

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 2A & 802.11ax HE20 & MIMO(CDD) & 5 260 MHz

Results of Conducted Emission

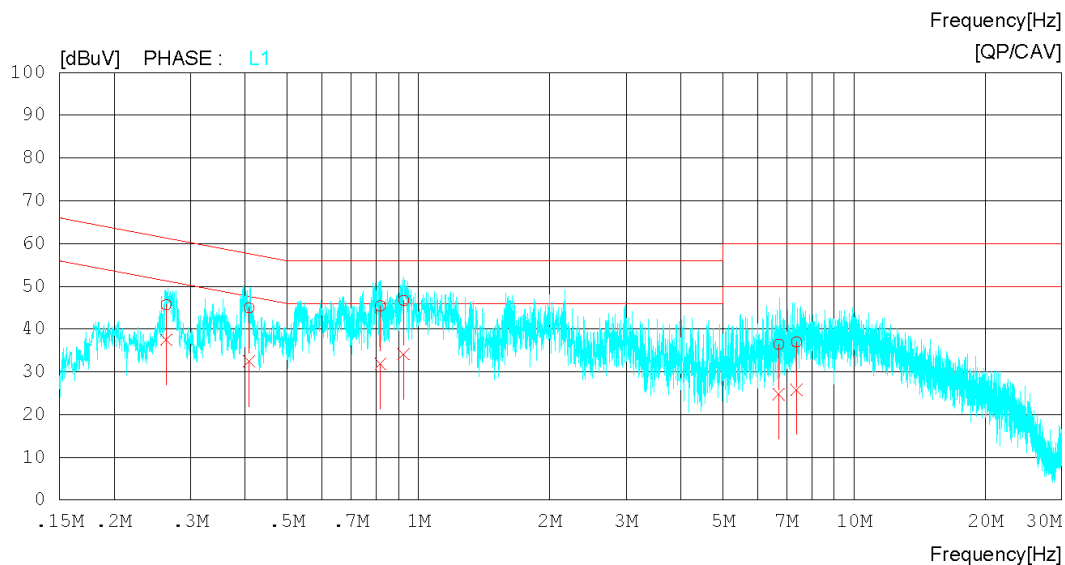
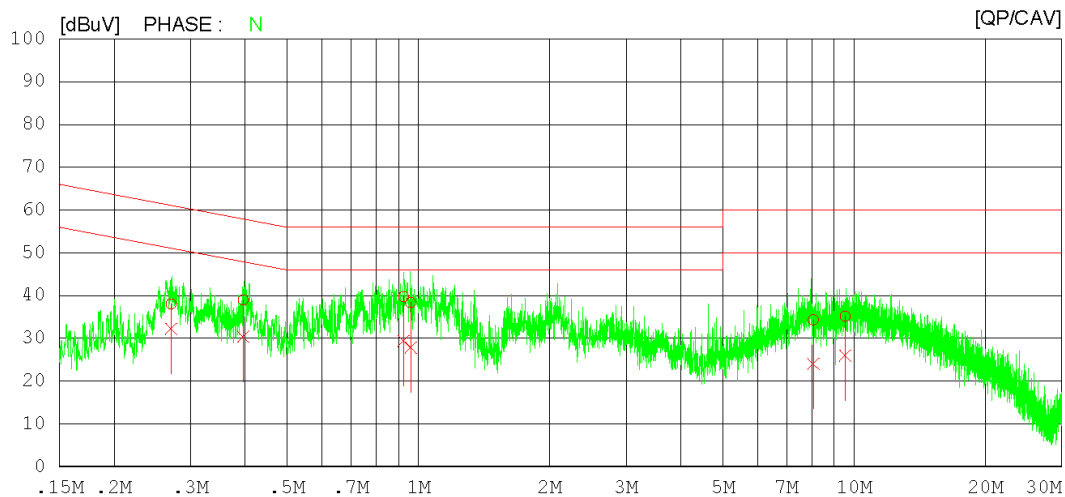
Date 2025-06-16

Order No.
Model No. WC1NH25
Serial No.
Test Condition UNII_2A
Memo 802.11ax(HE20)_5260

Reference No.
Power Supply 120 V, 60 Hz
Temp/Humi. 23 'C / 41 %
Operator S.M.GIL

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor
1. NSLK 8128 RC-387_N_24.10.21
2. NSLK 8128 RC-387_L1_24.10.21
Cable Loss
1. C1_LISN TO RECEIVER_2024-12-11
Pulse Limiter
1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 2A & 802.11ax HE20 & MIMO(CDD) & 5 260 MHz

Results of Conducted Emission

Date 2025-06-16

Order No.		Reference No.	
Model No.	WC1NH25	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 'C / 41 %
Test Condition	UNII_2A	Operator	S.M.GIL

Memo 802.11ax(HE20)_5260

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor

1. NSLK 8128 RC-387_N_24.10.21

2. NSLK 8128 RC-387_L1_24.10.21

Cable Loss

1. C1_LISN TO RECEIVER_2024-12-11

Pulse Lmitter

1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.27054	28.02	22.23	10.01	38.03	32.24	61.10	51.10	23.07	18.86	N
2	0.39620	28.96	20.38	10.03	38.99	30.41	57.93	47.93	18.94	17.52	N
3	0.92453	29.72	19.33	10.06	39.78	29.39	56.00	46.00	16.22	16.61	N
4	0.96021	28.31	17.82	10.06	38.37	27.88	56.00	46.00	17.63	18.12	N
5	8.06260	23.98	13.74	10.31	34.29	24.05	60.00	50.00	25.71	25.95	N
6	9.54040	24.79	15.63	10.34	35.13	25.97	60.00	50.00	24.87	24.03	N
7	0.26378	35.64	27.49	10.01	45.65	37.50	61.31	51.31	15.66	13.81	L1
8	0.40850	34.90	22.45	10.03	44.93	32.48	57.68	47.68	12.75	15.20	L1
9	0.81842	35.39	21.81	10.05	45.44	31.86	56.00	46.00	10.56	14.14	L1
10	0.92553	36.64	24.11	10.06	46.70	34.17	56.00	46.00	9.30	11.83	L1
11	6.71400	26.18	14.49	10.29	36.47	24.78	60.00	50.00	23.53	25.22	L1
12	7.38100	26.67	15.55	10.31	36.98	25.86	60.00	50.00	23.02	24.14	L1

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 2C & 802.11ax HE20 & MIMO(CDD) & 5 500 MHz

Results of Conducted Emission

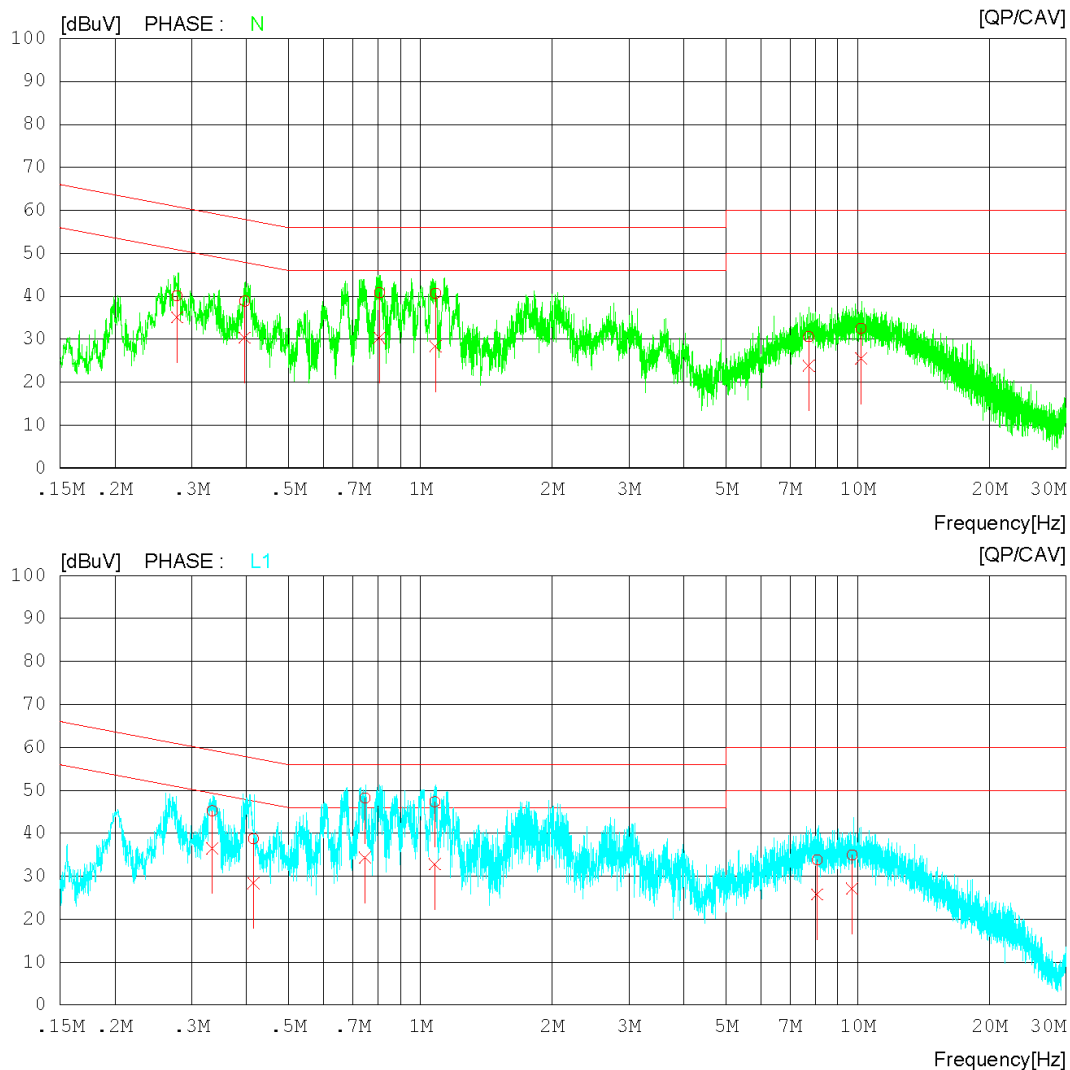
Date 2025-06-16

Order No.
Model No. WC1NH25
Serial No.
Test Condition UNII_2C
Memo 802.11ax(HE20)_5500

Reference No.
Power Supply 120 V, 60 Hz
Temp/Humi. 23 'C / 41 %
Operator S.M.GIL

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor
1. NSLK 8128 RC-387_N_24.10.21
2. NSLK 8128 RC-387_L1_24.10.21
Cable Loss
1. C1_LISN TO RECEIVER_2024-12-11
Pulse Limiter
1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 2C & 802.11ax HE20 & MIMO(CDD) & 5 500 MHz

Results of Conducted Emission

Date 2025-06-16

Order No.		Reference No.	
Model No.	WC1NH25	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 'C / 41 %
Test Condition	UNII_2C	Operator	S.M.GIL

Memo 802.11ax(HE20)_5500

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor

1. NSLK 8128 RC-387_N_24.10.21

2. NSLK 8128 RC-387_L1_24.10.21

Cable Loss

1. C1_LISN TO RECEIVER_2024-12-11

Pulse Lmitter

1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.27756	30.10	25.10	10.01	40.11	35.11	60.89	50.89	20.78	15.78	N
2	0.39655	28.81	20.35	10.03	38.84	30.38	57.93	47.93	19.09	17.55	N
3	0.80600	30.79	20.29	10.05	40.84	30.34	56.00	46.00	15.16	15.66	N
4	1.08300	30.59	18.30	10.06	40.65	28.36	56.00	46.00	15.35	17.64	N
5	7.72500	20.30	13.55	10.30	30.60	23.85	60.00	50.00	29.40	26.15	N
6	10.18080	22.16	15.17	10.36	32.52	25.53	60.00	50.00	27.48	24.47	N
7	0.33413	35.23	26.47	10.02	45.25	36.49	59.35	49.35	14.10	12.86	L1
8	0.41520	28.67	18.36	10.03	38.70	28.39	57.54	47.54	18.84	19.15	L1
9	0.74749	38.16	24.30	10.05	48.21	34.35	56.00	46.00	7.79	11.65	L1
10	1.07860	37.27	22.76	10.06	47.33	32.82	56.00	46.00	8.67	13.18	L1
11	8.08460	23.48	15.40	10.35	33.83	25.75	60.00	50.00	26.17	24.25	L1
12	9.72620	24.48	16.66	10.44	34.92	27.10	60.00	50.00	25.08	22.90	L1

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 3 & 802.11ax HE20 & MIMO(CDD) & 5745 MHz

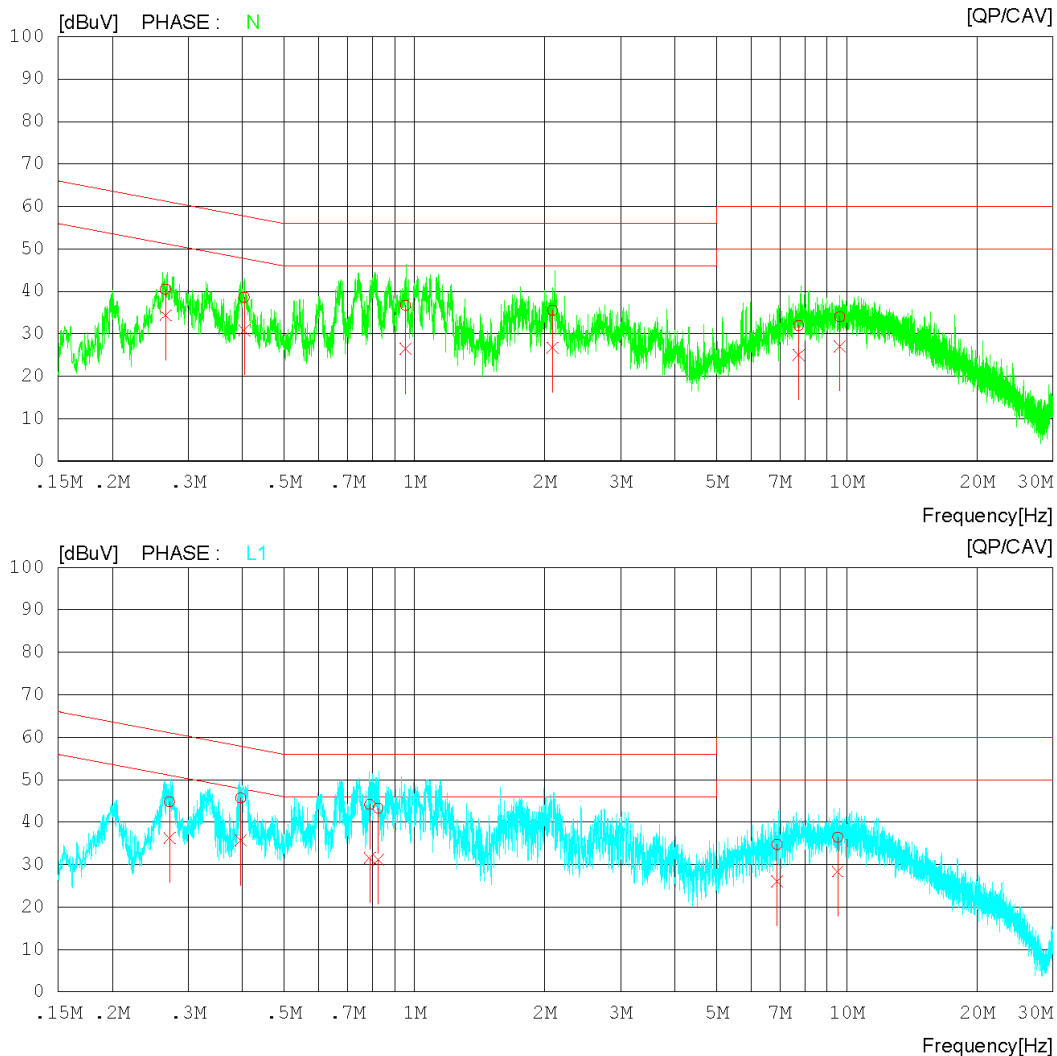
Results of Conducted Emission

Date 2025-06-16

Order No.		Reference No.	
Model No.	WC1NH25	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 'C / 41 %
Test Condition	UNII_3	Operator	S.M.GIL
Memo	802.11ax(HE20)_5745		

