



TEST REPORT

Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea Tel: 82-31-285-0894 Fax: 82-505-299-8311 www.kctl.co.kr	Report No.: KR23-SEF0019 Page (1) of (32)	eurofins KCTL
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1. Client

- Name : TYMICT
- Address : 222-12, Sangseo-ri, Useong-myon, Gongju-si,
Chungcheongnam-do, Republic of Korea
- Date of Receipt : 2022-12-05

2. Use of Report : -

3. Name of Product / Model : TBOX / TBX2

4. Manufacturer / Country of Origin : TYMICT / Korea

5. Date of Test : 2022-12-16

6. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
 (Address: 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)

7. Test method used : ANSI C63.4:2014, Class A
 ICES-003 Issue 7(ANSI C63.4a:2017)

8. FCC ID : 2A9Q6-TBX2

9. IC : 29802-TBX2

10. Test Results : Refer to the test result in the test report

Affirmation	Tested by Name : Dawoon Kong (Signature)	Technical Manager Name : Moonseop Cho (Signature)
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2023-01-27

Eurofins KCTL Co.,Ltd.

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REPORT REVISION HISTORY

Date	Revision	Page No
2023-01-27	Originally issued	-

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General remarks for test reports

Statement concerning the uncertainty of the measurement systems used for the tests

(may be required by the product standard or client)

☐ Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:

Procedure number, issue date and title:

Calculations leading to the reported values are on file with the testing laboratory that conducted the testing.

☒ Statement not required by the standard or client used for type testing

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Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea Tel: 82-31-285-0894 Fax: 82-505-299-8311 www.kctl.co.kr	Report No.: KR23-SEF0019 Page (4) of (32)	
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1. Applicant information

Applicant: TYMICT
Address: 222-12, Sangseo-ri, Useong-myon, Gongju-si,
 Chungcheongnam-do, Republic of Korea

Manufacturer: TYMICT
Address: 222-12, Sangseo-ri, Useong-myon, Gongju-si,
 Chungcheongnam-do, Republic of Korea



2. Laboratory information

Address

Eurofins KCTL Co.,Ltd. (Suwon Lab.)

65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea

Telephone Number: 82 31 285 0894

Facsimile Number: 82 505 299 8311

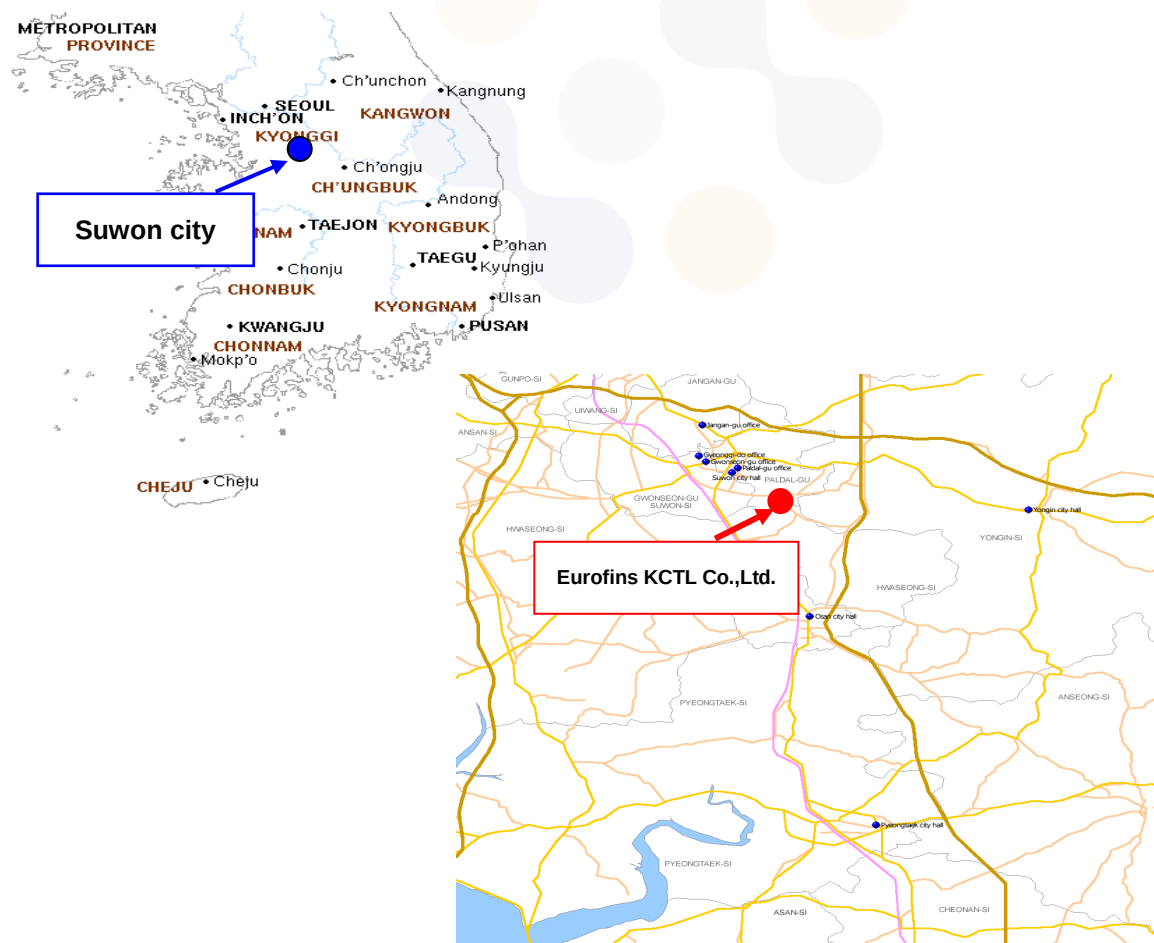
FCC Site Designation No: KR0040

VCCI Registration No.: R-20080, G-20078, C-20059, T-20056

Industry Canada Registration No. : 8035A

KOLAS NO.: KT231

SITE MAP



3. Test system configuration

3.1 Operation environment

	Temperature	Humidity	Pressure
Chamber 10 m (RE)	21.4 °C	22.9 % R.H.	-

Test site

These testing items were performed following locations;

Test item	Test site
Radiated Emission	10 m Chamber

3.2 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC.

The factors contributing to uncertainties are test receiver, cable loss, antenna factor calibration, Antenna directivity, antenna factor variation with height, antenna phase center variation, antenna frequency interpolation, measurement distance variation, site imperfection, mismatch, and system repeatability. Based on CISPR 16-4-2, the measurement uncertainty level with a 95 % confidence level was applied.

