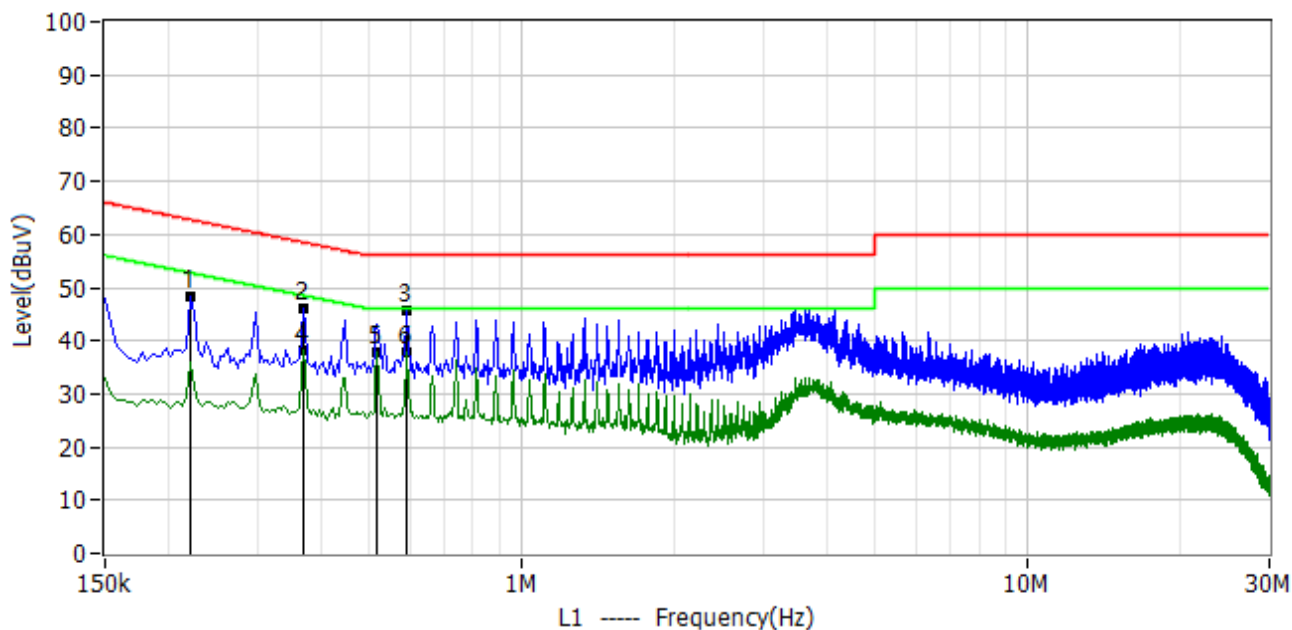




3.1.6 TEST RESULTS

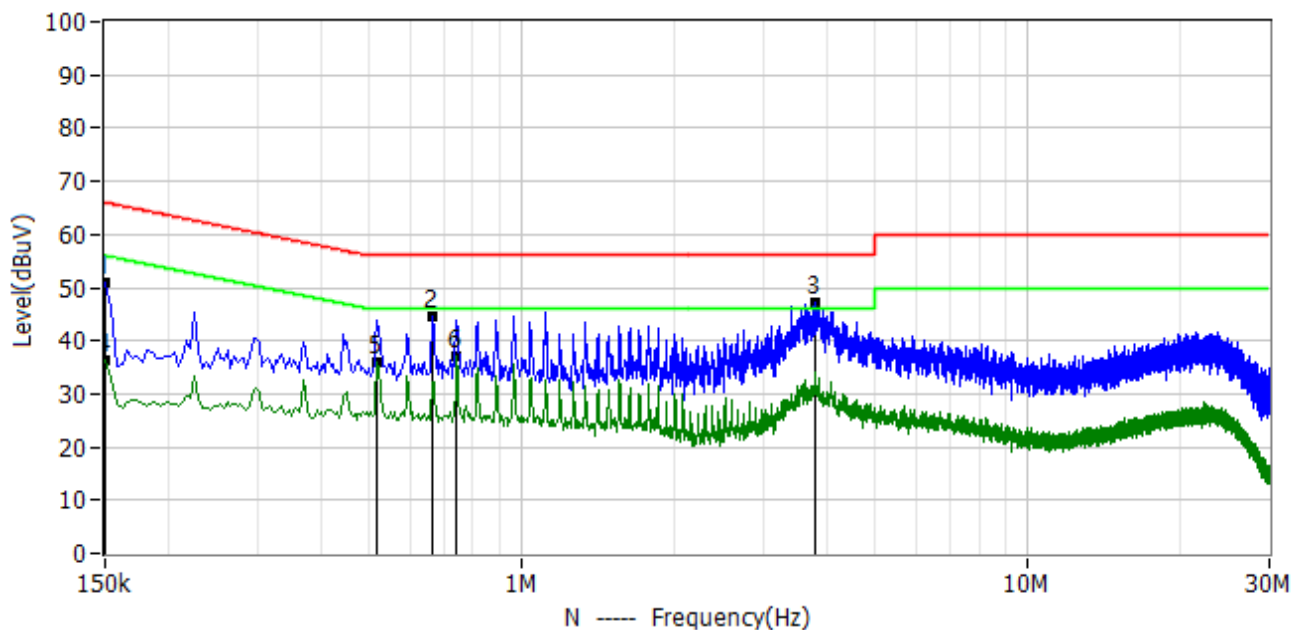
Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 24.9°C
M/N: CP12t	Humidity: 45%RH
Test Voltage: AC 120V/60Hz	Test Data: 2023-03-02
Test Mode: TX 5G WIFI	
Note:	



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	222.000kHz	37.62	10.60	48.22	62.74	-14.52	PK	L1
2*	370.000kHz	35.41	10.59	46.00	58.50	-12.50	PK	L1
3*	594.000kHz	35.05	10.58	45.63	56.00	-10.37	PK	L1
4*	370.000kHz	27.63	10.59	38.22	48.50	-10.28	AV	L1
5*	518.000kHz	27.37	10.58	37.95	46.00	-8.05	AV	L1
6*	594.000kHz	27.23	10.58	37.81	46.00	-8.19	AV	L1



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 24.9°C
M/N: CP12t	Humidity: 45%RH
Test Voltage: AC 120V/60Hz	Test Data: 2023-03-02
Test Mode: TX 5G WIFI	
Note:	



No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	150.000kHz	40.50	10.56	51.06	66.00	-14.94	PK	N
2*	666.000kHz	33.97	10.58	44.55	56.00	-11.45	PK	N
3*	3.786MHz	36.33	10.72	47.05	56.00	-8.95	PK	N
4*	150.000kHz	25.83	10.56	36.39	56.00	-19.61	AV	N
5*	518.000kHz	25.35	10.58	35.93	46.00	-10.07	AV	N
6*	742.000kHz	26.36	10.58	36.94	46.00	-9.06	AV	N



3.2 RADIATED EMISSION AND (BANDEGE) MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.407(b)7&15.205/209(a), then the limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	68.2	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15E.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

Note: In case the emission radiated emission above 1000MHz fall within the restricted band the restricted frequency bands, the peak limit is 74 dBuV/m.



LIMITS OF EMISSIONS OUTSIDE OF THE FREQUENCY BANDS

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note: $\text{dBuV/m(at 3M)} = \text{EIRP(dBm)} + 95.3$.

Peak Limit = $-27\text{dBm/MHz} + 95.3 = 68.3 \text{ dBuV/m}$.

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier harmonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

For Band edge

Spectrum Parameter	Setting
Detector	Peak
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /3 MHz

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

- The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

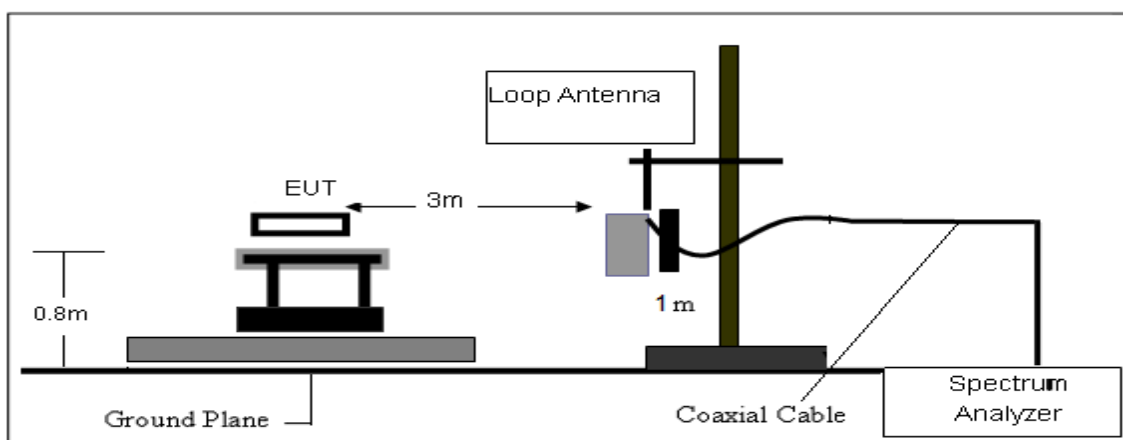
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.2 DEVIATION FROM TEST STANDARD

