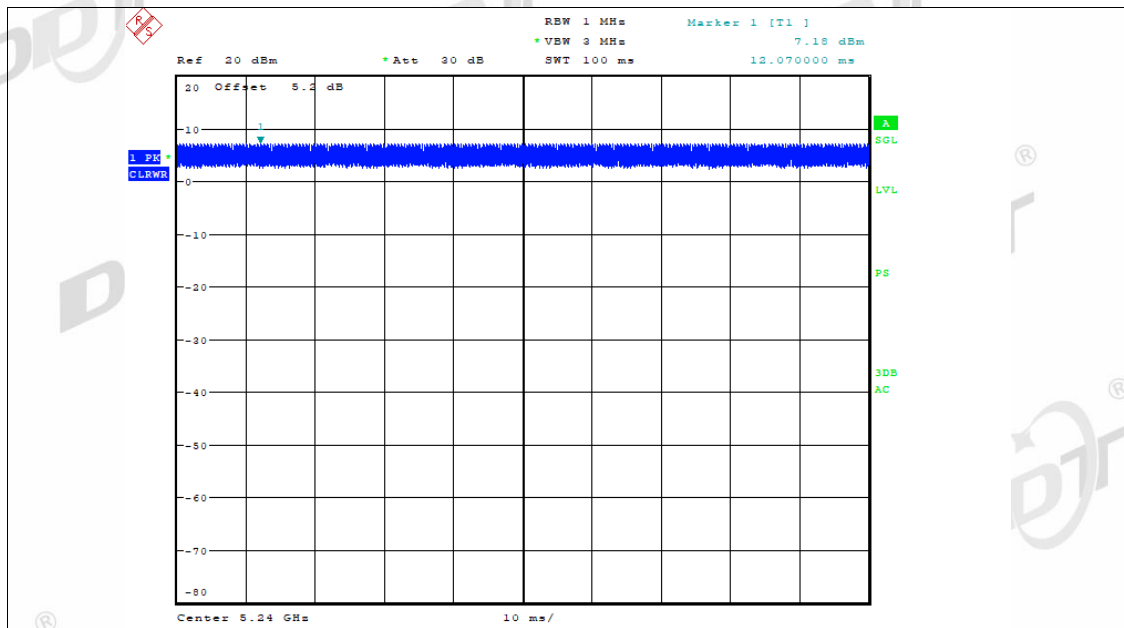
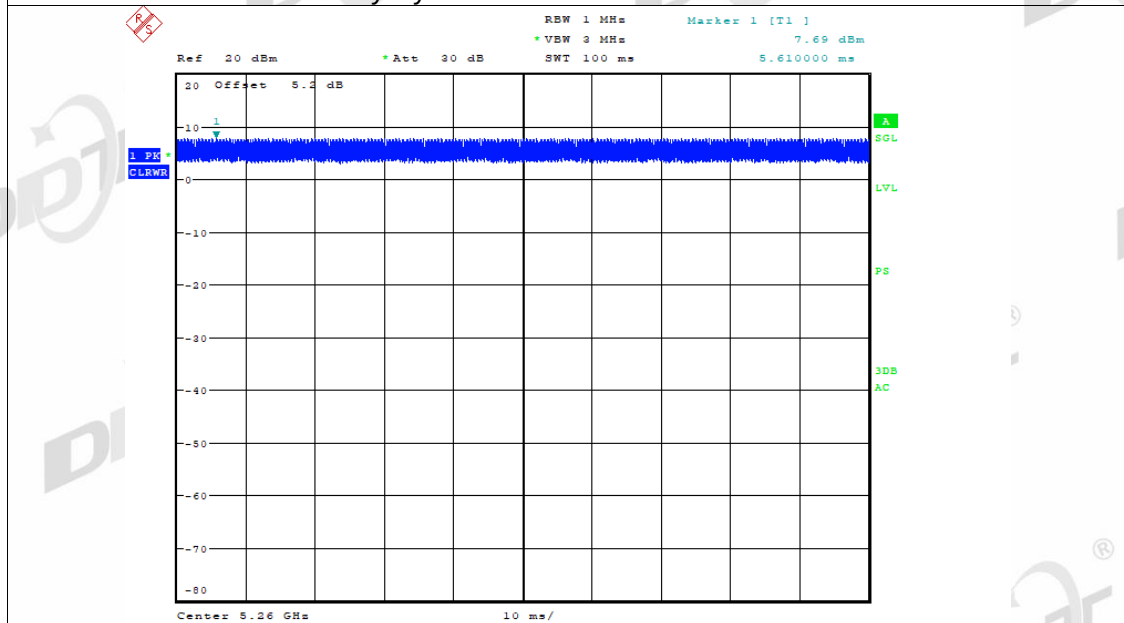




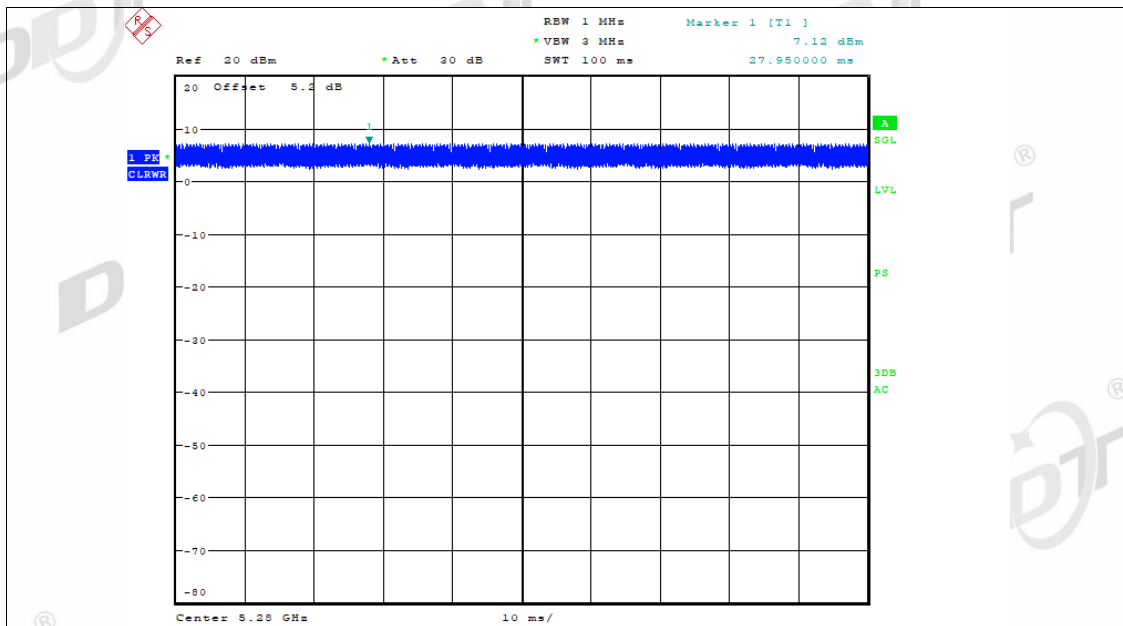
Date: 7.NOV.2022 11:53:46

Duty Cycle NVNT ac20 5260MHz Ant1

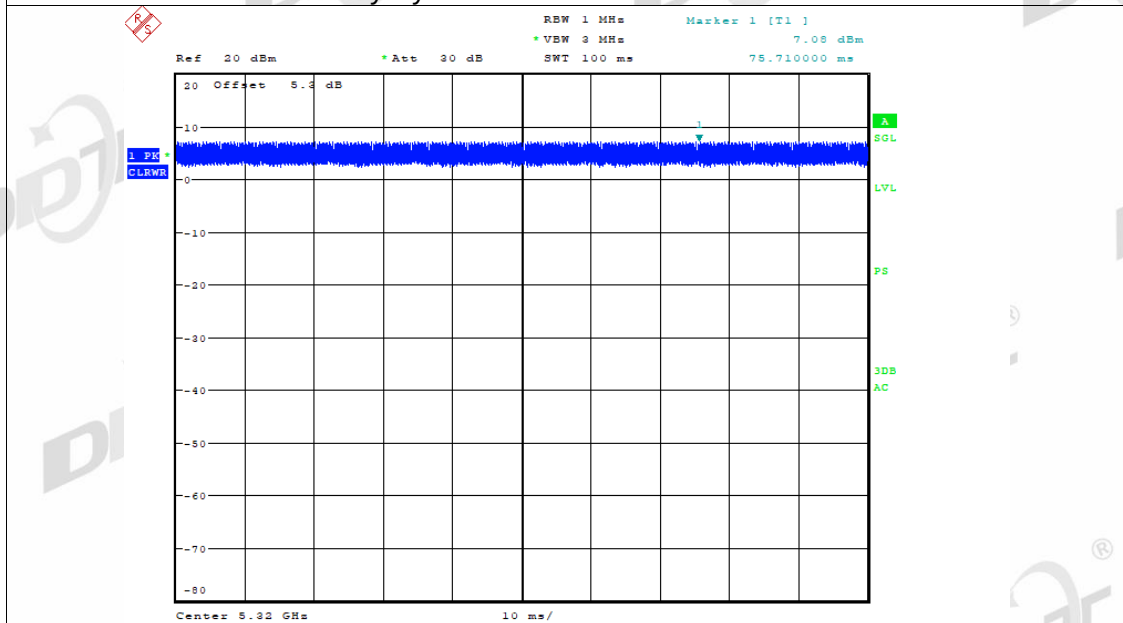


Date: 7.NOV.2022 11:57:42

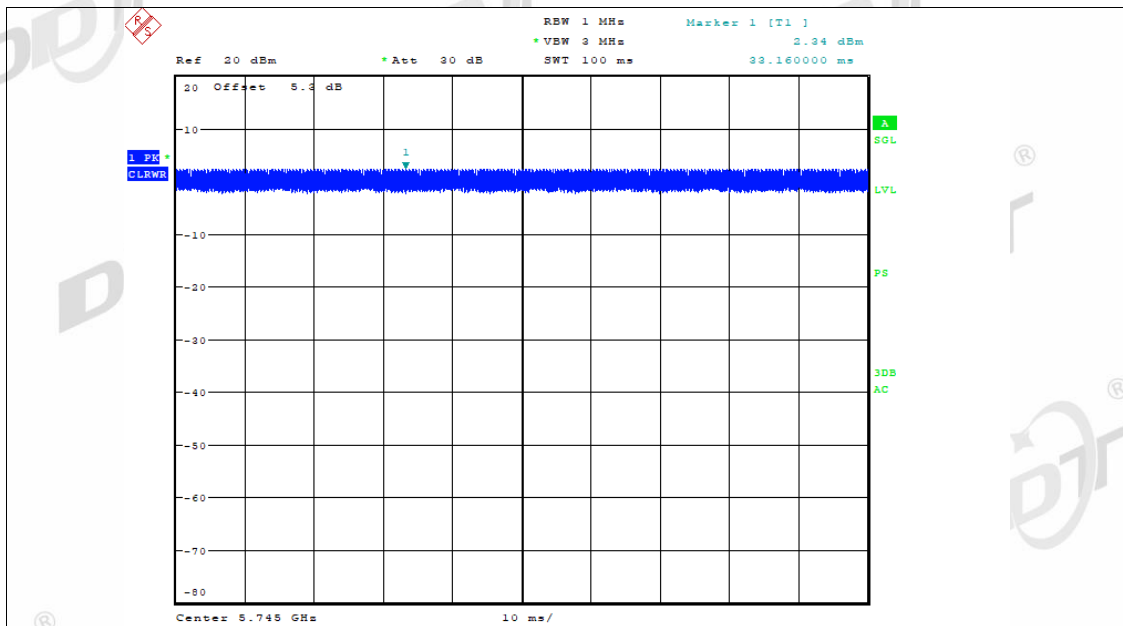
Duty Cycle NVNT ac20 5280MHz Ant1



Duty Cycle NVNT ac20 5320MHz Ant1

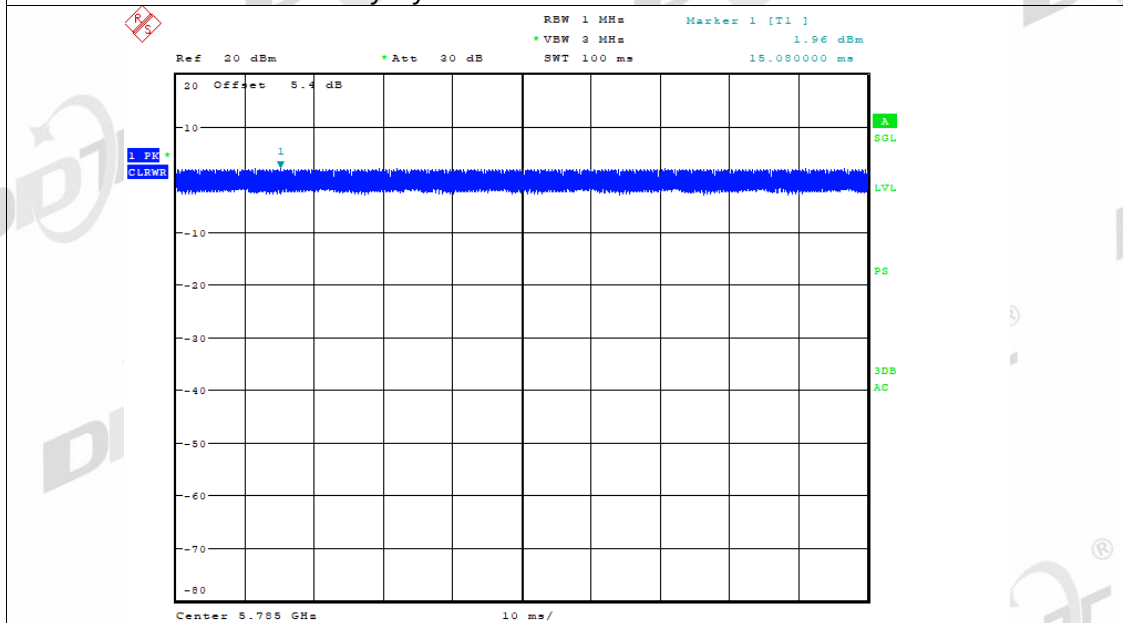


Duty Cycle NVNT ac20 5745MHz Ant1



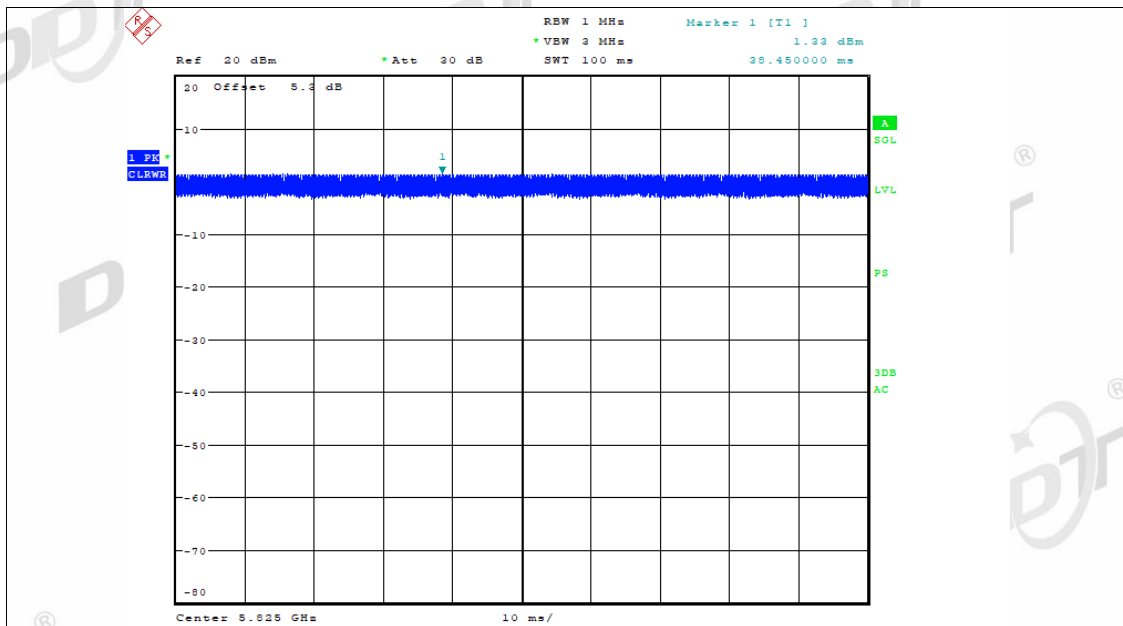
Date: 7.NOV.2022 13:15:16

Duty Cycle NVNT ac20 5785MHz Ant1



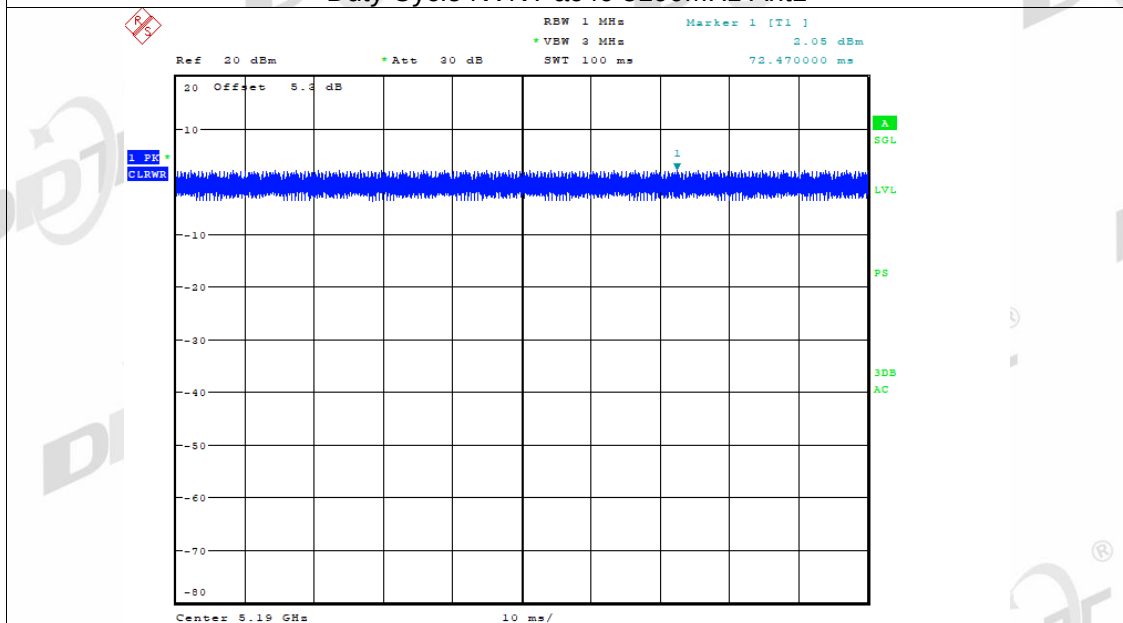
Date: 7.NOV.2022 13:20:00

Duty Cycle NVNT ac20 5825MHz Ant1



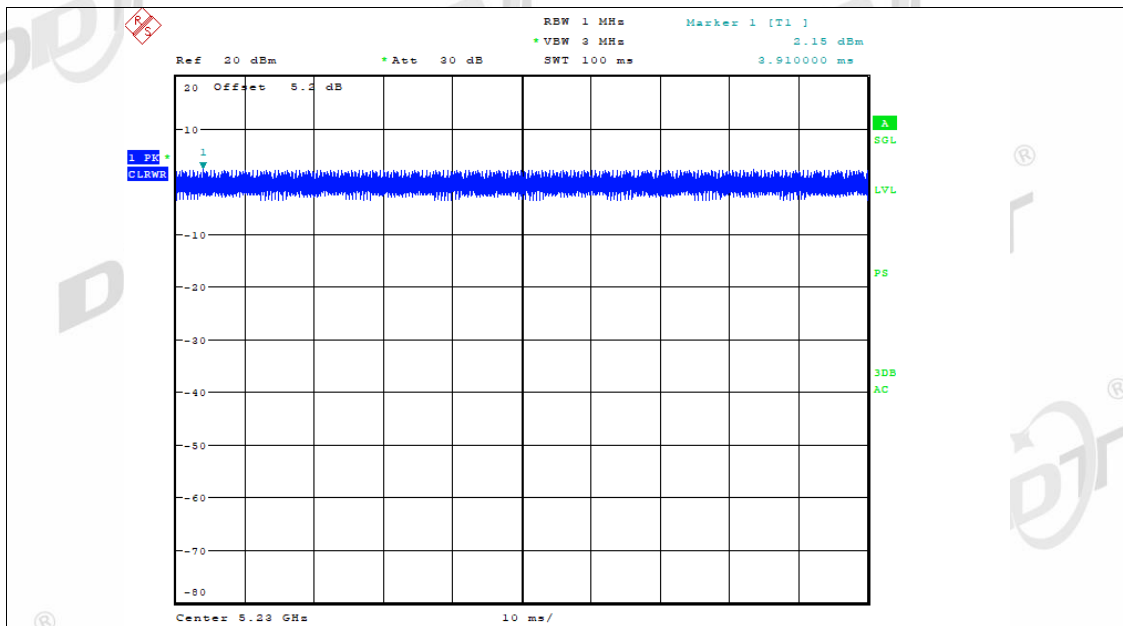
Date: 7.NOV.2022 13:29:31

Duty Cycle NVNT ac40 5190MHz Ant1



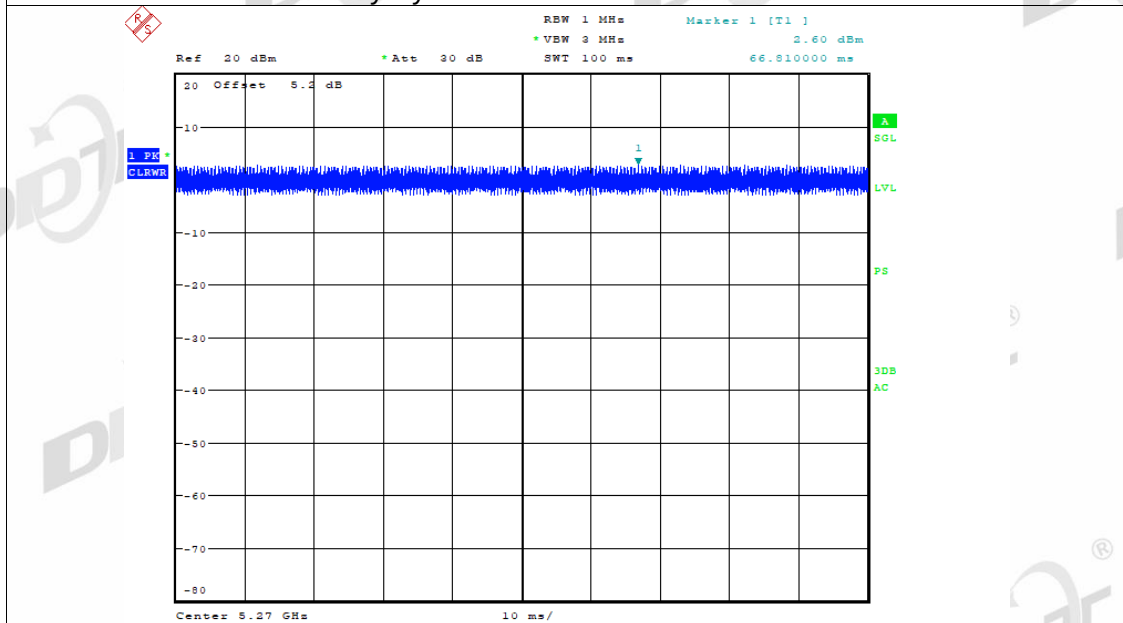
Date: 7.NOV.2022 14:28:38

Duty Cycle NVNT ac40 5230MHz Ant1



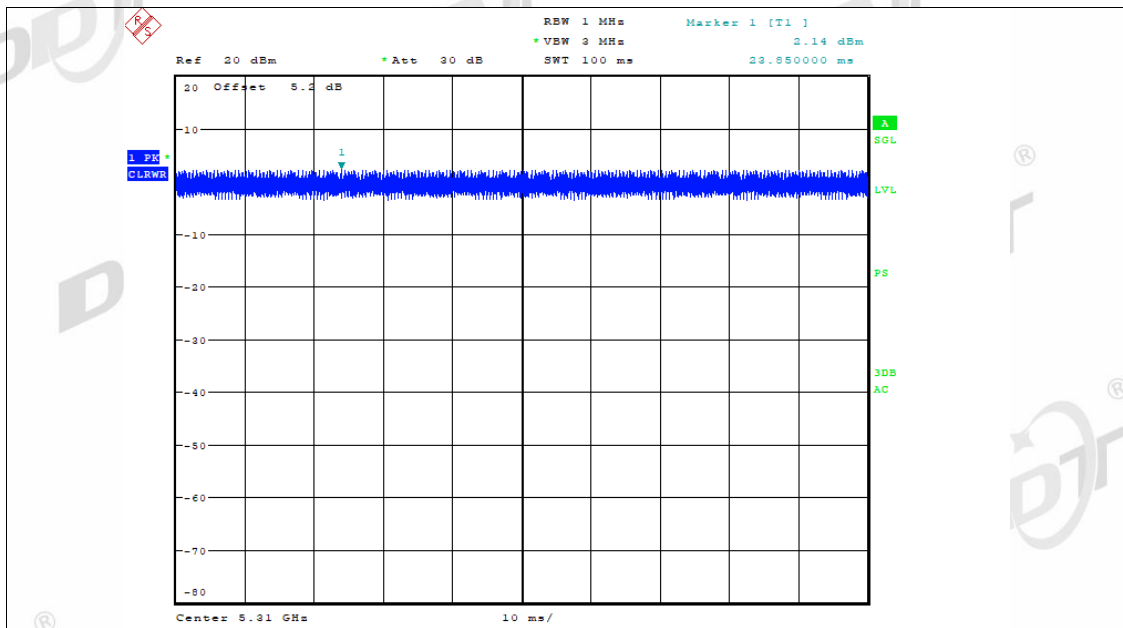
Date: 7.NOV.2022 14:39:39

Duty Cycle NVNT ac40 5270MHz Ant1



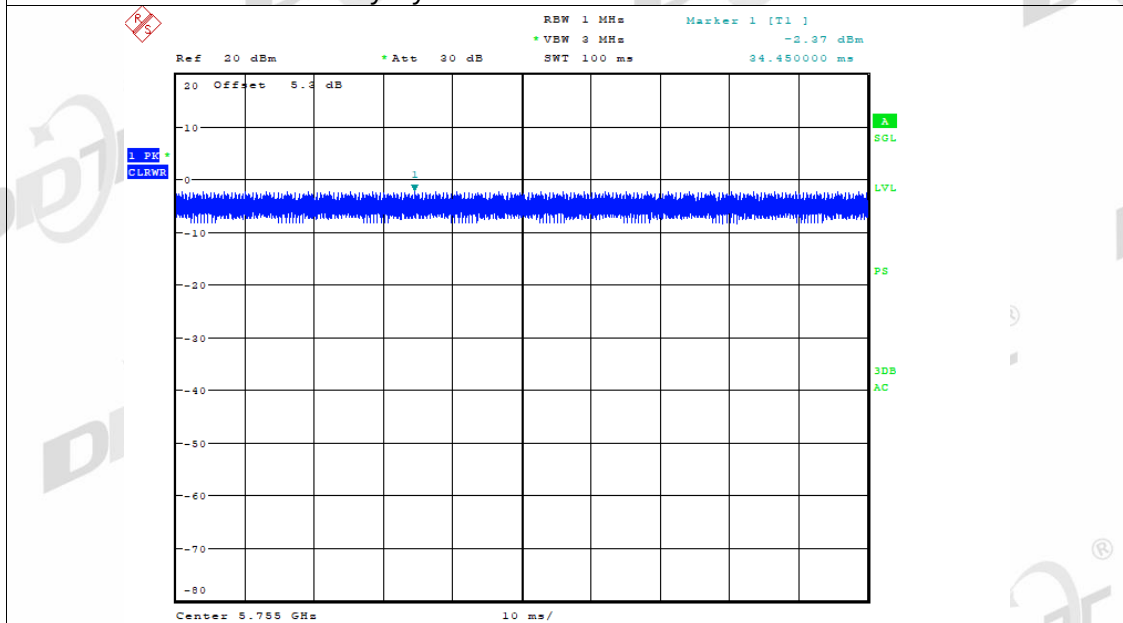
Date: 7.NOV.2022 14:48:32

Duty Cycle NVNT ac40 5310MHz Ant1



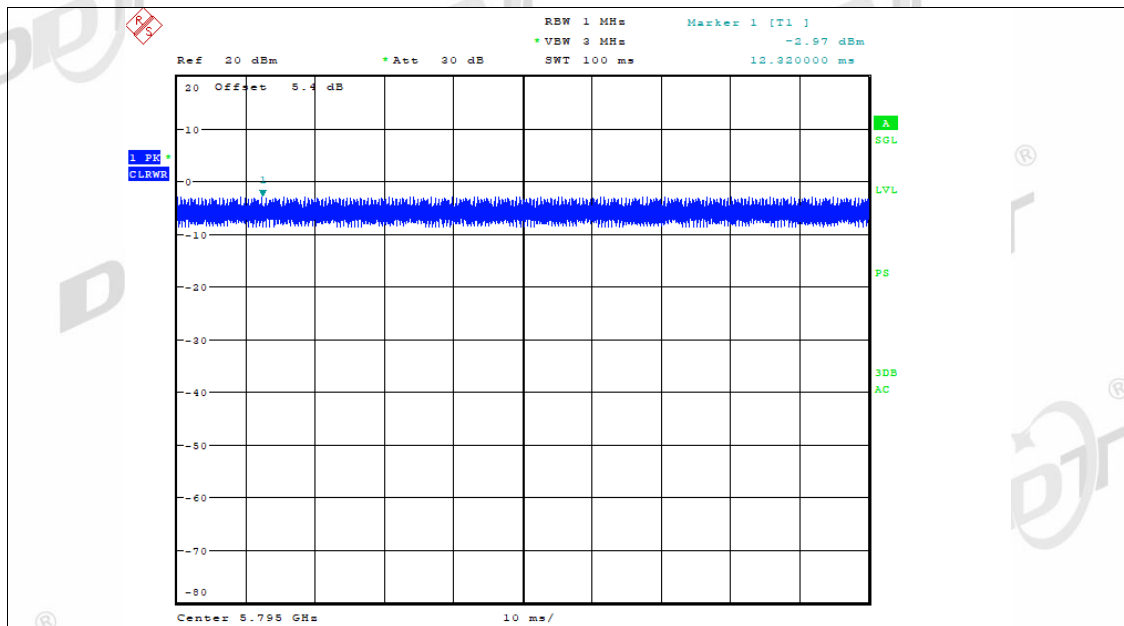
Date: 7.NOV.2022 14:52:45

Duty Cycle NVNT ac40 5755MHz Ant1



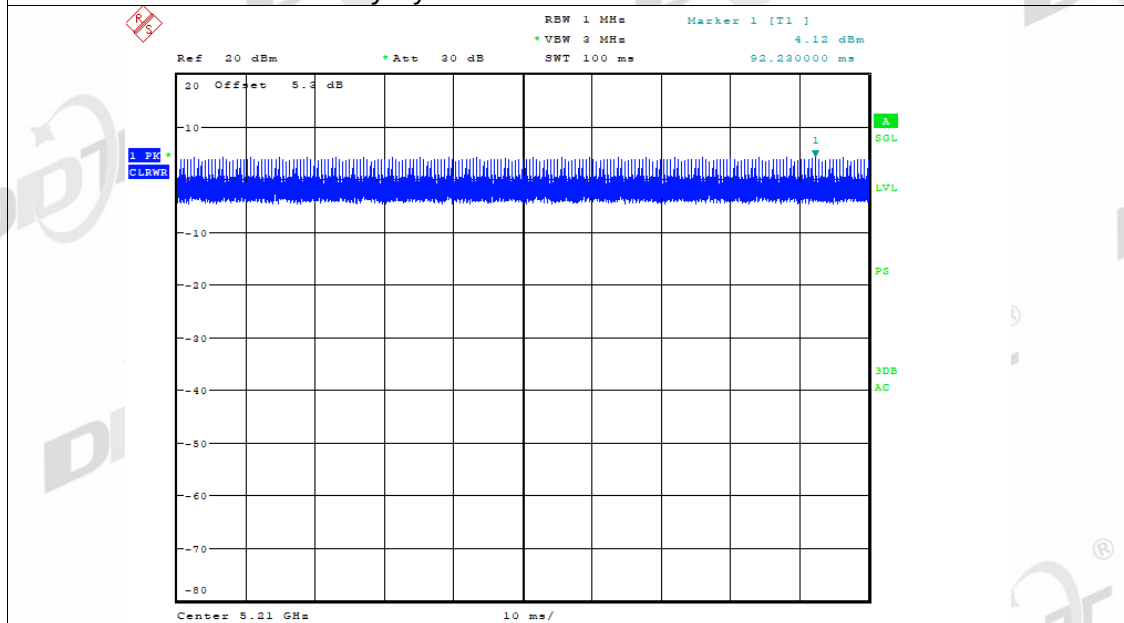
Date: 7.NOV.2022 14:56:57

Duty Cycle NVNT ac40 5795MHz Ant1



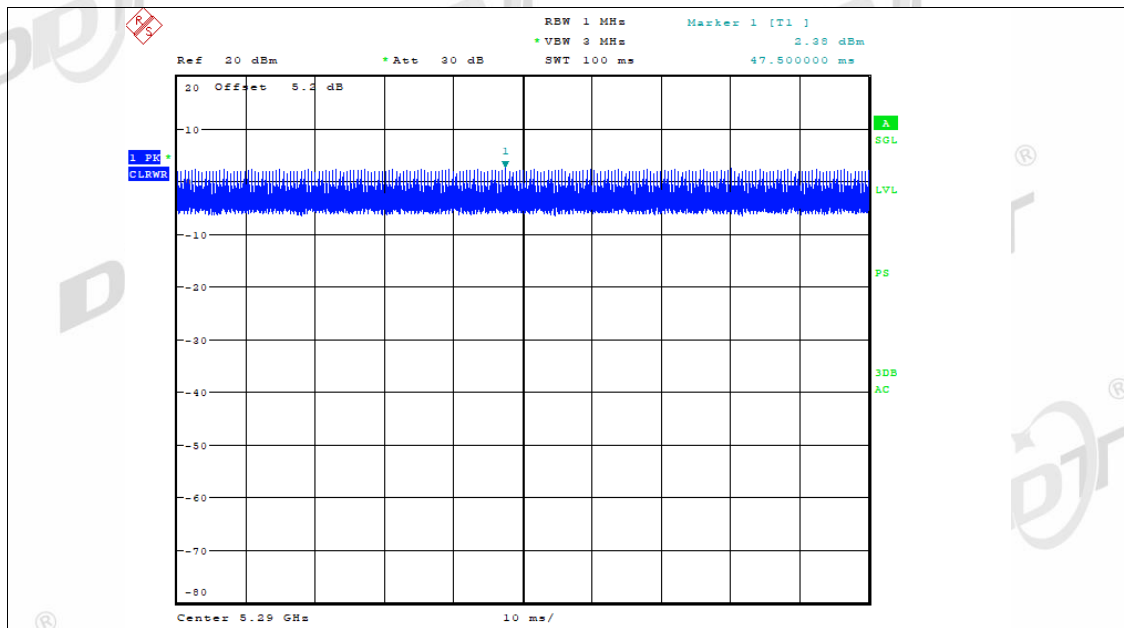
Date: 7.NOV.2022 15:01:20

Duty Cycle NVNT ac80 5210MHz Ant1



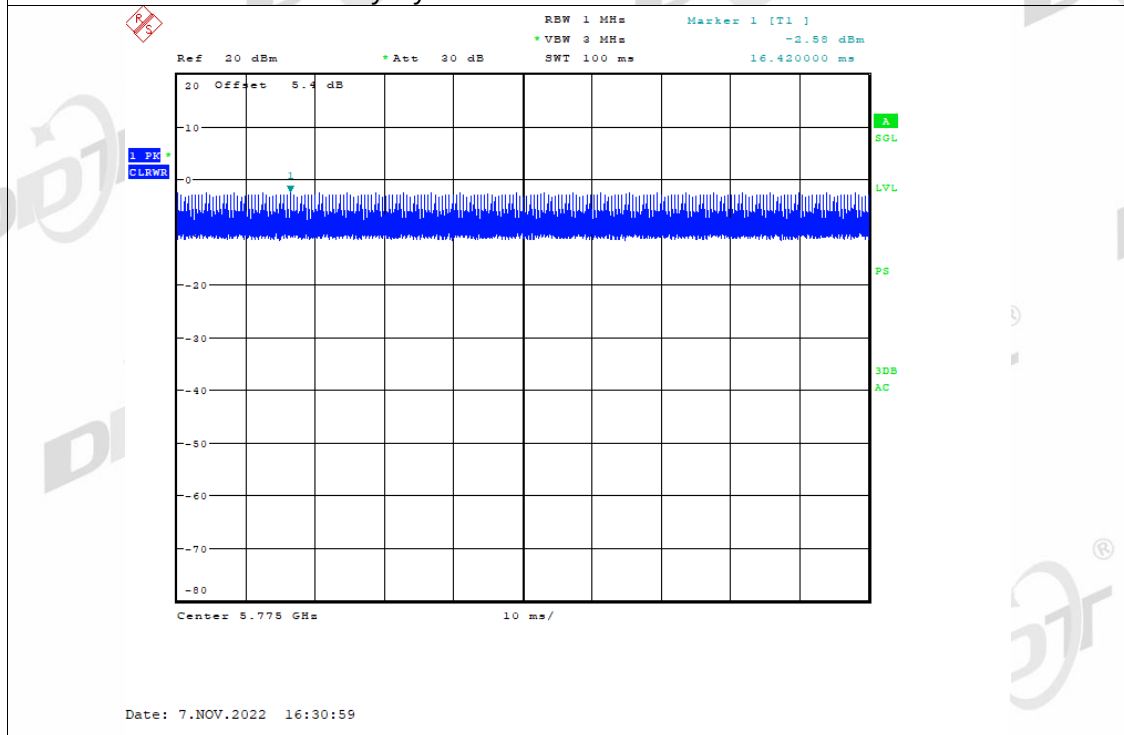
Date: 7.NOV.2022 16:16:06

Duty Cycle NVNT ac80 5290MHz Ant1



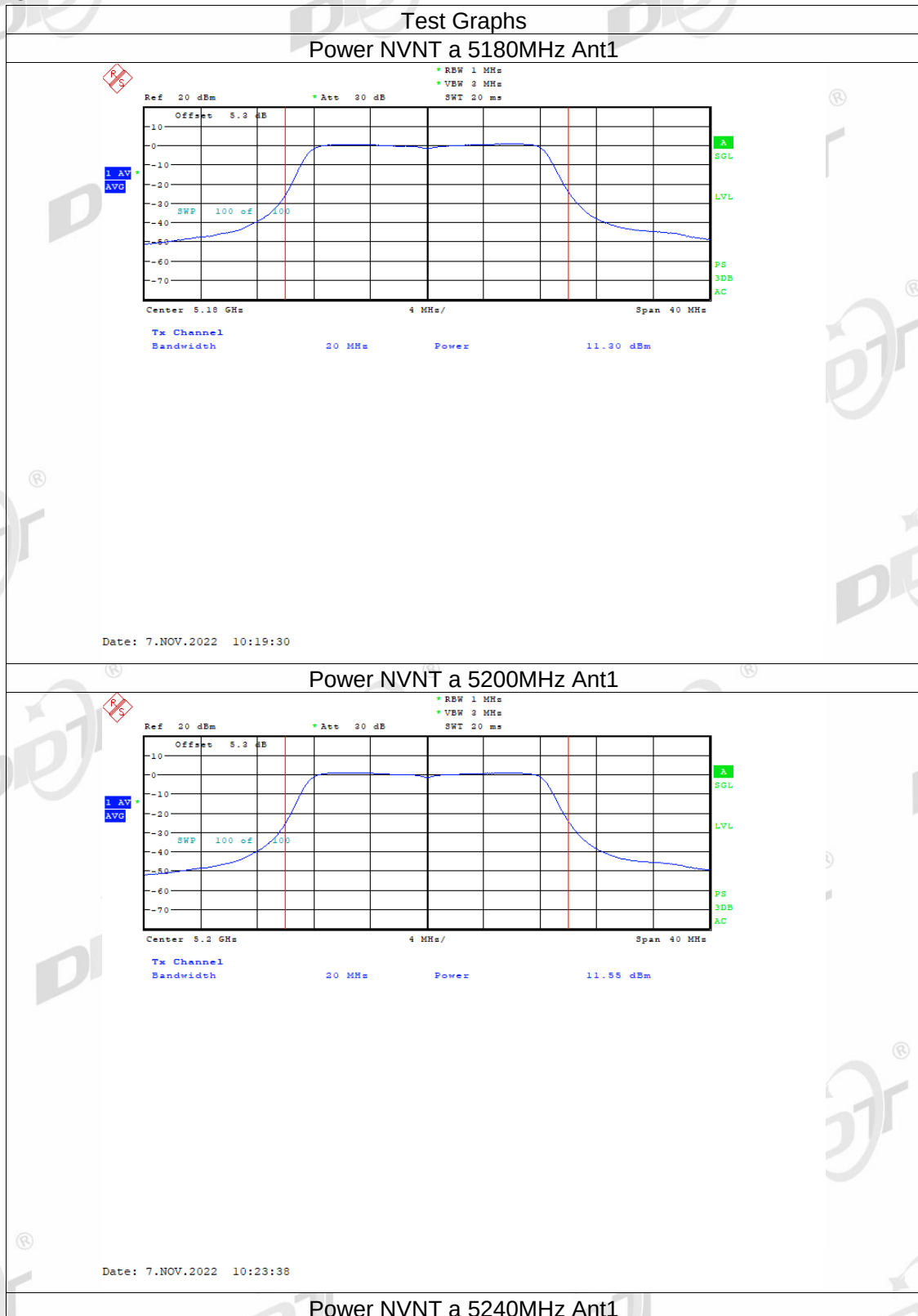
Date: 7.NOV.2022 16:24:01

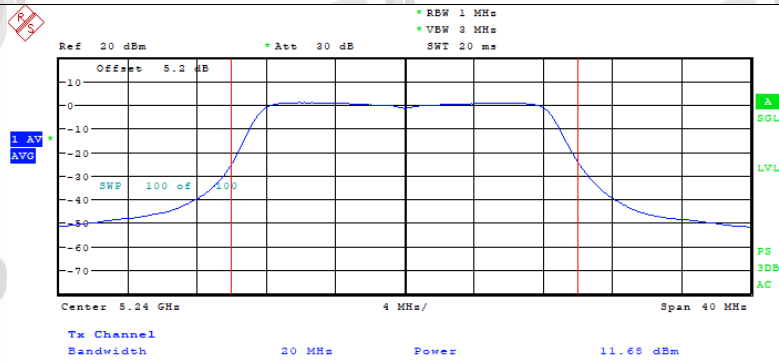
Duty Cycle NVNT ac80 5775MHz Ant1



Date: 7.NOV.2022 16:30:59

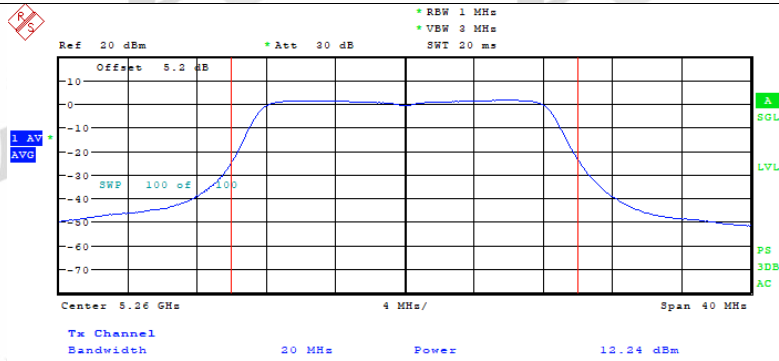
Power





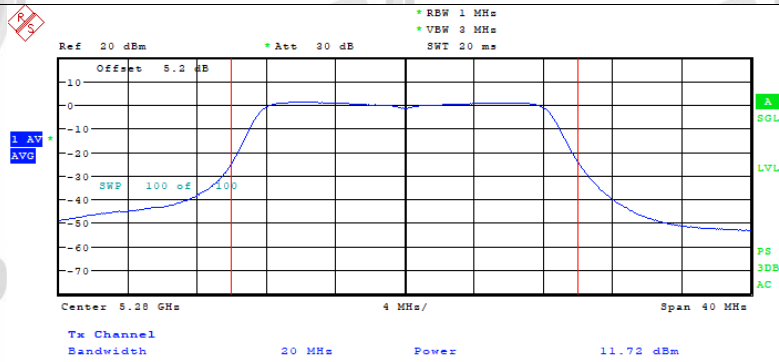
Date: 7.NOV.2022 10:27:27

Power NVNT a 5260MHz Ant1



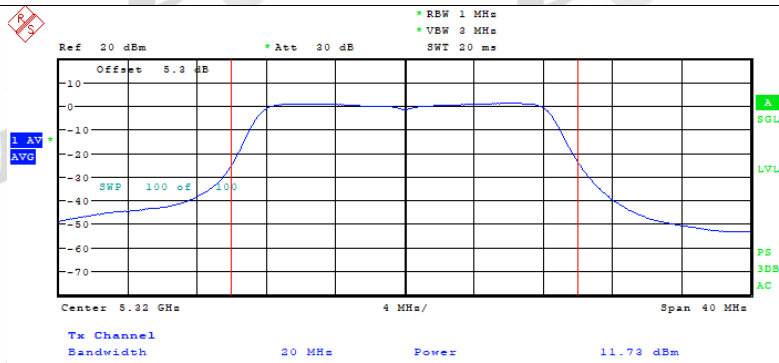
Date: 7.NOV.2022 10:32:15

Power NVNT a 5280MHz Ant1



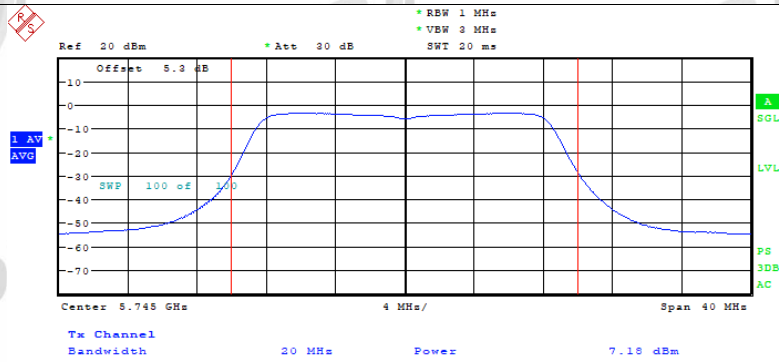
Date: 7.NOV.2022 10:36:46

Power NVNT a 5320MHz Ant1



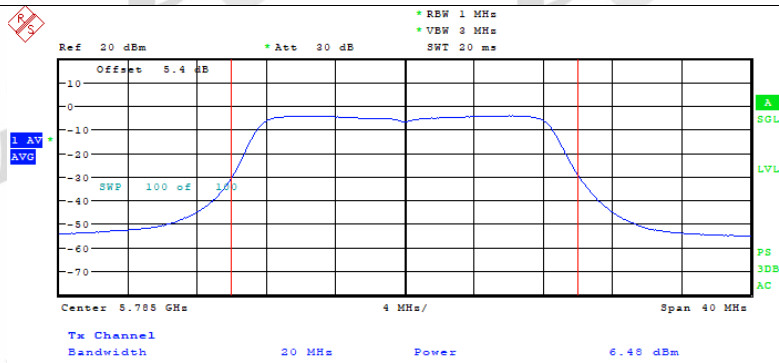
Date: 7.NOV.2022 10:40:48

Power NVNT a 5745MHz Ant1



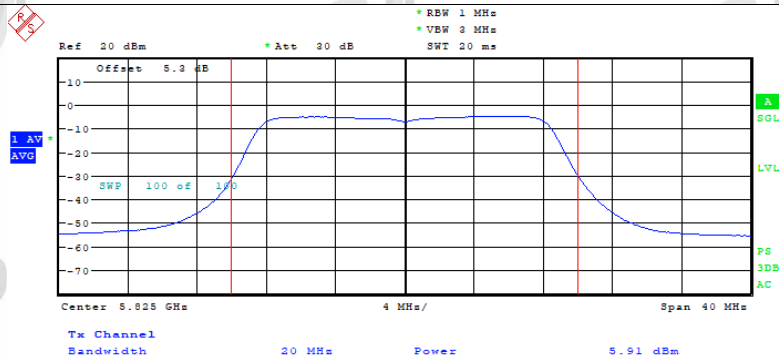
Date: 7.NOV.2022 11:03:57

Power NVNT a 5785MHz Ant1



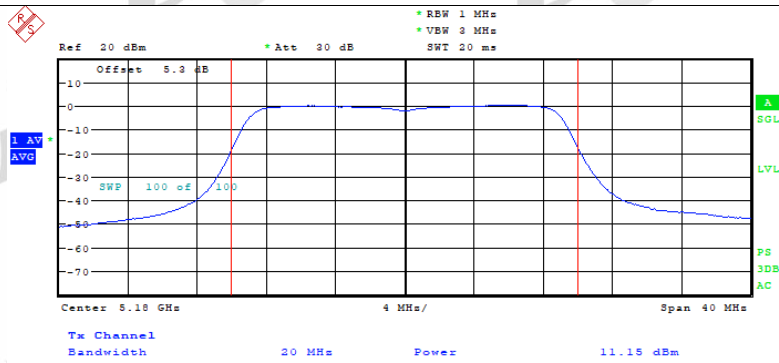
Date: 7.NOV.2022 10:53:16

Power NVNT a 5825MHz Ant1



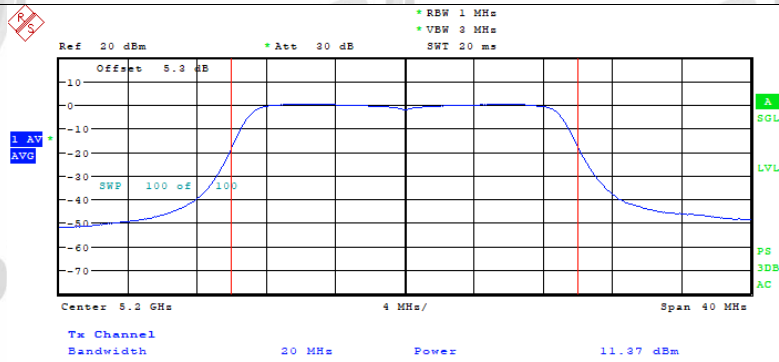
Date: 7.NOV.2022 10:56:59

Power NVNT n20 5180MHz Ant1



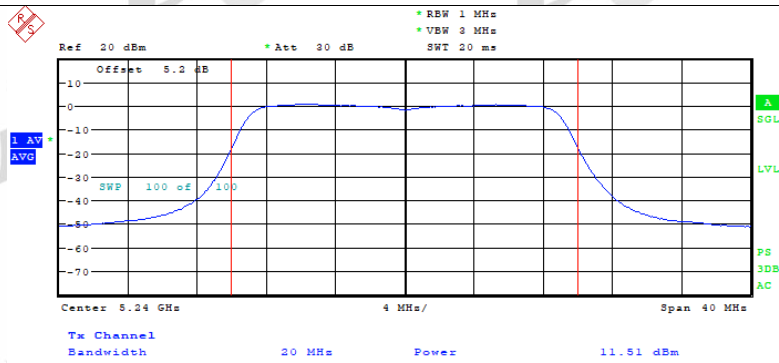
Date: 7.NOV.2022 11:05:37

Power NVNT n20 5200MHz Ant1



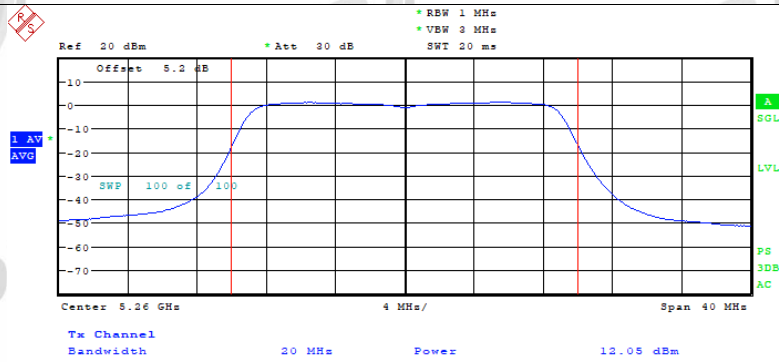
Date: 7.NOV.2022 11:08:57

Power NVNT n20 5240MHz Ant1



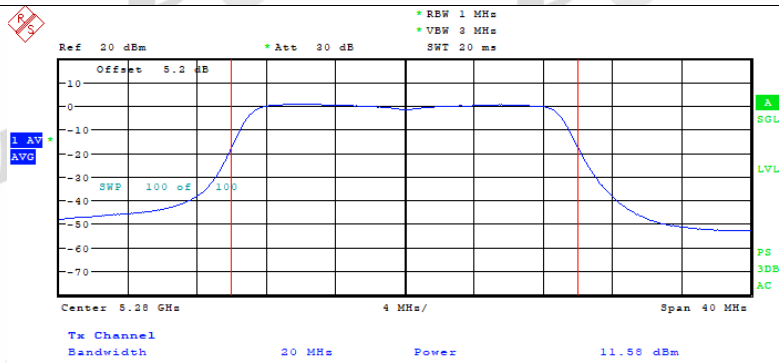
Date: 7.NOV.2022 11:12:43

Power NVNT n20 5260MHz Ant1



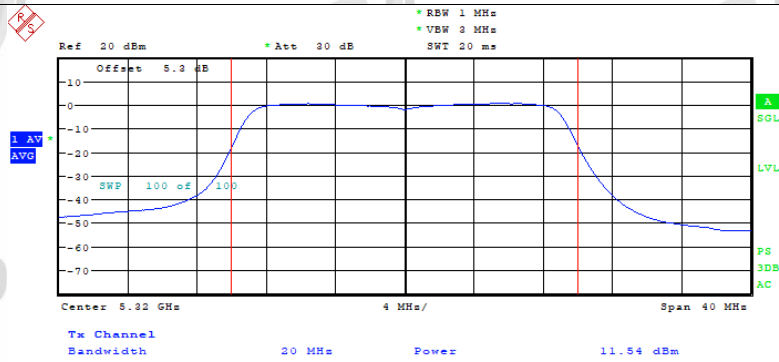
Date: 7.NOV.2022 11:16:21

Power NVNT n20 5280MHz Ant1



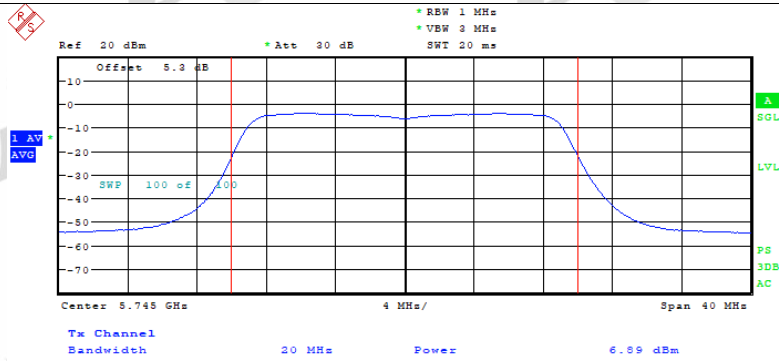
Date: 7.NOV.2022 11:20:23

Power NVNT n20 5320MHz Ant1



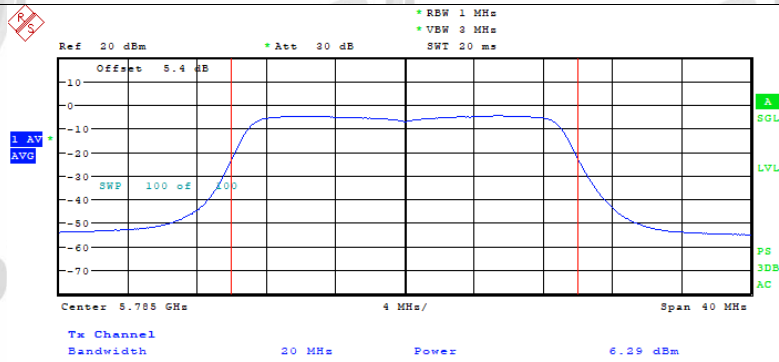
Date: 7.NOV.2022 11:24:08

Power NVNT n20 5745MHz Ant1



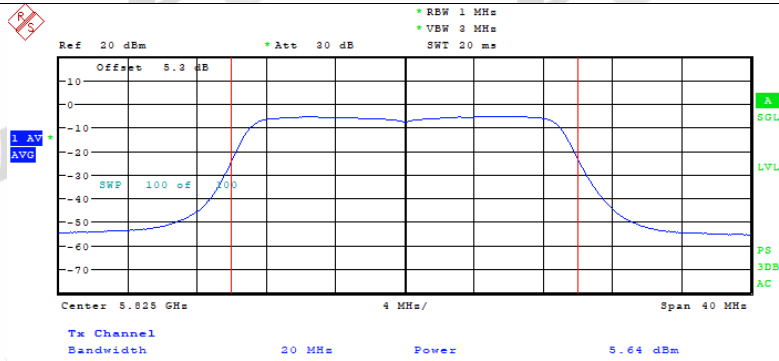
Date: 7.NOV.2022 11:29:07

Power NVNT n20 5785MHz Ant1



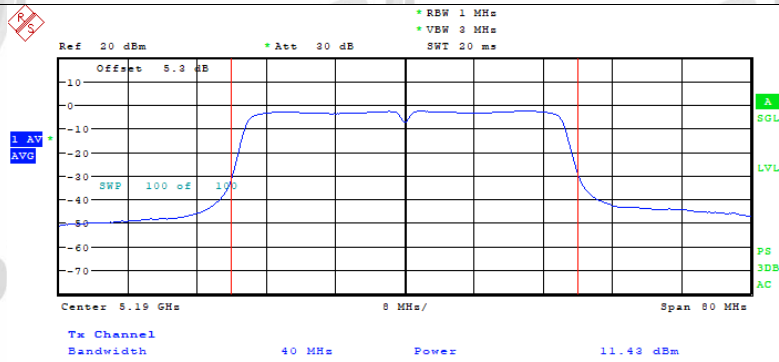
Date: 7.NOV.2022 11:37:54

Power NVNT n20 5825MHz Ant1



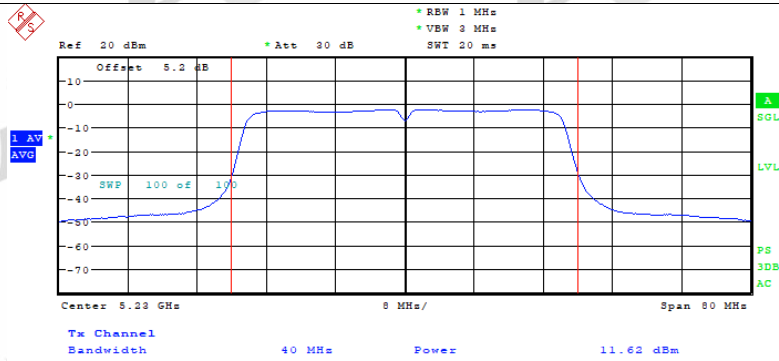
Date: 7.NOV.2022 11:40:57

Power NVNT n40 5190MHz Ant1



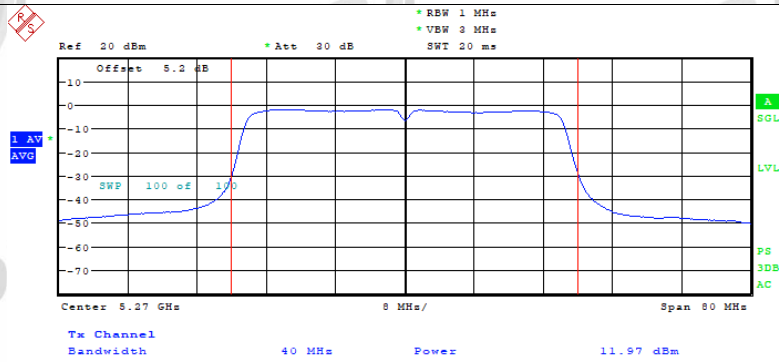
Date: 7.NOV.2022 13:58:36

Power NVNT n40 5230MHz Ant1



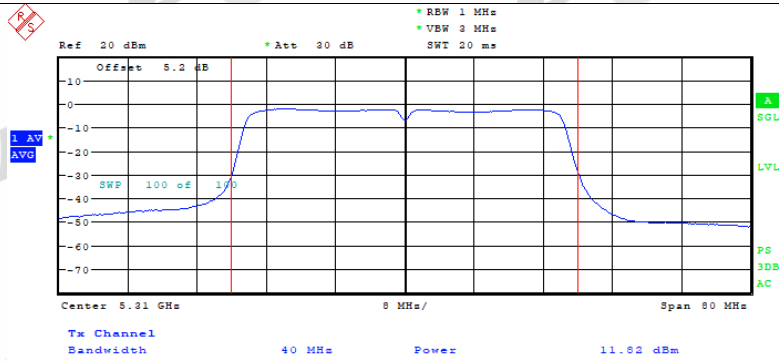
Date: 7.NOV.2022 14:03:50

Power NVNT n40 5270MHz Ant1



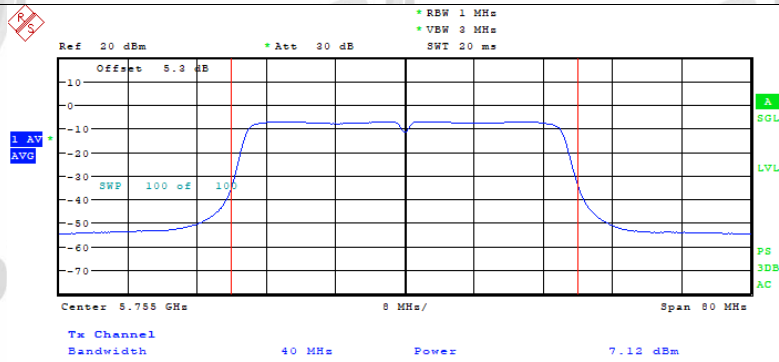
Date: 7.NOV.2022 14:13:48

Power NVNT n40 5310MHz Ant1



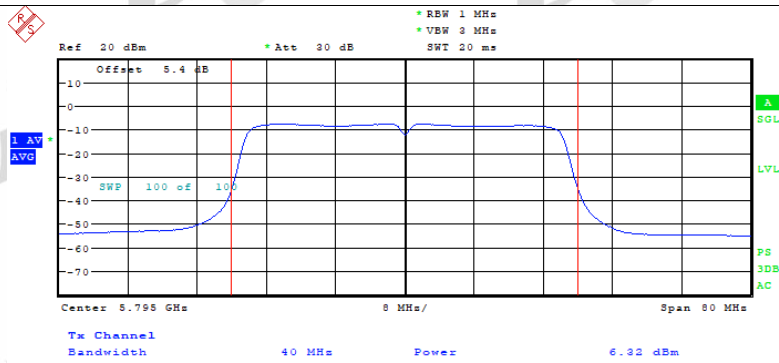
Date: 7.NOV.2022 14:18:36

Power NVNT n40 5755MHz Ant1



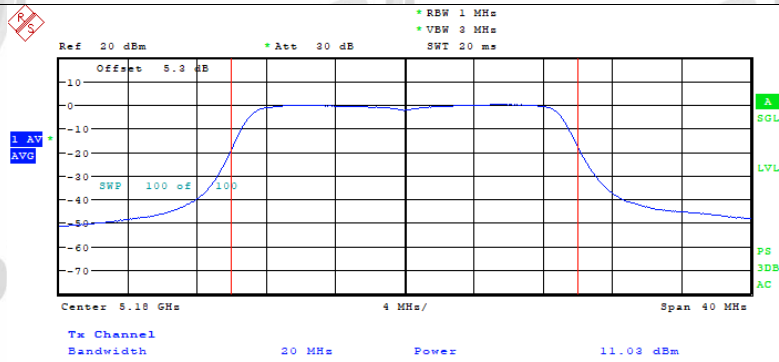
Date: 7.NOV.2022 13:47:34

Power NVNT n40 5795MHz Ant1



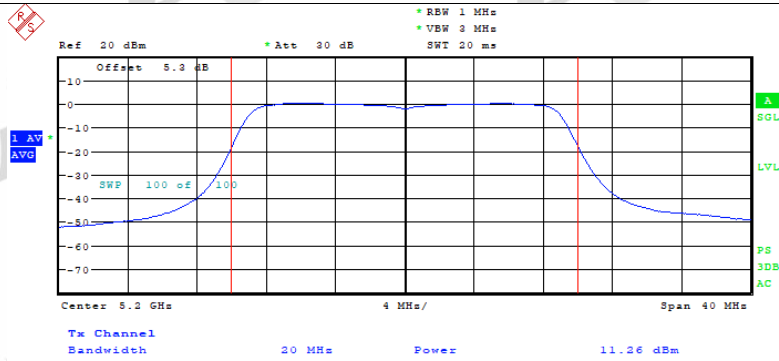
Date: 7.NOV.2022 13:52:45

Power NVNT ac20 5180MHz Ant1



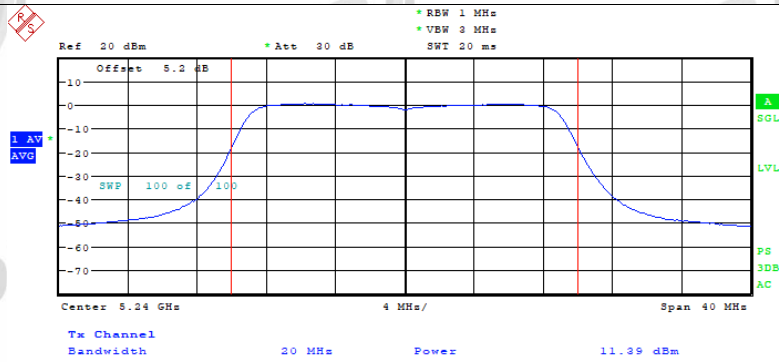
Date: 7.NOV.2022 11:46:52

Power NVNT ac20 5200MHz Ant1



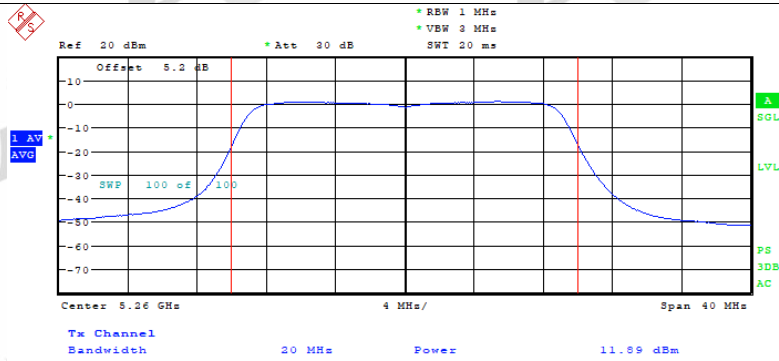
Date: 7.NOV.2022 11:50:46

Power NVNT ac20 5240MHz Ant1



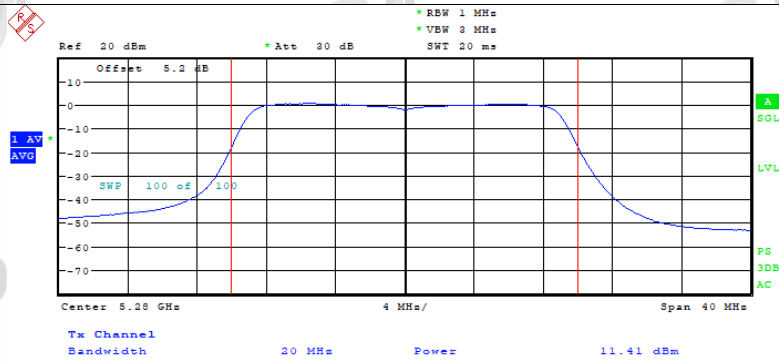
Date: 7.NOV.2022 11:53:56

Power NVNT ac20 5260MHz Ant1



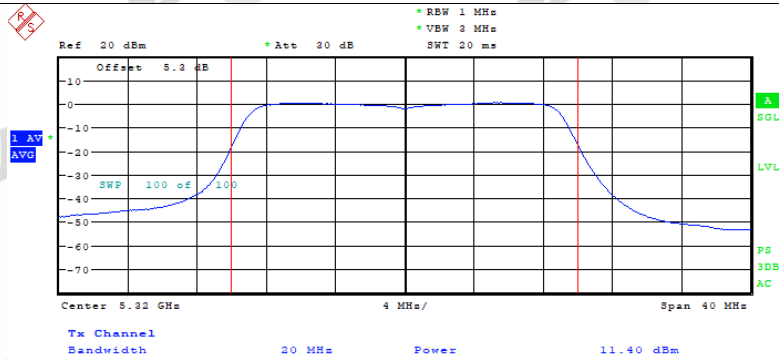
Date: 7.NOV.2022 11:57:52

Power NVNT ac20 5280MHz Ant1



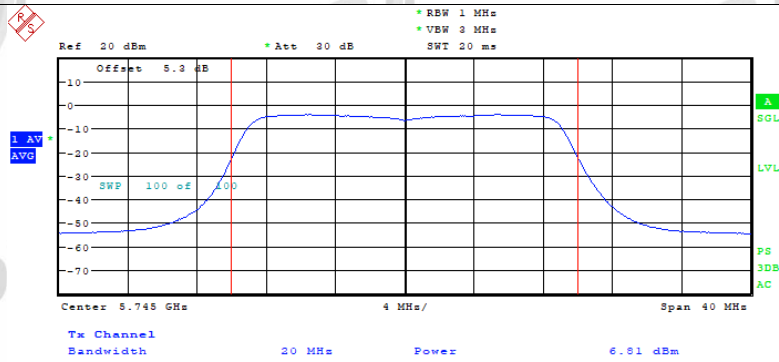
Date: 7.NOV.2022 12:03:18

Power NVNT ac20 5320MHz Ant1



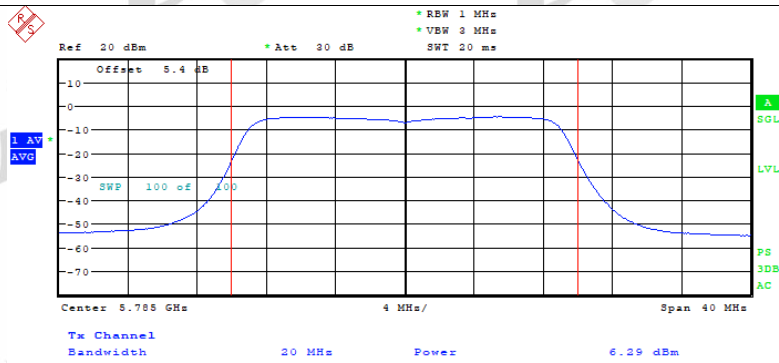
Date: 7.NOV.2022 12:07:09

Power NVNT ac20 5745MHz Ant1



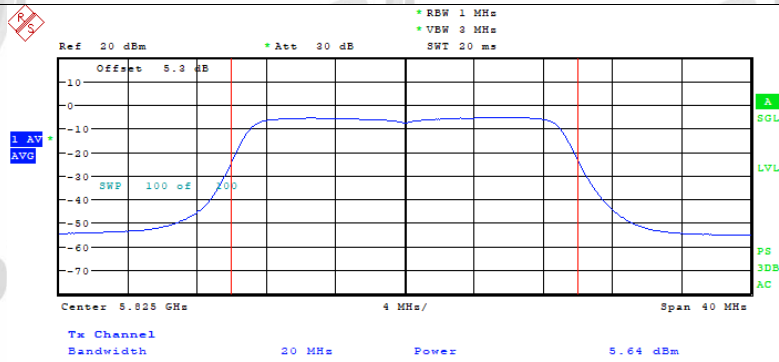
Date: 7.NOV.2022 13:15:27

Power NVNT ac20 5785MHz Ant1



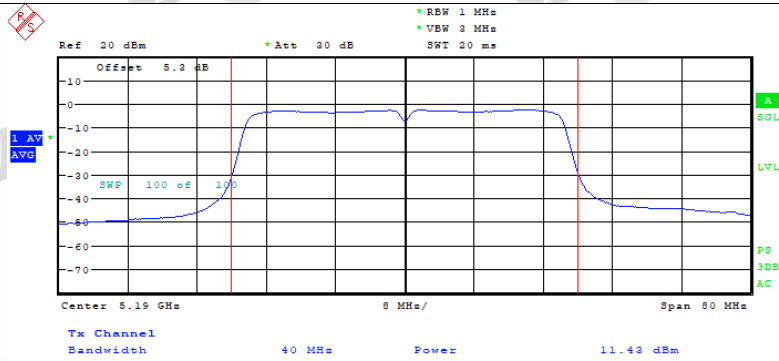
Date: 7.NOV.2022 13:20:12

Power NVNT ac20 5825MHz Ant1



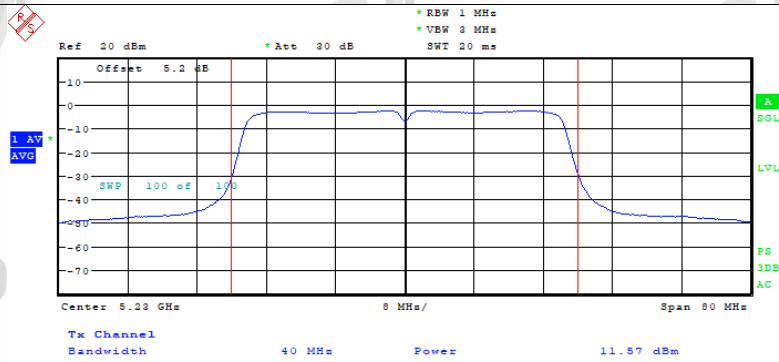
Date: 7.NOV.2022 13:29:44

Power NVNT ac40 5190MHz Ant1



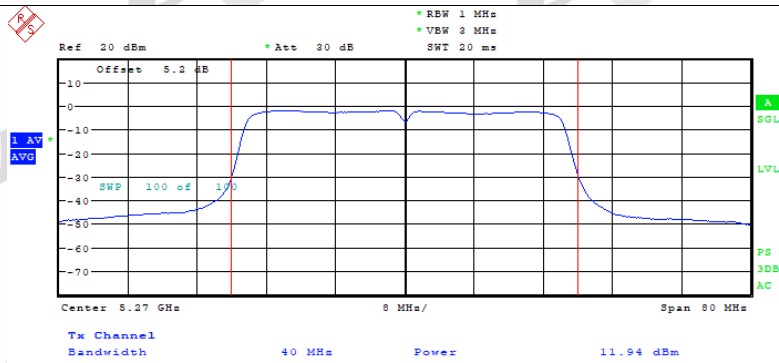
Date: 7.NOV.2022 14:28:47

Power NVNT ac40 5230MHz Ant1



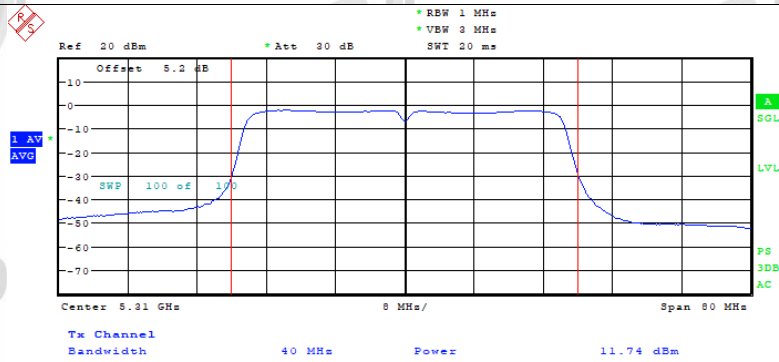
Date: 7.NOV.2022 14:39:48

Power NVNT ac40 5270MHz Ant1



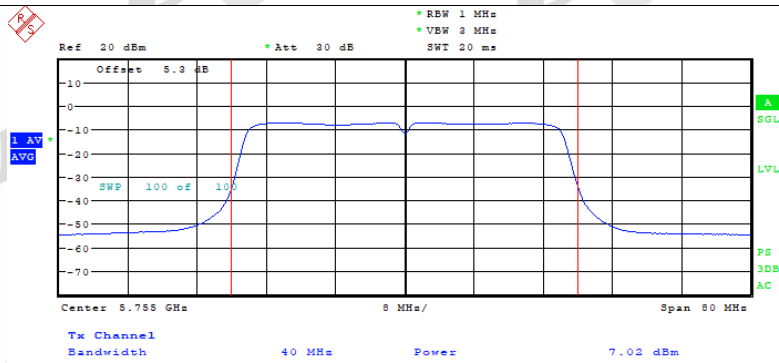
Date: 7.NOV.2022 14:48:42

Power NVNT ac40 5310MHz Ant1



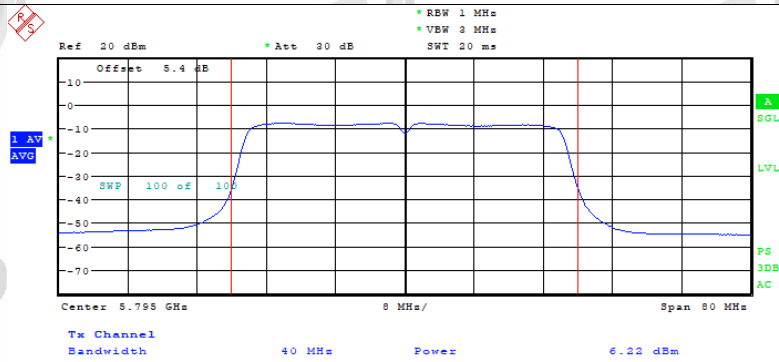
Date: 7.NOV.2022 14:52:55

Power NVNT ac40 5755MHz Ant1



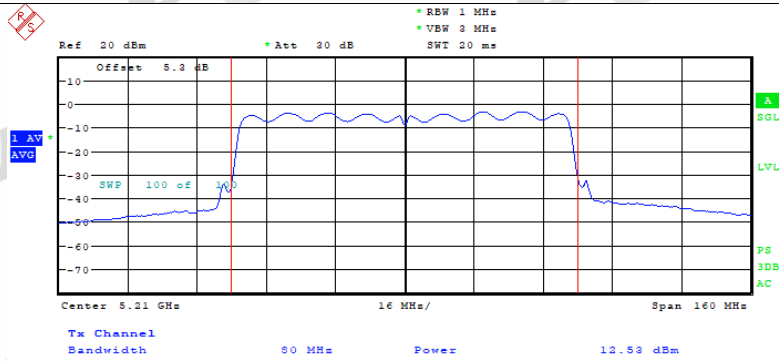
Date: 7.NOV.2022 14:57:07

Power NVNT ac40 5795MHz Ant1



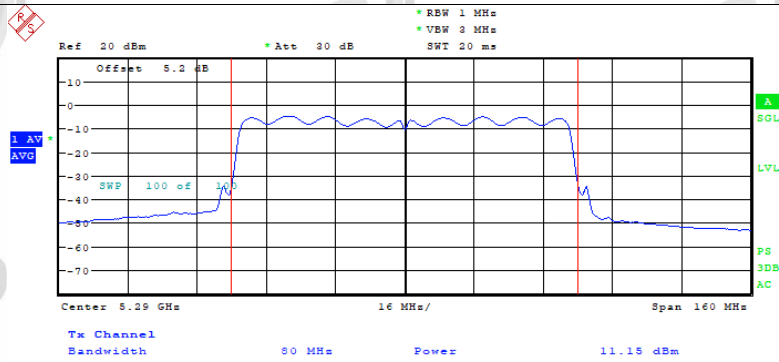
Date: 7.NOV.2022 15:01:32

Power NVNT ac80 5210MHz Ant1



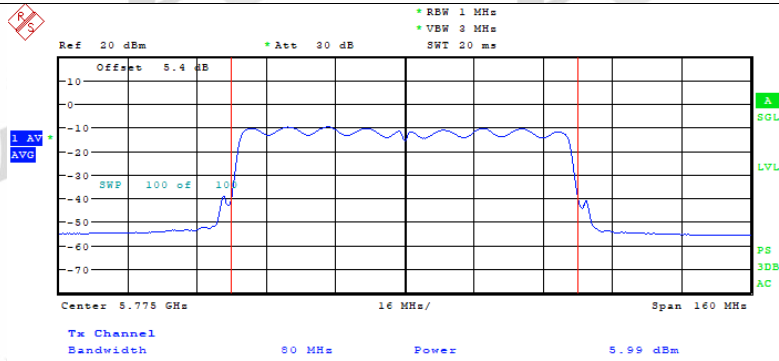
Date: 7.NOV.2022 16:16:18

Power NVNT ac80 5290MHz Ant1



Date: 7.NOV.2022 16:24:14

Power NVNT ac80 5775MHz Ant1



Date: 7.NOV.2022 16:31:12

6. Power Spectral Density

6.1. Block diagram of test setup

Same with 4.1

6.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz	5150-5250
	For RSS eirp: 10 dBm/MHz	
	11 dBm/MHz	5250-5350
	11 dBm/MHz	For FCC: 5470 - 5725 For IC: 5470 - 5600 5650 - 5725
	30 dBm/500 kHz	5725-5850
Note: The Power Spectral Density limit is the above limits-(8.43-6)		

6.3. Test procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Average
Sweep time	Auto
5725 MHz-5850 MHz	

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Average
Sweep time	Auto

6.4. Test result

Power Spectral Density

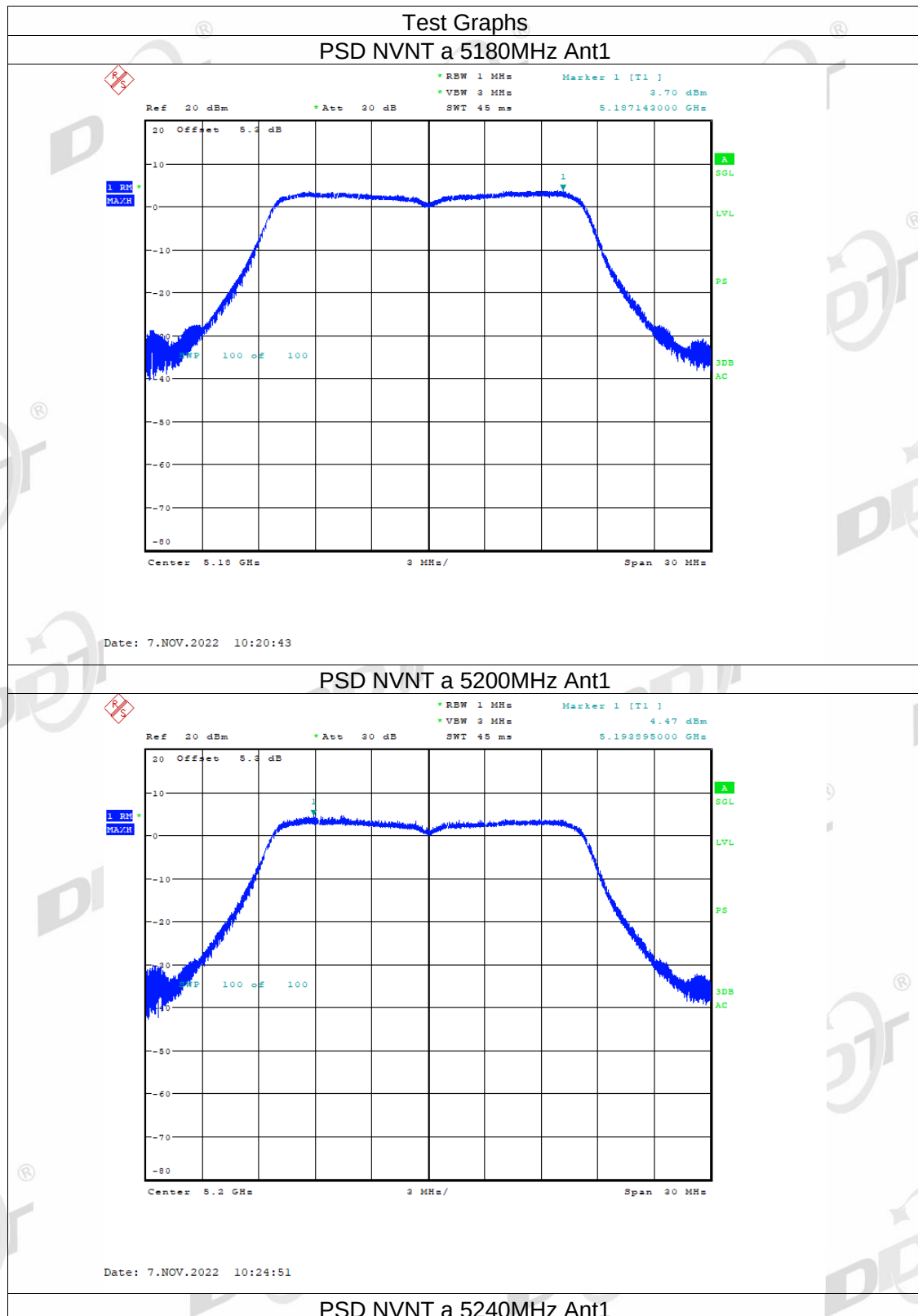
Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
a	5180	Ant1	3.7	0	3.7	11	PASS
a	5200	Ant1	4.47	0	4.47	11	PASS
a	5240	Ant1	4.48	0	4.48	11	PASS
a	5260	Ant1	4.66	0	4.66	11	PASS
a	5280	Ant1	4.81	0	4.81	11	PASS
a	5320	Ant1	4.63	0	4.63	11	PASS
a	5745	Ant1	-1.12	0	-1.12	30	PASS
a	5785	Ant1	-2.2	0	-2.2	30	PASS
a	5825	Ant1	-2.88	0	-2.88	30	PASS
n20	5180	Ant1	3.43	0	3.43	11	PASS
n20	5200	Ant1	4.25	0	4.25	11	PASS
n20	5240	Ant1	4.09	0	4.09	11	PASS
n20	5260	Ant1	4.61	0	4.61	11	PASS
n20	5280	Ant1	4.63	0	4.63	11	PASS
n20	5320	Ant1	4.13	0	4.13	11	PASS
n20	5745	Ant1	-1.16	0	-1.16	30	PASS
n20	5785	Ant1	-2.35	0	-2.35	30	PASS
n20	5825	Ant1	-3.14	0	-3.14	30	PASS
n40	5190	Ant1	0.75	0	0.75	11	PASS
n40	5230	Ant1	1.08	0	1.08	11	PASS
n40	5270	Ant1	1.69	0	1.69	11	PASS
n40	5310	Ant1	1.67	0	1.67	11	PASS
n40	5755	Ant1	-5.04	0	-5.04	30	PASS
n40	5795	Ant1	-5.81	0	-5.81	30	PASS
ac20	5180	Ant1	3.44	0	3.44	11	PASS
ac20	5200	Ant1	4.02	0	4.02	11	PASS
ac20	5240	Ant1	3.74	0	3.74	11	PASS
ac20	5260	Ant1	4.3	0	4.3	11	PASS
ac20	5280	Ant1	4.32	0	4.32	11	PASS
ac20	5320	Ant1	4.2	0	4.2	11	PASS
ac20	5745	Ant1	-1.67	0	-1.67	30	PASS
ac20	5785	Ant1	-2.63	0	-2.63	30	PASS
ac20	5825	Ant1	-2.45	0	-2.45	30	PASS
ac40	5190	Ant1	0.79	0	0.79	11	PASS
ac40	5230	Ant1	1.16	0	1.16	11	PASS
ac40	5270	Ant1	1.6	0	1.6	11	PASS
ac40	5310	Ant1	1.51	0	1.51	11	PASS
ac40	5755	Ant1	-5.24	0	-5.24	30	PASS
ac40	5795	Ant1	-5.75	0	-5.75	30	PASS
ac80	5210	Ant1	0.08	0	0.08	11	PASS
ac80	5290	Ant1	-1.07	0	-1.07	11	PASS
ac80	5775	Ant1	-8.1	0	-8.1	30	PASS

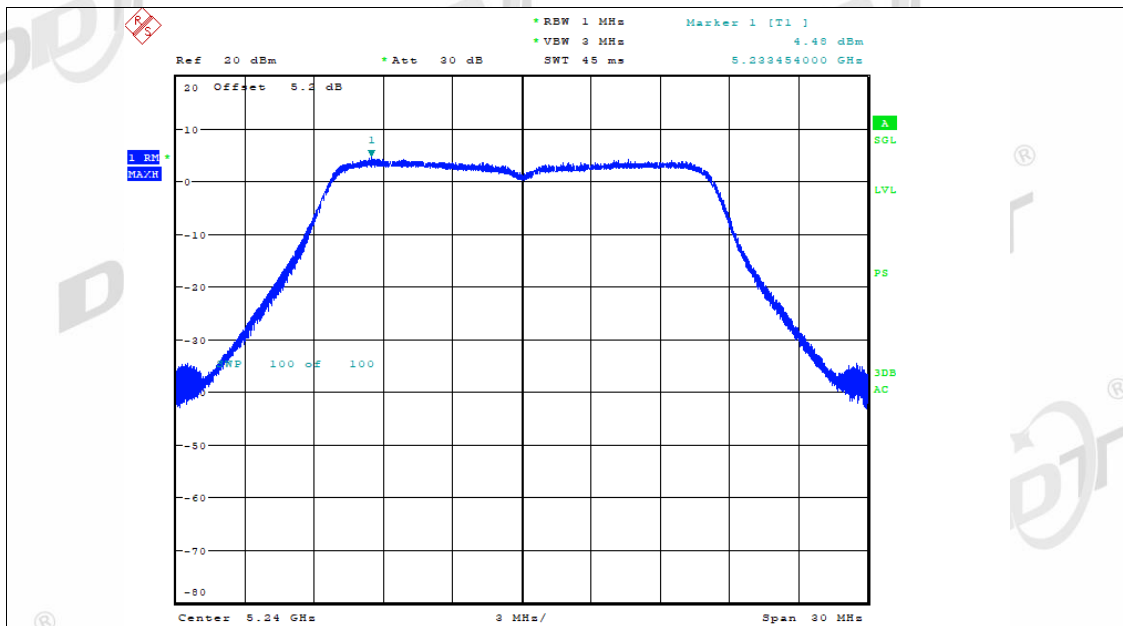
Note: The limit for band 5725MHz – 5850MHz is dBm/500kHz.

Power Spectral Density (EIRP)

Mode	Frequency (MHz)	Antenna	Total PSD (dBm/MHz)	Ant Gain (dBi)	EIRP (dBm/MHz)	Limit EIRP (dBm/MHz)	Verdict
a	5180	Ant1	3.7	3.3	7	10	PASS
a	5200	Ant1	4.47	3.3	7.77	10	PASS
a	5240	Ant1	4.48	3.3	7.78	10	PASS
a	5260	Ant1	4.66	3.3	7.96	-	-
a	5280	Ant1	4.81	3.3	8.11	-	-
a	5320	Ant1	4.63	3.3	7.93	-	-
a	5745	Ant1	-1.12	3.3	2.18	-	-
a	5785	Ant1	-2.2	3.3	1.1	-	-
a	5825	Ant1	-2.88	3.3	0.42	-	-
n20	5180	Ant1	3.43	3.3	6.73	10	PASS
n20	5200	Ant1	4.25	3.3	7.55	10	PASS
n20	5240	Ant1	4.09	3.3	7.39	10	PASS
n20	5260	Ant1	4.61	3.3	7.91	-	-
n20	5280	Ant1	4.63	3.3	7.93	-	-
n20	5320	Ant1	4.13	3.3	7.43	-	-
n20	5745	Ant1	-1.16	3.3	2.14	-	-
n20	5785	Ant1	-2.35	3.3	0.95	-	-
n20	5825	Ant1	-3.14	3.3	0.16	-	-
n40	5190	Ant1	0.75	3.3	4.05	10	PASS
n40	5230	Ant1	1.08	3.3	4.38	10	PASS
n40	5270	Ant1	1.69	3.3	4.99	-	-
n40	5310	Ant1	1.67	3.3	4.97	-	-
n40	5755	Ant1	-5.04	3.3	-1.74	-	-
n40	5795	Ant1	-5.81	3.3	-2.51	-	-
ac20	5180	Ant1	3.44	3.3	6.74	10	PASS
ac20	5200	Ant1	4.02	3.3	7.32	10	PASS
ac20	5240	Ant1	3.74	3.3	7.04	10	PASS
ac20	5260	Ant1	4.3	3.3	7.6	-	-
ac20	5280	Ant1	4.32	3.3	7.62	-	-
ac20	5320	Ant1	4.2	3.3	7.5	-	-
ac20	5745	Ant1	-1.67	3.3	1.63	-	-
ac20	5785	Ant1	-2.63	3.3	0.67	-	-
ac20	5825	Ant1	-2.45	3.3	0.85	-	-
ac40	5190	Ant1	0.79	3.3	4.09	10	PASS
ac40	5230	Ant1	1.16	3.3	4.46	10	PASS
ac40	5270	Ant1	1.6	3.3	4.9	-	-
ac40	5310	Ant1	1.51	3.3	4.81	-	-
ac40	5755	Ant1	-5.24	3.3	-1.94	-	-
ac40	5795	Ant1	-5.75	3.3	-2.45	-	-
ac80	5210	Ant1	0.08	3.3	3.38	10	PASS
ac80	5290	Ant1	-1.07	3.3	2.23	-	-
ac80	5775	Ant1	-8.1	3.3	-4.8	-	-

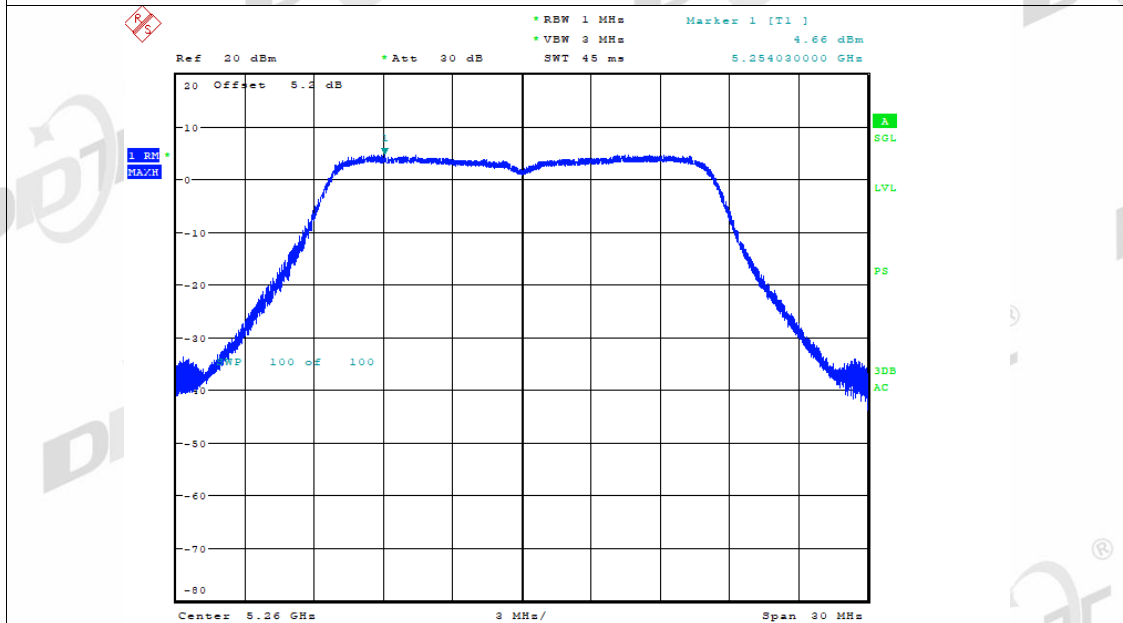
6.5. Original test data





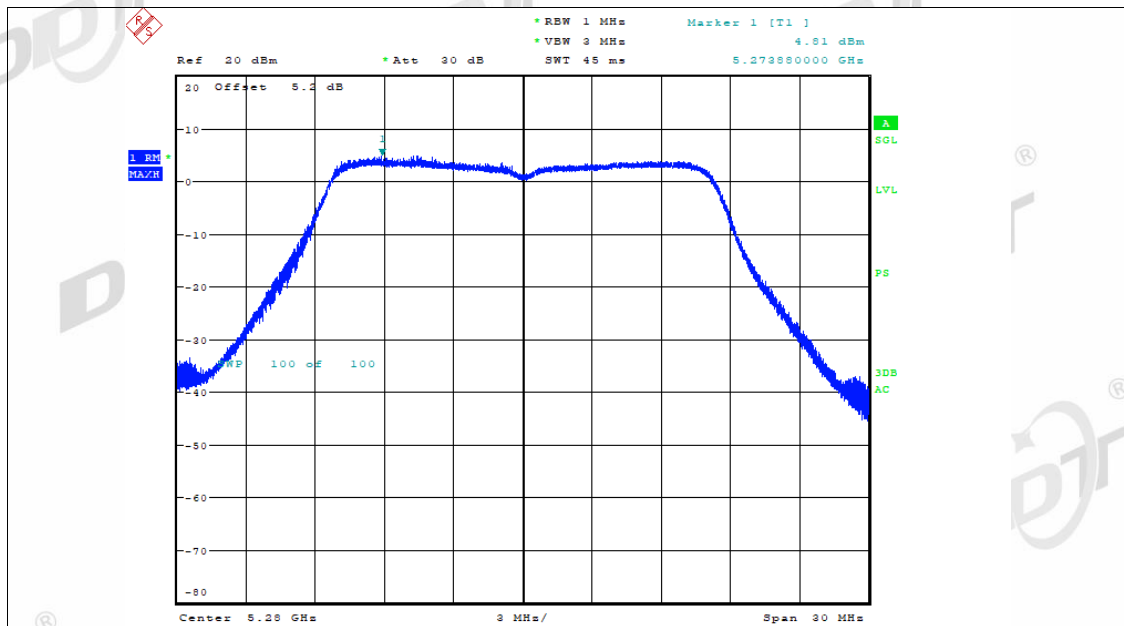
Date: 7.NOV.2022 10:28:41

PSD NVNT a 5260MHz Ant1



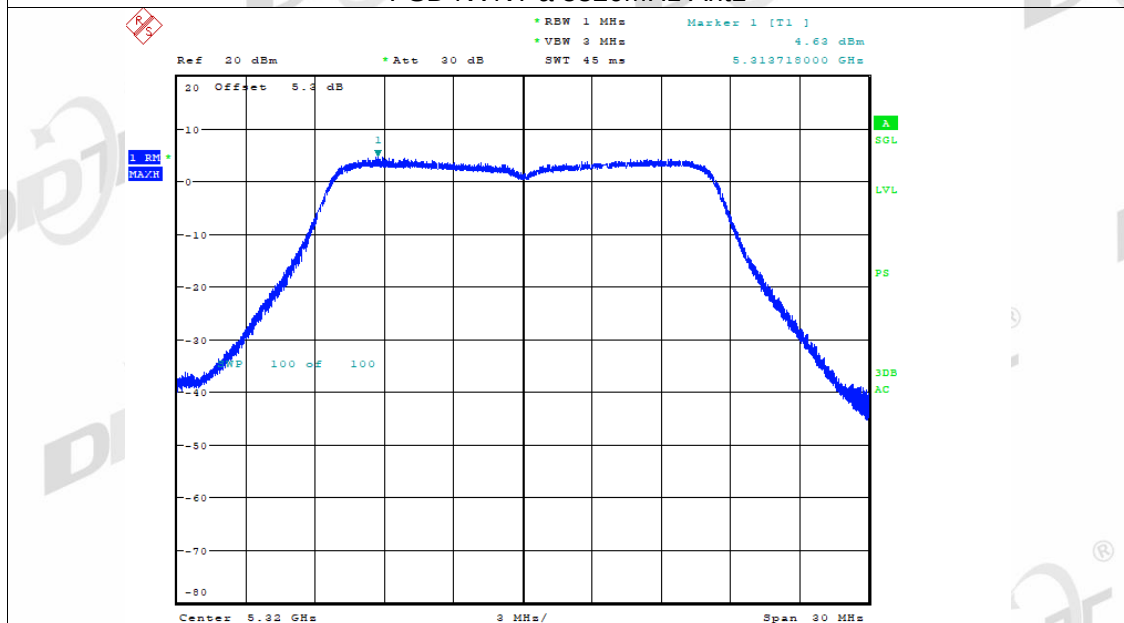
Date: 7.NOV.2022 10:33:30

PSD NVNT a 5280MHz Ant1



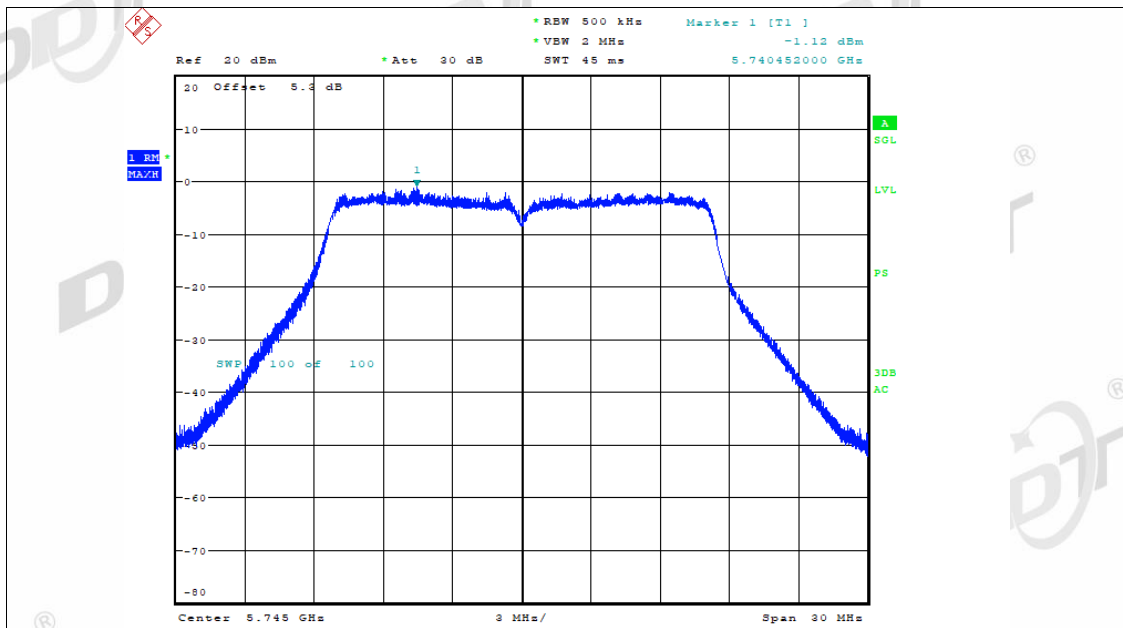
Date: 7.NOV.2022 10:38:00

PSD NVNT a 5320MHz Ant1



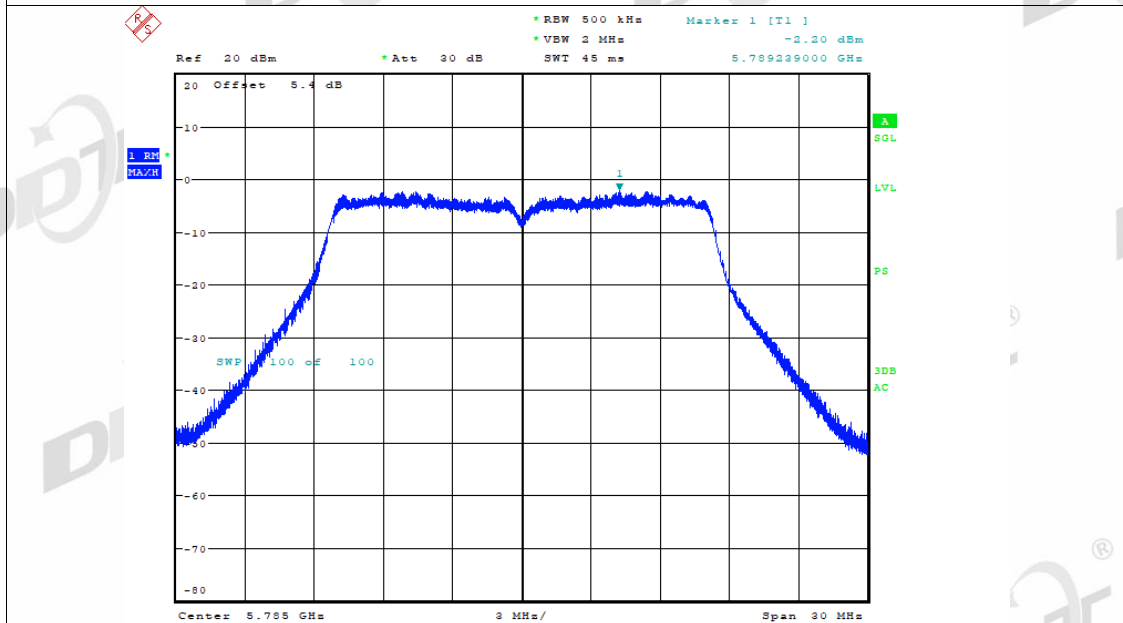
Date: 7.NOV.2022 10:42:04

PSD NVNT a 5745MHz Ant1



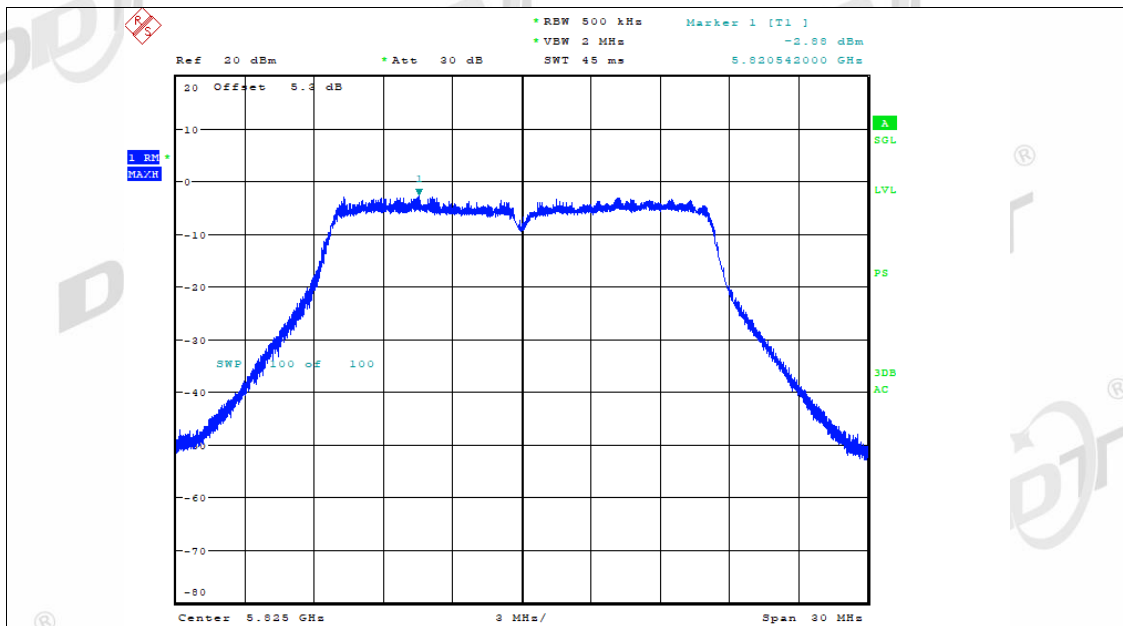
Date: 7.NOV.2022 11:04:23

PSD NVNT a 5785MHz Ant1



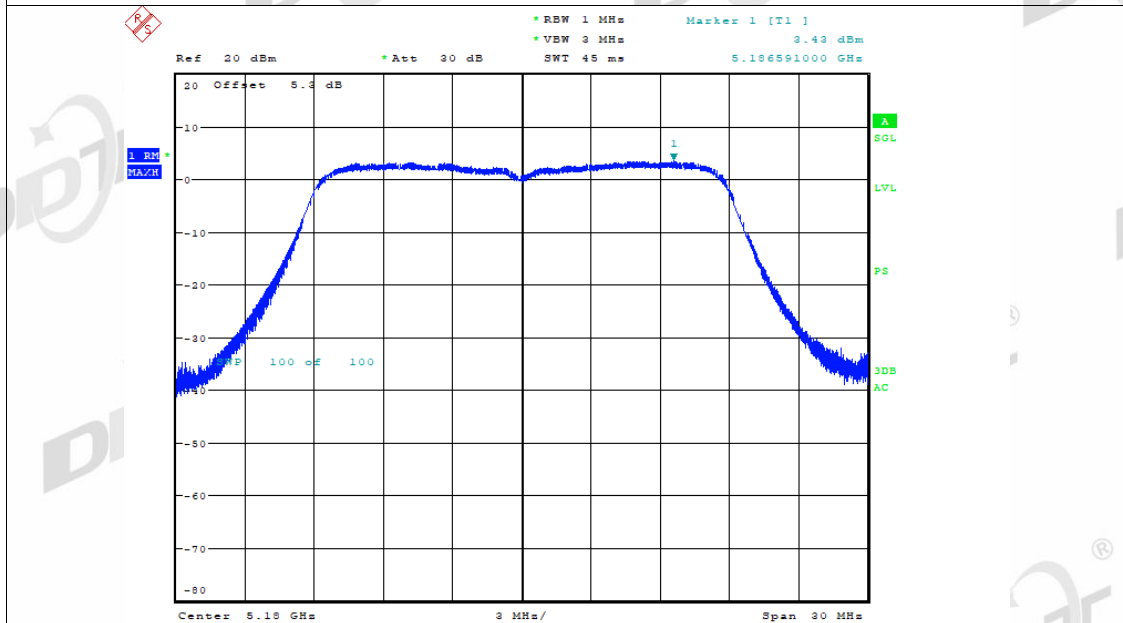
Date: 7.NOV.2022 10:54:35

PSD NVNT a 5825MHz Ant1



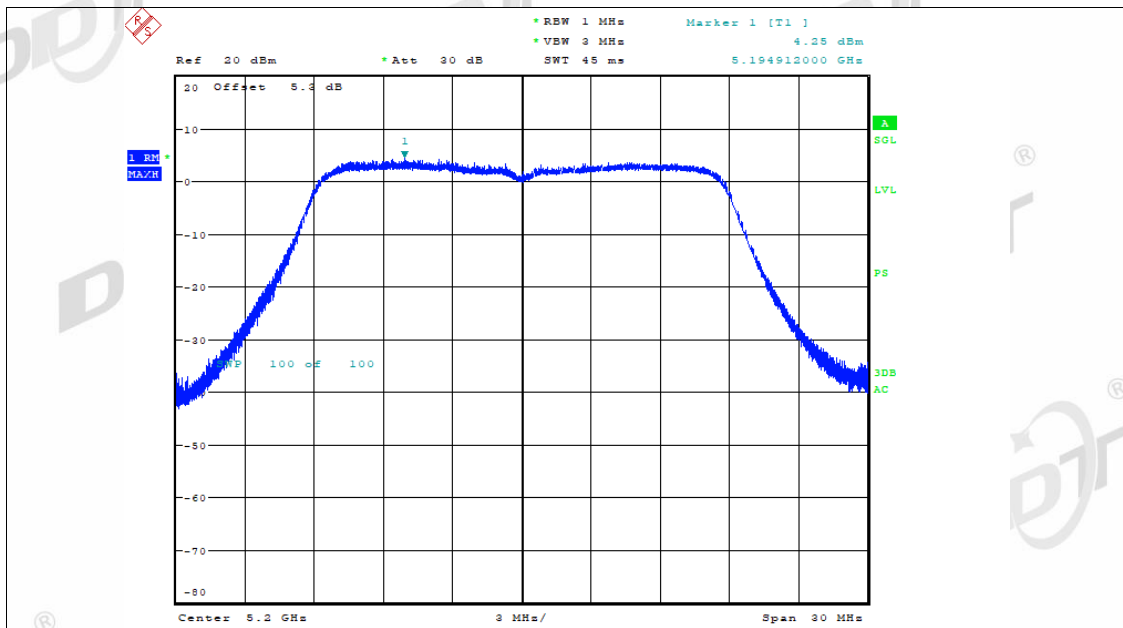
Date: 7.NOV.2022 10:58:20

PSD NVNT n20 5180MHz Ant1



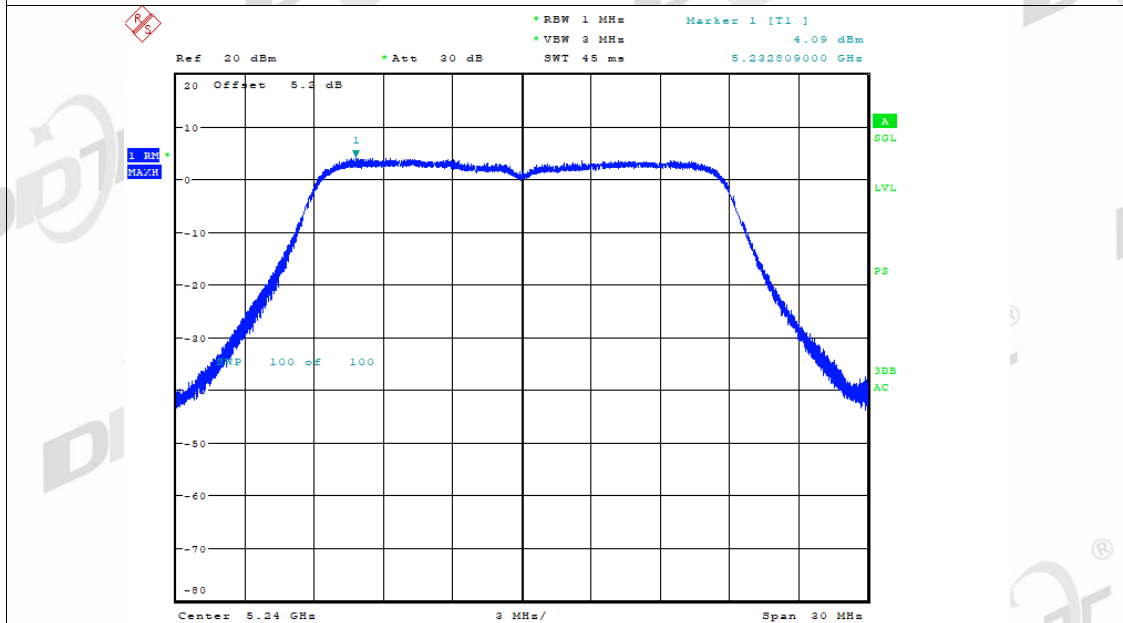
Date: 7.NOV.2022 11:06:57

PSD NVNT n20 5200MHz Ant1



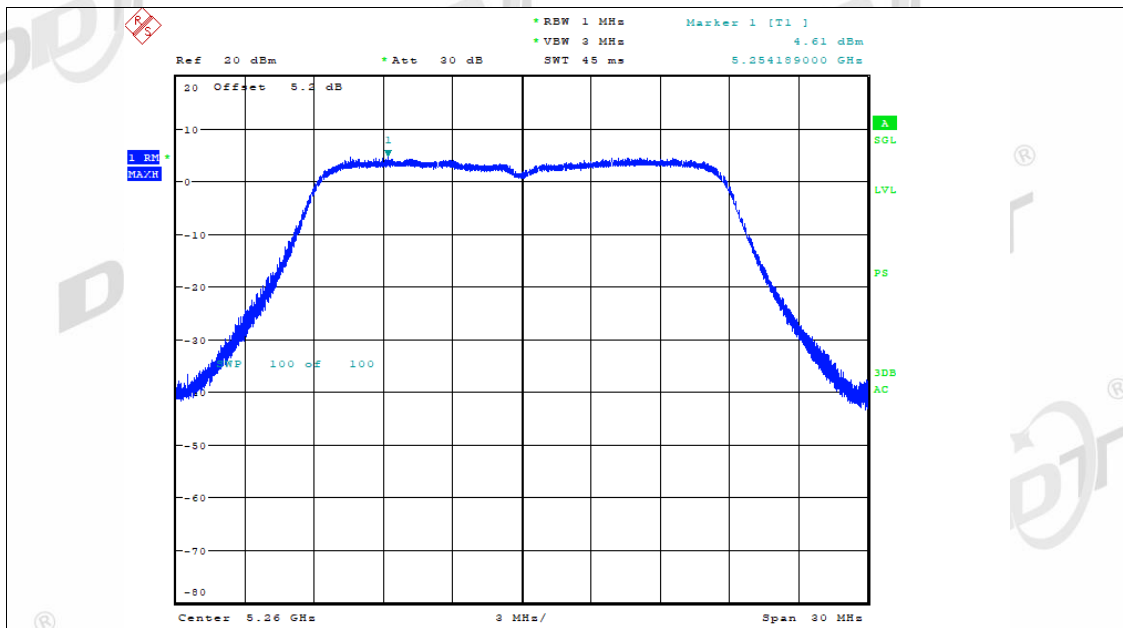
Date: 7.NOV.2022 11:10:19

PSD NVNT n20 5240MHz Ant1



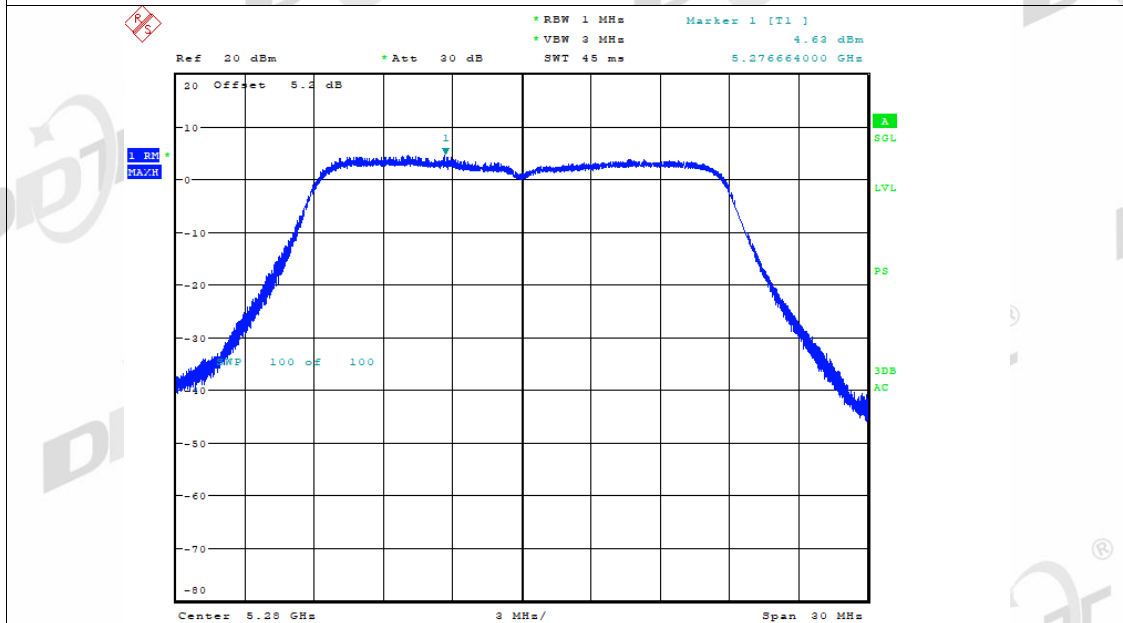
Date: 7.NOV.2022 11:14:08

PSD NVNT n20 5260MHz Ant1



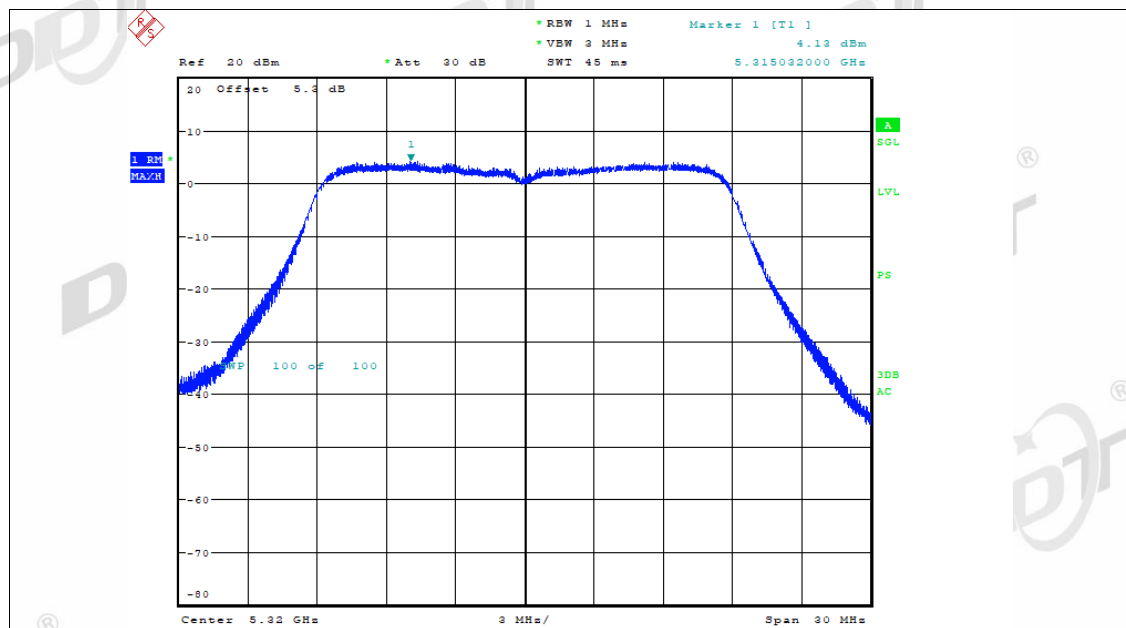
Date: 7.NOV.2022 11:17:47

PSD NVNT n20 5280MHz Ant1



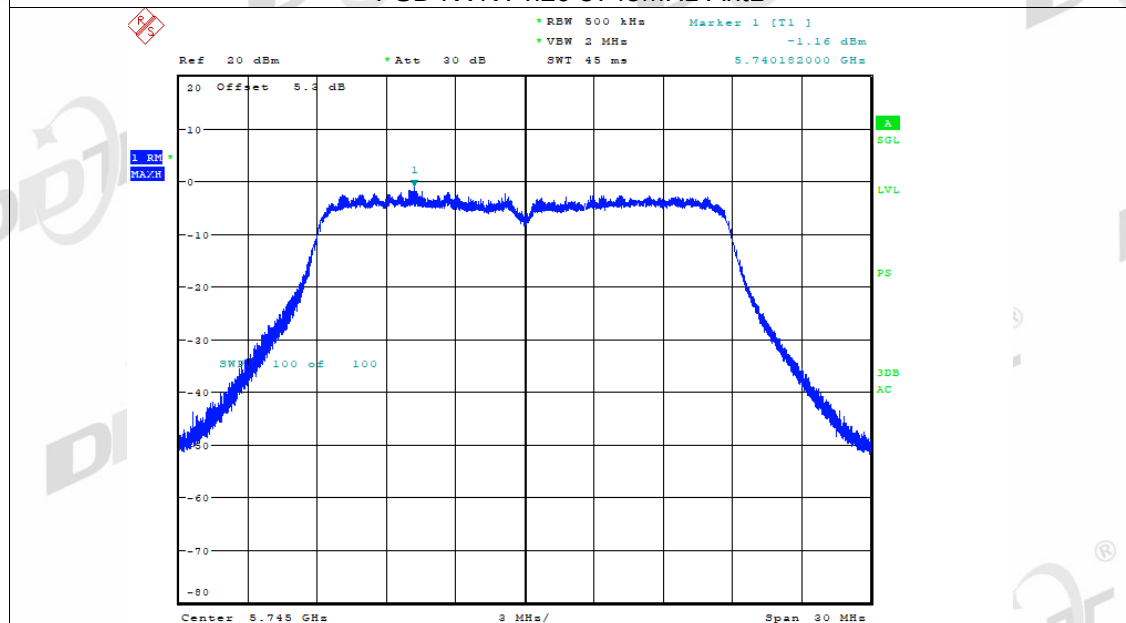
Date: 7.NOV.2022 11:21:49

PSD NVNT n20 5320MHz Ant1



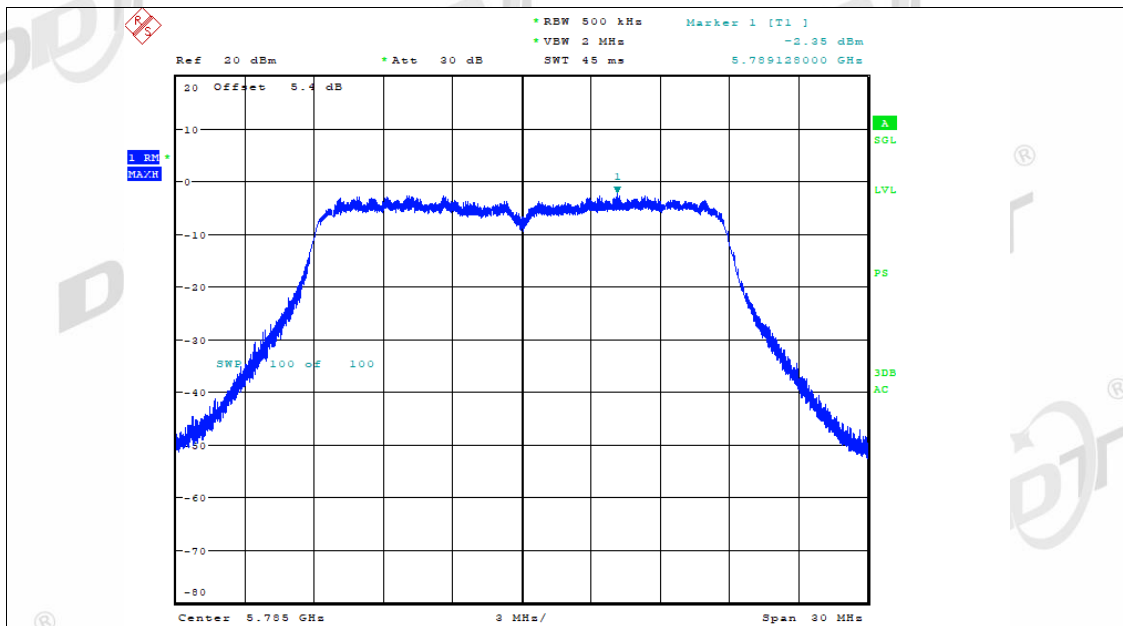
Date: 7.NOV.2022 11:25:35

PSD NVNT n20 5745MHz Ant1



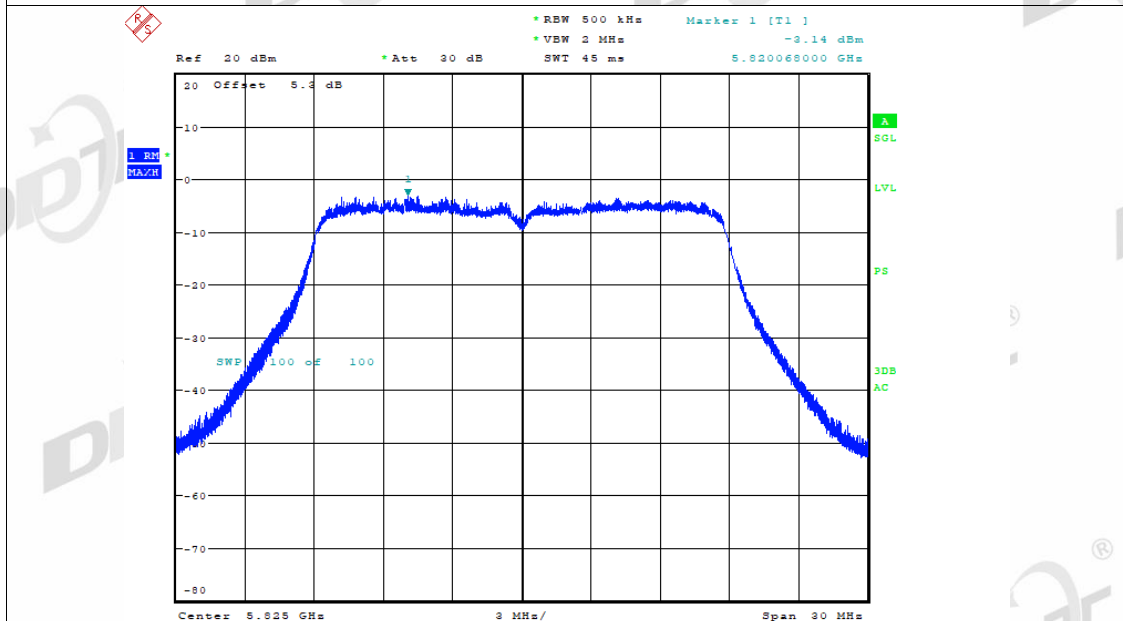
Date: 7.NOV.2022 11:30:36

PSD NVNT n20 5785MHz Ant1



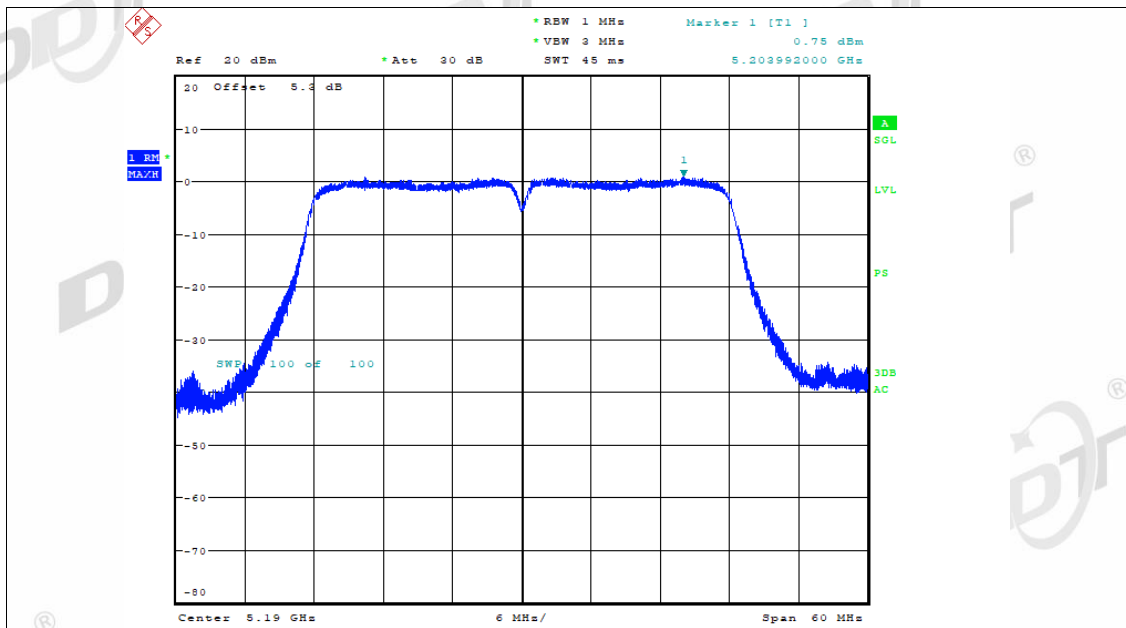
Date: 7.NOV.2022 11:39:06

PSD NVNT n20 5825MHz Ant1



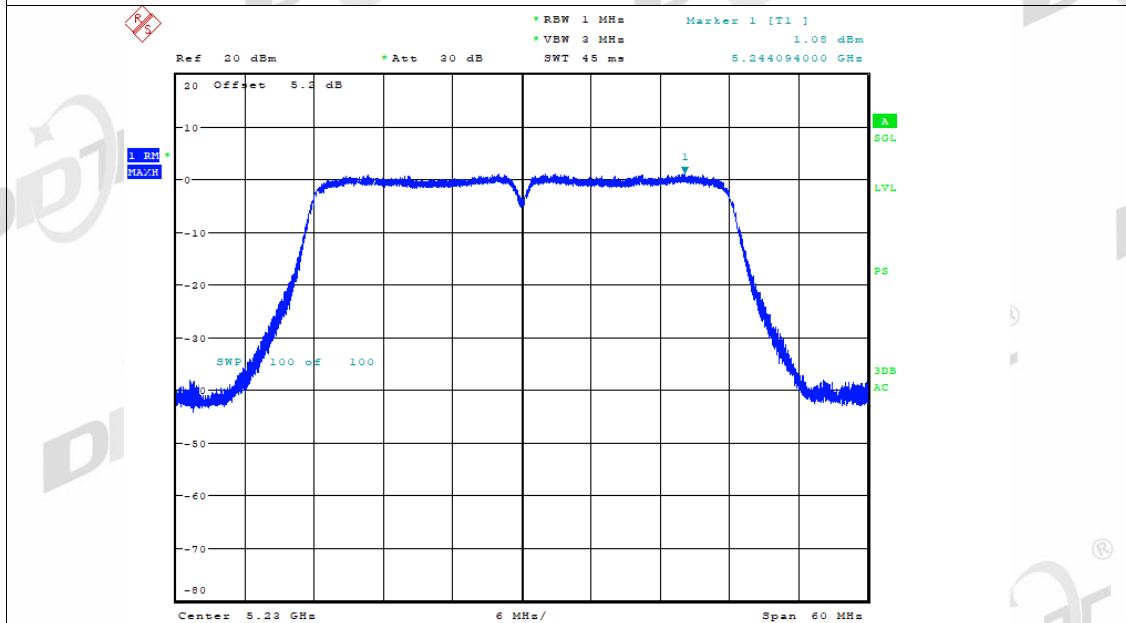
Date: 7.NOV.2022 11:42:10

PSD NVNT n40 5190MHz Ant1



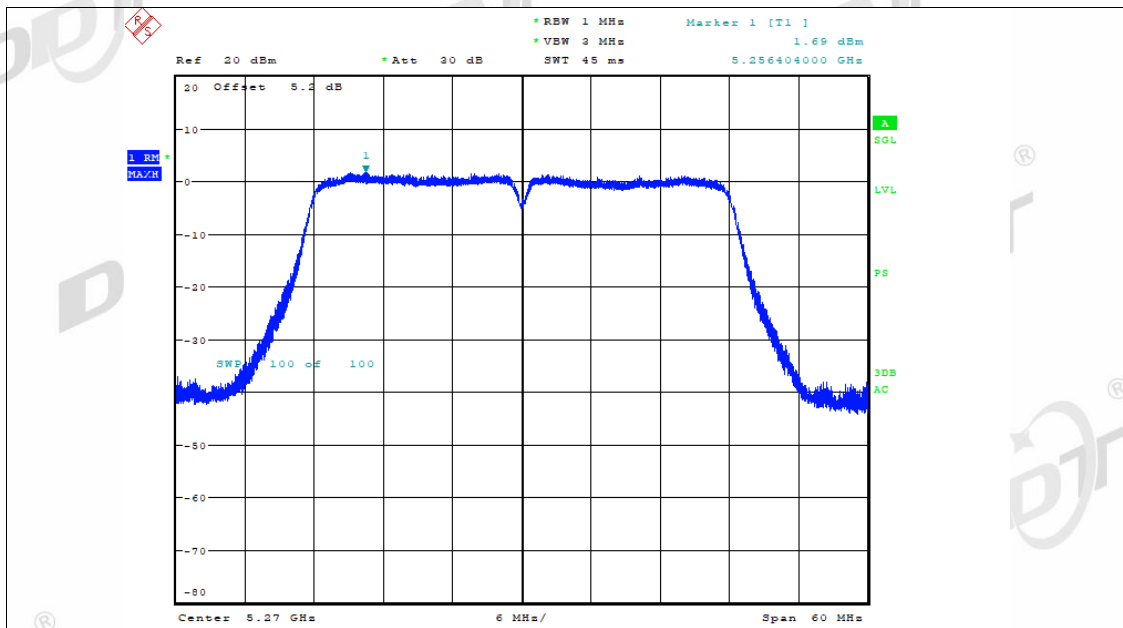
Date: 7.NOV.2022 13:59:59

PSD NVNT n40 5230MHz Ant1



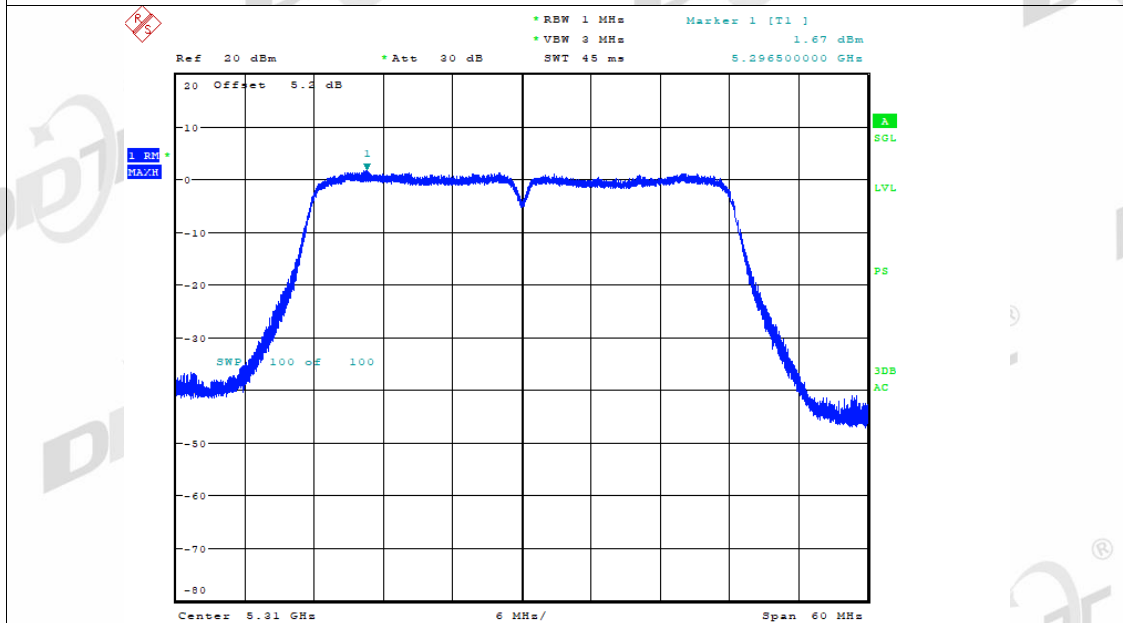
Date: 7.NOV.2022 14:05:18

PSD NVNT n40 5270MHz Ant1



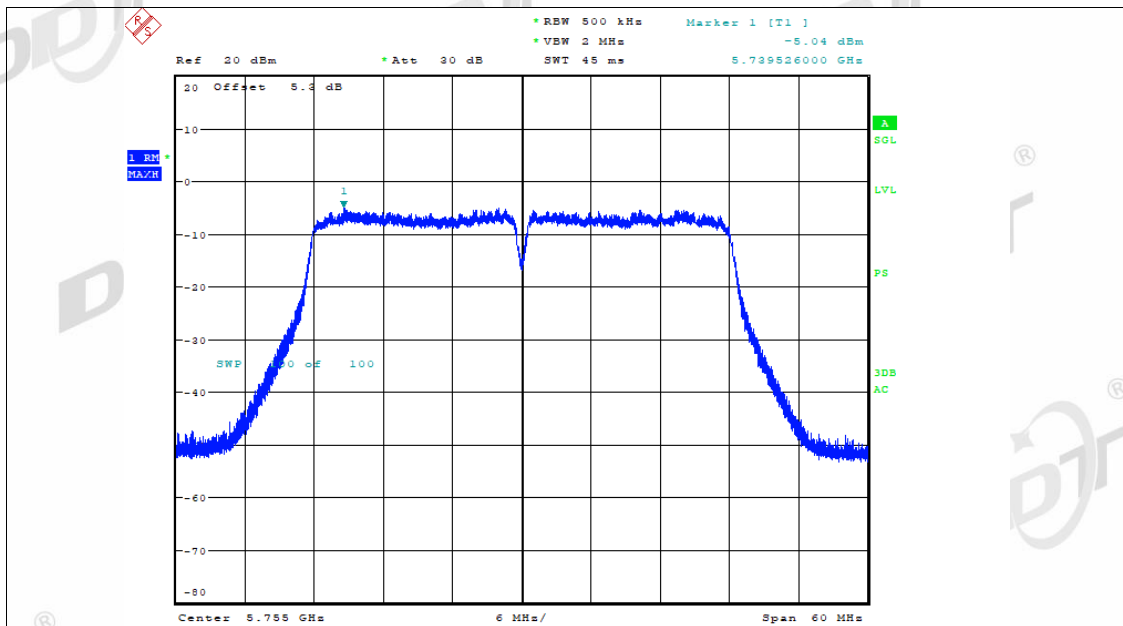
Date: 7.NOV.2022 14:14:58

PSD NVNT n40 5310MHz Ant1



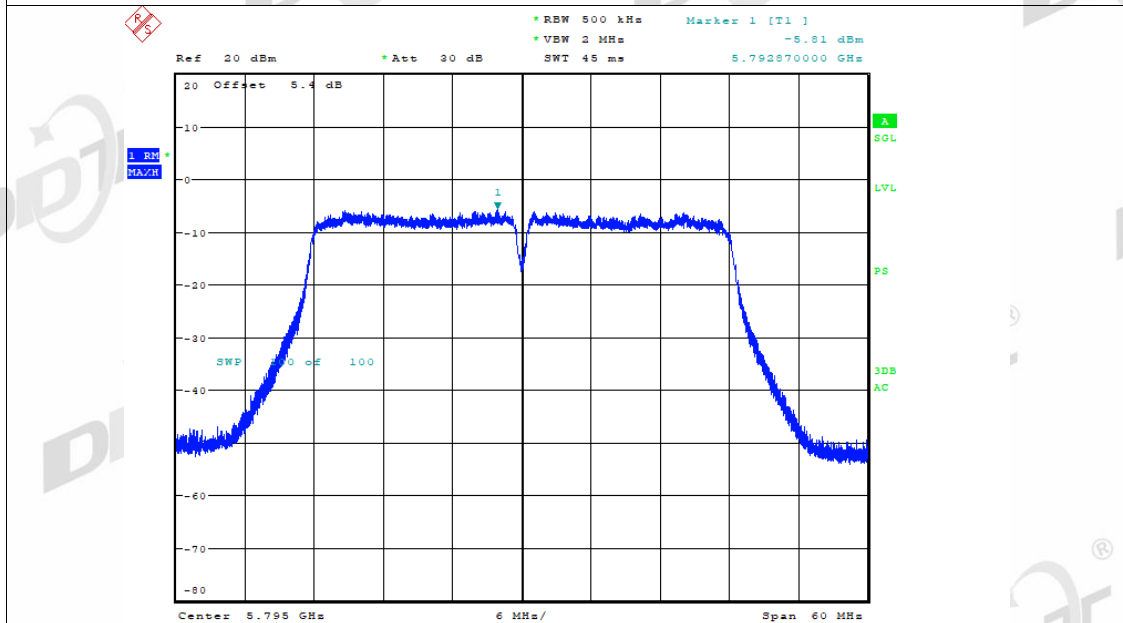
Date: 7.NOV.2022 14:19:46

PSD NVNT n40 5755MHz Ant1



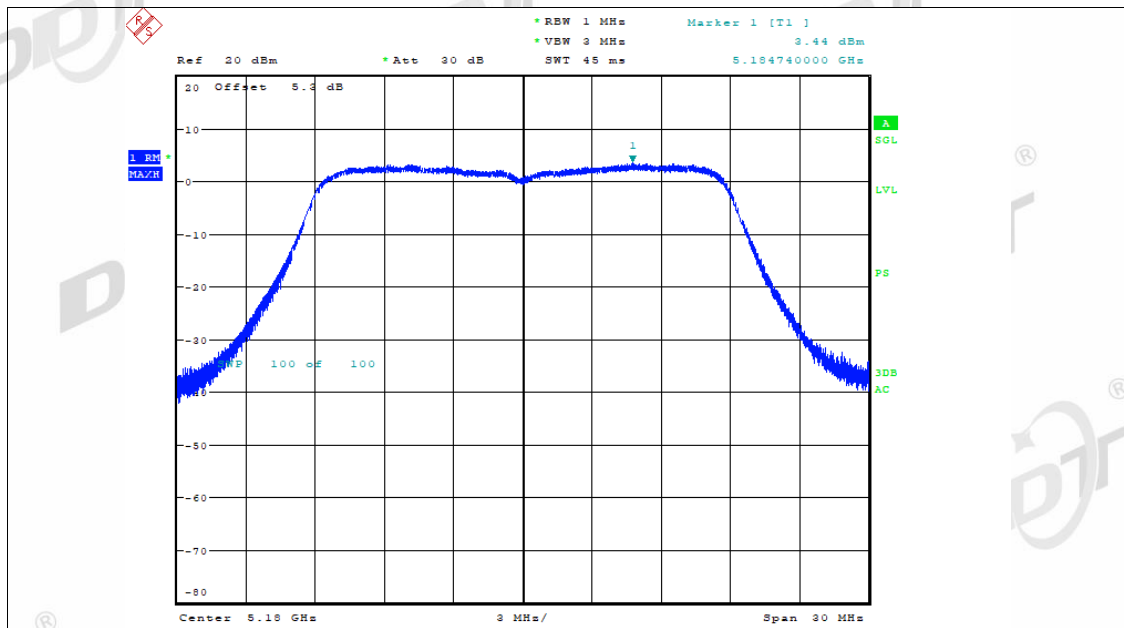
Date: 7.NOV.2022 13:48:54

PSD NVNT n40 5795MHz Ant1



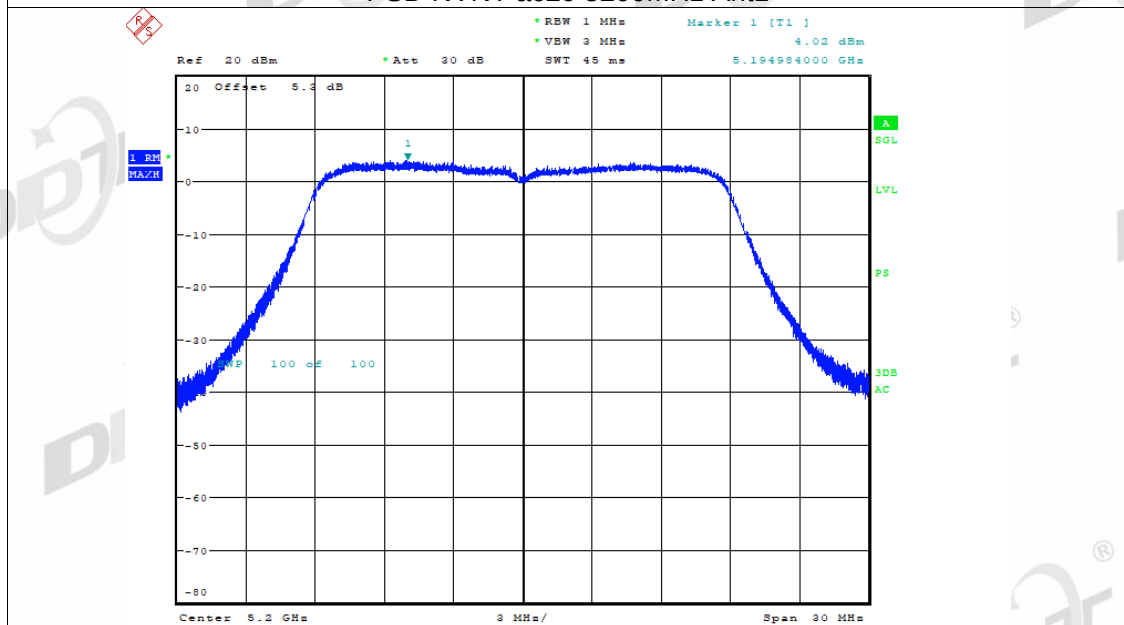
Date: 7.NOV.2022 13:54:10

PSD NVNT ac20 5180MHz Ant1



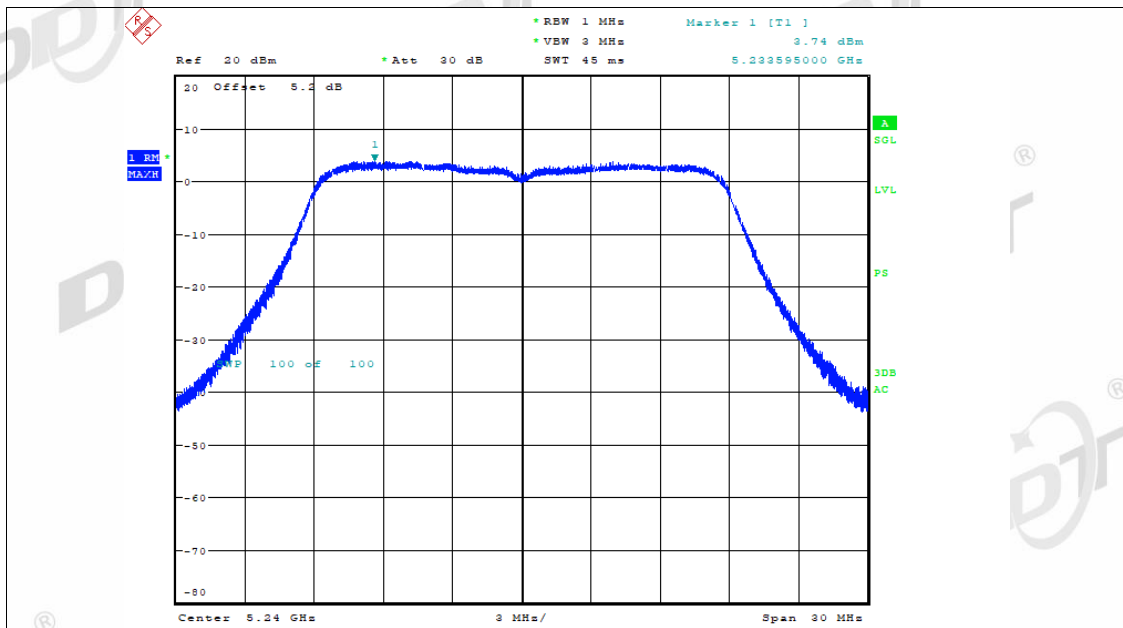
Date: 7.NOV.2022 11:48:05

PSD NVNT ac20 5200MHz Ant1



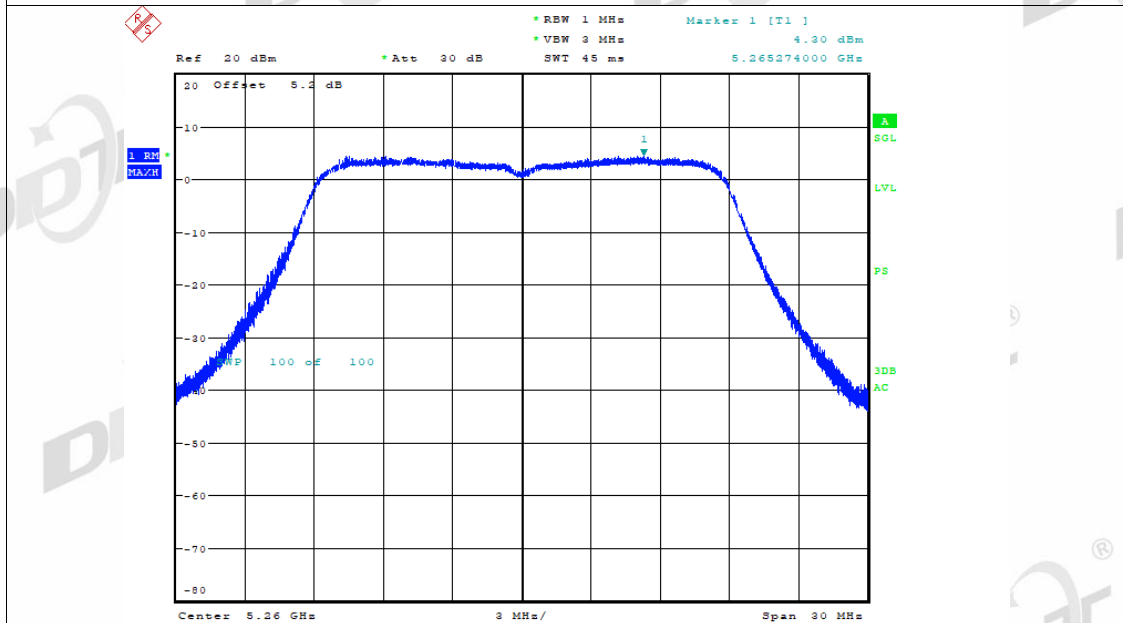
Date: 7.NOV.2022 11:52:01

PSD NVNT ac20 5240MHz Ant1



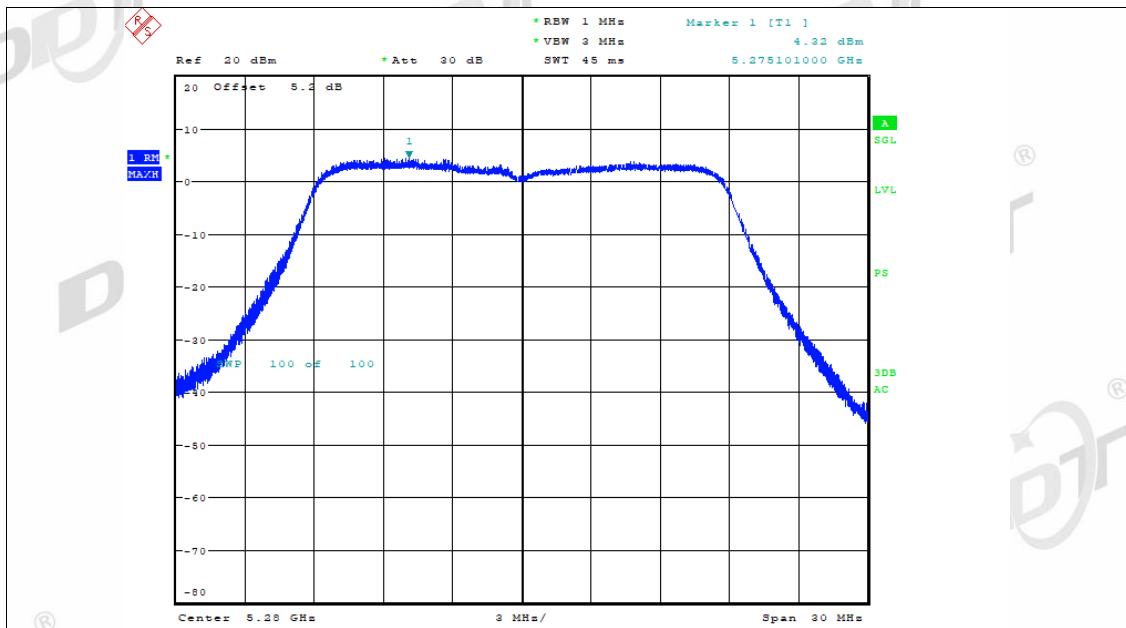
Date: 7.NOV.2022 11:55:13

PSD NVNT ac20 5260MHz Ant1



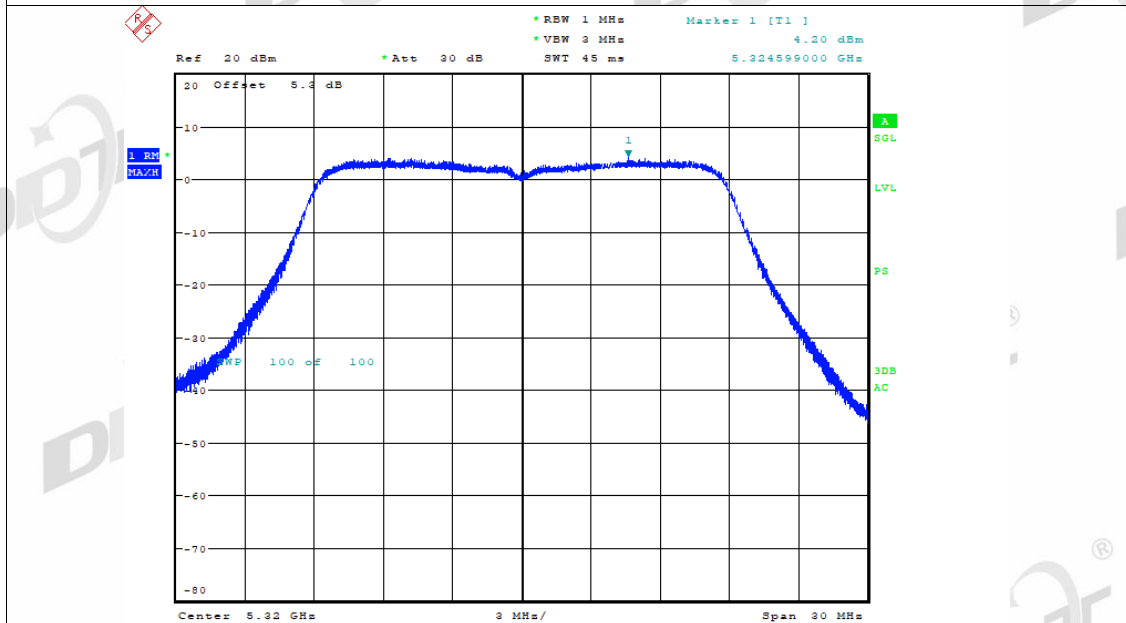
Date: 7.NOV.2022 11:59:09

PSD NVNT ac20 5280MHz Ant1



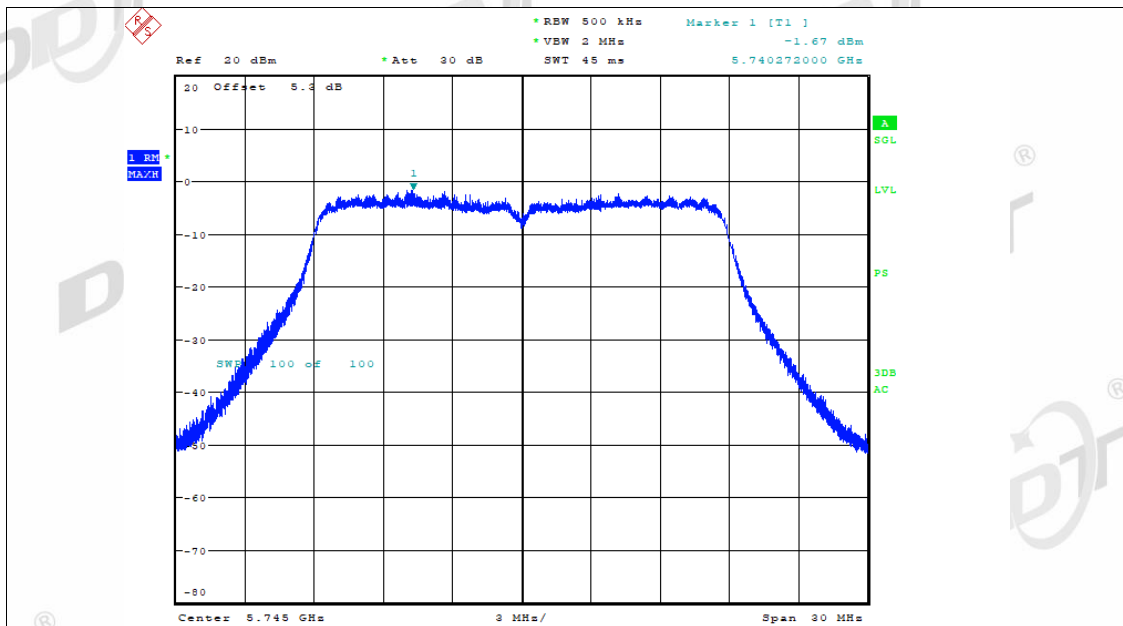
Date: 7.NOV.2022 12:04:36

PSD NVNT ac20 5320MHz Ant1



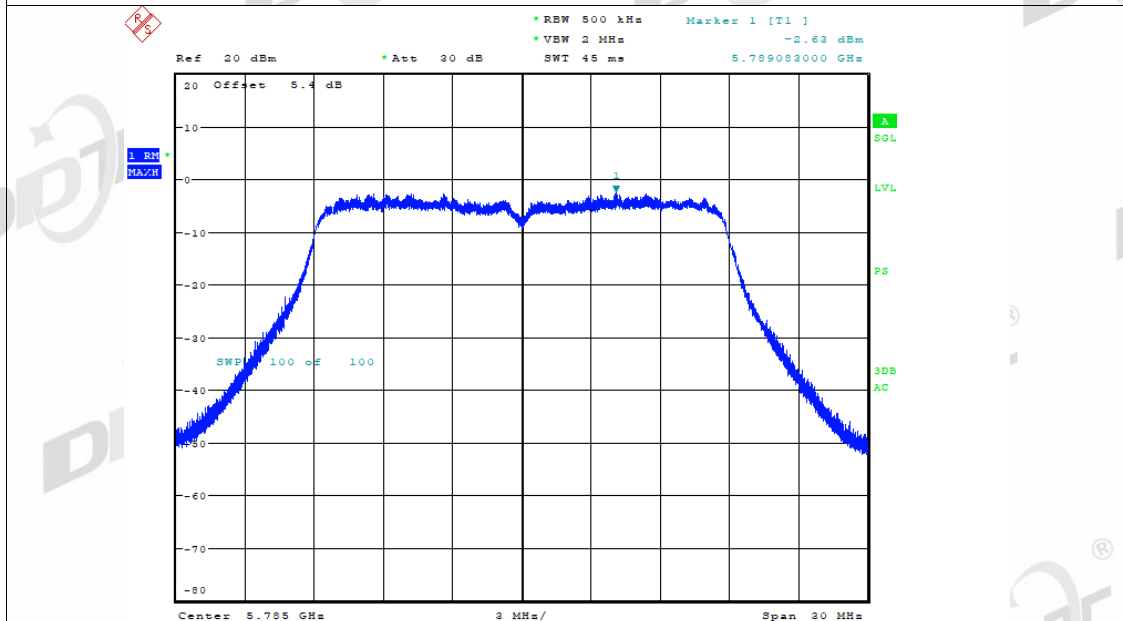
Date: 7.NOV.2022 12:08:28

PSD NVNT ac20 5745MHz Ant1



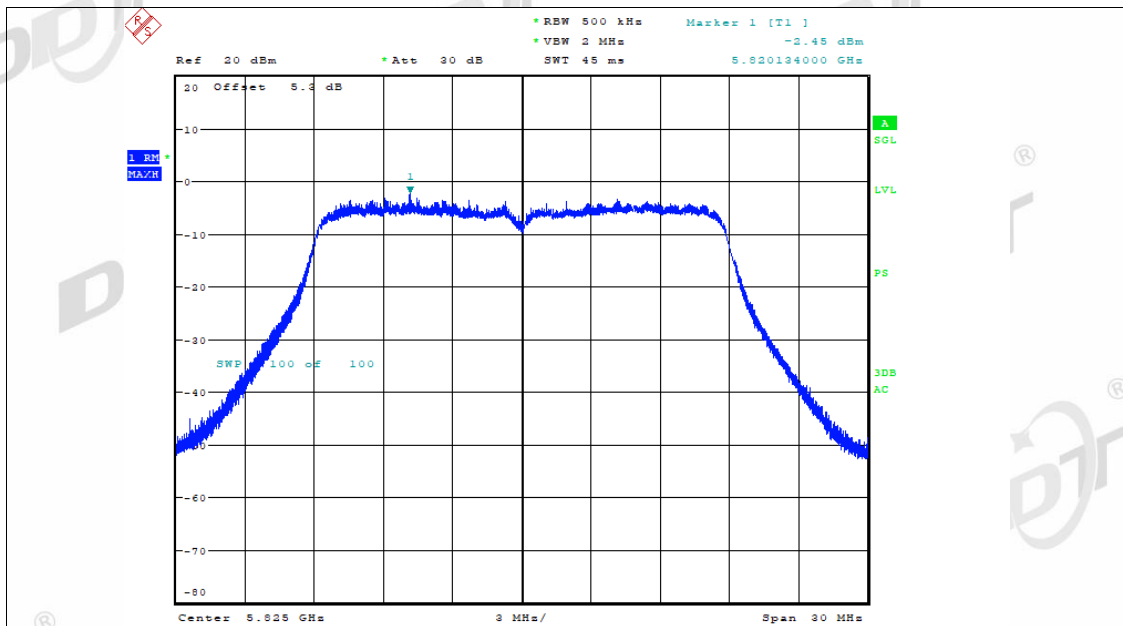
Date: 7.NOV.2022 13:16:47

PSD NVNT ac20 5785MHz Ant1



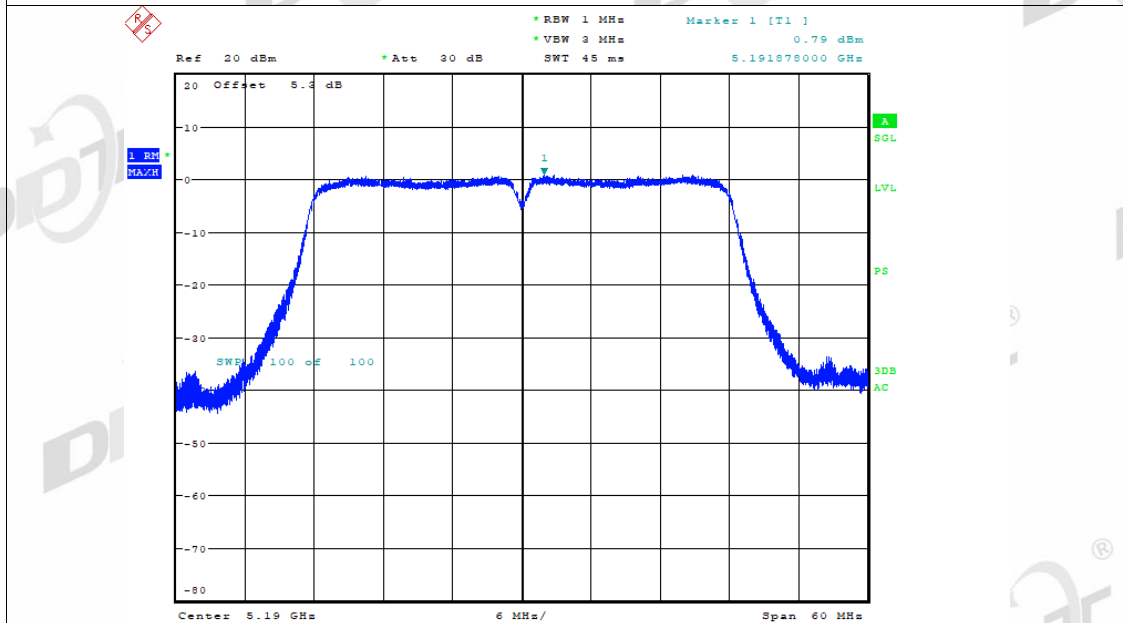
Date: 7.NOV.2022 13:21:35

PSD NVNT ac20 5825MHz Ant1



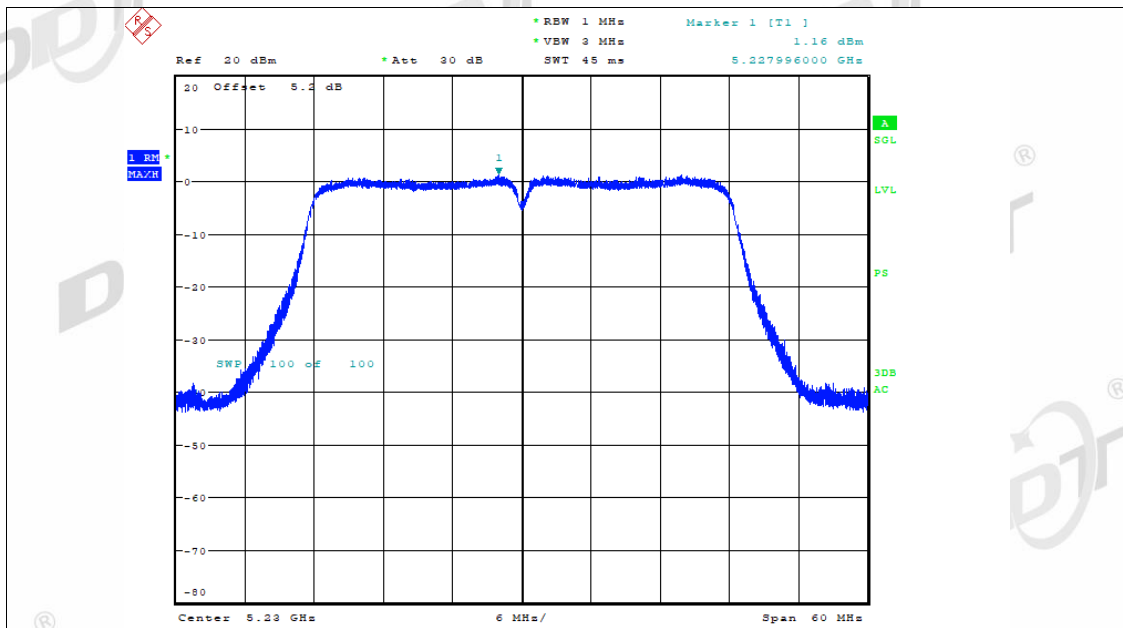
Date: 7.NOV.2022 13:31:07

PSD NVNT ac40 5190MHz Ant1



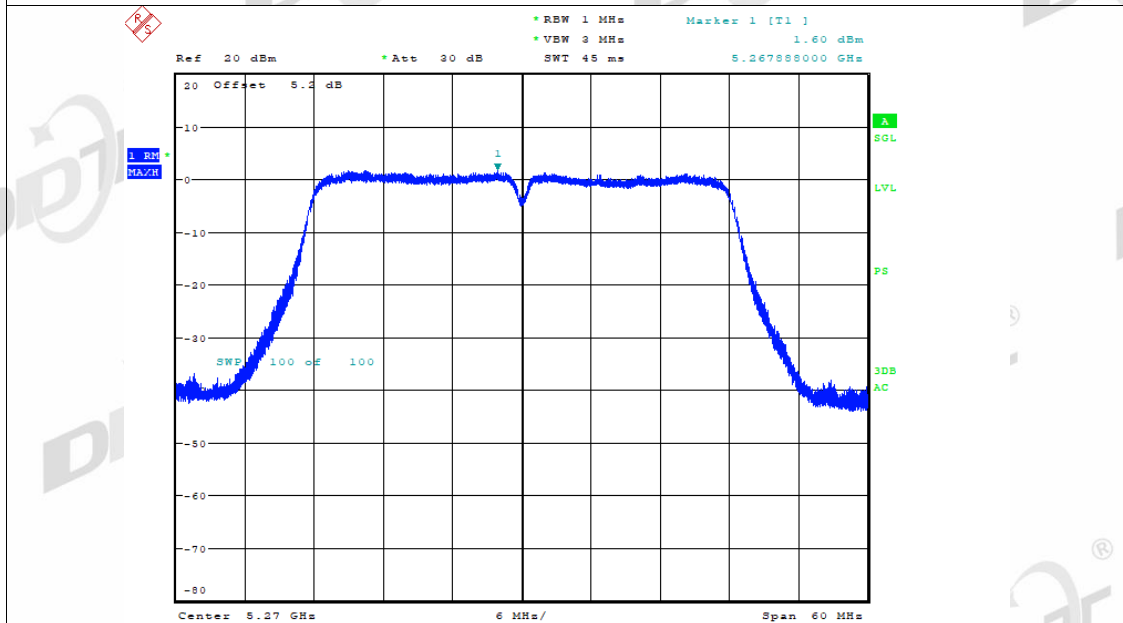
Date: 7.NOV.2022 14:29:59

PSD NVNT ac40 5230MHz Ant1



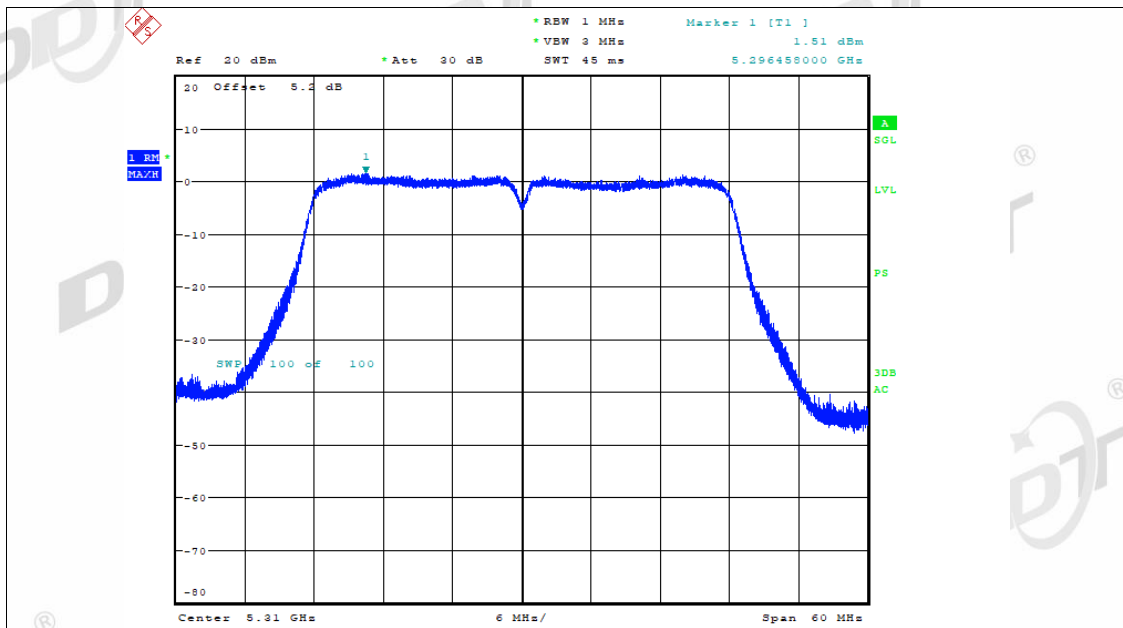
Date: 7.NOV.2022 14:41:03

PSD NVNT ac40 5270MHz Ant1



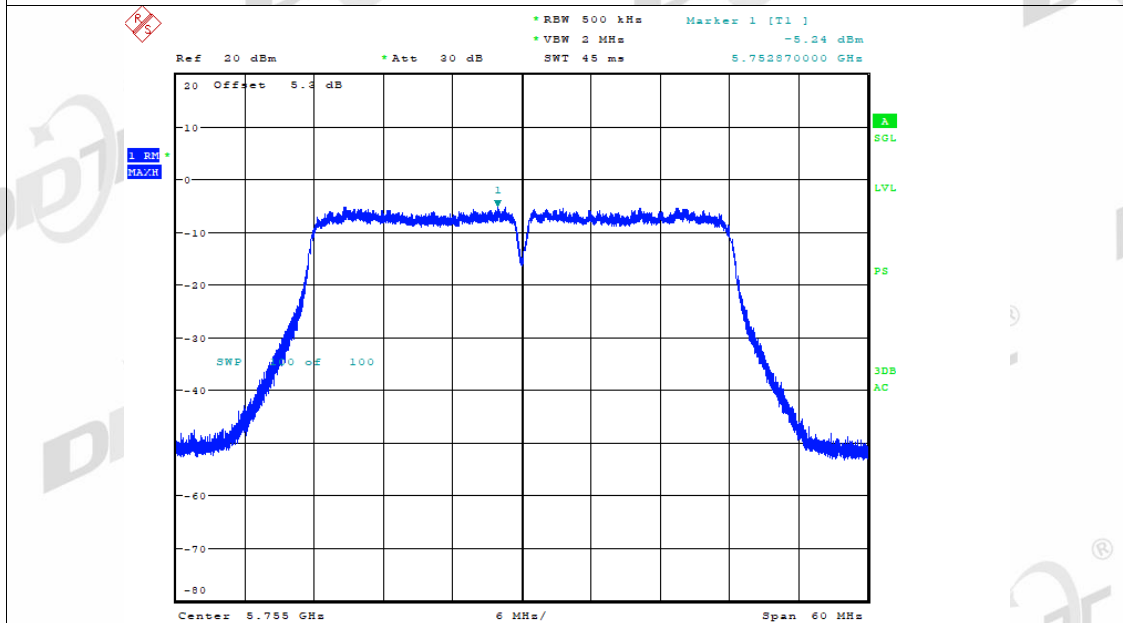
Date: 7.NOV.2022 14:49:56

PSD NVNT ac40 5310MHz Ant1



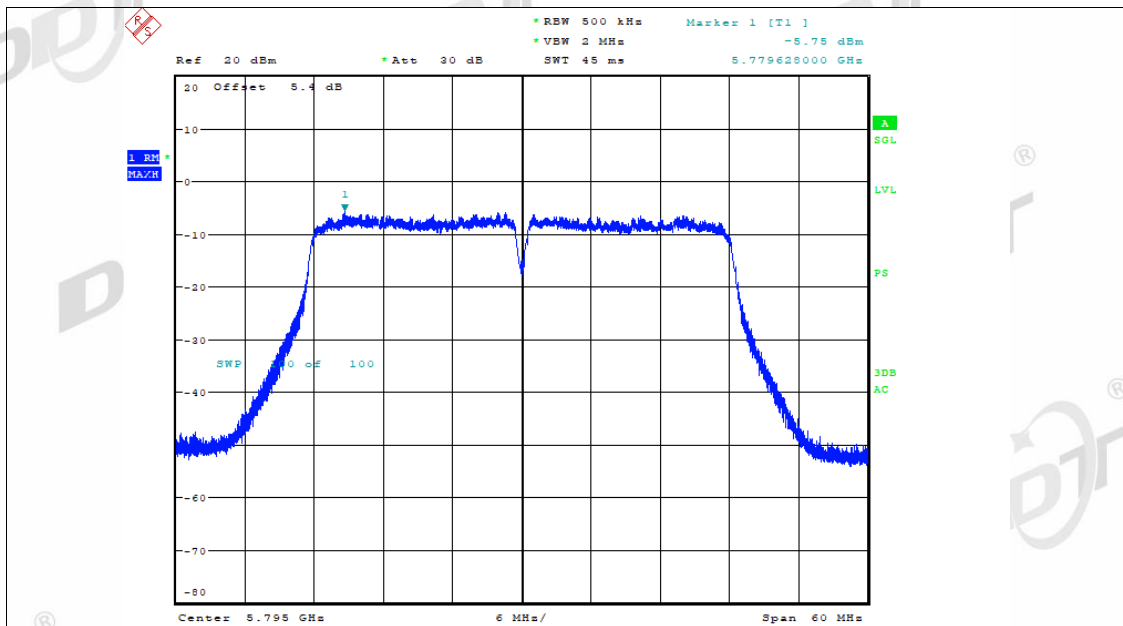
Date: 7.NOV.2022 14:54:10

PSD NVNT ac40 5755MHz Ant1



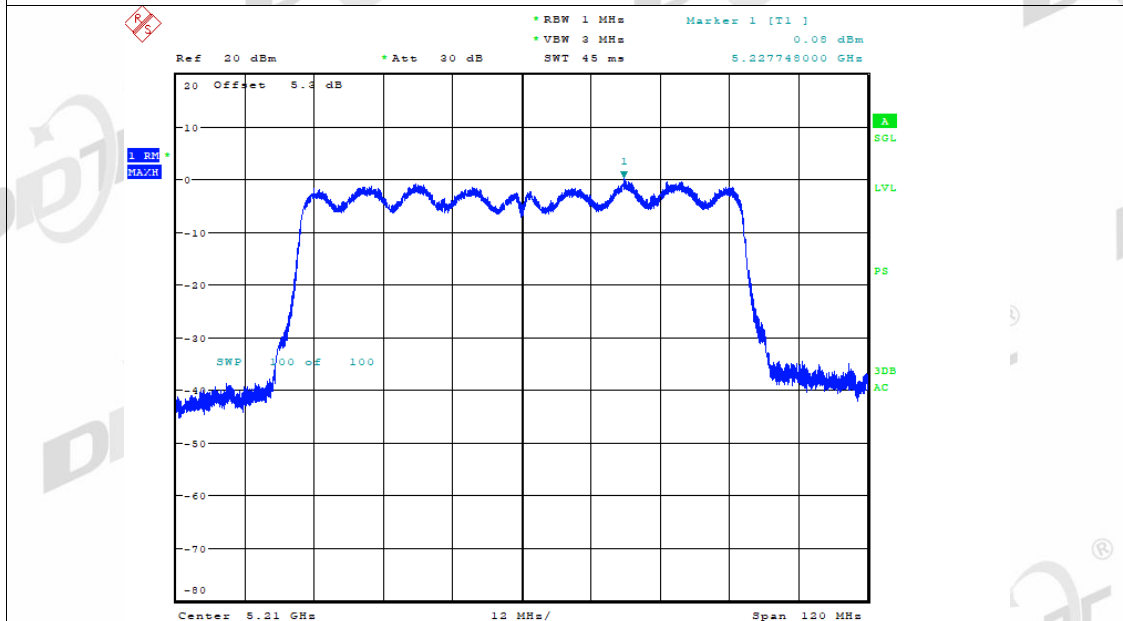
Date: 7.NOV.2022 14:58:25

PSD NVNT ac40 5795MHz Ant1



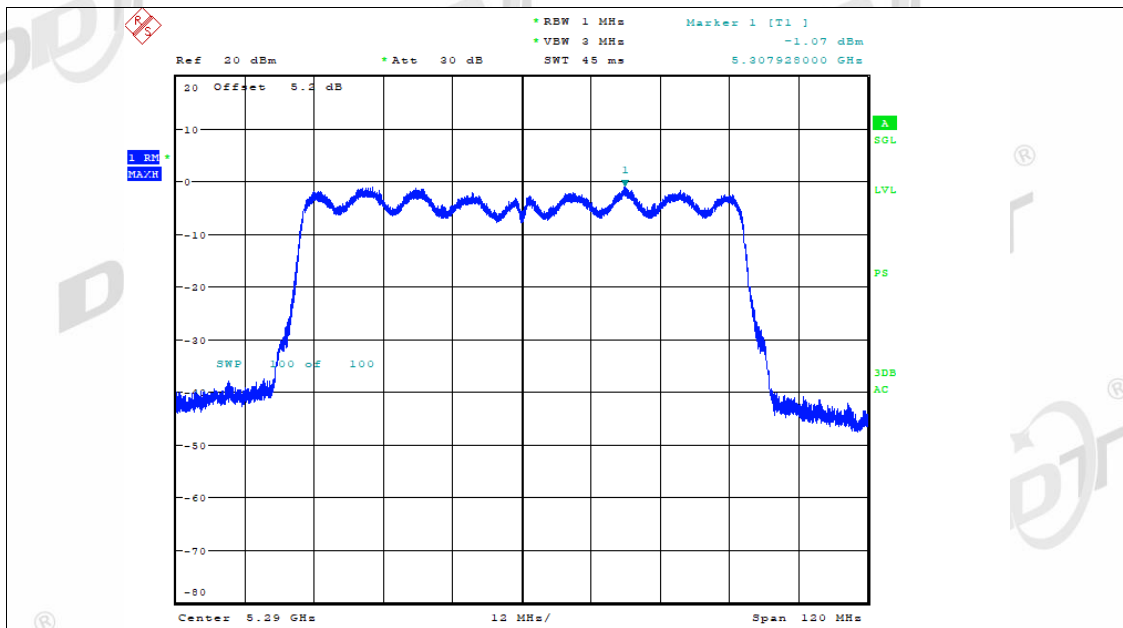
Date: 7.NOV.2022 15:02:51

PSD NVNT ac80 5210MHz Ant1



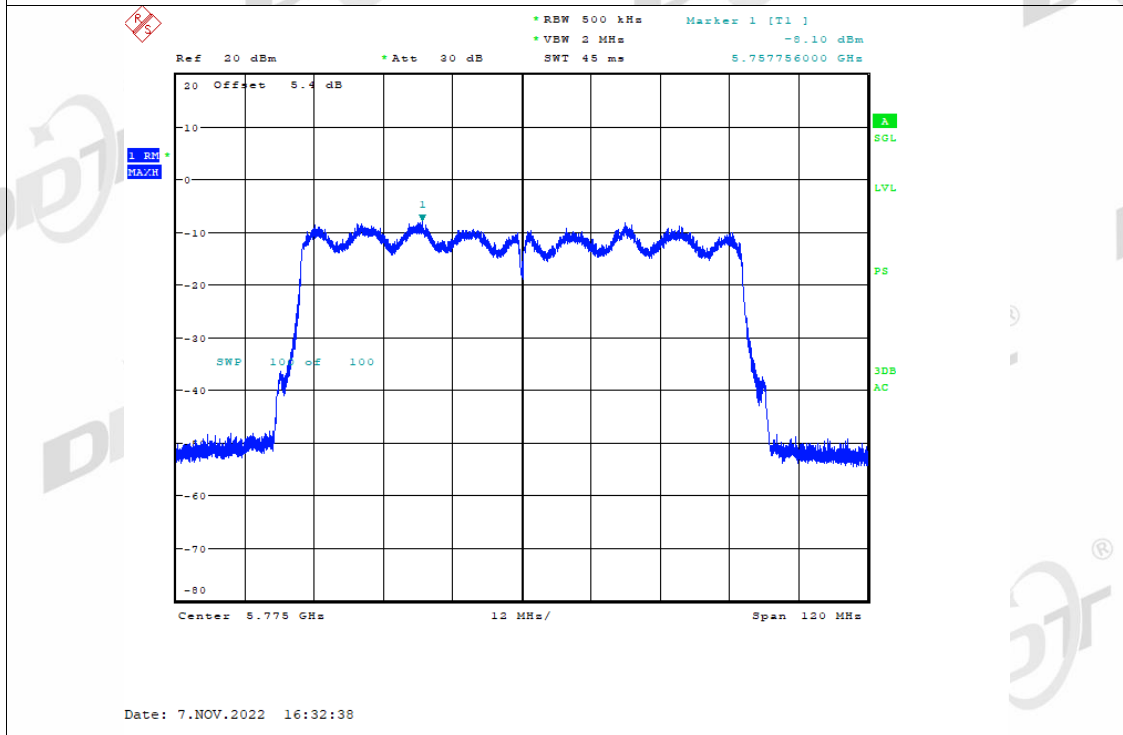
Date: 7.NOV.2022 16:17:39

PSD NVNT ac80 5290MHz Ant1



Date: 7.NOV.2022 16:25:36

PSD NVNT ac80 5775MHz Ant1



Date: 7.NOV.2022 16:32:38

7. Frequency Stability Measurement

7.1. Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

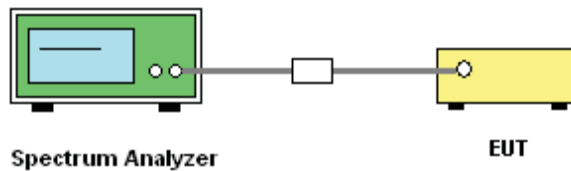
7.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

7.3. Test procedures

- (1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- (2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
- (3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

7.4. Test setup



7.5. Test result

Normal Temperature

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NTLV	a	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NTNV	a	5180	Ant1	5180	0	0	25	Pass
NTHV	a	5180	Ant1	5180	0	0	25	Pass
NTLV	a	5200	Ant1	5200	0	0	25	Pass
NTNV	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NTHV	a	5200	Ant1	5200	0	0	25	Pass
NTLV	a	5240	Ant1	5240	0	0	25	Pass
NTNV	a	5240	Ant1	5240	0	0	25	Pass
NTHV	a	5240	Ant1	5240	0	0	25	Pass
NTLV	a	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NTNV	a	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NTHV	a	5260	Ant1	5260	0	0	25	Pass
NTLV	a	5280	Ant1	5279.96	-40000	-7.58	25	Pass
NTNV	a	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTHV	a	5280	Ant1	5280	0	0	25	Pass
NTLV	a	5320	Ant1	5320	0	0	25	Pass
NTNV	a	5320	Ant1	5320	0	0	25	Pass
NTHV	a	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTLV	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTNV	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTHV	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTLV	a	5785	Ant1	5785	0	0	25	Pass
NTNV	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTHV	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTLV	a	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NTNV	a	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NTHV	a	5825	Ant1	5825	0	0	25	Pass
NTLV	n20	5180	Ant1	5180	0	0	25	Pass
NTNV	n20	5180	Ant1	5180	0	0	25	Pass
NTHV	n20	5180	Ant1	5180.02	20000	3.86	25	Pass
NTLV	n20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NTNV	n20	5200	Ant1	5200	0	0	25	Pass
NTHV	n20	5200	Ant1	5200	0	0	25	Pass
NTLV	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NTNV	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NTHV	n20	5240	Ant1	5240	0	0	25	Pass
NTLV	n20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NTNV	n20	5260	Ant1	5260.02	20000	3.8	25	Pass
NTHV	n20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NTLV	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTNV	n20	5280	Ant1	5280	0	0	25	Pass
NTHV	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTLV	n20	5320	Ant1	5320	0	0	25	Pass

NTNV	n20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTHV	n20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTLV	n20	5745	Ant1	5745	0	0	25	Pass
NTNV	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTHV	n20	5745	Ant1	5745	0	0	25	Pass
NTLV	n20	5785	Ant1	5785	0	0	25	Pass
NTNV	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTHV	n20	5785	Ant1	5785	0	0	25	Pass
NTLV	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NTNV	n20	5825	Ant1	5825.02	20000	3.43	25	Pass
NTHV	n20	5825	Ant1	5825	0	0	25	Pass
NTLV	n40	5190	Ant1	5190	0	0	25	Pass
NTNV	n40	5190	Ant1	5190.04	40000	7.71	25	Pass
NTHV	n40	5190	Ant1	5190	0	0	25	Pass
NTLV	n40	5230	Ant1	5230.04	40000	7.65	25	Pass
NTNV	n40	5230	Ant1	5230	0	0	25	Pass
NTHV	n40	5230	Ant1	5230	0	0	25	Pass
NTLV	n40	5270	Ant1	5270	0	0	25	Pass
NTNV	n40	5270	Ant1	5270	0	0	25	Pass
NTHV	n40	5270	Ant1	5270	0	0	25	Pass
NTLV	n40	5310	Ant1	5310.04	40000	7.53	25	Pass
NTNV	n40	5310	Ant1	5310.04	40000	7.53	25	Pass
NTHV	n40	5310	Ant1	5310	0	0	25	Pass
NTLV	n40	5755	Ant1	5755	0	0	25	Pass
NTNV	n40	5755	Ant1	5755	0	0	25	Pass
NTHV	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
NTLV	n40	5795	Ant1	5795	0	0	25	Pass
NTNV	n40	5795	Ant1	5795	0	0	25	Pass
NTHV	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
NTLV	ac20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NTNV	ac20	5180	Ant1	5180	0	0	25	Pass
NTHV	ac20	5180	Ant1	5180	0	0	25	Pass
NTLV	ac20	5200	Ant1	5200	0	0	25	Pass
NTNV	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NTHV	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NTLV	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NTNV	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NTHV	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NTLV	ac20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NTNV	ac20	5260	Ant1	5260	0	0	25	Pass
NTHV	ac20	5260	Ant1	5260	0	0	25	Pass
NTLV	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTNV	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTHV	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
NTLV	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTNV	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTHV	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
NTLV	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTNV	ac20	5745	Ant1	5745	0	0	25	Pass

NTHV	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NTLV	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTNV	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTHV	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
NTLV	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NTNV	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NTHV	ac20	5825	Ant1	5825	0	0	25	Pass
NTLV	ac40	5190	Ant1	5190	0	0	25	Pass
NTNV	ac40	5190	Ant1	5190	0	0	25	Pass
NTHV	ac40	5190	Ant1	5190	0	0	25	Pass
NTLV	ac40	5230	Ant1	5230	0	0	25	Pass
NTNV	ac40	5230	Ant1	5230	0	0	25	Pass
NTHV	ac40	5230	Ant1	5230	0	0	25	Pass
NTLV	ac40	5270	Ant1	5270	0	0	25	Pass
NTNV	ac40	5270	Ant1	5270	0	0	25	Pass
NTHV	ac40	5270	Ant1	5270	0	0	25	Pass
NTLV	ac40	5310	Ant1	5310.04	40000	7.53	25	Pass
NTNV	ac40	5310	Ant1	5310	0	0	25	Pass
NTHV	ac40	5310	Ant1	5310	0	0	25	Pass
NTLV	ac40	5755	Ant1	5755	0	0	25	Pass
NTNV	ac40	5755	Ant1	5755	0	0	25	Pass
NTHV	ac40	5755	Ant1	5755	0	0	25	Pass
NTLV	ac40	5795	Ant1	5795	0	0	25	Pass
NTNV	ac40	5795	Ant1	5795	0	0	25	Pass
NTHV	ac40	5795	Ant1	5795	0	0	25	Pass
NTLV	ac80	5210	Ant1	5210	0	0	25	Pass
NTNV	ac80	5210	Ant1	5210	0	0	25	Pass
NTHV	ac80	5210	Ant1	5210	0	0	25	Pass
NTLV	ac80	5290	Ant1	5290	0	0	25	Pass
NTNV	ac80	5290	Ant1	5290	0	0	25	Pass
NTHV	ac80	5290	Ant1	5290	0	0	25	Pass
NTLV	ac80	5775	Ant1	5775	0	0	25	Pass
NTNV	ac80	5775	Ant1	5775	0	0	25	Pass
NTHV	ac80	5775	Ant1	5775	0	0	25	Pass

Normal Voltage

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
-10℃	a	5180	Ant1	5179.98	-20000	-3.86	25	Pass
0℃	a	5180	Ant1	5180	0	0	25	Pass
10℃	a	5180	Ant1	5180	0	0	25	Pass
30℃	a	5180	Ant1	5180	0	0	25	Pass
40℃	a	5180	Ant1	5180	0	0	25	Pass
-45℃	a	5180	Ant1	5180.02	20000	3.86	25	Pass
-10℃	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
0℃	a	5200	Ant1	5200	0	0	25	Pass
10℃	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
30℃	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass

40℃	a	5200	Ant1	5199.98	-20000	-3.85	25	Pass
-45℃	a	5200	Ant1	5200	0	0	25	Pass
-10℃	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
0℃	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
10℃	a	5240	Ant1	5240	0	0	25	Pass
30℃	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
40℃	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-45℃	a	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-10℃	a	5260	Ant1	5260	0	0	25	Pass
0℃	a	5260	Ant1	5260	0	0	25	Pass
10℃	a	5260	Ant1	5259.98	-20000	-3.8	25	Pass
30℃	a	5260	Ant1	5260	0	0	25	Pass
40℃	a	5260	Ant1	5260	0	0	25	Pass
-45℃	a	5260	Ant1	5260	0	0	25	Pass
-10℃	a	5280	Ant1	5280	0	0	25	Pass
0℃	a	5280	Ant1	5280	0	0	25	Pass
10℃	a	5280	Ant1	5279.98	-20000	-3.79	25	Pass
30℃	a	5280	Ant1	5280	0	0	25	Pass
40℃	a	5280	Ant1	5280	0	0	25	Pass
-45℃	a	5280	Ant1	5280	0	0	25	Pass
-10℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
0℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
10℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
30℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
40℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
-45℃	a	5320	Ant1	5320.02	20000	3.76	25	Pass
-10℃	a	5745	Ant1	5745	0	0	25	Pass
0℃	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
10℃	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
30℃	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
40℃	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-45℃	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-10℃	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0℃	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
10℃	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
30℃	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
40℃	a	5785	Ant1	5785	0	0	25	Pass
-45℃	a	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-10℃	a	5825	Ant1	5825	0	0	25	Pass
0℃	a	5825	Ant1	5825	0	0	25	Pass
10℃	a	5825	Ant1	5825	0	0	25	Pass
30℃	a	5825	Ant1	5824.96	-40000	-6.87	25	Pass
40℃	a	5825	Ant1	5825	0	0	25	Pass
-45℃	a	5825	Ant1	5825	0	0	25	Pass
-10℃	n20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
0℃	n20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
10℃	n20	5180	Ant1	5180.02	20000	3.86	25	Pass
30℃	n20	5180	Ant1	5180	0	0	25	Pass
40℃	n20	5180	Ant1	5180.02	20000	3.86	25	Pass

-45℃	n20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
-10℃	n20	5200	Ant1	5200	0	0	25	Pass
0℃	n20	5200	Ant1	5200	0	0	25	Pass
10℃	n20	5200	Ant1	5200	0	0	25	Pass
30℃	n20	5200	Ant1	5200	0	0	25	Pass
40℃	n20	5200	Ant1	5200.02	20000	3.85	25	Pass
-45℃	n20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
-10℃	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
0℃	n20	5240	Ant1	5240	0	0	25	Pass
10℃	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
30℃	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
40℃	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-45℃	n20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-10℃	n20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
0℃	n20	5260	Ant1	5260.02	20000	3.8	25	Pass
10℃	n20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
30℃	n20	5260	Ant1	5260	0	0	25	Pass
40℃	n20	5260	Ant1	5260.02	20000	3.8	25	Pass
-45℃	n20	5260	Ant1	5260	0	0	25	Pass
-10℃	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
0℃	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
10℃	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
30℃	n20	5280	Ant1	5280	0	0	25	Pass
40℃	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
-45℃	n20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
-10℃	n20	5320	Ant1	5320	0	0	25	Pass
0℃	n20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
10℃	n20	5320	Ant1	5320	0	0	25	Pass
30℃	n20	5320	Ant1	5320	0	0	25	Pass
40℃	n20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
-45℃	n20	5320	Ant1	5320	0	0	25	Pass
-10℃	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
0℃	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
10℃	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
30℃	n20	5745	Ant1	5745	0	0	25	Pass
40℃	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-45℃	n20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
-10℃	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0℃	n20	5785	Ant1	5785	0	0	25	Pass
10℃	n20	5785	Ant1	5785	0	0	25	Pass
30℃	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
40℃	n20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-45℃	n20	5785	Ant1	5785.02	20000	3.46	25	Pass
-10℃	n20	5825	Ant1	5825	0	0	25	Pass
0℃	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
10℃	n20	5825	Ant1	5825	0	0	25	Pass
30℃	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
40℃	n20	5825	Ant1	5825	0	0	25	Pass
-45℃	n20	5825	Ant1	5824.98	-20000	-3.43	25	Pass

-10℃	n40	5190	Ant1	5190	0	0	25	Pass
0℃	n40	5190	Ant1	5190.04	40000	7.71	25	Pass
10℃	n40	5190	Ant1	5190	0	0	25	Pass
30℃	n40	5190	Ant1	5190	0	0	25	Pass
40℃	n40	5190	Ant1	5190	0	0	25	Pass
-45℃	n40	5190	Ant1	5190.04	40000	7.71	25	Pass
-10℃	n40	5230	Ant1	5230	0	0	25	Pass
0℃	n40	5230	Ant1	5230.04	40000	7.65	25	Pass
10℃	n40	5230	Ant1	5230	0	0	25	Pass
30℃	n40	5230	Ant1	5230	0	0	25	Pass
40℃	n40	5230	Ant1	5230.04	40000	7.65	25	Pass
-45℃	n40	5230	Ant1	5230	0	0	25	Pass
-10℃	n40	5270	Ant1	5270	0	0	25	Pass
0℃	n40	5270	Ant1	5270	0	0	25	Pass
10℃	n40	5270	Ant1	5270	0	0	25	Pass
30℃	n40	5270	Ant1	5270	0	0	25	Pass
40℃	n40	5270	Ant1	5270	0	0	25	Pass
-45℃	n40	5270	Ant1	5270.04	40000	7.59	25	Pass
-10℃	n40	5310	Ant1	5310	0	0	25	Pass
0℃	n40	5310	Ant1	5310.04	40000	7.53	25	Pass
10℃	n40	5310	Ant1	5310	0	0	25	Pass
30℃	n40	5310	Ant1	5310.04	40000	7.53	25	Pass
40℃	n40	5310	Ant1	5310	0	0	25	Pass
-45℃	n40	5310	Ant1	5310	0	0	25	Pass
-10℃	n40	5755	Ant1	5755	0	0	25	Pass
0℃	n40	5755	Ant1	5755	0	0	25	Pass
10℃	n40	5755	Ant1	5755	0	0	25	Pass
30℃	n40	5755	Ant1	5755	0	0	25	Pass
40℃	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-45℃	n40	5755	Ant1	5754.96	-40000	-6.95	25	Pass
-10℃	n40	5795	Ant1	5795	0	0	25	Pass
0℃	n40	5795	Ant1	5795	0	0	25	Pass
10℃	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
30℃	n40	5795	Ant1	5795	0	0	25	Pass
40℃	n40	5795	Ant1	5795	0	0	25	Pass
-45℃	n40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
-10℃	ac20	5180	Ant1	5180	0	0	25	Pass
0℃	ac20	5180	Ant1	5180	0	0	25	Pass
10℃	ac20	5180	Ant1	5180	0	0	25	Pass
30℃	ac20	5180	Ant1	5180	0	0	25	Pass
40℃	ac20	5180	Ant1	5180	0	0	25	Pass
-45℃	ac20	5180	Ant1	5180	0	0	25	Pass
-10℃	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
0℃	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
10℃	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
30℃	ac20	5200	Ant1	5200	0	0	25	Pass
40℃	ac20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
-45℃	ac20	5200	Ant1	5199.96	-40000	-7.69	25	Pass
-10℃	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass

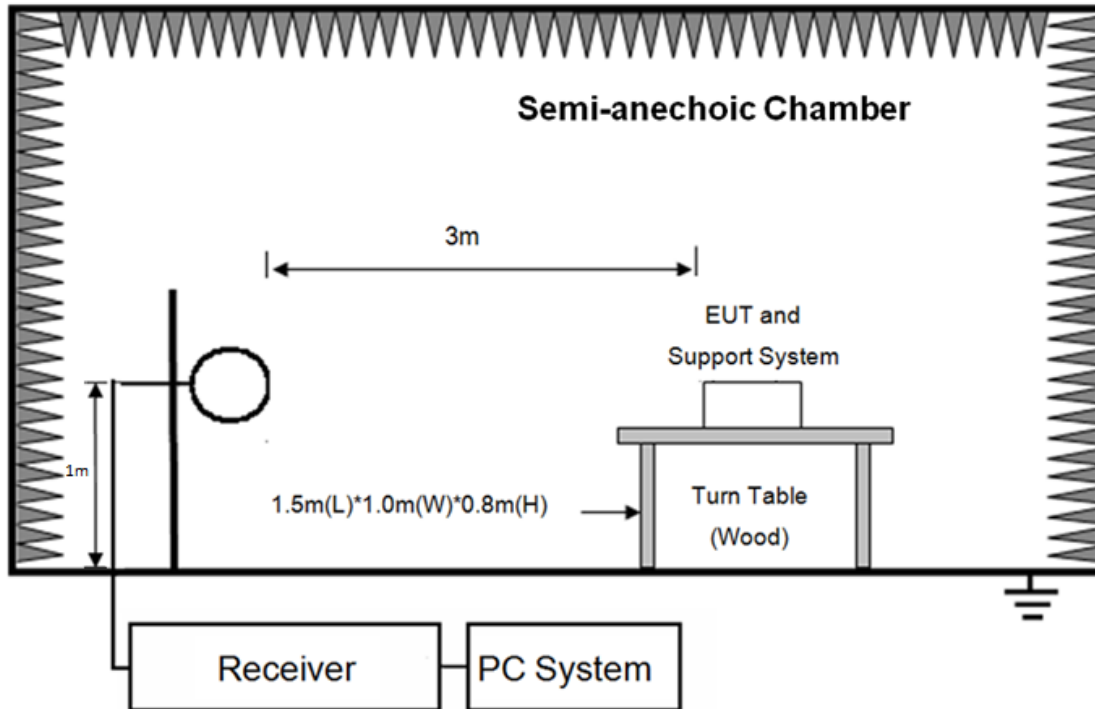
0℃	ac20	5240	Ant1	5240	0	0	25	Pass
10℃	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
30℃	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
40℃	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-45℃	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
-10℃	ac20	5260	Ant1	5260	0	0	25	Pass
0℃	ac20	5260	Ant1	5260	0	0	25	Pass
10℃	ac20	5260	Ant1	5260	0	0	25	Pass
30℃	ac20	5260	Ant1	5260	0	0	25	Pass
40℃	ac20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
-45℃	ac20	5260	Ant1	5259.98	-20000	-3.8	25	Pass
-10℃	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
0℃	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
10℃	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
30℃	ac20	5280	Ant1	5280	0	0	25	Pass
40℃	ac20	5280	Ant1	5279.98	-20000	-3.79	25	Pass
-45℃	ac20	5280	Ant1	5280	0	0	25	Pass
-10℃	ac20	5320	Ant1	5320	0	0	25	Pass
0℃	ac20	5320	Ant1	5320	0	0	25	Pass
10℃	ac20	5320	Ant1	5320	0	0	25	Pass
30℃	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
40℃	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
-45℃	ac20	5320	Ant1	5319.98	-20000	-3.76	25	Pass
-10℃	ac20	5745	Ant1	5744.98	-20000	-3.48	25	Pass
0℃	ac20	5745	Ant1	5745	0	0	25	Pass
10℃	ac20	5745	Ant1	5745	0	0	25	Pass
30℃	ac20	5745	Ant1	5745	0	0	25	Pass
40℃	ac20	5745	Ant1	5745	0	0	25	Pass
-45℃	ac20	5745	Ant1	5745	0	0	25	Pass
-10℃	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
0℃	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
10℃	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
30℃	ac20	5785	Ant1	5785	0	0	25	Pass
40℃	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-45℃	ac20	5785	Ant1	5784.98	-20000	-3.46	25	Pass
-10℃	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
0℃	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
10℃	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
30℃	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
40℃	ac20	5825	Ant1	5825	0	0	25	Pass
-45℃	ac20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
-10℃	ac40	5190	Ant1	5190	0	0	25	Pass
0℃	ac40	5190	Ant1	5190	0	0	25	Pass
10℃	ac40	5190	Ant1	5190	0	0	25	Pass
30℃	ac40	5190	Ant1	5190	0	0	25	Pass
40℃	ac40	5190	Ant1	5190	0	0	25	Pass
-45℃	ac40	5190	Ant1	5190	0	0	25	Pass
-10℃	ac40	5230	Ant1	5230	0	0	25	Pass
0℃	ac40	5230	Ant1	5230	0	0	25	Pass

10℃	ac40	5230	Ant1	5230	0	0	25	Pass
30℃	ac40	5230	Ant1	5230.04	40000	7.65	25	Pass
40℃	ac40	5230	Ant1	5230	0	0	25	Pass
-45℃	ac40	5230	Ant1	5230	0	0	25	Pass
-10℃	ac40	5270	Ant1	5270	0	0	25	Pass
0℃	ac40	5270	Ant1	5270	0	0	25	Pass
10℃	ac40	5270	Ant1	5270	0	0	25	Pass
30℃	ac40	5270	Ant1	5270	0	0	25	Pass
40℃	ac40	5270	Ant1	5270.04	40000	7.59	25	Pass
-45℃	ac40	5270	Ant1	5270	0	0	25	Pass
-10℃	ac40	5310	Ant1	5310.04	40000	7.53	25	Pass
0℃	ac40	5310	Ant1	5310	0	0	25	Pass
10℃	ac40	5310	Ant1	5310	0	0	25	Pass
30℃	ac40	5310	Ant1	5310	0	0	25	Pass
40℃	ac40	5310	Ant1	5310	0	0	25	Pass
-45℃	ac40	5310	Ant1	5310	0	0	25	Pass
-10℃	ac40	5755	Ant1	5755	0	0	25	Pass
0℃	ac40	5755	Ant1	5755	0	0	25	Pass
10℃	ac40	5755	Ant1	5755	0	0	25	Pass
30℃	ac40	5755	Ant1	5755	0	0	25	Pass
40℃	ac40	5755	Ant1	5755	0	0	25	Pass
-45℃	ac40	5755	Ant1	5755	0	0	25	Pass
-10℃	ac40	5795	Ant1	5795	0	0	25	Pass
0℃	ac40	5795	Ant1	5795	0	0	25	Pass
10℃	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
30℃	ac40	5795	Ant1	5795	0	0	25	Pass
40℃	ac40	5795	Ant1	5795	0	0	25	Pass
-45℃	ac40	5795	Ant1	5795	0	0	25	Pass
-10℃	ac80	5210	Ant1	5210	0	0	25	Pass
0℃	ac80	5210	Ant1	5210	0	0	25	Pass
10℃	ac80	5210	Ant1	5210	0	0	25	Pass
30℃	ac80	5210	Ant1	5210	0	0	25	Pass
40℃	ac80	5210	Ant1	5210	0	0	25	Pass
-45℃	ac80	5210	Ant1	5210	0	0	25	Pass
-10℃	ac80	5290	Ant1	5290	0	0	25	Pass
0℃	ac80	5290	Ant1	5290	0	0	25	Pass
10℃	ac80	5290	Ant1	5290	0	0	25	Pass
30℃	ac80	5290	Ant1	5290	0	0	25	Pass
40℃	ac80	5290	Ant1	5290	0	0	25	Pass
-45℃	ac80	5290	Ant1	5290	0	0	25	Pass
-10℃	ac80	5775	Ant1	5775	0	0	25	Pass
0℃	ac80	5775	Ant1	5775	0	0	25	Pass
10℃	ac80	5775	Ant1	5775	0	0	25	Pass
30℃	ac80	5775	Ant1	5775	0	0	25	Pass
40℃	ac80	5775	Ant1	5775	0	0	25	Pass
-45℃	ac80	5775	Ant1	5775	0	0	25	Pass
-45℃	ac80	5290	Ant1	5290	0	0	25	Pass

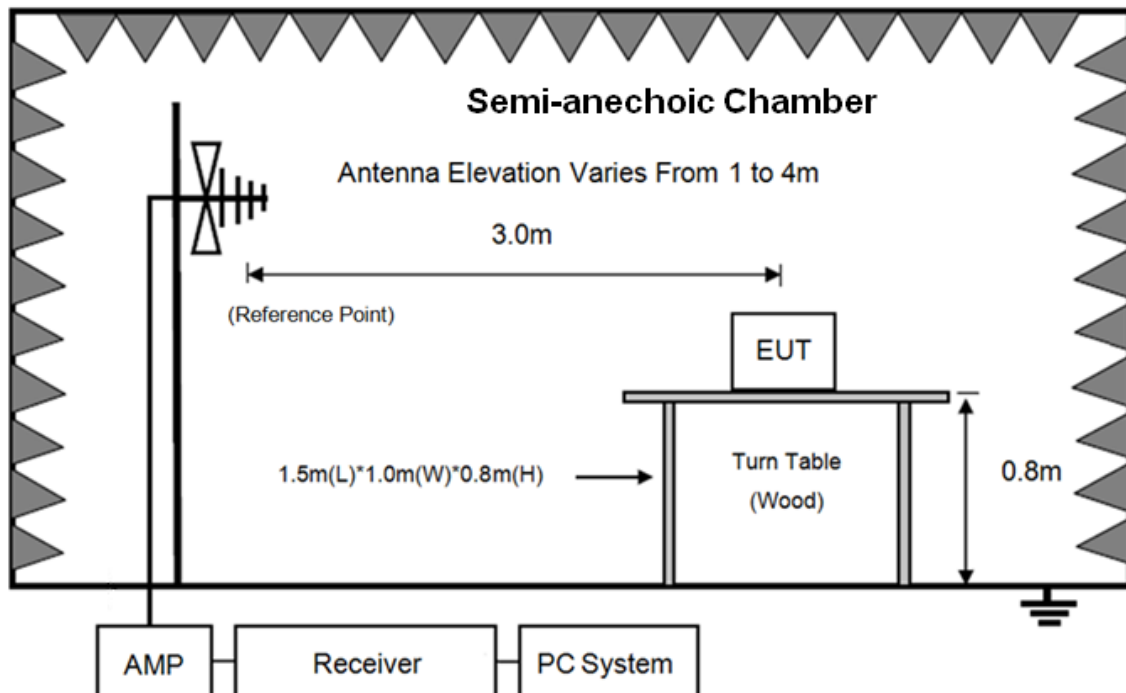
8. Emissions in restricted frequency bands

8.1. Block diagram of test setup

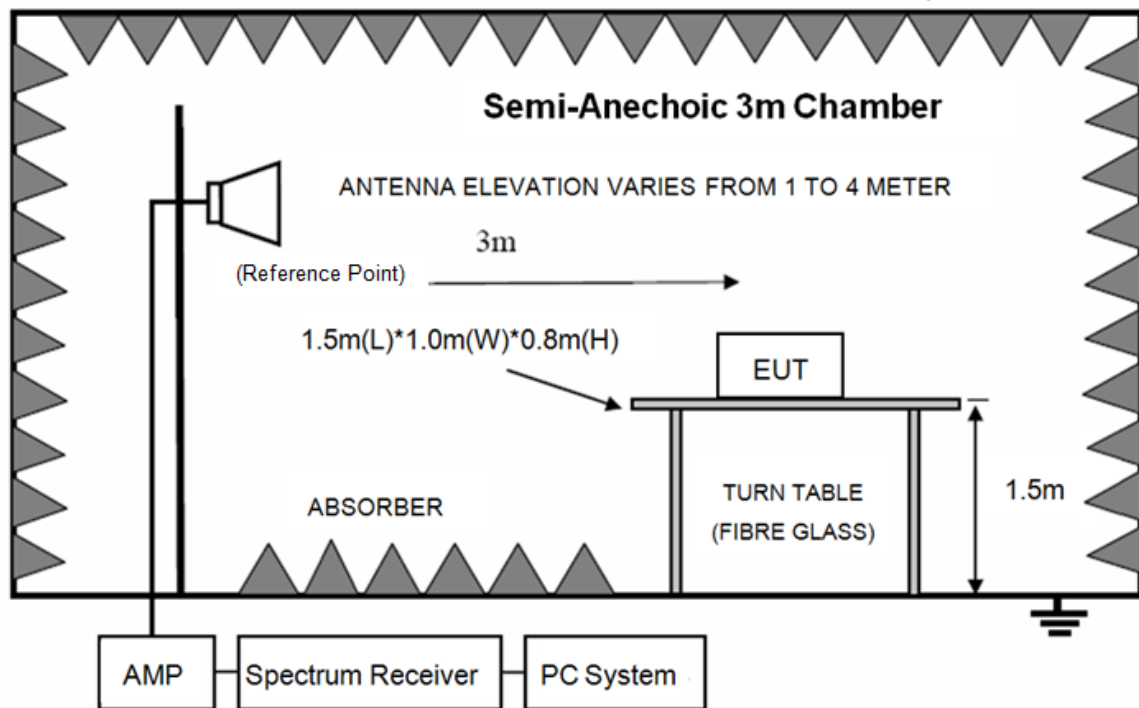
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



In 3 m Anechoic Chamber, test setup diagram for 30 MHz – 1 GHz:



In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

8.2. Limit

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6

(2) RSS-GEN Restricted frequency band*

MHz	MHz	MHz	GHz
0.090-0.110	12.57675-12.57725	399.9-410	7.25-7.75
0.495-0.505	13.36-13.41	608-614	8.025-8.5
2.1735-2.1905	16.42-16.423	960-1427	9.0-9.2
3.020-3.026	16.69475-16.69525	1435-1626.5	9.3-9.5
4.125-4.128	16.80425-16.80475	1645.5-1646.5	10.6-12.7
4.17725-4.17775	25.5-25.67	1660-1710	13.25-13.4
4.20725-4.20775	37.5-38.25	1718.8-1722.2	14.47-14.5
5.677-5.683	73-74.6	2200-2300	15.35-16.2
6.215-6.218	74.8-75.2	2310-2390	17.7-21.4
6.26775-6.26825	108-138	2483.5-2500	22.01-23.12
6.31175-6.31225	149.9-150.05	2655-2900	23.6-24.0
8.291-8.294	156.52475-156.52525	3260-3267	31.2-31.8
8.362-8.366	156.7-156.9	3332-3339	36.43-36.5
8.37625-8.38675	162.0125-167.17	3345.8-3358	Above 38.6
8.41425-8.41475	167.72-173.2	3500-4400	
12.29-12.293	240-285	4.5-5.15	
12.51975-12.52025	322-335.4	5.35-5.46	

* Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

(3) FCC 15.209 & RSS-GEN Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3m}(\text{dB}\mu\text{V}/\text{m}) = \text{Limit}_{30m}(\text{dB}\mu\text{V}/\text{m}) + 40\text{Log}(30m/3m)$$

8.3.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

8.3. Test procedure

- (1) EUT height should be 0.8 m for below 1 GHz at a semi - anechoic chamber while EUT height should be 1.5 m for above 1GHz at full chamber or semi - anechoic chamber ground with absorbers
- (2) Setup EUT and assistant system according clause 2.3 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test distance
9 kHz-30 MHz	Active Loop antenna	3 m
30 MHz-1 GHz	Trilog Broadband Antenna	3 m
1 GHz-18 GHz	Double Ridged Horn Antenna(1GHz-18GHz)	3 m
18 GHz-40 GHz	Horn Antenna(18GHz-40GHz)	3 m

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30 MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

- (4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 40 GHz:

- (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1m above ground.)

- (b) Change work frequency or channel of device if practicable.

- (c) Change modulation type of device if practicable.

- (d) Change power supply range from 85% to 115% of the rated supply voltage

- (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 40 GHz (tenth harmonic of fundamental frequency) was

investigated, and no any obvious emission were detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so below final test was performed with frequency range from 30 MHz to 18 GHz.

- (5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.
- (6) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9-90 kHz, 110-490 kHz, for emissions from 9 kHz-90kHz, 110kHz-490kHz and above 1GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.
- (7) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9 kHz-150 kHz	200 Hz
150 kHz-30 MHz	9 kHz
30 MHz-1 GHz	120 kHz

- (8) For emissions above 1 GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3MHz for Peak measure, the RBW is set at 1 MHz, VBW is set at 10 Hz for AV value.

8.4. Test result

PASS. (See below detailed test result)

All the emissions except fundamental emission from 9kHz to 40GHz were comply with 15.209 limit.

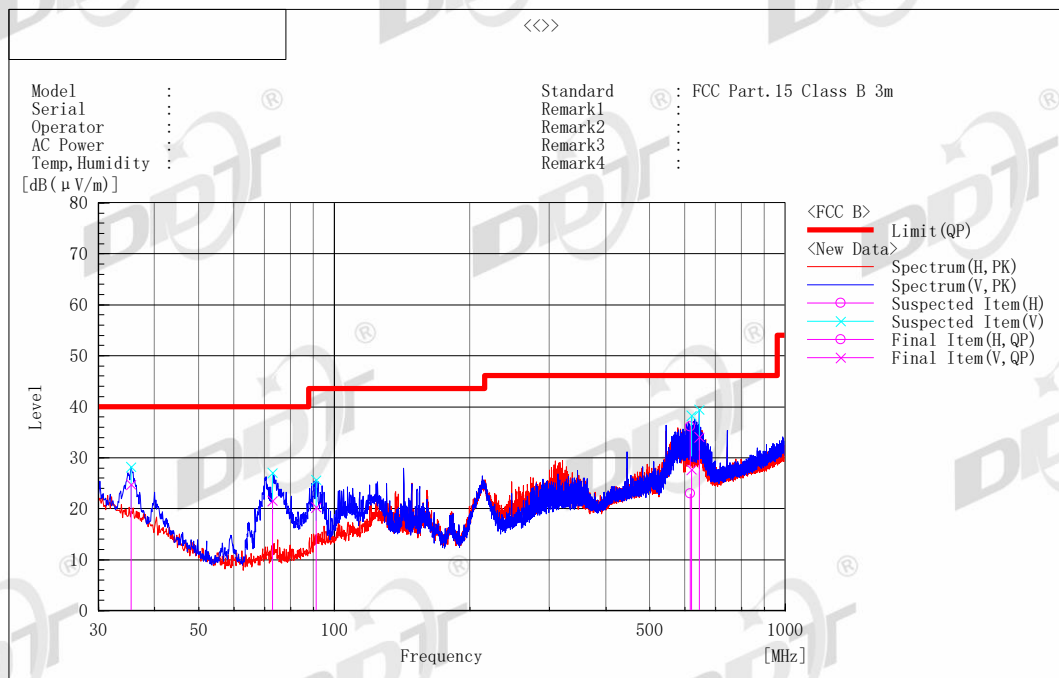
Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 40 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in transmission mode.

Note3: For below test data, when the limit tabular marked “/” means this frequency point is the fundamental emission and no need comply with this limit.

Note4: Scan with all modes, the worst case was recorded in this report.

Radiated Emission test (30MHz- 1GHz)



Final Result

No.	Frequency (P)	Reading	c. f	Result	Limit	Margin	Height	Angle	System	Remark
	[MHz]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[cm]	[°]		
1	35.456	V	33.1	-8.3	24.8	40.0	15.2	101.0	359.9	2
2	73.044	V	38.5	-17.0	21.5	40.0	18.5	101.0	359.9	2
3	90.989	V	34.5	-14.2	20.3	43.5	23.2	101.0	359.9	2
4	614.304	H	22.6	0.3	22.9	46.0	23.1	201.0	359.9	1
5	618.790	V	26.9	0.7	27.6	46.0	18.4	101.0	359.9	2
6	643.525	V	32.8	1.2	34.0	46.0	12.0	101.0	359.9	2

Note) Receive antenna polarization: Horizontal and/or Vertical

Test Distance: 3 m, Antenna Height: 1 m to 4 m

Level QP (Quasi-Peak) = Reading QP + Factor (Antenna Factor + Cable Loss - Amp. Gain)

Margin QP (Quasi-Peak) = Limit - Level QP

Radiated Emission test (above 1GHz)

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
Tx mode: 11a 6M Ant1 5180MHz								
6945.00	40.72	36.51	-31.16	46.07	74.00	-27.93	Peak	HORIZONTAL
9465.00	40.15	37.98	-30.06	48.07	74.00	-25.93	Peak	HORIZONTAL
10860.00	41.06	38.64	-29.08	50.62	74.00	-23.38	Peak	HORIZONTAL
13710.00	40.42	40.82	-28.91	52.33	74.00	-21.67	Peak	HORIZONTAL
15225.00	39.14	38.64	-27.60	50.18	74.00	-23.82	Peak	HORIZONTAL
17325.00	37.75	42.66	-26.89	53.52	74.00	-20.48	Peak	HORIZONTAL
5985.00	43.50	35.26	-31.86	46.90	74.00	-27.10	Peak	VERTICAL
7815.00	40.39	37.15	-30.98	46.56	74.00	-27.44	Peak	VERTICAL
9000.00	41.58	37.70	-30.52	48.76	74.00	-25.24	Peak	VERTICAL
11430.00	37.94	38.70	-28.63	48.01	74.00	-25.99	Peak	VERTICAL
14265.00	39.55	41.03	-27.75	52.83	74.00	-21.17	Peak	VERTICAL
17445.00	37.69	42.82	-27.23	53.28	74.00	-20.72	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5200MHz								
5685.00	42.73	34.35	-31.52	45.56	74.00	-28.44	Peak	HORIZONTAL
7905.00	41.09	37.08	-31.22	46.95	74.00	-27.05	Peak	HORIZONTAL
9435.00	40.12	37.96	-29.91	48.17	74.00	-25.83	Peak	HORIZONTAL
12795.00	39.88	39.13	-29.51	49.50	74.00	-24.50	Peak	HORIZONTAL
14010.00	39.37	41.39	-28.38	52.38	74.00	-21.62	Peak	HORIZONTAL
17085.00	37.25	42.32	-26.65	52.92	74.00	-21.08	Peak	HORIZONTAL
4200.00	46.70	31.72	-32.05	46.37	74.00	-27.63	Peak	VERTICAL
5985.00	43.62	35.26	-31.86	47.02	74.00	-26.98	Peak	VERTICAL
7725.00	41.92	37.22	-31.19	47.95	74.00	-26.05	Peak	VERTICAL
8985.00	43.21	37.69	-30.62	50.28	74.00	-23.72	Peak	VERTICAL
14205.00	39.19	41.11	-27.10	53.20	74.00	-20.80	Peak	VERTICAL
17295.00	37.78	42.61	-26.80	53.59	74.00	-20.41	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5240MHz								
6645.00	40.65	36.03	-31.17	45.51	74.00	-28.49	Peak	HORIZONTAL
8565.00	40.57	37.44	-30.97	47.04	74.00	-26.96	Peak	HORIZONTAL
8985.00	41.25	37.69	-30.62	48.32	74.00	-25.68	Peak	HORIZONTAL
12285.00	39.68	38.60	-29.28	49.00	74.00	-25.00	Peak	HORIZONTAL
14235.00	39.42	41.07	-27.43	53.06	74.00	-20.94	Peak	HORIZONTAL
16800.00	37.74	41.24	-25.80	53.18	74.00	-20.82	Peak	HORIZONTAL
6000.00	44.05	35.30	-31.80	47.55	74.00	-26.45	Peak	VERTICAL
8985.00	43.14	37.69	-30.62	50.21	74.00	-23.79	Peak	VERTICAL
11205.00	38.38	38.70	-28.32	48.76	74.00	-25.24	Peak	VERTICAL
13575.00	40.56	40.55	-29.12	51.99	74.00	-22.01	Peak	VERTICAL
14700.00	37.61	40.02	-27.53	50.10	74.00	-23.90	Peak	VERTICAL
17400.00	37.37	42.76	-27.17	52.96	74.00	-21.04	Peak	VERTICAL
Verdict: Pass								

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

3. For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

4. Scan with all modes, the worst case was recorded in this report.

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
Tx mode: 11a 6M Ant1 5260MHz								
6780.00	41.09	36.25	-31.16	46.18	74.00	-27.82	Peak	HORIZONTAL
8655.00	40.99	37.49	-30.92	47.56	74.00	-26.44	Peak	HORIZONTAL
10710.00	41.00	38.58	-29.43	50.15	74.00	-23.85	Peak	HORIZONTAL
14220.00	38.32	41.09	-27.27	52.14	74.00	-21.86	Peak	HORIZONTAL
15330.00	38.05	38.47	-27.44	49.08	74.00	-24.92	Peak	HORIZONTAL
16905.00	38.23	41.74	-26.79	53.18	74.00	-20.82	Peak	HORIZONTAL
4200.00	47.21	31.72	-32.05	46.88	74.00	-27.12	Peak	VERTICAL
5985.00	44.75	35.26	-31.86	48.15	74.00	-25.85	Peak	VERTICAL
8985.00	42.48	37.69	-30.62	49.55	74.00	-24.45	Peak	VERTICAL
11295.00	38.25	38.70	-28.59	48.36	74.00	-25.64	Peak	VERTICAL
13725.00	40.22	40.85	-28.92	52.15	74.00	-21.85	Peak	VERTICAL
17265.00	37.82	42.57	-26.84	53.55	74.00	-20.45	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5280MHz								
6660.00	40.56	36.06	-31.22	45.40	74.00	-28.60	Peak	HORIZONTAL
7995.00	40.94	37.00	-30.90	47.04	74.00	-26.96	Peak	HORIZONTAL
9585.00	39.85	38.05	-30.01	47.89	74.00	-26.11	Peak	HORIZONTAL
11205.00	39.68	38.70	-28.32	50.06	74.00	-23.94	Peak	HORIZONTAL
14160.00	39.27	41.18	-27.51	52.94	74.00	-21.06	Peak	HORIZONTAL
17055.00	37.55	42.28	-26.38	53.45	74.00	-20.55	Peak	HORIZONTAL
6000.00	43.31	35.30	-31.80	46.81	74.00	-27.19	Peak	VERTICAL
7920.00	40.91	37.06	-31.28	46.69	74.00	-27.31	Peak	VERTICAL
9000.00	42.21	37.70	-30.52	49.39	74.00	-24.61	Peak	VERTICAL
10965.00	39.12	38.69	-28.95	48.86	74.00	-25.14	Peak	VERTICAL
14430.00	39.32	40.80	-27.26	52.86	74.00	-21.14	Peak	VERTICAL
17295.00	37.30	42.61	-26.80	53.11	74.00	-20.89	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5320MHz								
6825.00	39.69	36.32	-30.98	45.03	74.00	-28.97	Peak	HORIZONTAL
8475.00	42.61	37.38	-31.02	48.97	74.00	-25.03	Peak	HORIZONTAL
10110.00	39.49	38.34	-29.69	48.14	74.00	-25.86	Peak	HORIZONTAL
11505.00	38.81	38.70	-28.61	48.90	74.00	-25.10	Peak	HORIZONTAL
14235.00	39.42	41.07	-27.43	53.06	74.00	-20.94	Peak	HORIZONTAL
17460.00	37.16	42.84	-27.25	52.75	74.00	-21.25	Peak	HORIZONTAL
6000.00	42.68	35.30	-31.80	46.18	74.00	-27.82	Peak	VERTICAL
7590.00	40.81	37.33	-30.90	47.24	74.00	-26.76	Peak	VERTICAL
8985.00	41.98	37.69	-30.62	49.05	74.00	-24.95	Peak	VERTICAL
11205.00	38.76	38.70	-28.32	49.14	74.00	-24.86	Peak	VERTICAL
14205.00	37.77	41.11	-27.10	51.78	74.00	-22.22	Peak	VERTICAL
17190.00	36.88	42.47	-26.92	52.43	74.00	-21.57	Peak	VERTICAL
Verdict: Pass								

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

3. For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

4. Scan with all modes, the worst case was recorded in this report.

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
Tx mode: 11a 6M Ant1 5745MHz								
7665.00	39.80	37.27	-31.39	45.68	74.00	-28.32	Peak	HORIZONTAL
9735.00	40.41	38.14	-30.06	48.49	74.00	-25.51	Peak	HORIZONTAL
11490.00	40.38	38.70	-28.61	50.47	74.00	-23.53	Peak	HORIZONTAL
13965.00	38.63	41.33	-28.48	51.48	74.00	-22.52	Peak	HORIZONTAL
16245.00	36.21	39.14	-27.49	47.86	74.00	-26.14	Peak	HORIZONTAL
17085.00	37.40	42.32	-26.65	53.07	74.00	-20.93	Peak	HORIZONTAL
4200.00	46.23	31.72	-32.05	45.90	74.00	-28.10	Peak	VERTICAL
7665.00	41.07	37.27	-31.39	46.95	74.00	-27.05	Peak	VERTICAL
9000.00	41.18	37.70	-30.52	48.36	74.00	-25.64	Peak	VERTICAL
11490.00	41.68	38.70	-28.61	51.77	74.00	-22.23	Peak	VERTICAL
14025.00	37.49	41.37	-28.35	50.51	74.00	-23.49	Peak	VERTICAL
17220.00	36.83	42.51	-26.90	52.44	74.00	-21.56	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5785MHz								
7050.00	38.24	36.68	-30.47	44.45	74.00	-29.55	Peak	HORIZONTAL
8970.00	39.24	37.68	-30.73	46.19	74.00	-27.81	Peak	HORIZONTAL
10545.00	39.17	38.52	-29.48	48.21	74.00	-25.79	Peak	HORIZONTAL
11565.00	41.95	38.69	-28.62	52.02	74.00	-21.98	Peak	HORIZONTAL
14205.00	37.35	41.11	-27.10	51.36	74.00	-22.64	Peak	HORIZONTAL
17295.00	36.58	42.61	-26.80	52.39	74.00	-21.61	Peak	HORIZONTAL
7710.00	41.50	37.23	-31.24	47.49	74.00	-26.51	Peak	VERTICAL
9000.00	41.62	37.70	-30.52	48.80	74.00	-25.20	Peak	VERTICAL
10875.00	37.05	38.65	-29.10	46.60	74.00	-27.40	Peak	VERTICAL
11565.00	41.35	38.69	-28.62	51.42	74.00	-22.58	Peak	VERTICAL
14205.00	37.17	41.11	-27.10	51.18	74.00	-22.82	Peak	VERTICAL
17040.00	36.55	42.26	-26.24	52.57	74.00	-21.43	Peak	VERTICAL
Tx mode: 11a 6M Ant1 5825MHz								
6645.00	39.63	36.03	-31.17	44.49	74.00	-29.51	Peak	HORIZONTAL
8295.00	38.98	37.24	-30.90	45.32	74.00	-28.68	Peak	HORIZONTAL
9975.00	37.76	38.28	-30.25	45.79	74.00	-28.21	Peak	HORIZONTAL
11655.00	40.28	38.67	-28.63	50.32	74.00	-23.68	Peak	HORIZONTAL
13575.00	38.94	40.55	-29.12	50.37	74.00	-23.63	Peak	HORIZONTAL
16845.00	37.03	41.46	-26.27	52.22	74.00	-21.78	Peak	HORIZONTAL
6660.00	39.47	36.06	-31.22	44.31	74.00	-29.69	Peak	VERTICAL
7770.00	40.41	37.18	-30.98	46.61	74.00	-27.39	Peak	VERTICAL
9000.00	40.02	37.70	-30.52	47.20	74.00	-26.80	Peak	VERTICAL
11655.00	41.20	38.67	-28.63	51.24	74.00	-22.76	Peak	VERTICAL
14190.00	36.97	41.13	-27.16	50.94	74.00	-23.06	Peak	VERTICAL
17295.00	36.71	42.61	-26.80	52.52	74.00	-21.48	Peak	VERTICAL
Verdict: Pass								

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

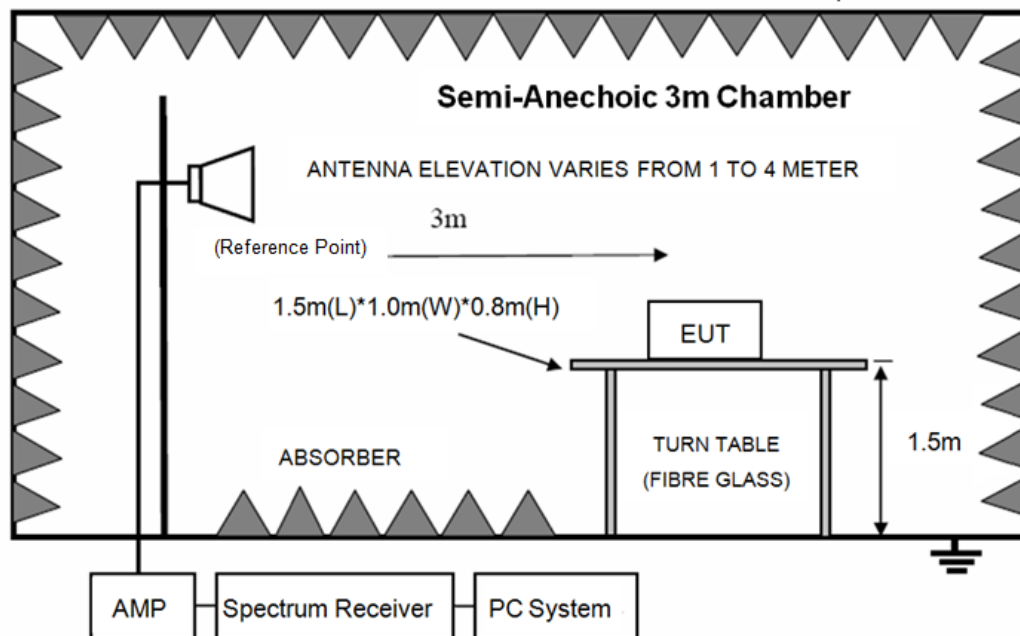
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

3. For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

4. Scan with all modes, the worst case was recorded in this report.

9. Band Edge Compliance

9.1. Block diagram of test setup



9.2. Limit

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/ MHz.
 - (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm / MHz.
 - (5) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
 - (6) The provisions of §15.205 apply to intentional radiators operating under this section.
- 27 dBm/MHz Limit=95.2+EIRP [dBm]=95.2-27=68.2 dBμV/m

9.3. Test procedure

Same with clause 8.3 except change investigated frequency range.

Remark: All restriction band have been tested, and only the worst case is shown in report.

9.4. Test result

Pass. (See below detailed test result)

Note1: As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit

Note2: Scan with all modes, the worst case was recorded in this report.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

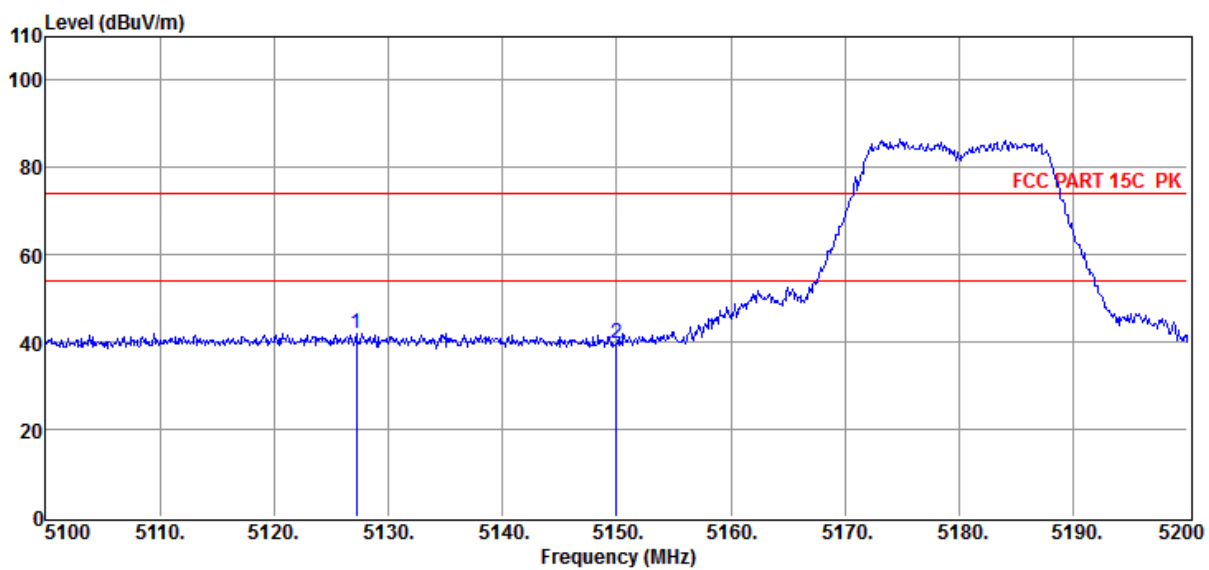
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5180MHz

Data: 41



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5127.20	40.49	33.13	-31.53	42.09	74.00	-31.91	Peak	HORIZONTAL
2	5150.00	38.11	33.17	-31.67	39.61	74.00	-34.39	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

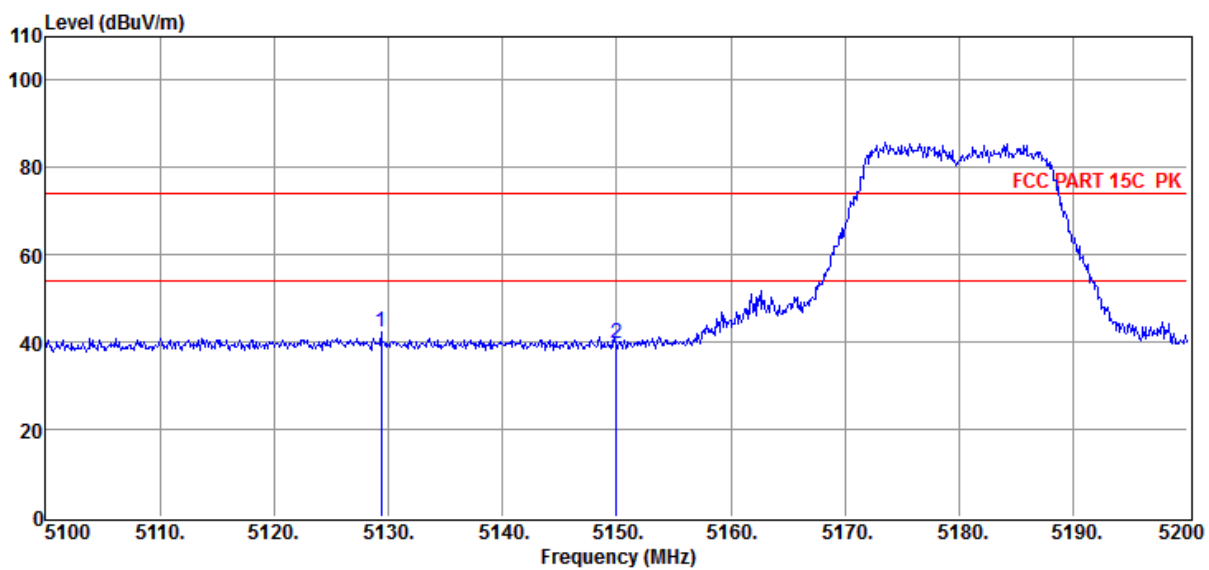
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5180MHz

Data: 42



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5129.40	40.57	33.13	-31.54	42.16	74.00	-31.84	Peak	VERTICAL
2	5150.00	38.03	33.17	-31.67	39.53	74.00	-34.47	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

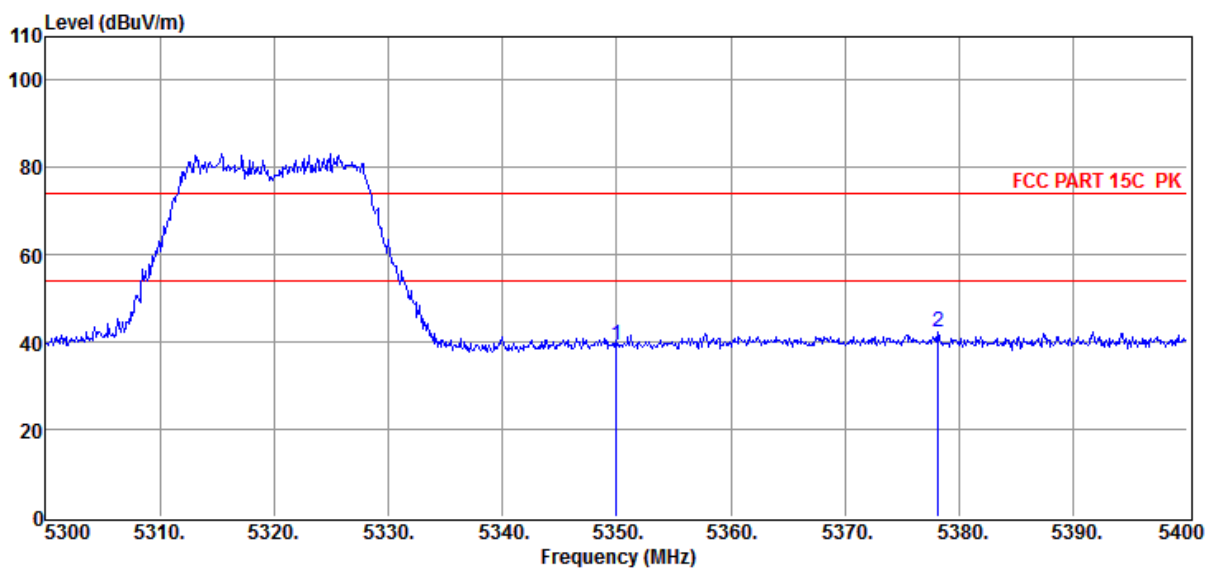
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5320MHz

Data: 43



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.77	33.53	-31.85	39.45	74.00	-34.55	Peak	VERTICAL
2	5378.20	40.41	33.58	-31.71	42.28	74.00	-31.72	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

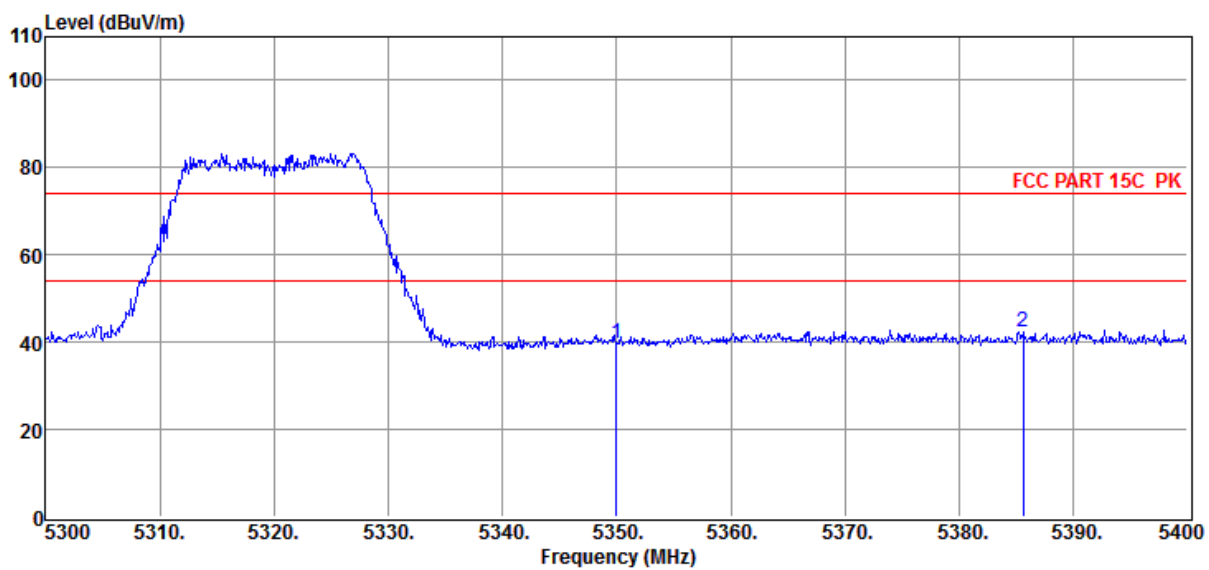
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5320MHz

Data: 44



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.93	33.53	-31.85	39.61	74.00	-34.39	Peak	HORIZONTAL
2	5385.60	40.41	33.59	-31.68	42.32	74.00	-31.68	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

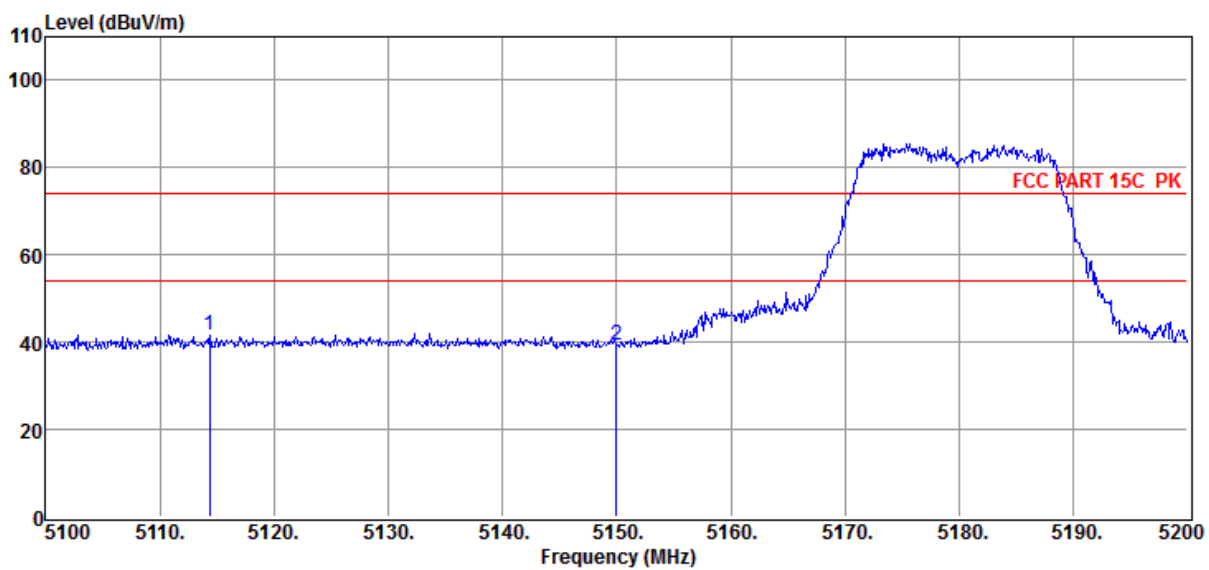
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5180MHz

Data: 45



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5114.40	39.88	33.11	-31.45	41.54	74.00	-32.46	Peak	VERTICAL
2	5150.00	37.89	33.17	-31.67	39.39	74.00	-34.61	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

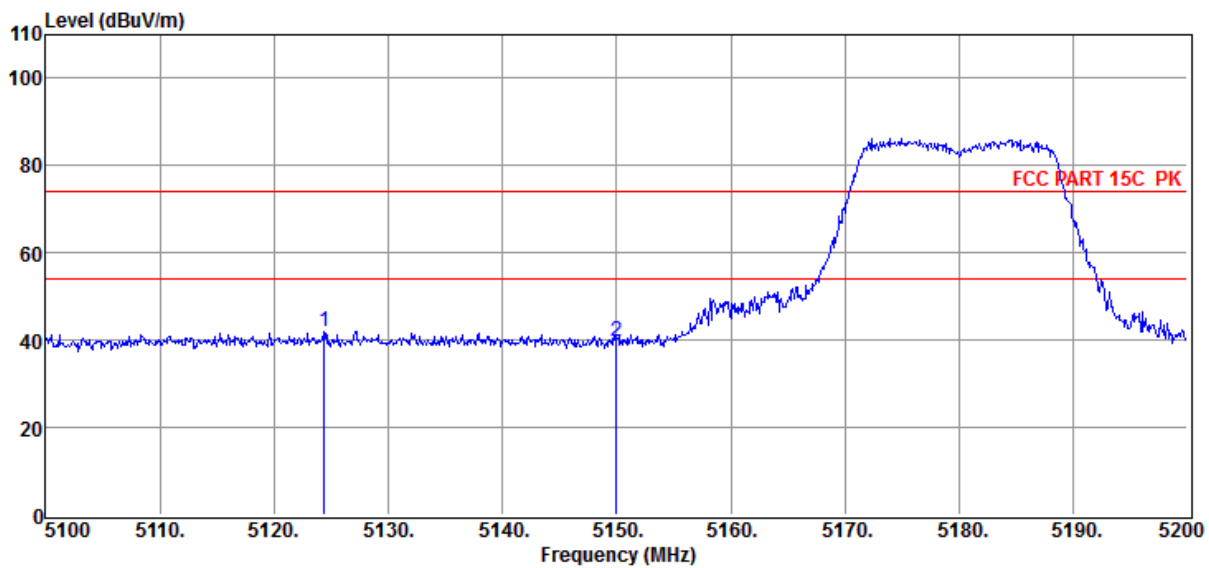
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5180MHz

Data: 46



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5124.40	40.29	33.12	-31.51	41.90	74.00	-32.10	Peak	HORIZONTAL
2	5150.00	38.08	33.17	-31.67	39.58	74.00	-34.42	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

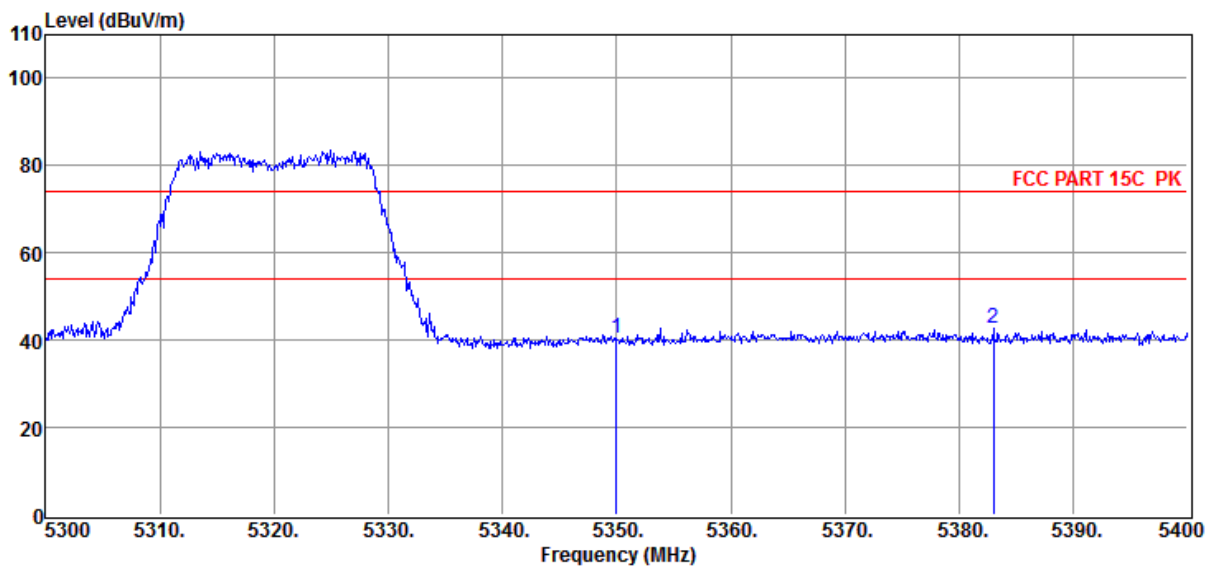
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5320MHz

Data: 47



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	38.88	33.53	-31.85	40.56	74.00	-33.44	Peak	HORIZONTAL
2	5383.00	40.68	33.59	-31.69	42.58	74.00	-31.42	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

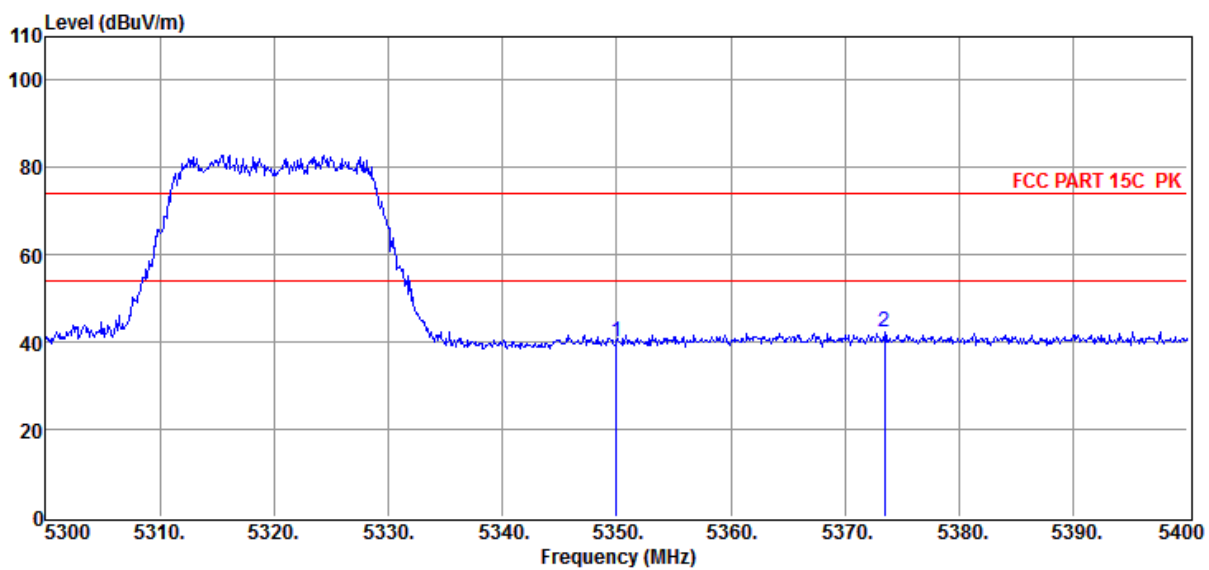
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5320MHz

Data: 48



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	38.30	33.53	-31.85	39.98	74.00	-34.02	Peak	VERTICAL
2	5373.50	40.45	33.57	-31.74	42.28	74.00	-31.72	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

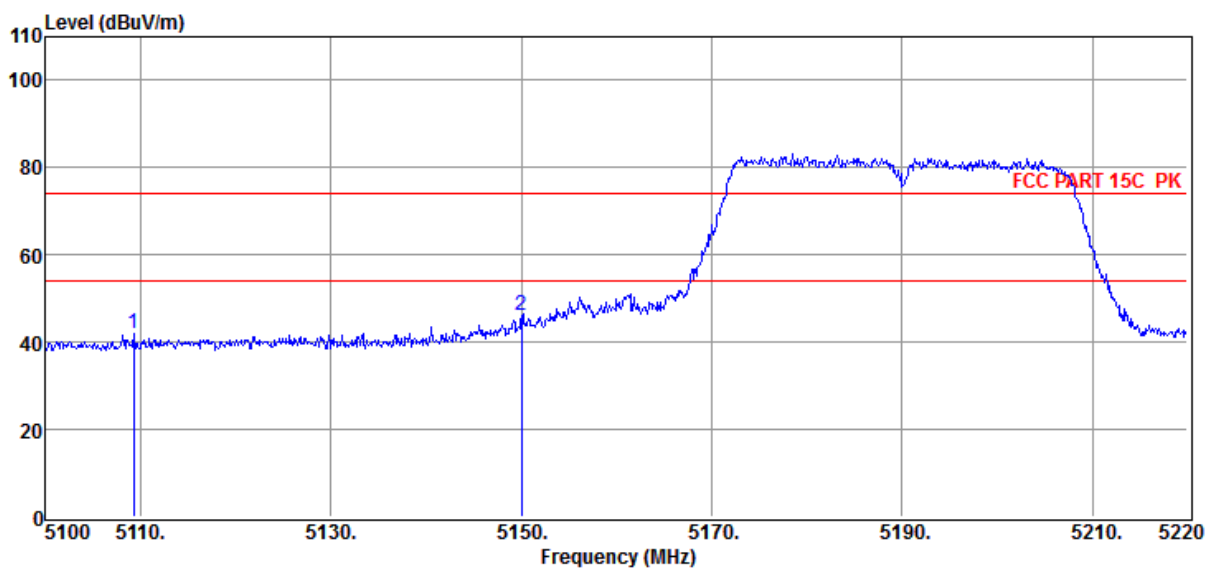
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5190MHz

Data: 49



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5109.24	40.14	33.10	-31.42	41.82	74.00	-32.18	Peak	HORIZONTAL
2	5150.00	44.64	33.17	-31.67	46.14	74.00	-27.86	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

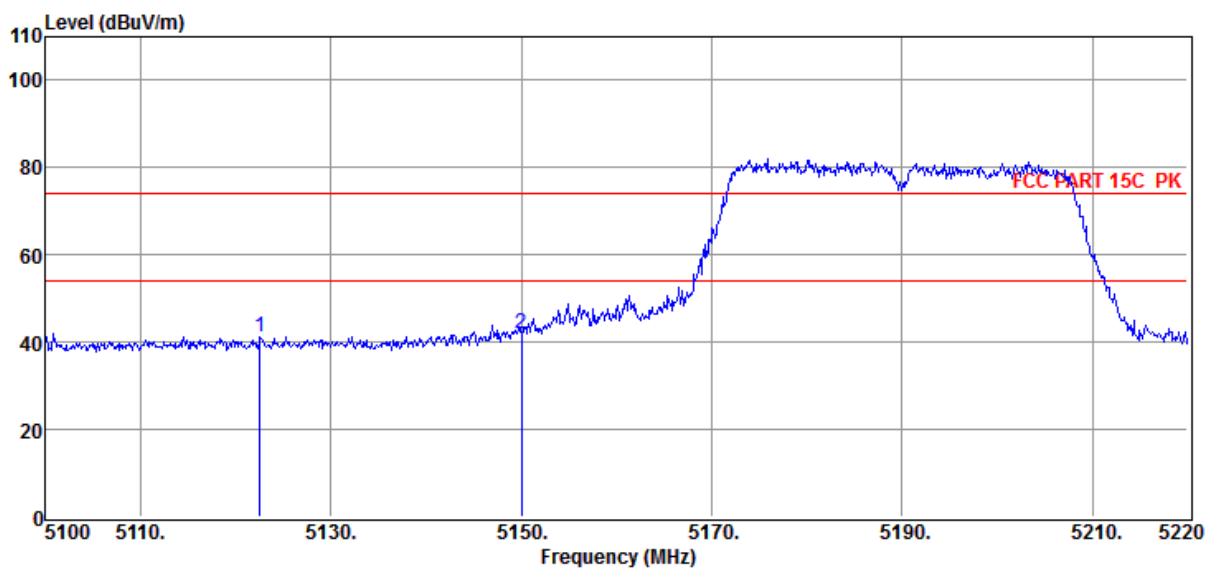
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5190MHz

Data: 50



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5122.56	39.43	33.12	-31.50	41.05	74.00	-32.95	Peak	VERTICAL
2	5150.00	40.42	33.17	-31.67	41.92	74.00	-32.08	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

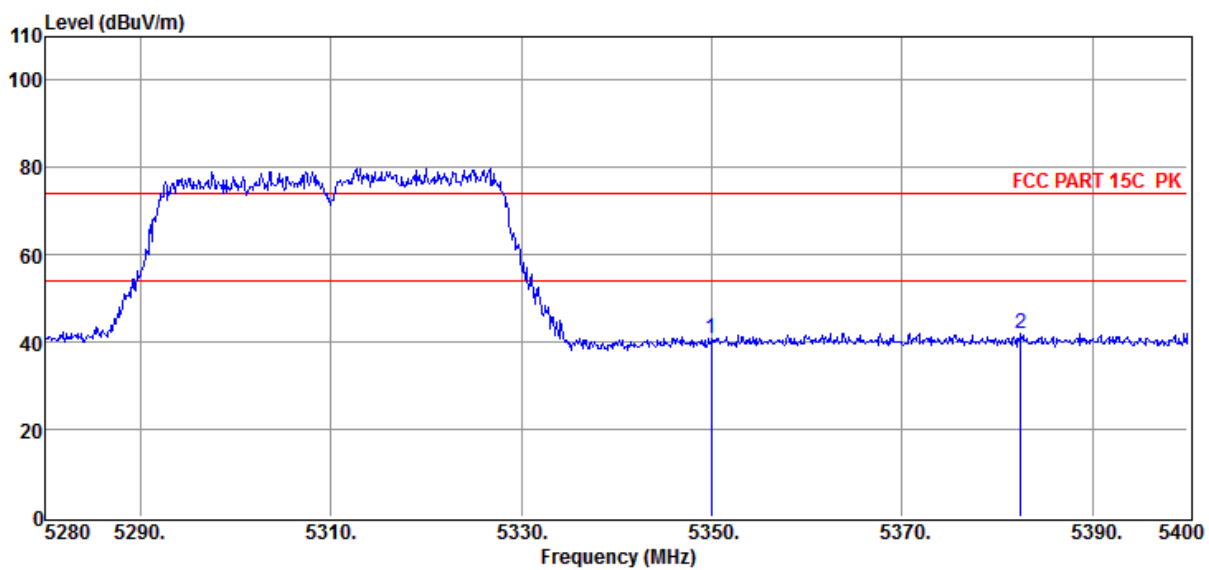
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5310MHz

Data: 51



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.05	33.53	-31.85	40.73	74.00	-33.27	Peak	VERTICAL
2	5382.48	39.99	33.59	-31.69	41.89	74.00	-32.11	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

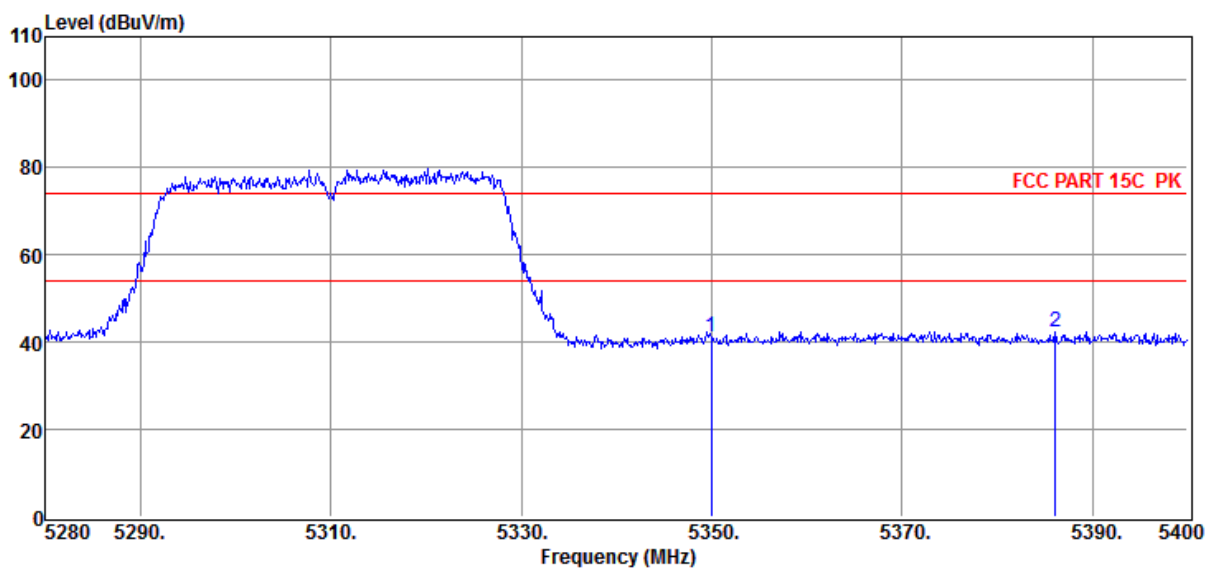
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5310MHz

Data: 52



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.62	33.53	-31.85	41.30	74.00	-32.70	Peak	HORIZONTAL
2	5386.08	40.38	33.59	-31.68	42.29	74.00	-31.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

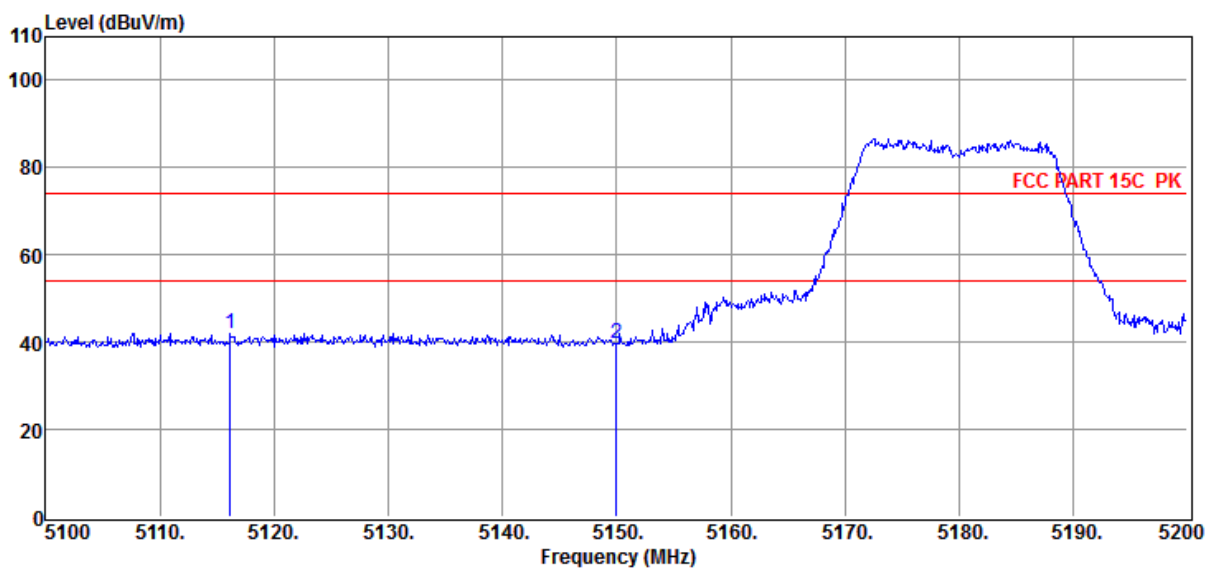
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5180MHz

Data: 53



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5116.20	40.46	33.11	-31.46	42.11	74.00	-31.89	Peak	HORIZONTAL
2	5150.00	38.24	33.17	-31.67	39.74	74.00	-34.26	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

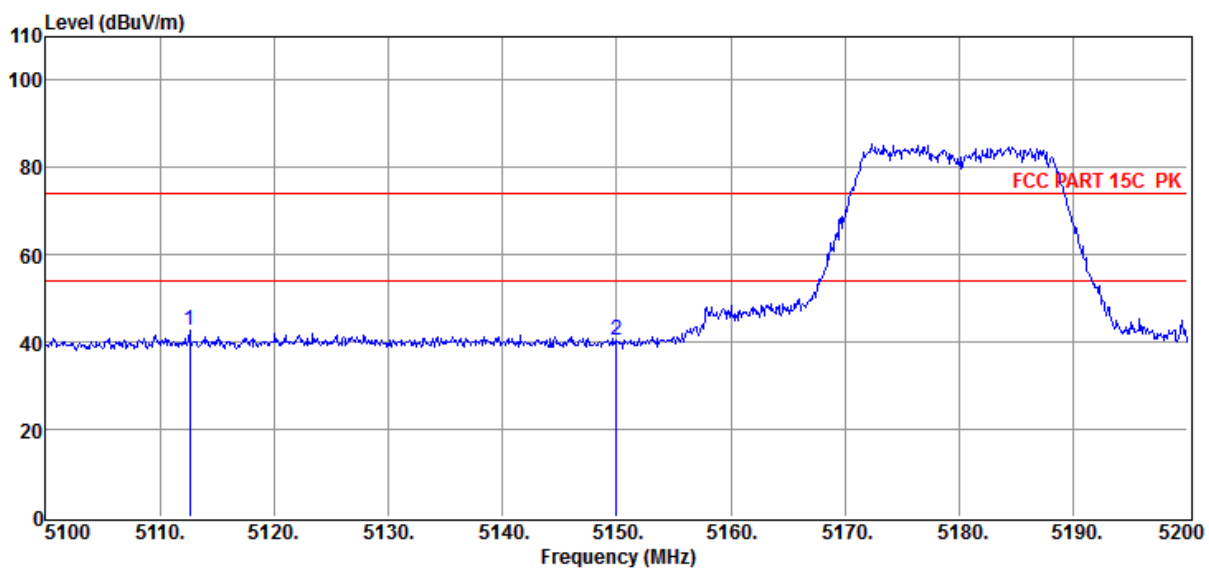
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5180MHz

Data: 54



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5112.60	40.88	33.10	-31.44	42.54	74.00	-31.46	Peak	VERTICAL
2	5150.00	38.82	33.17	-31.67	40.32	74.00	-33.68	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

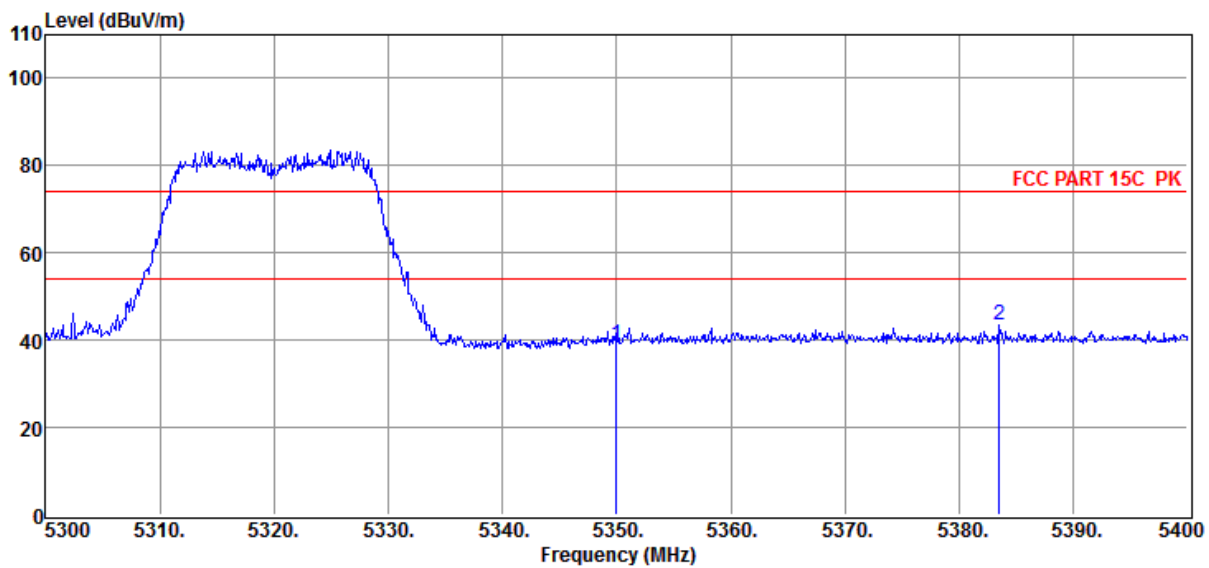
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5320MHz

Data: 55



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.26	33.53	-31.85	38.94	74.00	-35.06	Peak	VERTICAL
2	5383.50	41.40	33.59	-31.69	43.30	74.00	-30.70	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

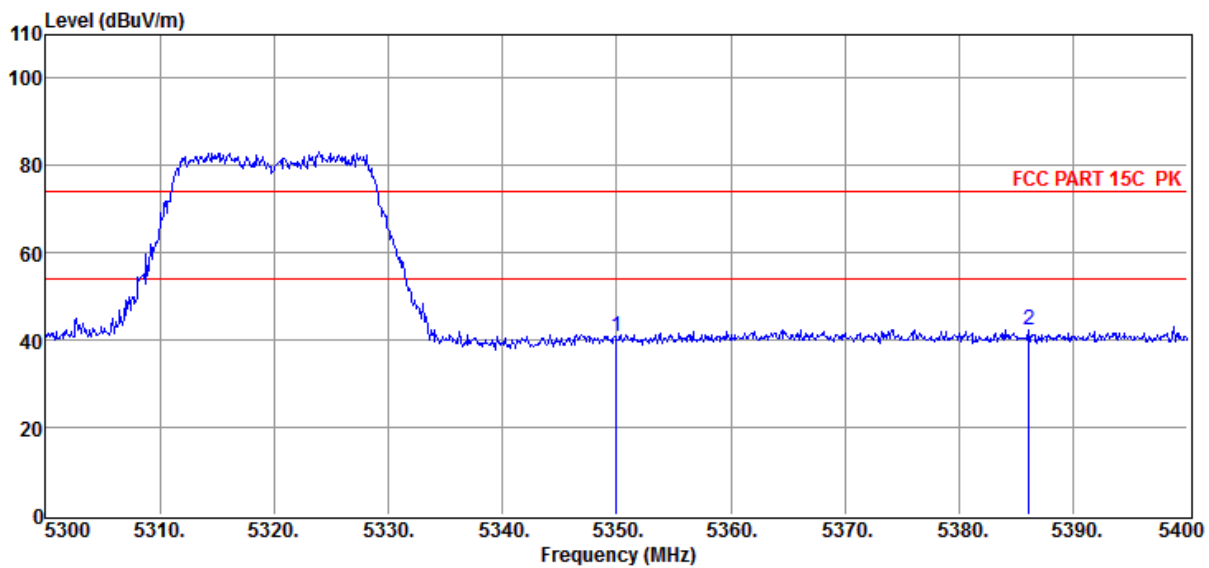
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5320MHz

Data: 56



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.08	33.53	-31.85	40.76	74.00	-33.24	Peak	HORIZONTAL
2	5386.10	40.43	33.59	-31.68	42.34	74.00	-31.66	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

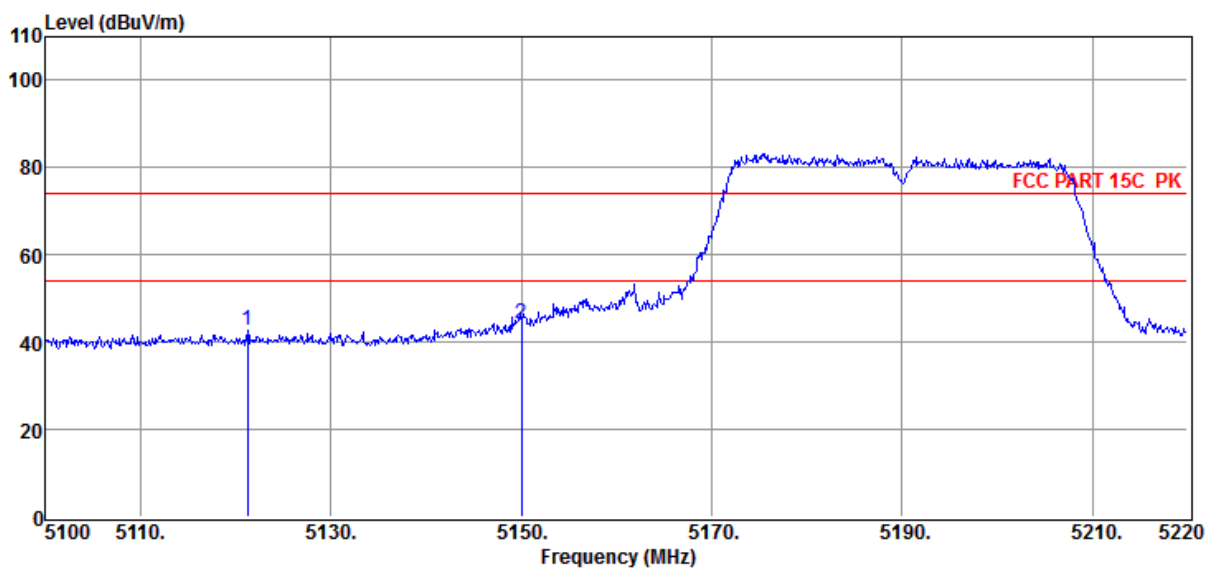
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5190MHz

Data: 57



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5121.24	40.90	33.12	-31.49	42.53	74.00	-31.47	Peak	HORIZONTAL
2	5150.00	42.84	33.17	-31.67	44.34	74.00	-29.66	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

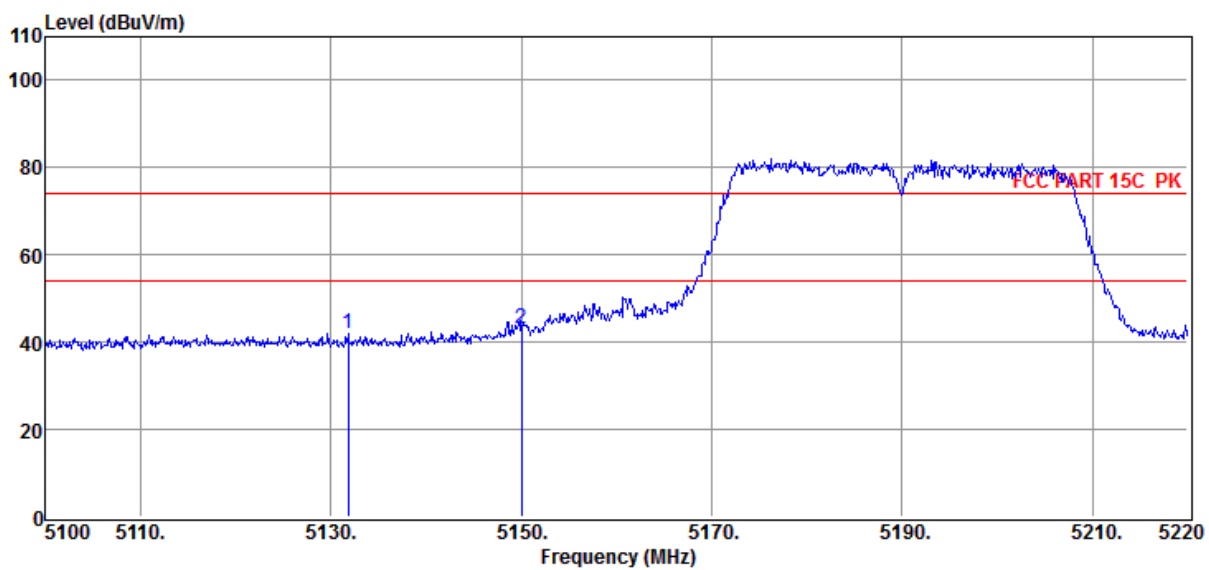
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5190MHz

Data: 58



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5131.80	40.51	33.14	-31.56	42.09	74.00	-31.91	Peak	VERTICAL
2	5150.00	41.60	33.17	-31.67	43.10	74.00	-30.90	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

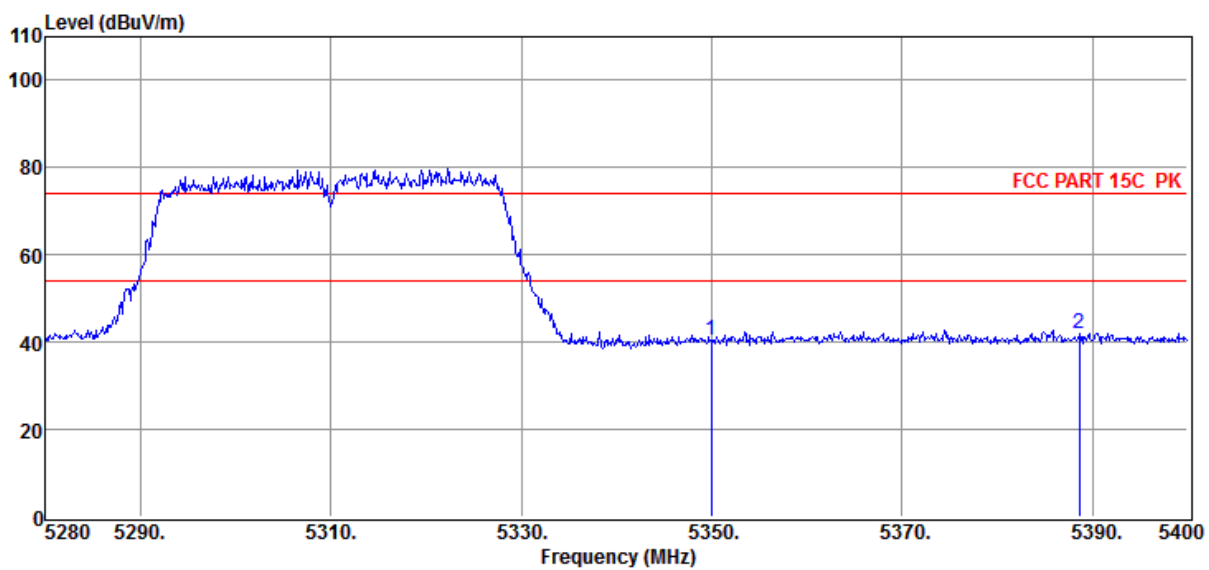
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5310MHz

Data: 59



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	38.61	33.53	-31.85	40.29	74.00	-33.71	Peak	VERTICAL
2	5388.60	40.19	33.60	-31.66	42.13	74.00	-31.87	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

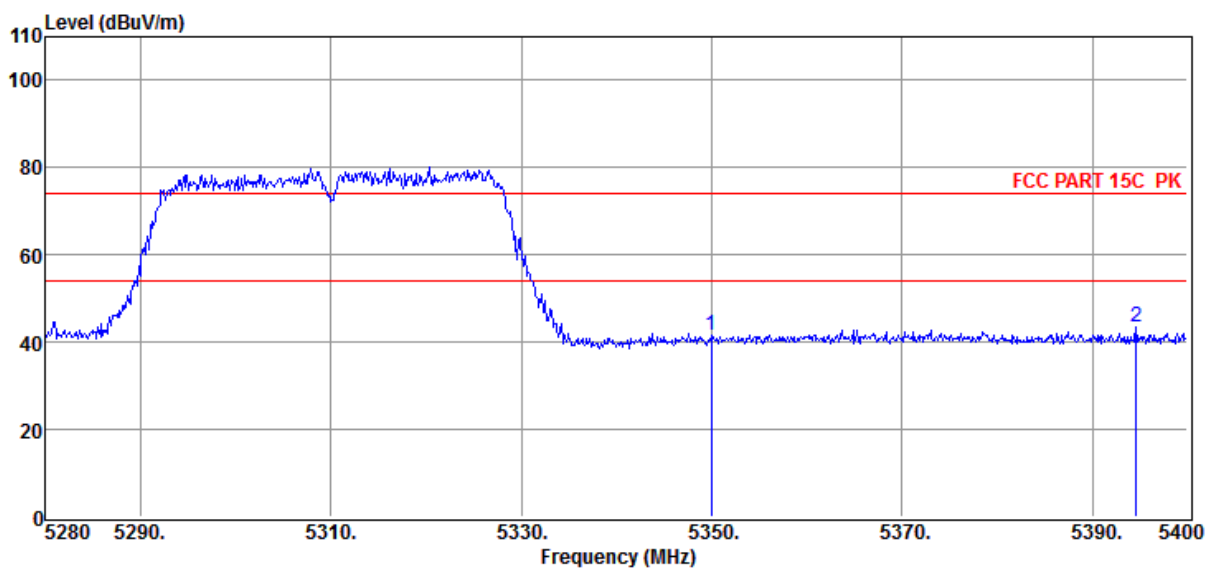
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5310MHz

Data: 60



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	39.92	33.53	-31.85	41.60	74.00	-32.40	Peak	HORIZONTAL
2	5394.60	41.46	33.61	-31.64	43.43	74.00	-30.57	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

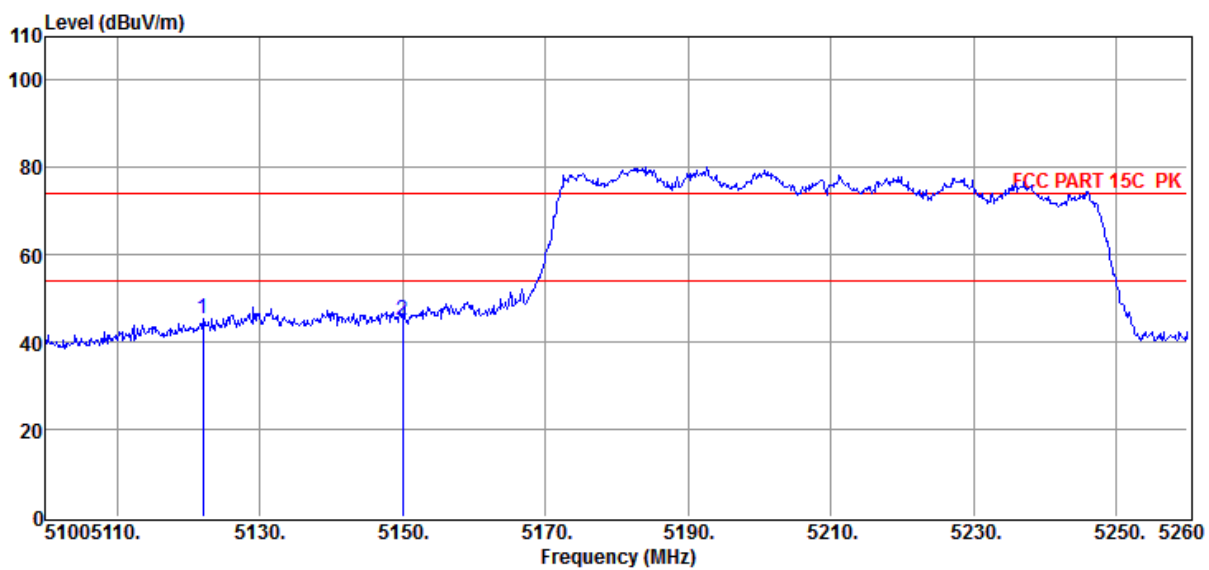
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5210MHz

Data: 61



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5122.08	43.77	33.12	-31.50	45.39	74.00	-28.61	Peak	HORIZONTAL
2	5150.00	43.59	33.17	-31.67	45.09	74.00	-28.91	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

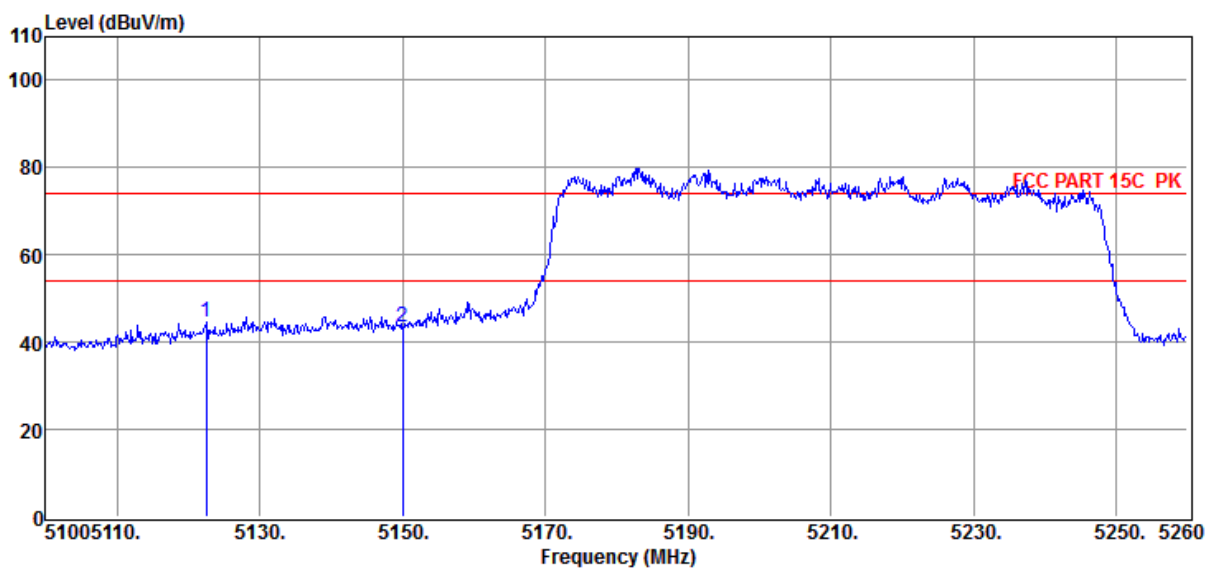
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5210MHz

Data: 62



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5122.56	42.88	33.12	-31.50	44.50	74.00	-29.50	Peak	VERTICAL
2	5150.00	42.06	33.17	-31.67	43.56	74.00	-30.44	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

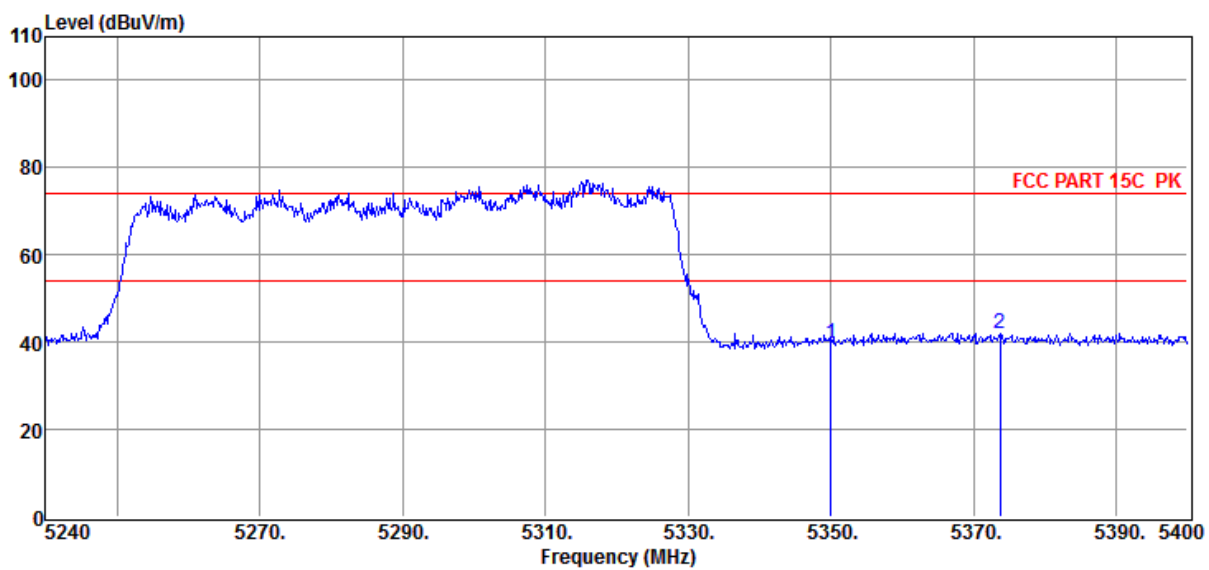
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5290MHz

Data: 63



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	37.82	33.53	-31.85	39.50	74.00	-34.50	Peak	VERTICAL
2	5373.76	40.05	33.57	-31.74	41.88	74.00	-32.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

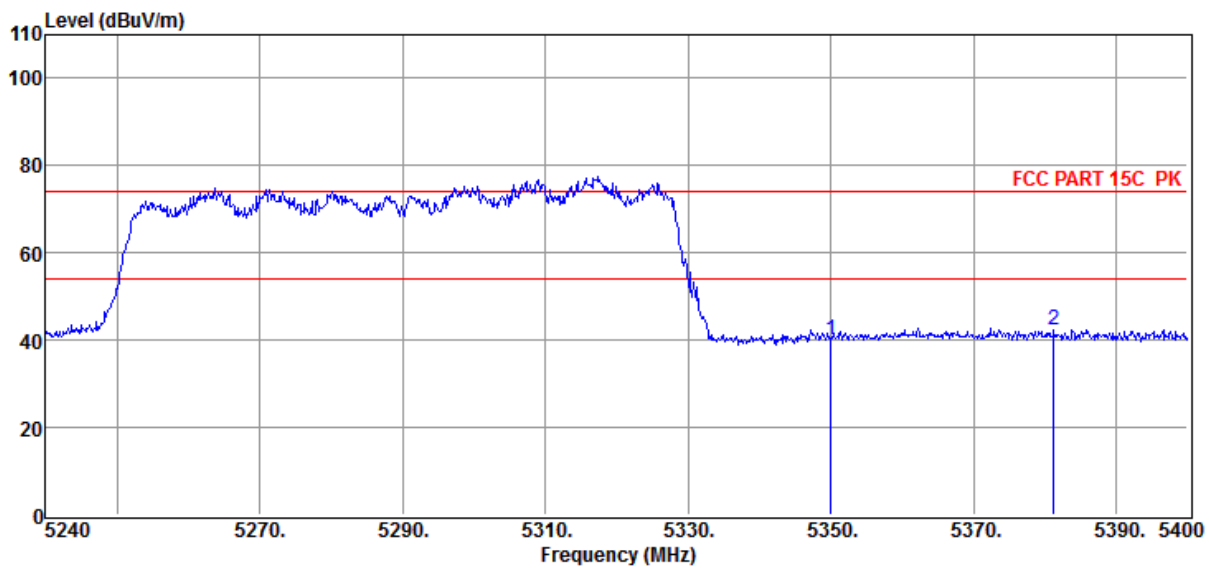
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5290MHz

Data: 64



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.00	38.34	33.53	-31.85	40.02	74.00	-33.98	Peak	HORIZONTAL
2	5381.28	40.60	33.59	-31.70	42.49	74.00	-31.51	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

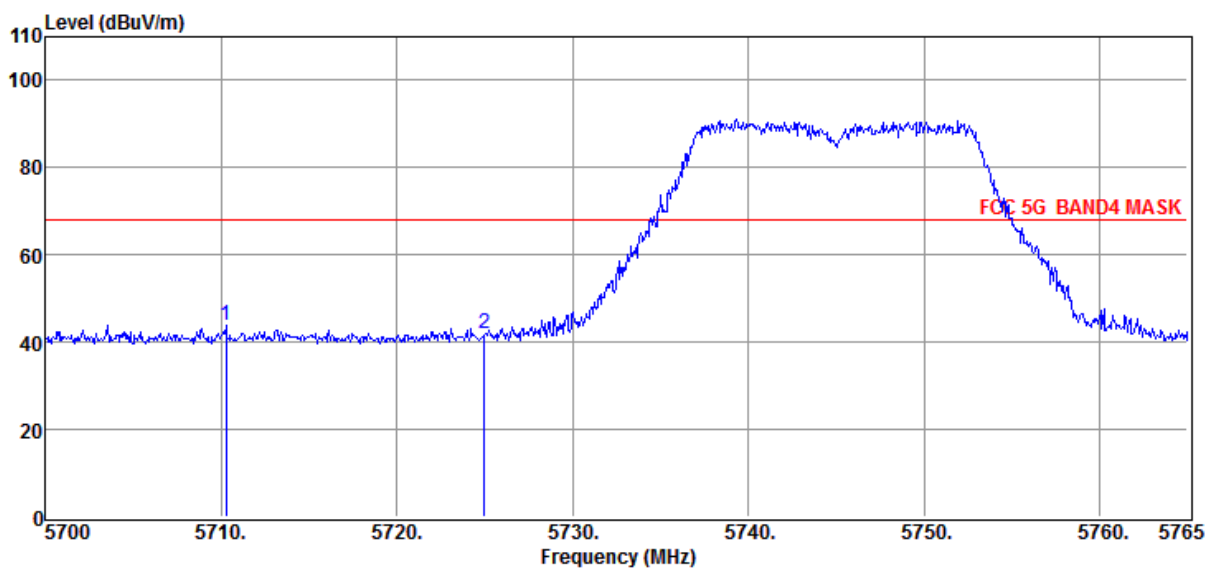
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5745MHz

Data: 65



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5710.27	40.96	34.43	-31.57	43.82	68.20	-24.38	Peak	HORIZONTAL
2	5725.00	39.26	34.47	-31.69	42.04	68.20	-26.16	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

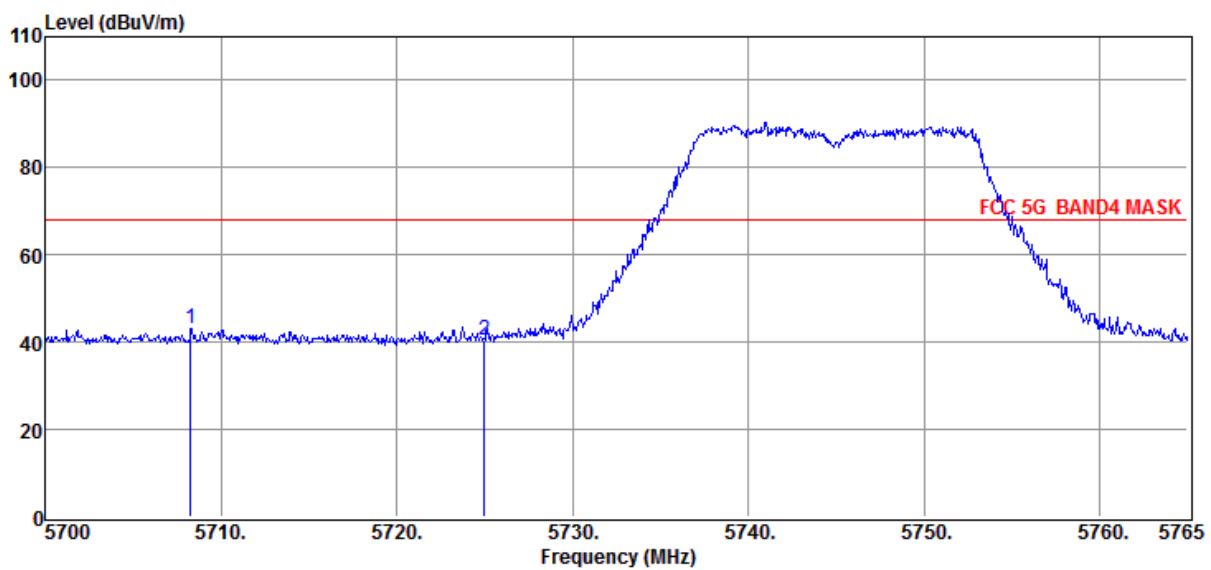
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5745MHz

Data: 66



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5708.26	40.40	34.42	-31.55	43.27	68.20	-24.93	Peak	VERTICAL
2	5725.00	37.82	34.47	-31.69	40.60	68.20	-27.60	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

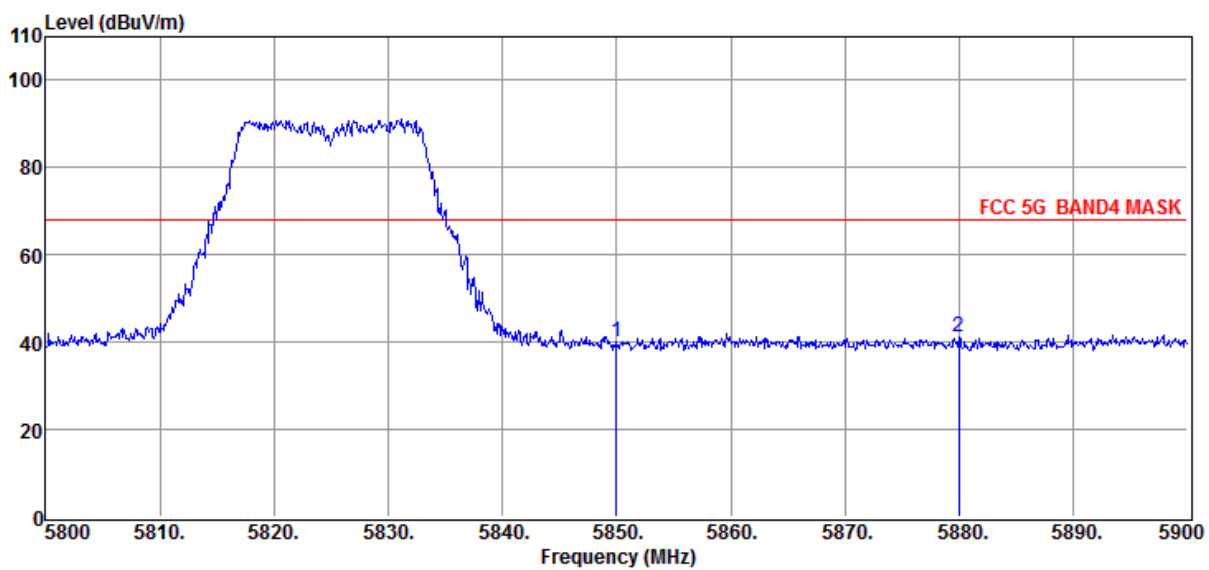
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5825MHz

Data: 67



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	37.52	34.85	-32.17	40.20	68.20	-28.00	Peak	HORIZONTAL
2	5880.00	38.03	34.94	-31.81	41.16	68.20	-27.04	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

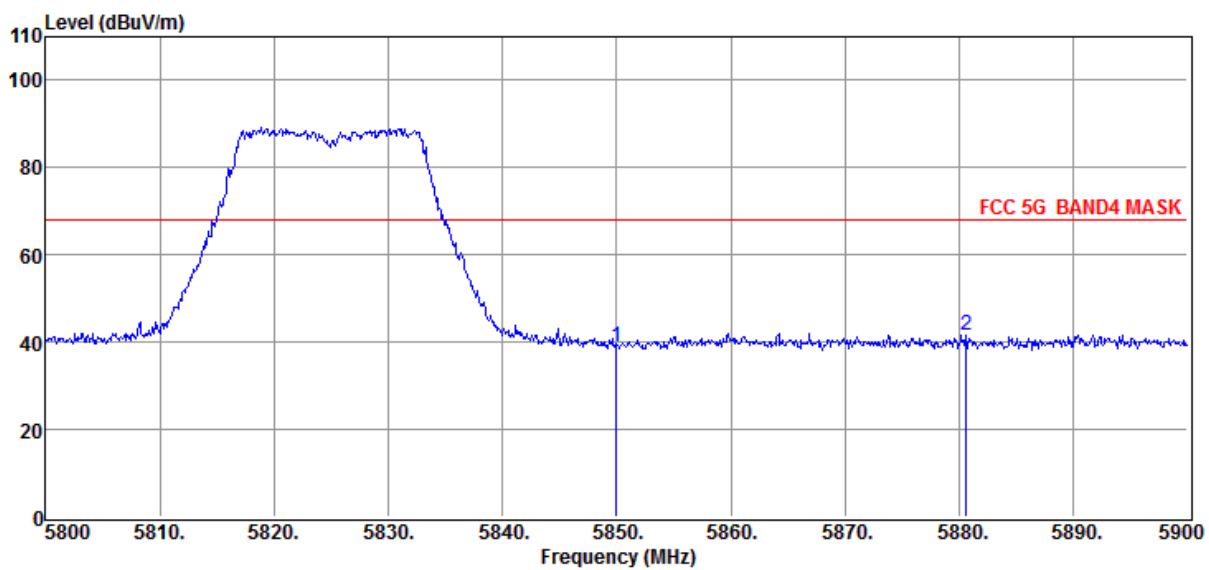
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11A 6M 5825MHz

Data: 68



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.38	34.85	-32.17	39.06	68.20	-29.14	Peak	VERTICAL
2	5880.60	38.32	34.94	-31.80	41.46	68.20	-26.74	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

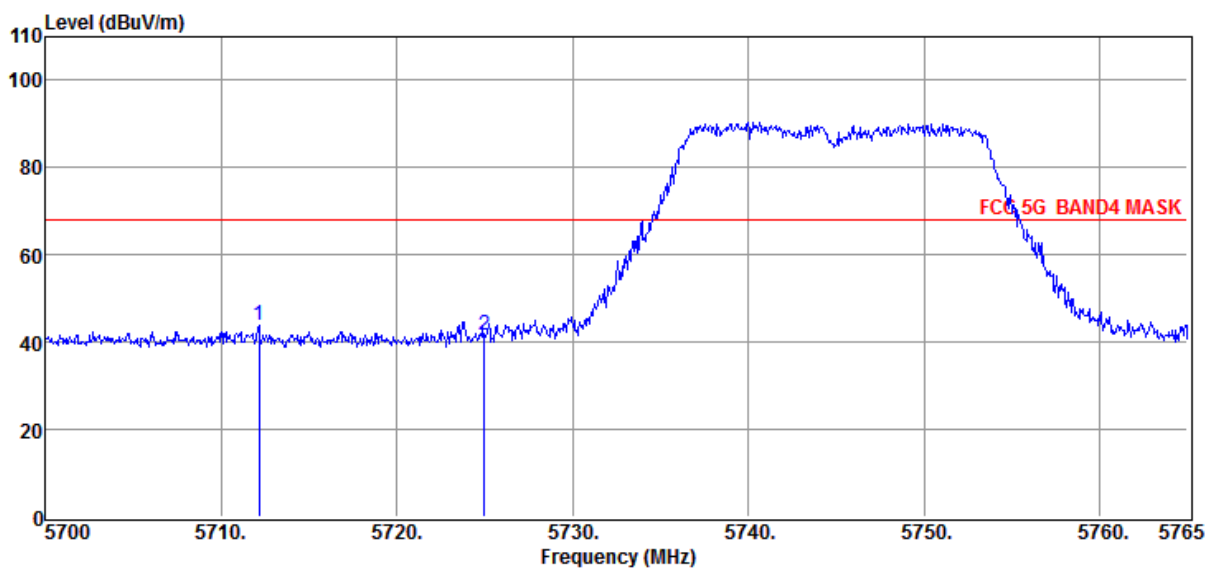
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5745MHz

Data: 69



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5712.16	40.82	34.44	-31.58	43.68	68.20	-24.52	Peak	HORIZONTAL
2	5725.00	38.84	34.47	-31.69	41.62	68.20	-26.58	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

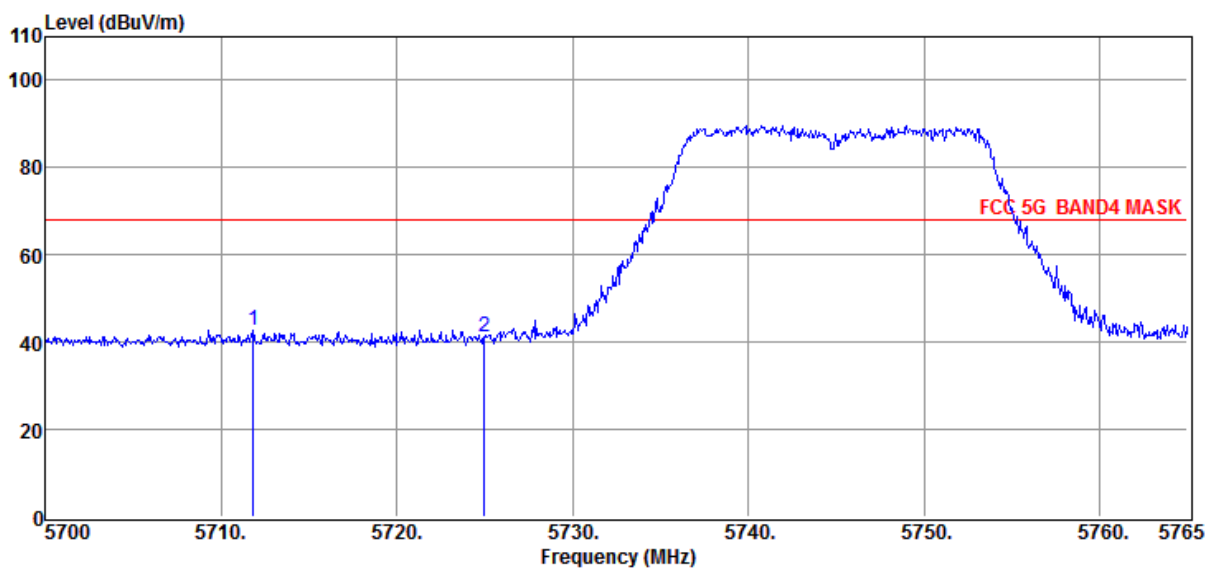
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5745MHz

Data: 70



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5711.83	39.97	34.44	-31.58	42.83	68.20	-25.37	Peak	VERTICAL
2	5725.00	38.58	34.47	-31.69	41.36	68.20	-26.84	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

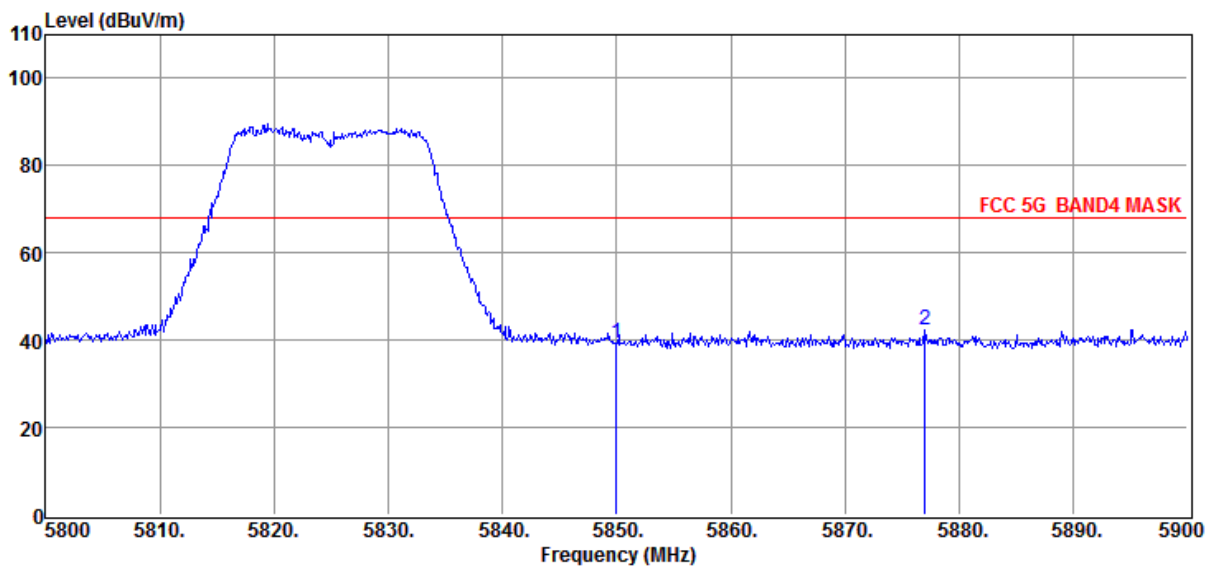
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5825MHz

Data: 71



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.55	34.85	-32.17	39.23	68.20	-28.97	Peak	VERTICAL
2	5877.00	39.30	34.93	-31.85	42.38	68.20	-25.82	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

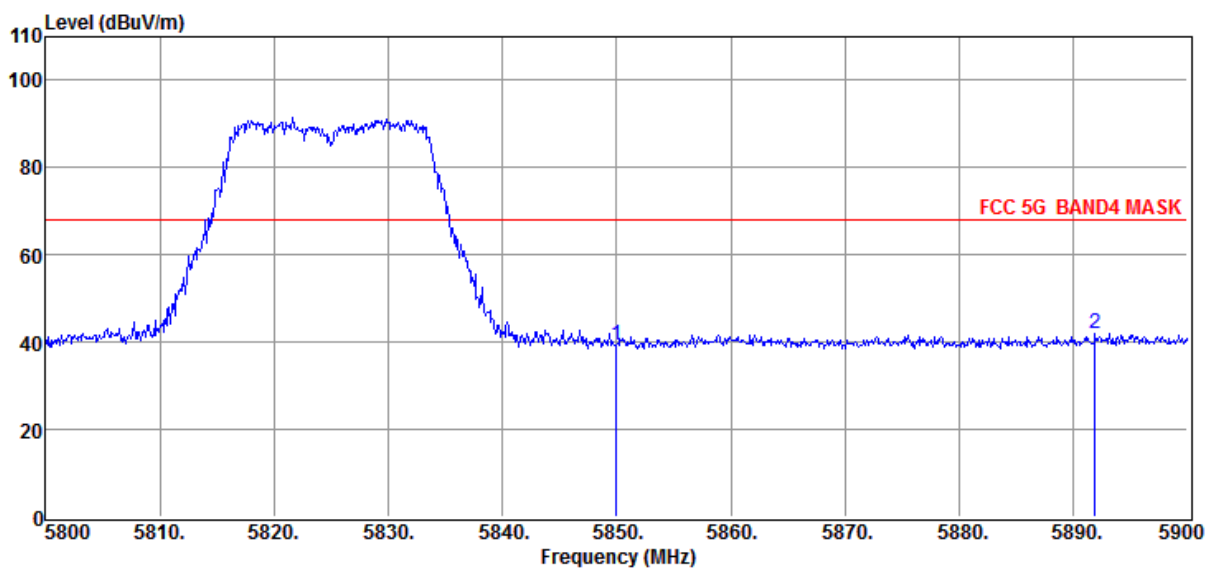
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N20 MCS0 5825MHz

Data: 72



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.74	34.85	-32.17	39.42	68.20	-28.78	Peak	HORIZONTAL
2	5891.90	38.75	34.98	-31.67	42.06	68.20	-26.14	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

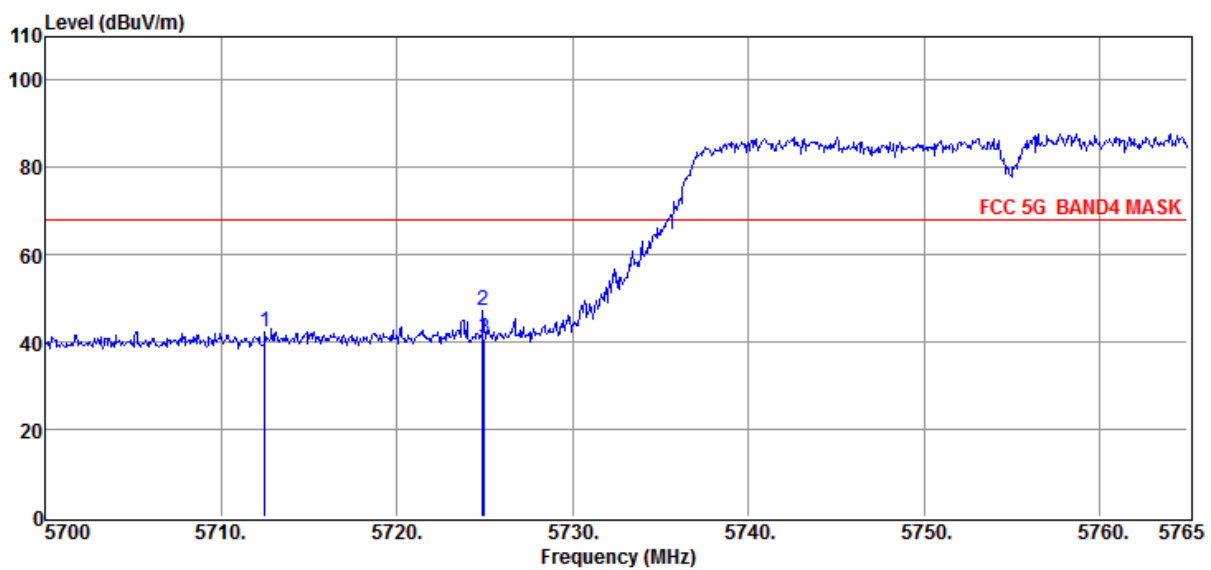
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5755MHz

Data: 73



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5712.48	39.44	34.44	-31.58	42.30	68.20	-25.90	Peak	VERTICAL
2	5724.90	44.38	34.47	-31.69	47.16	68.20	-21.04	Peak	VERTICAL
3	5725.00	38.09	34.47	-31.69	40.87	68.20	-27.33	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

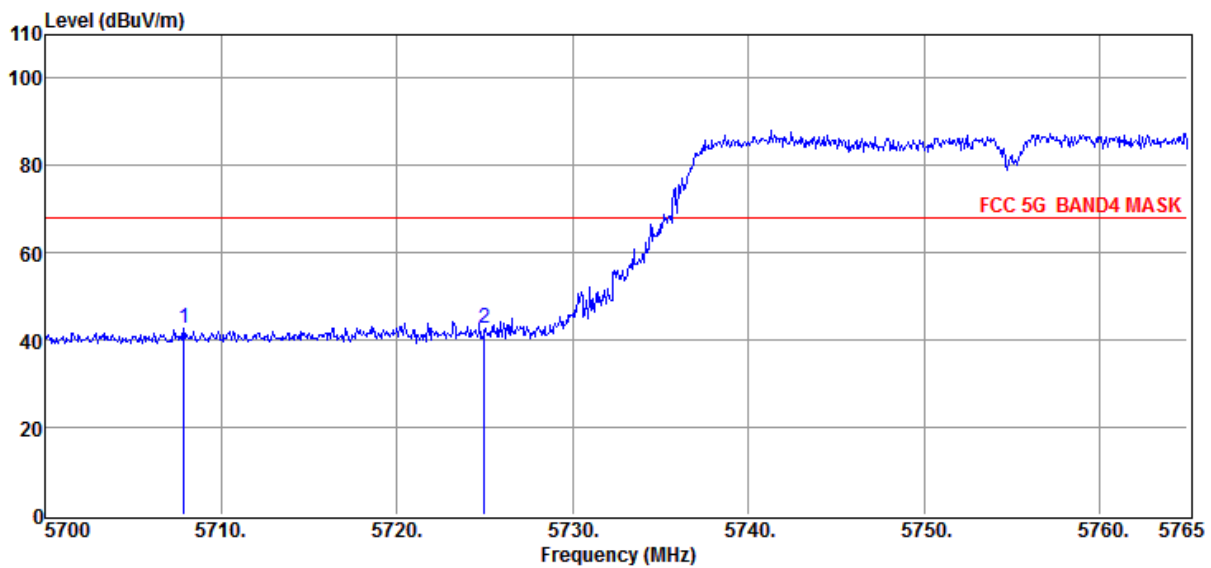
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5755MHz

Data: 74



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5707.87	39.75	34.42	-31.55	42.62	68.20	-25.58	Peak	HORIZONTAL
2	5725.00	39.99	34.47	-31.69	42.77	68.20	-25.43	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

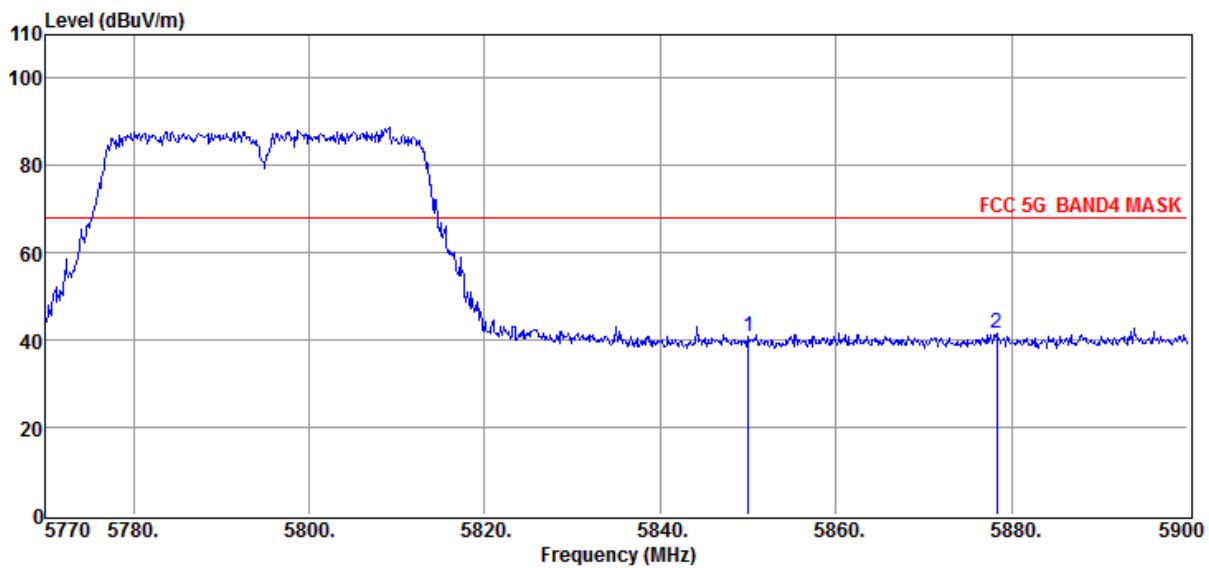
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5795MHz

Data: 75



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	38.05	34.85	-32.17	40.73	68.20	-27.47	Peak	HORIZONTAL
2	5878.29	38.51	34.93	-31.83	41.61	68.20	-26.59	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

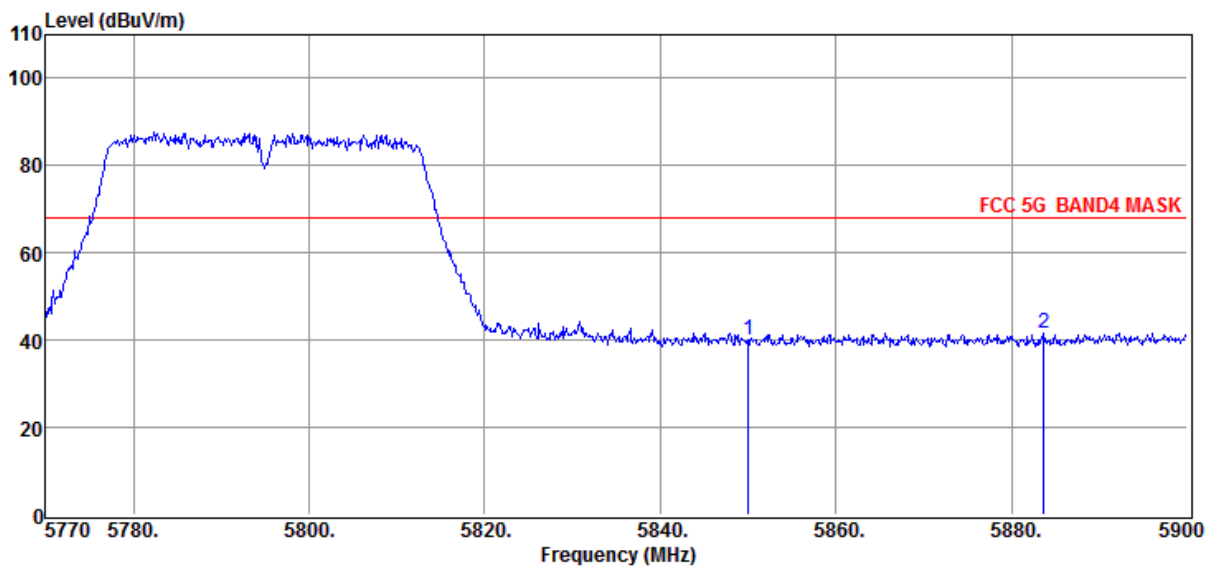
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11N40 MCS0 5795MHz

Data: 76



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	37.21	34.85	-32.17	39.89	68.20	-28.31	Peak	VERTICAL
2	5883.62	38.34	34.95	-31.77	41.52	68.20	-26.68	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

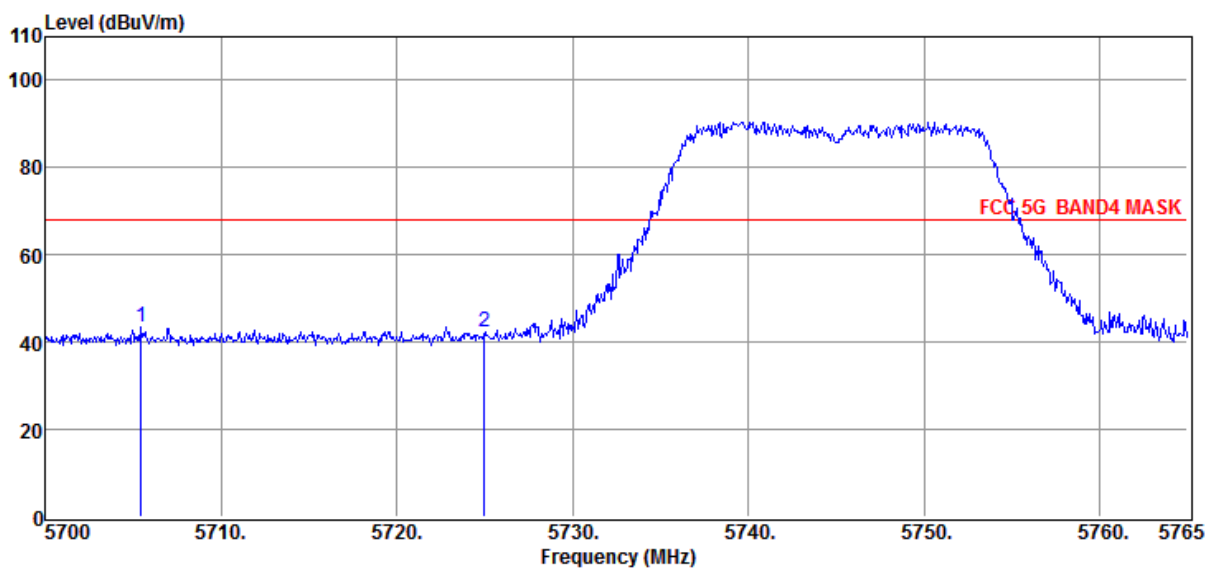
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5745MHz

Data: 77



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5705.46	40.52	34.42	-31.53	43.41	68.20	-24.79	Peak	HORIZONTAL
2	5725.00	39.66	34.47	-31.69	42.44	68.20	-25.76	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

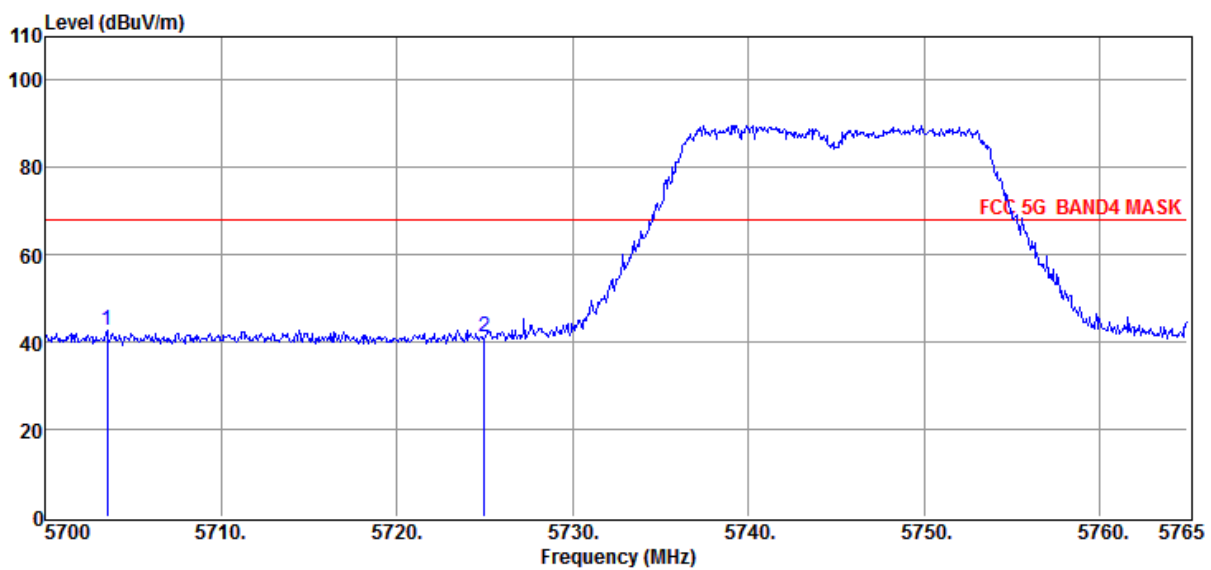
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5745MHz

Data: 78



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5703.51	39.73	34.41	-31.51	42.63	68.20	-25.57	Peak	VERTICAL
2	5725.00	38.35	34.47	-31.69	41.13	68.20	-27.07	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

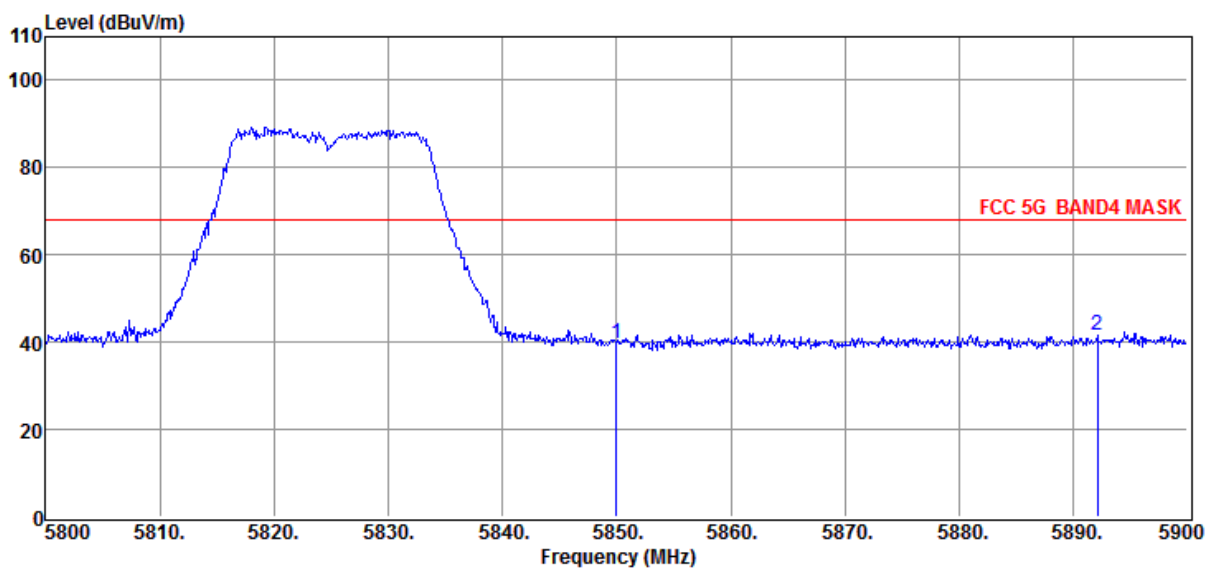
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5825MHz

Data: 79



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	37.00	34.85	-32.17	39.68	68.20	-28.52	Peak	VERTICAL
2	5892.10	38.11	34.98	-31.66	41.43	68.20	-26.77	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

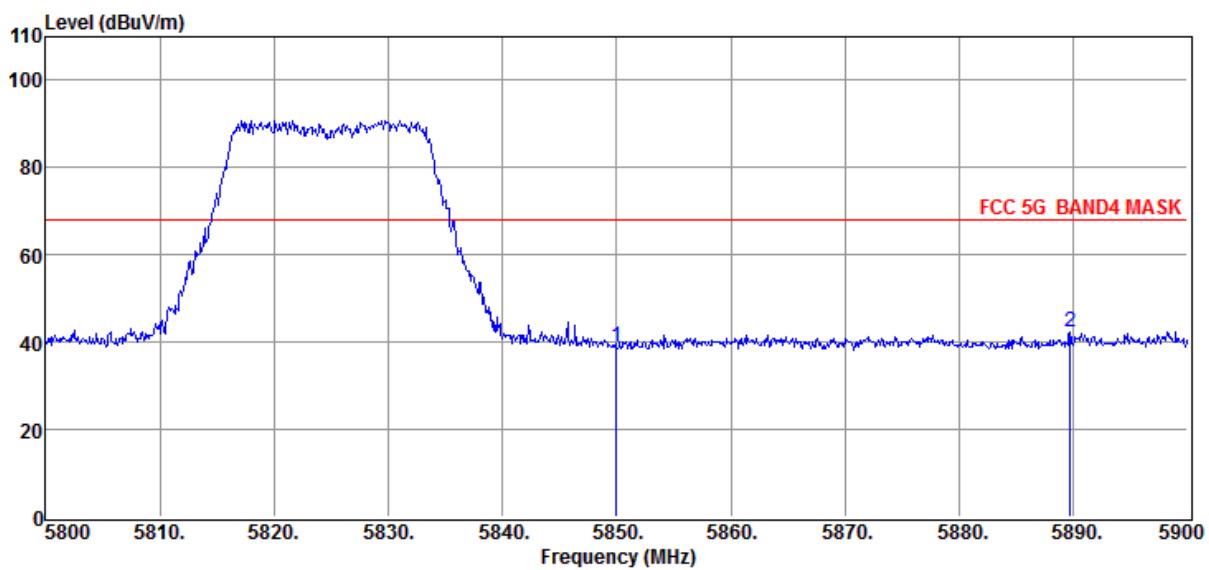
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC20 MCS0 5825MHz

Data: 80



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.17	34.85	-32.17	38.85	68.20	-29.35	Peak	HORIZONTAL
2	5889.70	38.95	34.97	-31.69	42.23	68.20	-25.97	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

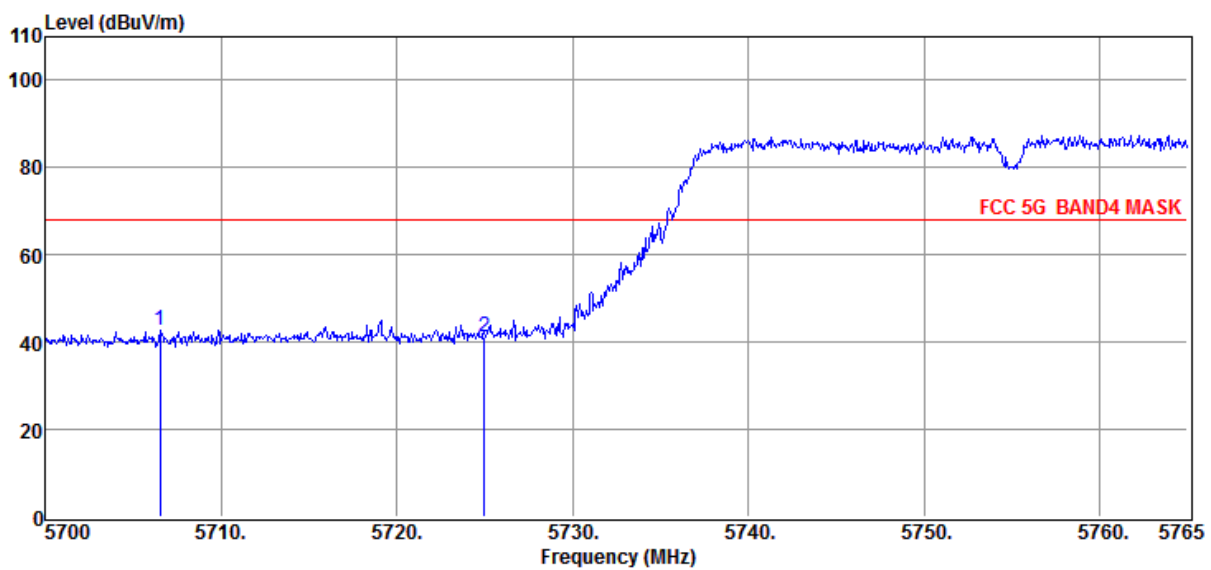
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5755MHz

Data: 81



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5706.50	39.82	34.42	-31.53	42.71	68.20	-25.49	Peak	VERTICAL
2	5725.00	38.39	34.47	-31.69	41.17	68.20	-27.03	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

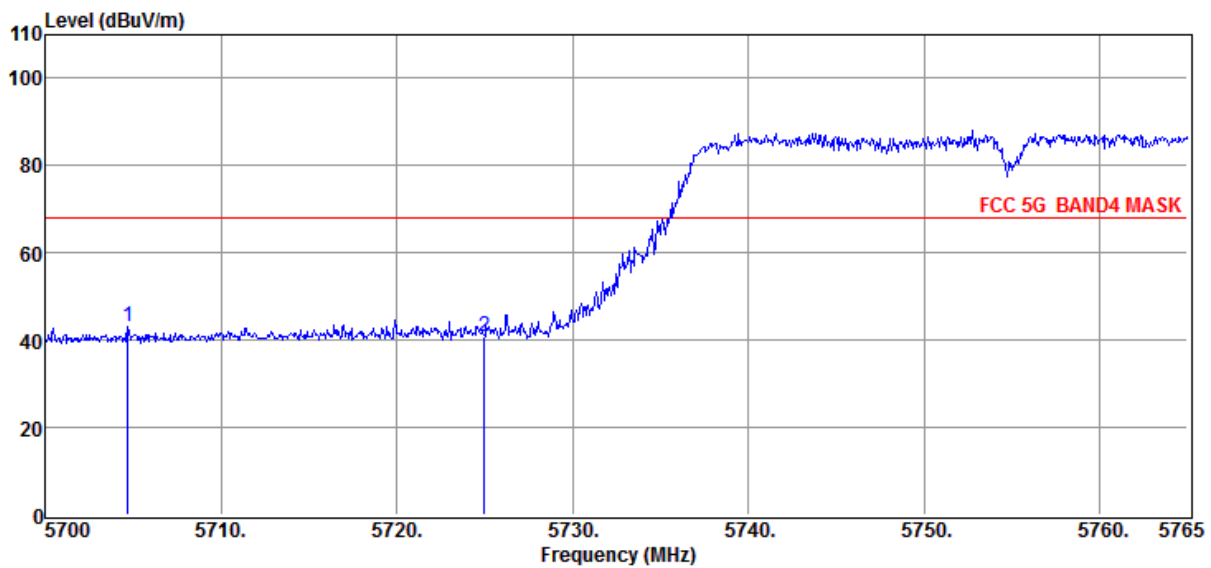
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5755MHz

Data: 82



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5704.68	40.05	34.41	-31.52	42.94	68.20	-25.26	Peak	HORIZONTAL
2	5725.00	38.15	34.47	-31.69	40.93	68.20	-27.27	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

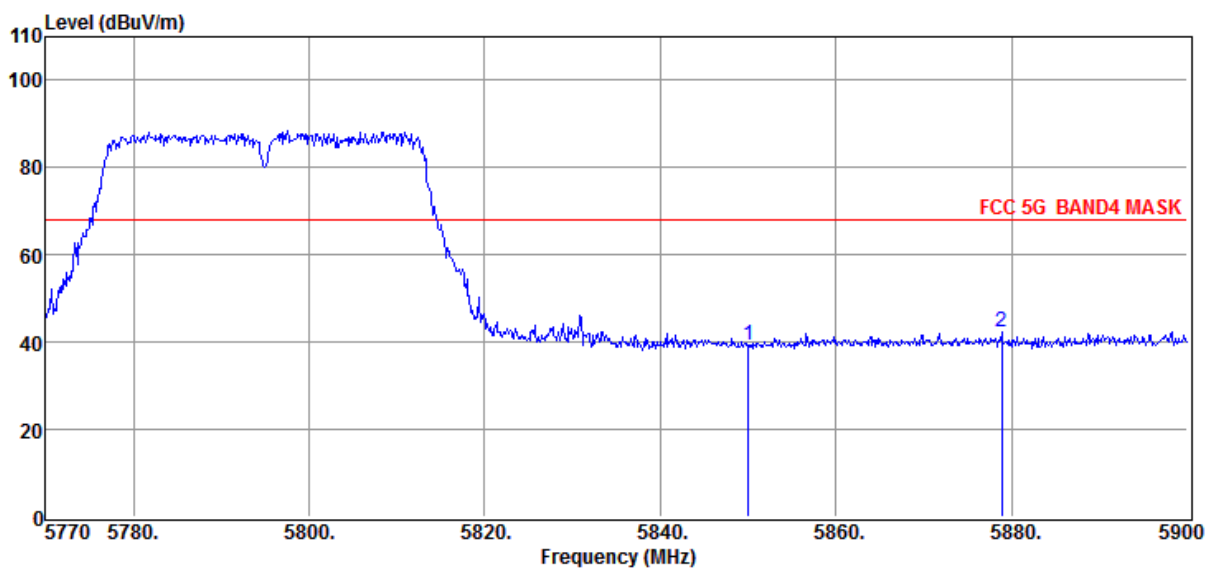
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5795MHz

Data: 83



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.75	34.85	-32.17	39.43	68.20	-28.77	Peak	HORIZONTAL
2	5878.81	39.31	34.94	-31.82	42.43	68.20	-25.77	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

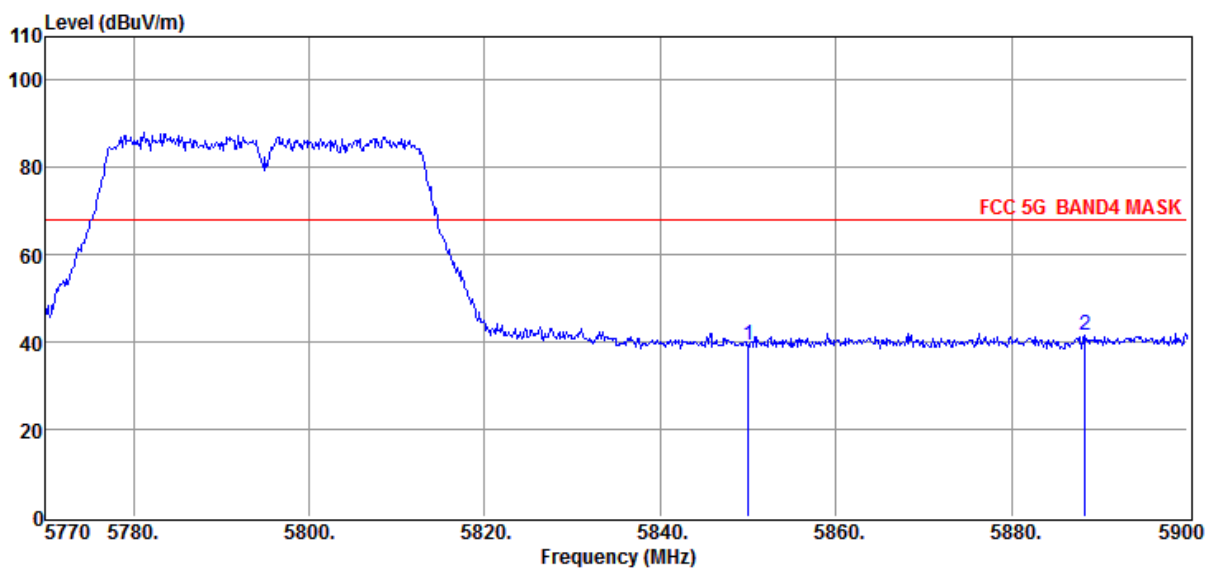
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC40 MCS0 5795MHz

Data: 84



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5850.00	36.47	34.85	-32.17	39.15	68.20	-29.05	Peak	VERTICAL
2	5888.30	38.36	34.96	-31.71	41.61	68.20	-26.59	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

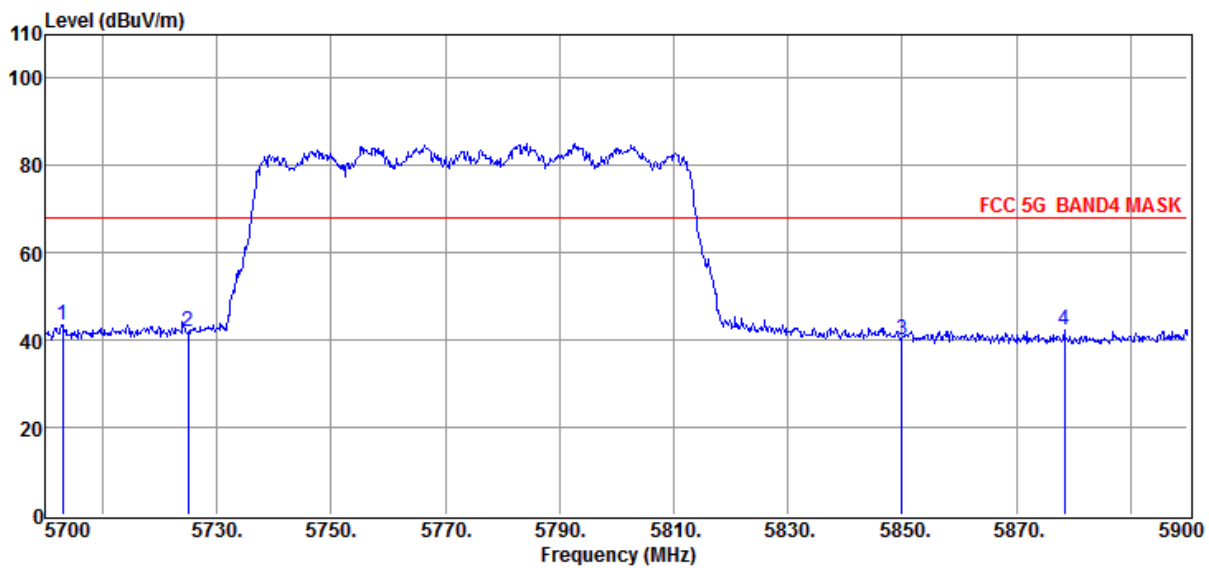
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5775MHz

Data: 85



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5703.00	40.57	34.41	-31.51	43.47	68.20	-24.73	Peak	VERTICAL
2	5725.00	39.33	34.47	-31.69	42.11	68.20	-26.09	Peak	VERTICAL
3	5850.00	37.58	34.85	-32.17	40.26	68.20	-27.94	Peak	VERTICAL
4	5878.40	39.23	34.94	-31.83	42.34	68.20	-25.86	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 11-13-2022

Tested By : Sunny

EUT : Wireless cast

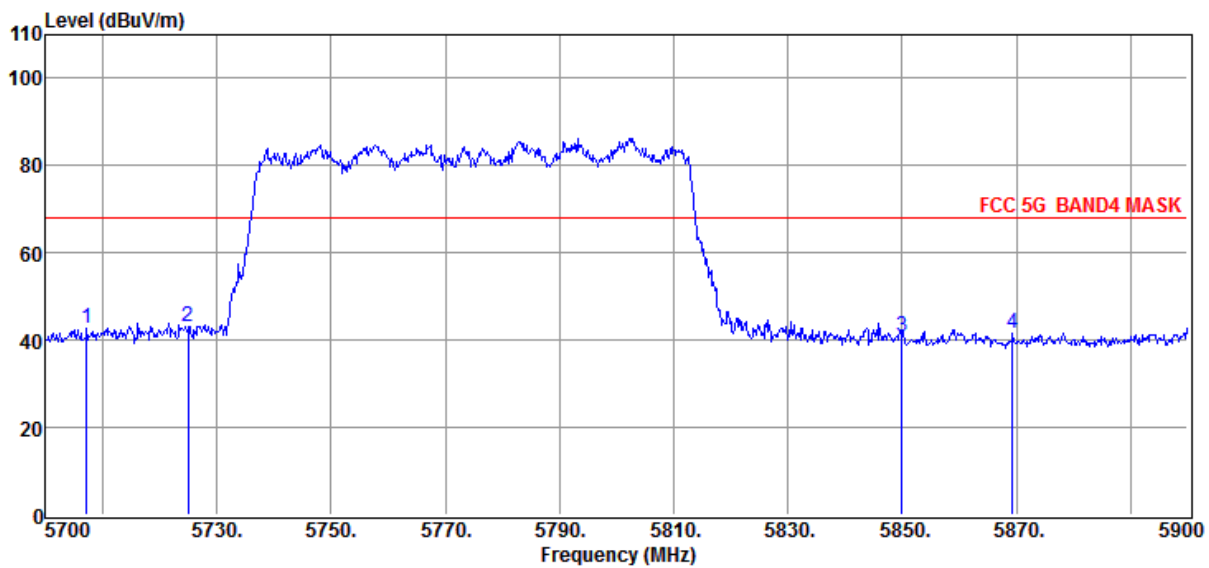
Model Number : HT005E

Power Supply : DC 5V

Test Mode : Tx mode

Memo : 11AC80 MCS0 5775MHz

Data: 86



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5707.20	39.73	34.42	-31.54	42.61	68.20	-25.59	Peak	HORIZONTAL
2	5725.00	40.24	34.47	-31.69	43.02	68.20	-25.18	Peak	HORIZONTAL
3	5850.00	38.33	34.85	-32.17	41.01	68.20	-27.19	Peak	HORIZONTAL
4	5869.40	38.70	34.91	-31.94	41.67	68.20	-26.53	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

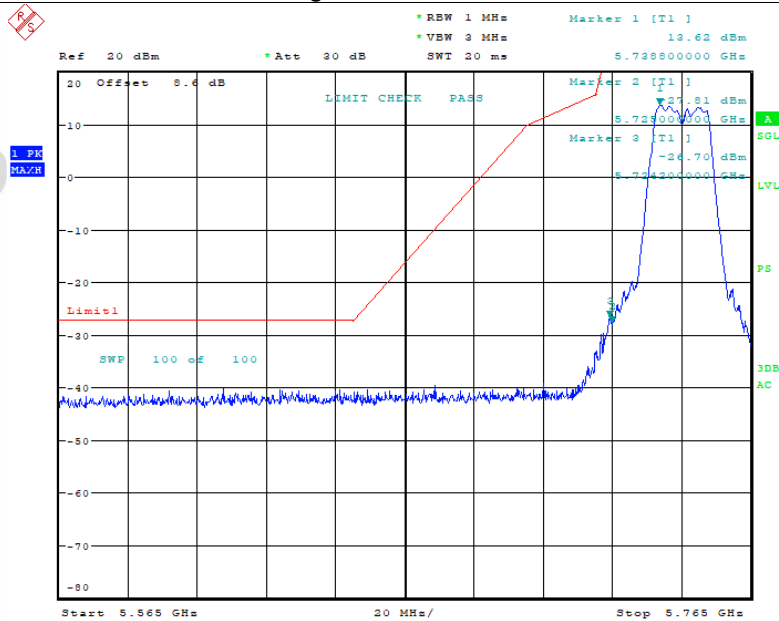
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

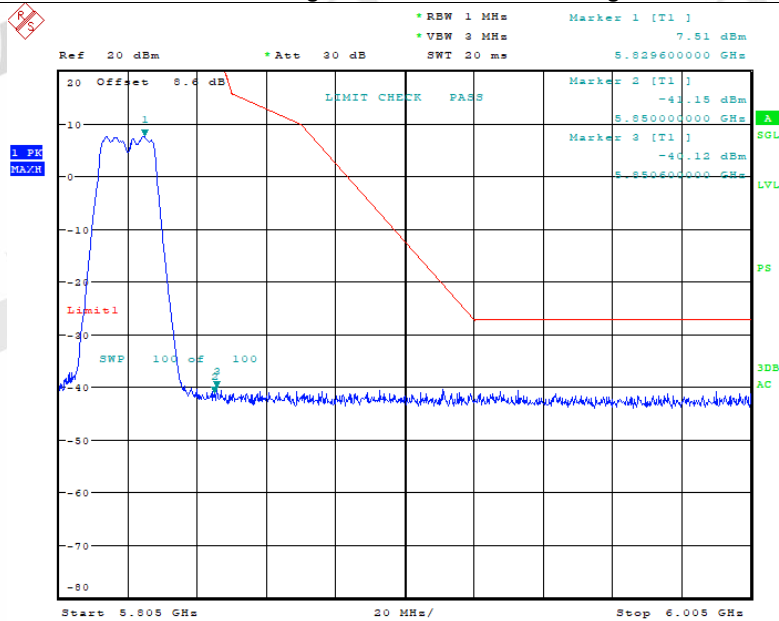
Test Graphs

Band Edge NVNT a 5745MHz Low Ant1



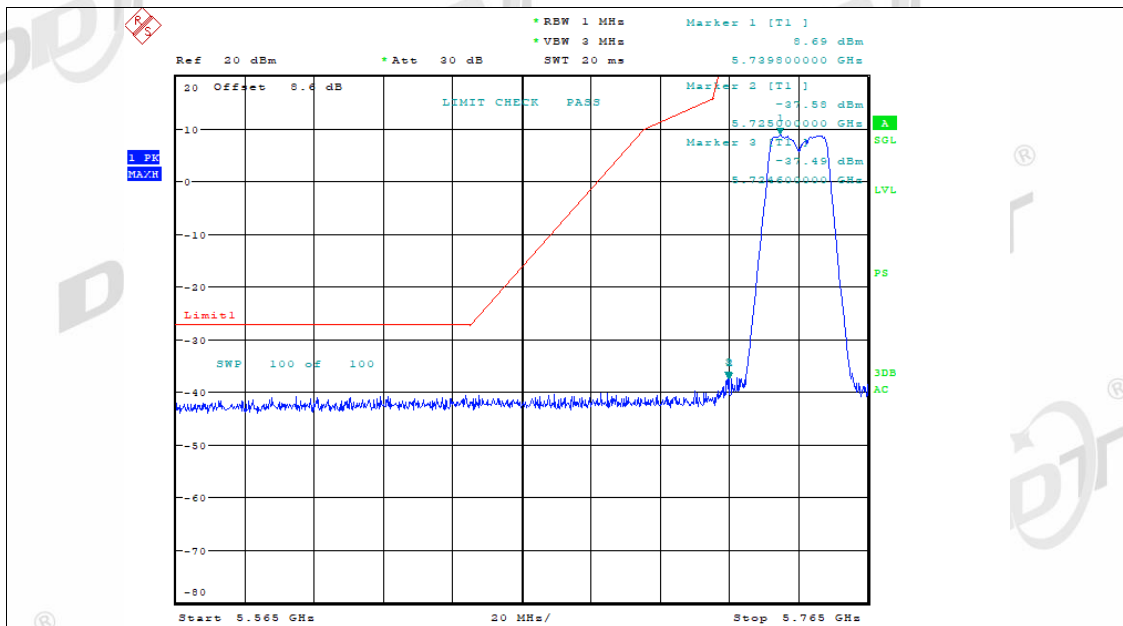
Date: 7.NOV.2022 10:50:13

Band Edge NVNT a 5825MHz High Ant1



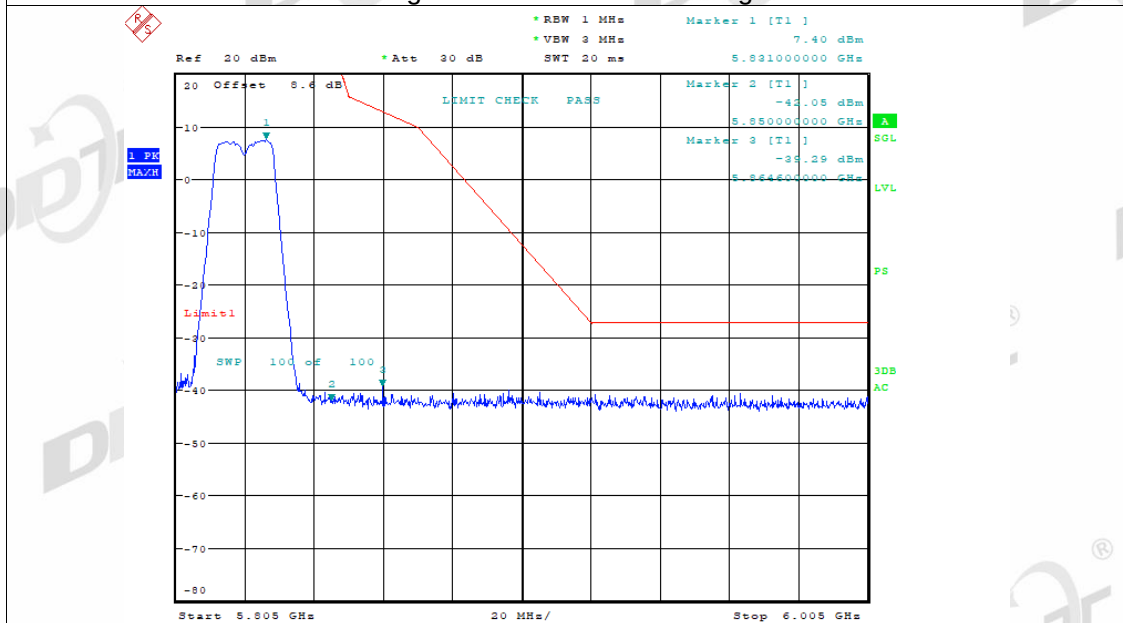
Date: 7.NOV.2022 10:58:37

Band Edge NVNT n20 5745MHz Low Ant1



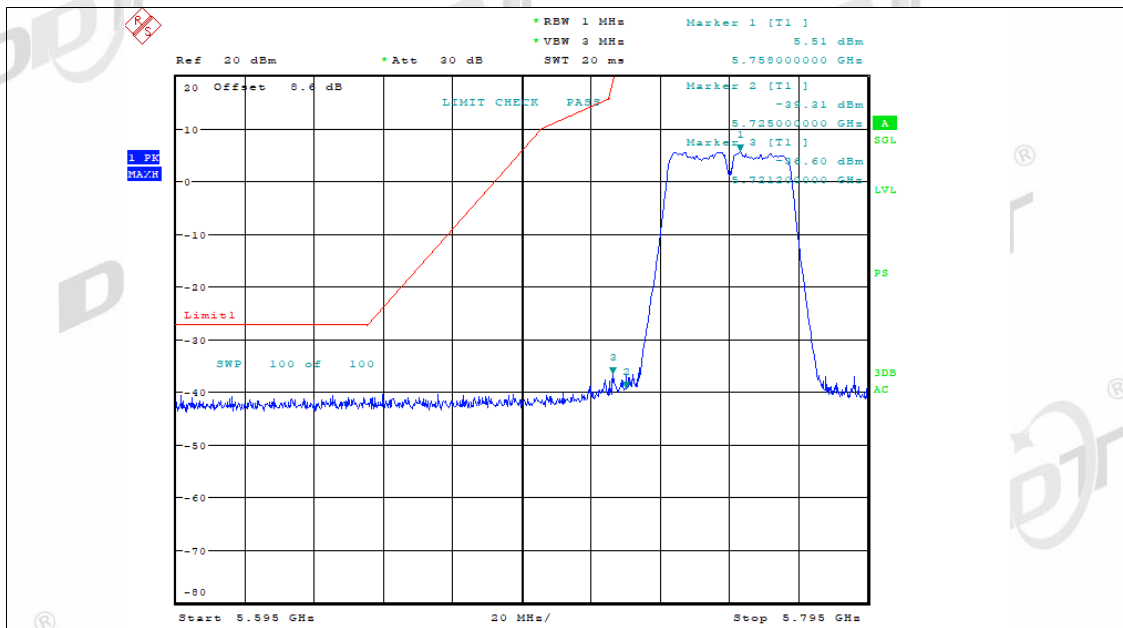
Date: 7.NOV.2022 11:30:55

Band Edge NVNT n20 5825MHz High Ant1



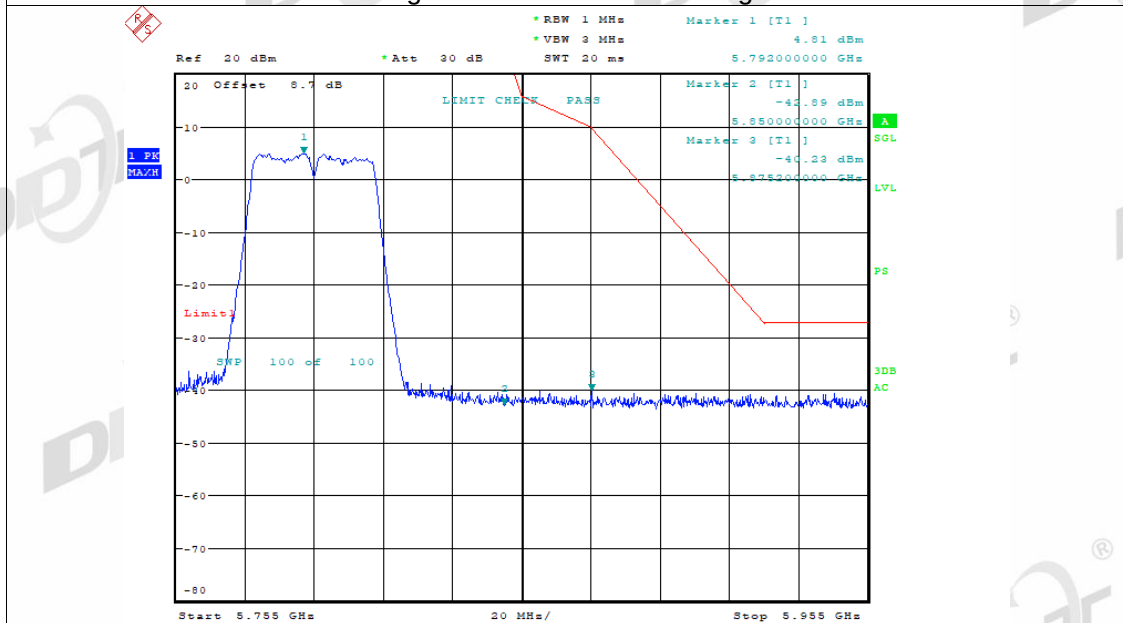
Date: 7.NOV.2022 11:42:24

Band Edge NVNT n40 5755MHz Low Ant1



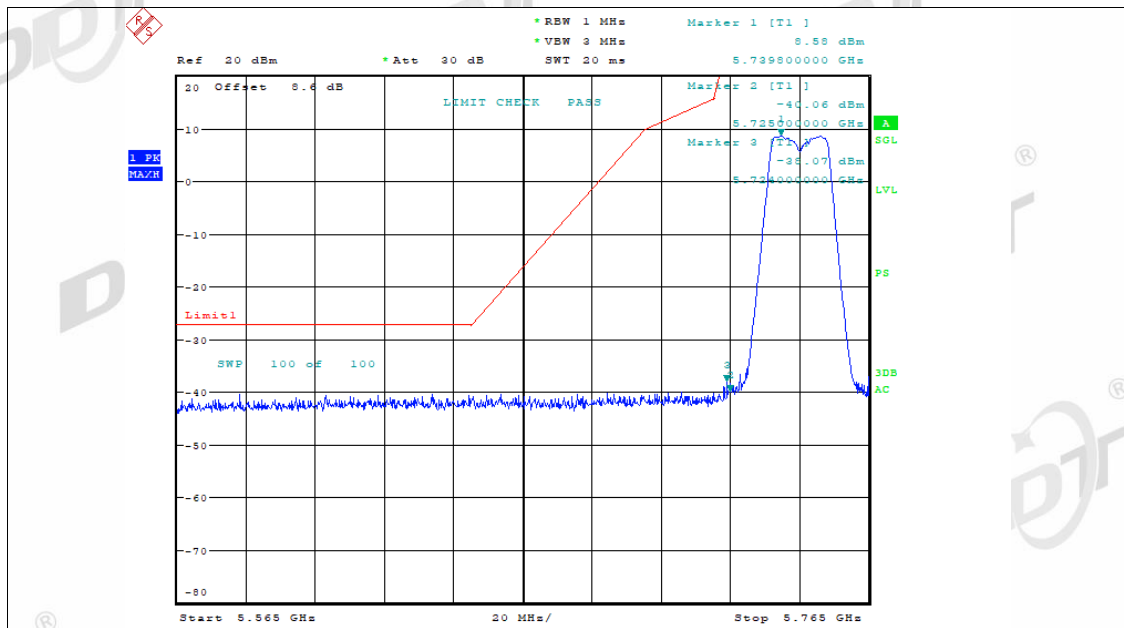
Date: 7.NOV.2022 13:49:12

Band Edge NVNT n40 5795MHz High Ant1



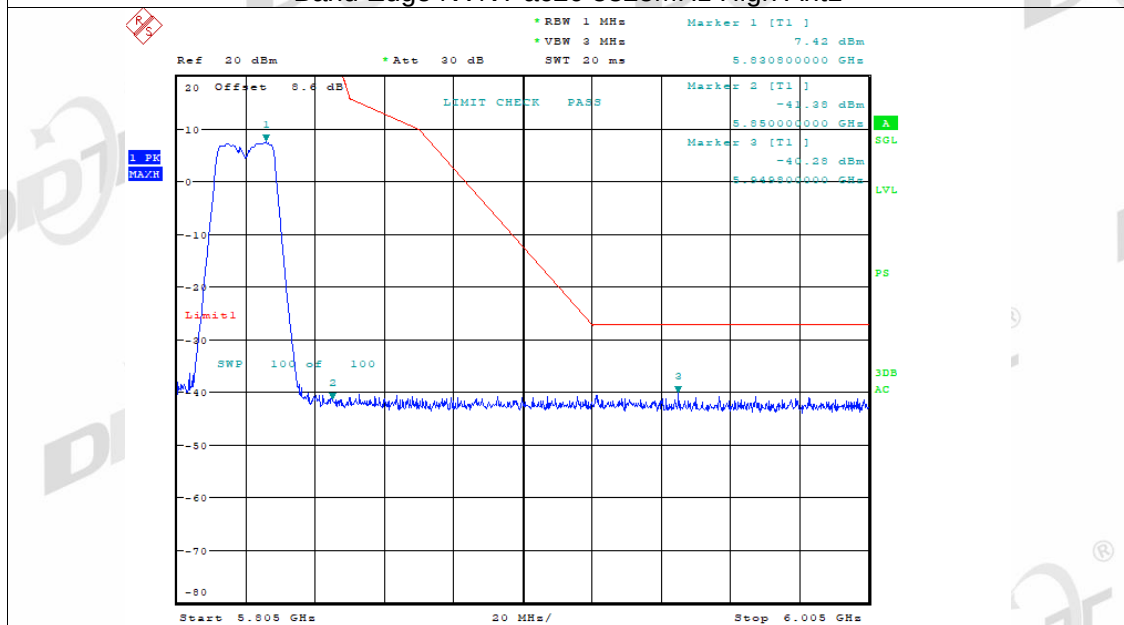
Date: 7.NOV.2022 13:54:29

Band Edge NVNT ac20 5745MHz Low Ant1



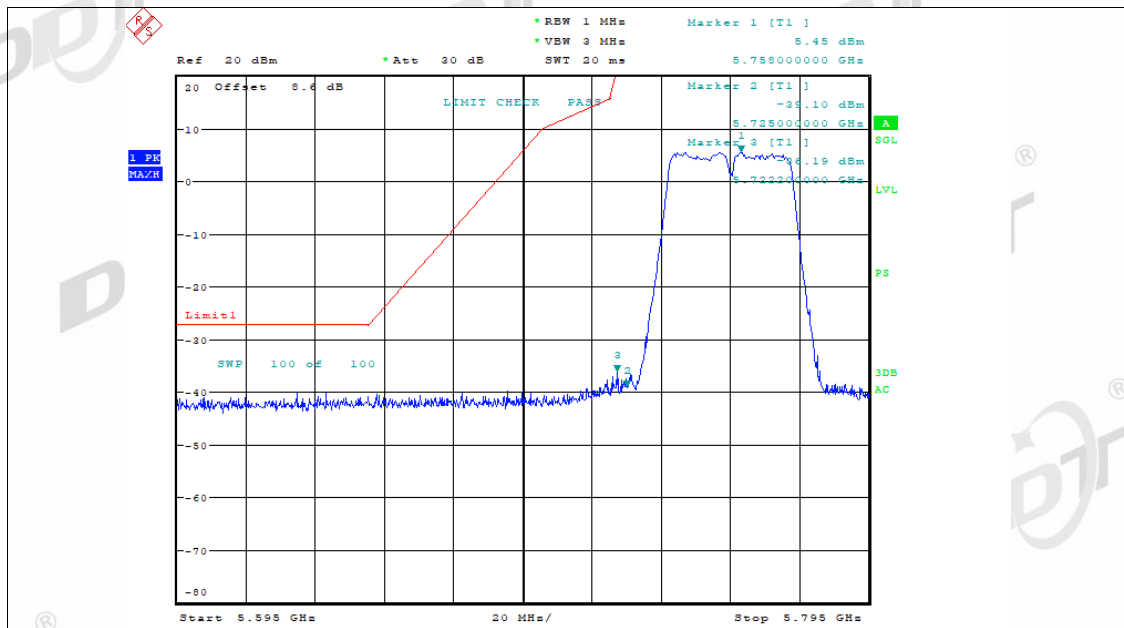
Date: 7.NOV.2022 13:17:03

Band Edge NVNT ac20 5825MHz High Ant1



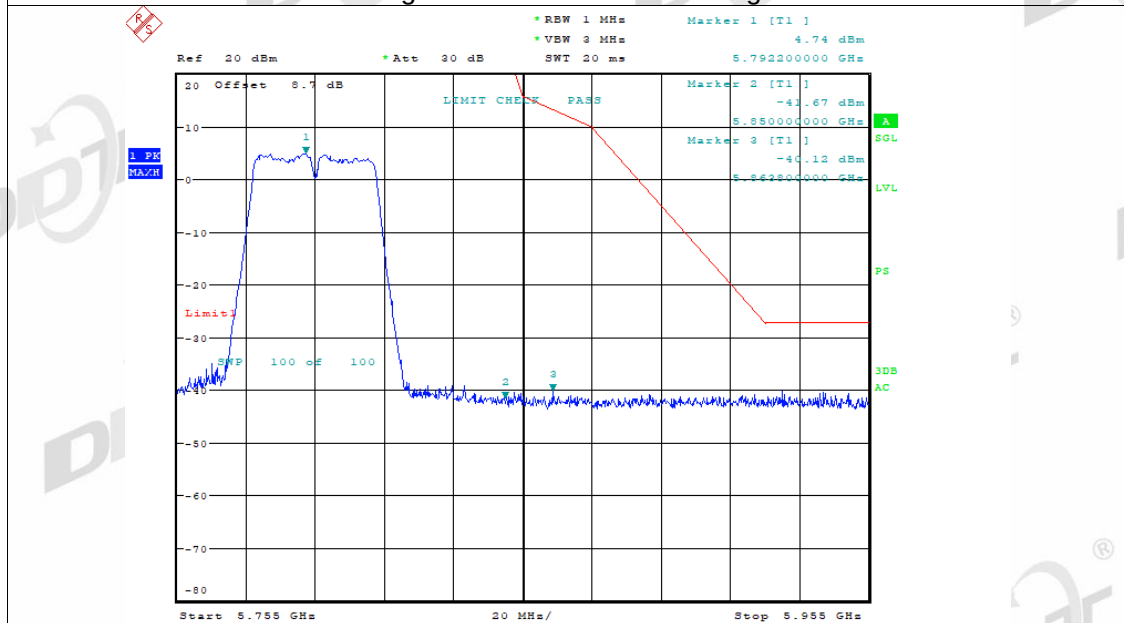
Date: 7.NOV.2022 13:31:25

Band Edge NVNT ac40 5755MHz Low Ant1



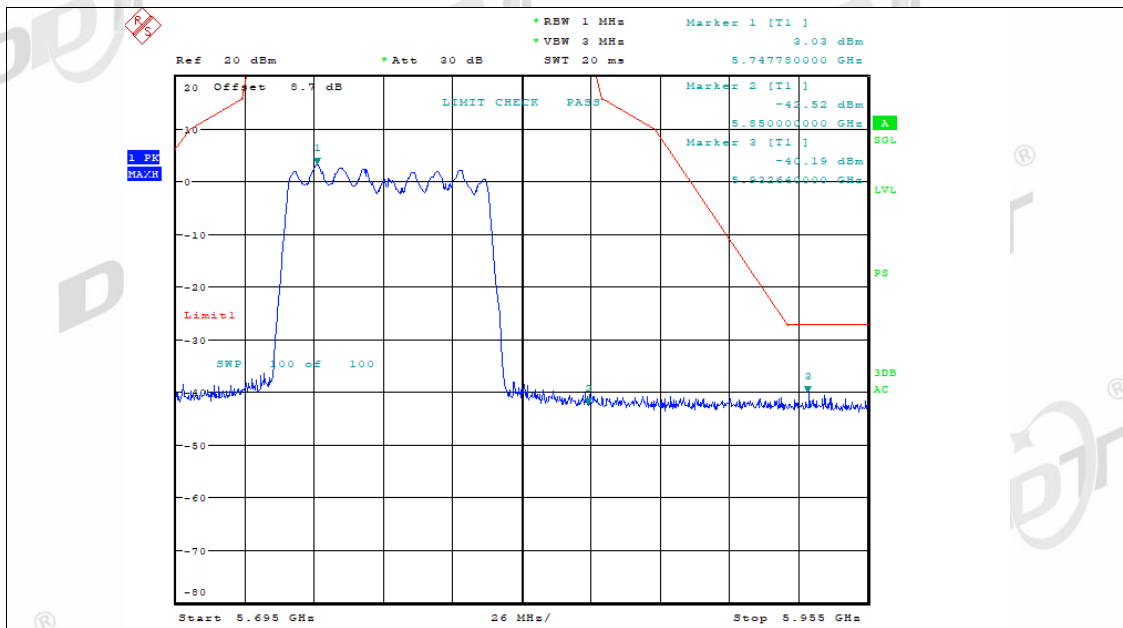
Date: 7.NOV.2022 14:58:41

Band Edge NVNT ac40 5795MHz High Ant1

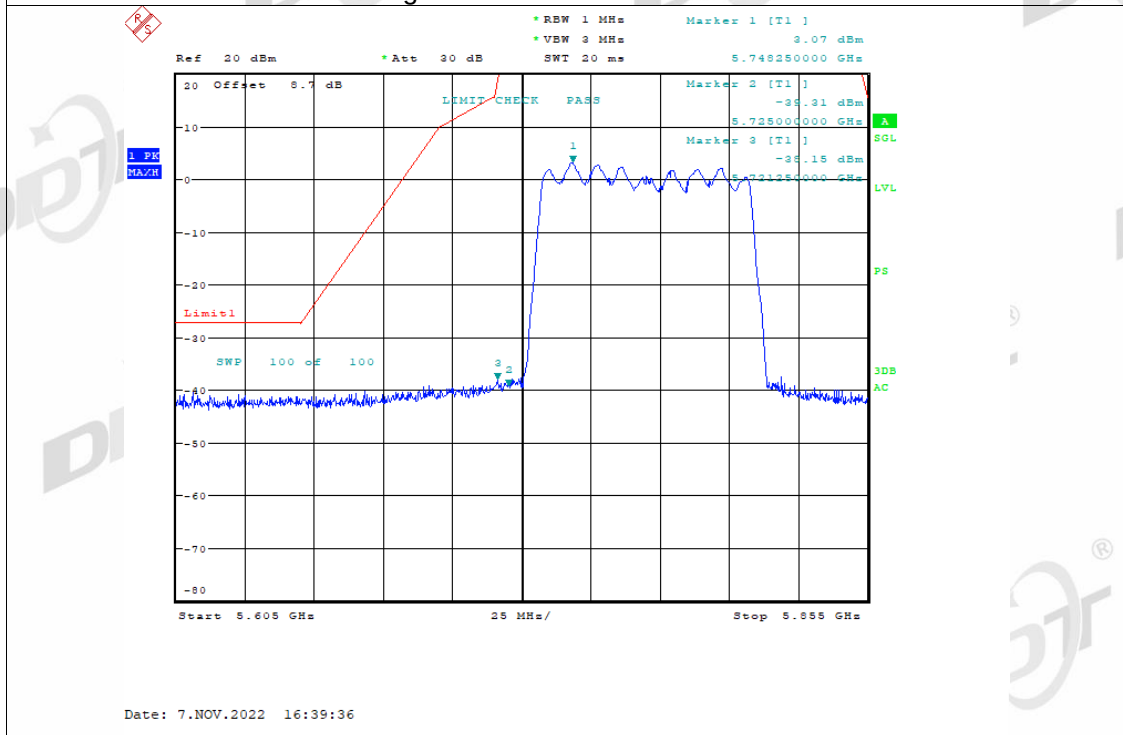


Date: 7.NOV.2022 15:03:08

Band Edge NVNT ac80 5775MHz High Ant1

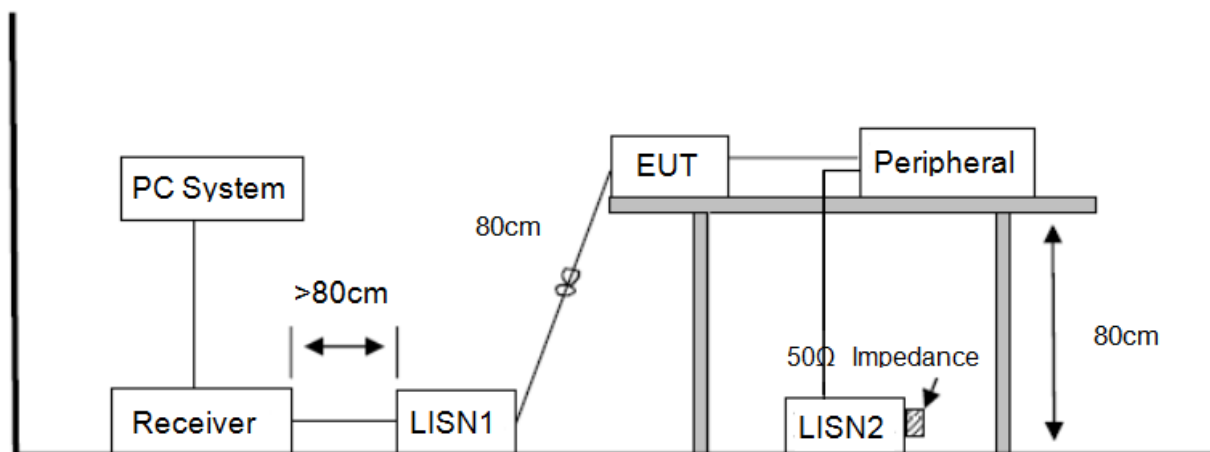


Band Edge NVNT ac80 5775MHz Low Ant1



10. Power Line Conducted Emission

10.1. Block diagram of test setup



10.2. Power Line Conducted Emission Limits (Class B)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150 kHz ~ 500 kHz	66 ~ 56*	56 ~ 46*
500 kHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

10.3. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.3 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.3 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

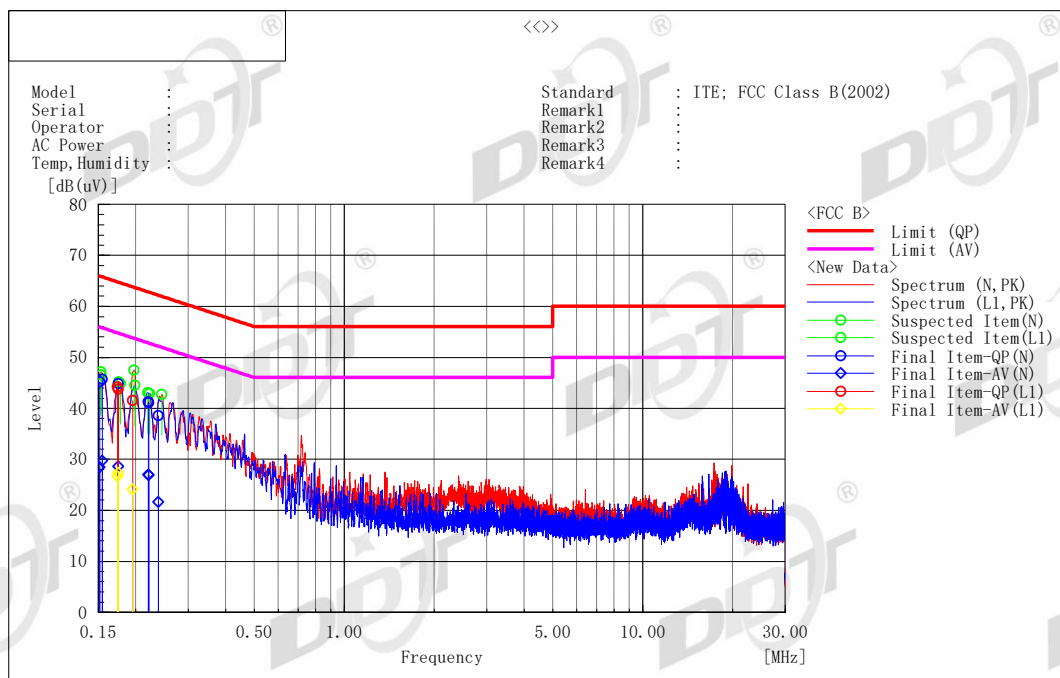
10.4. Test Result

PASS. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: Pre-test AC conducted emission at all mode, the worst case was recorded.

Test Data:



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.1544	35.9	19.9	9.8	45.7	29.7	65.8	55.8	20.1	26.1
2	0.1516	35.4	18.6	9.8	45.2	28.4	65.9	55.9	20.7	27.5
3	0.17527	35.0	18.8	9.8	44.8	28.6	64.7	54.7	19.9	26.1
4	0.22106	31.4	17.2	9.7	41.1	26.9	62.8	52.8	21.7	25.9
5	0.22089	31.6	17.3	9.7	41.3	27.0	62.8	52.8	21.5	25.8
6	0.23794	28.8	11.9	9.7	38.5	21.6	62.2	52.2	23.7	30.6

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.17406	34.3	16.8	9.8	44.1	26.6	64.8	54.8	20.7	28.2
2	0.19525	31.7	14.3	9.8	41.5	24.1	63.8	53.8	22.3	29.7
3	0.17521	34.0	17.5	9.8	43.8	27.3	64.7	54.7	20.9	27.4

Note1) Level (Quasi-Peak and/or C/Average) = Meter Reading + Factor

Note2) Line = Polarity of input power (Live or Neutral)

N : Abbreviation of Neutral Polarity, L1 : Abbreviation of Live Polarity,

Note3) Factor = LISN Insertion Loss + Cable Loss

Note4) Margin = Limit – Level (Quasi-Peak and/or C/Average)

Note5) C/Average : Abbreviation of CISPR Average

11. Antenna Requirements

11.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Result

The antenna used for this product is Chip antenna and no antenna other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 3.3 dBi.

12. Dynamic Frequency Selection

12.1. Applicability of DFS requirements

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	☐ Master	☒ Client Without Radar Detection	☐ Client with Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	☐ Master Device or Client with Radar Detection	☒ Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

12.2. Limit

(1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

(2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

12.3. Parameters of radar test waveforms

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests. Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A					

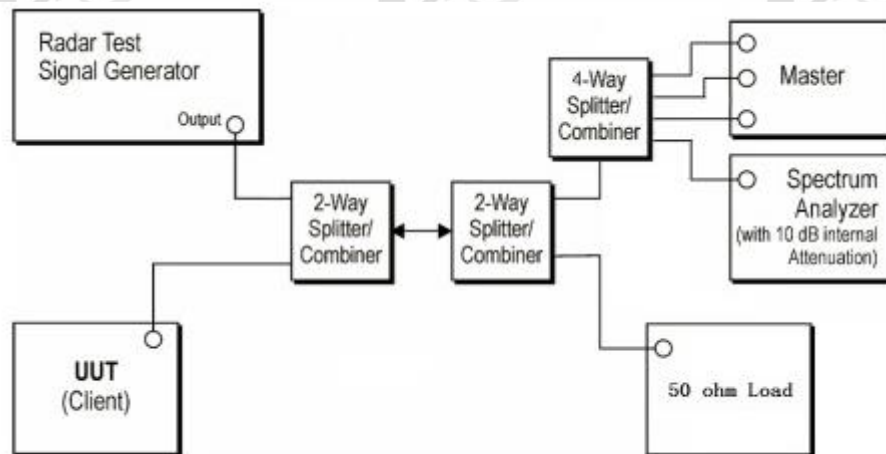
A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4

12.4. Calibration of radar waveform

Radar Waveform Calibration Procedure:

- (1) A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master
- (2) The interference Radar Detection Threshold Level is $-64\text{dBm} + 0\text{dBi} + 1\text{dB} = -63\text{dBm}$ that had been taken into account the output power range and antenna gain.
- (3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz. The spectrum analyzer had offset -1.0dB to compensate RF cable loss 1.0dB.
- (4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was $-64\text{dBm} + 0\text{dBi} + 1\text{dB} = -63\text{dBm}$. Capture the spectrum analyzer plots on short pulse radar waveform.

Conducted Calibration Setup:

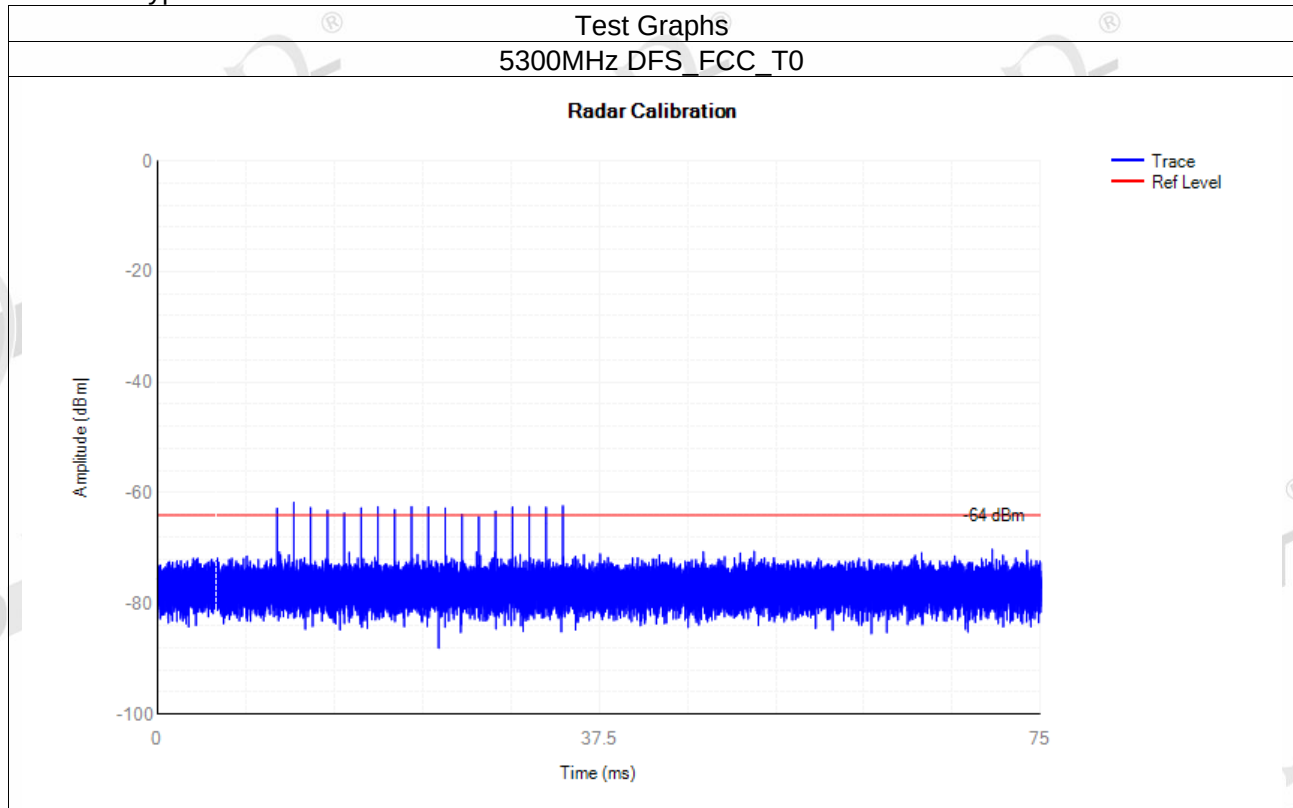


Note: 1. Use the software "Web" to set the frequency channel.

2. EUT is not support TPC and not with Radar detection.

Radar Waveform Calibration Result:

Radar Type 0



12.5. Channel closing transmission time, channel move time and non-occupancy period

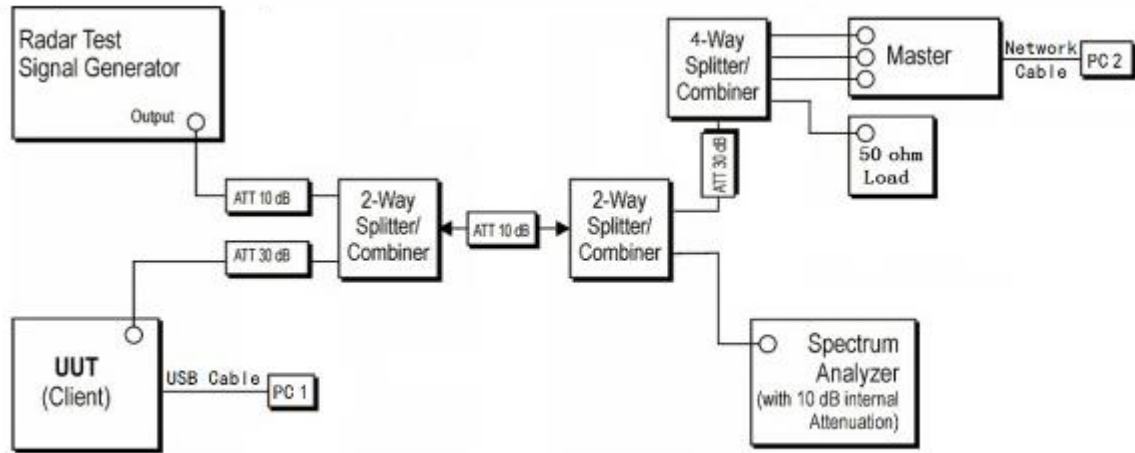
Block diagram of test setup Test Procedure:

- (1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- (2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -64dBm at the antenna port of the master device.
- (3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- (4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Test Software in order to properly load the network for the entire period of the test.
- (5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- (6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- (7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the
- (8) spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

12.6. Test setup

Setup for Client with injection at the Master



12.7. Test result

Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmissi on Time (s)	Limit Close Transmissi on Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
5300	0.4173	10	0.006	0.26	0.0036	0.06	Pass

BW/Channel	Test Item	Test Result	Limit	Results
5300MHz	Non-Occupancy Period	>30min	30min	pass

Test plots as follows:

