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Report No.: TMTN2312001599NR 8.5 NUMBER OF HOPPING FREQUENCY USED

LIMITS

RSS-247 Section 5.1 (d) Frequency hopping systems operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels.

TEST SETUP



TEST PROCEDURE

- 1. Check the calibration of the measuring instrument (spectrum analyzer) using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT as shown in test setup without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
- 3. Set the spectrum analyzer on MaxHold Mode, and then keep the EUT in hopping mode. Record all the signals from each channel until each one has been recorded.
- 4. Set the spectrum analyzer on View mode and then plot the result on spectrum analyzer screen.
- 5. Repeat above procedures until all frequencies measured were complete.



TEST RESULTS

Model Name	AT-LP70XBT	Test By	Peter Chu
Temp & Humidity	22.5°C, 45%	Test Date	2023/12/27

Modulation Type: GFSK / DH5

Result(No.of CH)	Limit(No.of CH)	Result
79	>15	PASS

Modulation Type: 8-DPSK / 3-DH5

Result(No.of CH)	Limit(No.of CH)	Result
79	>15	PASS



NUMBER OF HOPPING FREQUENCY USED



							8-DP	SK					
🊺 Ke	eysight Sp	ectrum A	nalyzer - Swe	pt SA									
sta	rt Fre	RF q 2.4	50 Ω	000 GHz			ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	12:39:18 Al TRAC	M Jan 03, 2 E 1 2 3 4	024	Frequency
				PI	NO: Fast 🕞 Gain:Low	#Atten: 2	e Run 0 dB	Avg Hold	:>10/10	DE		N N	
10 di	B/div	Ref Ref	Offset 11. 21.40 d	4 dB Bm					Mkr1 2	2.463 120 1.9-	6 0 G 48 dE	Hz 3m	Auto Tune
Log 11.4													Center Freq 2.441750000 GHz
1.40 -8.60	<u> </u>	ww.	YYYYYYY	YYWYYY	VhavaVVh	www.	www.yy	WWWYY	1- 447479999	WWWW	ww		Start Freq 2.400000000 GHz
-18.6													Stop Freq 2.483500000 GHz
-38.6	Ņ												CF Step 2.40200000 GHz Auto <u>Man</u>
-58.6												ĬĻ,	Freq Offset 0 Hz
-68.6												_	
Star #Re	t 2.40 s BW	0000 (100	GHz (Hz		#VBW	300 kHz		!	Sweep	Stop 2.48 8.000 ms (8350 G 1001 p	iHz ots)	
MSG									STATU	IS			



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8.6 DWELL TIME ON EACH CHANNEL

LIMITS

RSS-247 Section 5.1 (d) For frequency hopping systems operating in the band 2400-2483.5 MHz. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST SETUP



TEST PROCEDURE

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT as shown in test setup without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
- 3. Adjust the center frequency of spectrum analyzer on any frequency be measured and set spectrum analyzer to zero span mode. And then, set RBW and VBW of spectrum analyzer to proper value.
- 4. Measure the time duration of one transmission on the measured frequency. And then plot the result with time difference of this time duration.
- 5. Repeat above procedures until all frequencies measured were complete.
- 6. The EUT has 3 type of payload, DH1, DH3, DH5. The hopping rate is 1600 per second. The longer the payload is, the slower the hopping rate is.



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TEST RESULTS

Time of occupancy on the TX channel in 31.6sec = time domain slot length × hop rate ÷ number of hop per channel × 31.6

Refer to the attached graph.

The hopping rates of Bluetooth devices change with different types of payload. The longer the payload is, the slower the hopping rate. The hopping rate scenario is defined in Bluetooth core specification.

Model Name	AT-LP70XBT	Test By	Peter Chu
Temp & Humidity	22.5°C, 45%	Test Date	2023/12/27

Modulation Type: GFSK / DH5

Packet type	Dwell time (ms)	Time of occupancy on the TX channel in 31.6sec (ms)	Limit for Time of occupancy on the TX channel in 31.6sec (ms)	Result
DH1	0.400	128.00	400	PASS
DH3	1.665	266.40	400	PASS
DH5	2.900	309.33	400	PASS
AFH	2.900	154.67	400	PASS
	Packet type DH1 DH3 DH5 AFH	Packet type Dwell time (ms) DH1 0.400 DH3 1.665 DH5 2.900 AFH 2.900	Packet typeDwell time (ms)Time of occupancy on the TX channel in 31.6sec (ms)DH10.400128.00DH31.665266.40DH52.900309.33AFH2.900154.67	Packet typeDwell time on the TX channel in 31.6sec (ms)Limit for Time of occupancy on the TX channel in 31.6sec (ms)DH10.400128.00400DH31.665266.40400DH52.900309.33400AFH2.900154.67400

DH1 Dwell tine=0.400 ms×(1600÷2)÷79×31.6=128.00(ms)DH3 Dwell tine=1.665 ms×(1600÷4)÷79×31.6=266.40(ms)DH5 Dwell tine=2.900 ms×(1600÷6)÷79×31.6=309.33(ms)AFH Dwell tine=2.900 ms×(800÷6)÷20×8=154.67(ms)

Modulation Type: 8-DPSK / 3-DH5

Transmitting Frequency	Packet type	Dwell time (ms)	Time of occupancy on the TX channel in 31.6sec (ms)	Limit for Time of occupancy on the TX channel in 31.6sec (ms)	Results
2441MHz	3DH1	0.400	128.00	400	PASS
2441MHz	3DH3	1.665	266.40	400	PASS
2441MHz	3DH5	2.900	309.33	400	PASS
2441MHz	AFH	2.900	154.67	400	PASS
3DH1 Dwell tine=	0.400 ms	×(1600÷2)÷79×3	31.6= 128.00 (ms)		
3DH3 Dwell tine=	1.665 ms	×(1600÷4)÷79×3	31.6= 266.40 (ms)		
3DH5 Dwell tine=	2.900 ms	×(1600÷6)÷79×3	31.6= 309.33 (ms)		

AFH Dwell tine= 2.900 ms×(800÷6)÷20×8= 154.67 (ms)



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Report No.: TMTN2312001599NR DWELL TIME ON EACH PAYLOAD

