

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: P1037295

Luminaire Tested: S123DS-B340DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037295
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_4000K
Description: Define 3 Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

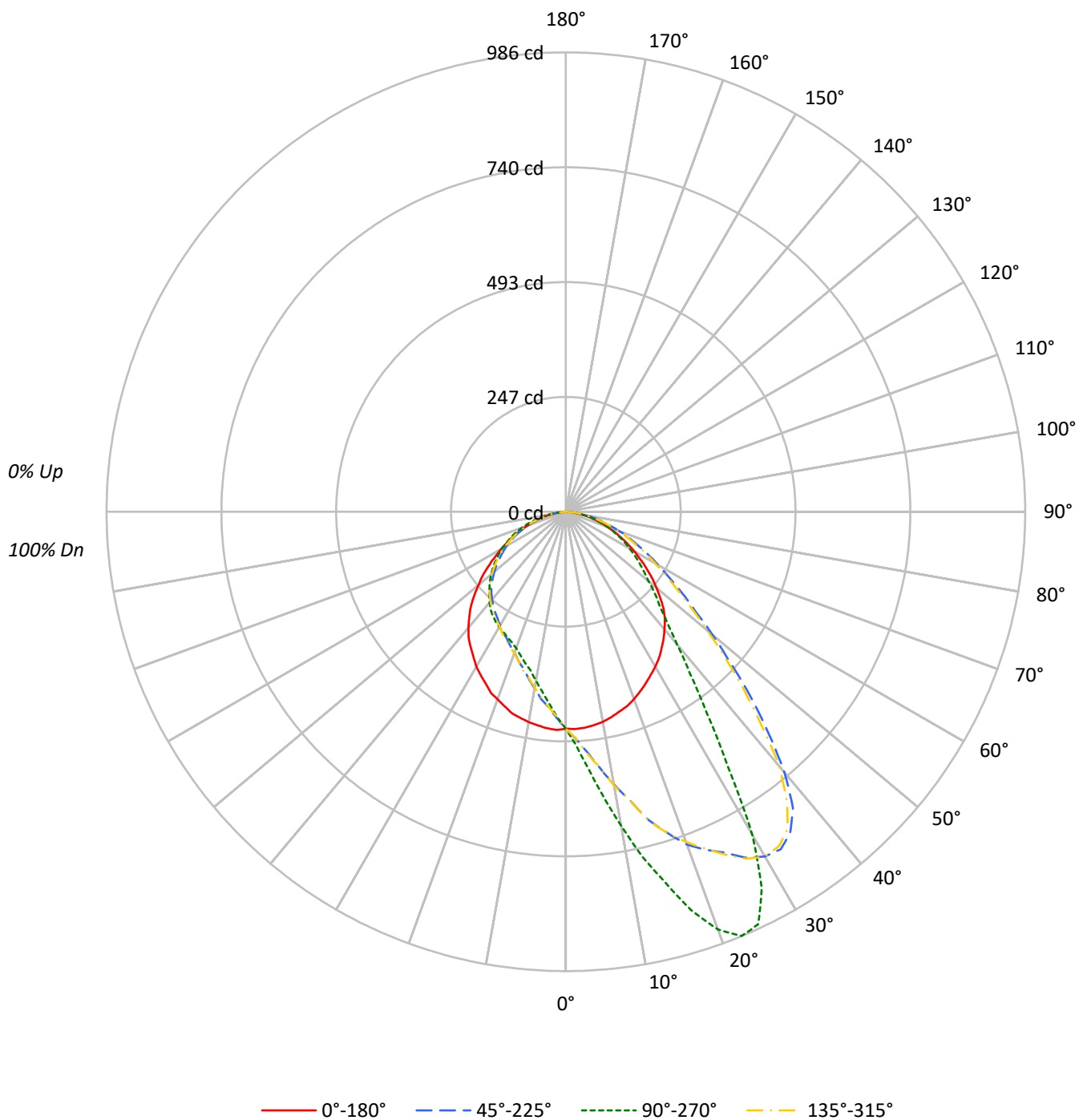
Lumens per Lamp: N/A
Luminaire Lumens: 1405.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5011	5011	5011	5011
5°	5025	5975	5039	4459
10°	5004	7479	5009	4028
15°	4947	9173	4987	3750
20°	4898	10928	4908	3570
25°	4822	11604	4833	3531
30°	4772	9946	4772	3549
35°	4707	6917	4677	3586
40°	4627	5210	4569	3575
45°	4526	4326	4395	3530
50°	4253	3875	4101	3498
55°	3954	3624	3793	3453
60°	3651	3399	3457	3419
65°	3321	3194	3158	3309
70°	2980	2996	2782	3150
75°	2608	2682	2437	2890
80°	2151	2349	1984	2486
85°	1667	1840	1334	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 10100 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	3.3
10°-20°	147.0	10.5
20°-30°	247.4	17.6
30°-40°	279.6	19.9
40°-50°	250.4	17.8
50°-60°	202.2	14.4
60°-70°	140.9	10.0
70°-80°	73.9	5.3
80°-90°	17.7	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°	440.3	31.3
0°-40°	719.9	51.2
0°-60°	1172.5	83.4
0°-90°	1405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1405.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	466	466	466	466	466	
5°	465	553	466	413	465	44
15°	444	823	448	336	444	125
25°	406	977	407	297	406	187
35°	358	526	356	273	358	224
45°	297	284	289	232	297	227
55°	211	193	202	184	211	189
65°	130	125	124	130	130	130
75°	63	64	59	70	63	67
85°	14	15	11	14	14	16
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°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	466.9	470.5	472.3	475.0	477.7	481.8	483.1	485.4	484.5	486.3	487.2
5°	465.1	471.4	476.8	483.6	489.9	494.4	498.9	506.1	511.5	512.4	516.5
7.5°	461.9	470.9	480.4	489.9	502.1	509.3	517.4	527.3	535.4	548.5	553.5
10°	457.8	470.5	484.0	497.1	513.8	525.1	535.0	551.7	568.4	581.9	594.5
12.5°	451.5	467.3	484.9	504.3	526.0	539.0	552.6	574.7	599.9	620.7	634.2
15°	443.9	463.7	486.3	507.0	530.9	555.3	569.7	594.5	630.6	650.0	684.7
17.5°	437.5	457.8	480.4	512.9	545.4	569.7	580.1	625.6	650.5	682.9	722.2
20°	427.6	453.3	482.2	514.7	556.6	571.5	592.7	638.7	669.4	711.8	760.1
22.5°	417.2	444.8	479.5	513.3	560.2	576.0	604.9	641.4	690.2	732.1	785.3
25°	406.0	435.7	470.9	511.1	557.1	580.1	607.2	652.3	705.0	757.8	807.0
27.5°	394.7	427.2	463.7	503.9	548.5	575.6	602.6	649.6	717.2	774.5	837.2
