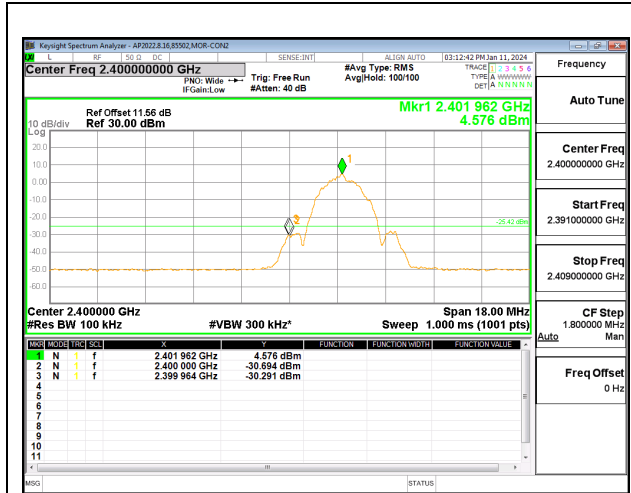
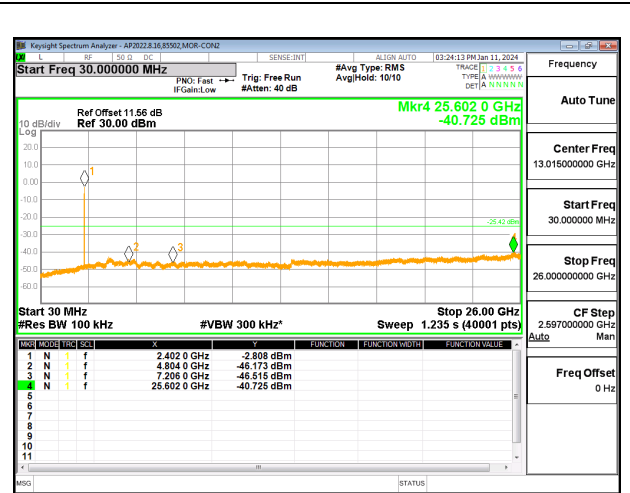


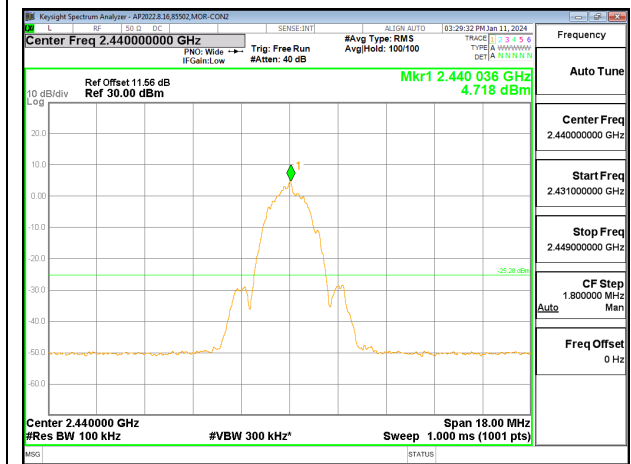
CHAIN 1



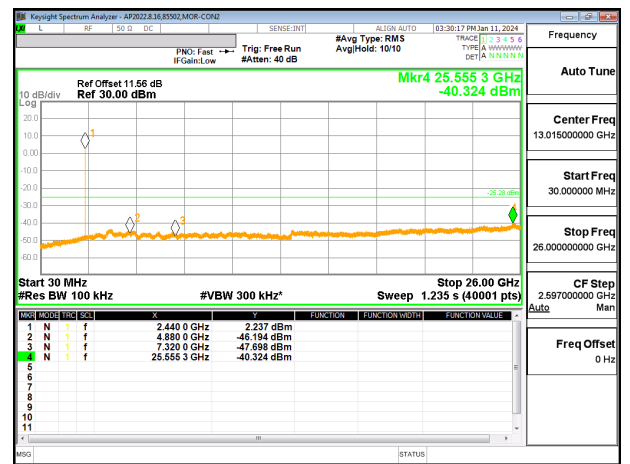
LOW CHANNEL BANDEDGE



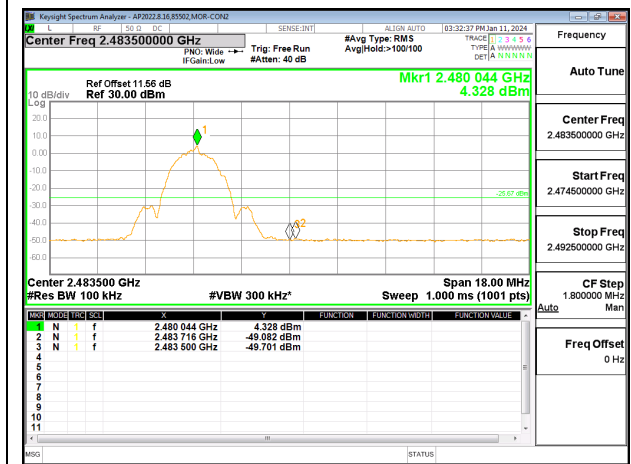
OUT-OF-BAND LOW CHANNEL



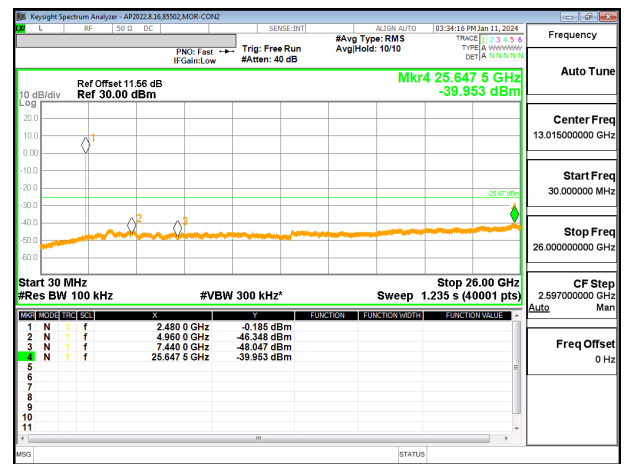
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



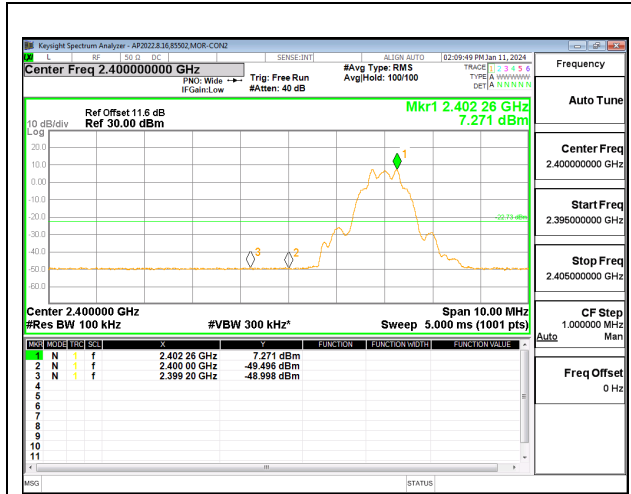
HIGH CHANNEL BANDEDGE



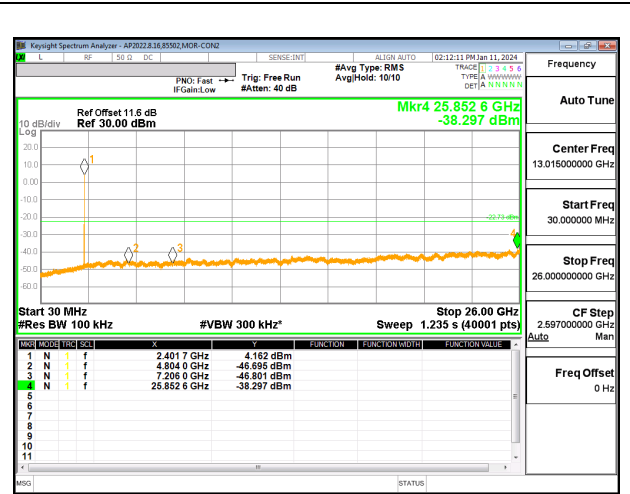
OUT-OF-BAND HIGH CHANNEL

9.6.3. BLE (125Kbps)

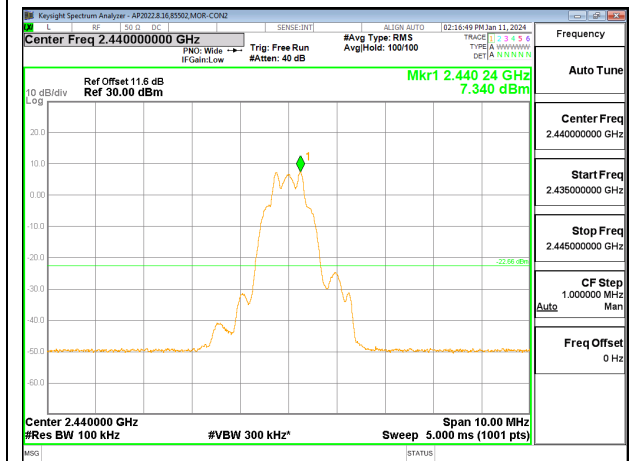
CHAIN 0



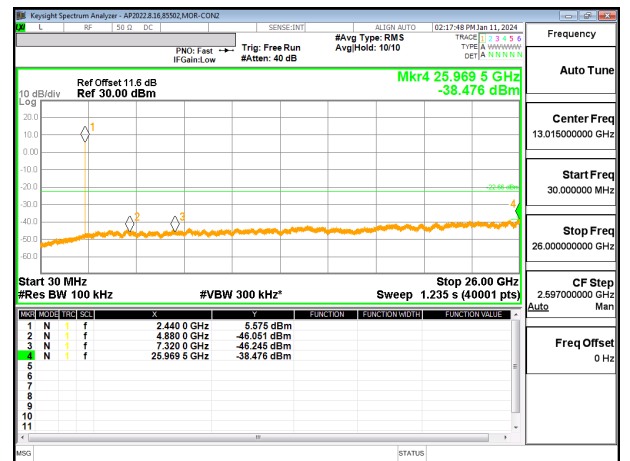
LOW CHANNEL BANDEDGE



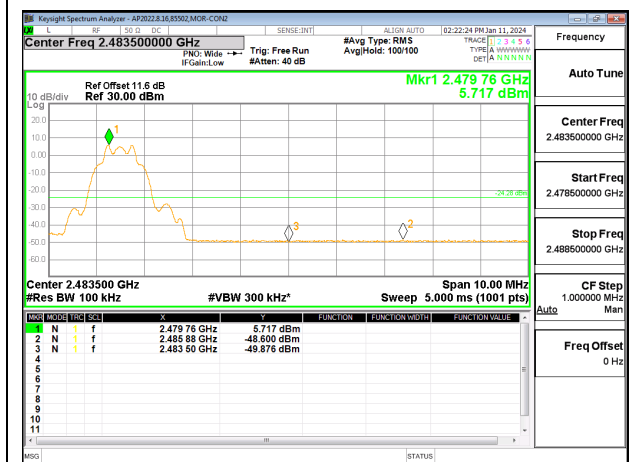
OUT-OF-BAND LOW CHANNEL



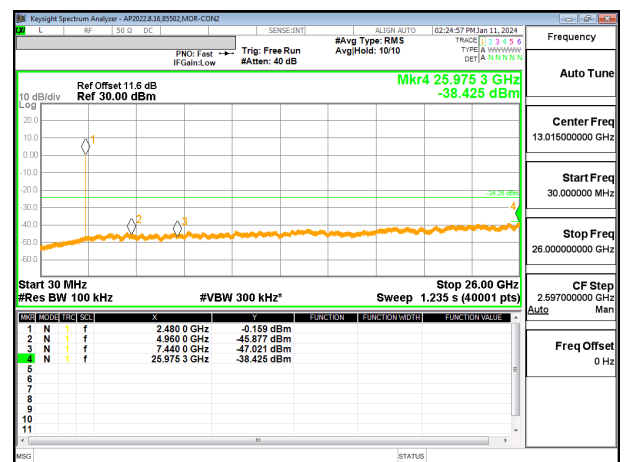
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

