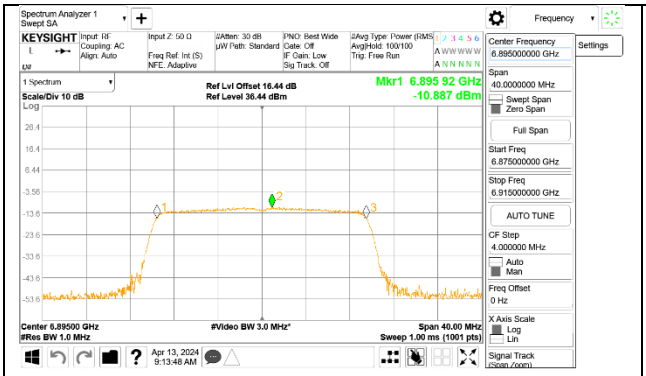
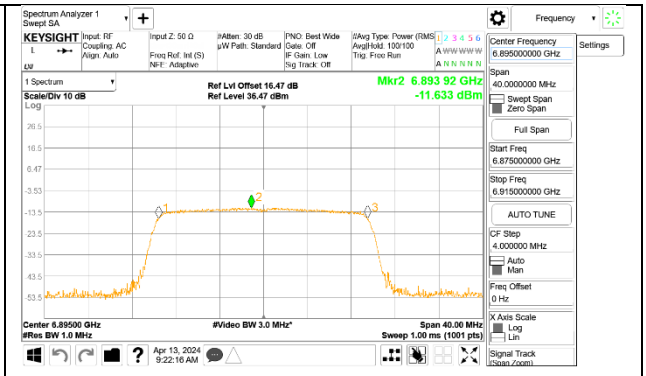
LOW CHANNEL

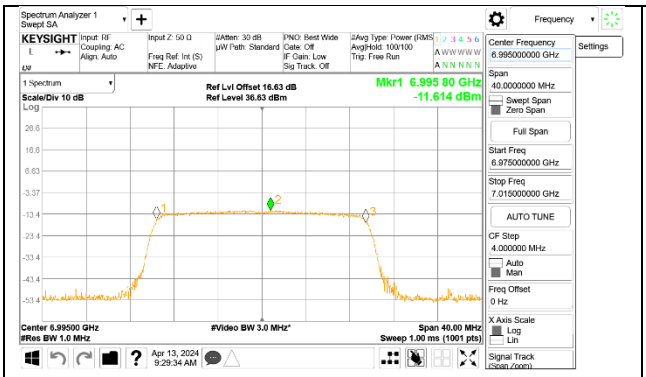


LOW CHANNEL Antenna 1

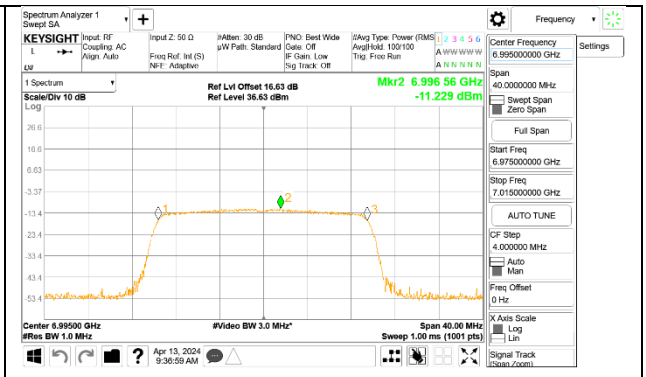


LOW CHANNEL Antenna 3

MID CHANNEL

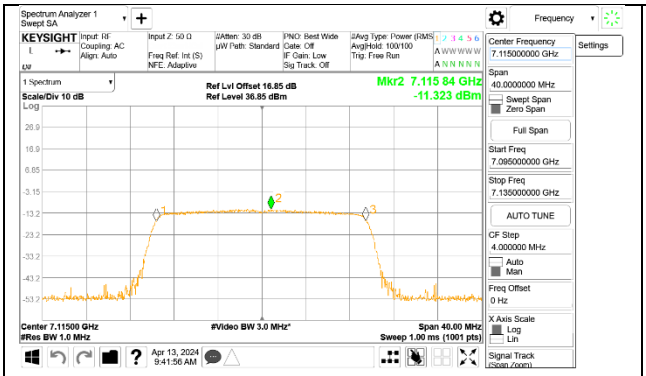


MID CHANNEL Antenna 1

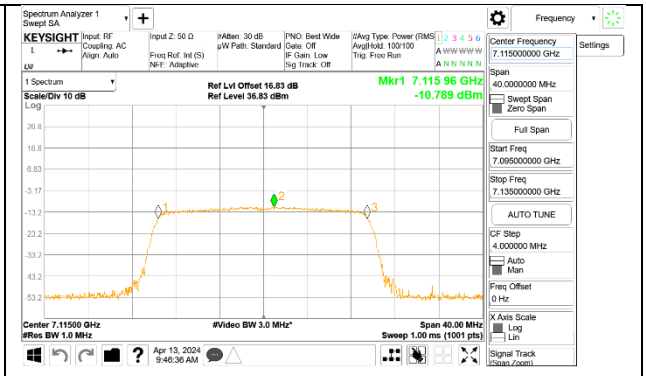


MID CHANNEL Antenna 3

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 106-Tones, RU Index 53

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-13

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Low	6895	2.80	5.60	24.00	-1.00
Mid	6995	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.77	**Included in Calculations of Corr'd PSD**

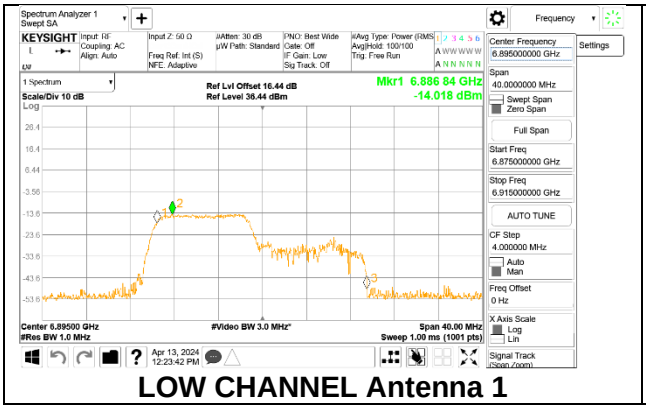
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Low	6895	-2.54	-3.11	2.99	24.00	-21.01
Mid	6995	-2.38	-3.08	3.09	24.00	-20.91

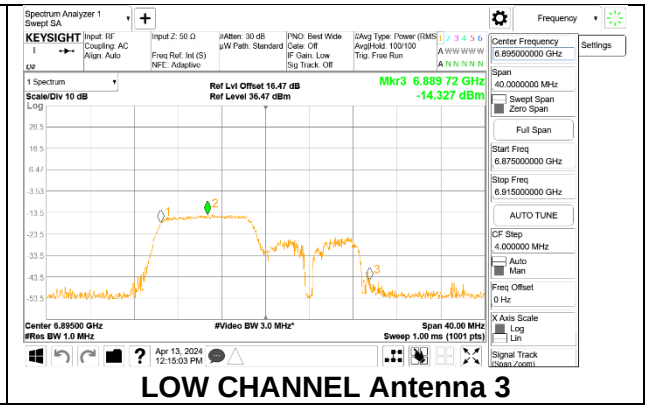
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	6895	-14.018	-14.327	-1.79	-1.00	-0.79
Mid	6995	-14.156	-14.062	-1.73	-1.00	-0.73

LOW CHANNEL

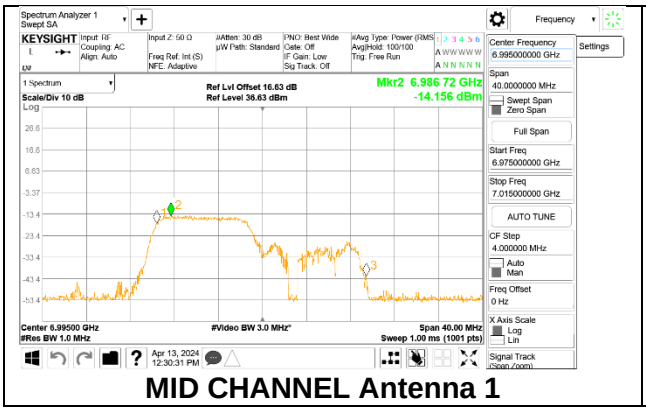


LOW CHANNEL Antenna 1

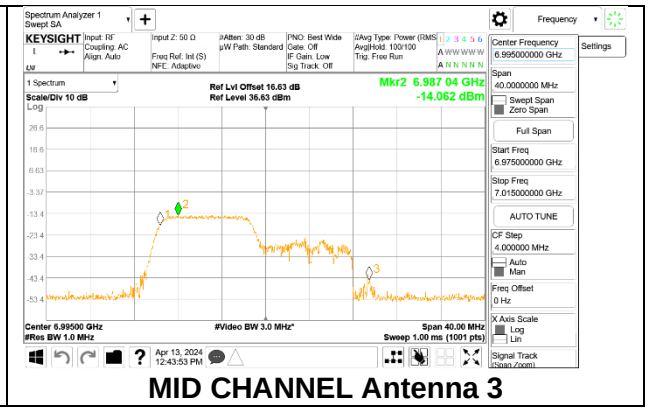


LOW CHANNEL Antenna 3

MID CHANNEL



MID CHANNEL Antenna 1



MID CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 106-Tones, RU Index 54

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-13

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
High	7115	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.77	**Included in Calculations of Corr'd PSD**

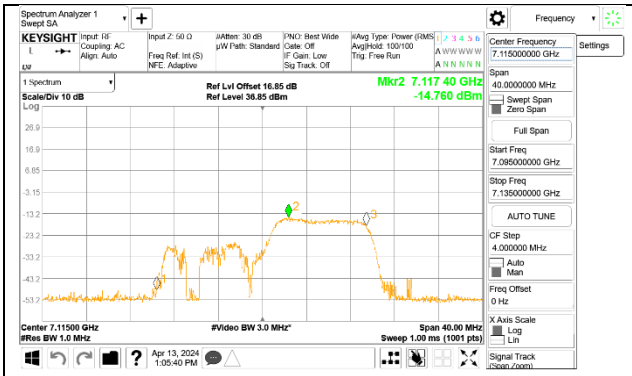
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
High	7115	-3.04	-3.27	2.66	24.00	-21.34

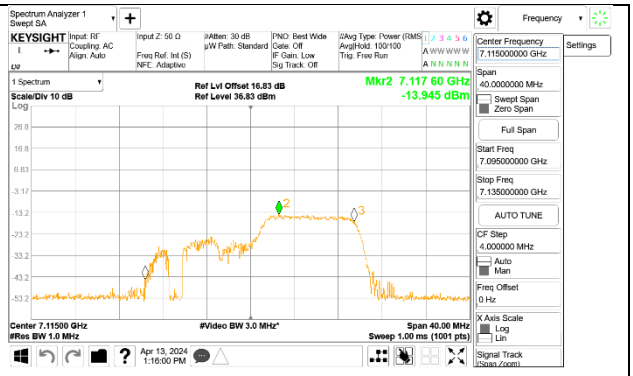
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
High	7115	-14.760	-13.945	-1.95	-1.00	-0.95

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 52-Tones, RU Index 37

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-13

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Low	6895	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.46	**Included in Calculations of Corr'd PSD**

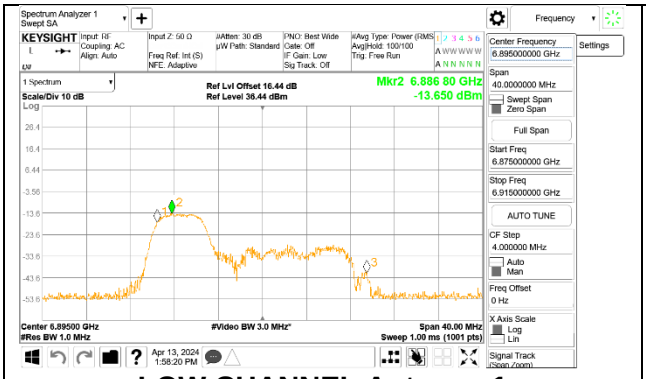
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Low	6895	-6.21	-6.37	-0.48	24.00	-24.48

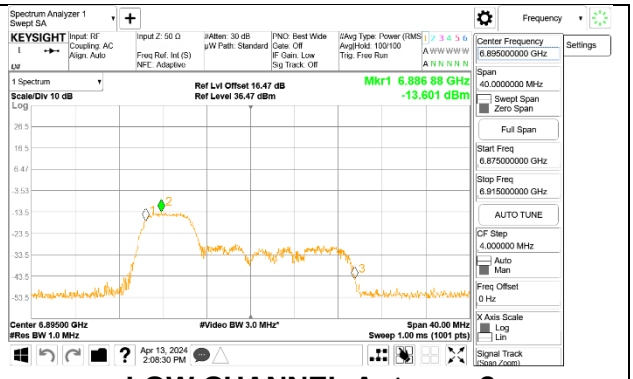
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	6895	-13.650	-13.601	-1.56	-1.00	-0.56

LOW CHANNEL



LOW CHANNEL Antenna 1



LOW CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 52-Tones, RU Index 38

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-13

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Mid	6995	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.46	**Included in Calculations of Corr'd PSD**

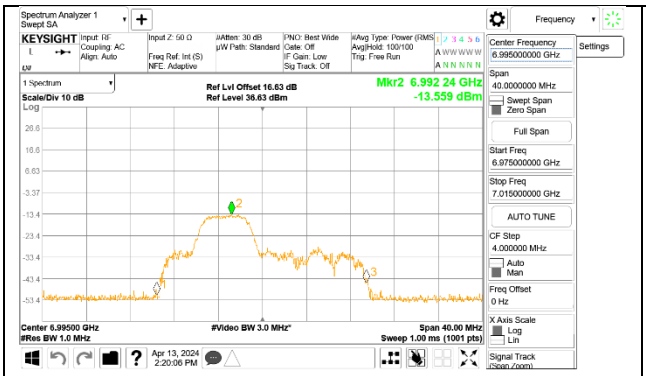
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Mid	6995	-5.22	-5.92	0.25	24.00	-23.75

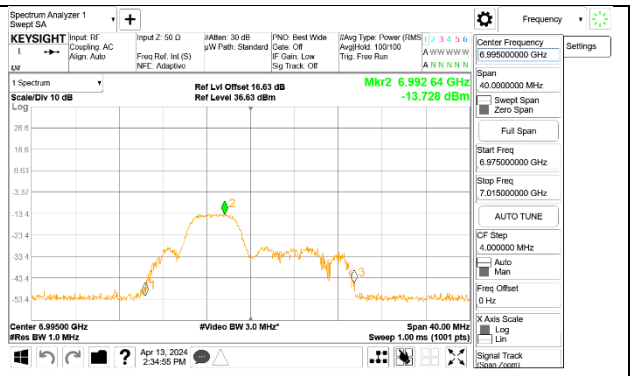
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	6995	-13.559	-13.728	-1.57	-1.00	-0.57

MID CHANNEL



MID CHANNEL Antenna 1



MID CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 52-Tones, RU Index 40

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-13

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
High	7115	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.46	**Included in Calculations of Corr'd PSD**

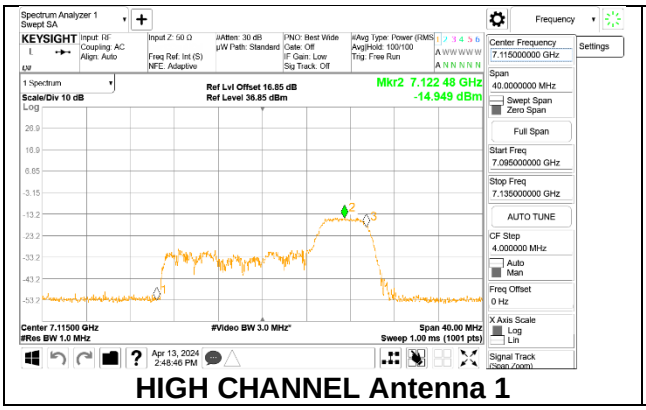
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
High	7115	-7.19	-6.61	-1.08	24.00	-25.08

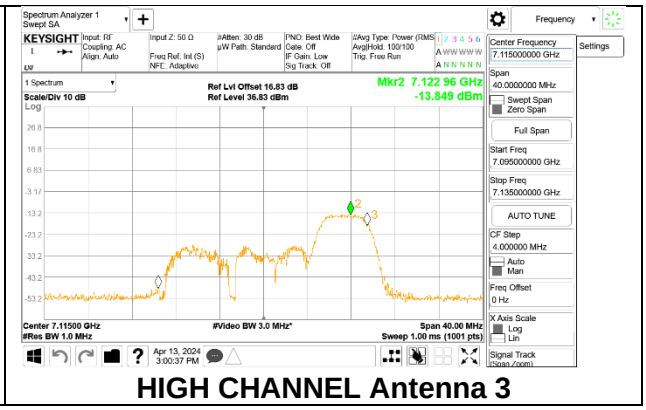
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
High	7115	-14.494	-13.849	-2.09	-1.00	-1.09

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 26-Tones, RU Index 0

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-15

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Low	6895	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.03	**Included in Calculations of Corr'd PSD**

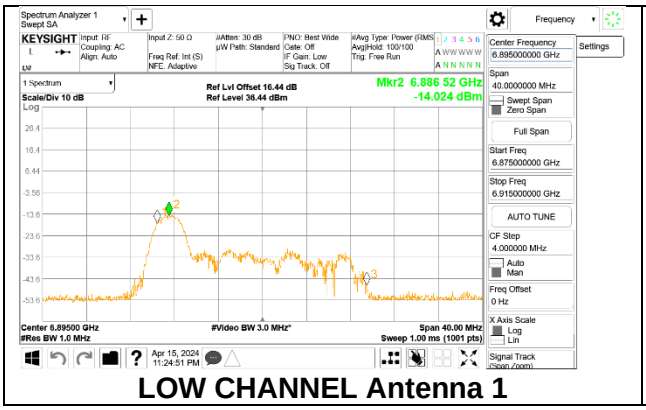
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Low	6895	-8.14	-8.56	-2.53	24.00	-26.53

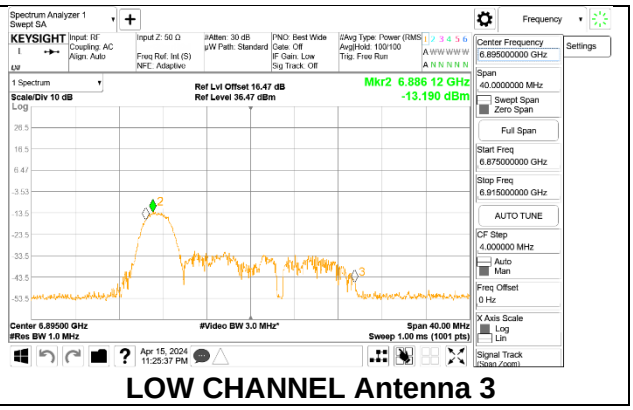
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	6895	-14.024	-13.190	-1.95	-1.00	-0.95

LOW CHANNEL



LOW CHANNEL Antenna 1



LOW CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 26-Tones, RU Index 4

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-15 to 2024-05-21

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Mid	6995	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.03	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Mid	6995	-7.49	-7.52	-1.69	24.00	-25.69

PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	6995	-13.971	-14.505	-2.59	-1.00	-1.59

MID CHANNEL

MID CHANNEL Antenna 1

MID CHANNEL Antenna 3

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: 26-Tones, RU Index 8

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-15

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
High	7115	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	3.03	**Included in Calculations of Corr'd PSD**

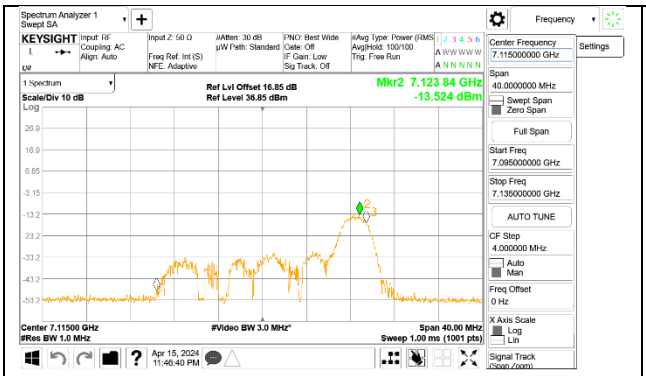
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
High	7115	-8.21	-7.92	-2.25	24.00	-26.25

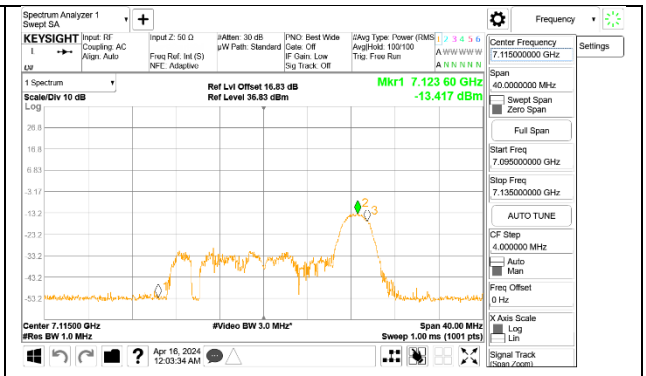
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
High	7115	-13.524	-13.417	-1.83	-1.00	-0.83

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

9.4.11. 802.11ax HE40 MODE 2TX IN THE UNII-8 BAND

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: SU, Single User

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-16

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Low	6925	2.80	5.60	24.00	-1.00
Mid	6965	2.80	5.60	24.00	-1.00
High	7085	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	1.35	**Included in Calculations of Corr'd PSD**

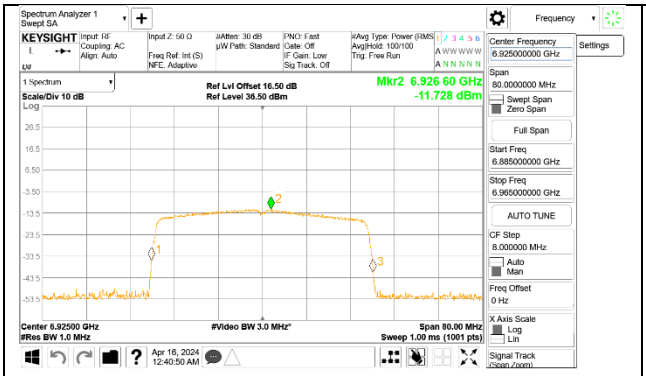
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Low	6925	2.19	2.08	7.95	24.00	-16.05
Mid	6965	2.35	2.57	8.27	24.00	-15.73
High	7085	2.24	1.86	7.86	24.00	-16.14

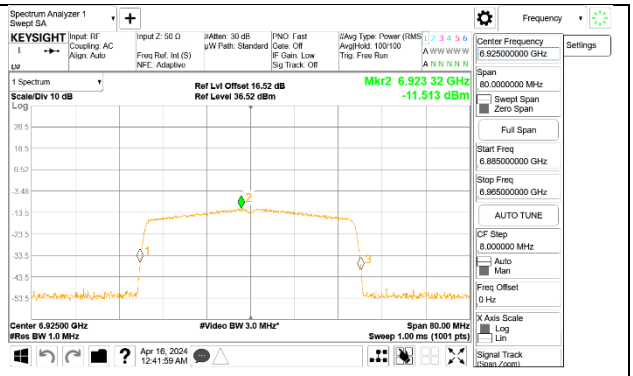
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	6925	-11.728	-11.513	-1.66	-1.00	-0.66
Mid	6965	-11.955	-11.652	-1.84	-1.00	-0.84
High	7085	-11.716	-11.204	-1.49	-1.00	-0.49

LOW CHANNEL

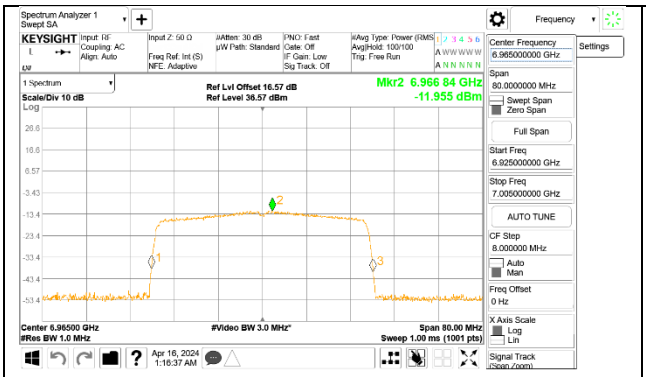


LOW CHANNEL Antenna 1

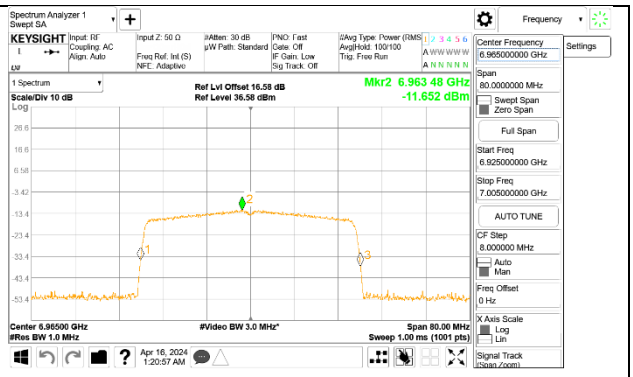


LOW CHANNEL Antenna 3

MID CHANNEL

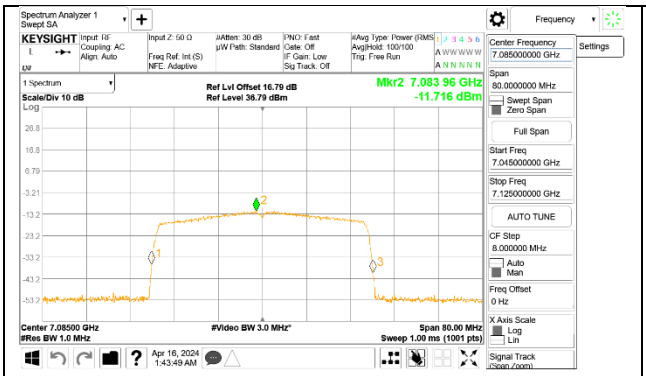


MID CHANNEL Antenna 1

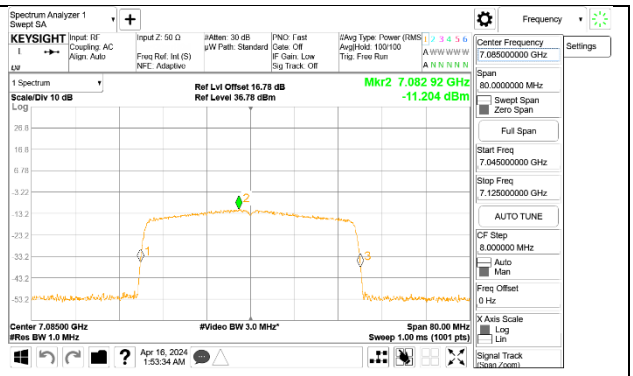


MID CHANNEL Antenna 3

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

9.4.12. 802.11ax HE80 MODE 2TX IN THE UNII-8 BAND

2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: SU, Single User

Test Engineer:	ZS16080 and JB45256
Test Date:	2024-04-16

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	e.i.r.p. Power Limit (dBm)	PSD Limit (dBm)
Low	6945	2.80	5.60	24.00	-1.00
High	7025	2.80	5.60	24.00	-1.00

Duty Cycle CF (dB)	2.38	**Included in Calculations of Corr'd PSD**

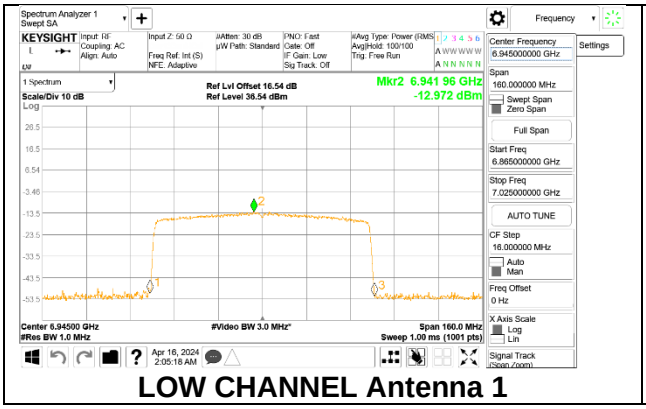
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 3 Meas Power (dBm)	Total Corr'd EIRP (dBm)	Power Limit EIRP (dBm)	Power Margin (dB)
Low	6945	5.03	4.94	10.80	24.00	-13.20
High	7025	4.91	4.75	10.64	24.00	-13.36

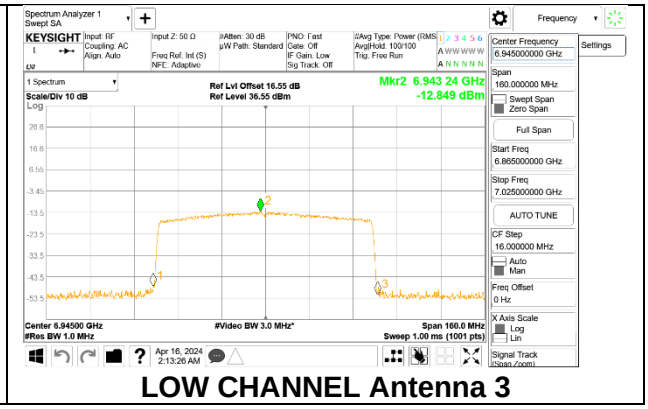
PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm)	Antenna 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	6945	-12.972	-12.849	-1.92	-1.00	-0.92
High	7025	-12.438	-12.690	-1.57	-1.00	-0.57

LOW CHANNEL

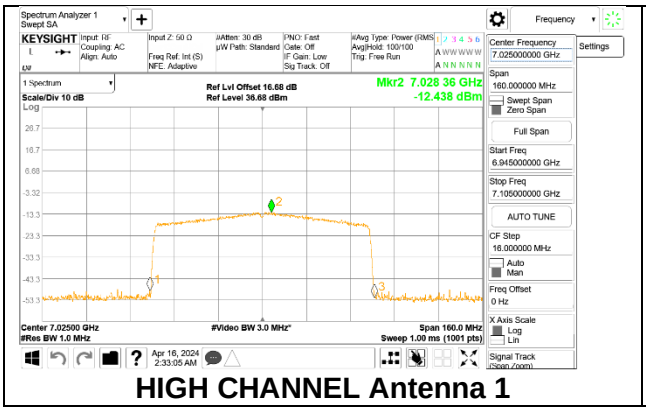


LOW CHANNEL Antenna 1

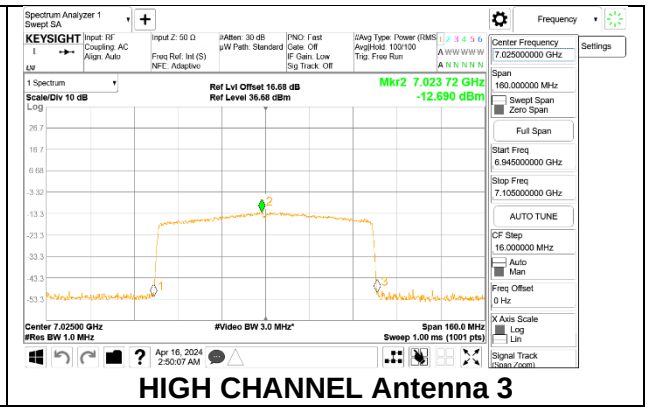


LOW CHANNEL Antenna 3

HIGH CHANNEL



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3

9.5. SPURIOUS EMMISSIONS IN-BAND – EMISSION MASK

LIMITS

FCC §15.407

(b)(7) For transmitters operating within the 5.925-7.125 GHz bands: power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

RSS-248

4.6.2 b. e.i.r.p. spectral density of unwanted emissions falling into the 5925-7125 MHz band shall be attenuated (in dB) below the reference power spectral density by:
i. 20 dB at 1 MHz away from the channel edge; and
ii. a linearly interpolated value between 20 dB and 28 dB at frequencies between 1 MHz outside of channel edge and one (1) channel bandwidth from the operating channel centre, respectively; and
iii. 28 dB at one (1) channel bandwidth away from the operating channel centre; and
iv. a linearly interpolated value between 28 dB and 40 dB at frequencies between one (1) channel bandwidth from the channel centre and one- and one-half (1.5) times the channel bandwidth away from the operating channel centre, respectively; and
v. 40 dB at one- and one-half (1.5) times the channel bandwidth away from the channel centre; and
vi. a minimum of 40 dB at frequencies that are further away than one and one-half (1.5) times the channel bandwidth from the channel centre.

TEST PROCEDURE

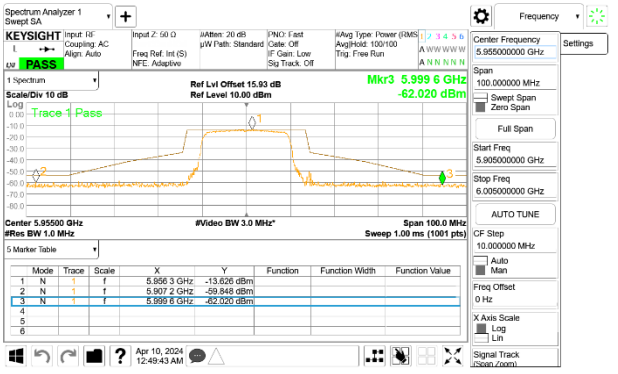
Per KDB 987594 D02 v01r01, Section J

RESULTS

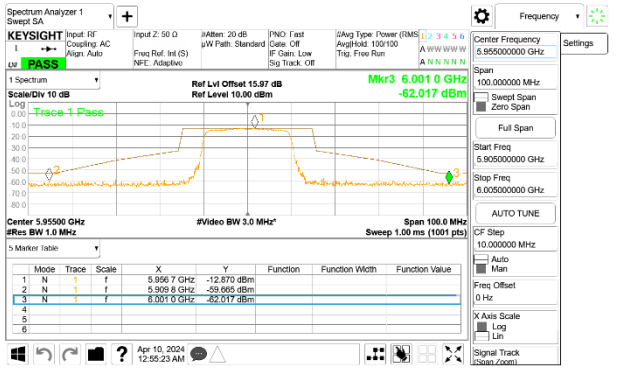
Test Engineer:	ZS 16080 and JB 45256
Test Date:	2024-04-09 to 2024-04-15

9.5.1. 802.11ax HE20 MODE 2TX IN THE UNII-5 BAND

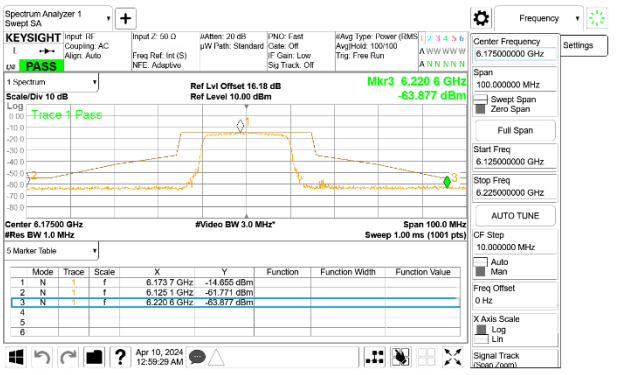
2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: SU, Single User



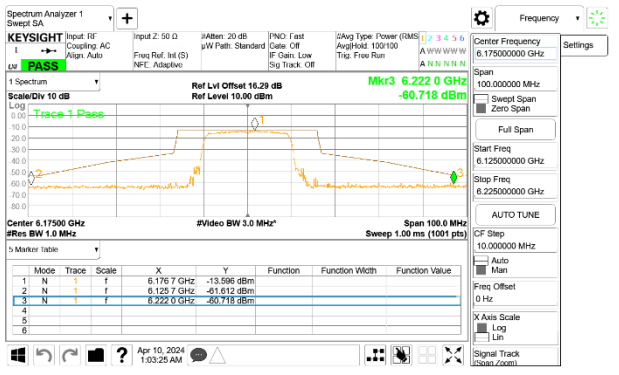
LOW CHANNEL Antenna 2



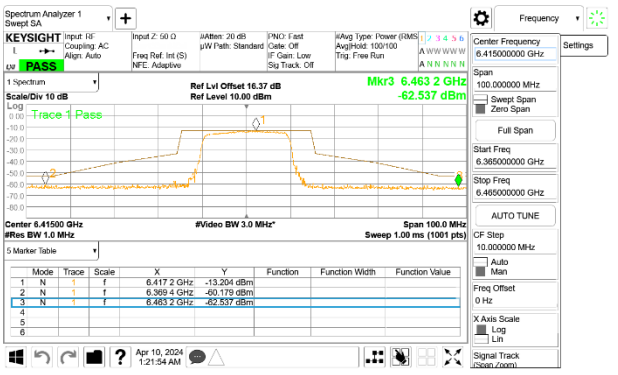
LOW CHANNEL Antenna 4



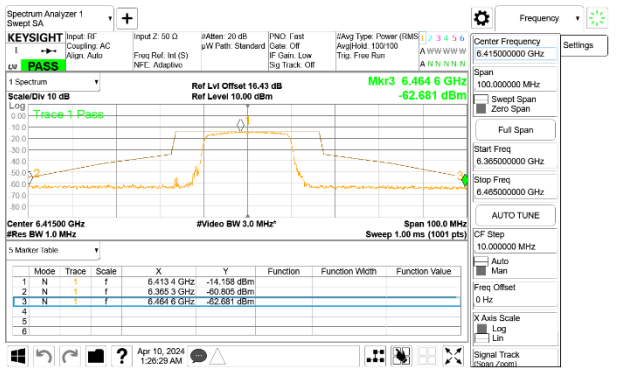
MID CHANNEL Antenna 2



MID CHANNEL Antenna 4

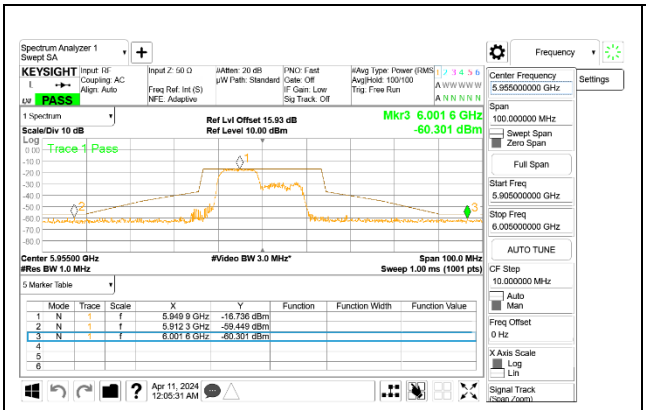


HIGH CHANNEL Antenna 2

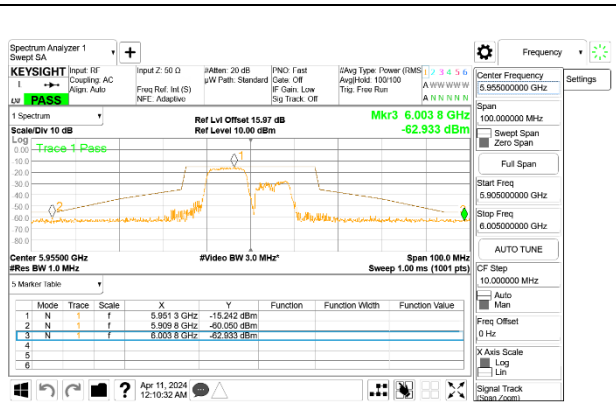


HIGH CHANNEL Antenna 4

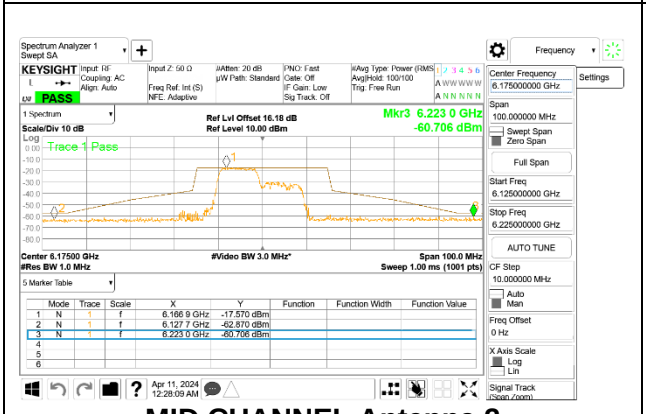
2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 106-Tones, RU Index 53



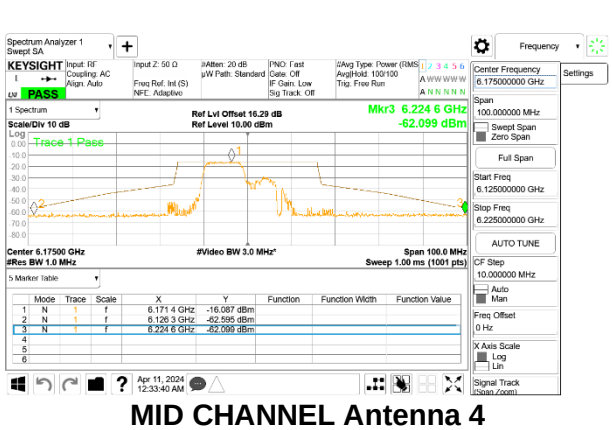
LOW CHANNEL Antenna 2



LOW CHANNEL Antenna 4

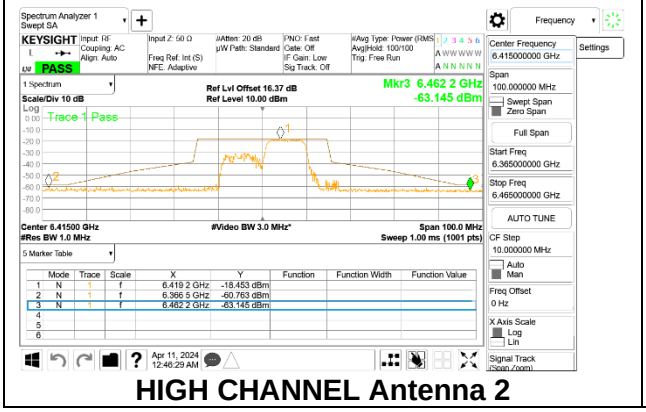


MID CHANNEL Antenna 2

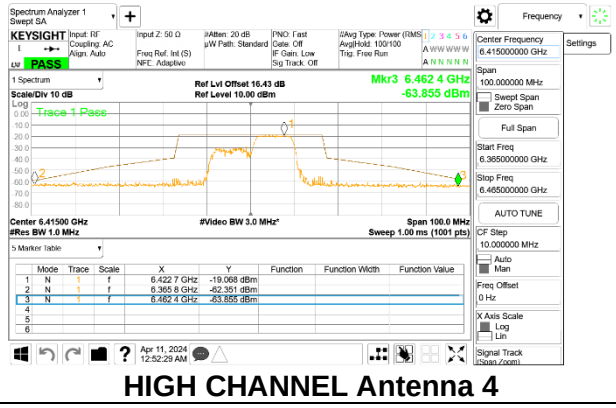


MID CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 106-Tones, RU Index 54

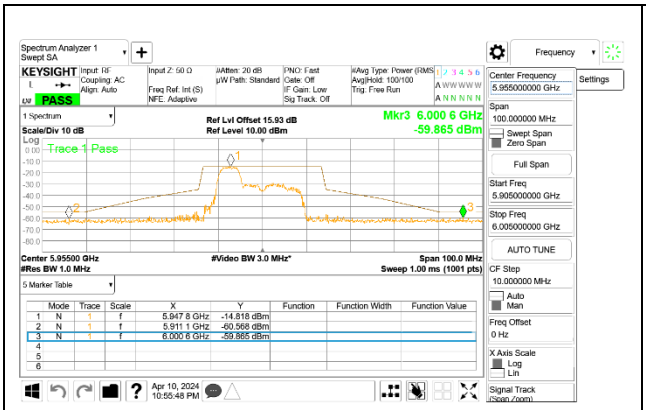


HIGH CHANNEL Antenna 2

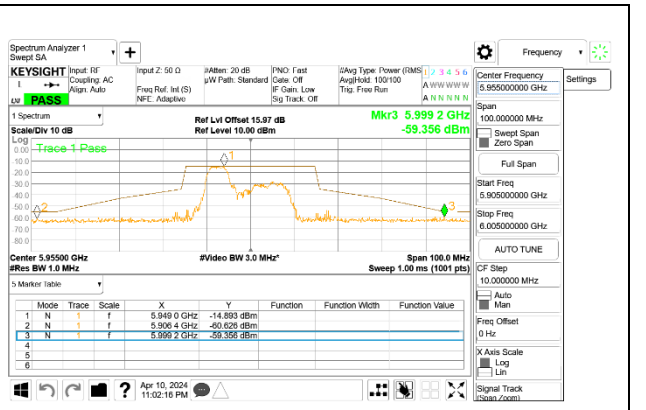


HIGH CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 52-Tones, RU Index 37

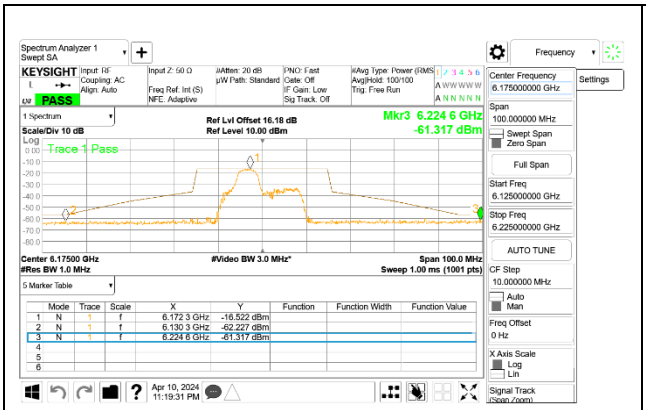


LOW CHANNEL Antenna 2

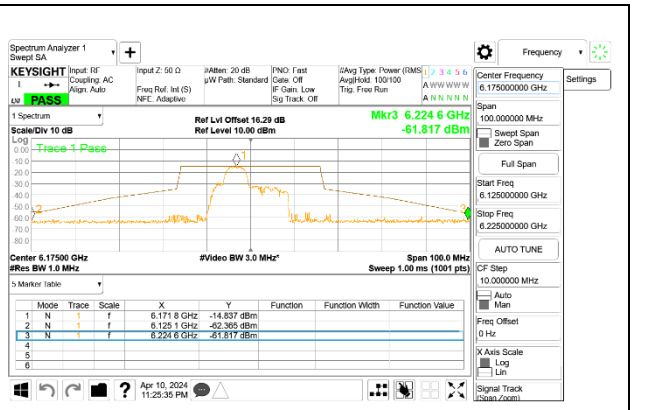


LOW CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 52-Tones, RU Index 38

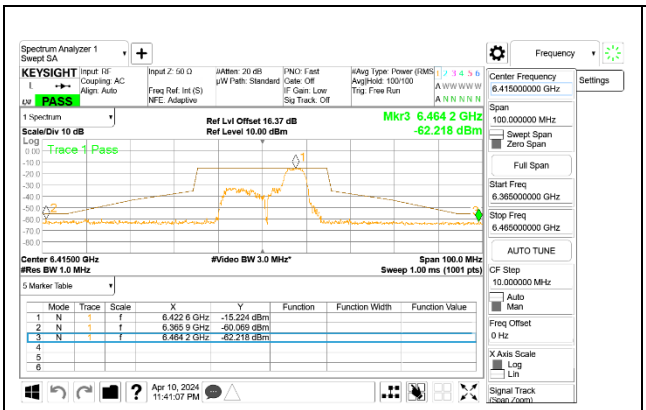


MID CHANNEL Antenna 2

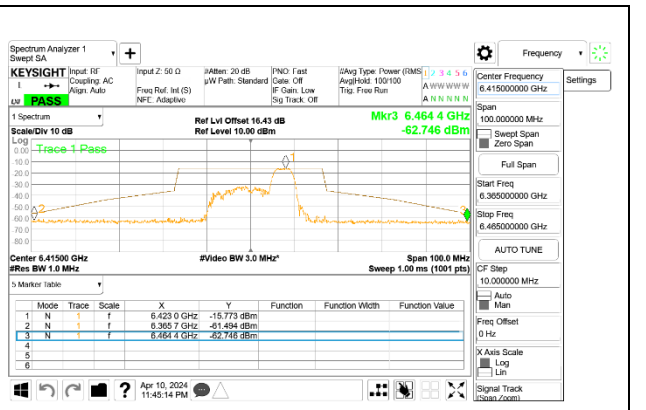


MID CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 52-Tones, RU Index 40

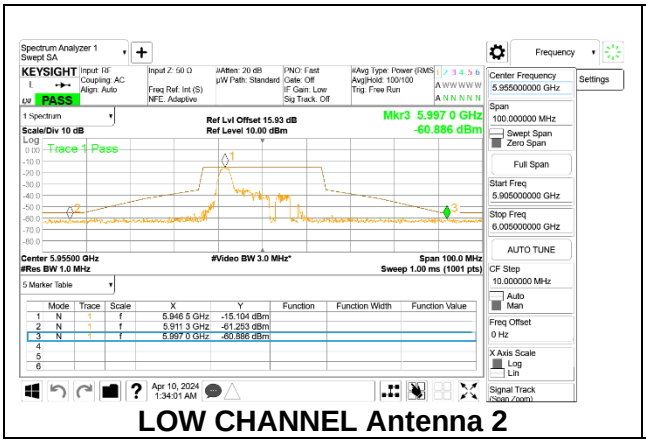


HIGH CHANNEL Antenna 2

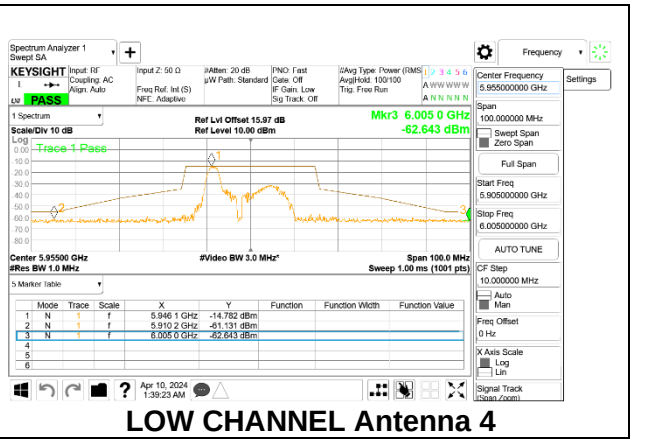


HIGH CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 26-Tones, RU Index 0

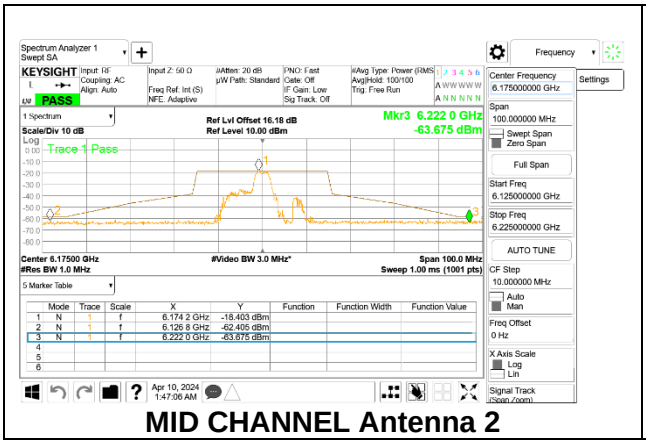


LOW CHANNEL Antenna 2

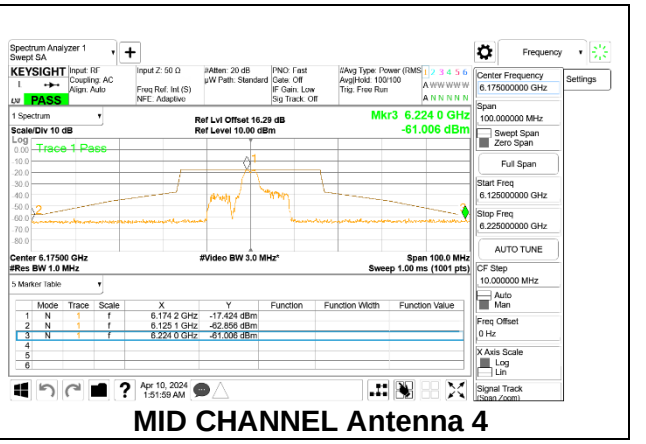


LOW CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 26-Tones, RU Index 4

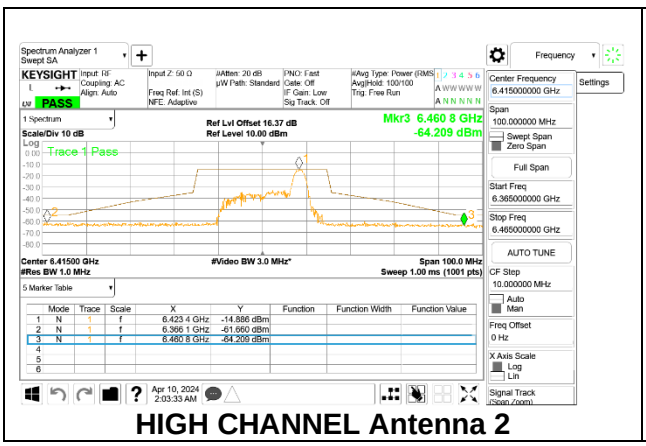


MID CHANNEL Antenna 2

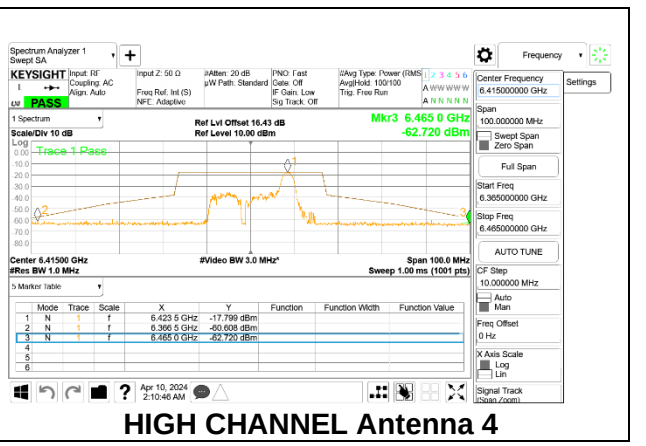


MID CHANNEL Antenna 4

2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: 26-Tones, RU Index 8



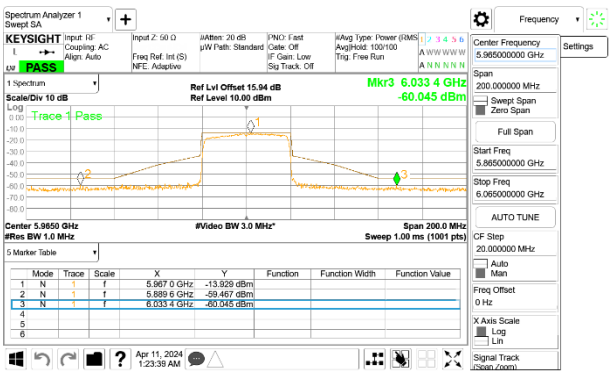
HIGH CHANNEL Antenna 2



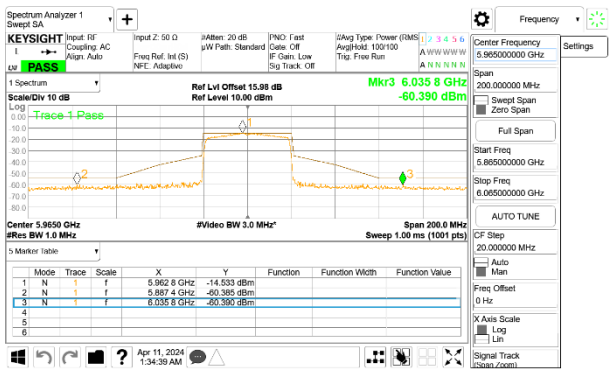
HIGH CHANNEL Antenna 4

9.5.2. 802.11ax HE40 MODE 2TX IN THE UNII-5 BAND

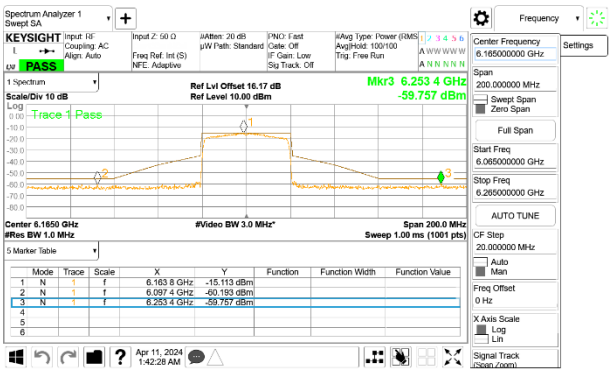
2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: SU, Single User



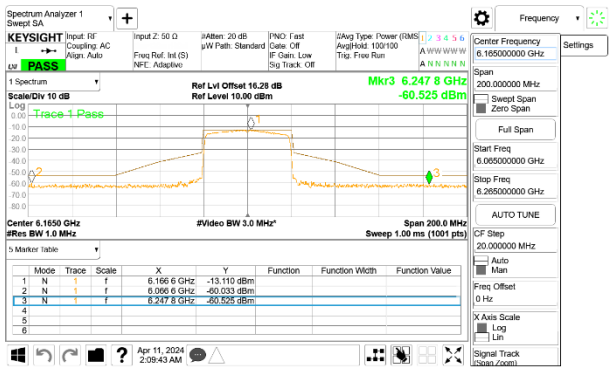
LOW CHANNEL Antenna 2



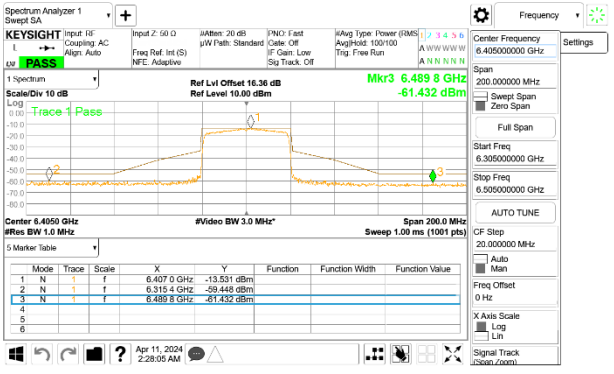
LOW CHANNEL Antenna 4



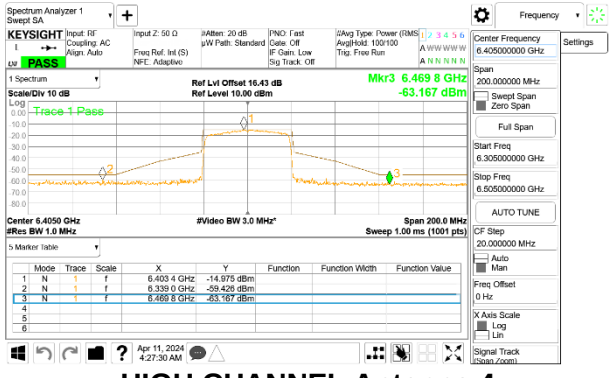
MID CHANNEL Antenna 2



MID CHANNEL Antenna 4



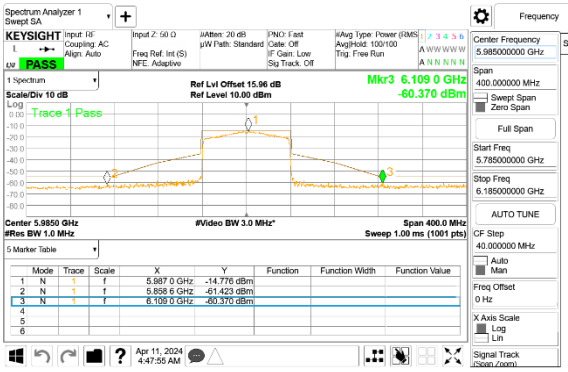
HIGH CHANNEL Antenna 2



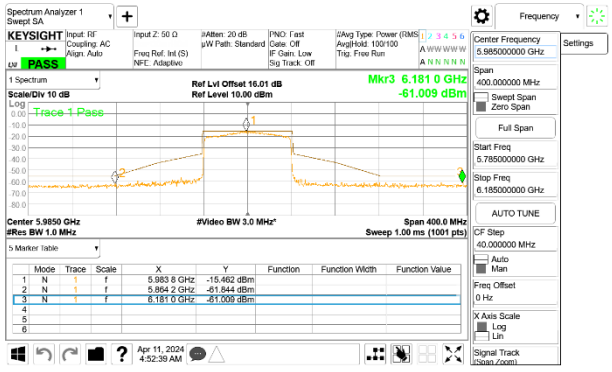
HIGH CHANNEL Antenna 4

9.5.3. 802.11ax HE80 MODE 2TX IN THE UNII-5 BAND

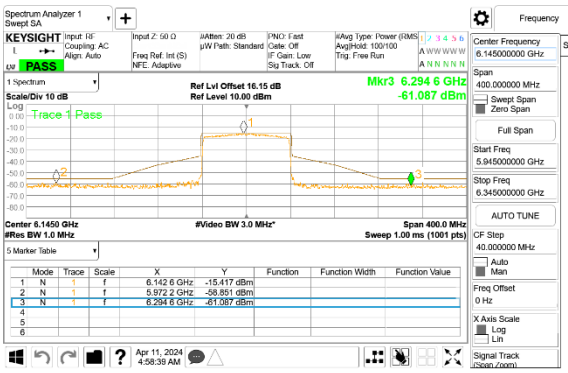
2TX Antenna 2 + Antenna 4 CDD OFDMA MODE: SU, Single User



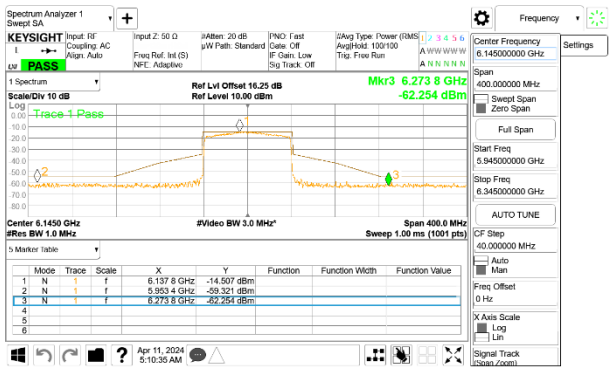
LOW CHANNEL Antenna 2



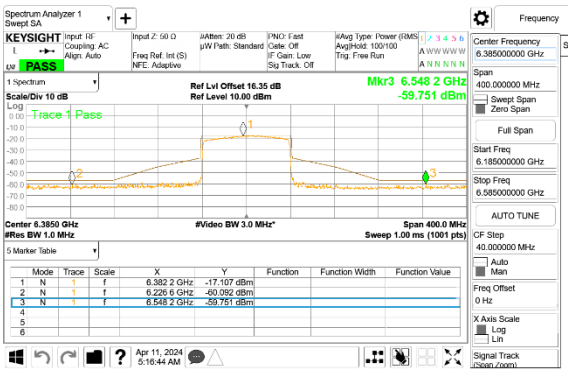
LOW CHANNEL Antenna 4



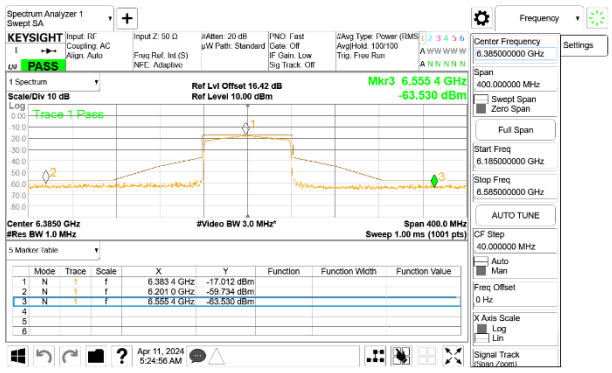
MID CHANNEL Antenna 2



MID CHANNEL Antenna 4



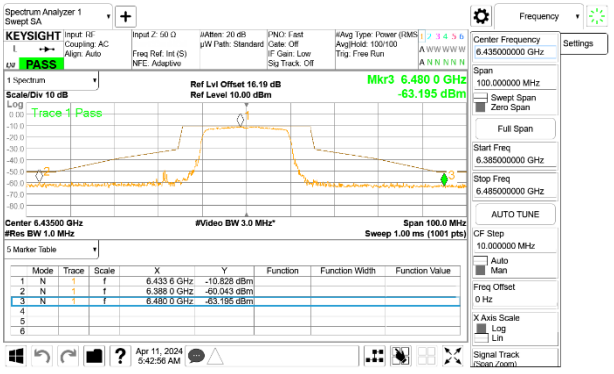
HIGH CHANNEL Antenna 2



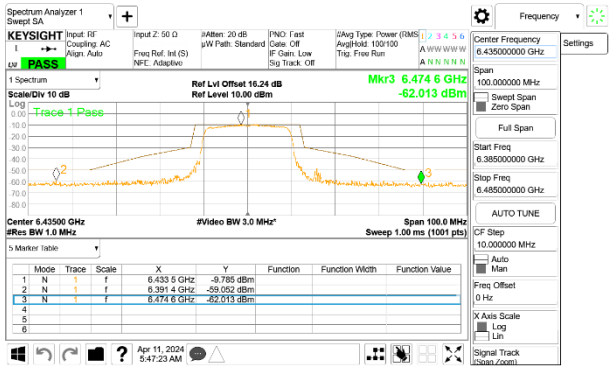
HIGH CHANNEL Antenna 4

9.5.4. 802.11ax HE20 MODE 2TX IN THE UNII-6 BAND

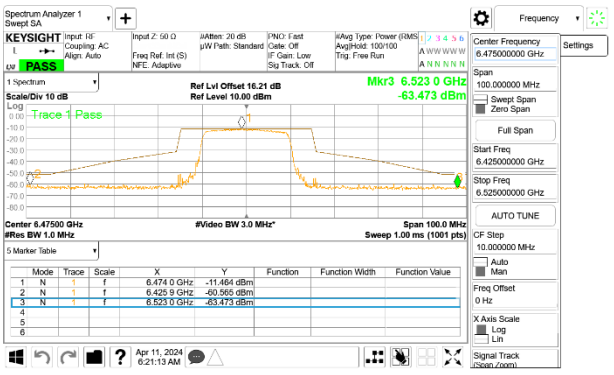
2TX Antenna 1 + Antenna 3 CDD OFDMA MODE: SU, Single User



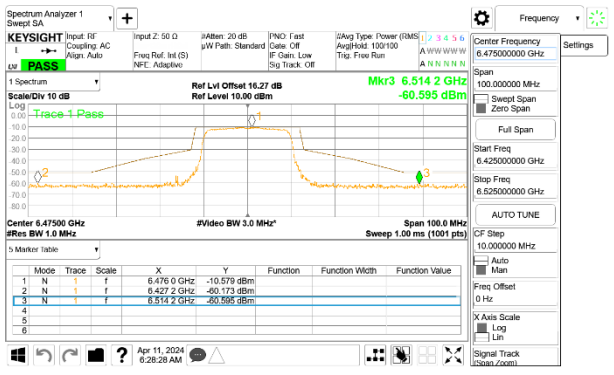
LOW CHANNEL Antenna 1



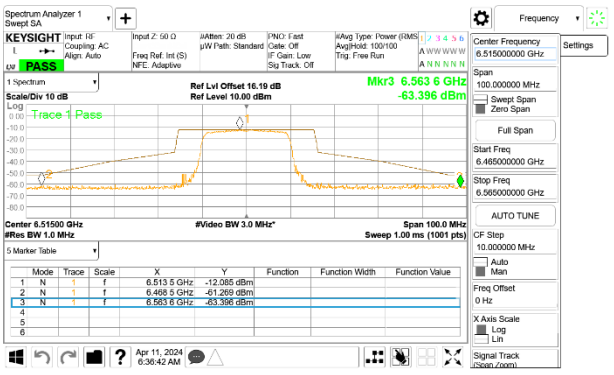
LOW CHANNEL Antenna 3



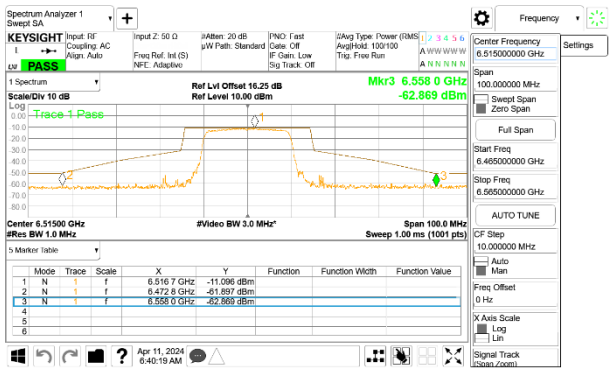
MID CHANNEL Antenna 1



MID CHANNEL Antenna 3



HIGH CHANNEL Antenna 1



HIGH CHANNEL Antenna 3