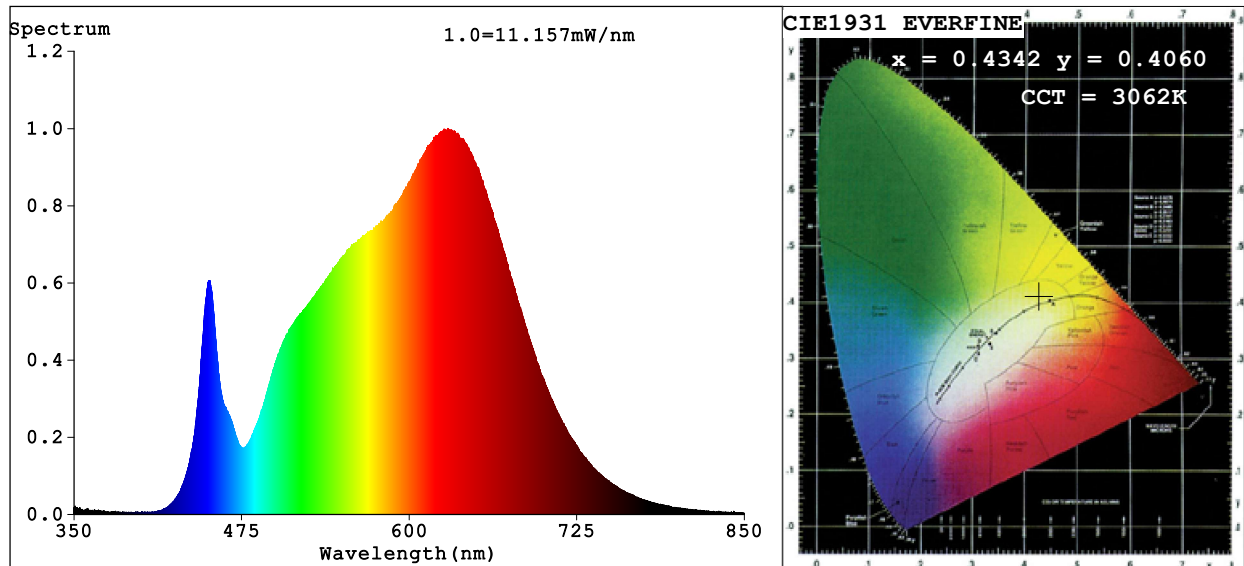


## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4342$   $y=0.4060$   $u'=0.2480$   $v'=0.5217$

CCT=3062K (Duv=0.0011) Dominant WL:Ld =582.2nm Purity=52.2%

Ratio:R=24.0% G=73.3% B=2.7%; Peak WL:Lp=629.0nm FWHM=170.9nm

Render Index:Ra=94.2 CRI=91.6 TM30:Rf=93 Rg=101

R1 =95 R2 =95 R3 =94 R4 =96 R5 =94 R6 =94 R7 =96

R8 =90 R9 =75 R10=88 R11=96 R12=79 R13=95 R14=96 R15=93

### Photo Parameters:

Flux = 555.1 lm Eff. : 81.27 lm/W Fe = 1.972 W

### Electrical parameters:

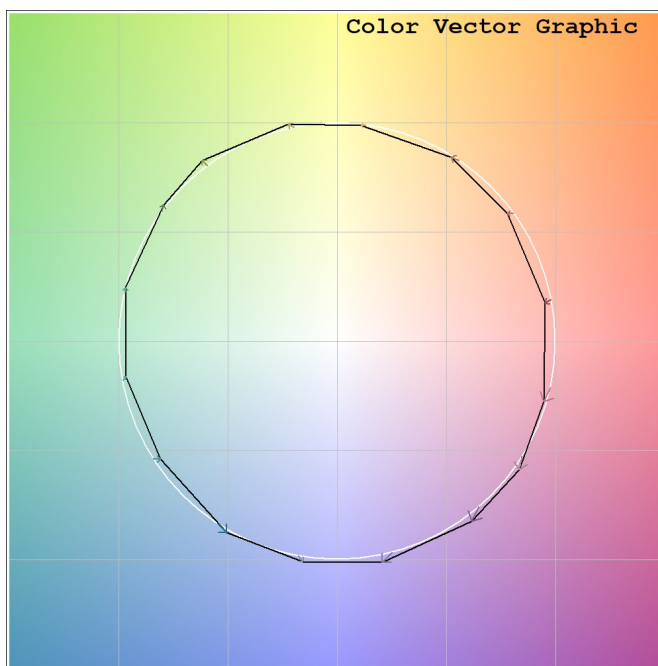
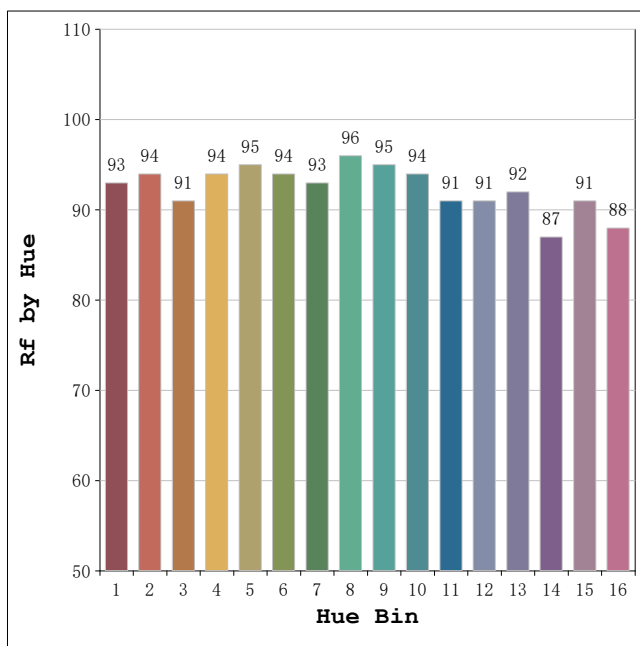
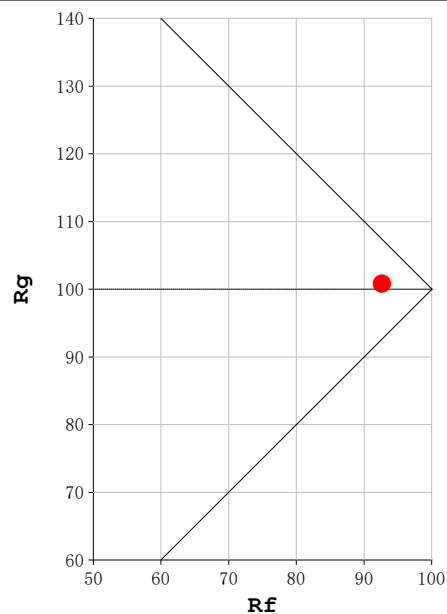
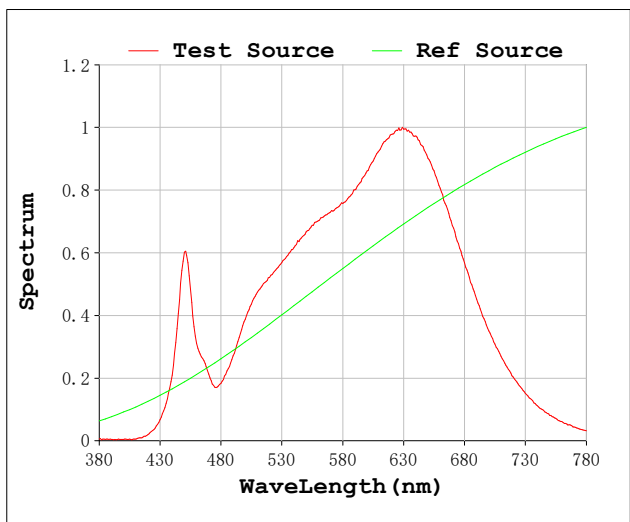
V = 47.998 V I = 0.1423 A P = 6.830 W PF = 1.000

Status: Integral T = 2000 ms Ip = 37658 (57%)

Model:Trazzo spot 43  
Tester:Sergio Carneros  
Temperature:20Deg  
Manufacturer:Luz Negra

