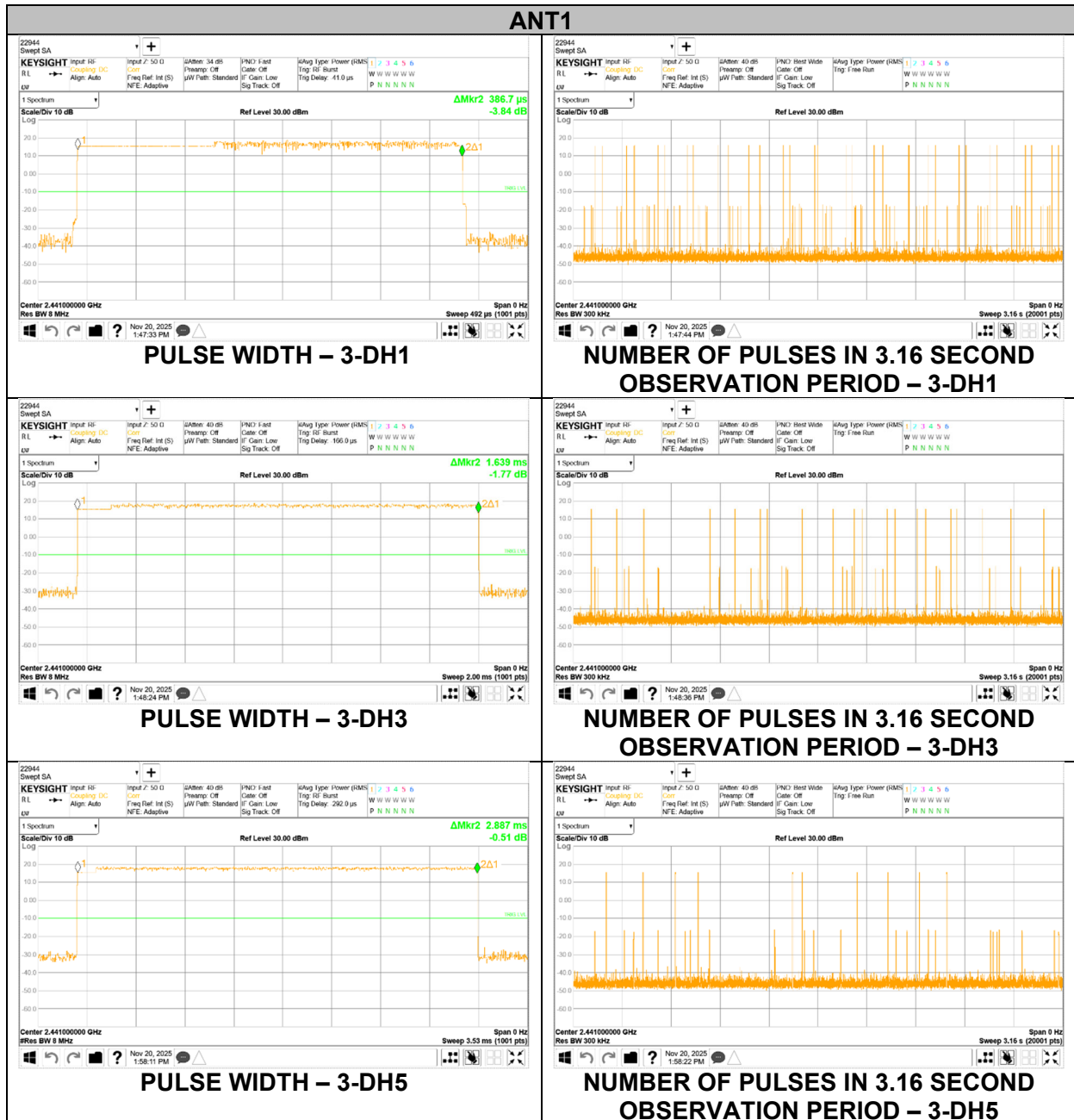
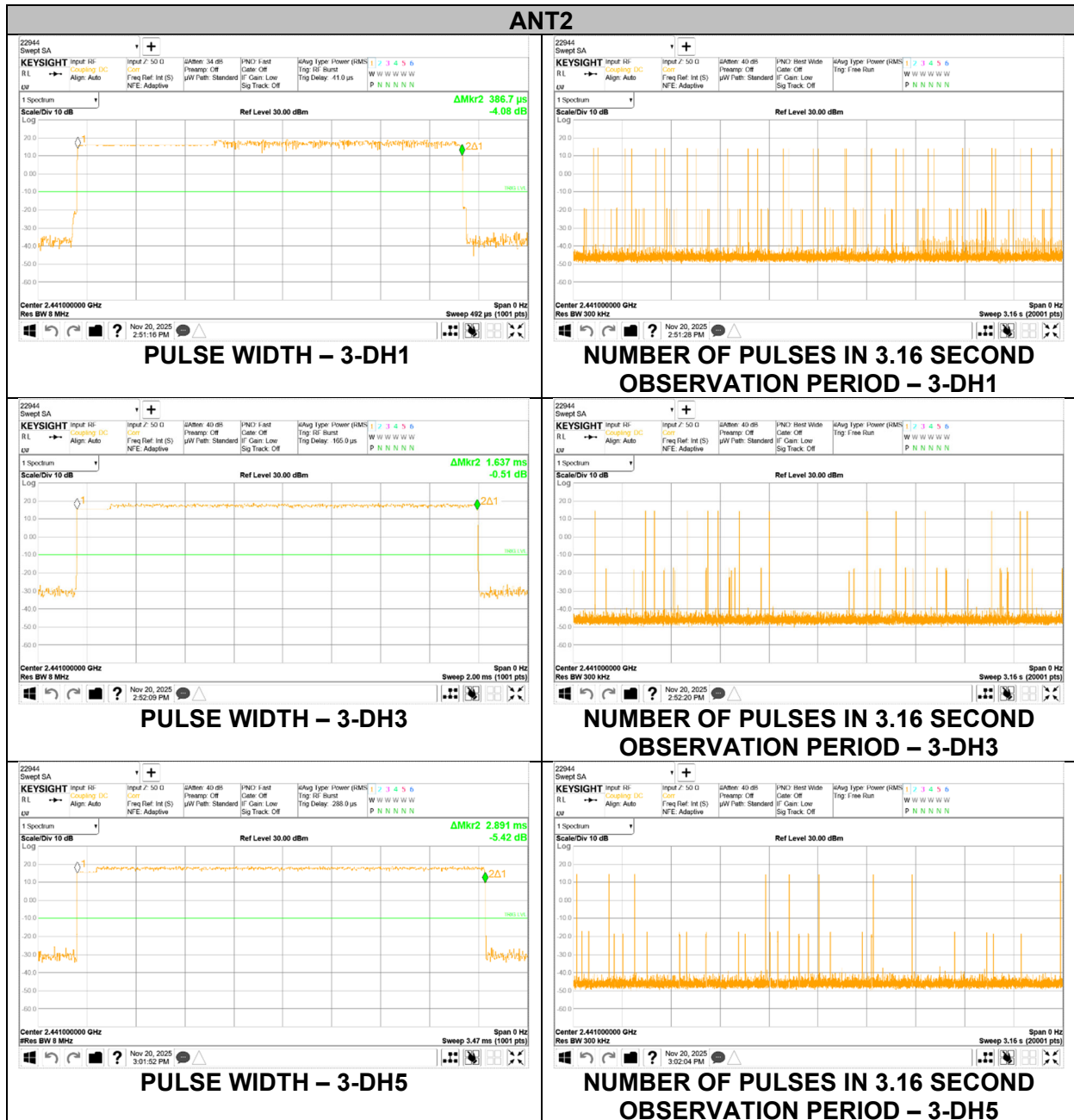




