Annex A. Plots of System Verification

The plots for system verification are shown as follows.

Plots of System Verification

S01 SAR - System Check_H6.5GHz_211207

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Speag 6.5GHz System Validation Kit	50.0 x 10.0 x 8.0		6.5GHzV2 Validation Kit

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat,	,		UID 0	6500.0,	5.65	6.21	33.7

Hardware Setup

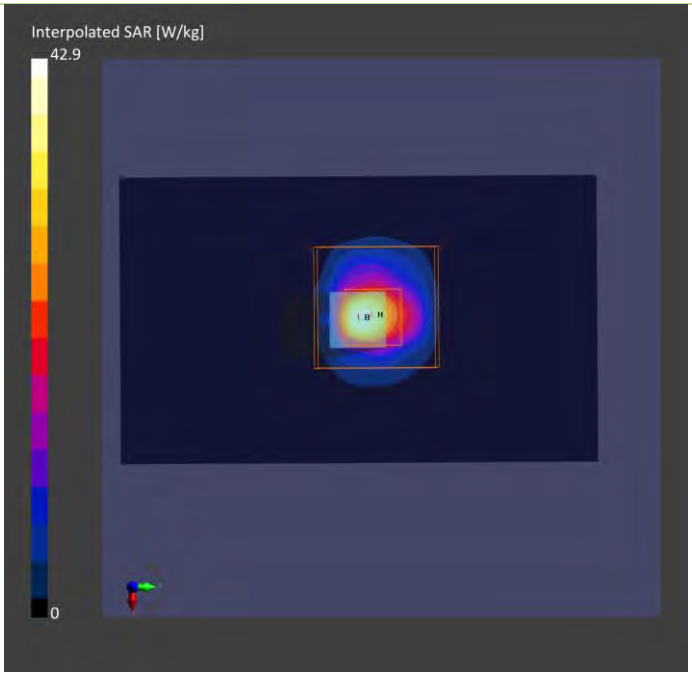
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2021-Dec-07	EX3DV4 - SN7554, 2021-08-26	DAE4 Sn1589, 2021-08-20

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	52.5 x 82.5	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2021-12-07	2021-12-07
psSAR1g [W/Kg]	24.7	31.2
psSAR10g [W/Kg]	5.20	5.74
Power Drift [dB]	0.02	0.01



Plots of System Verification

S01 Power Density - System Check_10 GHz_211210

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
SPEAG	100.0 x 100.0 x 172.0	SN: 1025	5G Verification Source 10 GHz

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Front 10.00	Validation band	CW	10000.0	1.0

Hardware Setup

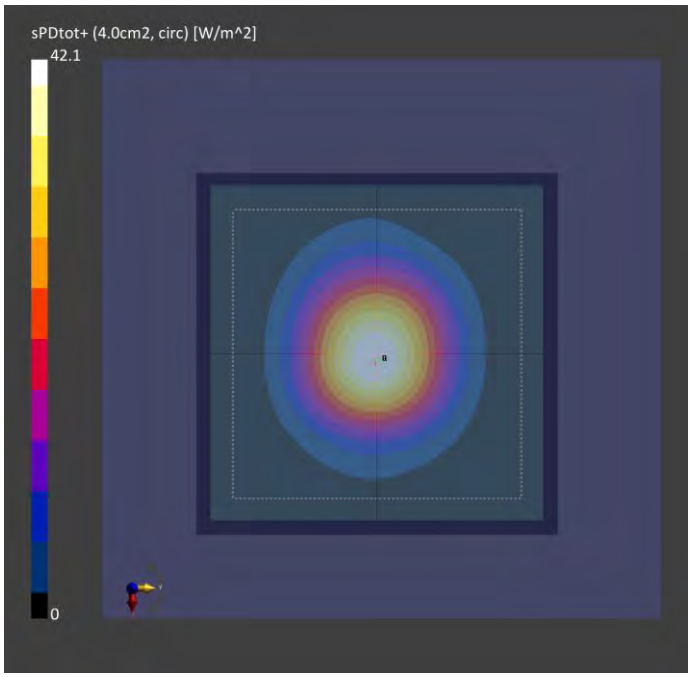
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	--Air--	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Date	2021-12-10
Avg. Area [cm^2]	4.00
$pS_{tot}avg$[W/m^2]	42.1
$pS_{n}avg$ [W/m^2]	41.8
E_{peak} [V/m]	136
Power Drift [dB]	0.01



Annex B. Plots of Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination are shown as follows.

