

Data Referencing

A. Introduction

This document outlines the test plan to **reference compliance test data** from the fully populated **Parent model [SM-F971U]** for use with the depopulated **Variant model [SC-57G]**, in accordance with **KDB 484596 D01 v03 (Referencing Test Data)** and subsequent guidance presented by the FCC OET in January 2026.

The applicant proposes to apply the **spot-check test plan** described herein to verify the variant's compliance where data referencing is used.

The applicant accepts full responsibility that the referenced test data validly demonstrates compliance for the variant listed in this application.

The grantee, **Samsung Electronics**, understands that data referencing does not relieve it of the obligation to ensure the filed certification data demonstrate **FCC compliance** for the variant device(s).

The complete test plan, including details of the differences between the reference and variant model, are provided as a separate, confidential exhibit.

B. Test Plan for data referencing

Test Requirements Summary for Parent and Variant Devices – EMC/RF

Test Items	SM-F971U (Parent Model)	SC-57G (Variant Model)
FCC Part 15.247/15E (radiated/conducted test)	Full Test	Spot-check the worst-case configuration based on Reference Model for conducted or radiated output power, band edge (where applicable) and radiated spurious for each radio technologies.
FCC Part 15F	Full Test	Spot-check
FCC Part 15E DFS	Full Test	Full Test
FCC Part 15E CBP	Full Test	Full Test
Part 22, 24, 27, 90 (GSM, WCDMA, LTE, 5G NR FR1,2)	Full Test	Partial
Part 15.225 - NFC	Full Test	Spot-check
Part 15C - WPT	Full Test	Spot-check
Part 15 B - Receiver	Full Test	Full Test
Part 15 B - Digital Device	Full Test	Full Test

Note. Please refer to the detailed test plan below.

Data Referencing Test Plan by Equipment Class – EMC/RF

Mode	Equipment Class	Data referencing	Comments
Digital Device	JBP	No	Full Test
Receiver mode	CXX	No	Full Test
WWAN	PCE	Yes(Partial)	Spot check: All supported bands (SC-57G) except full test items Full test: LTE B5, B2, B41C, 5G NR n41
	CBE	No	Not supported
	TNE	No	Not supported
	5GM	No	Not supported
2.4 GHz Wi-Fi	DTS	Yes(Partial)	Spot-check: 802.11g, n HT20, be EHT20 Full test:

			802.11b SISO radiated test
Bluetooth LE & ASK	DTS	No	Full Test
Bluetooth BDR&EDR	DSS	No	Full Test
5 GHz Wi-Fi	NII	Yes(Partial)	Full Test (different target) Spot-check
6 GHz Wi-Fi	6CD, 6VL	Yes	Spot-check
NFC	DXX	Yes	Spot-check
WPT	DCD	Yes	Spot-check
UWB	UWB	Yes	Spot-check
TNE and CBE and 5GM are not supported in the variant model.			

The only data referencing being requested is for the PCE (partial), DTS (partial), NII (partial), 6CD, 6VL, DXX, WPT and UWB equipment codes. For these air interfaces, the circuitry is identical in both the parent and variant models.

Data Referencing RF Exposure Test Plan by Equipment Class – RF exposure

Mode	Equipment Class	Data referencing	Comments
Digital Device	JBP	N/A	RF Exposure not applicable
Receiver mode	CXX	N/A	RF Exposure not applicable
WWAN	PCE	Yes	Spot check (Worst case spot-check & All test positions spot-check)
	TNE	N/A	Not supported in variant model
	CBE	N/A	Not supported in variant model
	5GM	N/A	Not supported in variant model
2.4 GHz Wi-Fi	DTS	Yes(Partial)	Spot-check for SISO Full test for MIMO
Bluetooth LE	DTS	No	Full test
Bluetooth	DSS	No	Full test
5 GHz Wi-Fi	NII	Yes	Spot-check
6 GHz Wi-Fi	6CD, 6VL	Yes	Spot-check for SAR Full test for IPD
NFC	DXX	Yes	Spot-check
WPT	DCD	Yes	Spot-check
UWB	UWB	No	Full Test
TNE and CBE and 5GM are not supported in the variant model.			

For RF exposure spot check,

There are two ways to spot check. First Worst case Spot-checks will be performed for each antenna for each operating band based on the worst-case air interface for head and body / hotspot exposure conditions. Most of air interface/antenna are included here. And second All test positions spot-check will be performed for each antenna for each operating band based on the All test positions of air interface for head and body / hotspot exposure conditions.

All test positions spot-check case are below;

- 1) Ant.D's air interface : GSM850, WCDMA Band V, LTE B12, LTE B13, LTE B5, NR Bn5
- 2) Ant.F's air interface : LTE B66(4), NR Bn66, NR Bn41, LTE B25

The air interface/Antenna(E/F) above requires a more detailed spot check (All test positions spot-check) as the part near the antenna has added components. All test positions spot-check results are compared with parent model, and the trends are checked for consistency across all positions. Of course, Worst test position result follows spot check criteria guideline.

Where the worst spot check does not meet the criteria established within KDB 484596 D01 Referencing Test Data v03 Section 3.2.2 full testing shall be performed for that exposure condition on the worst-case air interface for that band / antenna under test plus, where applicable any other air interface that could operate simultaneously with

Your concerns about RF exposure tests for simultaneous transmissions are noted but we address this by fully testing RF exposure for all air interfaces.

Spot-check test plan (Test Items) – EMC/RF

Note. Radiated measurements shall be performed in full on the worst-case operating modes in the band, or bands, where the radiated spot-check tests show deviation from the reference model that does not meet the acceptance criteria. As output power tables and rf circuitry are identical between reference and variant any conducted test data from the reference mode, where applicable, will be used for the variant model.

WWAN

Rule Part	Test item	Data referencing	Comments
22/24/27/90	e.r.p. and e.i.r.p.	Y	Worst case (Lowest margin), variant data within acceptance criteria
	Spurious	Y	

2.4 GHz Wi-Fi

Rule Part	Test item	Data referencing	Comments
15.247(b)	Tx conducted output power	Y	Worst case Spot-check. Power check with tune-up.
15.205 15.209 15.247	Radiated Band-edge	Y	Worst case (Lowest margin), variant data within acceptance criteria. For each mode (i.e. 802.11g, n, be), both band-edge and spurious worst case will be verified.
	Radiated Spurious	Y	

5 GHz Wi-Fi

Rule Part	Test item	Data referencing	Comments
15.407(a)	Tx conducted output power	Y	Worst case Spot-check. Power check with tune-up.
15.205 15.209 15.407(b)	Radiated Band-edge	Y	Worst case (Lowest margin), variant data within acceptance criteria. For each NII band (i.e. NII-1/2A/2C/3/4), both band-edge and spurious worst case will be verified.
	Radiated Spurious	Y	
15.407(h)	DFS	N	Full test for channel close and move time

6 GHz Wi-Fi

Rule Part	Test item	Data referencing	Comments
15.407(a)(1)	Tx conducted output power	Y	Worst case Spot-check. Power check with tune-up will be performed as follows: - For NII 5&7: SP power will be measured at worst band-edge & spurious points - For NII 6&8: Indoor power will be measured at worst band-edge & spurious points - For VLP: Power will be measured at worst spurious points in each band
15.205 15.209 15.407(b)(6)	Radiated Band-edge	Y	Worst case (Lowest margin), variant data within acceptance criteria. For each NII band (i.e. NII-5/6/7/8), both band-edge and spurious worst case will be verified.
	Radiated Spurious	Y	
15.407(d)	CBP	N	Full test

NFC

Rule Part	Test item	Data referencing	Comments
15.225	Field strength	Y	Fundamental field strength worst case will be verified.
15.205 15.209	Radiated Spurious	Y	Spurious worst case will be verified.

WPT

Rule Part	Test item	Data referencing	Comments
15.205 15.209	Radiated Spurious	Y	Spurious worst case will be verified.

UWB

Rule Part	Test item	Data referencing	Comments
15.519(c) 15.519(d) 15.209	Radiated Spurious	Y	Spurious worst case will be verified each channel (CH5, CH9).
15.519(e) 15.521(g)	Maximum Peak and average power	Y	Peak and Average power worst case will be verified each channel (CH5, CH9).