



#### 4.4 PEAK POWER EXCURSION MEASUREMENT

##### 4.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.350GHz	13dB
5.470 ~ 5.725GHz	13dB

##### 4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100041	May 13, 2009	May 12, 2010

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

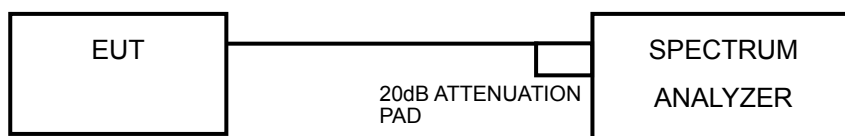
##### 4.4.3 TEST PROCEDURE

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set the spectrum bandwidth span to view the entire spectrum.
- c. Using peak detector and Max-hold function for Trace 1 (RB = 1MHz, VB = 3MHz) and 2 (RB = 1MHz, VB = 300 kHz).
- d. The differences between Trace1 and Trace 2 in any 1MHz band at f1 to f2 range were recorded and showed to another trace.

#### 4.4.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.4.5 TEST SETUP



#### 4.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



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#### 4.4.7 TEST RESULTS

##### 802.11a OFDM MODULATION

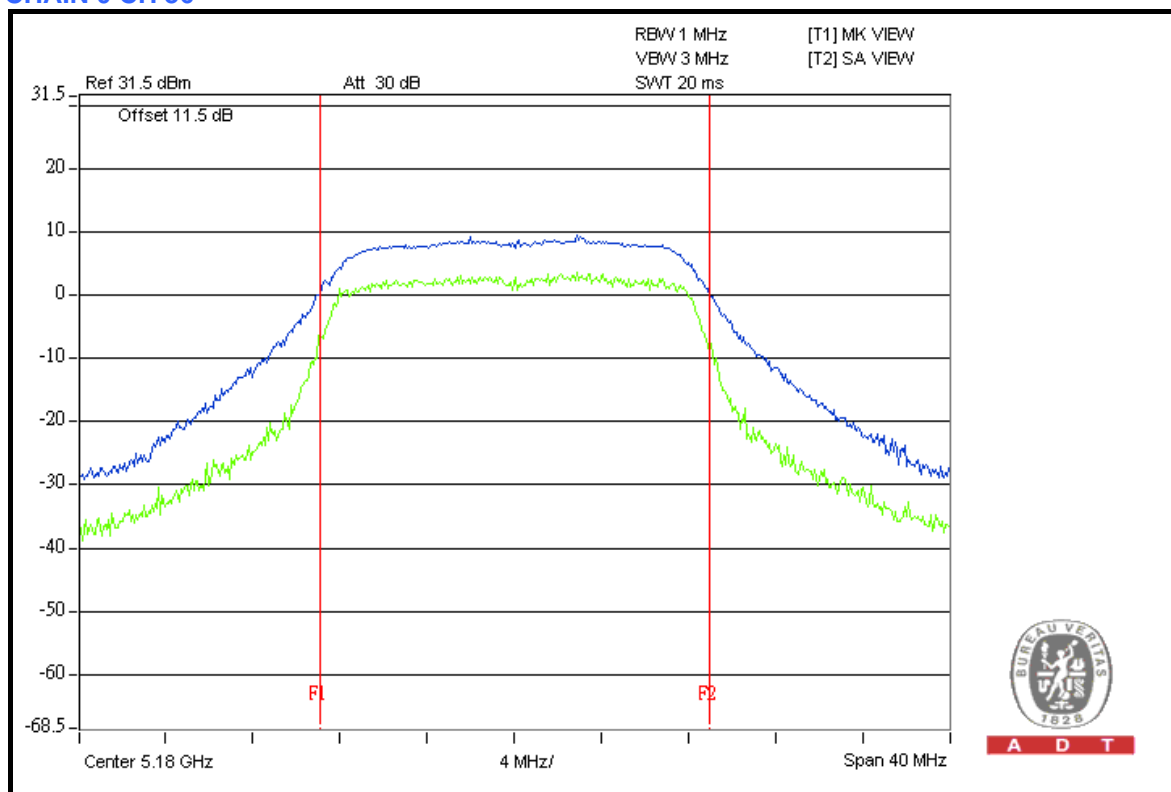
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.0Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN2		
36	5180	9.03	9.38	9.09	13	PASS
40	5200	9.50	8.48	9.61	13	PASS
48	5240	8.56	9.05	9.71	13	PASS
52	5260	9.25	8.73	8.63	13	PASS
60	5300	10.39	8.55	9.23	13	PASS
64	5320	9.24	8.59	8.86	13	PASS
100	5500	8.31	8.45	10.15	13	PASS
120	5600	8.23	8.98	9.03	13	PASS
140	5700	9.08	8.98	9.32	13	PASS