Plots of Measurement

P01 SAR - UNII-5_802.11ax HE160_Rear Face_0mm_Ch47_ WNC_Ant 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BEDW-WTW-P21090375	320.0 x 210.0 x 22.0		Tablet

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	Rear Face, 0.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	5.6	5.705	34.381

Hardware Setup

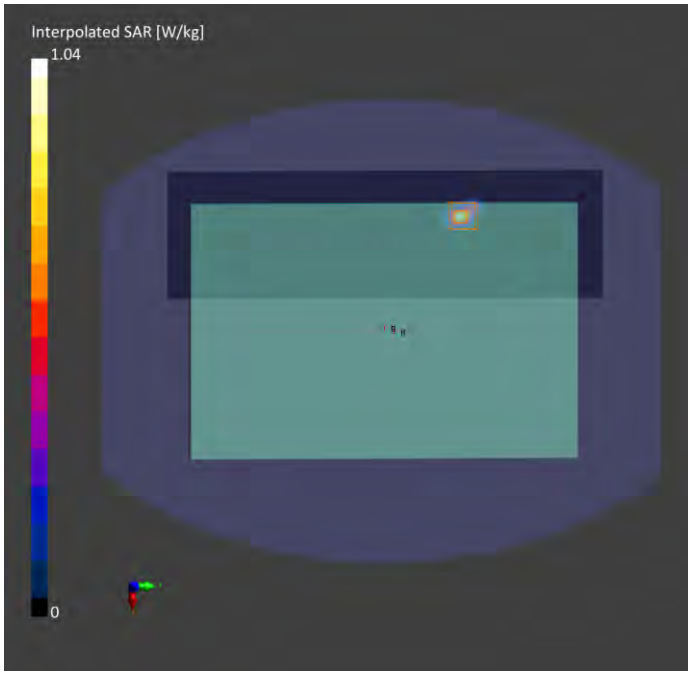
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2021-Dec-07	EX3DV4 - SN7554, 2021-08-26	DAE4 Sn1589, 2021-08-20

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	105.0 x 360.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2021-12-07	2021-12-07
psSAR1g [W/Kg]	0.622	0.712
psSAR10g [W/Kg]	0.153	0.168
Power Drift [dB]	0.06	0.05



P01 Power Density - UNII-5_802.11ax HE160_Rear Face_0mm_ Ch47_WNC_Ant0

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BEDW-WTW-P21090375	324.0 x 205.0 x 15.0		Tablet

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Rear Face 2.00	U-NII-5	WLAN 10755	6185.0 47	1.0

Hardware Setup

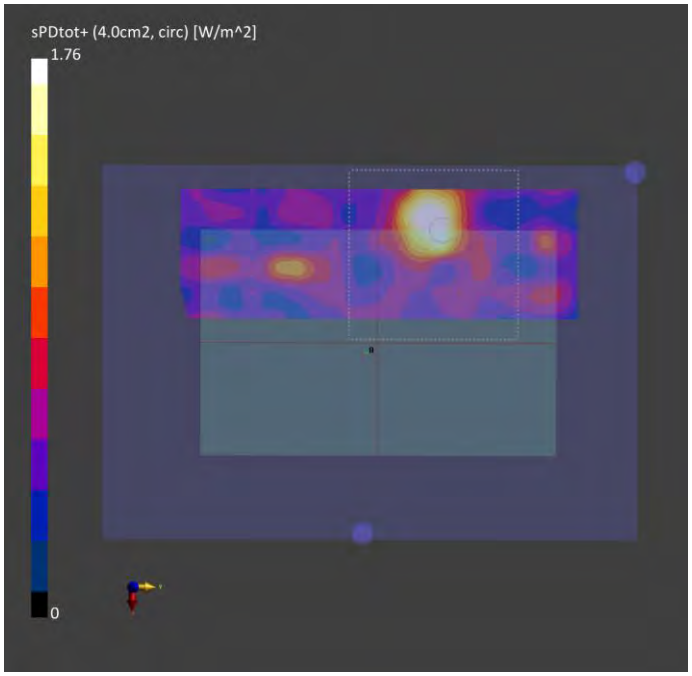
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	--Air--	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

	5G Scan
Date	2021-12-10
Avg. Area [cm²]	4.00
$pS_{tot}avg$[W/m²]	1.78
$pS_{n}avg$ [W/m²]	1.09
E_{peak} [V/m]	48.9
Power Drift [dB]	0.02



Annex C. Tissue & System Verification

The measuring results for tissue simulating liquid and system check are shown as below.

Note:

1. For Section 4.3, the dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ±10 % of the target values. Liquid temperature during the SAR testing has kept within ±2 ℃.
2. For Section 4.4, The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.
3. For Section 4.5, Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Annex A of this report.

