



Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

Company : Ground Co., Ltd.

Representative : : Woo Jea Wook

Address : 950, Deokguem-ro, Keumwang-eup, Eumsung-gun, Chungbook, Korea

1. Product Name : Digital Grounding Device(eca3G)  
- Model : LP-3P
2. Use of Report : For quality management
3. Date of Receipt : 2015.06.17
4. Date of test : 2015.06.17 - 2015.07.10
5. Testing Method: KS C IEC 61000-6-3 : 2014, KS C IEC 61000-6-1 : 2014
6. Test result : Pass

Tested by : Young Sik Kim

Approved by : Hyun Duck, Yoo

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2. This report should not be used for advertising, lawsuit, etc. without any official permission of KTC. It is only used for the quality test.
3. The copy of this report is invalid for use.

2015. 07. 17.



President

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# Test Report

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## 1. Test Item Description

Product	Digital Grounding Device(eca3G)
Model	LP-3P
Rated	AC 380 V, 60 Hz
Test Mode	Operating

## 2. Applicable Standards for Testing

Test Item	Standards	Application	Test Result
Conducted Emissions	KS C IEC 61000-6-3 (KS C CISPR 22)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Radiated Emissions		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Radio-frequency, electromagnetic field immunity test	KS C IEC 61000-6-1 (KS C IEC 61000-4-3)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

## 3. Permission Criteria of Test

### 3.1 Limits of Conducted emission

Frequency range (MHz)	Limits (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 - 56	56 - 46
0.5 ~ 5	56	46
5 ~ 30	60	50

### 3.2 Limits of Radiated emission

Frequency range(MHz)	Limits (dBuV/m)
30 ~ 230	30
230 ~ 1 000	37

### 3.3 Immunity Criteria

Test Item	Port	Level	Unit	Criterion	Reference Standard
Radio-frequency, electromagnetic field immunity test	Surface port	80 ~ 1 000 3 80	MHz V/m % AM (1 kHz)	A	KS C IEC 61000-4-3

### 3.4 Performance Evaluation Criteria

**Criterion A:** During testing, normal performance within the specified limit

**Criterion B:** During testing, temporary degradation, or loss of function or performance which is self-recovering:

**Criterion C:** During testing, temporary degradation, or loss of function or performance which requires operator intervention or system reset occurs





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## 4. Test conditions and Results

### 4.1 Conducted Test

#### 4.1.1 Test Instruments

Description	Model	Manufacturer	Serial number	Next Cal. Date	Use
EMI Receiver	N9038A	Agilent	MY51100116	2015-10-21	■
LISN	ENV216	Rohde & Schwarz	101339	2016-02-24	□
LISN	ENV4200	Rohde & Schwarz	100212	2015-09-16	■

#### 4.1.2 Test Site: EMI room(1 floor)

4.1.3 Operating Environment: Temperature: (22 ± 2) °C, Relative Humidity: (44 ± 5) % R.H.

#### 4.1.4 Test Method

※ KS C IEC 61000-6-3

- 1) The EUT shall be configured, installed, arranged and operated in a manner consistent with typical applications.
- 2) Interface cables/loads/devices shall be connected to at least one of each type of interface port of the EUT, and where practical, each cable shall be terminated in a device typical of actual usage.
- 3) Peripheral is connected with each connection terminal (interface port) in the test.
- 4) The EUT is grounded through a ground port. If the EUT is internal grounded through the power cable, the EUT is grounded through the use power source.
- 5) If the mains input cable of the external power supply unit is greater than 0,8 m, the external power supply unit shall be placed on the tabletop, with a nominal 0,1 m separation from the host unit.
- 6) Initial testing shall identify the frequency that has the highest disturbance relative to the limit.
- 7) The EUT supply the power through independent networks, and other peripheral device supplies the power through separate networks.
- 8) The EUT shall be placed on a non-conductive table such that it is 0,8 m above the horizontal ground reference plane. The rear of the EUT shall be 0,4 m from the vertical ground reference plane.
- 9) Excess lengths of cables shall be bundled at the approximate centre of the cable with the bundles 30 cm to 40 cm in length. If it is impractical to do so because of cable bulk or stiffness, or because the testing is being done at a user installation, the disposition of the excess cable shall be precisely noted in the test report.



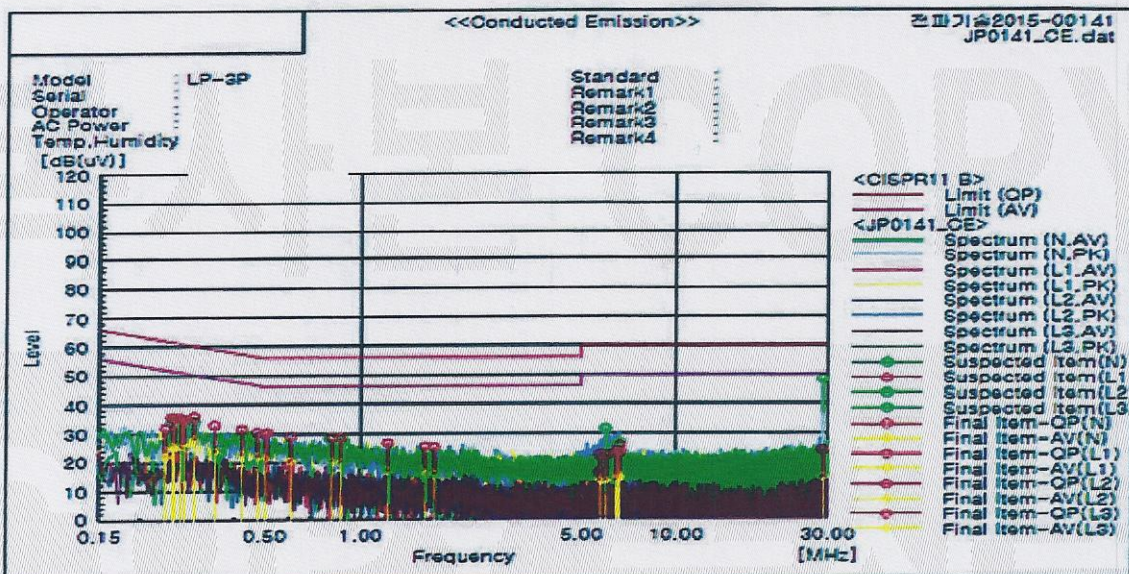


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4.1.5 Test Result:  Pass(Refer to below graph)  Fail



Final Result

N Phase		Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Remark
No.	Frequency	OP	CAV	[dB]	OP	CAV	OP	AV	OP	CAV	
	[MHz]	[dB(uV)]	[dB(uV)]		[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]	
001	0.34166	23.0	23.0	0.0	23.0	23.0	60.0	45.0	18.0	18.0	
002	0.44056	23.0	23.0	0.0	23.0	23.0	60.0	45.0	18.0	18.0	
003	0.51794	23.0	23.0	0.0	23.0	23.0	60.0	45.0	18.0	18.0	
004	0.60644	23.0	23.0	0.0	23.0	23.0	60.0	45.0	18.0	18.0	
005	0.70234	23.0	23.0	0.0	23.0	23.0	60.0	45.0	18.0	18.0	

L1 Phase		Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Remark
No.	Frequency	OP	CAV	[dB]	OP	CAV	OP	AV	OP	CAV	
	[MHz]	[dB(uV)]	[dB(uV)]		[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]	
001	0.25897	26.0	26.0	0.0	26.0	26.0	61.6	46.0	15.6	15.6	
002	0.30363	26.0	26.0	0.1	26.0	26.0	66.0	46.0	17.0	15.7	
003	0.35080	26.0	26.0	-1.0	26.0	26.0	60.0	46.0	17.0	15.6	
004	0.37845	26.0	26.0	1.0	26.0	26.0	60.0	46.0	16.4	15.6	
005	0.50048	26.0	26.0	1.0	26.0	26.0	66.0	46.0	16.0	15.6	
006	0.61206	32.0	32.0	-6.7	32.0	32.0	60.0	46.0	16.0	15.6	

L2 Phase		Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Remark
No.	Frequency	OP	CAV	[dB]	OP	CAV	OP	AV	OP	CAV	
	[MHz]	[dB(uV)]	[dB(uV)]		[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]	
001	0.25616	24.0	24.0	0.0	24.0	24.0	60.0	45.0	15.0	15.0	
002	0.30031	24.0	24.0	0.0	24.0	24.0	60.0	45.0	15.0	15.0	
003	0.34739	24.0	24.0	0.0	24.0	24.0	60.0	45.0	15.0	15.0	
004	0.39924	24.0	24.0	0.0	24.0	24.0	60.0	45.0	15.0	15.0	
005	0.55758	24.0	24.0	0.0	24.0	24.0	60.0	45.0	15.0	15.0	
006	0.68077	24.0	24.0	-1.1	24.0	24.0	60.0	45.0	17.0	15.0	

