



Report No.: FG1D2927F

# FCC RADIO TEST REPORT

**FCC ID** : PU5-LN13WYD

**Equipment** : Notebook Computer

**Brand Name** : Lenovo

: Lenovo 13w Yoga **Model Name** : Wistron Corporation **Applicant** 

21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist,

New Taipei City 221, Taiwan

Manufacturer : Lenovo PC HK Limited.

23/F, Lincoln House, Taikoo Place, 979 King's Road,

Quarry Bay, Hong Kong, China

Standard : FCC 47 CFR Part 2, and 90(S)

Equipment: Fibocom L860-GL-16 tested inside of Lenovo Notebook Computer.

The product was received on Jan. 04, 2022 and testing was performed from Feb. 21, 2022 to Mar. 08, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Louis Wu

Sporton International Inc. Wensan Laboratory

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# History of this test report

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Report No.	Version	Description	Issued Date
FG1D2927F	01	Initial issue of report	Mar. 09, 2022

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## **Summary of Test Result**

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark	
3.2	§2.1046 §90.635	Conducted Output Power and Effective Radiated Power	Pass	-	
-	-	Peak-to-Average Ratio	-	See Note	
-	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	-	See Note	
-	§2.1051 §90.691	Emission masks – In-band emissions	-	See Note	
-	§2.1051 §90.691	Emission masks – Out of band emissions	-	See Note	
-	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	-	See Note	
3.3	§2.1053 §90.691	Field Strength of Spurious Radiation	Pass	Under limit 22.02 dB at 2455.000 MHz	

#### Note:

- 1. The module (Model: L860-GL-16) makes no difference after verifying output power, this report reuses test data from the module report.
- Conducted power was verified to be consistent with the original modular approval, so the output power level in the original modular grant is referenced in this report for determining ERP of this host product

#### **Declaration of Conformity:**

- 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: Sheng Kuo Report Producer: Lucy Wu

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# 1 General Description

# 1.1 Feature of Equipment Under Test

Product Feature						
Equipment	Notebook Computer					
Brand Name	Lenovo					
Model Name	Lenovo 13w Yoga					
FCC ID	PU5-LN13WYD					
Sample 1	EUT with AWAN Antenna					
Sample 2	EUT with WNC Antenna					
EUT supports Radios application	WCDMA/HSPA/LTE/GNSS					
EUT Stage	Production Unit					

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#### Remark:

- 1. The above EUT's information was declared by manufacturer.
- 2. Equipment: Fibocom L860-GL-16 tested inside of Lenovo Notebook Computer.

WWAN Antenna Information									
Main Antenna	Manufacturer	AWAN	Peak gain (dBi)	LTE Band 26: -2.99					
Wain Antenna	Part number	025.901Z3.0001	Туре	PIFA					
Main Antonno	Manufacturer	WNC	Peak gain (dBi)	LTE Band 26: -3.77					
Main Antenna	Part number	025.901YZ.0001	Туре	PIFA					

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

# 1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard							
Tx Frequency	814.7 ~ 823.3 MHz						
Rx Frequency	859.7 ~ 868.3 MHz						
Bandwidth	1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz						
Maximum Output Power to Antenna	22.93 dBm						
Type of Modulation	QPSK / 16QAM / 64QAM						

#### 1.3 Modification of EUT

No modifications are made to the EUT during all test items.

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## 1.4 Testing Site

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory					
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333					
Test Site No.	Sporton Site No.					
Test Site No.	TH03-HY (TAF Code: 1190)					
Test Engineer	HaoEn Zhang					
Temperature (°C)	22.1~23.4					
Relative Humidity (%)	51.8~55.6					
Remark	The Conducted test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory.					

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Test Site	Sporton International Inc. Wensan Laboratory			
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010			
Test Site No.	Sporton Site No.			
rest site No.	03CH13-HY			
Test Engineer	Yuan Lee, Jacky Hong and Peter Liao			
Temperature (°C)	20~25			
Relative Humidity (%)	50~60			

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

# 1.5 Applied Standards

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

- FCC 47 CFR Part 2, 90
- ANSI / TIA-603-E
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01
- Interim Guidance for Equipment Authorization of Devices with Channel Bandwidths Combined Across Two Contiguous Service Rule Allocations OET/Lab/EACB, June 6, 2013

#### Remark:

- All test items were verified and recorded according to the standards and without any deviation during the test.
- The TAF code is not including all the FCC KDB listed without accreditation.

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#### **Test Configuration of Equipment Under Test** 2

#### 2.1 **Test Mode**

During all testing, EUT is in link mode with base station emulator at maximum power level.

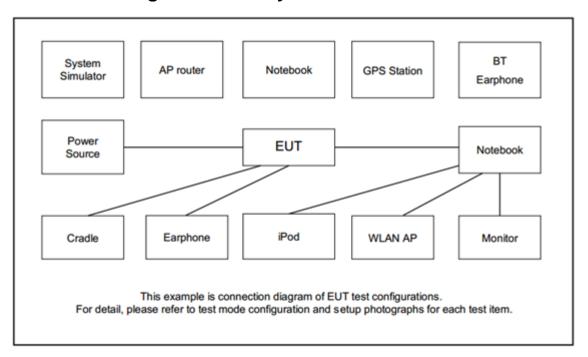
Frequency range investigated for radiated emission is 30 MHz to 9000 MHz.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in Tablet Type (three orthogonal axis (X: flat, Y: portrait, Z: landscape)) and Notebook Type, and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and find Notebook Type as worst plane.

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			_		/8.41							DD #		-	. 01	
Conducted	Band	Bandwidth (MHz)			Modulation			RB#			Test Channel					
Test Cases	Dana	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	Н
Max. Output Power	26	V	v	v	v	v	-	v	v	v	٧		V	٧	v	v
E.R.P.	26	٧	V	V	٧	V	-	V	V	V		N	lax. Po	ower		
Radiated																
Spurious	26	V		V	V		-	V			V			V	V	٧
Emission																
Remark	<ol> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz, ERP</li> </ol>									ERP						

## 2.2 Connection Diagram of Test System



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# 2.3 Support Unit used in test configuration and system

lt	em	Equipment	<b>Brand Name</b>	Model No.	FCC ID	Data Cable	Power Cord
1	1.	Earphone	SONY	MH750	N/A	Unshielded, 1.2m	N/A
2	2.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

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# 2.4 Frequency List of Low/Middle/High Channels

LTE Band 26 Channel and Frequency List										
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest						
45	Channel	26765	-	-						
15	Frequency	821.5	-	-						
10	Channel	-	26740	-						
10	Frequency	-	819	-						
5	Channel	26715	26740	26765						
5	Frequency	816.5	819	821.5						
3	Channel	26705	26740	26775						
3	Frequency	815.5	819	822.5						
1.4	Channel	26697	26740	26783						
1.4	Frequency	814.7	819	823.3						

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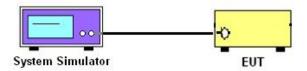
## 3 Conducted Test Items

# 3.1 Measuring Instruments

See list of measuring instruments of this test report.

## 3.1.1 Test Setup

## 3.1.2 Conducted Output Power



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#### 3.1.3 Test Result of Conducted Test

Please refer to Appendix A.

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## 3.2 Conducted Output Power Measurement and ERP Measurement

# 3.2.1 Description of the Conducted Output Power Measurement and ERP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

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The conducted output power of mobile transmitters must not exceed 100 Watts for LTE Band 26.

According to KDB 412172 D01 Power Approach,

 $EIRP = P_T + G_T - L_C$ , where

 $P_T$  = transmitter output power in dBm

 $G_T$  = gain of the transmitting antenna in dBi

L<sub>C</sub> = signal attenuation in the connecting cable between the transmitter and antenna in dB

#### 3.2.2 Test Procedures

- 1. The transmitter output port was connected to the system simulator.
- 2. Set EUT at maximum power through system simulator.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure and record the power level from the system simulator.