					DI	H1	Cŀ	H Low	/ (G	FSK))			
🊺 Ke	ysight Spect	rum Analyze	r - Swept SA											
Cen	ter Fre	RF a 2.40	50 Ω DC 2000000) GHz			SEN	NSE:INT	#Avg Ty	pe: RMS	11:07:33 TR	PM Jan ACE 1	23456	Frequency
				PNO:	Fast ↔	Trig	g: Free	eRun 0dB			т	YPE W DET P	PANN	+ N
				IFGain	LOW		.tem. 2	0.00			AMkr1	100	0.00	Auto Tune
10 di	Bidiu	Ref Offse Pef 21/	t11.4 dB									55.0	06 dB	
Log												_		
														Center Freq
11.4						-								2.402000000 GHz
4.40							▲ ^{1∆}	2						
1.40			·]		ſ	-	1							Start Freq
9.60														2.402000000 GHz
0.00														
-18.6														04-11 F-11
-28.6							_						_	2.40200000 6H2
-38.6							-							2 40200000 GHz
														Auto <u>Man</u>
-48.6	<u> </u>	a.l.	<u> </u>			-	- I.			1 L . 1				
	INN	W 14	- Ma	1, 40,4104	WWW	2	WW	Muchaer	Alway	WWWW	William Hand		jų k	Freg Offset
-58.6	4 1 11.4	.	1.1	No. 1. 1 of	111	1	-111	The full lite	1.1	1 1 1 1 1			•	0 Hz
60 G														
-68.6														1
Cen	ter 2.40	200000	0 GHz									Spa	n 0 Hz	
Res	BW 1.0) MHz			#VBV	N 3.0	MHz			Sweep 5	6.000 ms	(10	01 pts)	
MSG										STATU	5			
					пп	1 (л Г	Midd		2 2 2 2				
					DH	1 C	ЭН	Midd	le ((GFSK	()			
🎉 Kej	ysight Spect	rum Analyzer	r - Swept SA		DH	1 C	H	Midd	le ((GFSK	()		00.0004	
📜 Кеј И	ysight Spect ⊤ Iter Fre	rum Analyze RF	r - Swept SA 50 Ω DC 1000000) GHz	DH	1 C	CH SEM		le ((GFSK	11:08:32 TR	PM Jar	1 02, 2024 2 3 4 5 6	5 Frequency
الله الله الله الله الله الله الله الله	ysight Spect ⊤ Iter Fre	rum Analyzer RF 2q 2.44	r - Swept SA 50 Ω DC 1000000) GHz	DH Fast ↔		SEN SEN		le ((#Avg Ty	GFSK Align Auto pe: RMS	11:08:32 TRI T	PM Jar ACE 1 YPE W DET P	1 02, 2024 2 3 4 5 6 WMWWW P A N N 1	Frequency
الله الله الله الله الله الله الله الله	ysight Spect ⊤ Iter Fre	rum Analyzer RF 2q 2.44	r - Swept SA 50 Ω DC 1000000) GHz PNO: IFGain	DH Fast ↔	1 C	SEM SEM g: Free tten: 2		le ((#Avg Ty	ALIGN AUTO PPE: RMS	() 11:08:32 TR T T T	PM Jar ACE 1 YPE W DET P	1 02, 2024 2 3 4 5 6 WMWWW P A N N 1	Frequency Auto Tune
Me Me Cen	ysight Spect T	RF q 2.44	r - Swept SA 50 Ω DC 1000000) GHz PNO: IFGain	DH Fast ↔	Trig #At	SEM g: Free ten: 2		le ((#Avg Ty	ALIGN AUTO pe: RMS	11:08:32 TR T ΔMkr1	PM Jar ACE 1 YPE W DET P 400 54.6	102, 2024 2 3 4 5 (WMWW P A N N I D.0 µS 63 dB	Frequency Auto Tune
₩ Ke W Cen	ysight Spect ⊤ ter Fre B/div	Ref Offse Ref 21.4	r - Swept SA 50 Ω DC 10000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast ↔	Trig #At	SEN g: Free ten: 2		le ((#Avg Ty	ALIGN AUTO pe: RMS	11:08:32 TR T ΔMkr1	PM Jar ACE 1 YPE W DET P 400 54.0	102, 2024 2 3 4 5 б ум жим Р А N N I 2 .0 µs 63 dB	Frequency Auto Tune
M Cen 10 dE Log	ysight Spect ⊤ ter Fre B/div	rum Analyzer RF 2q 2.44 Ref Offse Ref 21.4	r - Swept SA 50 Ω DC 10000000 et 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast ↔	Trig #At	SEN g: Free ten: 2	Midd	le ((#Avg Ty	ALIGN AUTO pe: RMS	11:08:32 Τπ Τ ΔMkr1	PM Jar ACE 1 YPE W DET P 400 54.0	02,2024 2345 WMWWW PANNI 0.0 µs 63 dB	Frequency Auto Tune Center Freq
10 dE Log	ysight Spect T ter Fre	rum Analyzee RF cq 2.44 Ref Offse Ref 21.4	r-Swept SA 50 Ω DC 10000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast ↔	Trig #At	SEN 3: Free ten: 20		Ie ((#Avg Ty	ALIGN AUTO pe: RMS	□11:08:32 TR T ΔMkr1	РМ Јаг АСЕ 1 УРЕ W DET P 400 54.0	102,2024 2 3 4 5 (WHWWW P A N N I D.O µS 63 dB	Frequency Auto Tune Center Freq 2.441000000 GHz
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10 de Log 11.4	ysight Spect T Iter Fre B/div	Ref Offse	r-Swept SA 50 Ω DC 1000000 t 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast →		SEN g: Free ten: 20	Midd	le ((#Avg Ty		11:08:32 TR Τ ΔMkr1	PMJan ACE 1 YPE W DET P 400 54.0	102,2024 2 3 4 5 (P A N N I).0 µs 63 dB	Auto Tune Center Freq 2.44100000 GHz
10 dE Log	ysight Spect T	Ref Offse Ref 21.4	r-Swept SA 50 Ω DC 10000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast →		CH ser g: Free ten: 20	Midd	le ((#Avg Ty		11:08:32 TR T ΔMkr1	РМ Јаг АСЕ 1 УРЕ W DET P 400 54.0	102,2024 2 3 4 5 (ММЖЖМ Р А N N I Р А N N I 9 А N N I 3 d B	Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz
10 db 11.4 1.40	ysight Spect T ter Fre B/div	Ref Offse Ref 21.4	r-Swept SA 50 Ω DC 1000000(ht 11.4 dB 40 dBm) GHz PNO: IFGain	DH Fast → :Low		CH see g: Free ten: 20	Midd ISE:INT 0 dB	le ((ALIGN AUTO pe: RMS	[11:08:32 TR T ΔMkr1	PMJara	102,2024 2 3 4 5 (MMMMM P A NN I P A NN I	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz
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10 df Cen 11.4 1.40 -8.60	sight Spect T	Ref Offse Ref 2.44	r-Swept SA 50 Ω DC 1000000 t 11.4 dB \$0 dBm) GHz PNO: IFGain	DH Fast →		SER g: Free ten: 2 ^μ	Midd	Ie ((ALIGN AUTO pe: RMS	ΔMkr1	PMJan ACE 1 YPE W DET P 4000 54.0	102,2024 2 3 4 5 P A N N I P A N N I D.O µs 63 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq
10 db Cen 11.4 1.40 -8.60	ysight Spect ⊤ Iter Fre B/div	Ref Offse Ref 21.4	r-Swept SA 50 DC 1000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH	Trig #At	SER g: Free ten: 21	Midd	le ((11:08:32 TR T ΔΜKr1	PMJar ACE 1 VPPE W DET P 400 54.0	102,2024 2 3 4 5 7 P A NN1).0 µs 33 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz Stop Freq 2.44100000 GHz
10 dE Log 11.4 -8.60 -28.6	ysight Spect ⊤ Iter Fre B/div	Ref Offse Ref 2.44	r-Swept SA 50 DC 1000000 tt 11.4 dB \$0 dBm) GHz PNO: IFGain	DH		SEN g: Free ten: 21	Midd	Ie ((11:08:32 TR T ΔΜKr1	PM Jara Acce 1 YPE W Det P 400 54.6	102,2024 2.3.4.5.4 P A NN 1 P A NN 1 0.0 µs 3.3 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
₩ ке (X) Сеп 10 dE 11.4 1.40 -8.60 -18.6 -28.6 -38.6	3/div	Ref Offse Ref 2.44	r-Swept SA 50 Ω DC 1000000 t 11.4 dB t0 dBm) GHz PNO: IFGain	DH		SEM g: Free ten: 2	Midd	Ie ((11:09:32 TR T ΔMKr1	PM Jar ACE 1 YPE W DET P 400 54.6	102,2024 2 3 4 5 5 9 A NN 3.0 µs 63 dB	Center Freq Cathology of the second
₩ ке (X) Сеп 11.4 1.40 -8.60 -18.6 -28.6 -38.6	3/div	Ref Offse Ref 21.4	r-Swept SA 50 Ω DC 1000000 40 dBm) GHz PNC: IFGain	DH Fast		SEM 3: Free ten: 21 Δ2	Midd	Ie ((PM Jar ACE 1 YPE W DET P 400 54.0	102,2024 2 3 4 5 7 A NN 3.0 µs 33 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz Auto CF Step 2.40000000 GHz
Ke 3 3 10 df Log 11.4 1.40 -8.60 -18.6 -28.6 -38.6 -38.6 -38.6	3/div	Ref Offse Ref 21.44	r-Swept SA 50 Ω DC 1000000 40 dBm) GHz PNC: IFGain	Past ++		SEM g: Freese ten: 21 Δ2	Midd	Ie ((ΔMKr1	PM Jara	102,2024 23 45 24 P A NN 1 P A NN 1 S3 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man
Ke 2 2 10 df Log 11.4 1.40 -8.60 -18.6 -28.6 -38.6 -38.6	3/div	Ref Offse	r- Swept SA 50 Ω DC 1000000 t 11.4 dB 40 dBm	GHz PNO: IFGain	Past		SEN g: Free ten: 20 Δ2		Ie ((PM Jara ACE 1 VPF W DET P 400 54.0	102,2024 2345,2024 РАЛИ РАЛИ 53 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man
ID df Cen 11.4 1.40 -8.60 -28.6 -38.6 -48.6 -58.6	ysight Spector	Ref Offse Ref 21.4	r- Swept SA 50 Ω DC 1000000 t 11.4 dB 40 dBm	0 GHz PNO: IFGain	DH Fast				Ie ((ΔMkr1	PM Jara	02.2024 2 3 4 5 4 2 4 5 4 5 4 2 4 5 4 5 4 2 4 5 4 5 4 3 6 7 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4	Auto Tune Center Freq 2.44100000 GHz C44100000 GHz C44100000 GHz CF Step 2.40200000 GHz Auto Man Freq Offset
ID df Cen 11.4 1.40 -8.60 -28.6 -38.6 -48.6 -58.6	ysight Spect	Ref Offse Ref 2.44	r-Swept SA 50 Ω DC 1000000 t 11.4 dB 40 dBm	D GHz PNO: IFGain	DH				Ie ((ΔMkr1	PM Jara	02.2024 2 3 4 5 6 2 3 4 5 6 2 3 4 5 6 2 3 4 5 2 4 5 3 4 5 3 6 3 6 3 6 5 3 6 5 5 6 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	Auto Tune Center Freq 2.44100000 GHz C44100000 GHz C44100000 GHz CF Step 2.40200000 GHz Auto Man Freq Offset 0 Hz
200 Kee 200 Cen 10 di 11.4 1.40 -8.60 -18.6 -38.6 -48.6 -48.6 -68.6	Iter Fre	Ref Offse Ref 2.44	- Swept SA 50 Ω DC 1000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH				Ie ((ΔMkr1		02.2024 2 3 4 5 6 2 3 4 5 6 2 3 4 5 6 2 3 4 5 0 0 µs 63 d B	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.40200000 GHz Auto Man Freq Offset 0 Hz
200 Kee 200 Cen 10 di 11.4 1.40 -8.60 -18.6 -38.6 -48.6 -58.6 -68.6	ysight Spect	Ref Offse Ref 2.44	r- Swept SA 50 Ω DC 10000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH				Ie ((02.2024 2 3 4 5 6 2 3 4 5 6 2 3 4 5 6 2 3 4 5 0 4 14 0 4 14 14 14 14 14 14 14 14 14 14 14 14 14 1	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz Auto Tune Freq Offset 0 Hz
20 de 11.4 1.40 -8.60 -38.6 -38.6 -48.6 -68.6 -68.6 Cen	ysight Spect	Ref Offse Ref 2.44	r- Swept SA 50 pc 10000000 tt 11.4 dB 40 dBm) GHz PNO: IFGain	DH				Ie ((11:09:32 TR T ΔΜKr1		102,2024 2.3 4 5 ANN P A NN P A NN 33 d B	Frequency Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz Auto Tune CF Step 2.40200000 GHz Auto Man Freq Offset 0 Hz
Kee Cen	3/div	Ref Offse Ref 2.44	r- Swept SA 50 pc 10000000 it 11.4 dB 40 dBm) GHz PNO: IFGain					Ie ((Sweep 5	()	PM Jard	102, 2024 2.3.4.5 P A NNT P A NNT 3.3 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz 2.441000000 GHz Auto Tune CF Step 2.402000000 GHz Auto Man Freq Offset 0 Hz



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	DH1 CH High (GFSK)												
🊺 Ke	ysight Spe	ectrum Analyzer	r - Swept SA										
₩ Cen	ter F	RF req 2.48	50 Ω DC 000000 G	iHz		SEN	ISE:INT	#Avg Typ	ALIGN AUTO e: RMS	11:09:34 PI TRAC	4 Jan 02, 2024 E 1 2 3 4 5 6	Frequency	
				PNO: Fast FGain:Low	-+-	#Atten: 20	Run dB			DE	PPANNN		
10 di	Ref Offset 11.4 dB ΔMkr1 400.0 μs 10 dB/div Ref 21.40 dBm 55.29 dB												
Log												Center Fred	
11.4				_								2.480000000 GHz	
					∎1Ż	12							
1.40					T		-					Start Freq	
-8.60				_								2.48000000 GHz	
-18.6					+							Stop Freq	
-28.6												2.480000000 GHz	
												CE Stop	
-38.6												2.402000000 GHz	
-48.6												Auto <u>Man</u>	
-58.6	vellijye	hh	when	2	γų	ud holophyl	νľψ	MANA	nut ri Manata	Ŵ	and the second	Freq Offset 0 Hz	
-08.6													
Cen	ter 2	1800000	0 GHz								nan () Hz		
Res	BW 1	.0 MHz	o Griz	#V	вw	3.0 MHz		:	Sweep 5.	د) 000 ms.	1001 pts)		
MSG									STATUS				



