

Dear Samuel,

Thank you for your comments and please see our reply below. Thanks.

1. Remove all information regarding the AMC zone test report.

<TCB reply> Please note that this application doesn't have "AMC Zone type" from the beginning and there is no AMC zone test data in the test reports. Also, No-AMC declaration letter already in the filing.

2. Include the Motorola declaration disable the AMC zone type during manufacturing in the attestation exhibit.

<TCB reply> As explain above, the declaration letter already in the filing.

3. The scaling determination should be based on the correct definition as stated below:

$\text{Control} \times 3 + \text{maximum rated output power} \times 15) / (\text{actual_OP} \times 18)$ for each channel for each applicable DL:UL Maximum rated output power for each modulation/bandwidth/channel should be same; the actual measured output power in the denominator varies. Please review and correct accordingly.

<TCB reply> The max measured SAR before scaling for this application is only 1.07 mw/kg and commission had accepted the SAR report for final granting during the TCB PBA. It will be difficult for applicant to change all literatures at this point of time, since the product already in the market. Can we follow the commission's general guide line to enforce this on new application? We thank you for your understanding.

4. Please note that the reference lines in the SAR measurement linearity plots are incorrect. Reference line is established using measured points corresponding to probe sensors operating in the square law region; typically with the DUT operating at less than 20mW. The power at less than 20mW is used to establish the slope for the reference line for comparison with other measured SAR values to establish the error margin. Please show how your reference was determined and SAR estimated

<TCB reply> Please note that the SAR linearity plots is based on 12.5mW SAR test as we discussed in later Moto application. And calculated as below:

SAR at 12.5mw= 0.127

Expected SAR at 200mw= $0.127 \times (200/12.5) = 2.032\text{mw/kg}$

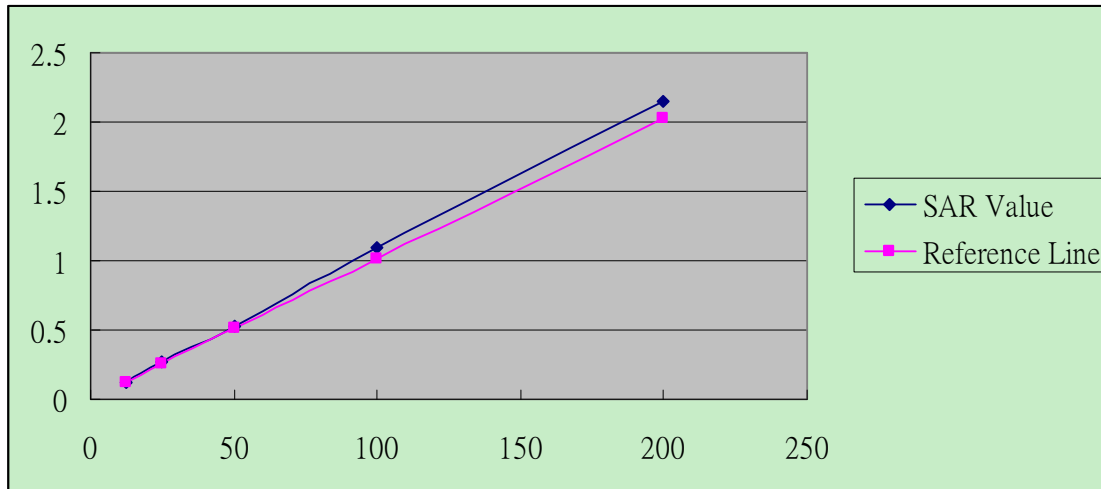
The measured SAR at 200mw= 2.15mw/kg

The error is $(2.15\text{mw/kg} - 2.032\text{mw/kg}) / 2.032 \text{mw/kg} = 0.05807 = 5.81\%$

So the calculation in SAR report is correct. I copy related portion below for your convenient. Thanks.

SAR value for various output power

WiMAX Peak RMS output power (mW)	12.5	25	50	100	200
SAR (mW /g)	0.127	0.268	0.531	1.1	2.15



Conclusion:

From the above evaluation, it suggests that the SAR result is about 5.81% over estimated. Accordingly we believe that the final SAR result is conservative.

Worst case determination

Choosing max output power channel of EMC report to pretest under 4 modulation types to determine worst case.

Pretest data as below:

CHANNEL BANDWIDTH	5MHz				10MHz			
TEST CHANNEL	High				Middle			
TX ANTENNA	Ant 1				Ant 1			
MODULATION	QPSK 1/2	QPSK 3/4	16QAM 1/2	16QAM 3/4	QPSK 1/2	QPSK 3/4	16QAM 1/2	16QAM 3/4
SAR VALUE	0.986	0.979	0.957	0.974	0.944	0.931	0.891	0.927

**Conclusion: Worst case is QPSK 1/2.

Compare with different scan resolution

With EUT hold on the worst case configuration (5MHz bandwidth / Low channel) with no any change in position or setting, 2 scans with different resolutions are preformed to evaluate the impact on the SAR value.