



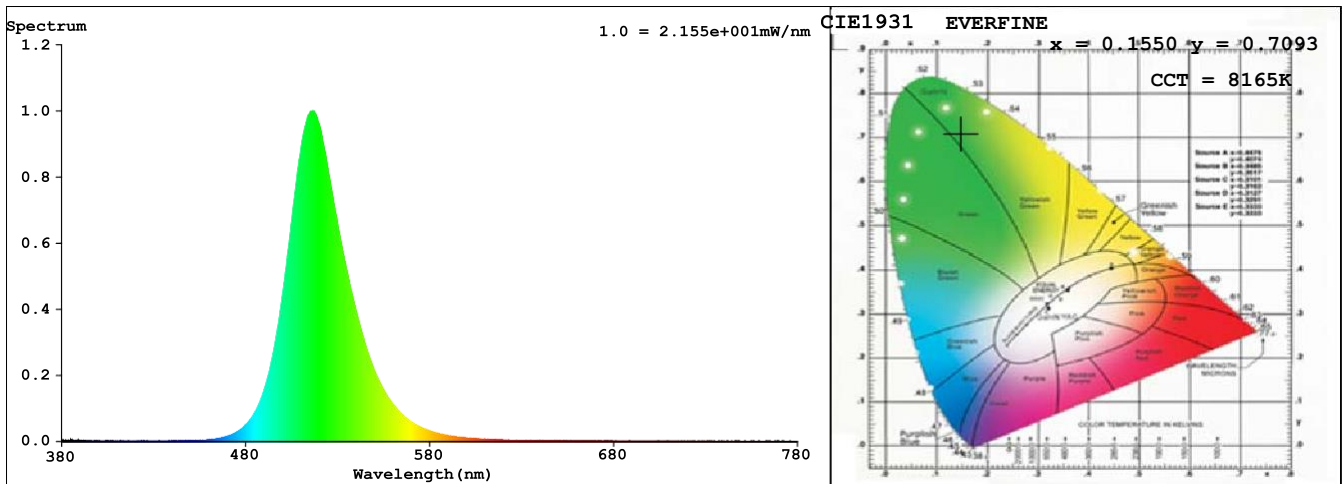
Spectrum Test Report

Sample : E24N230RGB Date : 2019-04-17 16:58:47
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP20 1M
 Sample No. : LD19040302#11 Instrument : HaasSuite(EVERFINE)
 Manufacturer : Test by : Velleman
 Assessor :
 Remark :

Test Condition

Temperature : 25.3Deg RH : 65.0%
 WL Range : 380nm-780nm IP : 52551 (80%)
 Test Mode : Fast Test T : 190 ms
 Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1550$ $y = 0.7093$ / $u' = 0.0553$ $v' = 0.5699$ ($duv=1.60e-01$)

CCT= 8165K Prcp WL: $L_d=522.9\text{nm}$ Purity=75.4%

Peak WL: $L_p=517\text{nm}$ FWHM: $=34.1\text{nm}$ Ratio:R=0.3% G=96.4% B=3.2%

Render Index: $R_a = 0.0$ CRI = 2.9 AvgR = 2.7 TM30:Rf=1 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=41 R15=0

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 394.67 lm Eff. : 75.23 lm/W $F_e = 864.71$ mW

Flux of emitted photons($\mu\text{mol/s}$):3.7687 Flu. and blue light ratio:89.78 Fluorescent eff.:163.0

Electrical parameters

V = 24.00 V I = 0.2186 A P = 5.246 W PF = 1.000 F=0.00 Hz



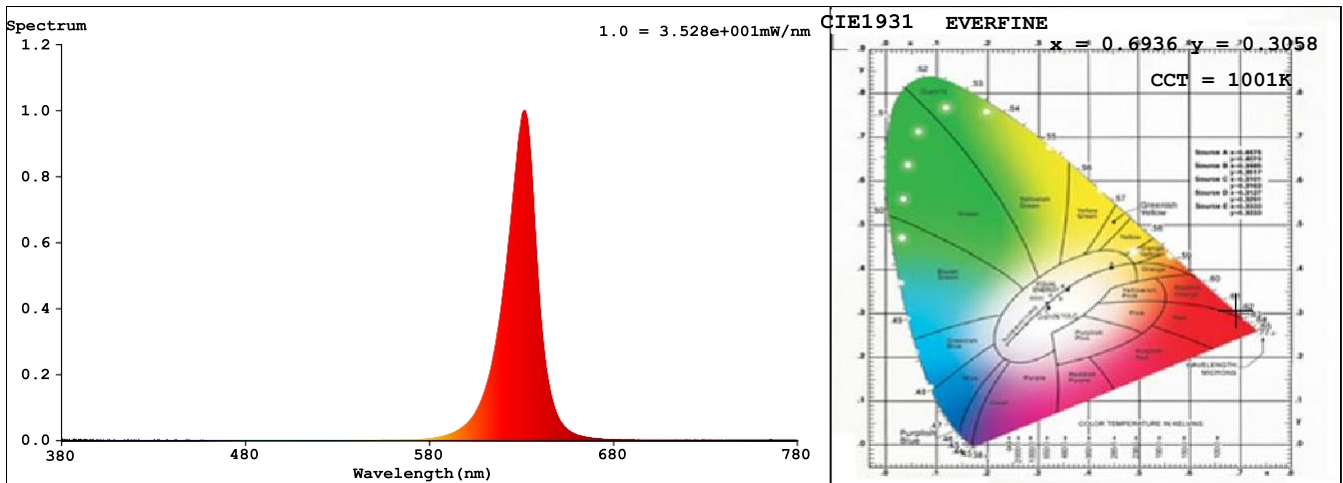
Spectrum Test Report

Sample	: E24N230RGB	Date	: 2019-04-17 16:59:40
Specification	: 5050 60LED 10MM 24V 14.4W RGB IP20 1M		
Sample No.	: LD19040302#11	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Velleman
Assessor	:		
Remark	:		

Test Condition

Temperature	: 25.3Deg	RH	: 65.0%
WL Range	: 380nm-780nm	IP	: 52974 (81%)
Test Mode	: Fast Test	T	: 115 ms
		Sensitivity	: High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.6936$ $y = 0.3058$ / $u' = 0.5253$ $v' = 0.5210$ ($duv = -7.77e-02$)

CCT= 1001K Prcp WL: $L_d = 621.3\text{nm}$ Purity=99.8%

Peak WL: $L_p = 632\text{nm}$ FWHM: =17.7nm Ratio:R=95.2% G=4.8% B=0.0%

Render Index: $R_a = 27.8$ CRI = 33.2 AvgR = 31.0 TM30:Rf=14 Rg=-1

R1 =9 R2 =78 R3 =33 R4 =0 R5 =4 R6 =89 R7 =9

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

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 151.71 lm Eff. : 30.36 lm/W Fe = 757.15 mW

Flux of emitted photons($\mu\text{mol/s}$):3.9709 Fluo. and blue light ratio:5214 Fluorescent eff.:151.5

Electrical parameters

V = 24.00 V I = 0.2082 A P = 4.996 W PF = 1.000 F=0.00 Hz



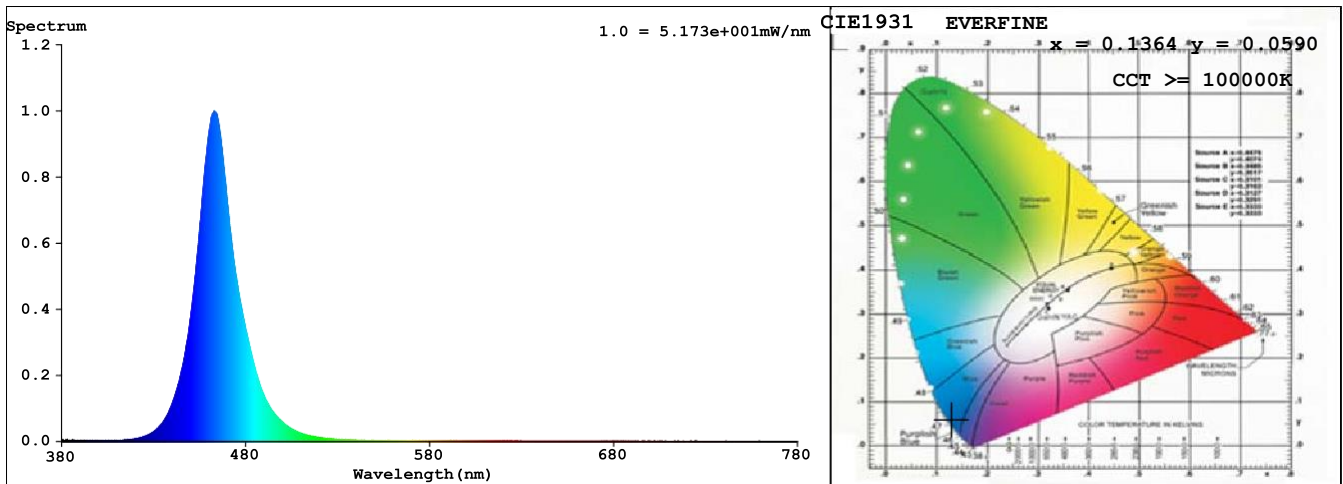
Spectrum Test Report

Sample : Date : 2019-04-17 16:59:58
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP20 1M
 Sample No. : LD19040302#11 Instrument : HaasSuite(EVERFINE)
 Manufacturer : Test by : Velleman
 Assessor :
 Remark :

Test Condition

Temperature : 25.3Deg RH : 65.0%
 WL Range : 380nm-780nm IP : 49904 (76%)
 Test Mode : Fast Test T : 115 ms
 Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1364$ $y = 0.0590$ / $u' = 0.1588$ $v' = 0.1546$ ($duv=1.64e-01$)

CCT>=100000K Prcp WL: $L_d=467.9\text{nm}$ Purity=96.5%

Peak WL: $L_p=463\text{nm}$ FWHM: =22.2nm Ratio:R=0.5% G=17.3% B=82.1%

Render Index: $R_a = 0.6$ CRI = 0.4 AvgR = 0.5 TM30:Rf=0 Rg=-111

R1 =0 R2 =0 R3 =0 R4 =0 R5 =5 R6 =0 R7 =0

R8 =0 R9 =0 R10=0 R11=0 R12=0 R13=0 R14=0 R15=3

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 96.693 lm Eff. : 18.88 lm/W Fe = 1.4391 W

Flux of emitted photons($\mu\text{mol/s}$):5.6019 Flu. and blue light ratio:0.1729 Fluorescent eff.:41.47

Electrical parameters

V = 24.00 V I = 0.2134 A P = 5.121 W PF = 1.000 F=0.00 Hz



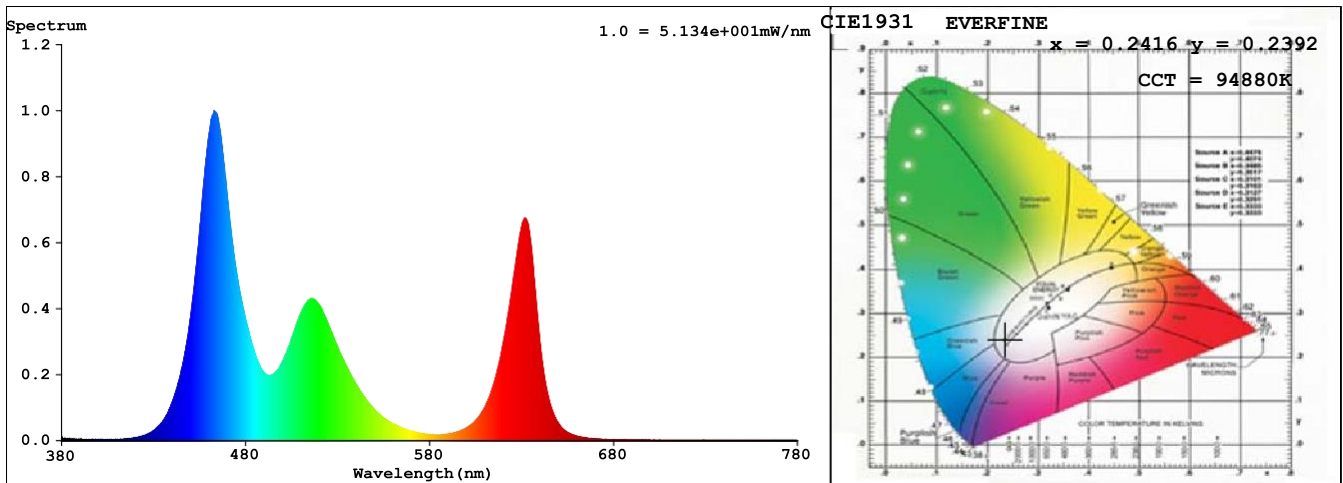
Spectrum Test Report

Sample : Date : 2019-04-17 17:00:11
 Specification : 5050 60LED 10MM 24V 14.4W RGB IP20 1M
 Sample No. : LD19040302#11 Instrument : HaasSuite(EVERFINE)
 Manufacturer : Test by : Velleman
 Assessor :
 Remark :

Test Condition

Temperature : 25.3Deg RH : 65.0%
 WL Range : 380nm-780nm IP : 51962 (79%)
 Test Mode : Fast Test T : 115 ms
 Sensitivity : High

Spectrum



Spectral Distribution

CIE1931 Chromaticity Diagram

Colorimetric Parameters

Chromaticity Coordinate: $x = 0.2416$ $y = 0.2392$ / $u' = 0.1794$ $v' = 0.3996$ ($duv=1.31e-03$)

CCT= 94880K Prcp WL: Ld=476.5nm Purity=40.1%

Peak WL: Lp=463nm FWHM: =22.5nm Ratio:R=22.3% G=63.3% B=14.4%

Render Index: Ra = 42.1 CRI = 37.9 AvgR = 35.5 TM30:Rf=39 Rg=113

R1 =23 R2 =50 R3 =68 R4 =44 R5 =46 R6 =51 R7 =55

R8 =0 R9 =0 R10=0 R11=34 R12=57 R13=26 R14=77 R15=2

LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 638.35 lm Eff. : 41.51 lm/W Fe = 3.0371 W

Flux of emitted photons($\mu\text{mol/s}$):13.236 Fluo. and blue light ratio:0.3327 Fluorescent eff.:49.31

Electrical parameters

V = 24.00 V I = 0.6408 A P = 15.38 W PF = 1.000 F=0.00 Hz