

Tel: +886 2 26099301 Fax: +886 2 26099303

A.4 TIME OF OCCUPANCY

Test Date	2024/10/14~17	Temp./Hum.	23°C/58~61%
Cable Loss	0.90 dB	Tostad Dv	Drien Heigh
Test Voltage	DC 6V (Via Battery)	Tested By	Brian Hsieh

A.4.1 Time of Occupancy

Mode	Centre Frequency (MHz)	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
FASSTest (ANT A)	2405.376	3	1.500	20.700	<400
	2439.168	3	1.500	20.700	<400
	2472.960	3	1.500	20.700	<400

Observation Period:

23 channels* 0.4 seconds= 9.2 seconds

Centre Frequency: 2405.376MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)

Centre Frequency: 2439.168MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)

Centre Frequency: 2472.960MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)

Mode	Centre Frequency (MHz)	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
T. 4 C.C.T.	2405.376	3	1.500	20.700	<400
FASSTest	2439.168	3	1.500	20.700	<400
(ANT B)	2472.960	3	1.500	20.700	<400

Observation Period:

23 channels* 0.4 seconds= 9.2 seconds

Centre Frequency: 2405.376MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)

Centre Frequency: 2439.168MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)

Centre Frequency: 2472.960MHz

For each second of 3 transmission appearance, the longest time of occupancy is

3 channels* 9.2 /2* 1.500 ms= 20.700 ms (<400ms)



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Mode	Centre Frequency (MHz)	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
T FIIGG	2407.50	1	1.400	17.3600	<400
T-FHSS (ANT A)	2437.50	1	1.400	17.3600	<400
(ANT A)	2467.50	1	1.400	17.3600	<400

Observation Period:

31 channels* 0.4 seconds= 12.4 seconds

Centre Frequency: 2407.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.4000 ms= 17.3600 ms (<400ms)

Centre Frequency: 2437.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.4000 ms= 17.3600 ms (<400ms)

Centre Frequency: 2467.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.4000 ms= 17.3600 ms (<400ms)

Mode	Centre Frequency (MHz)	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
T. FINGS	2407.50	1	1.500	18.6000	<400
T-FHSS	2437.50	1	1.500	18.6000	<400
(ANT B)	2467.50	1	1.500	18.6000	<400

Observation Period:

31 channels* 0.4 seconds= 12.4 seconds

Centre Frequency: 2407.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.5000 ms= 18.6000 ms (<400ms)

Centre Frequency: 2437.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.5000 ms= 18.6000 ms (<400ms)

Centre Frequency: 2467.50MHz

For each second of 1 transmission appearance, the longest time of occupancy is

1 channels* 12.4 /1* 1.5000 ms= 18.6000 ms (<400ms)

