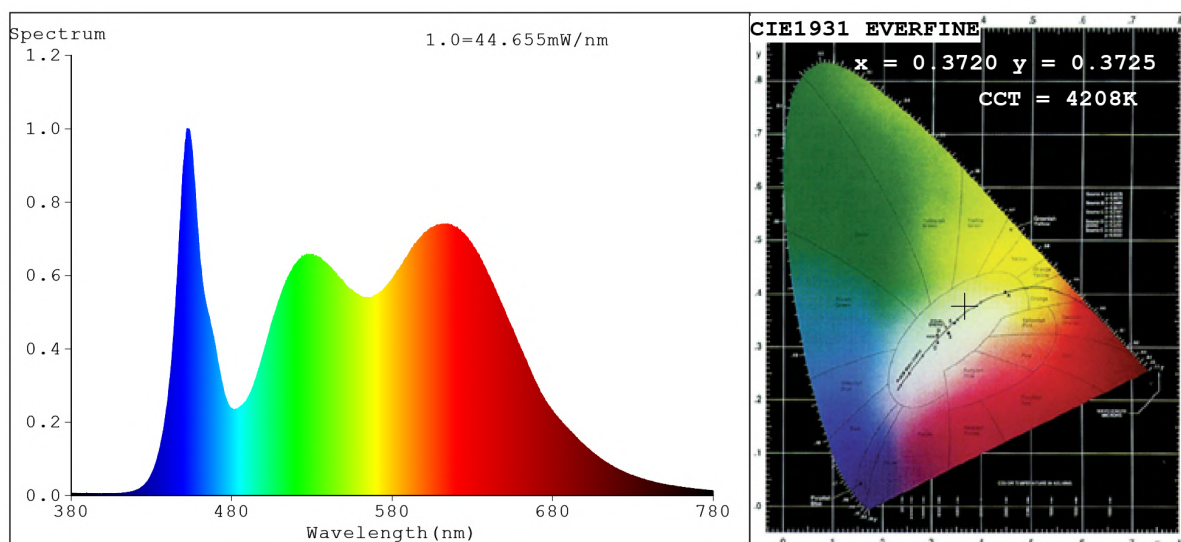


## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.3720$   $y=0.3725$   $u'=0.2212$   $v'=0.4984$   
 CCT=4208K (Duv=0.0006) Dominant WL:Ld =577.9nm Purity=23.4%  
 Ratio:R=20.1% G=76.0% B=4.0%; Peak WL:Lp=452.3nm FWHM=20.3nm  
 Render Index:Ra=95.8 CRI=92.0 TM30:Rf=92 Rg=101  
 R1 =99 R2 =98 R3 =94 R4 =98 R5 =97 R6 =95 R7 =96  
 R8 =90 R9 =72 R10=92 R11=93 R12=69 R13=100 R14=96 R15=95

### Photo Parameters:

Flux = 1934 lm Eff. : 94.28 lm/W Fe = 6.307 W Scotopic:3614.4 S/P:1.8684

### Electrical parameters:

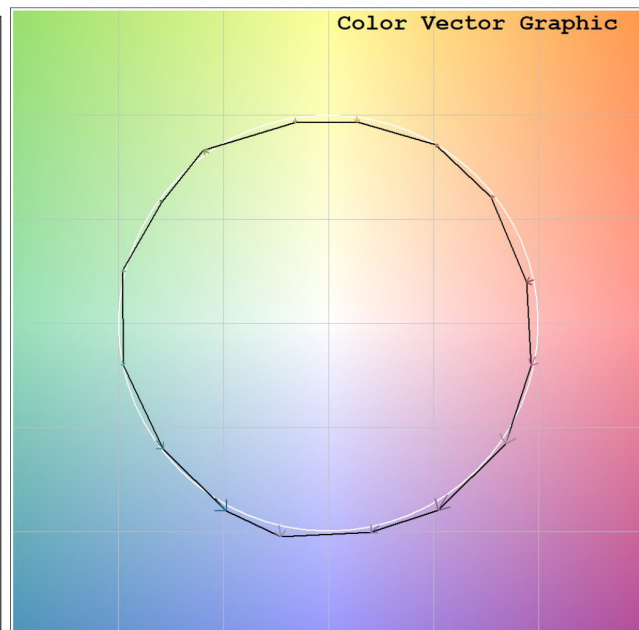
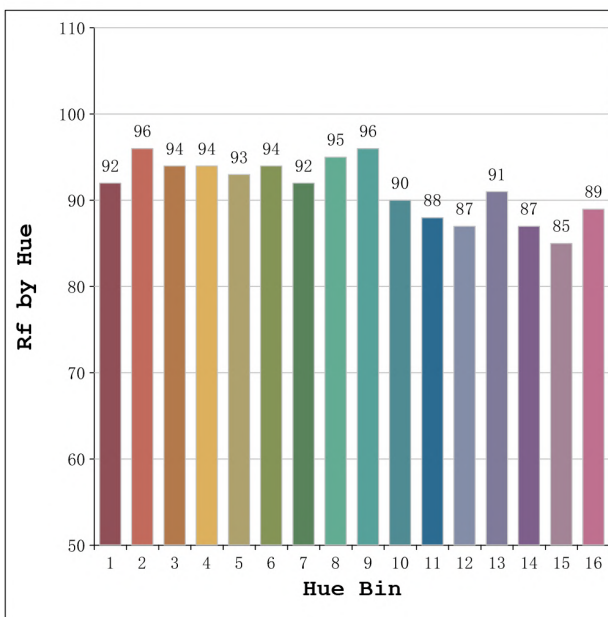
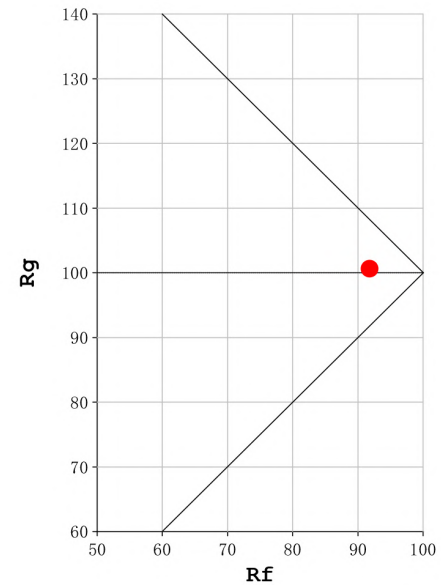
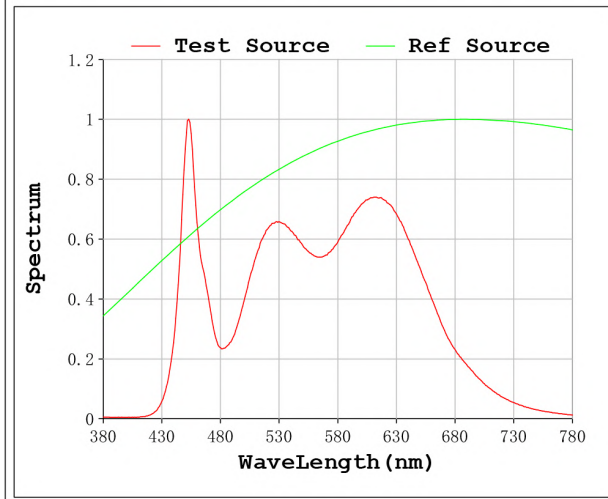
V = 23.998 V I = 0.8550 A P = 20.52 W PF = 1.000

Status: Integral T = 646 ms Ip = 42178 (64%)

