# 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 6 GHz WLAN 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 1M2602190015-15, 17, 19, 21 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
- DSI= 0/2 (Open, Free, Hotspot)
- DSI = 3/4 (Closed, Free, Hotspot)

| Mode | Band | IEEE 802.11 Modulated/Frame Output Power (in dBm) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SISO Antenna G | | | | | | | | SISO Antenna C | | | | | | | | SISO in MIMO | | | | | | | |
| | | 26T | | 52T | | 106T | | 242T | | 26T | | 52T | | 106T | | 242T | | 26T | | 52T | | 106T | | 242T | |
| Maximum / Nominal Power | | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. | Max. | Nom. |
| 2.4 GHz WiFi | | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 (ch. 11: 17.5) | 17.0 16.5 | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 (ch. 11: 17.5) | 17.0 16.5 | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 (ch. 11: 17.5) | 17.0 16.5 |

The below table is applicable in the following conditions:

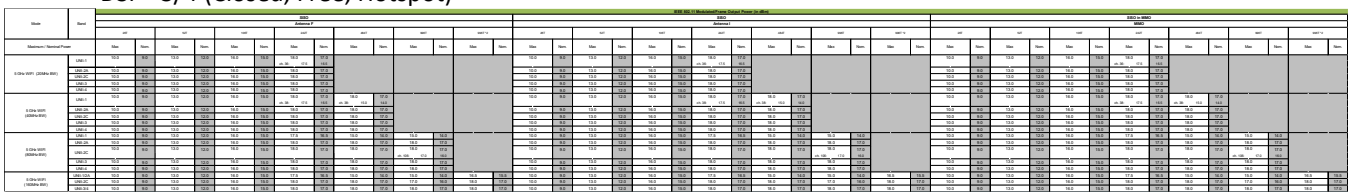
- DSI=1 (RCV On)

| Mode | Band | IEEE 802.11 Modulated/Frame Output Power (in dBm) | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SISO Antenna G | | | | | | | | SISO Antenna C | | | | | | | | SISO in MIMO | | | | | | | |
| | | 26T | | 52T | | 106T | | 242T | | 26T | | 52T | | 106T | | 242T | | 26T | | 52T | | 106T | | 242T | |
| Maximum / Nominal Power | | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. | Max | Nom. |
| 2.4 GHz WiFi | | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 | 17.0 | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 | 17.0 | 14.0 | 13.0 | 15.0 | 14.0 | 17.0 | 16.0 | 18.0 | 17.0 |

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

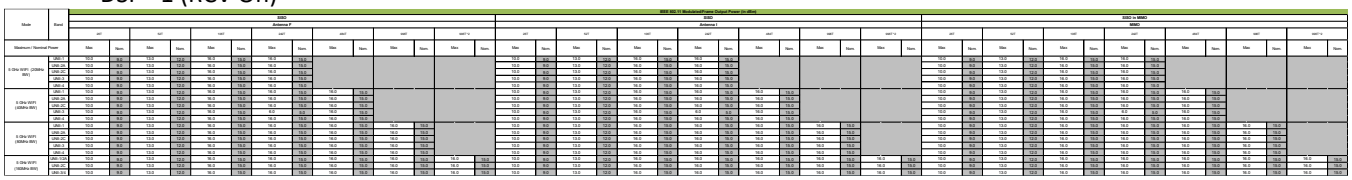
The below table is applicable in the following conditions:

- Pmax
- DSI = 0/2 (Open, Free, Hotspot)
- DSI = 3/4 (Closed, Free, Hotspot)



The below table is applicable in the following conditions:

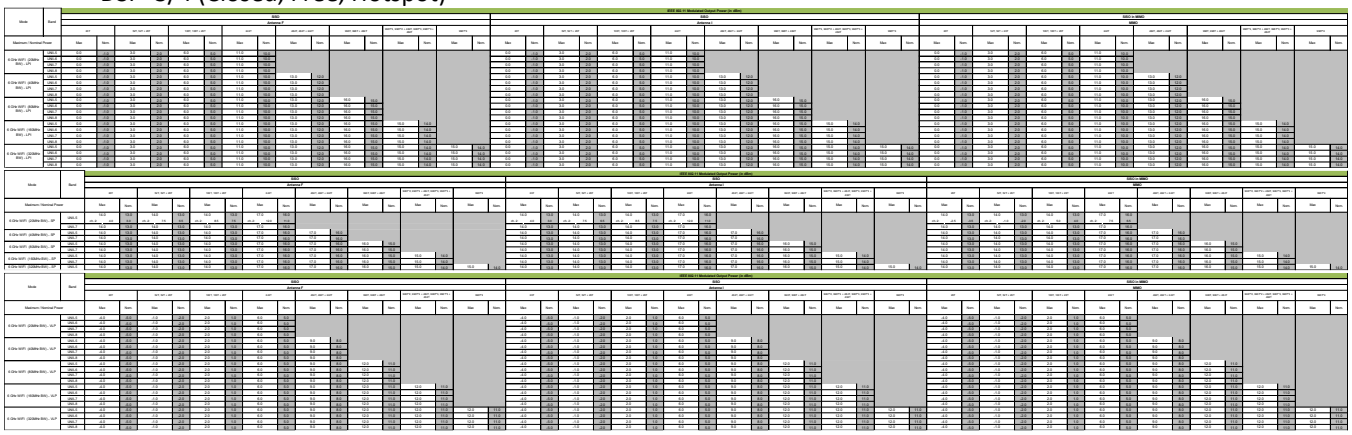
- DSI = 1 (RCV On)



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

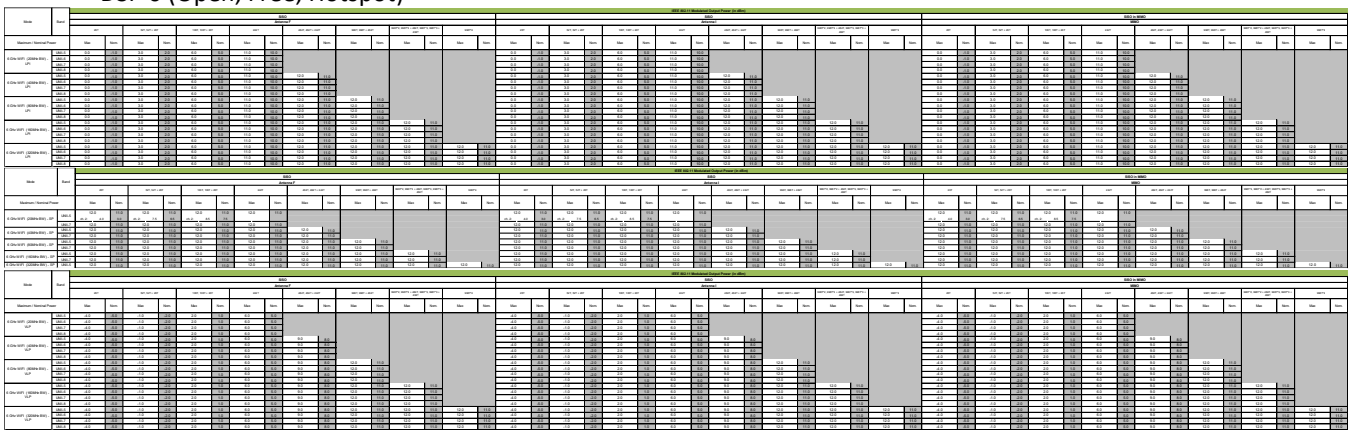
The below table is applicable in the following conditions:

- Pmax
- DSI =3/4 (Closed, Free, Hotspot)



The below table is applicable in the following conditions:

- DSI=0 (Open, Free, Hotspot)



The below table is applicable in the following conditions:

- DSI = 1 (RCV On)

