

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: P998483

Luminaire Tested: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B350DB2750-4F0-XX-W2A-A_3000K
Description: Define 4 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

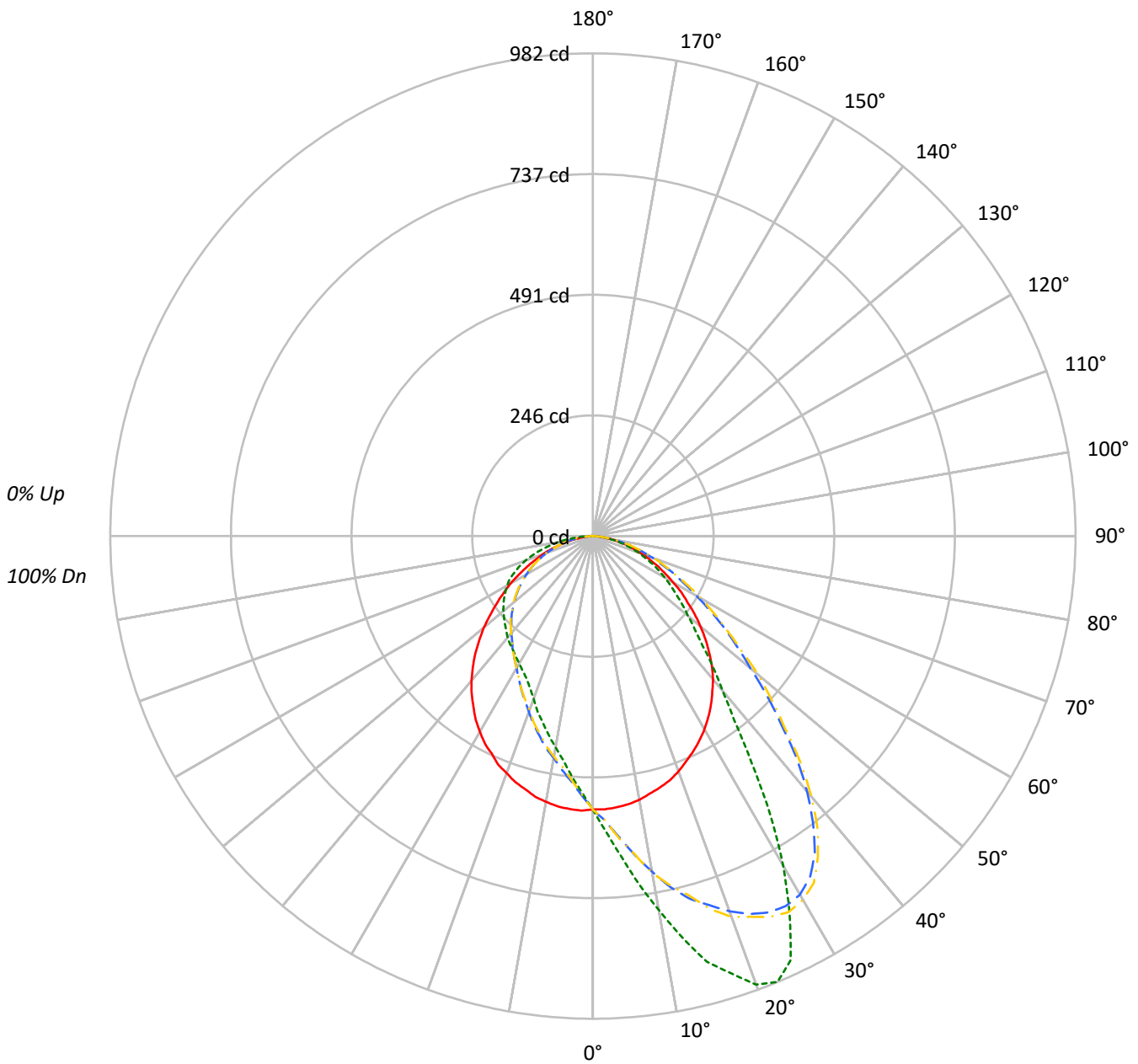
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1535.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular (W 0.33' 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



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



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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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85	85	85	85
2	100	92	86	80	98	90	84	79	87	82	78	84	79	76	81	77	74	72	72	72	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62	62	62	62
4	84	73	64	58	82	72	64	58	69	62	57	67	61	56	65	60	55	53	53	53	53
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46	46	46	46
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41	41	41	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	36	36	36	36
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33	33	33	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30	30	30	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27	27	27	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4536	4536	4536	4536
5°	4535	5342	4561	4014
10°	4511	6396	4545	3614
15°	4467	7568	4498	3319
20°	4420	8427	4452	3055
25°	4346	8563	4387	2874
30°	4275	7286	4327	2816
35°	4170	5602	4216	2817
40°	4047	4367	4087	2870
45°	3853	3641	3901	2918
50°	3619	3205	3671	3017
55°	3341	2936	3394	3139
60°	3074	2751	3164	3285
65°	2829	2560	2854	3406
70°	2539	2341	2594	3483
75°	2265	2092	2250	3441
80°	1860	1752	1841	3334
85°	1375	1291	1291	3190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 145°
 Vertical Angle: 45°
 Luminance: 7005 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	3.5
10°-20°	167.1	10.9
20°-30°	265.5	17.3
30°-40°	295.0	19.2
40°-50°	268.3	17.5
50°-60°	219.2	14.3
60°-70°	156.5	10.2
70°-80°	86.1	5.6
80°-90°	23.3	1.5
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°	486.7	31.7
0°-40°	781.7	50.9
0°-60°	1269.2	82.7
0°-90°	1535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1535.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	556	556	556	556	556	
5°	554	653	557	490	554	53
15°	529	896	533	393	529	149
25°	483	952	488	319	483	223
35°	419	563	424	283	419	262
45°	334	316	338	253	334	258
55°	235	206	239	221	235	211
65°	147	133	148	176	147	145
75°	72	66	71	109	72	76
85°	15	14	14	34	15	18
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°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	556.3	561.8	564.1	566.0	571.9	573.8	574.2	577.0	579.3	579.8	579.8
