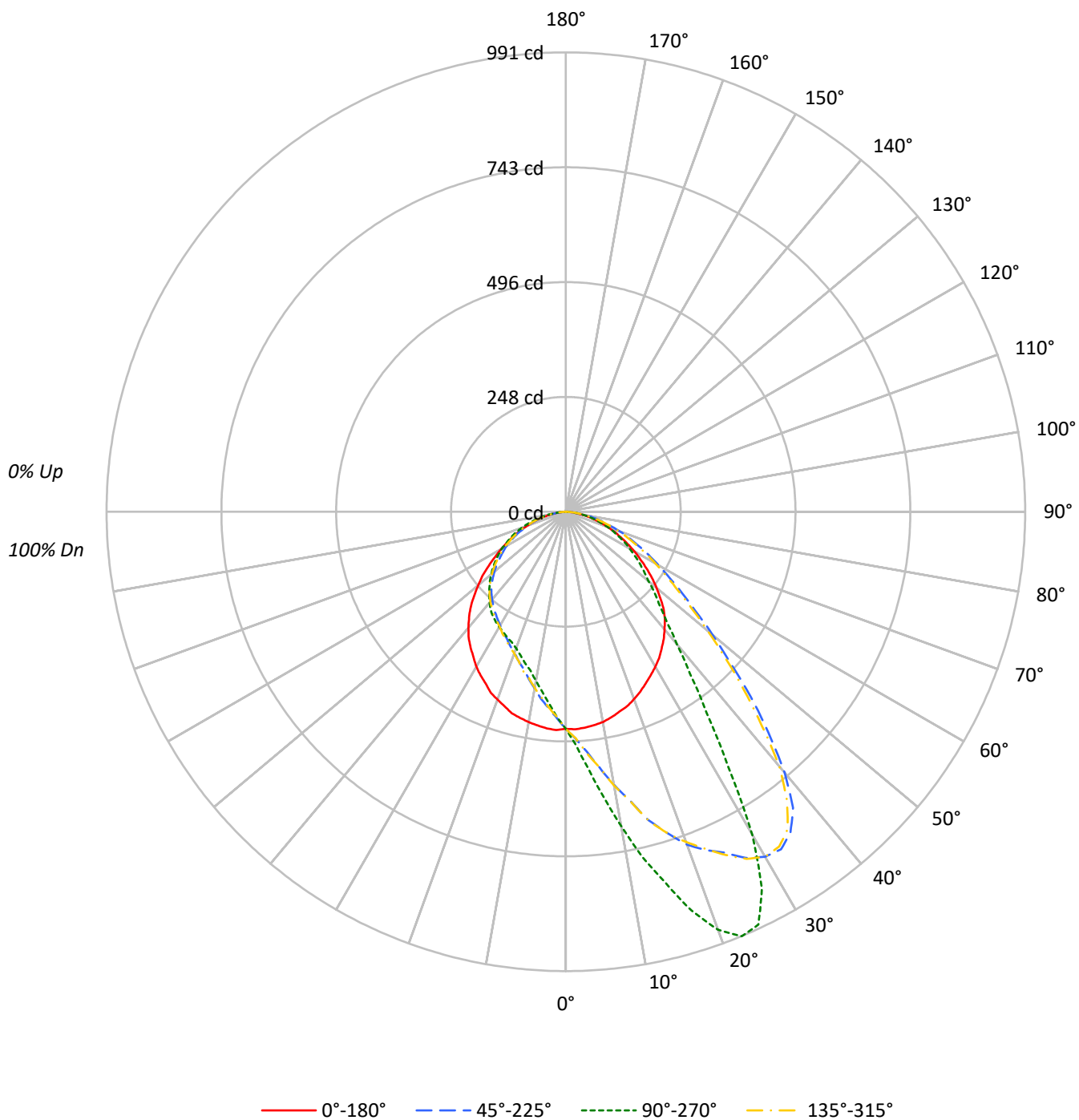
Lumens per Lamp: N/A
Luminaire Lumens: 1413.0 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V):
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	74	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	64	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	56	56	53
5	78	66	57	51	76	64	56	50	62	55	50	60	54	49	59	53	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	38	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	35	35	33
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31	31	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	28	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5040	5040	5040	5040
5°	5054	6010	5069	4485
10°	5033	7522	5038	4051
15°	4975	9226	5015	3771
20°	4927	10991	4937	3591
25°	4849	11670	4860	3551
30°	4799	10003	4799	3570
35°	4733	6956	4703	3607
40°	4654	5240	4596	3596
45°	4552	4351	4419	3550
50°	4277	3897	4124	3517
55°	3977	3644	3813	3474
60°	3673	3419	3477	3438
65°	3339	3212	3179	3329
70°	2999	3012	2798	3169
75°	2624	2699	2454	2907
80°	2163	2362	1996	2504
85°	1680	1853	1346	1680

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 10158 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	3.3
10°-20°	147.9	10.5
20°-30°	248.8	17.6
30°-40°	281.2	19.9
40°-50°	251.9	17.8
50°-60°	203.3	14.4
60°-70°	141.7	10.0
70°-80°	74.4	5.3
80°-90°	17.8	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	442.8	31.3
0°-40°	724.0	51.2
0°-60°	1179.1	83.4
0°-90°	1413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1413.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	468	468	468	468	468	
5°	468	556	469	415	468	44
15°	446	828	450	338	446	126
25°	408	983	409	299	408	188
35°	360	529	358	274	360	225
45°	299	286	290	233	299	229
55°	212	194	203	185	212	190
65°	131	126	125	131	131	131
75°	63	65	59	70	63	68
85°	14	15	11	14	14	17
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	469.5	473.2	475.0	477.7	480.4	484.5	485.9	488.1	487.2	489.0	489.9
5°	467.7	474.1	479.5	486.3	492.7	497.2	501.7	509.0	514.4	515.3	519.4
7.5°	464.5	473.6	483.1	492.7	504.9	512.2	520.3	530.3	538.5	551.6	556.6
10°	460.5	473.2	486.8	499.9	516.7	528.0	538.0	554.8	571.6	585.2	597.9
12.5°	454.1	470.0	487.7	507.2	529.0	542.1	555.7	577.9	603.4	624.2	637.8
15°	446.4	466.4	489.0	509.9	533.9	558.4	573.0	597.9	634.2	653.7	688.6
17.5°	440.0	460.5	483.1	515.8	548.5	573.0	583.4	629.2	654.2	686.8	726.3
20°	430.1	455.9	485.0	517.6	559.8	574.8	596.1	642.4	673.2	715.9	764.4
22.5°	419.6	447.3	482.2	516.3	563.4	579.3	608.3	645.1	694.1	736.3	789.8
