

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: P994965

Luminaire Tested: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-30)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K
Description: Define 3 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

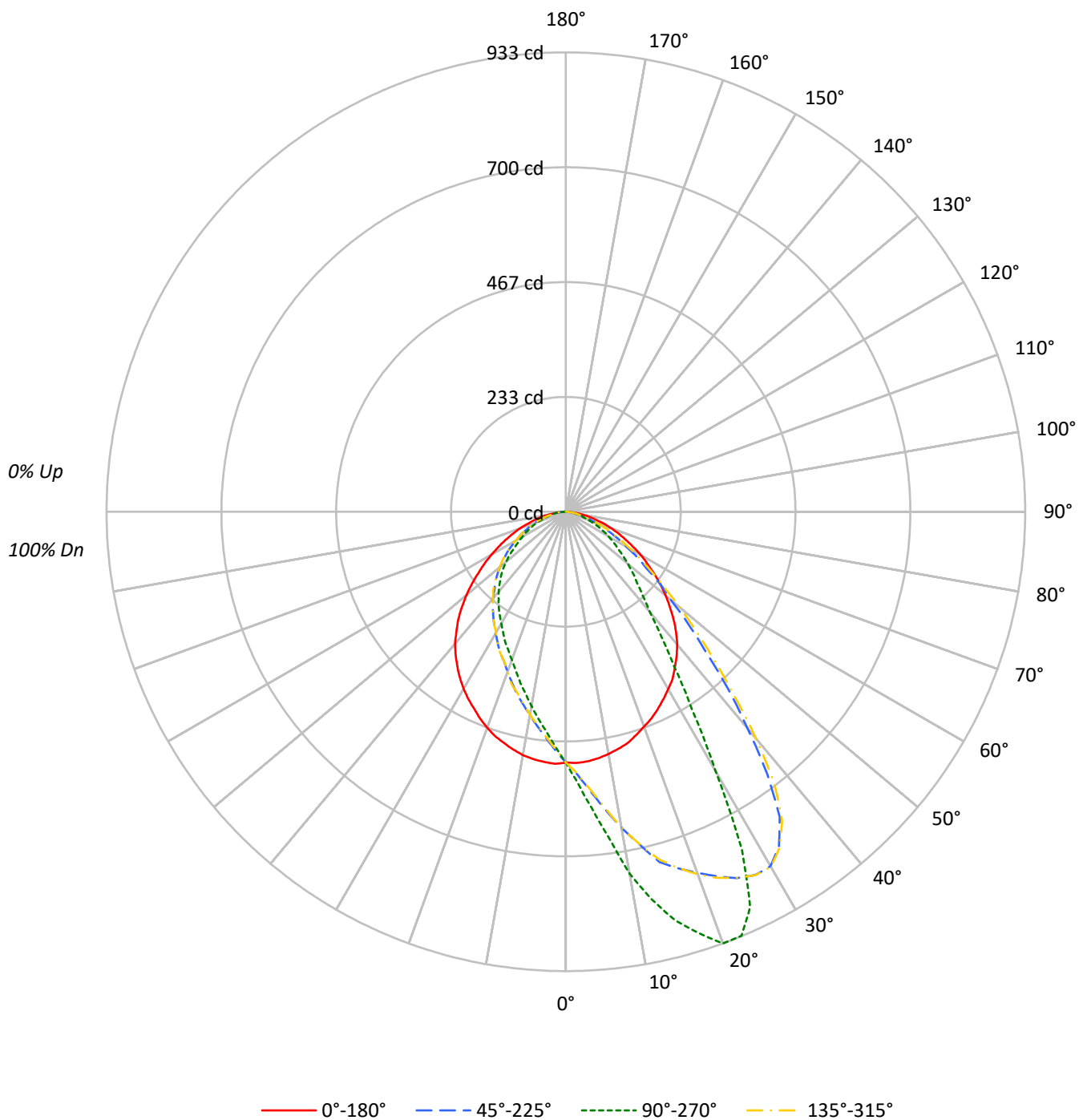
Lumens per Lamp: N/A
Luminaire Lumens: 1268.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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				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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92	90	89		87
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83	79	77		74
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		74	70	66		64
4	86	75	67	61	84	74	66	61	71	65	60		69	64	59		67	62	58		56
5	80	68	60	53	78	67	59	53	65	58	53		63	57	52		61	56	52		50
6	74	62	53	47	72	61	53	47	59	52	47		57	51	46		56	50	46		44
7	69	56	48	42	67	55	48	42	54	47	42		53	46	42		51	46	41		39
8	64	52	44	38	63	51	43	38	50	43	38		48	42	38		47	42	37		36
9	60	48	40	35	59	47	40	35	46	39	34		45	39	34		44	38	34		32
10	57	44	37	32	55	44	36	32	43	36	31		42	36	31		41	35	31		29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5481	5481	5481	5481
5°	5498	6534	5512	4847
10°	5461	8158	5485	4380
15°	5417	9576	5417	3994
20°	5318	10687	5348	3666
25°	5251	10517	5240	3464
30°	5169	7559	5159	3256
35°	5070	5047	5047	3122
40°	4943	3718	4919	2983
45°	4711	3119	4705	2847
50°	4424	2753	4409	2658
55°	4099	2413	4067	2396
60°	3782	2148	3746	2196
65°	3408	1887	3431	2043
70°	3075	1482	3157	1866
75°	2666	1306	2774	1705
80°	2219	1134	2405	1674
85°	1778	914	1939	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 8940 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	3.9
10°-20°	156.5	12.3
20°-30°	246.6	19.4
30°-40°	256.4	20.2
40°-50°	219.3	17.3
50°-60°	167.2	13.2
60°-70°	107.1	8.4
70°-80°	51.3	4.0
80°-90°	13.5	1.1
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°	453.1	35.7
0°-40°	709.5	56.0
0°-60°	1096.0	86.4
0°-90°	1268.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1268.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	509	509	509	509	509	
5°	509	605	510	449	509	48
15°	486	859	486	358	486	137
25°	442	886	441	292	442	204
35°	386	384	384	238	386	241
45°	310	205	309	187	310	238
55°	218	129	217	128	218	196
65°	134	74	135	80	134	134
75°	64	31	67	41	64	69
85°	14	7	16	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°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	510.5	514.0	516.6	518.4	522.7	525.4	527.5	531.5	531.5	532.3	534.1
5°	508.8	516.2	521.4	528.4	537.6	541.9	548.0	553.3	560.7	564.6	568.5
7.5°	504.9	515.3	526.2	536.7	550.2	558.9	565.0	578.5	588.1	599.9	609.1
10°	499.6	514.0	528.0	544.1	562.4	575.5	584.7	602.5	620.8	637.4	651.4
12.5°	493.1	510.5	530.6	550.2	575.9	589.0	603.8	626.1	652.2	673.2	691.9
15°	486.1	506.2	528.8	552.8	585.1	603.4	624.8	651.8	681.0	711.1	736.8
17.5°	475.2	500.5	525.8	560.7	598.6	609.5	627.8	664.9	701.1	728.1	759.5
20°	464.3	492.7	524.5	555.9	596.9	622.1	639.1	678.4	717.2	749.9	780.0
22.5°	454.3	483.9	517.1	556.7	595.1	620.4	641.8	682.7	727.7	764.3	801.3
25°	442.1	474.3	511.0	548.5	595.1	614.3	637.8	685.4	732.9	775.2	821.0
27.5°	429.0	461.7	497.9	536.3	579.0	607.3	630.4	681.4	739.4	784.8	831.9
30°	415.9	449.5	484.4	518.8	566.8	593.8	620.4	676.6	742.9	794.8	831.0
32.5°	403.3	431.6	466.1	499.6	547.2	576.8	606.9	671.8	744.2	787.8	805.3
35°	385.8	415.5	443.4	479.1	527.1	556.3	591.6	671.4	738.6	765.6	756.9
37.5°	369.7	394.6	421.2	453.0	502.2	540.2	576.8	660.1	719.8	721.5	672.3
40°	351.8	372.3	394.6	428.1	481.3	518.8	558.5	642.6	685.8	660.1	573.3
42.5°	331.3	349.7	367.1	399.8	457.8	499.6	542.4	620.8	636.5	577.2	487.0
45°	309.5	324.4	340.5	374.9	432.9	474.3	517.1	587.3	571.1	487.4	401.5
47.5°	286.9	299.5	315.2	346.6	406.3	448.6	489.2	539.3	498.3	408.5	336.6
50°	264.2	274.2	289.5	321.8	379.3	417.7	455.2	487.9	430.3	350.5	278.2
52.5°	242.0	249.8	265.5	293.0	348.8	385.4	412.4	425.1	366.7	289.5	241.5
55°	218.4	227.1	237.6	265.5	320.9	347.9	365.8	365.4	305.2	245.5	199.7
57.5°	195.8	203.6	212.8	240.7	285.6	303.9	319.1	311.7	254.6	201.0	171.3
60°	175.7	180.1	190.1	213.6	247.6	263.3	272.1	259.4	208.0	169.6	141.7
62.5°	153.9	158.3	166.5	188.8	209.7	218.0	225.4	209.3	171.8	138.2	121.2
65°	133.8	139.5	144.7	162.6	174.0	184.0	183.1	169.6	134.3	112.5	98.5
67.5°	116.4	118.6	122.9	133.8	139.1	146.5	146.9	131.7	108.1	91.6	83.3
70°	97.7	99.8	102.9	108.1	111.6	113.4	112.5	99.0	81.5	71.5	64.1
72.5°	81.5	81.1	83.3	83.3	86.8	86.3	83.7	73.2	61.9	53.6	49.3
75°	64.1	64.5	65.0	64.1	62.8	61.0	58.9	51.0	43.6	39.7	35.8
77.5°	50.1	49.3	49.7	46.6	44.9	43.2	40.1	36.2	30.1	29.2	27.5
80°	35.8	35.3	34.9	33.6	29.6	27.9	25.7	23.5	22.2	21.4	20.9
82.5°	24.0	24.0	23.1	20.5	18.3	17.0	16.6	15.7	14.4	14.4	14.0
85°	14.4	14.0	13.1	10.5	9.2	9.2	9.2	9.2	8.3	8.3	7.8
87.5°	5.7	5.2	3.9	3.9	3.5	3.5	3.5	3.1	3.1	2.6	2.6
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°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	537.6	537.6	541.5	545.4	543.2	544.5	549.3	547.6	551.1	550.6	552.0
5°	578.1	582.9	586.8	595.1	596.4	595.1	603.4	605.6	609.5	604.7	606.9
7.5°	623.9	633.9	643.5	655.7	659.6	660.5	664.9	671.0	676.2	666.6	671.4
10°	668.4	683.6	703.2	714.1	723.7	727.2	730.7	734.6	740.7	746.4	742.0