L3 Phase		Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Remark
No.	Frequency	OP	CAV	[dB]	OP	CAV	OP	AV	OP	CAV	
	[MHz]	[dB(uV)]	[dB(uV)]		[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]	
001	0.25444	26.0	26.0	0.0	26.0	26.0	61.6	46.0	15.6	15.6	
002	0.47355	26.0	26.0	-1.0	26.0	26.0	66.0	46.0	16.0	15.6	
003	1.70553	26.0	26.0	-4.6	26.0	26.0	66.0	46.0	16.0	15.6	
004	0.24204	11.0	11.0	0.0	11.0	11.0	62.0	42.0	10.0	10.1	

Final Result

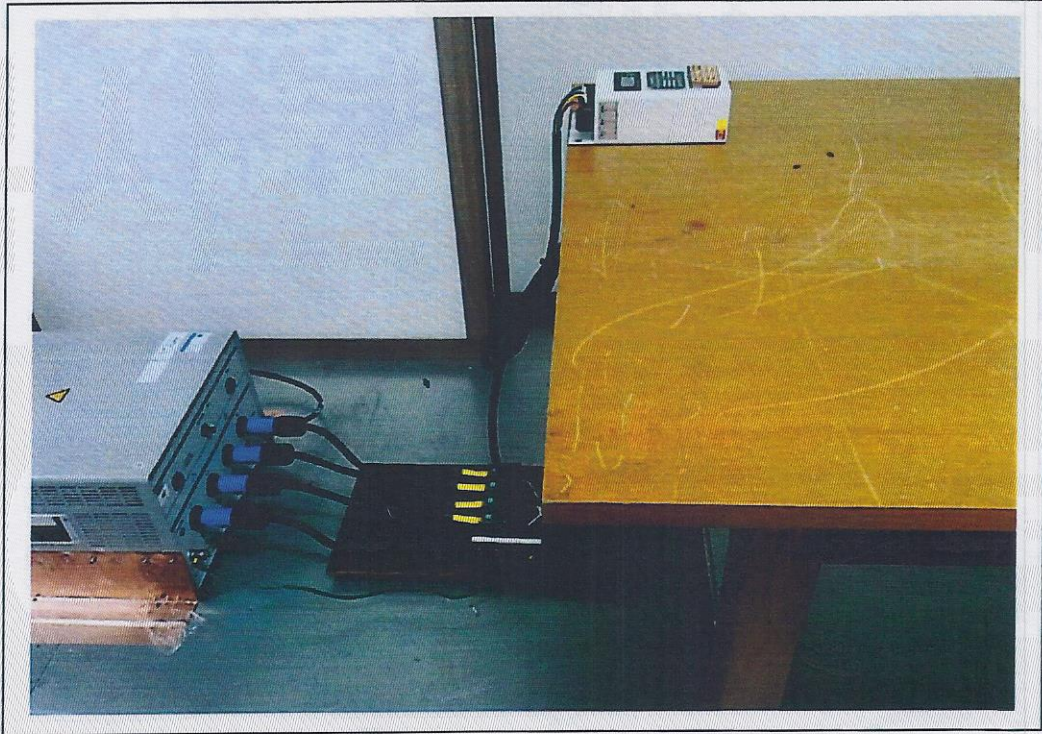
L3 Phase		Reading	Reading	c.f	Result	Result	Limit	Limit	Margin	Margin	Remark
No.	Frequency	OP	CAV	[dB]	OP	CAV	OP	AV	OP	CAV	
	[MHz]	[dB(uV)]	[dB(uV)]		[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]	
001	0.40476	11.0	11.0	0.0	11.0	11.0	67.4	47.4	15.0	14.0	
002	0.40953	2.0	2.0	0.0	2.0	2.0	60.0	60.0	17.0	16.7	



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## 4.1.6 Test Photo



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## 4.2 Radiated Disturbance

### 4.2.1 Test Instruments

Description	Model	Manufacturer	Serial number	Next Cal. Date	Use
EMI Receiver	N9038A	Agilent	MY53290083	2015-06-03	■
EMI Receiver	ESU40	Rohde & Schwarz	100198	2015-10-21	■
Pre amplifier	310N	Sonoma Instrument Co.	340214	2015-05-08	■
Pre amplifier	310N	Sonoma Instrument Co.	340215	2015-05-08	■
Antenna	Vulb9163	Schwarzbeck	498	2015-06-27	■
Antenna	Vulb9163	Schwarzbeck	385	2015-06-13	■
Antenna Master	MA 4000-EP	innco systems	201/16140507/L	-	■
Antenna Master	MA 4000-EP	innco systems	243/21551208/L	-	■
Turn Table	DT3000-3t	innco systems	-	-	■

### 4.2.2 Test Site: 10 m Chamber

4.2.3 Operating Environment: Temperature: (22 ± 2) °C, Relative Humidity: (44 ± 5) % R.H.

### 4.2.4 Test Method

※ KS C CISPR 22

- 1) - 6) Same with the test method 4.1.4
- 7) The EUT arrange that the maximum radiation occur with peripheral device and cable, etc.
- 8) The EUT is rotated by 360 degrees, the antenna shall be adjusted between 1 m and 4 m in height. Antenna-to-EUT polarization (horizontal and vertical) shall be varied during the measurements to find the maximum field-strength readings.
- 9) A measurement distance is 10 m.
- 10) The noise electric field strength calculates the following formulas.

$$F1[\text{dBuV/m}] = F2[\text{dBuV}] + AF[\text{dB/m}] + CL[\text{dB}]$$

F1 : Result    F2 : Reading    AF : Antenna correction Factor    CL : Cable Loss



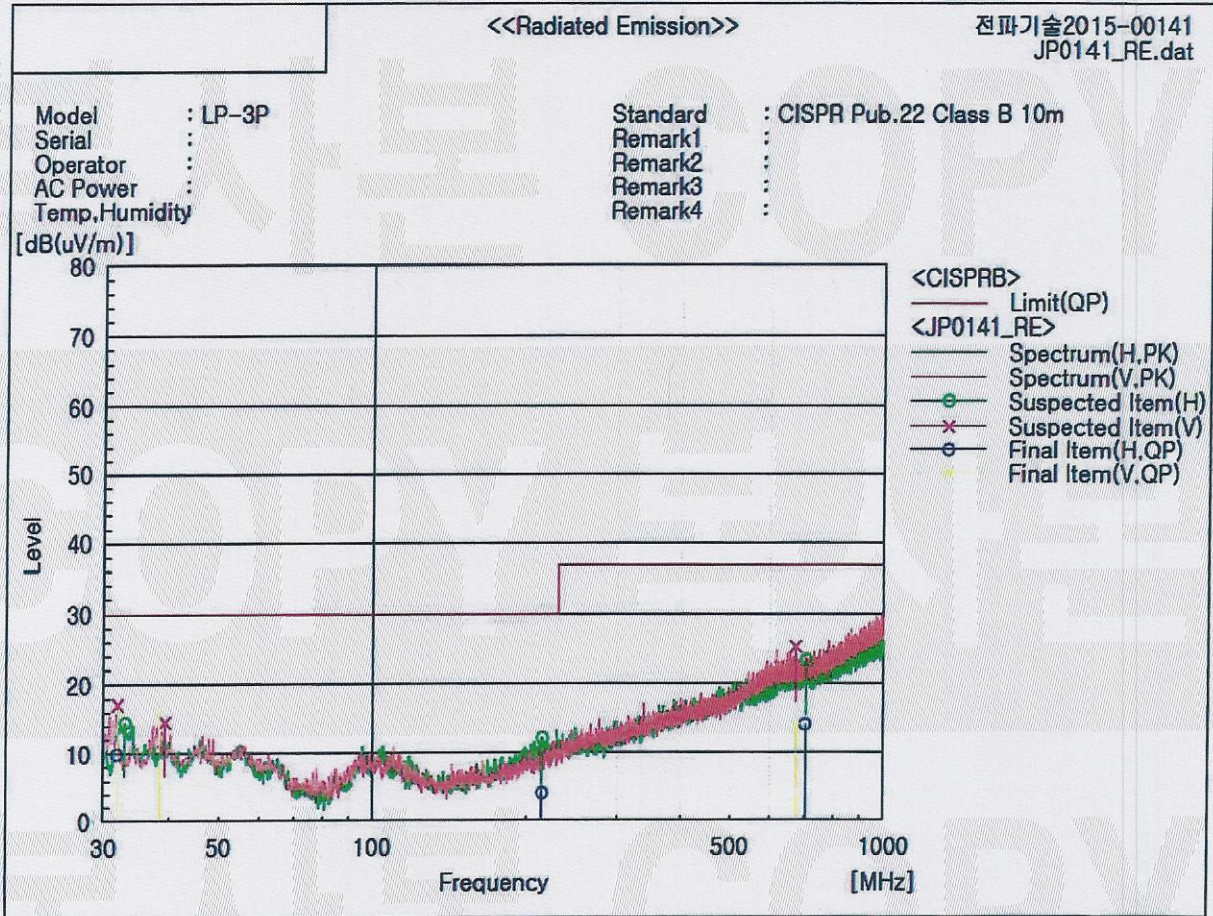


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4.2.5 Test Result:  Pass(Refer to below graph)  Fail



