

FCC Radio Test Report

FCC ID: 2BKM7-K8

	The report concerns:	Original Grant
	 0.45500.404	

Date Sample(s) Received.....: 2024-12-10

Date of Tested...... From 2024-12-11 to 2025-01-07

Date of issue...... 2025-02-18

Testing Laboratory DongGuanShuoXin Electronic Technology Co., Ltd.

Address Zone A, 1F, No. 6, XinGang Road YuanGang Street,

XinAn District, ChangAn Town, DongGuan City,

GuangDong, China

Applicant's name Gibson, Inc.

USA 37203

Equipment...... PROFESSIONAL MONITORING SYSTEM

S Y S

Trade Mark:

Model: K8

Ratings I/P: 100-240V~ 50/60Hz 150W MAX

Test Engineer: Jelenes Ore Fang

Jelena OuYang

Responsible Engineer:

Leo Chen

Authorized Signatory: Smll Wom

Smile Wang



Table of Contents	Page
1 TEST REPORT DECLARE	5
2 SUMMARY OF TEST RESULTS	6
2.1 MEASUREMENT UNCERTAINTY	7
3 GENERAL INFORMATION	8
3.1 GENERAL DESCRIPTION OF EUT	8
3.2 DESCRIPTION OF TEST MODES	10
3.3 PARAMETERS OF TEST SOFTWARE	11
3.4 BLOCKDIAGRAMSHOWINGTHECONFIGURATIONOFSYSTEMTESTED	11
3.5 SUPPORT UNITS	11
3.6 TEST ENVIRONMENT CONDITIONS	12
4 AC POWER LINE CONDUCTED EMISSIONS TEST	13
4.1 LIMIT	13
4.2 TEST PROCEDURE	13
4.3 MEASUREMENT INSTRUMENTS LIST	13
4.4 TESTSETUP	14
4.5 EUT OPERATING CONDITIONS	14
4.6 TEST RESULTS	15
5 RADIATED EMISSION TEST	17
5.1 LIMIT	17
5.2 TEST PROCEDURE AND SETTING	18
5.3 MEASUREMENT INSTRUMENTS LIST	19
5.4 TESTSETUP	19
5.5 EUT OPERATING CONDITIONS	20
5.6 TEST RESULTS - 9 KHZ TO 30MHZ	21
5.7 TEST RESULTS- 30 MHZ TO 1000MHZ	22
5.8 TEST RESULTS - ABOVE 1000MHZ (BAND EDGE)	24
5.9 TEST RESULTS - ABOVE 1000MHZ (HARMONIC)	32
6 NUMBER OF HOPPING FREQUENCY	44
6.1 LIMIT	44
6.2 TEST PROCEDURE AND SETTING	44
6.3 MEASUREMENT INSTRUMENTS LIST	44
6.4 TEST SETUP	44



6.5 EUT OPERATION CONDITIONS 44 6.6 TEST RESULTS 7 AVERAGE TIME OF OCCUPANCY 7.1 LIMIT 46 7.2 TEST PROCEDURE AND SETTING 47 7.3 MEASUREMENT INSTRUMENTS LIST 48 7.4 TEST SETUP 49 7.5 EUT OPERATION CONDITIONS 40 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 10.1 LIMIT 10.2 TEST PROCEDURE AND SETTING 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59 11.1 LIMIT 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59 11.1 LIMIT	Table of Contents	Page
6.6 TEST RESULTS 45 7 AVERAGE TIME OF OCCUPANCY 46 7.1 LIMIT 46 7.2 TEST PROCEDURE AND SETTING 46 7.3 MEASUREMENT INSTRUMENTS LIST 46 7.4 TEST SETUP 46 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 <tr< th=""><th></th><th></th></tr<>		
7 AVERAGE TIME OF OCCUPANCY 7.1 LIMIT 46 7.2 TEST PROCEDURE AND SETTING 46 7.3 MEASUREMENT INSTRUMENTS LIST 46 7.4 TEST SETUP 47 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59		
7.1 LIMIT 46 7.2 TEST PROCEDURE AND SETTING 46 7.3 MEASUREMENT INSTRUMENTS LIST 46 7.4 TEST SETUP 46 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 </td <td>6.6 TEST RESULTS</td> <td>45</td>	6.6 TEST RESULTS	45
7.2 TEST PROCEDURE AND SETTING 46 7.3 MEASUREMENT INSTRUMENTS LIST 46 7.4 TEST SETUP 46 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11.1 LIMIT 59	7 AVERAGE TIME OF OCCUPANCY	46
7.3 MEASUREMENT INSTRUMENTS LIST 46 7.4 TEST SETUP 46 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59	7.1 LIMIT	46
7.4 TEST SETUP 46 7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	7.2 TEST PROCEDURE AND SETTING	46
7.5 EUT OPERATION CONDITIONS 46 7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	7.3 MEASUREMENT INSTRUMENTS LIST	46
7.6 TEST RESULTS 47 8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	7.4 TEST SETUP	46
8 HOPPING CHANNEL SEPARATION MEASUREMENT 49 8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	7.5 EUT OPERATION CONDITIONS	46
8.1 LIMIT 49 8.2 TEST PROCEDURE AND SETTING 49 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	7.6 TEST RESULTS	47
8.2 TEST PROCEDURE AND SETTING 8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8 HOPPING CHANNEL SEPARATION MEASUREMENT	49
8.3 MEASUREMENT INSTRUMENTS LIST 49 8.4 TEST SETUP 49 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.1 LIMIT	49
8.4 TEST SETUP 8.5 EUT OPERATION CONDITIONS 49 8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 9.3 MEASUREMENT INSTRUMENTS LIST 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.2 TEST PROCEDURE AND SETTING	49
8.5 EUT OPERATION CONDITIONS 8.6 TEST RESULTS 9 BANDWIDTH TEST 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 9.3 MEASUREMENT INSTRUMENTS LIST 9.4 TEST SETUP 9.5 EUT OPERATION CONDITIONS 9.6 TEST RESULTS 10 MAXIMUM OUTPUT POWER 10.1 LIMIT 10.2 TEST PROCEDURE AND SETTING 10.3 MEASUREMENT INSTRUMENTS LIST 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.3 MEASUREMENT INSTRUMENTS LIST	49
8.6 TEST RESULTS 50 9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.4 TEST SETUP	49
9 BANDWIDTH TEST 52 9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.5 EUT OPERATION CONDITIONS	49
9.1 LIMIT 52 9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	8.6 TEST RESULTS	50
9.2 TEST PROCEDURE AND SETTING 52 9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9 BANDWIDTH TEST	52
9.3 MEASUREMENT INSTRUMENTS LIST 52 9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.1 LIMIT	52
9.4 TEST SETUP 52 9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.2 TEST PROCEDURE AND SETTING	52
9.5 EUT OPERATION CONDITIONS 52 9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.3 MEASUREMENT INSTRUMENTS LIST	52
9.6 TEST RESULTS 53 10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.4 TEST SETUP	52
10 MAXIMUM OUTPUT POWER 55 10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.5 EUT OPERATION CONDITIONS	52
10.1 LIMIT 55 10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	9.6 TEST RESULTS	53
10.2 TEST PROCEDURE AND SETTING 55 10.3 MEASUREMENT INSTRUMENTS LIST 55 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	10 MAXIMUM OUTPUT POWER	55
10.3 MEASUREMENT INSTRUMENTS LIST 10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 55	10.1 LIMIT	55
10.4 TEST SETUP 55 10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	10.2 TEST PROCEDURE AND SETTING	55
10.5 EUT OPERATION CONDITIONS 55 10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 55	10.3 MEASUREMENT INSTRUMENTS LIST	55
10.6 TEST RESULTS 56 11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	10.4 TEST SETUP	55
11 CONDUCTED SPURIOUS EMISSION 59 11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	10.5 EUT OPERATION CONDITIONS	55
11.1 LIMIT 59 11.2 TEST PROCEDURE AND SETTING 59	10.6 TEST RESULTS	56
11.2 TEST PROCEDURE AND SETTING 59	11 CONDUCTED SPURIOUS EMISSION	59
	11.1 LIMIT	59
11.3 MEASUREMENT INSTRUMENTS LIST 59	11.2 TEST PROCEDURE AND SETTING	59
	11.3 MEASUREMENT INSTRUMENTS LIST	59