Model:Ecoled Cob CTT (CW+WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

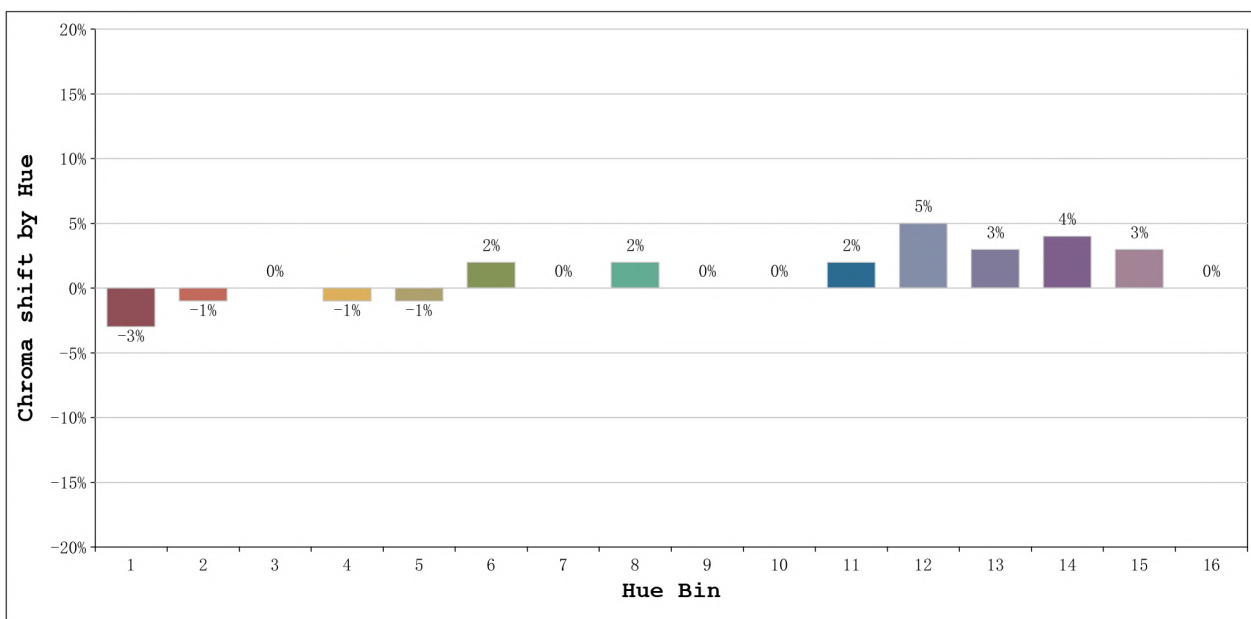
Number: 31.136  
 Date:2023-10-02 15:24:24  
 Humidity:57%  
 Remarks:100cm de tira flexible

**Rf: 92**      **CCT: 4208 K**      **u': 0.2212**  
**Rg: 101**      **Duv: 0.0006**      **v': 0.4984**



Model:Ecoled Cob CTT (CW+WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.136  
 Date:2023-10-02 15:24:24  
 Humidity:57%  
 Remarks:100cm de tira flexible

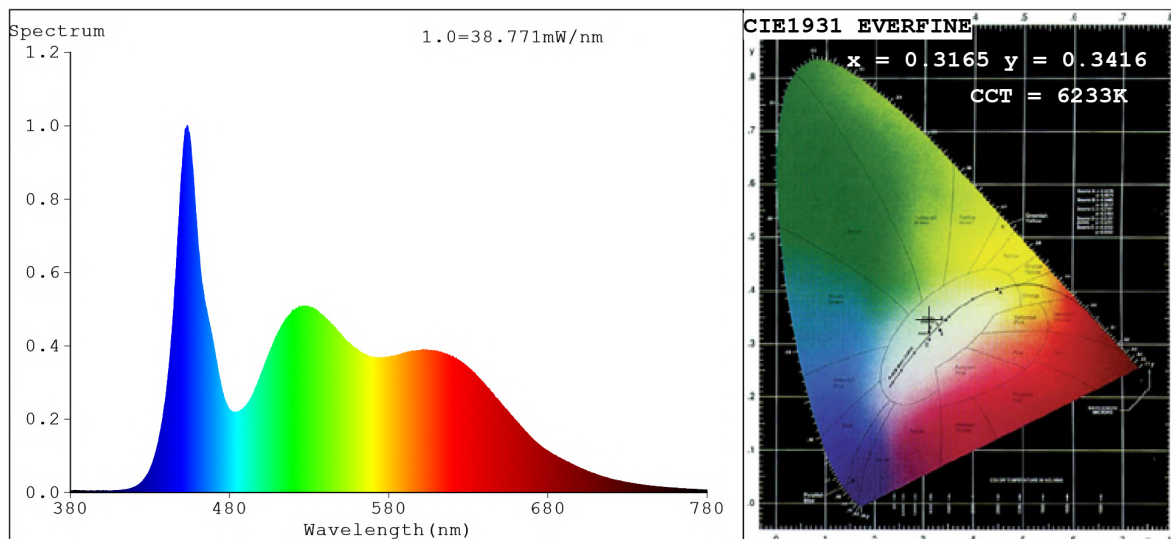


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0. 0° - 22. 5°	92	-3	0
2	22. 5° - 45. 0°	96	-1	1
3	45. 0° - 67. 5°	94	0	2
4	67. 5° - 90. 0°	94	-1	0
5	90. 0° - 112. 5°	93	-1	1
6	112. 5° - 135. 0°	94	2	2
7	135. 0° - 157. 5°	92	0	0
8	157. 5° - 180. 0°	95	2	0
9	180. 0° - 202. 5°	96	0	2
10	202. 5° - 225. 0°	90	0	5
11	225. 0° - 247. 5°	88	2	8
12	247. 5° - 270. 0°	87	5	2
13	270. 0° - 292. 5°	91	3	-4
14	292. 5° - 315. 0°	87	4	-6
15	315. 0° - 337. 5°	85	3	-7
16	337. 5° - 360. 0°	89	0	-3

