

Vertical:



Site 3m Anechoic Chamber2

 Polarization: **Vertical**

Temperature: 22.8(C)

Humidity: 51 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	P/F	Remark
1 *	32.5197	56.36	-19.42	36.94	40.00	-3.06	QP	P	
2 !	40.2754	54.63	-18.43	36.20	40.00	-3.80	QP	P	
3 !	50.4089	54.70	-18.81	35.89	40.00	-4.11	QP	P	
4	81.4969	55.05	-22.45	32.60	40.00	-7.40	QP	P	
5 !	108.6470	60.71	-20.56	40.15	43.50	-3.35	QP	P	
6	157.5587	54.04	-17.04	37.00	43.50	-6.50	QP	P	

Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

2. Measurements were conducted in all three channels (high, middle, low) and all modulation(1 MHz, 2 MHz, 4 MHz, 8 MHz), and the worst case Mode (Highest channel and 4 MHz) transmit with antenna 0 was submitted only.

3. Freq. = Emission frequency in MHz

Measurement (dB μ V/m) = Reading level (dB μ V) + Corr. Factor (dB)

Correction Factor= Antenna Factor + Cable loss – Pre-amplifier

Limit (dB μ V/m) = Limit stated in standard

Margin (dB) = Measurement (dB μ V/m) – Limits (dB μ V/m)

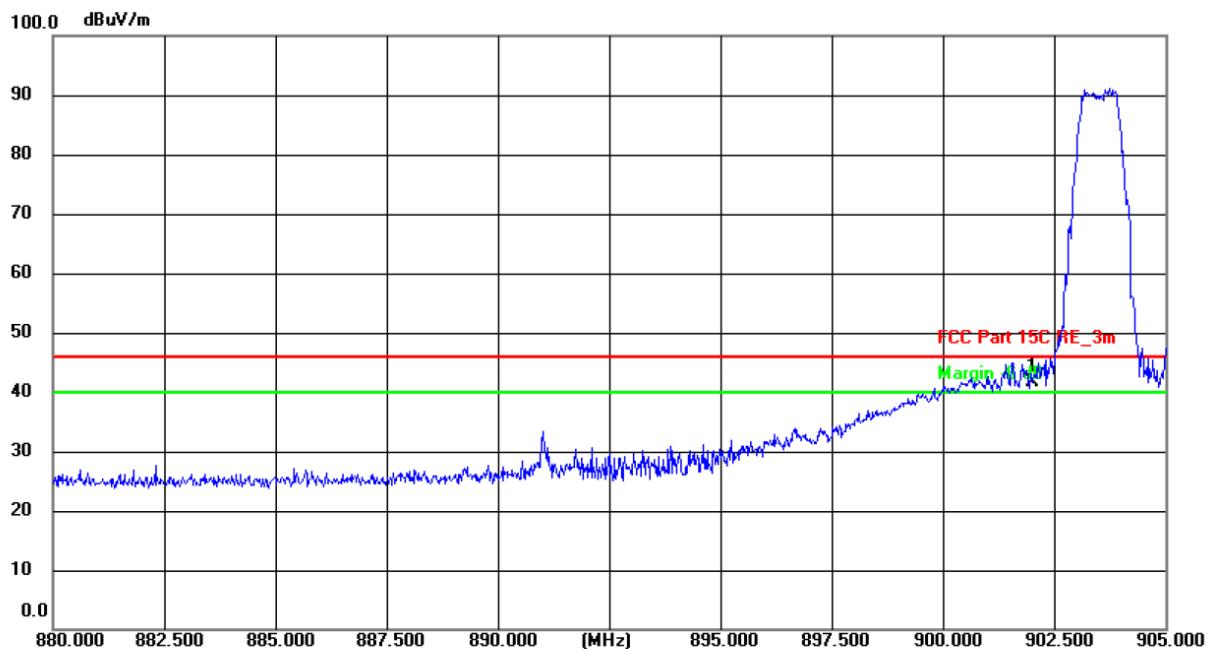
* is meaning the worst frequency has been tested in the test frequency range

Test Result of Radiated Spurious at Band edges

1MHz:

Lowest channel 903.5:

Horizontal:



Site: 3m Anechoic Chamber1

Polarization: **Horizontal**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	42.95	-1.24	41.71	46.00	-4.29	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

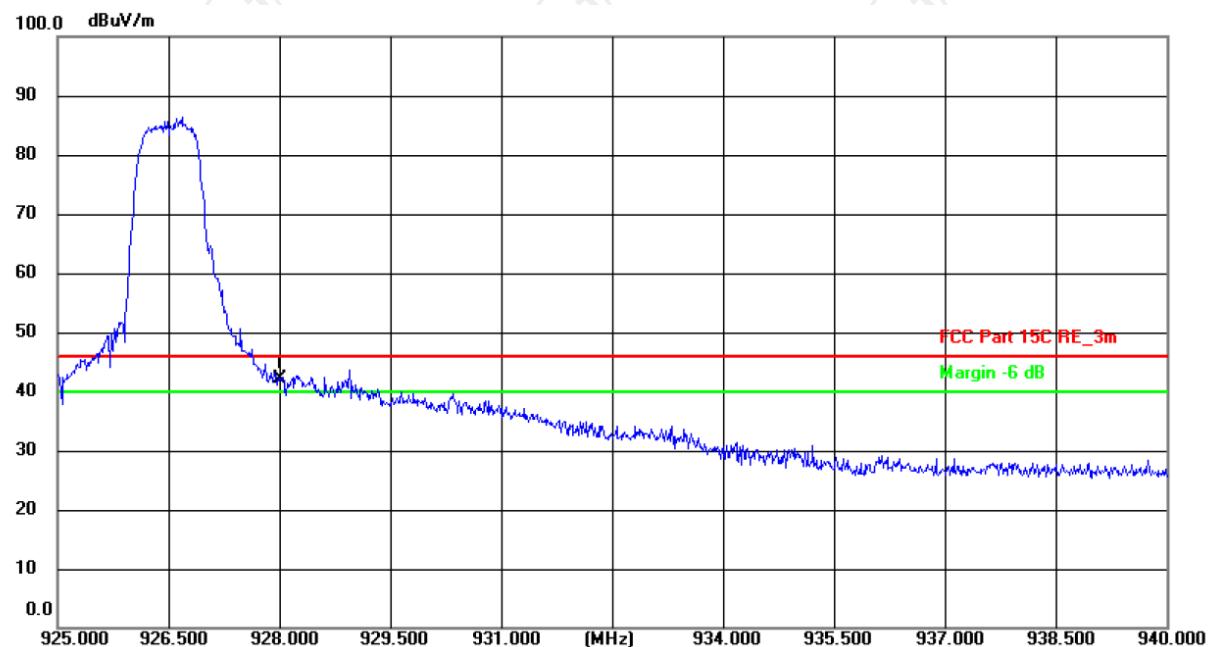
Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	45.17	-1.24	43.93	46.00	-2.07	peak	P	

Highest channel 926.5:

Horizontal:



Site: 3m Anechoic Chamber1

Polarization: **Horizontal**

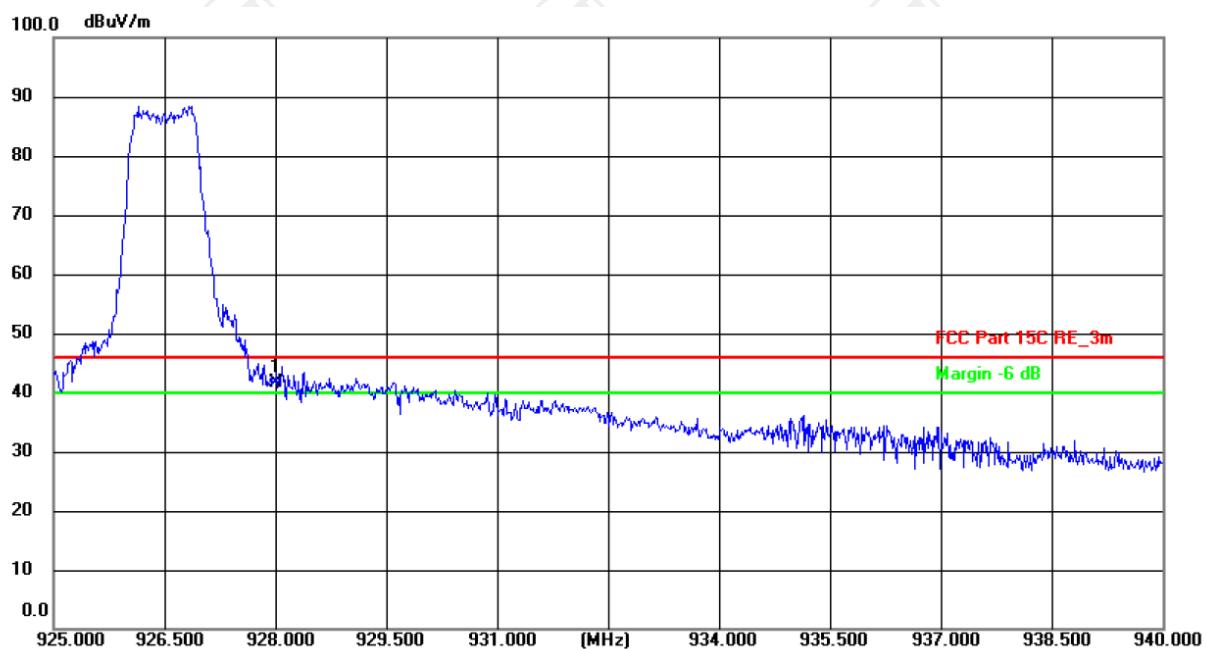
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	42.94	-0.76	42.18	46.00	-3.82	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	42.38	-0.76	41.62	46.00	-4.38	peak	P	

2MHz:

Lowest channel 905:

Horizontal:



Site: 3m Anechoic Chamber1

 Polarization: **Horizontal**

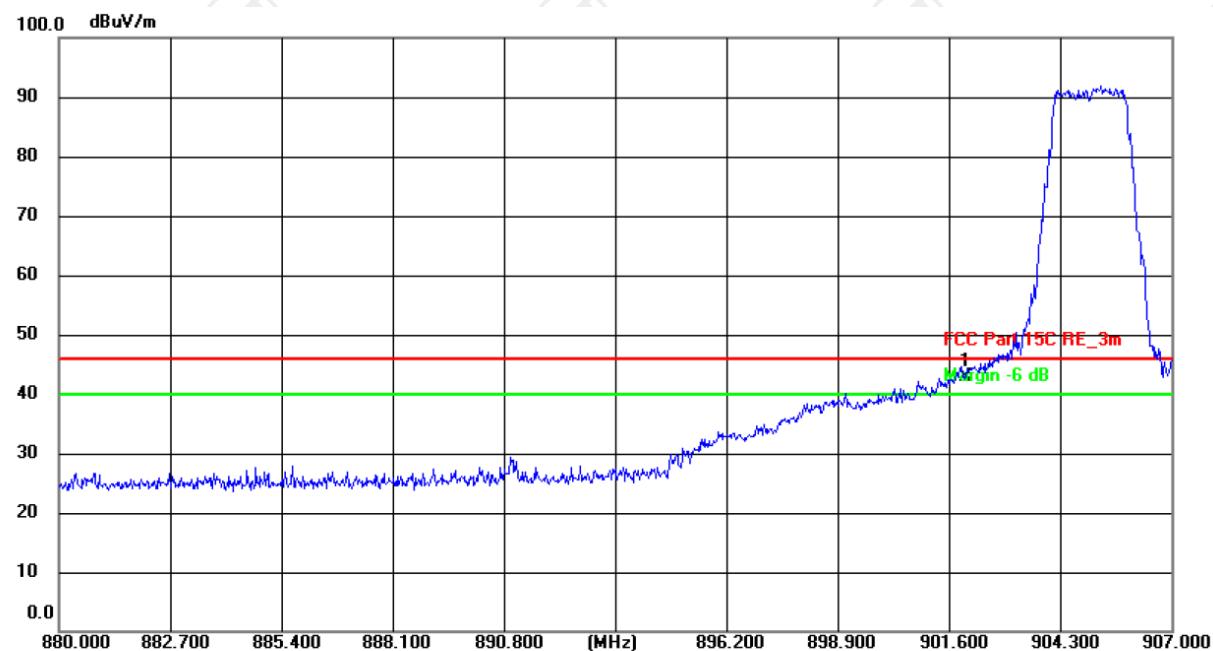
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	44.19	-1.24	42.95	46.00	-3.05	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

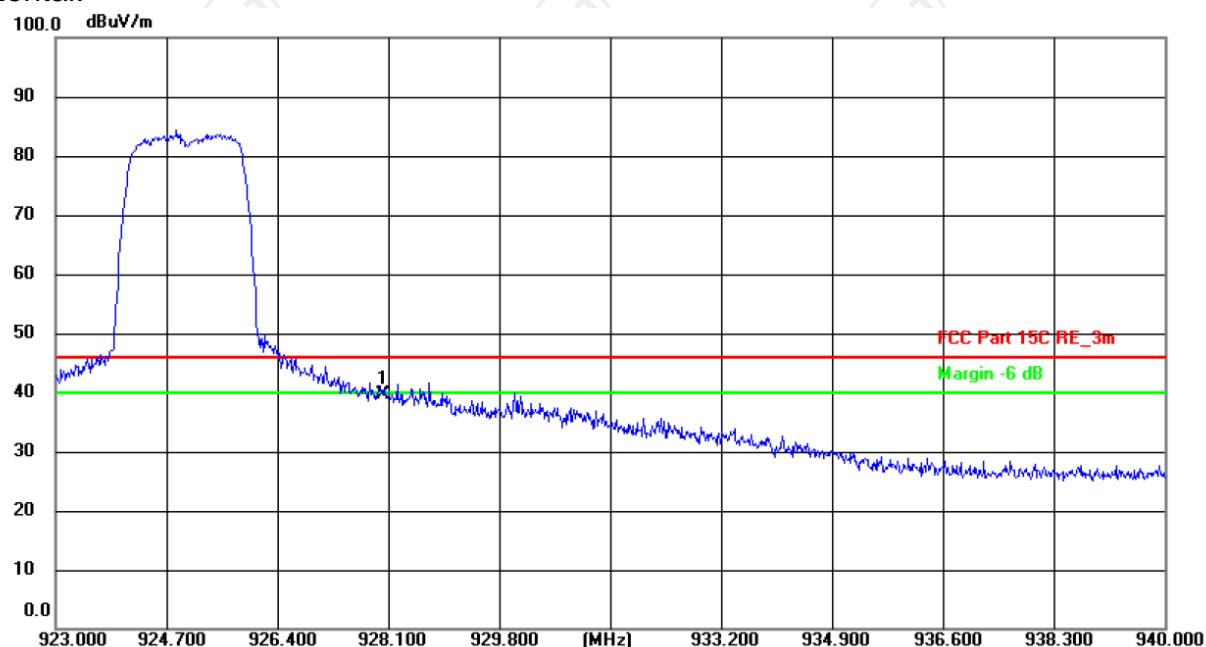
Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	44.14	-1.24	42.90	46.00	-3.10	peak	P	

Highest channel 925:

Horizontal:



Site: 3m Anechoic Chamber1

Polarization: **Horizontal**

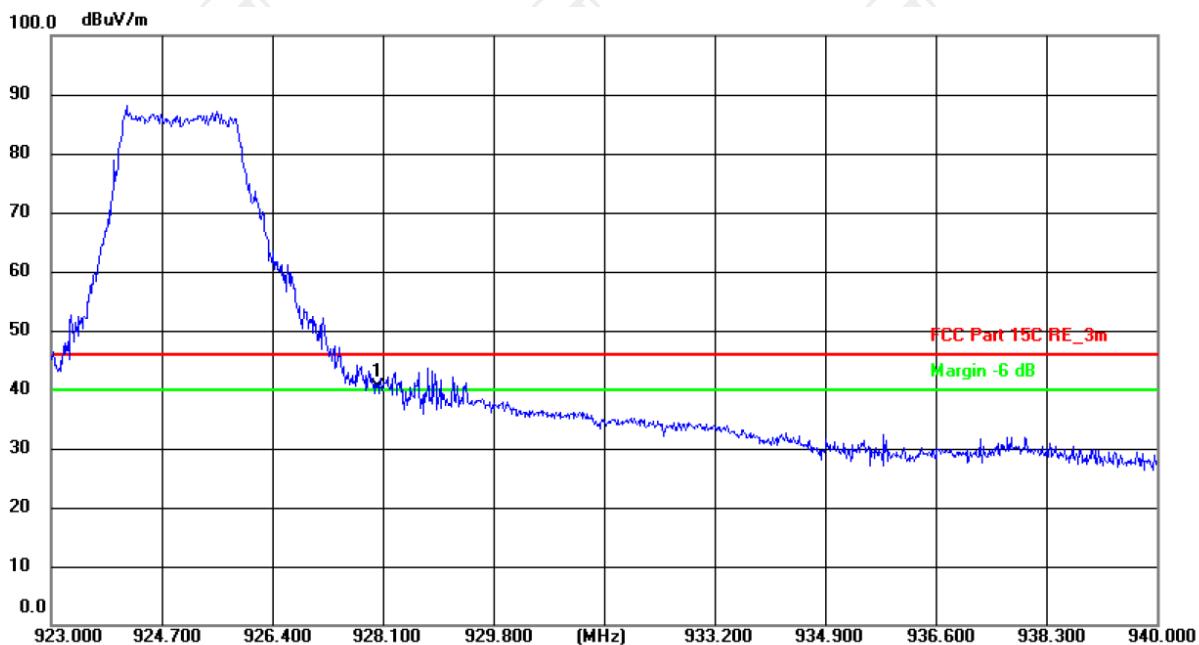
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	40.42	-0.76	39.66	46.00	-6.34	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

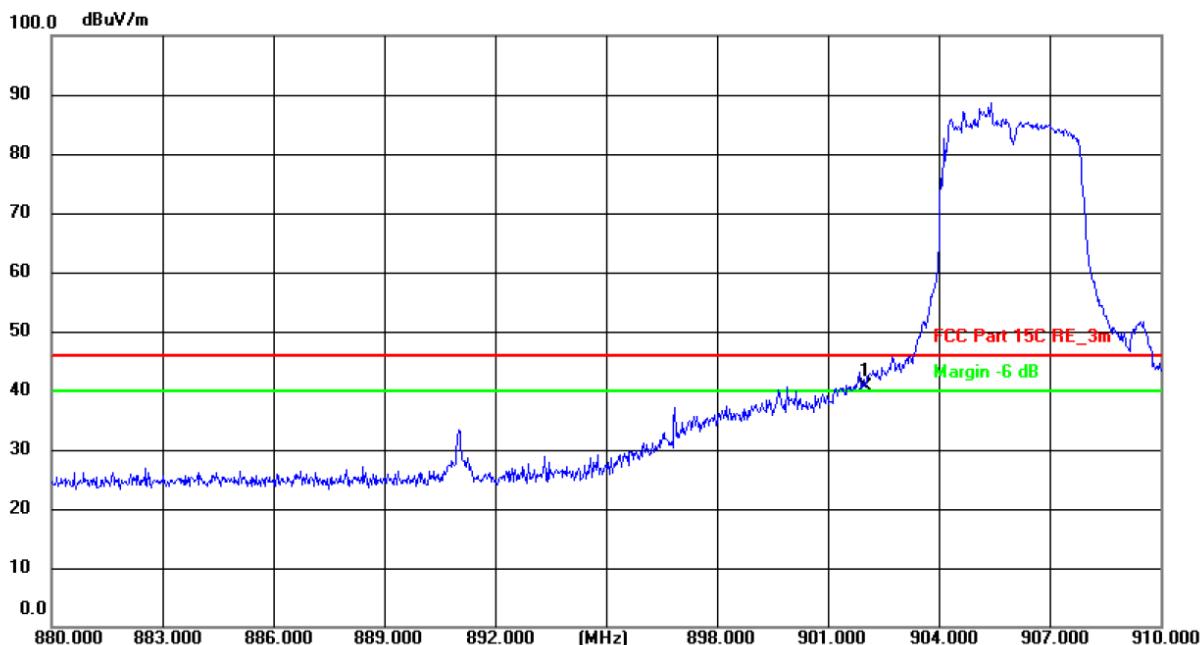
Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	41.16	-0.76	40.40	46.00	-5.60	peak	P	

4MHz:

Lowest channel 906:

Horizontal:



Site: 3m Anechoic Chamber1

 Polarization: **Horizontal**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	41.85	-1.24	40.61	46.00	-5.39	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

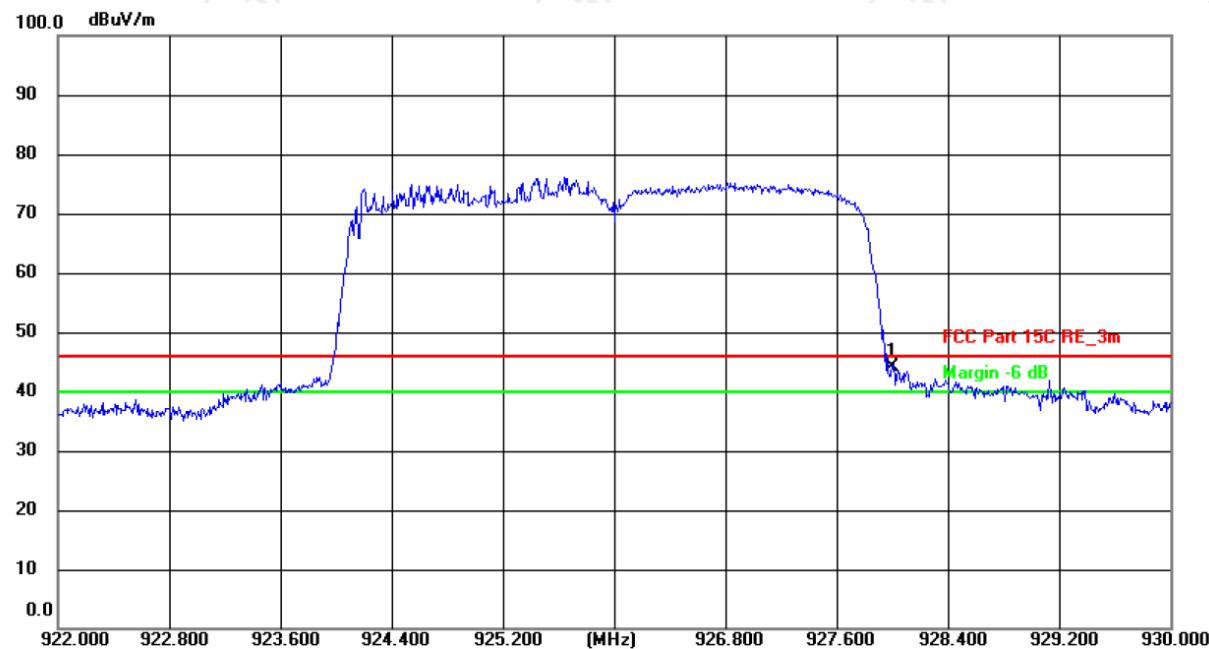
Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	39.68	-1.24	38.44	46.00	-7.56	peak	P	

Highest channel 926:

Horizontal:



Site: 3m Anechoic Chamber1

Polarization: **Horizontal**

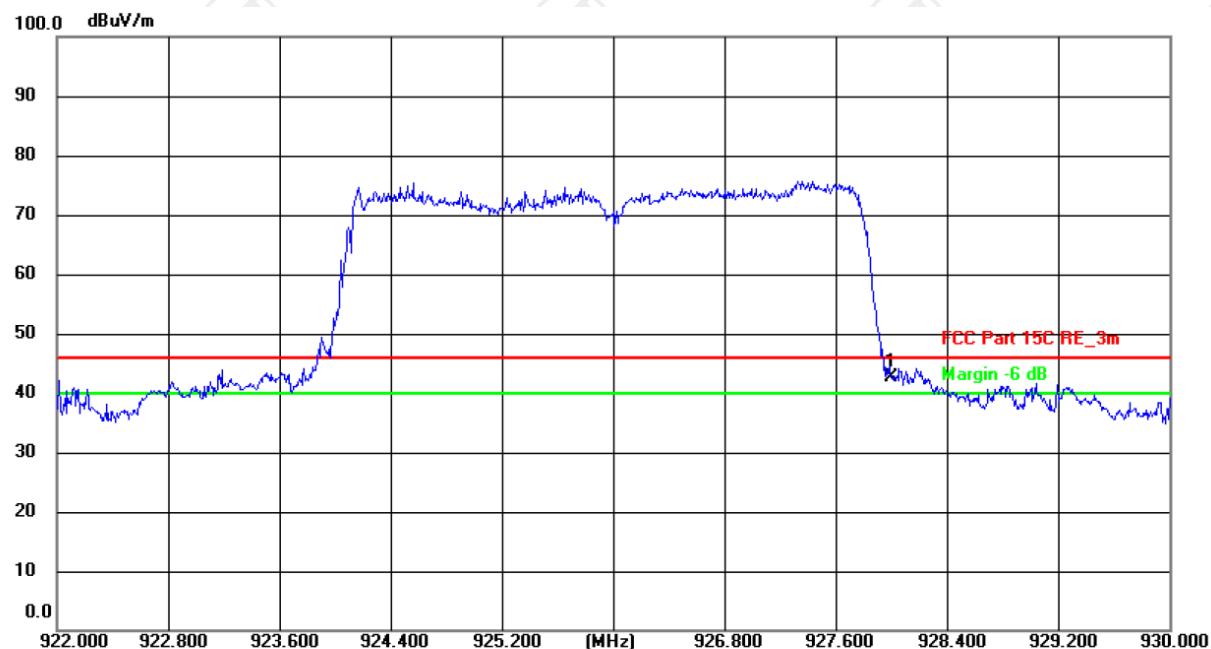
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	44.95	-0.76	44.19	46.00	-1.81	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

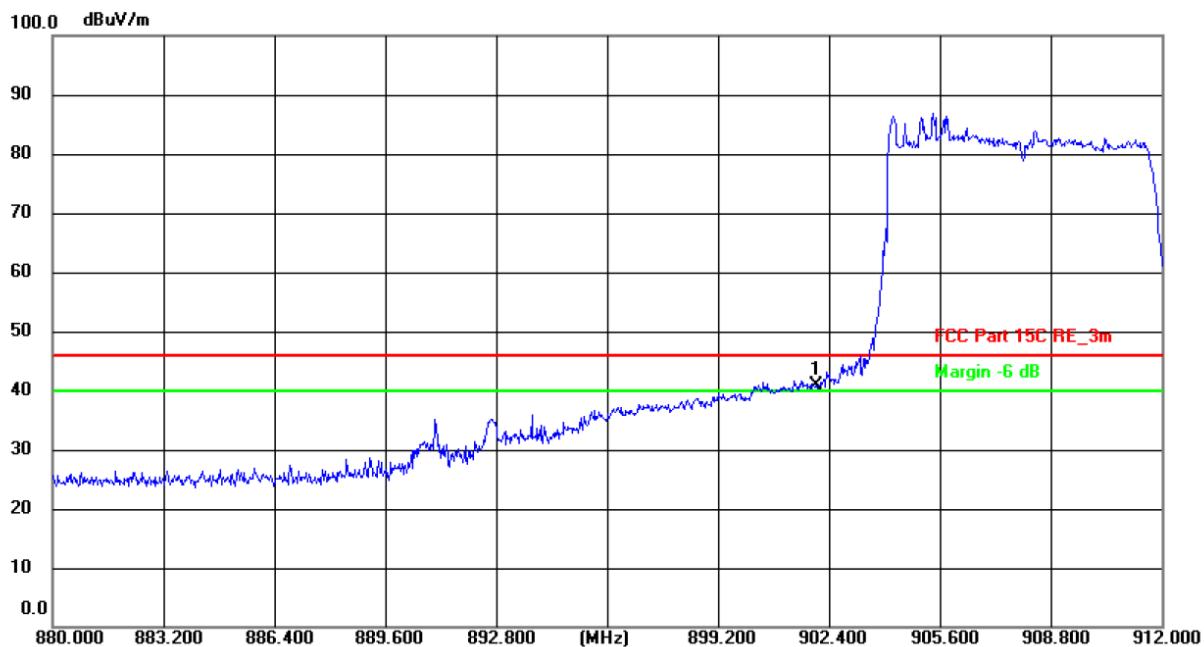
Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	43.29	-0.76	42.53	46.00	-3.47	peak	P	

8MHz:

Lowest channel 906:

Horizontal:



Site: 3m Anechoic Chamber1

 Polarization: **Horizontal**

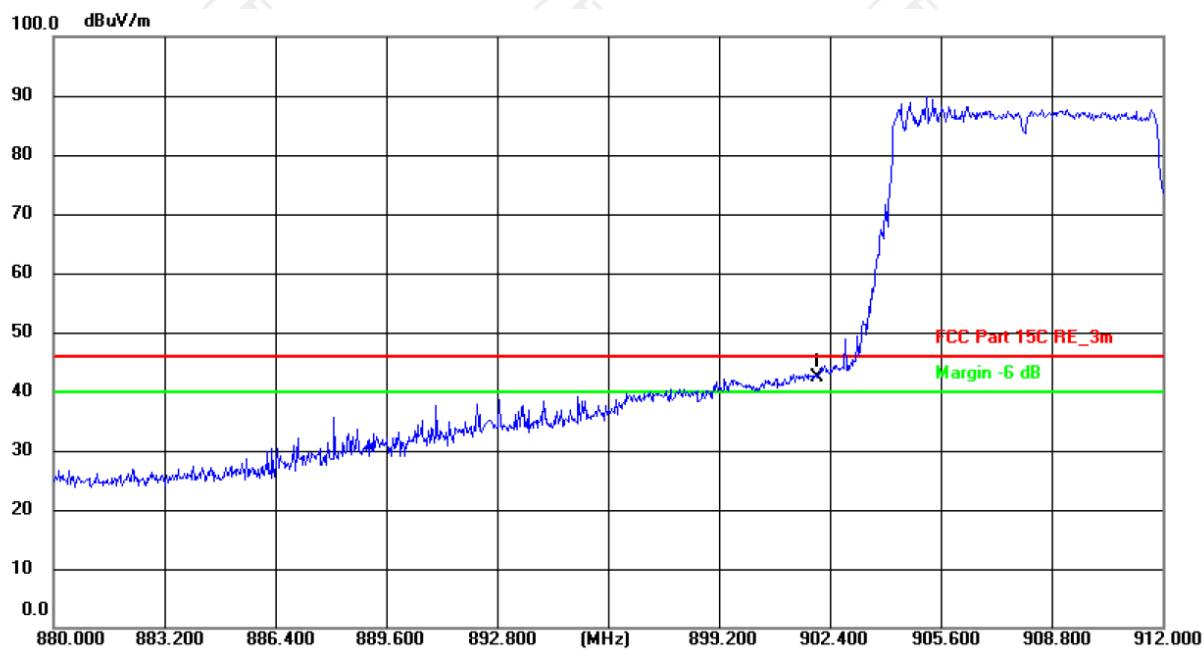
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	42.02	-1.24	40.78	46.00	-5.22	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

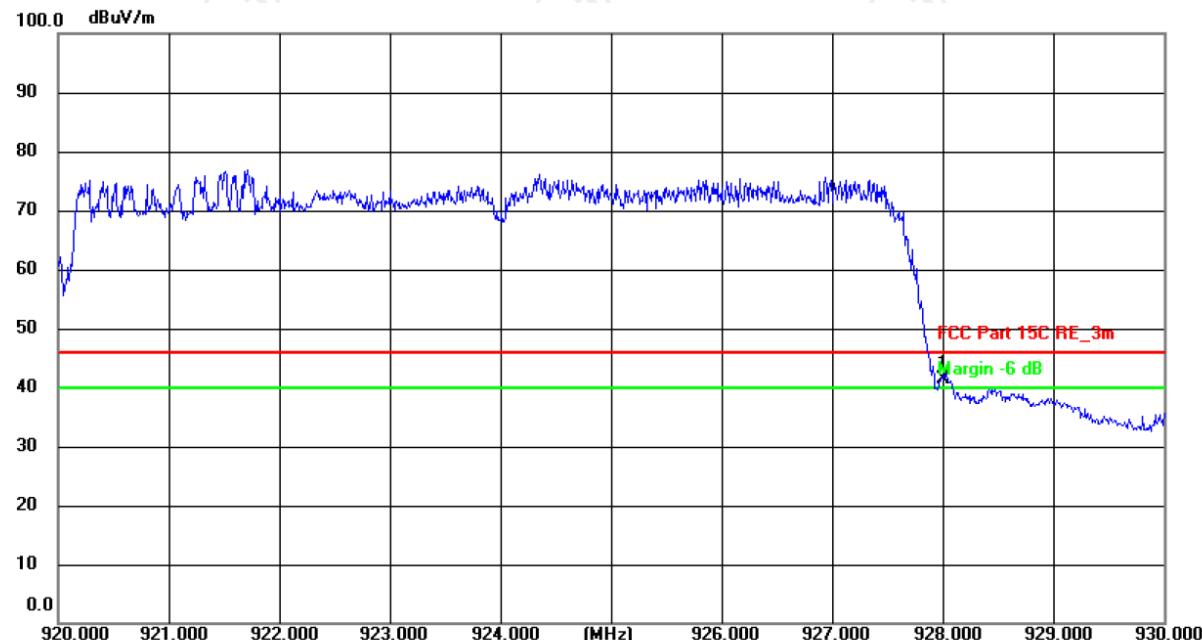
Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	902.0000	43.57	-1.24	42.33	46.00	-3.67	peak	P	

Highest channel 924:

Horizontal:



Site: 3m Anechoic Chamber1

Polarization: **Horizontal**

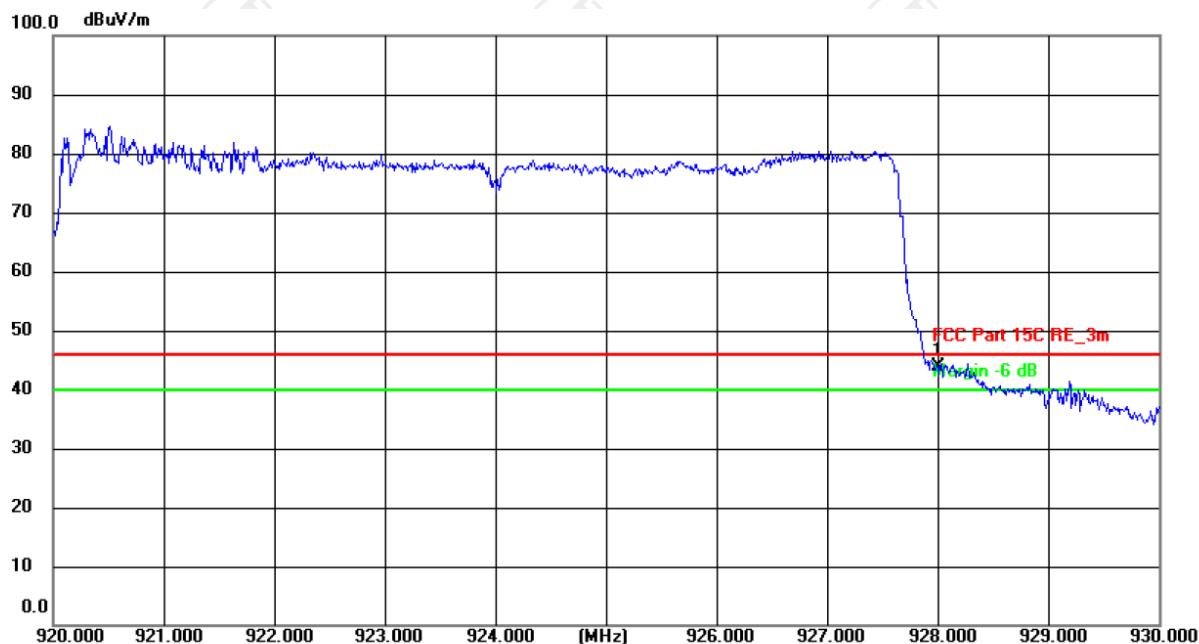
Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	42.25	-0.76	41.49	46.00	-4.51	peak	P	

Vertical:



Site: 3m Anechoic Chamber1

 Polarization: **Vertical**

Temperature: 24.8(C) Humidity: 54 %

Limit: FCC Part 15C RE_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	928.0000	44.52	-0.76	43.76	46.00	-2.24	peak	P	

Note:

1. Peak Final Emission Level=Peak Reading + Correction Factor;
2. Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
3. Measurements were conducted in transmit with antenna 0 was submitted only.

Above 1GHz

Modulation Type: 802.11ah BPSK

Low channel: 903.5 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1807	H	49.07	---	-6.20	42.87	---	74	54	-11.13
2710.5	H	47.36	---	-1.57	45.79	---	74	54	-8.21
---	H	---	---	---	---	---	---	---	---
1807	V	48.24	---	-6.20	42.04	---	74	54	-11.96
2710.5	V	43.90	---	-1.57	42.33	---	74	54	-11.67
---	V	---	---	---	---	---	---	---	---

Middle channel: 914.5MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1829	H	49.88	---	-6.07	43.81	---	74	54	-10.19
2743.5	H	44.49	---	-1.44	43.05	---	74	54	-10.95
---	H	---	---	---	---	---	---	---	---
1829	V	47.61	---	-6.07	41.54	---	74	54	-12.46
2743.5	V	46.34	---	-1.44	44.90	---	74	54	-9.10
---	V	---	---	---	---	---	---	---	---

High channel: 926.5 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1853	H	46.74	---	-5.94	40.8	---	74	54	-13.20
2779.5	H	45.38	---	-1.31	44.07	---	74	54	-9.93
---	H	---	---	---	---	---	---	---	---
1853	V	46.66	---	-5.94	40.72	---	74	54	-13.28
2779.5	V	47.30	---	-1.31	45.99	---	74	54	-8.01
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---” in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. All the restriction bands are compliance with the limit of 15.209.

Modulation Type: 802.11ah QPSK

Low channel: 905 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1810	H	49.67	---	-6.19	43.48	---	74	54	-10.52
2715	H	47.19	---	-1.56	45.63	---	74	54	-8.37
---	H	---	---	---	---	---	---	---	---
1810	V	48.41	---	-6.19	42.22	---	74	54	-11.78
2715	V	44.08	---	-1.56	42.52	---	74	54	-11.48
---	V	---	---	---	---	---	---	---	---

Middle channel: 915MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1831	H	44.96	---	-6.07	38.89	---	74	54	-15.11
2746.5	H	34.20	---	-1.44	32.76	---	74	54	-21.24
---	H	---	---	---	---	---	---	---	---
1831	V	45.46	---	-6.07	39.39	---	74	54	-14.61
2746.5	V	36.18	---	-1.44	34.74	---	74	54	-19.26
---	V	---	---	---	---	---	---	---	---

High channel: 925 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1850	H	49.11	---	-5.97	43.14	---	74	54	-10.86
2775	H	45.29	---	-1.32	43.97	---	74	54	-10.03
---	H	---	---	---	---	---	---	---	---
1850	V	48.06	---	-5.97	42.09	---	74	54	-11.91
2775	V	43.59	---	-1.32	42.27	---	74	54	-11.73
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---” in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. All the restriction bands are compliance with the limit of 15.209.

Modulation Type: 802.11ah 16QAM

Low channel: 906 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1812	H	48.69	---	-6.18	42.51	---	74	54	-11.49
2718	H	47.45	---	-1.55	45.90	---	74	54	-8.10
---	H	---	---	---	---	---	---	---	---
1812	V	49.33	---	-6.18	43.15	---	74	54	-10.85
2718	V	46.17	---	-1.55	44.62	---	74	54	-9.38
---	V	---	---	---	---	---	---	---	---

High channel: 926 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1852	H	48.35	---	-5.96	42.39	---	74	54	-11.61
2778	H	47.22	---	-1.31	45.91	---	74	54	-8.09
---	H	---	---	---	---	---	---	---	---
1852	V	48.44	---	-5.96	42.48	---	74	54	-11.52
2778	V	45.85	---	-1.31	44.54	---	74	54	-9.46
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---” in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. All the restriction bands are compliance with the limit of 15.209.

Modulation Type: 802.11ah 64QAM

Low channel: 908 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1816	H	48.56	---	-6.16	42.40	---	74	54	-11.60
2724	H	46.91	---	-1.53	45.38	---	74	54	-8.62
---	H	---	---	---	---	---	---	---	---
1816	V	48.25	---	-6.16	42.09	---	74	54	-11.91
2724	V	45.49	---	-1.53	43.96	---	74	54	-10.04
---	V	---	---	---	---	---	---	---	---

High channel: 924 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB μ V)	AV reading (dB μ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB μ V/m)	AV limit (dB μ V/m)	Margin (dB)
					Peak (dB μ V/m)	AV (dB μ V/m)			
1848	H	48.24	---	-5.98	42.26	---	74	54	-11.74
2772	H	45.17	---	-1.33	43.84	---	74	54	-10.16
---	H	---	---	---	---	---	---	---	---
1848	V	48.53	---	-5.98	42.55	---	74	54	-11.45
2772	V	48.21	---	-1.33	46.88	---	74	54	-7.12
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---” in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. All the restriction bands are compliance with the limit of 15.209.

Appendix A: Photographs of Test Setup

Please refer to document Appendix No.: TCT250625E035-A

Appendix B: Photographs of EUT

Please refer to document Appendix No.: TCT250625E035-B & TCT250625E035-C

*******END OF REPORT*******