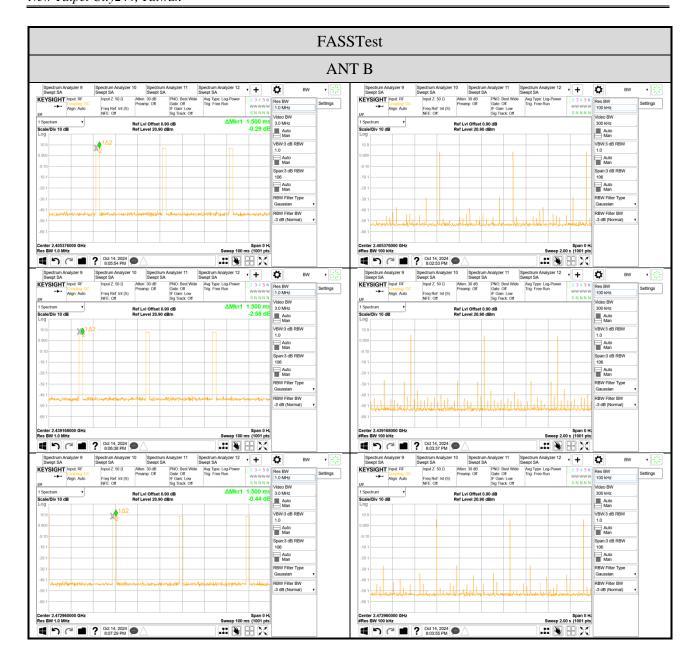


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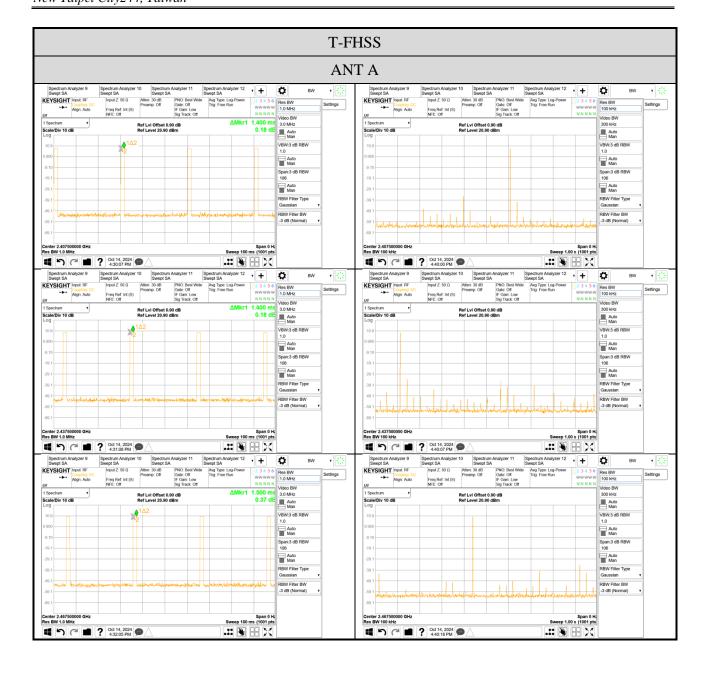
A.4.2 Measurement Plots



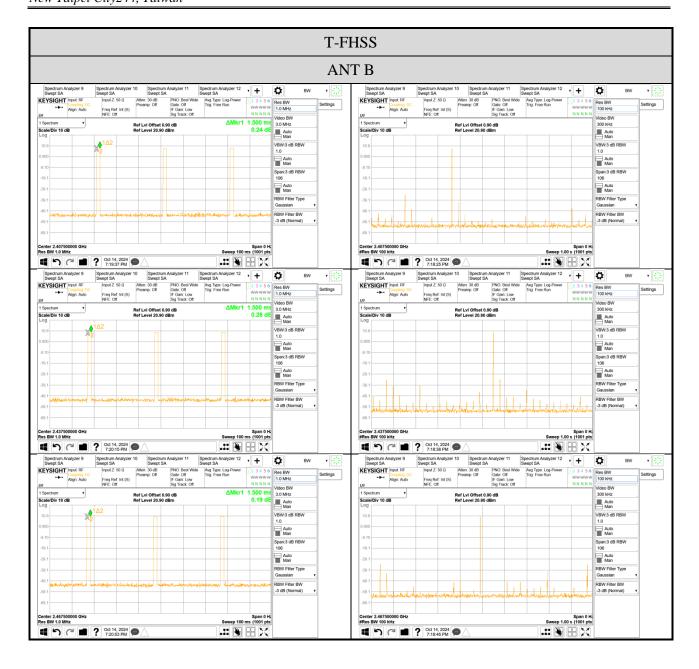








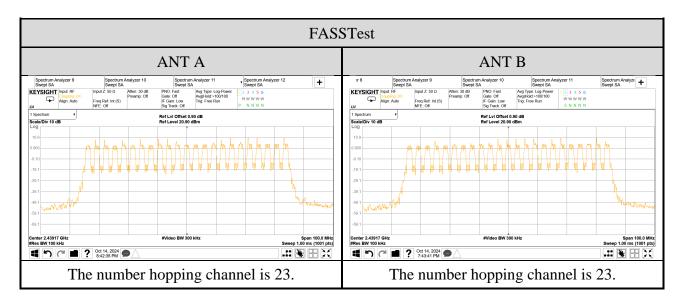


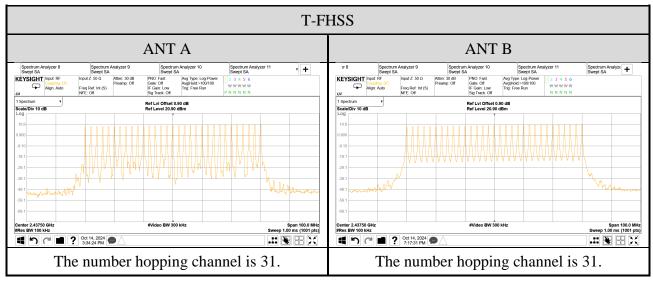




A.5 NUMBER OF HOPPING CHANNELS

Test Date	2024/10/14	Temp./Hum.	24°C/54%
Cable Loss	0.90 dB	Tastad Dv	Deign Heigh
Test Voltage	DC 6V (Via Battery)	Tested By	Brian Hsieh







A.6 MAXIMUM PEAK OUTPUT POWER

Test Date	2024/10/14	Temp./Hum.	24°C/54%
Cable Loss	0.90 dB	Tastad Dv	Drien Heigh
Test Voltage	DC 6V (Via Battery)	Tested By	Brian Hsieh

A.6.1 Maximum Peak Output Power

Mode	Centre Frequency Peak		t Power	Limit
Mode	(MHz)	dBm	W	Lillill
T. A. G. G. T.	2405.376	8.50	0.007	
FASSTest (ANT A)	2439.168	9.68	0.009	
	2472.960	10.49	0.011	21dDm (0.125W)
T. A. G. G. T.	2405.376	8.65	0.007	21dBm (0.125W)
FASSTest (ANT B)	2439.168	9.71	0.009	
(71111 D)	2472.960	10.40	0.011	

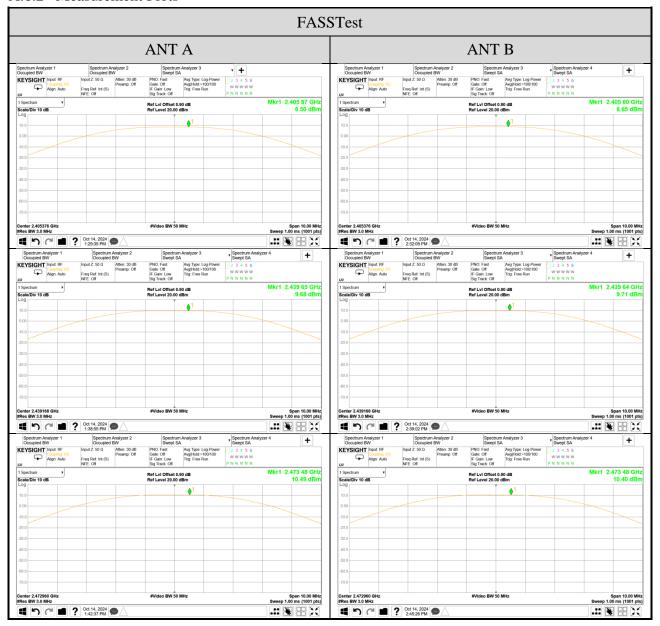
Mode	Centre Frequency	Peak Outpu	Limit	
Mode	(MHz)	dBm	W	LIIIII
T FILOG	2407.500	8.53	0.007	
T-FHSS (ANT A)	2437.500	9.63	0.009	
(/11/1//	2467.500	10.40	0.011	21dBm (0.125W)
T FILOG	2407.500	8.66	0.007	21dbiii (0.123 W)
T-FHSS (ANT B)	2437.500	9.62	0.009	
(III II)	2467.500	10.29	0.011	