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor
1. NSLK 8128 RC-387_N_24.10.21
2. NSLK 8128 RC-387_L1_24.10.21
Cable Loss
1. C1_LISN TO RECEIVER_2024-12-11
Pulse Lmitter
1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 3 & 802.11ax HE20 & MIMO(CDD) & 5 745 MHz

Results of Conducted Emission

Date 2025-06-16

Order No.		Reference No.	
Model No.	WC1NH25	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 °C / 41 %
Test Condition	UNII_3	Operator	S.M.GIL

Memo 802.11ax(HE20)_5745

LIMIT : FCC P15.207 AV
FCC P15.207 QP

Lisn Factor

1. NSLK 8128 RC-387_N_24.10.21
2. NSLK 8128 RC-387_L1_24.10.21

Cable Loss

1. C1_LISN TO RECEIVER_2024-12-11

Pulse Lmitter

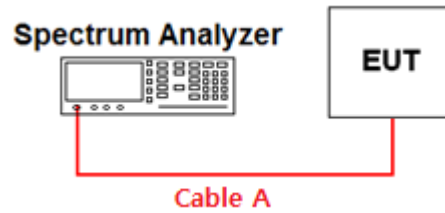
1. PULSE LIMITER_ESH3-Z2_101333_2024.08.21

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.26550	30.48	24.33	10.01	40.49	34.34	61.26	51.26	20.77	16.92	N
2	0.40423	28.55	20.84	10.03	38.58	30.87	57.77	47.77	19.19	16.90	N
3	0.95391	26.64	16.42	10.06	36.70	26.48	56.00	46.00	19.30	19.52	N
4	2.08640	25.44	16.64	10.08	35.52	26.72	56.00	46.00	20.48	19.28	N
5	7.74080	21.67	14.71	10.30	31.97	25.01	60.00	50.00	28.03	24.99	N
6	9.63880	23.62	16.74	10.35	33.97	27.09	60.00	50.00	26.03	22.91	N
7	0.27143	34.79	26.30	10.01	44.80	36.31	61.07	51.07	16.27	14.76	L1
8	0.39650	35.63	25.68	10.03	45.66	35.71	57.93	47.93	12.27	12.22	L1
9	0.78770	34.15	21.50	10.05	44.20	31.55	56.00	46.00	11.80	14.45	L1
10	0.82536	33.25	21.19	10.05	43.30	31.24	56.00	46.00	12.70	14.76	L1
11	6.89980	24.47	15.79	10.29	34.76	26.08	60.00	50.00	25.24	23.92	L1
12	9.52740	26.05	18.00	10.42	36.47	28.42	60.00	50.00	23.53	21.58	L1

APPENDIX I

Conducted Test set up Diagram

▪ Conducted Measurement



APPENDIX II

Duty Cycle Information

■ Test Procedure

Duty Cycle [X = On Time / (On + Off time)] is measured using Measurement Procedure of **KDB789033 D02v02r01**

1. Set the center frequency of the spectrum analyzer to the center frequency of the transmission.
2. Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value.
3. Set VBW $\geq$ RBW. Set detector = peak.
4. Note : The zero-span measurement method shall not be used unless both **RBW and VBW are $> 50 / T$** , where T is defined in section II.B.1.a), and **the number of sweep points across duration T exceeds 100**. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

T : 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.

(T = On time of the above table since the EUT operates with above fixed Duty Cycle and it is the minimum On time)

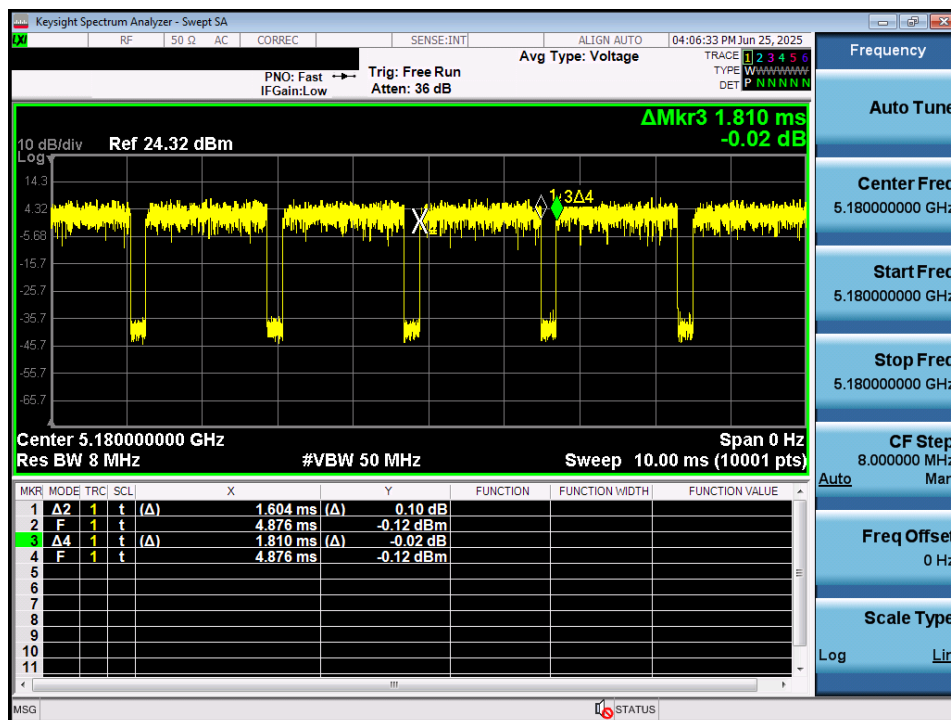
Duty Cycle Correction factor

Test Mode	Tone	Date rate	$T_{on}(ms)$	$T_{on+off}(ms)$	$x = T_{on} / (T_{on+off})$	DCCF = 10 $\log(1/x)$ (dB)	1/T (kHz)
802.11ax(20)	26T	MCS 0	1.604	1.810	0.886	0.52	0.623
802.11ax(20)	52T	MCS 0	1.524	1.730	0.881	0.55	0.656
802.11ax(20)	106T	MCS 0	1.399	1.615	0.866	0.62	0.715
802.11ax(20)	242T	MCS 0	1.212	1.445	0.839	0.76	0.825
802.11ax(20)	SU	MCS 0	0.312	0.518	0.602	2.20	3.208
802.11ax(40)	26T	MCS 0	1.604	1.810	0.886	0.52	0.623
802.11ax(40)	52T	MCS 0	1.524	1.730	0.881	0.55	0.656
802.11ax(40)	106T	MCS 0	1.400	1.615	0.867	0.62	0.714
802.11ax(40)	242T	MCS 0	1.212	1.445	0.839	0.76	0.825
802.11ax(40)	484T	MCS 0	1.204	1.473	0.817	0.88	0.831
802.11ax(40)	SU	MCS 0	0.311	0.526	0.590	2.29	3.221
802.11ax(80)	26T	MCS 0	1.608	1.814	0.886	0.52	0.622
802.11ax(80)	52T	MCS 0	1.524	1.730	0.881	0.55	0.656
802.11ax(80)	106T	MCS 0	1.400	1.615	0.867	0.62	0.714
802.11ax(80)	242T	MCS 0	1.212	1.445	0.839	0.76	0.825
802.11ax(80)	484T	MCS 0	1.204	1.473	0.817	0.88	0.831
802.11ax(80)	996T	MCS 0	1.148	1.489	0.771	1.13	0.871
802.11ax(80)	SU	MCS 0	0.297	0.529	0.561	2.51	3.367