**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]	System	Remark
1	31.764	H	29.6	-19.7	9.9	30.0	20.1	270.0	21.2	1	
2	214.345	H	20.5	-16.5	4.0	30.0	26.0	286.0	2.5	1	
3	702.993	H	19.6	-5.5	14.1	37.0	22.9	394.0	42.1	1	
4	31.841	V	35.4	-19.0	16.4	30.0	13.6	173.0	303.3	2	
5	38.417	V	32.8	-16.9	15.9	30.0	14.1	242.0	170.4	2	
6	676.355	V	18.4	-4.7	13.7	37.0	23.3	360.0	52.9	2	



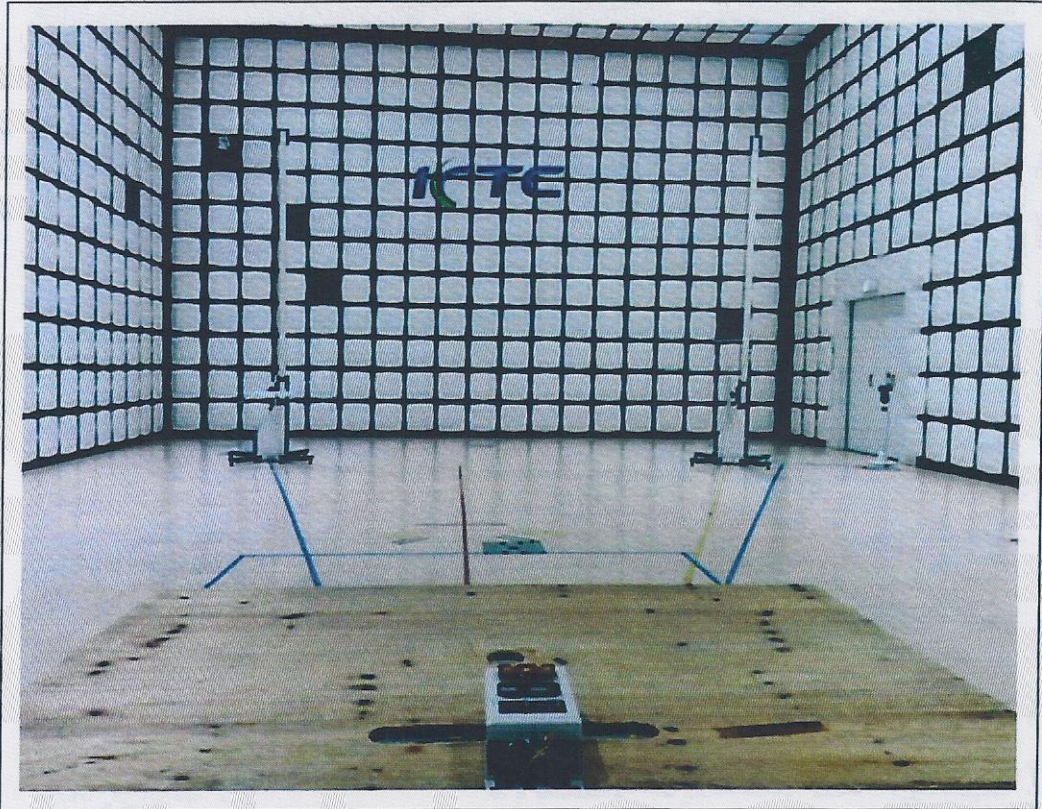


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## 4.2.6 Test photo







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## 4.4 Radio Frequency Electromagnetic Fields Immunity Test

### 4.4.1 Test Instruments

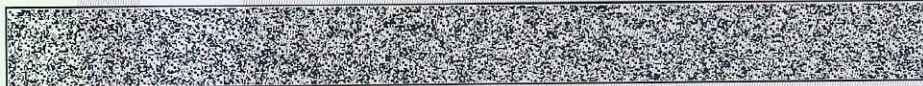
Description	Model	Manufacturer	Next Cal. Date	Use
Signal Generator	N518A	AGILENT	2015-10-08	■
RF Power Meter	NRP2	Rohde & Schwarz	2015-10-08	■
AVG POWER SENSOR	NRP-Z91	Rohde & Schwarz	2015-10-08	■
AVG POWER SENSOR	NRP-Z91	Rohde & Schwarz	2015-10-08	■
DIRECTIONAL COUPLER	DC6180A	AMPLIFIER RESEARCH	2015-10-08	■
DUAL DIRECTIONAL COUPLER	DC7144A	AMPLIFIER RESEARCH	2015-10-08	■
RF Power Amplifier	500W1000B	AMPLIFIER RESEARCH	-	■
RF Power Amplifier	100S1G6	AMPLIFIER RESEARCH	-	■
Log Periodic Antenna	LPDA-0803	TDK	-	□
High gain Horn Antenna	BBHA9120E	SCHWARZBECK	-	■

### 4.4.2 Test Site: Shielding room

4.4.3 Operating Environment: Temperature: (23 ± 2) °C, Relative Humidity: (41 ± 5) % R.H.

### 4.4.4 Test Conditions

Antenna Polarization:	Horizontal and Vertical
Antenna distance:	3 m
Electric Field Strength:	3 V/m
Frequency Range:	80 MHz to 1 000 MHz, 1 400 to 2 700 MHz
Modulation:	AM 80 %, 1 kHz sine wave
Sweep Capability:	1.5 x 10 <sup>-3</sup> decades/sec
Frequency Step:	1 % step
Side of the equipment under test:	4 sides
Performance Evaluation Criterion:	A



# Test Report

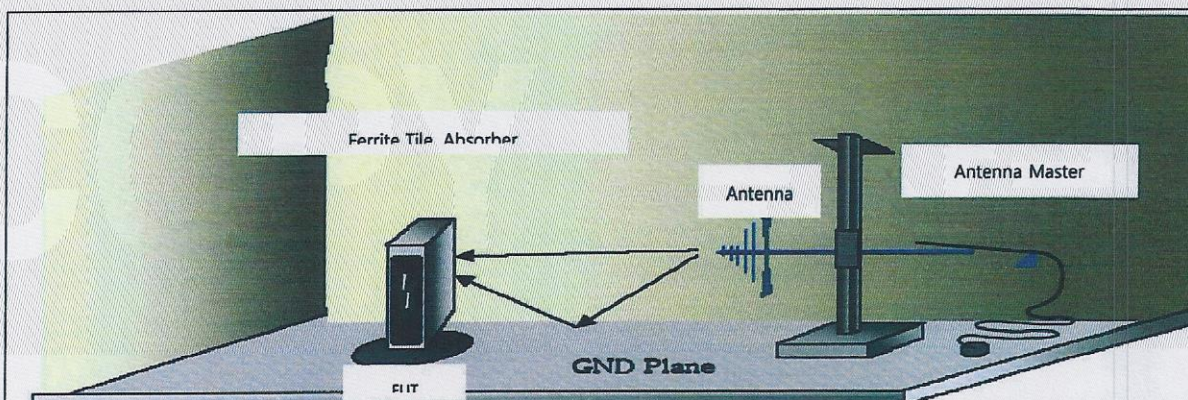
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## 4.4.5 Test Method

The immunity against radio frequency electromagnetic fields has been tested in accordance with KS C IEC 61000-4-3.

