

Quantity	Reference Frequency [GHz] ^{a1}						Notes
	100	143	217	353	545	857	
Number of bolometers	8	11	12	12	3	4	^{a2}
Effective beam solid angle Ω [arcmin ²]	106.22	60.44	28.57	27.69	26.44	24.37	^{b1}
Error in solid angle σ_Ω [arcmin ²]	0.14	0.04	0.04	0.02	0.02	0.02	^{b2}
Spatial variation (rms) $\Delta\Omega$ [arcmin ²]	0.20	0.20	0.19	0.20	0.21	0.12	^{b3}
Effective beam FWHM ₁ [arcmin]	9.68	7.30	5.02	4.94	4.83	4.64	^{b4}
Effective beam FWHM ₂ [arcmin]	9.66	7.22	4.90	4.92	4.67	4.22	^{b5}
Effective beam ellipticity ϵ	1.186	1.040	1.169	1.166	1.137	1.336	^{b6}
Variation (rms) of the ellipticity $\Delta\epsilon$	0.024	0.009	0.029	0.039	0.061	0.125	^{b7}
C_ℓ^{TT} expected for full-mission map sensitivity [$10^{-4} \mu\text{K}_{\text{CMB}}^2$]	1.93	0.48	1.11	13.0			^{c1}
[$10^{-4} \text{kJy}^2 \cdot \text{sr}$]					1.38	1.21	^{c1}
C_ℓ^{TT} map sensitivity from the 2018 release [$10^{-4} \mu\text{K}_{\text{CMB}}^2$]	1.52	0.36	0.78	11.6			^{c2}
[$10^{-4} \text{kJy}^2 \cdot \text{sr}$]					2.9–8	2.7–8	^{c3}
C_ℓ^{EE} map expected sensitivity from TOI white noise [$10^{-4} \mu\text{K}_{\text{CMB}}^2$]	5.01	2.70	2.77	51.1			^{c1}
C_ℓ^{EE} map sensitivity from the 2018 release [$10^{-4} \mu\text{K}_{\text{CMB}}^2$]	2.94	1.61	3.25	7.0			^{c2}
Dipole absolute calibration accuracy [%]	0.008	0.021	0.028	0.024	$\simeq 1$		^{d1}
Planet submm intercalibration accuracy [%]						$\simeq 3$	^{d2}
Intensity transfer function uncertainty ($700 < \ell < 1000$) [%]	Ref.	0.12	0.36	0.78	4.3		^{d3}
Polarization calibration accuracy [%]	0.7	-1.7	1.9				^{d4}
Galactic emission zero level uncertainty [MJy sr ⁻¹]	0.0008	0.0010	0.0024	0.0067	0.0165	0.0147	^{e1}
CIB monopole assumption [MJy sr ⁻¹]	0.0030	0.0079	0.033	0.13	0.35	0.64	^{e2}
CIB monopole uncertainty [%]	100	100	40	20	20	20	^{e3}
Zodiacal emission monopole level [μK_{CMB}]	0.43	0.94	3.8	34		0.04	^{e4}
[MJy sr ⁻¹]						0.12	^{e4}

^{a1} Channel-map reference frequency, and channel identifier.

^{a2} Number of bolometers whose data were used in producing the channel map. Note that, at 353 GHz, only 8 PSBs are used for polarization maps.

^{b1} Mean value over bolometers at the same frequency.

^{b2} As given by simulations.

^{b3} Variation (rms) of the solid angle across the sky.

^{b4} FWHM of the Gaussian whose solid angle is equivalent to that of the effective beams.

^{b5} Mean FWHM of the elliptical Gaussian fit.

^{b6} Ratio of the major to minor axis of the best-fit Gaussian averaged over the full sky.

^{b7} Variability (rms) on the sky.

^{c1} Estimate of the C_ℓ map noise for the full mission, derived from the TOI white noise (see Sect. 2.1), (table 5 of [Planck Collaboration VII 2016](#)).

^{c2} Estimate of the C_ℓ map noise for the full mission, derived from the odd-even ring null-test noise (Fig. 17, multipole range $\ell = 200$ –1000).

^{c3} Estimate of the C_ℓ map noise for the full mission, derived from the odd-even ring null-test noise (Fig. 13, multipole range $\ell = 200$ –2000).

^{d1} Absolute calibration accuracy from simulations with the Solar dipole (Table 7). The 545-GHz channel retains the 2015 planet calibration, and the accuracy is calculated a posteriori on the Solar dipole.

^{d2} The 857-GHz channel retains the 2015 planet calibration, and the accuracy is calculated a posteriori using the planet model ([Planck Collaboration LII 2017](#)) and the 545-GHz data.

^{d3} Derived upper limits of the transfer function on the first three acoustic peaks (Table 8).

^{d4} Polarization accuracy dominated by the polarization efficiency errors (Table 9).

^{e1} The monopoles of the maps are built with a Galactic dust model extrapolated to a zero-level for H I. Uncertainties are discussed in [Planck Collaboration VIII \(2014\)](#) (table 5).

^{e2} The monopole of the [Béthermin et al. \(2012\)](#) CIB model (table 6 of [Planck Collaboration VIII \(2016\)](#)).

^{e3} The CIB uncertainties are estimated combining the absolute measurements of FIRAS ([Puget et al. 1996](#); [Fixsen et al. 1998](#)) and the anisotropies from Planck HFI ([Planck Collaboration XXX 2014](#)) assuming the same SED for the absolute value and the anisotropies.

^{e4} Monopole contribution of the Zodiacal emission adjusted for high Galactic and ecliptic latitudes (table 6 of [Planck Collaboration VIII 2016](#)).