



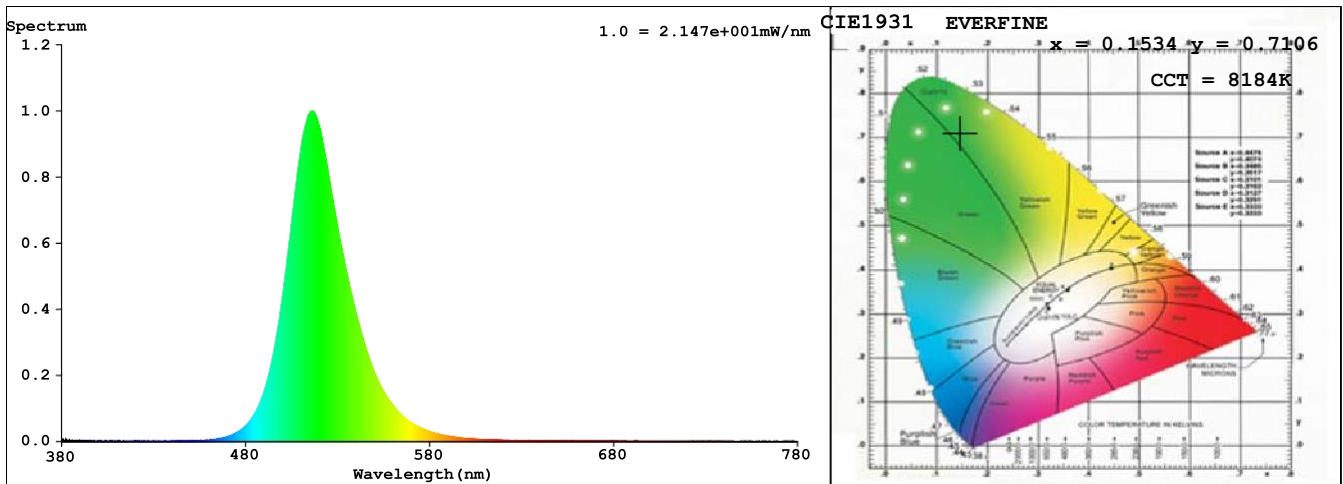
Spectrum Test Report

Sample	: E24W230RGB	Date	: 2019-04-17 17:06:52
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP68 1M		
Sample No.	: LD19040302#25	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 49552 (76%)
Test Mode	: Fast Test	T	: 180 ms
		Sensitivity	: High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1534$ $y = 0.7106$ / $u' = 0.0547$ $v' = 0.5700$ ($duv=1.60e-01$)

CCT= 8184K Prcp WL: $L_d=522.7nm$ Purity=75.6%

Peak WL: $L_p=517nm$ FWHM: $=33.8nm$ Ratio: $R=0.3\%$ $G=96.5\%$ $B=3.2\%$

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 = 389.08 lm Eff. : 75.52 lm/W $F_e = 854.01$ mW

Flux of emitted photons($\mu mol/s$): 3.7212 Fluo. and blue light ratio: 90.90 Fluorescent eff.: 164.0

