RADIO TEST REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant	:	Pinsheng technologies Co., Ltd.
Address	:	7Floor, No.5 middle Huangshan Avenue, North New Zone, Chongqing
Manufacturer	:	Pinsheng technologies Co., Ltd.
Address	:	7Floor, No.5 middle Huangshan Avenue, North New Zone, Chongqing
Factory	:	Chongqing Datiejiang Science and Technology Co.,Ltd.
Address	:	NO.368, BOE Avenue, Beibei District, Chongqing
E.U.T.	:	Label Printer
Brand Name	:	MakeID
Model No.	:	ML60R-WT
FCC ID	:	2AVAP-ML60
Measurement Standard	:	FCC PART 15.247
Date of Receiver	:	November 27, 2019
Date of Test	:	November 28, 2019 to December 02, 2019
Date of Report	:	December 03, 2019

This Test Report is Issued Under the Authority of :

Prepared by	Approved & Authorized Signer
Bowen Zhu / Engineer	Iori Fan / Authorized Signatory

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

TEL: +86-769-22022444 FAX: +86-769-22022799 Web: www.ntc-c.com
Address: Building D, Gaosheng Science and Technology park, Hongtu road, Nancheng district, Dongguan city, Guangdong province, China

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Revision History of This Test Report

Report Number	Description	Issued Date
NTC1911303FV00	Initial Issue	2019-12-03

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test

Product Name	:	Label Printer
Brand Name	:	MakeID
Main Model Name	:	ML60R-WT
Additional Model Name	:	Refer to Serial Model List
E.U.T. Type	:	Class B
Rating	:	Input: 24Vdc, 2.5A
Adapter	:	Model: EA10682P-240 Input: 100-240V~, 50/60Hz, 2.0A Output: 24V ⎓ 2.5A
Test voltage	:	AC 120V/60Hz
Model difference	:	These models have different exterior colors.
Note	:	According to the model difference, all tests were performed on model ML60R-WT.

Technical parameters

Frequency Range	:	2412-2462MHz for 802.11b/g/n(HT20) 2422MHz~2452MHz(802.11n(HT40))
Modulation	:	CCK, DQPSK, DBPSK for 802.11b OFDM for 802.11g/n(HT20)/n(HT40)
Modulation Technology	:	DSSS, OFDM
Number of Channel	:	11 for 802.11b/g/n(HT20) 7 for 802.11n(HT40)
Channel space	:	5MHz
Date Rate	:	802.11b:1~11Mbps, 802.11g:6~54Mbps 802.11n(HT20): 6.5~72.2Mbps 802.11n(HT40): 13.5~135Mbps
Antenna Type	:	PCB on-board antenna
Antenna Gain	:	2.0dBi (Declaration by Manufacturer)

Serial Model List

ML60-2N	ML60A-2N	ML60B-2N	ML60C-2N	ML60T-2N	ML60S-2N
ML60-3N	ML60A-3N	ML60B-3N	ML60C-3N	ML60T-3N	ML60S-3N
ML60-2NW	ML60A-2NW	ML60B-2NW	ML60C-2NW	ML60T-2NW	ML60S-2NW
ML60-3NW	ML60A-3NW	ML60B-3NW	ML60C-3NW	ML60T-3NW	ML60S-3NW
ML60-2F	ML60A-2F	ML60B-2F	ML60C-2F	ML60T-2F	ML60S-2F
ML60-3F	ML60A-3F	ML60B-3F	ML60C-3F	ML60T-3F	ML60S-3F
ML60-2FW	ML60A-2FW	ML60B-2FW	ML60C-2FW	ML60T-2FW	ML60S-2FW
ML60-3FW	ML60A-3FW	ML60B-3FW	ML60C-3FW	ML60T-3FW	ML60S-3FW
ML60-2NR	ML60A-2NR	ML60B-2NR	ML60C-2NR	ML60T-2NR	ML60S-2NR
ML60-3NR	ML60A-3NR	ML60B-3NR	ML60C-3NR	ML60T-3NR	ML60S-3NR
ML60-2FR	ML60A-2FR	ML60B-2FR	ML60C-2FR	ML60T-2FR	ML60S-2FR
ML60-3FR	ML60A-3FR	ML60B-3FR	ML60C-3FR	ML60T-3FR	ML60S-3FR
ML60-2NRW	ML60A-2NRW	ML60B-2NRW	ML60C-2NRW	ML60T-2NRW	ML60S-2NRW
ML60-3NRW	ML60A-3NRW	ML60B-3NRW	ML60C-3NRW	ML60T-3NRW	ML60S-3NRW
ML60-2FRW	ML60A-2FRW	ML60B-2FRW	ML60C-2FRW	ML60T-2FRW	ML60S-2FRW
ML60-3FRW	ML60A-3FRW	ML60B-3FRW	ML60C-3FRW	ML60T-3FRW	ML60S-3FRW
DS60-2N	DS60A-2N	DS60B-2N	DS60C-2N	DS60T-2N	DS60S-2N
DS60-3N	DS60A-3N	DS60B-3N	DS60C-3N	DS60T-3N	DS60S-3N
DS60-2NW	DS60A-2NW	DS60B-2NW	DS60C-2NW	DS60T-2NW	DS60S-2NW
DS60-3NW	DS60A-3NW	DS60B-3NW	DS60C-3NW	DS60T-3NW	DS60S-3NW
DS60-2F	DS60A-2F	DS60B-2F	DS60C-2F	DS60T-2F	DS60S-2F
DS60-3F	DS60A-3F	DS60B-3F	DS60C-3F	DS60T-3F	DS60S-3F
DS60-2FW	DS60A-2FW	DS60B-2FW	DS60C-2FW	DS60T-2FW	DS60S-2FW
DS60-3FW	DS60A-3FW	DS60B-3FW	DS60C-3FW	DS60T-3FW	DS60S-3FW
DS60-2NR	DS60A-2NR	DS60B-2NR	DS60C-2NR	DS60T-2NR	DS60S-2NR
DS60-3NR	DS60A-3NR	DS60B-3NR	DS60C-3NR	DS60T-3NR	DS60S-3NR
DS60-2FR	DS60A-2FR	DS60B-2FR	DS60C-2FR	DS60T-2FR	DS60S-2FR
DS60-3FR	DS60A-3FR	DS60B-3FR	DS60C-3FR	DS60T-3FR	DS60S-3FR
DS60-2NRW	DS60A-2NRW	DS60B-2NRW	DS60C-2NRW	DS60T-2NRW	DS60S-2NRW
DS60-3NRW	DS60A-3NRW	DS60B-3NRW	DS60C-3NRW	DS60T-3NRW	DS60S-3NRW
DS60-2FRW	DS60A-2FRW	DS60B-2FRW	DS60C-2FRW	DS60T-2FRW	DS60S-2FRW
DS60-3FRW	DS60A-3FRW	DS60B-3FRW	DS60C-3FRW	DS60T-3FRW	DS60S-3FRW
DT60-2N	DT60A-2N	DT60B-2N	DT60C-2N	DT60T-2N	DT60S-2N
DT60-3N	DT60A-3N	DT60B-3N	DT60C-3N	DT60T-3N	DT60S-3N
DT60-2NW	DT60A-2NW	DT60B-2NW	DT60C-2NW	DT60T-2NW	DT60S-2NW
DT60-3NW	DT60A-3NW	DT60B-3NW	DT60C-3NW	DT60T-3NW	DT60S-3NW
DT60-2F	DT60A-2F	DT60B-2F	DT60C-2F	DT60T-2F	DT60S-2F
DT60-3F	DT60A-3F	DT60B-3F	DT60C-3F	DT60T-3F	DT60S-3F
DT60-2FW	DT60A-2FW	DT60B-2FW	DT60C-2FW	DT60T-2FW	DT60S-2FW
DT60-3FW	DT60A-3FW	DT60B-3FW	DT60C-3FW	DT60T-3FW	DT60S-3FW
DT60-2NR	DT60A-2NR	DT60B-2NR	DT60C-2NR	DT60T-2NR	DT60S-2NR
DT60-3NR	DT60A-3NR	DT60B-3NR	DT60C-3NR	DT60T-3NR	DT60S-3NR
DT60-2FR	DT60A-2FR	DT60B-2FR	DT60C-2FR	DT60T-2FR	DT60S-2FR
DT60-3FR	DT60A-3FR	DT60B-3FR	DT60C-3FR	DT60T-3FR	DT60S-3FR

DT60-2NRW	DT60A-2NRW	DT60B-2NRW	DT60C-2NRW	DT60T-2NRW	DT60S-2NRW
DT60-3NRW	DT60A-3NRW	DT60B-3NRW	DT60C-3NRW	DT60T-3NRW	DT60S-3NRW
DT60-2FRW	DT60A-2FRW	DT60B-2FRW	DT60C-2FRW	DT60T-2FRW	DT60S-2FRW
DT60-3FRW	DT60A-3FRW	DT60B-3FRW	DT60C-3FRW	DT60T-3FRW	DT60S-3FRW
DP60-2N	DP60A-2N	DP60B-2N	DP60C-2N	DP60T-2N	DP60S-2N
DP60-3N	DP60A-3N	DP60B-3N	DP60C-3N	DP60T-3N	DP60S-3N
DP60-2NW	DP60A-2NW	DP60B-2NW	DP60C-2NW	DP60T-2NW	DP60S-2NW
DP60-3NW	DP60A-3NW	DP60B-3NW	DP60C-3NW	DP60T-3NW	DP60S-3NW
DP60-2F	DP60A-2F	DP60B-2F	DP60C-2F	DP60T-2F	DP60S-2F
DP60-3F	DP60A-3F	DP60B-3F	DP60C-3F	DP60T-3F	DP60S-3F
DP60-2FW	DP60A-2FW	DP60B-2FW	DP60C-2FW	DP60T-2FW	DP60S-2FW
DP60-3FW	DP60A-3FW	DP60B-3FW	DP60C-3FW	DP60T-3FW	DP60S-3FW
DP60-2NR	DP60A-2NR	DP60B-2NR	DP60C-2NR	DP60T-2NR	DP60S-2NR
DP60-3NR	DP60A-3NR	DP60B-3NR	DP60C-3NR	DP60T-3NR	DP60S-3NR
DP60-2FR	DP60A-2FR	DP60B-2FR	DP60C-2FR	DP60T-2FR	DP60S-2FR
DP60-3FR	DP60A-3FR	DP60B-3FR	DP60C-3FR	DP60T-3FR	DP60S-3FR
DP60-2NRW	DP60A-2NRW	DP60B-2NRW	DP60C-2NRW	DP60T-2NRW	DP60S-2NRW
DP60-3NRW	DP60A-3NRW	DP60B-3NRW	DP60C-3NRW	DP60T-3NRW	DP60S-3NRW
DP60-2FRW	DP60A-2FRW	DP60B-2FRW	DP60C-2FRW	DP60T-2FRW	DP60S-2FRW
DP60-3FRW	DP60A-3FRW	DP60B-3FRW	DP60C-3FRW	DP60T-3FRW	DP60S-3FRW
ML60	ML60A	ML60B			
ML60C	ML51A-BU	ML51B-BU	ML51R-BU		
ML60D	ML60A-GN	ML60B-GN	ML60R-GN		
ML60E	ML51A-PK	ML51B-PK	ML51R-PK		
ML60F	ML60A-WT	ML60B-WT	ML60R-WT		

WIFI Channel List

802.11 b/g/n(HT20)		802.11 n(HT40)	
Channel	Frequency MHz	Channel	Frequency MHz
1	2412	--	--
2	2417	--	--
3	2422	3	2422
4	2427	4	2427
5	2432	5	2432
6	2437	6	2437
7	2442	7	2442
8	2447	8	2447
9	2452	9	2452
10	2457	--	--
11	2462	--	--

Note: According to section 15.31(m), regards to the operating frequency range over 10MHz, the Lowest, middle, and the Highest frequency of channel were selected to perform the test. The selected frequency see below:

802.11b/g/n(HT20)		802.11n(HT40)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	3	2422
6	2437	6	2437
11	2462	9	2452

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: 2AVAP-ML60 filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rule.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters.

1.4 Equipment Modifications

Not available for this EUT intended for grant.

1.5 Support Device

Notebook	:	Manufacturer: IBM Model: 1834 P/N: 13N5615 CE, FCC: DOC
Adapter (For Notebook)	:	Manufacturer: Huntkey Model: HKA09019047-6D I/P: AC 100-240V 50-60Hz, 1.5A O/P: DC 19V 4.74A

1.6 Test Facility and Location

Site Description

EMC Lab : Listed by CNAS, August 13, 2018
The certificate is valid until August 13, 2024
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01
The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017
The certificate is valid until December 31, 2021
The Laboratory has been assessed and proved to be in compliance with ISO17025
The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017
The Designation Number is CN1214
Test Firm Registration Number: 907417

Listed by Industry Canada, June 08, 2017
The Certificate Registration Number. Is 46405-9743

Name of Firm : Dongguan Nore Testing Center Co., Ltd.
(Dongguan NTC Co., Ltd.)

Site Location : Building D, Gaosheng Science & Technology Park, Zhouxi Longxi Road, Nancheng District, Dongguan City, Guangdong Province, China

1.7 Summary of Test Results

FCC Rules	Description Of Test	Uncertainty	Result
§15.207 (a)	AC Power Conducted Emission	±1.06dB	Compliant
KDB558074 D01 DTS Meas Guidance v05	Duty cycle	±1.06dB	Compliant
§15.247(b)(3)	Max. Conducted Output Power	±1.06dB	Compliant
§15.247(a)(2)	6dB Bandwidth	±1.42 x10^{-4}%	Compliant
ANSI C63.10: 2013 Section 6.9.3	99% Occupied Bandwidth	±1.42 x10-4%	Compliant
§15.247(e)	Power Spectral Density	±1.06dB	Compliant
§15.247(d)	Band Edge and Conducted Spurious Emissions	±1.70dB	Compliant
§15.247(d),§15.209, §15.205	Radiated Spurious Emissions and Restricted Bands	±3.70dB	Compliant
§15.203	Antenna Requirement	N/A	Compliant

2. System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 Special Accessories

Not available for this EUT intended for grant.

2.3 Description of test modes

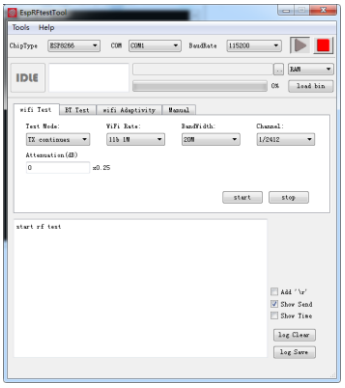
The EUT has been tested under continuous operating condition. Test program used to control the EUT staying in continuous transmitting mode. The Lowest, middle and highest channel were chosen for testing, and modulation type CCK, DQPSK, DBPSK, OFDM and all data rate were tested. But only the worst case data is shown in this report.

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements.

Test Item	Software	Description
Conducted RF Testing and Radiated testing	ESP_RF_test_tool_v1.1.0	Set the EUT to different modulation and channel

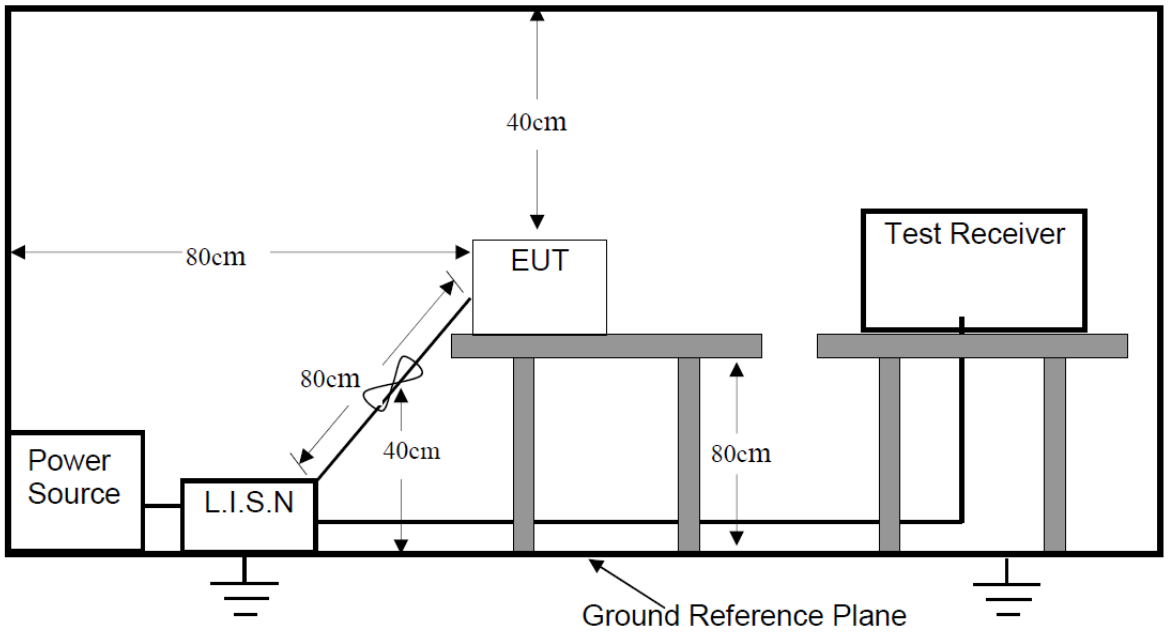
Output power setting table:

Test Mode	Set Tx Output Power Level	Data Rate
802.11b	0	1Mbps
802.11g	0	6Mbps
802.11n(HT20)	0	6.5Mbps
802.11n(HT40)	0	13.5Mbps



3. Conducted Emissions Test

3.1 Test SET-UP (Block Diagram of Configuration)



3.2 Test Condition

Test Requirement: FCC Part 15.207

Frequency Range: 150 KHz ~ 30 MHz

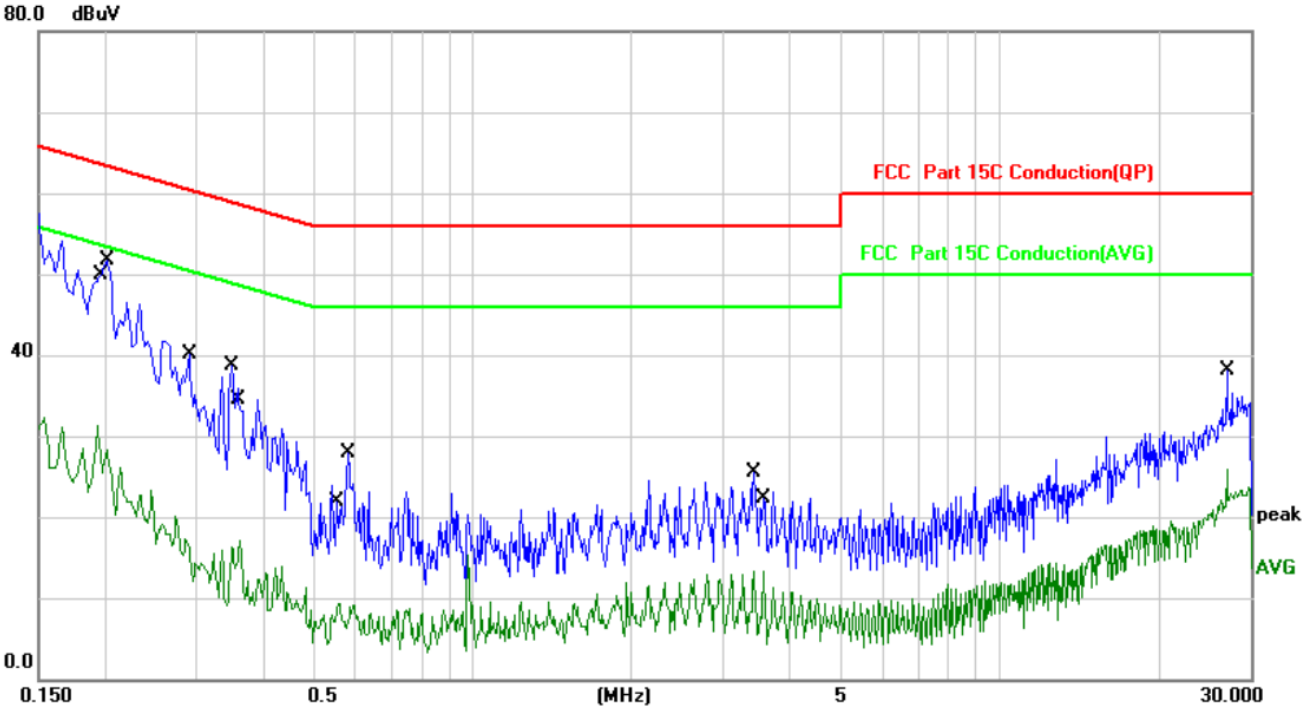
Detector: PEAK, AV

Operation Mode: Wifi Communication

3.3 Measurement Results

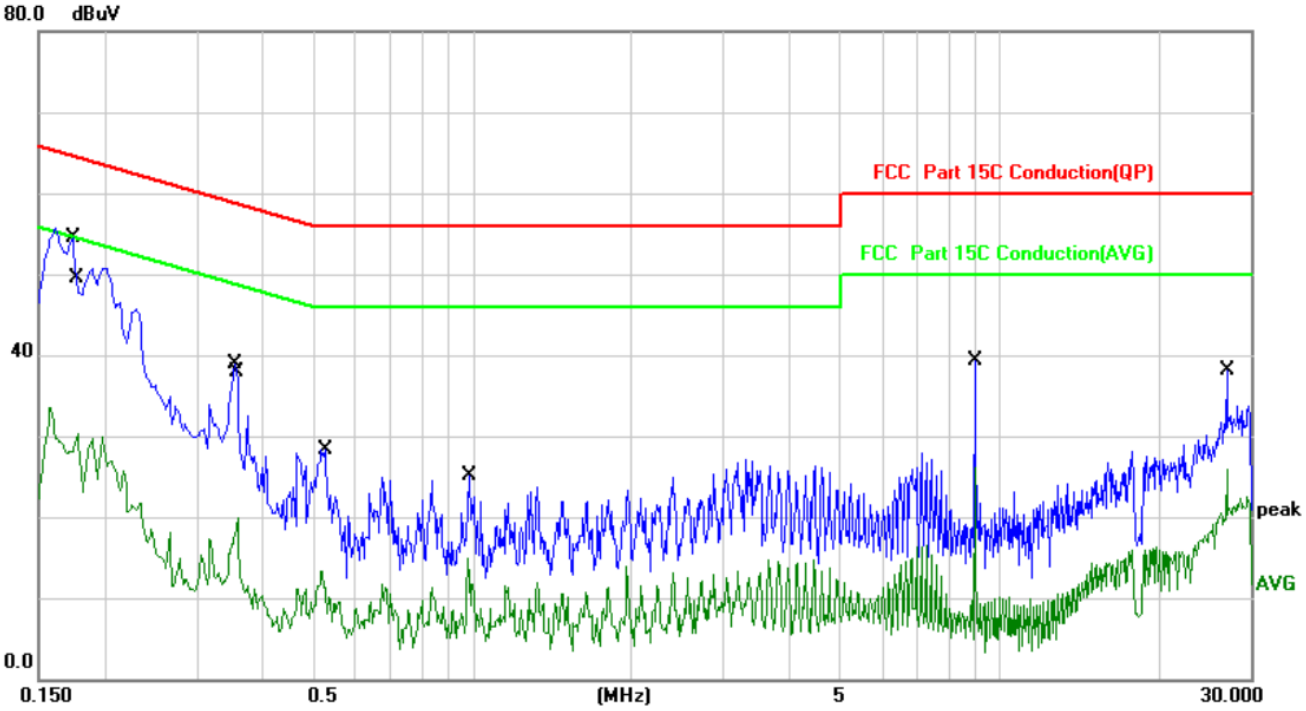
Please refer to following plots of the worst case.

E.U.T :	Label Printer	Model Name :	ML60R-WT
Temperature :	24°C	Relative Humidity :	52.8 %
Pressure :	1006 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	WFI Printing	Phase:	Line



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1940	6.56	24.68	31.24	53.86	-22.62	AVG	P	
2	0.2020	6.54	45.22	51.76	63.52	-11.76	QP	P	
3	0.2857	6.49	10.78	17.27	50.65	-33.38	AVG	P	
4	0.2898	6.47	33.58	40.05	60.53	-20.48	QP	P	
5	0.3497	6.49	32.18	38.67	58.97	-20.30	QP	P	
6	0.3618	6.49	10.55	17.04	48.69	-31.65	AVG	P	
7	0.5580	6.51	2.76	9.27	46.00	-36.73	AVG	P	
8	0.5817	6.51	21.31	27.82	56.00	-28.18	QP	P	
9	3.4180	6.56	18.86	25.42	56.00	-30.58	QP	P	
10	3.5739	6.58	6.79	13.37	46.00	-32.63	AVG	P	
11	27.0017	6.71	31.48	38.19	60.00	-21.81	QP	P	
12	27.0017	6.71	19.27	25.98	50.00	-24.02	AVG	P	

E.U.T :	Label Printer	Model Name :	ML60R-WT
Temperature :	24°C	Relative Humidity :	52.8 %
Pressure :	1006 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	WFI Printing	Phase:	Neutral



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1737	6.60	47.96	54.56	64.78	-10.22	QP	P	
2	0.1779	6.58	23.68	30.26	54.58	-24.32	AVG	P	
3	0.3537	6.49	32.34	38.83	58.87	-20.04	QP	P	
4	0.3578	6.49	13.39	19.88	48.78	-28.90	AVG	P	
5	0.5180	6.53	6.83	13.36	46.00	-32.64	AVG	P	
6	0.5260	6.53	21.69	28.22	56.00	-27.78	QP	P	
7	0.9818	6.47	8.50	14.97	46.00	-31.03	AVG	P	
8	0.9858	6.47	18.62	25.09	56.00	-30.91	QP	P	
9	9.0017	6.49	32.89	39.38	60.00	-20.62	QP	P	
10	9.0017	6.49	19.57	26.06	50.00	-23.94	AVG	P	
11	27.0018	6.71	31.31	38.02	60.00	-21.98	QP	P	
12	27.0018	6.71	19.13	25.84	50.00	-24.16	AVG	P	

4. Duty Cycle Test

4.1 Measurement Procedure

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

1. A diode detector and an oscilloscope that together have sufficiently short response time to permit accurate measurements of the on- and off-times of the transmitted signal.

2. The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on- and off-times of the transmitted signal

a. Set the center frequency of the instrument to the centre frequency of the transmission

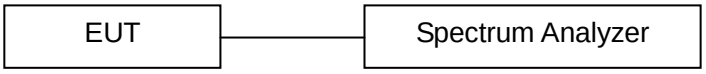
b. Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value(10MHz).

c. Set detector = Peak or average.

d. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100.

(For example, if VBW and/or RBW are limited to 3MHz, then the zero-span method of measuring duty cycle shall not be used if T≤16.7 microseconds.)

4.2 Test SET-UP (Block Diagram of Configuration)



4.3 Measurement Results

Please refer to following plots of the worst case.

The test was performed with 802.11b			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

The test was performed with 802.11g			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

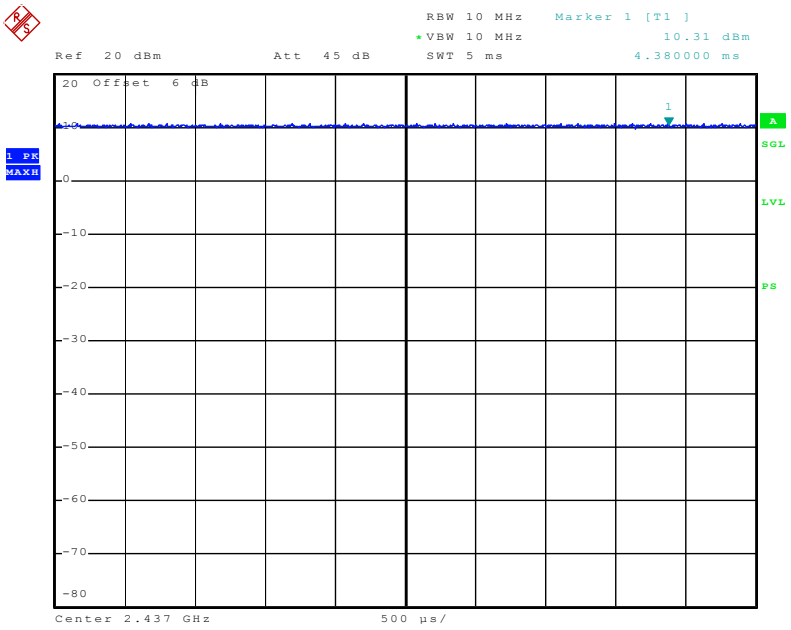
The test was performed with 802.11n (HT20)			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

The test was performed with 802.11n (HT40)			
Channel	Frequency (MHz)	duty cycle(x)	10log(1/x)
Middle	2437	100%	0

Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and MCS0 for 802.11n mode.

The spectrum analyzer plots are attached as below.

802.11b Middle Channel



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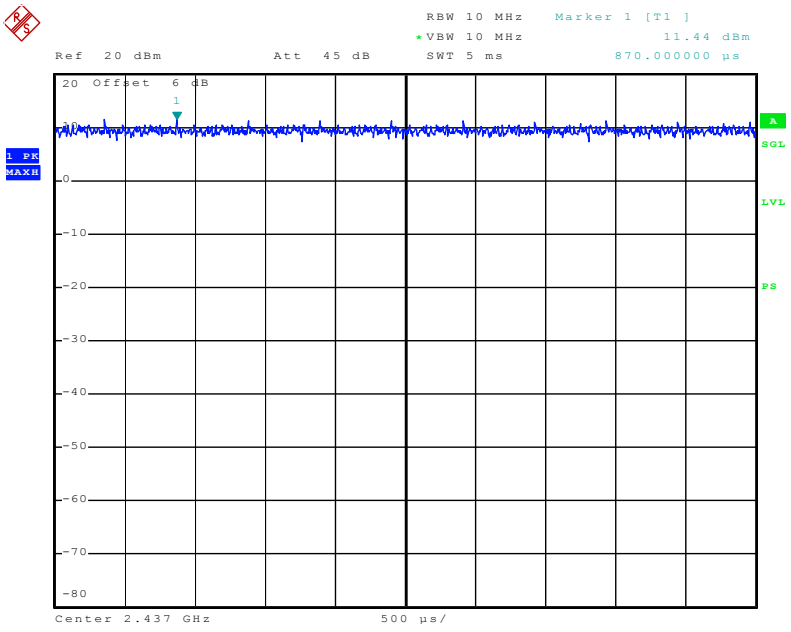
802.11g Middle Channel



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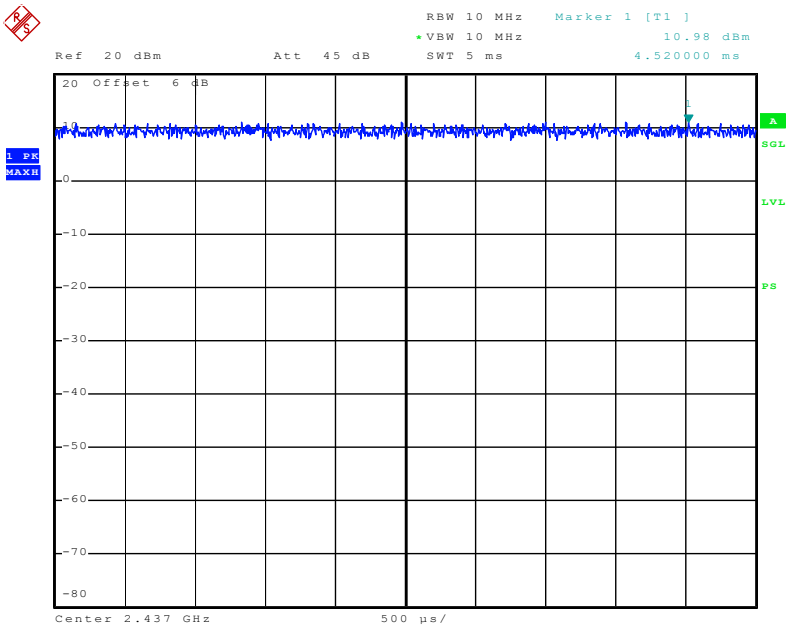
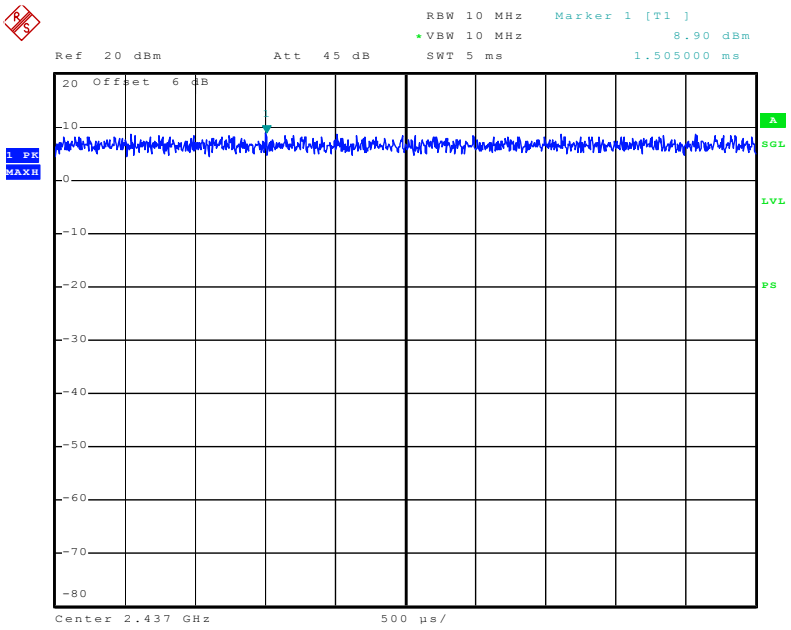
802.11n(HT20) Middle Channel



Date: 3.DEC.2019 09:51:22

802.11n(HT40) Middle Channel



Date: 3.DEC.2019 09:51:45

5. Max. Conducted (Average) Output Power

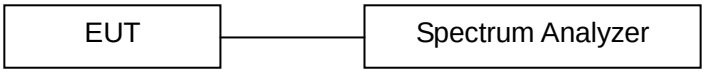
5.1 Measurement Procedure

Maximum Conducted Output power at Antenna Terminals, FCC Rules 15.247(b)(3):

One of the following procedures may be used to determine the maximum average conducted output power of a DTS EUT.

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

5.2 Test SET-UP (Block Diagram of Configuration)



5.3 Measurement Results

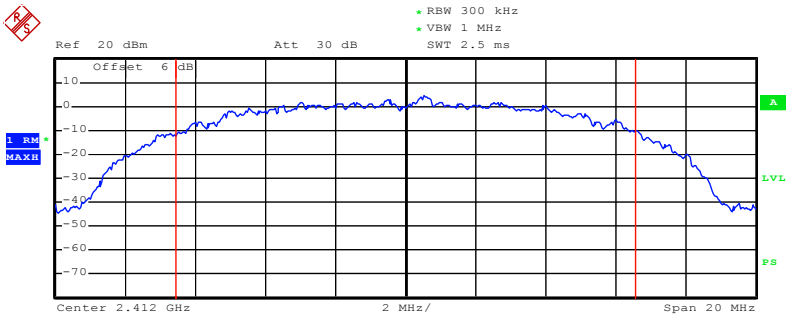
Pass

Please refer to following table and plots.

Temperature :	22 ℃	Humidity :	53%	
Test By:	Sance	Test Date :	December 03, 2019	
Antenna Gain:	2dBi	Test Result:	PASS	
Frequency (MHz)	10log(1/ duty cycle)	AV Output Power (dBm)	Final Power (dBm)	Limit (dBm)
IEEE 802.11b Mode (CCK)				
2412	0	14.92	14.92	30
2437	0	13.58	13.58	30
2462	0	12.63	12.63	30
IEEE 802.11g Mode (OFDM)				
2412	0	11.28	11.28	30
2437	0	10.75	10.75	30
2462	0	9.73	9.73	30
IEEE 802.11n(HT20) Mode (OFDM)				
2412	0	11.89	11.89	30
2437	0	10.61	10.61	30
2462	0	9.46	9.46	30
IEEE 802.11n(HT40) Mode (OFDM)				
2422	0	9.27	9.27	30
2437	0	8.63	8.63	30
2452	0	8.17	8.17	30
Final power= Ave output power+10log(1/ duty cycle)				

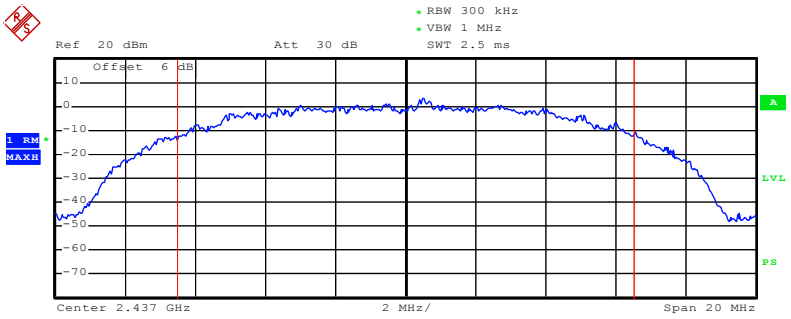
Note: We tested 802.11b/g/n mode the all data rate and recorded the worst case data for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and MCS0 for 802.11n mode.

802.11b Low Channel



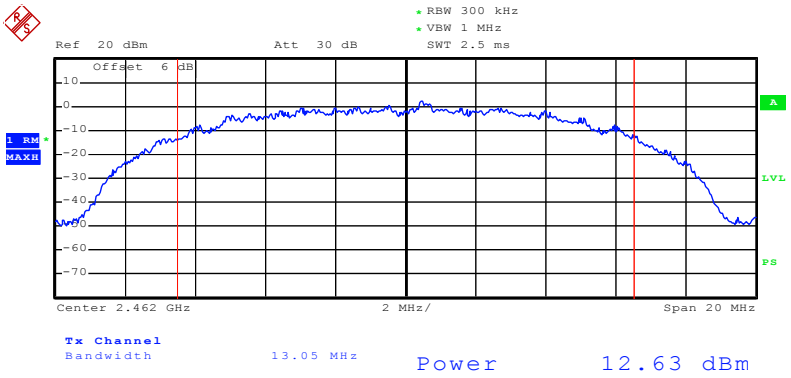
Date: 3.DEC.2019 09:32:17

802.11b Middle Channel



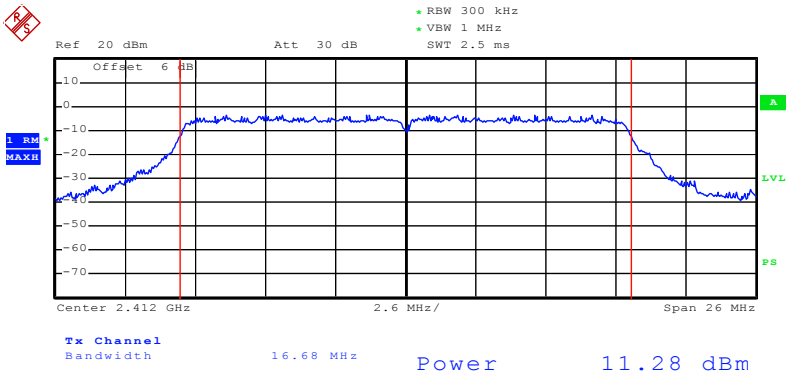
Date: 3.DEC.2019 09:33:49

802.11b High Channel



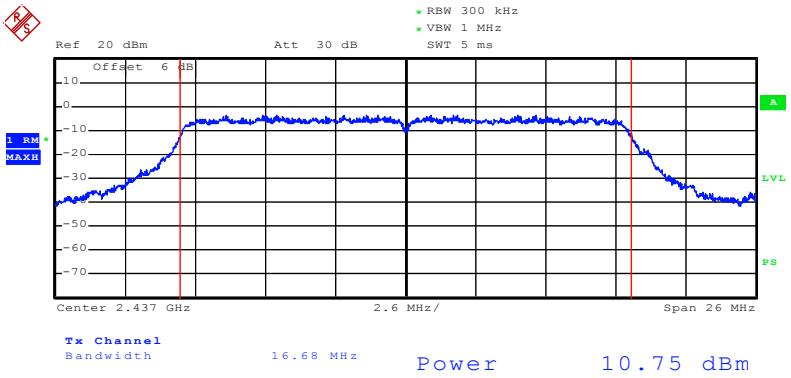
Date: 3.DEC.2019 09:34:40

802.11g Low Channel



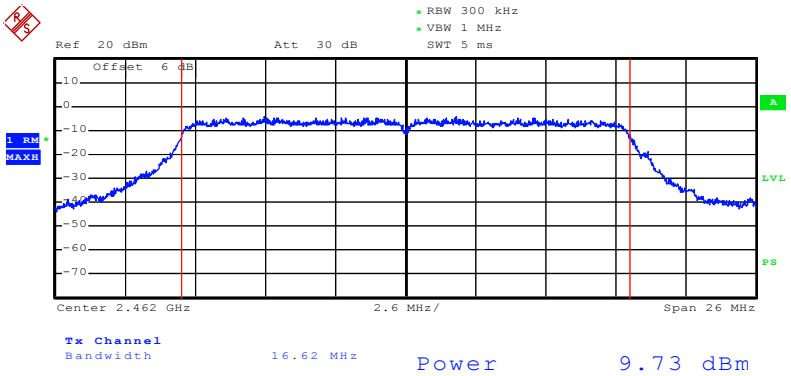
Date: 3.DEC.2019 09:35:42

802.11g Middle Channel



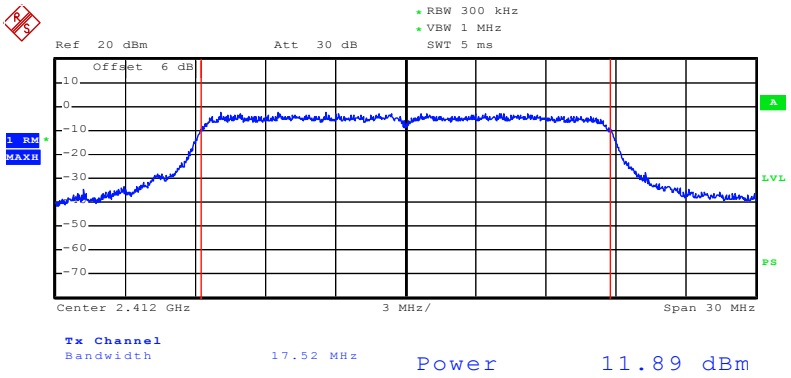
Date: 3.DEC.2019 09:38:12

802.11g High Channel



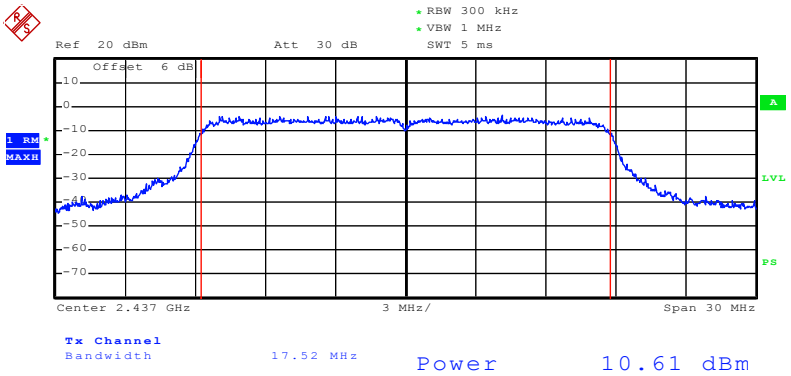
Date: 3.DEC.2019 09:38:56

802.11n(HT20) Low Channel



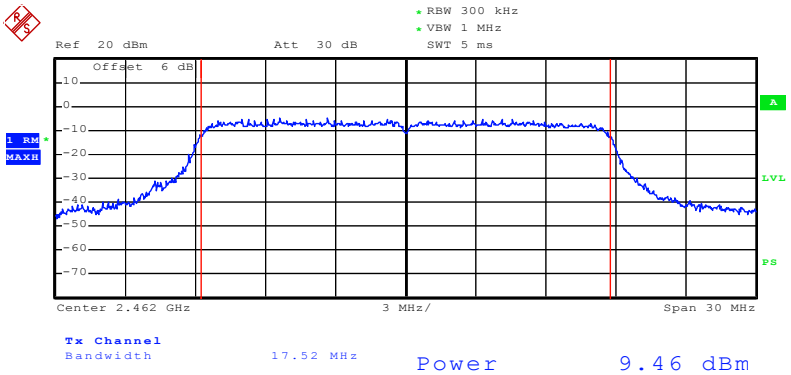
Date: 3.DEC.2019 09:45:03

802.11n(HT20) Middle Channel



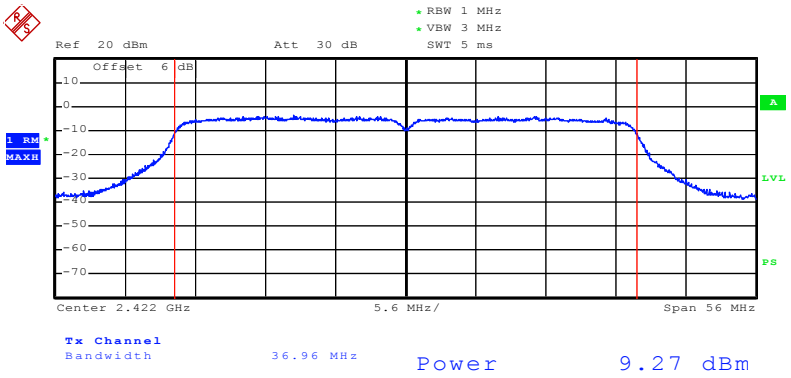
Date: 3.DEC.2019 09:45:46

802.11n(HT20) High Channel



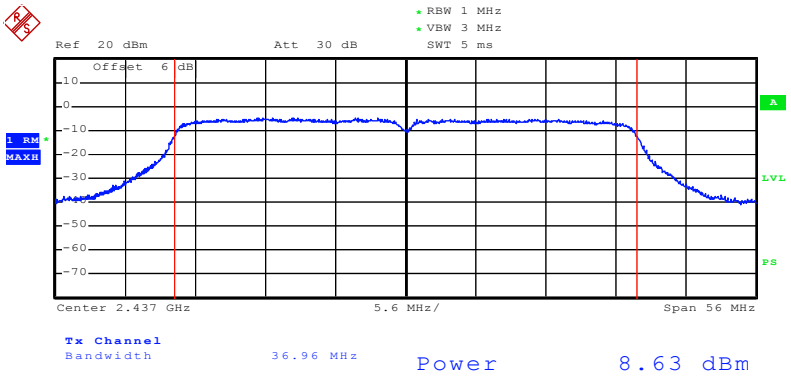
Date: 3.DEC.2019 09:46:22

802.11n(HT40) Low Channel



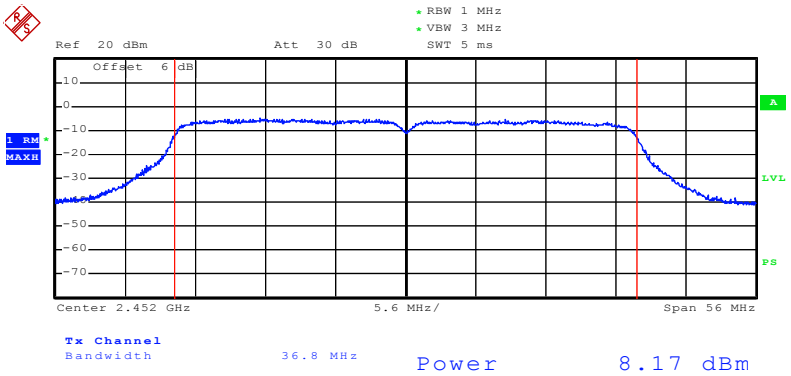
Date: 3.DEC.2019 09:47:10

802.11n(HT40) Middle Channel



Date: 3.DEC.2019 09:47:41

802.11n(HT40) High Channel



Date: 3.DEC.2019 09:48:17

6. 6dB Bandwidth

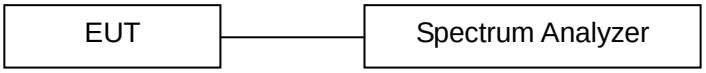
Measurement Procedure

DTS 6dB Channel Bandwidth, FCC Rule 15.247(a)(2):

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to FCC KDB558074(v03r03):

1. For 6dB bandwidth, Set the RBW = 100KHz.
2. Set the VBW ≥ 3 x RBW
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.2Test SET-UP (Block Diagram of Configuration)



6.3Measurement Results

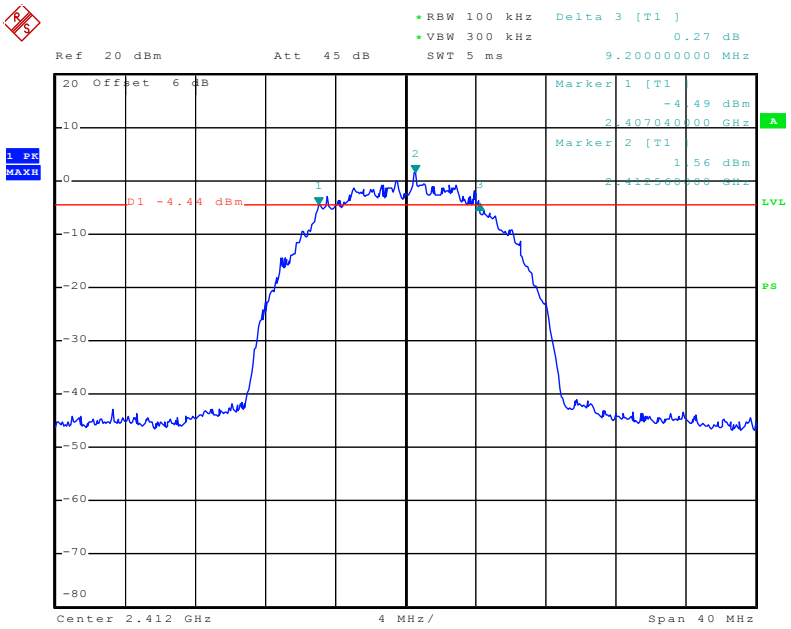
Pass

Please refer to following table and plots.

Temperature:	22 ℃	Humidity:	53 %
Test By:	Sance	Test Date:	December 03, 2019
Test Result:	PASS		

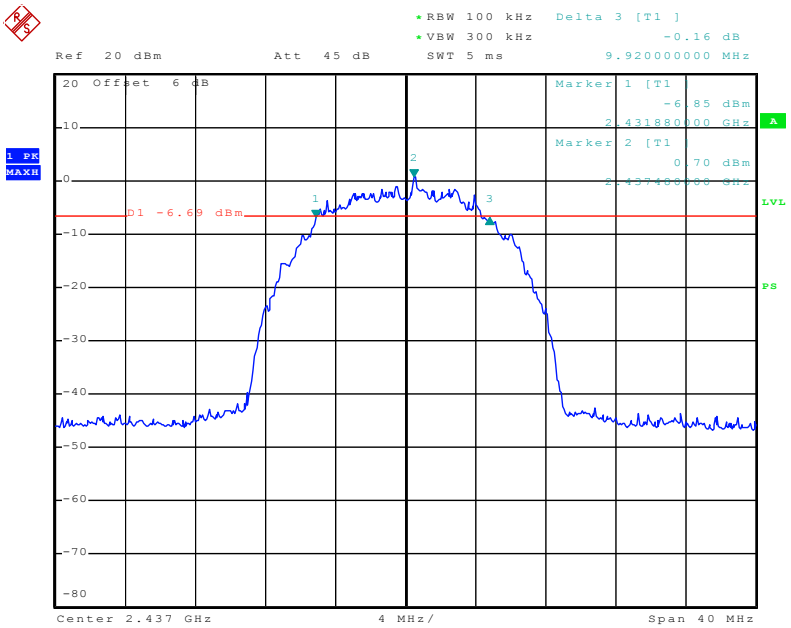
Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
IEEE 802.11b Mode (CCK)			
2412	1	9.20	>500
2437	1	9.92	>500
2462	1	9.12	>500
IEEE 802.11g Mode (OFDM)			
2412	6	16.56	>500
2437	6	16.44	>500
2462	6	16.64	>500
IEEE 802.11n(HT20) Mode (OFDM)			
2412	6.5	17.60	>500
2437	6.5	17.64	>500
2462	6.5	17.60	>500
IEEE 802.11n(HT40) Mode (OFDM)			
2422	13.5	36.80	>500
2437	13.5	36.80	>500
2452	13.5	36.64	>500

