

AC Power-Line Conducted Emissions (Graph)

Test Mode: U-NII 1 & TM 1 & 5 180 MHz

Results of Conducted Emission

DTNC

Date 2023-10-06

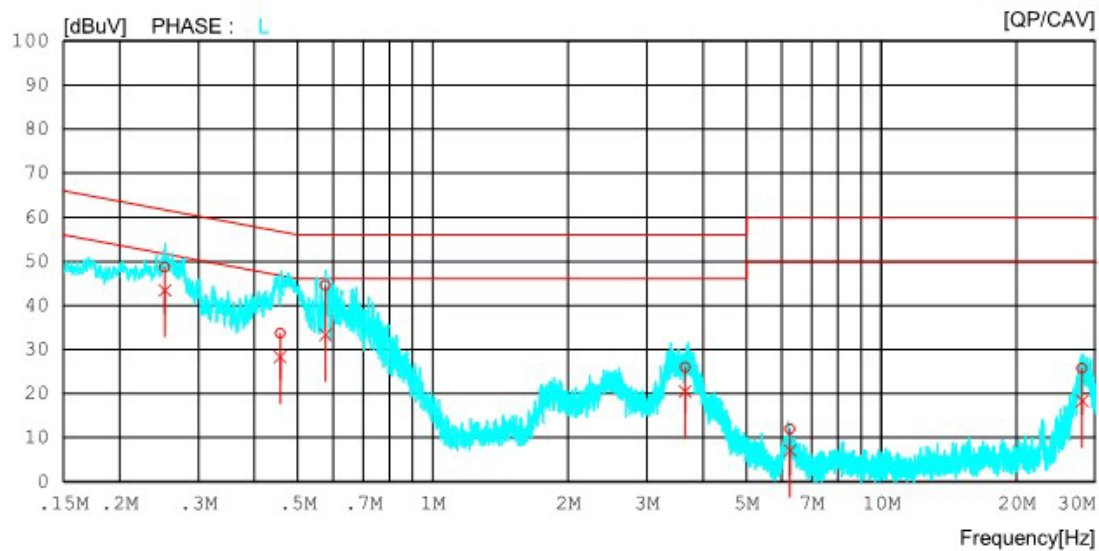
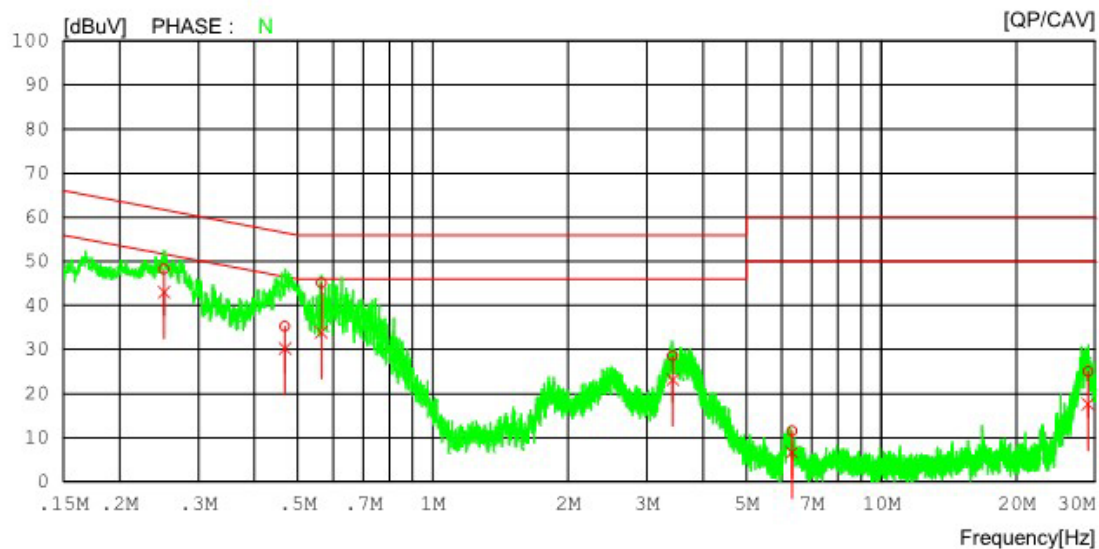
Order No.
Model No.
Serial No.
Test Condition
Memo

NFP-100
WLAN 5.1G
802.11a_5180

Reference No.
Power Supply
Temp/Humi.
Operator

21 'C / 41 %
S.M.GIL

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



AC Power-Line Conducted Emissions (Data List)

Test Mode: U-NII 1 & TM 1 & 5 180 MHz

Results of Conducted Emission

DTNC

Date 2023-10-06

Order No.
Model No. NFP-100
Serial No.
Test Condition WLAN 5.1G

Reference No.
Power Supply
Temp/Humi. 21 'C / 41 %
Operator S.M.GIL

Memo 802.11a_5180

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

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	0.25159	38.38	33.11	9.88	48.26	42.99	61.70	51.70	13.44	8.71	N
2	0.46783	25.30	20.32	9.90	35.20	30.22	56.55	46.55	21.35	16.33	N
3	0.56400	35.15	23.96	9.90	45.05	33.86	56.00	46.00	10.95	12.14	N
4	3.42560	18.57	13.21	9.96	28.53	23.17	56.00	46.00	27.47	22.83	N
5	6.32200	1.41	-3.33	10.03	11.44	6.70	60.00	50.00	48.56	43.30	N
6	28.89420	14.67	7.27	10.36	25.03	17.63	60.00	50.00	34.97	32.37	N
7	0.25230	38.86	33.51	9.88	48.74	43.39	61.68	51.68	12.94	8.29	L
8	0.45650	23.78	18.37	9.90	33.68	28.27	56.76	46.76	23.08	18.49	L
9	0.57583	34.67	23.44	9.90	44.57	33.34	56.00	46.00	11.43	12.66	L
10	3.65040	15.98	10.49	9.97	25.95	20.46	56.00	46.00	30.05	25.54	L
11	6.26180	1.90	-2.94	10.03	11.93	7.09	60.00	50.00	48.07	42.91	L
12	28.02920	15.38	7.94	10.35	25.73	18.29	60.00	50.00	34.27	31.71	L

AC Power-Line Conducted Emissions (Graph)

Test Mode: U-NII 2A & TM 1 & 5 260 MHz

Results of Conducted Emission

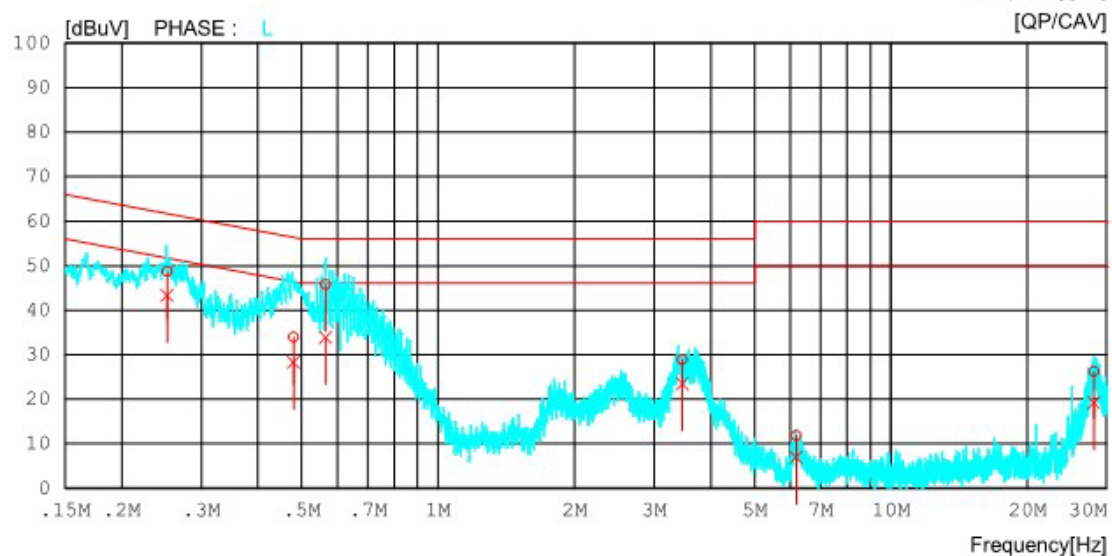
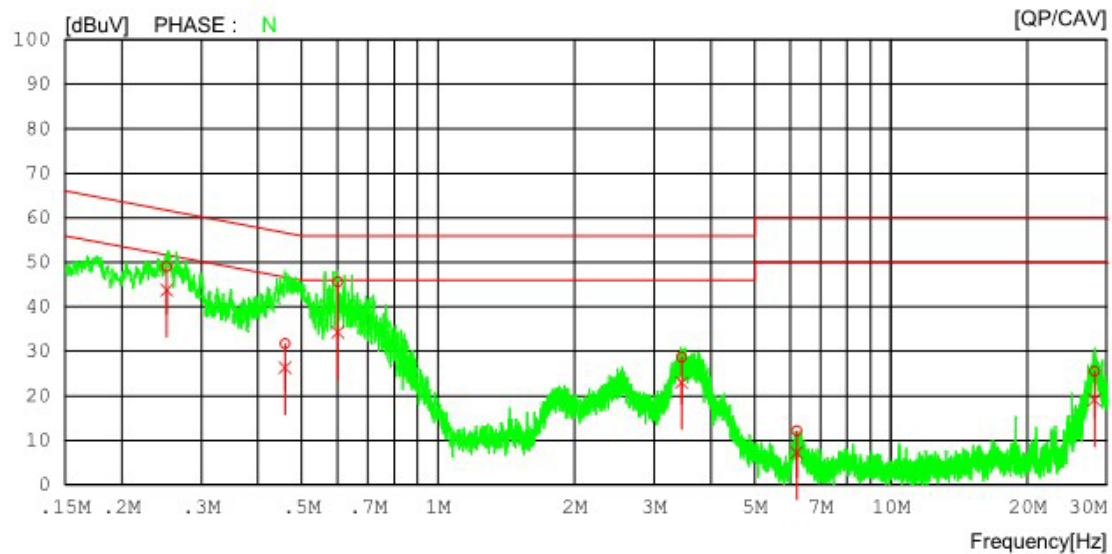
DTNC

Date 2023-10-06

Order No.
Model No. NFP-100
Serial No.
Test Condition WLAN 5.3G
Memo 802.11a_5260

Reference No.
Power Supply
Temp/Humi. 21 °C / 41 %
Operator S.M.GIL

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



AC Power-Line Conducted Emissions (Data List)

Test Mode: U-NII 2A & TM 1 & 5 260 MHz

Results of Conducted Emission

DTNC

Date 2023-10-06

Order No.
Model No. NFP-100
Serial No.
Test Condition WLAN 5.3G

Reference No.
Power Supply
Temp/Humi. 21 'C / 41 %
Operator S.M.GIL

Memo 802.11a_5260

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

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	0.25159	39.10	33.87	9.88	48.98	43.75	61.70	51.70	12.72	7.95	N
2	0.45917	21.75	16.44	9.90	31.65	26.34	56.71	46.71	25.06	20.37	N
3	0.60030	35.69	24.39	9.89	45.58	34.28	56.00	46.00	10.42	11.72	N
4	3.44960	18.75	13.01	9.96	28.71	22.97	56.00	46.00	27.29	23.03	N
5	6.18980	2.06	-2.83	10.03	12.09	7.20	60.00	50.00	47.91	42.80	N
6	28.14680	15.15	8.72	10.35	25.50	19.07	60.00	50.00	34.50	30.93	N
7	0.25199	38.79	33.46	9.88	48.67	43.34	61.69	51.69	13.02	8.35	L
8	0.47909	24.07	18.37	9.90	33.97	28.27	56.35	46.35	22.38	18.08	L
9	0.56366	35.91	23.95	9.90	45.81	33.85	56.00	46.00	10.19	12.15	L
10	3.46160	18.89	13.54	9.96	28.85	23.50	56.00	46.00	27.15	22.50	L
11	6.17540	1.73	-3.10	10.03	11.76	6.93	60.00	50.00	48.24	43.07	L
12	28.07520	15.85	8.83	10.35	26.20	19.18	60.00	50.00	33.80	30.82	L

AC Power-Line Conducted Emissions (Graph)

Test Mode: U-NII 2C & TM 1 & 5 500 MHz

Results of Conducted Emission

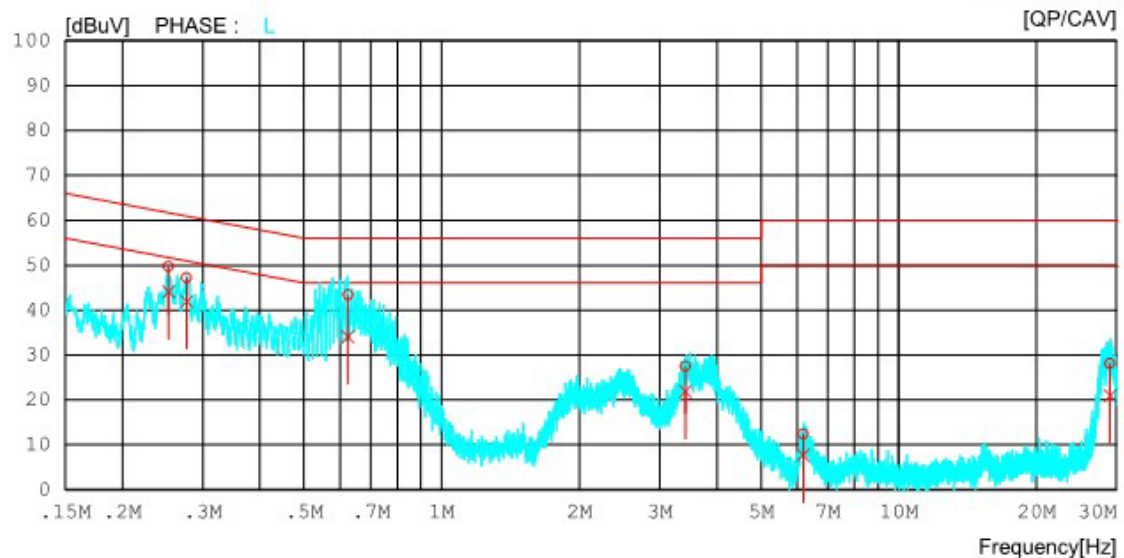
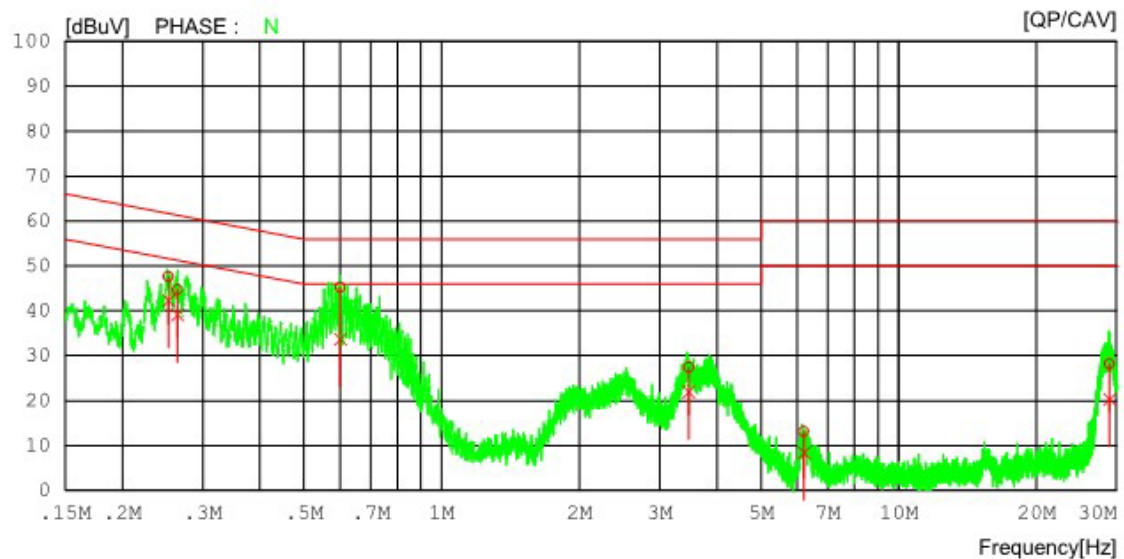
DTNC