DH Packet	Pulse Width [msec]	Number of Pulses in 3.16 seconds	Average Time of Occupancy [sec]	Limit [sec]	Margin [sec]
8DPSK Normal ANT2					
DH1	0.387	32	0.124	0.4	-0.276
DH3	1.637	15	0.246	0.4	-0.154
DH5	2.891	9	0.260	0.4	-0.140
DH Packet	Pulse Width [msec]	Number of Pulses in 0.8 seconds	Average Time of Occupancy [sec]	Limit [sec]	Margin [sec]
8DPSK AFH ANT2					
DH1	0.387	8	0.031	0.4	-0.369
DH3	1.637	4	0.061	0.4	-0.339
DH5	2.891	2	0.065	0.4	-0.335



9.6. OUTPUT POWER

LIMITS

§15.247 (b) (1)

The peak conducted output power limit is 0.125 W (21 dBm) since Bluetooth AFH mode can be used at least 20 non-overlapping hopping channels.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

RESULTS

9.6.1. BASIC DATA RATE GFSK MODULATION

Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
ANT1	0	2 402	18.06	21.00	-2.94
	39	2 441	17.83		-3.17
	78	2 480	17.48		-3.52
ANT2	0	2 402	18.10		-2.90
	39	2 441	18.32		-2.68
	78	2 480	18.40		-2.60
Worst			18.40		-2.60

9.6.2. ENHANCED DATA RATE Pi/4-DQPSK MODULATION

Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
ANT1	0	2 402	17.99	21.00	-3.01
	39	2 441	17.86		-3.14
	78	2 480	17.27		-3.73
ANT2	0	2 402	18.19		-2.81
	39	2 441	18.29		-2.71
	78	2 480	18.18		-2.82
Worst			18.29		-2.71

