

APPENDIX I: RU SAR EXCLUSION

I.1 IEEE 802.11ax/be RU SAR Exclusion

To make the most efficient use of the additional available subcarriers (data tones), IEEE 802.11ax/be can utilize Orthogonal Frequency-Division Multiple Access (OFDMA) which divides the existing 802.11 channels into smaller subchannels called Resource Units (RUs). Possible RU sizes are: 26T, 52T, 52T+26T, 106T, 106T+26T, 242T, 484T, 484T+242T, 996T, 996T+484T, 996T+484T+242T, 996T*2, and for WIFI 6E additionally 996T*2+484T, 996T*3, 996T*3+484T, 996T*4.

Per FCC Guidance, 802.11ax/be was considered a higher order 802.11 mode when compared to a/b/g/n/ac to apply KDB Publication 248227 D01v02r02 for OFDM mode selection. Therefore, SAR tests were not required for 802.11ax/be based on the maximum allowed output powers of OFDM modes and the reported SAR values. Per FCC Guidance, maximum conducted powers were performed for each RU size to demonstrate that the output powers would not be higher than the other OFDM 802.11 modes. Please refer to 1M2508270083-14, 16, 18, 20 for IEEE 802.11ax/be RU powers.

I.2 IEEE 802.11ax/be RU Target Powers

I.2.1 2.4 GHz WLAN 802.11ax/be RU WLAN Output Power

The below table is applicable in the following conditions:

- Pmax

Band		IEEE 802.11ax/be RU Modulated Frame Output Power (in dBm)																																							
		SISO ANT G															SISO ANT I															SISO in MIMO									
		26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T						
		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm		Max	Norm								
2.45 GHz	14.0	13.0		15.0	14.0		16.0	15.0		17.0	16.0		14.0	13.0		15.0	14.0		16.0	15.0		17.0	16.0		14.0	13.0		15.0	14.0		16.0	15.0		17.0	16.0						
	ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0						
	ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0						

The below table is applicable in in the following conditions:

- DSI=0 (Free, Hotspot, or Phablet)

Band	IEEE 802.11ax/be RU Modulated Frame Output Power (in dBm)																																			
	SISO ANT G												SISO ANT I												SISO in MIMO MIMO											
	26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T		
	Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.		Max	Norm.				
2.45 GHz	14.0	13.0		15.0	14.0		16.0	15.0		16.0	15.0		14.0	13.0		15.0	14.0		16.0	15.0		16.0	15.0		14.0	13.0		15.0	14.0		16.0	15.0				
	ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 11: 15.5	14.5		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 11: 15.5	14.5		ch. 12: 6.0	5.0		ch. 12: 6.0	5.0		ch. 11: 15.5	14.5				
	ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0		ch. 13: 0.0	-1.0				

The below table is applicable in in the following conditions:

- DSI=1 (Head)

Band	IEEE 802.11ax/be RU Modulated Frame Output Power (in dBm)																																			
	SISO												SISO												SISO in MIMO											
	ANT G												ANT I												MIMO											
	26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T			26T			52T, 52T+26T			106T, 106T+26T			242T		
Maximum / Nominal Power	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.	Max	Norm.	Norm.			
2.45 GHz	ch. 12	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0	14.0	13.0			
	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0	ch. 12	6.0	5.0			
	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0	ch. 13	0.0	-1.0			

FCC ID A3LSMS947B	RF EXPOSURE PART 1 TEST REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 1 of 3

I.2.2 5 GHz WLAN 802.11ax/be RU WLAN Output Power

The below table is applicable in the following conditions:

- P_{max}

[illegible]

The below table is applicable in the following conditions:

- DSI=0 (Free, Hotspot, or Phablet)
- DSI=1 (Head)

[illegible]

FCC ID A3LSMS947B	RF EXPOSURE PART 1 TEST REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 2 of 3

I.2.3 6 GHz WLAN Maximum 802.11ax/be RU WLAN Output Power

The below table is applicable in the following conditions:

- P_{max}

[illegible]

The below table is applicable in the following conditions:

- DSI=0 (Free, Hotspot, or Phablet)
- DSI=1 (Head)

[illegible]

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DUT Type: Portable Handset		APPENDIX I: Page 3 of 3