TEST REPORT

Application No.:	SUCR2502000112AT
Applicant:	Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
EUT Description:	POS System
Model No.:	L15C2, L15D2 ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark:	SUNMI
FCC ID:	2AH25T3L
Standards:	FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart E
Date of Receipt:	February 25, 2025
Date of Test:	March 6, 2025 to April 3, 2025
Date of Issue:	April 8, 2025
Test Result :	**PASS ***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

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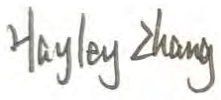
Version

Revision Record			
Version	**Description**	***Date***	***Remark***
00	Original	April 8, 2025	/

Authorized for issue by:				
Tested By		 **Hayley Zhang / Project Manager**		
Approved By		**Cloud Peng/Technical Manager**		

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1 Test Summary

Test Item	Band[1]	FCC rules No.	Test Requirements	Test Result	Result
Antenna Requirement	--	15.203/15.407(a)	--	Clause 3.1	PASS
26dB Emission Bandwidth	Band I	15.407(a)(1)	No limit.	Clause 3.5	For Report Purpose
	Band II-A	15.407(a)(2)			
	Band II-C	15.407(a)(2)			
6dB Emission Bandwidth	Band III	15.407(e)	≥ 500 kHz.	Clause 3.6	PASS
99% Occupied Bandwidth	Band I	KDB 789033 D02§ D	No limit.	Clause 3.7	For Report Purpose
	Band II-A				
	Band II-C				
	Band III				
Duty Cycle	Band I Band II-A Band II-C Band III	--	No limit.	Clause 3.3	For Report Purpose
Maximum Conducted Output Power	Band I	15.407(a)(iv)	< 250mW	Clause 3.4	PASS
	Band II-A	15.407(a)(2)	<MIN{250mW,11dBm+10*lg(EBW)}		
	Band II-C				
	Band III	15.407(a)(3)	< 1W		
Maximum Power Spectral Density	Band I	15.407(a)(iv)	<11dBm/MHz	Clause 3.8	PASS
	Band II-A	15.407(a)(2)	<11dBm/MHz		
	Band II-C				
	Band III	15.407(a)(3)	<30dBm/500KHz		
Radiated Spurious Emissions	Band I	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.15-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).	Clause 3.9	PASS
	Band II-A	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.25-5.35 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS
	Band II-C	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP). F≥1GHz & out-restricted: <-27dBm/MHz PK e.i.r.p. (exl. 5.47-5.725 GHz). F≥1GHz & in-restricted: §15.209 limit (AV&PK).		PASS
	Band III	15.407(b) 15.205/15.209	F<1GHz: §15.209 limit (QP) F≥1GHz &out-restricted:(PK) 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		PASS

Test Item	Band[1]	FCC rules No.	Test Requirements	Test Result	Result
			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. F≥1GHz & in-restricted: §15.209 limit (AV&PK).		
Restricted bands around fundamental frequency	Band I Band II-A Band II-C Band III	15.407(b) 15.205/15.209	---	Clause 3.10	PASS
AC Power Line Conducted Emissions	Band I Band II-A Band II-C Band III	15.207	---	Clause 3.2	PASS
Dynamic Frequency Selection	Band II-A Band II-C	15.407	Channel Move Time:10 Seconds	Clause 3.11	PASS
Frequency Stability	Band I Band II-A Band II-C Band III	15.407(g)	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual	N/A	N/A

Note 1:
Band I: 5150-5250MHz
Band II-A: 5250-5350MHz
Band II-C: 5470-5725MHz
Band III: 5725-5850MHz

2 General Information

2.1 Details of Client

Applicant:	Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China

2.2 Test Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Ives Cheng, Tizzy Song

2.3 Test Facility

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

• **A2LA (Certificate No. 6336.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

• **FCC –Designation Number: CN1312**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 717327

2.4 General Description of EUT

EUT Description:	POS System		
Model No.:	L15C2, L15D2		
Trade Mark:	SUNMI		
Hardware Version:	6225Coreboard_MB_V3.0		
Software Version:	1.0.0		
Power Supply:	24V		
IMEI:	RF Conducted	N/A	
	RSE & AC power line	867438070050376	
WLAN Mode Supported:	802.11a:	20 MHz channel bandwidth	
	802.11n:	20 MHz / 40 MHz channel bandwidth	
	802.11ac:	20 MHz / 40 MHz / 80 MHz channel bandwidth	
Operation Frequency:	5150MHz to 5250MHz 5250MHz to 5350MHz 5470MHz to 5725MHz 5725MHz to 5850MHz		
Modulation Type:	802.11a:	OFDM (BPSK, QPSK, 16QAM, 64QAM)	
	802.11n:	OFDM (BPSK, QPSK, 16QAM, 64QAM)	
	802.11ac:	OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)	
Channel Spacing:	20MHz:	802.11a/n(HT20)/ac(VHT20)	
	40MHz:	802.11n(HT40)/ac(VHT40)	
	80MHz:	802.11ac(VHT80)	
Antenna Type:	☐ External, ☒ Internalss		
Antenna Gain:	5150MHz to 5250MHz: 2.81dBi; 5250MHz to 5350MHz: 2.85dBi; 5470MHz to 5725MHz: 3.04dBi; 5725MHz to 5850MHz: 0.77dBi;		
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.		
Smart System:	☒ SISO	802.11a/n/ac	
	☐ MIMO	CDD: 802.11a/n/ac: Tx & Rx	
		STBC: 802.11n/ac: Tx & Rx	
		TXBF: 802.11n/ac: Tx & Rx	
	☐ Diversity	802.11a: Tx & Rx	
TPC Function:	☒Support, ☐Not Support		
DFS Function:	☐Master		
	☐Slave with radar detection	☒Slave without radar detection	
RF Cable:	2dB		

Note: *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, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
Remark:
1. The only difference between the two models is that L15C2 comes with a printer and L15D2 does not come with a printer, everything else is exactly the same. Based on the above differences, complete testing will be conducted for L15C2 model, while L15D2 model will only check EMC.
2. As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

Remark:
In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency range over which device operates	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre

For UNII Band I:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5180
	The Middle channel	5200
	The Highest channel	5240
IEEE 802.11n/ac 40MHz	The Lowest channel	5190
	The Highest channel	5230
IEEE 802.11ac 80MHz	The Middle channel	5210

For UNII Band II-A:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5260
	The Middle channel	5280
	The Highest channel	5320
IEEE 802.11n/ac 40MHz	The Lowest channel	5270
	The Highest channel	5310
IEEE 802.11ac 80MHz	The Middle channel	5290

For UNII Band II-C:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5500
	The Middle channel	5580
	The Highest channel	5700
IEEE 802.11n/ac 40MHz	The Lowest channel	5510
	The Middle channel	5550
	The Highest channel	5670
IEEE 802.11ac 80MHz	The Middle channel	5530

For UNII Band III:		
Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5745
	The Middle channel	5785
	The Highest channel	5825
IEEE 802.11n/ac 40MHz	The Lowest channel	5755
	The Highest channel	5795
IEEE 802.11ac 80MHz	The Middle channel	5775

2.5 Test Environment and Mode

Environment Parameter	101 kPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(℃)	Voltage(V)
NTNV	22~23	3.87
Remark: NV: Normal Voltage NT: Normal Temperature		

2.6 Description of Support Units

Description	Manufacturer	Model No.	FCC ID
Router	ASUS	GT-AXE11000	MSQ-RTAXJF00

2.7 Worst-case configuration and mode

Low data rate was used to test on antenna port conducted tests and radiated spurious emissions since it has the highest maximum power. Following are the worst-case data rates set for test:

Modulation Type	SISO - Data Rate	MIMO - Data Rate
802.11a	6 Mbps	/
802.11n (HT 20)	MCS0 (6.5 Mbps)	/
802.11n (HT 40)	MCS0 (13.5 Mbps)	/
802.11ac (VHT 20)	MCS0 (6.5 Mbps)	/
802.11ac (VHT 40)	MCS0 (13.5 Mbps)	/
802.11ac (VHT 80)	MCS0 (29.3 Mbps)	/

3 Equipment List

RF Test Equipment					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. date (yyyy/mm/dd)**	**Cal.Due date (yyyy/mm/dd)**
Shielding Room	Brilliant-emc	N/A	SUWI-04-08-01	2022/11/09	2025/11/08
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2025/02/13	2026/02/12
Measurement Software	Tonscend	TST272 V2.0	SUWI-03-55-03	NCR	NCR
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2024/05/08	2025/05/07
Temperature Chamber	ESPEC	SU-242	SUWI-01-13-02	2024/05/09	2025/05/08
Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-05	2025/01/21	2026/01/20
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2025/01/15	2026/01/14
Power meter	Anritsu	ML2495A	SUWI-01-31-01	2024/11/19	2025/11/18
Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	2024/11/19	2025/11/18
MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	2025/01/15	2026/01/14
Router	ASUS	GT-AXE11000(FCC ID MSQ-RTAXJF00)	SUWI-03-14-02	NCR	NCR
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-07	2024/11/19	2025/11/18

Conduction Test Equipment					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. date (yyyy/mm/dd)**	**Cal.Due date (yyyy/mm/dd)**
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2025/01/15	2026/01/14
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2025/02/13	2026/02/12
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	2024/05/06	2025/05/05
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	2024/05/06	2025/05/05
Measurement Software	Tonscend	JS32-CE 4.0.0.2	SUWI-02-09-05	NCR	NCR

9*6*6 Test Equipment					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. date (yyyy/mm/dd)**	**Cal.Due date (yyyy/mm/dd)**
Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-02	2024/11/25	2027/11/24
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-13	2025/02/13	2026/02/12
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2024/05/08	2025/05/07
Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-06	2024/11/21	2025/11/20
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2025/01/15	2026/01/14
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	2024/08/22	2025/08/21
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-05	2023/11/25	2025/11/24
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	2023/05/12	2025/05/11
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2023/05/13	2025/05/12
Amplifier	Tonscend	TAP9K3G32	SUWI-01-14-06	2024/11/19	2025/11/18
Amplifier	Tonscend	TAP01018050	SUWI-01-14-04	2024/11/19	2025/11/18
Amplifier	Tonscend	TAP30M7G30	SUWI-01-14-05	2024/11/19	2025/11/18
Measurement Software	Tonscend	JS32-RE V4.0.0.0	SUWI-02-09-04	NCR	NCR
Measurement Software	Tonscend	JS32-RSE 4.0.0.1	SUWI-02-09-06	NCR	NCR

Remark: NCR=No Calibration Requirement.

4 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	±0.54dB
2	RF power density, conducted	±1.03dB
3	Spurious emissions, conducted	±0.54dB
4	Radio Frequency	1%
5	Duty Cycle	±0.37%
6	Occupied Bandwidth	1%
7	Conduction Emission	± 2.90dB (150kHz to 30MHz)
8	Radiated Emission	± 3.13dB (9k -30MHz)
		± 4.88dB (30M -1GHz)
		± 4.75dB (1GHz to 18GHz)
		± 4.77dB (Above 18GHz)

Remark:
The U_{lab} (lab Uncertainty) is less than $U_{cispr/ETSI}$ (CISPR/ETSI Uncertainty), so the test results
– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

5 Test results and Measurement Data

5.1 Antenna Requirement

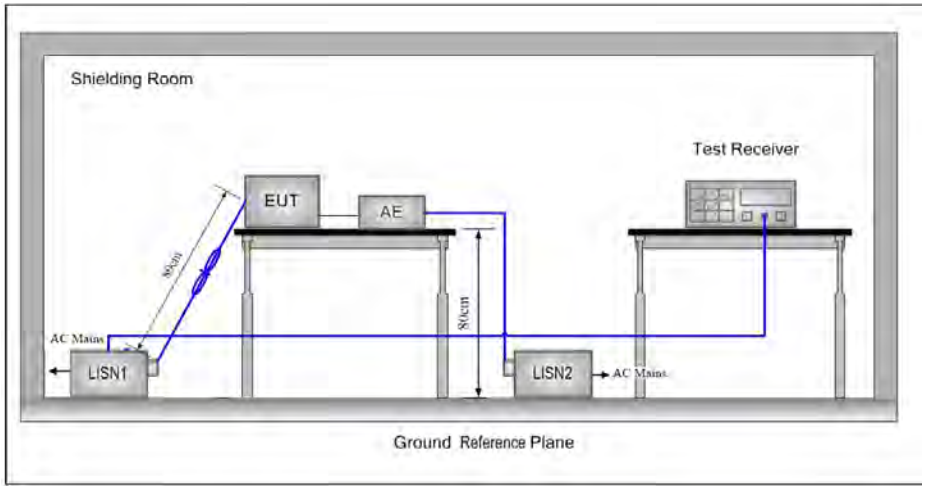
Standard requirement:	47 CFR Part 15 Section 15.203

The antenna is Integrated Antenna and no consideration of replacement. The best case gain of the antenna is
5150MHz to 5250MHz: 2.81dBi; *
5250MHz to 5350MHz: 2.85dBi;*
5470MHz to 5725MHz: 3.04dBi;*
5725MHz to 5850MHz: 0.77dBi;*

Note:
The antenna gain are derived from the gain information report provided by the manufacturer.
Remark:
As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

5.2 AC Power Line Conducted Emissions

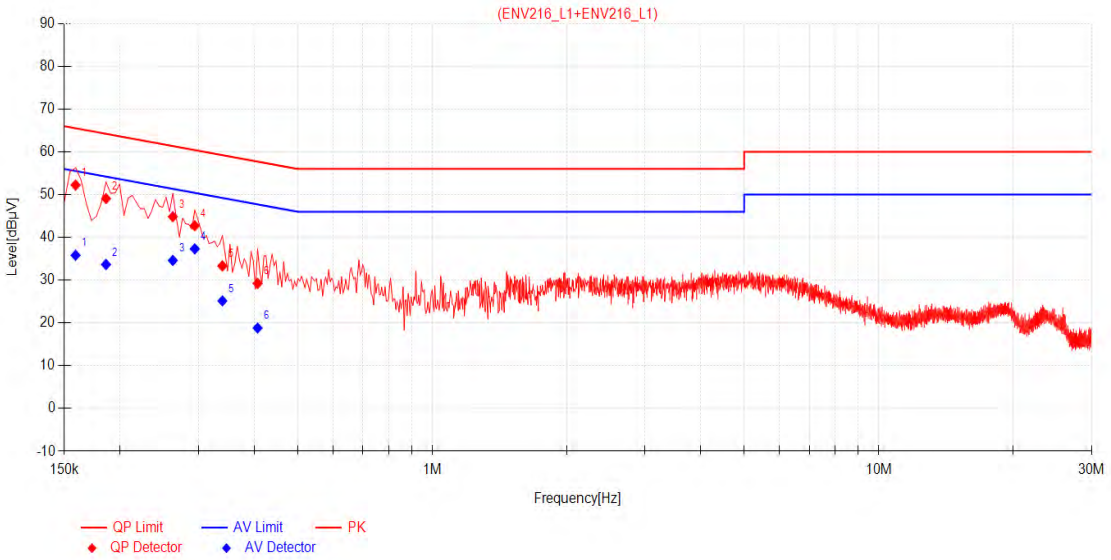
Test Requirement:	47 CFR Part 15 Section 15.207		
Test Method:	ANSI C63.10: 2013 Section 6.2		
Test Frequency Range:	150kHz to 30MHz		
Receiver Setup:	RBW = 9kHz, VBW = 30kHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
	* Decreases with the logarithm of the frequency.		
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.		

Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
Final Test Mode:	Refer to section 3.7 for details. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 6 for details.
Test Results:	Pass

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Phase:	Line

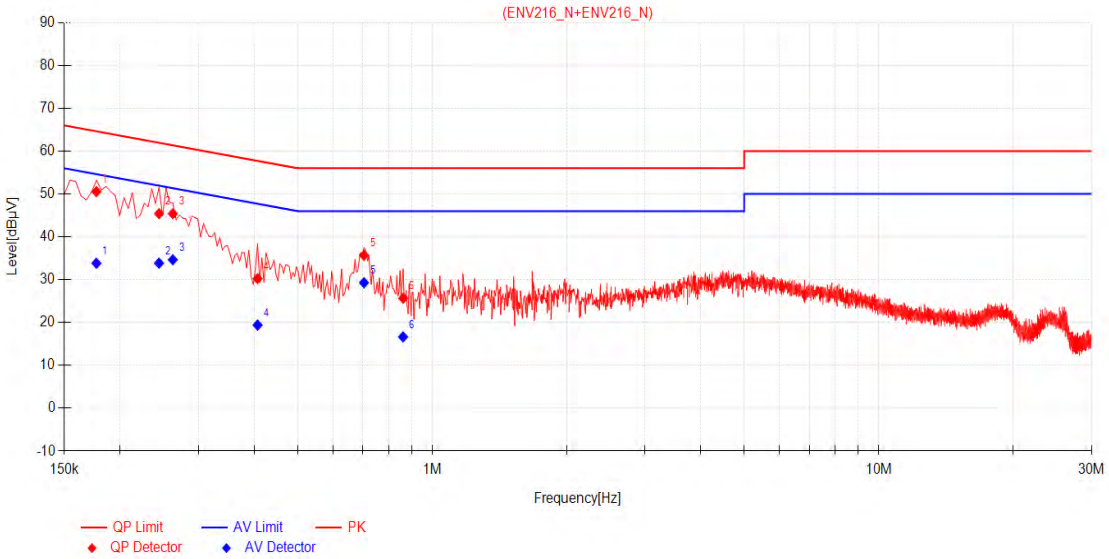


Final Data List

NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.1590	10.20	42.03	52.23	65.52	13.29	25.62	35.82	55.52	19.70	PASS
2	0.1860	10.18	38.90	49.08	64.21	15.13	23.49	33.67	54.21	20.54	PASS
3	0.2625	10.15	34.70	44.85	61.35	16.50	24.46	34.61	51.35	16.74	PASS
4	0.2940	10.15	32.59	42.74	60.41	17.67	27.17	37.32	50.41	13.09	PASS
5	0.3390	10.16	23.16	33.32	59.23	25.91	15.00	25.16	49.23	24.07	PASS
6	0.4065	10.17	19.08	29.25	57.72	28.47	8.66	18.83	47.72	28.89	PASS

Remark:
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dBµV] – Value[dBµV]

Phase:	Neutral

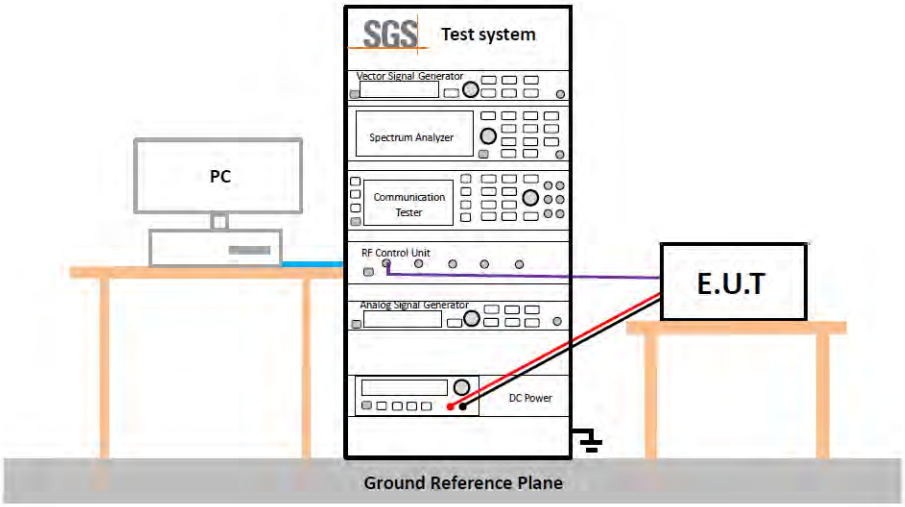


Final Data List

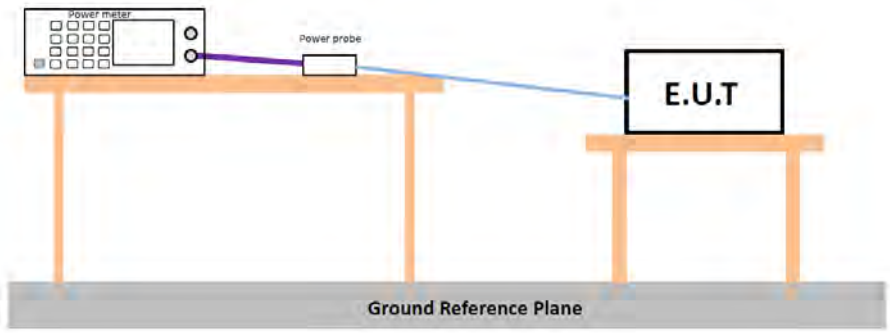
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.1770	10.19	40.36	50.55	64.63	14.08	23.65	33.84	54.63	20.79	PASS
2	0.2445	10.16	35.26	45.42	61.94	16.52	23.70	33.86	51.94	18.08	PASS
3	0.2625	10.16	35.23	45.39	61.35	15.96	24.49	34.65	51.35	16.70	PASS
4	0.4065	10.16	20.08	30.24	57.72	27.48	9.24	19.40	47.72	28.32	PASS
5	0.7035	10.21	25.49	35.70	56.00	20.30	19.08	29.29	46.00	16.71	PASS
6	0.8610	10.14	15.52	25.66	56.00	30.34	6.50	16.64	46.00	29.36	PASS

Remark:
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dBµV] – Value[dBµV]

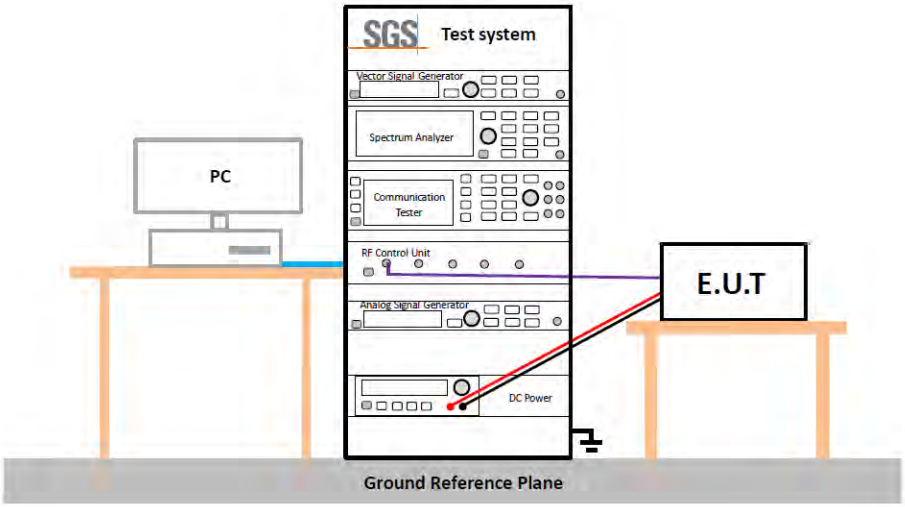
5.3 Duty Cycle

Test Requirement:	ANSI C63.10 :2013 Section 12.2
Test Method:	ANSI C63.10 :2013 Section 12.2
Test Setup:	
Instruments Used:	Refer to section 6 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 3.7 for details.
Limit:	No restriction limits
Test Results:	For report purpose
The detailed test data see: **Appendix**	

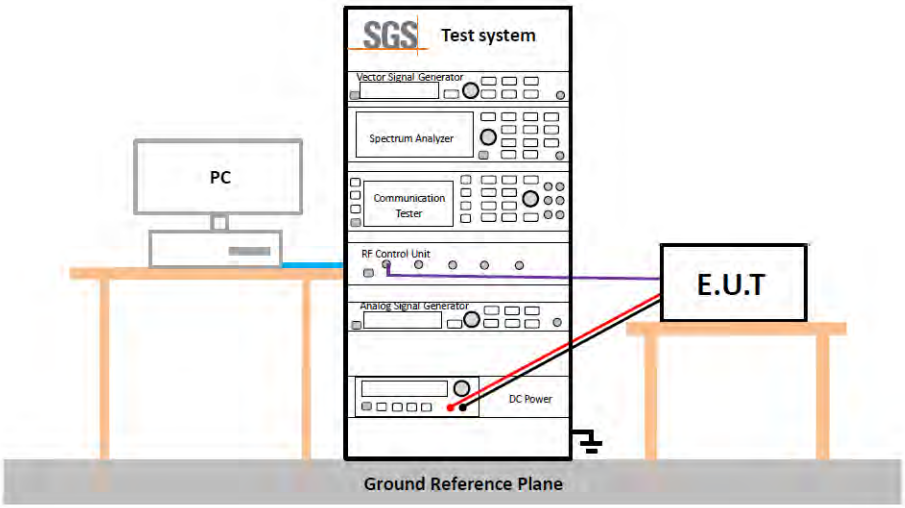
5.4 Conducted Output Power

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10 :2013 Section 12.3.3.2	
Test Setup:	 * Test with power meter (Detector function: Average) Method PM-G is measurement using a gated RF average power meter. Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.	
Test Instruments:	Refer to section 6 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Refer to section 3.7 for details.	
Limit:	Frequency Band	Limit
	5150-5250MHz	Not exceed 250mW(23.98dBm)
	5250-5350MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB
	5470-5725MHz	The lesser of 250mW(23.98dBm) or 11+ 10logB
	5725-5850MHz	Not exceed 1W(30dBm)
	*Where B is the 26dB emission bandwidth in MHz	
Test Results:	Pass	
The detailed test data see: **Appendix**		

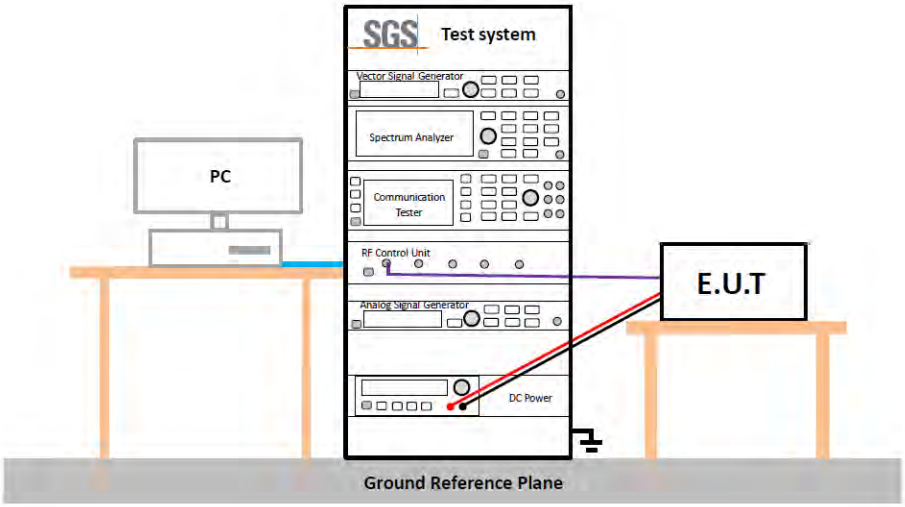
5.5 26dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a), KDB 789033 D02& C
Test Method:	ANSI C63.10: 2013 Section 12.4.1
Test Setup:	
Instruments Used:	Refer to section 6 for details.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 3.7 for details.
Limit:	No restriction limits
Test Results:	For Report Purpose
The detailed test data see: **Appendix**	

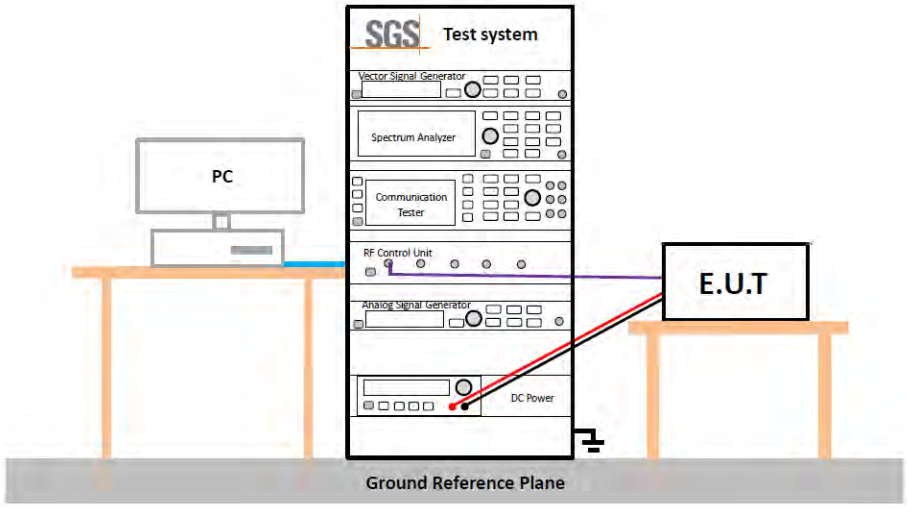
5.6 6dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(e)	
Test Method:	ANSI C63.10: 2013 Section 12.4.1	
Test Setup:		
Test Instruments:	Refer to section 6 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Refer to section 3.7 for details.	
Limit:	Frequency Band	Limit
	5725-5850MHz	At least 500kHz
Test Results:	Pass	
The detailed test data see: **Appendix**		

5.7 99% Occupied Bandwidth

Test Requirement:	KDB 789033 D02§ D
Test Method:	ANSI C63.10: 2013 Section 12.4.2
Test Setup:	
Instruments Used:	Refer to section 6 for details.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Refer to section 3.7 for details.
Limit:	No restriction limits
Test Results:	For Report Purpose
The detailed test data see: **Appendix**	

5.8 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2013 Section 12.5 KDB 789033 D02 v02r01, Section F.	
Test Setup:		
Instruments Used:	Refer to section 6 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Refer to section 3.7 for details.	
Limit:	Frequency Band	Limit
	5150-5250MHz	The power spectral density less than 11dBm/1MHz
	5250-5350MHz	The power spectral density less than 11dBm/1MHz
	5470-5725MHz	The power spectral density less than 11dBm/1MHz
	5725-5850MHz	The power spectral density less than <30dBm/500KHz
Test Results:	Pass	
The detailed test data see: **Appendix**		

5.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.205 and 15.209
Test Method:	ANSI C63.10: 2013 Section 6.4 / 6.5 / 6.6
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)
Test frequency:	9kHz ~ 40GHz(or 10 Harmonic)

Test Setup:

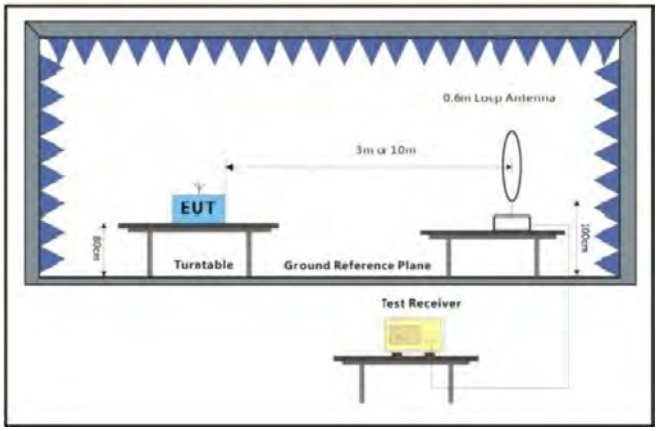


Figure 1. 9kHz to 30MHz

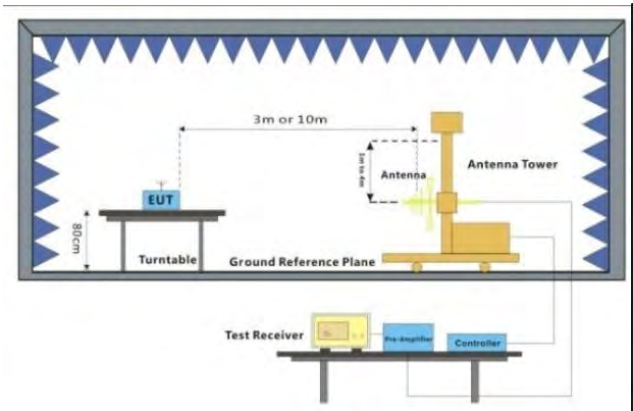


Figure 1. 30MHz to 1GHz

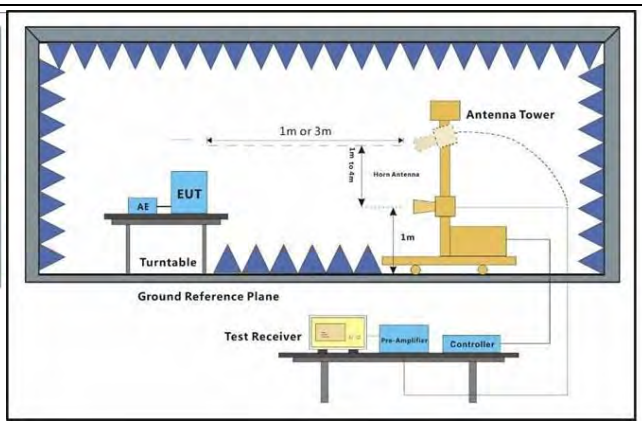


Figure 2. Above 1 GHz

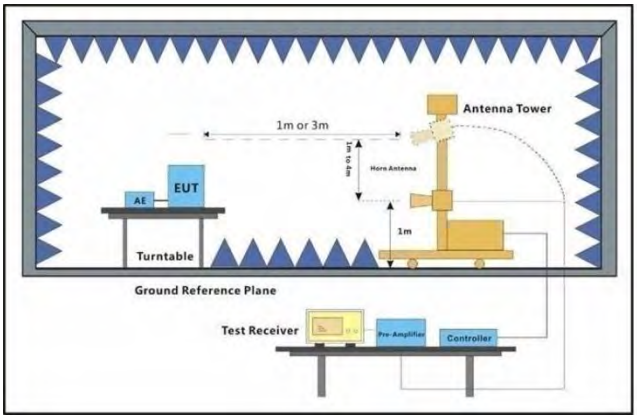
Test Procedure:	a. For below 1GHz test, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz test, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. (Distance from antenna to EUT is 1m for measurements >18GHz). c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna 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. 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. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Test the EUT in the outermost channels. h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the Z axis positioning which it is worse case. i. Repeat above procedures until all frequencies measured was complete. j. The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported k. The disturbance above 18GHz was very low, and the harmonics were the highest point could be found when testing, so only the harmonics had been displayed. l. At a measurement distance of 1 meter the limit line was increased by 20*LOG(3/1) = 9.54 dB.
Test Configuration:	Measurements below 30MHz • RBW = 10 kHz • VBW = 30 kHz • Detector = Peak & Average & Quasi-peak • Trace mode = max hold Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW ≥ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW ≥ 1/T, when duty cycle is less than 98 percent where Tis the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 3.7 for details. For below 1GHz part, through pre-scan all channels, but only the worst case is recorded in the report.
Instruments Used:	Refer to section 6 for details.
Test Results:	Pass
The detailed test data see: **Appendix**	

5.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013 Section 12.7		
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m)	Remark
	30MHz-88MHz	40.0	Quasi-peak
	88MHz-216MHz	43.5	Quasi-peak
	216MHz-960MHz	46.0	Quasi-peak
	960MHz-1GHz	54.0	Quasi-peak
	Above 1GHz	54.0	Average Value
		74.0	Peak Value

Test Setup:



Test Procedure:

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. 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 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. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel.
g. Test the EUT in the outermost channels.
h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the Z axis positioning which it is worse case.
i. Repeat above procedures until all frequencies measured was complete.

Test Configuration:	Measurements Below 1000MHz • RBW = 120 kHz • VBW = 300 kHz • Detector = Quasi-peak • Trace mode = max hold Peak Measurements Above 1000 MHz • RBW = 1 MHz • VBW ≥ 3 MHz • Detector = Peak • Sweep time = auto • Trace mode = max hold Average Measurements Above 1000MHz • RBW = 1 MHz • VBW = 10Hz, when duty cycle is no less than 98 percent. • VBW ≥ 1/T, when duty cycle is less than 98 percent where Tis the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Refer to section 3.7 for details.
Instruments Used:	Refer to section 6 for details.
Test Results:	Pass
The detailed test data see: **Appendix**	

5.11 Dynamic Frequency Selection

5.11.1 DFS Overview

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

5.11.2 DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	**Value (See Notes 1, 2, and 3)**
EIRP ≥ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. **Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. **Note3:** EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

5.11.3 RADAR TEST WAVEFORMS

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	$\text{Roundup}\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu\text{sec}}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

The aggregate is the average of the percentage of successful detections of Short Pulse Radar Types 1-4. For example, the following table indicates how to compute the aggregate of percentage of successful detections.

Radar Type	Number of Trials	Number of Successful Detections	Minimum Percentage of Successful Detection
1	35	29	82.9%
2	30	18	60%
3	30	27	90%
4	50	44	88%
Aggregate (82.9% + 60% + 90% + 88%)/4 = 80.2%			

Table 6 – Long Pulse Radar Test Waveform

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per *Burst*	Number of *Bursts*	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Table 7 – Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

5.11.4 Response Requirements

Table 4: DFS Response Requirement Values

Parameter	**Value**
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

6 Photographs - Setup Photos

Refer to Appendix A.2 WLAN Setup Photos.

7 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.065	2.101	98.29	0.08	0.03
802.11n (HT20)	SISO	5180	1.928	1.964	98.17	0.08	0.03
802.11n (HT40)	SISO	5190	0.949	0.984	96.44	0.16	0.03
802.11ac (VHT20)	SISO	5180	1.935	1.971	98.17	0.08	0.03
802.11ac (VHT40)	SISO	5190	0.953	0.988	96.46	0.16	0.03
802.11ac (VHT80)	SISO	5210	0.465	0.500	93.00	0.32	0.03

2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	17.328	/	Pass
		5200	1	17.273	/	Pass
		5240	1	17.253	/	Pass
		5260	1	17.598	/	Pass
		5300	1	17.193	/	Pass
		5320	1	17.261	/	Pass
		5500	1	17.375	/	Pass
		5580	1	21.743	/	Pass
		5700	1	21.877	/	Pass
		5745	1	19.790	/	Pass
		5785	1	17.386	/	Pass
		5825	1	17.390	/	Pass
802.11n (HT20)	SISO	5180	1	20.170	/	Pass
		5200	1	18.416	/	Pass
		5240	1	19.258	/	Pass
		5260	1	18.377	/	Pass
		5300	1	20.785	/	Pass
		5320	1	18.400	/	Pass
		5500	1	18.409	/	Pass
		5580	1	18.367	/	Pass
		5700	1	21.182	/	Pass
		5745	1	18.414	/	Pass
		5785	1	18.446	/	Pass
		5825	1	18.726	/	Pass
802.11n (HT40)	SISO	5190	1	36.704	/	Pass
		5230	1	36.545	/	Pass
		5270	1	36.636	/	Pass
		5310	1	36.562	/	Pass
		5510	1	36.672	/	Pass
		5550	1	36.603	/	Pass
		5670	1	36.617	/	Pass
		5755	1	36.642	/	Pass
		5795	1	36.587	/	Pass
802.11ac (VHT20)	SISO	5180	1	18.296	/	Pass
		5200	1	18.854	/	Pass
		5240	1	18.332	/	Pass
		5260	1	18.988	/	Pass
		5300	1	18.334	/	Pass
		5320	1	18.342	/	Pass
		5500	1	18.366	/	Pass
		5580	1	18.387	/	Pass
		5700	1	18.363	/	Pass
		5745	1	18.374	/	Pass
		5785	1	20.038	/	Pass
		5825	1	18.417	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.531	/	Pass
		5230	1	36.453	/	Pass
		5270	1	36.541	/	Pass

		5310	1	36.480	/	Pass
		5510	1	36.492	/	Pass
		5550	1	36.525	/	Pass
		5670	1	36.502	/	Pass
		5755	1	36.526	/	Pass
		5795	1	36.453	/	Pass
802.11ac (VHT80)	SISO	5210	1	76.488	/	Pass
		5290	1	76.618	/	Pass
		5530	1	76.757	/	Pass
		5610	1	76.550	/	Pass
		5775	1	79.150	/	Pass

2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5745	1	15.401	>=0.5	Pass
		5785	1	15.688	>=0.5	Pass
		5825	1	15.709	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	16.934	>=0.5	Pass
		5785	1	16.810	>=0.5	Pass
		5825	1	16.045	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	36.311	>=0.5	Pass
		5795	1	36.509	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	16.027	>=0.5	Pass
		5785	1	16.575	>=0.5	Pass
		5825	1	16.193	>=0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.395	>=0.5	Pass
		5795	1	35.190	>=0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.175	>=0.5	Pass

2.1.3 26dB BW

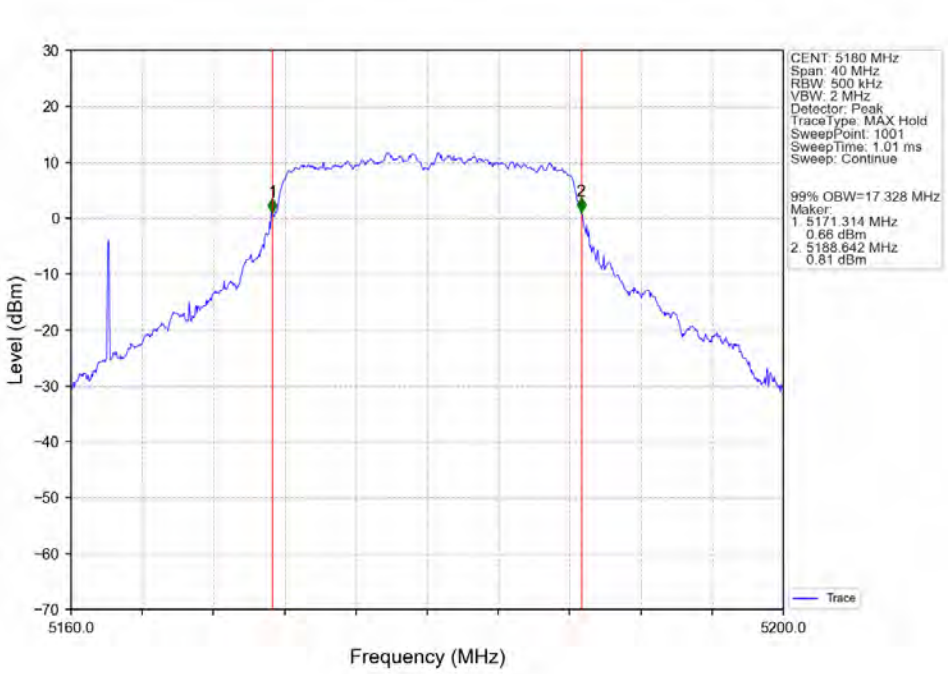
Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	23.682	/	Pass
		5200	1	23.669	/	Pass
		5240	1	23.585	/	Pass
		5260	1	23.517	/	Pass
		5300	1	23.657	/	Pass
		5320	1	23.971	/	Pass
		5500	1	23.781	/	Pass
		5580	1	23.747	/	Pass
		5700	1	23.737	/	Pass
802.11n (HT20)	SISO	5180	1	24.186	/	Pass
		5200	1	33.732	/	Pass
		5240	1	23.402	/	Pass
		5260	1	23.382	/	Pass
		5300	1	23.575	/	Pass
		5320	1	24.295	/	Pass
		5500	1	23.980	/	Pass
		5580	1	23.282	/	Pass
		5700	1	23.443	/	Pass
802.11n (HT40)	SISO	5190	1	42.145	/	Pass
		5230	1	45.648	/	Pass
		5270	1	42.192	/	Pass

		5310	1	42.460	/	Pass
		5510	1	41.959	/	Pass
		5550	1	41.961	/	Pass
		5670	1	41.975	/	Pass
802.11ac (VHT20)	SISO	5180	1	23.401	/	Pass
		5200	1	23.279	/	Pass
		5240	1	23.326	/	Pass
		5260	1	23.131	/	Pass
		5300	1	23.204	/	Pass
		5320	1	23.554	/	Pass
		5500	1	23.210	/	Pass
		5580	1	23.687	/	Pass
		5700	1	23.044	/	Pass
802.11ac (VHT40)	SISO	5190	1	42.545	/	Pass
		5230	1	41.548	/	Pass
		5270	1	42.014	/	Pass
		5310	1	41.877	/	Pass
		5510	1	41.557	/	Pass
		5550	1	41.880	/	Pass
		5670	1	41.654	/	Pass
802.11ac (VHT80)	SISO	5210	1	93.722	/	Pass
		5290	1	91.594	/	Pass
		5530	1	93.393	/	Pass
		5610	1	92.808	/	Pass

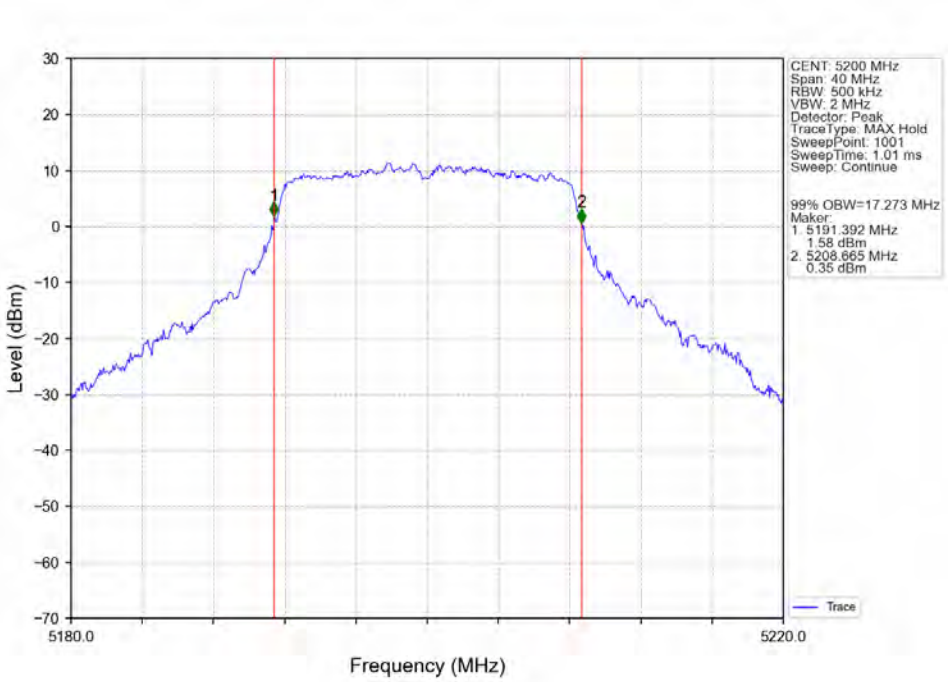
2.2 Test Graph

2.2.1 OBW

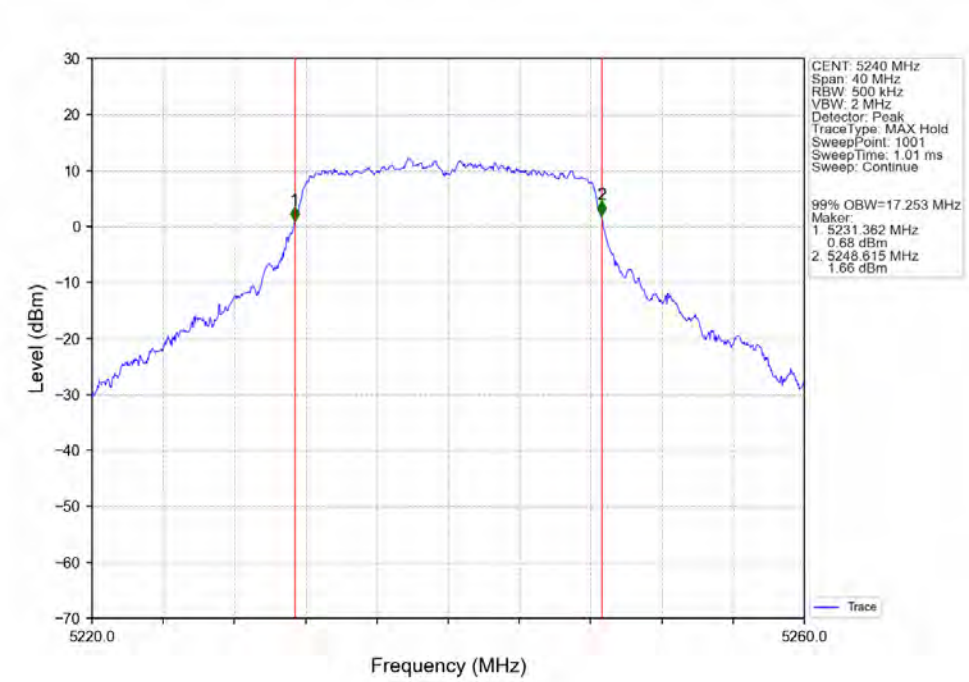
802.11a_LCH_5180MHz_Ant1_NTNV



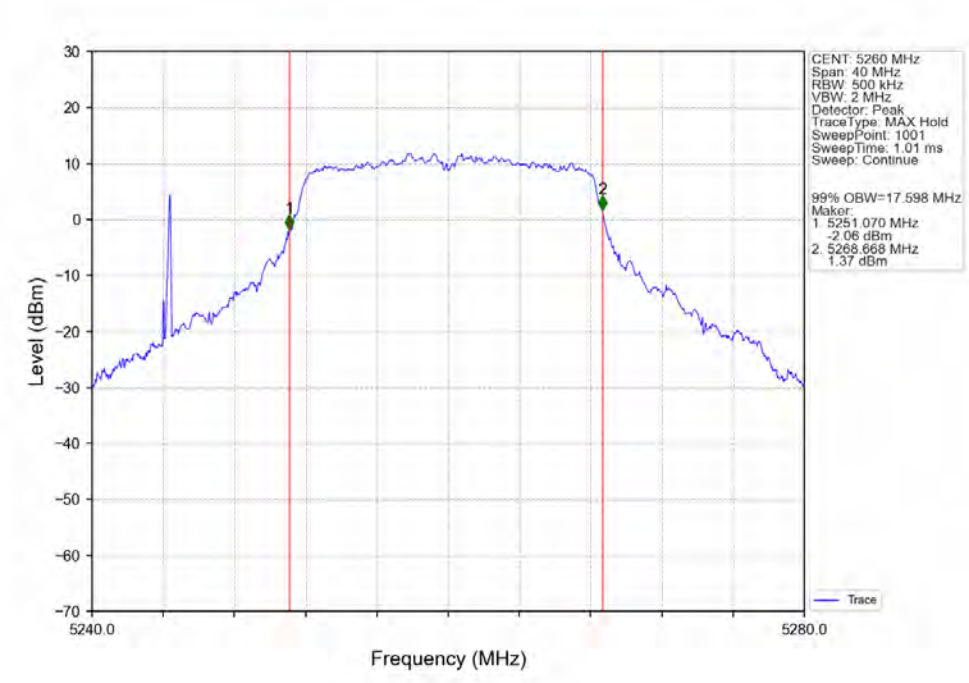
802.11a_MCH_5200MHz_Ant1_NTNV



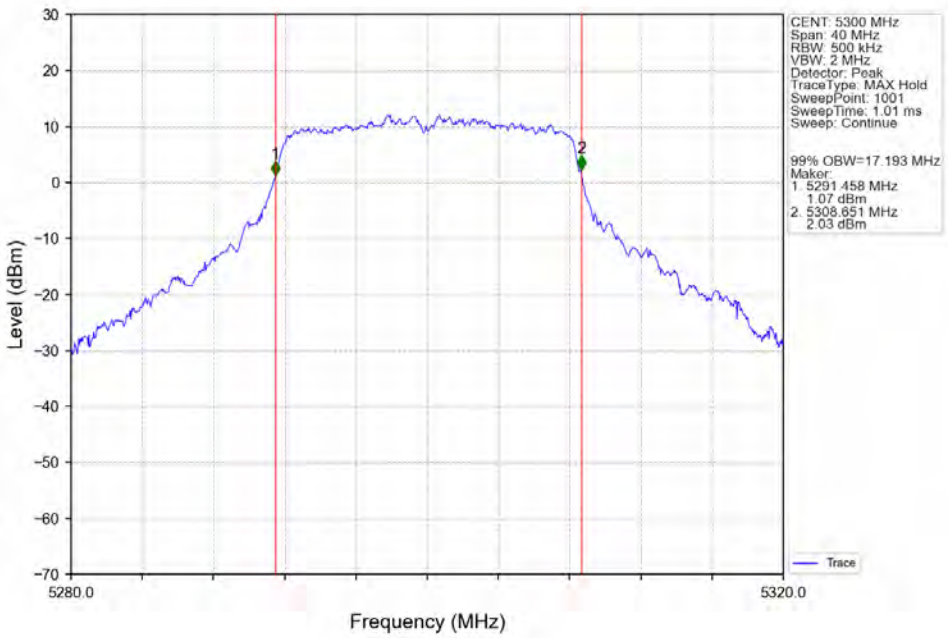
802.11a_HCH_5240MHz_Ant1_NTNV



802.11a_LCH_5260MHz_Ant1_NTNV



802.11a_MCH_5300MHz_Ant1_NTNV



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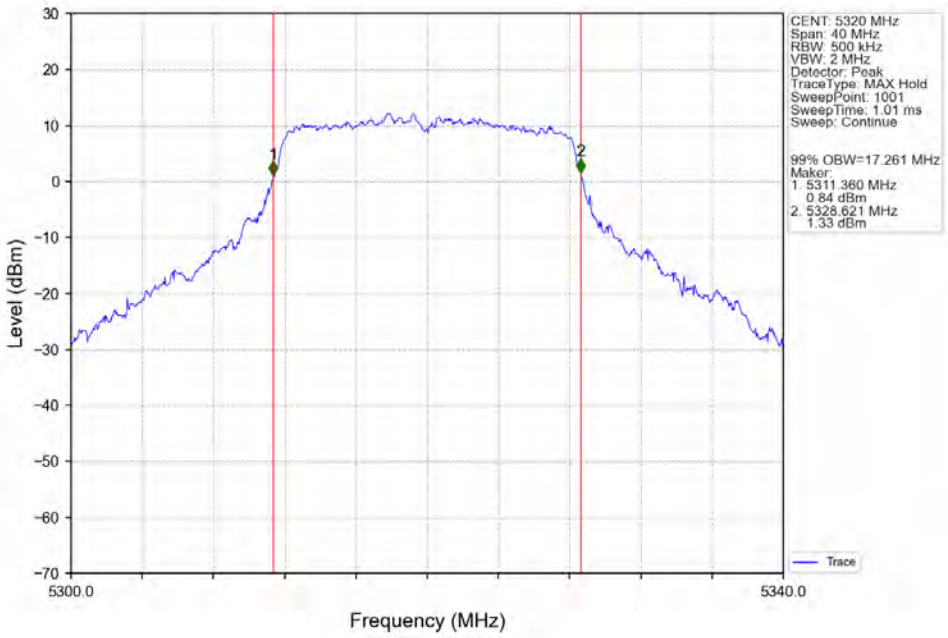
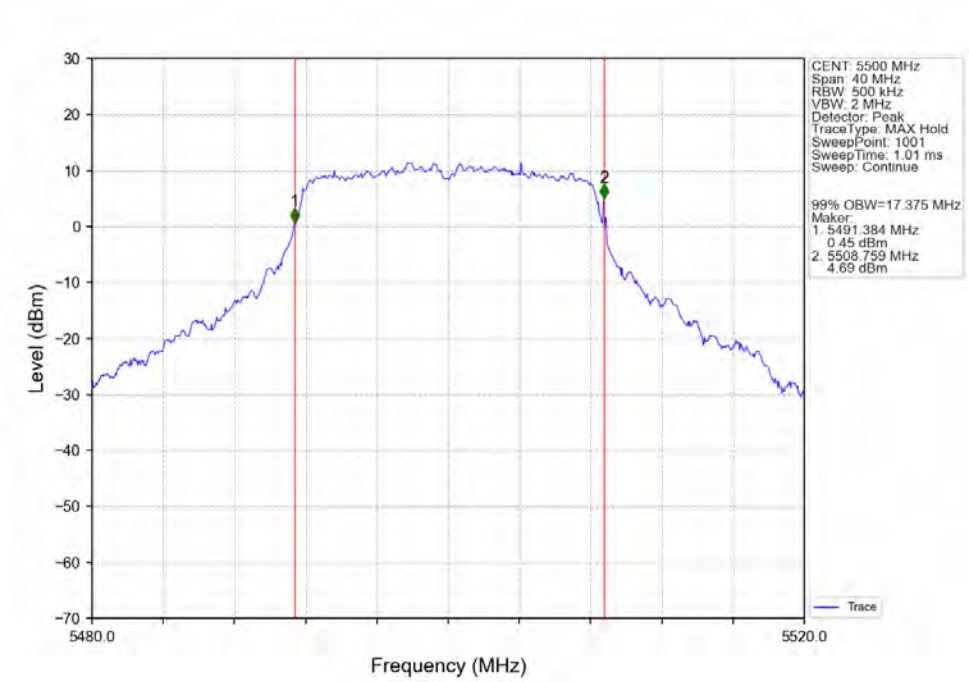
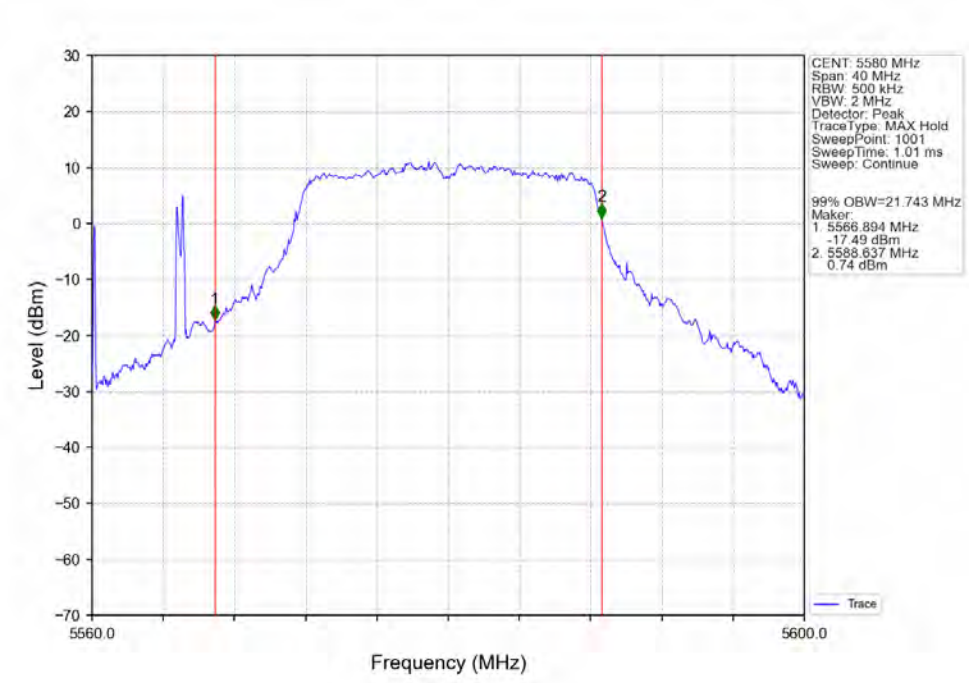


802.11a_LCH_5500MHz_Ant1_NTNV



802.11a_MCH_5580MHz_Ant1_NTNV



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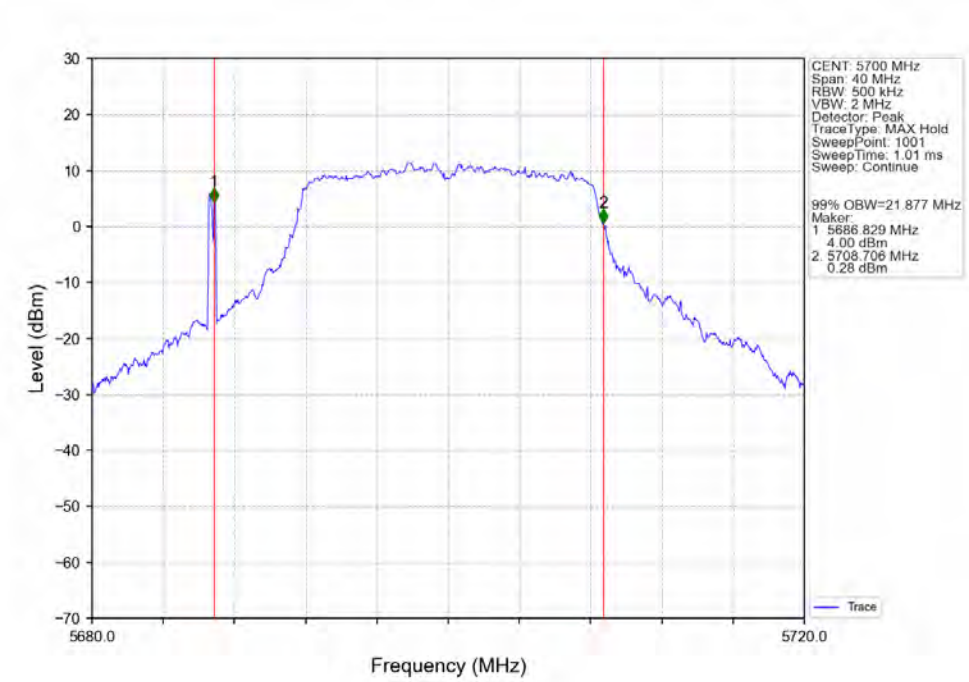

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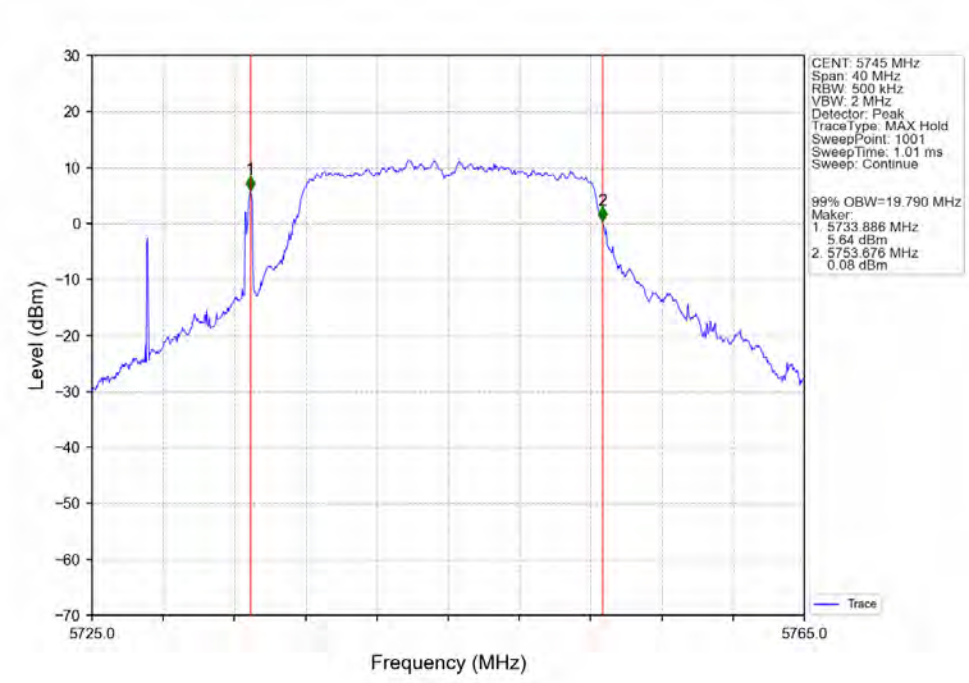

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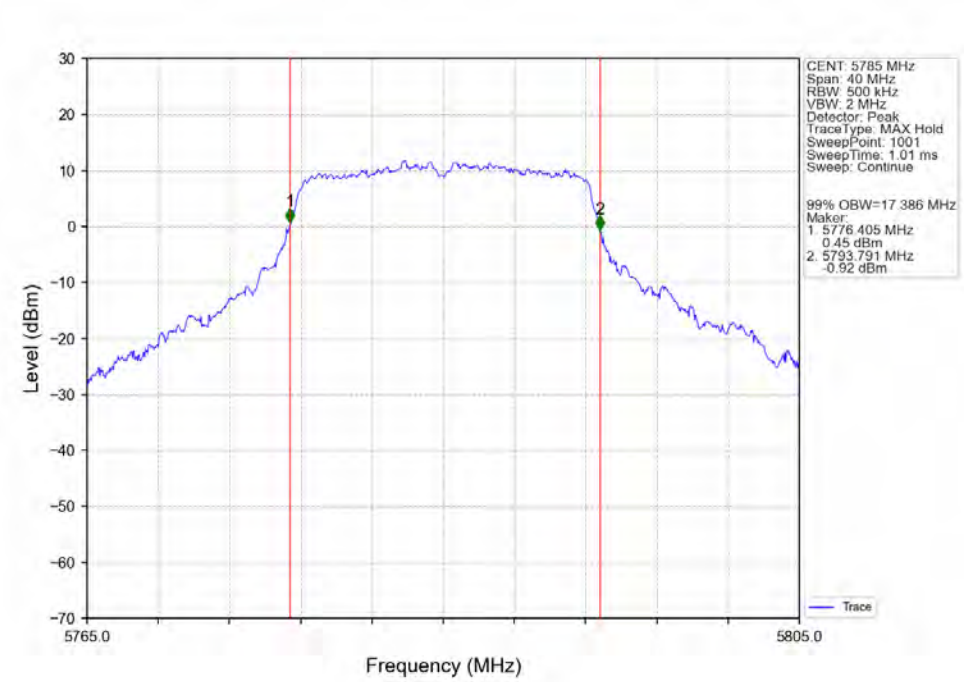
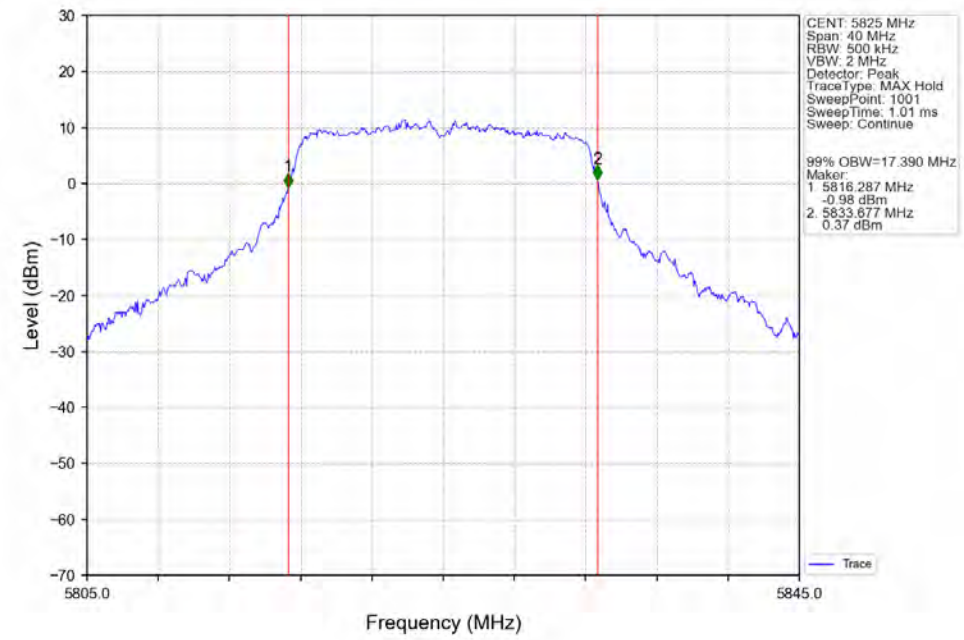
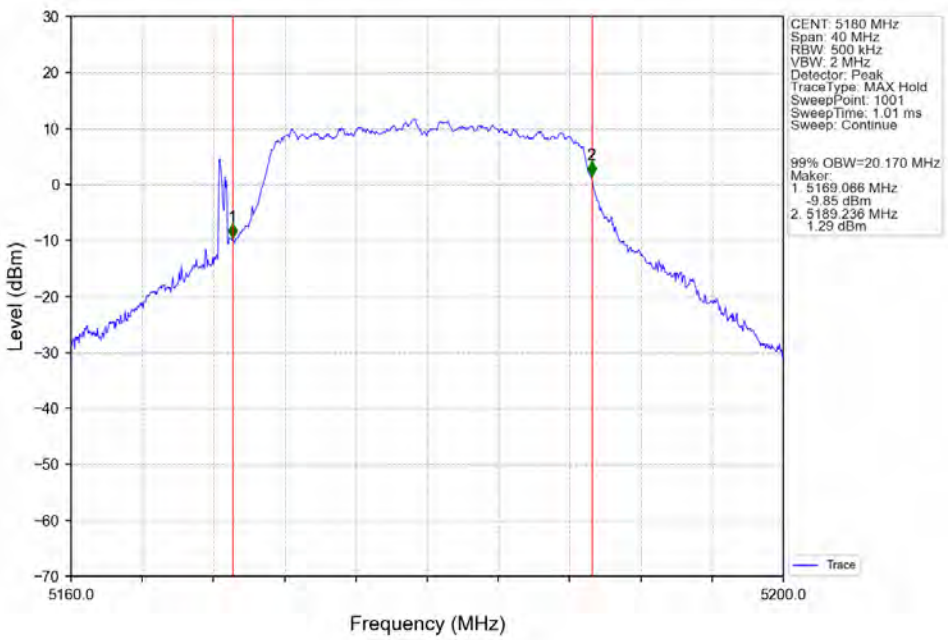


