

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: P1000454

Luminaire Tested: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000454
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_4000K
Description: Define 4 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

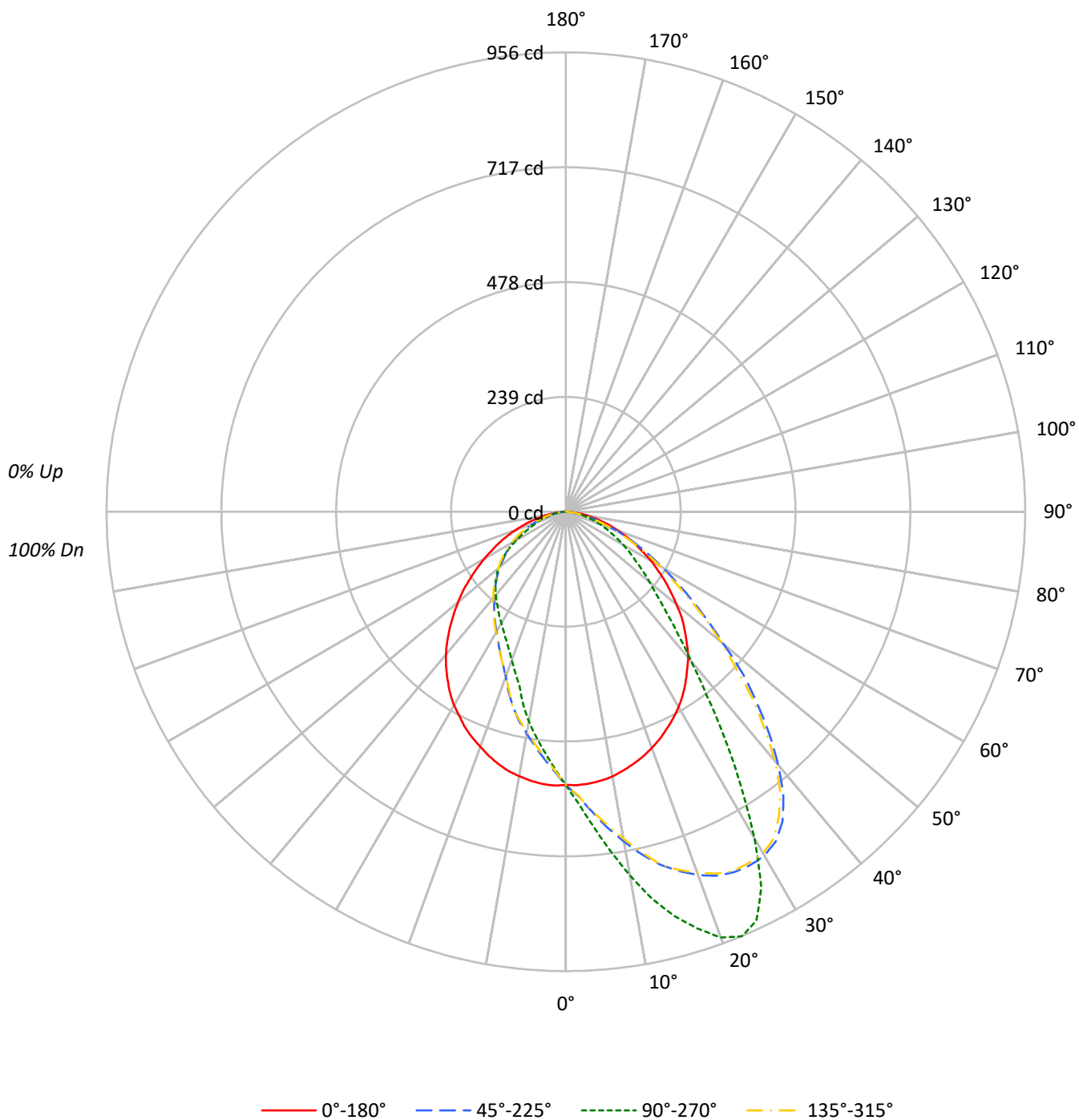
Lumens per Lamp: N/A
Luminaire Lumens: 1437.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

Luminous Intensity Polar Plot





TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	4636	4636	4636	4636
5°	4645	5377	4654	4109
10°	4631	6361	4627	3667
15°	4587	7347	4587	3151
20°	4539	8181	4516	2850
25°	4480	8445	4459	2646
30°	4417	7392	4382	2523
35°	4322	5755	4268	2449
40°	4218	4315	4134	2409
45°	4036	3408	3936	2387
50°	3817	2876	3713	2319
55°	3581	2508	3465	2195
60°	3347	2256	3198	1942
65°	3049	1989	2952	1671
70°	2785	1791	2654	1507
75°	2495	1500	2322	1285
80°	2151	1268	1958	1207
85°	1759	1076	1460	1076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 6931 cd/sqm

TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	3.8
10°-20°	166.2	11.6
20°-30°	260.4	18.1
30°-40°	289.1	20.1
40°-50°	256.2	17.8
50°-60°	199.7	13.9
60°-70°	130.6	9.1
70°-80°	64.1	4.5
80°-90°	15.6	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°	481.7	33.5
0°-40°	770.8	53.6
0°-60°	1226.7	85.4
0°-90°	1437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1437.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	568	568	568	568	568	
5°	568	657	568	502	568	54
15°	543	870	543	373	543	153
25°	498	939	496	294	498	229
35°	434	578	429	246	434	271
45°	350	296	341	207	350	270
55°	252	176	244	154	252	225
65°	158	103	153	87	158	158
75°	79	48	74	41	79	84
85°	19	12	16	12	19	22
90°	0	0	0	0	0	

TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	569.4	574.4	577.2	579.5	584.0	585.9	589.5	590.4	594.1	593.7	592.3
5°	567.5	576.2	582.7	589.5	597.8	602.4	607.4	614.7	618.4	623.4	626.6
7.5°	564.3	576.2	586.8	597.3	610.6	617.9	624.3	635.8	645.4	653.7	662.8
10°	559.3	574.4	590.0	604.2	622.5	631.2	640.8	657.8	671.1	682.5	697.2
12.5°	551.5	572.6	590.0	609.2	632.6	644.5	657.3	677.5	693.1	711.8	730.2
15°	543.3	566.6	589.5	614.7	641.3	655.0	667.9	694.9	718.7	740.2	760.4
17.5°	534.1	559.8	585.0	612.9	645.0	661.9	677.0	709.5	735.7	763.6	783.8
20°	523.1	551.1	579.9	611.1	647.2	666.0	683.0	720.1	748.9	779.2	804.4
22.5°	511.2	541.4	573.0	606.9	644.5	665.1	684.8	724.7	758.1	786.0	819.9
25°	497.9	530.0	562.5	598.2	640.4	662.8	683.0	722.4	758.1	794.7	827.7
27.5°	484.2	517.2	551.1	588.6	631.7	653.7	676.6	714.6	756.3	796.1	829.6