25°	408.3	438.2	473.6	514.0	560.3	583.4	610.6	656.0	709.1	762.1	811.6
27.5°	396.9	429.6	466.4	506.7	551.6	578.9	606.1	653.3	721.3	778.9	842.0
30°	386.1	418.7	455.5	496.7	543.9	570.2	596.1	655.1	730.8	795.7	859.2
32.5°	374.3	407.8	446.4	480.9	528.5	556.6	585.7	655.1	736.7	805.7	863.7
35°	360.2	394.7	427.8	462.3	509.4	540.7	573.4	650.5	742.2	808.9	844.7
37.5°	346.6	377.0	405.6	439.1	488.6	522.2	559.8	645.1	739.4	795.2	805.2
40°	331.2	361.6	384.7	416.0	468.2	507.2	545.3	637.8	727.7	763.0	734.0
42.5°	316.2	340.2	360.2	390.6	447.3	485.4	526.7	624.7	704.5	711.8	646.5
45°	299.0	316.2	333.9	368.4	424.6	463.6	509.4	605.6	667.3	646.5	563.9
47.5°	276.7	292.2	311.7	343.4	400.6	440.9	484.5	581.1	613.3	569.8	479.5
50°	255.4	268.6	286.7	317.6	375.2	414.6	460.9	542.6	558.4	489.9	413.3
52.5°	234.1	244.1	261.8	292.6	350.2	388.3	430.5	503.1	494.0	420.5	352.5
55°	211.9	220.5	237.3	267.7	321.2	357.5	397.9	454.6	431.0	361.1	306.7
57.5°	190.1	199.2	216.4	241.8	292.2	327.5	359.7	404.2	368.8	313.0	264.9
60°	170.6	178.3	191.4	216.4	262.2	290.8	320.3	350.7	321.2	267.2	230.5
62.5°	150.2	157.4	169.7	192.3	231.8	257.2	280.8	305.8	273.1	233.6	201.0
65°	131.1	137.0	148.3	169.2	201.4	222.3	241.3	258.6	232.3	196.0	171.5
67.5°	113.9	118.9	128.4	147.0	174.2	189.2	204.6	219.1	196.9	167.9	147.0
70°	95.3	99.3	108.0	121.6	143.4	158.8	170.1	181.0	161.0	137.9	123.8
72.5°	78.9	83.0	88.5	102.5	117.5	127.0	139.3	145.2	133.8	114.8	100.7
75°	63.1	66.2	71.2	80.3	94.4	100.7	108.4	113.0	102.5	89.8	81.2
77.5°	49.4	50.8	54.4	60.8	70.3	77.6	83.5	86.2	78.9	70.8	63.5
80°	34.9	36.7	39.5	44.9	52.2	54.4	58.1	61.2	56.7	49.4	44.9
82.5°	23.1	25.4	26.8	29.0	33.6	36.3	37.2	39.9	35.8	33.1	31.3
85°	13.6	14.5	15.0	16.3	18.6	20.0	21.3	21.8	20.9	20.4	18.6
87.5°	6.8	6.8	6.8	7.7	8.2	9.1	9.5	9.5	9.5	9.1	8.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	493.1	494.0	497.2	499.5	504.0	503.6	503.6	503.1	501.7	504.0	505.4
5°	527.6	535.3	536.2	546.2	546.6	550.7	553.5	551.2	556.6	556.2	552.1
7.5°	570.2	580.7	585.7	595.2	606.1	603.4	613.8	615.6	614.7	619.2	622.4
10°	617.0	635.1	647.8	665.5	670.0	672.8	679.6	685.5	697.3	688.2	694.1
12.5°	670.5	683.6	700.4	728.6	742.6	751.7	754.9	759.0	767.1	762.1	762.6
15°	715.4	733.1	761.7	796.6	800.7	812.0	809.3	833.8	845.6	827.9	837.9
17.5°	762.1	785.7	819.7	850.1	867.4	875.1	882.3	905.9	905.0	902.3	904.6
20°	792.1	830.6	872.8	913.2	918.2	924.1	943.6	953.6	951.8	959.5	964.5
22.5°	834.3	875.1	920.0	946.8	958.1	964.9	980.3	986.7	989.4	991.2	988.0
25°	869.6	913.2	946.3	969.9	976.7	980.3	985.3	987.1	985.8	982.6	985.3