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## 3.3 Field Strength of Spurious Radiation Measurement

#### 3.3.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

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The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43+10log<sub>10</sub>(P[Watts]) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 3.3.2 Test Procedures

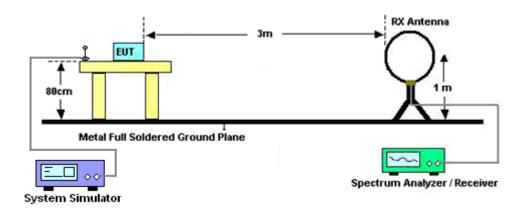
- 1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- 5. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
- 6. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
- 7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 9. Taking the record of output power at antenna port.
- 10. Repeat step 7 to step 8 for another polarization.
- 11. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 12. ERP (dBm) = EIRP 2.15
- 13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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## 3.3.3 Test Setup

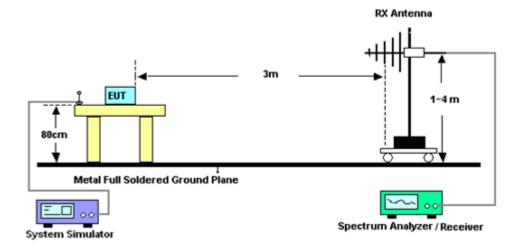
#### For radiated test below 30MHz



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#### For radiated test from 30MHz to 1GHz

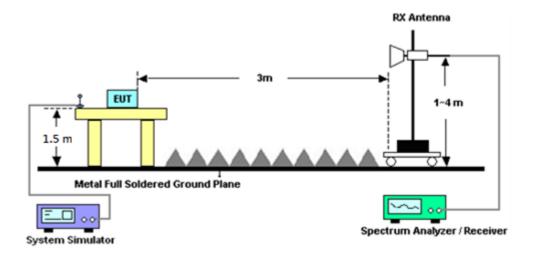
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#### For radiated test above 1GHz



#### 3.3.4 Test Result of Field Strength of Spurious Radiated

Please refer to Appendix B.

#### Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

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#### **List of Measuring Equipment** 4

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9kHz~30MHz	Sep. 07, 2021	Feb. 28, 2022~ Mar. 08, 2022	Sep. 06, 2022	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103 & 07	30MHz~1GHz	Apr. 28, 2021	Feb. 28, 2022~ Mar. 08, 2022	Apr. 27, 2022	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00802 N1D01N-06	54682 & AT-N0603	30MHz~1GHz	Sep. 09, 2021	Feb. 28, 2022~ Mar. 08, 2022	Sep. 08, 2022	Radiation (03CH13-HY)
Amplifier	Sonoma-Instru ment	310 N	187282	9kHz~1GHz	Dec. 15, 2021	Feb. 28, 2022~ Mar. 08, 2022	Dec. 14, 2022	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz~18GHz	May 18, 2021	Feb. 28, 2022~ Mar. 08, 2022	May 17, 2022	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Jul. 13, 2021	Feb. 28, 2022~ Mar. 08, 2022	Jul. 12, 2022	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 18, 2021	Feb. 28, 2022~ Mar. 08, 2022	May 17, 2022	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 26, 2021	Feb. 28, 2022~ Mar. 08, 2022	Oct. 25, 2022	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2021	Feb. 28, 2022~ Mar. 08, 2022	Mar. 17, 2022	Radiation (03CH13-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Dec. 08, 2021	Feb. 28, 2022~ Mar. 08, 2022	Dec. 07, 2022	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0SS	SN2	3GHz High Pass Filter	Jul. 12, 2021	Feb. 28, 2022~ Mar. 08, 2022	Jul. 11, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 11, 2021	Feb. 28, 2022~ Mar. 08, 2022	Mar. 10, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Feb. 28, 2022~ Mar. 08, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30MHz~18GHz	Feb. 09, 2022	Feb. 28, 2022~ Mar. 08, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30MHz~18GHz	Feb. 09, 2022	Feb. 28, 2022~ Mar. 08, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP200889	N/A	Sep. 30, 2021	Feb. 28, 2022~ Mar. 08, 2022	Sep. 29, 2022	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Feb. 28, 2022~ Mar. 08, 2022	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Feb. 28, 2022~ Mar. 08, 2022	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Feb. 28, 2022~ Mar. 08, 2022	.N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-000992	N/A	N/A	Feb. 28, 2022~ Mar. 08, 2022	N/A	Radiation (03CH13-HY)
Radio Communicatio n Analyzer	Anritsu	MT8821C	6262025341	LTE FDD/TDD LTE-2CC ULCA/DLCA	Oct. 05, 2021	Feb. 21, 2022~ Feb. 25, 2022	Oct. 04, 2022	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Jul. 13, 2021	Feb. 21, 2022~ Feb. 25, 2022	Jul. 12, 2022	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 07, 2022	Feb. 21, 2022~ Feb. 25, 2022	Jan. 06, 2023	Conducted (TH03-HY)

