

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT

Test Report No. : OT-18O-RED-128

AGR No. : A188A-301

Applicant : NURI Telecom Co., Ltd

Address : NURI Bld, 16 Sapyeong-daero, Seocho-gu, Seoul, Korea, 06552

Manufacturer : NURI Telecom Co., Ltd.

Address : NURI Bld, 16 Sapyeong-daero, Seocho-gu, Seoul, Korea, 06552

FCC ID. : 2AD28NDC-I632

Type of Equipment : Data Concentrator - All other devices

Model Name : NDC-I632

Multiple Model Name : N/A

Serial number : N/A

Total page of Report : 24 pages (including this page)

Date of Incoming : October 22, 2018

Date of Issuing : October 24, 2018

SUMMARY

The equipment complies with the requirement of FCC CFR 47 PART 15 SUBPART B Class A, Section 15.101.

This test report contains only the results of a single test of the sample supplied for the examination.

It is not a general valid assessment of the features of the respective products of the mass-production.

Reviewed by:

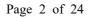
Jae-Beom, Cho / General Manager ONETECH Corp.

Approved by:

Gea Won, Lee / Managing Director

Report No.: OT-18O-RED-128

ONETECH Corp.





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Revision History

Rev. No.	Issued Report No.	Issued Date	Revisions	Section Affected
0	OT-18O-RED-128	October 24, 2018	Initial Issue	All



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1. VERIFICATION OF COMPLIANCE

Applicant : NURI Telecom Co., Ltd

Address : NURI Bld, 16 Sapyeong-daero, Seocho-gu, Seoul, Korea, 06552

Manufacturer : NURI Telecom Co., Ltd.

Address : NURI Bld, 16 Sapyeong-daero, Seocho-gu, Seoul, Korea, 06552

Factory : NURI Telecom Co., Ltd.

Address : 363, Green-ro, Naju-si, Jeollanam-do, Republic of Korea

FCC ID. : 2AD28NDC-I632

Model Name : NDC-I632

Brand Name : N/A

Date : October 24, 2018

DEVICE TYPE	ALL OTHER DEVICES			
E.U.T. DESCRIPTION	Data Concentrator			
THIS REPORT CONCERNS	Original Grant			
MEASUREMENT PROCEDURES	ANSI C63.4: 2014			
TYPE OF EQUIPMENT TESTED	Pre-Production			
KIND OF EQUIPMENT				
AUTHORIZATION REQUESTED	Certification			
EQUIPMENT WILL BE OPERATED	ECC DART 15 (CLASS A)			
UNDER FCC RULES PART(S)	FCC PART 15 (CLASS A)			
MODIFICATIONS ON THE EQUIPMENT	N			
TO ACHIEVE COMPLIANCE	None			
FINAL TEST WAS CONDUCTED ON	10 m, semi anechoic chamber			

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.



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2. GENERAL INFORMATION

2.1 Product Description

The NURI Telecom Co., Ltd, Model NDC-I632 (referred to as the EUT in this report) is a Data Concentrator. Product specification described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE	Plastic & Metal
LIST OF EACH OSC. OR	Main System Clock : 24 MHz, 25 MHz
CRY. FREQ.(FREQ.>=1 MHz)	G3-PLC : 154KHz ~ 487KHz
ELECTRICAL RATING	3-Phase / 400V3N~, 50/60 Hz ±3Hz, 0.5A
NUMBER OF PCB LAYERS	
(P. C. BOARD NAME)	6 Layers
EXTERNAL CONNECTOR	AC IN, Interface Pin Header

2.2 Model Differences

-. None.

2.3 Related Submittal(s) / Grant(s)

Original submittal only

2.4 Test System Details

The model numbers for all the equipments, which were used in the tested system, is:

Model	Manufacturer	Description	Connected to
NDC-I632	NURI Telecom Co., Ltd.	Data Concentrator (EUT)	-
NAMR-C108SR	NURI Telecom Co., Ltd.	Modem	EUT
N/A	N/A	Debug Board	EUT
N/A	N/A	Bluetooth Module	-

2.5 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4: 2014. Radiated testing was performed at a distance of 10 m from EUT to the antenna.





2.6 Test Facility

The Onetech Corp. has been designated to perform equipment testing in compliance with ISO/IEC 17025.

The Electromagnetic compatibility measurement facilities are located at:

- 1) 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea
- 2) 12-5, Jinsaegol-gil 75 beon-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea
- -. Site Filing:

VCCI (Voluntary Control Council for Interference) – Registration No. R-4112/ C-14617/ G-10666/ T-1842

IC (Industry Canada) - Registration No. Site# 3736A-3

-. Site Accreditation:

KOLAS (Korea Laboratory Accreditation Scheme) - Accreditation NO. KT085

FCC (Federal Communications Commission) - Accreditation No. KR0013

RRA (Radio Research Agency) - Designation No. KR0013



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3. SYSTEM TEST CONFIGURATION

3.1 Justification

This device was configured for testing in a typical way as a normal customer is supposed to be used. During the test, the following components were installed inside of the EUT.

DEVICE TYPE	MANUFACTURER	MODEL/PART NUMBER	FCC ID
MAIN BOARD	N/A	N/A	N/A

3.2 Mode of operation during the test

- -. The modem was connected to EUT with a power cord and PLC TX and using Debug Board, RX communication was being confirmed by Tera-Term program of laptop computer while testing.
- -. With Bluetooth Module used, It was used as peripheral to make EUT transmit signals.
- -. Input power condition during the measurements was 3-Phase AC 208 V_{\sim} , 60 Hz.

3.3 Cable Description

Ports Name	Shielded	Ferrite Bead	Metal Shell	Length (m)	Connected to
AC IN	N	N	N	1.5	LISN
Meter Interface Pin Header	N	N	N	1.2	Debug Board

3.4 Equipment Modifications

-. None.

3.5 Configuration of Test System

Line Conducted Test: The EUT was connected to LISN. Preliminary Power line Conducted Emission test was

performed by using the procedure in ANSI C63.4: 2014 7.3.3 to determine the worse

operating conditions.

Radiated Emission Test: Preliminary radiated emission test was conducted using the procedure in ANSI C63.4:

2014 8.3.1.1 to determine the worse operating conditions. Final radiated emission test was

conducted at 10 m semi anechoic chamber.



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4. PRELIMINARY TEST

4.1 AC Power line Conducted Emission Test

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worst operating condition (Please check one only)					
TX Mode	X					
RX Mode	X					

4.2 Radiated Emission Test

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worst operating condition (Please check one only)					
TX Mode	X					
RX Mode	X					





5. FINAL RESULT OF MEASURMENT

Preliminary test was done in normal operation mode. And the final measurement was selected for the maximized emission level.

5.1 Conducted Emission Test

5.1.1 Test data for TX Mode

Humidity Level : 50.6 % R.H. Temperature: 23.3 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B, SECTION 15.107 (a)

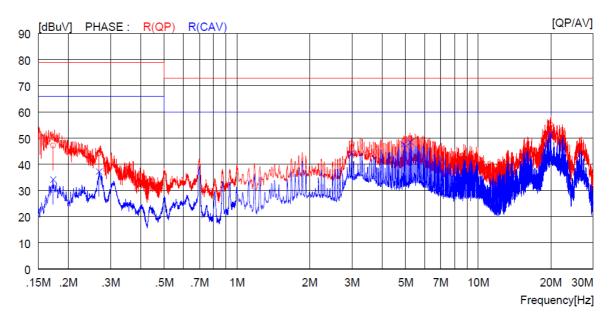
Type of Test : <u>CLASS A</u>

Result : PASSED BY 2.9 dB at 0.29400 MHz under CISPR-Average detector mode on T Line

EUT : NDC-I632 Date: October 23, 2018

Detector : Q.P (6 dB Bandwidth: 9 kHz)

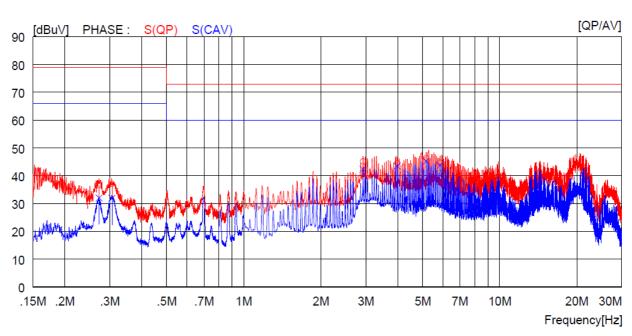
Tested Line : R LINE



NO	FREQ	READ		C.FACTOR	RES		LIM			RGIN	PHASE
		QΡ	AV		QΡ	AV	QP	AV	QΡ	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.17300	37 3		9.9	17 2		79.0		31.8		R(OP)
2	0.26800	34.3		9.9	44.2		79.0		34.8		R(OP)
4		01.0									\ ~ /
3	2.98800	37.9		10.0	47.9		73.0		25.1		R(QP)
4	4.92000	38.6		10.2	48.8		73.0		24.2		R(QP)
5	5.22500	39.6		10.2	49.8		73.0		23.2		R(QP)
6	19.93000	44.7		10.4	55.1		73.0		17.9		R(QP)
7	0.17300		24.3	9.9		34.2		66.0		31.8	R(CAV)
8	0.26800		27.3	9.9		37.2		66.0		28.8	R(CAV)
9	2.98800		34.3	10.0		44.3		60.0		15.7	R(CAV)
10	4.92000		37.5	10.2		47.7		60.0		12.3	R(CAV)
11	5.22500		38.3	10.2		48.5		60.0		11.5	R(CAV)
12	19.93000		41.3	10.4		51.7		60.0		8.3	R(CAV)



Tested Line : S LINE



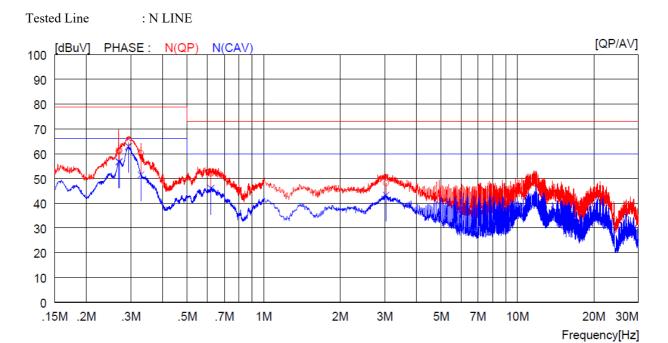
NO	FREQ	READ		C.FACTOR	RES		LIM			RGIN	PHASE
	[] ATT]	QP	AV	f 15 1	QP	AV	QP	AV	QP	AV	
	[MHz]	[aBuv]	[dBuV]	[dB]	[aBuv]	[dBuV]	[aBuv]	[dBuV]	[aBuv	[dBuV]	
1	0.27200	26.6		9.9	36.5		79.0		42.5		S(OP)
2	0.30500	27.2		9.9	37.1		79.0		41.9		S(QP)
3	2.92400	35.1		10.0	45.1		73.0		27.9		S(QP)
4	3.98000	34.3		10.2	44.5		73.0		28.5		S(QP)
5	5.16000	36.2		10.2	46.4		73.0		26.6		S(QP)
6	5.84500	34.5		10.2	44.7		73.0		28.3		S(QP)
7	0.27200		22.1	9.9		32.0		66.0		34.0	S(CAV)
8	0.30500		22.0	9.9		31.9		66.0		34.1	S(CAV)
9	2.92400		32.3	10.0		42.3		60.0		17.7	S(CAV)
10	3.98000		33.3	10.2		43.5		60.0		16.5	S(CAV)
11	5.16000		35.0	10.2		45.2		60.0		14.8	S(CAV)
12	5.84500		33.6	10.2		43.8		60.0		16.2	S(CAV)

Frequency[Hz]



Tested Line : T LINE [QP/AV] PHASE: T(QP) T(CAV) 100 90 80 70 60 50 40 30 20 10 .15M .2M .3M .5M .7M 1M 2M 3M 5M 7M 10M 20M 30M

NC	FREQ	READ	ING	C.FACTOR	RES	ULT	LIM	IT	MAI	RGIN	PHASE
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]][dBuV]	
1	0.29400	54.9		9.9	64.8		79.0		14.2		T(QP)
2	0.35100	47.7		10.0	57.7		79.0		21.3		T(OP)
3	0.58600	43.3		10.0	53.3		73.0		19.7		T(QP)
4	3.00000	38.7		10.0	48.7		73.0		24.3		T(QP)
5	11.83000	39.6		10.2	49.8		73.0		23.2		T(QP)
6	13.56000	41.3		10.3	51.6		73.0		21.4		T(QP)
7	0.29400		53.2	9.9		63.1		66.0		2.9	T(CAV)
8	0.35100		39.6	10.0		49.6		66.0		16.4	T(CAV)
9	0.58600		36.2	10.0		46.2		60.0		13.8	T(CAV)
10	3.00000		33.4	10.0		43.4		60.0		16.6	T(CAV)
11	11.83000		36.1	10.2		46.3		60.0		13.7	T(CAV)
12	13.56000		25.9	10.3		36.2		60.0		23.8	T(CAV)



NO	FREQ	READ		C.FACTOR	RES		LIM			RGIN	PHASE
	[MHz]	QP [dBuV]	AV [dBuV]	[dB]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.26800	51.4		9.9	61.3		79.0		17.7		N(QP)
2	0.27000	51.3		9.9	61.2		79.0		17.8		N(QP)
3	0.29300	54.6		9.9	64.5		79.0		14.5		N(QP)
4	0.32800	50.2		10.0	60.2		79.0		18.8		N(QP)
5	0.62000	41.9		10.0	51.9		73.0		21.1		N(QP)
6	3.03600	38.1		10.0	48.1		73.0		24.9		N(QP)
7	0.26800		46.9	9.9		56.8		66.0		9.2	N(CAV)
8	0.27000		46.9	9.9		56.8		66.0		9.2	N(CAV)
9	0.29300		53.1	9.9		63.0		66.0		3.0	N(CAV)
10	0.32800		41.5	10.0		51.5		66.0		14.5	N(CAV)
11	0.62000		36.0	10.0		46.0		60.0		14.0	N(CAV)
12	3.03600		33.2	10.0		43.2		60.0		16.8	N(CAV)

Remark: Margin (dB) = Limit - Level (Result)

The result level in above table is included the transducer factor that means insertion loss (LISN), cable lo ss and attenuator.

Tested by: Won-Kyun, Yim / Engineer





5.1.2 Test data for RX Mode

Humidity Level : 50.6 % R.H. Temperature: 23.3 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B, SECTION 15.107 (a)

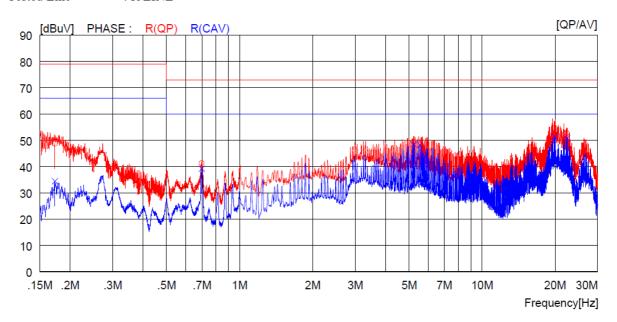
Type of Test : <u>CLASS A</u>

Result : PASSED BY 2.9 dB at 0.29200 MHz under CISPR-Average detector mode on HOT Line

EUT : NDC-I632 Date: October 23, 2018

Detector : Q.P (6 dB Bandwidth: 9 kHz)

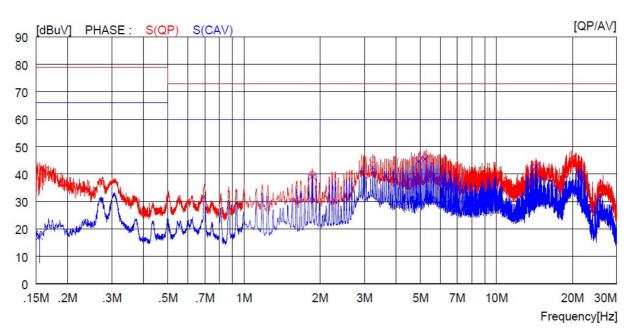
Tested Line : R LINE



NC	FREQ	READ	ING	C.FACTOR	RES	ULT	LIM	TIT	MAI	RGIN	PHASE
		QP	AV		QP	AV	QP	AV	QΡ	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.17300	38.8		9.9	48.7		79.0		30.3		R(OP)
2	0.69800	31.2		10.0	41.2		73.0		31.8		R(QP)
2	5.23000	39.2		10.2	49.4		73.0		23.6		R(QP)
,											
4	5.54500	38.3		10.2	48.5		73.0		24.5		R(QP)
5	19.93000	44.3		10.4	54.7		73.0		18.3		R(QP)
6	22.36000	42.2		10.5	52.7		73.0		20.3		R(QP)
7	0.17300		24.5	9.9		34.4		66.0		31.6	R(CAV)
8	0.69800		29.2	10.0		39.2		60.0		20.8	R(CAV)
9	5.23000		38.3	10.2		48.5		60.0		11.5	R(CAV)
10	5.54500		37.9	10.2		48.1		60.0		11.9	R(CAV)
11	19.93000		40.9	10.4		51.3		60.0		8.7	R(CAV)
12	22.36000		40.2	10.5		50.7		60.0		9.3	R(CAV)



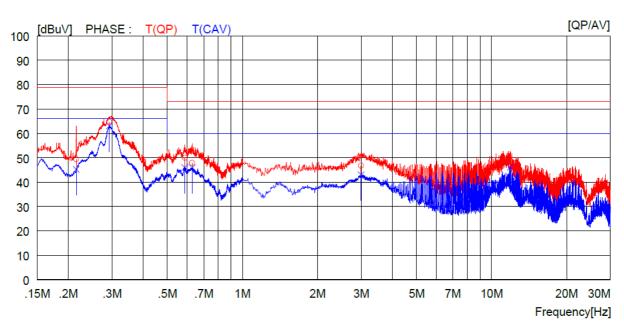
Tested Line : S LINE



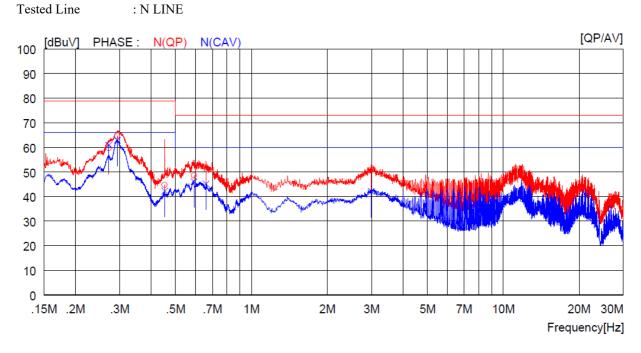
NO	FREQ	READ OP	ING AV	C.FACTOR	RES QP	ULT AV	LIN QP	TIN VA	MAI QP	RGIN AV	PHASE
	[MHz]	~	[dBuV]	[dB]	the second second	[dBuV]	Control of the Control	[dBuV]	[dBuV		
1	0.15500	32.3		9.9	42.2		79.0		36.8		S(QP)
2	1.86400	30.0		10.0	40.0		73.0		33.0		S(QP)
3	3.23200	35.2		10.0	45.2		73.0		27.8		S(QP)
4	4.91600	35.3		10.2	45.5		73.0		27.5		S(QP)
5	5.22000	36.1		10.2	46.3		73.0		26.7		S(QP)
6	14.36000	33.4		10.3	43.7		73.0		29.3		S(QP)
7	0.15500		7.3	9.9		17.2		66.0		48.8	S(CAV)
8	1.86400		29.1	10.0		39.1		60.0		20.9	S(CAV)
9	3.23200		32.4	10.0		42.4		60.0		17.6	S(CAV)
10	4.91600		34.4	10.2		44.6		60.0		15.4	S(CAV)
11	5.22000		35.3	10.2		45.5		60.0		14.5	S(CAV)
12	14.36000		32.5	10.3		42.8		60.0		17.2	S(CAV)



Tested Line : T LINE



NC	FREQ	READ	ING	C.FACTOR	RES	ULT	LIM	TIN	MAI	RGIN	PHASE
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]]
1	0.21500	39.5		9.9	49.4		79.0		29.6		T(OP)
2	0.29200			9.9	64.8		79.0		14.2		T (QP)
3	0.58700	40.0		10.0	50.0		73.0		23.0		T(QP)
4	0.62800	37.9		10.0	47.9		73.0		25.1		T(QP)
5	2.99200	36.8		10.0	46.8		73.0		26.2		T(QP)
6	11.89000	38.6		10.2	48.8		73.0		24.2		T(QP)
7	0.21500		35.4	9.9		45.3		66.0		20.7	T(CAV)
8	0.29200		53.2	9.9		63.1		66.0		2.9	T(CAV)
9	0.58700		36.0	10.0		46.0		60.0		14.0	T(CAV)
10	0.62800		35.9	10.0		45.9		60.0		14.1	T(CAV)
11	2.99200		33.0	10.0		43.0		60.0		17.0	T(CAV)
12	11.89000		35.9	10.2		46.1		60.0		13.9	T (CAV)



NO	FREQ	READ	ING	C.FACTOR	RES	ULT	LIM	IIT	MAI	RGIN	PHASE
		QP	AV		QP	AV	QP	AV	QP	AV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV	[dBuV]	
1	0.27100	49.8		9.9	59.7		79.0		19.3		N(OP)
2	0.29300	54.7		9.9	64.6		79.0		14.4		N(QP)
3	0.45200	34.7		10.0	44.7		79.0		34.3		N(QP)
4	0.59100	38.6		10.0	48.6		73.0		24.4		N(QP)
5	0.65900	42.0		10.0	52.0		73.0		21.0		N(QP)
6	2.98800	40.9		10.0	50.9		73.0		22.1		N(QP)
7	0.27100		51.0	9.9		60.9		66.0		5.1	N(CAV)
8	0.29300		53.0	9.9		62.9		66.0		3.1	N(CAV)
9	0.45200		32.2	10.0		42.2		66.0		23.8	N(CAV)
10	0.59100		36.1	10.0		46.1		60.0		13.9	N(CAV)
11	0.65900		35.1	10.0		45.1		60.0		14.9	N(CAV)
12	2.98800		32.1	10.0		42.1		60.0		17.9	N(CAV)

Remark: Margin (dB) = Limit - Level (Result)

The result level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator

Tested by: Won-Kyun, Yim / Engineer



5.2 Radiated Emission Test

The following table shows the highest levels of radiated emission on both polarizations of horizontal and vertical.

5.2.1 Test data for TX Mode

5.2.1.1 Test data

Humidity Level : 51.0 % R.H. Temperature: 24.1 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B, SECTION 15.109 (g)

Type of Test : <u>CLASS A</u>

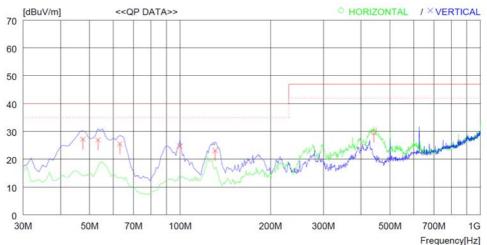
Result : PASSED BY 12.8 dB at 47.460 MHz

EUT : NDC-I632 Date: October 22, 2018

Frequency Range : 30 MHz ~ 1 000 MHz

Detector : Q.P (6 dB Bandwidth: 120 kHz)

Distance : 10 m



No.	FREQ	READING QP F	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
H	orizontal -									
1	441.281	34.5	16.1	7.2	28.2	29.6	47.0	17.4	100	359
V	ertical									
2	47.460	39.5	13.8	1.9	28.0	27.2	40.0	12.8	100	219
3	53.280	39.4	13.4	2.1	28.0	26.9	40.0	13.1	100	0
4	62.980	39.0	12.1	2.4	28.0	25.5	40.0	14.5	100	167
5	99.840	37.6	11.9	3.1	27.9	24.7	40.0	15.3	100	315
6	130.880	38.6	8.7	3.5	27.7	23.1	40.0	16.9	100	0

Remark: Margin (dB) = Limit - Result and Result = Reading Quasi-Peak + Antenna Factor + Loss - Gain Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

Tested by: Won-Kyun, Yim / Engineer





5.2.2 Test data for RX Mode

Humidity Level : 51.0 % R.H. Temperature: 24.1 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART B, SECTION 15.109 (g)

Type of Test : <u>CLASS A</u>

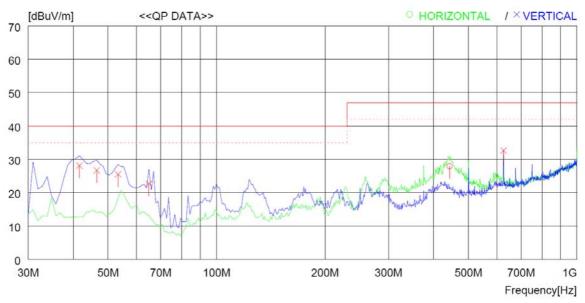
Result : PASSED BY 11.9 dB at 41.640 MHz

EUT : NDC-I632 Date: October 22, 2018

Frequency Range : 30 MHz ~ 1 000 MHz

Detector : Q.P (6 dB Bandwidth: 120 kHz)

Distance : 10 m



No.	FREQ	READING QP	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
H	orizontal -									
1	443.221	32.8	16.1	7.2	28.2	27.9	47.0	19.1	100	0
V	ertical									
2	41.640	41.3	13.6	1.2	28.0	28.1	40.0	11.9	100	359
3	46.490	38.9	13.8	2.0	28.0	26.7	40.0	13.3	100	184
4	53.280	38.0	13.4	2.1	28.0	25.5	40.0	14.5	100	359
5	64.920	37.1	11.3	2.3	28.0	22.7	40.0	17.3	300	359
6	625.577	33.0	19.3	8.8	28.5	32.6	47.0	14.4	100	359

Remark: Margin (dB) = Limit - Result and Result = Reading Quasi-Peak + Antenna Factor + Loss - Gain Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

Tested by: Won-Kyun, Yim / Engineer





6. FIELD STRENGTH CALCULATION

Meter readings are compared to the specification limit correcting for antenna and cable losses.

+ Meter reading	$(dB\mu V)$
+ Cable Loss	(dB)
+ Antenna Factor	(dB/m)
= Corrected Reading	$\left(dB\mu V/m\right)$
+ Cable Loss (dB) + Antenna Factor (dB/m) = Corrected Reading (dBμV/m) Margin (dB) Specification Limit (dBμV/m)	
Specification Limit	$\left(dB\mu V/m\right)$
- Corrected Reading	$\left(dB\mu V/m\right)$
= dB Relative to Spec	(± dB)

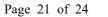




7. LIST OF TEST EQUIPMENT

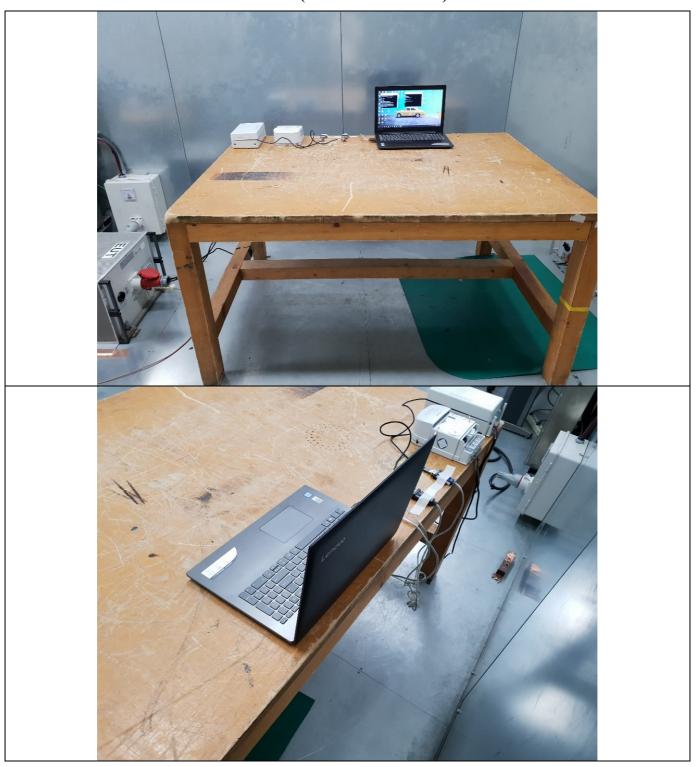
No.	EQUIPMENTS	MFR.	MODEL	SER. NO.	LAST CAL	DUE CAL	USE
1.			ESCI	101012	Oct. 27, 2017	One Year	
2.	Test receiver	R & S	ESCI	101013	Mar. 28, 2018	One Year	
3.			ESR	101470	Oct. 27, 2017	One Year	
4.		Sonoma	310N	312544	Mar. 28, 2018	One Year	
5.	Amplifier	Instrument	310N	312545	Mar. 28, 2018	One Year	
6.		Hewlett Packard	8447D	2944A07777	Mar. 29, 2018	One Year	
7.	TRILOG Broadband	C 1 1 - 1-	VULB9163	9163-419	Aug. 14, 2018	Two Years	
8.	Antenna	Schwarzbeck	VULB9163	9163-255	Jun. 05, 2018	Two Years	
9.	Horn Antenna	Schwarzbeck	BBHA9120D	BBHA9120D295	Aug 16, 2017	Two Years	
10.	Amplifier	Schwarzbeck	BBV9718	310	Mar. 30, 2018	One Year	
11.		EMCO	3825/2	9109-1867	Mar. 28, 2018	One Year	
12.		EMCO	3823/2	9109-1869	Apr. 11, 2018	One Year	
13.	LISN		NSLK 8128	8128-216	Mar. 28, 2018	One Year	
14.		Schwarzbeck	NSLK 8126	8126-404	Apr. 04, 2018	One Year	
15.			NSLK 8126	8126-479	Oct. 24, 2017	One Year	
16.	Transient Limiter	Hewlett Packard	11047A	3107A02762	Mar. 28, 2018	One Year	
17.	Controller	Innco System	CO3000	CO3000/904 /37211215/L	N/A	N/A	•
18.		·	CO3000	N/A	N/A	N/A	
19.			DT3000	930611	N/A	N/A	
20.	Turn Table	Innco System	DT5000-3t- Teagplatten	N/A	N/A	N/A	
21.	Antenna Master	Innco System	MA-4000XPET	MA4000/509 /37211215/L	N/A	N/A	
22.	7 mioma iviasioi	Inneo System	MA4000-EP	N/A	N/A	N/A	

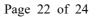
Remark: Mark ■ mean used equipment.





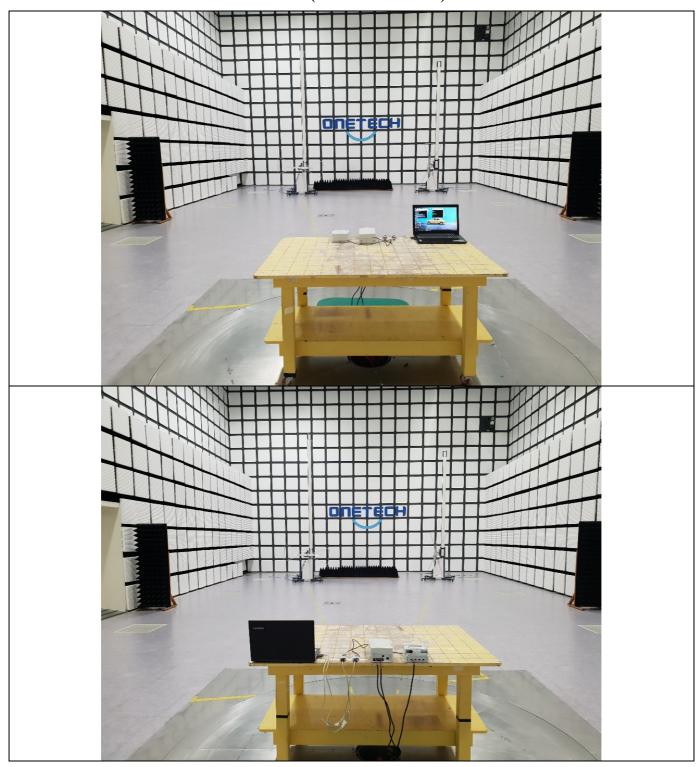
APPENDIX I - TEST SET-UP PHOTOS: (Conducted emission)

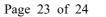






APPENDIX II - TEST SET-UP PHOTOS: (Radiated emission)







APPENDIX III - PHOTOGRAPHS REPORT