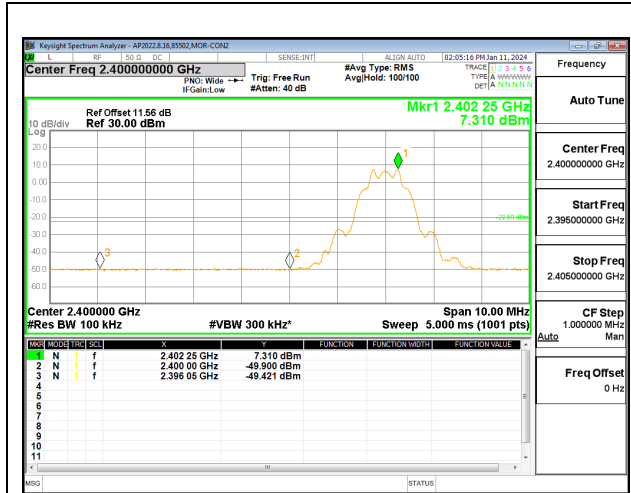


HIGH CHANNEL BANDEDGE

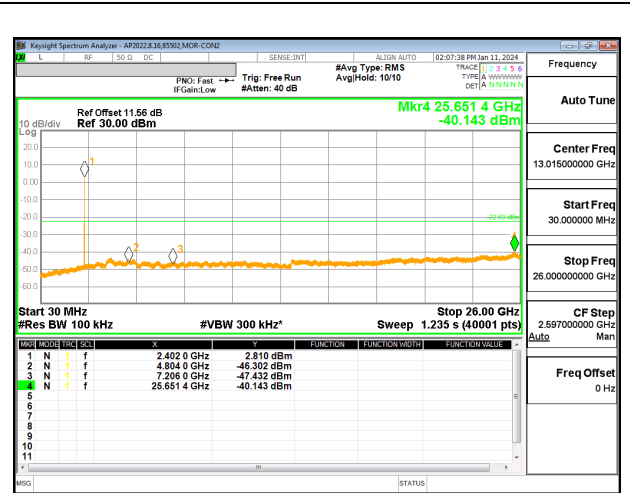


OUT-OF-BAND HIGH CHANNEL

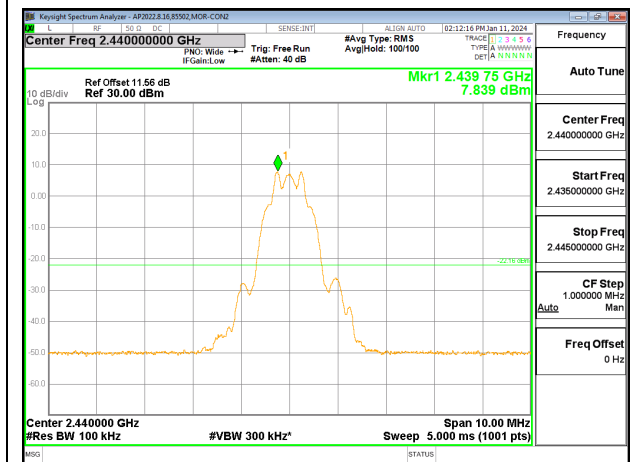
CHAIN 1



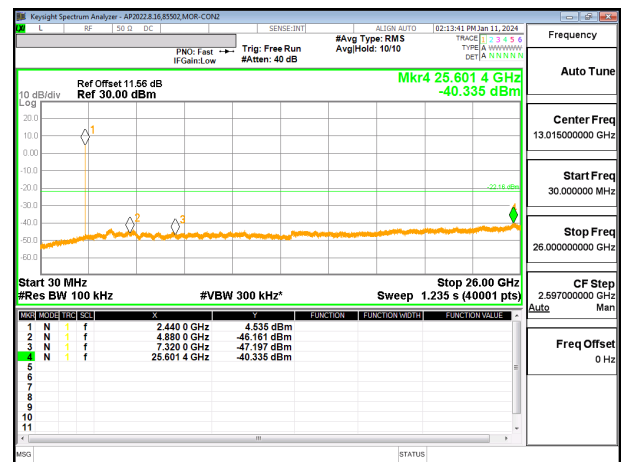
LOW CHANNEL BANDEDGE



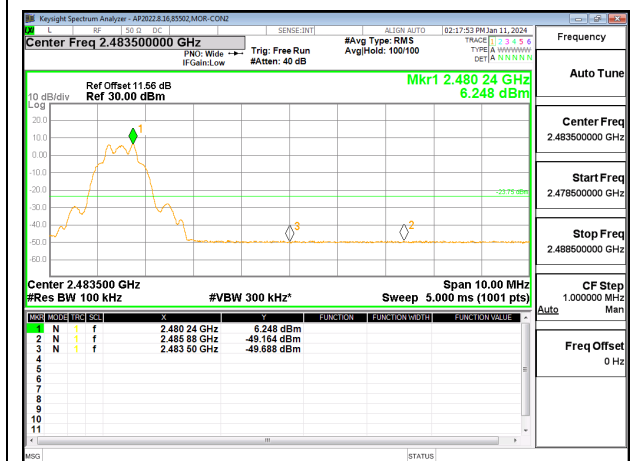
OUT-OF-BAND LOW CHANNEL



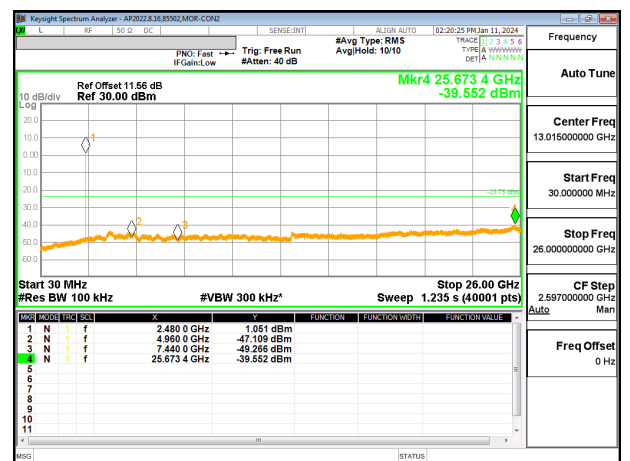
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



