

CHECKLIST FOR THE PAG REVIEW

RF Exposure Evaluation Policy for sources with frequency between 6000 MHz and 8500 MHz

serial number	question	Answer
1.	For frequencies up to 8500 MHz provide spatial peak SAR evaluation based on IEC/IEEE 62209-1528:2020, along with applicable product-specific procedures among KDB Pubs. 648474, 616217, 941225. SAR test data shall account for device tune-up tolerance (that is referred to as "Reported SAR" in KDB 447498).	Not Applicable This device only supports 5925-7125MHz, less than 8500MHz
2.	This policy considers a device compliant for Equipment Authorization purposes, so long as the SAR evaluation of step 1. is within the same SAR limits that have been established for frequencies below 6000 MHz (e.g., 1.6 W/kg for 1-g average SAR). In this case, the SAR evaluations are taken as a conservative compliance demonstration to the MPE power density limits of 47 CFR 1.1310(d)(3).	Please see pages 73 and page133 of the AE10 WSCT-A2LA-R&E240300009A-SAR report
3.	Documentation is required to support evaluation with MPE limits providing power density data in accordance with the following: 3.1 For the test configurations of step 1 having the highest SAR, evaluate Incident Power Density (IPD), using a suitable near-field probe and a total-field/power-density reconstruction method (e.g., as per methods in [Pfeiffer, 2019]) 3.2 Report estimated IPD measurement uncertainty (e.g., per methods of IEC/IEEE 63195-1:2022) ¹⁰ 3.3 Power density test data shall account for device tune-up tolerance. 3.4 If supported by the test system, also report estimated Absorbed (epithelial) Power Density (APD) (e.g., as per method in [Samaras, 2021])	Information about IPD is found in sections 9.6, 9.7, 9.8 of the AE10 WSCT-A2LA-R&E240300009A-SAR report page35-36 Information about APD please see pages 135 -136 of the AE10 WSCT-A2LA-R&E240300009A-SAR report Page31 adds the description of power density verification Power Density Test System Verification The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement

		region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer.per November 2017 TCBC Workshop Notes.
4.	The process of steps 1 to 4 shall be repeated for at least five channels, at the channel center frequency, selected to cover uniformly the largest frequency ranges used in the device, between 5925 MHz and 8500 MHz, and consistent with KDB Publication 248227 test configuration provisions.	Please see pages 133-134 of the AE10 WSCT-A2LA-R&E240300009A-SAR report
5.	For the purpose of SAR test exemption, analyses of simultaneous transmission combinations of RF sources with frequencies from 4 MHz and 8500 MHz (where the lowest frequency is per KDB Publication 447498- D01 SAR evaluation requirements ¹¹), may be performed according to the SPLSR approach (<i>id.</i>). Accordingly, no further compliance evaluation is needed for all antenna pairs for which the SPLSR exemption is applicable.	Please see pages 36-74 of the AE10 WSCT-A2LA-R&E240300009A-SAR report

One or more RF source(s) operating above 8500 MHz, Including Simultaneous Transmissions

serial number	question	Answer
6.	For evaluations and test exemption analyses of simultaneous-transmission combinations of different RF sources, the procedure outlined above, for a single source between 6000 and 8500 MHz shall be included in the calculation of total exposure ratio (TER) as in KDB Pub. 447498-D01-Appendix C.	Please see pages 73of the AE10 WSCT-A2LA-R&E240300009A-SAR report
7.	Any source above 8500 MHz shall be evaluated via incident power density measurements.	Not Applicable This device only supports 5925-7125MHz, less than 8500MHz

References

[Pfeifer, 2019] S. Pfeifer *et al.*, “Total Field Reconstruction in the Near Field Using Pseudo-Vector E-Field Measurements,” *IEEE Trans. EMC*, 61, (2): 476-486 (2019)

[Samaras, 2021] T. Samaras *et al.*, “Compliance Assessment of the Epithelial or Absorbed Power Density Below 10 GHz Using SAR Measurement Systems,” *Bioelectromagnetics*, 42: 484-490 (2021)

IEC/IEEE 63195-1:2022 (2022-05), *Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure*

IEC 62479:2010, *Assessment of the compliance of low-power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)*