

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: P1000453

Luminaire Tested: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-31)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K
Description: Define 4 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

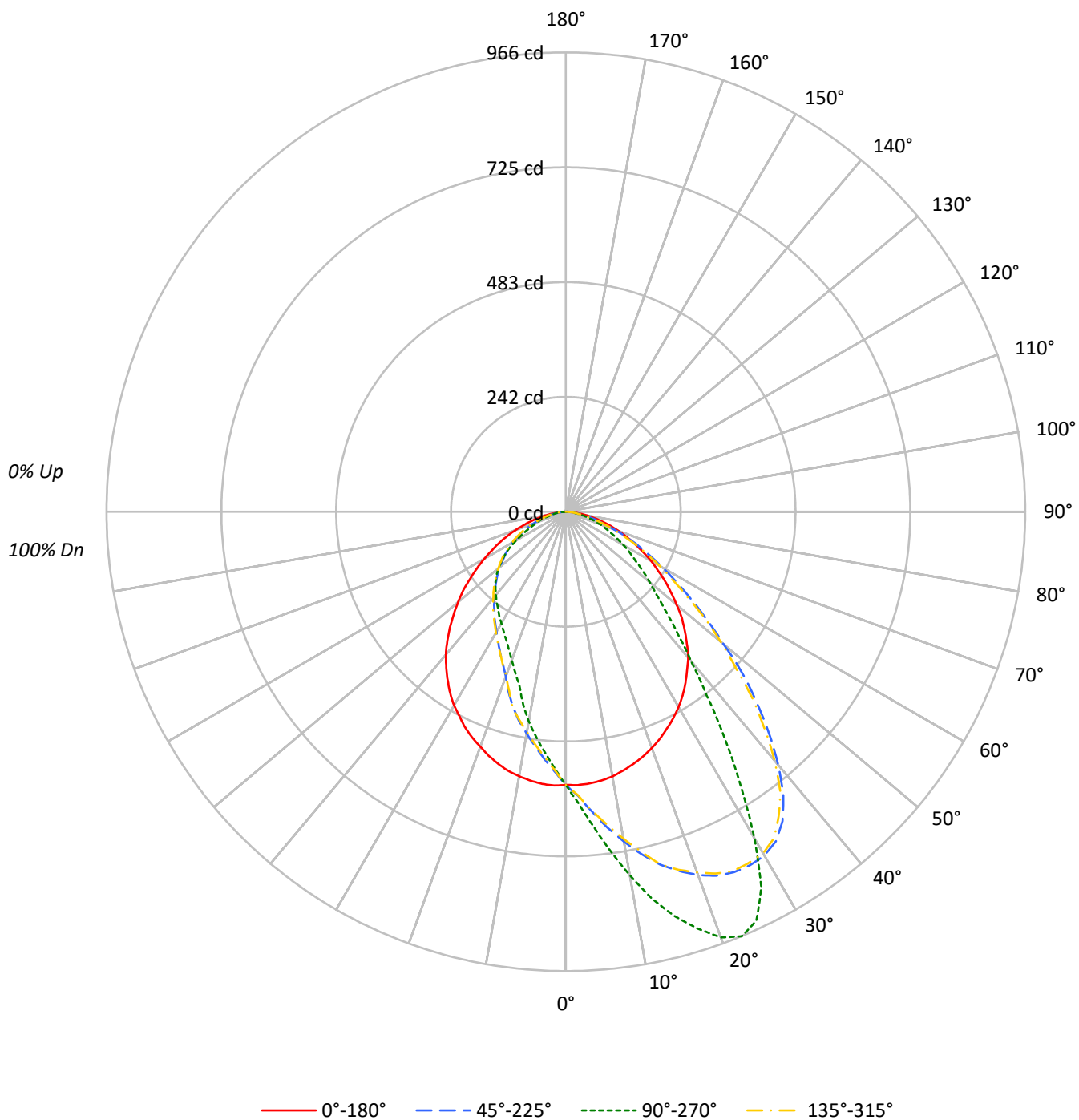
Lumens per Lamp: N/A
Luminaire Lumens: 1452.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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



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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	98	107	103	100	97	99	96	94		95	93	91		92	90	88		86
2	101	93	87	82	98	92	86	81	88	83	79		85	81	77		82	79	76		74
3	93	83	76	70	90	81	75	69	79	73	68		76	71	67		73	69	65		63
4	85	74	66	60	83	73	65	59	71	64	59		68	63	58		66	61	57		55
5	79	67	58	52	77	66	58	52	64	57	51		62	56	51		60	55	50		48
6	73	61	52	46	71	60	52	46	58	51	46		56	50	45		55	49	45		43
7	68	55	47	41	66	54	47	41	53	46	41		52	45	40		50	44	40		38
8	64	51	42	37	62	50	42	37	49	42	37		47	41	36		46	40	36		34
9	59	47	39	33	58	46	38	33	45	38	33		44	38	33		43	37	33		31
10	56	43	35	30	55	43	35	30	42	35	30		41	34	30		40	34	30		28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4684	4684	4684	4684
5°	4694	5433	4702	4153
10°	4679	6427	4676	3706
15°	4634	7424	4634	3184
20°	4587	8266	4563	2880
25°	4527	8533	4506	2673
30°	4463	7470	4428	2550
35°	4368	5815	4312	2474
40°	4262	4360	4178	2433
45°	4078	3442	3976	2413
50°	3858	2906	3753	2343
55°	3620	2533	3500	2218
60°	3382	2280	3231	1962
65°	3081	2009	2983	1688
70°	2813	1810	2682	1524
75°	2524	1515	2347	1298
80°	2174	1282	1977	1216
85°	1778	1085	1469	1085

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 7003 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	3.8
10°-20°	168.0	11.6
20°-30°	263.1	18.1
30°-40°	292.2	20.1
40°-50°	258.9	17.8
50°-60°	201.8	13.9
60°-70°	132.0	9.1
70°-80°	64.8	4.5
80°-90°	15.8	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°	486.7	33.5
0°-40°	778.8	53.6
0°-60°	1239.5	85.4
0°-90°	1452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1452.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	574	574	574	574	574	
5°	574	664	574	507	574	54
15°	549	879	549	377	549	155
25°	503	948	501	297	503	232
35°	439	584	433	248	439	274
45°	354	298	345	209	354	273
55°	255	178	246	156	255	228
65°	160	104	155	88	160	159
75°	80	48	74	41	80	85
85°	19	12	16	12	19	23
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°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	575.3	580.4	583.2	585.5	590.1	592.0	595.7	596.6	600.3	599.9	598.5
5°	573.5	582.3	588.7	595.7	604.0	608.6	613.7	621.1	624.8	629.9	633.2