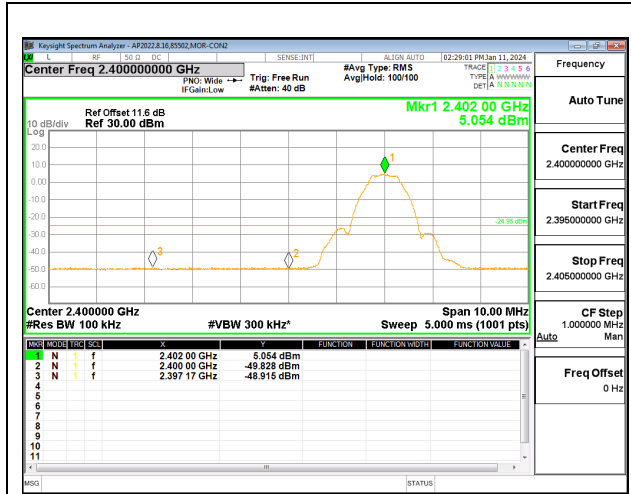
HIGH CHANNEL BANDEDGE



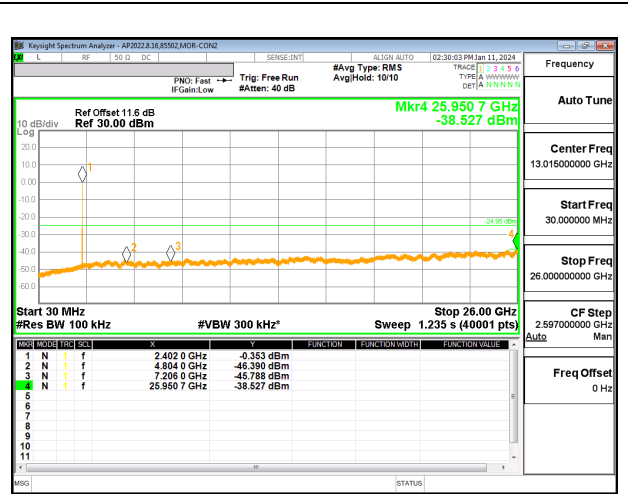
OUT-OF-BAND HIGH CHANNEL

9.6.4. BLE (500Kbps)

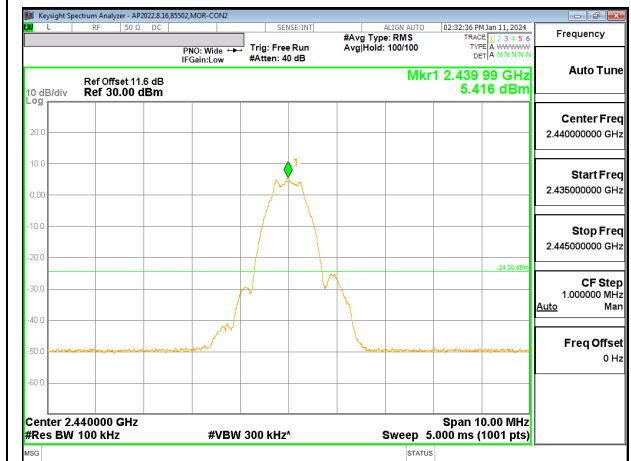
CHAIN 0



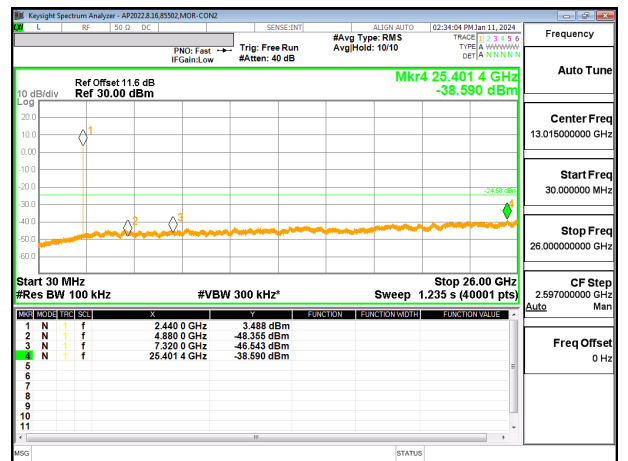
LOW CHANNEL BANDEDGE



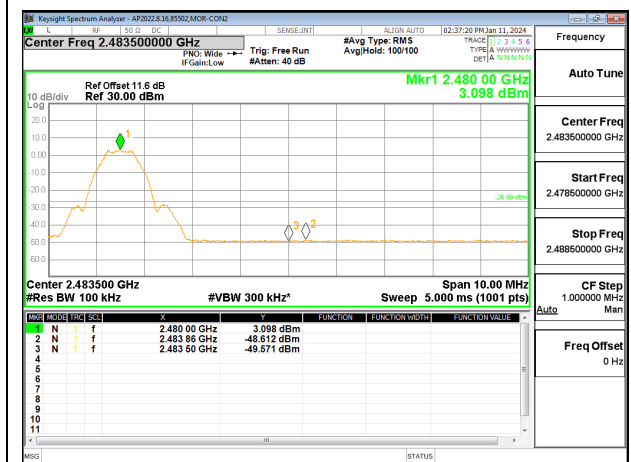
OUT-OF-BAND LOW CHANNEL



IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

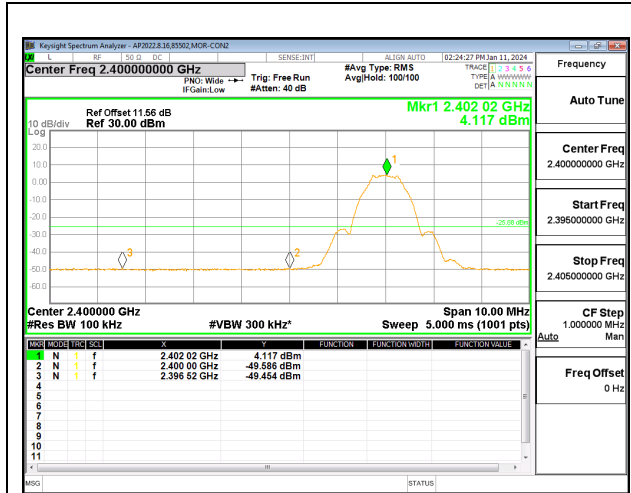


HIGH CHANNEL BANDEDGE

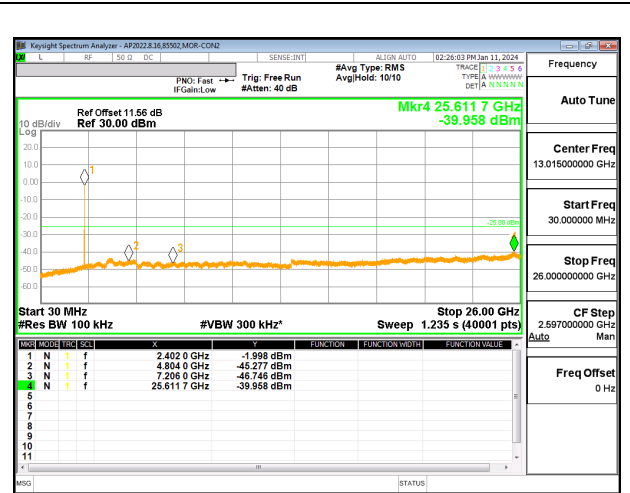


OUT-OF-BAND HIGH CHANNEL

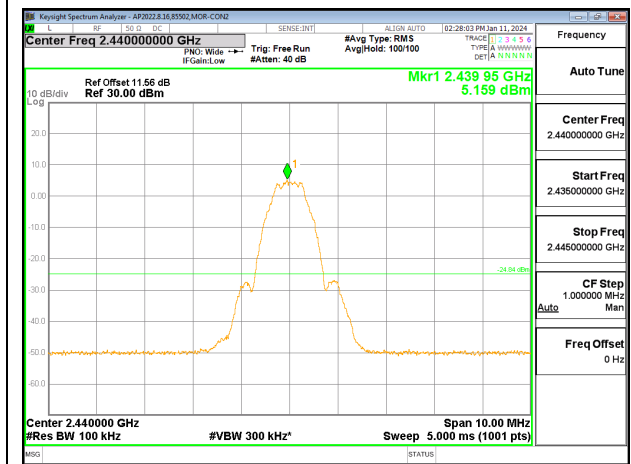
CHAIN 1



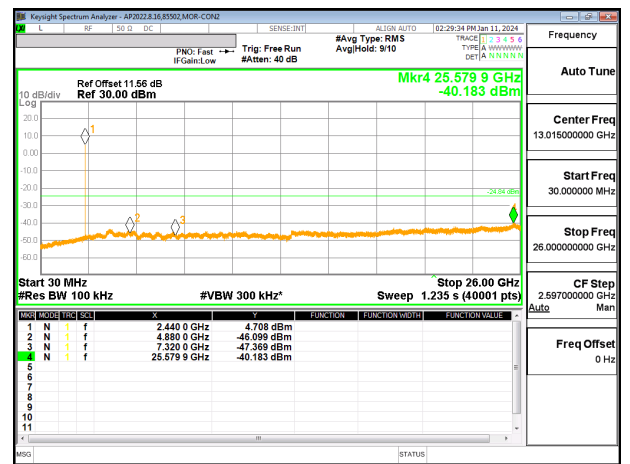
LOW CHANNEL BANDEDGE



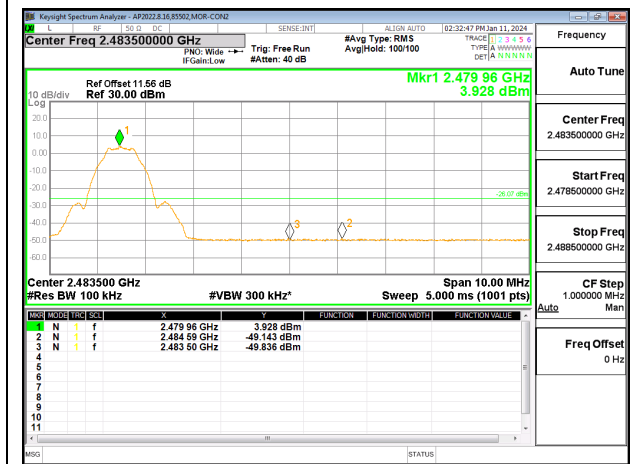
OUT-OF-BAND LOW CHANNEL



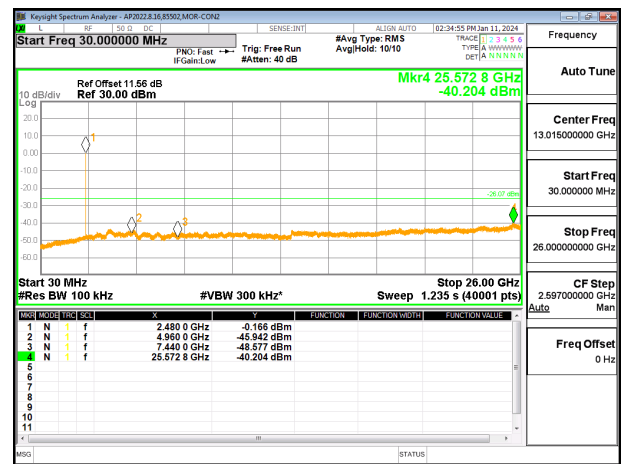
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

9.7. CONDUCTED SPURIOUS EMISSIONS – MIMO RESTRICTED BAND

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength (dBuV/m)	Measurement Distance (m)
0.009 - 0.490	$20 \cdot \log[2400/F(\text{kHz})]$	300
0.490 - 1.705	$20 \cdot \log[24000/F(\text{kHz})]$	30
1.705 - 30	29.5	30
30 - 88	40	3
88 - 216	43.5	3
216 - 960	46	3
Above 960	54	3

TEST PROCEDURE

Conducted measurements were made for this test.

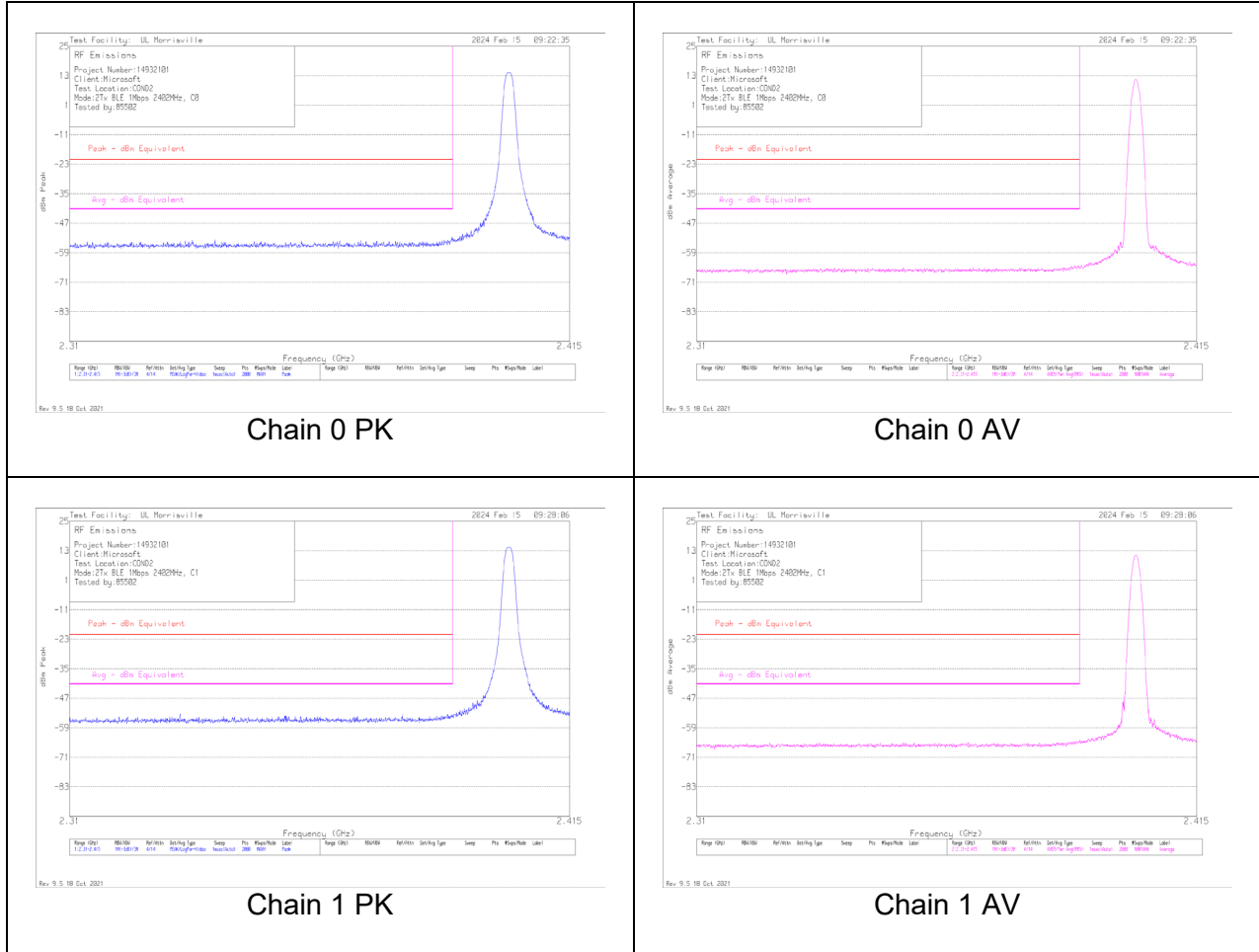
For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For peak measurements above 1 GHz, the resolution bandwidth is set to 1 MHz and the video bandwidth is set to 3 MHz.

The spectrum from 9 kHz to 26 GHz is investigated with the transmitter set to the channels/modes as described in Section 6.5.

