

Report No.: GTS201909000203F05

TEST REPORT

Applicant:	Autel Intelligent Tech. Corp., Ltd.
Address of Applicant:	7th-8th, 10th Floor, Bldg. B1, Zhiyuan, Xueyuan Rd. Xili, Nanshan, Shenzhen 518055, China
Manufacturer:	Autel Intelligent Tech. Corp., Ltd.
Address of Manufacturer: Factory 1:	7th-8th, 10th Floor, Bldg. B1, Zhiyuan, Xueyuan Rd. Xili, Nanshan, Shenzhen 518055, China Autel Intelligent Technology Corp.,Ltd.
Address of Factory 1:	6th Floor,Building 1,Yanxiang Zhigu,NO.11 Gaoxin West Rd,Guangming New District, Shenzhen City, Guangdong Province,China.
Factory 2:	AUTEL VIETNAM COMPANY LIMITED
Address of Factory 2:	4th Floor, Factory#6, Land#CN1, An Duong Industrial Zone, Hong Phong Township, An Duong County, Hai Phong, Viet Nam
Equipment Under Test (E	EUT)
Product Name:	MaxiFlash VCMI
Model No.:	MaxiFlash VCMI
Trade Mark:	Autel
FCC ID:	WQ8VCMI1911
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B
Date of sample receipt:	September 25, 2019
Date of Test:	September 25-29, 2019
Date of report issued:	September 29, 2019
Test Result :	Pass *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo Laboratory Manager

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Version 2

Version No.	Date	Description
00	September 29, 2019	Original

Prepared By:

han lou

Date:

Date:

September 29, 2019

Project Engineer

Check By:

TINSon

Reviewer

September 29, 2019

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4 Test Summary

Test Item	Test Requirement	Test Method	Class / Severity	Result
Conducted Emission	FCC Part15.107	ANSI C63.4	Class B	Pass
Radiated Emissions	FCC Part15.109	ANSI C63.4	Class B	Pass

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.

2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

The highest frequency generated or used in the EUT	Test frequency range of Radiated emission
<108MHz	30MHz ~ 1GHz
108MHz ~ 500MHz	30MHz ~ 2GHz
500MHz ~ 1GHz	30MHz ~ 5GHz
>1GHz	30MHz ~ 5th harmonic of the highest frequency or 40 GHz, whichever is lower.

The highest frequency of the internal sources of the EUT is more than 108MHz.

5 General Information

5.1 General Description of EUT

Product Name:	MaxiFlash VCMI
Model No.:	MaxiFlash VCMI
Serial No.:	123456789101112
Hardware Version:	V6
Software Version:	V1.00.10
Test sample(s) ID:	GTS201909000203-2
Sample(s) Status	Normal sample
Power Supply:	Adapter
	Model: A361-1203000DI
	Input: AC 100-240V, 50/60Hz, 1.5A
	Output: DC 12V, 3000mA
	Rechargeable battery: DC3.8V 3750mAh 14.25Wh

5.2 Test mode and Test voltage

Test mode:	Test mode:				
Oscilloscope mode	Keep the EUT in Oscilloscope mode.				
Multimeter mode	Keep the EUT in Multimeter mode.				
Signal generator mode	Keep the EUT in Signal generator mode.				
OBD mode	Keep the EUT in OBD mode.				
Test voltage:					
AC 120V/60Hz					

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
Supplied by client	ECU (MED17.1.6)	N/A	N/A
AUTEL	DV1912	Maxisys_Ultra	N/A

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

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

• FCC — Registration No.: 381383

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383.

• IC — Registration No.: 9079A

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A

• NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

5.7 Test Location

Tests were performed at:

Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

6 Test Instruments list

Radiated Emission:							
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020	
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A	
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 26 2019	June. 25 2020	
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020	
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020	
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020	
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020	
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020	
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020	
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020	
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020	
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020	
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020	
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020	
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020	
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020	
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020	
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020	
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020	
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 20 2018	Oct. 19 2019	
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 20 2018	Oct. 19 2019	
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 20 2018	Oct. 19 2019	
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020	



Con	Conducted Emission							
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020		
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2019	June. 25 2020		
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 26 2019	June. 25 2020		
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A		
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
7	Thermo meter	KTJ	TA328	GTS233	June. 26 2019	June. 25 2020		
8	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	June. 26 2019	June. 25 2020		
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 26 2019	June. 25 2020		

Gene	General used equipment:						
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 26 2019	June. 25 2020	
2	Barometer	ChangChun	DYM3	GTS255	June. 26 2019	June. 25 2020	



Test Results and Measurement Data 7

7.1 Radiated Emission

Test Requirement:	FCC Part15 B Section 15.109					
Test Method:	ANSI C63.4:2014					
Test Frequency Range:	30MHz to 6GHz					
Test site:	Measurement Dist	ance: 3m (Sen	ni-Anechoic (Chamber)		
Receiver setup:						
	Frequency	Detector	RBW	VBW	Value	
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	
	Above 1GHz	Peak	1MHz	3MHz	Peak	
		Average	1MHz	3MHz	Average	
Limit:				-		
	Frequency		µV/m @3m)		Value	
	30MHz-88MHz		0.00		lasi-peak	
	88MHz-216MHz 216MHz-960MH		3.50 6.00		lasi-peak lasi-peak	
	960MHz-1GHz		4.00		lasi-peak	
			4.00	1	verage	
	Above 1GHz		4.00		Peak	
	Antenna Tower Antenna Tower <td< td=""></td<>					
	1. The EUT was placed on the top of a rotating table 0.8 meters ab					
Test Procedure:	1. The EUT was	placed on the	top of a rota	ting table 0.	8 meters above	

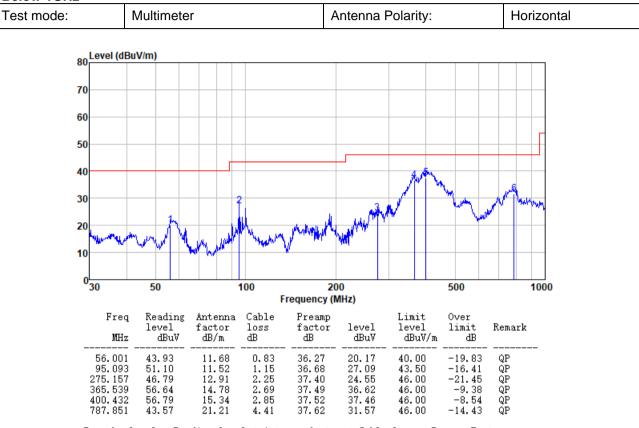
Global United Technology Services Co., Ltd. No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

	the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
	 The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	 The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	 For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	 The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	 If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak
	values of the EUT would be reported. Otherwise the emissions that
	did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar
Test Instruments:	Refer to section 6 for details
Test mode:	Refer to section 5.2 for details ,and only show the worst mode
Test results:	Pass

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Measurement Data

Below 1GHz



Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor



Test mode:	Multimeter			An	tenna Po	olarity:		Vertic	al
oo Leve	el (dBuV/m)								
80									
70									_
60									_
50									F
40									
30							a Minin	Amer	ĥ
20	Marine Marine of	mm	Mar Marine	Minal P	, MAY	· ·	V-***		
20 10	Mar Sur 1	mm	Mr. Turne	Mush Y May 141	y WY				
	50	him	100 Fre	20 equency (N	-		500	1	000
10 0	50 Freq Reading level MHz dBuV				-	Limit level dBuV	Over limit	1 Remark	000

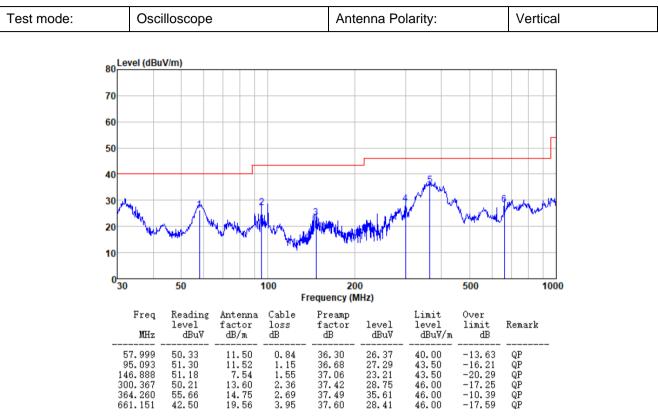
Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor



Test mode:	Oscilloscope		Antenna P	olarity:		Horizontal
80_Level	(dBuV/m)					
70						
60						
50						
40				AMAN		
30		1	In non-from	W h	hay at	at his may
20	marcher	Martin 107			- Jun	
10		V V	P			
0 ^L 30	50	100 Freque	200 ncy (MHz)	5	500	1000
F	req Reading Antenn level factor		eamp tor level)ver limit R	emark
	MHz dBuV dB/m 	dBdB	}dBu∛	dBuV/m 	dB 	
95. 153. 180. 254. 364. 410.	739 46.73 7.90 017 52.54 8.90 728 48.34 12.29 260 57.65 14.75	1.59 37. 1.74 37. 2.15 37. 2.69 37.	10 19.12 24 25.94 38 25.40 49 37.60	43.50 - 43.50 - 46.00 - 46.00	-24.38 -17.56 -20.60 -8.40	QP QP QP QP QP QP

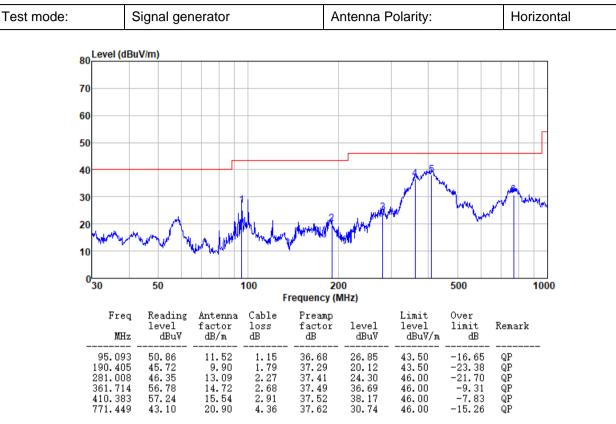
Remarks:level = Reading level + Antenna factor + Cable loss - Preamp Factor



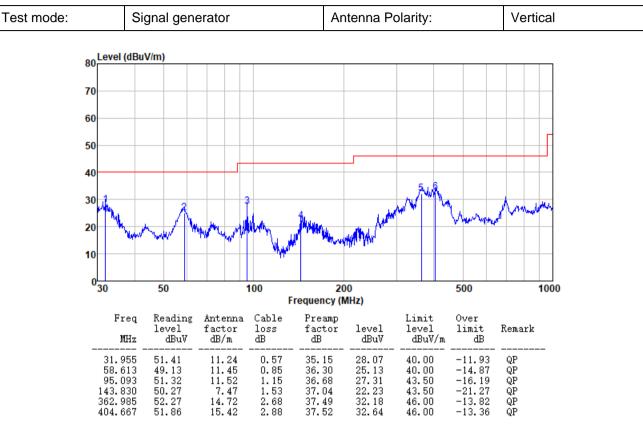


Remarks:level = Reading level + Antenna factor + Cable loss - Preamp Factor





Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor



Remarks:level = Reading level + Antenna factor + Cable loss - Preamp Factor



t mode:	OB	D			Antenna Po	olarity:	F	lorizontal
Level (dBu	ıV/m)							
)								
)								
)								
)					3 .4			
)	الا الله ال		luh I.	Î			Adaptive	when
	~~~~	hand	T WW	<b>M</b> .				
30	50	1	100 F	20 requency (N			500	1000
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBu∛	Limit level dBuV/m	Over limit dB	Remark
	49.21	11.52	1.15 1.60	36.68 37.10	25.20 25.39	43.50 43.50	-18.30 -18.11	QP QP

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor



st mode:	OBD		Ante	enna Polari	ty:		Verti	ical			
80 Level (dBu	ıV/m)										
70							_				
60							-				
50											
40											
1	2	į.									men
30 20 <b>111 1</b>	Manual And	Weber	WWW	Add and Mark			Where the	weath		hayon, Ilah	ment
30 20 <mark>/// // /</mark> 10	Marriel And	hay bould	a and a second s	, https://w		MIN /	Warna	wheth		herrer Ish	
30 20 /// //	50 ²	hay bould	100 Fr	20 requency (M		MW/		500		ieres deb	1000
30 20 10 0 30 Freq MHz	50 Reading level dBuV	Antenna factor dB/m				Limi leve dBu		500 Over limit dB	R	emar	

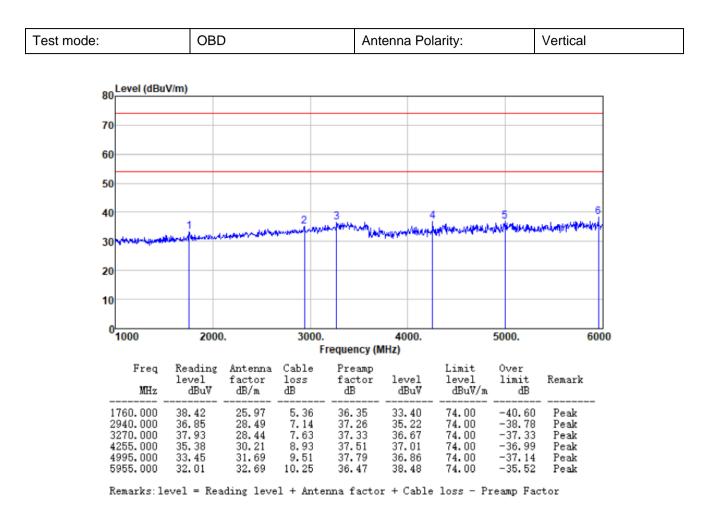
Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor



#### Above 1GHz Test mode: OBD Antenna Polarity: Horizontal 80 Level (dBuV/m) 70 60 50 40 2 the state of the state of the state of the state الاستخالية بنيانا 30 20 10 0^L 1000 2000. 3000. 4000. 5000. 6000 Frequency (MHz) Freq Reading Antenna Cable Preamp Limit Over level dBu∛ factor factor dB level level dBuV/m Remark loss limit MHzdB/m dBu∛ dB dB 74.00 74.00 74.00 74.00 74.00 74.00 74.00 36.39 37.00 1820.000 38.00 26.08 5.45 33.14 -40.86 Peak 2570.000 27.83 28.35 30.00 34.76 37.01 37.41 37.35 6.58 7.85 -39.24Peak 2570.000 3410.000 4165.000 4710.000 5915.000 37.34 37.47 37.69 -36.99 38.15 Peak 36.02 33.86 32.87 8.86 9.29 10.22 -36.59 Peak 36.64 -37.36 31.18 Peak 32.60 36.51 39.18 -34.82 Peak

Remarks:level = Reading level + Antenna factor + Cable loss - Preamp Factor





Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows: Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

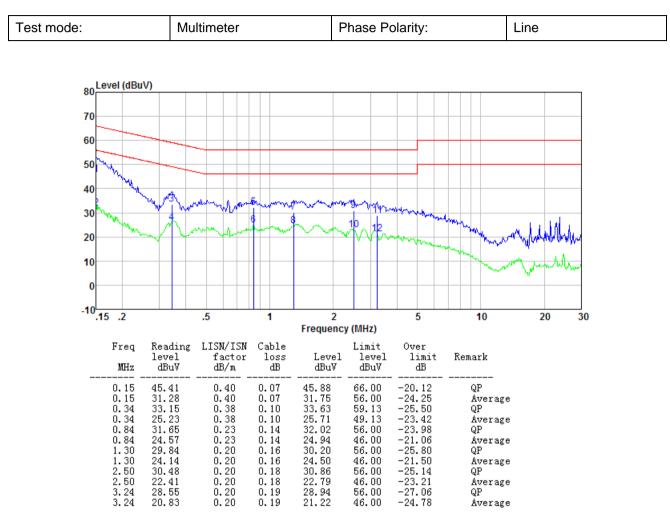


## 7.2 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107		
Test Method:	ANSI C63.4:2014		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	,		
Linit.	Frequency range (MHz)	Limit ( Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	0.5-30	60	50
Test setup:	Reference F	Plane	
Test procedure	LISN       40cm       6         AUX       Equipment       E.U.T         Test table/Insulation plane         Remark:       E.U.T: Equipment Under Test         LISN: Line Impedence Stabilization Netw         Test table height=0.8m         1.       The E.U.T and simulators		- AC power
	<ul> <li>a line impedance stabilization</li> <li>50ohm/50uH coupling implementation</li> <li>2. The peripheral devices and through a LISN that provious with 50ohm termination.</li> </ul>	ation network(L.I.S.N.) pedance for the meas re also connected to th des a 50ohm/50uH co (Please refers to the bl	. The provide a uring equipment. ne main power upling impedance
	<ul> <li>test setup and photograph</li> <li>3. Both sides of A.C. line are interference. In order to fi positions of equipment ar changed according to AN measurement.</li> </ul>	e checked for maximu ind the maximum emis nd all of the interface c	sion, the relative ables must be
Test environment:	Temp.: 25 °C Humi	d.: 52% Pre	ss.: 1 012mbar
Test Instruments:	Refer to section 6 for details		•
Test mode:	Refer to section 5.2 for details	,and only shows the w	vorst mode
Test results:	Pass		

#### Report No.: GTS201907000127F04

#### **Measurement Data**





Test mode:	Multimete	r	P	hase Pola	arity:	Neutral	
80 Level (dBuV) 70 60 50 40 30 20 10							Mallala
0						<u>~</u> ~~	V-TAL MA
-10.15 .2	.5	1	2		5	10	20 30
			Frequency	(MHz)	-		
Freq Reading level MHz dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.40 0.40 0.40 0.38 0.38 0.23 0.23 0.23 0.20 0.20 0.20 0.20 0.20	0.07 0.07 0.11 0.11 0.10 0.10 0.10 0.14 0.14 0.18 0.18 0.18 0.19 0.19	45.59 32.98 42.38 27.60 34.63 26.47 32.63 25.63 30.94 23.55 30.99 23.53	$\begin{array}{c} 66.\ 00\\ 56.\ 00\\ 63.\ 84\\ 53.\ 84\\ 59.\ 22\\ 49.\ 22\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ \end{array}$	-20. 41 -23. 02 -21. 46 -26. 24 -24. 59 -22. 75 -23. 37 -20. 37 -25. 06 -22. 45 -25. 01 -22. 47	QP Average QP Average QP Average QP Average QP Average QP Average	



Test mode:		Oscilloso	ре	F	Phase Pol	arity:	Line	
80 Level (dBu 70 60	V)							
50 40 30 20 10 0			in the second	er	Marria Aleran		man and and and and and and and and and a	what the hast
-10.15 .2		.5	1	2		5	10	20 30
.15 .2		.5		Frequency	y (MHz)	5	10	20 30
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark	
$egin{array}{c} 0.15\\ 0.15\\ 0.33\\ 0.50\\ 0.50\\ 0.84\\ 0.84\\ 1.36\\ 1.36\\ 2.59\\ 2.59\\ 2.59 \end{array}$	45.34 31.26 33.11 25.21 30.43 23.23 31.57 24.47 30.88 24.66 28.69 20.68	0.40 0.40 0.38 0.31 0.31 0.23 0.23 0.20 0.20 0.20 0.20 0.20	0.07 0.07 0.10 0.11 0.11 0.14 0.14 0.14 0.16 0.16 0.18 0.18 0.18	45.81 31.73 33.59 25.69 30.85 23.65 31.94 24.84 31.24 25.02 29.07 21.06	$\begin{array}{c} 66.\ 00\\ 56.\ 00\\ 59.\ 40\\ 49.\ 40\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ \end{array}$	-20.19 -24.27 -25.81 -23.71 -25.15 -22.35 -24.06 -21.16 -24.76 -20.98 -26.93 -24.94	QP Average QP Average QP Average QP Average QP Average QP Average	



Test mode:		Oscilloso	pe		Phase Po	larity:	Neut	ral	
80 Level (dBu 70 60	V)								
		- 		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				n for the for	
.15 .2		.5	1	2 Frequency	y (MHz)	5	10	20	30
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark		
$\begin{array}{c} 0.\ 15\\ 0.\ 15\\ 0.\ 34\\ 0.\ 34\\ 0.\ 84\\ 1.\ 17\\ 1.\ 17\\ 2.\ 03\\ 2.\ 03\\ 2.\ 81\\ 2.\ 81\\ \end{array}$	45.08 32.68 33.72 25.93 31.72 24.92 29.40 22.19 30.19 23.21 30.36 22.87	0.40 0.40 0.38 0.23 0.23 0.20 0.20 0.20 0.20 0.20 0.20	0.07 0.10 0.10 0.14 0.14 0.14 0.16 0.16 0.18 0.18 0.18 0.19 0.19	45.55 33.15 34.20 26.41 32.09 25.29 29.76 22.55 30.57 23.59 30.75 23.26	$\begin{array}{c} 65.\ 91\\ 55.\ 91\\ 59.\ 13\\ 49.\ 13\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ \end{array}$	-20.36 -22.76 -24.93 -22.72 -23.91 -20.71 -26.24 -23.45 -25.43 -22.41 -25.25 -22.74	QP Average QP Average QP Average QP Average QP Average QP Average		



Test mode:		Signal ger	nerator	Ρ	hase Pola	arity:	Line	
80 Level (dBu 70 60	V)							
50 40 30 20 10 0 -10 .15 .2		.5	*	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- 12 - 12 - 12 - 12	5	10	ut Marine Marine
.10 .2		.5	1	Z Frequency	(MHz)	5	10	20 30
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark	
$\begin{array}{c} 0.\ 16\\ 0.\ 16\\ 0.\ 34\\ 0.\ 34\\ 0.\ 50\\ 0.\ 50\\ 0.\ 87\\ 0.\ 87\\ 1.\ 99\\ 1.\ 99\\ 2.\ 82\\ 2.\ 82\end{array}$	44.05 32.52 33.88 26.02 31.15 24.17 30.36 23.13 29.43 23.01 30.69 23.15	0.40 0.40 0.38 0.31 0.31 0.22 0.22 0.20 0.20 0.20 0.20 0.20	0.08 0.08 0.10 0.11 0.11 0.11 0.14 0.14 0.18 0.18 0.19 0.19 0.19	44.53 33.00 34.36 26.50 31.57 24.59 30.72 23.49 29.81 23.39 31.08 23.54	$\begin{array}{c} 65.\ 65\\ 55.\ 65\\ 59.\ 13\\ 49.\ 13\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ \end{array}$	-21.12 -22.65 -24.77 -22.63 -24.43 -21.41 -25.28 -22.51 -26.19 -22.61 -24.92 -22.46	QP Average QP Average QP Average QP Average QP Average QP Average	



Test mode:		Signal ger	nerator	PI	hase Pola	irity:	Neutral	
80 Level (dBuV 70 60 50 1	/) 	-						
40 30 20 10 0		- Mores			8	ummun	Marine Market	hurmel Menter
-10.15 .2		.5	1	2 Frequency	v (MHz)	5	10	20 30
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark	
$\begin{array}{c} 0.15\\ 0.15\\ 0.35\\ 0.35\\ 0.78\\ 0.78\\ 1.32\\ 1.32\\ 2.36\\ 2.36\\ 3.17\\ 3.17\end{array}$	45.48 32.57 33.93 26.52 30.88 23.70 30.31 24.67 29.55 21.49 29.91 22.32	0.40 0.40 0.38 0.24 0.24 0.20 0.20 0.20 0.20 0.20 0.20	0.07 0.07 0.10 0.14 0.14 0.14 0.16 0.16 0.18 0.18 0.18 0.19 0.19	45.95 33.04 34.41 27.00 31.26 24.08 30.67 25.03 29.93 21.87 30.30 22.71	$\begin{array}{c} 66.00\\ 56.00\\ 59.05\\ 49.05\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ \end{array}$	-20.05 -22.96 -24.64 -22.05 -24.74 -21.92 -25.33 -20.97 -26.07 -24.13 -25.70 -23.29	QP Average QP Average QP Average QP Average QP Average QP Average	



Test mode:		OBD		F	Phase Pol	arity:	Line		
80 Level (dBu 70 60 50 40 30 20 10			a,		5~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			Hyle Male Van Male	Au
-10 <mark>.15 .2</mark>		.5	1	2 Frequency	(MH7)	5	10	20	30
Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark		
0.15 0.34 0.34 0.84 0.84 1.37 1.37 2.38 2.38 3.11 3.11	45.70 32.50 34.07 25.96 32.08 25.05 31.24 24.61 29.78 21.89 29.54 21.77	0. 40 0. 40 0. 38 0. 23 0. 23 0. 20 0. 20 0. 20 0. 20 0. 20 0. 20 0. 20 0. 20	0.07 0.07 0.10 0.14 0.14 0.14 0.16 0.16 0.18 0.18 0.18 0.19 0.19	46. 17 32. 97 34. 55 26. 44 32. 45 25. 42 31. 60 24. 97 30. 16 22. 27 29. 93 22. 16	$\begin{array}{c} 66.\ 00\\ 56.\ 00\\ 59.\ 22\\ 49.\ 22\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ 56.\ 00\\ 46.\ 00\\ \end{array}$	-19.83 -23.03 -24.67 -22.78 -23.55 -20.58 -24.40 -21.03 -25.84 -23.73 -26.07 -23.84	QP Average QP Average QP Average QP Average QP Average QP Average		



Fest mode:	OBD	OBD			arity:	Neutral	Neutral		
80 Level (dBu 70 60 50 40	V)								
30 ¹ 20 10 -10,15,2		.5	1	2	12/11/	5	10	20	1.u M- 30
Freq	Reading	LISN/ISN	Cable	Frequency	/ <mark>(MHz)</mark> Limit	Over			
MHz	level dBuV	factor dB/m	loss dB	Level dBuV	level dBu∛	limit dB	Remark		
0.15 0.15 0.35 0.50 0.50 0.84 0.84 1.34 1.34 2.50	45.19 31.75 34.55 26.97 31.75 24.64 32.73 25.66 31.77 25.87 31.74	0.40 0.40 0.38 0.31 0.31 0.23 0.23 0.23 0.20 0.20 0.20	0.07 0.07 0.10 0.11 0.11 0.11 0.14 0.14 0.14 0.16 0.16 0.18	45.66 32.22 35.03 27.45 32.17 25.06 33.10 26.03 32.13 26.23 32.12	$\begin{array}{c} 66.00\\ 56.00\\ 59.05\\ 49.05\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ 46.00\\ 56.00\\ \end{array}$	-20.34 -23.78 -24.02 -21.60 -23.83 -20.94 -22.90 -19.97 -23.87 -19.77 -23.88	QP Average QP Average QP Average QP Average QP Average QP		

#### Notes:

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss

Report No.: GTS201907000127F04

# 8 Test Setup Photo

Reference to the **appendix I** for details.

# 9 EUT Constructional Details

Reference to the **appendix II** for details.

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