27.5°	893.7	928.6	951.3	962.2	958.6	952.7	943.1	936.8	922.7	915.9	924.1
30°	903.7	919.1	925.9	907.8	889.6	875.1	856.9	823.4	797.1	804.8	794.3
32.5°	887.8	877.8	845.1	798.4	784.4	760.8	709.5	670.0	671.4	650.5	659.2
35°	841.1	795.7	734.0	663.2	644.6	631.9	575.7	567.1	548.9	529.4	534.9
37.5°	758.5	692.3	617.4	565.2	537.6	509.9	478.1	459.1	448.2	440.0	446.4
40°	657.8	577.0	515.3	468.6	445.0	427.3	405.6	386.5	374.3	372.9	375.2
42.5°	558.9	490.8	434.1	389.7	382.0	361.1	347.0	332.1	328.4	322.5	325.7
45°	473.2	417.8	371.1	334.8	325.7	320.3	303.0	293.5	289.4	285.8	291.2
47.5°	411.0	352.9	318.9	297.1	288.1	279.0	269.5	263.1	259.9	260.4	259.9
50°	351.1	308.5	278.5	261.8	256.3	250.0	242.2	238.2	236.8	232.7	235.9
52.5°	302.1	271.3	250.4	234.5	230.5	225.9	219.6	217.3	214.1	213.2	213.2
55°	262.7	238.6	221.8	211.4	206.4	202.8	199.2	196.4	194.2	194.2	194.2
57.5°	231.8	210.9	198.7	189.6	187.8	184.2	180.1	180.1	176.9	176.5	177.8
60°	205.5	186.9	177.4	169.7	166.9	166.0	162.0	162.0	161.0	158.8	160.6
62.5°	178.7	165.1	157.0	151.1	148.3	148.3	145.2	142.9	142.9	143.4	142.4
65°	154.2	144.3	137.0	132.5	131.1	129.3	128.8	127.0	125.7	126.1	125.7
67.5°	132.5	124.8	119.8	116.1	113.9	113.0	111.6	111.6	110.7	111.1	108.9
70°	113.0	105.2	101.2	97.5	96.6	96.6	94.8	95.3	94.4	95.7	94.8
72.5°	93.0	87.1	83.9	82.6	81.7	81.2	80.3	79.4	78.9	79.8	79.4
75°	75.3	70.3	68.0	67.1	66.2	66.2	65.8	65.3	64.9	64.9	64.9
77.5°	58.5	55.3	52.6	53.5	52.2	52.6	51.3	51.3	51.7	51.3	51.3
80°	43.1	40.8	40.8	39.9	38.1	39.0	39.0	37.7	37.2	38.1	36.7
82.5°	28.6	28.1	27.2	26.8	25.9	26.3	25.9	25.4	25.0	25.9	25.0
85°	16.8	16.8	16.3	15.4	16.3	15.9	15.4	15.4	15.0	15.0	15.0
87.5°	8.6	7.7	7.7	7.3	7.7	6.8	7.3	6.8	6.4	6.8	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	501.7	503.1	499.5	498.6	498.6	500.4	499.0	486.8	489.0	486.3	485.4
5°	557.1	554.4	550.7	548.9	546.6	540.3	539.8	525.8	523.1	514.0	509.9
7.5°	617.9	615.6	604.7	603.4	602.4	596.5	581.6	566.6	555.7	545.3	535.3
10°	687.3	680.5	675.5	665.5	660.5	652.3	632.8	618.8	600.2	584.3	563.4
12.5°	770.7	763.0	746.3	739.0	732.6	710.0	690.5	674.6	638.3	627.4	601.5
15°	832.0	815.7	813.8	798.0	797.1	772.1	734.9	717.7	689.5	649.6	622.9
17.5°	898.2	883.7	872.4	853.3	850.6	827.0	799.8	757.6	726.7	688.6	654.6
20°	946.8	939.1	919.5	911.8	896.0	876.0	847.9	795.7	758.0	719.9	678.2
22.5°	985.3	977.6	962.2	951.8	942.7	916.8	883.3	838.8	787.1	737.2	694.1
25°	984.9	982.6	976.3	971.3	964.5	945.4	917.3	874.6	817.0	762.1	702.2
27.5°	929.1	935.4	946.3	951.8	950.4	947.7	931.8	896.0	844.2	778.9	711.8
30°	812.9	836.1	856.5	883.7	891.9	911.8	920.9	900.5	859.2	798.4	724.0
