

Gantner Electronic **TEST REPORT**

SCOPE OF WORK

RADIO TESTING FCC – GT7.3500

REPORT NUMBER

2232708KAU-020

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PAGES

23

DOCUMENT CONTROL NUMBER

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TYPE: GT7.3500
DESCRIPTION: Multi-functional RFID terminal
ARTICLE NO: 919229
SERIAL NO: 1808000005

All measurement results refer to the equipment which was tested

MANUFACTURER: Gantner Electronic GmbH
CUSTOMER NAME: Gantner Electronic GmbH
ADDRESS (CUSTOMER): Montafonerstrasse 8
AT-6780 SCHRUNS
AUSTRIA

REPORT NO: 2232708KAU-020

TEST RESULT: The equipment complies to 47 CFR Part 15, Subpart C, Intentional radiators, section 15.225 / RSS-210, Issue 9 and RSS-GEN, Issue 5 (Referring to the operating modes specified in this report).

TEST LABORATORY: Intertek Deutschland GmbH
Innovapark 20, 87600 Kaufbeuren
Germany

FCC DESIGNATION NUMBER: DE0014

FCC TEST FIRM REGISTRATION NUMBER. 359260

INDUSTRY CANADA REGISTRATION. 8882A-1; 8882A-2


TEST ENGINEER: U. Gronert
Senior Project Engineer

REVIEWER: R. Dressler
Technical Manager EMC/ Radio







Details about Accreditations/Acceptances


EMC / Radio National

	<p>The Intertek Deutschland EMC-Lab is accredited by the Deutsche Akkreditierungsstelle GmbH (DAkKS)</p>
	<p>Registration Number (EMC general): D-PL-12085-01-01</p>
	<p>Registration Number (EMC Med): D-PL-12085-01-03</p>

International

	<p>The Intertek Deutschland EMC-Lab is accepted to participate in the IECEE (IEC Conformity assessment for Electrotechnical Equipment and Components) CB-Scheme</p> <p>CB Test Laboratory: TL118</p>
	<p>The Intertek Deutschland EMC-Lab is listed at the Federal Communications Commission (FCC)</p> <p>Designation Number: DE0014</p> <p>Test Firm Registration Number: 359260</p>
	<p>The <i>Bundesnetzagentur</i> recognizes Intertek Deutschland GmbH as Conformity Assessment Body in the sector electromagnetic compatibility (EMC).</p>
	<p>The Intertek Deutschland EMC-Lab is listed at Industry Canada No. 8882A-1 (OATS) and 8882A-2 (3 m alternative test site)</p>

Automotive

	<p>The Intertek Deutschland EMC-Lab is recognized as technical service of the Kraftfahrt-Bundesamt (KBA)</p> <p>Registration Number: KBA-P 00046-03</p>
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SECTION 2

MEASUREMENT AND TEST SPECIFICATION

47 CFR Part 15, Subpart C, Intentional radiators, section 15.225 /
RSS-210, Issue 9 and RSS-GEN, Issue 4

Test methods in:

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices

No additions, deviations or exclusions have been made from standards and accreditation.

The test results detailed in this report apply only to the GT7.3500 with the test setup described. Any modification such as a change, addition to or inclusion of another device into this product will require an additional evaluation.

The support equipment listed as part of the emission tests is required to properly exercise and test the device under test.

SECTION 3 GENERAL INFORMATION

Possible test case verdicts:

Test case does not apply to the test object: N/A (Not Applicable)

Test object does meet the requirement: P (Pass)

Test object does not meet the requirements: F (Fail)

Samples arrived: 2018-08-24

Testing: 2018-08-27 to 2018-09-20

Decimal separator: Point Comma

Environmental conditions during testing:

Temperature: 15 °C - 35 °C

Humidity: 20 % - 60 %

Atmospheric pressure: 900 mbar - 1000 mbar

If explicitly required by a basic standard the measured climatic conditions are documented in the corresponding test section.

Test sites:

Measurement Chamber	Type of chamber	IC Site filing #
ANECHOIC CHAMBER 1	Semi-anechoic 3 m	8882A-2

SECTION 4**SUMMARY OF TESTING****4.1 General annotation**

The tests were performed in the order of the right column in the “Test Results – Overview” table.

4.2 Measurement uncertainty

For each test method, an uncertainty evaluation was carried out. The results of the evaluation can be provided upon request from Intertek Deutschland GmbH.

4.3 Document History

REVISION	DATE	REPORT	CHANGES	AUTHOR
Initial release	2018-10-22	2232708KAU-020	Initial issue	UGR

SECTION 5**TEST RESULTS – OVERVIEW**

EMISSION	VERDICT	DATE	NO
Field strength (13.110 MHz – 14.010 MHz)	P	2018-08-30	3
Radiated emissions (< 30 MHz)	P	2018-08-30	2
Radiated emissions (30 MHz - 1 GHz)	P	2018-08-27	1
Frequency Stability Test	P	2018-09-04	5
Occupied bandwidth test	P	2018-09-03	4
Conducted emissions (0.15 MHz - 30 MHz)	P	2018-09-20	6

SECTION 6

INFORMATION ABOUT THE EUT

6.1 Description of the EUT

<input checked="" type="checkbox"/> table-top EUT	<input type="checkbox"/> floor-standing EUT
---	---

Dimensions:	Height:	Width:	Length:
	127.1 mm	151.1 mm	24.7 mm

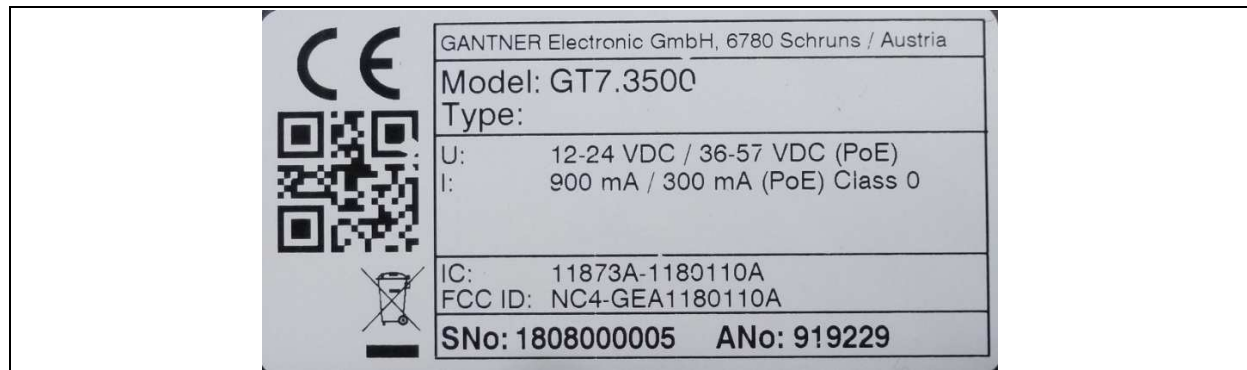
Software version: Radio/EMC test software for a continuous RFID field

Description: Multi-functional RFID terminal, Ethernet, PoE, 2 relay outputs, 1 status input, and with Wiegand, RS-232 and RS-485 interfaces, WLAN, Bluetooth.

Transmitter frequency range: 13.56 MHz

Frequency agile or hopping:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Antenna:	<input checked="" type="checkbox"/> Internal antenna	<input type="checkbox"/> External antenna
Antenna connector:	<input checked="" type="checkbox"/> None, internal antenna	<input type="checkbox"/> Yes, type
Type of used TAG:	GAT Testcard Mifare	
EUT - Temperature range:	-10°C to +50°C	
Transmitter stand by mode supported:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

6.1.1 Photo/ Sketch of the rating plate



6.2 Power interface

MODE	VOLTAGE (V)	FREQUENCY (Hz)	COMMENT
1	24	DC	Power supply delivered by customer

Power sources/associated test equipment

DEVICE	MANUFACTURER	TYPE	SN	ASSET NO.
Power Supply	DYS	DYS404-240166W	--	--

6.3 Configuration mode

MODE	DESCRIPTION
1	The GT7.3500 was supplied over the external power supply.

6.4 Operation mode

MODE	DESCRIPTION
1	Continuous RFID field with TAG in front of reader

6.5 Peripheral devices used for testing

DEVICE	MANUFACTURER	TYPE	FID	FCC ID
--	--	--	--	-

6.6 Supply and interconnecting cables used for testing

LINE	LENGTH (cm)	SHIELDING
Ethernet	290	Y
Mains cable to power supply	180	N
DC cable with ferrite core from power supply to EUT	35	N

SECTION 7

7.1 Field strength 13.110 MHz – 14.010 MHz (Emission Mask)

NORMATIVE REFERENCES		RESULT
Limits according to:	FCC §15.225 (a) – (c) RSS-210, Issue 9, section B4	P
Methods of measurement according to:	ANSI C63.10, section 6.3, 6.4 RSS-Gen 6.13, 8.9	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	1
Test requirements	Frequency range	13.110 MHz – 14.010 MHz
	Measurement time	1 s
	Antenna height	1 m

Limits

The limits below 30 MHz are given for different measurement distances. The limits below 30 MHz are converted to 3 m by using the extrapolation factor 40 dB/decade (according to §15.31).

Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)	Field strength (dBµV/m)	Measurement distance (m)
13.110 - 13.410	106	40.5	30	80.5	3
13.410 - 13.553	334	50.5	30	90.5	3
13.553 - 13.567	15848	84.0	30	124.0	3
13.567 - 13.710	334	50.5	30	90.5	3
13.710 - 14.010	106	40.5	30	80.5	3

Test setup details

Compliance with the spectrum mask is tested using a spectrum analyzer with resolution bandwidth set to 10 kHz or 9 kHz CISPR. The video bandwidth shall be at least three times greater than the resolution bandwidth.

The test was carried out automatically by the test receiver.

The EUT is a table-top EUT and was standing on a table made of Styrodur with a Pertinax plate on top and the dimensions 1.6 m x 1.0 m x 0.8 m (Length x Width x Height).

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector.

Test equipment

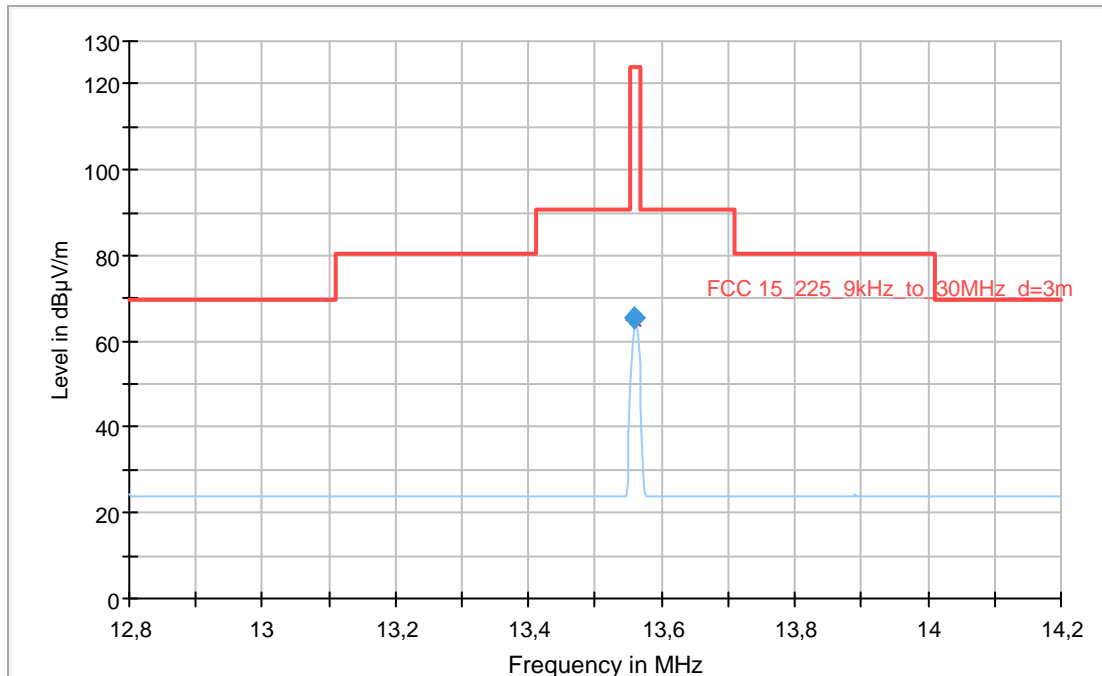
DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Semi-Anechoic chamber	Siepel	REF W460SLB	-	PM KF 1150-01	2016-12 (3 years)
Turntable	Inn-Co	-	-	PM KF 2949-04	-
Receiver 9 kHz- 7 GHz	Rohde & Schwarz	ESR7	101757	PM KF 3371	2018-04 (1 year)
Loop antenna 9 kHz- 30 MHz	Rohde & Schwarz	HFH2-Z2	881058/48	PM KF 1401	2017-10 (2 years)
Test software	Rohde & Schwarz	EMC 32 V.10.01.00	-	PM KF 2983-2	-

Measurement results – Field strength 13.110 MHz – 14.010 MHz (Emission Mask):

Intertek Test Report

Common Information

EUT: GT7.3500
 Test Verdict: Passed
 Test Description: Spurious emissions, 9 kHz - 30 MHz
 Operating Conditions: 120 V, 60 Hz over GAT NET.Power Supply 692833
 Operator Name: UGR
 Project Number: 32708
 Date: 2018-08-30
 Comment: Continuous RFID field with TAG in front



- Preview Result 1-QPK [Preview Result 1.Result:1]
- * Critical_Freqs AVG [Critical_Freqs.Result:5]
- * Critical_Freqs QPK [Critical_Freqs.Result:4]
- FCC 15_225_9kHz_to_30MHz_d=3m [.\ZF radiated\FCC Part 15C]
- ◆ Final_Result QPK [Final_Result.Result:4]
- ◆ Final_Result AVG [Final_Result.Result:5]

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
13.560000	65.66	---	124.00	58.34	1000.0	9.000	H	176.0	19.7

(continuation of the "Final_Result" table from column 15 ...)

Frequency (MHz)	Comment
13.560000	Peak: 65,7 dBµV/m

7.2 Radiated emissions < 30 MHz

NORMATIVE REFERENCES		RESULT
Limits according to:	FCC §15.225 (d), §15.209 RSS-210, Issue 9, section B4	P
Methods of measurement according to:	ANSI C63.10, section 6.3, 6.4 RSS-Gen 6.13, 8.9	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	1
Test requirements	Frequency range	9 kHz - 30 MHz
	Antenna height	1 m

Limits

The limits below 30 MHz are given for different measurement distances. The limits below 30 MHz are converted to 3 m by using the extrapolation factor 40 dB/decade (according to §15.31).

Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
0.009 - 0.490	2400/F(kHz)	67.6 - 20 · log(F(kHz))	300
0.490 - 1.705	24000/F(kHz)	87.6 - 20 · log(F(kHz))	30
1.705 - 13.110	30	29.5	30
14.010 - 30.000	30	29.5	30

Additionally, the level of any unwanted emissions shall not exceed the level of the fundamental emission.

Test setup details

Compliance with the spectrum mask is tested using a spectrum analyzer with resolution bandwidth set to 10 kHz or 9 kHz CISPR. The video bandwidth shall be at least three times greater than the resolution bandwidth.

The test was carried out automatically by the test receiver.

The EUT is a table-top EUT and was standing on a table made of Styrodur with a Pertinax plate on top and the dimensions 1.6 m x 1.0 m x 0.8 m (Length x Width x Height).

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test equipment

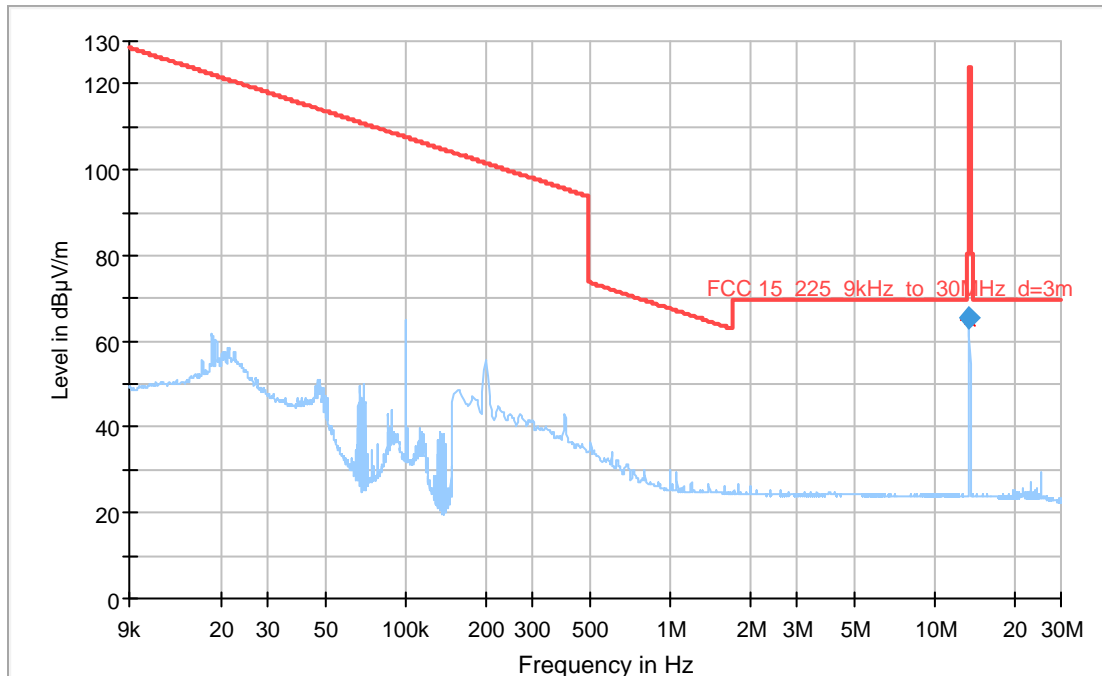
DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Semi-Anechoic chamber	Siepel	REF W460SLB	-	PM KF 1150-01	2016-12 (3 years)
Turntable	Inn-Co	-	-	PM KF 2949-04	-
Receiver 9 kHz- 7 GHz	Rohde & Schwarz	ESR7	101757	PM KF 3371	2018-04 (1 year)
Loop antenna 9 kHz- 30 MHz	Rohde & Schwarz	HFH2-Z2	881058/48	PM KF 1401	2017-10 (2 years)
Test software	Rohde & Schwarz	EMC 32 V.10.01.00	-	PM KF 2983-2	-

Measurement results – Radiated emissions < 30 MHz:

Intertek Test Report

Common Information

EUT: GT7.3500
 Test Verdict: Passed
 Test Description: Spurious emissions, 9 kHz - 30 MHz
 Operating Conditions: 120 V, 60 Hz over GAT NET.Power Supply 692833
 Operator Name: UGR
 Project Number: 32708
 Date: 2018-08-30
 Comment: Continuous RFID field with TAG in front



- Preview Result 1-QPK [Preview Result 1.Result:1]
- * Critical_Freqs AVG [Critical_Freqs.Result:5]
- * Critical_Freqs QPK [Critical_Freqs.Result:4]
- FCC 15_225_9kHz_to_30MHz_d=3m [.\ZF radiated\FCC Part 15C]
- ◆ Final_Result QPK [Final_Result.Result:4]
- ◆ Final_Result AVG [Final_Result.Result:5]

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
13.560000	65.66	---	124.00	58.34	1000.0	9.000	H	176.0	19.7

(continuation of the "Final_Result" table from column 15 ...)

Frequency (MHz)	Comment
13.560000	Peak: 65,7 dBµV/m

Anechoic chamber

Test procedure

The test site is an anechoic chamber suitable for radiated emission measurements in the frequency range of 9 kHz – 30 MHz It includes automatic turntable of radius 2 m. It enables manual and fully automatic measurements.

To find the highest level of radiation

- the height of the antenna is 1m with antenna in horizontal and vertical polarization;
- the turntable is rotated in range from 0° to 360°.

The system was configured for testing in a typical worst case fashion (as a customer may use it). All interface cables were moved to determine the position which resulted in the highest emission levels.

Correction factors

The field strength is calculated by adding the antenna factor and cable attenuation. The calculations are performed automatically by the measurement software EMC 32. As example consider the following input values and result:

FREQUENCY (MHZ)	RECEIVER READING U (dBμV)	ANTENNA FACTOR AF (dB/m)	CABLE ATTENUATION A (dB)	CORRECTION ANTENNA + CABLE (dB)	RADIATED FIELD STRENGTH E (dBμV/m)
30.0	20	20.6	0.8	21.4	41.4

$$E = U + AF + A$$

7.3 Radiated emissions 30 MHz to 1 GHz

NORMATIVE REFERENCES		RESULT
Limits according to:	FCC §15.225 (d), §15.209 RSS-210, Issue 9, section B4	P
Methods of measurement according to:	ANSI C63.10, section 6.3, 6.5 RSS-Gen 6.13, 8.9	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	2
Test requirements	Frequency range	30 MHz - 1 GHz
	Antenna height	1 m

Limits

Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/m)	Measurement distance (m)
30 – 88	100	40.0	3
88 – 216	150	43.5	3
216 – 960	200	46.0	3
Above 960	500	54.0	3

Test setup details

The EUT is a table-top EUT and was standing on a table made of Styrodur with a Pertinax plate on top and the dimensions 1.6 m x 1.0 m x 0.8 m (Length x Width x Height).

Overview sweeps performed with peak detectors and final measurement with quasi-peak detectors. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector.

Test equipment

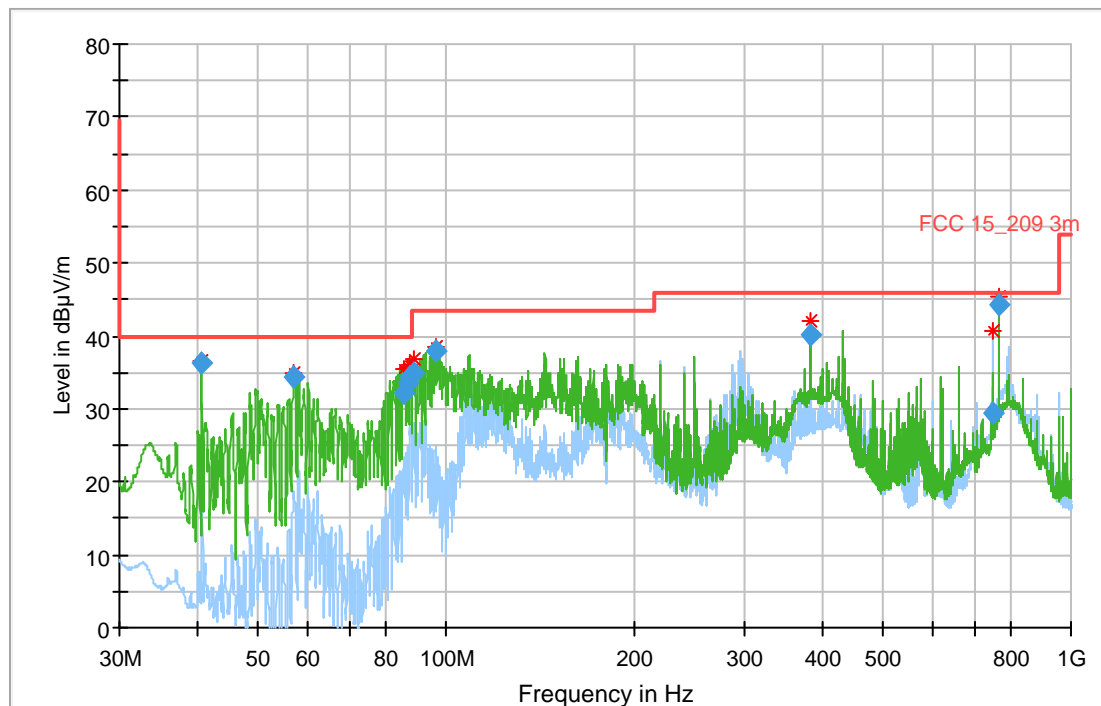
DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Semi-Anechoic chamber	Siepel	REF W460SLB	-	PM KF 1150-01	2016-12 (3 years)
Turntable	Inn-Co	-	-	PM KF 2949-04	-
Receiver 9 kHz- 7 GHz	Rohde & Schwarz	ESR7	101757	PM KF 3371	2018-04 (1 year)
Antenna 30 MHz - 3GHz	Rohde & Schwarz	HL 562	100354	PM KF 1123	2018-03 (2 years)
Test software	Rohde & Schwarz	EMC 32 V.10.01.00	-	PM KF 2983-2	-

Measurement results – Radiated emissions 30 MHz to 1 GHz:

Intertek Test Report

Common Information

EUT:	GT7.3500
Test Verdict:	pass
Test Description:	Radiated emission 30 - 1000 MHz
Operating Conditions:	RFID on (with Tag), WLAN on (CH8), Bluetooth on
Operator Name:	UGR
Project Number:	32708
Date:	2018-08-27
Comment:	



- Preview Result 1H-QPK [Preview Result 1H.Result:2]
- Preview Result 1V-QPK [Preview Result 1V.Result:2]
- * Critical_Freqs QPK [Critical_Freqs.Result:4]
- FCC 15_209 3m [..\EMI radiated\FCC Part 15C]
- ◆ Final_Result QPK [Final_Result.Result:4]

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Comment
40.680000	36.35	40.00	3.65	1000.0	120.000	100.0	V	109.0	14.4	
57.120000	34.31	---	---	1000.0	120.000	114.0	V	142.0	5.2	Source other than RFID-module
85.530000	32.13	---	---	1000.0	120.000	132.0	V	140.0	11.4	Source other than RFID-module
86.670000	33.48	---	---	1000.0	120.000	98.0	V	132.0	11.4	Source other than RFID-module
87.810000	34.31	---	---	1000.0	120.000	98.0	V	154.0	11.4	Source other than RFID-module
88.830000	34.79	---	---	1000.0	120.000	111.0	V	141.0	11.5	Source other than RFID-module
96.030000	38.07	---	---	1000.0	120.000	116.0	V	66.0	11.8	Source other than RFID-module
384.000000	40.07	---	---	1000.0	120.000	125.0	V	351.0	15.2	Source other than RFID-module
750.000000	29.45	---	---	1000.0	120.000	115.0	H	0.0	21.4	Source other than RFID-module
768.000000	44.27	---	---	1000.0	120.000	100.0	H	154.0	21.5	Source other than RFID-module

Anechoic chamber

Test procedure

The test site is an anechoic chamber suitable for radiated emission measurements in the frequency range of 30 MHz – 18 GHz (26 GHz). It includes automatic antenna mast of height 4 m and turntable of radius 2 m. It enables both manual and fully automatic measurements. To find the highest level of radiation

- the height of the antenna is scanned in range 1m to 4 m with antenna in horizontal and vertical polarization;
- the turntable is rotated in range from 0° to 360°.

The system was configured for testing in a typical worst case fashion (as a customer may use it). All interface cables were moved to determine the position which resulted in the highest emission levels.

Correction factors

The field strength is calculated by adding the antenna factor and cable attenuation. The calculations are performed automatically by the measurement software EMC 32. As example consider the following input values and result:

FREQUENCY (MHZ)	RECEIVER READING U (dBµV)	ANTENNA FACTOR AF (dB/m)	CABLE ATTENUATION A (dB)	CORRECTION ANTENNA + CABLE (dB)	RADIATED FIELD STRENGTH E (dBµV/m)
30.0	20	20.6	0.8	21.4	41.4

$$E = U + AF + A$$

7.4 Frequency stability measurement

NORMATIVE REFERENCES		RESULT
Limits according to:	FCC §15.225 (e) RSS-210, Issue 9, section B6 RSS-Gen Issue 4, section 6.11	P
Methods of measurement according to:	ANSI C63.10, section 9.14	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	1

Limits

Limit:	The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ (± 100 ppm) of the carrier frequency under nominal conditions.
EUT temperature range:	-15°C to +55°C
Test temperature range:	-30°C to +55°C
Nominal battery voltage:	3.6 V DC
Lower voltage limit (85%):	3.06 V DC

Test equipment

DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Temperature chamber	Heraeus-Vötsch	HT4010	45021	PM KF 1402	2018-02 (1 year)
Spectrum analyser	Rohde & Schwarz	FSV40	837356/012	PM KF 2783	2018-09 (1 year)
Loop antenna	Rohde & Schwarz	HZ-10	100055	PM KF 0965	2017-04 (3 year)

Measurement results – Frequency stability measurement:

Temperature °C	Carrier MHz	Upper limit:	13.561356 MHz
		Lower limit:	13.558644 MHz
Measured value under temperature influence:			
+50	13.560	13.56067290	
+40	13.560	13.56064400	
+30	13.560	13.56063680	
+20	13.560	13.56064400	
+10	13.560	13.56068020	
0	13.560	13.56070910	
-10	13.560	13.56073080	
-20	13.560	13.56075250	

Comment

A variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20°C had no influence on the frequency of the carrier.

7.5 Occupied bandwidth

NORMATIVE REFERENCES		RESULT
Limits according to:	RSS-Gen, Issue 4, 6.6	P
Methods of measurement according to:	RSS-Gen, Issue 4, 6.6	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	1

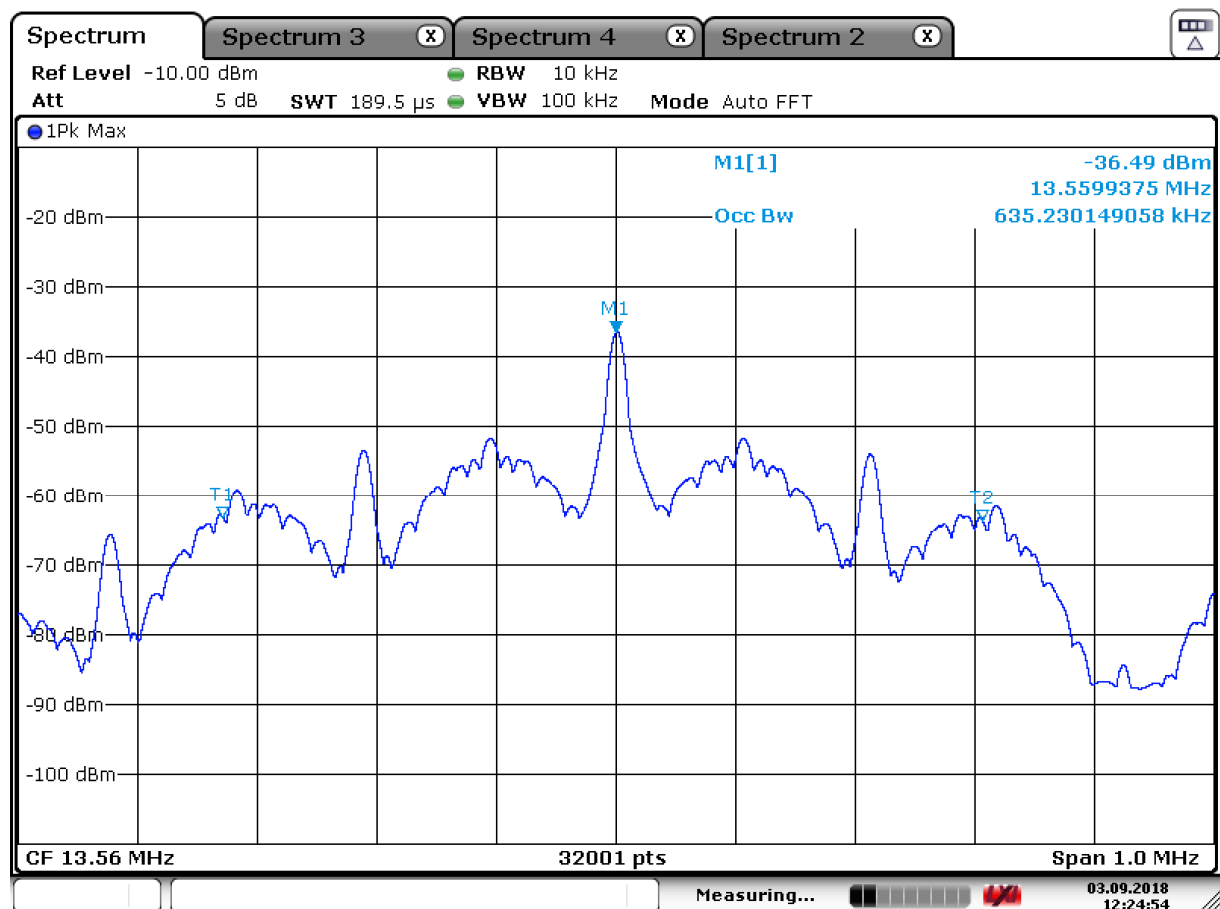
Test equipment

DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Spectrum analyser	Rohde & Schwarz	FSV40	837356/012	PM KF 2783	2018-09 (1 year)
Loop antenna	Rohde & Schwarz	HZ-10	100055	PM KF 0965	2017-04 (3 year)

Comment

The 99% occupied bandwidth is 635.27 kHz.

Measurement results – 99% occupied bandwidth:



Date: 3.SEP.2018 12:24:54

7.6 Conducted emissions

NORMATIVE REFERENCES		RESULT
Limits according to:	FCC, Part 15 C	P
Methods of measurement according to:	ANSI C63.10	
Equipment mode	Power interface	1
	EUT configuration mode	1
	Operation mode	1
Test requirements	Frequency range	150 kHz - 30 MHz

Test equipment

DESCRIPTION	MANUFACTURER	TYPE	SN	ASSET NO.	CALIBRATION
Shielded cabin	ETS LINDGREN	RFSD 100	3598	PM KF 2955-2	-
Pulse Limiter 10 dB 9 kHz - 200 MHz	Schwarzbeck	VTSD 9561-F N	9561-F N242	PM KF 3059	2018-02 (1 year)
Receiver 9 kHz - 7 GHz	Rohde & Schwarz	ESR7	101757	PM KF 3371	2018-04 (1 year)
V-Artificial mains- network, 2 Line	Rohde & Schwarz	ESH3-Z5	863367/018	PM KF 0142	2017-10 (2 years)
Test software	Rohde & Schwarz	EMC 32 V.8.54	-	PM KF 2983	-

Comment

In the following diagram, the N and L line are merged.

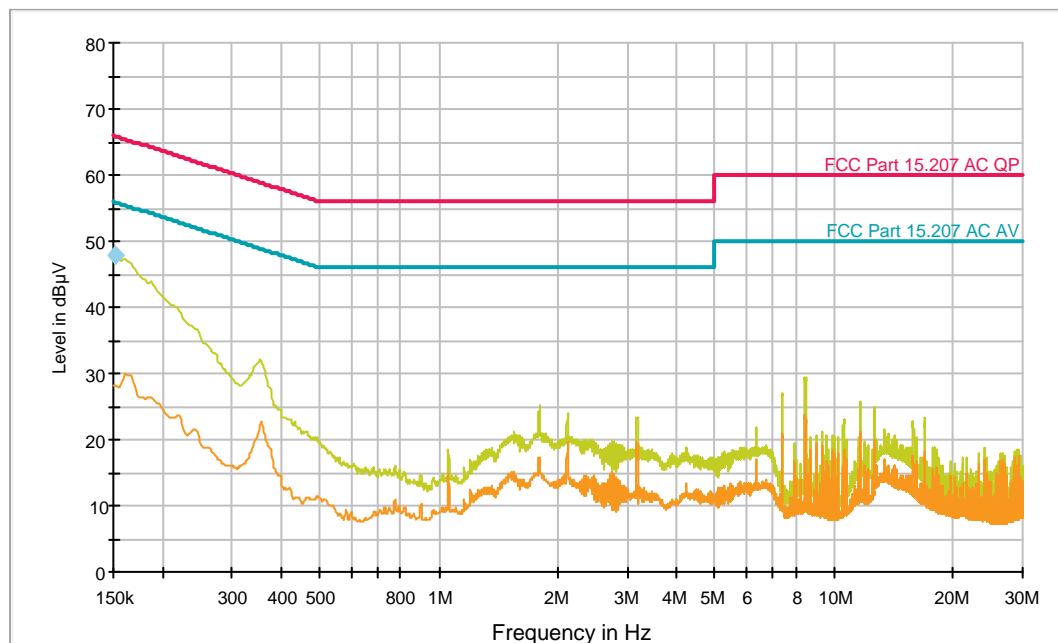
Measurement results – Conducted emissions:

Intertek Test Report

Common Information

EUT: GT7.3500
 Project No.: 32708
 Test description: Conducted Emissions
 Test standard: FCC Part 15.207
 Tested port: Mains
 Test verdict: Passed
 Operating conditions: 120 V, 60 Hz / RFID pulsed field
 Without antenna (load 22 Ohm)
 Operator name: UGR
 Date of testing: 20.09.2018

EN-CE-R32-LN01



- FCC Part 15.207 AC QP [..\EMI conducted\FCC Part 15 Subpart C\]
- FCC Part 15.207 AC AV [..\EMI conducted\FCC Part 15 Subpart C\]
- Preview Result 1-QPK [Preview Result 1.Result:1]
- Preview Result 2-CAV [Preview Result 2.Result:2]
- ◆ Final Result 1-QPK [Final Result 1.Result:1]

Final Result 1

Frequency (MHz)	QuasiPeak-ClearWrite (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.152250	47.9	GN	L1	10.3	18.0	65.9	

End of test report