



FCC EMI TEST REPORT

FCC ID	:	LHJ-FE5RW0D31
Equipment	:	FE5RW0D31
Brand Name	:	Continental
Model Name	:	FE5RW0D31
Applicant	:	Continental Automotive Systems, Inc. 21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Manufacturer	:	Continental Automotive Systems, Inc. 21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Standard	:	FCC 47 CFR FCC Part 15 Subpart B Class B

The product was received on Nov. 26, 2021 and testing was performed from Jan. 25, 2022 to Jan. 25, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu Sporton International Inc. EMC & Wireless Communications Laboratory No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FC1N2419-01	01	Initial issue of report	May 31, 2022
FC1N2419-01	02	 Revise Product Specification of Equipment Under Test Revise Test Mode 	Jun. 15, 2022



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.107	AC Conducted Emission	Not Required	-
3.1	15.109	Radiated Emission	Pass	8.81 dB under the limit at 17980.000 MHz

Note: Not required means after assessing, test items are not necessary to carry out.

Dec	arati	on	of C	Conf	or	mi	ty	/:	

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
- 2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

Comments and Explanations:

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Kaye Yang



1. General Description

1.1. Product Feature of Equipment Under Test

	Product Feature
Equipment	FE5RW0D31
Brand Name	Continental
Model Name	FE5RW0D31
FCC ID	LHJ-FE5RW0D31
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/GNSS
EUT Stage	Identical Prototype

Remark: The EUT's information above is declared by manufacturer.

1.2. Product Specification of Equipment Under Test

Product Specification is subject to this standard				
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 824.7 MHz ~ 848.3 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz 5G NR n77: 3700 MHz ~ 3980 MHz			
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz LTE Band 2: 1930.7 MHz ~ 1989.3 MHz LTE Band 4: 2110.7 MHz ~ 2154.3 MHz LTE Band 5: 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5 MHz ~ 2687.5 MHz LTE Band 25: 1930.7 MHz ~ 1994.3 MHz LTE Band 26: 869.7 MHz ~ 893.3 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 38: 2572.5 MHz ~ 2687.5 MHz SG NR n77: 3700 MHz ~ 3980 MHz GNSS : 1.57542 GHz; 1176.45 MHz (GPS / Glonass / BDS / Galileo / SBAS)			
Antenna Type	WWAN: Fixed External Antenna GNSS: Fixed External Antenna			



Product Specification is subject to this standard				
Type of Modulation	GSM / GPRS: GMSK EDGE(MCS 0-4): GMSK/(MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA : QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM 5G NR: PI/2 BPSK/QPSK/16QAM/64QAM/256QAM GNSS: BPSK			

Remark: The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.3. Modification of EUT

No modifications made to the EUT during the testing.

T.		
	Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
	Test Site Location	No.52, Huaya 1st Rd., Guishan Dist.,
		Taoyuan City 333, Taiwan (R.O.C.)
		TEL: +886-3-327-3456
		FAX: +886-3-328-4978
	Test Site No.	Sporton Site No.
		03CH06-HY

1.4. Test Location

FCC designation No.: TW1093

1.5. Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B Class B
- + ANSI C63.4-2014
- **Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.



2. Test Configuration of Equipment Under Test

2.1. Test Mode

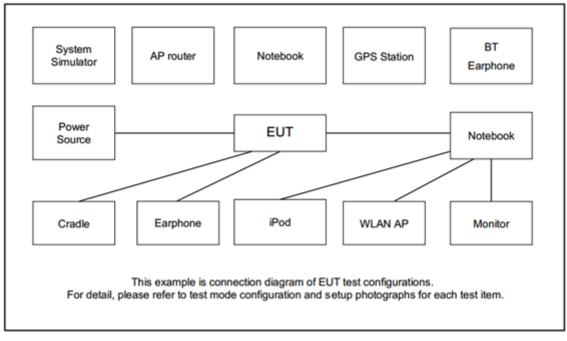
The EUT is tested along with the peripherals, operating under possible configurations in compliant with normal operation. The maximum emissions can be identified by a pre-scan carried out in different orientations of placement pursuant to ANSI C63.4-2014. Frequency range covered: Radiation Emission (30 MHz to the 5th harmonics of the highest fundamental frequency or to 40 GHz, whichever is lower).

Mode 1: GSM850 (GPRS Class 8) Link + WWAN Antenna*4 + GP Radiated GPS Rx + DC 12V + SIM 1	S Antenna +
Emissions Mode 2: 5G NR n77 Link + WWAN Antenna*4 + GPS Antenna + G 12V + SIM 1	PS Rx + DC

Remark:

- 1. The worst case of RE is mode 1; only the test data of this mode was reported.
- For Radiation Emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/ 5G NR n77); only the worst case for cellular band test data of this mode was reported.
- 3. For 5G NR test combination is EN-DC Band 5A-n77A.

2.2. Connection Diagram of Test System





2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	5G Wireless Test Platform	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8m
2.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8m
4.	DC Power Supply	GW Instek	GEU810960	N/A	N/A	Unshielded, 1.8m
5.	Antenna	Taoglas	TG.55.8113	N/A	N/A	N/A
6.	GPS Antenna	Tallysman	33-7972-00-3000	N/A	N/A	N/A

2.4. EUT Operation Test Setup

The EUT is in GSM or 5G NR idle mode during the test. The EUT is synchronized with the BCCH, and has been continuous receiving mode by setting paging reorganization of the system simulator.

The following programs installed in the EUT are programmed during the test:

1. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.



3. Test Result

3.1. Test of Radiated Emission Measurement

3.1.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.1.2. Measuring Instruments

Please refer to the measuring equipment list in this test report.

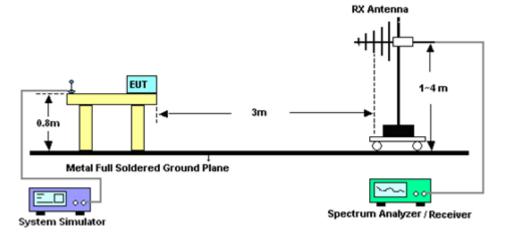
3.1.3. Test Procedures

- 1. The EUT is placed on a turntable with 0.8 meter above ground.
- 2. The EUT is set 3 meters from the interference receiving antenna, which is mounted on the top of a variable height antenna tower.
- 3. The table is rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120 kHz/VBW=300 kHz for frequency below 1 GHz; RBW=1 MHz VBW=3 MHz (Peak), RBW=1 MHz/VBW=10 Hz (Average) for frequency above 1 GHz).
- If the emission level of the EUT in peak mode is 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

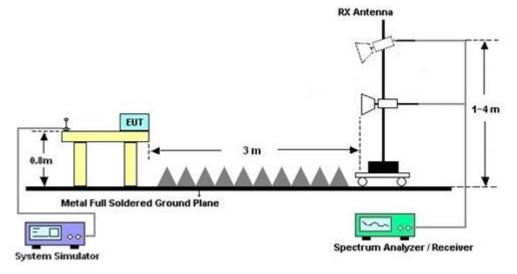


3.1.4. Test Setup of Radiated Emission

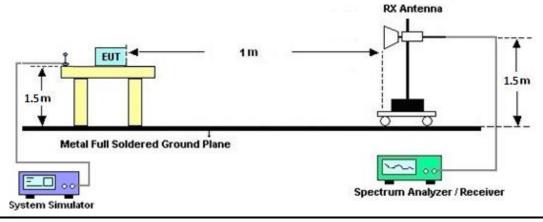
For Radiated Emissions from 30 MHz to 1 GHz



For Radiated Emissions from 1 GHz to 18GHz



For radiated test above 18GHz



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3.1.5. Test Result of Radiated Emission

Please refer to Appendix A.



4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 29, 2021	Jan. 25, 2022	Apr. 28, 2022	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL 6111C & N-6-06	2725 & AT-N0601	30MHz~1GHz	Nov. 11, 2021	Jan. 25, 2022	Nov. 10, 2022	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Feb. 03, 2021	Jan. 25, 2022	Feb. 02, 2022	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Sep. 27, 2021	Jan. 25, 2022	Sep. 26, 2022	Radiation (03CH06-HY)
Preamplifier	Jet-Power	JPA00101800- 30-10P	1601180001	1GHz~18GHz	Jul. 19, 2021	Jan. 25, 2022	Jul. 18, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_7000m m	532299/2	30MHz to 40GHz	Jul. 05, 2021	Jan. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_3000m m	532422/2	30MHz to 40GHz	Jul. 05, 2021	Jan. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF102_2000m m	532421/2	30MHz to 40GHz	Jul. 05, 2021	Jan. 25, 2022	Jul. 04, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SF104	802433/4	30Mhz to 18Ghz	Aug. 19, 2021	Jan. 25, 2022	Aug. 18, 2022	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Jan. 25, 2022	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Jan. 25, 2022	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Jan. 25, 2022	N/A	Radiation (03CH06-HY)
Software	Audix	E3 6.2009-8-24(k 5)	N/A	N/A	N/A	Jan. 25, 2022	N/A	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Jan. 25, 2022	Nov. 29, 2022	Radiation (03CH06-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Jan. 25, 2022	Jul. 22, 2022	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 03, 2021	Jan. 25, 2022	Apr. 02, 2022	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence	5.2 dB
of 95% (U = 2Uc(y))	5.2 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence	5.4 dB
of 95% (U = 2Uc(y))	5.4 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence	4.3 dB
of 95% (U = 2Uc(y))	4.3 dB