30°	383.9	416.3	452.9	493.9	540.8	567.0	592.7	651.4	726.7	791.2	854.3
32.5°	372.1	405.5	443.9	478.1	525.5	553.5	582.3	651.4	732.6	801.1	858.9
35°	358.2	392.4	425.4	459.7	506.6	537.7	570.2	646.8	738.0	804.3	839.9
37.5°	344.6	374.8	403.3	436.6	485.8	519.2	556.6	641.4	735.3	790.7	800.7
40°	329.3	359.5	382.5	413.6	465.5	504.3	542.2	634.2	723.5	758.7	729.8
42.5°	314.4	338.3	358.2	388.4	444.8	482.7	523.7	621.1	700.5	707.7	642.8
45°	297.3	314.4	332.0	366.3	422.2	461.0	506.6	602.2	663.5	642.8	560.7
47.5°	275.2	290.5	309.9	341.5	398.3	438.5	481.8	577.8	609.9	566.6	476.8
50°	254.0	267.0	285.1	315.8	373.0	412.3	458.3	539.5	555.3	487.2	410.9
52.5°	232.8	242.7	260.3	290.9	348.2	386.1	428.1	500.2	491.2	418.2	350.5
55°	210.7	219.2	235.9	266.1	319.4	355.5	395.6	452.0	428.5	359.1	304.9
57.5°	189.0	198.0	215.2	240.4	290.5	325.7	357.7	401.9	366.7	311.2	263.4
60°	169.6	177.3	190.4	215.2	260.7	289.1	318.5	348.7	319.4	265.7	229.1
62.5°	149.3	156.5	168.7	191.3	230.5	255.8	279.2	304.0	271.6	232.3	199.8
65°	130.4	136.2	147.5	168.3	200.3	221.0	240.0	257.1	231.0	194.9	170.5
67.5°	113.2	118.2	127.7	146.2	173.2	188.1	203.4	217.9	195.8	166.9	146.2
70°	94.7	98.8	107.4	120.9	142.5	157.9	169.2	180.0	160.1	137.1	123.1
72.5°	78.5	82.5	88.0	101.9	116.8	126.3	138.5	144.3	133.1	114.1	100.1
75°	62.7	65.9	70.8	79.8	93.8	100.1	107.8	112.3	101.9	89.3	80.7
77.5°	49.2	50.5	54.1	60.4	69.9	77.1	83.0	85.7	78.5	70.4	63.2
80°	34.7	36.5	39.2	44.7	51.9	54.1	57.7	60.9	56.4	49.2	44.7
82.5°	23.0	25.3	26.6	28.9	33.4	36.1	37.0	39.7	35.6	32.9	31.1
85°	13.5	14.4	14.9	16.2	18.5	19.8	21.2	21.7	20.7	20.3	18.5
87.5°	6.8	6.8	6.8	7.7	8.1	9.0	9.5	9.5	9.5	9.0	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°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	490.3	491.2	494.4	496.6	501.2	500.7	500.7	500.2	498.9	501.2	502.5
5°	524.6	532.3	533.2	543.1	543.6	547.6	550.3	548.1	553.5	553.0	549.0
7.5°	567.0	577.4	582.3	591.8	602.6	599.9	610.3	612.1	611.2	615.7	618.9
10°	613.5	631.5	644.1	661.7	666.2	669.0	675.7	681.6	693.3	684.3	690.2
12.5°	666.7	679.8	696.5	724.4	738.4	747.4	750.6	754.7	762.8	757.8	758.3
15°	711.4	728.9	757.4	792.1	796.2	807.4	804.7	829.1	840.8	823.2	833.1
17.5°	757.8	781.3	815.1	845.3	862.5	870.1	877.4	900.8	899.9	897.2	899.5
20°	787.6	825.9	867.9	908.0	913.0	918.9	938.2	948.2	946.4	954.0	959.0
22.5°	829.5	870.1	914.8	941.4	952.7	959.4	974.8	981.1	983.8	985.6	982.5
25°	864.7	908.0	941.0	964.4	971.2	974.8	979.7	981.6	980.2	977.0	979.7
27.5°	888.6	923.4	945.9	956.7	953.1	947.3	937.8	931.5	917.5	910.7	918.9
