WiMAX SAR Test reduction (Antenna1)

5 MHz Channel BW							
Channel No.		Low		Middle		High	
Freuency(MHz)		2498.5		2593		2687.5	
SAR(W/kg)		measured	scaled	measured	scaled	measured	scaled
USB Horizontal-A	QPSK 1/2	0.215	0.246	Test reduction[1]		Test reduction[2]	
USB Horizontal-B		0.966	1.106	1.01	1.236	0.687	0.805
USB vertiacl-C		0.14	0.16	Test reduction[3]		Test reduction[4]	
USB vertiacl-D		0.487	0.558				
USB tail/end		0.219	0.251				
USB Horizontal-A	16QAM 1/2	Test reduction[5]					
USB Horizontal-B		0.999	1.179	1.07	1.295	0.704	0.817
USB vertiacl-C		Test reduction[6]					
USB vertiacl-D							
USB tail/end							
10 MHz Channel BW							
Channel No.		Low		Middle		High	
Freuency(MHz)		2501		2593		2685	
SAR(W/kg)		measured	scaled	measured	scaled	measured	scaled
USB Horizontal-A	QPSK 1/2	Test reduction[7]		Test reduction[8]		0.289	0.318
USB Horizontal-B						0.677	0.745
USB vertiacl-C						0.074	0.081
USB vertiacl-D						0.274	0.301
USB tail/end						0.198	0.218
USB Horizontal-A	16QAM 1/2	Test reduction[9]					
USB Horizontal-B							
USB vertiacl-C							
USB vertiacl-D							
USB tail/end							

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[1] Use the scaled SAR to determine test reduction (<0.8 W/kg etc.). SAR value of the Max. Conducted output power channel is less than 0.8 W/kg. Therefore Middle and high channel SAR test were saved.

[2] See footnote 1, supra.

[3] See footnote 1, supra.

[4] See footnote 1, supra.

[5] The 16QAM maximum output power is ≤ ¼ dB higher than QPSK and QPSK SAR is < 0.8 W/kg, 16QAM SAR is not needed.

[6] See footnote 5, supra.

[7] Use the scaled SAR to determine test reduction (<0.8 W/kg etc.). SAR value of the Max. Conducted output power channel is less than 0.8 W/kg. Therefore Low and Middle channel SAR test were saved.

[8] See footnote 7, supra.

[9] See footnote 5, supra.

WiMAX SAR Test reduction (Antenna2)

5 MHz Channel BW							
Channel No.		Low		Middle		High	
Freuency(MHz)		2498.5		2593		2687.5	
SAR(W/kg)		measured	scaled	measured	scaled	measured	scaled
USB Horizontal-A	QPSK 1/2	0.339	0.39	Test reduction[10]			
USB Horizontal-B		1.08	1.243	0.896	1.072	0.849	1.037
USB vertiacl-C		0.428	0.493	Test reduction[11]			
USB vertiacl-D		0.097	0.112				
USB tail/end		0.049	0.056				
USB Horizontal-A	16QAM 1/2	Test reduction[12]		Test reduction[13]			
USB Horizontal-B		0.832	0.993				
USB vertiacl-C		Test reduction[14]					
USB vertiacl-D							
USB tail/end							
10 MHz Channel BW							
Channel No.		Low		Middle		High	
Freuency(MHz)		2501		2593		2685	
SAR(W/kg)		measured	scaled	measured	scaled	measured	scaled
USB Horizontal-A	QPSK 1/2	Test reduction[15]				0.516	0.562
USB Horizontal-B		0.856	0.968	0.869	0.985	0.838	0.913
USB vertiacl-C		Test reduction[16]				0.609	0.664
USB vertiacl-D						0.073	0.08
USB tail/end						0.127	0.138
USB Horizontal-A	16QAM 1/2	Test reduction[17]		Test reduction[18]		Test reduction[19]	
USB Horizontal-B				0.839	0.953		
USB vertiacl-C				Test reduction[20]			
USB vertiacl-D							
USB tail/end							

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[10] Use the scaled SAR to determine test reduction (<0.8 W/kg etc.). SAR value of the Max. Conducted output power channel is less than 0.8 W/kg. Therefore Middle and high channel SAR test were saved.

[11] See footnote 10, supra.

[12] The 16QAM maximum output power is ≤ ¼ dB higher than QPSK and QPSK SAR is < 0.8 W/kg, 16QAM SAR is not needed.

[13] See footnote 14, supra.

[14] See footnote 14, supra.

[15] See footnote 10, supra.

[16] See footnote 10, supra.

[17] See footnote 12, supra.

[18] See footnote 12, supra.

[19] See footnote 12, supra.

[20] See footnote 12, supra.