5°	554.0	562.7	569.6	576.1	585.8	589.9	595.0	600.5	607.9	612.5	614.8
7.5°	550.3	563.2	573.8	584.8	598.2	606.5	611.1	625.9	636.0	644.3	654.4
10°	544.8	561.3	576.6	592.7	611.6	621.7	631.9	649.8	664.1	680.2	693.2
12.5°	536.5	558.1	576.6	599.1	622.6	634.6	646.6	677.9	694.5	708.8	731.9
15°	529.1	550.7	577.0	600.1	629.1	647.1	664.6	684.9	711.1	742.0	764.1
17.5°	520.8	548.0	572.4	604.7	636.9	654.0	668.3	699.6	736.5	766.9	787.2
20°	509.3	536.9	569.2	603.3	641.5	654.9	673.8	715.7	748.9	778.9	812.1
22.5°	495.9	528.2	562.3	595.0	634.6	662.7	683.5	720.3	760.4	795.0	832.3
25°	483.0	518.0	548.0	592.7	634.6	653.5	677.0	720.8	764.6	806.5	844.8
27.5°	469.2	501.9	542.4	577.9	625.4	646.1	671.5	719.4	766.0	807.9	848.9
30°	454.0	489.0	522.6	564.6	610.7	637.4	660.9	713.0	760.4	804.2	842.5
32.5°	436.9	470.1	506.0	545.7	594.1	621.3	650.8	704.2	754.9	792.7	822.2
35°	418.9	452.6	483.9	524.5	574.2	601.4	630.0	689.0	739.2	770.1	787.2
37.5°	399.1	430.9	461.8	501.9	551.7	580.7	609.7	666.9	714.4	740.2	735.6
40°	380.2	408.8	437.4	475.2	527.2	558.1	583.5	641.1	682.6	693.6	678.4
42.5°	358.6	383.0	410.6	449.4	500.0	529.1	560.9	613.4	644.3	639.7	613.9
45°	334.1	355.8	383.4	419.9	471.5	501.4	528.2	577.9	600.5	589.0	542.0
47.5°	310.6	331.8	354.4	390.8	441.1	466.4	493.6	538.3	551.2	526.8	479.8
50°	285.3	302.8	326.3	360.9	407.9	434.6	457.2	493.1	497.7	467.8	418.9
52.5°	260.9	275.6	298.2	332.3	376.1	397.3	419.4	451.2	447.5	416.6	369.6
55°	235.0	248.9	269.6	301.0	339.7	359.9	378.8	407.0	399.1	367.3	326.3
57.5°	213.4	223.1	243.3	272.4	304.2	326.3	342.4	364.6	352.6	320.8	282.5
60°	188.5	200.5	217.5	241.0	272.4	287.1	301.4	316.2	307.9	277.4	243.3
62.5°	165.9	175.1	189.9	212.5	236.9	250.3	265.5	274.7	266.4	238.3	209.7
65°	146.6	153.9	165.5	183.9	207.4	218.5	227.2	236.0	229.1	202.8	182.0
67.5°	125.4	131.8	141.5	156.2	176.1	183.9	192.2	198.2	190.3	172.8	152.5
70°	106.5	111.1	120.3	131.3	145.2	152.5	159.5	165.5	158.5	143.8	128.6
72.5°	87.1	90.8	99.1	106.9	119.4	124.4	129.5	134.1	131.8	118.0	105.5
75°	71.9	73.3	78.8	85.3	93.1	98.6	102.3	105.1	103.2	92.2	84.3
77.5°	54.4	56.2	60.4	65.4	72.4	75.6	77.9	80.7	78.3	69.6	64.1
80°	39.6	40.1	42.4	47.0	51.6	52.1	54.4	58.1	56.7	50.7	46.5
82.5°	25.3	26.7	27.7	30.4	33.6	34.6	35.9	36.9	36.4	32.7	31.3
85°	14.7	14.7	15.7	17.5	18.4	19.8	20.3	20.7	21.7	19.4	18.0
87.5°	6.5	6.9	6.9	7.4	8.3	8.3	8.8	9.2	9.7	9.2	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	581.2	589.5	593.1	594.1	599.1	595.9	597.3	596.8	600.5	601.0	601.0
5°	623.6	633.2	636.5	641.1	648.0	649.8	648.4	651.2	656.3	652.6	658.1
7.5°	668.3	678.9	686.2	696.4	698.7	704.7	708.4	711.6	712.5	713.0	713.9
