



TEST REPORT

Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea Tel: 82-70-5008-1021 Fax: 82-505-299-8311 www.kctl.co.kr		Report No.: KR24-SEF0127 Page (1) of (35)	KCTL
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1. Client

- Name : TYMICT Inc.
- Address : 222-12, Sangseo-ri, Useong-myon, Gongju-si, Chungcheongnam-do, Republic of Korea
- Date of Receipt : 2024-08-23

2. Use of Report : -

3. Name of Product / Model : TBOX / TBX4

4. Manufacturer / Country of Origin : TYMICT / Korea

5. Date of Test : 2024-09-09 to 2024-09-10

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-TBX4

9. IC : 29802-TBX4

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

Affirmation	Tested by	Technical Manager
	 Name : Byunghwan Min (Signature)	 Name : Moonseop Cho (Signature)

2024-09-27

Eurofins KCTL Co.,Ltd.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by Eurofins KCTL Co.,Ltd.

REPORT REVISION HISTORY

Date	Revision	Page No
2024-09-27	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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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



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2. Laboratory information

Address

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

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

Telephone Number: 82 70 5008 1021

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)	22.8 °C /	31.9 % R.H. /	-
	22.5 °C	33.4 % 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:	3.6 dB
	150 kHz ~ 30 MHz:	3.1 dB
Shielded Room (CE#2)	9 kHz ~ 150 kHz:	3.6 dB
	150 kHz ~ 30 MHz:	3.1 dB
Radiated Emission measurement (Confidence level about 95 %, $k = 2$)		
10 m Chamber (4F)	30 MHz ~ 1 000 MHz	3 m: 6.2 dB
		10 m: 5.0 dB
	1 GHz ~ 6 GHz	3 m: 5.5 dB
	6 GHz ~ 18 GHz	3 m: 6.1 dB
	18 GHz ~ 30 GHz	3 m: 5.2 dB
	30 GHz ~ 40 GHz	3 m: 4.7 dB
10 m Chamber (2F)	30 MHz ~ 1 000 MHz	3 m: 5.8 dB
		10 m: 4.5 dB
	1 GHz ~ 6 GHz	3 m: 5.3 dB
	6 GHz ~ 18 GHz	3 m: 6.2 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)	

4. Description of EUT

4.1 General information

Processor and Memory	
Microprocessor	STM32H563
eMMC	8GB
Ports & Connectors	
Serial Port	RS232 (Debug Port)
CAN Bus	1
Connector	Amphenol 12 pin
Modem	
Description	LTE Cat 4 module optimized for M2M and IoT applications MIMO technology Multi constellation GNSS receiver
LTE-FDD Band	B2 / B4 / B5 / B12 / B13 / B14 / B66 / B71
GPS	GPS, GLONASS, BeiDou / Compass, Galileo and QZSS
Internal Antennas	
Type	LTE Main / LTE Diversity / GPS & GNSS
Sensors	
Type	6 Axis (3 axis gyroscope, 3 axis accelerometer)

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Power	
Rated Voltage	DC 12V
Operating Voltage*	DC 6 ~ 18V
Power Consumption	< 15W
Environmental	
Water / Dust Resistance	IP68
Operating Temperature Range*	-30 ~ 85°C (EC25-AF Extended Temperature)
Humidity	95% RH @ 65°C
Vibration	4.5G from 5 ~ 200Hz (x: 8, y: 8, z: 8 hour)
Physical	
Dimensions	134mm x 119mm x 36mm (L x W x H)
Weight	220g

4.2 Product description

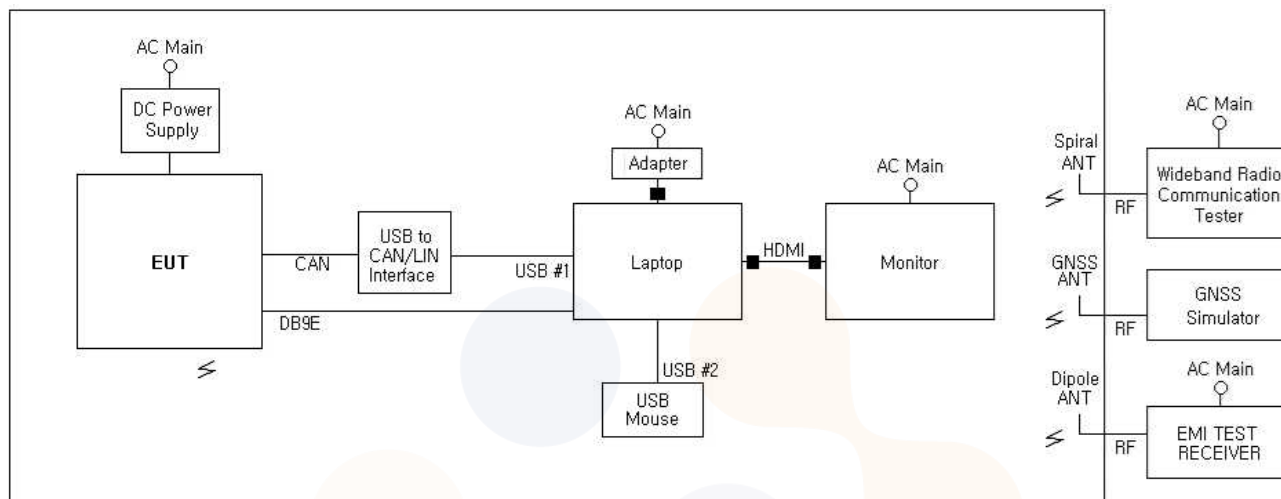
Type of product	TBOX
Model name (Basic)	TBX4
Model name (Variant)	-
Difference	-
Serial no	-
Testing voltage	DC 12 V
Input rating	DC 6 V ~ DC 18 V
Internal clock frequency	200 MHz
Note	-Failed to connect USB Keyboard to Laptop using all 3 USB ports.

4.3 Auxiliary equipments

Type	Model / Part #	S/N	Manufacturer
DC Power Supply	E3632A	KR94907353	Agilent
USB to CAN/LIN Interface	-	-	-
Laptop	NT500R5W	A13-040N2A	SAMSUNG
Adapter	A13-040N2A	CN60BA4400313ADON8 K2R1799	SAMSUNG
Monitor	LT24B350	ZWP0HMCD101771M	SAMSUNG
USB Mouse	CadMouse Compact	3DX-600068	3DCONNEXION
Wideband Radio Communication Tester	CMW500	169838	R&S
GNSS Simulator	RLLS03-3RP	73751	RACELOGIC
EMI TEST RECEIVER	ESCI3	101428	R&S
Spiral ANT	-	-	-
GNSS ANT	-	-	-
Dipole ANT	-	-	-

4.4 Test configuration

[Test #1 ~ Test #9]



	Start		End		Cable	
	Name	I/O port	Name	I/O port	Length (m)	Spec.
1	EUT	Power	DC Power Supply		2.5	Unshield
2		DB9E	Laptop	USB #3	2.0	Unshield
3		CAN	USB to CAN/LIN Interface	-	2.0	Unshield
4	Laptop	Power	Adapter	-	1.5	Unshield (Core)
5		HDMI	Monitor	HDMI	2.0	Shield (Core)
6		USB #1	USB to CAN/LIN Interface	-	1.0	Shield
7		USB #2	USB Mouse	-	1.5	Unshield
8	Wideband Radio Communication Tester	RF	Spiral ANT	-	3.0	Shield
9	GNSS Simulator	RF	GNSS ANT	-	3.0	Shield
10	EMI TEST RECEIVER	RF	Dipole ANT	-	3.0	Shield

4.5 Operating conditions

The EUT was configured as normal intended use.