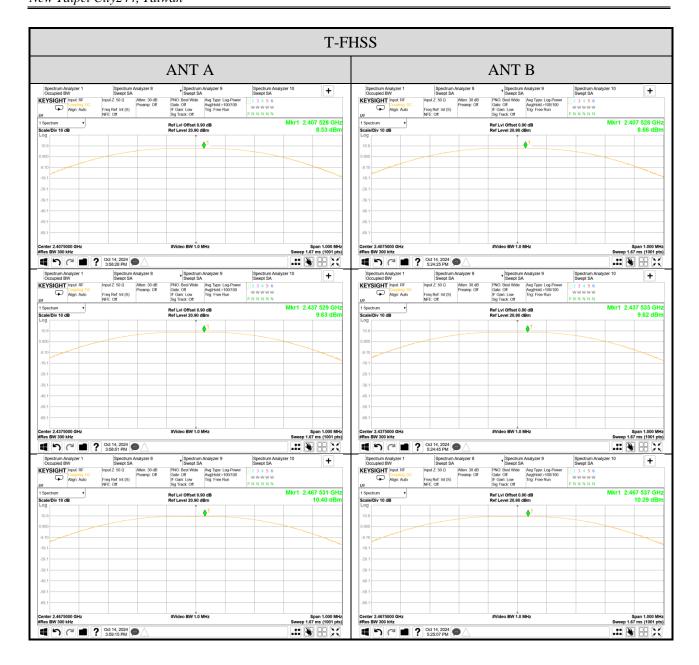
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A.6.2 Measurement Plots









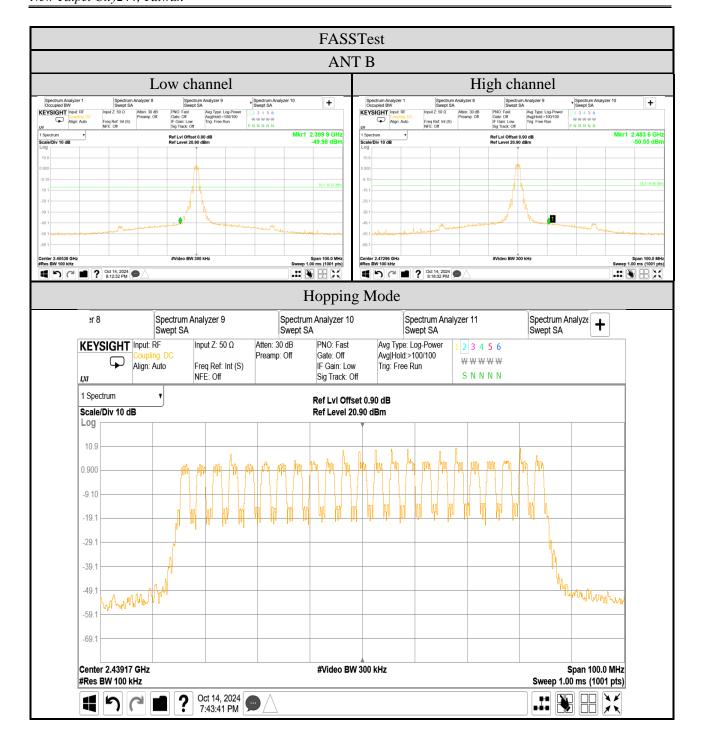
A.7 EMISSION LIMITATIONS MEASUREMENT

Test Date	2024/10/14	Temp./Hum.	24°C/54%
Cable Loss	0.90 dB	Tastad Dy	Drien Heigh
Test Voltage	DC 6V (Via Battery)	Tested By	Brian Hsieh

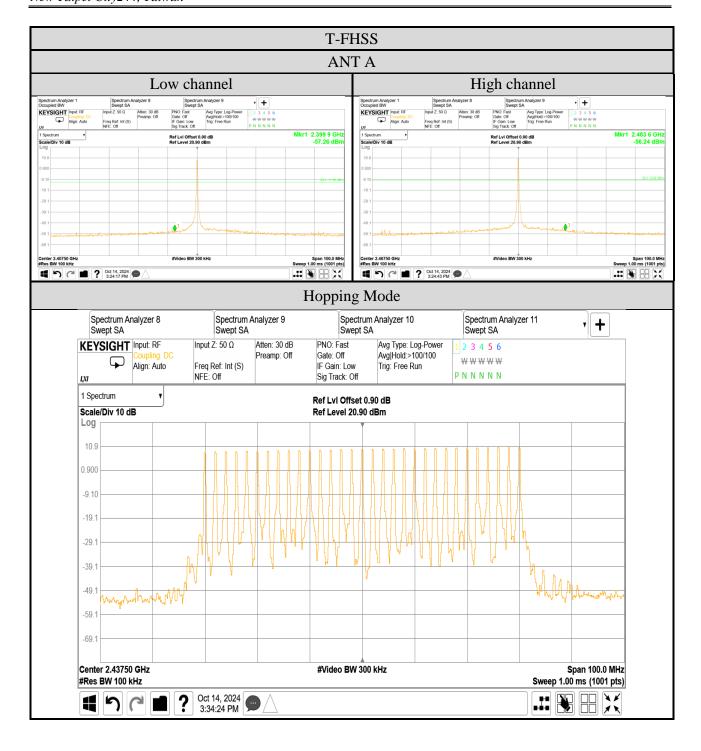
A.7.1 Band Edge













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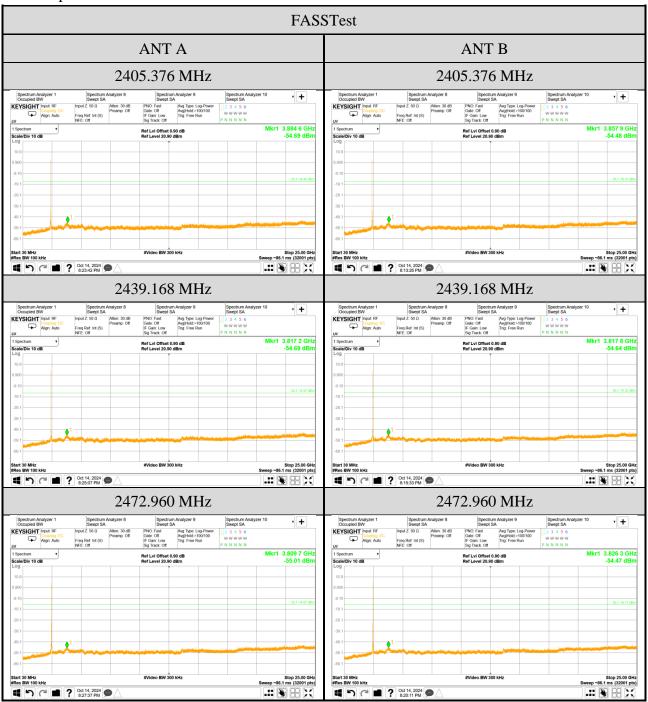
T-FHSS ANT B Low channel High channel Spectrum Analyzer 8 Swept SA Input Z: 50 Ω Atten: 30 Spectrum Analyzer 10 Swept SA Spectrum Analyzer 8 Swept SA Input Z: 50 Ω Atten: 30 e Spectrum Analyzer 10 Swept SA + KEYSIGHT Input RF KEYSIGHT Input RF PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Avg Type: Log-Pow Avg|Hold:>100/100 Trig: Free Run PNO: Fast Gate: Off IF Gain: Low Sig Track: Off Avg Type: Log-Pow Avg|Hold:>100/100 Trig: Free Run Coupling: D Align: Auto Freq Ref: Int (S) NFE: Off Mkr1 2.399 9 GH: -56,96 dBn Mkr1 2.483 6 GHz -55.58 dBm 1 Spectrum Scale/Div 10 dB Ref Lvi Offset 0.90 dB Ref Level 20.90 dBm Ref Lvi Offset 0.90 dB Ref Level 20.90 dBm Scale/Div 10 dB Span 100.0 MHz Sweep 1.00 ms (1001 pts) #Video BW 300 kHz #Video BW 300 kHz (14, 2024) S:25:43 PM 1 9 C 1 ? Oct 14, 2024 9 Hopping Mode Spectrum Analyzer 9 Spectrum Analyzer 10 Spectrum Analyzer 11 Spectrum Analyze Swept SA Swept SA Swept SA KEYSIGHT Input: RF Input Z: 50 Ω Atten: 30 dB PNO: Fast Avg Type: Log-Power 2 3 4 5 6 Avg|Hold:>100/100 Preamp: Off Gate: Off $\forall\forall\forall\forall\forall$ Align: Auto Freq Ref: Int (S) IF Gain: Low Trig: Free Run NFE: Off $N\ N\ N\ N\ N$ Sig Track: Off ĻΧI 1 Spectrum Ref LvI Offset 0.90 dB Scale/Div 10 dB Ref Level 20.90 dBm Log 10.9 0.900 -9 10 -19. -29. -39. -49 4 -59 -69.1 Center 2.43750 GHz #Video BW 300 kHz Span 100.0 MHz #Res BW 100 kHz Sweep 1.00 ms (1001 pts)

Oct 14, 2024 7:17:31 PM



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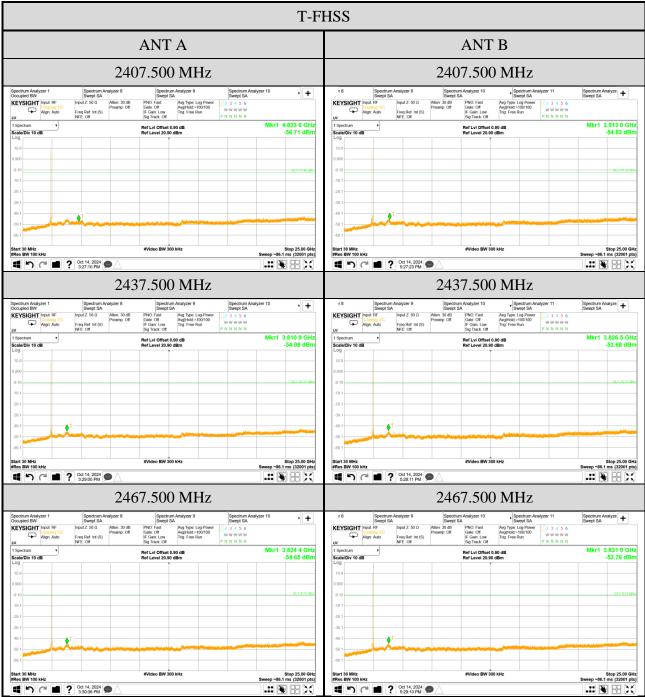
A.7.2 Spurious Emission



Note: All results have been included cable loss.



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Note: All results have been included cable loss.



A.8 DTS/Occupied Bandwidth

Test Date	2024/10/14	Temp./Hum.	24°C/54%
Cable Loss	0.90 dB	Tastad Dv	Drian Haich
Test Voltage	DC 6V (Via Battery)	Tested By	Brian Hsieh

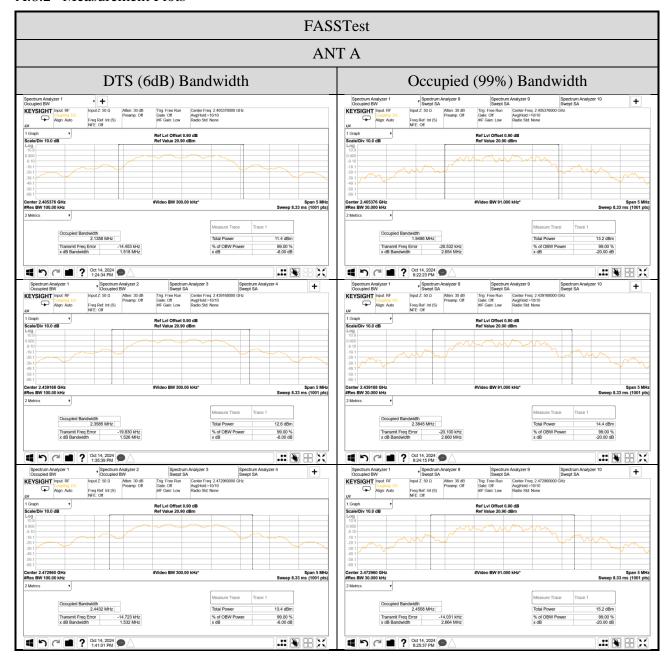
A.8.1 DTS/Occupied Bandwidth Result

Mode	Centre Frequency (MHz)	DTS (6dB) Bandwidth (MHz)	Occupied (99%) Bandwidth (MHz)	Limit
	2405.376	1.518	1.9486	
FASSTest (ANT A)	2439.168	1.526	2.3845	>500kHz
(11111)	2472.960	1.532	2.4558	
	2405.376	1.515	2.0721	
FASSTest (ANT B)	2439.168	1.522	2.3948	>500kHz
	2472.960	1.533	2.4643	

