

FCC&ISED RF Test Report

Product Name: Smart Phone

Model Number: LYA-L29, LYA-L09

Report No.: SYBH(Z-RF)20180706013002-2004

FCC ID: QISLYA-LX9 IC: 6369A-LYALX9

Reliability Laboratory of Huawei Technologies Co., Ltd.

(Global Compliance and Testing Center of Huawei Technologies Co., Ltd)

Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C Tel: +86 755 28780808 Fax: +86 755 89652518

Notice

1. The laboratory has passed the accreditation by China National Accreditation Service for Conformity Assessment (CNAS). The accreditation number is L0310.

2. The laboratory has passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01.

3. The laboratory has been recognized by the US Federal Communications Commission (FCC) to perform compliance testing subject to the Commission's Certification rules. The Designation Number is CN1173, and the Test Firm Registration Number is 294140.

4. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 6369A-1.

5. The laboratory (Reliability Lab of Huawei Technologies Co., Ltd) is also named "Global

Compliance and Testing Center of Huawei Technologies Co., Ltd", the both names have coexisted since 2009.

6. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

7. The test report is invalid if there is any evidence of erasure and/or falsification.

8. The test report is only valid for the test samples.

9. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.



Applicant:	Huawei Technologies Co., Ltd.
Address:	Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
	Bantian, Longgang District, Shenzhen, 518129, P.R.C

Date of Receipt Sample:	2018-08-03
Start Date of Test:	2018-08-03
End Date of Test:	2018-08-27

Test Result: Pass

Approved by Senior	2018-08-30	He Hao	He Hao
Engineer:	Date	Name	Signature

Prepared by:	2018-08-29	zhoulingbo	Zhou ling bo
	Date	Name	Signature



CONTENT

1	Genera	I Information	5
	1.1	Applied Standard	5
	1.2	Test Location	
	1.3	Test Environment Condition	5
2	Test Su	mmary	6
3	Descrip	tion of the Equipment under Test (EUT)	7
	3.1	General Description	7
	3.2	EUT Identity	8
	3.3	Technical Description	9
4	Genera	I Test Conditions / Configurations10	0
	4.1	EUT Configurations	0
	4.2	Test Environments	0
	4.3	Test Setups	1
	4.4	Test Conditions	4
5	Main Te	est Instruments10	6
6	Measur	ement Uncertainty1	7
7	Append	ixes1	7



1 General Information

1.1 Applied Standard	
Applied Rules:	47 CFR FCC Part 2, Subpart J
	47 CFR FCC Part 15, Subpart C
	ISED RSS-Gen (Issue 5, April 2018)
	ISED RSS-247 (Issue 2, February 2017)
Test Method:	FCC KDB 558074 D01 DTS Meas Guidance v04
	ANSI C63.10-2013, American National Standard for Testing Unlicensed
	Wireless Devices.
1.2 Test Location	
Test Location :	Reliability Laboratory of Huawei Technologies Co., Ltd.
Address1:	Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
	Bantian, Longgang District, Shenzhen, 518129, P.R.C
Address2:	No.2 New City Avenue Songshan Lake Sci. &Tech. Industry Park, Dongguan,
	Guangdong, P.R.C
1.3 Test Environment Co	ndition
Ambient Temperature:	19.5to 25 °C
Ambient Relative Humidity:	40 to 55 %
Atmospheric Pressure:	Not applicable



2 Test Summary

Test Item	FCC Rule No.	ISED Rule No.	Requirements	Test Result	Verdi ct	Test Addres s
DTS (6 dB) Bandwidth	15.247(a)(2)	RSS-247, 5.2	≥ 500 kHz.	Appendix A	Pass	Addres s 1
Occupied Bandwidth		RSS-247, 5.2 RSS-Gen, 6.7	No limit.	Appendix B	Pass	Addres s 1
Duty Cycle	KDB 558074 D01 (6.0)	KDB 558074 D01(6.0)	No limit.	Appendix C	Pass	Addres s 1
Maximum Conducted Average Output Power	15.247(b)(3)	RSS-247, 5.4	FCC: For directional gain: Conducted < 30 dBm – (G[dBi] – 6 [dB]); Otherwise: Conducted < 30 dBm, ISED: Conducted < 30 dBm. EIRP< 36 dBm,	Appendix D	Pass	Addres s 1
Maximum Power Spectral Density Level	15.247(e)	RSS-247, 5.2	Conducted < 8 dBm/3 kHz.	Appendix E	Pass	Addres s 1
Band Edges Compliance			< -30 dBr/100 kHz if total	Appendix F	Pass	Addres s 1
Unwanted Emissions into Non-Restricted Frequency Bands	15.247(d)	RSS-247, 5.5	average power ≤ power limit.	Appendix G	Pass	Addres s 1
Unwanted Emissions into Restricted Frequency Bands (Radiated)	15.247(d) 15.209 (NOTE 1)	RSS-247, 5.5 RSS-Gen, 6.13 RSS-Gen, 8.10	FCC Part 15.209 field strength limit; RSS-Gen 8.10 Field strength limit.	Appendix H	Pass	Addres s 2
AC Power Line Conducted Emissions	15.207	RSS-Gen, 8.8	FCC Part 15.207 conducted limit; RSS-Gen, 8.8 conducted limit.	Appendix I	Pass	Addres s 2
NOTE : According to KDB 558074 D01, antenna-port conducted measurements are acceptable as an alternative to radiated measurements for demonstrating compliance to the limits in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an						



Test Item	FCC Rule No.	ISED Rule No.	Requirements	Test Result	Verdi ct	Test Addres s
additional	radiated test for	cabinet/case emi	ssions will also be required.			

3 Description of the Equipment under Test (EUT)

3.1 General Description

LYA-L29 is a subscriber equipment in the GSM/WCDMA/LTE system. The GSM frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900.The UMTS frequency band is B1 and B2 and B4 and B5 and B6 and B8 and B19. The LTE frequency band is B1 and B2 and B3 and B4 and B5 and B6 and B7 and B8 and B9 and B12 and B17 and B18 and B19 and B20 and B26 and B28 and B32 and B34 and B38 and B39 and B40 and B41. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, Bluetooth, NFC, Wi-Fi and Wirelessly Charging etc. LYA-L29 is a dual SIM smart phone, and one of the SIM card interfaces could be used as HUAWEI nano SD card interface. Externally it provides type C USB charging port, and the port could be used as the earphone port or data-transfer port.

LYA-L09 is a subscriber equipment in the GSM/WCDMA/LTE system. The GSM frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900. The UMTS frequency band is B1 and B2 and B4 and B5 and B6 and B8 and B19. The LTE frequency band is B1 and B2 and B3 and B4 and B5 and B6 and B7 and B8 and B9 and B12 and B17 and B18 and B19 and B20 and B26 and B28 and B32 and B34 and B38 and B39 and B40 and B41. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, Bluetooth, NFC, Wi-Fi and Wirelessly Charging etc. LYA-L09 provides one SIM card interface and one HUAWEI nano SD card interface. Externally it provides type C USB charging port, and the port could be used as the earphone port or data-transfer port.

The difference between LYA-L29 and LYA-L09:

The only difference between LYA-L29 and LYA-L09 is that LYA-L09 deletes into single SIM card by software. Other parts of the two models are the same.

NOTE1: Only Bluetooth BLE test data included in this report. NOTE 2: We do not test the data of LYA-L09, all test data share the LYA-L29



3.2 EUT Identity

NOTE: Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list, but not means all the functional boards listed below shall be installed in one unit.

3.2.1 Board

	Board	
Description	Software version	Hardware version
Main Board	9.0.0.82(C432E82R1P7)	HL2LAYAM

3.2.2 Sub-Assembly

	Sub-Assembly			
Sub-Assembly Name	Model	Manufacturer	Description	
Adapter	HW-100400A00	Huawei Technologies Co.,Ltd.	Input Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V === 2A OR9V === 2A OR 10V === 4A	
Adapter	HW-100400U00	Huawei Technologies Co.,Ltd.	nput Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V === 2A OR9V === 2A OR 10V === 4A	
Adapter	HW-100400E00	Huawei Technologies Co.,Ltd.	nput Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V === 2A OR9V === 2A OR 10V === 4A	
Adapter	HW-100400B00	Huawei Technologies Co.,Ltd.	Input Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V === 2A OR9V === 2A OR 10V === 4A	
Li-ion Polymer Battery	HB486486ECW	Huawei Technologies Co.,Ltd.	Rated capacity: 4100mAh Nominal Voltage: +3.82V Charging Voltage: +4.4V	



3.3 Technical Description

Characteristics	Description			
TX/RX Operating	2400-2483.5	fc = 2402 MHz + N * 2 MHz, where:		
Range	MHz band	- fc = "Operating Frequency" in MHz,		
		- N = "Channel Number" with the range from 0 to 39.		
Modulation Type	Digital	GFSK,		
Emission Designator	GFSK for BT 4.2	GFSK for BT 4.2: 1M03FXD; GFSK for BT 5.0: 2M06FXD		
Bluetooth Power Class	Class 1			
Antenna Description	Isotropic Antenn	Isotropic Antenna		
Antenna Type	🗌 External, 🛛 Integrated			
Antenna Gain	-1.19 dBi (per antenna port, max.)			
Power Supply	🛛 AC/DC Adap	oter DPoE: DOther:		



4 General Test Conditions / Configurations

4.1 EUT Configurations

4.1.1 General Configurations

Configuration	Description	
Test Antenna Ports	Intil otherwise specified,	
	- All TX tests are performed at all TX antenna ports of the EUT, and	
	- All RX tests are performed at all RX antenna ports of the EUT.	
Multiple RF Sources	Other than the tested RF source of the EUT, other RF source(s) are disabled or shutdown	
	during measurements.	

4.1.2 Customized Configurations

# EUT Conf.	Signal Description	Operating Frequency	Duty cycle
TM1_Ch0	GFSK for BT 4.2 modulation, package type DH5, hopping off.	Ch No. 0 / 2402 MHz	60.8%
TM1_Ch19	GFSK for BT 4.2 modulation, package type DH5, hopping off.	Ch No. 19 / 2440 MHz	60.8%
TM1_Ch39	GFSK for BT 4.2 modulation, package type DH5, hopping off.	Ch No. 39 / 2480 MHz	60.8%
TM2_Ch0	GFSK for BT 5.0 modulation, package type DH5, hopping off.	Ch No. 0 / 2402 MHz	57.1
TM2_Ch19	GFSK for BT 5.0 modulation, package type DH5, hopping off.	Ch No. 19 / 2440 MHz	57.1
TM2_Ch39	GFSK for BT 5.0 modulation, package type DH5, hopping off.	Ch No. 39 / 2480 MHz	57.1

4.2 Test Environments

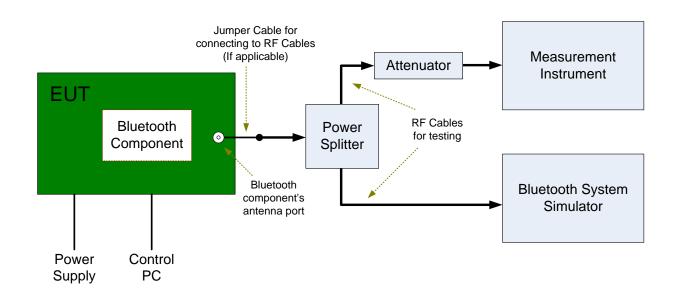
NOTE: The values used in the test report may be stringent than the declared.

Environment Parameter	Selected Values During Tests		
	Temperature	Voltage	Relative Humidity
NTNV	Ambient	3.82 VDC	Ambient

4.3 Test Setups

4.3.1 Test Setup 1

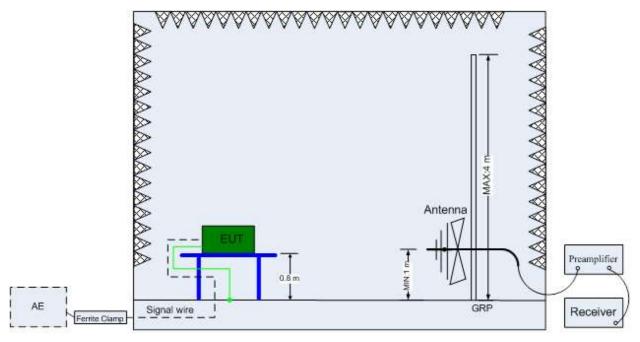
The Bluetooth component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by Bluetooth System Simulator and/or PC/software to emit the specified signals for the purpose of measurements.



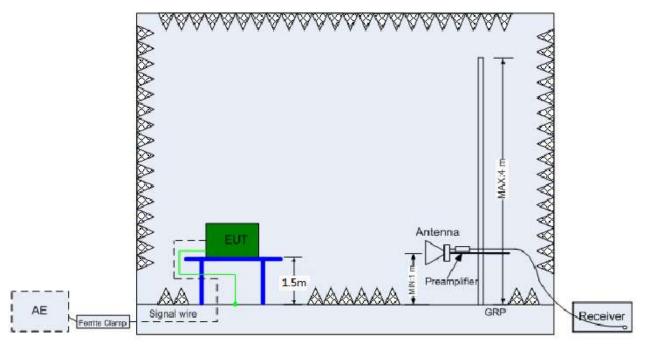
4.3.2 Test Setup 2

The semi-anechoic chamber and full-anechoic chamber has met the requirement of ANSI C63.4. The test distance is 3m.The setup is according to ANSI C63.4 and CAN/CSA-CEI/IEC CISPR 22.

The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).



(Below 1 GHz)



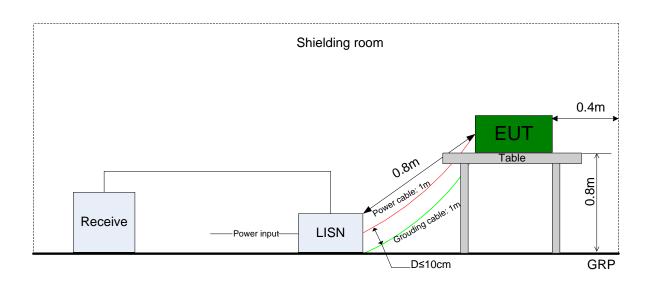
(Above 1 GHz)



4.3.3 Test Setup 3

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.



4.4 Test Conditions

Configuration Description 6dB Emission Meas. Method FCC KDB 558074 D01 §8.1 Option 2. Bandwidth (EBW) Test Env. NTNV Test Env. Test Setup Test Setup Cocupied Meas. Method FCC KDB 558074 D01 §8.2 Option 2. Bandwidth Test Env. TM2_Ch0, TM2_Ch19, TM2_Ch39. Occupied Meas. Method FCC KDB 558074 D01 §8.2 Option 2. Bandwidth Test Env. TMV Test Env. TMV_Ch0, TM1_Ch19, TM1_Ch39. Maximum Meas. Method FCC KDB 558074 D01 §9.2 2.4 Conducted Average Test Env. NTNV Output Power Test Env. NTNV Test Setup Test Setup 1 EUT Conf. Test Setup Test Setup 1 EUT Conf. Spectral Density Test Setup Test Setup 1 Level Test Setup Test Setup Test Setup Test Setup Test Setup Test Setup Test Setup Test Setup Test Setup Test Setup 1 EUT Conf. TM1_Ch0	Test Case	Test Conditions	;		
Bandwidth (EBW) Test Env. NTNV Test Setup Test Setup 1 EUT Conf. TM1_ch0, TM1_ch19, TM1_ch39. Cocupied Meas. Method FCC KDB 558074 Do1 §8.2 Option 2. Bandwidth Test Env. NTNV Test Setup Test Setup 1 EUT Conf. Maximum Meas. Method FCC KDB 558074 Do1 §9.2 .2 .4 Conducted Average Test Env. NTNV Output Power Test Setup Test Setup 1 EUT Conf. TM1_ch0, TM1_ch19, TM1_ch39. Maximum Power Meas. Method FCC KDB 55074 Do1 §10.1 Spectral Density Test Setup Test Setup 1 Level Test Setup Test Setup 1 EUT Conf. TM1_ch0, TM1_ch19, TM1_ch39. Maximum Power Meas. Method FCC KDB 55074 Do1 §10.1 Spectral Density Test Setup 1 EUT Conf. EUT Conf. TM1_ch0, TM1_ch19, TM1_ch39. </td <td></td> <td>Configuration</td> <td>Description</td> <td></td>		Configuration	Description		
Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch3, TM2_Ch39.OccupiedMeas. MethodFCC KD5 558074 D01 §3.2 Option 2.BandwidthTest Env.NTNVTest Env.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39.MaximumMeas. MethodFCC KD5 558074 D01 §3.2 Option 2.MaximumMeas. MethodFCC KD5 558074 D01 §3.2 Option 2.MaximumMeas. MethodFCC KD5 558074 D01 §3.2 .4Conducted AverageTest Env.NTNVOutput PowerTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum PowerMeas. MethodFCC KD5 558074 D01 §10.1Spectral DensityTest SetupTest SetupTest SetupEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum PowerMeas. MethodFCC KD5 558074 D01 §10.1Spectral DensityTest SetupTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KD5 558074 D01 §11.0Emissions intoTest SetupTest SetupTest Setup 1Frequency BandsTest SetupFrequency BandsTest SetupFrequency BandsTest SetupTest SetupTest Setup 1Frequency BandsTest SetupFrequency BandsMeas. MethodANSI Ce3.10; FCC KDB 558074 D01 §12.1, RadiatedInvantedMeas. MethodANSI Ce3.10; FCC	6dB Emission	Meas. Method	FCC KDB 558074 D01 §8.1 Option 2.		
EUT Conf. TM1_Ch0, TM1_Ch3, TM1_Ch39. TM2_Ch0, TM2_Ch39. Occupied Meas. Method FCC KD5 55074 D01 §8.2 Option 2. Bandwidth Test Env. NTNV Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39. Maximum Meas. Method FCC KD5 558074 D01 §9.2.2.4 Conducted Average Test Env. NTNV Output Power Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39. Maximum Power Test Setup Test Setup 1 Test Setup 1 Spectral Density Test Env. NTNV Test Setup 1 Levrel Test Setup 1 Test Setup 1 Test Setup 1 EuT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39. Band edge spurious Meas. Method FCC KDB 558074 D01 §13.0. emission Test Setup Test Setup 1 Test Setup 1 EuT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM1_Ch12. Unwanted Meas. Method FCC KDB 558074 D01 §11.0	Bandwidth (EBW)	Test Env.	NTNV		
Image: matrix for the second		Test Setup	Test Setup 1		
Occupied Bandwidth Meas. Method FCC KDB 558074 D01 §8.2 Option 2. Bandwidth Test Env. NTNV Test Setup Test Setup Test Setup.1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Maximum Meas. Method FCC KDB 558074 D01 §9.2.2.4 Conducted Average Test Env. NTNV Output Power Test Setup Test Setup.1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Maximum Power Test Setup Test Setup.1 Spectral Density Test Env. NTNV Level Test Setup Test Setup.1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39. Test Setup.1 Euro Test Setup.1 Test Setup.1 Level Test Setup Test Setup.1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39. Test Setup.1 EUT Conf. TM1_Ch0, TM1_Ch39. Unwanted Meas. Method FCC KDB 558074 D01 §13.0. Euro Conf. TM1_Ch0, TM1_Ch39. TM1_Ch0, TM1_Ch39.		EUT Conf.	TM1_Ch0, TM1_Ch19, TM1_Ch39.		
BandwidthTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.MaximumMeas. MethodFCC KDB 558074 D01 §9.2.2.4Conducted AverageTest Env.NTNVOutput PowerTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum PowerMeas. MethodFCC KDB 558074 D01§10.1Spectral DensityTest SetupTest Setup 1LevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39.Maximum PowerMeas. MethodFCC KDB 558074 D01§10.1Spectral DensityTest SetupTest Setup 1LevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39.Band edge spuriousMeas. MethodFCC KDB 558074 D01§11.0.emissionTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Tract_Ch0, TM2_Ch0, TM2_Ch39.UnwantedMeas. MethodFrequency BandsEUT Conf.Test SetupTest Setup 1Test SetupTest Setup 1			TM2_Ch0, TM2_Ch19, TM2_Ch39.		
Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Maximum Meas. Method FCC KDB 558074 D01 §9.2.2.4 Conducted Average Test Setup Test Setup Output Power Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Maximum Power Meas. Method FCC KDB 558074 D01 §10.1 Spectral Density Test Setup Test Setup 1 Level Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39. TM2_Ch0.1 Spectral Density Test Env. NTNV Level Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Test Setup Test Setup 1 Test Setup 1 Test Setup Test Setup 1 Test Setup 1 Test Setup Test Setup 1 Test Setup 1 Unwanted Meas. Method FCC KDB 558074 D01§13.0. EUT Conf. TM1_Ch0, TM1_Ch39. TM1_Ch0, TM1_Ch39. Unwanted Test Env. NTNV </td <td>Occupied</td> <td>Meas. Method</td> <td>FCC KDB 558074</td> <td>D01 §8.2 Option 2.</td>	Occupied	Meas. Method	FCC KDB 558074	D01 §8.2 Option 2.	
EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch39. Maximum Meas. Method FCC KDB 558074 D01 §9.2.2.4 Conducted Average Test Env. NTNV Output Power Test Setup Test Setup Test Setup Raximum Power Meas. Method FCC KDB 558074 D01 §10.1 Statum Spectral Density Meas. Method FCC KDB 558074 D01§10.1 Statum Spectral Density Test Setup Test Setup 1 Test Setup Level Test Setup Test Setup 1 Test Setup Band edge spurious Meas. Method FCC KDB 558074 D01§13.0. Test Setup Test Env. NTNV Test Setup Test Setup Test Setup Test Setup 1 Test Setup Test Setup Test Env. NTNV Test Setup Test Setup Test Setup Test Setup 1 Test Setup Test Setup Test Setup Test Setup 1 Test Setup Test Setup Unwanted Meas. Method FCC KDB 558074 D01§11.0 Test Setup Test Setup Test Setup	Bandwidth	Test Env.	NTNV		
MaximumMeas. MethodFCC KDB 558074 D01 §9.2.2. 4Conducted Average Conducted AverageTest Env.NTNVOutput PowerTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum Power Spectral Density 		Test Setup	Test Setup 1		
MaximumMeas. MethodFCC KDB 558074 D01 §9.2.2.4Conducted Average Output PowerTest Eruv.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum Power Spectral Density LevelMeas. MethodFCC KDB 558074 D01§10.1Test SetupTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM1_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39.TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Unwanted Emissions intoMeas. MethodFCC KDB 558074 D01§11.0Trest SetupTest Setup 1Eut Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39.Unwanted Emissions intoTest SetupTest SetupTest Setup 1Frequency Bands (Radiated)Meas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedTrequency Bands (Radiated)Test Setup 2Frequency Bands (Radiated)EUT Conf.Test Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0, Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch0, Worst Conf.).1-3 GHzTM1_Ch0, Worst Conf.).30 MHz -1		EUT Conf.	TM1_Ch0, TM1_C	h19, TM1_Ch39.	
Conducted Average Output PowerTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum Power Spectral Density LevelMeas. MethodFCC KDB 558074 D01§10.1Test SetupTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39.TM2_Ch0, TM2_Ch19, TM2_Ch39.Test Setup 1Eutr Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency Bands (Radiated)Test SetupTest Setup 1UnwantedMeas. MethodANSI CG3.10; FCC KDB 558074 D01§12.1, RadiatedEmissions into RestrictedTest SetupTest Setup 2UnwantedMeas. MethodANSI CG3.10; FCC KD 558074 D01§12.1, RadiatedEmissions into (Radiated)Test Setup 2Test Setup 2Frequency Bands (Radiated)EUT Conf.Test Setup 2Frequency Bands (Radiated)Test Setup 2TM1_Ch0, TM1_Ch19, TM1_Ch39. 3-18 GHzTM1_Ch0 (Worst Conf.).13-0 GHzTM1_Ch0; Worst Conf.).1-3 GHzTM1_Ch0; Worst Conf.).30 MHz -1 GHzTM1_Ch0; Worst Conf.).30 MHz -1 GHzTM2_Ch0; Worst Conf.).			TM2_Ch0, TM2_C	h19, TM2_Ch39.	
Output PowerTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum PowerMeas. MethodFCC KDB 558074 D01§10.1Spectral Density LevelTest Env.NTNVLevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test SetupTest Setup 1Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency Bands (Radiated)Test Setup 1Frequency Bands (Radiated)Meas. MethodANSI CG3.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM1_Ch19, TM1_Ch39. TM3_Ch0, TM1_Ch19, TM1_Ch39. TM3_Ch13, GH2TM1_Ch0 (Worst Conf.). TM3_Ch10,	Maximum	Meas. Method	FCC KDB 558074	D01 §9.2 .2. 4	
EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39, TM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum Power Spectral Density LevelMeas. MethodFCC KDB 558074 D01§10.1Test Env.NTNVLevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFrequency BandsFCC KDB 558074 D01§11.0UnwantedMeas. MethodFrequency BandsEUT Conf.Test SetupTest Setup 1Frequency BandsEUT Conf.Test Env.NTNVRestrictedTest SetupTest SetupTest Setup 2Frequency BandsEUT Conf.Mass MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupFrequency BandsEUT Conf.Mass MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedFrequency BandsTest Env.NTNVRestrictedTest SetupFrequency BandsSetup(Radiated)SetupMass MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedTest SetupTest Setup 2Frequency BandsTest Setup(Radiated)Test Setup<	Conducted Average	Test Env.	NTNV		
Image: Mass MethodTM2_Ch0, TM2_Ch19, TM2_Ch39.Maximum Power Spectral Density LevelMeas. MethodFCC KDB 558074 D01§10.1Test Env.NTNVLevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest Env.NTNVRestrictedTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.). 1-3 GHz(Radiated)S0 HHz -1 GHZTM1_Ch0 (Worst Conf.). 18-26.5 GHzTM1_Ch0 (Worst Conf.). 18-26.5 GHz30 MHz -1 GHZTM2_Ch0 (Worst Conf.). 18-26.5 GHzTM1_Ch0 (Worst Conf.).	Output Power	Test Setup	Test Setup 1		
Maximum Power Spectral Density LevelMeas. MethodFCC KDB 558074 D01§10.1Test Env.NTNVLevelTest SetupEUT Conf.Test Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.Test Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.Non-RestrictedTest SetupFrequency BandsEUT Conf.Test Env.NTNVUnwantedMeas. MethodMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.Non-RestrictedTest SetupTest SetupTest Setup 1Frequency BandsEUT Conf.Test Env.NTNVRestrictedTest Env.Test SetupTest Setup 2Frequency BandsEUT Conf.RestrictedTest SetupTest SetupTest Setup 2Frequency BandsEUT Conf.RestrictedTest SetupTest SetupTest Setup 2Frequency BandsEUT Conf.1-3 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0 (Worst Conf.).3-18 GHzTM1_Ch0 (Worst Conf.).3-18 GHzTM1_Ch0 (Worst Conf.).3-18 GHzTM1_Ch0 (Worst Conf.). <td></td> <td>EUT Conf.</td> <td>TM1_Ch0, TM1_C</td> <td>h19, TM1_Ch39.</td>		EUT Conf.	TM1_Ch0, TM1_C	h19, TM1_Ch39.	
Spectral Density LevelTest Env.NTNVLevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.EmissionTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVNon-RestrictedTest Env.NTNVFrequency BandsMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzTM1_Ch0, Worst Conf.).RestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 HZ -1 GHzTM1_Ch0 (Worst Conf.).Radiated)Meas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedFrequency BandsFC SetupTest Setup 2Frequency BandsFC SetupTest Setup 2Frequency BandsGalzTM1_Ch0, Worst Conf.).Radiated)Meas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedFrequency BandsGalzTM1_Ch0, TM1_Ch19, TM1_Ch			TM2_Ch0, TM2_C	h19, TM2_Ch39.	
LevelTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spuriousMeas. MethodFCC KDB 558074 D01§13.0.emissionTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzRestrictedTest SetupTM1_Ch0, TM1_Ch19, TM1_Ch39.Frequency BandsEUT Conf.30 MHz -1 GHzRestrictedTest SetupTM1_Ch0, TM1_Ch19, TM1_Ch39.Frequency BandsEUT Conf.30 MHz -1 GHzRestrictedTest SetupTM1_Ch0, Worst Conf.).1-3 GHzTM1_Ch0 (Worst Conf.).3-18 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_	Maximum Power	Meas. Method	FCC KDB 558074	D01§10.1	
EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Band edge spurious emissionMeas. MethodFCC KDB 558074 D01§13.0.emissionTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVNon-RestrictedTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsTest SetupTest Setup 2Frequency BandsTest SetupTest Setup 2Frequency BandsTest SetupTest Setup 2Frequency BandsTest SetupTest Setup 2Frequency BandsGol MHz -1 GHzTM1_Ch0 (Worst Conf.).(Radiated)30 MHz -1 GHzTM1_Ch0 (Worst Conf.).13 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHz30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).	Spectral Density	Test Env.	NTNV		
Image: Second	Level	Test Setup			
Band edge spurious emission Meas. Method FCC KDB 558074 D01§13.0. Test Env. NTNV Test Setup Test Setup 1 EUT Conf. TM1_Ch0, TM1_Ch39. Unwanted Meas. Method FCC KDB 558074 D01§11.0 Emissions into Test Env. NTNV Non-Restricted Test Setup Test Setup 1 Frequency Bands EUT Conf. TM1_Ch0, TM1_Ch19, TM1_Ch39. Unwanted Meas. Method ANSI C63.10; FCC KDB 558074 D01§12.1, Radiated Emissions into Test Setup TM1_Ch0, TM1_Ch19, TM1_Ch39. Unwanted Meas. Method ANSI C63.10; FCC KDB 558074 D01§12.1, Radiated Emissions into Test Env. NTNV Restricted Test Env. NTNV Restricted Test Setup Test Setup 2 Frequency Bands EUT Conf. 30 MHz -1 GHz TM1_Ch0, TM1_Ch19, TM1_Ch39. (Radiated) So MHz TM1_Ch0, TM1_Ch19, TM1_Ch39. 3-18 GHz 1-3 GHz TM1_Ch0 (Worst Conf.). 3-18 GHz TM1_Ch0 (Worst Conf.). 30 MHz -1 GHz TM2_Ch0 (Worst Conf.). <td></td> <td>EUT Conf.</td>		EUT Conf.			
emissionTest Env.NTNVTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedUnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzIndicatedTM1_Ch0, TM1_Ch19, TM1_Ch19, TM1_Ch39.StatedTest SetupTest SetupTest Setup 2Frequency BandsEUT Conf.1:3 GHzTM1_Ch0 (Worst Conf.).1:3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3:18 GHzTM1_Ch0 (Worst Conf.).3:18 GHzTM1_Ch0 (Worst Conf.).3:0 MHz -1 GHzTM2_Ch0 (Worst Conf.).3:0 MHz -1 GHzTM2_Ch0 (Worst Conf.).3:0 MHz -1 GHzTM2_Ch0 (Worst Conf.).			TM2_Ch0, TM2_Ch19, TM2_Ch39.		
Test SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.Test Setup 2UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.). 1-3 GHz(Radiated)3-18 GHzTM1_Ch0 (Worst Conf.), 18-26.5 GHzTM1_Ch0 (Worst Conf.), 18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM1_Ch0 (Worst Conf.).	Band edge spurious	Meas. Method	FCC KDB 558074 D01§13.0.		
EUT Conf.TM1_Ch0, TM1_Ch39.UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.1Prequency BandsEUT Conf.30 MHz -1 GHzTM1_Ch0, TM1_Ch19, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).30 MHz -1 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).	emission	Test Env.	NTNV		
UnwantedMeas. MethodFCC KDB 558074 D01§11.0Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzIndicatedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzIndicatedTM1_Ch0, TM1_Ch19, TM1_Ch39.Indicated1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.IndicatedImage: Setup 2Image: Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.Image: SetupImage: Setup 2Image: Setup 2Frequency BandsImage: Setup 2Image: Setup 2Frequency BandsImage: Setup 2Image: Setup 2Image: SetupImage: Setup 2Image: Setup 2Imag		Test Setup	Test Setup 1		
Emissions intoTest Env.NTNVNon-RestrictedTest SetupTest Setup 1Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency BandsEUT Conf.30 MHz -1 GHzInaction of the setup of the setup 2TM1_Ch0, TM1_Ch19, TM1_Ch39.Frequency BandsEUT Conf.30 MHz -1 GHzInaction of the setup of the setup 2TM1_Ch0, TM1_Ch19, TM1_Ch39.Inaction of the setup of the setup 2TM1_Ch0, TM1_Ch19, TM1_Ch39.Inaction of the setup 1Inaction of the setup 2Frequency BandsEUT Conf.30 MHz -1 GHzInaction of the setup 1Inaction of the setup 2Frequency BandsInaction of the setup 2Inaction of the setup 1Inaction of the setup 2Inaction of the setup 2Inaction of the setup 2Inaction of the setup 2Ina		EUT Conf.	TM1_Ch0, TM1_C	h39.	
Non-Restricted Frequency BandsTest SetupTest Setup 1EUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.Unwanted Emissions intoMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions into RestrictedTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch19 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).	Unwanted	Meas. Method	FCC KDB 558074	D01§11.0	
Frequency BandsEUT Conf.TM1_Ch0, TM1_Ch19, TM1_Ch39. TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch0 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).	Emissions into	Test Env.	NTNV		
TM2_Ch0, TM2_Ch19, TM2_Ch39.UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch19 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM1_Ch0 (Worst Conf.).	Non-Restricted	Test Setup	Test Setup 1		
UnwantedMeas. MethodANSI C63.10; FCC KDB 558074 D01§12.1, RadiatedEmissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch19 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM1_Ch0 (Worst Conf.).	Frequency Bands	EUT Conf.	TM1_Ch0, TM1_C	h19, TM1_Ch39.	
Emissions intoTest Env.NTNVRestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch19 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).			TM2_Ch0, TM2_Ch19, TM2_Ch39.		
RestrictedTest SetupTest Setup 2Frequency Bands (Radiated)EUT Conf.30 MHz -1 GHzTM1_Ch0 (Worst Conf.).1-3 GHzTM1_Ch0, TM1_Ch19, TM1_Ch39.3-18 GHzTM1_Ch19 (Worst Conf.),18-26.5 GHzTM1_Ch0 (Worst Conf.).30 MHz -1 GHzTM2_Ch0 (Worst Conf.).	Unwanted	Meas. Method	ANSI C63.10; FCC	CKDB 558074 D01§12.1, Radiated	
Frequency Bands EUT Conf. 30 MHz -1 GHz TM1_Ch0 (Worst Conf.). (Radiated) 1-3 GHz TM1_Ch0, TM1_Ch19, TM1_Ch39. 3-18 GHz TM1_Ch19 (Worst Conf.), 18-26.5 GHz TM1_Ch0 (Worst Conf.), 30 MHz -1 GHz TM2_Ch0 (Worst Conf.).	Emissions into	Test Env.	NTNV		
(Radiated) 1-3 GHz TM1_Ch0, TM1_Ch19, TM1_Ch39. 3-18 GHz TM1_Ch19 (Worst Conf.), 18-26.5 GHz TM1_Ch0 (Worst Conf.). 30 MHz -1 GHz TM2_Ch0 (Worst Conf.).	Restricted	Test Setup	Test Setup 2		
3-18 GHz TM1_Ch19 (Worst Conf.), 18-26.5 GHz TM1_Ch0 (Worst Conf.), 30 MHz -1 GHz TM2_Ch0 (Worst Conf.).	Frequency Bands	EUT Conf.	30 MHz -1 GHz	TM1_Ch0 (Worst Conf.).	
18-26.5 GHz TM1_Ch0 (Worst Conf.). 30 MHz -1 GHz TM2_Ch0 (Worst Conf.).	(Radiated)		1-3 GHz	TM1_Ch0, TM1_Ch19, TM1_Ch39.	
30 MHz -1 GHz TM2_Ch0 (Worst Conf.).			3-18 GHz	TM1_Ch19 (Worst Conf.),	
			18-26.5 GHz	TM1_Ch0 (Worst Conf.).	
1-3 GHz TM2_Ch0, TM1_Ch19, TM1_Ch39.			30 MHz -1 GHz	TM2_Ch0 (Worst Conf.).	
			1-3 GHz	TM2_Ch0, TM1_Ch19, TM1_Ch39.	



Test Case	Test Conditions			
	Configuration	Description		
		3-18 GHz TM2_Ch19 (Worst Conf.),		
		18-26.5 GHz	TM2_Ch0 (Worst Conf.).	
AC Power Line	Meas. Method	AC mains conducted.		
Conducted		Pre: RBW = 10 kHz; Det. = Peak.		
Emissions		Final: RBW = 9 kHz; Det. = CISPR Quasi-Peak & Average.		
	Test Env.	NTNV		
	Test Setup	Test Setup 3		
	EUT Conf.	TM1_Ch39. TM2_Ch39.		

5 Main Test Instruments

Test Address 1:

Main Test Equipments	Main Test Equipments				
Equipment Name	Manufacturer	Model	Serial Number	Cal Date	Cal- Due
Power supply	KEITHLEY	2303	1342889	2017/10/24	2018/10/24
Universal Radio Communication Tester	R&S	CMU200	110932	2018/4/27	2019/4/27
Universal Radio Communication Tester	R&S	CMW500	126854	2017/10/19	2018/10/19
Signal Analyzer	R&S	FSQ31	200021	2018/7/23	2019/7/23
Spectrum Analyzer	Agilent	N9030A	MY49431698	2018/7/23	2019/7/23
Temperature Chamber	WEISS	WKL64	56246002940010	2017/12/13	2018/12/13
Signal generator	Agilent	E8257D	MY49281095	2018/7/23	2019/7/23
Vector Signal Generator	R&S	SMU200A	104162	2018/7/23	2019/7/23
Power Detecting & Samplig Unit	R&S	OSP-B157	101429	2018/7/23	2019/7/23
Spectrum Analyzer	Keysight	N9040B	MY57212529	2018/6/28	2019/6/28

Test Address 2:

Main Test Equipments					
Equipment Name	Manufacturer	Model	Serial Number	Cal Date	Cal- Due
Test receiver	R&S	ESU26	100387	2018/1/20	2019/1/19
Test receiver	R&S	ESCI	101163	2018/1/20	2019/1/19
Spectrum analyzer	R&S	FSU3	200474	2018/1/20	2019/1/19
Spectrum analyzer	R&S	FSU43	100144	2018/1/20	2019/1/19
LOOP Antennas(9kHz-30MHz)	R&S	HFH2-Z2	100262	2017/4/25	2019/4/25
LOOP Antennas(9kHz-30MHz)	R&S	HFH2-Z2	100263	2017/4/25	2019/4/25
Trilog Broadband Antenna (30M~3GHz)	SCHWARZBECK	VULB 9163	9163-357	2017/4/21	2019/4/20
Double-Ridged Waveguide Horn Antenna (1G~18GHz)	R&S	HF907	100304	2017/5/27	2019/5/27
Pyramidal Horn Antenna(18GHz-26.5GHz)	ETS-Lindgren	3160-09	5140299	2017/7/20	2019/7/19
Artificial Main Network	R&S	ENV4200	100134	2018/5/8	2019/5/7
Line Impedance Stabilization Network	R&S	ENV216	100382	2018/5/8	2019/5/7
Software Information					
Test Item	Software N	lame	Manufacturer		Version
RE	EMC32		R&S		V9.25.0

Huawei Proprietary and Confidential Copyright © Huawei Technologies Co., Ltd.



CE	EMC32	R&S	V9.25.0

6 Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item		Extended Uncertainty
Transmit Output Power Data	Power [dBm]	U = 0.39 dB
RF Power Density, Conducted	Power [dBm]	U = 0.64 dB
Bandwidth	Magnitude [%]	U=7%
Band Edge Compliance	Disturbance Power [dBm]	U = 0.9 dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	20MHz~3.6GHz: U=0.88dB
		3.6GHz~8.4GHz: U=1.08dB
		8.4GHz~13.6GHz: U=1.24dB
		13.6GHz~22GHz: U=1.34dB
		22GHz~26.5GHz: U=1.36dB
Field Strength of Spurious Radiation	ERP/EIRP [dBm]	For 3 m Chamber:
		U = 5.90 dB (30 MHz-1 GHz)
		U = 4.94 dB (1 GHz-18 GHz)
		U = 4.24 dB (18 GHz-26.5 GHz)
Frequency Stability	Frequency Accuracy [Hz]	U=41.58Hz
AC Power Line Conducted Emissions	Disturbance Voltage[dBµV]	U=2.3 dB
Duty Cycle	Duty Cycle [%]	U=±2.06 %

7 Appendixes

Appendix No.	Description	
SYBH(Z-RF)20180706013002-2004-A	Appendix for Bluetooth BLE	

END