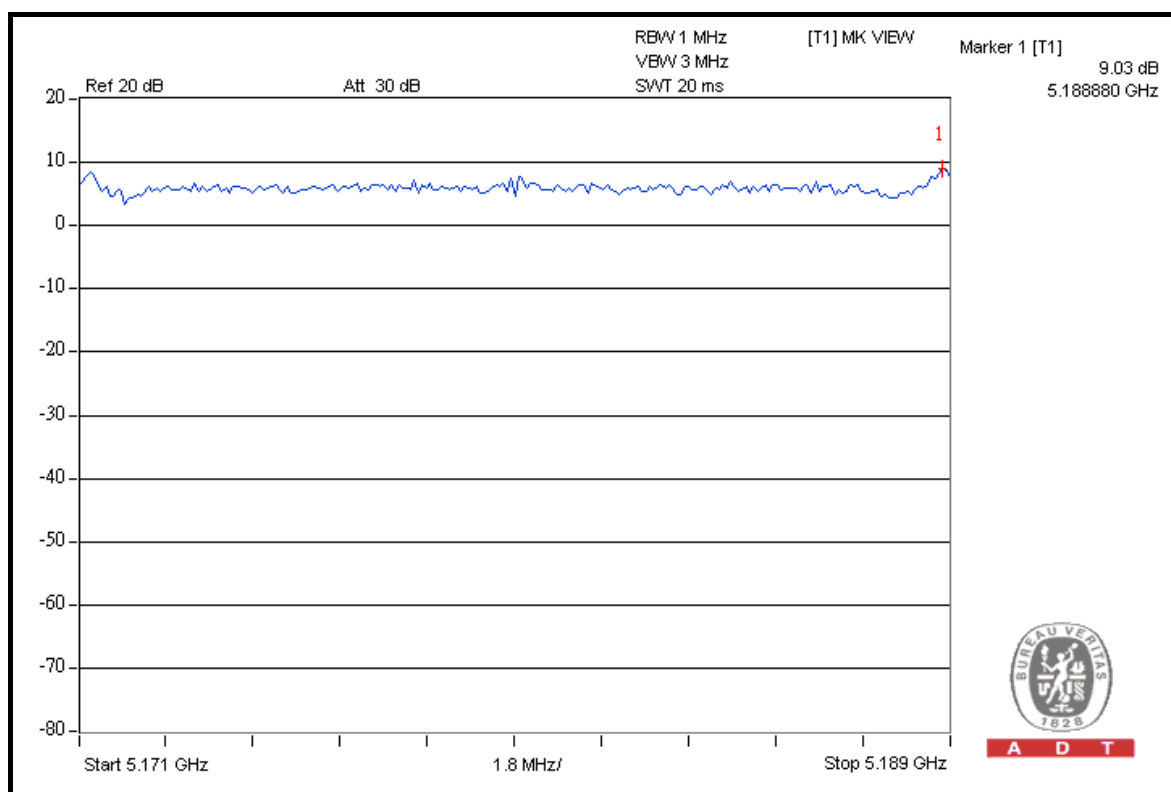


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### CHAIN 0 CH 36



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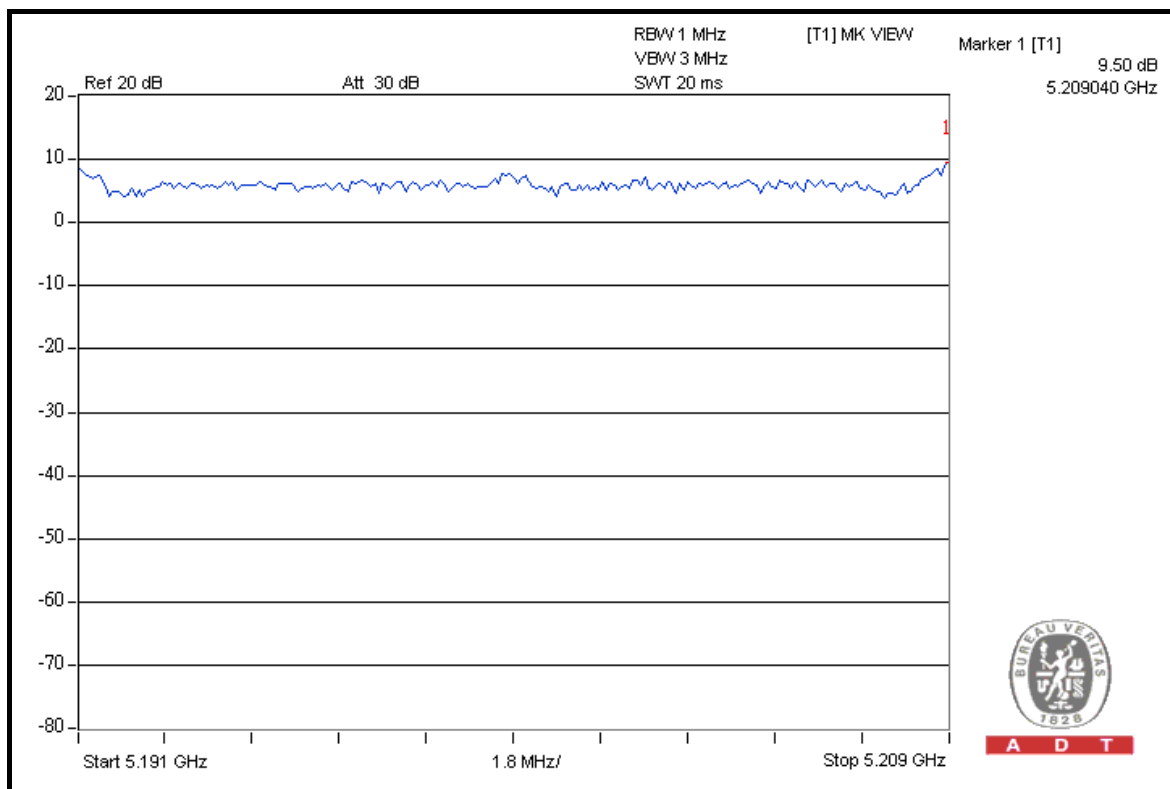
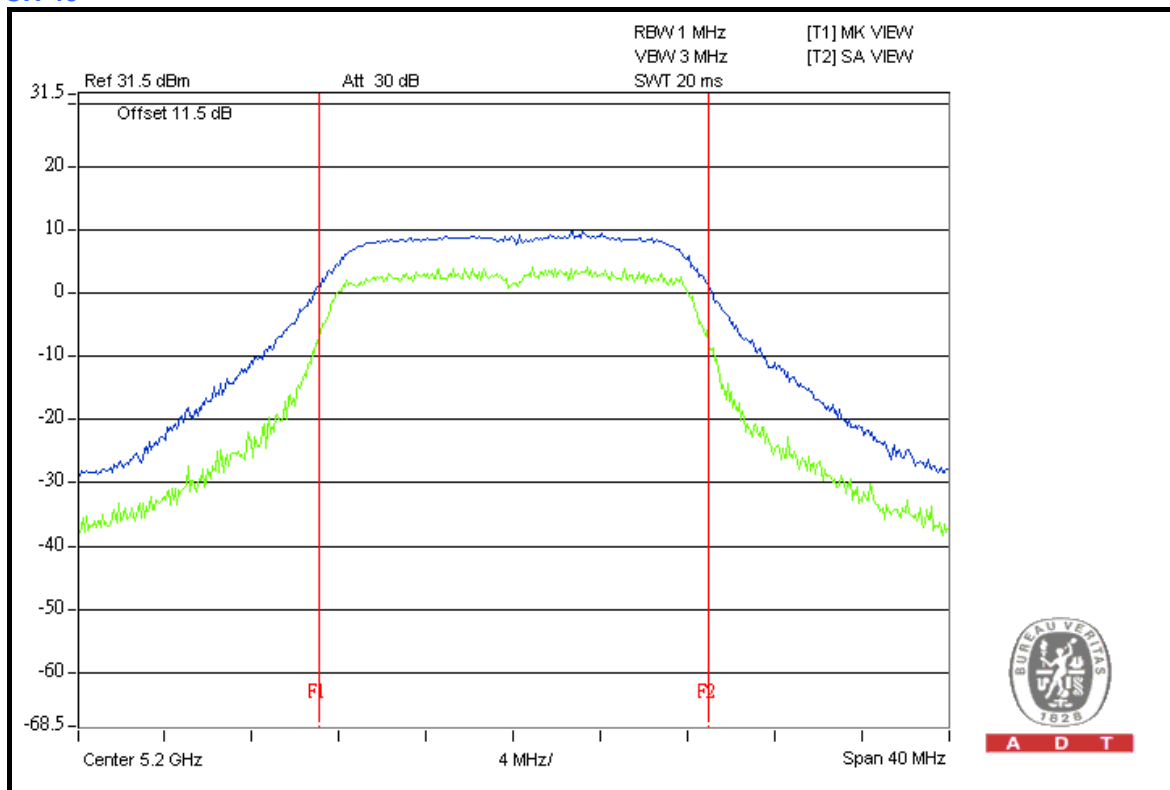


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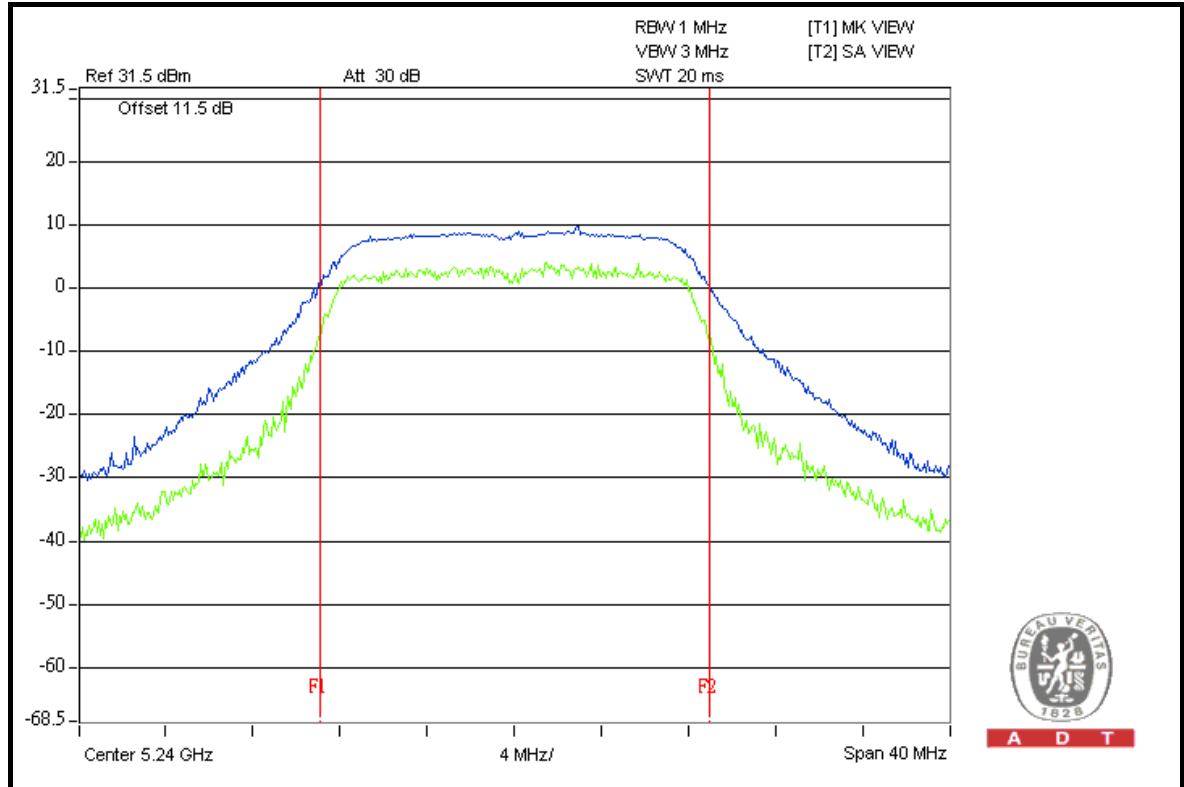
### CH 40