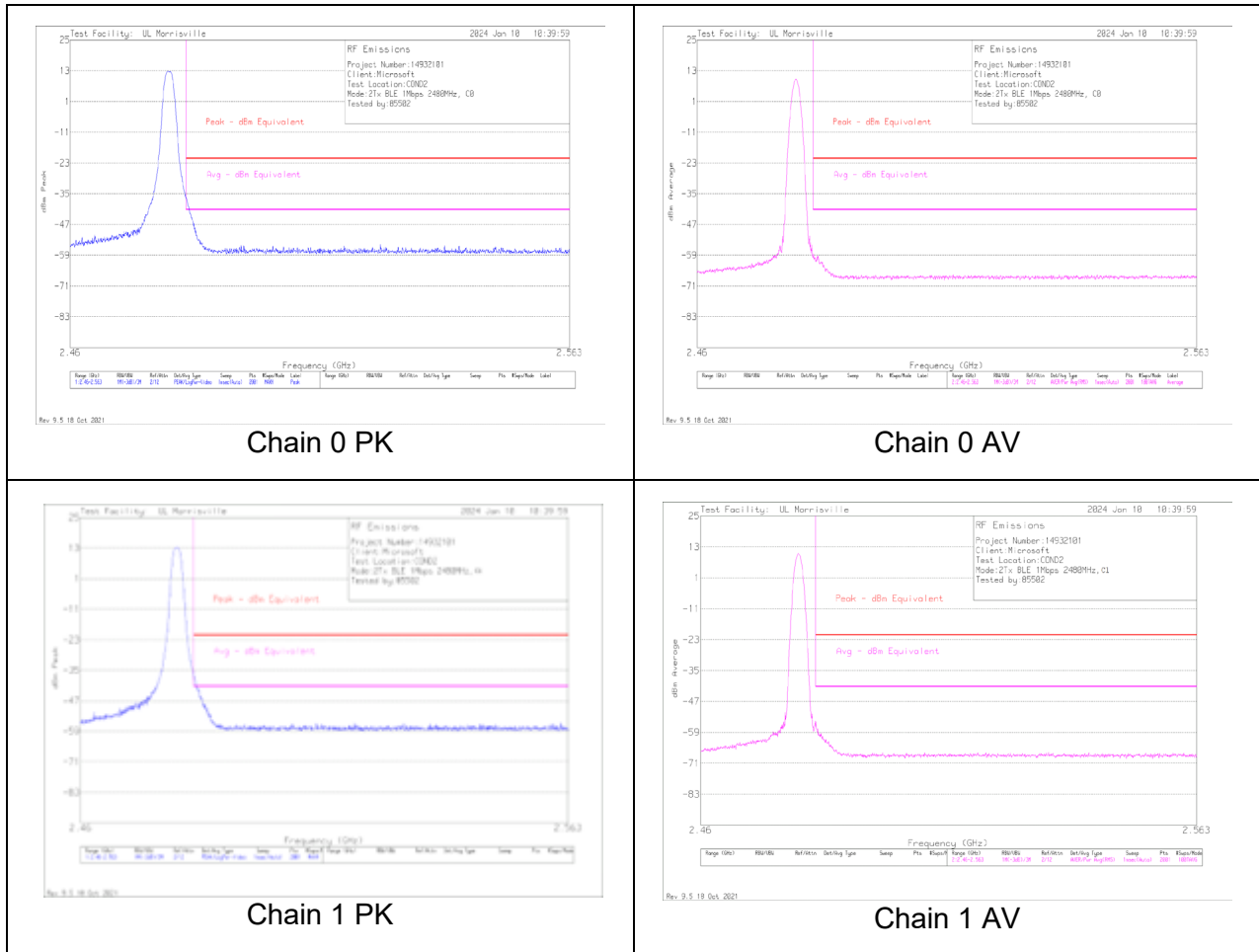
9.7.1. BLE (1Mbps)

LOW CHANNEL RESTRICTED BAND EDGE



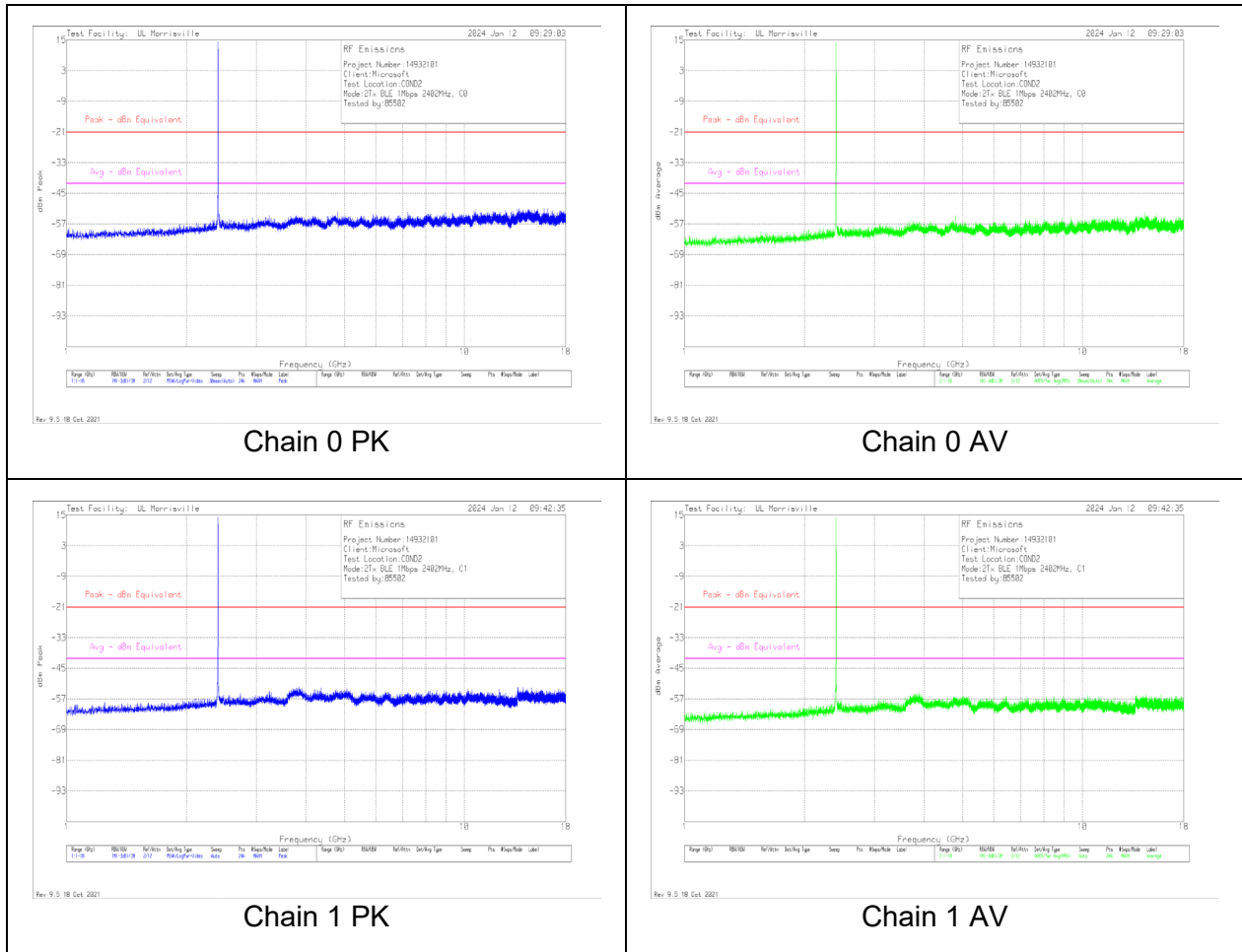
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.389945	-53.9	-42.36	-35.22	60.04	74	-13.96
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.389052	-64.26	-64.89	-52.67	42.58	54	-11.42

HIGH CHANNEL RESTRICTED BAND EDGE



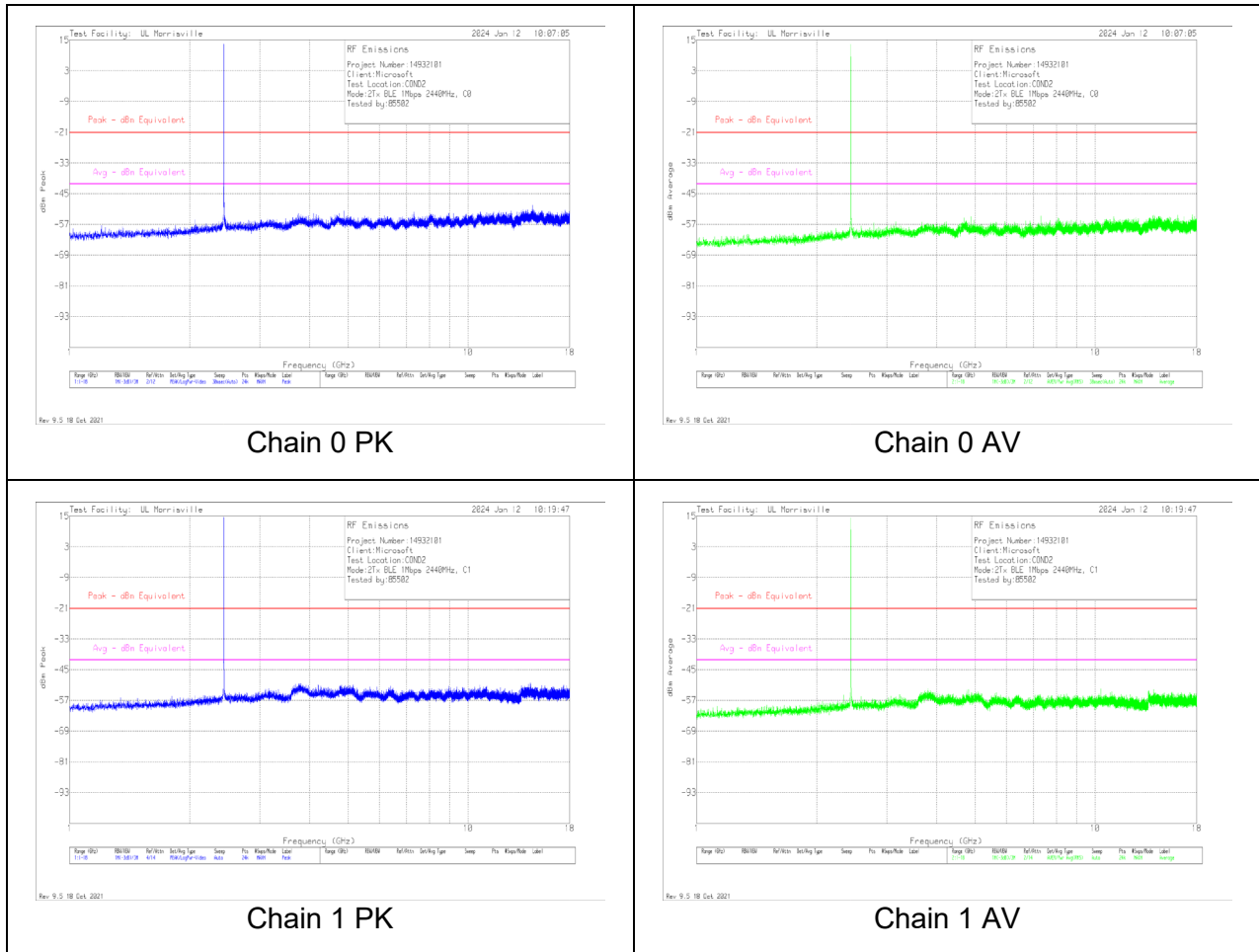
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.483547	-36.82	-37.28	-27.18	68.07	74	-5.93
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.483547	-58.42	-54.91	-44.43	50.83	54	-3.17

LOW CHANNEL SPURIOUS: 1-18 GHz



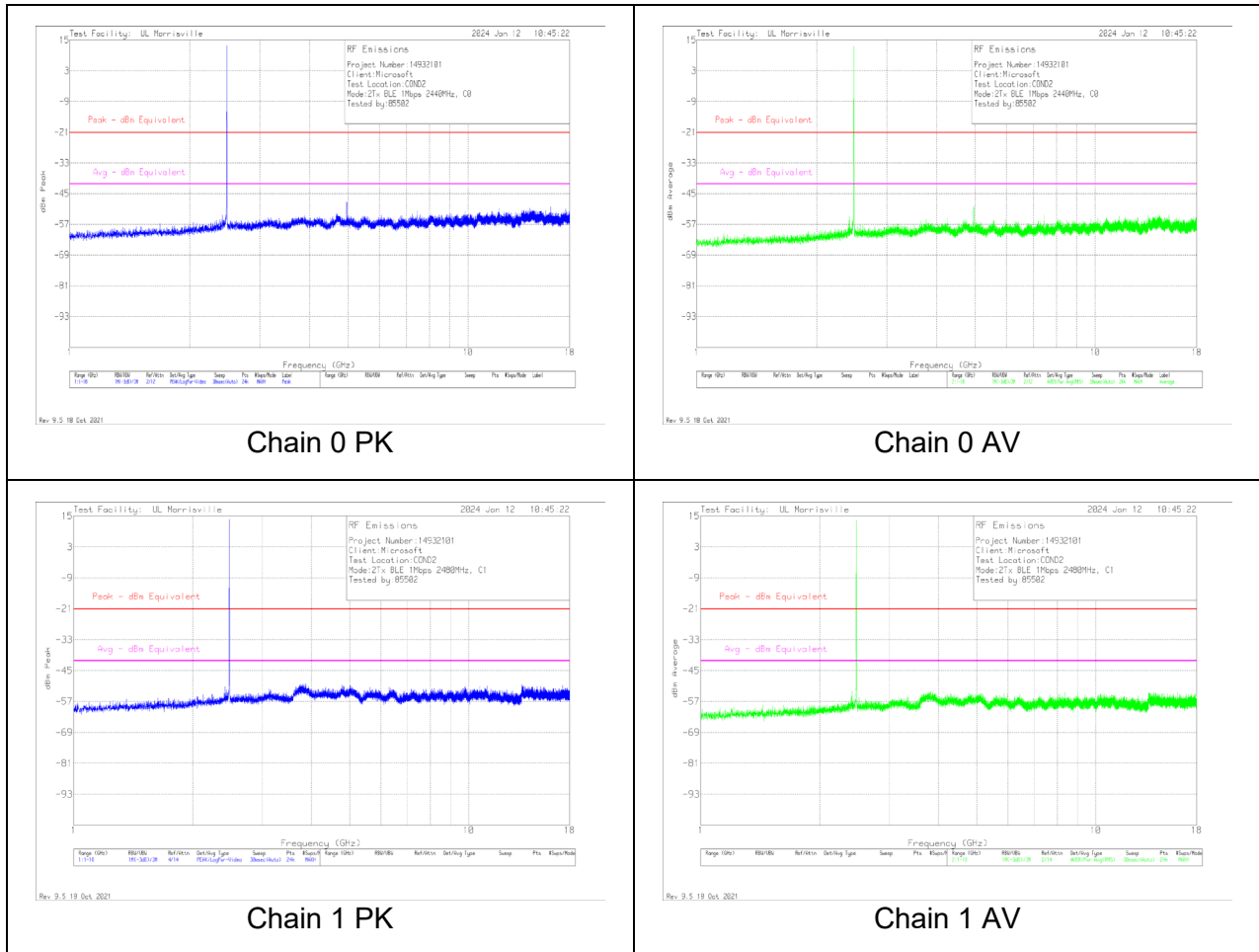
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
4.803201	-50.26	-53.48	-41.72	53.54	74	-20.46
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
14.382837	-52.5	-58.23	-42.59	52.67	54	-1.33

MID CHANNEL SPURIOUS: 1-18 GHz



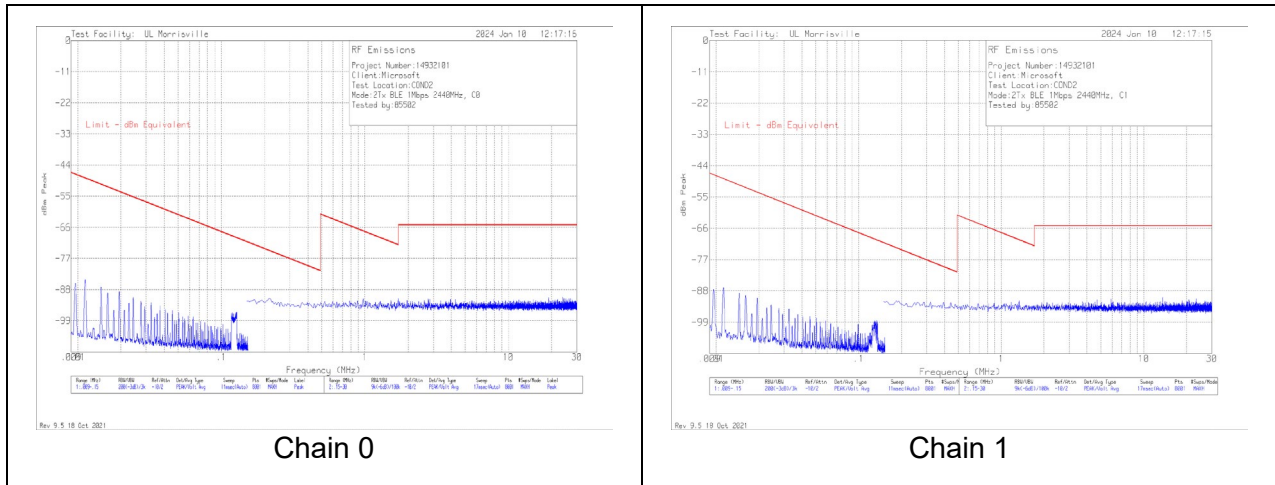
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
4.881121	-50.46	-55.02	-42.31	52.95	74	-21.05
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
3.810431	-57.99	-52.35	-42.42	-52.84	54	-1.16

HIGH CHANNEL SPURIOUS: 1-18 GHz



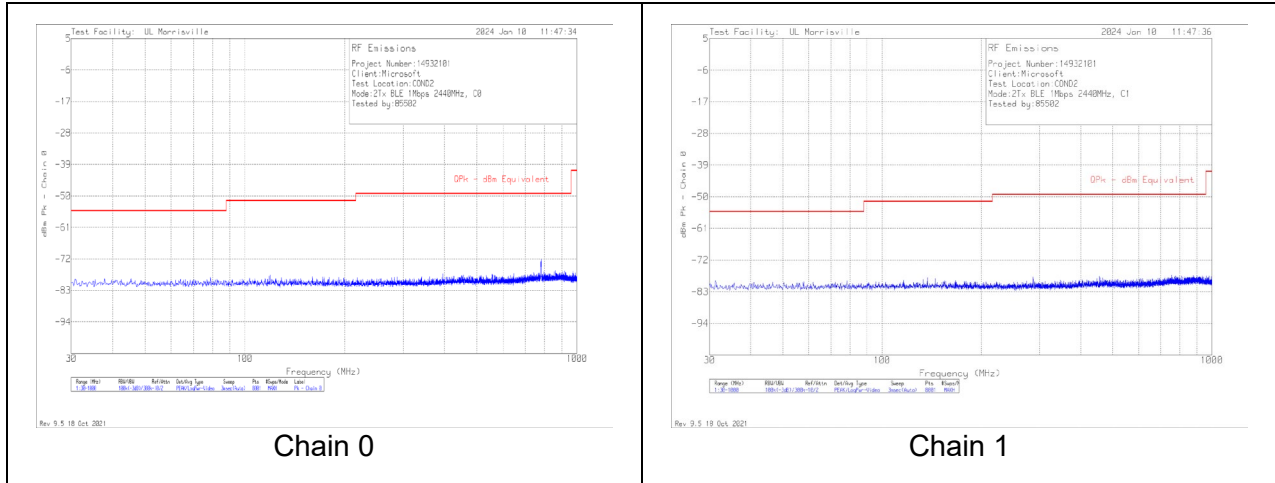
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
4.959749	-50.1	-52.05	-41.11	54.15	74	-19.85
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
14.479162	-54.5	-54.67	-42.69	52.56	54	-1.44

WORSE-CASE CHANNEL SPURIOUS: 0.009-30 MHz



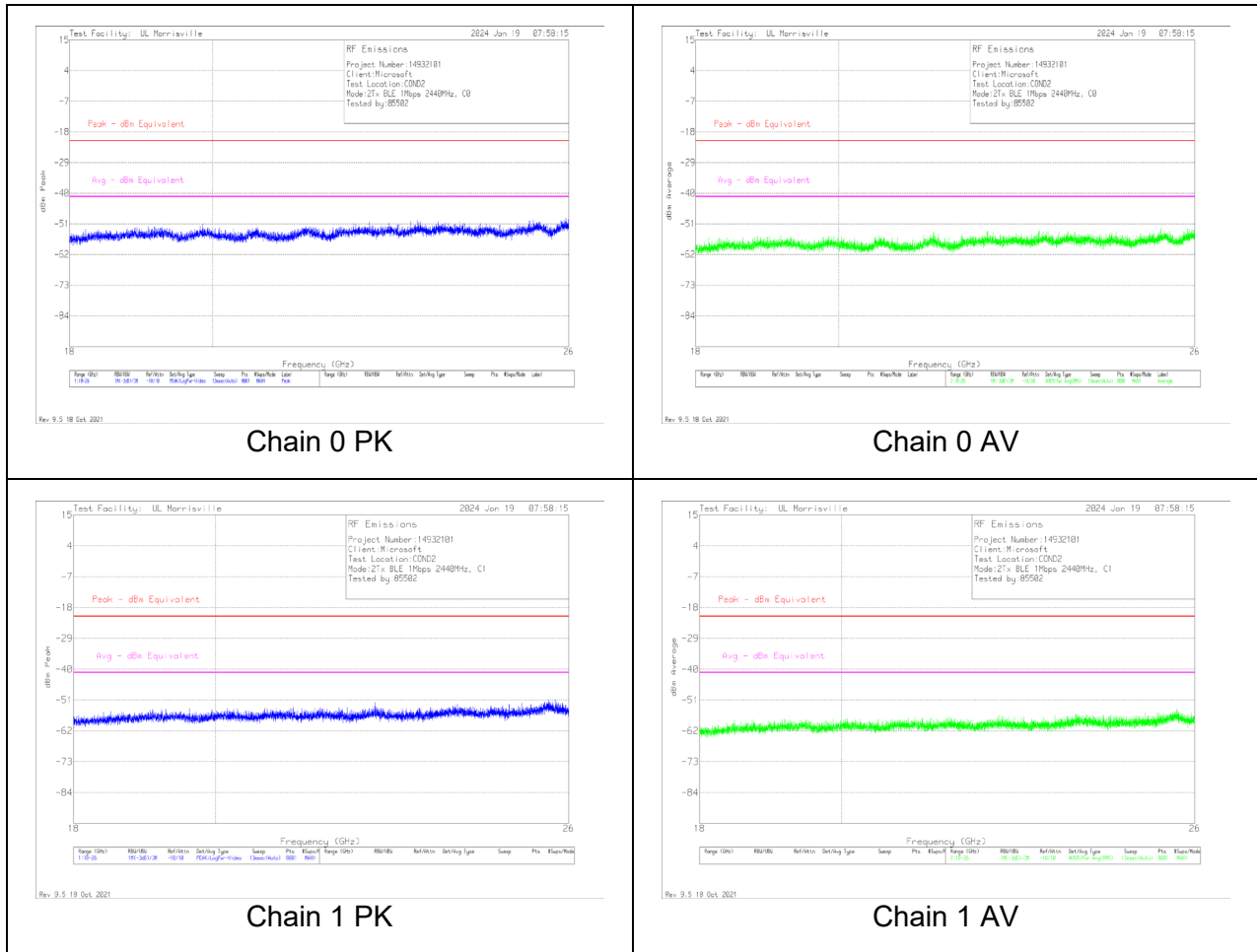
		Meas. Dist (m)				
Array Gain (dBi)	6.85	9-490kHz	0.49-30MHz			
GRF (dB):	6	300	30			
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	AV/QP E-field Limit (dBuV/m)	Margin (dB)
26.9720	-94.6	-90.29	-76.07	-0.81	46	-46.81