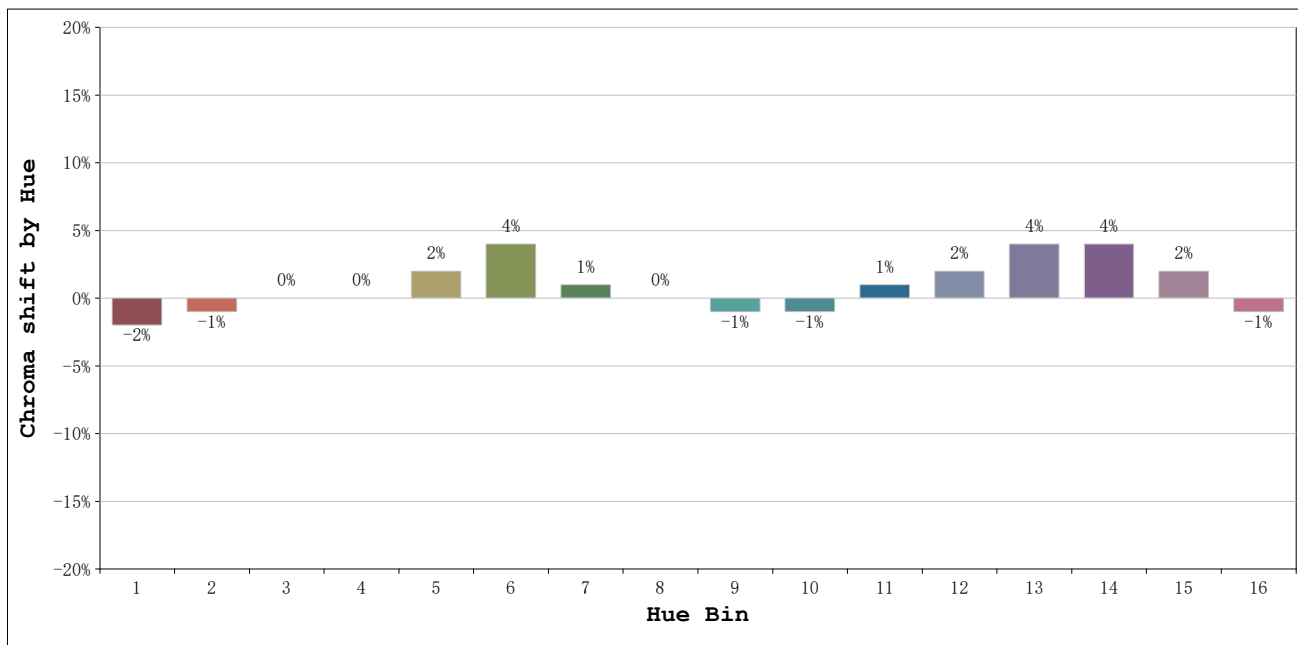
Number:3000k Negro  
Date:2026-02-18 09:16:09  
Humidity:50%  
Remarks:1 unidad

**Rf: 93**      **CCT: 3062 K**      **u': 0.2480**  
**Rg: 101**      **Duv: 0.0011**      **v': 0.5217**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k Negro  
 Date:2026-02-18 09:16:09  
 Humidity:50%  
 Remarks:1 unidad

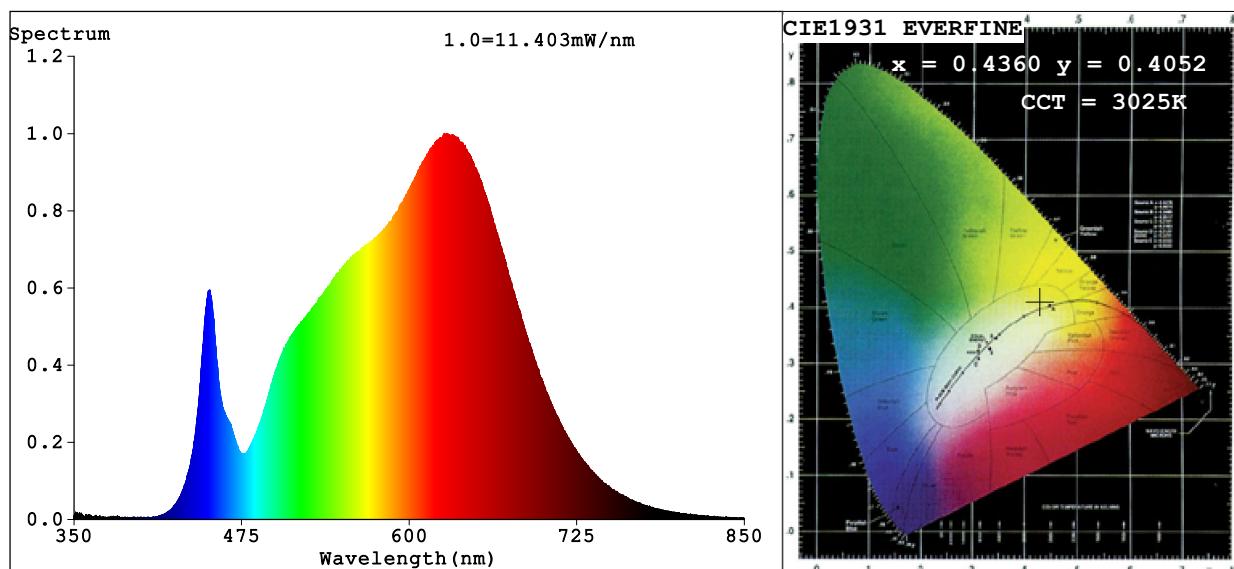


Hue Bin	Hue Angle	Rf	Graphic shift(%)	
			Chroma	Hue
1	0.0° - 22.5°	93	-2	0
2	22.5° - 45.0°	94	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	3
6	112.5° - 135.0°	94	4	0
7	135.0° - 157.5°	93	1	-2
8	157.5° - 180.0°	96	0	-1
9	180.0° - 202.5°	95	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	91	1	5
12	247.5° - 270.0°	91	2	3
13	270.0° - 292.5°	92	4	-4
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k Negro  
 Date:2026-02-18 09:16:09  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4360$   $y=0.4052$   $u'=0.2495$   $v'=0.5217$

CCT=3025K (Duv=0.0006) Dominant WL:Ld =582.5nm Purity=52.5%

Ratio:R=24.3% G=73.0% B=2.7%; Peak WL:Lp=627.6nm FWHM=168.5nm

Render Index:Ra=94.7 CRI=92.2 TM30:Rf=93 Rg=101

R1 =96 R2 =96 R3 =94 R4 =96 R5 =95 R6 =94 R7 =96

R8 =91 R9 =76 R10=89 R11=96 R12=80 R13=96 R14=96 R15=94

### Photo Parameters:

Flux = 558.9 lm Eff. : 81.88 lm/W Fe = 1.996 W

### Electrical parameters:

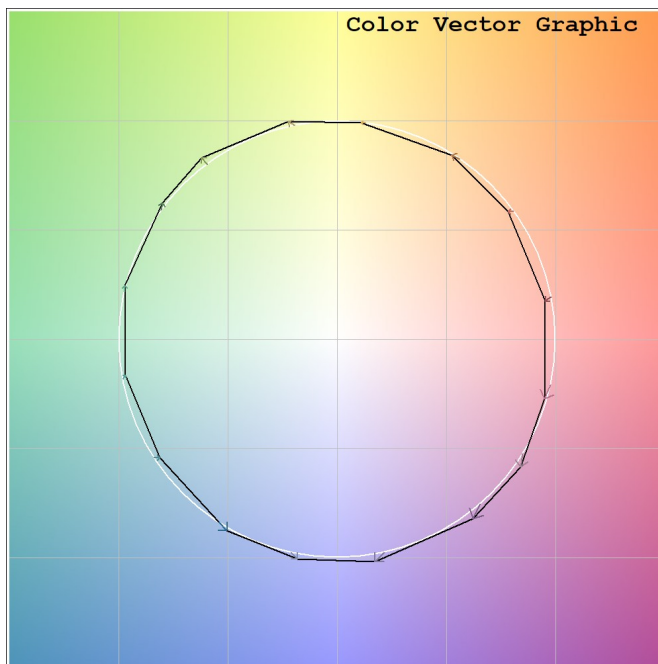
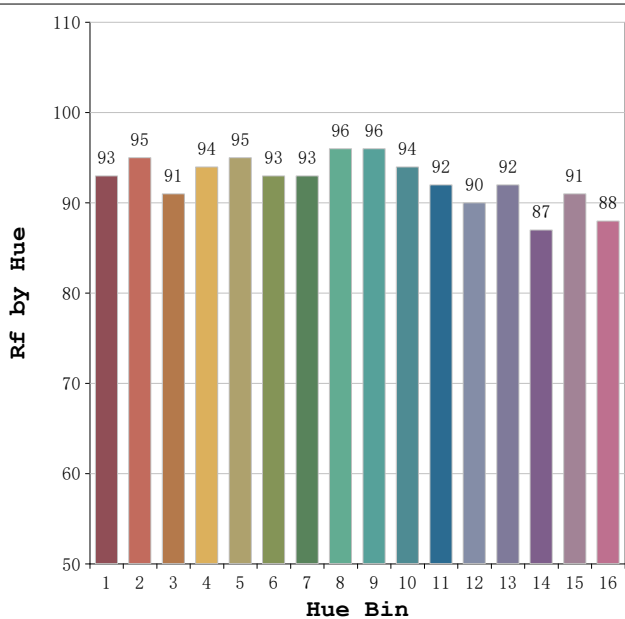
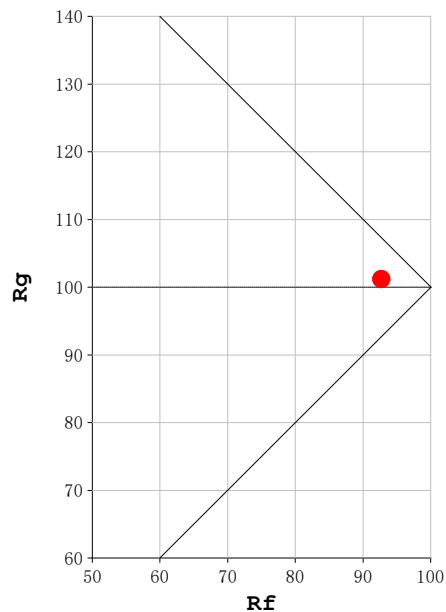
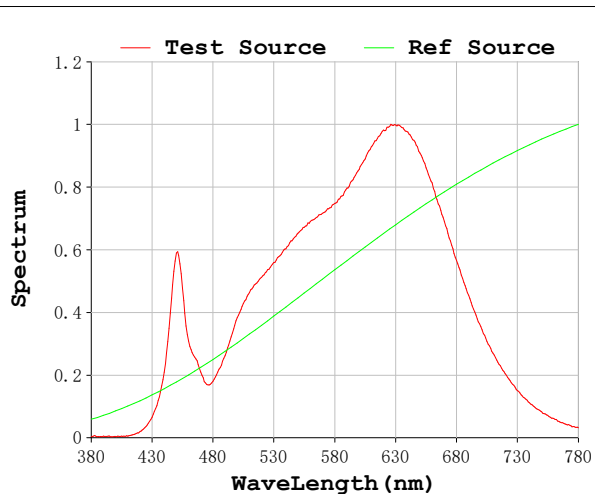
V = 47.998 V I = 0.1422 A P = 6.825 W PF = 1.000

