



# Portable CCD Spectroradiometer (LMS-6000 Series)

## Brochure

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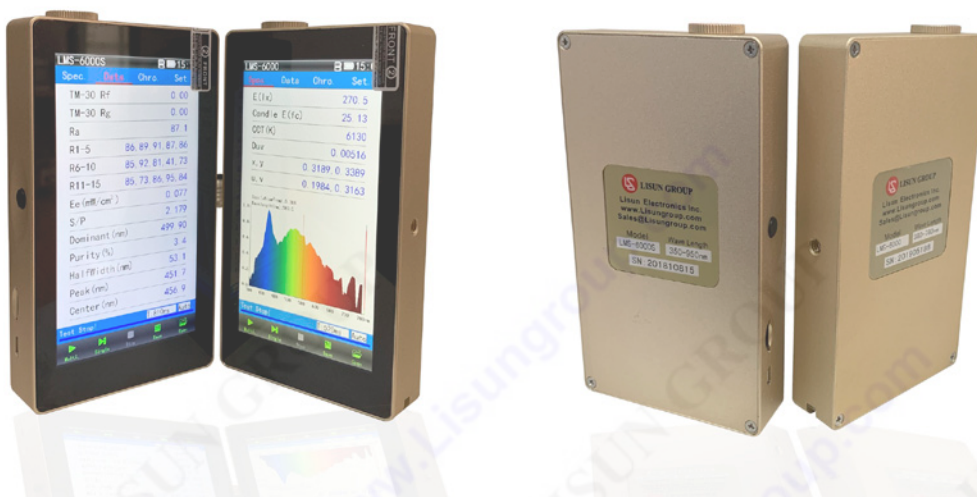
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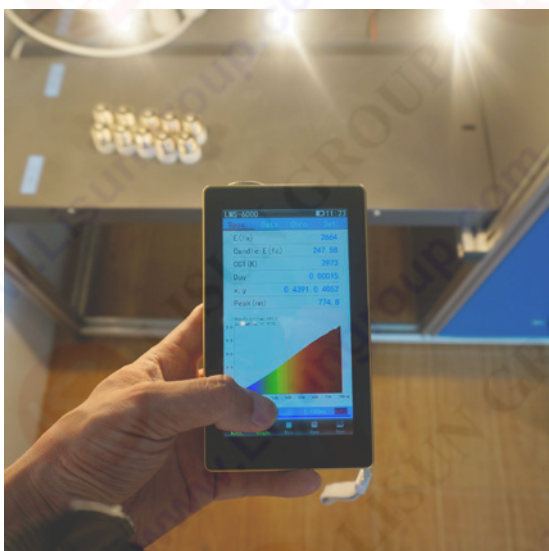
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**Leader in Lighting & Electrical Test Instruments**

Rev. 10/18/2019



# 1. Application



# 2. Introduction

The Portable CCD Colorimeter Spectroradiometer has the following versions which can measure different parameters:

- LMS-6000: illuminance (lux), E(Fc), Ee(W/m2), Tc (K), Duv Correlated Color Temperature (CCT), Chromaticity Coordinates, CRI, Purity, Peak Wavelength, Dominant Wavelength, Half Bandwidth, Center Wavelength, Centroid Wavelength, Total Color Difference, Brightness Difference, Red-Green Degree, Yellow-Blue Degree, CCT Difference, SDCM Diagram, Spectrum Diagram
- LMS-6000P: LMS-6000 Parameters+PAR, PPFD, YPF, Blue-purple irradiance Eb, Yellow-green irradiance Ey, Red-orange irradiance Er, Ratio of red and blue radiation Erb\_Ratio

- LMS-6000S: LMS-6000 Parameters+PAR, PPF, YPF, Blue-purple irradiance  $E_b$ , Yellow-green irradiance  $E_y$ , Red-orange irradiance  $E_r$ , Ratio of red and blue radiation  $E_{rb\_Ratio}$ ,  $R_f$  and  $R_g$  according to TM-30
- LMS-6000F: LMS-6000 Parameters+Flicker test
- LMS-6000B: LMS-6000 Parameters+Blue Light Hazard Weighted Irradiance according to GB/T20145, CIE S009/E:2002
- LMS-6000BF: LMS-6000 Parameters+Flicker test, Blue Light Hazard Weighted Irradiance according to GB/T20145, CIE S009/E:2002