Table of Contents	Page
11.4 TEST SETUP 11.5 EUT OPERATION CONDITIONS 11.6 TEST RESULTS	59 59 60



1 TEST REPORT DECLARE

Applicant for FCC	Gibson, Inc.		
Address for FCC	209 10th Avenue South, Suite 460, Nashville, TN USA 37203		
Manufacturer	Gibson, Inc.		
Address	209 10th Avenue South, Suite 460, Nashville, TN USA 37203		
Factory	EVERVICTORY ELECTRONIC COMPANY LIMITED		
Address	Chu Chi Management District, Hu Men Town, Dong-Guan City,		
71001000	Guang-Dong Province, P.R. China		
Equipment	PROFESSIONAL MONITORING SYSTEM		
Model No.	K8		
Trade Mark	KRK		
Standard	FCC Part15, Subpart C (15.247) ANSI C63.10-2013		

We Declare:

The equipment described above is tested by DongGuanShuoXin Electronic Technology Co., Ltd(ATT). and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and DongGuanShuoXin Electronic Technology Co., Ltd.(ATT) is assumed of full responsibility for the accuracy and completeness of these tests.

ATT is not responsible for the sampling stage, so the results only apply to the sample as received.

ATT's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. ATT shall have no liability for any declarations, inferences or generalizations drawn by the client or others from ATT issued reports.



2 SUMMARY OF TEST RESULTS

The EUT have been tested according to the applicable standards as referenced below:

Standard(s) Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.247(d) 15.205(a) 15.209(a)	Radiated Emission	PASS	
15.247(a)(1)(iii)	Number of Hopping Frequency	PASS	
15.247(a)(1)(iii)	Average Time Of Occupancy	PASS	
15.247(a)(1)	Hopping Channel Separation	PASS	
15.247(a)(1)	Bandwidth	PASS	
15.247(a)(1)	Maximum Output Power	PASS	
15.247(d)	Conducted Spurious Emission	PASS	
15.203	Antenna Requirement	PASS	Note(2)

Note:

- (1) "N/A" denotes test is not applicable in this test report
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.



2.1 MEASUREMENT UNCERTAINTY

Test Item	Uncertainty
Uncertainty for Conduction emission test (9kHz-150kHz)	3.7 dB
Uncertainty for Conduction emission test (150kHz-30MHz)	3.3 dB
Upcortainty for Padiation Emission tost (20MHz 200MHz)	4.60 dB (Polarize: V)
Uncertainty for Radiation Emission test (30MHz-200MHz)	4.60 dB (Polarize: H)
Uppertainty for Dadiction Emission toot (200MUz 40Uz)	6.10 dB (Polarize: V)
Uncertainty for Radiation Emission test (200MHz-1GHz)	5.08 dB (Polarize: H)
Uncontainty for Dadiation Emission took (4CL) - CCL)	5.01 dB (Polarize: V)
Uncertainty for Radiation Emission test (1GHz-6GHz)	5.01 dB (Polarize: H)
Uncertainty for Radiation Emission test (CCUz 19CUz)	5.26 dB (Polarize: V)
Uncertainty for Radiation Emission test (6GHz-18GHz)	5.26 dB (Polarize: H)
Uppertainty for Radiation Emission toot (1904-1004-1	5.06 dB (Polarize: V)
Uncertainty for Radiation Emission test (18GHz-40GHz)	5.06 dB (Polarize: H)
Uncertainty for radio frequency	±0.048kHz
Uncertainty for conducted RF Power	±0.32dB

Note:

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

Test Facility:

The Test site used by DongGuanShuoXin Electronic Technology Co., Ltd. to collect test data is located on the Zone A, 1F, No. 6, XinGang Road YuanGang Street, XinAn District, ChangAn Town, DongGuan City, GuangDong, China

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

Item	Registration No.	Expiration Date
CNAS	L3098	2030-08-27
A2LA	4893.01	2026-06-30
Innovation, Science and Economic Development Canada (ISED)	11033A CAB identifer:CN0083	2026-06-30
Federal Communications Commission (FCC)	171688 Designation No.:CN1235	2026-06-30



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	PROFESSIONAL MONITORING SY	YSTEM
Brand Name	/	
Test Model	K8	
Series Model	N/A	
Model Difference(s)	N/A	
Hardware Version	1.0	
Software Version	1.0	
Power Source	AC main	
Power Rating	100-240V~ 50/60Hz 150W MAX	
Operation Frequency	2402 MHz ~ 2480 MHz	
Modulation Technology	GFSK, π/4-DQPSK, 8-DPSK	
Bit Rate of Transmitter	1Mbps /2Mbps /3Mbps	
Antenna Information	Antenna Type: FPCB	Maximum Peak Gain: 2.1dBi
Max. Output Power	1Mbps: -4.298 dBm (0.000372 W) put Power 2Mbps: -4.185 dBm (0.000382 W) 3Mbps: -4.164 dBm (0.000383 W)	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.





2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		



3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description			
Mode 1	TX Mode NOTE (1)			
Mode 2	TX Mode Channel 01_3Mbps			

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test		
Final Test Mode	Description	
Mode 2	TX Mode Channel 01_3Mbps	

Radiated emissions test - Below 1GHz				
Final Test Mode Description				
Mode 2	TX Mode Channel 01_3Mbps			

Radiated emissions test - Above 1GHz				
Final Test Mode Description				
Mode 1 TX Mode NOTE (1)				

Conducted test				
Final Test Mode Description				
Mode 1	TX Mode note (1)			

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) The measurements for Hopping Channel Separation, Bandwidth and Maximum Output Power were tested during 1Mbps, 2Mbps and 3Mbps, the worst case are 1Mbps and 3Mbps, only worst case was documented.

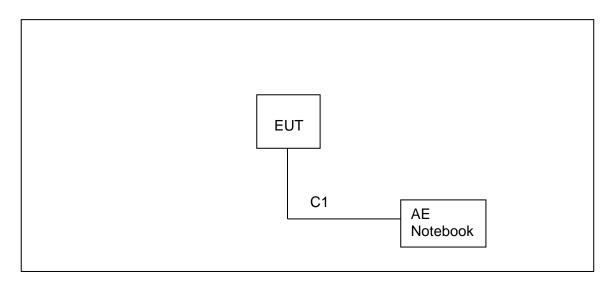


3.3 PARAMETERS OF TEST SOFTWARE

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of FHSS

Test Software	FCC_assist1.0.4.exe				
Frequency (MHz)	2402 2441 2480				
Parameters(1Mbps)	Default	Default	Default		
Parameters(3Mbps)	Default	Default	Default		

3.4 BLOCKDIAGRAMSHOWINGTHECONFIGURATIONOFSYSTEMTESTED



3.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
AE	Notebook	Lenovo	/	1

Item	Cable Type	Shielded Type	Ferrite Core	Length
C1	DC Cable	NO	NO	0.8m



3.6 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage
AC Power Line Conducted Emissions	05.400	54%	DC 5V
AC Power Line Conducted Emissions	25.4°C	34%	(AC 120V/60Hz)
Radiated Emissions-9K-30MHz	25.0°C	60%	DC 5V
Radiated Emissions-30 MHz to 1GHz	24.2°C	59%	DC 5V
Radiated Emissions-Above 1000 MHz	24.2°C	59%	DC 5V
Number of Hopping Frequency	24.6°C	48%	DC 5V
Average Time Of Occupancy	24.6°C	48%	DC 5V
Hopping Channel Separation	24.6°C	48%	DC 5V
Bandwidth	24.6°C	48%	DC 5V
Maximum Output Power	24.6°C	48%	DC 5V
Conducted Spurious Emission	24.6°C	48%	DC 5V



4 AC POWER LINE CONDUCTED EMISSIONS TEST

4.1 LIMIT

Fraguency of Emission (MHz)	Limit (dBµV)			
Frequency of Emission (MHz)	Quasi-peak	Average		
0.15 - 0.50	66 to 56*	56 to 46*		
0.50 - 5.0	56	46		
5.0 - 30.0	60	50		

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.2 TEST PROCEDURE

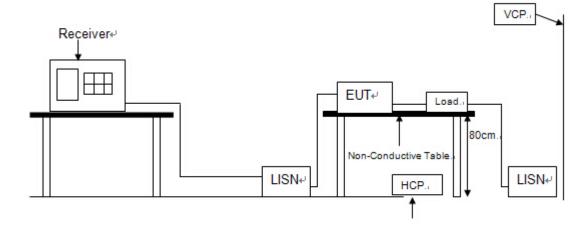
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.

4.3MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Manufacturer Type No.		Calibrated until
1	Pulse Limiter	MTS-systemtechn ik	MTS-IMP-136	261115-010-0024	11/17/2025
2	EMI Test Receiver	R&S	ESCI	101308	06/05/2025
3	LISN	AFJ	LS16	16011103219	06/05/2025
4	LISN	Schwarzbeck	NSLK 8127	8127-432	06/05/2025
5	MeasurementSoftwar e	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A



4.4 TESTSETUP



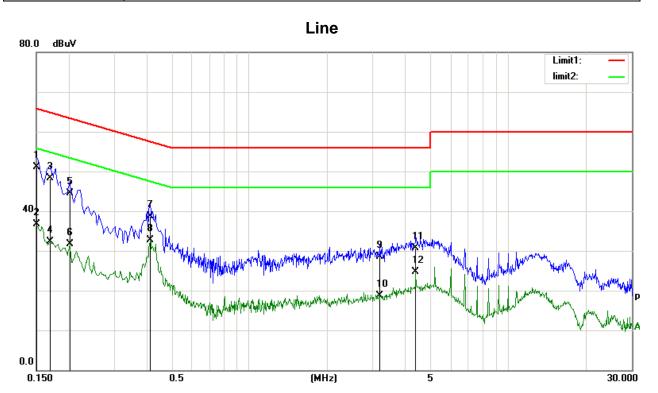
4.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical function (as a customer would normally use it), EUT was programmed to be in continuously transmitting data or hopping on mode.



4.6 TEST RESULTS

Test Mode: TX Mode Channel 01 _3Mbps



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	40.47	10.68	51.15	65.99	-14.84	QP
2	0.1500	25.95	10.68	36.63	55.99	-19.36	AVG
3	0.1700	37.80	10.57	48.37	64.96	-16.59	QP
4	0.1700	21.78	10.57	32.35	54.96	-22.61	AVG
5	0.2020	33.87	10.61	44.48	63.52	-19.04	QP
6	0.2020	21.02	10.61	31.63	53.52	-21.89	AVG
7	0.4140	28.21	10.41	38.62	57.57	-18.95	QP
8	0.4140	22.23	10.41	32.64	47.57	-14.93	AVG
9	3.2020	17.90	10.56	28.46	56.00	-27.54	QP
10	3.2020	8.19	10.56	18.75	46.00	-27.25	AVG
11	4.3939	19.99	10.77	30.76	56.00	-25.24	QP
12	4.3939	13.90	10.77	24.67	46.00	-21.33	AVG

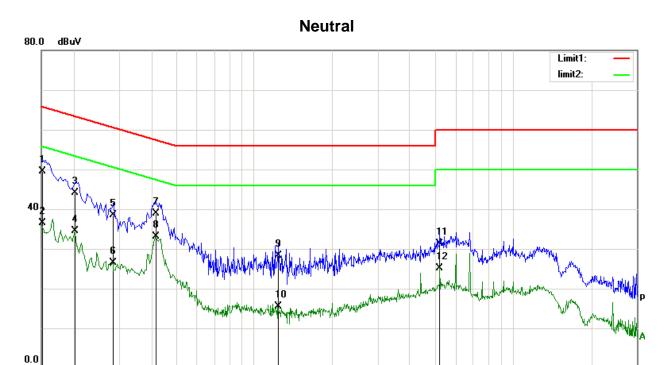
Remarks:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



30.000

Test Mode: TX Mode Channel 01 _3Mbps



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1516	38.78	10.67	49.45	65.91	-16.46	QP
2	0.1516	25.86	10.67	36.53	55.91	-19.38	AVG
3	0.2020	33.41	10.61	44.02	63.52	-19.50	QP
4	0.2020	23.96	10.61	34.57	53.52	-18.95	AVG
5	0.2860	27.99	10.56	38.55	60.64	-22.09	QP
6	0.2860	15.94	10.56	26.50	50.64	-24.14	AVG
7	0.4140	28.50	10.41	38.91	57.57	-18.66	QP
8	0.4140	22.76	10.41	33.17	47.57	-14.40	AVG
9	1.2300	17.65	10.57	28.22	56.00	-27.78	QP
10	1.2300	4.96	10.57	15.53	46.00	-30.47	AVG
11	5.1979	20.46	10.78	31.24	60.00	-28.76	QP
12	5.1979	14.42	10.78	25.20	50.00	-24.80	AVG

(MHz)

Remarks:

0.150

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

0.5



5 RADIATED EMISSION TEST

5.1 LIMIT

In case the emission fall within the restricted band specified on15.205(a) &RSS-Gen 8.10, then the 15.209(a) &RSS-Gen 8.9 limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000MHz)

Frequency	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(meters)		
0.009-0.490	2400/F(kHz)	300		
0.490-1.705	24000/F(kHz)	30		
1.705-30.0	30	30		
30-88	100	3		
88-216	150	3		
216-960	200	3		
Above 960	500	3		

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-30 MHz)

Frequency	Magnetic field strength (H-Field)	Measurement Distance		
(MHz)	(μA/m)	(meters)		
0.009-0.490	6.37/F(kHz)	300		
0.490-1.705	6.37/F(kHz)	30		
1.705-30.0	0.08	30		

LIMITS OF RADIATED EMISSION MEASUREMENT (30 MHz-1000MHz)

Frequency	Field Strength
(MHz)	(μV/m at 3m)
30-88	100
88-216	150
216-960	200
Above 960	500

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Fraguency (MHz)	(dBuV/m at 3 m)				
Frequency (MHz)	Peak	Average			
Above 1000	74	54			

Note:

- (1) The limit for radiated test was performed according to FCC PART 15C and RSS-247.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).



5.2 TEST PROCEDURE AND SETTING

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. The test result is calculated as the following:
 - (1) Result = Reading + Correct Factor
 - (2) Correct Factor = Antenna Factor + Cable Loss Amplifier Gain + Attenuator
 - (3) Margin = Result Limit

Spectrum Parameter	Setting				
Attenuation	Auto				
Start Frequency	1000 MHz				
Stop Frequency	10th carrier harmonic				
RBW / VBW	RBW 1MHz VBW 3MHz peak detector for Pk value				
(Emission in restricted band)	RMS detector for AV value				

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

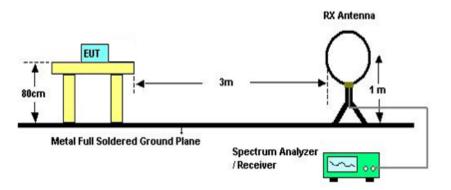


5.3 MEASUREMENT INSTRUMENTS LIST

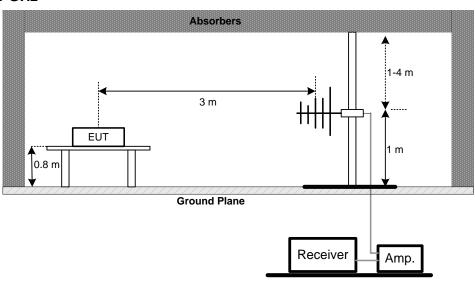
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	06/05/2025
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/17/2025
3	Loop antenna	SCHWARZBECK K	FMZB1519	1519-062	01/14/2025
4	Broadband antenna	SCHWARZBECK	VULB9168	VULB9168-192	03/29/2025
5	HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D 1065	03/29/2025
6	Preamplifier Amplifier	HP	8447F	3113A05680	11/17/2025
7	PRE-AMPLIFIER	EMEC	EM01G26G	980136	03/29/2025
8	RF Cable	R&S	Test Cable 4	4	11/17/2025
9	RF Cable	R&S	Test Cable 5	5	11/17/2025
10	RF Cable	R&S	Test Cable 9	9	04/17/2025
11	RF Cable	R&S	Test Cable 10	10	04/17/2025
12	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

