Shenzhen Global Test Service Co.,Ltd.
No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong

FCC PART 15 SUBPART C TEST REPORT

FCC PART 15.247

Report Reference No.....:	**GTS20241108022-2-02**
FCC ID..... :	**2AYD5-I24D04**
Compiled by (position+printed name+signature) .:	File administrators Peter Xiao
Supervised by (position+printed name+signature) .:	Test Engineer Evan Ouyang
Approved by (position+printed name+signature) .:	Manager Jason Hu
Date of issue .....:	Jan.10, 2025
Representative Laboratory Name.:	**Shenzhen Global Test Service Co.,Ltd.**
Address .....:	No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong,China
Applicant's name.....:	**Imin Technology Pte Ltd**
Address .....:	11 Bishan Street 21, #03-05 Bosch Building, Singapore 573943
Test specification .....**:**	
Standard .....:	**FCC Part 15.247**
TRF Originator.....:	Shenzhen Global Test Service Co.,Ltd.
Master TRF .....:	Dated 2014-12

Test item description .....:	**POS Device, Intelligent Electronic Scale**
Trade Mark .....:	iMin
Manufacturer .....:	Imin Technology Pte Ltd
Model/Type reference .....:	I24D04
Listed Models .....:	N/A
Modulation Type.....:	GFSK
Operation Frequency.....:	From 2402MHz to 2480MHz
Hardware Version .....:	N/A
Software Version .....:	N/A
Rating .....:	DC 24V/4.0A by adapter or DC 24V/2.5A by adapter
Result .....:	**PASS**

TEST REPORT

Test Report No. :	GTS20241108022-2-02	Jan.10, 2025 Date of issue

Equipment under Test	:	POS Device, Intelligent Electronic Scale
Model /Type	:	I24D04
Listed model	:	N/A
Applicant	:	**Imin Technology Pte Ltd**
Address	:	11 Bishan Street 21, #03-05 Bosch Building, Singapore 573943
Manufacturer	:	**Imin Technology Pte Ltd**
Address	:	11 Bishan Street 21, #03-05 Bosch Building, Singapore 573943

Test Result:	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

1. TEST STANDARDS

The tests were performed according to following standards:

FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.
ANSI C63.10-2020: American National Standard for Testing Unlicensed Wireless Devices
KDB 558074 D01 DTS Meas Guidance: Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247.

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Dec.19, 2024
Testing commenced on	:	Dec.19, 2024
Testing concluded on	:	Jan.09, 2025

2.2. Product Description

Product Name:	POS Device, Intelligent Electronic Scale
Trade Mark:	iMiN
Model/Type reference:	I24D04
List Model:	N/A
Model Declaration	N/A
Power supply:	DC 24V/4.0A by adapter or DC 24V/2.5A by adapter
Hardware Version	N/A
Software Version	N/A
Sample ID	GTS20241108022-2-S0001-3# GTS20241108022-2-S0001-4#(Version A) GTS20241108022-2-S0001-5#(Version B) GTS20241108022-2-S0001-6#(Version C) GTS20241108022-2-S0001-7#(Version D) GTS20241108022-2-S0001-8#(Version E) GTS20241108022-2-S0001-9#(Version F) GTS20241108022-2-S0001-10#(Version G) GTS20241108022-2-S0001-11#(Version H) GTS20241108022-2-S0001-12#(Version I)
Bluetooth	
Frequency Range	2402MHz ~ 2480MHz
Channel Number	79 channels for Bluetooth (DSS) 40 channels for Bluetooth (DTS)
Channel Spacing	1MHz for Bluetooth (DSS) 2MHz for Bluetooth (DTS)
Modulation Type	GFSK, π/4-DQPSK, 8DPSK for Bluetooth (DSS) GFSK for Bluetooth (DTS)
2.4GWLAN	
WLAN Operation frequency	IEEE 802.11b:2412-2462MHz IEEE 802.11g:2412-2462MHz IEEE 802.11n HT20:2412-2462MHz IEEE 802.11n HT40:2422-2452MHz IEEE 802.11ax HE20:2412-2462MHz IEEE 802.11ax HE40:2422-2452MHz
WLAN Modulation Type	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax HE20: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax HE40: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)

Channel number:	11 Channel for IEEE 802.11b/g/n/ax (HT20) 7 Channel for IEEE 802.11n/ax (HT40)
Channel separation:	5MHz
WIFI(5.2G/5.3G/5.7G/5.8G Band)	
WLAN Operation frequency	5180-5240MHz/ 5260MHz to 5320MHz/ 5500MHz to 5700MHz/ 5745MHz to 5825MHz
WLAN Modulation Type	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac VHT20: OFDM (256QAM,64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE20: OFDMA (1024QAM,256QAM,64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac VHT40: OFDM (256QAM,64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE40: OFDMA (1024QAM,256QAM,64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac VHT80: OFDM (256QAM,64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HE80: OFDMA (1024QAM,256QAM,64QAM, 16QAM, QPSK,BPSK)
Channel number:	4 Channels for 20MHz bandwidth(5180-5240MHz) 4 Channels for 20MHz bandwidth(5260-5320MHz) 11 Channels for 20MHz bandwidth(5500-5700MHz) 5 channels for 20MHz bandwidth(5745-5825MHz) 2 channels for 40MHz bandwidth(5190~5230MHz) 2 channels for 40MHz bandwidth(5270~5310MHz) 5 Channels for 40MHz bandwidth(5510-5670MHz) 2 channels for 40MHz bandwidth(5755~5795MHz) 1 channels for 80MHz bandwidth(5210MHz) 1 channels for 80MHz bandwidth(5290MHz) 2 Channels for 80MHz bandwidth(5530-5610MHz) 1 channels for 80MHz bandwidth(5775MHz)
Antenna Description	Internal Antenna, 2.05dBi(Max.) for 2.4G Band and 3.87dBi(Max.) for 5G Band
RFID(13.56MHz) (Optional)	
Frequency Range	13.56MHz
Channel Number	1
Modulation Type	ASK
Antenna Description	Internal Antenna, 0dBi (Max.), NFC has two optional antennas, antenna 1(Model:DS2-52) and antenna 2 (Model:DS2-51).
Remark:The I24D04 model has 9 versions; Version A: One large display and one small display (80 inch printer), Version B: One large display and one small display (58 inch printer), Version C: One large display and one small display (label printer), Version D: Double large display (80 inch printer), Version E: Double large display (58 inch printer), Version F: Double large display (label printer), Version G: Only one large display (80 inch printer), Version H: Only one large display (58 inch printer), Version I: Only one large display (label printer), The I24D04 screen is available in two resolutions, with the largest resolution screen tested in the report.	

2.3. Equipment Under Test

Power supply system utilised

Power supply voltage	:	○	230V / 50 Hz	○	120V / 60Hz
		○	12 V DC	●	24 V DC
		○	Other (specified in blank below)		

DC 24.0V

2.4. Short description of the Equipment under Test (EUT)

This is a POS Device, Intelligent Electronic Scale.
For more details, refer to the user's manual of the EUT.

2.5. EUT operation mode

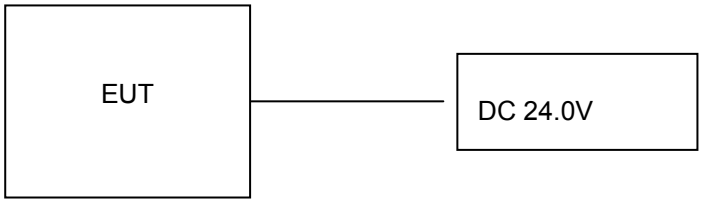
The Applicant provides communication tools software to control the EUT for staying in continuous transmitting (Duty Cycle more than 98%) and receiving mode for testing .There are 40 channels provided to the EUT. Channel 00/19/39 was selected to test.

Mode of Operations	Frequency Range (MHz)	Data Rate (Mbps)
(BLE)	2402	1
	2440	1
	2480	1
For Conducted Emission		
Test Mode	TX Mode	
For Radiated Emission		
Test Mode	TX Mode	

Channel	Frequency(MHz)	Channel	Frequency(MHz)
0	**2402**	20	2442
1	2404	21	2444
2	2406	22	2446
--	--	--	--
--	--	--	--
18	2438	38	2478
19	**2440**	**39**	**2480**

The EUT has been tested under operating condition.
This test was performed with EUT in X, Y, Z position and the worst case was found when EUT in X position.
AC conducted emission pre-test at both at AC 120V/60Hz and AC 240V/50Hz modes, recorded worst case(AC 120V/60Hz).
Worst-case mode and channel used for 150 KHz-30 MHz power line conducted emissions was the mode and channel with the highest output power, which was determined to be BT LE mode (MCH).
Worst-case mode and channel used for 9 KHz-1000 MHz radiated emissions was the mode and channel with the highest output power, that was determined to be BT LE mode(MCH).

2.6. Block Diagram of Test Setup



2.7. EUT Exercise Software

The system was configured for testing in a continuous transmits condition and change test channels by software (adb model) provided by application.

2.8. Special Accessories

Manufacturer	Description	Model	Serial Number	Certificate
SHENZHEN HONOR ELECTRONIC CO.,LTD.	Adapter	ADS-110DL-19-1240096G	--	SDOC
SHENZHEN HONOR ELECTRONIC CO.,LTD.	Adapter	ADS-65HI-19A-124060F	--	SDOC
Jiangsu Chenyang Electron Co.,Ltd.	Adapter	CYSE65-240250	--	SDOC
LENOVO	PC	DESKYOP-EUIVCNR	--	SDOC
LENOVO	Keyboard	T460S	--	SDOC
LENOVO	Mouse	Howard	--	SDOC
aigo	USB flash disk	U330	--	SDOC
THTF	Display	LE23CW-D	--	SDOC
SONY	Earphone	MDR-XB550AP	--	SDOC
--	Cashbox	--	--	SDOC

Note: The PC, Display, Cashbox, Keyboard, Mouse, Earphone and USB flash disk is only used for auxiliary testing.

2.9. External I/O Cable

I/O Port Description	Quantity	Cable
DC IN Port	1	Non-Shielded, 1.0m
USB Port	5	N/A
RJ11 Port	1	N/A
RJ12 Port	1	N/A
RJ45 Port	1	Non-Shielded, 10m
HDMI Port	1	N/A
Type-C Port	1	N/A
Earphone Port	1	N/A

2.10. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: 2AYD5-I24D04** filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

2.11. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Global Test Service Co.,Ltd.
No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong,China.

3.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS (No. CNAS L8169)
Shenzhen Global Test Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2019 General Requirements) for the Competence of Testing and Calibration Laboratories.
A2LA (Certificate No. 4758.01)
Shenzhen Global Test Service Co., Ltd. has been assessed by the American Association for Laboratory Accreditation (A2LA). Certificate No. 4758.01.
Industry Canada Registration Number. is 24189.
FCC Designation Number is CN1234.
FCC Registered Test Site Number is165725.

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

3.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Global Test Service Co.,Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Shenzhen GTS laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10 dB	(1)
Radiated Emission	1~18GHz	4.32 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.12 dB	(1)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5. Test Description

Applied Standard: FCC Part 15 Subpart C				
FCC Rules	Description of Test	Test Sample	Result	Remark
/	On Time and Duty Cycle	GTS20241108022-2-S0001-3#	/	/
§15.247(b)	Maximum Conducted Output Power	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§15.247(e)	Power Spectral Density	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§15.247(a)(2)	6dB Bandwidth	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§2.1047	99% Occupied Bandwidth	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§15.209, §15.247(d)	Conducted Spurious Emissions and Band Edges Test	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§15.209, §15.247(d)	Radiated Spurious Emissions	GTS20241108022-2-S0001-3# GTS20241108022-2-S0001-4# GTS20241108022-2-S0001-5# GTS20241108022-2-S0001-6# GTS20241108022-2-S0001-7# GTS20241108022-2-S0001-8# GTS20241108022-2-S0001-9# GTS20241108022-2-S0001-10# GTS20241108022-2-S0001-11# GTS20241108022-2-S0001-12#	Compliant	Note 1
§15.205	Emissions at Restricted Band	GTS20241108022-2-S0001-3#	Compliant	Appendix B
§15.207(a)	AC Conducted Emissions	GTS20241108022-2-S0001-4# GTS20241108022-2-S0001-5# GTS20241108022-2-S0001-6# GTS20241108022-2-S0001-7# GTS20241108022-2-S0001-8# GTS20241108022-2-S0001-9# GTS20241108022-2-S0001-10# GTS20241108022-2-S0001-11# GTS20241108022-2-S0001-12#	Compliant	Note 1
§15.203 §15.247(c)	Antenna Requirements	GTS20241108022-2-S0001-3#	Compliant	Note 1
§15.247(i)§2.1091	RF Exposure	/	Compliant	Note 2

Remark:
1. The measurement uncertainty is not included in the test result.
2. NA = Not Applicable; NP = Not Performed
3. Note 1 – Test results inside test report;
4. Note 2 – Test results in other test report (MPE Report).
5. We tested all test mode and recorded worst case in report

3.6. Equipments Used during the Test

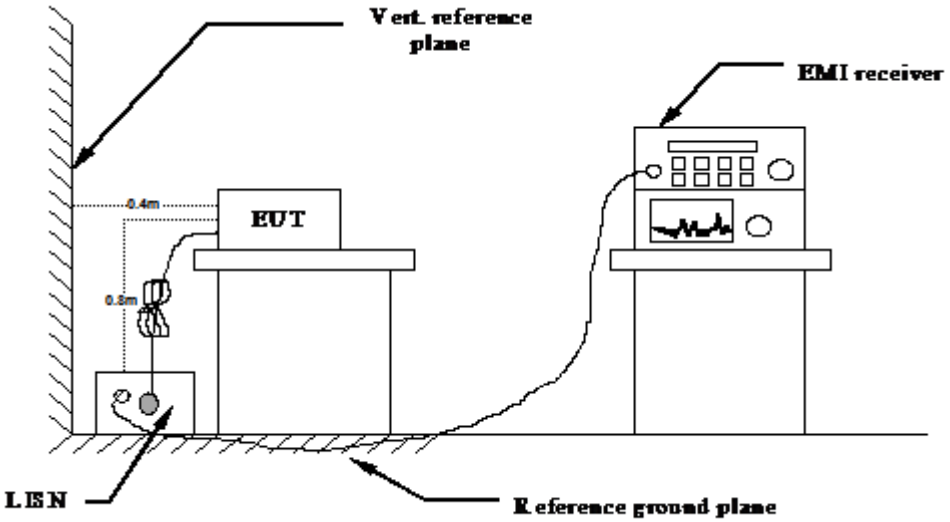
Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
LISN	CYBERTEK	EM5040A	E1850400105	2024/07/15	2025/07/14
LISN	R&S	ESH2-Z5	893606/008	2024/07/15	2025/07/14
EMI Test Receiver	R&S	ESPI3	101841-cd	2024/07/15	2025/07/14
EMI Test Receiver	R&S	ESCI7	101102	2024/07/15	2025/07/14
Spectrum Analyzer	Agilent	N9020A	MY48010425	2024/07/15	2025/07/14
Spectrum Analyzer	R&S	FSV40-N	101800	2024/07/15	2025/07/14
Vector Signal generator	Agilent	N5181A	MY49060502	2024/07/15	2025/07/14
Signal generator	Agilent	N5182A	3610AO1069	2024/07/15	2025/07/14
Climate Chamber	ESPEC	EL-10KA	A20120523	2024/07/15	2025/07/14
Controller	EM Electronics	Controller EM 1000	N/A	N/A	N/A
Horn Antenna	Schwarzbeck	BBHA 9120D	01622	2024/12/16	2025/12/15
Active Loop Antenna	Beijing Da Ze Technology Co.,Ltd.	ZN30900C	15006	2024/07/15	2025/07/14
Bilog Antenna	Schwarzbeck	VULB9163	000976	2024/07/15	2025/07/14
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2024/07/15	2025/07/14
Amplifier	Schwarzbeck	BBV 9743	#202	2024/01/27	2025/01/26
Amplifier	Taiwan Chengyi	EMC051845B	980355	2024/01/27	2025/01/26
Amplifier	Schwarzbeck	BBV9179	9719-025	2024/01/27	2025/01/26
Temperature/Humidity Meter	Gangxing	CTH-608	02	2024/07/15	2025/07/14
High-Pass Filter	HUBER+SUHNER	RG214	RE01	2024/07/15	2025/07/14
High-Pass Filter	HUBER+SUHNER	RG214	RE02	2024/07/15	2025/07/14
RF Cable(below 1GHz)	HUBER+SUHNER	RG214	RE01	2024/07/15	2025/07/14
RF Cable(above 1GHz)	HUBER+SUHNER	RG214	RE02	2024/07/15	2025/07/14
Data acquisition card	Agilent	U2531A	TW53323507	2024/07/15	2025/07/14
Power Sensor	Agilent	U2021XA	MY5365004	2024/07/15	2025/07/14
Test Control Unit	Tonscend	JS0806-1	178060067	2024/07/15	2025/07/14
Automated filter bank	Tonscend	JS0806-F	19F8060177	2024/07/15	2025/07/14
Wireless Commnunication Tester	Rohde&Schwarz	CMW500	125408	2024/07/15	2025/07/14
EMI Test Software	Tonscend	JS1120-1	Ver 2.6.8.0518	/	/
EMI Test Software	Tonscend	JS1120-3	Ver 2.5.77.0418	/	/
EMI Test Software	Tonscend	JS32-CE	Ver 2.5	/	/
EMI Test Software	Tonscend	JS32-RE	Ver 2.5.1.8	/	/

Note: 1. The Cal.Interval was one year.

4. TEST CONDITIONS AND RESULTS

4.1. AC Power Conducted Emission

TEST CONFIGURATION



TEST PROCEDURE

1 The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10-2020.
2 Support equipment, if needed, was placed as per ANSI C63.10-2020
3 All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10-2020
4 The EUT received DC 24V power, the adapter received AC120V/60Hz or AC 240V/50Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5 All support equipments received AC power from a second LISN, if any.
6 The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7 Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8 During the above scans, the emissions were maximized by cable manipulation.

AC Power Conducted Emission Limit

For intentional device, according to § 15.207(a) AC Power Conducted Emission Limits is as following：

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

DISTURBANCE Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:
CD (dBuV) = RA (dBuV) + PL (dB) + CL (dB)

Where CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

TEST RESULTS

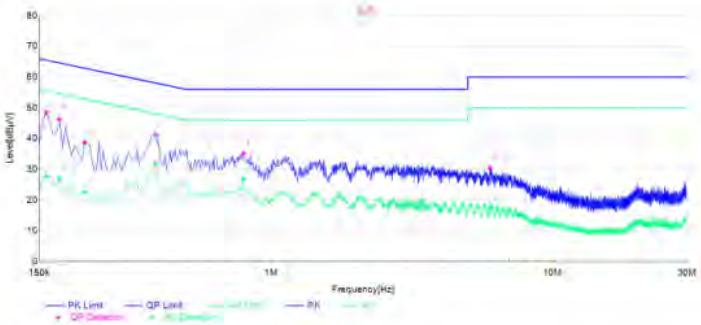
Remark: We measured Conducted Emission at GFSK mode from 150 KHz to 30MHz in AC120V and the worst case was recorded.

Temperature	25℃	Humidity	60%
Test Engineer	Evan Ouyang	Configurations	BT

Version A:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

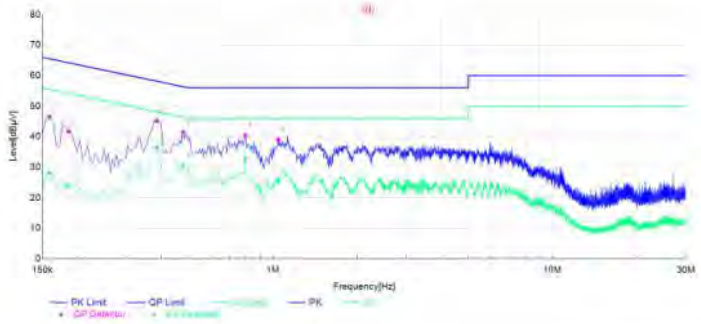
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	38.03	17.48	10.31	48.34	27.79	65.52	55.52	17.18	27.73	L1	PASS
2	0.177	36.09	17.07	10.22	46.31	27.29	64.63	54.63	18.32	27.34	L1	PASS
3	0.2175	28.64	12.42	10.14	38.78	22.56	62.91	52.91	24.13	30.35	L1	PASS
4	0.3885	31.22	21.54	10.15	41.37	31.69	58.10	48.10	16.73	16.41	L1	PASS
5	0.798	24.88	16.62	10.25	35.13	26.87	56.00	46.00	20.87	19.13	L1	PASS
6	6.009	19.86	6.75	10.49	30.35	17.24	60.00	50.00	29.65	32.76	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	36.13	17.89	10.31	46.44	28.20	65.52	55.52	19.08	27.32	N	PASS
2	0.186	31.47	13.91	10.18	41.65	24.09	64.21	54.21	22.56	30.12	N	PASS
3	0.384	34.95	26.33	10.15	45.10	36.48	58.19	48.19	13.09	11.71	N	PASS
4	0.4785	31.20	20.10	10.24	41.44	30.34	56.37	46.37	14.93	16.03	N	PASS
5	0.798	30.13	22.58	10.25	40.38	32.83	56.00	46.00	15.62	13.17	N	PASS
6	1.0455	28.87	15.21	10.20	39.07	25.41	56.00	46.00	16.93	20.59	N	PASS

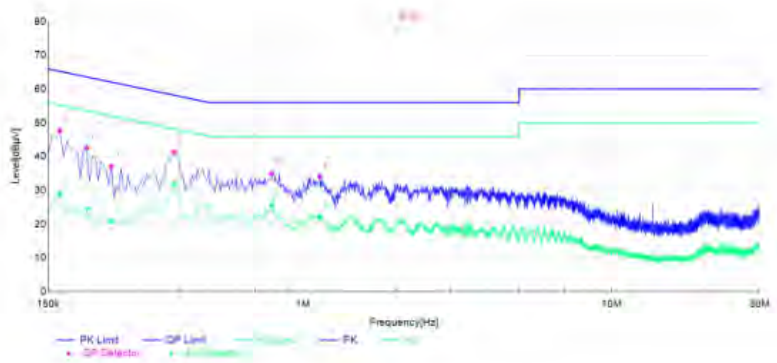
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

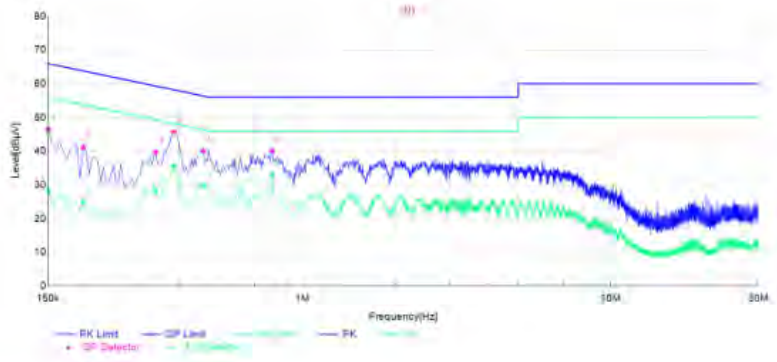
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1635	37.55	18.73	10.29	47.84	29.02	65.28	55.28	17.44	26.26	L1	PASS
2	0.1995	32.52	14.46	10.15	42.67	24.61	63.63	53.63	20.96	29.02	L1	PASS
3	0.24	26.97	10.86	10.13	37.10	20.99	62.10	52.10	25.00	31.11	L1	PASS
4	0.384	31.25	21.76	10.15	41.40	31.91	58.19	48.19	16.79	16.28	L1	PASS
5	0.7935	24.82	15.34	10.25	35.07	25.59	56.00	46.00	20.93	20.41	L1	PASS
6	1.1355	23.92	11.84	10.21	34.13	22.05	56.00	46.00	21.87	23.95	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	36.04	18.17	10.35	46.39	28.52	66.00	56.00	19.61	27.48	N	PASS
2	0.195	31.01	14.95	10.16	41.17	25.11	63.82	53.82	22.65	28.71	N	PASS
3	0.3345	29.61	18.01	10.12	39.73	28.13	59.34	49.34	19.61	21.21	N	PASS
4	0.384	35.65	25.36	10.15	45.80	35.51	58.19	48.19	12.39	12.68	N	PASS
5	0.4785	29.84	19.52	10.24	40.08	29.76	56.37	46.37	16.29	16.61	N	PASS
6	0.798	29.94	22.48	10.25	40.19	32.73	56.00	46.00	15.81	13.27	N	PASS

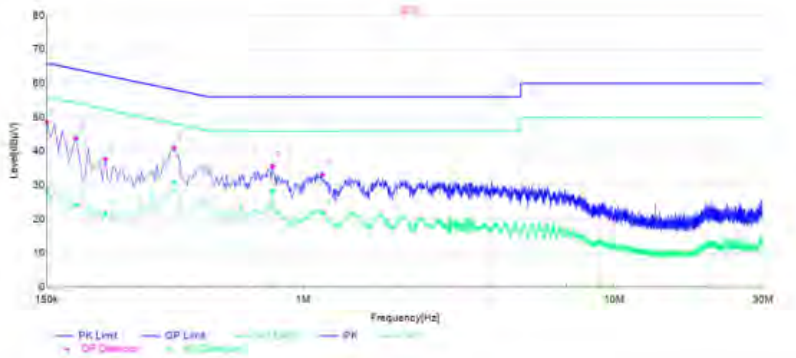
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version B:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

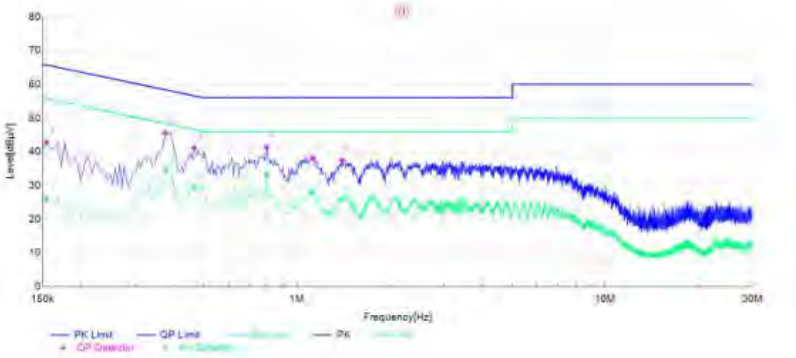
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	38.15	17.68	10.35	48.50	28.03	66.00	56.00	17.50	27.97	L1	PASS
2	0.186	33.68	14.05	10.18	43.86	24.23	64.21	54.21	20.35	29.98	L1	PASS
3	0.231	27.61	11.56	10.13	37.74	21.69	62.41	52.41	24.67	30.72	L1	PASS
4	0.384	30.80	20.78	10.15	40.95	30.93	58.19	48.19	17.24	17.26	L1	PASS
5	0.798	25.37	17.99	10.25	35.62	28.24	56.00	46.00	20.38	17.76	L1	PASS
6	1.1535	22.92	11.64	10.21	33.13	21.85	56.00	46.00	22.87	24.15	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	32.45	15.78	10.33	42.78	26.11	65.75	55.75	22.97	29.64	N	PASS
2	0.375	35.45	24.43	10.15	45.60	34.58	58.39	48.39	12.79	13.81	N	PASS
3	0.465	30.89	19.54	10.23	41.12	29.77	56.60	46.60	15.48	16.83	N	PASS
4	0.798	31.15	23.03	10.25	41.40	33.28	56.00	46.00	14.60	12.72	N	PASS
5	1.131	27.95	17.91	10.21	38.16	28.12	56.00	46.00	17.84	17.88	N	PASS
6	1.401	27.29	15.57	10.23	37.52	25.80	56.00	46.00	18.48	20.20	N	PASS

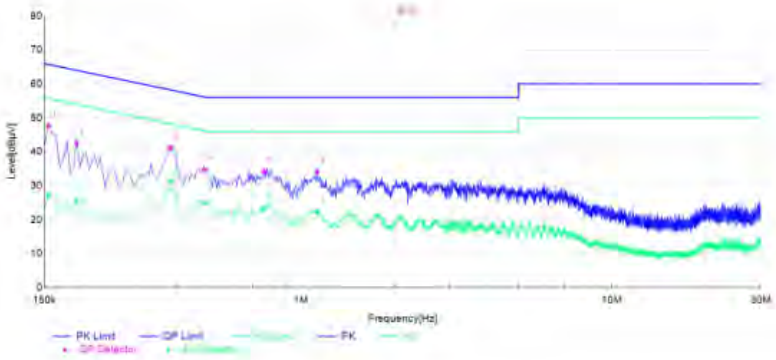
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

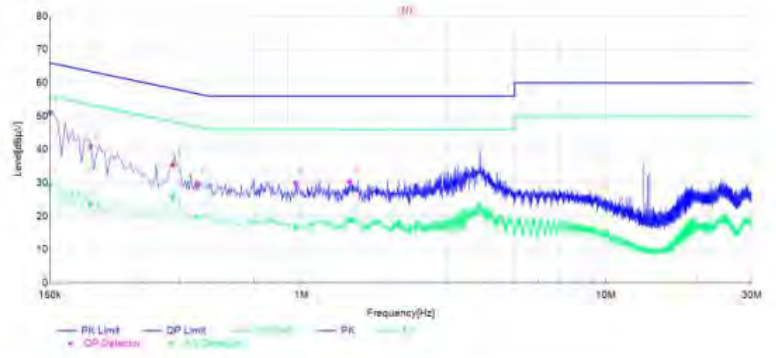
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	37.48	16.82	10.33	47.81	27.15	65.75	55.75	17.94	28.60	L1	PASS
2	0.1905	32.71	15.06	10.16	42.87	25.22	64.01	54.01	21.14	28.79	L1	PASS
3	0.3795	31.01	21.13	10.15	41.16	31.28	58.29	48.29	17.13	17.01	L1	PASS
4	0.4875	24.63	14.78	10.25	34.88	25.03	56.21	46.21	21.33	21.18	L1	PASS
5	0.762	24.05	13.09	10.24	34.29	23.33	56.00	46.00	21.71	22.67	L1	PASS
6	1.1265	24.12	12.35	10.21	34.33	22.56	56.00	46.00	21.67	23.44	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	40.65	18.81	10.35	51.00	29.16	66.00	56.00	15.00	26.84	N	PASS
2	0.204	30.77	13.49	10.15	40.92	23.64	63.45	53.45	22.53	29.81	N	PASS
3	0.3795	25.30	15.63	10.15	35.45	25.78	58.29	48.29	22.84	22.51	N	PASS
4	0.456	19.49	9.53	10.22	29.71	19.75	56.77	46.77	27.06	27.02	N	PASS
5	0.96	19.70	6.16	10.20	29.90	16.36	56.00	46.00	26.10	29.64	N	PASS
6	1.4415	20.13	8.64	10.23	30.36	18.87	56.00	46.00	25.64	27.13	N	PASS

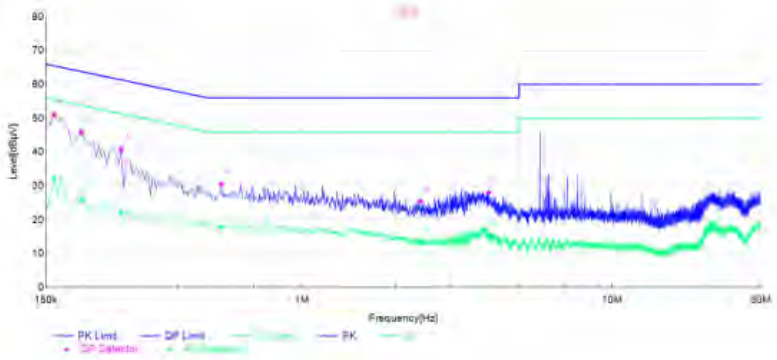
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version C:
Adapter: ADS-110DL-19-1240096G

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

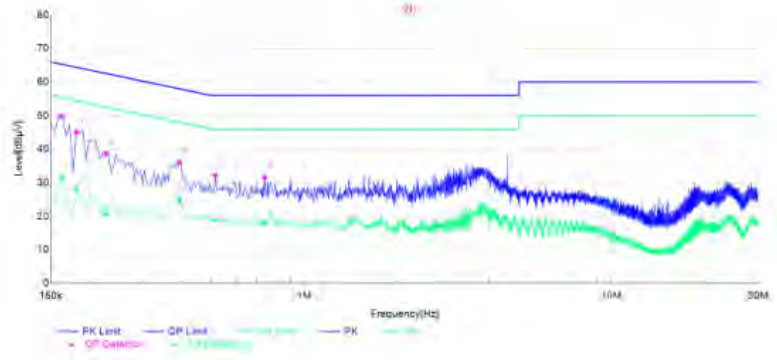
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	40.90	21.75	10.31	51.21	32.06	65.52	55.52	14.31	23.46	L1	PASS
2	0.195	35.78	15.72	10.16	45.94	25.88	63.82	53.82	17.88	27.94	L1	PASS
3	0.2625	30.77	12.09	10.12	40.89	22.21	61.35	51.35	20.46	29.14	L1	PASS
4	0.5505	20.41	7.63	10.22	30.63	17.85	56.00	46.00	25.37	28.15	L1	PASS
5	2.4135	15.13	3.05	10.30	25.43	13.35	56.00	46.00	30.57	32.65	L1	PASS
6	3.993	17.62	4.97	10.37	27.99	15.34	56.00	46.00	28.01	30.66	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1635	39.30	21.64	10.29	49.59	31.93	65.28	55.28	15.69	23.35	N	PASS
2	0.1815	34.88	17.80	10.20	45.08	28.00	64.42	54.42	19.34	26.42	N	PASS
3	0.2265	28.51	10.59	10.14	38.65	20.73	62.58	52.58	23.93	31.85	N	PASS
4	0.393	25.96	14.81	10.16	36.12	24.97	58.00	48.00	21.88	23.03	N	PASS
5	0.5145	22.01	8.53	10.24	32.25	18.77	56.00	46.00	23.75	27.23	N	PASS
6	0.744	21.38	7.76	10.24	31.62	18.00	56.00	46.00	24.38	28.00	N	PASS

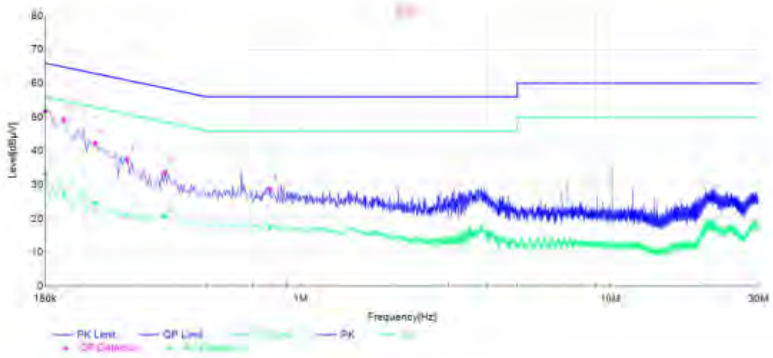
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version D:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

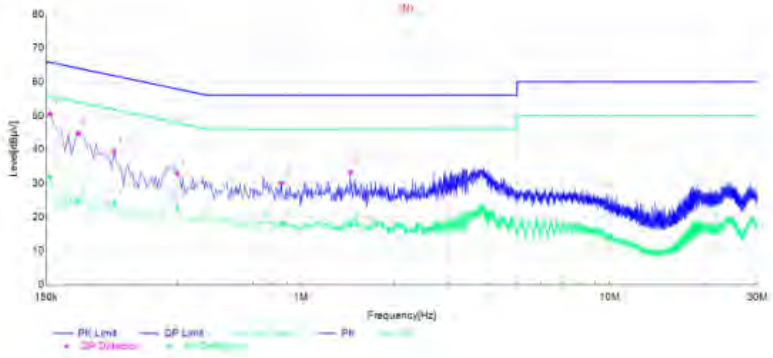
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	41.44	22.95	10.35	51.79	33.30	66.00	56.00	14.21	22.70	L1	PASS
2	0.1725	39.06	16.62	10.24	49.30	26.86	64.84	54.84	15.54	27.98	L1	PASS
3	0.2175	32.26	14.50	10.14	42.40	24.64	62.91	52.91	20.51	28.27	L1	PASS
4	0.276	27.38	11.05	10.11	37.49	21.16	60.94	50.94	23.45	29.78	L1	PASS
5	0.366	23.49	10.51	10.14	33.63	20.65	58.59	48.59	24.96	27.94	L1	PASS
6	0.798	18.35	7.29	10.25	28.60	17.54	56.00	46.00	27.40	28.46	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	40.18	21.54	10.33	50.51	31.87	65.75	55.75	15.24	23.88	N	PASS
2	0.1905	34.65	14.67	10.16	44.81	24.83	64.01	54.01	19.20	29.18	N	PASS
3	0.249	28.89	13.87	10.12	39.01	23.99	61.79	51.79	22.78	27.80	N	PASS
4	0.3975	22.94	13.01	10.16	33.10	23.17	57.91	47.91	24.81	24.74	N	PASS
5	0.8655	19.80	7.95	10.23	30.03	18.18	56.00	46.00	25.97	27.82	N	PASS
6	1.446	23.03	7.43	10.23	33.26	17.66	56.00	46.00	22.74	28.34	N	PASS

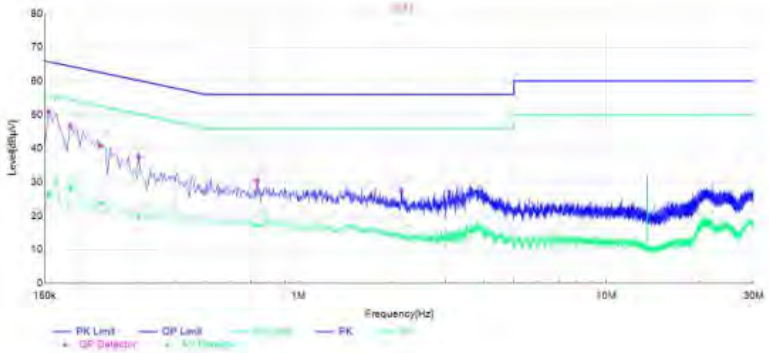
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

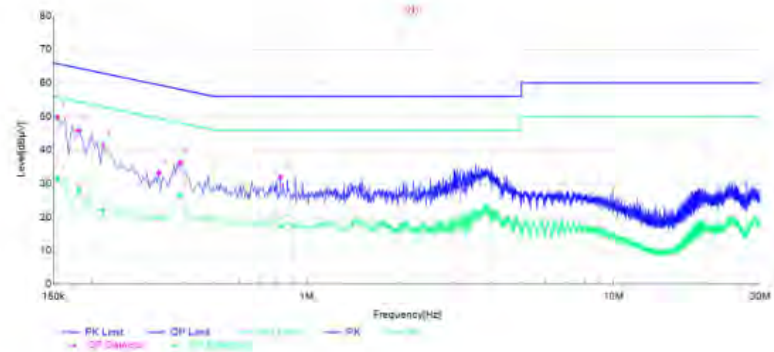
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	40.62	16.23	10.33	50.95	26.56	65.75	55.75	14.80	29.19	L1	PASS
2	0.1815	36.54	18.31	10.20	46.74	28.51	64.42	54.42	17.68	25.91	L1	PASS
3	0.2265	30.78	13.68	10.14	40.92	23.82	62.58	52.58	21.66	28.76	L1	PASS
4	0.303	27.48	9.99	10.11	37.59	20.10	60.16	50.16	22.57	30.06	L1	PASS
5	0.735	20.22	6.90	10.23	30.45	17.13	56.00	46.00	25.55	28.87	L1	PASS
6	2.157	17.34	3.32	10.28	27.62	13.60	56.00	46.00	28.38	32.40	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	39.47	21.18	10.33	49.80	31.51	65.75	55.75	15.95	24.24	N	PASS
2	0.1815	35.68	18.04	10.20	45.88	28.24	64.42	54.42	18.54	26.18	N	PASS
3	0.2175	31.03	11.94	10.14	41.17	22.08	62.91	52.91	21.74	30.83	N	PASS
4	0.33	23.14	9.90	10.12	33.26	20.02	59.45	49.45	26.19	29.43	N	PASS
5	0.3885	26.06	16.57	10.15	36.21	26.72	58.10	48.10	21.89	21.38	N	PASS
6	0.8205	21.69	6.79	10.24	31.93	17.03	56.00	46.00	24.07	28.97	N	PASS

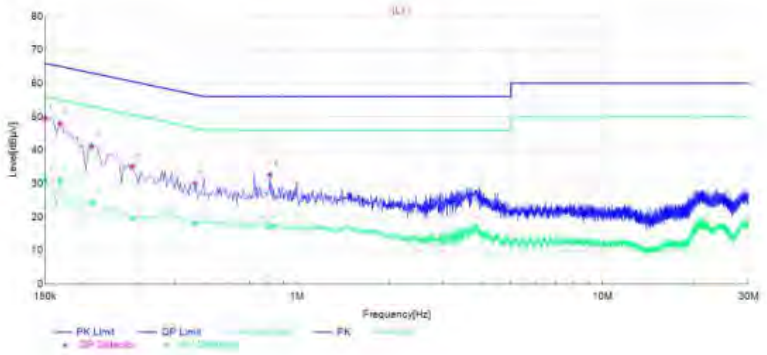
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version E:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

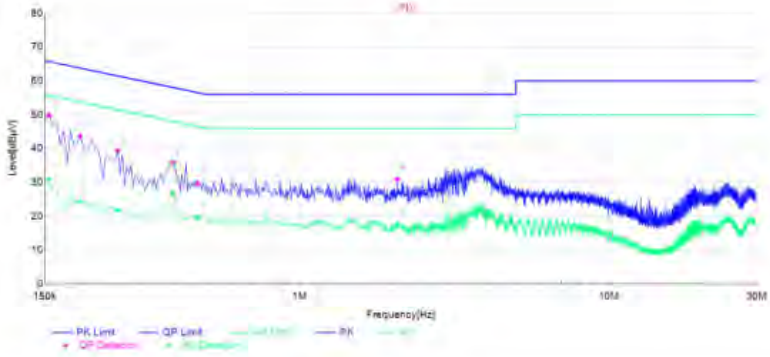
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	39.12	20.86	10.35	49.47	31.21	66.00	56.00	16.53	24.79	L1	PASS
2	0.168	37.72	20.80	10.27	47.99	31.07	65.06	55.06	17.07	23.99	L1	PASS
3	0.213	31.08	14.06	10.14	41.22	24.20	63.09	53.09	21.87	28.89	L1	PASS
4	0.2895	25.18	9.55	10.10	35.28	19.65	60.54	50.54	25.26	30.89	L1	PASS
5	0.465	19.78	7.89	10.23	30.01	18.12	56.60	46.60	26.59	28.48	L1	PASS
6	0.816	22.37	6.72	10.24	32.61	16.96	56.00	46.00	23.39	29.04	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	39.55	20.74	10.33	49.88	31.07	65.75	55.75	15.87	24.68	N	PASS
2	0.195	33.50	14.26	10.16	43.66	24.42	63.82	53.82	20.16	29.40	N	PASS
3	0.258	29.21	11.74	10.12	39.33	21.86	61.50	51.50	22.17	29.64	N	PASS
4	0.3885	25.83	16.61	10.15	35.98	26.76	58.10	48.10	22.12	21.34	N	PASS
5	0.4695	19.50	9.50	10.24	29.74	19.74	56.52	46.52	26.78	26.78	N	PASS
6	2.076	20.75	7.34	10.28	31.03	17.62	56.00	46.00	24.97	28.38	N	PASS

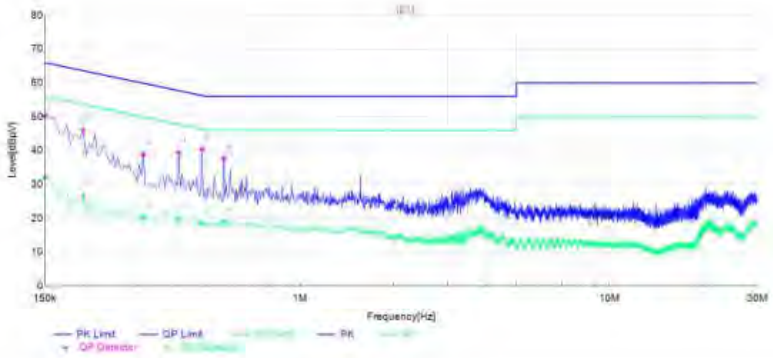
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

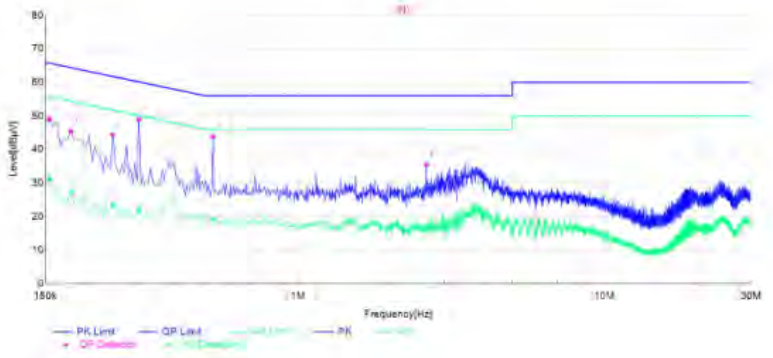
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	40.01	21.85	10.35	50.36	32.20	66.00	56.00	15.64	23.80	L1	PASS
2	0.1995	35.85	16.27	10.15	46.00	26.42	63.63	53.63	17.63	27.21	L1	PASS
3	0.312	28.71	10.36	10.11	38.82	20.47	59.92	49.92	21.10	29.45	L1	PASS
4	0.4065	29.18	9.57	10.17	39.35	19.74	57.72	47.72	18.37	27.98	L1	PASS
5	0.483	30.24	8.29	10.25	40.49	18.54	56.29	46.29	15.80	27.75	L1	PASS
6	0.5685	27.38	8.85	10.21	37.59	19.06	56.00	46.00	18.41	26.94	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	38.72	20.81	10.33	49.05	31.14	65.75	55.75	16.70	24.61	N	PASS
2	0.1815	35.19	17.17	10.20	45.39	27.37	64.42	54.42	19.03	27.05	N	PASS
3	0.249	34.20	13.40	10.12	44.32	23.52	61.79	51.79	17.47	28.27	N	PASS
4	0.303	38.87	12.04	10.11	48.98	22.15	60.16	50.16	11.18	28.01	N	PASS
5	0.528	33.68	9.10	10.23	43.91	19.33	56.00	46.00	12.09	26.67	N	PASS
6	2.625	25.17	7.04	10.31	35.48	17.35	56.00	46.00	20.52	28.65	N	PASS

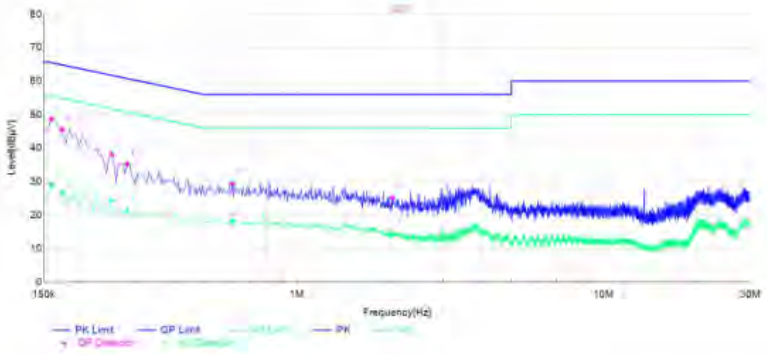
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version F:
Adapter: ADS-110DL-19-1240096G

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

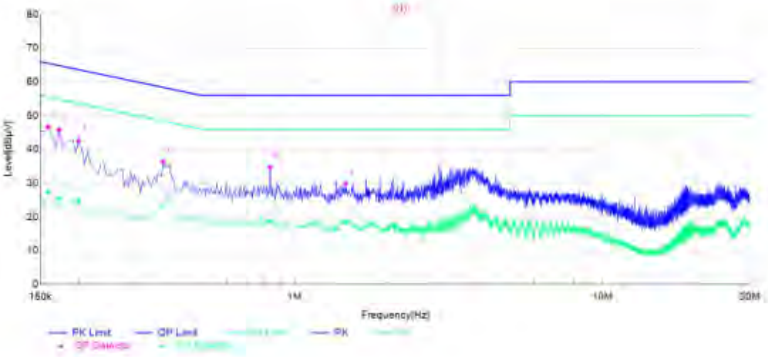
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	38.46	18.80	10.31	48.77	29.11	65.52	55.52	16.75	26.41	L1	PASS
2	0.1725	35.33	16.47	10.24	45.57	26.71	64.84	54.84	19.27	28.13	L1	PASS
3	0.249	28.05	14.39	10.12	38.17	24.51	61.79	51.79	23.62	27.28	L1	PASS
4	0.2805	25.22	11.15	10.11	35.33	21.26	60.80	50.80	25.47	29.54	L1	PASS
5	0.618	19.24	8.19	10.20	29.44	18.39	56.00	46.00	26.56	27.61	L1	PASS
6	2.0535	15.00	3.87	10.27	25.27	14.14	56.00	46.00	30.73	31.86	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	36.40	17.23	10.31	46.71	27.54	65.52	55.52	18.81	27.98	N	PASS
2	0.1725	35.64	15.39	10.24	45.88	25.63	64.84	54.84	18.96	29.21	N	PASS
3	0.1995	32.46	14.87	10.15	42.61	25.02	63.63	53.63	21.02	28.61	N	PASS
4	0.375	26.15	13.39	10.15	36.30	23.54	58.39	48.39	22.09	24.85	N	PASS
5	0.834	24.46	8.60	10.24	34.70	18.84	56.00	46.00	21.30	27.16	N	PASS
6	1.464	19.60	8.18	10.23	29.83	18.41	56.00	46.00	26.17	27.59	N	PASS

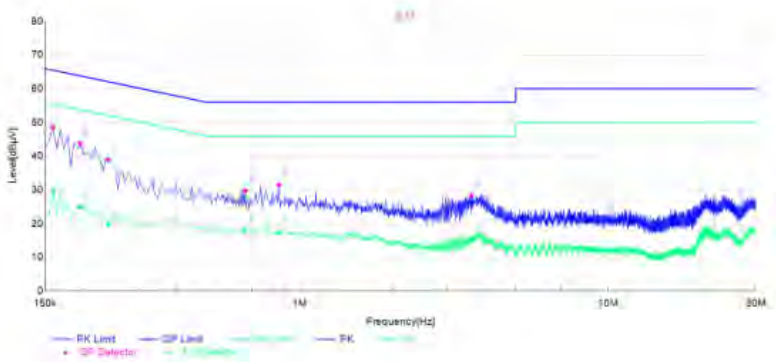
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version G:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

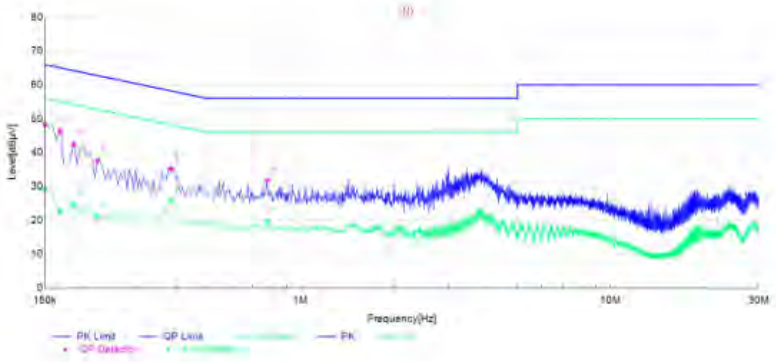
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	38.31	19.04	10.31	48.62	29.35	65.52	55.52	16.90	26.17	L1	PASS
2	0.195	33.63	14.85	10.16	43.79	25.01	63.82	53.82	20.03	28.81	L1	PASS
3	0.24	28.85	9.58	10.13	38.98	19.71	62.10	52.10	23.12	32.39	L1	PASS
4	0.6675	19.61	7.88	10.21	29.82	18.09	56.00	46.00	26.18	27.91	L1	PASS
5	0.8565	21.28	7.09	10.24	31.52	17.33	56.00	46.00	24.48	28.67	L1	PASS
6	3.597	18.03	5.01	10.36	28.39	15.37	56.00	46.00	27.61	30.63	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	38.02	18.64	10.35	48.37	28.99	66.00	56.00	17.63	27.01	N	PASS
2	0.168	36.07	12.41	10.27	46.34	22.68	65.06	55.06	18.72	32.38	N	PASS
3	0.186	32.23	14.58	10.18	42.41	24.76	64.21	54.21	21.80	29.45	N	PASS
4	0.222	27.47	11.13	10.14	37.61	21.27	62.74	52.74	25.13	31.47	N	PASS
5	0.384	24.98	15.47	10.15	35.13	25.62	58.19	48.19	23.06	22.57	N	PASS
6	0.78	21.43	9.60	10.25	31.68	19.85	56.00	46.00	24.32	26.15	N	PASS

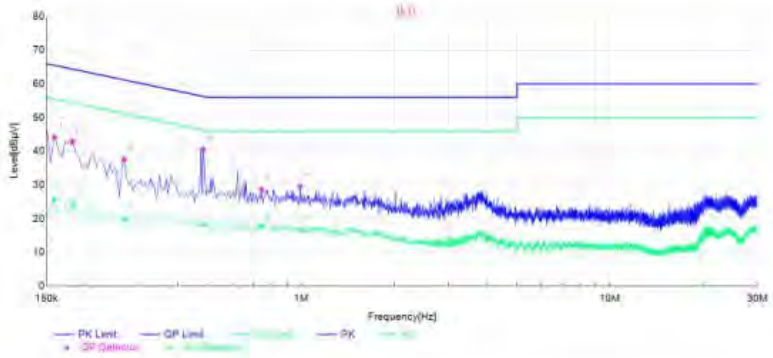
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

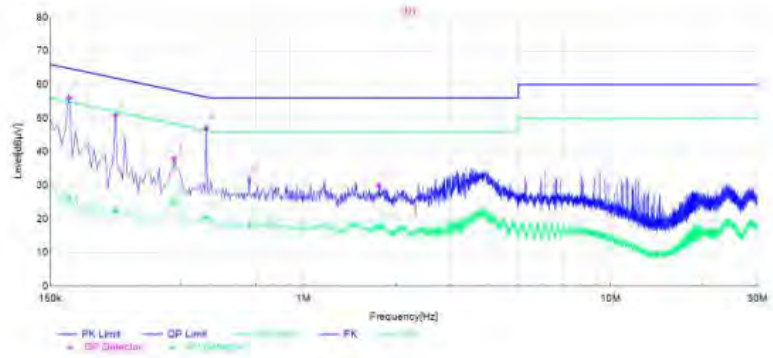
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	33.80	15.56	10.31	44.11	25.87	65.52	55.52	21.41	29.65	L1	PASS
2	0.1815	32.68	14.31	10.20	42.88	24.51	64.42	54.42	21.54	29.91	L1	PASS
3	0.267	27.46	9.62	10.11	37.57	19.73	61.21	51.21	23.64	31.48	L1	PASS
4	0.483	30.34	8.02	10.25	40.59	18.27	56.29	46.29	15.70	28.02	L1	PASS
5	0.744	18.40	7.66	10.24	28.64	17.90	56.00	46.00	27.36	28.10	L1	PASS
6	0.9915	19.42	6.38	10.19	29.61	16.57	56.00	46.00	26.39	29.43	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1725	45.85	15.71	10.24	56.09	25.95	64.84	54.84	8.75	28.89	N	PASS
2	0.2445	40.70	12.32	10.13	50.83	22.45	61.94	51.94	11.11	29.49	N	PASS
3	0.3795	27.69	15.03	10.15	37.84	25.18	58.29	48.29	20.45	23.11	N	PASS
4	0.483	36.74	10.37	10.25	46.99	20.62	56.29	46.29	9.30	25.67	N	PASS
5	0.6675	21.63	8.42	10.21	31.84	18.63	56.00	46.00	24.16	27.37	N	PASS
6	1.761	19.78	7.27	10.25	30.03	17.52	56.00	46.00	25.97	28.48	N	PASS

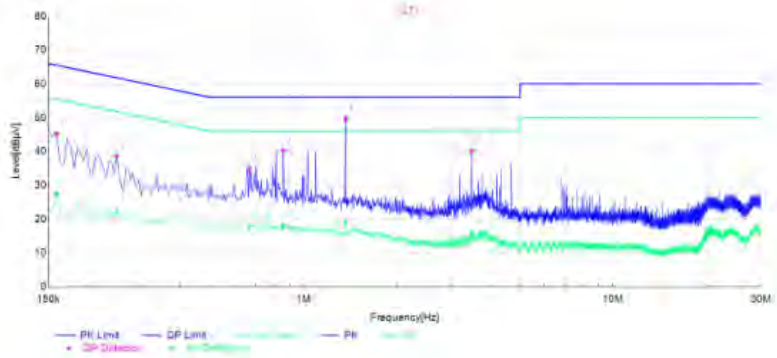
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version H:
Adapter: ADS-65HI-19A-124060F

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

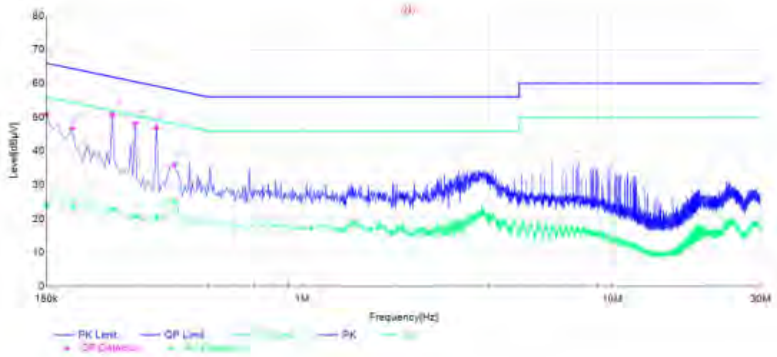
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	34.89	17.18	10.31	45.20	27.49	65.52	55.52	20.32	28.03	L1	PASS
2	0.249	28.63	11.91	10.12	38.75	22.03	61.79	51.79	23.04	29.76	L1	PASS
3	0.6675	24.81	7.63	10.21	35.02	17.84	56.00	46.00	20.98	28.16	L1	PASS
4	0.861	30.05	7.88	10.24	40.29	18.12	56.00	46.00	15.71	27.88	L1	PASS
5	1.3695	39.47	8.85	10.23	49.70	19.08	56.00	46.00	6.30	26.92	L1	PASS
6	3.498	29.74	5.76	10.35	40.09	16.11	56.00	46.00	15.91	29.89	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.15	40.48	13.32	10.35	50.83	23.67	66.00	56.00	15.17	32.33	N	PASS
2	0.1815	36.51	13.28	10.20	46.71	23.48	64.42	54.42	17.71	30.94	N	PASS
3	0.2445	40.55	12.89	10.13	50.68	23.02	61.94	51.94	11.26	28.92	N	PASS
4	0.2895	38.06	10.79	10.10	48.16	20.89	60.54	50.54	12.38	29.65	N	PASS
5	0.339	36.78	10.20	10.13	46.91	20.33	59.23	49.23	12.32	28.90	N	PASS
6	0.3885	25.97	14.90	10.15	36.12	25.05	58.10	48.10	21.98	23.05	N	PASS

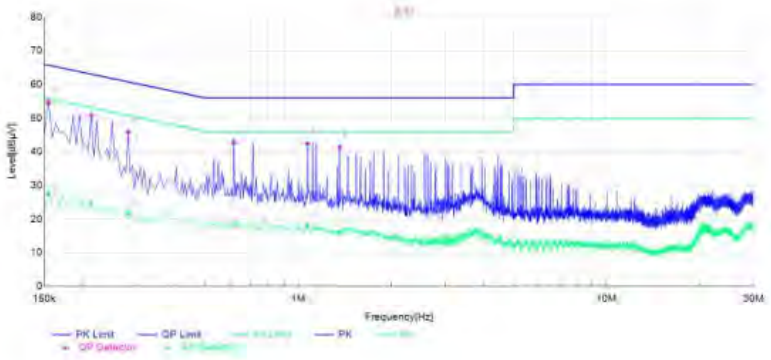
Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Adapter: CYSE65-240250

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

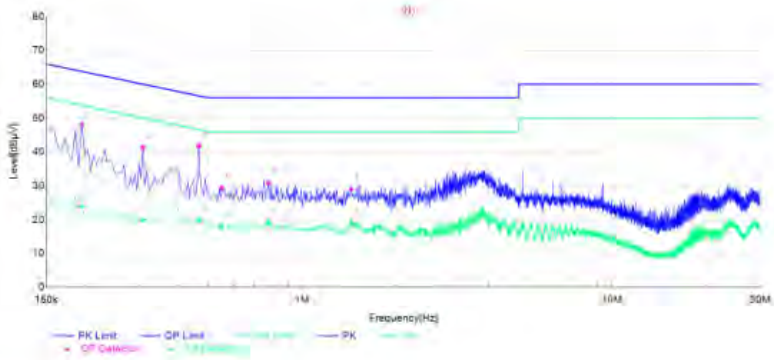
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1545	44.25	17.12	10.33	54.58	27.45	65.75	55.75	11.17	28.30	L1	PASS
2	0.213	40.67	14.07	10.14	50.81	24.21	63.09	53.09	12.28	28.88	L1	PASS
3	0.2805	35.85	11.83	10.11	45.96	21.94	60.80	50.80	14.84	28.86	L1	PASS
4	0.618	32.57	8.55	10.20	42.77	18.75	56.00	46.00	13.23	27.25	L1	PASS
5	1.0725	32.15	8.03	10.21	42.36	18.24	56.00	46.00	13.64	27.76	L1	PASS
6	1.365	31.03	5.94	10.23	41.26	16.17	56.00	46.00	14.74	29.83	L1	PASS

Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.195	37.76	13.83	10.16	47.92	23.99	63.82	53.82	15.90	29.83	N	PASS
2	0.3075	31.17	9.80	10.11	41.28	19.91	60.04	50.04	18.76	30.13	N	PASS
3	0.465	31.69	9.88	10.23	41.92	20.11	56.60	46.60	14.68	26.49	N	PASS
4	0.5505	19.16	7.70	10.22	29.38	17.92	56.00	46.00	26.62	28.08	N	PASS
5	0.78	20.65	8.88	10.25	30.90	19.13	56.00	46.00	25.10	26.87	N	PASS
6	1.4415	18.75	8.87	10.23	28.98	19.10	56.00	46.00	27.02	26.90	N	PASS

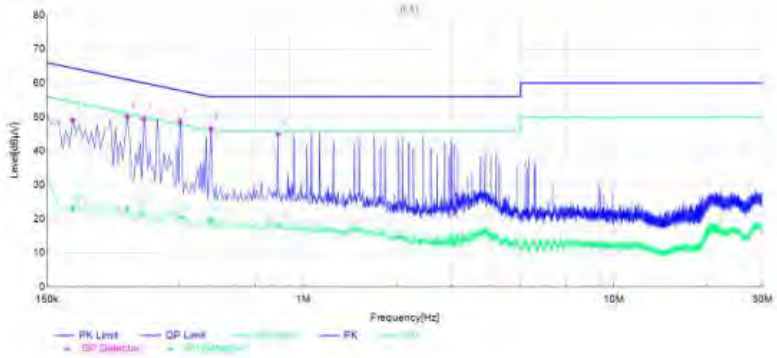
Note:1. Result (dBµV) = Reading (dBµV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Version I:
Adapter: ADS-110DL-19-1240096G

Power supply:	AC 120V/60Hz	Polarization	L

Test Graph



Final Data List

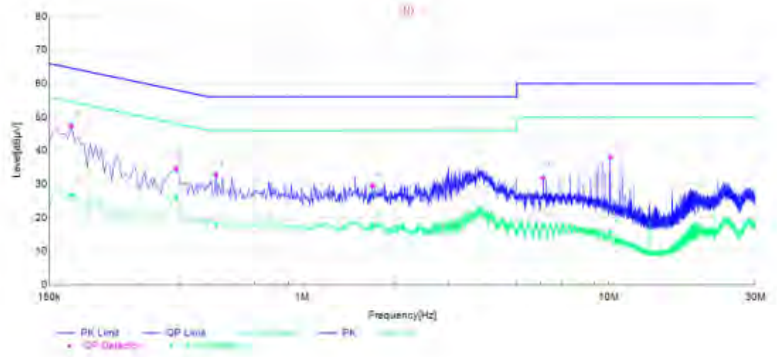
NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.1815	38.89	12.86	10.20	49.09	23.06	64.42	54.42	15.33	31.36	L1	PASS
2	0.2715	40.04	12.75	10.11	50.15	22.86	61.07	51.07	10.92	28.21	L1	PASS
3	0.3075	39.14	12.02	10.11	49.25	22.13	60.04	50.04	10.79	27.91	L1	PASS
4	0.402	38.49	10.34	10.17	48.66	20.51	57.81	47.81	9.15	27.30	L1	PASS
5	0.5055	36.40	9.41	10.25	46.65	19.66	56.00	46.00	9.35	26.34	L1	PASS
6	0.8295	34.60	8.08	10.24	44.84	18.32	56.00	46.00	11.16	27.68	L1	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Power supply:	AC 120V/60Hz	Polarization	N

Test Graph



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.177	37.24	16.71	10.22	47.46	26.93	64.63	54.63	17.17	27.70	N	PASS
2	0.3885	24.58	16.19	10.15	34.73	26.34	58.10	48.10	23.37	21.76	N	PASS
3	0.5235	22.80	7.84	10.24	33.04	18.08	56.00	46.00	22.96	27.92	N	PASS
4	1.698	19.39	7.77	10.25	29.64	18.02	56.00	46.00	26.36	27.98	N	PASS
5	6.117	21.50	7.04	10.49	31.99	17.53	60.00	50.00	28.01	32.47	N	PASS
6	10.1175	27.54	5.16	10.60	38.14	15.76	60.00	50.00	21.86	34.24	N	PASS

Note:1. Result (dBμV) = Reading (dBμV) + Factor (dB).

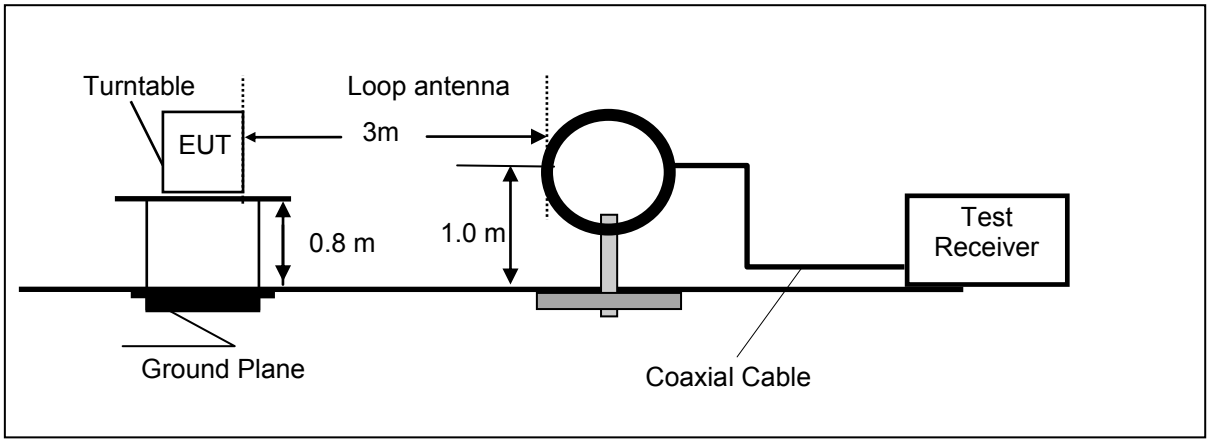
2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Note: All modes have been tested and the worst mode is recorded in the report, NFC has two optional antennas, with the worst mode recorded in the report (NFC antenna Model:DS2-52).

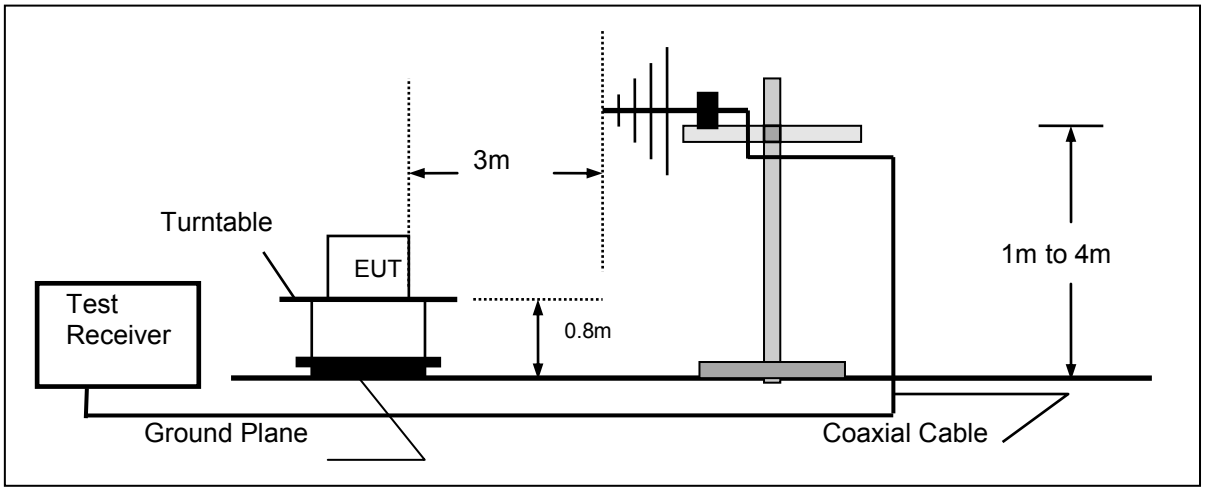
4.2. Radiated Emission

TEST CONFIGURATION

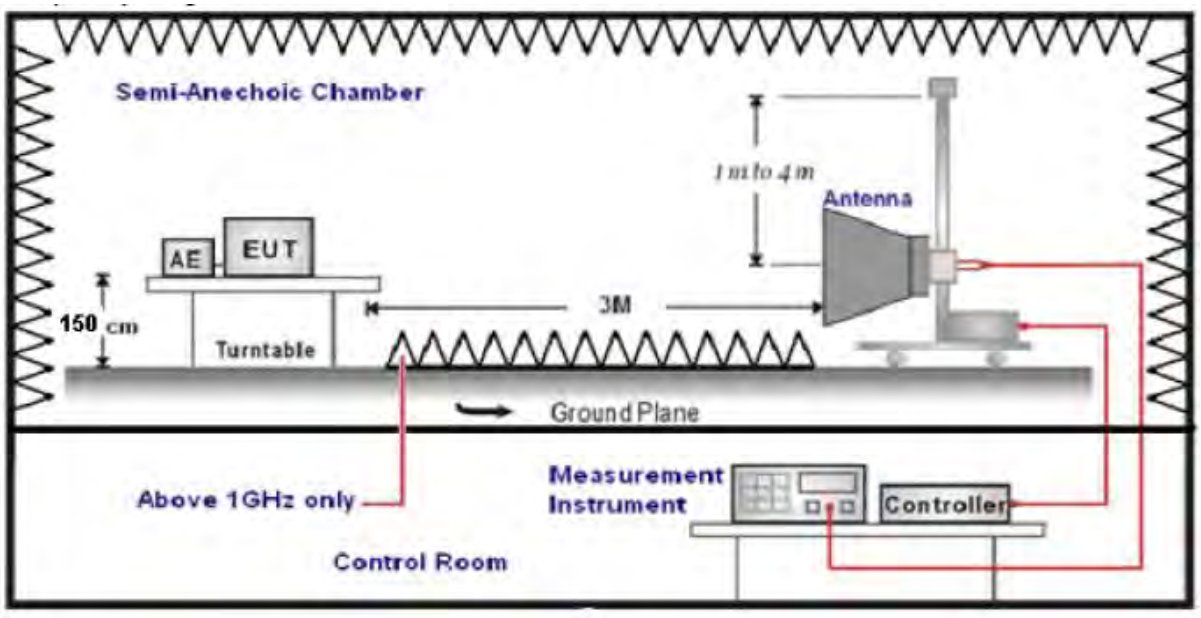
Frequency range 9 KHz – 30MHz



Frequency range 30MHz – 1000MHz



Frequency range above 1GHz-25GHz



TEST PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane when testing frequency range 9 KHz –1GHz;the EUT was placed on a turn table which is 1.5m above ground plane when testing frequency range 1GHz – 25GHz.
2. Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0℃ to 360℃ to acquire the highest emissions from EUT.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measurements have been completed.
5. Radiated emission test frequency band from 30MHz to 25GHz.
6. The distance between test antenna and EUT as following table states:

Test Frequency range	Test Antenna Type	Test Distance
9KHz-30MHz	Active Loop Antenna	3
30MHz-1GHz	Ultra-Broadband Antenna	3
1GHz-18GHz	Double Ridged Horn Antenna	3
18GHz-25GHz	Horn Anternna	1

7. Setting test receiver/spectrum as following table states:

Test Frequency range	Test Receiver/Spectrum Setting	Detector
9KHz-150KHz	RBW=200Hz/VBW=3KHz,Sweep time=Auto	QP
150KHz-30MHz	RBW=9KHz/VBW=100KHz,Sweep time=Auto	QP
30MHz-1GHz	RBW=120KHz/VBW=1000KHz,Sweep time=Auto	QP
1GHz-40GHz	Peak Value: RBW=1MHz/VBW=3MHz, Sweep time=Auto Average Value: RBW=1MHz/VBW=10Hz, Sweep time=Auto	Peak

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

Transd=AF +CL-AG

RADIATION LIMIT

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission from intentional radiators at a distance of 3 meters shall not exceed the following table. According to § 15.247(d), in any 100kHz bandwidth outside the frequency band in which the EUT is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the100kHz bandwidth within the band that contains the highest level of desired power.

The pre-test have done for the EUT in three axes and found the worst emission at position shown in test setup photos.

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
0.009-0.49	3	20log(2400/F(KHz))+40log(300/3)	2400/F(KHz)
0.49-1.705	3	20log(24000/F(KHz))+ 40log(30/3)	24000/F(KHz)
1.705-30	3	20log(30)+ 40log(30/3)	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST RESULTS

Remark: We measured Radiated Emission at GFSK mode from 9KHz to 25GHz in AC120V and the worst case was recorded.

Temperature	25℃	Humidity	55%
Test Engineer	Evan Ouyang	Configurations	BT

For 9 KHz~30MHz

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dBuV)	Remark
-	-	-	-	See Note

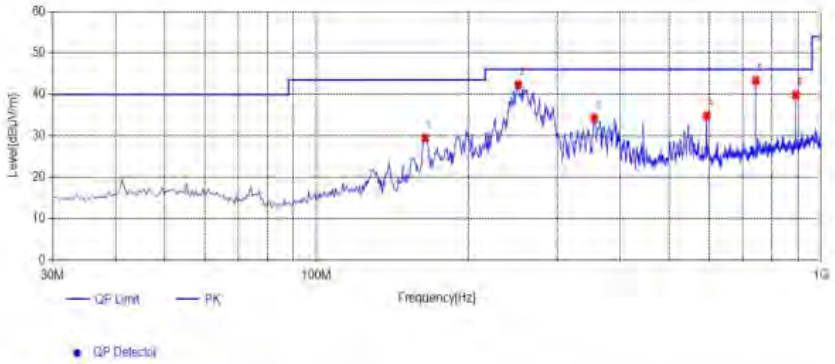
Note:
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
Limit line = specific limits (dBuV) + distance extrapolation factor.

For 30MHz-1GHz
Version A:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



Suspected List

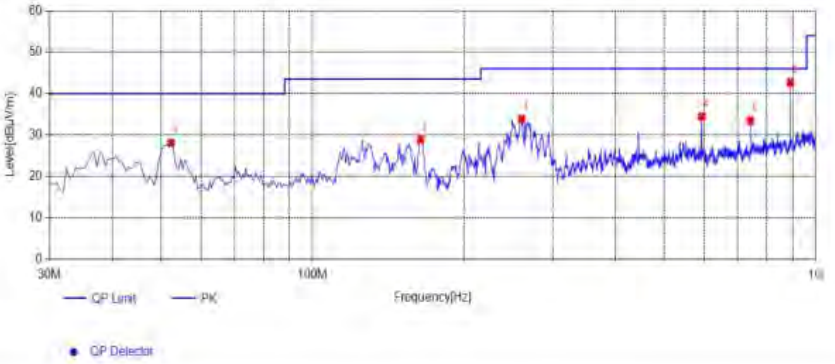
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	164.345	42.39	-12.92	29.47	43.50	14.03	100	314	PK	Horizonta	PASS
2	251.16	51.02	-8.65	42.37	46.00	3.63	100	261	PK	Horizonta	PASS
3	355.435	40.30	-6.06	34.24	46.00	11.76	100	294	PK	Horizonta	PASS
4	594.055	35.46	-0.60	34.86	46.00	11.14	100	38	PK	Horizonta	PASS
5	742.465	42.24	1.13	43.37	46.00	2.63	100	31	PK	Horizonta	PASS
6	891.36	37.85	1.98	39.83	46.00	6.17	100	8	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	52.31	39.06	-10.98	28.08	40.00	11.92	100	274	PK	Vertical	PASS
2	163.86	41.80	-12.96	28.84	43.50	14.66	100	271	PK	Vertical	PASS
3	260.375	42.11	-8.26	33.85	46.00	12.15	100	86	PK	Vertical	PASS
4	594.055	35.12	-0.60	34.52	46.00	11.48	100	99	PK	Vertical	PASS
5	742.465	32.36	1.13	33.49	46.00	12.51	100	152	PK	Vertical	PASS
6	891.36	40.70	1.98	42.68	46.00	3.32	100	231	PK	Vertical	PASS

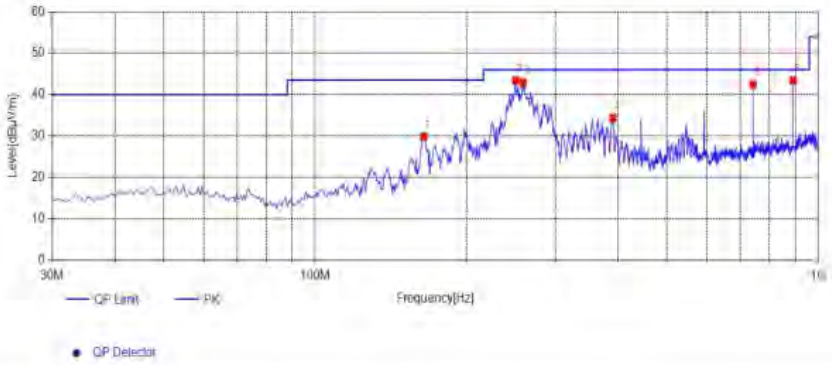
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



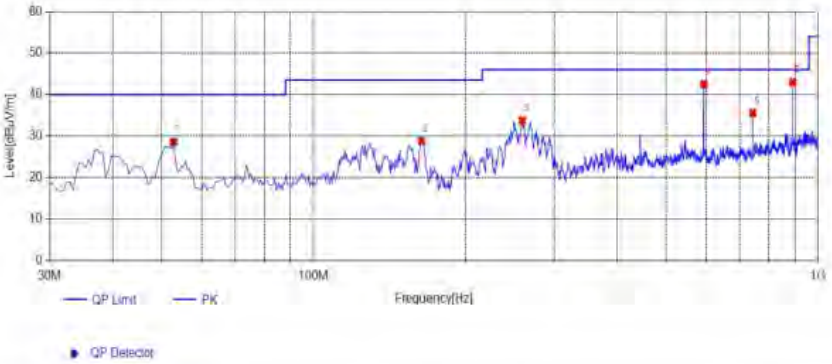
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	164.345	42.80	-12.92	29.88	43.50	13.62	100	322	PK	Horizonta	PASS
2	250.19	52.15	-8.70	43.45	46.00	2.55	100	279	PK	Horizonta	PASS
3	258.92	51.22	-8.31	42.91	46.00	3.09	100	262	PK	Horizonta	PASS
4	390.84	39.84	-5.49	34.35	46.00	11.65	100	23	PK	Horizonta	PASS
5	742.465	41.33	1.13	42.46	46.00	3.54	100	43	PK	Horizonta	PASS
6	891.36	41.39	1.98	43.37	46.00	2.63	100	335	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	52.795	39.56	-11.02	28.54	40.00	11.46	100	334	PK	Vertical	PASS
2	163.86	41.77	-12.96	28.81	43.50	14.69	100	340	PK	Vertical	PASS
3	259.405	42.04	-8.29	33.75	46.00	12.25	100	83	PK	Vertical	PASS
4	594.055	43.15	-0.60	42.55	46.00	3.45	100	90	PK	Vertical	PASS
5	742.465	34.38	1.13	35.51	46.00	10.49	100	180	PK	Vertical	PASS
6	891.36	40.99	1.98	42.97	46.00	3.03	100	37	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

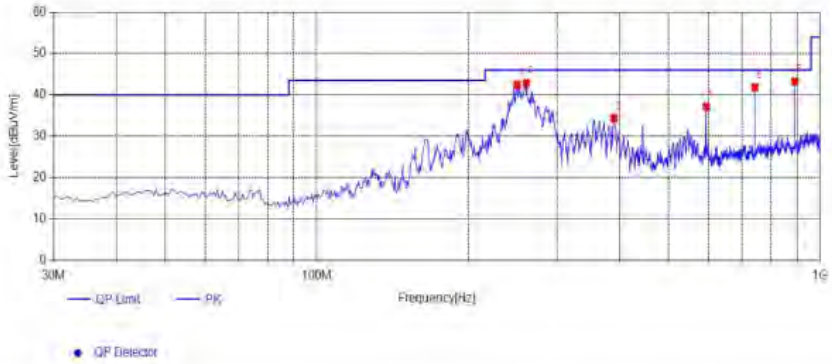
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version B:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



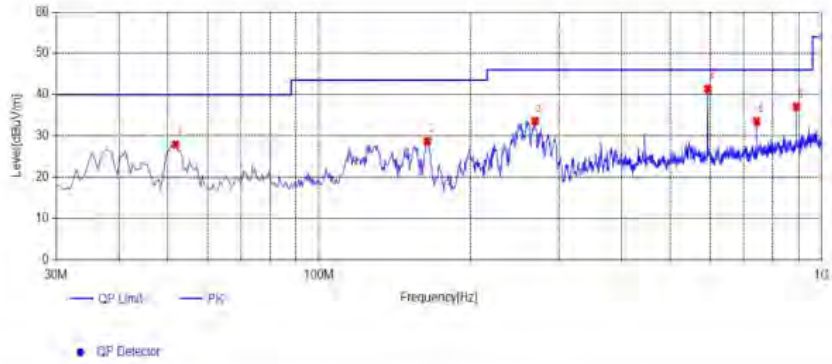
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	250.19	51.17	-8.70	42.47	46.00	3.53	100	138	PK	Horizonta	PASS
2	260.86	51.12	-8.24	42.88	46.00	3.12	100	267	PK	Horizonta	PASS
3	389.87	39.90	-5.50	34.40	46.00	11.60	100	321	PK	Horizonta	PASS
4	594.055	37.78	-0.60	37.18	46.00	8.82	100	25	PK	Horizonta	PASS
5	742.465	40.71	1.13	41.84	46.00	4.16	100	35	PK	Horizonta	PASS
6	891.36	41.28	1.98	43.26	46.00	2.74	100	328	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.825	38.84	-10.96	27.88	40.00	12.12	100	305	PK	Vertical	PASS
2	164.345	41.63	-12.92	28.71	43.50	14.79	100	312	PK	Vertical	PASS
3	269.105	41.53	-7.91	33.62	46.00	12.38	100	110	PK	Vertical	PASS
4	594.055	42.03	-0.60	41.43	46.00	4.57	100	183	PK	Vertical	PASS
5	742.465	32.34	1.13	33.47	46.00	12.53	100	146	PK	Vertical	PASS
6	891.36	35.14	1.98	37.12	46.00	8.88	100	103	PK	Vertical	PASS

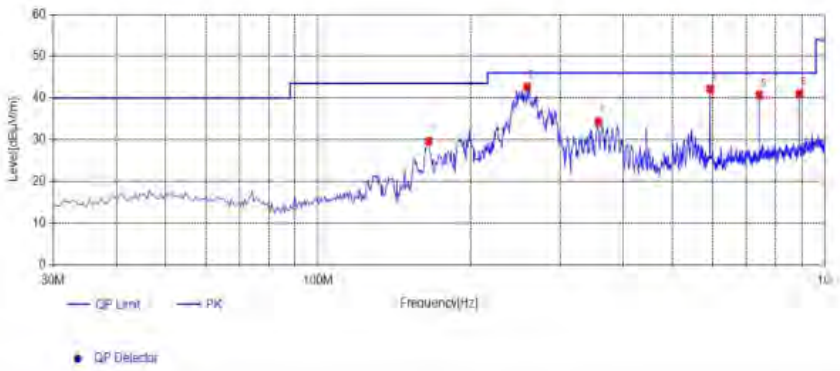
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



Suspected List

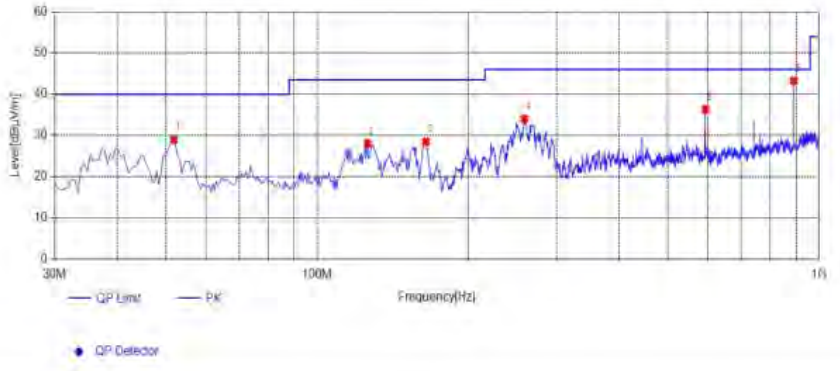
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	165.315	42.50	-12.85	29.65	43.50	13.85	100	331	PK	Horizonta	PASS
2	258.435	50.97	-8.34	42.63	46.00	3.37	100	107	PK	Horizonta	PASS
3	357.375	40.27	-6.01	34.26	46.00	11.74	100	311	PK	Horizonta	PASS
4	594.055	42.77	-0.60	42.17	46.00	3.83	100	47	PK	Horizonta	PASS
5	742.465	39.55	1.13	40.68	46.00	5.32	100	33	PK	Horizonta	PASS
6	891.36	39.05	1.98	41.03	46.00	4.97	100	193	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.825	39.89	-10.96	28.93	40.00	11.07	100	248	PK	Vertical	PASS
2	126.03	41.38	-13.31	28.07	43.50	15.43	100	174	PK	Vertical	PASS
3	164.83	41.41	-12.89	28.52	43.50	14.98	100	274	PK	Vertical	PASS
4	258.92	42.38	-8.31	34.07	46.00	11.93	100	78	PK	Vertical	PASS
5	594.055	36.92	-0.60	36.32	46.00	9.68	100	101	PK	Vertical	PASS
6	891.36	41.28	1.98	43.26	46.00	2.74	100	171	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

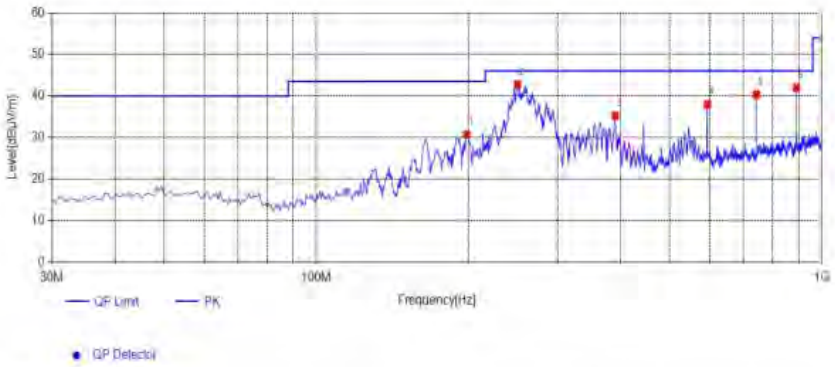
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version C:

Adapter: ADS-110DL-19-1240096G

Horizontal

Test Graph



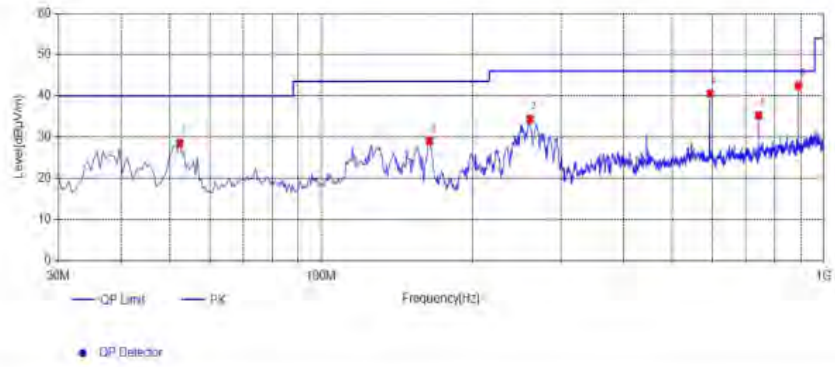
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	198.295	41.08	-10.34	30.74	43.50	12.76	100	271	PK	Horizonta	PASS
2	250.19	51.45	-8.70	42.75	46.00	3.25	100	98	PK	Horizonta	PASS
3	390.355	40.72	-5.49	35.23	46.00	10.77	100	18	PK	Horizonta	PASS
4	594.055	38.63	-0.60	38.03	46.00	7.97	100	298	PK	Horizonta	PASS
5	742.465	39.21	1.13	40.34	46.00	5.66	100	35	PK	Horizonta	PASS
6	891.36	39.98	1.98	41.96	46.00	4.04	100	28	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	52.31	39.52	-10.98	28.54	40.00	11.46	100	340	PK	Vertical	PASS
2	164.345	42.01	-12.92	29.09	43.50	14.41	100	316	PK	Vertical	PASS
3	260.375	42.68	-8.26	34.42	46.00	11.58	100	81	PK	Vertical	PASS
4	594.055	41.17	-0.60	40.57	46.00	5.43	100	234	PK	Vertical	PASS
5	742.465	34.11	1.13	35.24	46.00	10.76	100	94	PK	Vertical	PASS
6	891.36	40.53	1.98	42.51	46.00	3.49	100	210	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

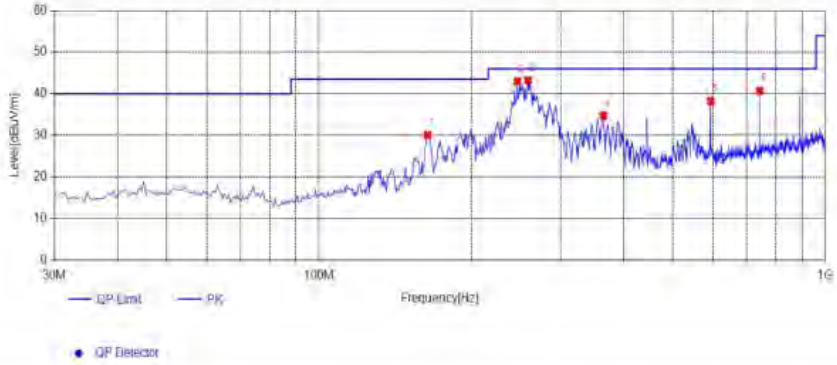
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version D:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



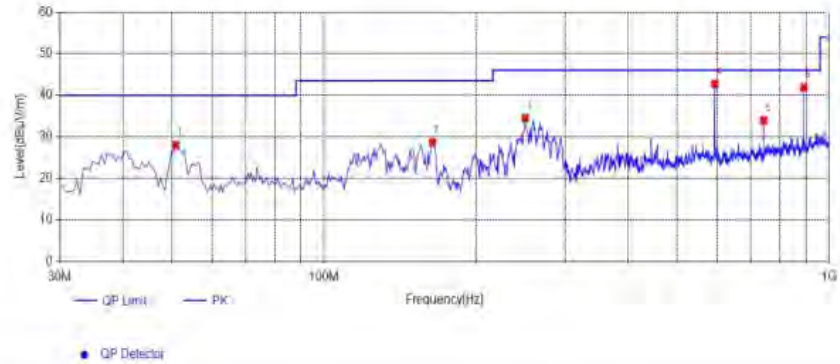
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	163.86	43.04	-12.96	30.08	43.50	13.42	100	322	PK	Horizonta	PASS
2	246.795	51.84	-8.84	43.00	46.00	3.00	100	112	PK	Horizonta	PASS
3	258.92	51.56	-8.31	43.25	46.00	2.75	100	252	PK	Horizonta	PASS
4	364.65	40.60	-5.86	34.74	46.00	11.26	100	299	PK	Horizonta	PASS
5	594.055	38.82	-0.60	38.22	46.00	7.78	100	358	PK	Horizonta	PASS
6	742.465	39.60	1.13	40.73	46.00	5.27	100	39	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	50.855	38.92	-10.90	28.02	40.00	11.98	100	307	PK	Vertical	PASS
2	163.86	41.61	-12.96	28.65	43.50	14.85	100	304	PK	Vertical	PASS
3	250.19	43.17	-8.70	34.47	46.00	11.53	100	117	PK	Vertical	PASS
4	594.055	43.32	-0.60	42.72	46.00	3.28	100	187	PK	Vertical	PASS
5	742.465	32.80	1.13	33.93	46.00	12.07	100	147	PK	Vertical	PASS
6	891.36	39.92	1.98	41.90	46.00	4.10	100	44	PK	Vertical	PASS

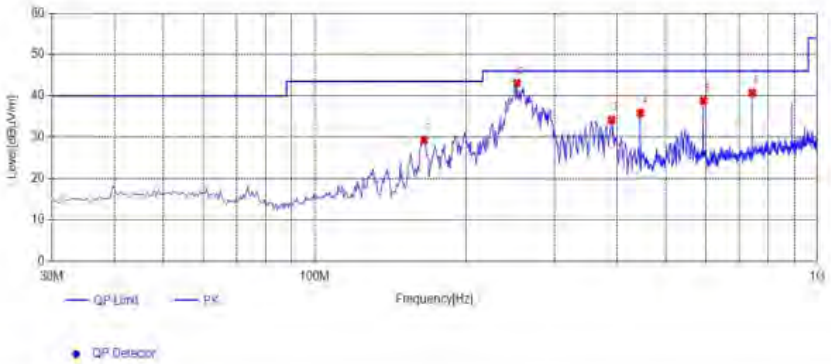
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



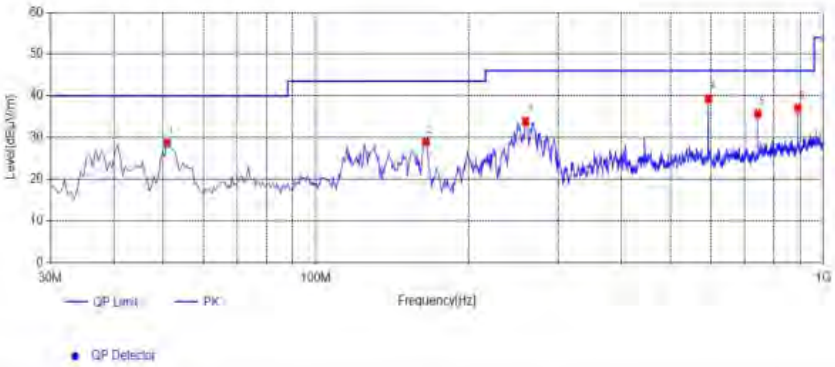
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	165.315	42.15	-12.85	29.30	43.50	14.20	100	334	PK	Horizonta	PASS
2	252.615	51.64	-8.59	43.05	46.00	2.95	100	250	PK	Horizonta	PASS
3	389.87	39.72	-5.50	34.22	46.00	11.78	100	23	PK	Horizonta	PASS
4	445.645	39.77	-3.91	35.86	46.00	10.14	100	154	PK	Horizonta	PASS
5	594.055	39.44	-0.60	38.84	46.00	7.16	100	160	PK	Horizonta	PASS
6	742.465	39.67	1.13	40.80	46.00	5.20	100	36	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	50.855	39.59	-10.90	28.69	40.00	11.31	100	270	PK	Vertical	PASS
2	164.83	41.77	-12.89	28.88	43.50	14.62	100	324	PK	Vertical	PASS
3	258.92	42.16	-8.31	33.85	46.00	12.15	100	70	PK	Vertical	PASS
4	594.055	39.93	-0.60	39.33	46.00	6.67	100	64	PK	Vertical	PASS
5	742.465	34.56	1.13	35.69	46.00	10.31	100	151	PK	Vertical	PASS
6	891.36	35.05	1.98	37.03	46.00	8.97	100	57	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

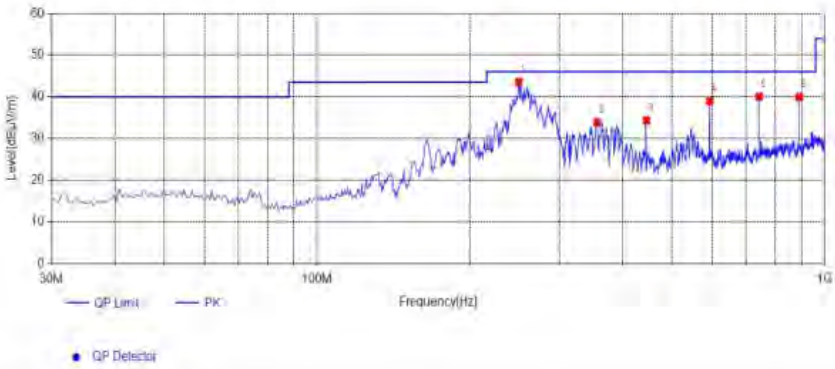
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version E:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



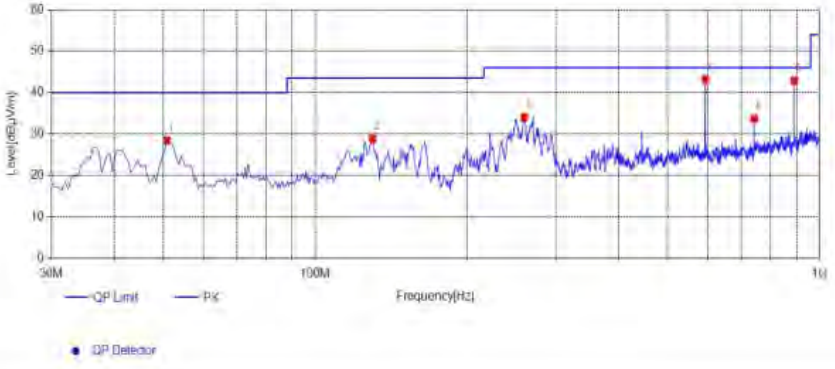
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	249.705	52.28	-8.72	43.56	46.00	2.44	100	267	PK	Horizonta	PASS
2	356.405	39.87	-6.03	33.84	46.00	12.16	100	291	PK	Horizonta	PASS
3	445.645	38.22	-3.91	34.31	46.00	11.69	100	154	PK	Horizonta	PASS
4	594.055	39.59	-0.60	38.99	46.00	7.01	100	2	PK	Horizonta	PASS
5	742.465	38.93	1.13	40.06	46.00	5.94	100	37	PK	Horizonta	PASS
6	891.36	37.98	1.98	39.96	46.00	6.04	100	147	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	50.855	39.34	-10.90	28.44	40.00	11.56	100	358	PK	Vertical	PASS
2	129.91	42.48	-13.58	28.90	43.50	14.60	100	168	PK	Vertical	PASS
3	259.89	42.36	-8.28	34.08	46.00	11.92	100	88	PK	Vertical	PASS
4	594.055	43.80	-0.60	43.20	46.00	2.80	100	105	PK	Vertical	PASS
5	742.95	32.59	1.13	33.72	46.00	12.28	100	79	PK	Vertical	PASS
6	891.36	40.92	1.98	42.90	46.00	3.10	100	172	PK	Vertical	PASS

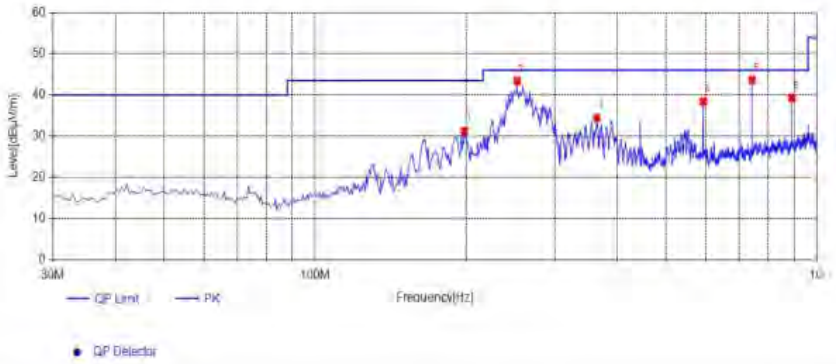
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



Suspected List

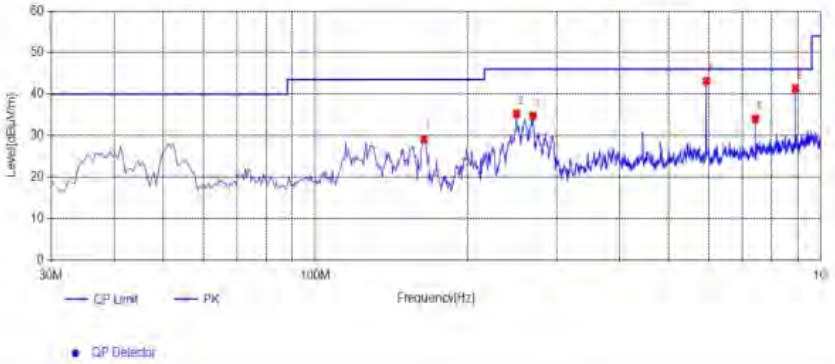
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	198.295	41.67	-10.34	31.33	43.50	12.17	100	274	PK	Horizonta	PASS
2	252.615	51.98	-8.59	43.39	46.00	2.61	100	117	PK	Horizonta	PASS
3	364.165	40.29	-5.87	34.42	46.00	11.58	100	307	PK	Horizonta	PASS
4	594.055	39.02	-0.60	38.42	46.00	7.58	100	157	PK	Horizonta	PASS
5	742.465	42.50	1.13	43.63	46.00	2.37	100	41	PK	Horizonta	PASS
6	891.36	37.34	1.98	39.32	46.00	6.68	100	191	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	163.86	42.09	-12.96	29.13	43.50	14.37	100	293	PK	Vertical	PASS
2	250.19	43.96	-8.70	35.26	46.00	10.74	100	196	PK	Vertical	PASS
3	269.59	42.69	-7.89	34.80	46.00	11.20	100	93	PK	Vertical	PASS
4	594.055	43.81	-0.60	43.21	46.00	2.79	100	100	PK	Vertical	PASS
5	742.465	32.90	1.13	34.03	46.00	11.97	100	150	PK	Vertical	PASS
6	891.36	39.38	1.98	41.36	46.00	4.64	100	150	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

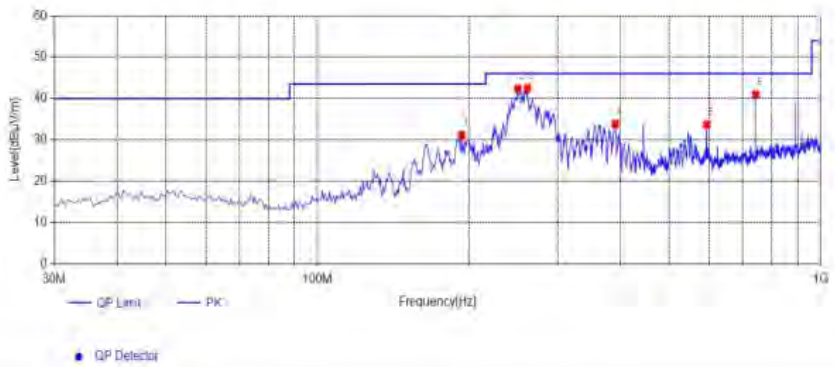
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version F:

Adapter: ADS-110DL-19-1240096G

Horizontal

Test Graph



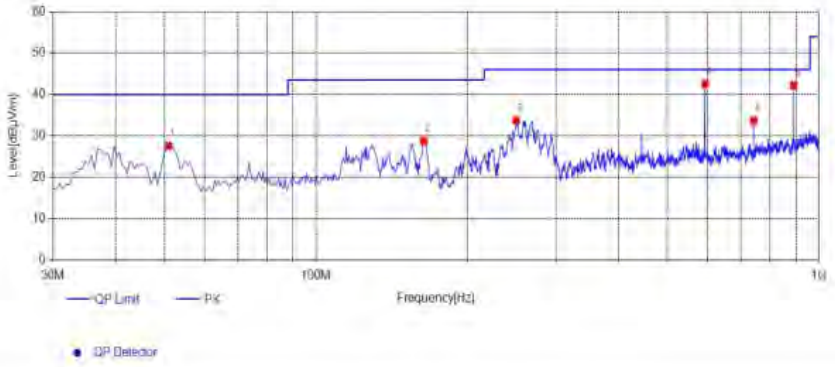
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	193.445	41.98	-10.80	31.18	43.50	12.32	100	289	PK	Horizonta	PASS
2	250.19	51.10	-8.70	42.40	46.00	3.60	100	132	PK	Horizonta	PASS
3	261.345	50.68	-8.22	42.46	46.00	3.54	100	256	PK	Horizonta	PASS
4	390.84	39.34	-5.49	33.85	46.00	12.15	100	23	PK	Horizonta	PASS
5	594.055	34.32	-0.60	33.72	46.00	12.28	100	40	PK	Horizonta	PASS
6	742.465	39.81	1.13	40.94	46.00	5.06	100	29	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	50.855	38.47	-10.90	27.57	40.00	12.43	100	225	PK	Vertical	PASS
2	163.86	41.75	-12.96	28.79	43.50	14.71	100	321	PK	Vertical	PASS
3	250.19	42.48	-8.70	33.78	46.00	12.22	100	128	PK	Vertical	PASS
4	594.055	43.18	-0.60	42.58	46.00	3.42	100	98	PK	Vertical	PASS
5	742.465	32.52	1.13	33.65	46.00	12.35	100	81	PK	Vertical	PASS
6	891.36	40.25	1.98	42.23	46.00	3.77	100	231	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

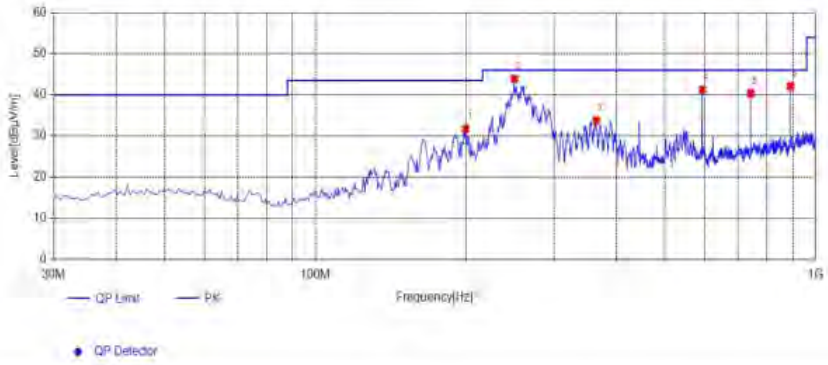
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version G:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



Suspected List

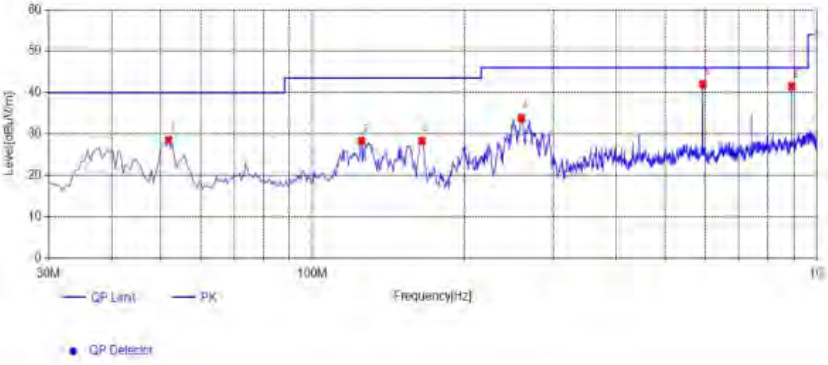
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	199.75	41.91	-10.20	31.71	43.50	11.79	100	273	PK	Horizonta	PASS
2	250.19	52.68	-8.70	43.98	46.00	2.02	100	294	PK	Horizonta	PASS
3	364.65	39.67	-5.86	33.81	46.00	12.19	100	283	PK	Horizonta	PASS
4	594.055	41.92	-0.60	41.32	46.00	4.68	100	29	PK	Horizonta	PASS
5	742.465	39.25	1.13	40.38	46.00	5.62	100	36	PK	Horizonta	PASS
6	891.36	40.14	1.98	42.12	46.00	3.88	100	184	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.825	39.46	-10.96	28.50	40.00	11.50	100	259	PK	Vertical	PASS
2	125.06	41.55	-13.24	28.31	43.50	15.19	100	149	PK	Vertical	PASS
3	164.83	41.21	-12.89	28.32	43.50	15.18	100	355	PK	Vertical	PASS
4	259.405	42.11	-8.29	33.82	46.00	12.18	100	92	PK	Vertical	PASS
5	594.055	42.65	-0.60	42.05	46.00	3.95	100	119	PK	Vertical	PASS
6	891.36	39.47	1.98	41.45	46.00	4.55	100	142	PK	Vertical	PASS

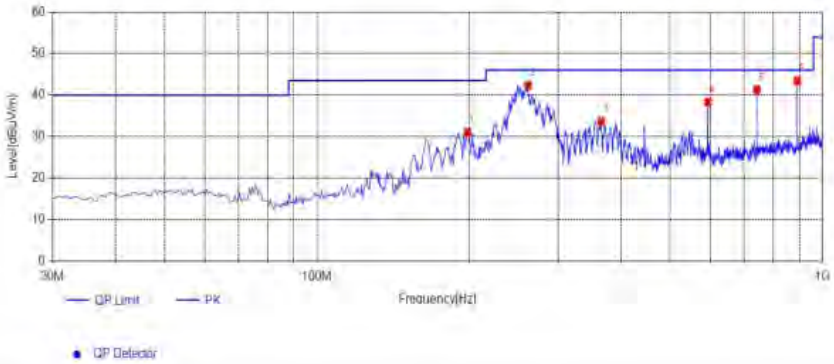
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



Suspected List

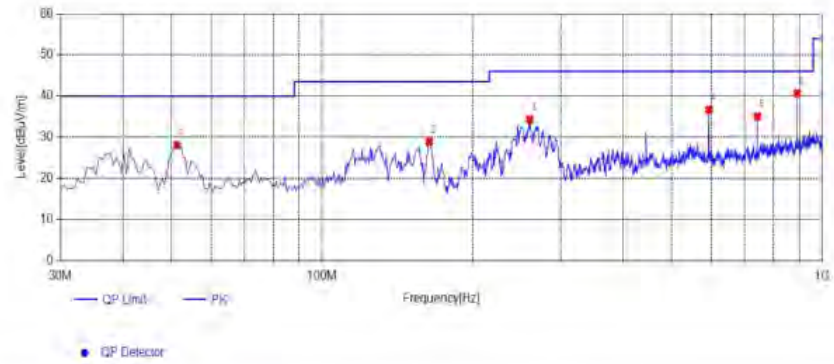
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	198.78	41.36	-10.29	31.07	43.50	12.43	100	266	PK	Horizonta	PASS
2	261.83	50.59	-8.20	42.39	46.00	3.61	100	133	PK	Horizonta	PASS
3	365.135	39.50	-5.85	33.65	46.00	12.35	100	309	PK	Horizonta	PASS
4	594.055	38.93	-0.60	38.33	46.00	7.67	100	136	PK	Horizonta	PASS
5	742.465	40.16	1.13	41.29	46.00	4.71	100	33	PK	Horizonta	PASS
6	891.36	41.48	1.98	43.46	46.00	2.54	100	336	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.34	38.98	-10.92	28.06	40.00	11.94	100	298	PK	Vertical	PASS
2	163.86	41.84	-12.96	28.88	43.50	14.62	100	264	PK	Vertical	PASS
3	260.375	42.61	-8.26	34.35	46.00	11.65	100	75	PK	Vertical	PASS
4	594.055	37.32	-0.60	36.72	46.00	9.28	100	144	PK	Vertical	PASS
5	742.465	33.97	1.13	35.10	46.00	10.90	100	95	PK	Vertical	PASS
6	891.36	38.72	1.98	40.70	46.00	5.30	100	254	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

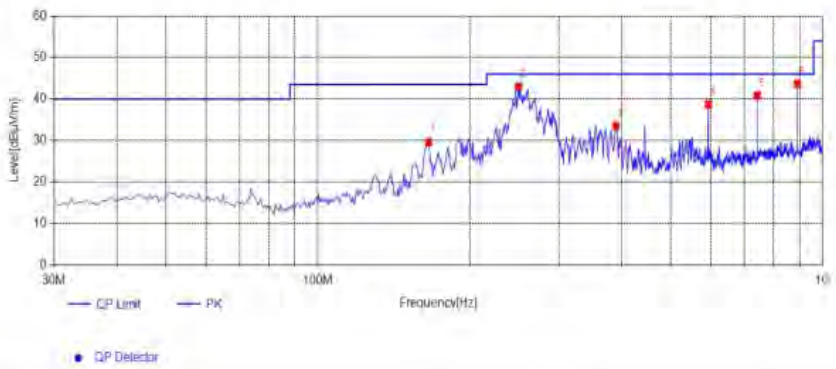
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version H:

Adapter: ADS-65HI-19A-124060F

Horizontal

Test Graph



Suspected List

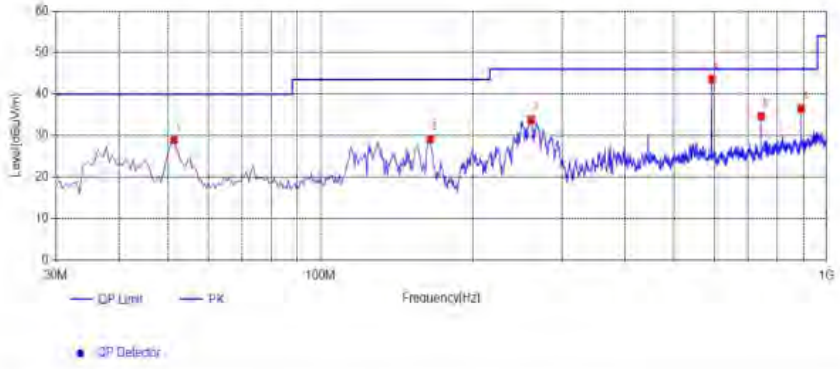
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	165.8	42.41	-12.84	29.57	43.50	13.93	100	320	PK	Horizonta	PASS
2	249.705	51.78	-8.72	43.06	46.00	2.94	100	261	PK	Horizonta	PASS
3	389.385	39.03	-5.51	33.52	46.00	12.48	100	14	PK	Horizonta	PASS
4	594.055	39.34	-0.60	38.74	46.00	7.26	100	2	PK	Horizonta	PASS
5	742.465	39.74	1.13	40.87	46.00	5.13	100	31	PK	Horizonta	PASS
6	891.36	41.72	1.98	43.70	46.00	2.30	100	44	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.34	39.80	-10.92	28.88	40.00	11.12	100	216	PK	Vertical	PASS
2	164.83	42.04	-12.89	29.15	43.50	14.35	100	285	PK	Vertical	PASS
3	260.86	42.09	-8.24	33.85	46.00	12.15	100	89	PK	Vertical	PASS
4	594.055	44.25	-0.60	43.65	46.00	2.35	100	82	PK	Vertical	PASS
5	742.95	33.58	1.13	34.71	46.00	11.29	100	89	PK	Vertical	PASS
6	891.36	34.48	1.98	36.46	46.00	9.54	100	219	PK	Vertical	PASS

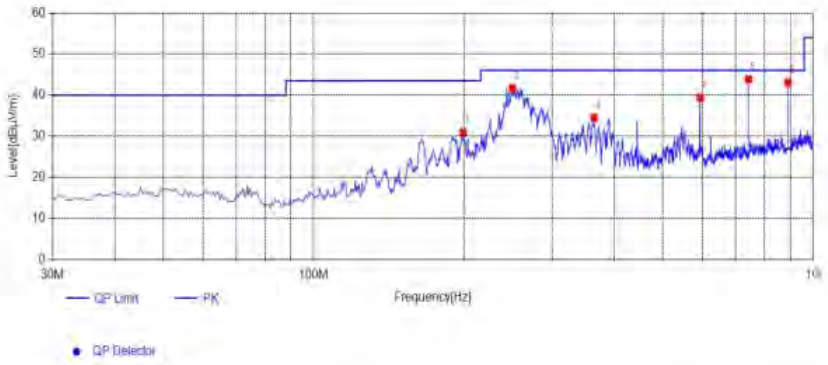
Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Adapter: CYSE65-240250

Horizontal

Test Graph



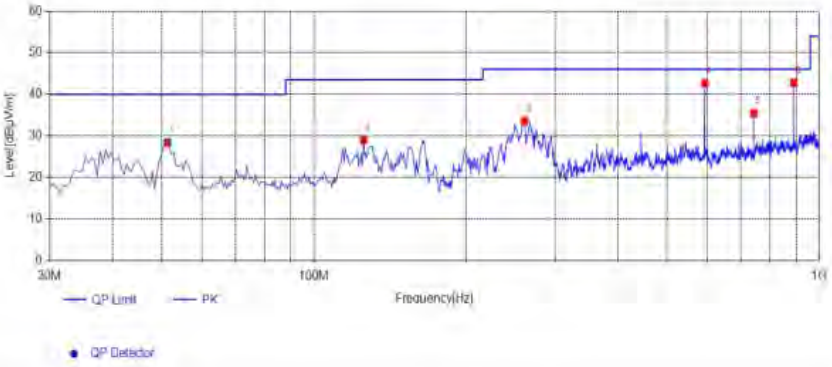
Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	199.265	41.15	-10.25	30.90	43.50	12.60	100	318	PK	Horizonta	PASS
2	250.19	50.43	-8.70	41.73	46.00	4.27	100	96	PK	Horizonta	PASS
3	364.165	40.33	-5.87	34.46	46.00	11.54	100	312	PK	Horizonta	PASS
4	594.055	40.03	-0.60	39.43	46.00	6.57	100	156	PK	Horizonta	PASS
5	742.465	42.73	1.13	43.86	46.00	2.14	100	36	PK	Horizonta	PASS
6	891.36	41.10	1.98	43.08	46.00	2.92	100	328	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List											
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.34	39.33	-10.92	28.41	40.00	11.59	100	218	PK	Vertical	PASS
2	125.545	42.24	-13.28	28.96	43.50	14.54	100	176	PK	Vertical	PASS
3	261.345	41.81	-8.22	33.59	46.00	12.41	100	92	PK	Vertical	PASS
4	594.055	43.26	-0.60	42.66	46.00	3.34	100	184	PK	Vertical	PASS
5	742.95	34.32	1.13	35.45	46.00	10.55	100	187	PK	Vertical	PASS
6	891.36	40.80	1.98	42.78	46.00	3.22	100	35	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

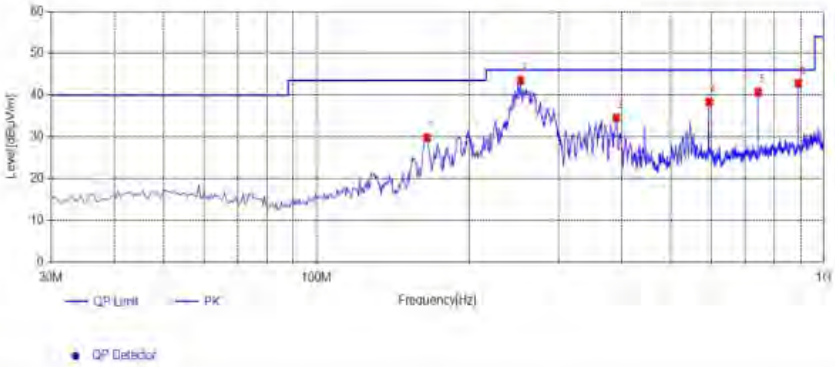
2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Version I:

Adapter: ADS-110DL-19-1240096G

Horizontal

Test Graph



Suspected List

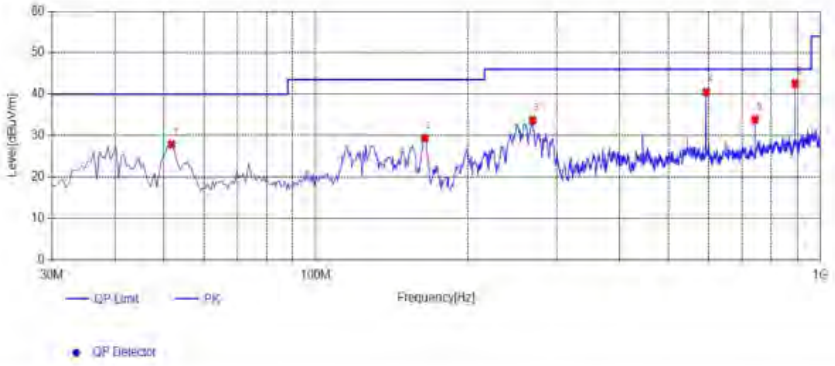
NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	165.315	42.67	-12.85	29.82	43.50	13.68	100	323	PK	Horizonta	PASS
2	252.615	52.13	-8.59	43.54	46.00	2.46	100	260	PK	Horizonta	PASS
3	389.87	40.02	-5.50	34.52	46.00	11.48	100	28	PK	Horizonta	PASS
4	594.055	38.95	-0.60	38.35	46.00	7.65	100	24	PK	Horizonta	PASS
5	742.465	39.59	1.13	40.72	46.00	5.28	100	36	PK	Horizonta	PASS
6	891.36	40.88	1.98	42.86	46.00	3.14	100	45	PK	Horizonta	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Vertical

Test Graph



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	51.825	38.80	-10.96	27.84	40.00	12.16	100	225	PK	Vertical	PASS
2	164.345	42.25	-12.92	29.33	43.50	14.17	100	267	PK	Vertical	PASS
3	269.105	41.60	-7.91	33.69	46.00	12.31	100	91	PK	Vertical	PASS
4	594.055	41.14	-0.60	40.54	46.00	5.46	100	218	PK	Vertical	PASS
5	742.465	32.77	1.13	33.90	46.00	12.10	100	195	PK	Vertical	PASS
6	891.36	40.64	1.98	42.62	46.00	3.38	100	170	PK	Vertical	PASS

Note:1. Result (dBµV/m) = Reading(dBµV/m) + Factor (dB) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB).

Note: All modes have been tested and the worst mode is recorded in the report, NFC has two optional antennas, with the worst mode recorded in the report (NFC antenna Model:DS2-52).

For 1GHz to 25GHz

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.82	32.44	30.25	7.95	60.96	74.00	-13.04	Peak	Horizontal
4804.00	36.34	32.44	30.25	7.95	46.48	54.00	-7.52	Average	Horizontal
4804.00	50.96	31.60	36.50	7.00	53.06	74.00	-20.94	Peak	Vertical
4804.00	35.62	31.60	36.50	7.00	37.72	54.00	-16.28	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	48.98	32.52	30.31	8.12	59.31	74.00	-14.69	Peak	Horizontal
4880.00	36.74	32.52	30.31	8.12	47.07	54.00	-6.93	Average	Horizontal
4880.00	51.16	31.02	36.50	7.60	53.28	74.00	-20.72	Peak	Vertical
4880.00	35.86	31.02	36.50	7.60	37.98	54.00	-16.02	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	50.23	32.68	30.27	7.88	60.52	74.00	-13.48	Peak	Horizontal
4960.00	35.24	32.68	30.27	7.88	45.53	54.00	-8.47	Average	Horizontal
4960.00	52.40	31.58	36.20	7.82	55.60	74.00	-18.40	Peak	Vertical
4960.00	38.01	31.58	36.20	7.82	41.21	54.00	-12.79	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version A_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.13	32.44	30.25	7.95	60.27	74.00	-13.73	Peak	Horizontal
4804.00	35.31	32.44	30.25	7.95	45.45	54.00	-8.55	Average	Horizontal
4804.00	50.50	31.60	36.50	7.00	52.60	74.00	-21.40	Peak	Vertical
4804.00	36.37	31.60	36.50	7.00	38.47	54.00	-15.53	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	49.12	32.52	30.31	8.12	59.45	74.00	-14.55	Peak	Horizontal
4880.00	36.36	32.52	30.31	8.12	46.69	54.00	-7.31	Average	Horizontal
4880.00	49.45	31.02	36.50	7.60	51.57	74.00	-22.43	Peak	Vertical
4880.00	35.23	31.02	36.50	7.60	37.35	54.00	-16.65	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.12	32.68	30.27	7.88	61.41	74.00	-12.59	Peak	Horizontal
4960.00	35.51	32.68	30.27	7.88	45.80	54.00	-8.20	Average	Horizontal
4960.00	50.78	31.58	36.20	7.82	53.98	74.00	-20.02	Peak	Vertical
4960.00	38.46	31.58	36.20	7.82	41.66	54.00	-12.34	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version B_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	49.69	32.44	30.25	7.95	59.83	74.00	-14.17	Peak	Horizontal
4804.00	36.16	32.44	30.25	7.95	46.30	54.00	-7.70	Average	Horizontal
4804.00	50.17	31.60	36.50	7.00	52.27	74.00	-21.73	Peak	Vertical
4804.00	36.02	31.60	36.50	7.00	38.12	54.00	-15.88	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	50.05	32.52	30.31	8.12	60.38	74.00	-13.62	Peak	Horizontal
4880.00	37.97	32.52	30.31	8.12	48.30	54.00	-5.70	Average	Horizontal
4880.00	50.90	31.02	36.50	7.60	53.02	74.00	-20.98	Peak	Vertical
4880.00	36.58	31.02	36.50	7.60	38.70	54.00	-15.30	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.22	32.68	30.27	7.88	61.51	74.00	-12.49	Peak	Horizontal
4960.00	36.01	32.68	30.27	7.88	46.30	54.00	-7.70	Average	Horizontal
4960.00	52.04	31.58	36.20	7.82	55.24	74.00	-18.76	Peak	Vertical
4960.00	37.35	31.58	36.20	7.82	40.55	54.00	-13.45	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version C_Adapter: ADS-110DL-19-1240096G_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	51.00	32.44	30.25	7.95	61.14	74.00	-12.86	Peak	Horizontal
4804.00	35.94	32.44	30.25	7.95	46.08	54.00	-7.92	Average	Horizontal
4804.00	50.75	31.60	36.50	7.00	52.85	74.00	-21.15	Peak	Vertical
4804.00	35.24	31.60	36.50	7.00	37.34	54.00	-16.66	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	50.15	32.52	30.31	8.12	60.48	74.00	-13.52	Peak	Horizontal
4880.00	36.61	32.52	30.31	8.12	46.94	54.00	-7.06	Average	Horizontal
4880.00	50.08	31.02	36.50	7.60	52.20	74.00	-21.80	Peak	Vertical
4880.00	34.75	31.02	36.50	7.60	36.87	54.00	-17.13	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.03	32.68	30.27	7.88	61.32	74.00	-12.68	Peak	Horizontal
4960.00	36.64	32.68	30.27	7.88	46.93	54.00	-7.07	Average	Horizontal
4960.00	52.35	31.58	36.20	7.82	55.55	74.00	-18.45	Peak	Vertical
4960.00	37.92	31.58	36.20	7.82	41.12	54.00	-12.88	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version D_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.22	32.44	30.25	7.95	60.36	74.00	-13.64	Peak	Horizontal
4804.00	35.82	32.44	30.25	7.95	45.96	54.00	-8.04	Average	Horizontal
4804.00	50.77	31.60	36.50	7.00	52.87	74.00	-21.13	Peak	Vertical
4804.00	35.95	31.60	36.50	7.00	38.05	54.00	-15.95	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	48.96	32.52	30.31	8.12	59.29	74.00	-14.71	Peak	Horizontal
4880.00	37.20	32.52	30.31	8.12	47.53	54.00	-6.47	Average	Horizontal
4880.00	50.55	31.02	36.50	7.60	52.67	74.00	-21.33	Peak	Vertical
4880.00	36.20	31.02	36.50	7.60	38.32	54.00	-15.68	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	50.68	32.68	30.27	7.88	60.97	74.00	-13.03	Peak	Horizontal
4960.00	36.87	32.68	30.27	7.88	47.16	54.00	-6.84	Average	Horizontal
4960.00	51.22	31.58	36.20	7.82	54.42	74.00	-19.58	Peak	Vertical
4960.00	37.21	31.58	36.20	7.82	40.41	54.00	-13.59	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version E_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.96	32.44	30.25	7.95	61.10	74.00	-12.90	Peak	Horizontal
4804.00	35.35	32.44	30.25	7.95	45.49	54.00	-8.51	Average	Horizontal
4804.00	51.09	31.60	36.50	7.00	53.19	74.00	-20.81	Peak	Vertical
4804.00	35.29	31.60	36.50	7.00	37.39	54.00	-16.61	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	50.36	32.52	30.31	8.12	60.69	74.00	-13.31	Peak	Horizontal
4880.00	37.00	32.52	30.31	8.12	47.33	54.00	-6.67	Average	Horizontal
4880.00	49.51	31.02	36.50	7.60	51.63	74.00	-22.37	Peak	Vertical
4880.00	34.96	31.02	36.50	7.60	37.08	54.00	-16.92	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	52.05	32.68	30.27	7.88	62.34	74.00	-11.66	Peak	Horizontal
4960.00	36.64	32.68	30.27	7.88	46.93	54.00	-7.07	Average	Horizontal
4960.00	51.52	31.58	36.20	7.82	54.72	74.00	-19.28	Peak	Vertical
4960.00	37.72	31.58	36.20	7.82	40.92	54.00	-13.08	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version F_Adapter: ADS-110DL-19-1240096G_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.03	32.44	30.25	7.95	60.17	74.00	-13.83	Peak	Horizontal
4804.00	36.29	32.44	30.25	7.95	46.43	54.00	-7.57	Average	Horizontal
4804.00	50.11	31.60	36.50	7.00	52.21	74.00	-21.79	Peak	Vertical
4804.00	35.21	31.60	36.50	7.00	37.31	54.00	-16.69	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	50.43	32.52	30.31	8.12	60.76	74.00	-13.24	Peak	Horizontal
4880.00	37.52	32.52	30.31	8.12	47.85	54.00	-6.15	Average	Horizontal
4880.00	50.73	31.02	36.50	7.60	52.85	74.00	-21.15	Peak	Vertical
4880.00	34.91	31.02	36.50	7.60	37.03	54.00	-16.97	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.23	32.68	30.27	7.88	61.52	74.00	-12.48	Peak	Horizontal
4960.00	35.79	32.68	30.27	7.88	46.08	54.00	-7.92	Average	Horizontal
4960.00	51.25	31.58	36.20	7.82	54.45	74.00	-19.55	Peak	Vertical
4960.00	37.44	31.58	36.20	7.82	40.64	54.00	-13.36	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version G_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.25	32.44	30.25	7.95	60.39	74.00	-13.61	Peak	Horizontal
4804.00	35.48	32.44	30.25	7.95	45.62	54.00	-8.38	Average	Horizontal
4804.00	50.90	31.60	36.50	7.00	53.00	74.00	-21.00	Peak	Vertical
4804.00	36.20	31.60	36.50	7.00	38.30	54.00	-15.70	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	49.32	32.52	30.31	8.12	59.65	74.00	-14.35	Peak	Horizontal
4880.00	37.32	32.52	30.31	8.12	47.65	54.00	-6.35	Average	Horizontal
4880.00	50.80	31.02	36.50	7.60	52.92	74.00	-21.08	Peak	Vertical
4880.00	36.07	31.02	36.50	7.60	38.19	54.00	-15.81	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.79	32.68	30.27	7.88	62.08	74.00	-11.92	Peak	Horizontal
4960.00	36.62	32.68	30.27	7.88	46.91	54.00	-7.09	Average	Horizontal
4960.00	51.77	31.58	36.20	7.82	54.97	74.00	-19.03	Peak	Vertical
4960.00	37.79	31.58	36.20	7.82	40.99	54.00	-13.01	Average	Vertical

Note: All modes were tested and the worst mode was recorded in the report (version H_Adapter: ADS-65HI-19A-124060F_NFC antenna Model:DS2-52).

BT LE

Channel 0 / 2402 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4804.00	50.04	32.44	30.25	7.95	60.18	74.00	-13.82	Peak	Horizontal
4804.00	36.66	32.44	30.25	7.95	46.80	54.00	-7.20	Average	Horizontal
4804.00	50.99	31.60	36.50	7.00	53.09	74.00	-20.91	Peak	Vertical
4804.00	35.98	31.60	36.50	7.00	38.08	54.00	-15.92	Average	Vertical

Channel 19 / 2440 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4880.00	49.11	32.52	30.31	8.12	59.44	74.00	-14.56	Peak	Horizontal
4880.00	37.13	32.52	30.31	8.12	47.46	54.00	-6.54	Average	Horizontal
4880.00	49.93	31.02	36.50	7.60	52.05	74.00	-21.95	Peak	Vertical
4880.00	35.64	31.02	36.50	7.60	37.76	54.00	-16.24	Average	Vertical

Channel 39 / 2480 MHz

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4960.00	51.20	32.68	30.27	7.88	61.49	74.00	-12.51	Peak	Horizontal
4960.00	35.21	32.68	30.27	7.88	45.50	54.00	-8.50	Average	Horizontal
4960.00	51.19	31.58	36.20	7.82	54.39	74.00	-19.61	Peak	Vertical
4960.00	37.35	31.58	36.20	7.82	40.55	54.00	-13.45	Average	Vertical

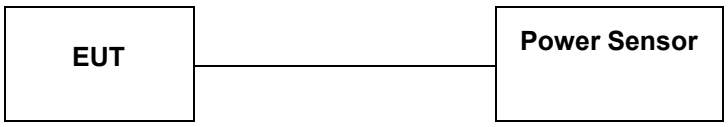
Note: All modes were tested and the worst mode was recorded in the report (version I_Adapter: ADS-110DL-19-1240096G_NFC antenna Model:DS2-52).

Notes:

1). Measuring frequencies from 9 KHz~10^{th} harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2). Radiated emissions measured in frequency range from 9 KHz~10^{th} harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.
3). Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4). Measured= Reading- Pre. Fac.+ Ant. Fac.+ Cab. Loss
5). Margin = Measured- Limit

4.3. Maximum Peak Output Power

TEST CONFIGURATION



TEST PROCEDURE

According to KDB 558074 D01 15.247 Measurement Guidance v05r02 Section 8.3.1 Maximum peak conducted output power, 8.3.1.3 The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

LIMIT

The Maximum Peak Output Power Measurement is 30dBm.

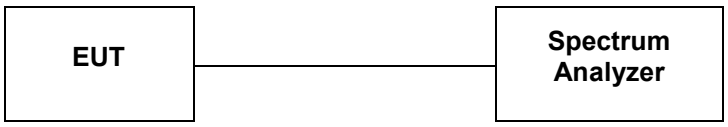
TEST RESULTS

For reporting purpose only.

Please refer to Appendix B.3.

4.4. Power Spectral Density

TEST CONFIGURATION



TEST PROCEDURE

1.Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2.Set the RBW =3 kHz.
3.Set the VBW =10 KHz.
4.Set the span to 1.5 times the DTS channel bandwidth.
5.Detector = peak.
6.Sweep time = auto couple.
7.Trace mode = max hold.
8.Allow trace to fully stabilize.
9.Use the peak marker function to determine the maximum power level.
10.If measured value exceeds limit,reduce RBW(no less than 3 kHz)and repeat.
11.The resulting peak PSD level must be 8 dBm.

LIMIT

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

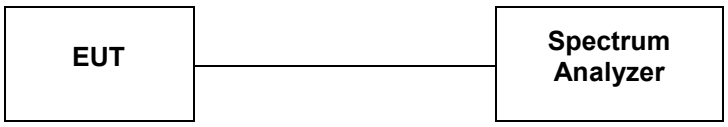
TEST RESULTS

For reporting purpose only.

Please refer to Appendix B.4.

4.5. 99% and 6dB Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW=100 KHz and VBW=300KHz.
The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.
According to KDB 558074 D01 DTS Meas Guidance v05r02 for one of the following procedures may be used to determine the modulated DTS device signal bandwidth.
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

LIMIT

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz

TEST RESULTS

For reporting purpose only.

Please refer to Appendix B.1.

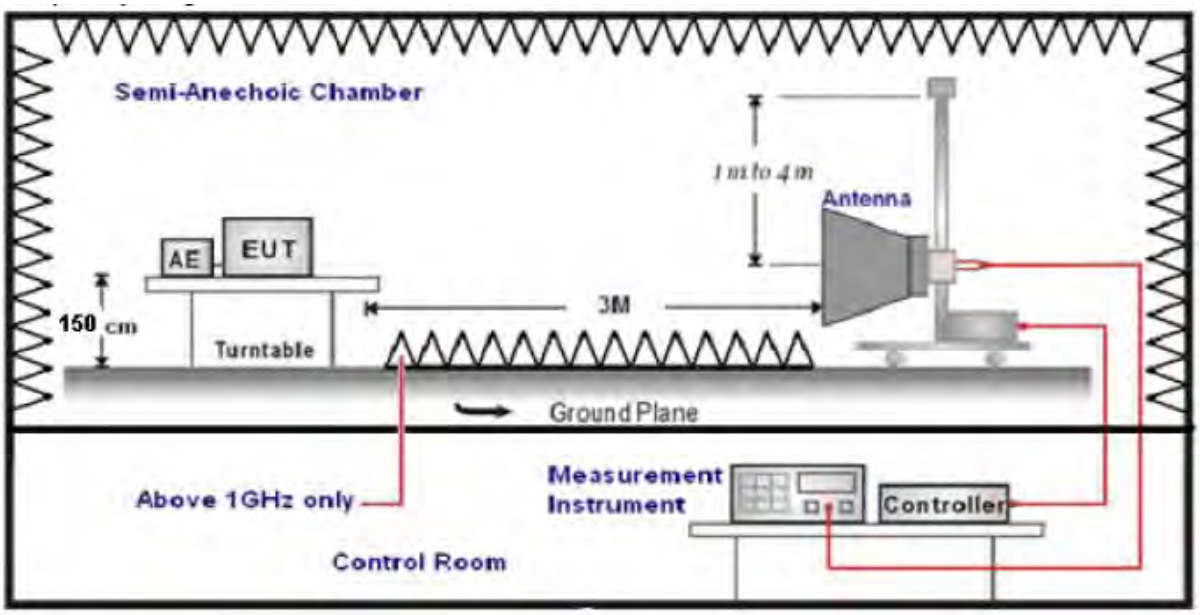
Please refer to Appendix B.2.

4.6. Conducted Spurious Emissions and Band Edge Compliance of RF Emission

TEST REQUIREMENT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

1.The EUT was placed on a turn table which is 1.5m above ground plane.
2.Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0℃ to 360℃ to acquire the highest emissions from EUT.
3.And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4.Repeat above procedures until all frequency measurements have been completed..
5.The distance between test antenna and EUT was 3 meter:
6.Setting test receiver/spectrum as following table states:

Test Frequency range	Test Receiver/Spectrum Setting	Detector
1GHz-40GHz	Peak Value: RBW=1MHz/VBW=3MHz, Sweep time=Auto Average Value: RBW=1MHz/VBW=10Hz, Sweep time=Auto	Peak

LIMIT

Below -20dB of the highest emission level in operating band.
Radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)

TEST RESULTS

4.6.1 For Conducted at Restricted Band Measurement

For reporting purpose only.

Please refer to Appendix B.7.

4.6.2 For Conducted Bandedge Measurement

For reporting purpose only.

Please refer to Appendix B.5.

4.6.3 For Conducted Spurious Emissions Measurement

For reporting purpose only.

Please refer to Appendix B.6.

4.7. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Test Result

The antenna used for this product is Internal Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 2.05dBi.

Reference to the **Internal photos**.

5. TEST SETUP PHOTOS OF THE EUT

Reference to the Test Report: **GTS20241108022-2-01.**

6. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Reference to the Test Report: **GTS20241108022-2-01.**

.....End of Report.....