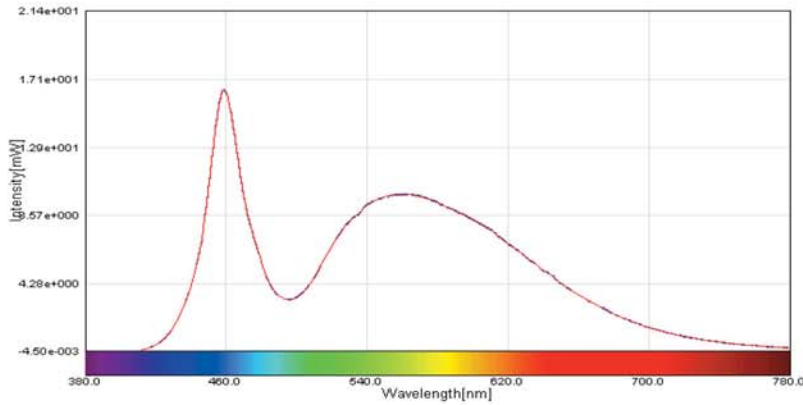
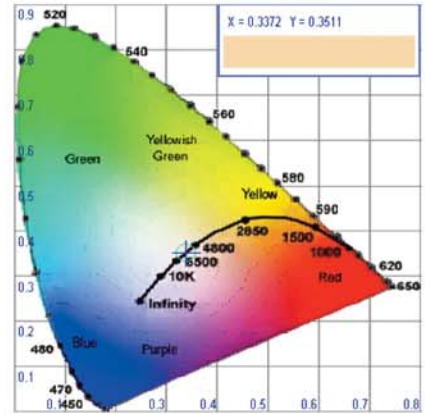


LED Optical and Electrical Test Report(OPI-1000)

■ Overlay Spectrum Graph



■ CIE Color Graph



■ Test Data

| No. | Volts(V) y | Amps(A) u | Power(W) v | PF u' | CCT(°C) v' | CRI CCF' | Φv(lm) Pu(%) | K(lm/W) (%) | x |
|-----|-----------------|------------------|----------------|------------------|------------------|----------------|-----------------|-----------------|--------|
| 01 | 11.60 0.3512 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5305.6 0.4833 | 78.6 0.9987 | 545.76 6.47 | 81.46 0.3977 | 0.3373 |
| 02 | 11.60 0.3511 | 0.5730 0.2064 | 6.70 0.3222 | 1.0000 0.2064 | 5304.8 0.4833 | 78.6 0.9987 | 545.67 6.46 | 81.44 0.3977 | 0.3373 |
| 03 | 11.60 0.3512 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5305.5 0.4833 | 78.6 0.9987 | 545.60 6.47 | 81.43 0.3977 | 0.3373 |
| 04 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5305.9 0.4833 | 78.6 0.9987 | 545.55 6.46 | 81.42 0.3977 | 0.3373 |
| 05 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5307.3 0.4833 | 78.6 0.9987 | 545.52 6.46 | 81.42 0.3977 | 0.3373 |
| 06 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5307.7 0.4833 | 78.6 0.9987 | 545.47 6.44 | 81.41 0.3977 | 0.3373 |
| 07 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5307.2 0.4833 | 78.6 0.9987 | 545.39 6.46 | 81.40 0.3977 | 0.3373 |
| 08 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5307.4 0.4832 | 78.6 0.9987 | 545.34 6.43 | 81.39 0.3977 | 0.3373 |
| 09 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5307.4 0.4833 | 78.6 0.9987 | 545.29 6.44 | 81.39 0.3977 | 0.3373 |
| 10 | 11.60 0.3511 | 0.5730 0.2063 | 6.70 0.3222 | 1.0000 0.2063 | 5309.1 0.4832 | 78.6 0.9987 | 545.26 6.43 | 81.38 0.3977 | 0.3372 |

*Test Model : MR16

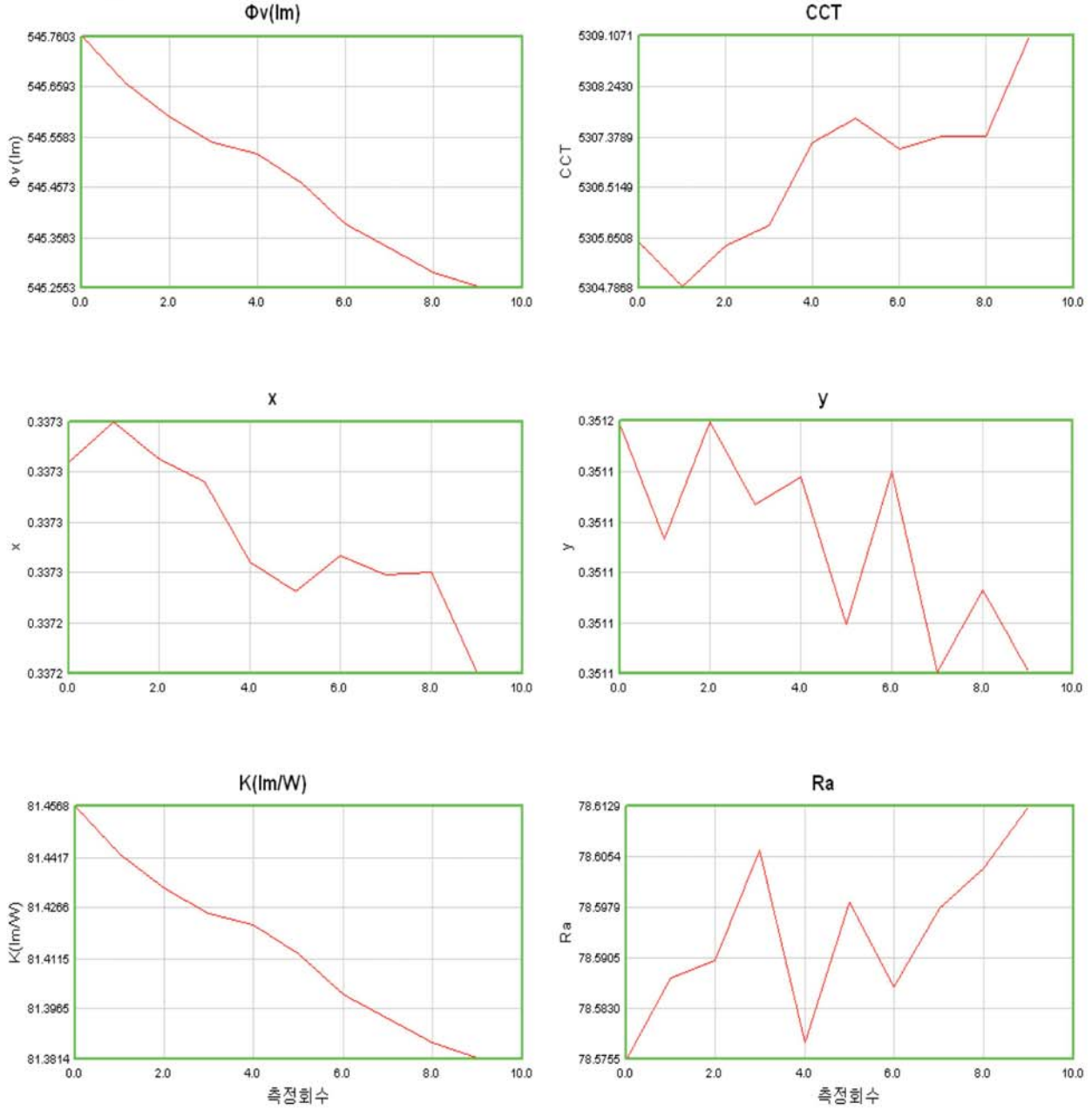
*Test Date : 2010-09-08

*Test Spec. : 7W-5000K-60

*Test Dept. : Q.D

LED Optical and Electrical Test Report(OPI-1000)

Item Graph



*Test Model : MR16

*Test Date : 2010-09-08

*Test Spec. : 7W-5000K-60

*Test Dept. : Q.D