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	DH3 CH Low (GFSK)												
Var		Applycer St	SA				• /						
XI XI	/signt spect	RF 50 S	2 DC		SENSE:INT	ALIGN AU	JTO 11:18:17 F	M Jan 02, 2024					
Cent	ter Fre	q 2.4020	00000 G	Hz	Tria: Free Run	#Avg Type: RMS	TRA	CE 1 2 3 4 5 6	Frequency				
				PNO: Fast ++++ FGain:Low	#Atten: 20 dB		E	ET P P A N N N					
							ΔMkr1 1	665 ms	Auto Tune				
10 dB	Ndiv	Ref Offset 1' Ref 21.40	dBm					64.67 dB					
Log	Sian												
									Center Freq				
11.4									2.402000000 GHz				
					▲ 1Δ2								
1.40		<u> </u>											
									Start Freq				
-8.60									2.402000000 GHz				
-18.6									Stop Erog				
									Stop Freq				
-28.6									2.402000000 GHZ				
-38.6									CF Step				
00.0									2.402000000 GHz				
.48.6									Auto <u>Man</u>				
-40.0	line -	ես	ماه	MALL V	لمساليهم	hitself 1.	يعا الع						
50 G	arthfa.		l. Ma	!' \r% ∖2	. William .	inte alle	n distanti	1	Freq Offset				
-30.0									0 Hz				
co.c													
-68.6													
	ter 2.40	2000000	GHz					Span 0 Hz					
Cent		20000000											
Cent Res	BW 1.0) MHz		#VBW 3	.0 MHz	Swee	p 15.00 ms	(1001 pts)					
Cent Res	BW 1.0) MHz		#VBW 3	.0 MHz	Swee	p 15.00 ms	(1001 pts)					
Cent Res	BW 1.0) MHz		#VBW 3	.0 MHz	Swee	p 15.00 ms	(1001 pts)					
Cent Res	BW 1.0) MHz		#VBW 3	.0 MHz	Swee	p 15.00 ms	(1001 pts)					
Cent Res	BW 1.0) MHz		#VBW 3	омн _z	swee هالم (CES	p 15.00 ms	(1001 pts)					
Cent Res	BW 1.0) MHz		#VBW 3	омни СН Mido	swee swee solution	p 15.00 ms TATUS SK)	(1001 pts)					
Cent Res MSG Key	BW 1.0) MHz	vept SA	#vbw 3	омни СН Mido	swee sidle (GFS	p 15.00 ms TATUS SK)	(1001 pts)					
	BW 1.0	rum Analyzer - Sv RF 50 2	vept SA 2 DC	#VBW 3	CH Mido	Swee SIE (GFS	p 15.00 ms TATUS SK)	(1001 pts)	Frequency				
Cent Res Msg Key X/ Cent	/sight Spect T	rum Analyzer - 5v RF 50 s aq 2.4410	vept SA 2 DC 00000 G	#VBW 3 DH3	O MHZ	Sweej st JIe (GFS Align AL #Avg Type: RMS	p 15.00 ms TATUS SK)	(1001 pts) MJan 02, 2024 CE 1 2 3 4 5 6 PE W PA NNN	Frequency				
Cent Res MSG Key XI Cent	sight Spect ⊤ ter Fre	rum Analyzer - Sv RF 50 s aq 2.4410	vept SA 2 DC 00000 G	#VBW 3 DH3 HZ PNO: Fast FGain:Low	O MHZ	Sweej st dle (GFS Align AL #Avg Type: RMS	р 15.00 ms татия СК) ито 11:17:36 F тра ту с	(1001 pts) M Jan 02, 2024 CE 1 2 3 4 5 6 PE WVM WWW ET P P A NNN	Frequency				
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Frequency

Auto Tune

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Start Freq

Stop Freq

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DH5 CH Middle(GFSK)

🎉 Keysight Sp	ectrum Analyzer - Sw	vept SA							- 5 💌
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<mark>W</mark> ⊺ Center	Fred	F 5		CH2		SEN:	SE:INT	#Avg Ty	ALIGN AUTO	10:40:28 F	M Jan 02, 2024	Frequency
Center	TTEQ	2.400	000000	PNO: Fas IFGain:Lo	t ↔ w	Trig: Free #Atten: 20	Run dB		,,	דו ב	PE WWMWWW ET P P A N N N	
10 dB/di	Re v R e	f Offsei ef 21.4	11.4 dB 0 dBm							2 ۵Mkr1 5	.900 ms 2.96 dB	Auto Tune
11.4		۲ ۲			ture and	1	Δ2	-	- Andread growthe		Anorman	Center Freq 2.480000000 GHz
-18.6 -28.6 -38.6												Start Freq 2.480000000 GHz
-48.6 -58.6 -68.6		4nkhaha/		traup)	2		3∆4 ∿4		sh lur	y nu	w	Stop Freq 2.480000000 GHz
Center Res BV	2.480 / 1.0 N	00000 /IHz	0 GHz	#\	vвw	/ 3.0 MHz			Sweep :	20.00 ms	Span 0 Hz (1001 pts)	CF Step 2.402000000 GHz Auto <u>Man</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 t 1 t 1 t 1 t	(Δ) (Δ)		2.900 ms 6.800 ms 3.740 ms 6.800 ms	(Δ) (Δ)	52.96 c -52.79 dB -0.62 d -52.79 dB	IB m IB m		UNCTION WIDTH			Freq Offset 0 Hz
7 8 9 10 11 <						III			[





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8.7 DUTY CYCLE

<u>LIMIT</u>

Nil (No dedicated limit specified in the Rules)

TEST SETUP



TEST PROCEDURE

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value. Set VBW ≥ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T 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 measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)



TEST RESULTS

No non-compliance noted.

TEST DATA

Model Name	AT-LP70XBT	Test By	Peter Chu
Temp & Humidity	22.5°C, 45%	Test Date	2023/12/27

Modulation Type: GFSK / DH5

	us	Times	Ton(us)	Total Ton time(ms)
Ton1	2900	1	2900	
Ton2		0	0	
Ton3			0	2.9
Тр				3.74

Ton	2.90
Tp(Ton+Toff)	3.74
Duty Cycle	0.78
Duty Factor	1.10

Modulation Type: 8-DPSK / 3-DH5

	us	Times	Ton(us)	Total Ton time(ms)
Ton1	2900.000	1	2900	
Ton2		0	0	
Ton3			0	2.9
Тр				3.74

Ton	2.9
Tp(Ton+Toff)	3.74
Duty Cycle	0.78
Duty Factor	1.10

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TEST PLOT

Duty Cycle

							G	FSK(Low)					
🊺 Ke	eysight S	Spectrum	Analyzer - Sv	vept SA										- 7 -
w Cer	⊺ nter	Freq	50 s 2.4020	2 DC 00000 GH	lz		SEN	NSE:INT	#Avg Typ	ALIGN AUTO pe: RMS) 10:31	:58 PM Jar TRACE 1	02,2024 23456	Frequency
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		Re	f Offset 1	1.4 dB	Jam.co						∆Mkr′	1 2.90	00 ms	Auto Tune
10 d Log	B/div	/ Re	f 21.40	dBm						1		49.5	94 aB	
11.4						- 1/	\				_			Center Freg
1.40			,	_		•	ļ	L			_			2.402000000 GHz
-8.60														ļ
-18.6														
-10.0														Start Freq
-28.6														2.402000000 GHz
-38.6							<u>⊿3∆4</u>							
-48.E	A.M.			n,444× 2		/FAN	¥	mote		երոր			WWW.	Stop Fred
-58.6	· ·					· · ·					-			2 40200000 GHz
-68.6	-										_			2.40200000 0112
		0.400												
Cer	ter 2	2.4020 / 1 0 M	100000 (107	GHZ	#\	/B)//	3 0 MH-			Sween	20.00 m	Spa 06 (10)	n 0 Hz	2 40200000 GHz
Res		1.0 1			#1		5.0 WHZ			oweep	20.001	15 (10	o i prej	Auto Man
MKR	MODE	TRC SC	(A)	X	00 ma	(A)	Y 40.04	FUNC	TION FU	INCTION WIDT	H FL	JNCTION V	ALUE	
2	F	1 t	(Δ)	4.4	80 ms		-49.94	3m						E 0/5
3	<u>4</u>	1 t	(∆)	3.7	40 ms	<u>(Δ)</u>	-2.56	dB						FreqOffset
5		•••		4.4	00 1115		-43.23 UL	2111					=	0 HZ
6														
8														
9														
11													-	
•													F.	
MSG										STAT	US			
							GF	SK(№	liddle	e)				
🎉 Ke	eysight S	Spectrum	Analyzer - Sv	vept SA			GF	SK(N	liddle	e)				
Ke Ke	eysight S T	Spectrum Ri	Analyzer - Sv 50 S	vept SA 2 DC 00000 CH			GF	SK(N NSE:INT) 10:33	15 PM Jar	1 02, 2024	Frequency
اللہ اللہ 🗱 🕅 🚺 🚺	=ysight S ⊤ nter	Spectrum RI Freq	Analyzer - Sv 50 g 2.4410	vept SA 2 DC 00000 GH P	łz NO: Fast	t ++	GF ser		iddle #Avg Typ	ALIGN AUTO) 10:33	TRACE 1 TYPE W	1 02, 2024 2 3 4 5 6 VMWWW P 4 N N N	Frequency
i الله مرس Cer	=ysight S ⊤ nter	Spectrum RI Freq	Analyzer - Sv 5 5 5 2.4410	vept SA 2 DC 00000 GH IF(1 Z NO: Fast Gain:Lov	t + → W	SEP Trig: Free #Atten: 20		fiddle #Avg Typ	ALIGN AUTO pe: RMS) 10:33	115 PM Jar TRACE 1 TYPE W DET P	02, 2024 2 3 4 5 6 WM WWW P A N N N	Frequency
₩ Ka X# Cer	T T nter B/div	Spectrum Freq Re Re	Analyzer - Sv 50 2 2.4410 f Offset 1 f 21.40	wept SA 2 DC PI IF0 1.4 dB dBm	12 NO: Fast Gain:Lov	t •► W	GF ser Trig: Free #Atten: 20	SK(N vse:int] e Run 0 dB	1iddle #Avg Typ	ALIGN AUTO pe: RMS	∑ 10:33 ΔMkr′	15 PM Jar TRACE 1 TYPE W DET P 1 2.90 53.5	2 3 4 5 6 MWWW P A N N N 00 ms 58 dB	Frequency Auto Tune
UKA Cer 10 d Log	T T nter	Spectrum Ri Freq Re v Re	Analyzer - Sv 50 2 2.4410 f Offset 1 f 21.40	vept SA 2 DC PI IF4 1.4 dB dBm	12 NO: Fasi Gain:Lov	t ↔ > W	GF SER Trig: Free #Atten: 20	SK(N VSE:INT Run O dB	1iddle #Avg Typ	ALIGN AUTO pe: RMS	٥ ا٥:33 ΔMkr ′	:15 PMJar TRACE 1 TYPE W DET P 1 2.90 53.5	02,2024 2 3 4 5 6 WMWWW P A N N N 00 ms 58 dB	Frequency Auto Tune
₩ Ка Сег 10 d Log 11.4	B/div	Spectrum Freq Re Re	Analyzer - Sv 50 5 2.4410 f Offset 1 f 21.40	vept SA 2 DC Pi Pi IF4 1.4 dB dBm	IZ NO: Fasi Gain:Lou	t i ► w	GF Trig: Free #Atten: 20	SK(N vse:int e Run o dB	1iddle #Avg Typ	ALIGN AUTO pe: RMS	∑ 10:33	15 PMJar TRACE 1 TYPE W DET P 1 2.90 53.5	102,2024 2 3 4 5 6 WMWWW P A N N N 00 ms 58 dB	Frequency Auto Tune
10 d Log 11.40	B/div	Spectrum Freq Re Re	Analyzer - Sv 50 £ 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GH Pi IF4 1.4 dB dBm	Iz NO: Fasi Gain:Lou	t +> w	GF Trig: Free #Atten: 20	SK(N vse:int e Run o dB	1iddle #Avg Typ	ALIGN AUTO Dec: RMS	ΔMkr [*]	:15 PM Jar TRACE 1 TYPE W DET P 1 2.90 53.5	102,2024 2 3 4 5 6 7 M WWW P A NN N 00 ms 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz
10 d 11.40 1.40 -8.60	B/div	Spectrum RI Freq Re Re	Analyzer - Sv 50 £ 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GH IF4 1.4 dB dBm	1z NO: Fast Gain:Lou	t ↔ ₩	GF SEP Trig: Free #Atten: 20	SK(N «SE:INT] © dB	1iddle #Avg Typ	ALIGN AUTO pe: RMS	ΔMkr [*]	1 2.90 53.	102,2024 2 3 4 5 6 WMWWW P A N N N 00 ms 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz
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10 d Log 11.4 1.40 -8.60 -18.6	B/div	Freq Rev Rev	Analyzer - Sv 50 5 2.4410 f Offset 1 f 21.40	vept SA 2 DC PI IF(IF(IA dB dBm	1z NO: Fasi Gain:Lov	t ->-	GF	SK(M ISE:INT D dB	Avg Typ	ALIGN AUTO pe: RMS	ΔMkr ²	1 2.90 53.	102,2024 2 3 4 5 6 WMWWW P A NN N D0 ms 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz
10 dd Cer 11.4 -8.6 -28.6 -38.6 -38.6	B/div	Re Re Re	Analyzer - Sv = 50 g 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GH P IFr 1.4 dB dBm	1z NO: Fasi Gain:Lov	t +>	GF	SK(M KSE:INT P Run 0 dB	Avg Typ	ALIGN AUTO pe: RMS		1 2.90	102,2024 2 3 4 5 6 WMWWW P A NN N P A NN N 00 ms 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz
10 d 10 d 11.4 -8.6 -18.6 -38.6 -38.6 -38.6	B/div	Re Re Re	Analyzer - Sv = 50 g 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GH P IF4 1.4 dB dBm	Iz NO: Fass Gain:Lov	t ->-	GF SEP Trig: Free #Atten: 2	SK(M sse.int] e Run 0 dB	Hiddle #Avg Typ	ALIGN AUTO		1 2.90	102,2024 2 3 4 5 7 4 N N P A N N N 00 ms 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.441000000 GHz
10 d Cer 11.4 1.4 -8.6 -18.6 -28.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6	B/div	Re Re Re Re	Analyzer - Sv 50 s 2.4410 f Offset 1 f 21.40	vept SA 2 DC P IF0 1.4 dB dBm dBm L L L L L L L L L L L L L	Iz NO: Fasi Sain:Lov	t	GF SEP Trig: Free #Atten: 2	SK(M sse.int] e Run 0 dB		ALIGN AUTO		1 2.90	102,2024 2 3 4 5 7 9 A N N N 20 ms 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz
10 d Cer 1.4 -8.60 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6	B/div	Rectrum Freq	Analyzer - Sw 50 5 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GF P IF4 dB dB dB dB dB dB dB dB dB dB	12 NO: Fasi Sain:Lov	t>-	GF SEP Trig: Free #Atten: 2	SK(N RESINT Run 0 dB		ALIGN AUTO pe: RMS		:15 PM Jar TRACE 1 TYPEW DET P 1 2.90 53.5	02,2024 2 3 4 5 6 7 4 N N 2 3 4 5 6 7 4 N N 2 3 4 5 6 7 4 5 7 4 N N 2 3 4 5 7 4 5 7 4 N N 2 3 4 5 7 4	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
10 d Cer 11.4 1.4 -28.6 -38.6 -38.6 -38.6 -38.6 -58.6 -68.6	B/div	Spectrum Freq Re Re	Analyzer - Sv = 50 € 2.4410 f Offset 1 f 21.40	Vept SA 2 DC Pi 1.4 dB dBm	1z NO: Fasi Sain:Lov	t>-		SK(Ν vse:INT 0 dB Δ4		ALIGN AUTCO Pe: RMS		125 PM Jar TRACE [1 TYPE W DET P 1 2.90 53.5	02,2024	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz
10 dd Cer 11.4 -18.6 -28.6 -38.6 -38.6 -38.6 -58.6 -68.6	B/div	Spectrum Freq Rev Rev Rev Rev Rev Rev Rev Rev Rev Rev	Analyzer - Sv 50 5 2.4410 f Offset 11 f 21.40	Vept SA 2 DC 000000 GF P IF(1.4 dB dBm U U U U U U U U U U U U U	Iz NO: Fasi Gain:Lou	t ->> W				Align Autro pe: RMS		515 PMJan Tryne W DET P 1 2.90 53.5	n 0 Hz	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz Stop Freq 2.44100000 GHz
10 dd Cer 11.4 -8.6 -18.6 -88.6 -48.6 -88.6 -68.6 Cer Res	B/div	Spectrum Freq Rev Rev Rev Rev Rev Rev Rev Rev Rev Rev	Analyzer - Sv 50 2.4410 f Offset 1 f 21.40 0000000 IHz	Vept SA 2 DC 000000 GH P IF 1.4 dB dBm L L L L L L L L L L L L L	IZ NO: Fasi Gain:Lou	t ↔ ₩	GF - Trig: Free #Atten: 2		Avg Tyr	Align Autor De: RMS	20.00 n	Spans (100	102,2024 2 3 4 5 6 6 700 ms 58 dB 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz 2.44100000 GHz 2.44100000 GHz
10 dd Cer 11.4 -8.6 -18.6 -38.6 -38.6 -38.6 -38.6 -38.6 -38.6 -68.6 Cer Res	B/div	Spectrum Rep Rep Rep 2.4410 1.0 M	Analyzer - Sv = So ⊊ 2.4410 f Offset 1 f 21.40 0000000 Hz	vept SA 2 DC 000000 GH If 14 dB dBm 	Iz NO: Fasi Sain:Lov	t -→- W	GF SEP Trig: Free #Atten: 2	SK(N vse.int] e Run o dB dd dd dd e Run o dB		ALIGN AUTO Pe: RMS	ک اد:ع ک اد: ک اد:ع ک اد:ع ک اد:ع ک اد:ع ک اد:ع ک اد:ع ک اد:ع ک اد:ع ک اد: ک اد: ک اد: ک اد: ک اد: ک اد: ک اد: ک اد:ع ک اد:ع ک اد:ع ک اد: ک اد: ک اد: ک اد: ک اد:ع ک اد:ع ک اد: ک ا ک اد: ک اد: ک ا ک ا ک ا	Spans (100)	n 0, 2024 2 3 4 5 6 2 7 4 5 6 2 8 4 5 58 dB 58 dB 58 dB 58 dB 58 dB 58 dB 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz Start Freq 2.44100000 GHz Stop Freq 2.44100000 GHz CF Step 2.40200000 GHz Auto Man
10 dd Cer 11.40 -8.60 -18.6 -28.6 -38.6 -38.6 -38.6 -38.6 -68.6 Cer Res NIX	B/div B/div b b b b b b b b b b b b b b b b b b b	Spectrum Rep Rep Rep 2.4410 (1.10 N TRE EC 1 t	Analyzer - Sw 50 β 50 β 2.4410 f Offset 1 f 21.40	vept SA 2 DC 00000 GH If if	Iz NO: Fast Gain:Lov 2 2 4 4 4	t>- //Β₩	GF - Trig: Free #Atten: 2 - 1Δ2 - 1Δ2 - 1Δ2 - 3.3.6 MHz - 3.3.6 MHz				20.00 m	12.90 MJac 1 TRACE 1 TYPE W DET P 1 2.90 53.5 55.5 55.5 55.5 55.5 55.	n 0, 2024 2 3 4 5 6 6 2 9 A NN N DO ms 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man
Cer 10 dd 11.40 -8.60 -18.6 -38.6 -38.6 -38.6 -68.6 Cer Res 23 3	B/div	Spectrum Freq Req www. 2.4410 / 1.0 N Res 2.4410 / 1.0 N Res 2.4410 / 1.0 N	Analyzer - Sv 5 0 5 2.4410 f Offset 1 f 21.40 0000000 (Hz (Δ)	wept SA 2 DC 000000 GH PI I.4 dB dBm GHZ	1z NO: Fasian:Lov Gain:Lov 40 #V	t → ///////////////////////////////////	GF - Trig: Free #Atten: 2 1Δ2 - 1Δ2 - 3.0 MHz - 53.58 - 52.58 dF			ALIGN AUTO pe: RMS	20.00 m	Spans (100)	102,2024 2 3 4 5 6 6 2 9 4 N N 00 ms 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man Freq Offset
Cer 10 dd 11.40 -8.60 -18.6 -28.6 -8.6 -8.6 Cer Res 2 3 4 5	B/div B/div	Spectrum Freq Re Re 2.4411 1.1 1.1 1.1 1.1	Analyzer - Sv 5 0 5 2.4410 f Offset 1 f 21.40 000000 0 Hz (Δ)	vept SA 2 DC Pi III 1.4 dB dBm GHz 2.9 5.8 3.7.7 5.8	12 NO: Fasin:Lov Gain:Lov 2 2 4 4 00 ms 60 ms 60 ms	t → → w /BW (Δ)	GF Trig: Free #Atten: 20 1 Δ2 - 1 Δ	SK(N VSE:INT P RUN 0 dB A A A A A A A A A A A A A		ALIGN AUTO De: RMS	20.00 m	EISPMJar TRACE [TYPE] 12.90 53.5 53.5 53.5 53.5 53.5 53.5 53.5 53.	n 0 Hz n 0 Hz n 0 Hz n 0 Hz n 2 34 5 6 2 34 5 6 7 4 NIN 7 1 NI	Frequency Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.440000000 GHz Auto Man Freq Offset 0 Hz
Karal Cer Cer 10 dd Cer 11.40 -8.60 -18.6 -28.6 -88.6 Cer Res Cer Res Xaral 1 2 3 4 5 5 6	B/div B/div	Spectrum Freq Re Re 2.441(1.0 N Re 2.441(1.0 N Re 2.441(1.0 N	Analyzer - Sv 50 5 2.4410 f Offset 11 f 21.40 000000 (Hz (Δ)	vept SA 2 DC 000000 GF Pi Iff 1.4 dB dBm	1z NO: Fasi Sain:Lov 2 2 4 4 4 4 4 4 4 4 0 ms. 60 ms. 60 ms.	 λ /ul>	GF Trig: Free #Atten: 2 ¹ 1Δ2 - 1Δ2 - 3.0 MHz 3.0 MHz 53.58 -52.58 dE			ALIGN AUTO De: RMS	20.00 m	Spans (10)	n 0, 2024 2 3 4 5 6 6 2 3 4 5 6 6 2 3 4 5 6 6 2 3 4 5 6 5 8 dB 9 0 ms 5	Frequency Auto Tune Center Freq 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz 2.441000000 GHz Auto Man Freq Offset 0 Hz
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10 dd XX Cer 14.40 -8.60 -7.70	B/div	Spectrum Freq Req Rev V Rev V Rev V Rev V Rev V Rev V Rev V	Analyzer - Sv 50 g 2.4410 f Offset 1 f 21.40 0000000 Hz (Δ) (Δ)	vept SA 2 DC 000000 GH P IF 1.4 dB dBm GHz SC S.8 3.7 5.8	1z NO: Fass Sain: Lov 2 2 2 2 2 2 2 2 2 2 2 2 2 00 ms 60 ms 60 ms	 λ /ul>	GF Trig: Free #Atten: 2 1Δ2 - 1Δ2 - 1Δ2 - 3.0 MHz 3.0 MHz -52.58 dE -52.58 dE	SK(Ν se.int] o dB dB dA dB m dB m dB m dB m dB		ALIGN AUTO De: RMS	20.00 m	Spans (100)	n 0, 2024 2 3 4 5 6 MAMMANN 58 dB	Frequency Auto Tune Center Freq 2.44100000 GHz 2.44100000 GHz 2.44100000 GHz 2.44100000 GHz 2.40200000 GHz Auto Man Freq Offset 0 Hz
10 dd X 10 dd 1.4 -18.6 -28.6 -28.6 -28.6 -28.6 Cer Res Cer Res 2 3 4 4 6 6 6 6 7 7 8 9 10	B/div B/div B/div B/div B/div F BW	Spectrum Freq Req W44 2.4410 / 1.0 N NRC SS 1 t 1 t 1 t 1 t	Analyzer - Sv 50 £ 50 £ 2.4410 f Offset 1 f 21.40 0000000 Hz	wept SA 2 DC 000000 GH If If<	1z NO: Fasi Sain:Lov 2 2 2 40 ms 60 ms 60 ms	(GF - Trig: Free #Atten: 2 - 1Δ2 - 1Δ2 - 1Δ2 - 3.0 MHz - 3.0 MHz - 52.58 dE - 666 - 52.58 dE	SK(N ISE-INT] PRUN O dB A A A A A A A A A A A A A		ALIGN AUTO Pe: RMS	20.00 m	Spans (100)	n 0, 2024 2 3 4 5 6 2 7 4 5 6 2 8 4 5 58 dB 58 dB	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man Freq Offset 0 Hz
10 d Cer 20 11.4 -8.6 -8.6 -88.6 -88.6 -88.6 Cer Res 11.4 -88.6 -99.6 -9	B/div B/div B/div B/div B/div BB/di BB/di BB/di BB/div BB/div BB/di BB/div BB/div BB/d	Spectrum R Freq Re R R R R R R R R R R R R R	Analyzer - Sv 5 5 5 2.4410 7 Offset 1 f 21.40 0000000 (Hz (Δ) (Δ)	wept SA 2 DC 000000 GH If If<	IZ NO: Fasi Sain:Loo A A A A A A A A A A A A A A A A A A	(GF - Trig: Free #Atten: 2 - 1Δ2 - 1Δ2 - 1Δ2 - 1Δ2 - 3.0 MHz - 3.0 MHz - 52.58 dt - 0.66 - 52.58 dt - 0.66 - 52.58 dt	SK(N ISE:INT PRUN O dB A A A A A A A A A A A A A		ALIGN AUTO De: RMS		::15 РМ Јаг ТКАСЕ [] ТУТЧЕ Щ БЕТ Р 1 2.90 53.5 53.5 53.5 53.5 53.5 53.5 53.5 53.	102, 2024 2 3 4 5 6 7 A NNN 20 ms 58 dB 10 ms 50	Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 2.402000000 GHz Auto Man Freq Offset 0 Hz



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GFSK(High) 📕 Keysight Spectrum Analyzer - Swept SA 10:38:10 PM Jan 02, 2024 TRACE 1 2 3 4 5 6 TYPE DET P P A N N N Center Freq 2.480000000 GHz Frequency #Avg Type: RMS PNO: Fast ++ Trig: Free Run IFGain:Low #Atten: 20 dB Auto Tune ΔMkr1 2.900 ms 54.18 dB Ref Offset 11.4 dB Ref 21.40 dBm **▲**1∆2 11 **Center Freq** 2.480000000 GHz .4 -8.6 18. Start Freq 28. 2.48000000 GHz 344 38. -48. nije voje Prof. byhar ner a Stop Freq -58 2.48000000 GHz 68. Center 2.480000000 GHz Res BW 1.0 MHz Span 0 Hz Sweep 20.00 ms (1001 pts) **CF Step** 2.402000000 GHz Auto <u>Man</u> #VBW 3.0 MHz MKR MODE TRC 2.900 ms (Δ) 5.680 ms 3.740 ms (Δ) 5.680 ms 54.18 dB -53.16 dBm 0.45 dB -53.16 dBm Freq Offset 0 Hz 10 11 STATUS 8-DPSK (Low) Keysight Spectrum Analyzer - Swept SA 10:44:17 PM Jan 02, 2024 TRACE 1 2 3 4 5 6 TYPE WWM WWW DET P P A N N N ALIGN AU #Avg Type: RMS Frequency Center Freq 2.402000000 GHz PNO: Fast +++ Trig: Free Run #Atten: 20 dB Auto Tune ΔMkr1 2.900 ms 54.26 dB Ref Offset 11.4 dB Ref 21.40 dBm 10 dB/div Log 11. **Center Freq** 1Δ2 2.402000000 GHz -8.6 18. Start Freq -28. 2.402000000 GHz 38 -48.6 with 2 uw 1. A. A. n ituit Stop Freq 581 2.402000000 GHz 68. Center 2.402000000 GHz Res BW 1.0 MHz CF Step 2.40200000 GHz Span 0 Hz #VBW 3.0 MHz Sweep 20.00 ms (1001 pts) Auto Man MKR MODELTROLSOL v EUNCTION EUNCTION WIDTH 2.900 ms (Δ) 54.26 dB 5.960 ms -54.27 dBm 3.740 ms (Δ) -0.33 dB 5.960 ms -54.27 dBm Freq Offset 0 Hz 10 11 STATUS

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8.8 CONDUCTED SPURIOUS EMISSION

LIMITS

RSS-247 Issue 3 Annex 5.5, in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. Attenuation below the general field strength limits specified in RSS-Gen is not required.

TEST SETUP



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 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.



TEST RESULTS

Model Name	AT-LP70XBT	Test By	Peter Chu
Temp & Humidity	22.5°C, 45%	Test Date	2023/12/27

OUT-OF-BAND SPURIOUS EMISSIONS-CONDUCTED MEASUREMENT

			CHL	ow	(30MF	−łz	26.5	GHz /	GFS	K)	
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			PI IFC	NO: Fast Gain:Low	#Atten: 20) dB	Avgine	10/10	D	PPANNN	
	Re	f Offset 11	4 dB					Mkr1 2	2.402 162	2 1 GHz	Auto Tune
10 dB/c	div Re	ef 21.40 c	1Bm	-				-	-0.0	67 dBm	
11.4											Center Freq
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-8.60 —								_			
-18.6										-21 h7 dBm	Start From
-28.6							_	_			2.31000000 GHz
-38.6											
-48.6 —							_	_		$\langle 2 \rangle_{3}$	01-1-F-1-1
-58.6	and the second second			Annie Alema	-	hi franky startyff og	an a	in an		- N.	2 40700000 GHz
-68.6											2.407000000 GH2
Start 1	2 31000	GH7							Stop 2.40	1700 GH2	CESton
#Res I	BW 100	kHz		#VE	300 kHz			Sweep 1	0.67 ms (4	0001 pts)	1.000000000 GHz
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CH Mid (30MHz ~ 26.5GHz / GFSK) 📕 Keysight Spectrum Analy. đ 11:36:04 PM Jan 12, 2024 TRACE 1 2 3 4 5 6 TYPE M WWW DET P P A N N N ALIGN AU #Avg Type: RMS Avg|Hold:>10/10 Frequency Start Freq 30.000000 MHz Trig: Free Run #Atten: 20 dB PNO: Fast 😱 IFGain:Low Auto Tune Mkr1 2.441 4 GHz -0.958 dBm Ref Offset 11.4 dB Ref 21.40 dBm 10 dB/div Center Freq 11.4 13.265000000 GHz -8.6 18. Start Freq 28. 30.000000 MHz 38 | 48. Stop Freq -581 26.50000000 GHz 68. Start 30 MHz #Res BW 100 kHz Stop 26.50 GHz Sweep 2.531 s (40001 pts) CF Step 1.00000000 GHz #VBW 300 kHz Auto Man MKR MODE TRC SCL FUNCTION WIDTH FUNCTION N 1 f N 1 f N 1 f -0.958 dBm -58.129 dBm -58.485 dBm 2.441 4 GHz 2.400 000 0 GHz 2.483 500 0 GHz Freq Offset 0 Hz 10 11 STATUS



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الله الله المالي Stai	=ysight ⊤ rt F	t Spect	rum / RF 30	Analyzer - Swe 50 Ω .000000	ept SA DC D MHZ PI	NO: Fast	S Trig: Fr	ENSE:INT	#Avg Typ Avg Hold	ALIGN AUTO De: RMS :>10/10	11:39:44 Pi TRAC TYI	MJan 12, 2024 E 1 2 3 4 5 6 E M WM WWW	Frequency
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Star	t Freq 2	2.400000	000 GHz		Trig: Free	Run	#Avg Typ	e: RMS	TRAC	E 1 2 3 4 5 6	Frequency
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11.4						Â	1				Center Freq 2.441750000 GHz
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	s BW 10	0 kH7		#\/D\/	2 200 LU-			0 0	000 me (4004 4-1	
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#Res MSG [][] Kej	/sight Spectru T	m Analyzer - Swe	ept SA	#989	SEP	ISE:INT	#Avg Typ	Sweep 8	12:00:24 AI	1001 pts)	Frequency
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#Re: MSG Star 10 dil 11.4 1.40 -8.60 -18.6 -28.6 -38.6 -38.6 -38.6 -58.6 -58.6 Star *Re	right Spectru T Freq 2 3/div R 3/div R 3/div R 4 5/div R 4 5/div R 5/div R	m Analyzer - Swi RF 50 Ω 2.3100001 tef Offset 11 tef 21.40 c c c c c c c c c c c c c c	ept SA DC DOO GHz PP IFC .4 dB IBm	#VBV	Trig: Free #Atten: 2		#Avg Typ Avg Hold	Sweep 8 status ALIGN AUTO e: RMS e: RMS >10/10 Mkr1 2.4	12:00:24 AV TRAC TRAC 1755 162 0.44 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Alan 13, 2024 E[12 3 4 5 6 E] M WWWWW E] P P A N N 25 GHz 96 dBm -18.90 dBm -19.90	Frequency Auto Tune Center Freq 2.40500000 GHz Start Freq 2.31000000 GHz Stop Freq 2.50000000 GHz L0000000 GHz Auto Man
#Rei MsG Star 10 dil Logg 11.4 1.40 -18.6 -38.6 -48.6 -58.6 Star #Rei 23 4 1 23 4	right Spectru T Freq 2 B/div R B/div R C C C C C C C C C C C C C	m Analyzer - Swi RF 50 Ω 2.3100001 tef Offset 11 tef 21.40 c 0 GHz 0 GHz 1 f f f 1 f 1	x 2.435 500 1 2.4.4 dB 1Bm 2.475 152 2 2.400 000 2.483 500 1	#VBV	SEP → Trig: Free #Atten: 21 → Trig: Free #Atten: 21 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓ 1 ↓	ISE:INT	#Avg Typ AvgHold	Sweep 8 Status ALIGN AUTO e: RMS e: RMS >10/10 Mkr1 2.4	12:00:24 AI TRAC TRAC TRAC TRAC TRAC TRAC TRAC TRAC	Alan 13, 2024 #1 2 3 4 5 6 #1 2 3 4 5 6 H M WWWW 25 GHz 96 dBm -18.90 dBm -19.90 dB	Frequency Auto Tune Center Freq 2.40500000 GHz Start Freq 2.31000000 GHz Stop Freq 2.50000000 GHz L0000000 GHz CF Step 1.00000000 GHz Auto Man Freq Offset 0 Hz
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			~ 20.5G	ΠΖ / Õ-Ŭ	PSK)	
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11.4 1.40					1	Center Freq 2.358500000 GHz
-8.60 -28.6 -38.6					-22.89 dBm	Start Freq 2.310000000 GHz
-48.6 -58.6 -68.6	an a lay in car a china chima airi air		Makata dak geranan dak basa basa basa basa basa basa basa ba			Stop Freq 2.407000000 GHz
Start 2.31000 GHz #Res BW 100 kHz	#*	VBW 300 kHz	ST FUNCTION FUN	Stop weep 10.67 m	2.40700 GHz ns (40001 pts)	CF Step 1.00000000 GHz Auto <u>Man</u>
1 N 1 f 2 N 1 f 3 N 1 f 4 - - 5 - -	2.402 162 1 GHz 2.400 000 0 GHz 2.483 500 0 GHz	-2.889 dBm -55.540 dBm dBm			E	Freq Offset 0 Hz
7 8 9 10 11 1 <						
Kewight Spectrum Analyzer - Si	want SA			SINISS		
X T RF 50 Start Freq 30.00000	Ω DC DO MHz	SENSE	INT #Avg Typ	ALIGN AUTO 11:5 e: RMS >10/10	4:54 PM Jan 12, 2024 TRACE 1 2 3 4 5 6 TYPE M WM WWW	Frequency
	PINU: Fas		B		DET P P A N N N	
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Ref Offset 1 10 dB/div Ref 21.40 11.4 1.40 -8.60	IFGain:Lo 1.4 dB dBm	#Atten: 20 d		Mkr1 2	.401 7 GHz -3.974 dBm	Auto Tune Center Freq 13.26500000 GHz
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		(СН М	id (3	30MHz	~ 2	6.5GI	Hz / 8	B-DPS	SK)	
🊺 Keys	ight Spectrur	m Analyzer - Swe	ept SA								
v¤ Start	⊤ Freq 3	RF 50 Ω	DC 0 MHz		SENS	Æ:INT	#Avg Typ	ALIGN AUTO	11:52:32 PI TRAC	4 Jan 12, 2024 E 1 2 3 4 5 6	Frequency
			PI	NO: Fast 🔾 Gain:Low	#Atten: 20	dB	Avginoid	1.210/10	DE	PPANNN	
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-28.6										-20.10 dbm	Start Freq
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-58.6	تعفيليه والمليج									10-	26.50000000 GHz
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Start	20 MH	-							-		
Start		,	^						CTAN 7	6 60 CU7I	OF Otom
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#Res	BW 10	z 0 kHz	~ 	#VBV	N 300 kHz	5111/		Sweep 2	Stop 2 2.531 s (4	6.50 GHz 0001 pts)	CF Step 1.00000000 GHz Auto <u>Man</u>
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#Res	BW 10 DETROS	z 0 kHz CL	× 2.441 2.400 000 0	#VBV 4 GHz 0 GHz	N 300 kHz -3.176 dBi -58.359 dBi	FUNC m m	CTION FUI	Sweep 3	Stop 2 2.531 s (4 FUNCTIO	6.50 GHz 0001 pts)	CF Step 1.00000000 GHz Auto <u>Man</u> Erea Offset
#Res	BW 10 DETROS N 1 N 1 N 1	z 0 kHz GU f f f	× 2.441 2.400 000 2.483 500	#VBV 4 GHz 0 GHz 0 GHz	V 300 kHz -3.176 dBi -58.359 dBi -57.992 dBi	FUNG m m n	CTION FUI	Sweep 2	Stop 2 2.531 s (4	6.50 GHz 0001 pts)	CF Step 1.00000000 GHz Auto Man Freq Offset
#Res	BW 10	z 0 kHz GL	× 2.441 / 2.400 000 (2.483 500 (#VB\ 4 GHz 0 GHz 0 GHz	N 300 kHz -3.176 dBj -58.359 dBj -57.992 dBj	FUNC m m m	CTION FUI	Sweep 2	Stop 2 2.531 s (4	6.50 GHz 0001 pts) DN VALUE	CF Step 1.00000000 GHz Auto <u>Man</u> Freq Offset 0 Hz
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#Res	BW 10 ODE TRC S N 1 N 1 N 1	2 0 kHz CL f f f	× 2.441 / 2.400 000 (2.483 500 (#VB\ 4 GHz 0 GHz 0 GHz	N 300 kHz -3.176 dB -68.359 dB -57.992 dB	m EUNO m m m		Sweep :	Stop 2 2.531 s (4	6.50 GHz 0001 pts)	CF Step 1.00000000 GHz Auto <u>Man</u> Freq Offset 0 Hz
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		C	CH Hi	ah (:	30MH	z ~ 2	26.5G	Hz /	8-DP	SK)	
in k	evright Spectrum	Analyzer - Sw	ent SA	<u> </u>						/	
LXI	T F	RF 50 Ω	DC		SEN	NSE:INT		ALIGN AUTO	11:42:18 P	M Jan 12, 2024	
Sta	rt Freq 2	.475000	000 GHz		Tria: Free	Dun	#Avg Typ	e:RMS	TRAC	E 1 2 3 4 5 6	Frequency
			P IF	NO: Fast G Gain:Low	#Atten: 2	0 dB	Avginoid	.~10/10	D	PPANNN	
							М	kr1 2 4	30 161 8	75 GHz	Auto Tune
10	Re ADIAN DA	ef Offset 11	.4 dB					KI I 2.4	-2.7	59 dBm	
Log		CI 21.40 (
11.	4										Center Freq
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-8.6	n	1	e Ta								
10.	-		\								
-10.	0	-								-22.76 dBm	Start Freq
-28.	6		11								2.475000000 GHz
-38.	6	~	where a								
-48.	6 <mark>2 , </mark> //	<u> </u>		3							
-58.	م الميولا ليوني ال	and the second	~~~	+un Sanaa	denter and the		-		-	the Dard Start of Start surface	StopFreq
-68	6										2.500000000 GHz
	-										
Sta	rt 2.47500) GHz							Stop 2.5	0000 GHz	CF Step
#R	es BW 100) kHz		#VB۱	N 300 kHz		S	weep 2.	667 ms (4	0001 pts)	1.00000000 GHz
MKE	MODE TRC SO	SL	х		Y	FUN	ICTION FUI	NCTION WIDTH	FUNCTI	DN VALUE	Auto <u>Man</u>
1	N 1 f	2.	480 161 87	5 GHz	-2.759 dE	3m					
2	N 1 T		2.400 000	0 GHZ 0 GHZ	dE -58.937 dE	3m 3m					Freq Offset
4											0 Hz
<u>5</u>						-					
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р к	eysight Spectrum	n Analyzer - Sw	ept SA			105 M/T		STATU	5	10.0004	
∭ik ØM Sta	T F	n Analyzer - Swi RF 50 Ω	ept SA DC 0 MH7		SEM	NSE:INT	#Avg Typ	STATU:	11:43:15 P TRAC	M Jan 12, 2024 E 1 2 3 4 5 6	Frequency
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₩ ¤ ¤ Sta	ieysight Spectrum T F Irt Freq 3	n Analyzer - Sw ச 50 Ω 0.000000	ept SA DC O MHZ IFC	NO: Fast G Gain:Low	Trig: Free #Atten: 2	NSE:INT Run 0 dB	#Avg Typ Avg Hold	ALIGN AUTO ne: RMS :>10/10	11:43:15 P TRAC TYI D	MJan 12, 2024 E 1 2 3 4 5 6 M WM WWW ET P P A N N N	Frequency
₩ K XV Sta	ieysight Spectrum T F Int Freq 3	n Analyzer - Sw 35 Ω 0.00000 0.00000 0.000000 0.000000 0.000000 0.0000000 0.0000000 0.0000000 0.0000000 0.00000000	ept SA DC O MHz IF(.4 dB	NO: Fast G Gain:Low	SEN Trig: Free #Atten: 20	NSE:INT ≥ Run 0 dB	#Avg Typ Avg Hold	ALIGN AUTO e: RMS :>10/10	11:43:15 P TRAC TYI DI Kr1 2.48	MJan 12, 2024 E 1 2 3 4 5 6 MWMWWW ET P P A N N N	Frequency
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I0 of Log	ieysight Spectrum T Freq 3 art Freq 3 dB/div Re	n Analyzer - Sw 	ept SA DC D O MHz IF4 .4 dB dBm	NO: Fast G Gain:Low	Trig: Free #Atten: 20	e Run 0 dB	#Avg Typ Avg Hold	ALIGN AUTO ve: RMS i>10/10 Mb	11:43:15 P TRAC TM D (r1 2.48) -3.1	^{MJan 12, 2024} ¹² I 2 3 4 5 6 ¹² M M WWW TP P A N N N 0 5 GHz 50 dBm	Frequency Auto Tune
10 o Log	eysight Spectrum T F Int Freq 3 Re dB/div Re 4	n Analyzer - Sw ₩ 50 Ω 0.000000 ef Offset 11 ef 21.40 (1	ept SA DC O MHz Pi IF4 .4 dB dBm	NO: Fast G Gain:Low	Trig: Free #Atten: 20	NSE:INT Run 0 dB	#Avg Typ Avg Hold	ALIGN AUTO re: RMS :>10/10	s 11:43:15 p TRAC TM D cr1 2.480 -3.1	MJan 12,2024 E 1 2 3 4 5 6 E M M WWW T P P A NN N D 5 GHz 50 dBm	Frequency Auto Tune
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10 c Sta 10 c Log 11. 1.4 -8.6 -18. -28. -38. -38. -48.	Red dB/div R dB/div R dB/div R	n Analyzer - Sw ⊮ 50 Ω 0.000000 ef Offset 11 ef 21.40 c 1 1	ept SA DC PI IF4 IF4 dBm	NO: Fast G Gain:Low	SEP Trig: Free #Atten: 2	e Run 0 dB	#Avg Typ Avg Hold	ALIGN AUTO ie: RMS >10/10 MI	s 11:43:15 P Try cr1 2.48 -3.1	Man 12, 2024 FE [1 2 3 4 5 6 FE [M WAWWWW TF P P A N N N D 5 GHZ 50 dBm -2315 abn	Frequency Auto Tune Center Freq 13.26500000 GHz Start Freq 30.000000 MHz
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-18.6 -28.6													Stop Freq 2.483500000 GHz
-38.6	ľ											l	CF Step 2.402000000 GHz Auto <u>Man</u>
-40.6												ĥ,	Freq Offset 0 Hz
-68.6 Star #Re:	t 2.40 s BW	000	GHz							Stop 2 48	350 0	:H7	
		100	kHz		#VB\	V 300 kHz			Sweep 8	.000 ms (1001	ots)	
MSG		100	kHz		#VB\	W 300 kHz			Sweep 8	.000 ms (1001 p	ots)	
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8.9 RADIATED EMISSION

LIMITS

RSS-Gen Issue 5, Only radiocommunication receivers operating in stand-alone mode within the band 30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements.

RSS-Gen Issue 5 § 8.10 (b) Unwanted emissions that fall into restricted bands of Table 6 shall comply with the limits specified in RSS-Gen.

KSS-Gen Issue 5 Table 3: Restricted Frequency Bands (""	RSS-G	en Issue 5	5 Table 3:	Restricted	Frequency	/ Bands	(Note)
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MHz	MHz	MHz	GHz
0.090 - 0.110	13.36 – 13.41	1645.5 - 1646.5	9.0 - 9.2
2.1735 – 2.190	16.42 - 16.423	1660 -1710	9.3 - 9.5
3.020 - 3.026	16.69475 - 16.69525	1718.8 - 1722.2	10.6 -12.7
4.125 - 4.128	16.80425 - 16.80475	2200 - 2300	13.25 -13.4
4.17725 - 4.17775	25.5 - 25.67	2310 - 2390	14.47 – 14.5
4.20725 - 4.20775	37.5 - 38.25	2655 - 2900	15.35 -16.2
5.677 – 5.683	73 - 74.6	3260 - 3267	17.7 - 21.4
6.215 – 6.218	74.8 - 75.2	3332 - 3339	22.01 - 23.12
6.26775 – 6.26825	108 -138	3345.8 - 3358	23.6 - 24.0
6.31175 - 6.31225	156.52475 - 156.52525	3500 - 4400	31.2 - 31.8
8.291 - 8.294	156.7 - 156.9	4500 - 5150	36.43 - 36.5
8.362 - 8.366	240 - 285	5350 - 5460	Above 38.6
8.37625 - 8.38675	322 -335.4	7250 - 7750	
8.41425 - 8.41475	399.9 - 410	8025 - 8500	
12.29 - 12.293	608 - 614		
12.51975 - 12.52025	960 - 1427		
12.57675 - 12.57725	1435 – 1626.5		

Note: Certain frequency bands listed in Table 1 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200 and 300 series RSSs, such as RSS-247 and RSS-310, which contain the requirements that apply to licence-exempt radio apparatus.



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RSS-Gen Issue 5 Table 2: Radiated Limits of Receiver Spurious Emissions

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)
30 - 88	100 (3 nW)
88 - 216	150 (6.8 nW)
216 - 960	200 (12 nW)
Above 960	500 (75 nW)

Note: Measurements for compliance with limits in the abobe table may be performed at distances other than 3 metres, in accordance with Section 7.2.7.

RSS-Gen Issue 5 Table 5: General Field Strength Limis for Transmitters at Frequencies Above 30MHz

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)
30 - 88	100 (3 nW)
88 - 216	150 (6.8 nW)
216 - 960	200 (12 nW)
Above 960	500 (75 nW)

Note: Transmitting devices are not permitted in Table 1 bands or, unless stated otherwise, in TV bands (54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz and 614-806 MHz).

RSS-Gen Issue 5 Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

Frequency (fundamental or spurious)	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	<i>Measurement Distance (metres)</i>		
9 - 490 kHz	2,400/F (F in kHz)	2,400/337F (F in kHz)	300		
490 - 1,705 kHz	24,000/F (F in kHz)	24,000/337F (F in kHz)	30		
1.705 - 30 MHz	30	N/A	30		

Note: The emission limits for the bands 9-90 kHz and 110-490 kHz are based on measurements employing an average detector.



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TEST SETUP

The diagram below shows the test setup that is utilized to make the measurements for emission from below 1GHz.

9kHz ~ 30MHz









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The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8/1.5 meters above the ground at a 3 meter chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The spectrum analyzer was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. The tests were performed in accordance with 558074 D01 15.247 Meas Guidance v05



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NOTE:

- 1. The resolution bandwidth of test receiver is 200Hz for Quasi-peak detection (QP) at frequency 9~150(kHz).
- 2. The resolution bandwidth of test receiver is 9kHz for Quasi-peak detection (QP) at frequency 0.15~30(MHz).
- 3. The resolution bandwidth of test receiver is 120kHz for Quasi-peak detection (QP) at frequency 30~1000(MHz).
- 4. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.
- 5. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth $\leq 1/T$ for Average detection (AV) at frequency above 1GHz.



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TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Test Voltage: AC 120V, 60Hz

Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/28
Model Name	AT-LP70XBT	Test By	Peter Chu
Test Mode	ТХ	Temp & Humidity	22.3°C, 49%

Vertical



REMARK:

- 1.Test receiver setting QP(Qusai Peak): RBW=120kHz
- 2.C.F=Antenna Factor+Cable Loss
- 3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit
- 4. The other emission levels were 10dB below the limit
- 5.The test distance is 3m.



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Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/28
Model Name	AT-LP70XBT	Test By	Peter Chu
Test Mode	ТХ	Temp & Humidity	22.3°C, 49%

Horizontal



REMARK:

1.Test receiver setting QP(Qusai Peak): RBW=120kHz

2.C.F=Antenna Factor+Cable Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



TX Above 1 GHz

Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH Low TX / GFSK	TEMP& Humidity	21.8°C, 47%



REMARK:

- 1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≥1/T
- 2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss
- 3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit 4. The other emission levels were 10dB below the limit
- 5.The test distance is 3m.



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Report No.: TMTN2312001599NR

roduct Name	AUTOM/	ATIC WIRE	LESS TU	RNTABLE	Те	est Date	2023/12/27			
Model		AT-LP70XBT Test By						Peter Chu		
Test Mode		CH Low T	X / GFSK	ζ.	TEMP	& Humidity	21.8	°C, 47%		
Horizontal										
100	el (dBuV/m)						Date: 202	3-12-27		
90										
90										
80										
70										
60										
50	8									
402 4	6 7									
	5									
30										
20										
10										
0										
-100	0 4000.	6000. 8000.	10000. 12	2000. 14000. Frequency (MI	16000. 18 Iz)	3000. 20000. 22	2000. 24000	. 26500		
Freq	Reading	C.F	Result PK	Limit	Margin	Detector				
MHz	dBuV	dB	dBuV/m	dBuV/m	dB					
1129.400	41.95	-14.96	26.99	54.00	-27.01	Average				
1129.400	52.32	-14.96	37.36	74.00	-36.64	Peak				
1879.600	39.44	-10.70	28.74	54.00	-25.26	Average				
2250.360	38.42	-6.30	32.12	54.00	-21.88	Average				
2250.360	48.64	-6.30	42.34	74.00	-31.66	Peak				
4803.510	49.28	-0.19	40.09	54.00	-13,91	Average				
	40.20	0.10		24100	10.01					

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz, Average: RBW=1MHz, VBW \geq 1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3.The result basic equation calculation is as follow:Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



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Report No.:	TMTN2312001599NR



REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≥1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



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Product Name	AUTOMA	ATIC WIRE	ESS TU	JRNTABLE	Т	est Date	2023/12/27	
Model	Model AT-LP70XBT Test By Pe			Peter Chu				
Test Mode		CH Mid T	X / GFSł	<	TEM	P& Humidity	21.8°C, 47%	
Horizontal								
100	/el (dBuV/m)					 	Date: 2023-12-27	
90								
80								
70								
60								
50	8							
40	4 7							
30	35							
20					_			
10								
¥10	00 4000.	6000. 8000.	10000. 12	2000. 14000. 1 Frequency (MH)	6000. 18 ⁽)	000. 20000. 2200	0. 24000. 26500	
Freq	Reading	C.F	Result	Limit M	Margin	Detector		
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1226.050	42.46	-14.20	28.26	54.00 ·	25.74	Average		
1226.050	53.41	-14.20	39.21	74.00	34.79	Peak		
1887.060	39.43	-10.75	28.68	54.00	-25.32	Average		
188/.060	50.27	-10./5	39.52	74.00 ·	-34.48	Peak Average		
2253.260	48.90	-6.31	42.59	74.00	-31.41	Peak		
4881.910	39.93	0.09	40.02	54.00	13.98	Average		
4881.910	47.63	0.09	47.72	74.00	26.28	Peak		

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW \geq 1/T 2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss 3.The result basic equation calculation is as follow:Result = Reading + C.F, Margin = Result-Limit 4.The other emission levels were 10dB below the limit



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Product Name	AUTOMA	ATIC WIREL	est Date	2023/12/27				
Model		AT-LP70XBT Test By						
Test Mode	CH High TX / GFSK TEMP& Humidity 21.8°C, 47						21.8°C, 47%	
Vertical								
100	el (dBuV/m)						Date: 2023-12-27	
90								
90								
80								
70								
60								
50	40 8							
402								
30	35							
20								
10								
0 <mark>100</mark>	0 4000.	6000. 8000.	10000. 12	2000. 14000. * Frequency (MH	16000. 18 z)	8000. 20000. 220	00. 24000. 26500	
Freq	Reading	C.F	Result PK	Limit	Margin	Detector		
MHz	dBuV	dB	dBuV/m	dBuV/m	dB			
1197.150	41.65	-14.44	27.21	54.00	-26.79	Average		
1197.150	52.41	-14.44	37.97	74.00	-36.03	Peak		
1984.520	42.29	-9.72	32.57	54.00	-21.43	Average		
1984.520	53.22	-9.72	43.50	74.00	-30.50	Peak		
2290.180	48.32	-6.19	42.13	74.00	-31.87	Peak		
4960.050	35.04	0.50	35.54	54.00	-18.46	Average		
4960.050	45.11	0.50	45.61	74.00	-28.39	Peak		

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≧1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



Product Name	AUTON	IATIC WIRE	LESS 1	URNTABL	.E	Test Da	te	20	23/12/27		
Model		AT-LF	P7OXBT			Test B	у	Pe	eter Chu		
Test Mode		CH High	TX / GF	SK	Т	EMP& Hur	nidity	21.	8°C, 47%		
Horizontal	Horizontal										
100Level	(dBuV/m)							ate: 2023	-12-27		
90											
80											
70											
60											
00											
50	8										
40 2 4											
30											
20											
10											
0 <mark>1000</mark>	4000.	6000. 8000.	10000. 1	2000. 14000. Frequency (M	16000. Hz)	. 18000. 2000	0. 22000	. 24000.	26500		
Freq	Reading	C.F	Result PK	Limit	Margi	in Detect	or				
MHz	dBuV	dB	dBuV/m	dBuV/m	c	dB					
1226.520	42.48	-14.19	28.29	54.00	-25.7	71 Avera	Ige				
1226.520	52.33	-14.19	38.14	74.00	-35.8	86 Peak	-				
1892.520	39.24	-10.66	28.58	54.00	-25.4	42 Avera	ige				
2258.260	38.40	-10.00	32.07	54.00	-21.9	93 Avera	ge				
2258.260	48.24	-6.33	41.91	74.00	-32.0	09 Peak	-				
4959.930	37.69	0.50	38.19	54.00	-15.8	81 Avera	ige				
4959.930	45.95	0.50	46.45	74.00	-27.5	55 Peak					

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz, Average: RBW=1MHz, VBW \geq 1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



-	I											
Product Nam	ie	AUTON	IATIC WI	RELESS	IURNIA	BLE	Te	est Date	2023	/12/27		
Model			AT	LP70XB	Γ		-	Test By	Pete	r Chu		
Test Mode			CH Low	TX / 8-D	PSK		TEMP	& Humidity	21.8°	C, 47%		
Vertical												
100	Leve	l (dBuV/m)							Date: 2023-1	2-27		
90												
80							_					
70												
60												
50										<u> </u>		
50	4	6	3									
40	2	s 7	7									
30		I –										
20												
20												
10												
0	1000	4000.	6000. 80)00. 10000.	12000. 140	00. 10	5000. 18	000. 20000. 2200	0. 24000.	26500		
					Frequenc	y (MHz)					
Fr	eq	Readin	g C.	F Resul	t Limi K	t M	argin	Detector				
м	Hz	dBu	V d	B dBuV/	m dBuV/	m	dB					
1122.4	50	42.1	9 -14.9	9 27.2	9 54.0	 a _	26.80	Average				
1122.4	50	52.0	7 -14.9	9 37.0	8 74.0	9 -	36.92	Peak				
1988.1	40	42.3	4 -9.7	1 32.6	54.0	9 -	21.37	Average				
1988.1	40	54.0	8 -9.7	1 44.3	7 74.0	9 -	29.63	Peak				
2233.4	80	38.8	8 -6.3	9 32.4	9 54.0	9 -	21.51	Average				
2233.4	80	48.2	9 -6.3	9 41.9	0 74.0	9 -	32.10	Peak				
4804.1	40	34.5	5 -0.1 8 _0.1	9 34.3 9 <u>4</u> 51	9 74 0	9 - 9 -	19.66	Average				

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≥1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

- 3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit
- 4. The other emission levels were 10dB below the limit



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REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≥1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

- 3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit
- 4. The other emission levels were 10dB below the limit



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Report No.: TMTN2312001599NR

Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH Mid TX / 8-DPSK	TEMP& Humidity	21.8°C, 47%



REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz, Average: RBW=1MHz, VBW≥1/T 2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss 3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit 4. The other emission levels were 10dB below the limit



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Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH Mid TX / 8-DPSK	TEMP& Humidity	21.8°C, 47%



REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≥1/T

- 2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss
- 3.The result basic equation calculation is as follow:Result = Reading + C.F, Margin = Result-Limit
- 4. The other emission levels were 10dB below the limit



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REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz,Average: RBW=1MHz, VBW≧1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



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Report No.: TMTN2312001599NR

Product N	lame	AUTOM	ATIC WIRE	LESS TU	JRNTABLE	Test Date		2023/12/27
Mode	el		AT-LF	70XBT		Test By Peter (Peter Chu
Test Mo	ode		CH High T	X / 8-DPS	SK	TEM	P& Humidity	21.8°C, 47%
Horizonta	al							
	100	el (dBuV/m)						Date: 2023-12-27
	00							
	90							
	80							
	70							
	60							
	50	8						
	40 2 4	6						
		5 1						
	30 3							
	20							
	10							
	0	1 4000	6000 8000	10000 13	2000 14000	16000 18	8000 20000 2200	0 24000 26500
	1000	4000.		10000. 12	Frequency (M	Hz)	20000. 20000. 2200	0. 24000. 20000
	Freq	Reading	C.F	Result	Limit	Margin	Detector	
	мц.,	dBuV	40	PK dBuV/m	dBu\//m	ab		
						ub		
122	2.520	42.04	-14.24	27.80	54.00	-26.20	Average	
122	2.520	52.65	-14.24	38.41	74.00	-35.59	Peak	
188	9.270	38.28	-10.75	27.53	54.00	-26.47	Average	
188	9.270	48.54	-10.75	37.79	74.00	-36.21	Peak	
226	3.440	38.18	-6.30	31.88	54.00	-22.12	Average	
226	3.440	48.26	-6.30	41.96	74.00	-32.04	Peak	
495	9.960	35.29	0.50	35.79	54.00	-18.21	Average	
495	9.960	45.26	0.50	45./6	/4.00	-28.24	Реак	

REMARK:

1.Spectrum analyzer setting Peak: RBW=1MHz, VBW=3MHz, Average: RBW=1MHz, VBW \geq 1/T

2.C.F=Antenna Factor+Cable Loss-Preamplifier gain+2.4GHz~2.5GHz Filter Insertion Loss

3. The result basic equation calculation is as follow: Result = Reading + C.F, Margin = Result-Limit

4. The other emission levels were 10dB below the limit



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Restricted Band Edges

2390.000

2390.000

34.80

44.85

6.84

6.84

41.64

51.69

Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH Low TX / GFSK	TEMP& Humidity	21.8°C, 47%

Horizontal 100 Level (dBuV/m) Date: 2023-12-27 90 80 70 60 50 40 30 20 10 0^L 2310 2320. 2330. 2340. 2350. 2360. 2370. 2380. 2390. 2400. 2407 Frequency (MHz) Limit Margin Freq Reading C.F Result Detector PK dB MHz dBuV dBuV/m dBuV/m dB - --- ------ -----____ ----2390.000 34.95 6.84 41.79 54.00 -12.21 Average 2390.000 45.09 6.84 51.93 74.00 -22.07 Peak Vertical 100 Level (dBuV/m) Date: 2023-12-27 90 80 70 60 50 40 30 20 10 0<mark>_____</mark>2310 2320. 2330. 2360. 2400. 2407 2340. 2350. 2370. 2380. 2390. Frequency (MHz) Reading C.F Result Limit Margin Freq Detector PK MHz dBuV dB dBuV/m dBuV/m dB ---- --------- -------

54.00

74.00

-12.36

-22.31

Average

Peak



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Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH High TX / GFSK	TEMP& Humidity	21.8°C, 47%





Vertical





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Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH Low TX / 8-DPSK	TEMP& Humidity	21.8°C, 47%





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Product Name	AUTOMATIC WIRELESS TURNTABLE	Test Date	2023/12/27
Model	AT-LP70XBT	Test By	Peter Chu
Test Mode	CH High TX / 8-DPSK	TEMP& Humidity	21.8°C, 47%





Vertical





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Report No.: TMTN2312001599NR 8.10 CONDUCTED EMISSION

<u>LIMITS</u>

RSS-Gen Issue 5, A radio apparatus that is designed to be connected to the public utility (AC) power line shall ensure that the radio frequency voltage, which is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz-30 MHz, shall not exceed the limits in Table 3.

Unless the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in Table 3 below. The more stringent limit applies at the frequency range boundaries.

The conducted emissions shall be measured in accordance with the reference publication mentioned in Section 3.

Frequency Range	Conducted Limit (dBµv)		
(MHz)	Quasi-peak	Average	
0.15 - 0.50	66 to 56*	56 to 46*	
0.50 - 5.00	56	46	
5.00 - 30.0	60	50	

RSS-Gen Issue 5 Table 4: AC Power Lines Conducted Emission Limits

Note: * Decreases with the logarithm of the frequency.



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TEST SETUP





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TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.10: 2013.

The test procedure is performed in a 4m × 3m × 2.4m (L×W×H) shielded room.

The EUT along with its peripherals were placed on a 1.0m (W) × 1.5m (L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.

The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.

The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN is 0.8 m. Where a mains flexible cord was provided by the manufacturer shall be 1 m long, or if in excess of 1 m, the excess cable was folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.



TEST RESULTS

Test Voltage: AC 120V, 60Hz

Model No.	AT-LP70XBT	Test Mode	Normal Operation
Environmental Conditions	26.5℃, 44% RH	Resolution Bandwidth	9 kHz
Tested by	Jeremy Zhong		

LINE

(The chart below shows the highest readings taken from the final data.)





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Model No.	AT-LP70XBT	Test Mode	Normal Operation
Environmental Conditions	26.5℃, 44% RH	Resolution Bandwidth	9 kHz
Tested by	Jeremy Zhong		

NEUTRAL

(The chart below shows the highest readings taken from the final data.)



=== END of Report ===