Status: Integral T = 2000 ms Ip = 38347 (59%)

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

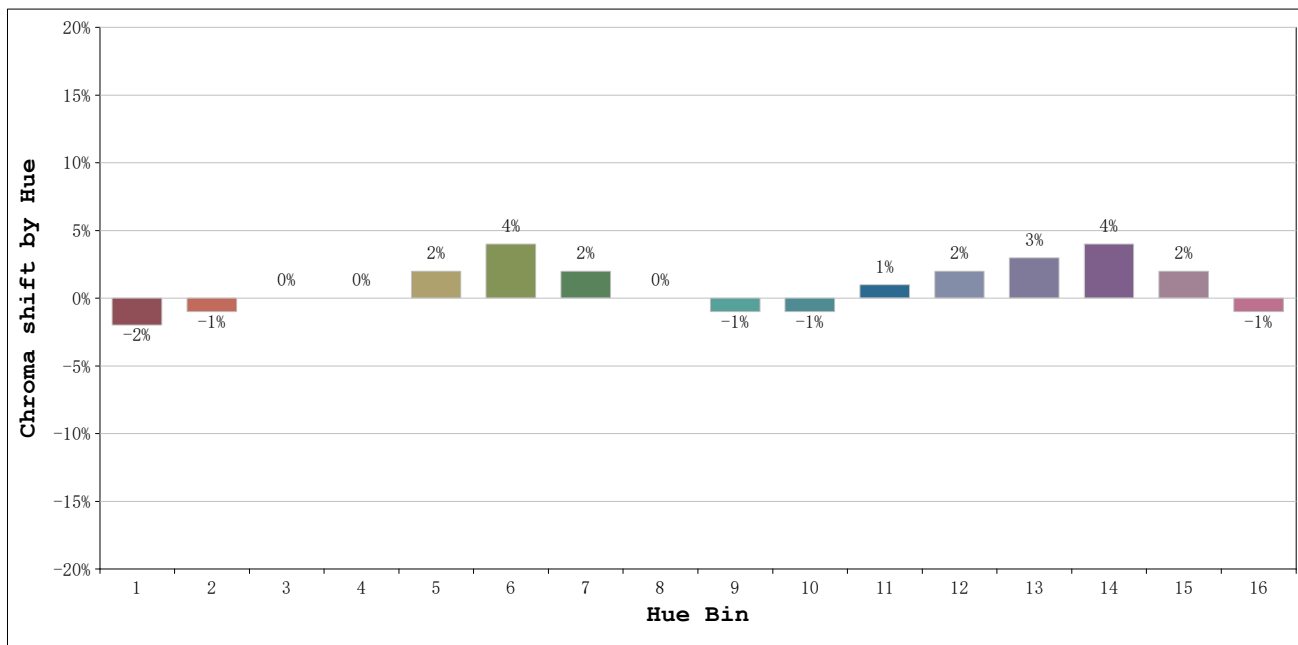
Number:3000k rojo oscuro  
 Date:2026-02-18 09:17:09  
 Humidity:50%  
 Remarks:1 unidad

**Rf: 93**      **CCT: 3025 K**      **u': 0.2495**  
**Rg: 101**      **Duv: 0.0006**      **v': 0.5217**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k rojo oscuro  
 Date:2026-02-18 09:17:09  
 Humidity:50%  
 Remarks:1 unidad

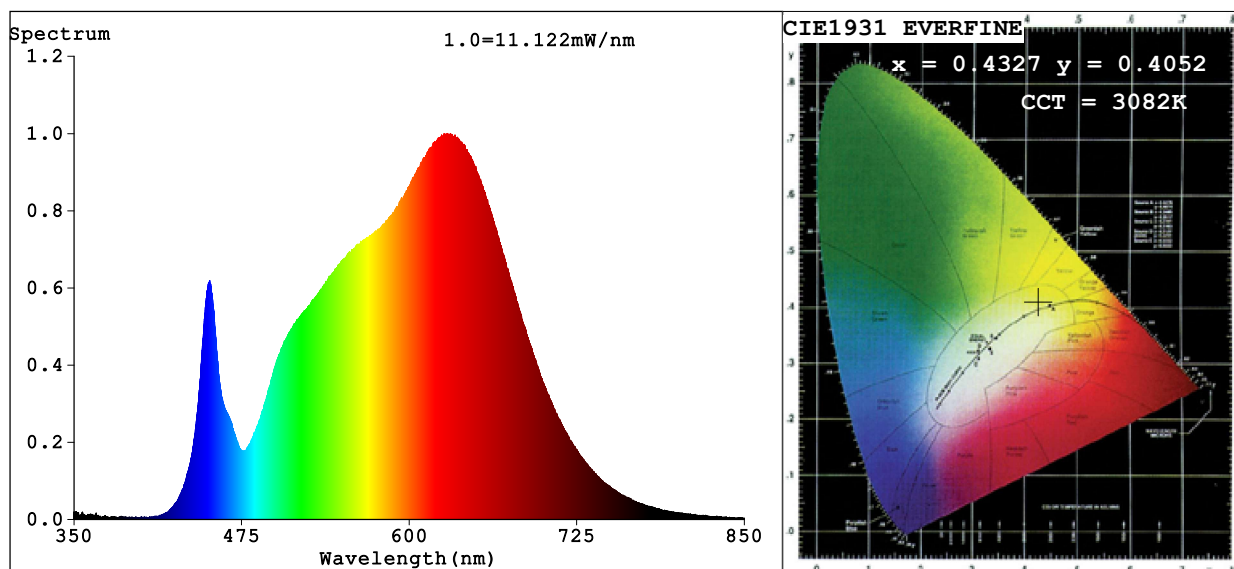


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	93	-2	0
2	22.5° - 45.0°	95	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	3
6	112.5° - 135.0°	93	4	0
7	135.0° - 157.5°	93	2	-2
8	157.5° - 180.0°	96	0	-2
9	180.0° - 202.5°	96	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	92	1	5
12	247.5° - 270.0°	90	2	3
13	270.0° - 292.5°	92	3	-4
14	292.5° - 315.0°	87	4	-5
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k rojo oscuro  
 Date:2026-02-18 09:17:09  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4327$   $y=0.4052$   $u'=0.2474$   $v'=0.5212$

