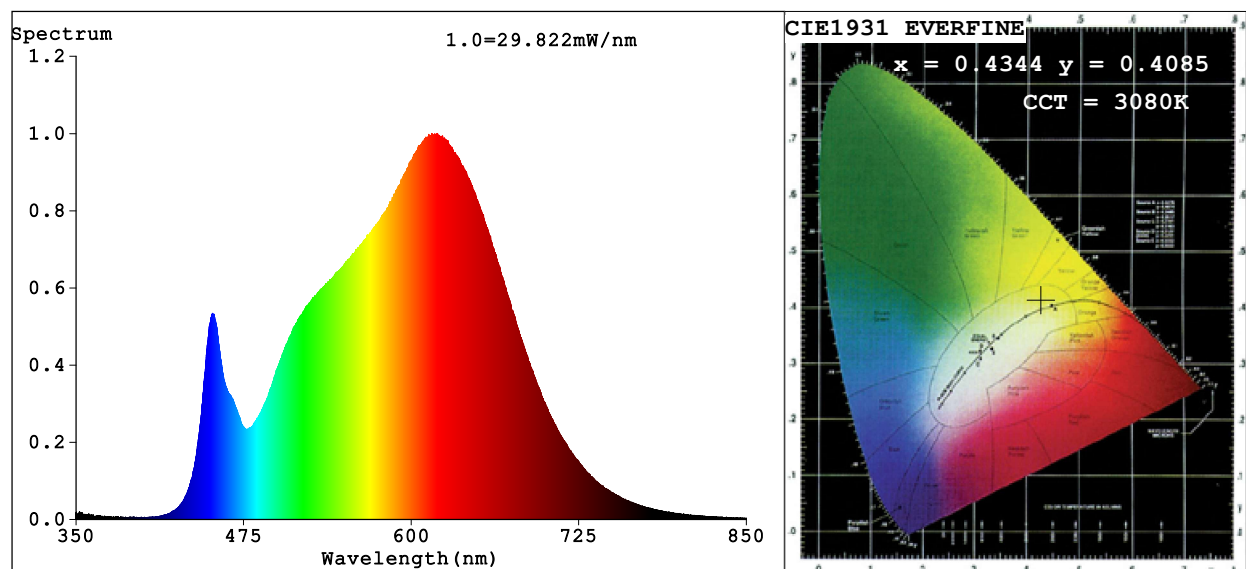


## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4344$   $y=0.4085$   $u'=0.2470$   $v'=0.5227$

$CCT=3080K$  ( $Duv=0.0021$ ) Dominant WL:Ld =581.8nm Purity=53.0%

Ratio:R=23.7% G=73.4% B=2.9%; Peak WL:Lp=615.4nm FWHM=166.8nm

Render Index:Ra=92.8 CRI=89.5 TM30:Rf=91 Rg=98

R1 =93 R2 =96 R3 =98 R4 =93 R5 =92 R6 =95 R7 =93

R8 =82 R9 =58 R10=89 R11=94 R12=78 R13=94 R14=98 R15=88

### Photo Parameters:

Flux = 1518 lm Eff. : 49.82 lm/W Fe = 5.159 W

### Electrical parameters:

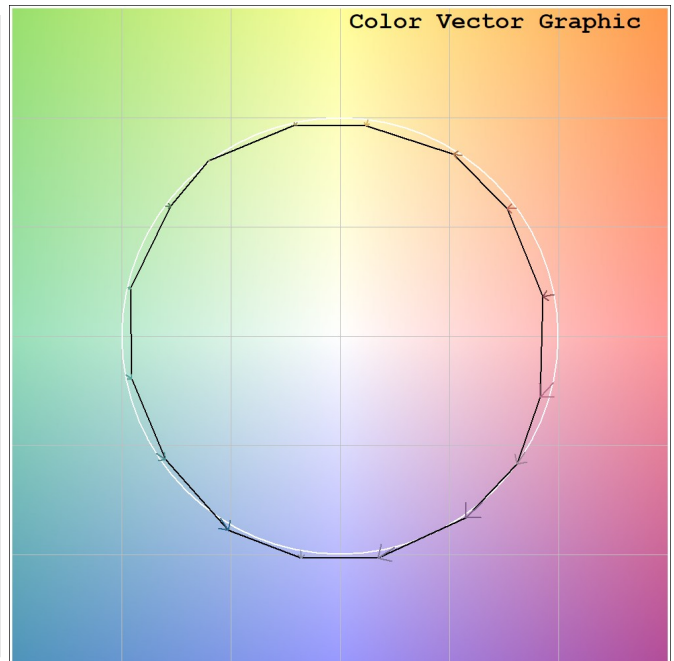
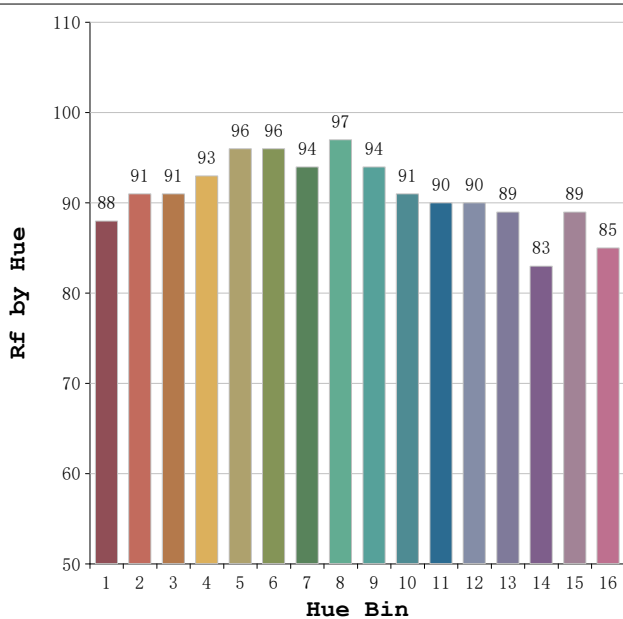
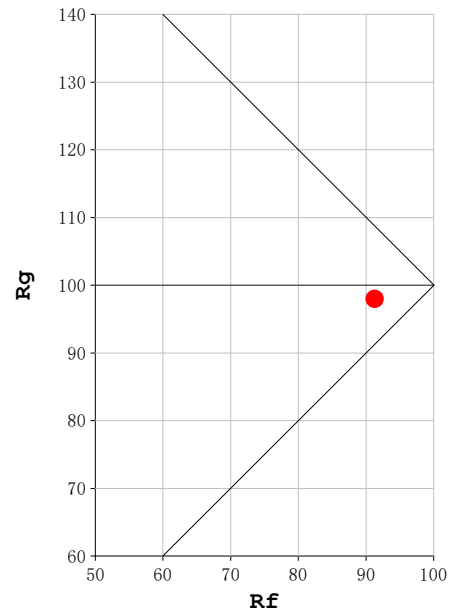
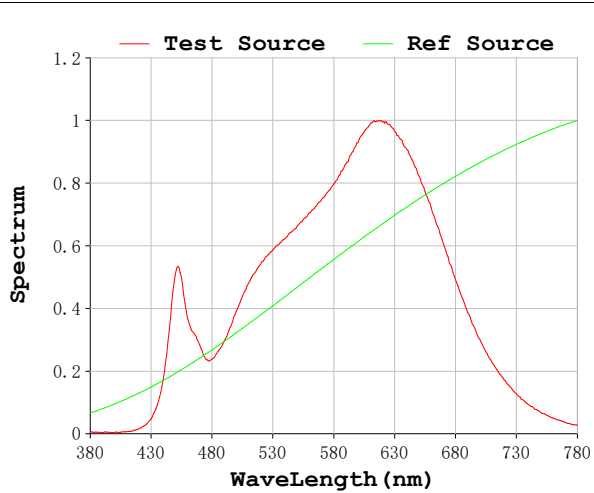
V = 230.03 V I = 0.1381 A P = 30.46 W PF = 0.9590

Status: Integral T = 888 ms Ip = 46983 (72%)

Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

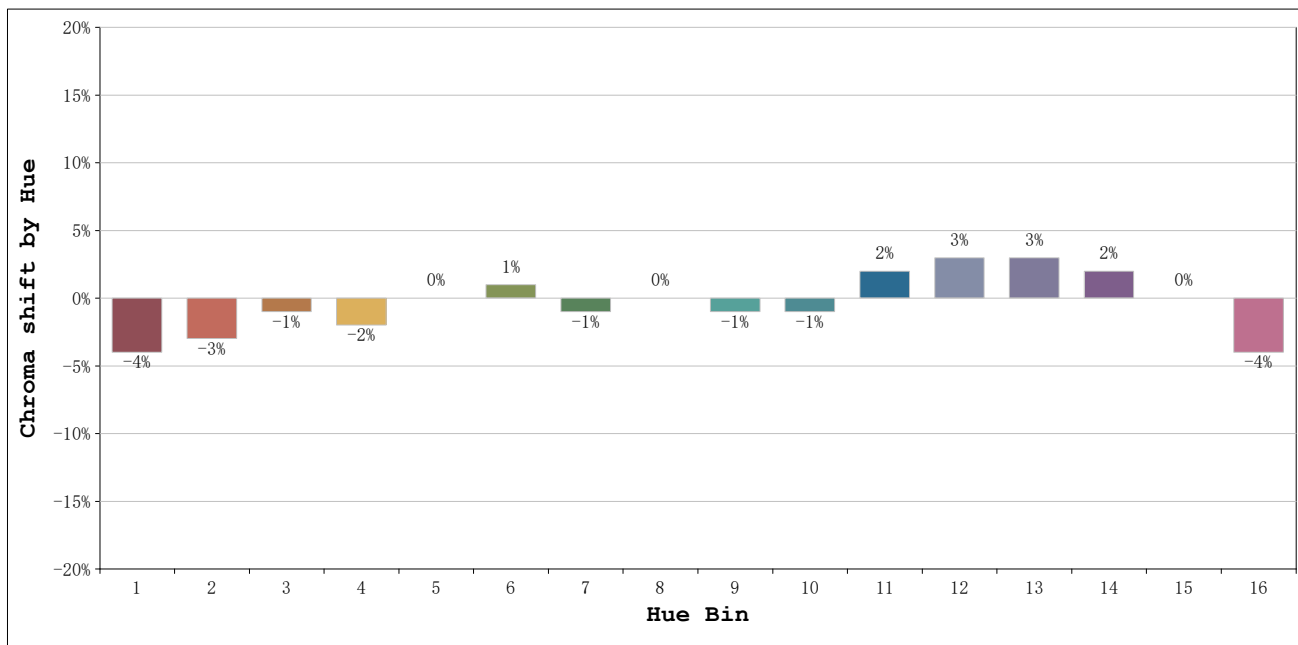
Number:3000K 20ª Panal de abeja  
 Date:2026-03-23 08:33:10  
 Humidity:50%  
 Remarks:1 unidad

**Rf: 91**      **CCT: 3080 K**      **u': 0.2470**  
**Rg: 98**      **Duv: 0.0021**      **v': 0.5227**



Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000K 20ª Panal de abeja  
 Date:2026-03-23 08:33:10  
 Humidity:50%  
 Remarks:1 unidad

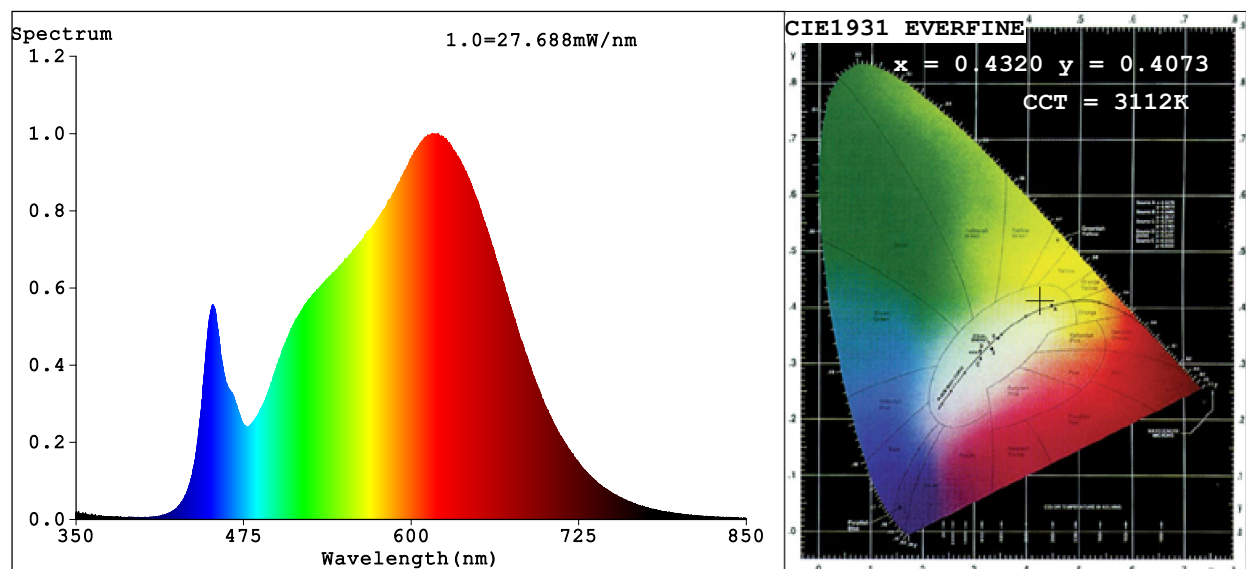


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	88	-4	0
2	22.5° - 45.0°	91	-3	2
3	45.0° - 67.5°	91	-1	4
4	67.5° - 90.0°	93	-2	0
5	90.0° - 112.5°	96	0	2
6	112.5° - 135.0°	96	1	1
7	135.0° - 157.5°	94	-1	-1
8	157.5° - 180.0°	97	0	0
9	180.0° - 202.5°	94	-1	2
10	202.5° - 225.0°	91	-1	5
11	225.0° - 247.5°	90	2	6
12	247.5° - 270.0°	90	3	1
13	270.0° - 292.5°	89	3	-7
14	292.5° - 315.0°	83	2	-9
15	315.0° - 337.5°	89	0	-5
16	337.5° - 360.0°	85	-4	-7

Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000K 20ª Panal de abeja  
 Date:2026-03-23 08:33:10  
 Humidity:50%  
 Remarks:1 unidad

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4320$   $y=0.4073$   $u'=0.2460$   $v'=0.5219$   
 CCT=3112K (Duv=0.0020) Dominant WL:Ld =581.6nm Purity=51.9%  
 Ratio:R=23.5% G=73.5% B=2.9%; Peak WL:Lp=620.1nm FWHM=167.1nm  
 Render Index:Ra=92.7 CRI=89.5 TM30:Rf=91 Rg=98  
 R1 =93 R2 =96 R3 =98 R4 =93 R5 =92 R6 =95 R7 =93  
 R8 =82 R9 =58 R10=89 R11=94 R12=78 R13=94 R14=98 R15=88