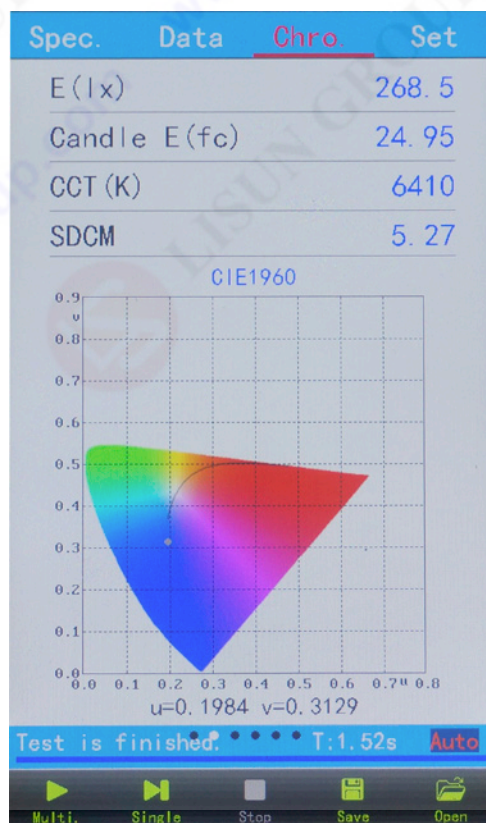
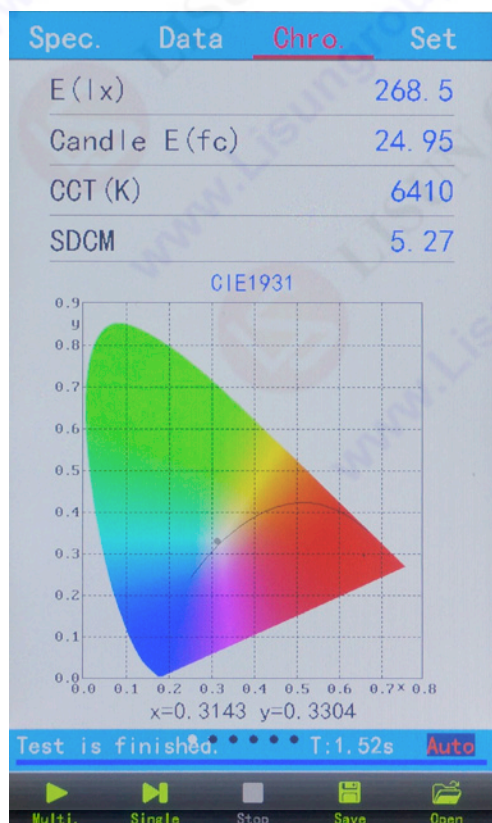
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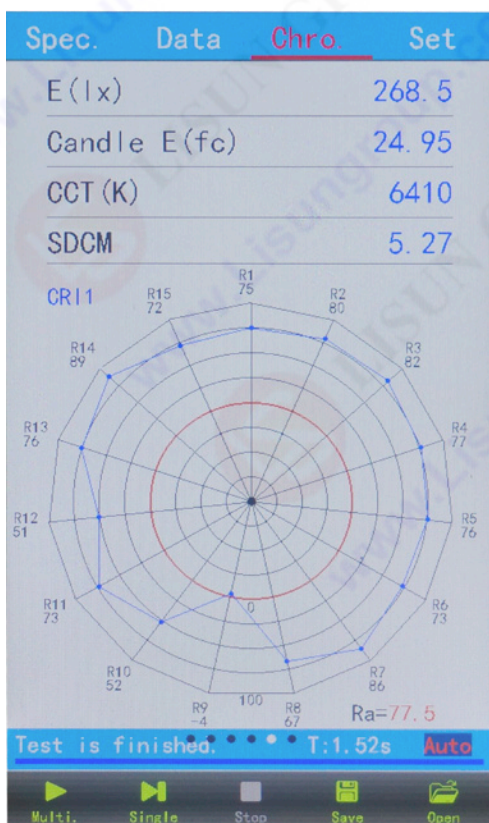
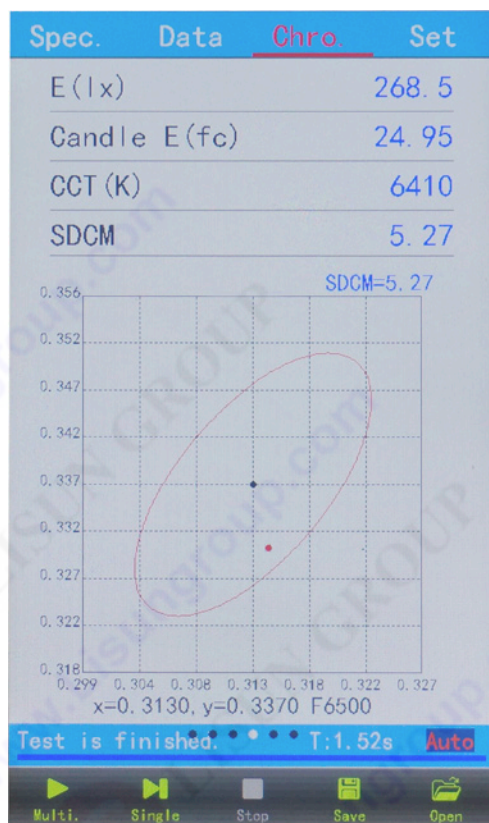
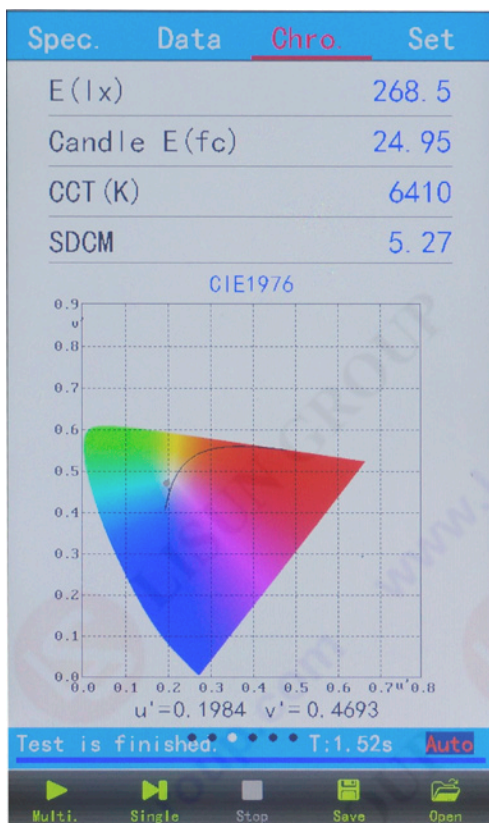
- Spectrum Range: 380~780nm. (The LMS-6000P is 350~800nm and LMS-6000S is 350~950nm)
- Spectral Resolution:  $\pm 0.2\text{nm}$ , Reproducibility:  $\pm 0.5\text{nm}$
- Accuracy of Chromaticity Coordinate ( $\Delta x$ ,  $\Delta y$ ):  $\pm 0.005$
- Correlated Color Temperature CCT: 1,000K ~ 100,000K
- Illuminance range: 5~200,000lx
- LCD screen: 5inch high definition IPS capacitive touch screen and resolution is up to 480\*854
- With 4000mAh rechargeable Li-ion battery continuous working time 20 hours
- Size is one Iphone 6S and thickness is like diameter of 1RMB coin
- Connect to PC via USB, English version software can be run in Win7, Win8 or Win10