$CCT=3082K$  ( $Duv=0.0011$ ) Dominant WL:Ld =582.1nm Purity=51.5%

Ratio:R=23.9% G=73.3% B=2.7%; Peak WL:Lp=628.3nm FWHM=172.5nm

Render Index:Ra=94.4 CRI=91.8 TM30:Rf=93 Rg=101

R1 =95 R2 =95 R3 =94 R4 =96 R5 =94 R6 =94 R7 =96

R8 =90 R9 =76 R10=88 R11=96 R12=79 R13=95 R14=96 R15=93

### Photo Parameters:

Flux = 556.2 lm Eff. : 81.50 lm/W Fe = 1.979 W

### Electrical parameters:

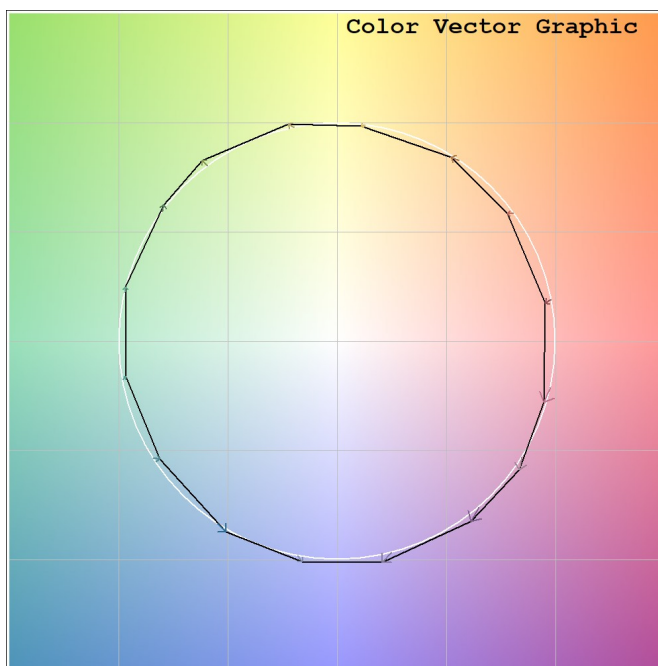
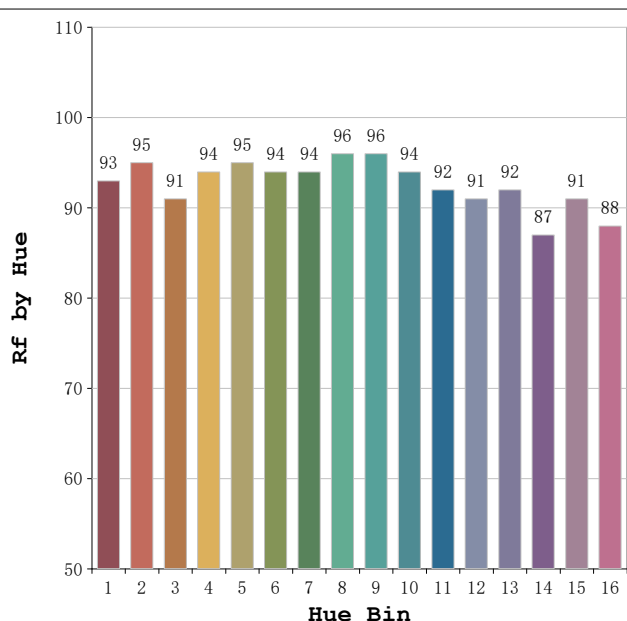
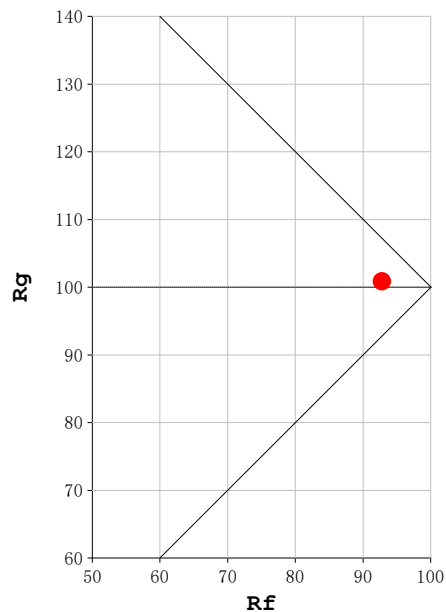
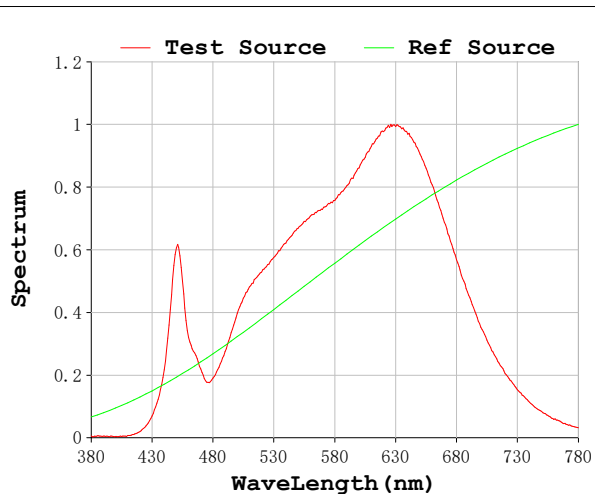
V = 47.998 V I = 0.1422 A P = 6.825 W PF = 1.000

Status: Integral T = 2000 ms Ip = 37580 (57%)

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k azul mate  
 Date:2026-02-18 09:18:15  
 Humidity:50%  
 Remarks:1 unidad

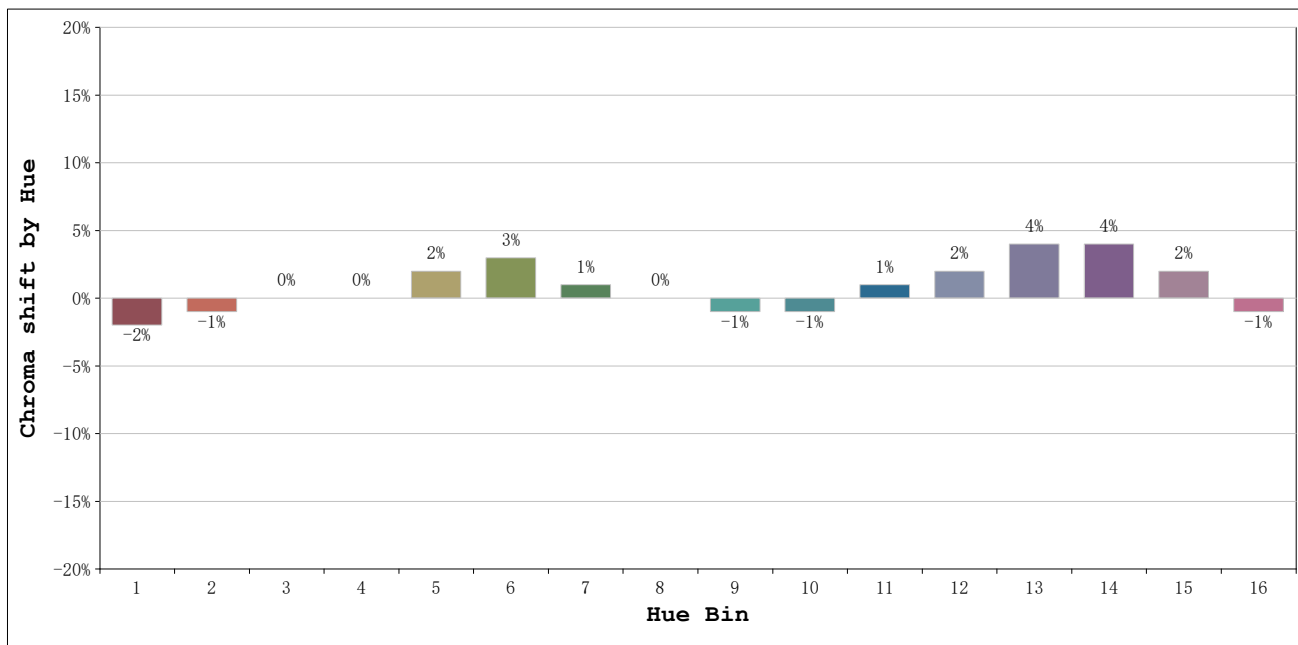
**Rf: 93**      **CCT: 3082 K**      **u': 0.2474**  
**Rg: 101**      **Duv: 0.0011**      **v': 0.5212**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k azul mate  
 Date:2026-02-18 09:18:15  
 Humidity:50%  
 Remarks:1 unidad



