FCC RF Test Report

(LTE BS)

Report No.:	JYTSZ-R12-2400005
Applicant:	Septier Communication Ltd.
Address of Applicant:	35 Efal st. Petah Tikwa, Israel

Equipment Under Test (EUT)

Product Name:	MIDI SYSTEM
Model No.:	MIDI SYSTEM REV1
Trade Mark:	N/A
FCC ID:	2BDKO-SEPTIER
Applicable Standards:	FCC CFR Title 47 Part 2, 22H, 24E, 27L, 90S
Date of Sample Receipt:	28 Dec., 2023
Date of Test:	29 Dec., 2023 to 24 Jan., 2024
Date of Report Issued:	04 Feb., 2024
Test Result:	PASS

Tested by:	***Project Engineer***	***Date:***	*04 Feb., 2024*
Reviewed by:	***Senior Engineer***	***Date:***	*04 Feb., 2024*
Approved by:	***Manager***	***Date:***	*04 Feb., 2024*

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

1 Version

Version No.	Date	Description
00	*24 Jan., 2024*	*Original*
01	*31 Jan., 2024*	*1. Updated pages 4, 8 and 16 of the report* *2. Updated Appendix A-LTE-ANT1*
02	*04 Feb., 2024*	*Updated page 4 of the report*

2 Contents

Page

3 General Information

3.1 Client Information

Applicant:	Septier Communication Ltd.
Address:	35 Efal st. Petah Tikwa, Israel
Manufacturer/Factory:	Septier Communication Ltd.
Address:	35 Efal st. Petah Tikwa, Israel

3.2 General Description of E.U.T.

Product Name:	MIDI SYSTEM	
Model No.:	MIDI SYSTEM REV1	
Operation Frequency Range:	LTE band 2:	1930 MHz - 1990 MHz
	LTE band 25:	1930 MHz - 1995 MHz
	LTE band 26:	859 MHz - 894 MHz
	LTE band 66:	2110 MHz - 2180 MHz
Modulation Type:	☒QPSK ☒16QAM	
Antenna Type:	External Antenna	
Antenna Gain:	LTE band 2:	ANT1: 1.2 dBi (declare by Applicant)
		ANT2: 1.2 dBi (declare by Applicant)
	LTE band 25:	ANT1: 1.2 dBi (declare by Applicant)
		ANT2: 1.2 dBi (declare by Applicant)
	LTE band 26:	ANT1: 3.14 dBi (declare by Applicant)
		ANT2: 3.14 dBi (declare by Applicant)
	LTE band 66:	ANT1: 1.2 dBi (declare by Applicant)
		ANT2: 1.2 dBi (declare by Applicant)
Power Supply:	DC 12-22V	
AC Adapter:	Model: GST360A15-C8P Input: AC100-240V, 50/60Hz, 3.8A Output: DC 15V, 19.3A, 289.5W MAX (100-200V) DC 15V, 22.7A, 340.5W MAX (200-240V)	
Test Sample Condition:	The test samples were provided in good working order with no visible defects.	

3.3 Test Mode and Environment

Test Mode:	
QPSK mode:	Keep the EUT communication with simulated station in QPSK mode
16QAM mode:	Keep the EUT communication with simulated station in 16QAM mode
Remark: *The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.*	
Operating Environment:	
Temperature:	Normal: 15℃ ~ 35℃, Extreme: -30℃ ~ +50℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 15Vdc, Extreme: Low 10 Vdc, High 22 Vdc
Test Engineer:	Lucas Ding (Conducted measurement) Kiran Zeng (Radiated measurement)

3.4 Description of Test Auxiliary Equipment

Test Equipment	Manufacturer	Model No.	Serial No.
Lenovo	Laptop	ThinkPad T14 Gen 1	SL10Z47277
Lenovo	Screen	B2728-R	/

3.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Radiated Emission (30MHz ~ 200MHz) (3m SAC)	4.6 dB
Radiated Emission (200MHz ~ 1000MHz) (3m SAC)	5.8 dB
Radiated Emission (1GHz ~ 6GHz) (3m FAR)	4.95 dB
Radiated Emission (6GHz ~ 18GHz) (3m FAR)	5.23 dB
Radiated Emission (18GHz ~ 40GHz) (3m FAR)	5.32 dB
Note: *All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.*	

3.6 Additions to, Deviations, or Exclusions from the Method

No

3.7 Laboratory Facility

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

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

3.9 Test Instruments List

Radiated Emission(3m SAC):					
Test Equipment	**Manufacturer**	**Model No.**	**Manage No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
3m SAC	ETS	9m*6m*6m	WXJ001-1	04-14-2021	04-13-2024
Loop Antenna	Schwarzbeck	FMZB 1519 B	WXJ002-4	02-09-2023	02-08-2024
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	02-09-2023	02-08-2024
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-02-2021	07-01-2024
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-2	02-09-2023	02-08-2024
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	12-27-2023	12-26-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-27-2023	12-26-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	12-27-2023	12-26-2024
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	12-27-2023	12-26-2024
Pre-amplifier (1GHz ~ 18GHz)	SKET	LNPA_0118G-50	WXJ001-3	12-27-2023	12-26-2024
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-27-2023	12-26-2024
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	12-27-2023	12-26-2024
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-27-2023	12-26-2024
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ004-2	09-23-2023	09-24-2024
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-18-2023	01-17-2024
				01-17-2024	01-16-2025
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG001-5	01-18-2023	01-17-2024
				01-17-2024	01-16-2025
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG001-7	01-18-2023	01-17-2024
				01-17-2024	01-16-2025
Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Test Software	Tonscend	TS+	Version: 3.0.0.1		

Radiated Emission(3m FAR):					
Test Equipment	**Manufacturer**	**Model No.**	**Manage No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
3m FAR	YUNYI	9m*6m*6m	WXJ097	06-15-2023	06-14-2028
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ097-2	07-13-2023	07-12-2024
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-02-2021	07-01-2024
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ097-3	07-14-2023	07-13-2024
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	12-27-2023	12-26-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-27-2023	12-26-2024
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	12-27-2023	12-26-2024
Pre-amplifier (30MHz ~ 1GHz)	YUNYI	PAM-310N	WXJ097-5	05-14-2023	05-13-2024
Pre-amplifier (1GHz ~ 18GHz)	YUNYI	PAM-118N	WXJ097-6	05-14-2023	05-13-2024
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-27-2023	12-26-2024
EMI Test Receiver	Rohde & Schwarz	ESCI3	WXJ003	12-27-2023	12-26-2024
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-27-2023	12-26-2024
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ081-1	06-13-2023	06-12-2024
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-13M	WXG097-1	08-01-2023	07-31-2024
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG097-2	08-01-2023	07-31-2024
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG097-3	08-01-2023	07-31-2024
High Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Low Band Reject Filter Group	Tonscend	JS0806-F	WXJ097-4	N/A	
Test Software	Tonscend	TS+	Version: 5.0.0		

Conducted method:					
Test Equipment	**Manufacturer**	**Model No.**	**Manage No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ081-1	06-13-2023	06-12-2024
Vector Signal Generator	Keysight	N5182B	WXJ091-1	06-13-2023	06-12-2024
Vector Signal Generator	Keysight	N5182B	WXJ091-2	06-14-2023	06-13-2024
Signal Generator	Keysight	N5173B	WXJ091-3	06-13-2023	06-12-2024
Network Analyzer	Keysight	E5071C	WXJ091	01-10-2023	01-09-2024
				12-27-2023	12-26-2024
RF Control Unit	Tonscend	JS0806-1	WXG010-2	N/A	N/A
RF Control Unit	Tonscend	JS0806-1	WXG010-3	N/A	N/A
Band Reject Filter Group	Tonscend	JS0806-F	WXG010-4	N/A	N/A
Test Software	Tonscend	TS+	Version: 2.6.9.0526		

4 Measurement Setup and Procedure

4.1 Test Channel

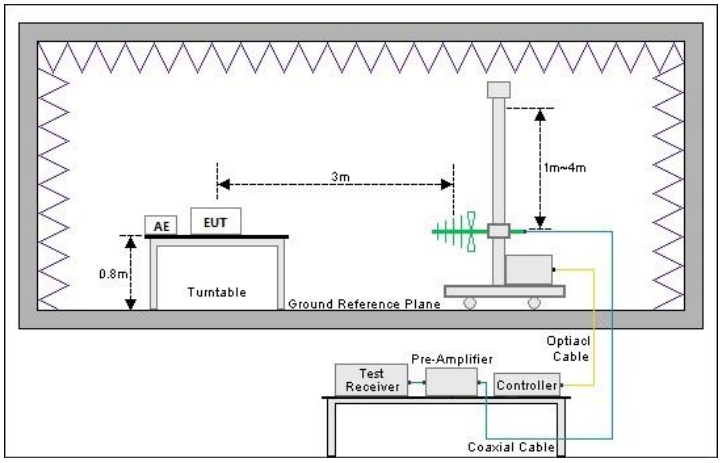
According to ANSI C63.26-2015 chapter 5.1.2.1 Table 2 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

LTE band 2			LTE band 25		
Channels		Frequency (MHz)	Channels		Frequency (MHz)
5 MHz			5 MHz		
Lowest channel	625	1932.5	Lowest channel	8065	1932.5
Middle channel	900	1960.0	Middle channel	8365	1962.5
Highest channel	1175	1987.5	Highest channel	8665	1992.5
LTE band 26 For Part 22			**LTE band 26 For Part 90**		
Channels		Frequency (MHz)	Channels		Frequency (MHz)
5 MHz			5 MHz		
Lowest channel	8815	871.5	Lowest channel	8715	861.5
Middle channel	8915	881.5	Middle channel	8740	864.0
Highest channel	9015	891.5	Highest channel	8765	866.5
LTE band 66					
Channels		Frequency (MHz)			
5 MHz					
Lowest channel	66461	2112.5			
Middle channel	66786	2145.0			
Highest channel	67111	2177.5			

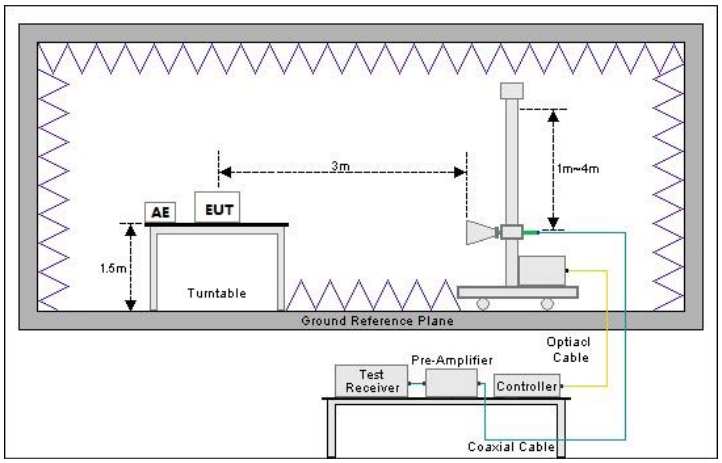
4.2 Test Setup

1) Radiated emission measurement:

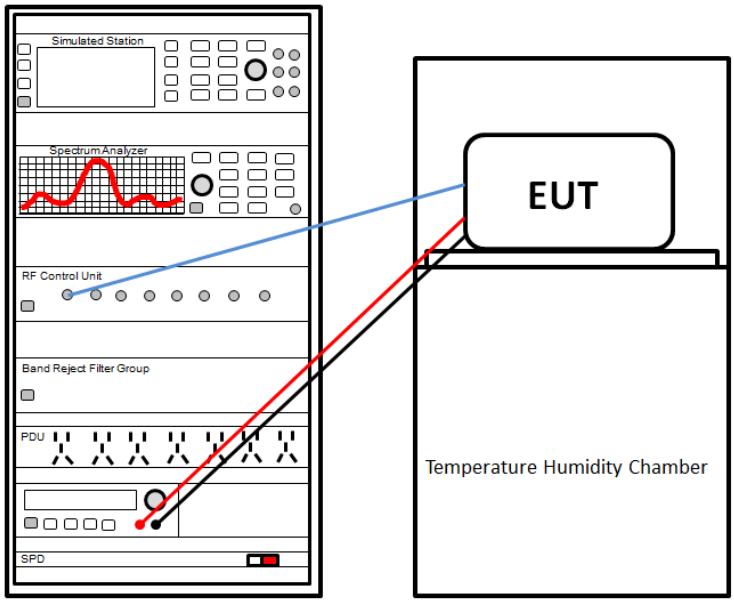
Below 1GHz (3m SAC)



Above 1GHz (3m FAR)



2) Conducted test method



4.3 Test Procedure

Test method	Test step
Radiated emission	**For below 1GHz:** 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. **For above 1GHz:** 1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
Conducted test method	1. The LTE antenna port of EUT was connected to the test port of the test system through an RF cable. 2. The EUT is keeping in continuous transmission mode and tested in all modulation modes. 3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.

5 Test Results

5.1 Summary

5.1.1 Clause and Data Summary

Test items	Standard clause	Test data	Result
RF Exposure	Part 1.1307 Part 2.1093	See Exposure Evaluation Report	Pass
RF Output Power	Part 2.1046 Part 22.913 (a)(1) Part 24.232 (a) Part 27.50 (d)(2) Part 90.635 (a)	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Peak-to-Average Power Ratio	Part 24.232 (d) Part 27.50 (d)(5)	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Modulation Characteristics	Part 2.1047	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
26dB Emission Bandwidth 99% Occupied Bandwidth	Part 2.1049	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Out of Band Emission at Antenna Terminals	Part 2.1051 Part 22.917 (a) Part 24.238 (a) Part 27.53 (c) Part 27.53 (h) Part 90.691 (a)	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917 (a) Part 24.238 (a) Part 27.53 (c) Part 27.53 (h) Part 27.53 (m)(4) Part 90.691 (a)	See Section 5.2	Pass
Frequency Stability vs. Temperature	Part 2.1055 (a)(1)(b) Part 22.355 Part 24.235 Part 27.54 Part 90.213 (a)	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Frequency Stability vs. Voltage	Part 2.1055 (d)(2) Part 22.355 Part 24.235 Part 27.54 Part 90.213 (a)	Appendix A-LTE-ANT1 Appendix A-LTE-ANT2	Pass
Remark: *1. Pass: The EUT complies with the essential requirements in the standard.* *2. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (Fundamental Frequency below 1GHz)/1.0dB (Fundamental Frequency above 1GHz) (provided by the customer).*			
Test Method:	*ANSI/TIA-603-E-2016* *ANSI C63.26-2015*		

5.1.2 Test Limit

Test items	Limit
RF Output Power	**LTE band 2/25:** 1640W EIRP **LTE band 66:** 1640W EIRP **LTE band 26(Part 22):** 500W ERP **LTE band 26(Part 90):** 1000W EIRP
Peak-to-Average Power Ratio	**LTE band 2/4/25/26:**The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB **Other bands:** N/A report only
Modulation Characteristics	N/A
26dB Emission Bandwidth 99% Occupied Bandwidth	N/A
Out of Band Emission at Antenna Terminals Field Strength of Spurious Radiation	**LTE band 2, 25, 26(Part 22), 66** The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. **LTE band 26(Part 90):** (1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. (2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

Frequency Stability vs. Temperature

Frequency Stability vs. Voltage

LTE band 2:

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

LTE band 66:

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

LTE band 26(Part 22):

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

TABLE C-1—FREQUENCY TOLERANCE FOR TRANSMITTERS IN THE PUBLIC MOBILE SERVICES

Frequency range (MHz)	Base, fixed (ppm)	Mobile >3 watts (ppm)	Mobile ≤3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

LTE band 26(Part 90):

Part 90.213(a): Unless noted elsewhere, transmitters used in the services governed by this part must have a minimum frequency stability as specified in the following table.

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
Below 25	[1][2][3] 100	100	200
25-50	20	20	50
72-76	5		50
150-174	[5][11] 5	[6] 5	[4][6] 50
216-220	1.0		1.0
220-222[12]	0.1	1.5	1.5
421-512	[7][11][14] 2.5	[8] 5	[8] 5
806-809	[14] 1.0	1.5	1.5
809-824	[14] 1.5	2.5	2.5
851-854	1.0	1.5	1.5
854-869	1.5	2.5	2.5
896-901	[14] 0.1	1.5	1.5
902-928	2.5	2.5	2.5
902-928[13]	2.5	2.5	2.5
929-930	1.5		
935-940	0.1	1.5	1.5
1427-1435	[9] 300	300	300
Above 2450[10]			

5.2 Field Strength of Spurious Radiation Measurement

Note: All modulation types was pretested, and it was found that QPSK modulation was the worst modes, and only the worst modes were reflected in the report.

LTE band 25 – 5 MHz bandwidth						
Lowest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
3865.00	-60.83	-0.36	-61.19	-13.00	48.19	Vertical
5797.50	-59.17	4.16	-55.01	-13.00	42.01	Vertical
7730.00	-56.19	6.10	-50.09	-13.00	37.09	Vertical
3865.00	-61.75	-0.17	-61.92	-13.00	48.92	Horizontal
5797.50	-60.31	4.07	-56.24	-13.00	43.24	Horizontal
7730.00	-56.92	5.76	-51.16	-13.00	38.16	Horizontal
Middle channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
3925.00	-61.24	-1.01	-62.25	-13.00	49.25	Vertical
5887.50	-59.52	3.85	-55.67	-13.00	42.67	Vertical
7850.00	-56.31	5.56	-50.75	-13.00	37.75	Vertical
3925.00	-61.27	-0.54	-61.81	-13.00	48.81	Horizontal
5887.50	-59.84	4.08	-55.76	-13.00	42.76	Horizontal
7850.00	-56.61	5.56	-51.05	-13.00	38.05	Horizontal
Highest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
3985.00	-60.87	-0.36	-61.23	-13.00	48.23	Vertical
5977.50	-59.69	3.50	-56.19	-13.00	43.19	Vertical
7970.00	-56.81	6.54	-50.27	-13.00	37.27	Vertical
3985.00	-61.55	0.06	-61.49	-13.00	48.49	Horizontal
5977.50	-60.11	3.85	-56.26	-13.00	43.26	Horizontal
7970.00	-56.94	6.33	-50.61	-13.00	37.61	Horizontal
Remark:						
1. The emission levels of below 1 GHz are lower than the limit 10dB, so not show in test report.						

LTE band 26(Part 22H) – 5 MHz bandwidth

Lowest channel

Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1743.00	-67.07	-11.51	-78.58	-13.00	65.58	Vertical
2164.50	-66.23	-8.67	-74.90	-13.00	61.90	Vertical
3486.00	-64.88	-3.89	-68.77	-13.00	55.77	Vertical
1743.00	-67.53	-10.85	-78.38	-13.00	65.38	Horizontal
2164.50	-66.38	-9.13	-75.51	-13.00	62.51	Horizontal
3486.00	-64.77	-3.96	-68.73	-13.00	55.73	Horizontal

Middle channel

Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1763.00	-67.26	-10.70	-77.96	-13.00	64.96	Vertical
3644.50	-66.33	-8.66	-74.99	-13.00	61.99	Vertical
3526.00	-64.78	-3.33	-68.11	-13.00	55.11	Vertical
1763.00	-67.82	-10.28	-78.10	-13.00	65.10	Horizontal
3644.50	-66.48	-8.73	-75.21	-13.00	62.21	Horizontal
3526.00	-64.43	-3.42	-67.85	-13.00	54.85	Horizontal

Highest channel

Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1783.00	-66.80	-9.90	-76.70	-13.00	63.70	Vertical
2674.50	-66.42	-8.45	-74.87	-13.00	61.87	Vertical
3566.00	-64.63	-2.59	-67.22	-13.00	54.22	Vertical
1783.00	-67.40	-9.70	-77.10	-13.00	64.10	Horizontal
2674.50	-66.68	-8.21	-74.89	-13.00	61.89	Horizontal
3566.00	-64.54	-2.65	-67.19	-13.00	54.19	Horizontal

Remark:

1. The emission levels of below 1 GHz are lower than the limit 10dB, so not show in test report.

LTE band 26(90S) – 5 MHz bandwidth						
Lowest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1723.00	-67.90	-12.21	-80.11	-13.00	67.11	Vertical
2584.50	-63.96	-8.84	-72.80	-13.00	59.80	Vertical
3466.00	-63.77	-3.57	-67.34	-13.00	54.34	Vertical
1723.00	-67.82	-11.35	-79.17	-13.00	66.17	Horizontal
2584.50	-60.45	-9.23	-69.68	-13.00	56.68	Horizontal
3466.00	-64.12	-3.42	-67.54	-13.00	54.54	Horizontal
Middle channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1728.00	-67.56	-11.90	-79.46	-13.00	66.46	Vertical
2592.00	-64.27	-8.75	-73.02	-13.00	60.02	Vertical
3456.00	-64.12	-3.71	-67.83	-13.00	54.83	Vertical
1728.00	-67.85	-11.13	-78.98	-13.00	65.98	Horizontal
2592.00	-60.29	-9.20	-69.49	-13.00	56.49	Horizontal
3456.00	-64.05	-3.65	-67.70	-13.00	54.70	Horizontal
Highest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
1733.00	-67.42	-11.60	-79.02	-13.00	66.02	Vertical
2599.50	-64.00	-8.67	-72.67	-13.00	59.67	Vertical
3466.00	-64.14	-3.85	-67.99	-13.00	54.99	Vertical
1733.00	-67.94	-10.92	-78.86	-13.00	65.86	Horizontal
2599.50	-60.55	-9.18	-69.73	-13.00	56.73	Horizontal
3466.00	-64.20	-3.88	-68.08	-13.00	55.08	Horizontal
Remark:						
1. The emission levels of below 1 GHz are lower than the limit 10dB, so not show in test report.						

LTE band 66 – 5 MHz bandwidth						
Lowest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
4225.00	-61.44	-2.15	-63.59	-13.00	50.59	Vertical
6337.50	-59.34	3.80	-55.54	-13.00	42.54	Vertical
8450.00	-57.88	5.86	-52.02	-13.00	39.02	Vertical
4225.00	-62.50	-2.22	-64.72	-13.00	51.72	Horizontal
6337.50	-59.59	3.86	-55.73	-13.00	42.73	Horizontal
8450.00	-58.95	6.07	-52.88	-13.00	39.88	Horizontal
Middle channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
4290.00	-61.53	-3.02	-64.55	-13.00	51.55	Vertical
6435.00	-59.35	3.17	-56.18	-13.00	43.18	Vertical
8580.00	-58.28	5.49	-52.79	-13.00	39.79	Vertical
4290.00	-62.00	-2.92	-64.92	-13.00	51.92	Horizontal
6435.00	-59.91	3.32	-56.59	-13.00	43.59	Horizontal
8580.00	-58.53	5.46	-53.07	-13.00	40.07	Horizontal
Highest channel						
Frequency (MHz)	Reading Level (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Polarization
4355.00	-61.40	-2.25	-63.65	-13.00	50.65	Vertical
6532.50	-59.82	4.23	-55.59	-13.00	42.59	Vertical
8710.00	-57.95	5.53	-52.42	-13.00	39.42	Vertical
4355.00	-62.03	-2.22	-64.25	-13.00	51.25	Horizontal
6532.50	-59.96	4.19	-55.77	-13.00	42.77	Horizontal
8710.00	-59.08	5.32	-53.76	-13.00	40.76	Horizontal
Remark:						
1. The emission levels of below 1 GHz are lower than the limit 10dB, so not show in test report.						

------End of report------