12.5°	716.3	738.6	757.3	776.9	788.7	787.4	797.4	800.0	804.8	806.1	807.9
15°	755.6	786.9	798.7	827.9	830.5	839.3	850.6	860.6	861.9	859.3	859.3
17.5°	793.0	820.1	841.0	864.6	869.3	876.8	891.1	895.9	897.7	897.2	897.2
20°	823.6	841.4	876.8	896.4	904.2	913.8	923.8	929.9	931.3	933.0	930.4
22.5°	843.6	870.7	899.4	915.6	922.1	925.6	932.1	933.9	931.7	932.1	932.6
25°	859.3	885.9	903.4	907.7	907.3	902.9	898.1	889.8	889.0	885.5	878.5
27.5°	863.7	873.7	871.5	853.7	835.8	834.0	805.3	789.6	771.7	774.3	764.3
30°	840.1	827.1	796.1	750.8	732.0	701.5	669.2	635.7	622.6	608.2	634.8
32.5°	782.6	735.9	681.0	622.1	590.8	563.7	529.3	504.9	490.9	479.1	501.8
35°	695.8	623.0	550.2	494.4	468.7	444.3	412.0	399.8	382.4	384.1	386.3
37.5°	584.2	504.0	449.1	394.1	377.1	367.1	343.6	324.8	318.7	317.0	317.0
40°	479.6	413.7	364.9	321.8	308.7	300.4	281.6	272.9	266.4	264.6	266.8
42.5°	396.7	340.5	302.6	273.8	264.6	254.2	246.3	235.4	234.1	231.1	235.0
45°	333.1	284.3	255.9	235.0	227.1	223.2	214.5	208.0	205.3	204.9	208.0
47.5°	282.5	244.6	219.7	206.7	200.6	196.6	189.2	186.6	184.0	184.9	183.5
50°	237.2	208.8	192.7	180.9	177.0	173.1	168.3	165.7	164.4	164.4	163.9
52.5°	203.6	180.1	169.6	158.7	157.0	154.8	149.5	147.8	145.6	145.2	146.9
55°	174.4	158.3	147.8	141.3	139.5	135.2	133.0	130.8	129.5	128.6	129.1
57.5°	149.1	136.9	129.9	124.3	121.2	119.5	115.5	115.1	114.2	114.2	113.8
60°	128.2	119.5	111.2	107.7	105.5	103.3	102.9	100.3	99.0	99.8	99.4
62.5°	108.6	101.6	96.8	92.9	91.6	89.8	88.5	87.6	86.3	86.8	86.8
65°	90.7	85.0	81.5	78.0	77.6	75.9	75.4	74.6	74.6	74.1	75.0
67.5°	74.6	70.6	67.6	65.4	64.1	64.5	62.8	61.5	61.5	61.0	62.3
70°	59.3	57.1	54.1	51.4	49.7	49.7	47.5	47.1	47.1	47.1	46.6
72.5°	45.8	41.9	40.5	39.7	39.7	39.7	38.8	38.8	38.4	38.8	38.4
75°	34.0	33.6	32.7	32.3	32.3	31.8	31.4	31.4	31.4	31.4	31.4
77.5°	26.6	26.6	25.7	25.3	25.3	25.3	24.9	24.9	24.4	24.4	24.4
80°	19.6	19.6	18.7	18.7	18.7	18.3	18.3	18.3	18.7	18.3	18.3
82.5°	13.5	13.5	13.1	13.5	13.1	12.6	12.6	12.6	12.2	12.6	12.6
85°	7.8	7.8	7.4	7.0	7.4	7.4	7.0	7.4	7.0	7.4	7.0
87.5°	3.1	2.6	2.6	2.6	2.2	2.6	2.2	2.2	2.6	2.2	2.6
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	549.8	547.2	545.4	544.1	542.8	546.7	541.5	535.8	531.9	529.3	528.4
5°	607.3	601.7	596.9	592.9	593.8	593.8	584.7	574.6	565.9	561.1	555.9
7.5°	674.0	667.9	658.3	656.2	654.4	643.5	634.4	616.0	605.1	594.2	584.7
10°	740.3	732.4	723.3	720.2	715.9	702.4	688.4	664.9	651.4	631.3	618.7
12.5°	802.2	792.6	783.5	781.3	774.7	763.0	739.0	714.6	691.5	670.1	647.9
15°	854.1	851.5	837.5	828.8	814.4	798.3	793.0	759.9	730.7	708.5	668.4
17.5°	897.7	885.5	872.4	866.7	861.1	842.3	823.6	789.6	758.2	725.5	699.7