10°	709.7	723.1	733.3	750.3	754.0	757.2	773.3	766.9	775.2	772.4	773.3
12.5°	743.4	769.7	778.0	806.5	809.3	820.4	819.4	829.6	831.4	835.1	831.4
15°	787.6	818.1	831.4	847.5	856.8	869.7	872.0	885.8	891.3	896.4	891.3
17.5°	828.2	844.3	878.4	891.3	897.3	904.2	921.7	926.8	935.1	931.9	941.1
20°	848.5	871.5	907.5	929.6	938.8	945.3	960.0	967.8	971.1	971.1	972.0
22.5°	866.4	899.6	926.4	951.7	960.0	964.6	973.4	979.4	980.7	981.7	982.6
25°	882.6	912.5	934.2	948.5	951.7	951.7	956.8	953.1	947.1	951.7	954.5
27.5°	882.6	903.8	913.5	918.5	918.5	906.1	898.7	883.5	870.6	866.9	875.2
30°	867.8	877.5	864.1	851.7	842.0	833.7	804.7	781.6	777.0	773.8	786.3
32.5°	833.7	821.3	795.0	759.1	744.8	725.9	703.3	685.8	675.2	671.5	668.7
35°	773.3	741.1	707.0	658.6	648.4	624.5	593.6	580.7	563.2	562.7	568.7
37.5°	707.4	657.7	620.8	574.7	560.4	535.1	506.0	492.7	480.7	471.5	482.5
40°	630.5	587.2	530.9	493.1	472.9	459.5	435.1	420.3	414.8	410.2	417.1
42.5°	558.6	511.1	467.3	428.6	412.0	396.8	380.7	366.4	362.2	361.8	366.9
45°	487.1	440.6	400.0	366.9	356.3	347.0	331.4	327.2	320.3	315.7	318.0
47.5°	430.0	382.1	348.4	323.1	313.9	306.0	295.9	289.0	283.0	281.1	283.9
50°	373.8	341.5	306.9	285.7	278.8	271.5	263.6	257.2	254.4	252.6	254.4
52.5°	328.6	294.0	270.5	253.5	246.6	241.0	235.5	232.7	229.1	230.0	231.8
55°	288.0	257.6	237.8	225.4	221.2	218.9	212.0	208.8	207.4	206.5	207.4
57.5°	249.8	227.7	212.9	202.3	196.8	195.4	189.9	189.9	188.5	187.1	187.6
60°	219.4	200.5	186.2	177.9	177.0	174.7	171.0	170.5	167.3	168.7	169.1
62.5°	188.5	173.3	163.6	158.5	155.3	154.4	152.1	151.6	150.2	150.7	149.8
65°	164.1	151.6	141.9	137.8	136.4	136.0	134.1	132.7	131.8	132.7	131.8
67.5°	139.6	131.3	124.0	119.8	118.0	117.5	116.1	115.2	115.7	114.3	115.2
70°	116.6	108.3	103.7	101.4	100.5	99.1	99.1	99.1	99.1	98.2	97.7
72.5°	98.2	89.9	86.6	85.3	84.3	83.9	82.5	83.0	82.5	82.0	83.9
75°	77.9	72.8	69.6	68.2	69.1	67.7	66.4	67.3	65.9	66.4	68.2
77.5°	59.0	56.7	54.8	53.9	53.0	52.1	52.1	51.2	51.2	51.2	51.2
80°	42.9	42.4	39.2	38.7	38.7	37.8	37.8	37.8	37.8	37.3	37.8
82.5°	28.6	28.1	27.2	26.7	25.8	26.3	26.3	25.3	25.3	24.9	25.3
85°	16.6	16.6	15.7	15.2	14.7	15.2	14.3	13.8	14.3	13.8	14.3
87.5°	7.8	6.9	7.4	6.9	6.0	6.5	5.5	6.0	5.5	5.1	6.0
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°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	600.1	598.7	596.8	596.8	594.5	594.5	590.8	584.4	578.9	577.0	577.9
5°	651.2	651.7	648.9	646.6	642.5	639.2	633.2	621.7	618.0	610.7	605.6
7.5°	709.7	707.9	702.8	699.1	698.2	690.8	677.9	664.1	653.1	645.7	635.1
10°	775.7	768.3	760.9	758.6	753.1	740.6	725.9	710.7	695.5	679.3	661.4
12.5°	831.0	816.7	816.2	810.7	800.1	793.2	775.7	754.0	727.7	709.7	689.5
15°	890.4	877.0	866.0	855.8	850.8	830.5	815.7	788.6	757.2	737.9	724.0
17.5°	932.8	926.8	907.9	903.3	896.4	872.9	849.4	822.7	795.5	768.3	730.9
20°	966.9	963.2	950.8	944.3	933.3	914.8	886.3	855.4	824.0	785.3	750.3
22.5°	981.7	977.1	966.9	961.4	954.5	938.8	914.4	879.3	838.3	803.8	766.4
25°	952.6	960.9	958.2	955.9	953.1	943.9	925.4	894.6	854.5	815.3	768.7
27.5°	887.2	901.5	915.3	917.1	921.7	925.4	918.1	895.9	862.3	820.8	769.7
30°	799.2	805.6	833.7	842.0	848.5	872.0	885.8	880.3	854.5	817.1	770.1
32.5°	686.2	703.3	731.9	751.7	769.2	795.5	831.4	845.7	836.5	806.1	759.5
35°	579.3	599.6	632.8	658.1	675.6	713.0	755.4	786.3	797.8	782.6	741.1
37.5°	491.8	516.2	545.7	555.4	575.6	621.7	680.2	723.1	751.2	752.6	720.3
40°	425.8	438.3	461.8	476.5	496.4	535.1	592.2	648.9	691.3	705.6	688.5
42.5°	370.1	379.8	397.3	415.2	433.2	462.7	515.3	568.3	625.4	654.0	653.5
45°	325.8	336.0	348.0	362.7	375.2	407.0	448.4	502.8	552.1	596.4	607.4
47.5°	287.1	295.9	310.6	317.1	325.4	355.3	391.3	442.0	493.1	543.8	556.7
50°	258.6	265.9	276.1	280.2	289.4	311.6	341.0	382.1	438.8	485.3	509.3
52.5°	232.7	238.3	246.1	249.3	255.8	272.4	299.1	331.4	378.4	426.3	460.0
55°	210.6	214.3	219.8	223.5	228.1	242.9	262.7	291.7	332.3	373.8	406.5
57.5°	189.9	192.6	198.2	200.0	203.7	215.2	229.1	253.5	290.8	327.7	359.5
60°	170.5	172.4	175.6	179.7	182.5	190.3	203.2	223.5	253.5	287.1	312.9
62.5°	152.1	154.9	155.8	157.6	159.9	167.3	177.4	192.2	218.5	246.1	273.3
65°	133.2	135.5	137.3	137.8	140.1	145.6	154.9	167.8	184.8	208.8	234.1
67.5°	115.7	117.1	118.0	119.8	122.1	124.9	132.3	141.9	157.6	177.0	197.3
70°	99.5	99.5	100.9	101.4	104.2	107.4	110.6	119.8	133.7	149.3	163.1
72.5°	82.0	84.3	83.9	86.2	85.7	88.0	92.2	98.2	108.3	120.7	134.1
75°	66.8	68.2	68.2	68.2	69.1	71.0	73.3	78.8	86.6	96.8	104.6
77.5°	52.1	53.0	53.0	53.0	53.5	55.3	57.6	61.3	66.8	72.8	77.4
80°	37.3	38.3	38.3	39.2	39.2	39.6	41.9	43.8	46.5	51.2	55.8
82.5°	25.3	25.8	26.7	26.7	26.3	27.2	27.7	29.5	32.3	33.2	36.4
85°	13.8	14.3	14.7	14.7	15.2	16.1	15.7	17.5	17.5	19.4	20.3
87.5°	5.5	6.5	6.5	6.0	6.5	6.5	6.5	7.4	7.8	8.3	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: P998483

CATALOG NUMBER: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	573.8	571.9	570.6	570.6	566.4	562.3	560.0	559.0	558.1	554.4	549.4
5°	597.3	591.3	587.2	583.0	576.1	568.7	561.3	557.2	551.2	542.9	536.9
7.5°	623.6	609.3	604.7	599.6	585.8	573.3	563.2	554.4	544.8	534.2	523.6
10°	645.7	630.5	620.3	611.6	593.6	577.0	561.8	548.9	536.5	522.6	509.7
12.5°	666.9	645.2	634.6	621.7	602.8	578.9	559.0	542.9	524.5	510.2	494.5
15°	696.4	660.0	642.5	634.2	608.8	580.7	556.7	532.8	517.6	495.9	482.1
17.5°	701.0	671.5	660.0	638.8	608.4	576.6	548.9	524.9	501.9	482.5	464.6
20°	717.1	678.4	660.0	646.6	606.5	574.2	543.8	513.0	490.8	470.1	449.8
22.5°	727.3	683.5	664.1	642.9	604.7	566.0	530.0	503.3	476.1	454.9	438.8
25°	724.5	680.7	659.0	639.2	592.7	554.0	521.7	487.6	462.3	439.2	418.0
27.5°	723.1	673.8	650.8	628.6	584.8	544.3	503.7	476.1	448.0	421.2	405.6
30°	719.4	665.0	638.3	614.3	568.7	526.3	491.8	459.5	431.4	407.0	386.2
32.5°	707.0	650.3	624.5	598.7	551.2	508.8	473.8	443.8	415.7	390.4	370.5
35°	690.4	632.8	604.7	577.5	530.0	487.1	454.9	423.5	397.3	372.8	354.0
37.5°	673.8	612.5	586.2	554.9	511.1	466.4	433.2	405.1	380.7	355.3	334.6
40°	649.8	588.5	559.5	532.8	481.6	439.7	409.3	383.9	359.9	336.0	318.5
42.5°	617.1	562.3	532.3	502.8	454.9	413.4	383.9	361.3	338.7	318.9	299.6
45°	583.9	530.5	503.7	477.5	425.4	386.2	359.0	338.3	319.4	297.7	282.1
47.5°	543.8	498.7	471.9	446.1	396.8	357.6	332.8	313.4	295.9	277.9	263.2
50°	502.8	463.6	439.2	412.5	365.5	330.0	305.6	289.4	275.1	258.1	246.1
52.5°	458.6	424.5	403.7	377.9	336.4	303.7	278.8	262.7	250.7	238.3	227.7
55°	411.6	386.7	364.6	343.8	304.6	275.1	253.0	238.7	230.4	218.9	209.7
57.5°	369.2	345.2	331.8	308.3	274.2	245.2	227.7	215.7	206.0	199.1	191.7
60°	324.9	305.6	290.8	273.8	243.8	219.4	200.9	194.0	183.9	178.8	175.6
62.5°	282.5	268.7	254.9	242.0	215.2	192.2	178.4	169.6	163.6	158.5	155.8
65°	242.4	229.5	219.8	208.3	186.2	167.8	154.9	147.9	141.9	140.6	137.3
67.5°	203.2	197.7	187.1	177.9	159.0	144.7	135.0	126.3	123.1	121.7	118.9
70°	170.1	163.6	155.3	147.5	133.2	120.7	112.0	108.8	104.2	103.7	100.5
72.5°	140.1	132.3	126.3	120.3	109.7	98.6	94.0	89.4	87.1	85.3	83.9
75°	111.1	105.5	101.4	96.3	87.1	79.7	73.3	71.4	70.1	69.6	68.7
77.5°	83.0	79.3	77.4	72.4	65.9	59.5	56.7	53.9	53.9	53.0	53.5
80°	59.0	56.7	54.4	51.6	46.1	43.3	41.0	39.2	38.3	37.8	38.3
82.5°	37.3	35.9	35.5	33.6	30.0	28.6	26.7	25.3	25.3	25.3	25.3
85°	20.7	20.7	20.7	18.0	16.6	15.2	14.3	13.8	13.8	13.8	14.3
87.5°	8.8	8.8	7.4	7.4	6.9	6.0	5.5	5.5	6.0	6.0	6.5
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: P998483
 CATALOG NUMBER: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	548.0	546.1	547.1	542.4	538.3	532.3	527.2	526.3	525.4	528.2	526.3
5°	532.3	530.0	527.7	522.2	513.9	508.8	501.4	501.0	498.2	494.1	495.0
7.5°	515.3	513.9	510.6	501.9	494.5	485.8	479.8	474.7	472.4	468.7	467.3
10°	501.4	496.4	493.6	483.9	475.2	465.9	458.1	454.4	450.3	447.0	444.7
12.5°	482.5	481.2	473.3	465.5	458.1	447.5	441.5	430.9	425.4	428.2	427.2
15°	470.1	463.6	461.8	450.7	438.3	431.4	420.3	413.4	411.1	407.0	401.9
17.5°	453.5	449.4	442.9	432.8	418.5	408.8	401.0	394.5	391.7	386.2	382.1
20°	437.8	430.9	425.8	416.6	402.8	390.4	380.7	376.5	369.6	365.0	362.7
22.5°	423.5	418.5	411.1	397.3	385.3	373.3	361.8	355.8	349.3	346.6	342.9
25°	406.0	397.7	392.7	377.5	364.6	354.9	344.3	336.4	332.8	328.1	327.2
27.5°	389.0	381.1	375.2	361.8	346.1	333.7	327.2	321.7	315.2	315.2	312.9
30°	371.9	366.4	357.2	344.3	329.5	317.5	310.2	305.1	302.8	301.0	300.5
32.5°	354.9	347.5	342.0	324.5	313.4	302.3	296.8	292.7	289.9	289.4	289.9
35°	337.4	329.1	323.5	307.9	296.8	286.7	284.4	280.7	279.3	278.8	281.1
37.5°	318.9	312.5	305.6	292.7	280.2	274.2	269.6	268.2	267.8	270.5	271.5
40°	301.9	296.3	289.9	276.1	266.8	260.4	258.1	256.7	258.6	261.3	262.7
42.5°	285.7	277.9	272.8	260.4	252.1	248.4	245.6	245.6	247.5	250.7	253.0
45°	268.7	262.7	257.6	246.6	239.2	235.0	234.6	235.0	237.4	239.7	242.4
47.5°	252.1	246.1	240.6	231.4	224.9	222.6	222.1	222.6	226.3	229.5	232.7
50°	236.9	230.4	225.4	216.6	211.5	208.8	209.2	211.5	214.3	218.9	223.1
52.5°	218.9	214.3	209.7	201.9	197.3	195.4	196.8	198.6	203.7	206.9	212.0
55°	201.4	197.3	193.6	187.6	183.9	182.5	183.4	186.2	190.3	195.9	201.9
57.5°	185.3	180.7	177.0	172.8	168.7	169.1	169.6	173.3	178.4	183.4	190.3
60°	167.3	164.5	161.3	156.2	154.4	154.4	155.8	159.9	164.5	172.8	178.8
62.5°	151.2	147.5	145.2	141.9	139.2	139.6	142.9	146.6	152.1	159.0	166.8
65°	134.6	130.4	128.6	125.8	124.9	125.4	127.7	133.2	139.2	145.2	152.5
67.5°	116.1	114.8	112.9	110.1	111.1	111.5	113.8	118.4	124.9	130.9	139.2
70°	100.5	97.7	97.2	94.9	94.9	96.3	100.9	104.2	110.1	116.6	125.4
72.5°	83.9	81.6	81.6	79.7	81.1	82.5	84.8	89.4	94.9	101.4	108.8
75°	66.8	65.9	66.8	65.9	65.9	68.2	71.0	74.7	80.7	87.6	93.6
77.5°	51.6	51.6	51.2	52.5	52.5	53.9	57.6	61.3	65.9	71.4	77.9
80°	37.8	37.8	37.8	39.2	40.6	40.6	42.9	47.5	51.6	55.3	61.3
82.5°	25.8	25.8	25.8	26.7	28.6	28.6	31.3	34.1	38.7	41.9	44.7
85°	15.7	15.7	15.2	16.1	16.6	18.0	20.3	22.1	24.4	27.2	30.0
87.5°	6.9	6.9	7.4	7.8	8.3	9.2	10.1	11.1	13.4	14.3	15.7
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: P998483

CATALOG NUMBER: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	524.9	524.5	522.2	523.1	520.3	521.2	522.6	523.1	524.9	523.6	523.1
5°	492.7	491.8	490.4	489.0	488.5	490.4	487.1	488.1	489.0	490.4	492.2
7.5°	466.4	465.9	464.6	462.3	461.3	460.4	460.9	464.1	463.6	463.2	466.4
10°	442.4	442.9	440.1	439.7	436.9	436.4	436.9	437.8	439.2	441.1	441.5
12.5°	417.6	423.5	418.5	416.6	412.5	414.8	415.7	411.6	413.9	415.2	422.2
15°	401.9	399.1	395.9	395.9	394.0	393.1	390.8	394.0	395.9	398.7	397.7
17.5°	380.2	375.6	373.8	371.9	372.4	374.2	369.2	376.5	376.5	377.9	375.6
20°	361.3	357.6	355.3	354.4	353.0	352.1	351.6	353.5	356.3	357.2	359.5
22.5°	341.5	341.5	337.8	336.4	335.5	334.1	336.4	335.1	336.9	338.7	342.4
25°	324.9	324.9	323.5	321.7	320.3	319.4	320.8	320.3	321.7	324.0	324.9
27.5°	311.6	310.2	309.7	309.2	308.8	309.2	308.8	310.2	311.6	312.0	311.1
30°	300.0	298.6	299.1	299.1	299.6	299.1	298.6	300.0	300.5	299.6	300.0