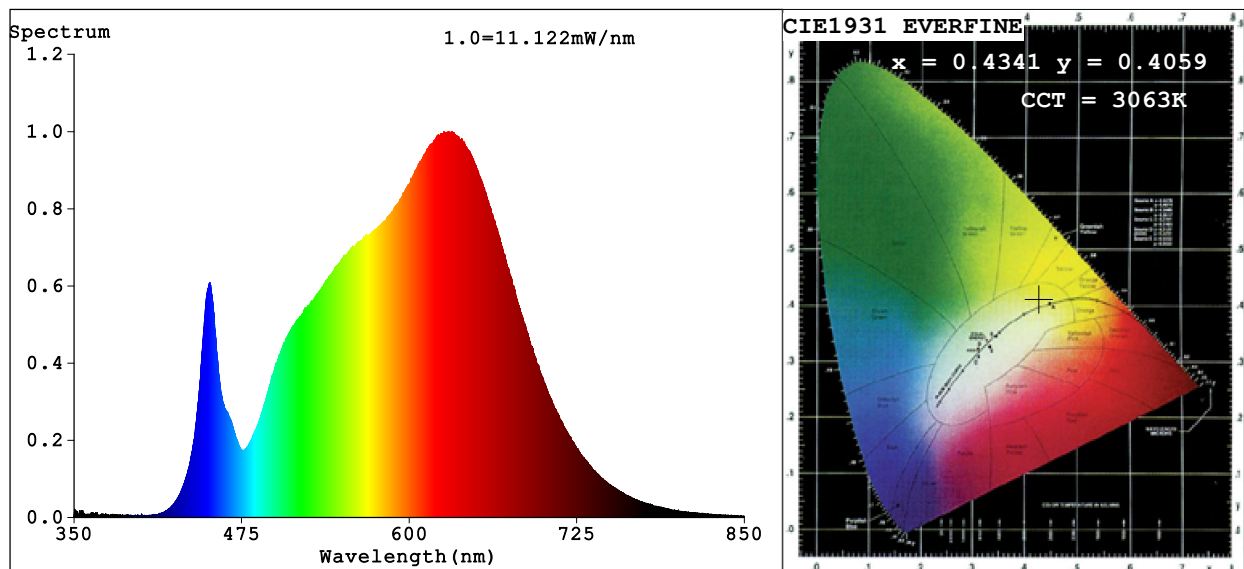


Hue Bin	Hue Angle	Rf	Graphic shift(%)	
			Chroma	Hue
1	0.0° - 22.5°	93	-2	0
2	22.5° - 45.0°	95	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	2
6	112.5° - 135.0°	94	3	0
7	135.0° - 157.5°	94	1	-2
8	157.5° - 180.0°	96	0	-1
9	180.0° - 202.5°	96	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	92	1	5
12	247.5° - 270.0°	91	2	3
13	270.0° - 292.5°	92	4	-4
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k azul mate  
 Date:2026-02-18 09:18:15  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4341$   $y=0.4059$   $u'=0.2480$   $v'=0.5217$

CCT=3063K (Duv=0.0011) Dominant WL:Ld =582.2nm Purity=52.2%

Ratio:R=24.0% G=73.3% B=2.7%; Peak WL:Lp=629.3nm FWHM=171.6nm

Render Index:Ra=94.2 CRI=91.6 TM30:Rf=93 Rg=101

R1 =95 R2 =95 R3 =94 R4 =96 R5 =94 R6 =94 R7 =96

R8 =90 R9 =75 R10=88 R11=96 R12=78 R13=95 R14=96 R15=93

### Photo Parameters:

Flux = 555.4 lm Eff. : 81.44 lm/W Fe = 1.975 W

### Electrical parameters:

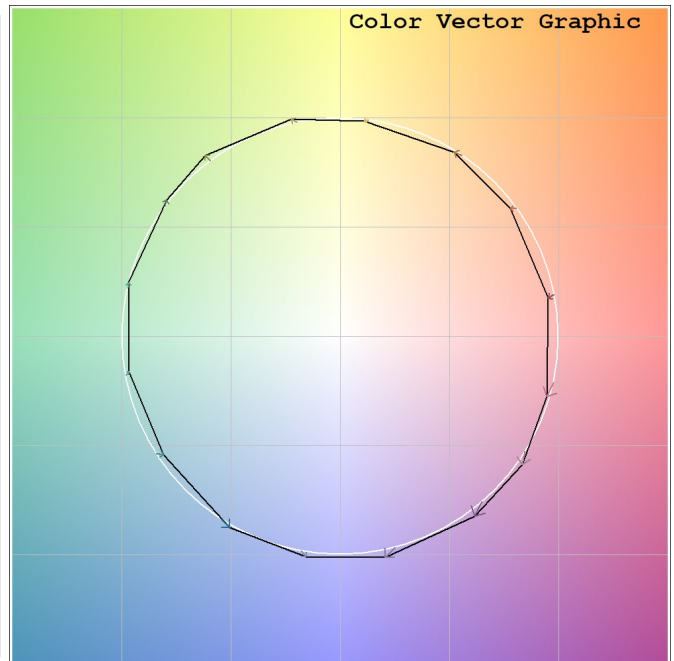
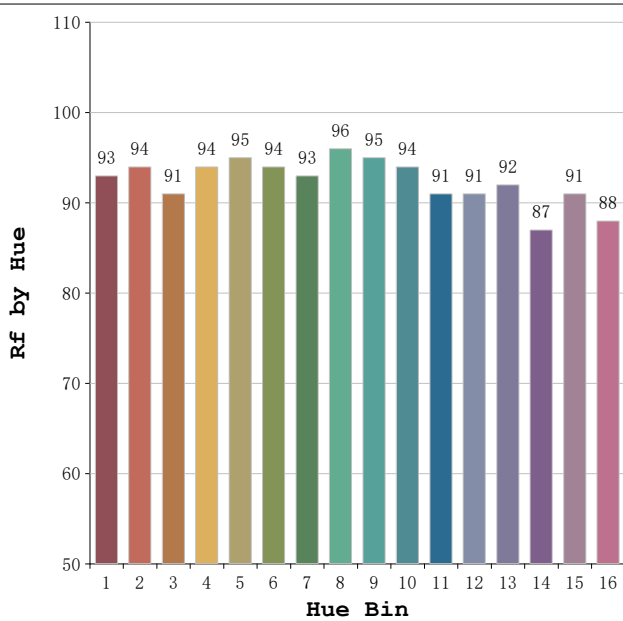
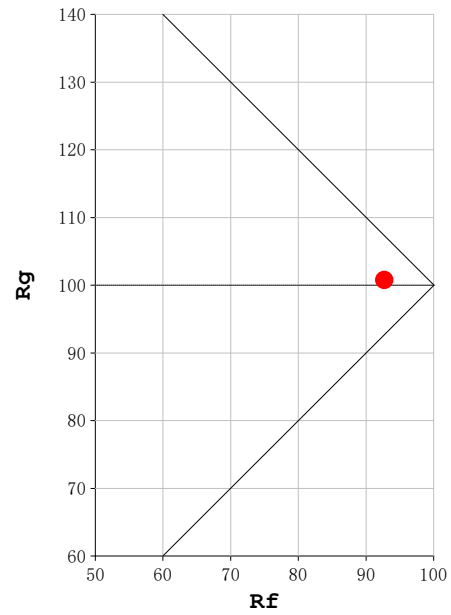
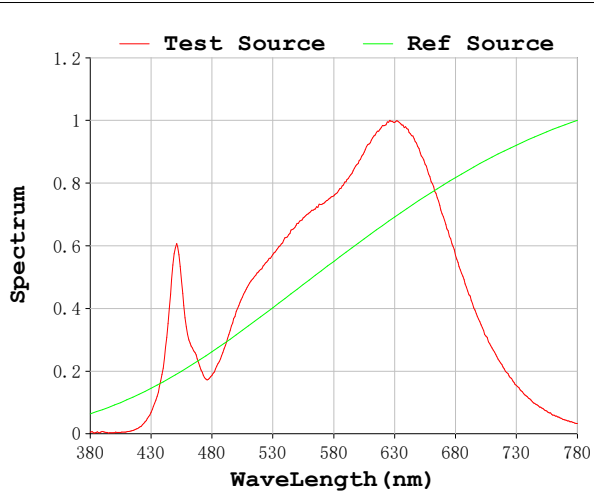
V = 47.998 V I = 0.1421 A P = 6.821 W PF = 1.000

Status: Integral T = 2000 ms Ip = 37659 (57%)

Model:Trazzo spot 43  
Tester:Sergio Carneros  
Temperature:20Deg  
Manufacturer:Luz Negra