30°	898.6	913.9	920.7	902.6	884.6	870.1	852.1	818.7	792.5	800.2	789.8
32.5°	882.8	872.8	840.4	793.9	779.9	756.5	705.5	666.2	667.6	646.8	655.4
35°	836.3	791.2	729.8	659.5	641.0	628.4	572.4	563.9	545.8	526.4	531.8
37.5°	754.2	688.3	613.9	562.0	534.5	507.0	475.4	456.5	445.7	437.5	443.9
40°	654.1	573.8	512.4	466.0	442.5	424.9	403.3	384.3	372.1	370.8	373.0
42.5°	555.7	488.1	431.7	387.5	379.8	359.1	345.1	330.2	326.6	320.7	323.9
45°	470.5	415.4	369.0	332.9	323.9	318.5	301.3	291.8	287.8	284.2	289.6
47.5°	408.7	350.9	317.1	295.5	286.4	277.4	267.9	261.6	258.5	258.9	258.5
50°	349.1	306.7	277.0	260.3	254.9	248.5	240.9	236.8	235.5	231.4	234.6
52.5°	300.4	269.7	249.0	233.2	229.1	224.6	218.3	216.1	212.9	212.0	212.0
55°	261.2	237.3	220.6	210.2	205.2	201.6	198.0	195.3	193.1	193.1	193.1
57.5°	230.5	209.8	197.6	188.6	186.7	183.1	179.1	179.1	175.9	175.5	176.8
60°	204.3	185.8	176.4	168.7	166.0	165.1	161.0	161.0	160.1	157.9	159.7
62.5°	177.7	164.2	156.1	150.2	147.5	147.5	144.3	142.1	142.1	142.5	141.6
65°	153.4	143.4	136.2	131.7	130.4	128.6	128.1	126.3	124.9	125.4	124.9
67.5°	131.7	124.0	119.1	115.5	113.2	112.3	111.0	111.0	110.1	110.5	108.3
70°	112.3	104.7	100.6	97.0	96.1	96.1	94.3	94.7	93.8	95.2	94.3
72.5°	92.5	86.6	83.4	82.1	81.2	80.7	79.8	78.9	78.5	79.4	78.9
75°	74.9	69.9	67.7	66.8	65.9	65.9	65.4	65.0	64.5	64.5	64.5
77.5°	58.2	55.0	52.3	53.2	51.9	52.3	51.0	51.0	51.4	51.0	51.0
80°	42.9	40.6	40.6	39.7	37.9	38.8	38.8	37.4	37.0	37.9	36.5
82.5°	28.4	28.0	27.1	26.6	25.7	26.2	25.7	25.3	24.8	25.7	24.8
85°	16.7	16.7	16.2	15.3	16.2	15.8	15.3	15.3	14.9	14.9	14.9
87.5°	8.6	7.7	7.7	7.2	7.7	6.8	7.2	6.8	6.3	6.8	6.3
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	498.9	500.2	496.6	495.7	495.7	497.5	496.2	484.0	486.3	483.6	482.7
5°	553.9	551.2	547.6	545.8	543.6	537.2	536.8	522.8	520.1	511.1	507.0
7.5°	614.4	612.1	601.3	599.9	599.0	593.2	578.3	563.4	552.6	542.2	532.3
10°	683.4	676.6	671.7	661.7	656.8	648.7	629.3	615.3	596.8	581.0	560.2
12.5°	766.4	758.7	742.0	734.8	728.5	705.9	686.5	670.8	634.7	623.8	598.1
15°	827.3	811.0	809.2	793.5	792.5	767.7	730.8	713.6	685.6	645.9	619.3
17.5°	893.1	878.7	867.4	848.5	845.8	822.3	795.3	753.3	722.6	684.7	650.9
20°	941.4	933.7	914.3	906.7	890.9	871.0	843.1	791.2	753.8	715.9	674.4
22.5°	979.7	972.1	956.7	946.4	937.3	911.6	878.3	834.0	782.6	733.0	690.2
25°	979.3	977.0	970.7	965.8	959.0	940.1	912.1	869.7	812.4	757.8	698.3
27.5°	923.8	930.1	941.0	946.4	945.0	942.3	926.5	890.9	839.5	774.5	707.7
30°	808.3	831.3	851.6	878.7	886.8	906.7	915.7	895.4	854.3	793.9	719.9