5.4 TESTSETUP

9 kHz-30 MHz

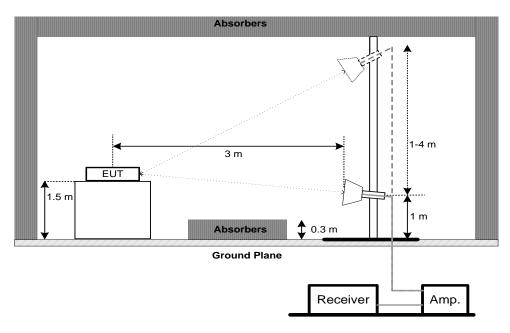


30 MHz to 1 GHz





Above 1 GHz



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

Report No.: 24EFSS12026 10591



5.6 TEST RESULTS - 9 kHz TO 30MHz

Test Mode:	TX Mode Channel 01 _3Mbps
------------	---------------------------

Freq.	Reading Limit		Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				Р
				Р

Note:

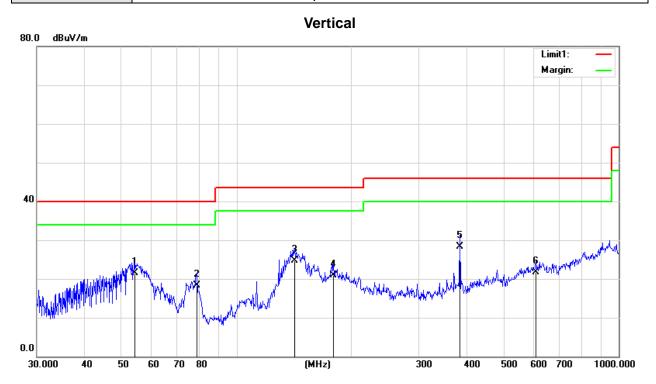
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =20 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor



5.7 TEST RESULTS- 30 MHz TO 1000MHz

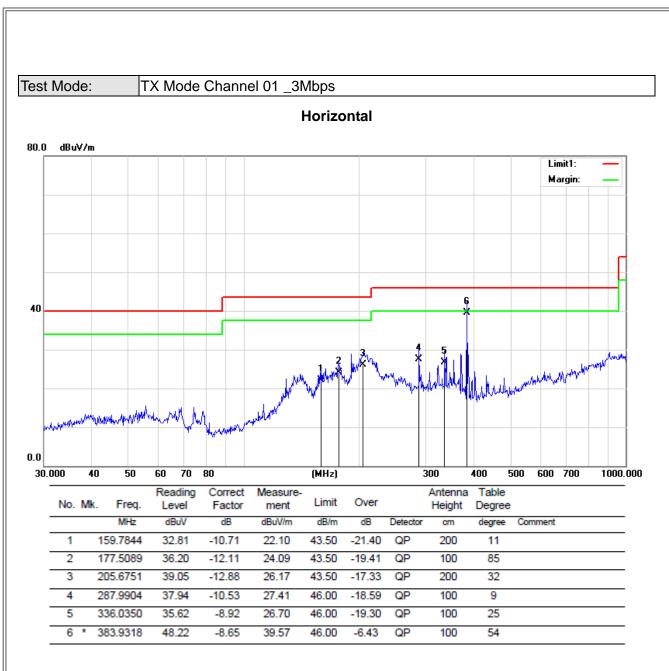
Test Mode: TX Mode Channel 01 _3Mbps



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		54.2610	35.92	-14.36	21.56	40.00	-18.44	QP	100	12	
2		78.6888	35.83	-17.45	18.38	40.00	-21.62	QP	100	66	
3		141.8262	36.53	-11.80	24.73	43.50	-18.77	QP	300	14	
4		179.3863	33.52	-12.59	20.93	43.50	-22.57	QP	100	88	
5	*	383.9318	37.02	-8.65	28.37	46.00	-17.63	QP	100	2	
6		607.7866	25.53	-3.92	21.61	46.00	-24.39	QP	300	36	

^{*:}Maximum data x:Over limit !:over margin (Reference Only



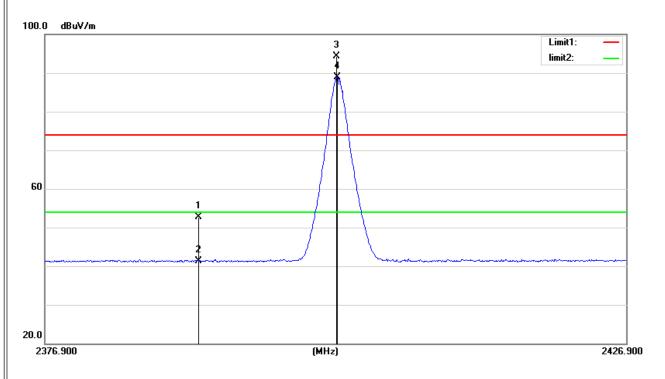


*:Maximum data x:Over limit !:over margin (Reference Only



5.8 TEST RESULTS - ABOVE 1000MHz (BAND EDGE)

Test Mode: TX 2402 MHz_CH00_1Mbps

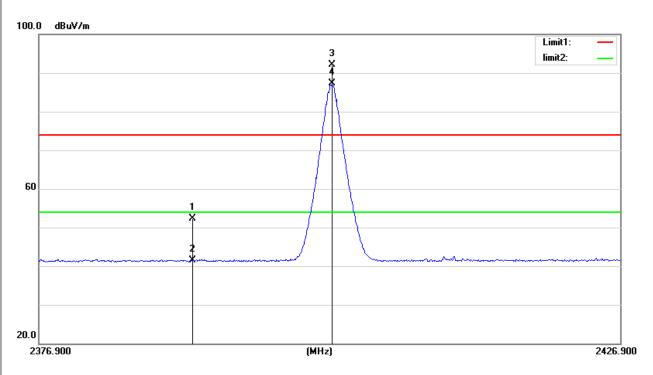


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2390.000	22.56	30.14	52.70	74.00	-21.30	peak	150	141	
2		2390.000	11.22	30.14	41.36	54.00	-12.64	AVG	150	141	
3	Х	2401.900	64.08	30.15	94.23	74.00	20.23	peak	150	141	No Limit
4	*	2401.950	58.71	30.15	88.86	54.00	34.86	AVG	150	141	No Limit



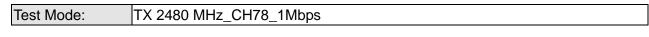


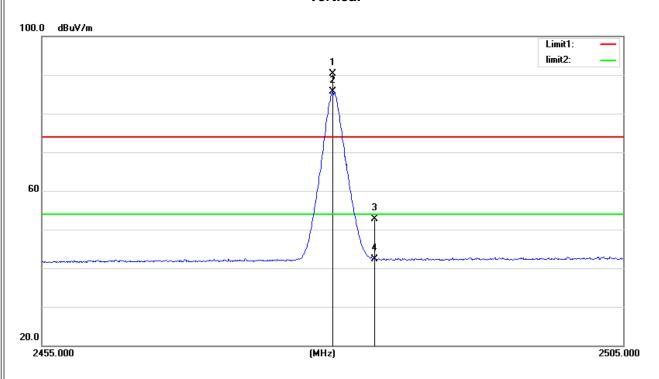
Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2390.000	22.22	30.14	52.36	74.00	-21.64	peak	150	253	
2		2390.000	11.42	30.14	41.56	54.00	-12.44	AVG	150	253	
3	Х	2401.950	61.96	30.15	92.11	74.00	18.11	peak	150	253	No Limit
4	*	2402.000	57.06	30.15	87.21	54.00	33.21	AVG	150	253	No Limit

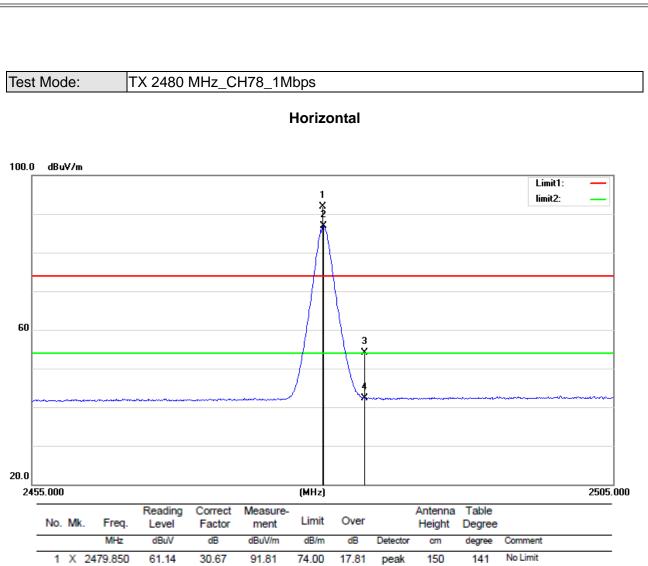






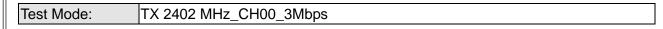
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	Х	2479.900	59.66	30.67	90.33	74.00	16.33	peak	150	296	No Limit
2	*	2479.950	55.05	30.67	85.72	54.00	31.72	AVG	150	296	No Limit
3		2483.500	21.94	30.71	52.65	74.00	-21.35	peak	150	296	
4		2483.500	11.62	30.71	42.33	54.00	-11.67	AVG	150	296	

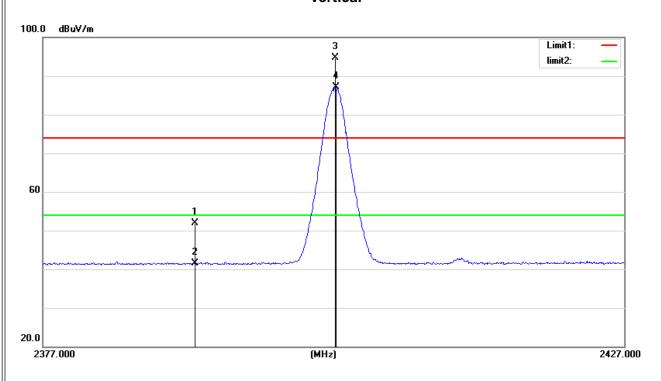




No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	Х	2479.850	61.14	30.67	91.81	74.00	17.81	peak	150	141	No Limit
2	*	2480.000	56.33	30.67	87.00	54.00	33.00	AVG	150	141	No Limit
3		2483.500	23.35	30.71	54.06	74.00	-19.94	peak	150	141	
4		2483.500	11.63	30.71	42.34	54.00	-11.66	AVG	150	141	

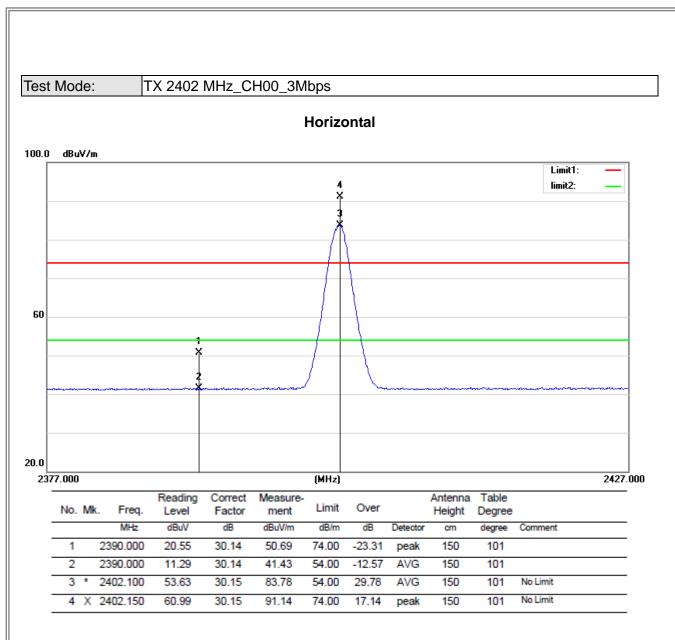




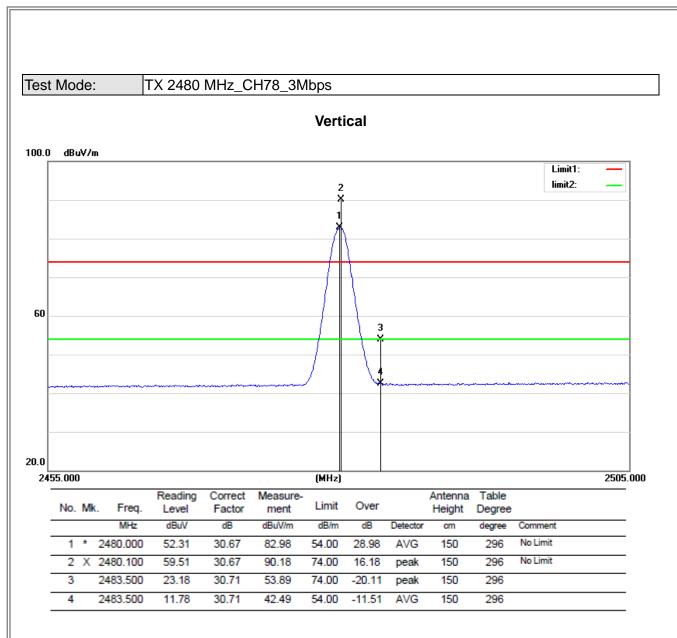


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		2390.000	21.78	30.14	51.92	74.00	-22.08	peak	150	186	
2		2390.000	11.31	30.14	41.45	54.00	-12.55	AVG	150	186	
3	Х	2402.050	64.58	30.15	94.73	74.00	20.73	peak	150	186	No Limit
4	*	2402.100	56.90	30.15	87.05	54.00	33.05	AVG	150	186	No Limit

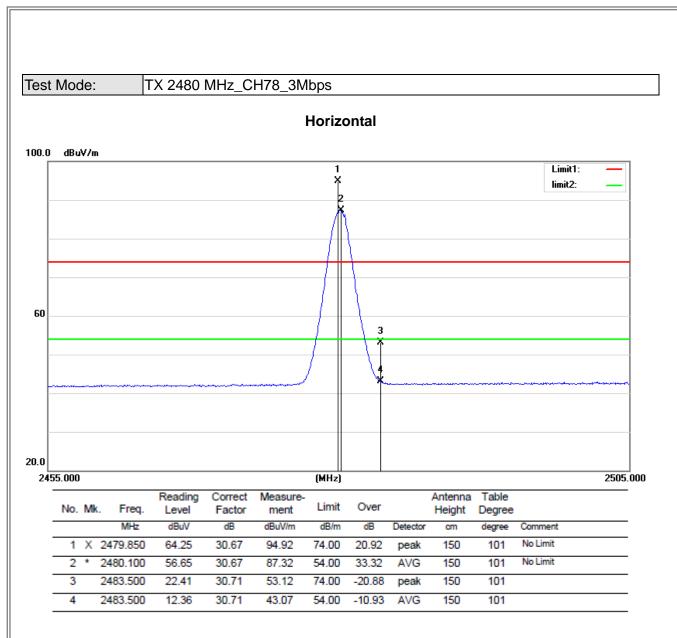








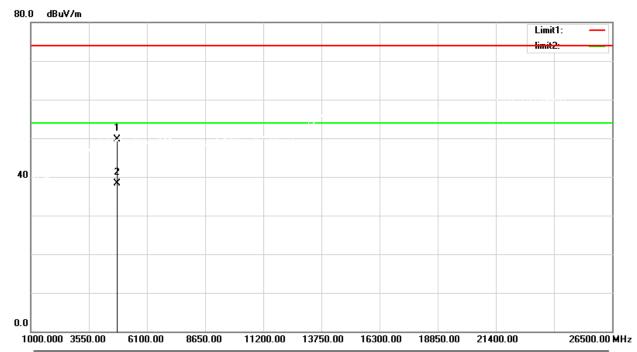






5.9 TEST RESULTS - ABOVE 1000MHz (HARMONIC)

Test Mode: TX 2402 MHz_CH00_1Mbps

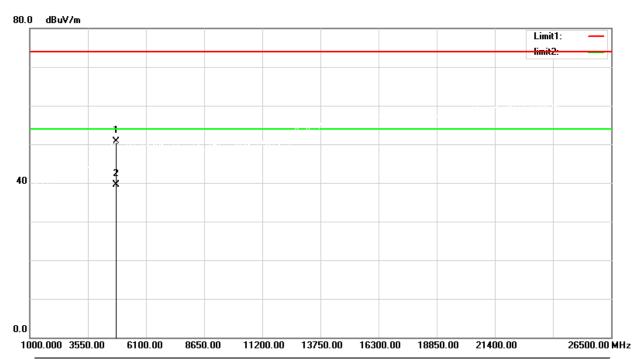


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4804.000	51.55	-1.90	49.65	74.00	-24.35	peak	150	41	
2	*	4804.000	40.17	-1.90	38.27	54.00	-15.73	AVG	150	41	



Test Mode: TX 2402 MHz_CH00_1Mbps

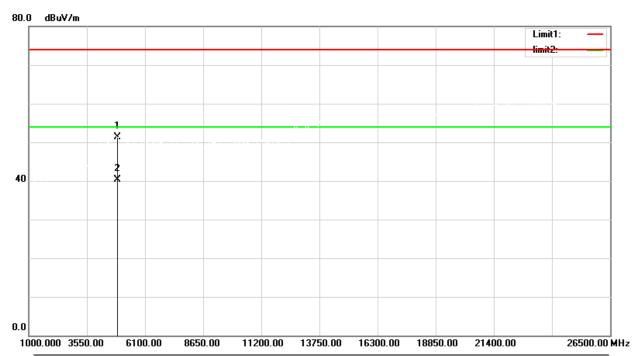
Horizontal



No.	Mk	. Freq.			Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4804.000	52.51	-1.90	50.61	74.00	-23.39	peak	150	35	
2	*	4804.000	41.48	-1.90	39.58	54.00	-14.42	AVG	150	35	



Test Mode: TX 2441 MHz_CH39_1Mbps

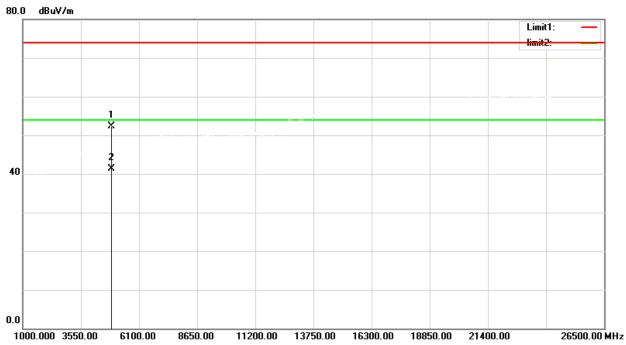


No.	Mk	. Freq.			Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4884.000	53.54	-2.15	51.39	74.00	-22.61	peak	150	101	
2	*	4884.000	42.41	-2.15	40.26	54.00	-13.74	AVG	150	101	



Test Mode: TX 2441 MHz_CH39_1Mbps

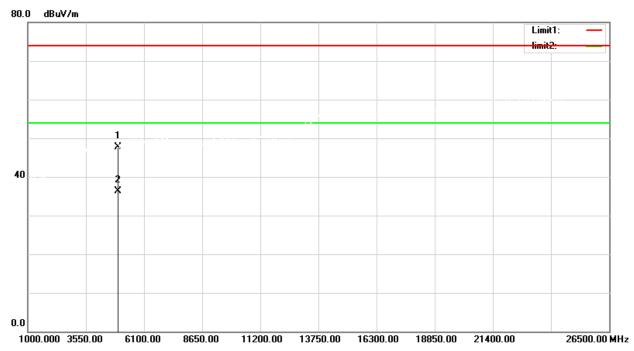
Horizontal



No.	Mk	. Freq.			Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4884.000	54.54	-2.15	52.39	74.00	-21.61	peak	150	39	
2	*	4884.000	43.48	-2.15	41.33	54.00	-12.67	AVG	150	39	



Test Mode: TX 2480 MHz_CH78_1Mbps

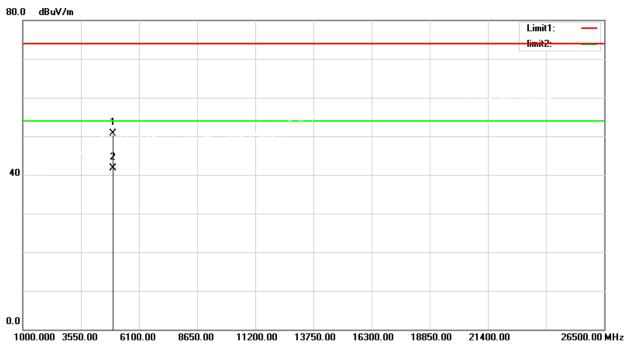


No.	М	k.	Freq.			Measure- ment	Limit	Over		Antenna Height		
			MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		49	60.000	49.37	-1.76	47.61	74.00	-26.39	peak	150	11	
2	*	49	60.000	38.01	-1.76	36.25	54.00	-17.75	AVG	150	11	



Test Mode: TX 2480 MHz_CH78_1Mbps

Horizontal

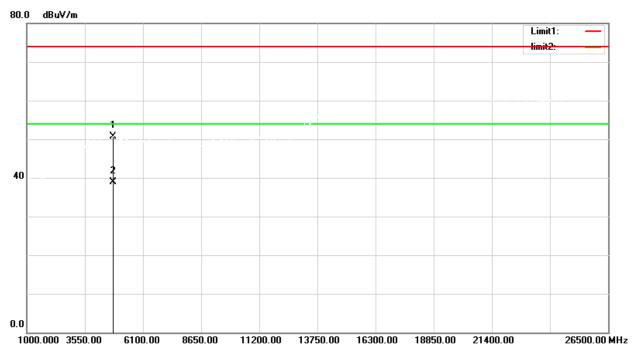


No. N	Иk.	Freq.	Reading Level		Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1	4	960.000	52.53	-1.76	50.77	74.00	-23.23	peak	150	49	
2 *	4	960.000	43.42	-1.76	41.66	54.00	-12.34	AVG	150	49	



Test Mode: TX 2402 MHz_CH00_3Mbps

Vertical

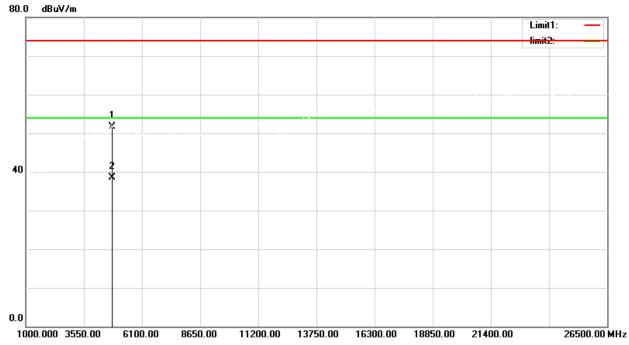


No.	М	۱k.	Freq.			Measure- ment	Limit	Over		Antenna Height		
			MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		48	04.000	52.55	-1.90	50.65	74.00	-23.35	peak	150	109	_
2	*	48	04.000	40.88	-1.90	38.98	54.00	-15.02	AVG	150	109	