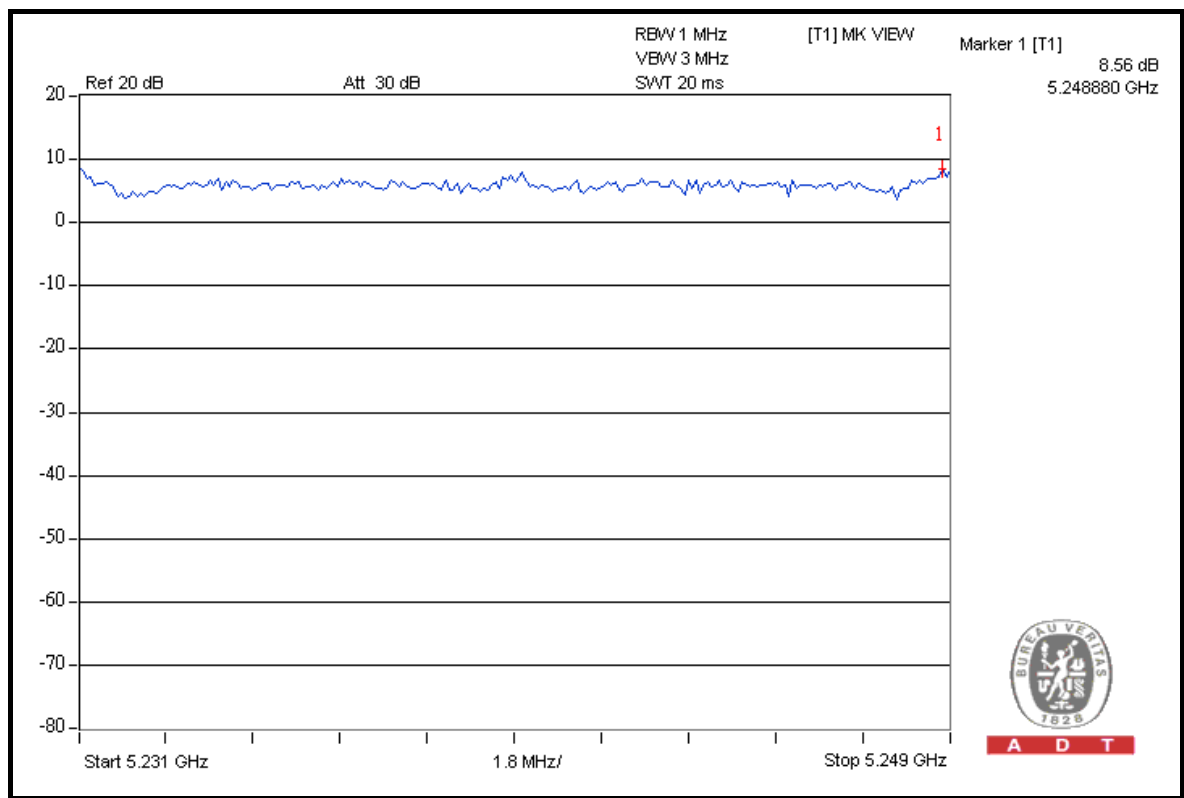


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CH 48



A D T

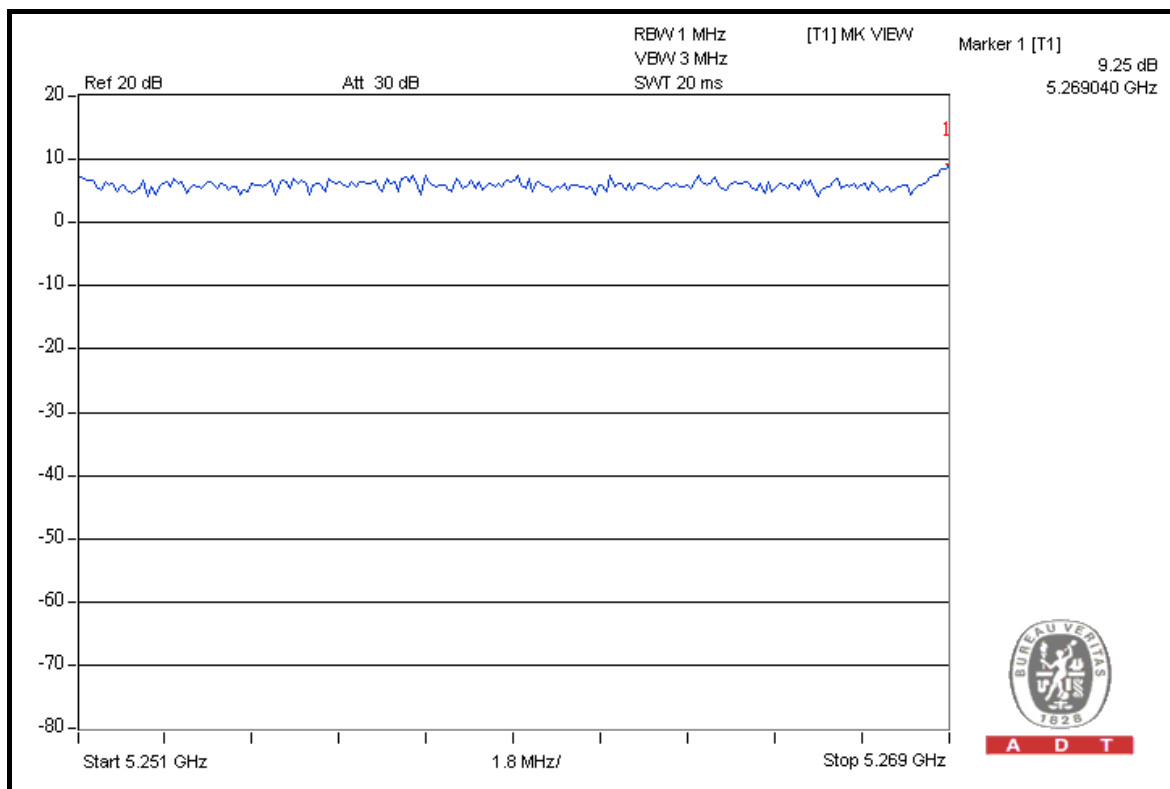
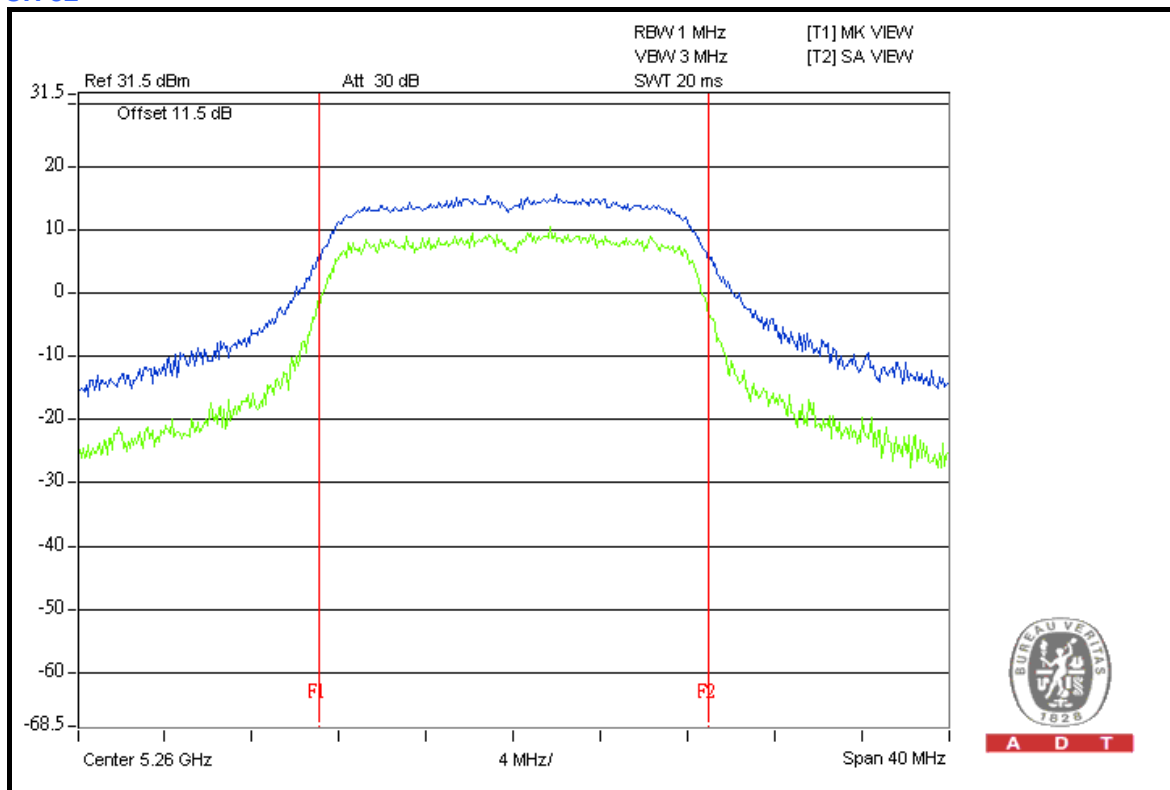


