

Date: December 21, 2018

Federal Communications Commission
Office of Engineering and Technology Laboratory Division
7435 Oakland Mills Rd.
Columbia MD 21046

Attn: Office of Engineering and Technology

HAC Attestation - FCC ID: A3LSMG970F

To whom it may concern:

Seongkyu Choi hereby declares that the MIF values detailed below are based on worst case operating modes for all air interfaces for which the HAC rating is provided based on the current methodology for determining MIF values.

Reference Test report Number(s): UL Verification Services Test Report 12563734.

SPEAG test files

UID	Communication System Name	MIF (dB)
10021-DAC	GSM-FDD (TDMA, GMSK)	3.63
10011-CAB	UMTS-FDD (WCDMA)	-27.23
10170-CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16QAM)	-9.76
10182-CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16QAM)	-9.76
10176-CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16QAM)	-9.76
10173-CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16QAM)	-1.44
10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	-2.02
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	0.12
10069-CAC	IEEE 802.11a/n WiFi 5 GHz (OFDM, 54 Mbps)	-3.15
10030-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	1.02
	IEEE 802.11ax WiFi 2.4 GHz (OFDMA, MCS8, 106 tones, RU Index 53)	-4.61
N/A	IEEE 802.11ax HE80 WiFi 5 GHz (OFDMA, MCS9, 996 tones, RU Index 67)	-4.20

Sincerely,



Seongkyu Choi
Engineer
On behalf of Samsung Electronics..