WORSE-CASE CHANNEL SPURIOUS: 30-1000 MHz



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	4.7	3				
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	QPK E-field Limit (dBuV/m)	Margin (dB)
61.88875	-79.41	-79.64	-64.96	30.29	40	-9.71

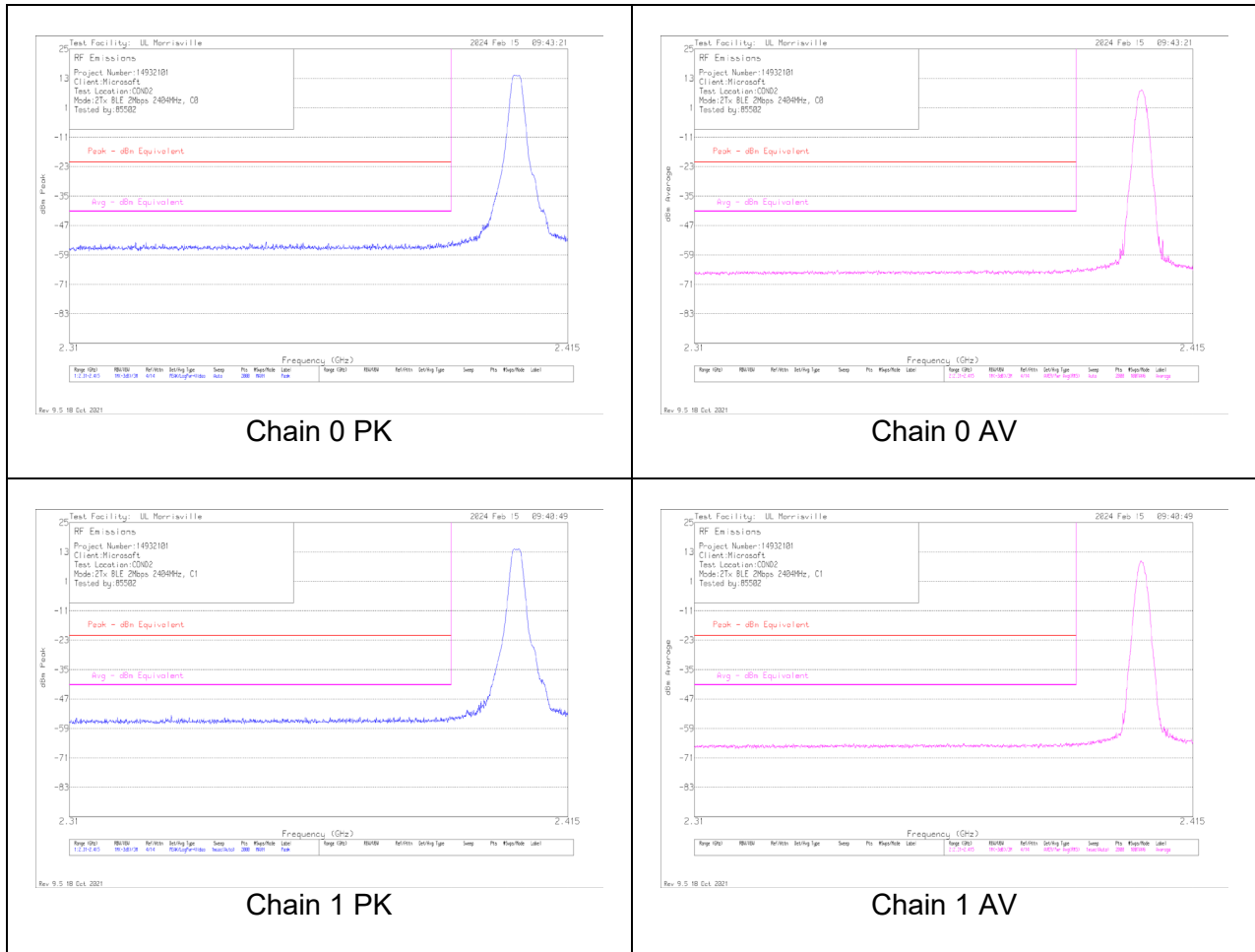
WORSE-CASE CHANNEL SPURIOUS: 18-26 GHz



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.03					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
25.949	-48.95	-55.03	-41.14	54.11	74	-19.89
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
25.862	-57.77	-52.66	-42.61	52.65	54	-1.35

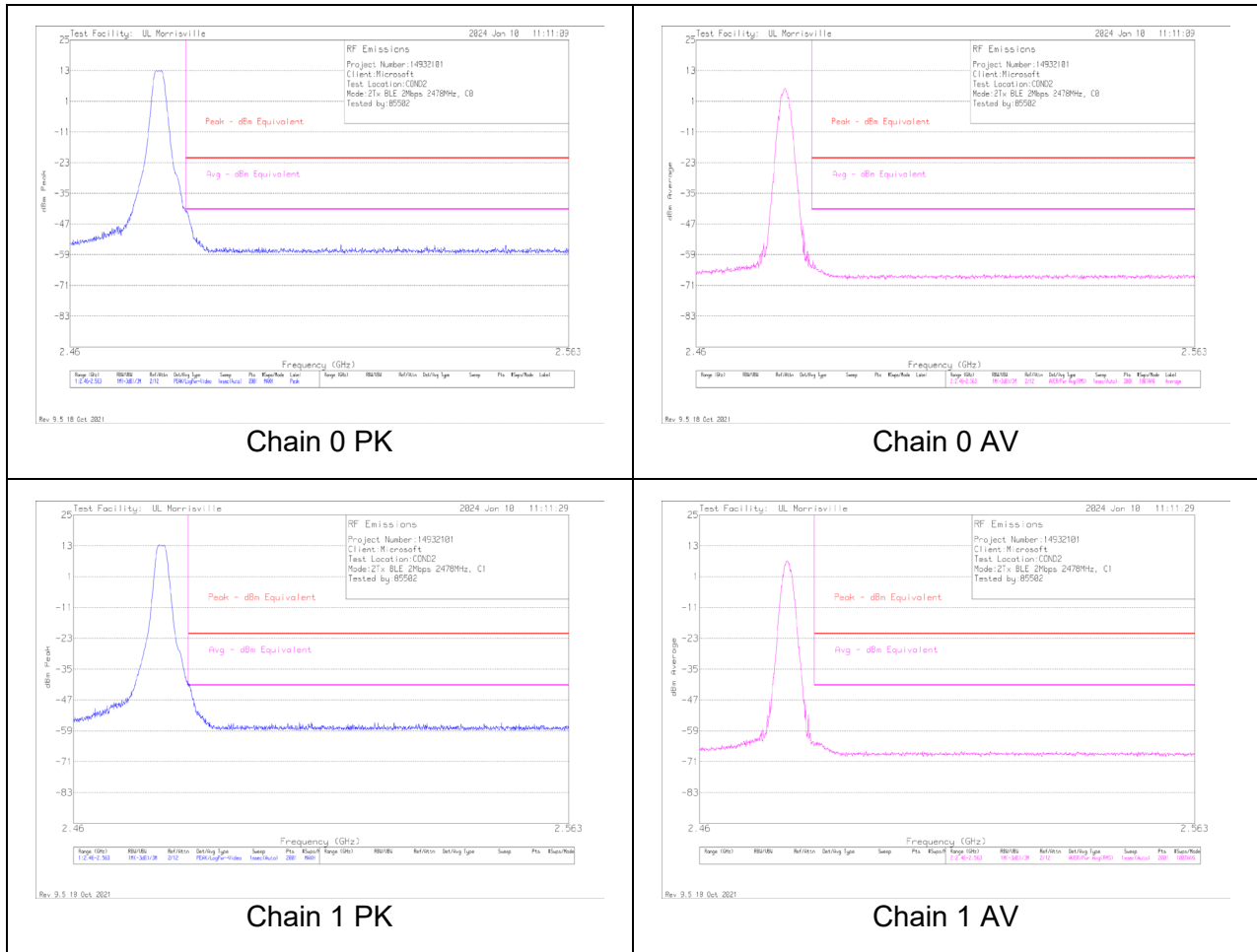
9.7.1. BLE (2Mbps)

LOW CHANNEL RESTRICTED BAND EDGE



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	4.87					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.389997	-54.13	-54.49	-44.45	50.81	74	-23.19
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.389104	-64.91	-65.24	-50.34	44.92	54	-9.08

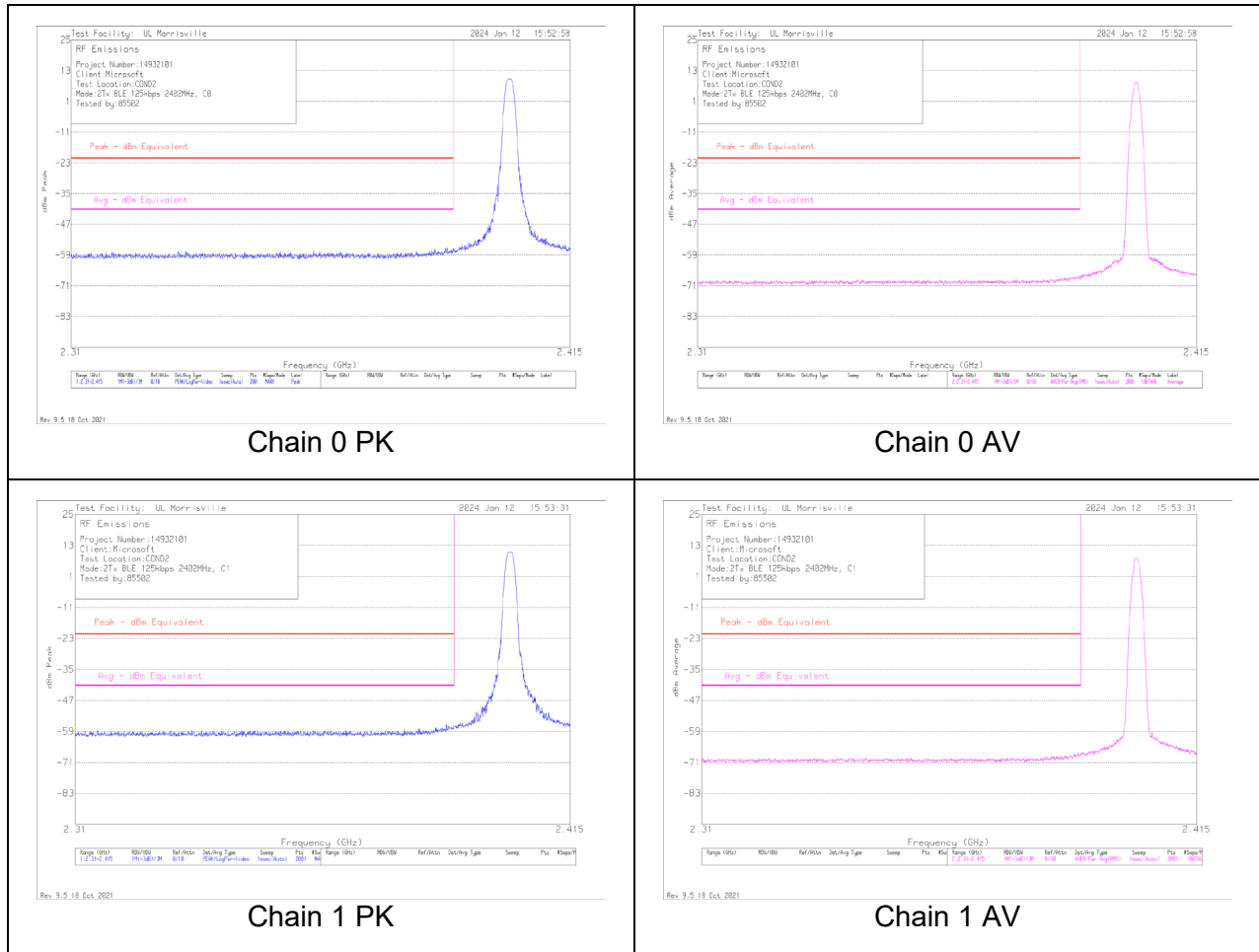
HIGH CHANNEL RESTRICTED BAND EDGE



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	4.87					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.483702	-41.95	-40.59	-31.36	63.90	74	-10.10
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.483702	-61.27	-63.83	-47.63	47.62	54	-6.38