30°	469.1	501.1	536.9	572.6	618.4	640.4	663.7	705.0	750.3	790.2	826.4
32.5°	452.6	485.5	519.4	556.6	601.4	625.3	646.8	693.5	739.8	779.2	813.1
35°	434.2	465.4	497.5	535.5	579.9	601.4	627.1	675.6	722.4	764.1	786.0
37.5°	414.5	444.3	474.1	511.7	554.3	580.4	605.6	654.6	704.0	732.0	743.4
40°	396.2	422.3	448.4	484.6	527.7	554.7	580.4	631.2	674.7	696.3	687.6
42.5°	372.9	399.9	423.3	456.7	500.2	525.4	551.5	604.2	639.5	648.2	626.6
45°	350.0	372.4	394.9	427.4	473.2	494.7	522.7	571.7	601.0	593.2	561.6
47.5°	327.5	345.8	366.9	398.5	439.7	465.4	491.5	534.1	554.7	543.7	499.8
50°	300.9	319.3	341.3	368.7	408.6	433.3	453.9	493.3	508.9	481.9	428.7
52.5°	275.8	291.8	310.6	336.2	374.2	396.7	419.1	453.0	458.1	426.9	371.0
55°	251.9	264.8	284.5	305.1	339.9	363.7	379.3	408.1	406.8	367.8	319.7
57.5°	227.2	239.1	252.4	273.9	306.9	324.8	341.7	366.9	353.6	320.6	273.0
60°	205.2	212.1	225.4	246.0	273.9	289.5	302.8	316.5	305.1	269.3	232.7
62.5°	180.9	188.7	198.3	214.8	239.6	254.2	263.8	269.8	257.9	230.4	197.0
65°	158.0	164.9	175.0	189.6	208.4	219.4	224.5	228.6	222.2	191.0	164.4
67.5°	137.4	142.0	151.2	160.8	180.9	183.7	190.6	192.4	179.6	155.7	134.7
70°	116.8	121.4	125.5	137.0	146.1	151.2	152.5	152.5	139.7	124.1	106.7
72.5°	97.6	100.3	104.4	112.2	117.3	120.9	122.8	120.5	108.6	95.7	82.9
75°	79.2	80.6	84.3	89.3	93.4	92.1	91.6	88.9	80.2	71.0	63.7
77.5°	60.9	61.8	66.0	67.3	67.3	68.7	66.9	64.1	56.8	49.9	46.7
80°	45.8	47.2	47.6	48.6	47.6	47.6	46.3	41.7	38.0	34.8	32.5
82.5°	31.6	32.5	33.0	31.6	32.5	31.1	28.9	25.7	23.4	22.9	22.0
85°	18.8	19.2	18.8	18.8	17.4	16.9	15.1	14.7	13.7	13.7	13.3
87.5°	9.2	8.7	7.8	6.9	6.9	6.4	6.9	6.0	6.9	6.4	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

TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	595.9	601.0	601.4	606.0	604.6	602.4	606.5	603.7	609.2	607.4	609.7
5°	630.8	637.6	643.6	647.2	653.7	652.3	659.2	656.9	661.9	656.9	663.3
7.5°	671.5	683.0	688.9	698.6	701.3	701.8	710.0	711.8	715.0	711.8	715.5
10°	711.4	725.1	738.9	746.6	751.7	758.6	765.9	769.1	771.4	768.2	770.5
12.5°	747.6	769.1	784.2	799.8	803.4	809.4	817.2	816.3	825.4	823.6	827.7
15°	781.0	804.8	823.1	835.5	845.6	850.6	865.3	866.2	865.7	870.3	867.6
17.5°	810.8	830.9	857.0	873.1	885.4	885.4	893.7	910.6	909.3	908.8	911.6
20°	835.1	858.0	882.2	909.3	919.3	921.2	932.6	941.3	942.7	942.7	942.7
22.5°	853.4	880.4	906.5	925.8	933.5	940.0	950.0	955.5	957.4	956.4	957.4
25°	862.5	888.2	914.8	932.2	936.7	940.4	941.3	944.5	944.1	938.6	941.8
27.5°	864.4	889.1	906.5	911.1	908.8	906.5	891.9	893.2	889.1	880.9	884.1
30°	856.1	869.4	869.0	854.8	850.6	841.0	827.7	808.0	792.0	785.1	787.4
32.5°	826.4	826.4	809.9	777.8	763.6	746.2	722.4	704.5	683.4	678.9	687.6
35°	785.1	761.8	731.5	689.4	667.9	655.0	613.8	601.0	583.1	578.1	582.2
37.5°	721.0	682.1	638.1	598.7	580.4	557.5	521.3	503.0	490.1	481.4	485.5
40°	649.1	601.9	556.1	507.5	487.4	468.6	441.6	425.1	404.5	405.4	406.8
42.5°	580.4	524.9	473.6	428.7	409.5	393.9	375.2	355.0	347.7	345.4	343.1
45°	507.5	448.4	400.3	366.9	349.5	334.8	317.4	306.0	297.3	295.5	297.7
47.5°	438.8	388.9	343.1	311.9	297.7	290.4	276.7	266.1	260.6	256.1	258.8
50°	376.5	329.8	293.2	267.1	257.0	251.9	239.1	233.6	228.1	226.7	226.3
52.5°	325.2	285.4	253.8	232.7	224.9	222.2	212.5	204.8	200.2	201.5	202.5
55°	278.5	244.6	219.9	202.9	196.5	193.3	186.4	180.9	177.7	176.4	177.3
57.5°	237.3	208.0	190.1	176.4	171.3	169.9	162.6	160.8	158.5	157.1	157.1
60°	199.7	179.1	162.6	154.8	149.3	148.0	142.5	140.2	139.7	138.3	137.4
62.5°	168.1	151.2	139.7	131.5	129.2	128.7	125.1	122.3	120.9	120.0	120.0
65°	140.6	128.3	118.6	112.7	110.9	109.9	105.8	104.9	104.0	103.1	102.6
67.5°	117.3	106.3	99.4	95.3	93.0	93.4	91.2	89.3	89.3	88.9	88.4
70°	94.8	87.9	82.0	79.7	78.8	77.9	77.0	75.6	75.1	75.1	75.1
72.5°	74.7	70.1	66.9	65.5	64.6	63.7	62.8	62.8	62.8	62.3	62.3
75°	57.3	55.4	53.1	51.8	51.8	52.7	51.3	49.9	48.6	47.6	48.1
77.5°	43.1	42.1	40.8	38.5	38.9	38.0	38.0	37.1	37.6	37.6	36.6
80°	31.6	30.2	29.8	28.4	28.9	28.4	27.9	27.9	27.0	27.0	27.0
82.5°	22.0	20.6	20.6	20.2	19.7	19.7	19.2	19.2	19.7	18.8	18.8
85°	13.3	12.8	12.8	11.9	11.9	11.9	11.9	12.4	11.9	11.5	11.5
87.5°	6.0	6.4	6.0	5.5	5.5	5.5	5.0	5.0	4.6	5.0	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: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	611.1	607.9	607.4	607.4	602.4	605.1	599.6	593.7	590.9	590.9	585.9
5°	661.9	658.7	655.5	650.5	650.5	647.7	639.0	630.3	623.9	618.4	612.4
7.5°	714.1	710.9	701.8	696.7	699.5	694.0	682.5	667.9	656.9	648.2	635.8
10°	770.9	762.2	757.6	754.9	745.3	739.3	726.0	704.5	690.8	679.3	663.3
12.5°	817.2	819.9	802.5	803.9	794.3	786.0	765.4	744.8	724.2	708.2	684.4
15°	867.1	858.9	848.3	840.1	836.9	826.8	809.4	781.9	759.5	734.3	707.3
17.5°	906.5	900.1	890.0	882.2	875.4	851.1	836.4	812.2	781.5	756.7	723.7
20°	940.0	934.0	919.8	914.8	902.4	885.0	863.9	826.4	798.9	771.8	739.8
22.5°	954.2	948.2	935.8	929.4	921.6	904.7	884.5	848.8	814.9	781.0	747.1
25°	942.2	942.2	936.3	934.0	927.1	912.0	891.4	861.2	825.0	788.3	748.0
27.5°	884.5	896.0	900.1	902.4	902.4	902.8	888.6	859.3	824.1	788.3	746.2
30°	801.2	820.4	837.3	842.4	851.1	860.7	866.7	852.5	820.9	783.3	741.2
32.5°	696.3	721.0	752.6	760.4	772.3	801.2	817.2	823.1	805.7	772.8	727.9
35°	591.8	623.0	642.2	666.0	677.0	719.6	755.4	776.9	772.8	753.1	712.3
37.5°	500.7	518.5	541.9	567.1	589.1	629.8	674.3	716.0	732.9	723.3	692.6
40°	413.2	434.2	462.2	482.8	497.9	538.7	593.7	639.0	676.1	682.1	663.3
42.5°	351.3	372.4	389.4	411.8	423.7	463.1	511.7	568.5	612.4	635.8	627.6
45°	303.7	316.5	330.3	343.1	357.7	392.6	437.5	499.8	549.2	582.2	585.4
47.5°	262.0	273.5	285.4	297.3	305.5	332.6	373.8	424.6	478.7	524.0	541.9
50°	232.7	238.2	246.9	253.8	263.4	286.7	319.7	363.7	421.0	470.0	493.3
52.5°	203.8	210.7	217.6	223.5	229.9	246.4	276.7	314.7	364.2	414.5	443.4
55°	179.6	185.1	191.5	195.6	199.3	213.9	236.8	266.1	308.7	356.4	392.1
57.5°	159.9	162.2	167.7	169.9	174.1	186.0	202.5	228.6	262.9	309.2	338.5
60°	138.3	142.9	147.0	148.9	152.1	160.3	171.8	196.1	225.8	259.7	293.2
62.5°	120.9	122.8	126.0	128.3	130.5	139.3	148.9	167.2	189.6	218.0	248.7
65°	104.9	105.8	107.6	110.9	112.2	118.6	124.1	137.4	158.5	180.0	210.7
67.5°	88.4	89.3	91.6	93.4	94.8	98.9	104.9	114.5	126.0	149.8	166.7
70°	75.6	75.6	77.0	77.9	79.2	81.1	84.3	91.6	102.1	117.3	132.8
72.5°	63.2	63.2	63.2	64.6	64.6	66.0	67.8	72.8	80.2	92.1	102.1
75°	49.0	49.5	50.4	50.4	50.8	52.7	54.1	55.4	59.1	66.9	76.0
77.5°	37.1	38.0	38.5	37.6	38.5	38.5	40.3	42.1	44.0	46.3	53.1
80°	27.5	27.9	27.0	27.5	27.5	28.4	29.3	28.9	29.8	32.5	34.4
82.5°	18.3	18.8	18.8	18.8	18.8	20.2	20.2	19.7	20.2	20.6	21.1
85°	11.5	11.0	11.0	11.5	11.0	11.0	11.5	11.9	11.5	11.9	12.4
87.5°	5.0	5.0	5.0	5.0	4.6	4.6	5.0	4.6	5.0	4.6	4.1
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: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	583.1	580.8	579.5	579.0	574.9	572.6	571.2	570.3	568.9	565.3	562.0
5°	605.1	598.7	595.5	591.8	585.4	578.1	572.1	568.5	563.9	556.6	549.7
7.5°	625.7	616.1	609.7	604.6	593.7	581.7	572.1	564.3	555.6	545.6	535.9
10°	647.2	631.7	623.4	615.6	599.6	584.0	570.3	558.8	546.5	533.2	522.7
12.5°	664.2	643.6	634.4	623.4	603.7	585.4	568.0	552.4	536.4	522.2	507.1
15°	683.9	658.2	647.7	633.5	606.5	582.7	560.2	543.3	526.8	505.7	489.7
17.5°	695.3	665.6	650.5	638.1	608.8	579.9	553.8	532.7	513.5	492.4	475.5
20°	706.8	672.9	656.0	638.5	603.7	573.0	545.6	520.4	500.2	477.3	459.9
22.5°	710.5	671.1	653.2	637.2	600.5	566.2	534.6	508.9	485.5	462.6	442.9
25°	710.5	670.6	649.5	628.9	590.4	555.2	523.6	495.6	469.5	446.6	426.9
27.5°	703.1	661.4	639.5	620.7	580.8	542.8	510.3	479.6	454.4	431.5	409.1
30°	694.0	648.2	626.2	603.7	565.3	529.1	493.8	465.4	438.8	412.7	392.6
32.5°	682.5	634.0	609.7	586.8	546.0	508.5	475.9	448.0	422.8	395.8	373.3
35°	666.0	612.9	585.9	565.7	526.3	487.4	456.2	428.7	404.5	376.5	352.3
37.5°	645.0	593.7	566.2	541.4	500.7	464.9	435.6	409.1	385.2	359.6	332.6
40°	620.2	566.6	542.8	516.7	473.6	439.7	412.3	388.4	364.6	340.3	314.2
42.5°	592.3	539.1	512.6	487.4	446.2	412.7	387.1	365.5	343.5	321.1	293.2
45°	558.8	508.9	483.3	459.4	419.6	385.2	361.9	341.3	322.5	299.6	274.8
47.5°	521.3	477.8	451.7	426.0	387.1	357.3	334.4	317.0	300.9	278.0	255.6
50°	484.6	441.6	420.5	394.4	358.7	330.7	307.4	292.7	280.3	257.9	237.7
52.5°	438.4	405.8	385.7	363.2	328.9	300.5	282.2	269.3	254.7	237.3	219.4
55°	397.6	367.4	351.3	330.3	296.4	271.2	255.6	243.7	232.2	216.7	202.5
57.5°	351.3	332.6	316.5	298.2	264.8	243.2	229.5	219.4	208.9	196.1	184.6
60°	302.8	294.1	278.5	263.8	235.4	216.7	205.2	196.1	186.0	175.4	165.8
62.5°	259.7	254.7	245.5	234.1	207.5	191.5	180.0	173.1	165.8	156.2	147.0
65°	219.0	216.7	208.0	199.7	181.4	167.2	157.1	153.0	144.7	137.4	129.2
67.5°	182.8	180.0	175.0	171.3	155.7	142.5	137.4	131.9	125.1	119.6	112.7
70°	146.1	145.7	142.5	137.9	129.6	120.0	115.0	111.3	104.4	100.3	95.3
72.5°	113.6	115.9	113.1	111.3	105.8	98.9	94.4	92.1	86.6	83.4	79.7
75°	84.7	86.6	87.9	84.7	83.4	80.2	76.0	73.7	71.0	66.4	65.0
77.5°	57.7	61.8	61.8	62.8	63.2	61.4	58.2	56.3	53.1	52.2	50.4
80°	38.0	41.7	42.1	43.1	44.4	44.4	42.1	41.7	38.5	38.0	36.6
82.5°	22.0	25.2	27.0	28.4	27.9	29.8	27.9	27.5	25.7	25.7	24.7
85°	11.9	12.4	13.3	14.2	15.1	16.0	16.0	15.6	15.1	14.7	13.7
87.5°	4.6	4.6	5.0	4.6	5.0	6.0	6.4	6.4	6.0	5.5	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: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	559.3	558.4	557.5	553.8	550.6	545.1	540.5	538.7	538.2	538.7	537.3
5°	543.3	542.8	539.6	533.2	527.2	520.8	516.2	511.7	508.9	508.9	505.7
7.5°	528.2	524.9	522.2	514.0	507.1	498.4	491.5	487.4	485.1	480.1	480.1
10°	512.1	507.5	503.9	496.1	486.0	477.3	468.6	463.6	459.4	455.8	454.4
12.5°	496.1	492.4	485.5	477.3	467.2	456.2	447.1	443.4	433.8	426.0	426.5
15°	481.0	472.7	469.5	457.6	445.7	435.2	421.9	411.3	403.6	398.5	392.1
17.5°	464.0	455.8	449.8	439.7	424.2	407.7	394.9	380.7	372.9	364.2	360.0
20°	445.2	438.4	433.8	417.8	399.0	379.3	365.1	356.4	347.7	341.3	337.6
22.5°	429.2	420.5	415.0	393.5	372.9	353.2	342.2	334.8	327.5	322.0	320.2
25°	408.6	403.6	390.3	371.5	346.3	333.0	323.4	313.8	309.7	306.0	301.9
27.5°	391.6	379.3	370.1	345.4	329.8	314.7	305.1	297.7	292.7	289.0	285.8
30°	370.6	359.1	346.3	325.7	311.5	297.3	288.6	282.6	277.1	274.8	272.1
32.5°	348.6	338.1	325.7	309.2	291.8	280.8	273.9	267.5	263.8	261.6	258.3
35°	328.9	315.6	307.4	291.8	277.6	265.2	258.8	253.3	249.2	248.3	247.8
37.5°	307.8	297.7	290.0	273.9	262.0	251.5	245.5	239.6	237.3	236.8	235.0
40°	289.5	280.8	273.5	258.3	245.5	235.9	231.3	227.7	225.4	225.4	224.9
42.5°	273.5	264.3	257.0	243.2	231.8	223.1	218.0	214.4	213.5	213.9	213.5
45°	255.6	247.8	240.5	226.3	216.7	210.3	204.8	202.9	201.5	202.0	202.5
47.5°	238.7	232.2	224.9	213.5	202.5	195.6	192.4	190.6	190.6	190.6	191.5
50°	223.5	216.2	209.8	197.9	187.8	182.3	179.6	177.3	177.7	178.2	178.6
52.5°	205.7	199.3	194.7	182.8	175.4	168.6	165.4	165.8	165.4	165.4	166.3
55°	190.1	183.7	179.1	168.1	160.8	156.2	153.5	152.1	152.5	151.6	153.5
57.5°	172.7	167.2	164.0	153.5	147.0	142.9	140.6	138.3	139.3	138.8	138.3
60°	157.6	151.2	146.1	138.8	133.3	128.3	126.9	124.6	125.5	124.6	124.1
62.5°	140.2	135.1	131.5	124.1	119.6	115.4	112.2	110.9	110.4	109.0	107.6
65°	122.8	120.0	116.3	109.0	104.4	101.2	99.4	98.0	97.6	93.9	89.8
67.5°	106.7	104.9	101.2	95.7	91.6	88.4	85.7	83.4	80.6	77.9	75.6
70°	91.6	88.9	86.6	81.5	77.9	74.7	71.9	69.2	67.8	65.0	64.1
72.5°	77.0	74.2	71.9	67.3	64.1	60.9	60.0	56.8	55.4	55.0	55.0
75°	61.8	59.5	58.2	54.1	51.3	49.0	47.6	46.7	45.8	44.9	43.5
77.5°	47.2	45.8	44.9	42.1	39.9	38.5	38.0	34.8	33.9	33.0	32.1
80°	34.4	33.9	33.0	30.7	29.8	26.6	26.6	25.7	25.2	25.2	25.2
82.5°	23.4	22.4	22.0	19.7	19.2	18.8	18.3	17.9	18.3	17.9	18.3
85°	12.4	11.9	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.0	11.5
87.5°	4.6	4.6	4.6	4.6	4.1	4.6	4.6	4.1	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

TEST NUMBER: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	537.3	539.1	536.9	538.2	535.0	534.6	535.0	535.0	535.5	535.9	536.4
5°	507.1	506.6	503.9	502.0	500.7	502.0	503.0	503.9	503.0	503.9	504.3
7.5°	478.7	477.3	475.9	472.7	473.6	472.7	475.5	474.1	474.1	476.4	478.2
10°	453.5	450.7	449.8	446.2	443.4	442.9	446.2	447.5	448.9	449.8	453.5
12.5°	421.0	416.8	413.6	415.0	407.2	410.4	411.3	409.5	415.0	421.4	417.8
15°	386.1	386.6	380.2	377.9	371.5	373.3	373.8	378.4	382.9	382.5	388.0
17.5°	360.5	357.7	352.3	351.8	349.0	350.4	350.0	353.6	352.3	354.5	359.1
20°	336.7	334.8	330.3	328.4	329.3	328.4	328.9	329.3	330.7	335.8	334.8
22.5°	317.9	315.6	315.6	313.3	310.6	309.7	311.9	313.3	315.1	316.1	318.4
25°	301.4	299.6	297.3	295.9	293.6	294.1	295.5	297.3	298.7	300.5	302.3
27.5°	284.5	284.5	282.2	281.7	280.8	280.3	282.2	283.1	283.1	284.5	286.3
30°	271.2	271.2	268.9	268.4	268.0	268.0	269.3	269.8	270.3	271.6	272.5
32.5°	258.3	257.9	257.0	257.4	257.0	257.4	257.4	257.9	258.8	259.3	261.1
35°	246.4	246.9	246.0	246.0	245.5	246.0	246.9	247.4	247.8	248.7	248.7
37.5°	235.0	235.9	235.4	236.8	236.8	236.8	236.8	237.7	237.7	237.7	237.3
40°	224.9	224.9	224.5	225.4	226.3	226.3	226.7	226.7	227.2	227.2	226.7
42.5°	213.5	214.4	215.7	216.2	217.1	216.7	218.0	217.6	218.0	217.1	216.2
45°	202.9	202.9	204.8	206.6	207.0	207.0	207.0	208.0	207.0	205.7	205.2
47.5°	191.5	192.4	193.3	195.6	196.1	196.1	196.1	196.1	195.1	195.1	195.1
50°	180.0	180.5	180.9	181.9	183.2	182.8	182.8	182.8	184.6	182.8	183.2
52.5°	166.3	166.7	167.2	169.0	168.6	168.6	169.0	169.0	170.4	169.9	169.0
55°	152.5	152.5	153.5	153.5	153.5	154.4	154.8	155.7	155.3	155.7	156.2
57.5°	138.8	137.9	137.4	137.4	138.8	138.3	138.8	138.8	140.6	141.5	142.0
60°	122.8	122.8	122.3	119.6	119.6	119.1	120.5	121.4	122.3	126.4	126.0
62.5°	106.3	104.4	102.6	103.1	100.3	101.7	100.8	101.7	104.4	107.6	108.1
65°	89.8	88.4	86.6	86.1	85.2	86.6	86.1	86.6	87.9	89.8	92.1
67.5°	75.1	74.7	73.7	73.3	73.3	73.3	74.2	74.2	74.7	76.0	77.4
70°	64.1	63.7	64.1	63.2	63.7	63.2	63.7	64.1	64.6	65.0	66.4
72.5°	54.1	54.1	54.1	53.1	54.1	53.6	53.6	54.1	54.5	55.0	55.9
75°	43.1	42.1	41.2	40.3	39.9	40.8	41.2	40.8	42.1	44.0	44.0
77.5°	32.5	32.1	32.1	32.1	32.5	32.1	33.0	32.5	33.0	33.0	33.9
80°	25.2	24.7	25.2	25.2	24.7	25.7	25.2	25.2	25.7	26.1	25.7
82.5°	18.3	18.8	18.3	18.3	18.3	19.2	18.3	18.3	18.3	18.8	18.8
85°	11.5	11.5	11.5	11.5	11.9	11.5	11.9	11.5	12.4	11.9	11.9
87.5°	4.1	4.6	5.0	5.0	5.0	5.0	4.6	5.0	5.5	5.0	5.5
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: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5	568.5
2.5°	538.2	540.5	539.6	536.4	537.8	540.5	543.3	546.9	549.2	551.1	552.0
5°	506.6	510.7	509.8	509.8	511.7	516.2	520.8	528.6	531.4	534.6	539.1
7.5°	478.7	481.9	484.6	485.5	488.3	494.3	500.2	508.9	515.8	519.4	522.2
10°	453.9	456.2	460.4	462.6	465.4	472.7	481.4	490.6	497.5	503.9	507.5
12.5°	422.3	431.5	437.0	440.7	444.3	455.3	462.2	472.3	480.5	486.5	492.0
15°	387.1	398.1	401.3	415.5	424.6	433.3	443.9	455.8	463.6	470.4	477.8
17.5°	357.3	365.1	368.7	383.9	391.6	405.4	420.5	435.6	447.5	452.6	459.9
20°	338.5	342.6	350.0	355.0	363.2	379.3	395.8	414.1	432.0	437.0	444.3
22.5°	319.3	324.8	329.8	336.7	343.1	354.1	370.6	390.7	410.0	419.1	427.8
25°	301.9	307.4	310.6	317.9	323.9	334.8	346.3	366.9	389.8	397.6	411.3
27.5°	288.1	291.3	296.8	300.0	306.9	317.0	327.5	343.1	365.5	378.8	392.1
30°	274.4	276.7	281.3	285.8	290.9	297.7	309.7	324.8	345.4	356.8	370.1
32.5°	260.6	264.3	267.1	270.3	275.8	284.0	292.2	306.9	323.4	336.2	349.5
35°	249.2	250.6	254.2	257.9	261.6	268.9	277.6	291.8	306.4	316.5	328.4
37.5°	236.8	239.1	241.9	243.2	249.2	253.8	262.9	273.9	291.3	297.7	309.7
40°	227.2	226.7	229.5	231.8	234.5	241.9	247.4	259.3	273.0	283.1	290.4
42.5°	215.3	215.3	216.2	219.0	222.6	227.2	233.6	243.7	257.9	265.2	273.9
45°	205.7	204.3	204.8	206.6	208.9	213.5	219.9	228.6	242.8	248.7	257.9
47.5°	194.2	192.8	192.8	194.7	196.5	199.7	204.8	214.8	226.3	234.1	240.9
50°	181.4	181.9	181.4	182.8	183.7	186.9	192.4	200.6	211.2	217.6	225.4
52.5°	169.5	168.6	168.1	169.0	170.9	173.1	179.1	186.4	196.5	202.9	209.8
55°	154.8	155.7	155.7	155.7	158.5	159.4	164.0	171.3	181.4	186.4	192.8
57.5°	141.5	141.1	142.0	141.5	143.8	147.0	150.7	156.2	166.3	171.3	177.3
60°	126.9	127.3	127.8	127.8	129.6	132.8	137.0	142.0	150.2	155.3	160.8
62.5°	109.0	111.3	113.6	114.5	117.3	119.6	122.3	127.8	135.1	138.8	143.8
65°	92.1	95.3	98.5	100.8	102.6	104.9	108.6	113.6	119.6	123.2	128.3
67.5°	77.4	79.7	83.8	86.1	89.8	92.5	94.8	98.9	106.3	107.6	111.8
70°	66.9	67.8	69.6	71.5	75.6	77.9	80.6	84.7	90.2	93.4	95.7
72.5°	56.3	56.8	57.7	59.5	61.4	64.1	67.3	71.0	76.0	77.4	80.6
75°	44.9	47.6	47.6	49.0	50.4	51.8	54.5	58.2	61.4	63.7	65.5
77.5°	33.4	34.8	35.7	38.0	39.9	41.2	43.1	45.8	47.6	49.5	50.8
80°	26.1	26.6	27.0	27.0	27.9	29.8	31.6	33.4	35.7	36.6	38.0
82.5°	19.2	19.2	19.2	20.2	20.6	21.1	21.1	22.0	24.3	25.2	26.6
85°	12.4	12.4	12.4	12.4	12.8	13.3	13.7	14.2	14.2	14.2	15.1
87.5°	5.0	6.0	5.5	6.0	6.0	6.0	6.0	6.4	6.4	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: P1000454

CATALOG NUMBER: SA4XXRDP-B350DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	568.5	568.5	568.5	568.5
2.5°	555.6	558.4	563.0	569.4
5°	542.8	550.6	557.9	567.5
7.5°	531.4	540.5	550.6	564.3
10°	518.1	529.5	542.4	559.3
12.5°	502.5	518.5	533.2	551.5
15°	491.0	503.0	521.7	543.3
17.5°	475.0	491.0	509.8	534.1
20°	459.9	476.8	497.9	523.1
22.5°	443.9	463.1	484.2	511.2
25°	427.4	448.0	469.1	497.9
27.5°	412.3	431.0	454.9	484.2
30°	393.9	415.5	438.4	469.1
32.5°	376.1	398.5	421.9	452.6
35°	356.8	379.3	404.9	434.2
37.5°	338.1	362.8	386.1	414.5
40°	317.4	343.1	367.4	396.2
42.5°	297.3	323.9	348.1	372.9
45°	278.5	304.6	326.6	350.0
47.5°	260.6	284.0	306.4	327.5
50°	243.2	262.9	283.5	300.9
52.5°	224.9	243.7	260.2	275.8
55°	208.4	223.1	237.7	251.9
57.5°	188.7	203.4	216.2	227.2
60°	172.2	181.4	193.8	205.2
62.5°	153.5	164.0	173.6	180.9
65°	135.1	144.3	151.6	158.0
67.5°	119.6	125.1	130.5	137.4
70°	100.8	105.4	111.8	116.8
72.5°	84.7	88.4	91.6	97.6
75°	68.7	71.9	73.7	79.2
77.5°	53.1	56.3	57.7	60.9
80°	40.8	41.2	43.1	45.8
82.5°	27.9	28.9	29.3	31.6
85°	16.0	18.3	17.9	18.8
87.5°	6.9	7.3	8.2	9.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)