9.6.3. ENHANCED DATA RATE 8DPSK MODULATION

Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
ANT1	0	2 402	18.56	21.00	-2.44
	39	2 441	18.42		-2.58
	78	2 480	17.78		-3.22
ANT2	0	2 402	18.49		-2.51
	39	2 441	18.75		-2.25
	78	2 480	18.81		-2.19
Worst			18.81		-2.19

9.6.4. BASIC DATA RATE GFSK MODULATION (DUAL)

Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
DUAL ANT1	0	2 402	13.36	21.00	
	39	2 441	13.43		
	78	2 480	13.99		
DUAL ANT2	0	2 402	12.58		
	39	2 441	12.25		
	78	2 480	12.31		
DUAL ANT1+2	0	2 402	16.00		-5.00
	39	2 441	15.89		-5.11
	78	2 480	16.24		-4.76
Worst			16.24		-4.76

9.6.1. ENHANCED DATA RATE Pi/4-DQPSK MODULATION (DUAL)

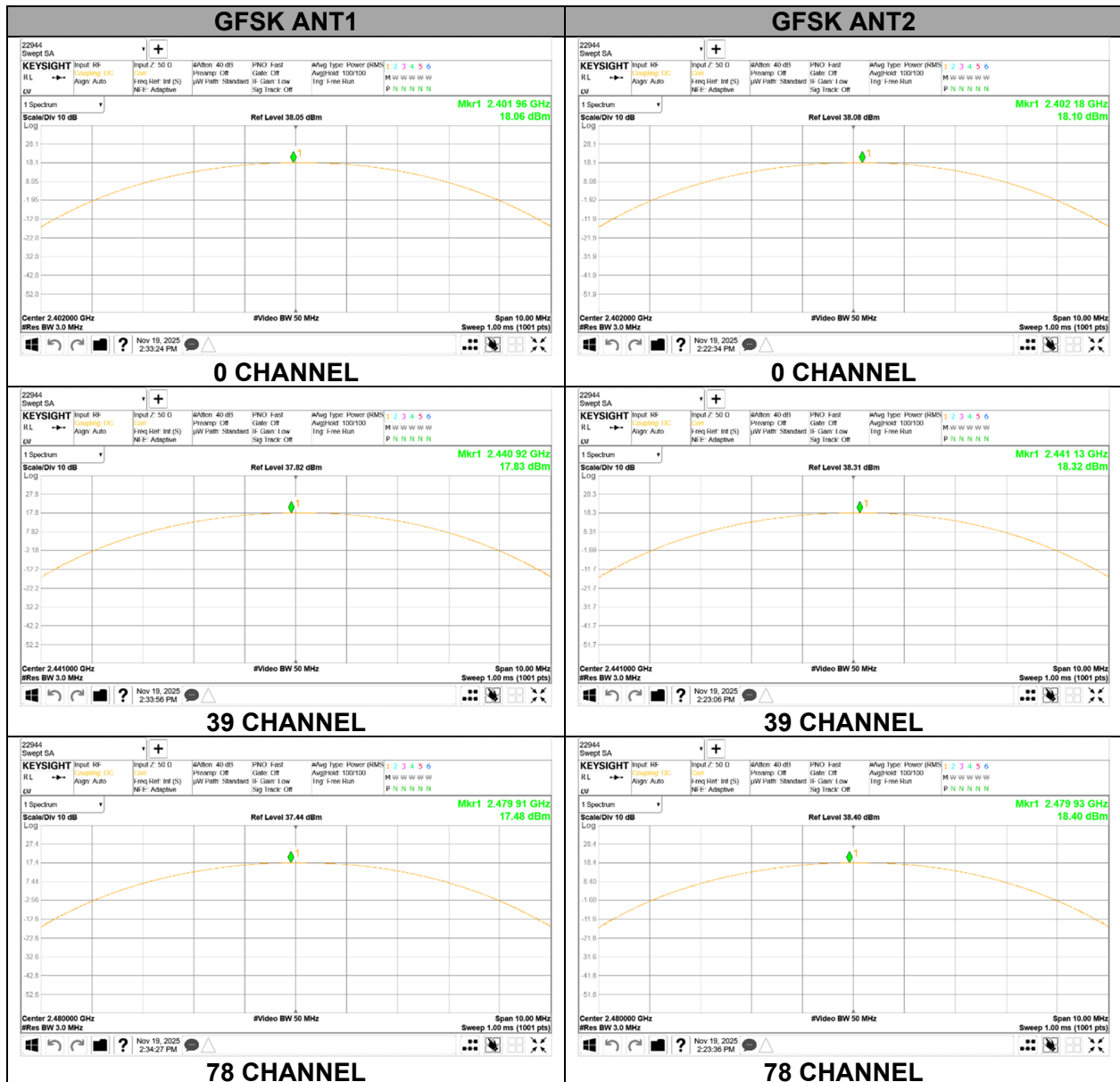
Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
DUAL ANT1	0	2 402	12.94	21.00	
	39	2 441	12.68		
	78	2 480	13.17		
DUAL ANT2	0	2 402	12.36		
	39	2 441	12.15		
	78	2 480	11.88		
DUAL ANT1+2	0	2 402	15.67		-5.33
	39	2 441	15.43		-5.57
	78	2 480	15.58		-5.42
Worst			15.67		-5.33

