



Date: November 14, 2019

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: A3LSMN770F

To whom it may concern:

SAMSUNG ELECTRONICS CO., LTD. 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 13094578-S3.

**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
10178-CAF	LTE-FDD (SC-FDMA, 1 RB, 5 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
10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	-3.98

Sincerely,

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On behalf of SAMSUNG ELECTRONICS CO., LTD..