20°	932.6	919.0	909.9	901.6	899.0	877.6	848.0	817.9	783.5	746.8	713.3
22.5°	934.3	932.6	926.5	921.7	916.4	902.5	878.9	841.4	804.8	764.7	720.7
25°	898.1	895.5	912.9	908.6	912.1	906.8	894.2	862.8	820.1	773.0	728.5
27.5°	789.1	815.7	843.2	852.8	859.3	878.1	884.2	866.7	832.3	782.1	732.4
30°	640.9	676.2	720.7	744.7	763.0	797.8	843.2	848.9	832.7	792.6	731.6
32.5°	503.1	535.4	571.1	599.5	623.9	695.4	756.4	800.5	808.3	787.4	733.8
35°	405.5	419.4	453.4	480.5	513.6	574.6	646.6	717.6	765.6	768.2	727.2
37.5°	334.4	341.8	371.5	386.7	406.3	460.0	527.1	620.0	694.5	729.8	708.9
40°	276.8	293.9	310.9	319.6	333.5	370.6	435.1	507.9	600.3	665.7	680.6
42.5°	240.2	247.6	258.5	270.7	279.5	311.7	354.9	421.6	504.9	596.0	637.0
45°	211.9	214.5	225.8	233.7	242.8	265.5	296.0	351.8	425.1	514.9	584.7
47.5°	188.3	193.6	199.7	204.5	210.6	228.0	254.2	294.7	359.2	439.5	514.5
50°	167.4	170.5	178.3	180.5	184.9	197.1	217.1	248.1	301.3	365.4	443.0
52.5°	147.8	153.5	156.5	159.6	163.5	173.5	186.6	211.9	252.0	312.2	378.0
55°	132.5	134.3	138.6	141.3	144.3	151.3	162.6	181.4	212.8	260.7	323.1
57.5°	117.7	117.7	122.1	124.3	127.3	132.5	142.6	157.0	179.6	215.4	272.5
60°	102.0	102.5	105.9	108.6	109.4	114.7	122.9	134.3	151.7	177.9	224.5
62.5°	88.1	90.2	92.0	92.9	95.9	99.0	105.9	113.8	126.0	149.1	182.2
65°	76.3	76.7	78.0	78.9	80.2	83.7	88.9	94.2	104.6	121.6	148.7
67.5°	62.8	64.5	66.3	66.3	67.6	69.3	74.6	78.9	86.8	96.8	115.1
70°	47.1	48.0	50.6	51.9	53.6	56.7	59.3	61.9	68.0	75.4	89.4
72.5°	39.2	39.2	40.1	40.5	40.5	42.7	46.6	49.3	52.3	57.5	67.1
75°	31.4	31.4	32.7	32.3	33.1	34.0	34.4	36.2	37.9	41.9	47.5
77.5°	24.9	25.3	25.3	25.7	25.7	26.2	26.6	27.5	28.3	30.5	33.1
80°	18.3	18.7	18.7	19.2	19.2	19.6	20.1	20.5	21.4	22.2	23.5
82.5°	12.6	13.1	13.1	13.5	13.1	13.5	14.0	14.0	14.4	15.3	15.7
85°	7.4	7.4	7.8	7.4	7.4	7.4	7.8	7.8	8.3	9.6	9.6
87.5°	2.2	2.6	2.2	2.6	2.6	2.6	2.6	3.1	3.1	3.5	3.9
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°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	527.1	524.9	522.7	522.7	517.9	513.6	511.4	512.3	509.7	506.2	502.7
5°	550.2	541.5	539.7	534.9	528.4	519.3	514.5	510.1	504.9	497.9	491.4
7.5°	571.6	560.2	554.1	549.3	536.7	524.0	513.6	506.6	497.5	487.0	479.1
10°	599.5	578.5	572.0	561.1	543.2	525.4	513.1	501.8	489.2	477.0	466.5
12.5°	621.7	597.7	585.5	574.6	551.5	528.8	508.4	494.4	479.1	465.6	452.1
15°	647.0	620.0	598.6	585.5	556.3	528.8	505.7	486.1	469.1	452.5	440.8
17.5°	659.2	625.2	615.6	596.9	554.6	527.1	498.8	477.8	457.3	438.2	424.2
20°	678.4	638.7	614.7	602.1	564.6	524.0	490.9	466.9	445.6	425.1	410.3
22.5°	679.7	636.5	620.8	596.9	550.6	514.9	483.9	454.7	429.9	410.7	395.4
25°	676.6	632.6	610.8	591.6	553.3	509.7	470.0	441.2	416.8	394.6	376.7
27.5°	675.3	621.3	600.8	581.6	538.4	494.4	461.7	429.0	401.1	381.5	363.2
30°	673.6	609.1	584.2	562.0	522.3	482.6	443.4	415.1	388.5	363.6	345.3
32.5°	662.3	592.5	567.2	543.7	500.9	461.3	430.3	400.2	371.5	348.3	331.8
35°	658.8	577.2	544.1	518.8	477.0	441.6	409.0	384.1	357.1	334.0	314.3
37.5°	648.7	561.5	525.8	493.5	449.9	416.4	392.4	367.5	341.4	316.5	300.8
40°	631.3	543.2	502.7	469.6	424.6	390.6	368.4	350.1	324.4	302.1	283.0
42.5°	605.6	524.5	480.9	446.0	396.3	364.5	346.2	328.7	306.9	283.8	268.1
45°	575.9	499.6	459.1	420.3	369.7	338.8	319.6	309.1	289.1	269.4	251.1
47.5°	535.4	473.9	433.8	393.7	342.2	312.2	296.9	286.4	272.5	251.1	236.3
50°	484.4	440.8	402.8	367.1	315.2	286.4	271.2	263.3	251.6	236.3	221.9
52.5°	427.7	402.4	371.0	337.9	287.7	260.7	246.8	240.7	231.9	217.6	205.3
55°	370.6	359.7	338.3	305.6	259.0	236.7	224.5	216.7	210.1	199.7	189.2
57.5°	319.6	314.3	299.5	274.2	235.0	211.9	201.4	196.2	191.0	183.1	172.6
60°	266.8	272.5	257.2	244.6	208.8	188.8	179.6	174.0	171.3	164.4	157.8
62.5°	221.0	226.3	217.6	208.0	182.7	164.8	159.1	153.9	152.2	146.1	139.5
65°	179.6	186.2	179.6	174.4	159.1	144.3	137.3	134.7	133.0	129.1	123.8
67.5°	143.0	149.5	146.5	139.9	135.2	122.9	119.0	116.4	115.5	112.5	108.1
70°	107.7	116.8	117.7	113.8	109.4	103.8	101.1	100.3	98.1	95.5	92.9
72.5°	77.6	88.1	88.5	88.5	85.9	85.9	83.3	82.0	82.0	79.3	76.3
75°	57.1	64.1	65.0	65.8	67.1	68.4	66.7	66.7	66.3	63.7	62.3
77.5°	37.9	44.0	46.2	49.3	51.0	51.0	51.9	52.8	51.9	50.6	49.7
80°	24.4	28.8	31.4	33.1	35.8	37.1	38.4	38.8	37.9	37.5	36.2
82.5°	16.1	17.4	18.7	20.9	24.0	26.2	26.2	25.7	26.6	26.2	25.7
85°	9.2	10.0	10.5	10.9	12.6	14.8	15.3	15.7	16.6	15.7	14.8
87.5°	3.5	3.9	3.9	3.9	4.8	5.2	6.5	8.3	7.8	7.0	7.0
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: P994965

CATALOG NUMBER: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	502.7	500.5	499.6	497.5	492.2	488.7	484.8	482.2	482.6	480.5	481.8
5°	487.0	486.6	483.5	479.1	471.7	467.8	460.8	457.3	455.6	456.0	453.4
7.5°	473.9	470.0	467.8	460.8	453.9	445.6	439.9	436.9	434.2	431.6	429.9
10°	459.1	455.6	452.1	444.7	435.1	427.3	419.4	416.4	412.4	410.7	409.4
12.5°	443.4	441.2	436.9	428.1	417.2	409.8	400.7	398.9	393.7	390.2	389.3
15°	429.0	427.7	419.8	409.8	398.9	391.5	383.7	378.4	369.7	371.5	368.4
17.5°	413.7	408.1	403.3	389.8	384.5	373.2	364.0	361.4	355.3	351.4	347.5
20°	396.7	393.3	387.2	378.4	365.8	352.7	345.7	341.4	337.9	331.8	330.0
22.5°	380.6	376.3	371.0	359.7	348.8	337.9	328.3	324.4	320.0	315.7	313.0
25°	368.0	361.4	355.8	341.8	330.9	321.8	315.7	309.1	303.0	300.4	299.5
27.5°	348.3	344.4	338.8	325.7	315.7	305.6	300.0	295.6	289.1	286.0	283.4
30°	335.7	327.9	321.3	310.9	300.8	289.9	284.7	279.5	275.5	271.6	268.6
32.5°	318.7	312.6	307.4	296.9	286.9	276.8	271.2	263.3	261.2	258.1	254.6
35°	302.1	298.2	292.5	281.2	270.3	263.3	257.2	249.8	247.2	245.0	242.0
37.5°	286.4	280.8	276.8	265.9	256.4	248.1	243.3	237.2	235.4	232.8	230.6
40°	272.9	267.3	263.3	252.4	242.4	233.7	230.6	224.5	221.9	218.9	217.6
42.5°	257.7	252.9	247.6	239.8	229.3	220.6	214.5	211.0	207.5	206.2	203.6
45°	241.5	237.2	233.2	224.5	213.6	207.5	202.3	197.5	194.9	192.7	191.0
47.5°	227.6	223.7	218.4	208.8	200.1	194.4	189.2	184.4	181.8	179.2	177.0
50°	211.5	209.3	203.6	194.4	186.2	179.6	174.8	170.5	168.7	165.7	162.2
52.5°	197.1	193.1	188.3	180.9	173.5	165.7	159.1	156.5	153.5	151.7	148.7
55°	180.1	177.4	172.2	165.7	157.8	151.3	146.5	143.0	139.1	137.3	133.4
57.5°	165.7	160.9	158.3	150.0	142.6	136.0	132.5	129.1	124.7	122.1	120.3
60°	150.0	145.6	141.7	134.7	129.5	122.5	117.3	114.2	111.2	107.7	105.9
62.5°	134.7	131.2	126.4	120.8	114.2	108.6	104.6	100.3	98.5	95.0	93.7
65°	118.2	115.5	111.6	105.1	99.8	95.0	91.1	87.6	85.9	84.6	83.7
67.5°	103.3	99.8	97.2	91.6	85.9	82.0	79.8	77.6	75.4	74.1	72.8
70°	88.1	85.5	82.8	77.6	73.7	70.2	68.4	66.7	65.4	64.1	62.8
72.5°	72.4	71.1	68.4	65.0	61.9	59.3	58.0	55.8	54.5	52.3	51.4
75°	59.7	57.5	56.2	53.2	50.6	48.4	46.6	44.0	42.3	41.4	41.0
77.5°	47.1	46.2	44.5	41.9	40.5	38.4	35.8	34.9	34.0	34.0	33.6
80°	35.3	34.0	32.7	30.5	29.2	27.5	27.5	27.5	27.0	27.5	27.0
82.5°	24.0	23.1	22.2	20.9	20.5	20.5	20.9	20.9	20.9	20.9	20.9
85°	14.0	14.0	14.0	14.4	14.0	14.0	14.4	14.8	14.4	14.4	14.0
87.5°	6.5	6.5	7.0	7.0	7.4	7.4	7.4	7.4	7.4	7.4	7.8
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: P994965

CATALOG NUMBER: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	481.3	481.8	480.5	477.8	477.4	478.3	480.9	480.0	477.8	481.8	478.3
5°	454.7	452.5	451.7	452.5	449.9	448.6	451.2	449.9	451.2	451.7	453.0
7.5°	429.0	429.4	426.8	427.3	423.8	424.6	424.6	424.6	426.0	426.8	428.6
10°	406.8	407.6	404.6	405.0	402.4	400.7	402.0	404.6	404.6	404.6	405.5
12.5°	388.9	385.0	382.8	382.4	379.3	378.4	381.0	381.9	384.1	384.1	385.4
15°	366.7	365.8	364.0	364.0	356.6	358.4	359.2	362.3	366.7	363.2	364.0
17.5°	346.6	344.4	342.2	341.4	340.5	337.9	341.4	340.9	343.6	344.0	345.3
20°	328.7	327.0	322.6	323.1	323.9	320.0	322.2	322.2	324.8	327.4	330.5
22.5°	311.3	309.5	307.4	308.2	305.6	304.8	304.8	306.9	310.0	312.2	311.7
25°	297.8	294.7	293.4	292.1	290.8	291.7	290.4	292.5	294.7	296.0	294.7
27.5°	282.5	281.2	278.6	277.3	275.1	276.0	276.8	278.6	279.9	279.9	281.2
30°	267.7	265.9	265.1	263.8	263.8	262.0	262.5	264.2	265.5	266.8	268.6
32.5°	253.3	252.0	250.7	250.7	249.8	249.4	248.9	251.6	251.6	254.2	254.2
35°	241.5	239.4	239.4	237.2	238.0	237.6	236.7	238.5	238.9	240.7	240.2
37.5°	228.5	228.5	227.6	225.4	223.7	224.1	226.3	226.3	227.6	227.1	228.5
40°	215.4	214.5	214.5	213.2	212.8	212.3	212.8	213.2	215.4	214.9	215.4
42.5°	202.3	202.7	200.6	200.6	200.6	199.2	199.7	200.1	201.0	201.9	203.2
45°	189.7	188.8	188.3	187.5	186.6	187.0	186.6	188.3	187.9	188.8	190.1
47.5°	176.1	174.8	174.4	172.6	172.6	173.5	173.1	174.4	174.8	176.1	175.3
50°	163.1	161.3	160.0	160.4	157.8	158.7	158.7	160.0	161.3	161.7	162.6
52.5°	147.8	147.4	146.9	144.7	144.3	143.9	144.3	144.7	146.5	147.8	148.2
55°	133.0	132.5	129.9	129.1	127.7	127.7	128.6	129.1	132.1	132.5	134.3
57.5°	119.5	118.2	115.1	114.7	114.7	114.7	113.4	115.1	116.0	118.2	118.2
60°	104.6	104.6	102.0	102.0	102.5	102.0	102.0	102.5	102.5	104.2	105.1
62.5°	92.9	92.4	92.4	91.6	91.1	91.6	91.1	91.1	91.6	92.9	94.2
65°	82.4	82.0	81.5	81.1	80.2	80.2	80.7	81.5	81.5	82.4	82.8
67.5°	72.4	72.4	71.5	71.5	71.1	70.6	71.1	70.6	72.4	72.4	72.8
70°	62.3	61.9	60.6	60.2	58.9	59.3	59.3	60.6	61.0	61.9	62.8
72.5°	50.1	50.1	49.3	48.4	48.8	48.0	48.0	48.4	48.4	49.7	50.1
75°	41.4	40.5	40.1	40.5	40.1	41.0	40.1	40.1	41.0	41.0	41.0
77.5°	34.0	34.0	33.6	33.6	34.0	33.6	34.0	34.0	34.0	33.6	34.0
80°	27.9	27.5	27.5	27.5	27.0	27.0	27.0	27.0	27.0	27.0	27.0
82.5°	20.9	20.9	20.5	20.9	20.9	20.5	20.9	20.5	20.5	20.9	20.9
85°	14.0	14.8	14.0	14.0	14.4	14.4	14.8	14.4	14.8	14.0	14.4
87.5°	7.4	7.8	7.8	7.4	7.4	7.8	7.8	7.8	8.3	7.4	7.8
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: P994965

CATALOG NUMBER: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2	509.2
2.5°	481.8	483.5	481.8	478.3	481.8	483.9	486.1	489.6	491.4	491.4	494.0
5°	454.3	457.8	456.5	455.6	459.1	461.3	464.8	469.1	473.9	477.0	480.5
7.5°	429.9	432.1	434.2	434.2	437.7	442.5	447.8	453.0	459.1	463.4	466.1
10°	408.5	410.3	411.6	413.3	418.5	423.8	430.7	437.3	442.5	447.3	451.7
12.5°	388.0	390.6	393.7	395.0	398.9	405.5	412.0	419.8	428.1	432.9	437.3
15°	368.4	369.7	373.2	377.1	380.6	387.6	395.9	404.2	411.1	418.5	422.5
17.5°	348.3	348.8	357.9	355.8	367.1	373.6	378.0	385.8	397.2	403.3	409.4
20°	328.7	333.1	337.0	339.2	345.3	352.7	365.4	371.5	380.6	386.3	391.5
22.5°	313.5	320.0	320.0	325.2	328.3	335.3	344.4	356.2	366.2	370.1	377.6
25°	300.0	303.0	308.2	310.0	315.7	321.8	327.9	340.5	351.4	356.6	361.9
27.5°	282.5	286.4	293.4	293.4	300.8	307.4	314.8	323.1	334.0	341.4	347.0
30°	269.0	272.9	276.0	280.8	283.8	289.9	303.0	309.1	318.7	325.2	332.2
32.5°	256.4	259.4	262.0	267.3	270.7	277.7	284.7	295.6	303.9	310.0	317.4
35°	242.4	245.5	248.9	252.9	258.1	264.6	271.2	280.3	288.6	294.3	300.4
37.5°	229.3	231.5	236.7	239.4	243.7	249.8	258.1	267.7	275.1	279.5	285.6
40°	216.7	218.4	222.4	227.1	230.2	235.0	243.7	252.0	261.2	266.4	271.2
42.5°	203.2	205.3	208.8	213.6	218.4	223.7	228.5	238.0	246.3	250.7	255.9
45°	191.4	192.7	195.3	200.1	204.9	208.8	216.2	225.0	232.8	236.3	242.0
47.5°	177.4	178.8	182.7	184.9	190.1	195.3	202.7	211.5	218.4	221.9	227.1
50°	163.1	164.4	167.0	171.8	175.3	180.9	187.5	194.9	203.6	208.4	211.5
52.5°	149.1	151.7	153.9	157.8	162.2	167.9	174.0	180.9	188.3	193.1	196.6
55°	135.2	137.3	139.9	142.1	147.4	152.6	159.6	166.1	172.6	177.0	180.9
57.5°	119.5	122.5	125.1	129.5	133.4	137.8	145.6	150.8	158.7	161.7	165.2
60°	105.9	109.0	111.2	114.7	118.2	123.8	129.1	135.6	142.1	146.1	150.4
62.5°	94.6	95.9	97.2	100.7	104.2	109.4	114.7	121.2	128.2	130.4	133.8
65°	83.3	84.6	86.8	89.8	92.4	95.5	101.1	106.4	112.9	116.4	117.7
67.5°	73.7	75.0	75.4	77.6	79.8	83.3	86.3	91.6	97.7	99.8	102.5
70°	62.8	65.0	65.4	67.1	68.0	70.2	73.7	77.6	82.4	86.3	88.5
72.5°	50.1	53.2	54.1	56.7	58.0	60.2	62.8	65.8	68.9	70.6	72.4
75°	41.0	41.9	42.3	44.5	46.6	49.7	51.0	52.8	55.4	57.5	59.3
77.5°	34.0	34.4	34.9	34.9	35.3	37.1	39.7	41.9	43.6	44.5	45.8
80°	27.5	27.0	27.0	27.5	27.5	27.5	28.3	31.4	32.3	34.4	34.0
82.5°	21.4	20.5	20.9	20.5	20.5	20.5	20.5	20.9	20.9	22.2	23.1
85°	14.0	14.4	14.0	14.0	13.5	14.0	13.5	13.5	13.1	13.1	12.6
87.5°	7.4	7.8	7.4	7.4	7.0	7.4	7.0	7.0	6.5	6.5	5.7
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: P994965

CATALOG NUMBER: S123RDR-B340DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	509.2	509.2	509.2	509.2
2.5°	496.1	499.2	505.3	510.5
5°	485.7	490.5	499.6	508.8
7.5°	473.0	480.5	492.2	504.9
10°	460.8	470.4	484.8	499.6
12.5°	448.6	458.7	473.9	493.1
15°	434.2	444.7	463.0	486.1
17.5°	421.6	435.5	452.1	475.2
20°	408.1	418.5	439.9	464.3
22.5°	391.1	408.5	428.6	454.3
25°	377.6	392.8	412.9	442.1
27.5°	361.0	378.9	403.3	429.0
30°	347.5	362.3	385.0	415.9
32.5°	331.8	349.2	372.8	403.3
35°	317.8	332.7	354.9	385.8
37.5°	301.3	317.4	342.2	369.7
40°	286.9	302.6	326.1	351.8
42.5°	269.4	286.0	309.5	331.3
45°	255.5	270.7	289.5	309.5
47.5°	238.5	254.6	272.9	286.9
50°	223.2	238.0	252.4	264.2
52.5°	206.7	220.2	233.2	242.0
55°	191.4	201.9	212.3	218.4
57.5°	173.5	183.5	192.3	195.8
60°	157.8	166.1	171.8	175.7
62.5°	141.3	147.4	151.7	153.9
65°	125.1	129.5	131.7	133.8
67.5°	108.6	112.5	113.8	116.4
70°	91.1	95.5	96.4	97.7
72.5°	78.0	78.0	79.8	81.5
75°	62.3	63.2	64.1	64.1
77.5°	48.8	48.8	49.7	50.1
80°	35.8	36.2	36.2	35.8
82.5°	24.4	25.3	24.4	24.0
85°	13.5	15.3	14.4	14.4
87.5°	5.7	5.7	6.5	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)