Tissue Verification									Validation for CW			Validation for Modulation				System Validation					Note			
Plot No.	Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (εr)	Targeted Conductivity (σ)	Targeted Permittivity (εr)	Deviation Conductivity (σ)	Deviation Permittivity (εr)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date	Frequency (MHz)	Targeted 1g SAR (W/kg)	Measured 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N	Output Power (dB)
S01	6500	23.3	6.21	33.7	6.07	34.5	2.31	-2.32	Pass	Pass	Pass	OFDM	N/A	Pass	Dec. 07, 2021	6500	290.00	31.2	312.00	7.59	1029	7554	1589	20

Plot No.	Test Date	Frequency [GHz]	mmWave Probe S/N	Verification Source S/N	Averaging Area [cm^2]	Distance [mm]	Target Power Density [W/m^2]	Measured Power Density [W/m^2]	Deviation [%]
S01	Dec. 10, 2021	10	9438	1025	4	10.0	42.7	42.1	-1.41%

Annex D. Maximum Target Conducted Power

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

WLAN Tune-up Power (Laptop Mode)							
UNII-5							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	1	5955	5.0	5.0	2.0	2.0	5.0
	5	5975	5.0	5.0	2.0	2.0	5.0
	9	5995	5.0	5.0	2.0	2.0	5.0
	13	6015	5.0	5.0	2.0	2.0	5.0
	17	6035	5.0	5.0	2.0	2.0	5.0
	21	6055	5.0	5.0	2.0	2.0	5.0
	25	6075	5.0	5.0	2.0	2.0	5.0
	29	6095	5.0	5.0	2.0	2.0	5.0
	33	6115	5.0	5.0	2.0	2.0	5.0
	37	6135	5.0	5.0	2.0	2.0	5.0
	41	6155	5.0	5.0	2.0	2.0	5.0
	45	6175	5.0	5.0	2.0	2.0	5.0
	49	6195	5.0	5.0	2.0	2.0	5.0
	53	6215	5.0	5.0	2.0	2.0	5.0
	57	6235	5.0	5.0	2.0	2.0	5.0
	61	6255	5.0	5.0	2.0	2.0	5.0
	65	6275	5.0	5.0	2.0	2.0	5.0
	69	6295	5.0	5.0	2.0	2.0	5.0
	73	6315	5.0	5.0	2.0	2.0	5.0
	77	6335	5.0	5.0	2.0	2.0	5.0
	81	6355	5.0	5.0	2.0	2.0	5.0
	85	6375	5.0	5.0	2.0	2.0	5.0
	89	6395	5.0	5.0	2.0	2.0	5.0
	93	6415	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	3	5965	8.0	8.0	5.0	5.0	8.0
	11	6005	8.0	8.0	5.0	5.0	8.0
	19	6045	8.0	8.0	5.0	5.0	8.0
	27	6085	8.0	8.0	5.0	5.0	8.0
	35	6125	8.0	8.0	5.0	5.0	8.0
	43	6165	8.0	8.0	5.0	5.0	8.0
	51	6205	8.0	8.0	5.0	5.0	8.0
	59	6245	8.0	8.0	5.0	5.0	8.0
	67	6285	8.0	8.0	5.0	5.0	8.0
	75	6325	8.0	8.0	5.0	5.0	8.0
	83	6365	8.0	8.0	5.0	5.0	8.0
	91	6405	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	7	5985	10.5	10.5	7.5	7.5	10.5
	23	6065	10.5	10.5	7.5	7.5	10.5
	39	6145	10.5	10.5	7.5	7.5	10.5
	55	6225	10.5	10.5	7.5	7.5	10.5
	71	6305	10.5	10.5	7.5	7.5	10.5
	87	6385	10.5	10.5	7.5	7.5	10.5
802.11ax HE160	15	6025	13.5	13.5	10.5	10.5	13.5
	47	6185	13.5	13.5	10.5	10.5	13.5
	79	6345	13.5	13.5	10.5	10.5	13.5

WLAN Tune-up Power (Laptop Mode)							
UNII-6							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	97	6435	5.0	5.0	2.0	2.0	5.0
	101	6455	5.0	5.0	2.0	2.0	5.0
	105	6475	5.0	5.0	2.0	2.0	5.0
	109	6495	5.0	5.0	2.0	2.0	5.0
	113	6515	5.0	5.0	2.0	2.0	5.0
	117	6535	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	99	6445	8.0	8.0	5.0	5.0	8.0
	107	6485	8.0	8.0	5.0	5.0	8.0
	115	6525	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	103	6465	10.5	10.5	7.5	7.5	10.5
	119	6545	10.5	10.5	7.5	7.5	10.5
802.11ax HE160	111	6505	13.5	13.5	10.5	10.5	13.5

WLAN Tune-up Power (Laptop Mode)							
UNII-7							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	121	6555	5.0	5.0	2.0	2.0	5.0
	125	6575	5.0	5.0	2.0	2.0	5.0
	129	6595	5.0	5.0	2.0	2.0	5.0
	133	6615	5.0	5.0	2.0	2.0	5.0
	137	6635	5.0	5.0	2.0	2.0	5.0
	141	6655	5.0	5.0	2.0	2.0	5.0
	145	6675	5.0	5.0	2.0	2.0	5.0
	149	6695	5.0	5.0	2.0	2.0	5.0
	153	6715	5.0	5.0	2.0	2.0	5.0
	157	6735	5.0	5.0	2.0	2.0	5.0
	161	6755	5.0	5.0	2.0	2.0	5.0
	165	6775	5.0	5.0	2.0	2.0	5.0
	169	6795	5.0	5.0	2.0	2.0	5.0
	173	6815	5.0	5.0	2.0	2.0	5.0
	177	6835	5.0	5.0	2.0	2.0	5.0
	181	6855	5.0	5.0	2.0	2.0	5.0
	185	6875	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	123	6565	8.0	8.0	5.0	5.0	8.0
	131	6605	8.0	8.0	5.0	5.0	8.0
	139	6645	8.0	8.0	5.0	5.0	8.0
	147	6685	8.0	8.0	5.0	5.0	8.0
	155	6725	8.0	8.0	5.0	5.0	8.0
	163	6765	8.0	8.0	5.0	5.0	8.0
	171	6805	8.0	8.0	5.0	5.0	8.0
	179	6845	8.0	8.0	5.0	5.0	8.0
	187	6885	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	135	6625	10.5	10.5	7.5	7.5	10.5
	151	6705	10.5	10.5	7.5	7.5	10.5
	167	6785	10.5	10.5	7.5	7.5	10.5
	183	6865	10.5	10.5	7.5	7.5	10.5
802.11ax HE160	143	6665	13.5	13.5	10.5	10.5	13.5
	175	6825	13.5	13.5	10.5	10.5	13.5

WLAN Tune-up Power (Laptop Mode)							
UNII-8							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	189	6895	5.0	5.0	2.0	2.0	5.0
	193	6915	5.0	5.0	2.0	2.0	5.0
	197	6935	5.0	5.0	2.0	2.0	5.0
	201	6955	5.0	5.0	2.0	2.0	5.0
	205	6975	5.0	5.0	2.0	2.0	5.0
	209	6995	5.0	5.0	2.0	2.0	5.0
	213	7015	5.0	5.0	2.0	2.0	5.0
	217	7035	5.0	5.0	2.0	2.0	5.0
	221	7055	5.0	5.0	2.0	2.0	5.0
	225	7075	5.0	5.0	2.0	2.0	5.0
	229	7095	5.0	5.0	2.0	2.0	5.0
	233	7115	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	195	6925	8.0	8.0	5.0	5.0	8.0
	203	6965	8.0	8.0	5.0	5.0	8.0
	211	7005	8.0	8.0	5.0	5.0	8.0
	219	7045	8.0	8.0	5.0	5.0	8.0
	227	7085	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	199	6945	10.5	10.5	7.5	7.5	10.5
	215	7025	10.5	10.5	7.5	7.5	10.5
802.11ax HE160	207	6985	13.5	13.5	10.5	10.5	13.5

WLAN Tune-up Power (Tablet Mode)							
UNII-5							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	1	5955	5.0	5.0	2.0	2.0	5.0
	5	5975	5.0	5.0	2.0	2.0	5.0
	9	5995	5.0	5.0	2.0	2.0	5.0
	13	6015	5.0	5.0	2.0	2.0	5.0
	17	6035	5.0	5.0	2.0	2.0	5.0
	21	6055	5.0	5.0	2.0	2.0	5.0
	25	6075	5.0	5.0	2.0	2.0	5.0
	29	6095	5.0	5.0	2.0	2.0	5.0
	33	6115	5.0	5.0	2.0	2.0	5.0
	37	6135	5.0	5.0	2.0	2.0	5.0
	41	6155	5.0	5.0	2.0	2.0	5.0
	45	6175	5.0	5.0	2.0	2.0	5.0
	49	6195	5.0	5.0	2.0	2.0	5.0
	53	6215	5.0	5.0	2.0	2.0	5.0
	57	6235	5.0	5.0	2.0	2.0	5.0
	61	6255	5.0	5.0	2.0	2.0	5.0
	65	6275	5.0	5.0	2.0	2.0	5.0
	69	6295	5.0	5.0	2.0	2.0	5.0
	73	6315	5.0	5.0	2.0	2.0	5.0
	77	6335	5.0	5.0	2.0	2.0	5.0
	81	6355	5.0	5.0	2.0	2.0	5.0
	85	6375	5.0	5.0	2.0	2.0	5.0
	89	6395	5.0	5.0	2.0	2.0	5.0
	93	6415	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	3	5965	8.0	8.0	5.0	5.0	8.0
	11	6005	8.0	8.0	5.0	5.0	8.0
	19	6045	8.0	8.0	5.0	5.0	8.0
	27	6085	8.0	8.0	5.0	5.0	8.0
	35	6125	8.0	8.0	5.0	5.0	8.0
	43	6165	8.0	8.0	5.0	5.0	8.0
	51	6205	8.0	8.0	5.0	5.0	8.0
	59	6245	8.0	8.0	5.0	5.0	8.0
	67	6285	8.0	8.0	5.0	5.0	8.0
	75	6325	8.0	8.0	5.0	5.0	8.0
	83	6365	8.0	8.0	5.0	5.0	8.0
	91	6405	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	7	5985	8.0	8.0	7.5	7.5	10.5
	23	6065	8.0	8.0	7.5	7.5	10.5
	39	6145	8.0	8.0	7.5	7.5	10.5
	55	6225	8.0	8.0	7.5	7.5	10.5
	71	6305	8.0	8.0	7.5	7.5	10.5
	87	6385	8.0	8.0	7.5	7.5	10.5
802.11ax HE160	15	6025	8.0	8.0	8.0	8.0	11.0
	47	6185	8.0	8.0	8.0	8.0	11.0
	79	6345	8.0	8.0	8.0	8.0	11.0

WLAN Tune-up Power (Tablet Mode)							
UNII-6							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	97	6435	5.0	5.0	2.0	2.0	5.0
	101	6455	5.0	5.0	2.0	2.0	5.0
	105	6475	5.0	5.0	2.0	2.0	5.0
	109	6495	5.0	5.0	2.0	2.0	5.0
	113	6515	5.0	5.0	2.0	2.0	5.0
	117	6535	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	99	6445	8.0	8.0	5.0	5.0	8.0
	107	6485	8.0	8.0	5.0	5.0	8.0
	115	6525	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	103	6465	8.0	8.0	7.5	7.5	10.5
	119	6545	8.0	8.0	7.5	7.5	10.5
802.11ax HE160	111	6505	8.0	8.0	8.0	8.0	11.0

WLAN Tune-up Power (Tablet Mode)							
UNII-7							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	121	6555	5.0	5.0	2.0	2.0	5.0
	125	6575	5.0	5.0	2.0	2.0	5.0
	129	6595	5.0	5.0	2.0	2.0	5.0
	133	6615	5.0	5.0	2.0	2.0	5.0
	137	6635	5.0	5.0	2.0	2.0	5.0
	141	6655	5.0	5.0	2.0	2.0	5.0
	145	6675	5.0	5.0	2.0	2.0	5.0
	149	6695	5.0	5.0	2.0	2.0	5.0
	153	6715	5.0	5.0	2.0	2.0	5.0
	157	6735	5.0	5.0	2.0	2.0	5.0
	161	6755	5.0	5.0	2.0	2.0	5.0
	165	6775	5.0	5.0	2.0	2.0	5.0
	169	6795	5.0	5.0	2.0	2.0	5.0
	173	6815	5.0	5.0	2.0	2.0	5.0
	177	6835	5.0	5.0	2.0	2.0	5.0
	181	6855	5.0	5.0	2.0	2.0	5.0
	185	6875	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	123	6565	8.0	8.0	5.0	5.0	8.0
	131	6605	8.0	8.0	5.0	5.0	8.0
	139	6645	8.0	8.0	5.0	5.0	8.0
	147	6685	8.0	8.0	5.0	5.0	8.0
	155	6725	8.0	8.0	5.0	5.0	8.0
	163	6765	8.0	8.0	5.0	5.0	8.0
	171	6805	8.0	8.0	5.0	5.0	8.0
	179	6845	8.0	8.0	5.0	5.0	8.0
	187	6885	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	135	6625	8.0	8.0	7.5	7.5	10.5
	151	6705	8.0	8.0	7.5	7.5	10.5
	167	6785	8.0	8.0	7.5	7.5	10.5
	183	6865	8.0	8.0	7.5	7.5	10.5
802.11ax HE160	143	6665	8.0	8.0	8.0	8.0	11.0
	175	6825	8.0	8.0	8.0	8.0	11.0

WLAN Tune-up Power (Tablet Mode)							
UNII-8							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	189	6895	5.0	5.0	2.0	2.0	5.0
	193	6915	5.0	5.0	2.0	2.0	5.0
	197	6935	5.0	5.0	2.0	2.0	5.0
	201	6955	5.0	5.0	2.0	2.0	5.0
	205	6975	5.0	5.0	2.0	2.0	5.0
	209	6995	5.0	5.0	2.0	2.0	5.0
	213	7015	5.0	5.0	2.0	2.0	5.0
	217	7035	5.0	5.0	2.0	2.0	5.0
	221	7055	5.0	5.0	2.0	2.0	5.0
	225	7075	5.0	5.0	2.0	2.0	5.0
	229	7095	5.0	5.0	2.0	2.0	5.0
	233	7115	5.0	5.0	2.0	2.0	5.0
802.11ax HE40	195	6925	8.0	8.0	5.0	5.0	8.0
	203	6965	8.0	8.0	5.0	5.0	8.0
	211	7005	8.0	8.0	5.0	5.0	8.0
	219	7045	8.0	8.0	5.0	5.0	8.0
	227	7085	8.0	8.0	5.0	5.0	8.0
802.11ax HE80	199	6945	8.0	8.0	7.5	7.5	10.5
	215	7025	8.0	8.0	7.5	7.5	10.5
802.11ax HE160	207	6985	8.0	8.0	8.0	8.0	11.0

Annex E. Measured Conducted Power Result

The measuring conducted power (Unit: dBm) are shown as below.

WLAN Conducted Power (Laptop Mode)			
UNII-5 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	15	6025	13.41
	47	6185	13.46
	79	6345	13.38

UNII-6 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	111	6505	13.44

UNII-7 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	143	6665	13.35
	175	6825	13.41

UNII-8 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	207	6985	13.37

WLAN Conducted Power (Laptop Mode)			
UNII-5 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	15	6025	13.4
	47	6185	13.45
	79	6345	13.42

UNII-6 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	111	6505	13.4

UNII-7 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	143	6665	13.41
	175	6825	13.39

UNII-8 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	207	6985	13.4

WLAN Conducted Power (Laptop Mode)					
UNII-5 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	15	6025	10.39	10.41	13.41
	47	6185	10.4	10.47	13.45
	79	6345	10.41	10.38	13.41

UNII-6 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	111	6505	10.42	10.41	13.43

UNII-7 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	143	6665	10.4	10.38	13.4
	175	6825	10.45	10.31	13.39

UNII-8 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	207	6985	10.42	10.34	13.39

WLAN Conducted Power (Tablet Mode)			
UNII-5 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	15	6025	7.88
	47	6185	7.91
	79	6345	7.7

UNII-6 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	111	6505	7.68

UNII-7 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	143	6665	7.8
	175	6825	7.71

UNII-8 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	207	6985	7.69

WLAN Conducted Power (Tablet Mode)			
UNII-5 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	15	6025	7.66
	47	6185	7.85
	79	6345	7.59

UNII-6 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	111	6505	7.66

UNII-7 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	143	6665	7.68
	175	6825	7.75

UNII-8 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	207	6985	7.81

WLAN Conducted Power (Tablet Mode)					
UNII-5 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	15	6025	7.5	7.71	10.62
	47	6185	7.79	7.8	10.81
	79	6345	7.6	7.69	10.66

UNII-6 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	111	6505	7.68	7.44	10.57

UNII-7 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	143	6665	7.81	7.45	10.64
	175	6825	7.66	7.49	10.59

UNII-8 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	207	6985	7.49	7.71	10.61

Annex F. SAR and Power Density Test Result

SAR Results for Body Exposure Condition.

Note:
1. SAR testing for WLAN was performed on the maximum power mode.
2. The “< 0.001” means there is no SAR value or the SAR is too low to be measured.

SAR and Power Density Test Result

System & Position						DUT & Accessory		SAR								Power Density								
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Antenna Manufacturer	Ant Status	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)	Measured APD W/m^2 (4cm^2)	Grid Step [λ]	iPD [W/m2]	Scaling Factor for Measurement Uncertainty	Averaging Area [cm2]	Power Drift [dB]	Normal psPD [W/m2]	Scaled Normal psPD [W/m2]	Total psPD [W/m2]	Scaled Total psPD [W/m2]
	UNII-5	802.11ax HE160	Bottom	0	47	WNC	Ant 0	94.10	1.06	13.50	13.46	1.01	-0.09	0.66	0.71	4.74									
	UNII-5	802.11ax HE160	Bottom	0	47	WNC	Ant 1	93.50	1.07	13.50	13.45	1.01	0.05	0.513	0.55	3.77									
	UNII-5	802.11ax HE160	Bottom	0	47	WNC	Ant 0+1	96.80	1.03	13.50	13.45	1.01	0.02	0.294	0.31	2.09									
1	UNII-5	802.11ax HE160	Rear Face	0	47	WNC	Ant 0	94.10	1.06	8.00	7.91	1.02	0.05	0.712	0.77	5.16	0.25	3.12	1.545	4.00	0.02	1.09	1.79	1.78	2.92
	UNII-5	802.11ax HE160	Left Side	0	47	WNC	Ant 0	94.10	1.06	8.00	7.91	1.02	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Right Side	0	47	WNC	Ant 0	94.10	1.06	8.00	7.91	1.02	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Top Side	0	47	WNC	Ant 0	94.10	1.06	8.00	7.91	1.02	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Bottom Side	0	47	WNC	Ant 0	94.10	1.06	8.00	7.91	1.02	0.01	0.208	0.22	1.53									
	UNII-5	802.11ax HE160	Rear Face	0	47	WNC	Ant 1	93.50	1.07	8.00	7.85	1.04	-0.05	0.471	0.52	3.56									
	UNII-5	802.11ax HE160	Left Side	0	47	WNC	Ant 1	93.50	1.07	8.00	7.85	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Right Side	0	47	WNC	Ant 1	93.50	1.07	8.00	7.85	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Top Side	0	47	WNC	Ant 1	93.50	1.07	8.00	7.85	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Bottom Side	0	47	WNC	Ant 1	93.50	1.07	8.00	7.85	1.04	0.06	0.333	0.37	2.51									
	UNII-5	802.11ax HE160	Rear Face	0	47	WNC	Ant 0+1	96.80	1.03	11.00	10.81	1.04	0.01	0.41	0.44	2.93									
	UNII-5	802.11ax HE160	Left Side	0	47	WNC	Ant 0+1	96.80	1.03	11.00	10.81	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Right Side	0	47	WNC	Ant 0+1	96.80	1.03	11.00	10.81	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Top Side	0	47	WNC	Ant 0+1	96.80	1.03	11.00	10.81	1.04	0	<0.001	0.00	0.00									
	UNII-5	802.11ax HE160	Bottom Side	0	47	WNC	Ant 0+1	96.80	1.03	11.00	10.81	1.04	-0.11	0.244	0.26	1.74									
	UNII-5	802.11ax HE160	Rear Face	0	15	WNC	Ant 0	94.10	1.06	8.00	7.88	1.03	0.05	0.634	0.69	4.67									
	UNII-5	802.11ax HE160	Rear Face	0	79	WNC	Ant 0	94.10	1.06	8.00	7.70	1.07	-0.08	0.485	0.55	3.70									
	UNII-6	802.11ax HE160	Rear Face	0	111	WNC	Ant 0	94.10	1.06	8.00	7.68	1.08	-0.04	0.529	0.61	4.05									
	UNII-7	802.11ax HE160	Rear Face	0	143	WNC	Ant 0	94.10	1.06	8.00	7.80	1.05	0.11	0.38	0.42	2.86									
	UNII-7	802.11ax HE160	Rear Face	0	175	WNC	Ant 0	94.10	1.06	8.00	7.71	1.07	0.14	0.327	0.37	2.51									
	UNII-8	802.11ax HE160	Rear Face	0	207	WNC	Ant 0	94.10	1.06	8.00	7.69	1.07	-0.09	0.317	0.36	2.44									
	UNII-5	802.11ax HE160	Rear Face	0	47	HB	Ant 0	94.10	1.06	8.00	7.91	1.02	0.09	0.645	0.70	4.67									
	UNII-5	802.11ax HE160	Rear Face	0	47	Speed	Ant 0	94.10	1.06	8.00	7.91	1.02	0.05	0.612	0.66	4.46									
	UNII-5	802.11ax HE160	Rear Face	0	47	Auden	Ant 0	94.10	1.06	8.00	7.91	1.02	-0.1	0.67	0.72	4.88									

Annex G. SAR Measurement Variability

Since all the measured SAR_{1g} are less than 0.8 W/kg, the repeated measurement is not required.

Annex H. Analysis of Simultaneous Transmission SAR

The analysis of simultaneous transmission SAR are shown as below.

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
A	WWAN + WLAN 6G + BT	Yes

Notes

1. The WLAN 2.4G , 5G and 6G cannot transmit simultaneously.

Simultaneous Transmission SAR Evaluation (Body)					
Band	Position	1 Max WWAN 1g SAR W/kg	2 Max WLAN 6G 1g SAR W/kg	3 Max BT 1g SAR W/kg	1 + 2 + 3 Summimg result 1g SAR W/kg
WCDMA II	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.17	0.77	0.53	1.47
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.25	0.00	0.00	0.25
	Top Side	0.73	0.00	0.00	0.73
	Bottom Side	0.00	0.37	0.11	0.48
WCDMA IV	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.11	0.77	0.53	1.41
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.45	0.00	0.00	0.45
	Top Side	0.71	0.00	0.00	0.71
	Bottom Side	0.00	0.37	0.11	0.48
WCDMA V	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.09	0.77	0.53	1.39
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.60	0.00	0.00	0.60
	Top Side	0.60	0.00	0.00	0.60
	Bottom Side	0.00	0.37	0.11	0.48
LTE 5	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.08	0.77	0.53	1.38
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.63	0.00	0.00	0.63
	Top Side	0.87	0.00	0.00	0.87
	Bottom Side	0.00	0.37	0.11	0.48
LTE 7	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.16	0.77	0.53	1.46
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.70	0.00	0.00	0.70
	Top Side	0.71	0.00	0.00	0.71
	Bottom Side	0.00	0.37	0.11	0.48
LTE 12	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.08	0.77	0.53	1.38
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.29	0.00	0.00	0.29
	Top Side	1.00	0.00	0.00	1.00
	Bottom Side	0.00	0.37	0.11	0.48
LTE 13	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.12	0.77	0.53	1.42
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.58	0.00	0.00	0.58
	Top Side	0.92	0.00	0.00	0.92
	Bottom Side	0.00	0.37	0.11	0.48

Simultaneous Transmission SAR Evaluation (Body)					
Band	Position	1 Max WWAN 1g SAR W/kg	2 Max WLAN 6G 1g SAR W/kg	3 Max BT 1g SAR W/kg	1 + 2 + 3 Summimg result 1g SAR W/kg
LTE 14	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.09	0.77	0.53	1.39
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.62	0.00	0.00	0.62
	Top Side	0.84	0.00	0.00	0.84
	Bottom Side	0.00	0.37	0.11	0.48
LTE 25	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.19	0.77	0.53	1.49
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.27	0.00	0.00	0.27
	Top Side	0.51	0.00	0.00	0.51
	Bottom Side	0.00	0.37	0.11	0.48
LTE 26	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.07	0.77	0.53	1.37
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.57	0.00	0.00	0.57
	Top Side	0.57	0.00	0.00	0.57
	Bottom Side	0.00	0.37	0.11	0.48
LTE 30	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.12	0.77	0.53	1.42
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.39	0.00	0.00	0.39
	Top Side	0.66	0.00	0.00	0.66
	Bottom Side	0.00	0.37	0.11	0.48
LTE 41	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.07	0.77	0.53	1.37
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.28	0.00	0.00	0.28
	Top Side	0.70	0.00	0.00	0.70
	Bottom Side	0.00	0.37	0.11	0.48
LTE 66	Bottom	0.00	0.71	0.11	0.82
	Rear Face	0.15	0.77	0.53	1.45
	Left Side	0.00	0.00	0.00	0.00
	Right Side	0.39	0.00	0.00	0.39
	Top Side	0.92	0.00	0.00	0.92
	Bottom Side	0.00	0.37	0.11	0.48

Annex I. SAR to Peak Location Separation Ratio Analysis.

Since sum of simultaneous transmission SAR is less than the SAR limit for Body : SAR_{1g} 1.6 W/kg. There is no requirement for SAR to Peak Location Separation Ratio Analysis.

Annex J. Calibration of Test Equipment List

Calibration of Test Equipment List are shown as below.

Equipment for SAR Test					
Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D6.5GHzV2	1029	Feb. 10, 2021	1 Year
System Verification Source	SPEAG	5G Verification Source 10 GHz	1025	Jan. 19, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7554	Aug. 26, 2021	1 Year
E-Field Probe	SPEAG	EUmmWV4	9438	Jul. 26, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	861	Apr. 14, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1589	Aug. 20, 2021	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Apr. 06, 2021	1 Year
Universal Wireless Test Set	Anritsu	MT8870A/MU887000A	6201699387	Sep. 22, 2021	1 Year
Thermometer	YFE	YF-160A	191100743	Apr. 12, 2021	1 Year
Dielectric Assessment Kit	SPEAG	DAKS-3.5	1151	Jul. 14, 2021	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4010	Jul. 13, 2021	1 Year

Annex K. Verifying the Mechanism Operation of Gravity-sensor

The power verified by LCD angle changed are shown as below.

<Power Reduction by LCD Angle Changed and Verifying Power Level of operating Laptop and Tablet mode on Setp A ~ G>

Test Band：802.11ax HE160 Ant 0 for UNII-5 Representative																																							
Summary	<A> From lid closed when LCD is 0° which power is subject to Laptop user mode, opening the screen side in 10° each step until the power of Tablet mode is obtained.																																							
	Degrees	0	10	20	30	40	50	.....									150	160	170	180	190	200	.....																		
	Power (dBm)	12.7	13.3	12.7	13.2	13.0	12.8										12.9	13.3	13.3	12.8	13.3	7.4																		
The Power level changed by LCD Triggering Angle is 190°	<B> Close the screen side in 5° each step from Step A, the power of Laptop mode is reobtained.																																							
	Degrees	.....										185	190	195	200	.....																								
	Power (dBm)											12.7	12.9	7.7	7.8																								
	<C> Verfying the power changed in 1° at each step.																																							
	Degrees	.....									198	199	190	191	192	.....																								
	Power (dBm)										13.1	13.1	12.7	7.5	7.3																								
	<D>Then Keep opening the screen side in 10° each step until fully open when LCD angle.																																							
	Degrees	0	10	20	30	40	50	.....									180	190	200	210	220	.....																	340	350	360
	Power (dBm)	12.8	12.7	13.1	12.8	12.7	12.8										12.8	13.2	7.8	7.8	7.8																	7.3	7.6	7.8
	<E> From fully open when LCD is 360° which the operating mode is Tablet, closing the screen side in 10° each step until the power subject to operating Laptop mode is obtained.																																							
	Degrees	360	350	340	330	320	310	.....									200	190	180	.....																				
	Power (dBm)	7.7	7.8	7.8	7.5	7.8	7.6										-0.8	12.7	12.7																				
	<F> From fully open when LCD is 360° which the operating mode is Tablet, closing the screen side in 5° each step until fully closed.																																							
	Degrees	360	355	350	345	340	335	330	325	320	315	310	.....		195	190	185	.....																					10	5	0
	Power (dBm)	7.4	7.2	7.7	7.6	7.3	7.3	7.7	7.8	7.7	7.7	7.6			7.8	13	13																					13.2	13	13.2
	<G> Closing the screen side in 1° each step until the power subject to operating Laptop mode is obtained and keep closing until fully closed.																																							
	Degrees	360	359	358	357	356	355	354	353	352	351	350	.....		192	191	190	199	198	199	198	.....															5	4	3	2	1	0
	Power (dBm)	7.4	7.4	7.5	7.5	7.6	7.6	7.2	7.5	7.4	7.8	7.4			7.7	7.7	12.9	12.9	13.1	13.2	12.9																12.9	12.8	12.8	13.1	12.9	13