Model:Ecoled Cob CTT (CW+WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.136  
 Date:2023-10-02 15:24:24  
 Humidity:57%  
 Remarks:100cm de tira flexible

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.3165$   $y=0.3416$   $u'=0.1958$   $v'=0.4754$   
 CCT=6233K (Duv=0.0076) Dominant WL:Ld =498.1nm Purity=5.2%  
 Ratio:R=15.2% G=79.3% B=5.5%; Peak WL:Lp=453.6nm FWHM=20.6nm  
 Render Index:Ra=92.1 CRI=87.2 TM30:Rf=90 Rg=98  
 R1 =93 R2 =93 R3 =92 R4 =94 R5 =91 R6 =90 R7 =96  
 R8 =87 R9 =60 R10=83 R11=92 R12=60 R13=94 R14=95 R15=90

### Photo Parameters:

Flux = 1139 lm Eff. : 105.45 lm/W Fe = 3.782 W Scotopic:2629.6 S/P:2.3081

### Electrical parameters:

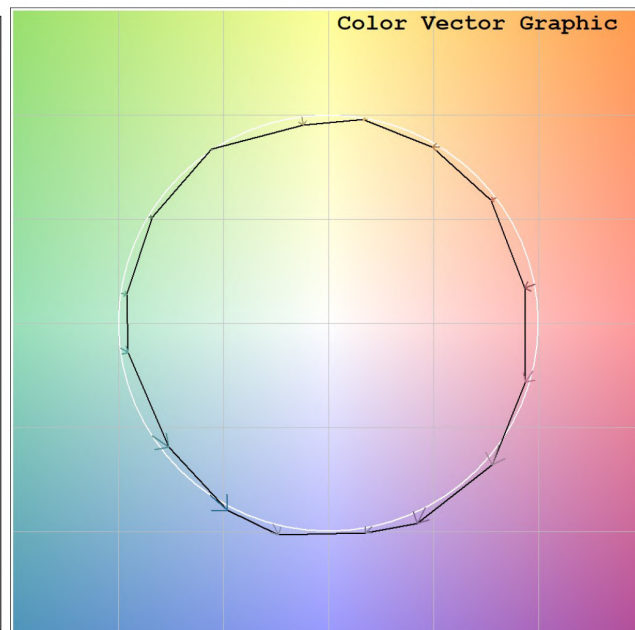
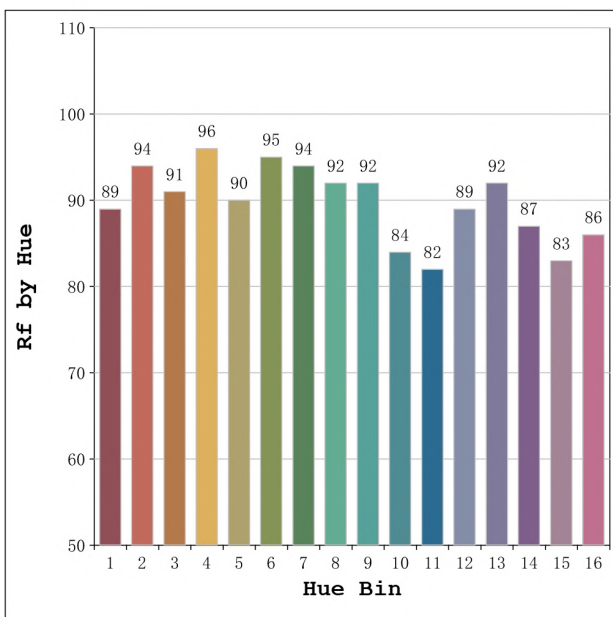
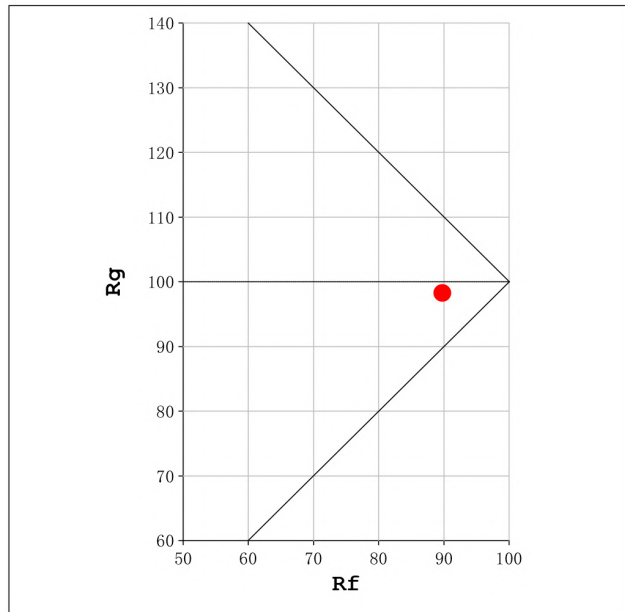
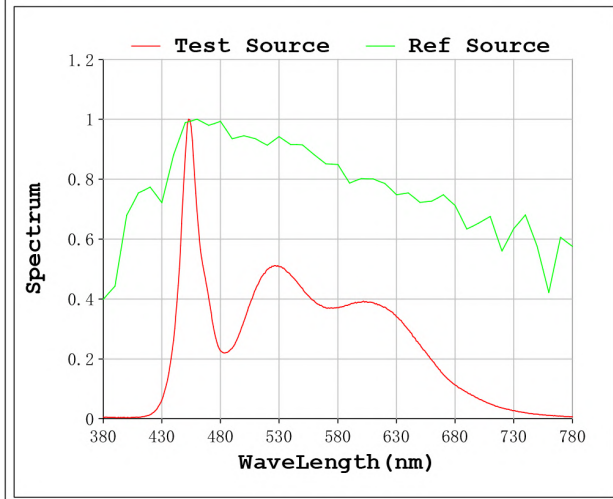
V = 23.998 V I = 0.4502 A P = 10.80 W PF = 1.000

Status: Integral T = 646 ms Ip = 33837 (52%)

Model:Ecoled Cob CTT (CW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.136  
 Date:2023-10-02 15:26:55  
 Humidity:57%  
 Remarks:100cm de tira flexible

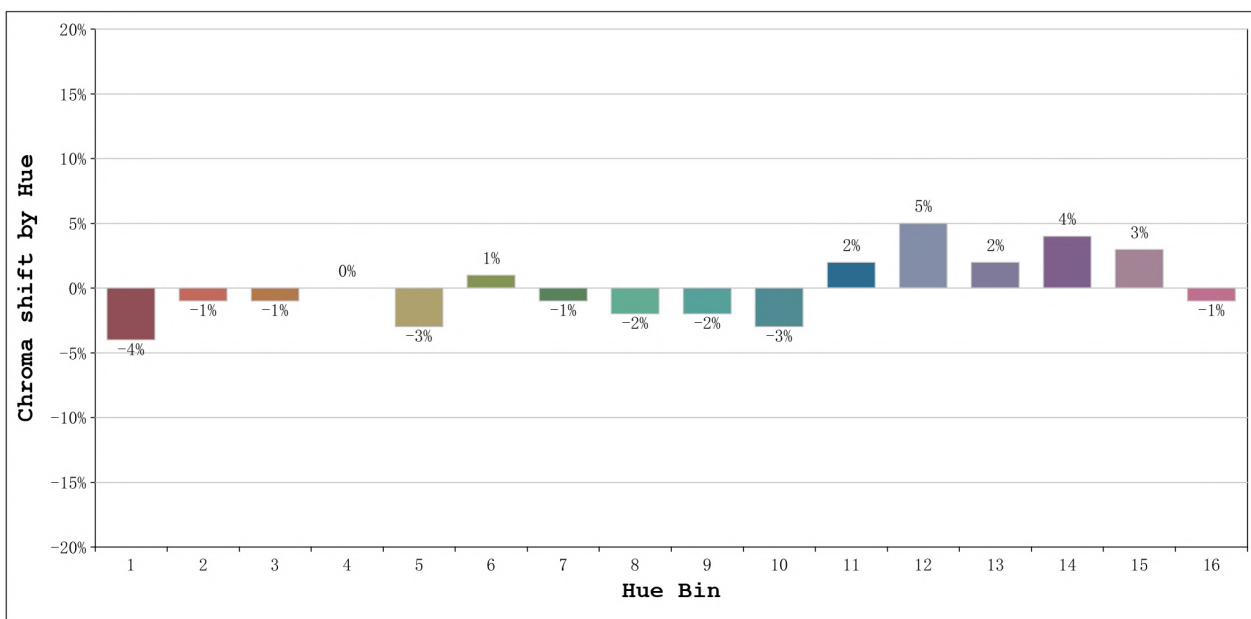
**Rf: 90**      **CCT: 6233 K**      **u': 0.1958**  
**Rg: 98**      **Duv: 0.0076**      **v': 0.4754**



Model:Ecoled Cob CTT (CW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.136  
 Date:2023-10-02 15:26:55  
 Humidity:57%  
 Remarks:100cm de tira flexible



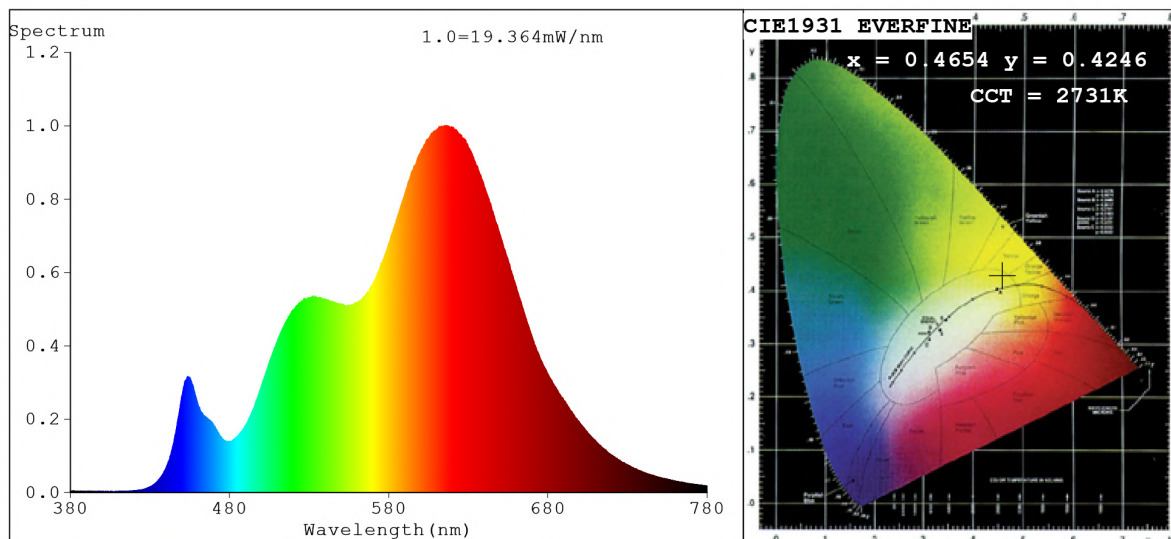


			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	89	-4	0
2	22.5° - 45.0°	94	-1	0
3	45.0° - 67.5°	91	-1	3
4	67.5° - 90.0°	96	0	2
5	90.0° - 112.5°	90	-3	0
6	112.5° - 135.0°	95	1	0
7	135.0° - 157.5°	94	-1	0
8	157.5° - 180.0°	92	-2	0
9	180.0° - 202.5°	92	-2	3
10	202.5° - 225.0°	84	-3	9
11	225.0° - 247.5°	82	2	11
12	247.5° - 270.0°	89	5	3
13	270.0° - 292.5°	92	2	-3
14	292.5° - 315.0°	87	4	-6
15	315.0° - 337.5°	83	3	-8
16	337.5° - 360.0°	86	-1	-5

Model:Ecoled Cob CTT (CW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.136  
 Date:2023-10-02 15:26:55  
 Humidity:57%  
 Remarks:100cm de tira flexible

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4654$   $y=0.4246$   $u'=0.2598$   $v'=0.5334$   
 CCT=2731K (Duv=0.0046) Dominant WL:Ld =582.7nm Purity=67.1%  
 Ratio:R=26.6% G=71.3% B=2.1%; Peak WL:Lp=616.3nm FWHM=143.7nm  
 Render Index:Ra=93.6 CRI=90.0 TM30:Rf=89 Rg=95  
 R1 =95 R2 =97 R3 =99 R4 =98 R5 =95 R6 =98 R7 =91  
 R8 =77 R9 =46 R10=92 R11=96 R12=83 R13=96 R14=98 R15=86

### Photo Parameters:

Flux = 856.3 lm Eff. : 81.08 lm/W Fe = 2.726 W Scotopic:1101.6 S/P:1.2865

### Electrical parameters:

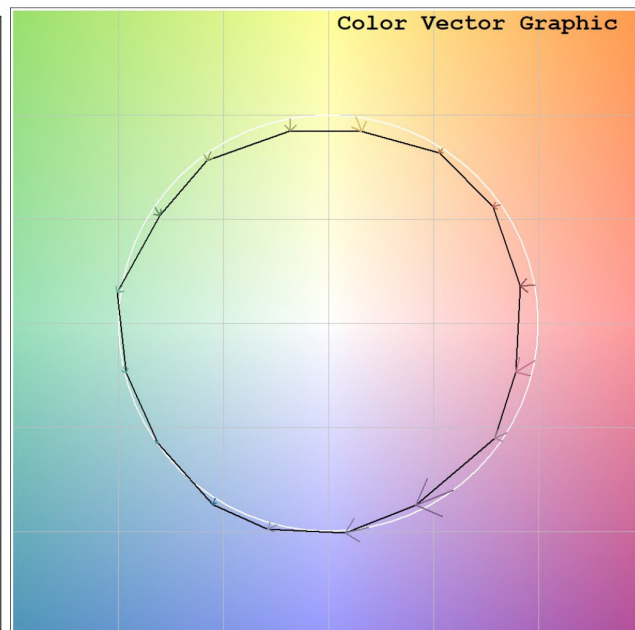
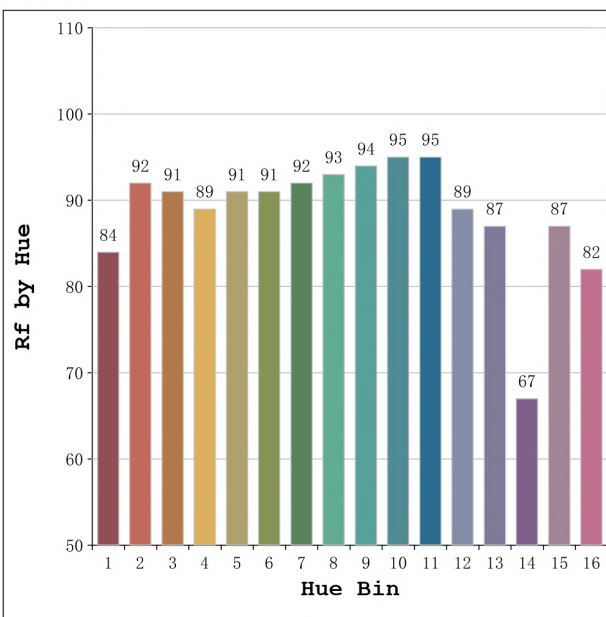
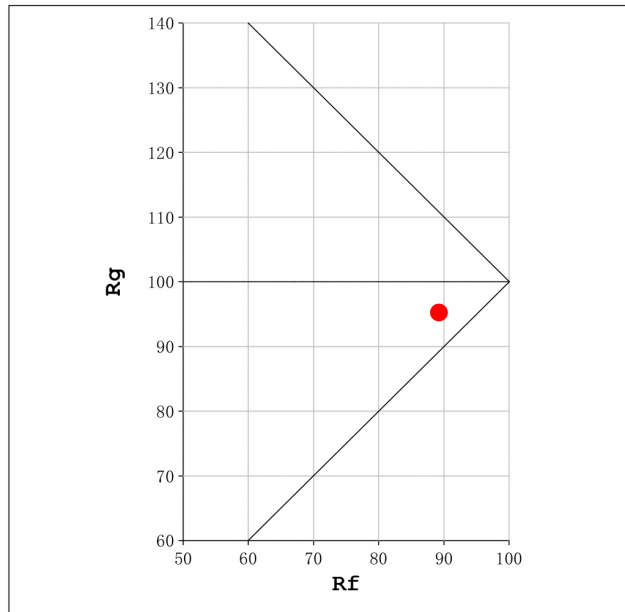
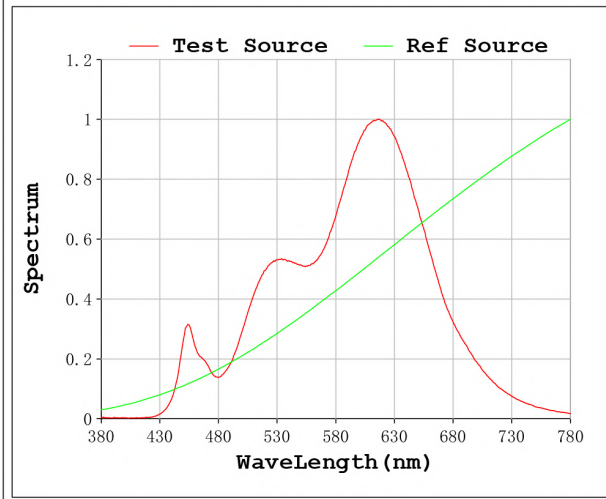
V = 23.998 V I = 0.4401 A P = 10.56 W PF = 1.000

Status: Integral T = 1394 ms Ip = 52272 (80%)

Model:Ecoled Cob CTT (WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.137  
 Date:2023-10-02 15:28:17  
 Humidity:57%  
 Remarks:100cm de tira flexible

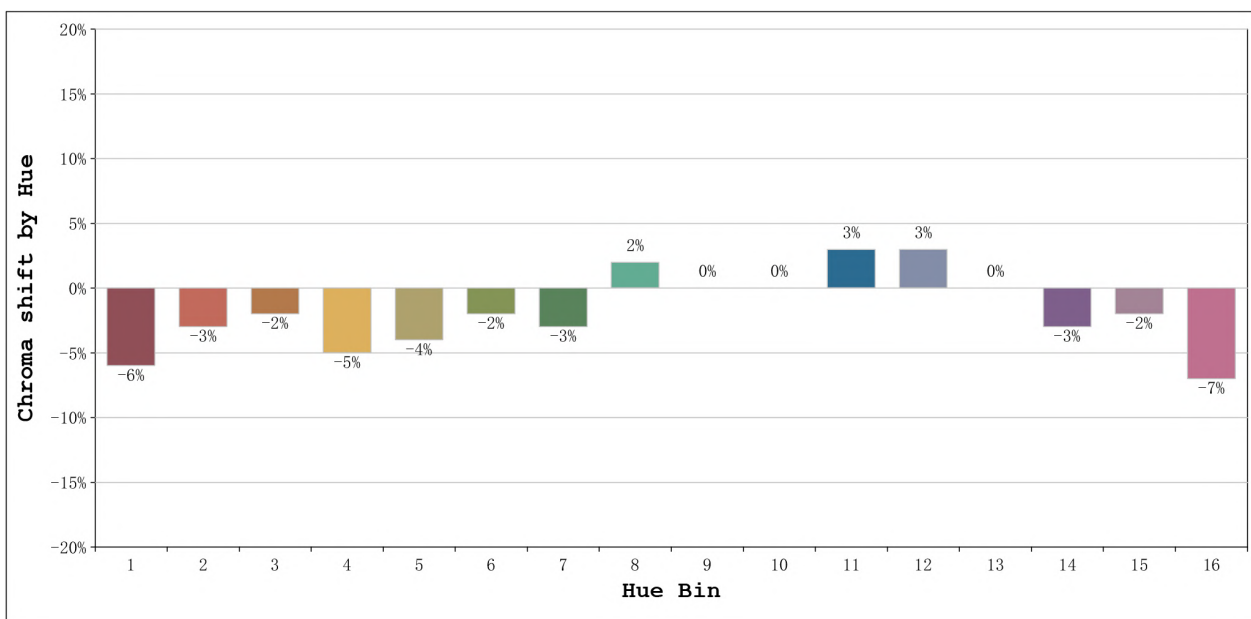
**Rf: 89**      **CCT: 2731 K**      **u': 0.2598**  
**Rg: 95**      **Duv: 0.0046**      **v': 0.5334**



Model:Ecoled Cob CTT (WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.137  
 Date:2023-10-02 15:28:17  
 Humidity:57%  
 Remarks:100cm de tira flexible





			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	84	-6	1
2	22.5° - 45.0°	92	-3	1
3	45.0° - 67.5°	91	-2	0
4	67.5° - 90.0°	89	-5	-3
5	90.0° - 112.5°	91	-4	1
6	112.5° - 135.0°	91	-2	4
7	135.0° - 157.5°	92	-3	2
8	157.5° - 180.0°	93	2	4
9	180.0° - 202.5°	94	0	3
10	202.5° - 225.0°	95	0	2
11	225.0° - 247.5°	95	3	1
12	247.5° - 270.0°	89	3	-3
13	270.0° - 292.5°	87	0	-11
14	292.5° - 315.0°	67	-3	-18
15	315.0° - 337.5°	87	-2	-4
16	337.5° - 360.0°	82	-7	-6

Model:Ecoled Cob CTT (WW)  
 Tester:Sergio Carneros  
 Temperature:27Deg  
 Manufacturer:Luz Negra S.L.

Number: 31.137  
 Date:2023-10-02 15:28:17  
 Humidity:57%  
 Remarks:100cm de tira flexible