Note1: Where, T = Transmission duration / x = Duty cycle

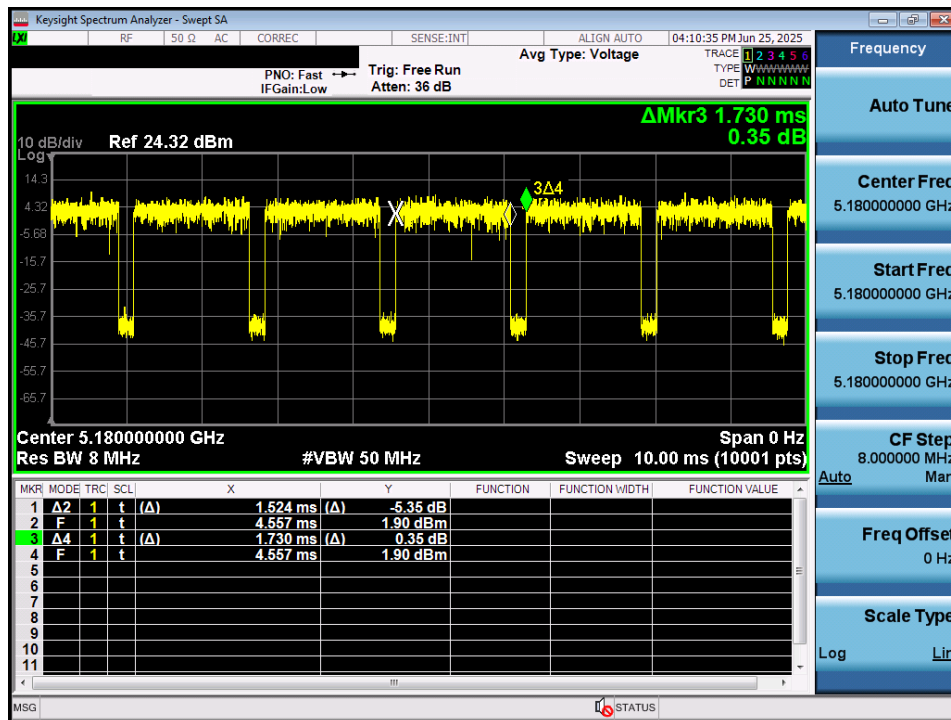
Duty Cycle

802.11ax HE20 & 5 180 MHz & MCS 0 & 26 Tone



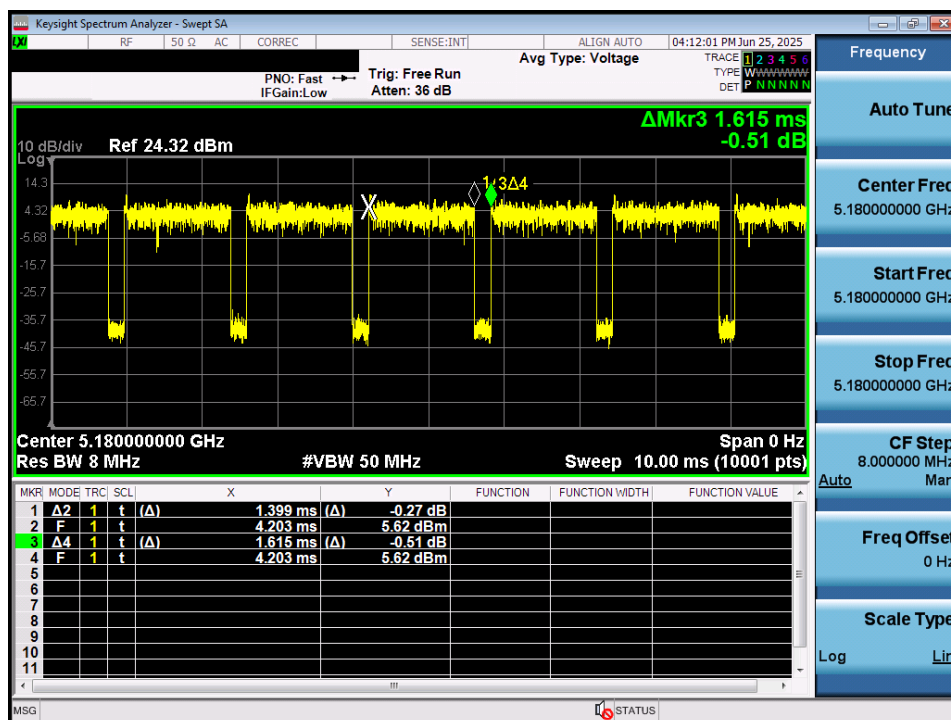
Duty Cycle

802.11ax HE20 & 5 180 MHz & & MCS 0 & 52 Tone

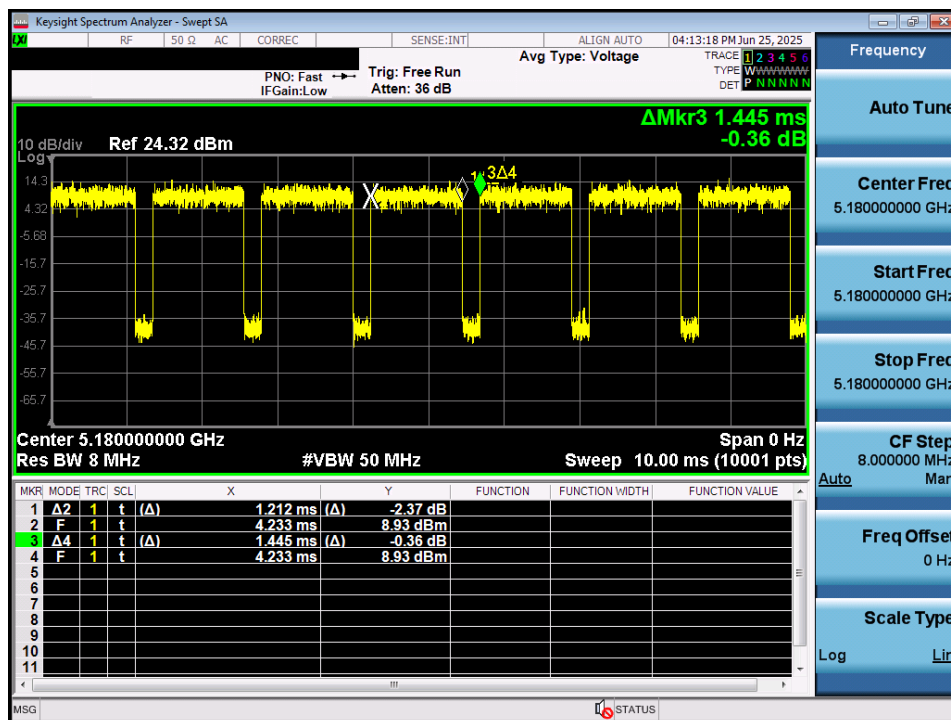


Duty Cycle

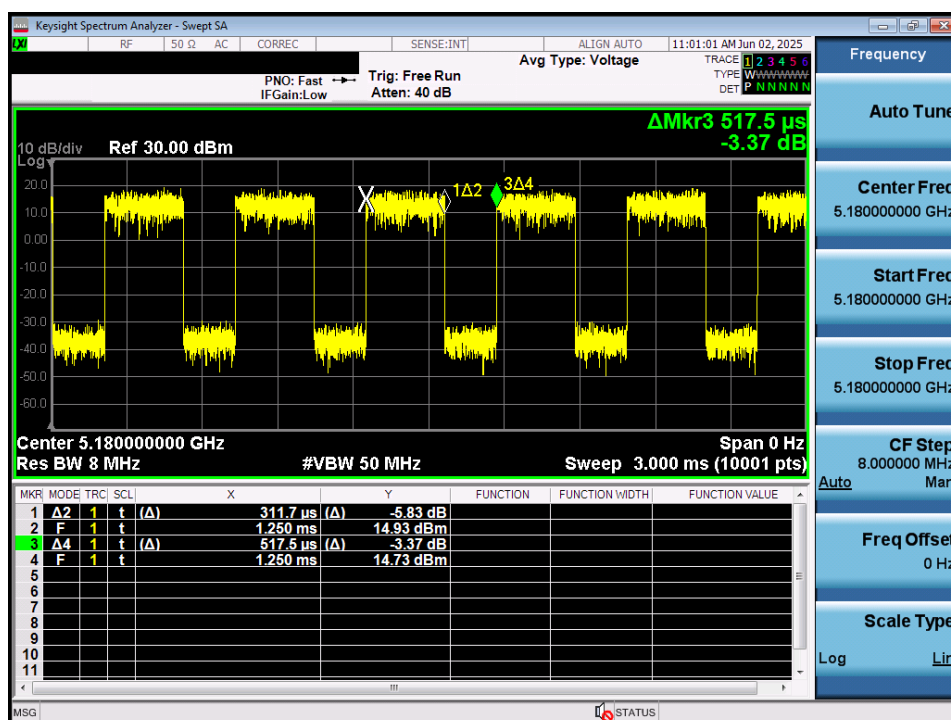
802.11ax HE20 & 5 180 MHz & & MCS 0 & 106 Tone



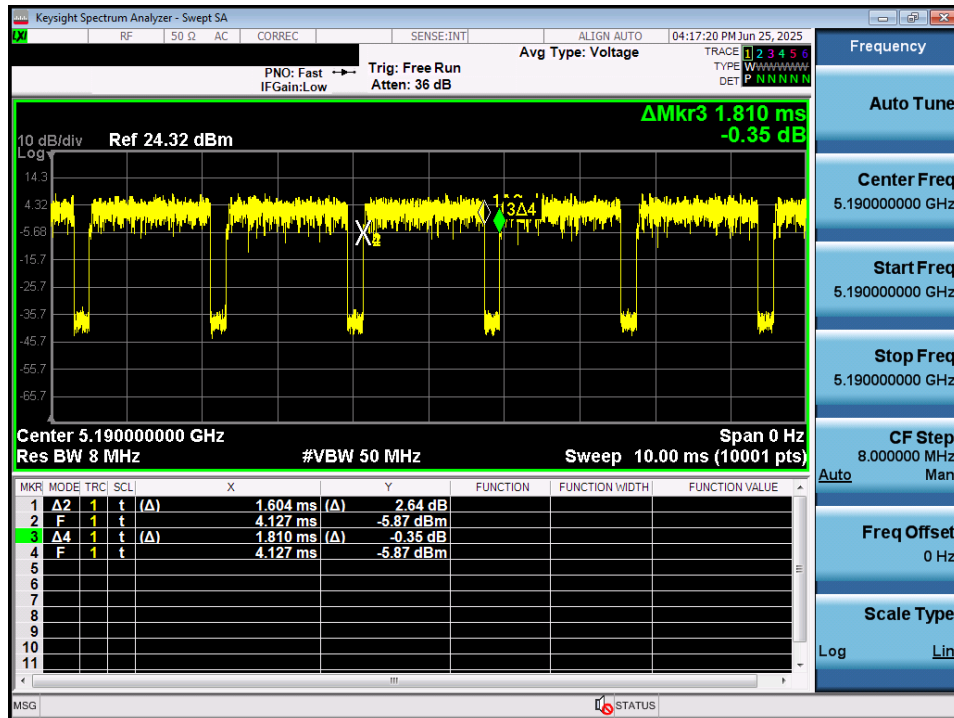
802.11ax HE20 & 5 180 MHz & & MCS 0 & 242 Tone



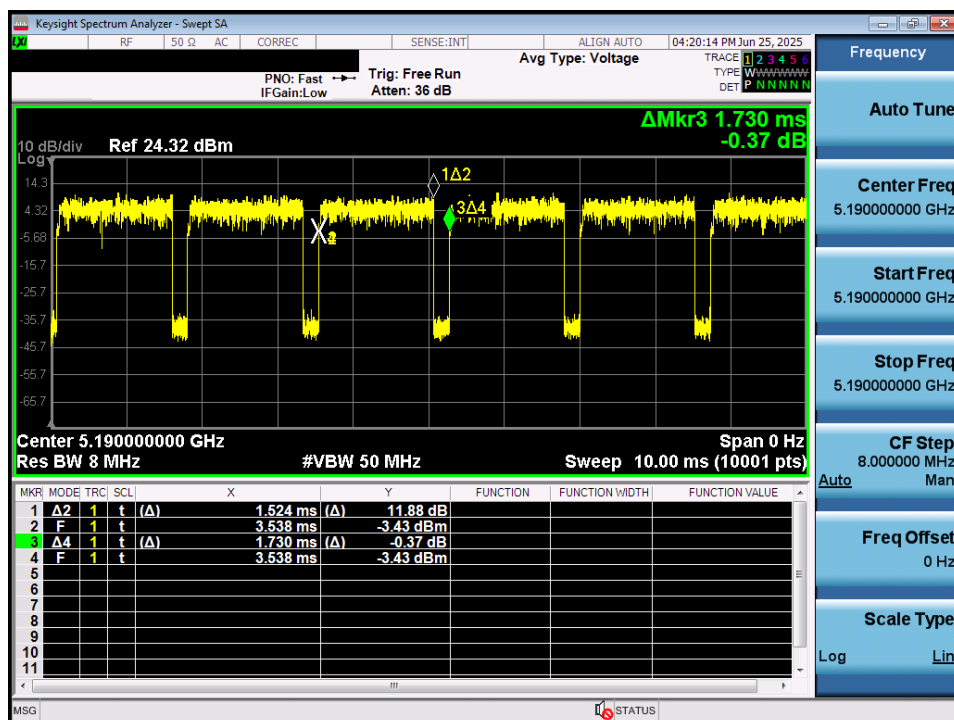
802.11ax HE20 & 5 180 MHz & & MCS 0 & SU



802.11ax HE40 & 5 190 MHz & & MCS 0 & 26 Tone

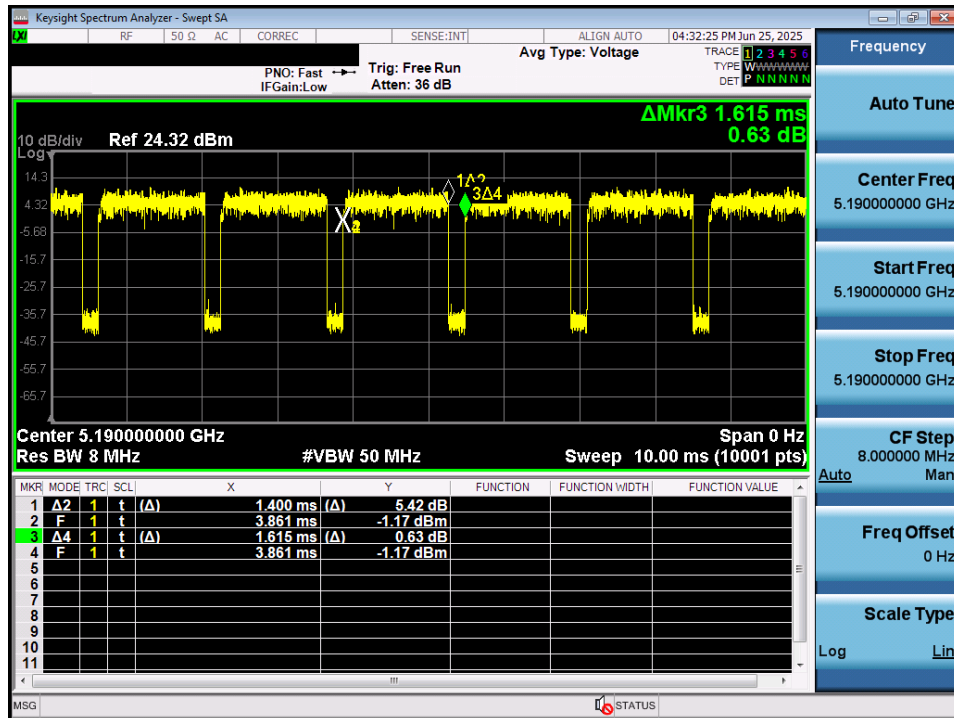


802.11ax HE40 & 5 190 MHz & & MCS 0 & 52 Tone



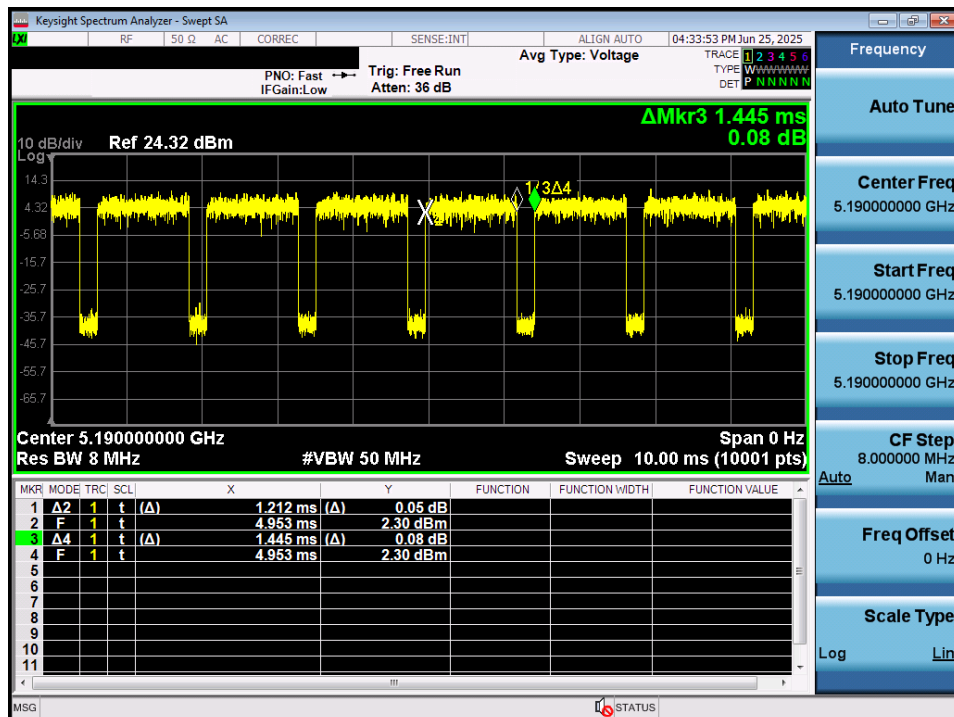
Duty Cycle

802.11ax HE40 & 5 190 MHz & & MCS 0 & 106 Tone

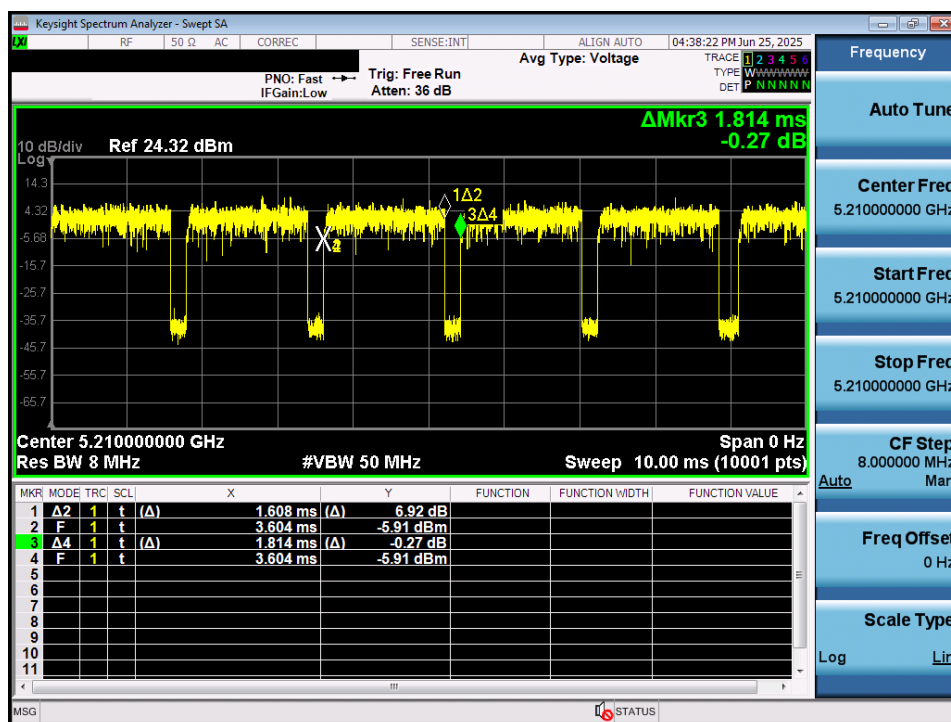


Duty Cycle

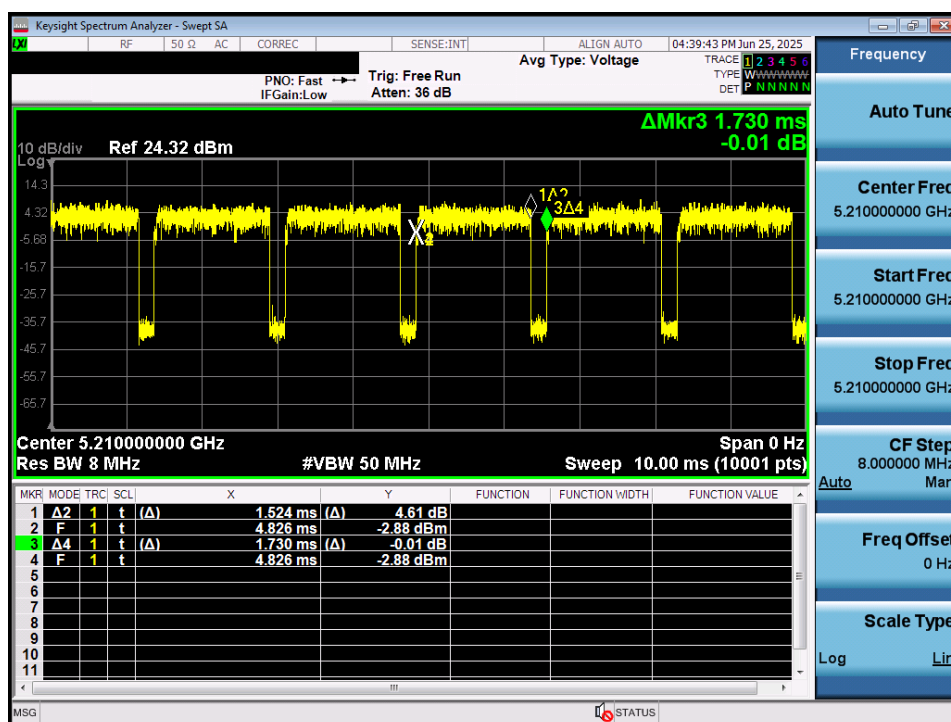
802.11ax HE40 & 5 190 MHz & & MCS 0 & 242 Tone



