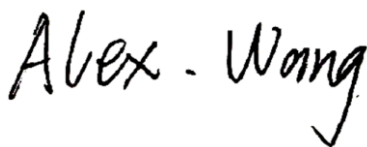


TEST REPORT

Application No.: BTEK250730174A04-T01
Applicant: SHENZHEN ECARE ELECTRONICS CO., LTD
Address of Applicant: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China
Manufacturer: SHENZHEN ECARE ELECTRONICS CO., LTD
Address of Manufacturer: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China
Equipment Under Test (EUT):
EUT Name: Wireless Meat Probe
Test Model.: TP963PB
Adding Model(s): TP960BW, TP960B, TP961BW, TP961B, TP962B, TP962BW, TP963B, TP963BW, TP963PW, TP963PR, TP963PY, TP960, TP961, TP962, TP963, PR05B, PR05W, TP960W, TP961W, TP962W, TP963W
Trade Mark: /
FCC ID: 2AATP-TP963PB
Standard(s) : 47 CFR Part 15, Subpart C 15.249
Date of Receipt Sample(s): 2025-08-06
Date of Test: 2025-08-07 to 2025-08-21
Date of Issue: 2025-08-22

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.



Alex Wang/ Approved & Authorized
EMC Laboratory Manager



Revision Record			
Version	Issue Date	Revisions	Remarks
V0	2025-08-22	Initial	Valid

Authorized for issue by:			
		Karl Liu	
		Karl Liu / File Editor	
		June Li	
		June Li/Reviewer	

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.



2 Test Summary

Radio Spectrum Technical Requirement				
Standard	Item	Method	Requirement	Result
47 CFR Part 15, Subpart C 15.249	Antenna Requirement	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Radio Spectrum Matter Part				
Standard	Item	Method	Requirement	Result
47 CFR Part 15, Subpart C 15.249	Conducted Emissions at AC Power Line (150kHz-30MHz)	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	N/A
	20dB Bandwidth	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass
	Field strength of the Fundamental signal	ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.249	Pass
	Radiation Spurious Emission	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209/15.249	Pass

Note:

N/A: Not applicable.



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4 General Information

4.1 Details of E.U.T.

Power supply:	Capacity: DC 2.4V 0.012Wh from battery
Frequency Range:	915MHz
Modulation Type:	ASK
Number of Channels:	1
Antenna Type:	wire antenna
Antenna Gain:	0dBi
Sample No.:	BTEK250730174A04-01
Model(s) Difference Statement	☐ Single Model.
	☒ Multi-Models: TP963PB, TP960BW, TP960B, TP961BW, TP961B, TP962B, TP962BW, TP963B, TP963BW, TP963PW, TP963PR, TP963PY, TP960, TP961, TP962, TP963, PR05B, PR05W, TP960W, TP961W, TP962W, TP963W Only the model TP963PB was tested. According to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions of other models are identical for the above models, with only difference on Model No

4.2 EUT Test Mode and Test Condition

Test Mode	Description	Remark
1	TX	Continue TX
Remark: 1. only show the worst case in the test report.		

Test Conditions	
Temperature:	24.3 °C
Relative Humidity:	55 %
ATM Pressure:	1010 mbar

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--

4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Peak Output Power	± 0.76dB
20dB Bandwidth	± 3%
Conducted Spurious Emissions	± 0.8dB
Radiated Emissions which fall in the restricted bands	±5.1dB (1GHz-6GHz); ±5.2dB(above 6GHz)
Radiated Spurious Emissions (Below 1GHz)	±5.1dB
Radiated Spurious Emissions (Above 1GHz)	±5.1dB (1GHz-6GHz); ±5.2dB(above 6GHz)



4.5 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.,

A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel: 0755-2334 4200

Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



5 Equipment List

Conducted Test					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Shielding Room	YIHENG ENELECTRONIC	9*5*3.3	YH-BT-220304-04	2025-02-15	2028-02-14
EMI Test Receiver	Rohde&Schwarz	ESCI	101021	2025-06-18	2026-06-17
Measurement Software	Fara	EZ EMC Ver. FA-03A2	N/A	N/A	N/A
LISN	Rohde&Schwarz	ENV216	101472	2025-06-18	2026-06-17
LISN	Schwarzbeck	NSLK 8128	05127	2025-06-18	2026-06-17

RF Conducted					
Equipment	Manufacturer	Model No	Serial No	Cal Date	Cal Due Date
Shielding Room	YIHENG ENELECTRONIC	5.5*3.1*3	YH-BT-220304-03	2025-02-15	2028-02-14
EXA Signal Analyzer	KEYSIGHT	N9020A	MY54230486	2025-06-19	2026-06-18
DC Power Supply	E3632A	E3642A	KR75304416	2025-06-19	2026-06-18
Attenuator	RswTech	SMA-JK-6dB	N/A	2025-06-19	2026-06-18
Attenuator	RswTech	SMA-JK-3dB	N/A	2025-06-19	2026-06-18
RF Control Unit	Techy	TR1029-1	N/A	2025-06-19	2026-06-18
RF Sensor Unit	Techy	TR1029-2	N/A	2025-06-19	2026-06-18
WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	141258	2025-06-19	2026-06-18
MXG Vector Signal Generator	Agilent	N5182A	US46240522	2025-06-19	2026-06-18
Programmable Temperature&Humidity Chamber	GRT	GR-HWX1000	GR22051001	2025-06-19	2026-06-18
Measurement Software	TACHOY	RF TestSoft	N/A	N/A	N/A

RSE					
Equipment	Manufacturer	Model No	Serial No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	YIHENG ENELECTRONIC	966	YH-BT-220304-01	2025-02-15	2028-02-14
EMI Test Receiver	Rohde&Schwarz	ESCI	100694	2025-06-18	2026-06-17
TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	01324	2025-06-18	2026-06-17
Pre-Amplifier	Schwarzbeck	BBV 9745	#180	2025-06-18	2026-06-17
Measurement Software	Fara	EZ EMC Ver. FA-03A2	N/A	2025-06-18	2026-06-17
EXA Signal Analyzer	Keysight	N9020A	MY54440290	2025-06-18	2026-06-17
Horn Antenna	Schwarzbeck	BBHA 9120D	02695	2025-06-18	2026-06-17
Pre-Amplifier	Tonscend	TAP0118045	AP20K806109	2025-06-18	2026-06-17



Horn Antenna	SCHWARZBECK	BBHA9170	1157	2025-06-18	2026-06-17
Low Noise Pre-amplifier	SKET	LNPA-1840G-50	SK2022032902	2025-06-18	2026-06-17
Signal analyzer	ROHDE&SCHWARZ	FSQ40	100010	2025-06-18	2026-06-17
Loop Antenna	ETS	6502	00201177	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-7.00M	/	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	LMR400UF-NMNM-3.00M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-7.00M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-2.50M	/	2025-06-18	2026-06-17
Cable	BTEK	SFT205PUR-MNSWSM-0.30M	/	2025-06-18	2026-06-17



6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

This product has a wire antenna, fulfill the requirement of this section.



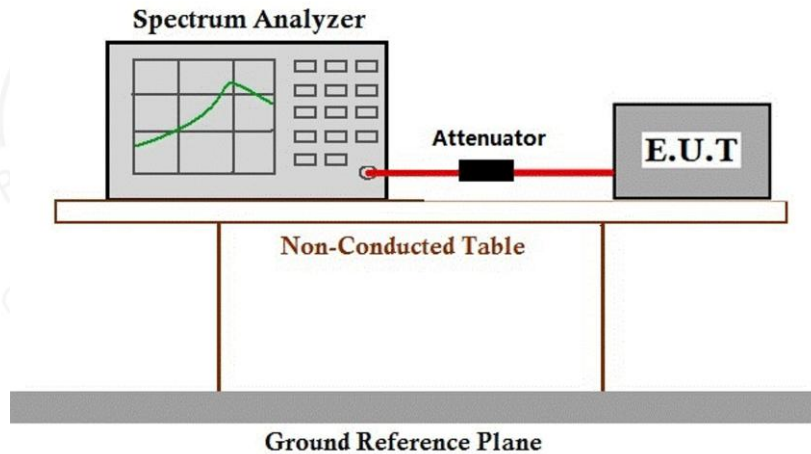
7 Radio Spectrum Matter Test Results

7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215 c

Limit: N/A

7.1.1 Test Setup Diagram



7.1.2 Measurement Procedure and Data

Set span = 1MHz, centered on a transmitting channel

RBW $\geq 1\%$ 20dB Bandwidth, VBW $\geq$ RBW

Sweep = auto

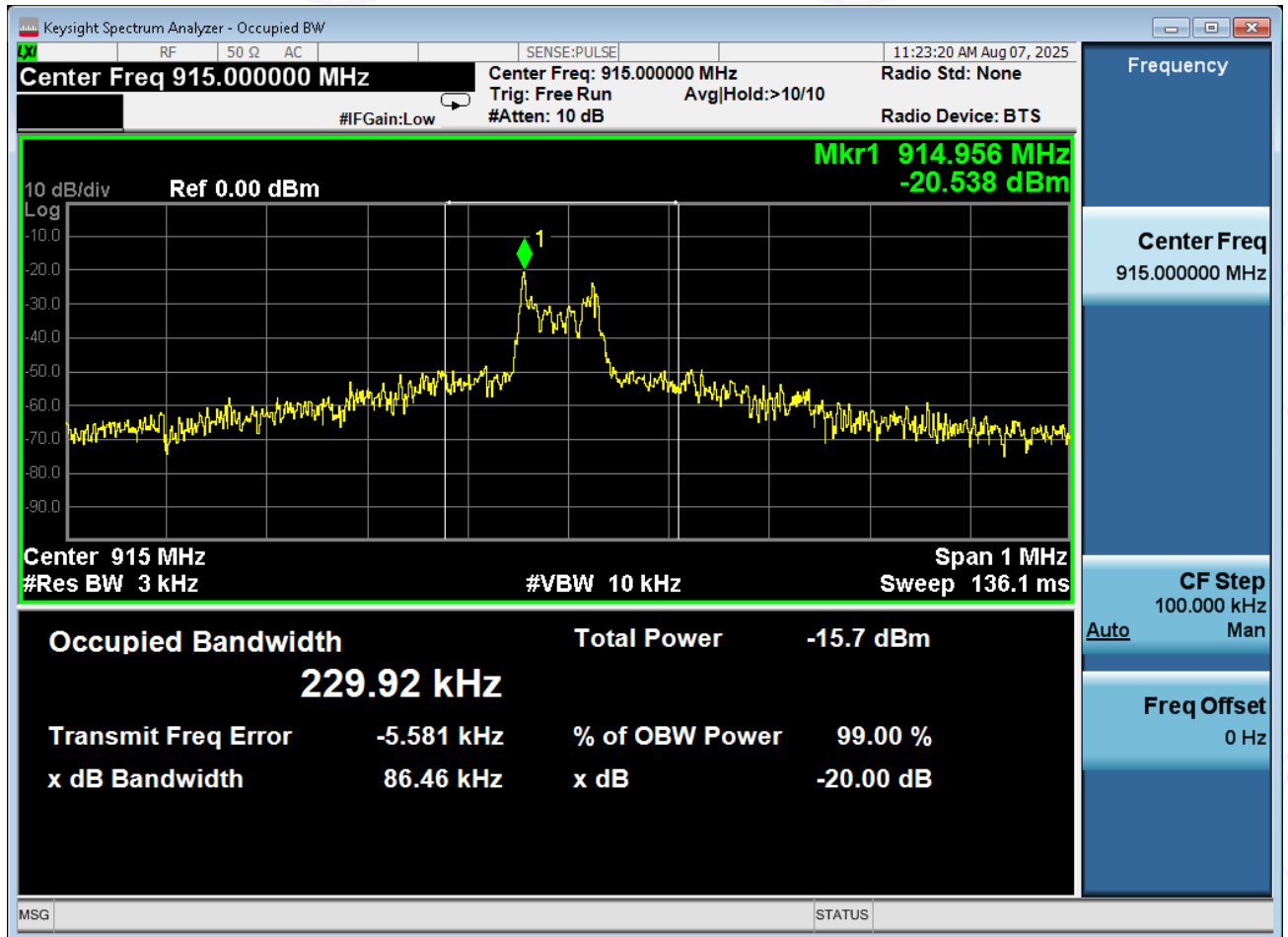
Detector function = peak

Trace = max hold

All the trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission, use the marker-delta function to measure and record the 20dB down



Test Frequency(MHz)	Bandwidth(kHz)
915	229.92



7.2 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209&15.249

Limit:

Field strength of the Fundamental signal

Fundamental Frequency (MHz)	Field strength of fundamental (milli-volts/meter)	Field strength of Harmonics (micro-volts/meter)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24.0-24.25	250	2500

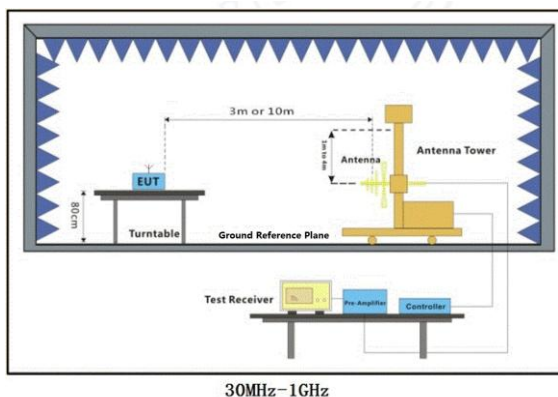
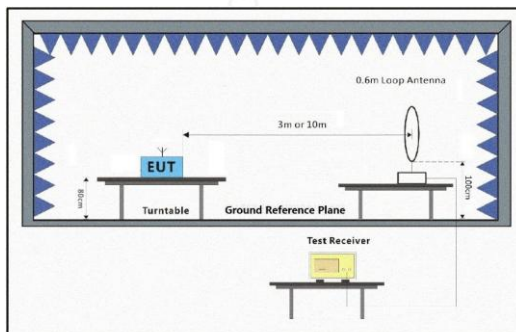
Radiation Spurious Emission

Frequency (MHz)	Field strength(microvolts/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

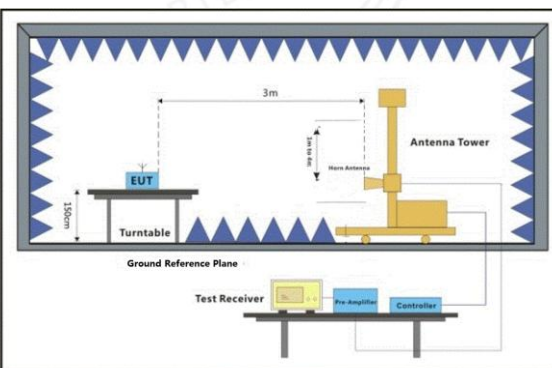
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

7.2.1 Test Setup Diagram



30MHz-1GHz



Above 1GHz



7.2.2 Test Setup Diagram

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

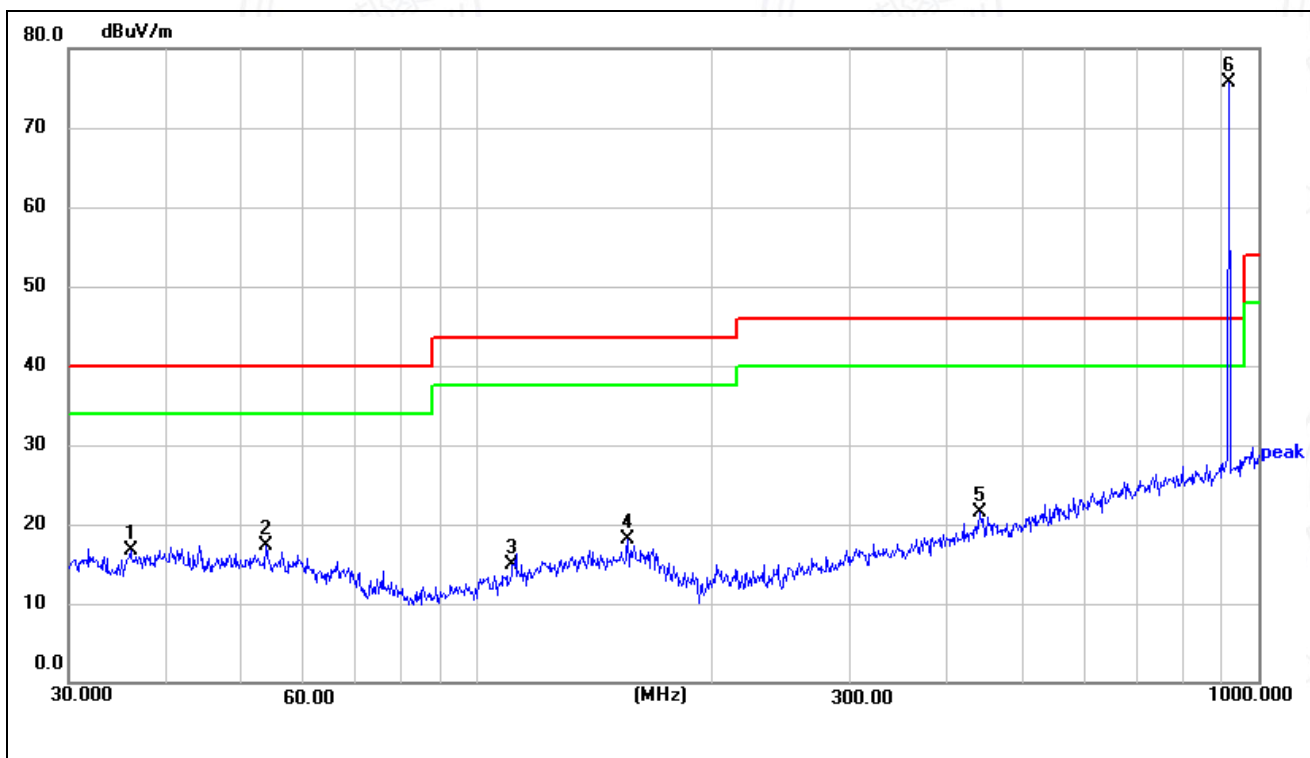
Remark 1: Level= Reading Level + Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

➤ Below 1GHz

Test Channel	Low	Polarity:	Horizontal
--------------	-----	-----------	------------

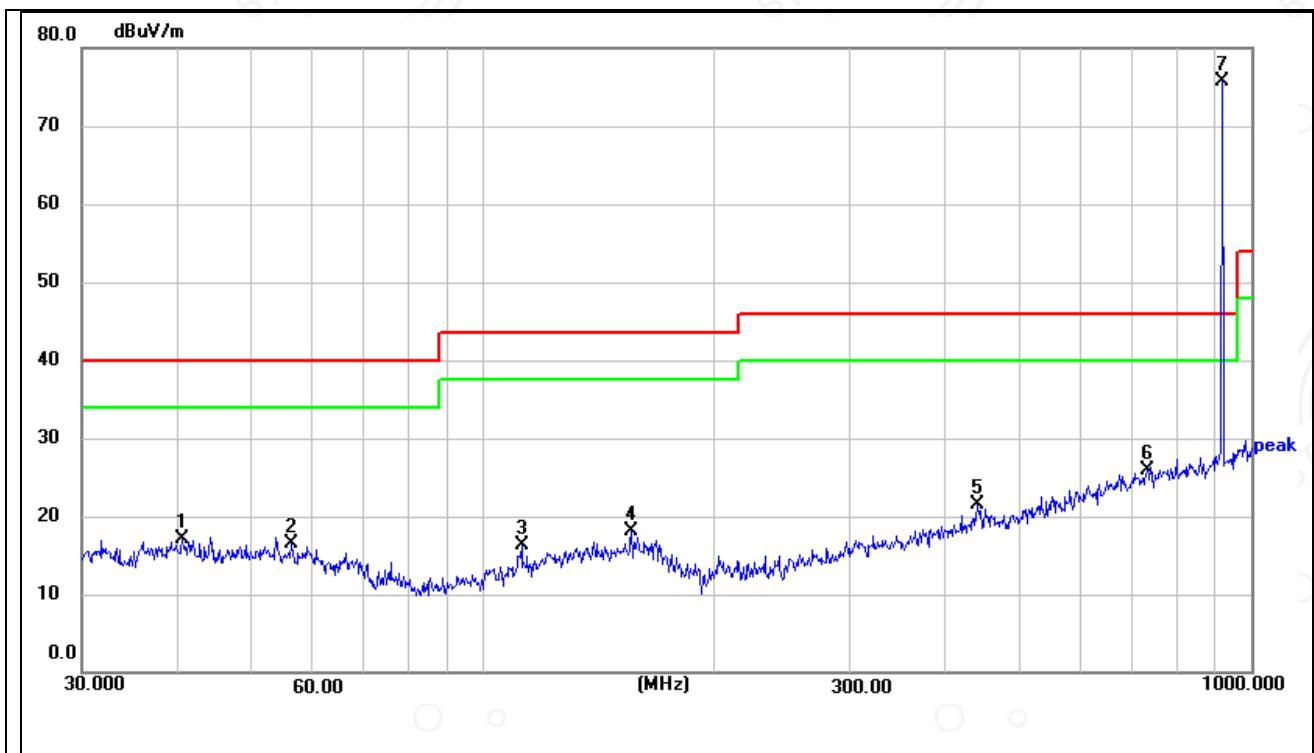




No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	36.0007	27.80	-11.14	16.66	40.00	-23.34	peak	100	0	P	
2	53.6932	28.64	-11.43	17.21	40.00	-22.79	peak	100	0	P	
3	110.9571	27.51	-12.52	14.99	43.50	-28.51	peak	100	0	P	
4	155.9101	29.84	-11.83	18.01	43.50	-25.49	peak	100	0	P	
5	440.1963	29.65	-8.18	21.47	46.00	-24.53	peak	100	0	P	
6 *	916.0687	77.64	-1.99	75.65	46.00	29.65	peak	100	0	P	Fundamental frequency



Test Channel	Low	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	40.5591	28.46	-11.37	17.09	40.00	-22.91	peak	100	0	P	
2	56.1974	28.70	-12.26	16.44	40.00	-23.56	peak	100	0	P	
3	112.1304	28.91	-12.57	16.34	43.50	-27.16	peak	100	0	P	
4	155.9101	29.84	-11.83	18.01	43.50	-25.49	peak	100	0	P	
5	440.1962	29.65	-8.18	21.47	46.00	-24.53	peak	100	0	P	
6	731.9202	29.75	-3.89	25.86	46.00	-20.14	peak	100	0	P	
7 *	916.0686	77.64	-1.99	75.65	46.00	29.65	peak	100	0	P	Fundamental frequency



Above 1GHz

Polarity: Horizontal; Modulation:GFSK

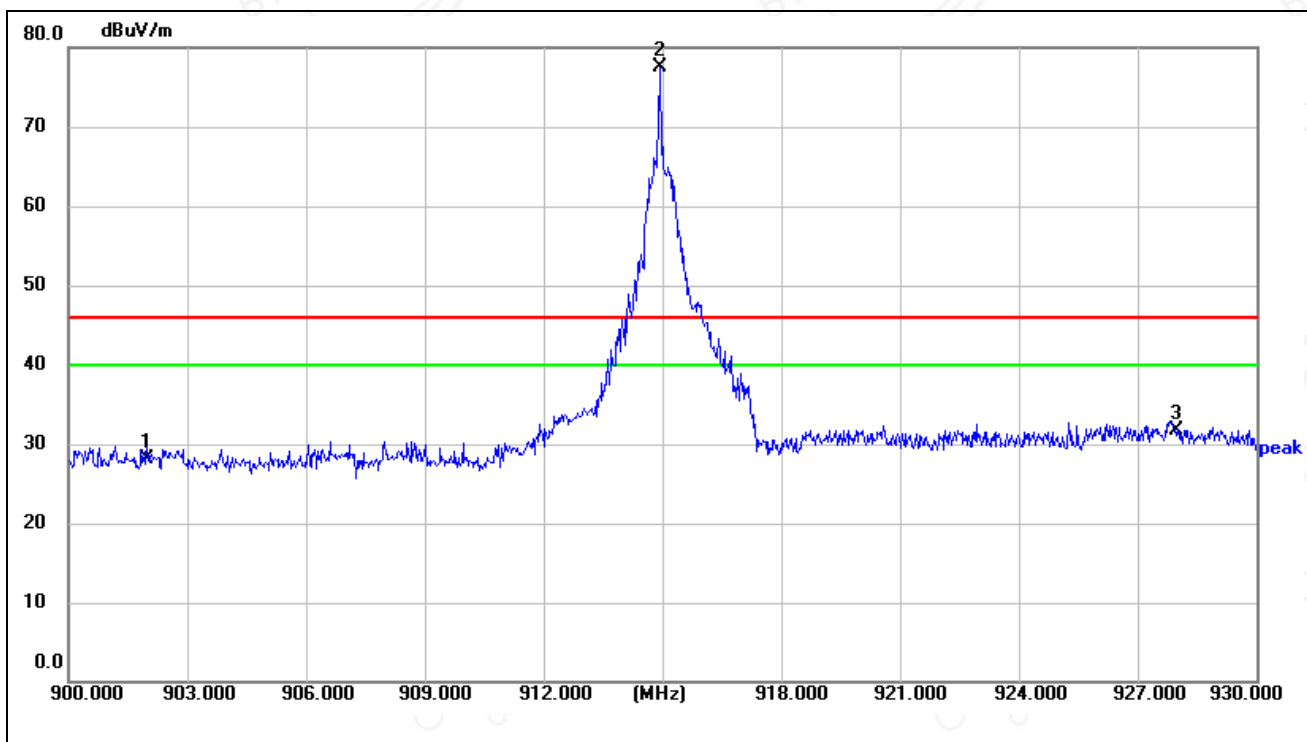
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin(dB)	Detector	P/F
1	1830.000	67.35	-24.14	43.21	74	-30.79	peak	P
2	2745.000	69.6	-23.92	45.68	74	-28.32	peak	P
3	3660.000	74.84	-23.92	50.92	74	-23.08	peak	P

Polarity: Vertical; Modulation:GFSK

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin(dB)	Detector	P/F
1	1830.000	68.74	-24.14	44.6	74	-29.4	peak	P
2	2745.000	69.14	-23.92	45.22	74	-28.78	peak	P
3	3660.000	74.46	-23.92	50.54	74	-23.46	peak	P



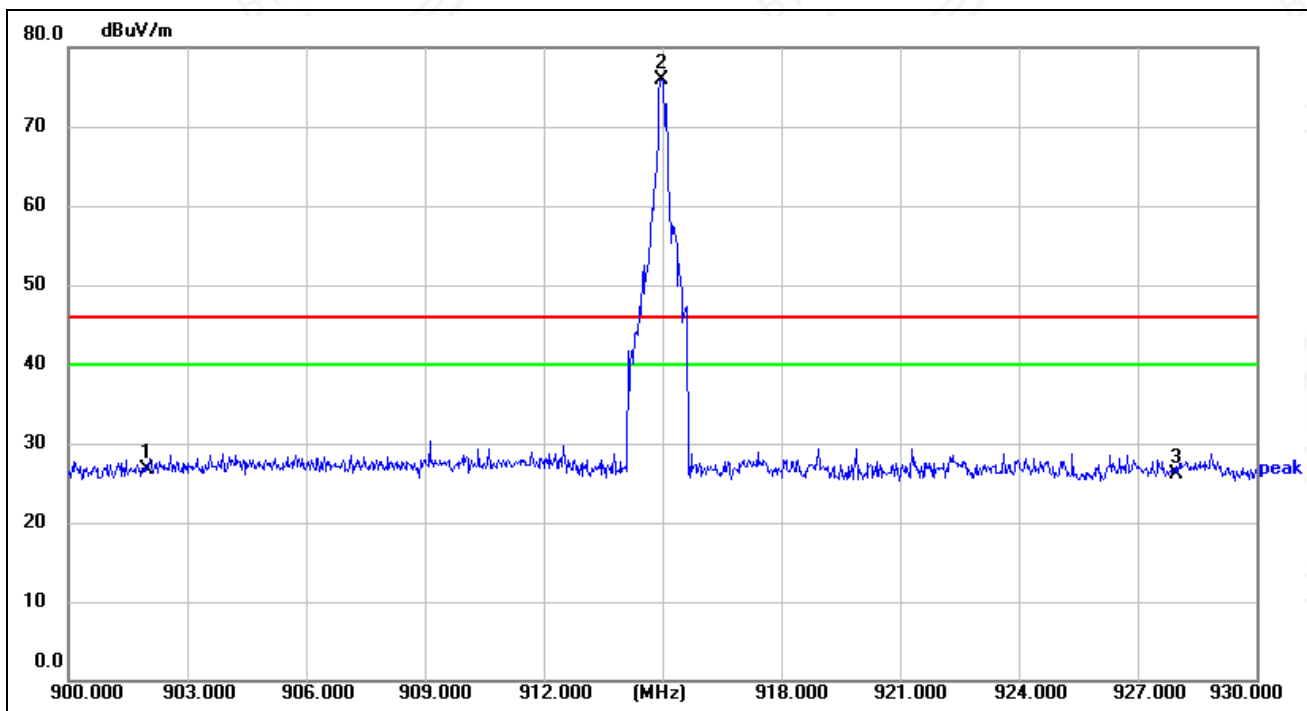
Test Bandedge	/	Polarity:	Horizontal
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	902.0000	29.94	-1.85	28.09	46.00	-17.91	peak	100	360	P	
2 *	914.9400	79.31	-1.84	77.47	46.00	31.47	peak	100	360	P	Fundamental frequency
3	928.0000	33.85	-2.05	31.80	46.00	-14.20	peak	100	360	P	



Test Bandedge	/	Polarity:	Vertical
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	902.0000	28.65	-1.85	26.80	46.00	-19.20	peak	100	0	P	
2 *	914.9700	77.83	-1.85	75.98	46.00	29.98	peak	100	0	P	Fundamental frequency
3	928.0000	28.07	-2.05	26.02	46.00	-19.98	peak	100	0	P	



8 Test Setup Photo

Please Refer to Appendix – Test Setup Photos.

9 EUT Constructional Details (EUT Photos)

Please Refer to Appendix - External and Internal Appendix EUT Photos

- End of the Report -