The EUT was placed on a non-metallic table 0.8 m above the reference ground plane covered with grid ferrite tiles and was operated according to its specified operating mode. The field strength was monitored by 3 isotropic sensors during the complete test. The isotropic sensors were located beside the equipment. The antenna has been oriented for both horizontal and vertical polarization. The distance between antenna and the equipment under facing each of the four sides of the EUT.

## 4.4.6 Test Configuration



## 4.4.7 Test Result: Continuous

No	Item	Limits	Test Result			
			Meas.	DL	UL	
1	Max. Output Power	[DL] +43[dBm]/Total @ +2.7 dB ~ -2.7 dB [UL] +30[dBm]/Total @ +2.7 dB ~ -2.7 dB	10 MHz	43.00 dBm	29.95 dBm	
2	ACLR	±2.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-59.55 dBc		
			Upper	-67.44 dBc		
		±7.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-73.43 dBc		
			Upper	-73.65 dBc		
		±2.5 MHz@Less than -32.2 dB/3.84 MHz	Lower			-62.78 dBc
			Upper			-65.84 dBc
±7.5 MHz@Less than -32.2 dB/3.84 MHz	Lower		-72.58 dBc			
	Upper		-72.49 dBc			





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1	DL																				
	Item : Output Power	763 MHz	LTE 10MHz																		
DL		GAIN : 100 dB	Input : -87 dBm Output : +43 dBm																		
* Agilent		Meas Setup																			
Ch Freq 763 MHz Trig Free		Avg Number 10																			
Channel Power		On Off																			
Ref 35.73 dBm *Atten 24 dB		Avg Mode Repeat																			
		Integ BW 10.0000 MHz																			
Center 763.00 MHz Span 12 MHz		Chan Pwr Span 12.000000 MHz																			
*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level																			
Channel Power 43.00 dBm /10.0000 MHz		Power Spectral Density -27.00 dBm/Hz																			
Copyright 2000-2005 Agilent Technologies																					
2	ACL																				
	Item : ACLR	763 MHz	LTE 10MHz																		
DL		GAIN : 100 dB	Input : -87 dBm Output : +43 dBm																		
* Agilent		Meas Setup																			
Ch Freq 763 MHz Trig Free		Avg Number 10																			
Adj Channel Power		On Off																			
Ref 33.36 dBm *Atten 18 dB		Avg Mode Repeat																			
		Chan Integ BW 10.0000 MHz																			
Center 763.00 MHz Span 30 MHz		Offset/Limits																			
*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type Total Pwr Ref																			
<table border="1"> <thead> <tr> <th>RMS Results</th> <th>Freq Offset</th> <th>Ref BW</th> <th>dBc Lower</th> <th>dBc</th> <th>dBc Upper</th> </tr> </thead> <tbody> <tr> <td>Carrier Power</td> <td>7.580 MHz</td> <td>3.040 MHz</td> <td>-59.55</td> <td>-16.59</td> <td>-67.44</td> </tr> <tr> <td>42.96 dBm / 10.0000 MHz</td> <td>12.50 MHz</td> <td>3.040 MHz</td> <td>-73.43</td> <td>-30.47</td> <td>-73.65</td> </tr> </tbody> </table>		RMS Results	Freq Offset	Ref BW	dBc Lower	dBc	dBc Upper	Carrier Power	7.580 MHz	3.040 MHz	-59.55	-16.59	-67.44	42.96 dBm / 10.0000 MHz	12.50 MHz	3.040 MHz	-73.43	-30.47	-73.65	Optimize Ref Level	
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42.96 dBm / 10.0000 MHz	12.50 MHz	3.040 MHz	-73.43	-30.47	-73.65																
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No.	UL																										
1	Item : Output Power	793 MHz	LTE 10MHz																								
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm																								
	* Agilent		Meas Setup																								
	Ch Freq 793 MHz Trig Free		Avg Number 10																								
	Channel Power		Exp Off																								
	Ref 22.58 dBm *Atten 10 dB		Avg Mode Repeat																								
			Integ BW 10.0000 MHz																								
	Center 793.00 MHz Span 12 MHz		Chan Pwr Span 12.000000 MHz																								
	*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level																								
	<b>Channel Power</b> 29.95 dBm /10.0000 MHz		<b>Power Spectral Density</b> -40.05 dBm/Hz																								
Copyright 2000-2008 Agilent Technologies																											
2	Item : ACLR	793 MHz	LTE 10MHz																								
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm																								
	* Agilent		Meas Setup																								
	Ch Freq 793 MHz Trig Free		Avg Number 10																								
	Adj Channel Power		Exp Off																								
	Ref 20.44 dBm *Atten 6 dB		Avg Mode Repeat																								
			Chan Integ BW 10.0000 MHz																								
	Center 793.00 MHz Span 30 MHz		Offset/Limits																								
	*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type Total Pwr Ref																								
	<b>RMS Results</b> <table border="1" style="font-size: 0.8em;"> <thead> <tr> <th>Carrier Power</th> <th>Freq Offset</th> <th>Ref BW</th> <th>dBc</th> <th>Lower</th> <th>dBc</th> <th>Upper</th> <th>dBc</th> </tr> </thead> <tbody> <tr> <td>29.95 dBm / 10.0000 MHz</td> <td>7.500 MHz</td> <td>3.840 MHz</td> <td>-62.78</td> <td>-32.93</td> <td>-65.84</td> <td>-35.89</td> <td>-42.54</td> </tr> <tr> <td></td> <td>12.50 MHz</td> <td>3.840 MHz</td> <td>-72.58</td> <td>-42.64</td> <td>-72.49</td> <td></td> <td></td> </tr> </tbody> </table>		Carrier Power	Freq Offset	Ref BW	dBc	Lower	dBc	Upper	dBc	29.95 dBm / 10.0000 MHz	7.500 MHz	3.840 MHz	-62.78	-32.93	-65.84	-35.89	-42.54		12.50 MHz	3.840 MHz	-72.58	-42.64	-72.49			Optimize Ref Level
Carrier Power	Freq Offset	Ref BW	dBc	Lower	dBc	Upper	dBc																				
29.95 dBm / 10.0000 MHz	7.500 MHz	3.840 MHz	-62.78	-32.93	-65.84	-35.89	-42.54																				
	12.50 MHz	3.840 MHz	-72.58	-42.64	-72.49																						
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## 4.5 Electrical Fast Transients Immunity Test

### 4.5.1 Test Instruments

Description	Model	Manufacturer	Next Cal. Date	Use
Burst & Surge Tester	UCS500N7.2	EM Test	2015-10-10	■
Burst & Surge Tester	CNI503b9.4	EM Test	2015-10-10	■
Capacitive Coupling Clamp	HFK	EM Test	2015-10-10	□

### 4.5.2 Test Site: Laboratory

4.5.3 Operating Environment: Temperature: (23 ± 2) °C, Relative Humidity: (41 ± 5) % R.H.

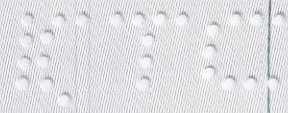
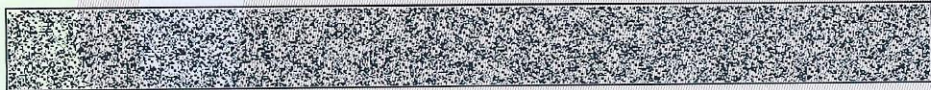
### 4.5.4 Test Conditions

Test Voltage: RF (2 port) ± 0.5 kV  
 LAN (1 port) ± 0.5 kV  
 Ext. ALM (1 port) ± 0.5 kV  
 MR DC OUT (1 port) ± 0.5 kV  
 DC -48 V port ± 1.0 kV

Impulse Repetition Frequency: 5 kHz  
 Impulse Rise Time: 5 ns ± 30 %  
 Impulse Cycle: 50 ns ± 30 %  
 Impulse Duration: 15 ms ± 20 %  
 Burst Period: 300 ms ± 20 %  
 Application Time: 1  
 Application Method: Input DC power port (Coupling / decoupling network) Etc. (Capacitive coupling clamp)  
 Performance Evaluation Criterion: B