32.5°	670.3	703.7	747.9	762.8	788.5	826.8	869.7	877.4	851.6	805.2	727.6
35°	549.9	577.4	611.7	635.1	658.1	720.4	774.5	821.4	830.0	799.3	725.8
37.5°	455.1	474.5	504.8	524.6	545.8	599.0	674.8	735.7	778.6	779.5	720.8
40°	386.6	395.1	421.3	435.7	456.0	502.1	569.7	649.1	711.8	740.7	707.7
42.5°	327.5	338.8	360.4	371.2	384.3	424.5	469.1	544.5	622.0	683.8	683.4
45°	292.3	300.4	310.3	319.4	334.3	358.2	409.1	465.5	539.9	609.9	637.4
47.5°	261.2	268.8	278.8	281.5	291.4	314.0	345.1	394.2	463.7	533.2	585.1
50°	235.0	241.3	248.1	253.1	257.6	276.1	299.5	341.0	396.5	463.7	528.2
52.5°	214.7	219.2	225.1	227.8	231.9	245.4	263.4	294.1	339.7	401.0	463.7
55°	195.8	198.9	202.5	207.0	208.9	218.8	232.8	258.9	292.8	347.8	407.3
57.5°	178.2	179.5	181.8	184.5	186.7	195.3	207.5	225.1	254.9	297.3	353.6
60°	158.3	161.9	163.3	166.0	167.4	174.1	183.6	198.5	221.5	258.0	300.4
62.5°	141.6	143.9	146.2	147.5	150.7	152.9	160.6	174.1	193.1	220.1	258.5
65°	126.8	127.7	129.0	130.4	131.3	134.0	141.2	150.2	164.6	188.6	218.3
67.5°	109.6	110.5	112.3	112.8	113.7	117.3	121.3	129.0	141.2	159.2	183.6
70°	92.9	94.3	95.2	96.1	97.4	98.8	103.3	109.6	119.1	131.7	150.7
72.5°	78.5	79.8	79.8	80.7	80.3	82.1	86.6	91.1	97.4	107.8	124.5
75°	64.1	64.1	65.0	65.4	65.9	67.7	69.5	73.1	78.0	86.2	96.5
77.5°	50.5	50.1	51.0	51.0	51.0	52.3	54.1	55.9	59.1	65.0	73.1
80°	37.0	37.0	37.9	38.3	37.4	37.9	38.8	40.6	42.9	46.9	51.4
82.5°	24.4	26.2	25.7	26.2	25.7	26.6	27.1	27.5	28.4	30.2	33.4
85°	14.9	14.9	14.9	15.3	14.9	15.3	15.3	15.3	15.8	16.7	18.0
87.5°	6.3	6.3	6.3	6.8	6.3	6.3	6.8	6.3	6.8	6.8	7.2
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°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	478.1	476.8	476.8	475.9	473.2	468.2	467.8	468.7	466.0	463.3	459.2
5°	501.6	493.0	490.3	487.6	482.2	473.2	469.6	466.4	461.5	455.6	449.3
7.5°	521.4	509.3	505.7	500.7	489.9	477.2	469.1	462.4	455.6	447.5	439.8
10°	546.3	528.7	520.1	512.9	498.0	480.4	468.2	458.3	447.5	437.5	427.6
12.5°	574.2	545.8	543.1	525.5	508.4	482.2	467.3	452.9	438.5	426.3	415.9
15°	597.7	566.6	555.3	543.6	510.6	478.1	463.7	447.5	430.8	417.7	402.4
17.5°	612.6	586.9	562.9	547.2	512.9	484.0	456.0	437.5	420.0	401.9	389.3
20°	630.6	593.2	572.4	551.2	517.4	479.5	451.5	428.5	406.9	390.6	375.3
22.5°	648.7	598.1	581.0	558.0	518.3	475.0	443.4	420.4	395.6	379.4	362.7
25°	646.8	605.4	576.9	557.5	509.3	470.9	433.9	406.9	383.9	363.1	346.4
27.5°	648.2	597.2	568.4	545.8	503.0	465.1	424.0	395.6	371.7	350.0	332.4
30°	648.7	585.1	559.8	532.7	491.2	451.1	412.7	383.9	358.6	335.2	319.4
32.5°	647.3	575.1	543.6	519.2	472.7	437.5	399.7	369.0	343.3	321.6	306.7