7.5°	570.2	582.3	592.9	603.6	617.0	624.4	630.9	642.4	652.2	660.5	669.7
10°	565.1	580.4	596.1	610.5	629.0	637.8	647.5	664.6	678.1	689.6	704.5
12.5°	557.3	578.6	596.1	615.6	639.2	651.2	664.2	684.6	700.3	719.3	737.8
15°	548.9	572.5	595.7	621.1	648.0	661.9	674.8	702.1	726.2	748.0	768.3
17.5°	539.7	565.6	591.1	619.3	651.7	668.8	684.1	717.0	743.3	771.6	791.9
20°	528.6	556.8	586.0	617.4	654.0	673.0	690.1	727.6	756.8	787.3	812.8
22.5°	516.5	547.1	579.0	613.3	651.2	672.1	692.0	732.2	766.0	794.2	828.5
25°	503.1	535.5	568.4	604.5	647.1	669.7	690.1	729.9	766.0	803.0	836.4
27.5°	489.2	522.6	556.8	594.8	638.3	660.5	683.6	722.0	764.2	804.4	838.2
30°	474.0	506.4	542.5	578.6	624.8	647.1	670.7	712.3	758.1	798.4	835.0
32.5°	457.3	490.6	524.9	562.4	607.7	631.8	653.5	700.8	747.5	787.3	821.6
35°	438.8	470.3	502.7	541.1	586.0	607.7	633.6	682.7	729.9	772.0	794.2
37.5°	418.9	449.0	479.0	517.0	560.0	586.4	611.9	661.4	711.4	739.6	751.2
40°	400.4	426.7	453.1	489.7	533.2	560.5	586.4	637.8	681.8	703.5	694.7
42.5°	376.8	404.1	427.7	461.5	505.4	530.9	557.3	610.5	646.1	654.9	633.2
45°	353.6	376.3	399.0	431.8	478.1	499.9	528.1	577.6	607.3	599.4	567.5
47.5°	330.9	349.4	370.7	402.7	444.3	470.3	496.6	539.7	560.5	549.4	505.0
50°	304.1	322.6	344.8	372.6	412.9	437.9	458.7	498.5	514.2	486.9	433.2
52.5°	278.6	294.8	313.8	339.7	378.1	400.8	423.5	457.8	462.8	431.4	374.9
55°	254.6	267.5	287.4	308.3	343.4	367.5	383.2	412.4	411.0	371.7	323.1
57.5°	229.6	241.6	255.0	276.8	310.1	328.2	345.3	370.7	357.3	324.0	275.9
60°	207.4	214.3	227.7	248.5	276.8	292.5	305.9	319.8	308.3	272.2	235.1
62.5°	182.8	190.7	200.4	217.1	242.1	256.9	266.6	272.6	260.6	232.8	199.0
65°	159.7	166.6	176.8	191.6	210.6	221.7	226.8	231.0	224.5	193.0	166.2
67.5°	138.9	143.5	152.7	162.5	182.8	185.6	192.5	194.4	181.4	157.4	136.1
70°	118.0	122.7	126.8	138.4	147.6	152.7	154.1	154.1	141.2	125.4	107.8
72.5°	98.6	101.4	105.5	113.4	118.5	122.2	124.0	121.7	109.7	96.7	83.8
75°	80.1	81.5	85.2	90.3	94.4	93.0	92.6	89.8	81.0	71.7	64.3
77.5°	61.6	62.5	66.7	68.0	68.0	69.4	67.6	64.8	57.4	50.5	47.2
80°	46.3	47.7	48.1	49.1	48.1	48.1	46.7	42.1	38.4	35.2	32.9
82.5°	31.9	32.9	33.3	31.9	32.9	31.5	29.2	25.9	23.6	23.1	22.2
85°	19.0	19.4	19.0	19.0	17.6	17.1	15.3	14.8	13.9	13.9	13.4
87.5°	9.3	8.8	7.9	6.9	6.9	6.5	6.9	6.0	6.9	6.5	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	602.2	607.3	607.7	612.3	611.0	608.6	612.8	610.0	615.6	613.7	616.1
5°	637.3	644.3	650.3	654.0	660.5	659.1	666.0	663.7	668.8	663.7	670.2
7.5°	678.5	690.1	696.1	705.8	708.6	709.1	717.4	719.3	722.5	719.3	723.0
10°	718.8	732.7	746.6	754.4	759.5	766.5	773.9	777.1	779.4	776.2	778.5