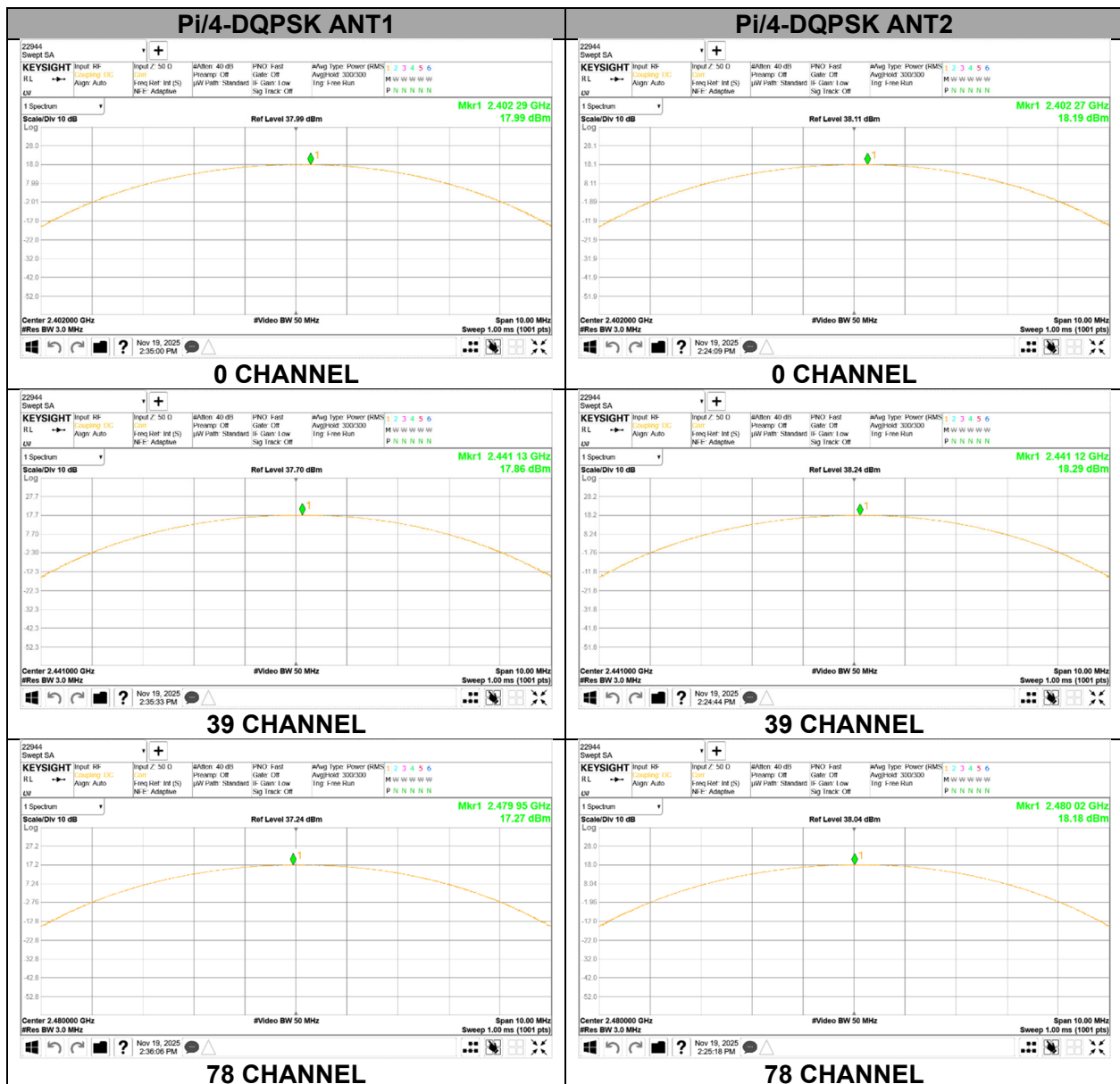
9.6.2. ENHANCED DATA RATE 8DPSK MODULATION (DUAL)

