



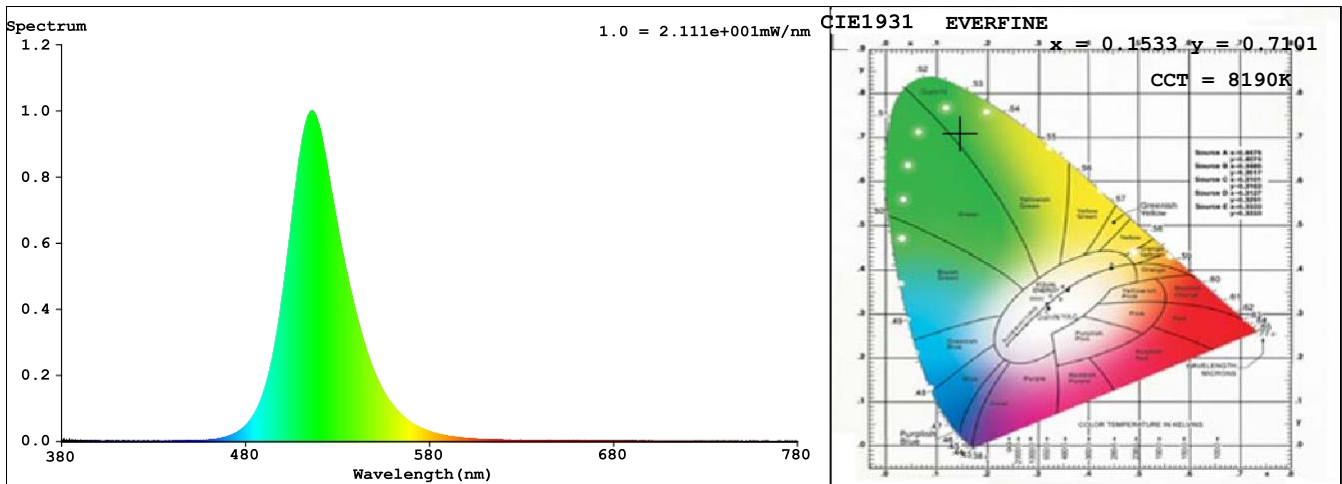
## Spectrum Test Report

Sample : E24M230RGB Date : 2019-04-17 17:01:13  
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP65 1M:  
 Sample No. : LD19040302#16 Instrument : HaasSuite(EVERFINE)  
 Manufacturer : Test by : Velleman  
 Assessor :  
 Remark :

### Test Condition

Temperature : 25.3Deg RH : 65.0%  
 WL Range : 380nm-780nm IP : 52733 (80%)  
 Test Mode : Fast Test T : 195 ms  
 Sensitivity : High

### Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.1533$   $y = 0.7101$  /  $u' = 0.0547$   $v' = 0.5699$  ( $duv=1.60e-01$ )

CCT= 8190K Prcp WL:  $L_d=522.6\text{nm}$  Purity=75.5%

Peak WL:  $L_p=516\text{nm}$  FWHM:  $=34.0\text{nm}$  Ratio:R=0.3% G=96.4% B=3.3%

Render Index:  $R_a = 0.0$  CRI = 2.9 AvgR = 2.7 TM30:Rf=0 Rg=8

R1 =0 R2 =0 R3 =0 R4 =0 R5 =0 R6 =0 R7 =0

R8 =0 R9 =0 R10=0 R11=0 R12=0 R13=0 R14=40 R15=0

LEVEL:OUT WHITE:OUT

### Photometric & Radiometric Parameters

Flux = 383.05 lm Eff. : 74.14 lm/W  $F_e = 841.65$  mW

Flux of emitted photons( $\mu\text{mol/s}$ ):3.6675 Flu. and blue light ratio:91.19 Fluorescent eff.:161.2

### Electrical parameters

V = 24.00 V I = 0.2153 A P = 5.167 W PF = 1.000 F=0.00 Hz



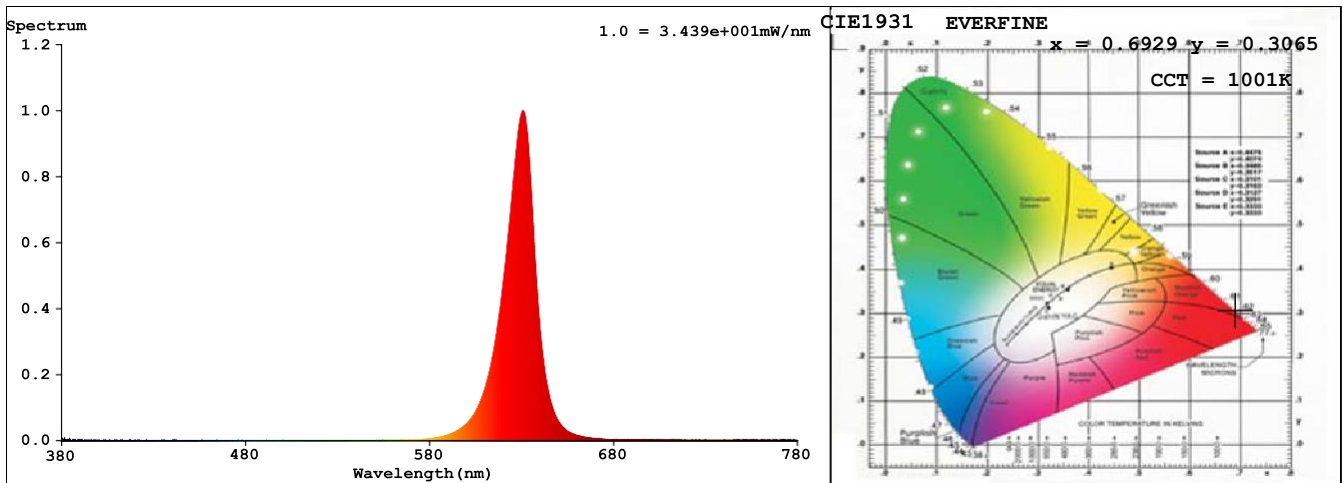
## Spectrum Test Report

Sample	: E24M230RGB	Date	: 2019-04-17 17:01:41
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP65 1M:		
Sample No.	: LD19040302#16	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

### Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 53475 (82%)
Test Mode	: Fast Test	T	: 119 ms
		Sensitivity	: High

### Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.6929$   $y = 0.3065$  /  $u' = 0.5237$   $v' = 0.5212$  ( $duv = -7.61e-02$ )

CCT= 1001K Prcp WL:  $L_d = 620.9\text{nm}$  Purity=99.9%

Peak WL:  $L_p = 631\text{nm}$  FWHM: =17.2nm Ratio:R=95.2% G=4.8% B=0.0%

Render Index:  $R_a = 27.4$  CRI = 33.0 AvgR = 30.8 TM30:Rf=11 Rg=-1

R1 =8 R2 =78 R3 =32 R4 =0 R5 =3 R6 =90 R7 =8

R8 =0 R9 =0 R10=72 R11=0 R12=79 R13=31 R14=61 R15=0

LEVEL:OUT WHITE:OUT

### Photometric & Radiometric Parameters

Flux = 147.94 lm Eff. : 29.88 lm/W Fe = 723.10 mW

Flux of emitted photons( $\mu\text{mol/s}$ ):3.7889 Fluo. and blue light ratio:2760 Fluorescent eff.:146.0

### Electrical parameters

V = 24.00 V I = 0.2063 A P = 4.951 W PF = 1.000 F=0.00 Hz



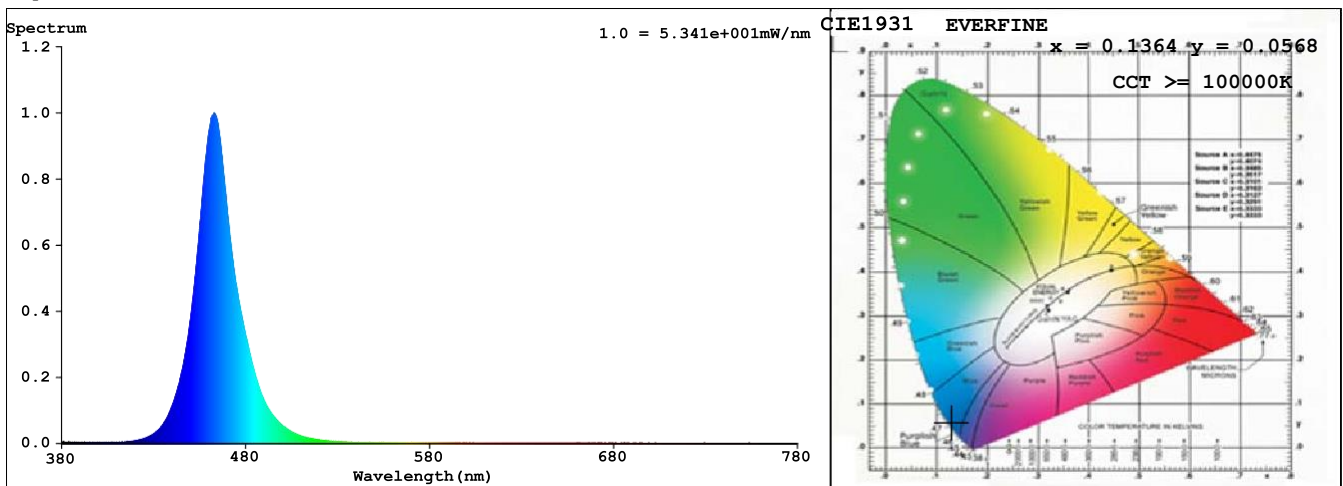
## Spectrum Test Report

Sample : E24M230RGB Date : 2019-04-17 17:02:40  
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP65 1M  
 Sample No. : LD19040302#16 Instrument : HaasSuite(EVERFINE)  
 Manufacturer : Test by : Velleman  
 Assessor :  
 Remark :

### Test Condition

Temperature : 25.3Deg RH : 65.0%  
 WL Range : 380nm-780nm IP : 53288 (81%)  
 Test Mode : Fast Test T : 119 ms  
 Sensitivity : High

### Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.1364$   $y = 0.0568$  /  $u' = 0.1600$   $v' = 0.1500$  ( $duv=1.67e-01$ )

$CCT \geq 100000K$  Prcp WL:  $L_d=467.6nm$  Purity= $96.9\%$

Peak WL:  $L_p=463nm$  FWHM:  $=21.7nm$  Ratio: $R=0.4\%$   $G=15.5\%$   $B=84.1\%$

Render Index:  $R_a = 0.3$   $CRI = 0.2$   $AvgR = 0.2$   $TM30:R_f=0$   $R_g=-103$

$R_1 = 0$   $R_2 = 0$   $R_3 = 0$   $R_4 = 0$   $R_5 = 2$   $R_6 = 0$   $R_7 = 0$

$R_8 = 0$   $R_9 = 0$   $R_{10} = 0$   $R_{11} = 0$   $R_{12} = 0$   $R_{13} = 0$   $R_{14} = 0$   $R_{15} = 1$

LEVEL:OUT WHITE:OUT

### Photometric & Radiometric Parameters

Flux =  $94.976$  lm Eff. :  $18.68$  lm/W Fe =  $1.4581$  W

Flux of emitted photons( $\mu mol/s$ ): $5.6691$  Flu. and blue light ratio: $0.1622$  Fluorescent eff.: $40.07$

### Electrical parameters

$V = 24.00$  V  $I = 0.2119$  A  $P = 5.085$  W PF =  $1.000$  F= $0.00$  Hz



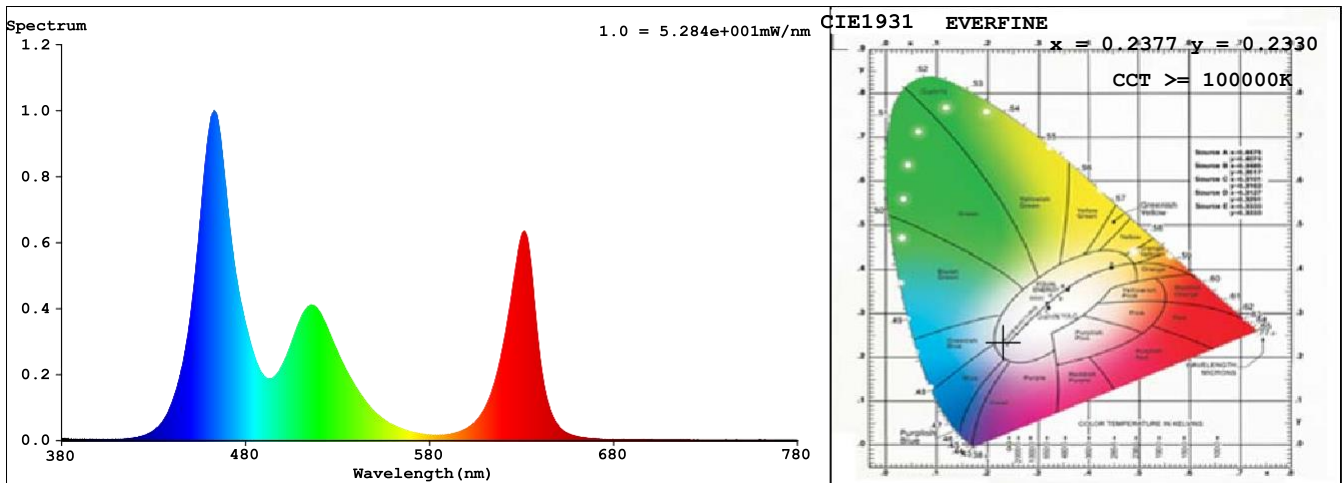
## Spectrum Test Report

Sample : E24M230RGB Date : 2019-04-17 17:02:58  
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP65 1M  
 Sample No. : LD19040302#16 Instrument : HaasSuite(EVERFINE)  
 Manufacturer : Test by : Velleman  
 Assessor :  
 Remark :

### Test Condition

Temperature : 25.3Deg RH : 65.0%  
 WL Range : 380nm-780nm IP : 52681 (80%)  
 Test Mode : Fast Test T : 119 ms  
 Sensitivity : High

### Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.2377$   $y = 0.2330$  /  $u' = 0.1787$   $v' = 0.3941$  ( $duv=3.73e-03$ )

CCT $\geq$ 100000K Prcp WL: Ld=476.0nm Purity=42.1%

Peak WL: Lp=463nm FWHM: =22.1nm Ratio:R=22.2% G=63.0% B=14.8%

Render Index: Ra = 42.4 CRI = 38.3 AvgR = 35.9 TM30:Rf=40 Rg=114

R1 =24 R2 =49 R3 =67 R4 =47 R5 =47 R6 =49 R7 =56

R8 =0 R9 =0 R10=0 R11=38 R12=56 R13=26 R14=77 R15=3

LEVEL:OUT WHITE:OUT

### Photometric & Radiometric Parameters

Flux = 621.77 lm Eff. : 40.87 lm/W Fe = 3.0020 W

Flux of emitted photons( $\mu\text{mol/s}$ ):13.037 Fluo. and blue light ratio:0.3174 Fluorescent eff.:47.54

### Electrical parameters

V = 24.00 V I = 0.6340 A P = 15.21 W PF = 1.000 F=0.00 Hz