Electrical parameters

$V = 24.00$ V $I = 0.2147$ A $P = 5.152$ W $PF = 1.000$ $F=0.00$ Hz



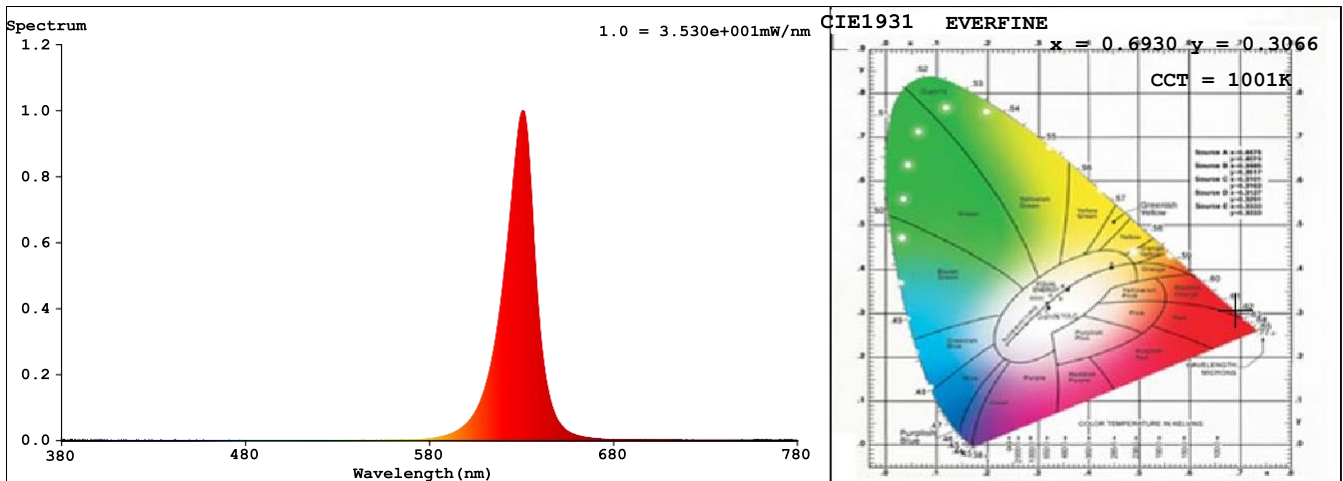
Spectrum Test Report

Sample	: E24W230RGB	Date	: 2019-04-17 17:07:56
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP68 1M		
Sample No.	: LD19040302#25	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 53043 (81%)
Test Mode	: Fast Test	T	: 115 ms
		Sensitivity	: High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.6930$ $y = 0.3066$ / $u' = 0.5236$ $v' = 0.5213$ ($duv = -7.60e-02$)

CCT= 1001K Prcp WL: $L_d = 620.9nm$ Purity=99.9%

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

Render Index: $R_a = 27.4$ CRI = 32.9 AvgR = 30.7 TM30: $R_f = 10$ $R_g = -1$

R1 =8 R2 =78 R3 =32 R4 =0 R5 =3 R6 =89 R7 =8

R8 =0 R9 =0 R10=72 R11=0 R12=79 R13=30 R14=61 R15=0

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 152.53 lm Eff. : 30.73 lm/W $F_e = 743.72$ mW

Flux of emitted photons($\mu mol/s$): 3.8971 Fluo. and blue light ratio: 29848 Fluorescent eff.: 149.9

Electrical parameters

V = 24.00 V I = 0.2068 A P = 4.963 W PF = 1.000 F=0.00 Hz



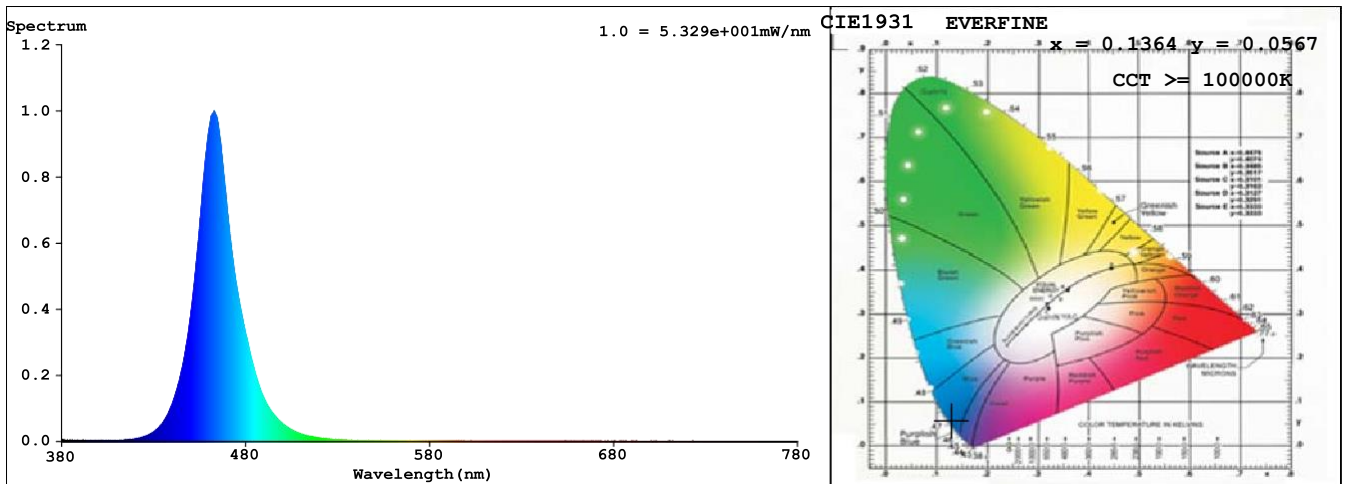
Spectrum Test Report

Sample	: E24W230RGB	Date	: 2019-04-17 17:08:09
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP68 1M		
Sample No.	: LD19040302#25	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 51357 (78%)
Test Mode	: Fast Test	T	: 115 ms
		Sensitivity	: High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1364$ $y = 0.0567$ / $u' = 0.1601$ $v' = 0.1498$ ($duv=1.67e-01$)