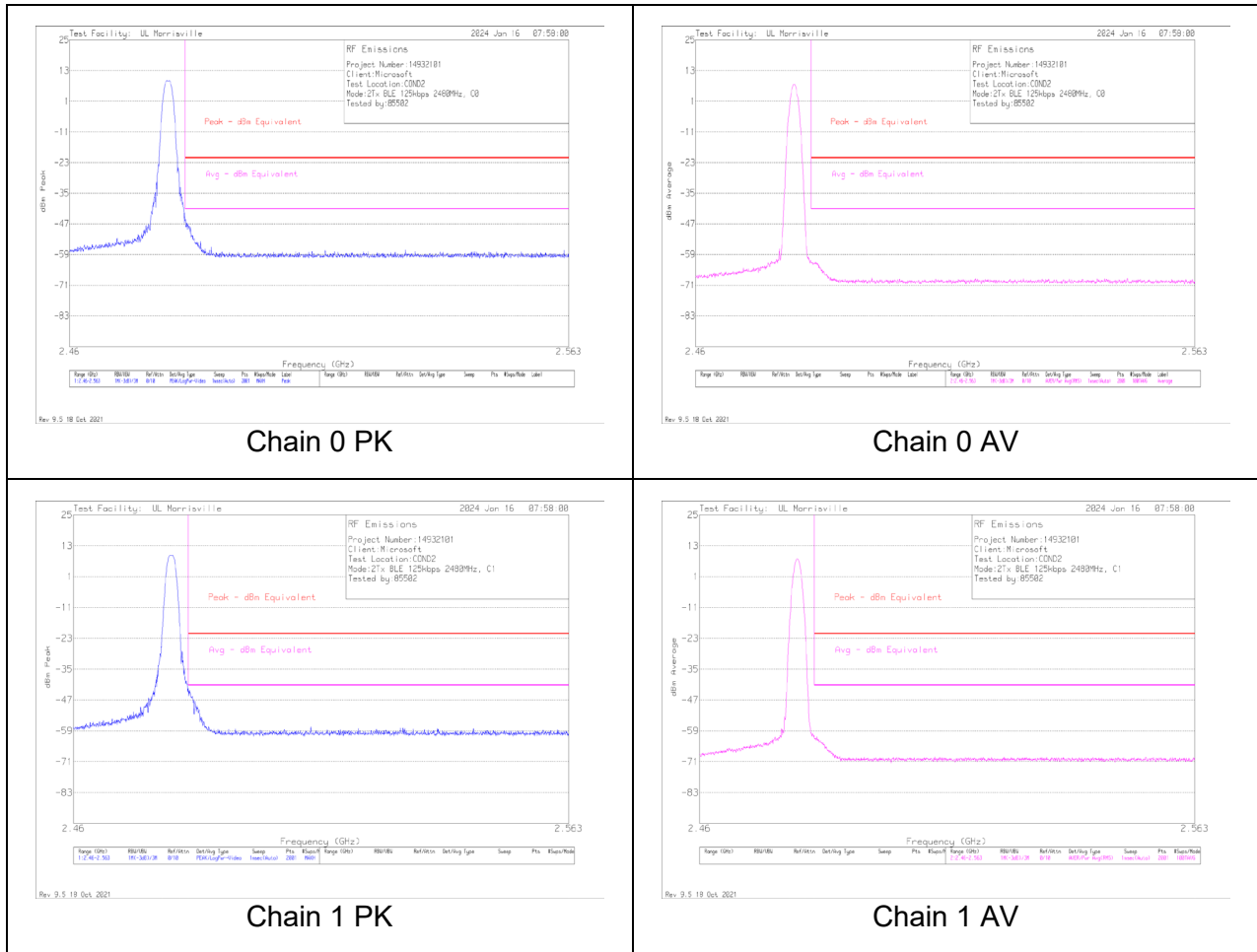
9.7.1. BLE (125kbps)

LOW CHANNEL RESTRICTED BAND EDGE



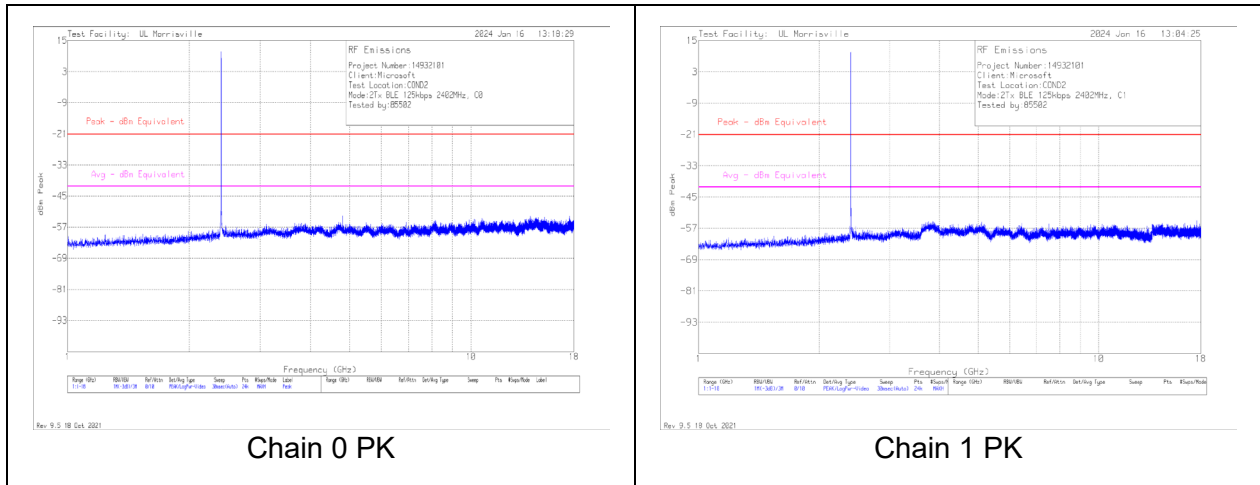
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	0.82					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.388369	-56.35	-56.25	-46.44	48.82	74	-25.18
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.389419	-67.95	-67.12	-56.84	38.42	54	-15.58

HIGH CHANNEL RESTRICTED BAND EDGE



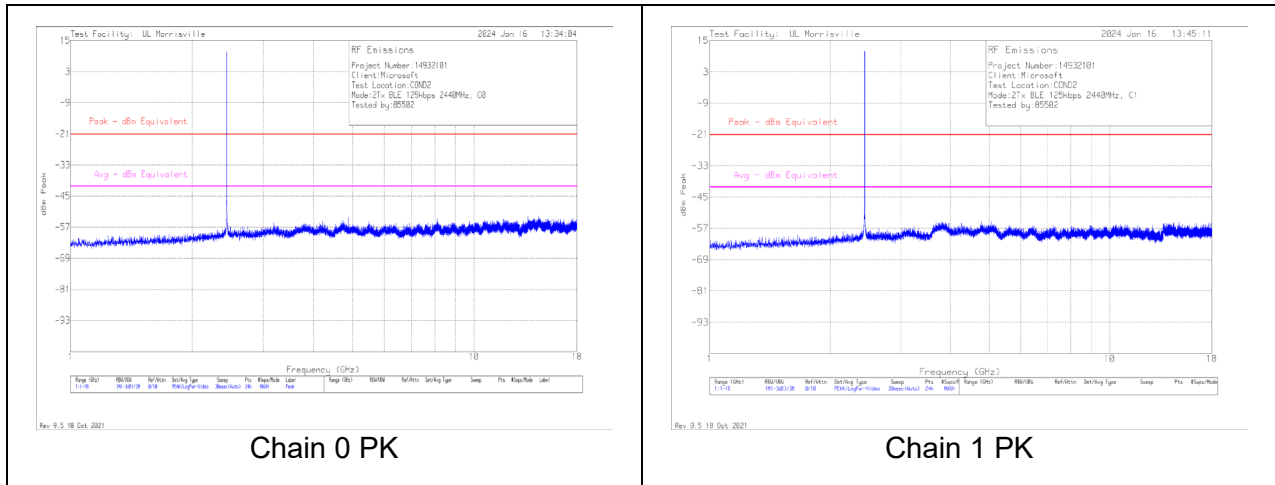
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	0.82					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.483599	-45.84	-43.5	-34.65	60.60	74	-13.40
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.484063	-62.6	-61.16	-51.14	44.12	54	-9.88

LOW CHANNEL SPURIOUS: 1-18 GHz



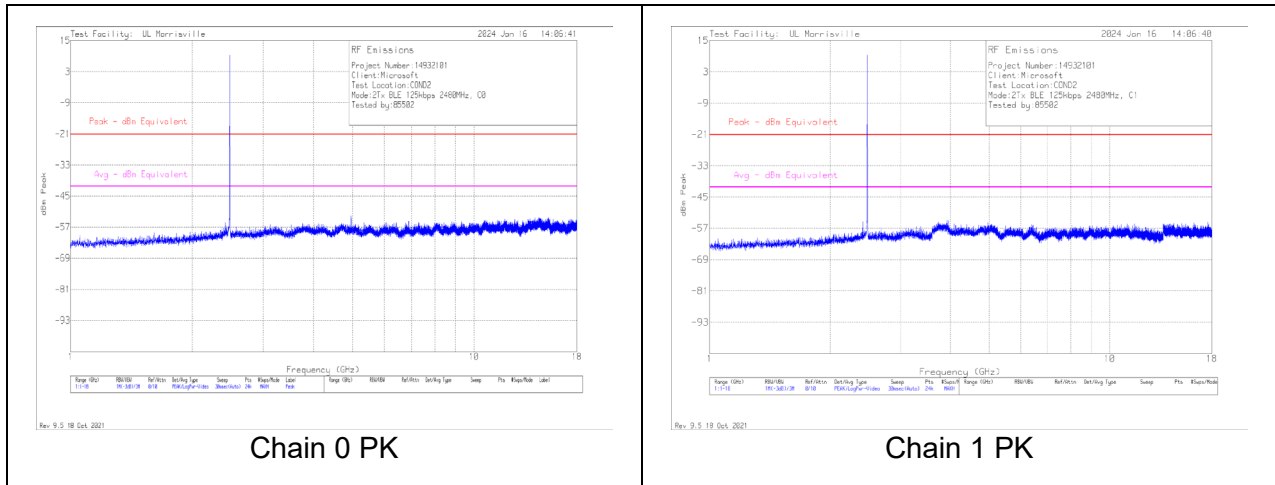
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
14.023962	-52.77	-57.47	-44.65	50.60	74	-23.40
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
14.023962	-52.77	-57.47	-43.83	51.42	54	-2.58

