



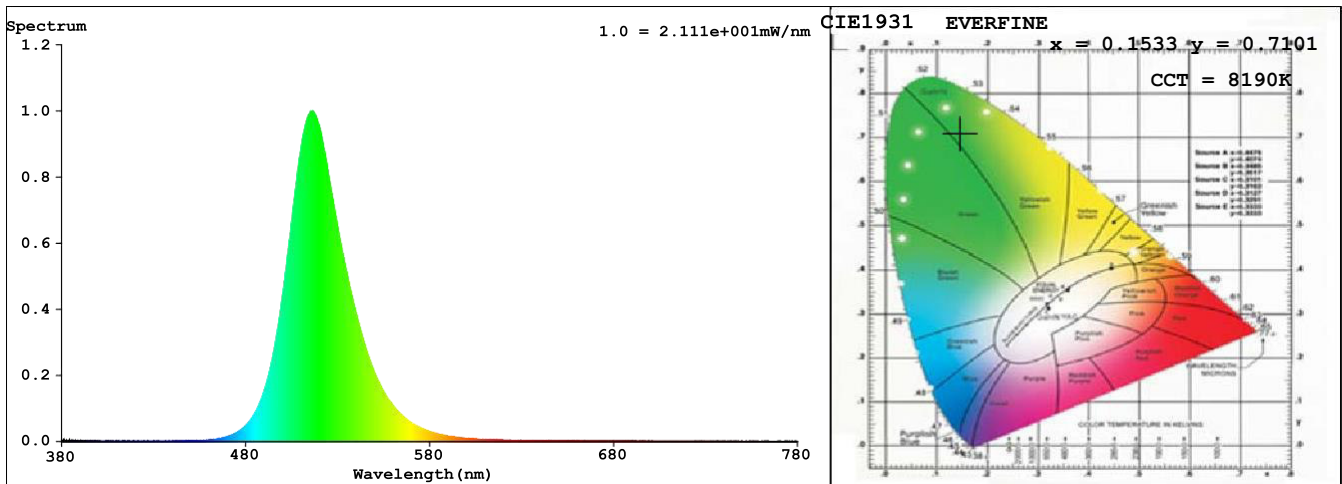
Spectrum Test Report

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 Prpc WL: $L_d=522.6nm$ Purity=75.5%

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

Render Index: $R_a = 0.0$ $CRI = 2.9$ $AvgR = 2.7$ $TM30:R_f=0$ $R_g=8$

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

$R_8=0$ $R_9=0$ $R_{10}=0$ $R_{11}=0$ $R_{12}=0$ $R_{13}=0$ $R_{14}=40$ $R_{15}=0$

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($\mu mol/s$): 3.6675 Fluo. 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



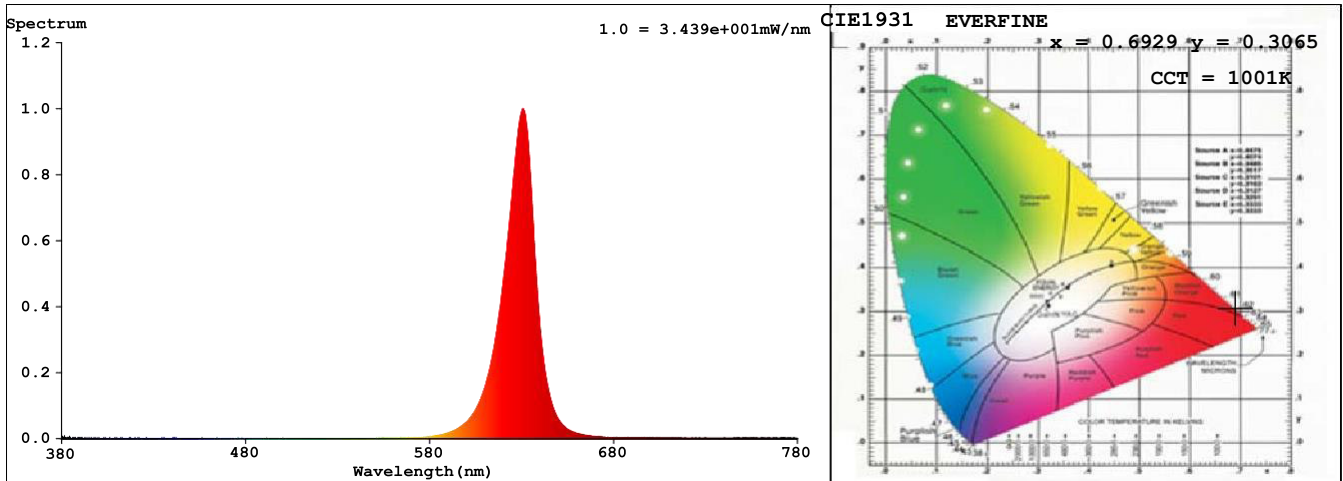
Spectrum Test Report

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: $= 17.2\text{nm}$ Ratio: R=95.2% G=4.8% B=0.0%

Render Index: $R_a = 27.4$ CRI = 33.0 AvgR = 30.8 TM30: $R_f = 11$ $R_g = -1$

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 $F_e = 723.10$ 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



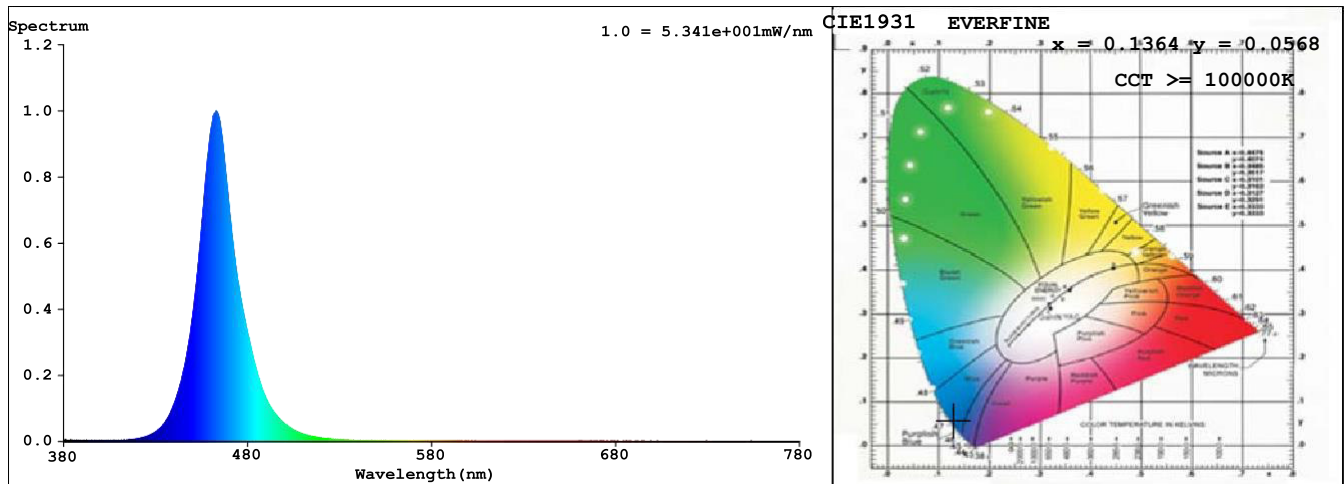
Spectrum Test Report

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>=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:Rf=0 Rg=-103

R1 =0 R2 =0 R3 =0 R4 =0 R5 =2 R6 =0 R7 =0

R8 =0 R9 =0 R10=0 R11=0 R12=0 R13=0 R14=0 R15=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 Fluo. 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



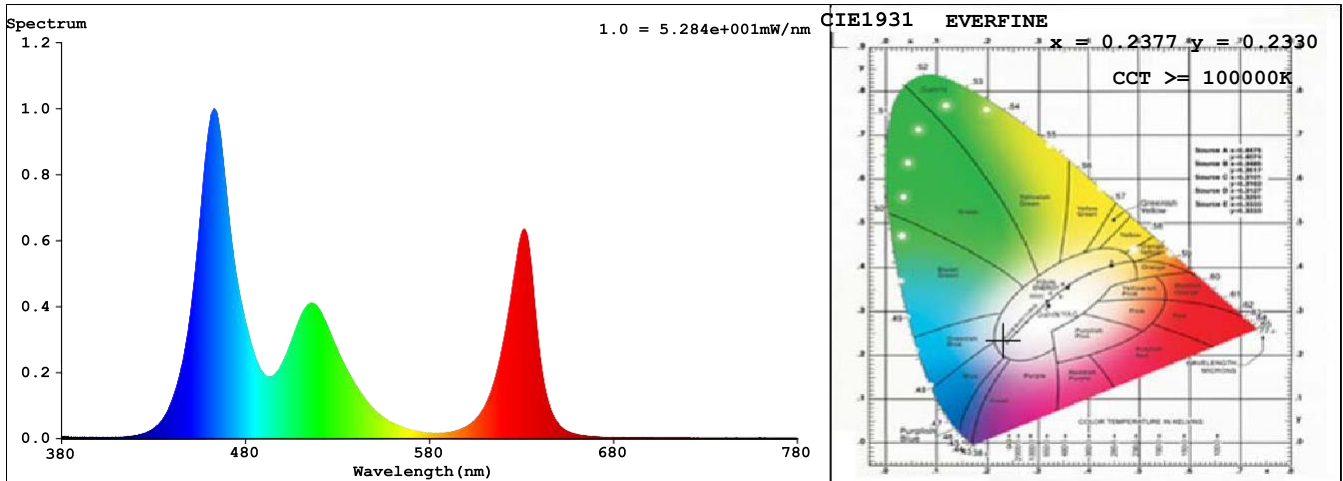
Spectrum Test Report

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 ≥ 100000K Prcp WL: $L_d=476.0nm$ Purity=42.1%

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

Render Index: $R_a = 42.4$ CRI = 38.3 AvgR = 35.9 TM30: $R_f=40$ $R_g=114$

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 $F_e = 3.0020 W$

Flux of emitted photons($\mu mol/s$):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