32.5°	289.4	289.4	290.4	290.8	290.8	291.3	291.7	290.8	291.3	289.9	290.4
35°	280.7	281.6	282.5	283.0	283.4	283.0	283.9	283.4	282.5	281.6	281.1
37.5°	271.9	272.8	274.7	275.1	276.5	277.0	276.1	276.1	275.6	273.8	272.8
40°	262.7	263.6	265.9	267.3	268.2	269.6	268.7	268.7	266.8	265.0	263.6
42.5°	253.9	255.8	258.1	259.5	261.3	261.3	261.3	260.4	258.1	256.2	254.9
45°	245.2	245.6	248.9	251.2	253.0	253.0	253.0	251.6	250.3	246.6	244.7
47.5°	235.5	236.9	240.6	242.9	244.7	245.2	245.2	243.8	241.0	237.8	235.5
50°	224.9	227.2	231.4	234.6	236.9	237.8	236.4	235.5	232.3	228.6	225.8
52.5°	214.8	217.5	222.6	225.4	228.6	229.1	228.6	227.2	223.5	218.5	216.1
55°	204.6	206.9	212.5	217.1	219.8	220.8	219.8	217.5	212.9	207.9	205.5
57.5°	193.6	196.8	202.8	207.4	210.6	211.1	210.2	207.9	204.2	197.7	194.5
60°	182.0	186.2	192.2	196.8	200.9	201.4	200.5	197.3	192.6	186.2	183.4
62.5°	170.5	173.7	180.7	185.7	189.0	191.3	189.4	186.2	181.6	175.1	171.0
65°	157.2	161.8	167.8	172.4	176.1	176.5	175.6	172.8	167.8	160.8	157.6
67.5°	144.3	147.5	153.5	159.5	160.8	162.2	160.8	158.1	153.9	147.9	143.3
70°	128.6	131.3	138.7	142.9	144.7	146.1	145.2	142.4	138.7	133.2	129.5
72.5°	112.9	115.2	122.1	125.4	129.0	128.6	128.1	126.3	121.2	117.5	115.2
75°	96.3	99.1	103.7	107.8	109.2	109.2	109.2	107.8	104.6	98.6	96.3
77.5°	81.1	82.5	86.2	88.5	89.9	90.3	89.9	87.6	85.7	81.6	80.2
80°	62.2	65.9	68.7	69.1	71.0	71.0	71.0	70.1	68.2	64.1	63.6
82.5°	47.0	47.9	50.7	52.1	53.0	52.5	52.5	50.7	50.2	47.9	47.0
85°	31.8	33.2	32.7	34.6	35.0	34.1	34.1	35.0	32.7	33.2	31.8
87.5°	17.5	17.5	18.4	18.0	19.8	19.8	18.9	19.4	18.4	18.0	17.5
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: P998483
 CATALOG NUMBER: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3	556.3
2.5°	523.1	525.9	523.1	524.9	525.9	528.2	529.1	533.2	534.6	537.8	537.8
5°	491.8	493.1	493.6	495.4	497.3	501.9	505.1	511.1	518.0	518.9	523.1
7.5°	466.4	468.7	472.4	471.0	474.2	481.2	485.3	492.7	499.6	503.3	508.3
10°	443.8	446.6	448.0	449.4	455.3	461.3	467.8	472.9	482.1	487.6	491.8
12.5°	425.4	423.1	425.8	430.9	437.8	441.5	450.3	458.1	465.0	471.0	474.7
15°	401.4	403.3	406.0	414.8	416.6	425.8	429.1	437.8	450.7	456.3	460.9
17.5°	378.4	384.4	389.9	393.1	398.7	406.0	415.2	424.9	433.2	439.7	445.2
20°	359.9	365.9	369.2	371.5	377.0	387.1	395.9	407.9	418.5	423.5	430.9
22.5°	345.2	345.2	349.8	356.7	359.9	369.6	377.0	389.9	401.4	407.9	414.8
25°	326.8	329.5	333.2	339.2	343.8	351.6	362.2	373.3	385.8	391.3	400.0
27.5°	311.6	314.8	319.8	321.2	325.8	332.8	343.8	355.8	368.7	374.7	382.1
30°	300.0	301.9	303.7	306.5	310.6	316.6	325.8	336.4	352.1	356.7	365.9
32.5°	289.9	290.8	291.7	294.0	296.3	302.3	309.7	321.2	334.1	341.0	349.3
35°	280.7	279.8	280.2	281.6	283.9	286.2	294.0	303.7	315.7	324.0	330.4
37.5°	271.9	270.1	269.6	269.6	270.5	273.3	279.3	287.6	300.5	307.4	313.9
40°	262.2	260.4	259.5	259.0	258.6	260.4	265.0	273.3	283.4	289.9	297.3
42.5°	253.0	251.2	248.9	248.4	247.5	248.4	251.6	259.5	268.2	274.7	280.7
45°	243.8	240.6	237.8	236.0	236.4	235.0	237.4	243.3	253.5	257.6	263.6
47.5°	233.7	230.0	226.3	224.4	222.6	223.5	224.4	229.5	238.3	242.4	248.4
50°	224.0	218.9	214.8	212.5	211.1	210.2	211.1	216.1	222.6	226.3	231.4
52.5°	212.9	207.9	203.7	200.0	198.2	196.8	197.3	201.9	207.9	211.5	216.6
55°	202.8	196.3	190.8	186.2	184.8	184.3	183.9	187.1	192.2	195.9	200.0
57.5°	191.3	184.8	178.8	173.3	170.5	170.1	170.1	171.0	177.4	180.2	182.5
60°	179.7	172.8	166.4	161.3	157.2	155.8	155.3	157.2	160.4	163.1	166.4
62.5°	166.8	159.9	152.1	147.5	143.3	139.6	141.0	141.5	146.1	147.5	150.2
65°	154.4	146.6	140.1	132.7	128.1	125.8	124.9	125.8	129.5	130.0	131.8
67.5°	140.1	132.7	124.9	119.8	115.7	111.5	110.6	110.6	112.5	113.8	116.1
70°	126.3	118.9	110.1	104.6	100.5	96.8	95.4	94.9	96.3	97.2	99.5
72.5°	110.1	102.8	96.3	90.3	85.3	82.5	81.1	80.2	81.6	82.5	83.0
75°	93.1	87.1	80.7	74.7	71.4	68.7	66.8	65.4	66.4	66.4	66.4
77.5°	77.0	71.0	65.9	61.8	57.6	54.4	53.0	51.6	52.1	52.1	53.0
80°	59.9	55.8	51.6	47.9	44.2	41.5	40.6	39.2	38.3	37.8	37.8
82.5°	44.2	41.0	37.3	34.1	32.3	29.5	28.6	26.7	26.7	26.3	26.3
85°	29.5	27.7	24.0	21.7	20.3	18.9	18.0	17.1	15.7	15.7	15.2
87.5°	15.7	14.7	13.8	11.1	11.1	9.7	9.2	8.8	7.4	7.8	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: P998483

CATALOG NUMBER: S124DR-B350DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	556.3	556.3	556.3	556.3
2.5°	541.1	545.7	549.8	556.3
5°	529.1	535.5	544.3	554.0
7.5°	515.3	525.4	536.9	550.3
10°	502.4	513.9	528.6	544.8
12.5°	489.0	502.8	518.9	536.5
15°	473.8	487.6	505.6	529.1
17.5°	460.0	476.5	495.9	520.8
20°	443.8	459.5	480.7	509.3
22.5°	429.5	447.5	471.0	495.9
25°	413.9	429.5	453.0	483.0
27.5°	398.2	417.6	440.1	469.2
30°	383.0	399.1	423.5	454.0
32.5°	366.4	385.8	408.3	436.9
35°	348.4	366.9	388.1	418.9
37.5°	332.3	350.3	371.9	399.1
40°	314.3	333.2	353.0	380.2
42.5°	296.8	313.9	333.7	358.6
45°	279.8	294.5	312.5	334.1
47.5°	262.2	274.7	291.3	310.6
50°	243.3	256.7	269.2	285.3
52.5°	225.8	237.4	247.5	260.9
55°	208.8	216.6	224.9	235.0
57.5°	190.8	196.8	202.8	213.4
60°	172.8	178.4	181.6	188.5
62.5°	155.3	157.6	161.8	165.9
65°	136.0	139.2	141.5	146.6
67.5°	118.4	119.8	122.1	125.4
70°	100.0	103.2	104.2	106.5
72.5°	84.3	85.7	86.6	87.1
75°	66.8	68.2	69.1	71.9
77.5°	52.5	52.1	53.9	54.4
80°	38.7	37.3	37.8	39.6
82.5°	25.3	25.8	25.3	25.3
85°	15.7	15.2	14.3	14.7
87.5°	6.9	6.9	6.5	6.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)