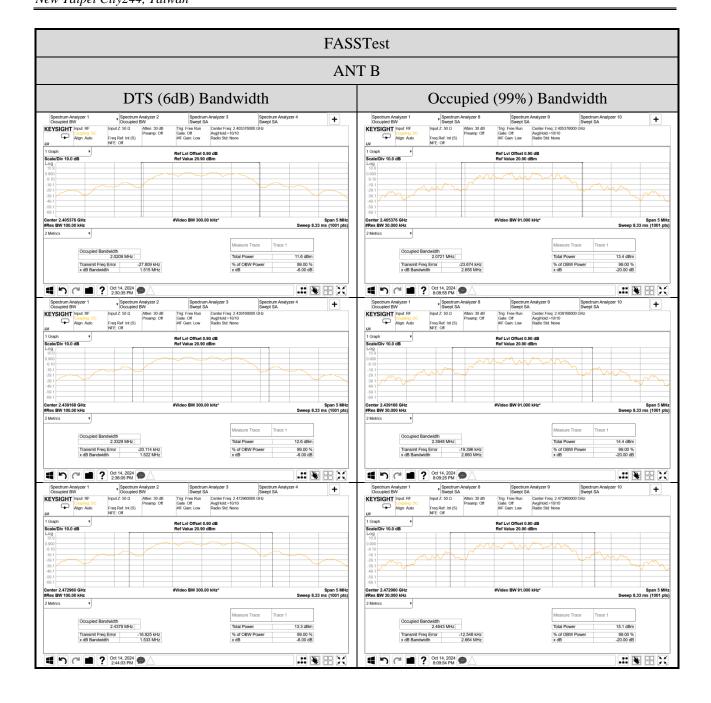


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A.8.2 Measurement Plots









A.9 POWER SPECTRAL DENSITY

Test Date	2024/10/14	Temp./Hum.	24°C/54%
Cable Loss	0.90 dB	Tooted Dy	Drien Heigh
Test Voltage	DC 6V (Via Battery)	Tested By Brian Hsieh	

A.9.1 Power Spectral Density Result

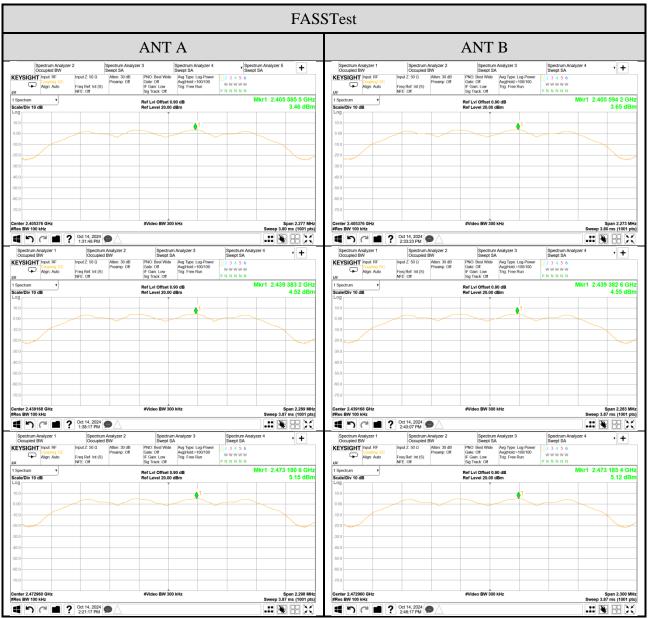
Mode	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit	
T-FHSS (ANT A)	2405.376	3.46		
	2439.168	4.52	<8 dBm/3kHz	
	2472.960	5.15		
T-FHSS (ANT B)	2405.376	3.65		
	2439.168	4.55	<8 dBm/3kHz	
	2472.960	5.12		

Note: According to FCC announcement KDB558074 D01V04, and the resolution bandwidth is measured at 100kHz, the test results are stricter than 3kHz.



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A.9.2 Measurement Plots



Note: All results have been included cable loss.