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 = 0.1 AvgR = 0.2 TM30: $R_f=0$ $R_g=-102$

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 = 94.566 lm Eff. : 18.76 lm/W Fe = 1.4529 W

Flux of emitted photons($\mu mol/s$): 5.6487 Fluo. and blue light ratio: 0.1620 Fluorescent eff.: 40.22

Electrical parameters

V = 24.00 V I = 0.2101 A P = 5.042 W PF = 1.000 F=0.00 Hz



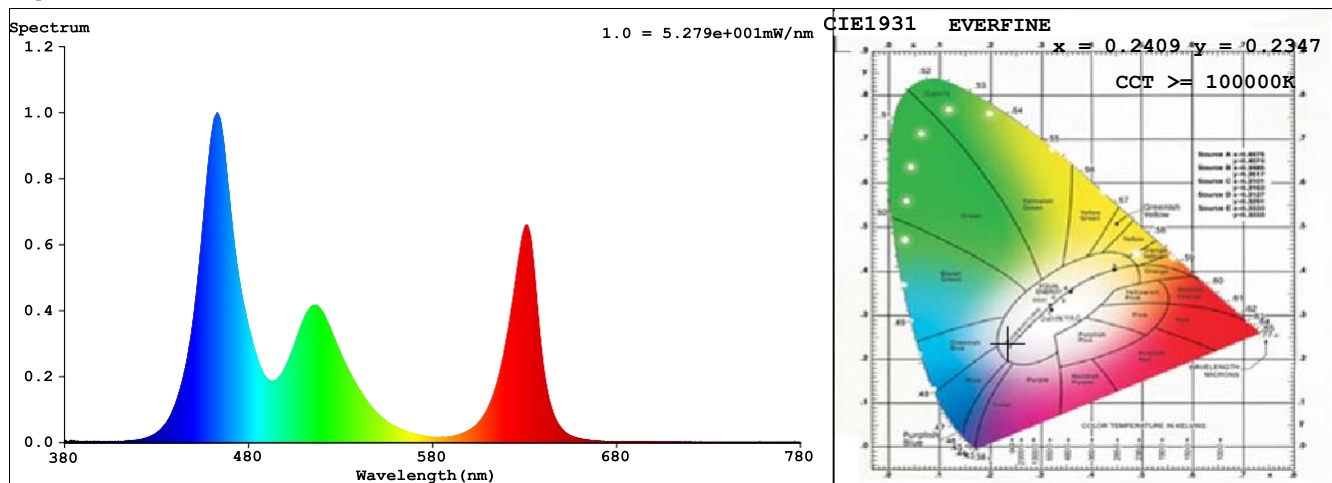
Spectrum Test Report

Sample	: E24W230RGB	Date	: 2019-04-17 17:08:23
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP68 1M		
Sample No.	: LD19040302#25	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 52319 (80%)
Test Mode	: Fast Test	T	: 115 ms
		Sensitivity	: High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.2409$ $y = 0.2347$ / $u' = 0.1806$ $v' = 0.3960$ ($duv=1.96e-03$)

CCT>=100000K Prcp WL: $L_d=475.7nm$ Purity=40.9%

Peak WL: $L_p=463nm$ FWHM: $=22.1nm$ Ratio: R=22.7% G=62.7% B=14.5%

Render Index: $R_a = 41.0$ CRI = 36.8 AvgR = 34.4 TM30: $R_f=39$ $R_g=114$

R1 =21 R2 =48 R3 =67 R4 =43 R5 =44 R6 =49 R7 =55

R8 =0 R9 =0 R10=0 R11=33 R12=55 R13=24 R14=77 R15=0

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 631.77 lm Eff. : 41.72 lm/W $Fe = 3.0294 W$

Flux of emitted photons($\mu mol/s$):13.175 Fluo. and blue light ratio:0.3267 Fluorescent eff.:49.27

Electrical parameters

V = 24.00 V I = 0.6310 A P = 15.14 W PF = 1.000 F=0.00 Hz