802.11ax HE80 & 5 210 MHz & & MCS 0 & 26 Tone

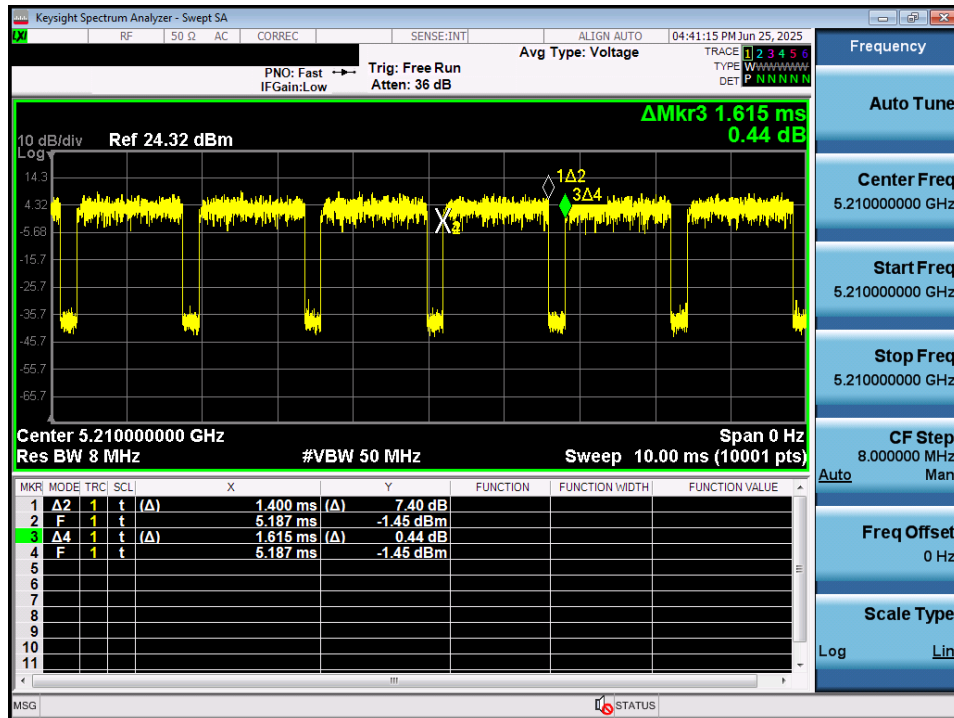


802.11ax HE80 & 5 210 MHz & MCS 0 & 52 Tone



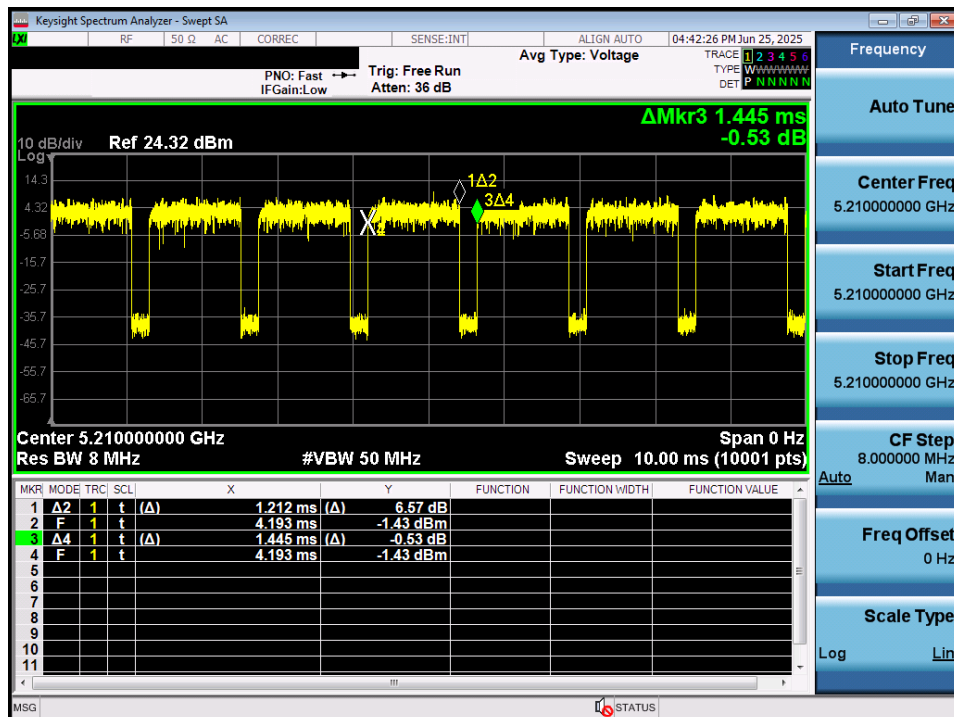
Duty Cycle

802.11ax HE80 & 5 210 MHz & & MCS 0 & 106 Tone



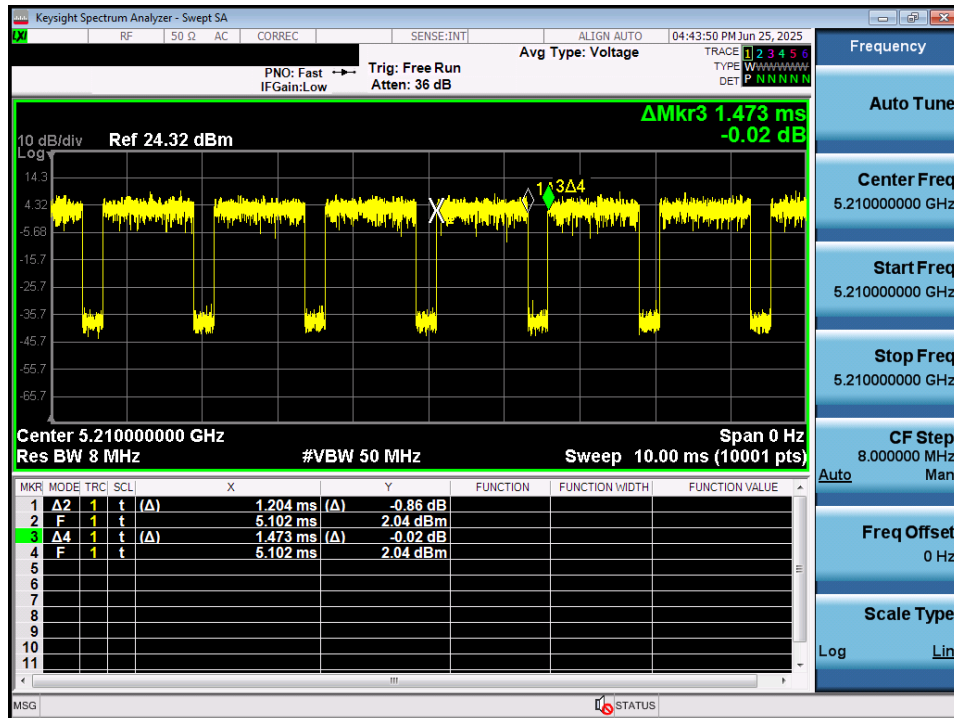
Duty Cycle

802.11ax HE80 & 5 210 MHz & & MCS 0 & 242 Tone



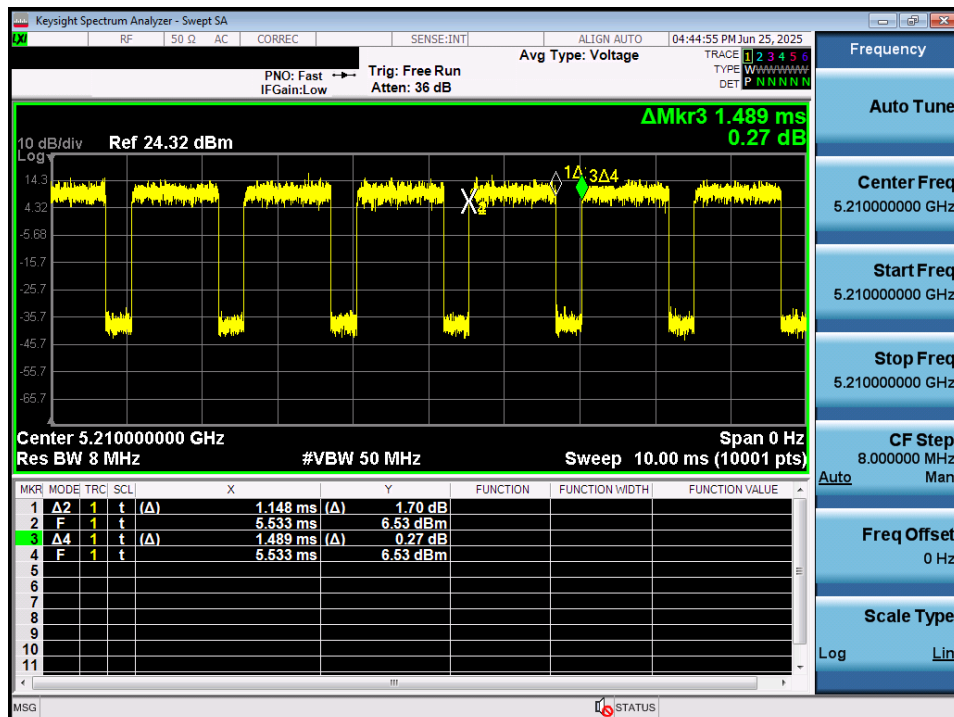
Duty Cycle

802.11ax HE80 & 5 210 MHz & & MCS 0 & 484 Tone



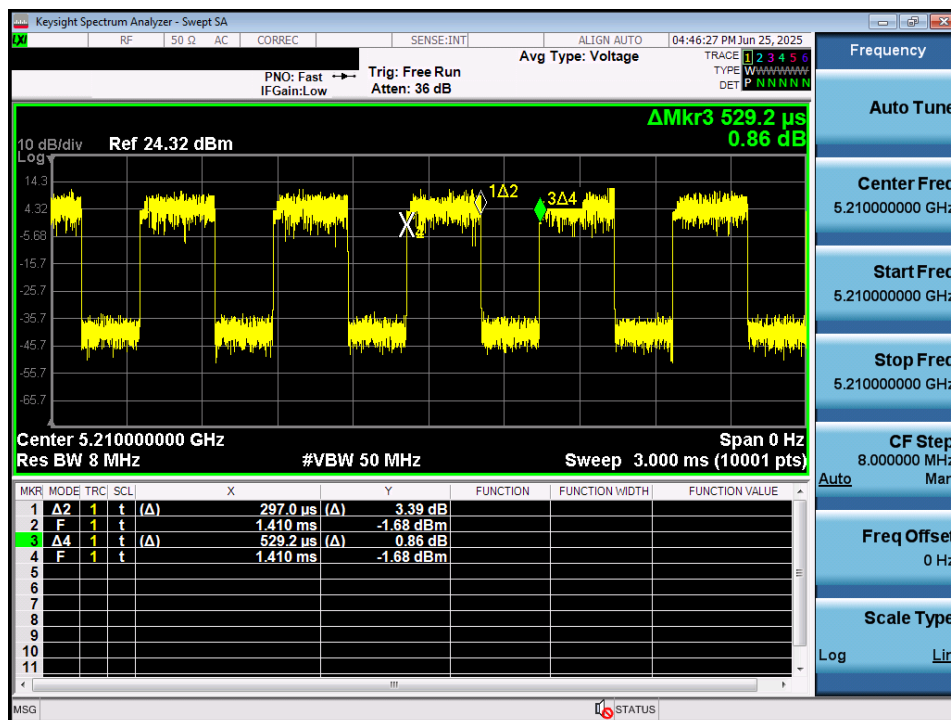
Duty Cycle

802.11ax HE80 & 5 210 MHz & & MCS 0 & 996 Tone



Duty Cycle

802.11ax HE80 & 5 210 MHz & MCS 0 & SU

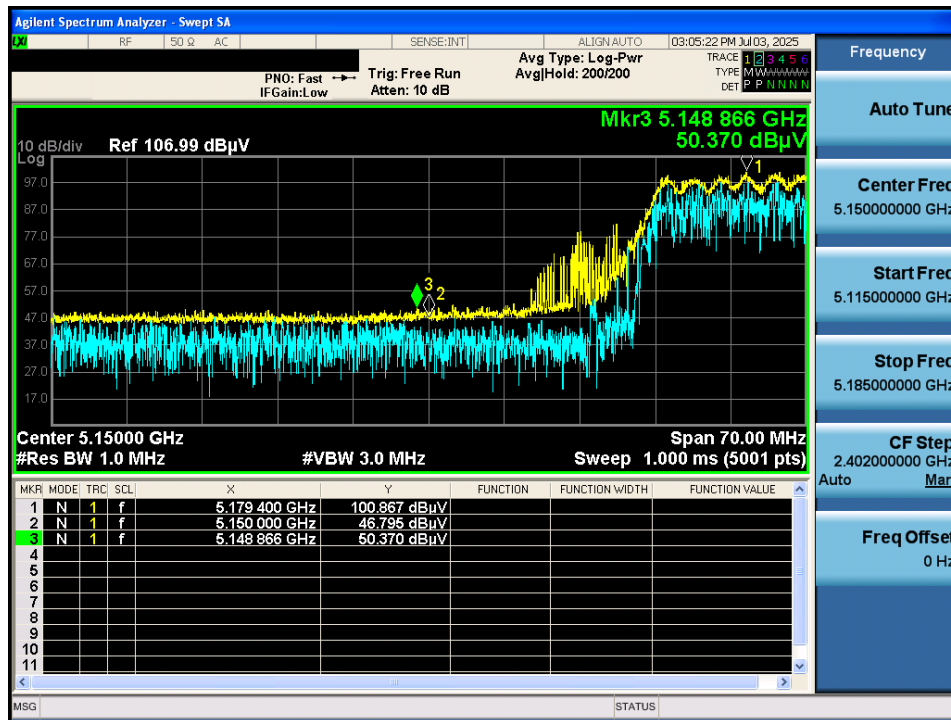


APPENDIX III

Unwanted Emissions (Radiated) Test Plot: MIMO(CDD)

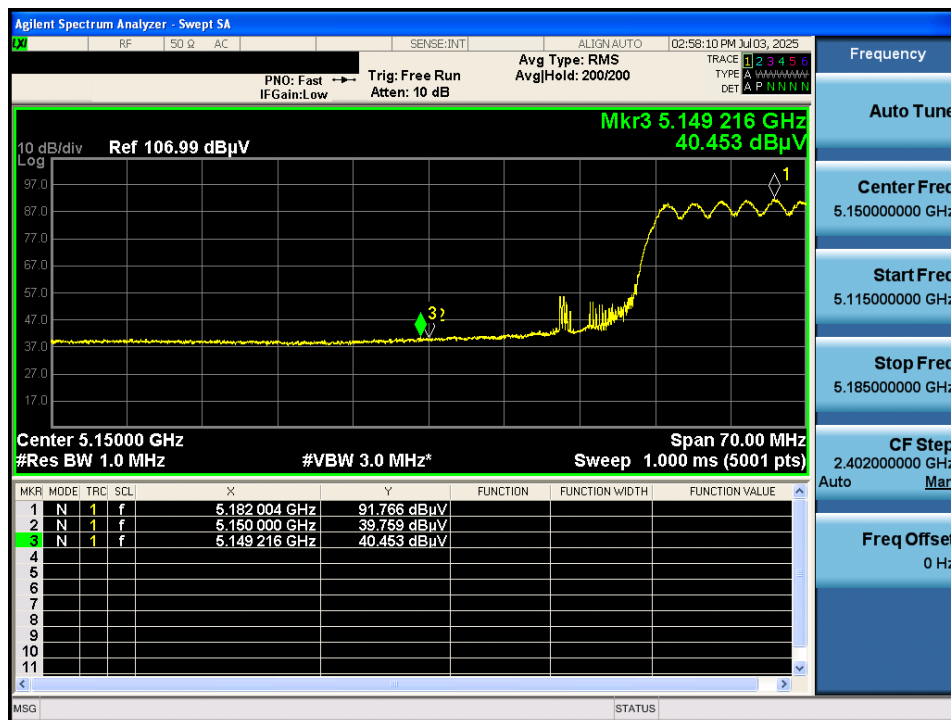
802.11ax HE20 & U-NII 1 & Ch.36 & Z axis & Hor & SU

Detector Mode : PK

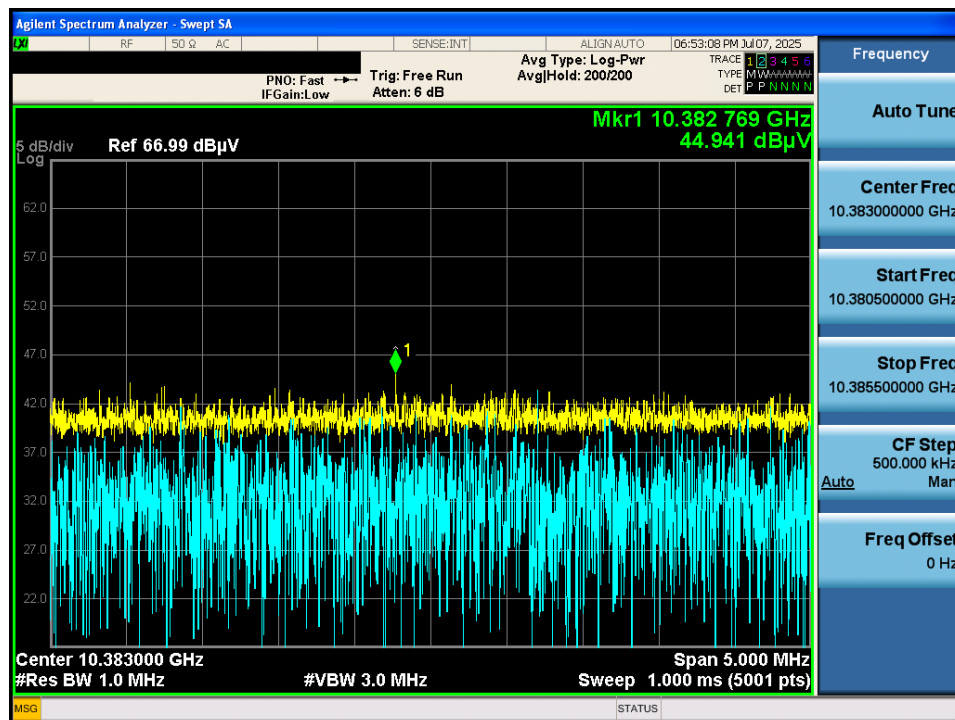


802.11ax HE20 & U-NII 1 & Ch.36 & Z axis & Hor & SU

Detector Mode : AV



Detector Mode : PK



Detector Mode : PK

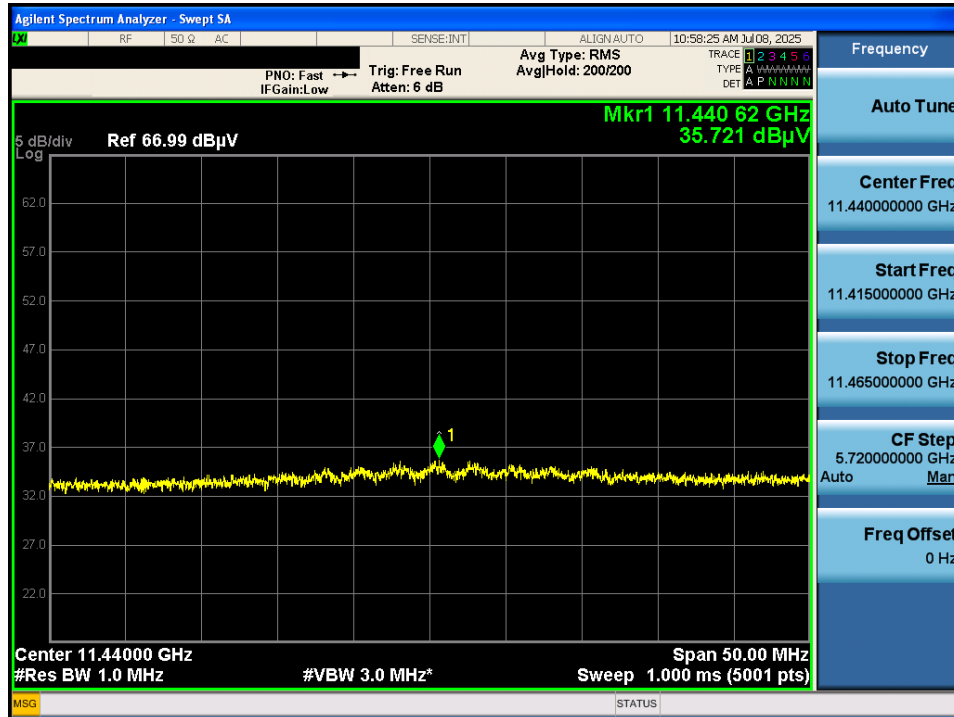


Detector Mode : PK



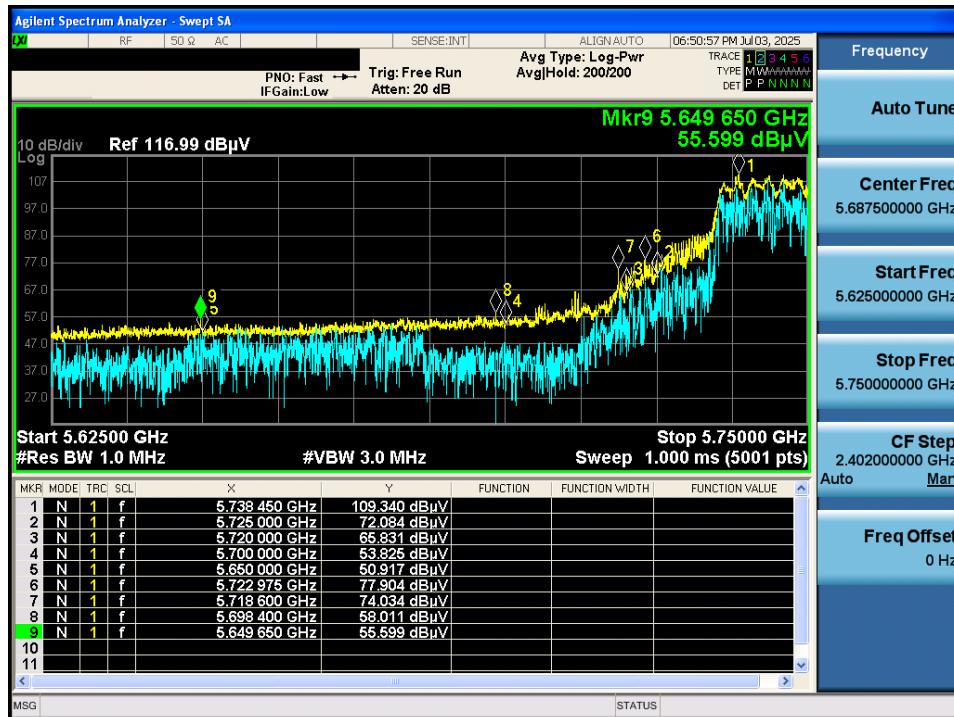
802.11ax HE20 & U-NII 2C & Ch.100 & X axis & Hor & SU

Detector Mode : AV



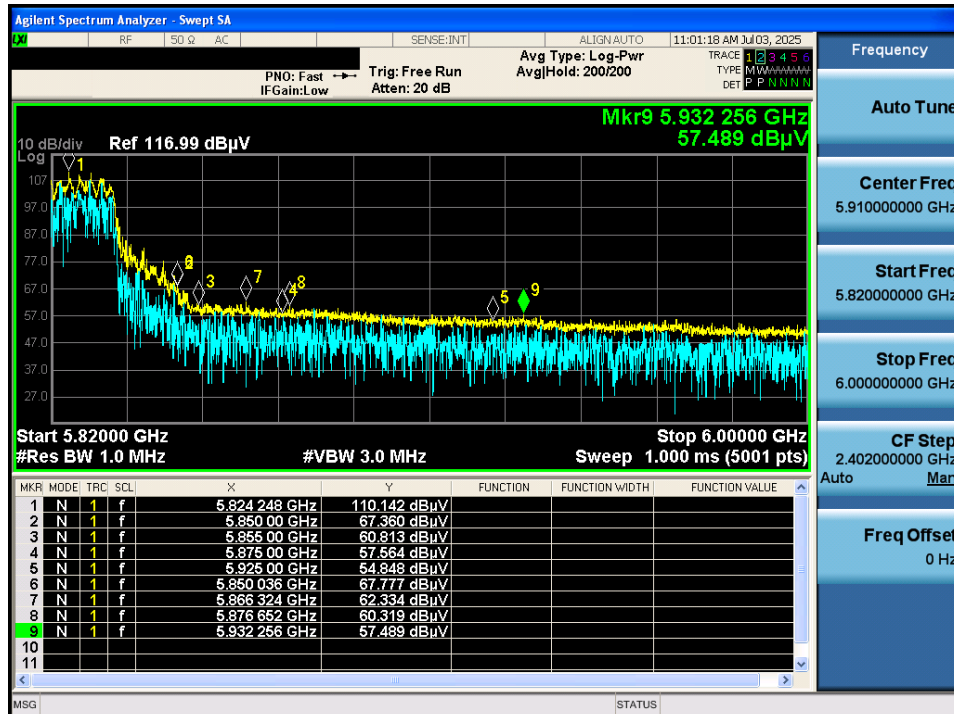
802.11ax HE20 & U-NII 3 & Ch.149 & Z axis & Hor & SU

Detector Mode : PK



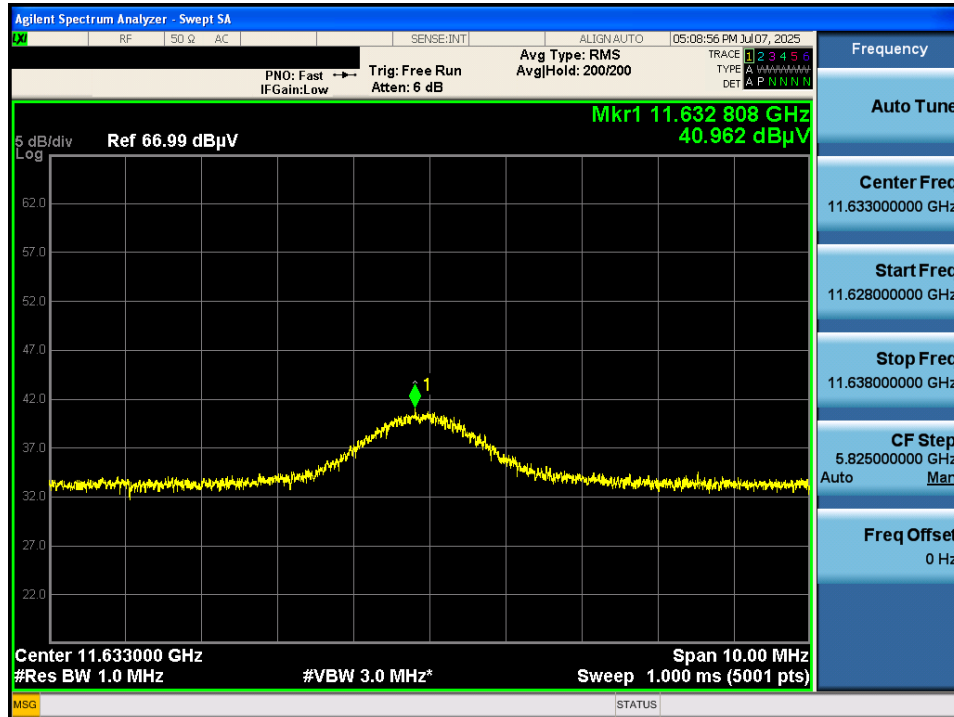
802.11ax HE20 & U-NII 3 & Ch.165 & X axis & Hor & 26 Tone & 8 RU