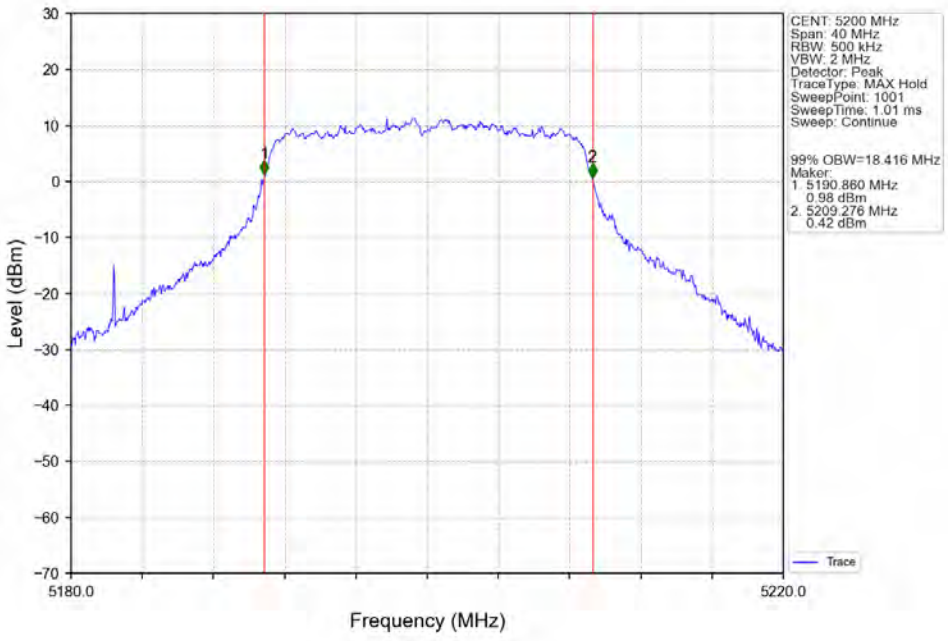
802.11a_HCH_5825MHz_Ant1_NTNV



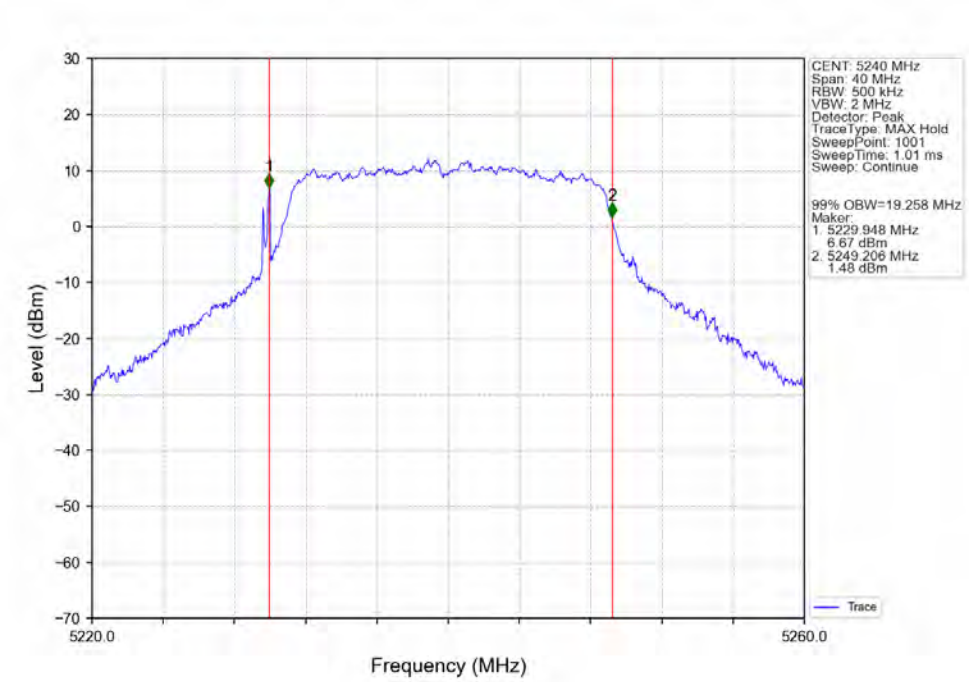
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



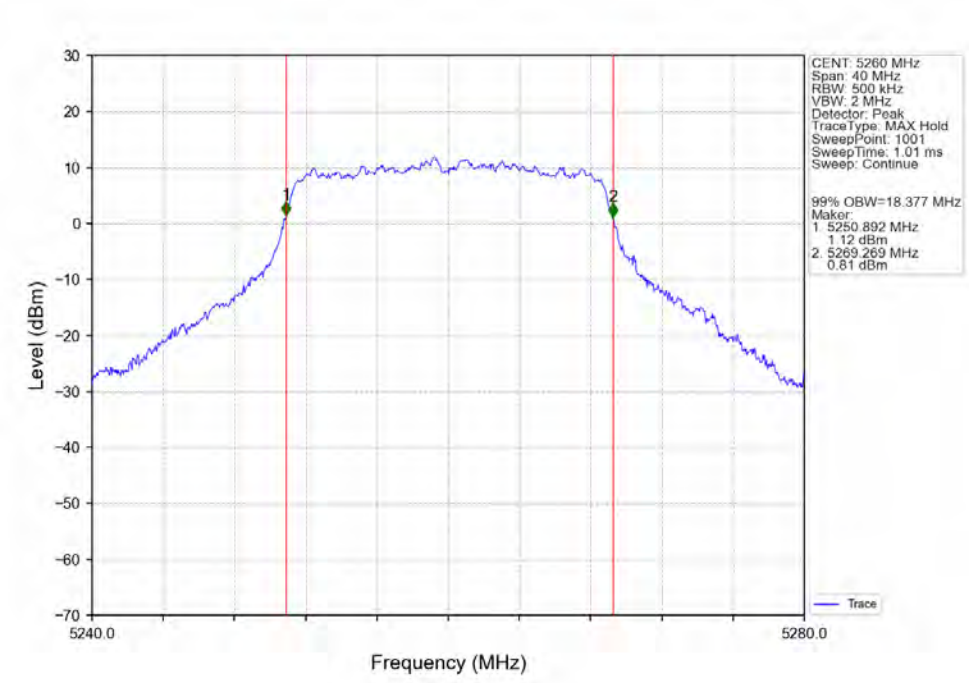
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



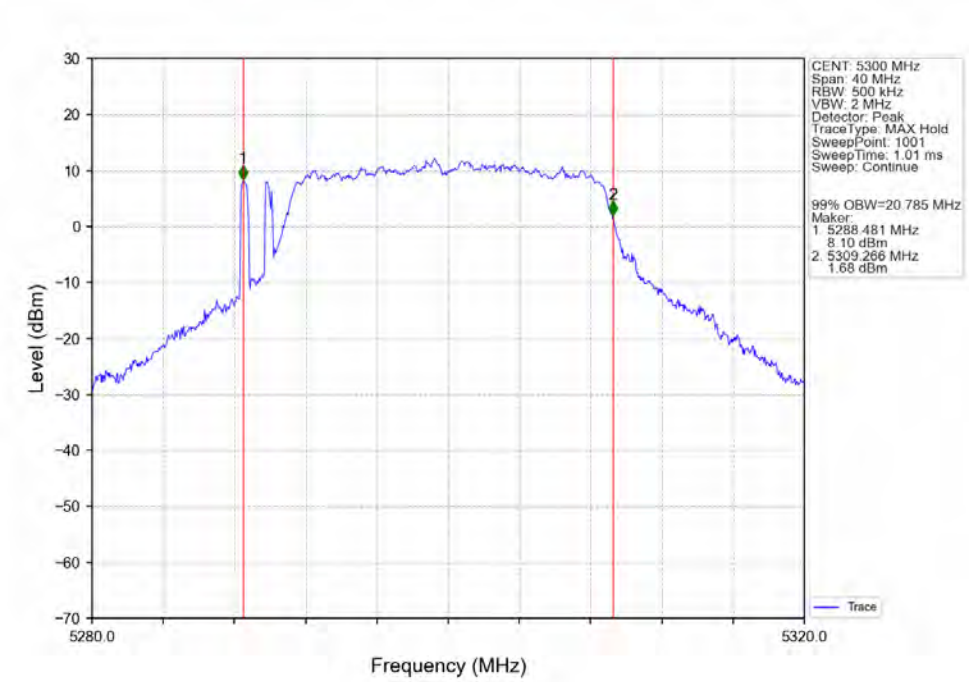
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



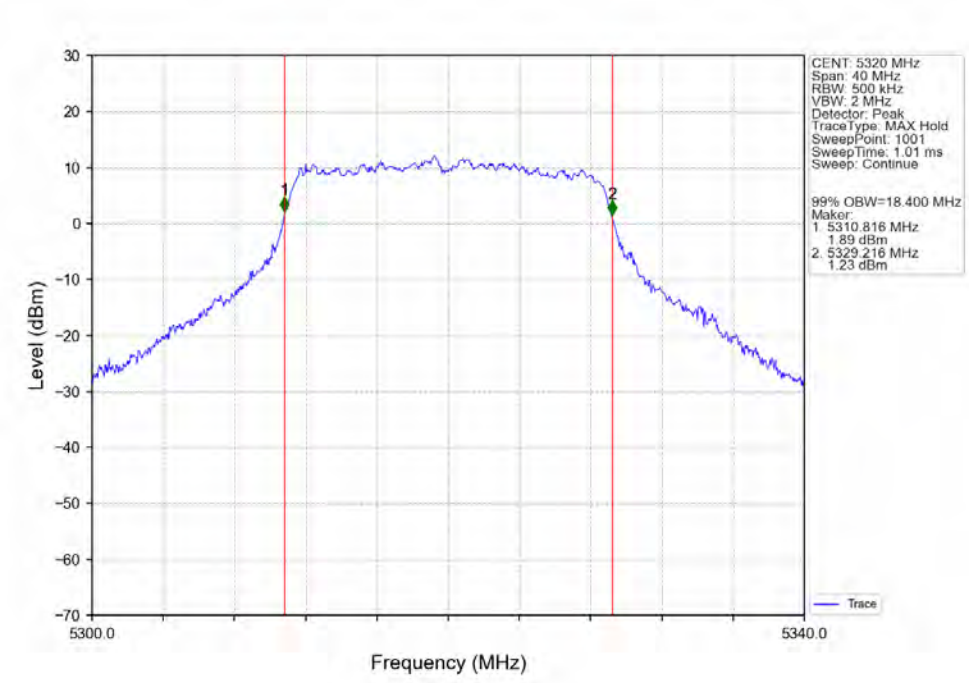
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV



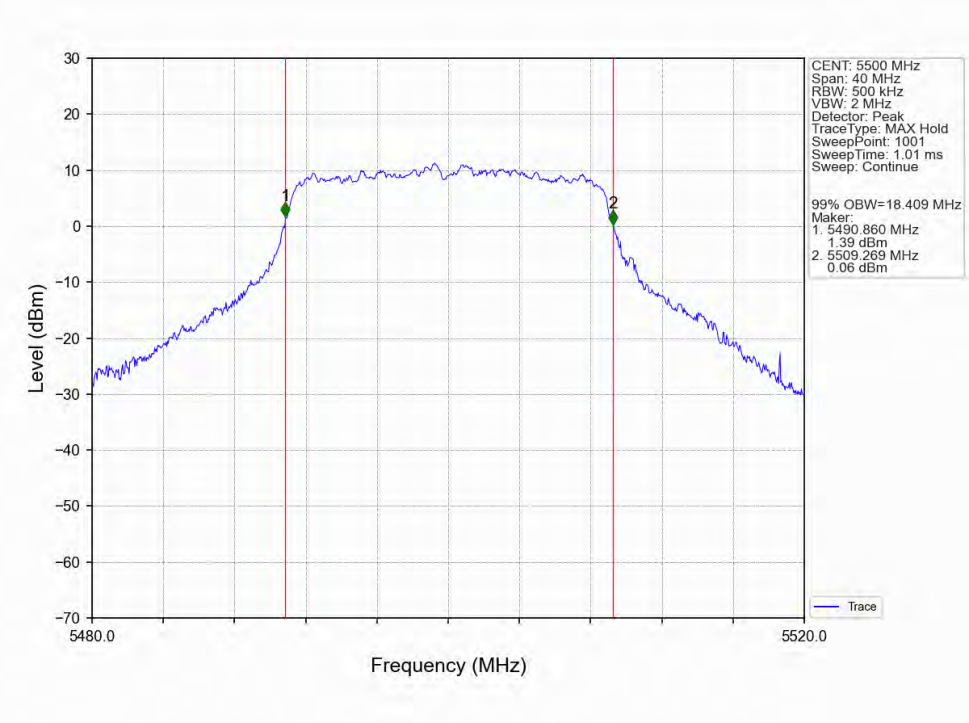
802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



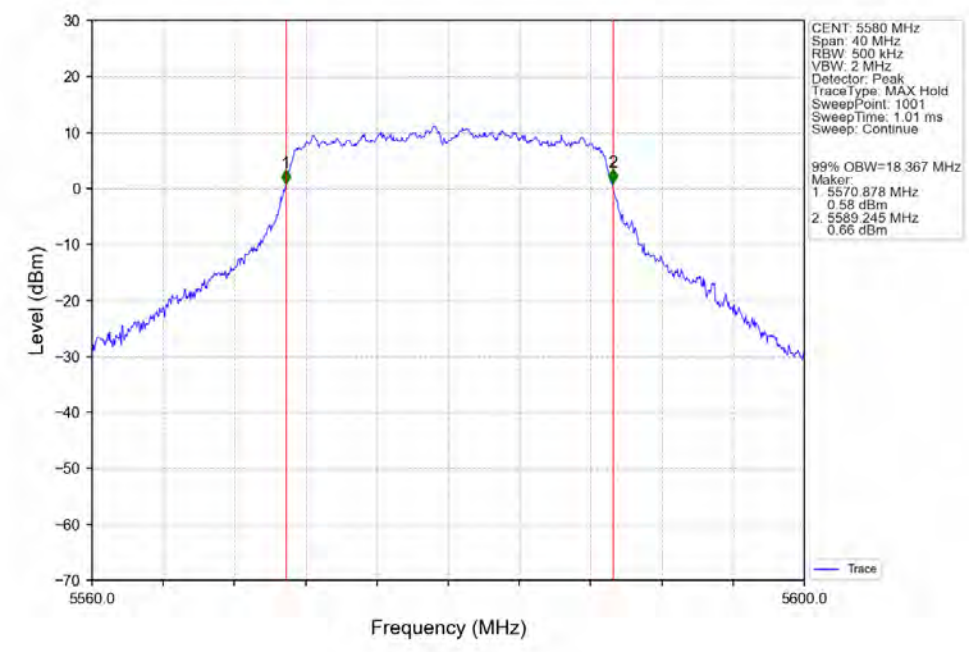
802.11n(HT20)_HCH_5320MHz_Ant1_NTNV



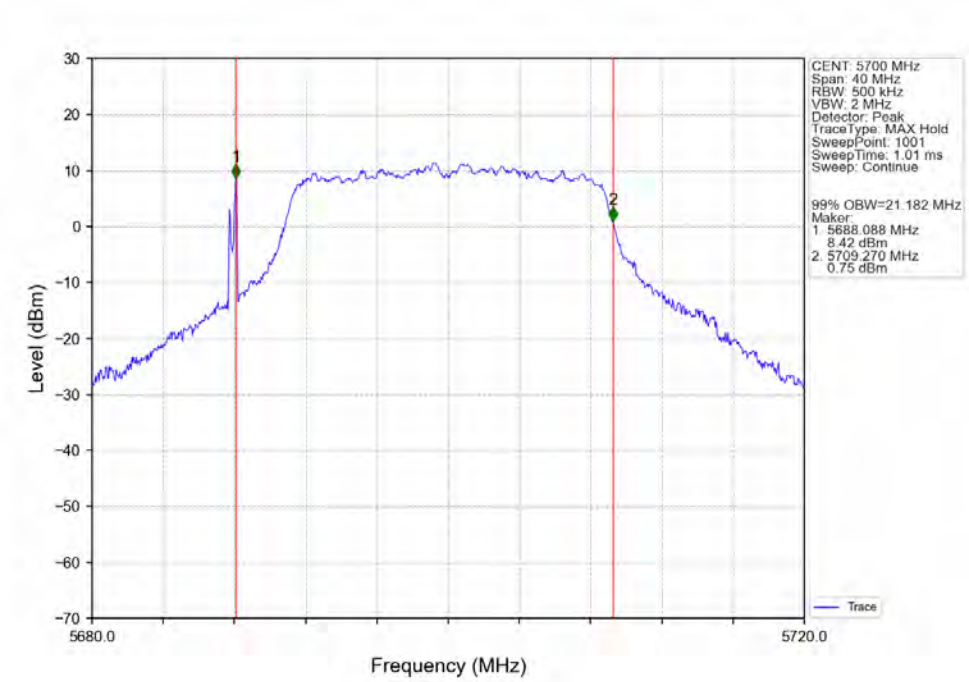
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



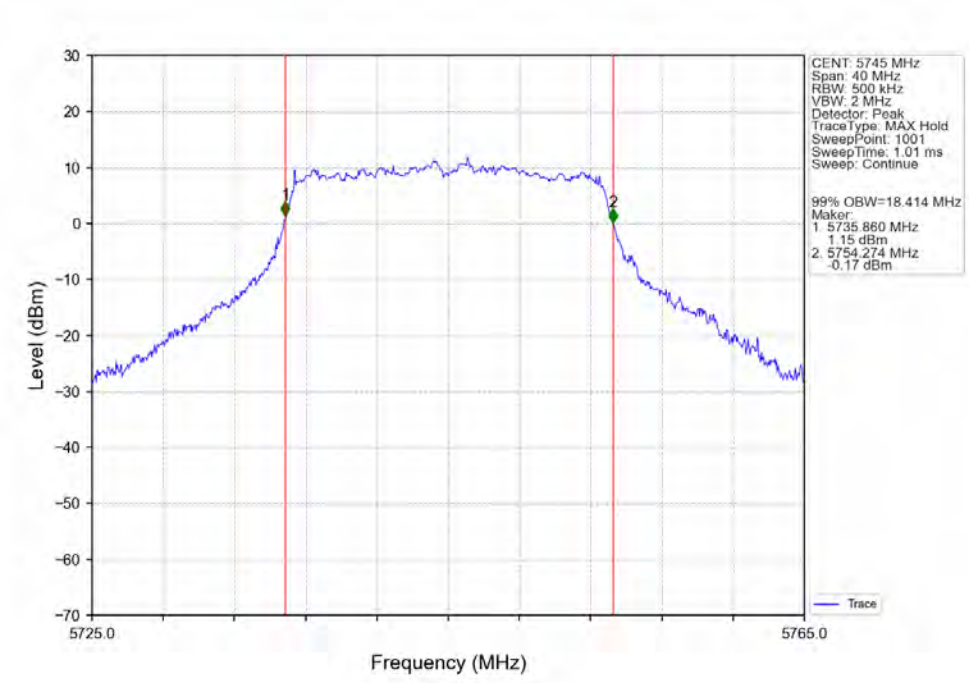
802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



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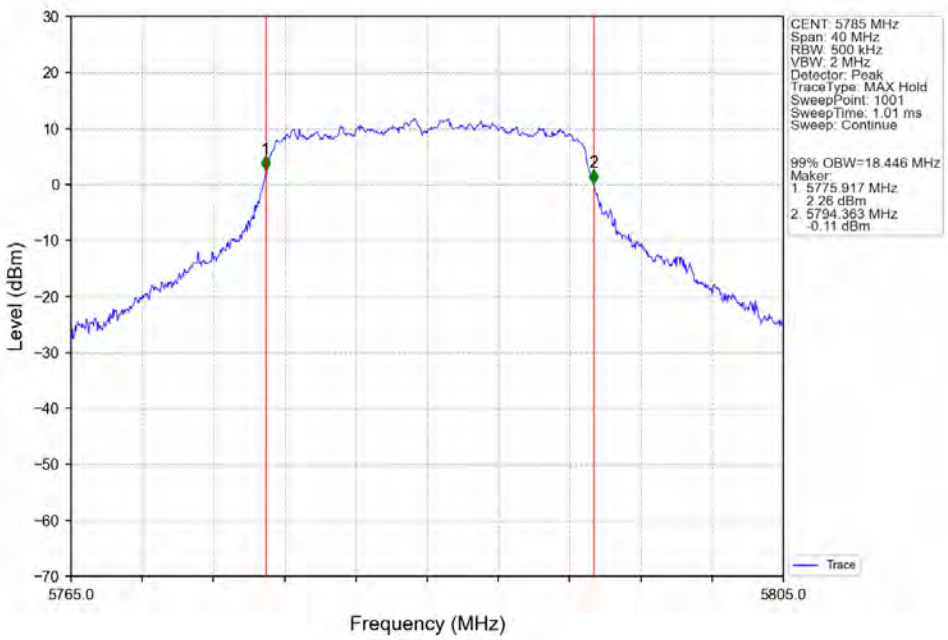
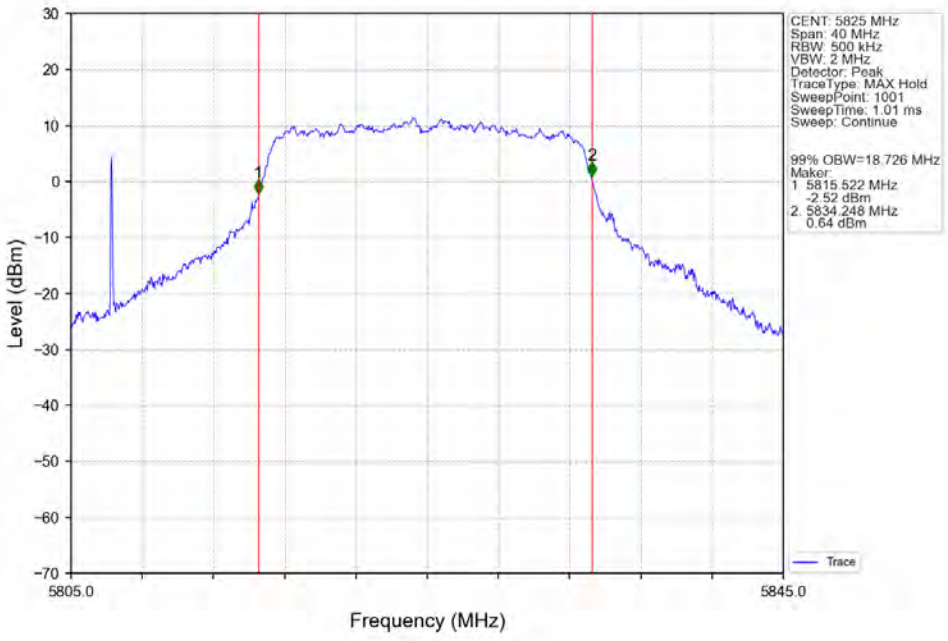
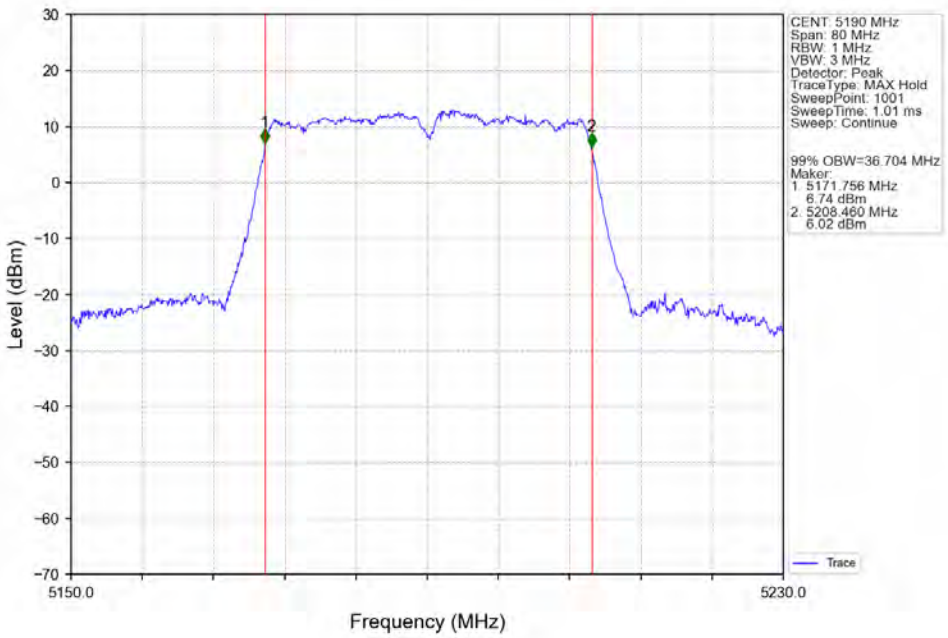


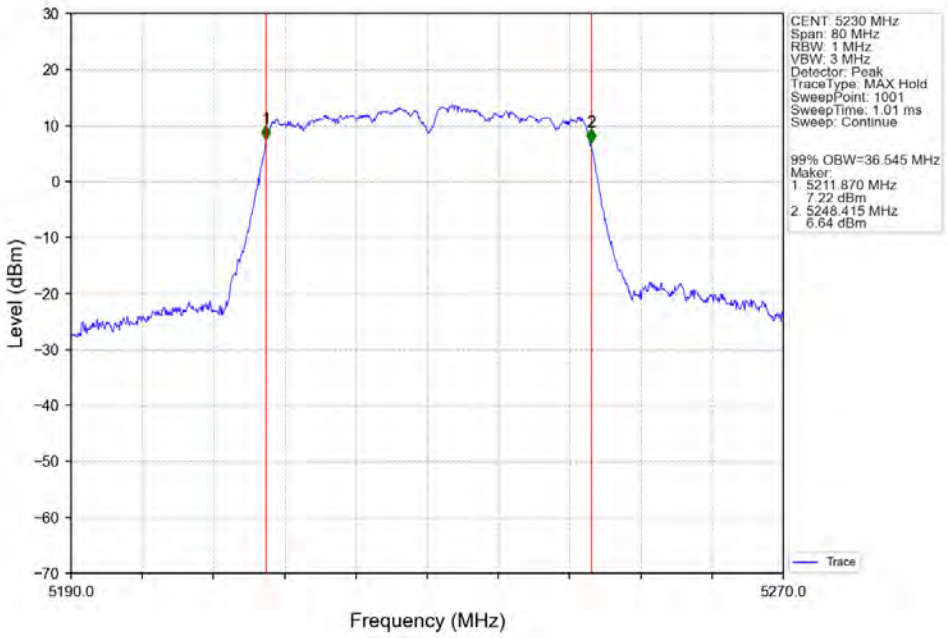
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



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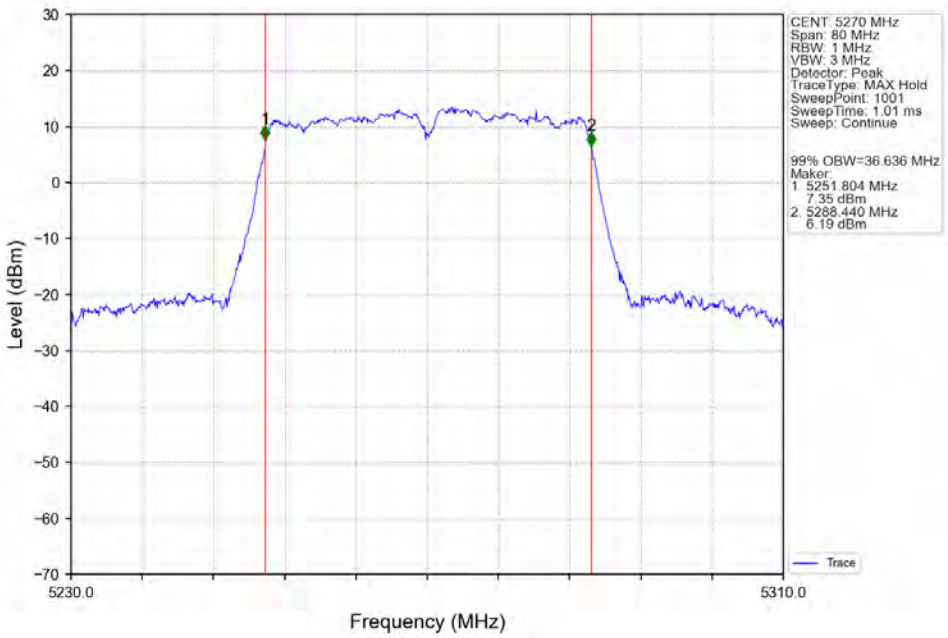
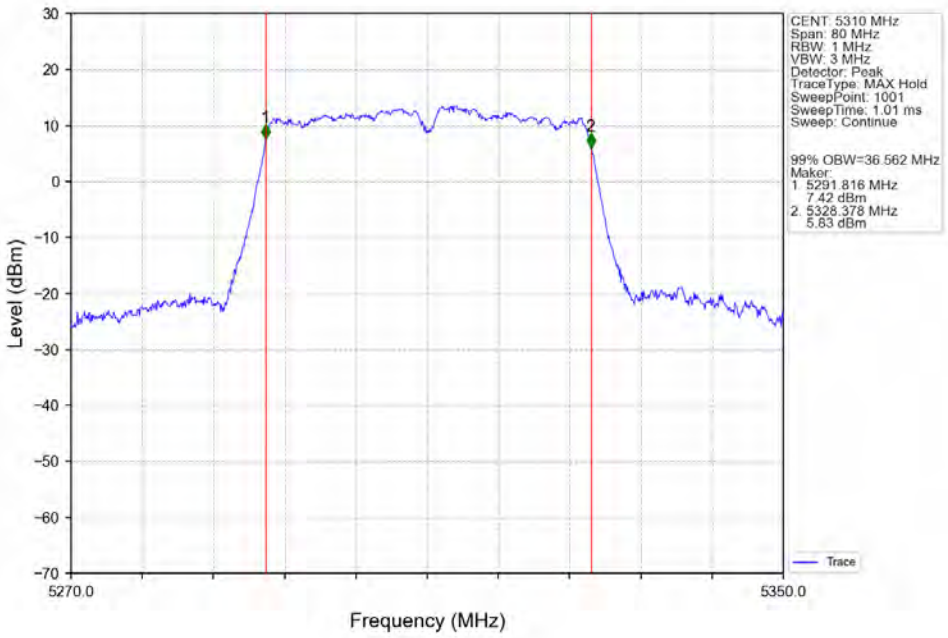
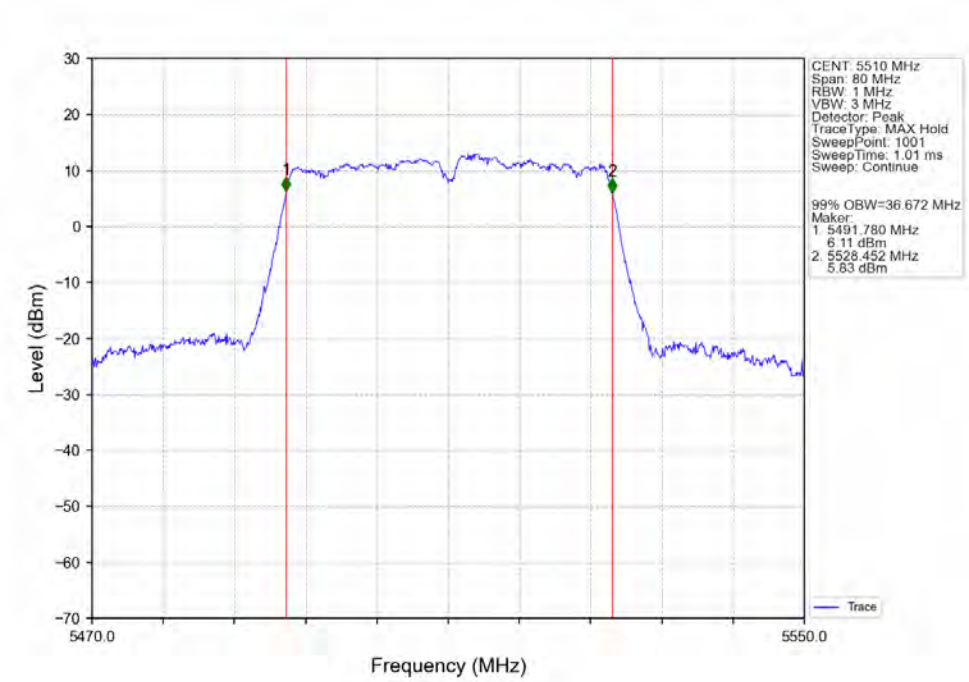


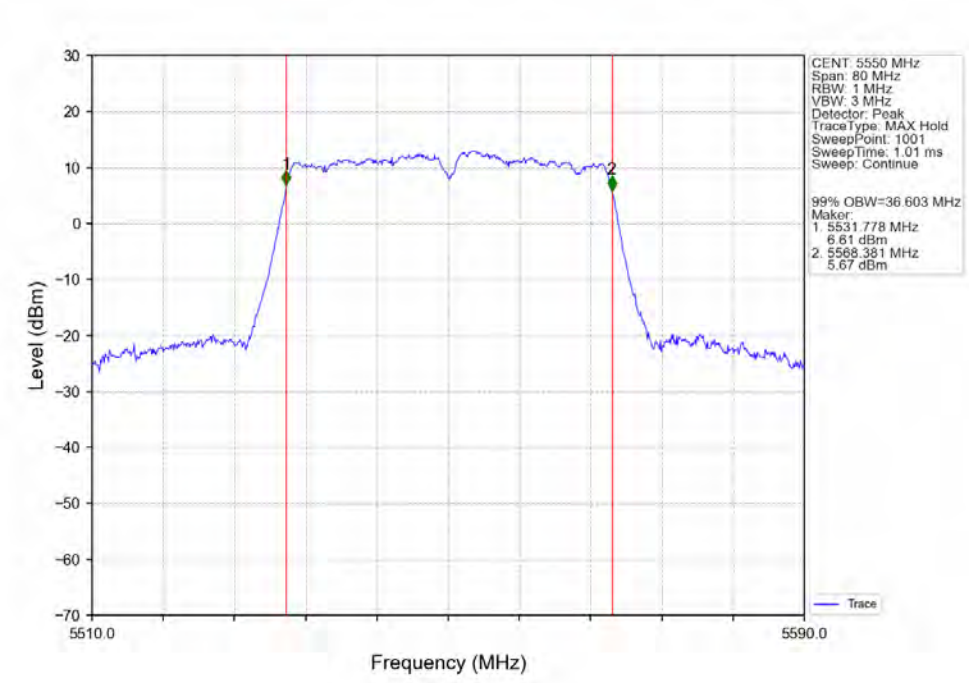
802.11n(HT40)_HCH_5310MHz_Ant1_NTNV



802.11n(HT40)_LCH_5510MHz_Ant1_NTNV



802.11n(HT40)_MCH_5550MHz_Ant1_NTNV



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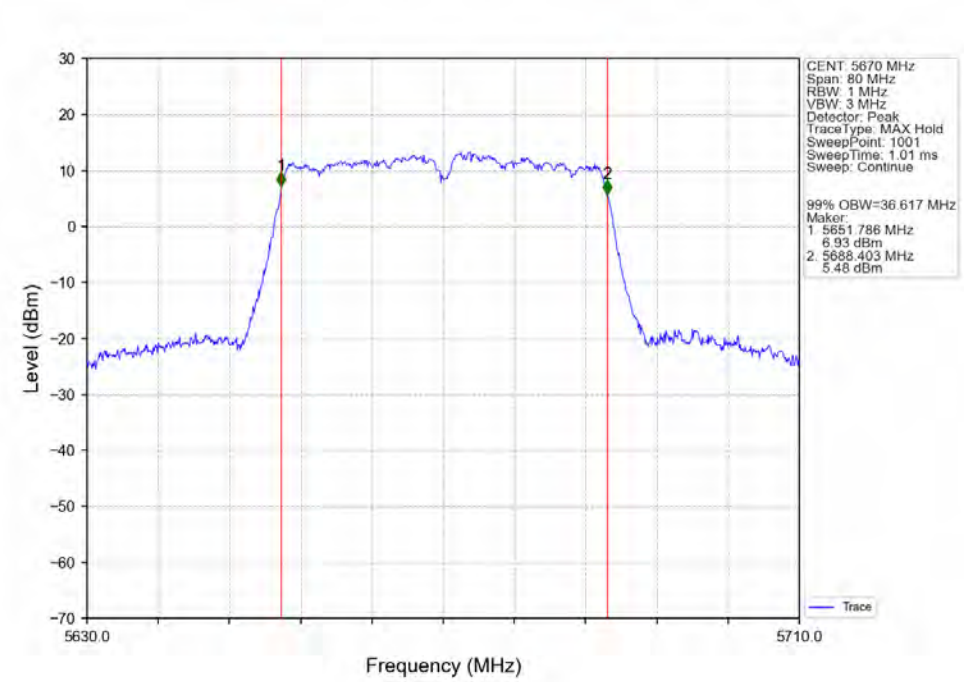
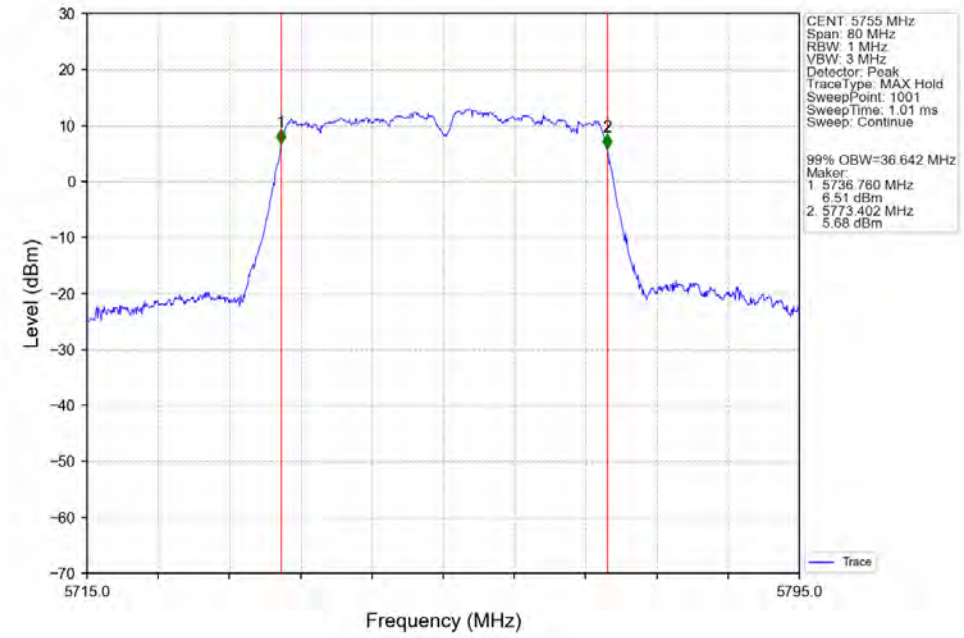


802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



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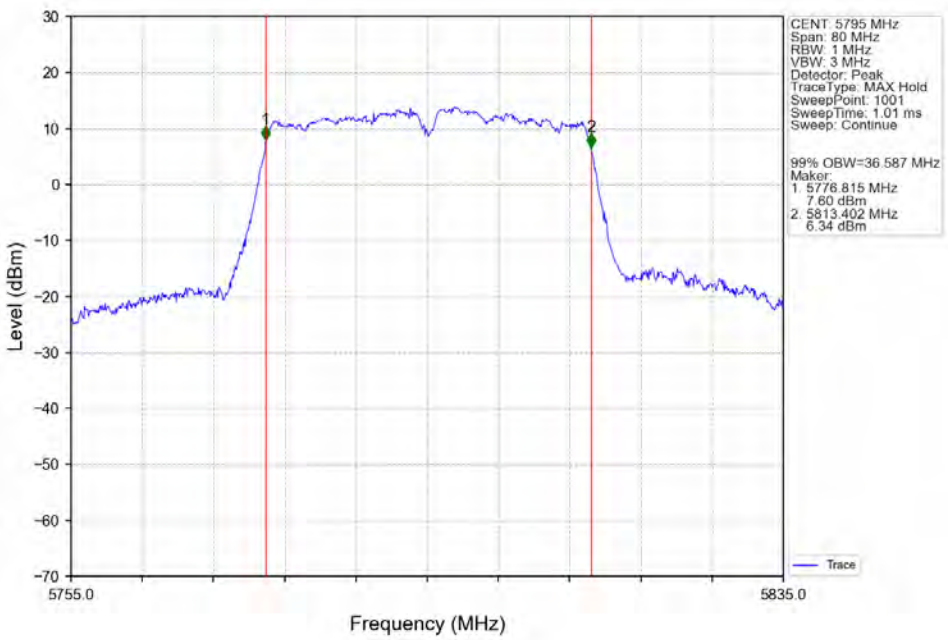
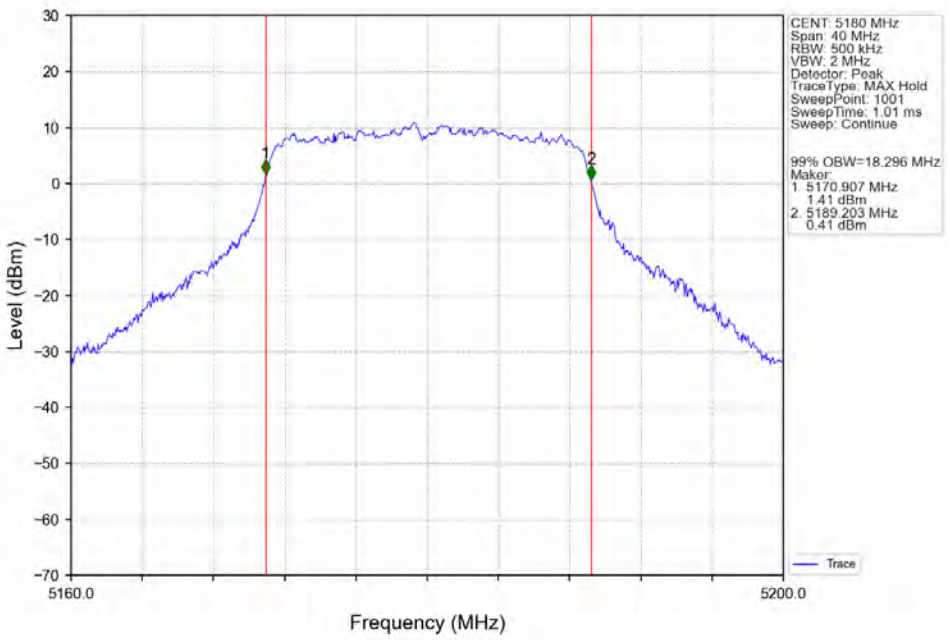
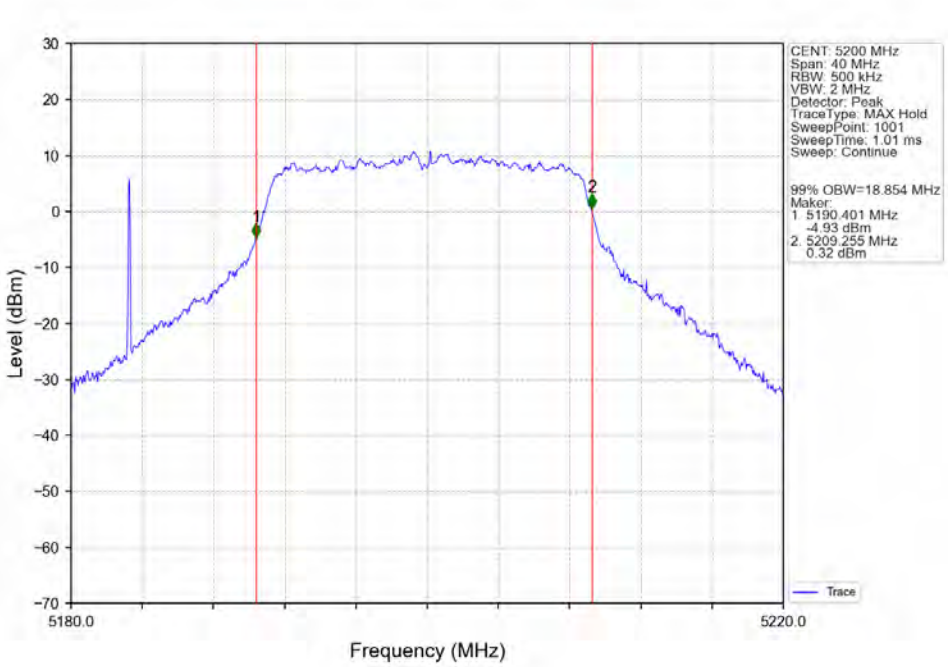


802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



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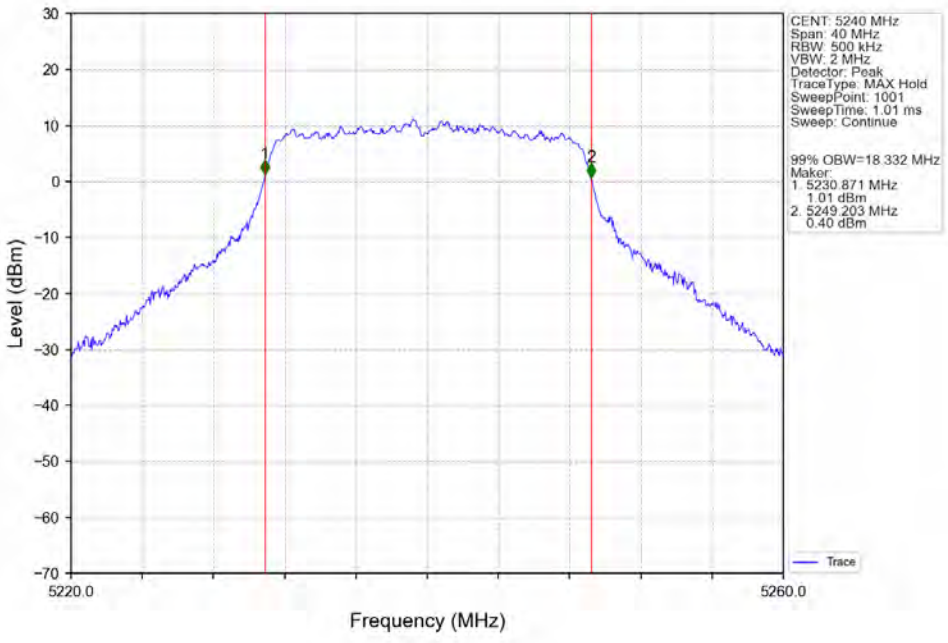

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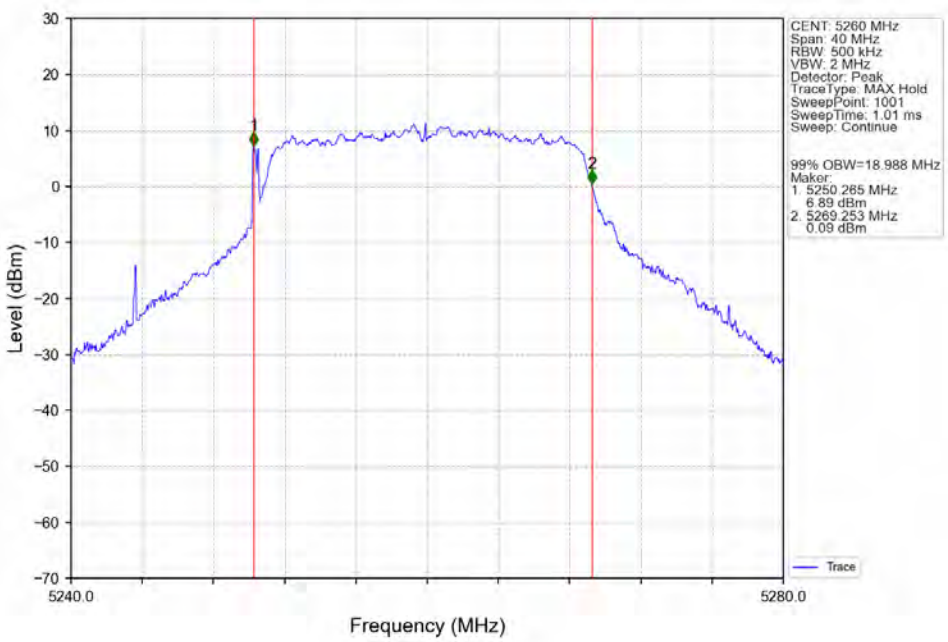

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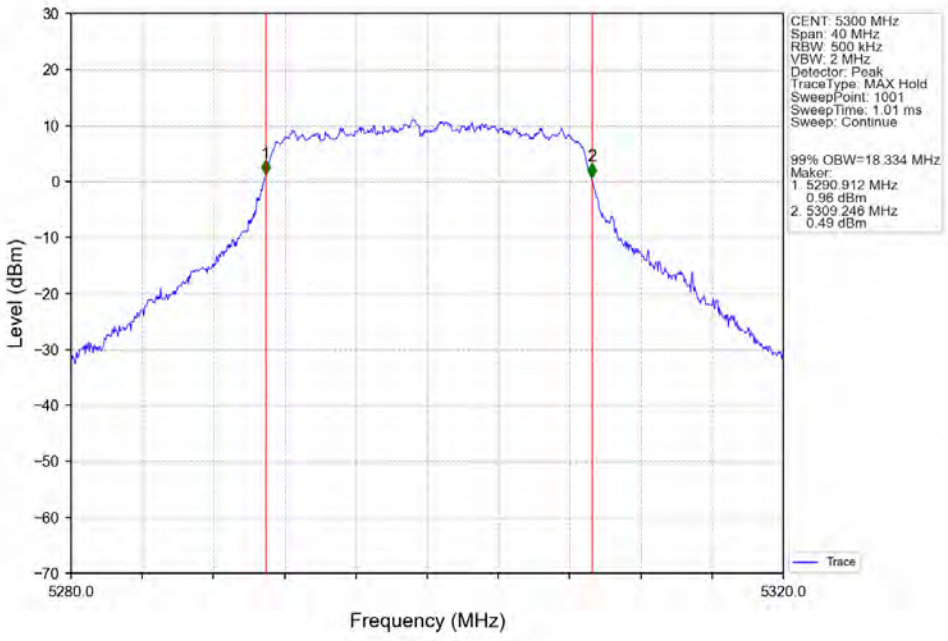

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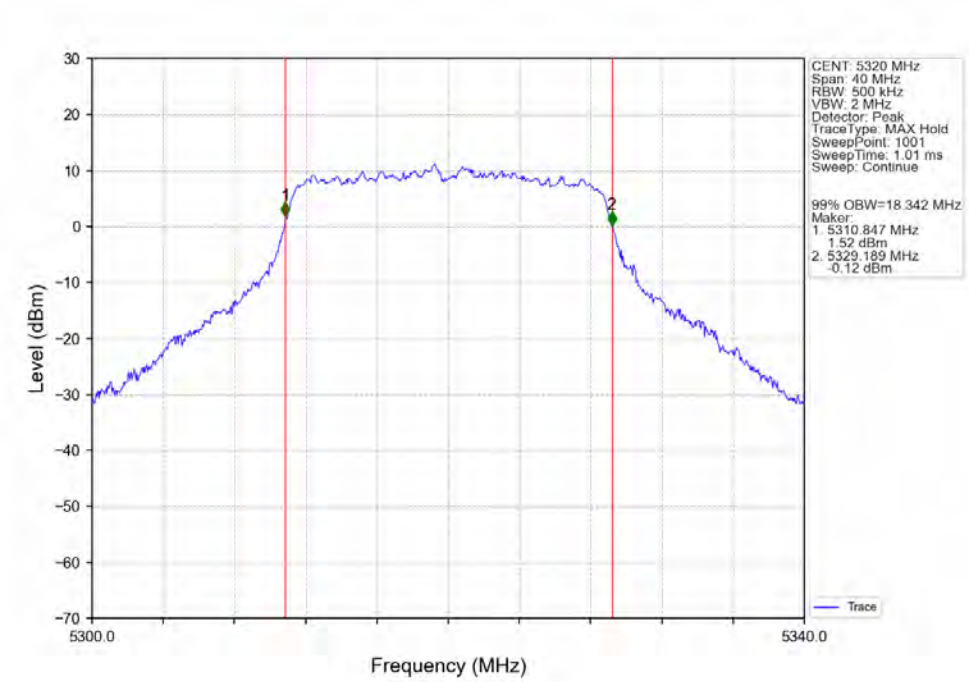
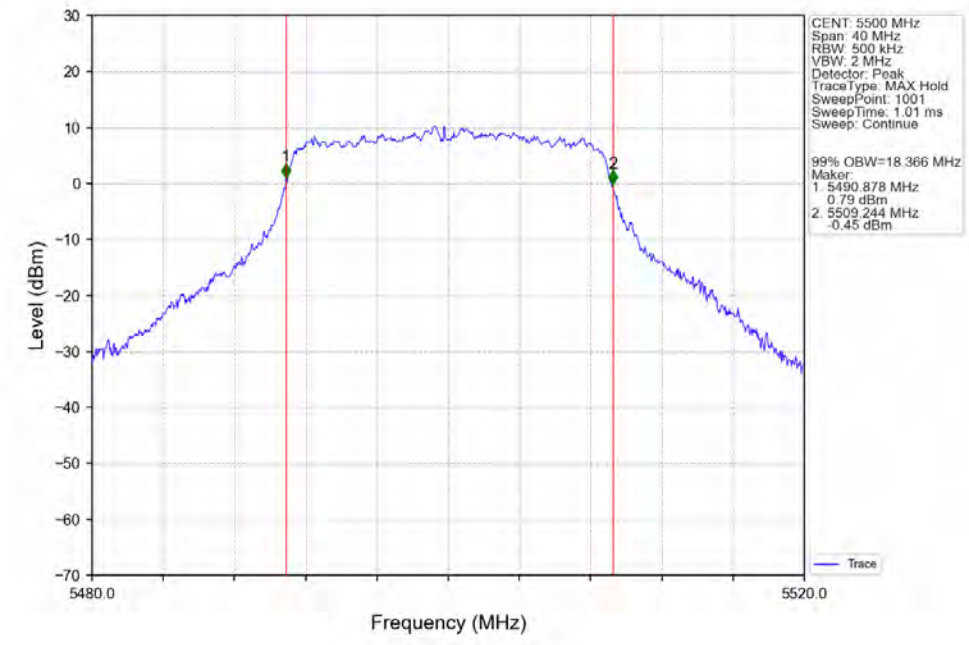


802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV



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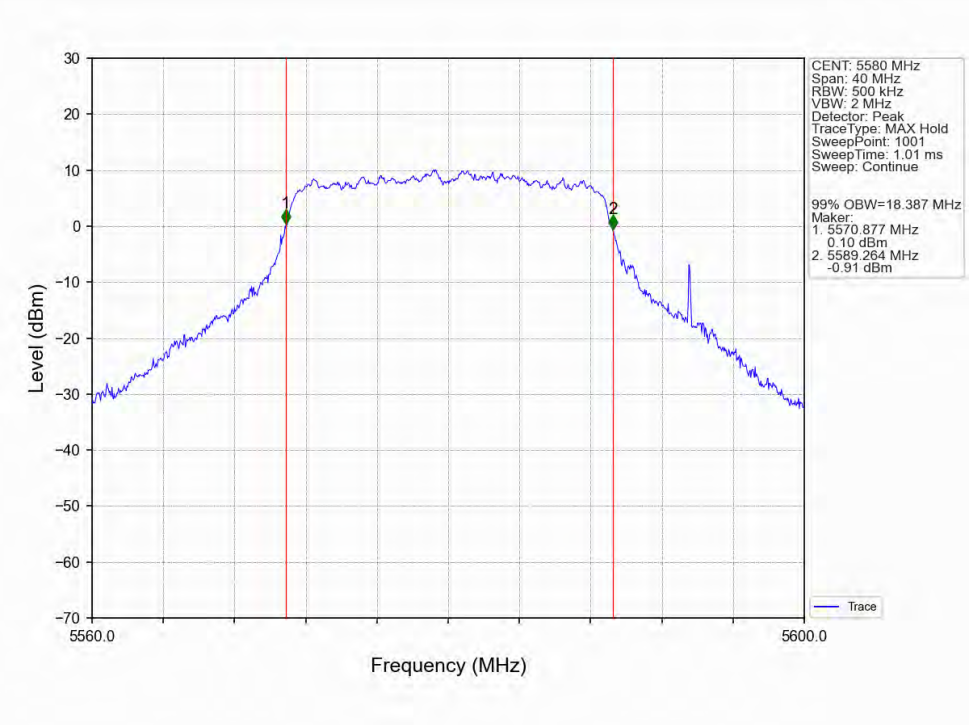

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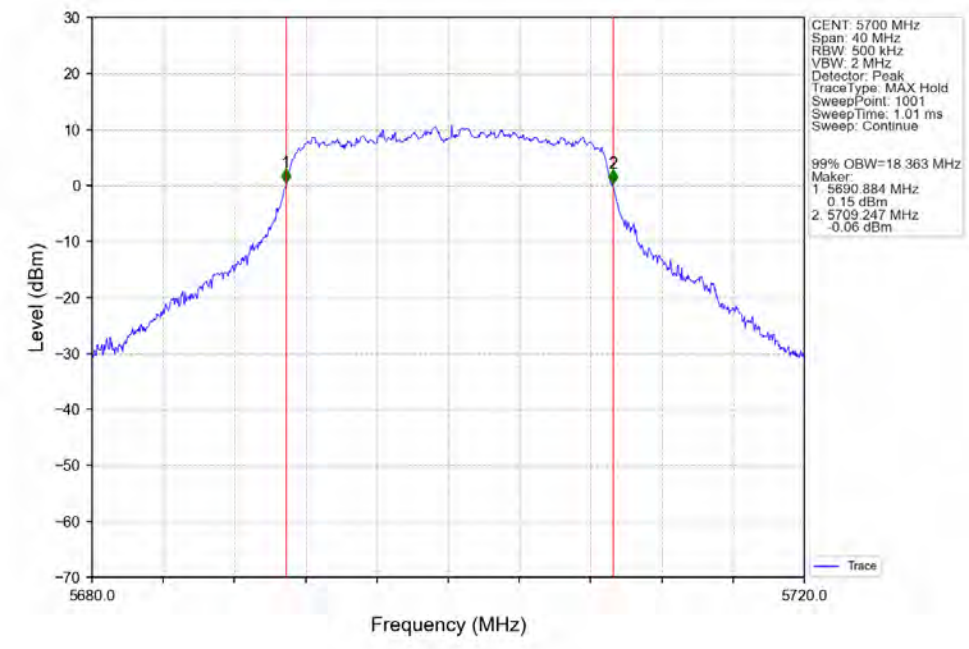
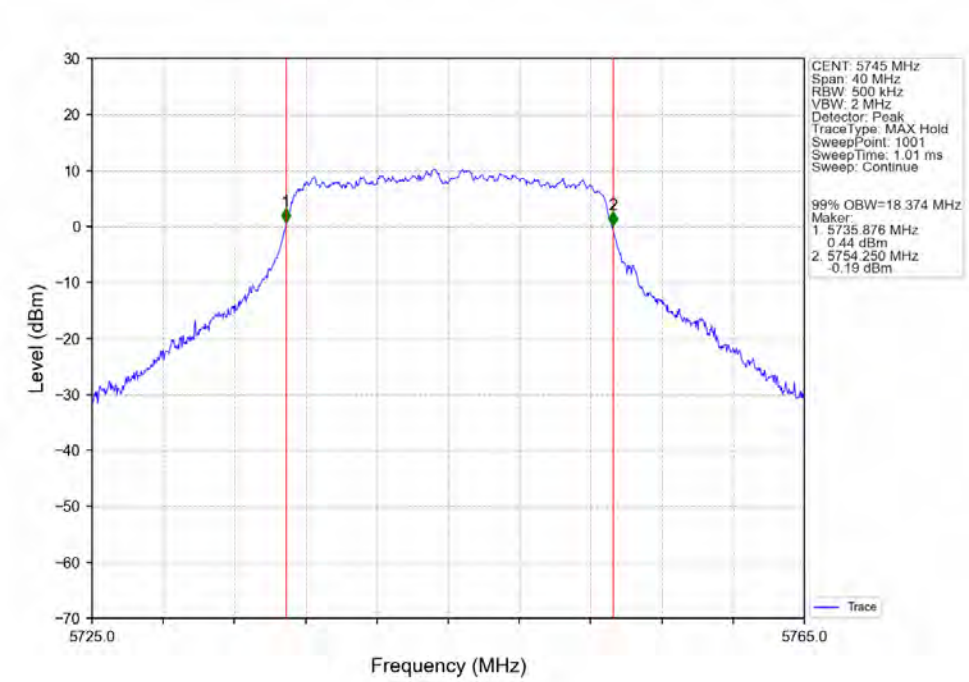


802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



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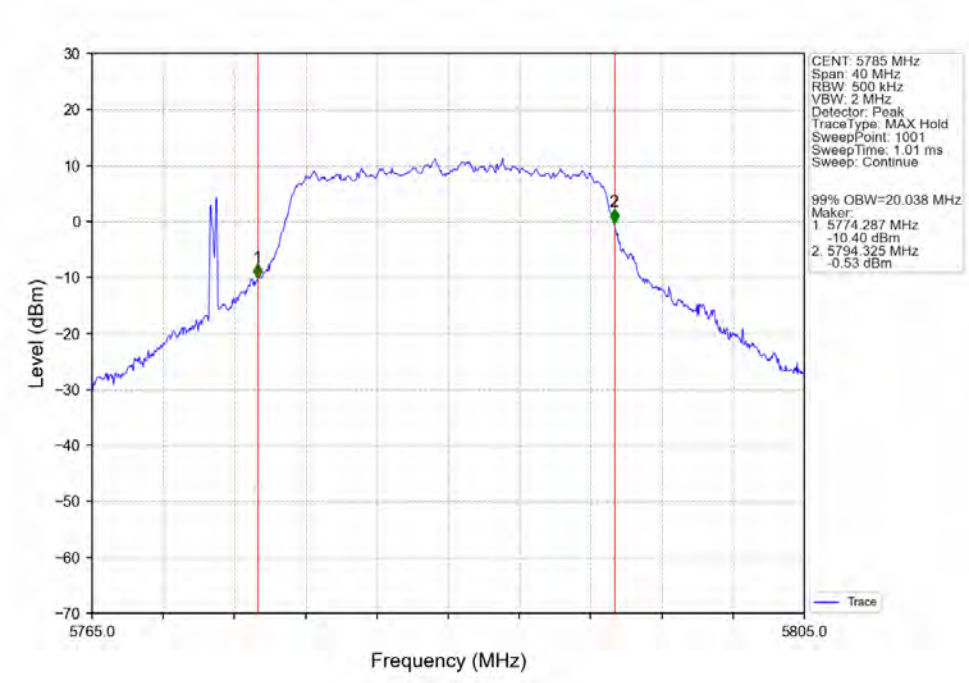
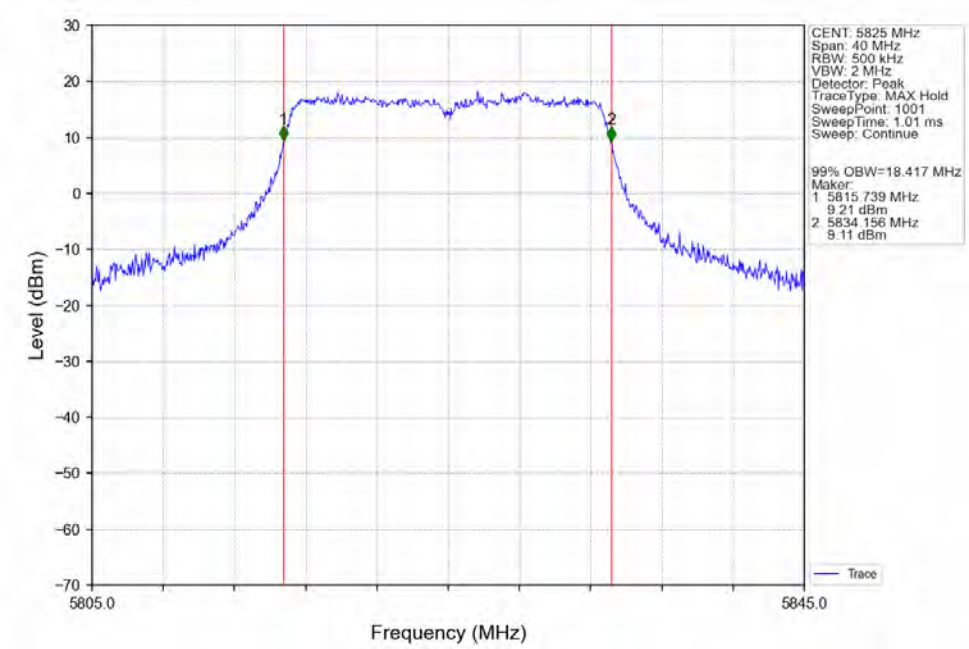
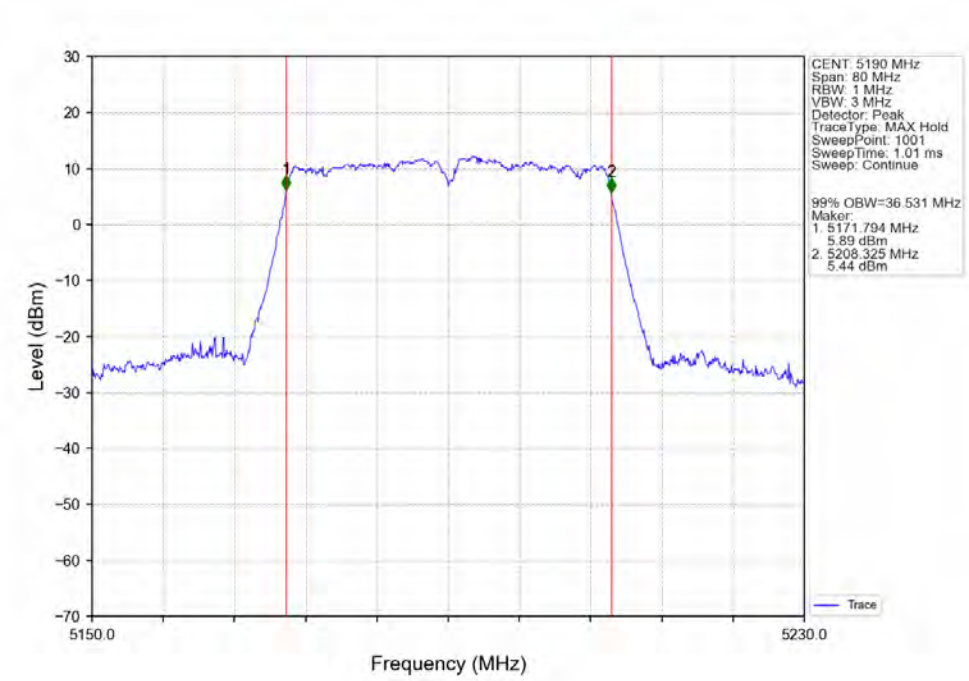


802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



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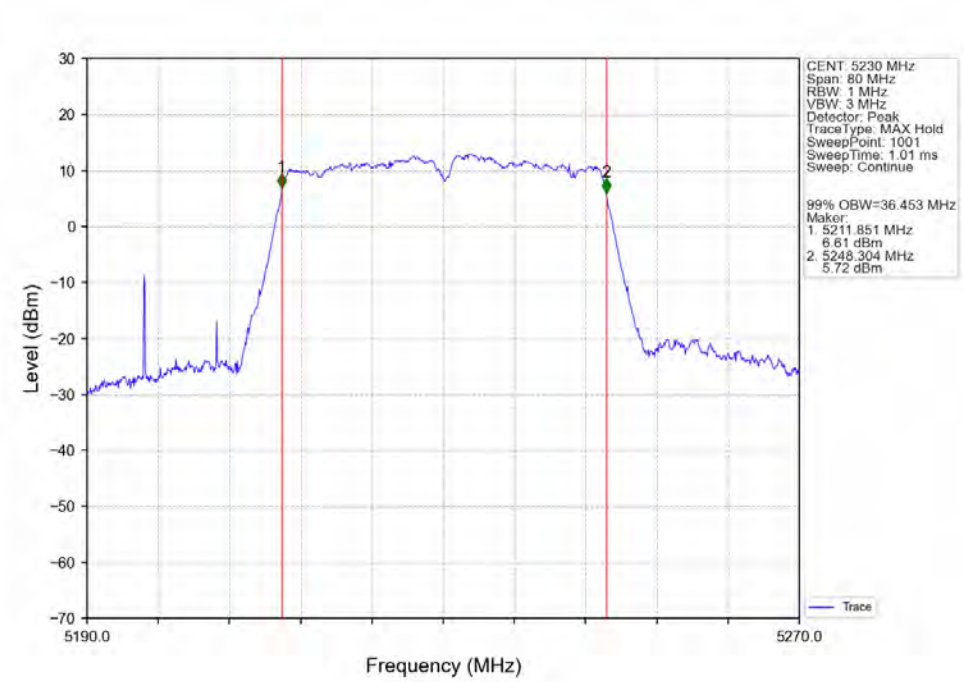

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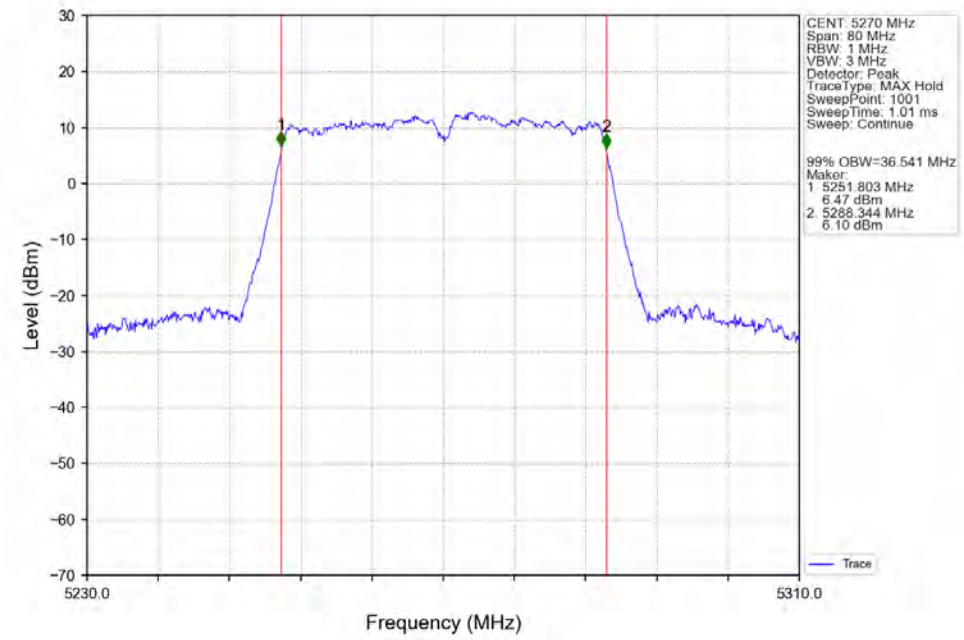
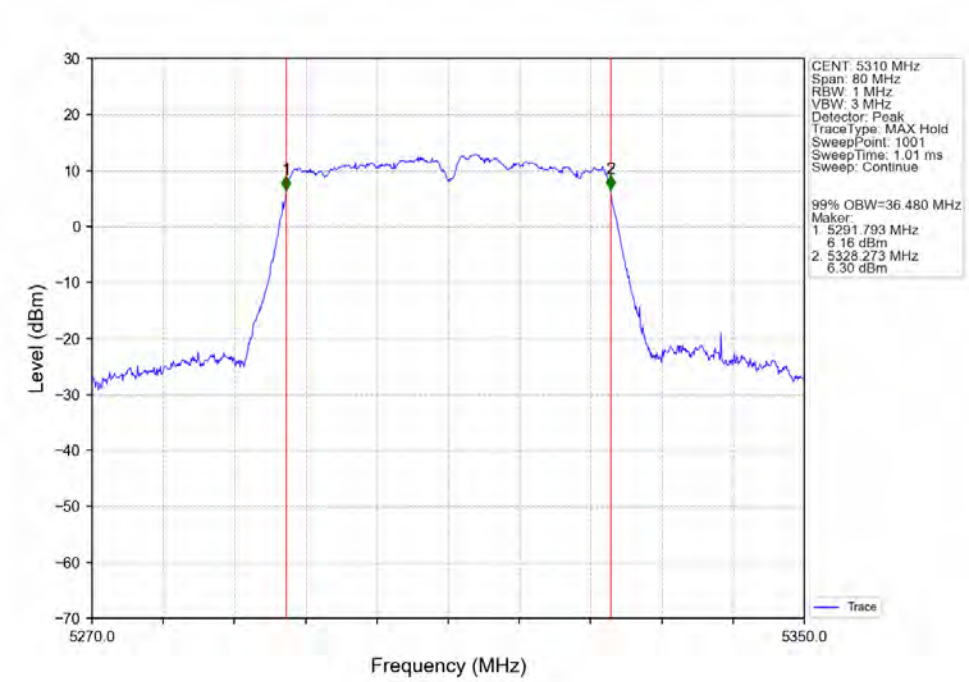
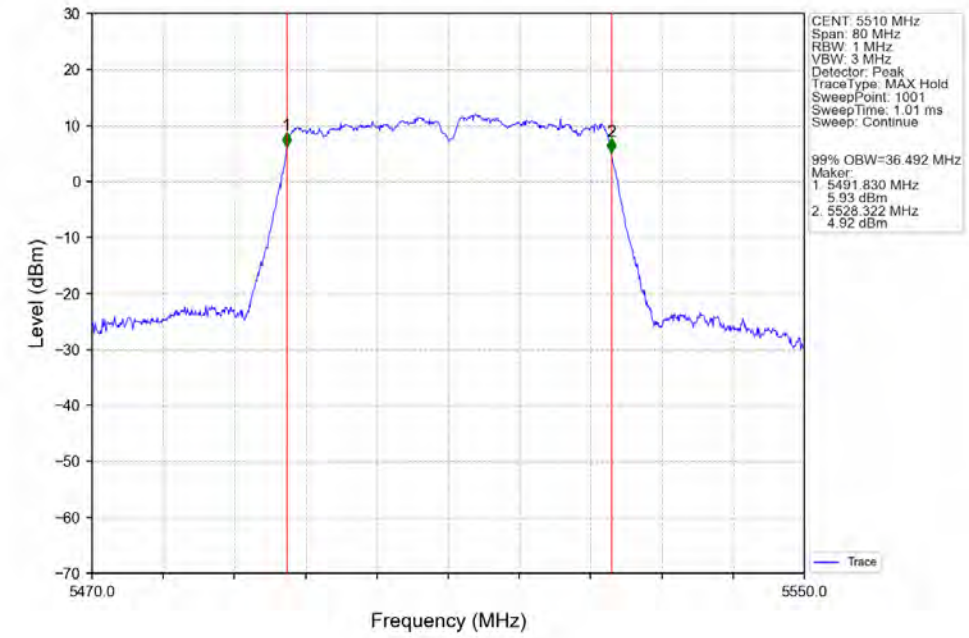


802.11ac(VHT40)_HCH_5310MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5510MHz_Ant1_NTNV



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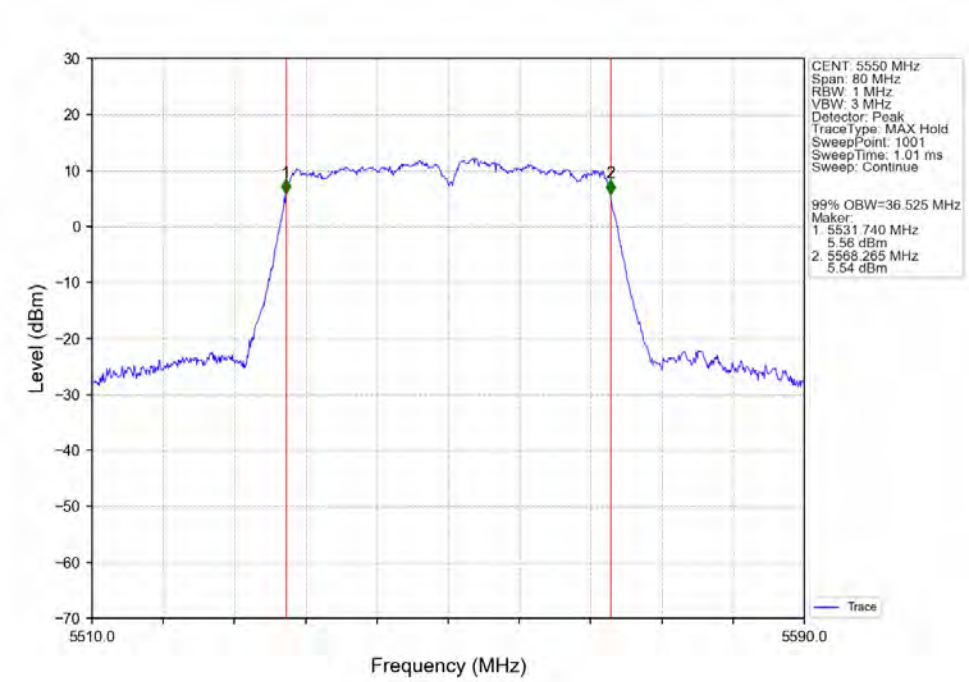

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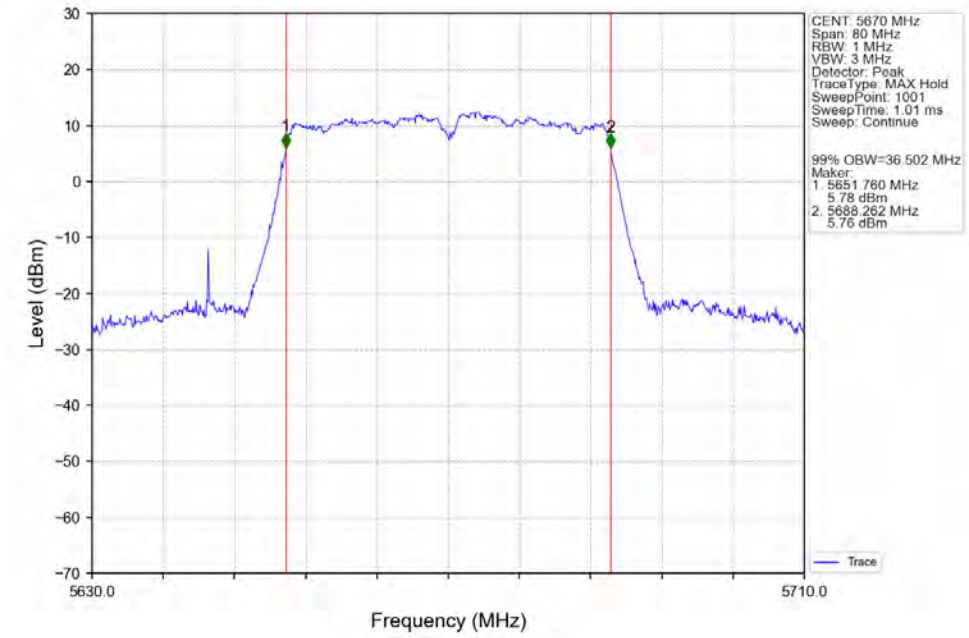

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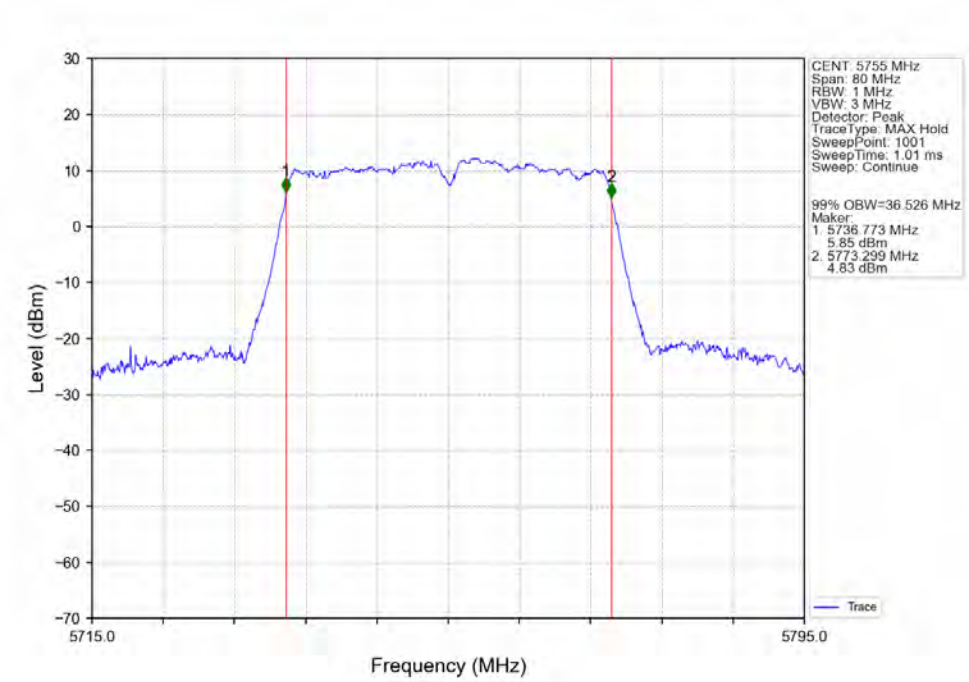

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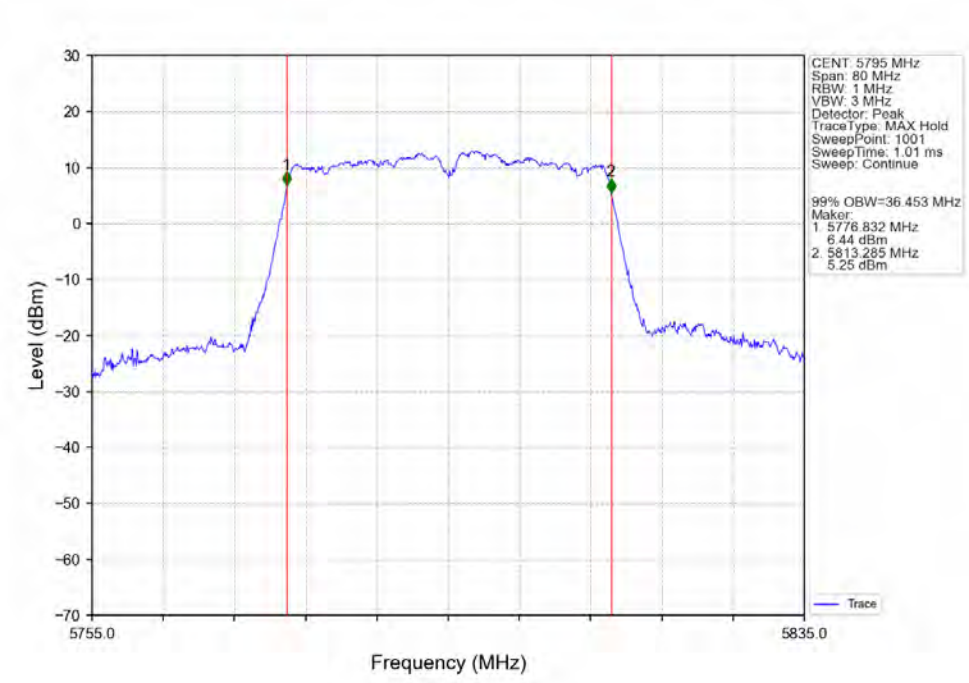
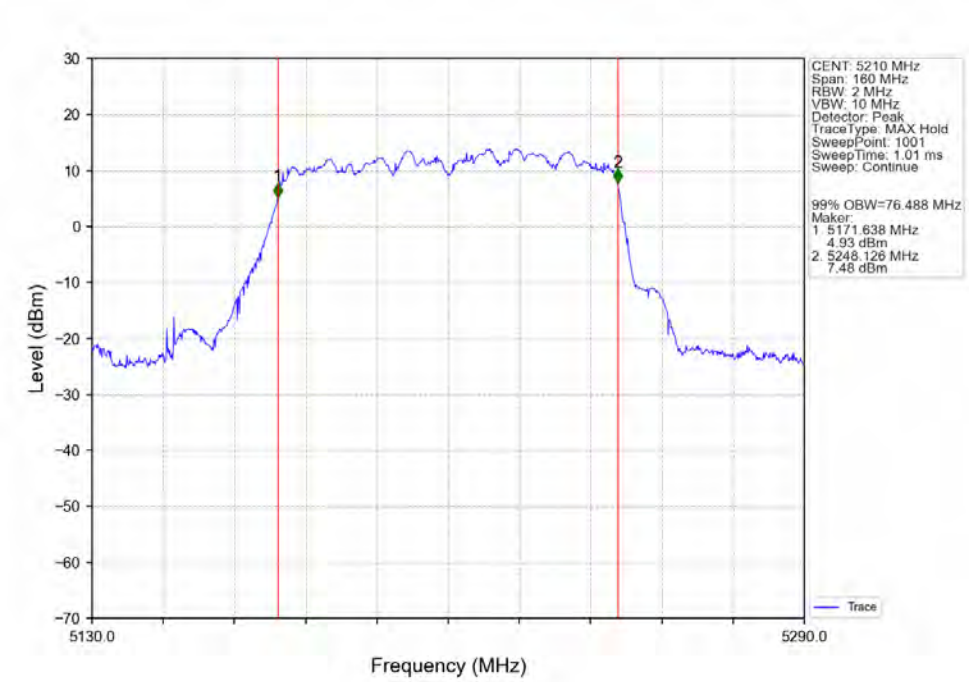
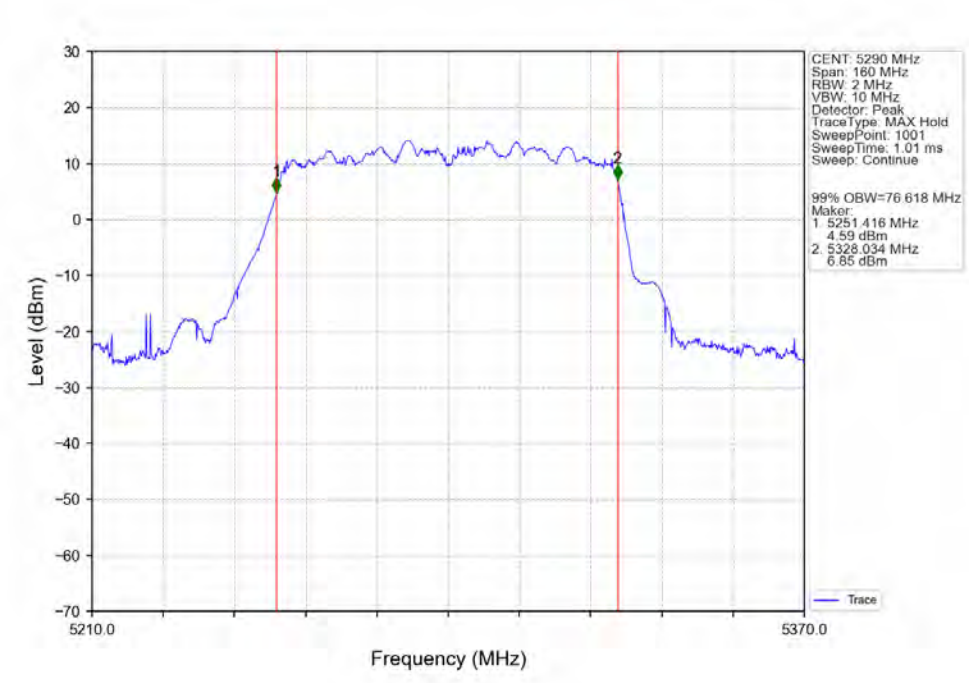


802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



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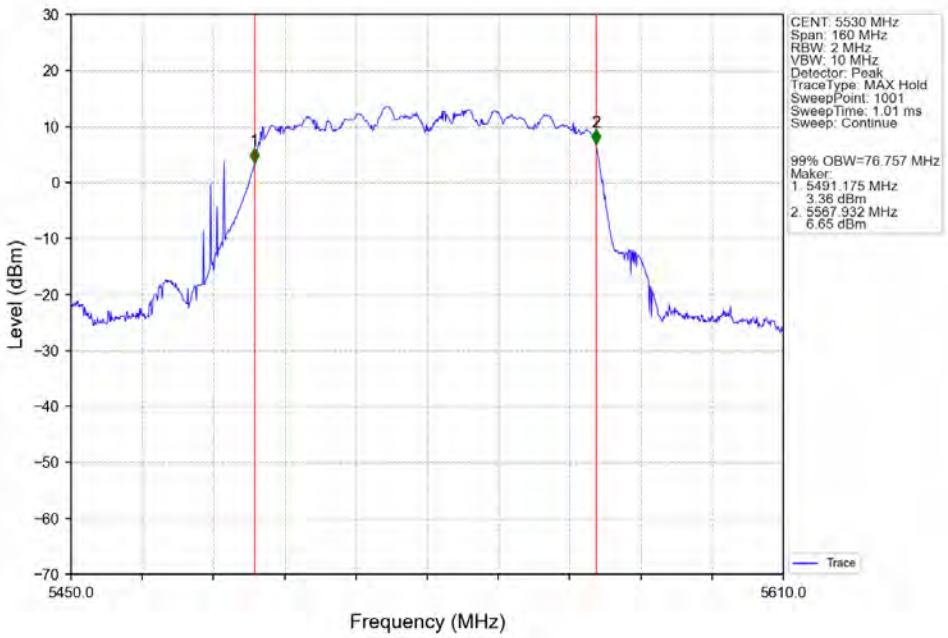
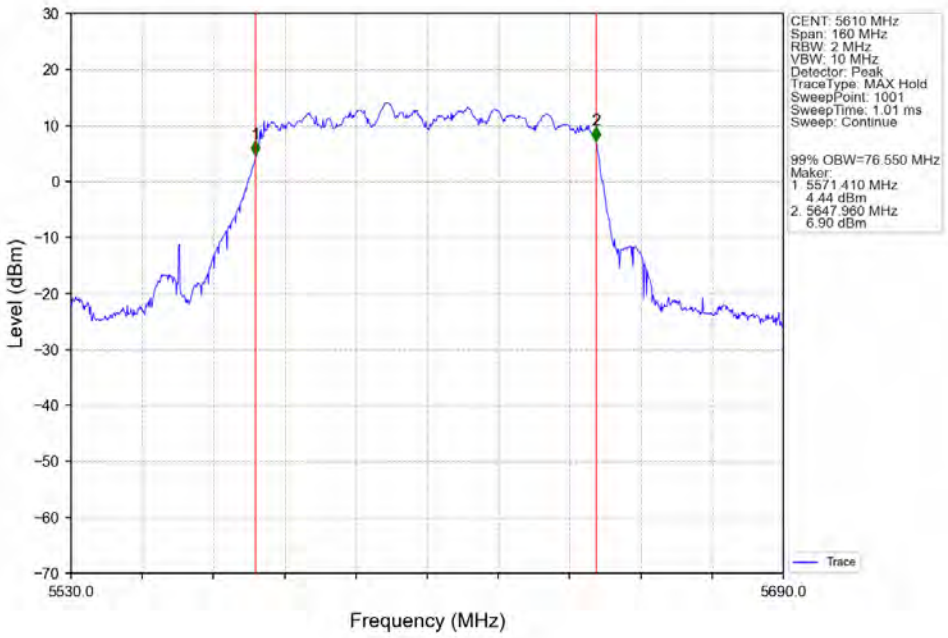
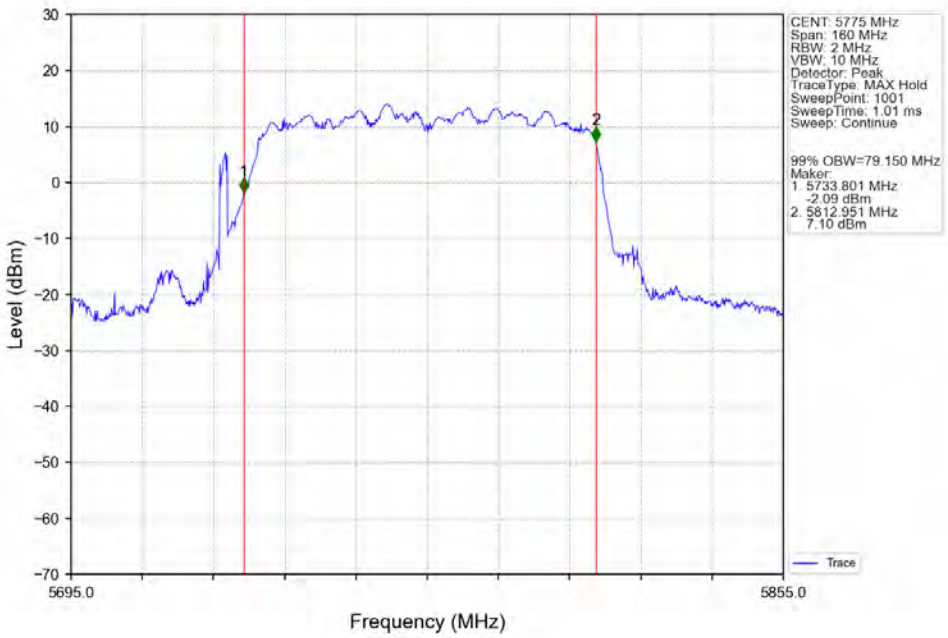


802.11ac(VHT80)_HCH_5610MHz_Ant1_NTNV

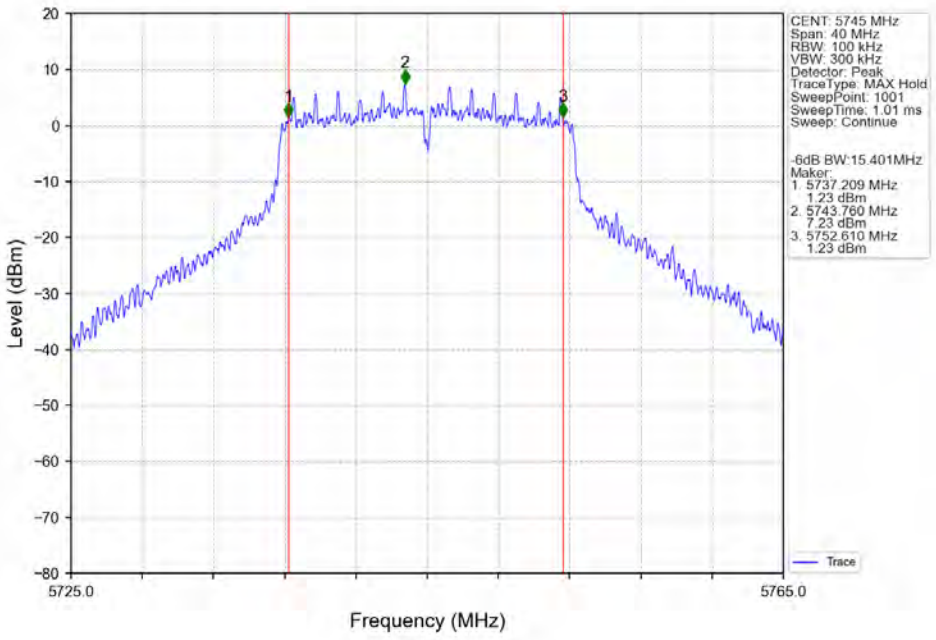


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV

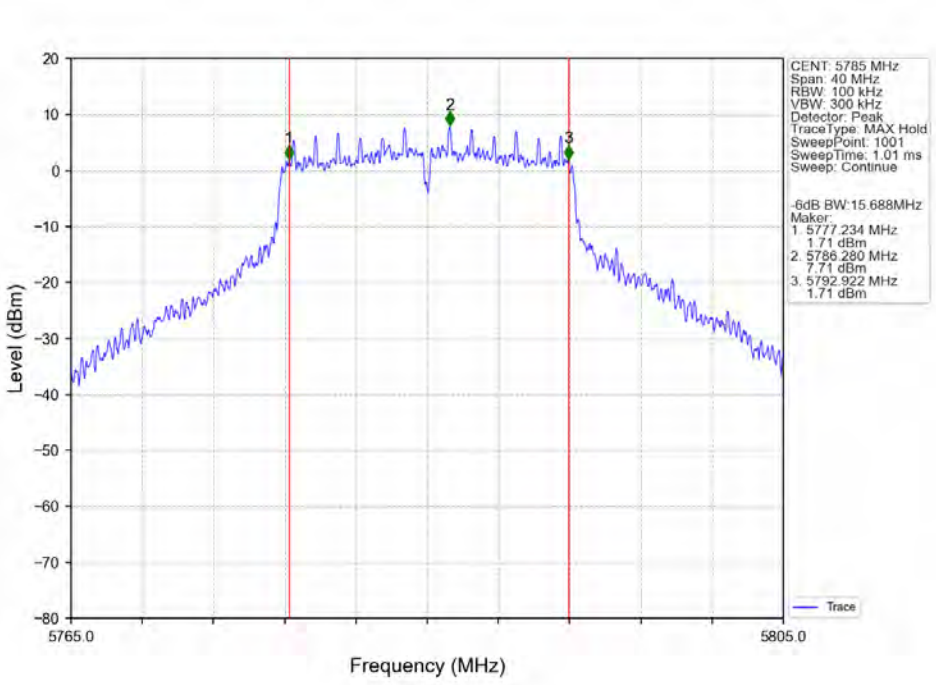


2.2.2 6dB BW

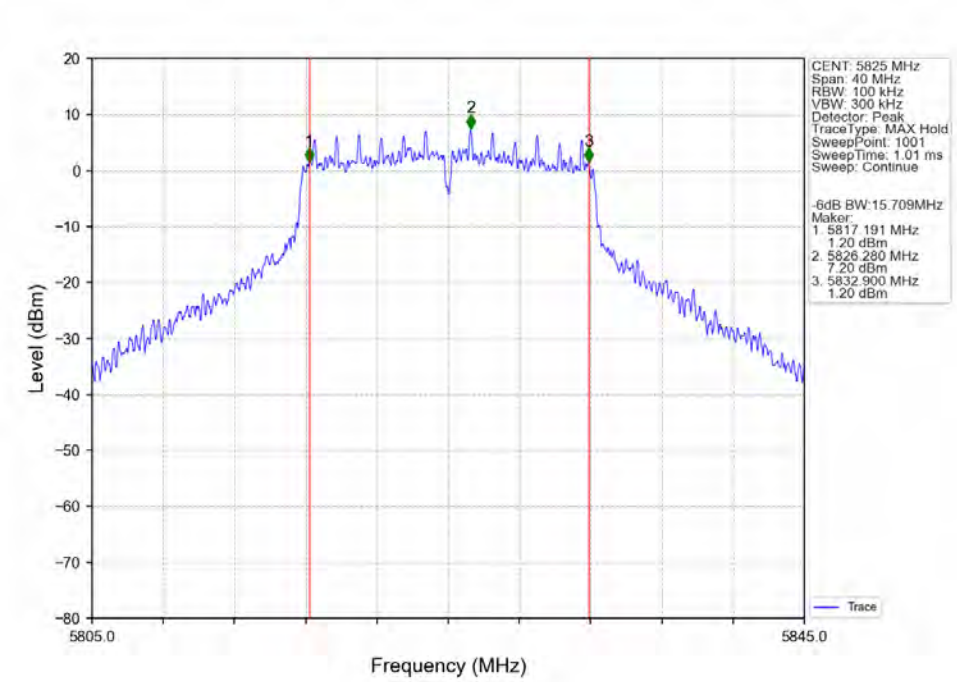
802.11a_LCH_5745MHz_Ant1_NTNV



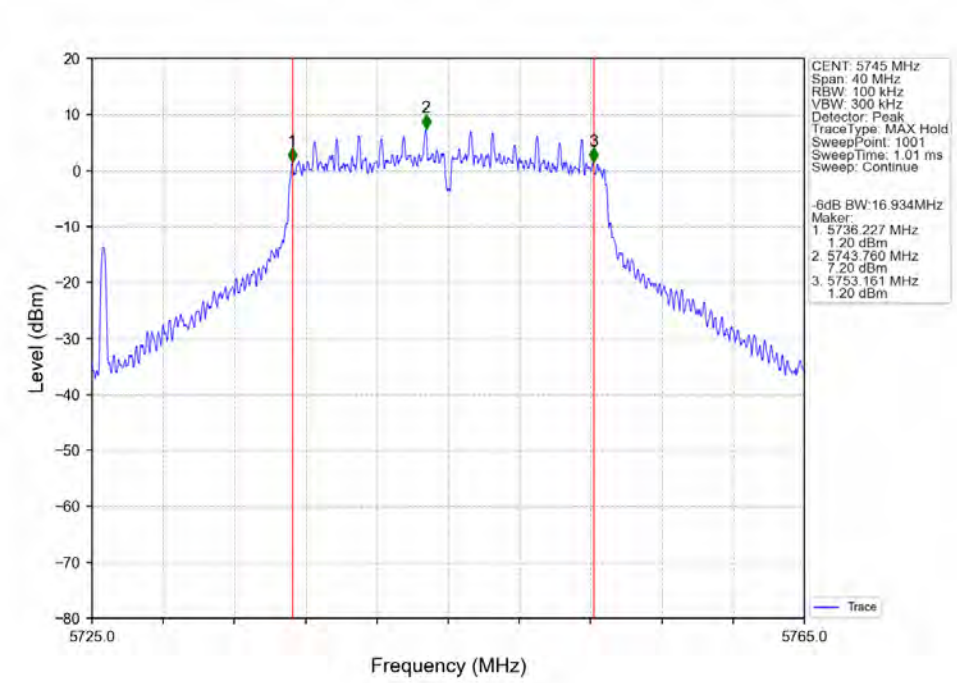
802.11a_MCH_5785MHz_Ant1_NTNV



802.11a_HCH_5825MHz_Ant1_NTNV



802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



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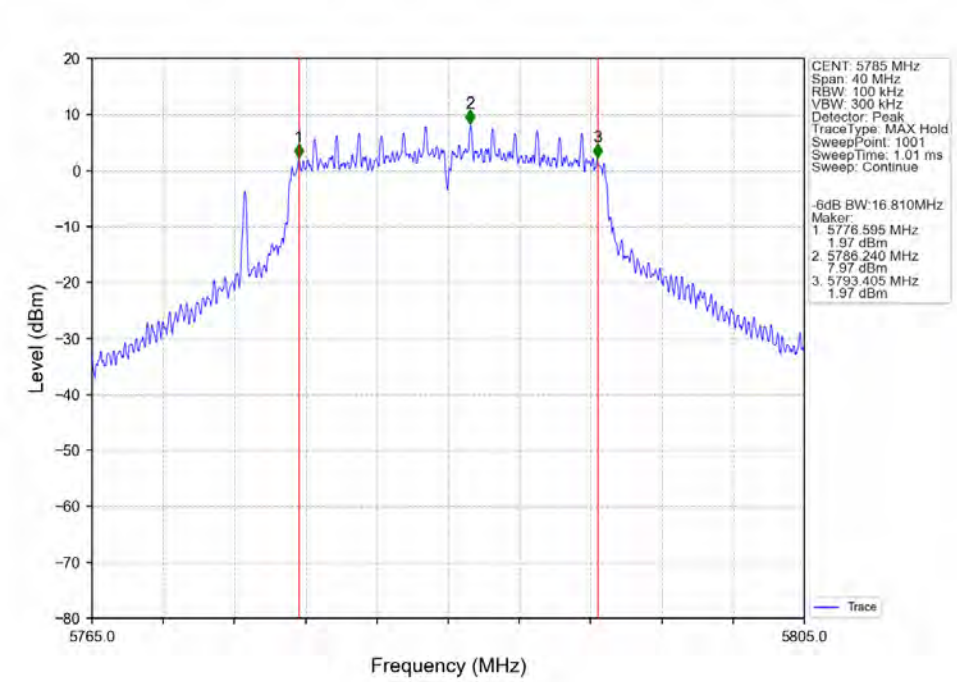

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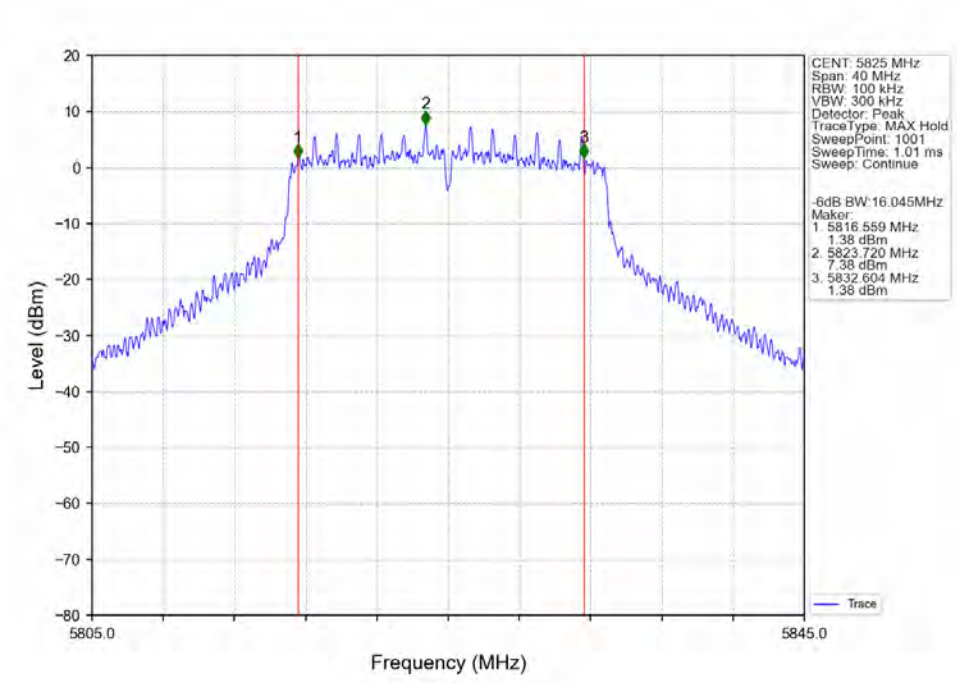
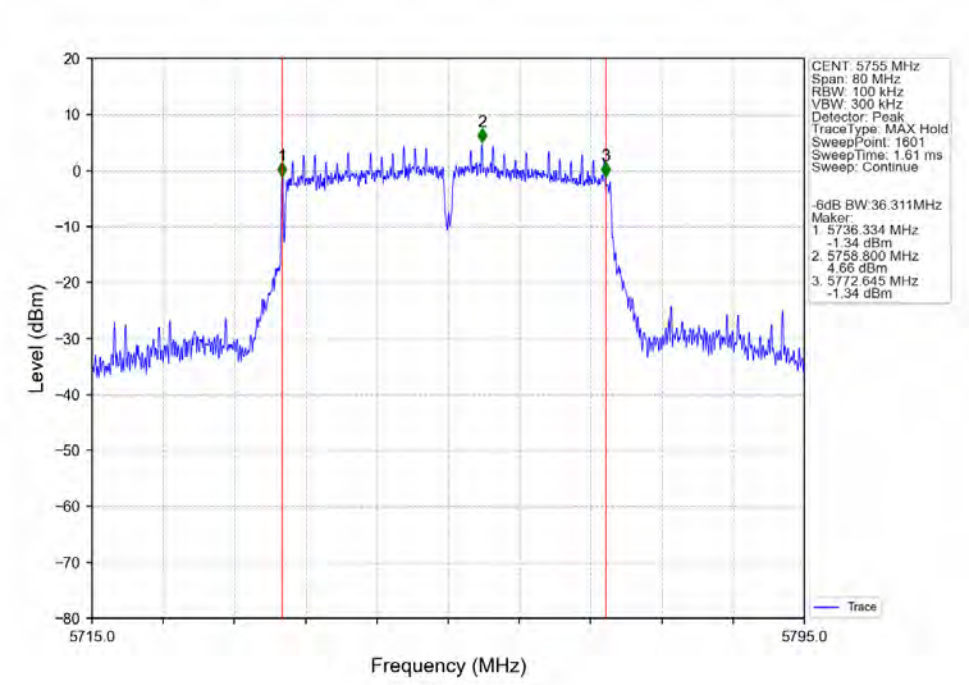
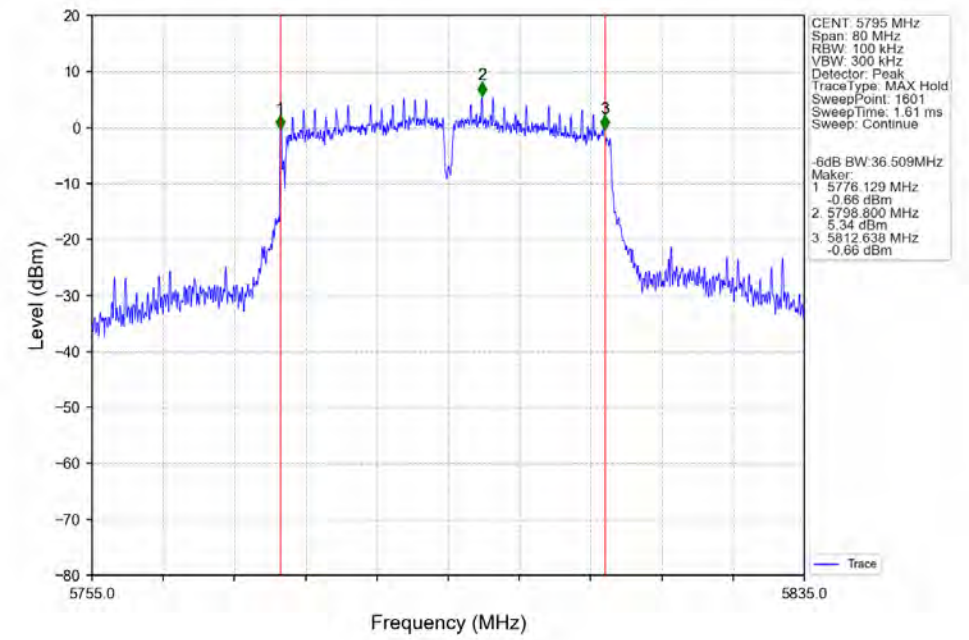


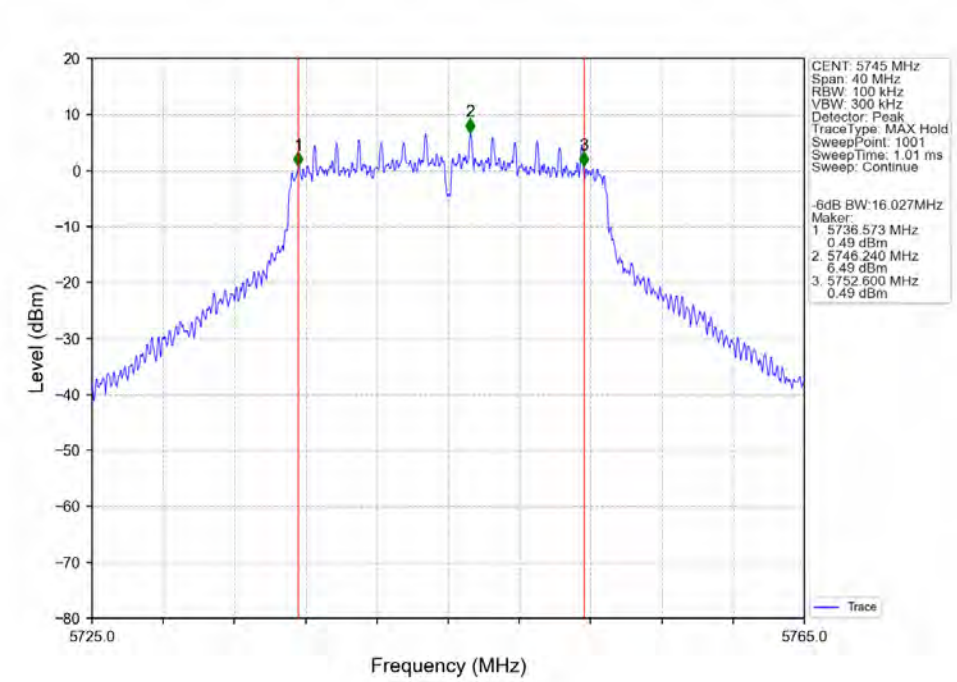
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



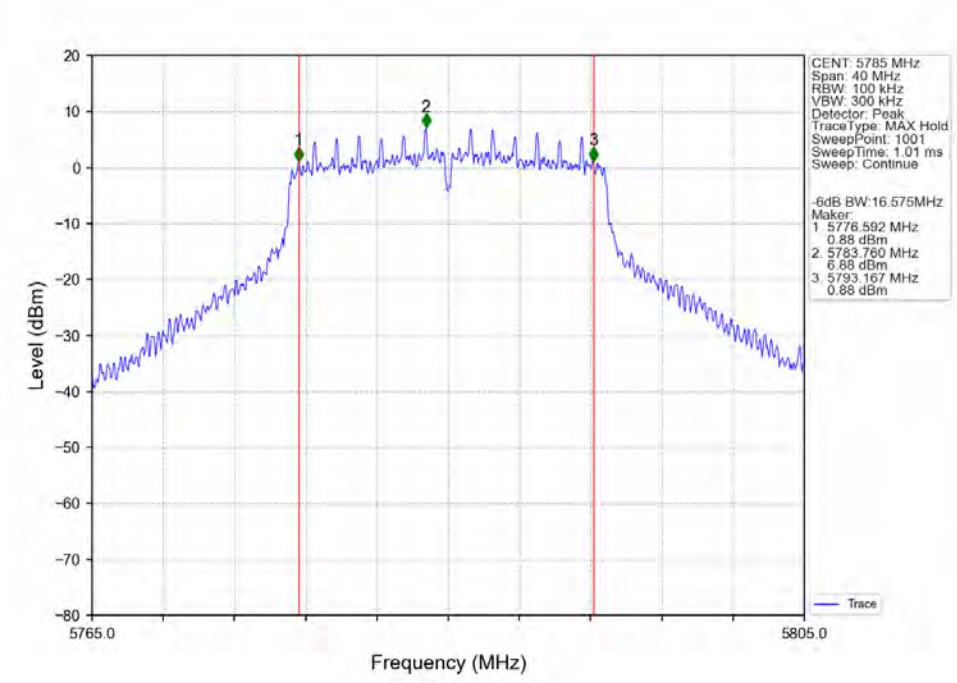
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



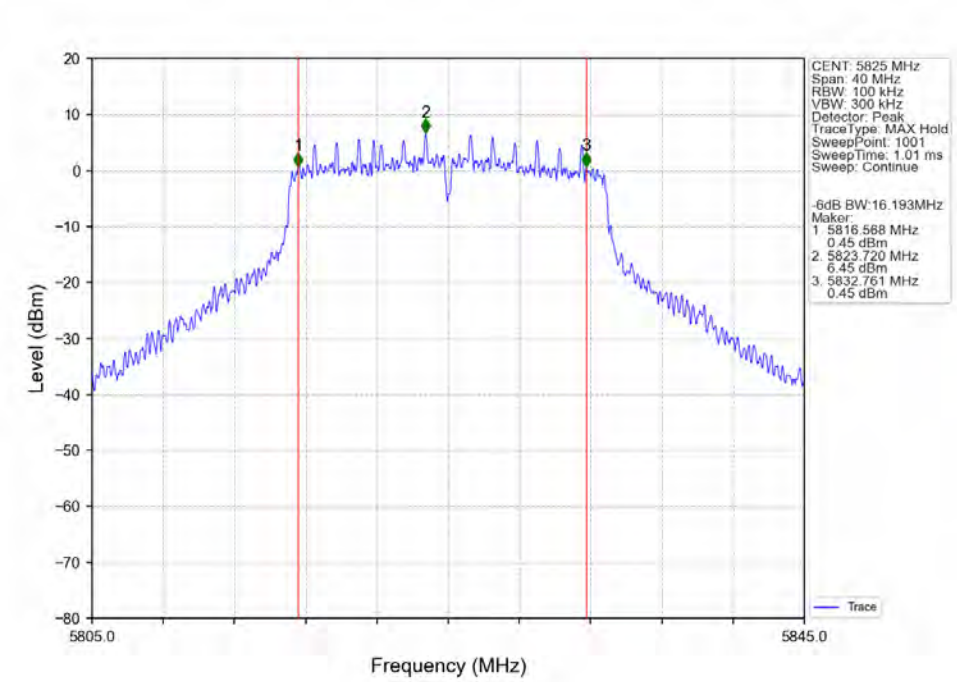
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



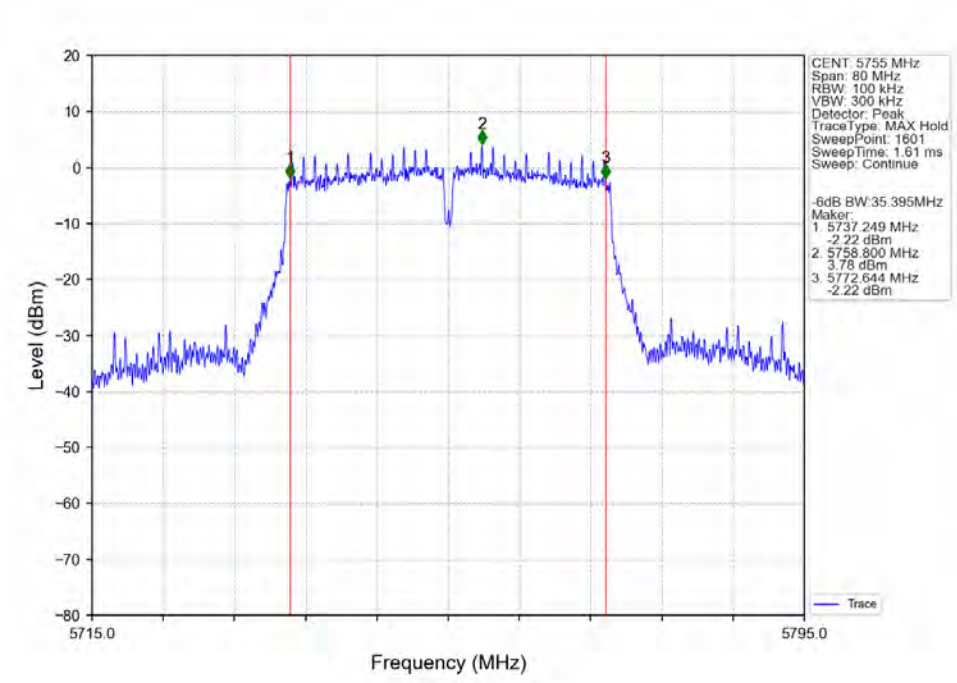
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



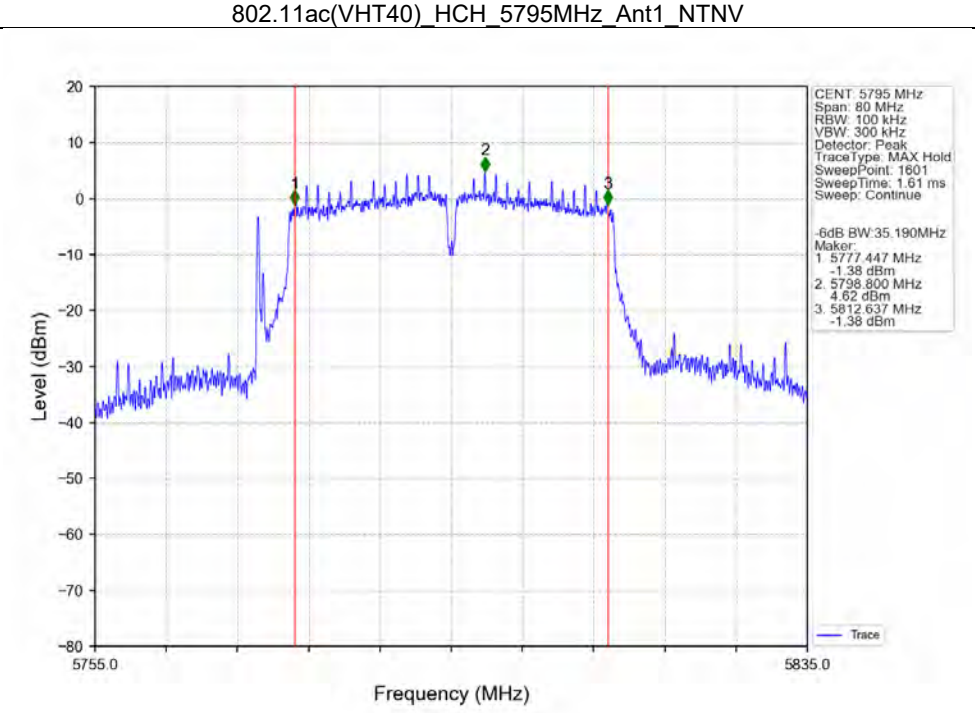
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



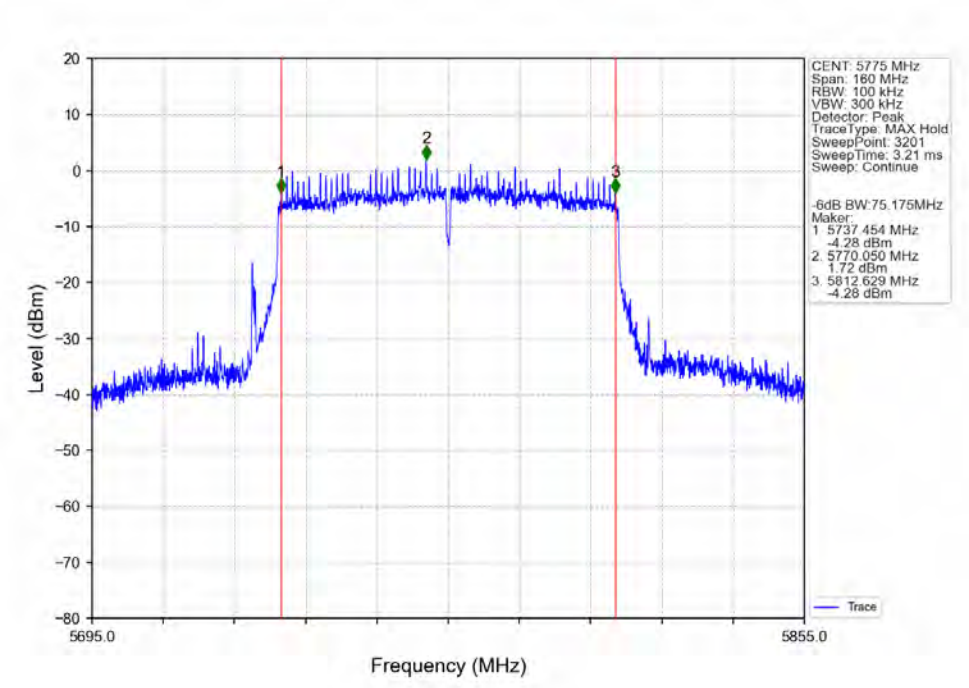
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV

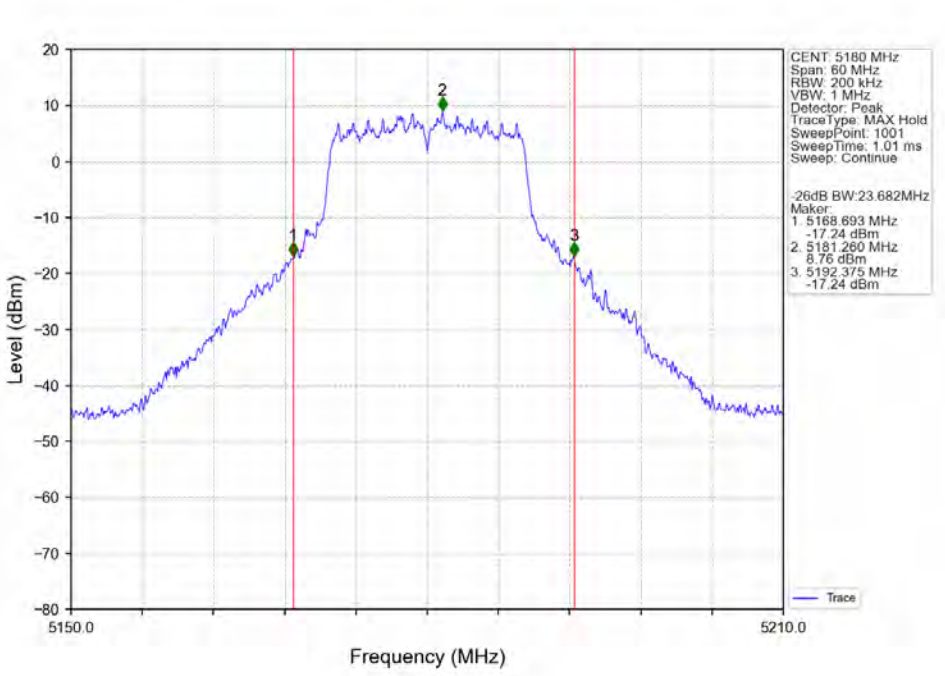


802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV

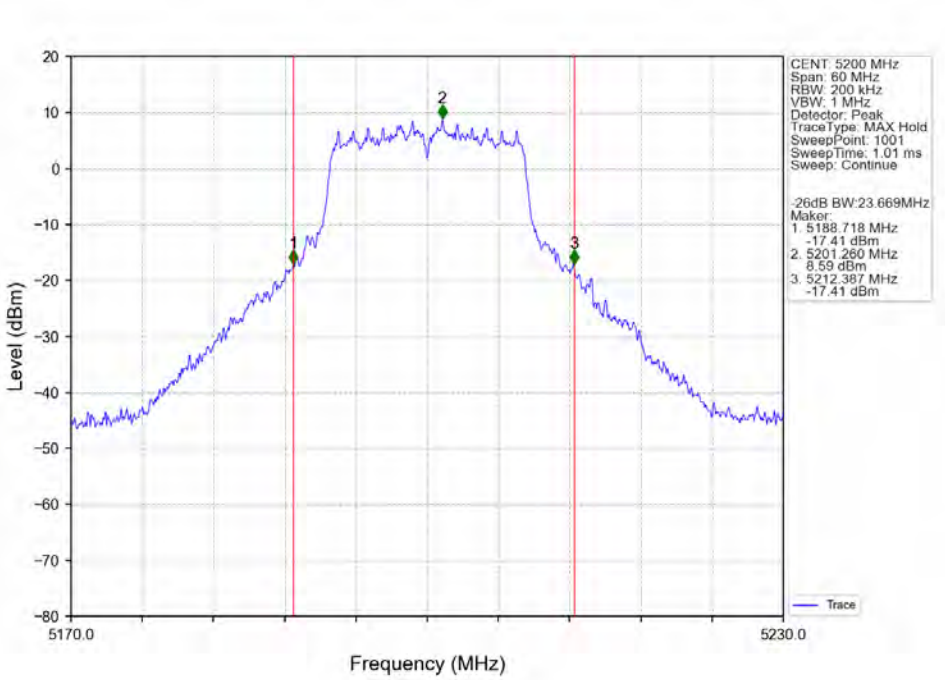


2.2.3 26dB BW

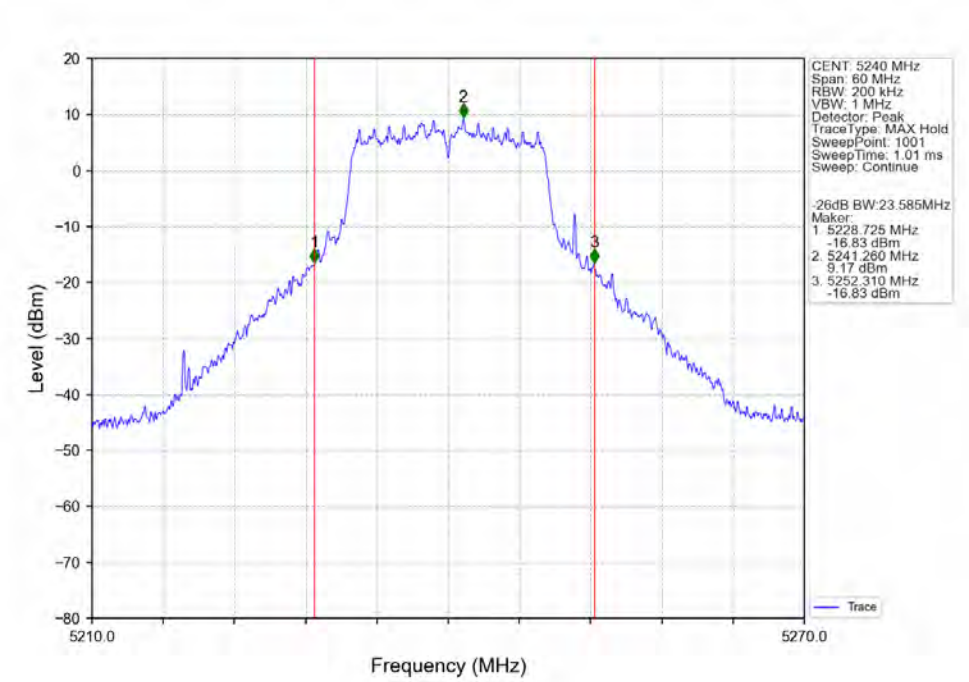
802.11a_LCH_5180MHz_Ant1_NTNV



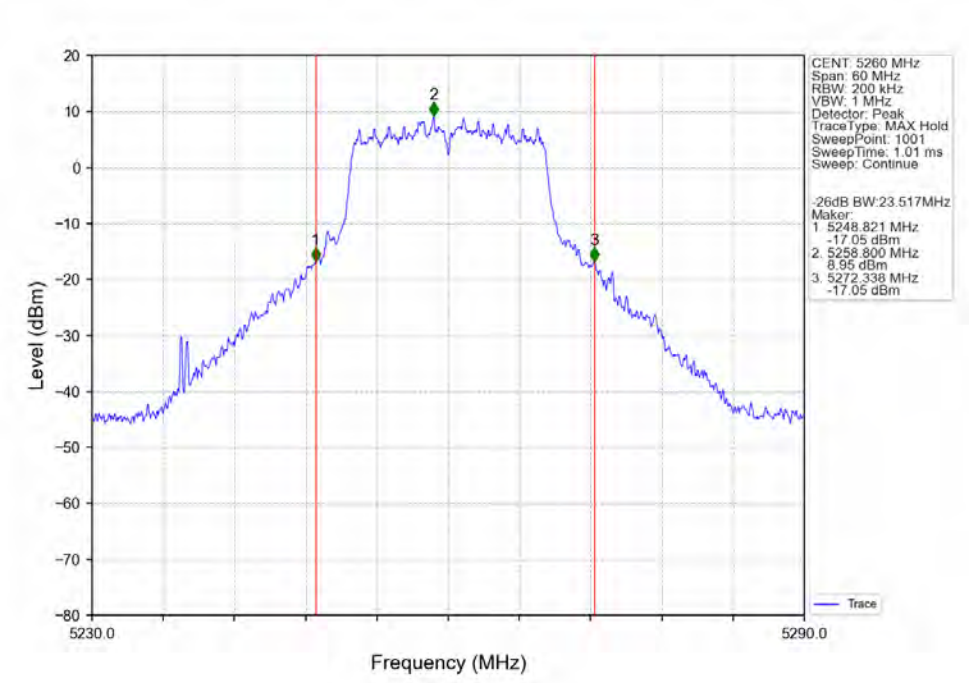
802.11a_MCH_5200MHz_Ant1_NTNV



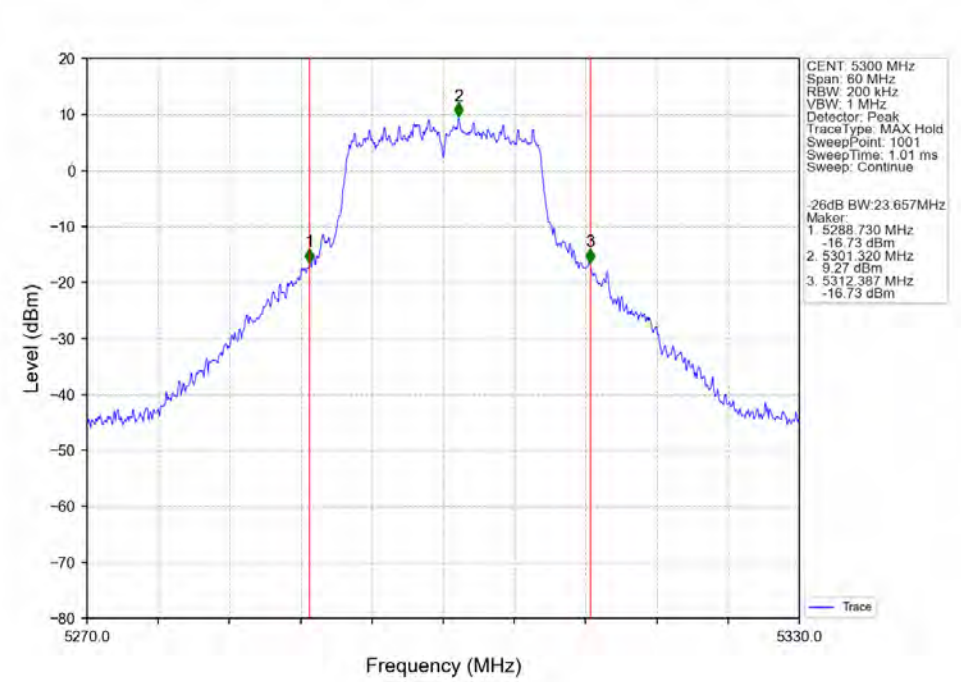
802.11a_HCH_5240MHz_Ant1_NTNV



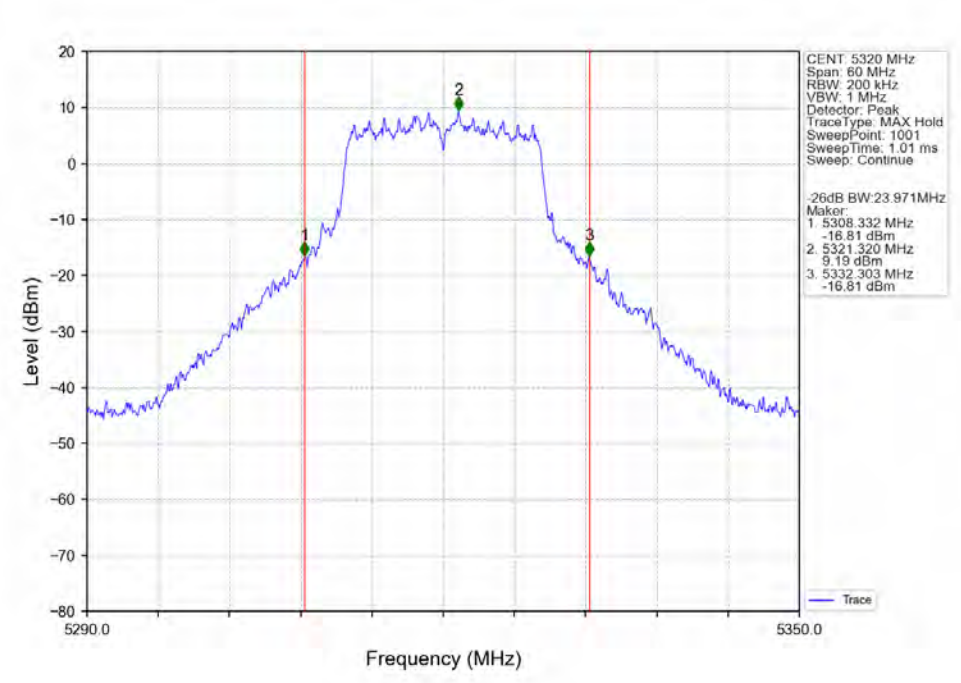
802.11a_LCH_5260MHz_Ant1_NTNV



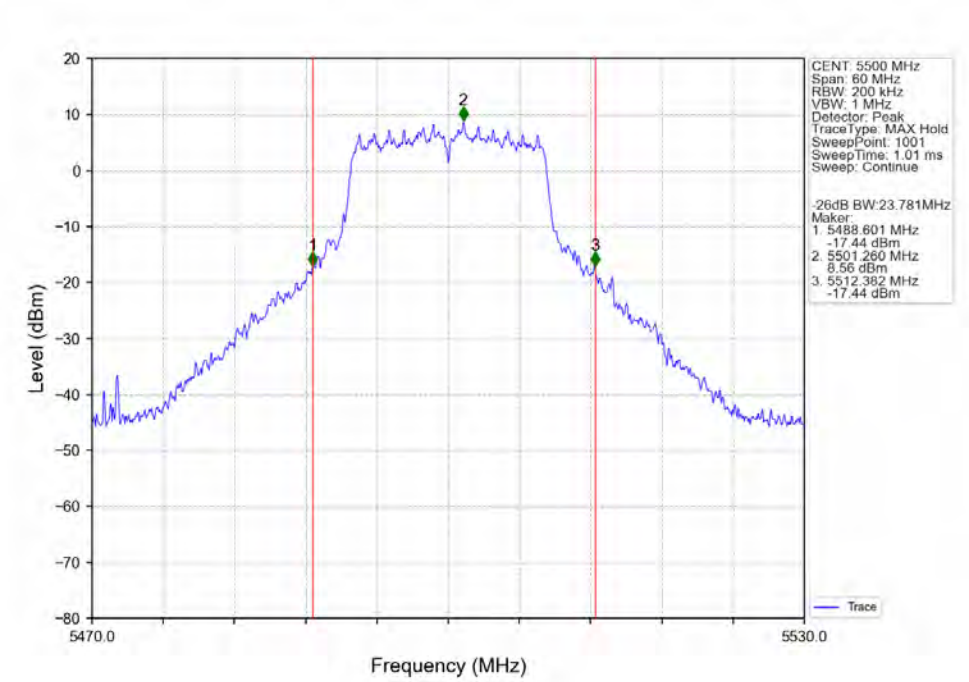
802.11a_MCH_5300MHz_Ant1_NTNV



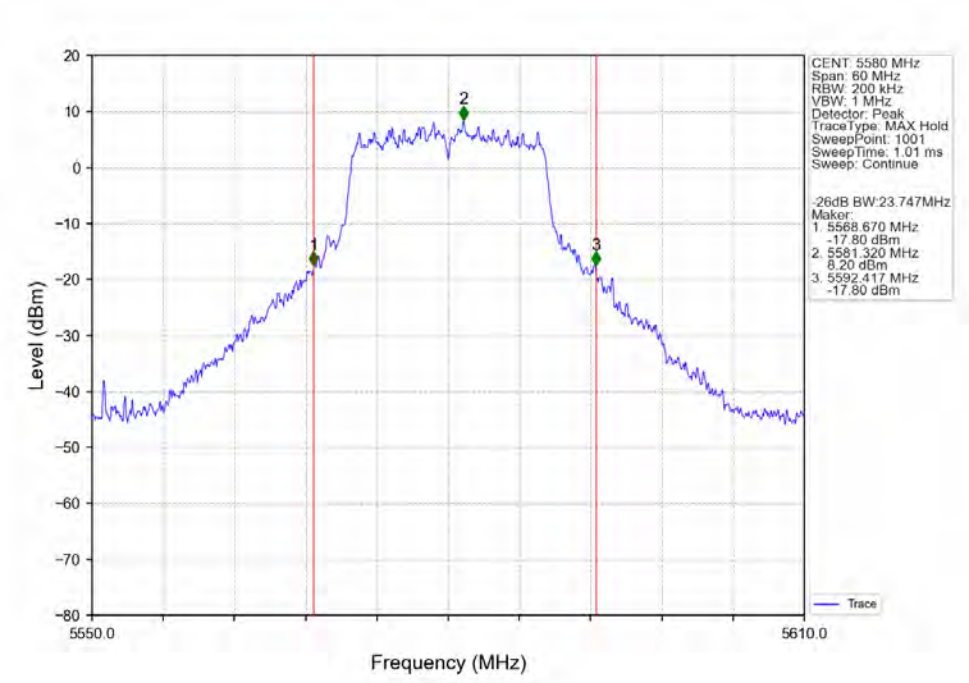
802.11a_HCH_5320MHz_Ant1_NTNV



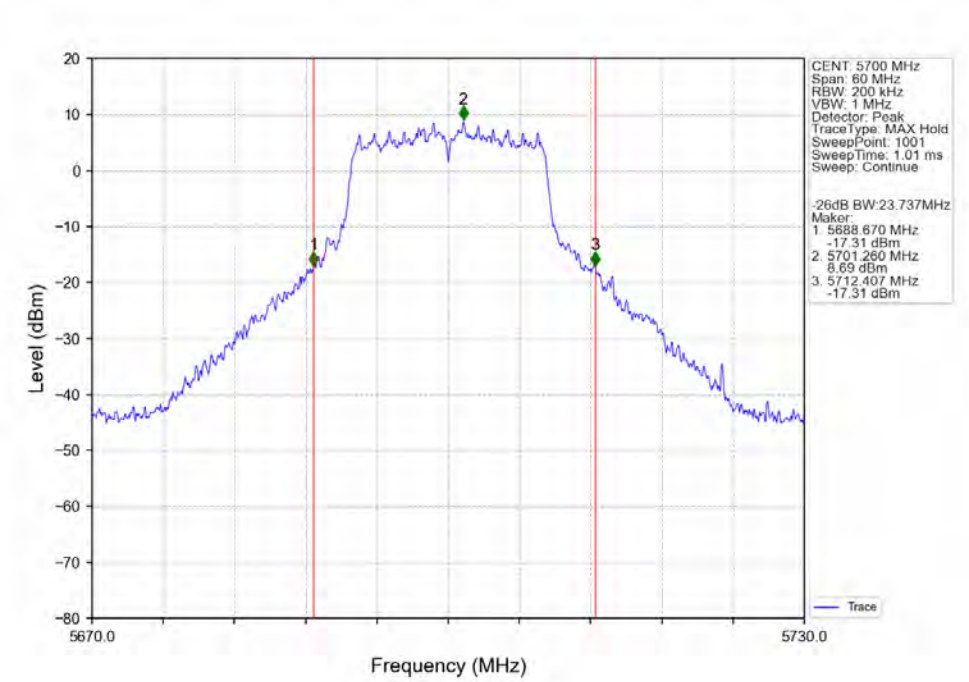
802.11a_LCH_5500MHz_Ant1_NTNV



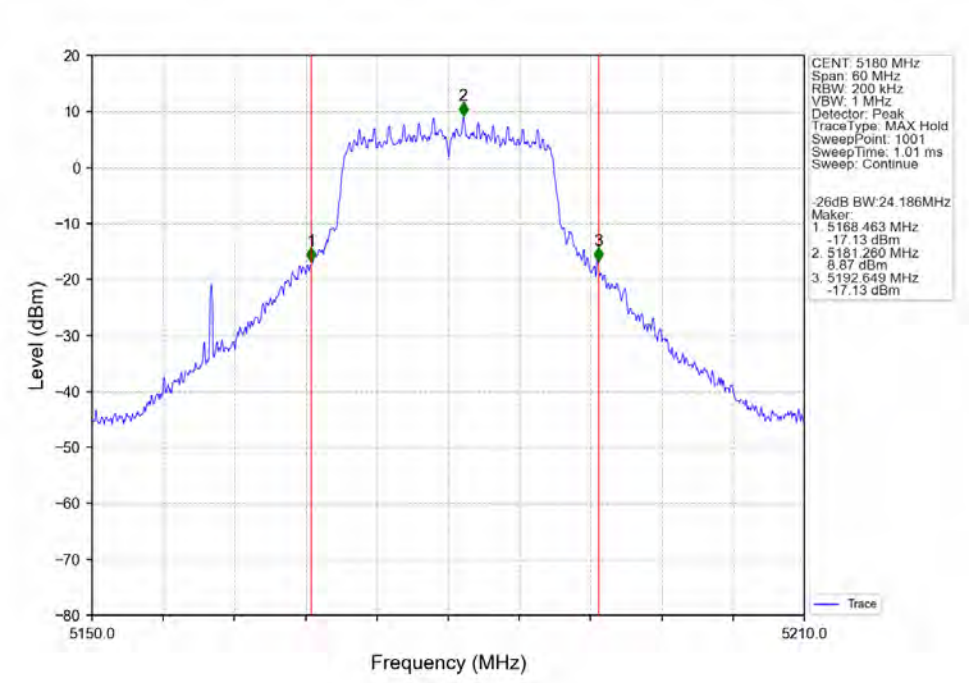
802.11a_MCH_5580MHz_Ant1_NTNV



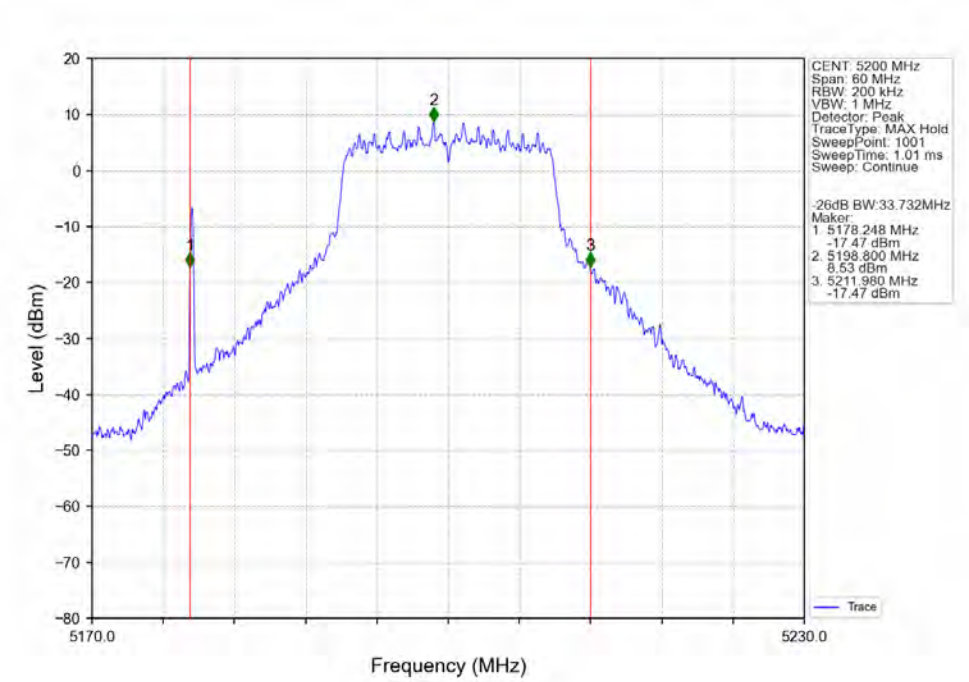
802.11a_HCH_5700MHz_Ant1_NTNV



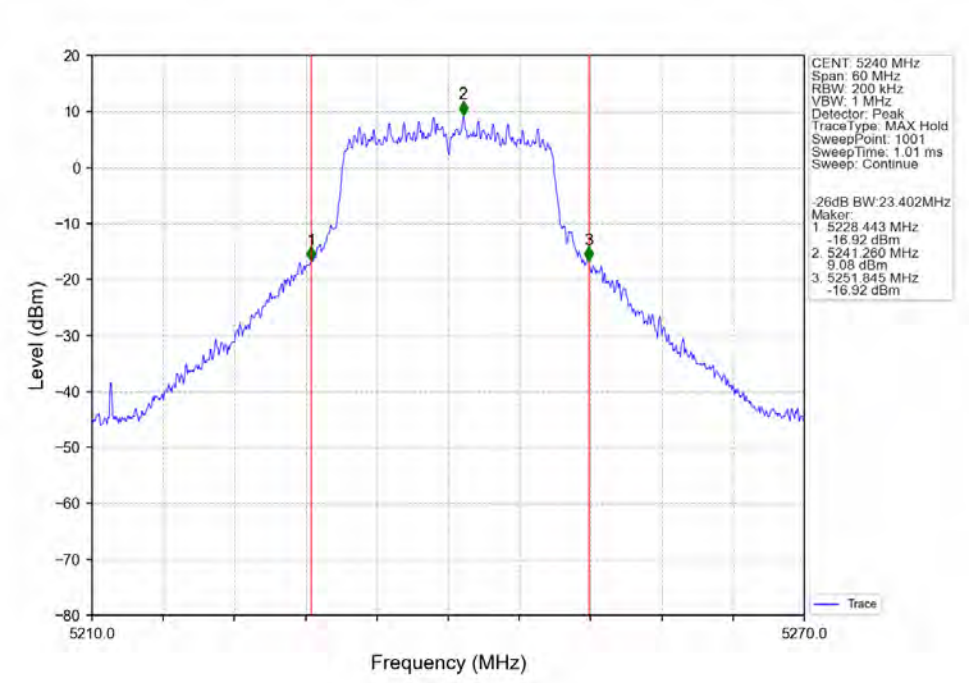
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



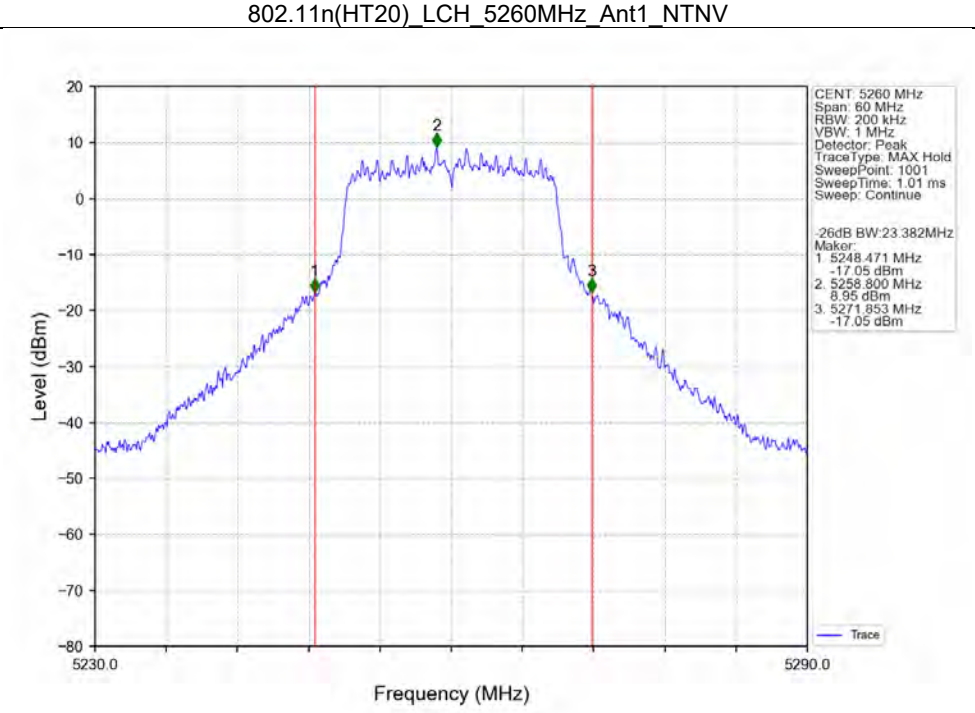
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



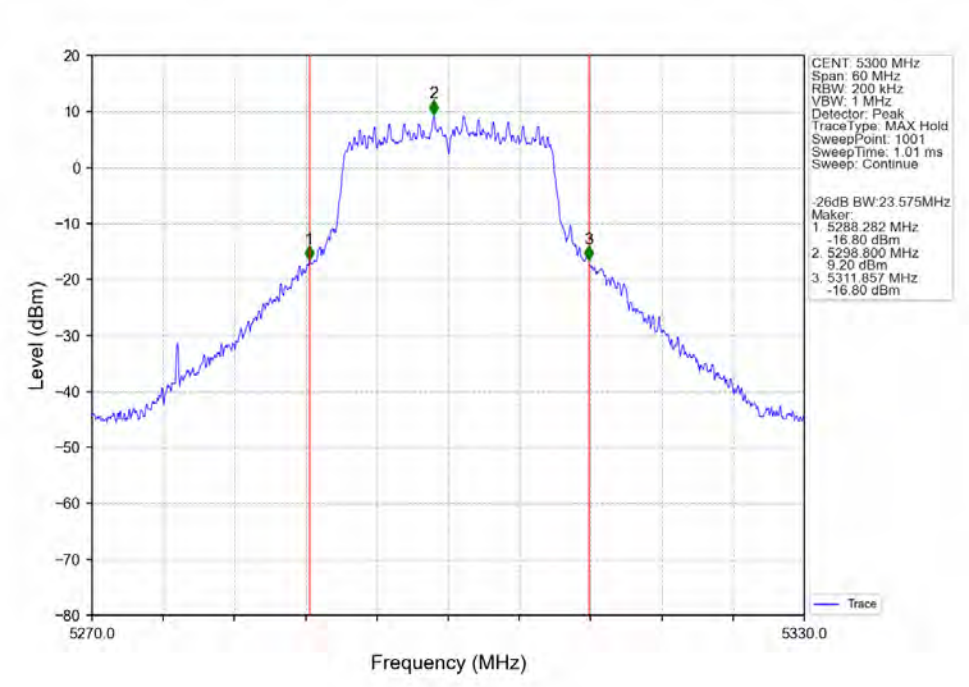
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



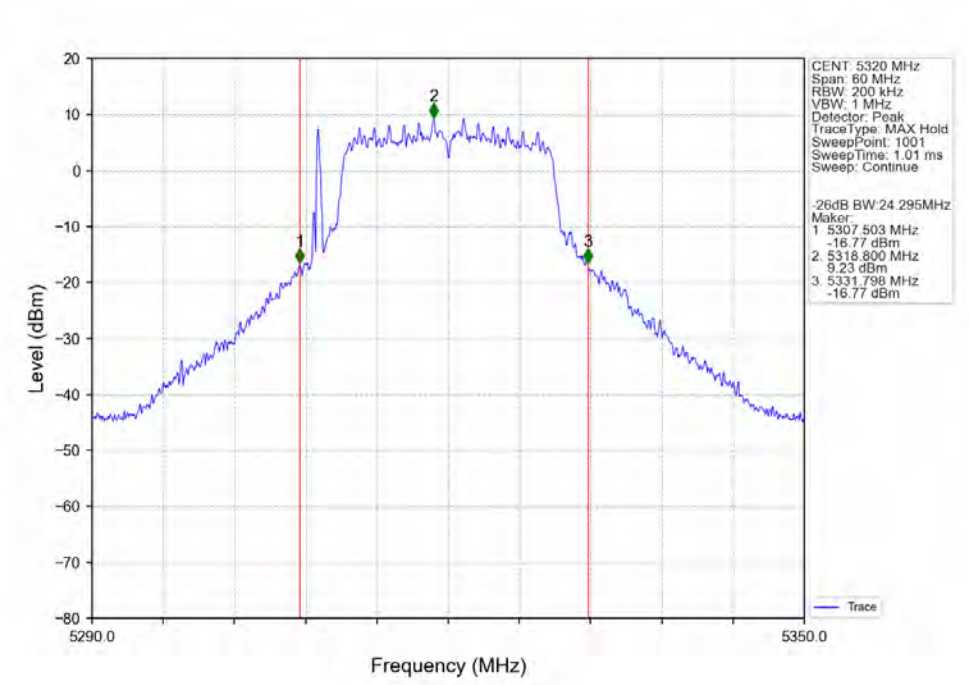
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV



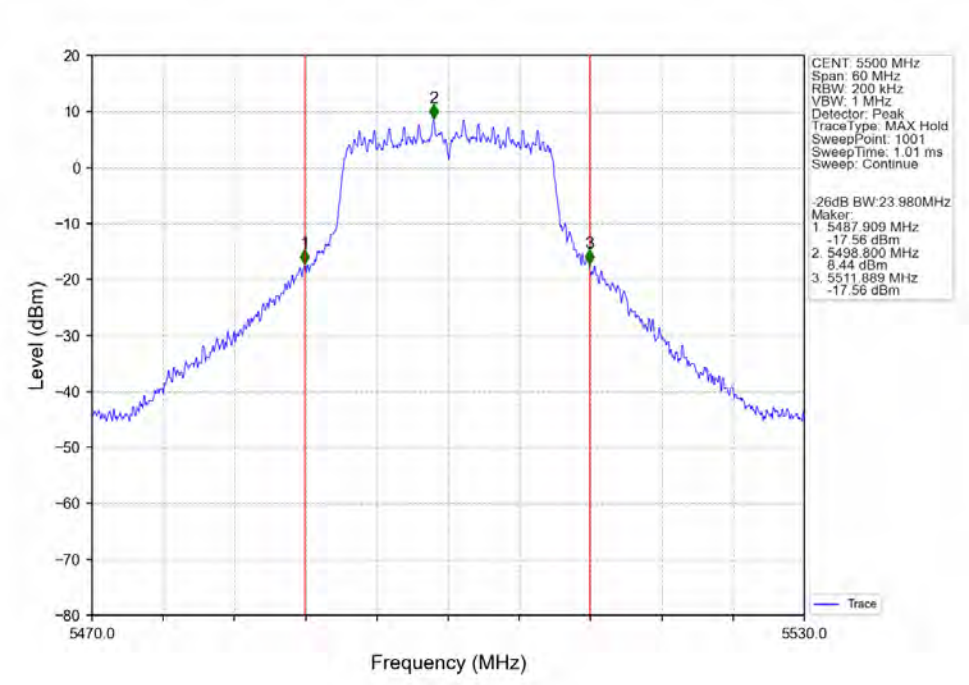
802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



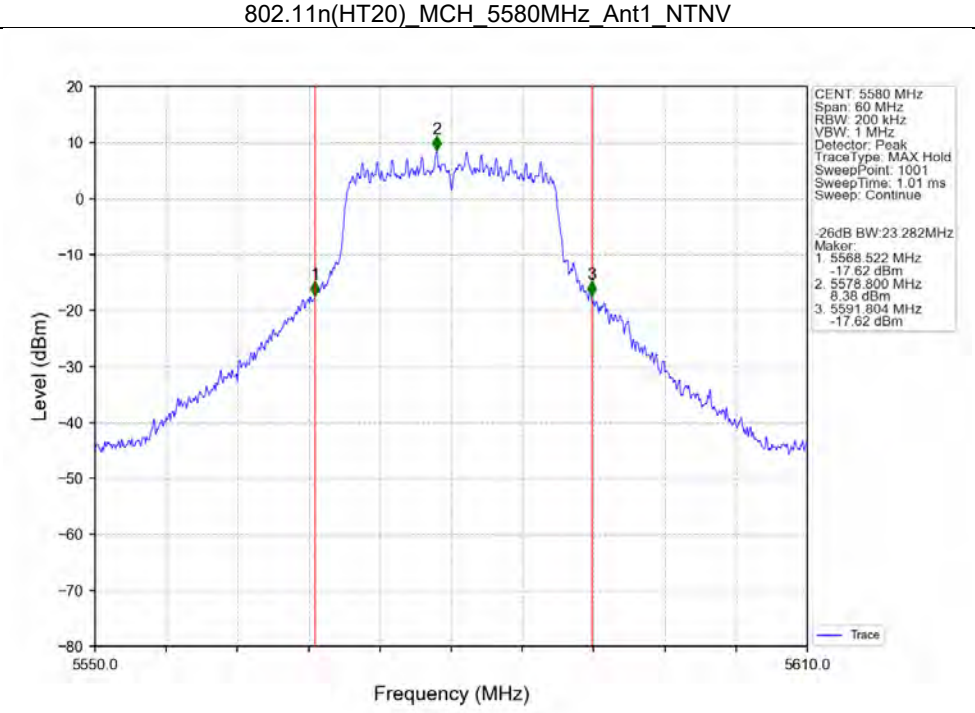
802.11n(HT20)_HCH_5320MHz_Ant1_NTNV



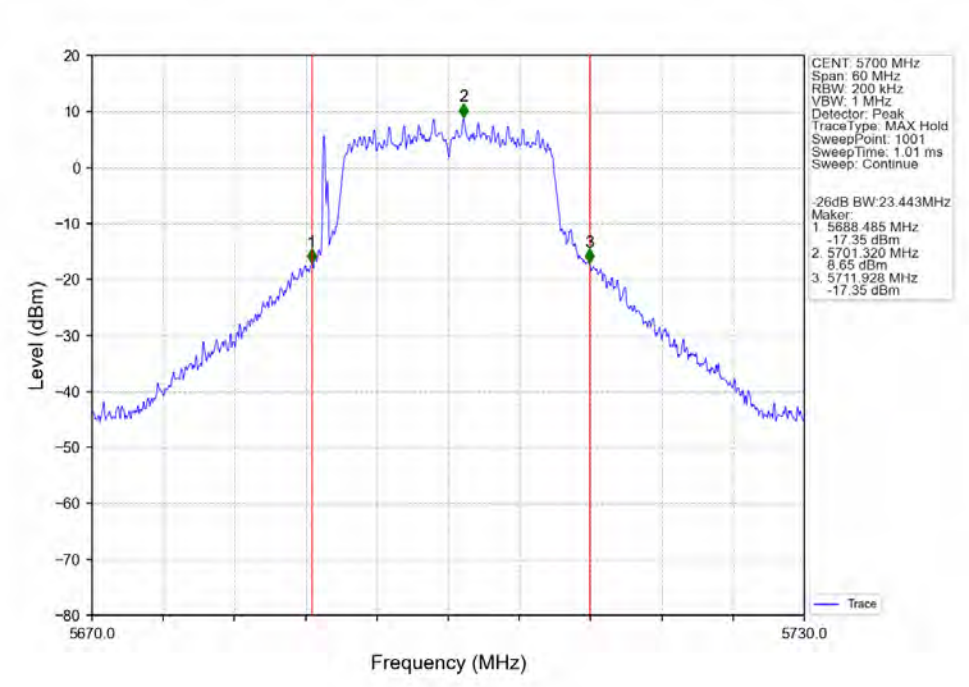
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



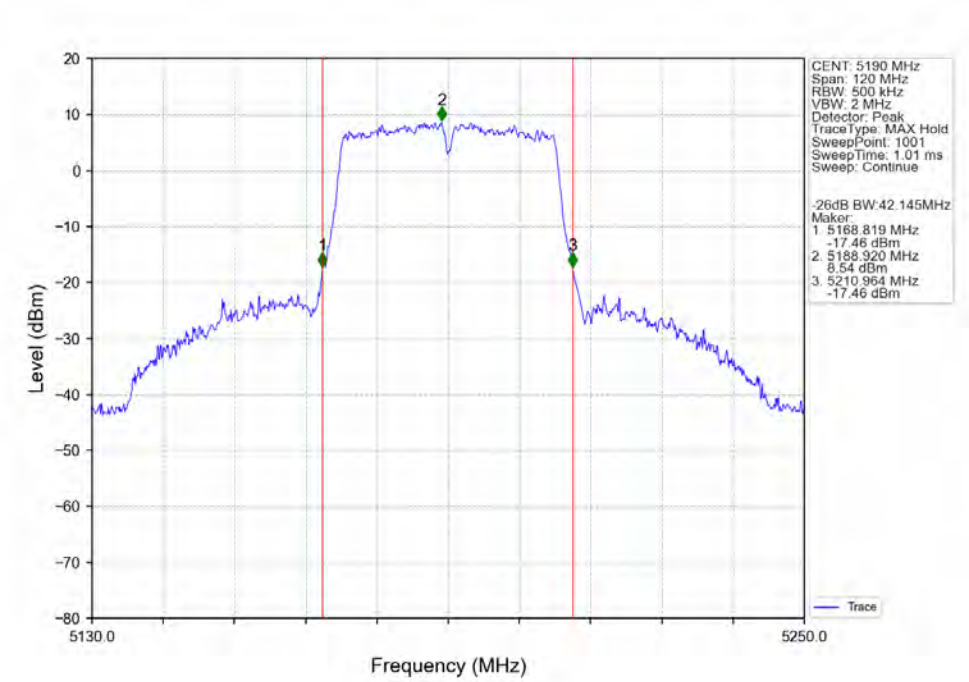
802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



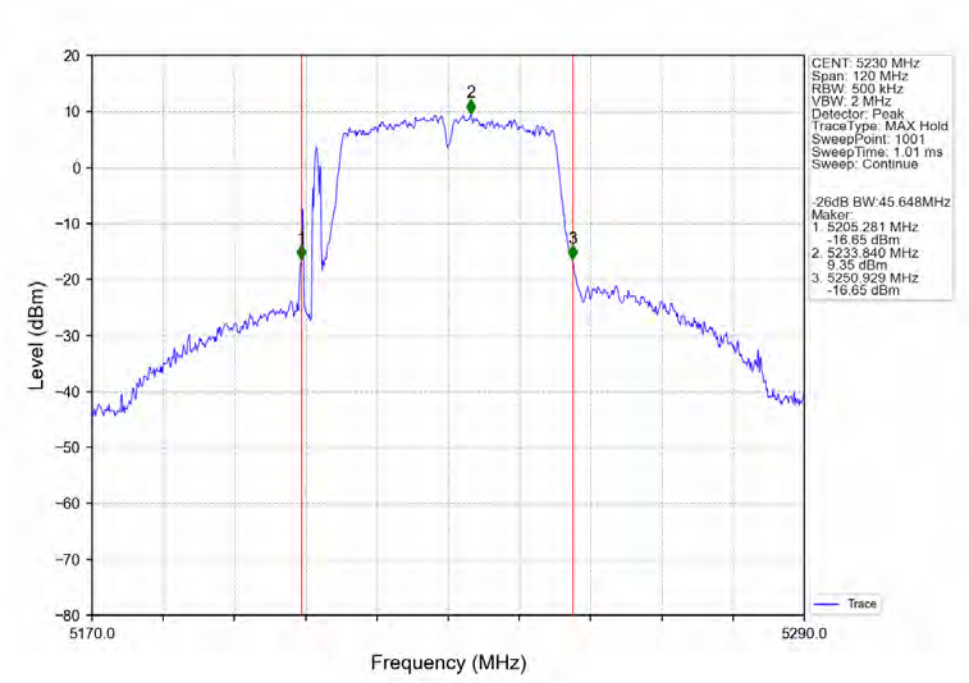
802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



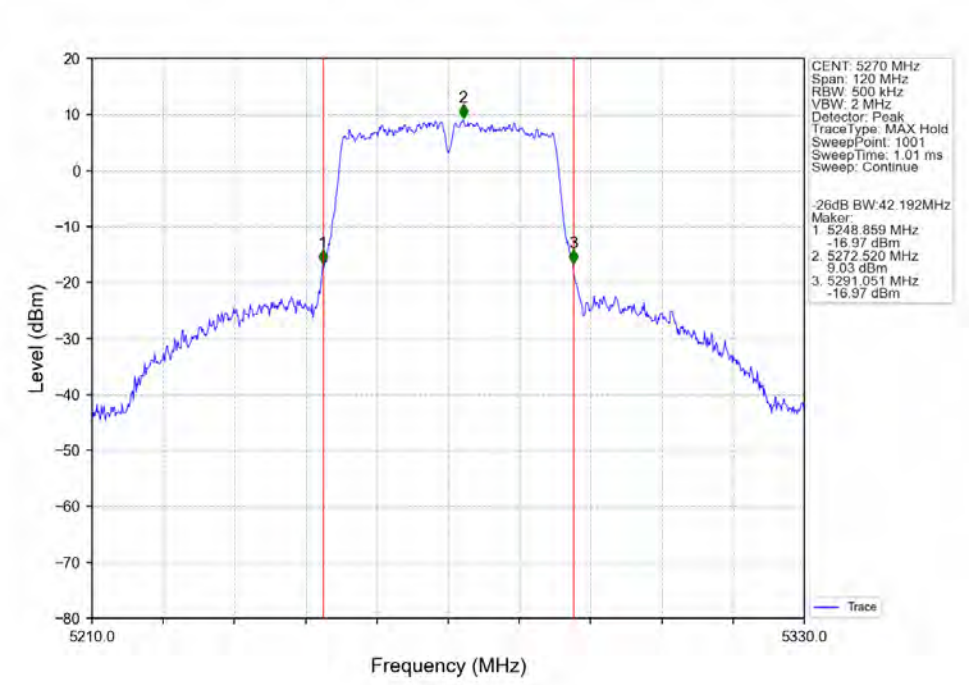
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



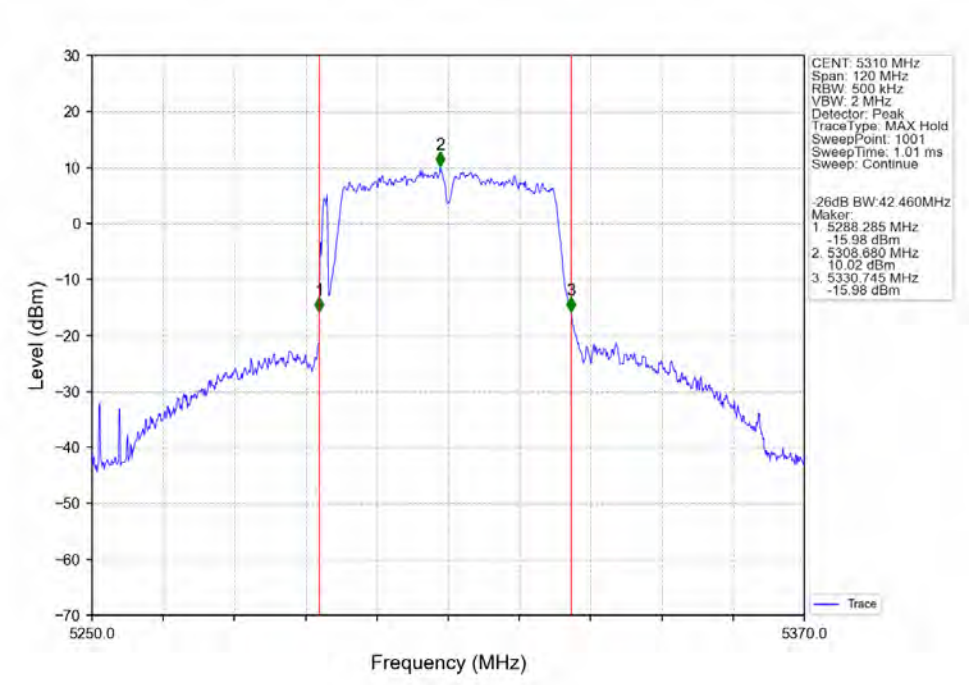
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



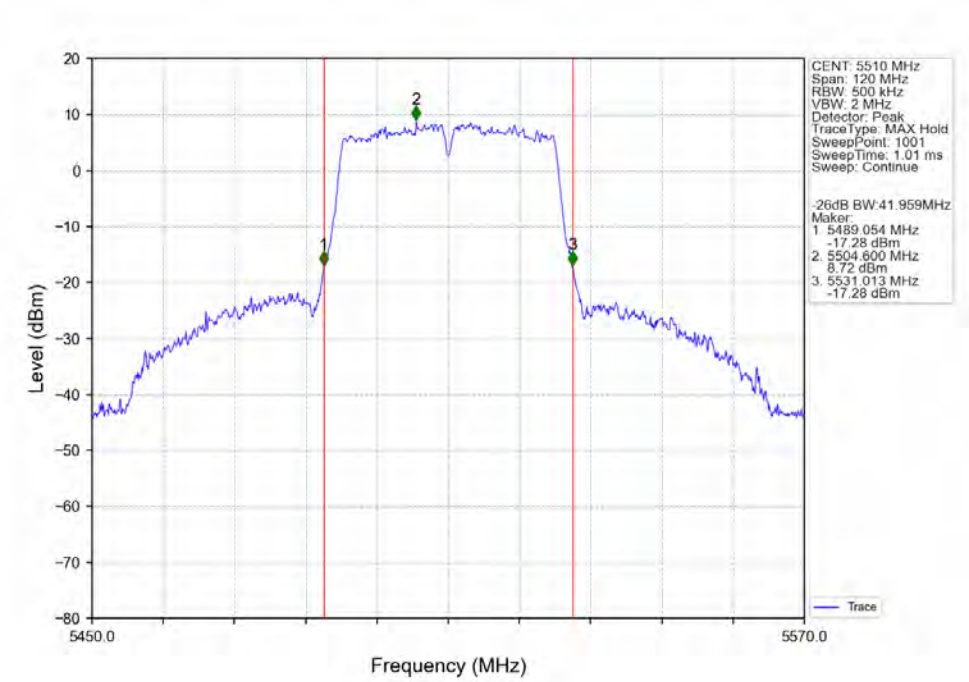
802.11n(HT40)_LCH_5270MHz_Ant1_NTNV



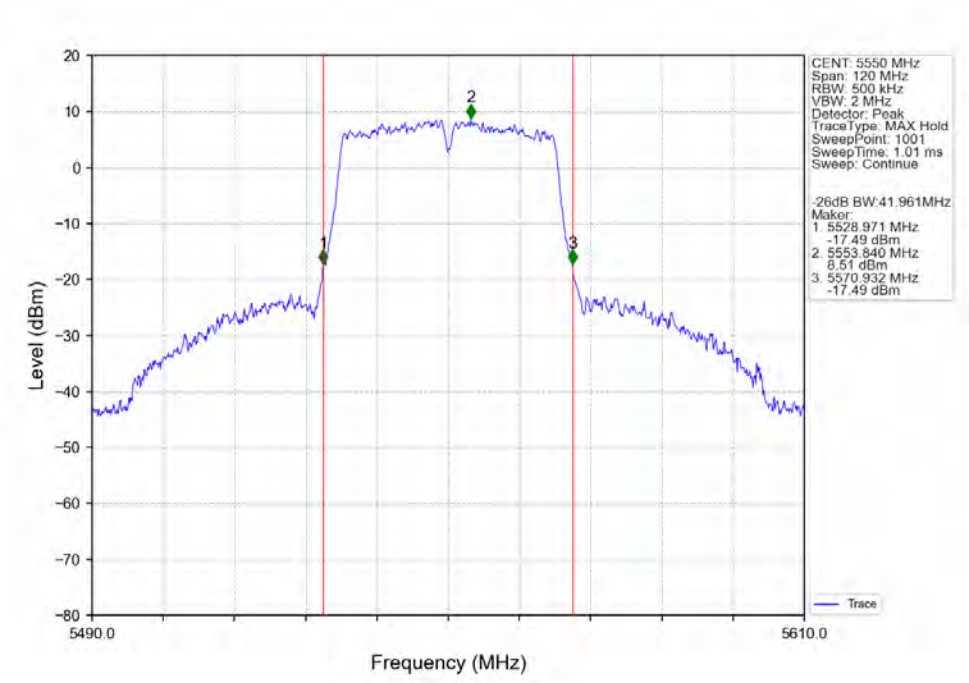
802.11n(HT40)_HCH_5310MHz_Ant1_NTNV



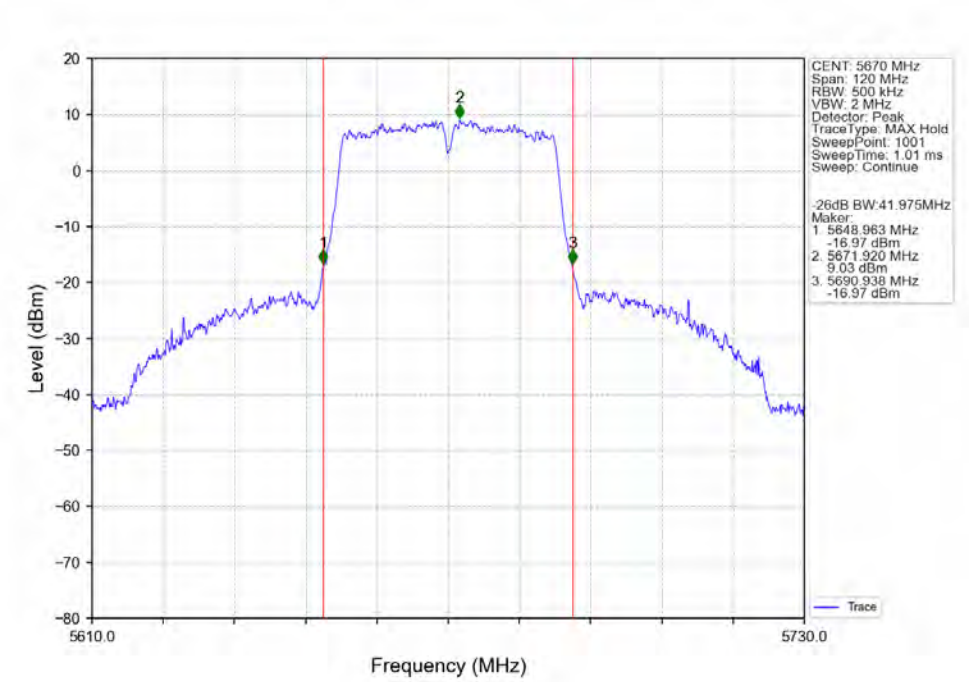
802.11n(HT40)_LCH_5510MHz_Ant1_NTNV



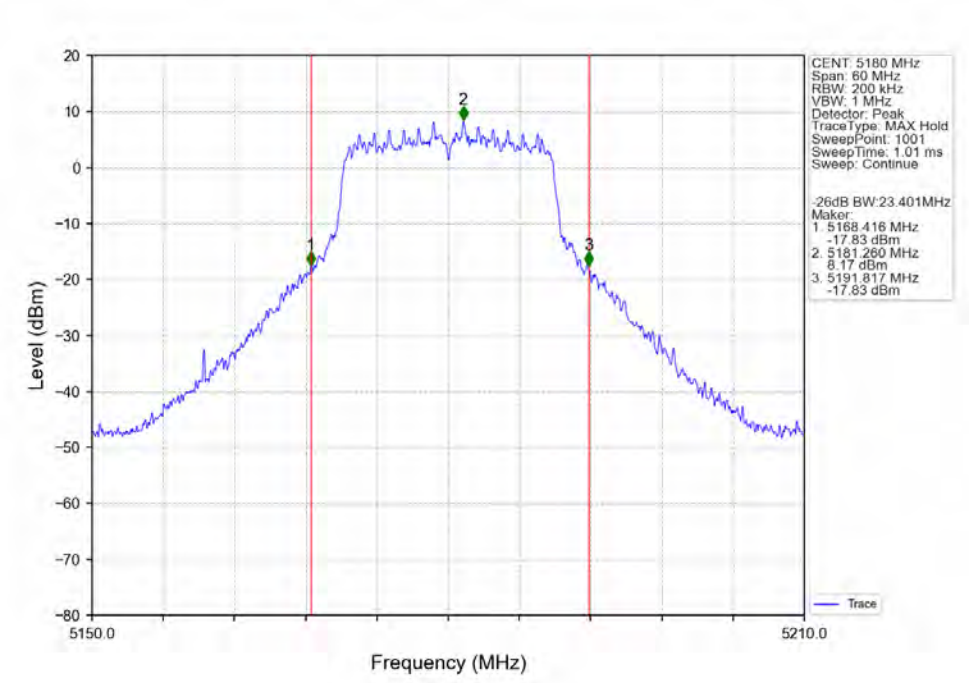
802.11n(HT40)_MCH_5550MHz_Ant1_NTNV



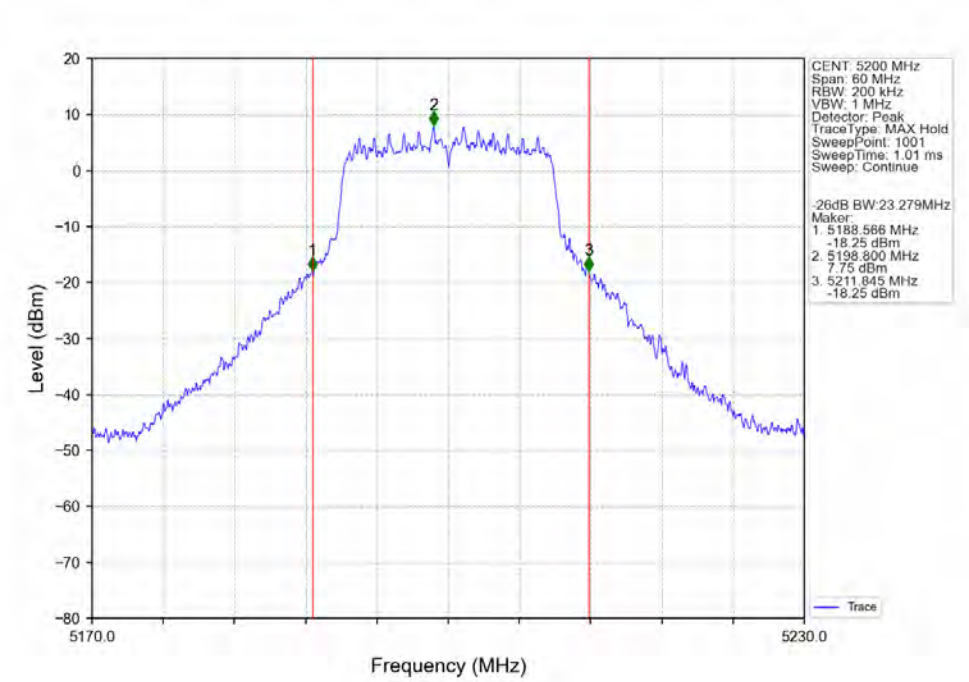
802.11n(HT40)_HCH_5670MHz_Ant1_NTNV



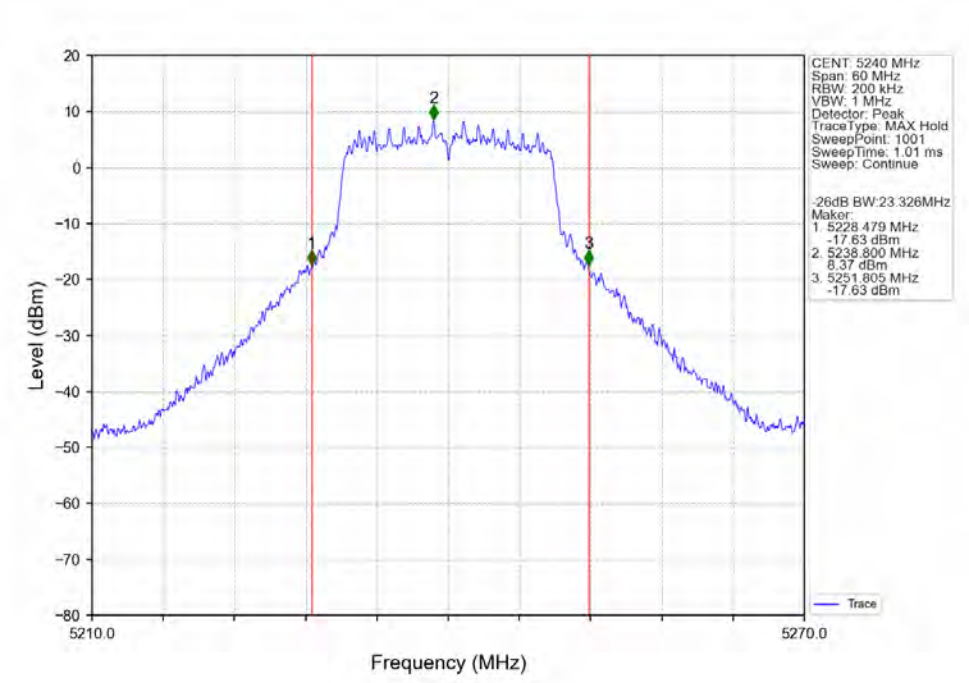
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



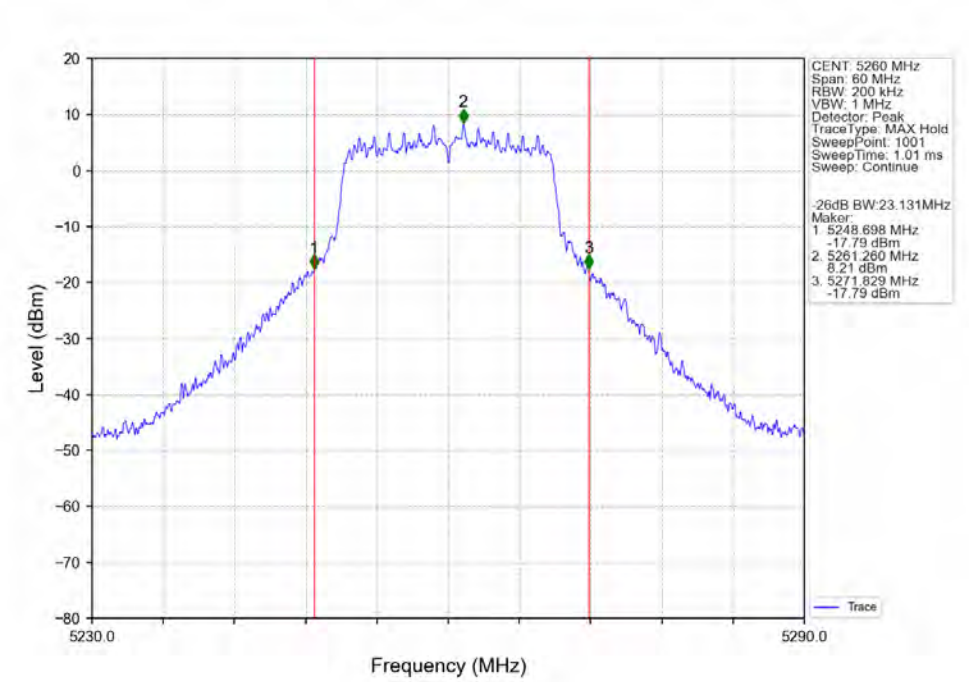
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



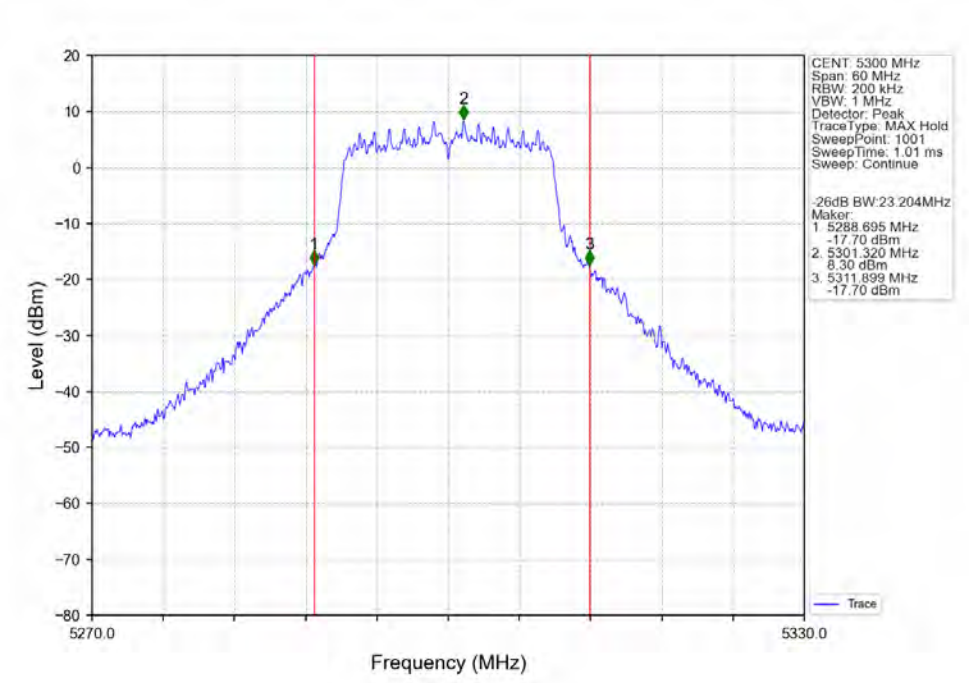
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



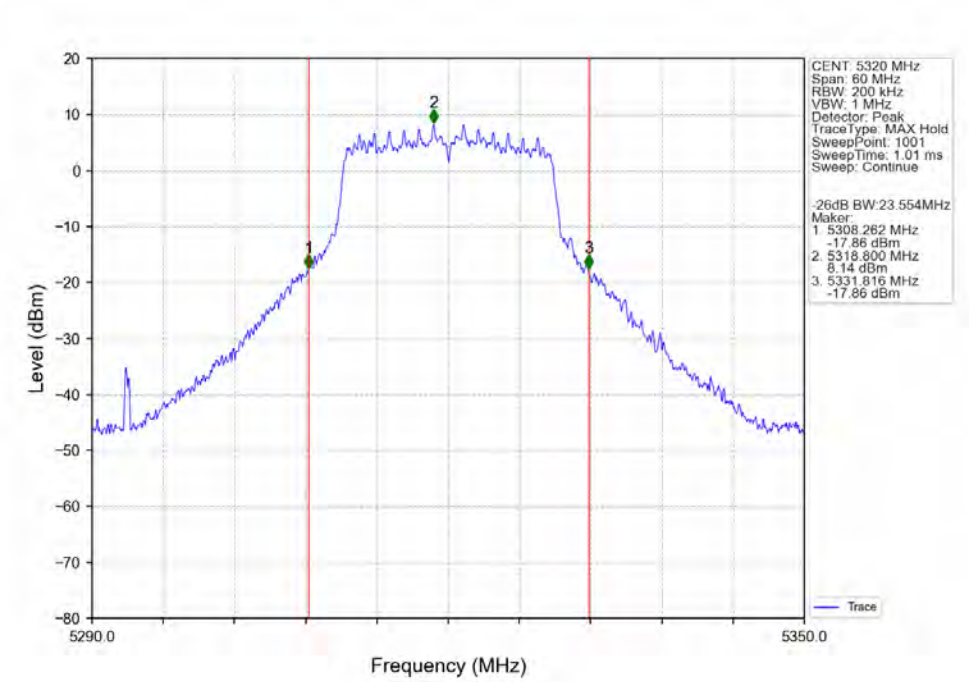
802.11ac(VHT20)_LCH_5260MHz_Ant1_NTNV



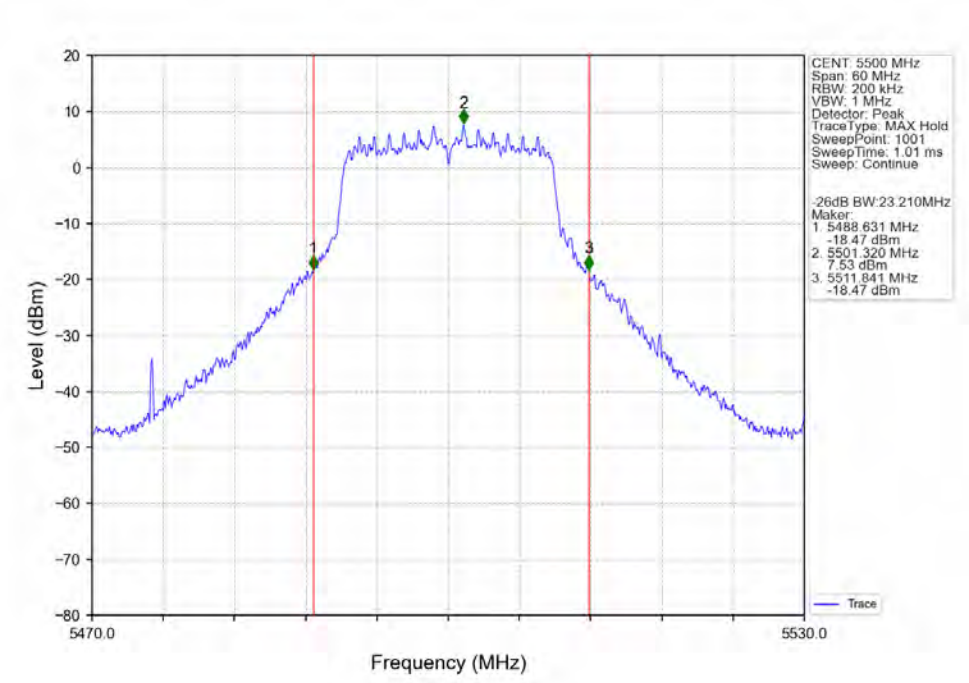
802.11ac(VHT20)_MCH_5300MHz_Ant1_NTNV



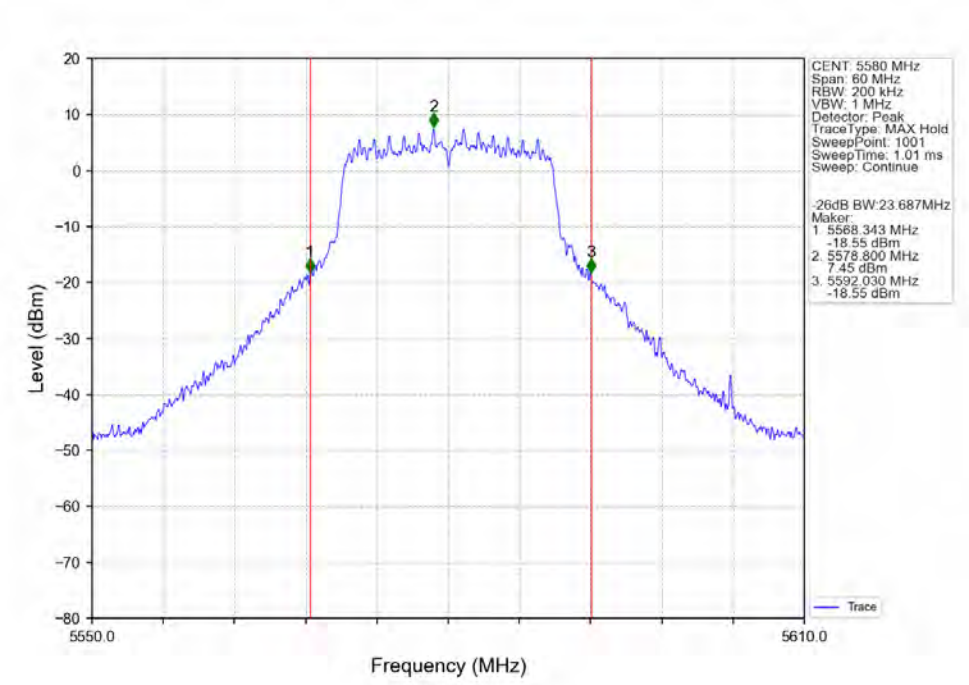
802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV



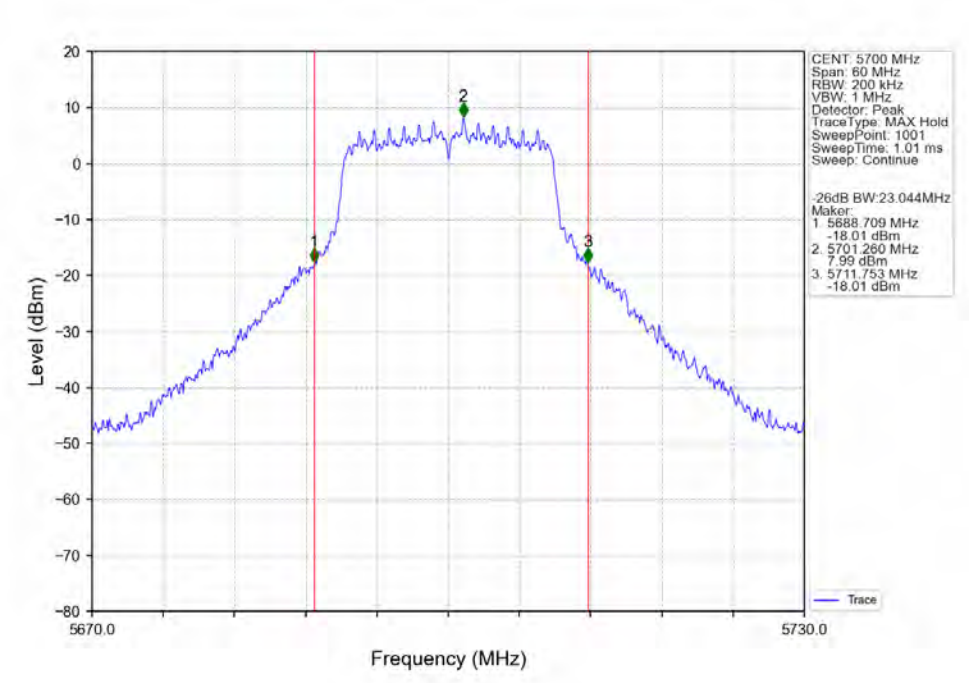
802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV



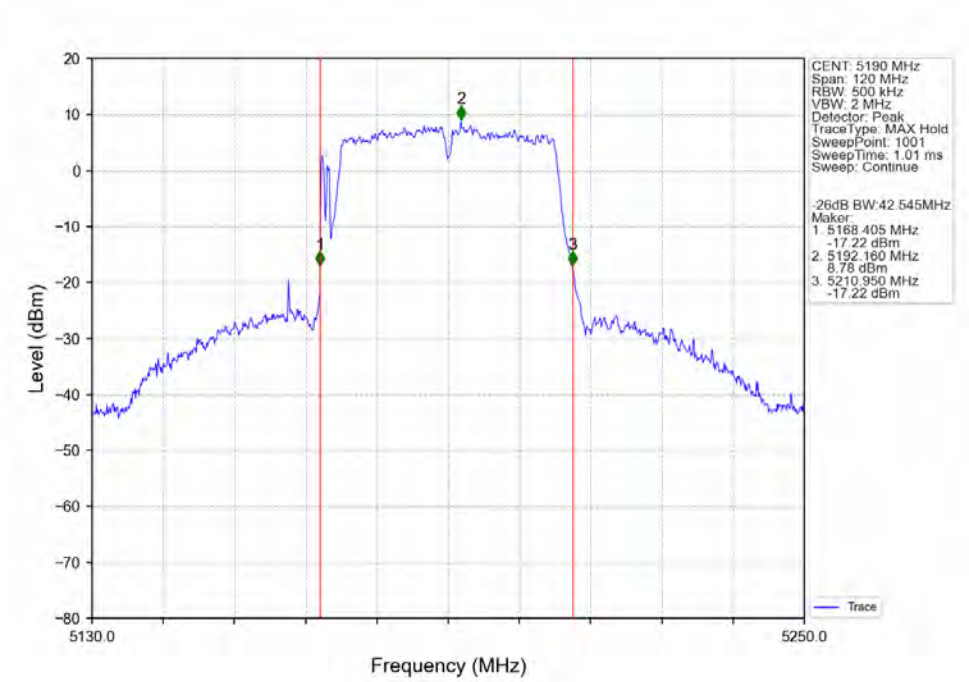
802.11ac(VHT20)_MCH_5580MHz_Ant1_NTNV



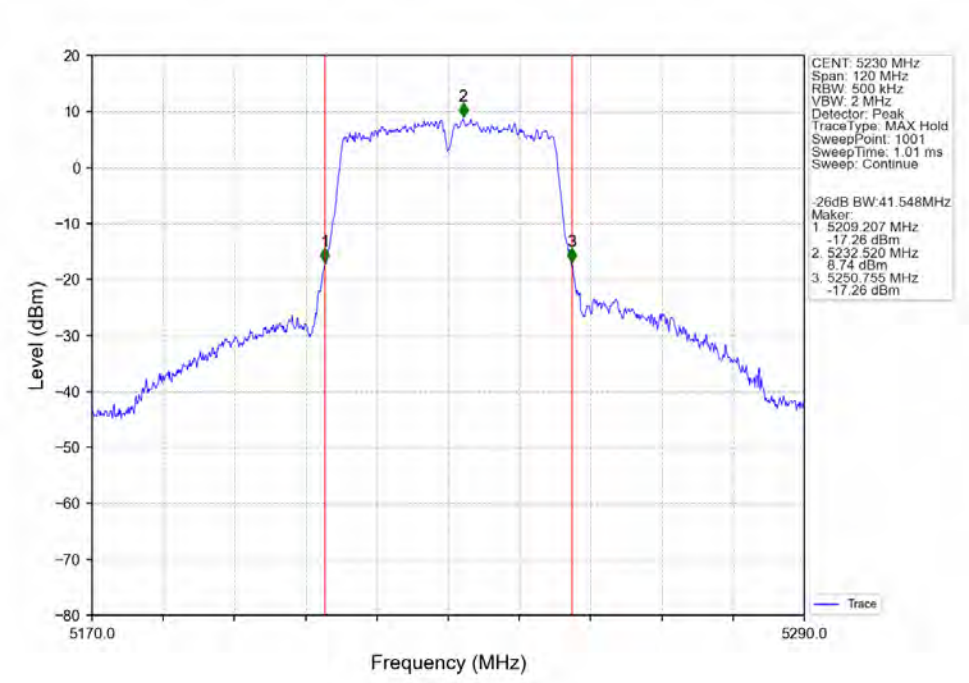
802.11ac(VHT20)_HCH_5700MHz_Ant1_NTNV



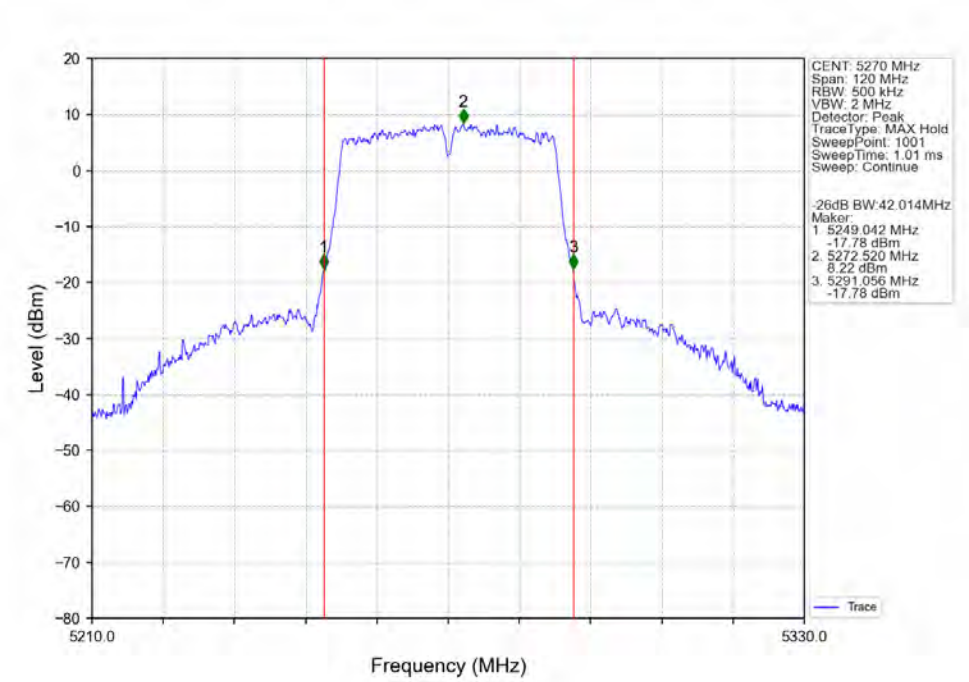
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



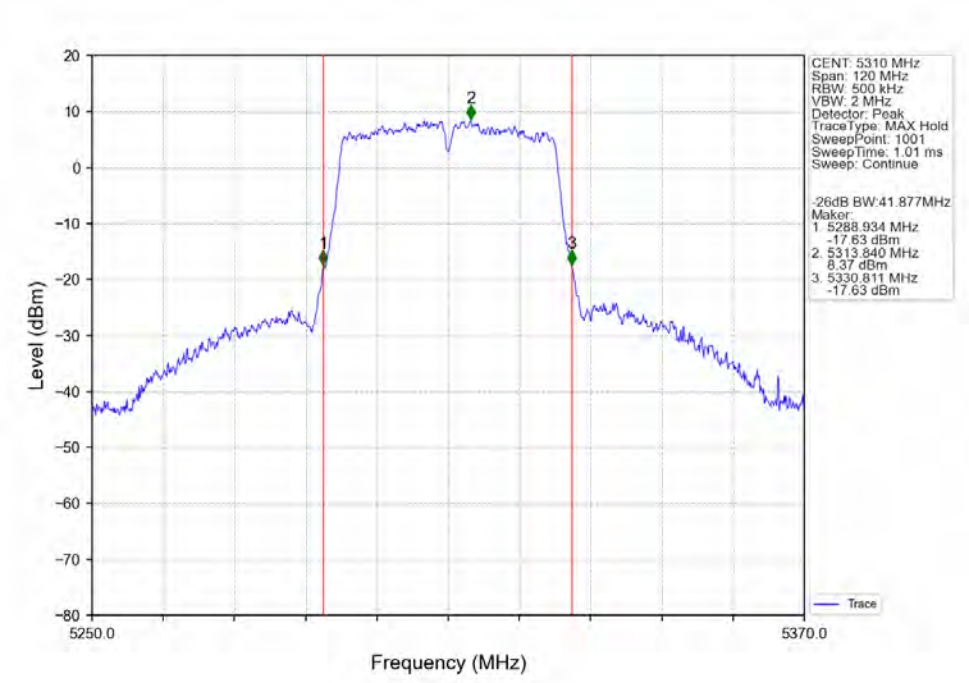
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



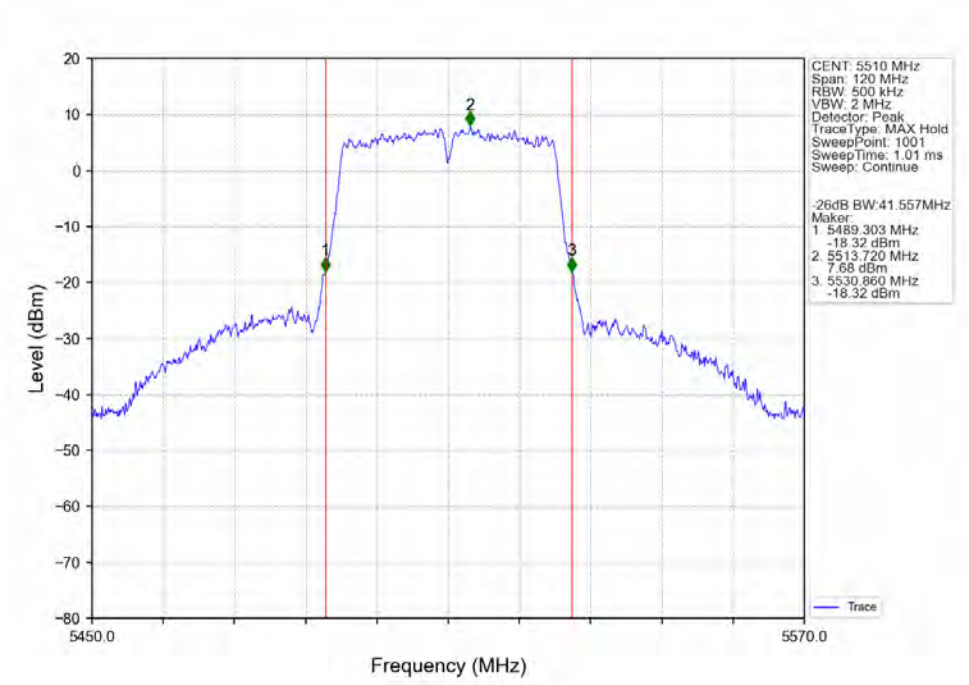
802.11ac(VHT40)_LCH_5270MHz_Ant1_NTNV



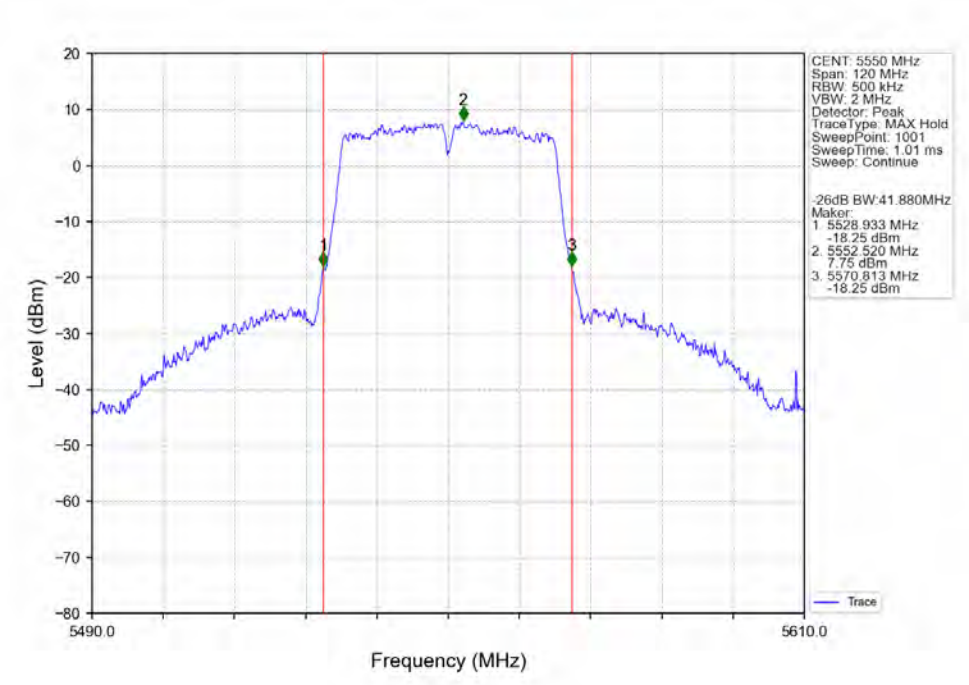
802.11ac(VHT40)_HCH_5310MHz_Ant1_NTNV



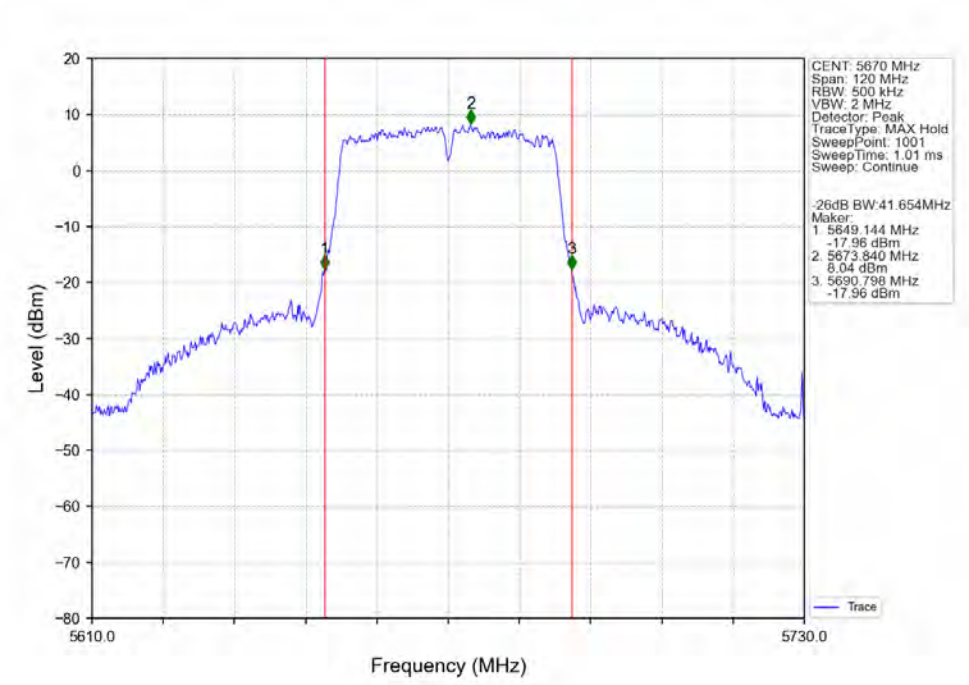
802.11ac(VHT40)_LCH_5510MHz_Ant1_NTNV



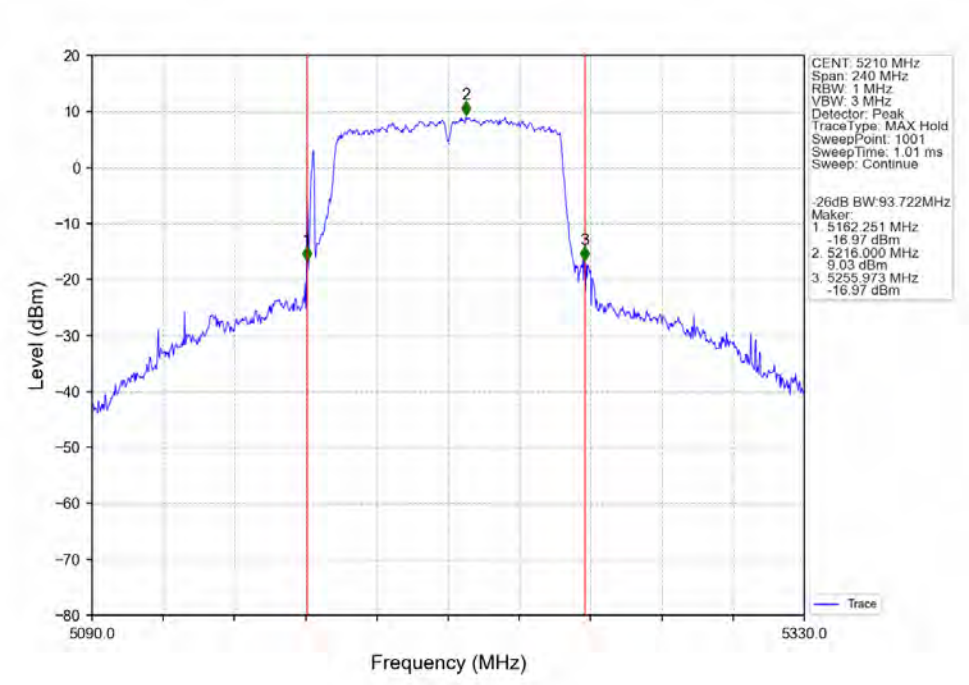
802.11ac(VHT40)_MCH_5550MHz_Ant1_NTNV



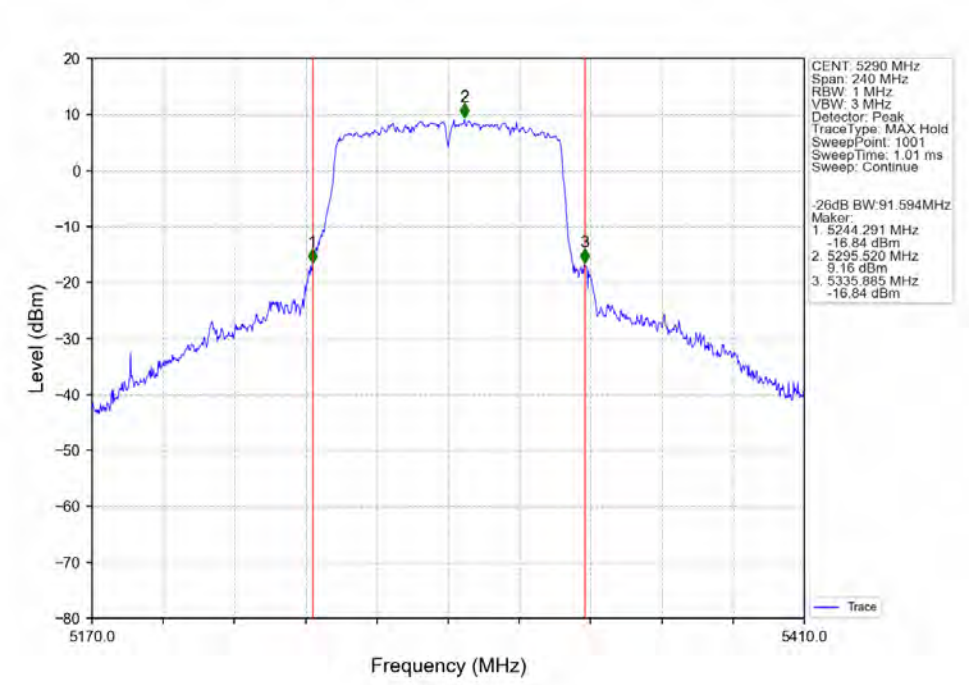
802.11ac(VHT40)_HCH_5670MHz_Ant1_NTNV



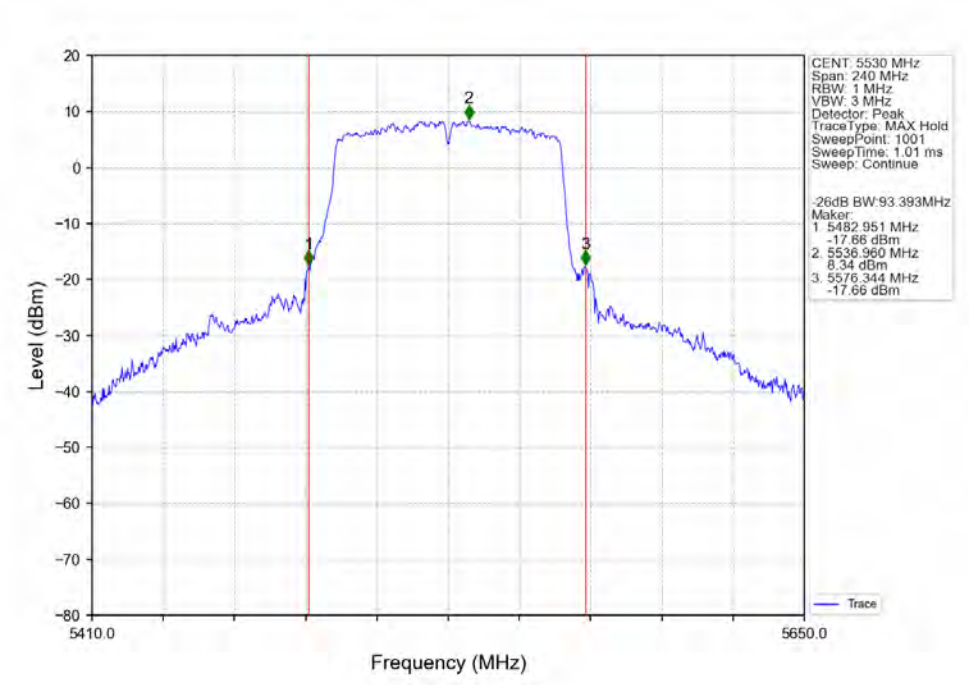
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



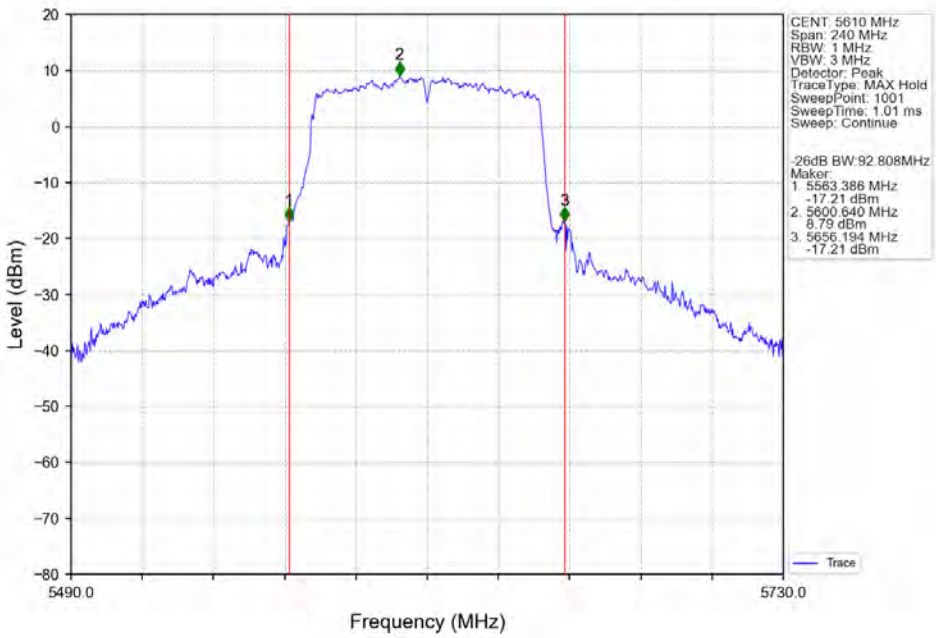
802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



802.11ac(VHT80)_LCH_5530MHz_Ant1_NTNV



802.11ac(VHT80)_HCH_5610MHz_Ant1_NTNV



3. Maximum Conducted Output Power

3.1 Test Result

3.1.1 Power

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	14.33	<=23.98	Pass
		5200	14.38	<=23.98	Pass
		5240	14.42	<=23.98	Pass
		5260	14.68	<=23.98	Pass
		5300	14.53	<=23.98	Pass
		5320	14.64	<=23.98	Pass
		5500	14.39	<=23.98	Pass
		5580	14.52	<=23.98	Pass
		5700	14.47	<=23.98	Pass
		5745	9.82	<=30	Pass
		5785	9.78	<=30	Pass
		5825	9.68	<=30	Pass
802.11n (HT20)	SISO	5180	13.54	<=23.98	Pass
		5200	13.52	<=23.98	Pass
		5240	13.43	<=23.98	Pass
		5260	13.30	<=23.98	Pass
		5300	13.42	<=23.98	Pass
		5320	13.39	<=23.98	Pass
		5500	13.41	<=23.98	Pass
		5580	13.39	<=23.98	Pass
		5700	13.36	<=23.98	Pass
		5745	9.72	<=30	Pass
		5785	9.87	<=30	Pass
		5825	9.92	<=30	Pass
802.11n (HT40)	SISO	5190	13.48	<=23.98	Pass
		5230	13.36	<=23.98	Pass
		5270	13.51	<=23.98	Pass
		5310	13.22	<=23.98	Pass
		5510	13.61	<=23.98	Pass
		5550	13.55	<=23.98	Pass
		5670	13.49	<=23.98	Pass
		5755	10.03	<=30	Pass
		5795	9.88	<=30	Pass
802.11ac (VHT20)	SISO	5180	12.39	<=23.98	Pass
		5200	12.28	<=23.98	Pass
		5240	12.42	<=23.98	Pass
		5260	12.44	<=23.98	Pass
		5300	12.39	<=23.98	Pass
		5320	12.46	<=23.98	Pass
		5500	12.32	<=23.98	Pass
		5580	12.41	<=23.98	Pass
		5700	12.22	<=23.98	Pass
		5745	9.94	<=30	Pass
		5785	9.86	<=30	Pass
		5825	9.97	<=30	Pass
802.11ac (VHT40)	SISO	5190	12.58	<=23.98	Pass
		5230	12.62	<=23.98	Pass
		5270	12.64	<=23.98	Pass

		5310	12.71	<=23.98	Pass
		5510	12.74	<=23.98	Pass
		5550	12.67	<=23.98	Pass
		5670	12.73	<=23.98	Pass
		5755	9.78	<=30	Pass
		5795	9.81	<=30	Pass
802.11ac (VHT80)	SISO	5210	12.33	<=23.98	Pass
		5290	12.51	<=23.98	Pass
		5530	12.44	<=23.98	Pass
		5610	12.37	<=23.98	Pass
		5775	10.05	<=30	Pass
Note1: Antenna Gain: Ant1: 2.81dBi;					

4. Maximum Power Spectral Density

4.1 Test Result

4.1.1 PSD

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/MHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5180	6.68	<=11	Pass
		5200	6.42	<=11	Pass
		5240	6.99	<=11	Pass
		5260	7.02	<=11	Pass
		5300	7.21	<=11	Pass
		5320	7.00	<=11	Pass
		5500	6.31	<=11	Pass
		5580	5.89	<=11	Pass
		5700	6.52	<=11	Pass
802.11n (HT20)	SISO	5180	6.27	<=11	Pass
		5200	6.08	<=11	Pass
		5240	6.56	<=11	Pass
		5260	6.47	<=11	Pass
		5300	6.60	<=11	Pass
		5320	6.61	<=11	Pass
		5500	5.73	<=11	Pass
		5580	5.81	<=11	Pass
		5700	6.13	<=11	Pass
802.11n (HT40)	SISO	5190	3.93	<=11	Pass
		5230	4.71	<=11	Pass
		5270	4.58	<=11	Pass
		5310	4.69	<=11	Pass
		5510	3.83	<=11	Pass
		5550	3.96	<=11	Pass
		5670	4.19	<=11	Pass
802.11ac (VHT20)	SISO	5180	5.37	<=11	Pass
		5200	5.23	<=11	Pass
		5240	5.74	<=11	Pass
		5260	5.67	<=11	Pass
		5300	5.75	<=11	Pass
		5320	5.49	<=11	Pass
		5500	4.79	<=11	Pass
		5580	4.84	<=11	Pass
		5700	5.21	<=11	Pass
802.11ac (VHT40)	SISO	5190	3.39	<=11	Pass
		5230	3.99	<=11	Pass
		5270	3.59	<=11	Pass
		5310	3.78	<=11	Pass
		5510	2.80	<=11	Pass
		5550	3.28	<=11	Pass
		5670	3.48	<=11	Pass
802.11ac (VHT80)	SISO	5210	0.20	<=11	Pass
		5290	0.24	<=11	Pass
		5530	-0.47	<=11	Pass
		5610	0.09	<=11	Pass
Note1: Antenna Gain: Ant1: 2.81dBi;					

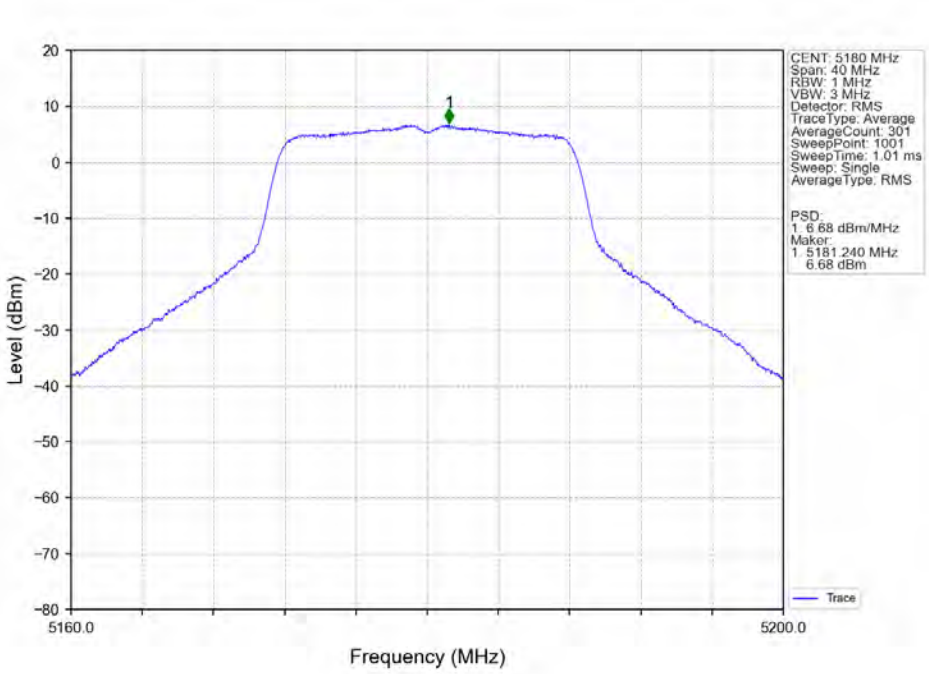
4.1.2 PSD-Band3

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/500kHz)		Verdict
			ANT1	Limit	
802.11a	SISO	5745	3.32	<=30	Pass
		5785	4.21	<=30	Pass
		5825	3.56	<=30	Pass
802.11n (HT20)	SISO	5745	2.95	<=30	Pass
		5785	3.99	<=30	Pass
		5825	3.09	<=30	Pass
802.11n (HT40)	SISO	5755	0.93	<=30	Pass
		5795	1.77	<=30	Pass
802.11ac (VHT20)	SISO	5745	2.28	<=30	Pass
		5785	2.65	<=30	Pass
		5825	2.13	<=30	Pass
802.11ac (VHT40)	SISO	5755	0.29	<=30	Pass
		5795	0.92	<=30	Pass
802.11ac (VHT80)	SISO	5775	-3.01	<=30	Pass
Note1: Antenna Gain: Ant1: 0.77dBi;					

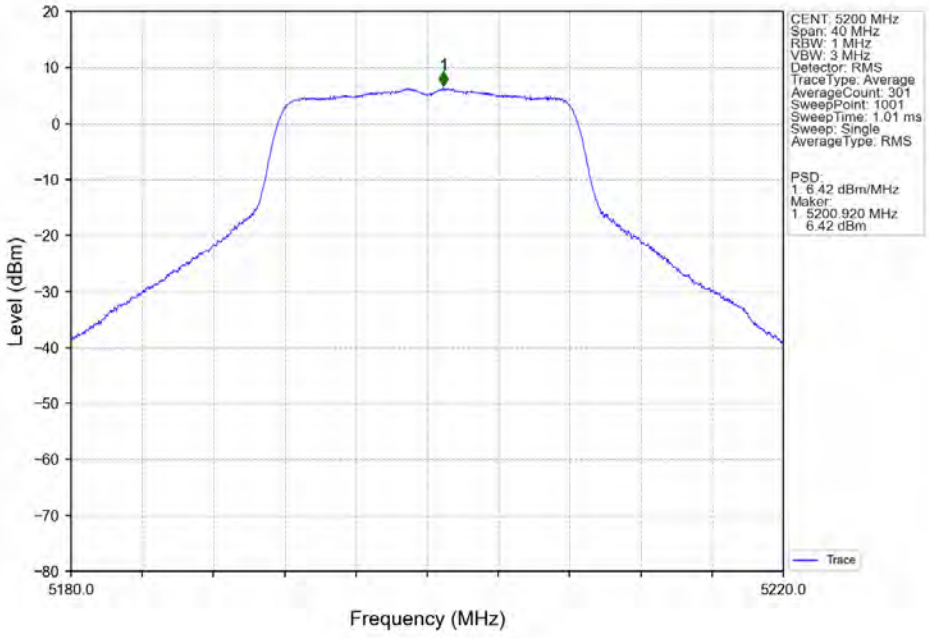
4.2 Test Graph

4.2.1 PSD

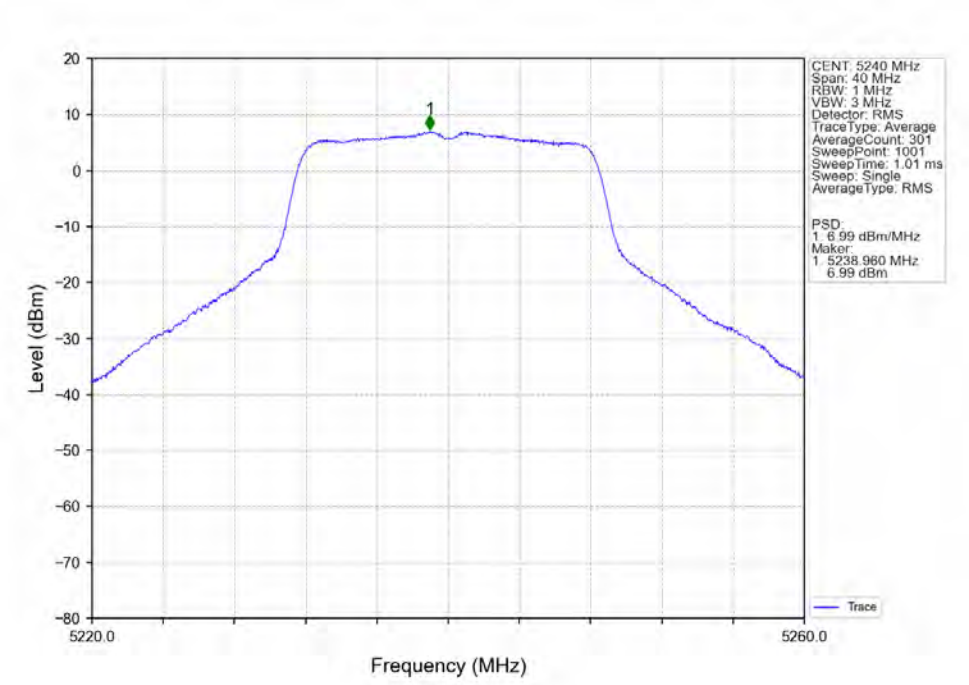
802.11a_LCH_5180MHz_Ant1_NTNV



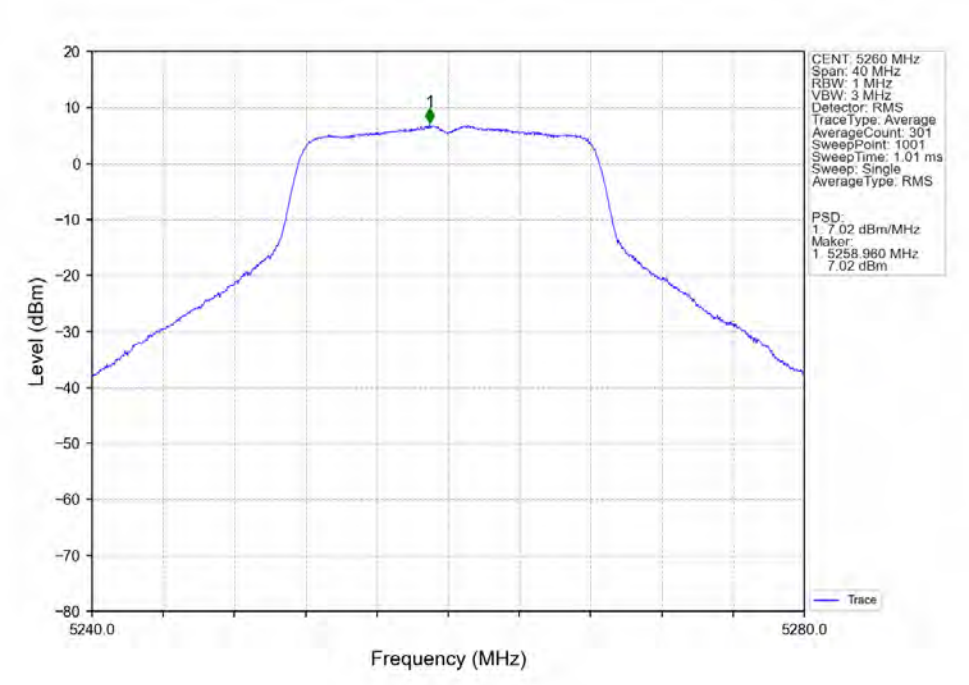
802.11a_MCH_5200MHz_Ant1_NTNV



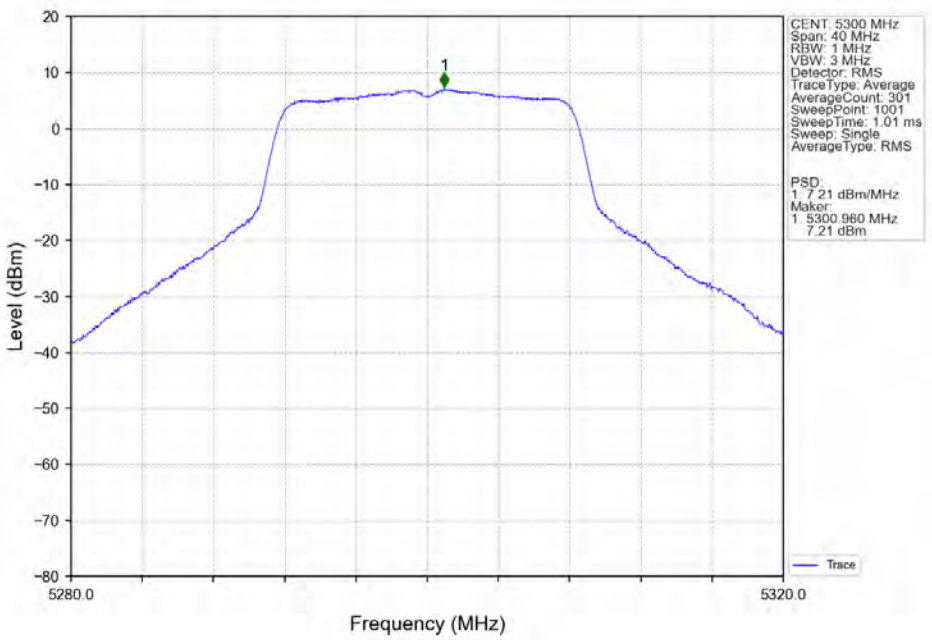
802.11a_HCH_5240MHz_Ant1_NTNV



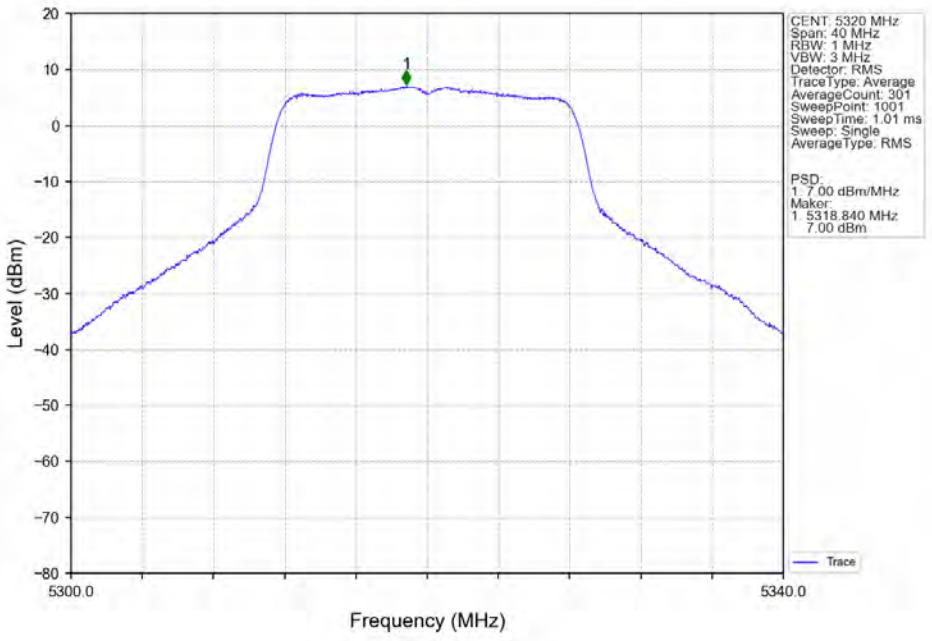
802.11a_LCH_5260MHz_Ant1_NTNV



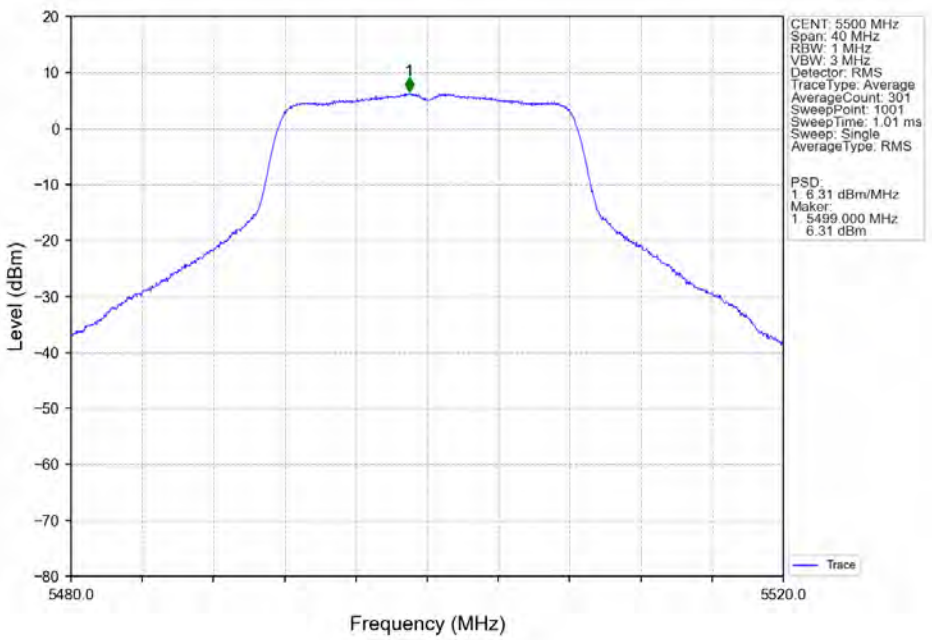
802.11a_MCH_5300MHz_Ant1_NTNV



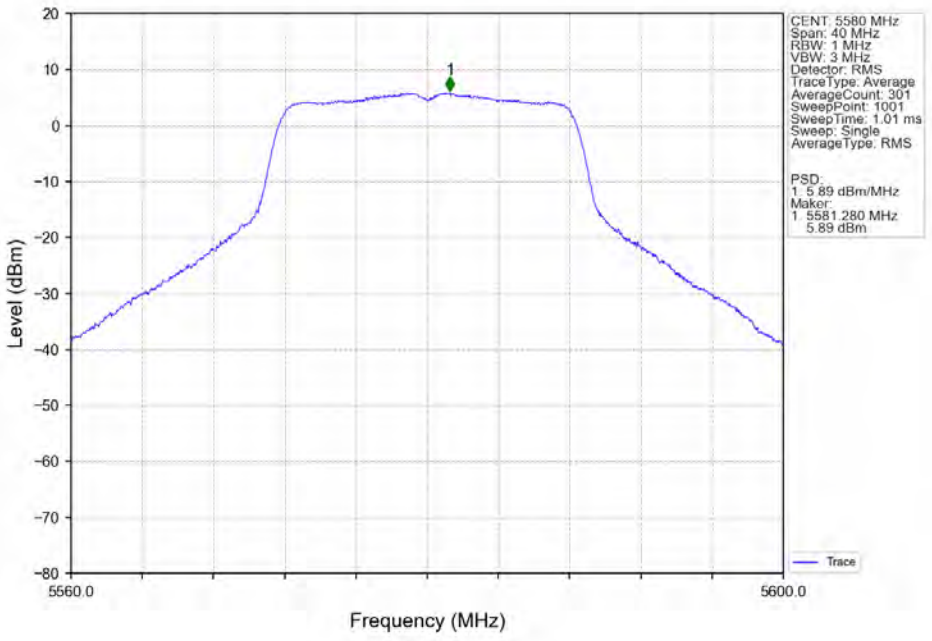
802.11a_HCH_5320MHz_Ant1_NTNV



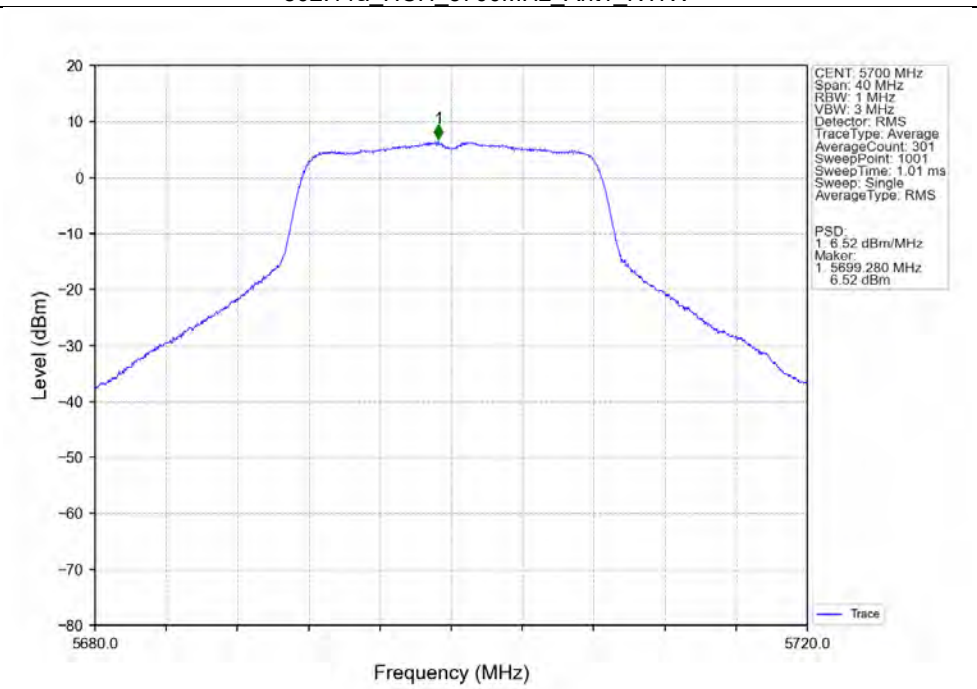
802.11a_LCH_5500MHz_Ant1_NTNV



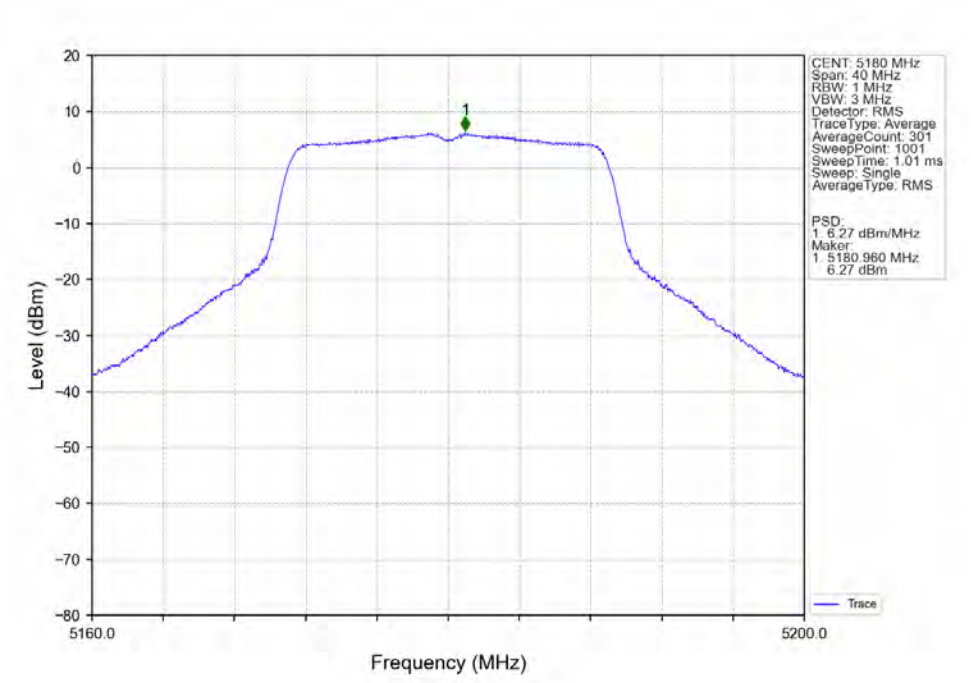
802.11a_MCH_5580MHz_Ant1_NTNV



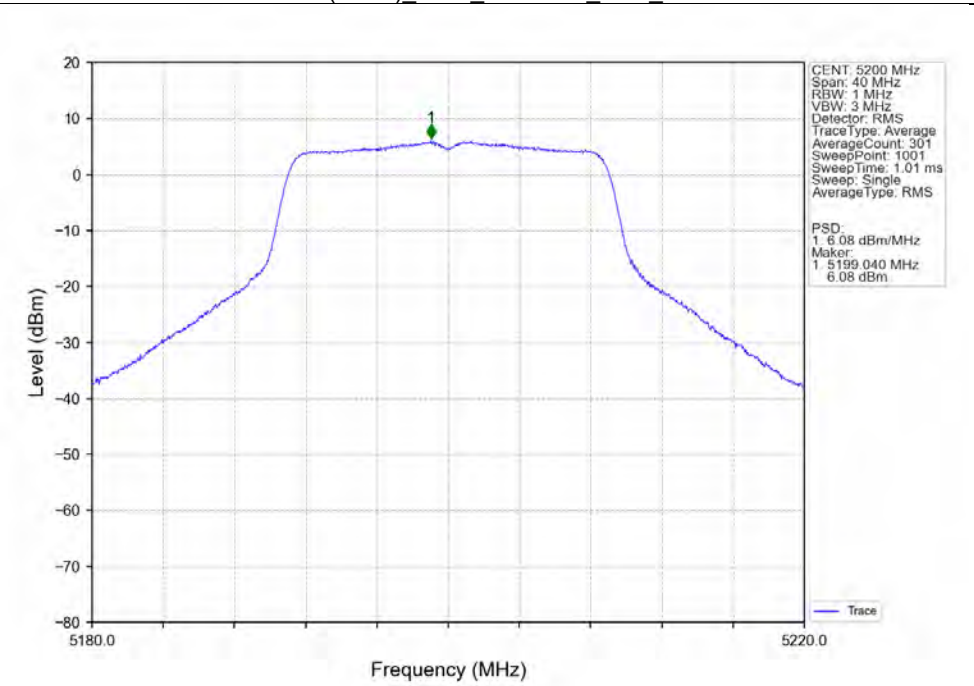
802.11a_HCH_5700MHz_Ant1_NTNV



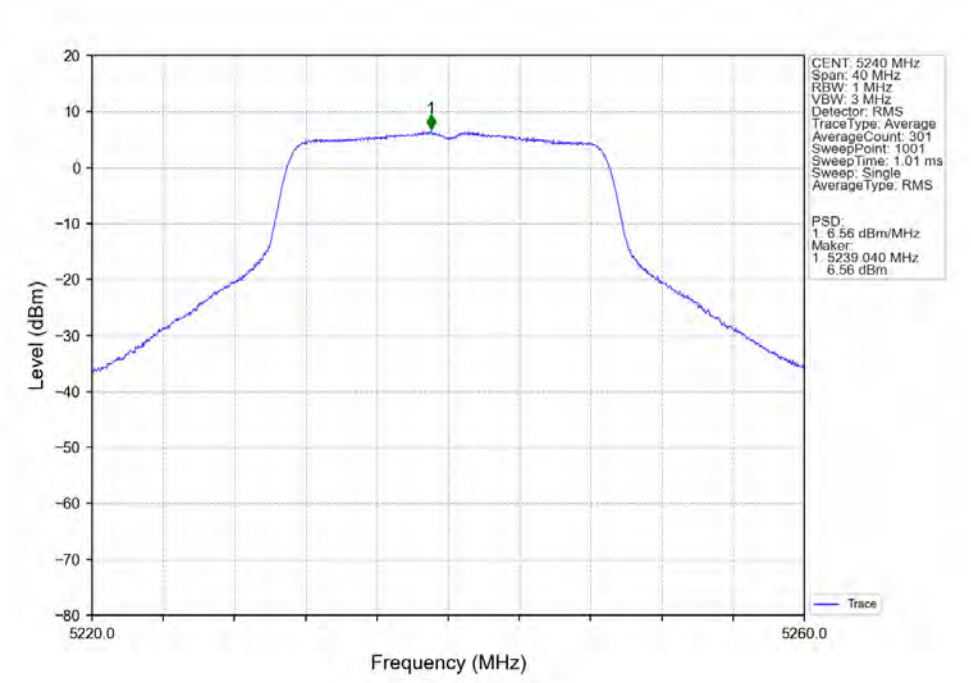
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



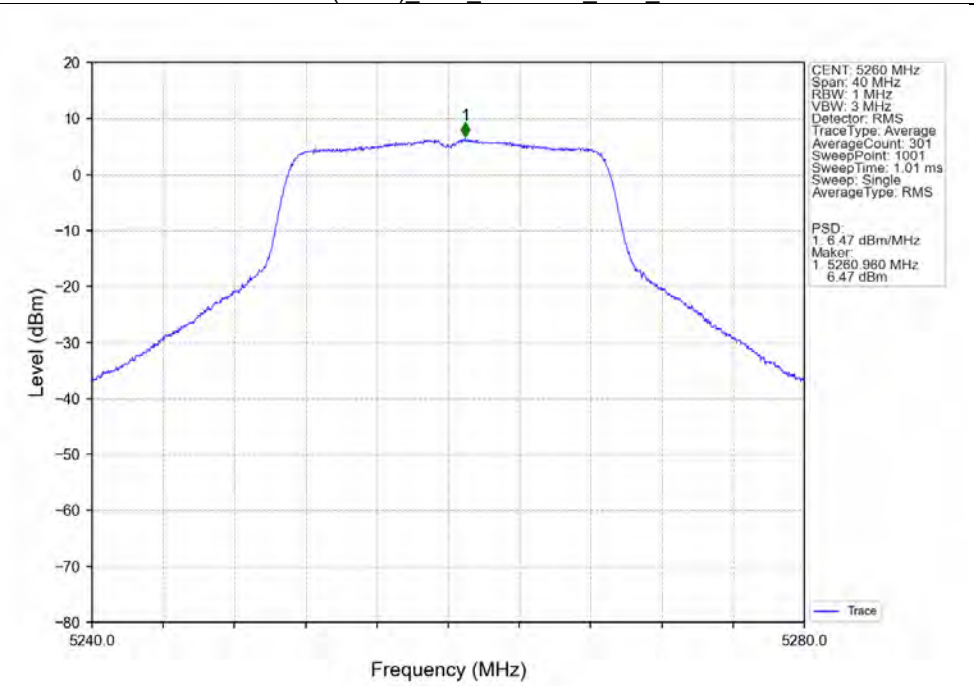
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



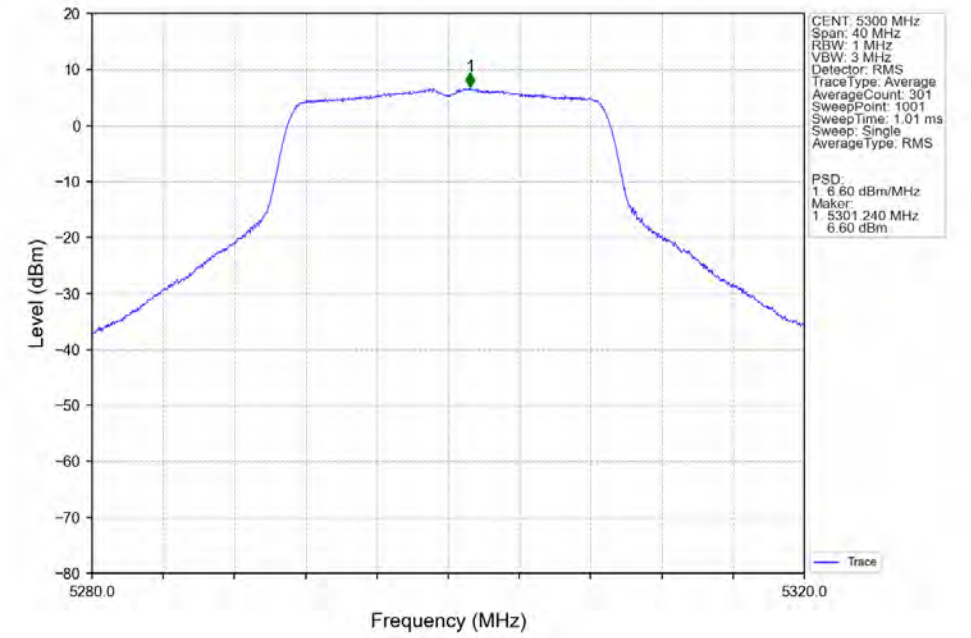
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



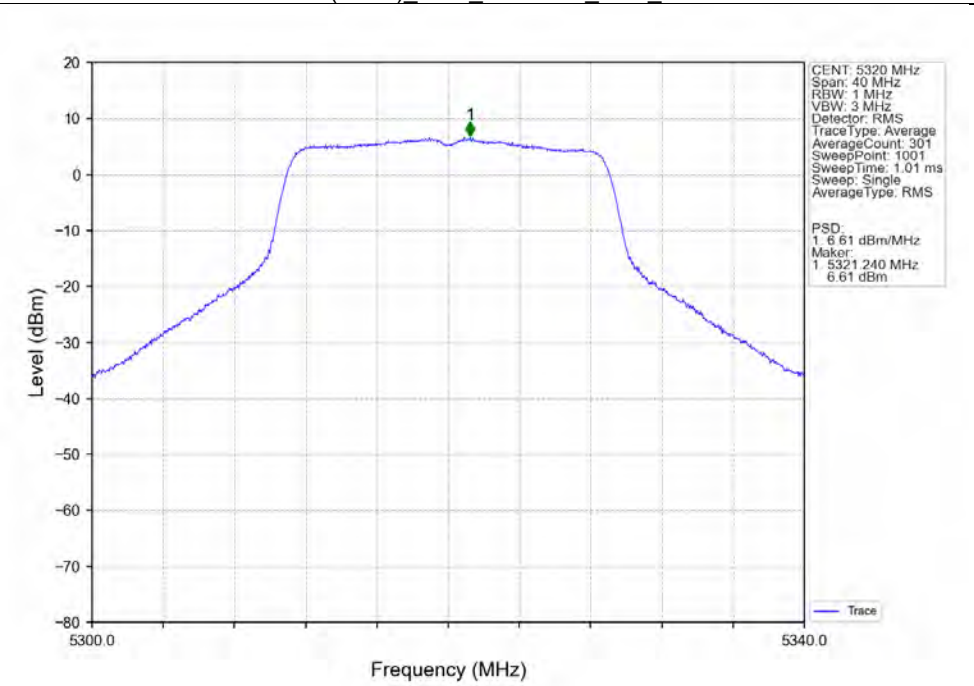
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV



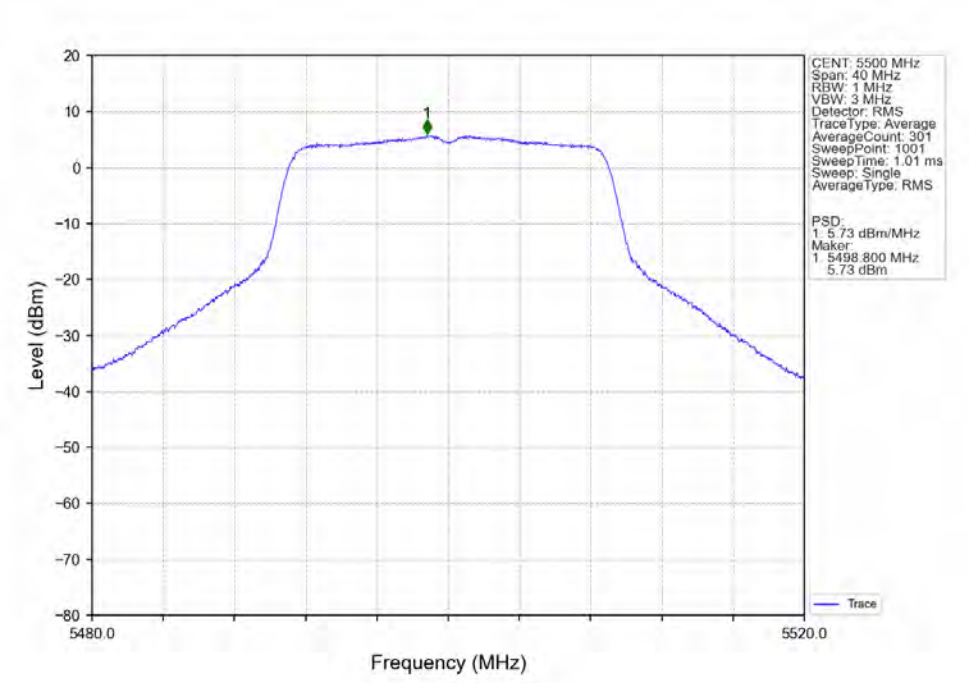
802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



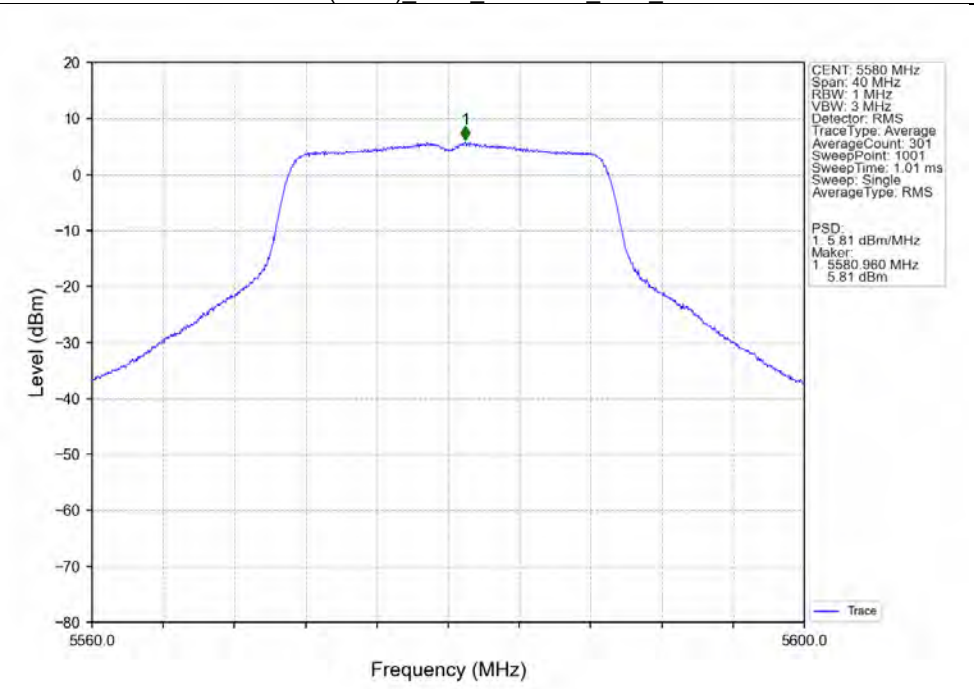
802.11n(HT20)_HCH_5320MHz_Ant1_NTNV



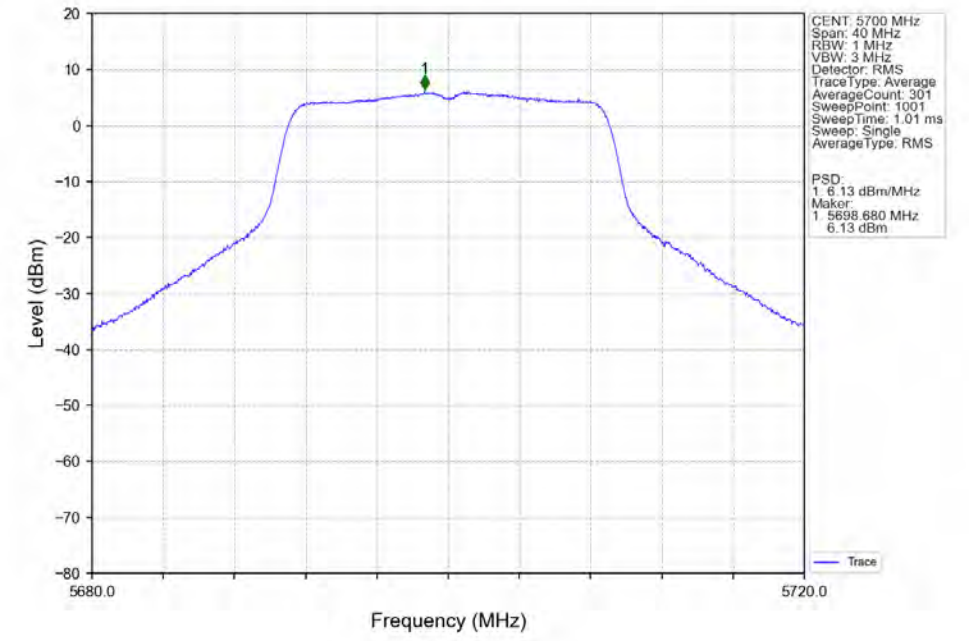
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



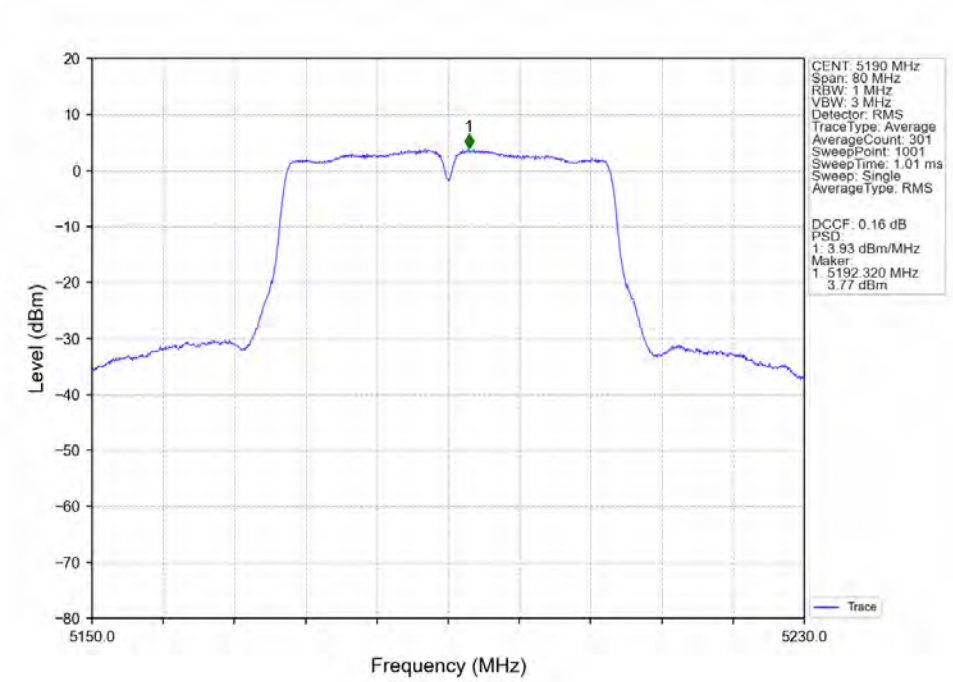
802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



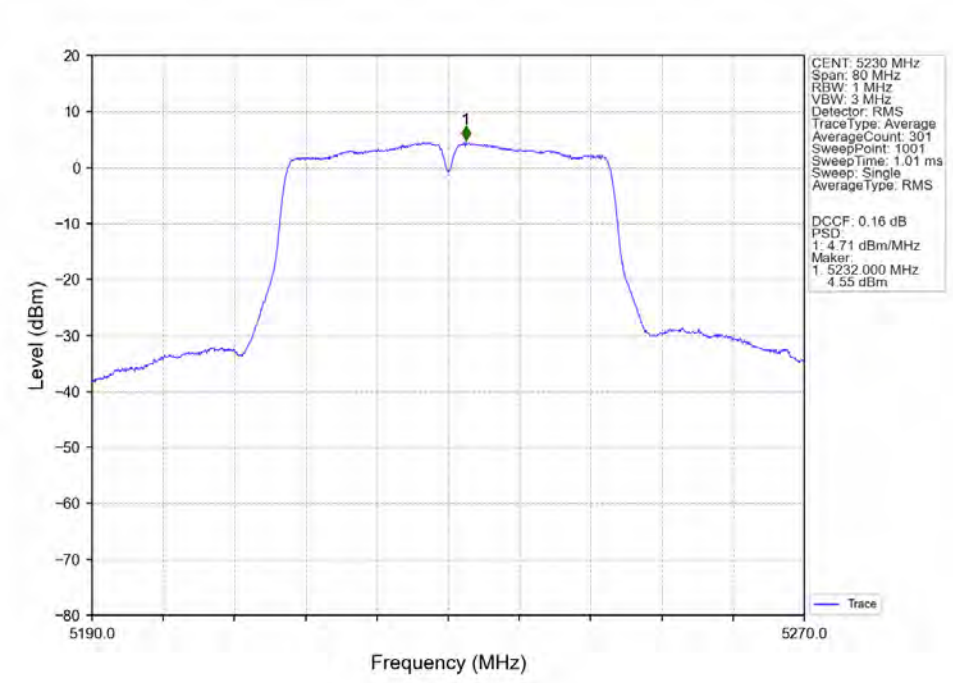
802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



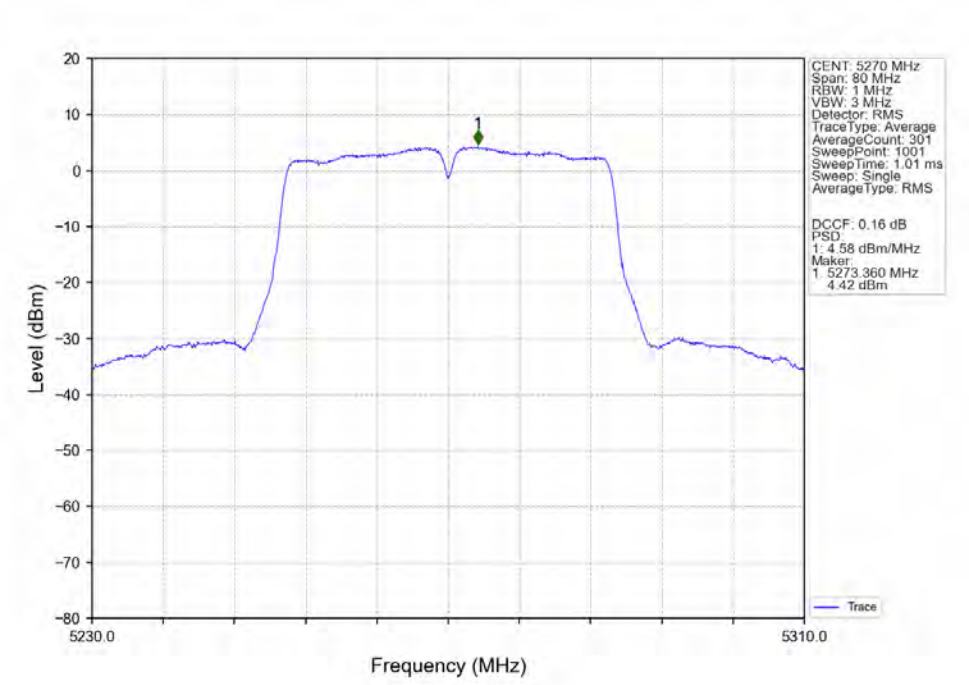
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



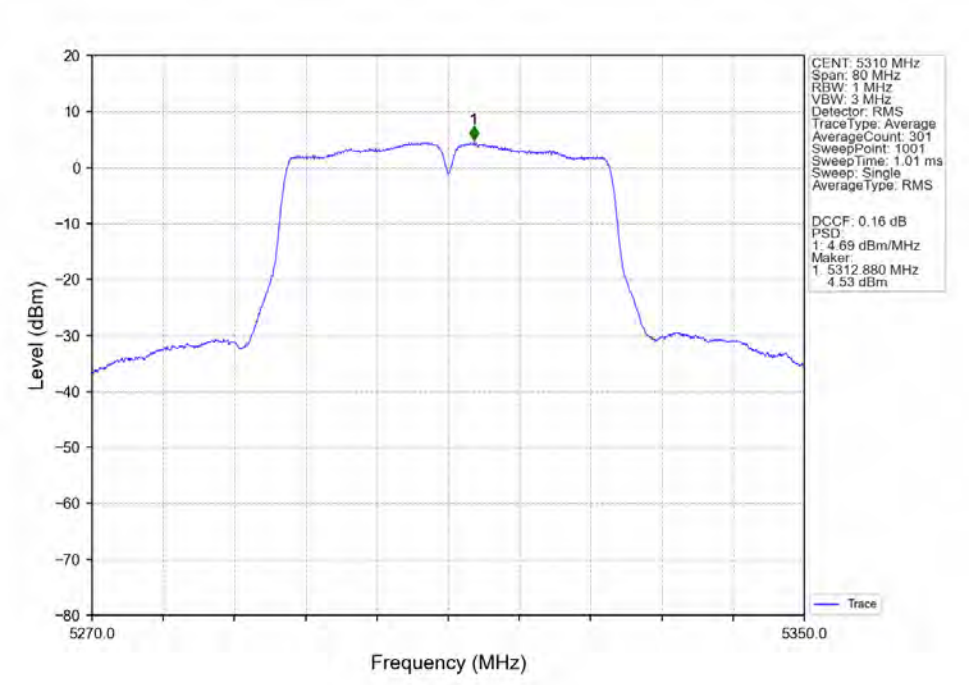
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



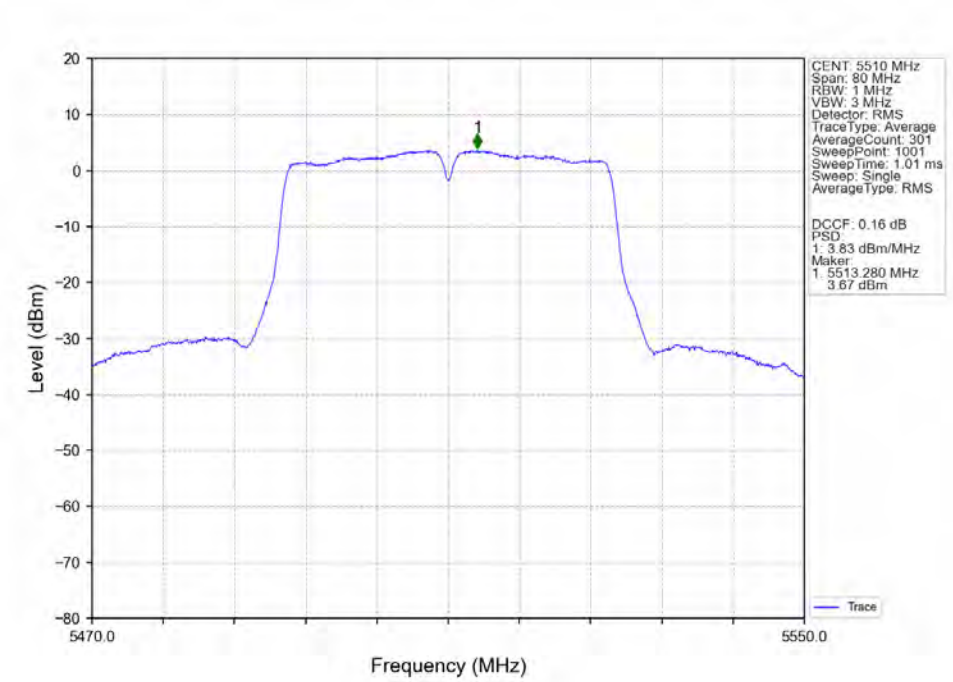
802.11n(HT40)_LCH_5270MHz_Ant1_NTNV



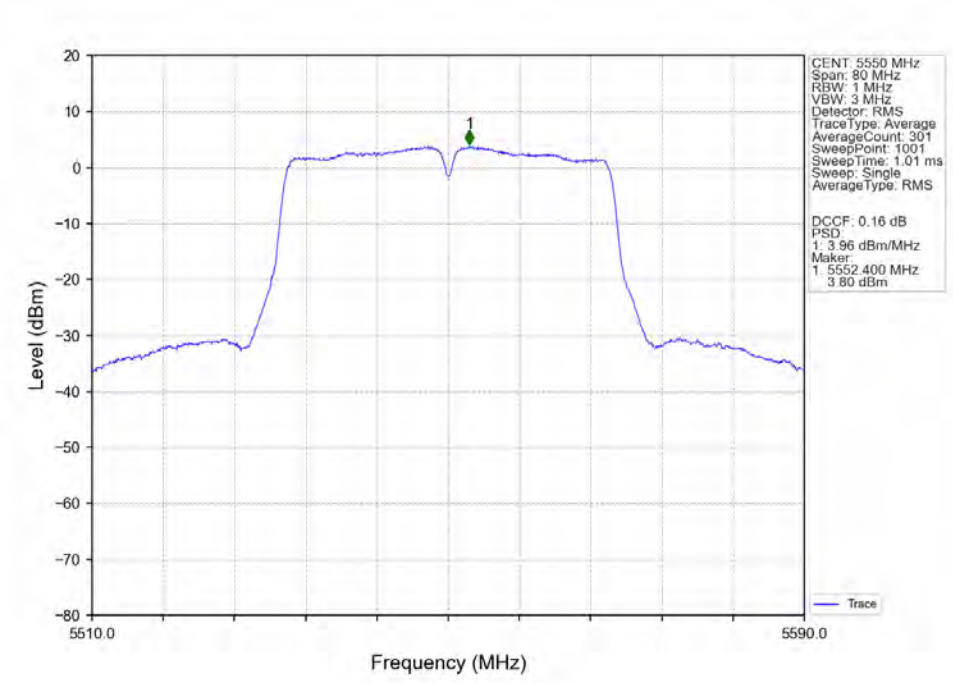
802.11n(HT40)_HCH_5310MHz_Ant1_NTNV



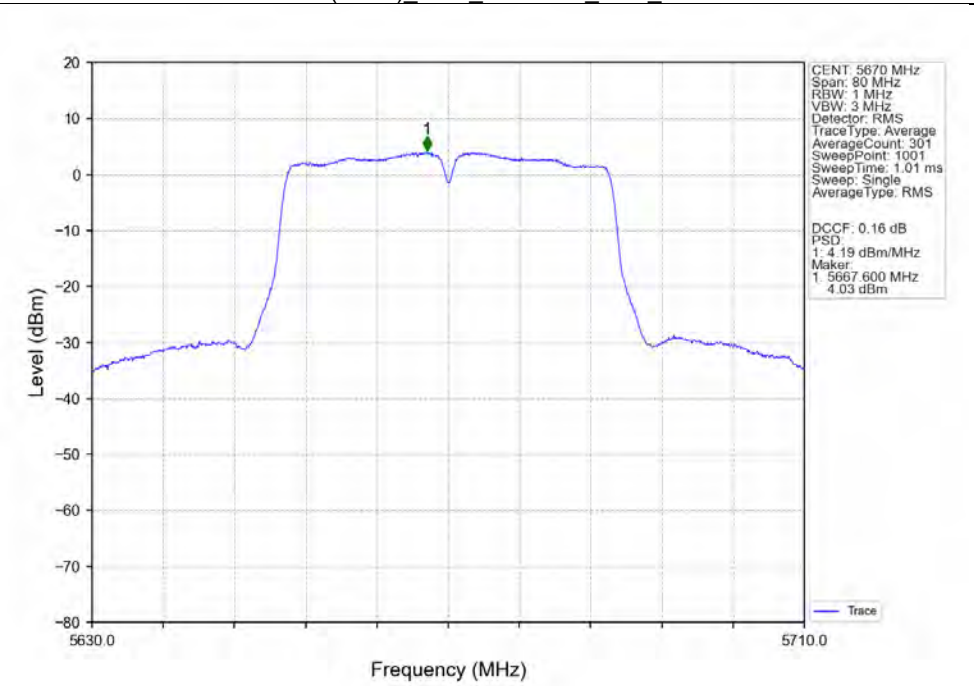
802.11n(HT40)_LCH_5510MHz_Ant1_NTNV



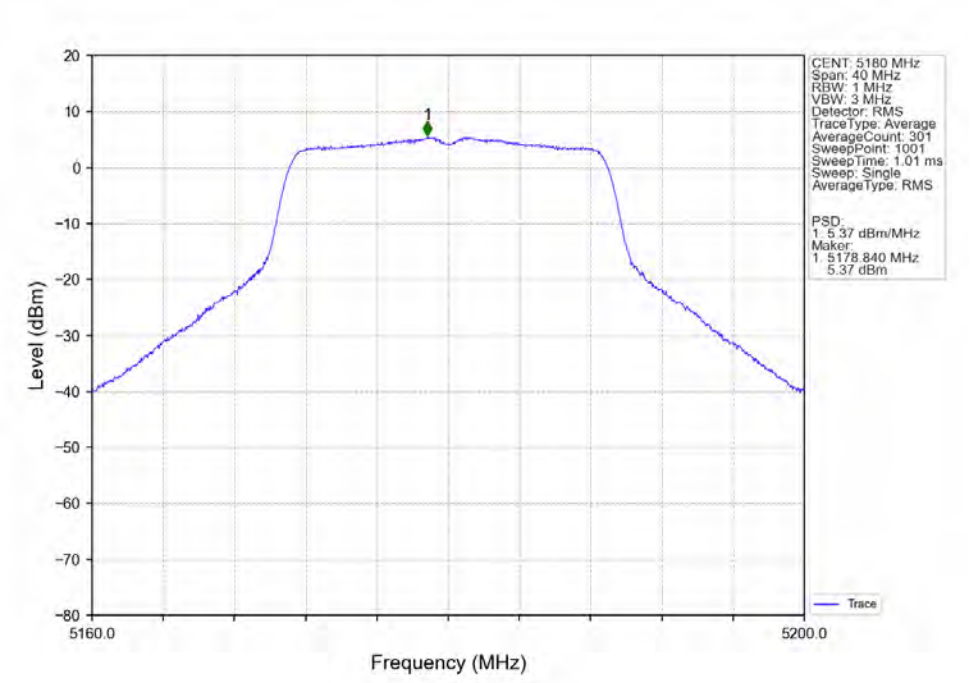
802.11n(HT40)_MCH_5550MHz_Ant1_NTNV



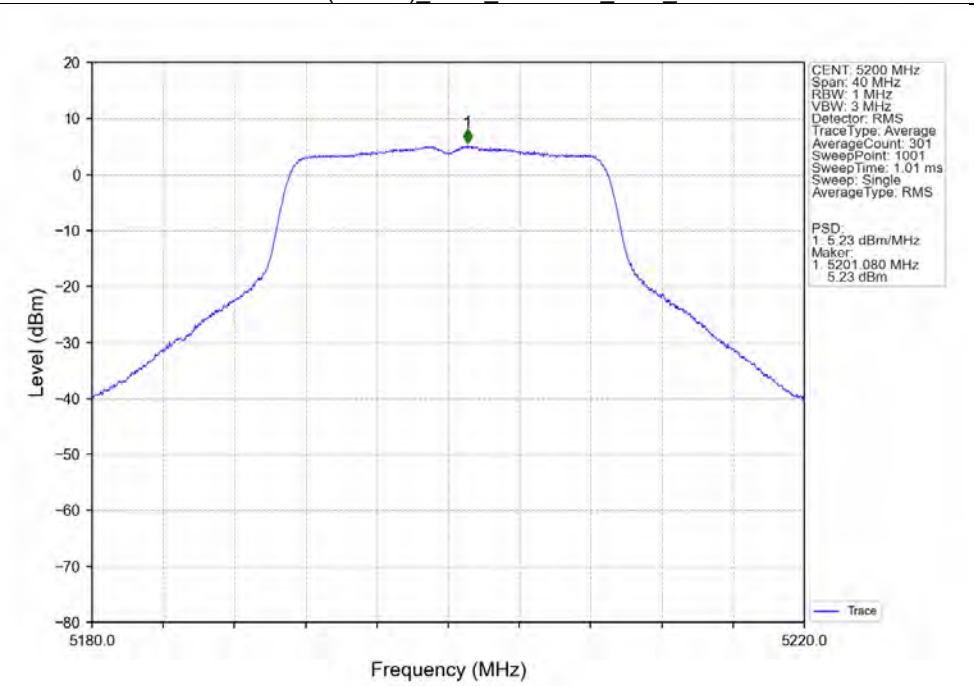
802.11n(HT40)_HCH_5670MHz_Ant1_NTNV



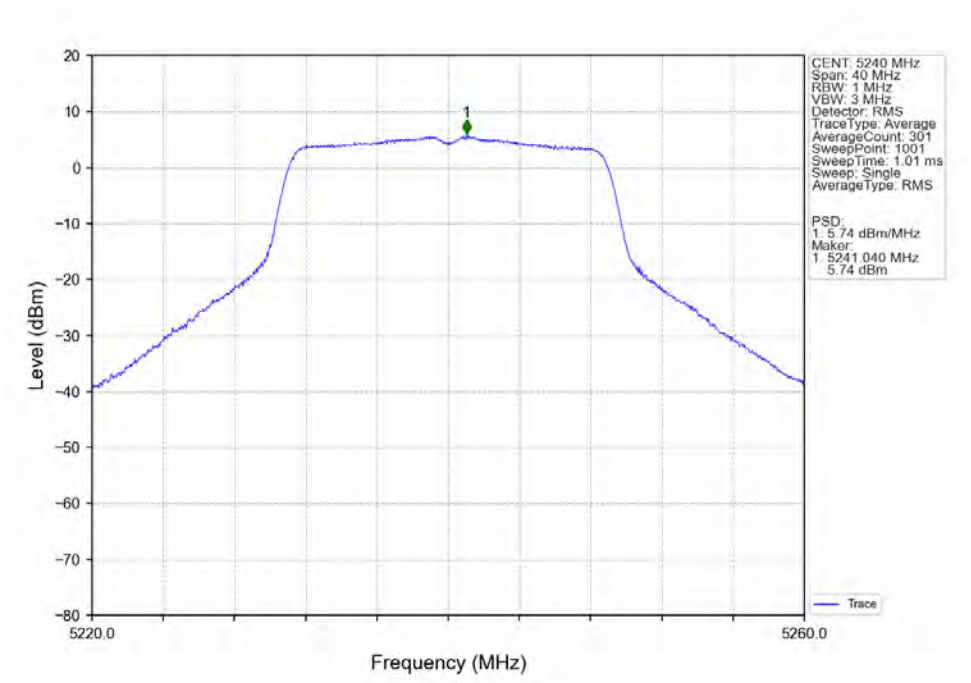
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



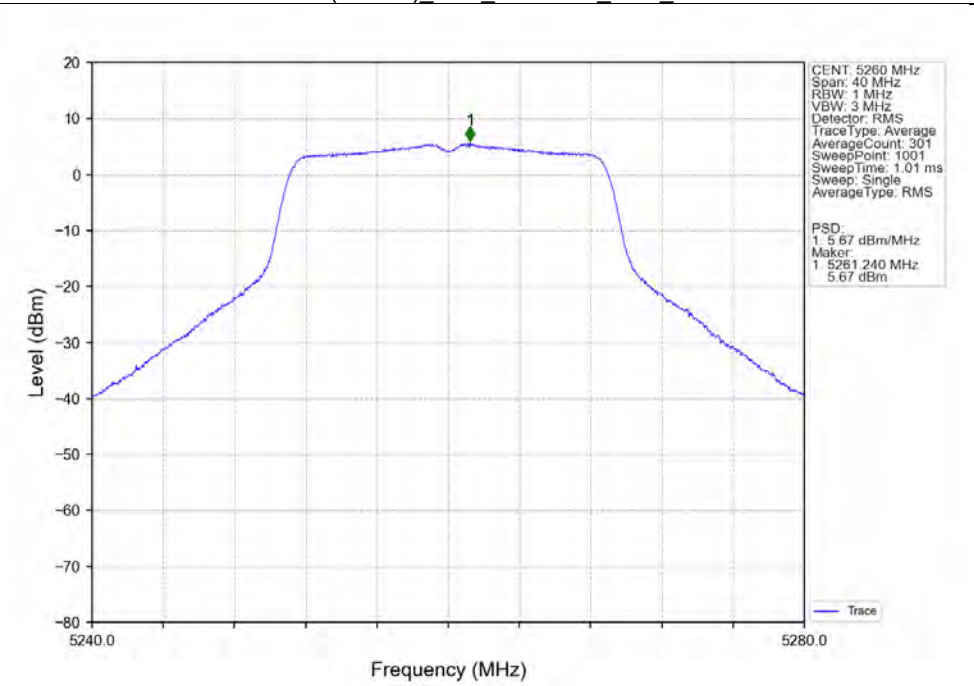
802.11ac(VHT20)_MCH_5200MHz_Ant1_NTNV



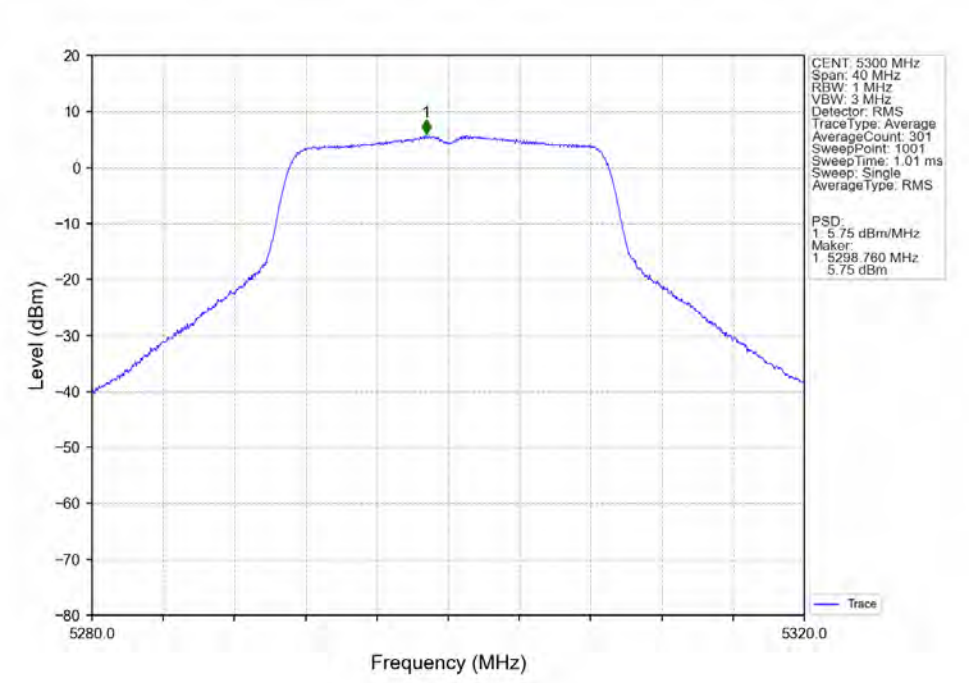
802.11ac(VHT20)_HCH_5240MHz_Ant1_NTNV



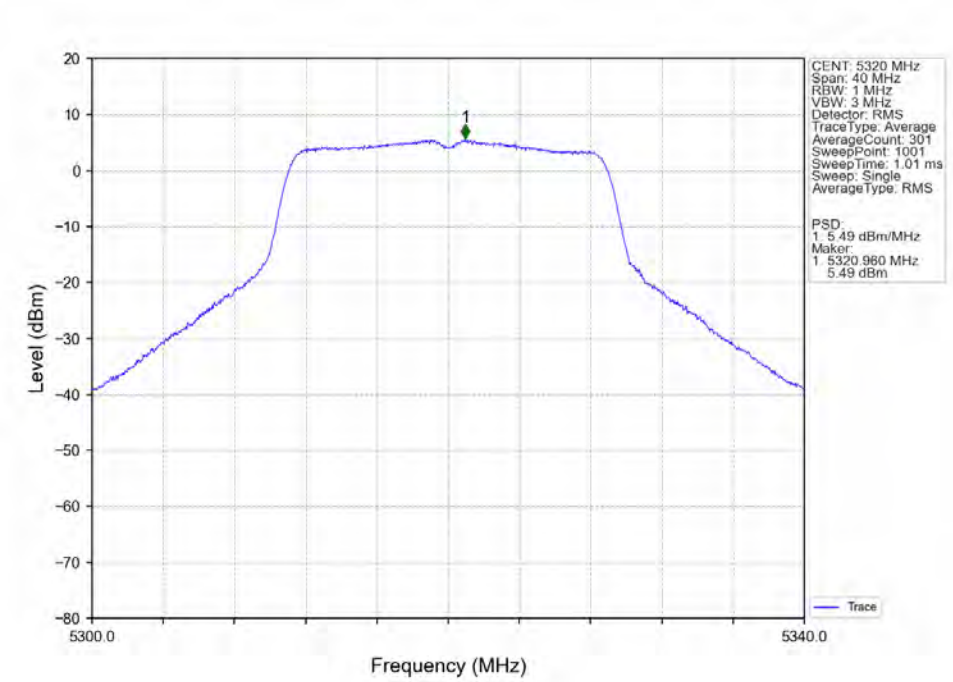
802.11ac(VHT20)_LCH_5260MHz_Ant1_NTNV



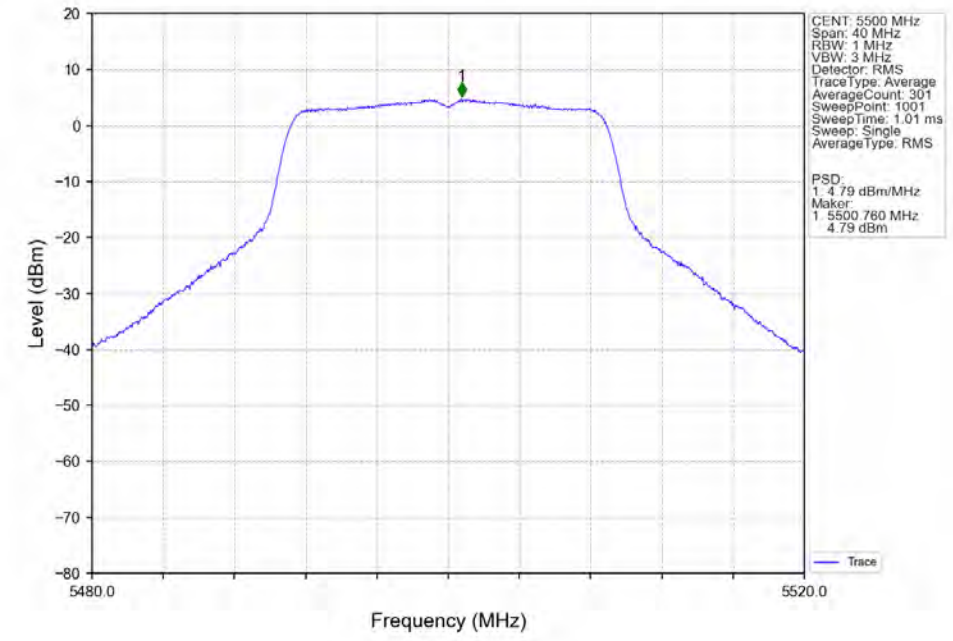
802.11ac(VHT20)_MCH_5300MHz_Ant1_NTNV



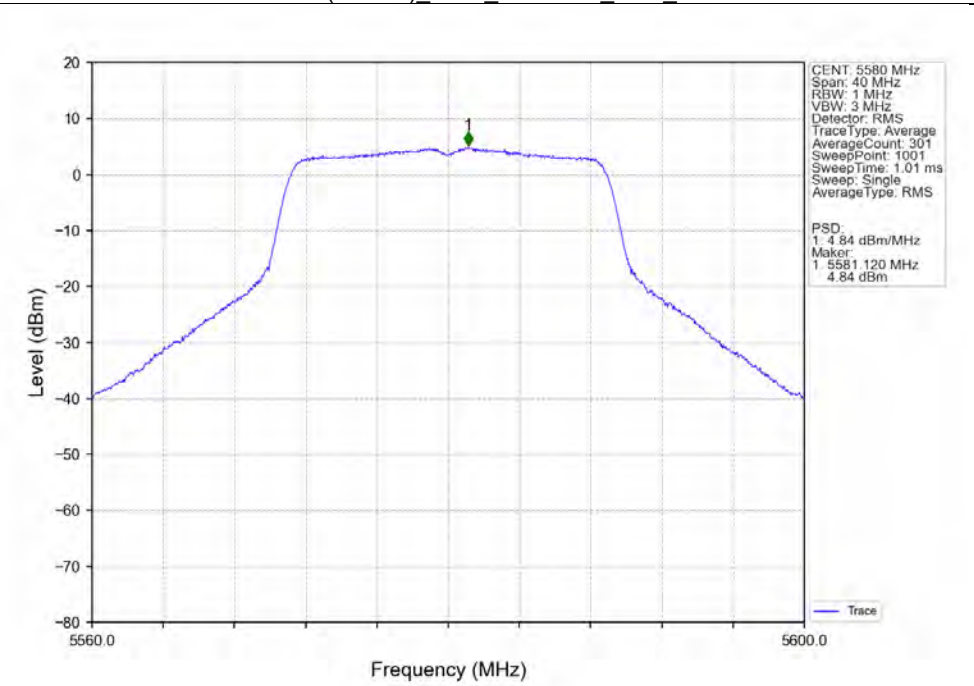
802.11ac(VHT20)_HCH_5320MHz_Ant1_NTNV



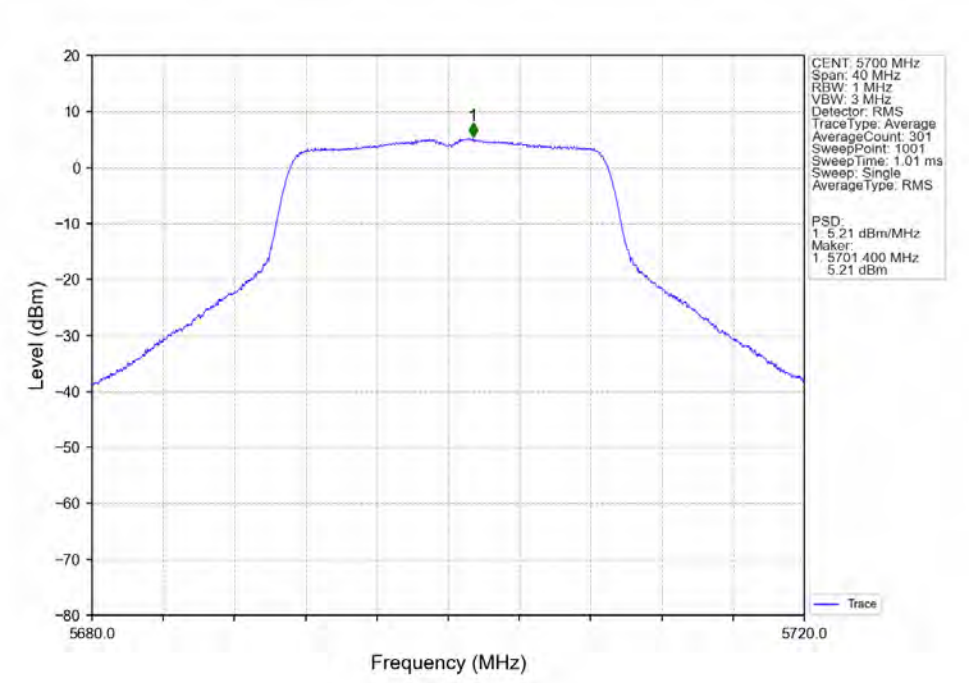
802.11ac(VHT20)_LCH_5500MHz_Ant1_NTNV



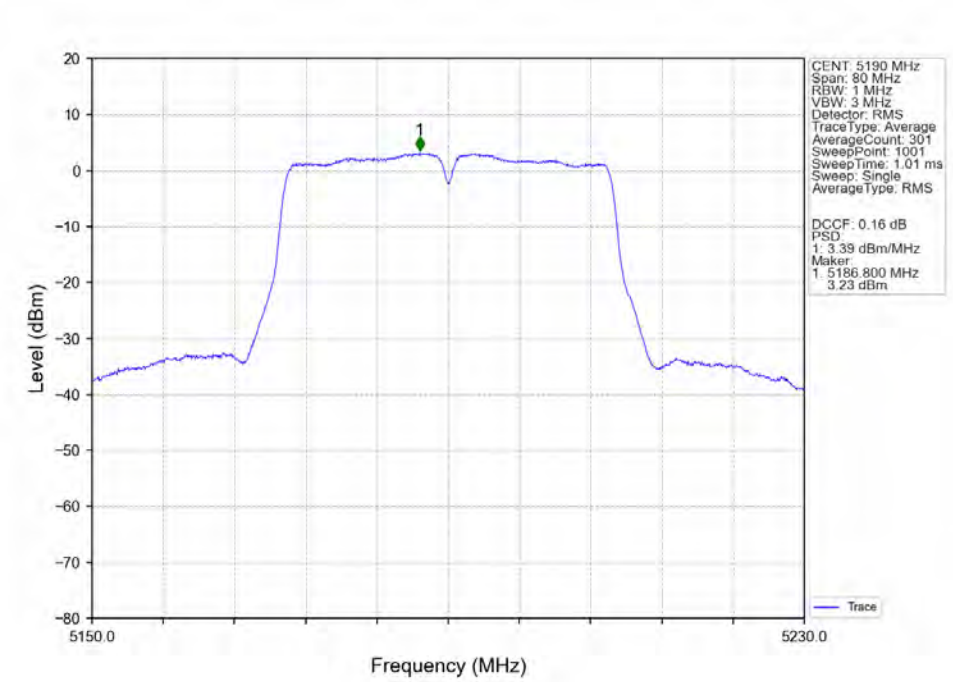
802.11ac(VHT20)_MCH_5580MHz_Ant1_NTNV



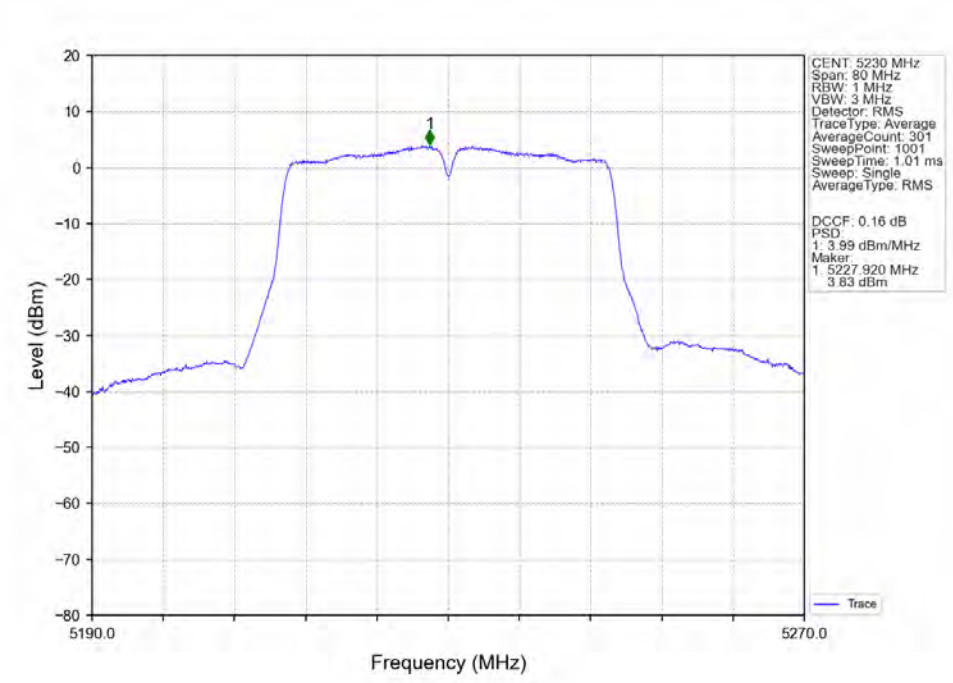
802.11ac(VHT20)_HCH_5700MHz_Ant1_NTNV



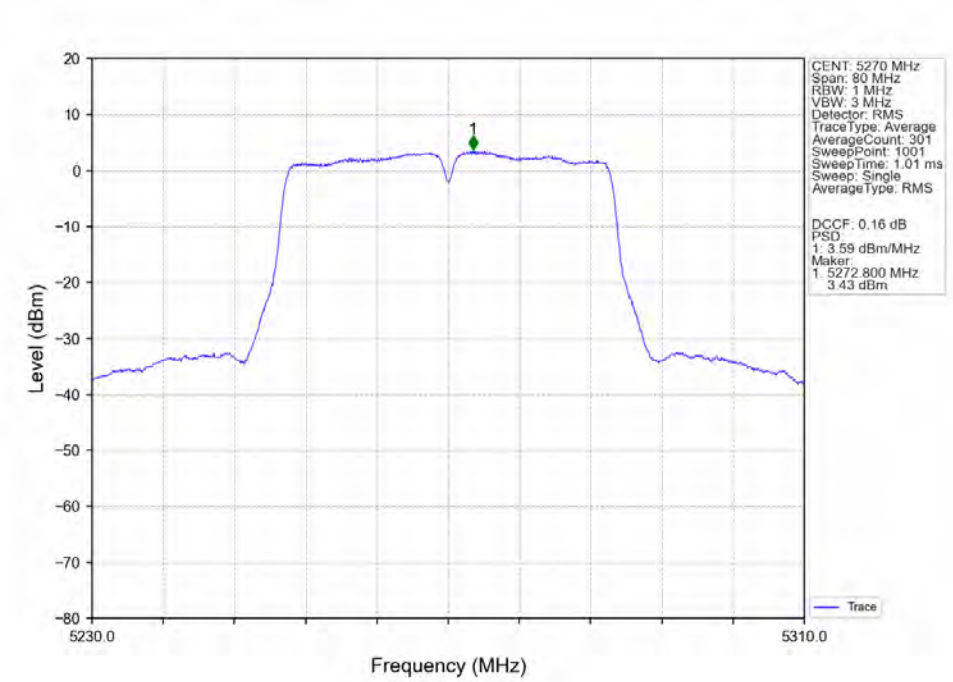
802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



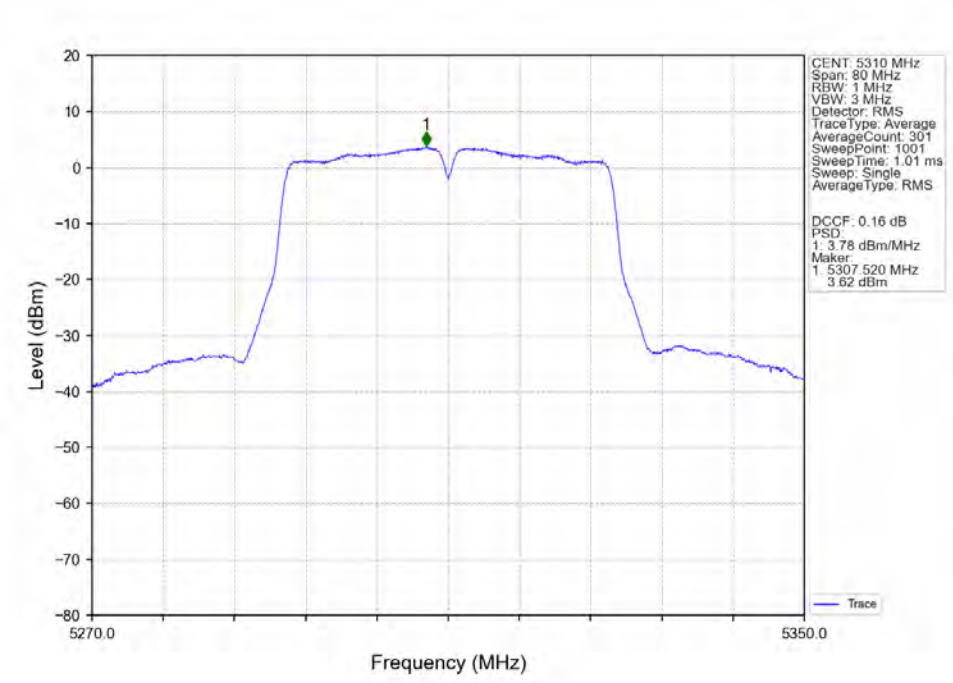
802.11ac(VHT40)_HCH_5230MHz_Ant1_NTNV



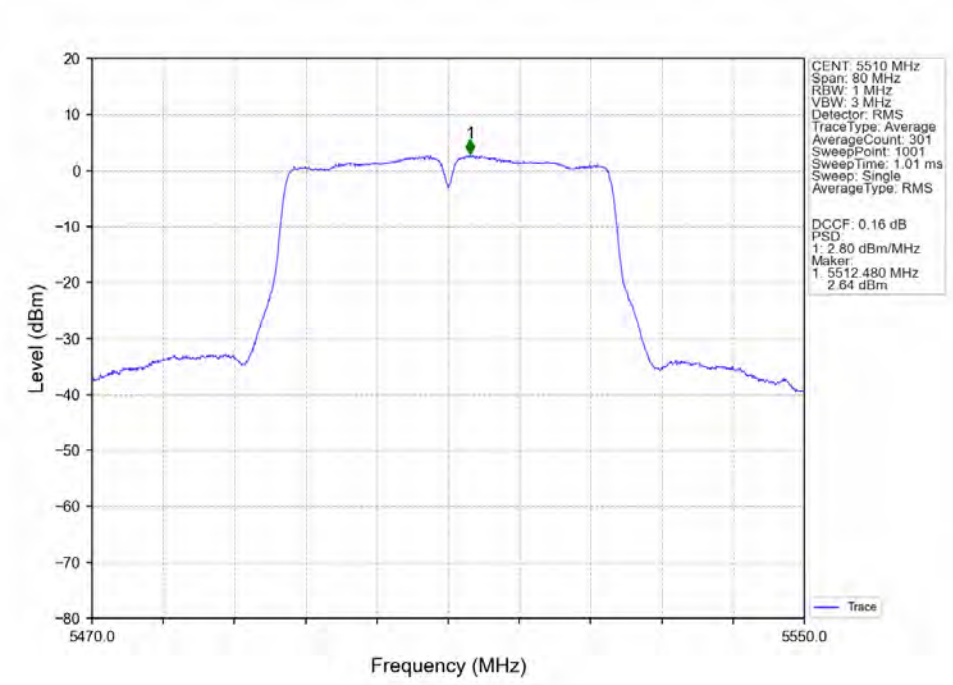
802.11ac(VHT40)_LCH_5270MHz_Ant1_NTNV



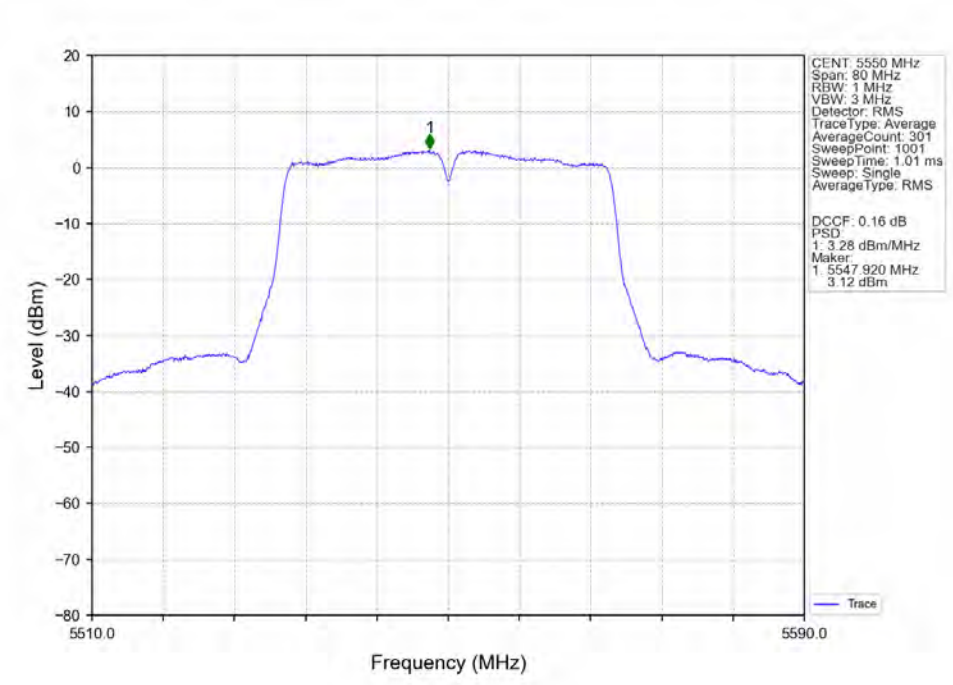
802.11ac(VHT40)_HCH_5310MHz_Ant1_NTNV



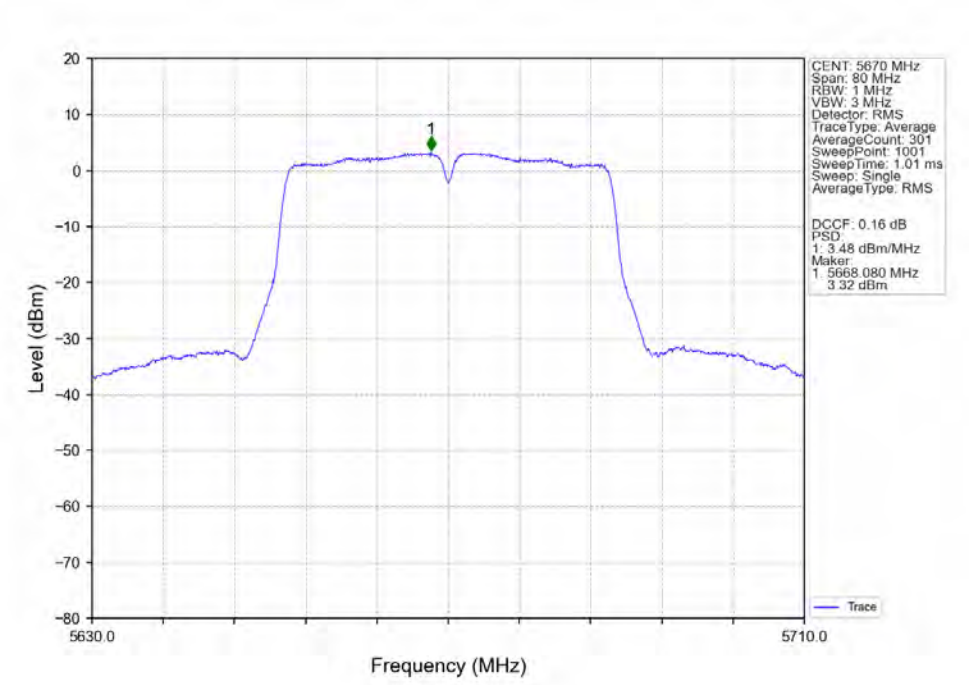
802.11ac(VHT40)_LCH_5510MHz_Ant1_NTNV



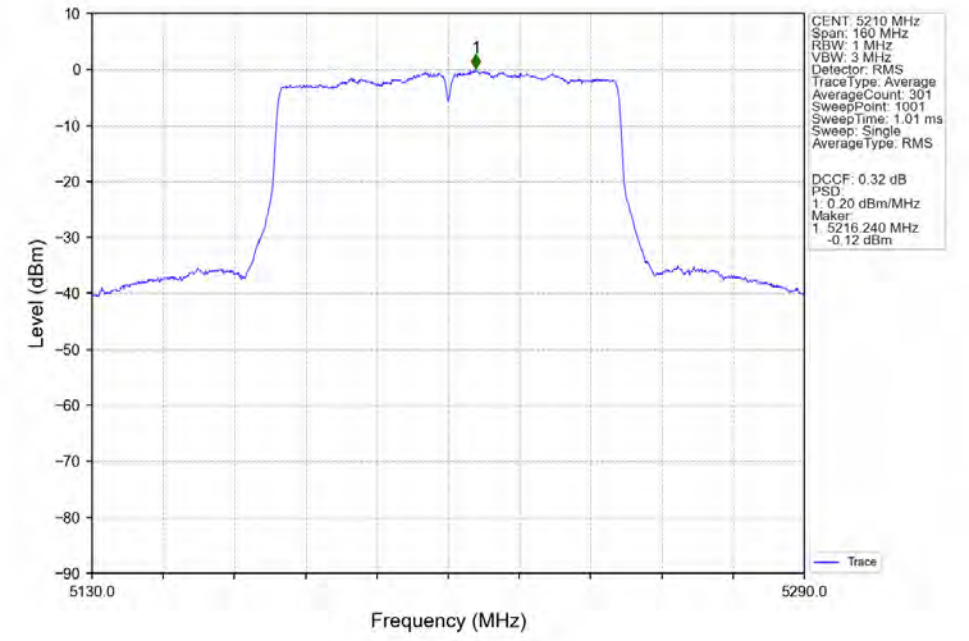
802.11ac(VHT40)_MCH_5550MHz_Ant1_NTNV



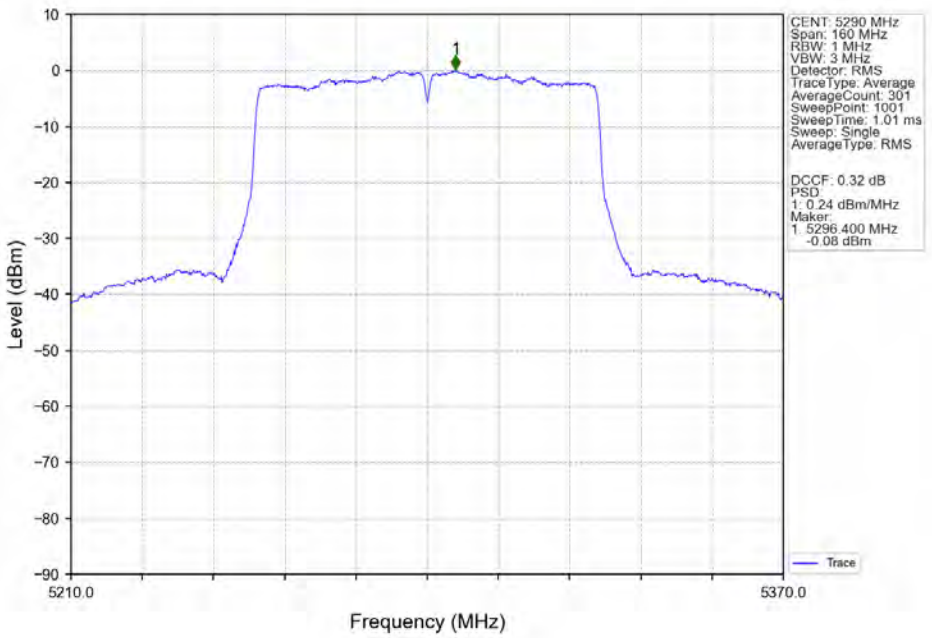
802.11ac(VHT40)_HCH_5670MHz_Ant1_NTNV



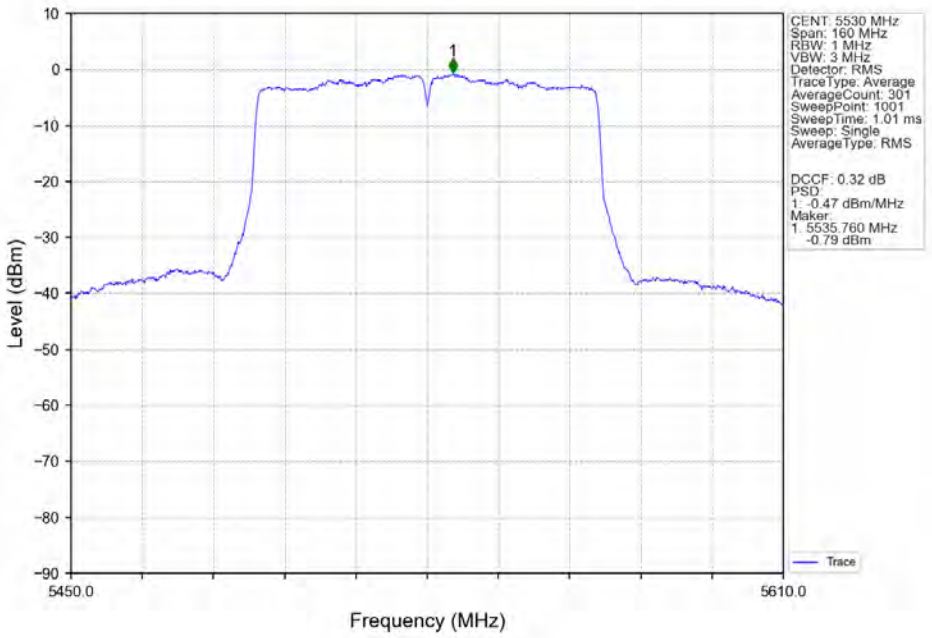
802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



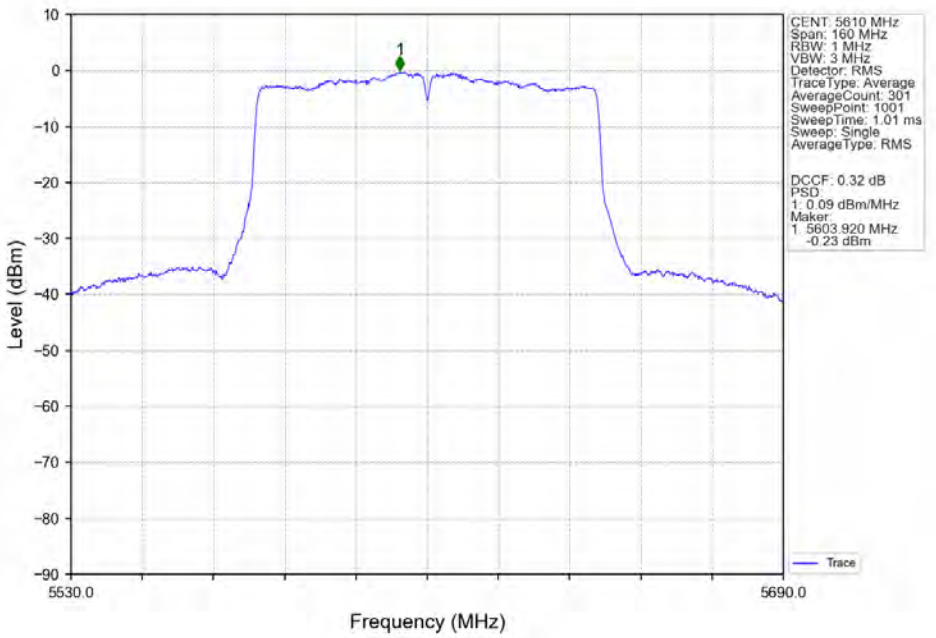
802.11ac(VHT80)_MCH_5290MHz_Ant1_NTNV



802.11ac(VHT80)_LCH_5530MHz_Ant1_NTNV

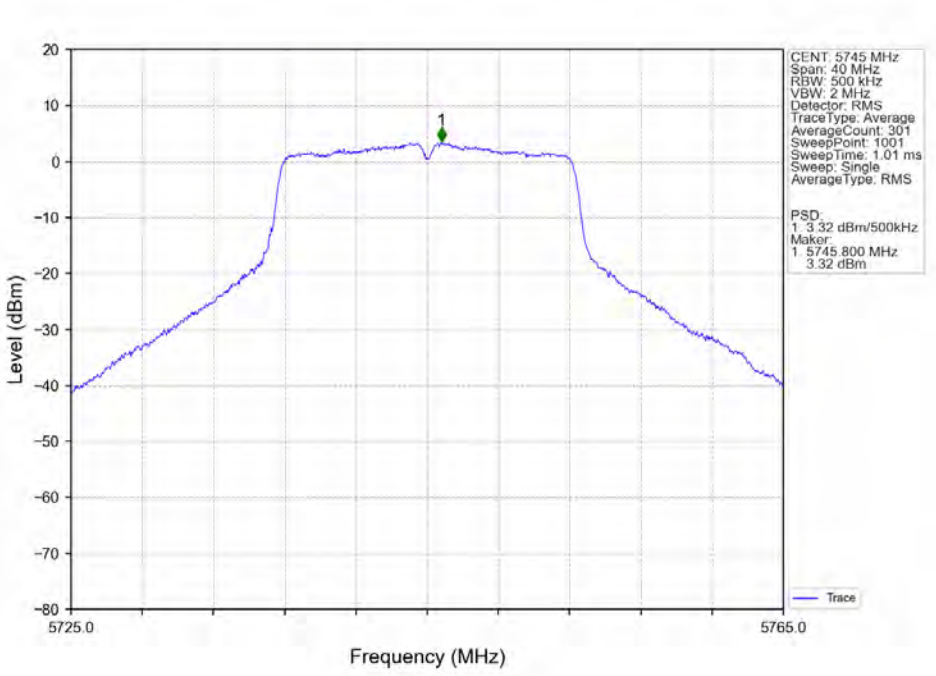


802.11ac(VHT80)_HCH_5610MHz_Ant1_NTNV

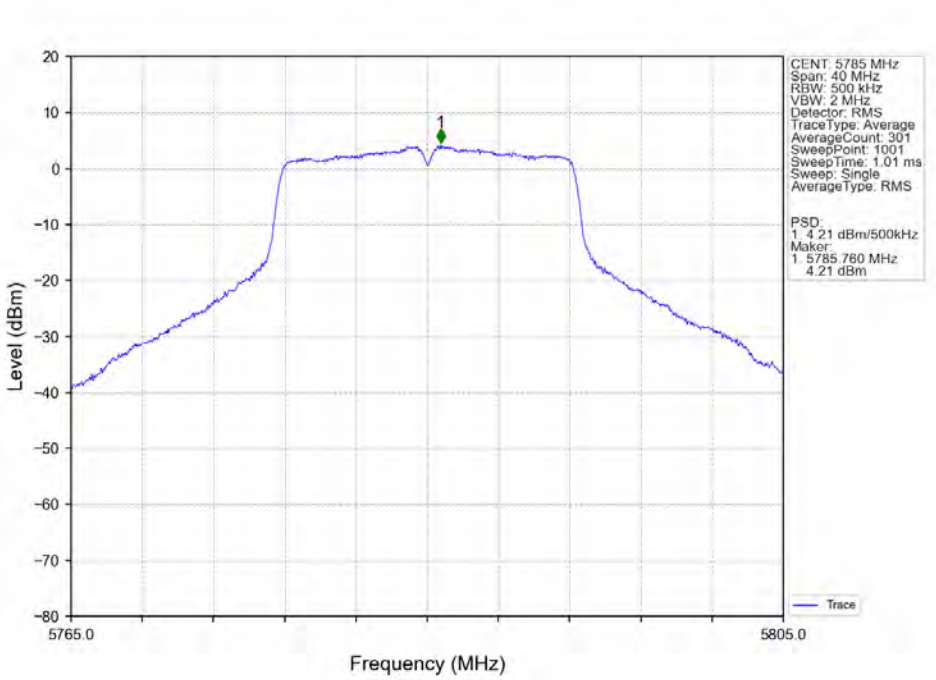


4.2.2 PSD-Band3

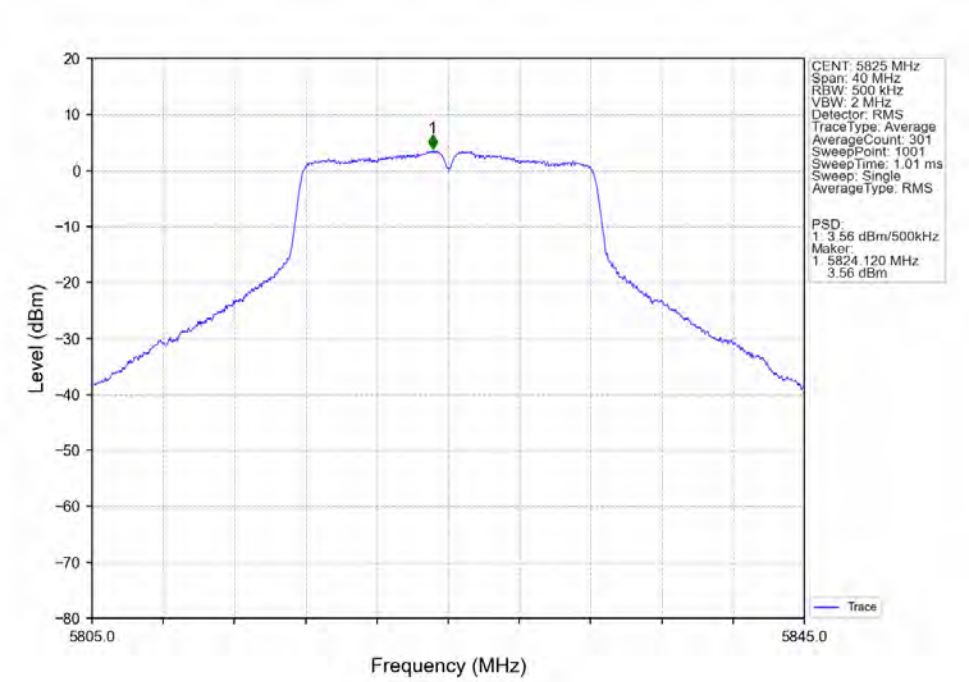
802.11a_LCH_5745MHz_Ant1_NTNV



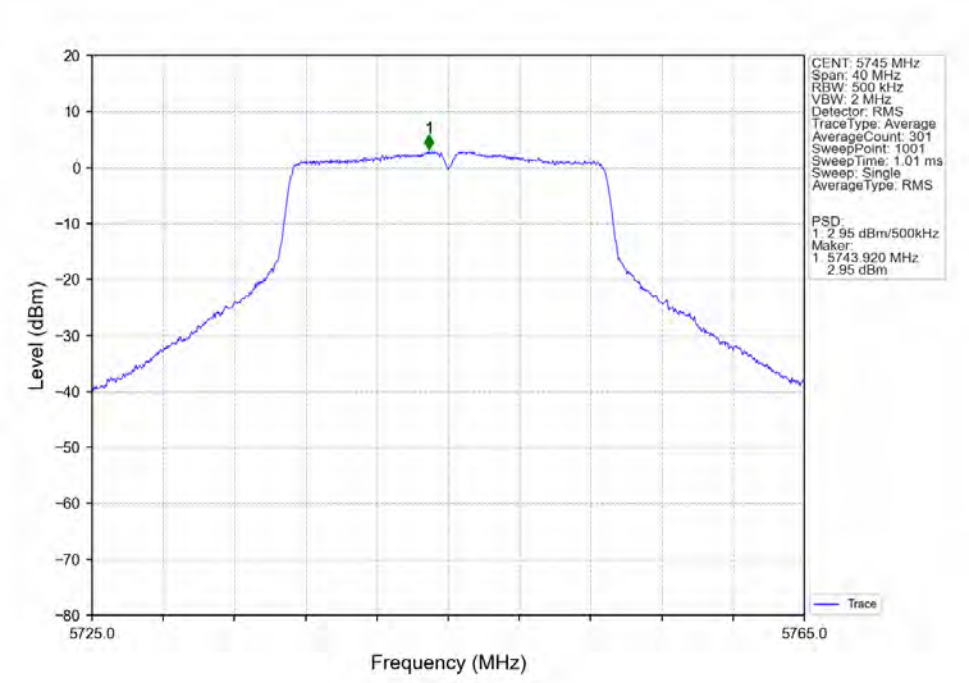
802.11a_MCH_5785MHz_Ant1_NTNV



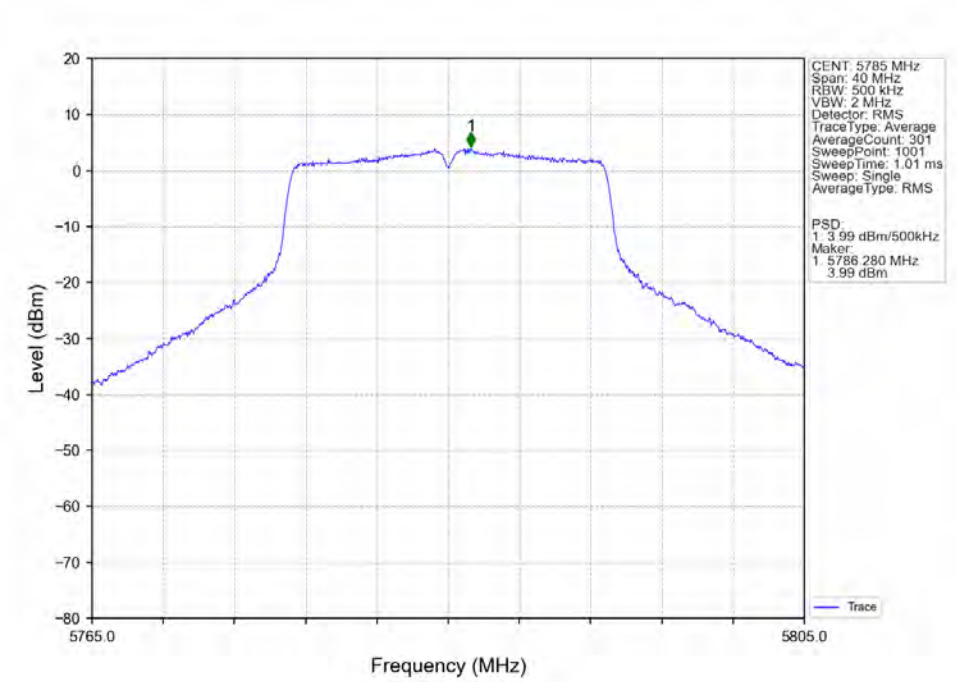
802.11a_HCH_5825MHz_Ant1_NTNV



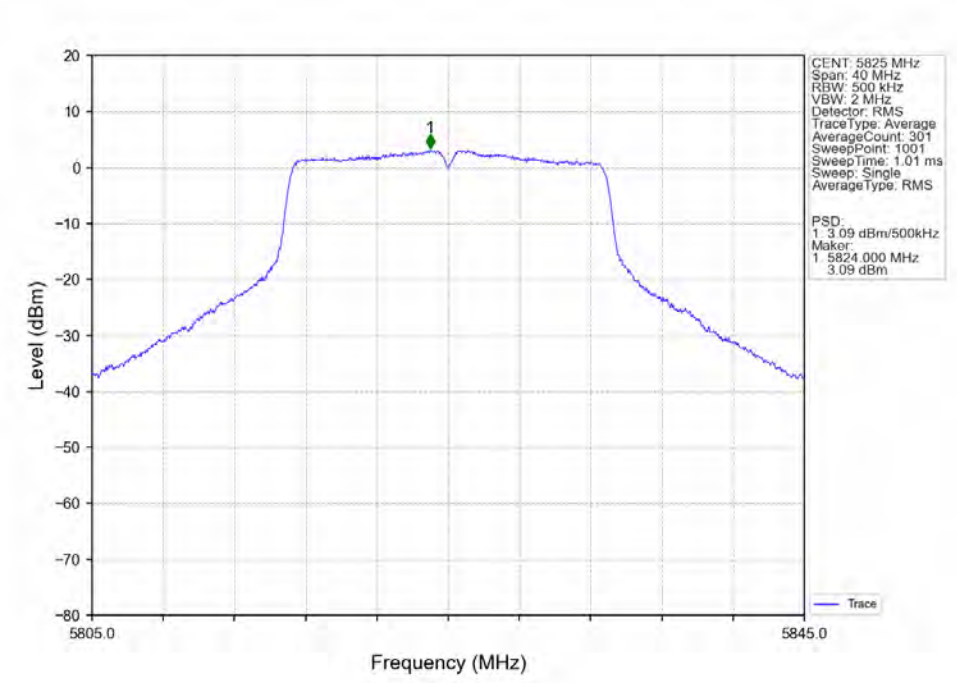
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



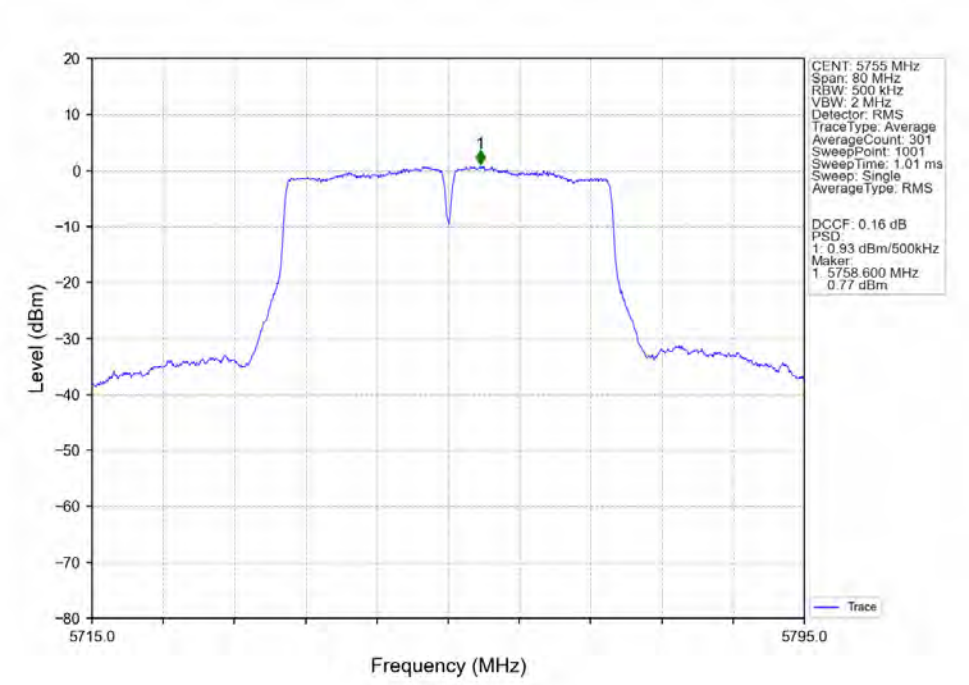
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



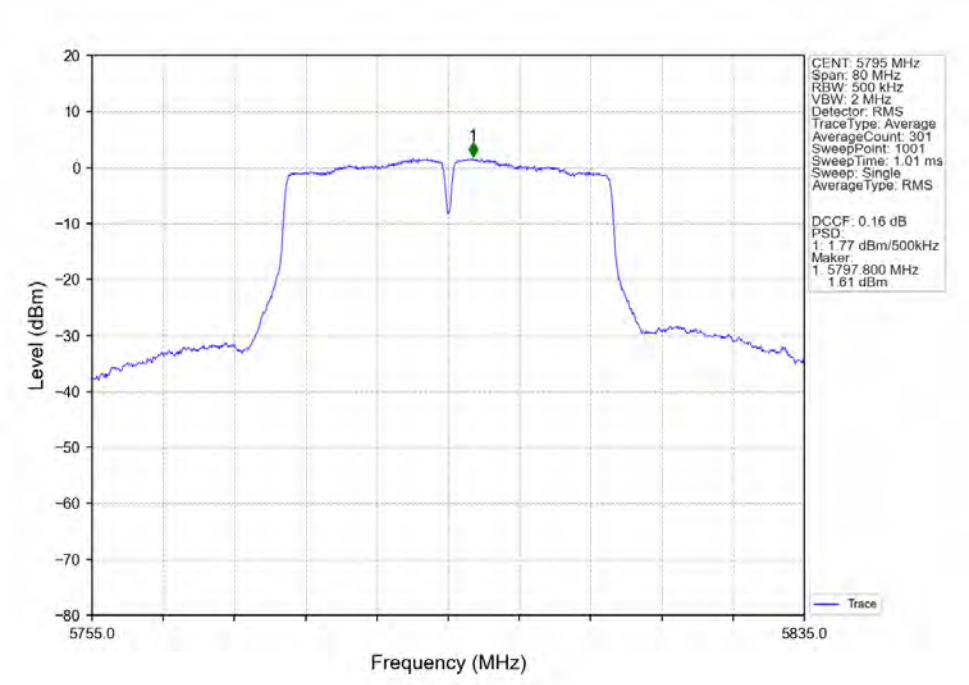
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



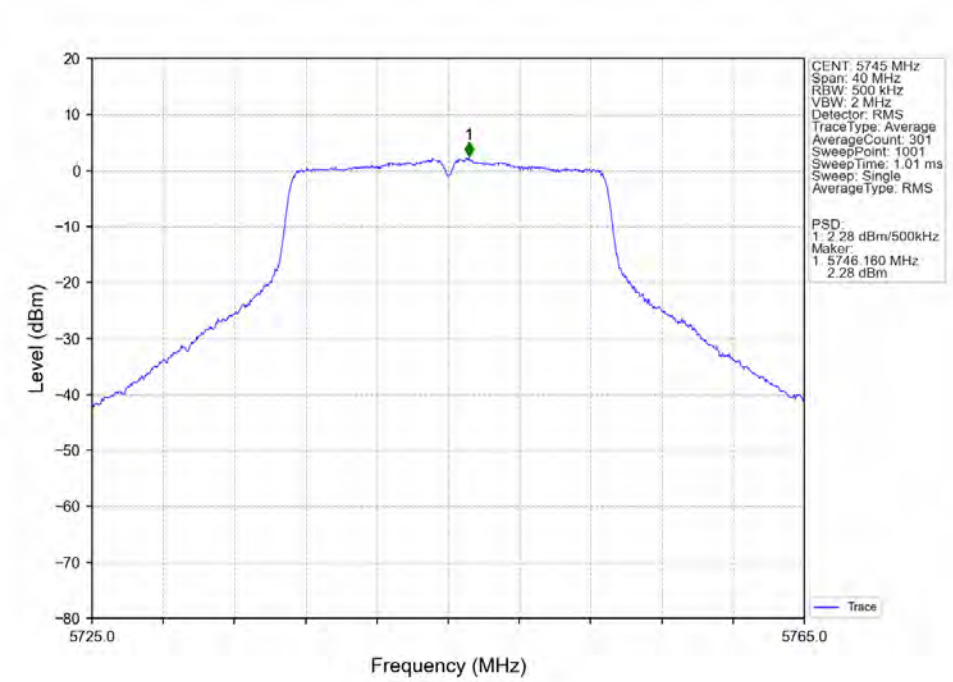
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



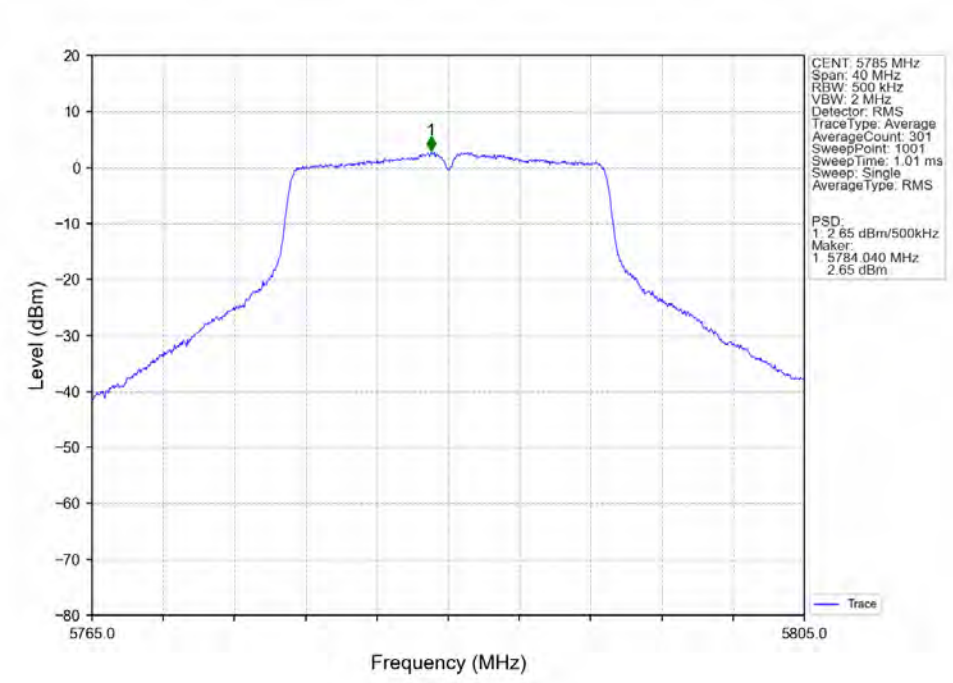
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



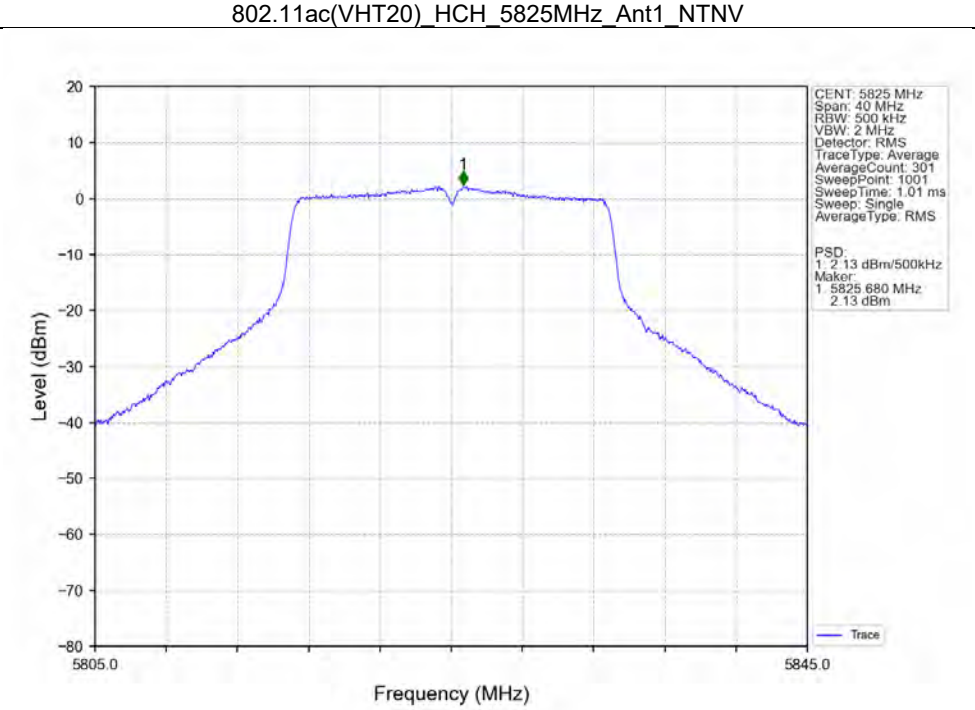
802.11ac(VHT20)_LCH_5745MHz_Ant1_NTNV



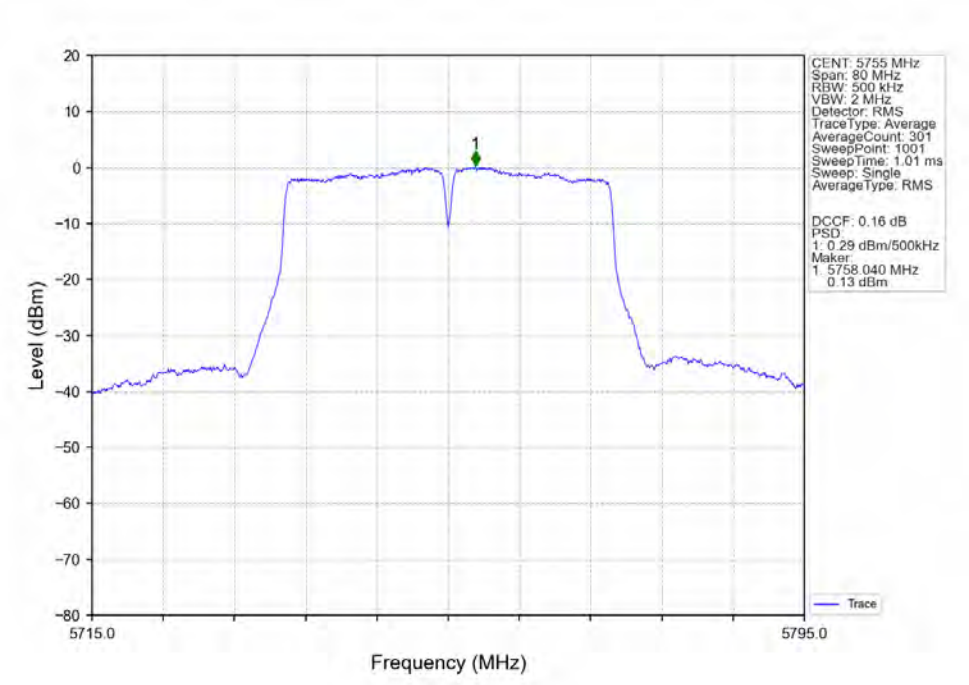
802.11ac(VHT20)_MCH_5785MHz_Ant1_NTNV



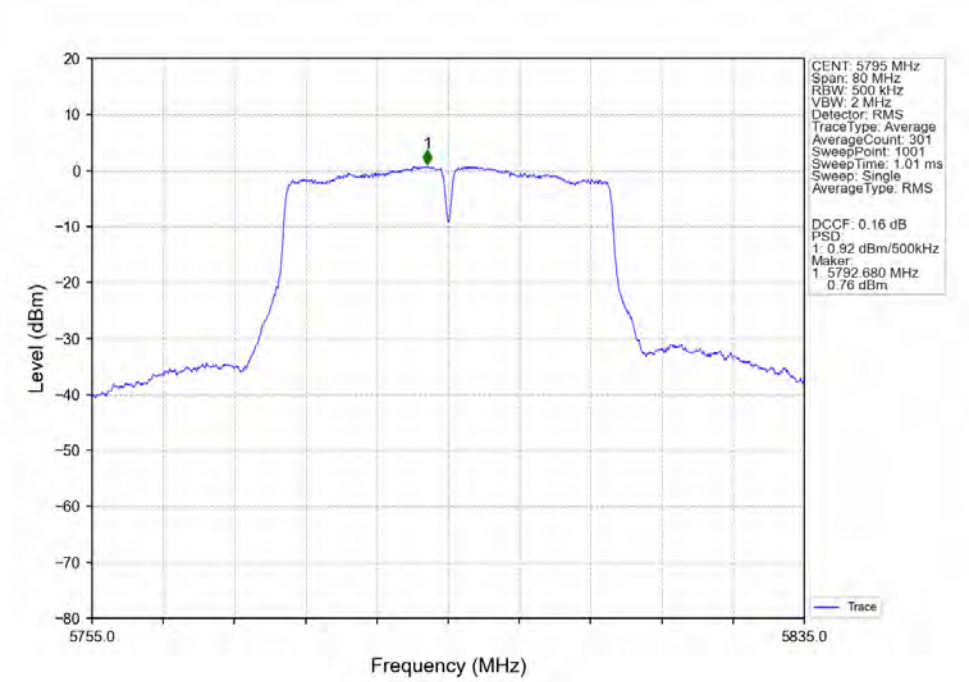
802.11ac(VHT20)_HCH_5825MHz_Ant1_NTNV



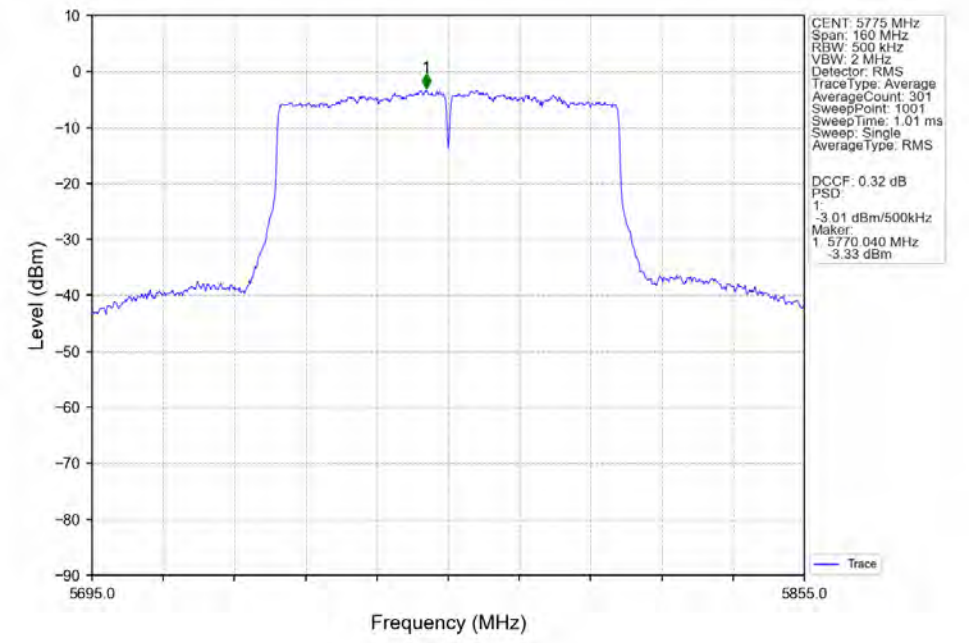
802.11ac(VHT40)_LCH_5755MHz_Ant1_NTNV



802.11ac(VHT40)_HCH_5795MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5775MHz_Ant1_NTNV



5. Frequency Stability

5.1 Test Result

5.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict
802.11a	SISO	5180	20	102	5180.080	5150 to 5250	Pass
				120	5178.780	5150 to 5250	Pass
				138	5180.260	5150 to 5250	Pass
			-30	120	5180.060	5150 to 5250	Pass
			-20	120	5180.000	5150 to 5250	Pass
			-10	120	5178.980	5150 to 5250	Pass
			0	120	5180.080	5150 to 5250	Pass
			10	120	5180.000	5150 to 5250	Pass
			30	120	5180.080	5150 to 5250	Pass
			40	120	5180.080	5150 to 5250	Pass
			50	120	5178.300	5150 to 5250	Pass
		5200	20	102	5200.060	5150 to 5250	Pass
				120	5200.100	5150 to 5250	Pass
				138	5198.980	5150 to 5250	Pass
			-30	120	5200.020	5150 to 5250	Pass
			-20	120	5200.080	5150 to 5250	Pass
			-10	120	5200.060	5150 to 5250	Pass
			0	120	5200.060	5150 to 5250	Pass
			10	120	5198.320	5150 to 5250	Pass
			30	120	5200.040	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.020	5150 to 5250	Pass
		5240	20	102	5240.040	5150 to 5250	Pass
				120	5240.040	5150 to 5250	Pass
				138	5237.500	5150 to 5250	Pass
			-30	120	5240.020	5150 to 5250	Pass
			-20	120	5240.040	5150 to 5250	Pass
			-10	120	5240.000	5150 to 5250	Pass
			0	120	5240.040	5150 to 5250	Pass
			10	120	5240.040	5150 to 5250	Pass
			30	120	5240.060	5150 to 5250	Pass
			40	120	5240.020	5150 to 5250	Pass
			50	120	5240.040	5150 to 5250	Pass
		5260	20	102	5260.080	5250 to 5350	Pass
				120	5260.020	5250 to 5350	Pass
				138	5260.060	5250 to 5350	Pass
			-30	120	5260.040	5250 to 5350	Pass
			-20	120	5260.080	5250 to 5350	Pass
			-10	120	5260.040	5250 to 5350	Pass
			0	120	5257.220	5250 to 5350	Pass
			10	120	5260.040	5250 to 5350	Pass
			30	120	5260.060	5250 to 5350	Pass
			40	120	5260.120	5250 to 5350	Pass
			50	120	5260.080	5250 to 5350	Pass
		5300	20	102	5300.040	5250 to 5350	Pass
				120	5300.080	5250 to 5350	Pass
				138	5300.460	5250 to 5350	Pass

			-30	120	5299.980	5250 to 5350	Pass
			-20	120	5298.200	5250 to 5350	Pass
			-10	120	5300.060	5250 to 5350	Pass
			0	120	5300.080	5250 to 5350	Pass
			10	120	5300.080	5250 to 5350	Pass
			30	120	5300.120	5250 to 5350	Pass
			40	120	5300.080	5250 to 5350	Pass
			50	120	5300.100	5250 to 5350	Pass
		5320	20	102	5320.040	5250 to 5350	Pass
				120	5319.220	5250 to 5350	Pass
				138	5320.000	5250 to 5350	Pass
			-30	120	5320.000	5250 to 5350	Pass
			-20	120	5320.020	5250 to 5350	Pass
			-10	120	5320.000	5250 to 5350	Pass
			0	120	5320.020	5250 to 5350	Pass
			10	120	5320.040	5250 to 5350	Pass
			30	120	5320.020	5250 to 5350	Pass
			40	120	5320.000	5250 to 5350	Pass
			50	120	5320.000	5250 to 5350	Pass
		5500	20	102	5500.020	5470 to 5725	Pass
				120	5500.020	5470 to 5725	Pass
				138	5500.040	5470 to 5725	Pass
			-30	120	5500.040	5470 to 5725	Pass
			-20	120	5500.060	5470 to 5725	Pass
			-10	120	5498.980	5470 to 5725	Pass
			0	120	5500.060	5470 to 5725	Pass
			10	120	5500.080	5470 to 5725	Pass
			30	120	5500.080	5470 to 5725	Pass
			40	120	5500.060	5470 to 5725	Pass
			50	120	5500.020	5470 to 5725	Pass
		5580	20	102	5580.040	5470 to 5725	Pass
				120	5575.860	5470 to 5725	Pass
				138	5580.060	5470 to 5725	Pass
			-30	120	5580.040	5470 to 5725	Pass
			-20	120	5580.080	5470 to 5725	Pass
			-10	120	5580.060	5470 to 5725	Pass
			0	120	5580.060	5470 to 5725	Pass
			10	120	5580.080	5470 to 5725	Pass
			30	120	5580.040	5470 to 5725	Pass
			40	120	5580.060	5470 to 5725	Pass
			50	120	5580.060	5470 to 5725	Pass
		5700	20	102	5700.060	5470 to 5725	Pass
				120	5700.100	5470 to 5725	Pass
				138	5700.040	5470 to 5725	Pass
			-30	120	5700.040	5470 to 5725	Pass
			-20	120	5697.840	5470 to 5725	Pass
			-10	120	5700.080	5470 to 5725	Pass
			0	120	5700.080	5470 to 5725	Pass
			10	120	5702.120	5470 to 5725	Pass
			30	120	5700.100	5470 to 5725	Pass
			40	120	5699.240	5470 to 5725	Pass
			50	120	5700.120	5470 to 5725	Pass
		5745	20	102	5745.080	5725 to 5850	Pass
				120	5742.920	5725 to 5850	Pass
				138	5745.060	5725 to 5850	Pass
			-30	120	5745.060	5725 to 5850	Pass
			-20	120	5745.060	5725 to 5850	Pass
			-10	120	5745.080	5725 to 5850	Pass
			0	120	5745.060	5725 to 5850	Pass
			10	120	5745.060	5725 to 5850	Pass

			30	120	5745.040	5725 to 5850	Pass
			40	120	5744.680	5725 to 5850	Pass
			50	120	5741.860	5725 to 5850	Pass
		5785	20	102	5785.100	5725 to 5850	Pass
				120	5785.960	5725 to 5850	Pass
				138	5785.120	5725 to 5850	Pass
			-30	120	5785.120	5725 to 5850	Pass
			-20	120	5785.080	5725 to 5850	Pass
			-10	120	5785.080	5725 to 5850	Pass
			0	120	5785.100	5725 to 5850	Pass
			10	120	5785.100	5725 to 5850	Pass
			30	120	5783.420	5725 to 5850	Pass
			40	120	5785.120	5725 to 5850	Pass
			50	120	5785.040	5725 to 5850	Pass
		5825	20	102	5820.580	5725 to 5850	Pass
				120	5821.220	5725 to 5850	Pass
				138	5824.980	5725 to 5850	Pass
			-30	120	5825.040	5725 to 5850	Pass
			-20	120	5824.740	5725 to 5850	Pass
			-10	120	5825.020	5725 to 5850	Pass
			0	120	5821.300	5725 to 5850	Pass
			10	120	5824.980	5725 to 5850	Pass
			30	120	5823.720	5725 to 5850	Pass
			40	120	5825.040	5725 to 5850	Pass
			50	120	5825.080	5725 to 5850	Pass
802.11n (HT20)	SISO	5180	20	102	5180.020	5150 to 5250	Pass
				120	5180.040	5150 to 5250	Pass
				138	5180.020	5150 to 5250	Pass
			-30	120	5180.040	5150 to 5250	Pass
			-20	120	5180.040	5150 to 5250	Pass
			-10	120	5180.020	5150 to 5250	Pass
			0	120	5180.020	5150 to 5250	Pass
			10	120	5180.040	5150 to 5250	Pass
			30	120	5179.020	5150 to 5250	Pass
			40	120	5178.900	5150 to 5250	Pass
			50	120	5180.020	5150 to 5250	Pass
		5200	20	102	5200.020	5150 to 5250	Pass
				120	5197.540	5150 to 5250	Pass
				138	5200.060	5150 to 5250	Pass
			-30	120	5200.040	5150 to 5250	Pass
			-20	120	5200.020	5150 to 5250	Pass
			-10	120	5200.060	5150 to 5250	Pass
			0	120	5200.040	5150 to 5250	Pass
			10	120	5196.640	5150 to 5250	Pass
			30	120	5200.040	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.040	5150 to 5250	Pass
		5240	20	102	5239.980	5150 to 5250	Pass
				120	5239.980	5150 to 5250	Pass
				138	5239.980	5150 to 5250	Pass
			-30	120	5239.980	5150 to 5250	Pass
			-20	120	5239.960	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5240.040	5150 to 5250	Pass
			10	120	5240.020	5150 to 5250	Pass
			30	120	5239.980	5150 to 5250	Pass
			40	120	5239.980	5150 to 5250	Pass
			50	120	5239.040	5150 to 5250	Pass
		5260	20	102	5260.060	5250 to 5350	Pass
				120	5260.060	5250 to 5350	Pass

				138	5260.060	5250 to 5350	Pass
			-30	120	5260.060	5250 to 5350	Pass
			-20	120	5260.020	5250 to 5350	Pass
			-10	120	5260.020	5250 to 5350	Pass
			0	120	5258.100	5250 to 5350	Pass
			10	120	5259.320	5250 to 5350	Pass
			30	120	5260.060	5250 to 5350	Pass
			40	120	5260.080	5250 to 5350	Pass
			50	120	5260.060	5250 to 5350	Pass
		5300	20	102	5300.020	5250 to 5350	Pass
				120	5300.040	5250 to 5350	Pass
				138	5300.020	5250 to 5350	Pass
			-30	120	5300.060	5250 to 5350	Pass
			-20	120	5300.060	5250 to 5350	Pass
			-10	120	5298.520	5250 to 5350	Pass
			0	120	5298.740	5250 to 5350	Pass
			10	120	5297.920	5250 to 5350	Pass
			30	120	5300.060	5250 to 5350	Pass
			40	120	5300.080	5250 to 5350	Pass
			50	120	5300.060	5250 to 5350	Pass
		5320	20	102	5319.980	5250 to 5350	Pass
				120	5318.300	5250 to 5350	Pass
				138	5319.960	5250 to 5350	Pass
			-30	120	5320.000	5250 to 5350	Pass
			-20	120	5320.000	5250 to 5350	Pass
			-10	120	5320.000	5250 to 5350	Pass
			0	120	5320.020	5250 to 5350	Pass
			10	120	5320.040	5250 to 5350	Pass
			30	120	5319.980	5250 to 5350	Pass
			40	120	5319.960	5250 to 5350	Pass
			50	120	5320.000	5250 to 5350	Pass
		5500	20	102	5500.040	5470 to 5725	Pass
				120	5500.020	5470 to 5725	Pass
				138	5500.060	5470 to 5725	Pass
			-30	120	5500.040	5470 to 5725	Pass
			-20	120	5500.040	5470 to 5725	Pass
			-10	120	5500.060	5470 to 5725	Pass
			0	120	5496.680	5470 to 5725	Pass
			10	120	5500.060	5470 to 5725	Pass
			30	120	5500.020	5470 to 5725	Pass
			40	120	5500.040	5470 to 5725	Pass
			50	120	5499.840	5470 to 5725	Pass
		5580	20	102	5580.040	5470 to 5725	Pass
				120	5580.020	5470 to 5725	Pass
				138	5580.020	5470 to 5725	Pass
			-30	120	5579.020	5470 to 5725	Pass
			-20	120	5579.880	5470 to 5725	Pass
			-10	120	5580.040	5470 to 5725	Pass
			0	120	5580.020	5470 to 5725	Pass
			10	120	5580.020	5470 to 5725	Pass
			30	120	5580.060	5470 to 5725	Pass
			40	120	5580.080	5470 to 5725	Pass
			50	120	5578.060	5470 to 5725	Pass
		5700	20	102	5700.020	5470 to 5725	Pass
				120	5700.080	5470 to 5725	Pass
				138	5699.980	5470 to 5725	Pass
			-30	120	5700.040	5470 to 5725	Pass
			-20	120	5700.000	5470 to 5725	Pass
			-10	120	5698.420	5470 to 5725	Pass
			0	120	5700.060	5470 to 5725	Pass

			10	120	5699.560	5470 to 5725	Pass
			30	120	5694.620	5470 to 5725	Pass
			40	120	5700.000	5470 to 5725	Pass
			50	120	5700.020	5470 to 5725	Pass
		5745	20	102	5745.040	5725 to 5850	Pass
				120	5744.980	5725 to 5850	Pass
				138	5745.040	5725 to 5850	Pass
			-30	120	5745.040	5725 to 5850	Pass
			-20	120	5741.700	5725 to 5850	Pass
			-10	120	5745.020	5725 to 5850	Pass
			0	120	5745.000	5725 to 5850	Pass
			10	120	5745.060	5725 to 5850	Pass
			30	120	5745.020	5725 to 5850	Pass
			40	120	5745.020	5725 to 5850	Pass
			50	120	5744.980	5725 to 5850	Pass
		5785	20	102	5785.040	5725 to 5850	Pass
				120	5785.040	5725 to 5850	Pass
				138	5785.080	5725 to 5850	Pass
			-30	120	5784.260	5725 to 5850	Pass
			-20	120	5785.080	5725 to 5850	Pass
			-10	120	5785.060	5725 to 5850	Pass
			0	120	5785.040	5725 to 5850	Pass
			10	120	5785.060	5725 to 5850	Pass
			30	120	5785.060	5725 to 5850	Pass
			40	120	5785.020	5725 to 5850	Pass
			50	120	5783.860	5725 to 5850	Pass
		5825	20	102	5825.040	5725 to 5850	Pass
				120	5825.000	5725 to 5850	Pass
				138	5824.980	5725 to 5850	Pass
			-30	120	5824.960	5725 to 5850	Pass
			-20	120	5825.000	5725 to 5850	Pass
			-10	120	5824.980	5725 to 5850	Pass
			0	120	5825.000	5725 to 5850	Pass
			10	120	5824.560	5725 to 5850	Pass
			30	120	5825.020	5725 to 5850	Pass
			40	120	5824.920	5725 to 5850	Pass
			50	120	5824.980	5725 to 5850	Pass
802.11n (HT40)	SISO	5190	20	102	5190.120	5150 to 5250	Pass
				120	5186.200	5150 to 5250	Pass
				138	5190.040	5150 to 5250	Pass
			-30	120	5190.040	5150 to 5250	Pass
			-20	120	5190.040	5150 to 5250	Pass
			-10	120	5188.440	5150 to 5250	Pass
			0	120	5190.040	5150 to 5250	Pass
			10	120	5190.040	5150 to 5250	Pass
			30	120	5190.080	5150 to 5250	Pass
			40	120	5190.080	5150 to 5250	Pass
			50	120	5190.080	5150 to 5250	Pass
		5230	20	102	5230.080	5150 to 5250	Pass
				120	5228.880	5150 to 5250	Pass
				138	5230.040	5150 to 5250	Pass
			-30	120	5230.080	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.080	5150 to 5250	Pass
			0	120	5230.080	5150 to 5250	Pass
			10	120	5229.800	5150 to 5250	Pass
			30	120	5230.080	5150 to 5250	Pass
			40	120	5230.080	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass
		5270	20	102	5270.080	5250 to 5350	Pass

				120	5270.120	5250 to 5350	Pass
				138	5270.120	5250 to 5350	Pass
			-30	120	5270.080	5250 to 5350	Pass
			-20	120	5270.080	5250 to 5350	Pass
			-10	120	5270.120	5250 to 5350	Pass
			0	120	5270.120	5250 to 5350	Pass
			10	120	5270.120	5250 to 5350	Pass
			30	120	5267.200	5250 to 5350	Pass
			40	120	5270.080	5250 to 5350	Pass
			50	120	5268.440	5250 to 5350	Pass
		5310	20	102	5310.040	5250 to 5350	Pass
				120	5310.080	5250 to 5350	Pass
				138	5310.040	5250 to 5350	Pass
			-30	120	5310.080	5250 to 5350	Pass
			-20	120	5310.080	5250 to 5350	Pass
			-10	120	5310.040	5250 to 5350	Pass
			0	120	5309.960	5250 to 5350	Pass
			10	120	5310.080	5250 to 5350	Pass
			30	120	5310.120	5250 to 5350	Pass
			40	120	5310.080	5250 to 5350	Pass
			50	120	5310.040	5250 to 5350	Pass
		5510	20	102	5510.120	5470 to 5725	Pass
				120	5510.000	5470 to 5725	Pass
				138	5510.120	5470 to 5725	Pass
			-30	120	5508.960	5470 to 5725	Pass
			-20	120	5510.080	5470 to 5725	Pass
			-10	120	5510.120	5470 to 5725	Pass
			0	120	5510.080	5470 to 5725	Pass
			10	120	5510.040	5470 to 5725	Pass
			30	120	5510.000	5470 to 5725	Pass
			40	120	5510.080	5470 to 5725	Pass
			50	120	5510.120	5470 to 5725	Pass
		5550	20	102	5550.080	5470 to 5725	Pass
				120	5550.040	5470 to 5725	Pass
				138	5549.400	5470 to 5725	Pass
			-30	120	5550.040	5470 to 5725	Pass
			-20	120	5550.080	5470 to 5725	Pass
			-10	120	5550.080	5470 to 5725	Pass
			0	120	5550.040	5470 to 5725	Pass
			10	120	5550.080	5470 to 5725	Pass
			30	120	5550.040	5470 to 5725	Pass
			40	120	5550.040	5470 to 5725	Pass
			50	120	5550.080	5470 to 5725	Pass
		5670	20	102	5670.080	5470 to 5725	Pass
				120	5670.080	5470 to 5725	Pass
				138	5670.040	5470 to 5725	Pass
			-30	120	5670.040	5470 to 5725	Pass
			-20	120	5670.080	5470 to 5725	Pass
			-10	120	5670.040	5470 to 5725	Pass
			0	120	5670.200	5470 to 5725	Pass
			10	120	5670.040	5470 to 5725	Pass
			30	120	5670.040	5470 to 5725	Pass
			40	120	5670.040	5470 to 5725	Pass
			50	120	5670.080	5470 to 5725	Pass
		5755	20	102	5755.040	5725 to 5850	Pass
				120	5755.120	5725 to 5850	Pass
				138	5755.000	5725 to 5850	Pass
			-30	120	5755.040	5725 to 5850	Pass
			-20	120	5755.080	5725 to 5850	Pass
			-10	120	5755.040	5725 to 5850	Pass

			0	120	5755.080	5725 to 5850	Pass
			10	120	5755.040	5725 to 5850	Pass
			30	120	5755.040	5725 to 5850	Pass
			40	120	5755.080	5725 to 5850	Pass
			50	120	5751.680	5725 to 5850	Pass
		5795	20	102	5795.080	5725 to 5850	Pass
				120	5795.080	5725 to 5850	Pass
				138	5795.080	5725 to 5850	Pass
			-30	120	5795.080	5725 to 5850	Pass
			-20	120	5795.080	5725 to 5850	Pass
			-10	120	5795.080	5725 to 5850	Pass
			0	120	5795.080	5725 to 5850	Pass
			10	120	5795.040	5725 to 5850	Pass
			30	120	5795.080	5725 to 5850	Pass
			40	120	5795.080	5725 to 5850	Pass
			50	120	5795.080	5725 to 5850	Pass
802.11ac (VHT20)	SISO	5180	20	102	5180.000	5150 to 5250	Pass
				120	5180.000	5150 to 5250	Pass
				138	5179.080	5150 to 5250	Pass
			-30	120	5178.520	5150 to 5250	Pass
			-20	120	5177.680	5150 to 5250	Pass
			-10	120	5180.000	5150 to 5250	Pass
			0	120	5177.600	5150 to 5250	Pass
			10	120	5180.020	5150 to 5250	Pass
			30	120	5180.020	5150 to 5250	Pass
			40	120	5180.040	5150 to 5250	Pass
			50	120	5180.020	5150 to 5250	Pass
		5200	20	102	5200.060	5150 to 5250	Pass
				120	5200.060	5150 to 5250	Pass
				138	5198.080	5150 to 5250	Pass
			-30	120	5200.020	5150 to 5250	Pass
			-20	120	5200.040	5150 to 5250	Pass
			-10	120	5200.020	5150 to 5250	Pass
			0	120	5200.040	5150 to 5250	Pass
			10	120	5200.020	5150 to 5250	Pass
			30	120	5198.700	5150 to 5250	Pass
			40	120	5200.060	5150 to 5250	Pass
			50	120	5200.080	5150 to 5250	Pass
		5240	20	102	5240.000	5150 to 5250	Pass
				120	5240.000	5150 to 5250	Pass
				138	5240.000	5150 to 5250	Pass
			-30	120	5240.000	5150 to 5250	Pass
			-20	120	5237.660	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5237.560	5150 to 5250	Pass
			10	120	5239.980	5150 to 5250	Pass
			30	120	5239.980	5150 to 5250	Pass
			40	120	5239.980	5150 to 5250	Pass
			50	120	5240.020	5150 to 5250	Pass
		5260	20	102	5260.060	5250 to 5350	Pass
				120	5260.080	5250 to 5350	Pass
				138	5259.800	5250 to 5350	Pass
			-30	120	5260.060	5250 to 5350	Pass
			-20	120	5260.060	5250 to 5350	Pass
			-10	120	5260.040	5250 to 5350	Pass
			0	120	5260.060	5250 to 5350	Pass
			10	120	5260.080	5250 to 5350	Pass
			30	120	5260.060	5250 to 5350	Pass
			40	120	5260.080	5250 to 5350	Pass
			50	120	5258.780	5250 to 5350	Pass

		5300	20	102	5300.060	5250 to 5350	Pass
				120	5300.060	5250 to 5350	Pass
				138	5300.040	5250 to 5350	Pass
			-30	120	5300.040	5250 to 5350	Pass
			-20	120	5300.060	5250 to 5350	Pass
			-10	120	5300.040	5250 to 5350	Pass
			0	120	5299.060	5250 to 5350	Pass
			10	120	5300.040	5250 to 5350	Pass
			30	120	5300.060	5250 to 5350	Pass
			40	120	5300.020	5250 to 5350	Pass
			50	120	5300.040	5250 to 5350	Pass
		5320	20	102	5320.020	5250 to 5350	Pass
				120	5319.960	5250 to 5350	Pass
				138	5320.040	5250 to 5350	Pass
			-30	120	5320.020	5250 to 5350	Pass
			-20	120	5320.000	5250 to 5350	Pass
			-10	120	5320.000	5250 to 5350	Pass
			0	120	5320.000	5250 to 5350	Pass
			10	120	5319.940	5250 to 5350	Pass
			30	120	5320.020	5250 to 5350	Pass
			40	120	5320.000	5250 to 5350	Pass
			50	120	5317.140	5250 to 5350	Pass
		5500	20	102	5500.020	5470 to 5725	Pass
				120	5500.080	5470 to 5725	Pass
				138	5500.060	5470 to 5725	Pass
			-30	120	5500.040	5470 to 5725	Pass
			-20	120	5498.640	5470 to 5725	Pass
			-10	120	5497.940	5470 to 5725	Pass
			0	120	5500.060	5470 to 5725	Pass
			10	120	5500.040	5470 to 5725	Pass
			30	120	5500.080	5470 to 5725	Pass
			40	120	5496.800	5470 to 5725	Pass
			50	120	5500.020	5470 to 5725	Pass
		5580	20	102	5577.220	5470 to 5725	Pass
				120	5580.420	5470 to 5725	Pass
				138	5580.020	5470 to 5725	Pass
			-30	120	5580.020	5470 to 5725	Pass
			-20	120	5580.020	5470 to 5725	Pass
			-10	120	5580.040	5470 to 5725	Pass
			0	120	5580.020	5470 to 5725	Pass
			10	120	5578.240	5470 to 5725	Pass
			30	120	5581.280	5470 to 5725	Pass
			40	120	5580.040	5470 to 5725	Pass
			50	120	5580.020	5470 to 5725	Pass
		5700	20	102	5700.040	5470 to 5725	Pass
				120	5700.060	5470 to 5725	Pass
				138	5700.080	5470 to 5725	Pass
			-30	120	5700.020	5470 to 5725	Pass
			-20	120	5700.040	5470 to 5725	Pass
			-10	120	5701.720	5470 to 5725	Pass
			0	120	5700.020	5470 to 5725	Pass
			10	120	5700.060	5470 to 5725	Pass
			30	120	5700.040	5470 to 5725	Pass
			40	120	5700.020	5470 to 5725	Pass
			50	120	5700.040	5470 to 5725	Pass
		5745	20	102	5745.020	5725 to 5850	Pass
				120	5745.040	5725 to 5850	Pass
				138	5745.040	5725 to 5850	Pass
			-30	120	5745.020	5725 to 5850	Pass
			-20	120	5745.040	5725 to 5850	Pass

			-10	120	5745.020	5725 to 5850	Pass
			0	120	5745.040	5725 to 5850	Pass
			10	120	5745.020	5725 to 5850	Pass
			30	120	5745.000	5725 to 5850	Pass
			40	120	5745.040	5725 to 5850	Pass
			50	120	5745.020	5725 to 5850	Pass
		5785	20	102	5785.000	5725 to 5850	Pass
				120	5785.040	5725 to 5850	Pass
				138	5785.080	5725 to 5850	Pass
			-30	120	5785.040	5725 to 5850	Pass
			-20	120	5785.060	5725 to 5850	Pass
			-10	120	5783.080	5725 to 5850	Pass
			0	120	5785.080	5725 to 5850	Pass
			10	120	5786.240	5725 to 5850	Pass
			30	120	5785.060	5725 to 5850	Pass
			40	120	5785.040	5725 to 5850	Pass
			50	120	5785.060	5725 to 5850	Pass
		5825	20	102	5823.360	5725 to 5850	Pass
				120	5825.000	5725 to 5850	Pass
				138	5825.040	5725 to 5850	Pass
			-30	120	5822.220	5725 to 5850	Pass
			-20	120	5825.020	5725 to 5850	Pass
			-10	120	5824.940	5725 to 5850	Pass
			0	120	5824.980	5725 to 5850	Pass
			10	120	5825.020	5725 to 5850	Pass
			30	120	5825.000	5725 to 5850	Pass
			40	120	5825.020	5725 to 5850	Pass
			50	120	5825.020	5725 to 5850	Pass
802.11ac (VHT40)	SISO	5190	20	102	5186.400	5150 to 5250	Pass
				120	5190.040	5150 to 5250	Pass
				138	5190.040	5150 to 5250	Pass
			-30	120	5190.080	5150 to 5250	Pass
			-20	120	5190.120	5150 to 5250	Pass
			-10	120	5190.120	5150 to 5250	Pass
			0	120	5190.120	5150 to 5250	Pass
			10	120	5190.080	5150 to 5250	Pass
			30	120	5190.080	5150 to 5250	Pass
			40	120	5189.560	5150 to 5250	Pass
			50	120	5190.120	5150 to 5250	Pass
		5230	20	102	5230.080	5150 to 5250	Pass
				120	5230.080	5150 to 5250	Pass
				138	5230.080	5150 to 5250	Pass
			-30	120	5230.080	5150 to 5250	Pass
			-20	120	5230.080	5150 to 5250	Pass
			-10	120	5230.080	5150 to 5250	Pass
			0	120	5230.080	5150 to 5250	Pass
			10	120	5230.080	5150 to 5250	Pass
			30	120	5230.080	5150 to 5250	Pass
			40	120	5230.080	5150 to 5250	Pass
			50	120	5230.080	5150 to 5250	Pass
		5270	20	102	5270.080	5250 to 5350	Pass
				120	5270.120	5250 to 5350	Pass
				138	5270.120	5250 to 5350	Pass
			-30	120	5270.120	5250 to 5350	Pass
			-20	120	5270.120	5250 to 5350	Pass
			-10	120	5270.120	5250 to 5350	Pass
			0	120	5270.120	5250 to 5350	Pass
			10	120	5270.120	5250 to 5350	Pass
			30	120	5270.120	5250 to 5350	Pass
			40	120	5270.120	5250 to 5350	Pass

			50	120	5270.120	5250 to 5350	Pass
		5310	20	102	5310.080	5250 to 5350	Pass
				120	5310.040	5250 to 5350	Pass
				138	5310.040	5250 to 5350	Pass
			-30	120	5310.080	5250 to 5350	Pass
			-20	120	5310.080	5250 to 5350	Pass
			-10	120	5307.160	5250 to 5350	Pass
			0	120	5310.080	5250 to 5350	Pass
			10	120	5310.080	5250 to 5350	Pass
			30	120	5310.040	5250 to 5350	Pass
			40	120	5310.080	5250 to 5350	Pass
			50	120	5310.040	5250 to 5350	Pass
		5510	20	102	5510.080	5470 to 5725	Pass
				120	5509.960	5470 to 5725	Pass
				138	5510.000	5470 to 5725	Pass
			-30	120	5510.040	5470 to 5725	Pass
			-20	120	5510.080	5470 to 5725	Pass
			-10	120	5510.120	5470 to 5725	Pass
			0	120	5510.120	5470 to 5725	Pass
			10	120	5510.000	5470 to 5725	Pass
			30	120	5510.040	5470 to 5725	Pass
			40	120	5510.120	5470 to 5725	Pass
			50	120	5510.120	5470 to 5725	Pass
		5550	20	102	5550.040	5470 to 5725	Pass
				120	5550.040	5470 to 5725	Pass
				138	5550.080	5470 to 5725	Pass
			-30	120	5550.000	5470 to 5725	Pass
			-20	120	5550.080	5470 to 5725	Pass
			-10	120	5548.240	5470 to 5725	Pass
			0	120	5550.080	5470 to 5725	Pass
			10	120	5550.000	5470 to 5725	Pass
			30	120	5547.760	5470 to 5725	Pass
			40	120	5550.040	5470 to 5725	Pass
			50	120	5550.000	5470 to 5725	Pass
		5670	20	102	5670.000	5470 to 5725	Pass
				120	5670.040	5470 to 5725	Pass
				138	5670.040	5470 to 5725	Pass
			-30	120	5670.040	5470 to 5725	Pass
			-20	120	5670.080	5470 to 5725	Pass
			-10	120	5670.080	5470 to 5725	Pass
			0	120	5670.000	5470 to 5725	Pass
			10	120	5670.000	5470 to 5725	Pass
			30	120	5670.080	5470 to 5725	Pass
			40	120	5670.120	5470 to 5725	Pass
			50	120	5670.040	5470 to 5725	Pass
		5755	20	102	5755.120	5725 to 5850	Pass
				120	5755.080	5725 to 5850	Pass
				138	5755.080	5725 to 5850	Pass
			-30	120	5755.080	5725 to 5850	Pass
			-20	120	5755.120	5725 to 5850	Pass
			-10	120	5755.040	5725 to 5850	Pass
			0	120	5755.040	5725 to 5850	Pass
			10	120	5755.080	5725 to 5850	Pass
			30	120	5755.080	5725 to 5850	Pass
			40	120	5755.040	5725 to 5850	Pass
			50	120	5755.080	5725 to 5850	Pass
		5795	20	102	5795.040	5725 to 5850	Pass
				120	5795.080	5725 to 5850	Pass
				138	5795.040	5725 to 5850	Pass
			-30	120	5795.080	5725 to 5850	Pass

			-20	120	5795.080	5725 to 5850	Pass
			-10	120	5795.080	5725 to 5850	Pass
			0	120	5795.080	5725 to 5850	Pass
			10	120	5795.040	5725 to 5850	Pass
			30	120	5795.040	5725 to 5850	Pass
			40	120	5795.080	5725 to 5850	Pass
			50	120	5795.080	5725 to 5850	Pass
802.11ac (VHT80)	SISO	5210	20	102	5210.150	5150 to 5250	Pass
				120	5210.150	5150 to 5250	Pass
				138	5210.150	5150 to 5250	Pass
			-30	120	5210.150	5150 to 5250	Pass
			-20	120	5210.075	5150 to 5250	Pass
			-10	120	5210.075	5150 to 5250	Pass
			0	120	5210.075	5150 to 5250	Pass
			10	120	5210.075	5150 to 5250	Pass
			30	120	5210.150	5150 to 5250	Pass
			40	120	5210.150	5150 to 5250	Pass
			50	120	5210.075	5150 to 5250	Pass
		5290	20	102	5290.075	5250 to 5350	Pass
				120	5290.075	5250 to 5350	Pass
				138	5290.075	5250 to 5350	Pass
			-30	120	5290.075	5250 to 5350	Pass
			-20	120	5290.075	5250 to 5350	Pass
			-10	120	5290.075	5250 to 5350	Pass
			0	120	5290.075	5250 to 5350	Pass
			10	120	5290.075	5250 to 5350	Pass
			30	120	5290.075	5250 to 5350	Pass
			40	120	5290.075	5250 to 5350	Pass
			50	120	5290.075	5250 to 5350	Pass
		5530	20	102	5530.075	5470 to 5725	Pass
				120	5530.075	5470 to 5725	Pass
				138	5530.075	5470 to 5725	Pass
			-30	120	5530.075	5470 to 5725	Pass
			-20	120	5530.075	5470 to 5725	Pass
			-10	120	5530.075	5470 to 5725	Pass
			0	120	5530.075	5470 to 5725	Pass
			10	120	5530.075	5470 to 5725	Pass
			30	120	5530.075	5470 to 5725	Pass
			40	120	5530.075	5470 to 5725	Pass
			50	120	5530.075	5470 to 5725	Pass
		5610	20	102	5610.075	5470 to 5725	Pass
				120	5610.075	5470 to 5725	Pass
				138	5609.174	5470 to 5725	Pass
			-30	120	5610.075	5470 to 5725	Pass
			-20	120	5610.075	5470 to 5725	Pass
			-10	120	5610.075	5470 to 5725	Pass
			0	120	5610.075	5470 to 5725	Pass
			10	120	5610.075	5470 to 5725	Pass
			30	120	5610.075	5470 to 5725	Pass
			40	120	5610.075	5470 to 5725	Pass
			50	120	5610.075	5470 to 5725	Pass
		5775	20	102	5775.075	5725 to 5850	Pass
				120	5775.075	5725 to 5850	Pass
				138	5775.075	5725 to 5850	Pass
			-30	120	5775.075	5725 to 5850	Pass
			-20	120	5775.075	5725 to 5850	Pass
			-10	120	5775.075	5725 to 5850	Pass
			0	120	5775.075	5725 to 5850	Pass
			10	120	5775.000	5725 to 5850	Pass
			30	120	5775.075	5725 to 5850	Pass

			40	120	5775.075	5725 to 5850	Pass
			50	120	5775.075	5725 to 5850	Pass

6. Signal Calibration

6.1 Test Result

6.1.1 SC

Band: 2C							
Mode	Bandwidth (MHz)	Frequency (MHz)	Radar Signal		Signal Calibration		Verdict
			Type	Trial Id	Result	Limit	
802.11a	20	5320	0	0	Refer To Test Graph		Pass
			1	0	Refer To Test Graph		Pass
			2	0	Refer To Test Graph		Pass
			3	0	Refer To Test Graph		Pass
			4	0	Refer To Test Graph		Pass
			5	0	Refer To Test Graph		Pass
			6	0	Refer To Test Graph		Pass

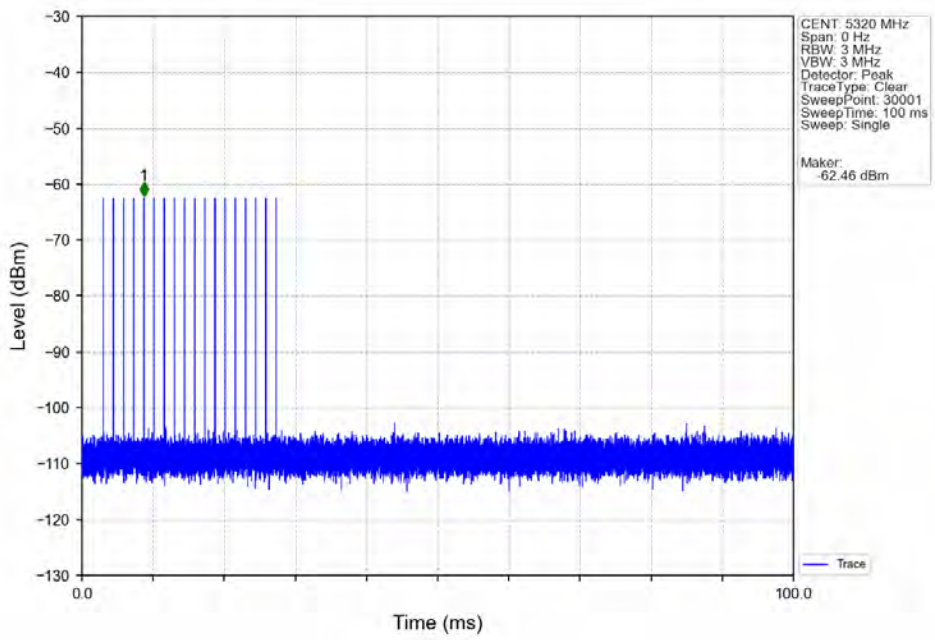
6.1.2 SC

Band: 2A							
Mode	Bandwidth (MHz)	Frequency (MHz)	Radar Signal		Signal Calibration		Verdict
			Type	Trial Id	Result	Limit	
802.11ac (VHT80)	80	5530	0	0	Refer To Test Graph		Pass
			1	0	Refer To Test Graph		Pass
			2	0	Refer To Test Graph		Pass
			3	0	Refer To Test Graph		Pass
			4	0	Refer To Test Graph		Pass
			5	0	Refer To Test Graph		Pass
			6	0	Refer To Test Graph		Pass

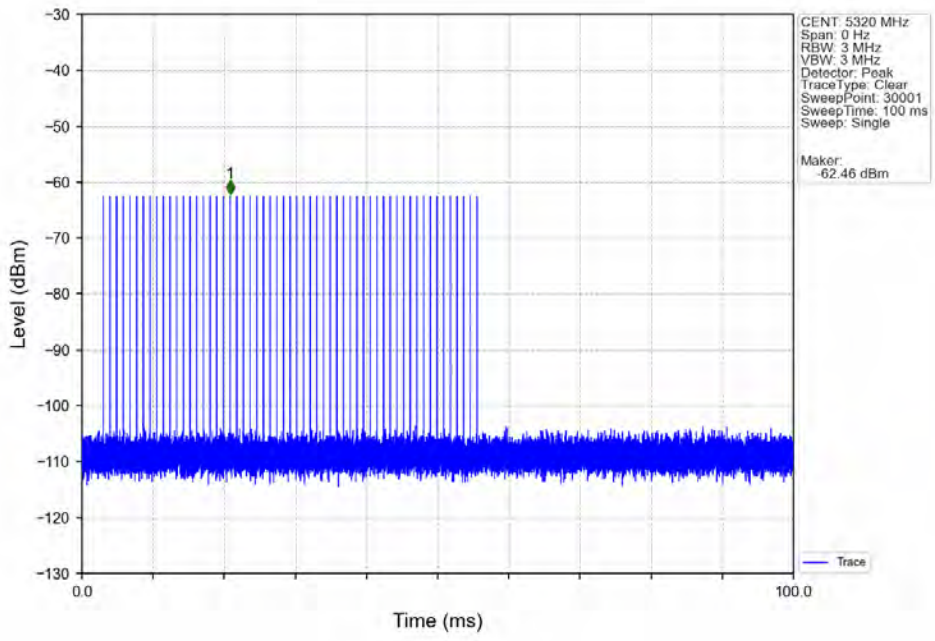
6.2 Test Graph

6.2.1 SC

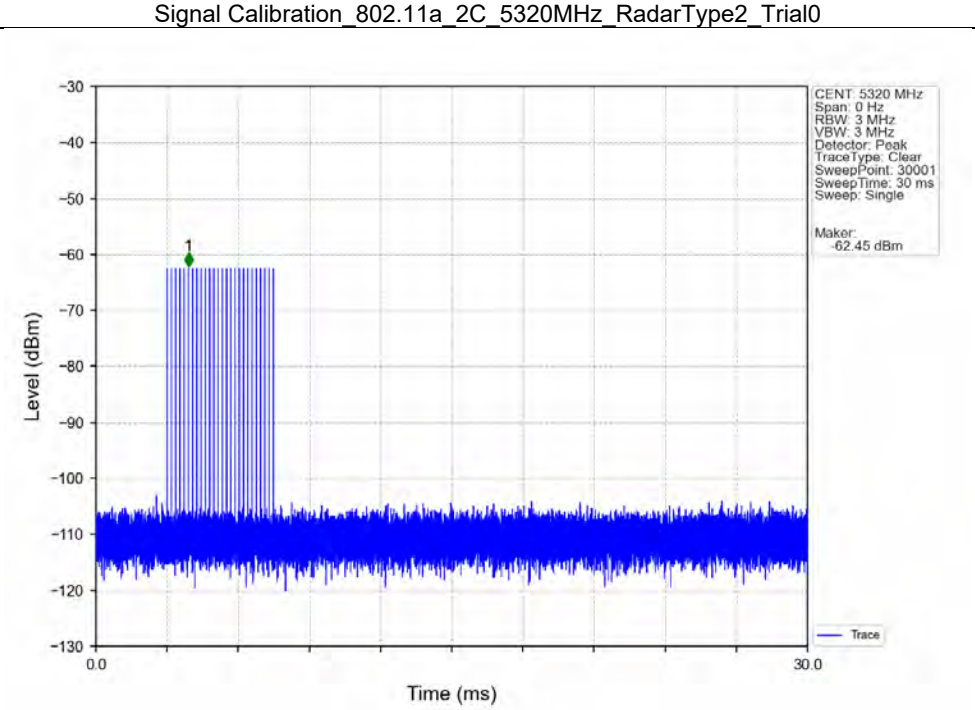
Signal Calibration_802.11a_2C_5320MHz_RadarType0_Trial0



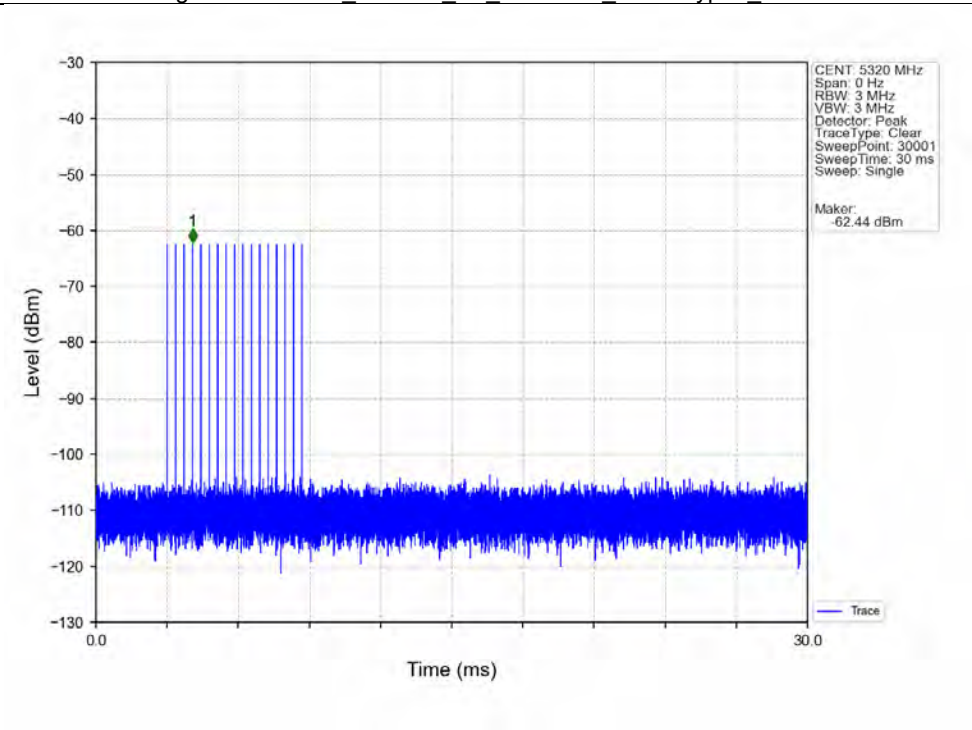
Signal Calibration_802.11a_2C_5320MHz_RadarType1_Trial0



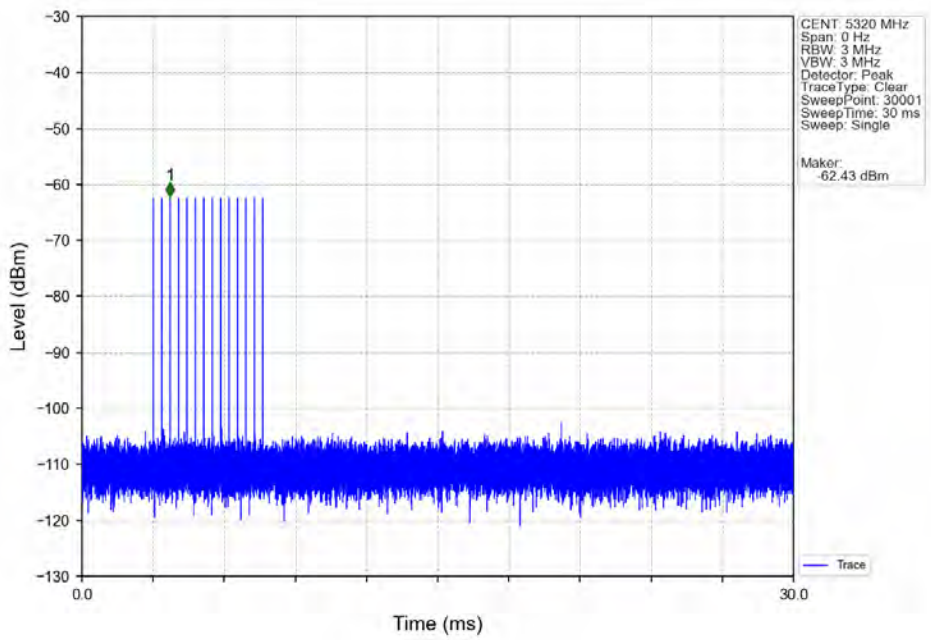
Signal Calibration_802.11a_2C_5320MHz_RadarType2_Trial0



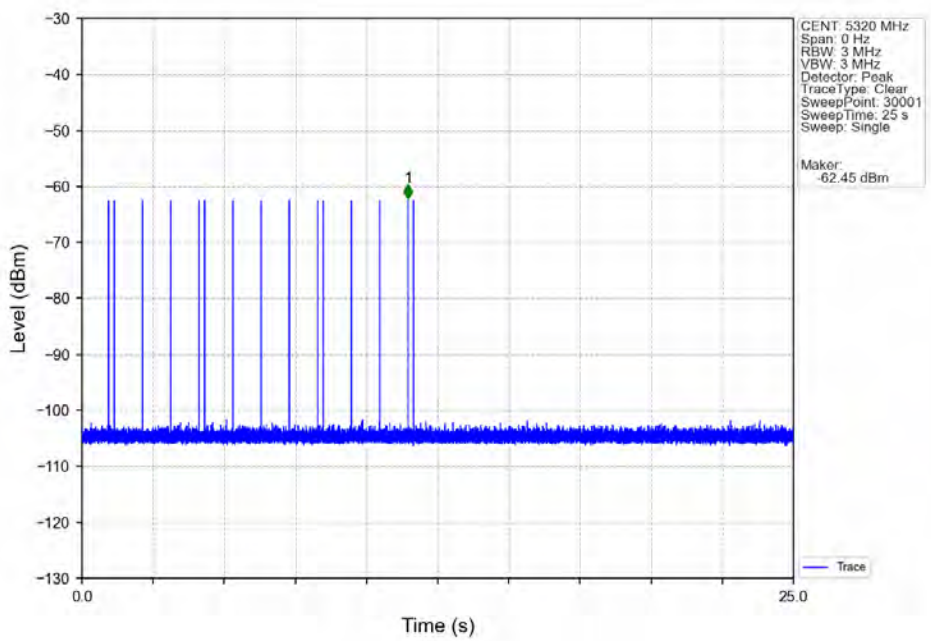
Signal Calibration_802.11a_2C_5320MHz_RadarType3_Trial0



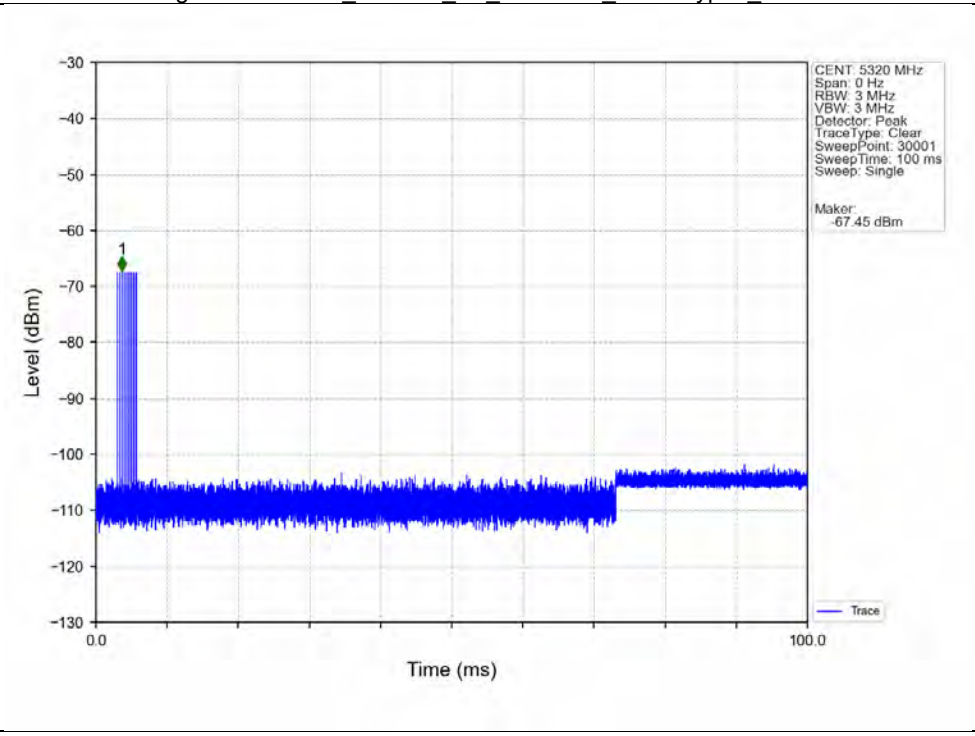
Signal Calibration_802.11a_2C_5320MHz_RadarType4_Trial0



Signal Calibration_802.11a_2C_5320MHz_RadarType5_Trial0

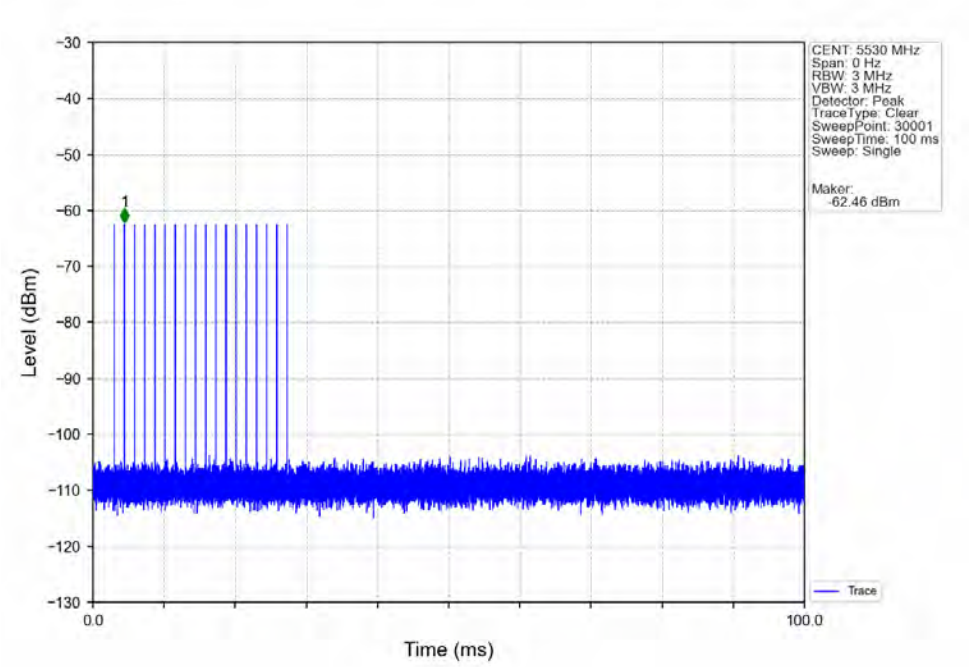


Signal Calibration_802.11a_2C_5320MHz_RadarType6_Trial0

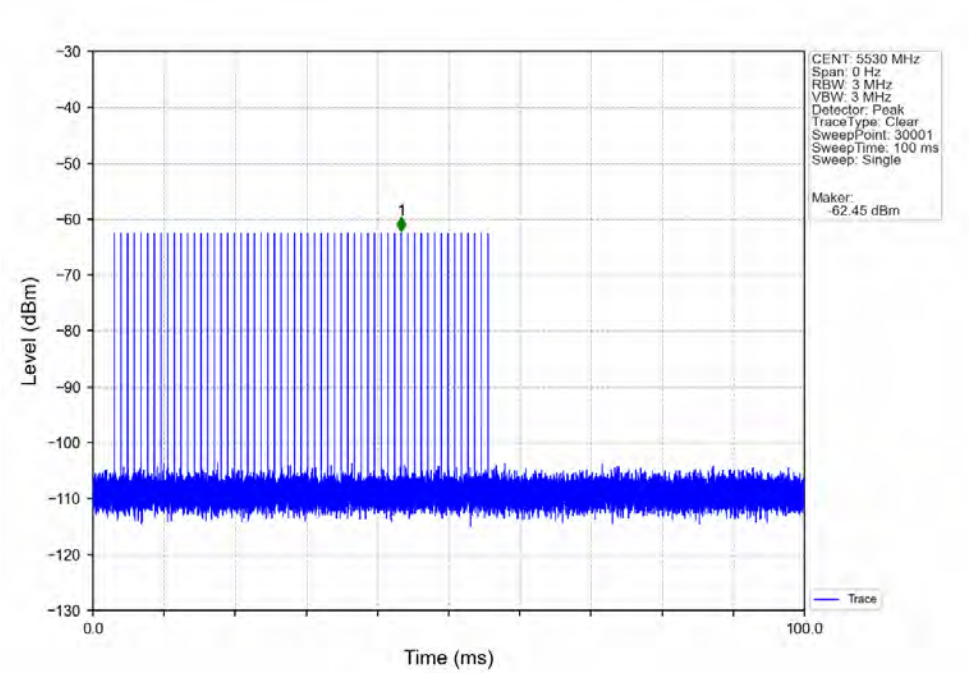


6.2.2 SC

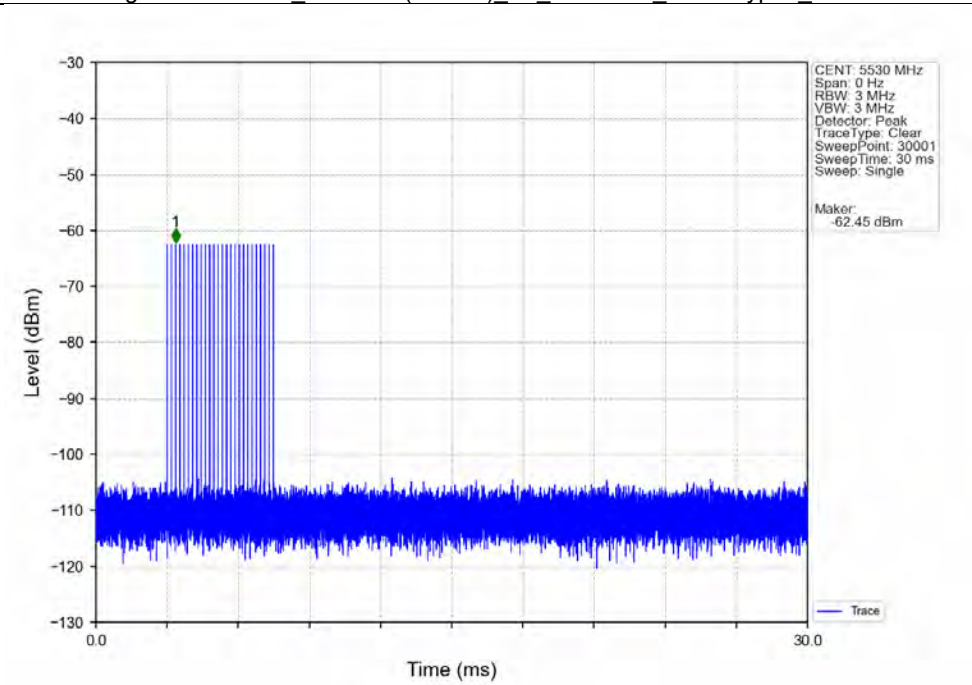
Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType0_Trial0



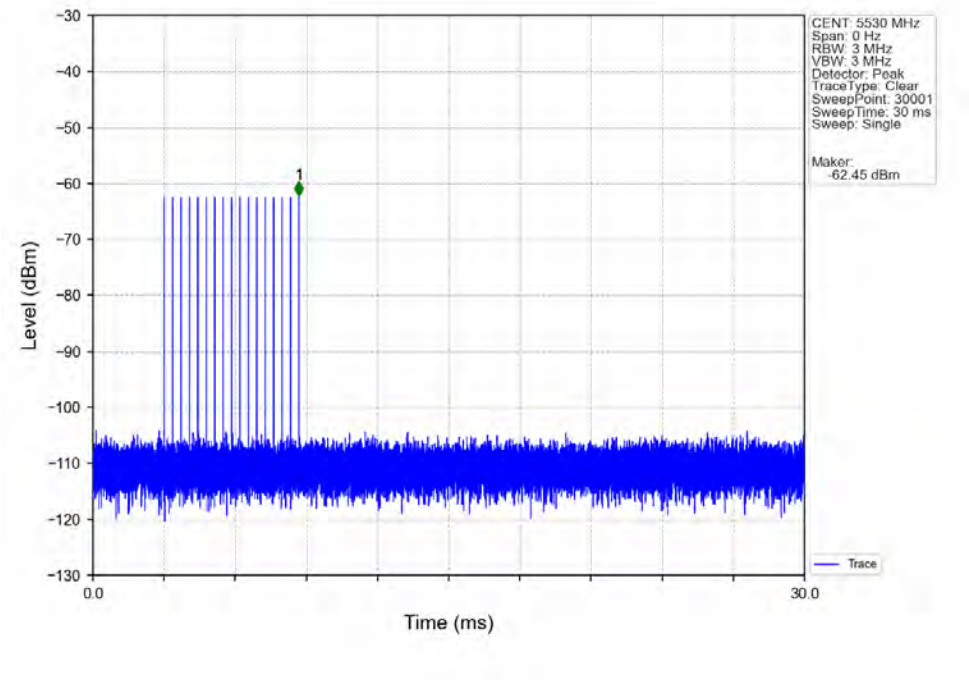
Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType1_Trial0



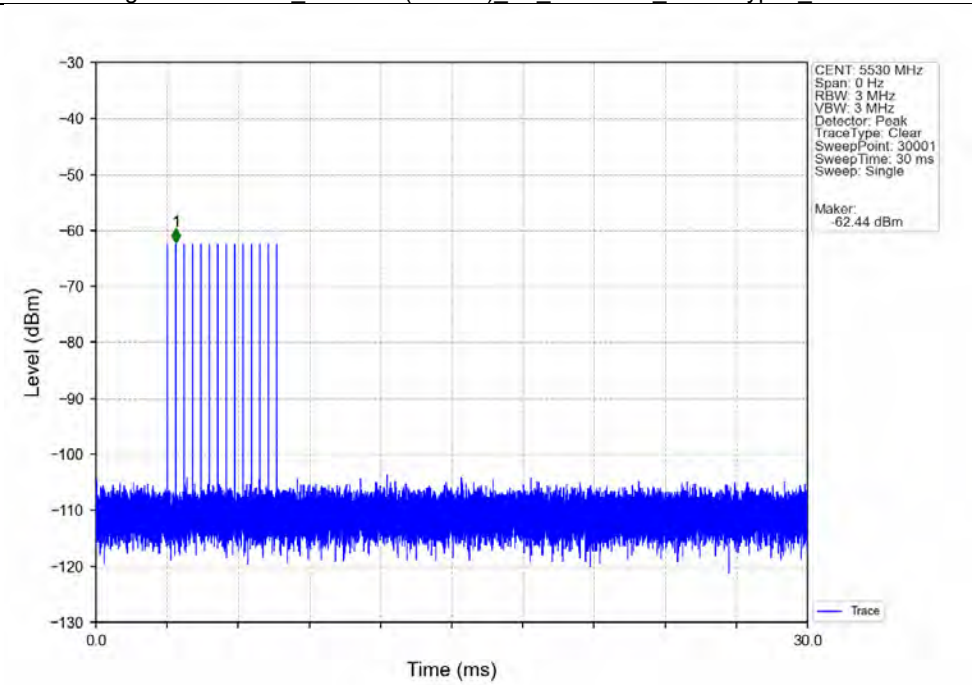
Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType2_Trial0



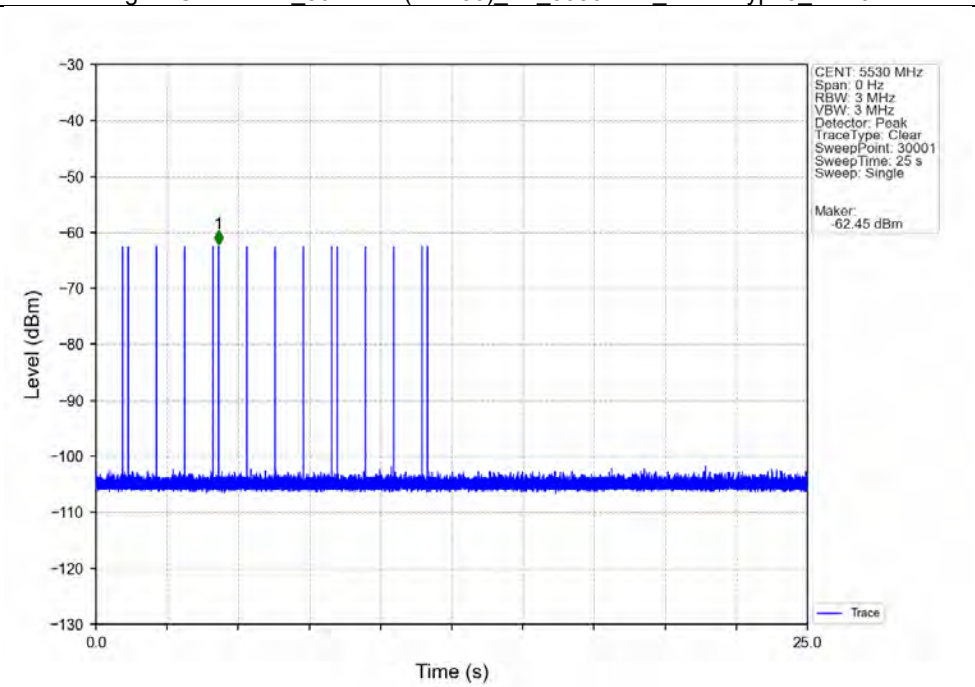
Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType3_Trial0



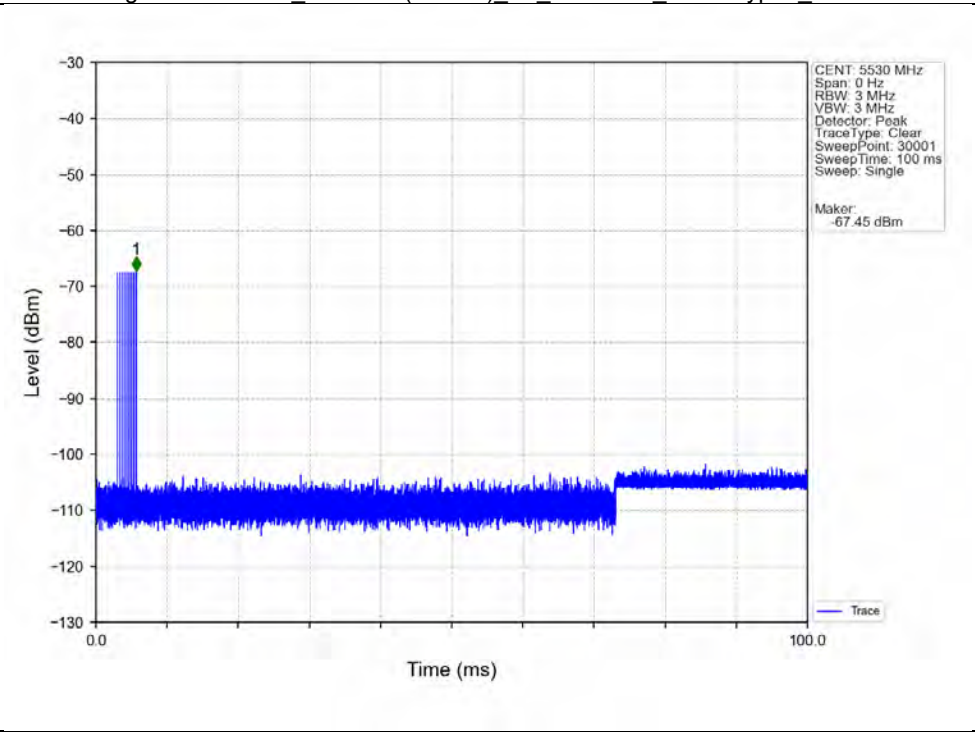
Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType4_Trial0



Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType5_Trial0



Signal Calibration_802.11ac(VHT80)_2A_5530MHz_RadarType6_Trial0



7. Channel Loading (Payload)

7.1 Test Result

7.1.1 Payload

Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Loading (Payload) (%)		Verdict
			Result	Limit	
802.11a	20	5320	30.26	>=17	Pass

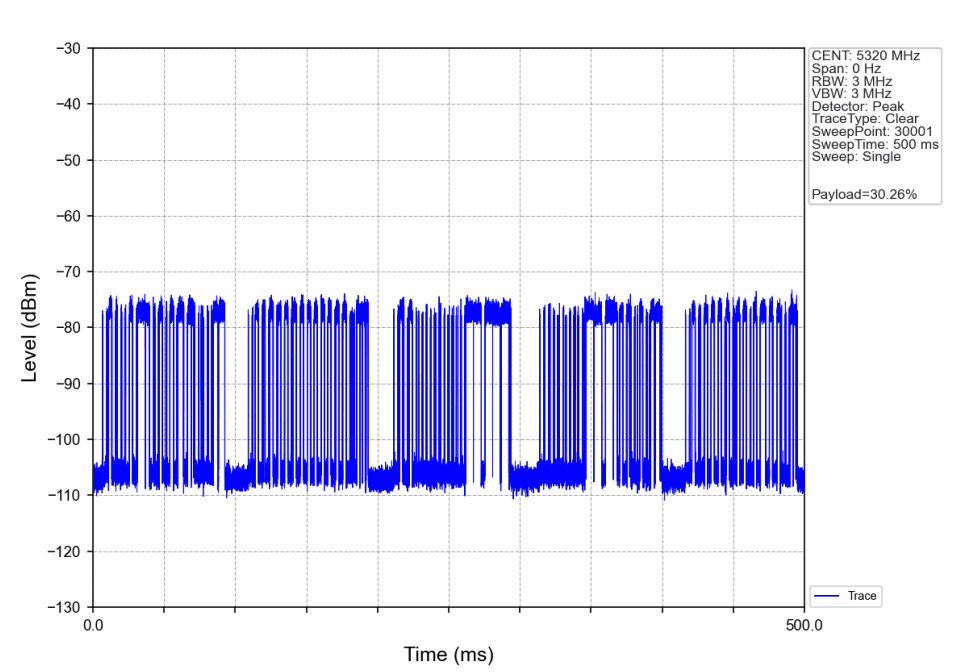
7.1.2 Payload

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Loading (Payload) (%)		Verdict
			Result	Limit	
802.11ac (VHT80)	80	5530	26.70	>=17	Pass

7.2 Test Graph

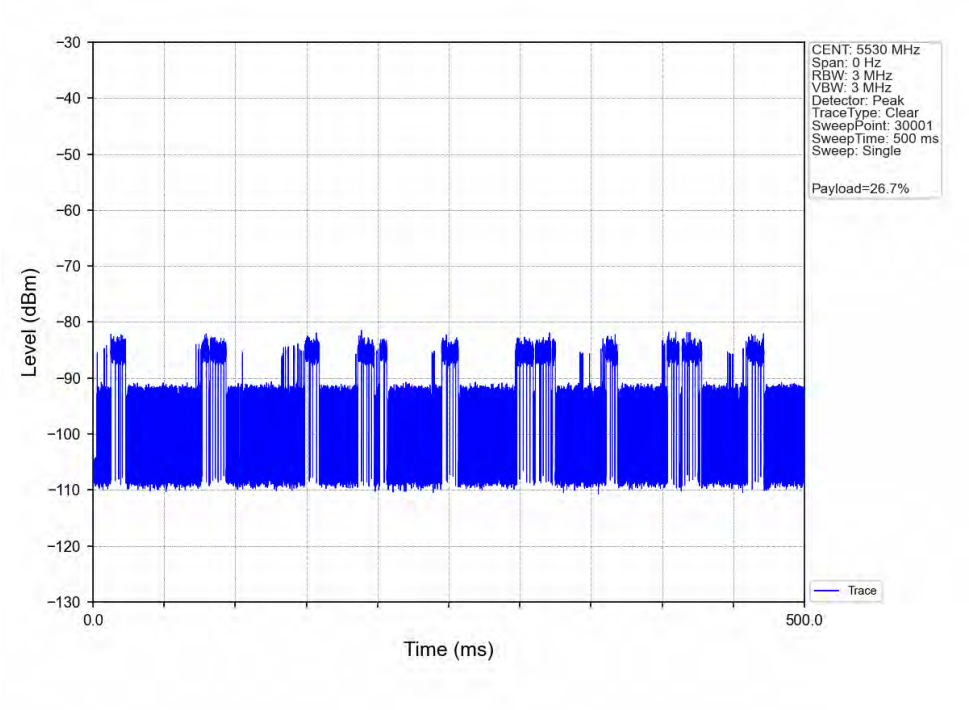
7.2.1 Payload

Channel Loading (Payload)_802.11a_2C_5320MHz



7.2.2 Payload

Channel Loading (Payload)_802.11ac(VHT80)_2A_5530MHz



8. Channel Move Time and Closing Transmission Time

8.1 Test Result

8.1.1 CMT_CTT

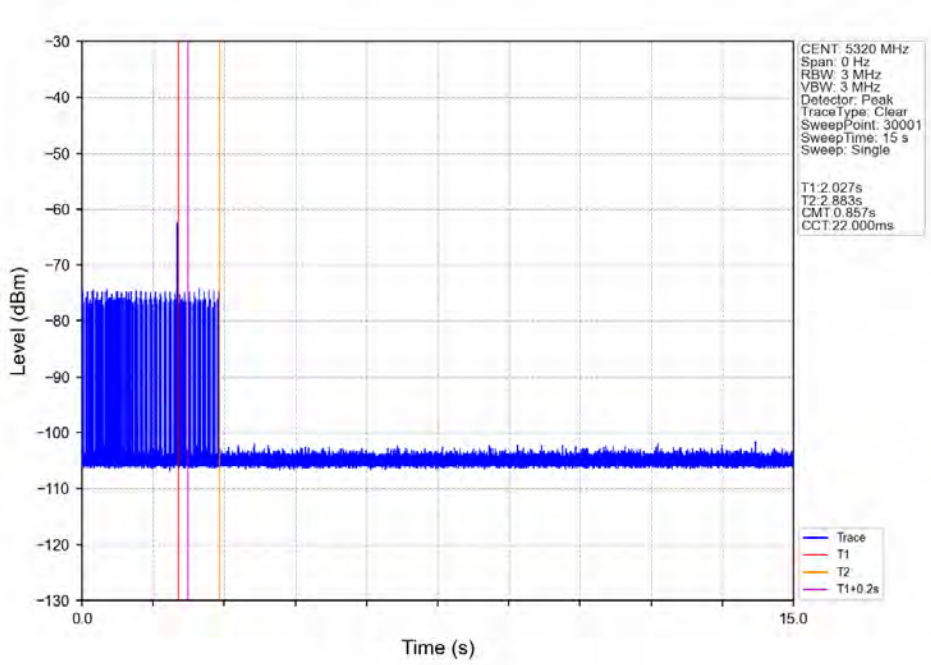
Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Move Time and Closing Transmission Time		Verdict
			Result	Limit	
802.11a	20	5320	Refer To Test Graph		Pass

8.1.2 CMT_CTT

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Move Time and Closing Transmission Time		Verdict
			Result	Limit	
802.11ac (VHT80)	80	5530	Refer To Test Graph		Pass

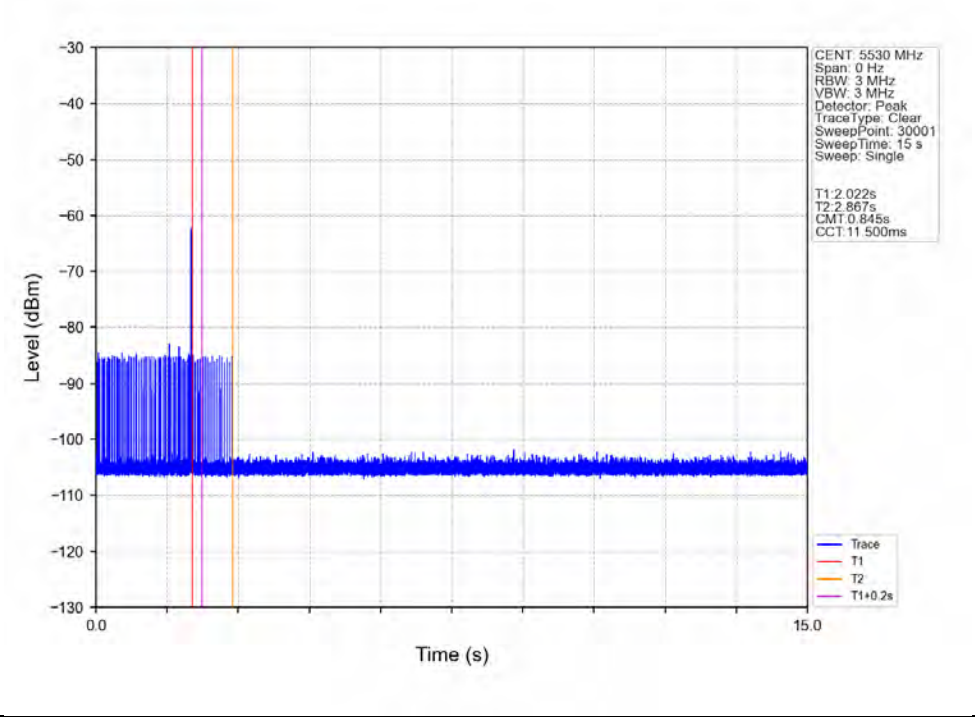
8.2 Test Graph

8.2.1 CMT_CTT

Channel Move Time and Closing Transmission Time_802.11a_2C_5320MHz


8.2.2 CMT_CTT

Channel Move Time and Closing Transmission Time_802.11ac(VHT80)_2A_5530MHz



9. Non-Occupancy Period

9.1 Test Result

9.1.1 Period

Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Non-Occupancy Period		Verdict
			Result	Limit	
802.11a	20	5320	Refer To Test Graph		Pass

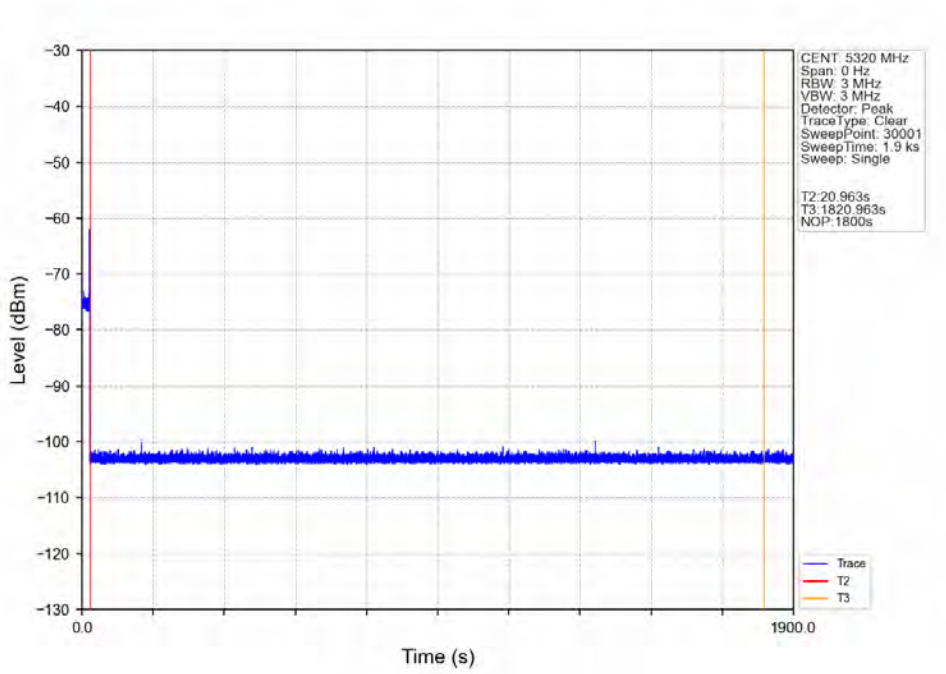
9.1.2 Period

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Non-Occupancy Period		Verdict
			Result	Limit	
802.11ac (VHT80)	80	5530	Refer To Test Graph		Pass

9.2 Test Graph

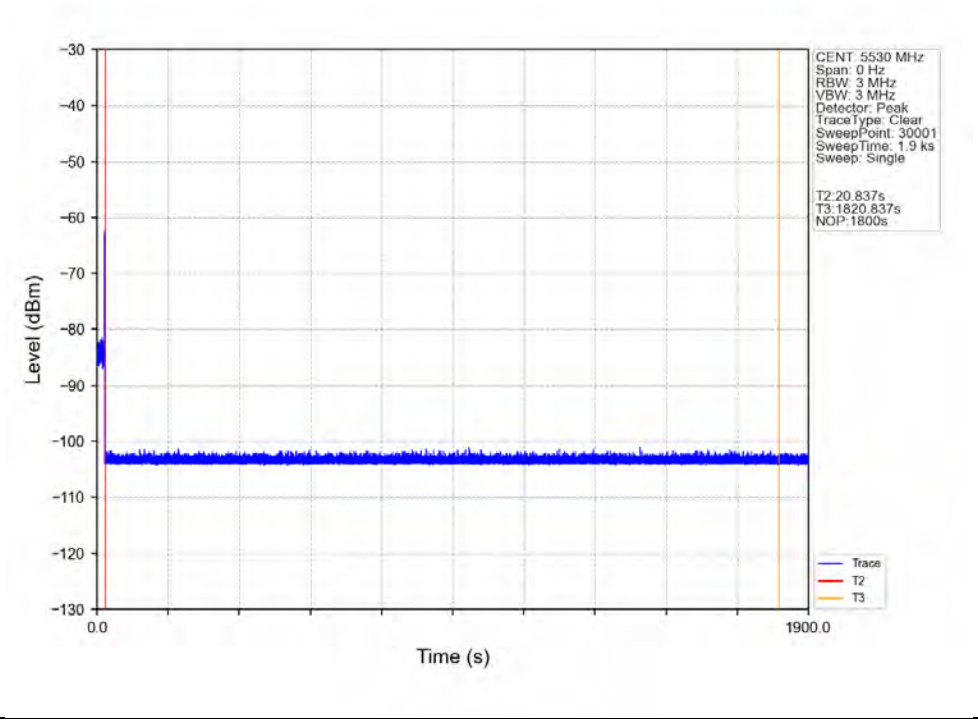
9.2.1 Period

Non-Occupancy Period_802.11a_2C_5320MHz



9.2.2 Period

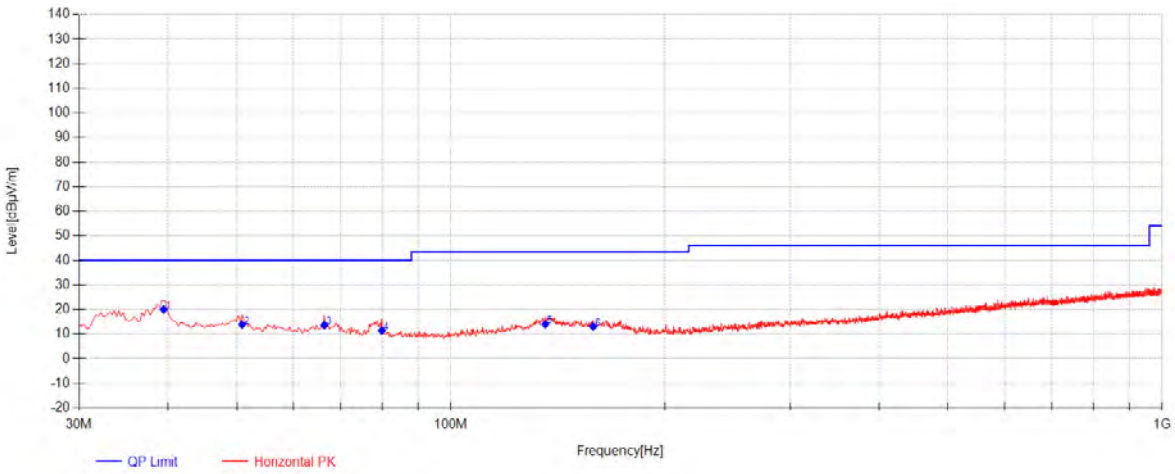
Non-Occupancy Period_802.11ac(VHT80)_2A_5530MHz



Radiated Spurious Emissions

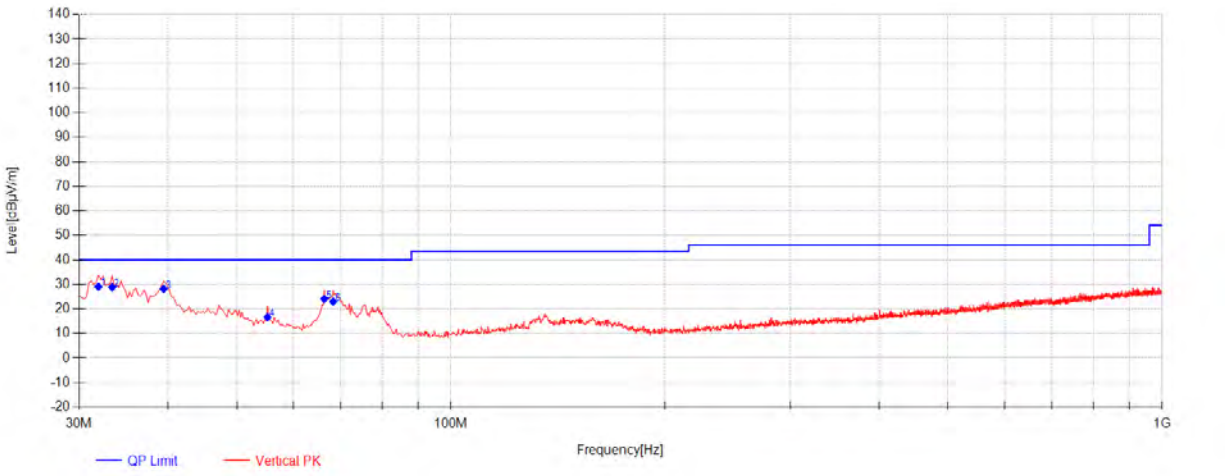
Radiated emission below 1GHz

Worst case Mode: 11ac80_Channel 58 WORSE



Final Data List								
NO.	Frequency [MHz]]	Reading [dBµV]	Factor [dB]	AF [dB/m]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	39.4575	43.56	-42.23	18.69	20.02	40.00	19.98	Horizontal
2	50.855	37.46	-42.14	18.51	13.84	40.00	26.16	Horizontal
3	66.375	38.26	-41.89	17.23	13.60	40.00	26.40	Horizontal
4	79.955	38.16	-41.63	14.91	11.44	40.00	28.56	Horizontal
5	135.73	36.53	-41.13	18.57	13.97	43.50	29.53	Horizontal
6	158.525	34.72	-40.70	19.00	13.02	43.50	30.48	Horizontal

11ac80_Channel 58 WORSE



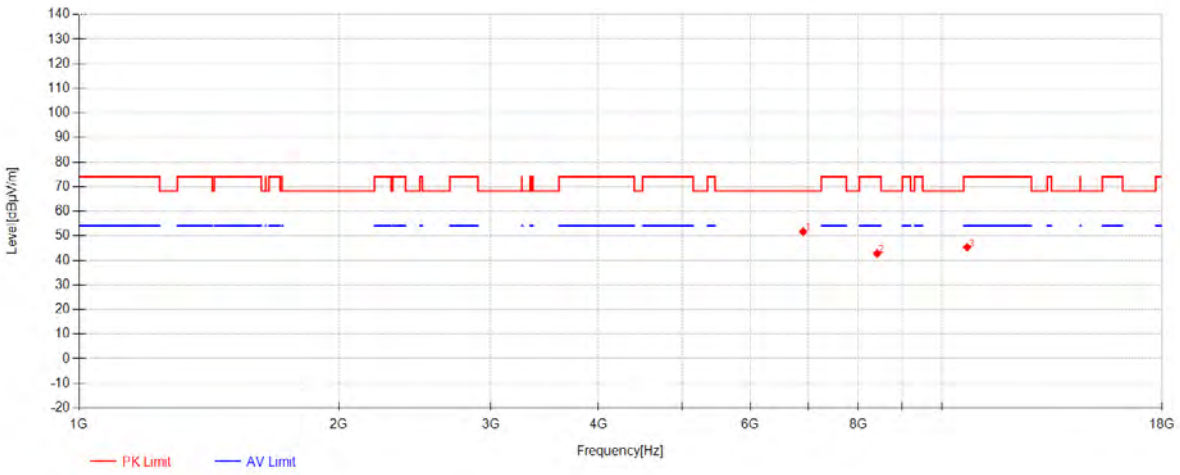
Final Data List								
NO.	Frequency [MHz]]	Reading [dBµV]	Factor [dB]	AF [dB/m]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	31.94	53.26	-42.29	18.11	29.07	40.00	10.93	Vertical
2	33.395	53.01	-42.28	18.14	28.87	40.00	11.13	Vertical
3	39.4575	51.74	-42.23	18.69	28.20	40.00	11.80	Vertical
4	55.22	40.53	-42.07	18.20	16.66	40.00	23.34	Vertical
5	66.375	48.69	-41.89	17.23	24.03	40.00	15.97	Vertical
6	68.315	48.03	-41.86	16.74	22.91	40.00	17.09	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier gain. The basic equation with a sample calculation is as follows:
   Value = Reading(dBµV) + AF(dB/m) + Factor(dB):
   AF = Antenna Factor(dB/m)
   Factor = Cable Factor(dB) - Preamplifier gain(dB)
   Margin = Limit(dBµV/m) – Value(dBµV/m)
2) All channels have been tested, but only the worst case data displayed in this report.

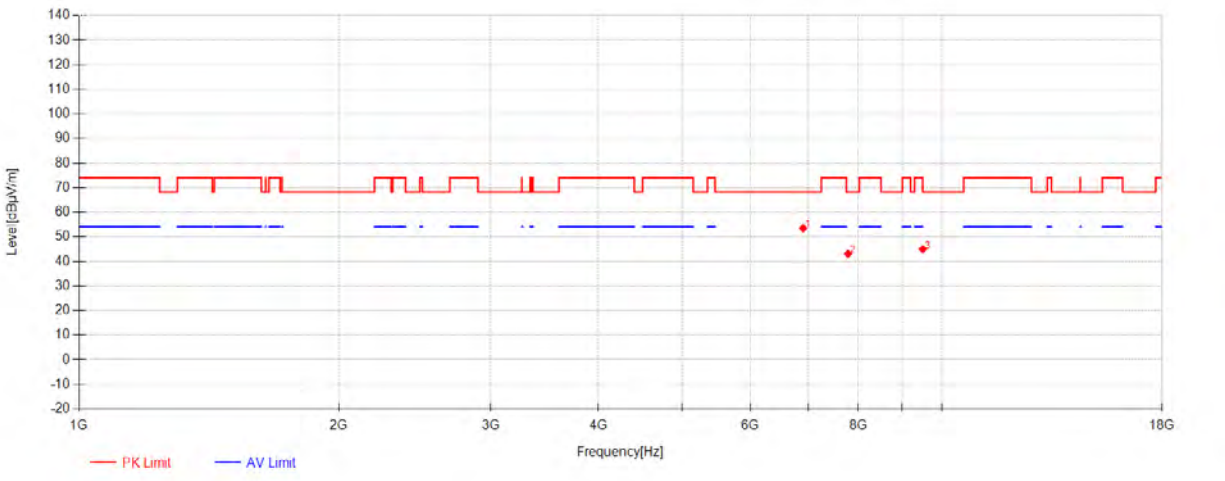
Transmitter emission Above 1GHz

802.11a_Channel 36



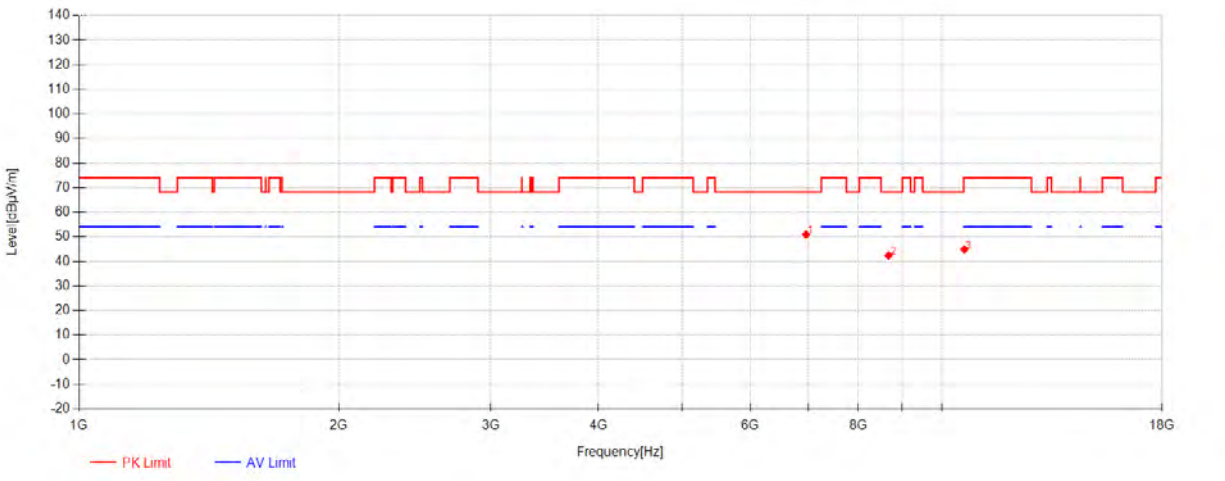
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6906.8125	60.65	34.83	-43.84	51.64	68.30	16.66	Horizontal
2	8412.8333	47.31	36.85	-41.43	42.74	74.00	31.26	Horizontal
3	10699.895	44.24	38.57	-37.49	45.32	74.00	28.68	Horizontal

802.11a_Channel 36



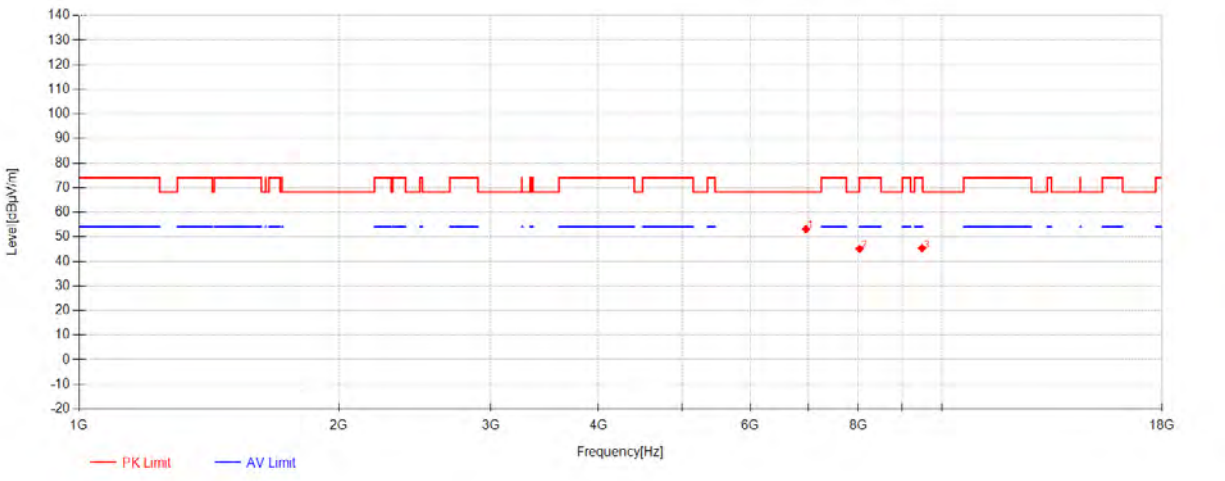
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6906.8125	62.46	34.83	-43.84	53.45	68.30	14.85	Vertical
2	7784.1667	48.85	36.80	-42.64	43.01	68.30	25.29	Vertical
3	9505.3333	47.33	37.51	-39.92	44.92	68.30	23.38	Vertical

802.11a_Channel 44



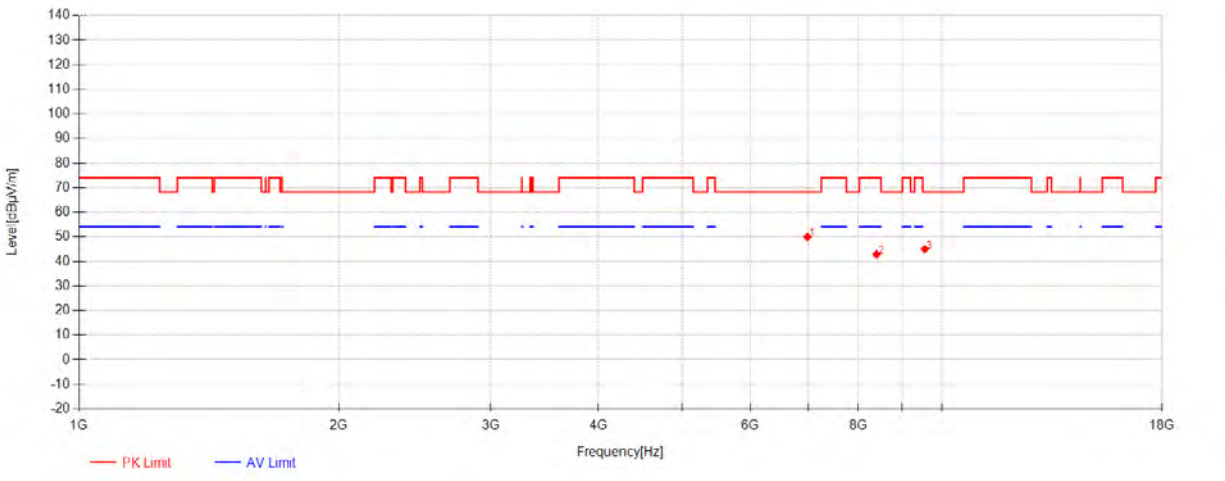
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6960	59.35	34.93	-43.35	50.92	68.30	17.38	Horizontal
2	8675.4167	46.89	36.69	-41.23	42.36	68.30	25.94	Horizontal
3	10618.916	44.17	38.56	-37.91	44.82	74.00	29.18	Horizontal

802.11a_Channel 44



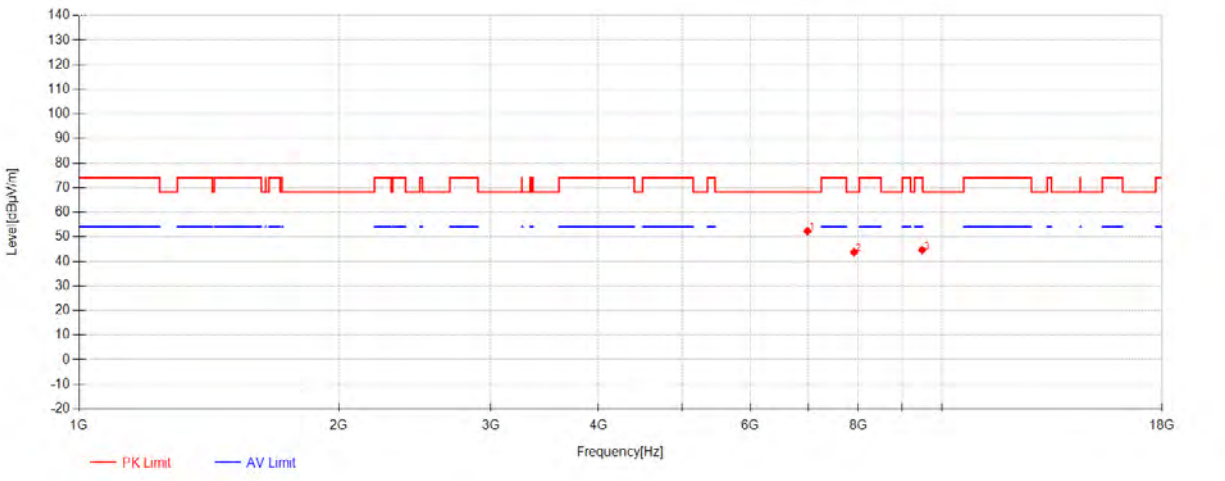
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6960	61.49	34.93	-43.35	53.06	68.30	15.24	Vertical
2	8029.0208	49.87	37.08	-41.90	45.05	74.00	28.95	Vertical
3	9484.7292	47.83	37.47	-39.95	45.35	74.00	28.65	Vertical

802.11a_Channel 48



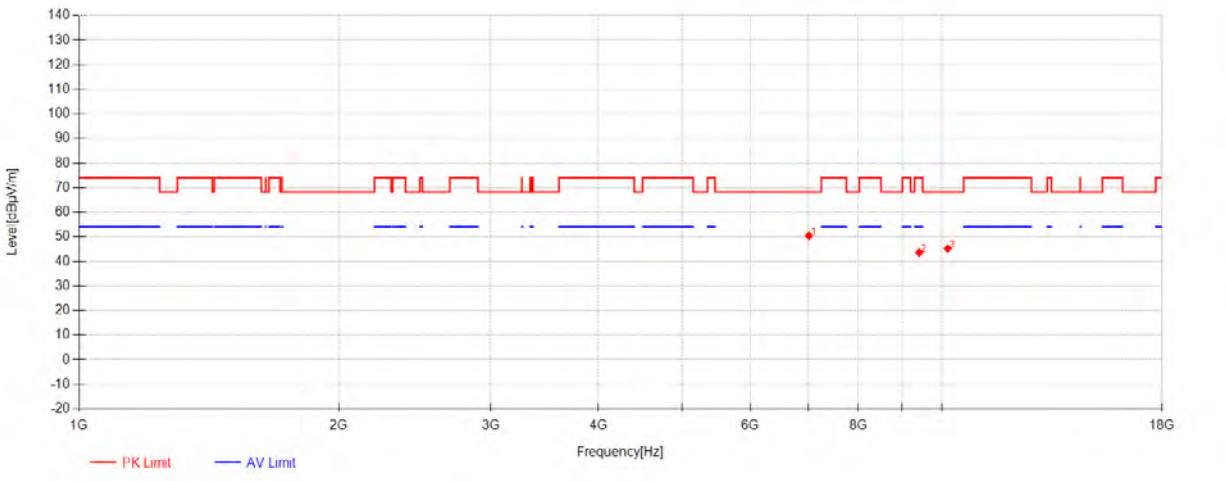
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6986.8333	58.09	34.98	-43.11	49.96	68.30	18.34	Horizontal
2	8400.8542	47.32	36.86	-41.37	42.81	74.00	31.19	Horizontal
3	9554.6875	46.90	37.61	-39.54	44.96	68.30	23.34	Horizontal

802.11a_Channel 48



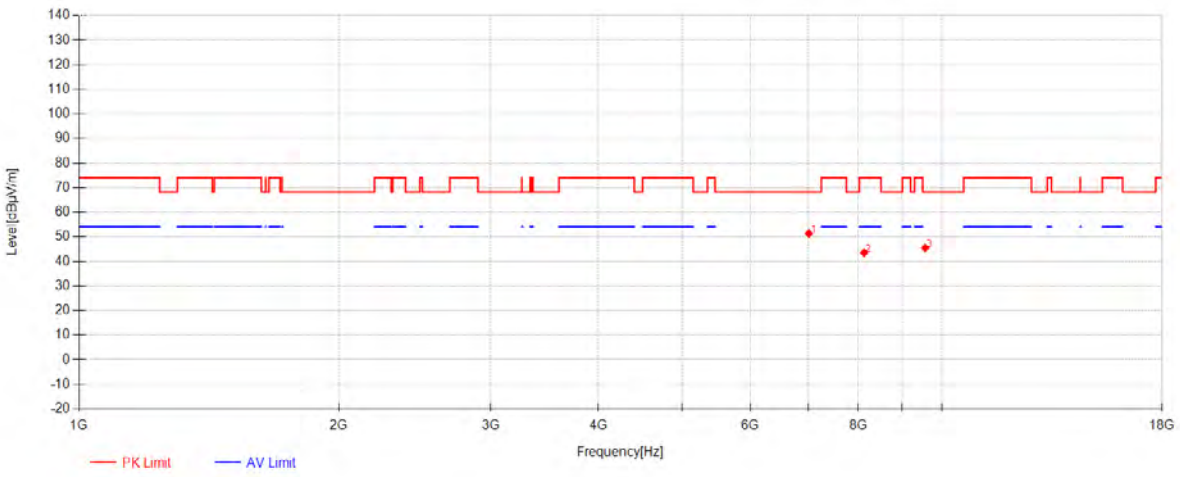
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	6986.8333	60.42	34.98	-43.11	52.29	68.30	16.01	Vertical
2	7912.1042	49.36	36.98	-42.67	43.67	68.30	24.63	Vertical
3	9487.6042	47.03	37.48	-39.96	44.55	74.00	29.45	Vertical

802.11a_Channel 52



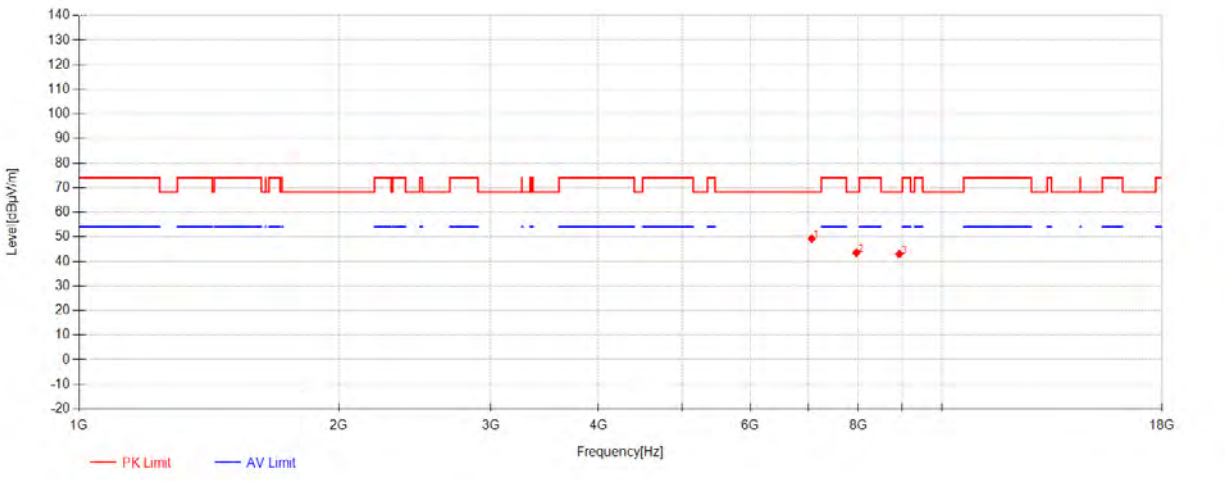
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7013.1875	58.49	35.04	-43.08	50.45	68.30	17.85	Horizontal
2	9415.25	46.13	37.33	-39.93	43.53	74.00	30.47	Horizontal
3	10159.395	45.67	38.52	-39.04	45.14	68.30	23.16	Horizontal

802.11a_Channel 52



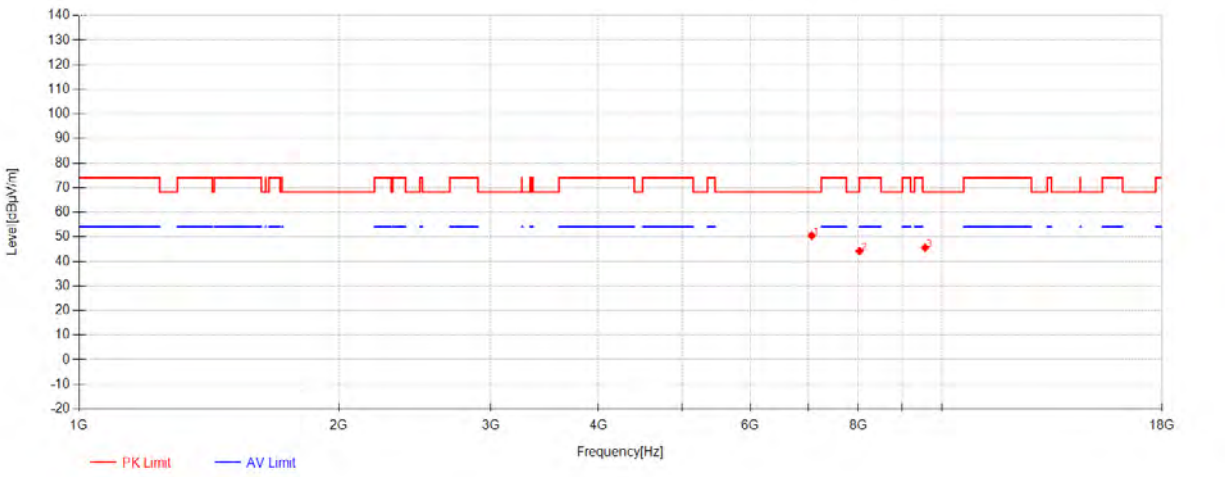
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7013.1875	59.39	35.04	-43.08	51.35	68.30	16.95	Vertical
2	8125.3333	47.97	37.02	-41.55	43.45	74.00	30.55	Vertical
3	9563.3125	47.29	37.63	-39.48	45.44	68.30	22.86	Vertical

802.11a_Channel 60



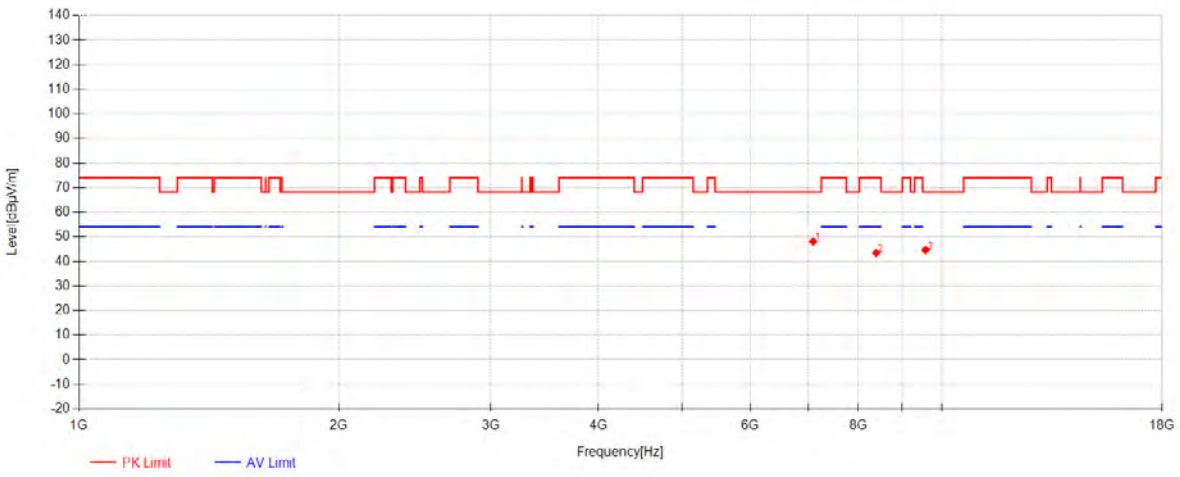
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7066.8542	57.52	35.19	-43.44	49.27	68.30	19.03	Horizontal
2	7960.5	48.79	37.04	-42.37	43.46	68.30	24.84	Horizontal
3	8925.5417	47.31	36.54	-40.90	42.95	68.30	25.35	Horizontal

802.11a_Channel 60



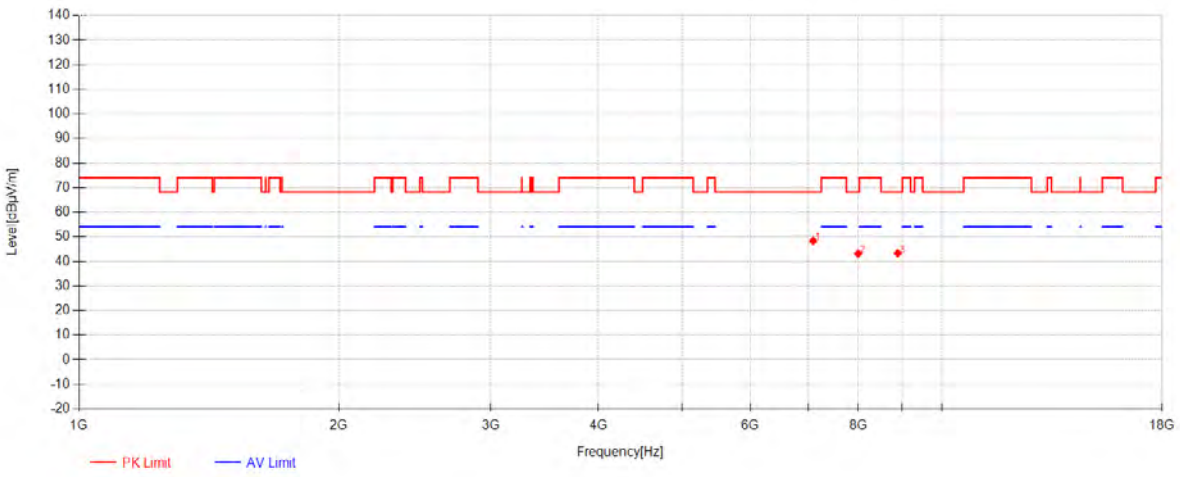
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7066.8542	58.73	35.19	-43.44	50.48	68.30	17.82	Vertical
2	8027.1042	48.92	37.08	-41.92	44.09	74.00	29.91	Vertical
3	9561.3958	47.40	37.62	-39.49	45.53	68.30	22.77	Vertical

802.11a_Channel 64



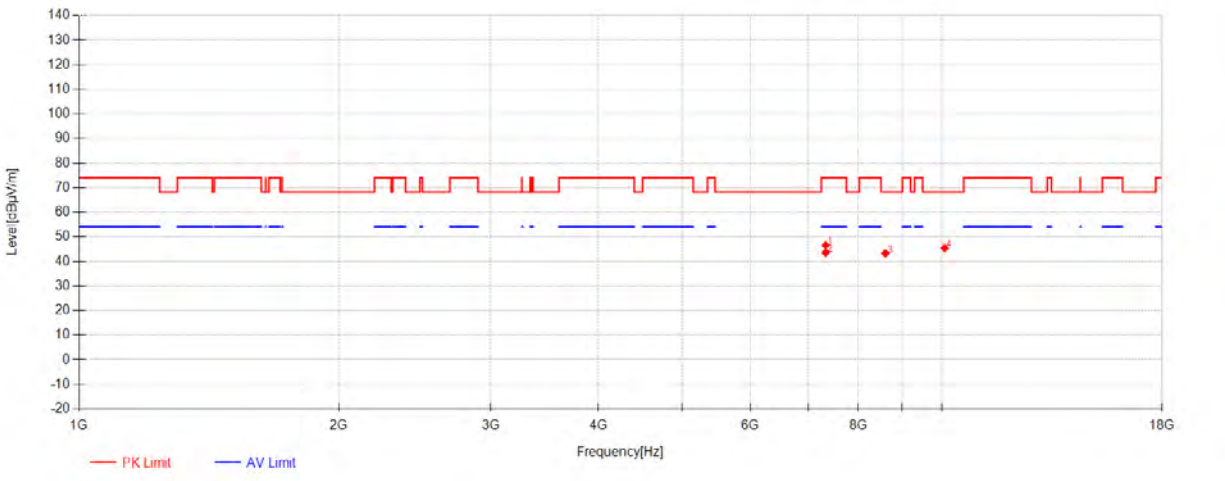
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7093.2083	56.49	35.26	-43.61	48.14	68.30	20.16	Horizontal
2	8391.75	47.94	36.86	-41.41	43.39	74.00	30.61	Horizontal
3	9571.9375	46.36	37.64	-39.41	44.59	68.30	23.71	Horizontal

802.11a_Channel 64



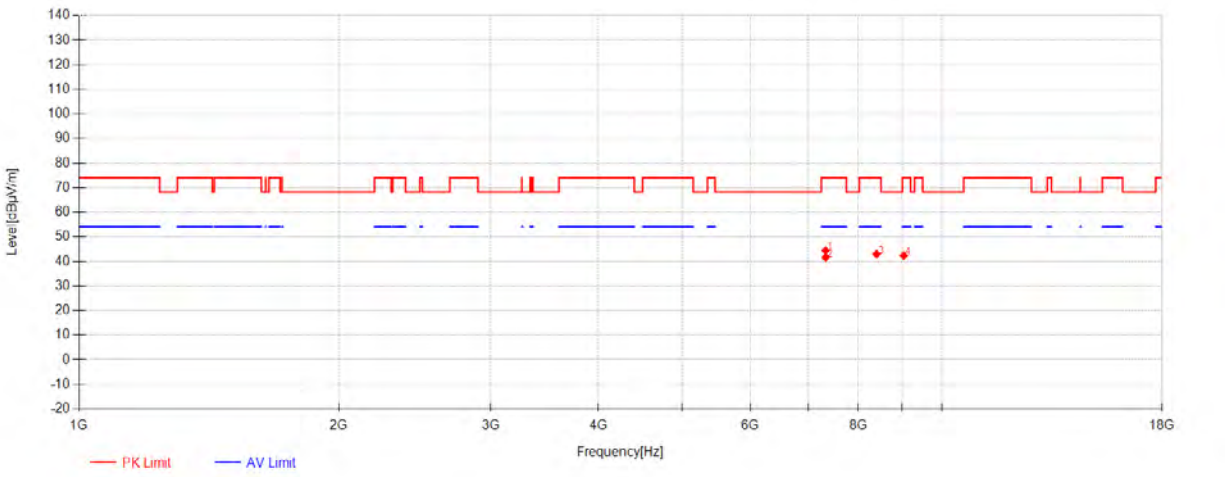
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7093.2083	56.73	35.26	-43.61	48.38	68.30	19.92	Vertical
2	7997.875	48.14	37.10	-42.14	43.09	68.30	25.21	Vertical
3	8891.5208	47.62	36.57	-40.93	43.26	68.30	25.04	Vertical

802.11a_Channel 100



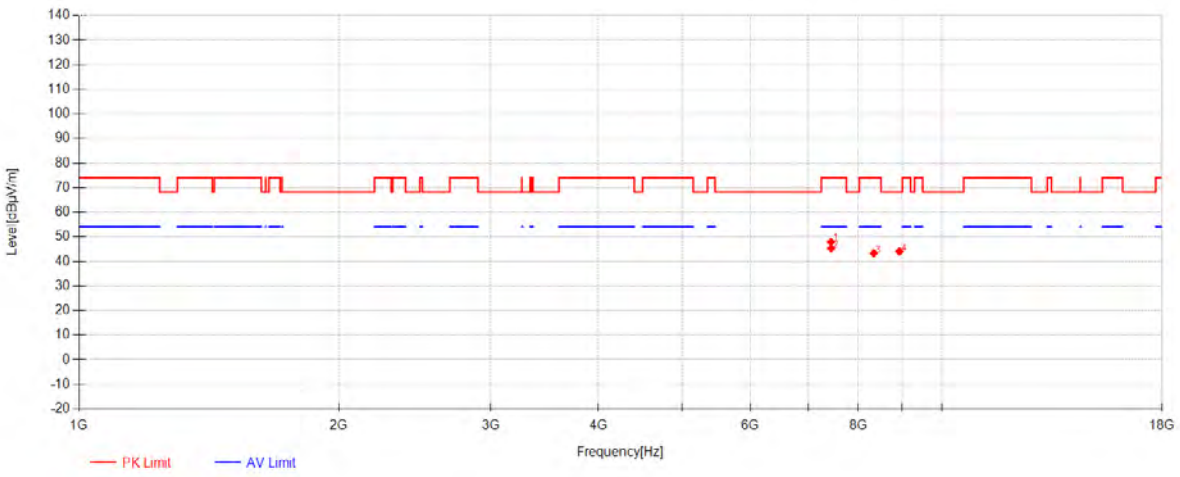
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7333.2708	53.75	35.93	-43.15	46.53	74.00	27.47	Horizontal
2	7333.75	50.74	35.93	-43.15	43.53	54.00	10.47	Horizontal
3	8601.625	47.39	36.74	-40.90	43.23	68.30	25.07	Horizontal
4	10074.104	45.75	38.51	-38.88	45.38	68.30	22.92	Horizontal

802.11a_Channel 100



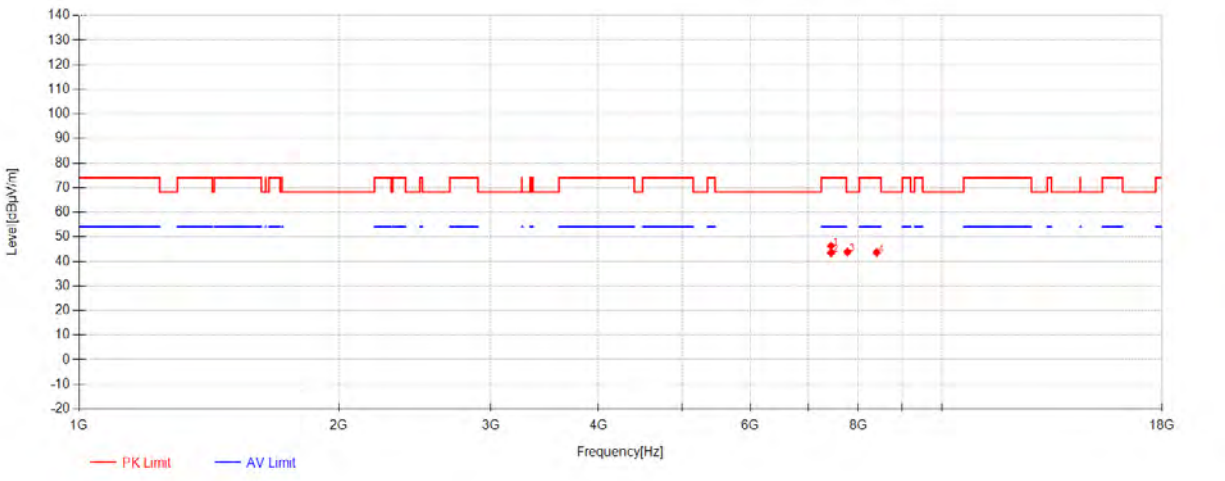
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7333.2708	51.58	35.93	-43.15	44.36	74.00	29.64	Vertical
2	7333.75	48.80	35.93	-43.15	41.59	54.00	12.41	Vertical
3	8402.2917	47.43	36.86	-41.38	42.91	74.00	31.09	Vertical
4	9035.2708	46.46	36.57	-40.71	42.32	74.00	31.68	Vertical

802.11a_Channel 116



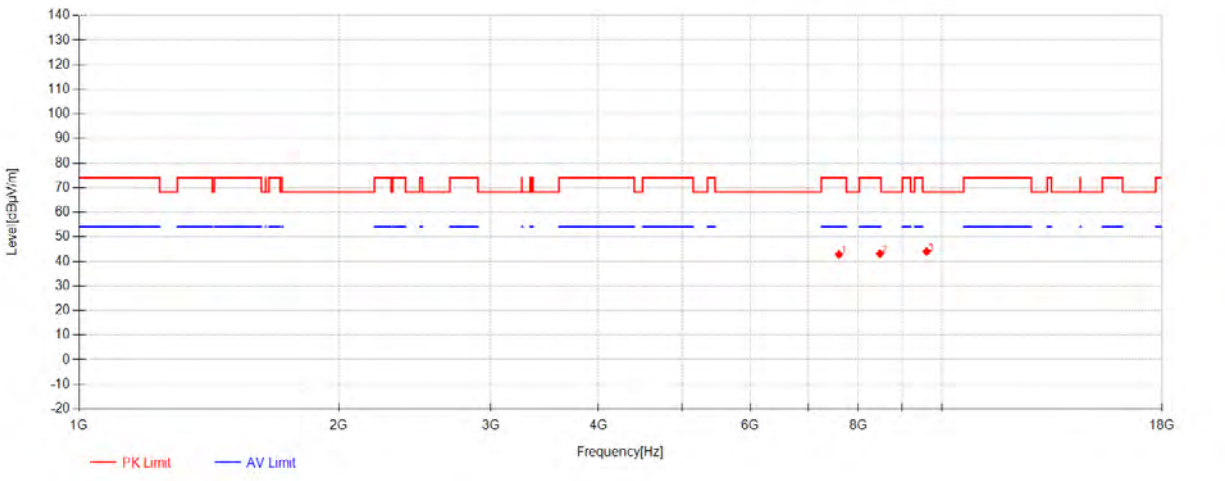
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7440.125	54.63	36.23	-42.94	47.92	74.00	26.08	Horizontal
2	7440.6042	51.93	36.23	-42.94	45.22	54.00	8.78	Horizontal
3	8339.0417	48.02	36.90	-41.67	43.24	74.00	30.76	Horizontal
4	8929.375	48.34	36.54	-40.90	43.98	68.30	24.32	Horizontal

802.11a_Channel 116



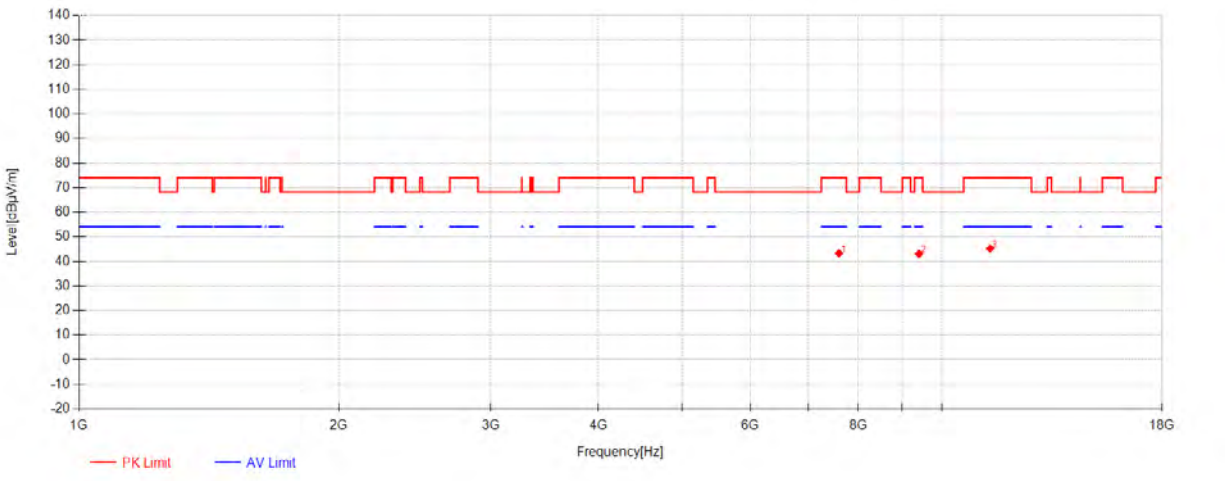
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7439.6458	52.98	36.23	-42.94	46.27	74.00	27.73	Vertical
2	7440.6042	50.14	36.23	-42.94	43.43	54.00	10.57	Vertical
3	7772.1875	49.65	36.78	-42.68	43.75	68.30	24.55	Vertical
4	8403.25	48.10	36.86	-41.38	43.57	74.00	30.43	Vertical

802.11a_Channel 140



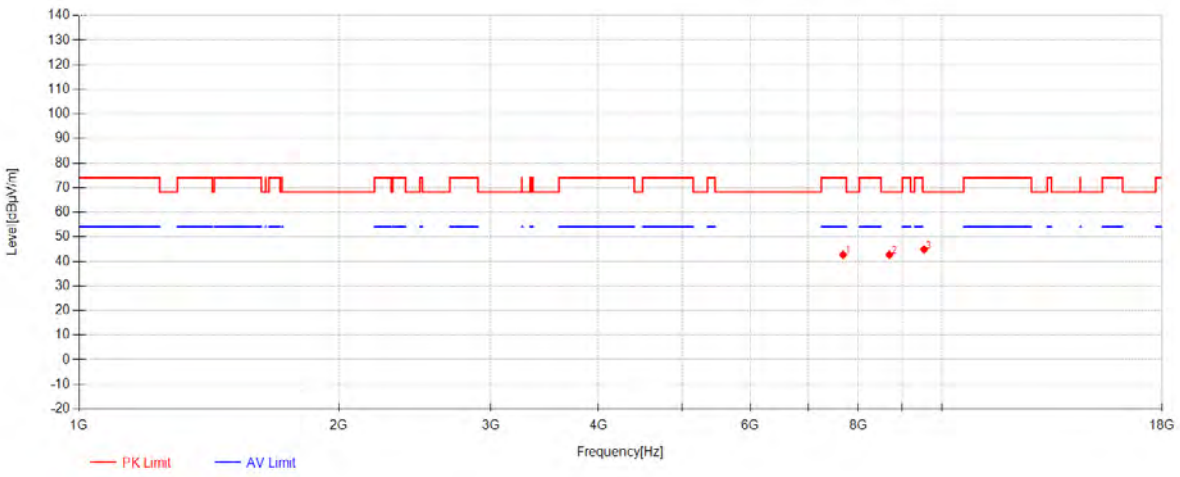
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7600.1667	48.97	36.54	-42.74	42.77	74.00	31.23	Horizontal
2	8478	47.96	36.81	-41.71	43.07	74.00	30.93	Horizontal
3	9602.125	45.41	37.70	-39.21	43.91	68.30	24.39	Horizontal

802.11a_Channel 140



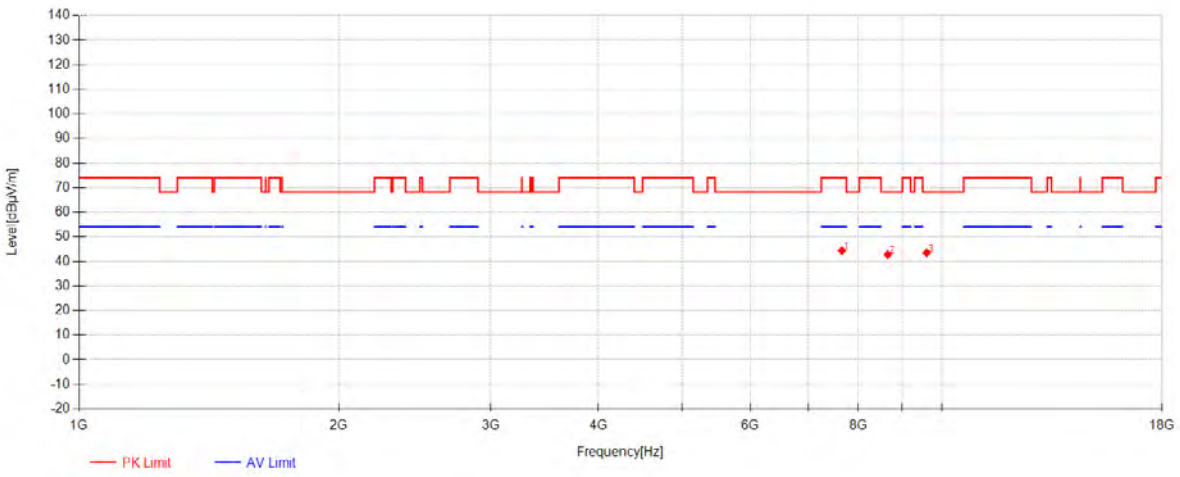
Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7600.1667	49.45	36.54	-42.74	43.25	74.00	30.75	Vertical
2	9408.5417	45.63	37.32	-39.92	43.02	74.00	30.98	Vertical
3	11377.437	43.83	38.79	-37.45	45.17	74.00	28.83	Vertical

802.11a_Channel 149



Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7684.0208	48.91	36.66	-42.92	42.65	74.00	31.35	Horizontal
2	8694.5833	47.27	36.68	-41.32	42.64	68.30	25.66	Horizontal
3	9536	46.94	37.57	-39.69	44.83	68.30	23.47	Horizontal

802.11a_Channel 149



Final Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	7660.0625	50.58	36.62	-42.87	44.34	74.00	29.66	Vertical
2	8655.2917	47.14	36.71	-41.14	42.71	68.30	25.59	Vertical
3	9603.0833	44.95	37.71	-39.21	43.45	68.30	24.85	Vertical