### Photo Parameters:

Flux = 1424 lm Eff. : 46.72 lm/W Fe = 4.825 W

### Electrical parameters:

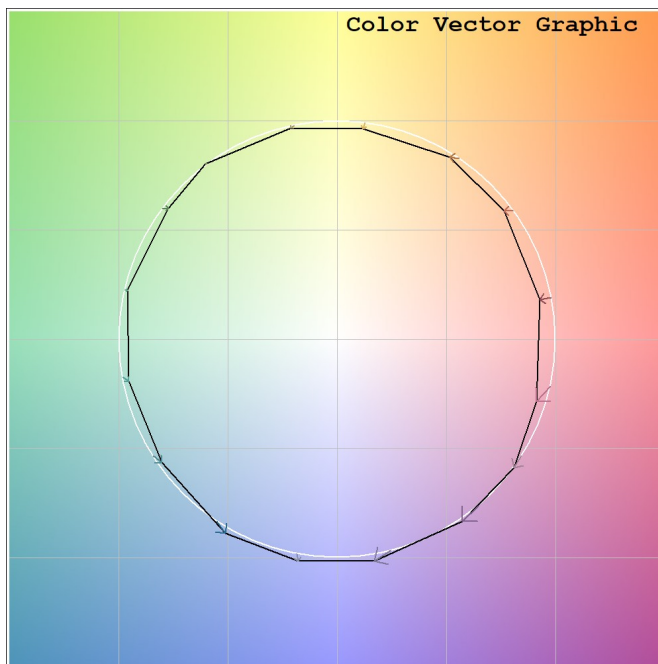
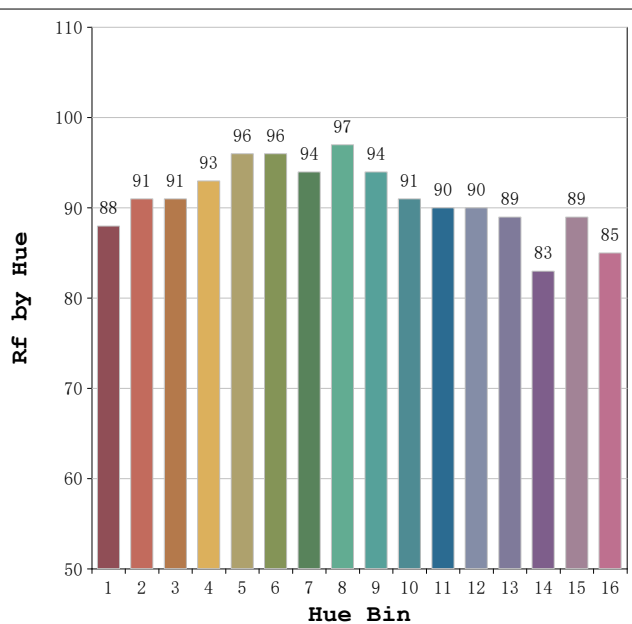
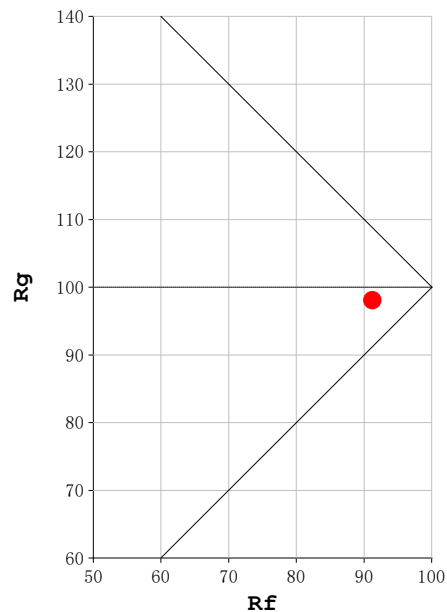
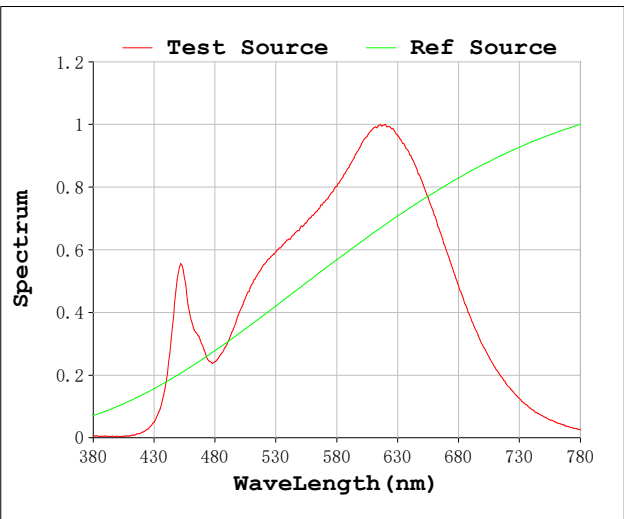
V = 230.06 V I = 0.1381 A P = 30.48 W PF = 0.9591

Status: Integral T = 888 ms Ip = 43761 (67%)

Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

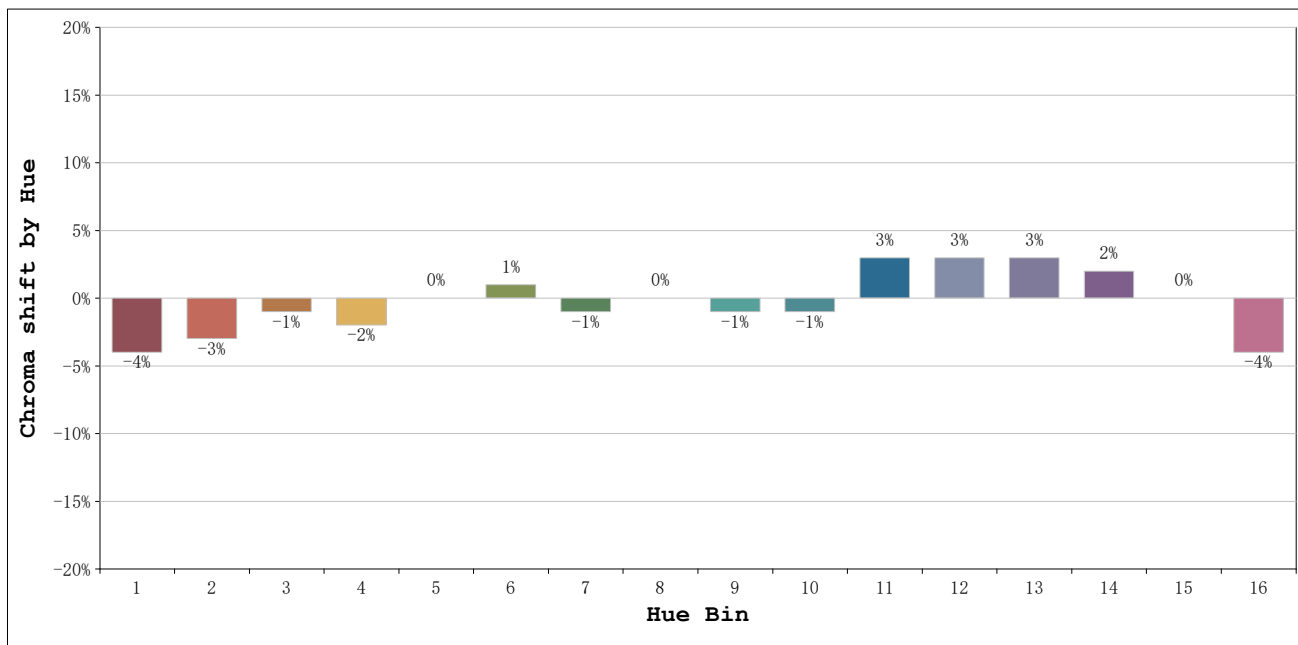
Number:3000K 50ª Panal de abeja  
 Date:2026-03-23 08:35:20  
 Humidity:50%  
 Remarks:1 unidad

**Rf: 91**      **CCT: 3112 K**      **u': 0.2460**  
**Rg: 98**      **Duv: 0.0020**      **v': 0.5219**



Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000K 50ª Panal de abeja  
 Date:2026-03-23 08:35:20  
 Humidity:50%  
 Remarks:1 unidad



Hue Bin	Hue Angle	Rf	Graphic shift(%)	
			Chroma	Hue
1	0.0° - 22.5°	88	-4	0
2	22.5° - 45.0°	91	-3	2
3	45.0° - 67.5°	91	-1	4
4	67.5° - 90.0°	93	-2	0
5	90.0° - 112.5°	96	0	2
6	112.5° - 135.0°	96	1	1
7	135.0° - 157.5°	94	-1	-1
8	157.5° - 180.0°	97	0	0
9	180.0° - 202.5°	94	-1	2
10	202.5° - 225.0°	91	-1	5
11	225.0° - 247.5°	90	3	6
12	247.5° - 270.0°	90	3	1
13	270.0° - 292.5°	89	3	-7
14	292.5° - 315.0°	83	2	-9
15	315.0° - 337.5°	89	0	-6
16	337.5° - 360.0°	85	-4	-7

Model:Spotia Zomm CTT  
 Tester:Sergio Carneros  
 Temperature:20Deg  
 Manufacturer:Luz Negra

Number:3000K 50ª Panal de abeja  
 Date:2026-03-23 08:35:20  
 Humidity:50%  
 Remarks:1 unidad