802.11b Low Channel



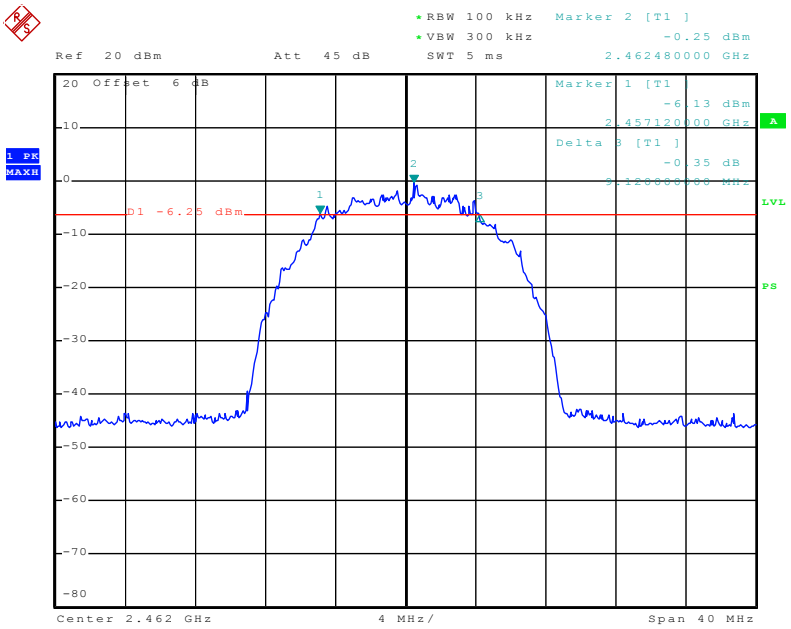
Date: 3.DEC.2019 08:39:04

802.11b Middle Channel



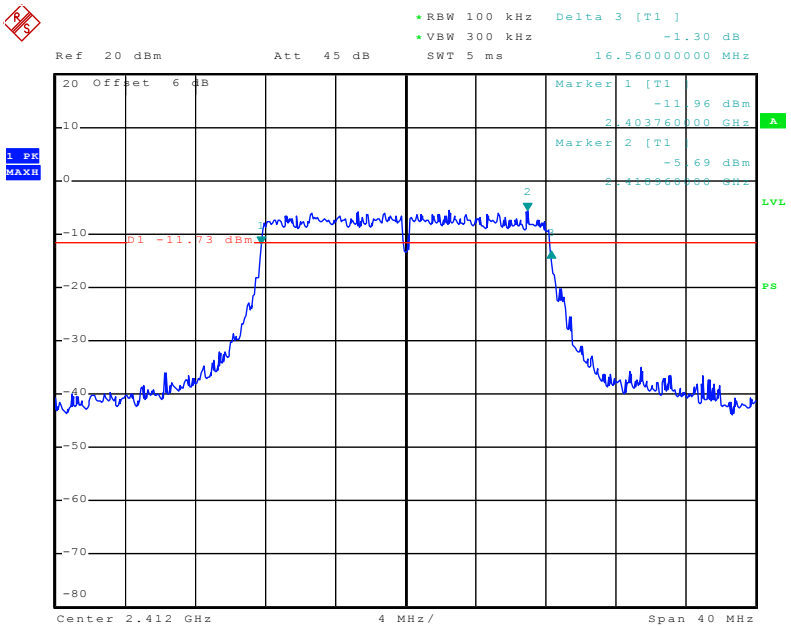
Date: 3.DEC.2019 08:37:19

802.11b High Channel



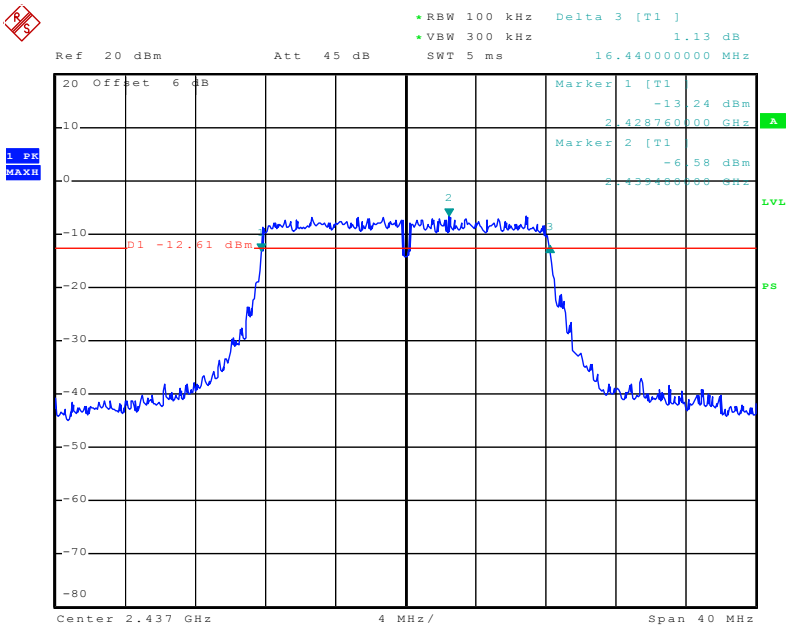
Date: 3.DEC.2019 08:35:47

802.11g Low Channel



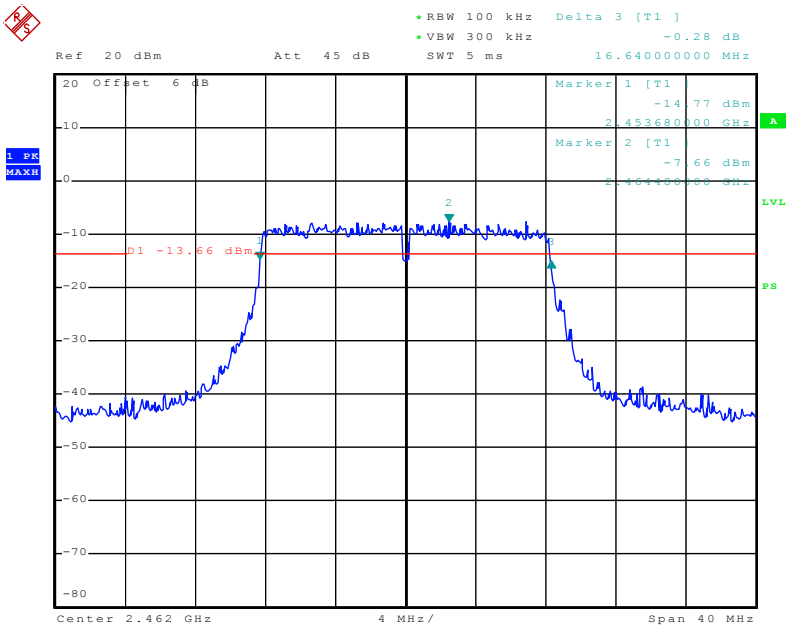
Date: 3.DEC.2019 08:40:34

802.11g Middle Channel



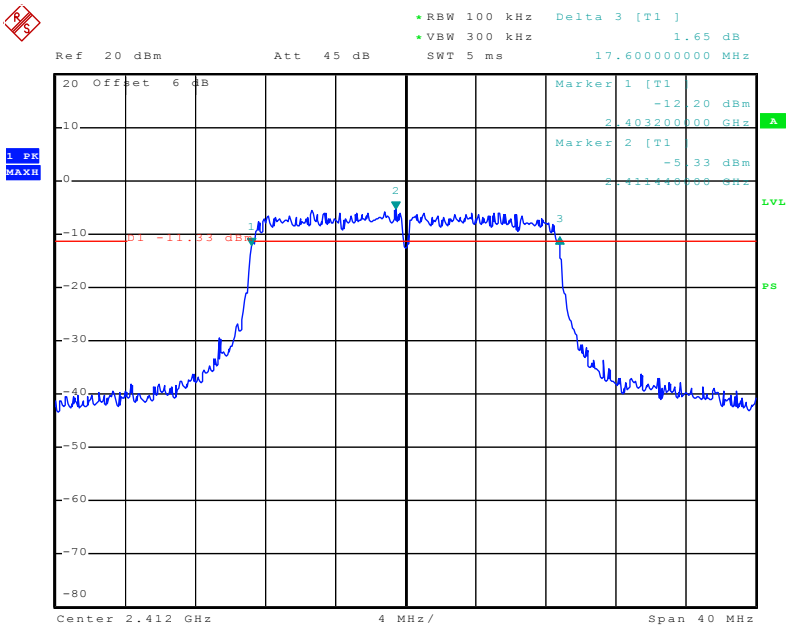
Date: 3.DEC.2019 08:41:49

802.11g High Channel



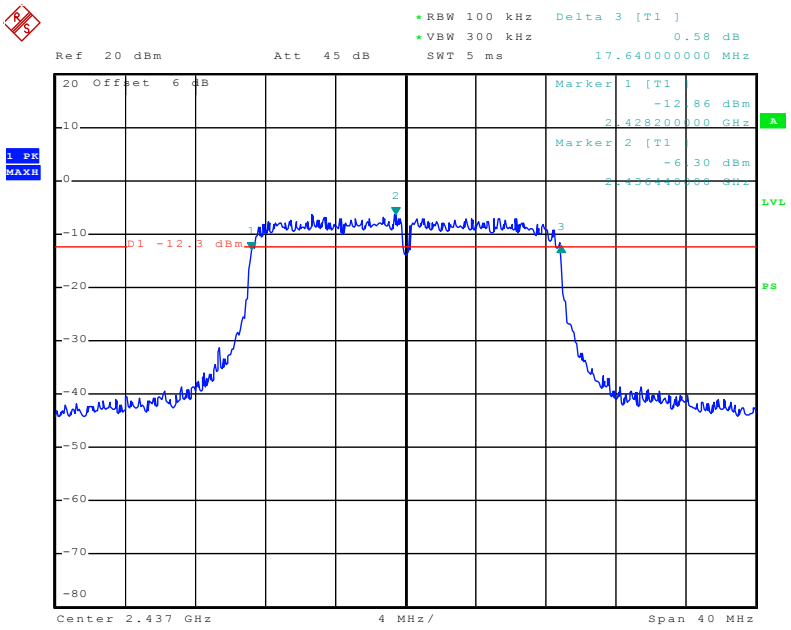
Date: 3.DEC.2019 08:43:17

802.11n(HT20) Low Channel



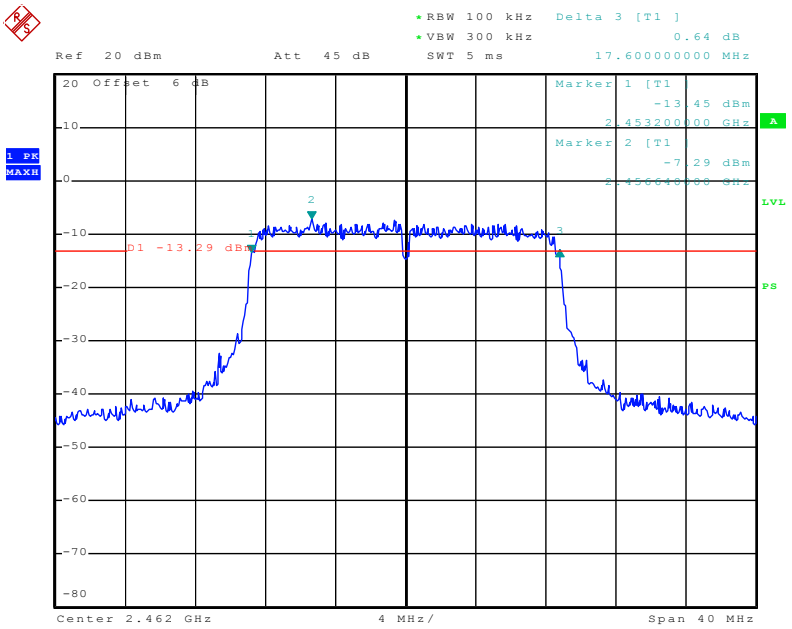
Date: 3.DEC.2019 08:45:09

802.11n(HT20) Middle Channel



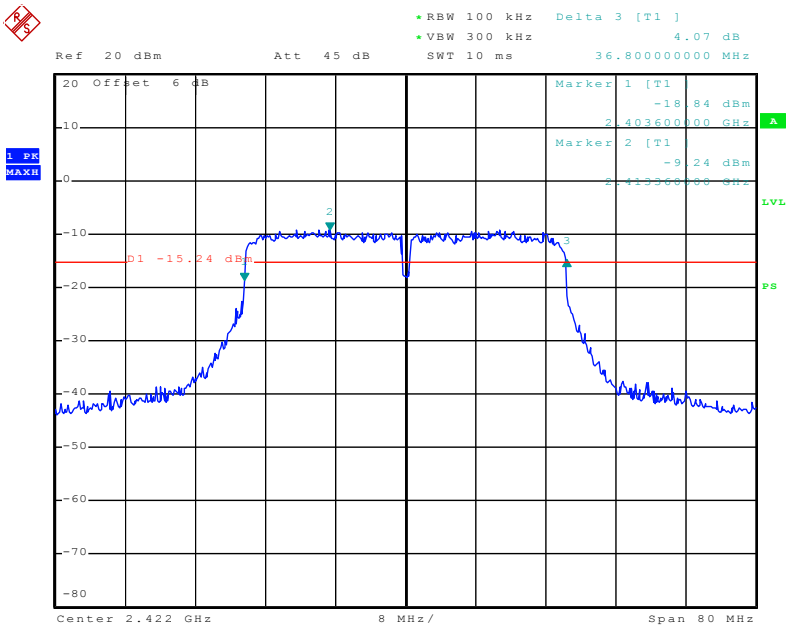
Date: 3.DEC.2019 08:46:28

802.11n(HT20) High Channel



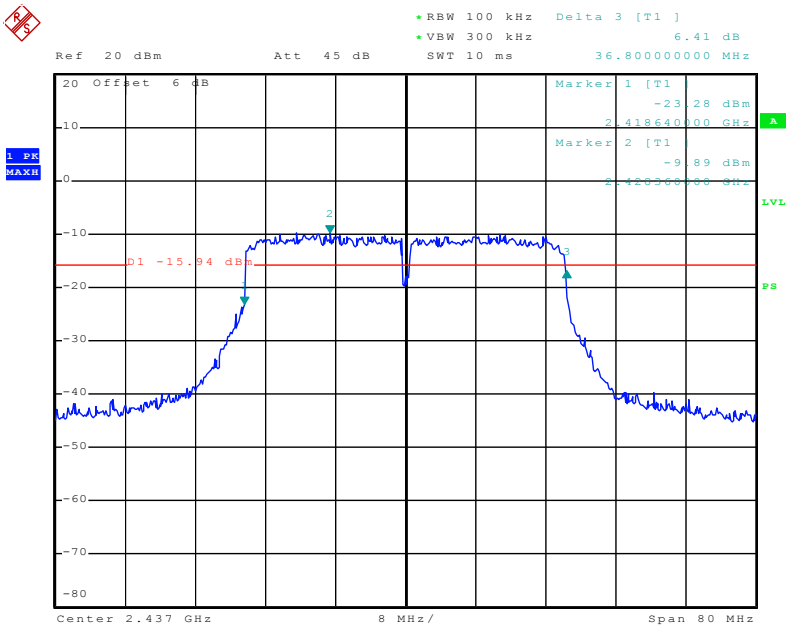
Date: 3.DEC.2019 08:47:46

802.11n(HT40) Low Channel



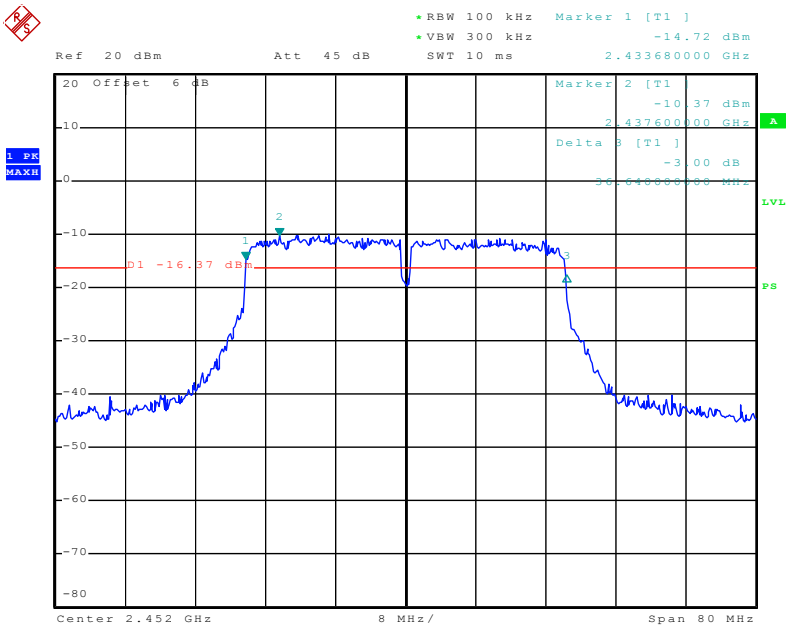
Date: 3.DEC.2019 08:49:24

802.11n(HT40) Middle Channel



Date: 3.DEC.2019 08:50:31

802.11n(HT40) High Channel



Date: 3.DEC.2019 08:52:17

7. 99% Occupied Bandwidth Test

7.1Measurement Procedure

ANSI C63.10: 2013 Section 6.9.3: The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

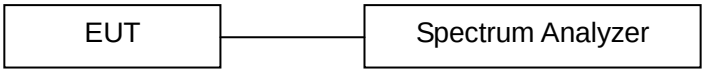
1. The transmitter output was connected to the spectrum analyzer through a low loss cable. The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

2. The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW.

3. A peak, or peak hold, may be used in place of the sampling detector as this may produce a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold may be necessary to determine the occupied bandwidth if the device is not transmitting continuously.

4. Set SPA “Meas” function, Select “Occupied Bandwidth” function, Select “99% Power Bandwidth”. The frequency of the upper and lower markers indicating the edges of the transmitters “99% Power” emission bandwidth shall be recorded to automate by SPA.

7.2Test SET-UP (Block Diagram of Configuration)



7.3Measurement Results

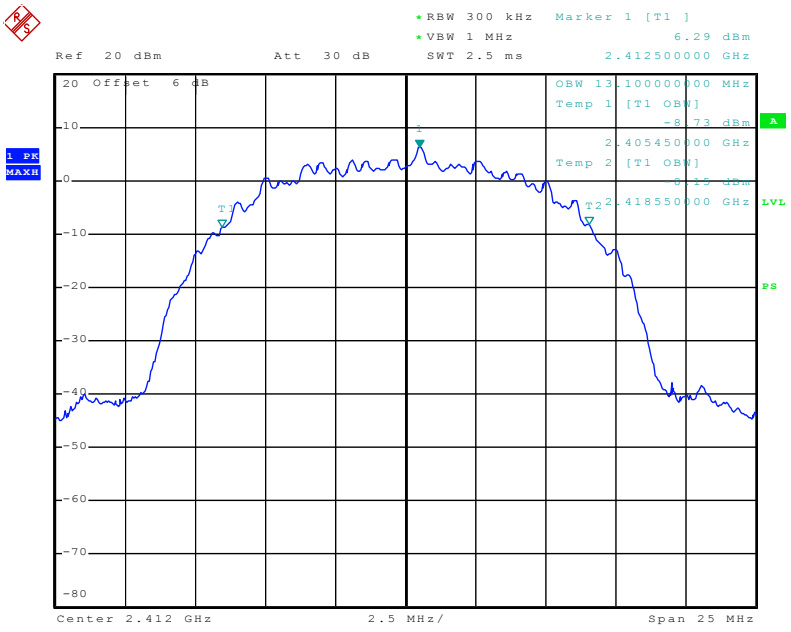
Pass

Please refer to following table and plots.

Temperature:	22 ℃	Humidity:	53 %
Test By:	Sance	Test Date:	December 03, 2019
Test Result:	PASS		

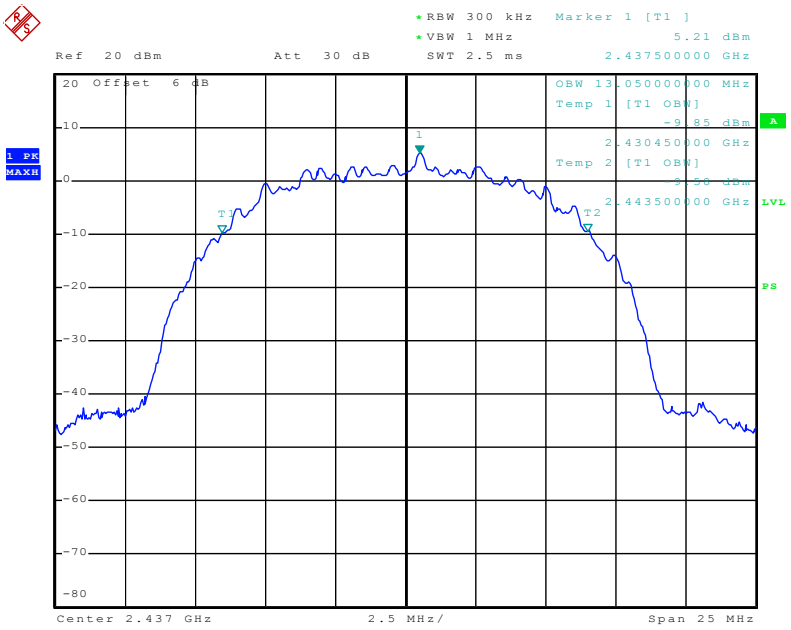
Frequency (MHz)	Data Rate (Mbps)	99% Bandwidth (MHz)
IEEE 802.11b Mode (CCK)		
2412	1	13.10
2437	1	13.05
2462	1	13.05
IEEE 802.11g Mode (OFDM)		
2412	6	16.68
2437	6	16.68
2462	6	16.62
IEEE 802.11n(HT20) Mode (OFDM)		
2412	6.5	17.52
2437	6.5	17.52
2462	6.5	17.52
IEEE 802.11n(HT40) Mode (OFDM)		
2422	13.5	36.96
2437	13.5	36.96
2452	13.5	36.80

802.11b Low Channel



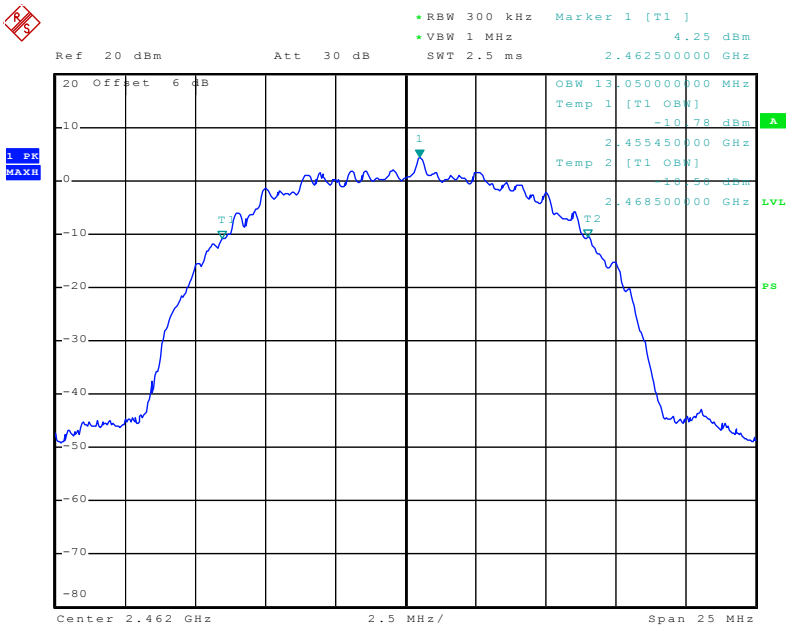
Date: 3.DEC.2019 09:14:48

802.11b Middle Channel



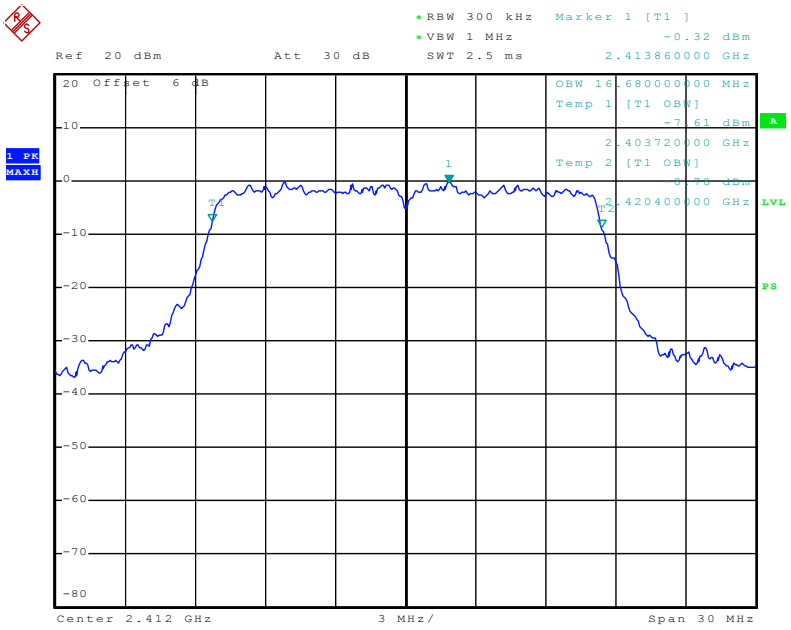
Date: 3.DEC.2019 09:17:14

802.11b High Channel



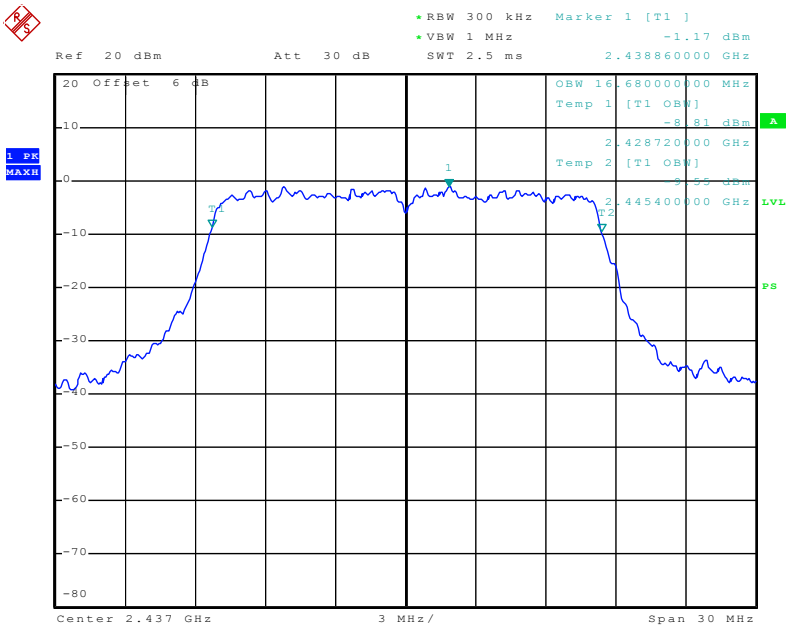
Date: 3.DEC.2019 09:17:40

802.11g Low Channel



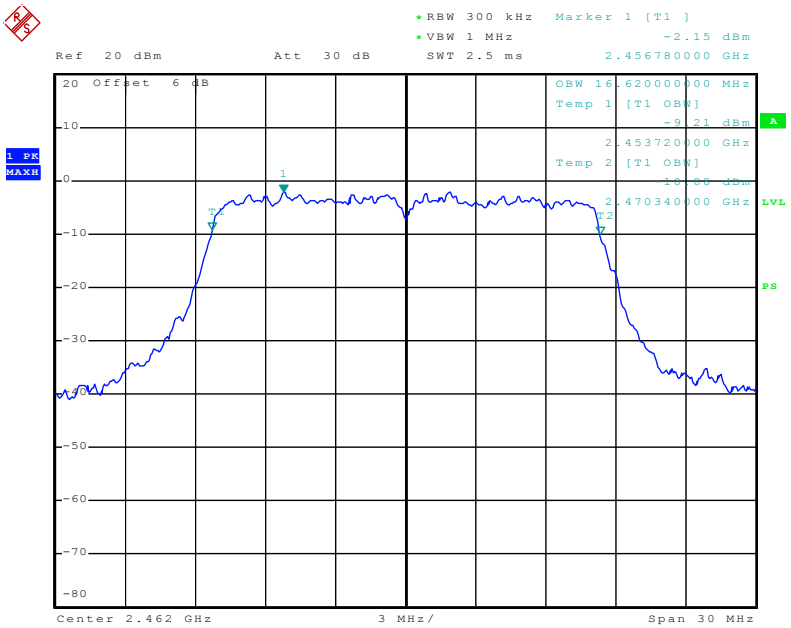
Date: 3.DEC.2019 09:18:33

802.11g Middle Channel



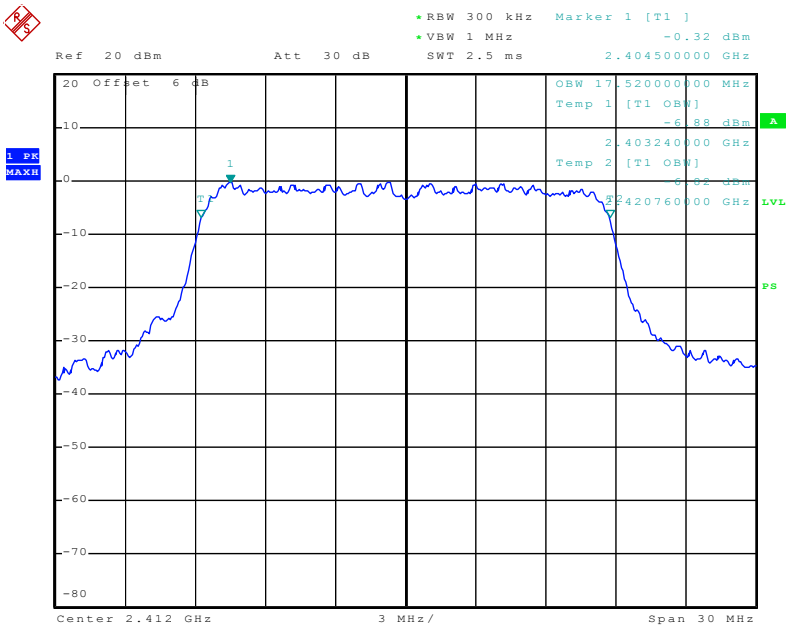
Date: 3.DEC.2019 09:19:17

802.11g High Channel



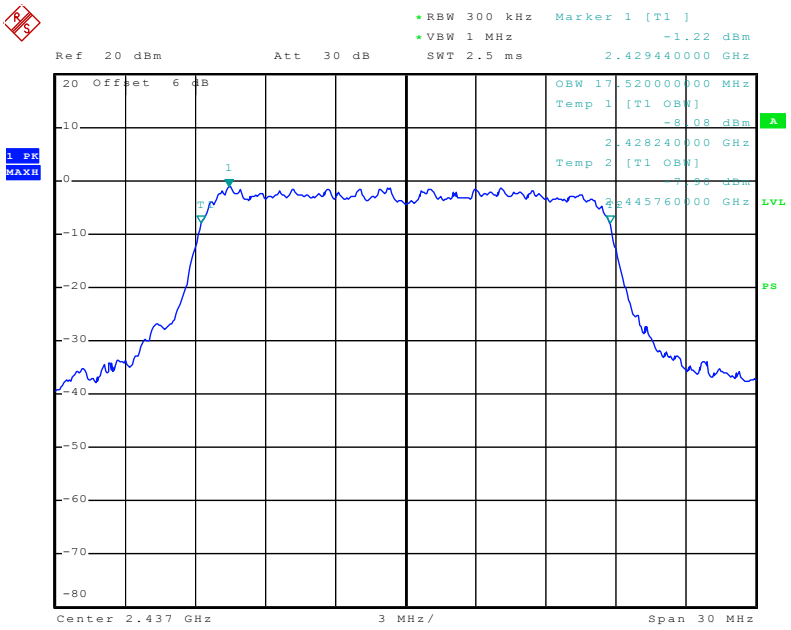
Date: 3.DEC.2019 09:19:49

802.11n(HT20) Low Channel



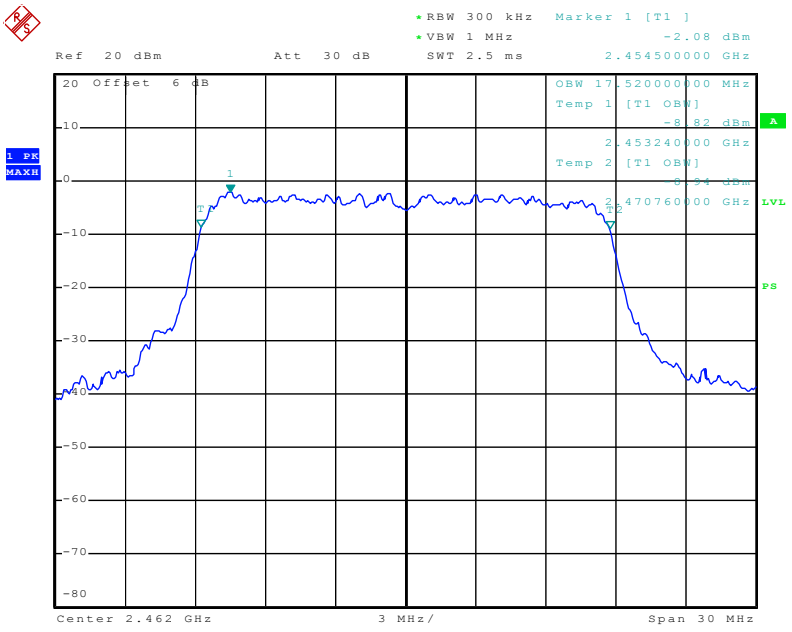
Date: 3.DEC.2019 09:20:32

802.11n(HT20) Middle Channel



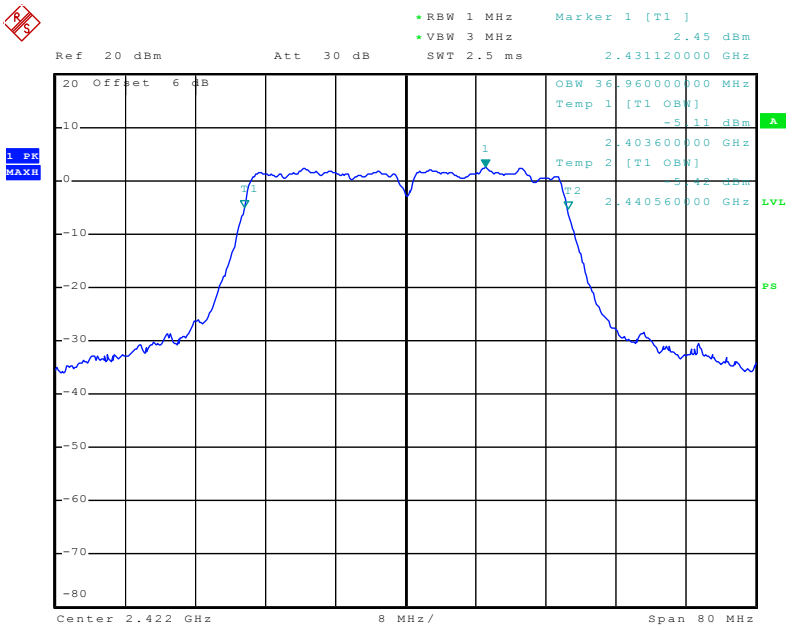
Date: 3.DEC.2019 09:21:08

802.11n(HT20) High Channel



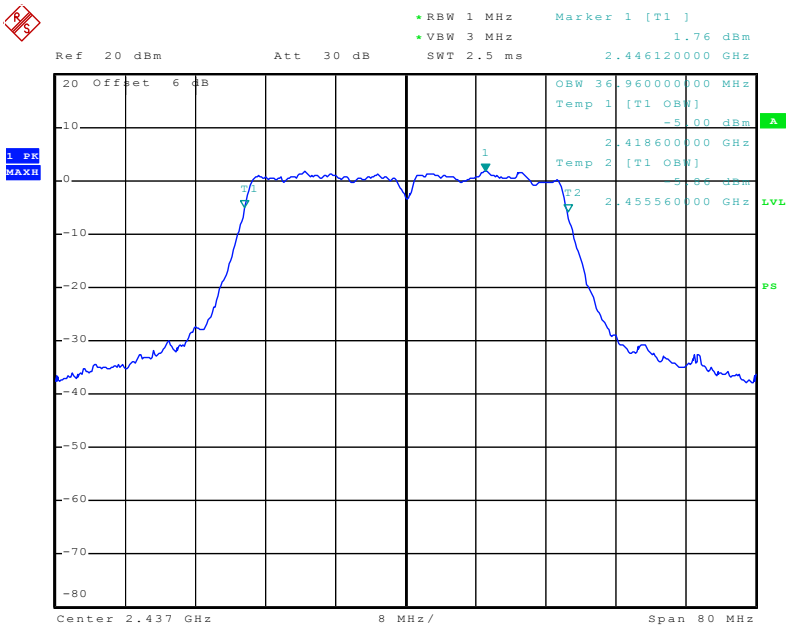
Date: 3.DEC.2019 09:21:48

802.11n(HT40) Low Channel



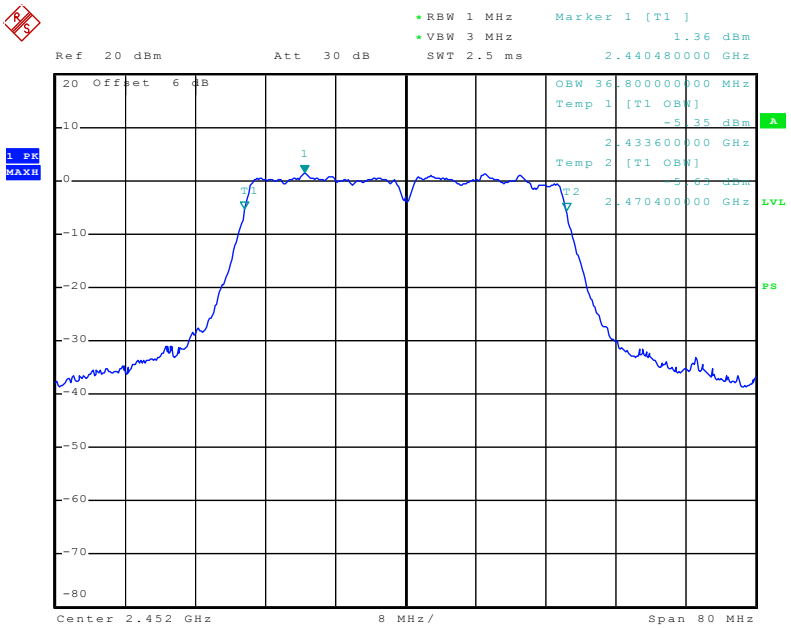
Date: 3.DEC.2019 09:22:45

802.11n(HT40) Middle Channel



Date: 3.DEC.2019 09:23:20

802.11n(HT40) High Channel



Date: 3.DEC.2019 09:24:32

8. Power Spectral Density

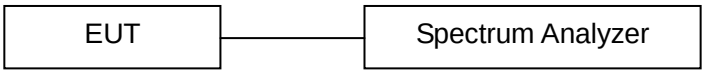
8.1Measurement Procedure

DTS 6dB Channel Bandwidth, FCC Rule 15.247(a)(2):

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to FCC KDB558074 (v03r03):

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz≤RBW≤100KHz
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

8.2Test SET-UP (Block Diagram of Configuration)



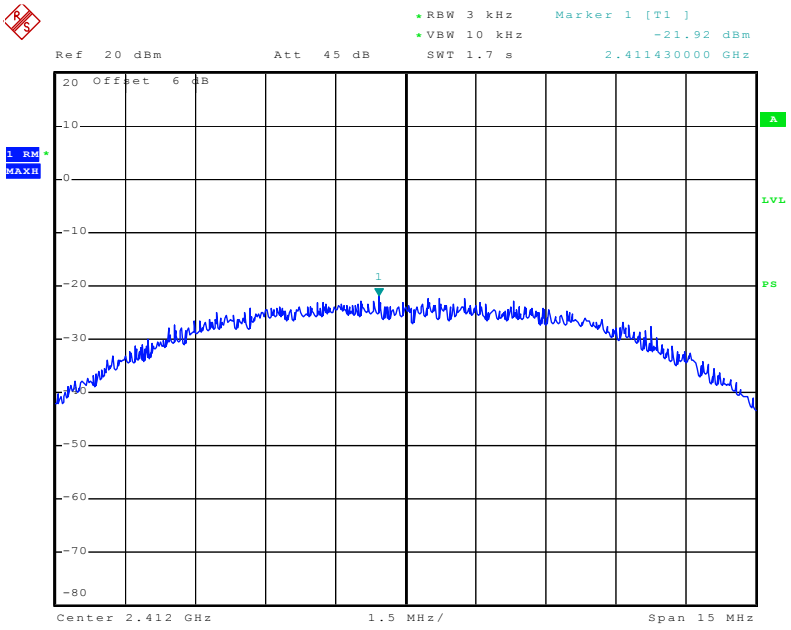
8.3Measurement Results

Pass

Please refer to following table and plots.

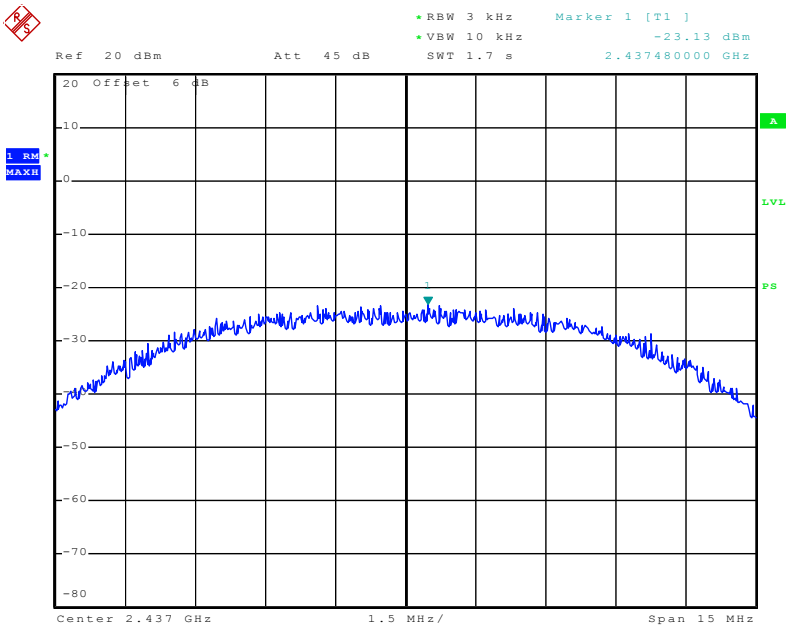
Temperature :	22 ℃	Humidity :	53 %
Test By:	Sance	Test Date :	December 03, 2019
Test Result:	PASS		
Frequency (MHz)	Data Rate (Mbps)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
IEEE 802.11b Mode (CCK)			
2412	1	-21.92	8
2437	1	-23.13	8
2462	1	-23.82	8
IEEE 802.11g Mode (OFDM)			
2412	6	-26.67	8
2437	6	-27.59	8
2462	6	-28.57	8
IEEE 802.11n(HT20) Mode (OFDM)			
2412	6.5	-27.04	8
2437	6.5	-27.74	8
2462	6.5	-28.65	8
IEEE 802.11n(HT40) Mode (OFDM)			
2422	13.5	-30.52	8
2437	13.5	-31.13	8
2452	13.5	-31.35	8

802.11b Low Channel



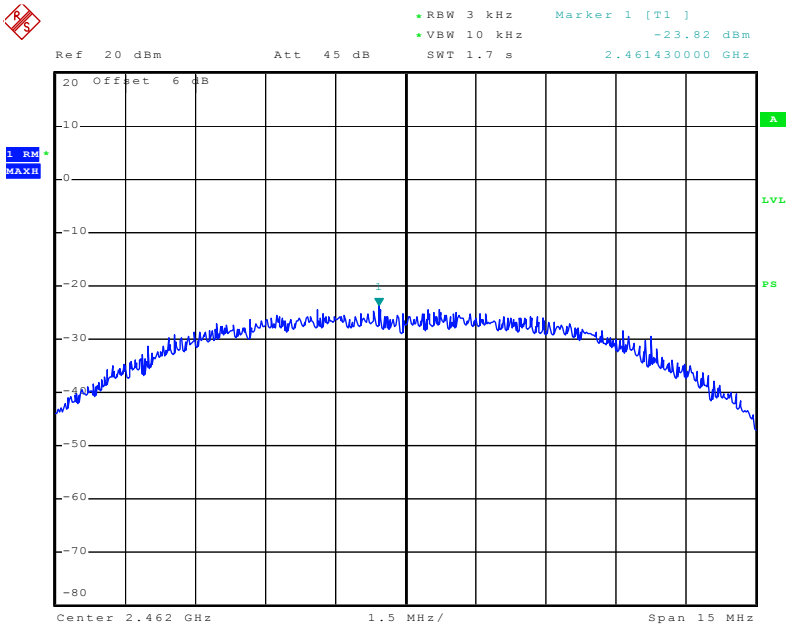
Date: 3.DEC.2019 08:54:26

802.11b Middle Channel



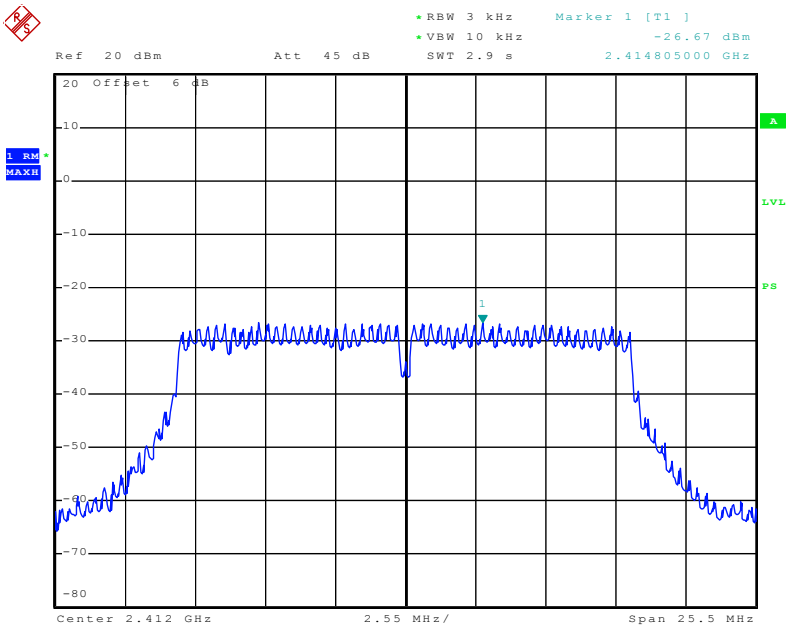
Date: 3.DEC.2019 08:54:51

802.11b High Channel



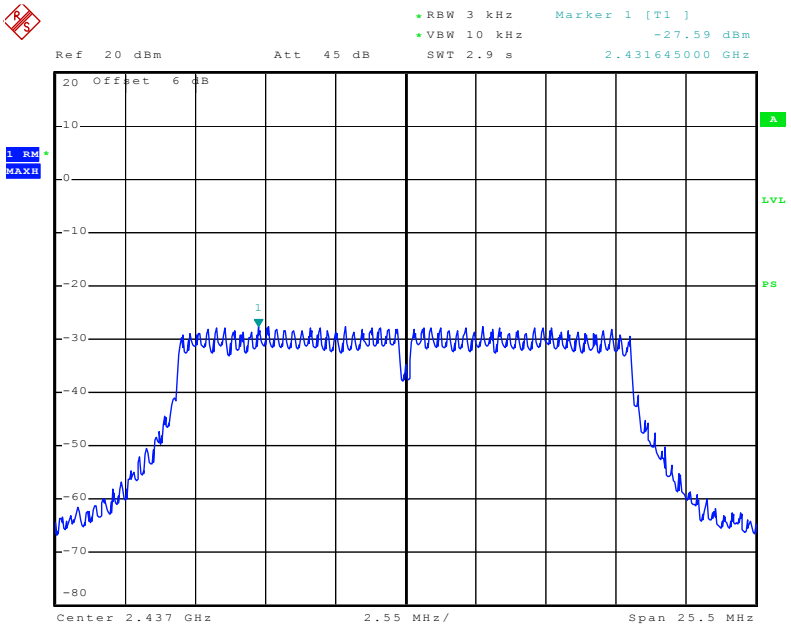
Date: 3.DEC.2019 08:55:19

802.11g Low Channel



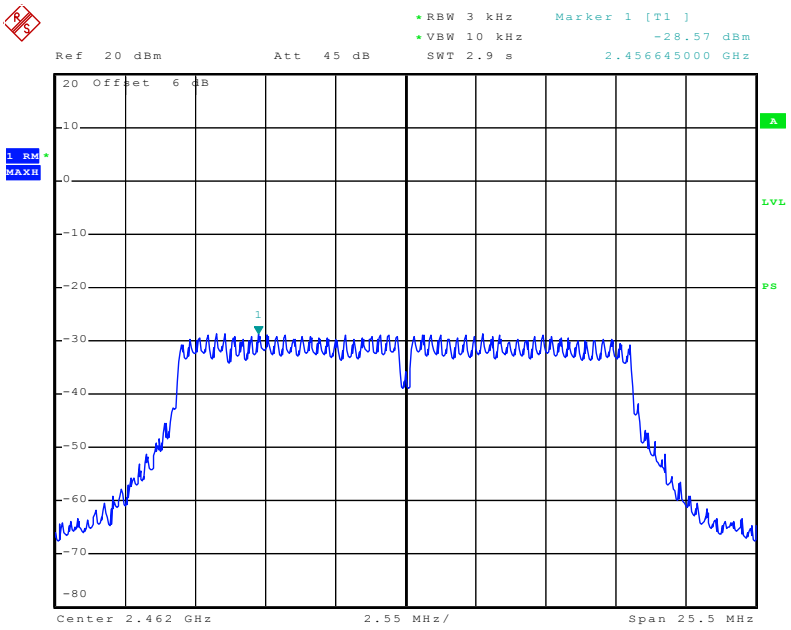
Date: 3.DEC.2019 09:00:15

802.11g Middle Channel



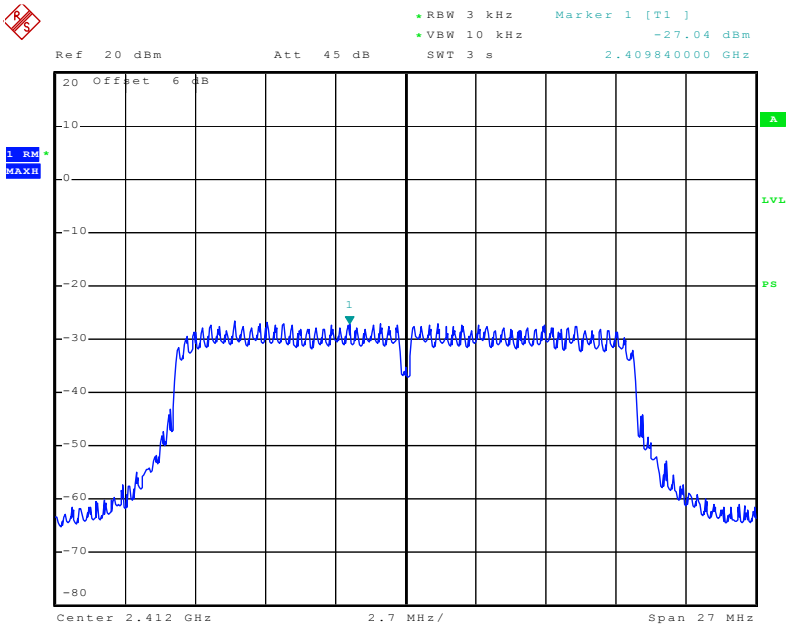
Date: 3.DEC.2019 09:00:40

802.11g High Channel



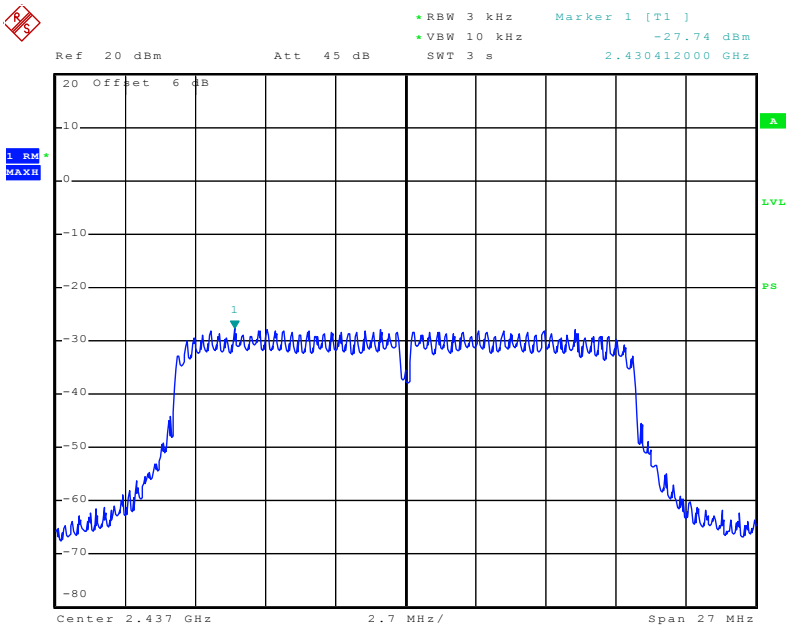
Date: 3.DEC.2019 09:01:06

802.11n(HT20) Low Channel



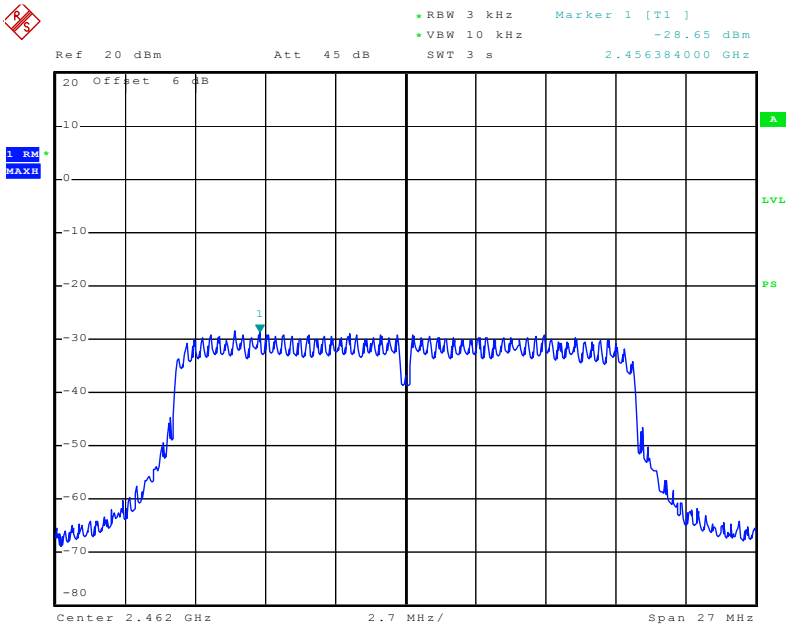
Date: 3.DEC.2019 09:01:56

802.11n(HT20) Middle Channel



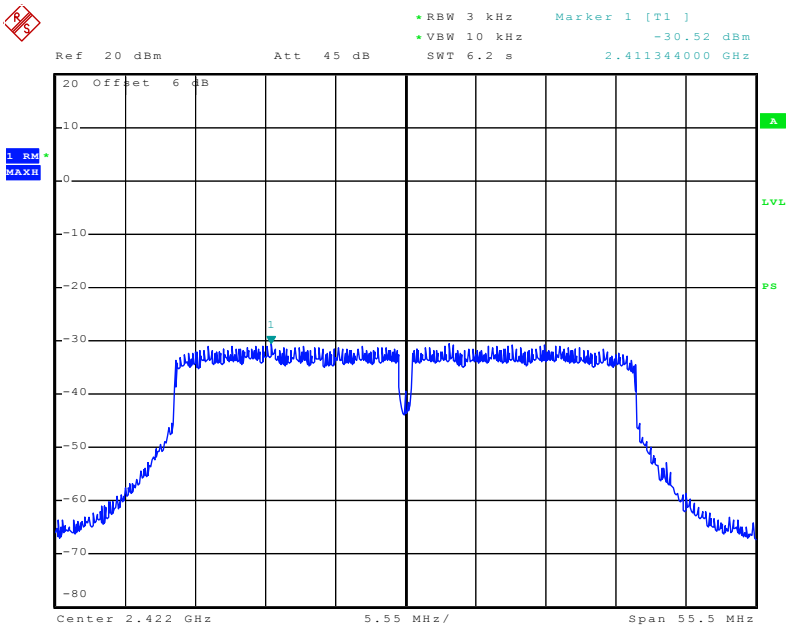
Date: 3.DEC.2019 09:02:27

802.11n(HT20) High Channel



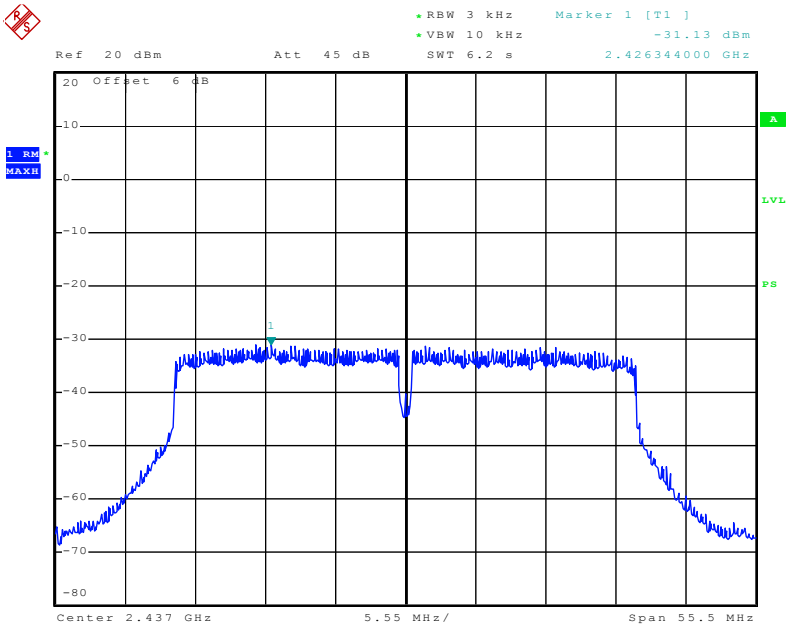
Date: 3.DEC.2019 09:02:50

802.11n(HT40) Low Channel



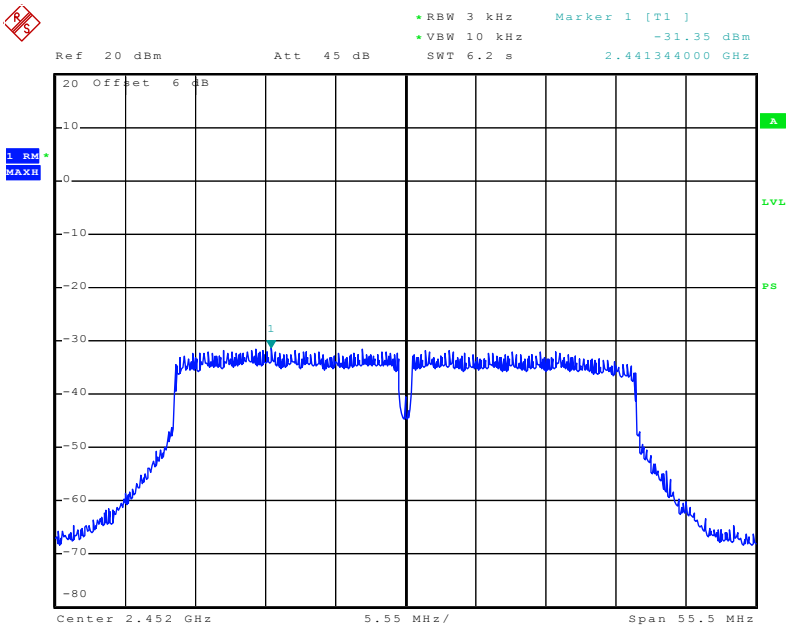
Date: 3.DEC.2019 09:03:37

802.11n(HT40) Middle Channel



Date: 3.DEC.2019 09:04:11

802.11n(HT40) High Channel



Date: 3.DEC.2019 09:04:46

9. Band Edge and Conducted Spurious Emissions

9.1Requirement and Measurement Procedure

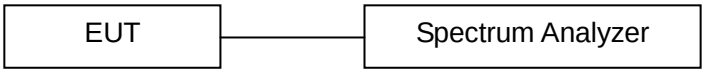
In any 100KHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below.

A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Frequency Band (MHz)	Level	Resolution Bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	3 MHz
	Average	1 MHz	If D≥98 then VBW ≥ 3*RBW, If D≤98 then VBW ≥1/T

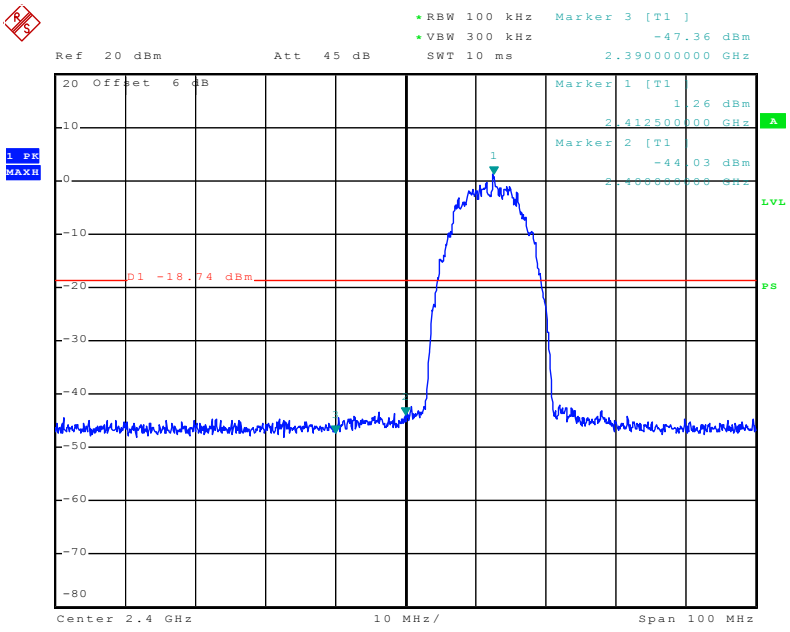
9.2Test SET-UP (Block Diagram of Configuration)



9.3Measurement Results

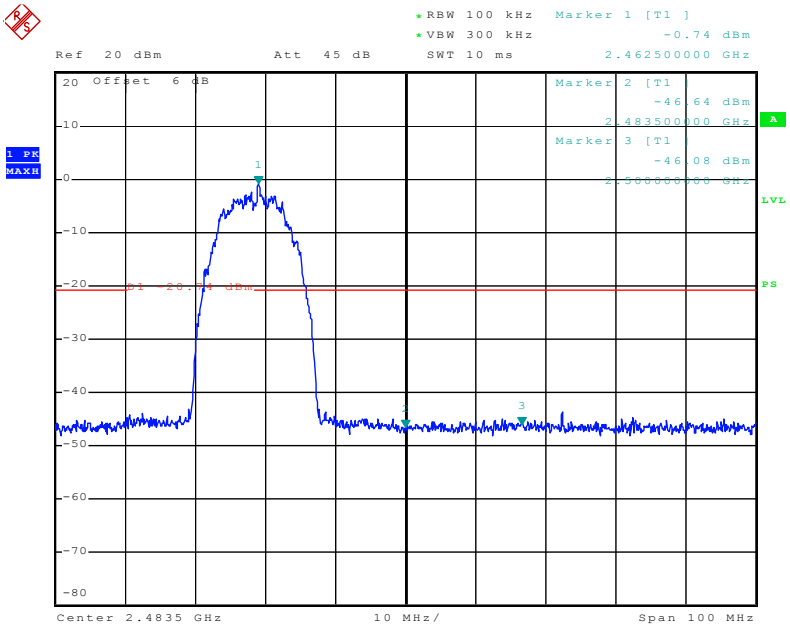
The test plots and table showed all spurious emission and up to the tenth harmonic was measured and they were found to be at least 20dB below the highest level of the desired power in the passband. Please refer to below plots.

Band Edge
802.11b Low Channel



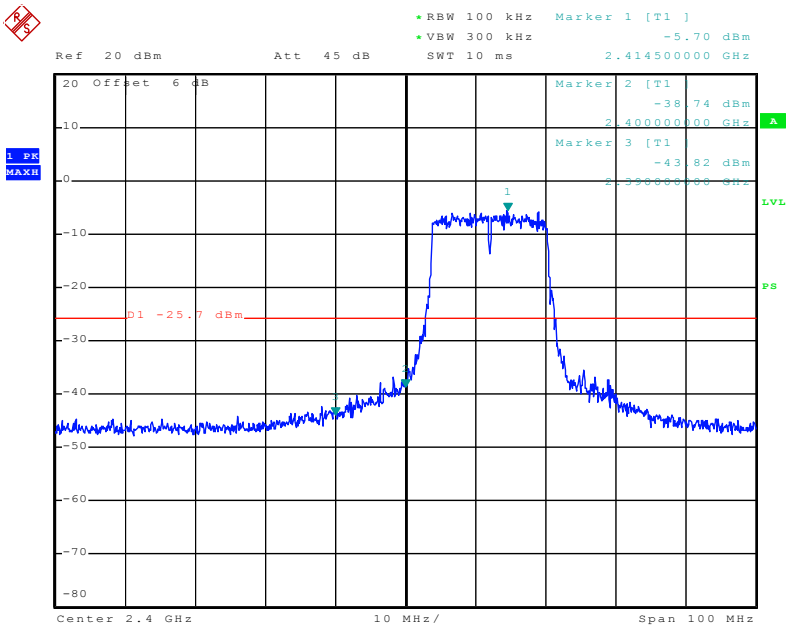
Date: 3.DEC.2019 09:55:41

802.11b High Channel



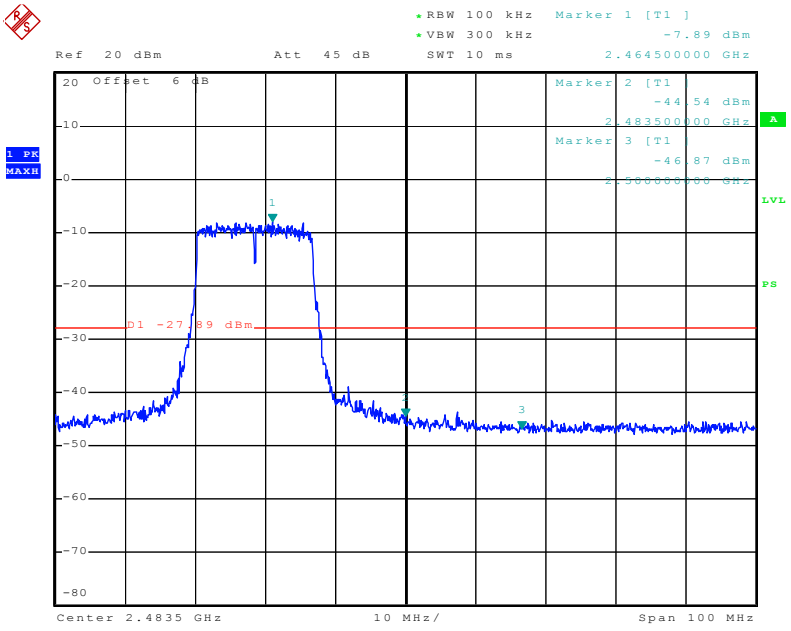
Date: 3.DEC.2019 09:57:01

802.11g Low Channel



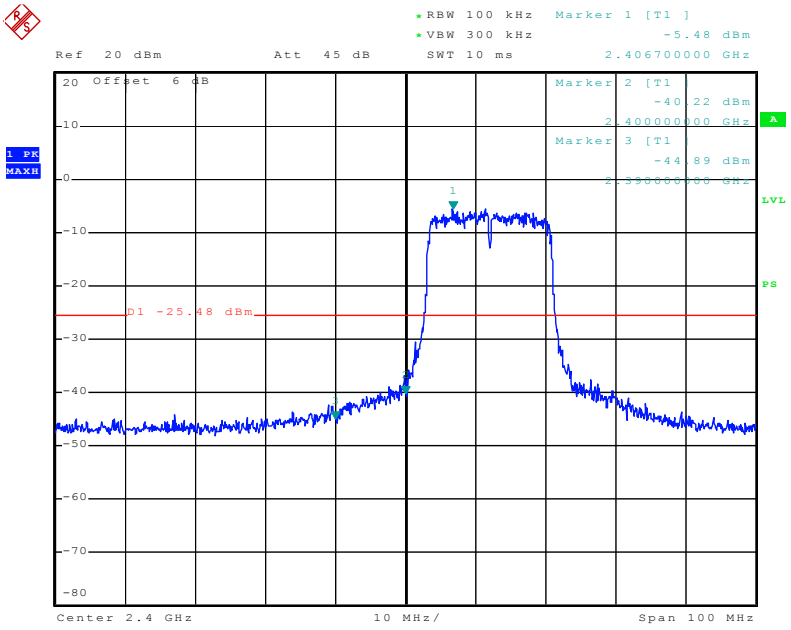
Date: 3.DEC.2019 09:58:54

802.11g High Channel



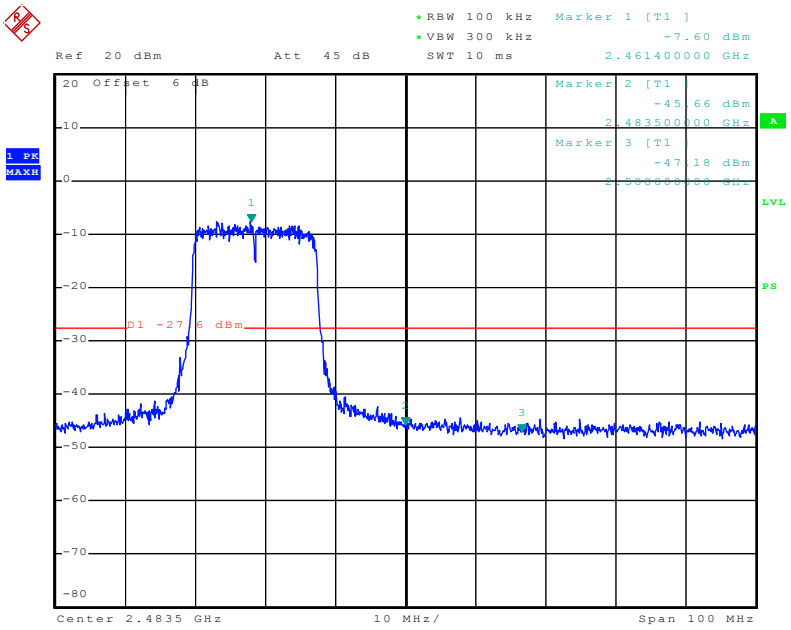
Date: 3.DEC.2019 09:59:58

802.11n(HT20) Low Channel



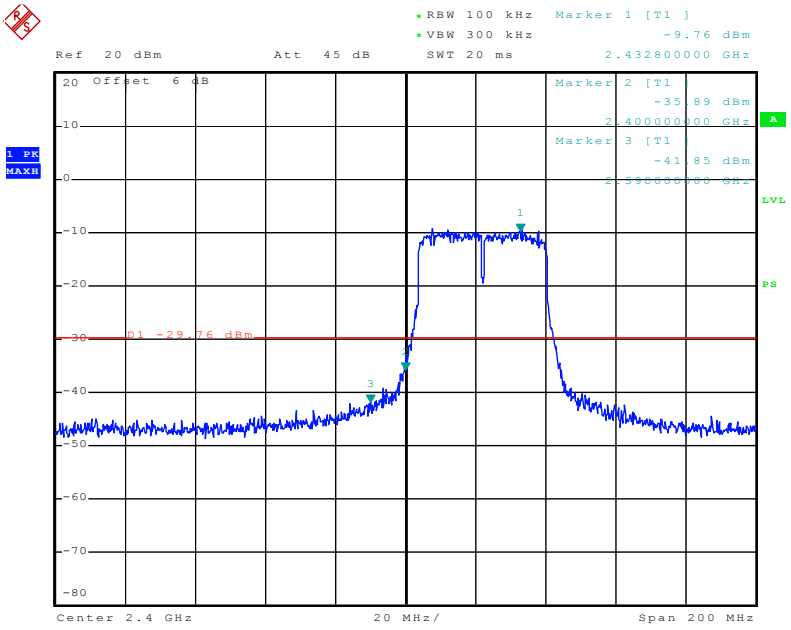
Date: 3.DEC.2019 10:01:07

802.11n(HT20) High Channel



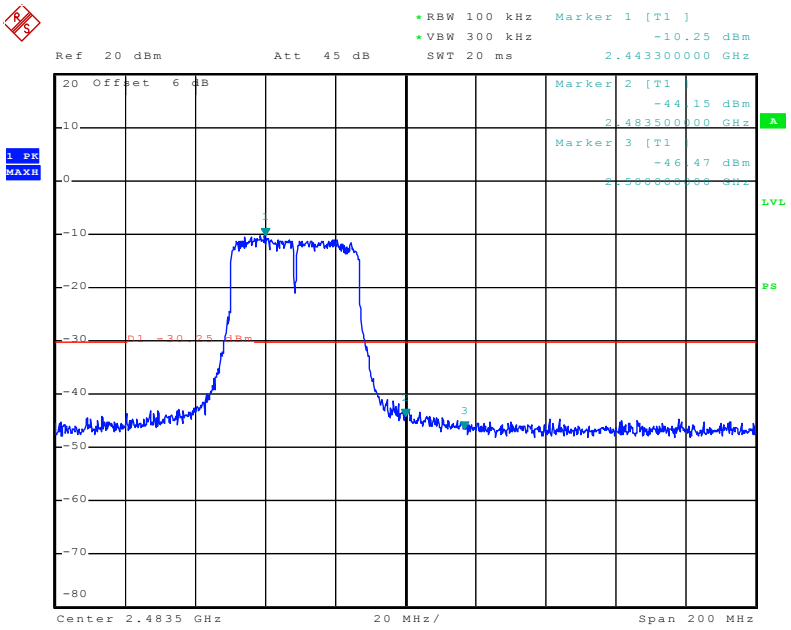
Date: 3.DEC.2019 10:02:07

802.11n(HT40) Low Channel



Date: 3.DEC.2019 10:06:29

802.11n(HT40) High Channel

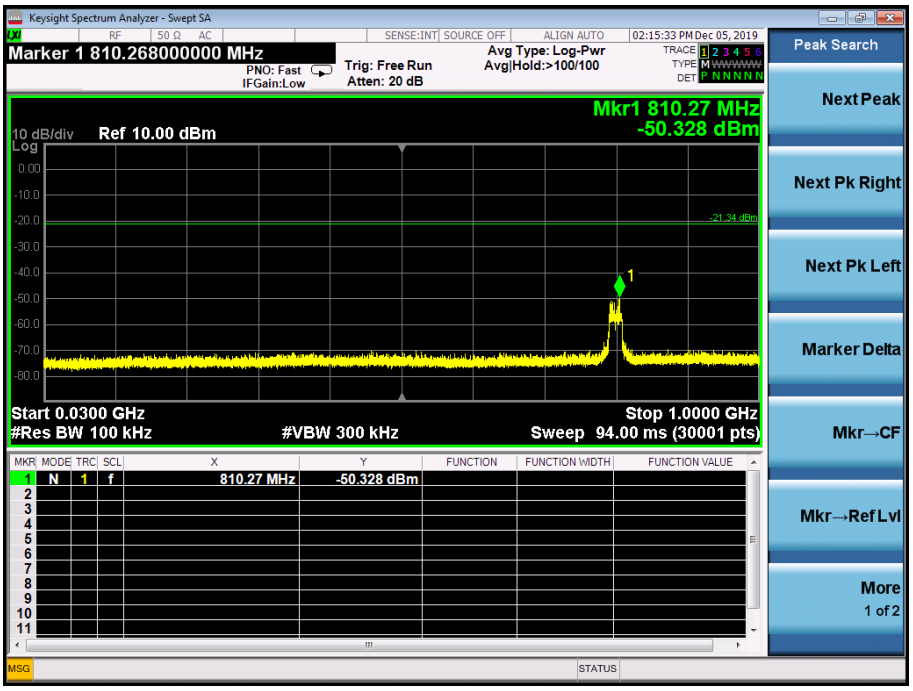


Date: 3.DEC.2019 10:05:58

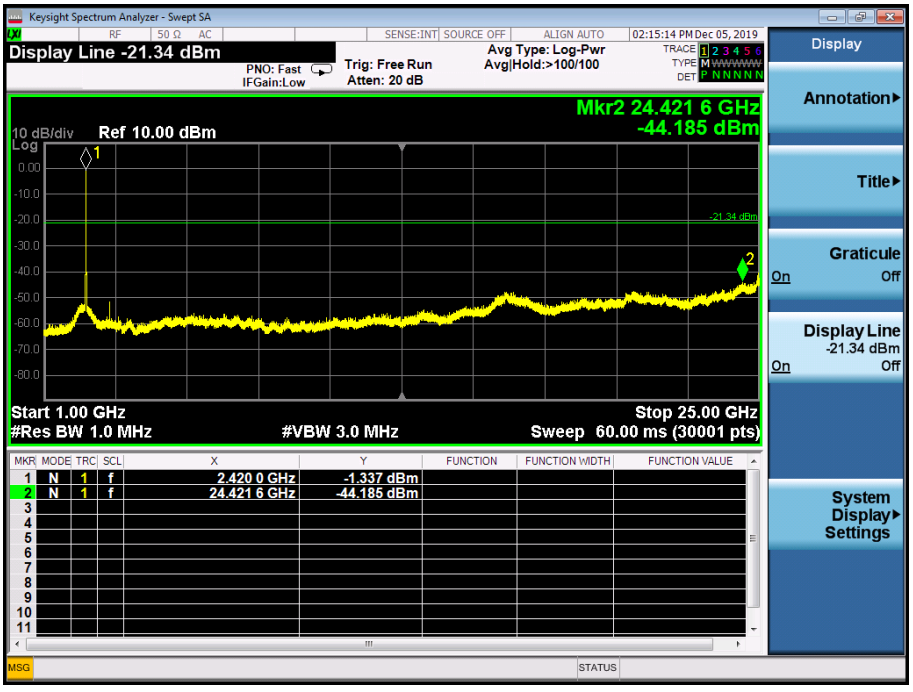
Conducted Spurious Emissions

The worst case: 802.11n(HT20)

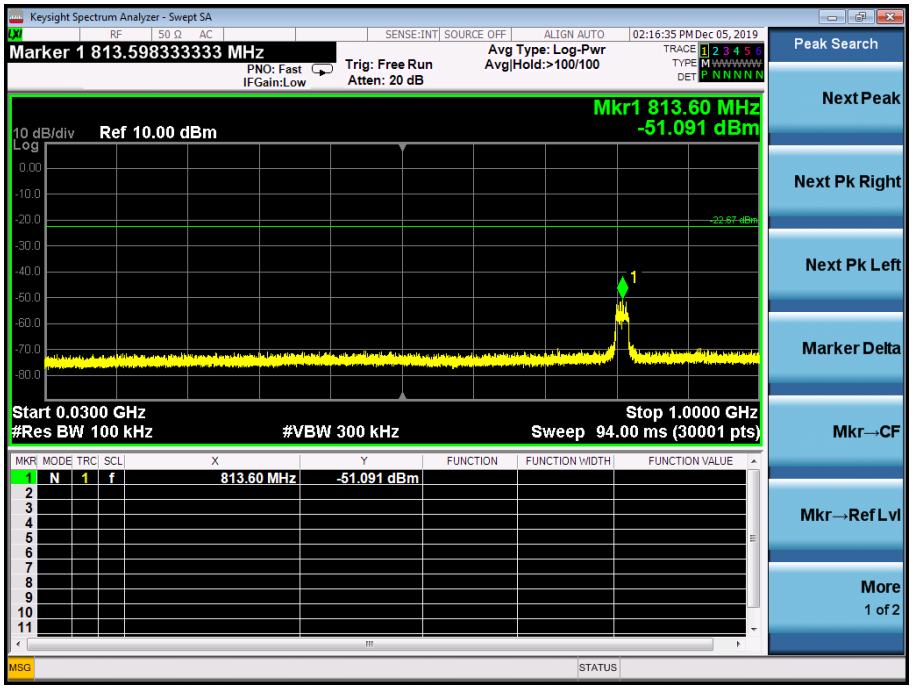
Low Channel Below 1G



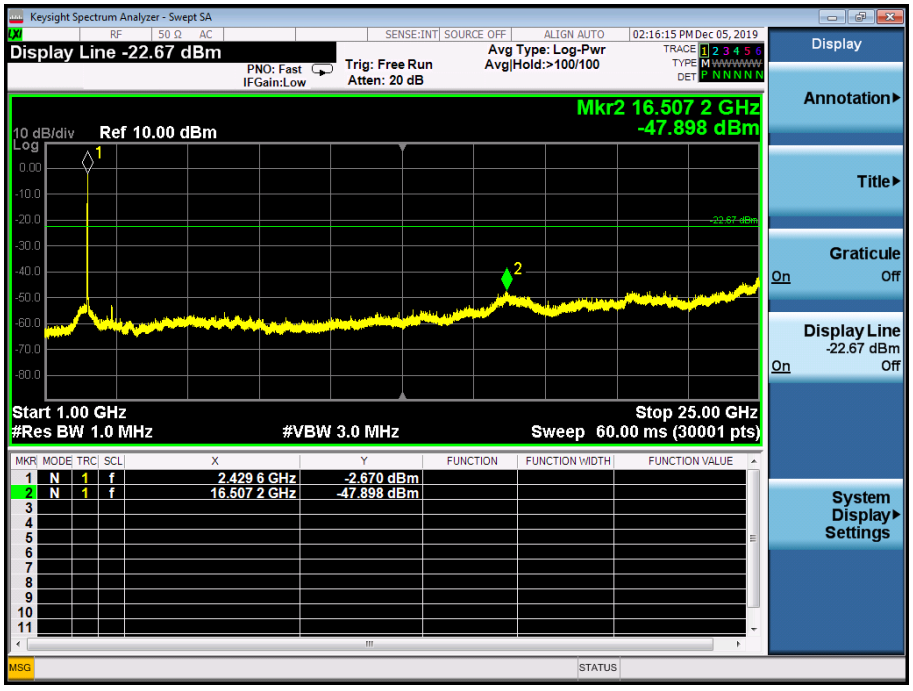
Above 1G



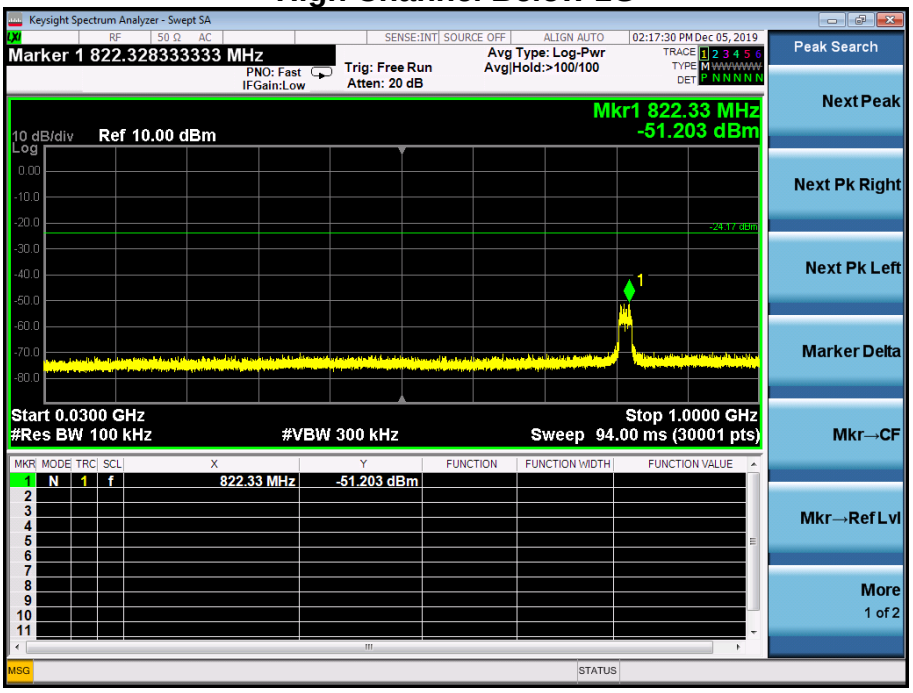
Middle Channel Below 1G



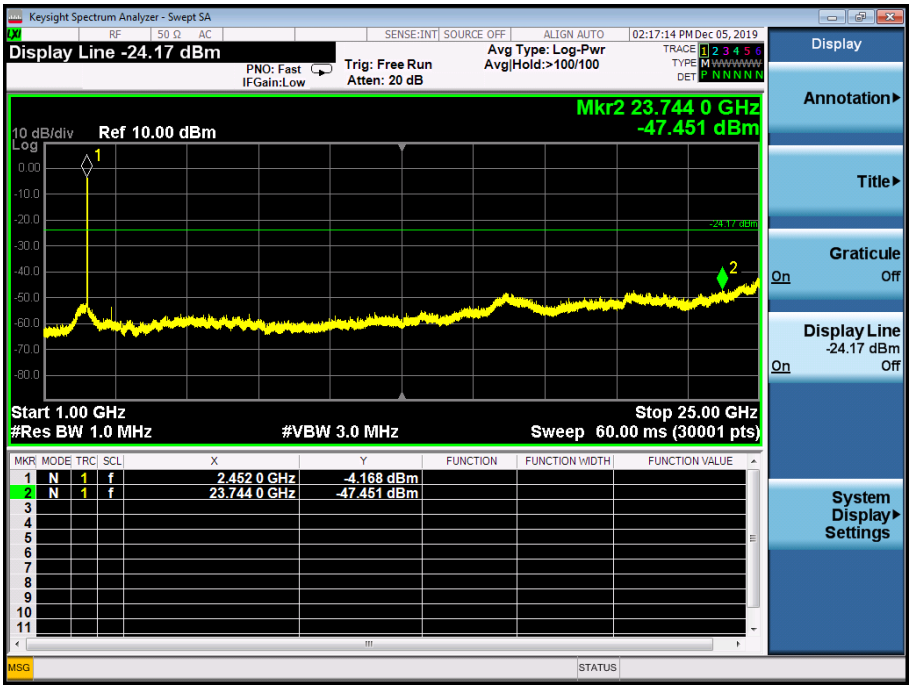
Above 1G



High Channel Below 1G



Above 1G

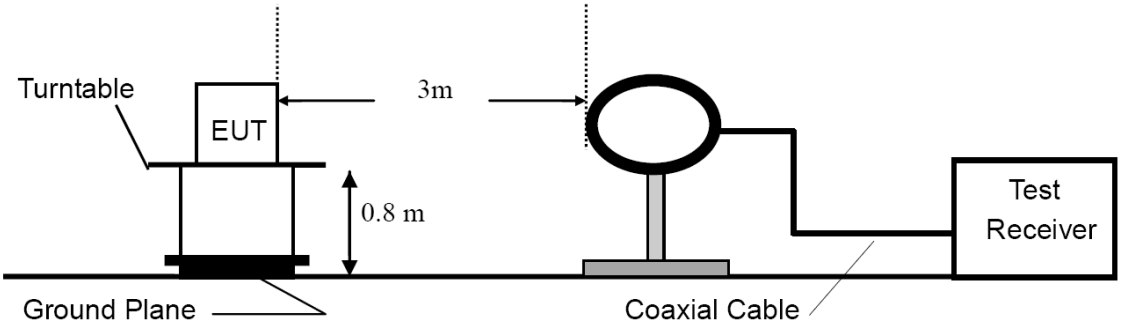


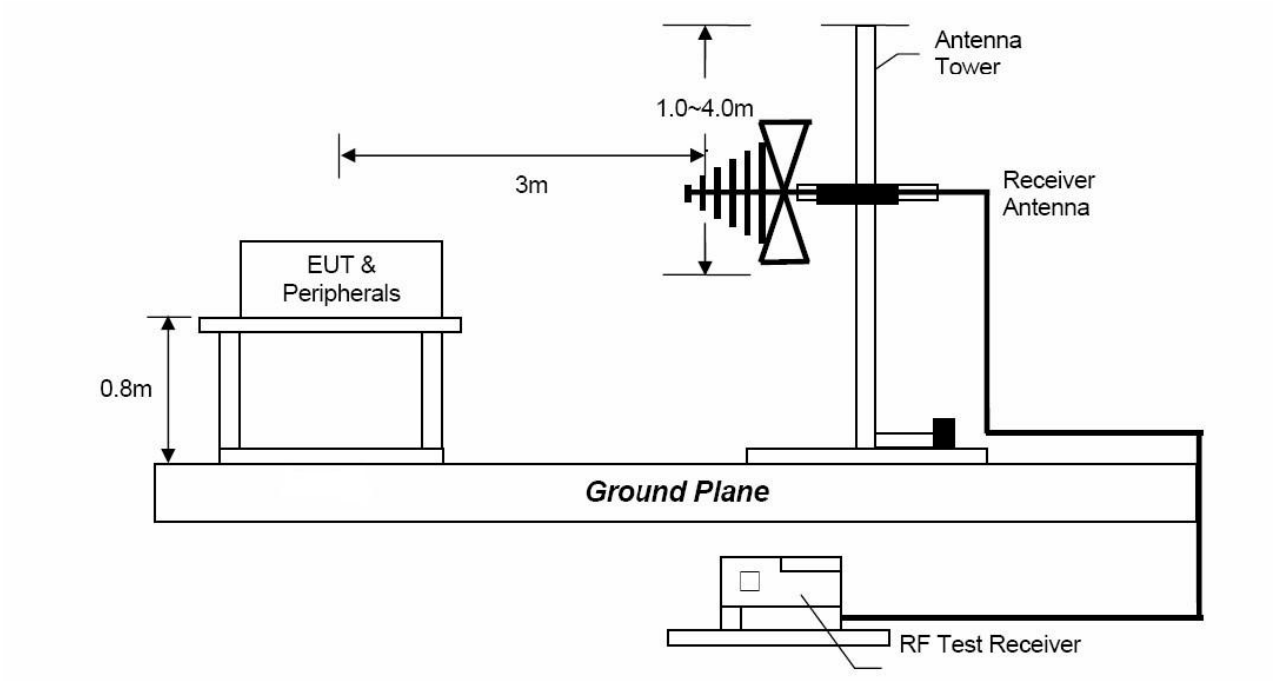
Note: Sweep points=30001pts

10. Radiated Spurious Emissions and Restricted Bands

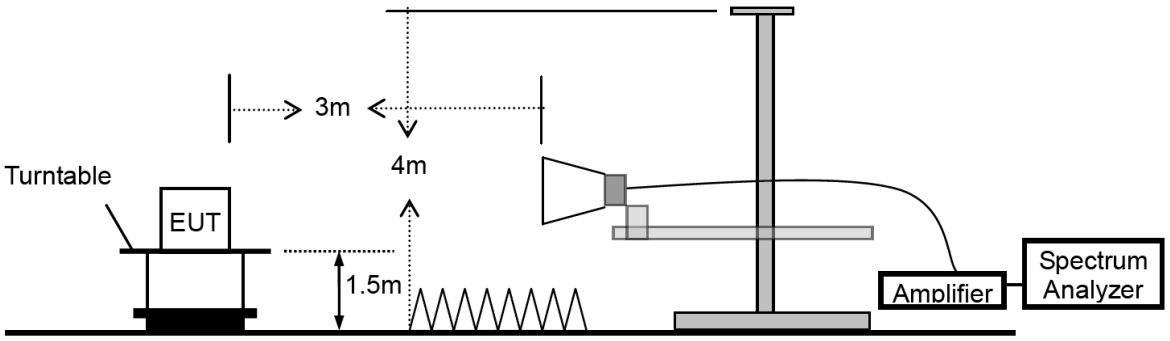
10.1 Test SET-UP (Block Diagram of Configuration)

10.1.1 Radiated Emission Test Set-Up, Frequency Below 30MHz





10.1.2 Radiated Emission Test Set-Up, Frequency above 1GHz



10.2 Measurement Procedure

a. Blow 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.
b. For the radiated emission test above 1GHz:
The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
d. The height of antenna 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.
e. 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. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.
f. A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Frequency Band (MHz)	Level	Resolution Bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	3 MHz
	Average	1 MHz	If D≥98 then VBW ≥ 3*RBW, If D≤98 then VBW ≥1/T

10.3 Limit

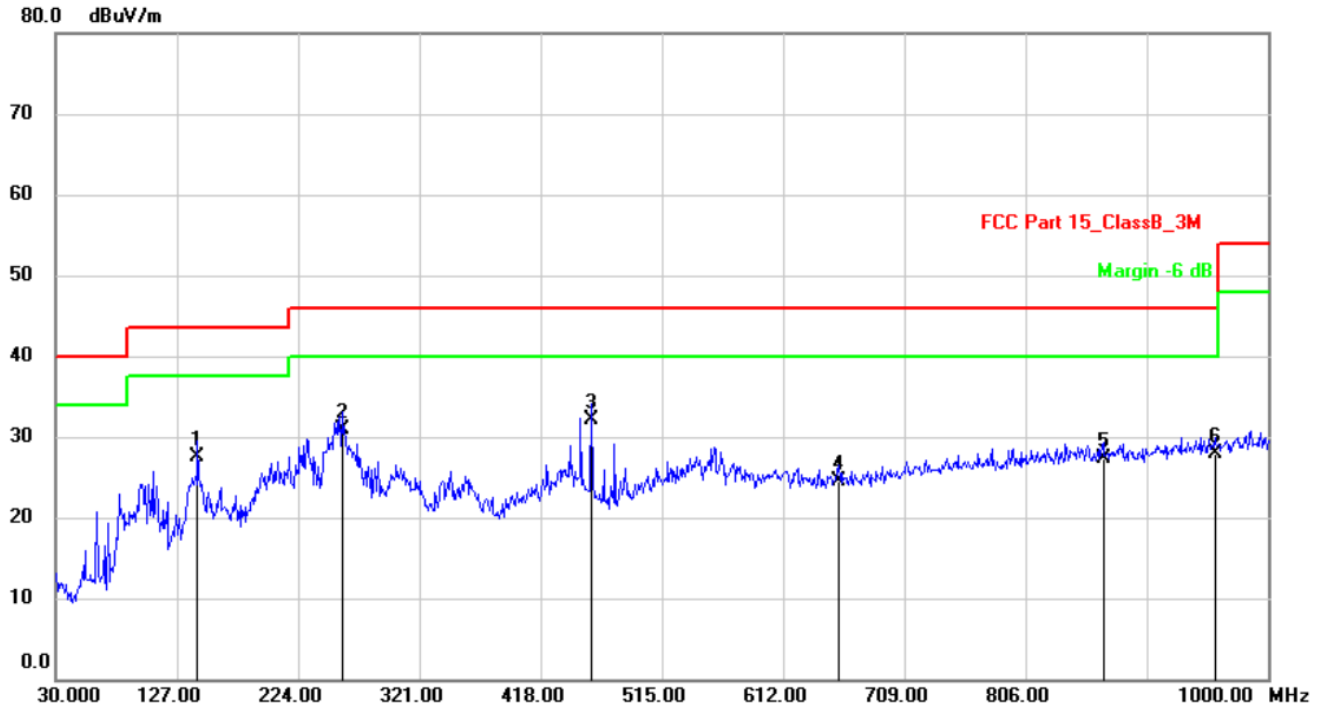
Frequency range MHz	Distance Meters	Field Strengths Limit (15.209) μV/m
0.009 ~ 0.490	300	2400/F(kHz)
0.490 ~ 1.705	30	24000/F(kHz)
1.705 ~ 30	30	30
30 ~ 88	3	100
88 ~ 216	3	150
216 ~ 960	3	200
Above 960	3	500

Remark：(1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) As shown in 15.35(b), 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.
(4) The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.
(5) §15.247(d) specifies that emissions which fall in the restricted bands, as defined in §15.205 comply with radiated emission limits specified in §15.209.

10.4 Measurement Results

Please refer to following plots of the worst case (802.11b Middle channel)

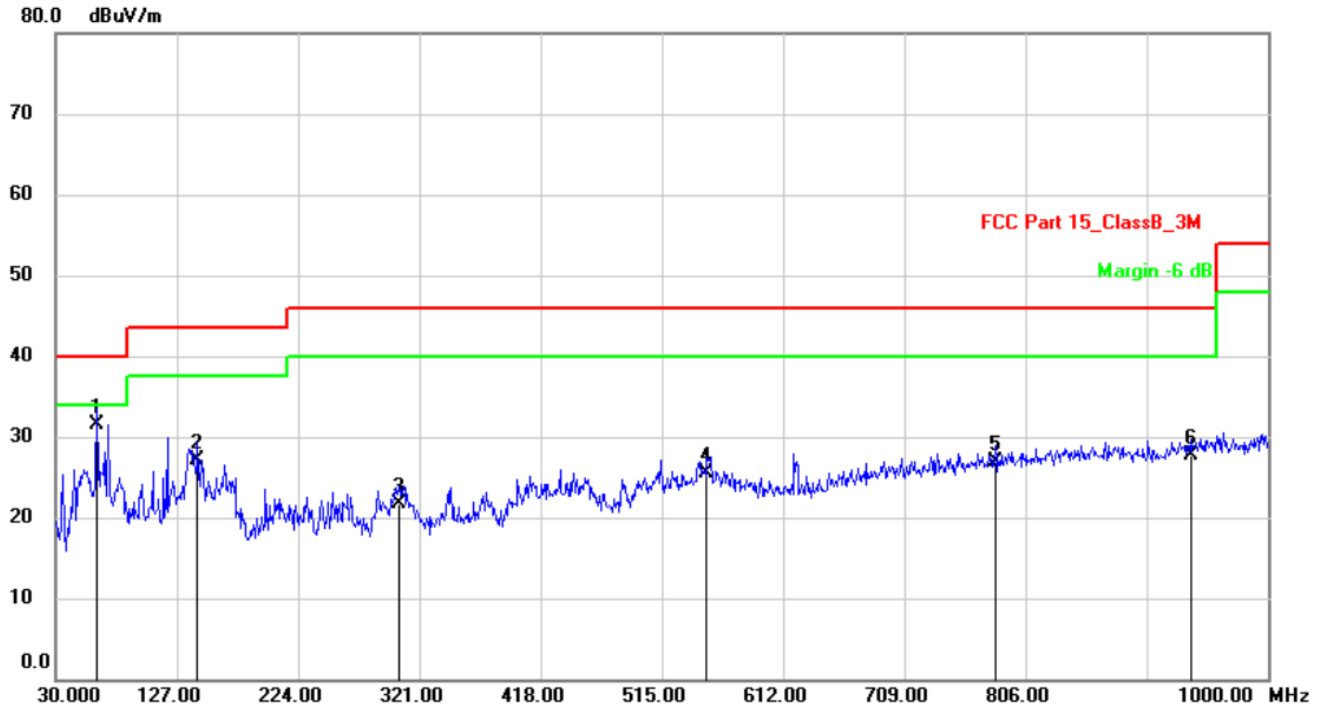
E.U.T :	Label Printer	Model Name :	ML60R-WT
Temperature :	25°C	Relative Humidity :	64 %
Pressure :	1006 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	WIFI	Phase:	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		143.4900	43.09	-15.59	27.50	43.50	-16.00	QP	200	192	
2		258.9200	42.46	-11.46	31.00	46.00	-15.00	QP	200	253	
3	*	458.7400	39.96	-7.76	32.20	46.00	-13.80	QP	200	52	
4		656.6200	29.47	-4.97	24.50	46.00	-21.50	QP	200	60	
5		868.0800	28.42	-1.12	27.30	46.00	-18.70	QP	200	300	
6		957.3200	28.21	-0.21	28.00	46.00	-18.00	QP	200	180	

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

E.U.T :	Label Printer	Model Name :	ML60R-WT
Temperature :	25°C	Relative Humidity :	64 %
Pressure :	1006 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	WIFI	Phase:	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	62.9800	46.57	-15.07	31.50	40.00	-8.50	QP	100	122	
2		143.4900	45.79	-18.59	27.20	43.50	-16.30	QP	100	180	
3		304.5100	34.14	-12.34	21.80	46.00	-24.20	QP	100	136	
4		550.8900	34.03	-8.53	25.50	46.00	-20.50	QP	100	181	
5		781.7500	29.07	-2.17	26.90	46.00	-19.10	QP	100	105	
6		937.9200	28.16	-0.46	27.70	46.00	-18.30	QP	100	230	

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Test Mode:	The worst case: 802.11b	Test Date :	December 03, 2019
Frequency Range:	Above 1GHz	Temperature :	24℃
Test Result:	PASS	Humidity :	47 %
Measured Distance:	3m	Test By:	Sance

Freq. (MHz)	Ant.Pol. (H/V)	Reading Level(dBuV)		Factor (dB/m)	Emission Level (dBuV)		Limit 3m (dBuV/m)		Margin (dB)	
		PK	AV		PK	AV	PK	AV	PK	AV
Operation Mode: TX Mode (Low)										
4824	V	57.18	43.11	6.38	63.56	49.49	74.00	54.00	-10.44	-4.51
7236	V	44.79	31.34	10.48	55.27	41.82	74.00	54.00	-18.73	-12.18

4824	H	56.27	40.91	6.38	62.65	40.41	74.00	54.00	-11.35	-6.71
7236	H	42.48	31.20	52.96	41.68	43.28	74.00	54.00	-21.04	-12.32

Operation Mode: TX Mode (Mid)										
4884	V	55.91	41.62	6.61	62.52	48.23	74.00	54.00	-11.48	-5.77
7326	V	44.82	31.57	10.54	55.36	42.11	74.00	54.00	-18.64	-11.89

4884	H	55.96	40.92	6.61	62.57	47.53	74.00	54.00	-11.43	-6.47
7326	H	42.65	31.53	10.54	53.19	42.07	74.00	54.00	-20.81	-11.93

Operation Mode: TX Mode (High)										
4944	V	56.09	41.93	6.83	62.92	48.76	74.00	54.00	-11.08	-5.24
7416	V	44.68	32.18	10.59	55.27	42.77	74.00	54.00	-18.73	-11.23

4944	H	55.74	40.52	6.83	62.57	47.35	74.00	54.00	-11.43	-6.65
7416	H	42.52	31.98	10.59	53.11	42.57	74.00	54.00	-20.89	-11.43

Note: (1) All Readings are Peak Value and AV.
(2) Emission Level= Reading Level + Factor
(3) Factor= Antenna Gain + Cable Loss – Amplifier Gain
(4) the radiated emission measurement made up to 25GHz.
Data of measurement within this frequency range shown " ---" in the table above means the reading of emissions are attenuated more than 10dB below the permissible limits.
(5) Measurement uncertainty : ±3.7dB.
(6) Horn antenna used for the emission over 1000MHz.

Spurious Emission in restricted band:

Operation Mode:	TX	Test Date :	December 03, 2019
Frequency Range:	Above 1GHz	Temperature :	24 ℃
Test Result:	PASS	Humidity :	47 %
Measured Distance:	3m	Test By:	Sance

Freq. (MHz)	Ant.Pol. (H/V)	Reading Level(dBuV)		Factor (dB/m)	Emission Level (dBuV)		Limit 3m (dBuV/m)		Margin (dB)	
		PK	AV		PK	AV	PK	AV	PK	AV
The worst case: Test Mode: 802.11n(HT20)										
2398.000	H	68.39	40.55	0.13	68.52	40.68	74.00	54.00	-5.48	-13.32
2398.000	V	64.87	38.66	0.13	65.00	38.79	74.00	54.00	-9.00	-15.21
2483.500	H	69.12	39.67	0.35	69.47	40.02	74.00	54.00	-13.98	-18.85
2483.500	V	65.20	38.81	0.35	65.55	38.71	74.00	54.00	-8.45	-15.29

Note: (1) All Readings are Peak Value and AV.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss
(3) Measurement uncertainty : ±3.7dB

11. Antenna Application

11.1 Antenna requirement

According to of FCC part 15C section 15.203 and 15.240:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
Systems operating in the 2400-2483.5MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

11.2 Measurement Results

The antenna is PCB on-board antenna that no antenna other than furnished by the responsible party shall be used with the device, and the best case gain of the antenna is 2.0dBi, So, the antenna is consider meet the requirement.

12. Test Equipment List

Description	Manufacturer	Model Number	Serial Number	Characteristics	Calibration Date	Calibration Due Date
Test Receiver	Rohde & Schwarz	ESCI7	100837	9KHz~7GHz	Mar. 14, 2019	1 year
Antenna	Schwarzbeck	VULB9162	9162-010	30MHz~7GHz	Mar. 23, 2019	1 year
Spectrum Analyzer	Rohde & Schwarz	FSU26	200409/026	20Hz~26.5GHz	Mar. 14, 2019	1 year
Spectrum Analyzer	Keysight	N9020A	MY54200831	20Hz~26.5GHz	Apr. 24, 2019	1 year
Spectrum Analyzer	Rohde & Schwarz	FSV40	101003	10Hz~40GHz	Apr. 24, 2019	1 year
L.I.S.N	Rohde & Schwarz	ESH2-Z5	893606/014	9KHz~30MHz	Mar. 13, 2019	1 Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-372	15GHz~40GHz	Mar. 23, 2019	1 year
Pre-Amplifier	EMCI	EMC 184045	980102	18GHz~40GHz	Apr. 24, 2019	1 year
Power Sensor	DARE	RPR3006W	15I00041SNO64	100MHz~6GHz	Mar. 14, 2019	1 year
Communication Tester	Rohde & Schwarz	CMW500	149004	70MHz~6GHz	Mar. 14, 2019	1 year
Horn Antenna	COM-Power	AH-118	071078	500MHz~18GHz	Mar. 23, 2019	1 year
Pre-Amplifier	HP	HP 8449B	3008A00964	1GHz~26.5GHz	Mar. 14, 2019	1 year
Pre-Amplifier	HP	HP 8447D	1145A00203	100KHz~1.3GHz	Mar. 14, 2019	1 year
Loop Antenna	Schwarzbeck	FMZB 1513	1513-272	9KHz~30MHz	Apr. 24, 2019	1 year
Temperature & Humidity Chamber	REMAFEE	SYHR225L	N/A	-40~150℃	Apr. 24, 2019	1 year
DC Source	MY	MY8811	N/A	0~30V	N/A	N/A
Temporary antenna connector	TESCOM	SS402	N/A	9KHz~25GHz	N/A	N/A
Power Meter	Anritsu	ML2495A	1139001	100k-65GHz	Apr. 24, 2019	1 year
Power Sensor	Anritsu	MA2411B	100345	300M-40GHz	Apr. 24, 2019	1 year
Test Software	EZ	EZ_EMC	N/A	N/A	N/A	N/A

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

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