

DECLARATION OF CONFORMITY

We; Samsung Techwin Co., Ltd.
DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCT;

Report No: KES-E1-15T0168
Type of equipment: NETWORK CAMERA
Model Name: SNB-6005P
Variant Model -
Applicant: Samsung Techwin Co., Ltd.
Address: 84, Jeongdong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea
Manufacturer : TIANJIN SAMSUNG TECHWIN
OPTO-ELECTRONIC CO., LTD.
Address: No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China
Test standards : AS/NZS CISPR22:2009+A1:2010
Classification: C-Tick

The above equipment was tested by EMC compliance Testing Laboratory for with the requirements of C-tick Rules and Regulations. The results of testing in this report apply to the product / system which was tested only.

MAY. 28. 2015
(Date of issue)

(Name and signature of authorized person)



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AS/NZS EMI Test Report

Test Report No. : KES-E1-15T0168
Date of Issue : 05. 28. 2015
Description of Product : NETWORK CAMERA
Model No. : SNB-6005P
Variant Model : -
Applicant : Samsung Techwin Co., Ltd.
Address : 84, Jeongdong-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea
Manufacturer : TIANJIN SAMSUNG TECHWIN OPTO-ELECTRONIC CO., LTD.
Address : No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China
Applicable Regulation : AS/NZS CISPR22:2009 + A1:2010

Date of Receipt : 05. 17. 2015
Test Date : 05. 18. 2015 - 05. 19. 2015

Tested by:

Hyo Jin, Kim
Test Engineer

Reviewed by:

Dong Hun, Jang
Technical Manager



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Revision history

Revision	Date of issue	Test report No.	Description
-	05. 28. 2015	KES-E1-15T0168	Initial

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1. General Information

1.1 Introduction

The EMI Test Report for CE Declaration of Conformity is prepared on behalf of named applicant in accordance with the EMC Directive(2004/108/EC) of the European Economic Community. The test results reported in this document relate only to the item that was tested.

All radiated emission, conducted emission measurements required by the EMC Directive were performed manually at KES Co., Ltd. (here in after called KES), 473-29, Gayeo-ro, Yeoju-si, Gyeonggi-do, Korea

The radiated emission measurements performed on 10 meter, Open Area Test Site, test range maintained by KES. Complete ANSI63.4;2009 description and site attenuation measurement data records are maintained at the test facility and have been placed on file with the Federal Communications Commission.

The KES EMC test facilities in and Yeoju-si are designated testing laboratory according to ISO/IEC 17025 by Radio Research Agency(RRA), Korea Communication Commission.



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1.2 Product Description for Equipment Under Test (EUT)

Samsung Techwin Co., Ltd., NETWORK CAMERA, Model No: SNB-6005P or the "E.U.T". as referred to in this report is base model.

Main Specifications of EUT are:

	DIA	PIA
Video		
Imaging Device	1/1.9" PS 2.42M CMOS	1/1.9" PS 2.42M CMOS
Total Pixels	1952(H)X1241(V) approx 2.42M pixels	1952(H)X1241(V) approx 2.42M pixels
Effective Pixels	1937(H)X1097(V) approx 2.12M pixels	1937(H)X1097(V) approx 2.12M pixels
Scanning System	Progressive	Progressive
Min. Illumination	Color:0.03Lux(1/30sec,F1.2,50IRE), TBD B/W:0.003Lux(1/30sec,F1.2,50IRE), TBD Color:0.015Lux(1/30sec,F1.2,30IRE), TBD B/W:0.0015Lux(1/30sec,F1.2,30IRE), TBD	Color:0.015Lux(1/30sec,F1.2,30IRE) B/W:0.0015Lux(1/30sec,F1.2,30IRE)
S / N Ratio	50dB	50dB
Video Out	CVBS:1.0Vp-p/75Ω composite,720x480(N),720x576(P),forinstallation -DIPconnectortype	CVBS:1.0Vp-p/75Ω composite,720x480(N),720x576(P),forinstallation -DIPconnectortype
Lens		
Focus Control	SimpleFocus/Manual - Remote control via network (Manual, Simple Focus, Day&Night)	SimpleFocus/Manual - Remote control via network (Manual, Simple Focus, Day&Night)
Lens Type	Manual / DC Auto Iris, P-Iris	Manual / DC Auto Iris, P-Iris
Mount Type	C/CS-Mount	C/CS-Mount
Operational		
Camera Title	Off / On (Displayed up to 45 characters)	Off / On (Displayed up to 45 characters)
Day & Night	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule
Backlight Compensation	Off / BLC / WDR	Off / BLC / WDR
Wide Dynamic Range	Max. 120dB	Max. 120dB
Contrast Enhancement	SSDR(SamsungSuperDynamicRange) (Off / On)	SSDR(SamsungSuperDynamicRange) (Off / On)
Digital Noise Reduction	SSNRIII(2D+3DNoiseFilter) (Off / On)	SSNRIII(2D+3DNoiseFilter) (Off / On)
Digital Image Stabilization	Off / On	Off / On
Defog	Auto/Manual/Off	Auto/Manual/Off
Motion Detection	Off/On(4zoneswith 4 points Polygon)	Off/On(4zoneswith 4 points Polygon)
Privacy Masking	Off / On (32 zones with 4 points of polygon)	Off / On (32 zones with 4 points of polygon)
Gain Control	Off / Low / Middle / High	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor	ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1 ~ 1/12,000sec)	Minimum / Maximum / Anti flicker (1 ~ 1/12,000sec)
Flip / Mirror	Off / On	Off / On
Intelligent Video Analytics	Tampering,VirtualLine,Enter/Exit,Appear/Disappear,AudioDetection,FaceDetection withMetadata	Tampering,VirtualLine,Enter/Exit,Appear/Disappear,AudioDetection,FaceDetection withMetadata
Alarm I/O	Input1ea/Output1ea	Input1ea/Output1ea
Serial Interface	RS-485 (Protocol:Samsung-T/E,Pelco-D/P,Sungjin,Panasonic,Honeywell,AD	RS-485 (Protocol:Samsung-T/E,Pelco-D/P,Sungjin,Panasonic,Hone

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	,Vicon,GE,BOSCH)	ywell,AD,Vicon,GE,BOSCH)
Alarm Triggers	Motion detection, Tampering Detection, Audio Detection, Face Detecton, Network disconnection, Video analytics, Alarm input	Motion detection, Tampering Detection, Audio Detection, Face Detecton, Network disconnection, Video analytics, Alarm input
Alarm events	FileuploadviaFTPandE-Mail NotificationviaE-Mail,TCPandHTTP localstorage(SD/SDHC/SDXC)recordingatNetworkdisconnected&Event(AlarmTriggers) Externaloutput,LocalPC(Manual)	FileuploadviaFTPandE-Mail NotificationviaE-Mail,TCPandHTTP localstorage(SD/SDHC/SDXC)recordingatNetworkdisconnected&Event(AlarmTriggers) Externaloutput,LocalPC(Manual)
Network		
Ethernet	RJ-45 (10/100BASE-T)	RJ-45 (10/100BASE-T)
Video Compression Format	H.264 (MPEG-4 Part 10/AVC), Motion JPEG	H.264 (MPEG-4 Part 10/AVC), Motion JPEG
Resolution	1920x1080//1280x1024/1280x960/1280x720/ 1024x768/800x600/720x576/800x450/640x480/640x360/320x240/320x180	1920x1080//1280x1024/1280x960/1280x720/ 1024x768/800x600/720x576/800x450/640x480/640x360/320x240/320x180
Max. Framerate	[H.264] Max 60fps at all resolutions [MJPEG] Max 15fps@1920x1080 / 1280x1024 / 1280x960 / 1280x720 / 1024x768 Max 30fps@800x600 / 800x450 / 640x480 / 640x360 / 320x240 / 320x180	[H.264] Max 60fps at all resolutions [MJPEG] Max 15fps@1920x1080 / 1280x1024 / 1280x960 / 1280x720 / 1024x768 Max 30fps@800x600 / 800x450 / 640x480 / 640x360 / 320x240 / 320x180
Smart Codec	Manualmode(Area-based:5ea) Facedetectionmode	Manualmode(Area-based:5ea) Facedetectionmode
Video Quality Adjustment	H.264:CompressionLevel,TargetBitrateLevelControl MJPEG:QualityLevelControl	H.264:CompressionLevel,TargetBitrateLevelControl MJPEG:QualityLevelControl
Bitrate Control Method	H.264:CBRorVBR, MJPEG:VBR	H.264:CBRorVBR, MJPEG:VBR
Streaming Capability	Multiple Streaming (Up to 10 Profiles)	Multiple Streaming (Up to 10 Profiles)
Audio I/O	Mic(Line)-in/Built-inMicSelectableviaUI,Line-out(Mono,1Vrms) 2.5VDC(4mA)powered2KOhm	Mic(Line)-in/Built-inMicSelectableviaUI,Line-out(Mono,1Vrms) 2.5VDC(4mA)powered2KOhm
Audio Compression Format	G.711u-law/G.726Selectable G.726(ADPCM)8KHz,G.7118KHz G.726:16Kbps,24Kbps,32Kbps,40Kbps	G.711u-law/G.726Selectable G.726(ADPCM)8KHz,G.7118KHz G.726:16Kbps,24Kbps,32Kbps,40Kbps
Audio Communication	Bi-directional	Bi-directional
IP	IPv4, IPv6	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL)LoginAuthentication DigestLoginAuthentication IPAddressFiltering UseraccessLog 802.1xAuthentication	HTTPS(SSL)LoginAuthentication DigestLoginAuthentication IPAddressFiltering UseraccessLog 802.1xAuthentication
Streaming Method	Unicast / Multicast	Unicast / Multicast
Max. User Access	15 users at Unicast Mode	15 users at Unicast Mode
Memory Slot	microSD/SDHC/SDXC -motionImagesrecordedintheSDX/SDHC/SDmemorycardcanbedownloaded.	microSD/SDHC/SDXC -motionImagesrecordedintheSDX/SDHC/SDmemorycardcannbedownloaded.
Application	ONVIFProfileS&G	ONVIFProfileS&G

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Programming Interface	SUNAPI(HTTPAPI)	SUNAPI(HTTPAPI)
Webpage Language	English,French,German,Spanish,Italian,Chinese,Korean,Russian,Japanese, Swedish,Danish,Portuguese,Turkish,Polish,Czech,Rumanian,Serbian, Dutch, Croatian,Hungarian,Greek,Norwegian,Finnish	English,French,German,Spanish,Italian,Chinese,Korean,Russian,Japanese, Swedish,Danish,Portuguese,Turkish,Polish,Czech,Rumanian, Serbian,Dutch, Croatian,Hungarian,Greek,Norwegian,Finnish
Web Viewer	SupportedOS:WindowsXP/VISTA/7/8,MACOSX10.7 SupportedBrowser:MicrosoftInternetExplorer(Ver.10,9,8), Mozilla Firefox (Ver. 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9), Google Chrome (Ver. 25, 24, 23, 22, 21, 20, 19, 18, 17,16, 15), Apple Safari (Ver. 6.0.2(Mac OS X 10.8, 10.7 only), 5.1.7) * Mac OS X only	SupportedOS:WindowsXP/VISTA/7/8,MACOSX10.7 SupportedBrowser:MicrosoftInternetExplorer(Ver.10,9,8), Mozilla Firefox (Ver. 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9), Google Chrome (Ver. 25, 24, 23, 22, 21, 20, 19, 18, 17,16, 15), Apple Safari (Ver. 6.0.2(Mac OS X 10.8, 10.7 only), 5.1.7) * Mac OS X only
Central Management Software	SmartViewer	SmartViewer
Environmental		
Operating Temperature / Humidity	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH	-30°C~+55°C(+14°F~+131°F)/Lessthan90%RH ※-10°C~+55°C(+14°F~+131°F)/Lessthan90%RH(기준사양)
Storage Temperature / Humidity	-30°C~+60°C(-22°F~+140°F)/ Less than 90% RH	-30°C~+60°C(-22°F~+140°F)/ Less than 90% RH
Electrical		
Input Voltage / Current	AC24V, DC 12V, PoE (IEEE802.3af class 3)	AC24V, DC 12V, PoE (IEEE802.3af class 3)
Power Consumption	TBD	Max.11.44W(AC24V,50~60Hz) Max.10.1W(DC12V) Max.11.1W(PoE,Class3)
Mechanical		
Color / Material	FRONT (BLACK) , BODY (IVORY) / FRONT(Aluminium), BODY(Plastic)	FRONT (BLACK) , BODY (IVORY) / FRONT(Aluminium), BODY(Plastic)
Dimension (WxHxD)	W73.1 x H66.6 x D147.8	W73.1 x H66.6 x D147.8
Weight	TBD	430g

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1.3 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
NETWORK CAMERA	SNB-6005P	-	TIANJIN SAMSUNG TECHWIN OPTO-ELECTRONIC CO., LTD.	EUT

1.4 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
PoE Adapter	FSD-804PS(V3)	-	PLANET Technology Corp.	-
Notebook	LG15N54	410NZET022292	LG Electronics Inc.,	-
AC/DC Adapter	ADP-90WH B	84ZW19F1557	DELTA ELECTRONICS(JIANGSU) LTD.	-
PTZ Controller	SPC-1010	-	SAMSUNG TECHWIN CO., LTD	-
Headset	RHS-2000	-	ROYCHE	-
Monitor	SMT-2232	C95V67VF900015Y	Weihai Daewoo Electronics Co., Ltd.	-
Micro SD	-	-	Sandisk	-
ALARM ZIG	-	-	-	-

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1.5 External I/O Cabling

- AC, DC Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA	Audio In	Headset	Audio Out	1.8	Unshielded
	Audio Out	Headset	Audio In	1.8	Unshielded
	BNC	Monitor	BNC	5.0	Shielded
	RJ-45	Notebook	RJ-45	3.0	Unshielded
	RS-485	PTZ Controller	RS-485	3.0	Unshielded
	Micro SD SLOT	Micro SD	Micro SD SLOT	-	-
	ALARM	ALARM ZIG	ALARM	3.0	Unshielded

- POE Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA	Audio In	Headset	Audio Out	1.8	Unshielded
	Audio Out	Headset	Audio In	1.8	Unshielded
	BNC	Monitor	BNC	5.0	Shielded
	RJ-45	POE Adapter	RJ-45	3.0	Unshielded
	RS-485	PTZ Controller	RS-485	3.0	Unshielded
	Micro SD SLOT	Micro SD	Micro SD SLOT	-	-
	ALARM	ALARM ZIG	ALARM	3.0	Unshielded
POE Adapter	RJ-45	Notebook	RJ-45	1.0	Unshielded

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1.6 Special Accessories

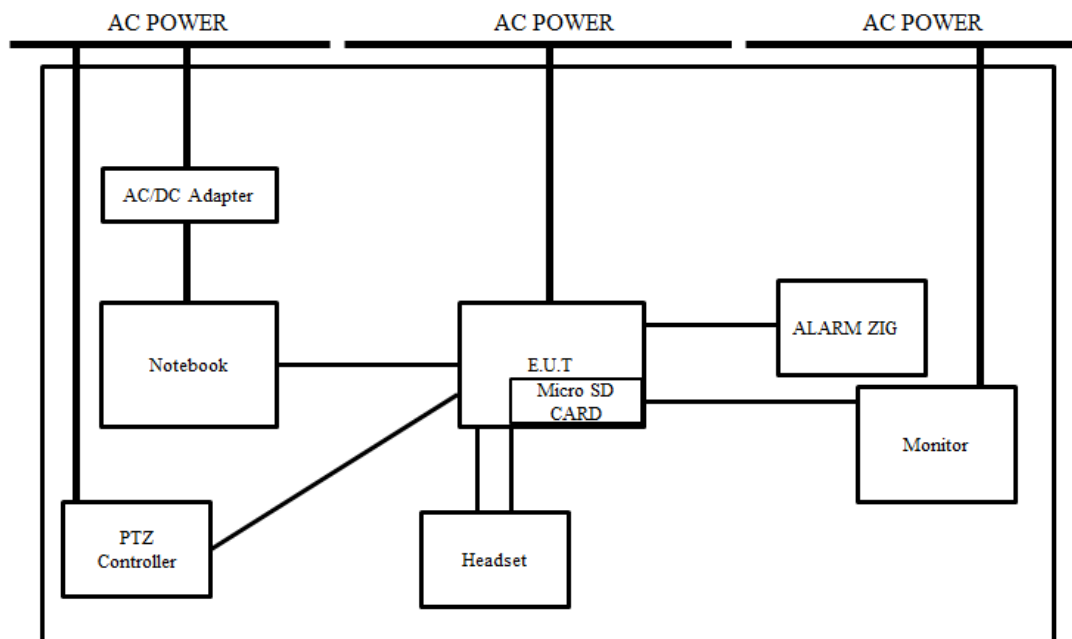
As shown in section 1.8, all interface cables used for compliance testing are shielded as normally supplied or by use respective component manufacturers.