Date 2023-10-06

Order No.
Model No. NFP-100
Serial No.
Test Condition WLAN 5.5G
Memo 802.11a_5500

Reference No.
Power Supply
Temp/Humi. 21 °C / 41 %
Operator S.M.GIL

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



AC Power-Line Conducted Emissions (Data List)

Test Mode: U-NII 2C & TM 1 & 5 500 MHz

Results of Conducted Emission

DTNC

Date 2023-10-06

Order No.		Reference No.	
Model No.	NFP-100	Power Supply	
Serial No.		Temp/Humi.	21 'C / 41 %
Test Condition	WLAN 5.5G	Operator	S.M.GIL
Memo	802.11a_5500		

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

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	0.25228	37.70	32.40	9.88	47.58	42.28	61.68	51.68	14.10	9.40	N
2	0.26429	34.81	29.21	9.88	44.69	39.09	61.30	51.30	16.61	12.21	N
3	0.59996	35.30	23.78	9.90	45.20	33.68	56.00	46.00	10.80	12.32	N
4	3.47240	17.39	11.98	9.96	27.35	21.94	56.00	46.00	28.65	24.06	N
5	6.20400	3.16	-1.68	10.03	13.19	8.35	60.00	50.00	46.81	41.65	N
6	28.91920	17.74	9.95	10.36	28.10	20.31	60.00	50.00	31.90	29.69	N
7	0.25229	39.78	34.21	9.88	49.66	44.09	61.68	51.68	12.02	7.59	L
8	0.27670	37.35	32.00	9.89	47.24	41.89	60.91	50.91	13.67	9.02	L
9	0.62344	33.56	24.22	9.89	43.45	34.11	56.00	46.00	12.55	11.89	L
10	3.41280	17.54	11.93	9.96	27.50	21.89	56.00	46.00	28.50	24.11	L
11	6.18180	2.40	-2.38	10.03	12.43	7.65	60.00	50.00	47.57	42.35	L
12	29.00460	17.80	10.63	10.36	28.16	20.99	60.00	50.00	31.84	29.01	L

AC Power-Line Conducted Emissions (Graph)

Test Mode: U-NII 3 & TM 1 & 5 745 MHz

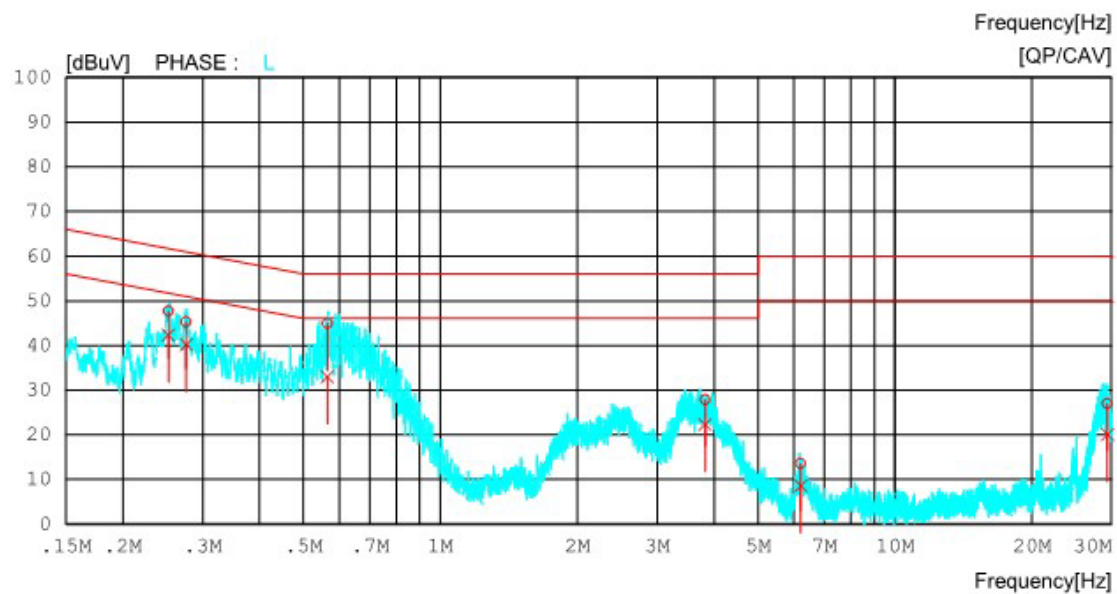
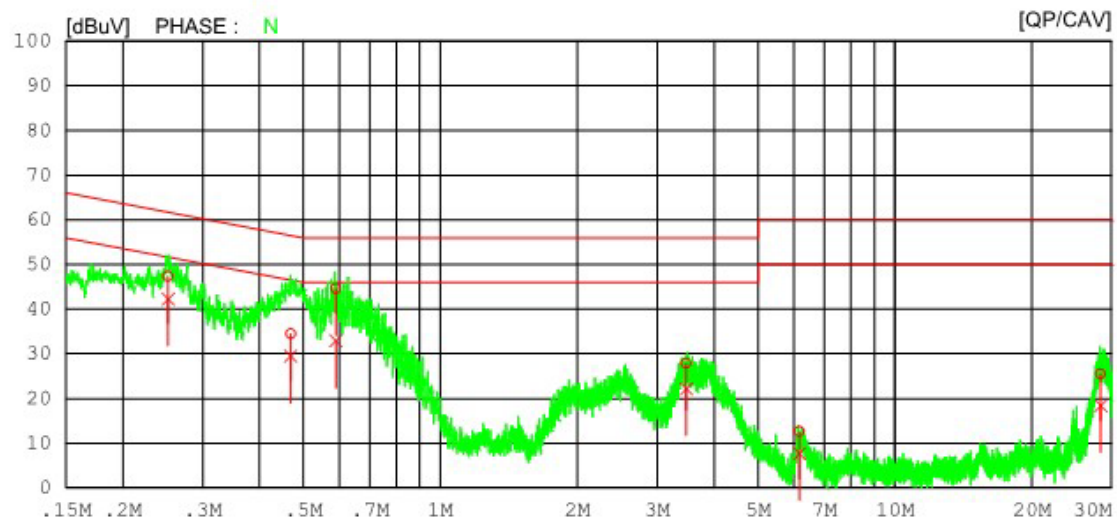
Results of Conducted Emission

DTNC

Date 2023-10-06

Order No.
Model No.
Serial No.
Test ConditionNFP-100
WLAN 5.7GReference No.
Power Supply
Temp/Humi.
Operator21 °C / 41 %
S.M.GIL

Memo 802.11a_5745

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

AC Power-Line Conducted Emissions (Data List)

Test Mode: U-NII 3 & TM 1 & 5 745 MHz

Results of Conducted Emission

DTNC

Date 2023-10-06

Order No.
Model No. NFP-100
Serial No.
Test Condition WLAN 5.7G

Reference No.
Power Supply
Temp/Humi. 21 °C / 41 %
Operator S.M.GIL

Memo 802.11a_5745

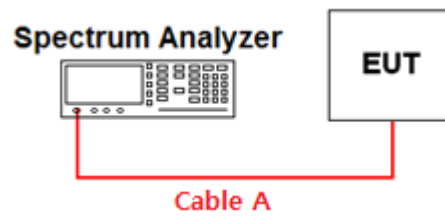
LIMIT : FCC P15.207 AV
FCC P15.207 QP

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	0.25184	37.53	32.42	9.88	47.41	42.30	61.70	51.70	14.29	9.40	N
2	0.46858	24.60	19.56	9.90	34.50	29.46	56.54	46.54	22.04	17.08	N
3	0.58838	34.74	23.03	9.90	44.64	32.93	56.00	46.00	11.36	13.07	N
4	3.47360	18.00	12.25	9.96	27.96	22.21	56.00	46.00	28.04	23.79	N
5	6.16460	2.54	-2.34	10.03	12.57	7.69	60.00	50.00	47.43	42.31	N
6	28.35960	15.18	8.08	10.35	25.53	18.43	60.00	50.00	34.47	31.57	N
7	0.25214	37.75	32.47	9.88	47.63	42.35	61.69	51.69	14.06	9.34	L
8	0.27565	35.46	30.26	9.89	45.35	40.15	60.95	50.95	15.60	10.80	L
9	0.56361	35.06	23.11	9.90	44.96	33.01	56.00	46.00	11.04	12.99	L
10	3.82160	17.91	12.31	9.97	27.88	22.28	56.00	46.00	28.12	23.72	L
11	6.20380	3.51	-1.40	10.03	13.54	8.63	60.00	50.00	46.46	41.37	L
12	29.34860	16.67	9.69	10.37	27.04	20.06	60.00	50.00	32.96	29.94	L

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**

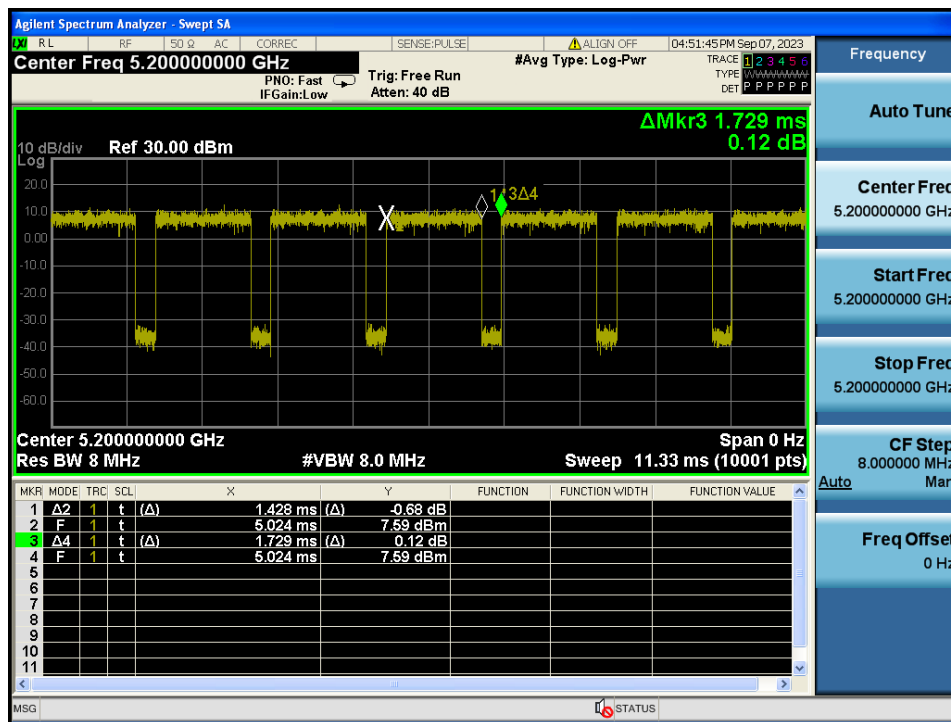
1. Set the center frequency of the spectrum analyzer to the center frequency of the transmission.
2. Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value.
3. Set VBW $\geq$ RBW. Set detector = peak.
4. Note : The zero-span measurement method shall not be used unless both **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)

