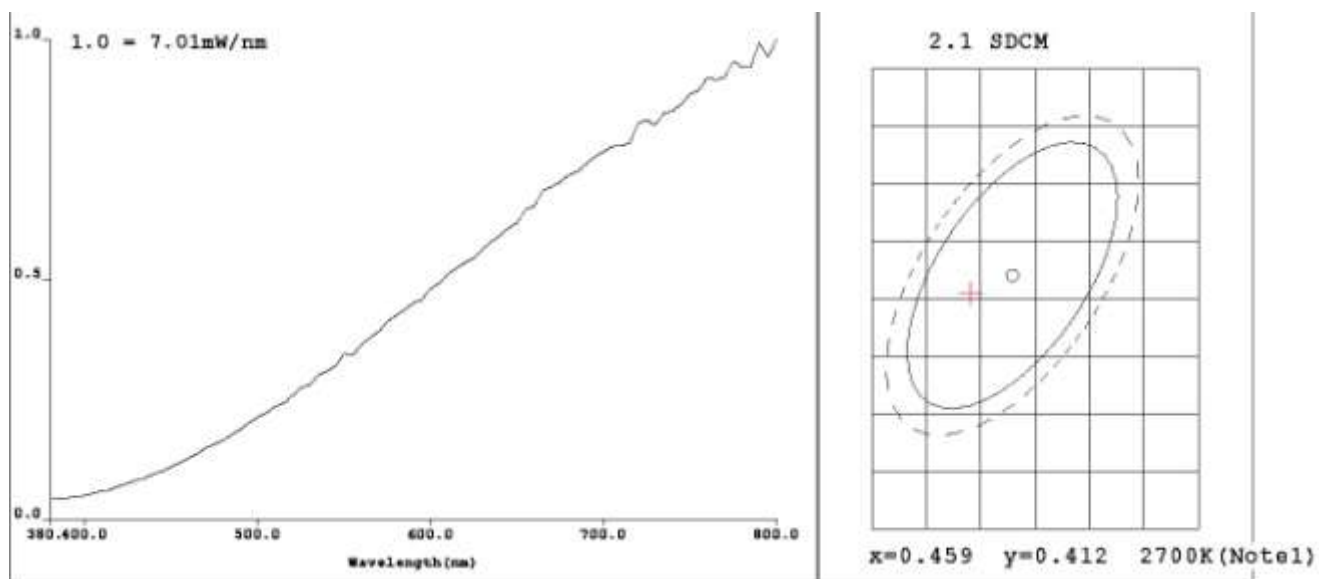


Light Source Test Report



CIE Color Parameters:

Chromaticity Coordinate: $x=0.4552$ $y=0.4104$ $u=0.2595$ $v=0.3511$ CCT:

Tc= 2765K Prcp Wave L: $d=583.8\text{nm}$ Purity=59.8%

Peak Wave L: $l_p=800\text{nm}$ Half Width: $D_l p=180.4\text{nm}$ Ratio: R=26.1% G=70.9% B=3.0%

Average Wave: 686nm

Rendering Index: Ra=99.6

R1 =100 R2 =100 R3 =100 R4 =100 R5 =100 R6 =100 R7 =99 R8 =100

R9 =99 R10=100 R11=100 R12=99 R13=100 R14=100 R15=100

Photo Parameters:

Flux: $F=207.36(\text{lm})$ Luminous efficacy: 10.66(lm/W) Luminous Power: $P=1.401(\text{W})$

Electrical Parameters:

$U=12.07\text{V}$ $I=1.610\text{A}$ $P=19.44\text{W}$ PF=1.000

Instrument Status: Scan Range: 380.0nm-800.0nm Interval: 5.0nm $I_p = 420$ REF = 6164 % = -0.973% TMP (PMT) = 20.1degrees centigrade Product Type: G4-12V 20W Manufacturer: Ultramax Instrument: PMS-50 System Test Department: QC Temperature: 21.7deg Humidity: 65.0% Test Operator: QC Test Date: 2013-11-11