Hand bag, USB cable for charging, SD storage card

### 3.Operation Interface





# LMS-6000 Test Report

**Product Mark**

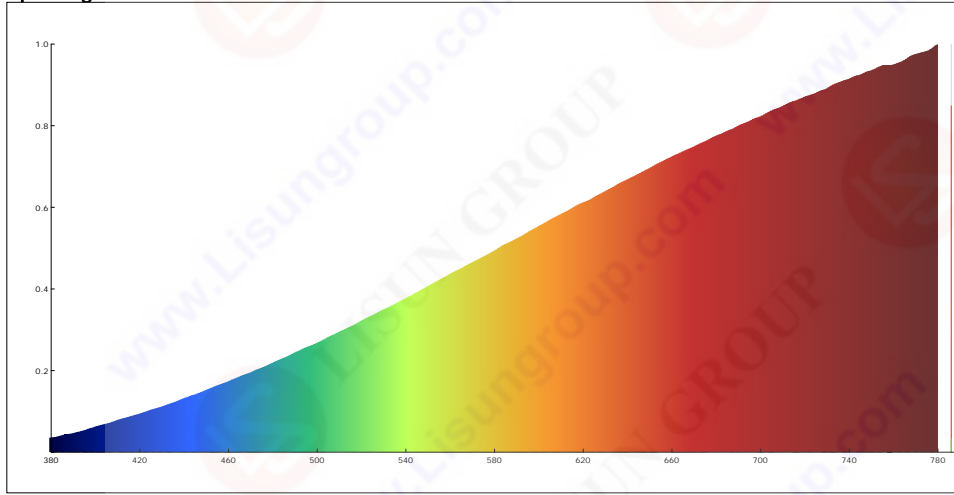
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 Temperature: 20°C  
 Tester: admin