Appendix A. Radiated Emission Test Result

					Temp	erature	:	24~2	25°C		
Test Engineer :	Howar	d Huar	ng		Relati	ve Hun	nidity :	46~4	8%		
Fest Distance :	3m				Polari	zation	:	Horiz	zontal		
Domork .	#6 is m	nobile s	station s	signal w	hich ca	an be ig	nored.				
Remark :	#7 is s	ystem	simulate	or signa	al which	n can be	e ignore	ed.			
Lev	/el (dBuV/m)									Date: 2022	-01-25
97											
84.9											
										FCC CL	CC D
72.8	6									FCC CL4	-6dB
60.6	7						1146		FCC	CLASS-B	(AVG)
48.5						12					-6dB
		9	10	i i			1.5-				
36.4											
	45										
24.3 2											
12.1											
	1000.	3000.	5000.	7000		DOO. ncy (MHz)	11000.	13000.	1500	0.	18000
Site	(Discrete)	озаное	5-HY		-						
Conditi		FCC CL/	А <i>SS</i> -В Эг	n 9120D	_1156 V	ERTICA	L				
Project	t :	1N2419		n 9120D	_1156 V	ERTICA	L				
Project Power	· :	1N2419 DC12V		n 9120D	_1156 V	ERTICA	L				
Project	: : :	1N2419		n 9120D	_1156 V	ERTICA	L				
Project Power	: : :	1N2419 DC12V Mode 1 X	-01 Over	Limit	Read			T/Pos			
Project Power	: : :	1N2419 DC12V Mode 1	-01 Over		Read	ERTICA Factor		T/Pos	Remark		
Project Power	Freq	1N2419 DC12V Mode 1 X	Over Limit	Limit	Read			T/Pos deg	Remark		
Project Power	Freq	1N2419 DC12V Mode 1 X Level dBuV/m	Over Limit	Limit Line dBuV/m	Read Level 	Factor	A/Pos	deg	Remark Peak		
Project Power Memo – 1 2	Freq HHz 41.88 131.52	1N2419 DC12V Mode 1 × Level dBuV/m 27.91 21.22	-01 Over Limit 	Limit Line dBuV/m 40.00 43.50	Read Level dBuV 39.94 33.00	Factor 	A/Pos cm 	deg 	Peak Peak		
Project Power Memo – 1 2 3	Freq HHz 41.88 131.52 220.35	1N2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03	-01 Over Limit dB -12.09 -22.28 -23.97	Limit Line dBuV/m 40.00 43.50 46.00	Read Level dBu¥ 39.94 33.00 35.71	Factor dB/m -12.03 -11.78 -13.68	A/Pos 	deg 	Peak Peak Peak		
Project Power Memo 1 2 3 4 5	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22	-01 Over Limit dB -12.09 -22.28	Limit Line dBuV/m 40.00 43.50	Read Level dBuV 39.94 33.00	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86	A/Pos cm 	deg 	Peak Peak		
Project Power Wemo 1 2 3 4 5 6 *	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78	Limit Line dBuV/m 40.00 43.50 46.00 46.00	Read Level dBuV 39.94 33.00 35.71 29.10 27.94 71.05	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27	A/Pos	deg 	Peak Peak Peak Peak Peak Peak		
Project Power Wemo 1 2 3 4 5 6 * 7 *	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20	Limit Line dBuV/m 40.00 43.50 46.00 46.00	Read Level dBuV 39.94 33.00 35.71 29.10 27.94 71.05 52.97	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65	A/Pos 	deg 	Peak Peak Peak Peak Peak Peak Peak		
Project Power Wemo 1 2 3 4 5 6 * 7 * 8 9	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40 945.40 2992.00	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41	Limit Line dBuV/m 40.00 43.50 46.00 46.00	Read Level dBuV 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10	A/Pos	deg	Peak Peak Peak Peak Peak Peak		
Project Power Wemo 1 2 3 4 5 4 5 6 * 7 8 9 10	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40 945.40 2992.00 4778.00	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59 42.44	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41 -31.56	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00	Read Level dBuV 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99	A/Pos	deg 	Peak Peak Peak Peak Peak Peak Peak Peak		
Project Power Wemo 1 2 3 4 5 6 * 7 * 8 9	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40 945.40 2992.00 4778.00 6934.00	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59 42.44 45.85	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00	Read Level 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43 60.21	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99 -14.36	A/Pos	deg 	Peak Peak Peak Peak Peak Peak Peak Peak		
Project Power Wemo 1 2 3 4 5 6 * 7 * 8 9 10 11 12 13	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40 945.40 2992.00 4778.00 6934.00 8992.00 10926.00	IN2419 DC12V Mode 1 × Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59 42.44 45.85 49.56 38.61	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41 -31.56 -28.15 -24.44 -15.39	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 54.00	Read Level 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43 60.21 58.75 43.00	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99 -14.36 -9.19 -4.39	A/Pos	deg 84	Peak Peak Peak Peak Peak Peak Peak Peak		
Project Power Memo 1 2 3 4 5 6 * 7 * 8 9 10 11 12 13 14	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 836.40 881.40 945.40 2992.00 4778.00 6934.00 8992.00 10926.00	IN2419 DC12V Mode 1 X Level dBuV/m 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59 42.44 45.85 49.56 38.61 52.65	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41 -31.56 -28.15 -24.44 -15.39 -21.35	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 74.00	Read Level 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43 60.21 58.75 43.00 57.04	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99 -14.36 -9.19 -4.39 -4.39	A/Pos	deg 84 84	Peak Peak Peak Peak Peak Peak Peak Peak		
Project Power Memo 1 2 3 4 5 6 * 7 * 8 9 10 11 12 13 14 15	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 831.40 945.40 2992.00 4778.00 6934.00 8992.00 10926.00	IN2419 DC12V Mode 1 × Level 27.91 21.22 22.03 27.22 28.80 73.32 55.62 33.49 39.59 42.44 45.85 49.56 38.61 52.65 37.82	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41 -31.56 -28.15 -24.44 -15.39	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 54.00	Read Level 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43 60.21 58.75 43.00	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99 -14.36 -9.19 -4.39	A/Pos	deg 84 84 184	Peak Peak Peak Peak Peak Peak Peak Peak		
Project Power Memo 1 2 3 4 5 6 * 7 * 8 9 10 11 12 13 14 15 16 17	Freq Freq MHz 41.88 131.52 220.35 594.00 741.00 836.40 836.40 831.40 945.40 2992.00 4778.00 6934.00 8992.00 10926.00 10926.00 11044.00	IN2419 DC12V Mode 1 X Level 27.91 21.22 22.03 27.22 22.03 27.22 22.03 27.22 23.80 73.32 55.62 33.49 39.59 42.44 45.85 49.56 38.61 52.65 37.82 52.25 45.19	-01 Over Limit dB -12.09 -22.28 -23.97 -18.78 -17.20 -12.51 -34.41 -31.56 -28.15 -24.44 -15.39 -21.35 -16.18	Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 54.00 54.00	Read Level 39.94 33.00 35.71 29.10 27.94 71.05 52.97 28.40 64.69 61.43 60.21 58.75 43.00 57.04 42.20	Factor dB/m -12.03 -11.78 -13.68 -1.88 0.86 2.27 2.65 5.09 -25.10 -18.99 -14.36 -9.19 -4.39 -4.39 -4.38	A/Pos	deg 84 84 184 184	Peak Peak Peak Peak Peak Peak Peak Peak		

