Certificate #6613.01

FCC TEST REPORT

(Part 15, Subpart E)

Applicant:	Cohda Wireless Pty Ltd.
Address:	27 Greenhill Road Wayville SA 5034 Australia

Manufacturer or Supplier:	Cohda Wireless Pty Ltd.
Address:	27 Greenhill Road Wayville SA 5034 Australia
Product:	Road-Side (Transceiver) Unit for infrastructure.
Brand Name:	Cohda Wireless
Model Name:	MK6 RSU
Series Model	MK6 RSU
FCC ID:	2AEGPMK6RSU
Date of tests:	Jan. 26, 2023 ~ Nov. 27, 2023

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart E, Section 15.407**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Chao Wu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
Chao Wu Date: Nov. 27, 2023	Sun Peibo Date: Nov. 27, 2023

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TABLE OF CONTENTS

RELEASE CONTROL RECORD 4

1 SUMMARY OF TEST RESULTS 5
1.1 MEASUREMENT UNCERTAINTY 7
2 GENERAL INFORMATION 8
2.1 GENERAL DESCRIPTION OF EUT 8
2.2 DESCRIPTION OF TEST MODES 10
2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL 13
2.3 DUTY CYCLE OF TEST SIGNAL 17
2.4 DESCRIPTION OF SUPPORT UNITS 18
2.4.1 CONFIGURATION OF SYSTEM UNDER TEST 19
2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS 20

3 TEST TYPES AND RESULTS 21

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT 21
3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT 21
3.1.2 LIMITS OF UNWANTED EMISSION 21
3.1.3 TEST INSTRUMENTS 22
3.1.4 TEST PROCEDURES 24
3.1.5 DEVIATION FROM TEST STANDARD 24
3.1.6 TEST SETUP 25
3.1.7 EUT OPERATING CONDITION 26
3.1.8 TEST RESULTS 27
3.2 CONDUCTED EMISSION MEASUREMENT 176
3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT 176
3.2.2 TEST INSTRUMENTS 176
3.2.3 TEST PROCEDURES 176
3.2.4 DEVIATION FROM TEST STANDARD 177
3.2.5 TEST SETUP 177
3.2.6 EUT OPERATING CONDITIONS 177
3.2.7 TEST RESULTS 178
3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT 180
3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT 180
3.3.2 TEST SETUP 181
3.3.3 TEST INSTRUMENTS 182
3.3.4 TEST PROCEDURE 183

3.3.5 DEVIATION FROM TEST STANDARD 185
3.3.6 EUT OPERATING CONDITIONS 185
3.3.7 TEST RESULTS 186
3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT 187
3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT 187
3.4.2 TEST SETUP 187
3.4.3 TEST INSTRUMENTS 187
3.4.4 TEST PROCEDURES 188
3.4.5 DEVIATION FROM TEST STANDARD 188
3.4.6 EUT OPERATING CONDITIONS 188
3.4.7 TEST RESULTS 189
3.5 AUTOMATICALLY DISCONTINUE TRANSMISSION 190
3.5.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION 190
3.5.2 TEST INSTRUMENTS 190
3.5.3 TEST RESULT 190

4 PHOTOGRAPHS OF THE TEST CONFIGURATION 191

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB192

6 APPENDIX 193

EMISSION BANDWIDTH 193
TEST RESULT 193
TEST GRAPHS 196
OCCUPIED CHANNEL BANDWIDTH 224
TEST RESULT 224
TEST GRAPHS 227
MIN EMISSION BANDWIDTH 255
TEST RESULT B4 255
TEST GRAPHS B4 256
DUTY CYCLE 262
TEST RESULT 262
TEST GRAPHS 263
MAXIMUM CONDUCTED OUTPUT POWER 269
TEST RESULT 269
MAXIMUM POWER SPECTRAL DENSITY 275
TEST RESULT 275
TEST GRAPHS 280

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QSU2306260109RF07	Original release	Nov. 27, 2023

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**TEST LAB**
15.407(b)(6)	AC Power Conducted Emission	Compliance	B
15.407(b) (1/2/3/4/5)	Radiated Emission & Band Edge Measurement	Compliance	A/B
15.407(a/1/2/3)	Maximum conducted output Power	Compliance	A/B
15.407(a/1/2/3)	Peak Power Spectral Density	Compliance	B
15.407(i)	26 dB Bandwidth	Compliance	B
15.407(e)	6 dB Bandwidth	Compliance	B
15.203	Antenna Requirement	Compliance	B

NOTE:

1. Except the data of RSE and Band Edge Measurement, other data please refer to the appendix.
2. Only the worse data were report.
3. WLAN 5G supports SISO&MIMO mode，the whole testing have assessed the MIMO mode by referring to their maximum conducted power.
4. For WIFI 5G, RSE had been tested on SISO&MIMO mode of EUT. The worst case was found on MIMO mode, only the worst case data had been reported in the report.
5. This DUT can only operate on authorized spectrum in the US. When set up the router for unauthorized bands, failed to connect, the unauthorized bands are not available.

***Test Lab Information Reference**

Lab A:

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

Lab Address:

No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

Accredited Test Lab Cert 3939.01

FCC Site Registration No. : 525120; Designation No. : CN1171;

Lab B:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	±2.70dB
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions (30MHz~1GHz)	±4.98dB
Radiated emissions (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Power Spectral Density	±0.85 dB

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

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	Road-Side (Transceiver) Unit for infrastructure.
BRAND NAME*	Cohda Wireless
MODEL NAME*	MK6 RSU
SERIES MODEL*	MK6 RSU
NOMINAL VOLTAGE*	48Vdc(POE Adapter)
MODULATION *	OFDM
TRANSFER RATE*	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac: up to 866.6Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n/ac (20MHz)/ 2 for 802.11n/ac(40MHz) 1 for 802. 802.11ac(80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n/ac (20MHz)/ 2 for 802.11n/ac(40MHz) 1 for 802. 802.11ac(80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n/ac (20MHz) 6 for 802.11n/ac(40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac(40MHz) 1 for 802.11ac (80MHz)
AVERAGE POWER	54.08 mW for 5180 ~ 5240MHz 57.81 mW for 5260 ~ 5320MHz 94.19 mW for 5500 ~ 5720MHz 127.94 mW for 5745 ~ 5825MHz
ANTENNA TYPE*	Monopole Antenna
ANTENNA GAIN*	ANT1/ANT2: 2.0dBi for 5180 ~ 5240MHz 2.0dBi for 5260 ~ 5320MHz 2.0dBi for 5500 ~ 5720MHz 2.0dBi for 5745 ~ 5825MHz
HW VERSION*	Rev 1.0
SW VERSION*	19.Release.134186

I/O PORTS*	Refer to user's manual
CABLE SUPPLIED*	N/A

NOTE:

1. ***Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information , Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

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

3. The EUT incorporates a MIMO function. Physically, the EUT provides two transmitters and two receivers.

MODULATION MODE	TX FUNCTION
802.11a	2TX/2RX
802.11n/802.11ac (20MHz)	2TX/2RX
802.11n/802.11ac(40MHz)	2TX/2RX
802.11ac(80MHz)	2TX/2RX

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	MANUFACTURER	MODEL
2x Antenna for LTE/2G/3G/CDMA	Taoglas	TG.80.4H31
1x Antenna for WLAN/BT	HUBER+SUHNER	1399.17.0224
1x Antenna for WLAN	HUBER+SUHNER	1399.17.0224
2x Antenna for DSRC	Taoglas	TD.80.6H31
1x Antenna for GNSS	Taoglas	TLS.40.1F11
1xM12 field attachable connector	Amphenol	MSXS-08BMMD-SL8001

2.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n, 802.11ac(40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n, 802.11ac(40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		

FOR 5500 ~ 5720MHz

12 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n, 802.11ac(40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	138	5690 MHz
122	5610 MHz		

FOR 5745 ~ 5825MHz

5 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n, 802.11ac(40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
142	5710 MHz	159	5795 MHz
151	5755 MHz		

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY
155	5775 MHz

2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	**Powered by Adapter with wifi(5G) link**
B	-	-	-	√	Powered by Battery with wifi(5G) link
C	-	-	-	-	Powered by USB with wifi(5G) link

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

NOTE:
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane.**
NOTE: "-"means no effect

RADIATED EMISSION TEST (BELOW 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36	OFDM	6.0

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144,149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		144 to 165	144,149, 157,165	OFDM	MCS0
A	802.11n/ac (40MHz)		142 to 159	142,151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138 to 155	138,155	OFDM	MCS0

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36	OFDM	6.0

BANDEDGE MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11n/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11n/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11n/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11n/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11n/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11n/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11n/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11n/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 48V By POE Adapter	Chao Wu
RE≥1G	23deg. C, 70%RH	DC 48V By POE Adapter	Chao Wu
PLC	25deg. C, 52%RH	DC 48V By POE Adapter	Chao Wu
APCM	25deg. C, 60%RH	DC 48V By POE Adapter	Chao Wu

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix Of this test report.

WORST-CASE DATA:

Measured Duty Cycle		
Mode		Duty Cycle [%]
		ANT1/2
5GHZ	11a	100
	11n20	100
	11n40	100
	11ac20	100
	11ac40	100
	11ac80	100

Note:

Duty cycle of test signal is < 98%, duty factor shall be considered.

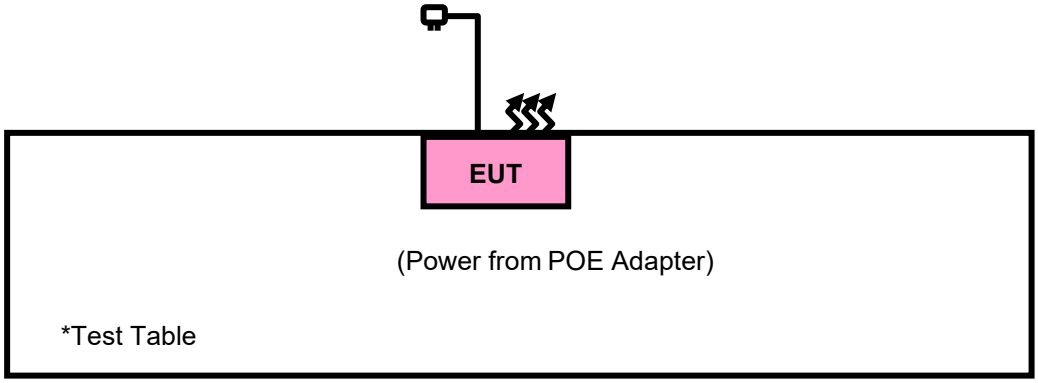
2.4 DESCRIPTION OF SUPPORT UNITS

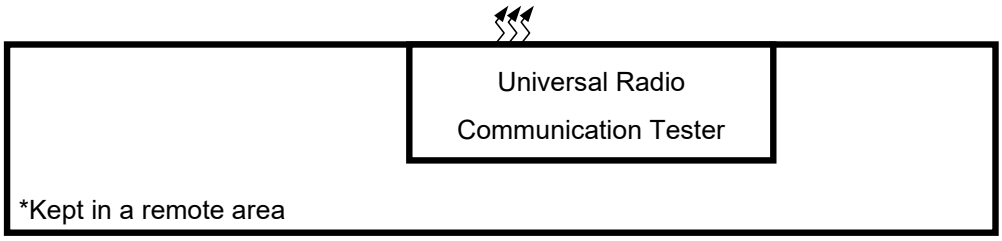
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Laptop	Lenovo	Thnikpad L440	R90FTFKP	N/A
2	POE Adapter	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

2.4.1 CONFIGURATION OF SYSTEM UNDER TEST





2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

3 TEST TYPES AND RESULTS

3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.1.2 LIMITS OF UNWANTED EMISSION

	APPLICABLE TO	LIMIT	
RESTRICTED BANDS	789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m (dBµV/m)	
		PK : 74	AV : 54
OUT OF THE RESTRICTED BANDS	APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
	15.407(b)(1)	PK : -27	PK : 68.2
	15.407(b)(2)		
	15.407(b)(3)		
	15.407(b)(4)	See note 2 (FCC 16-24)	

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

2. All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 22, 23	May. 21,26
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,23	Feb. 17,24
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,23	Feb. 17,24
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.04, 22	Sep.03, 23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.03, 23	Sep.02, 24
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	N/A	May. 06,23	May. 05,24
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,23	Mar. 27,24
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,23	May. 05,24
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,23	May.09,24
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,23	Feb. 16,24
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 12,22	Aug. 11,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 11,23	Aug. 10,24
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,23	Feb. 13,24
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,23	Feb. 13,24
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,22	Sep.02,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.02,22	Sep.01,24

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Chamber.

3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.30,22	Aug.29,24
Pre-Amplifier	R&S	SCU08F1	101028	Sep.16,22	Sep.15,24
Signal Generator	R&S	SMB100A	182185	Feb.16,22	Feb.15,24
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESW44	101973	Feb.25,22	Feb.24,24
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.28,22	Feb.27,24
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22,22	Aug.21,24
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.23,22	Feb.22,24
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.22,22	Aug.21,24
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.23,22	Feb.22,24
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.27,22	Jun.26,24
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	N/A	N/A
DC Source	HYELEC	HY3010B	551016	Aug.31,22	Aug.30,24
Hygrothermograph	DELI	20210528	SZ014	Sep.06,22	Sep.05,24
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.28,23	Oct.27,23
CABLE	R&S	W13.02	N/A	Oct.27,23	Apr.26,24
CABLE	R&S	W12.14	N/A	Apr.28,23	Oct.27,23
CABLE	R&S	W12.14	N/A	Oct.27,23	Apr.26,24

NOTE: 1. The calibration interval of the above test instruments is 6 months or 24 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Chamber.