Manufacture:  
 Humidity: 65%  
 Test Date: 2019-05-30

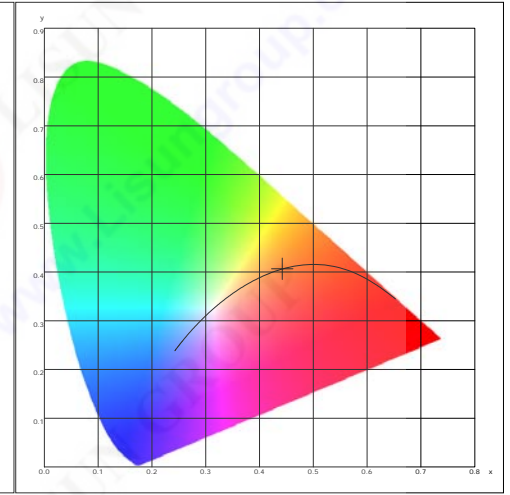
**Parameter**

Name	Value	Name	Value	Name	Value	Name	Value
E(lx)	3845.03	Peak(nm)	780.0				
Candle E(fc)	357.21	Center(nm)	681.1				
CCT(K)	2929	Centroid(nm)	649.5				
Duv	0.00015	Color Ratio(RGB)	25.0,73.1,1.9				
x,y	0.4423,0.4062	CIE1931 X	6129.676				
u,v	0.2531,0.3487	CIE1931 Y	5629.626				
u',v'	0.2531,0.5230	CIE1931 Z	2098.773				
SDCM	1.43	TLCI-2012	100				
Ra	99.9	Integral Time(ms)	0				
Ee(mW/cm <sup>2</sup> )	2.409	Peak Signal	55619				
S/P	1.446	Dark Signal	2145				
Dominant(nm)	583.10	Compensate level	2870				
Purity(%)	54.7						
HalfWidth(nm)	197.9						

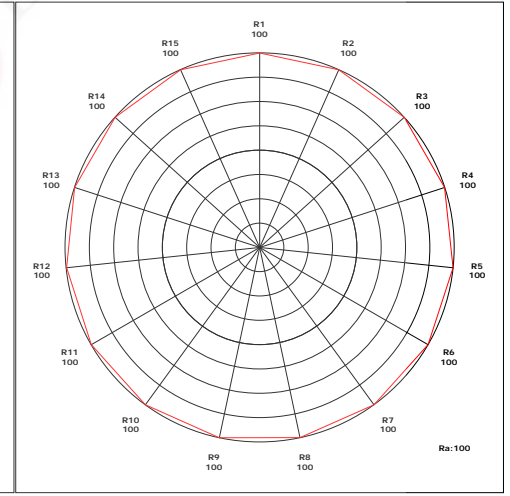
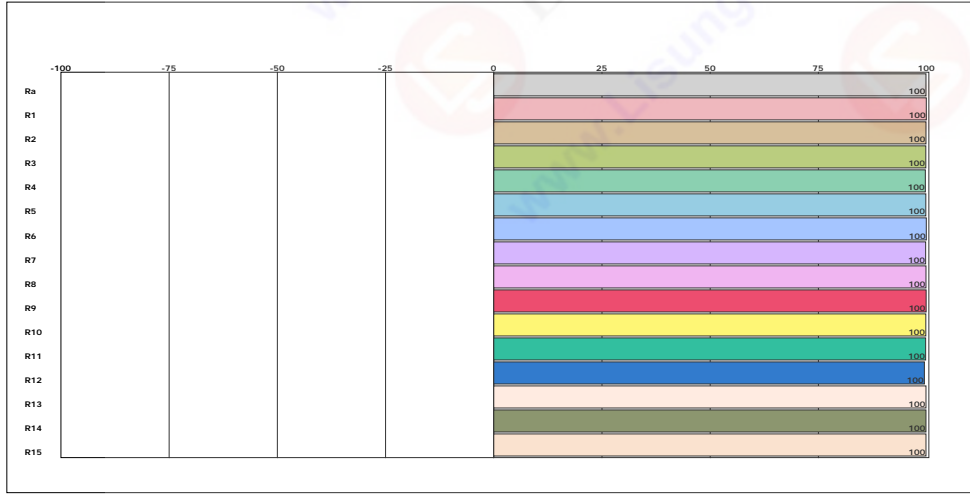
**Spectrogram**



