verify No.116027901189

위변조방지/진위확인
cert.qnqkorea.com:8080

TEST REPORT

Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-70-4904-0113 FAX: 82-505-299-8311 www.kctl.co.kr	Report No.: KR26-SRF0004 Page(1) of (21)	eurofins | KCTL

1. Client

- Name : KORNIT DIGITAL
- Address : 12 Ha'Amal St., Afek Park, Rosh-Ha'Ayin 4809246, Israel
- Date of Receipt : 2025-09-17

2. Use of Report : Certification

3. Name of Product / Model : RFID reader & Antenna - 06-EBRD-00002 / ST25R3918-AQET

4. Manufacturer / Country of Origin : KORNIT DIGITAL / Israel

5. FCC ID : 2AGY2RFIDREADER

6. Date of Test : 2025-12-05 to 2025-12-10

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

8. Test method used : FCC Part 15 Subpart C, 15.225

9. Test Result : Refer to the test result in the test report

	Tested by	Technical Manager
Affirmation	Name : Youngju Jo (Signature)	Name : Euijung Kim (Signature)

2026-02-06

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
2026-02-06	Originally issued	-

This report shall not be reproduced except in full, without the written approval of Eurofins KCTL Co.,Ltd. This document may be altered or revised by Eurofins KCTL Co.,Ltd. personnel only, and shall be noted in the revision section of the document. Any alteration of this document not carried out by Eurofins KCTL Co.,Ltd. will constitute fraud and shall nullify the document. This test report is a general report that does not use the KOLAS accreditation mark and is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.

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**

CONTENTS

1. General information

Client	:	KORNIT DIGITAL
Address	:	12 Ha'Amal St., Afek Park, Rosh-Ha'Ayin 4809246, Israel
Manufacturer	:	KORNIT DIGITAL
Address	:	12 Ha'Amal St., Afek Park, Rosh-Ha'Ayin 4809246, Israel
Laboratory	:	Eurofins KCTL Co.,Ltd.
Address	:	65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea
Accreditations	:	FCC Site Designation No: KR0040, FCC Site Registration No: 687132 VCCI Registration No. : R-20080, G-20078, C-20059, T-20056 CAB Identifier: KR0040 ISED Number: 8035A KOLAS No.: KT231

2. Device information

Equipment under test	:	RFID reader & Antenna - 06-EBRD-00002
Model	:	ST25R3918-AQET
Modulation technique	:	ASK (NFC)
Number of channels	:	1 ch
Power source	:	DC 5.0 V
Antenna specification	:	PCB Loop Antenna
Frequency range	:	13.56 ㎒ (NFC)
Software version	:	05-PCBB-00002 rev 1
Hardware version	:	06-EBRD-00002 rev 1 assembly
Test device serial No.	:	25120001
Operation temperature	:	-40 ℃ ~ 90 ℃

2.1. Frequency/channel operations

This device contains the following capabilities:
NFC

Ch.	Frequency (㎒)
01	13.56

Table 2.1.1. NFC

3. Antenna requirement

Requirement of FCC part section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

-The transmitter has permanently attached PCB Loop Antenna (internal antenna) on board.

4. Summary of tests

FCC Part section(s)	Parameter	Test Condition	Test results
15.225(a)	In-band Fundamental Emission	Radiated	Pass
15.225(b) 15.225(c)	In-band Spurious Emission		Pass
	In-band Spurious Emission		Pass
15.225(d) 15.209	Out-of–band Spurious Emission		Pass
15.225(e)	Frequency Stability Tolerance	Conducted	Pass
15.215(c) 2.1049	20 dB Bandwidth		Pass
			Pass
15.207(a)	AC Conducted emissions		N/A(Note4)

Notes:

1. All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.
2. These tests were performed other than open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.
3. The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z. It was determined that **Y** orientation was worst-case orientation. Therefore, all final radiated testing was performed with the EUT in **Y** orientation.
4. This test is not applicable because the EUT only connects DC power line.
5. The test procedure(s) in this report were performed in accordance as following.
   - ANSI C63.10-2020
6. The radiated test was performed with and without passive tag. The test results shown in the following sections represent the worst case emissions.
   - Worst Case : Without passive tag

5. Measurement uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2020.

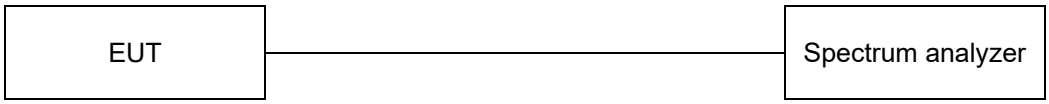
All measurement uncertainty values are shown with a coverage factor of k=2 to indicated a 95 % level of confidence. The measurement data shown herein meets of exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (±)	
Channel Bandwidth	0.1 %	
Occupied Bandwidth	0.1 %	
Radiated spurious Emissions	Below 30 ㎒	2.3 ㏈
	30 ㎒ to 1 000 ㎒	2.6 ㏈

6. Test results

6.1. 20 dB Bandwidth

Test setup



Limit

According to §15.215(c), Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

Test procedure

ANSI C63.10-2020 - Section 6.9.2

Test settings

The spectrum analyzer connected receive antenna and the EUT placed on near the receive antenna. The RBW is set to 10 kHz. The VBW is set to 3 times the RBW. The sweep time is coupled.

Test settings

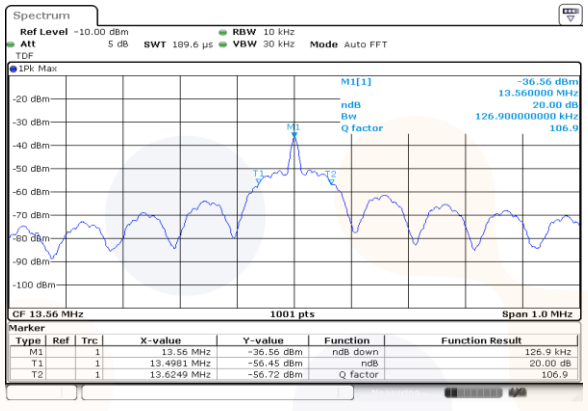
The occupied bandwidth is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). Typical ratios, expressed in dB, are −6 dB, −20 dB, and −26 dB, corresponding to 6 dB BW, 20 dB BW, and 26 dB BW, respectively. In this subclause, the ratio is designated by "−xx dB." The reference value is either the level of the unmodulated carrier or the highest level of the spectral envelope of the modulated signal, as stated by the applicable requirement. Some requirements might specify a specific maximum or minimum value for the "−xx dB" bandwidth; other requirements might specify that the "−xx dB" bandwidth be entirely contained within the authorized or designated frequency band.

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency.
b) Span: Two times and five times the OBW.
c) RBW = 1 % to 5 % of the OBW and VBW ≥ 3 x RBW
d) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation.
e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target "−xx dB down" requirement; that is, if the requirement calls for measuring the −20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
f) Detector: peak
g) Trace mode: max hold.
h) Allow the trace to stabilize.
i) Determine the "−xx dB down amplitude" using ((reference value) − xx). Alternatively, this calculation may be made by using the marker-delta function of the instrument.
j) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).
k) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the "−xx dB down amplitude" determined in step h). If a marker is below this "−xx dB down amplitude" value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the "−xx dB down amplitude" determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

Test results

Frequency [㎒]	20 ㏈ Bandwidth [㎒]		Limit [㎒]	20 ㏈ Bandwidth [㎒]
13.56	Lowest Frequency	13.498	13.110	0.127
	Highest Frequency	13.625	14.010	

20㏈ Bandwidth



Note:

Because the measured signal is CW/CW-like, adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW

6.2. Frequency tolerance

Test setup

Limit

According to 15.225 (e), The frequency tolerance of the carrier signal shall be maintained within ±0.01 % of the operating frequency over a temperature variation of −20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85 % to 115 % of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

Test procedure

ANSI C63.10-2020 - Section 6.8.1

Test results

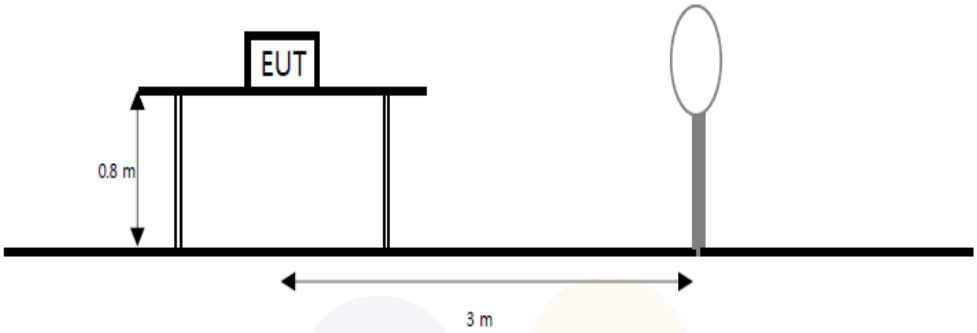
Voltage	Voltage	TEMP	Maintaining time	Measure frequency	Frequency deviation	Deviation
[%]	[V]	[℃]		[㎐]	[㎐]	[%]
100	5.00	-40.0	Startup	13 560 312	-312.0	0.002 30
			2 minutes	13 560 312	-312.0	0.002 30
			5 minutes	13 560 312	-312.0	0.002 30
			10 minutes	13 560 312	-312.0	0.002 30
		-30.0	Startup	13 560 312	-312.0	0.002 30
			2 minutes	13 560 312	-312.0	0.002 30
			5 minutes	13 560 312	-312.0	0.002 30
			10 minutes	13 560 312	-312.0	0.002 30
		-20.0	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 375	-375.0	0.002 77
		-10.0	Startup	13 560 362	-362.0	0.002 67
			2 minutes	13 560 362	-362.0	0.002 67
			5 minutes	13 560 387	-387.0	0.002 85
			10 minutes	13 560 387	-387.0	0.002 85
		0.0	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 375	-375.0	0.002 77
		10.0	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 375	-375.0	0.002 77
		20(Ref.)	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 337	-337.0	0.002 49
		30.0	Startup	13 560 337	-337.0	0.002 49
			2 minutes	13 560 325	-325.0	0.002 40
			5 minutes	13 560 325	-325.0	0.002 40
			10 minutes	13 560 325	-325.0	0.002 40
		40.0	Startup	13 560 300	-300.0	0.002 21
			2 minutes	13 560 300	-300.0	0.002 21
			5 minutes	13 560 300	-300.0	0.002 21
			10 minutes	13 560 300	-300.0	0.002 21
		50.0	Startup	13 560 287	-287.0	0.002 12
			2 minutes	13 560 287	-287.0	0.002 12
			5 minutes	13 560 287	-287.0	0.002 12
			10 minutes	13 560 287	-287.0	0.002 12
		60.0	Startup	13 560 275	-275.0	0.002 03
			2 minutes	13 560 275	-275.0	0.002 03
			5 minutes	13 560 275	-275.0	0.002 03
			10 minutes	13 560 275	-275.0	0.002 03
		70.0	Startup	13 560 287	-287.0	0.002 12
			2 minutes	13 560 287	-287.0	0.002 12
			5 minutes	13 560 287	-287.0	0.002 12
			10 minutes	13 560 287	-287.0	0.002 12

Voltage	Voltage	TEMP	Maintaining time	Measure frequency	Frequency deviation	Deviation
[%]	[V]	[℃]		[Hz]	[Hz]	[%]
100	5.00	80.0	Startup	13 560 287	-287.0	0.002 12
			2 minutes	13 560 287	-287.0	0.002 12
			5 minutes	13 560 287	-287.0	0.002 12
			10 minutes	13 560 287	-287.0	0.002 12
		90.0	Startup	13 560 287	-287.0	0.002 12
			2 minutes	13 560 287	-287.0	0.002 12
			5 minutes	13 560 287	-287.0	0.002 12
			10 minutes	13 560 287	-287.0	0.002 12
85	4.25	20.0	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 337	-337.0	0.002 49
115	5.75	20.0	Startup	13 560 375	-375.0	0.002 77
			2 minutes	13 560 375	-375.0	0.002 77
			5 minutes	13 560 375	-375.0	0.002 77
			10 minutes	13 560 337	-337.0	0.002 49

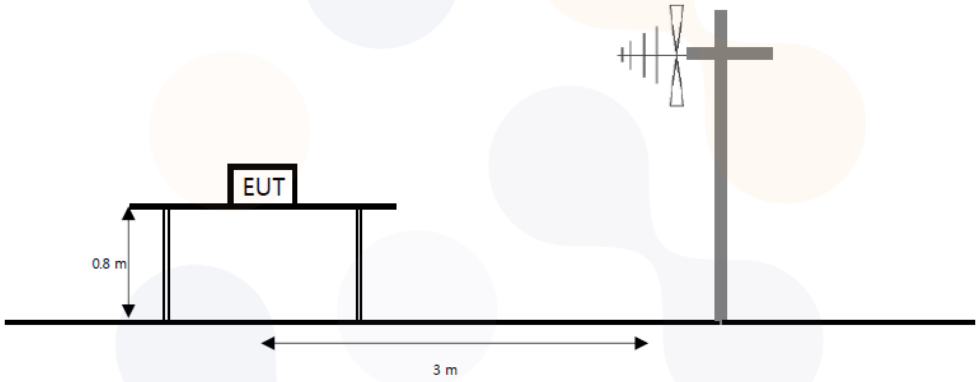
6.3. Radiated spurious emissions

Test setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 9 ㎑ to 30 ㎒ Emissions



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓ emissions.



Limit

According to section 15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (㎒)	Field strength (㎶/m)	Measurement distance (m)
0.009 - 0.490	2 400/F(㎑)	300
0.490 - 1.705	24 000/F(㎑)	30
1.705 - 30	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 ㎒, 76–88 ㎒, 174–216 ㎒ or 470–806 ㎒. However, operation within these frequency bands is permitted under other sections of this part, e.g., Section15.231 and 15.241.

According to section 15.225 (a), The field strength of any emission within the band 13.553-13.567 ㎒ shall not exceed 15, 848 microvolts/meter at 30 meters.

According to section 15.225 (b), With in the bands 13.410-13.553 ㎒ and 13.567-13.710 ㎒, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

According to section 15.225 (c), With in the bands 13.110-13.410 ㎒ and 13.710-14.010 ㎒, the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

According to section 15.225 (d), The Field Strength of any emissions appearing outside of the 13.110-14.010 ㎒ band shall not exceed the general radiated emission limits in 15.209.

Test procedure

ANSI C63.10-2020 - Section 6.4, 6.5

Test settings

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in table
3. VBW ≥ 3 x RBW
4. Detector = peak
5. Sweep time = No faster than coupled (auto) time
6. Trace mode = max hold
7. Trace was allowed to stabilize

Table. RBW as a function of frequency

Frequency	RBW
9 ㎑ to 150 ㎑	200 ㎐ to 300 ㎐
0.15 ㎒ to 30 ㎒	9 ㎑ to 10 ㎑
30 ㎒ to 1 000 ㎒	100 ㎑ to 120 ㎑
> 1 000 ㎒	1 ㎒

Notes:

1. *f* <30 ㎒, extrapolation factor of 40 ㏈/decade of distance. $F_d = 40\log(D_m/Ds)$
   f ≥30 ㎒, extrapolation factor of 20 ㏈/decade of distance. $F_d = 20\log(D_m/Ds)$
   Where:
   F_d= Distance factor in ㏈
   D_m= Measurement distance in meters
   D_s= Specification distance in meters
2. Measurements were performed at 3m and the data was extrapolated to the specified measurement distance of 30m using the square of an inverse linear distance extrapolation factor (40 ㏈/decade) as specified in § 15.31(f)(2). Extrapolation Factor = 40 log10(30/3) = 40 ㏈.
3. Factors(㏈) = Antenna factor(㏈/m) + Cable loss(㏈) + or Amp. gain(㏈) + or F_d(㏈)
4. Result = Reading + Cable loss + Amp gain + Ant. factor - Distance factor
5. The worst-case emission are reported however emissions whose levels were not within 20 ㏈ of respective limits were not reported.
6. All measurements were recorded using a spectrum analyzer employing a quasi-peak detector.
7. Below 30 ㎒ frequency range, all orientations about parallel, perpendicular, and ground-parallel were investigated then reported and the worse orientations of Face-on and Face-off were set for final test.
8. Face-on = Parallel, Face-off = Perpendicular
9. [1)] means restricted band

Test results for fundamental

13.553-13.567 ㎒

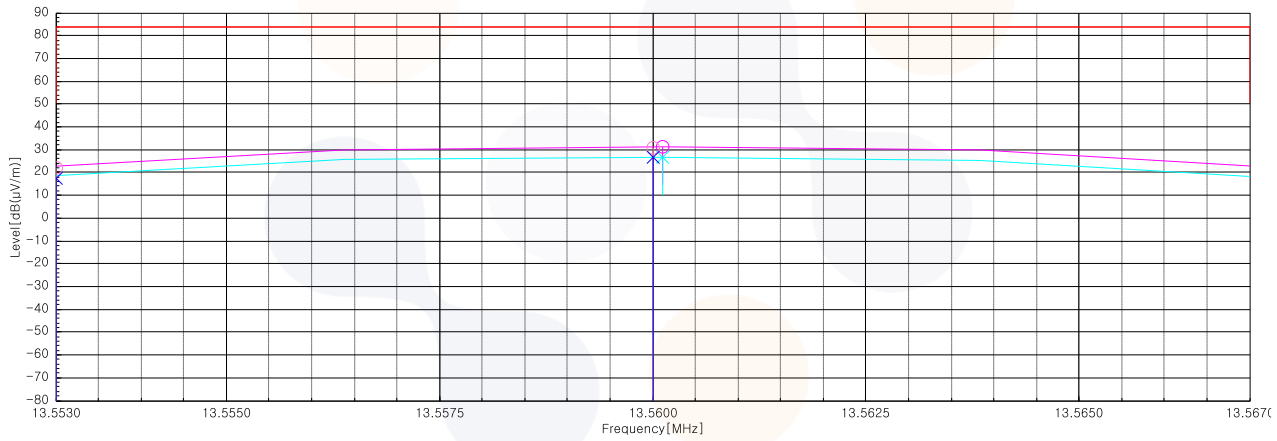
[Face-on]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
13.56	82.90	20.57	-32.54	40.00	30.93	84.00	53.07

[Face-off]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
13.56	78.50	20.57	-32.54	40.00	26.53	84.00	57.47

Face-on/Face-off



Test results for in-band & out-band (9 ㎑ to 30 ㎒)

13.110-14.010 ㎒

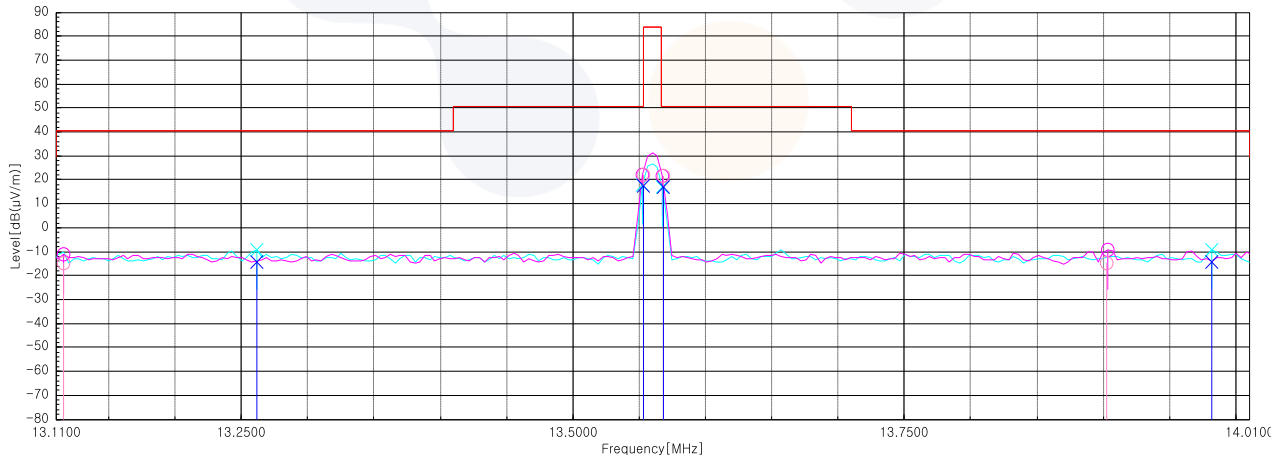
[Face-on]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
13.12	37.20	20.56	-32.54	40.00	-14.78	40.51	55.29
13.55	73.90	20.57	-32.54	40.00	21.93	50.47	28.54
13.57	73.40	20.57	-32.54	40.00	21.43	50.47	29.04
13.90	37.30	20.58	-32.55	40.00	-14.67	40.51	55.18

[Face-off]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
13.26	37.40	20.57	-32.54	40.00	-14.57	40.51	55.08
13.55	69.50	20.57	-32.54	40.00	17.53	50.47	32.94
13.57	68.90	20.57	-32.54	40.00	16.93	50.47	33.54
13.98	37.60	20.58	-32.55	40.00	-14.37	40.51	54.88

Face-on/Face-off



Test results (9 ㎑ to 30 ㎒)

0.009-30 ㎒

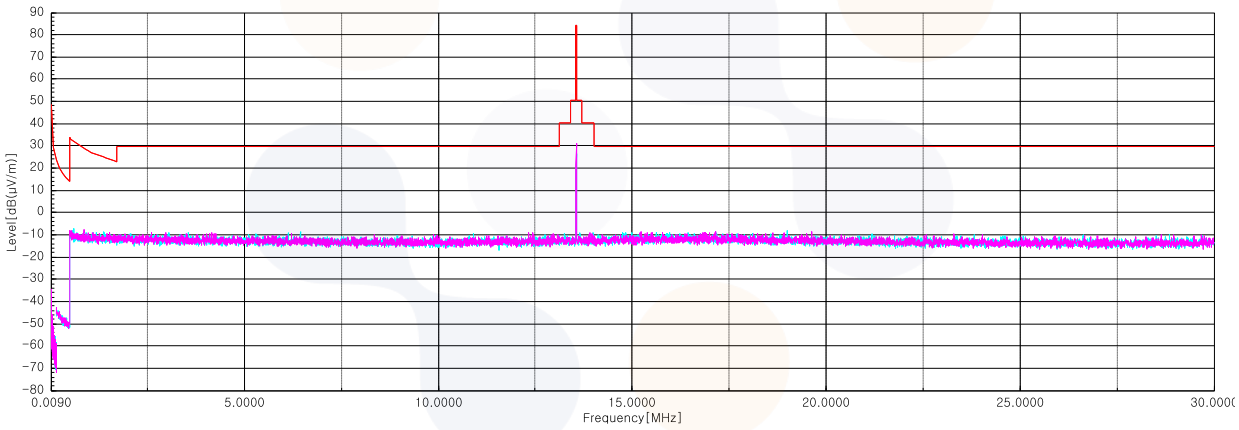
[Face-on]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
No spurious emissions were detected within 20 ㏈ of the limit.							

[Face-off]

Frequency	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data							
No spurious emissions were detected within 20 ㏈ of the limit.							

Face-on/Face-off

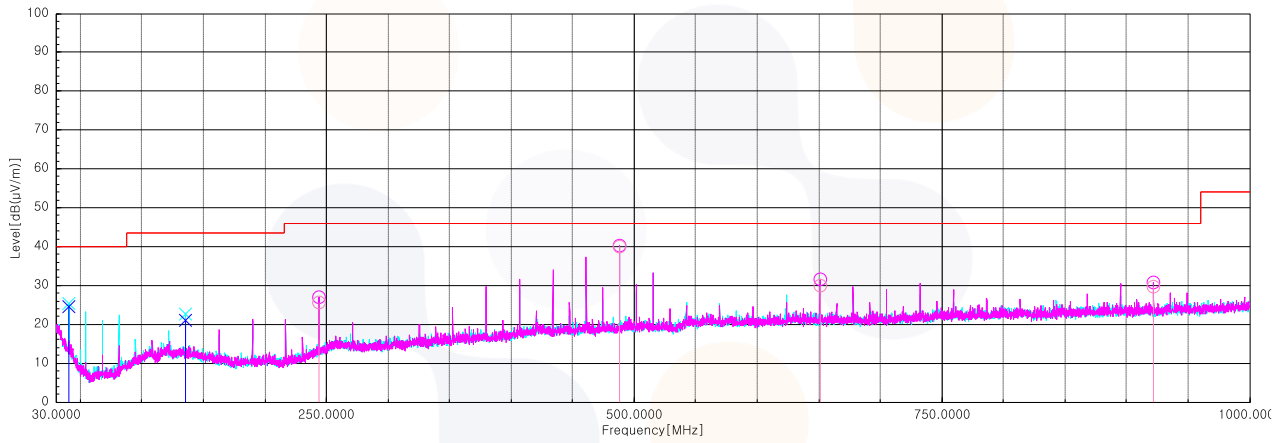


Test results (Below 1 000 ㎒)

30-1000 ㎒

Frequency	Pol.	Reading	Antenna Factor	Amp. + Cable	Distance Factor	Result	Limit	Margin
(㎒)	(V/H)	(dB(㎶))	(dB)	(dB)	(dB)	(dB(㎶/m))	(dB(㎶/m))	(dB)
Quasi peak data								
40.67	V	38.00	19.03	-32.44	-	24.59	40.00	15.41
135.61[1)]	V	34.80	17.70	-31.37	-	21.13	43.52	22.39
244.01[1)]	H	38.90	17.90	-31.15	-	25.65	46.02	20.37
488.20	H	47.30	23.21	-30.56	-	39.95	46.02	6.07
650.92	H	35.40	24.90	-30.30	-	30.00	46.02	16.02
922.16	H	31.60	26.50	-28.47	-	29.63	46.02	16.39

Horizontal/Vertical



7. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Antenna Mast	innco systems GmbH	MA4640-XP-ET	AM002	N/A
Turn Device	innco systems GmbH	DS1200-S-1t	0002	N/A
Controller	innco systems GmbH	CO3000	CO3000/1442/54370322/P	N/A
Spectrum Analyzer	R&S	FSV40	100988	26.04.24
Amplifier	SONOMA INSTRUMENT	310N	421910	26.07.01
Bilog Antenna	Teseq GmbH	CBL 6112D	61521	26.12.11
Loop Antenna	R&S	HFH2-Z2	100355	26.06.25
Vector Signal Generator	R&S	SMBV100A	257566	26.07.01
Spectrum Analyzer	R&S	FSV40	100989	26.09.29
Temp & Humid Chamber	Myeongseong R&P	CTHC-50P-DT	20150824-3	26.01.16
DC Power Supply	AGILENT	E3632A	MY40008800	26.06.30

End of test report