35°	644.1	563.4	526.9	496.2	453.8	418.2	387.5	355.9	328.4	308.5	291.4
37.5°	635.6	550.8	509.3	479.0	431.7	395.6	368.5	342.4	315.8	292.3	277.9
40°	629.3	533.6	491.7	458.7	407.8	372.6	350.0	325.2	299.1	277.9	263.9
42.5°	614.8	517.4	473.6	434.4	384.3	348.2	327.0	307.2	284.6	263.9	251.3
45°	591.4	499.8	451.5	411.8	358.6	324.3	304.9	288.7	268.8	249.0	236.4
47.5°	558.4	474.5	428.1	388.4	333.3	298.6	279.2	267.0	251.3	234.6	223.7
50°	522.8	447.0	404.2	364.9	309.0	275.2	256.2	244.9	234.6	219.2	208.9
52.5°	476.3	417.7	376.7	339.2	282.8	250.3	233.7	225.5	214.7	203.9	194.9
55°	431.2	379.8	346.0	310.3	257.1	226.9	210.7	202.1	195.8	186.7	179.5
57.5°	378.9	344.6	313.5	281.0	233.2	205.7	190.4	180.0	175.9	171.9	165.1
60°	330.6	304.5	279.2	252.2	208.4	183.6	168.7	160.6	156.5	153.8	149.3
62.5°	286.4	266.1	244.5	222.8	183.1	160.6	149.3	141.2	137.6	137.1	133.1
65°	244.0	229.6	212.0	190.8	159.7	139.8	129.0	124.0	120.0	120.0	116.8
67.5°	201.6	191.7	177.7	162.8	138.5	120.0	110.1	105.6	103.3	103.3	101.0
70°	167.8	161.0	148.4	135.3	114.1	100.1	92.5	88.4	87.1	87.5	85.7
72.5°	136.2	129.0	118.6	109.2	93.4	83.0	77.6	73.1	70.8	71.3	70.8
75°	105.6	101.9	92.9	85.7	73.1	65.9	60.9	58.6	56.8	57.3	56.4
77.5°	79.4	74.0	69.0	64.1	56.4	50.5	46.5	44.2	42.9	42.9	42.9
80°	54.1	53.2	49.2	46.5	40.1	35.6	32.5	32.0	30.7	30.7	30.7
82.5°	35.2	32.9	30.7	28.9	25.3	22.6	21.2	20.3	19.8	19.4	20.3
85°	19.4	18.0	17.1	15.3	14.0	12.6	11.3	10.8	10.4	10.8	10.4
87.5°	7.7	6.3	6.3	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: P1037295

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	458.3	457.8	458.7	456.0	451.5	449.3	443.0	441.6	441.2	441.6	442.1
5°	445.7	445.2	443.9	439.4	433.9	429.9	422.2	421.8	419.1	416.3	417.7
7.5°	433.5	431.7	429.0	423.1	415.9	411.4	405.1	400.6	397.0	394.7	392.9
10°	421.3	418.6	415.9	408.2	399.2	392.4	384.8	381.2	377.1	375.3	373.5
12.5°	405.5	402.8	397.9	388.8	383.4	374.8	367.2	363.6	361.3	357.7	355.5
15°	392.9	387.5	384.8	375.3	364.0	363.1	349.1	348.2	343.7	343.7	340.1
17.5°	378.5	374.4	369.4	360.0	351.8	343.7	336.5	333.8	329.7	328.8	327.0
20°	364.5	359.1	357.3	347.8	339.2	329.3	321.6	318.9	317.1	315.3	316.7
22.5°	350.0	345.5	341.0	332.4	326.1	316.2	311.7	309.0	306.3	305.4	305.8
25°	336.1	332.0	327.5	318.9	312.1	304.0	300.0	298.6	297.3	297.3	296.8
27.5°	322.5	318.5	314.4	306.7	300.0	294.1	290.9	289.6	288.2	289.1	290.0
30°	308.5	304.9	301.3	294.6	289.1	283.7	281.9	281.0	280.6	282.8	282.8
32.5°	295.9	292.8	290.0	283.7	278.3	273.8	272.5	272.9	273.4	274.7	275.6