Test Mode: TX 2402 MHz_CH00_3Mbps

Horizontal

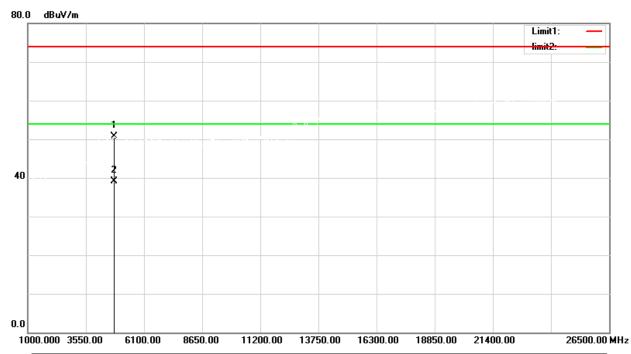


No.	Mk	. Freq		g Correct Factor			Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4804.00	53.55	-1.90	51.65	74.00	-22.35	peak	150	88	
2	*	4804.00	0 40.44	-1.90	38.54	54.00	-15.46	AVG	150	88	



Test Mode: TX 2441 MHz_CH39_3Mbps

Vertical

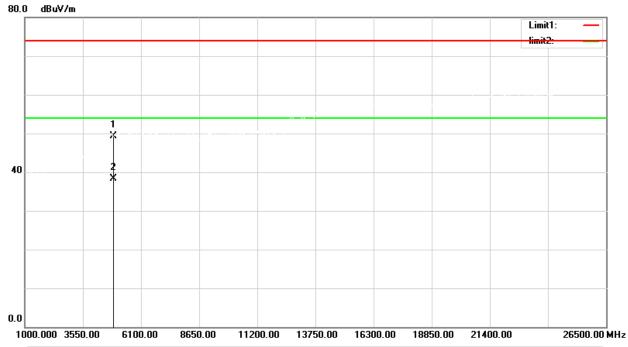


No.	M	۸k.	Freq.	Reading Level		Measure- ment		Over		Antenna Height		
			MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		48	804.000	52.51	-1.90	50.61	74.00	-23.39	peak	150	250	
2	*	48	804.000	41.02	-1.90	39.12	54.00	-14.88	AVG	150	250	



Test Mode: TX 2441 MHz_CH39_3Mbps

Horizontal



No.	M	k. Fre		Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MH	: dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4884.00	0 51.54	-2.15	49.39	74.00	-24.61	peak	150	352	
2	*	4884.00	0 40.40	-2.15	38.25	54.00	-15.75	AVG	150	352	

2 * 4960.000

38.01

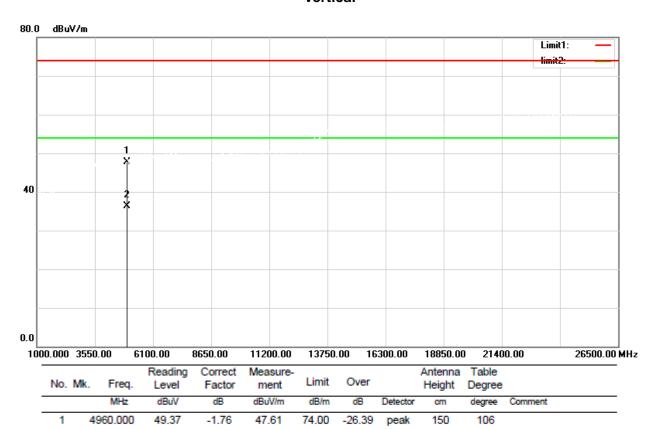
-1.76

36.25



Test Mode: TX 2480 MHz_CH78_3Mbps

Vertical



54.00 -17.75

150

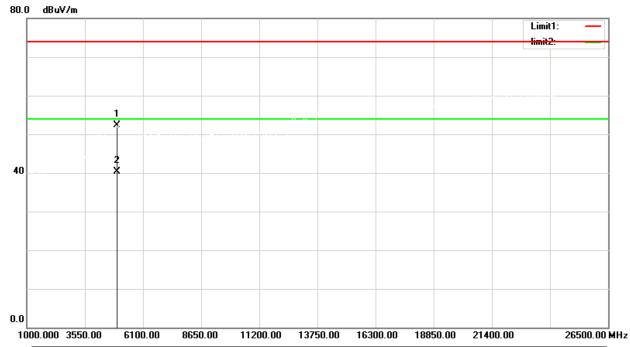
AVG

106



Test Mode: TX 2480 MHz_CH78_3Mbps

Horizontal



No.	Mk	. Freq.			Measure- ment		Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector	cm	degree	Comment
1		4960.000	54.03	-1.76	52.27	74.00	-21.73	peak	150	87	
2	*	4960.000	42.12	-1.76	40.36	54.00	-13.64	AVG	150	87	



6 NUMBER OF HOPPING FREQUENCY

6.1 LIMIT

FCC Part15, Subpart C (15.247)					
Section	Test Item				
15.247(a)(1)(iii)	Number of Hopping Frequency				

6.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW=100 kHz, VBW=300 kHz, Sweep time = Auto.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating Frequency Range
RBW	100kHz
VBW	300kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

6.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

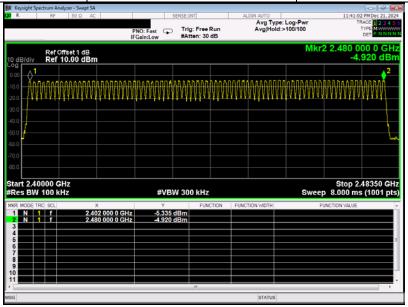
6.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

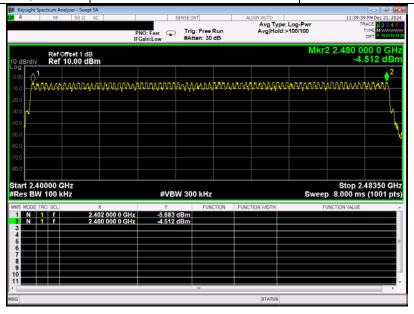
6.5 EUT OPERATION CONDITIONS



	Hopping Mode_1Mbps	
Number of Hopping	Measurement result(CH)	Limit(CH)
Frequency	79	≥15



	Hopping Mode_3Mbps	
Number of Hopping	Measurement result(CH)	Limit(CH)
Frequency	79	≥15





7 AVERAGE TIME OF OCCUPANCY

7.1 LIMIT

FCC Part15, Subpart C (15.247)					
Section Test Item Limit					
15.247(a)(1)(iii)	Average Time of Occupancy	0.4sec			

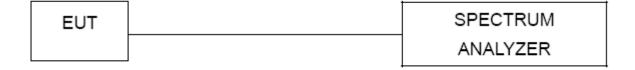
7.2 TEST PROCEDURE AND SETTING

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses
- d. Sweep Time is more than once pulse time
- e. Set the center frequency on any frequency would be measure and set the frequency span to zero span
- f. Measure the maximum time duration of one single pulse
- g. Set the EUT for DH1, DH3 and DH5 packet transmitting
- h. Measure the maximum time duration of one single pulse
- i. DH1 Packet permit maximum 1600 / 79 / 2 = 10.12 hops per second in each channel (1 time slot TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds
- j. DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slots TX, 1 time slot RX).So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds
- k. DH5 Packet permit maximum 1600/79/6 = 3.37 hops per second in each channel (5 time slots TX, 1 time slot RX).So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds

7.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

7.4 TEST SETUP



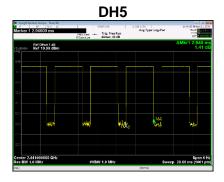
7.5 EUT OPERATION CONDITIONS



TX Mode_1Mbps						
Mode	Channel Frequency	Pulse Time	Dwell Time	Limit		
Mode	(MHz)	(ms)	(ms)	(ms)		
DH1	2441	0.396	126.7	400		
DH3	2441	1.670	267.2	400		
DH5	2441	2.940	313.4	400		



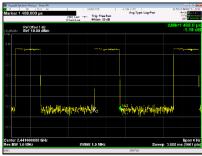




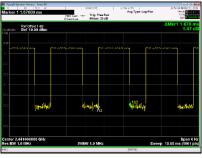


TX Mode_3Mbps						
Mode Channel Frequency Pulse Time Dwell Time Lim (MHz) (ms) (ms)						
DH1	2441	0.408	130.6	400		
DH3	2441	1.670	267.2	400		
DH5	2441	2.940	313.4	400		

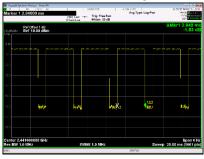
2441MHzDH1



2441MHzDH3



2441MHzDH5





8 HOPPING CHANNEL SEPARATION MEASUREMENT

8.1 LIMIT

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

8.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Span = wide enough to capture the peaks of two adjacent channels

Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span

Video (or Average) Bandwidth (VBW) ≥ RBW

Sweep = Auto

Detector function = Peak

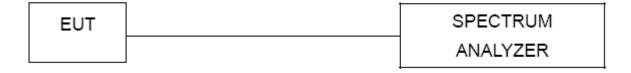
Trace = Max Hold

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RBW	10 kHz
VBW	30 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

8.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS



TX Mode_1Mbps						
Channel	Frequency	Channel	Limit	Result		
	(MHz)	Separation(MHz)	(MHz)	11000		
CH00	2402	0.999	>(25KHz or 2/3*20dB	PASS		
01100	2102	0.000	Bandwidth)	17.00		
CH39	2441	1.002	>(25KHz or 2/3*20dB	PASS		
01139	2 44 1	1.002	Bandwidth)	FASS		
CH78	2480	1.002	>(25KHz or 2/3*20dB	PASS		
UH/6	Z 4 0U	1.002	Bandwidth)	FA33		











TX Mode_3Mbps						
Channel	Frequency (MHz)	Channel Separation(MHz)	Limit (MHz)	Result		
CH00	2402	1.008	>(25KHz or 2/3*20dB Bandwidth)	PASS		
CH39	2441	0.993	>(25KHz or 2/3*20dB Bandwidth)	PASS		
CH78	2480	1.011	>(25KHz or 2/3*20dB Bandwidth)	PASS		









9 BANDWIDTH TEST

9.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item				
15.247(a)(1) Bandwidth				

9.2 TEST PROCEDURE AND SETTING

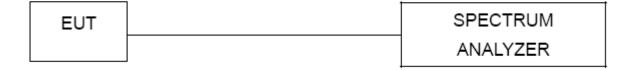
- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 30 kHz, VBW=100 kHz, Sweep Time = Auto.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth
RBW	30kHz
VBW	100kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

9.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS



TX Mode_1Mbps						
Channel	Frequency	20dB Bandwidth	99 % Emission Bandwidth	Result		
	(MHz)	(MHz)	(MHz)			
CH00	2402	0.928	0.8568	PASS		
CH39	2441	0.926	0.8593	PASS		
CH78	2480	0.934	0.8419	PASS		







TX Mode_3Mbps				
Channel	Frequency	20dB Bandwidth	99 % Emission Bandwidth	Result
	(MHz)	(MHz)	(MHz)	
CH00	2402	1.253	1.3407	PASS
CH39	2441	1.326	1.3527	PASS
CH78	2480	1.333	1.3436	PASS

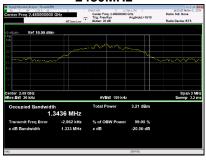




2441MHz



2480MHz





10 MAXIMUM OUTPUT POWER

10.1 LIMIT

FCC Part15 , Subpart C (15.247)			
Section Test Item Limit			
15.247(a)(1)	Maximum Output Power	0.125Watt or 21dBm	

Note:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB band width of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

10.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 1MHz/3MHz, VBW= 1MHz/3MHz, Sweep time = Auto.

10.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

10.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

10.5 EUT OPERATION CONDITIONS

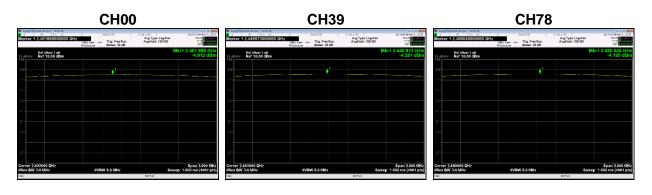


TX Mode_1Mbps					
Channal	Frequency	Output Power	Output Power	Dogult	
Channel	(MHz)	(dBm)	(W)	Result	
CH00	2402	-5.010	0.000316	PASS	
CH39	2441	-4.402	0.000363	PASS	
CH78	2480	-4.298	0.000372	PASS	
Limit	21dBm /0.125W				





TX Mode_2Mbps					
Channal	Frequency	Output Power	Output Power	Dogult	
Channel	(MHz)	(dBm)	(W)	Result	
CH00	2402	-4.912	0.000323	PASS	
CH39	2441	-4.281	0.000373	PASS	
CH78	2480	-4.185	0.000382	PASS	
Limit	21dBm /0.125W				





TX Mode_3Mbps					
Channal	Frequency	Output Power	Output Power	Dogult	
Channel	(MHz)	(dBm)	(W)	Result	
CH00	2402	-4.809	0.000330	PASS	
CH39	2441	-4.210	0.000379	PASS	
CH78	2480	-4.164	0.000383	PASS	
Limit	21dBm /0.125W				





11 CONDUCTED SPURIOUS EMISSION

11.1 LIMIT

For FCC

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

11.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, Sweep time = Auto.

11.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2025/05/22
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

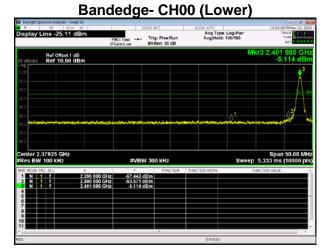
11.4 TEST SETUP

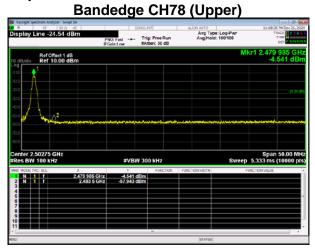
EUT	SPECTRUM
	ANALYZER

11.5 EUT OPERATION CONDITIONS

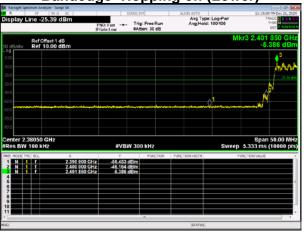


TX Mode_1Mbps

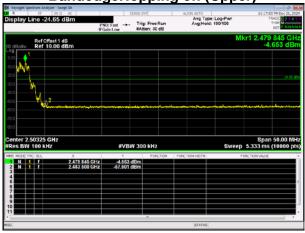




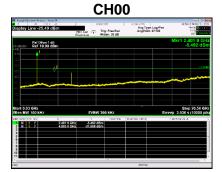
Bandedge- Hopping on (Lower)







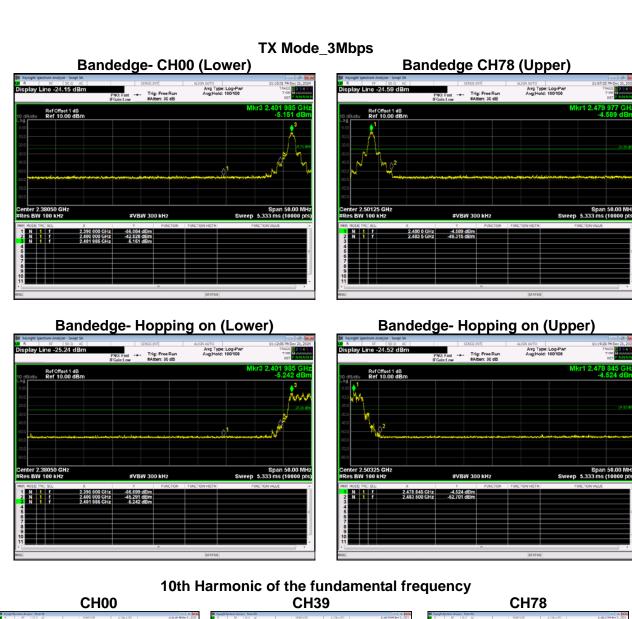
10th Harmonic of the fundamental frequency

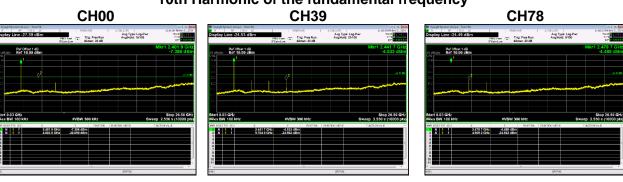












END OF TEST REPORT