

CMS : MULTI-SPECTRAL SENSOR

SENSOR IDENTIFICATION

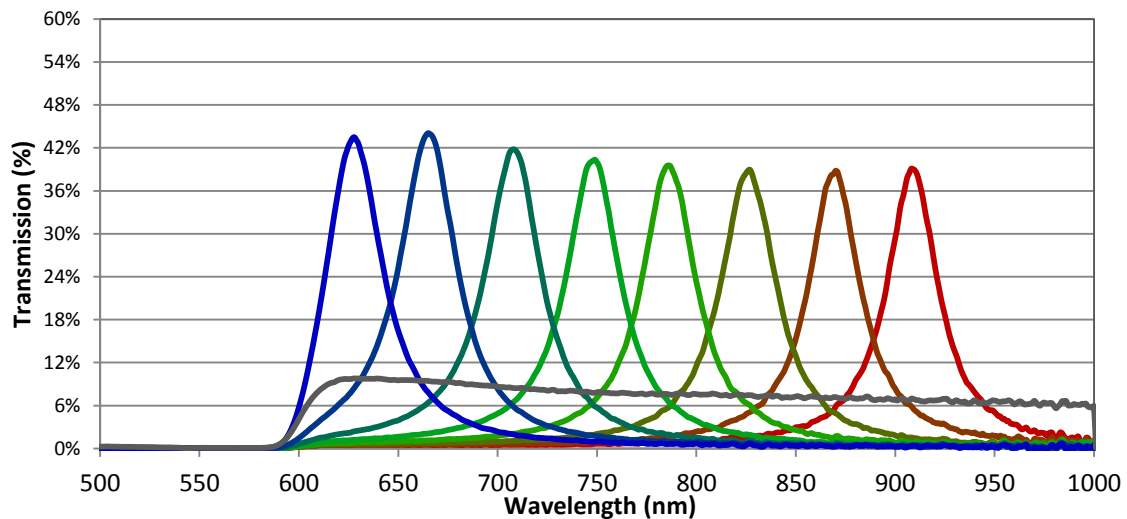
Designation	CMSsensor-S1
Technology	COLOR-SHADES
S/N	CMS16100013

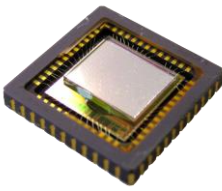
CMOS SENSOR SPECIFICATIONS

Array type	CMOS (Si)
Spectral band	400 to 1000 nm
Resolution	1280 (H) x 1024 (V)
Pixel pitch	5.3 μm

FILTER SPECIFICATIONS

Macro-pixel size	3x3 bands
Wavelength range	650 to 900 nm typical
Type of pixel	8 colors (narrow bands) + 1 B&W
Band 1	λ_c : 627 nm / FWHM : 37 nm / T_{max} : 49%
Band 2	λ_c : 665 nm / FWHM : 35 nm / T_{max} : 48%
Band 3	λ_c : 708 nm / FWHM : 34 nm / T_{max} : 46%
Band 4	λ_c : 748 nm / FWHM : 33 nm / T_{max} : 44%
Band 5	λ_c : 786 nm / FWHM : 33 nm / T_{max} : 43%
Band 6	λ_c : 826 nm / FWHM : 34 nm / T_{max} : 42%
Band 7	λ_c : 869 nm / FWHM : 31 nm / T_{max} : 42%
Band 8	λ_c : 909 nm / FWHM : 31 nm / T_{max} : 43%
Band 9	Neutral density : $T_{mean} = 9\%$ over [600-950] nm



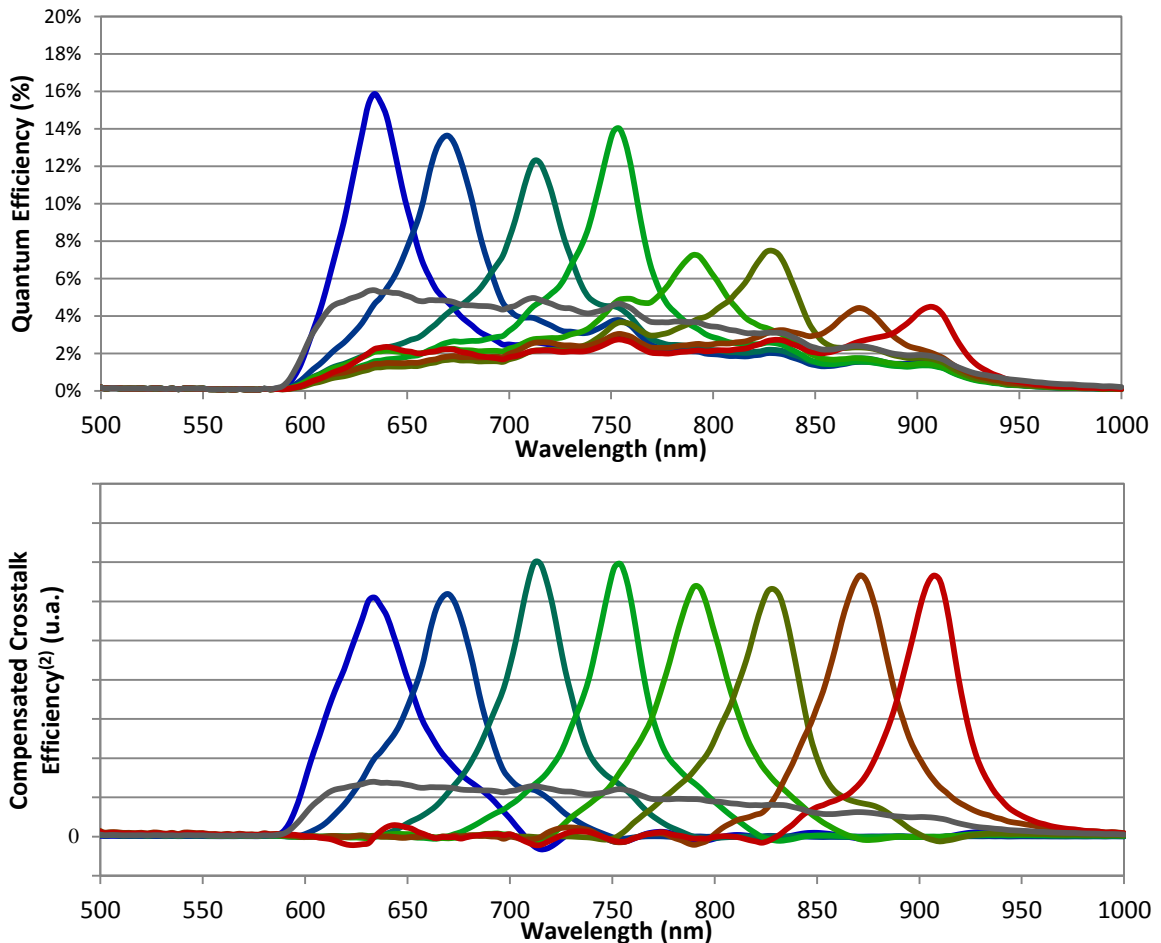


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MULTISPECTRAL SENSOR SPECIFICATIONS

Macro-pixel size	3x3 bands
Wavelength range	650 to 900 nm typical
Type of pixel	8 colors (narrow bands) + 1 B&W
Band 1	λ_c : 635 nm / FWHM : 38 nm / QE max : 16%
Band 2	λ_c : 669 nm / FWHM : 42 nm / QE max : 14%
Band 3	λ_c : 713 nm / FWHM : 41 nm / QE max : 12%
Band 4	λ_c : 752 nm / FWHM : 36 nm / QE max : 14%
Band 5	λ_c : 790 nm / FWHM : 49 nm / QE max : 7%
Band 6	λ_c : 827 nm / FWHM : 44 nm / QE max : 7%
Band 7	λ_c : 871 nm / FWHM : 46 nm / QE max : 4%
Band 8	λ_c : 906 nm / FWHM : 43 nm / QE max : 4%
Band 9	Neutral density : $T_{mean} = 3.4\%$ over [650-900] nm
Pixel operability	> 99.85 % ⁽¹⁾

⁽¹⁾Dead pixels : < 0.15% among which 0.10% used for alignment purpose in the 4 corners of the pictures.



⁽²⁾The CCE is extracted from the SILIOS post processing method for crosstalk correction (see [Post-processing method for crosstalk reduction in multispectral data and images](#)).