32.5°	674.1	707.7	752.2	767.1	793.0	831.5	874.6	882.3	856.5	809.8	731.7
35°	553.0	580.7	615.1	638.7	661.9	724.5	778.9	826.1	834.7	803.9	729.9
37.5°	457.7	477.2	507.6	527.6	548.9	602.4	678.7	739.9	783.0	783.9	724.9
40°	388.8	397.4	423.7	438.2	458.6	504.9	573.0	652.8	715.9	744.9	711.8
42.5°	329.3	340.7	362.5	373.4	386.5	426.9	471.8	547.6	625.6	687.7	687.3
45°	294.0	302.1	312.1	321.2	336.2	360.2	411.5	468.2	543.0	613.3	641.0
47.5°	262.7	270.4	280.4	283.1	293.1	315.7	347.0	396.5	466.4	536.2	588.4
50°	236.4	242.7	249.5	254.5	259.0	277.6	301.2	343.0	398.8	466.4	531.2
52.5°	215.9	220.5	226.4	229.1	233.2	246.8	264.9	295.8	341.6	403.3	466.4
55°	196.9	200.1	203.7	208.2	210.0	220.0	234.1	260.4	294.4	349.8	409.6
57.5°	179.2	180.6	182.8	185.5	187.8	196.4	208.7	226.4	256.3	299.0	355.7
60°	159.2	162.9	164.2	166.9	168.3	175.1	184.6	199.6	222.7	259.5	302.1
62.5°	142.4	144.7	147.0	148.3	151.5	153.8	161.5	175.1	194.2	221.4	259.9
65°	127.5	128.4	129.7	131.1	132.0	134.7	142.0	151.1	165.6	189.6	219.6
67.5°	110.2	111.1	113.0	113.4	114.3	117.9	122.0	129.7	142.0	160.1	184.6
70°	93.5	94.8	95.7	96.6	98.0	99.3	103.9	110.2	119.8	132.5	151.5
72.5°	78.9	80.3	80.3	81.2	80.7	82.6	87.1	91.6	98.0	108.4	125.2
75°	64.4	64.4	65.3	65.8	66.2	68.0	69.9	73.5	78.5	86.6	97.1
77.5°	50.8	50.4	51.3	51.3	51.3	52.6	54.4	56.3	59.4	65.3	73.5
80°	37.2	37.2	38.1	38.6	37.7	38.1	39.0	40.8	43.1	47.2	51.7
82.5°	24.5	26.3	25.9	26.3	25.9	26.8	27.2	27.7	28.6	30.4	33.6
85°	15.0	15.0	15.0	15.4	15.0	15.4	15.4	15.4	15.9	16.8	18.1
87.5°	6.4	6.4	6.4	6.8	6.4	6.4	6.8	6.4	6.8	6.8	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	480.9	479.5	479.5	478.6	475.9	470.9	470.4	471.3	468.6	465.9	461.8
5°	504.5	495.8	493.1	490.4	485.0	475.9	472.2	469.1	464.1	458.2	451.8
7.5°	524.4	512.2	508.5	503.6	492.7	480.0	471.8	465.0	458.2	450.0	442.3
10°	549.4	531.7	523.1	515.8	500.8	483.1	470.9	460.9	450.0	440.0	430.1
12.5°	577.5	548.9	546.2	528.5	511.3	485.0	470.0	455.5	440.9	428.7	418.3
15°	601.1	569.8	558.4	546.6	513.5	480.9	466.4	450.0	433.2	420.1	404.7
17.5°	616.1	590.2	566.2	550.3	515.8	486.8	458.6	440.0	422.3	404.2	391.5
20°	634.2	596.5	575.7	554.4	520.3	482.2	454.1	431.0	409.2	392.9	377.4
22.5°	652.3	601.5	584.3	561.2	521.2	477.7	445.9	422.8	397.9	381.5	364.7
25°	650.5	608.8	580.2	560.7	512.2	473.6	436.4	409.2	386.1	365.2	348.4
27.5°	651.9	600.6	571.6	548.9	505.8	467.7	426.4	397.9	373.8	352.0	334.3
30°	652.3	588.4	563.0	535.8	494.0	453.6	415.1	386.1	360.7	337.1	321.2
32.5°	651.0	578.4	546.6	522.2	475.4	440.0	401.9	371.1	345.2	323.5	308.5