35°	282.8	280.6	277.9	272.5	267.9	263.9	264.3	264.3	265.2	267.5	269.3
37.5°	271.1	267.9	265.7	261.2	257.6	254.0	255.3	256.7	257.6	260.3	261.2
40°	257.1	255.8	254.0	249.4	246.3	245.8	246.3	247.2	249.0	250.3	251.7
42.5°	245.8	244.0	241.8	238.2	235.5	235.9	236.4	237.3	238.2	240.4	241.8
45°	233.2	231.9	230.1	226.9	224.6	225.1	225.5	225.5	226.4	229.1	230.1
47.5°	219.2	219.7	217.4	214.3	212.9	212.9	212.9	213.8	216.1	217.0	217.4
50°	205.7	204.8	204.3	201.2	200.3	199.8	200.3	200.7	203.9	203.4	204.8
52.5°	191.3	191.3	190.8	189.0	187.6	187.6	186.7	189.0	189.9	190.8	192.2
55°	177.3	175.9	175.5	174.6	172.8	172.3	173.2	175.9	176.8	177.7	179.1
57.5°	161.9	161.9	161.0	159.7	159.7	159.7	159.7	161.5	162.8	163.7	166.4
60°	148.0	146.2	144.8	144.8	144.8	144.3	147.1	147.1	149.8	150.2	151.1
62.5°	131.3	130.4	129.5	129.9	129.5	130.4	131.3	133.1	133.5	134.9	136.2
65°	115.5	115.5	114.6	117.3	115.5	115.5	117.7	117.7	118.6	120.0	121.8
67.5°	100.1	100.6	99.7	99.7	100.6	101.0	101.5	103.3	103.7	105.6	107.8
70°	84.4	85.3	85.7	84.8	85.7	86.6	87.5	88.0	89.8	90.7	92.0
72.5°	70.4	71.3	69.9	70.4	70.8	71.7	72.2	73.1	74.0	76.7	77.6
75°	56.4	55.9	55.5	57.3	56.4	58.2	58.6	58.6	59.5	61.8	62.7
77.5°	43.3	43.3	43.8	42.9	44.2	43.8	44.2	45.6	46.9	46.9	50.5
80°	30.2	31.1	31.1	31.1	31.6	32.0	31.1	33.4	33.8	33.8	35.2
82.5°	19.4	19.8	19.4	20.3	20.3	21.2	20.7	21.2	22.1	23.0	23.5
85°	10.4	10.4	11.3	11.3	10.8	11.3	10.8	11.3	12.2	12.2	12.6
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: P1037295

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	441.6	442.1	440.3	438.9	442.5	440.3	440.3	440.7	439.8	441.2	440.7
5°	416.8	417.2	414.1	415.0	413.2	412.7	412.3	415.0	414.5	414.1	415.0
7.5°	392.4	392.4	391.1	390.2	390.2	388.8	390.6	390.2	391.1	391.1	392.4
10°	372.1	373.0	370.8	368.5	368.1	368.5	368.5	369.0	369.4	372.6	372.1
12.5°	355.5	354.1	353.6	352.3	350.0	349.1	348.2	353.2	351.8	351.8	351.8
15°	337.0	340.1	339.7	335.6	334.7	336.5	335.6	335.6	340.1	339.7	339.2
17.5°	327.0	326.1	325.2	323.0	323.4	323.0	323.4	323.4	326.1	326.1	326.1
20°	315.8	314.0	314.0	313.1	313.1	311.7	313.5	314.0	315.8	315.8	316.2
22.5°	305.8	304.5	304.5	304.0	304.9	303.1	304.9	305.4	305.4	306.7	306.7
25°	297.3	296.4	296.4	297.3	297.3	297.3	297.3	299.1	297.7	298.2	297.7
27.5°	289.6	290.0	290.5	290.9	290.5	290.9	291.4	292.3	292.8	292.3	291.4
30°	282.4	283.7	284.2	284.2	285.1	285.5	286.0	286.0	286.4	285.1	286.0
32.5°	277.0	277.0	277.9	278.3	279.2	279.7	279.7	280.6	280.1	278.8	279.2
35°	269.3	269.3	271.1	272.0	273.4	272.9	273.4	273.4	273.8	272.9	271.6
37.5°	261.6	262.5	262.5	264.3	264.8	265.2	264.8	265.7	265.2	264.3	263.9
40°	252.6	252.2	252.6	254.0	254.4	254.4	254.4	255.3	255.3	255.3	254.9
42.5°	241.3	242.7	242.2	243.6	243.1	243.1	244.0	244.9	245.4	244.0	244.5
45°	230.5	230.5	231.4	231.4	231.9	231.9	233.7	232.8	233.7	232.8	233.2
47.5°	218.8	219.2	219.2	219.7	220.6	221.5	220.6	221.0	221.0	221.5	220.6
50°	205.7	205.7	206.6	207.9	209.8	208.9	208.4	210.2	208.9	208.9	207.9
52.5°	192.2	193.5	194.0	195.3	196.7	197.1	197.6	196.7	197.1	195.8	196.2
55°	179.1	179.5	181.3	182.7	184.0	184.0	183.6	184.0	184.5	182.7	182.7
57.5°	166.0	167.4	169.2	169.2	171.0	171.0	170.5	170.5	171.0	169.6	169.2
60°	152.0	153.4	155.6	155.6	158.3	158.8	157.9	157.0	157.0	155.6	156.1
62.5°	137.1	138.5	139.8	142.1	143.9	143.0	144.8	143.0	143.4	140.7	140.7
65°	124.0	124.5	126.8	129.0	129.0	129.9	129.0	129.5	128.1	128.1	126.3
67.5°	108.7	108.7	111.0	113.2	115.5	115.5	115.5	114.1	114.1	112.8	112.8
70°	95.2	94.7	97.0	98.3	99.7	100.1	99.2	98.8	97.9	96.5	96.1
72.5°	78.5	79.4	81.6	82.5	84.8	84.4	86.6	83.9	83.9	81.6	81.2
75°	63.6	64.5	66.8	68.1	69.5	69.5	70.8	69.5	67.7	66.8	66.3
77.5°	50.5	50.1	51.9	54.1	54.6	54.1	55.0	54.6	52.8	52.8	51.9
80°	36.1	37.4	39.2	38.8	40.6	40.1	40.1	39.2	39.2	37.9	38.8
82.5°	23.9	25.3	25.7	25.3	25.7	26.6	27.1	26.6	26.6	25.7	26.2
85°	12.6	12.6	13.5	14.0	13.5	13.5	14.0	15.3	14.4	13.5	14.4
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: P1037295

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5	465.5
2.5°	442.1	443.0	443.4	441.6	440.3	442.5	445.7	447.9	449.7	452.0	453.3
5°	415.9	419.1	419.1	420.0	421.3	423.6	429.4	433.5	437.1	439.8	442.1
7.5°	393.8	396.0	397.4	399.7	401.9	405.1	411.8	417.7	423.1	426.3	429.9
10°	373.9	375.8	378.0	379.4	383.4	387.9	396.5	401.5	407.8	412.7	417.2
12.5°	355.0	361.3	362.7	362.2	365.8	370.8	379.4	387.0	393.8	398.8	403.7
15°	341.5	343.7	346.4	346.0	353.6	355.0	362.2	371.2	380.3	383.4	387.9
17.5°	326.6	330.2	332.9	334.3	336.5	341.5	348.2	355.0	366.7	367.2	378.9
20°	314.9	318.5	320.3	322.1	323.4	329.3	335.2	342.8	352.3	357.3	363.6
22.5°	307.2	309.0	310.3	311.7	313.5	316.7	323.9	332.4	338.8	344.2	348.2
25°	298.2	300.0	301.8	302.7	304.0	305.8	311.2	318.0	327.0	330.6	334.7
27.5°	291.8	291.8	292.8	292.8	294.6	296.4	300.4	306.7	314.0	318.5	323.9
30°	285.1	284.6	285.1	284.6	284.2	286.9	290.5	295.9	300.9	306.3	309.9
32.5°	278.3	277.9	277.9	278.3	276.5	277.9	279.7	284.6	290.0	292.8	296.8
35°	271.1	270.2	270.2	270.2	269.3	268.4	270.2	274.7	278.3	281.9	285.1
37.5°	263.9	262.5	262.5	261.6	260.7	259.4	259.4	263.0	267.9	269.3	273.4
40°	254.0	254.0	253.1	252.6	251.7	250.8	249.4	252.6	257.1	258.5	261.6
42.5°	244.0	242.7	242.2	242.2	242.2	240.9	240.0	242.2	244.9	247.2	249.0
45°	232.8	231.9	232.3	231.9	231.0	230.5	230.1	231.0	234.1	235.0	237.3
47.5°	220.6	220.1	220.1	219.7	219.2	219.7	217.9	220.1	221.0	221.9	223.7
50°	207.9	207.5	207.0	206.6	206.6	207.0	206.6	206.6	208.4	209.3	211.1
52.5°	195.3	194.0	194.0	193.5	193.5	192.6	193.5	194.0	194.9	195.8	196.7
55°	181.8	181.8	180.4	180.4	179.5	179.5	180.0	179.5	181.3	182.2	182.2
57.5°	168.7	166.9	167.4	166.4	165.5	165.1	165.1	166.0	166.9	166.9	167.8
60°	154.7	152.9	152.5	150.7	151.6	150.2	150.7	150.7	152.5	151.6	152.5
62.5°	140.7	138.5	137.1	136.2	136.2	136.7	135.8	135.3	136.2	137.1	138.9
65°	125.9	124.5	123.1	121.8	121.8	121.3	122.2	120.9	120.4	120.9	121.8
67.5°	110.5	109.2	107.8	106.5	106.9	105.6	104.7	106.0	105.1	105.6	106.5
70°	95.6	94.7	92.0	91.1	90.7	91.1	90.7	89.8	91.1	90.7	91.1
72.5°	80.7	79.8	78.5	76.2	76.2	75.8	75.3	75.3	74.9	74.9	74.9
75°	66.3	64.5	63.2	62.7	61.8	61.3	60.9	60.0	60.4	60.9	60.0
77.5°	51.4	49.2	48.7	48.7	47.4	47.4	47.8	47.4	46.9	46.9	46.9
80°	37.9	36.1	36.1	35.2	34.3	34.3	34.3	34.3	33.8	33.4	33.8
82.5°	24.4	23.9	23.5	23.5	24.4	22.6	23.5	23.0	22.6	22.6	22.1
85°	13.5	14.0	13.5	14.0	13.1	13.5	13.5	13.5	13.1	13.5	12.6
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: P1037295

CATALOG NUMBER: S123DS-B340DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	465.5	465.5	465.5	465.5
2.5°	455.6	456.9	461.5	466.9
5°	446.6	450.2	456.5	465.1
7.5°	436.6	442.1	451.1	461.9
10°	425.4	433.0	444.3	457.8
12.5°	413.2	423.1	437.5	451.5
15°	405.5	415.4	428.5	443.9
17.5°	390.6	402.4	415.9	437.5
20°	375.3	388.4	406.0	427.6
22.5°	363.6	377.6	394.2	417.2
25°	349.6	364.0	382.1	406.0
27.5°	334.7	349.1	369.4	394.7
30°	323.4	337.4	356.8	383.9
32.5°	309.9	323.4	343.7	372.1
35°	294.6	309.9	329.3	358.2
37.5°	282.8	296.8	317.1	344.6
40°	270.2	282.4	302.2	329.3
42.5°	256.7	270.2	287.3	314.4
45°	244.0	254.0	271.6	297.3
47.5°	230.5	241.8	255.3	275.2
50°	216.1	225.5	240.4	254.0
52.5°	202.1	209.8	222.4	232.8
55°	187.2	194.9	204.3	210.7
57.5°	173.2	178.6	184.9	189.0
60°	156.1	161.5	165.5	169.6
62.5°	140.7	144.8	147.1	149.3
65°	124.9	127.2	128.6	130.4
67.5°	107.8	110.1	110.5	113.2
70°	92.0	92.5	93.4	94.7
72.5°	77.1	78.0	77.6	78.5
75°	61.8	62.7	61.8	62.7
77.5°	46.9	47.8	47.8	49.2
80°	33.8	34.3	34.7	34.7
82.5°	22.1	23.5	22.6	23.0
85°	12.6	13.1	13.1	13.5
87.5°	5.9	6.3	5.9	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)