

RF Test Data for Bluetooth (BR+EDR) (Conducted Measurements)

General Description of EUT	
EUT Name:	Smart Watch
Model:	Noise Alt Watch 1
Sample ID:	HC-C-202507-0179-03-01#
Test Standard:	FCC Part 15.247
Environmental Conditions	
Ambient Temperature:	25°C
Ambient Humidity:	45%RH
Test Power Supply:	DC 5V
Test Engineer:	Kael Li
Note: For a more detailed features description, please refer to the report TBR-C-202507-0179-6.	

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1: 20dB Emission Bandwidth

1.1 Test Result

Test Mode	Antenna	Frequency[MHz]	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.520	2402.471	---	---
DH5	Ant1	2441	0.945	2440.520	2441.465	---	---
DH5	Ant1	2480	0.975	2479.499	2480.474	---	---
2DH5	Ant1	2402	1.326	2401.313	2402.639	---	---
2DH5	Ant1	2441	1.371	2440.295	2441.666	---	---
2DH5	Ant1	2480	1.374	2479.292	2480.666	---	---
3DH5	Ant1	2402	1.326	2401.322	2402.648	---	---
3DH5	Ant1	2441	1.359	2440.298	2441.657	---	---
3DH5	Ant1	2480	1.347	2479.304	2480.651	---	---

1.2 Test Graphs





3DH5-Ant1-2402



3DH5-Ant1-2441



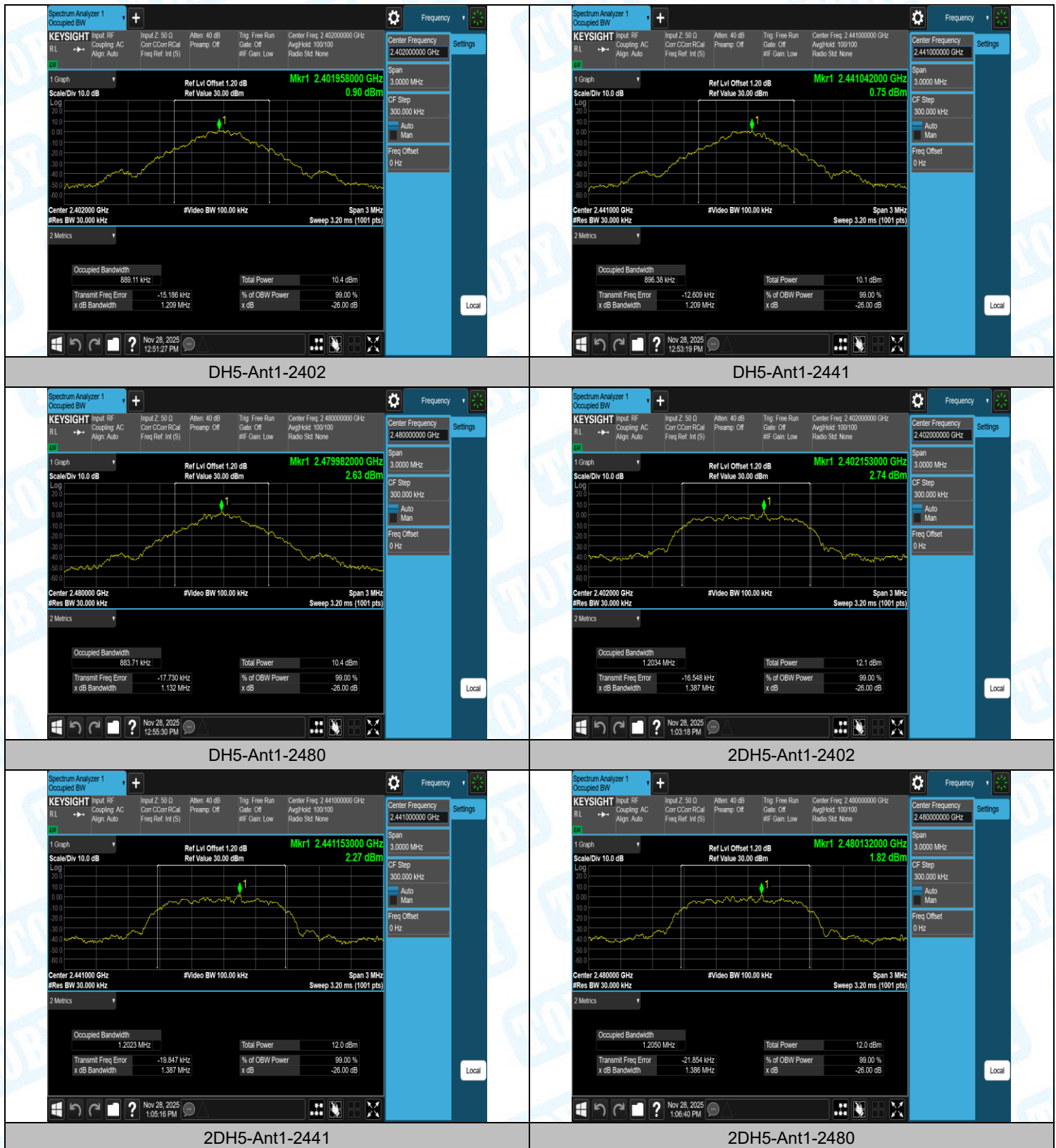
3DH5-Ant1-2480

2: Occupied Channel Bandwidth

2.1 Test Result

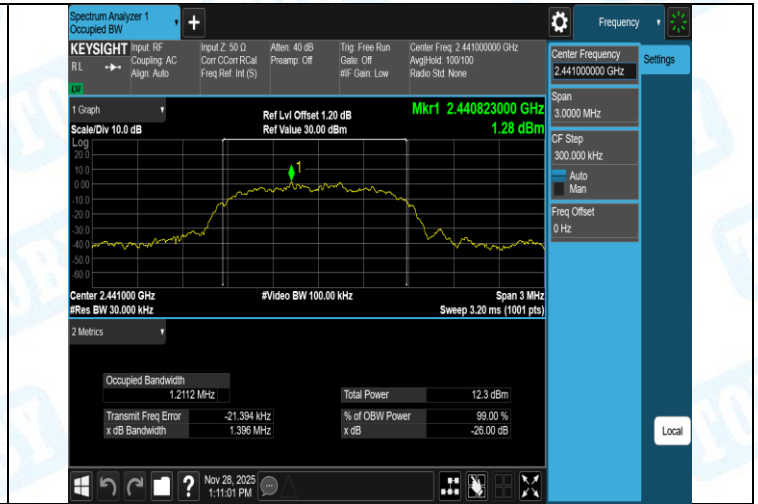
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88911	2401.5403	2402.4294	---	---
DH5	Ant1	2441	0.89638	2440.5392	2441.4356	---	---
DH5	Ant1	2480	0.88371	2479.5404	2480.4241	---	---
2DH5	Ant1	2402	1.2034	2401.3818	2402.5852	---	---
2DH5	Ant1	2441	1.2023	2440.3790	2441.5813	---	---
2DH5	Ant1	2480	1.2050	2479.3757	2480.5807	---	---
3DH5	Ant1	2402	1.2121	2401.3713	2402.5834	---	---
3DH5	Ant1	2441	1.2112	2440.3730	2441.5842	---	---
3DH5	Ant1	2480	1.2131	2479.3728	2480.5859	---	---

2.2 Test Graphs





3DH5-Ant1-2402



3DH5-Ant1-2441



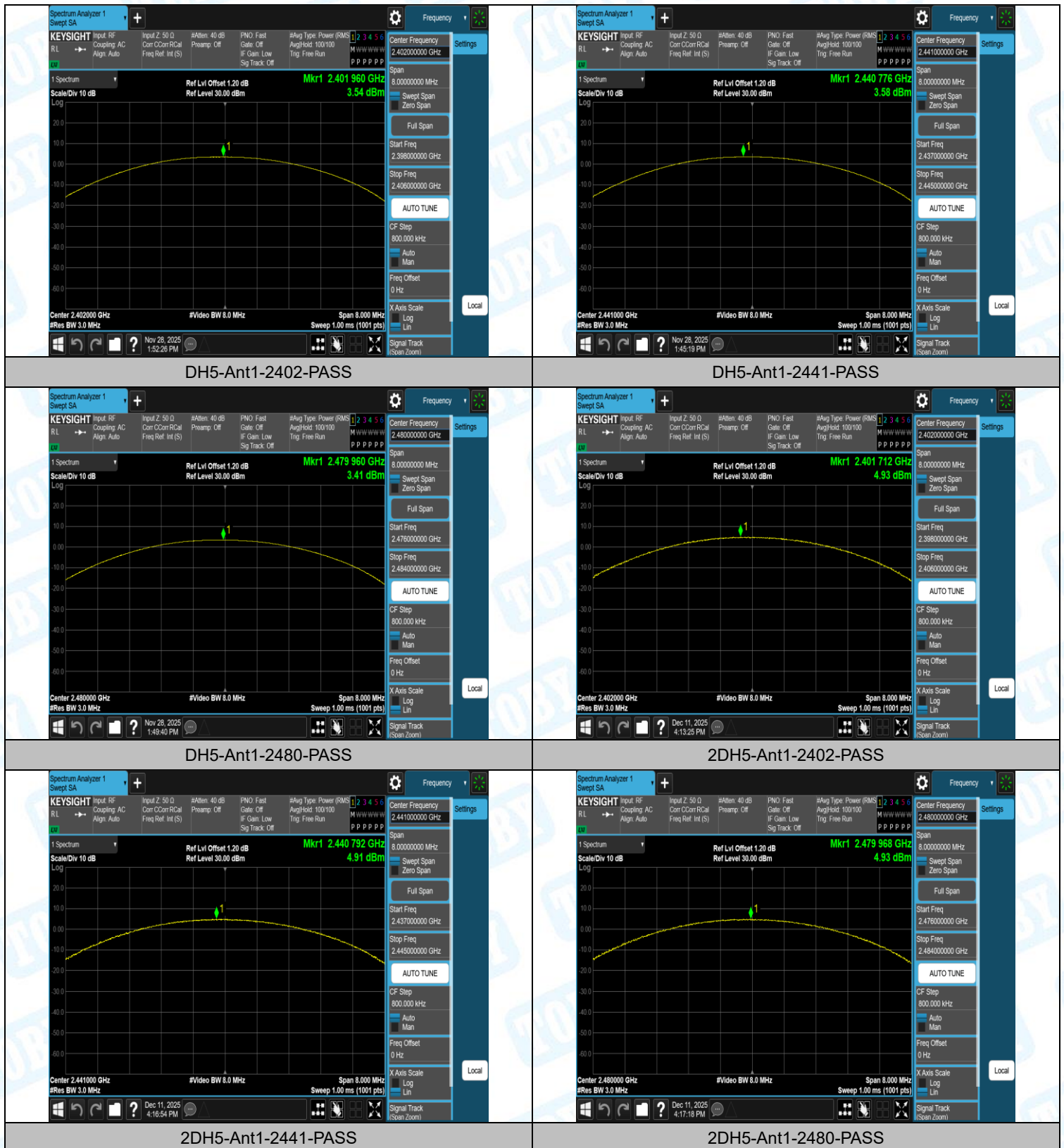
3DH5-Ant1-2480

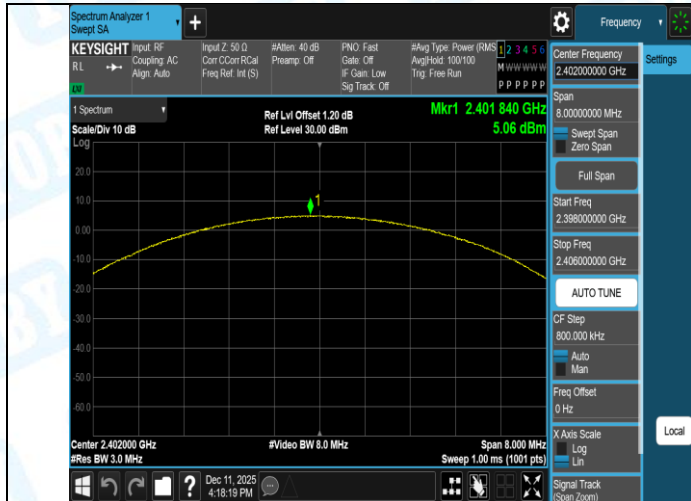
3: Maximum conducted output power

3.1 Test Result Peak

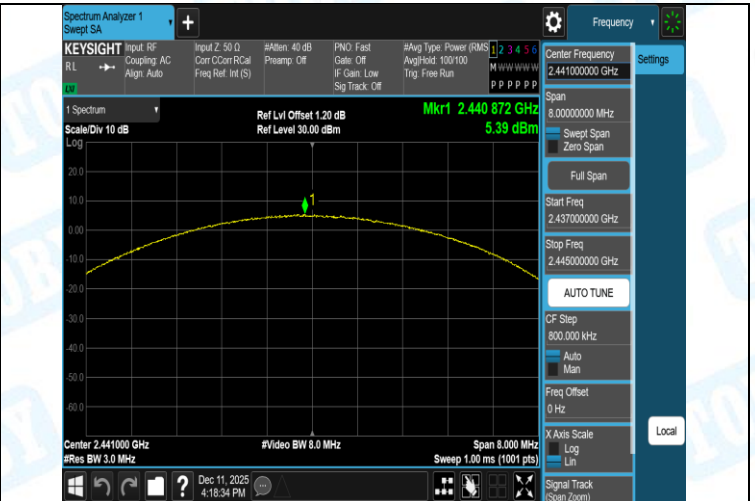
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	3.54	≤30	PASS
DH5	Ant1	2441	3.58	≤30	PASS
DH5	Ant1	2480	3.41	≤30	PASS
2DH5	Ant1	2402	4.93	≤20.97	PASS
2DH5	Ant1	2441	4.91	≤20.97	PASS
2DH5	Ant1	2480	4.93	≤20.97	PASS
3DH5	Ant1	2402	5.06	≤20.97	PASS
3DH5	Ant1	2441	5.39	≤20.97	PASS
3DH5	Ant1	2480	5.41	≤20.97	PASS

3.2 Test Graphs

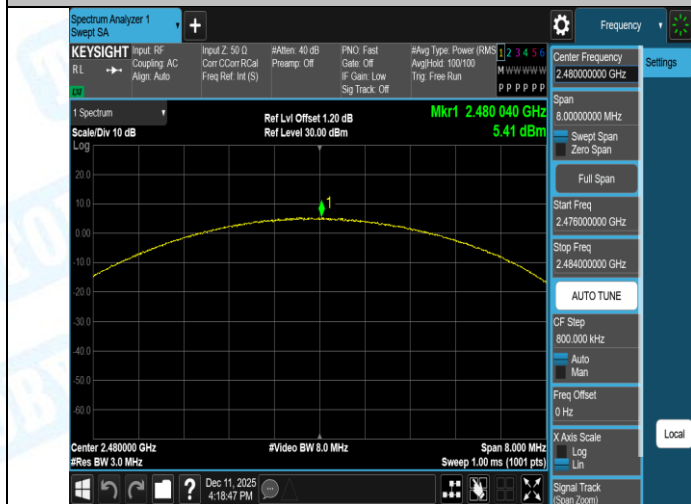




3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS



3DH5-Ant1-2480-PASS

4: Carrier frequency separation

4.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.994	≥0.975	PASS
2DH5	Ant1	Hop	1.004	≥0.916	PASS
3DH5	Ant1	Hop	0.976	≥0.906	PASS

4.2 Test Graphs

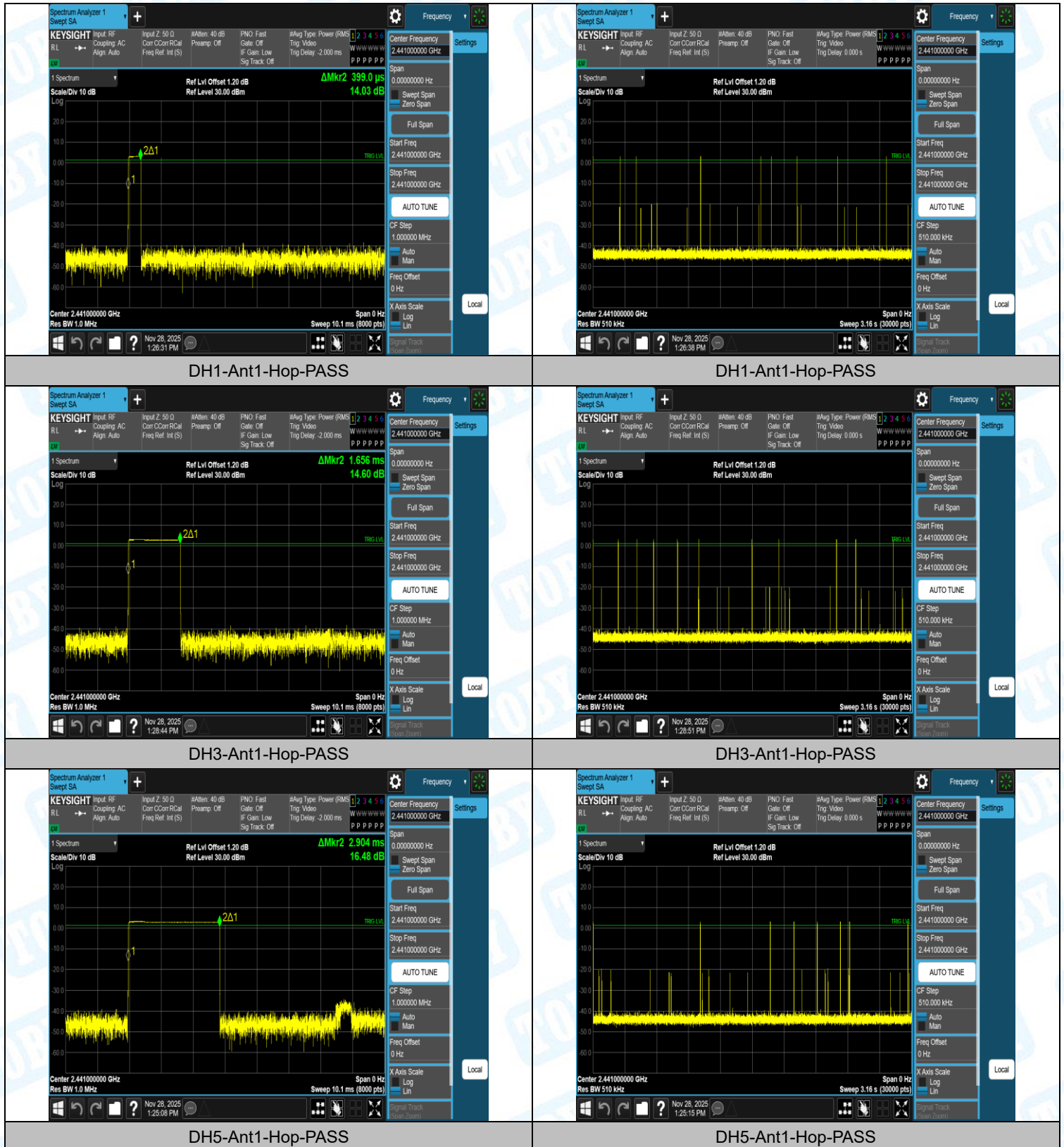


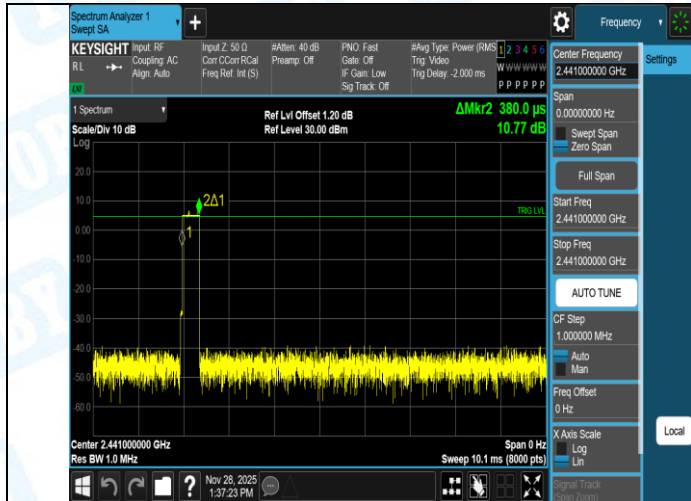
5: Time of occupancy

5.1 Test Result

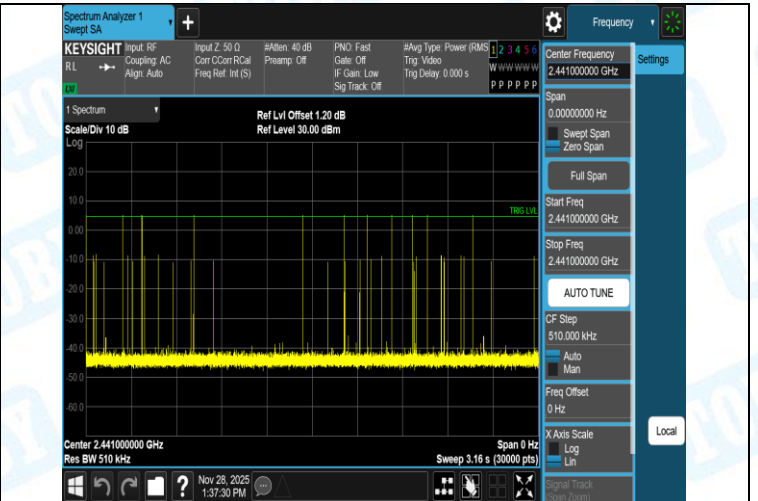
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.399	90	0.036	≤0.4	PASS
DH3	Ant1	Hop	1.656	110	0.182	≤0.4	PASS
DH5	Ant1	Hop	2.904	80	0.232	≤0.4	PASS
2DH1	Ant1	Hop	0.380	110	0.042	≤0.4	PASS
2DH3	Ant1	Hop	1.633	80	0.131	≤0.4	PASS
2DH5	Ant1	Hop	2.880	80	0.23	≤0.4	PASS
3DH1	Ant1	Hop	0.380	160	0.061	≤0.4	PASS
3DH3	Ant1	Hop	1.630	50	0.082	≤0.4	PASS
3DH5	Ant1	Hop	2.882	80	0.231	≤0.4	PASS

5.2 Test Graphs





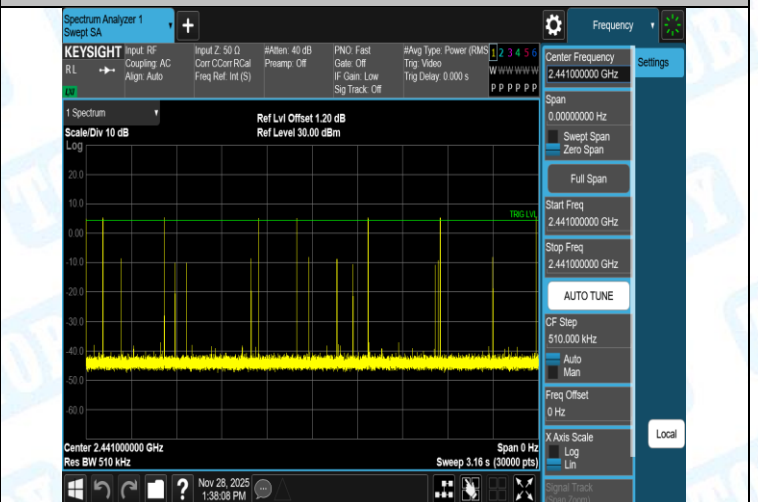
2DH1-Ant1-Hop-PASS



2DH1-Ant1-Hop-PASS



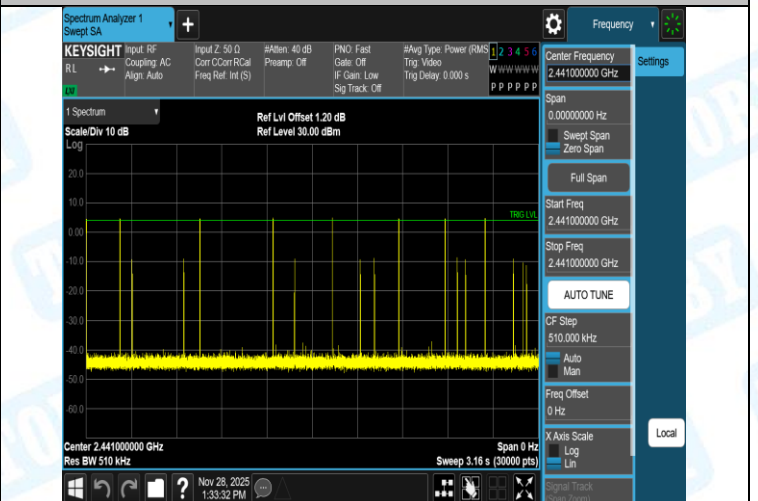
2DH3-Ant1-Hop-PASS



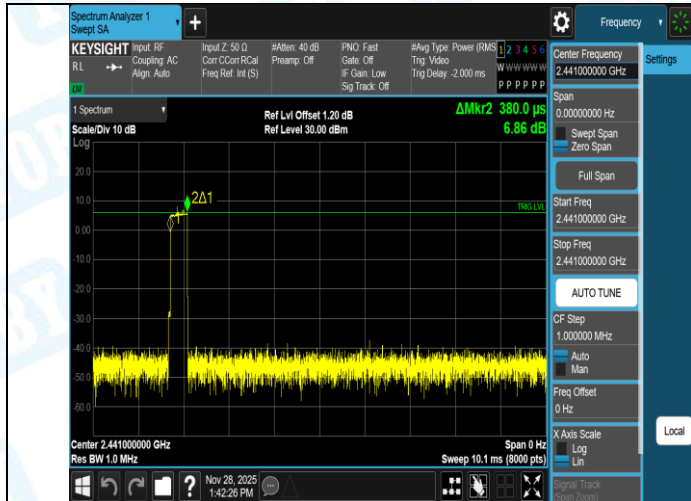
2DH3-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS



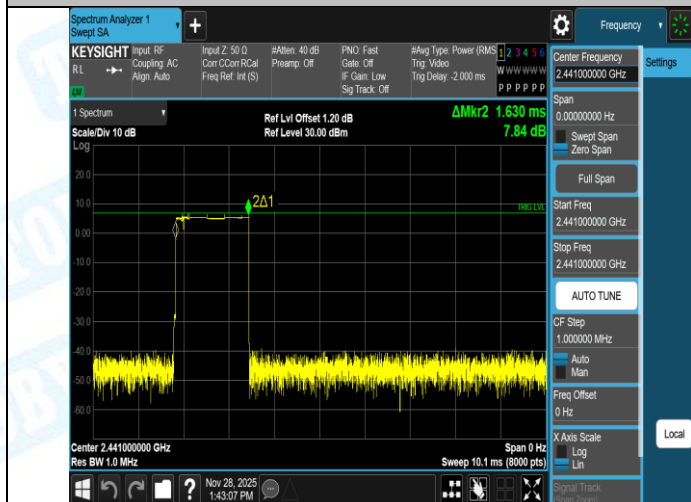
2DH5-Ant1-Hop-PASS



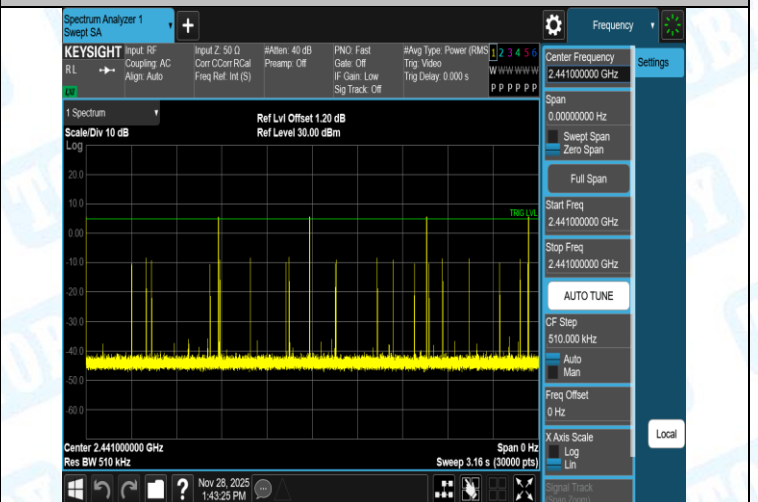
3DH1-Ant1-Hop-PASS



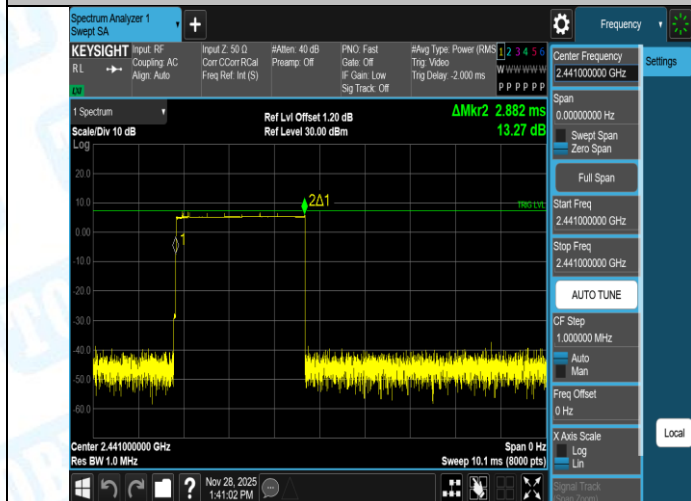
3DH1-Ant1-Hop-PASS



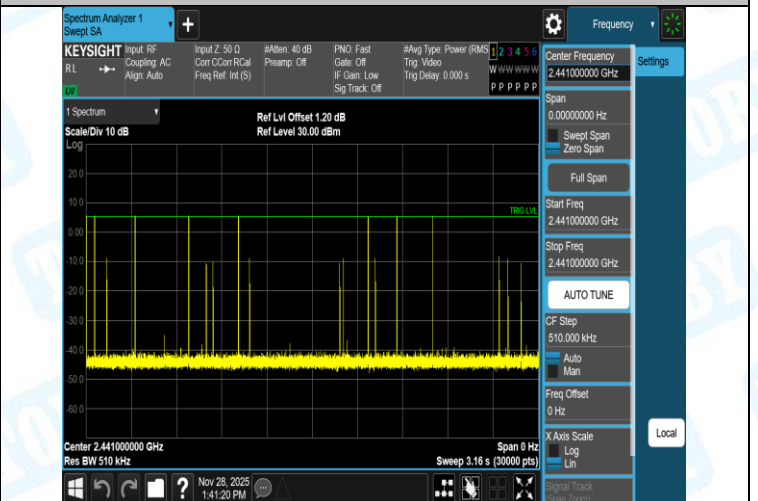
3DH3-Ant1-Hop-PASS



3DH3-Ant1-Hop-PASS



3DH5-Ant1-Hop-PASS



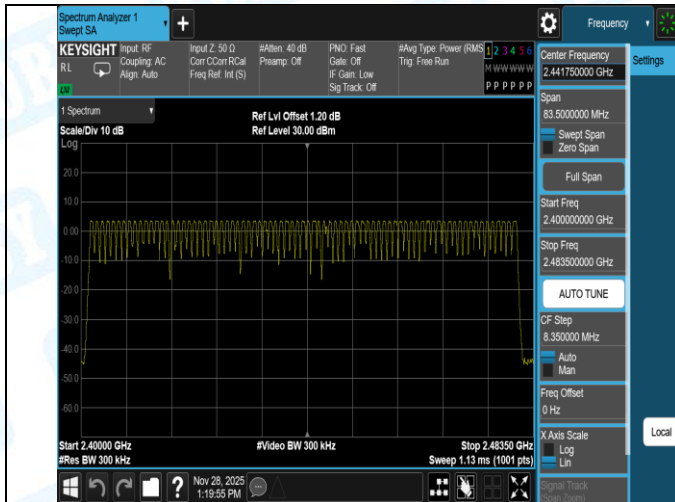
3DH5-Ant1-Hop-PASS

6: Number of hopping channels

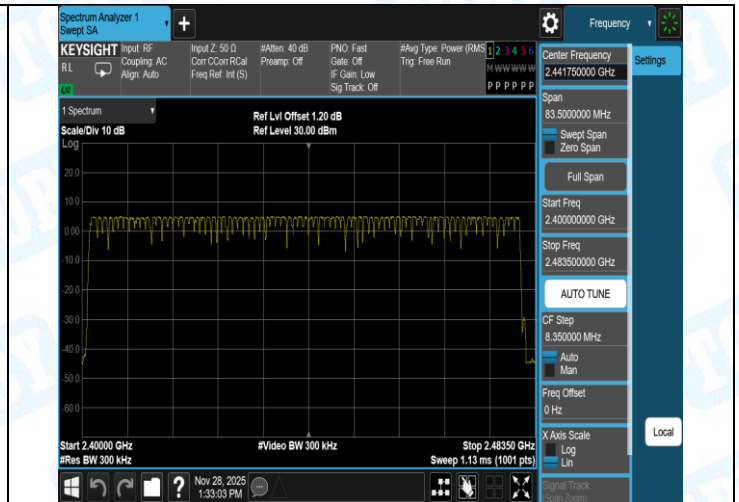
6.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

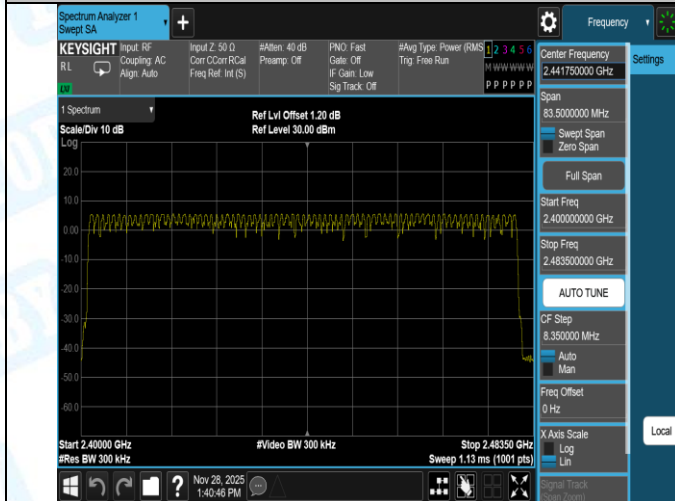
6.2 Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS



3DH5-Ant1-Hop-PASS

7: Band edge measurements

7.1 Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.51	-48.73	≤-16.49	PASS
DH5	Ant1	High	2480	3.06	-52.6	≤-16.94	PASS
DH5	Ant1	Low	Hop_2402	3.46	-50.29	≤-16.54	PASS
DH5	Ant1	High	Hop_2480	3.44	-45.51	≤-16.56	PASS
2DH5	Ant1	Low	2402	4.15	-52.04	≤-15.85	PASS
2DH5	Ant1	High	2480	2.72	-56.44	≤-17.28	PASS
2DH5	Ant1	Low	Hop_2402	4.91	-57.41	≤-15.09	PASS
2DH5	Ant1	High	Hop_2480	5.42	-56.38	≤-14.58	PASS
3DH5	Ant1	Low	2402	4.56	-51.7	≤-15.45	PASS
3DH5	Ant1	High	2480	4.72	-56.36	≤-15.28	PASS
3DH5	Ant1	Low	Hop_2402	5.36	-57.72	≤-14.64	PASS
3DH5	Ant1	High	Hop_2480	5.58	-55.86	≤-14.42	PASS