1.7 EUT Modifications

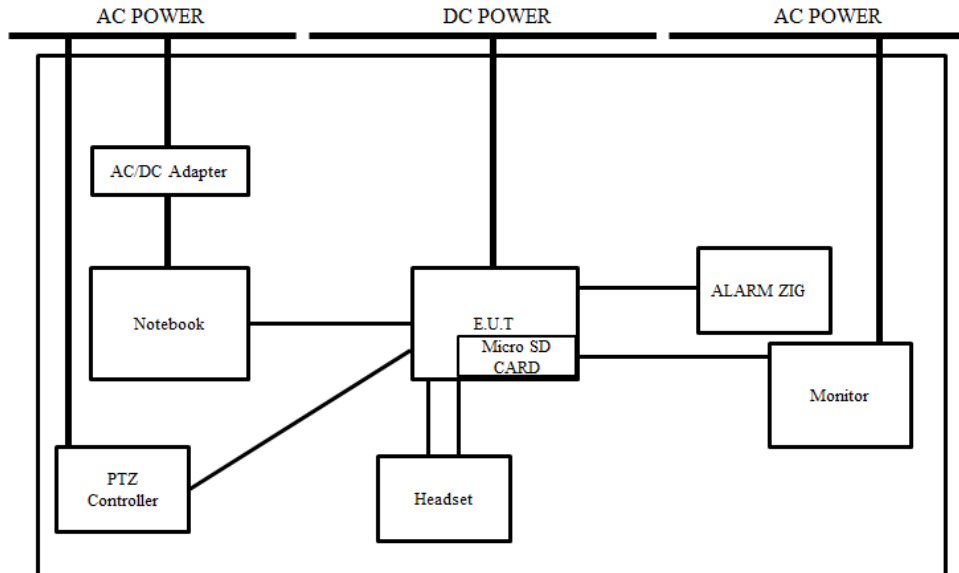
No modifications were made to the EUT in order to achieve and maintain compliance to the standards described in this report.

1.8 Configuration of Test System

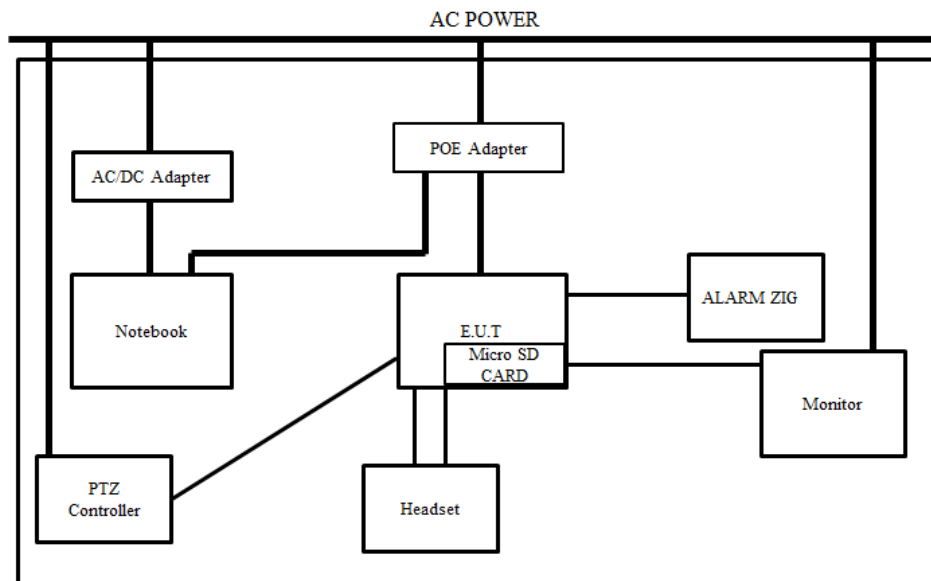
- AC Mode



- DC Mode



- POE Mode



1.9 Operating condition

※ Test Operating Mode

- Ping test
- web view monitoring
- Alarm test

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2. Test standards and results

Specifications	Description	Test Point	Remark
CISPR22, Class A	Conducted Emission	AC Input Port	C
CISPR22, Class A	Radiated Emission	Enclosure	C

Note : C=Complies N/C=Not Complies N/T=Not Tested N/A=Not Applicable

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3. Test Performed

3.1 Conducted Emission Measurements

3.1.1 Test Description

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was placed on a wooden table, 80 centimeters height above the floor. Power was fed to the EUT through a 50 ohm/ 50 micro henry Line Impedance Stabilization Network (LISN). The ground plane that was electrically bonded to the shield room ground system and all power lines entering the shield room were filtered.

3.1.2 Test Equipments

Description	Manufacturer	Model Number	Serial Number	Cal. Due
EMI Receiver/Signal Analyzer	Narda S.T.S / PMM	PMM 9010F	020WW31006	04. 01. 2016
LISN	R&S	ENV216	101137	02. 10. 2016
LISN	EMCO	3810/2	2228	-
8-Wire ISN CAT3	Schwarzbeck Mess	CAT3 8158	8158-0019	04. 02. 2016
8-Wire ISN CAT5	Schwarzbeck Mess	NTFM 8158	8158-0030	04. 02. 2016
8-Wire ISN CAT6	Schwarzbeck Mess	NTFM 8158	8158-0029	08. 15. 2015
Electro wave Shieldroom	SEMITEC	-	-	-

3.1.3 Test Environments

Ambient Temperatures : see the data
Relative Humidity : see the data

3.1.4 Test Limits

Frequency (MHz)	CISPR Publication 22			
	Class B		Class A	
	QP	AV	QP	AV
0.15 to 0.50	66 to 56	56 to 46	79	66
0.50 to 5.00	56	46	73	60
5.00 to 30.00	60	50	73	60

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- Telecommunication

Frequency (MHz)	CISPR 22(Voltage)			
	Class B (dB μ V)		Class A (dB μ V)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.50	84.0 to 74.0	74.0 to 64.0	97.0 to 87.0	84.0 to 74.0
0.50 to 30.00	74.0	64.0	87.0	74.0

Frequency (MHz)	CISPR 22(Current)			
	Class B (dB μ A)		Class A (dB μ A)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.50	40.0 to 30.0	30.0 to 20.0	53.0 to 43.0	40.0 to 30.0
0.50 to 30.00	30.0	20.0	43.0	30.0

3.1.5 Test Procedure

The conducted emission levels were measured on each current-carrying line with the spectrum analyzer operating in the CISPR quasi-peak mode (or peak mode if applicable). The analyzer's 6 dB bandwidth was set to 9 kHz. The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. If the conducted emission exceed the average limit with the instrument set to the quasi-peak mode, the measurements are made in the average mode. The emission spectrum was scanned from 150 kHz to 30 MHz. The highest emission amplitudes relative to the appropriate limits were measured and have been recorded. Quasi-peak readings are distinguished with a "QP".

The conducted emission test was performed with the EUT exercise program loaded, and the emissions were scanned between 150 kHz to 30 MHz on the HOT side and NEUTRAL side, herein referred to as H and N, respectively.

3.1.6 Test Results

According to the data in section 2.1.7, the EUT complied with the CISPR22 standards.

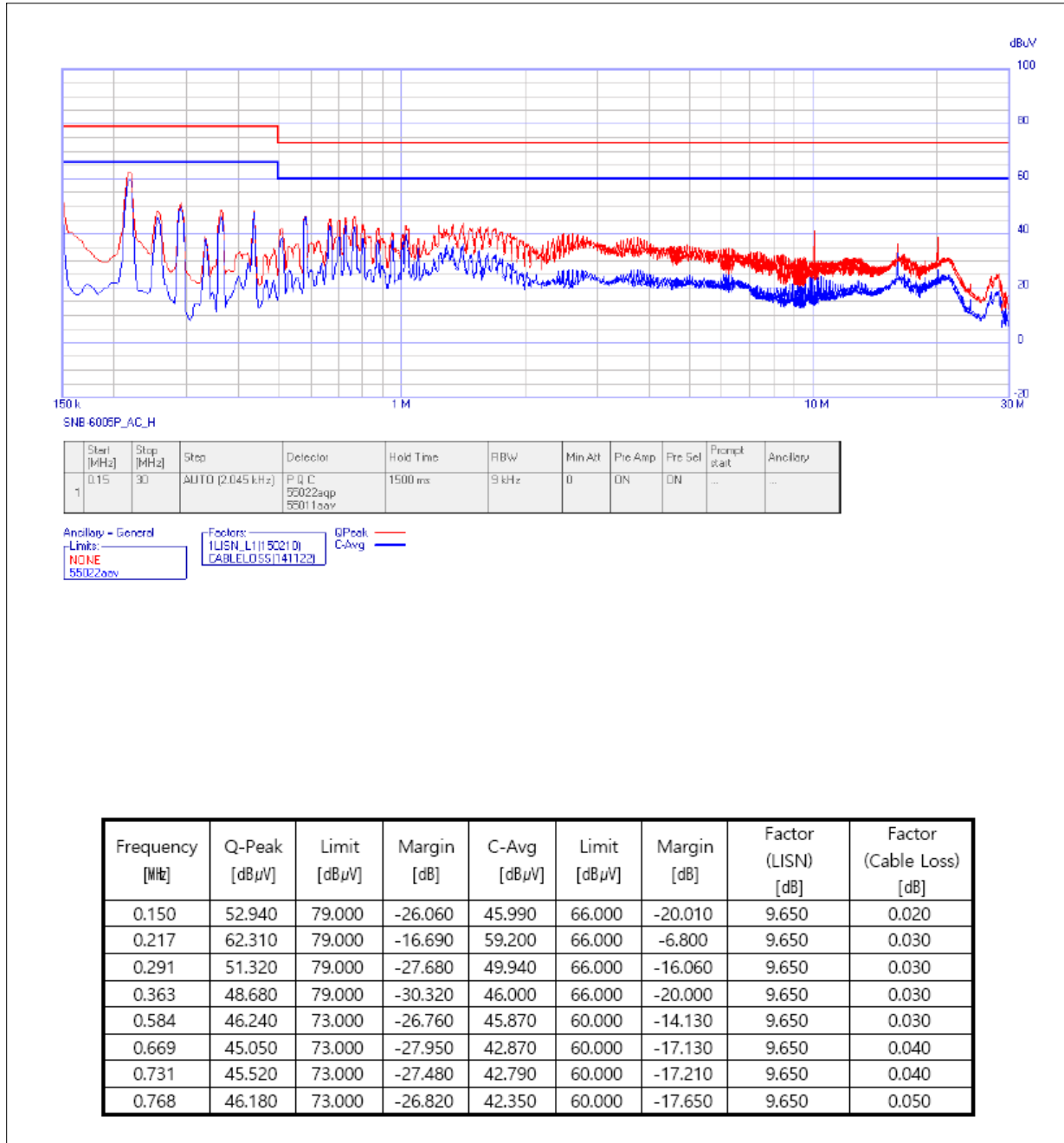


3.1.7 Test Data

- AC Mode

Temperature: 23.2 °C Humidity: 40.1 % R.H. Test Date: 05. 18. 2015 Tested by: Hyo Jin, Kim

Polarization: HOT



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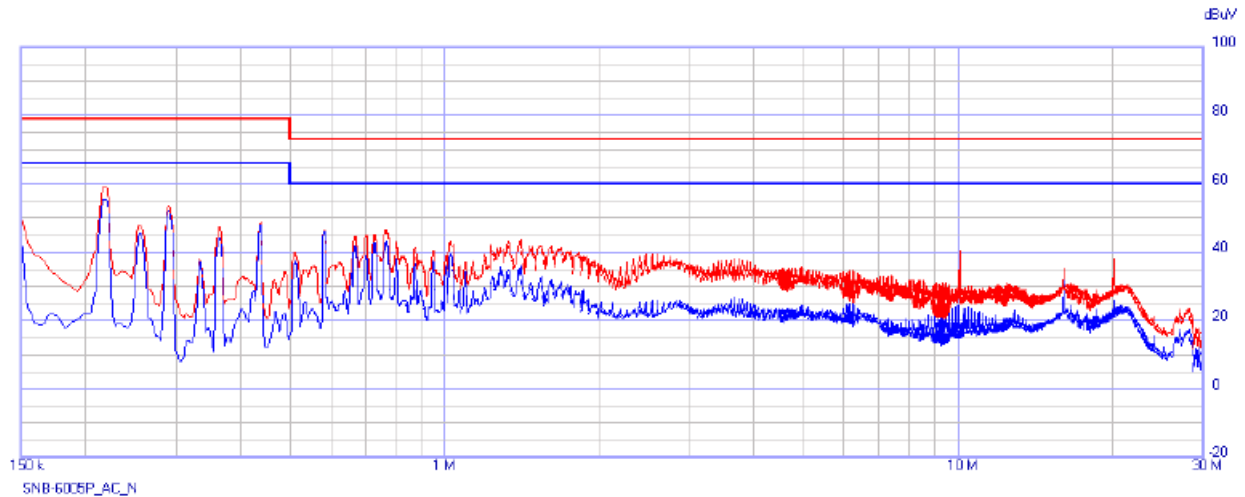


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Polarization: NEUTRAL



5NB-6006P_AC_N

Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
0.15	30	AUTO (2.045 kHz)	P.O.C. 55022asp 55011asv	1500 ms	9 kHz	0	ON	ON	...	...