### 4.5.5 Test Method

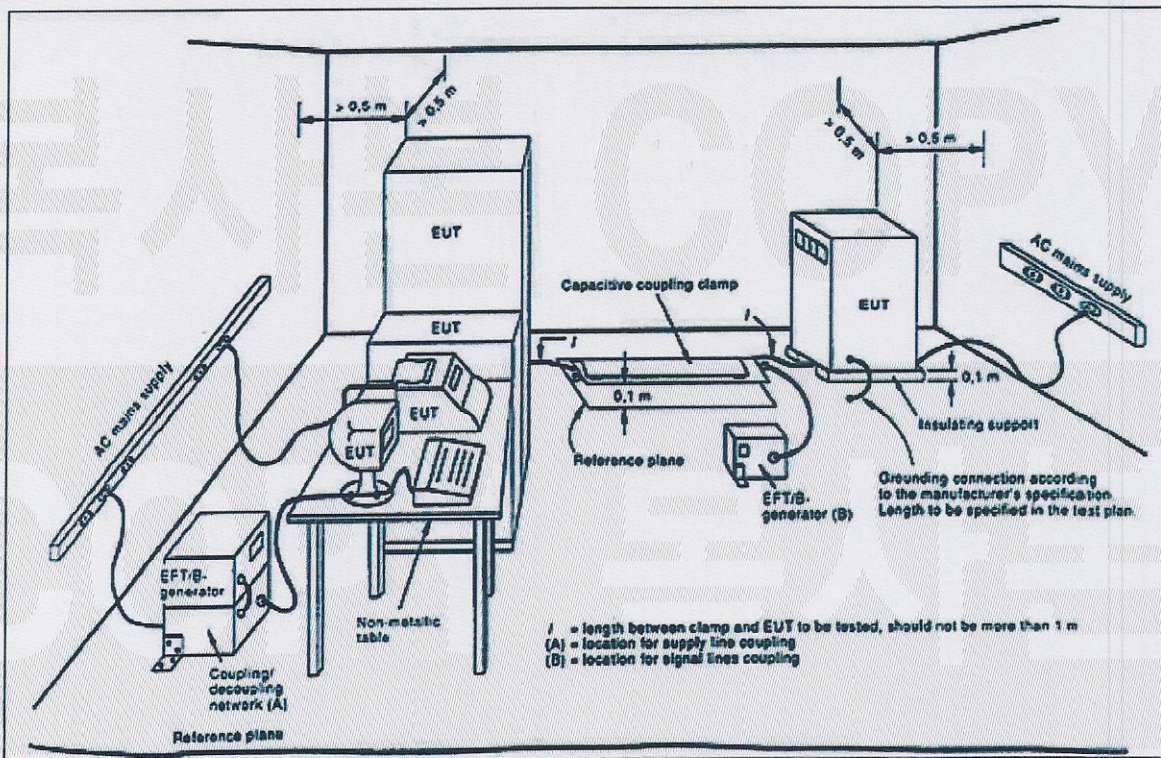
The immunity against fast transients on the DC power line was tested in accordance with KS C IEC 61000-4-4. The EUT was placed on a non-conductive support 0.8 m above a reference ground plane(RGP) and was put into operation according to the stand-by operation mode. The GRP exceeded the projected geometry of the EUT and the capacitive clamp by more than 20 cm. The clamp has been placed directly on the GRP. The un-used signal connector of the clamp has been terminated with a 50 resistor. The distance between the EUT and all other conductive structures, except the ground plane beneath the EUT, was more than 0.5 m.



# Test Report

Report No. : 전파기술2015-00141

## 4.5.6 Test Configuration



## 4.5.7 Test Result: After Electrical first transient test

[Input/output DC Power Ports]

Application Point	Criterion	Test Result	
		(+) Burst	(-) Burst
DC IN	-	-	-
DC OUT	-	-	-

[Input/output DC Power Ports and Signal Ports]

Application Point	Criterion	Test Result	
		(+) Burst	(+) Burst
DC -48V Ports (1 Port)	B	A	A
RF Ports (2 Ports)	B	A	A
LAN Ports (1 Port)	B	A	A
MR DC OUT Ports (1 Port)	B	A	A
Ext. ALM (1 port)	B	A	A





Korea Testing Certification

# Test Report

Report No. : 전 파기술2015-00141

No	Item	Limits	Test Result			
			Meas.	DL	UL	
1	Max. Output Power	【DL】 '+43[dBm]/Total @ +2.7 dB ~ -2.7 dB 【UL】 '+30[dBm]/Total @ +2.7 dB ~ -2.7 dB	10 MHz	42.93 dBm	29.96 dBm	
2	ACLR	±2.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-60.54 dBc		
			Upper	-66.23 dBc		
		±7.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-73.34 dBc		
			Upper	-73.65 dBc		
		±2.5 MHz@Less than -32.2 dB/3.84 MHz	Lower			-62.82 dBc
			Upper			-66.05 dBc
		±7.5 MHz@Less than -35.2 dB/3.84 MHz	Lower			-72.69 dBc
			Upper			-72.56 dBc





Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

1	DL																																																																							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Item : Output Power</td> <td>763 MHz</td> <td>LTE 10MHz</td> </tr> <tr> <td>DL</td> <td>GAIN : 100 dB</td> <td>Input : -57 dBm</td> <td>Output : +43 dBm</td> </tr> <tr> <td colspan="4">* Agilent</td> </tr> <tr> <td colspan="2">Ch Freq 763 MHz</td> <td colspan="2">Trig Free</td> </tr> <tr> <td colspan="2">Channel Power</td> <td colspan="2"></td> </tr> <tr> <td colspan="4"> </td> </tr> <tr> <td colspan="2">Center 763.00 MHz</td> <td colspan="2">Span 12 MHz</td> </tr> <tr> <td colspan="2">*Res BW 100 kHz</td> <td colspan="2">*VBW 1 kHz Sweep 295.9 ms (601 pts)</td> </tr> <tr> <td colspan="2">Channel Power</td> <td colspan="2">Power Spectral Density</td> </tr> <tr> <td colspan="2">42.93 dBm /10.0000 MHz</td> <td colspan="2">-27.07 dBm/Hz</td> </tr> <tr> <td colspan="4">Copyright 2000-2008 Agilent Technologies</td> </tr> </table>	Item : Output Power		763 MHz	LTE 10MHz	DL	GAIN : 100 dB	Input : -57 dBm	Output : +43 dBm	* Agilent				Ch Freq 763 MHz		Trig Free		Channel Power								Center 763.00 MHz		Span 12 MHz		*Res BW 100 kHz		*VBW 1 kHz Sweep 295.9 ms (601 pts)		Channel Power		Power Spectral Density		42.93 dBm /10.0000 MHz		-27.07 dBm/Hz		Copyright 2000-2008 Agilent Technologies																														
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# Test Report

Report No. : 전파기술2015-00141

No.	UL																						
1	Item : Output Power	793 MHz	LTE 10MHz																				
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm																				
	* Agilent		Meas Setup																				
	Ch Freq 793 MHz	Trig Free	Avg Number 10																				
	Channel Power		On Off																				
	Ref 24.38 dBm *Atten 10 dB		Avg Mode Repeat																				
			Integ BW 10.0000 MHz																				
	Center 793.00 MHz Span 12 MHz		Chan Pwr Span 12.000000 MHz																				
	*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level																				
	<b>Channel Power</b> 29.95 dBm /10.0000 MHz		More 1 of 2																				
<b>Power Spectral Density</b> -40.04 dBm/Hz																							
Copyright 2000-2006 Agilent Technologies																							
2	Item : ACLR	793 MHz	LTE 10MHz																				
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm																				
	* Agilent		Meas Setup																				
	Ch Freq 793 MHz	Trig Free	Avg Number 10																				
	Adj Channel Power		On Off																				
	Ref 20.38 dBm *Atten 6 dB		Avg Mode Repeat																				
			Chan Integ BW 10.0000 MHz																				
	Center 793.00 MHz Span 30 MHz		Offset/Limits																				
	*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type Total Pwr Ref																				
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	12.50 MHz	3.840 MHz	-72.69	-42.70	-72.56	-42.57																	
		More 1 of 2																					
Copyright 2000-2006 Agilent Technologies																							





Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

## LMT

**FirstNet\_LMT Ver. 1.0.0**

TX [ ] RX [ ] COMB [ ] CLOSE Maintenance [OFF]

STATUS	CONTROL	DETAIL	ALARM MASK	ALARM SETTING	DOWNLOAD	ALARM HISTORY	EXTENTION
<b>Downlink</b> <input checked="" type="radio"/> Input -57.0 dBm <input checked="" type="radio"/> Output 43.0 dBm Gain 100.0 dB Isolation 121.6 dB Iso. Avg 121.0 dB RS Input -84.9 dBm RS Output 15.1 dBm CINR 15.6 dB PCI 1 Gain Mode [GAIN SET] Target RS 11 dBm Target Gain 100 dB <input checked="" type="radio"/> PAU <input checked="" type="radio"/> Cancellation Status	<b>Uplink</b> <input checked="" type="radio"/> Input -98.6 dBm <input checked="" type="radio"/> Output 1.4 dBm Gain 100.0 dB Isolation 124.0 dB Iso. Avg 123.4 dB Gain Mode [GAIN SET] Gain Balance 0 dB Target Gain 100 dB <input checked="" type="radio"/> PAU <input checked="" type="radio"/> Cancellation Status	<b>System</b> Model IRES-700US10-20 F/W Version 4.0.0(4.0.0) S/N A00290000040R Rep ID FN123456 Server IP 172.17.175.10 Rep IP 192.168.0.101 Subnet Mask 255.255.255.255 Gateway IP 192.168.0.254 Select Pattern [LTE10M] Detect Carrier [0] CINR Threshold [-5 dB]	<input checked="" type="radio"/> High Temp. 31.7 °C <input checked="" type="radio"/> Low Temp. <input checked="" type="radio"/> Initialization <input checked="" type="radio"/> VSWR Fall <input checked="" type="radio"/> Device Fall <input checked="" type="radio"/> RS Detect <input checked="" type="radio"/> Alarm Mask <input checked="" type="radio"/> Test Alarm F/W reflect Mode <input checked="" type="radio"/> Immediately <input checked="" type="radio"/> Schedule 0 : 0 Rep Time 2015/01/05 18:05:40 Time Sync. Re-search Export Restart				

## Ext. ALM.

**FirstNet\_LMT Ver. 1.0.0**

TX [ ] RX [ ] COMB [ ] CLOSE Maintenance [OFF]

STATUS	CONTROL	DETAIL	ALARM MASK	ALARM SETTING	DOWNLOAD	ALARM HISTORY	EXTENTION
<b>Downlink</b> <input checked="" type="radio"/> Input -57.0 dBm <input checked="" type="radio"/> Output 43.0 dBm Gain 100.0 dB Isolation 121.5 dB Iso. Avg 121.2 dB RS Input -84.9 dBm RS Output 15.1 dBm CINR 16.0 dB PCI 1 Gain Mode [GAIN SET] Target RS 11 dBm Target Gain 100 dB <input checked="" type="radio"/> PAU <input checked="" type="radio"/> Cancellation Status	<b>Uplink</b> <input checked="" type="radio"/> Input -99.7 dBm <input checked="" type="radio"/> Output 0.3 dBm Gain 100.0 dB Isolation 123.2 dB Iso. Avg 123.6 dB Gain Mode [GAIN SET] Gain Balance 0 dB Target Gain 100 dB <input checked="" type="radio"/> PAU <input checked="" type="radio"/> Cancellation Status	<b>System</b> Model IRES-700US10-20 F/W Version 4.0.0(4.0.0) S/N A00290000040R Rep ID FN123456 Server IP 172.17.175.10 Rep IP 192.168.0.101 Subnet Mask 255.255.255.255 Gateway IP 192.168.0.254 Select Pattern [LTE10M] Detect Carrier [0] CINR Threshold [-5 dB]	<input checked="" type="radio"/> High Temp. 31.9 °C <input checked="" type="radio"/> Low Temp. <input checked="" type="radio"/> Initialization <input checked="" type="radio"/> VSWR Fall <input checked="" type="radio"/> Device Fall <input checked="" type="radio"/> RS Detect <input checked="" type="radio"/> Alarm Mask <input checked="" type="radio"/> Test Alarm F/W reflect Mode <input checked="" type="radio"/> Immediately <input checked="" type="radio"/> Schedule 0 : 0 Rep Time 2015/01/05 18:07:13 Time Sync. Re-search Export Restart				





Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

## 4.6 Surge Immunity Test

### 4.6.1 Test Instruments

Description	Model	Manufacturer	Next Cal. Date	Use
Burst & Surge Tester	UCS500N7.2	EM Test	2015-10-10	■
Burst & Surge Tester	CNI503b9.4	EM Test	2015-10-10	■
Capacitive Coupling Clamp	HFK	EM Test	2015-10-10	□

### 4.6.2 Test Site: Laboratory

4.6.3 Operating Environment: Temperature: (23 ± 2) °C, Relative Humidity: (41 ± 5) % R.H.

### 4.6.4 Test Conditions

Test Voltage: RF (2 port) ± 4.0 kV  
 LAN (1 port) ± 4.0 kV  
 Ext. ALM (1 port) ± 4.0 kV  
 MR DC OUT (1 port) ± 4.0 kV  
 DC -48 V port ± 1.0 kV

Open Circuit Voltage Waveform: 1.2/50 μs  
 Short Circuit Current Waveform: 8/20 μs  
 Polarization: + / -  
 Phase angle: 0°, 90°, 180°, 270° (Input AC power port)  
 Number of Test: 5  
 Repetition rate: Once per minute  
 Performance Evaluation Criterion: B

### 4.6.5 Test Method

The immunity against surge on the DC power line was tested in accordance with KS C IEC 61000-4-5 For line to line coupling the ground output of pulse generator has been connected directly to one power line. The signal output of pulse generator has been connected via 18 uF.





Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

## 4.6.6 Test Result: After Surge test

[Input/output DC Power Ports]

Application Point	Criteria	Test Result	
		(+) Surge	(-) Surge
DC IN	-	-	-
DC OUT	-	-	-

[Input/output DC Power Ports and Signal Ports]

Application Point	Criteria	Test Result	
		(+) Surge	(+) Surge
DC -48V Ports (1 Port)	B	A	A
RF Ports (2 Ports)	B	A	A
LAN Ports (1 Port)	B	A	A
MR DC OUT Ports (1 Port)	B	A	A
Ext. ALM (1 port)	B	A	A

No	Item	Limits	Test Result			
			Meas.	DL	UL	
1	Max. Output Power	【DL】 '+43[dBm]/Total @ +2.7 dB ~ -2.7 dB 【UL】 '+30[dBm]/Total @ +2.7 dB ~ -2.7 dB	10 MHz	42.94 dB m	29.95 dB m	
2	ACLR	±2.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-60.03 dBc		
			Upper	-67.03 dBc		
		±7.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-73.38 dBc		
			Upper	-73.62 dBc		
		±2.5 MHz@Less than -32.2 dB/3.84 MHz	Lower			-62.76 dBc
			Upper			-65.97 dBc
		±7.5 MHz@Less than -35.2 dB/3.84 MHz	Lower			-7.64 dBc
			Upper			-72.58 dBc





Korea Testing Certification

# Test Report

Report No. : 전 파기술2015-00141

1	No.	DL																														
	Item : Output Power	763 MHz		LTE 10MHz																												
	DL	GAIN : 100 dB	Input : -57 dBm	Output : +43 dBm																												
	* Agilent			Meas Setup																												
	Ch Freq	763 MHz	Trig Free	Avg Number 10 On Off																												
	Channel Power			Avg Mode Repeat																												
	Ref 35.99 dBm	*Atten 24 dB		Integ BW 10.0000 MHz																												
				Chan Pwr Span 12.000000 MHz																												
	Center 763.00 MHz	Span 12 MHz		Optimize Ref Level																												
	*Res BW 100 kHz	*VBW 1 kHz	Sweep 295.9 ms (601 pts)	More 1 of 2																												
	Channel Power	Power Spectral Density																														
	42.94 dBm /10.0000 MHz	-27.06 dBm/Hz																														
	Copyright 2000-2006 Agilent Technologies																															
2	Item : ACLR	763 MHz		LTE 10MHz																												
	DL	GAIN : 100 dB	Input : -57 dBm	Output : +43 dBm																												
	* Agilent			Meas Setup																												
	Ch Freq	763 MHz	Trig Free	Avg Number 10 On Off																												
	Adj Channel Power			Avg Mode Repeat																												
	Ref 33.56 dBm	*Atten 18 dB		Chan Integ BW 10.0000 MHz																												
				Offset/Limits																												
	Center 763.00 MHz	Span 30 MHz		Meas Type Total Pwr Ref																												
	*Res BW 100 kHz	*VBW 1 kHz	Sweep 739.8 ms (601 pts)	Optimize Ref Level																												
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RMS Results	Freq Offset	Ref BW	dBc Lower	dBc	dBc Upper	dBc																										
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	Copyright 2000-2006 Agilent Technologies																															