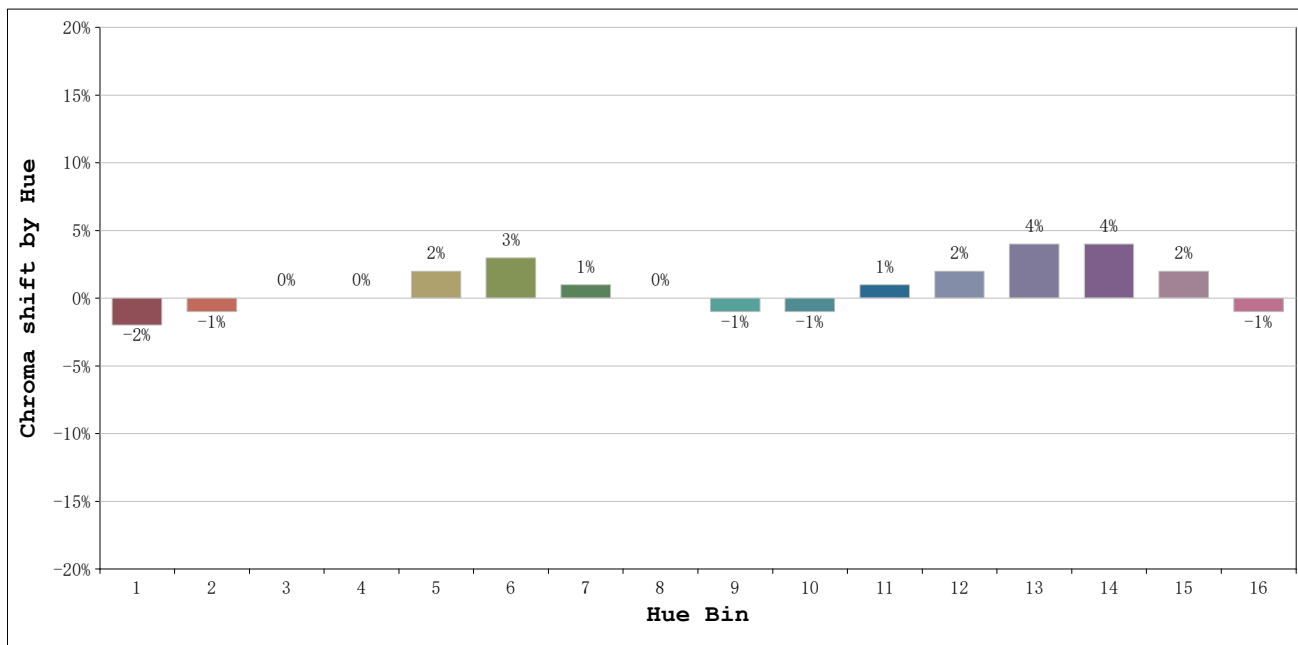
Number:3000k gris mate  
Date:2026-02-18 09:19:18  
Humidity:50%  
Remarks:1 unidad

**Rf: 93**      **CCT: 3063 K**      **u': 0.2480**  
**Rg: 101**      **Duv: 0.0011**      **v': 0.5217**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k gris mate  
 Date:2026-02-18 09:19:18  
 Humidity:50%  
 Remarks:1 unidad

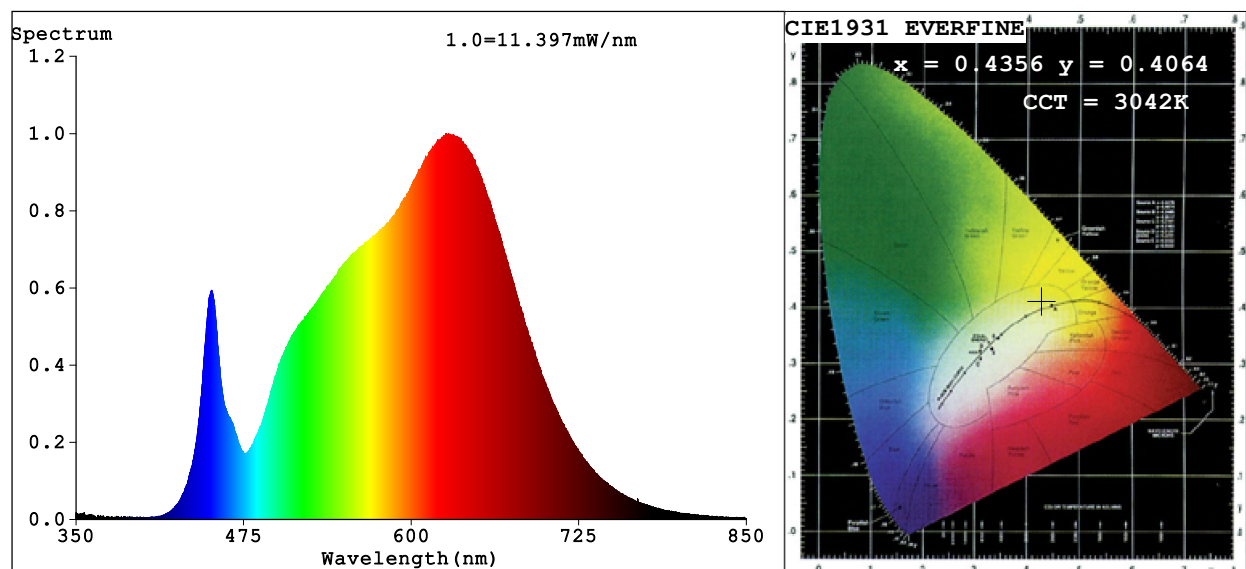


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	93	-2	0
2	22.5° - 45.0°	94	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	3
6	112.5° - 135.0°	94	3	0
7	135.0° - 157.5°	93	1	-2
8	157.5° - 180.0°	96	0	-1
9	180.0° - 202.5°	95	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	91	1	5
12	247.5° - 270.0°	91	2	3
13	270.0° - 292.5°	92	4	-4
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k gris mate  
 Date:2026-02-18 09:19:18  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4356$   $y=0.4064$   $u'=0.2487$   $v'=0.5221$   
 CCT=3042K (Duv=0.0011) Dominant WL:Ld =582.3nm Purity=52.7%  
 Ratio:R=24.1% G=73.2% B=2.7%; Peak WL:Lp=626.0nm FWHM=170.0nm  
 Render Index:Ra=94.2 CRI=91.6 TM30:Rf=93 Rg=101  
 R1 =95 R2 =95 R3 =94 R4 =96 R5 =94 R6 =94 R7 =96  
 R8 =90 R9 =75 R10=88 R11=96 R12=79 R13=95 R14=96 R15=93

### Photo Parameters:

Flux = 564.8 lm Eff. : 82.87 lm/W Fe = 2.007 W

### Electrical parameters:

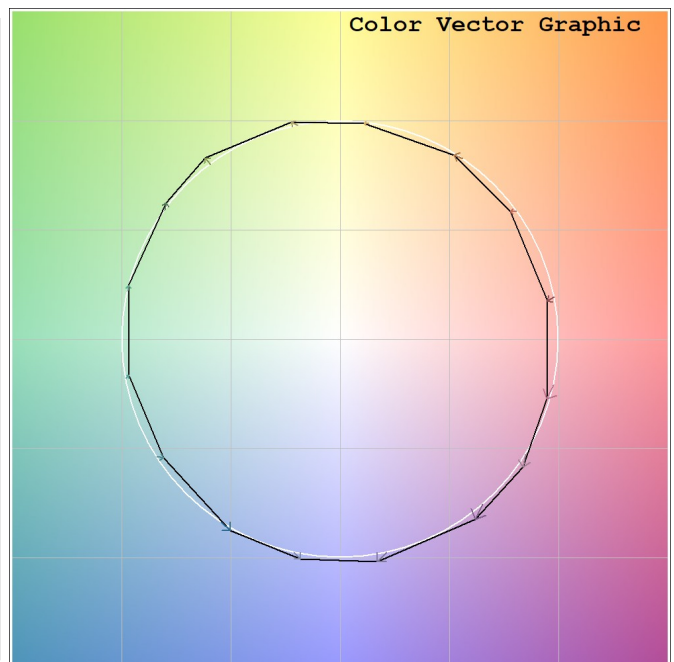
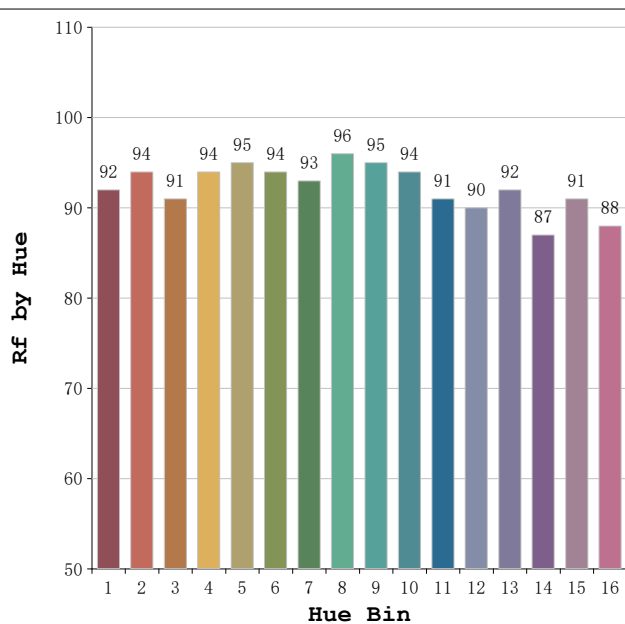
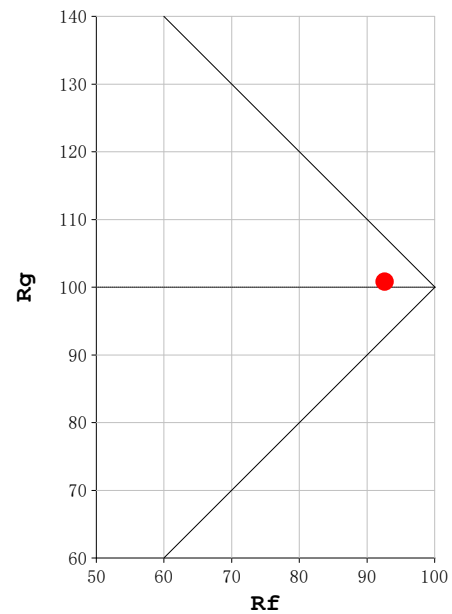
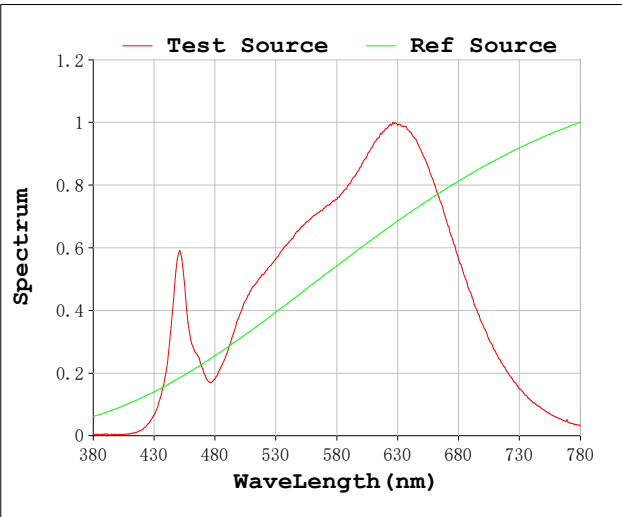
V = 47.998 V I = 0.1420 A P = 6.816 W PF = 1.000