Ancillary = General

Limits:

55022asp

55011asv

Factors:

1LISN_L2(150210)

CABLELOSS(141122)

QPeak

C-Avg

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (LISN) [dB]	Factor (Cable Loss) [dB]
0.150	50.130	79.000	-28.870	44.000	66.000	-22.000	9.630	0.020
0.217	59.090	79.000	-19.910	55.530	66.000	-10.470	9.640	0.030
0.291	53.750	79.000	-25.250	52.160	66.000	-13.840	9.640	0.030
0.436	48.850	79.000	-30.150	48.320	66.000	-17.680	9.640	0.030
0.584	46.110	73.000	-26.890	45.770	60.000	-14.230	9.650	0.030
0.702	44.810	73.000	-28.190	39.150	60.000	-20.850	9.650	0.040
0.731	45.140	73.000	-27.860	42.430	60.000	-17.570	9.650	0.040
0.768	46.540	73.000	-26.460	42.680	60.000	-17.320	9.650	0.050

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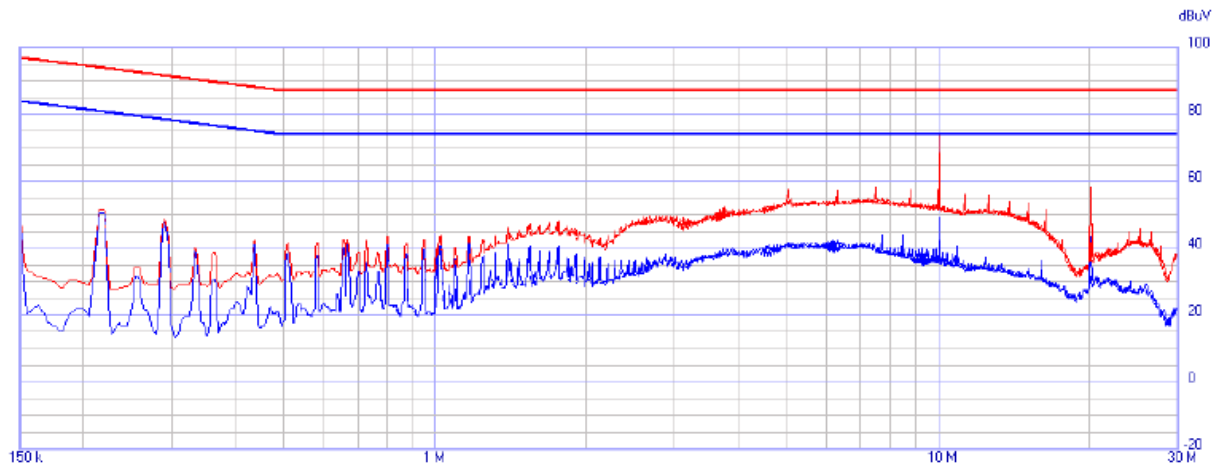


- Telecommunication

- AC Mode

Temperature: 23.2 °C Humidity: 40.1 % R.H. Test Date: 05. 18. 2015 Tested by: Hyo Jin, Kim

[10 Mbps]



Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt	Auxiliary
0.15	30	AUTO (2.045 kHz)	P.O.C. KN22_CE_TEL_... KN22_CE_TEL_A	1500 ms	9 kHz	0	ON	ON	...	...

Analogy - General

Limits:
KN22_CE_TEL_A_DP
KN22_CE_TEL_A_AV

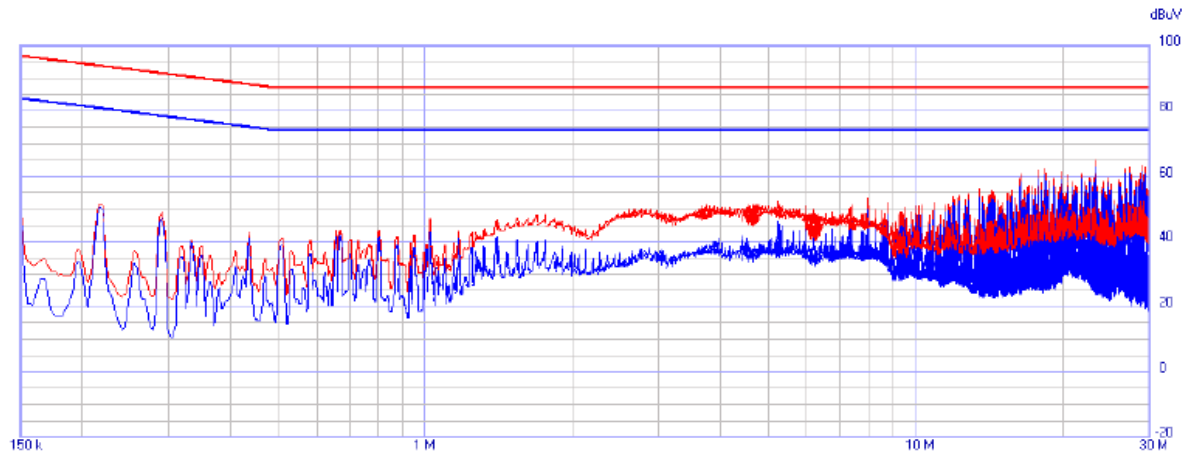
Factors:
R_ISN 10 Mbps(150402) ISN ONLY
CABLELOSS(1411.22)

GPeak ———
CAvg ———

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (ISN) [dB]	Factor (Cable Loss) [dB]
0.150	49.230	97.000	-47.770	47.770	84.000	-36.230	10.290	0.020
0.217	51.640	93.910	-42.270	50.580	80.910	-30.330	10.210	0.030
0.289	48.810	91.550	-42.740	47.540	78.550	-31.010	10.150	0.030
0.436	42.500	88.130	-45.630	41.200	75.130	-33.930	10.070	0.030
7.508	58.150	87.000	-28.850	40.190	74.000	-33.810	9.830	0.250
10.046	73.980	87.000	-13.020	48.250	74.000	-25.750	9.830	0.280
20.005	58.060	87.000	-28.940	43.340	74.000	-30.660	9.870	0.200



[100 Mbps]



SNB-6005P_AC_100Mbps

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Alt	Pre Amp	Pre Sel	Prompt stat	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C KN22_CE_TEL KN22_CE_TEL_A	1500 ms	9 kHz	0	ON	ON	...	...

Analysis - General

Limits:
KN22_CE_TEL_A_QP
KN22_CE_TEL_A_AV

Factors:
R_ISN 100Mbps(150402)ISN ONLY
CABLELOSS(141123)

QPeak
C-Avg

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (ISN) [dB]	Factor (Cable Loss) [dB]
0.150	49.760	97.000	-47.240	48.140	84.000	-35.860	9.790	0.020
0.217	51.180	93.910	-42.730	50.340	80.910	-30.570	9.710	0.030
0.289	49.100	91.550	-42.450	47.330	78.550	-31.220	9.650	0.030
0.438	42.540	88.090	-45.550	41.100	75.090	-33.990	9.570	0.030
0.440	42.540	88.050	-45.510	41.100	75.050	-33.950	9.570	0.030
23.203	64.790	87.000	-22.210	62.820	74.000	-11.180	9.350	0.240
26.629	62.580	87.000	-24.420	60.970	74.000	-13.030	9.350	0.370
27.199	62.870	87.000	-24.130	61.020	74.000	-12.980	9.350	0.380
28.833	63.320	87.000	-23.680	61.380	74.000	-12.620	9.360	0.410



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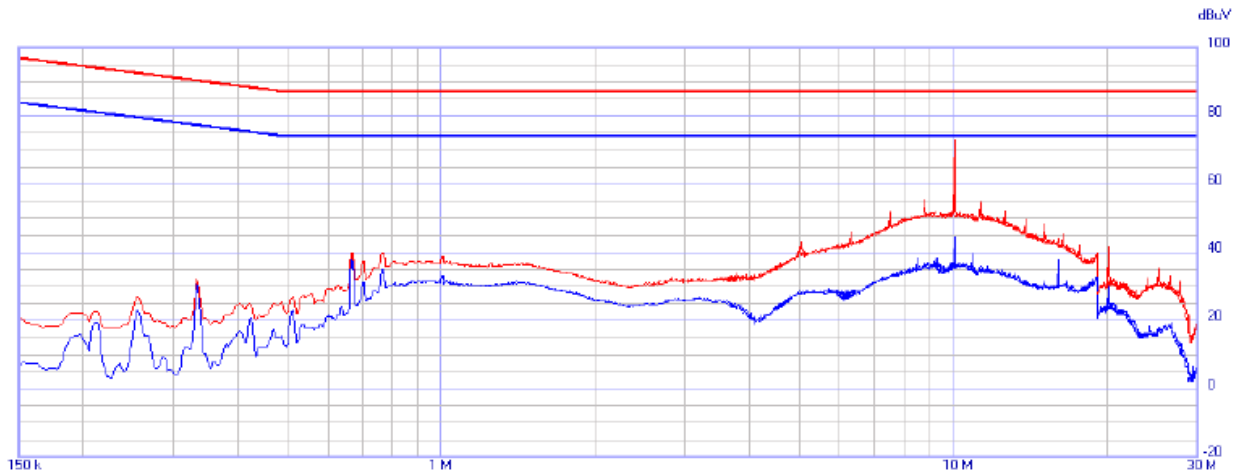
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- DC Mode

Temperature: 23.2 °C Humidity: 40.1 % R.H. Test Date: 05. 18. 2015 Tested by: Hyo Jin, Kim

[10 Mbps]



5NB-6005P_DC_10Mbps

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C KN22_CE_TEL KN22_CE_TEL A	1500 ms	9 kHz	0	ON	DN	...	...

Ancillary = General

Limits:

KN22_CE_TEL_A_OP
KN22_CE_TEL_A_AV

Factors: R_ISN 10 Mbps(150402) ISN ONLY
CABLE LOSS(141122)

QPeak
CAvg

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (ISN) [dB]	Factor (Cable Loss) [dB]
6.269	46.020	87.000	-40.980	28.750	74.000	-45.250	9.830	0.210
7.508	51.720	87.000	-35.280	33.290	74.000	-40.710	9.830	0.250
8.753	55.440	87.000	-31.560	36.730	74.000	-37.270	9.830	0.280
10.046	73.230	87.000	-13.770	44.260	74.000	-29.740	9.830	0.280

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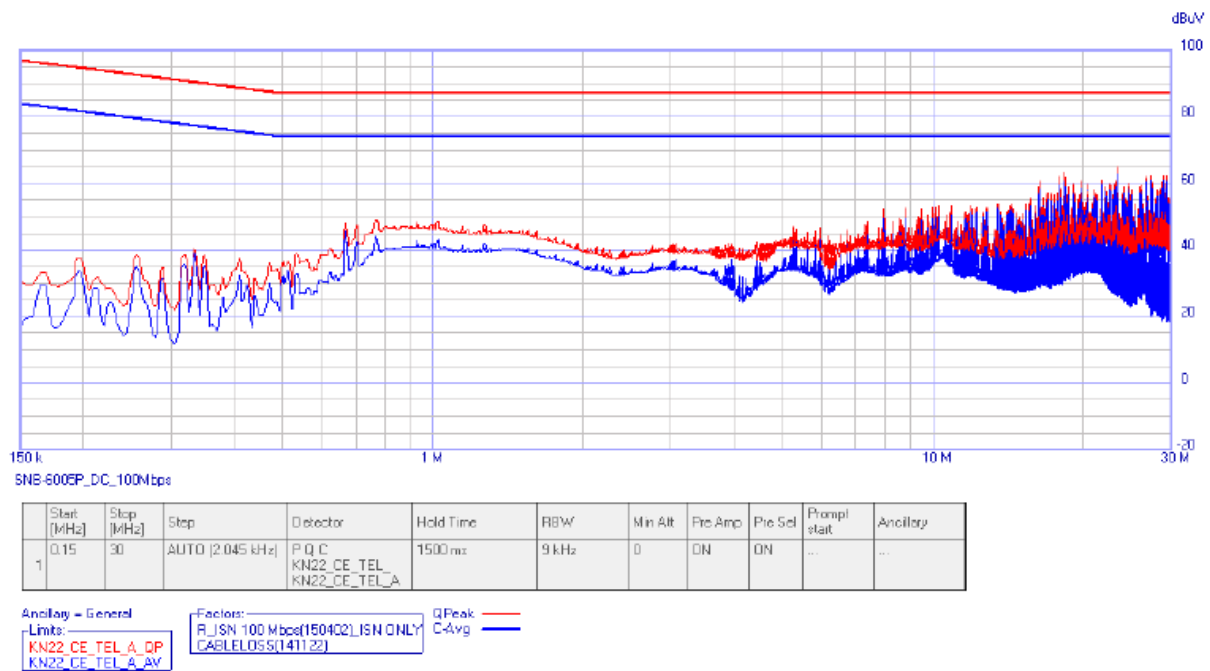


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[100 Mbps]



Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (ISN) [dB]	Factor (Cable Loss) [dB]
18.281	63.240	87.000	-23.760	60.560	74.000	-13.440	9.340	0.230
23.203	64.810	87.000	-22.190	62.950	74.000	-11.050	9.350	0.240
27.199	62.510	87.000	-24.490	60.900	74.000	-13.100	9.350	0.380
28.833	62.630	87.000	-24.370	60.950	74.000	-13.050	9.360	0.410

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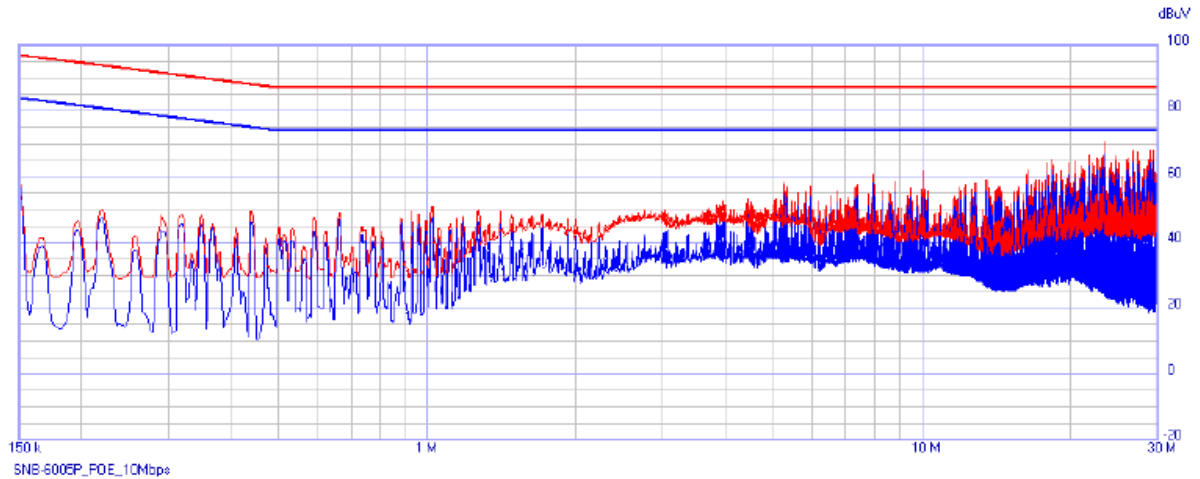
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- POE Mode

Temperature: 23.2 °C Humidity: 40.1 % R.H. Test Date: 05. 18. 2015 Tested by: Hyo Jin, Kim

[10 Mbps]



Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
0.15	30	AUTO [2.045 kHz]	P Q C KN22_CE_TEL KN22_CE_TEL_A	1500 ms	9 kHz	0	ON	ON	...	...

Ancillary - General

Limits:
KN22_CE_TEL_A_QP
KN22_CE_TEL_A_AV

Factors:
RJSN 10 Mbps(150402)JSN ONLY
CABLELOSS(141122)

QPeak
CAvg

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (JSN) [dB]	Factor (Cable Loss) [dB]
0.150	59.250	97.000	-37.750	58.470	84.000	-25.530	10.290	0.020
0.220	50.130	93.840	-43.710	47.460	80.840	-33.380	10.200	0.030
0.291	48.510	91.490	-42.980	43.730	78.490	-34.760	10.150	0.030
0.442	49.390	88.020	-38.630	46.170	75.020	-28.850	10.070	0.030
23.203	70.480	87.000	-16.520	66.940	74.000	-7.060	9.880	0.240
26.629	68.130	87.000	-18.870	64.570	74.000	-9.430	9.890	0.370
28.833	67.960	87.000	-19.040	64.350	74.000	-9.650	9.900	0.410
29.293	68.000	87.000	-19.000	64.440	74.000	-9.560	9.900	0.440

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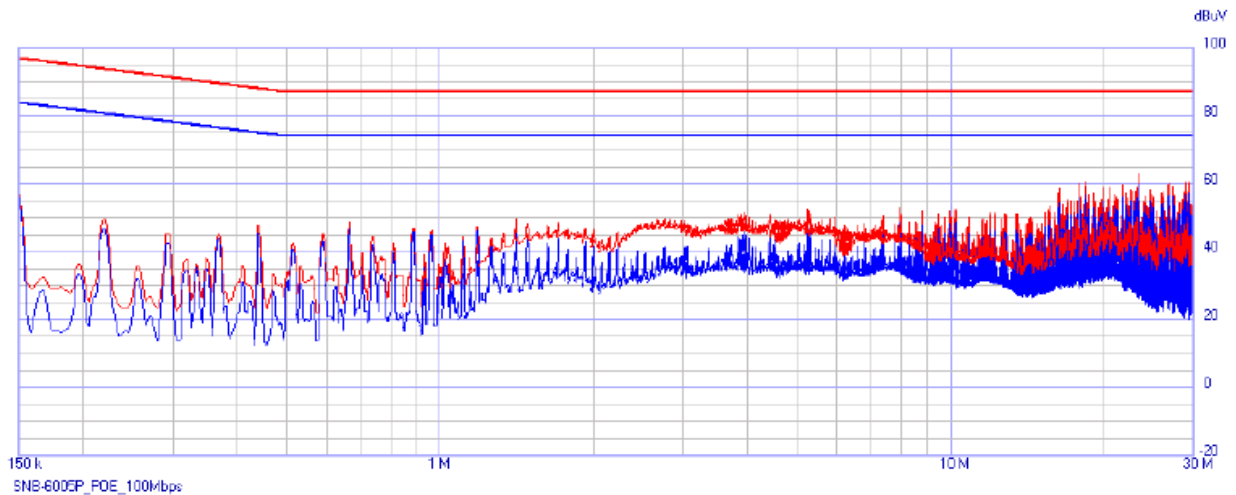


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[100 Mbps]



Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
0.15	30	AUTO (2.045 kHz)	P.Q.C KN22_CE_TEL_ KN22_CE_TEL_A	1500 ms	9 kHz	0	ON	ON	...	...

Ancillary - General

Limits
KN22_CE_TEL_A_QP
KN22_CE_TEL_A_AV

Factors:
R_USN 100 Mbps(150402) ISN ONLY
CABLE LOSS(141122)

Q-Peak
C-Avg

Frequency [MHz]	Q-Peak [dBμV]	Limit [dBμV]	Margin [dB]	C-Avg [dBμV]	Limit [dBμV]	Margin [dB]	Factor (ISN) [dB]	Factor (Cable Loss) [dB]
0.150	58.700	97.000	-38.300	58.000	84.000	-26.000	9.790	0.020
0.220	49.690	93.840	-44.150	46.980	80.840	-33.860	9.700	0.030
0.369	45.350	89.530	-44.180	43.940	76.530	-32.590	9.610	0.030
0.442	47.810	88.020	-40.210	45.690	75.020	-29.330	9.570	0.030
18.281	60.880	87.000	-26.120	56.810	74.000	-17.190	9.340	0.230
23.203	62.910	87.000	-24.090	59.510	74.000	-14.490	9.350	0.240
28.833	60.220	87.000	-26.780	56.960	74.000	-17.040	9.360	0.410
29.293	60.260	87.000	-26.740	57.120	74.000	-16.880	9.360	0.440

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3.2 Radiated Emission Measurements

3.2.1 Test Description

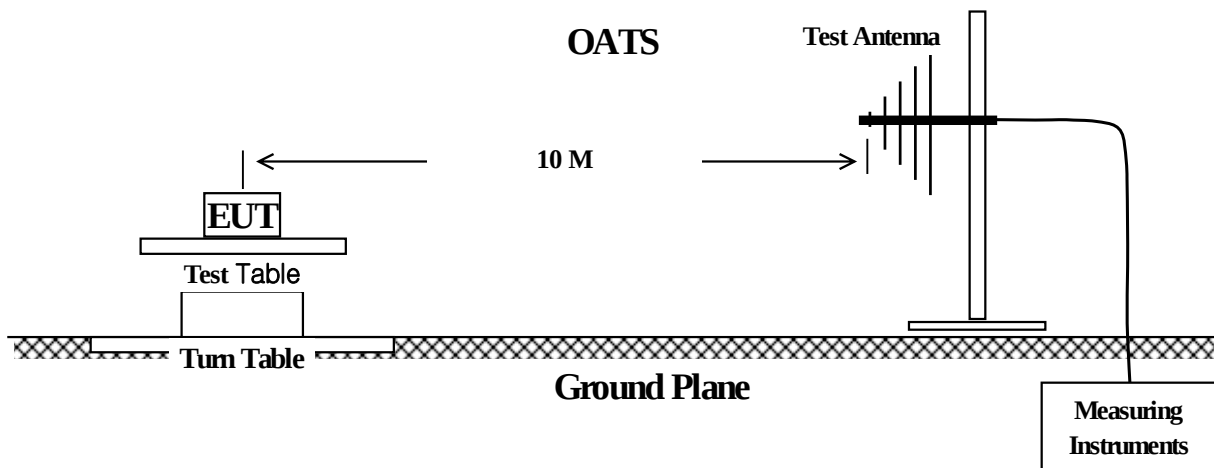
The radiated emissions measurements were performed on the ten-meter, open-field test site. The EUT was placed on a nonconductive turntable approximately 0.8 meters above the ground plane.

The frequency spectrum from 30 MHz to 1 000 MHz and 1 000 MHz to 6 000 MHz was scanned and maximum emission levels at each frequency recorded.

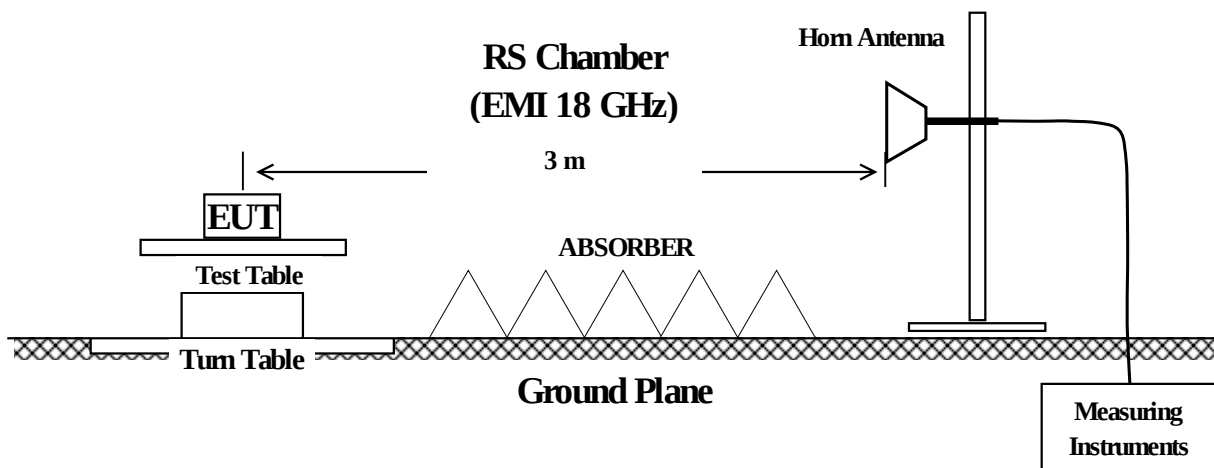
The system was rotated 360°, and the antenna was varied in the height between 1.0 and 4.0 meters in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

- above 1 GHz : Antenna height is fixed to 1.0 m

* Below 1 GHz



* Above 1 GHz



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3.2.2 Test Equipments

Description	Manufacturer	Model Number	Serial Number	Cal. Due
EMI TEST Receiver	R & S	ESVS10	826008/014	04. 01. 2016
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-385	05. 09. 2015
OATS	KES	-	-	-
Antenna Mast	DAEIL EMC	-	-	-
Turn Table	DAEIL EMC	-	-	-
EMI TEST Receiver	R & S	ESU	100532	05. 06. 2015
PREAMPLIFIER	8449B	H.P	3008A00538	07. 23. 2015
Double Ridged Horn Antenna	A-H-SYSTEM,INC	SAS-571	414	02. 09. 2017
RS Chamber (EMI 18GHz)	SEMITEC	-	-	-
Antenna Mast	AUDIX	-	-	-
Turn Table	AUDIX	-	-	-

3.2.3 Test Environments

Temperatures : see the data
Humidity : see the data

3.2.4 Test Limits*** Below 1 GHz**

Frequency (MHz)	CISPR Publication 22	
	Class B	Class A
	Quasi-peak dB(uV/m)	Quasi-peak dB(uV/m)
0,15 to 30	Under consideration	Under consideration
30 to 230	30	40
230 to 1 000	37	47

*** Above 1 GHz**

Frequency (MHz)	CISPR Publication 22			
	Class B @ 3 m (dB μ V/m)		Class A @ 3 m (dB μ V/m)	
	PK	AV	PK	AV
1 000 to 3 000	70	50	76	56
3 000 to 6 000	74	54	80	60

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3.2.5 Test Procedure

Before final measurements of radiated emission were made on the OATS, the EUT was scanned in semi-anechoic chamber in order to determine its emission spectrum signature. The physical arrangement of the test system and associated cabling was varied in order to determine the effect on the EUT's emission in amplitude, direction and frequency. This process was repeated during final radiated emission measurements on the OATS range, at each frequency, in order to ensure that maximum emissions amplitudes were attained.

The radiated emission test was performed with EUT exercise program loaded, and the emissions were scanned between 30 MHz to 1 000 MHz and 1 000 MHz to 6 000 MHz using the spectrum analyzer. The spectrum analyzer's 6 dB bandwidth was set to 120 kHz(1 MHz), and the analyzer was operated in the CISPR quasi-peak (Peak) detection mode.

Measurements were taken using both HORIZONTAL and VERTICAL antenna polarization, herein referred to as H and V, respectively.

Field Strength Calculation

The Field Strength (FS) is calculated by adding the Antenna Factor (AF) and Cable Factor (CF) and Amplifier Gain(AG) from the Measured Reading (MR). The basic equation with a sample calculation is as follows:

$$* \text{ Below 1 GHz : FS(dB}\mu\text{V/m)} = \text{MR(dB}\mu\text{V)} + [\text{AF(dB/m)} + \text{CF(dB)}]$$

$$* \text{ Above 1 GHz : FS(dB}\mu\text{V/m)} = \text{MR(dB}\mu\text{V)} + [\text{AF(dB/m)} + \text{CF(dB)}] - \text{AG}$$



3.2.6 Test Results

According to the data in section 3.2.7, the EUT complied with the CISPR22 standards.

3.2.7 Test Data

* Below 1 GHz

- AC Mode

Temperature: 20.1 °C Humidity: 60.0 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim

Frequency (MHz)	Amplitude (dB μ V/m)	Antenna		Correction Factor		Corrected Amplitude (dB μ V/m)	Applicable Limit (dB μ V/m)	Margin (dB)
		Polar. (H/V)	Height (m)	Ant. (dB)	Cable (dB)			
51.341	12.600	V	1.000	13.780	1.640	28.020	40.000	11.980
61.045	12.300	V	1.000	13.020	1.820	27.140	40.000	12.860
71.713	10.800	V	1.000	11.150	1.990	23.940	40.000	16.060
250.195	12.100	V	2.810	11.820	3.870	27.790	47.000	19.210
641.100	12.500	H	2.230	20.310	6.860	39.670	47.000	7.330
727.423	13.100	H	2.150	21.320	7.480	41.900	47.000	5.100

- DC Mode

Temperature: 20.1 °C Humidity: 60.0 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim

Frequency (MHz)	Amplitude (dB μ V/m)	Antenna		Correction Factor		Corrected Amplitude (dB μ V/m)	Applicable Limit (dB μ V/m)	Margin (dB)
		Polar. (H/V)	Height (m)	Ant. (dB)	Cable (dB)			
52.318	9.700	V	1.000	13.710	1.660	25.070	40.000	14.930
77.533	9.600	V	1.000	9.870	2.060	21.530	40.000	18.470
200.735	9.100	H	2.980	9.970	3.460	22.530	40.000	17.470
250.190	10.100	V	2.350	11.820	3.870	25.790	47.000	21.210
597.453	10.900	H	2.310	19.840	6.540	37.280	47.000	9.720
612.970	10.300	H	2.560	20.020	6.660	36.980	47.000	10.020

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- POE Mode

Temperature: 20.1 °C Humidity: 60.0 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim

Frequency (MHz)	Amplitude (dB μ V/m)	Antenna		Correction Factor		Corrected Amplitude (dB μ V/m)	Applicable Limit (dB μ V/m)	Margin (dB)
		Polar. (H/V)	Height (m)	Ant. (dB)	Cable (dB)			
39.702	11.600	V	1.000	13.340	1.410	26.350	40.000	13.650
61.040	12.800	V	1.000	13.020	1.820	27.640	40.000	12.360
69.772	12.700	V	1.000	11.570	1.970	26.240	40.000	13.760
200.718	10.700	H	2.370	9.970	3.460	24.130	40.000	15.870
597.450	12.100	H	2.820	19.840	6.540	38.480	47.000	8.520
737.132	11.000	H	2.210	21.460	7.550	40.010	47.000	6.990

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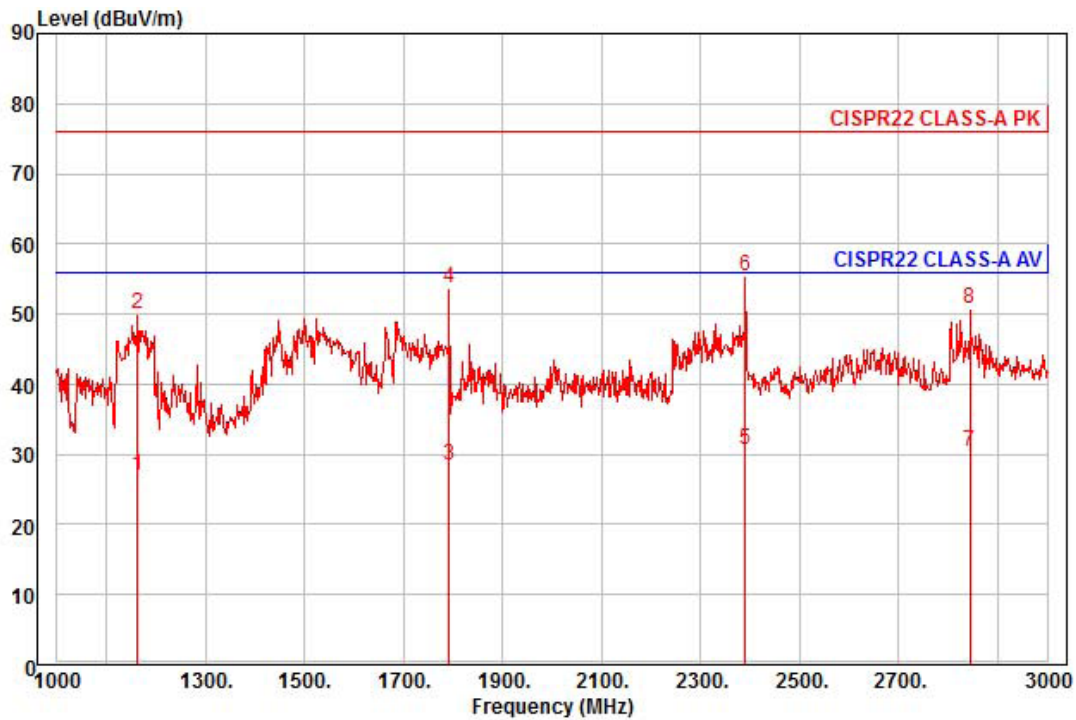
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* Above 1 GHz

- AC Mode

Temperature: 22.9 °C Humidity: 46.5 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim



Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : AC
Memo : 1 - 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1162.00	32.95	24.24	5.83	35.93	45	56.00	-28.91	horizontal	Average
2	1162.00	55.97	24.24	5.83	35.93	45	76.00	-25.89	horizontal	Peak
3	1792.00	29.02	26.85	7.36	34.88	72	56.00	-27.65	horizontal	Average
4	1792.00	54.26	26.85	7.36	34.88	72	76.00	-22.41	horizontal	Peak
5 av	2390.00	26.98	29.30	8.68	34.26	39	56.00	-25.30	horizontal	Average
6 pp	2390.00	51.80	29.30	8.68	34.26	39	76.00	-20.48	horizontal	Peak
7	2844.00	24.64	30.16	9.63	33.95	60	56.00	-25.52	horizontal	Average
8	2844.00	44.99	30.16	9.63	33.95	60	76.00	-25.17	horizontal	Peak

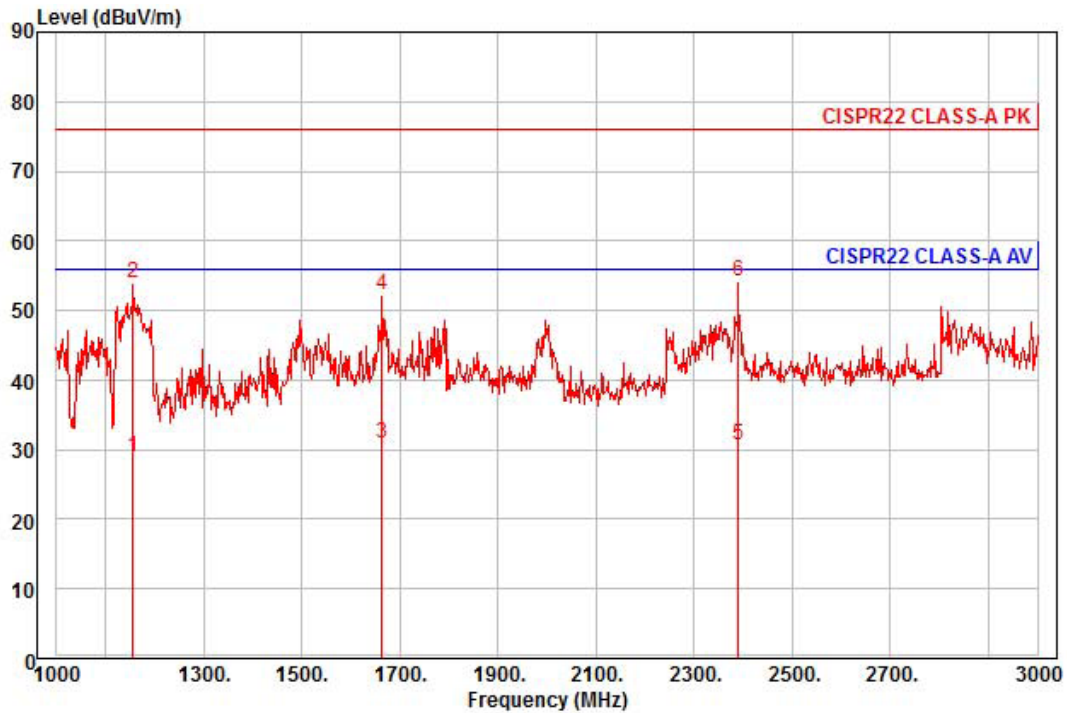
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Test report No.:
KES-E1-15T0168
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : AC
Memo : 1 - 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1156.00	34.80	24.23	5.82	35.94	11	56.00	-27.09	vertical	Average
2	1156.00	59.92	24.23	5.82	35.94	11	76.00	-21.97	vertical	Peak
3 av	1664.00	32.92	26.05	7.05	35.09	35	56.00	-25.07	vertical	Average
4	1664.00	54.23	26.05	7.05	35.09	35	76.00	-23.76	vertical	Peak
5	2390.00	26.99	29.30	8.68	34.26	29	56.00	-25.29	vertical	Average
6 pp	2390.00	50.41	29.30	8.68	34.26	29	76.00	-21.87	vertical	Peak

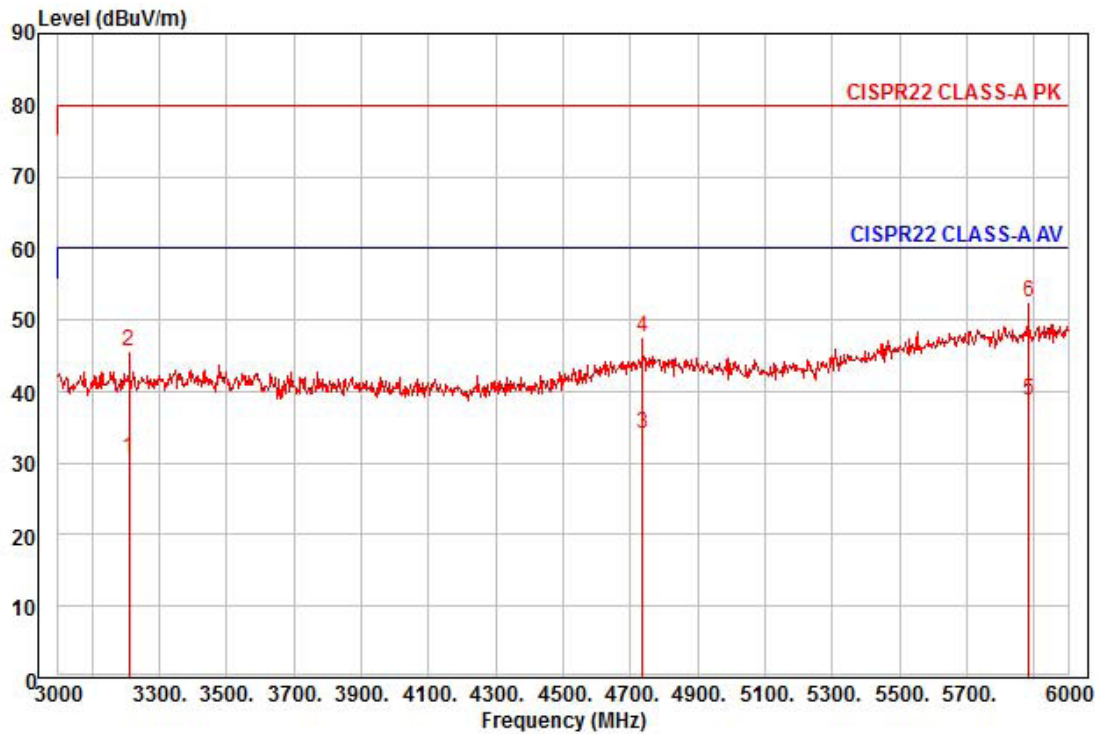
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : AC
Memo : 3 - 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3210.00	23.76	30.65	10.29	34.08	59	60.00	-29.38	horizontal	Average
2	3210.00	38.73	30.65	10.29	34.08	59	80.00	-34.41	horizontal	Peak
3	4737.00	22.02	32.94	12.74	33.67	76	60.00	-25.97	horizontal	Average
4	4737.00	35.59	32.94	12.74	33.67	76	80.00	-32.40	horizontal	Peak
5 pp	5883.00	20.23	34.78	17.12	33.33	306	60.00	-21.20	horizontal	Average
6 pk	5883.00	33.90	34.78	17.12	33.33	306	80.00	-27.53	horizontal	Peak

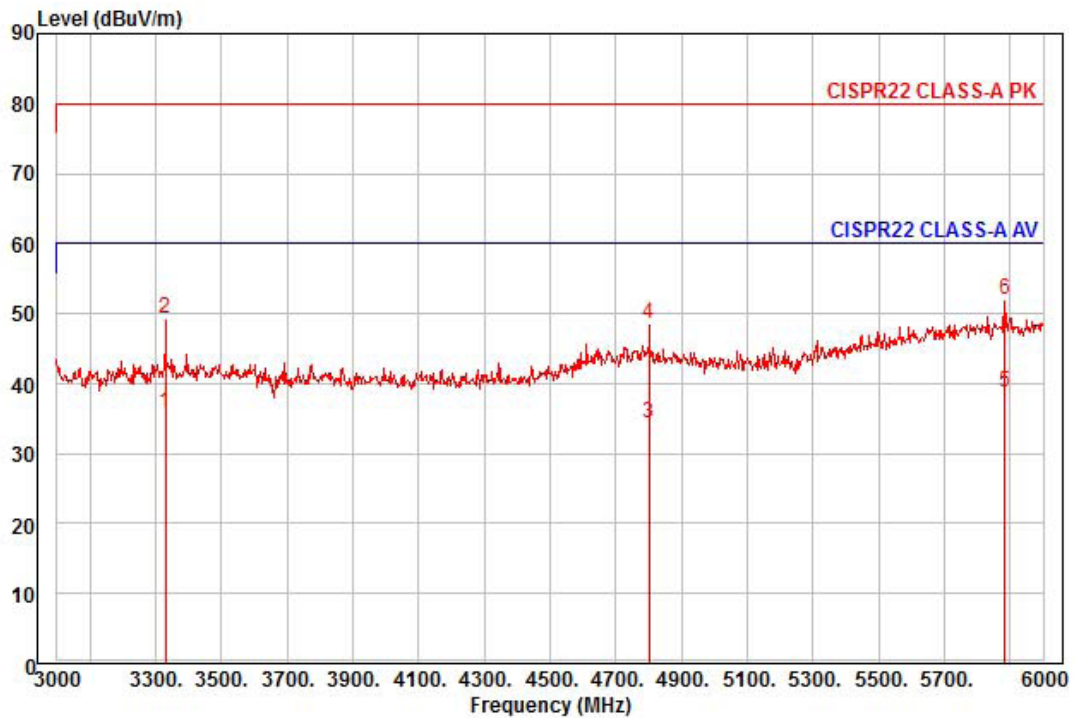
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Test report No.:
KES-E1-15T0168
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : AC
Memo : 3 - 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3330.00	28.73	30.79	10.47	34.21	342	60.00	-24.22	vertical	Average
2	3330.00	42.20	30.79	10.47	34.21	342	80.00	-30.75	vertical	Peak
3	4800.00	21.85	33.17	12.84	33.56	242	60.00	-25.70	vertical	Average
4	4800.00	36.05	33.17	12.84	33.56	242	80.00	-31.50	vertical	Peak
5 pp	5883.00	20.22	34.78	17.12	33.33	280	60.00	-21.21	vertical	Average
6 pk	5883.00	33.31	34.78	17.12	33.33	280	80.00	-28.12	vertical	Peak

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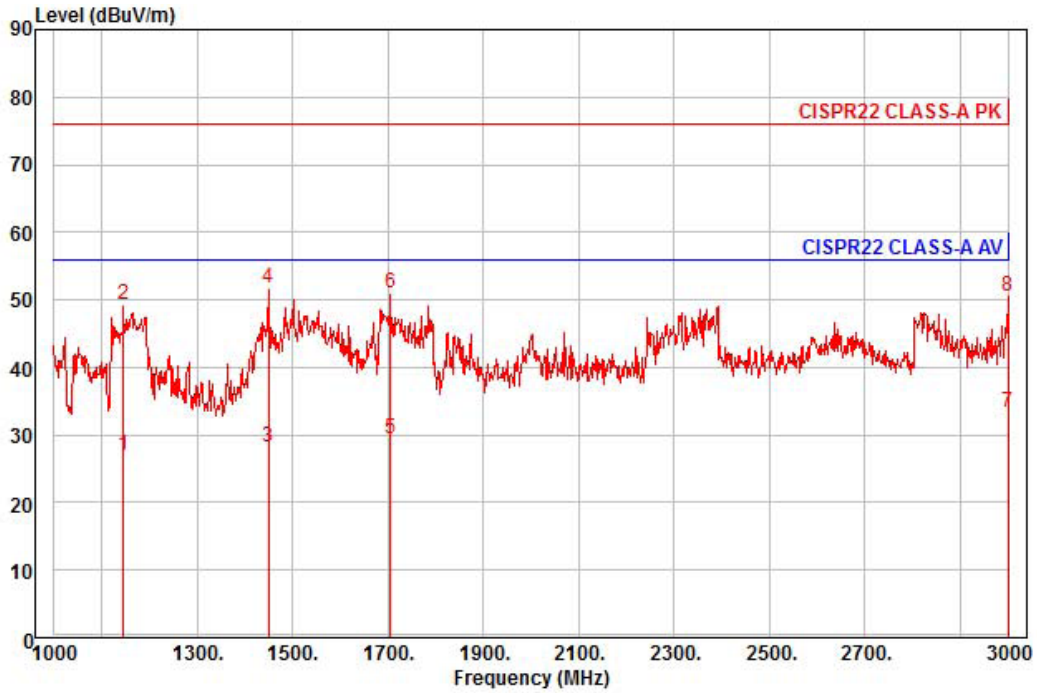
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Test report No.:
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- DC Mode

Temperature: 22.9 °C Humidity: 46.5 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim



Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : DC
Memo : 1 - 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1146.00	32.90	24.20	5.79	35.96	38	56.00	-29.07	horizontal	Average
2	1146.00	55.15	24.20	5.79	35.96	38	76.00	-26.82	horizontal	Peak
3	1450.00	32.20	24.91	6.53	35.45	7	56.00	-27.81	horizontal	Average
4 pk	1450.00	55.63	24.91	6.53	35.45	7	76.00	-24.38	horizontal	Peak
5	1706.00	30.90	26.32	7.15	35.02	13	56.00	-26.65	horizontal	Average
6	1706.00	52.60	26.32	7.15	35.02	13	76.00	-24.95	horizontal	Peak
7 pp	3000.00	26.72	30.40	9.96	33.84	254	56.00	-22.76	horizontal	Average
8	3000.00	44.05	30.40	9.96	33.84	254	76.00	-25.43	horizontal	Peak

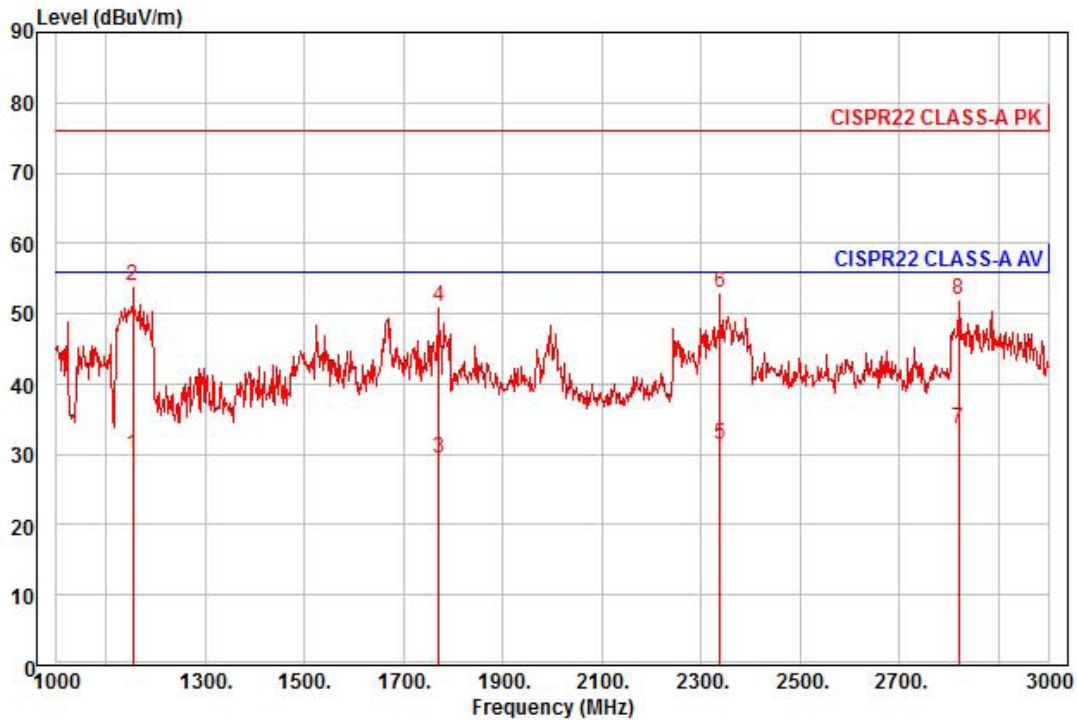
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Test report No.:
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : DC
Memo : 1 - 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamplifier Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1154.00	35.81	24.22	5.81	35.94	11	56.00	-26.10	vertical	Average
2 pp	1154.00	59.83	24.22	5.81	35.94	11	76.00	-22.08	vertical	Peak
3	1772.00	30.26	26.73	7.31	34.91	43	56.00	-26.61	vertical	Average
4	1772.00	51.86	26.73	7.31	34.91	43	76.00	-25.01	vertical	Peak
5	2338.00	27.87	29.14	8.57	34.30	37	56.00	-24.72	vertical	Average
6	2338.00	49.66	29.14	8.57	34.30	37	76.00	-22.93	vertical	Peak
7 av	2820.00	27.97	30.12	9.58	33.96	3	56.00	-22.29	vertical	Average
8	2820.00	46.26	30.12	9.58	33.96	3	76.00	-24.00	vertical	Peak

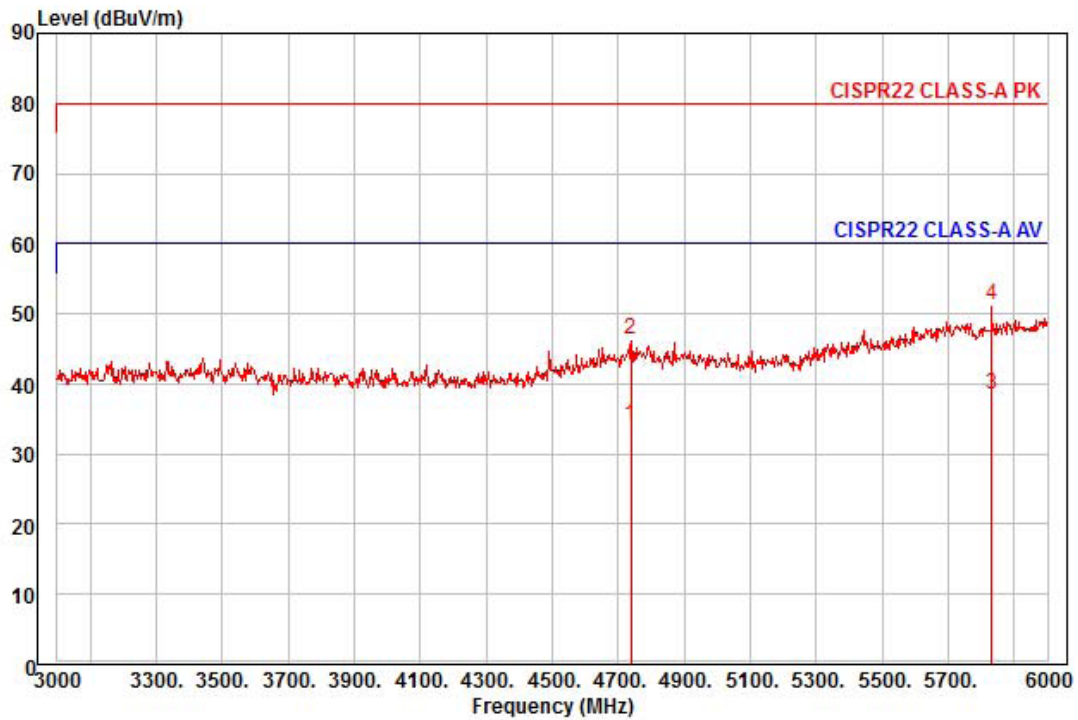
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : DC
Memo : 3 - 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	4740.00	21.99	32.95	12.74	33.67	123	60.00	-25.99	horizontal	Average
2	4740.00	34.44	32.95	12.74	33.67	123	80.00	-33.54	horizontal	Peak
3 pp	5832.00	20.33	34.63	16.89	33.33	347	60.00	-21.48	horizontal	Average
4 pk	5832.00	33.09	34.63	16.89	33.33	347	80.00	-28.72	horizontal	Peak

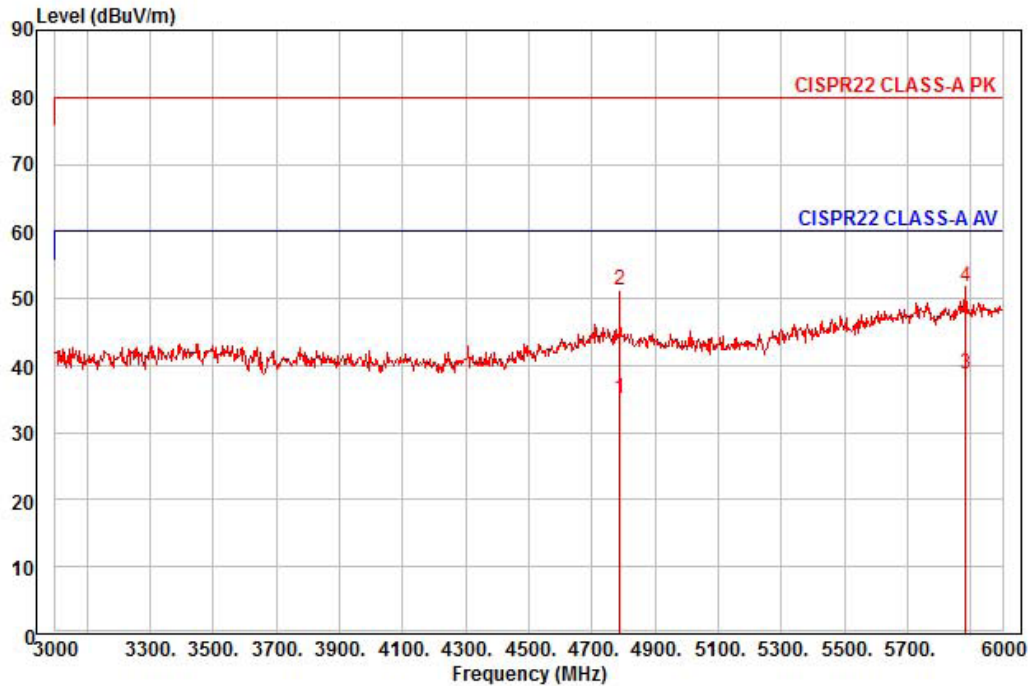
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : DC
Memo : 3 - 6 GHz

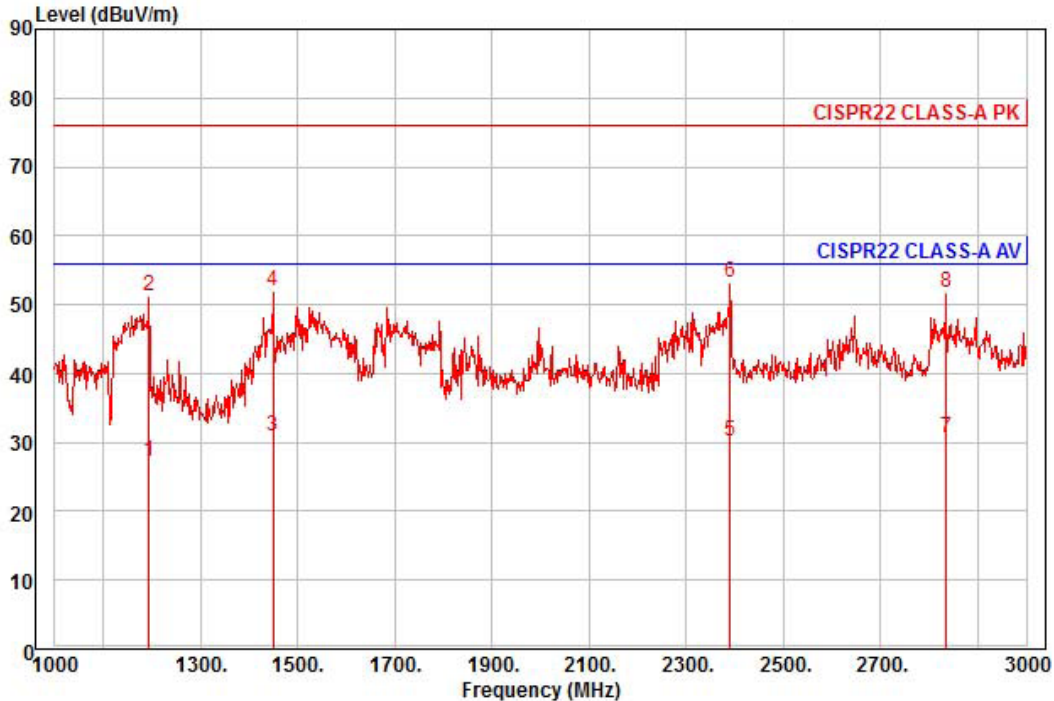
	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	4788.00	22.71	33.13	12.82	33.58	194	60.00	-24.92	vertical	Average
2	4788.00	38.78	33.13	12.82	33.58	194	80.00	-28.85	vertical	Peak
3 pp	5883.00	20.28	34.78	17.12	33.33	264	60.00	-21.15	vertical	Average
4 pk	5883.00	33.26	34.78	17.12	33.33	264	80.00	-28.17	vertical	Peak

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- POE Mode

Temperature: 22.9 °C Humidity: 46.5 % R.H. Test Date: 05. 19. 2015 Tested by: Hyo Jin, Kim



Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : POE
Memo : 1 - 3 Ghz

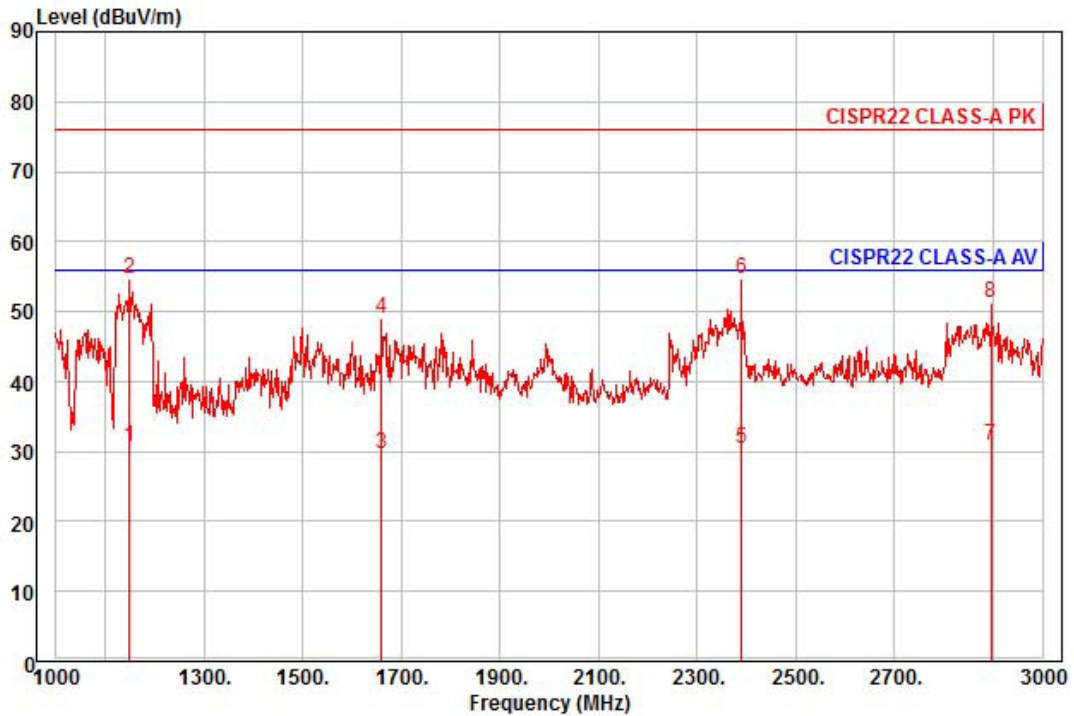
	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1194.00	32.78	24.31	5.91	35.88	36	56.00	-28.88	horizontal	Average
2	1194.00	56.92	24.31	5.91	35.88	36	76.00	-24.74	horizontal	Peak
3 av	1450.00	35.01	24.91	6.53	35.45	63	56.00	-25.00	horizontal	Average
4	1450.00	55.88	24.91	6.53	35.45	63	76.00	-24.13	horizontal	Peak
5	2390.00	26.50	29.30	8.68	34.26	30	56.00	-25.78	horizontal	Average
6 pp	2390.00	49.44	29.30	8.68	34.26	30	76.00	-22.84	horizontal	Peak
7	2836.00	24.94	30.14	9.62	33.95	53	56.00	-25.25	horizontal	Average
8	2836.00	45.86	30.14	9.62	33.95	53	76.00	-24.33	horizontal	Peak



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Test report No.:
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : POE
Memo : 1 - 3 Ghz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	1148.00	36.51	24.21	5.80	35.95	7	56.00	-25.43	vertical	Average
2 pp	1148.00	60.72	24.21	5.80	35.95	7	76.00	-21.22	vertical	Peak
3	1660.00	31.59	26.03	7.04	35.10	255	56.00	-26.44	vertical	Average
4	1660.00	51.00	26.03	7.04	35.10	255	76.00	-27.03	vertical	Peak
5	2390.00	26.69	29.30	8.68	34.26	45	56.00	-25.59	vertical	Average
6	2390.00	50.97	29.30	8.68	34.26	45	76.00	-21.31	vertical	Peak
7 av	2896.00	24.76	30.24	9.74	33.91	340	56.00	-25.17	vertical	Average
8	2896.00	45.30	30.24	9.74	33.91	340	76.00	-24.63	vertical	Peak

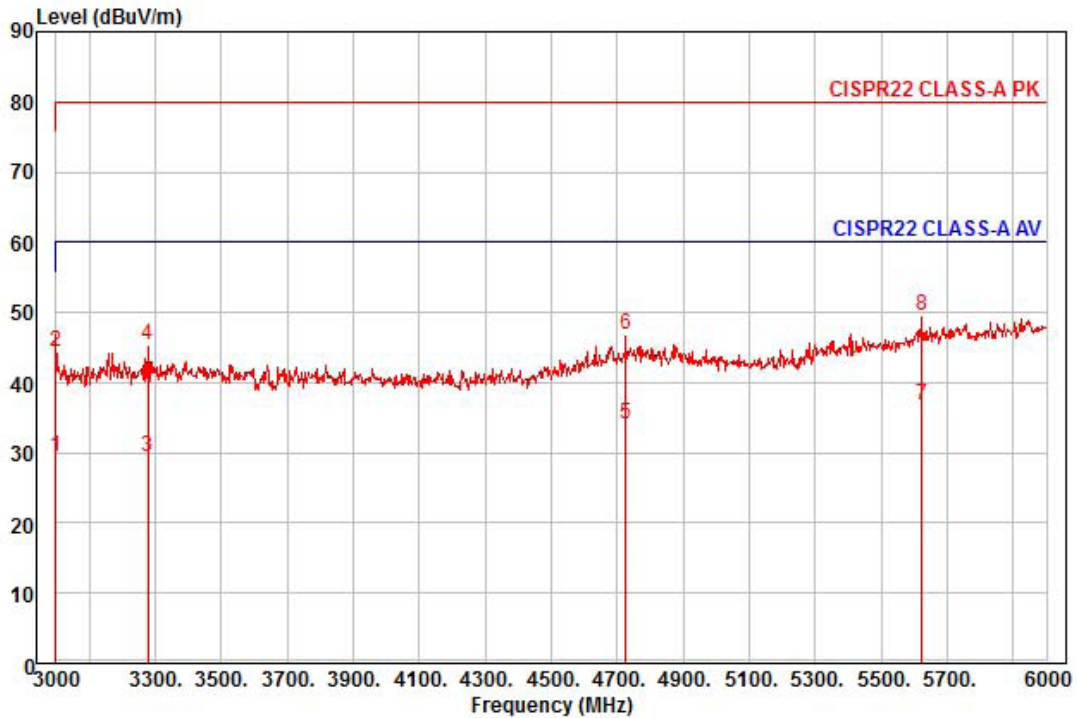
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : POE
Memo : 3 - 6 Ghz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3000.00	22.81	30.40	9.96	33.84	242	56.00	-26.67	horizontal	Average
2	3000.00	37.86	30.40	9.96	33.84	242	76.00	-31.62	horizontal	Peak
3	3279.00	22.52	30.73	10.40	34.16	73	60.00	-30.51	horizontal	Average
4	3279.00	38.30	30.73	10.40	34.16	73	80.00	-34.73	horizontal	Peak
5	4725.00	22.16	32.90	12.72	33.69	38	60.00	-25.91	horizontal	Average
6	4725.00	34.89	32.90	12.72	33.69	38	80.00	-33.18	horizontal	Peak
7 pp	5622.00	20.18	34.01	15.95	33.30	81	60.00	-23.16	horizontal	Average
8 pk	5622.00	32.96	34.01	15.95	33.30	81	80.00	-30.38	horizontal	Peak

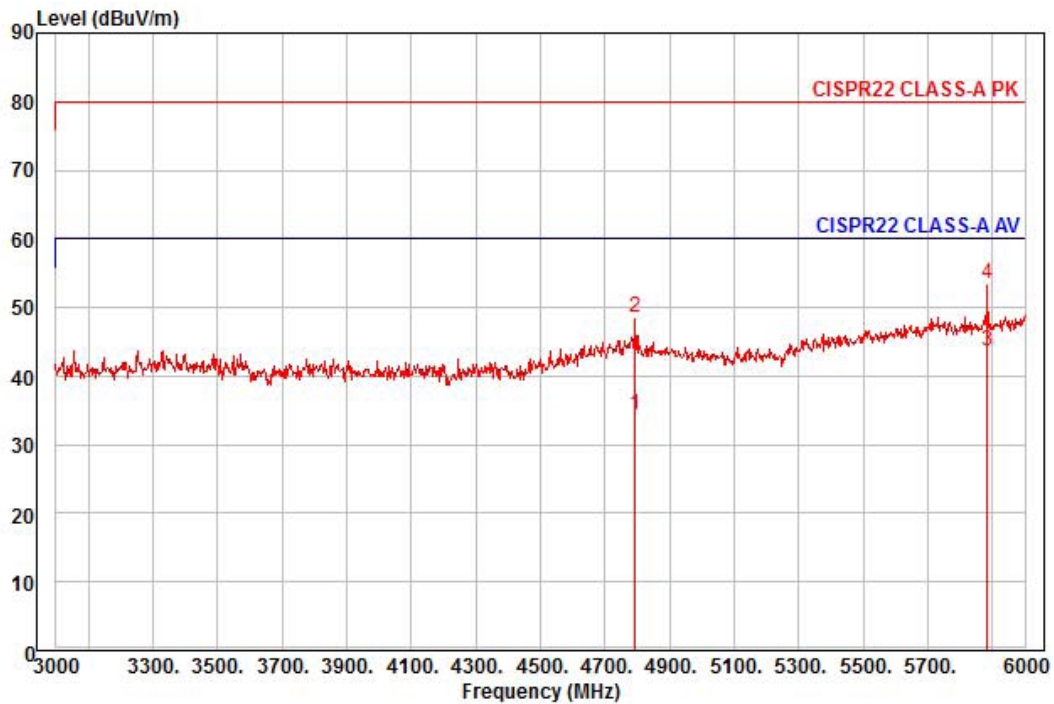
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Site : chamber
Condition: CISPR22 CLASS-A PK 3m HORN-414(15.02.09) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : SNB-6005P
Mode : POE
Memo : 3 - 6 Ghz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	4794.00	21.87	33.15	12.83	33.57	235	60.00	-25.72	vertical	Average
2	4794.00	36.03	33.15	12.83	33.57	235	80.00	-31.56	vertical	Peak
3 pp	5883.00	25.20	34.78	17.12	33.33	124	60.00	-16.23	vertical	Average
4 pk	5883.00	34.89	34.78	17.12	33.33	124	80.00	-26.54	vertical	Peak

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4. Test Setup Photographs

4.1 Conducted Emission

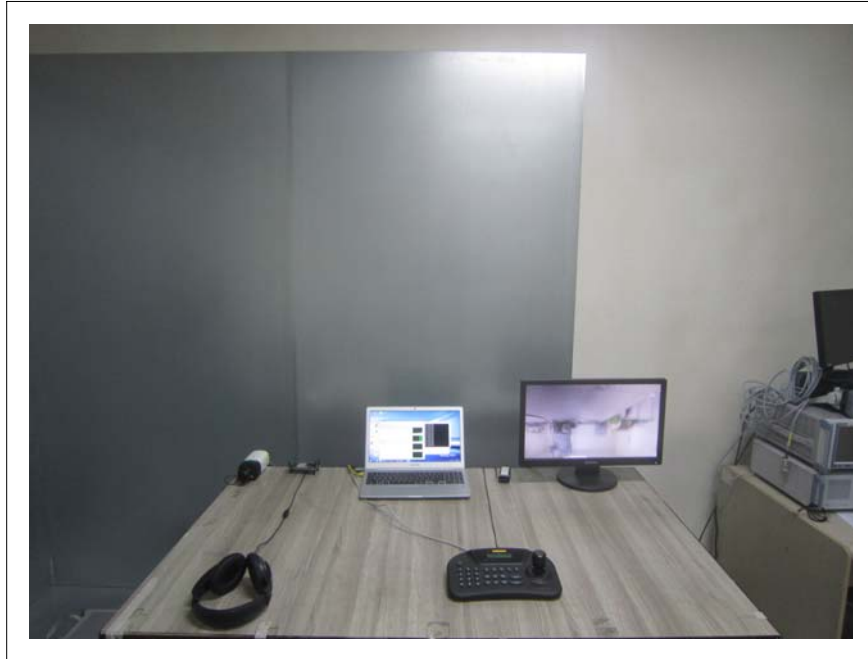
- AC Mode



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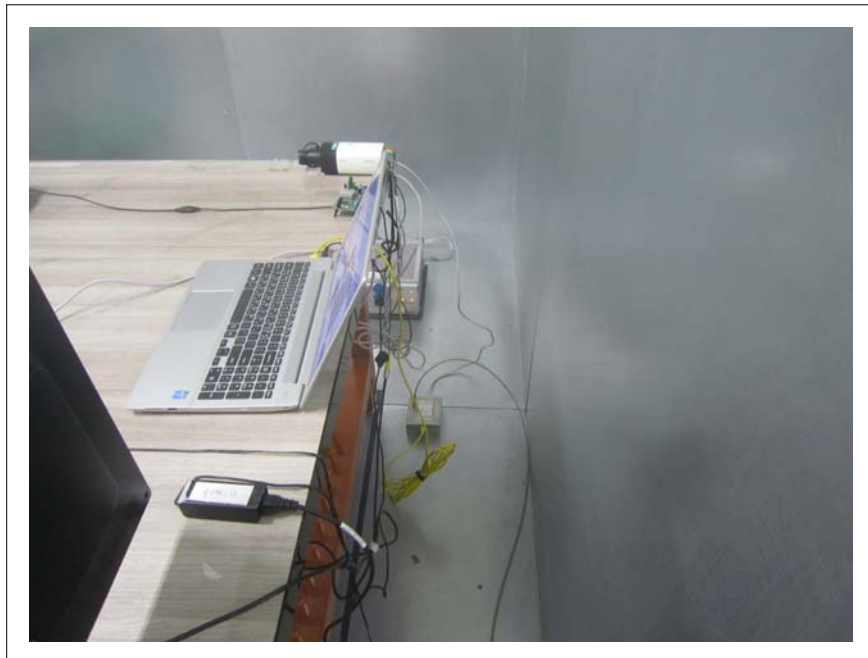
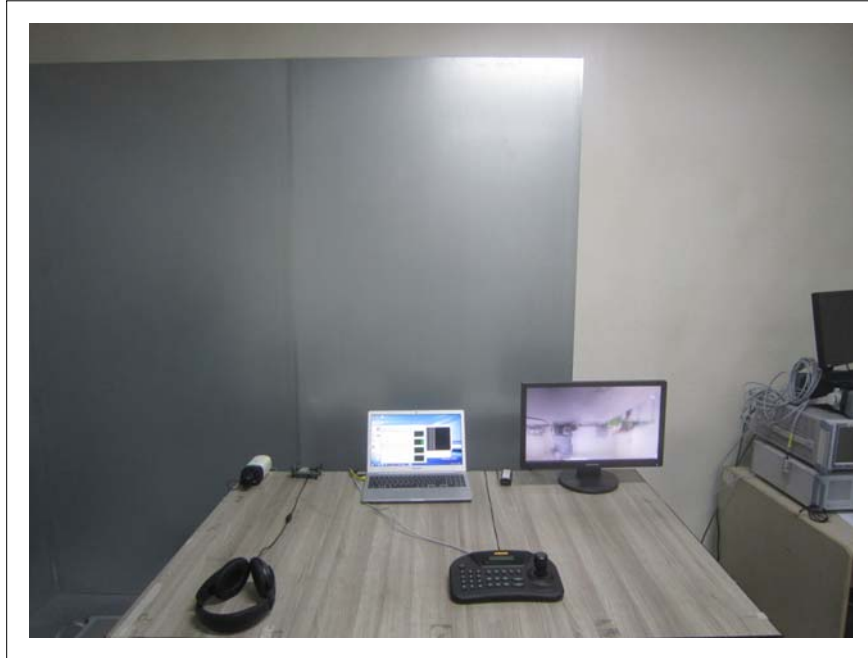
- Telecommunication Emission

-AC Mode



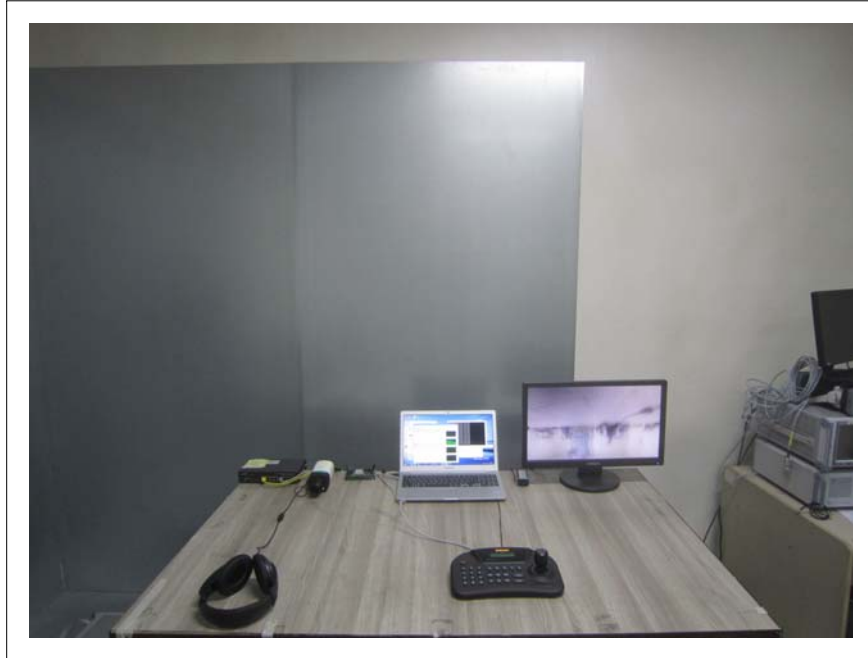
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-DC Mode



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-POE Mode



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4.2 Radiated Emission

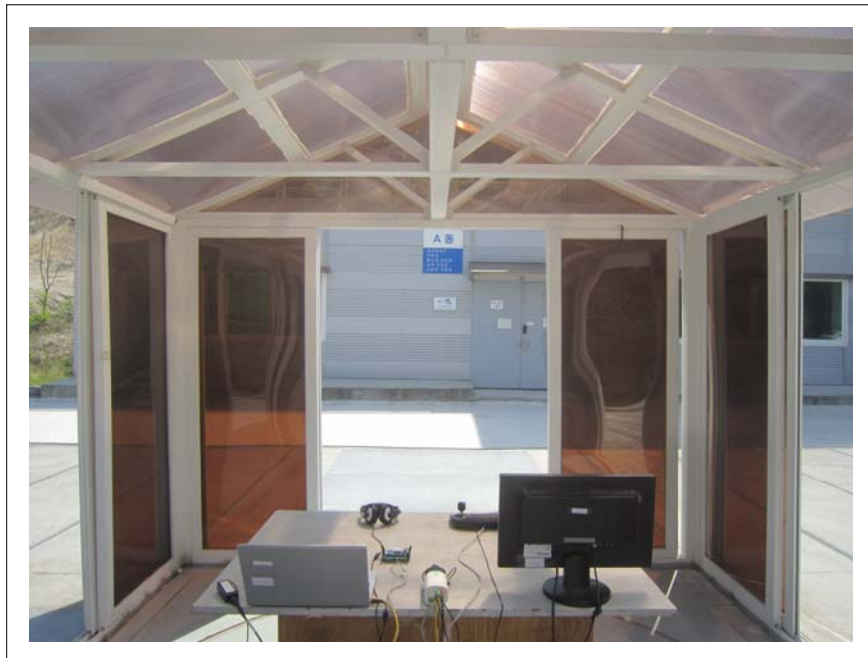
* Blow 1 GHz

-AC Mode



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-DC Mode



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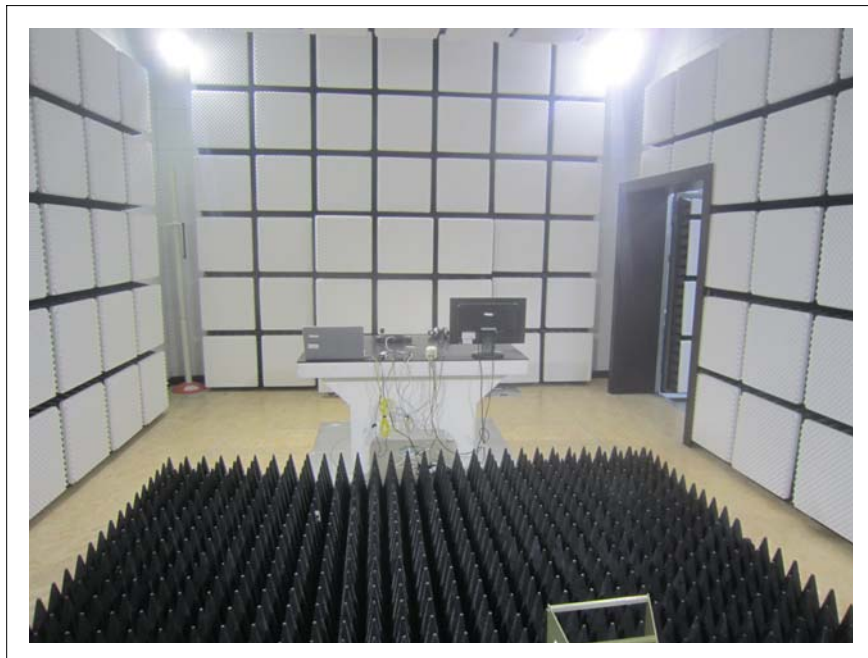
-POE Mode



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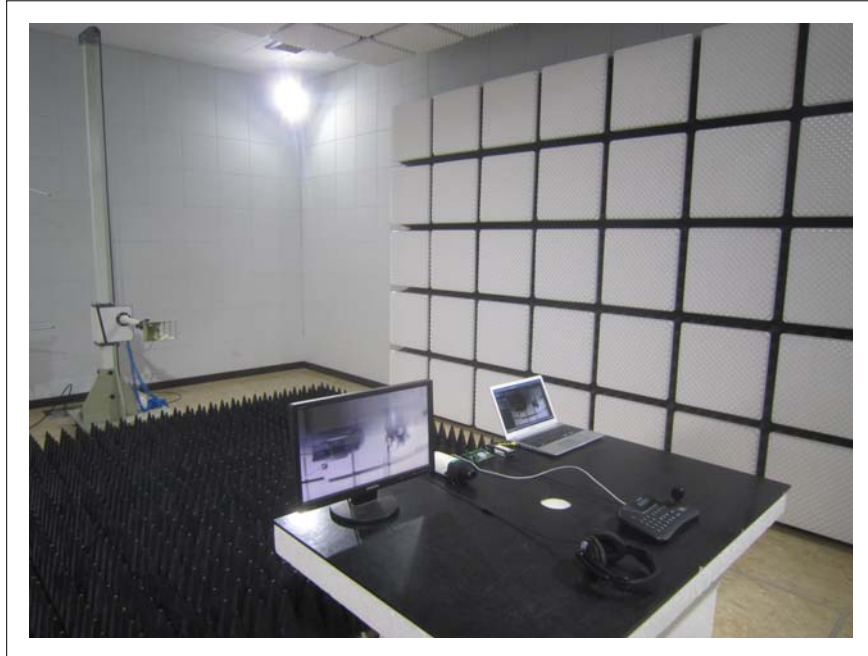
*** Above 1 GHz**

-AC Mode



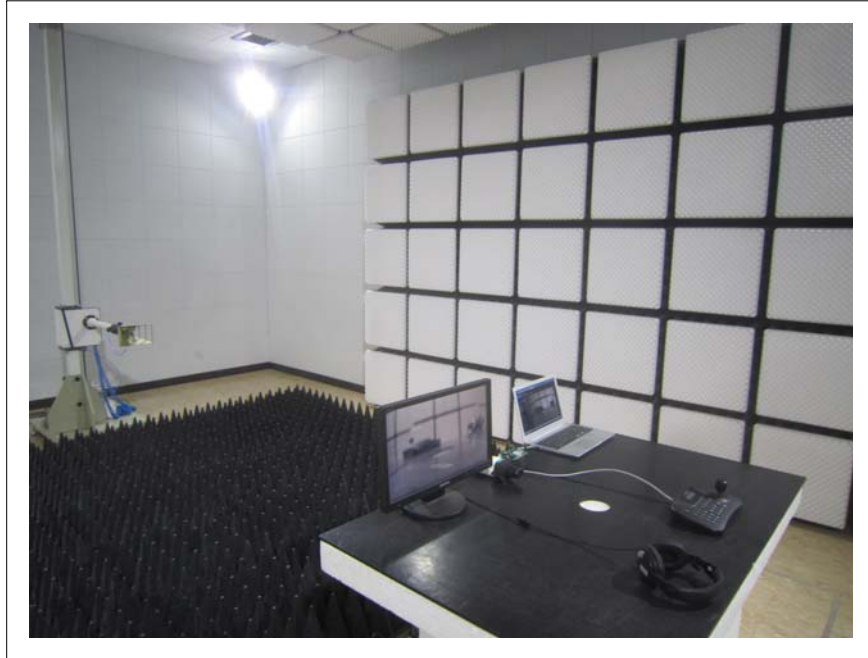
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-DC Mode



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-POE Mode



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5. External Photographs

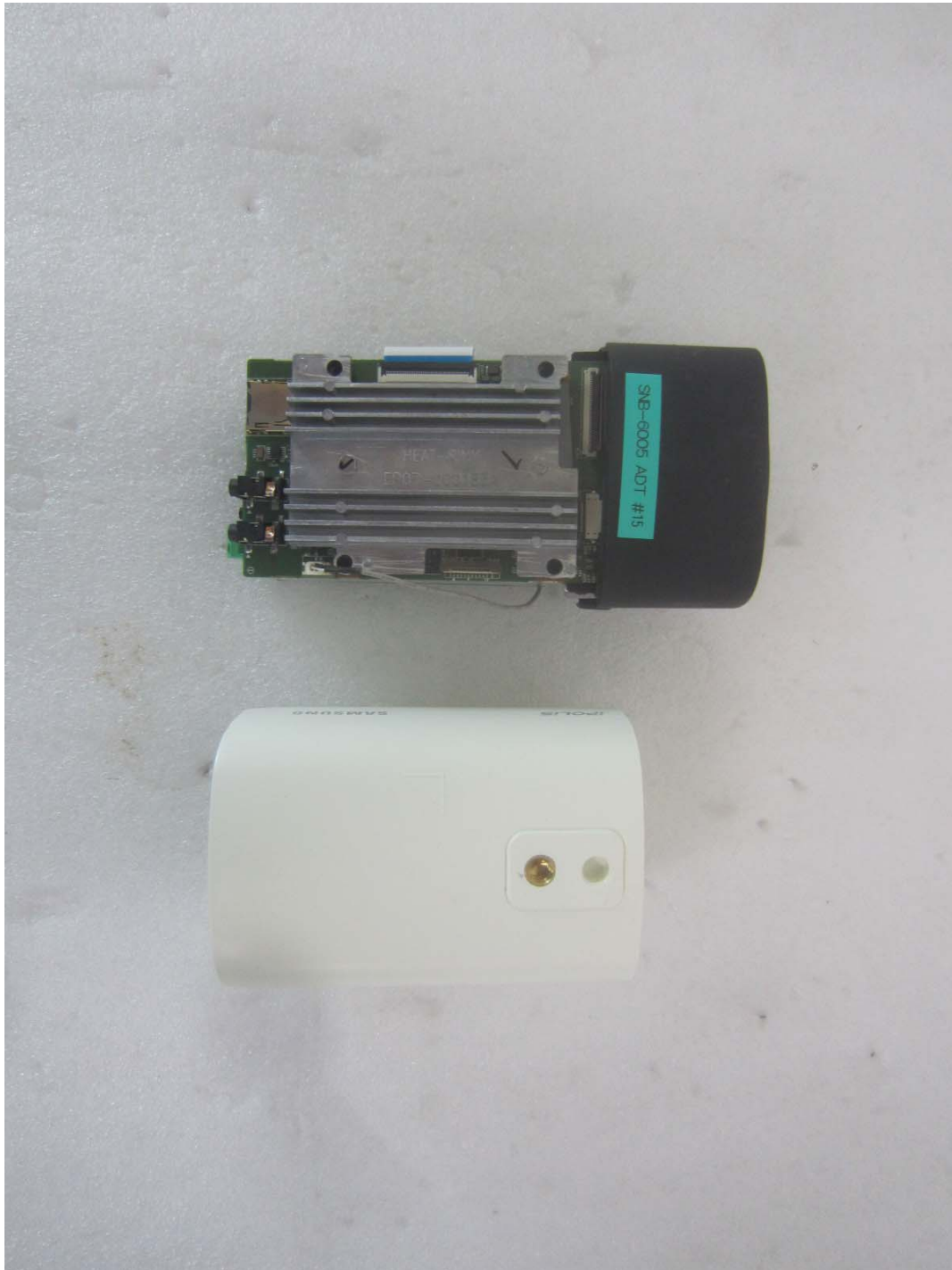


[FRONT VIEW]



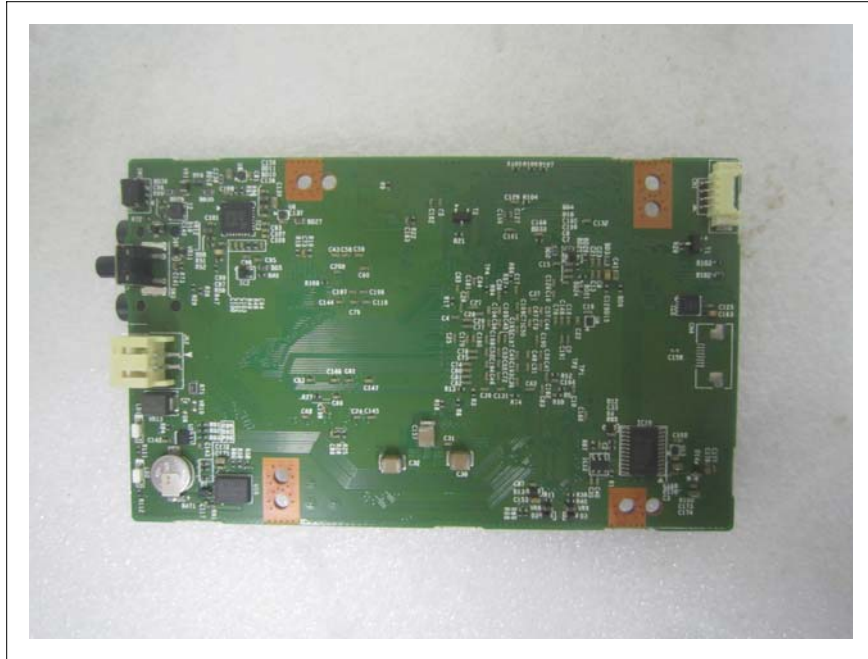
[REAR VIEW]

6. Internal Photographs



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E.U.T: Internal View(Top) - Main Board

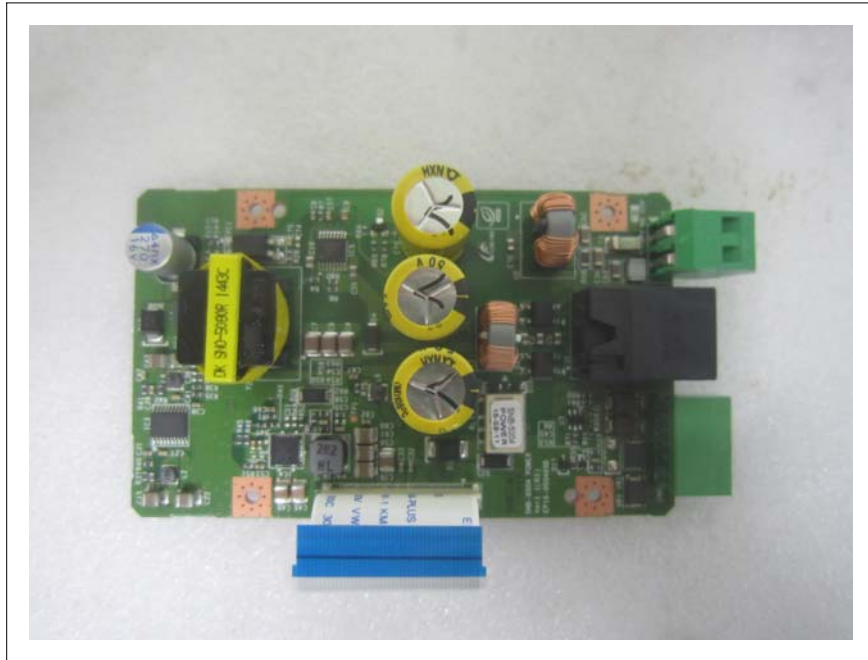


E.U.T: Internal View(Bottom) - Main Board

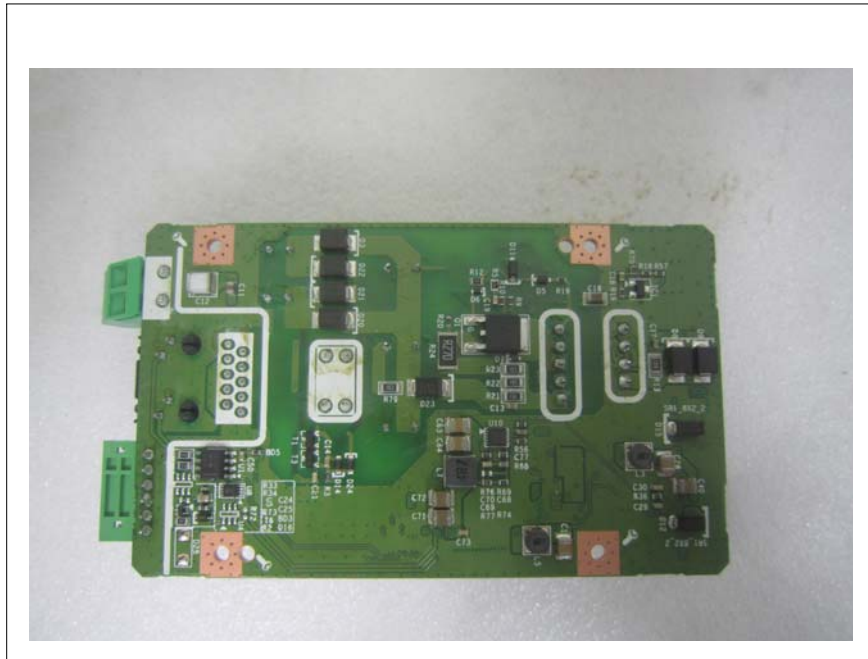


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E.U.T: Internal View(Top) - Power Board



E.U.T: Internal View(Bottom) - Power Board



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E.U.T: Internal View(Top) - Lens Board



E.U.T: Internal View(Bottom) - Lens Board



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