12.5°	755.4	777.1	792.4	808.1	811.8	817.9	825.7	824.8	834.1	832.2	836.4
15°	789.2	813.2	831.7	844.2	854.4	859.5	874.3	875.2	874.8	879.4	876.6
17.5°	819.2	839.6	866.0	882.2	894.7	894.7	903.0	920.1	918.8	918.3	921.1
20°	843.8	866.9	891.4	918.8	928.9	930.8	942.4	951.2	952.5	952.5	952.5
22.5°	862.3	889.6	916.0	935.4	943.3	949.8	959.9	965.5	967.4	966.4	967.4
25°	871.5	897.5	924.3	941.9	946.5	950.2	951.2	954.4	953.9	948.4	951.6
27.5°	873.4	898.4	916.0	920.6	918.3	916.0	901.2	902.6	898.4	890.1	893.3
30°	865.1	878.5	878.0	863.7	859.5	849.8	836.4	816.5	800.3	793.3	795.6
32.5°	835.0	835.0	818.3	785.9	771.6	754.0	729.9	711.9	690.6	685.9	694.7
35°	793.3	769.7	739.2	696.6	674.8	661.9	620.2	607.3	589.2	584.1	588.3
37.5°	728.5	689.2	644.7	604.9	586.4	563.3	526.7	508.2	495.2	486.5	490.6
40°	655.9	608.2	561.9	512.8	492.5	473.5	446.2	429.5	408.7	409.6	411.0
42.5°	586.4	530.4	478.6	433.2	413.8	398.0	379.1	358.7	351.3	349.0	346.7
45°	512.8	453.1	404.5	370.7	353.2	338.3	320.8	309.2	300.4	298.5	300.9
47.5°	443.4	393.0	346.7	315.2	300.9	293.4	279.6	268.9	263.4	258.7	261.5
50°	380.5	333.3	296.2	269.8	259.7	254.6	241.6	236.1	230.5	229.1	228.6
52.5°	328.6	288.4	256.4	235.1	227.3	224.5	214.8	206.9	202.3	203.7	204.6
55°	281.4	247.2	222.2	205.0	198.6	195.3	188.4	182.8	179.6	178.2	179.1
57.5°	239.8	210.1	192.1	178.2	173.1	171.7	164.3	162.5	160.1	158.8	158.8
60°	201.8	181.0	164.3	156.4	150.9	149.5	143.9	141.6	141.2	139.8	138.9
62.5°	169.9	152.7	141.2	132.8	130.5	130.1	126.4	123.6	122.2	121.3	121.3
65°	142.1	129.6	119.9	113.9	112.0	111.1	106.9	106.0	105.1	104.1	103.7
67.5°	118.5	107.4	100.4	96.3	94.0	94.4	92.1	90.3	90.3	89.8	89.3
70°	95.8	88.9	82.8	80.5	79.6	78.7	77.8	76.4	75.9	75.9	75.9
72.5°	75.4	70.8	67.6	66.2	65.3	64.3	63.4	63.4	63.4	62.9	62.9
75°	57.9	56.0	53.7	52.3	52.3	53.2	51.8	50.5	49.1	48.1	48.6
77.5°	43.5	42.6	41.2	38.9	39.3	38.4	38.4	37.5	38.0	38.0	37.0
80°	31.9	30.5	30.1	28.7	29.2	28.7	28.2	28.2	27.3	27.3	27.3
82.5°	22.2	20.8	20.8	20.4	19.9	19.9	19.4	19.4	19.9	19.0	19.0
85°	13.4	13.0	13.0	12.0	12.0	12.0	12.0	12.5	12.0	11.6	11.6
87.5°	6.0	6.5	6.0	5.6	5.6	5.6	5.1	5.1	4.6	5.1	5.1
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°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	617.4	614.2	613.7	613.7	608.6	611.4	605.9	599.9	597.1	597.1	592.0
5°	668.8	665.6	662.3	657.2	657.2	654.5	645.7	636.9	630.4	624.8	618.8
7.5°	721.6	718.3	709.1	704.0	706.8	701.2	689.6	674.8	663.7	654.9	642.4
10°	779.0	770.2	765.5	762.8	753.1	747.0	733.6	711.9	698.0	686.4	670.2
12.5°	825.7	828.5	810.9	812.3	802.6	794.2	773.4	752.6	731.8	715.6	691.5
15°	876.2	867.8	857.2	848.9	845.6	835.4	817.9	790.1	767.4	741.9	714.6
17.5°	916.0	909.5	899.3	891.4	884.5	860.0	845.2	820.6	789.6	764.6	731.3