35°	647.8	566.6	529.9	499.0	456.4	420.5	389.7	357.9	330.3	310.3	293.1
37.5°	639.2	553.9	512.2	481.8	434.1	397.9	370.6	344.3	317.6	294.0	279.4
40°	632.8	536.7	494.5	461.4	410.1	374.7	352.0	327.1	300.8	279.4	265.4
42.5°	618.3	520.3	476.3	436.9	386.5	350.2	328.9	308.9	286.3	265.4	252.7
45°	594.7	502.6	454.1	414.2	360.7	326.2	306.7	290.3	270.4	250.4	237.7
47.5°	561.6	477.2	430.5	390.6	335.2	300.3	280.8	268.6	252.7	235.9	225.0
50°	525.8	449.6	406.5	367.0	310.7	276.7	257.7	246.3	235.9	220.5	210.0
52.5°	479.1	420.1	378.8	341.1	284.4	251.8	235.0	226.8	215.9	205.0	196.0
55°	433.7	382.0	347.9	312.1	258.6	228.2	211.9	203.2	196.9	187.8	180.6
57.5°	381.1	346.6	315.3	282.6	234.5	206.9	191.4	181.0	176.9	172.8	166.0
60°	332.5	306.2	280.8	253.6	209.6	184.6	169.7	161.5	157.4	154.7	150.2
62.5°	288.1	267.7	245.9	224.1	184.2	161.5	150.2	142.0	138.4	137.9	133.8
65°	245.4	230.9	213.2	191.9	160.6	140.6	129.7	124.8	120.7	120.7	117.5
67.5°	202.8	192.8	178.7	163.8	139.3	120.7	110.7	106.2	103.9	103.9	101.6
70°	168.8	162.0	149.3	136.1	114.8	100.7	93.0	88.9	87.6	88.0	86.2
72.5°	137.0	129.7	119.3	109.8	93.9	83.5	78.0	73.5	71.2	71.7	71.2
75°	106.2	102.5	93.5	86.2	73.5	66.2	61.2	59.0	57.2	57.6	56.7
77.5°	79.8	74.4	69.4	64.4	56.7	50.8	46.7	44.5	43.1	43.1	43.1
80°	54.4	53.5	49.4	46.7	40.4	35.8	32.7	32.2	30.8	30.8	30.8
82.5°	35.4	33.1	30.8	29.0	25.4	22.7	21.3	20.4	20.0	19.5	20.4
85°	19.5	18.1	17.2	15.4	14.1	12.7	11.3	10.9	10.4	10.9	10.4
87.5°	7.7	6.4	6.4	5.9	5.4	5.0	5.0	4.1	4.1	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037293

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	460.9	460.5	461.4	458.6	454.1	451.8	445.5	444.1	443.7	444.1	444.6
5°	448.2	447.8	446.4	441.9	436.4	432.3	424.6	424.2	421.4	418.7	420.1
7.5°	436.0	434.1	431.4	425.5	418.3	413.7	407.4	402.8	399.2	396.9	395.1
10°	423.7	421.0	418.3	410.6	401.5	394.7	387.0	383.3	379.3	377.4	375.6
12.5°	407.8	405.1	400.1	391.0	385.6	377.0	369.3	365.6	363.4	359.7	357.5
15°	395.1	389.7	387.0	377.4	366.1	365.2	351.1	350.2	345.7	345.7	342.1
17.5°	380.6	376.5	371.5	362.0	353.8	345.7	338.4	335.7	331.6	330.7	328.9
20°	366.5	361.1	359.3	349.8	341.1	331.2	323.5	320.7	318.9	317.1	318.5
22.5°	352.0	347.5	343.0	334.3	328.0	318.0	313.5	310.7	308.0	307.1	307.6
25°	338.0	333.9	329.3	320.7	313.9	305.8	301.7	300.3	299.0	299.0	298.5
27.5°	324.4	320.3	316.2	308.5	301.7	295.8	292.6	291.2	289.9	290.8	291.7
30°	310.3	306.7	303.0	296.2	290.8	285.3	283.5	282.6	282.2	284.4	284.4
32.5°	297.6	294.4	291.7	285.3	279.9	275.4	274.0	274.5	274.9	276.3	277.2
35°	284.4	282.2	279.4	274.0	269.5	265.4	265.8	265.8	266.7	269.0	270.8
37.5°	272.6	269.5	267.2	262.7	259.0	255.4	256.8	258.1	259.0	261.8	262.7
40°	258.6	257.2	255.4	250.9	247.7	247.2	247.7	248.6	250.4	251.8	253.1
42.5°	247.2	245.4	243.2	239.5	236.8	237.3	237.7	238.6	239.5	241.8	243.2
45°	234.5	233.2	231.4	228.2	225.9	226.4	226.8	226.8	227.7	230.5	231.4
47.5°	220.5	220.9	218.7	215.5	214.1	214.1	214.1	215.0	217.3	218.2	218.7
50°	206.9	206.0	205.5	202.3	201.4	201.0	201.4	201.9	205.0	204.6	206.0
52.5°	192.3	192.3	191.9	190.1	188.7	188.7	187.8	190.1	191.0	191.9	193.3
55°	178.3	176.9	176.5	175.6	173.7	173.3	174.2	176.9	177.8	178.7	180.1
57.5°	162.9	162.9	162.0	160.6	160.6	160.6	160.6	162.4	163.8	164.7	167.4
60°	148.8	147.0	145.6	145.6	145.6	145.2	147.9	147.9	150.6	151.1	152.0
62.5°	132.0	131.1	130.2	130.7	130.2	131.1	132.0	133.8	134.3	135.6	137.0
65°	116.1	116.1	115.2	117.9	116.1	116.1	118.4	118.4	119.3	120.7	122.5
67.5°	100.7	101.2	100.3	100.3	101.2	101.6	102.1	103.9	104.3	106.2	108.4
70°	84.8	85.7	86.2	85.3	86.2	87.1	88.0	88.5	90.3	91.2	92.5
72.5°	70.8	71.7	70.3	70.8	71.2	72.1	72.6	73.5	74.4	77.1	78.0
75°	56.7	56.3	55.8	57.6	56.7	58.5	59.0	59.0	59.9	62.1	63.1
77.5°	43.6	43.6	44.0	43.1	44.5	44.0	44.5	45.8	47.2	47.2	50.8
80°	30.4	31.3	31.3	31.3	31.8	32.2	31.3	33.6	34.0	34.0	35.4
82.5°	19.5	20.0	19.5	20.4	20.4	21.3	20.9	21.3	22.2	23.1	23.6
85°	10.4	10.4	11.3	11.3	10.9	11.3	10.9	11.3	12.2	12.2	12.7
87.5°	3.6	3.6	3.6	3.6	4.1	3.6	4.1	4.1	3.6	3.6	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037293

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	444.1	444.6	442.8	441.4	445.0	442.8	442.8	443.2	442.3	443.7	443.2
5°	419.2	419.6	416.4	417.4	415.5	415.1	414.6	417.4	416.9	416.4	417.4
7.5°	394.7	394.7	393.3	392.4	392.4	391.0	392.9	392.4	393.3	393.3	394.7
10°	374.3	375.2	372.9	370.6	370.2	370.6	370.6	371.1	371.5	374.7	374.3
12.5°	357.5	356.1	355.7	354.3	352.0	351.1	350.2	355.2	353.8	353.8	353.8
15°	338.9	342.1	341.6	337.5	336.6	338.4	337.5	337.5	342.1	341.6	341.1
17.5°	328.9	328.0	327.1	324.8	325.3	324.8	325.3	325.3	328.0	328.0	328.0
20°	317.6	315.7	315.7	314.8	314.8	313.5	315.3	315.7	317.6	317.6	318.0
22.5°	307.6	306.2	306.2	305.8	306.7	304.9	306.7	307.1	307.1	308.5	308.5
25°	299.0	298.0	298.0	299.0	299.0	299.0	299.0	300.8	299.4	299.9	299.4
27.5°	291.2	291.7	292.2	292.6	292.2	292.6	293.1	294.0	294.4	294.0	293.1
30°	284.0	285.3	285.8	285.8	286.7	287.2	287.6	287.6	288.1	286.7	287.6
32.5°	278.5	278.5	279.4	279.9	280.8	281.3	281.3	282.2	281.7	280.4	280.8
35°	270.8	270.8	272.6	273.6	274.9	274.5	274.9	274.9	275.4	274.5	273.1
37.5°	263.1	264.0	264.0	265.8	266.3	266.7	266.3	267.2	266.7	265.8	265.4
40°	254.0	253.6	254.0	255.4	255.9	255.9	255.9	256.8	256.8	256.8	256.3
42.5°	242.7	244.1	243.6	245.0	244.5	244.5	245.4	246.3	246.8	245.4	245.9
45°	231.8	231.8	232.7	232.7	233.2	233.2	235.0	234.1	235.0	234.1	234.5
47.5°	220.0	220.5	220.5	220.9	221.8	222.7	221.8	222.3	222.3	222.7	221.8
50°	206.9	206.9	207.8	209.1	210.9	210.0	209.6	211.4	210.0	210.0	209.1
52.5°	193.3	194.6	195.1	196.4	197.8	198.2	198.7	197.8	198.2	196.9	197.3
55°	180.1	180.6	182.4	183.7	185.1	185.1	184.6	185.1	185.5	183.7	183.7
57.5°	166.9	168.3	170.1	170.1	171.9	171.9	171.5	171.5	171.9	170.6	170.1
60°	152.9	154.2	156.5	156.5	159.2	159.7	158.8	157.9	157.9	156.5	157.0
62.5°	137.9	139.3	140.6	142.9	144.7	143.8	145.6	143.8	144.3	141.5	141.5
65°	124.8	125.2	127.5	129.7	129.7	130.7	129.7	130.2	128.8	128.8	127.0
67.5°	109.3	109.3	111.6	113.9	116.1	116.1	116.1	114.8	114.8	113.4	113.4
70°	95.7	95.3	97.5	98.9	100.3	100.7	99.8	99.3	98.4	97.1	96.6
72.5°	78.9	79.8	82.1	83.0	85.3	84.8	87.1	84.4	84.4	82.1	81.7
75°	64.0	64.9	67.1	68.5	69.9	69.9	71.2	69.9	68.0	67.1	66.7
77.5°	50.8	50.4	52.2	54.4	54.9	54.4	55.3	54.9	53.1	53.1	52.2
80°	36.3	37.7	39.5	39.0	40.8	40.4	40.4	39.5	39.5	38.1	39.0
82.5°	24.0	25.4	25.9	25.4	25.9	26.8	27.2	26.8	26.8	25.9	26.3
85°	12.7	12.7	13.6	14.1	13.6	13.6	14.1	15.4	14.5	13.6	14.5
87.5°	4.1	3.6	3.6	4.1	3.6	3.6	4.1	4.1	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037293

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2	468.2
2.5°	444.6	445.5	445.9	444.1	442.8	445.0	448.2	450.5	452.3	454.6	455.9
5°	418.3	421.4	421.4	422.3	423.7	426.0	431.9	436.0	439.6	442.3	444.6
7.5°	396.0	398.3	399.7	401.9	404.2	407.4	414.2	420.1	425.5	428.7	432.3
10°	376.1	377.9	380.2	381.5	385.6	390.1	398.8	403.7	410.1	415.1	419.6
12.5°	357.0	363.4	364.7	364.3	367.9	372.9	381.5	389.2	396.0	401.0	406.0
15°	343.4	345.7	348.4	347.9	355.7	357.0	364.3	373.4	382.4	385.6	390.1
17.5°	328.4	332.1	334.8	336.2	338.4	343.4	350.2	357.0	368.8	369.3	381.1
20°	316.6	320.3	322.1	323.9	325.3	331.2	337.1	344.8	354.3	359.3	365.6
22.5°	308.9	310.7	312.1	313.5	315.3	318.5	325.7	334.3	340.7	346.1	350.2
25°	299.9	301.7	303.5	304.4	305.8	307.6	313.0	319.8	328.9	332.5	336.6
27.5°	293.5	293.5	294.4	294.4	296.2	298.0	302.1	308.5	315.7	320.3	325.7
30°	286.7	286.3	286.7	286.3	285.8	288.5	292.2	297.6	302.6	308.0	311.7
32.5°	279.9	279.4	279.4	279.9	278.1	279.4	281.3	286.3	291.7	294.4	298.5
35°	272.6	271.7	271.7	271.7	270.8	269.9	271.7	276.3	279.9	283.5	286.7
37.5°	265.4	264.0	264.0	263.1	262.2	260.8	260.8	264.5	269.5	270.8	274.9
40°	255.4	255.4	254.5	254.0	253.1	252.2	250.9	254.0	258.6	259.9	263.1
42.5°	245.4	244.1	243.6	243.6	243.6	242.2	241.3	243.6	246.3	248.6	250.4
45°	234.1	233.2	233.6	233.2	232.3	231.8	231.4	232.3	235.4	236.4	238.6
47.5°	221.8	221.4	221.4	220.9	220.5	220.9	219.1	221.4	222.3	223.2	225.0
50°	209.1	208.7	208.2	207.8	207.8	208.2	207.8	207.8	209.6	210.5	212.3
52.5°	196.4	195.1	195.1	194.6	194.6	193.7	194.6	195.1	196.0	196.9	197.8
55°	182.8	182.8	181.5	181.5	180.6	180.6	181.0	180.6	182.4	183.3	183.3
57.5°	169.7	167.9	168.3	167.4	166.5	166.0	166.0	166.9	167.9	167.9	168.8
60°	155.6	153.8	153.3	151.5	152.4	151.1	151.5	151.5	153.3	152.4	153.3
62.5°	141.5	139.3	137.9	137.0	137.0	137.5	136.5	136.1	137.0	137.9	139.7
65°	126.6	125.2	123.8	122.5	122.5	122.0	122.9	121.6	121.1	121.6	122.5
67.5°	111.1	109.8	108.4	107.1	107.5	106.2	105.2	106.6	105.7	106.2	107.1
70°	96.2	95.3	92.5	91.6	91.2	91.6	91.2	90.3	91.6	91.2	91.6
72.5°	81.2	80.3	78.9	76.7	76.7	76.2	75.8	75.8	75.3	75.3	75.3
75°	66.7	64.9	63.5	63.1	62.1	61.7	61.2	60.3	60.8	61.2	60.3
77.5°	51.7	49.4	49.0	49.0	47.6	47.6	48.1	47.6	47.2	47.2	47.2
80°	38.1	36.3	36.3	35.4	34.5	34.5	34.5	34.5	34.0	33.6	34.0
82.5°	24.5	24.0	23.6	23.6	24.5	22.7	23.6	23.1	22.7	22.7	22.2
85°	13.6	14.1	13.6	14.1	13.2	13.6	13.6	13.6	13.2	13.6	12.7
87.5°	5.0	5.0	5.0	5.4	5.4	5.4	5.4	5.4	5.9	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037293

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	468.2	468.2	468.2	468.2
2.5°	458.2	459.5	464.1	469.5
5°	449.1	452.7	459.1	467.7
7.5°	439.1	444.6	453.6	464.5
10°	427.8	435.5	446.8	460.5
12.5°	415.5	425.5	440.0	454.1
15°	407.8	417.8	431.0	446.4
17.5°	392.9	404.7	418.3	440.0
20°	377.4	390.6	408.3	430.1
22.5°	365.6	379.7	396.5	419.6
25°	351.6	366.1	384.2	408.3
27.5°	336.6	351.1	371.5	396.9
30°	325.3	339.3	358.8	386.1
32.5°	311.7	325.3	345.7	374.3
35°	296.2	311.7	331.2	360.2
37.5°	284.4	298.5	318.9	346.6
40°	271.7	284.0	303.9	331.2
42.5°	258.1	271.7	289.0	316.2
45°	245.4	255.4	273.1	299.0
47.5°	231.8	243.2	256.8	276.7
50°	217.3	226.8	241.8	255.4
52.5°	203.2	210.9	223.6	234.1
55°	188.3	196.0	205.5	211.9
57.5°	174.2	179.6	186.0	190.1
60°	157.0	162.4	166.5	170.6
62.5°	141.5	145.6	147.9	150.2
65°	125.7	127.9	129.3	131.1
67.5°	108.4	110.7	111.1	113.9
70°	92.5	93.0	93.9	95.3
72.5°	77.6	78.5	78.0	78.9
75°	62.1	63.1	62.1	63.1
77.5°	47.2	48.1	48.1	49.4
80°	34.0	34.5	34.9	34.9
82.5°	22.2	23.6	22.7	23.1
85°	12.7	13.2	13.2	13.6
87.5°	5.9	6.4	5.9	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)