Korea Testing Certification

# Test Report

Report No. : 전파기술2015-00141

No.	UL																
1	Item : Output Power	793 MHz	LTE 10MHz														
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm														
	* Agilent		Meas Setup														
	Ch Freq 793 MHz	Trig Free	Avg Number 10														
	Channel Power		On Off														
	Ref 23.56 dBm *Atten 10 dB		Avg Mode Repeat														
	Log 10 dB/Offst 40 dB		Integ BW 10.0000 MHz														
	Center 793.00 MHz Span 12 MHz		Chan Pwr Span 12.000000 MHz														
	*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level														
	Channel Power	Power Spectral Density	More 1 of 2														
29.95 dBm /10.0000 MHz	-40.05 dBm/Hz																
Copyright 2009-2006 Agilent Technologies																	
2	Item : ACLR	793 MHz	LTE 10MHz														
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm														
	* Agilent		Meas Setup														
	Ch Freq 793 MHz	Trig Free	Avg Number 10														
	Adj Channel Power		On Off														
	Ref 20.43 dBm *Atten 6 dB		Avg Mode Repeat														
	Log 10 dB/Offst 40 dB		Chan Integ BW 10.0000 MHz														
	Center 793.00 MHz Span 30 MHz		Offset/Limits														
	*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type, Total Pwr Ref														
	RMS Results	Optimize Ref Level	More 1 of 2														
Carrier Power 29.99 dBm / 10.0000 MHz	<table border="1"> <thead> <tr> <th>Freq Offset</th> <th>Ref BW</th> <th>dBc Lower</th> <th>dBc</th> <th>dBc Upper</th> </tr> </thead> <tbody> <tr> <td>7.500 MHz</td> <td>3.040 MHz</td> <td>-62.76</td> <td>-32.77</td> <td>-65.97</td> </tr> <tr> <td>12.50 MHz</td> <td>3.040 MHz</td> <td>-72.64</td> <td>-42.65</td> <td>-72.50</td> </tr> </tbody> </table>	Freq Offset	Ref BW	dBc Lower	dBc	dBc Upper	7.500 MHz	3.040 MHz	-62.76	-32.77	-65.97	12.50 MHz	3.040 MHz	-72.64	-42.65	-72.50	
Freq Offset	Ref BW	dBc Lower	dBc	dBc Upper													
7.500 MHz	3.040 MHz	-62.76	-32.77	-65.97													
12.50 MHz	3.040 MHz	-72.64	-42.65	-72.50													
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# Test Report

Report No. : 전파기술2015-00141

## LMT

FirstNet\_LMT Ver. 1.0.0

TX RX COMB CLOSE Maintenance OFF

STATUS CONTROL DETAIL ALARM MASK ALARM SETTING DOWNLOAD ALARM HISTORY EXTENTION

Downlink		Uplink		System	
Input	-57.0 dBm	Input	-99.4 dBm	Model	IRES-700US10-20
Output	43.0 dBm	Output	0.6 dBm	F/W Version	4.0.0(4.0.0)
Gain	100.0 dB	Gain	100.0 dB	S/N	A00290000040R
Isolation	120.8 dB	Isolation	121.8 dB	Rep ID	FNI23456
Iso. Avg	120.8 dB	Iso. Avg	121.3 dB	Server IP	172.17.175.10
RS Input	-85.0 dBm			Rep IP	192.168.0.101
RS Output	15.0 dBm			Subnet Mask	255.255.255.255
CINR	16.0 dB			Gateway IP	192.168.0.254
PCI	1			Select Pattern	LTE10M
Gain Mode	GAIN SET	Gain Mode	GAIN SET	Detect Carrier	0
Target RS	11 dBm	Gain Balance	0 dB	CINR Threshold	-5 dB
Target Gain	100 dB	Target Gain	100 dB		
PAU	ON	PAU	ON	External Alarm #1	●
Cancellation Status	●	Cancellation Status	●	External Alarm #2	●

High Temp. 30.8 °C  
 Low Temp. ●  
 Initialization ●  
 VSWR Fail ●  
 Device Fail ●  
 RS Detect ●  
 Alarm Mask 24 Hour None  
 Test Alarm OFF

F/W reflect Mode  
 Immediately  
 Schedule 0 : 0

Rep Time 2015/01/05 17:21:45 Time Sync.  
 Re-search  
 Export Restart

## Ext. ALM

FirstNet\_LMT Ver. 1.0.0

TX RX COMB CLOSE Maintenance OFF

STATUS CONTROL DETAIL ALARM MASK ALARM SETTING DOWNLOAD ALARM HISTORY EXTENTION

Downlink		Uplink		System	
Input	-57.0 dBm	Input	-99.8 dBm	Model	IRES-700US10-20
Output	43.0 dBm	Output	0.2 dBm	F/W Version	4.0.0(4.0.0)
Gain	100.0 dB	Gain	100.0 dB	S/N	A00290000040R
Isolation	120.9 dB	Isolation	121.9 dB	Rep ID	FNI23456
Iso. Avg	120.8 dB	Iso. Avg	121.2 dB	Server IP	172.17.175.10
RS Input	-85.0 dBm			Rep IP	192.168.0.101
RS Output	15.0 dBm			Subnet Mask	255.255.255.255
CINR	15.5 dB			Gateway IP	192.168.0.254
PCI	1			Select Pattern	LTE10M
Gain Mode	GAIN SET	Gain Mode	GAIN SET	Detect Carrier	0
Target RS	11 dBm	Gain Balance	0 dB	CINR Threshold	-5 dB
Target Gain	100 dB	Target Gain	100 dB		
PAU	ON	PAU	ON	External Alarm #1	●
Cancellation Status	●	Cancellation Status	●	External Alarm #2	●

High Temp. 30.6 °C  
 Low Temp. ●  
 Initialization ●  
 VSWR Fail ●  
 Device Fail ●  
 RS Detect ●  
 Alarm Mask 24 Hour None  
 Test Alarm OFF

F/W reflect Mode  
 Immediately  
 Schedule 0 : 0

Rep Time 2015/01/05 17:21:24 Time Sync.  
 Re-search  
 Export Restart



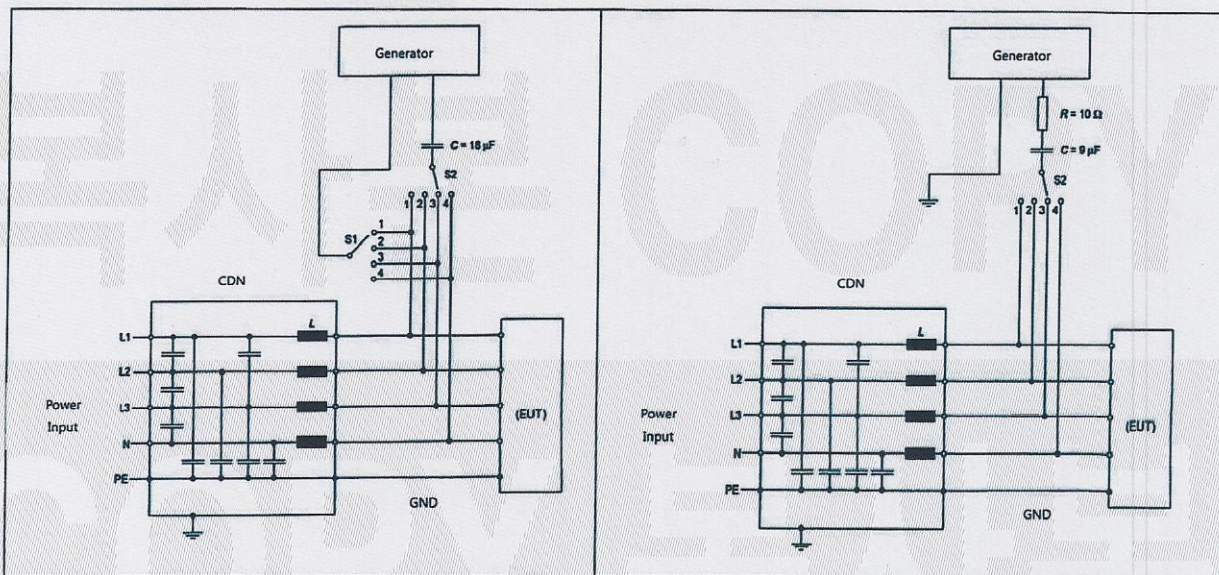




# Test Report

Report No. : 전파기술2015-00141

## 4.6.7 Test Configuration



## 4.7 Conducted Immunity Test

### 4.7.1 Test Instruments

Description	Model	Manufacturer	Next Cal. Date	Use
CONTINUOUS WAVE SIMULATION	CWS500N	EM TEST	2015-10-08	■
ATTENUATOR	ATT6/80	EM TEST	2015-10-07	■
RF Injection clamp	EM101	LUTHI	2015-10-08	■
CDN	CDN M2/M3	LUTHI	2015-10-08	■
CDN	CDN M4 PE-100A	LUTHI	2015-10-08	□
CDN	CDN M2 PE-100A	LUTHI	2015-10-08	□
CDN	CDN M4 N-100A	LUTHI	2015-10-08	□
CDN	CDN M3-100A	LUTHI	2015-10-08	□
CDN	CDN M5-100A	LUTHI	2015-10-08	□

### 4.7.2 Test Site: Laboratory





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# Test Report

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4.7.3 Operating Environment: Temperature: (23 ± 2) °C, Relative Humidity: (41 ± 5) % R.H.

### 4.7.4 Test Conditions

Frequency bandwidth:	150 kHz ~ 80 MHz
Electric Field Strength:	3 V
Modulation:	AM, 80 %, 1 kHz sine wave
Sweep rate:	1.5 x 10 <sup>-3</sup> decades/sec
Frequency Step:	1 % step
Performance Evaluation Criteria:	A

### 4.7.5 Test Method

The immunity against conducted disturbances in the frequency range from 0.15 MHz to 80 MHz has been tested in accordance KS C IEC 61000-4-6.

The EUT was placed on a non-metallic support 0.1 m above a reference ground plane(RGP)with coupling/decoupling networks(CDN) placed 0.3 m from the EUT on the RGP. The disturbance signal level was calibrated as specified in the standard. All relevant cables shall be provided with the appropriate coupling and decoupling devices at a distance between 0.1 m and 0.3 m from the projected geometry of the EUT on the RGP.

### 4.7.6 Test Result: During Continuous Conducted disturbances test

[Input/output DC Power Ports]

Application Point	Criteria	Test Result
DC IN	-	-
DC OUT	-	-

[Signal Ports]

Application Point	Criteria	Test Result
Signal line	A	A

No.	Item	Limits	Test Result			
			Meas.	DL	UL	
1	Max. Output Power	【DL】 +43[dBm]/Total @ +2.7 dB ~ -2.7 dB 【UL】 +30[dBm]/Total @ +2.7 dB ~ -2.7 dB	10 MHz	42.96 dBm	29.93 dBm	
2	ACLR	±2.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-59.71 dBc		
			Upper	-66.97 dBc		
		±7.5 MHz@Less than -44.2 dB/3.84 MHz	Lower	-73.37 dBc		
			Upper	-73.71 dBc		
		±2.5 MHz@Less than -32.2 dB/3.84 MHz	Lower			-62.81 dBc
			Upper			-65.85 dBc
		±7.5 MHz@Less than -35.2 dB/3.84 MHz	Lower			-72.62 dBc
			Upper			-72.48 dBc





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# Test Report

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No.	DL																															
1	Item : Output Power	763 MHz	LTE 10MHz																													
	DL	GAIN : 100 dB	Input : -87 dBm Output : +43 dBm																													
	* Agilent		Meas Setup																													
	Ch Freq 763 MHz	Trig Free	Avg Number 10																													
	Channel Power		On Off																													
	Ref 35.14 dBm *Atten 24 dB		Avg Mode Repeat																													
			Integ BW 10.0000 MHz																													
	Center 763.00 MHz Span 12 MHz		Chan Pwr Span 12.000000 MHz																													
	*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level																													
	<b>Channel Power</b> 42.96 dBm /10.0000 MHz		More 1 of 2																													
<b>Power Spectral Density</b> -27.04 dBm/Hz																																
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2	Item : AGLR	763 MHz	LTE 10MHz																													
	DL	GAIN : 100 dB	Input : -87 dBm Output : +43 dBm																													
	* Agilent		Meas Setup																													
	Ch Freq 763 MHz	Trig Free	Avg Number 10																													
	Adj Channel Power		On Off																													
	Ref 33.35 dBm *Atten 18 dB		Avg Mode Repeat																													
			Chan Integ BW 10.0000 MHz																													
	Center 763.00 MHz Span 30 MHz		Offset/Limits																													
	*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type Total Pwr Ref																													
	<b>RMS Results</b> <table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Freq</th> <th>Offset</th> <th>Ref BW</th> <th>dBc</th> <th>Lower</th> <th>dBm</th> <th>dBc</th> <th>Upper</th> <th>dBm</th> </tr> </thead> <tbody> <tr> <td>42.90 dBm / 10.0000 MHz</td> <td>7.500 MHz</td> <td>3.840 MHz</td> <td>3.840 MHz</td> <td>-59.71</td> <td>-16.72</td> <td>-66.97</td> <td>-23.99</td> <td>-30.72</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>-73.37</td> <td>-30.38</td> <td>-73.71</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Carrier Power	Freq	Offset	Ref BW	dBc	Lower	dBm	dBc	Upper	dBm	42.90 dBm / 10.0000 MHz	7.500 MHz	3.840 MHz	3.840 MHz	-59.71	-16.72	-66.97	-23.99	-30.72						-73.37	-30.38	-73.71			
Carrier Power	Freq	Offset	Ref BW	dBc	Lower	dBm	dBc	Upper	dBm																							
42.90 dBm / 10.0000 MHz	7.500 MHz	3.840 MHz	3.840 MHz	-59.71	-16.72	-66.97	-23.99	-30.72																								
				-73.37	-30.38	-73.71																										
		More 1 of 2																														
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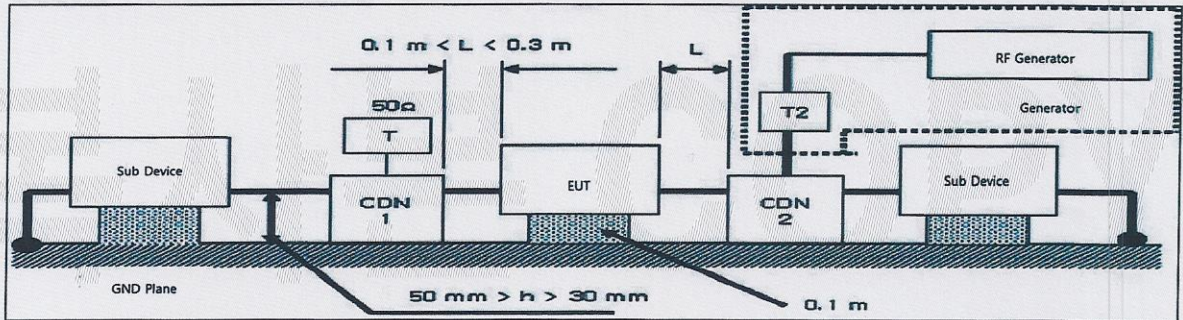
No.	UL		
1	Item : Output Power	793 MHz	LTE 10MHz
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm
	* Agilent		Meas Setup
	Ch Freq 793 MHz	Trig Free	Avg Number 10
	Channel Power		On Off
	Ref 24.59 dBm *Atten 10 dB		Avg Mode Repeat
	Log 10		Exp
	dB/Offset 40		Integ BW 10.0000 MHz
	Center 793.00 MHz	Span 12 MHz	Chan Pwr Span 12.000000 MHz
	*Res BW 100 kHz *VBW 1 kHz Sweep 295.9 ms (601 pts)		Optimize Ref Level
Channel Power	Power Spectral Density	None 1 of 2	
29.93 dBm /10.0000 MHz	-40.07 dBm/Hz		
Copyright 2000-2000 Agilent Technologies			
2	Item : ACLR	793 MHz	LTE 10MHz
	UL	GAIN : 100 dB	Input : -70 dBm Output : +30 dBm
	* Agilent		Meas Setup
	Ch Freq 793 MHz	Trig Free	Avg Number 10
	Adj Channel Power		On Off
	Ref 20.94 dBm *Atten 6 dB		Avg Mode Repeat
	Log 10		Exp
	dB/Offset 40		Chan Integ BW 10.0000 MHz
	Center 793.00 MHz	Span 30 MHz	Offset/Limits
	*Res BW 100 kHz *VBW 1 kHz Sweep 739.8 ms (601 pts)		Meas Type, Total Pwr Ref
RMS Results	Optimize Ref Level	None 1 of 2	
Carrier Power	29.97 dBm / 10.0000 MHz		
	Freq Offset 2.500 MHz	Ref BW 3.040 MHz	dBc Lower -62.81
			dBc Upper -35.88
Copyright 2000-2000 Agilent Technologies			



# Test Report

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## 4.7.7 Test Configuration



End.

