

## **Appendix for WCDMA Band 5**

Product Name: 5G Window CPE

Model No: TITAN 5100

## AppendixA: Average Power Output Data

### Test Result

#### WCDMA

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
Band5	4132	23.95	38.45	PASS
Band5	4182	23.68	38.45	PASS
Band5	4233	23.71	38.45	PASS

#### HSDPA

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band5	4132	1	22.95	38.5	PASS
Band5	4132	2	22.44	38.5	PASS
Band5	4132	3	22.44	38.5	PASS
Band5	4132	4	22.44	38.5	PASS
Band5	4182	1	22.76	38.5	PASS
Band5	4182	2	22.23	38.5	PASS
Band5	4182	3	22.22	38.5	PASS
Band5	4182	4	22.23	38.5	PASS
Band5	4233	1	22.70	38.5	PASS
Band5	4233	2	22.20	38.5	PASS
Band5	4233	3	22.21	38.5	PASS
Band5	4233	4	22.22	38.5	PASS

#### HSUPA

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band5	4132	1	22.92	38.5	PASS
Band5	4132	2	20.96	38.5	PASS
Band5	4132	3	21.88	38.5	PASS
Band5	4132	4	20.97	38.5	PASS
Band5	4132	5	23.00	38.5	PASS
Band5	4182	1	22.77	38.5	PASS
Band5	4182	2	20.73	38.5	PASS
Band5	4182	3	21.74	38.5	PASS
Band5	4182	4	20.69	38.5	PASS

Band5	4182	5	22.74	38.5	PASS
Band5	4233	1	22.74	38.5	PASS
Band5	4233	2	20.68	38.5	PASS
Band5	4233	3	21.64	38.5	PASS
Band5	4233	4	20.71	38.5	PASS
Band5	4233	5	22.72	38.5	PASS

## AppendixB:Peak-to-Average Ratio

### Test Result

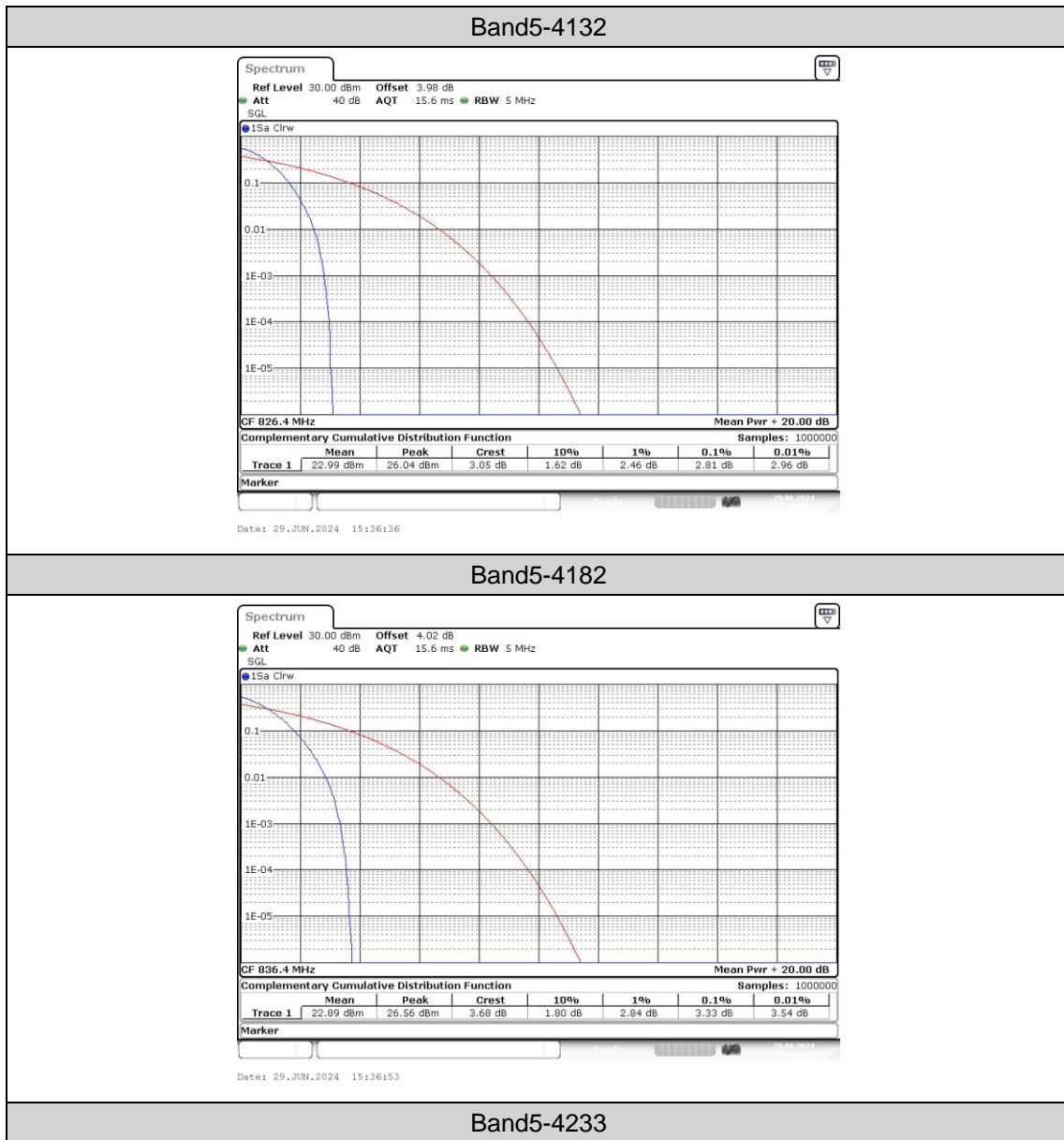
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band5	4132	2.81	13	PASS
Band5	4182	3.33	13	PASS
Band5	4233	3.16	13	PASS

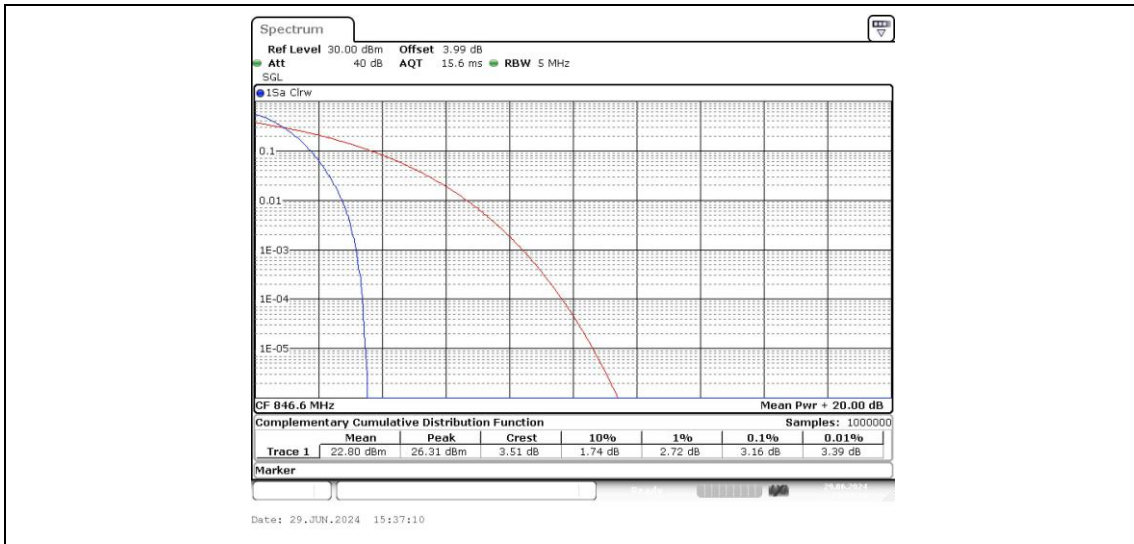
Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band5	4132	1	3.1	13	PASS
Band5	4132	2	3.3	13	PASS
Band5	4132	3	3.45	13	PASS
Band5	4132	4	3.48	13	PASS
Band5	4182	1	3.48	13	PASS
Band5	4182	2	3.65	13	PASS
Band5	4182	3	3.8	13	PASS
Band5	4182	4	3.86	13	PASS
Band5	4233	1	3.42	13	PASS
Band5	4233	2	3.57	13	PASS
Band5	4233	3	3.71	13	PASS
Band5	4233	4	3.77	13	PASS

Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band5	4132	1	4.09	13	PASS
Band5	4132	2	5.16	13	PASS
Band5	4132	3	4.9	13	PASS
Band5	4132	4	5.22	13	PASS
Band5	4132	5	3.86	13	PASS
Band5	4182	1	4.75	13	PASS
Band5	4182	2	5.59	13	PASS
Band5	4182	3	5.51	13	PASS
Band5	4182	4	5.62	13	PASS
Band5	4182	5	4.46	13	PASS
Band5	4233	1	4.55	13	PASS
Band5	4233	2	5.48	13	PASS

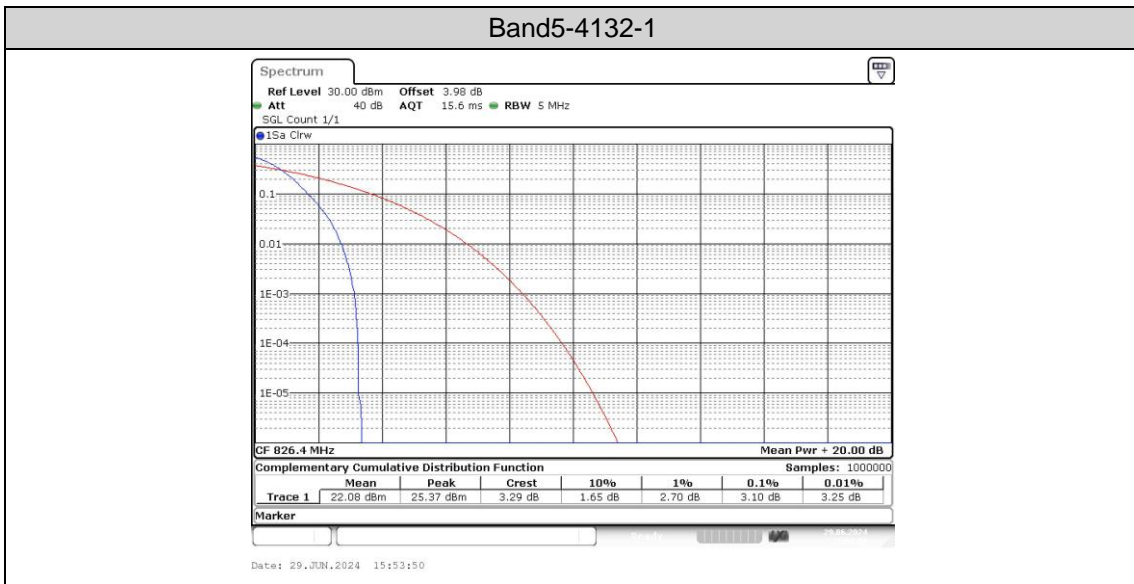
Band5	4233	3	5.36	13	PASS
Band5	4233	4	3.51	13	PASS
Band5	4233	5	4.29	13	PASS

### Test Graphs

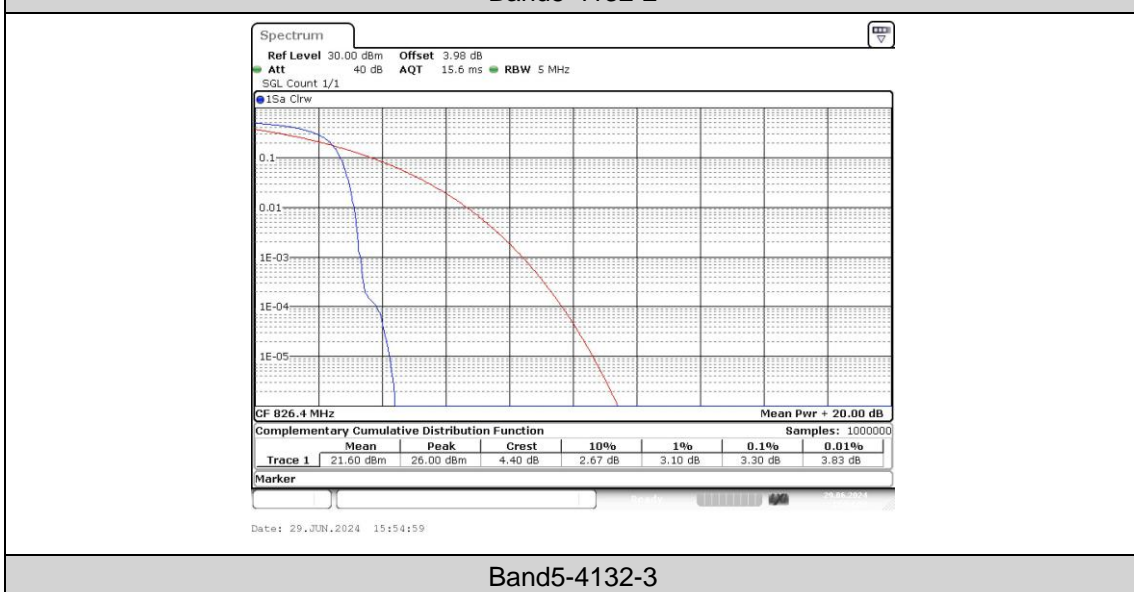




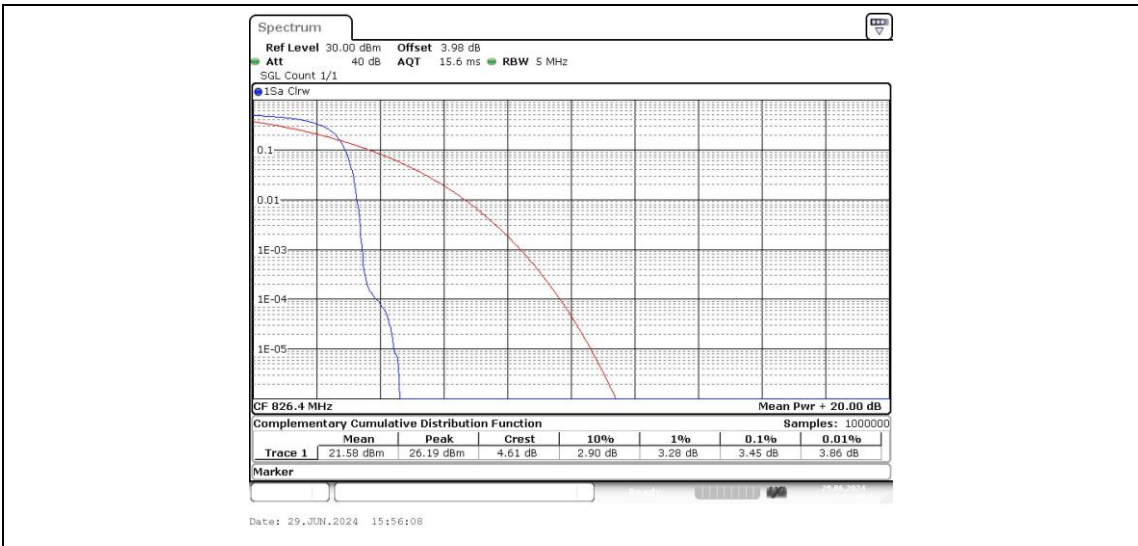
Band5-4132-1



Band5-4132-2



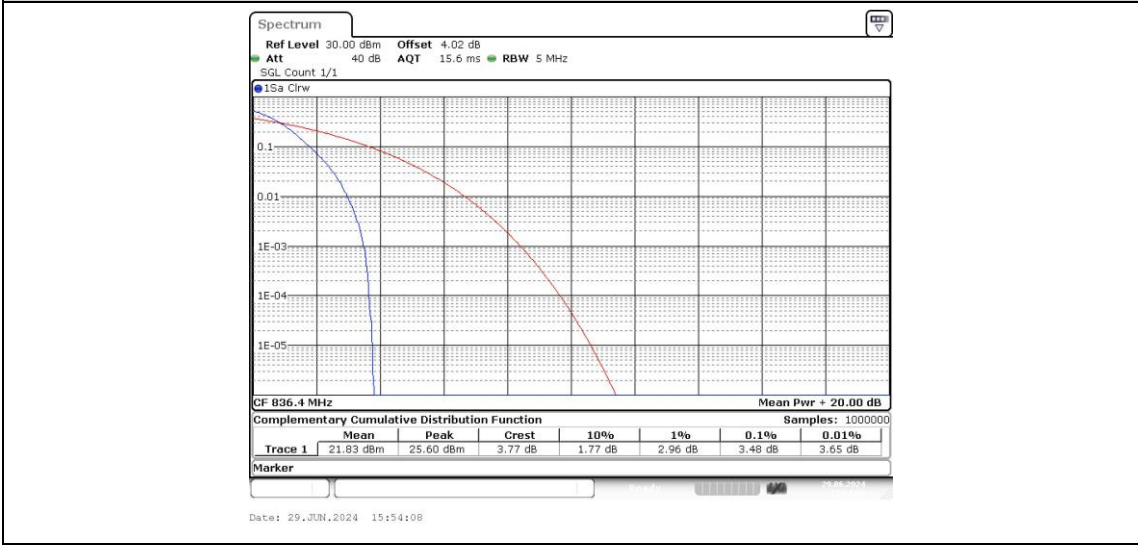
Band5-4132-3



Band5-4132-4

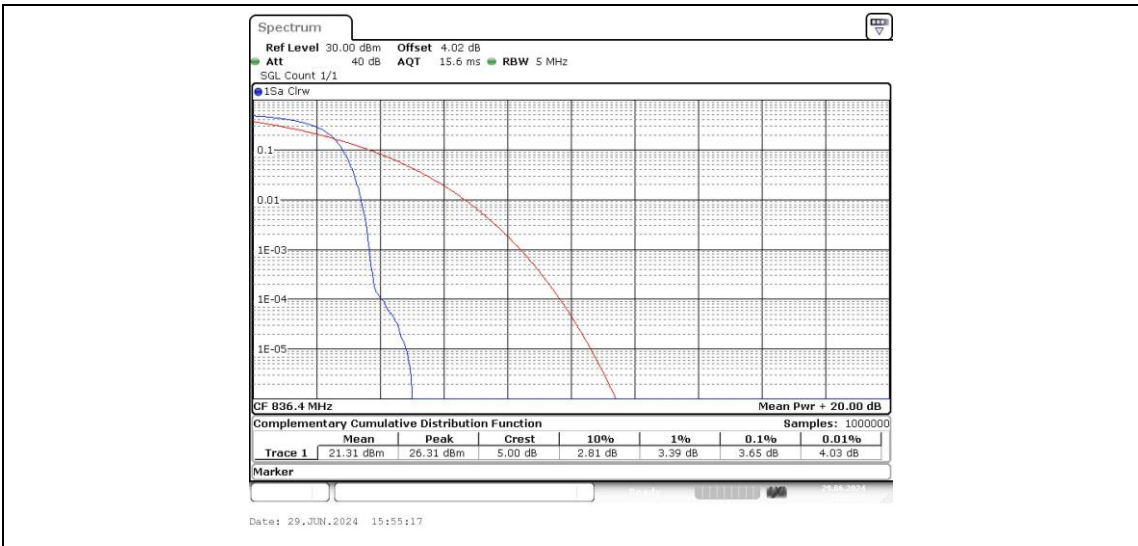


Band5-4182-1

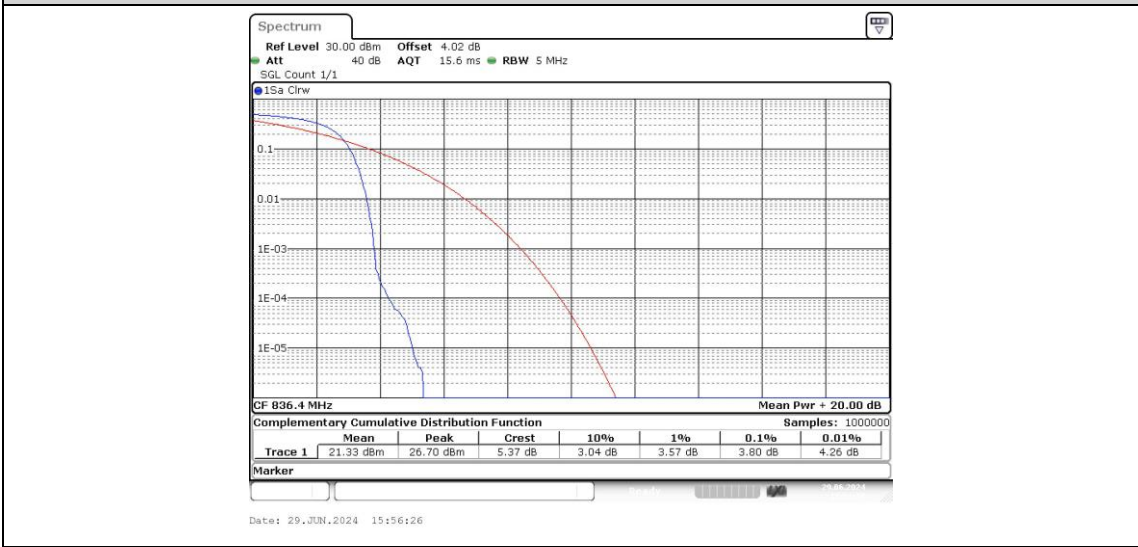


Band5-4182-2

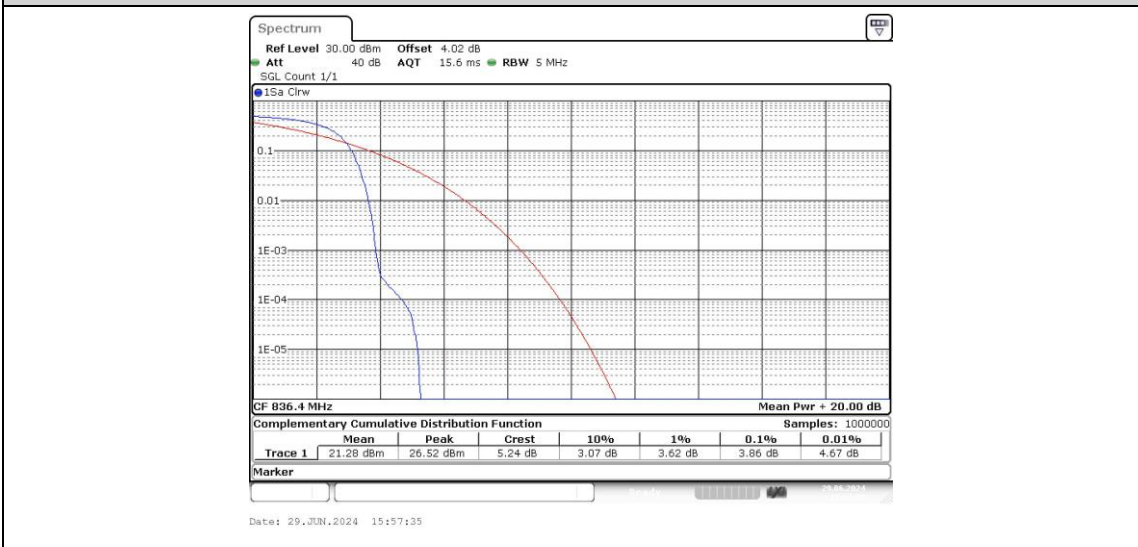




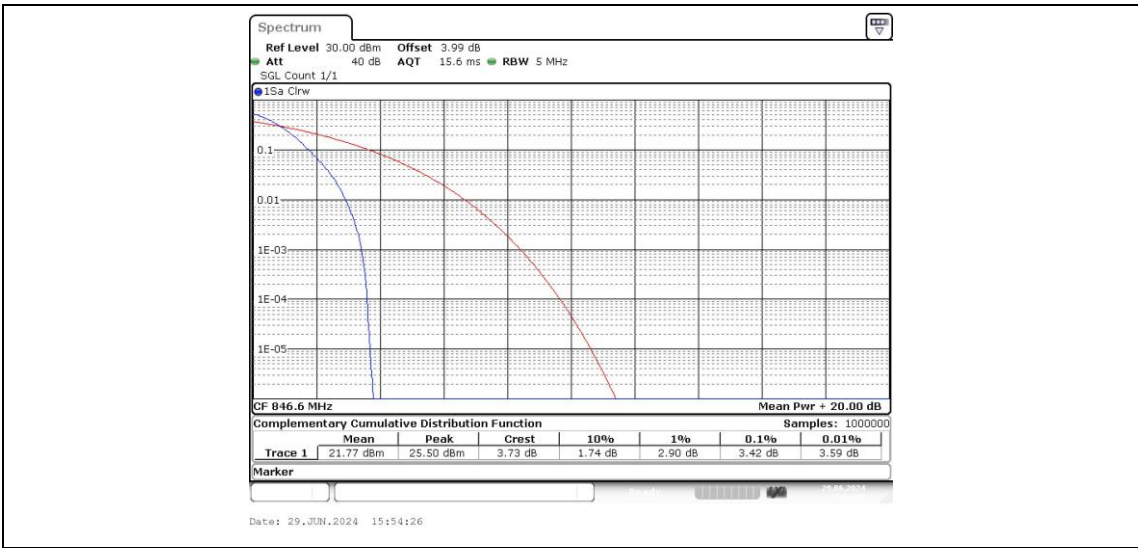
Band5-4182-3



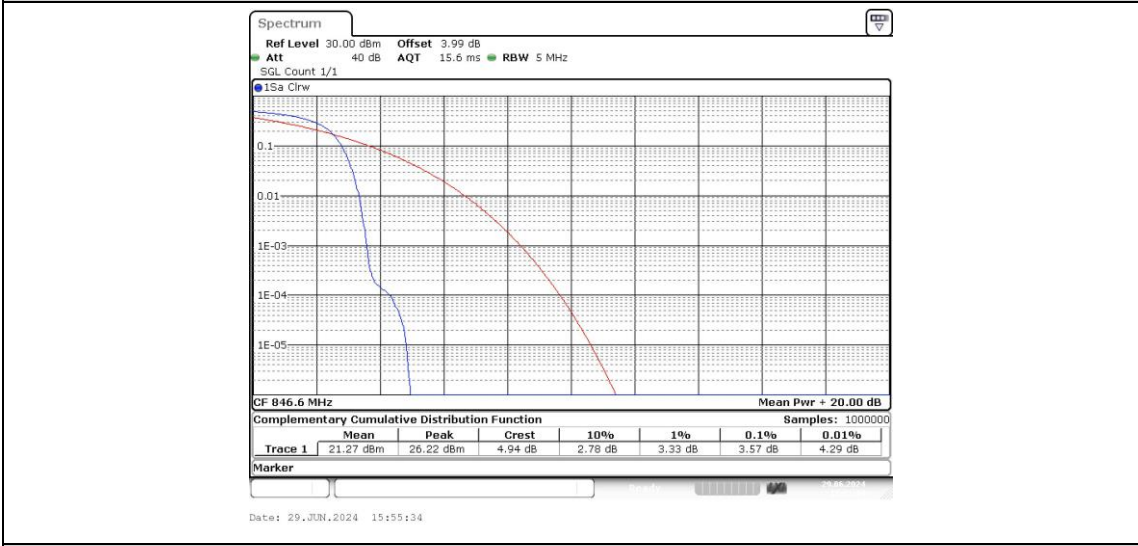
Band5-4182-4



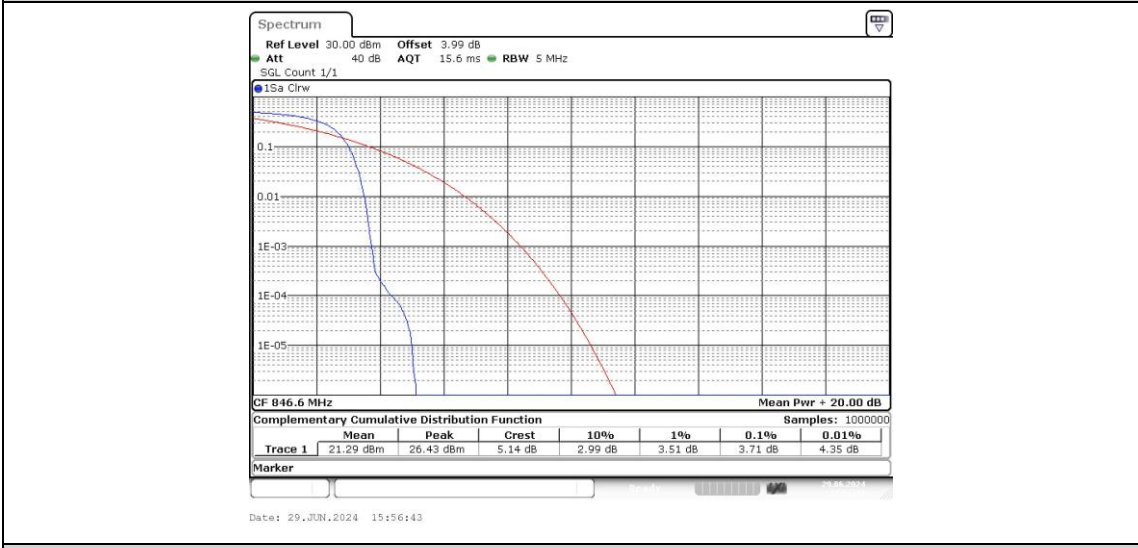
Band5-4233-1



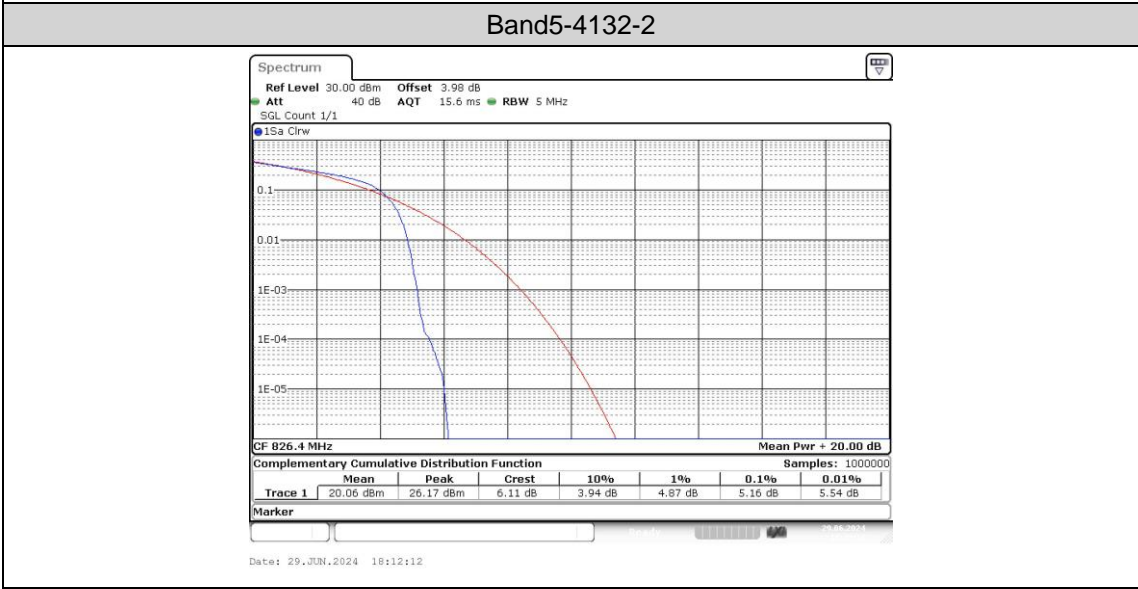
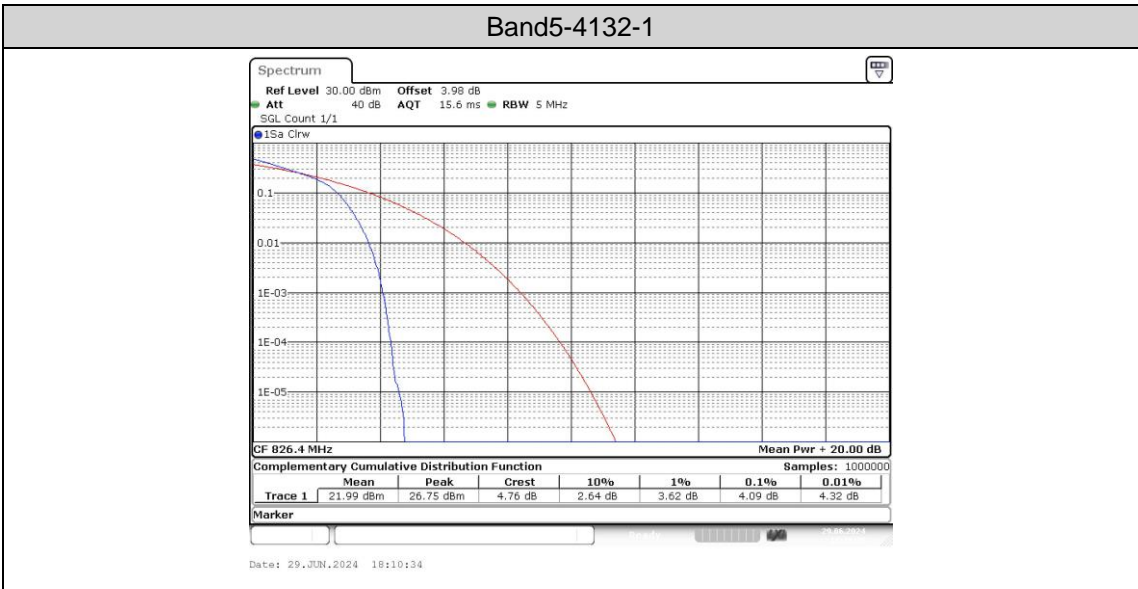
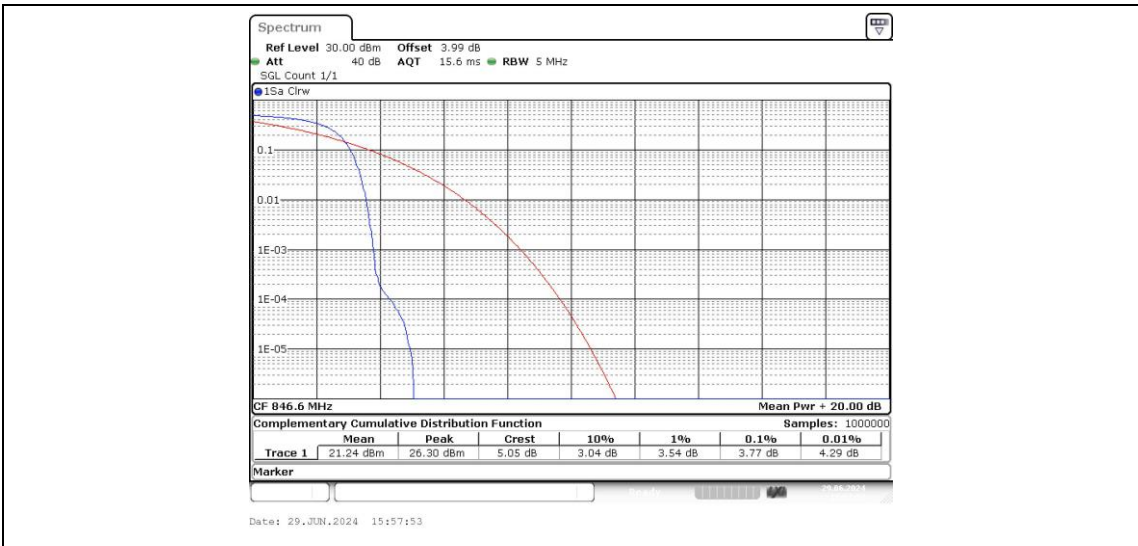
Band5-4233-2



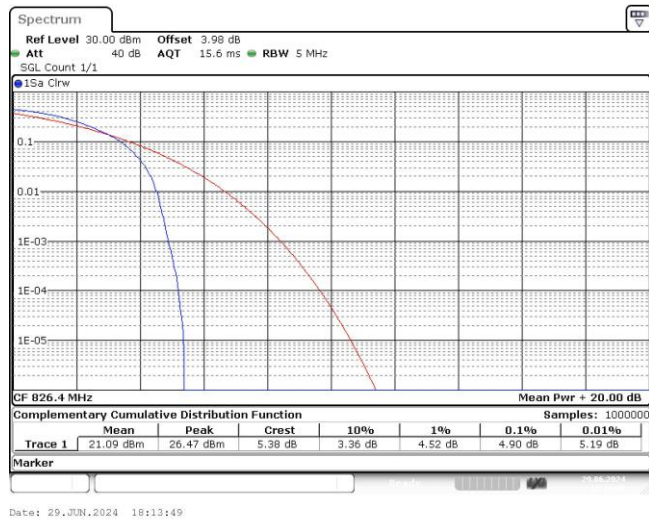
Band5-4233-3



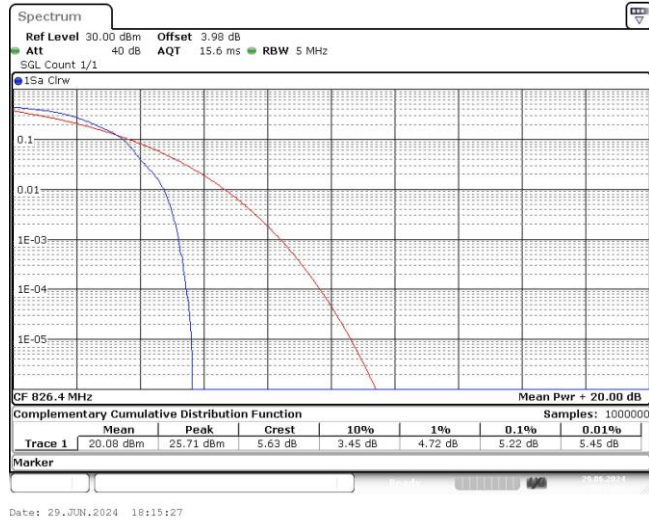
Band5-4233-4



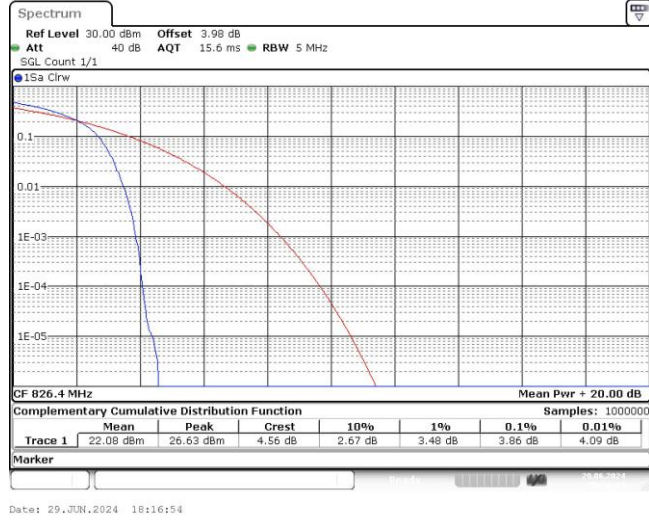
**Band5-4132-3**



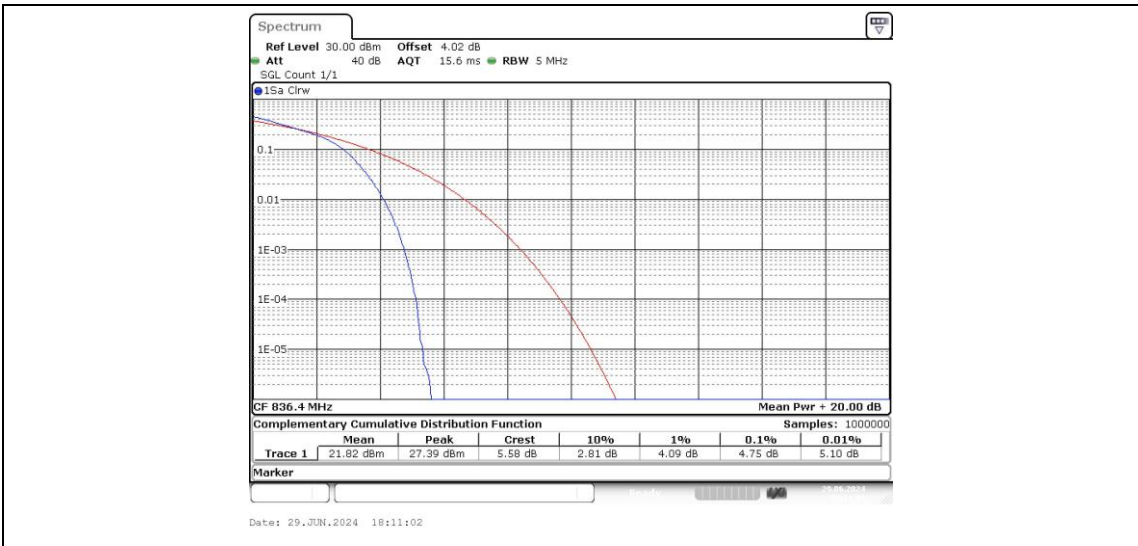
**Band5-4132-4**



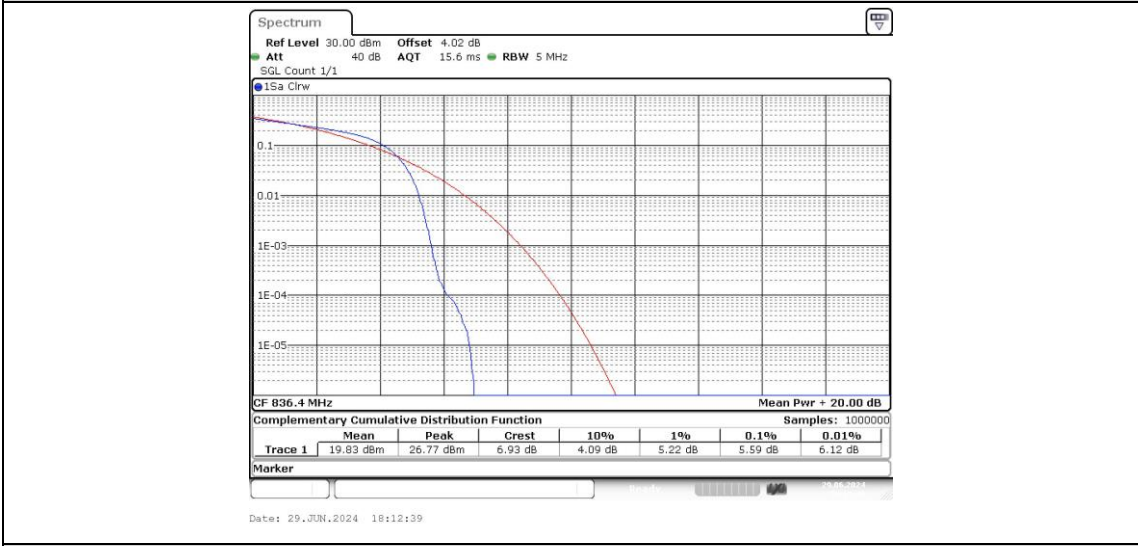
**Band5-4132-5**



**Band5-4182-1**



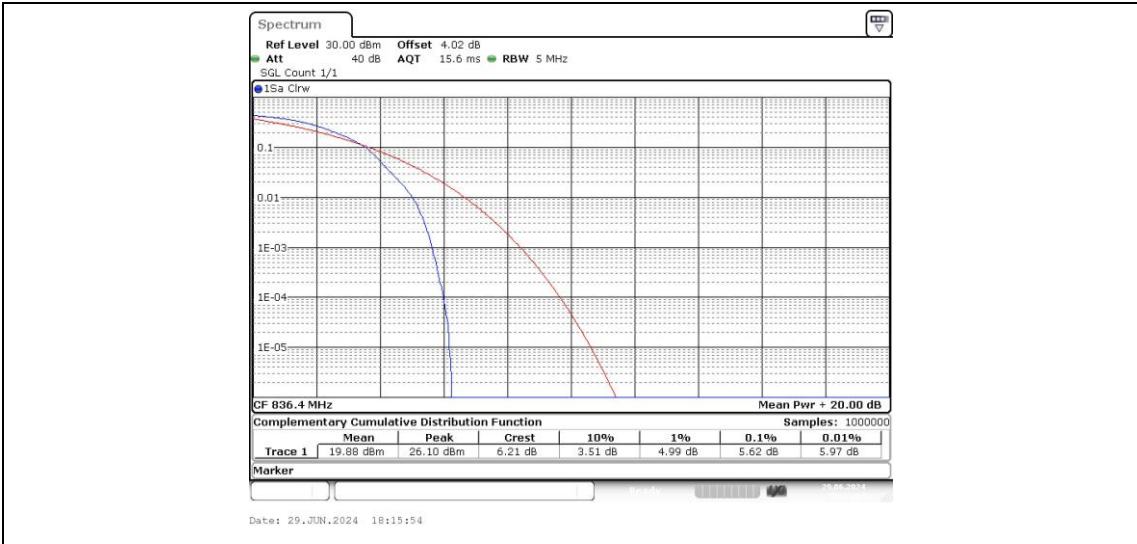
Band5-4182-2



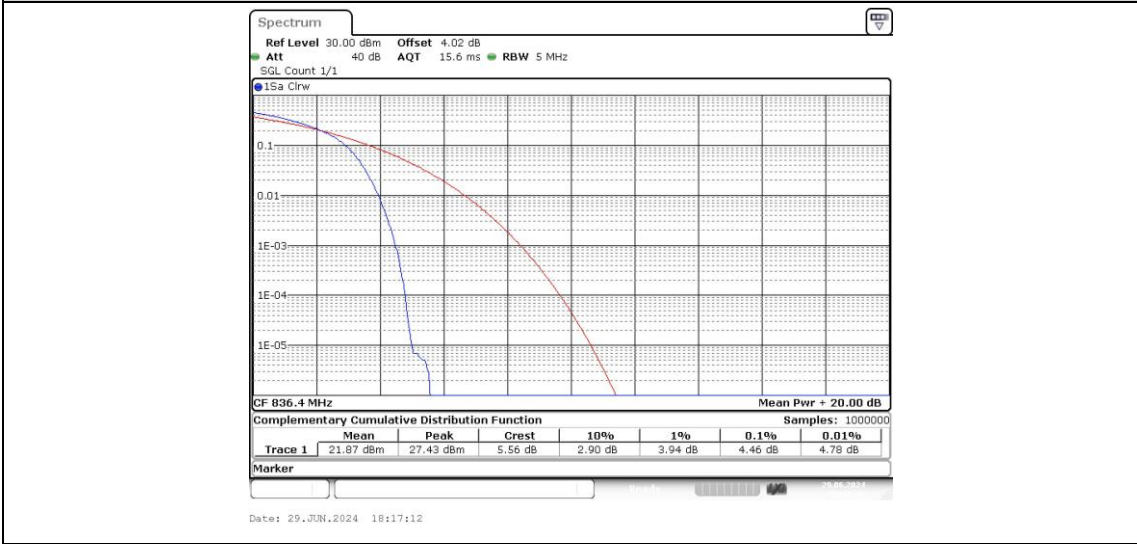
Band5-4182-3



Band5-4182-4



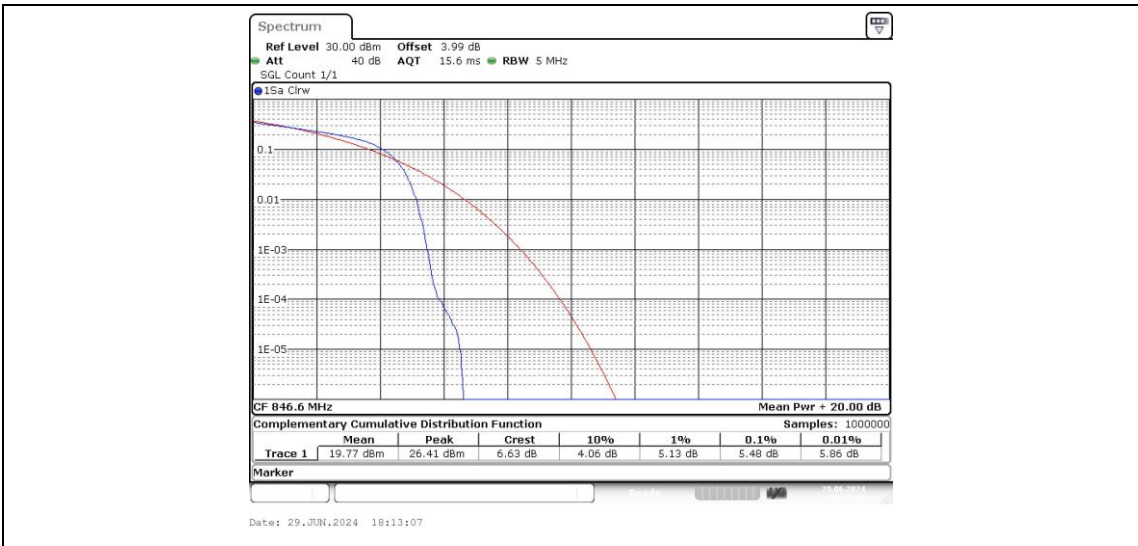
Band5-4182-5



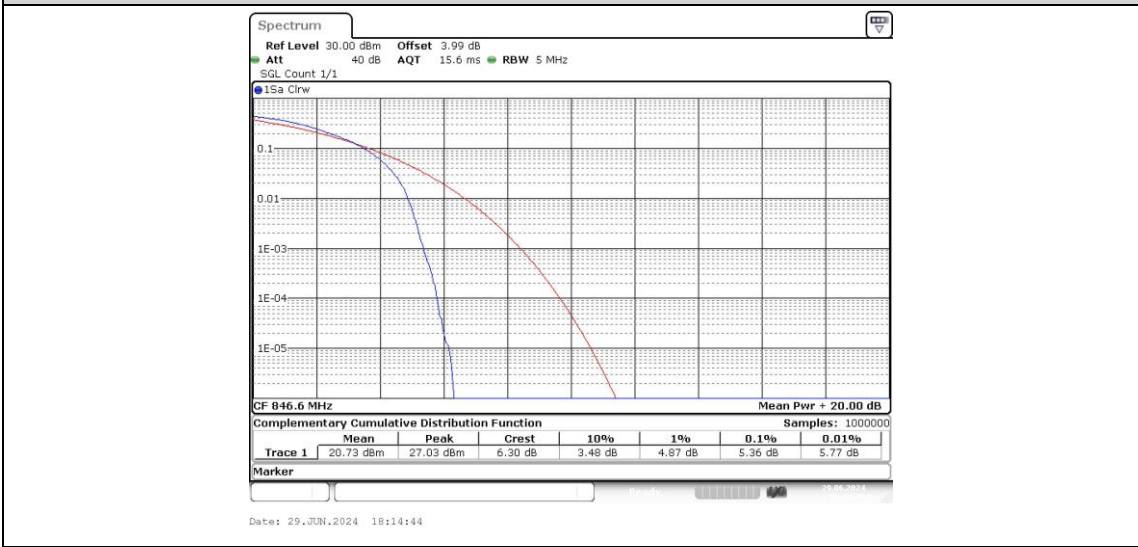
Band5-4233-1



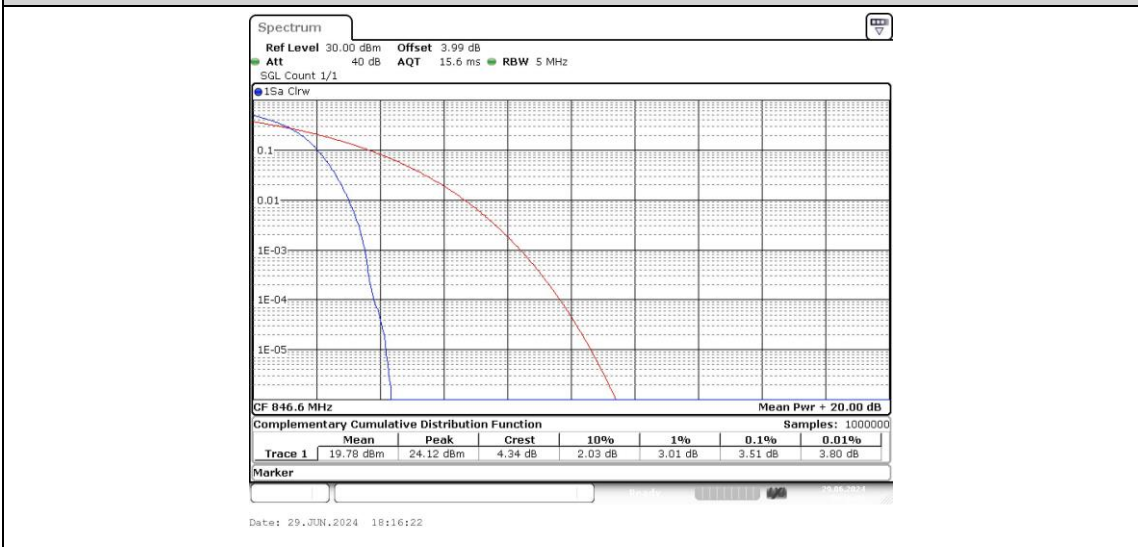
Band5-4233-2



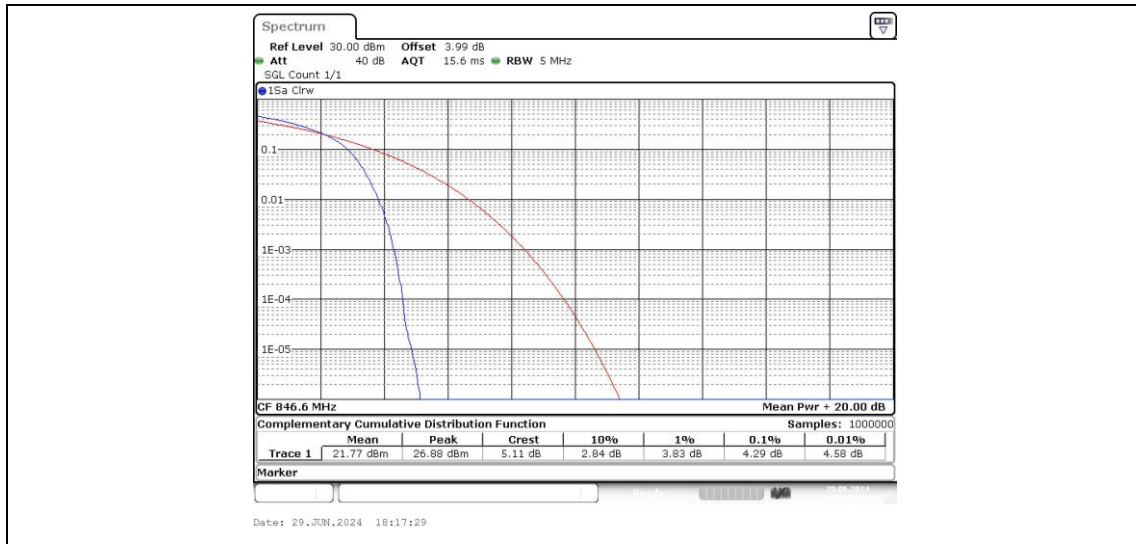
Band5-4233-3



Band5-4233-4



Band5-4233-5





## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result

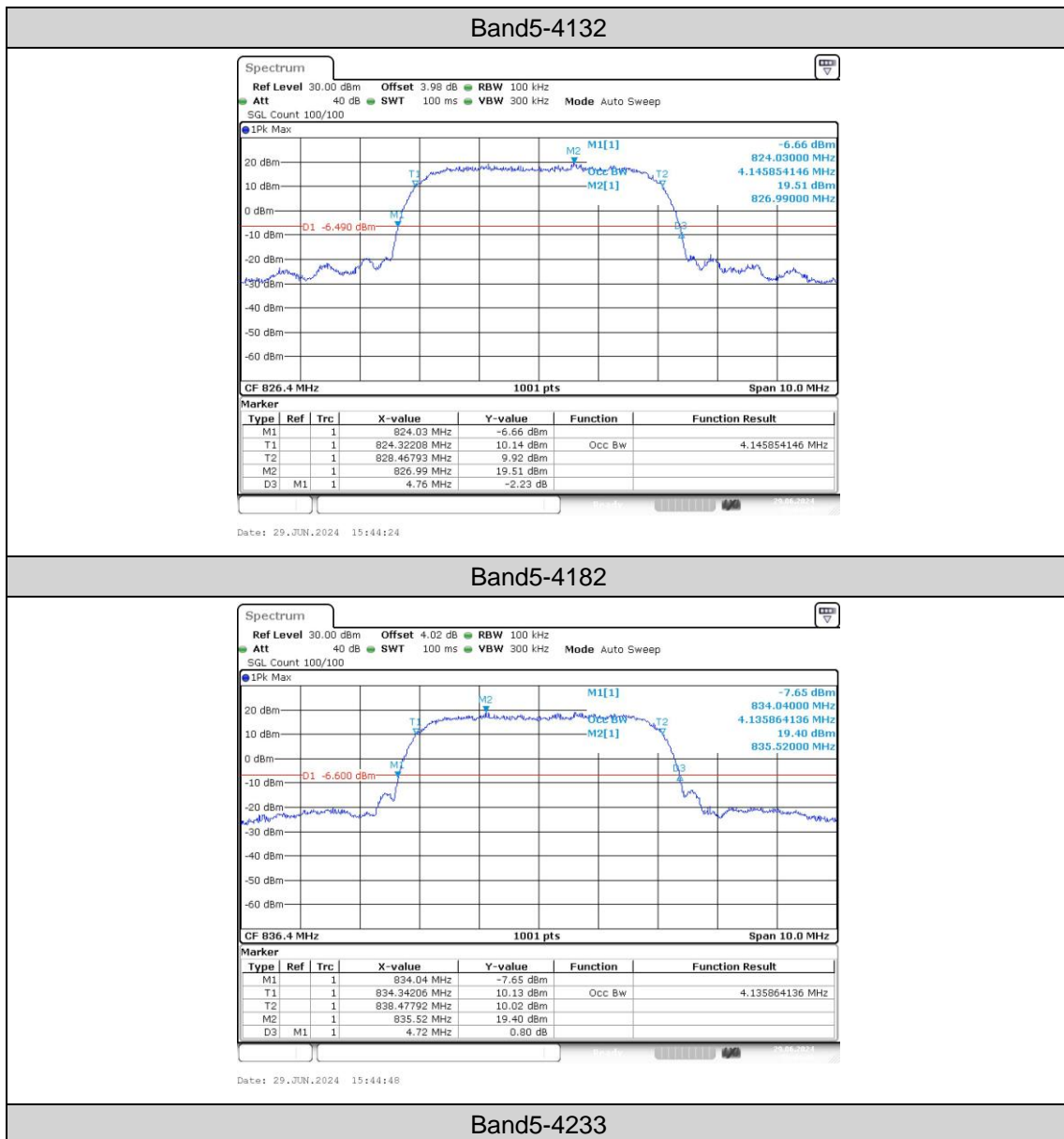
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band5	4132	4.146	4.76	---	PASS
Band5	4182	4.136	4.72	---	PASS
Band5	4233	4.146	4.74	---	PASS

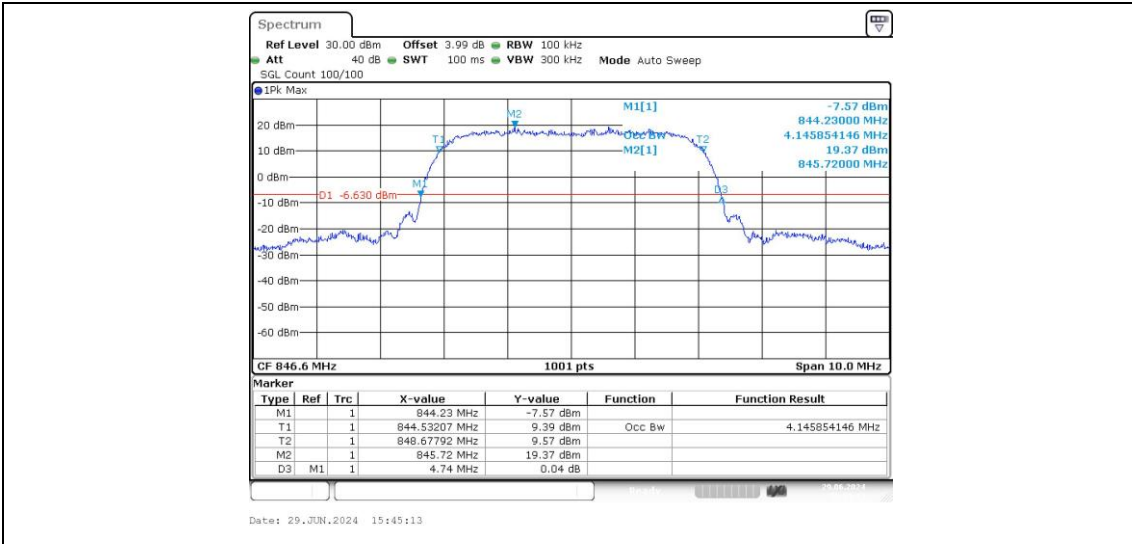
Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band5	4132	1	4.136	4.72	---	PASS
Band5	4132	2	4.136	4.72	---	PASS
Band5	4132	3	4.126	4.73	---	PASS
Band5	4132	4	4.126	4.72	---	PASS
Band5	4182	1	4.146	4.71	---	PASS
Band5	4182	2	4.146	4.75	---	PASS
Band5	4182	3	4.146	4.75	---	PASS
Band5	4182	4	4.156	4.77	---	PASS
Band5	4233	1	4.146	4.72	---	PASS
Band5	4233	2	4.156	4.75	---	PASS
Band5	4233	3	4.156	4.75	---	PASS
Band5	4233	4	4.156	4.75	---	PASS

Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band5	4132	1	4.156	4.74	---	PASS
Band5	4132	2	4.156	4.74	---	PASS
Band5	4132	3	4.156	4.74	---	PASS
Band5	4132	4	4.156	4.74	---	PASS
Band5	4132	5	4.136	4.74	---	PASS
Band5	4182	1	4.166	4.74	---	PASS
Band5	4182	2	4.166	4.76	---	PASS
Band5	4182	3	4.176	4.75	---	PASS
Band5	4182	4	4.166	4.76	---	PASS
Band5	4182	5	4.146	4.72	---	PASS

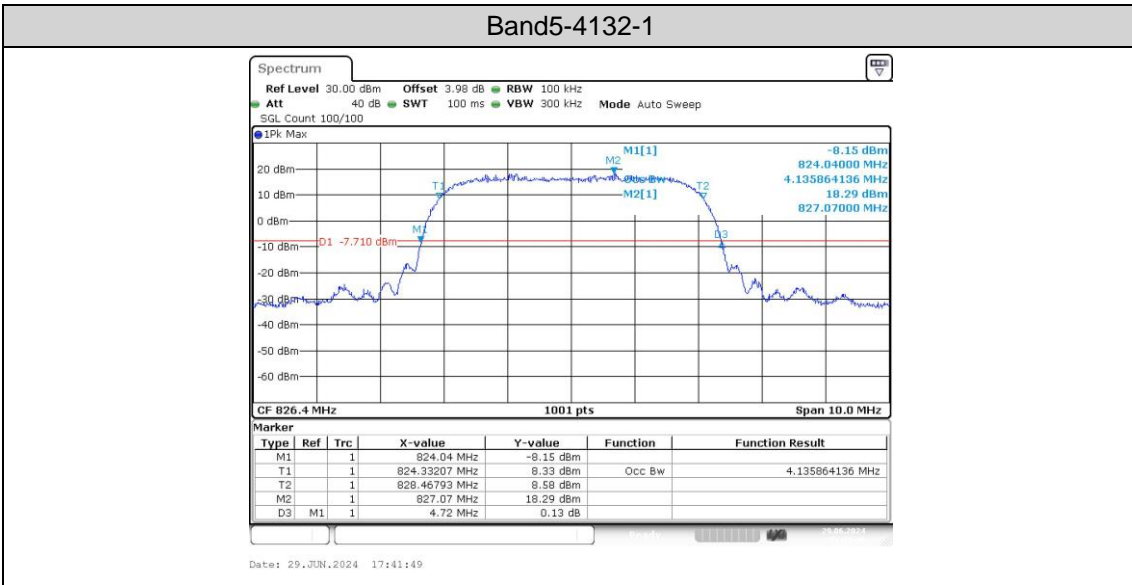
Band5	4233	1	4.176	4.73	---	PASS
Band5	4233	2	4.166	4.80	---	PASS
Band5	4233	3	4.186	4.77	---	PASS
Band5	4233	4	4.176	4.77	---	PASS
Band5	4233	5	4.156	4.72	---	PASS

### Test Graphs

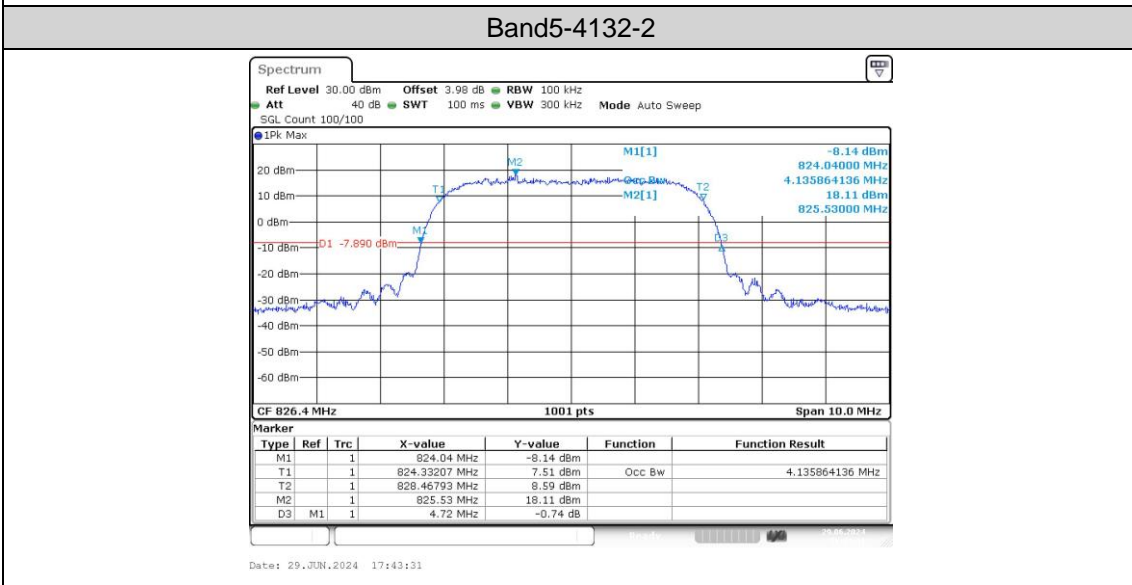
**Band5-4233**



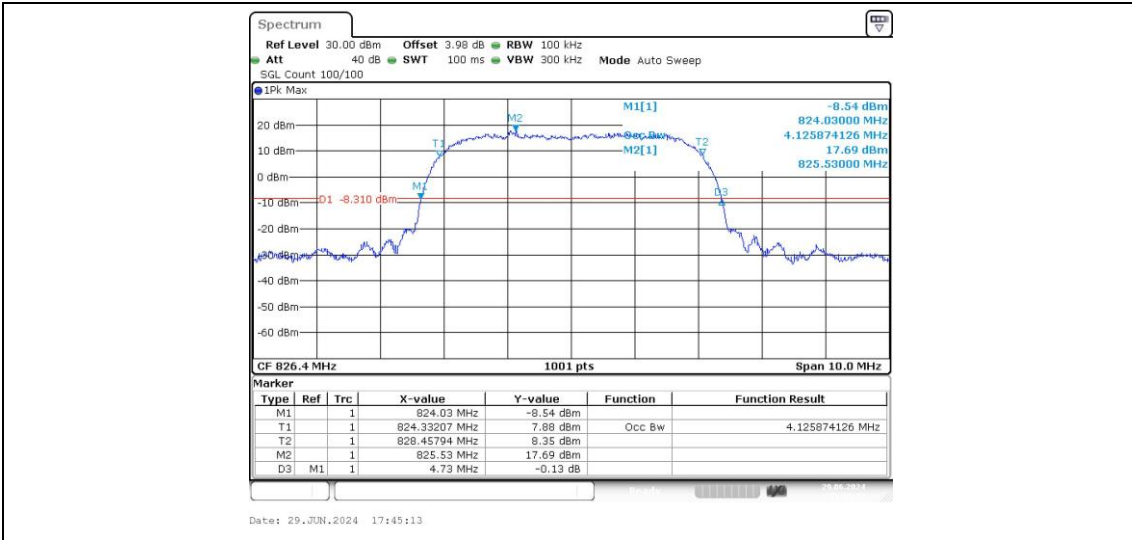
Band5-4132-1



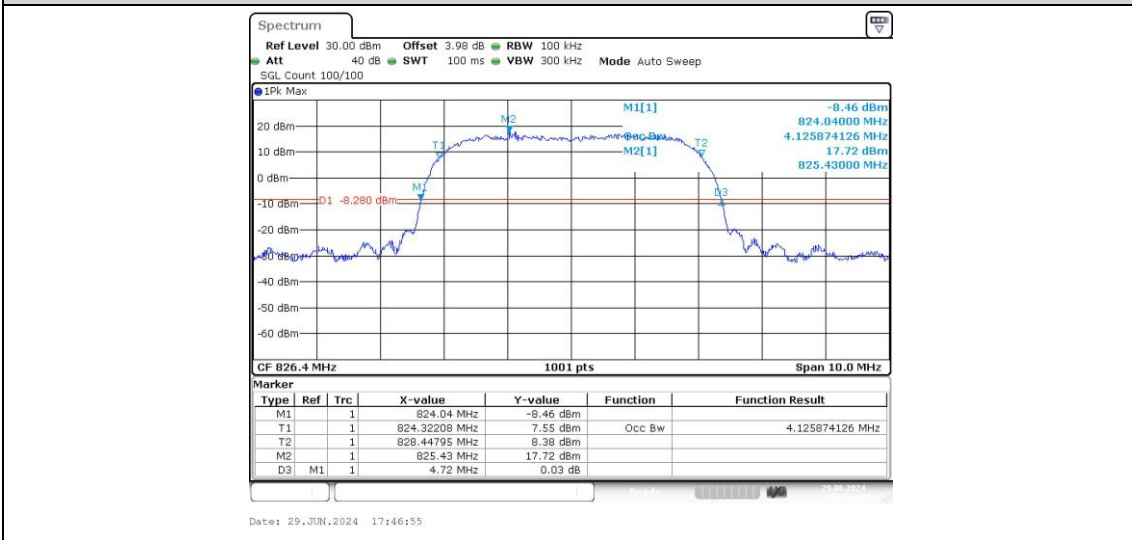
Band5-4132-2



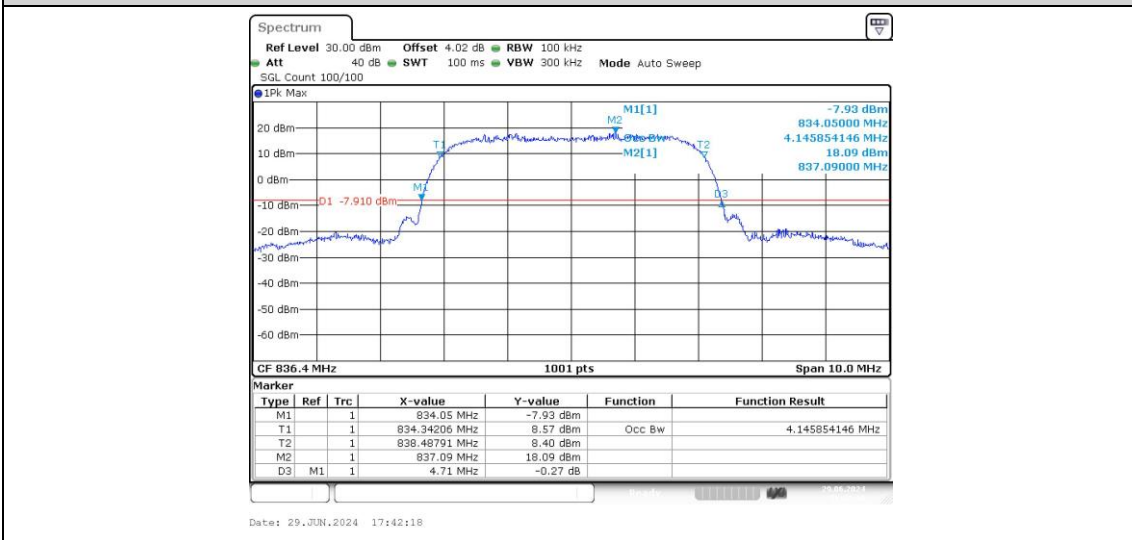
Band5-4132-3



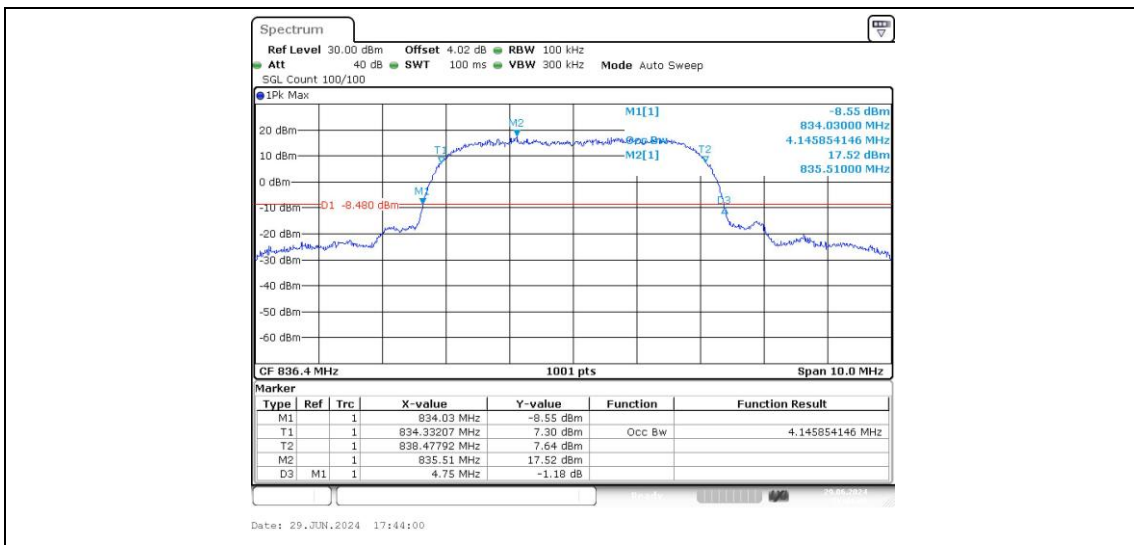
Band5-4132-4



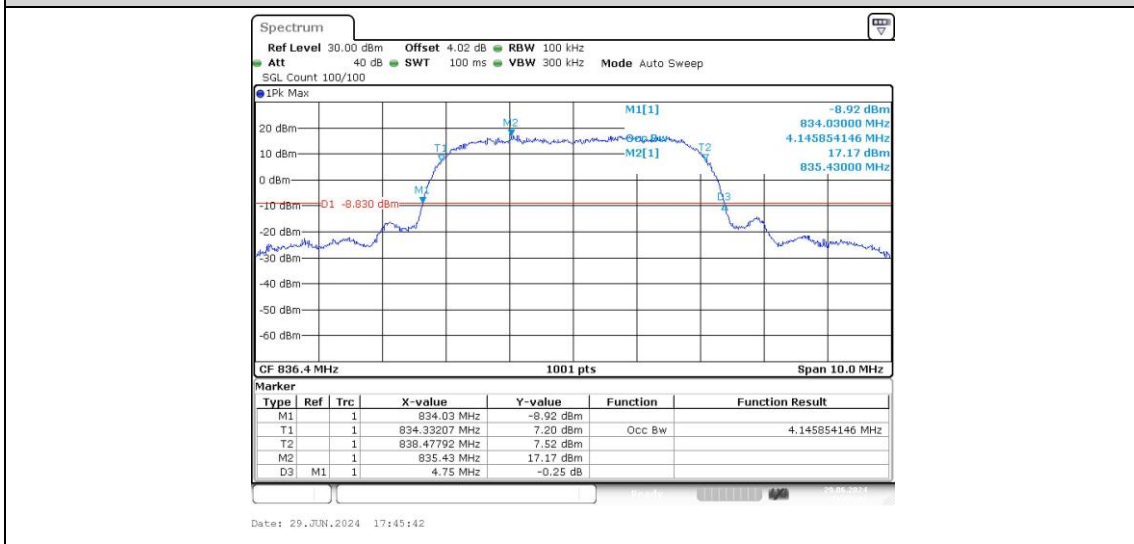
Band5-4182-1



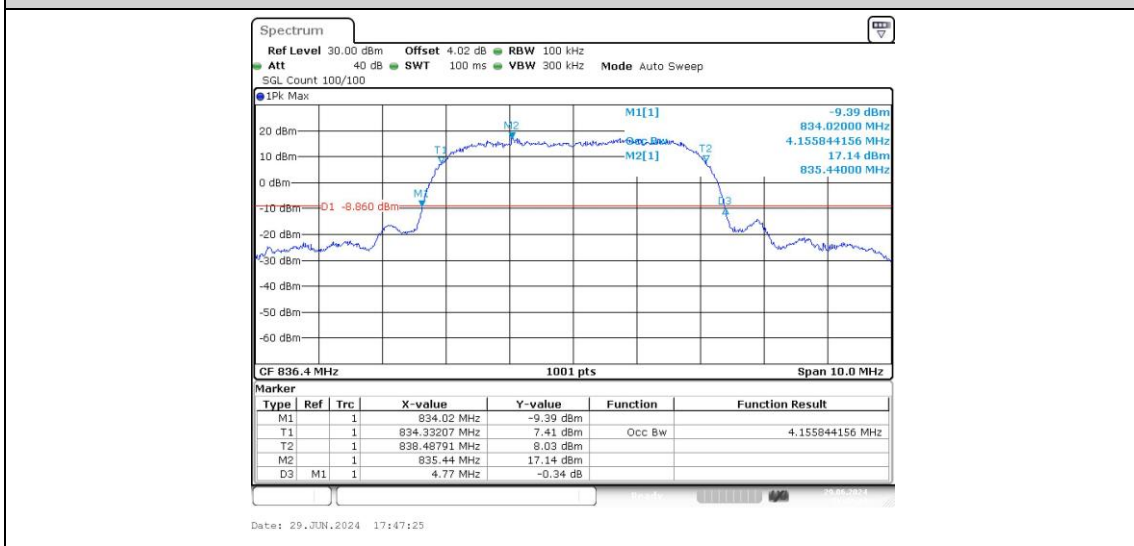
Band5-4182-2



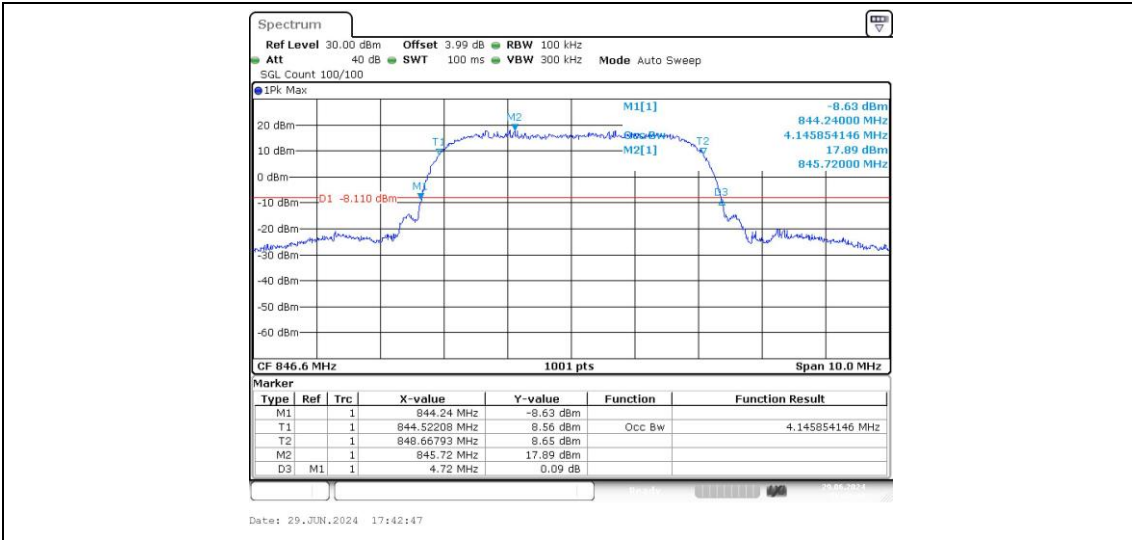
Band5-4182-3



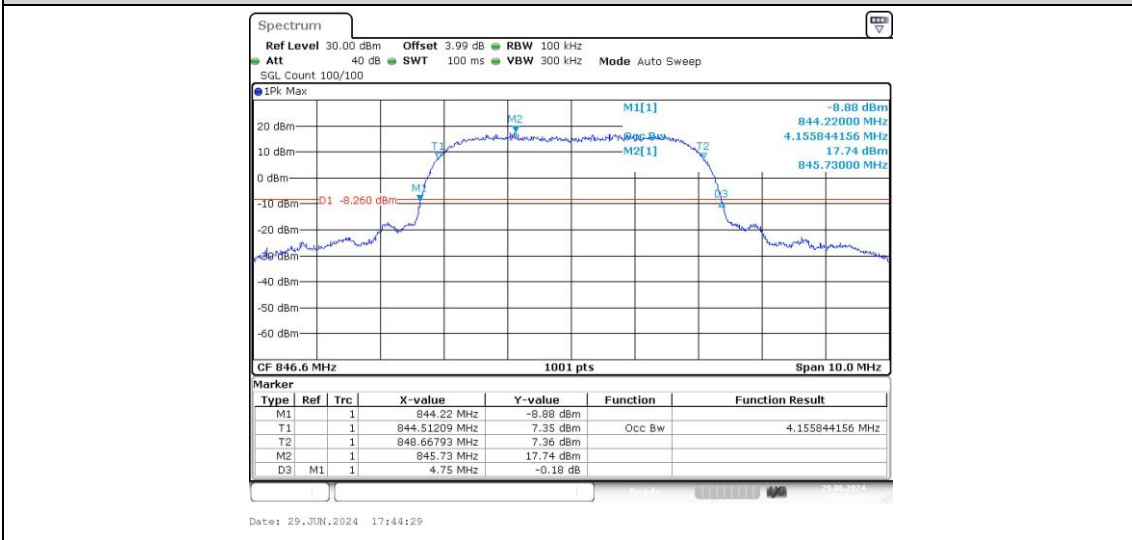
Band5-4182-4



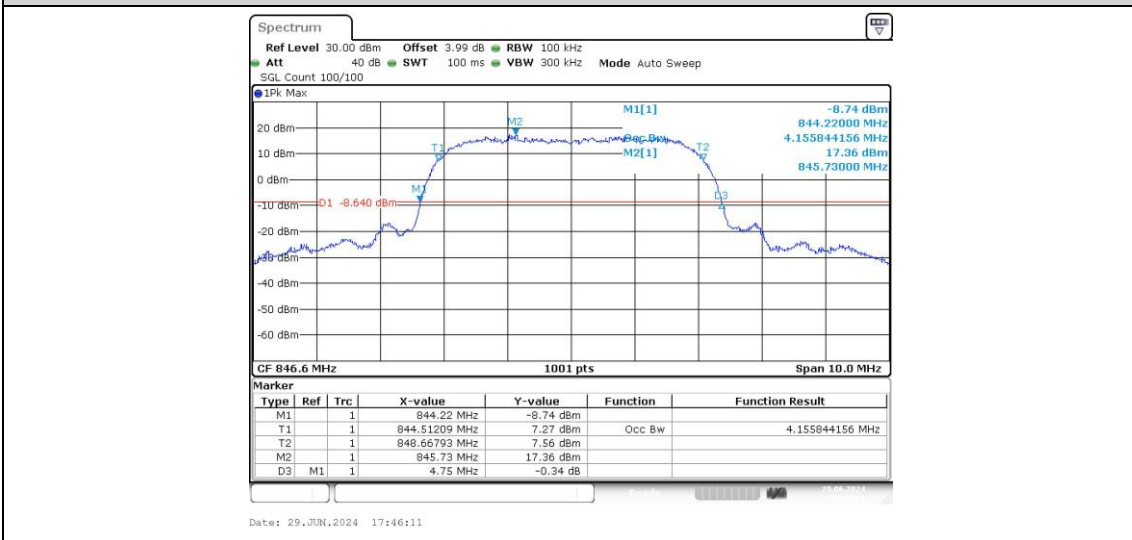
Band5-4233-1



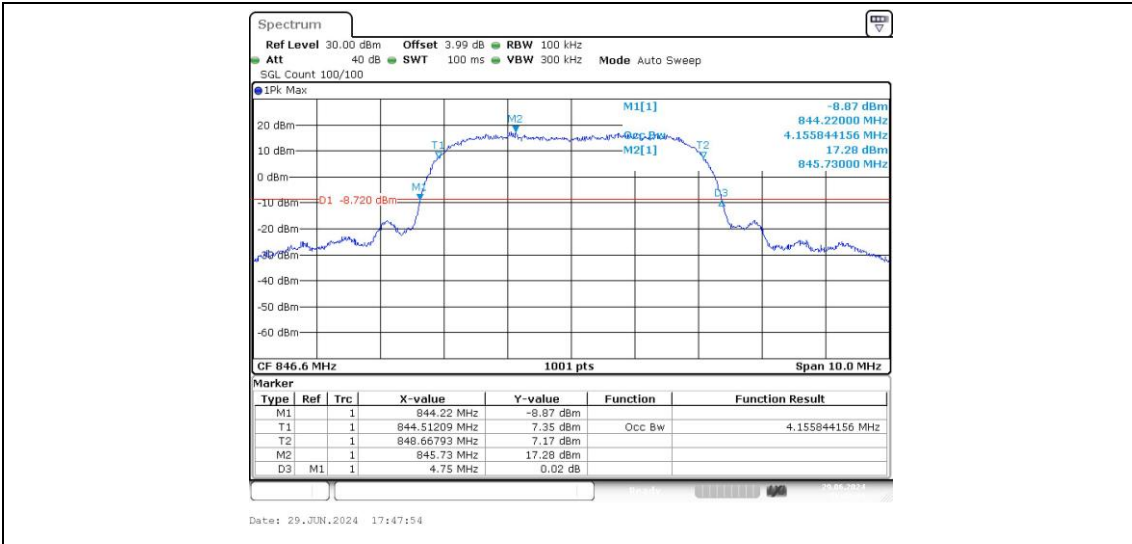
Band5-4233-2



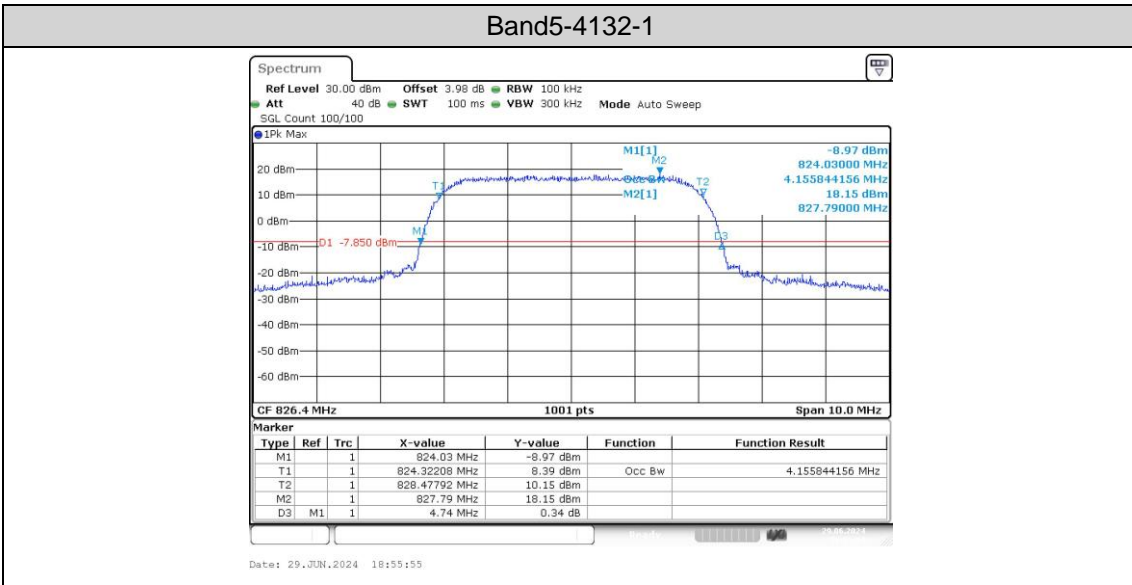
Band5-4233-3



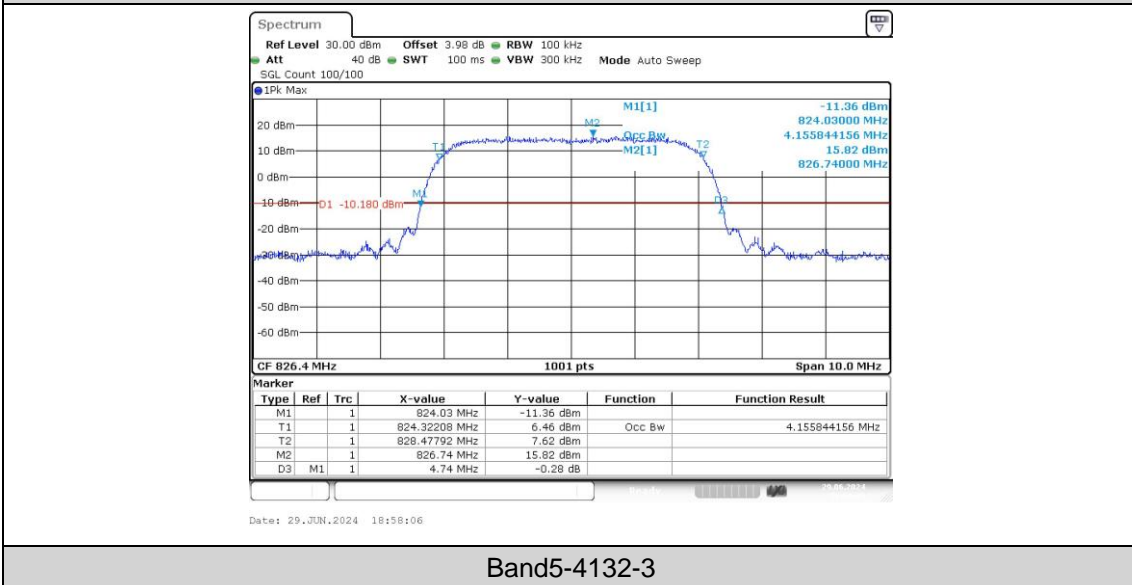
Band5-4233-4



Band5-4132-1

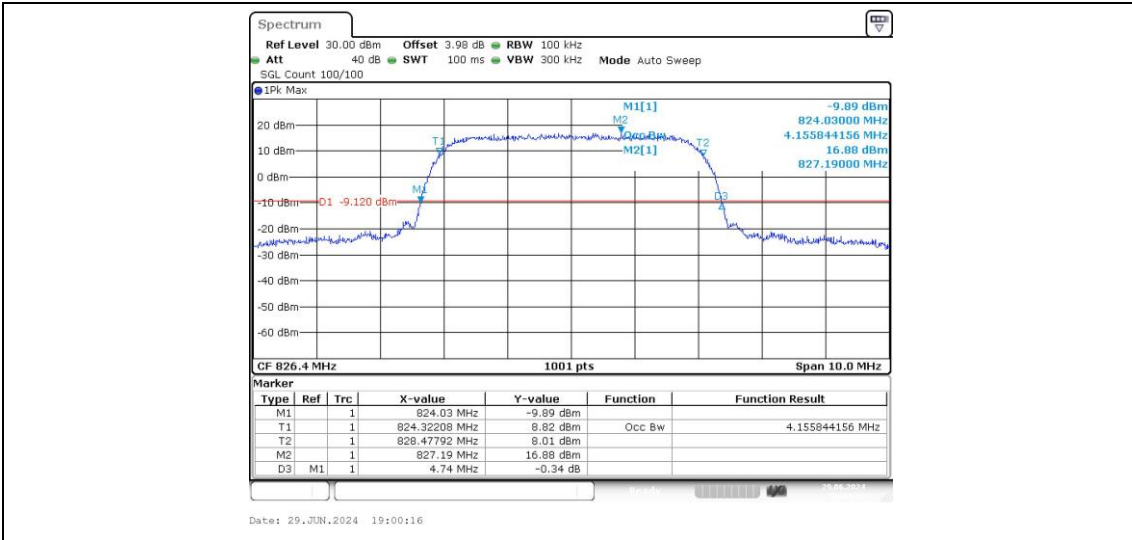


Band5-4132-2

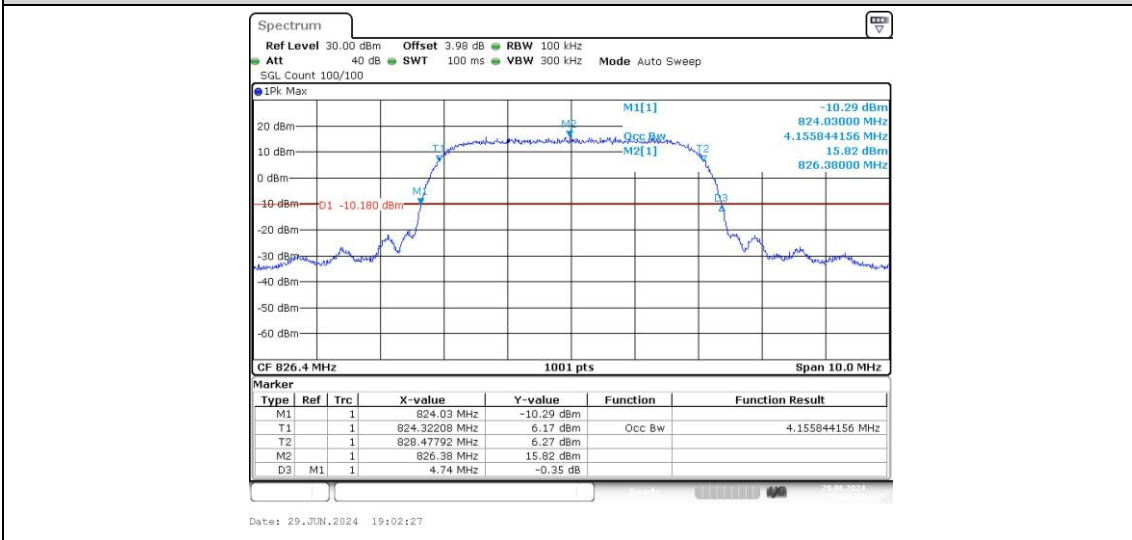


Band5-4132-3

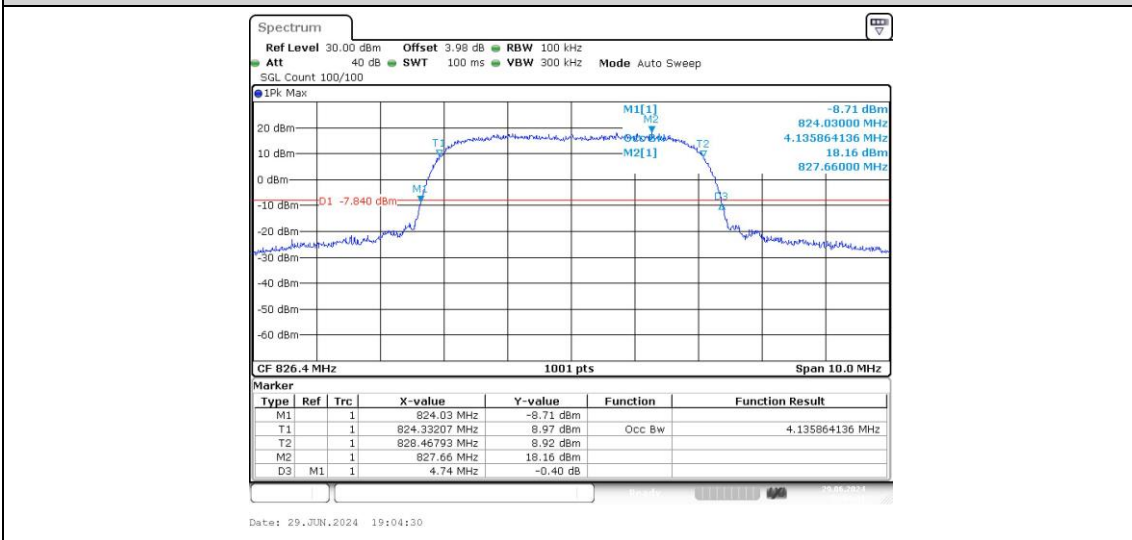




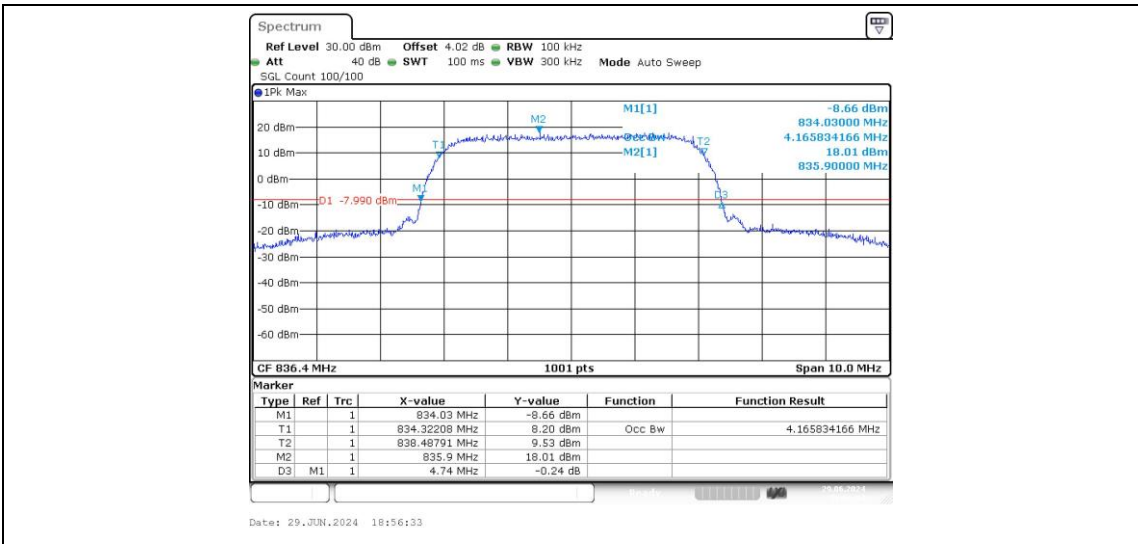
Band5-4132-4



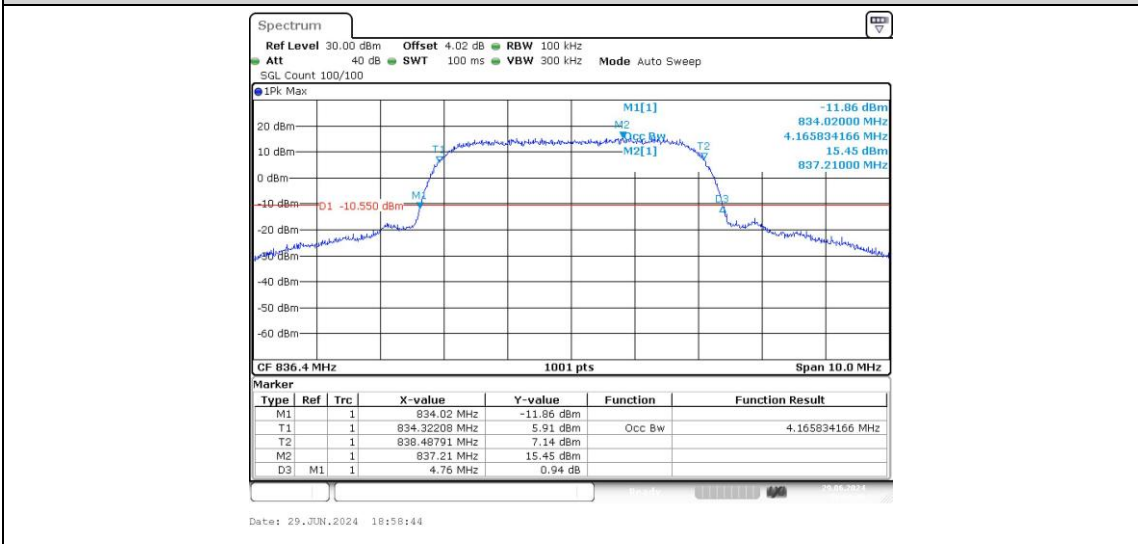
Band5-4132-5



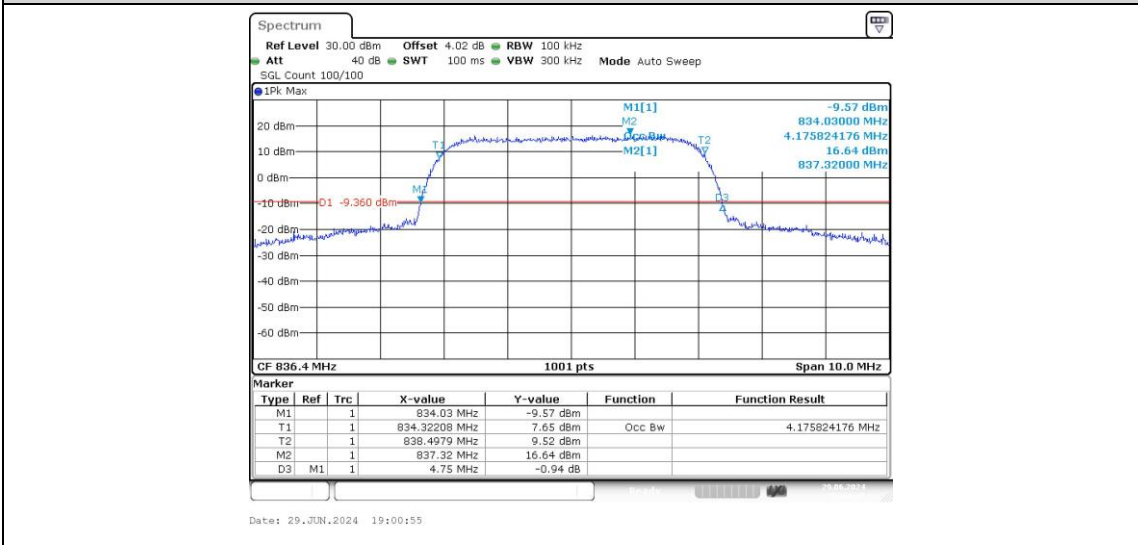
Band5-4182-1



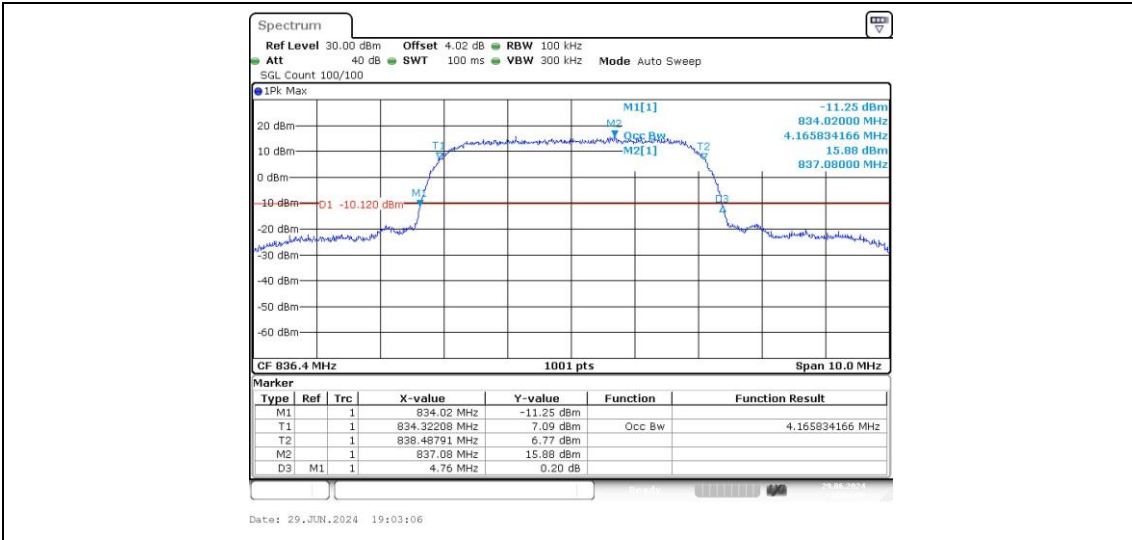
Band5-4182-2



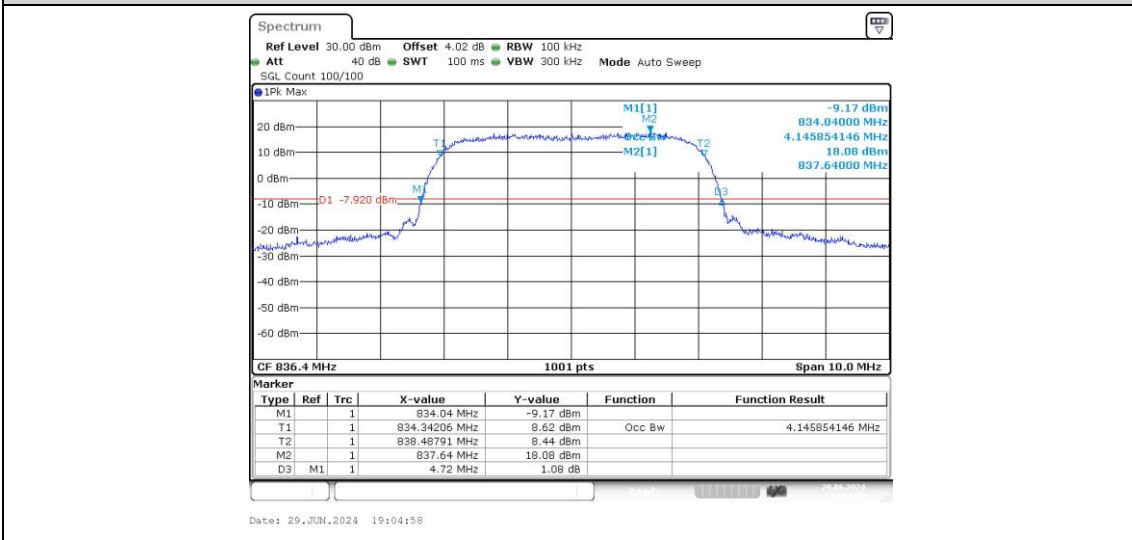
Band5-4182-3



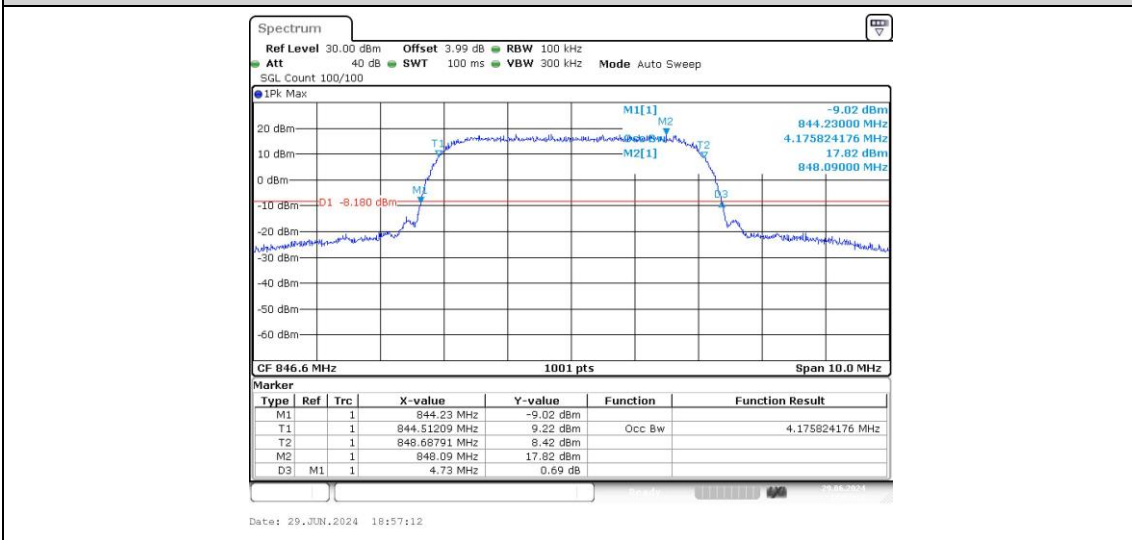
Band5-4182-4



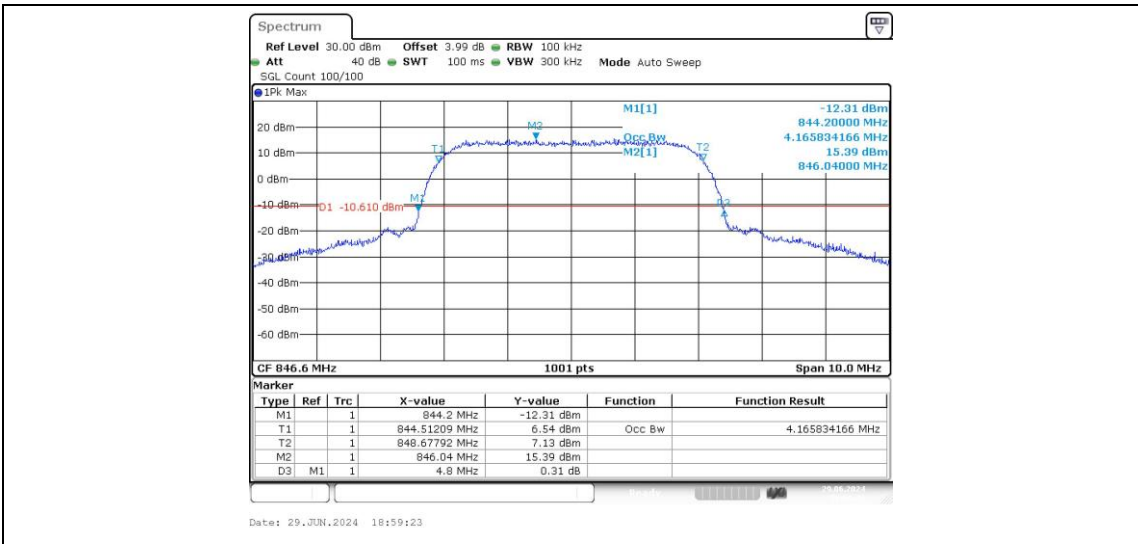
Band5-4182-5



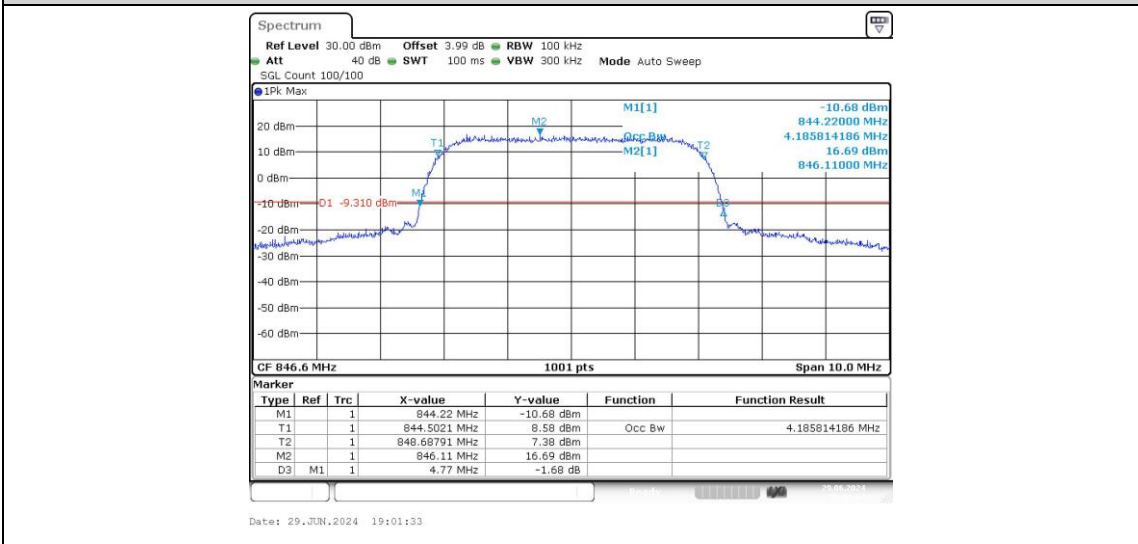
Band5-4233-1



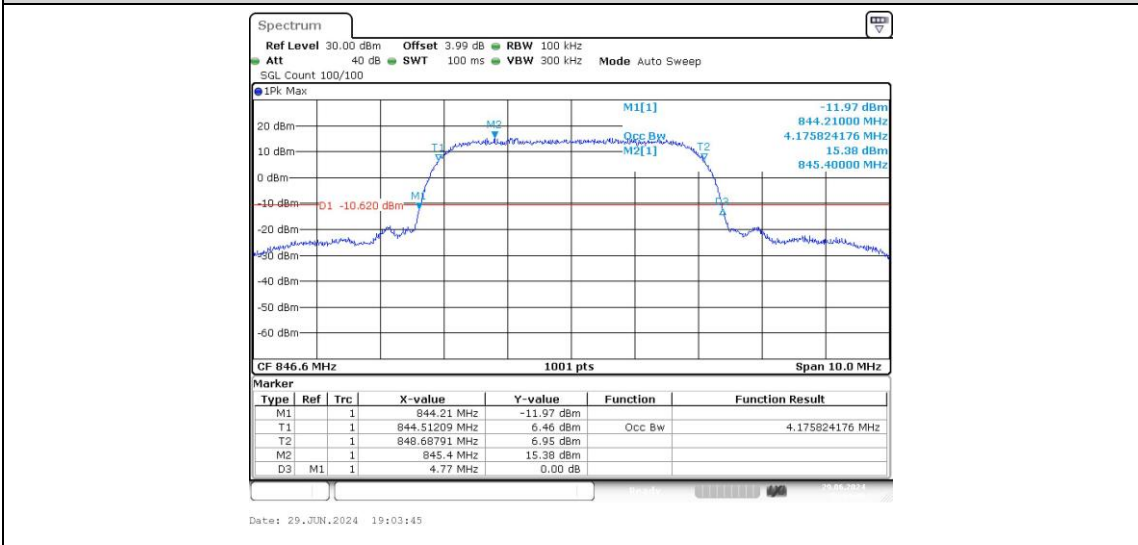
Band5-4233-2



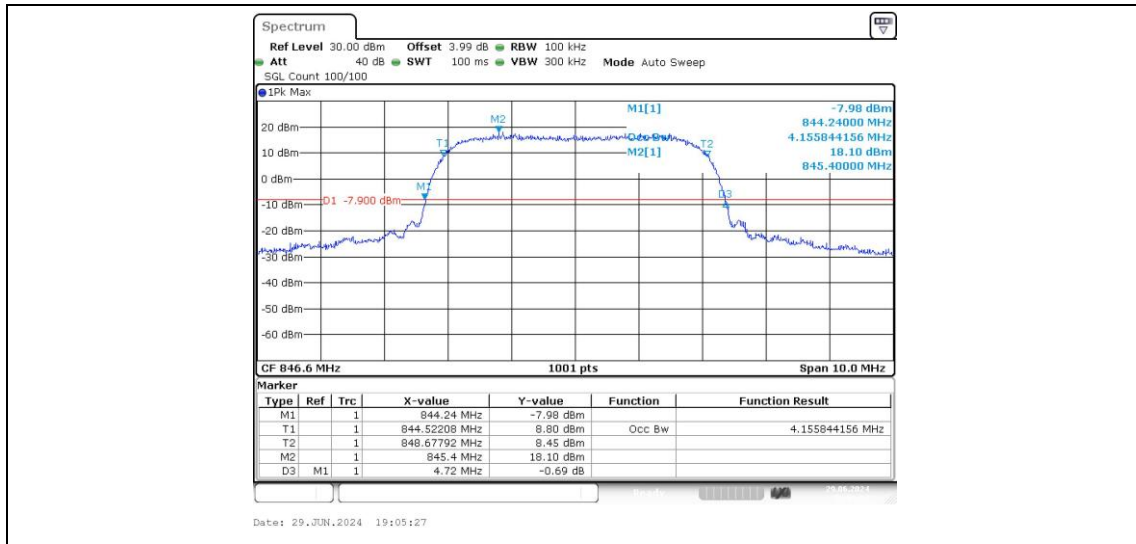
Band5-4233-3



Band5-4233-4



Band5-4233-5



## AppendixD:Band Edge

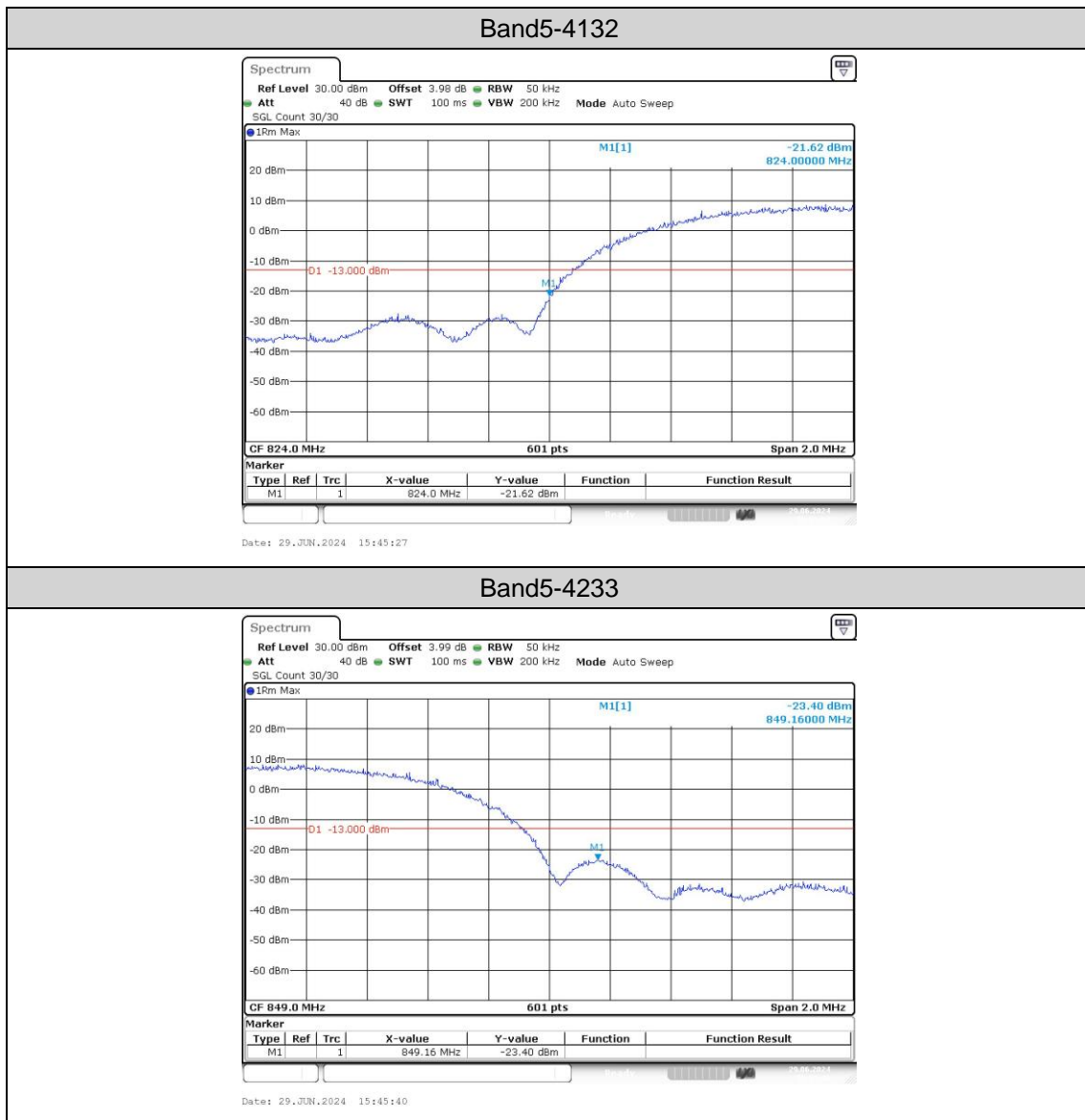
### Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band5	4132	824.00	-21.62	-13	PASS
Band5	4233	849.16	-23.40	-13	PASS

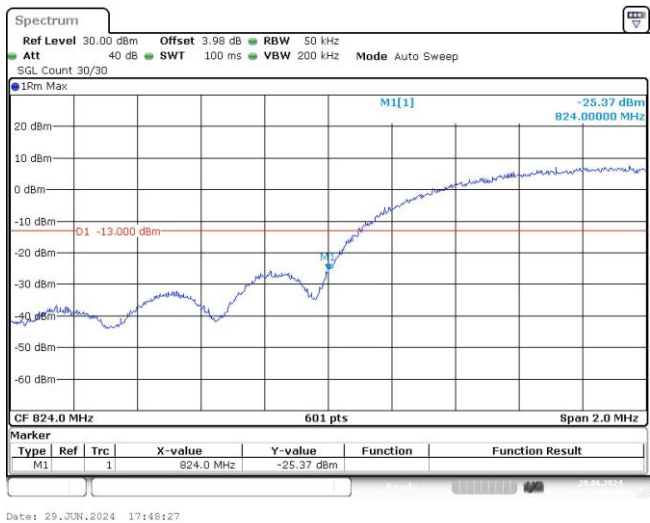
Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band5	4132	1	824.00	-25.37	-13	PASS
Band5	4132	2	824.00	-24.97	-13	PASS
Band5	4132	3	824.00	-25.00	-13	PASS
Band5	4132	4	824.00	-25.43	-13	PASS
Band5	4233	1	849.12	-23.33	-13	PASS
Band5	4233	2	849.00	-22.88	-13	PASS
Band5	4233	3	849.00	-22.45	-13	PASS
Band5	4233	4	849.00	-21.92	-13	PASS

Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band5	4132	1	824.00	-24.59	-13	PASS
Band5	4132	2	824.00	-27.79	-13	PASS
Band5	4132	3	824.00	-25.23	-13	PASS
Band5	4132	4	824.00	-26.54	-13	PASS
Band5	4132	5	824.00	-24.85	-13	PASS
Band5	4233	1	849.19	-24.40	-13	PASS
Band5	4233	2	849.00	-23.99	-13	PASS
Band5	4233	3	849.00	-25.00	-13	PASS
Band5	4233	4	849.00	-25.21	-13	PASS
Band5	4233	5	849.14	-24.56	-13	PASS

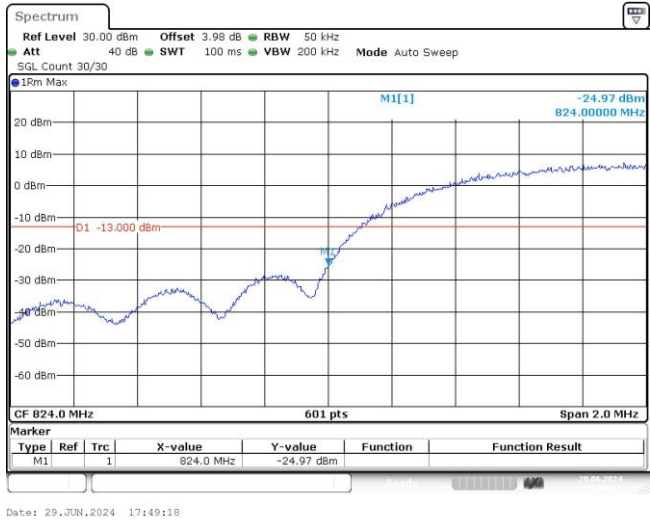
### Test Graphs



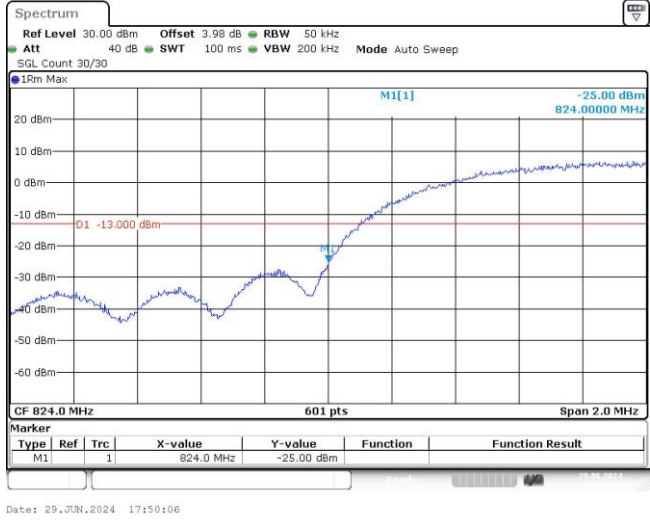
Band5-4132-1



Band5-4132-2

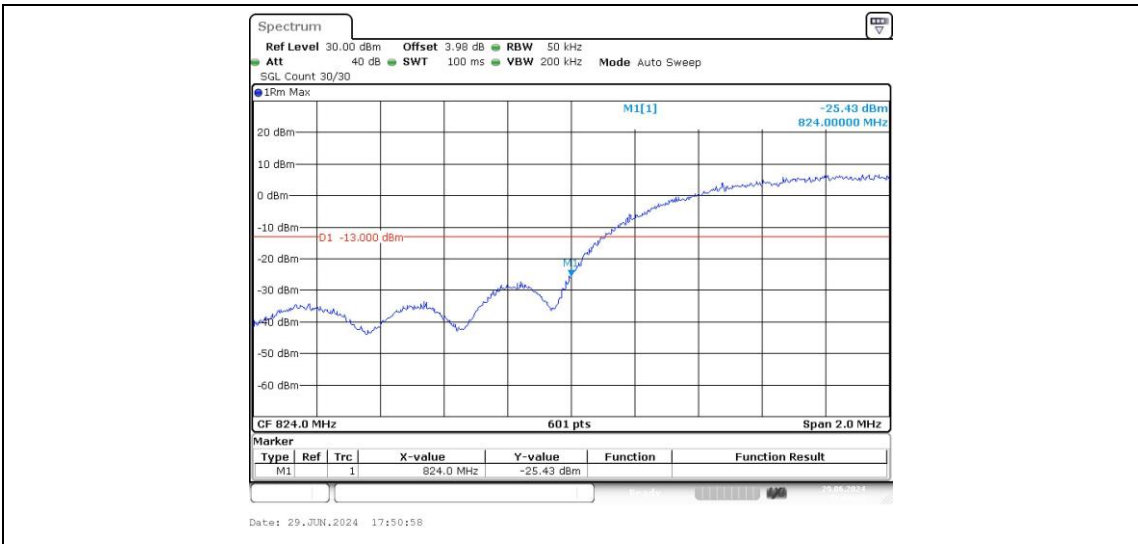


Band5-4132-3

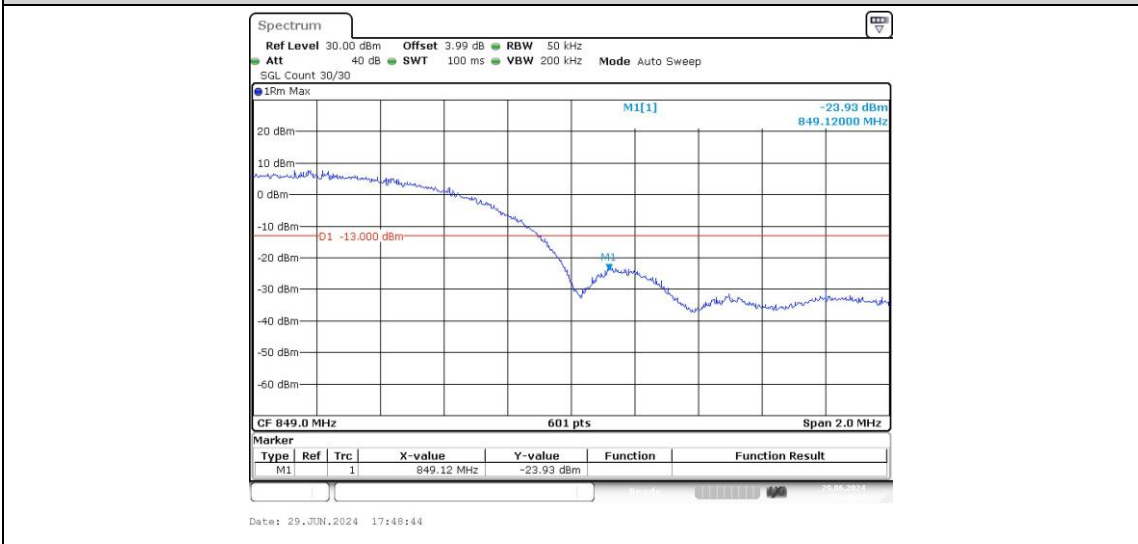


Band5-4132-4

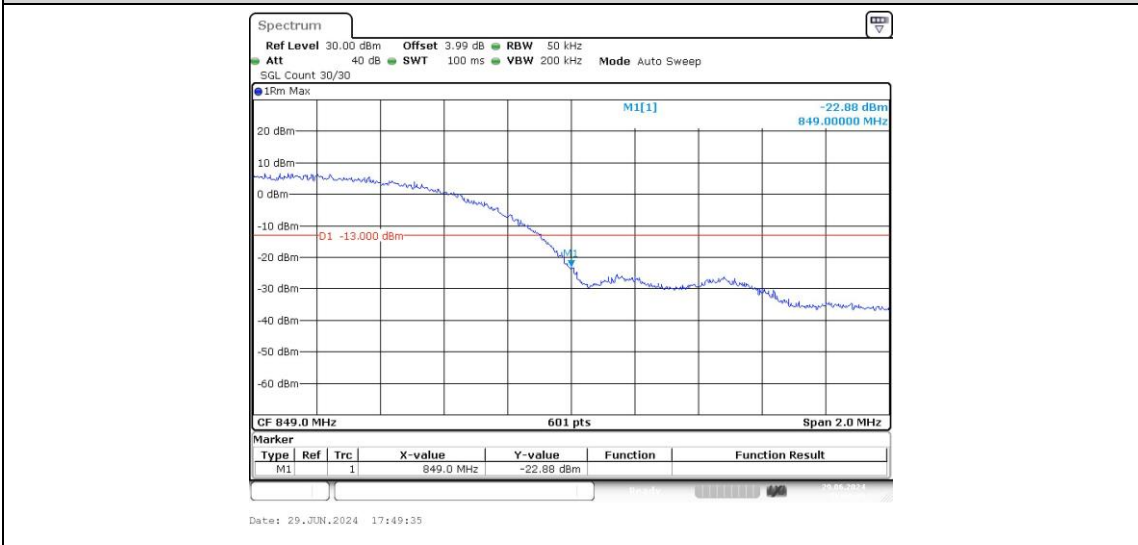




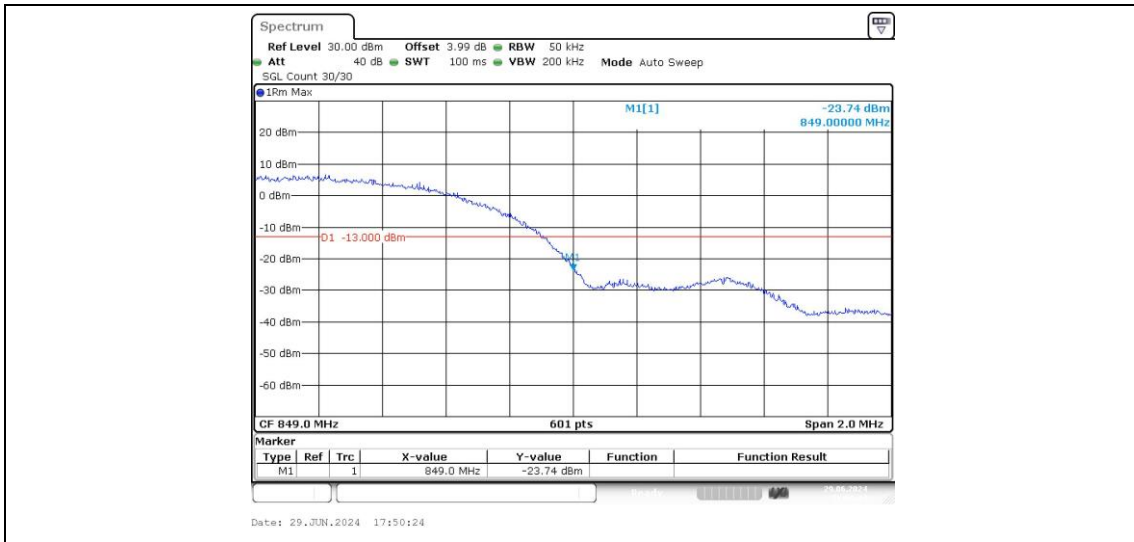
**Band5-4233-1**



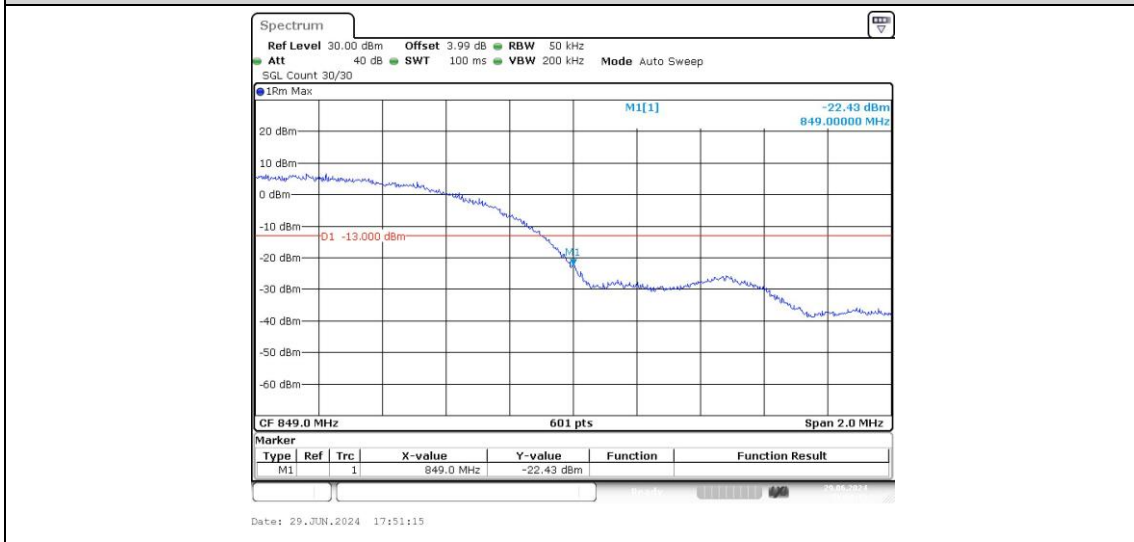
**Band5-4233-2**



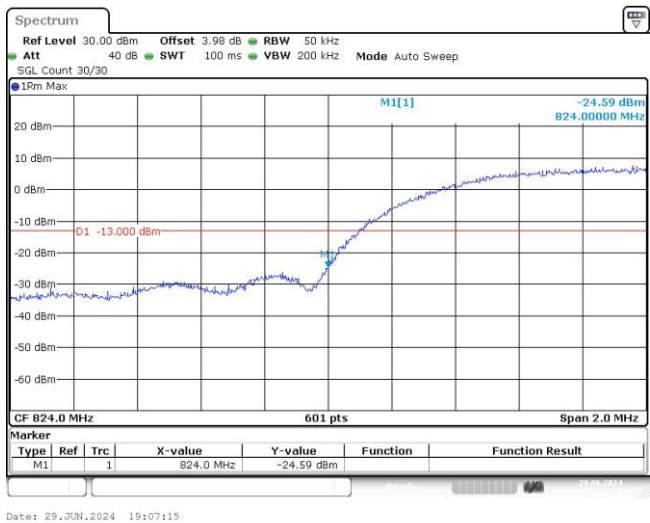
**Band5-4233-3**



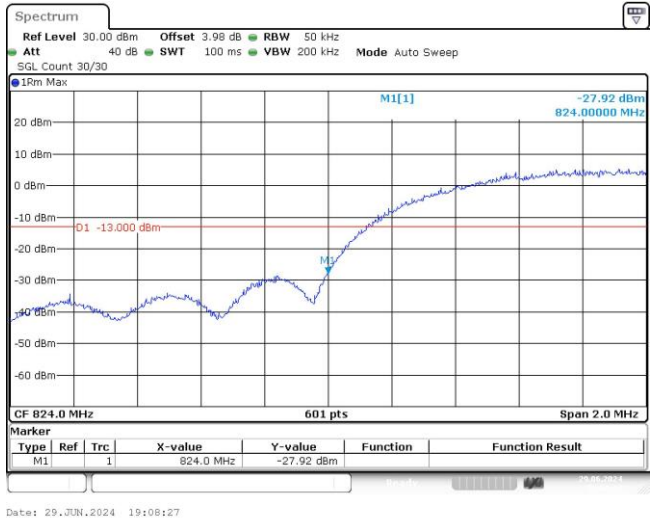
Band5-4233-4



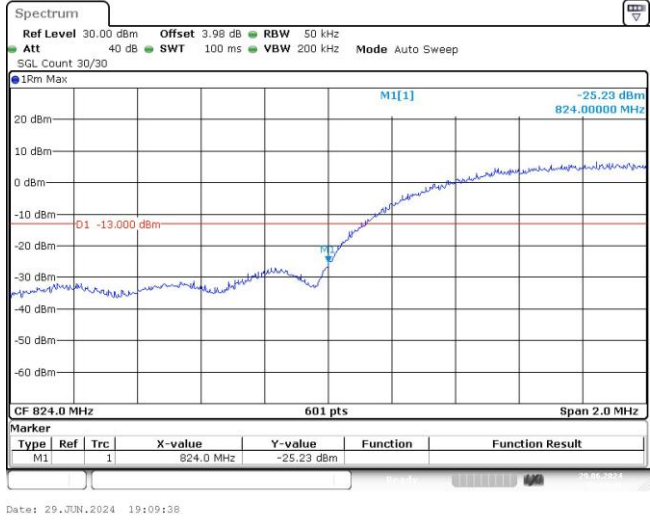
**Band5-4132-1**



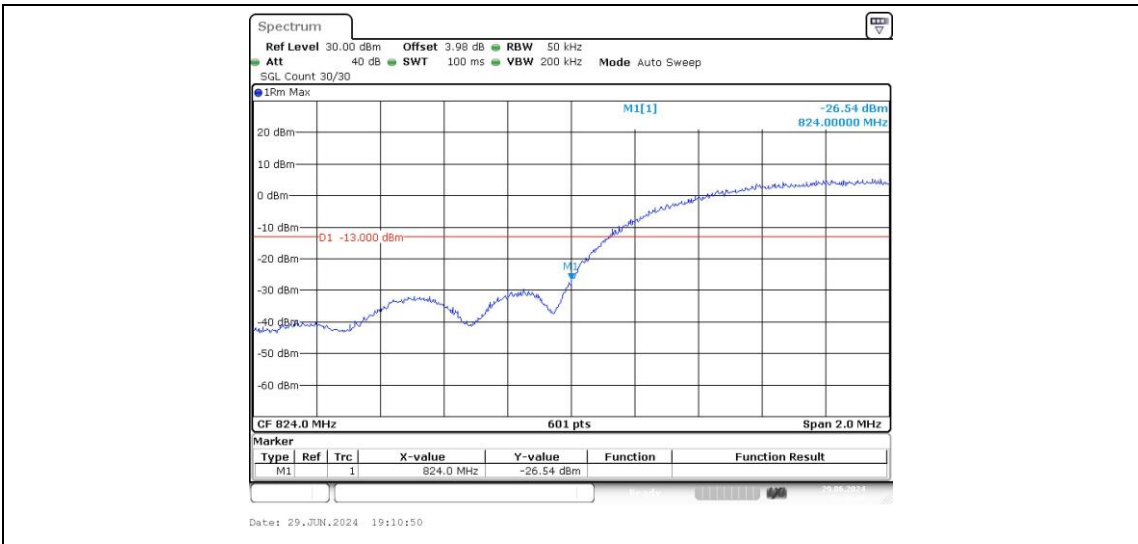
**Band5-4132-2**



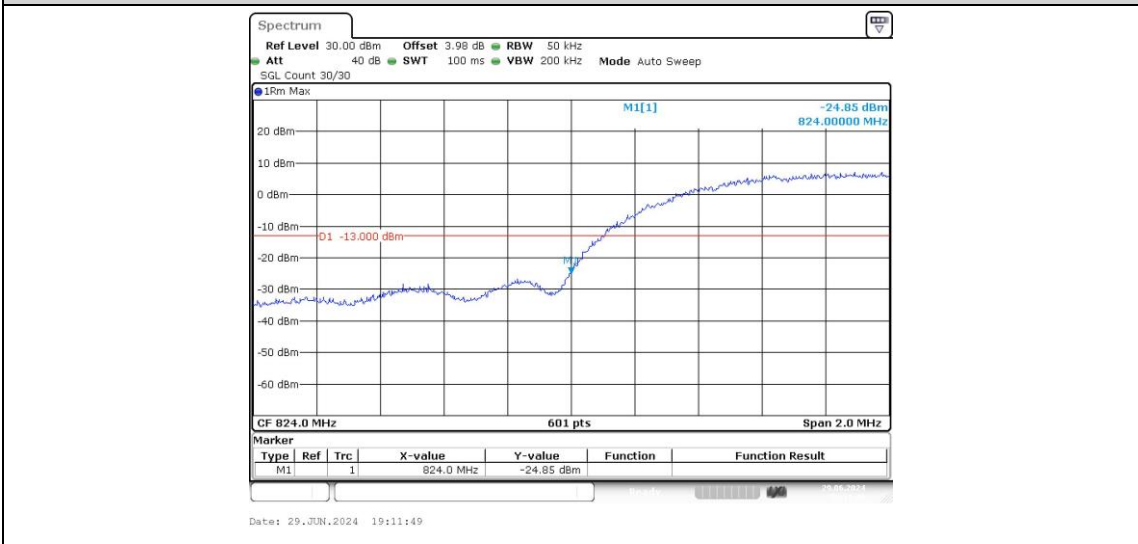
**Band5-4132-3**



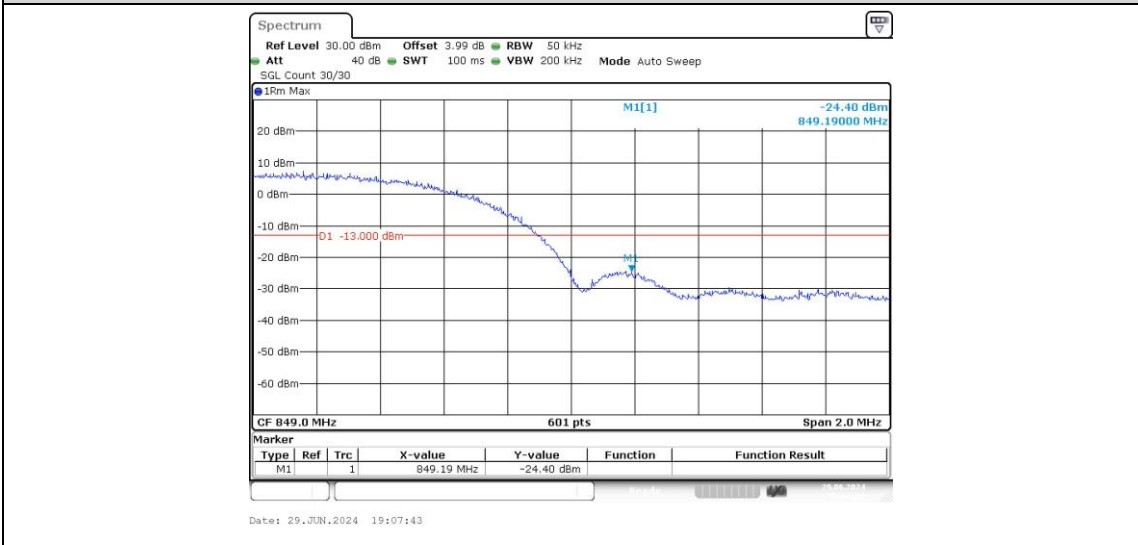
**Band5-4132-4**



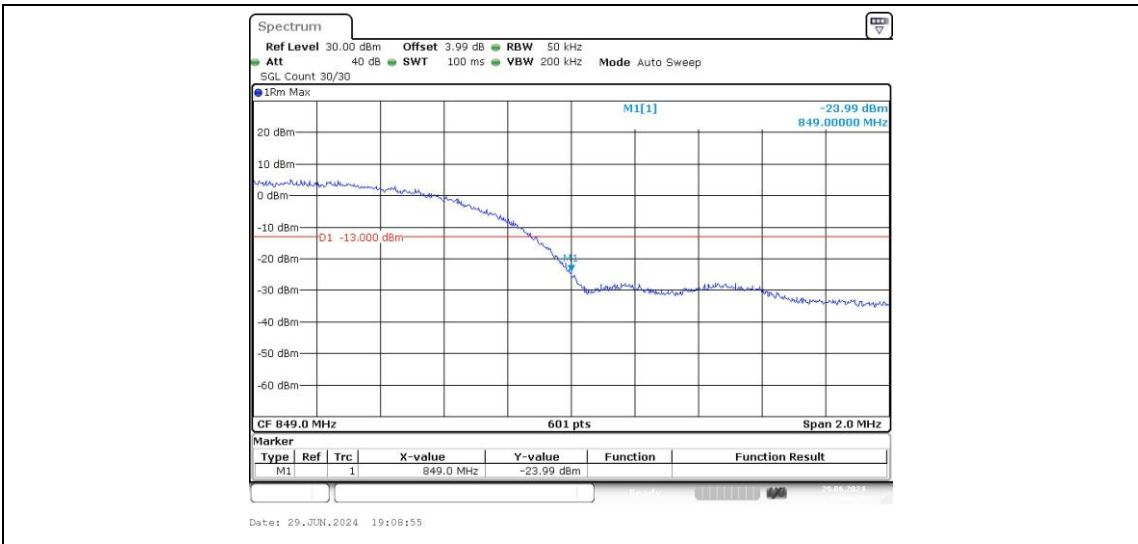
Band5-4132-5



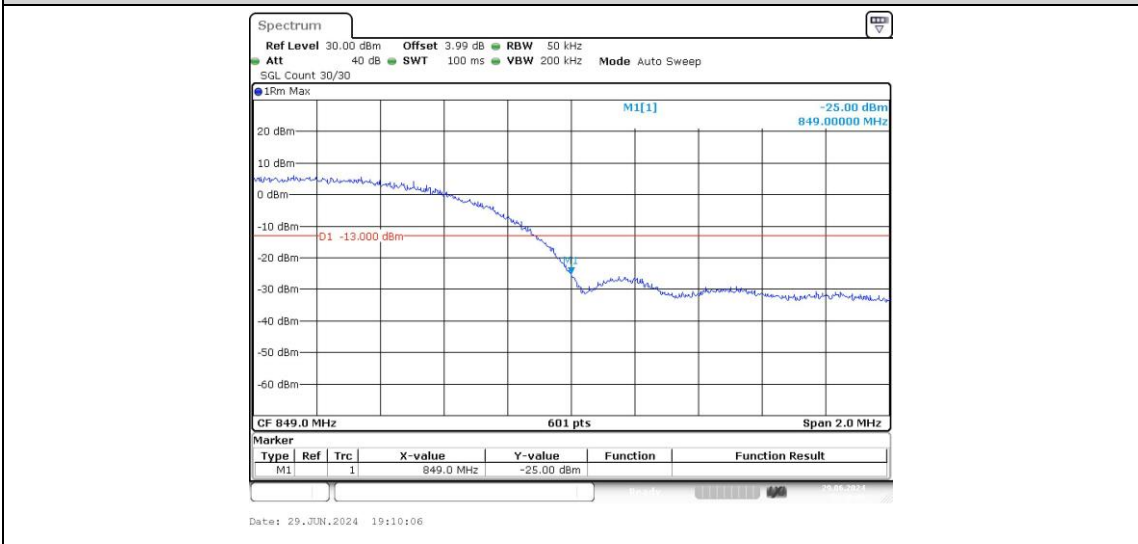
Band5-4233-1



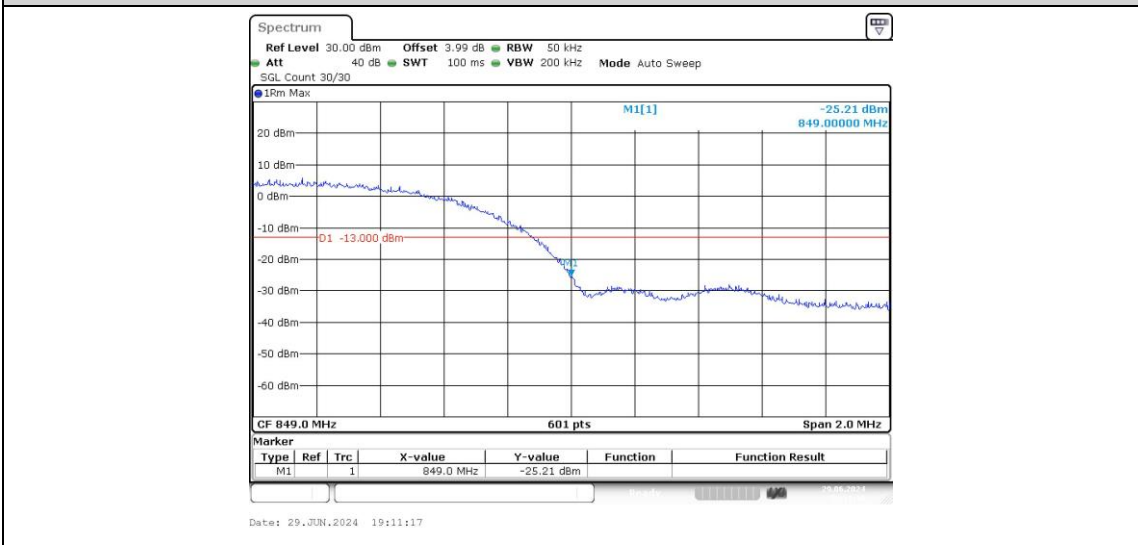
Band5-4233-2



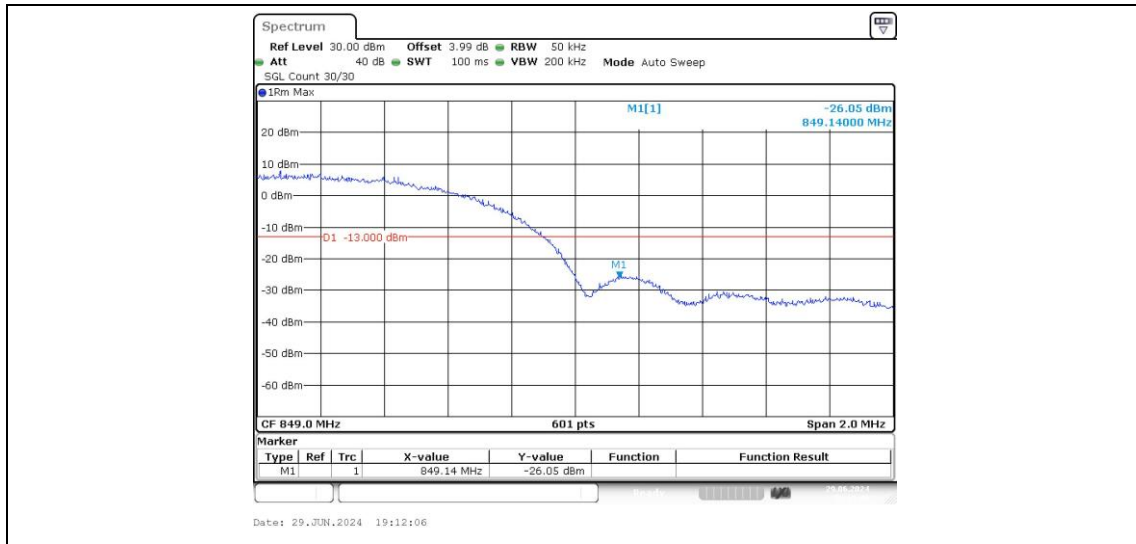
Band5-4233-3



Band5-4233-4



Band5-4233-5



## AppendixE: Conducted SpuriousEmission

### Test Result

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band5	4132	0.009~0.15MHz	0.01	-76.25	-33	PASS
Band5	4132	0.15~30MHz	0.2	-72.86	-23	PASS
Band5	4132	30~1000MHz	946.17	-62.54	-13	PASS
Band5	4132	1000~10000MHz	6908.43	-42.69	-13	PASS
Band5	4182	0.009~0.15MHz	0.01	-76.46	-33	PASS
Band5	4182	0.15~30MHz	0.17	-71.77	-23	PASS
Band5	4182	30~1000MHz	952.47	-62.88	-13	PASS
Band5	4182	1000~10000MHz	6789.64	-43.04	-13	PASS
Band5	4233	0.009~0.15MHz	0.01	-76.64	-33	PASS
Band5	4233	0.15~30MHz	19.28	-73.19	-23	PASS
Band5	4233	30~1000MHz	984.97	-62.99	-13	PASS
Band5	4233	1000~10000MHz	6851.73	-43.05	-13	PASS

Band	Channel	SubTest	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band5	4132	1	0.15~30MHz	0.23	-72.36	-23	PASS
Band5	4132	1	30~1000MHz	965.08	-62.8	-13	PASS
Band5	4132	1	1000~10000MHz	6535.4	-42.99	-13	PASS
Band5	4132	1	0.009~0.15MHz	0.01	-76.51	-33	PASS
Band5	4132	2	0.15~30MHz	0.17	-71.79	-23	PASS
Band5	4132	2	30~1000MHz	977.69	-62.85	-13	PASS
Band5	4132	2	1000~10000MHz	6876.48	-43.05	-13	PASS
Band5	4132	2	0.009~0.15MHz	0.01	-76.42	-33	PASS
Band5	4132	3	0.15~30MHz	0.2	-70.83	-23	PASS
Band5	4132	3	0.009~0.15MHz	0.01	-76.6	-33	PASS
Band5	4132	3	1000~10000MHz	6893.13	-43.09	-13	PASS
Band5	4132	3	30~1000MHz	994.18	-62.94	-13	PASS
Band5	4132	4	0.15~30MHz	0.17	-72.86	-23	PASS
Band5	4132	4	1000~10000MHz	6574.1	-43.08	-13	PASS
Band5	4132	4	0.009~0.15MHz	0.01	-76.25	-33	PASS
Band5	4132	4	30~1000MHz	979.15	-62.57	-13	PASS
Band5	4182	1	1000~10000MHz	6806.28	-43.14	-13	PASS
Band5	4182	1	30~1000MHz	975.27	-62.7	-13	PASS
Band5	4182	1	0.009~0.15MHz	0.01	-76.44	-33	PASS
Band5	4182	1	0.15~30MHz	0.46	-72.61	-23	PASS

Band5	4182	2	0.15~30MHz	0.17	-72.59	-23	PASS
Band5	4182	2	30~1000MHz	987.88	-62.87	-13	PASS
Band5	4182	2	0.009~0.15MHz	0.01	-76.58	-33	PASS
Band5	4182	2	1000~10000MHz	6539	-43.04	-13	PASS
Band5	4182	3	30~1000MHz	986.42	-63	-13	PASS
Band5	4182	3	0.15~30MHz	0.2	-72.56	-23	PASS
Band5	4182	3	1000~10000MHz	6911.58	-43.11	-13	PASS
Band5	4182	3	0.009~0.15MHz	0.01	-76.44	-33	PASS
Band5	4182	4	0.009~0.15MHz	0.01	-76.43	-33	PASS
Band5	4182	4	0.15~30MHz	0.2	-72.75	-23	PASS
Band5	4182	4	30~1000MHz	987.39	-62.93	-13	PASS
Band5	4182	4	1000~10000MHz	6582.65	-43.07	-13	PASS
Band5	4233	1	0.15~30MHz	18.65	-72.83	-23	PASS
Band5	4233	1	30~1000MHz	988.85	-62.72	-13	PASS
Band5	4233	1	1000~10000MHz	6852.63	-42.62	-13	PASS
Band5	4233	1	0.009~0.15MHz	0.01	-76.3	-33	PASS
Band5	4233	2	0.009~0.15MHz	0.01	-76.26	-33	PASS
Band5	4233	2	0.15~30MHz	20.98	-72.13	-23	PASS
Band5	4233	2	1000~10000MHz	6533.15	-42.86	-13	PASS
Band5	4233	2	30~1000MHz	994.18	-62.43	-13	PASS
Band5	4233	3	0.009~0.15MHz	0.01	-76.37	-33	PASS
Band5	4233	3	0.15~30MHz	18.59	-72.83	-23	PASS
Band5	4233	3	30~1000MHz	972.84	-62.41	-13	PASS
Band5	4233	3	1000~10000MHz	6820.68	-43.09	-13	PASS
Band5	4233	4	1000~10000MHz	6782.44	-43.04	-13	PASS
Band5	4233	4	0.009~0.15MHz	0.01	-76.38	-33	PASS
Band5	4233	4	0.15~30MHz	0.2	-72.79	-23	PASS
Band5	4233	4	30~1000MHz	980.12	-62.78	-13	PASS

Band	Channel	SubTest	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band5	4132	1	0.15~30MHz	29.15	-72.83	-23	PASS
Band5	4132	1	30~1000MHz	960.23	-62.64	-13	PASS
Band5	4132	1	1000~10000MHz	6853.53	-42.89	-13	PASS
Band5	4132	1	0.009~0.15MHz	0.01	-76.54	-33	PASS
Band5	4132	2	30~1000MHz	931.62	-62.85	-13	PASS
Band5	4132	2	1000~10000MHz	6552.5	-42.9	-13	PASS
Band5	4132	2	0.15~30MHz	21.28	-72.82	-23	PASS
Band5	4132	2	0.009~0.15MHz	0.01	-76.55	-33	PASS
Band5	4132	3	1000~10000MHz	6516.5	-43.07	-13	PASS
Band5	4132	3	0.009~0.15MHz	0.01	-76.37	-33	PASS