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A D T

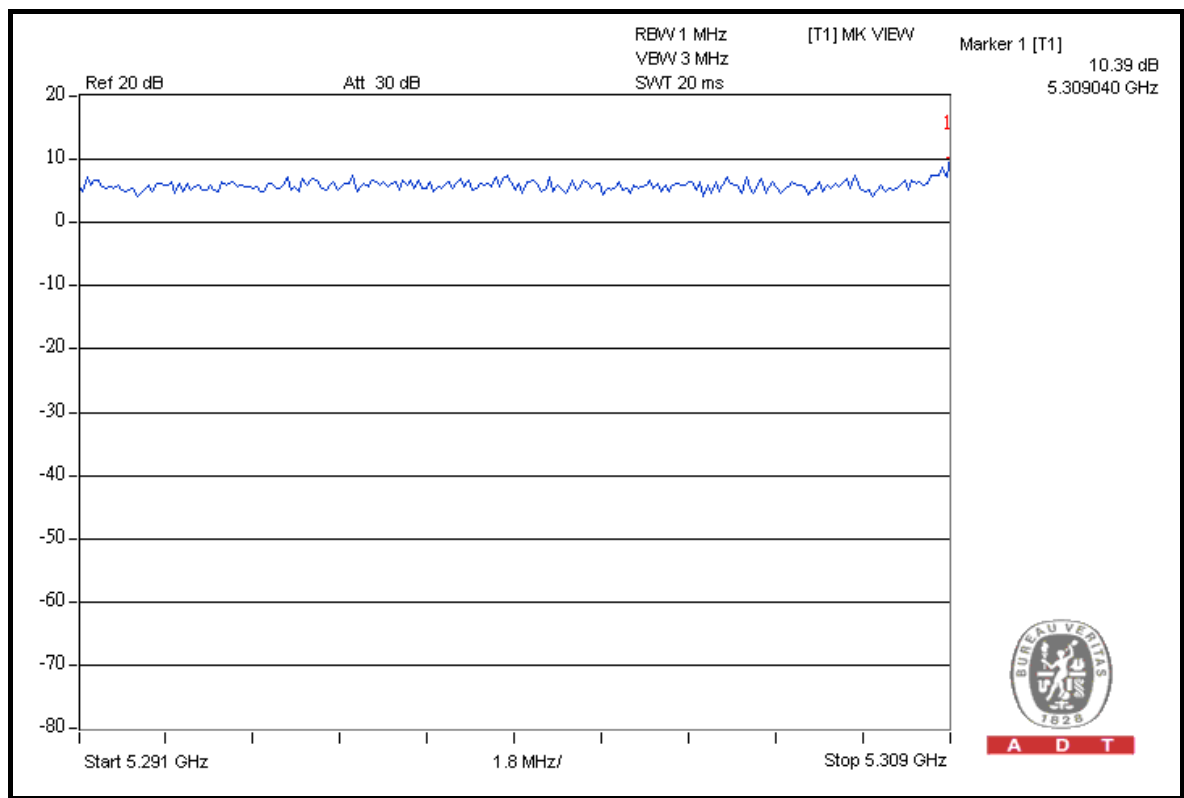
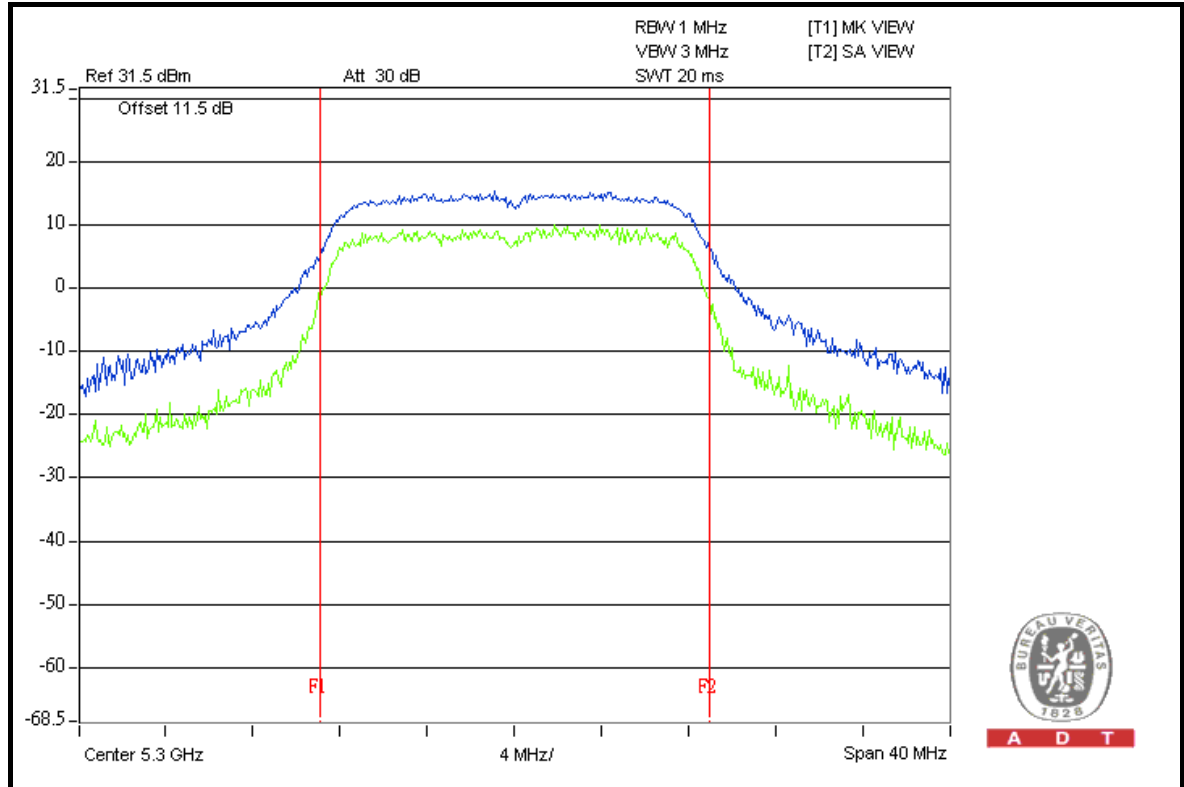
### CH 52