20°	949.8	943.7	929.4	924.3	911.8	894.2	872.9	835.0	807.2	779.9	747.5
22.5°	964.1	958.1	945.6	939.1	931.2	914.1	893.8	857.7	823.4	789.2	754.9
25°	952.1	952.1	946.1	943.7	936.8	921.5	900.7	870.2	833.6	796.6	755.8
27.5°	893.8	905.3	909.5	911.8	911.8	912.3	897.9	868.3	832.7	796.6	754.0
30°	809.5	829.0	846.1	851.2	860.0	869.7	875.7	861.4	829.4	791.5	748.9
32.5°	703.5	728.5	760.5	768.3	780.4	809.5	825.7	831.7	814.1	780.8	735.5
35°	598.0	629.5	648.9	673.0	684.1	727.1	763.2	785.0	780.8	760.9	719.7
37.5°	505.9	523.9	547.5	573.0	595.2	636.4	681.3	723.4	740.6	730.8	699.8
40°	417.5	438.8	467.0	487.8	503.1	544.3	599.9	645.7	683.2	689.2	670.2
42.5°	355.0	376.3	393.4	416.1	428.1	467.9	517.0	574.4	618.8	642.4	634.1
45°	306.9	319.8	333.7	346.7	361.5	396.7	442.0	505.0	555.0	588.3	591.5
47.5°	264.7	276.3	288.4	300.4	308.7	336.0	377.7	429.1	483.7	529.5	547.5
50°	235.1	240.7	249.5	256.4	266.1	289.7	323.1	367.5	425.4	474.9	498.5
52.5°	206.0	212.9	219.9	225.9	232.3	249.0	279.6	318.0	368.0	418.9	448.0
55°	181.4	187.0	193.5	197.6	201.3	216.1	239.3	268.9	312.0	360.1	396.2
57.5°	161.5	163.8	169.4	171.7	175.9	187.9	204.6	231.0	265.7	312.4	342.0
60°	139.8	144.4	148.6	150.4	153.7	162.0	173.6	198.1	228.2	262.4	296.2
62.5°	122.2	124.0	127.3	129.6	131.9	140.7	150.4	168.9	191.6	220.3	251.3
65°	106.0	106.9	108.8	112.0	113.4	119.9	125.4	138.9	160.1	181.9	212.9
67.5°	89.3	90.3	92.6	94.4	95.8	100.0	106.0	115.7	127.3	151.4	168.5
70°	76.4	76.4	77.8	78.7	80.1	81.9	85.2	92.6	103.2	118.5	134.2
72.5°	63.9	63.9	63.9	65.3	65.3	66.7	68.5	73.6	81.0	93.0	103.2
75°	49.5	50.0	50.9	50.9	51.4	53.2	54.6	56.0	59.7	67.6	76.8
77.5°	37.5	38.4	38.9	38.0	38.9	38.9	40.7	42.6	44.4	46.7	53.7
80°	27.8	28.2	27.3	27.8	27.8	28.7	29.6	29.2	30.1	32.9	34.7
82.5°	18.5	19.0	19.0	19.0	19.0	20.4	20.4	19.9	20.4	20.8	21.3
85°	11.6	11.1	11.1	11.6	11.1	11.1	11.6	12.0	11.6	12.0	12.5
87.5°	5.1	5.1	5.1	5.1	4.6	4.6	5.1	4.6	5.1	4.6	4.2
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°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	589.2	586.9	585.5	585.0	580.9	578.6	577.2	576.2	574.9	571.2	567.9
5°	611.4	604.9	601.7	598.0	591.5	584.1	578.1	574.4	569.8	562.4	555.4
7.5°	632.2	622.5	616.1	611.0	599.9	587.8	578.1	570.2	561.4	551.3	541.5
10°	654.0	638.3	629.9	622.1	605.9	590.1	576.2	564.7	552.2	538.8	528.1
12.5°	671.1	650.3	641.0	629.9	610.0	591.5	573.9	558.2	542.0	527.6	512.4
15°	691.0	665.1	654.5	640.1	612.8	588.7	566.1	548.9	532.3	511.0	494.8
17.5°	702.6	672.5	657.2	644.7	615.1	586.0	559.6	538.3	518.9	497.6	480.4
20°	714.2	679.9	662.8	645.2	610.0	579.0	551.3	525.8	505.4	482.3	464.7
22.5°	717.9	678.1	660.0	643.8	606.8	572.1	540.1	514.2	490.6	467.5	447.6
25°	717.9	677.6	656.3	635.5	596.6	561.0	529.0	500.8	474.4	451.3	431.4
27.5°	710.5	668.4	646.1	627.2	586.9	548.5	515.6	484.6	459.1	436.0	413.3
30°	701.2	654.9	632.7	610.0	571.2	534.6	498.9	470.3	443.4	417.0	396.7
32.5°	689.6	640.6	616.1	592.9	551.7	513.8	480.9	452.7	427.2	399.9	377.2
35°	673.0	619.3	592.0	571.6	531.8	492.5	461.0	433.2	408.7	380.5	355.9
37.5°	651.7	599.9	572.1	547.1	505.9	469.8	440.2	413.3	389.3	363.3	336.0
40°	626.7	572.5	548.5	522.1	478.6	444.3	416.6	392.5	368.4	343.9	317.5
42.5°	598.5	544.8	517.9	492.5	450.8	417.0	391.1	369.4	347.1	324.5	296.2
45°	564.7	514.2	488.3	464.2	424.0	389.3	365.6	344.8	325.8	302.7	277.7
47.5°	526.7	482.7	456.4	430.4	391.1	361.0	337.9	320.3	304.1	280.9	258.3
50°	489.7	446.2	424.9	398.5	362.4	334.2	310.6	295.8	283.3	260.6	240.2
52.5°	442.9	410.1	389.7	367.0	332.3	303.6	285.1	272.2	257.3	239.8	221.7
55°	401.8	371.2	355.0	333.7	299.5	274.0	258.3	246.2	234.7	218.9	204.6
57.5°	355.0	336.0	319.8	301.3	267.5	245.8	231.9	221.7	211.1	198.1	186.5
60°	305.9	297.1	281.4	266.6	237.9	218.9	207.4	198.1	187.9	177.3	167.6
62.5°	262.4	257.3	248.1	236.5	209.7	193.5	181.9	175.0	167.6	157.8	148.6
65°	221.2	218.9	210.1	201.8	183.3	168.9	158.8	154.6	146.3	138.9	130.5
67.5°	184.7	181.9	176.8	173.1	157.4	143.9	138.9	133.3	126.4	120.8	113.9
70°	147.6	147.2	143.9	139.3	131.0	121.3	116.2	112.5	105.5	101.4	96.3
72.5°	114.8	117.1	114.3	112.5	106.9	100.0	95.3	93.0	87.5	84.2	80.5
75°	85.6	87.5	88.9	85.6	84.2	81.0	76.8	74.5	71.7	67.1	65.7
77.5°	58.3	62.5	62.5	63.4	63.9	62.0	58.8	56.9	53.7	52.8	50.9
80°	38.4	42.1	42.6	43.5	44.9	44.9	42.6	42.1	38.9	38.4	37.0
82.5°	22.2	25.5	27.3	28.7	28.2	30.1	28.2	27.8	25.9	25.9	25.0
85°	12.0	12.5	13.4	14.3	15.3	16.2	16.2	15.7	15.3	14.8	13.9
87.5°	4.6	4.6	5.1	4.6	5.1	6.0	6.5	6.5	6.0	5.6	4.6
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: P1000453

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	565.1	564.2	563.3	559.6	556.3	550.8	546.2	544.3	543.8	544.3	542.9
5°	548.9	548.5	545.2	538.8	532.7	526.3	521.6	517.0	514.2	514.2	511.0
7.5°	533.7	530.4	527.6	519.3	512.4	503.6	496.6	492.5	490.2	485.1	485.1
10°	517.5	512.8	509.1	501.3	491.1	482.3	473.5	468.4	464.2	460.5	459.1
12.5°	501.3	497.6	490.6	482.3	472.1	461.0	451.7	448.0	438.3	430.4	430.9
15°	486.0	477.7	474.4	462.4	450.4	439.7	426.3	415.6	407.8	402.7	396.2
17.5°	468.9	460.5	454.5	444.3	428.6	411.9	399.0	384.6	376.8	368.0	363.8
20°	449.9	442.9	438.3	422.1	403.1	383.2	368.9	360.1	351.3	344.8	341.1
22.5°	433.7	424.9	419.3	397.6	376.8	356.9	345.7	338.3	330.9	325.4	323.5
25°	412.9	407.8	394.3	375.4	349.9	336.5	326.8	317.1	312.9	309.2	305.0
27.5°	395.7	383.2	374.0	349.0	333.3	318.0	308.3	300.9	295.8	292.1	288.8
30°	374.4	362.9	349.9	329.1	314.7	300.4	291.6	285.6	280.0	277.7	274.9
32.5°	352.2	341.6	329.1	312.4	294.8	283.7	276.8	270.3	266.6	264.3	261.0
35°	332.3	318.9	310.6	294.8	280.5	268.0	261.5	256.0	251.8	250.9	250.4
37.5°	311.0	300.9	293.0	276.8	264.7	254.1	248.1	242.1	239.8	239.3	237.4
40°	292.5	283.7	276.3	261.0	248.1	238.4	233.7	230.0	227.7	227.7	227.3
42.5°	276.3	267.1	259.7	245.8	234.2	225.4	220.3	216.6	215.7	216.1	215.7
45°	258.3	250.4	243.0	228.6	218.9	212.4	206.9	205.0	203.7	204.1	204.6
47.5°	241.1	234.7	227.3	215.7	204.6	197.6	194.4	192.5	192.5	192.5	193.5
50°	225.9	218.5	212.0	200.0	189.8	184.2	181.4	179.1	179.6	180.0	180.5
52.5°	207.8	201.3	196.7	184.7	177.3	170.3	167.1	167.6	167.1	167.1	168.0
55°	192.1	185.6	181.0	169.9	162.5	157.8	155.1	153.7	154.1	153.2	155.1
57.5°	174.5	168.9	165.7	155.1	148.6	144.4	142.1	139.8	140.7	140.2	139.8
60°	159.2	152.7	147.6	140.2	134.7	129.6	128.2	125.9	126.8	125.9	125.4
62.5°	141.6	136.5	132.8	125.4	120.8	116.6	113.4	112.0	111.5	110.2	108.8
65°	124.0	121.3	117.6	110.2	105.5	102.3	100.4	99.0	98.6	94.9	90.7
67.5°	107.8	106.0	102.3	96.7	92.6	89.3	86.6	84.2	81.5	78.7	76.4
70°	92.6	89.8	87.5	82.4	78.7	75.4	72.7	69.9	68.5	65.7	64.8
72.5°	77.8	75.0	72.7	68.0	64.8	61.6	60.6	57.4	56.0	55.5	55.5
75°	62.5	60.2	58.8	54.6	51.8	49.5	48.1	47.2	46.3	45.4	44.0
77.5°	47.7	46.3	45.4	42.6	40.3	38.9	38.4	35.2	34.3	33.3	32.4
80°	34.7	34.3	33.3	31.0	30.1	26.8	26.8	25.9	25.5	25.5	25.5
82.5°	23.6	22.7	22.2	19.9	19.4	19.0	18.5	18.1	18.5	18.1	18.5
85°	12.5	12.0	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.1	11.6
87.5°	4.6	4.6	4.6	4.6	4.2	4.6	4.6	4.2	4.6	4.6	4.6
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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CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	542.9	544.8	542.5	543.8	540.6	540.1	540.6	540.6	541.1	541.5	542.0
5°	512.4	511.9	509.1	507.3	505.9	507.3	508.2	509.1	508.2	509.1	509.6
7.5°	483.7	482.3	480.9	477.7	478.6	477.7	480.4	479.0	479.0	481.4	483.2
10°	458.2	455.4	454.5	450.8	448.0	447.6	450.8	452.2	453.6	454.5	458.2
12.5°	425.4	421.2	418.0	419.3	411.5	414.7	415.6	413.8	419.3	425.8	422.1
15°	390.2	390.6	384.2	381.8	375.4	377.2	377.7	382.3	386.9	386.5	392.0
17.5°	364.3	361.5	355.9	355.5	352.7	354.1	353.6	357.3	355.9	358.2	362.9
20°	340.2	338.3	333.7	331.9	332.8	331.9	332.3	332.8	334.2	339.3	338.3
22.5°	321.2	318.9	318.9	316.6	313.8	312.9	315.2	316.6	318.4	319.4	321.7
25°	304.6	302.7	300.4	299.0	296.7	297.1	298.5	300.4	301.8	303.6	305.5
27.5°	287.4	287.4	285.1	284.7	283.7	283.3	285.1	286.0	286.0	287.4	289.3
30°	274.0	274.0	271.7	271.2	270.8	270.8	272.2	272.6	273.1	274.5	275.4
32.5°	261.0	260.6	259.7	260.1	259.7	260.1	260.1	260.6	261.5	262.0	263.8
35°	249.0	249.5	248.5	248.5	248.1	248.5	249.5	249.9	250.4	251.3	251.3
37.5°	237.4	238.4	237.9	239.3	239.3	239.3	239.3	240.2	240.2	240.2	239.8
40°	227.3	227.3	226.8	227.7	228.6	228.6	229.1	229.1	229.6	229.6	229.1
42.5°	215.7	216.6	218.0	218.5	219.4	218.9	220.3	219.9	220.3	219.4	218.5
45°	205.0	205.0	206.9	208.7	209.2	209.2	209.2	210.1	209.2	207.8	207.4
47.5°	193.5	194.4	195.3	197.6	198.1	198.1	198.1	198.1	197.2	197.2	197.2
50°	181.9	182.4	182.8	183.8	185.1	184.7	184.7	184.7	186.5	184.7	185.1
52.5°	168.0	168.5	168.9	170.8	170.3	170.3	170.8	170.8	172.2	171.7	170.8
55°	154.1	154.1	155.1	155.1	155.1	156.0	156.4	157.4	156.9	157.4	157.8
57.5°	140.2	139.3	138.9	138.9	140.2	139.8	140.2	140.2	142.1	143.0	143.5
60°	124.0	124.0	123.6	120.8	120.8	120.3	121.7	122.7	123.6	127.7	127.3
62.5°	107.4	105.5	103.7	104.1	101.4	102.8	101.8	102.8	105.5	108.8	109.2
65°	90.7	89.3	87.5	87.0	86.1	87.5	87.0	87.5	88.9	90.7	93.0
67.5°	75.9	75.4	74.5	74.1	74.1	74.1	75.0	75.0	75.4	76.8	78.2
70°	64.8	64.3	64.8	63.9	64.3	63.9	64.3	64.8	65.3	65.7	67.1
72.5°	54.6	54.6	54.6	53.7	54.6	54.2	54.2	54.6	55.1	55.5	56.5
75°	43.5	42.6	41.7	40.7	40.3	41.2	41.7	41.2	42.6	44.4	44.4
77.5°	32.9	32.4	32.4	32.4	32.9	32.4	33.3	32.9	33.3	33.3	34.3
80°	25.5	25.0	25.5	25.5	25.0	25.9	25.5	25.5	25.9	26.4	25.9
82.5°	18.5	19.0	18.5	18.5	18.5	19.4	18.5	18.5	18.5	19.0	19.0
85°	11.6	11.6	11.6	11.6	12.0	11.6	12.0	11.6	12.5	12.0	12.0
87.5°	4.2	4.6	5.1	5.1	5.1	5.1	4.6	5.1	5.6	5.1	5.6
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: P1000453

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4	574.4
2.5°	543.8	546.2	545.2	542.0	543.4	546.2	548.9	552.6	555.0	556.8	557.7
5°	511.9	516.1	515.1	515.1	517.0	521.6	526.3	534.1	536.9	540.1	544.8
7.5°	483.7	486.9	489.7	490.6	493.4	499.4	505.4	514.2	521.2	524.9	527.6
10°	458.7	461.0	465.2	467.5	470.3	477.7	486.5	495.7	502.7	509.1	512.8
12.5°	426.7	436.0	441.6	445.3	449.0	460.1	467.0	477.2	485.5	491.5	497.1
15°	391.1	402.2	405.5	419.8	429.1	437.9	448.5	460.5	468.4	475.3	482.7
17.5°	361.0	368.9	372.6	387.9	395.7	409.6	424.9	440.2	452.2	457.3	464.7
20°	342.0	346.2	353.6	358.7	367.0	383.2	399.9	418.4	436.5	441.6	449.0
22.5°	322.6	328.2	333.3	340.2	346.7	357.8	374.4	394.8	414.2	423.5	432.3
25°	305.0	310.6	313.8	321.2	327.2	338.3	349.9	370.7	393.9	401.8	415.6
27.5°	291.1	294.4	299.9	303.2	310.1	320.3	330.9	346.7	369.4	382.8	396.2
30°	277.2	279.6	284.2	288.8	293.9	300.9	312.9	328.2	349.0	360.6	374.0
32.5°	263.4	267.1	269.8	273.1	278.6	287.0	295.3	310.1	326.8	339.7	353.2
35°	251.8	253.2	256.9	260.6	264.3	271.7	280.5	294.8	309.6	319.8	331.9
37.5°	239.3	241.6	244.4	245.8	251.8	256.4	265.7	276.8	294.4	300.9	312.9
40°	229.6	229.1	231.9	234.2	237.0	244.4	249.9	262.0	275.9	286.0	293.4
42.5°	217.5	217.5	218.5	221.2	224.9	229.6	236.1	246.2	260.6	268.0	276.8
45°	207.8	206.4	206.9	208.7	211.1	215.7	222.2	231.0	245.3	251.3	260.6
47.5°	196.2	194.9	194.9	196.7	198.6	201.8	206.9	217.1	228.6	236.5	243.5
50°	183.3	183.8	183.3	184.7	185.6	188.8	194.4	202.7	213.4	219.9	227.7
52.5°	171.3	170.3	169.9	170.8	172.6	175.0	181.0	188.4	198.6	205.0	212.0
55°	156.4	157.4	157.4	157.4	160.1	161.1	165.7	173.1	183.3	188.4	194.9
57.5°	143.0	142.6	143.5	143.0	145.3	148.6	152.3	157.8	168.0	173.1	179.1
60°	128.2	128.7	129.1	129.1	131.0	134.2	138.4	143.5	151.8	156.9	162.5
62.5°	110.2	112.5	114.8	115.7	118.5	120.8	123.6	129.1	136.5	140.2	145.3
65°	93.0	96.3	99.5	101.8	103.7	106.0	109.7	114.8	120.8	124.5	129.6
67.5°	78.2	80.5	84.7	87.0	90.7	93.5	95.8	100.0	107.4	108.8	112.9
70°	67.6	68.5	70.4	72.2	76.4	78.7	81.5	85.6	91.2	94.4	96.7
72.5°	56.9	57.4	58.3	60.2	62.0	64.8	68.0	71.7	76.8	78.2	81.5
75°	45.4	48.1	48.1	49.5	50.9	52.3	55.1	58.8	62.0	64.3	66.2
77.5°	33.8	35.2	36.1	38.4	40.3	41.7	43.5	46.3	48.1	50.0	51.4
80°	26.4	26.8	27.3	27.3	28.2	30.1	31.9	33.8	36.1	37.0	38.4
82.5°	19.4	19.4	19.4	20.4	20.8	21.3	21.3	22.2	24.5	25.5	26.8
85°	12.5	12.5	12.5	12.5	13.0	13.4	13.9	14.3	14.3	14.3	15.3
87.5°	5.1	6.0	5.6	6.0	6.0	6.0	6.0	6.5	6.5	6.9	6.9
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: P1000453

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	574.4	574.4	574.4	574.4
2.5°	561.4	564.2	568.8	575.3
5°	548.5	556.3	563.7	573.5
7.5°	536.9	546.2	556.3	570.2
10°	523.5	535.1	548.0	565.1
12.5°	507.7	523.9	538.8	557.3
15°	496.2	508.2	527.2	548.9
17.5°	480.0	496.2	515.1	539.7
20°	464.7	481.8	503.1	528.6
22.5°	448.5	467.9	489.2	516.5
25°	431.8	452.7	474.0	503.1
27.5°	416.6	435.5	459.6	489.2
30°	398.0	419.8	442.9	474.0
32.5°	380.0	402.7	426.3	457.3
35°	360.6	383.2	409.2	438.8
37.5°	341.6	366.6	390.2	418.9
40°	320.8	346.7	371.2	400.4
42.5°	300.4	327.2	351.8	376.8
45°	281.4	307.8	330.0	353.6
47.5°	263.4	287.0	309.6	330.9
50°	245.8	265.7	286.5	304.1
52.5°	227.3	246.2	262.9	278.6
55°	210.6	225.4	240.2	254.6
57.5°	190.7	205.5	218.5	229.6
60°	174.0	183.3	195.8	207.4
62.5°	155.1	165.7	175.4	182.8
65°	136.5	145.8	153.2	159.7
67.5°	120.8	126.4	131.9	138.9
70°	101.8	106.5	112.9	118.0
72.5°	85.6	89.3	92.6	98.6
75°	69.4	72.7	74.5	80.1
77.5°	53.7	56.9	58.3	61.6
80°	41.2	41.7	43.5	46.3
82.5°	28.2	29.2	29.6	31.9
85°	16.2	18.5	18.1	19.0
87.5°	6.9	7.4	8.3	9.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)