3. The FCC Site Registration No. is 434559; The Designation No. is CN1325.

3.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

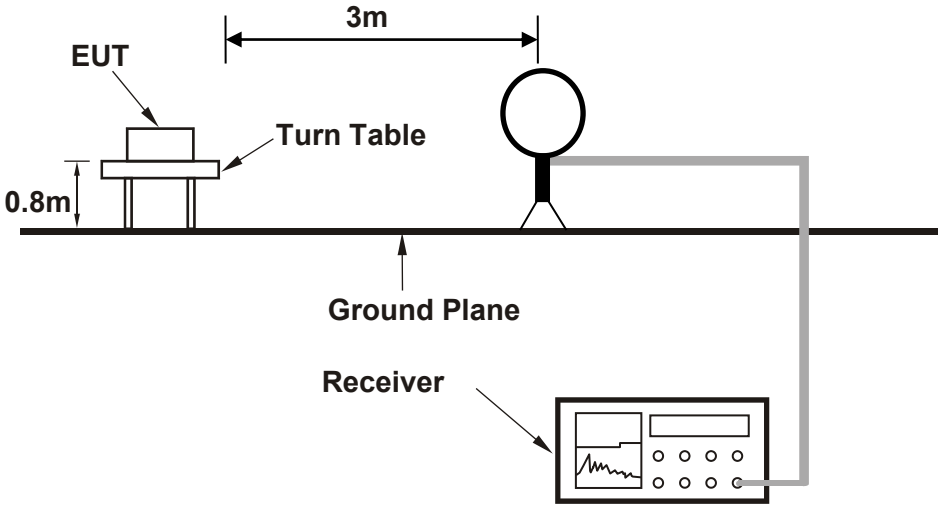
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

3.1.5 DEVIATION FROM TEST STANDARD

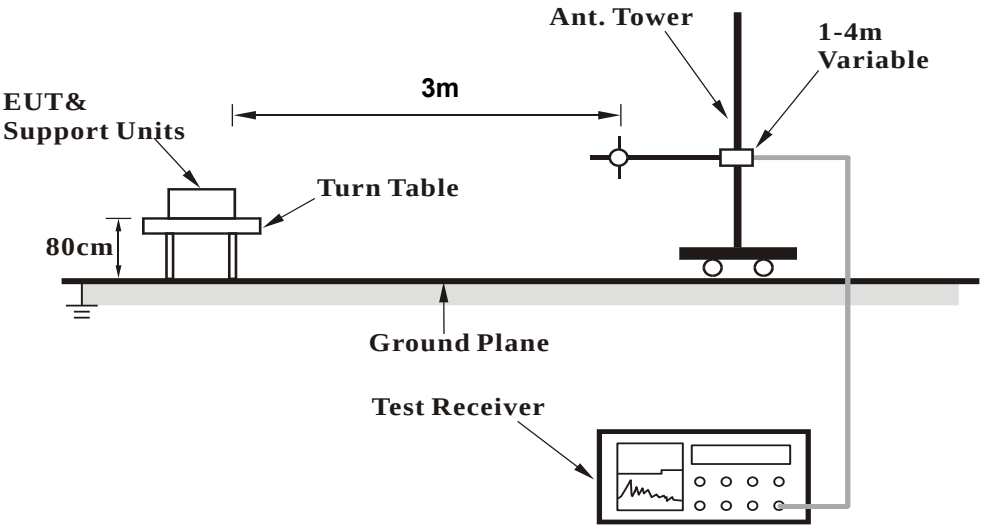
No deviation.

3.1.6 TEST SETUP

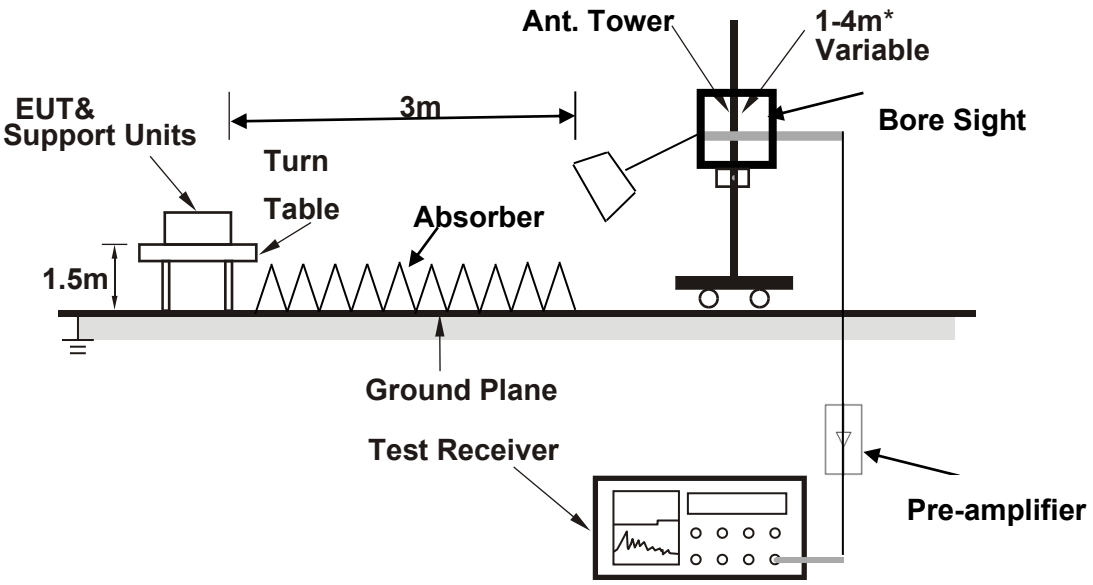
<Frequency Range 9KHz~30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.7 EUT OPERATING CONDITION

a. Set the EUT under full load condition and placed them on a testing table.

b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.

c. The necessary accessories enable the EUT in full functions.

3.1.8 TEST RESULTS

NOTE ： The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

30 MHz – 1GHz data:

Band 4

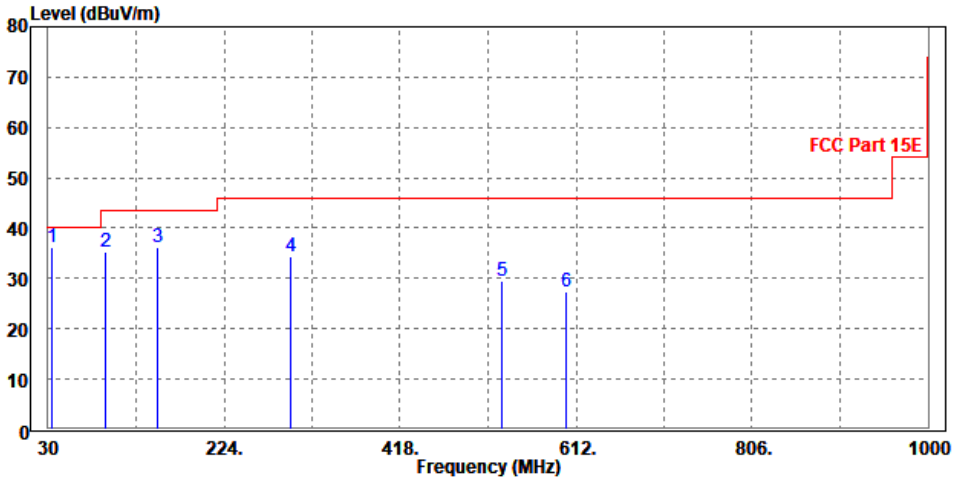
802.11n(40MHz):

CHANNEL	TX Channel 151	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
55.22	35.62	62.48	40	-4.38	9.68	0.43	36.97	100	360	QP
108.57	37.95	64.15	43.5	-5.55	10.03	0.55	36.78	100	360	QP
143.49	39.09	65.74	43.5	-4.41	9.31	0.64	36.6	100	360	QP
301.6	39.84	61.15	46	-6.16	14.04	0.91	36.26	100	360	QP
450.01	37.42	55.64	46	-8.58	17.15	1.15	36.52	100	360	QP
600.36	28.38	44.16	46	-17.62	19.71	1.36	36.85	100	360	QP

REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

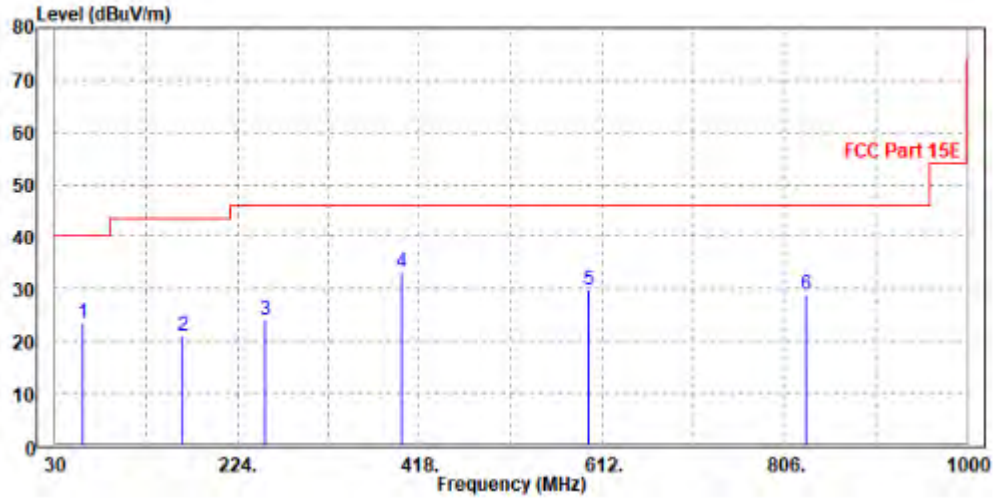


CHANNEL	Channel 151	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
34.85	36.16	55.3	40	-3.84	17.88	0.33	37.35	100	0	QP
94.02	35.19	62.75	43.5	-8.31	8.8	0.52	36.88	100	0	QP
151.25	36.24	61.58	43.5	-7.26	10.55	0.66	36.55	100	0	QP
296.75	34.44	55.89	46	-11.56	13.91	0.9	36.26	100	0	QP
529.55	29.38	46.62	46	-16.62	18.19	1.26	36.69	100	0	QP
600.36	27.49	43.38	46	-18.51	19.6	1.36	36.85	100	0	QP

REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.



ABOVE 1GHz WORST-CASE DATA:

Note: For higher frequency, the emission is too low to be detected.

Band 1

802.11a

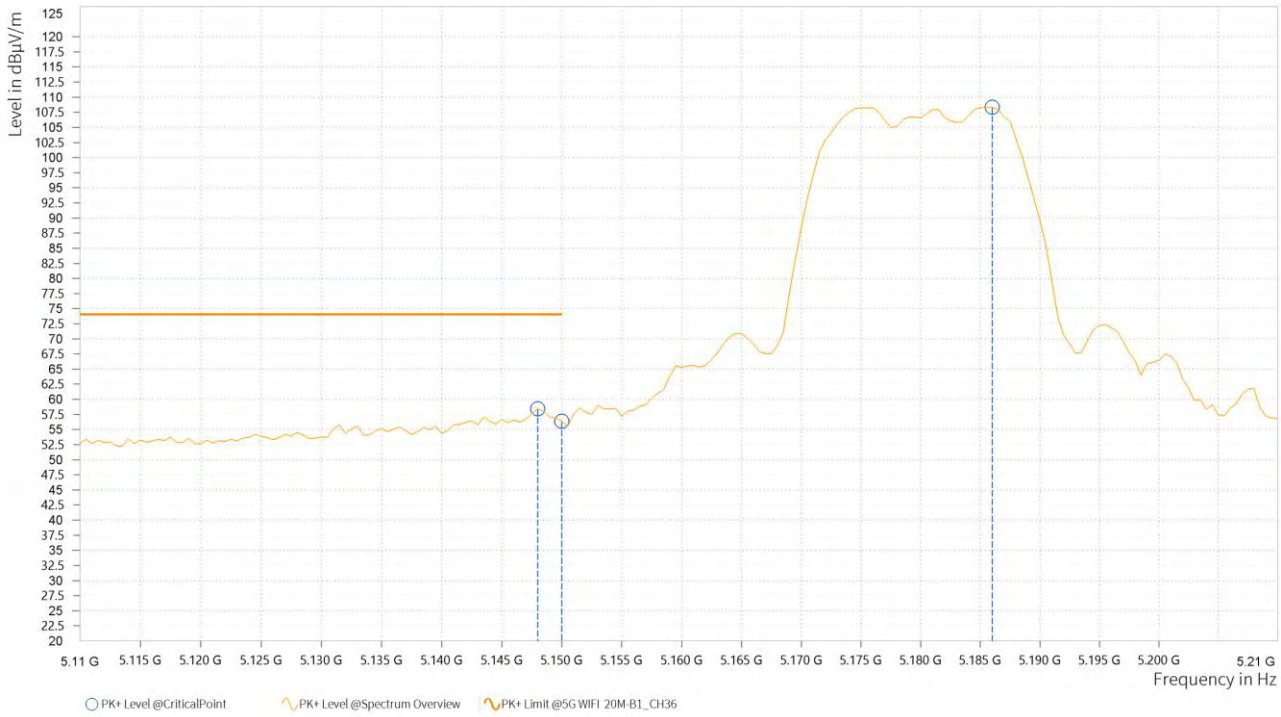
CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.17	58.24	74	-16.83	34.52	9.92	45.51	100	280	Peak
5150	50.32	51.39	54	-3.68	34.52	9.92	45.51	100	280	Average
5180	107.34	108.4	/	/	34.54	9.91	45.51	100	280	Peak
5180	101.75	102.81	/	/	34.54	9.91	45.51	100	280	Average
5350	54.12	55.1	74	-19.88	34.68	9.85	45.51	100	280	Peak
5350	47.37	48.35	54	-6.63	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.92	56.91	74	-18.08	34.6	9.92	45.51	100	175	Peak
5150	48.89	49.88	54	-5.11	34.6	9.92	45.51	100	175	Average
5180	100.35	101.35	/	/	34.6	9.91	45.51	100	175	Peak
5180	94.77	95.77	/	/	34.6	9.91	45.51	100	175	Average
5350	55.04	56.1	74	-18.96	34.6	9.85	45.51	100	175	Peak
5350	47.46	48.52	54	-6.54	34.6	9.85	45.51	100	175	Average

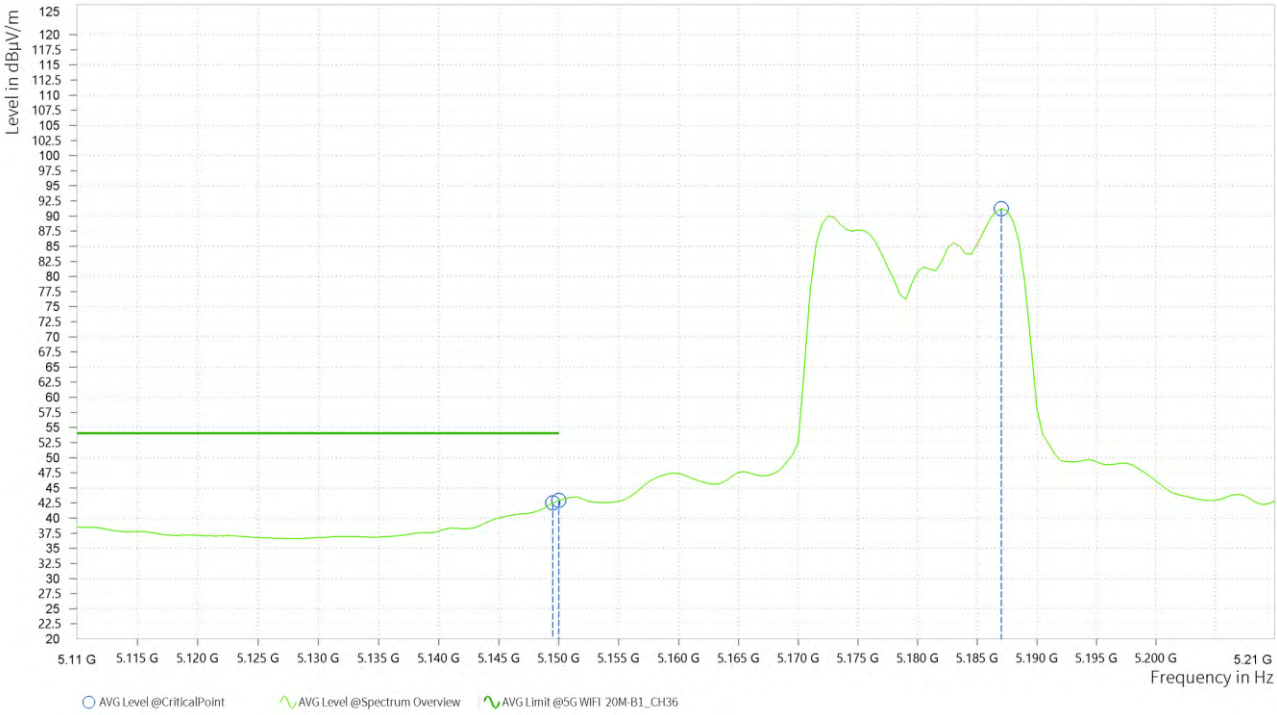
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

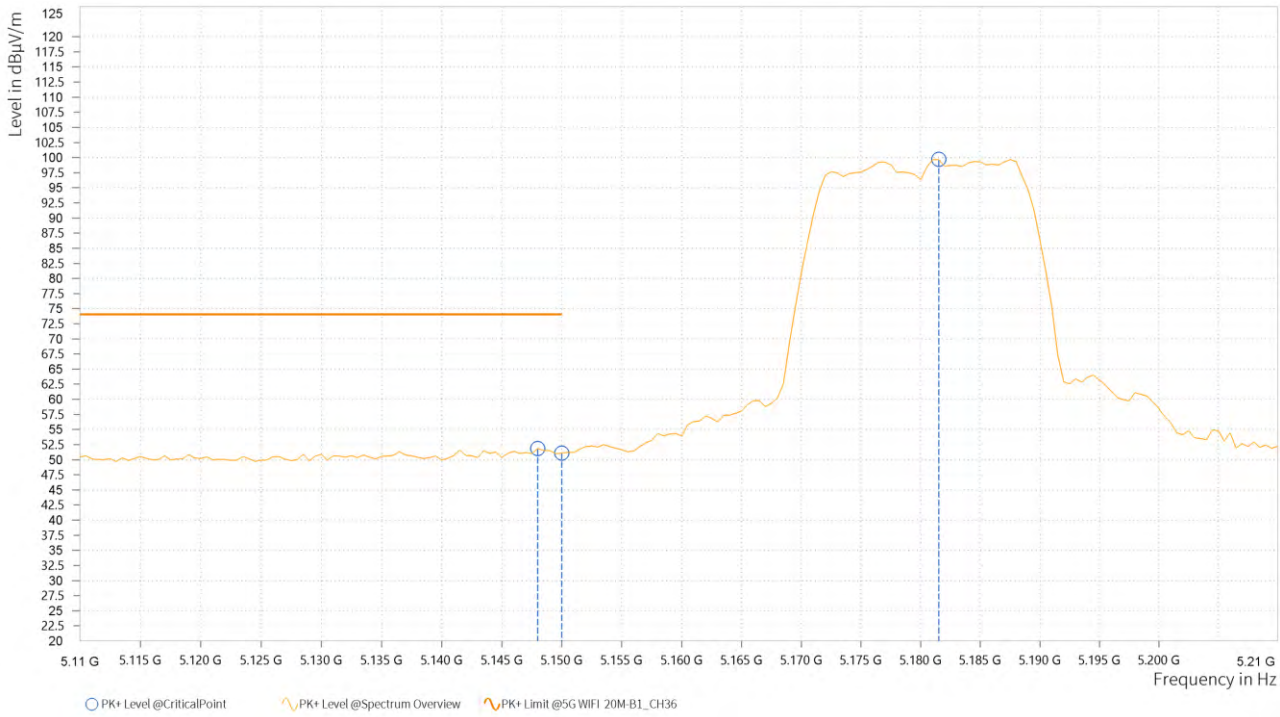
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,148.000	58.41	74.00	15.59	12.74	H	151.4	2
1	5,150.000	56.35	74.00	17.65	12.75	H	151.4	2
1	5,186.000	108.32			12.90	H	151.4	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.500	42.55	54.00	11.45	12.75	H	355.1	2
1	5,150.000	42.91	54.00	11.09	12.75	H	355.1	2
1	5,187.000	91.21			12.90	H	355.1	2



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,148.000	51.85	74.00	22.15	12.74	V	359.1	1
1	5,150.000	51.10	74.00	22.90	12.75	V	7	2
1	5,181.500	99.69			12.88	V	89.3	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.500	37.00	54.00	17.00	12.75	V	255.1	1
1	5,150.000	37.15	54.00	16.85	12.75	V	255.1	1
1	5,178.500	91.28			12.87	V	4.3	1

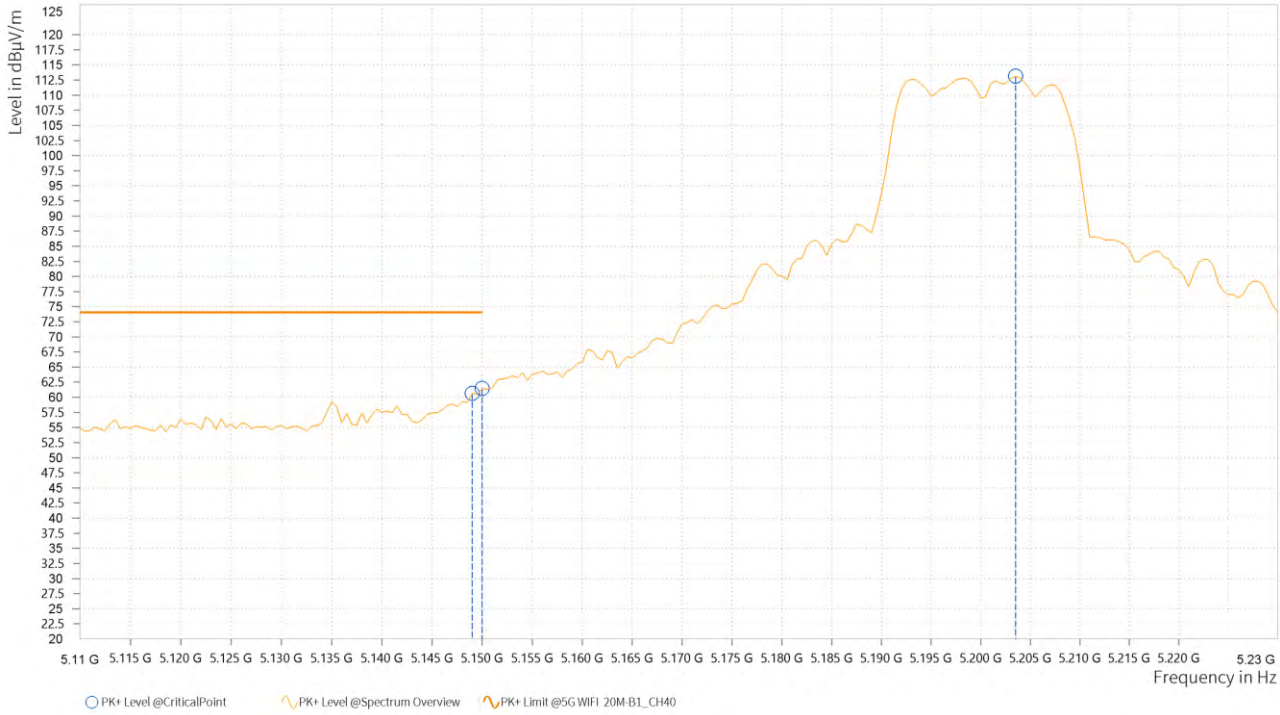
CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	58.11	59.18	74	-15.89	34.52	9.92	45.51	100	75	Peak
5150	50.52	51.59	54	-3.48	34.52	9.92	45.51	100	75	Average
5200	110.45	111.5	/	/	34.56	9.9	45.51	100	75	Peak
5200	103.53	104.58	/	/	34.56	9.9	45.51	100	75	Average
5350	55.06	56.04	74	-18.94	34.68	9.85	45.51	100	75	Peak
5350	47.65	48.63	54	-6.35	34.68	9.85	45.51	100	75	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.96	56.95	74	-18.04	34.6	9.92	45.51	100	175	Peak
5150	50.04	51.03	54	-3.96	34.6	9.92	45.51	100	175	Average
5200	103.07	104.08	/	/	34.6	9.9	45.51	100	175	Peak
5200	97.11	98.12	/	/	34.6	9.9	45.51	100	175	Average
5350	53.57	54.63	74	-20.43	34.6	9.85	45.51	100	175	Peak
5350	47.67	48.73	54	-6.33	34.6	9.85	45.51	100	175	Average

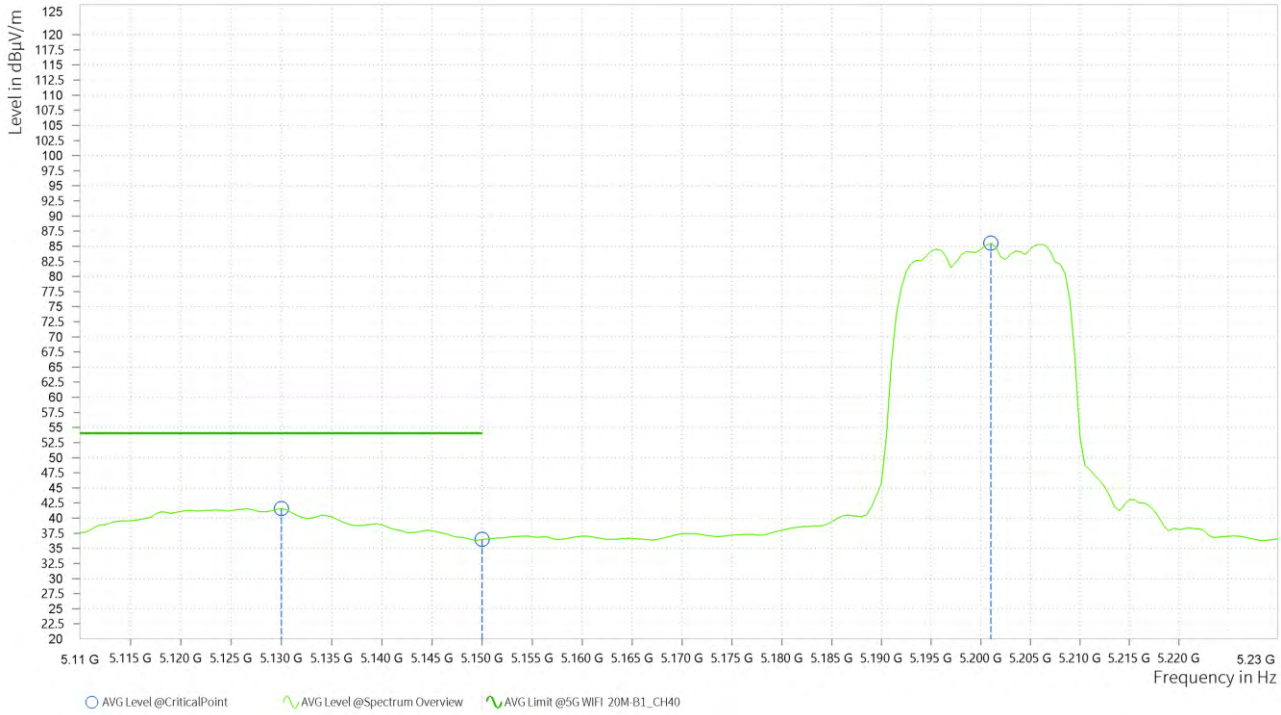
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

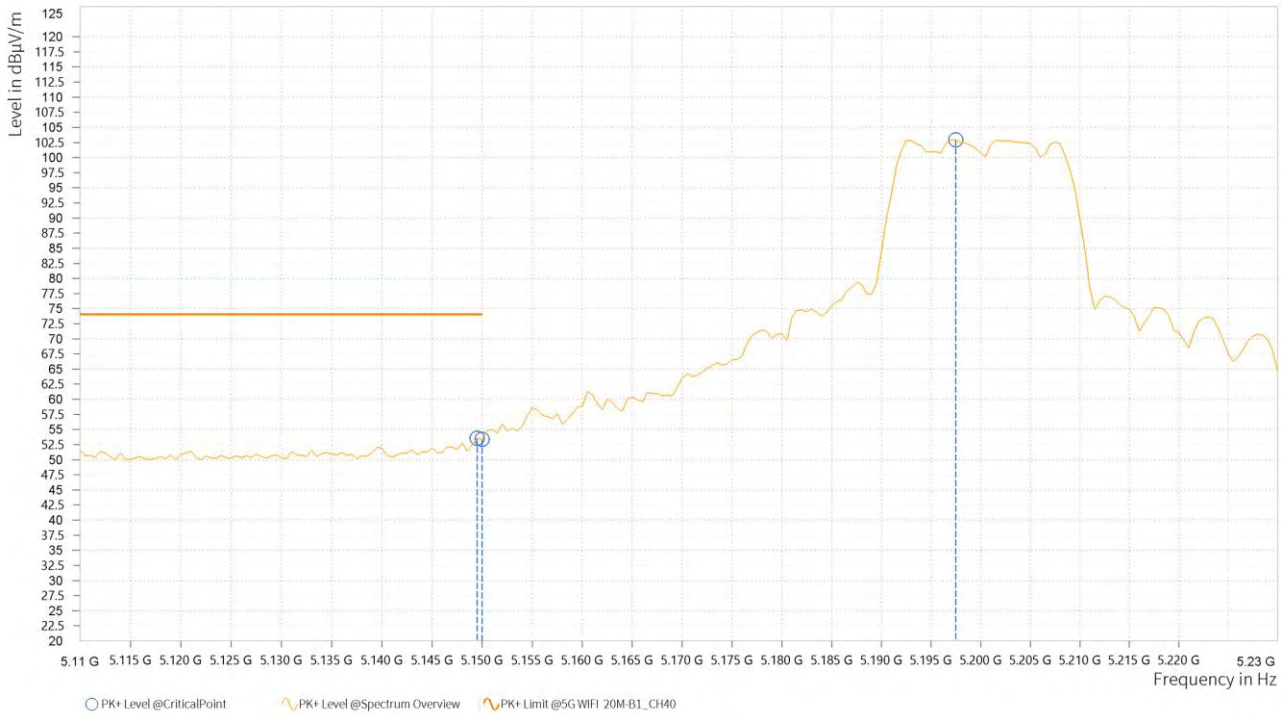
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.000	60.67	74.00	13.33	12.74	H	177.8	2
2	5,150.000	61.44	74.00	12.56	12.75	H	130	2
2	5,203.500	113.13			12.95	H	272.2	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,130.000	41.57	54.00	12.43	12.69	H	355	2
2	5,150.000	36.48	54.00	17.52	12.75	H	5	1
2	5,201.000	85.50			12.95	H	355	2



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.500	53.57	74.00	20.43	12.75	V	136.8	1
2	5,150.000	53.38	74.00	20.62	12.75	V	136.8	1
2	5,197.500	102.95			12.94	V	90.2	1



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.500	37.28	54.00	16.72	12.75	V	355	2
2	5,150.000	37.41	54.00	16.59	12.75	V	355	2
2	5,193.000	90.83			12.92	V	1	1

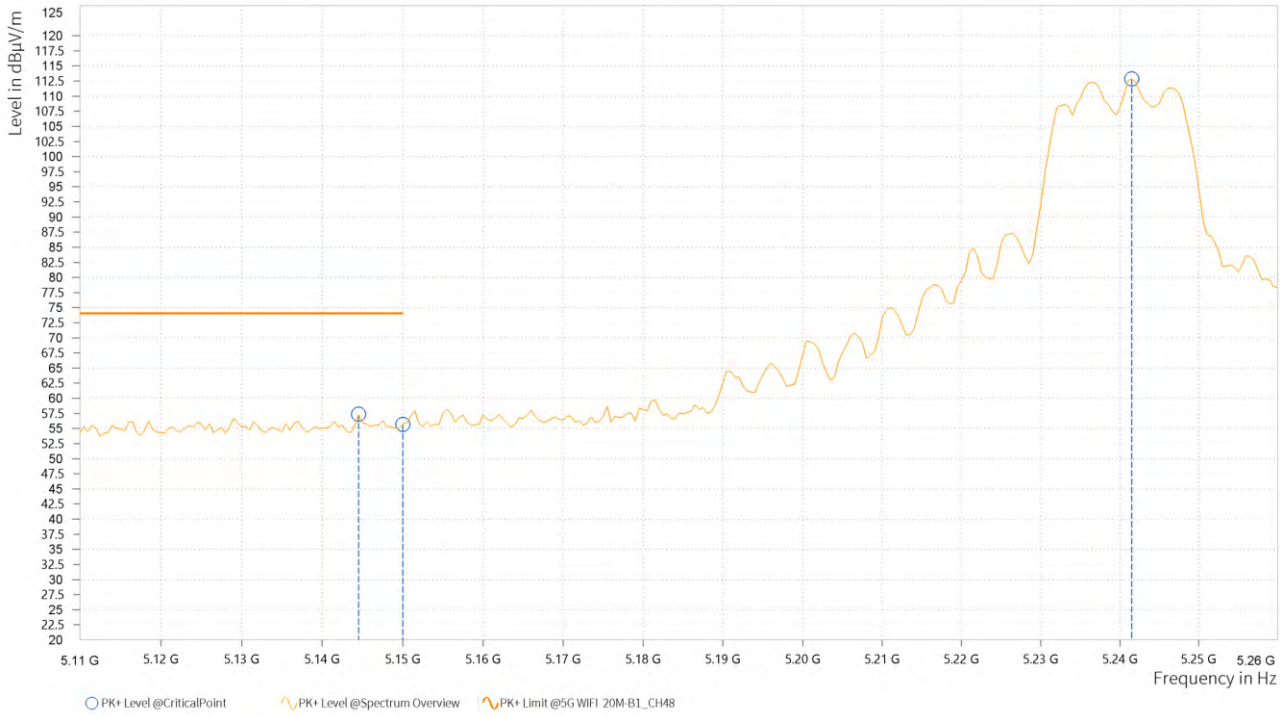
CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.16	55.23	74	-19.84	34.52	9.92	45.51	100	75	Peak
5150	49.15	50.22	54	-4.85	34.52	9.92	45.51	100	75	Average
5240	109.91	110.94	/	/	34.59	9.89	45.51	100	75	Peak
5240	102.98	104.01	/	/	34.59	9.89	45.51	100	75	Average
5350	54.57	55.55	74	-19.43	34.68	9.85	45.51	100	75	Peak
5350	47.89	48.87	54	-6.11	34.68	9.85	45.51	100	75	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.54	56.53	74	-18.46	34.6	9.92	45.51	100	175	Peak
5150	48.05	49.04	54	-5.95	34.6	9.92	45.51	100	175	Average
5240	101.56	102.58	/	/	34.6	9.89	45.51	100	175	Peak
5240	95.59	96.61	/	/	34.6	9.89	45.51	100	175	Average
5350	53.46	54.52	74	-20.54	34.6	9.85	45.51	100	175	Peak
5350	48.63	49.69	54	-5.37	34.6	9.85	45.51	100	175	Average

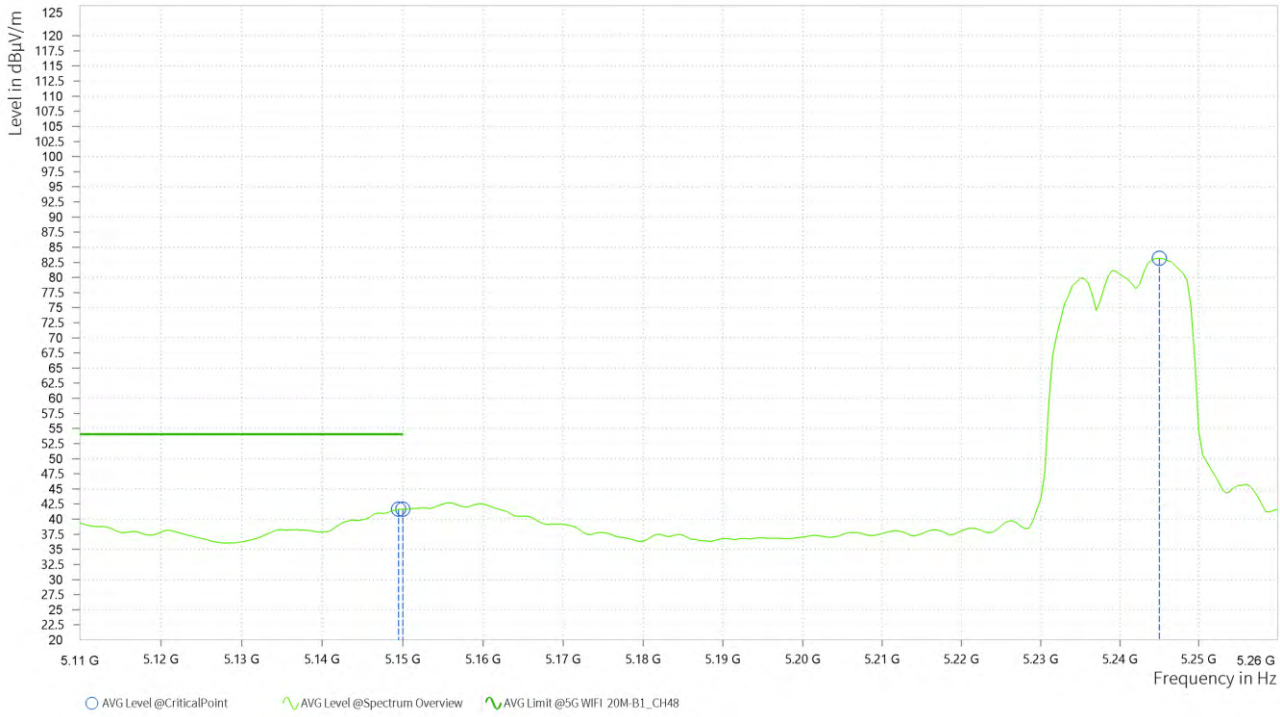
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

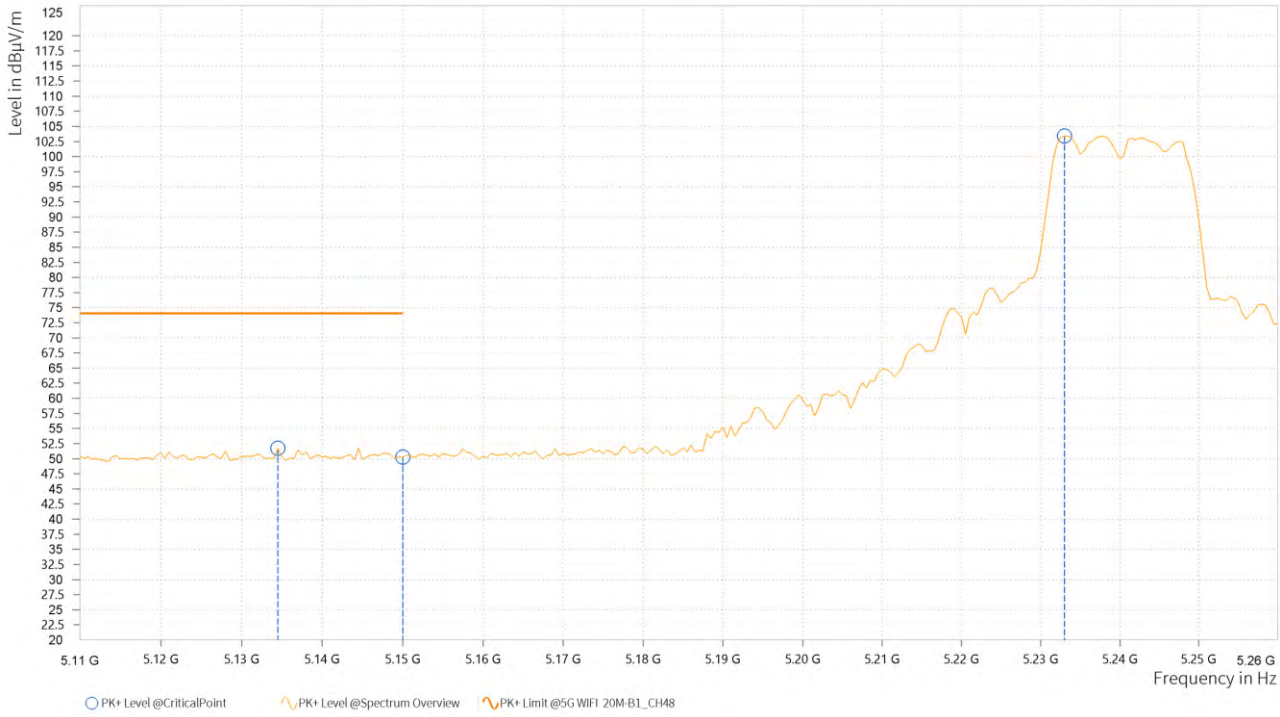
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,144.500	57.34	74.00	16.66	12.73	H	145.4	2
3	5,150.000	55.66	74.00	18.34	12.75	H	145.4	2
3	5,241.500	112.86			12.94	H	145.4	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,149.500	41.64	54.00	12.36	12.75	H	355	2
3	5,150.000	41.65	54.00	12.35	12.75	H	355	2
3	5,245.000	83.16			12.94	H	355	2



Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,134.500	51.74	74.00	22.26	12.70	V	91.4	1
3	5,150.000	50.24	74.00	23.76	12.75	V	187	1
3	5,233.000	103.42			12.94	V	359	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,129.000	37.29	54.00	16.71	12.69	V	5	1
3	5,150.000	36.63	54.00	17.37	12.75	V	359	1
3	5,233.000	92.88			12.94	V	359	2

802.11n (20MHz)

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

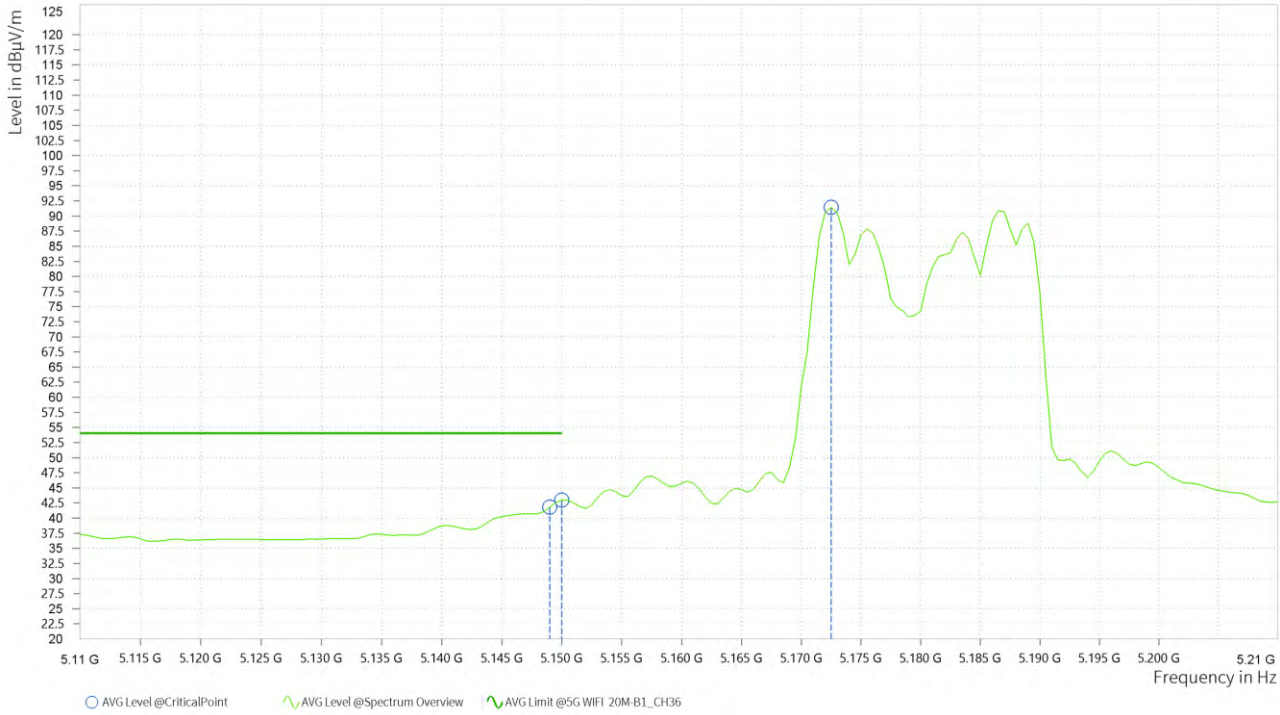
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.58	58.65	74	-16.42	34.52	9.92	45.51	100	280	Peak
5150	50.64	51.71	54	-3.36	34.52	9.92	45.51	100	280	Average
5180	106.6	107.66	/	/	34.54	9.91	45.51	100	280	Peak
5180	100.67	101.73	/	/	34.54	9.91	45.51	100	280	Average
5350	55.78	56.76	74	-18.22	34.68	9.85	45.51	100	280	Peak
5350	47	47.98	54	-7	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.32	57.31	74	-17.68	34.6	9.92	45.51	100	175	Peak
5150	49.67	50.66	54	-4.33	34.6	9.92	45.51	100	175	Average
5180	99.71	100.71	/	/	34.6	9.91	45.51	100	175	Peak
5180	92.99	93.99	/	/	34.6	9.91	45.51	100	175	Average
5350	53.85	54.91	74	-20.15	34.6	9.85	45.51	100	175	Peak
5350	47.47	48.53	54	-6.53	34.6	9.85	45.51	100	175	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,144.500	57.04	74.00	16.96	12.73	H	144.2	2
1	5,150.000	57.32	74.00	16.68	12.75	H	144.2	2
1	5,175.500	109.69			12.86	H	144.2	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.000	41.81	54.00	12.19	12.74	H	5	1
1	5,150.000	42.98	54.00	11.02	12.75	H	5	1
1	5,172.500	91.44			12.85	H	5	1



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.000	52.19	74.00	21.81	12.74	V	79.8	2
1	5,150.000	50.79	74.00	23.21	12.75	V	328.1	1
1	5,188.000	101.29			12.90	V	139.2	1

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,147.500	37.00	54.00	17.00	12.74	V	359	1
1	5,150.000	37.01	54.00	16.99	12.75	V	4.4	1
1	5,178.500	90.54			12.87	V	4.4	1

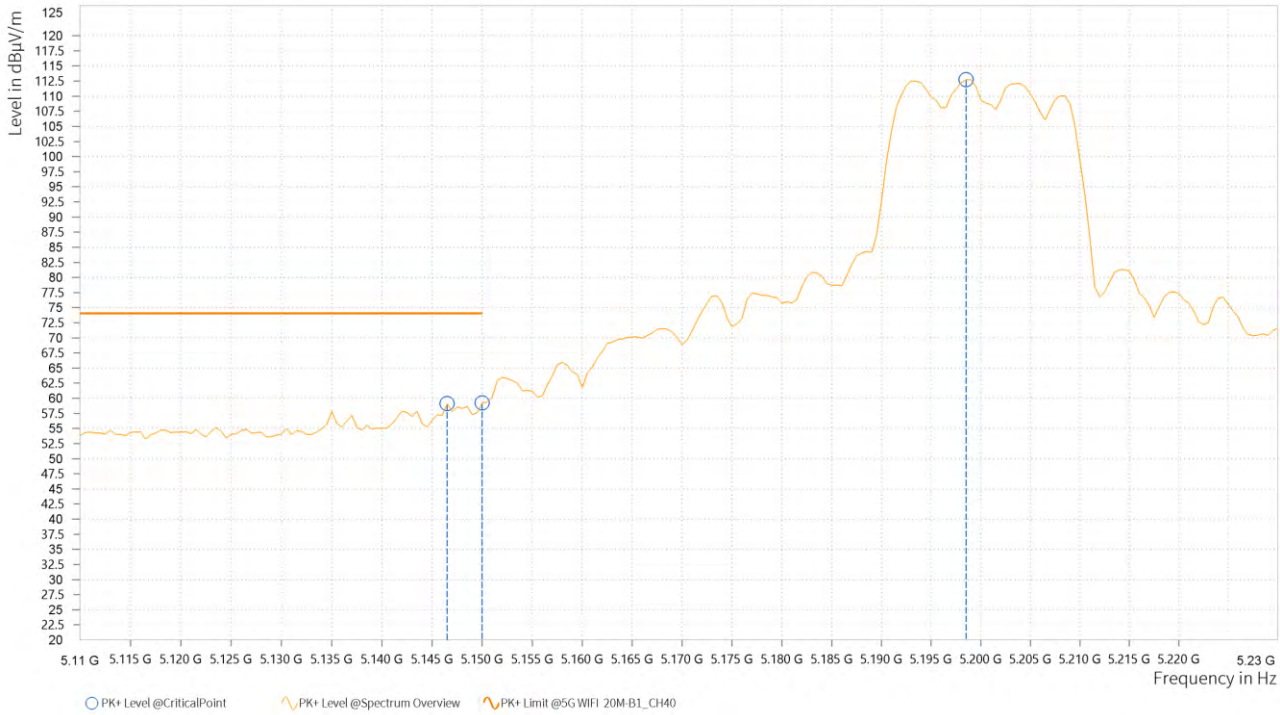
CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	58.98	60.05	74	-15.02	34.52	9.92	45.51	100	280	Peak
5150	50.05	51.12	54	-3.95	34.52	9.92	45.51	100	280	Average
5200	110.08	111.13	/	/	34.56	9.9	45.51	100	280	Peak
5200	102.69	103.74	/	/	34.56	9.9	45.51	100	280	Average
5350	55.34	56.32	74	-18.66	34.68	9.85	45.51	100	280	Peak
5350	47.87	48.85	54	-6.13	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	59.25	60.24	74	-14.75	34.6	9.92	45.51	100	175	Peak
5150	49.19	50.18	54	-4.81	34.6	9.92	45.51	100	175	Average
5200	103.11	104.12	/	/	34.6	9.9	45.51	100	175	Peak
5200	96.15	97.16	/	/	34.6	9.9	45.51	100	175	Average
5350	57.04	58.1	74	-16.96	34.6	9.85	45.51	100	175	Peak
5350	47.84	48.9	54	-6.16	34.6	9.85	45.51	100	175	Average

REMARKS:

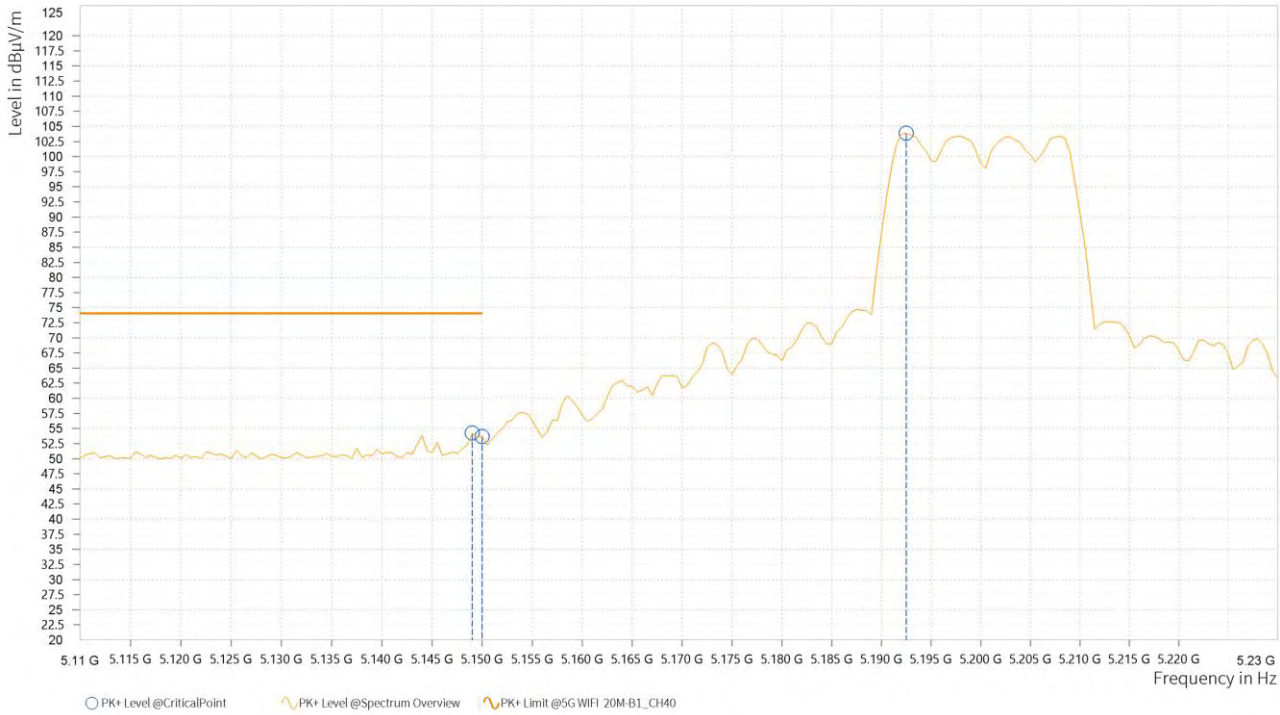
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,146.500	59.10	74.00	14.90	12.74	H	269.8	2
2	5,150.000	59.24	74.00	14.76	12.75	H	269.8	2
2	5,198.500	112.73			12.94	H	269.8	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,130.000	41.83	54.00	12.17	12.69	H	355.7	2
2	5,150.000	36.44	54.00	17.56	12.75	H	5.7	1
2	5,205.500	85.50			12.94	H	355.7	2

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.000	54.24	74.00	19.76	12.74	V	142.7	1
2	5,150.000	53.68	74.00	20.32	12.75	V	142.7	1
2	5,192.500	103.86			12.92	V	142.7	1



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,125.500	37.36	54.00	16.64	12.67	V	5	1
2	5,150.000	37.50	54.00	16.50	12.75	V	355.7	2
2	5,208.000	90.10			12.94	V	1	1

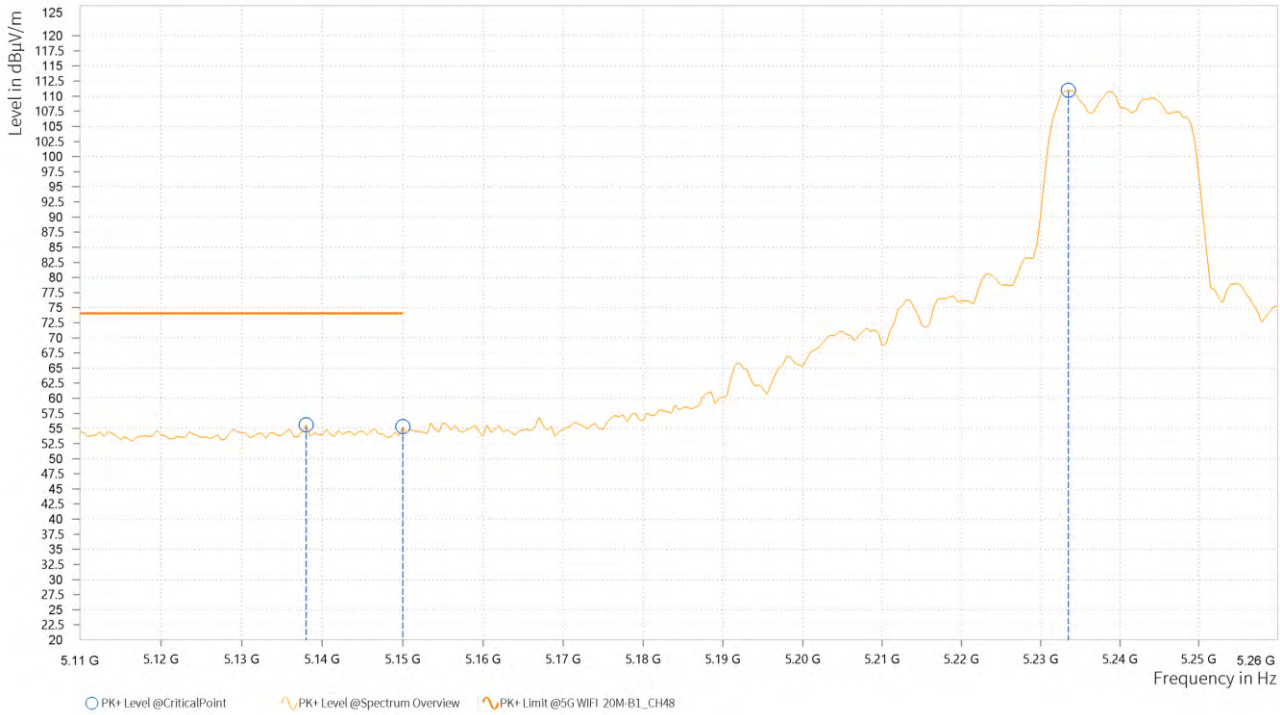
CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.94	56.01	74	-19.06	34.52	9.92	45.51	100	280	Peak
5150	47.72	48.79	54	-6.28	34.52	9.92	45.51	100	280	Average
5240	108.23	109.26	/	/	34.59	9.89	45.51	100	280	Peak
5240	101.89	102.92	/	/	34.59	9.89	45.51	100	280	Average
5350	53.34	54.32	74	-20.66	34.68	9.85	45.51	100	280	Peak
5350	48.02	49	54	-5.98	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.46	54.45	74	-20.54	34.6	9.92	45.51	100	175	Peak
5150	48.22	49.21	54	-5.78	34.6	9.92	45.51	100	175	Average
5240	101.74	102.76	/	/	34.6	9.89	45.51	100	175	Peak
5240	95.41	96.43	/	/	34.6	9.89	45.51	100	175	Average
5350	56.82	57.88	74	-17.18	34.6	9.85	45.51	100	175	Peak
5350	47.2	48.26	54	-6.8	34.6	9.85	45.51	100	175	Average

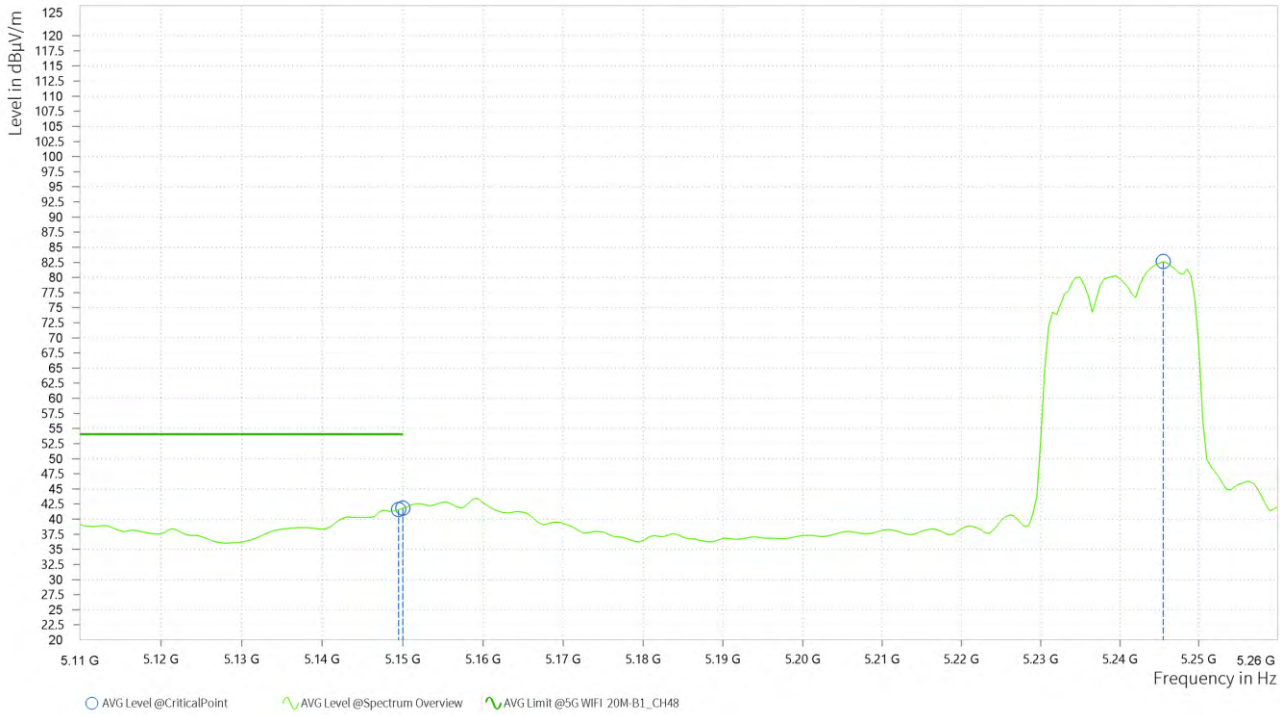
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

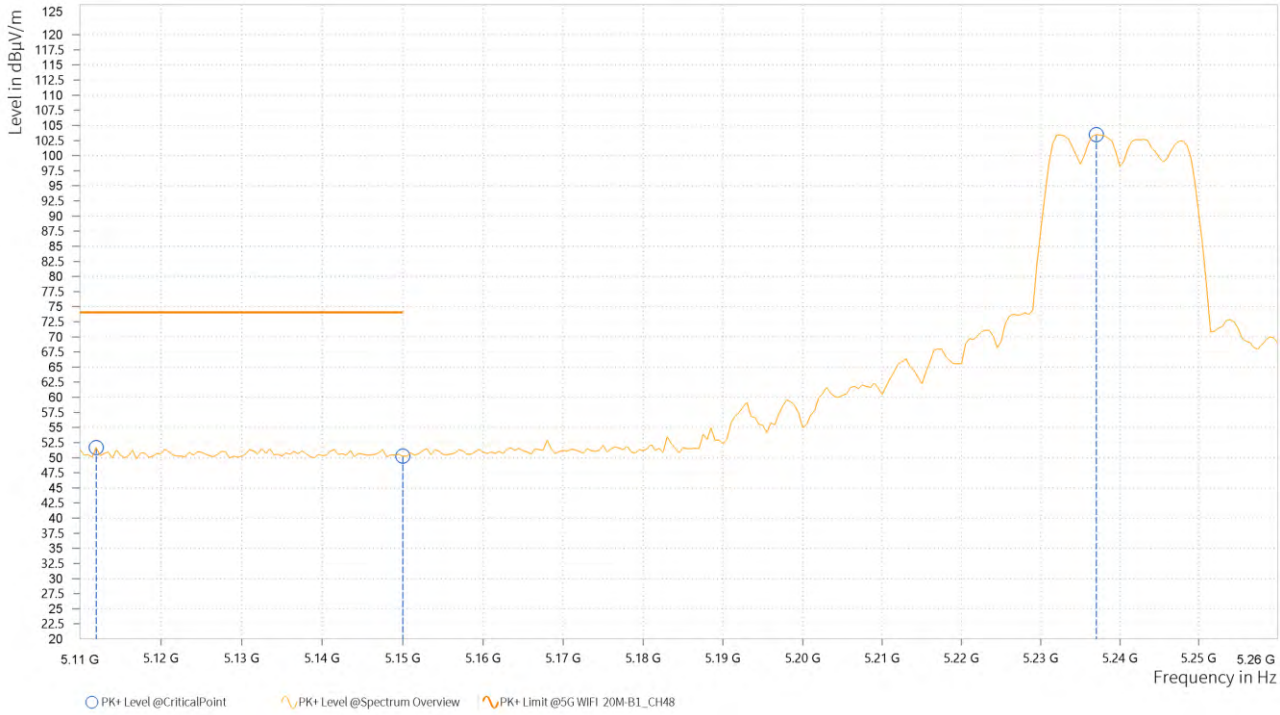
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,138.000	55.62	74.00	18.38	12.71	H	268.6	2
3	5,150.000	55.31	74.00	18.69	12.75	H	268.6	2
3	5,233.500	110.98			12.94	H	268.6	2



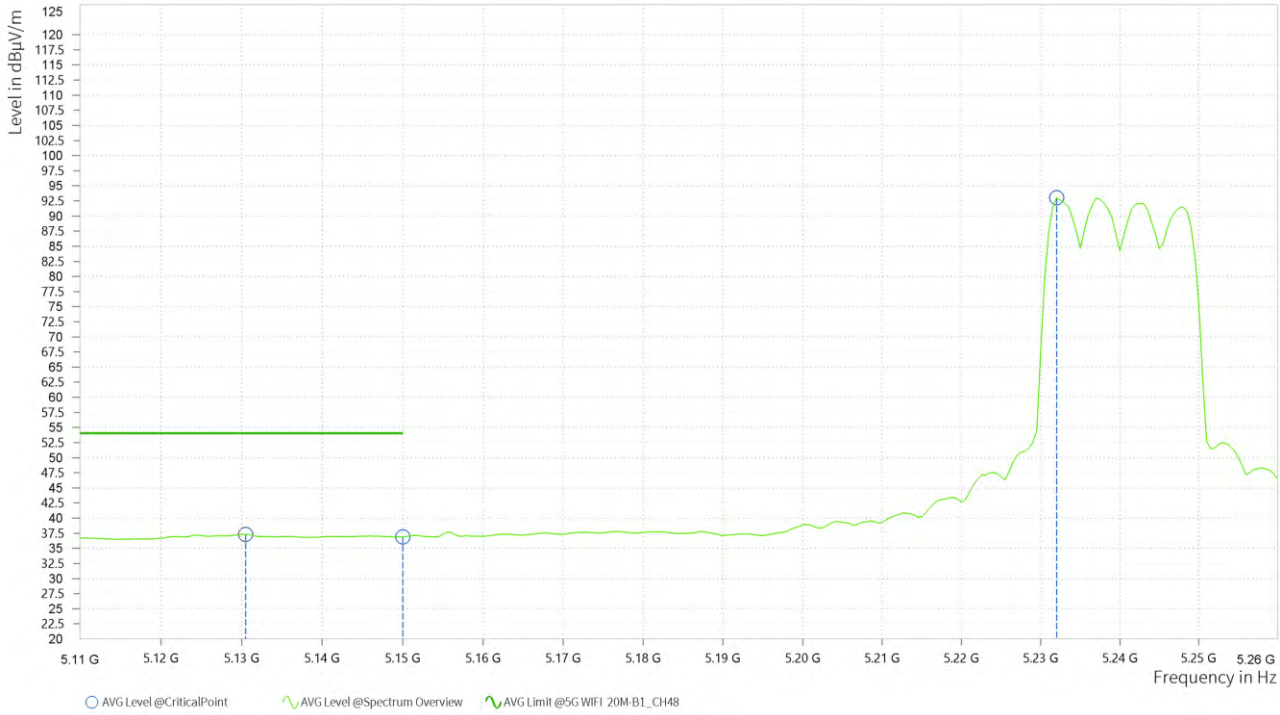
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,149.500	41.60	54.00	12.40	12.75	H	355	2
3	5,150.000	41.79	54.00	12.21	12.75	H	355	2
3	5,245.500	82.63			12.94	H	355	2



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,112.000	51.70	74.00	22.30	12.64	V	355	2
3	5,150.000	50.25	74.00	23.75	12.75	V	359	1
3	5,237.000	103.48			12.94	V	353	1



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,130.500	37.31	54.00	16.69	12.69	V	4.4	1
3	5,150.000	36.90	54.00	17.10	12.75	V	359	2
3	5,232.000	93.05			12.94	V	4.4	1



802.11n (40MHz)

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

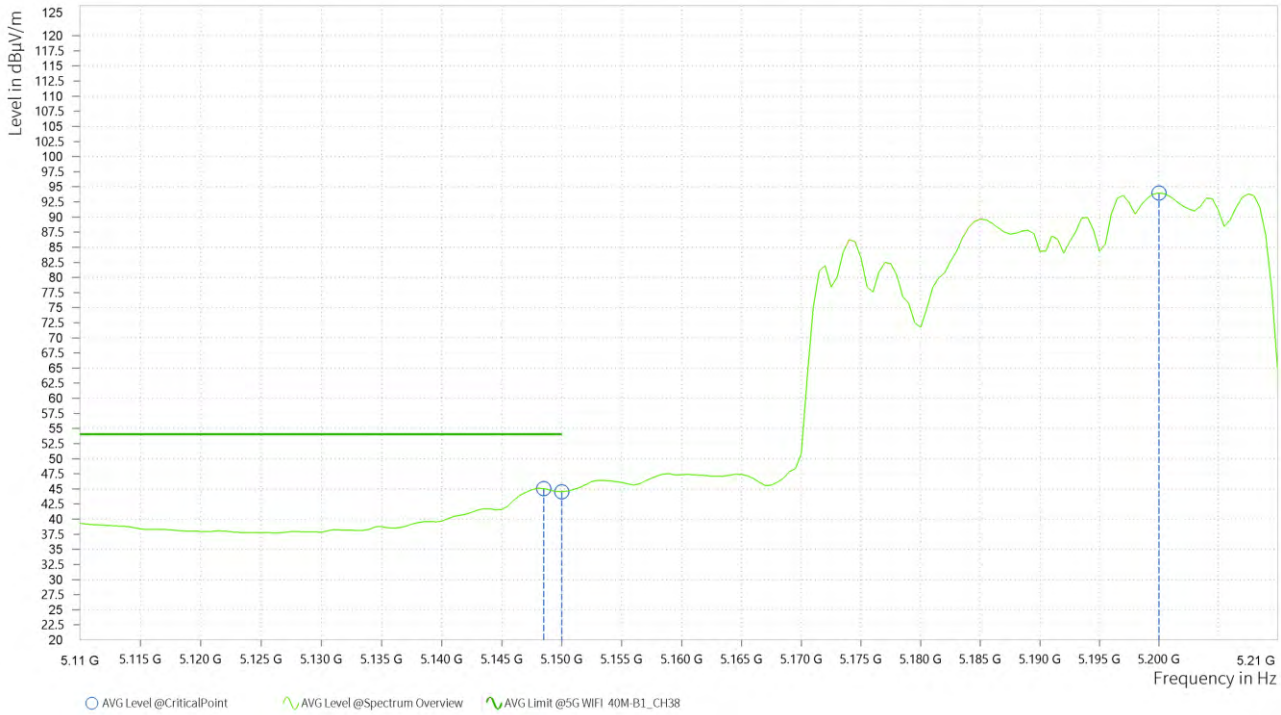
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.77	58.84	74	-16.23	34.52	9.92	45.51	100	280	Peak
5150	53.33	54.4	54	-0.67	34.52	9.92	45.51	100	280	Average
5190	100.78	101.83	/	/	34.55	9.91	45.51	100	280	Peak
5190	95.4	96.45	/	/	34.55	9.91	45.51	100	280	Average
5350	54.23	55.21	74	-19.77	34.68	9.85	45.51	100	280	Peak
5350	47.48	48.46	54	-6.52	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.84	57.83	74	-17.16	34.6	9.92	45.51	100	175	Peak
5150	50.91	51.9	54	-3.09	34.6	9.92	45.51	100	175	Average
5190	94.66	95.66	/	/	34.6	9.91	45.51	100	175	Peak
5190	92.73	93.73	/	/	34.6	9.91	45.51	100	175	Average
5350	52.59	53.65	74	-21.41	34.6	9.85	45.51	100	175	Peak
5350	47.53	48.59	54	-6.47	34.6	9.85	45.51	100	175	Average

REMARKS:

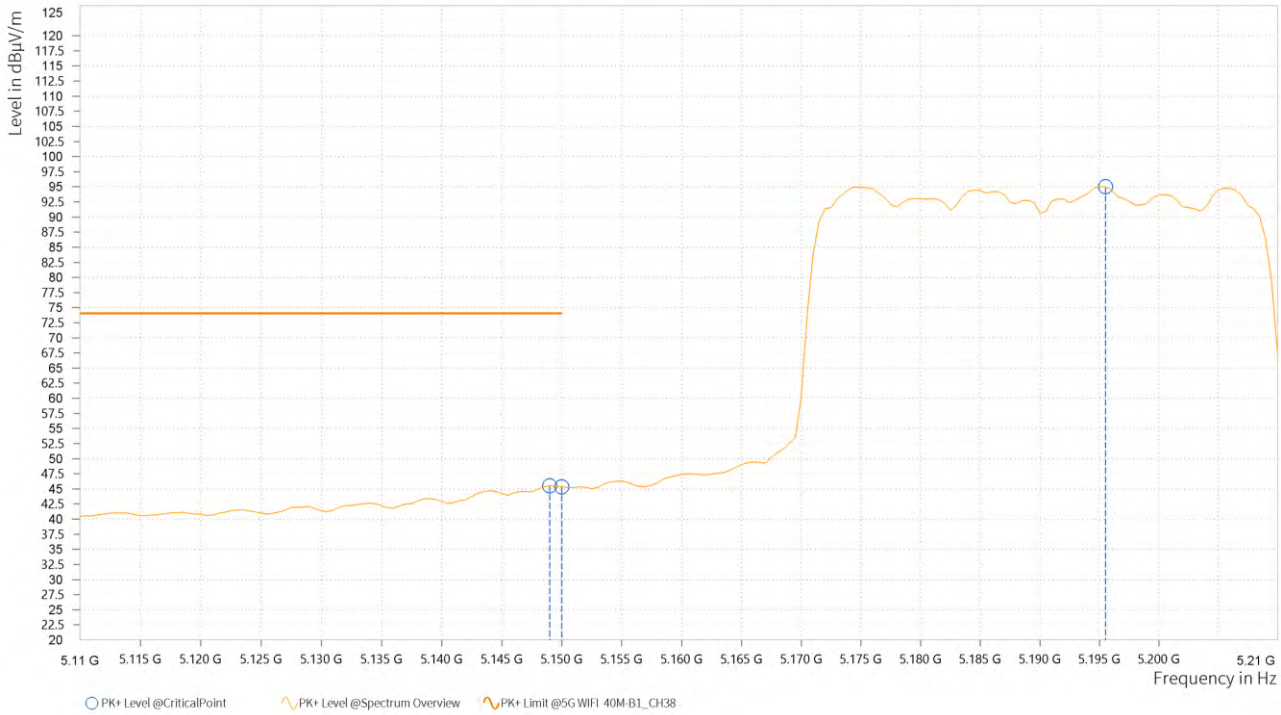
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.000	45.55	74.00	28.45	12.74	H	268.6	2
1	5,150.000	45.27	74.00	28.73	12.75	H	268.6	2
1	5,205.500	95.17			12.94	H	172.9	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,148.500	45.04	54.00	8.96	12.74	H	355	2
1	5,150.000	44.54	54.00	9.46	12.75	H	355	2
1	5,200.000	93.99			12.95	H	355	2



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.000	45.52	74.00	28.48	12.74	V	267.4	2
1	5,150.000	45.37	74.00	28.63	12.75	V	267.4	2
1	5,195.500	95.01			12.93	V	171.8	2



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,146.500	39.07	54.00	14.93	12.74	V	258.7	1
1	5,150.000	38.76	54.00	15.24	12.75	V	359	2
1	5,176.500	85.01			12.86	V	5	1

CHANNEL	TX Channel 46	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5150	56.44	57.51	74	-17.56	34.52	9.92	45.51	100	280	Peak
5150	49.81	50.88	54	-4.19	34.52	9.92	45.51	100	280	Average
5230	102.56	103.6	/	/	34.58	9.89	45.51	100	280	Peak
5230	97.41	98.45	/	/	34.58	9.89	45.51	100	280	Average
5350	53.61	54.59	74	-20.39	34.68	9.85	45.51	100	280	Peak
5350	47.89	48.87	54	-6.11	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
5150	52.23	53.22	74	-21.77	34.6	9.92	45.51	100	175	Peak
5150	48.5	49.49	54	-5.5	34.6	9.92	45.51	100	175	Average
5230	95.78	96.8	/	/	34.6	9.89	45.51	100	175	Peak
5230	93.47	94.49	/	/	34.6	9.89	45.51	100	175	Average
5350	52.56	53.62	74	-21.44	34.6	9.85	45.51	100	175	Peak
5350	47.56	48.62	54	-6.44	34.6	9.85	45.51	100	175	Average

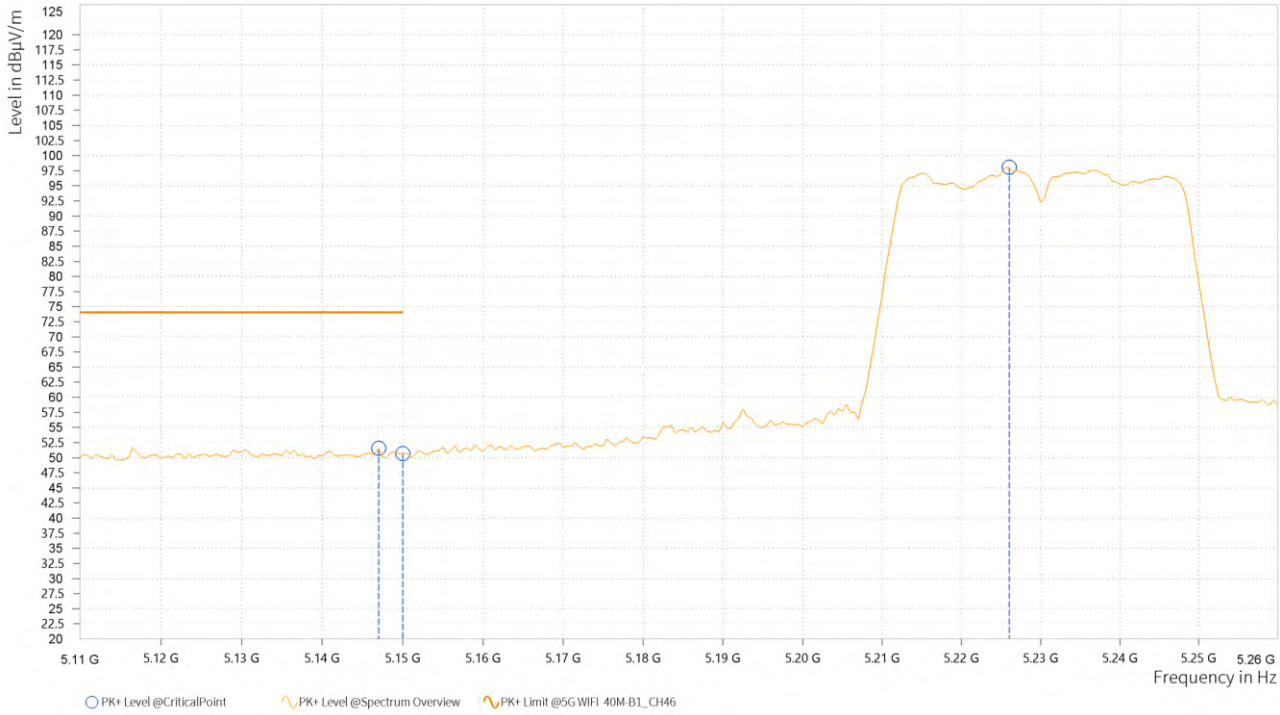
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5210MHz: Fundamental frequency.

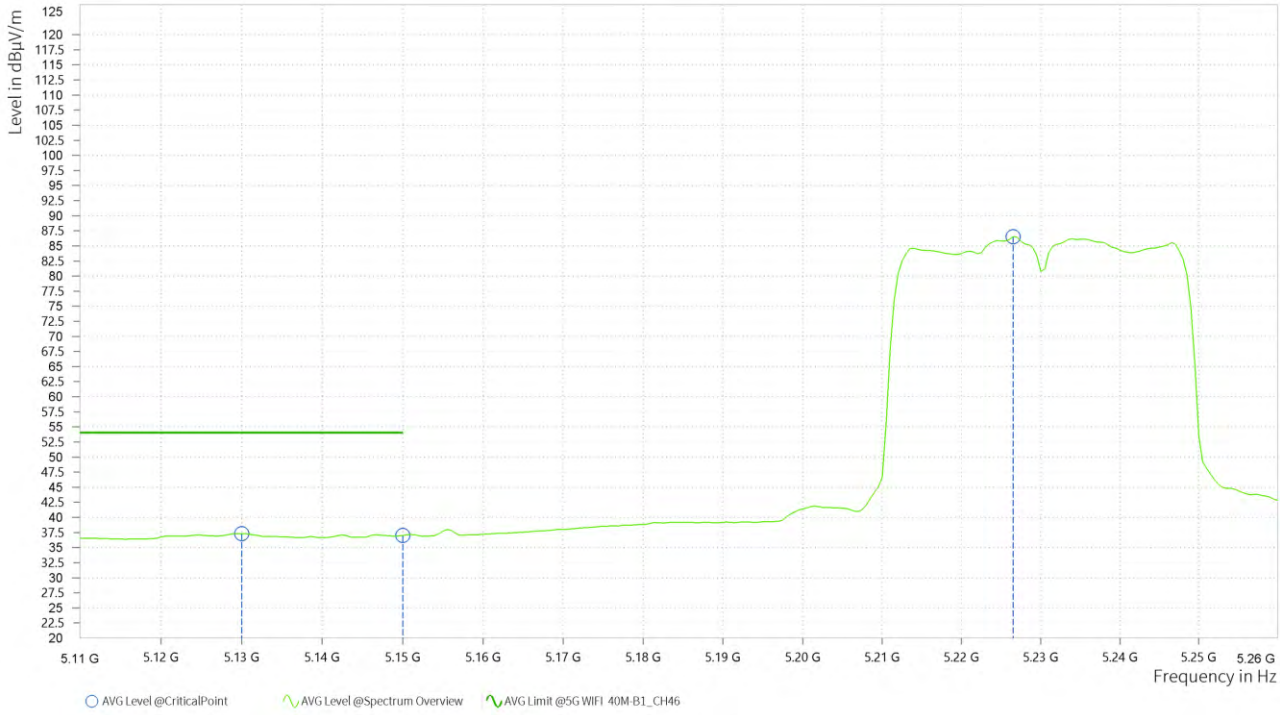
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,147.000	55.54	74.00	18.46	12.74	H	225.2	1
2	5,150.000	54.25	74.00	19.75	12.75	H	266.2	2
2	5,214.000	107.51			12.94	H	169.3	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.500	42.31	54.00	11.69	12.75	H	355	2
2	5,150.000	42.43	54.00	11.57	12.75	H	355	2
2	5,214.500	78.26			12.94	H	355	2

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,147.000	51.53	74.00	22.47	12.74	V	216	2
2	5,150.000	50.69	74.00	23.31	12.75	V	358.2	1
2	5,226.000	98.05			12.94	V	343.7	1



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,130.000	37.31	54.00	16.69	12.69	V	5	1
2	5,150.000	37.01	54.00	16.99	12.75	V	5	1
2	5,226.500	86.53			12.94	V	5	1



802.11ac (20MHz)

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

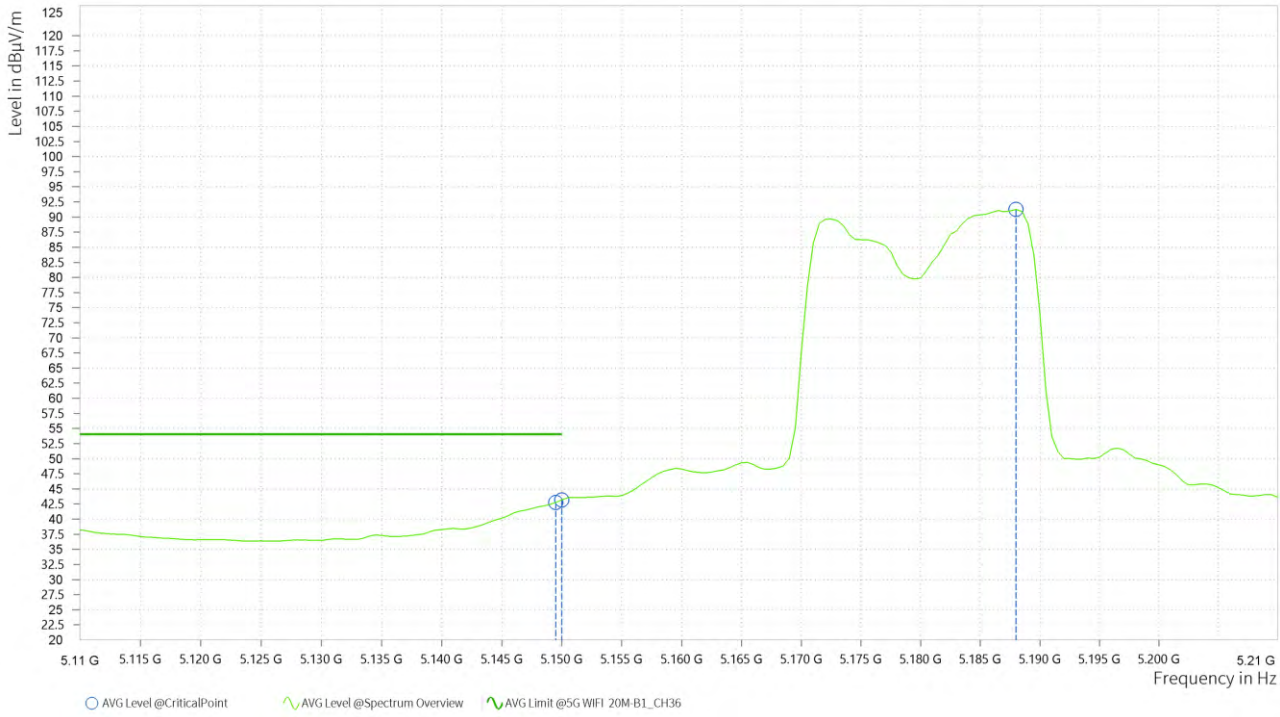
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.15	58.22	74	-16.85	34.52	9.92	45.51	100	280	Peak
5150	51.69	52.76	54	-2.31	34.52	9.92	45.51	100	280	Average
5180	104.79	105.85	/	/	34.54	9.91	45.51	100	280	Peak
5180	99.68	100.74	/	/	34.54	9.91	45.51	100	280	Average
5350	55.34	56.32	74	-18.66	34.68	9.85	45.51	100	280	Peak
5350	48.15	49.13	54	-5.85	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.97	58.96	74	-16.03	34.6	9.92	45.51	100	175	Peak
5150	49.72	50.71	54	-4.28	34.6	9.92	45.51	100	175	Average
5180	97.95	98.95	/	/	34.6	9.91	45.51	100	175	Peak
5180	91.93	92.93	/	/	34.6	9.91	45.51	100	175	Average
5350	54.36	55.42	74	-19.64	34.6	9.85	45.51	100	175	Peak
5350	47.08	48.14	54	-6.92	34.6	9.85	45.51	100	175	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,146.500	57.52	74.00	16.48	12.74	H	71.1	1
1	5,150.000	57.46	74.00	16.54	12.75	H	290.1	2
1	5,187.500	108.08			12.90	H	290.1	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,149.500	42.76	54.00	11.24	12.75	H	355	2
1	5,150.000	43.19	54.00	10.81	12.75	H	355	2
1	5,188.000	91.26			12.90	H	355	2



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,138.500	51.63	74.00	22.37	12.71	V	217.2	2
1	5,150.000	51.31	74.00	22.69	12.75	V	144	1
1	5,178.000	98.80			12.87	V	355	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	5,131.500	36.96	54.00	17.04	12.69	V	102.4	2
1	5,150.000	36.91	54.00	17.09	12.75	V	359	1
1	5,172.000	87.98			12.84	V	4.9	1

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.24	58.31	74	-16.76	34.52	9.92	45.51	100	280	Peak
5150	50.91	51.98	54	-3.09	34.52	9.92	45.51	100	280	Average
5200	108.68	109.73	/	/	34.56	9.9	45.51	100	280	Peak
5200	101.33	102.38	/	/	34.56	9.9	45.51	100	280	Average
5350	55.91	56.89	74	-18.09	34.68	9.85	45.51	100	280	Peak
5350	48.26	49.24	54	-5.74	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.31	57.3	74	-17.69	34.6	9.92	45.51	100	175	Peak
5150	49.03	50.02	54	-4.97	34.6	9.92	45.51	100	175	Average
5200	101.54	102.55	/	/	34.6	9.9	45.51	100	175	Peak
5200	94.94	95.95	/	/	34.6	9.9	45.51	100	175	Average
5350	54.03	55.09	74	-19.97	34.6	9.85	45.51	100	175	Peak
5350	46.95	48.01	54	-7.05	34.6	9.85	45.51	100	175	Average

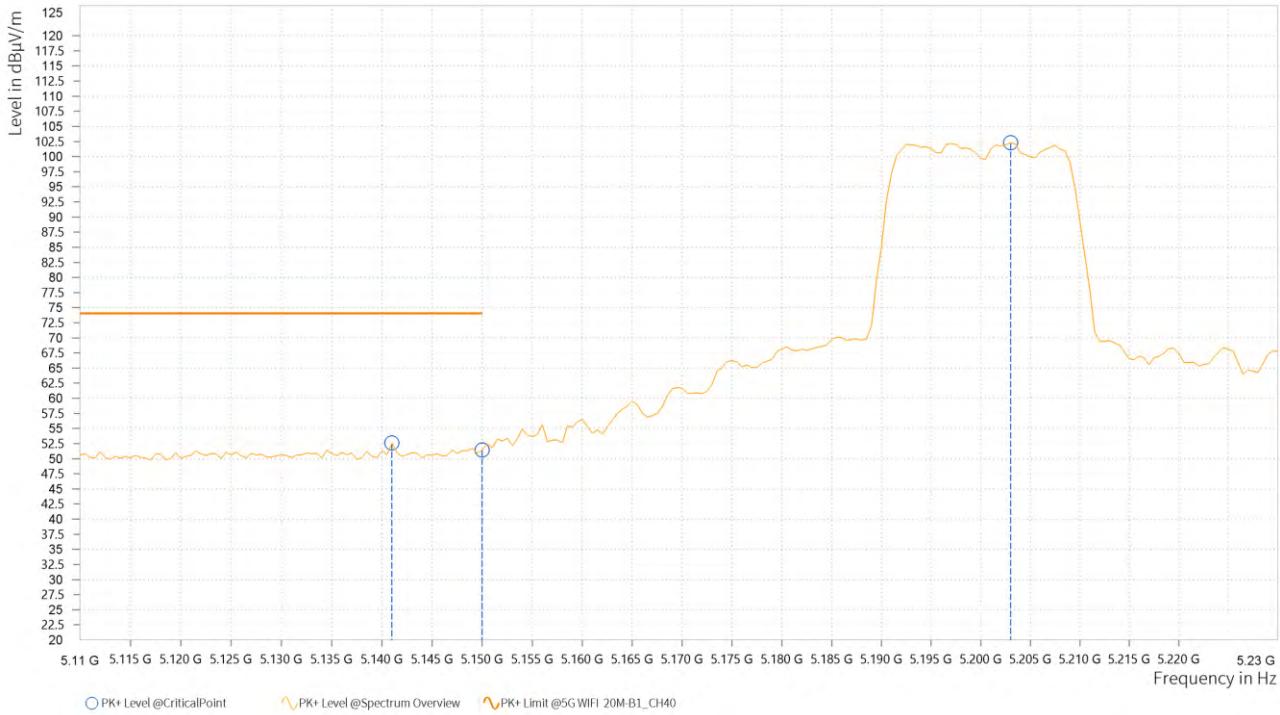
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,146.000	59.63	74.00	14.37	12.73	H	138.3	2
2	5,150.000	57.70	74.00	16.30	12.75	H	220.6	1
2	5,192.500	110.23			12.92	H	138.3	2

Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,129.000	42.02	54.00	11.98	12.69	H	355	2
2	5,150.000	36.80	54.00	17.20	12.75	H	355	2
2	5,202.500	85.00			12.95	H	0.9	2

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,141.000	52.59	74.00	21.41	12.72	V	67.8	2
2	5,150.000	51.45	74.00	22.55	12.75	V	142.8	1
2	5,203.000	102.27			12.95	V	191.8	1



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	5,149.500	37.33	54.00	16.67	12.75	V	355.7	2
2	5,150.000	37.26	54.00	16.74	12.75	V	355.7	2
2	5,207.000	88.18			12.94	V	1	1

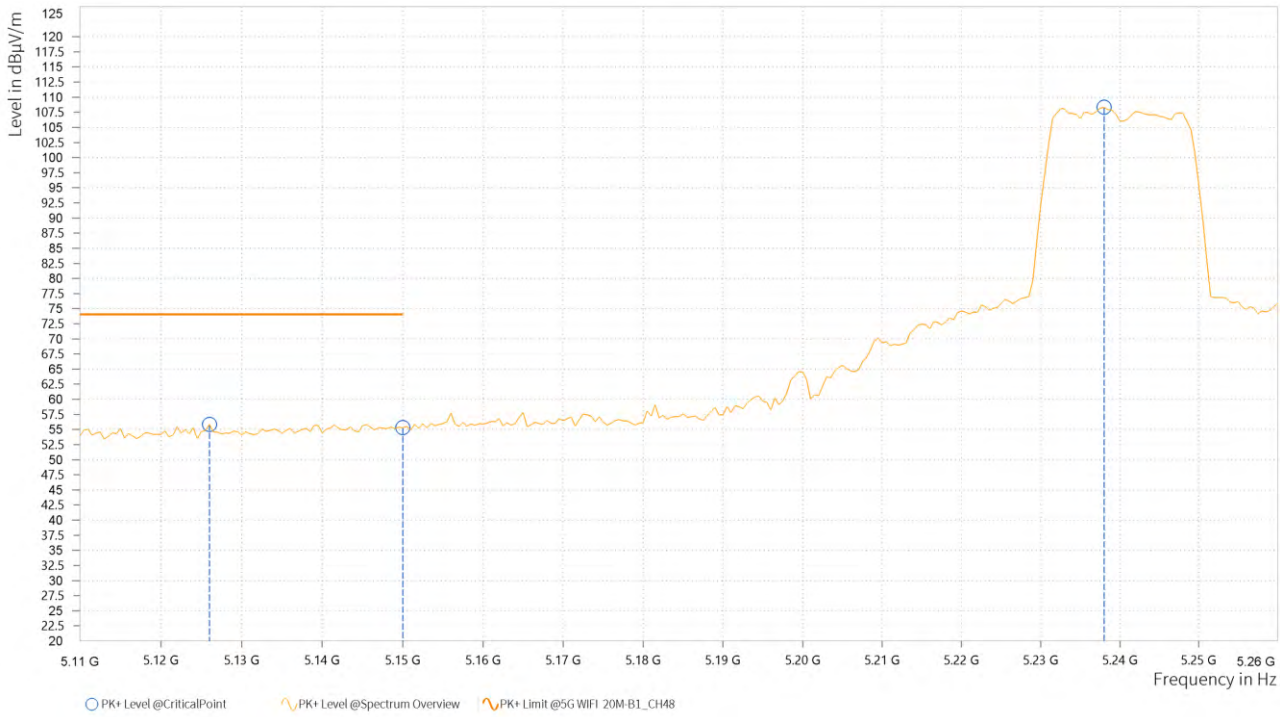
CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.6	56.67	74	-18.4	34.52	9.92	45.51	100	280	Peak
5150	48.64	49.71	54	-5.36	34.52	9.92	45.51	100	280	Average
5240	107.41	108.44	/	/	34.59	9.89	45.51	100	280	Peak
5240	100.73	101.76	/	/	34.59	9.89	45.51	100	280	Average
5350	54.37	55.35	74	-19.63	34.68	9.85	45.51	100	280	Peak
5350	47.98	48.96	54	-6.02	34.68	9.85	45.51	100	280	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.34	54.33	74	-20.66	34.6	9.92	45.51	100	175	Peak
5150	48.09	49.08	54	-5.91	34.6	9.92	45.51	100	175	Average
5240	100.55	101.57	/	/	34.6	9.89	45.51	100	175	Peak
5240	93.01	94.03	/	/	34.6	9.89	45.51	100	175	Average
5350	55.15	56.21	74	-18.85	34.6	9.85	45.51	100	175	Peak
5350	47.96	49.02	54	-6.04	34.6	9.85	45.51	100	175	Average

REMARKS:

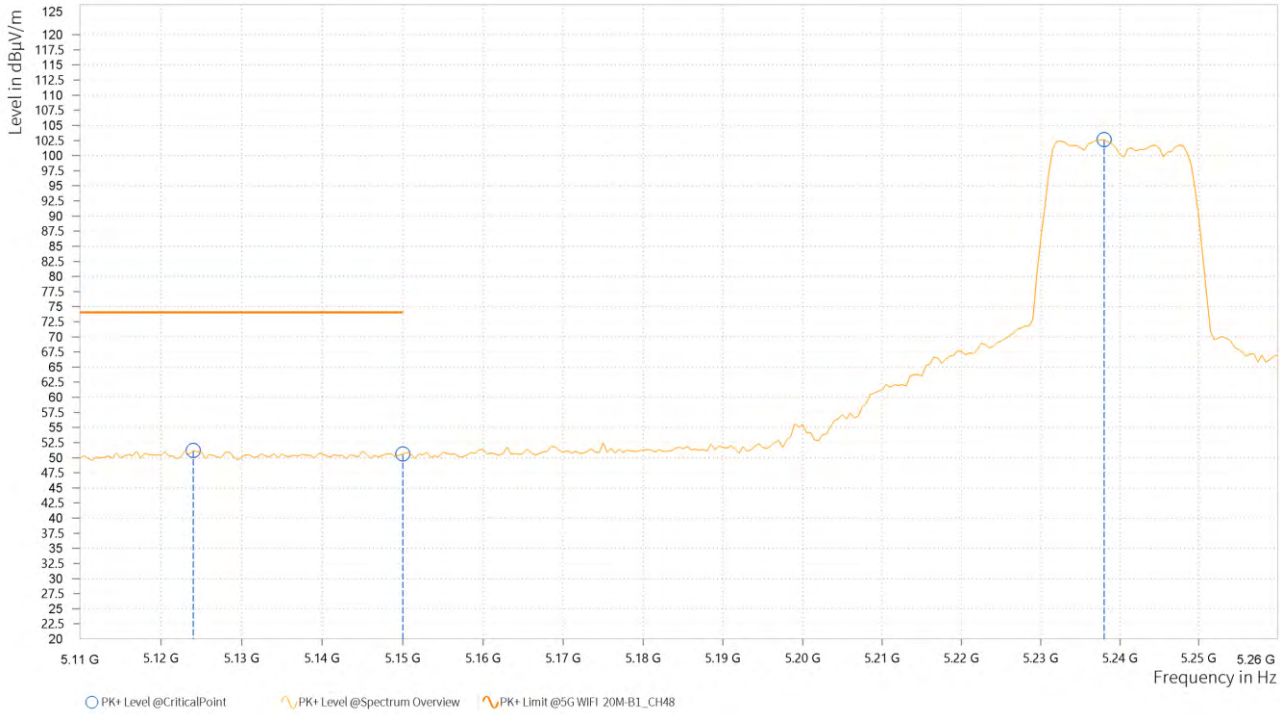
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,126.000	55.85	74.00	18.15	12.68	H	137.1	2
3	5,150.000	55.29	74.00	18.71	12.75	H	137.1	2
3	5,238.000	108.31			12.94	H	137.1	2

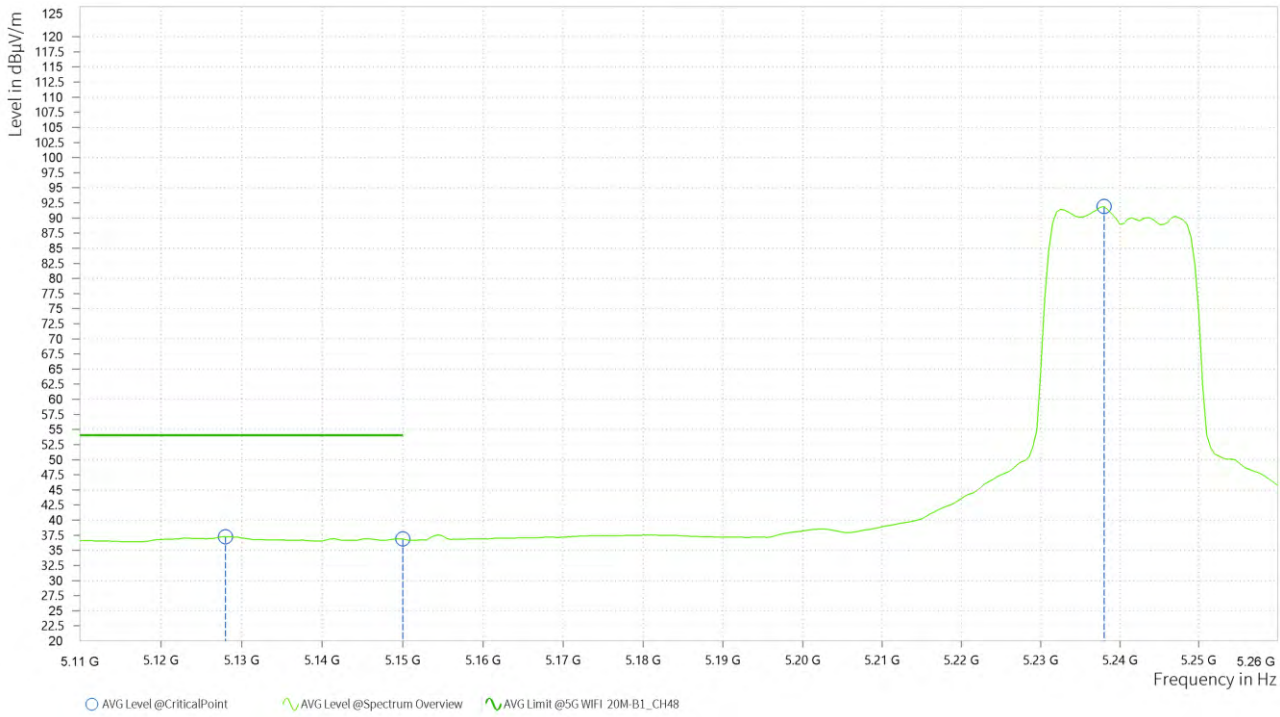


Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,149.000	41.61	54.00	12.39	12.74	H	355	2
3	5,150.000	41.80	54.00	12.20	12.75	H	355	2
3	5,248.000	82.17			12.94	H	355	2

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,124.000	51.19	74.00	22.81	12.67	V	1	1
3	5,150.000	50.59	74.00	23.41	12.75	V	65.4	2
3	5,238.000	102.65			12.94	V	328	1



Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	5,128.000	37.27	54.00	16.73	12.68	V	6.3	1
3	5,150.000	36.87	54.00	17.13	12.75	V	6.3	1
3	5,238.000	91.91			12.94	V	6.3	1



802.11ac (40MHz)

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.38	54.45	74	-20.62	34.52	9.92	45.51	100	282	Peak
5150	50.31	51.38	54	-3.69	34.52	9.92	45.51	100	282	Average
5190	100.3	101.35	/	/	34.55	9.91	45.51	100	282	Peak
5190	94.57	95.62	/	/	34.55	9.91	45.51	100	282	Average
5350	53.63	54.61	74	-20.37	34.68	9.85	45.51	100	282	Peak
5350	48.42	49.4	54	-5.58	34.68	9.85	45.51	100	282	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.01	54	74	-20.99	34.6	9.92	45.51	105	185	Peak
5150	48.77	49.76	54	-5.23	34.6	9.92	45.51	105	185	Average
5190	95.1	96.1	/	/	34.6	9.91	45.51	105	185	Peak
5190	90.26	91.26	/	/	34.6	9.91	45.51	105	185	Average
5350	53.03	54.09	74	-20.97	34.6	9.85	45.51	105	185	Peak
5350	47.97	49.03	54	-6.03	34.6	9.85	45.51	105	185	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.