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CH 60

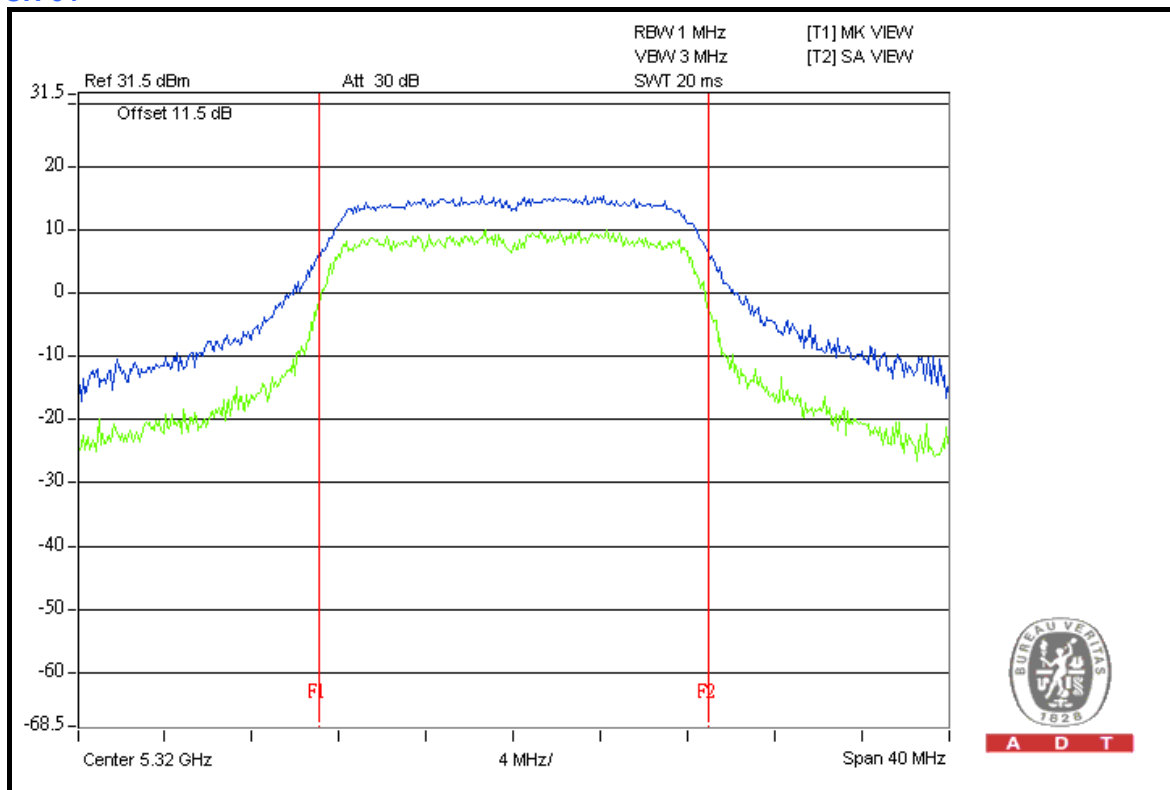




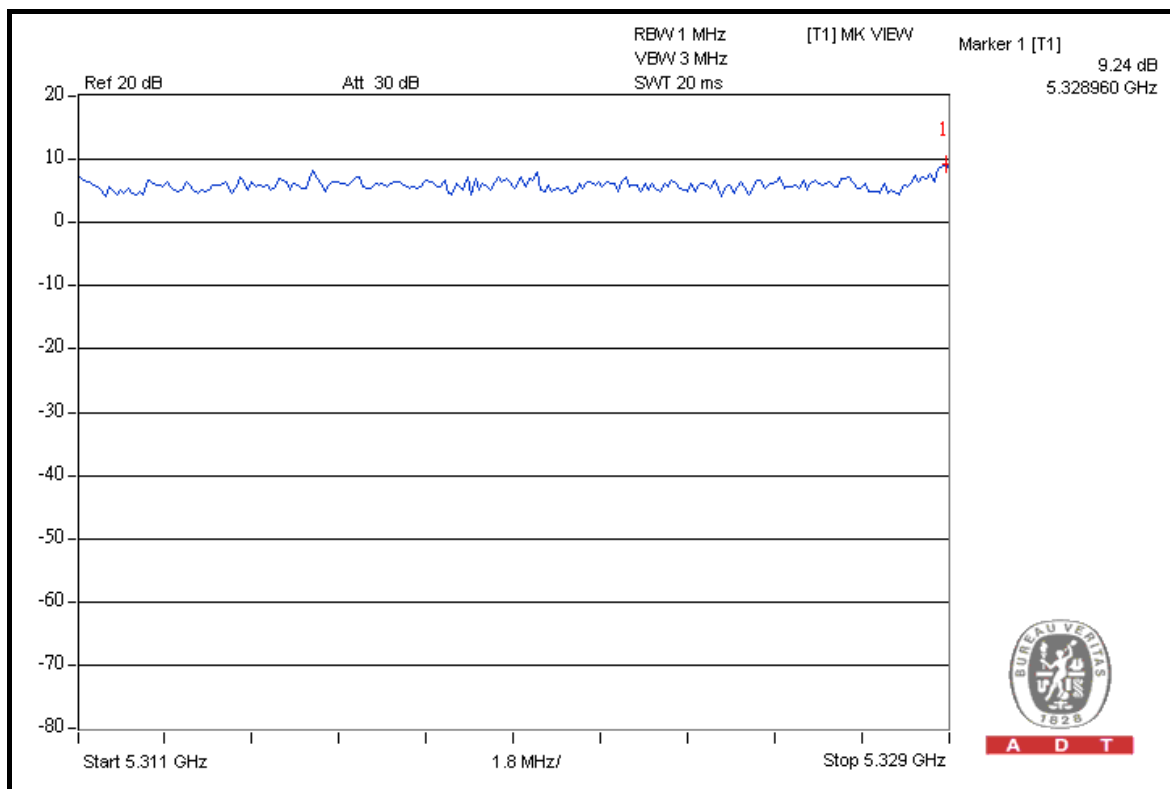


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### CH 64



A D T

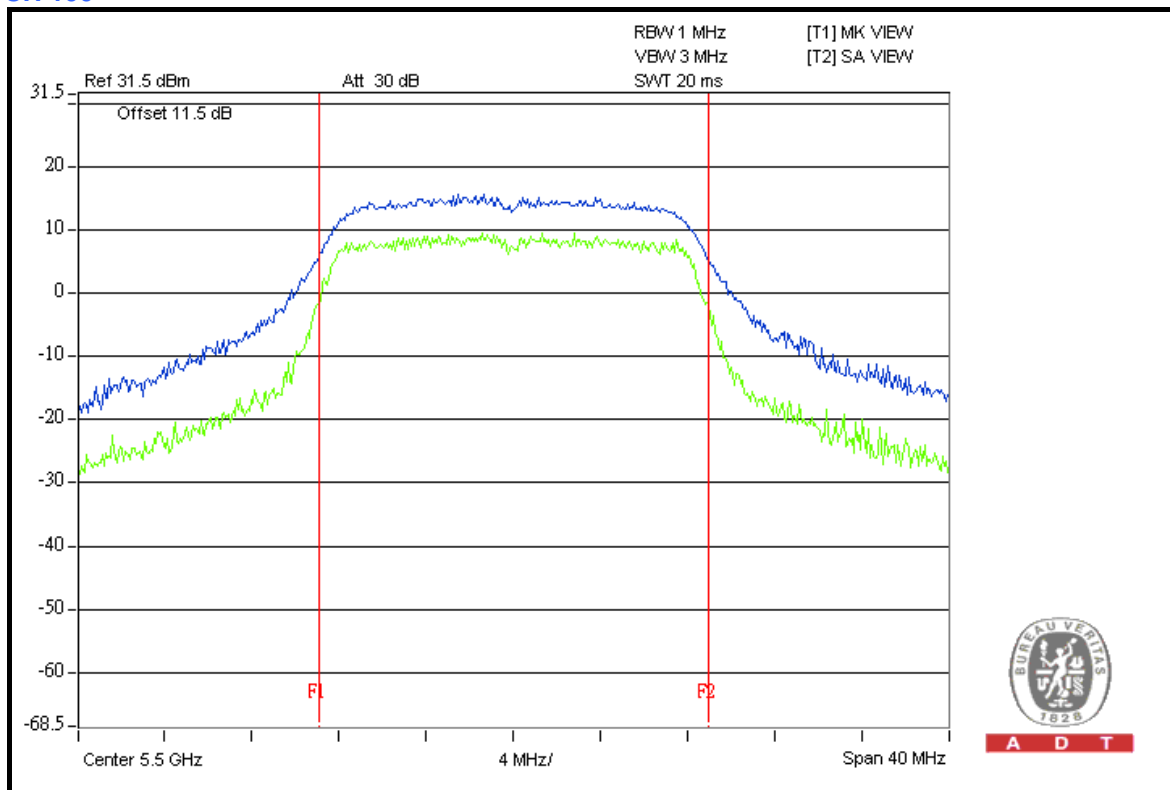


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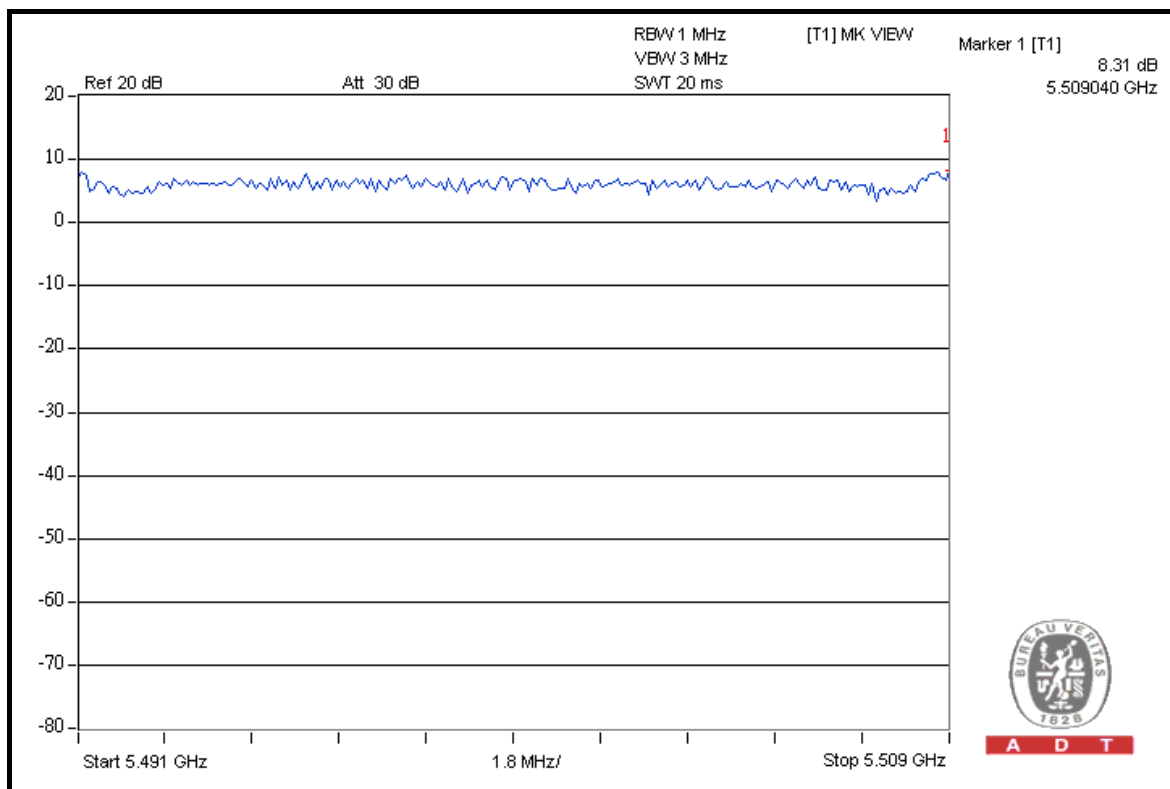


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A D T

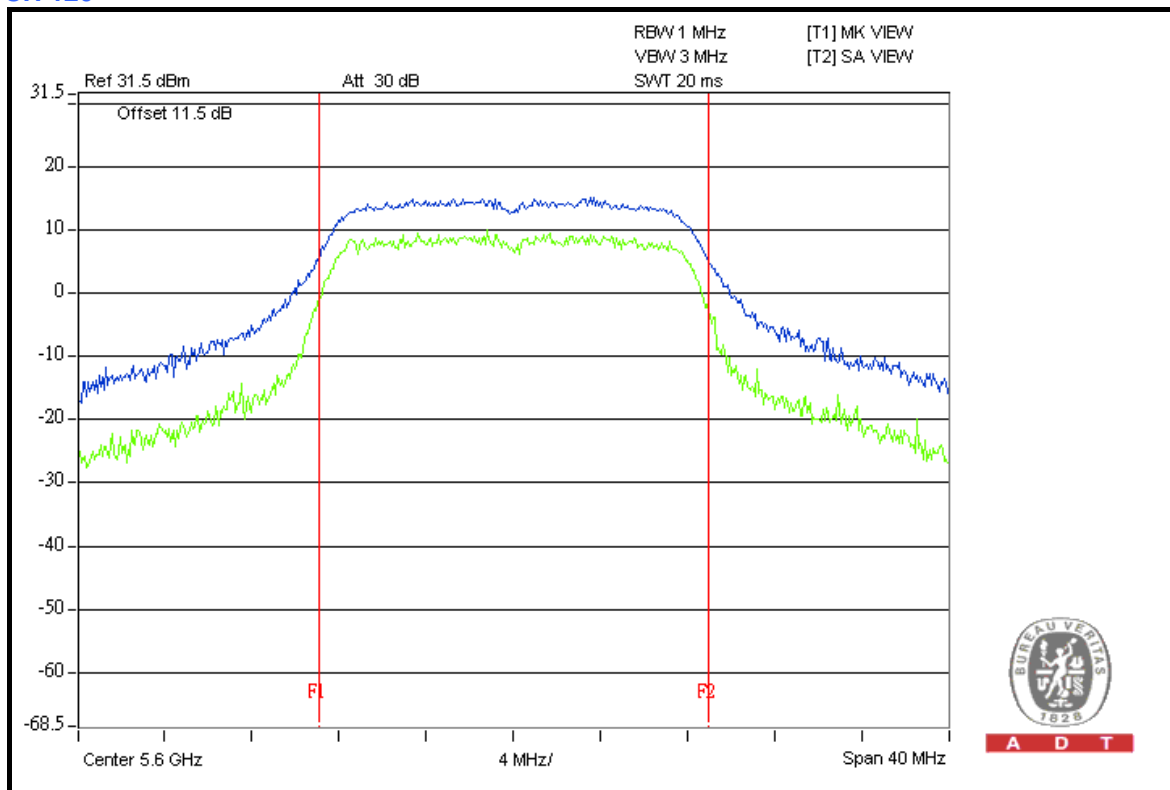


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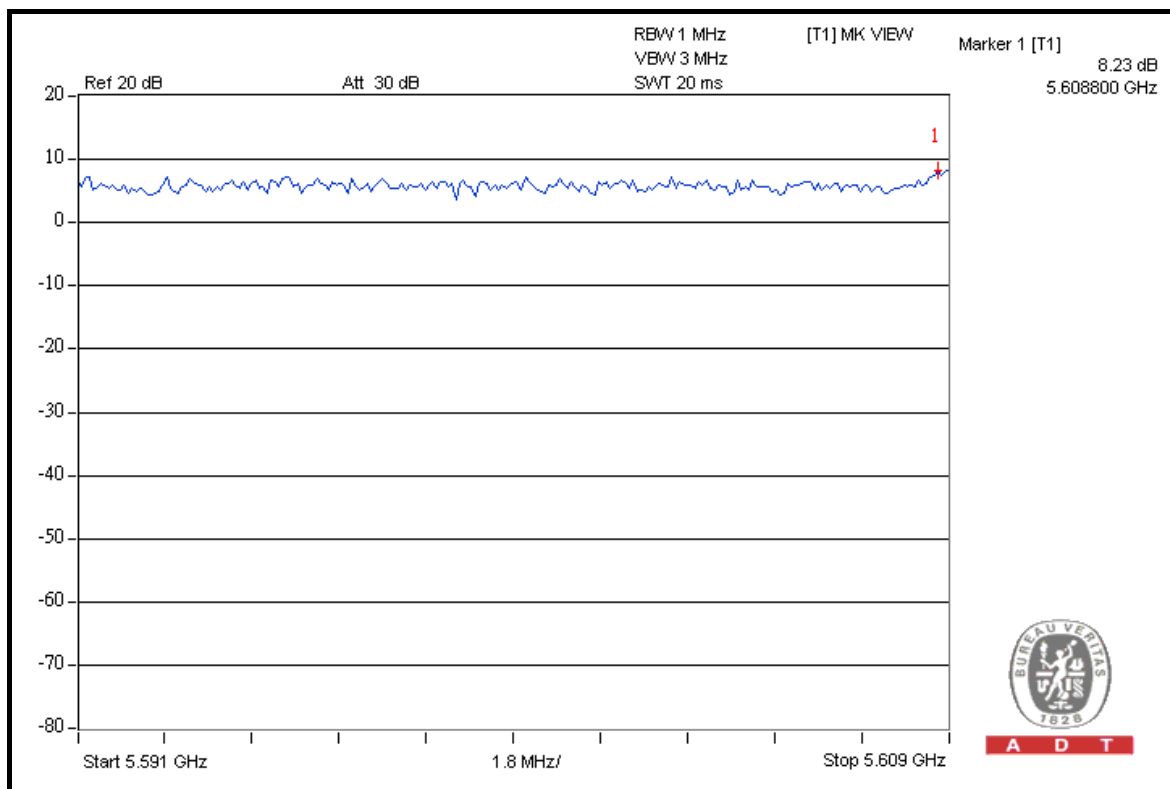