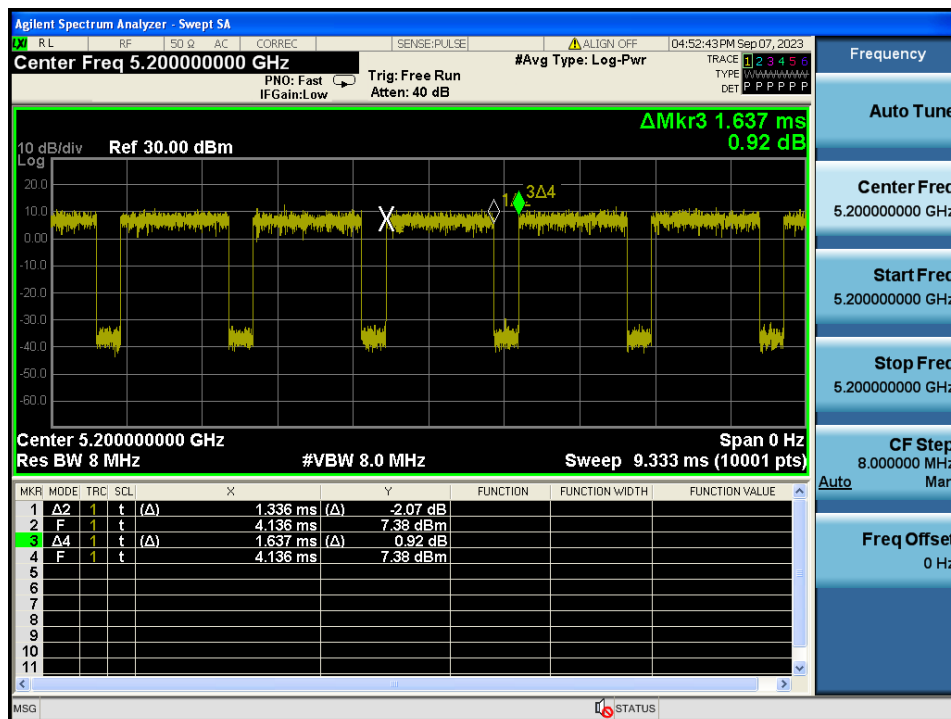
Duty Cycle

Test Mode: TM1 & Ch.40



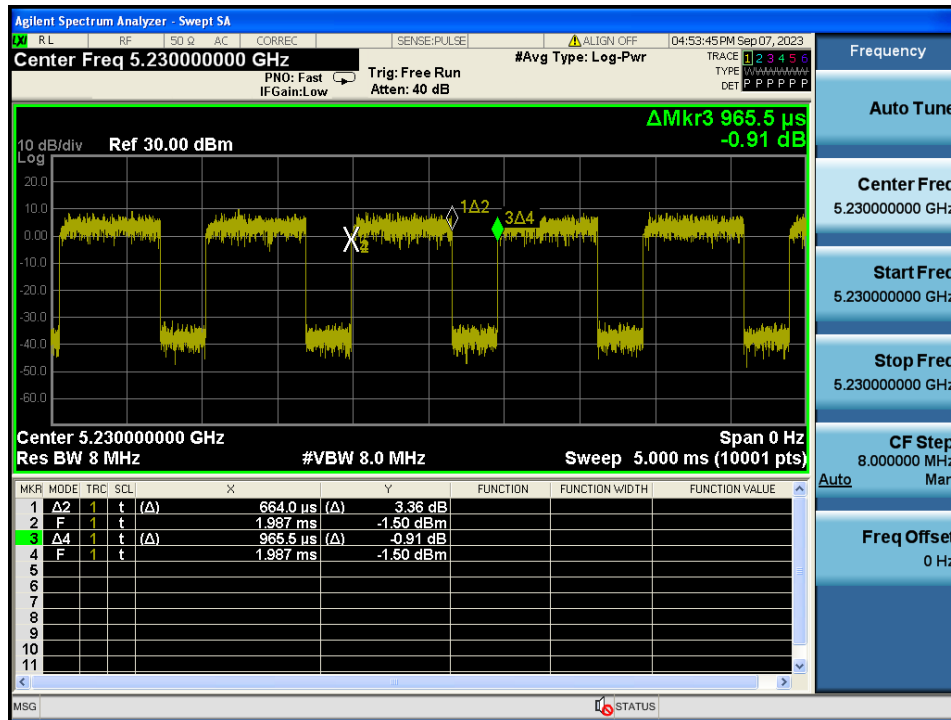
Duty Cycle

Test Mode: TM 2 & Ch.40



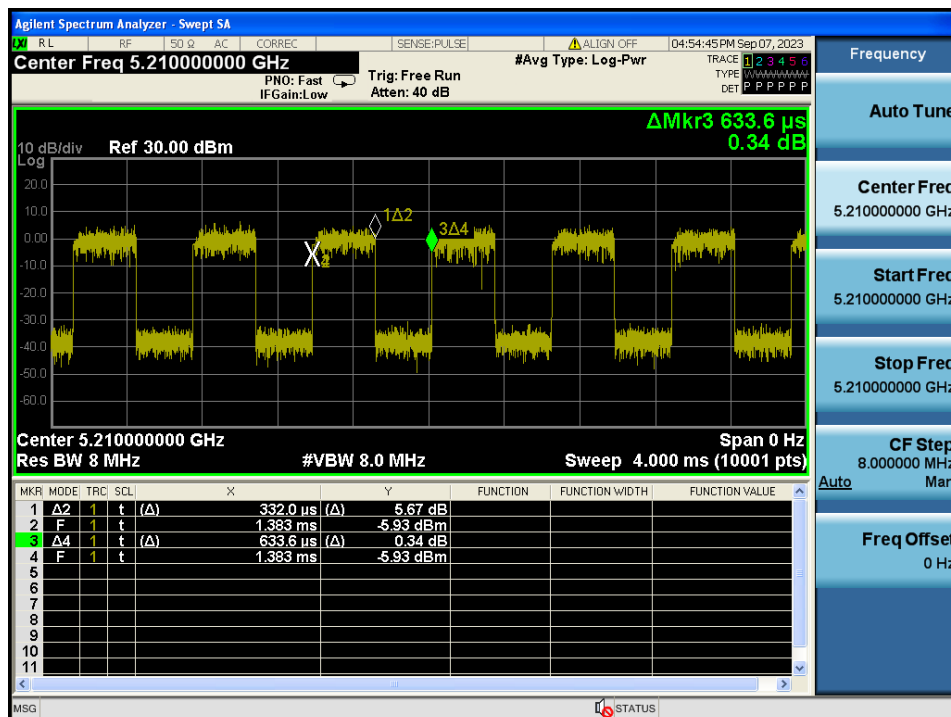
Duty Cycle

Test Mode: TM 3 & Ch.46



Duty Cycle

Test Mode: TM 4 & Ch.42

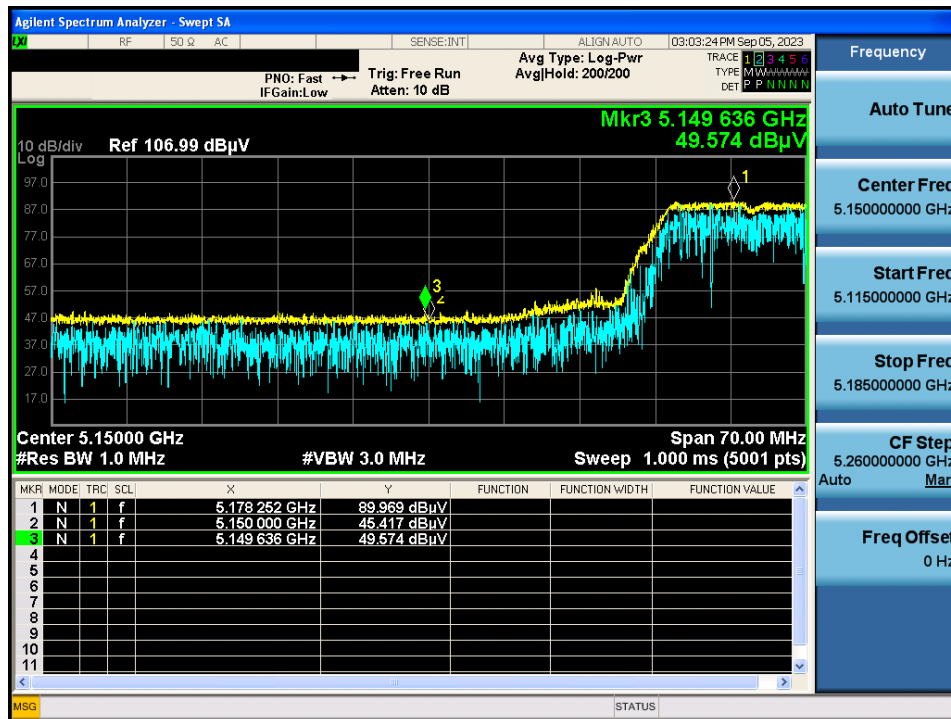


APPENDIX III

Unwanted Emissions (Radiated) Test Plot:

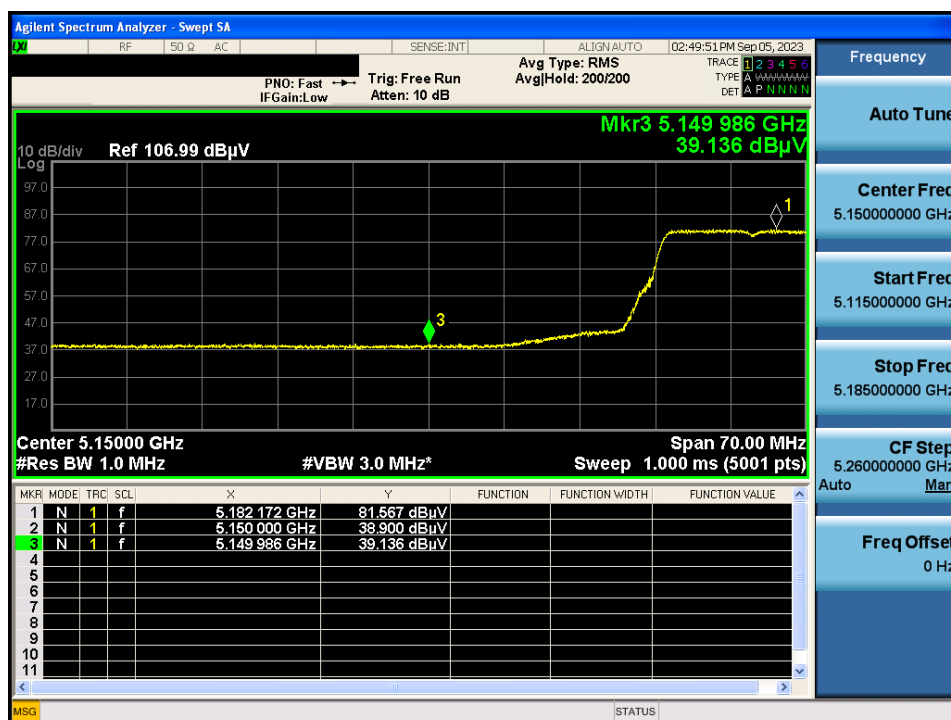
TM 1 & U-NII 1 & 5 180 & X axis & Hor

Detector Mode : PK



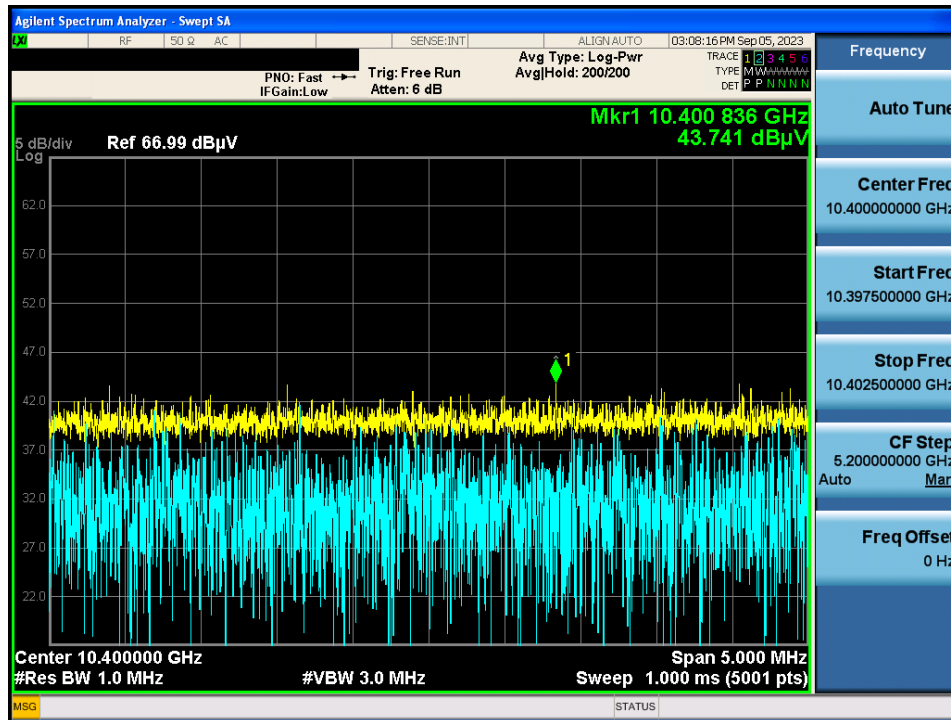
TM 1 & U-NII 1 & 5 180 & X axis & Hor

Detector Mode : AV



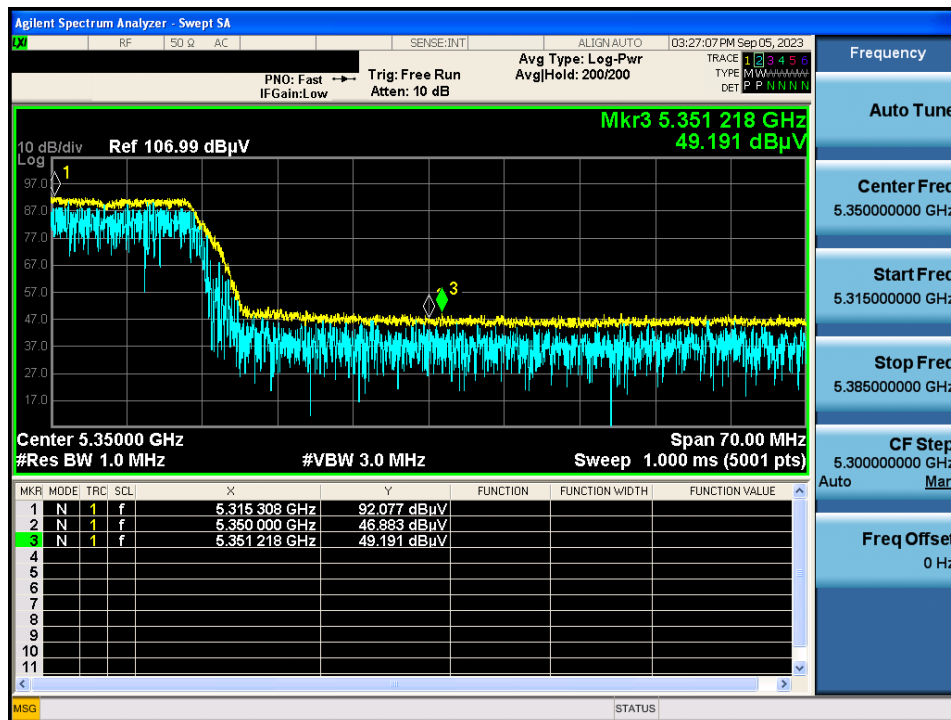
TM 1 & U-NII 1 & 5 200 & X axis & Hor

Detector Mode : PK



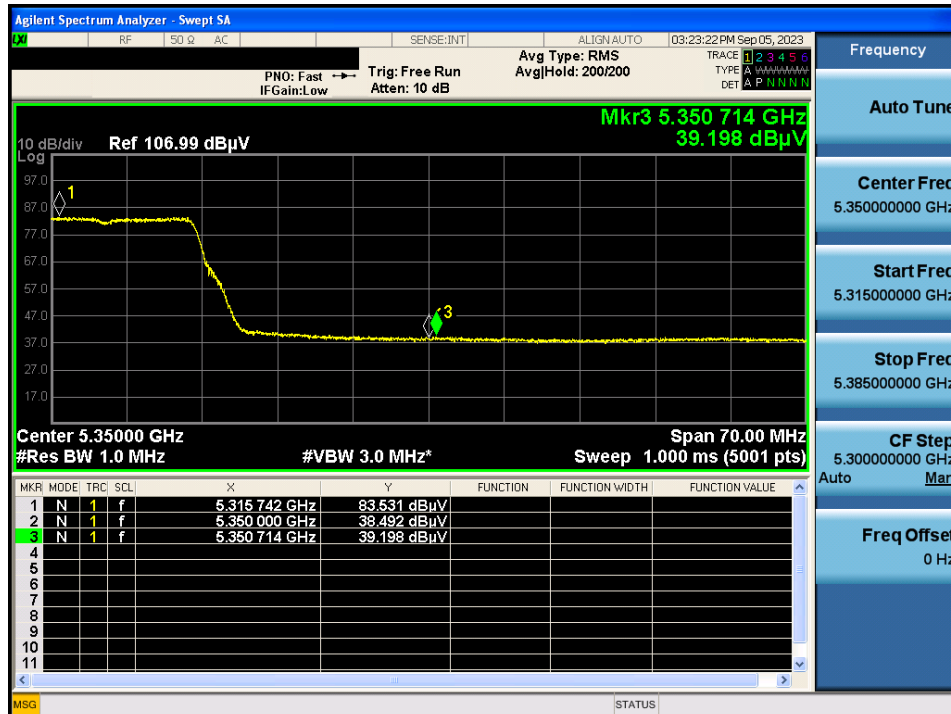
TM 1 & U-NII 2A & 5 320 & X axis & Hor

Detector Mode : PK



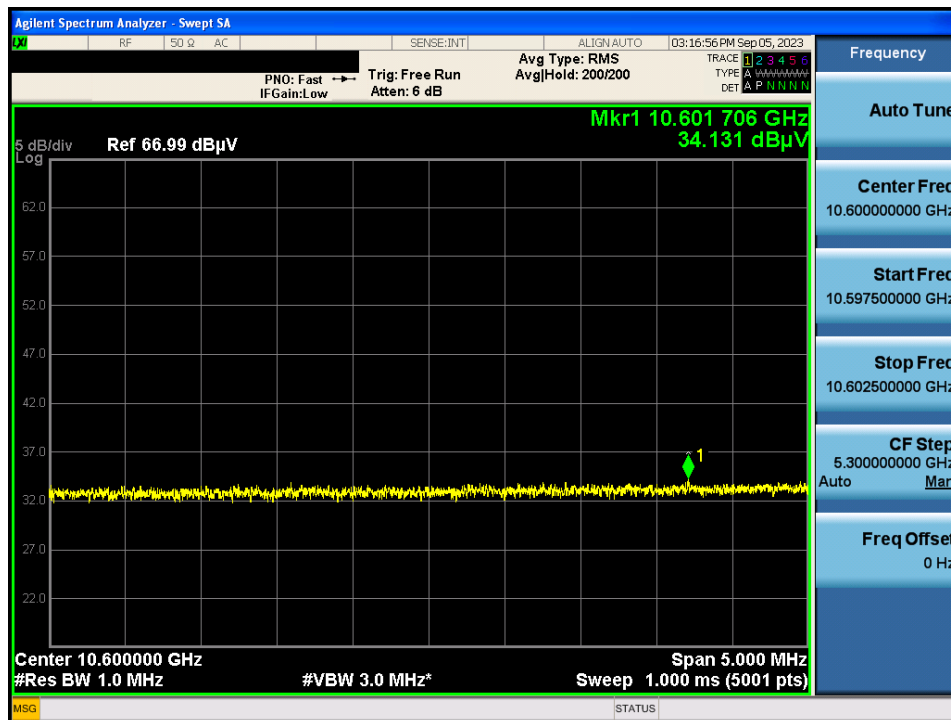
TM 1 & U-NII 2A & 5 320 & X axis & Hor

Detector Mode : AV



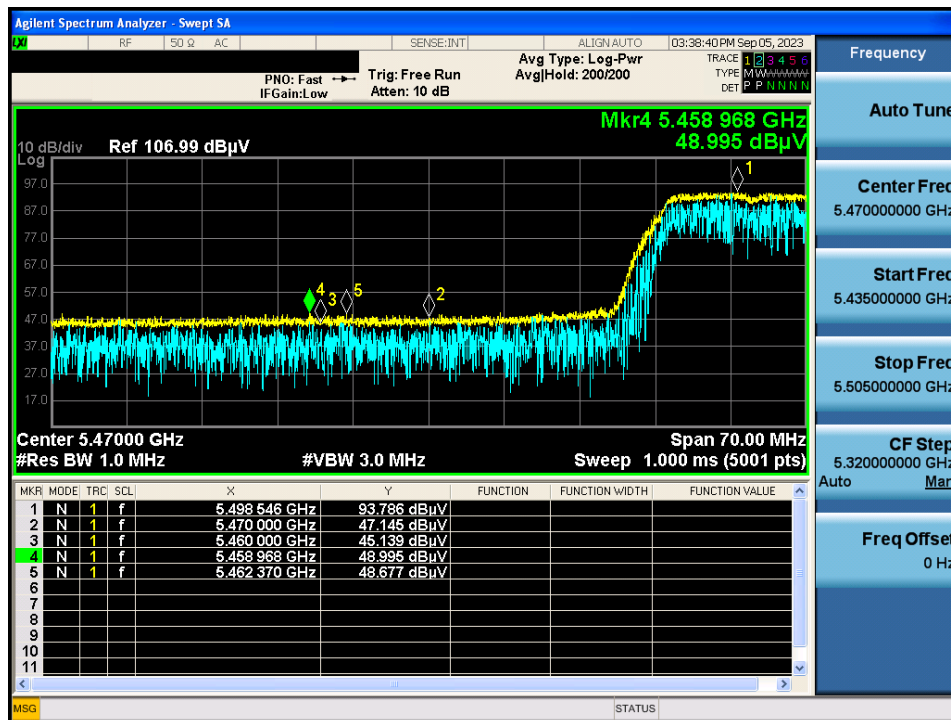
TM 1 & U-NII 2A & 5 300 & X axis & Hor

Detector Mode : AV



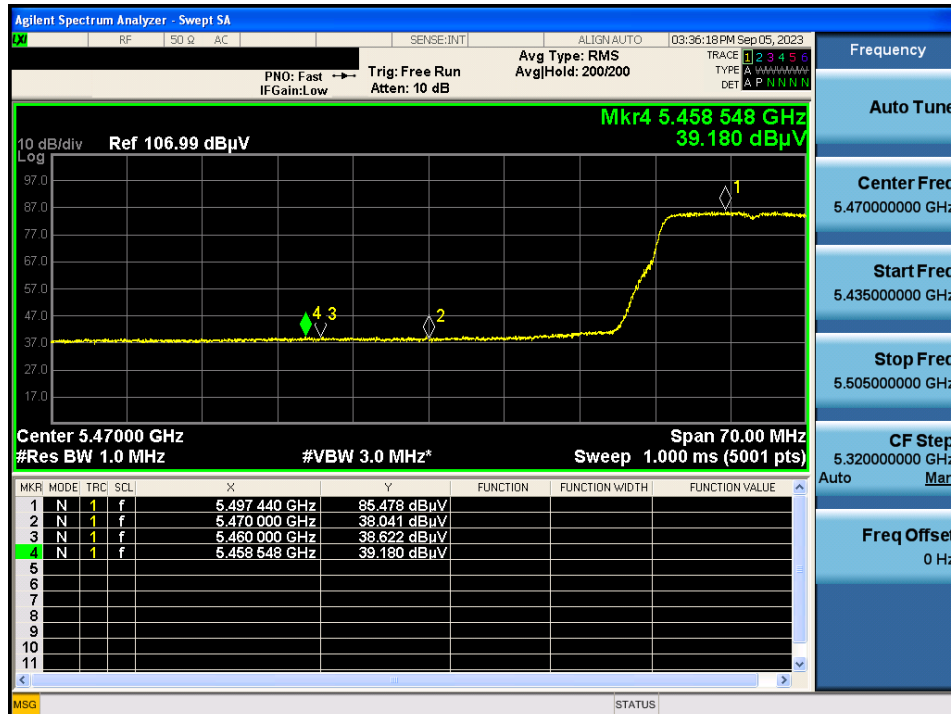