MID CHANNEL SPURIOUS: 1-18 GHz



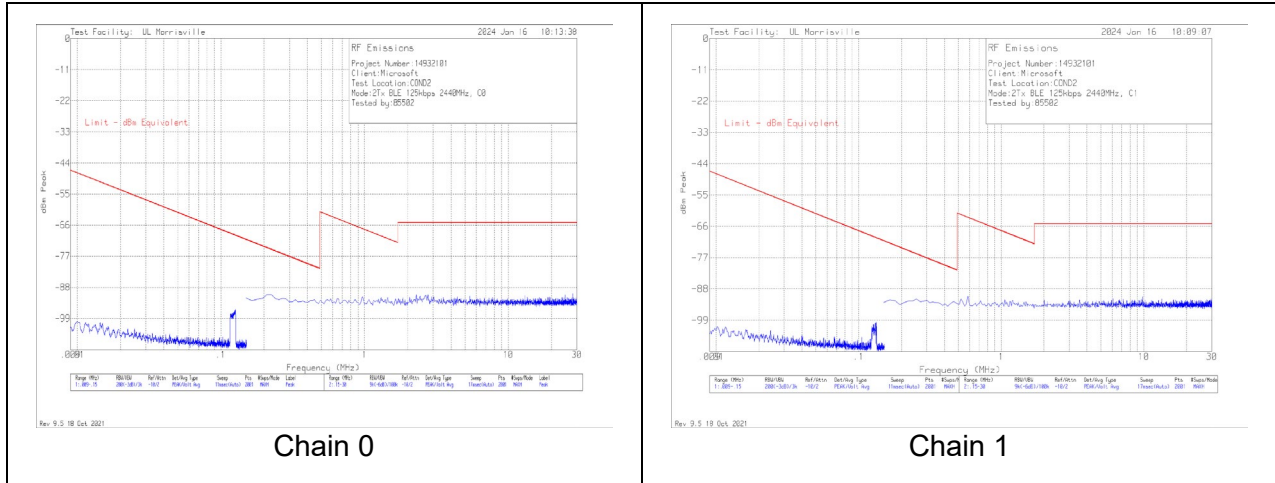
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
13.612403	-53.02	-57.24	-44.78	50.48	74	-23.52
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
13.612403	-53.02	-57.24	-44.78	50.48	54	-3.52

HIGH CHANNEL SPURIOUS: 1-18 GHz



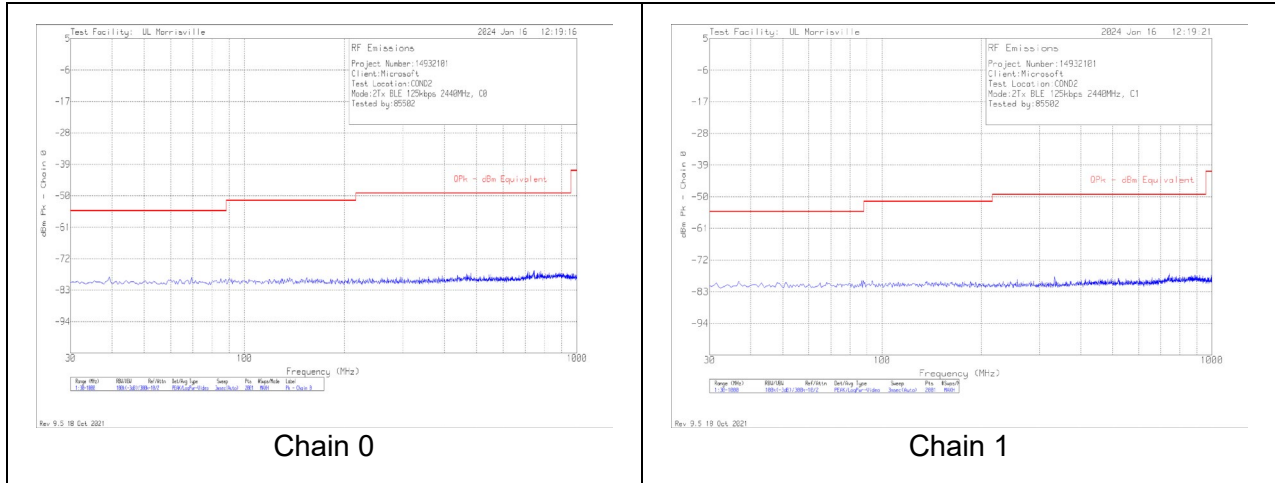
Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
4.959749	-52.66	-54.78	-43.73	51.53	74	-22.47
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
4.959749	-52.66	-54.78	-43.73	51.53	54	-2.47

WORSE-CASE CHANNEL SPURIOUS: 0.009-30 MHz



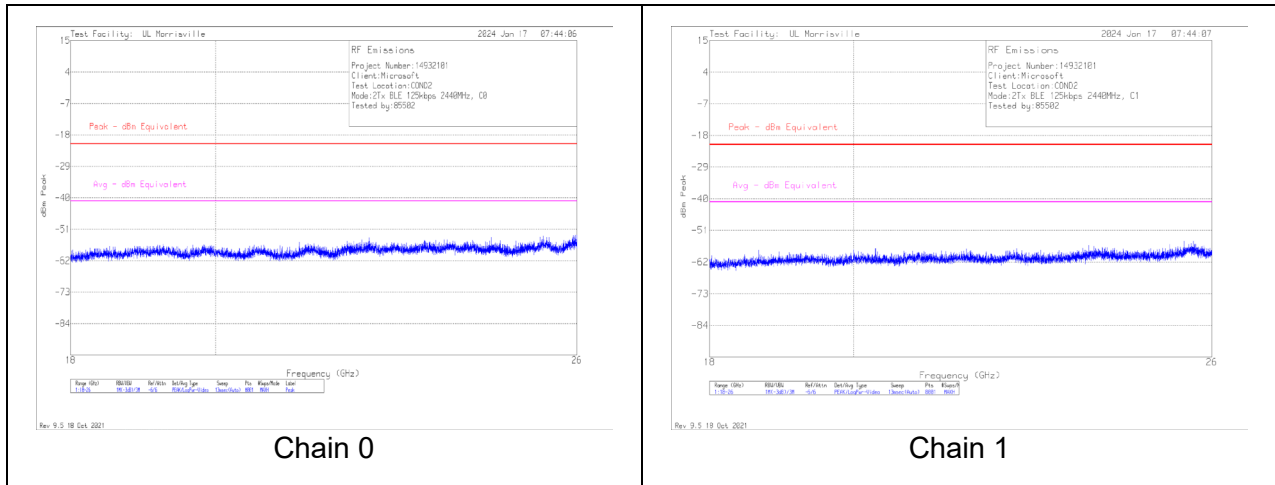
		Meas. Dist (m)				
Array Gain (dBi)	6.85	9-490kHz	0.49-30MHz			
GRF (dB):	6	300	30			
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	AV/QP E-field Limit (dBuV/m)	Margin (dB)
1.6574	-92.61	-93.17	-77.02	-1.76	23.2	-24.98

WORSE-CASE CHANNEL SPURIOUS: 30-1000 MHz



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	4.7	3				
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	QPK E-field Limit (dBuV/m)	Margin (dB)
136.70	-78.68	-79.5	-64.51	30.75	40	-9.25

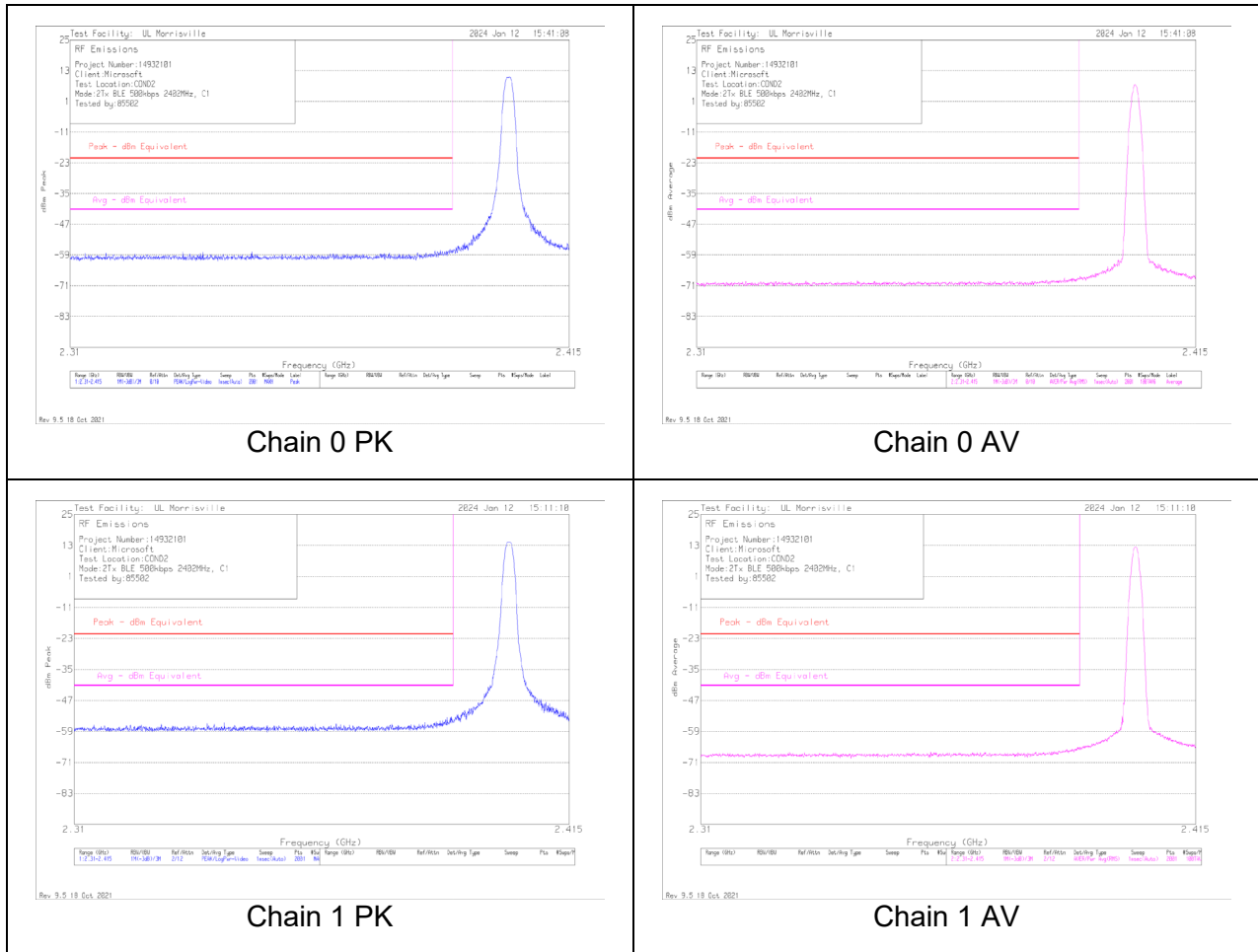
WORSE-CASE CHANNEL SPURIOUS: 18-26 GHz



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
25.971	-52.99	-58.34	-45.03	50.23	74	-23.77
Frequency (MHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
25.971	-52.99	-58.34	-45.03	50.23	54	-3.77

9.7.1. BLE (500kbps)

LOW CHANNEL RESTRICTED BAND EDGE



Array Gain (dBi)	GRF (dB)	Meas. Dist (m)				
6.85	0	3				
DCCF (dB)	2.44					
Frequency (GHz)	Meter PK Reading Chain 0 (dBm)	Meter PK Reading Chain 1 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	Margin (dB)
2.389577	-57.19	-53.35	-45.00	50.26	74	-23.74
Frequency (GHz)	Meter AV Reading Chain 0 (dBm)	Meter AV Reading Chain 1 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	Margin (dB)
2.389787	-68.06	-65.29	-54.16	41.10	54	-12.90