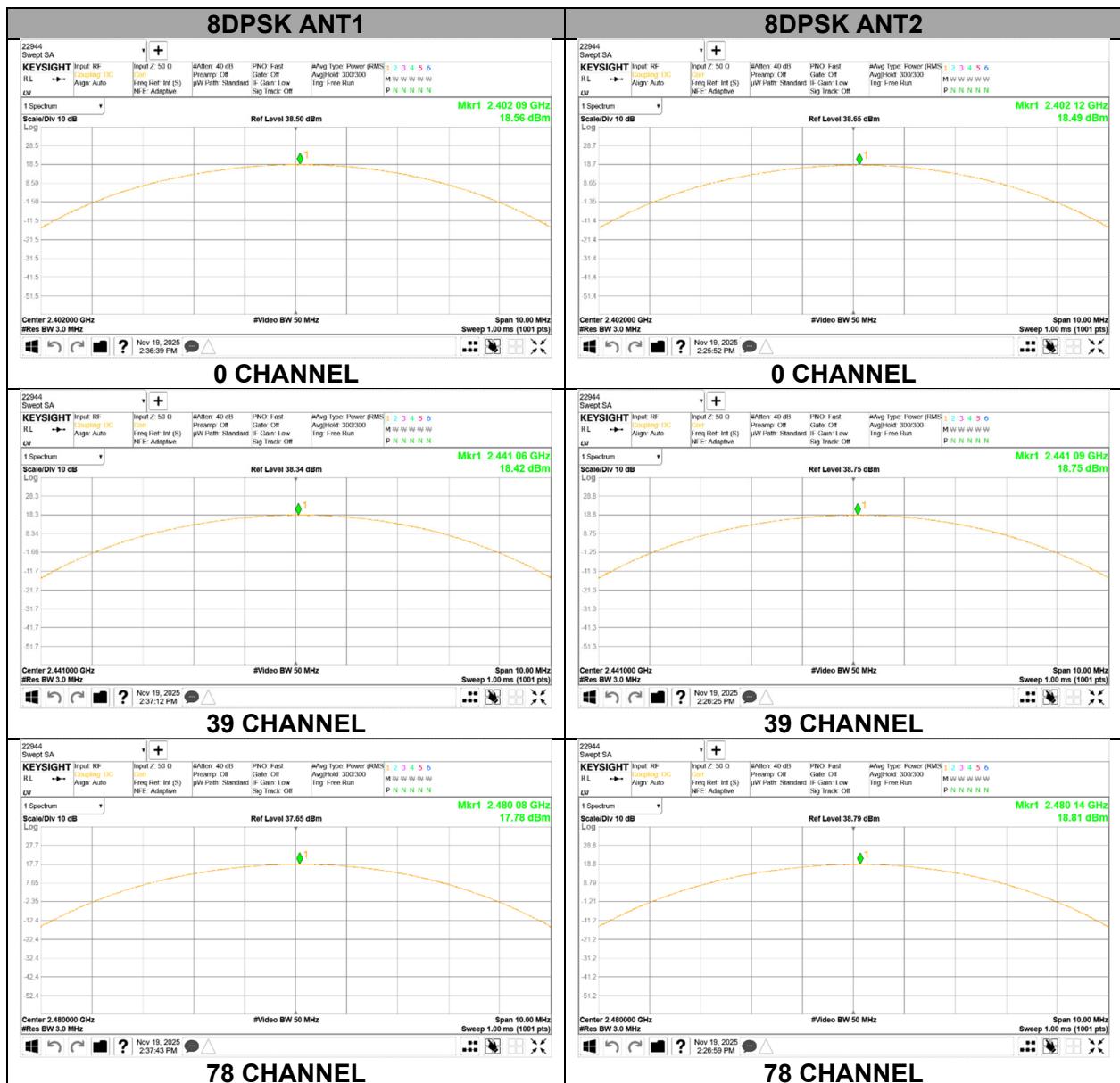
Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
DUAL ANT1	0	2 402	13.30	21.00	
	39	2 441	13.10		
	78	2 480	13.67		
DUAL ANT2	0	2 402	12.77		
	39	2 441	12.41		
	78	2 480	12.19		
DUAL ANT1+2	0	2 402	16.05		-4.95
	39	2 441	15.78		-5.22
	78	2 480	16.00		-5.00
Worst			16.05		-4.95

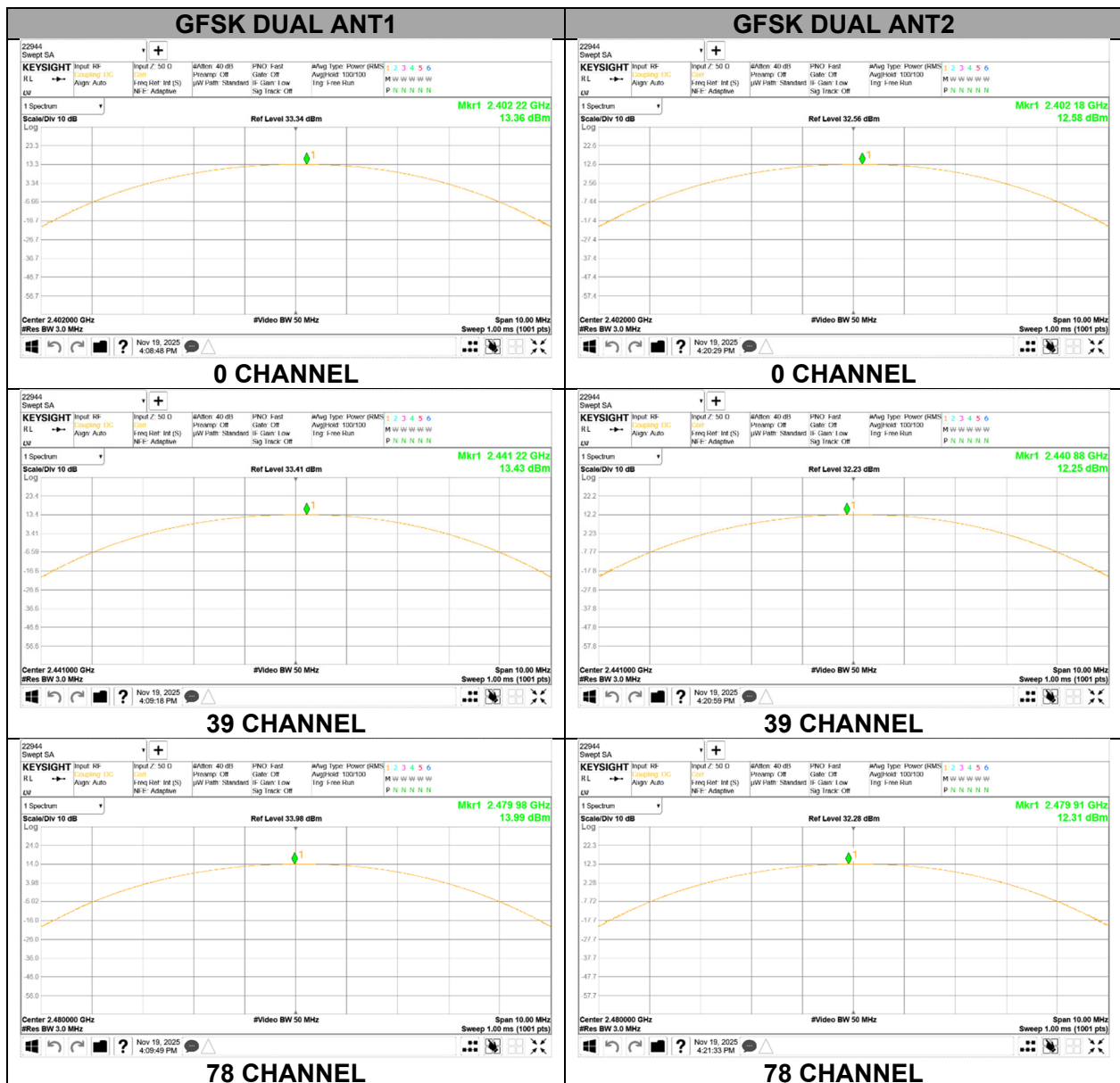
9.6.3. OUTPUT POWER PLOTS

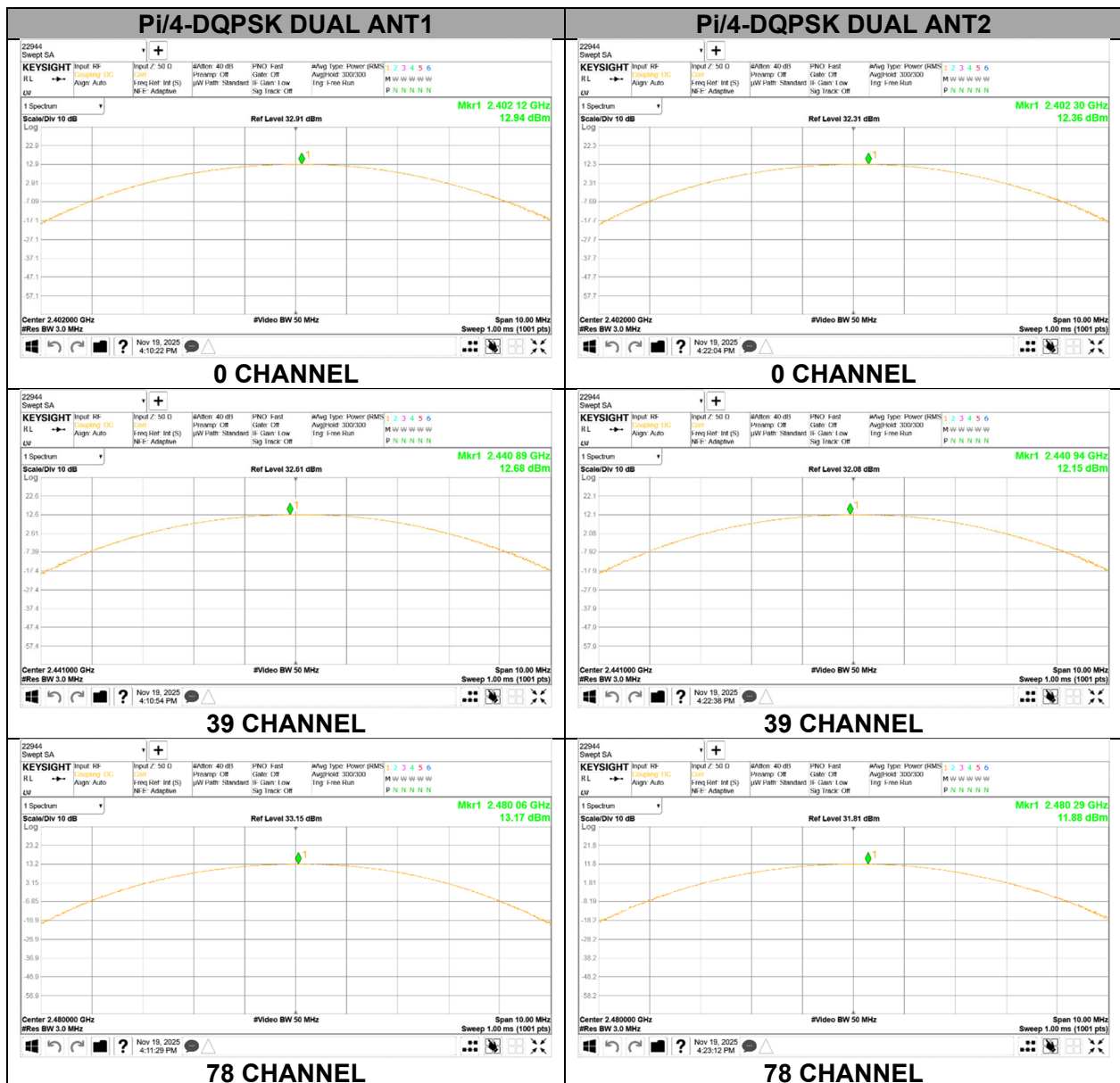
PEAK OUTPUT POWER

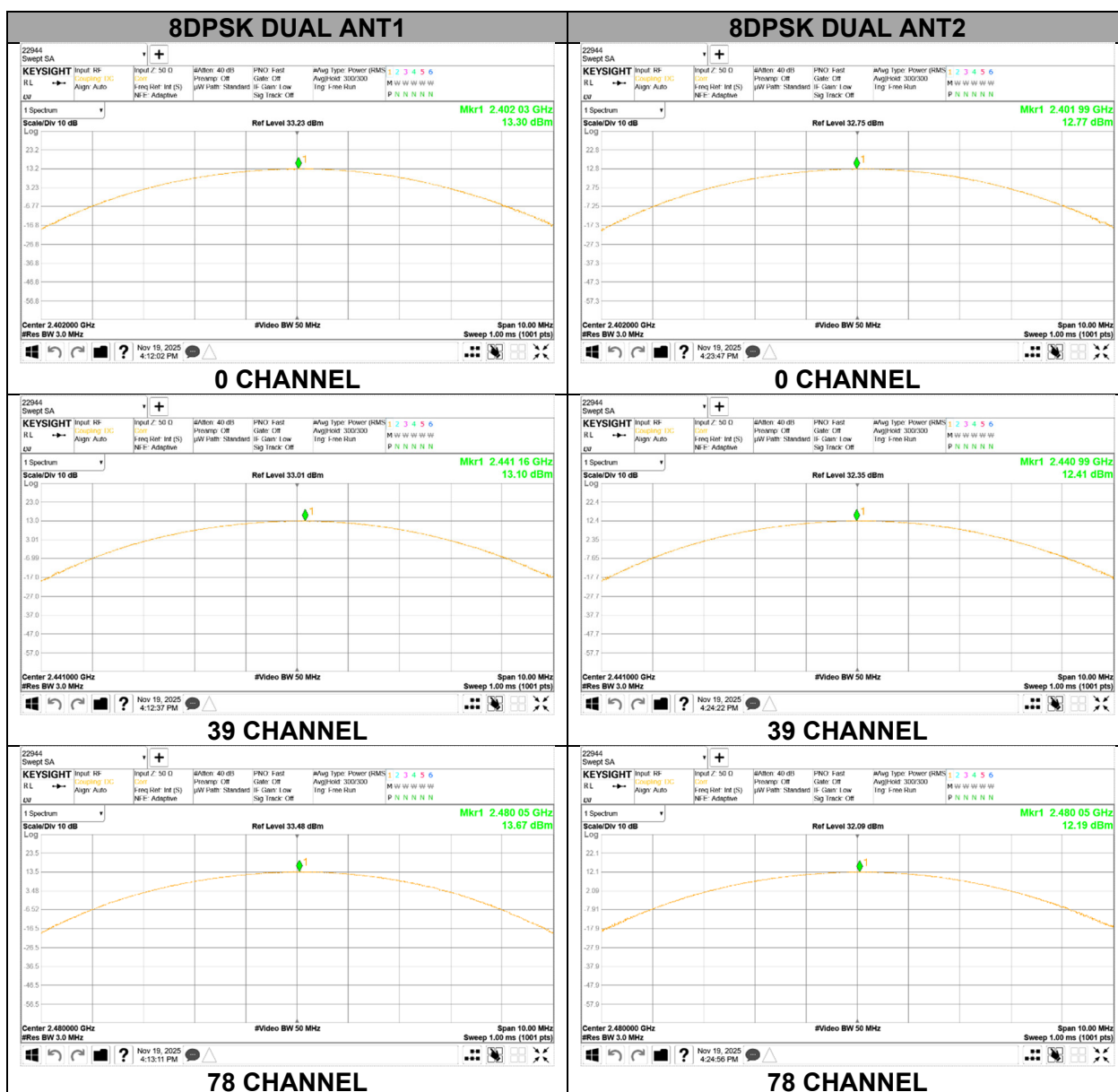












9.7. AVERAGE POWER

LIMITS

None; for reporting purposes only

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.
The cable assembly insertion loss was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

9.7.1. BASIC DATA RATE GFSK MODULATION

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
ANT1	0	2 402	17.942	62.259
	39	2 441	17.674	58.533
	78	2 480	17.265	53.272
ANT2	0	2 402	17.952	62.402
	39	2 441	18.162	65.494
	78	2 480	18.220	66.374

9.7.2. ENHANCED DATA RATE PI/4-DQPSK MODULATION

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
ANT1	0	2 402	15.376	34.483
	39	2 441	15.199	33.105
	78	2 480	14.681	29.383
ANT2	0	2 402	15.414	34.786
	39	2 441	15.549	35.884
	78	2 480	15.598	36.291

9.7.3. ENHANCED DATA RATE 8DPSK MODULATION

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
ANT1	0	2 402	15.432	34.930
	39	2 441	15.239	33.412
	78	2 480	14.698	29.499
ANT2	0	2 402	15.435	34.954
	39	2 441	15.614	36.425
	78	2 480	15.724	37.359

9.7.4. BASIC DATA RATE GFSK MODULATION(DUAL)

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
DUAL ANT1	0	2 402	13.222	
	39	2 441	13.281	
	78	2 480	13.838	
DUAL ANT2	0	2 402	12.424	
	39	2 441	12.092	
	78	2 480	12.134	
DUAL ANT1+2	0	2 402	15.852	38.473
	39	2 441	15.737	37.475
	78	2 480	16.079	40.545

9.7.5. ENHANCED DATA RATE PI/4-DQPSK MODULATION(DUAL)

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
DUAL ANT1	0	2 402	10.488	
	39	2 441	10.333	
	78	2 480	10.305	
DUAL ANT2	0	2 402	9.780	
	39	2 441	9.777	
	78	2 480	9.676	
DUAL ANT1+2	0	2 402	13.158	20.694
	39	2 441	13.074	20.296
	78	2 480	13.012	20.008

9.7.6. ENHANCED DATA RATE 8DPSK MODULATION(DUAL)

Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
DUAL ANT1	0	2 402	10.526	
	39	2 441	10.361	
	78	2 480	10.327	
DUAL ANT2	0	2 402	9.799	
	39	2 441	9.795	
	78	2 480	9.704	
DUAL ANT1+2	0	2 402	13.188	20.836
	39	2 441	13.097	20.405
	78	2 480	13.037	20.124

9.8. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

Limit = -20 dBc

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The band-edges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS