Prüfbericht-Nr.: *Test report no.*:	**DE25HIET 002**	**Auftrags-Nr.:** *Order no.*:	**168530508**	**Seite 1 von 17** *Page 1 of 17*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2025-01-10	
Auftraggeber: *Client*:	**Axis Communications AB** Gränden 1, SE-223 69 Lund, Sweden			
Prüfgegenstand: *Test item*:	Network Video Door Station			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	AXIS I8307-VE			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	47 CFR FCC Part 15 Subpart C, 15.225 47 CFR FCC Part 15 Subpart C, 15.209 47 CFR FCC Part 15 Subpart C, 15.207	RSS-210 Issue 11 June 2024 RSS-Gen Issue 5 with Amendment 1 & 2 February 2021		

Wareneingangsdatum: *Date of sample receipt*:	2025-03-02	Refer to Photo Documentation
Prüfmuster-Nr.: *Test sample no:*	A003910070-001~006	
Prüfzeitraum: *Testing period*:	2025-02-28 – 2025-03-24	
Ort der Prüfung: *Place of testing*:	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result**:	Pass	

geprüft von: tested by:	X Jonathan Li	**genehmigt von:** *authorized by*:	X Lin Lin
Datum: *Date:* 2025-08-25		**Ausstellungsdatum:** *Issue date:* 2025-08-25	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*: FCC ID: PNB-AXISI8307-VE
IC:3919A-I8307VE
HVIN: I8307-VE

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* *Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. *The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.*

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 20 DB AND OCCUPIED BANDWIDTH
RESULT: Pass

5.1.3 FREQUENCY STABILITY
RESULT: Pass

5.1.4 RADIATED EMISSIONS – IN-BAND AND OUT OF BAND
RESULT: Pass

5.1.5 CONDUCTED EMISSIONS ON AC MAINS
RESULT: Pass

CONTENTS

1 GENERAL REMARKS

1.1 COMPLEMENTARY MATERIALS

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of RFID operating

Appendix B: Photographs of the Test Set-up

1.2 LIST OF DOCUMENT CHANGE

No.	Report No.	Description
1	DE25HIET 001	First release.
2	DE25HIET 002	Update the address of the applicant.

2 TEST SITES

2.1 TEST FACILITIES

Test Facility 1:

TÜV Rheinland (Shenzhen) Co., Ltd.

Address: 2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China

A2LA accreditation certification number: 5162.01

2.2 TESTING PERIOD

Date of test: 2025-02-28 to 2025-03-24

2.3 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Table 1: List of Test and Measurement Equipment

Test Facility 1: TÜV Rheinland (Shenzhen) Co., Ltd.						
☒ Unwanted Emission Testing (TS9975)						
Equip. No.	**Description**	**Manufacturer**	**Model**	**Serial No.**	**Calibrated Date (DD.MM.YYYY)**	**Calibrated until (DD.MM.YYYY)**
G1826021	EMI Test Receiver	R&S	ESR 7	102021	29.09.2024	28.09.2025
G1826023	Signal Analyzer	R&S	FSV 40	101439	29.09.2024	28.09.2025
G1826024	System Controller Interface	R&S	SCI-100	S10010038	N/A	N/A
G1826025	Filterbank	R&S	Wlan	100759	29.09.2024	28.09.2025
G1826026	OSP	R&S	OSP 120	102040	N/A	N/A
G1826028	Pre-amplifier	R&S	SCU08F1	08320031	29.09.2024	28.09.2025
G1826029	Amplifier	R&S	SCU-18F	180070	29.09.2024	28.09.2025
G1826030	Amplifier	R&S	SCU40A	100475	29.09.2024	28.09.2025
G1826031	Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	28.09.2024	27.09.2026
G1826032	Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	28.09.2024	27.09.2026
G1826033	Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	28.09.2024	27.09.2026
G1826034	Active Loop Antenna	Schwarzbeck	FMZB 1513	302	28.09.2024	27.09.2026
G1826036	Test software	R&S	EMC32 (V10.60.10)	N/A	N/A	N/A
G1826037	Control PC	Dell	OptiPlex 7050	36NV9P2	N/A	N/A
G1826433	3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	14.09.2024	13.09.2027
☒ Conducted Emissions						
Equip. No.	**Description**	**Manufacturer**	**Model**	**Serial No.**	**Calibrated Date (YYYY-MM-DD)**	**Calibrated until (YYYY-MM-DD)**
GC-SZ 004632	EMI Test Receiver	R&S	ESR3	102680	2025-02-10	2026-02-09
GC-SZ 001010	Artificial Mains Network	R&S	ENV216	102333	2024-07-23	2025-07-22
GC-SZ 004633	Artificial Mains Network	R&S	ENV216	101445	2025-02-10	2026-02-09
G1825091	EMC32 test software	R&S	EMC32(Ver. 10.50.00)		N/A	N/A

2.4 TRACEABILITY

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.5 CALIBRATION

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.6 MEASURMENT UNCERTAINTY

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: System Measurement Uncertainty

Parameter	Condition	Extended Uncertainty
Radiated emissions	9 kHz < f ≤ 30 MHz 30 MHz < f ≤ 1 GHz 1 GHz < f ≤ 18 GHz 18 GHz < f ≤ 40 GHz	± 5.6 dB ± 4.6 dB ± 4.4 dB ± 5.1 dB
Conducted Emission	9 kHz < f ≤ 150 kHz 150 kHz < f ≤ 30 GHz	± 3.7 dB ± 3.3 dB
Remark: 95% Confidence Levels, k=2.		

2.7 LOCATION OF ORIGINAL DATA

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.8 STATUS OF FACILITY USED FOR TESTING

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 GENERAL PRODUCT INFORMATION

3.1 GENERAL DESCRIPTION

The EUT is network video door station supporting RFID and T-coil induction technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 TECHNICAL DATA

Table 3: Rating of EUT

General Information of EUT	Description
Kind of Equipment	Network Video Door Station
Type Designation	AXIS I8307-VE
Trademark	AXIS
Operating Temperature Range	-30 °C - +55 °C
Operating Voltage	DC 24V via AC/DC adapter or DC 56V via PoE power supply
Extreme Voltage	DC 18V ~ 28V via AC/DC adapter, DC 44V ~ 57V via PoE

Table 4: Technical Specification of EUT

Raido Characteristics	Description
Permitted Frequency Band:	13.553 MHz to 13.567 MHz; 119 kHz to 140 kHz
Operating Frequency:	13.56 MHz; 125 kHz
Type of Modulation:	ASK
Channel Number:	1 Channel
Antenna Type:	Internal Coil Antenna
Product Class:	1

Note: The correctness of all data provided by customer in the test report is ensured and responsible of the customer. Any misjudgment of the test results caused by the use of incorrect data provided by customer shall be borne by the customer.

3.3 INDEPENDENT OPERATION MODES

The basic operation modes are:

A. On, RFID active
    1. 13.56 MHz operating
    2. 125 kHz operating
B. Idle
C. Off

3.4 NOISE GENERATING AND NOISE SUPPRESSING PARTS

Refer to the Circuit Diagram.

3.5 SUBMITTED DOCUMENTS

☒ User Manual
☒ Circuit Diagram
☒ Block Diagram
☐ Model Difference Letter
☒ Rating Label
☒ PCB Layout
☒ Photo Document
☒ Parts List

4 TEST SET-UP AND OPERATION MODES

4.1 PRINCIPLE OF CONFIGURATION SELECTION

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 TEST OPERATION AND TEST SOFTWARE

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10:2013.

According to clause 3.1, all tests were performed on model *AXIS I8307-VE* in this report.

4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT

The EUT was tested together with the following accessories and auxiliary equipment:

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop PC	Lenovo	Thinkpad T480	10Q67059
Power Supply	RS PRO	LIF120-10B24	N/A
PoE Midspan	Axis Communications	POEA30U-1ATE	02172-004
Electric Door Strike	Assa	Solid 14 24V	N/A

Table 6: List of Ports and Cables

Description	Specification	Max. Length	Cable Classification
Ethernet Cable	CAT5E/6 STP Cable, shielded	≥ 30 m	Wired Network Port
Relay cable	Two wire conductor cable, 24VD, unshielded	≤ 30 m	Signal/Control Port
I/O cable	Multi conductor cable, 4 x I/O ports, unshielded	≤ 30 m	Signal/Control Port
RS-485 cable	Multi conductor cable, RS-485 A/B type, unshielded	≥ 30 m	Signal/Control Port
Audio line-in/out	Dual shielded cables	< 3m	N/A

4.4 COUNTERMEASURES TO ACHIEVE RADIO SPECTRUM COMPLIANCE

The test sample, which has been tested, contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 TEST SETUP DIAGRAM

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

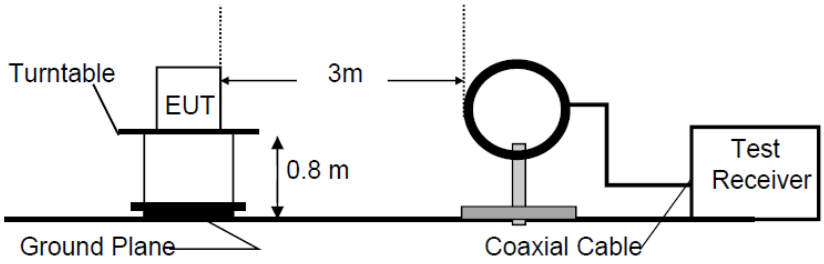


Diagram of Measurement Configuration for Radiation Test (30MHz to 1GHz)

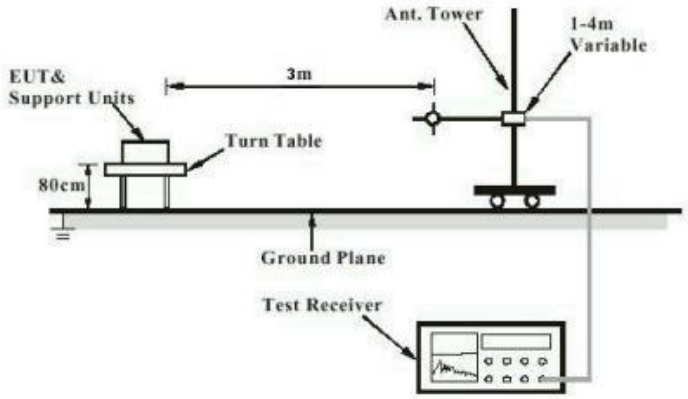
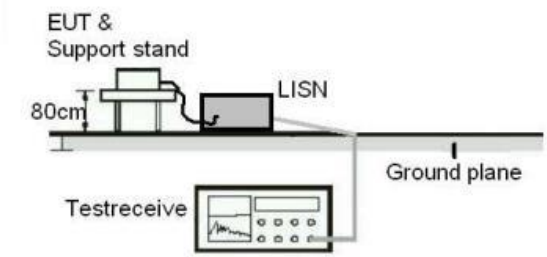


Diagram of Measurement Configuration for Mains Conduction Measurement



5 TEST RESULTS

5.1 ESSENTIAL REQUIREMENTS OF TRANSMITTER

5.1.1 ANTENNA REQUIREMENT

RESULT: **Pass**

Test standard : 47 CFR FCC Part 15 Subpart C, 15.203
RSS-Gen Issue 5 with Amendment 1 & 2 February 2021, section 6.8

According to the manufacturer's declaration, the EUT has an internal coil antenna, the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore, the EUT is considered sufficient to comply with the provision.

Note:
N/A

Refer to EUT Photo for details.

5.1.2 20 dB AND OCCUPIED BANDWIDTH

RESULT: **Pass**

Test standard	:	47 CFR FCC Part 15 Subpart C, 15.215 RSS-Gen Issue 5 with Amendment 1 & 2 February 2021
Requirement	:	47 CFR FCC Part 15 Subpart C, 15.215, section (c) RSS-Gen Issue 5 with Amendment 1 & 2 February 2021, section 6.7
Basic standard	:	ANSI C63.10:2013
Limits	:	Within assigned band
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-02-28 to 2025-03-24
Input Voltage	:	DC 24V
Operation mode	:	A
Test conditions	:	☒ Normal conditions; ☐ Extreme conditions
Ambient temperature	:	23 ºC
Relative humidity	:	51%
Atmospheric pressure	:	101.0 kPa

Note:
N/A

Refer to attached Appendix A for details of test results.

5.1.3 FREQUENCY STABILITY

RESULT: **Pass**

Test standard	:	47 CFR FCC Part 15 Subpart C, 15.225 RSS-210 Issue 11 June 2024
Requirement	:	47 CFR FCC Part 15 Subpart C, 15.225, section (e) RSS-210 Issue 11 June 2024, Annex B.6 b)
Basic standard	:	ANSI C63.10:2013
Limits	:	±0.01% of the operating frequency less than ±100 ppm
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-02-28 to 2025-03-24
Input Voltage	:	DC 24V
Operation mode	:	A.1
Test conditions	:	☒ Normal conditions; ☒ Extreme conditions
Ambient temperature	:	23 ºC
Relative humidity	:	51%
Atmospheric pressure	:	101.0 kPa

Note:
N/A

Refer to attached Appendix A for details of test results.

5.1.4 RADIATED EMISSIONS – IN-BAND AND OUT OF BAND

RESULT: **Pass**

Test standard	:	47 CFR FCC Part 15 Subpart C, 15.225 RSS-210 Issue 11 June 2024
Requirement	:	47 CFR FCC Part 15 Subpart C, 15.225, section (a), (b), (c) & (d) RSS-210 Issue 11 June 2024, Annex B.6 a)
Basic standard	:	ANSI C63.10:2013 47 CFR FCC Part 15 Subpart C, 15.209 & 15.205
Frequency range	:	9 kHz – 30 MHz 30 – 1000 MHz
Limits	:	i. 15.848 mV/m (84 dBµV/m) at 30 m, within the band 13.553-13.567 MHz ii. 334 µV/m (50.47 dBµV/m) at 30 m, within the bands 13.410-13.553 MHz and 13.567-13.710 MHz iii. 106 µV/m (40.51 dBµV/m) at 30 m, within the bands 13.110-13.410 MHz and 13.710-14.010 MHz iv. General field strength limits for frequencies outside the band 13.110 14.010 MHz 47 CFR 15.209(a) and RSS-Gen Issue 5 with Amendment 1 & 2 February 2021, section 8.9
Kind of test site	:	3m Semi-Anechoic Chamber

Test Setup

Date of testing	:	2025-02-28 to 2025-03-24
Input Voltage	:	DC 24V
Operation mode	:	A
Test conditions	:	☒ Normal conditions; ☐ Extreme conditions
Ambient temperature	:	23 ºC
Relative humidity	:	53%
Atmospheric pressure	:	101.0 kPa

Note:
In accordance with 47 CFR 15.31(f)(2), where the measurement distance was specified to be 30 or 300 meters, a correction factor was applied to permit measurement to be performed at a separation distance. The applied formula for limits at 3 meter is:
Extrapolation (dB) = 40log (300/3) = 80 dB
Extrapolation (dB) = 40log (30/3) = 40 dB

Refer to attached Appendix A for details of test results.

5.1.5 CONDUCTED EMISSIONS ON AC MAINS

RESULT: **Pass**

Test standard	:	47 CFR FCC Part 15 Subpart C, 15.207 RSS-Gen Issue 5 with Amendment 1 & 2 February 2021
Requirement	:	47 CFR FCC Part 15 Subpart C, 15.207, section (a) RSS-Gen Issue 5 with Amendment 1 & 2 February 2021, section 8.8
Basic standard	:	ANSI C63.10:2013
Frequency range	:	0.15 – 30 MHz
Limits	:	47 CFR FCC Part 15 Subpart C, 15.207, section (a) RSS-Gen Issue 5 with Amendment 1 & 2 February 2021, Table 4 0.15 – 0.5 MHz, 66 to 56 dBuV (Quasi-peak), 56 to 46 dBuV (Average) 0.5 – 5 MHz, 56 dBuV (Quasi-peak), 46 dBuV (Average) 5 – 30 MHz, 60 dBuV (Quasi-peak), 50 (Average)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-02-28 to 2025-03-24
Input Voltage	:	DC 24V
Operation mode	:	A
Test conditions	:	☒ Normal conditions; ☐ Extreme conditions
Ambient temperature	:	24.9 ºC
Relative humidity	:	50.4%
Atmospheric pressure	:	101.0 kPa

Note:
N/A

Refer to attached Appendix A for details of test results.

6 PHOTOGRAPHS OF THE TEST SETUP

For photographs of the test setup, refer to attached Appendix B.

7 LIST OF TABLES

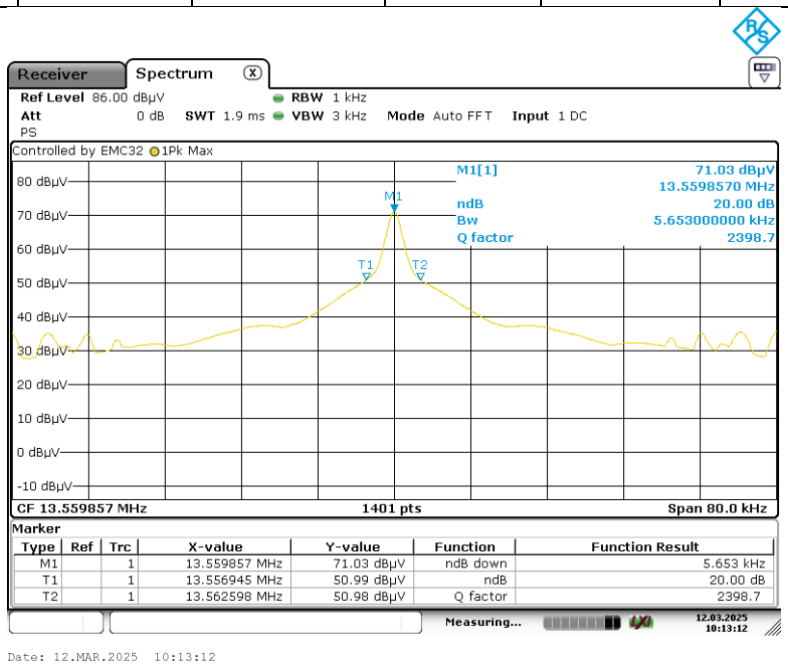
========== END OF REPORT ==========

APPENDIX A: TEST RESULTS OF RFID OPERATING

APPENDIX A.1: 20 DB BANDWIDTH AND OCCUPIED BANDWIDTH

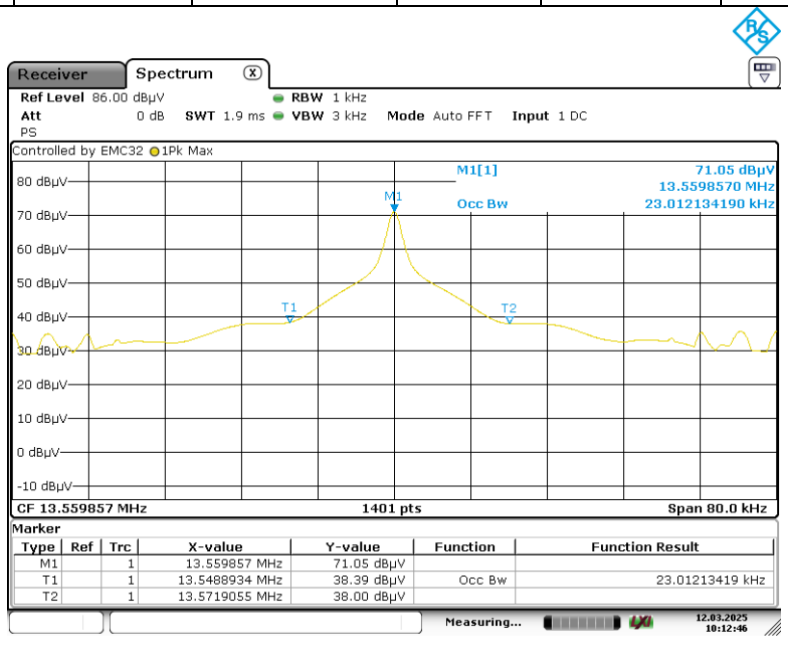
RFID 13.56 MHz operating

Test Conditions	20 dB Bandwidth					Verdict
	f_L Channel (MHz)	f_H Channel (MHz)	20 dB BW (kHz)	f_L Limit (MHz)	f_H Limit (MHz)	
Normal	13.5569	13.5626	5.653	> 13.110	< 14.010	Pass



Date: 12.MAR.2025 10:13:12

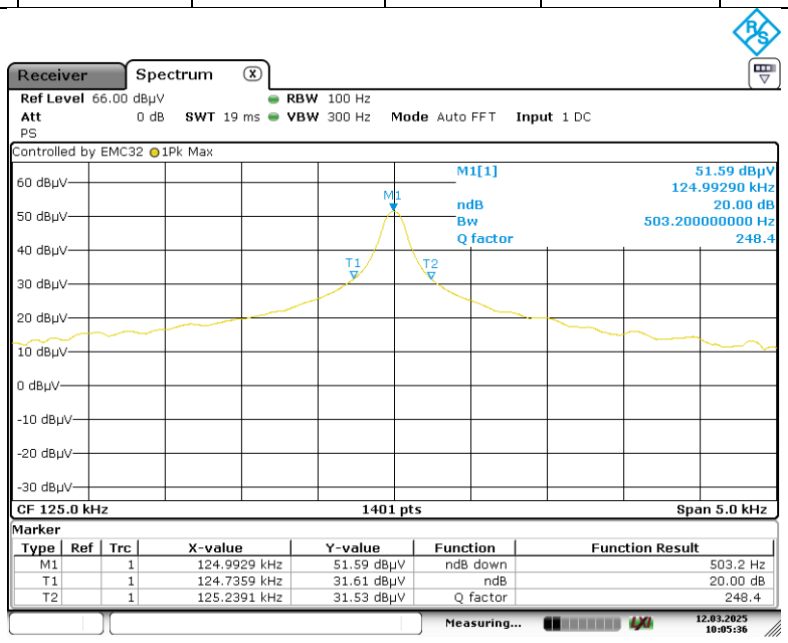
Test Conditions	Occupied Bandwidth (99% emission Bandwidth)					Verdict
	f_L Channel (MHz)	f_H Channel (MHz)	OCW (kHz)	f_L Limit (MHz)	f_H Limit (MHz)	
Normal	13.5489	13.5719	23.01	> 13.110	< 14.010	Pass



Date: 12.MAR.2025 10:12:47

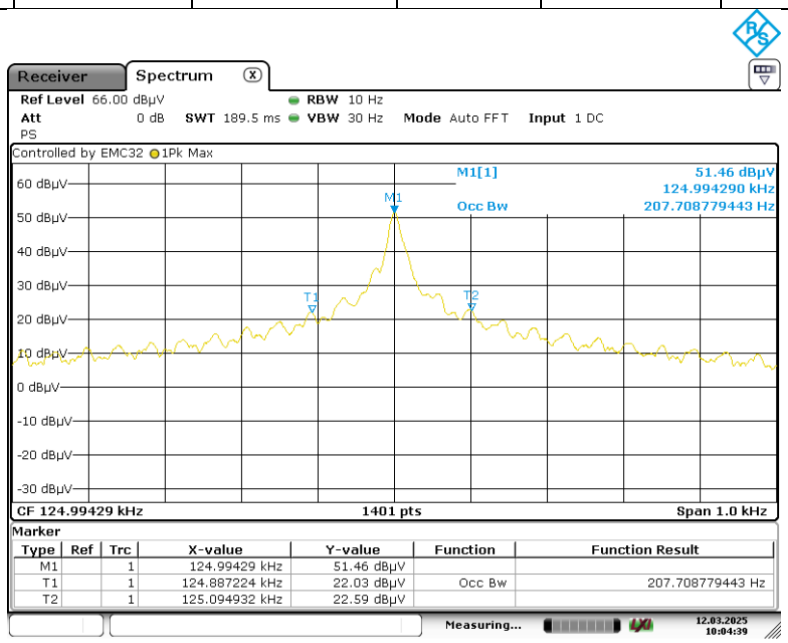
RFID 125 kHz operating (informative information)

Test Conditions	20 dB Bandwidth					Verdict
	f_L Channel (MHz)	f_H Channel (MHz)	20 dB BW (kHz)	f_L Limit (MHz)	f_H Limit (MHz)	
Normal	0.1247	0.1252	0.503	--	--	--



Date: 12.MAR.2025 10:05:36

Test Conditions	Occupied Bandwidth (99% emission Bandwidth)					Verdict
	f_L Channel (MHz)	f_H Channel (MHz)	OCW (kHz)	f_L Limit (MHz)	f_H Limit (MHz)	
Normal	0.1249	0.1251	0.208	--	--	--



Date: 12.MAR.2025 10:04:39

APPENDIX A.2: FREQUENCY STABILITY

RFID 13.56 MHz operating

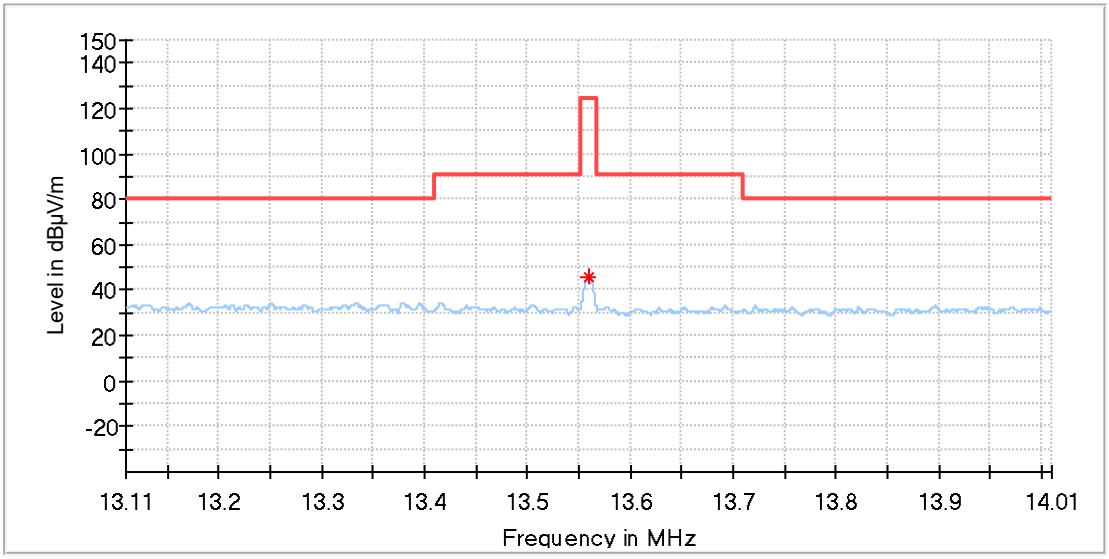
Test Frequency_f_c (MHz)	Test Conditions		Test Results (MHz)	Deviation (kHz)	Limit	Result
	Temp(°C)	Volt (V DC)				
13.56	-20	24	13.560712	0.712	100ppm ±0.01% of f_c (1.356 kHz)	Pass
	-10	24	13.560889	0.889		Pass
	0	24	13.560715	0.715		Pass
	10	24	13.560894	0.894		Pass
	20	24	13.560618	0.618		Pass
	30	24	13.560748	0.748		Pass
	40	24	13.560847	0.847		Pass
	50	24	13.560869	0.869		Pass
	20	20.4	13.560799	0.799		Pass
		24	13.560834	0.834		Pass
		27.6	13.560824	0.824		Pass
Note: Deviation (kHz) = (Test Result-f_c)*1000						

APPENDIX A.3: RADIATED EMISSIONS – IN-BAND AND OUT OF BAND

RFID 13.56 MHz operating – In-band emissions
Polarization – X

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C / RSS-210
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.560000	45.98	124.00	78.02	100.0	X	172.0	20.0

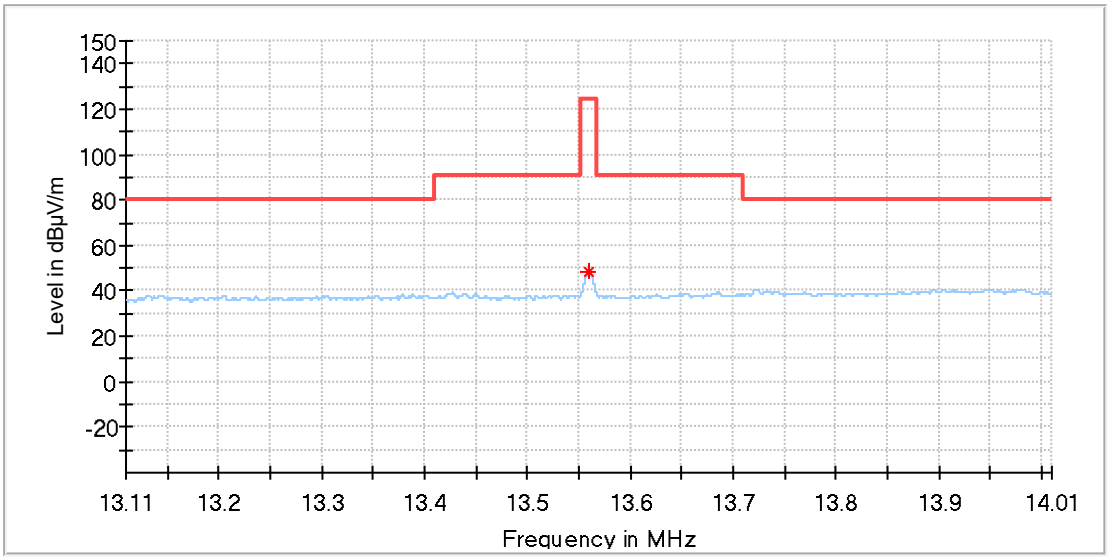
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Comment
---	---	---	---	---		---	---	

Polarization – Y

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C / RSS-210
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.560000	48.30	124.00	75.70	100.0	Y	219.0	20.0

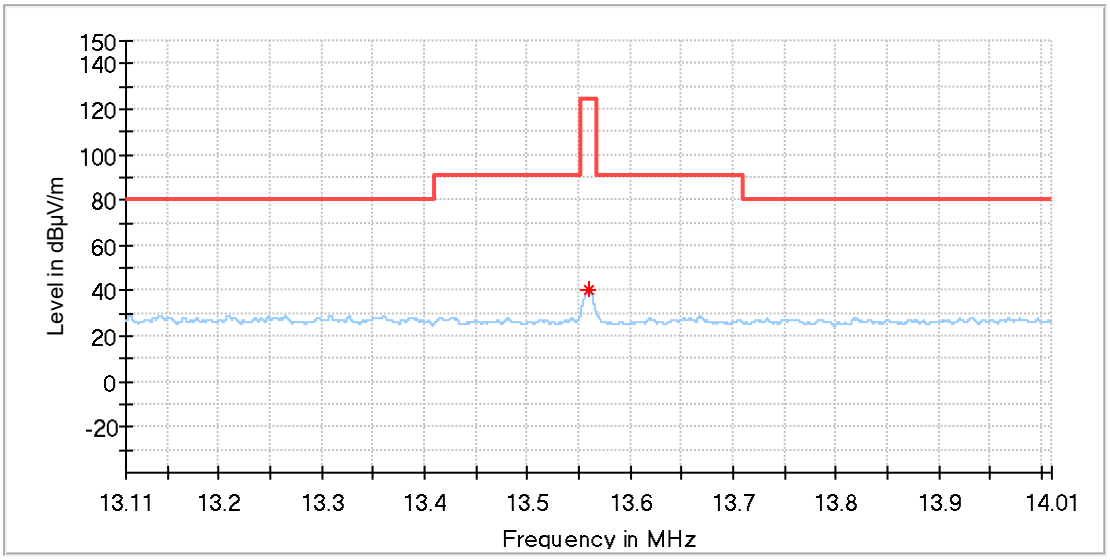
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Comment
---	---	---	---	---		---	---	

Polarization – Z

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C / RSS-210
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.560000	40.65	124.00	83.35	100.0	Z	187.0	20.0

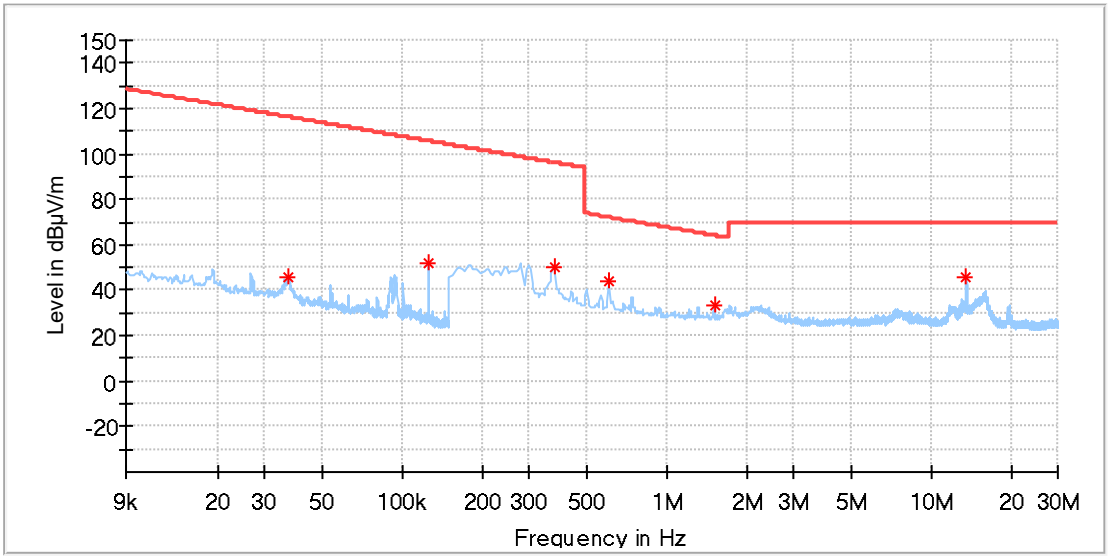
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Comment
---	---	---	---	---		---	---	

RFID 13.56 MHz operating – Out of Band, frequency range 9 kHz to 30 MHz
Polarization – X

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036898	45.51	116.25	70.74	100.0	X	316.0	19.9
0.125023	51.65	105.66	54.01	100.0	X	150.0	19.9
0.373875	50.08	96.15	46.07	100.0	X	0.0	19.9
0.602140	44.32	72.02	27.70	100.0	X	78.0	19.9
1.506419	33.55	64.07	30.52	100.0	X	42.0	20.0
13.560552	46.07	69.50	23.43	100.0	X	164.0	20.3

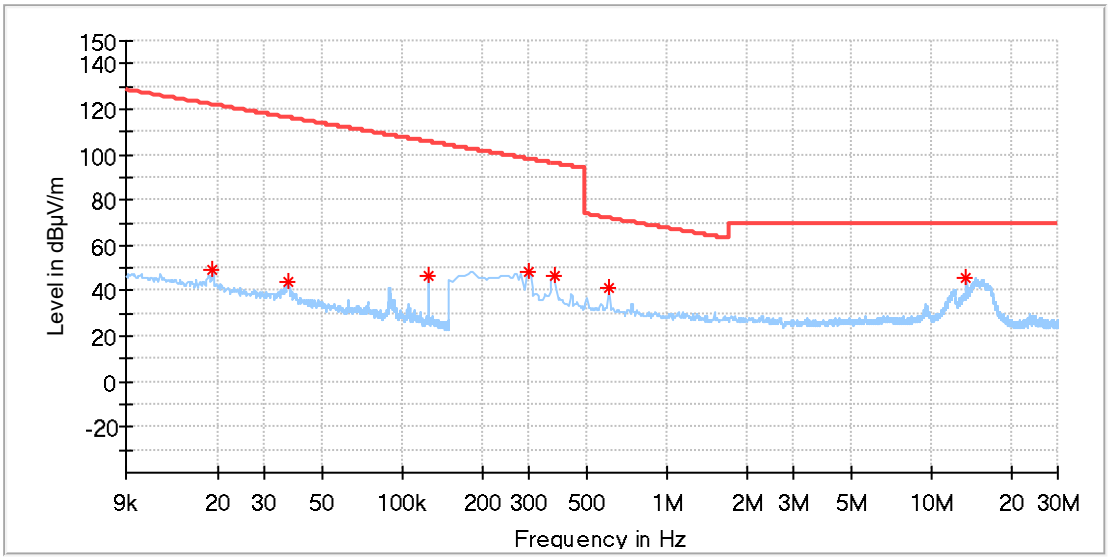
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Polarization – Y

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	48.85	121.94	73.09	100.0	Y	245.0	19.9
0.036898	43.81	116.25	72.44	100.0	Y	266.0	19.9
0.125023	46.59	105.66	59.06	100.0	Y	223.0	19.9
0.299250	48.67	98.08	49.41	100.0	Y	302.0	19.9
0.373875	46.34	96.15	49.81	100.0	Y	349.0	19.9
0.602140	41.35	72.02	30.66	100.0	Y	151.0	19.9
13.560552	45.48	69.50	24.02	100.0	Y	5.0	20.3

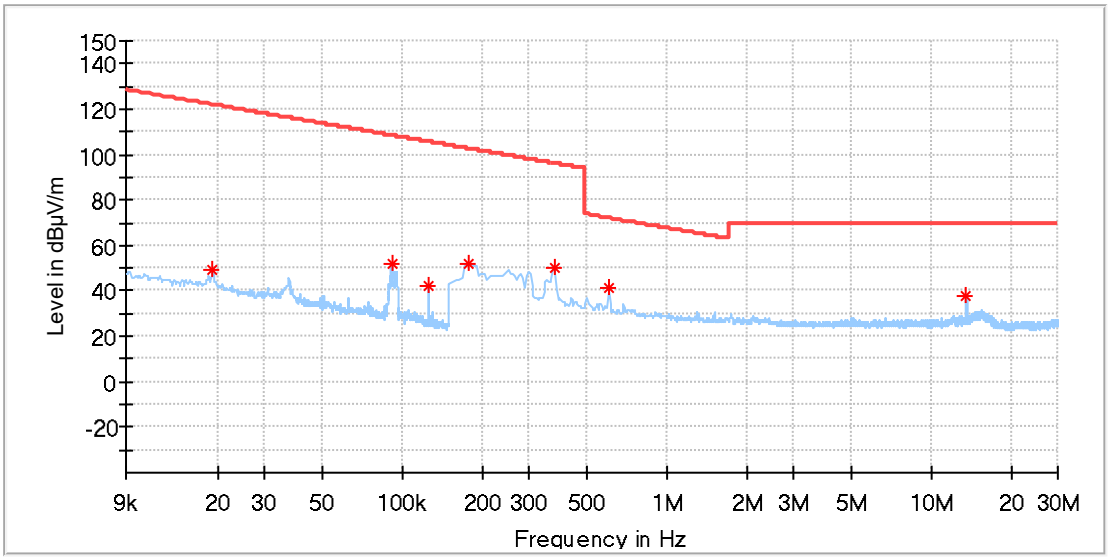
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Polarization – Z

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	49.13	121.94	72.80	100.0	Z	306.0	19.9
0.090981	51.49	108.42	56.93	100.0	Z	56.0	19.9
0.125023	42.19	105.66	63.47	100.0	Z	128.0	19.9
0.176338	51.91	102.67	50.76	100.0	Z	59.0	19.8
0.373875	49.70	96.15	46.44	100.0	Z	55.0	19.9
0.602140	41.38	72.02	30.64	100.0	Z	332.0	19.9
13.560552	37.73	69.50	31.77	100.0	Z	4.0	20.3

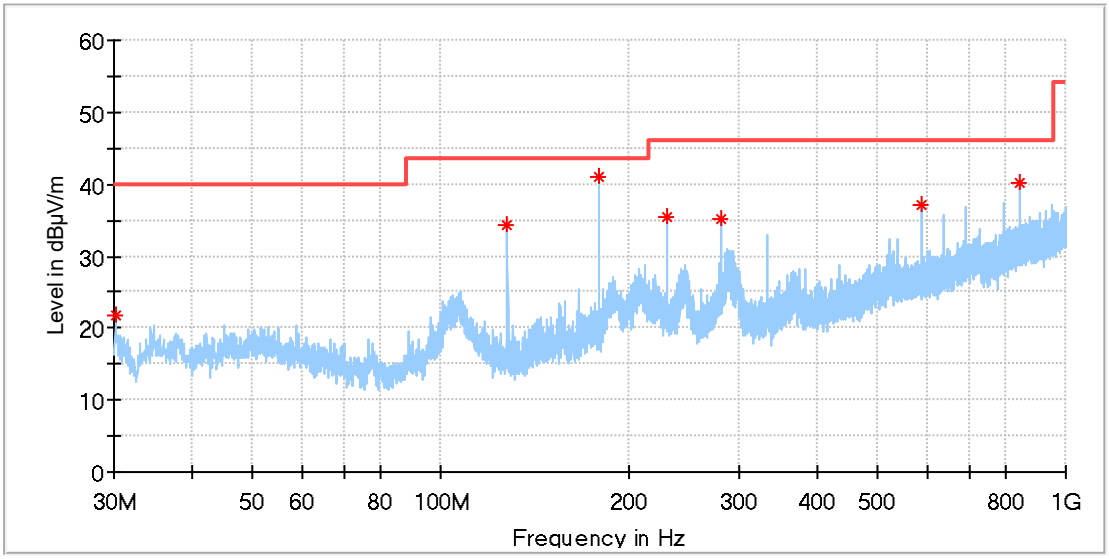
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

RFID 13.56 MHz operating – Out of Band, frequency range 30 MHz to 1 GHz
Polarization – Horizontal

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
30.149231	21.69	40.00	18.31	100.0	H	289.0	-23.0
127.932692	34.27	43.50	9.23	100.0	H	354.0	-21.7
179.081539	41.06	43.50	2.44	100.0	H	0.0	-20.7
230.267692	35.50	46.00	10.50	100.0	H	302.0	-18.1
281.416539	35.03	46.00	10.97	100.0	H	166.0	-16.7
588.421539	37.21	46.00	8.79	100.0	H	79.0	-10.0
844.277692	40.20	46.00	5.80	100.0	H	120.0	-5.4

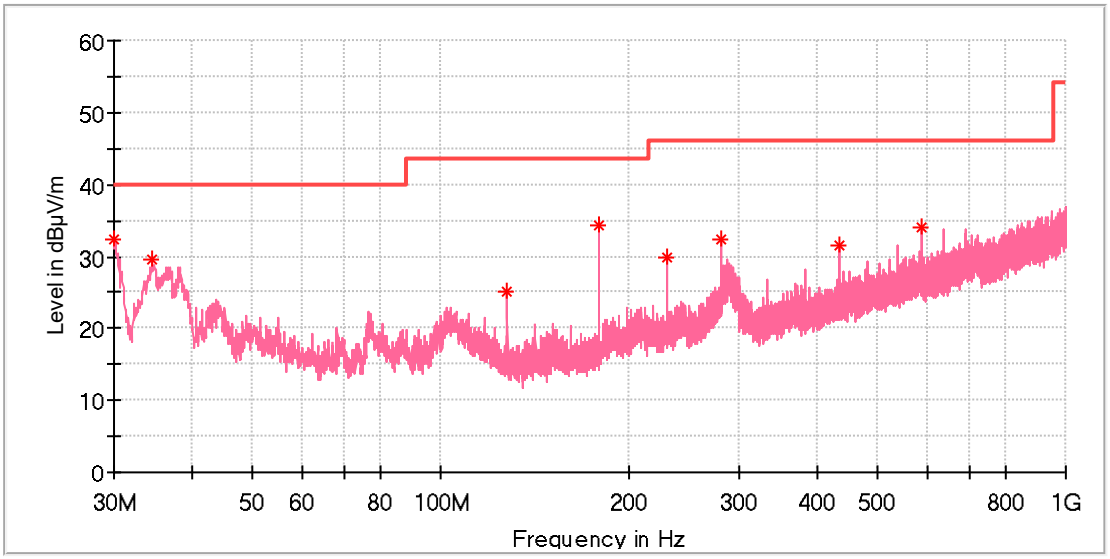
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Polarization – Vertical

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
30.037308	32.26	40.00	7.75	100.0	V	304.0	-23.0
34.551539	29.59	40.00	10.41	100.0	V	232.0	-22.1
127.932692	25.11	43.50	18.39	100.0	V	164.0	-21.7
179.081539	34.31	43.50	9.19	100.0	V	56.0	-20.7
230.267692	29.99	46.00	16.01	100.0	V	63.0	-18.1
281.416539	32.43	46.00	13.58	100.0	V	48.0	-16.7
434.937692	31.67	46.00	14.33	100.0	V	145.0	-13.0
588.421539	33.95	46.00	12.05	100.0	V	120.0	-10.0

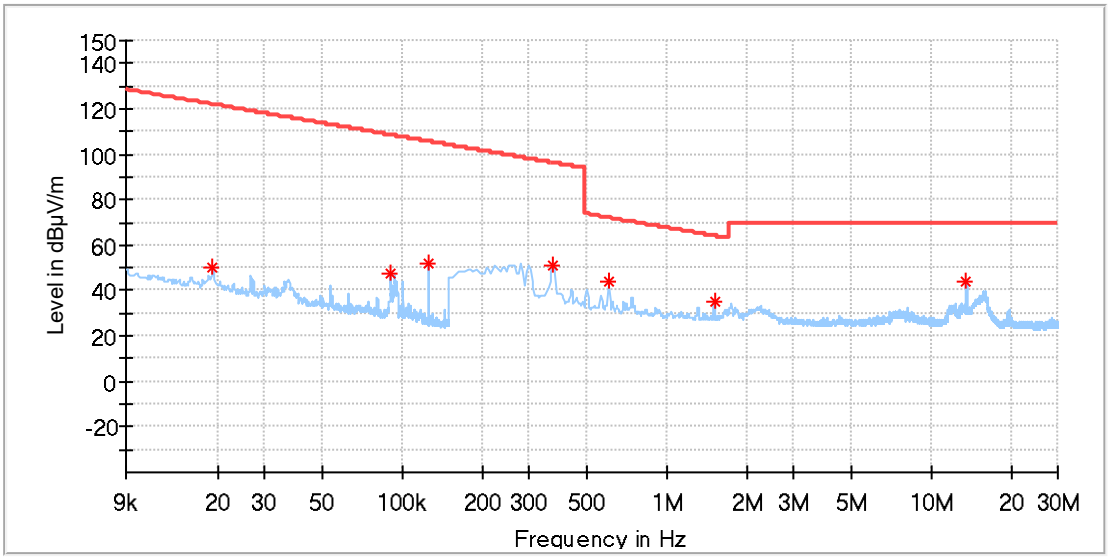
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

RFID 125 kHz operating – Out of Band, frequency range 9 kHz to 30 MHz
Polarization – X

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	50.17	121.94	71.77	100.0	X	11.0	19.9
0.090579	47.90	108.46	60.56	100.0	X	355.0	19.9
0.125023	51.72	105.66	53.94	100.0	X	153.0	19.9
0.369485	50.81	96.25	45.44	100.0	X	72.0	19.9
0.602140	44.20	72.02	27.81	100.0	X	169.0	19.9
1.506419	35.24	64.07	28.83	100.0	X	25.0	20.0
13.560552	44.32	69.50	25.18	100.0	X	349.0	20.3

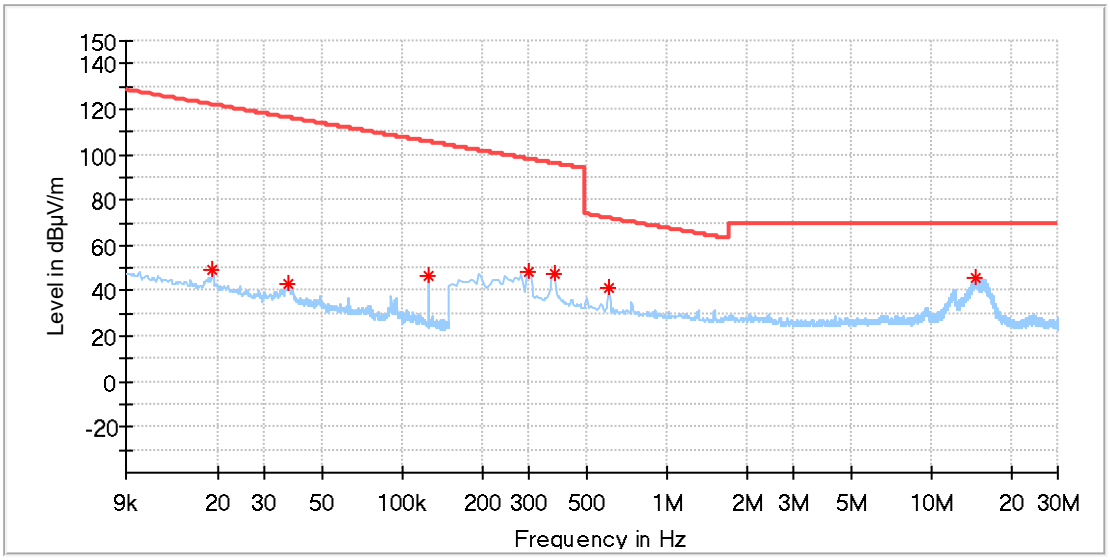
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Polarization – Y

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	49.57	121.94	72.36	100.0	Y	208.0	19.9
0.037200	43.21	116.18	72.97	100.0	Y	0.0	19.9
0.125023	46.74	105.66	58.92	100.0	Y	220.0	19.9
0.299250	48.28	98.08	49.80	100.0	Y	69.0	19.9
0.373875	47.48	96.15	48.67	100.0	Y	29.0	19.9
0.602140	41.38	72.02	30.63	100.0	Y	309.0	19.9
14.614081	45.39	69.50	24.11	100.0	Y	48.0	20.3

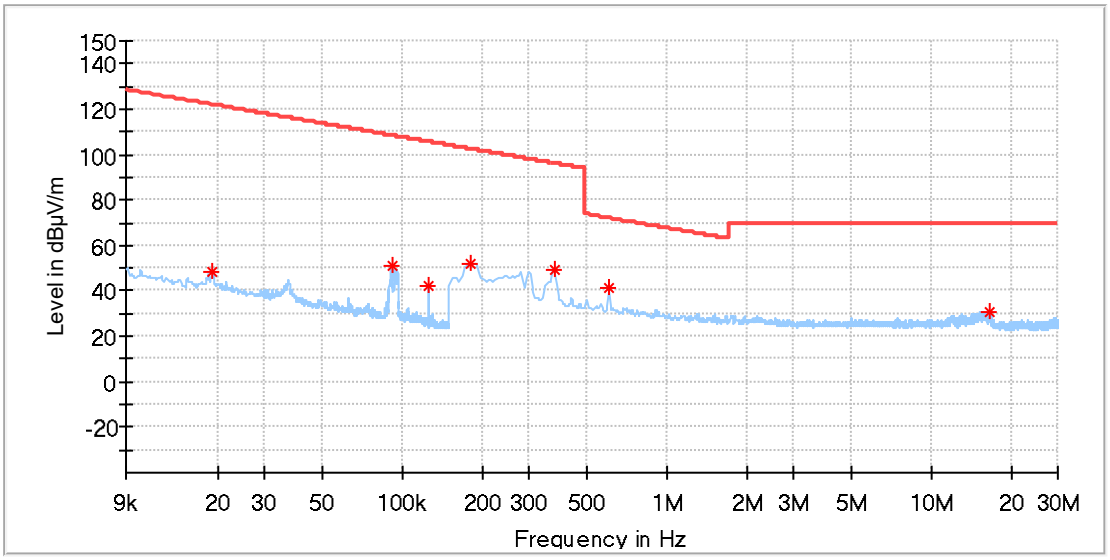
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Polarization – Z

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	48.41	121.94	73.53	100.0	Z	211.0	19.9
0.090981	51.31	108.42	57.10	100.0	Z	63.0	19.9
0.125023	41.94	105.66	63.72	100.0	Z	154.0	19.9
0.180728	51.84	102.46	50.62	100.0	Z	57.0	19.8
0.373875	49.34	96.15	46.80	100.0	Z	82.0	19.9
0.602140	41.48	72.02	30.54	100.0	Z	118.0	19.9
16.510434	30.89	69.50	38.61	100.0	Z	93.0	20.3

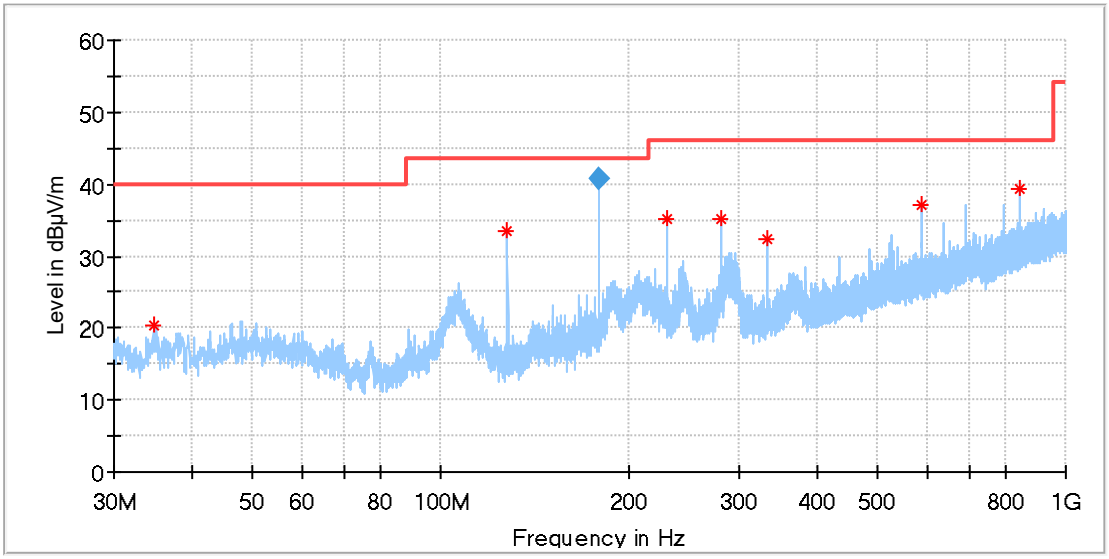
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

RFID 125 kHz operating – Out of Band, frequency range 30 MHz to 1 GHz
Polarization – Horizontal

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.887308	20.25	40.00	19.75	100.0	H	338.0	-22.0
127.932692	33.53	43.50	9.97	100.0	H	0.0	-21.7
179.081539	40.74	43.50	2.76	100.0	H	356.0	-20.7
230.230385	35.26	46.00	10.74	100.0	H	311.0	-18.1
281.416539	35.18	46.00	10.82	100.0	H	180.0	-16.7
332.602692	32.29	46.00	13.71	100.0	H	298.0	-15.2
588.458846	37.05	46.00	8.95	100.0	H	84.0	-10.0
844.277692	39.24	46.00	6.76	100.0	H	114.0	-5.4

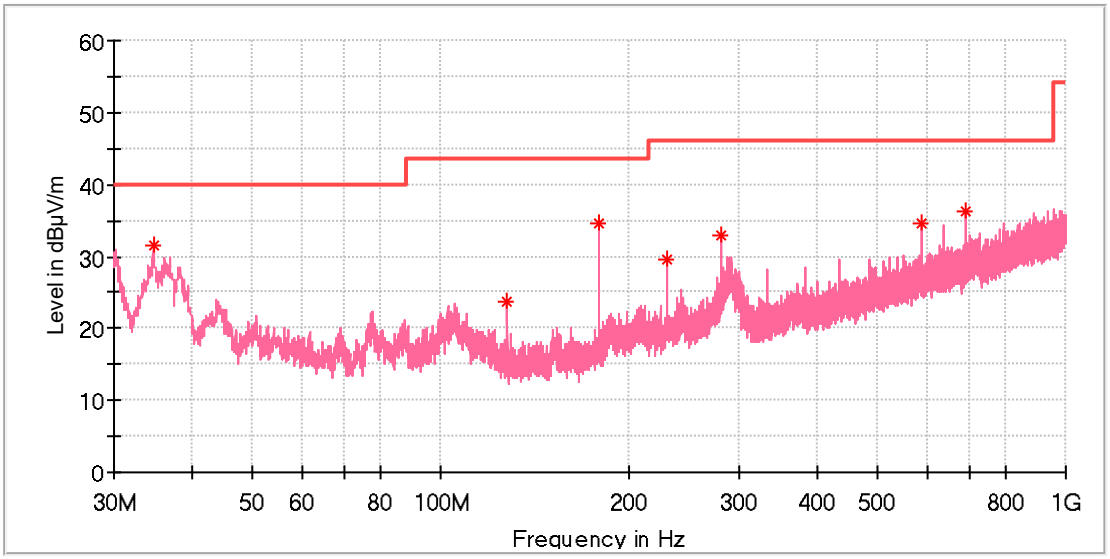
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
179.085692	40.72	43.50	2.78	100.0	H	1.0	-20.7

Polarization – Vertical

EUT Information

EUT Name:	Network Video Door Station
Model:	AXIS I8307-VE
Test Mode:	Mode A
Order No/Sample No:	168530508/A003910070-001
Test Voltage:	DC 24V via PoE port
Remark:	Temp 23 Humi:53%
Test Standard:	FCC PART 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.663462	31.52	40.00	8.48	100.0	V	111.0	-22.1
127.932692	23.70	43.50	19.80	100.0	V	177.0	-21.7
179.081539	34.50	43.50	9.00	100.0	V	57.0	-20.7
230.230385	29.56	46.00	16.44	100.0	V	34.0	-18.1
281.416539	33.05	46.00	12.95	100.0	V	71.0	-16.7
588.458846	34.66	46.00	11.34	100.0	V	131.0	-10.0
690.793846	36.22	46.00	9.78	100.0	V	57.0	-8.1

Final_Result

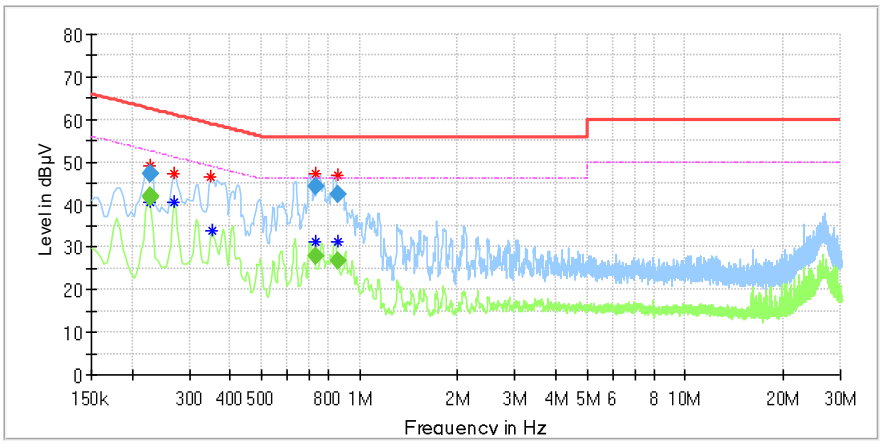
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

APPENDIX A.4: CONDUCTED EMISSIONS ON AC MAINS

RFID 13.56 MHz & 125 kHz operating
Neutral

EUT Information

EUT Name:	Network Video Door Station
Order Number:	168530508
Model:	AXIS I8307-VE
Test Mode:	On, Normal operating with RFID and T-Coil active, powered by
Test Voltage:	AC 120V/ 60Hz
Test By:/Review By	Junhua / Shower Dai
Tem./Hum./Pressure:	24.9°C/50.4%/101kPa
Remark:	SR3



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.227625	---	41.96	52.65	10.68	N	9.7
0.227625	48.98	---	62.65	13.66	N	9.7
0.228400	47.21	---	61.14	13.92	N	9.7
0.228400	---	40.59	51.14	10.55	N	9.7
0.269400	---	40.59	51.14	10.55	N	9.7
0.269400	47.21	---	61.14	13.92	N	9.7
0.347756	46.47	---	59.02	12.54	N	9.7
0.351488	---	33.99	48.93	14.94	N	9.7
0.729225	---	31.12	46.00	14.88	N	9.7
0.733225	47.36	---	56.00	8.64	N	9.7
0.859281	46.99	---	56.00	9.01	N	9.7
0.859550	---	31.28	46.00	14.72	N	9.7

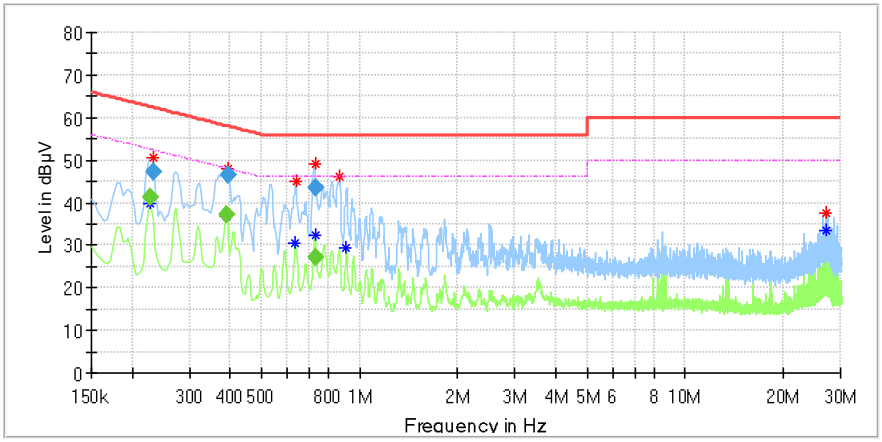
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.227625	---	41.79	52.54	10.74	1000.0	9.000	N	9.7
0.227625	47.20	---	62.54	15.34	1000.0	9.000	N	9.7
0.228400	---	41.92	52.51	10.59	1000.0	9.000	N	9.7
0.228400	47.44	---	62.51	15.07	1000.0	9.000	N	9.7
0.729225	---	28.04	46.00	17.96	1000.0	9.000	N	9.7
0.733225	44.11	---	56.00	11.89	1000.0	9.000	N	9.7
0.859281	42.25	---	56.00	13.75	1000.0	9.000	N	9.7
0.859550	---	26.63	46.00	19.37	1000.0	9.000	N	9.7

Live

EUT Information

EUT Name:	Network Video Door Station
Order Number:	168530508
Model:	AXIS I8307-VE
Test Mode:	On, Normal operating with RFID and T-Coil active, powered by AC/DC adapter
Test Voltage:	AC 120V/ 60Hz
Test By:/Review By	Junhua / Shower Dai
Tem./Hum./Pressure:	24.9°C/50.4%/101kPa
Remark:	SR3



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.227856	---	39.76	52.51	12.74	L1	9.8
0.231856	50.75	---	62.51	11.76	L1	9.8
0.388300	---	36.97	48.09	11.12	L1	9.9
0.393300	48.14	---	58.09	9.95	L1	9.9
0.635063	---	30.37	46.00	15.63	L1	9.9
0.638794	44.90	---	56.00	11.10	L1	9.9
0.729112	49.19	---	56.00	6.81	L1	9.9
0.732844	---	32.53	46.00	13.47	L1	9.9
0.866400	46.29	---	56.00	9.71	L1	9.9
0.911175	---	29.40	46.00	16.60	L1	9.9
27.160519	---	33.32	50.00	16.68	L1	10.1
27.160519	37.72	---	60.00	22.28	L1	10.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.227856	---	41.13	52.53	11.40	1000.0	9.000	L1	9.8
0.231856	47.07	---	62.38	15.31	1000.0	9.000	L1	9.8
0.388300	---	37.19	48.10	10.91	1000.0	9.000	L1	9.9
0.393300	46.58	---	57.99	11.41	1000.0	9.000	L1	9.9
0.729112	43.63	---	56.00	12.37	1000.0	9.000	L1	9.9
0.732844	---	27.09	46.00	18.91	1000.0	9.000	L1	9.9

========== END OF APPENDIX ==========