Conducted Emission measurement (Confidence level about 95 %, $k = 2$)		
Shielded Room (CE#1)	9 kHz ~ 150 kHz:	3.50 dB
	150 kHz ~ 30 MHz:	3.06 dB
Shielded Room (CE#2)	9 kHz ~ 150 kHz:	3.05 dB
	150 kHz ~ 30 MHz:	3.06 dB
Radiated Emission measurement (Confidence level about 95 %, $k = 2$)		
10 m Chamber (4F)	30 MHz ~ 200 MHz	3 m: 4.98 dB
		10 m: 4.96 dB
	200 MHz ~ 1 000 MHz	3 m: 4.28 dB
		10 m: 4.28 dB
	1 GHz ~ 6 GHz	3 m: 5.08 dB
	6 GHz ~ 18 GHz	3 m: 5.38 dB
	18 GHz ~ 30 GHz	3 m: 5.22 dB
10 m Chamber (2F)	30 MHz ~ 200 MHz	3 m: 4.50 dB
		10 m: 4.48 dB
	200 MHz ~ 1 000 MHz	3 m: 3.72 dB
		10 m: 3.70 dB
	1 GHz ~ 6 GHz	3 m: 5.08 dB

3.3 Measurement Program

These test items were performed by software programs;

Test item	Measurement Program		Used
Conducted Emission	EP5/CE_Ver 5.4.0(TOYO)		☐
Radiated Emission	2F	EP10/RE_Ver 2021.01.000 (TOYO)	☒
	4F	EP5/RE_Ver 5.11.10(TOYO)	



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4. Description of EUT

4.1 General information

Processor and Memory	
Microprocessor	STM32F765
eMMC	8GB
Ports & Connectors	
Serial Port	RS232 (Debug Port)
CAN Bus	2
Connector	Amphenol 12+12 pin
Modem	
LTE Cat 4 module optimized for M2M and IoT applications MIMO technology Multi-constellation GNSS receiver	Worldwide LTE coverage LTE-FDD: B2/B4/B5/B12/B13/B14/B66/B71 GPS, GLONASS, BeiDou/Compass, Galileo and QZSS
Internal Antennas	
Type	LTE Main LTE Diversity GPS & GNSS
Sensor	
Type	9-Axis (3-axis gyroscope, 3-axis accelerometer, 3-axis compass)
Input/Output	
Input	Digital High Side 2 Digital Low Side 2
Output	Digital (Max 1A, Low Side)
Power	
Rated Voltage	DC 12V
Operating Voltage	DC 6~18V
Environmental	
Water/Dust Resistance	IP68
Operating Temperature Range	-30 ~ 85°C (EC25-E Extended Temperature)
Humidity	95% RH @ 65°C
Vibration	4.5G from 5~200Hz (x: 8, y:8, z:8 hour)
Physical	
Dimensions	L: 133.5mm x W: 118.8mm x H: 36mm
Weight	283 g

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4.2 Product description

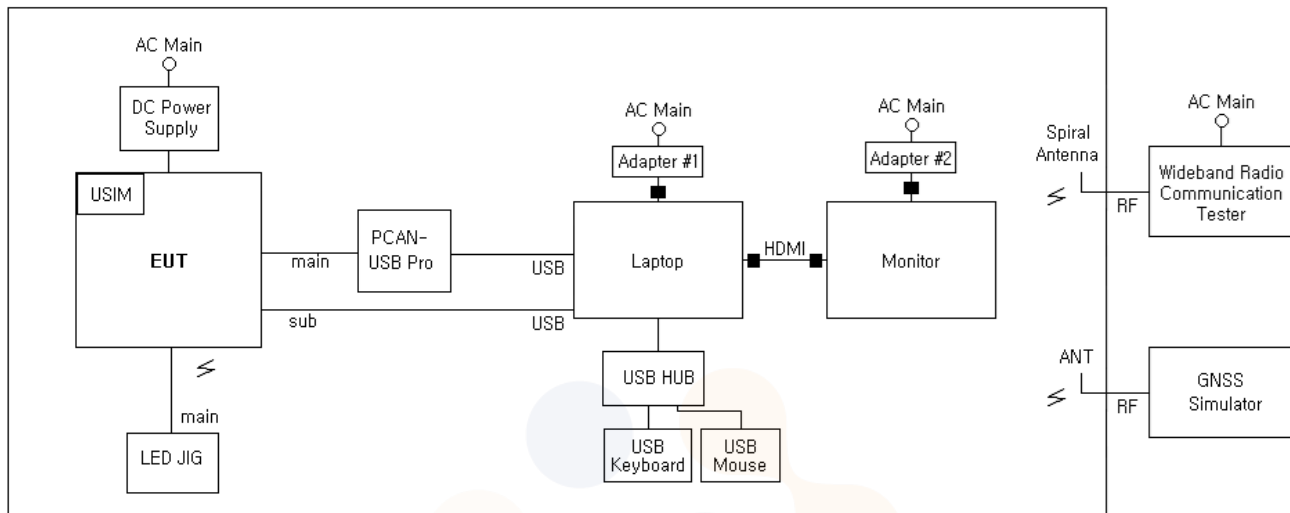
Type of product	TBOX
Model name (Basic)	TBX2
Model name (Variant)	-
Difference	-
Serial no	-
Testing voltage	DC 12 V
Input rating	DC 6 V ~ DC 18 V
Internal clock frequency	168 MHz
RF Frequency	LTE Band 2_1 850.7 MHz ~ 1 909.3 MHz LTE Band 4_1 710.7 MHz ~ 1 754.3 MHz LTE Band 5_824.7 MHz ~ 848.3 MHz LTE Band 12_699.7 MHz ~ 715.3 MHz LTE Band 13_779.5 MHz ~ 784.5 MHz LTE Band 14_790.5 MHz ~ 800.5 MHz LTE Band 66_1 710.7 MHz ~ 1 779.3 MHz LTE Band 71_665.5 MHz ~ 695.5 MHz
Note	-The following accessory was provided by the manufacturer. 1) LTE Module - FCC ID: XMR201808EC25AF
Note	-The sub port is an administrator port, but it is implemented and tested to check the operation status.

4.3 Auxiliary equipments

Type	Model / Part #	S/N	Manufacturer
DC Power Supply	E3632A	KR94907353	Agilent
Laptop	TP00083A	-	LCFC(HeFei) ELCTRONICS Technology Co.,Ltd.
Adapter #1	ADLX45NCC3A	-	Chicony Power Technology(Suzhou) Co.,Ltd.
PCAN-USB Pro	IPEH-004061	-	PEAK System
LED JIG	-	-	-
Monitor	24EA57VQ	610NTJJ8L044	LG
Adapter #2	ADS-40FSG-19 19025GPG-1	HG0CD62768621A085	LG
USB Mouse	M-U0026	-	Logitech
USB Keyboard	SKG-3000UB	TAKB516933V	SAMSUNG
USIM	-	-	-
Wideband Radio Communication Tester	CMW500	169838	R&S
Spiral Antenna	PSA-75301R/170	-	COBHAM
USB HUB	-	-	-
GNSS Simulator	RLLS03-3RP	73751	RACELOGIC
ANT	-	-	-

4.4 Test configuration

[Test #1 ~ Test #8]



	Start		End		Cable	
	Name	I/O port	Name	I/O port	Length (m)	Spec.
1	EUT	Power	DC Power Supply	-	3.0	Unshield
2		sub	Laptop	RS232	3.0	Unshield
3		main	LED JIG	-	3.0	Unshield
4		main	PCAN-USB Pro	USB	3.0	Unshield
5		USIM	USIM	-	Direct	-
6	Laptop	Power	Adapter #1	-	1.5	Unshield (Core)
7		HDMI	Monitor	HDMI	1.2	Shield (Core)
8		USB	USB Keyboard	-	1.5	Unshield
9		USB	USB Mouse	-	1.5	Unshield
10	Monitor	Power	Adapter #2	-	1.5	Unshield
11	Wideband Radio Communication	RF	Spiral Antenna	-	1.0	Shield
12	Laptop	USB	USB HUB	-	0.2	Shield
13	GNSS Simulator	RF	ANT	-	1.0	Shield

4.5 Operating conditions

The EUT was configured as normal intended use.

Test mode	Normal operating
Test #1[LTE Band 2] Test #2[LTE Band 4] Test #3[LTE Band 5] Test #4[LTE Band 12] Test #5LTE Band 13] Test #6[LTE Band 14] Test #7[LTE Band 66] Test #8[LTE Band 71]	After connecting EUT and Laptop via PCAN-USB Pro, check the CAN communication data value with the 'PCAN-View' program. After connecting EUT and Laptop with RS232 Cable, use the 'Tera Term' program to check the control status of the LED JIG with LED lights. Check LTE status using EUT and Wideband Radio Communication. Tested using the GNSS Simulator while monitoring the GPS operation status with the 'Tera Term' program.

5. Summary of test results

5.1 Summary of EMI emission test results

Applied	Test items	Test method	Result
☐	Conducted Emission	ANSI C63.4:2014 FCC Part 15 Subpart B, Class A ICES-003 Issue 7 (ANSI C63.4a:2017)	NA
☒	Radiated Emission	ANSI C63.4:2014 FCC Part 15 Subpart B, Class A ICES-003 Issue 7 (ANSI C63.4a:2017)	Pass

These results are deemed satisfactory evidence of compliance with ICES-003 of the Canadian Interference-Causing Equipment Regulations.

6. Test results

6.1 Radiated Emission

Testing voltage	DC 12 V		
Test facility	10 m Chamber (4F)		
Test distance	10 m, 3 m		
Date	2022-12-16		
Temperature (°C)	21.4 °C	Humidity (% R.H.)	22.9 % R.H.
Remarks	Pass		

6.1.1 Limits of radiated emission measurement

	Class A at 10 m QP(dB(μV/m))		Class B at 3 m QP(dB(μV/m))	
Frequency [MHz]	FCC ¹⁾	ISED (ICES Issue 7)	FCC ¹⁾	ISED (ICES Issue 7)
30-88	39.1	40.0	40.0	40.0
88-216	43.5	43.5	43.5	43.5
216-230	46.4	46.4	46.0	46.0
230-960	46.4	47.0	46.0	47.0
Above 960	49.5	49.5	54.0	54.0

- ¹⁾: Alternative standard: CISPR, Pub. 22

- Test data in this section has been taken against the FCC 15.109(a) or (B) Limit as it is the most stringent limit.

By complying with more restrictive FCC 15.109 Limit compliance with the ICES-003 Issue 7 limit also demonstrated.

6.1.2 Measurement procedure

The test was done at a 10 m chamber with a quasi-peak detector. EUT was placed on a non-metallic table height of 0.8 m above the reference ground plane. Cables were folded back and forth forming a bundle 0.3 m to 0.4 m long and were hanged at a 0.4 m height to the ground plane.

Cables connected to EUT were fixed to cause maximum emission. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.

6.1.3 Used equipments

Equipment	Model no.	Serial no.	Makers	Next Cal. Date	Used
EMI TEST RECEIVER	ESR7	101078	R&S	2023.08.18	☒
Bilog Antenna	CBL 6112D	37876	TESEQ	2024.09.07	☒
AMPLIFIER	310N	293004	SONOMA	2023.08.18	☒
ATTENUATOR	8491B	MY39270292	AGILENT	-	☒
Antenna Mast	MA4640-XP-ET	-	Innco Systems	-	☒
Turn Table	DT3000-2t	-	Innco Systems	-	☒
PXA SIGNAL ANALYZER	N9030A	MY54170575	KEYSIGHT	2023.03.16	☒
DOUBLE RIDGED HORN ANTENNA	3117	00161083	ETS-LINDGREN	2023.01.21	☒
BROADBAND PREAMPLIFIER	BBV 9718C	00138	SCHWARZBECK	2023.10.19	☒

6.1.4 Sample calculation

The field strength is calculated adding the antenna Factor, cable loss and, Antenna pad adding, subtracting the amplifier gain from the measured reading.

The sample calculation is as follow:

$$\text{Result} = \text{M.R} + \text{C.F}(\text{A.F} + \text{C.L} + 6 \text{ dB Att} - \text{A.G})$$

M.R = Meter Reading

C.F = Correction Factor

A.F = Antenna Factor C.L = Cable Loss

A.G = Amplifier Gain

6 dB Att = 6 dB Attenuator

If M.R is 30 dB, A.F 12 dB, C.L 5 dB, 6 dB, A.G 35 dB

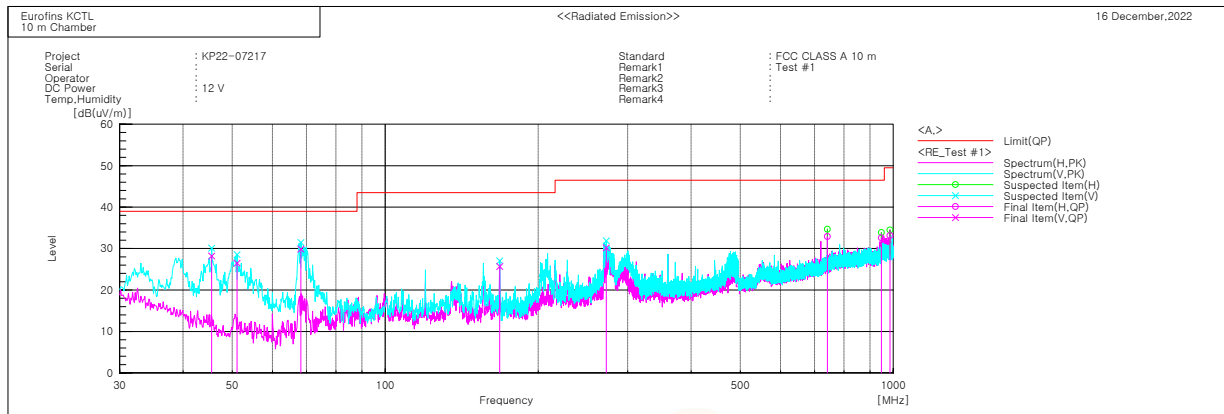
The result is $30 + 12 + 5 + 6 - 35 = 18 \text{ dB } (\mu\text{V/m})$

Bilog Antenna and ATTENUATOR (6 dB) were calibrated together.

AV = CAV : Abbreviation of CISPR Average

6.1.5 Radiated emission measurement result

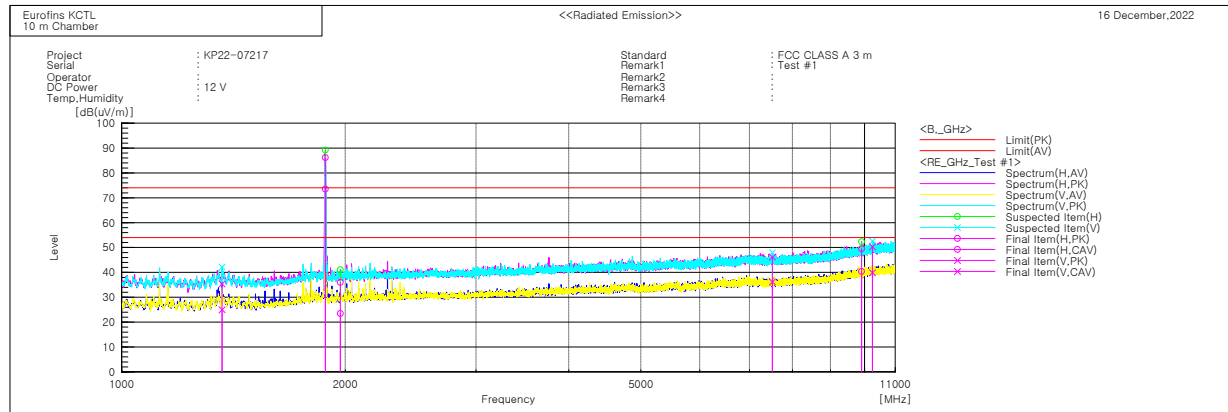
30 MHz ~ 1 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	45.520	V	41.5	-13.3	28.2	39.0	10.8	162.0	68.0
2	51.098	V	42.3	-15.8	26.5	39.0	12.5	128.0	75.0
3	68.194	V	46.6	-16.7	29.9	39.0	9.1	119.0	14.0
4	167.983	V	37.1	-11.4	25.7	43.5	17.8	216.0	140.0
5	272.379	V	36.7	-6.5	30.2	46.5	16.3	152.0	5.0
6	741.738	H	26.2	6.7	32.9	46.5	13.6	267.0	225.0
7	947.620	H	22.3	10.3	32.6	46.5	13.9	325.0	61.0
8	985.208	H	22.0	11.1	33.1	49.5	16.4	342.0	216.0

1 GHz ~ 11 GHz

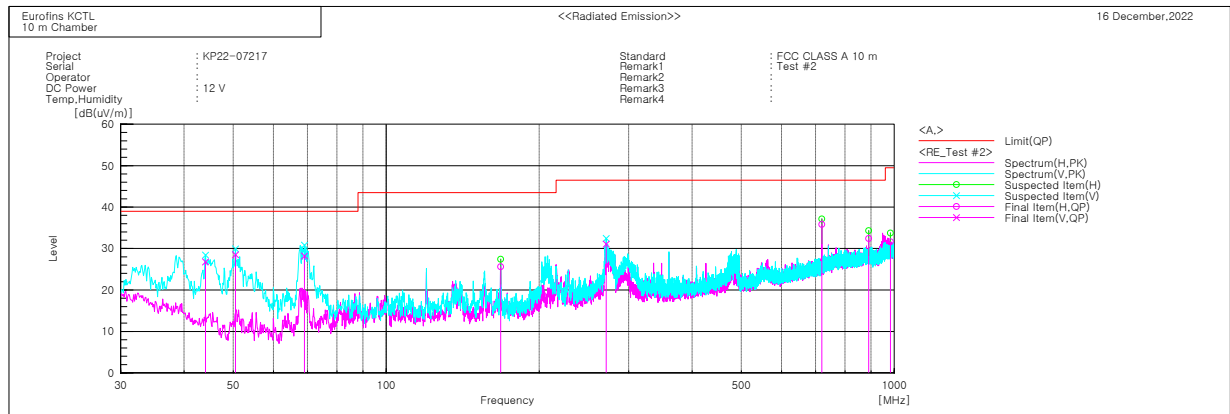


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1364.881	V	39.6	29.2	-4.2	35.4	25.0	74.0	54.0	38.6	29.0	125.0	29.0
2	1880.865	H	88.3	75.6	-2.1	86.2	73.5	74.0	54.0	-12.2	-19.5	238.0	154.0
3	1970.154	H	37.7	25.2	-1.7	36.0	23.5	74.0	54.0	38.0	30.5	326.0	177.0
4	7514.624	V	37.4	27.4	8.8	46.2	36.2	74.0	54.0	27.8	17.8	116.0	279.0
5	9911.676	H	37.2	28.1	12.3	49.5	40.4	74.0	54.0	24.5	13.6	216.0	37.0
6	10249.940	V	37.1	26.7	13.2	50.3	39.9	74.0	54.0	23.7	14.1	249.0	126.0

No. 2 is the fundamental frequency. (1 880.865 MHz_LTE Band 2)

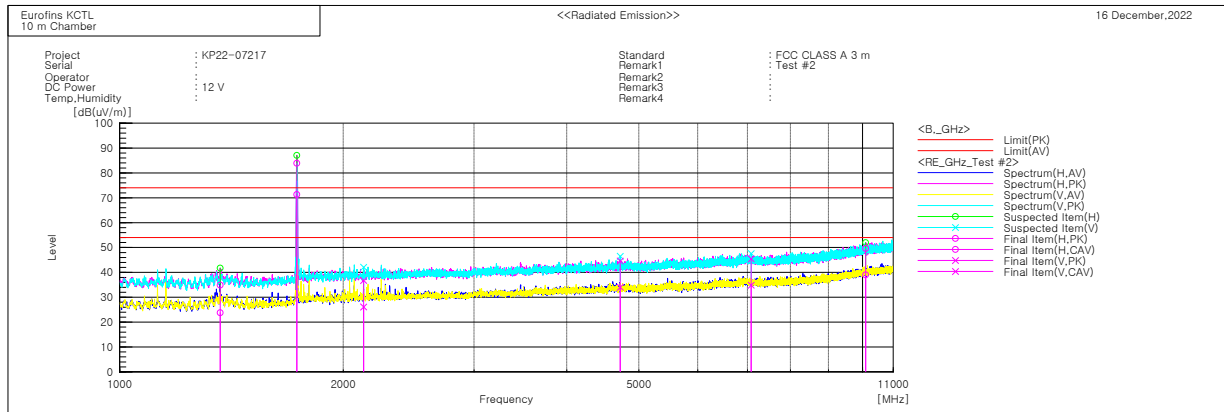
30 MHz ~ 1 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	44.065	V	39.3	-12.5	26.8	39.0	12.2	127.0	92.0
2	50.491	V	44.1	-15.6	28.5	39.0	10.5	171.0	56.0
3	69.043	V	44.8	-16.6	28.2	39.0	10.8	163.0	81.0
4	167.983	H	37.0	-11.4	25.6	43.5	17.9	324.0	273.0
5	271.045	V	37.6	-6.5	31.1	46.5	15.4	248.0	349.0
6	720.034	H	30.0	5.8	35.8	46.5	10.7	337.0	182.0
7	890.148	H	22.8	9.6	32.4	46.5	14.1	215.0	11.0
8	982.540	H	20.6	11.0	31.6	49.5	17.9	342.0	46.0

1 GHz ~ 11 GHz

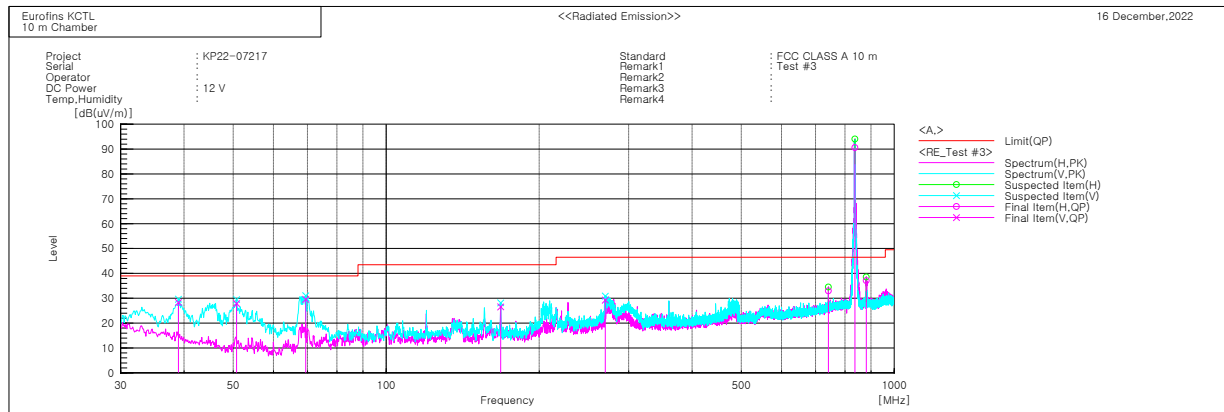


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1365.739	H	39.1	28.0	-4.2	34.9	23.8	74.0	54.0	39.1	30.2	161.0	26.0
2	1732.337	H	87.2	74.6	-3.3	83.9	71.3	74.0	54.0	-9.9	-17.3	229.0	143.0
3	2129.843	V	38.0	27.3	-1.2	36.8	26.1	74.0	54.0	37.2	27.9	132.0	290.0
4	4718.350	V	39.9	29.4	4.7	44.6	34.1	74.0	54.0	29.4	19.9	248.0	156.0
5	7082.777	V	36.6	26.0	8.9	45.5	34.9	74.0	54.0	28.5	19.1	164.0	237.0
6	10099.700	H	36.9	26.3	12.7	49.6	39.0	74.0	54.0	24.4	15.0	326.0	241.0

No. 2 is the fundamental frequency. (1 732.337 MHz_LTE Band 4)

30 MHz ~ 1 GHz

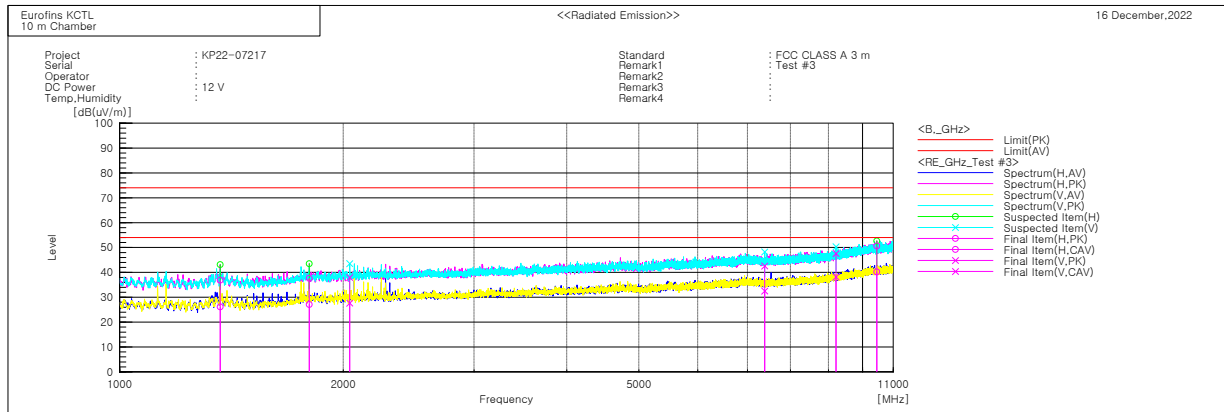


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	38.973	V	38.0	-9.7	28.3	39.0	10.7	161.0	277.0
2	50.734	V	43.6	-15.7	27.9	39.0	11.1	172.0	131.0
3	69.406	V	46.2	-16.6	29.6	39.0	9.4	126.0	45.0
4	167.983	V	38.0	-11.4	26.6	43.5	16.9	241.0	105.0
5	269.833	V	35.8	-6.5	29.3	46.5	17.2	134.0	352.0
6	741.859	H	26.2	6.8	33.0	46.5	13.5	326.0	28.0
7	837.040	H	82.1	8.5	90.6	46.5	-44.1	278.0	81.0
8	880.933	H	27.7	9.4	37.1	46.5	9.4	316.0	122.0

No. 7 is the fundamental frequency. (837.040 MHz_LTE Band 5)

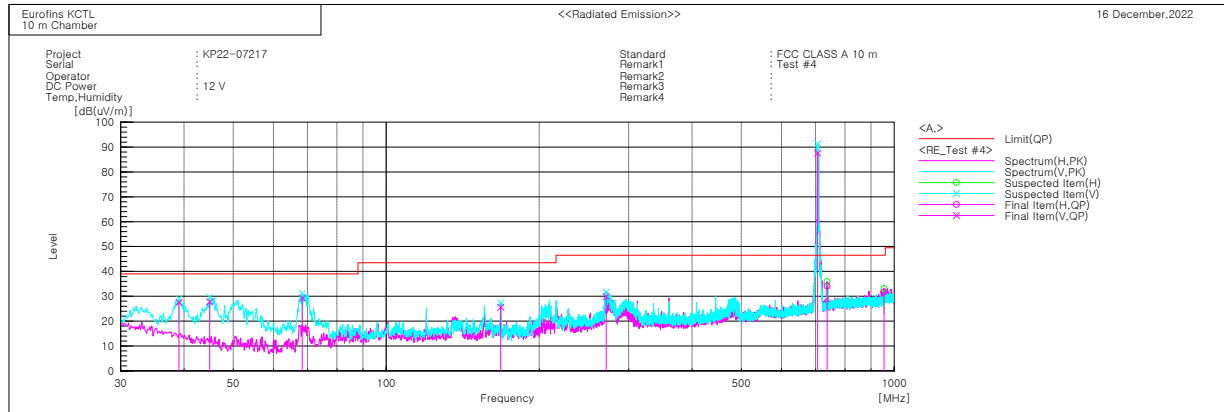
1 GHz ~ 11 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1365.739	H	41.1	30.3	-4.2	36.9	26.1	74.0	54.0	37.1	27.9	325.0	183.0
2	1800.162	H	39.9	29.4	-2.3	37.6	27.1	74.0	54.0	36.4	26.9	266.0	219.0
3	2040.554	V	39.6	29.3	-1.6	38.0	27.7	74.0	54.0	36.0	26.3	119.0	325.0
4	7384.984	V	33.8	23.7	8.8	42.6	32.5	74.0	54.0	31.4	21.5	251.0	80.0
5	9212.822	V	37.1	27.7	10.5	47.6	38.2	74.0	54.0	26.4	15.8	125.0	158.0
6	10453.420	H	37.4	27.0	13.2	50.6	40.2	74.0	54.0	23.4	13.8	215.0	326.0

30 MHz ~ 1 GHz

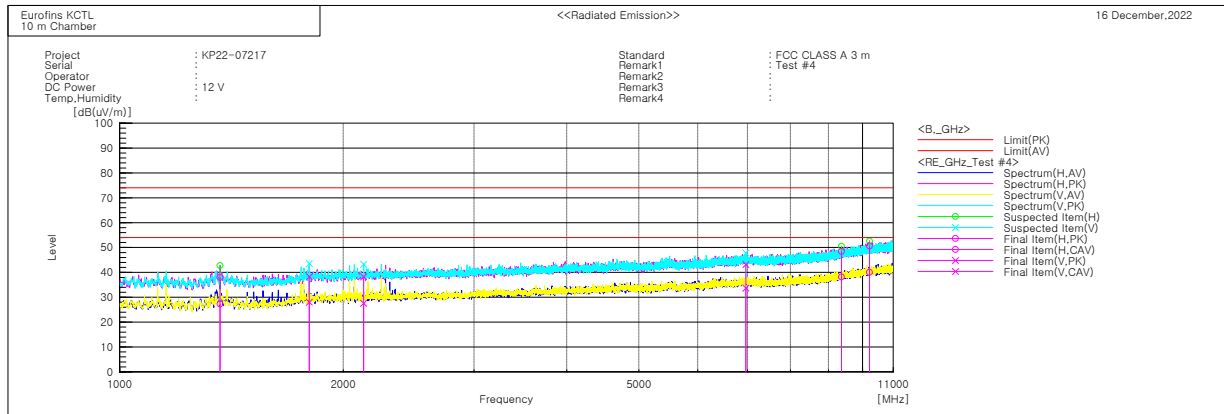


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	39.094	V	37.4	-9.8	27.6	39.0	11.4	182.0	126.0
2	44.914	V	40.8	-13.0	27.8	39.0	11.2	132.0	92.0
3	68.315	V	46.0	-16.7	29.3	39.0	9.7	215.0	328.0
4	167.983	V	37.0	-11.4	25.6	43.5	17.9	154.0	106.0
5	271.045	V	36.4	-6.5	29.9	46.5	16.6	171.0	337.0
6	706.818	V	82.2	5.4	87.6	46.5	-41.1	118.0	151.0
7	737.494	H	27.4	6.7	34.1	46.5	12.4	326.0	41.0
8	954.410	H	21.2	10.5	31.7	46.5	14.8	238.0	46.0

No. 6 is the fundamental frequency. (706.818 MHz_LTE Band 12)

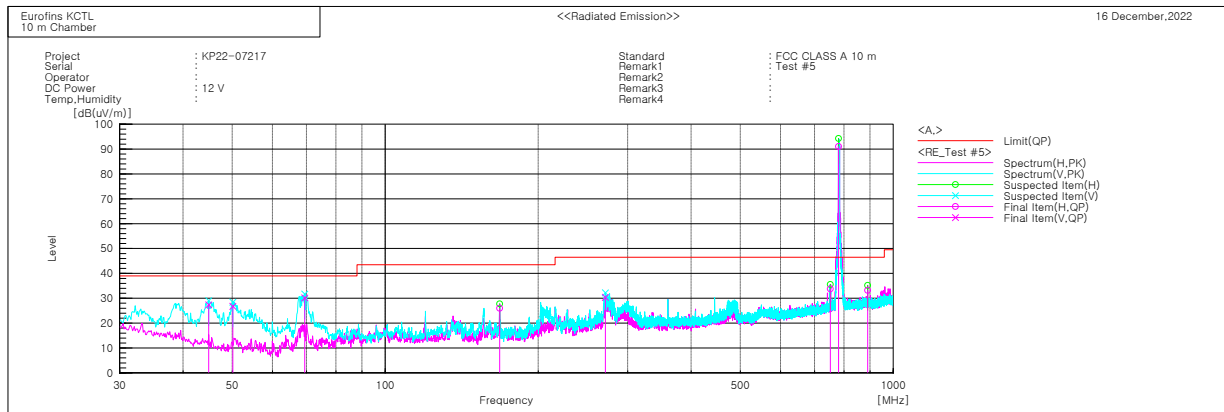
1 GHz ~ 11 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1364.881	H	42.2	31.5	-4.2	38.0	27.3	74.0	54.0	36.0	26.7	325.0	61.0
2	1800.162	V	40.6	30.3	-2.3	38.3	28.0	74.0	54.0	35.7	26.0	146.0	142.0
3	2130.701	V	39.5	28.8	-1.2	38.3	27.6	74.0	54.0	35.7	26.4	157.0	262.0
4	6966.874	V	33.8	24.3	9.4	43.2	33.7	74.0	54.0	30.8	20.3	281.0	127.0
5	9368.218	H	37.6	27.4	10.8	48.4	38.2	74.0	54.0	25.6	15.8	215.0	100.0
6	10219.890	H	37.6	27.0	13.0	50.6	40.0	74.0	54.0	23.4	14.0	221.0	216.0

30 MHz ~ 1 GHz

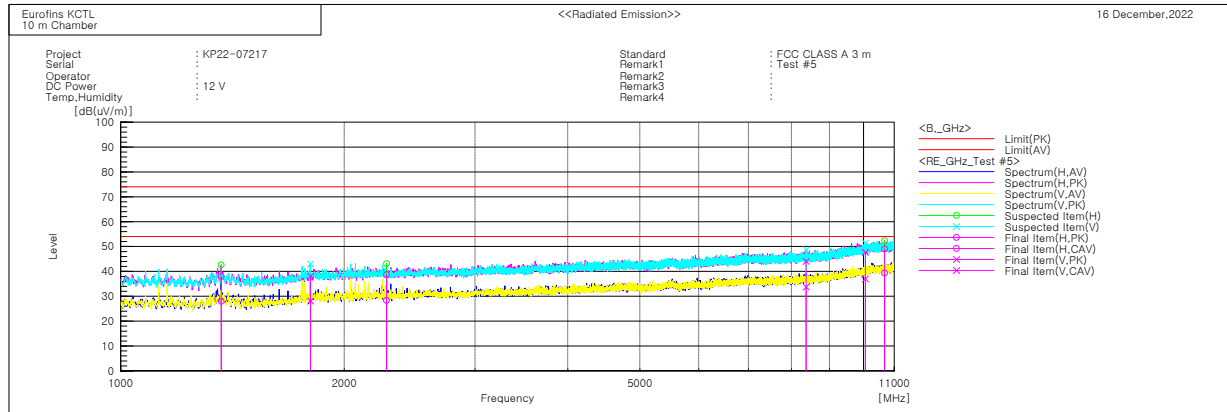


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	44.914	V	40.4	-13.0	27.4	39.0	11.6	194.0	152.0
2	50.128	V	42.2	-15.4	26.8	39.0	12.2	127.0	101.0
3	69.406	V	46.8	-16.6	30.2	39.0	8.8	116.0	33.0
4	167.983	H	37.4	-11.4	26.0	43.5	17.5	334.0	268.0
5	271.166	V	36.9	-6.5	30.4	46.5	16.1	273.0	342.0
6	751.923	H	26.7	7.1	33.8	46.5	12.7	165.0	32.0
7	780.295	H	83.3	7.7	91.0	46.5	-44.5	316.0	152.0
8	890.148	H	23.6	9.6	33.2	46.5	13.3	305.0	119.0

No. 7 is the fundamental frequency. (780.295 MHz_LTE Band 13)

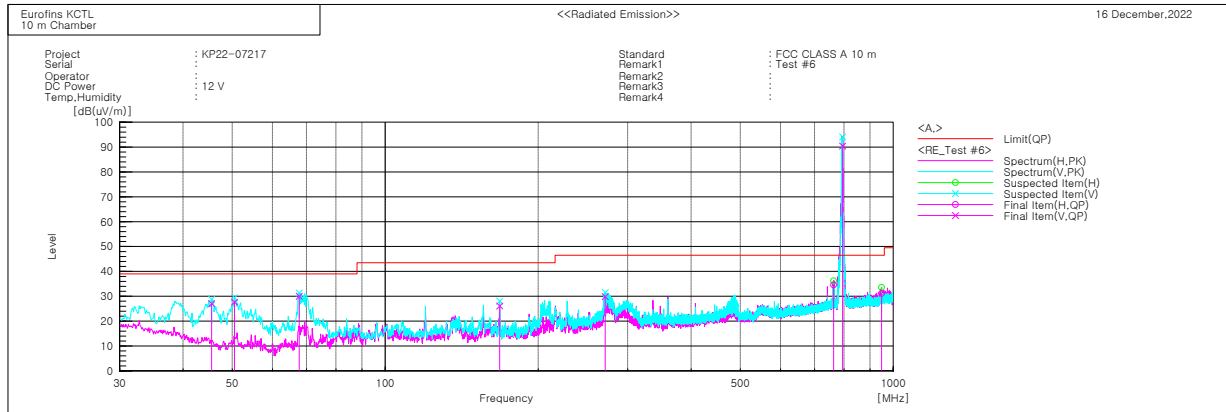
1 GHz ~ 11 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f. [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1365.518	H	42.2	32.2	-4.2	38.0	28.0	74.0	54.0	36.0	26.0	261.0	43.0
2	1800.740	V	40.4	30.4	-2.3	38.1	28.1	74.0	54.0	35.9	25.9	116.0	14.0
3	2280.164	H	39.7	29.3	-1.0	38.7	28.3	74.0	54.0	35.3	25.7	328.0	293.0
4	8371.568	V	34.8	24.5	9.3	44.1	33.8	74.0	54.0	29.9	20.2	226.0	4.0
5	10055.500	V	34.9	24.2	12.6	47.7	37.0	74.0	54.0	26.3	17.0	136.0	215.0
6	10672.630	H	35.3	25.7	13.7	49.0	39.4	74.0	54.0	25.0	14.6	125.0	236.0

30 MHz ~ 1 GHz

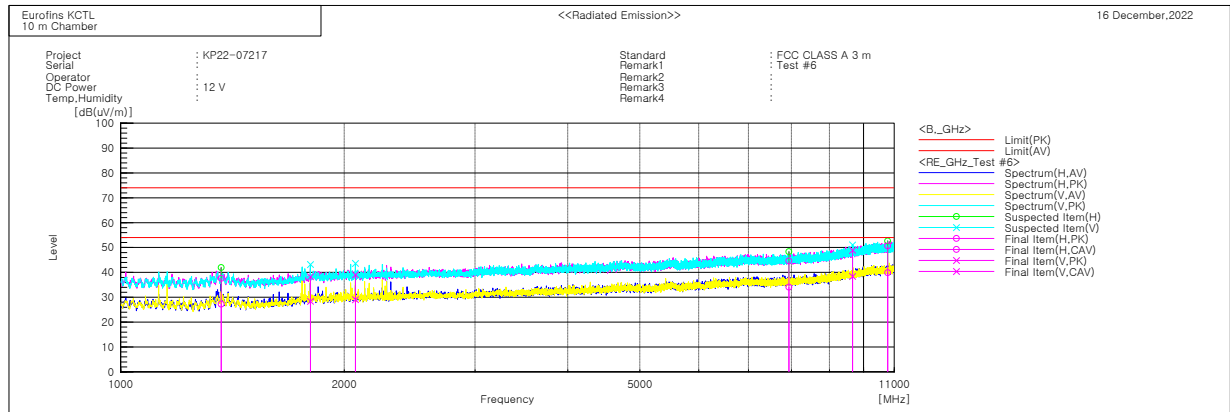


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	45.520	V	40.4	-13.3	27.1	39.0	11.9	115.0	65.0
2	50.491	V	43.3	-15.6	27.7	39.0	11.3	128.0	142.0
3	67.709	V	46.7	-16.7	30.0	39.0	9.0	161.0	358.0
4	167.983	V	37.5	-11.4	26.1	43.5	17.4	149.0	113.0
5	271.045	V	36.4	-6.5	29.9	46.5	16.6	210.0	35.0
6	763.441	H	27.1	7.5	34.6	46.5	11.9	264.0	267.0
7	794.966	V	82.2	8.2	90.4	46.5	-43.9	125.0	48.0
8	948.469	H	20.8	10.3	31.1	46.5	15.4	354.0	50.0

No. 7 is the fundamental frequency. (794.966 MHz_LTE Band 14)

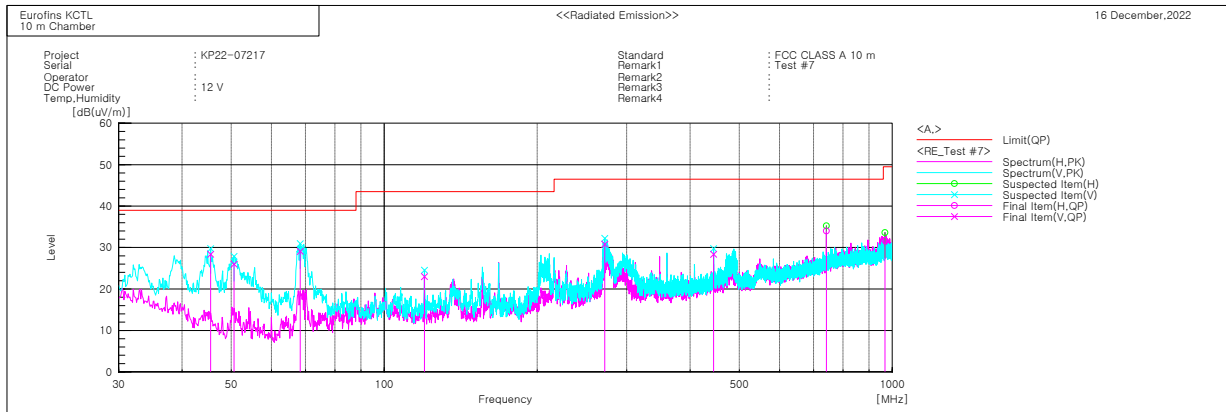
1 GHz ~ 11 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1365.518	H	41.8	31.4	-4.2	37.6	27.2	74.0	54.0	36.4	26.8	116.0	162.0
2	1800.740	V	40.6	30.7	-2.3	38.3	28.4	74.0	54.0	35.7	25.6	153.0	41.0
3	2070.203	V	40.7	30.7	-1.6	39.1	29.1	74.0	54.0	34.9	24.9	122.0	143.0
4	7937.196	H	35.6	25.1	9.0	44.6	34.1	74.0	54.0	29.4	19.9	325.0	86.0
5	9665.332	V	37.2	26.7	11.7	48.9	38.4	74.0	54.0	25.1	15.6	215.0	138.0
6	10778.890	H	36.7	26.0	13.9	50.6	39.9	74.0	54.0	23.4	14.1	217.0	220.0

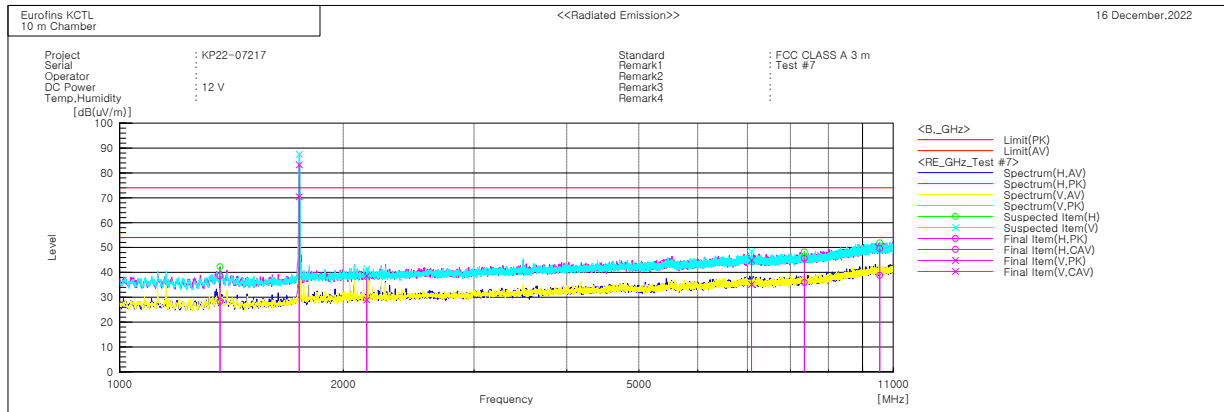
30 MHz ~ 1 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	45.520	V	41.7	-13.3	28.4	39.0	10.6	141.0	60.0
2	50.613	V	41.6	-15.6	26.0	39.0	13.0	128.0	103.0
3	68.315	V	45.8	-16.7	29.1	39.0	9.9	118.0	264.0
4	119.968	V	33.1	-10.1	23.0	43.5	20.5	223.0	164.0
5	271.773	V	37.3	-6.5	30.8	46.5	15.7	127.0	338.0
6	445.039	V	28.8	-0.4	28.4	46.5	18.1	253.0	170.0
7	741.738	H	27.3	6.7	34.0	46.5	12.5	164.0	52.0
8	967.505	H	20.9	10.8	31.7	49.5	17.8	326.0	81.0

1 GHz ~ 11 GHz

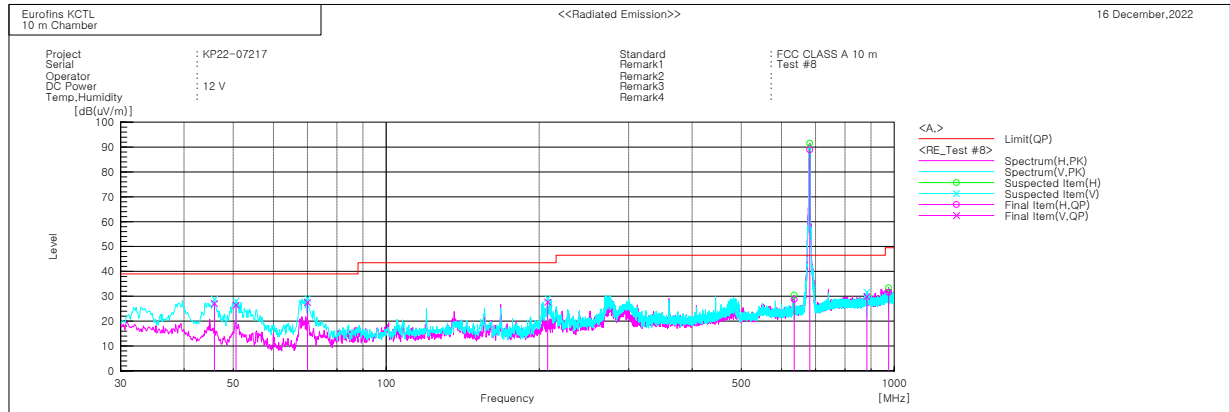


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1364.881	H	42.8	32.5	-4.2	38.6	28.3	74.0	54.0	35.4	25.7	272.0	137.0
2	1745.215	V	86.4	73.5	-3.1	83.3	70.4	74.0	54.0	-9.3	-16.4	116.0	109.0
3	2151.306	V	39.7	30.1	-1.1	38.6	29.0	74.0	54.0	35.4	25.0	136.0	223.0
4	7087.928	V	36.0	26.3	8.9	44.9	35.2	74.0	54.0	29.1	18.8	243.0	260.0
5	8349.986	H	36.3	26.6	9.3	45.6	35.9	74.0	54.0	28.4	18.1	206.0	154.0
6	10550.430	H	36.1	25.3	13.5	49.6	38.8	74.0	54.0	24.4	15.2	149.0	214.0

No. 2 is the fundamental frequency. (1 745.215 MHz_LTE Band 66)

30 MHz ~ 1 GHz

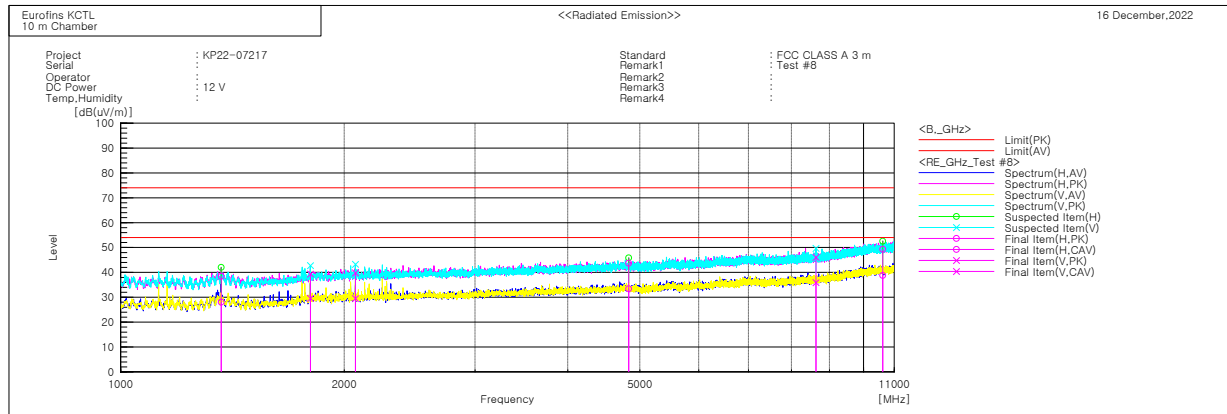


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	45.884	V	40.6	-13.5	27.1	39.0	11.9	127.0	23.0
2	50.613	V	42.0	-15.6	26.4	39.0	12.6	181.0	68.0
3	70.013	V	44.1	-16.6	27.5	39.0	11.5	164.0	19.0
4	207.874	V	38.8	-11.1	27.7	43.5	15.8	244.0	116.0
5	635.280	H	24.6	4.2	28.8	46.5	17.7	327.0	282.0
6	682.083	H	83.7	5.2	88.9	46.5	-42.4	305.0	41.0
7	883.115	V	20.5	9.4	29.9	46.5	16.6	225.0	129.0
8	974.780	H	20.6	11.0	31.6	49.5	17.9	162.0	71.0

No. 6 is the fundamental frequency. (682.083 MHz_LTE Band 71)

1 GHz ~ 11 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	1365.518	H	42.6	32.2	-4.2	38.4	28.0	74.0	54.0	35.6	26.0	172.0	234.0
2	1800.740	V	41.7	31.9	-2.3	39.4	29.6	74.0	54.0	34.6	24.4	125.0	68.0
3	2070.203	V	41.4	31.1	-1.6	39.8	29.5	74.0	54.0	34.2	24.5	177.0	249.0
4	4830.291	H	38.7	28.4	5.0	43.7	33.4	74.0	54.0	30.3	20.6	328.0	330.0
5	8630.831	V	36.6	26.4	9.5	46.1	35.9	74.0	54.0	27.9	18.1	257.0	105.0
6	10615.680	H	35.6	25.1	13.7	49.3	38.8	74.0	54.0	24.7	15.2	214.0	42.0