Detector Mode : PK



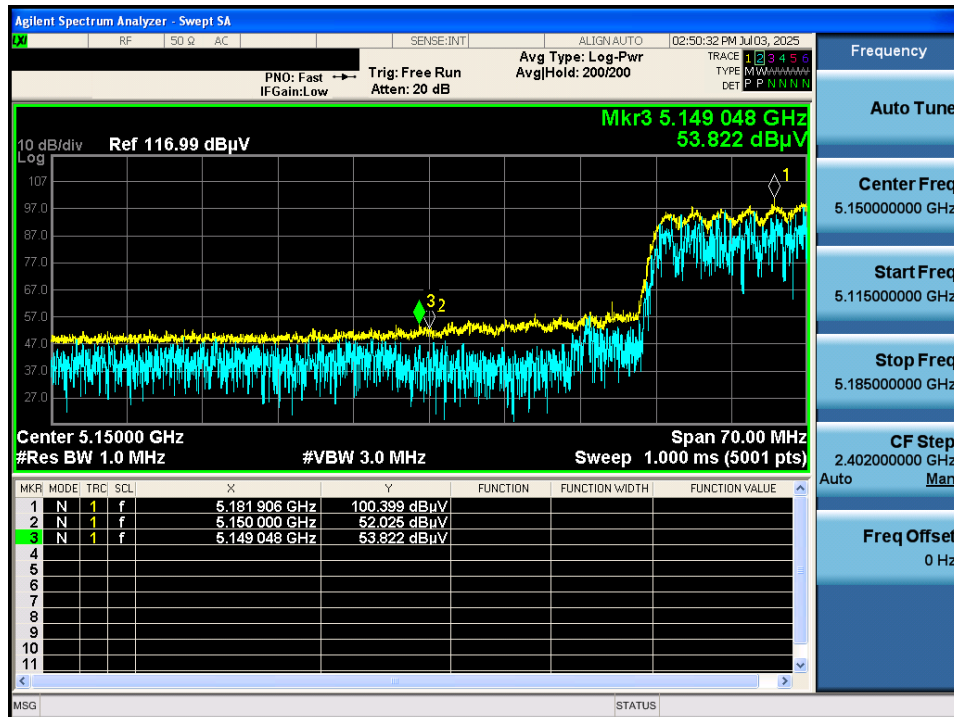
802.11ax HE20 & U-NII 3 & Ch.149 & X axis & Hor & 26 Tone & 0 RU

Detector Mode :
AV



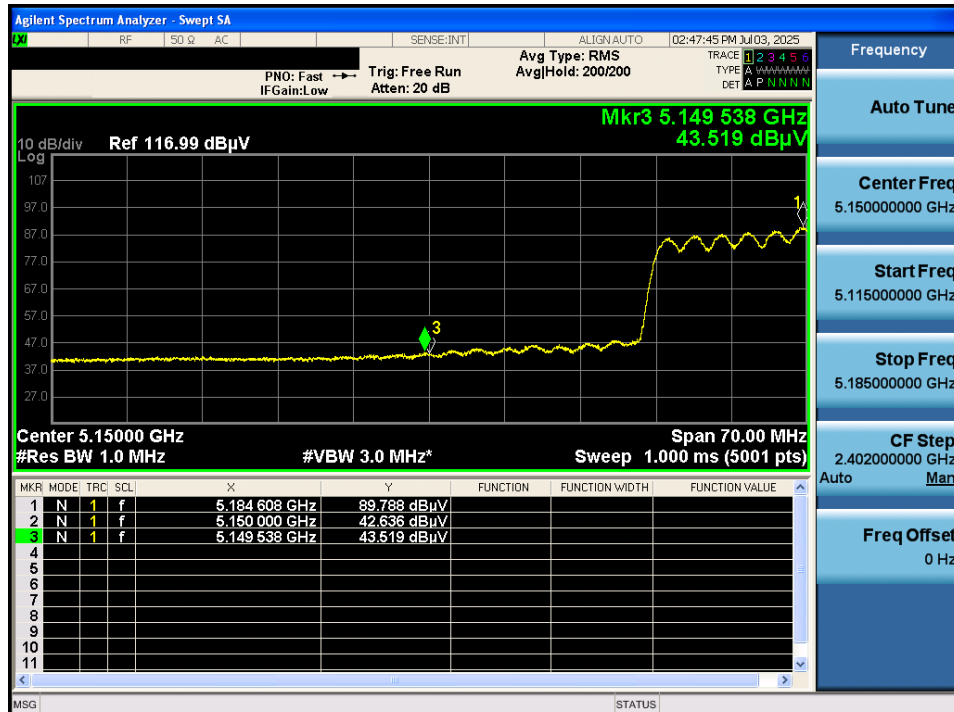
802.11ax HE40 & U-NII 1 & Ch.38 & X axis & Hor & SU

Detector Mode : PK



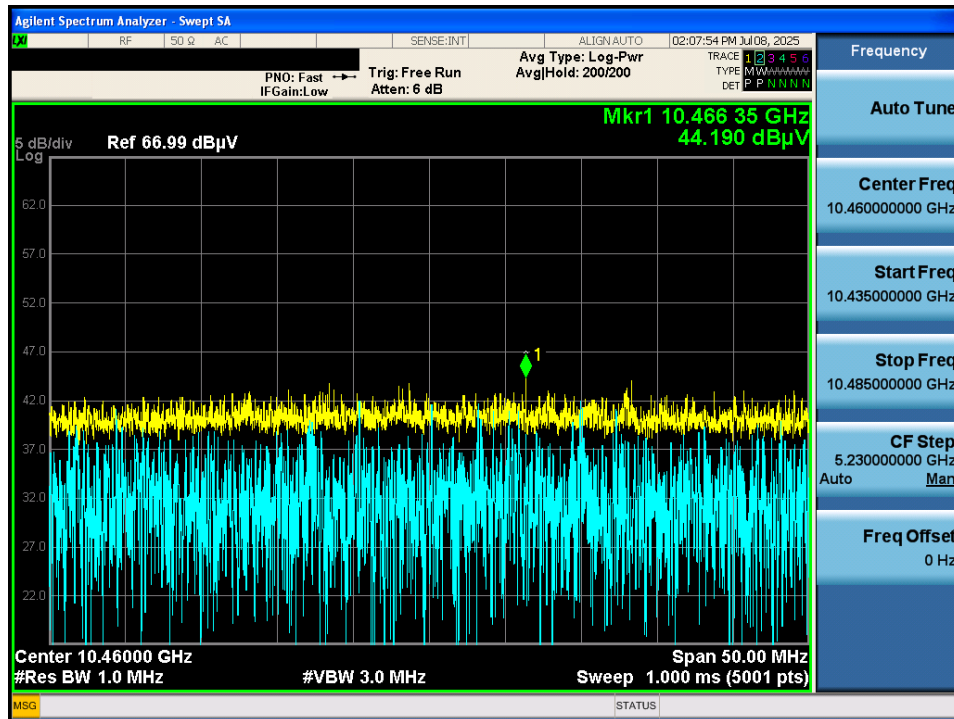
802.11ax HE40 & U-NII 1 & Ch.38 & X axis & Hor & SU

Detector Mode : AV



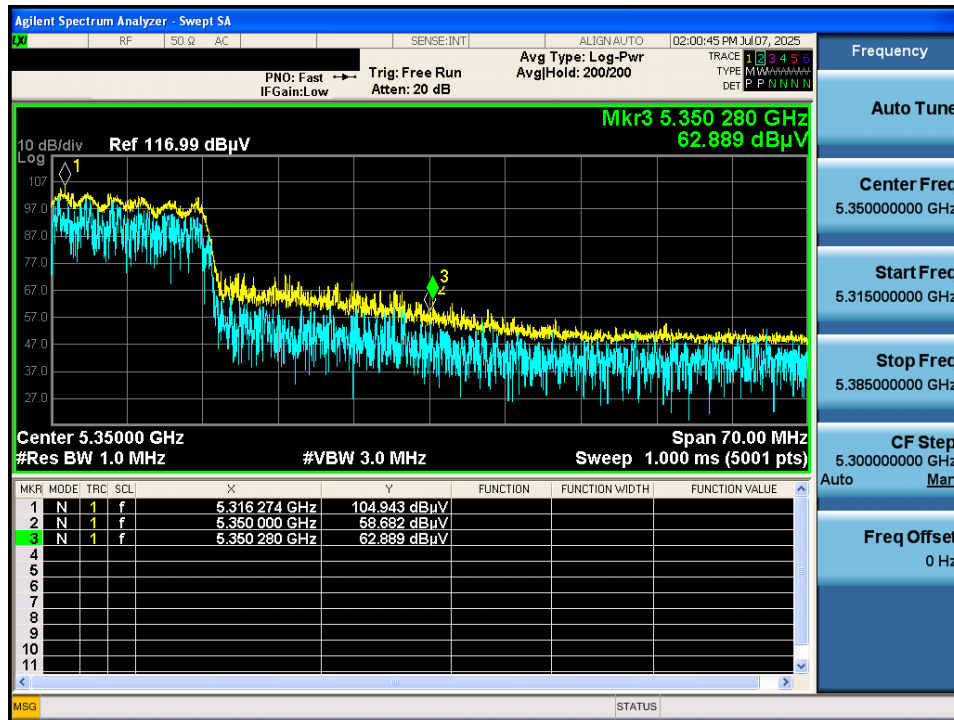
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Detector Mode : PK



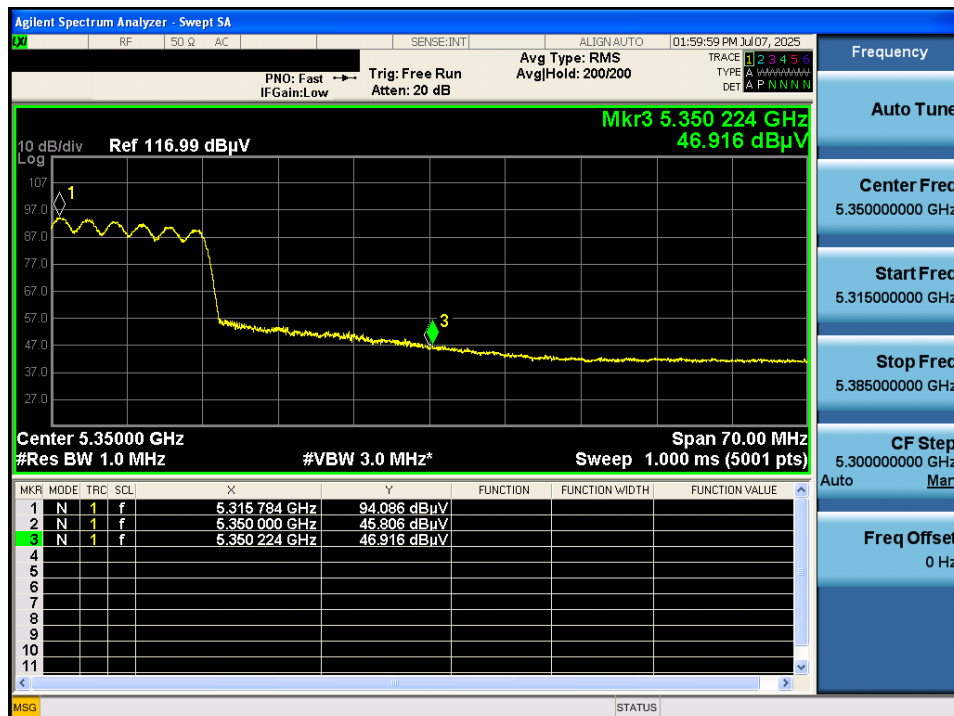
802.11ax HE40 & U-NII 1 & Ch.54 & X axis & Hor & 484 Tone & 65 RU

Detector Mode : PK



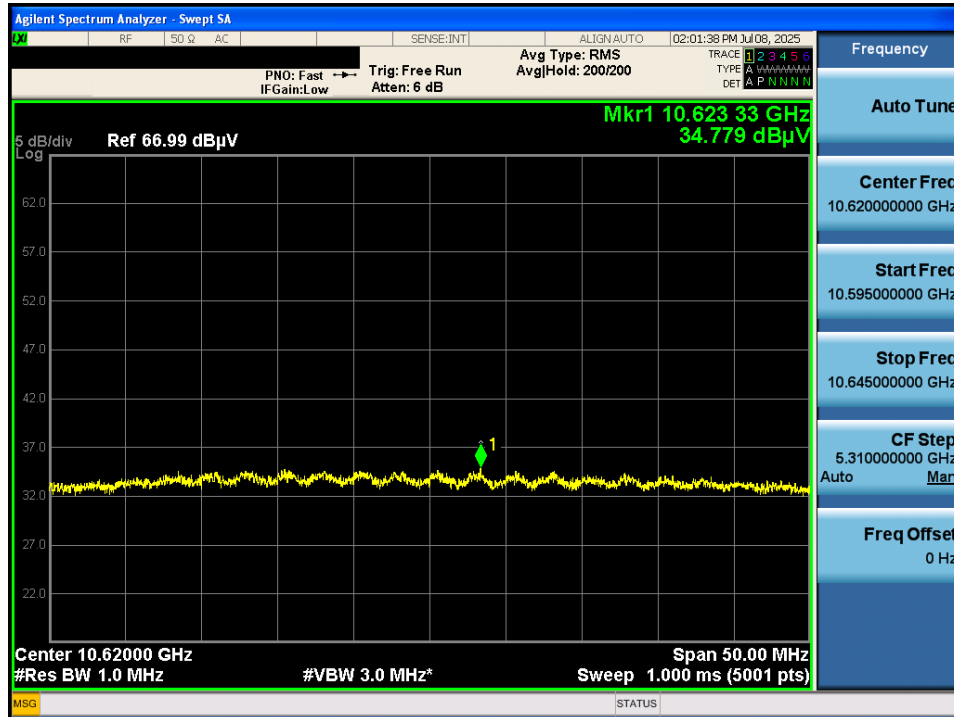
802.11ax HE40 & U-NII 1 & Ch.54 & X axis & Hor & 484 Tone & 65 RU

Detector Mode : AV



802.11ax HE40 & U-NII 1 & Ch.62 & X axis & Hor & 484 Tone & 65 RU

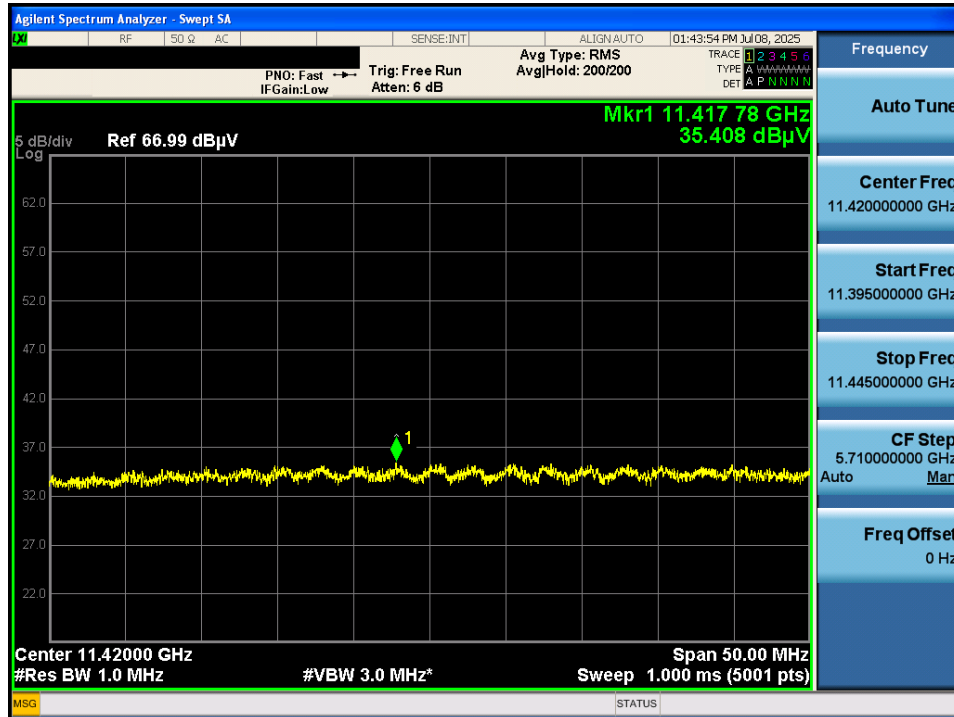
Detector Mode : AV



Detector Mode : PK

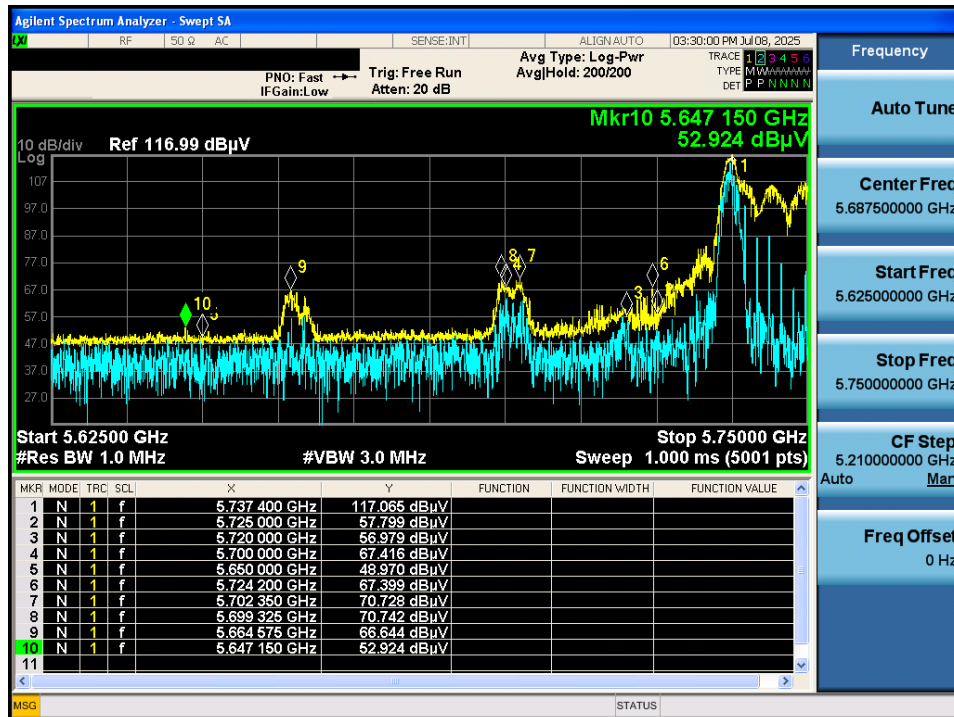


802.11ax HE40 & U-NII 2C & Ch.142 & X axis & Hor & 484 Tone & 65 RU Detector Mode : AV



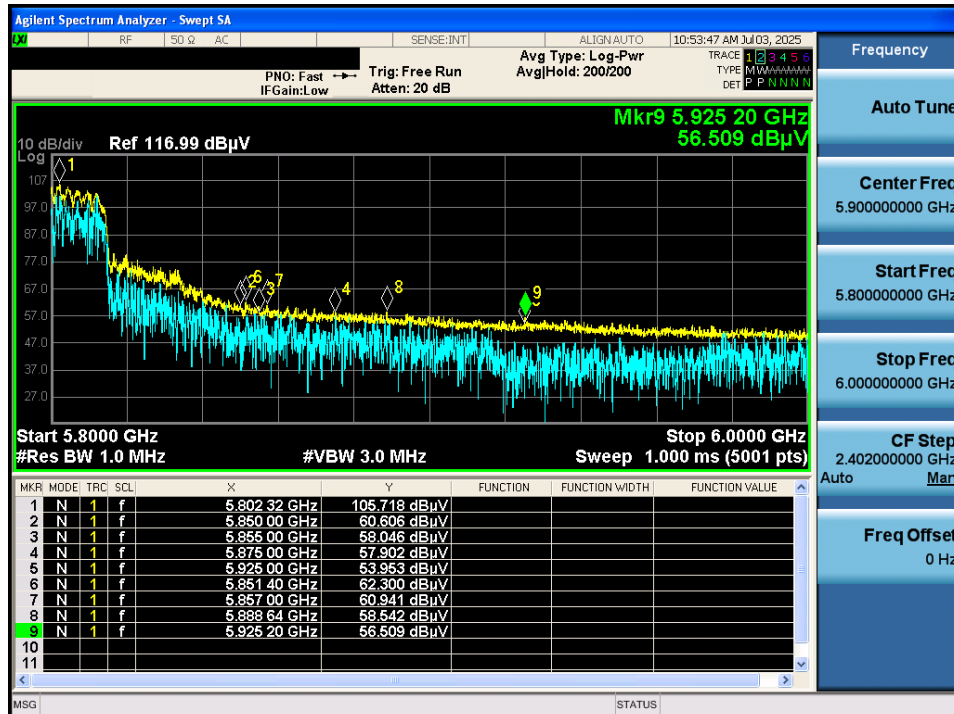
802.11ax HE40 & U-NII 3 & Ch.151 & X axis & Hor & 26 Tone & 0 RU

Detector Mode : PK



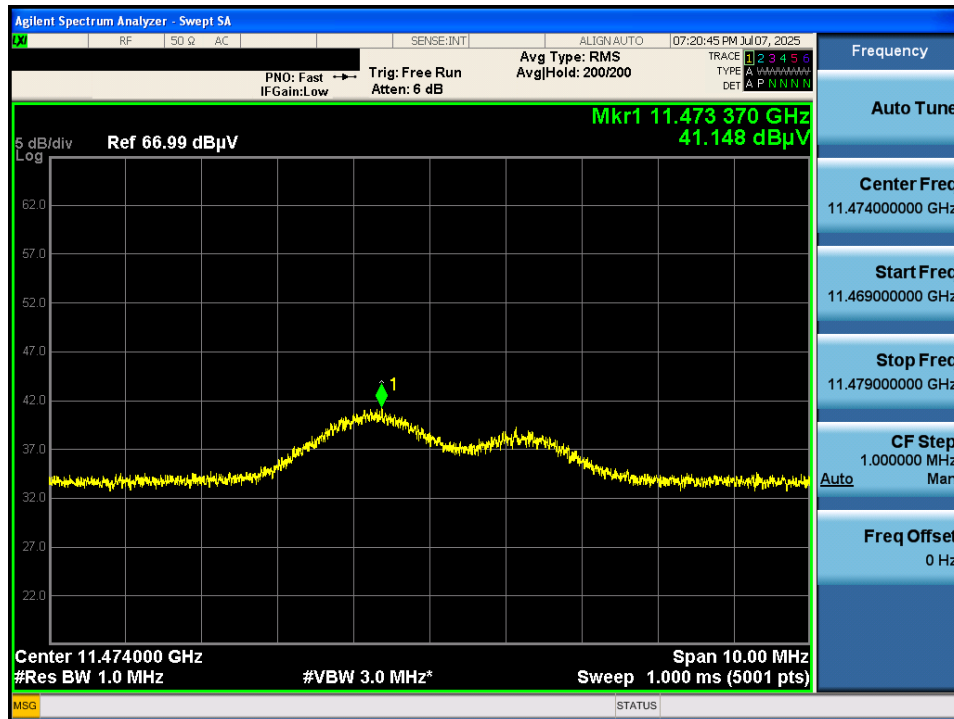
802.11ax HE40 & U-NII 3 & Ch.159 & X axis & Hor & 484 Tone & 65 RU

Detector Mode : PK



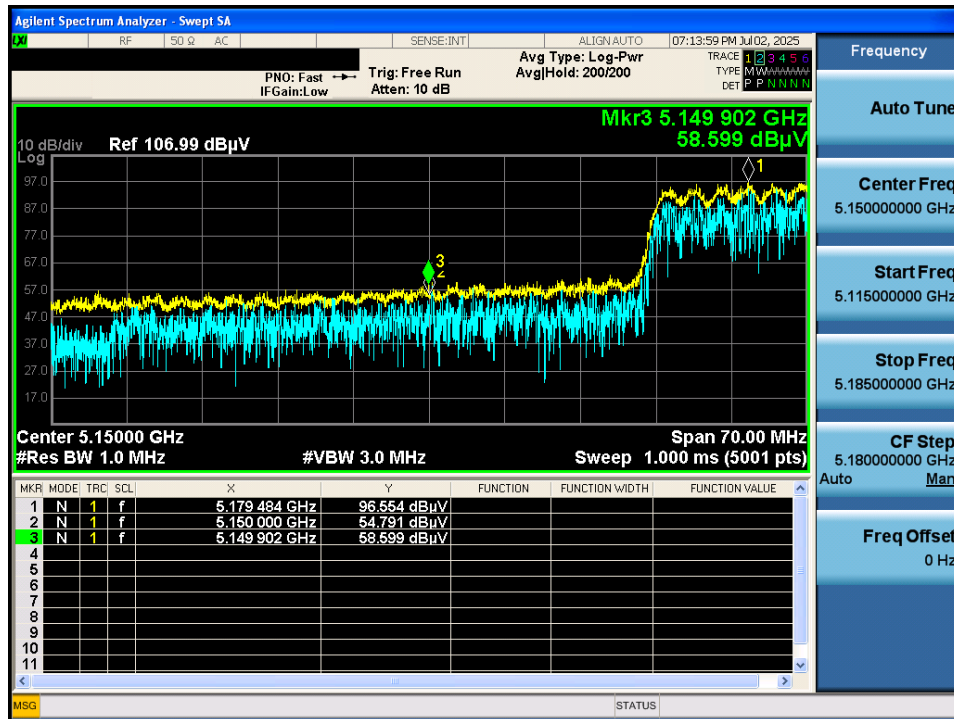
802.11ax HE40 & U-NII 3 & Ch.151 & X axis & Hor & 26 Tone & 0 RU

Detector Mode : AV



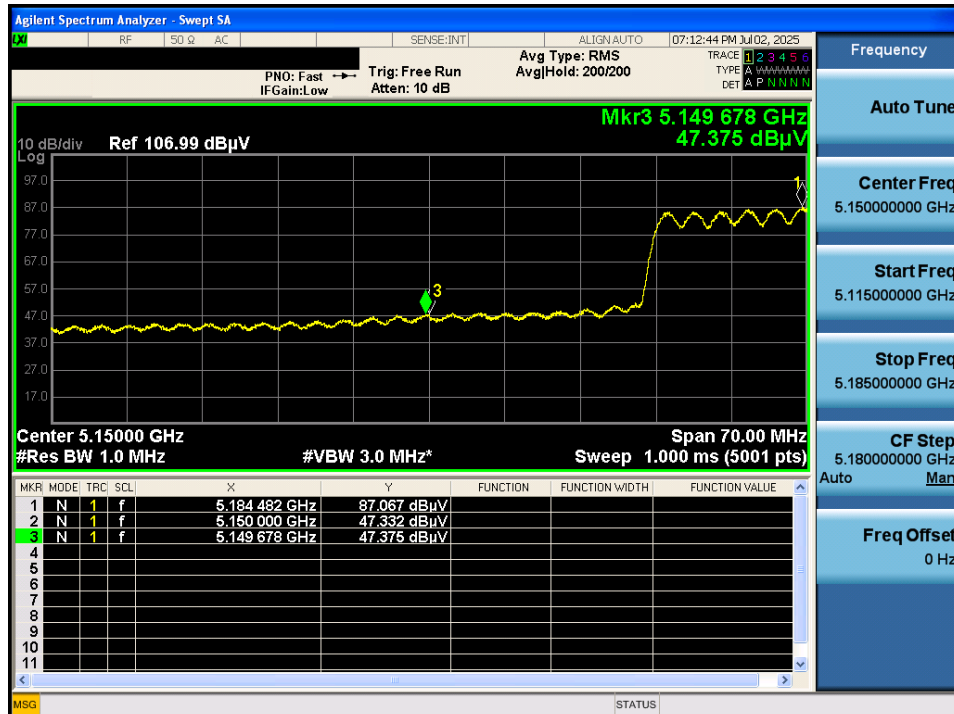
802.11ax HE80 & U-NII 1 & Ch.42 & Z axis & Hor & 996 Tone & 67 RU

Detector Mode : PK

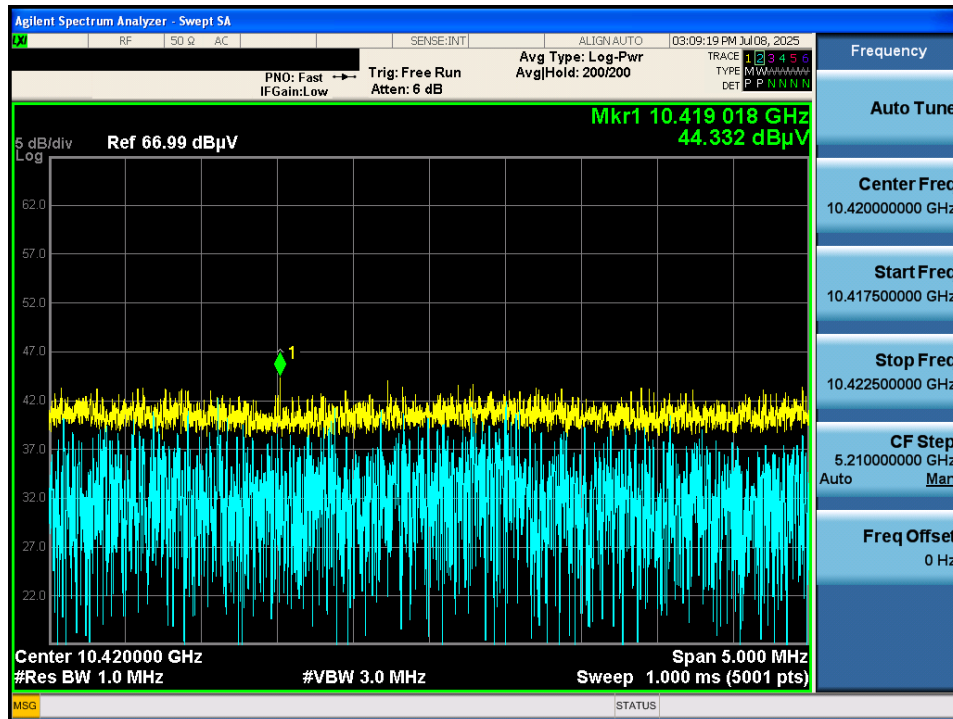


802.11ax HE80 & U-NII 1 & Ch.42 & Z axis & Hor & 996 Tone & 67 RU

Detector Mode : AV

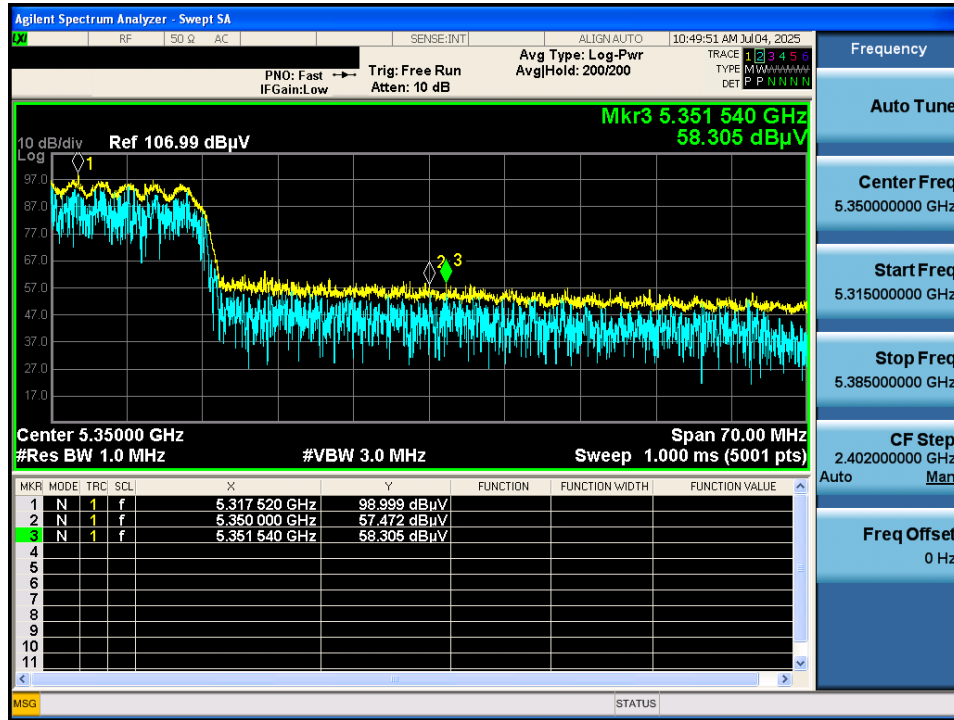


802.11ax HE80 & U-NII 1 & Ch.42 & X axis & Hor & 996 Tone & 67 RU Detector Mode : PK



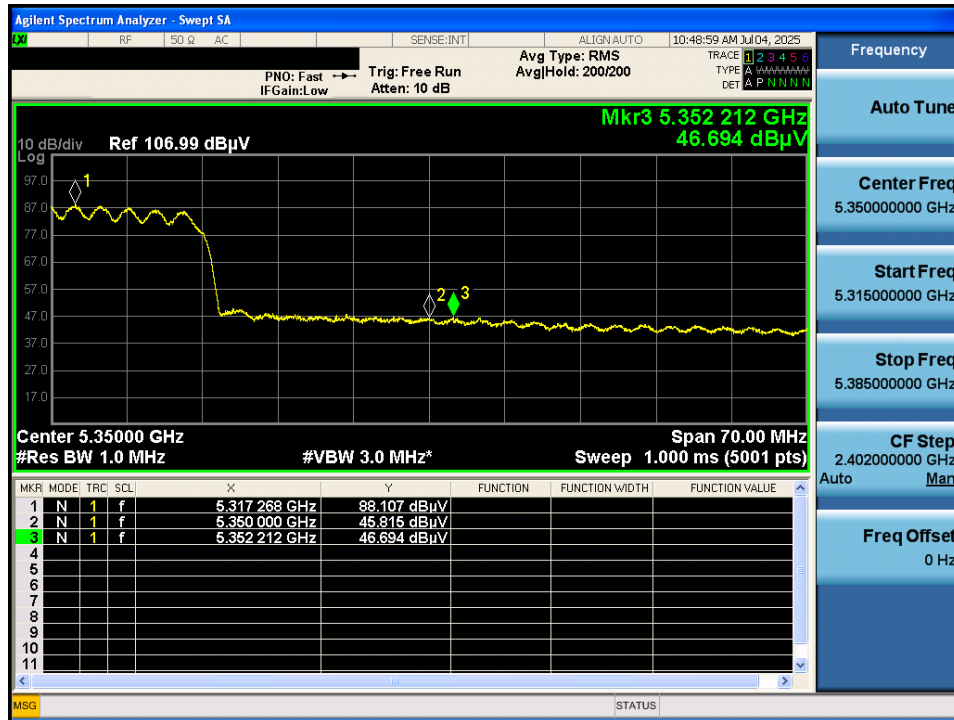
802.11ax HE80 & U-NII 1 & Ch.58 & Z axis & Hor & 996 Tone & 67 RU

Detector Mode : PK



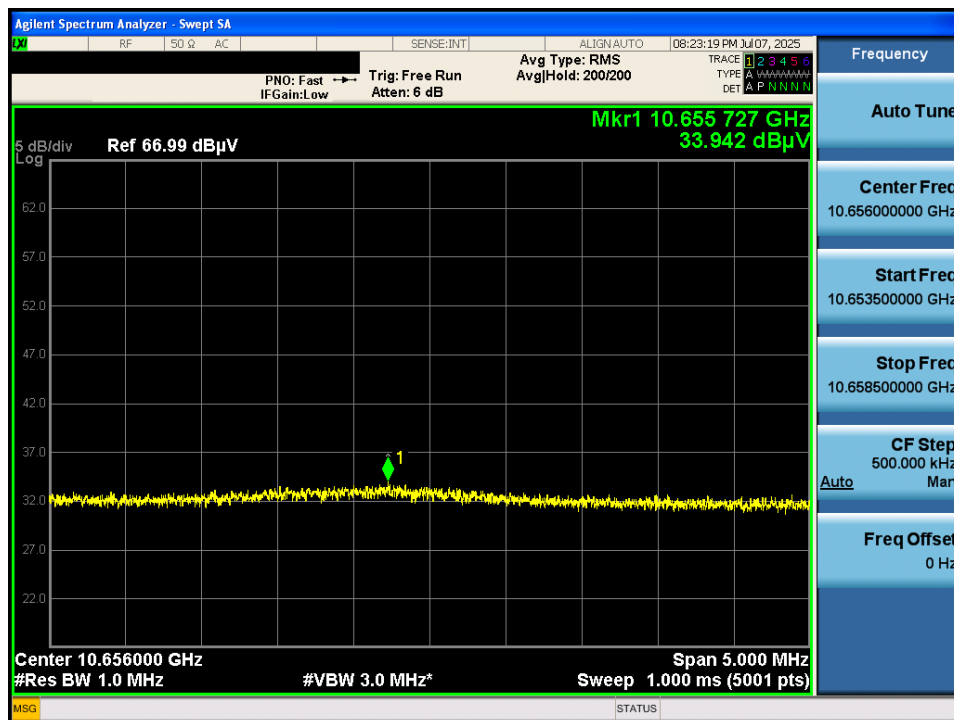
802.11ax HE80 & U-NII 1 & Ch.58 & Z axis & Hor & 996 Tone & 67 RU

Detector Mode : AV

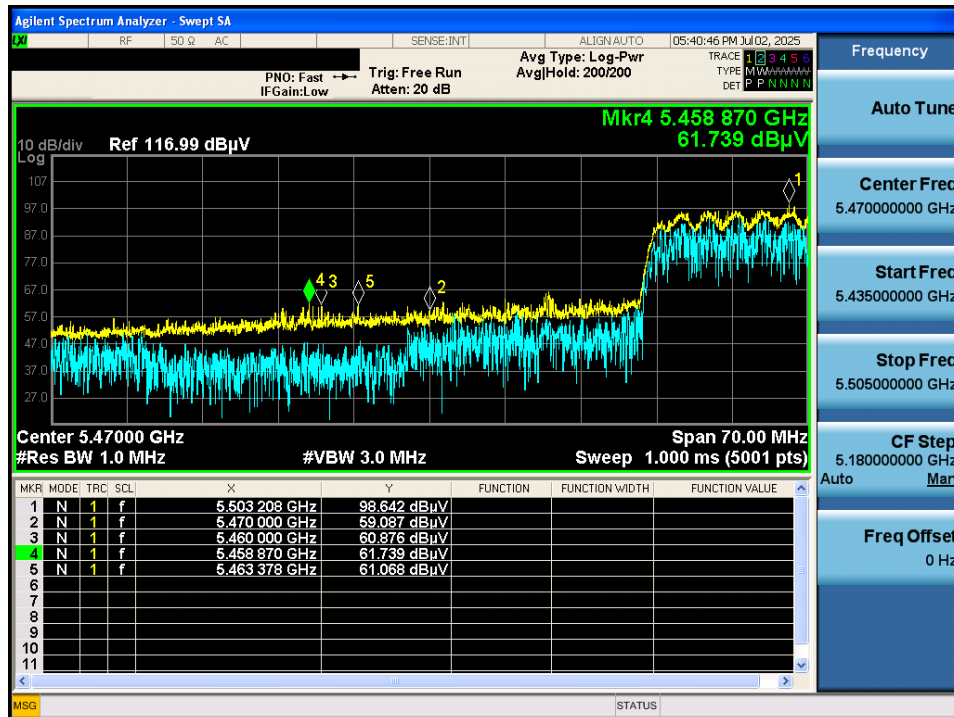


802.11ax HE80 & U-NII 1 & Ch.58 & X axis & Hor & 26 Tone & 36 RU

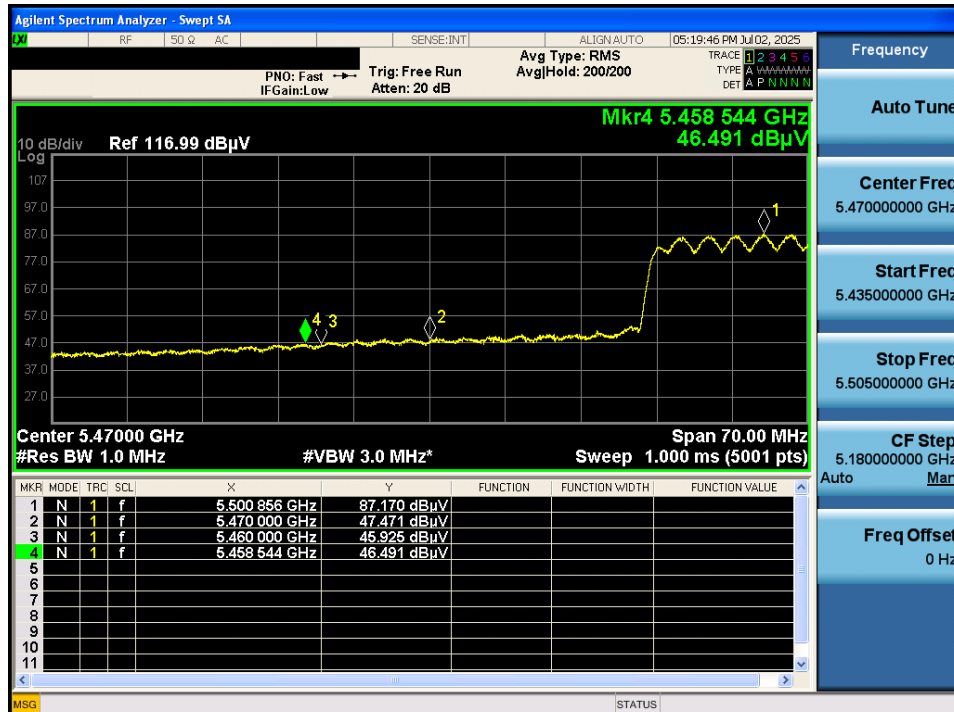
Detector Mode : AV



Detector Mode : PK

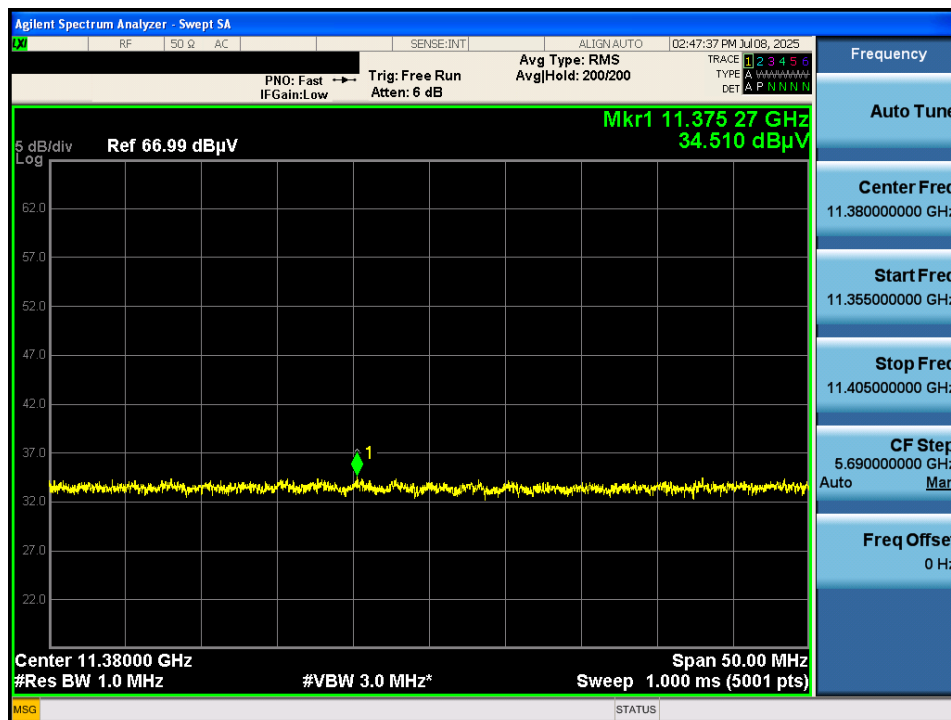


Detector Mode : AV



802.11ax HE80 & U-NII 2C & Ch.138 & Z axis & Hor & 996 Tone & 67 RU

Detector
Mode : AV



Detector Mode : PK



802.11ax HE80 & U-NII 3 & Ch.155 & X axis & Hor & 26 Tone & 0 RU

Detector Mode : AV