TM 1 & U-NII 2C & 5 500 & X axis & Hor

Detector Mode : PK



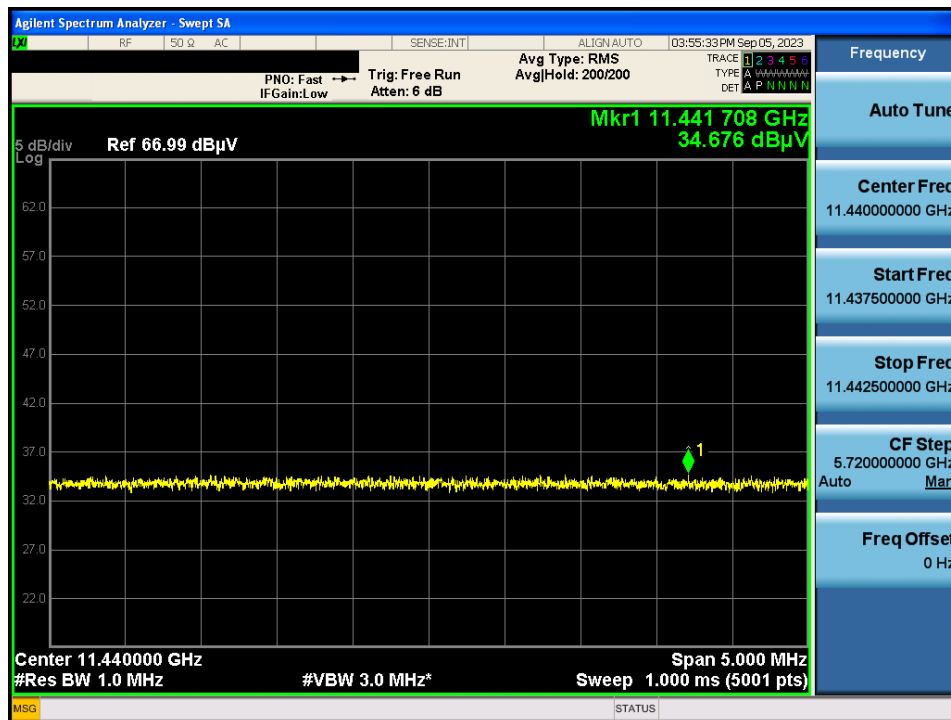
TM 1 & U-NII 2C & 5 500 & X axis & Hor

Detector Mode : AV

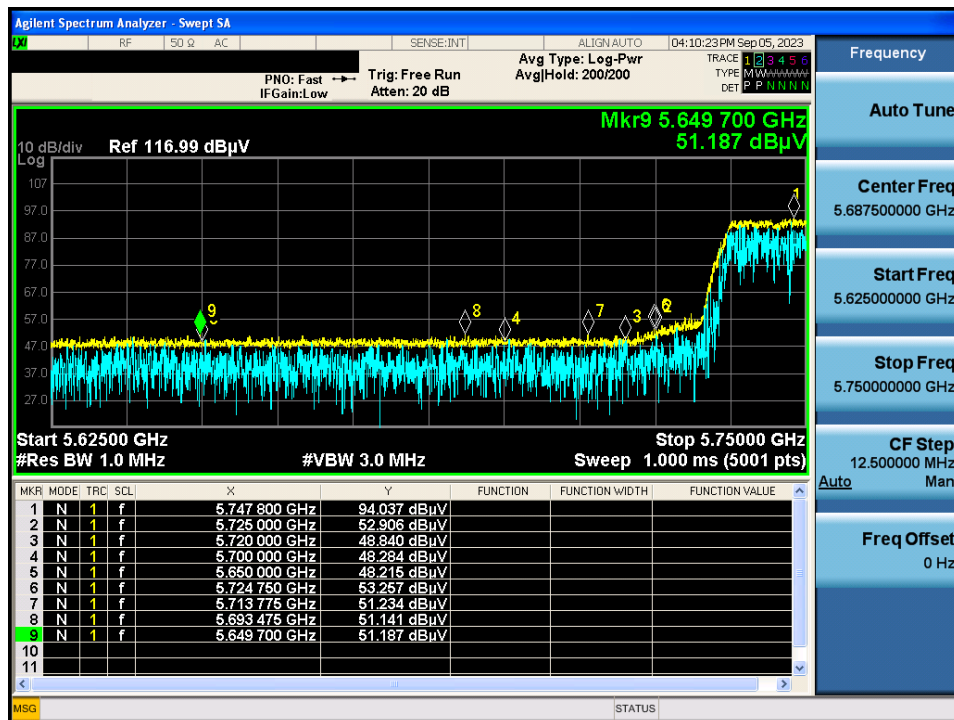


TM 1 & U-NII 2C & 5 720 & X axis & Hor

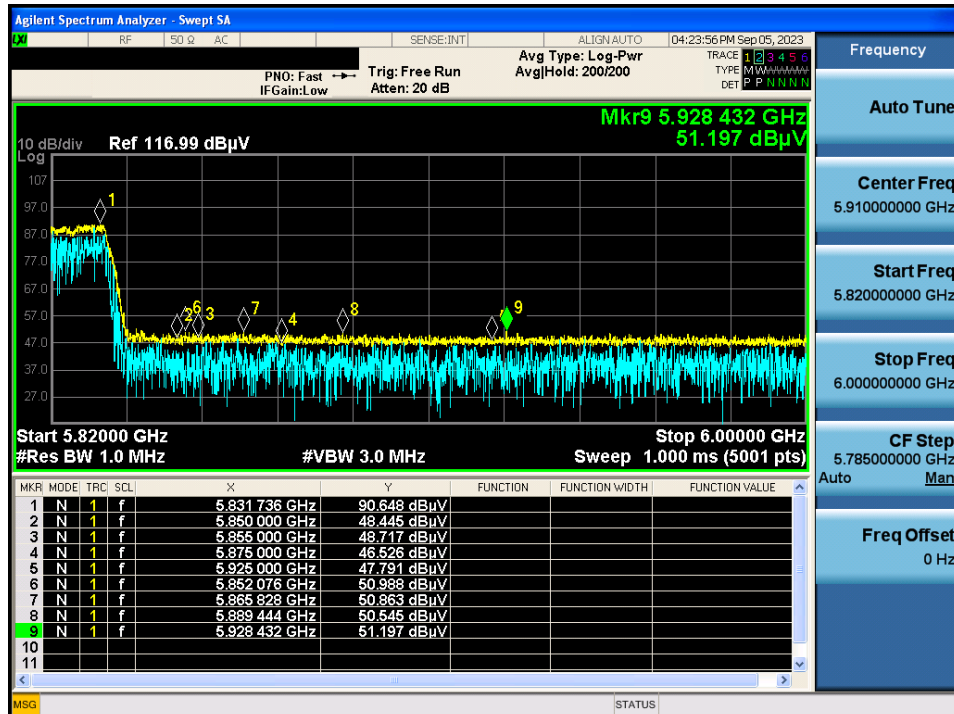
Detector Mode : AV



Detector Mode : PK

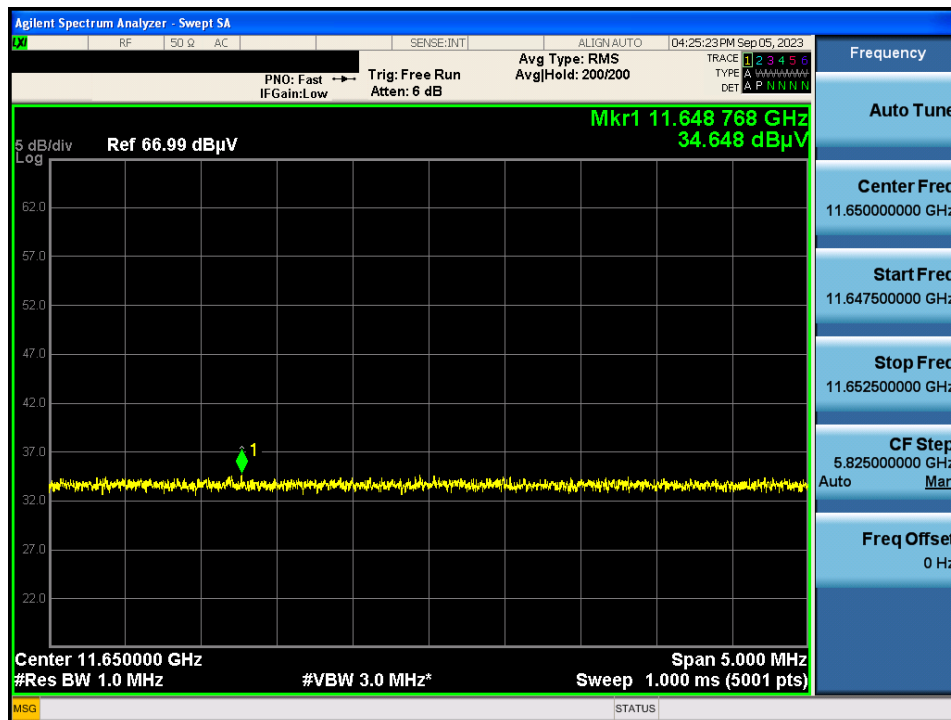


Detector Mode : PK



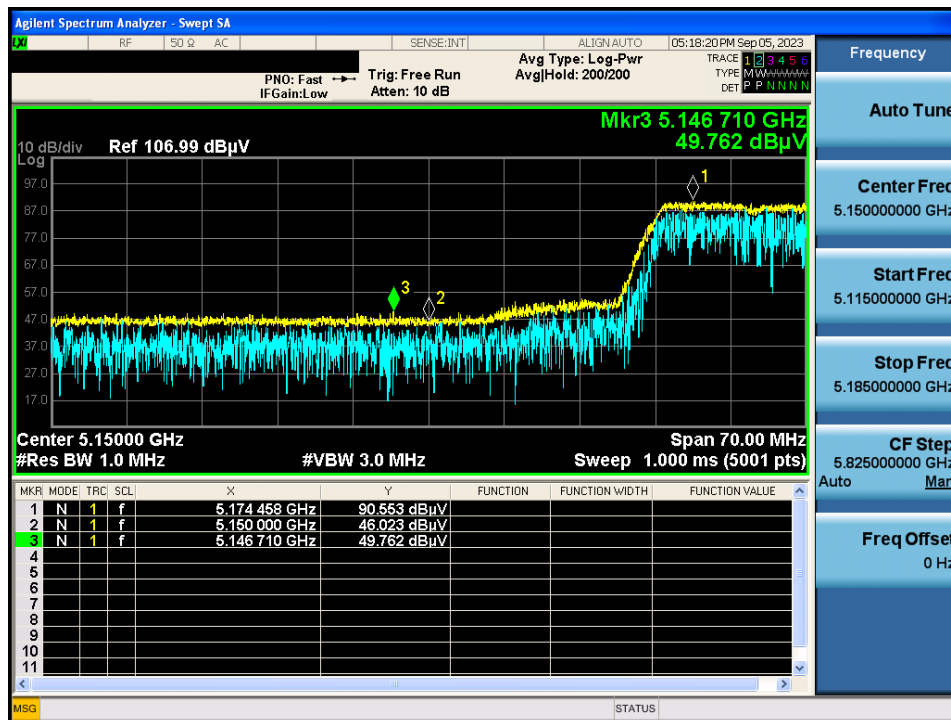
TM 1 & U-NII 3 & 5 825 & X axis & Hor

Detector Mode : AV



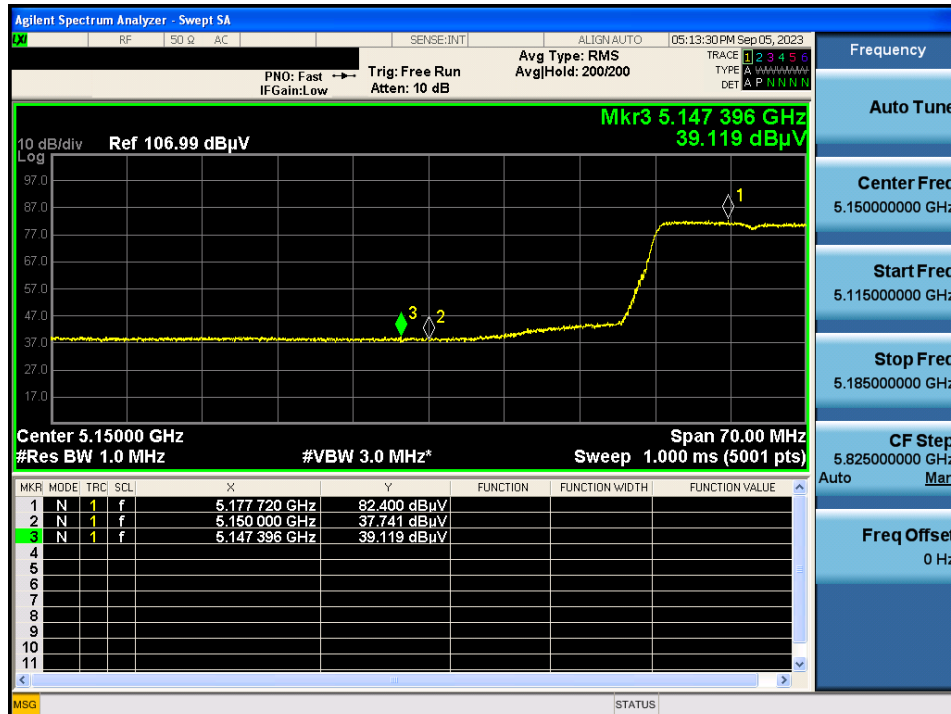
TM 2 & U-NII 1 & 5180 & X axis & Hor

Detector Mode : PK



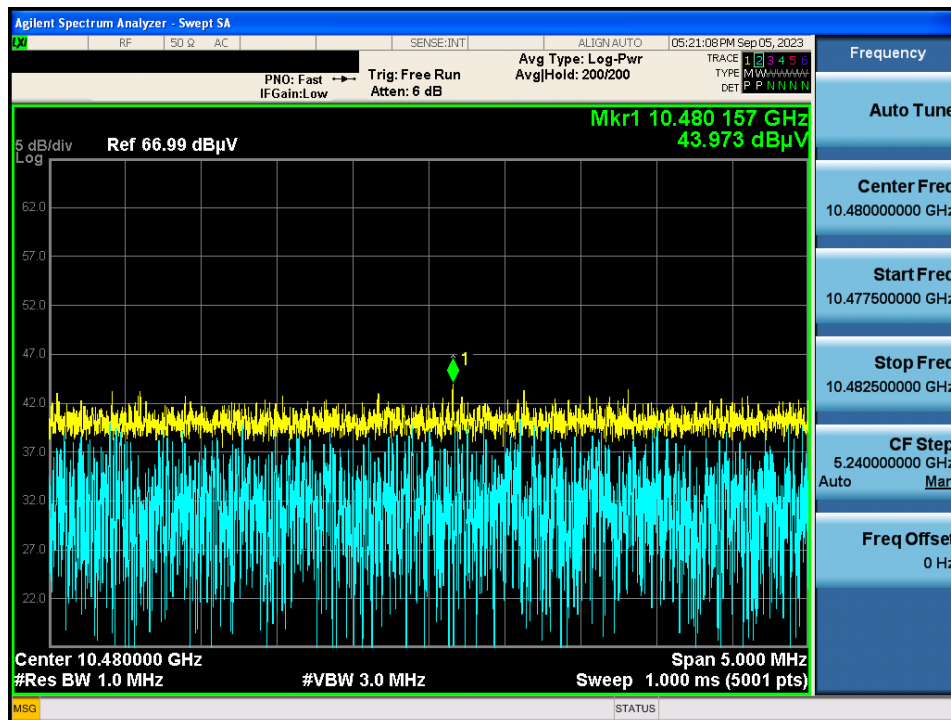
TM 2 & U-NII 1 & 5180 & X axis & Hor

Detector Mode : AV



TM 2 & U-NII 1 & 5 240 & X axis & Hor

Detector Mode : PK

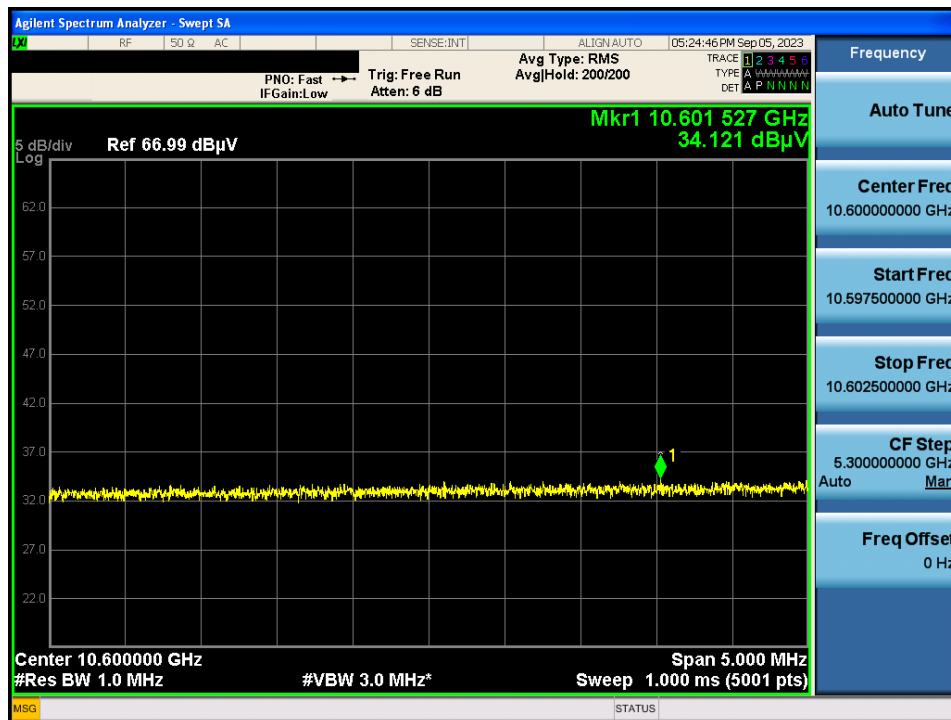


Detector Mode : PK



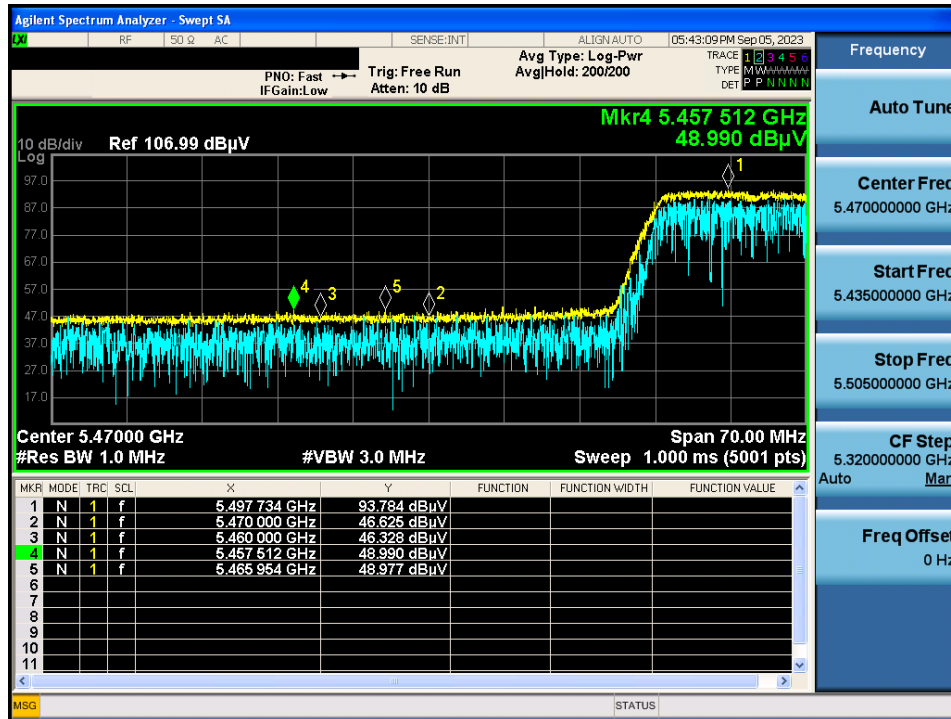
TM 2 & U-NII 2A & 5 300 & X axis & Hor

Detector Mode : AV



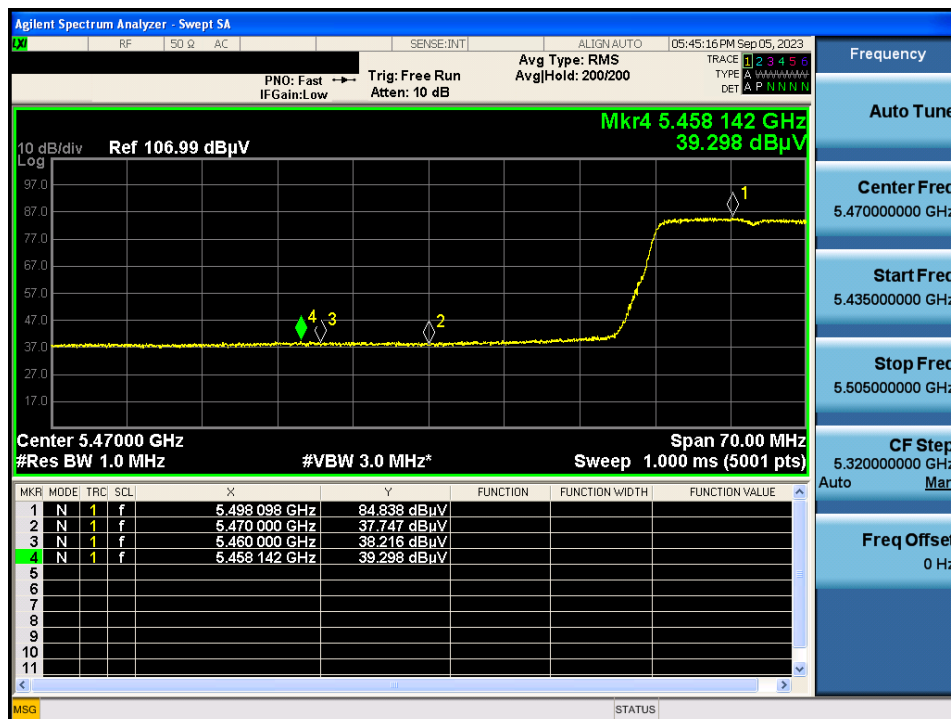
TM 2 & U-NII 2C & 5 500 & X axis & Hor

Detector Mode : PK



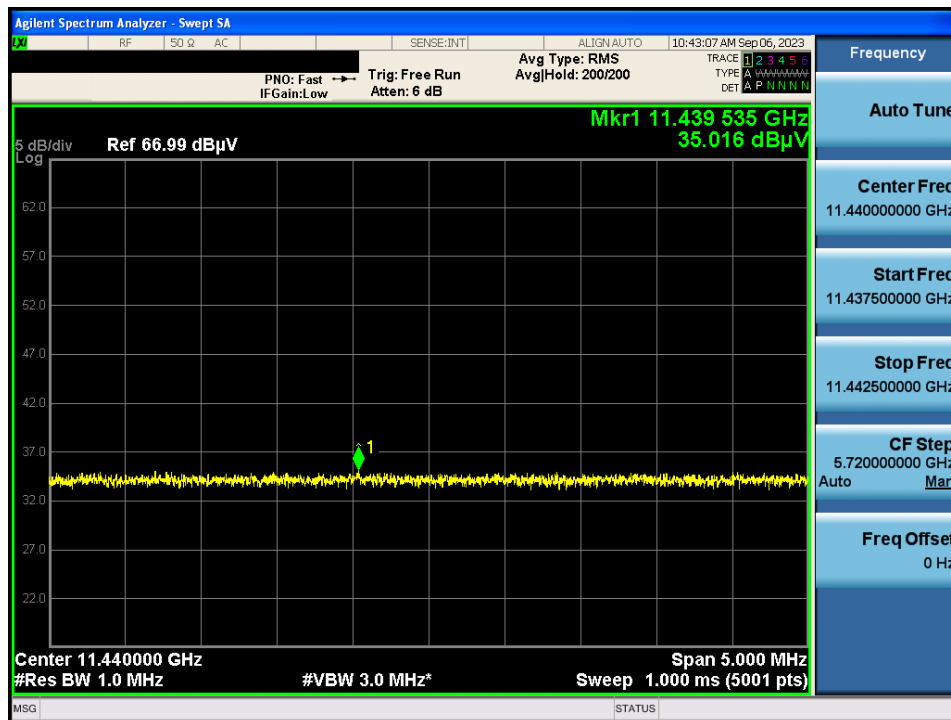
TM 2 & U-NII 2C & 5 500 & X axis & Hor

Detector Mode : AV



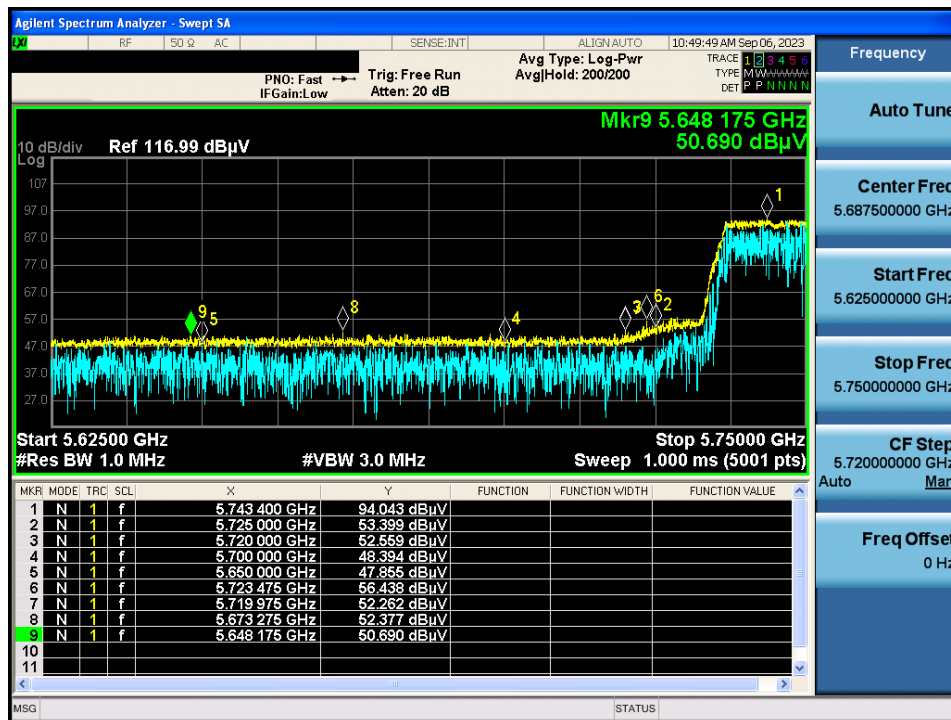
TM 2 & U-NII 2C & 5 720 & X axis & Hor

Detector Mode : AV



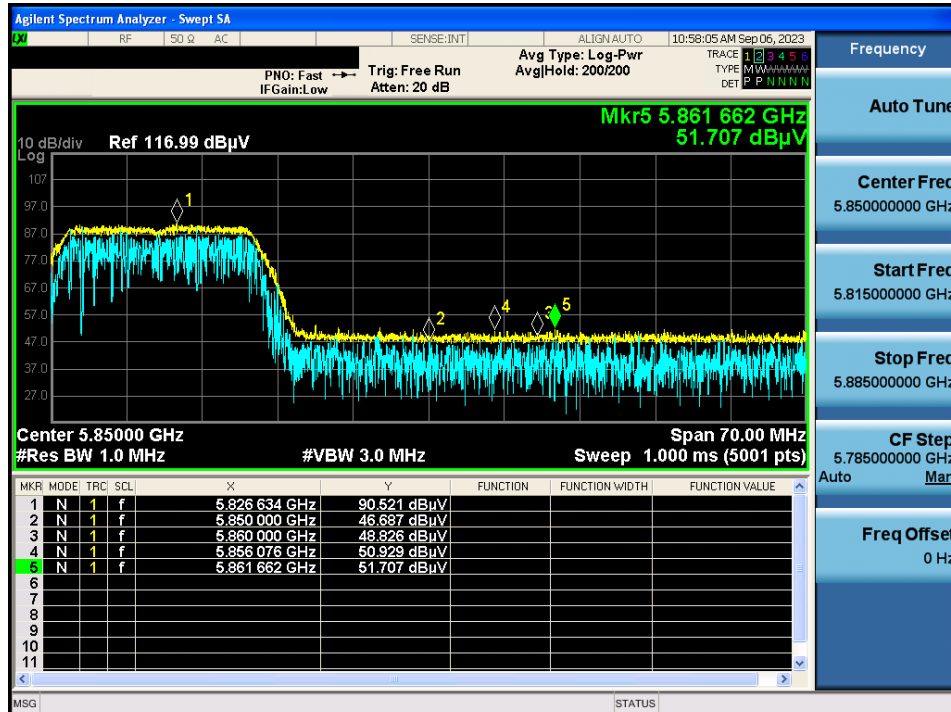
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Detector Mode : PK



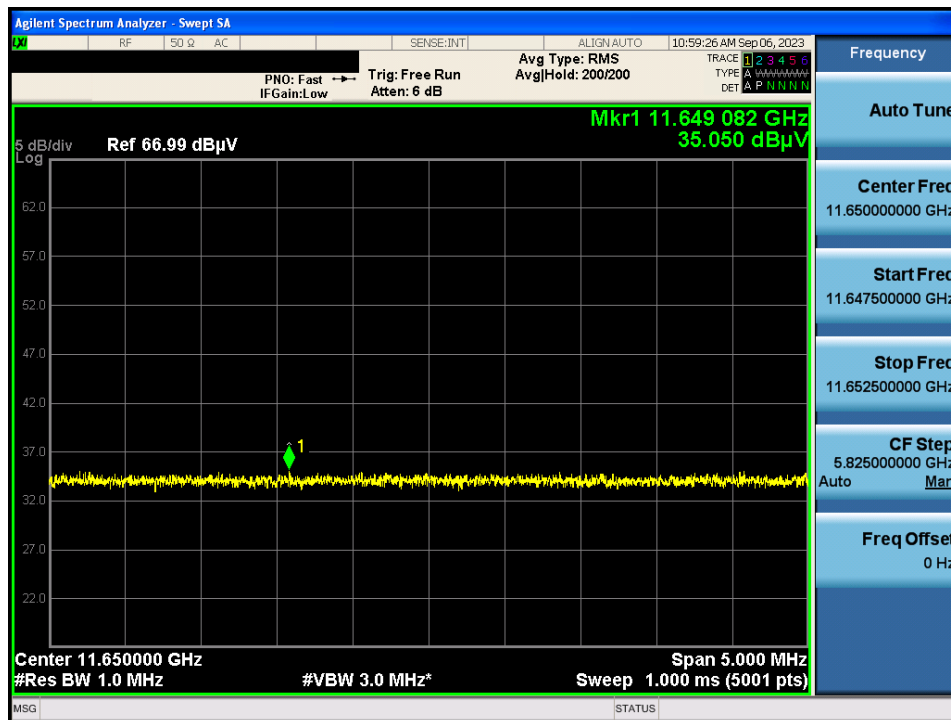
TM 2 & U-NII 3 & 5 825 & X axis & Hor

Detector Mode : PK



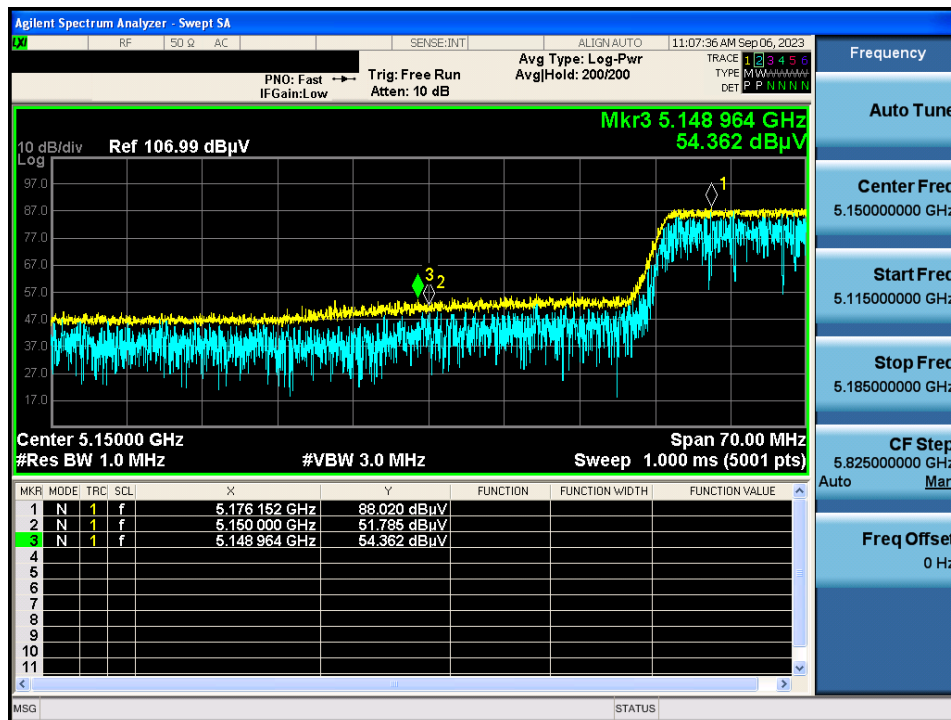
TM 2 & U-NII 3 & 5 825 & X axis & Hor

Detector Mode : AV



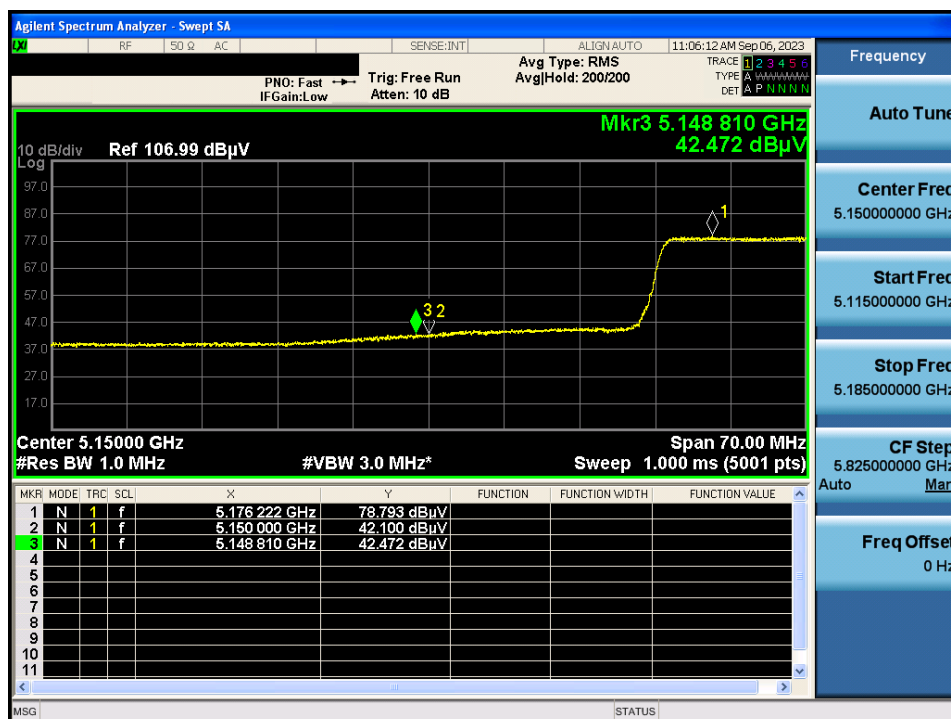
TM 3 & U-NII 1 & 5 190 & X axis & Hor

Detector Mode : PK

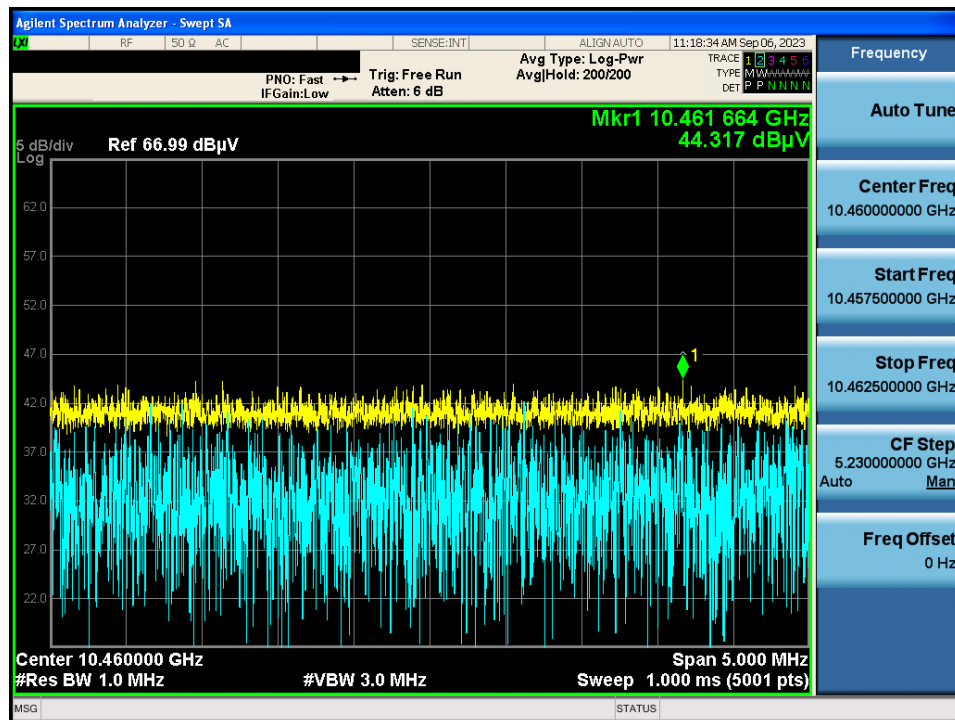


TM 3 & U-NII 1 & 5 190 & X axis & Hor

Detector Mode : AV



Detector Mode : PK

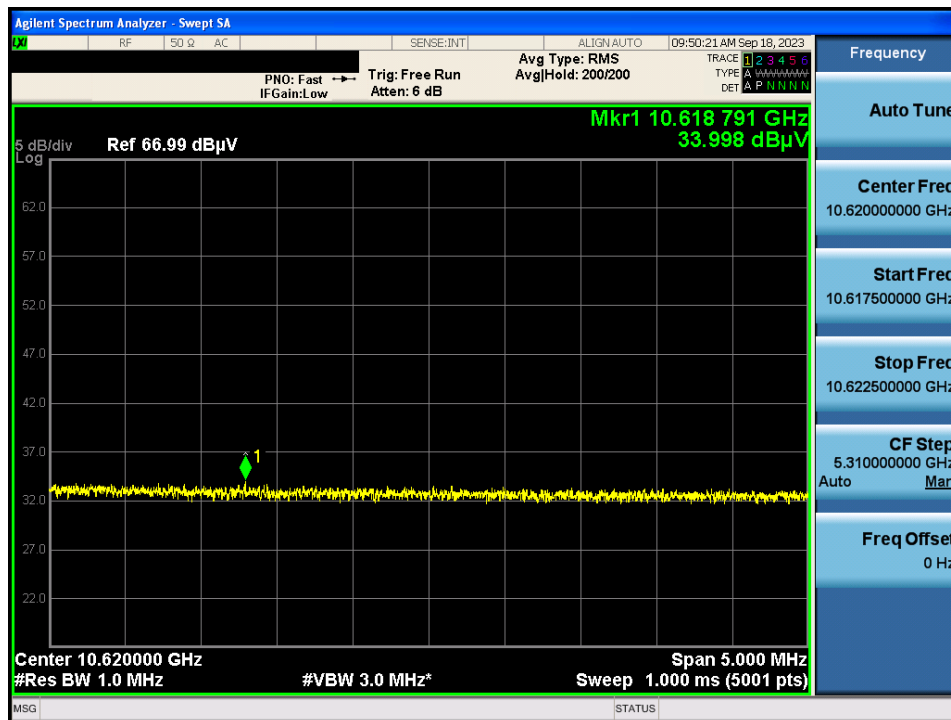


Detector Mode : PK



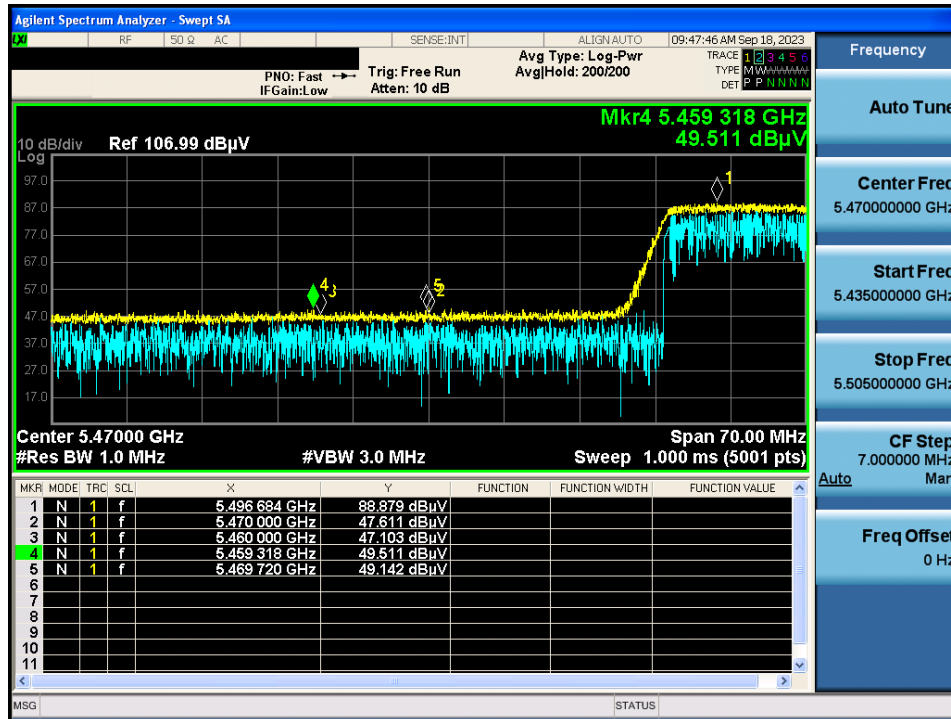
TM 3 & U-NII 2A & 5 310 & X axis & Hor

Detector Mode : AV



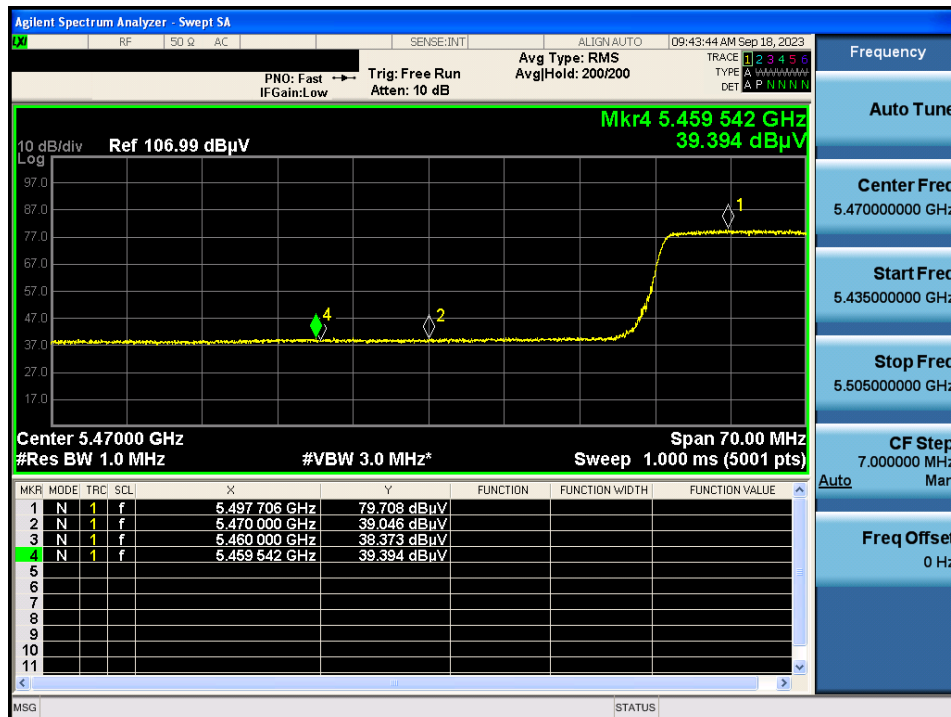
TM 3 & U-NII 2C & 5 510 & X axis & Hor

Detector Mode : PK



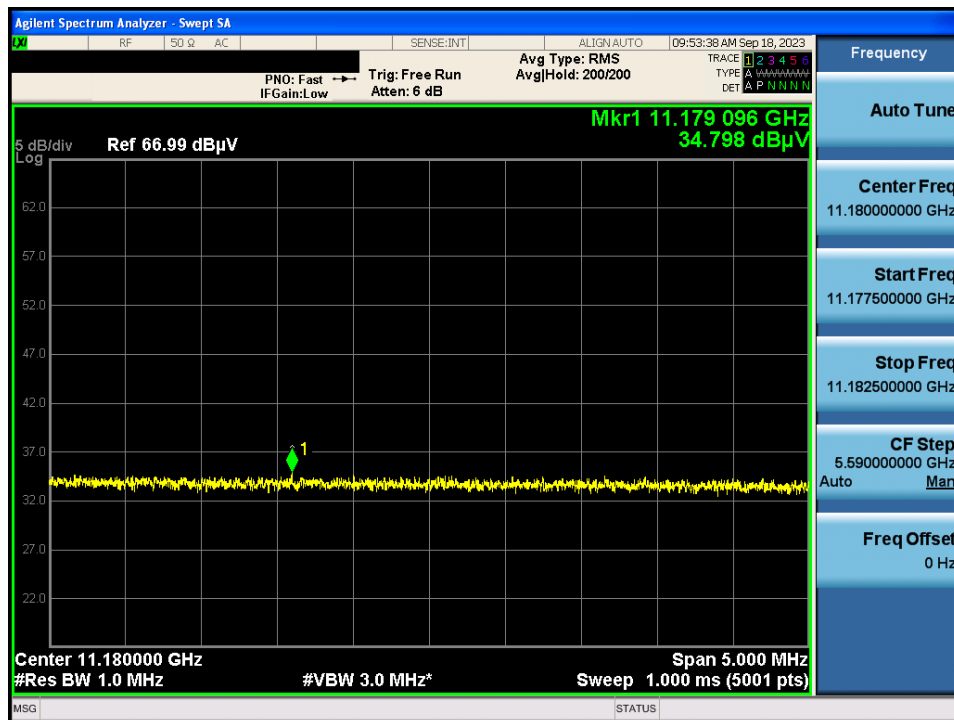
TM 3 & U-NII 2C & 5 510 & X axis & Hor

Detector Mode : AV



TM 3 & U-NII 2C & 5 590 & X axis & Hor

Detector Mode : AV

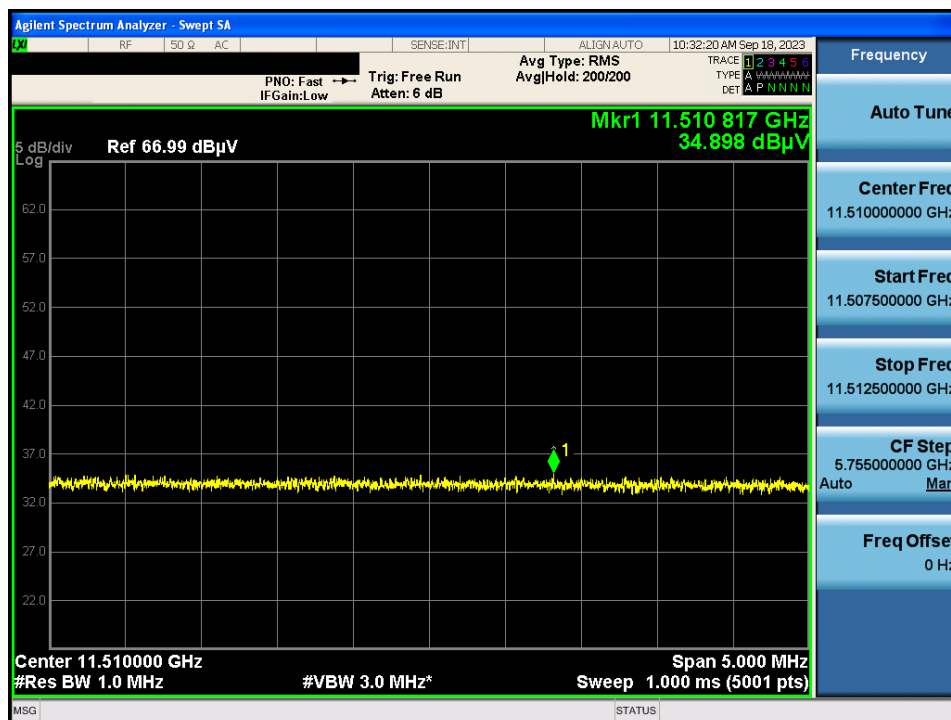


Detector Mode : PK

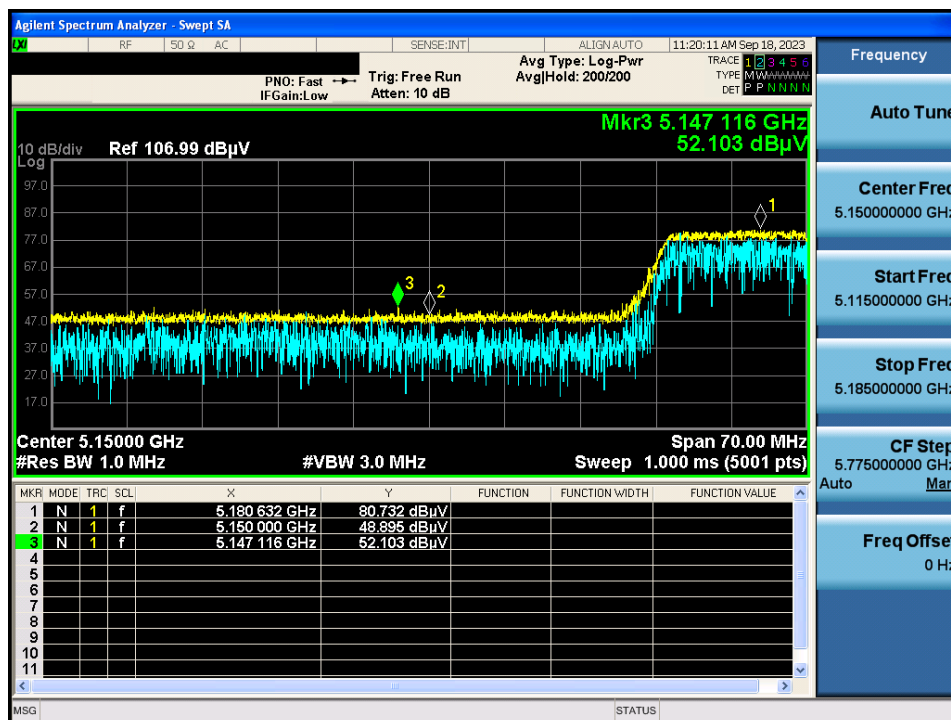


TM 3 & U-NII 3 & 5 755 & X axis & Hor

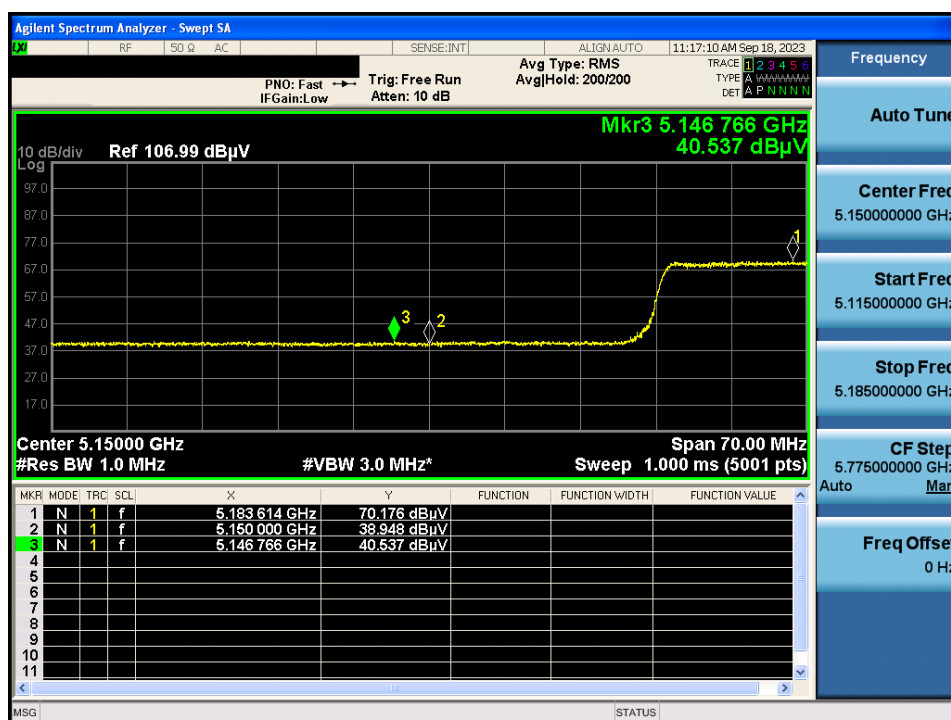
Detector Mode : AV



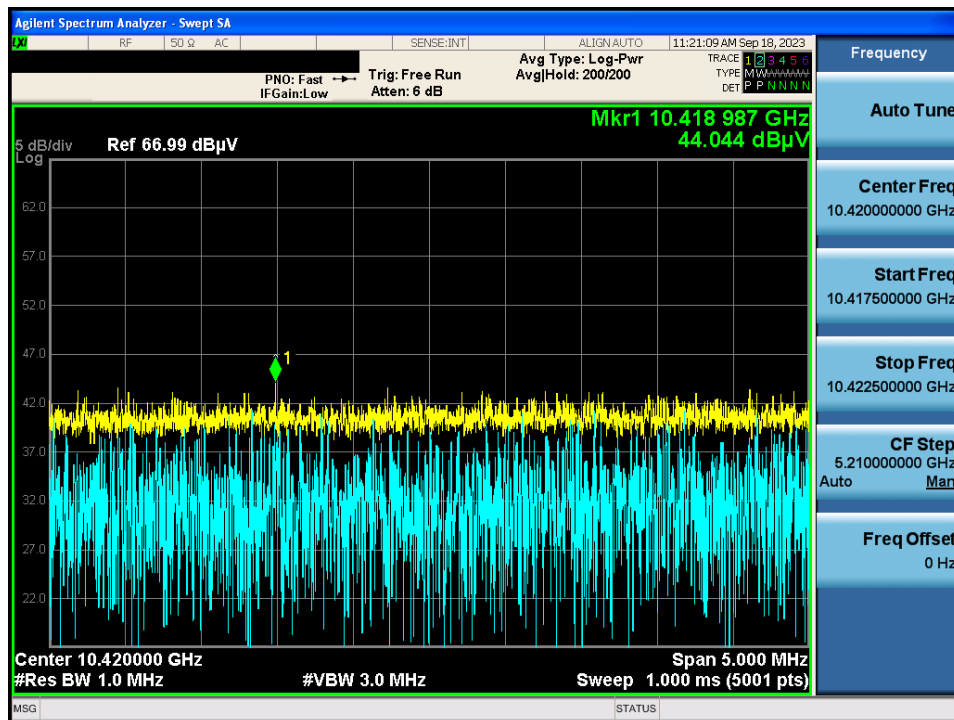
Detector Mode : PK



Detector Mode : AV

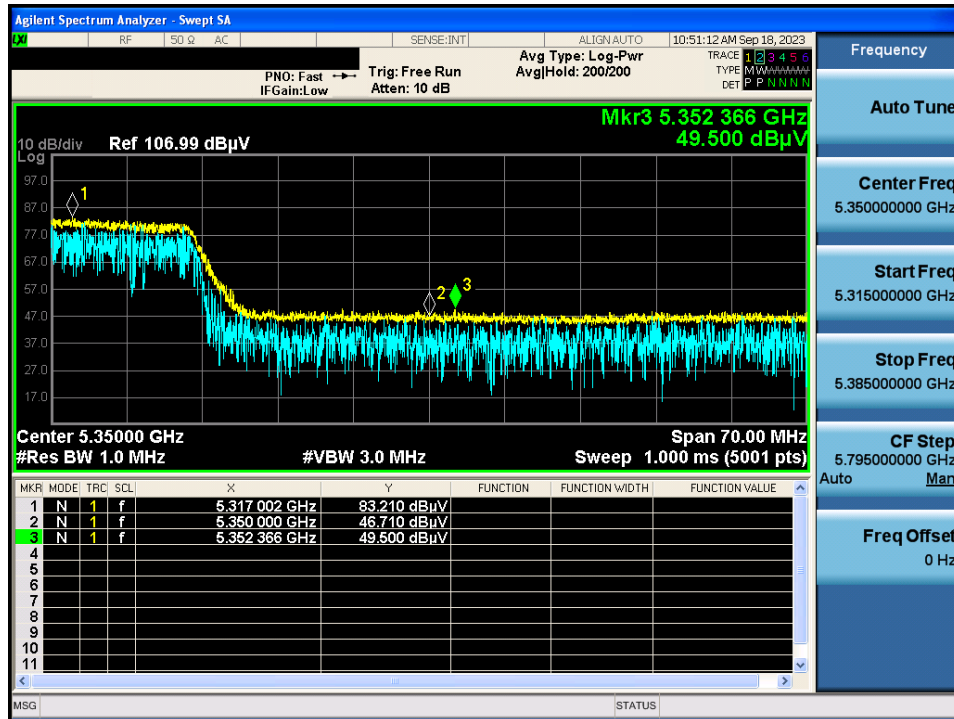


Detector Mode : PK



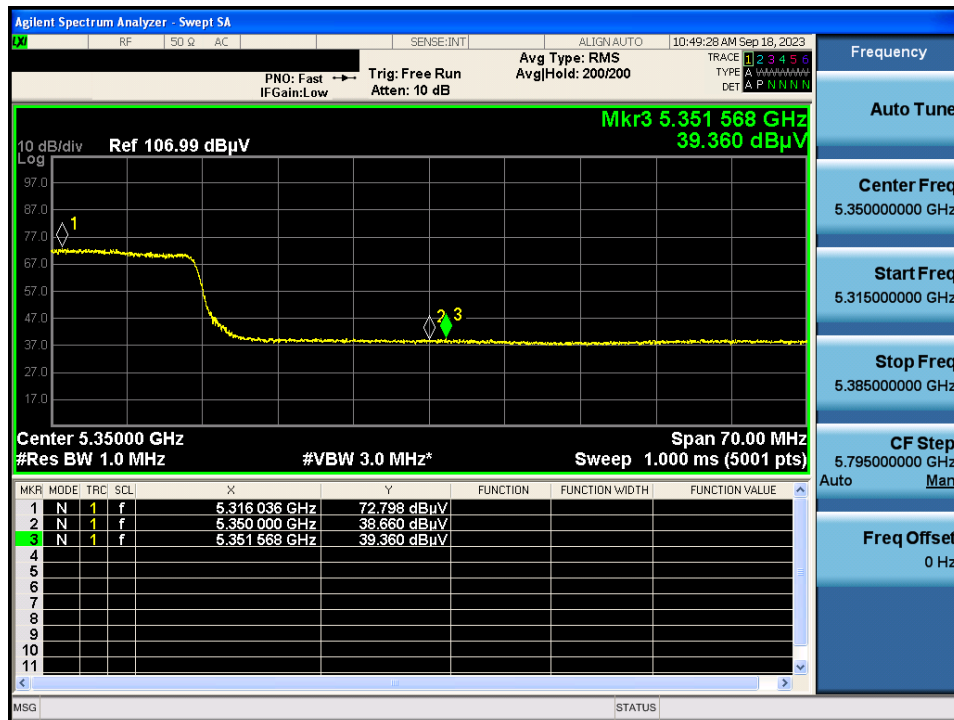
TM 4 & U-NII 2A & 5 290 & X axis & Hor

Detector Mode : PK



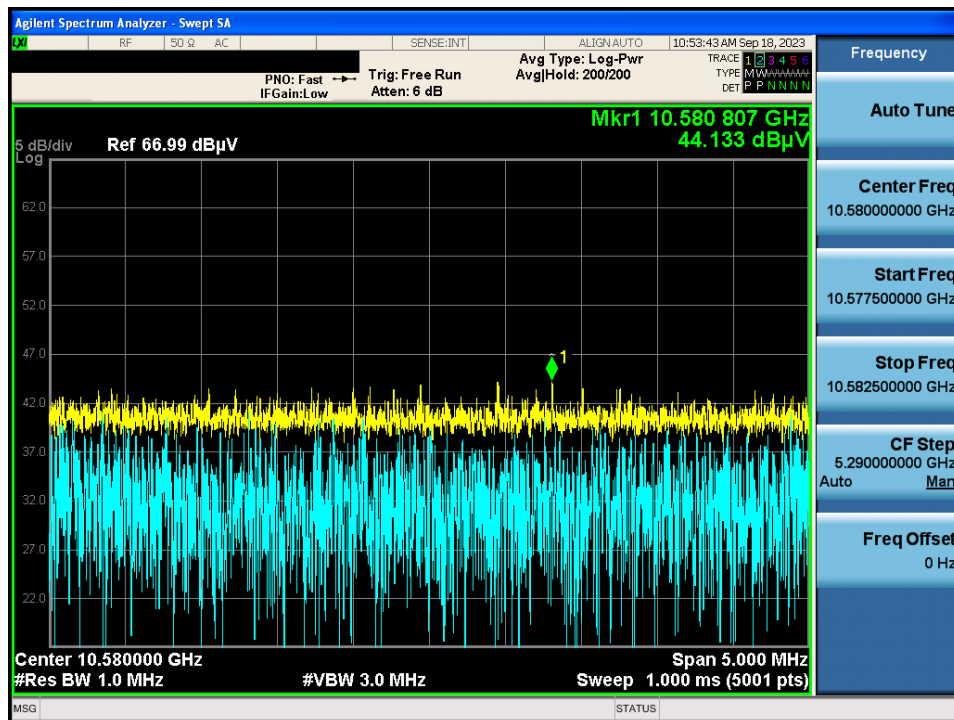
TM 4 & U-NII 2A & 5 290 & X axis & Hor

Detector Mode : AV



TM 4 & U-NII 2A & 5 290 & X axis & Hor

Detector Mode : PK

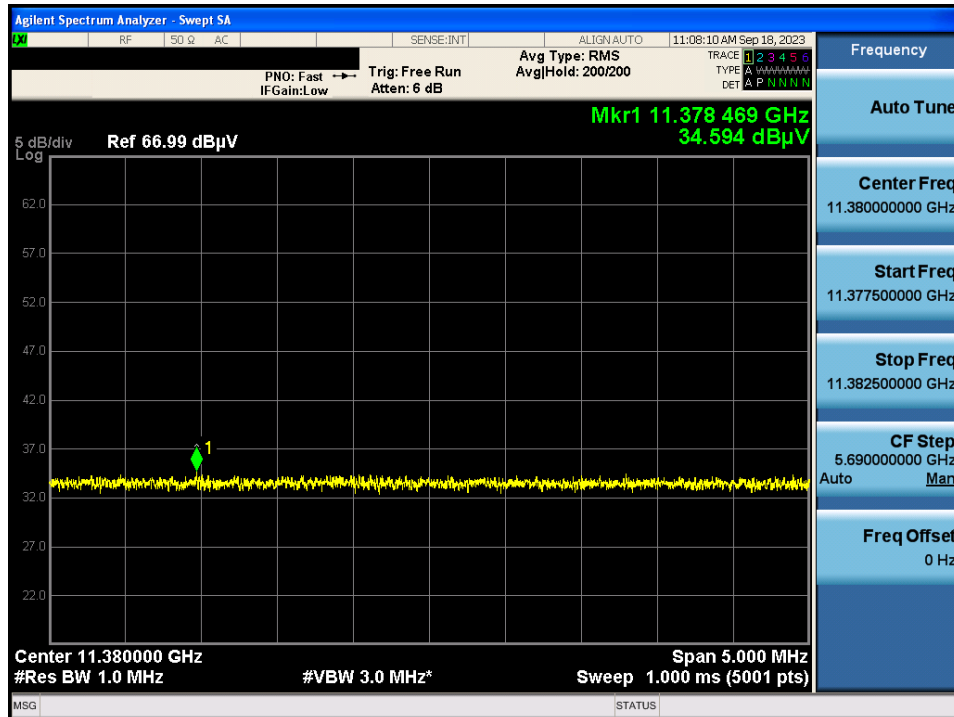


Detector Mode : PK



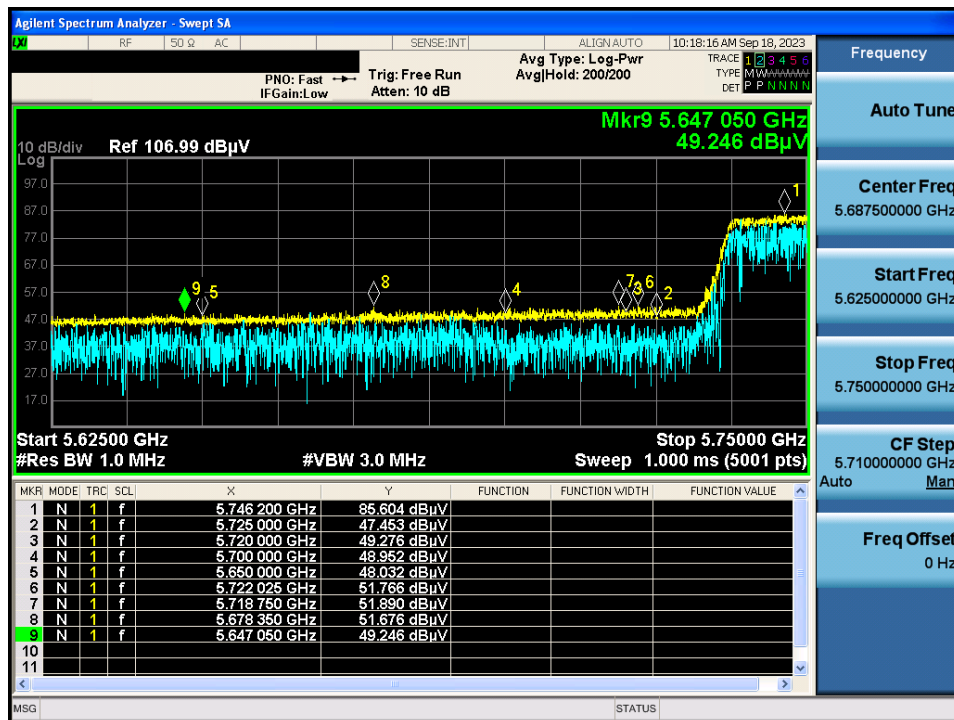
TM 4 & U-NII 2C & 5 690 & X axis & Hor

Detector Mode : AV



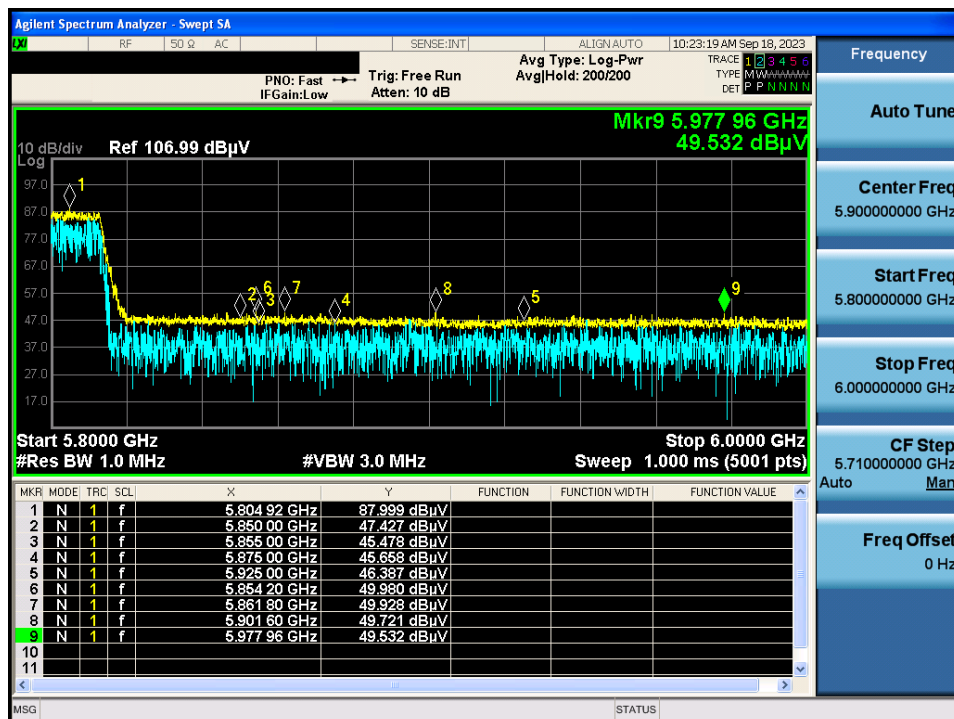
TM 4 & U-NII 3 & 5 775 & X axis & Hor

Detector Mode : PK



TM 4 & U-NII 3 & 5 775 & X axis & Hor

Detector Mode : PK



TM 4 & U-NII 3 & 5 775 & X axis & Hor

Detector Mode : AV