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# 5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.45 dB

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#### **Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)**

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.73 dB
Confidence of 95% (U = 20C(y))	

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# **Appendix A. Test Results of Conducted Test**

# Conducted Output Power(Average power & ERP)

	LTE E	Band 26 Ma	aximum A	verage Pov	ver [dBm]	(GT - LC =	-2.99 dB)		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)	
15	1	0		22.92	-	-			
15	1	74	QPSK	22.69	-	-	17.78	0.0600	
15	75	0		21.63	-	-			
15	1	0	16-QAM	21.96	-	-	16.82	0.0481	
15	1	0	64-QAM	20.68	-	-	15.54	0.0358	
Limit Conducted power < 100W				Result			Pass		

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	LTE Band 26 Maximum Average Power [dBm] (GT - LC = -2.99 dB)												
BW [MHz]	RB Size	B Size RB Offset Mod Lowest Middle Highest ERP (dBm) ERP (W)											
10	1	0	QPSK	ı	22.93	-	17.79	0.0601					
10	1	0	16-QAM	-	21.72	-	16.58	0.0455					
10	1	0	64-QAM	-	20.89	-	15.75	0.0376					
Limit	Conduc	ted power	< 100W	Result Pass									

	LTE Band 26 Maximum Average Power [dBm] (GT - LC = -2.99 dB)											
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)				
5	1	0	QPSK	22.63	22.89	22.89	17.75	0.0596				
5	1	0	16-QAM	21.86	22.36	21.85	17.22	0.0527				
5	1	0	64-QAM	20.96	20.72	21.23	16.09	0.0406				
Limit Conducted power < 100W					Result	Pass						

	LTE Band 26 Maximum Average Power [dBm] (GT - LC = -2.99 dB)											
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)				
3	1	0	QPSK	22.63	22.86	22.92	17.78	0.0600				
3	1	0	16-QAM	21.72	22.58	21.68	17.44	0.0555				
3	1	0	64-QAM	20.78	21.63	20.69	16.49	0.0446				
Limit Conducted power < 100W					Result	Pass						

	LTE Band 26 Maximum Average Power [dBm] (GT - LC = -2.99 dB)											
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)				
1.4	1	0	QPSK	22.69	22.21	22.85	17.71	0.0590				
1.4	1	0	16-QAM	21.85	22.36	22.18	17.22	0.0527				
1.4	1	0	64-QAM	20.69	21.21	21.25	16.11	0.0408				
Limit Conducted power < 100W					Result	Pass						

# **Appendix B. Test Results of Radiated Test**

# LTE Band 26

Report No.: FG1D2927F

			Lī	ΓΕ Band 26 /	1.4MHz / QI	PSK			
Channel	Frequency (MHz)	ERP (dBm)	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
	1628	-41.02	-13	-28.02	-56.7	-41.86	6.31	9.30	Н
	2442	-37.12	-13	-24.12	-54.59	-37.31	7.87	10.21	Н
	3257	-55.97	-13	-42.97	-75.84	-56.56	9.07	11.81	Н
									Н
									Н
Lowest									Н
Lowest	1628	-43.80	-13	-30.80	-59.48	-44.64	6.31	9.30	V
	2442	-36.45	-13	-23.45	-53.78	-36.64	7.87	10.21	V
	3257	-55.68	-13	-42.68	-75.68	-56.27	9.07	11.81	V
									V
									V
									V
	1637	-39.55	-13	-26.55	-55.34	-40.40	6.33	9.33	Н
	2455	-35.02	-13	-22.02	-52.44	-35.21	7.94	10.28	Н
	3274	-55.89	-13	-42.89	-75.79	-56.54	9.11	11.91	Н
									Н
									Н
Middle									Н
Middle	1637	-42.49	-13	-29.49	-58.28	-43.34	6.33	9.33	V
	2455	-36.45	-13	-23.45	-53.72	-36.64	7.94	10.28	V
	3274	-55.79	-13	-42.79	-75.8	-56.44	9.11	11.91	V
									V
									V
									V

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		1		1	I	ı		I	
	1645	-40.27	-13	-27.27	-56.15	-41.14	6.34	9.36	Н
	2468	-35.74	-13	-22.74	-53.09	-35.92	8.01	10.34	Н
	3291	-56.06	-13	-43.06	-75.97	-56.77	9.14	12.00	Н
									Н
									Н
									Н
Highest	1645	-42.98	-13	-29.98	-58.86	-43.85	6.34	9.36	V
	2468	-36.38	-13	-23.38	-53.57	-36.56	8.01	10.34	V
	3291	-55.71	-13	-42.71	-75.72	-56.42	9.14	12.00	V
									V
									V
									V

Report No.: FG1D2927F

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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LTE Band 26 / 5MHz / QPSK Over **SPA** S.G. TX Cable **TX Antenna** Frequency **ERP** Limit **Polarization** Channel Limit Reading **Power** loss Gain (MHz) (dBm) (dBm) (H/V) (dB) (dBm) (dBm) (dB) (dBi) 1628 -41.77 -13 -28.77 -57.45 -42.61 6.31 9.30 Н 10.22 Н 2443 -35.60 -13 -22.60 -53.07 -35.80 7.87 -56.00 -13 -75.87 3257 -43.00 -56.59 9.07 11.81 Η Н Н Н Lowest 1628 -42.86 -13 -29.86 -58.54 -43.70 6.31 9.30 V -37.52 V 2443 -13 -24.52 -54.84 -37.72 7.87 10.22 ٧ 3257 -13 -43.01 -76.01 9.07 -56.01 -56.60 11.81 ٧ ٧ ٧ -39.92 -55.66 Н 1633 -13 -26.92 -40.77 6.32 9.32 10.25 Н 2450 -35.54 -13 -22.54 -52.97 7.91 -35.73 -13 -42.69 -75.58 9.09 Н 3267 -55.69 -56.32 11.87 Н Η Η Middle ٧ 1633 -42.93 -13 -29.93 -58.68 -43.78 6.32 9.32 2450 -13 -53.19 7.91 ٧ -35.91 -22.91 -36.10 10.25 3267 -55.82 -13 -42.82 -75.83 -56.45 9.09 11.87 ٧ V V V

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		1		1	I	I	I		
	1638	-40.65	-13	-27.65	-56.45	-41.50	6.33	9.33	Н
	2458	-35.39	-13	-22.39	-52.79	-35.58	7.95	10.29	Н
	3277	-55.92	-13	-42.92	-75.82	-56.58	9.11	11.92	Н
									Η
									Η
									Н
Highest	1638	-42.66	-13	-29.66	-58.46	-43.51	6.33	9.33	V
	2458	-36.60	-13	-23.60	-53.84	-36.79	7.95	10.29	V
	3277	-56.06	-13	-43.06	-76.07	-56.72	9.11	11.92	V
									V
									V
									V

Report No.: FG1D2927F

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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			Ľ	TE Band 26	/ 10MHz / QF	PSK			
Channel	Frequency ( MHz )	ERP (dBm)	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
	1629	-40.35	-13	-27.35	-56.04	-41.18	6.32	9.30	Н
	2443	-35.95	-13	-22.95	-53.42	-36.15	7.87	10.22	Н
	3258	-55.77	-13	-42.77	-75.64	-56.37	9.07	11.82	Н
									Н
									Н
Middle									Н
Middle	1629	-43.76	-13	-30.76	-59.45	-44.59	6.32	9.30	V
	2443	-37.33	-13	-24.33	-54.65	-37.53	7.87	10.22	V
	3258	-55.78	-13	-42.78	-75.78	-56.38	9.07	11.82	V
									V
									V
									V

Report No.: FG1D2927F

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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