Status: Integral T = 2000 ms Ip = 38539 (59%)

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

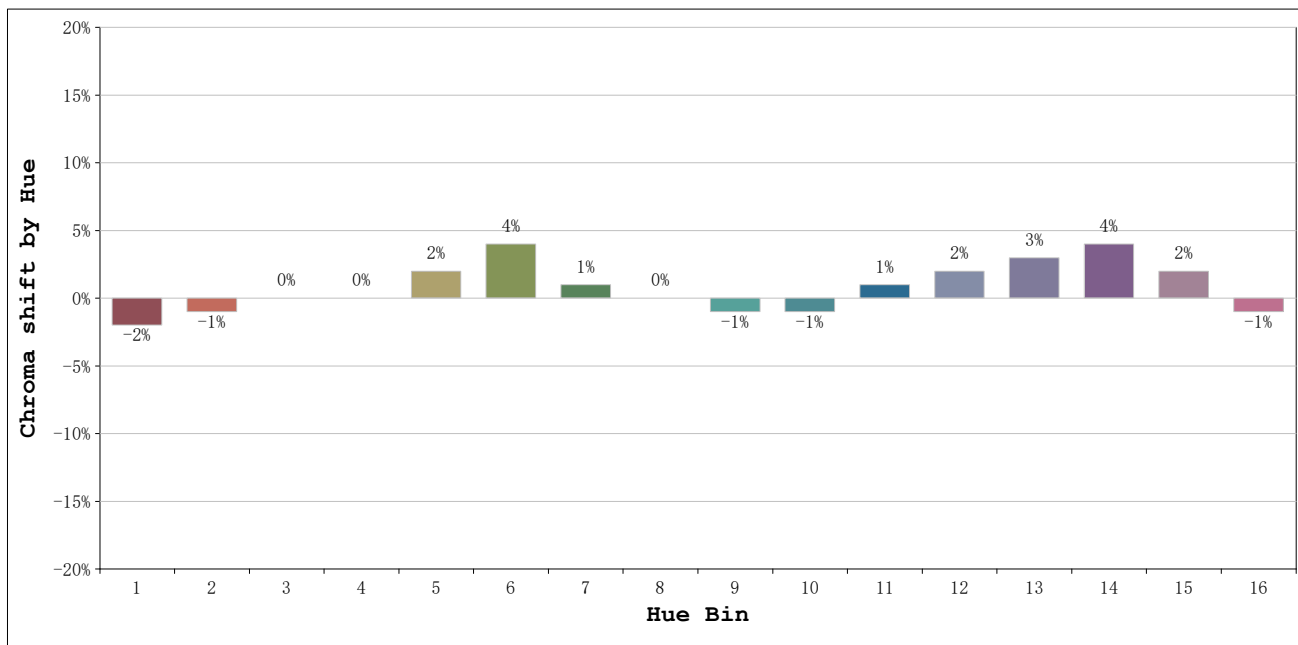
Number:3000k oro mate  
 Date:2026-02-18 09:20:22  
 Humidity:50%  
 Remarks:1 unidad

**Rf: 93**      **CCT: 3042 K**      **u': 0.2487**  
**Rg: 101**      **Duv: 0.0011**      **v': 0.5221**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k oro mate  
 Date:2026-02-18 09:20:22  
 Humidity:50%  
 Remarks:1 unidad

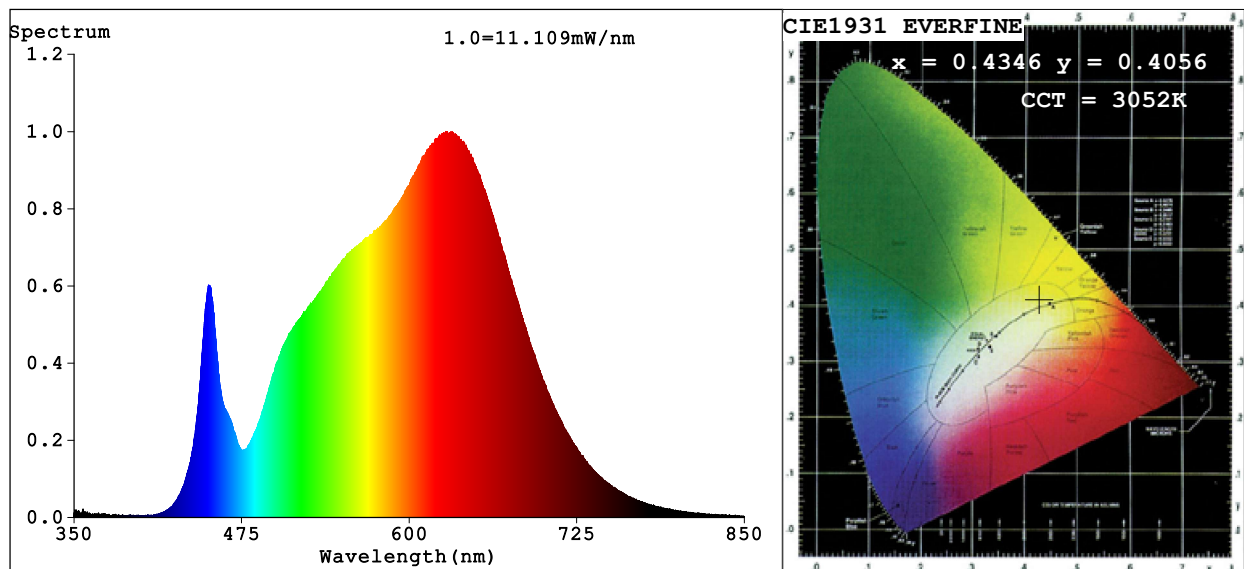


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	92	-2	0
2	22.5° - 45.0°	94	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	3
6	112.5° - 135.0°	94	4	0
7	135.0° - 157.5°	93	1	-2
8	157.5° - 180.0°	96	0	-1
9	180.0° - 202.5°	95	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	91	1	6
12	247.5° - 270.0°	90	2	4
13	270.0° - 292.5°	92	3	-4
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k oro mate  
 Date:2026-02-18 09:20:22  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4346$   $y=0.4056$   $u'=0.2484$   $v'=0.5216$

CCT=3052K (Duv=0.0009) Dominant WL:Ld =582.3nm Purity=52.2%

Ratio:R=24.1% G=73.2% B=2.7%; Peak WL:Lp=627.3nm FWHM=170.7nm

Render Index:Ra=94.4 CRI=91.7 TM30:Rf=93 Rg=101

R1 =95 R2 =96 R3 =94 R4 =96 R5 =94 R6 =94 R7 =96

R8 =90 R9 =75 R10=88 R11=96 R12=79 R13=95 R14=96 R15=93

### Photo Parameters:

Flux = 552.0 lm Eff. : 80.93 lm/W Fe = 1.966 W

### Electrical parameters:

V = 47.998 V I = 0.1421 A P = 6.821 W PF = 1.000

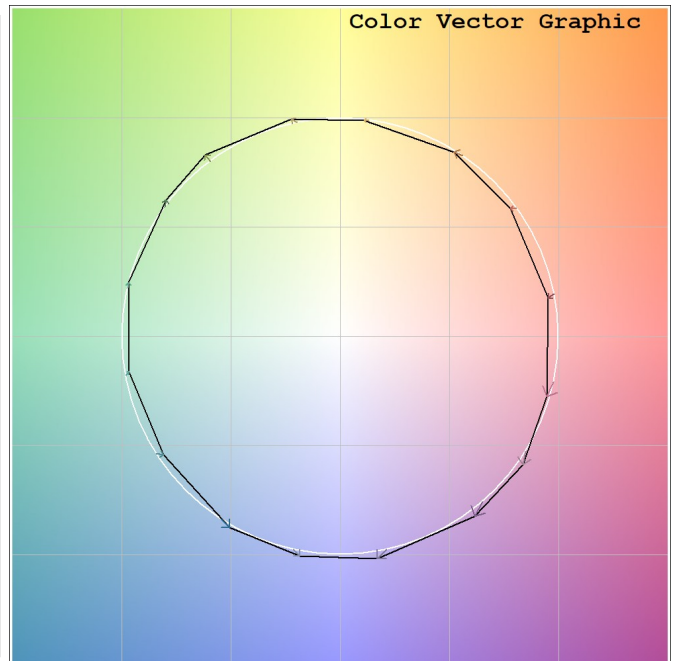
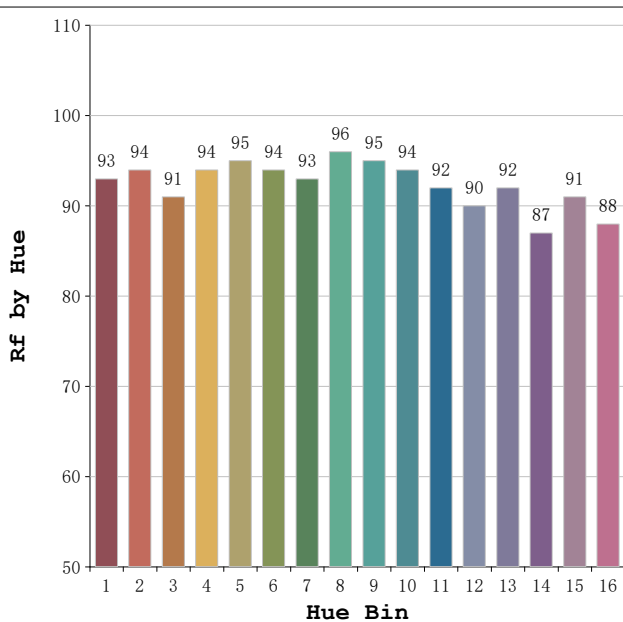
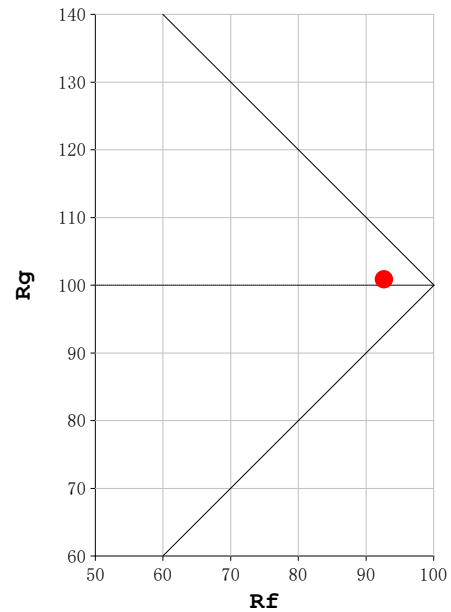
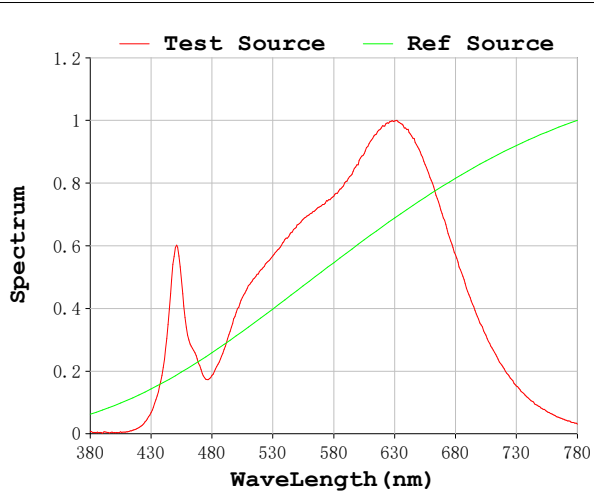
Status: Integral T = 2000 ms Ip = 37515 (57%)

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k burdeos  
 Date:2026-02-18 09:21:23  
 Humidity:50%  
 Remarks:1 unidad

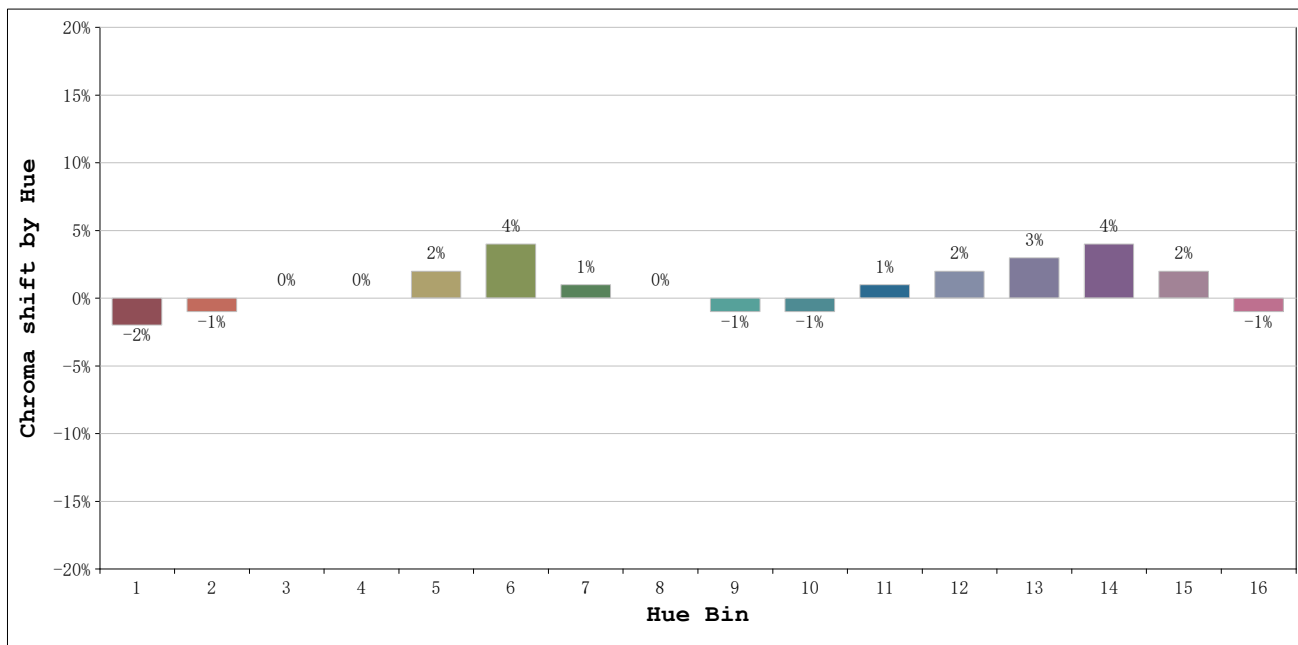


**Rf: 93**      **CCT: 3052 K**      **u': 0.2484**  
**Rg: 101**      **Duv: 0.0009**      **v': 0.5216**



Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k burdeos  
 Date:2026-02-18 09:21:23  
 Humidity:50%  
 Remarks:1 unidad



			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	93	-2	0
2	22.5° - 45.0°	94	-1	1
3	45.0° - 67.5°	91	0	4
4	67.5° - 90.0°	94	0	2
5	90.0° - 112.5°	95	2	3
6	112.5° - 135.0°	94	4	0
7	135.0° - 157.5°	93	1	-2
8	157.5° - 180.0°	96	0	-1
9	180.0° - 202.5°	95	-1	0
10	202.5° - 225.0°	94	-1	2
11	225.0° - 247.5°	92	1	5
12	247.5° - 270.0°	90	2	4
13	270.0° - 292.5°	92	3	-4
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	91	2	-5
16	337.5° - 360.0°	88	-1	-6

Model:Trazzo spot 43  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000k burdeos  
 Date:2026-02-18 09:21:23  
 Humidity:50%  
 Remarks:1 unidad