**CIE1931**



**CRI**



**Instrument Status**

Type: LMS-6000  
 Integral Time: 0.032ms

SN: 0  
 VPeak: 55619

Scan Range: 380-780nm  
 VDark: 2145

Remark:

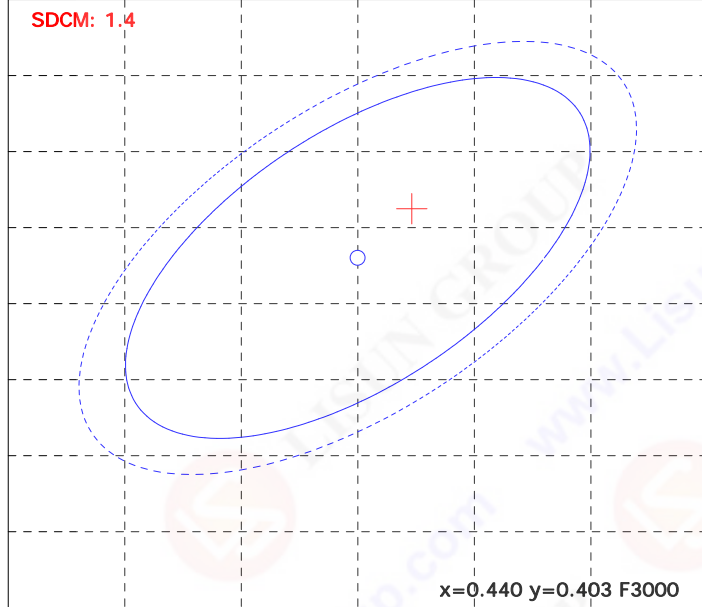
# LMS-6000 Test Report

## Product Mark

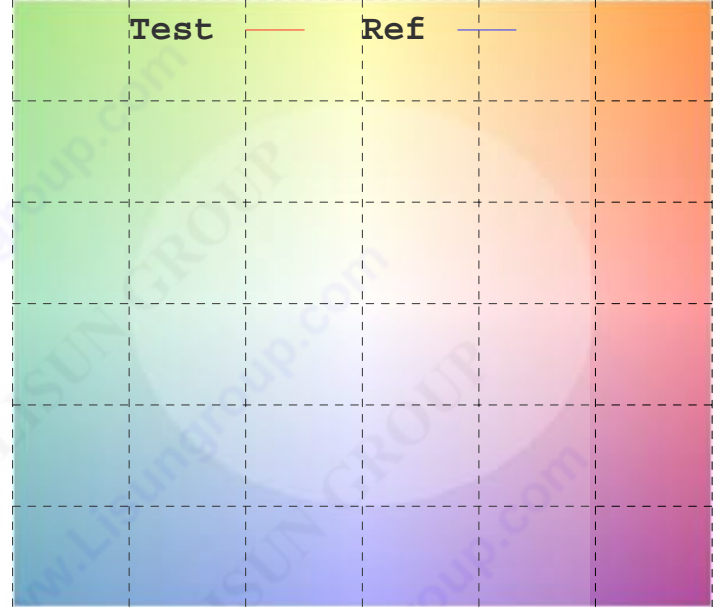
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Temperature: 20°C  
Tester: admin

Manufacture:  
Humidity: 65%  
Test Date: 2019-05-30

## SDCM



## TM30



## Instrument Status

Type: LMS-6000  
Integral Time: 0.032ms

SN: 0  
VPeak: 55619

Scan Range: 380-780nm  
VDark: 2145

Remark: