Report No. : FA451423A

## Appendix D. SAR System Validation

SAR measurement systems are validated according to procedures in KDB 865664 (D01), and the validation status is tabulated below according to the validation date(s), measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters.

SAR Lab	FREQ.	Probe	Probe SN	Probe CAL. Parameter		COND.	PERM.	CV	V Validation	ı	Additio			
	[MHz]					(σ)	(ɛr)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	835	ES3DV3	3270	835	Head	0.928	42.981	Pass	Pass	Pass	GMSK	Pass	N/A	10/03/2013
	835	ES3DV3	3270	835	Body	0.978	53.389	Pass	Pass	Pass	GMSK	Pass	N/A	10/01/2013
01	1750	ES3DV3	3270	1750	Head	1.397	41.623	Pass	Pass	Pass	N/A	N/A	N/A	10/06/2013
UI	1750	ES3DV3	3270	1750	Body	1.530	51.730	Pass	Pass	Pass	N/A	N/A	N/A	10/04/2013
	1900	ES3DV3	3270	1900	Head	1.449	38.532	Pass	Pass	Pass	GMSK	Pass	N/A	10/11/2013
	1900	ES3DV3	3270	1900	Body	1.521	53.218	Pass	Pass	Pass	GMSK	Pass	N/A	10/08/2013

SAR	FREQ.		Probe SN	Probe CAL.		COND.	PERM.	CV	V Validation		Additio	nal Validati	on	Doto
Lab	[MHz]	Probe		Parar		(σ)	(ɛr)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	750	EX3DV4	3770	750	Head	0.900	40.780	Pass	Pass	Pass	N/A	N/A	N/A	05/01/2014
	750	EX3DV4	3770	750	Body	0.960	54.810	Pass	Pass	Pass	N/A	N/A	N/A	05/03/2014
	835	EX3DV4	3770	835	Head	0.928	43.177	Pass	Pass	Pass	GMSK	Pass	N/A	04/29/2014
	835	EX3DV4	3770	835	Body	0.963	54.540	Pass	Pass	Pass	GMSK	Pass	N/A	04/27/2014
02	1750	EX3DV4	3770	1750	Head	1.389	39.795	Pass	Pass	Pass	N/A	N/A	N/A	05/06/2014
02	1750	EX3DV4	3770	1750	Body	1.530	52.220	Pass	Pass	Pass	N/A	N/A	N/A	05/06/2014
	1900	EX3DV4	3770	1900	Head	1.449	38.532	Pass	Pass	Pass	GMSK	Pass	N/A	05/12/2014
	1900	EX3DV4	3770	1900	Body	1.518	50.989	Pass	Pass	Pass	GMSK	Pass	N/A	05/09/2014
	2600	EX3DV4	3770	2600	Head	1.984	37.541	Pass	Pass	Pass	N/A	N/A	N/A	05/13/2014
	2600	EX3DV4	3770	2600	Body	2.211	51.223	Pass	Pass	Pass	N/A	N/A	N/A	05/11/2014

SAR Lab	FREQ. [MHz]	Probe	Probe SN	Probe CAL. Parameter		COND.	PERM.	CV	V Validation		Additio			
						(σ)	(Er)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	835	EX3DV4	3925	835	Head	0.917	42.244	Pass	Pass	Pass	GMSK	Pass	N/A	01/01/2014
	835	EX3DV4	3925	835	Body	0.952	55.377	Pass	Pass	Pass	GMSK	Pass	N/A	01/06/2014
03	1900	EX3DV4	3925	1900	Head	1.431	38.421	Pass	Pass	Pass	GMSK	Pass	N/A	01/16/2014
03	1900	EX3DV4	3925	1900	Body	1.511	52.322	Pass	Pass	Pass	GMSK	Pass	N/A	01/18/2014
	2600	EX3DV4	3925	2600	Head	1.982	37.433	Pass	Pass	Pass	N/A	N/A	N/A	01/16/2014
	2600	EX3DV4	3925	2600	Body	2.109	51.109	Pass	Pass	Pass	N/A	N/A	N/A	01/19/2014

COND. PERM. **CW** Validation Additional Validation SAR FREQ. Probe Date Duty Probe Probe Modulation [MHz] Parameter PAR Sensitivity Factor Linearity Isotropy Type 835 EX3DV4 3931 835 0.884 41.182 **GMSK** N/A 09/13/2013 Head Pass Pass Pass Pass EX3DV4 GMSK 09/15/2013 835 3931 835 Body 0.978 54.221 Pass Pass Pass Pass N/A Pass Pass 1750 EX3DV4 3931 1750 Head 1.403 38.964 N/A N/A 09/19/2013 Pass N/A 04 1750 EX3DV4 3931 1750 Body 1.536 52.111 Pass Pass Pass N/A N/A N/A 09/19/2013 1900 EX3DV4 3931 1900 Head 1.430 38.937 Pass Pass Pass **GMSK** Pass N/A 09/16/2013 1900 EX3DV4 3931 1900 Body 1.545 51.942 GMSK N/A 09/12/2013 Pass Pass Pass Pass

Report No.: FA451423A

SAR Lab	FREQ.	Probe	Probe SN	Probe CAL. Parameter		COND.	PERM.	CV	V Validation	1	Additio	_		
	[MHz]					(σ)	(Er)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	835	EX3DV4	3935	835	Head	0.911	40.606	Pass	Pass	Pass	GMSK	Pass	N/A	11/09/2013
	835	EX3DV4	3935	835	Body	0.985	54.224	Pass	Pass	Pass	GMSK	Pass	N/A	11/10/2013
OF	1750	EX3DV4	3935	1750	Head	1.389	39.795	Pass	Pass	Pass	N/A	N/A	N/A	11/15/2013
05	1750	EX3DV4	3935	1750	Body	1.488	53.136	Pass	Pass	Pass	N/A	N/A	N/A	11/19/2013
	1900	EX3DV4	3935	1900	Head	1.458	38.959	Pass	Pass	Pass	GMSK	Pass	N/A	11/23/2013
	1900	EX3DV4	3935	1900	Body	1.577	52.586	Pass	Pass	Pass	GMSK	Pass	N/A	11/20/2013

SAR Lab	FREQ. [MHz]	Probe	Probe SN	Probe CAL. Parameter		COND.	PERM.	CV	V Validation	1	Additio	_		
						(σ)	(ɛr)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	835	EX3DV4	3954	835	Head	0.895	41.668	Pass	Pass	Pass	GMSK	Pass	N/A	11/08/2013
	835	EX3DV4	3954	835	Body	0.993	54.701	Pass	Pass	Pass	GMSK	Pass	N/A	11/06/2013
06	1900	EX3DV4	3954	1900	Head	1.450	38.530	Pass	Pass	Pass	GMSK	Pass	N/A	11/18/2013
	1900	EX3DV4	3954	1900 Body		1.521	53.218	Pass	Pass	Pass	GMSK	Pass	N/A	11/13/2013

SAR	FREQ.	Probe	Probe SN	Probe CAL. Parameter		COND.	PERM.	CV	V Validation	1	Additio	Data		
Lab	[MHz]					(σ)	(Er)	Sensitivity	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date
	750	EX3DV4	3955	750	Head	0.879	42.334	Pass	Pass	Pass	N/A	N/A	N/A	11/28/2013
	750	EX3DV4	3955	750	Body	0.963	54.742	Pass	Pass	Pass	N/A	N/A	N/A	11/28/2013
07	1900	EX3DV4	3955	1900	Head	1.444	39.643	Pass	Pass	Pass	GMSK	Pass	N/A	12/29/2013
07	1900	EX3DV4	3955	1900	Body	1.524	52.264	Pass	Pass	Pass	GMSK	Pass	N/A	12/29/2013
	2600	EX3DV4	3955	2600	Head	1.882	38.226	Pass	Pass	Pass	N/A	N/A	N/A	01/04/2014
	2600	EX3DV4	3955	2600	Body	2.134	52.243	Pass	Pass	Pass	N/A	N/A	N/A	01/04/2014