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F act F actions and					Temp	erature	:	24~2	5°C			
Fest Engineer :	Howar	Howard Huang			Relative Humidity :			46~4	46~48%			
Test Distance :	3m				Polari	zation	:	Verti	cal			
emark :	#6 is n	nobile s	station	signal w	hich ca	an be ig	nored.					
	#7 is s	#7 is system simulator signal which can be ignored.										
	/el (dBuV/m)	1								Date:	2022-01-25	
51												
84.9												
										FC	C CLASS-B	
72.8	6										-6dB	
60.6							1146		F	FCC CLAS	SS-B (AVG)	
48.5				- 11	1	2					-6dB	
40.3		a	10								1	
36.4							135					
4	5											
24.3												
12.1												
030	1000.	3000.	5000.	7000			11000.	13000.	15	5000.	18000	
Trace:	(Discrete)			7000		DOO. NCY (MHZ)	11000.	13000.	15	5000.	18000	
Trace: Site	(Discrete)	03CH06	5-НУ		Freque	ncy (MHz)		13000.	15	5000.	18000	
Trace: Site Conditi	(Discrete) : on :	03CH06 FCC CL/	5-НУ 4.SS-В Э	7000 7000	Freque	ncy (MHz)		13000.	15	5000.	18000	
Trace: Site	(Discrete) : on :	03CH06	5-НУ 4.SS-В Э		Freque	ncy (MHz)		13000.	15	5000.	18000	
Trace: Site Conditi Project	(Discrete) : on : :	03CH06 FCC CL/ 1N2419	5-НУ 4.SS-В Э		Freque	ncy (MHz)		13000.	15	5000.	18000	
Trace: Site Conditi Project Power	(Discrete) : on : : :	03CH06 FCC CL/ 1N2419 DC12V	6-HY 455-B3 -01	m 9120D	Freque _1156 ⊢	ncy (MHz)	NTAL		15	5000.	18000	
Trace: Site Conditi Project Power	(Discrete) on : : :	03CH06 FCC CL/ 1N2419 DC12V Mode 1 X	6-HY ASS-B3 -01 Over	m 9120D Limit	Freque	ncy (MHz) IORIZOI	NTAL	13000. T/Pos	15 Remar		18000	
Trace: Site Conditi Project Power	(Discrete) on : : : : : : : : : : : : : : : : : : :	03CH06 FCC CL/ 1N2419 DC12V Mode 1 X Level	5-HY ASS-B3 -01 Over Limit	m 9120D Limit Line	Freque _1156 + Read Level	ncy (MHz) IORIZOI Factor	NTAL A/Pos	T/Pos			18000	
Trace: Site Conditi Project Power	(Discrete) on : : : : : : : : : : : : : : : : : : :	03CH06 FCC CL/ 1N2419 DC12V Mode 1 X	5-HY ASS-B3 -01 Over Limit	m 9120D Limit	Freque _1156 ⊢ Read	ncy (MHz) IORIZOI	NTAL				18000	
Trace: Site Conditi Project Power	(Discrete) on : : : : : : : : : : : : : : : : : : :	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m	6-HY 455-B3 -O1 Over Limit 	m 9120D Limit Line	Freque _1156 ⊢ Read Level 	ncy (MHz) IORIZOI Factor	NTAL A/Pos	T/Pos 			18000	
Trace: Site Conditi Project Power Memo 1 2	(Discrete) on : : : : : : : : : : : : : : : : : : :	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m 22.21 23.04	5-HY ASS-B3 -O1 Over Limit -21.29 -20.46	m 9120D Limit Line dBuV/m 43.50 43.50	Freque _1156 Read Level dBuV 36.26 35.36	RCY (MHZ) IORIZOI Factor dB/m - 14.05 - 12.32	A/Pos	T/Pos deg	Remar Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3	(Discrete) on : : : : : : : : : : : : : :	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m 22.21 23.04 24.78	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22	m 9120D Limit Line dBuV/m 43.50 43.50 46.00	Freque _1156 Read Level dBuV 36.26 35.36 38.36	Factor - 14.05 - 13.58	A/Pos	T/Pos 	Remar Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 	(Discrete) on : : : : : : : : : : : : : : : : : : :	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m 22.21 23.04 24.78 27.61	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00	Freque _1156 ⊢ 	Factor - 14.05 - 13.58 - 8.63	A/Pos	T/Pos 	Remar Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3	(Discrete) on : : : : : : : : : : : : : :	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m 22.21 23.04 24.78 27.61	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22	m 9120D Limit Line dBuV/m 43.50 43.50 46.00	Freque _1156 Read Level dBuV 36.26 35.36 38.36	Factor - 14.05 - 13.58	A/Pos	T/Pos deg 	Remar Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5	(Discrete) in in i	03CH00 FCC CL/ 1N2419 DC12V Mode 1 X Level dBuV/m 22.21 23.04 24.78 27.61 29.58	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00	Freque _1156 Read Level dBuV 36.26 35.36 38.36 36.24 28.67	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65	A/Pos	T/Pos deg 	Remar Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00 46.00	Freque _1156 ⊢ 	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15	A/Pos	T/Pos deg 	Remar Peak Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09	5-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00 46.00 46.00 74.00	Freque _1156 ⊢ Read Level dBu¥ 36.26 35.36 36.24 28.67 69.17 49.56 29.53 64.27	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18	A/Pos 	T/Pos deg 	Remar Peak Peak Peak Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9 10	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56	5-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00	Freque _1156 ⊢ Read Level dBu¥ 36.26 35.36 36.24 28.67 69.17 49.56 29.53 64.27 61.36	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80	A/Pos 	T/Pos deg 	Remar Peak Peak Peak Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9 10 11	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56 45.88	6-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44 -28.12	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00	Freque _1156 ⊢ Read Level dBu¥ 36.26 35.36 36.24 28.67 69.17 49.56 29.53 64.27 61.36 60.22	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80 -14.34	A/Pos 	T/Pos deg 	Remar Peak Peak Peak Peak Peak Peak Peak Peak		18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9 10 11 12	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56 45.88 49.04	5-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44 -28.12 -24.96	m 9120D Limit Line dBuV/m 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00	Freque 	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80 -14.34 -9.84	A/Pos 	T/Pos deg 	Remar Peak Peak Peak Peak Peak Peak Peak Peak	k	18000	
Trace: Site Conditi Project Power Aemo 1 2 3 4 5 6 7 8 9 10 11 12 13	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56 45.88 49.04 38.24	G-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44 -28.12 -24.96 -15.76	m 9120D Limit Line dBuV/m 43.50 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 54.00	Freque _1156 ⊢ Read Level dBu¥ 36.26 35.36 36.24 28.67 69.17 49.56 29.53 64.27 61.36 60.22 58.88 42.60	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80 -14.34 -9.84 -4.36	A/Pos 	T/Pos deg 92	Remar Peak Peak Peak Peak Peak Peak Peak Peak	k	18000	
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Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9 10 11 12 13 14	(Discrete) in in i	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56 45.88 49.04 38.24 52.09 38.19	G-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44 -28.12 -24.96 -15.76	m 9120D Limit Line dBuV/m 43.50 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 54.00	Freque _1156 ⊢ Read Level dBu¥ 36.26 35.36 36.24 28.67 69.17 49.56 29.53 64.27 61.36 60.22 58.88 42.60	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80 -14.34 -9.84 -4.36	A/Pos 	T/Pos deg 92 92 156	Remar Peak Peak Peak Peak Peak Peak Peak Peak	k	18000	
Trace: Site Conditi Project Power Memo 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	(Discrete) (Discr	03CH00 FCC CL/ IN2419 DC12V Mode 1 X Level 22.21 23.04 24.78 27.61 29.58 71.44 52.21 33.68 39.09 42.56 45.88 49.04 38.24 52.09 38.19 52.52	5-HY ASS-B3 -O1 Over Limit -21.29 -20.46 -21.22 -18.39 -16.42 -12.32 -34.91 -31.44 -28.12 -24.96 -15.76 -21.91 -15.81	m 9120D Limit Line dBuV/m 43.50 43.50 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 54.00	Freque 	Factor -14.05 -12.32 -13.58 -8.63 0.91 2.27 2.65 4.15 -25.18 -18.80 -14.34 -9.84 -4.36 -4.36 -4.41	A/Pos 	T/Pos deg 92 92 156 156	Remar Peak Peak Peak Peak Peak Peak Peak Peak	k ge	18000	