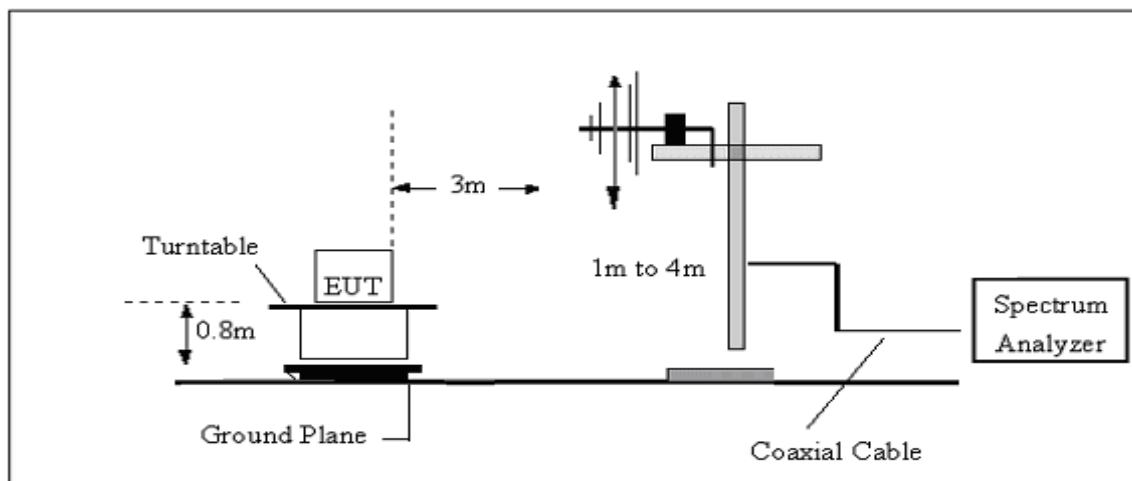
No deviation

3.2.3 TEST SETUP

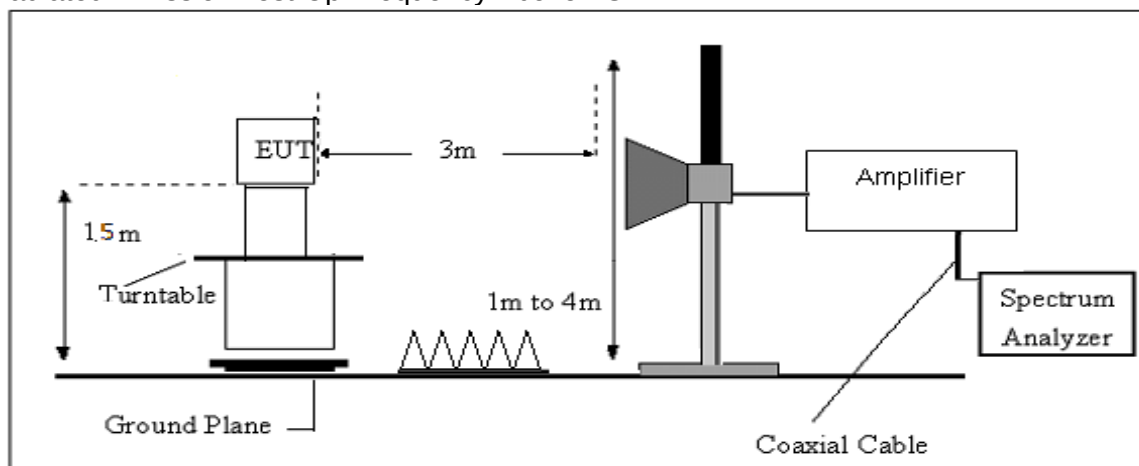
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz





3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

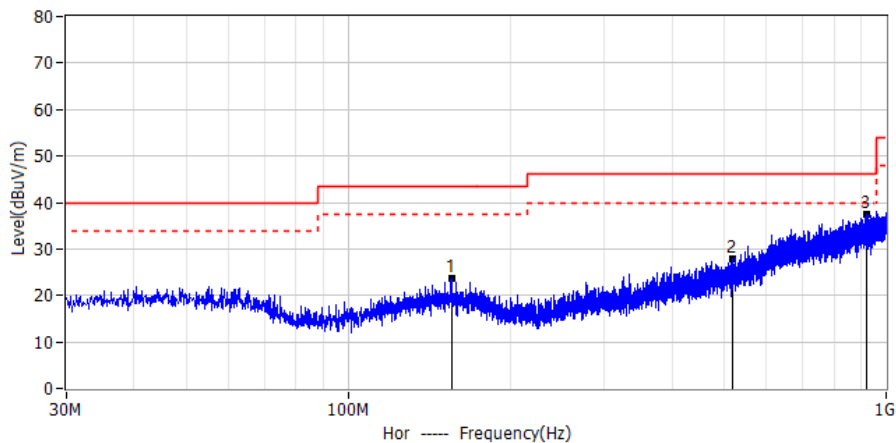
Frequency (MHz)	FS (dBμV/m)	RA (dBμV/m)	AF (dB)	CL (dB)	AG (dB)	Factor (dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

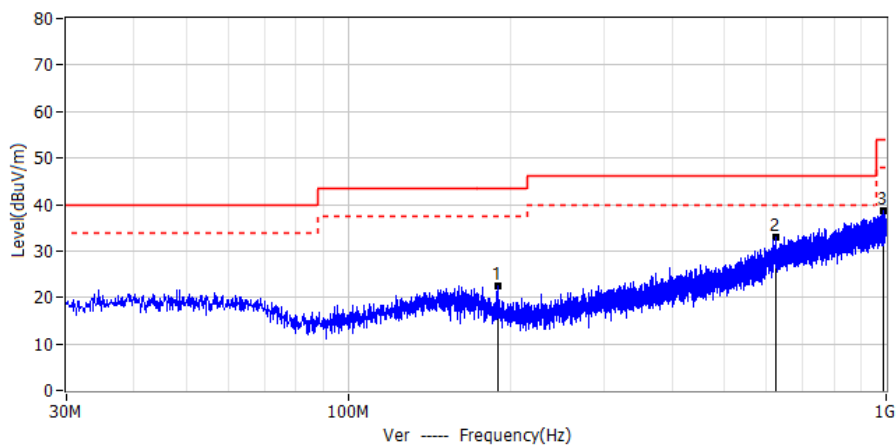


3.2.6 TEST RESULTS

Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 25.7°C
M/N: CP12t	Humidity: 45%RH
Test Voltage: Battery	Test Data: 2023-03-02
Test Mode: TX 5G WIFI	
Note:	



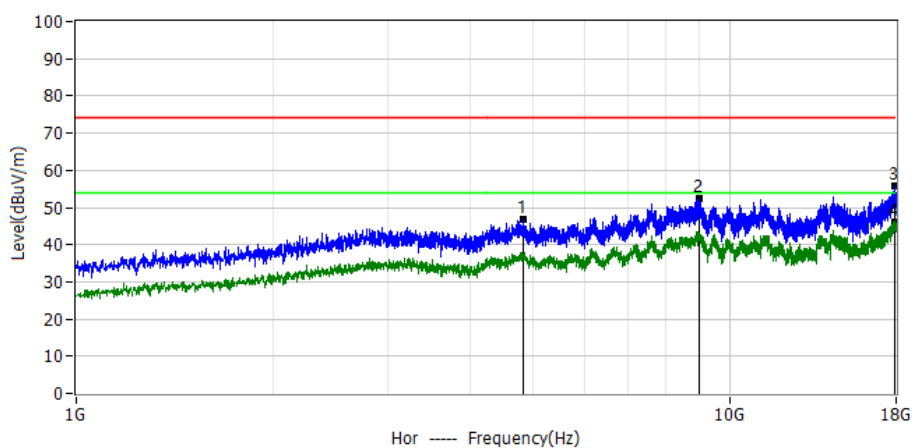
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	156.221MHz	3.74	19.90	23.64	43.50	-19.86	PK	Hor
2*	518.395MHz	2.53	25.34	27.87	46.00	-18.13	PK	Hor
3*	917.671MHz	4.22	33.34	37.56	46.00	-8.44	PK	Hor



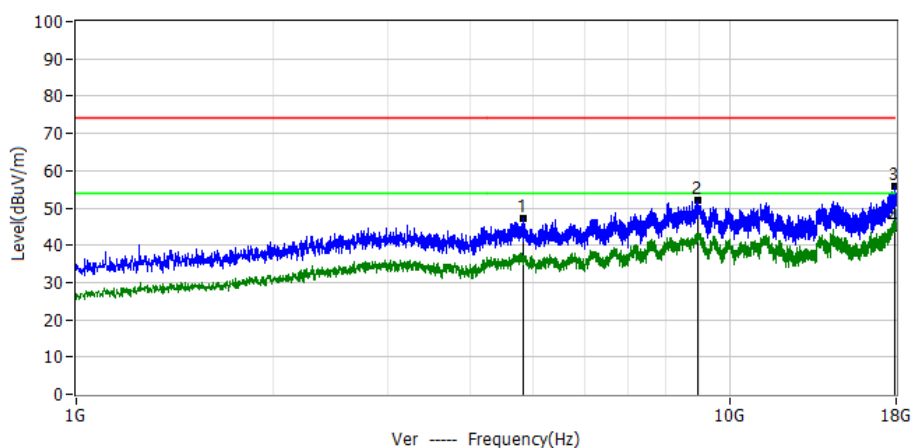
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	190.293MHz	4.84	17.66	22.50	43.50	-21.00	PK	Ver
2*	623.398MHz	4.53	28.53	33.06	46.00	-12.94	PK	Ver
3*	988.966MHz	4.12	34.52	38.64	54.00	-15.36	PK	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5260	
Note:	



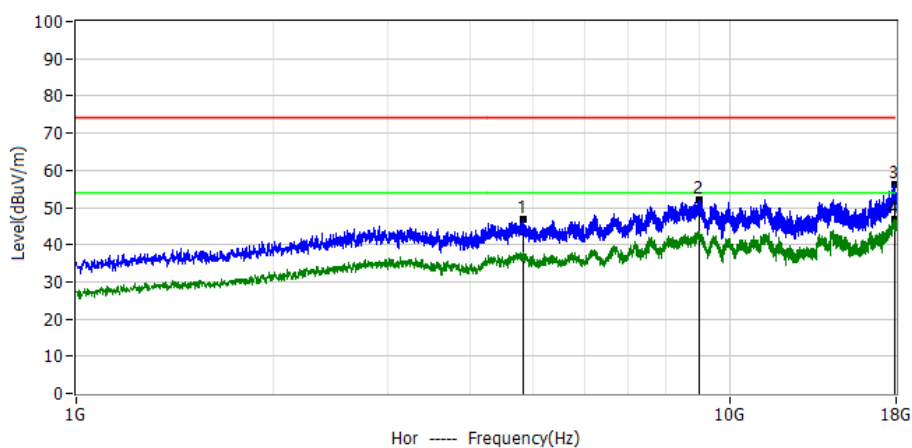
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.829GHz	52.82	-6.01	46.81	74.00	-27.19	PK	Hor
2*	9.011GHz	53.73	-1.17	52.56	74.00	-21.44	PK	Hor
3*	17.902GHz	47.25	8.45	55.70	74.00	-18.30	PK	Hor
4*	17.902GHz	37.65	8.45	46.10	54.00	-7.90	AV	Hor



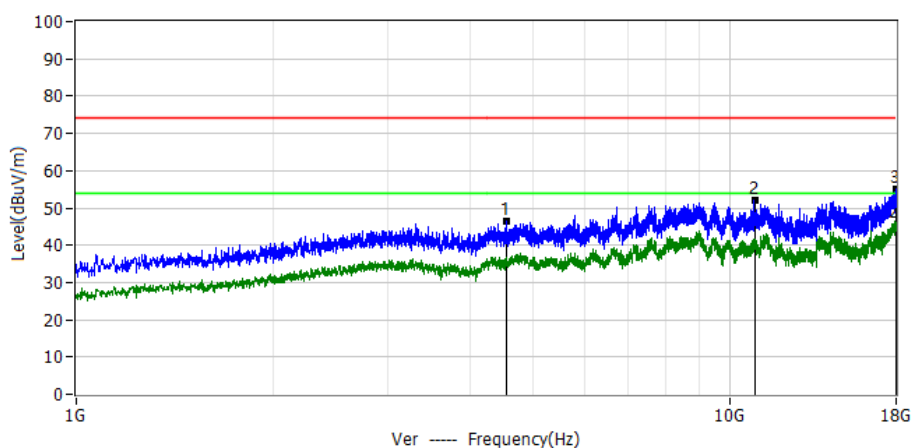
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.827GHz	53.19	-6.01	47.18	74.00	-26.82	PK	Ver
2*	8.928GHz	53.61	-1.37	52.24	74.00	-21.76	PK	Ver
3*	17.900GHz	47.33	8.45	55.78	74.00	-18.22	PK	Ver
4*	17.900GHz	36.25	8.45	44.70	54.00	-9.30	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5300	
Note:	



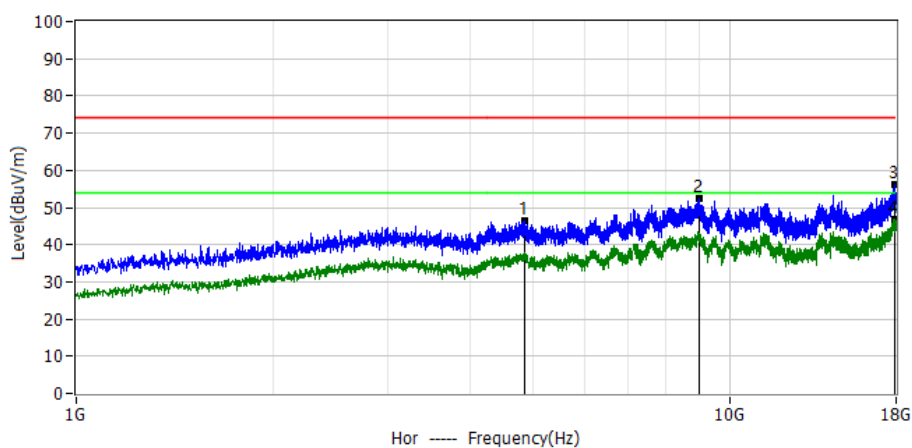
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.827GHz	52.96	-6.01	46.95	74.00	-27.05	PK	Hor
2*	9.005GHz	53.08	-1.17	51.91	74.00	-22.09	PK	Hor
3*	17.896GHz	47.60	8.45	56.05	74.00	-17.95	PK	Hor
4*	17.896GHz	38.45	8.45	46.90	54.00	-7.10	AV	Hor



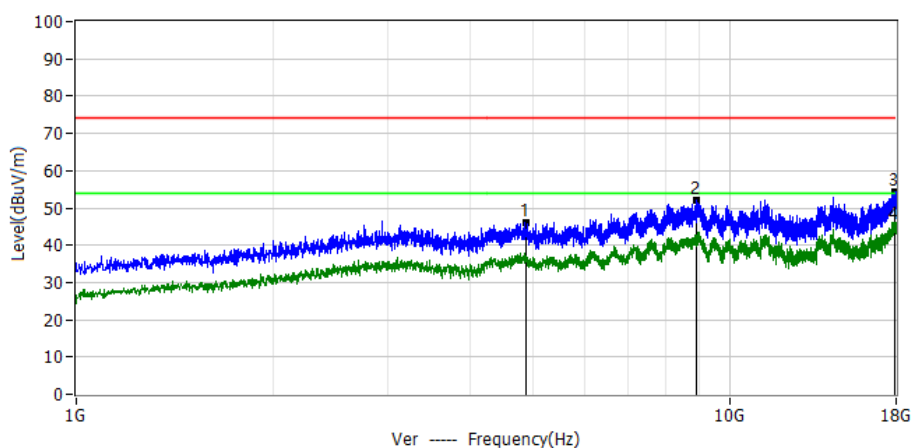
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.547GHz	52.14	-5.79	46.35	74.00	-27.65	PK	Ver
2*	10.920GHz	50.63	1.40	52.03	74.00	-21.97	PK	Ver
3*	17.977GHz	46.64	8.50	55.14	74.00	-18.86	PK	Ver
4*	17.977GHz	36.30	8.50	44.80	54.00	-9.20	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5320	
Note:	



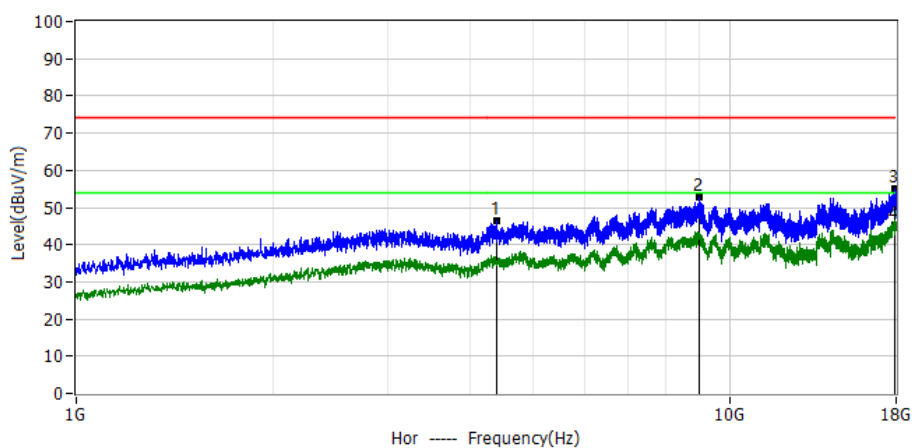
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.868GHz	52.45	-6.04	46.41	74.00	-27.59	PK	Hor
2*	8.973GHz	53.70	-1.25	52.45	74.00	-21.55	PK	Hor
3*	17.904GHz	47.80	8.45	56.25	74.00	-17.75	PK	Hor
4*	17.904GHz	38.25	8.45	46.70	54.00	-7.30	AV	Hor



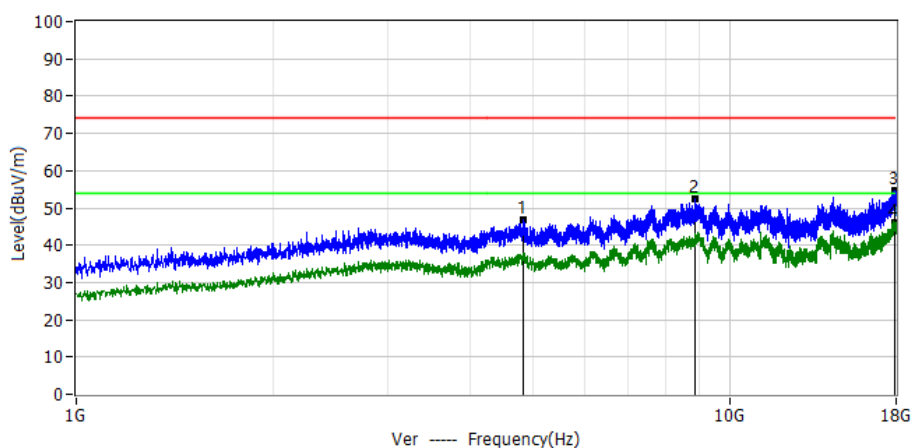
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.870GHz	52.06	-6.04	46.02	74.00	-27.98	PK	Ver
2*	8.909GHz	53.47	-1.43	52.04	74.00	-21.96	PK	Ver
3*	17.890GHz	46.02	8.44	54.46	74.00	-19.54	PK	Ver
4*	17.890GHz	36.76	8.44	45.20	54.00	-8.80	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5745	
Note:	



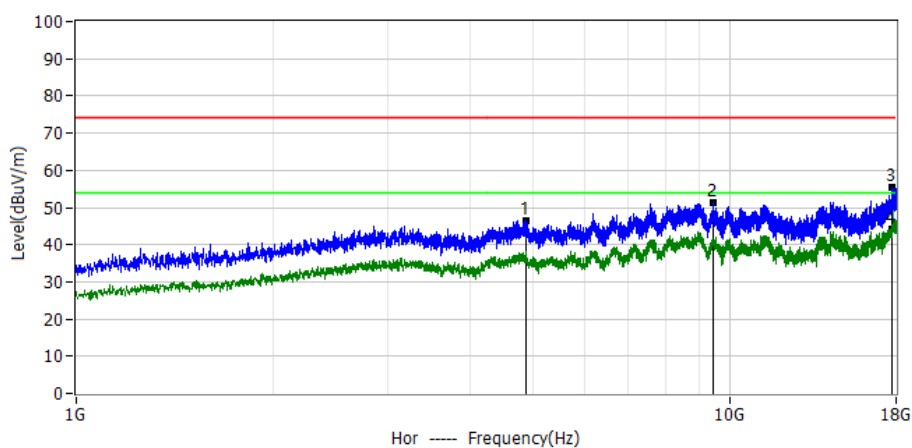
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.404GHz	52.60	-6.16	46.44	74.00	-27.56	PK	Hor
2*	9.001GHz	53.93	-1.17	52.76	74.00	-21.24	PK	Hor
3*	17.945GHz	46.47	8.48	54.95	74.00	-19.05	PK	Hor
4*	17.945GHz	37.02	8.48	45.50	54.00	-8.50	AV	Hor



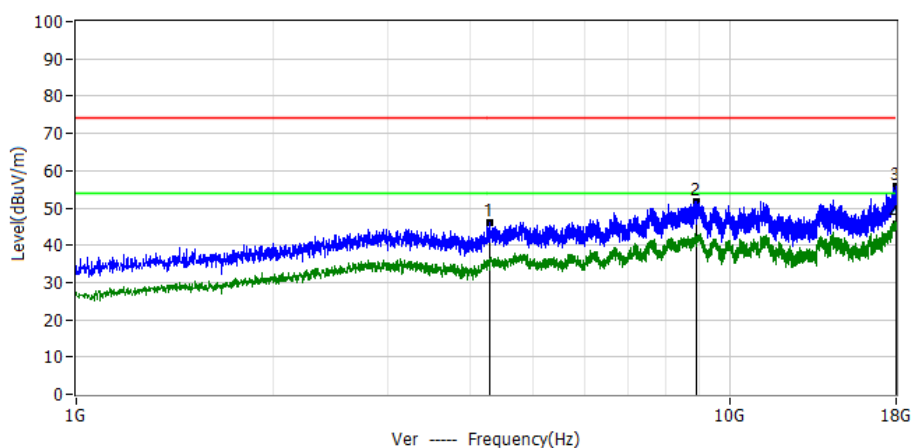
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.842GHz	52.99	-6.02	46.97	74.00	-27.03	PK	Ver
2*	8.865GHz	53.83	-1.55	52.28	74.00	-21.72	PK	Ver
3*	17.913GHz	46.23	8.46	54.69	74.00	-19.31	PK	Ver
4*	17.913GHz	37.54	8.46	46.00	54.00	-8.00	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5785	
Note:	



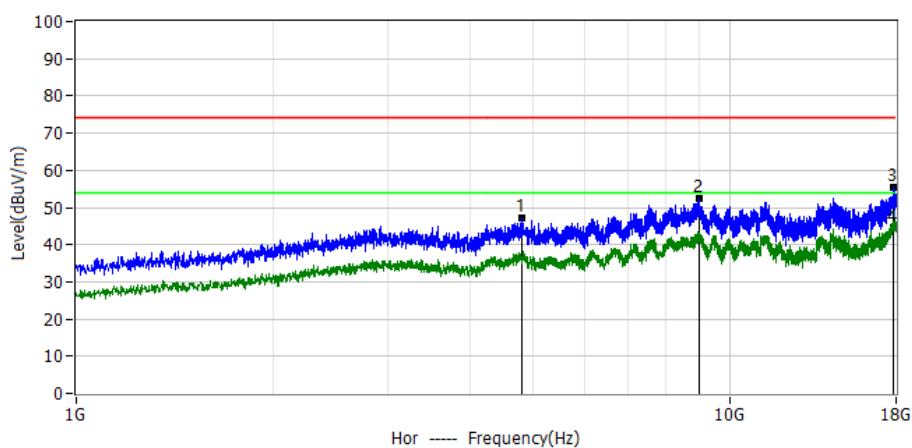
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.891GHz	52.55	-6.06	46.49	74.00	-27.51	PK	Hor
2*	9.421GHz	52.33	-1.17	51.16	74.00	-22.84	PK	Hor
3*	17.726GHz	47.18	8.33	55.51	74.00	-18.49	PK	Hor
4*	17.726GHz	35.87	8.33	44.20	54.00	-9.80	AV	Hor



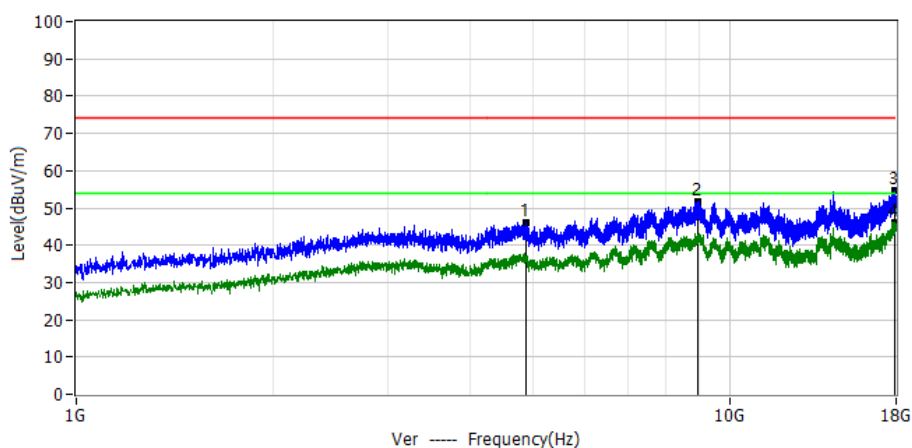
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.298GHz	52.60	-6.61	45.99	74.00	-28.01	PK	Ver
2*	8.920GHz	53.04	-1.40	51.64	74.00	-22.36	PK	Ver
3*	17.960GHz	47.32	8.49	55.81	74.00	-18.19	PK	Ver
4*	17.960GHz	37.21	8.49	45.70	54.00	-8.30	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11a 5825	
Note:	



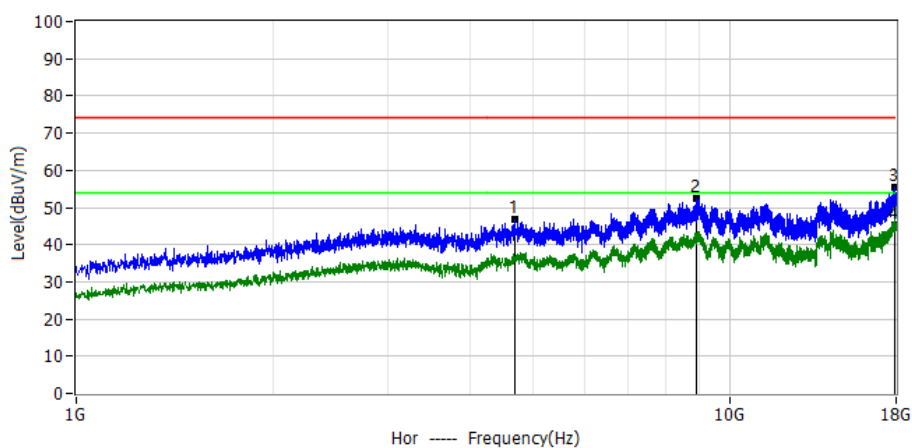
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.817GHz	53.30	-6.00	47.30	74.00	-26.70	PK	Hor
2*	8.986GHz	53.47	-1.21	52.26	74.00	-21.74	PK	Hor
3*	17.805GHz	46.97	8.38	55.35	74.00	-18.65	PK	Hor
4*	17.805GHz	36.32	8.38	44.70	54.00	-9.30	AV	Hor



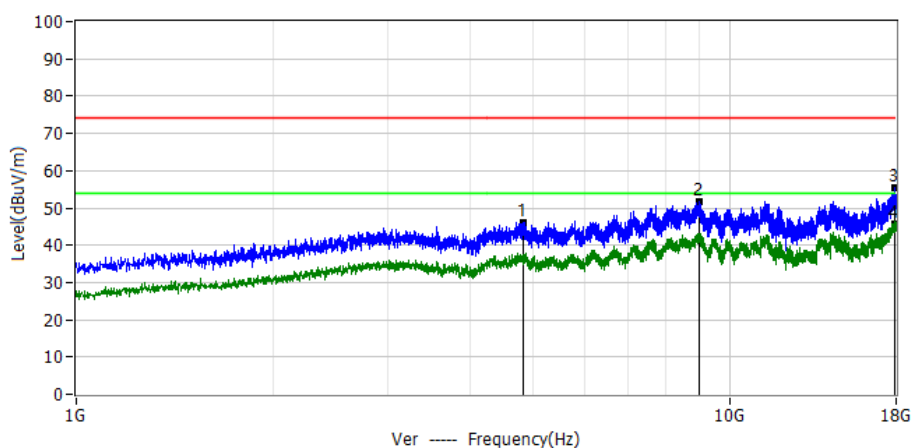
No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.885GHz	52.08	-6.05	46.03	74.00	-27.97	PK	Ver
2*	8.928GHz	53.18	-1.37	51.81	74.00	-22.19	PK	Ver
3*	17.928GHz	46.23	8.47	54.70	74.00	-19.30	PK	Ver
4*	17.928GHz	37.43	8.47	45.90	54.00	-8.10	AV	Ver



Project: LGT23B071	Test Engineer: Dylan.shi
EUT: Smart Phone	Temperature: 26.7°C
M/N: CP12t	Humidity: 52%RH
Test Voltage: Battery	Test Data: 2023-03-12
Test Mode: 802.11ac80 5530	
Note:	



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.700GHz	52.69	-5.91	46.78	74.00	-27.22	PK	Hor
2*	8.922GHz	53.81	-1.39	52.42	74.00	-21.58	PK	Hor
3*	17.904GHz	46.99	8.45	55.44	74.00	-18.56	PK	Hor
4*	17.904GHz	37.05	8.45	45.50	54.00	-8.50	AV	Hor



No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	4.844GHz	52.25	-6.02	46.23	74.00	-27.77	PK	Ver
2*	9.009GHz	52.73	-1.17	51.56	74.00	-22.44	PK	Ver
3*	17.900GHz	46.84	8.45	55.29	74.00	-18.71	PK	Ver
4*	17.900GHz	37.15	8.45	45.60	54.00	-8.40	AV	Ver