Test mode	Normal operating
Test #1	After changing to CAN communication mode by executing 'MobaXterm' program on Laptop, 'PCAN-VIEW' program is executed to check CAN communication status and proceed with the test.
Test #2[LTE Band 2] Test #3[LTE Band 4] Test #4[LTE Band 5] Test #5[LTE Band 12] Test #6[LTE Band 13] Test #7[LTE Band 14] Test #8[LTE Band 66] Test #9[LTE Band 71]	Run the 'MobaXterm' program on Laptop to change to LTE communication mode, check the signal of GNSS Simulator, link 'LTE' through Wideband Radio Communication Tester equipment, and check the data processing amount of 95 % or more.

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)	N/A ^(Note 1)
☒	Radiated Emission	ANSI C63.4:2014 FCC Part 15 Subpart B, Class A ICES-003 Issue 7 (ANSI C63.4a:2017)	Refer to Section 6.1.6

Note1) Not applicable because the product is supplied DC power.

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)		
Site validation date		Below 1 GHz	2024-02-20 (2F), 2024-03-15 (4F)	
		Above 1 GHz	2023-10-18 (2F), 2023-11-20 (4F)	
Test distance		10 m, 3 m		
Date		2024-09-09, 2024-09-10		
Below 1 GHz	Temperature (°C)	22.8 °C	Humidity (% R.H.)	31.9 % R.H.
Above 1 GHz		22.5 °C		33.4 % R.H.

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

Date: 2024-09-09, 2024-09-10

Equipment	Model no.	Serial no.	Makers	Next Cal. Date	Used
EMI TEST RECEIVER	ESR7	101078	R&S	2025.08.12	☒
Bilog Antenna	CBL 6112D	37876	TESEQ	2025.05.25	☒
AMPLIFIER	310N	293004	SONOMA	2025.08.12	☒
ATTENUATOR	8491B	MY39270292	AGILENT	-	☒
Antenna Mast	MA4640-XP-ET	-	Innco Systems	-	☒
Turn Table	DT3000-2t	-	Innco Systems	-	☒
EMI TEST RECEIVER	ESW44	103121	R&S	2025.05.13	☒
DOUBLE RIDGED HORN ANTENNA	3117	00161083	ETS-LINDGREN	2025.02.05	☒
AMPLIFIER	BBV9718C	00138	SCHWARZBECK	2024.10.13	☒

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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

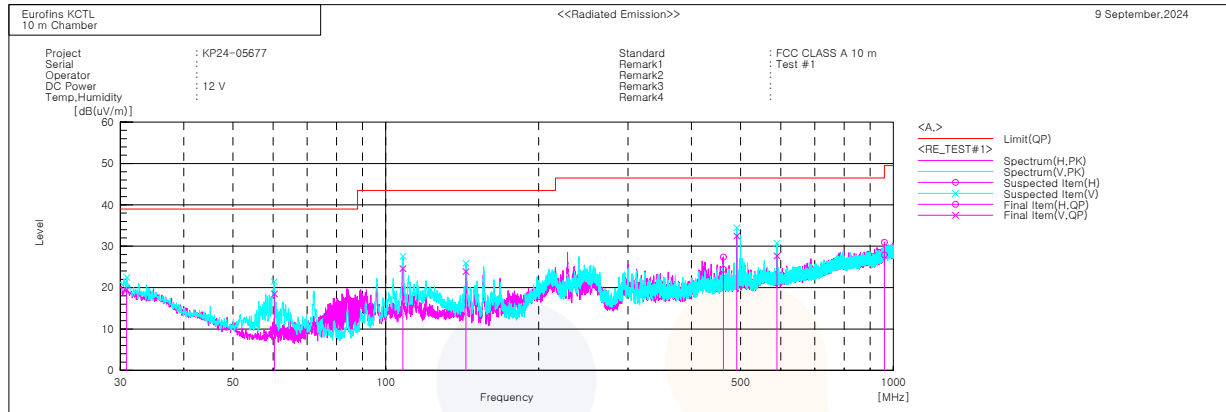
The result is $30 + 12 + 5 + 6 - 35 = 18 \text{ dB } (\mu\text{V/m})$

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

AV = CAV : Abbreviation of CISPR Average

6.1.5 Radiated emission measurement result

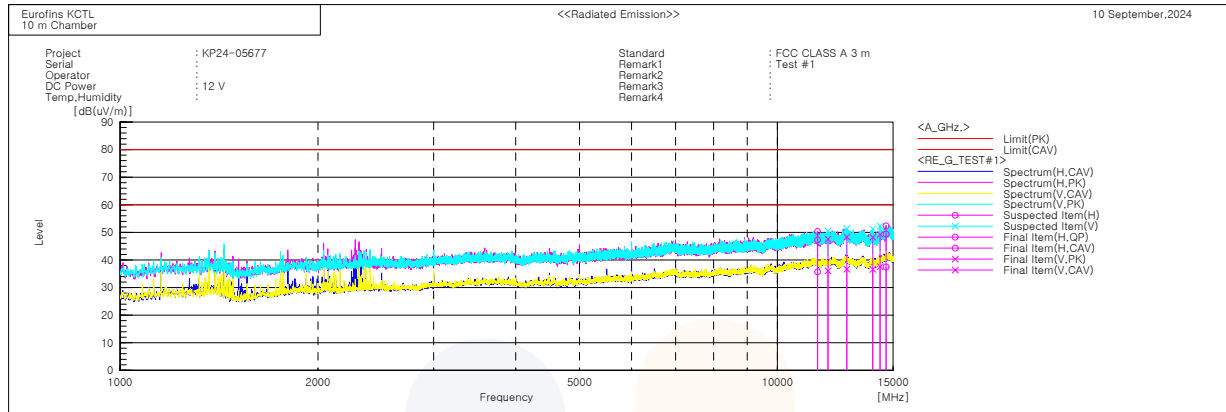
30 MHz ~ 1 GHz



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	30.849	V	22.3	-2.8	19.5	39.0	19.5	385.0	210.0
2	60.323	V	32.7	-14.2	18.5	39.0	20.5	161.0	61.0
3	108.083	V	33.4	-8.8	24.6	43.5	18.9	180.0	172.0
4	143.873	V	32.2	-8.3	23.9	43.5	19.6	217.0	348.0
5	462.437	H	23.8	0.6	24.4	46.5	22.1	259.0	304.0
6	491.420	V	31.4	1.1	32.5	46.5	14.0	140.0	57.0
7	589.788	V	24.7	3.0	27.7	46.5	18.8	246.0	22.0
8	960.194	H	16.8	11.1	27.9	49.5	21.6	162.0	208.0

1 GHz ~ 15 GHz

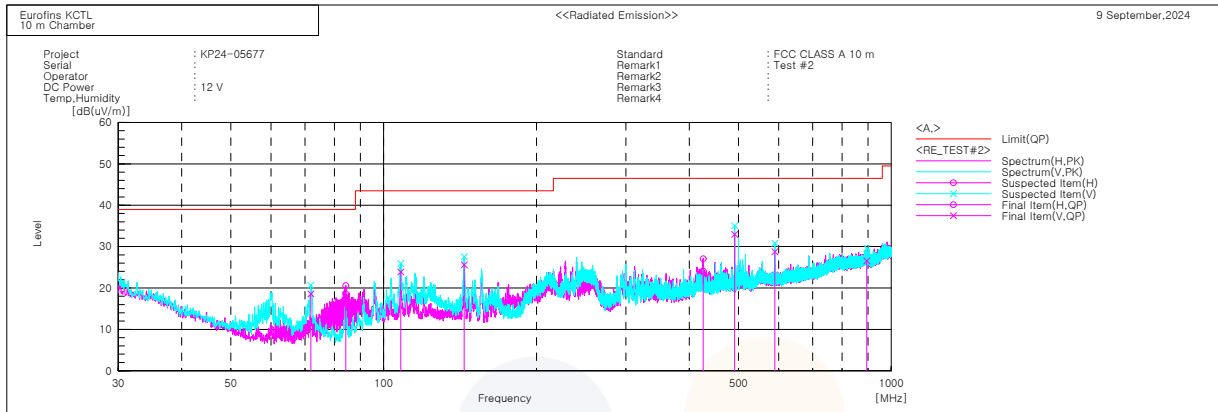


Final Result

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	11515.000	H	32.4	20.8	14.9	47.3	35.7	80.0	60.0	32.7	24.3	100.0	192.0
2	11945.190	V	32.0	20.5	15.6	47.6	36.1	80.0	60.0	32.4	23.9	367.0	107.0
3	12754.350	V	31.4	19.7	17.0	48.4	36.7	80.0	60.0	31.6	23.3	194.0	289.0
4	13971.620	V	32.6	20.9	15.7	48.3	36.6	80.0	60.0	31.7	23.4	195.0	356.0
5	14336.330	V	32.8	21.1	16.5	49.3	37.6	80.0	60.0	30.7	22.4	276.0	168.0
6	14640.690	H	32.7	20.8	16.7	49.4	37.5	80.0	60.0	30.6	22.5	177.0	132.0

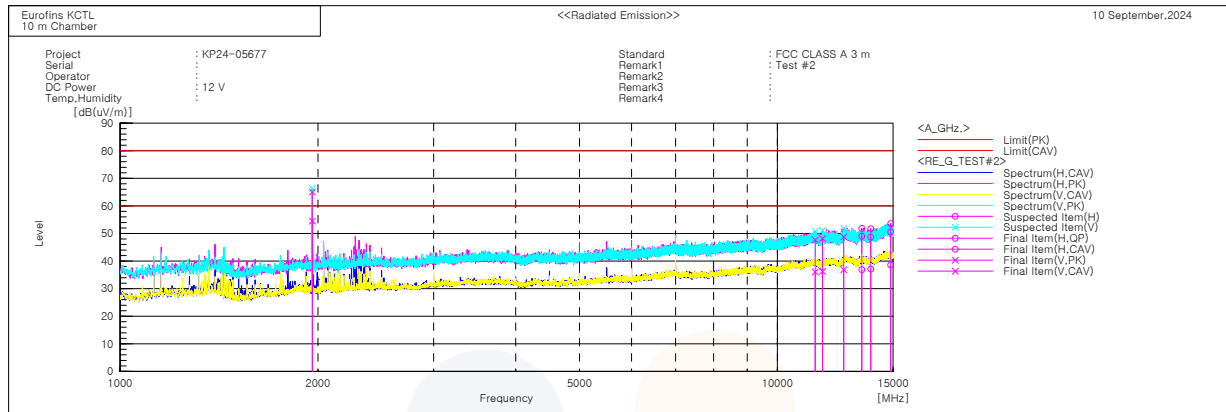
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Page (20) of (35)**30 MHz ~ 1 GHz****Final Result**

No.	Frequency [MHz]	(P)	Reading [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	71.889	V	32.0	-13.4	18.6	39.0	20.4	229.0	111.0
2	84.237	H	31.8	-13.2	18.6	39.0	20.4	393.0	130.0
3	108.085	V	32.7	-8.8	23.9	43.5	19.6	279.0	154.0
4	144.064	V	33.9	-8.3	25.6	43.5	17.9	160.0	358.0
5	426.282	H	24.4	-0.3	24.1	46.5	22.4	240.0	294.0
6	491.420	V	31.9	1.1	33.0	46.5	13.5	241.0	348.0
7	589.733	V	25.8	3.0	28.8	46.5	17.7	191.0	126.0
8	894.712	V	17.2	9.4	26.6	46.5	19.9	374.0	11.0

1 GHz ~ 15 GHz



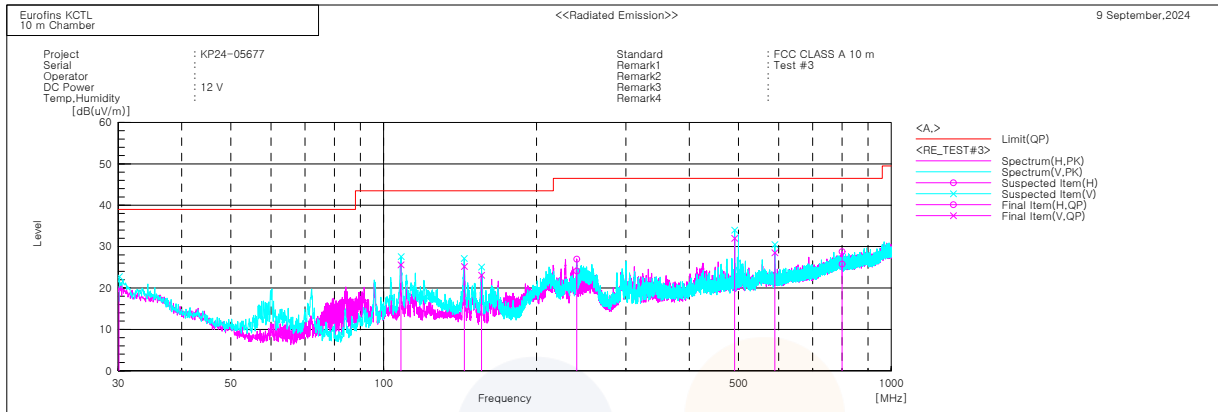
Final Result

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	1960.547	V	66.4	55.8	-1.3	65.1	54.5	80.0	60.0	14.9	5.5	149.0	327.0
2	11420.650	V	32.8	21.2	14.9	47.7	36.1	80.0	60.0	32.3	23.9	224.0	206.0
3	11713.980	V	32.5	20.6	15.7	48.2	36.3	80.0	60.0	31.8	23.7	292.0	327.0
4	12616.600	V	32.8	20.9	16.0	48.8	36.9	80.0	60.0	31.2	23.1	144.0	251.0
5	13441.230	H	32.7	20.6	16.3	49.0	36.9	80.0	60.0	31.0	23.1	119.0	289.0
6	13868.730	H	33.0	21.4	15.7	48.7	37.1	80.0	60.0	31.3	22.9	365.0	355.0
7	14879.460	H	33.7	21.7	16.9	50.6	38.6	80.0	60.0	29.4	21.4	128.0	319.0

No. 1 is the fundamental frequency. (1 960.547 MHz_LTE Band 1(Rx))

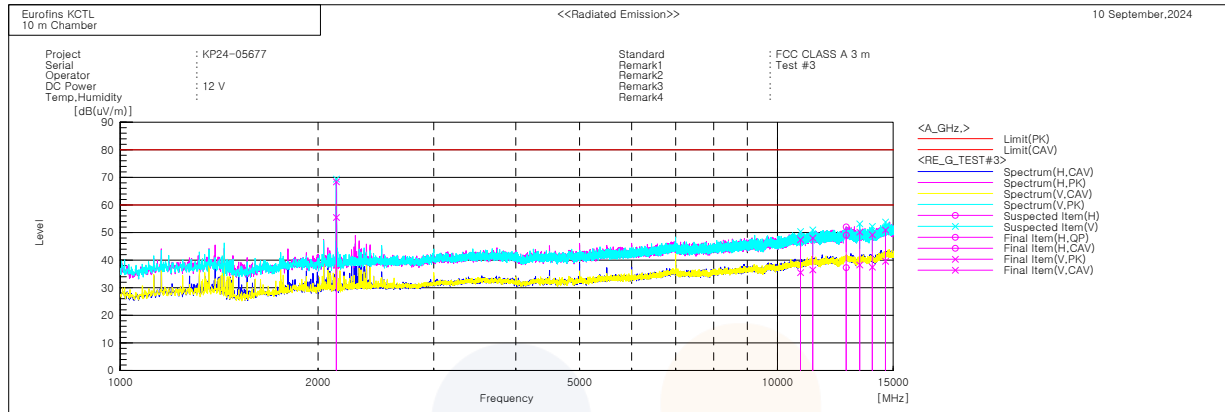
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Page (22) of (35)**30 MHz ~ 1 GHz****Final Result**

No.	Frequency [MHz]	(P)	Reading [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	30.105	V	22.6	-2.8	19.8	39.0	19.2	387.0	183.0
2	108.202	V	34.4	-8.8	25.6	43.5	17.9	166.0	173.0
3	144.161	V	33.5	-8.3	25.2	43.5	18.3	147.0	359.0
4	155.947	V	32.3	-9.2	23.1	43.5	20.4	165.0	202.0
5	240.071	H	31.3	-7.2	24.1	46.5	22.4	379.0	337.0
6	491.431	V	30.9	1.1	32.0	46.5	14.5	252.0	342.0
7	589.723	V	25.5	3.0	28.5	46.5	18.0	168.0	152.0
8	800.058	H	18.0	7.8	25.8	46.5	20.7	354.0	129.0

1 GHz ~ 15 GHz

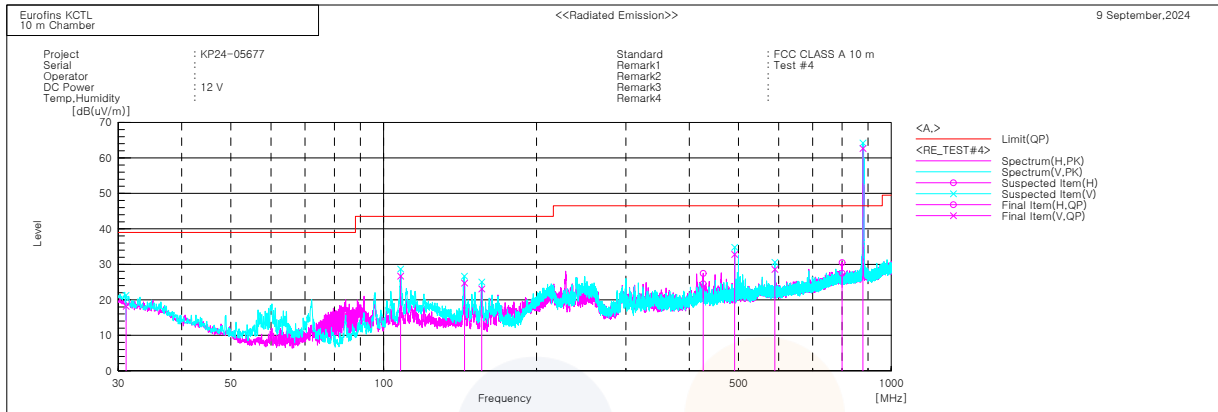


Final Result

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	2132.227	V	69.3	56.4	-0.9	68.4	55.5	80.0	60.0	11.6	4.5	187.0	36.0
2	10842.660	V	33.7	21.6	13.7	47.4	35.5	80.0	60.0	32.6	24.5	100.0	2.0
3	11318.630	V	33.1	21.6	14.9	48.0	36.5	80.0	60.0	32.0	23.5	400.0	141.0
4	12725.470	H	32.3	20.5	16.8	49.1	37.3	80.0	60.0	30.9	22.7	195.0	160.0
5	13338.330	V	34.2	22.3	16.0	50.2	38.3	80.0	60.0	29.8	21.7	176.0	172.0
6	13943.690	V	33.4	21.7	15.8	49.2	37.5	80.0	60.0	30.8	22.5	173.0	97.0
7	14601.570	V	34.2	22.9	16.7	50.9	39.6	80.0	60.0	29.1	20.4	276.0	66.0

No. 1 is the fundamental frequency. (2 132.227 MHz_LTE Band 4(Rx))

30 MHz ~ 1 GHz

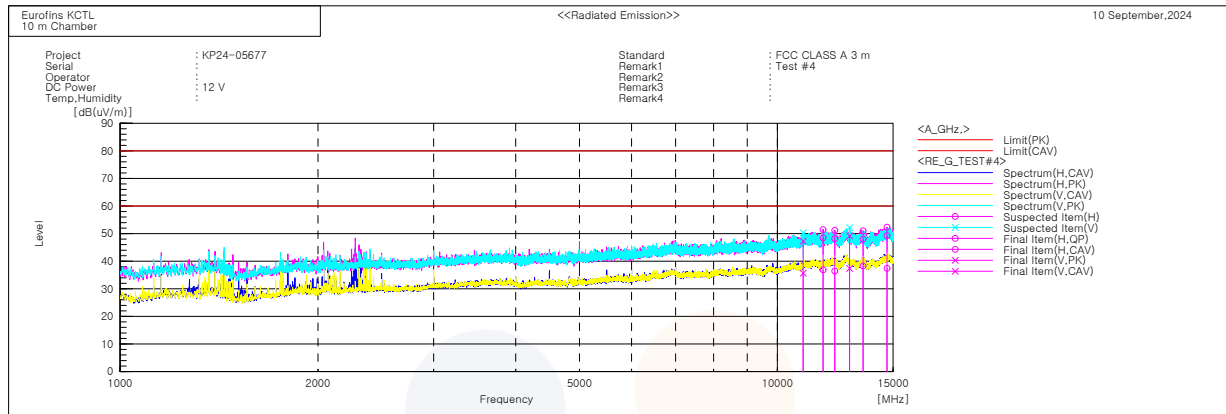


Final Result

No.	Frequency [MHz]	(P)	Reading [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	31.085	V	21.2	-3.0	18.2	39.0	20.8	383.0	232.0
2	107.970	V	35.5	-8.8	26.7	43.5	16.8	192.0	173.0
3	144.290	V	33.0	-8.3	24.7	43.5	18.8	156.0	358.0
4	156.064	V	32.3	-9.2	23.1	43.5	20.4	163.0	357.0
5	426.269	H	24.8	-0.3	24.5	46.5	22.0	227.0	285.0
6	491.419	V	31.7	1.1	32.8	46.5	13.7	239.0	343.0
7	589.726	V	25.6	3.0	28.6	46.5	17.9	168.0	138.0
8	800.072	H	19.7	7.8	27.5	46.5	19.0	378.0	55.0
9	879.707	V	53.7	9.0	62.7	46.5	-16.2	265.0	343.0

No. 9 is the fundamental frequency. (879.707 MHz_LTE Band 5(Rx))

1 GHz ~ 15 GHz

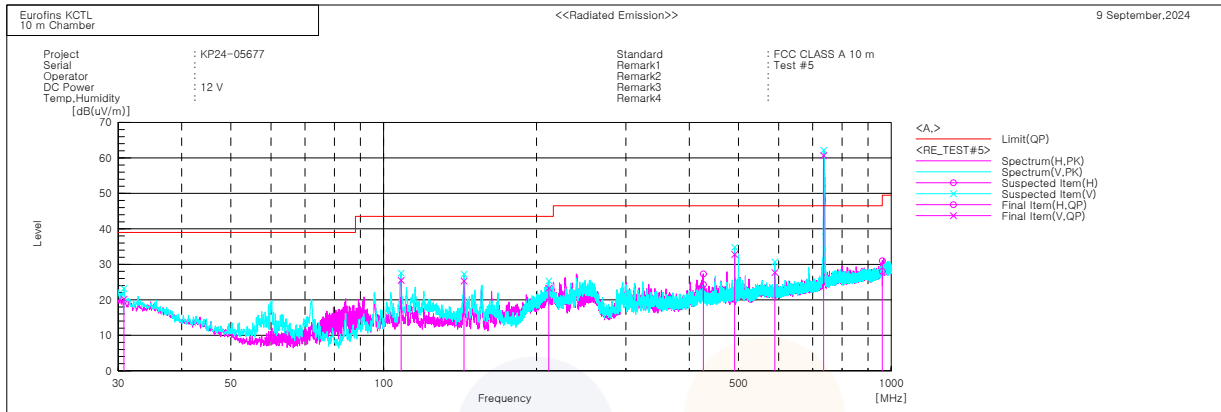


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(μV)]	Reading CAV [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Result CAV [dB(μV/m)]	Limit PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	10946.400	V	33.1	21.5	14.2	47.3	35.7	80.0	60.0	32.7	24.3	236.0	340.0
2	11739.480	H	33.0	21.4	15.5	48.5	36.9	80.0	60.0	31.5	23.1	200.0	223.0
3	12225.630	H	32.1	20.3	16.1	48.2	36.4	80.0	60.0	31.8	23.6	100.0	238.0
4	12877.690	V	32.9	21.1	16.3	49.2	37.4	80.0	60.0	30.8	22.6	375.0	141.0
5	13501.540	H	31.5	21.8	16.5	48.0	38.3	80.0	60.0	32.0	21.7	134.0	195.0
6	14688.240	H	32.4	20.5	16.9	49.3	37.4	80.0	60.0	30.7	22.6	200.0	252.0

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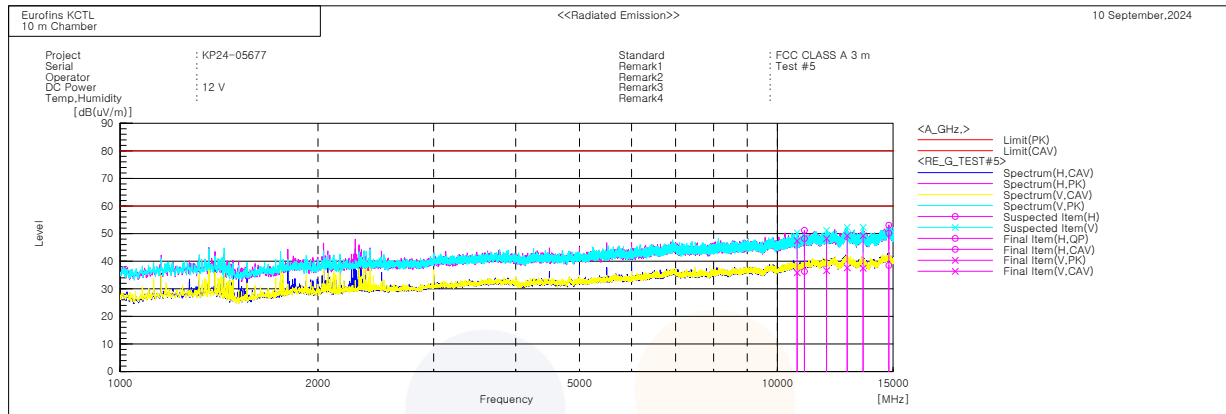
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Page (26) of (35)**30 MHz ~ 1 GHz****Final Result**

No.	Frequency [MHz]	(P)	Reading [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	30.776	V	23.0	-2.8	20.2	39.0	18.8	332.0	88.0
2	108.268	V	34.3	-8.8	25.5	43.5	18.0	122.0	206.0
3	143.957	V	33.6	-8.3	25.3	43.5	18.2	171.0	355.0
4	211.564	V	33.2	-9.9	23.3	43.5	20.2	166.0	307.0
5	426.344	H	24.6	-0.3	24.3	46.5	22.2	282.0	294.0
6	491.497	V	31.7	1.1	32.8	46.5	13.7	117.0	48.0
7	589.725	V	24.7	3.0	27.7	46.5	18.8	113.0	172.0
8	735.685	V	54.5	6.2	60.7	46.5	-14.2	163.0	105.0
9	960.071	H	16.9	11.1	28.0	49.5	21.5	175.0	126.0

No. 8 is the fundamental frequency. (735.685 MHz_LTE Band 12(Rx))

1 GHz ~ 15 GHz

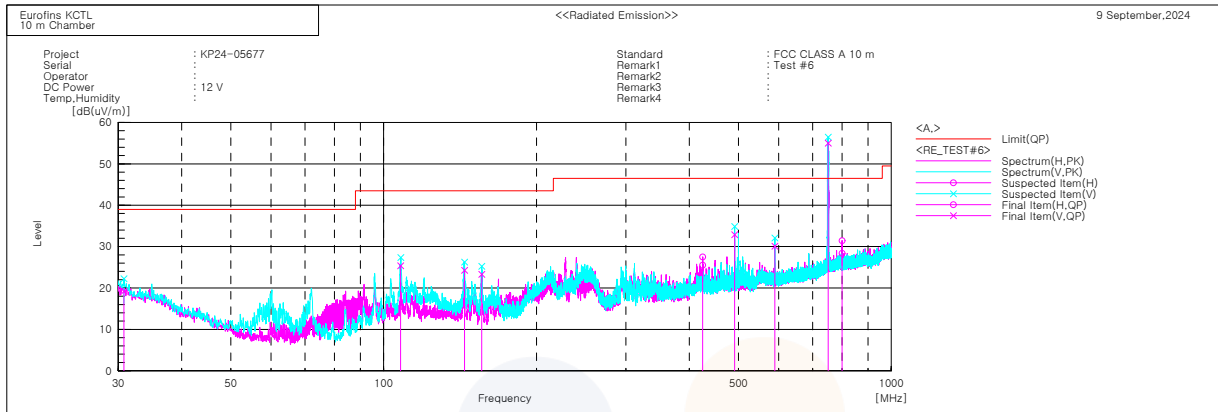


Final Result

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	10721.050	V	33.5	21.9	13.9	47.4	35.8	80.0	60.0	32.6	24.2	157.0	32.0
2	10993.190	H	33.8	21.9	14.4	48.2	36.3	80.0	60.0	31.8	23.7	167.0	293.0
3	11884.770	V	32.5	20.9	15.7	48.2	36.6	80.0	60.0	31.8	23.4	121.0	153.0
4	12773.990	V	32.5	20.8	16.8	49.3	37.6	80.0	60.0	30.7	22.4	112.0	359.0
5	13505.800	V	32.8	21.0	16.5	49.3	37.5	80.0	60.0	30.7	22.5	348.0	357.0
6	14783.500	H	33.3	21.7	16.8	50.1	38.5	80.0	60.0	29.9	21.5	117.0	159.0

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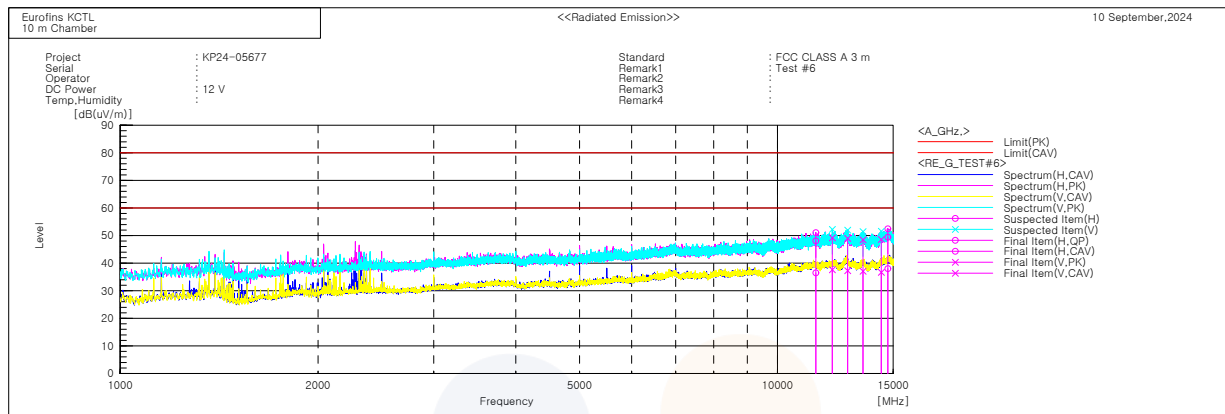
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Page (28) of (35)**30 MHz ~ 1 GHz****Final Result**

No.	Frequency [MHz]	(P)	Reading [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	30.776	V	22.0	-2.8	19.2	39.0	19.8	332.0	39.0
2	108.009	V	34.2	-8.8	25.4	43.5	18.1	100.0	121.0
3	144.385	V	32.6	-8.3	24.3	43.5	19.2	221.0	348.0
4	156.019	V	32.5	-9.2	23.3	43.5	20.2	118.0	186.0
5	425.237	H	25.8	-0.3	25.5	46.5	21.0	299.0	285.0
6	491.453	V	31.8	1.1	32.9	46.5	13.6	273.0	342.0
7	589.736	V	27.1	3.0	30.1	46.5	16.4	191.0	347.0
8	751.209	V	48.2	6.8	55.0	46.5	-8.5	163.0	215.0
9	800.058	H	20.6	7.8	28.4	46.5	18.1	354.0	312.0

No. 8 is the fundamental frequency. (751.209 MHz_LTE Band 13(Rx))

1 GHz ~ 15 GHz



Final Result

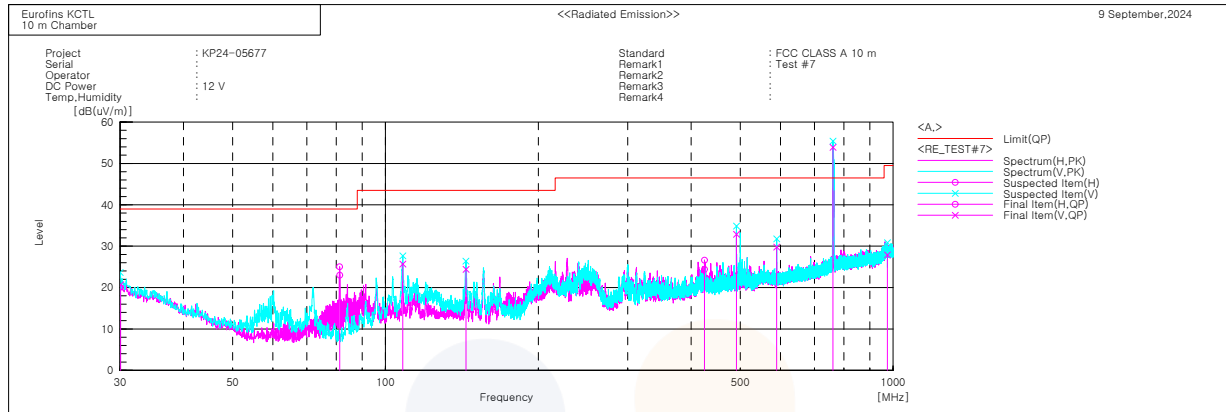
No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	11439.330	H	33.2	21.6	14.9	48.1	36.5	80.0	60.0	31.9	23.5	165.0	296.0
2	12117.750	V	33.4	21.8	15.8	49.2	37.6	80.0	60.0	30.8	22.4	300.0	82.0
3	12785.880	V	32.3	20.6	16.7	49.0	37.3	80.0	60.0	31.0	22.7	111.0	207.0
4	13497.350	V	32.0	20.6	16.5	48.5	37.1	80.0	60.0	31.5	22.9	198.0	127.0
5	14392.480	V	32.2	20.3	16.4	48.6	36.7	80.0	60.0	31.4	23.3	100.0	49.0
6	14723.090	H	32.6	21.2	16.8	49.4	38.0	80.0	60.0	30.6	22.0	280.0	239.0

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30 MHz ~ 1 GHz

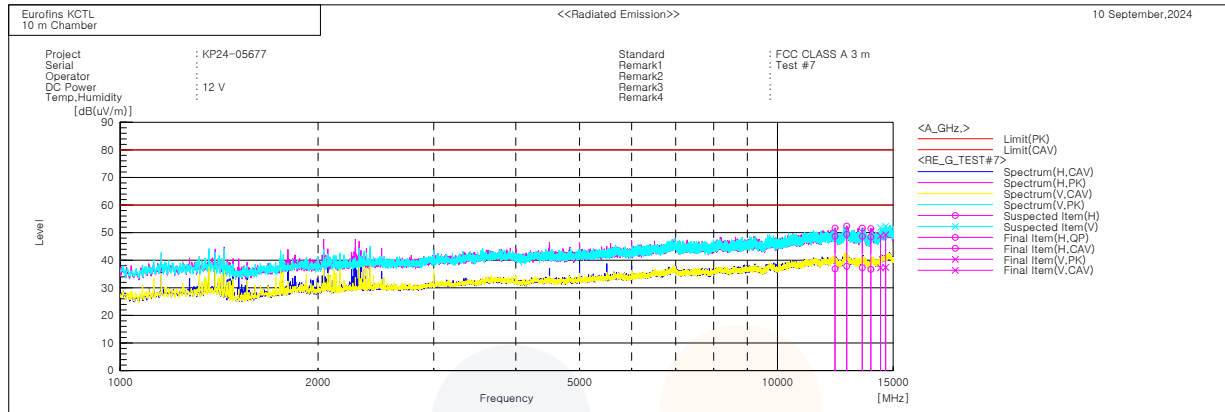


Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin [dB]	Height [cm]	Angle [deg]
1	30.072	V	23.5	-2.8	20.7	39.0	18.3	324.0	58.0
2	81.252	H	36.8	-13.8	23.0	39.0	16.0	210.0	280.0
3	108.140	V	34.5	-8.8	25.7	43.5	17.8	124.0	103.0
4	144.054	V	32.7	-8.3	24.4	43.5	19.1	150.0	17.0
5	425.177	H	24.7	-0.3	24.4	46.5	22.1	257.0	294.0
6	491.420	V	31.8	1.1	32.9	46.5	13.6	240.0	350.0
7	589.767	V	26.8	3.0	29.8	46.5	16.7	179.0	232.0
8	761.169	V	46.7	7.2	53.9	46.5	-7.4	145.0	195.0
9	974.853	V	16.4	11.5	27.9	49.5	21.6	199.0	358.0

No. 8 is the fundamental frequency. (761.169 MHz_LTE Band 14(Rx))

1 GHz ~ 15 GHz



Final Result

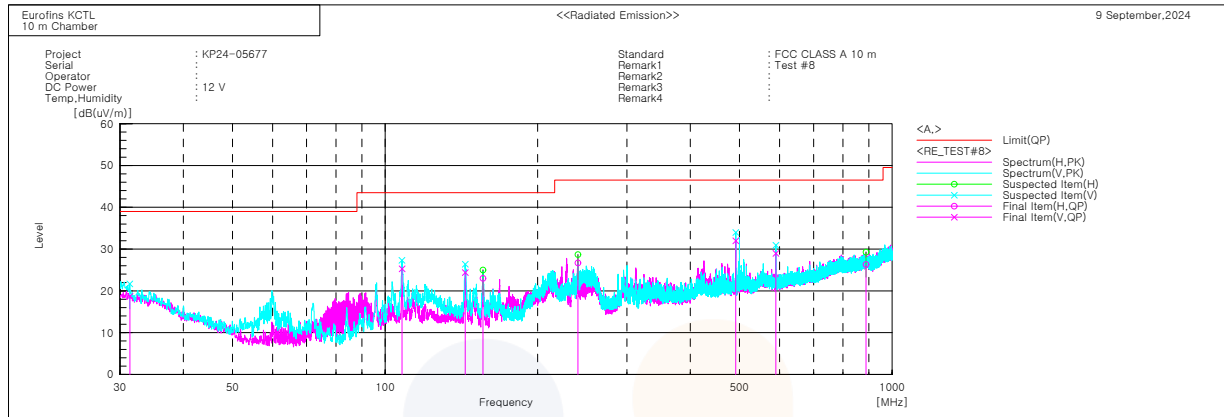
No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]
1	12234.200	H	32.6	20.8	16.1	48.7	36.9	80.0	60.0	31.3	23.1	176.0	2.0
2	12745.050	H	32.4	20.8	17.0	49.4	37.8	80.0	60.0	30.6	22.2	257.0	64.0
3	13460.730	H	32.3	20.9	16.4	48.7	37.3	80.0	60.0	31.3	22.7	392.0	284.0
4	13870.450	H	32.8	21.0	15.7	48.5	36.7	80.0	60.0	31.5	23.3	173.0	123.0
5	14354.170	V	32.4	20.8	16.5	48.9	37.3	80.0	60.0	31.1	22.7	241.0	333.0
6	14610.880	V	32.6	20.7	16.7	49.3	37.4	80.0	60.0	30.7	22.6	113.0	359.0

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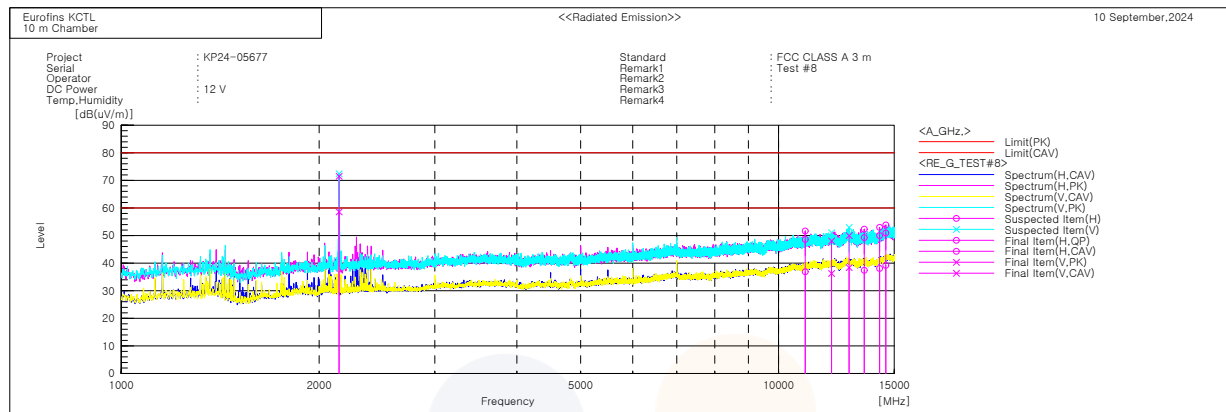
30 MHz ~ 1 GHz



Final Result

No.	Frequency [MHz]	(P)	Reading OP [dB(uV)]	c.f [dB(1/m)]	Result OP [dB(uV/m)]	Limit OP [dB(uV/m)]	Margin [dB]	Height [cm]	Angle [deg]
1	31.383	V	21.9	-3.2	18.7	39.0	20.3	323.0	240.0
2	107.982	V	34.1	-8.8	25.3	43.5	18.2	100.0	139.0
3	143.862	V	32.7	-8.3	24.4	43.5	19.1	400.0	11.0
4	155.968	H	32.2	-9.2	23.0	43.5	20.5	386.0	159.0
5	240.051	H	34.0	-7.3	26.7	46.5	19.8	359.0	337.0
6	491.453	V	30.9	1.1	32.0	46.5	14.5	173.0	59.0
7	589.755	V	26.0	3.0	29.0	46.5	17.5	213.0	61.0
8	888.040	H	17.0	9.3	26.3	46.5	20.2	340.0	107.0

1 GHz ~ 15 GHz

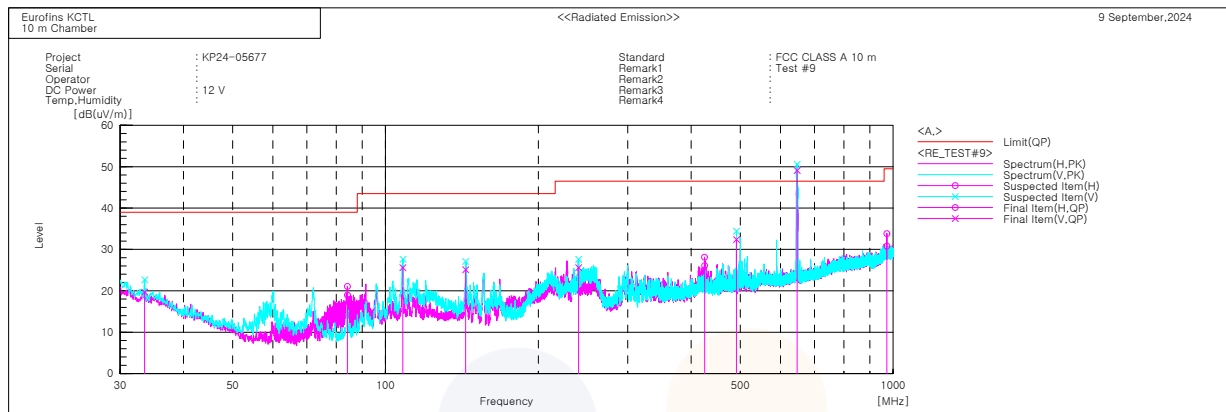


Final Result

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	2145.096	V	72.4	59.5	-0.9	71.5	58.6	80.0	60.0	8.5	1.4	174.0	251.0
2	10982.930	H	34.3	22.6	14.3	48.6	36.9	80.0	60.0	31.4	23.1	254.0	230.0
3	12044.620	V	32.6	20.8	15.5	48.1	36.3	80.0	60.0	31.9	23.7	195.0	91.0
4	12802.880	V	33.5	21.9	16.5	50.0	38.4	80.0	60.0	30.0	21.6	162.0	106.0
5	13502.480	H	32.8	20.9	16.5	49.3	37.4	80.0	60.0	30.7	22.6	400.0	169.0
6	14247.910	H	33.7	21.8	16.3	50.0	38.1	80.0	60.0	30.0	21.9	130.0	201.0
7	14560.750	H	34.3	22.6	16.6	50.9	39.2	80.0	60.0	29.1	20.8	300.0	80.0

No. 1 is the fundamental frequency. (2 145.096 MHz_LTE Band 66(Rx))

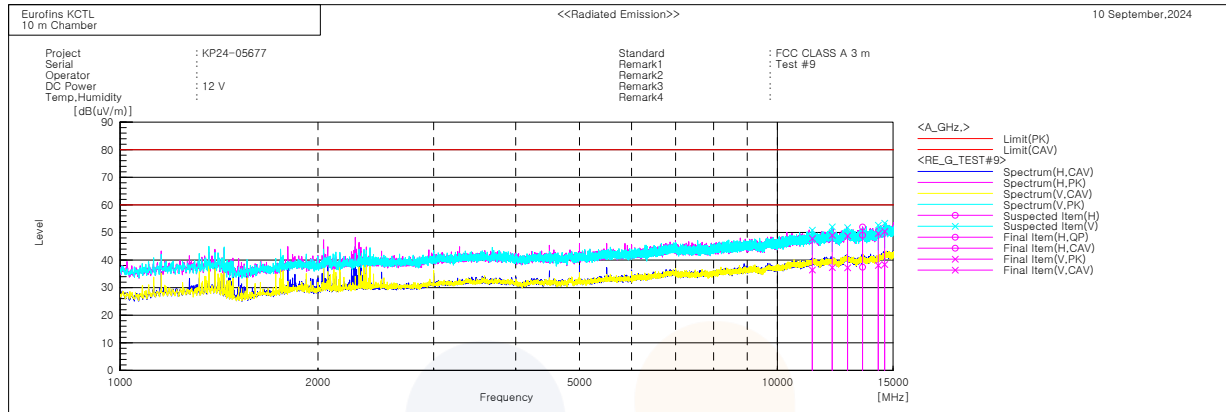
30 MHz ~ 1 GHz



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	33.527	V	24.1	-4.4	19.7	39.0	19.3	320.0	151.0
2	84.120	H	32.3	-13.3	19.0	39.0	20.0	400.0	134.0
3	108.201	V	34.4	-8.8	25.6	43.5	17.9	265.0	194.0
4	143.895	V	33.4	-8.3	25.1	43.5	18.4	139.0	354.0
5	240.039	V	32.9	-7.3	25.6	46.5	20.9	137.0	164.0
6	425.282	H	26.4	-0.3	26.1	46.5	20.4	244.0	298.0
7	491.464	V	31.3	1.1	32.4	46.5	14.1	185.0	351.0
8	646.902	V	44.8	4.3	49.1	46.5	-2.6	122.0	356.0
9	972.262	H	19.4	11.4	30.8	49.5	18.7	222.0	187.0

No. 8 is the fundamental frequency. (646.902 MHz_LTE Band 71(Rx))

1 GHz ~ 15 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	11302.560	V	33.0	21.6	14.8	47.8	36.4	80.0	60.0	32.2	23.6	269.0	328.0
2	12116.850	V	33.2	21.5	15.8	49.0	37.3	80.0	60.0	31.0	22.7	184.0	328.0
3	12790.050	V	32.2	20.6	16.6	48.8	37.2	80.0	60.0	31.2	22.8	157.0	311.0
4	13460.360	H	32.5	20.9	16.5	49.0	37.4	80.0	60.0	31.0	22.6	300.0	124.0
5	14238.530	V	33.4	21.8	16.3	49.7	38.1	80.0	60.0	30.3	21.9	125.0	235.0
6	14564.970	V	33.8	21.8	16.6	50.4	38.4	80.0	60.0	29.6	21.6	281.0	341.0