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A D T

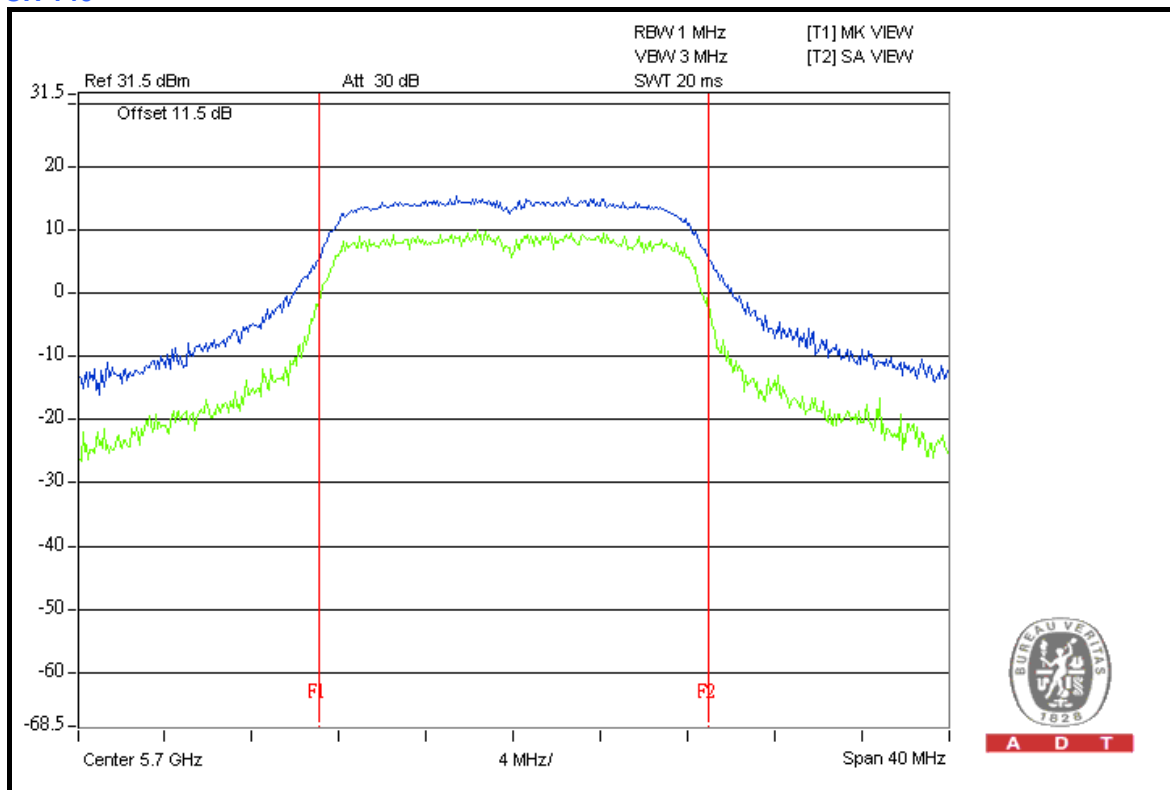


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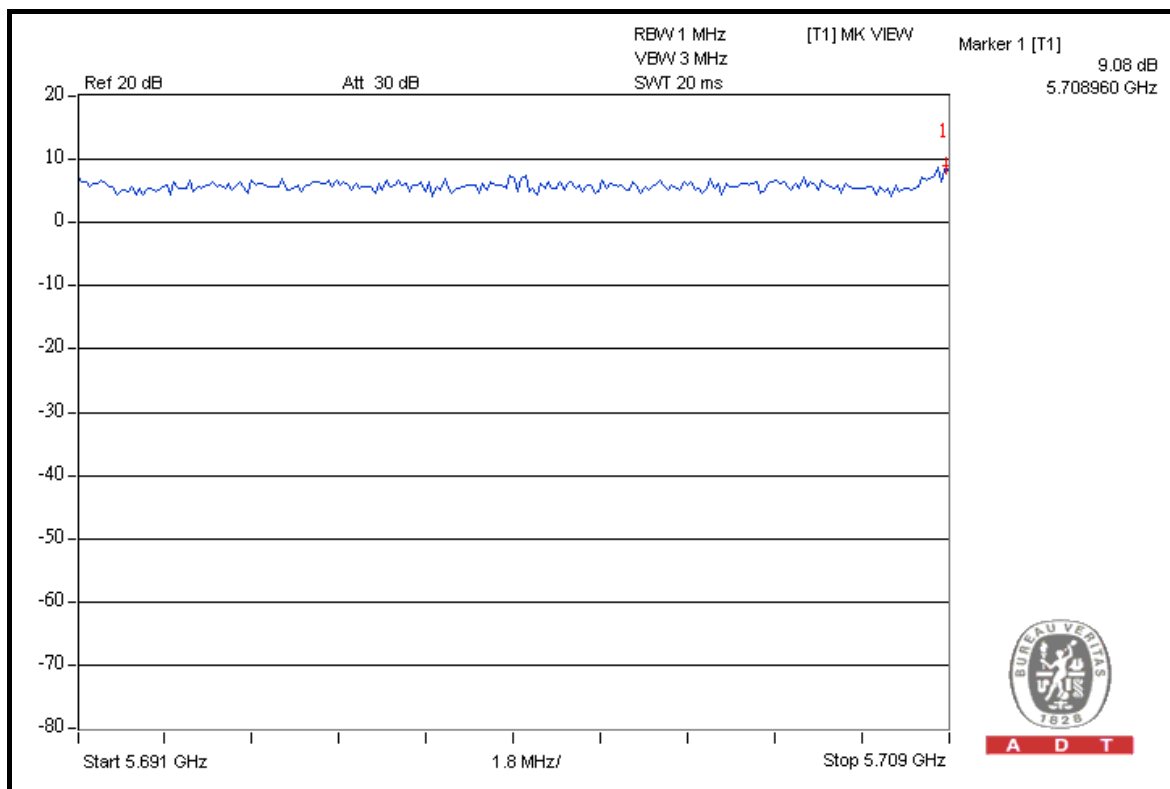


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### CH 140



A D T

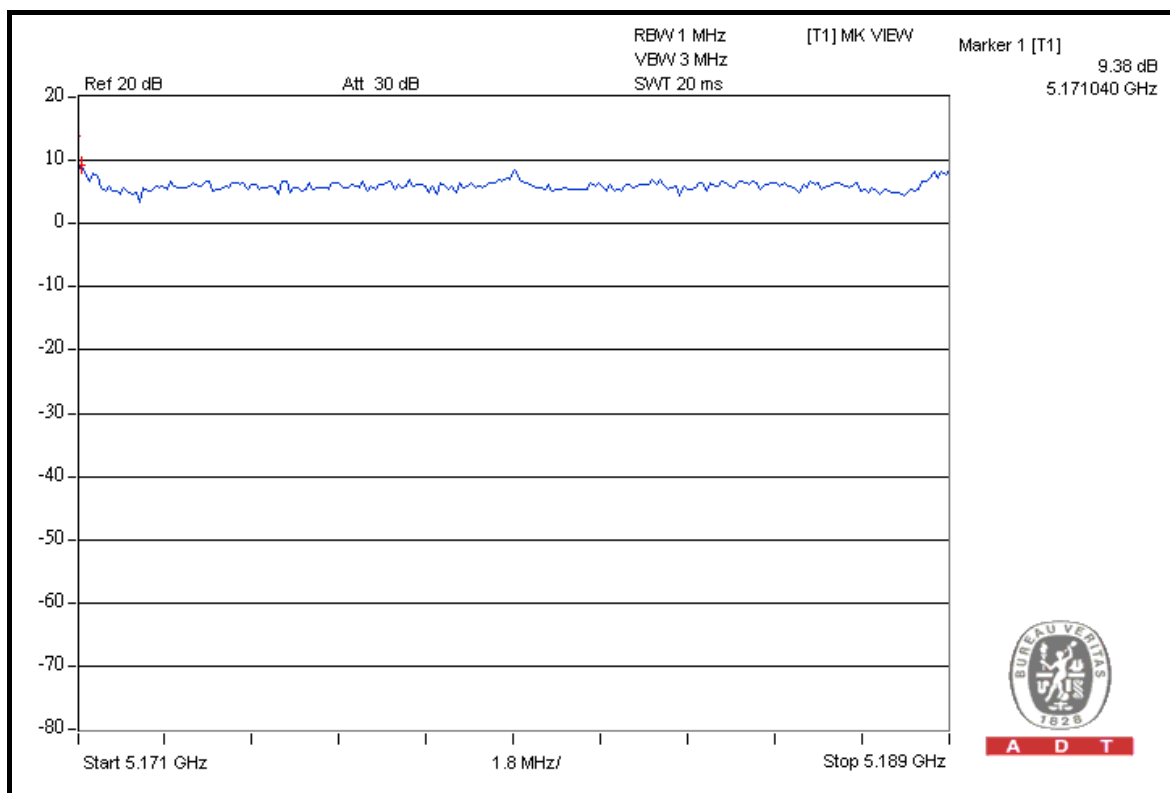
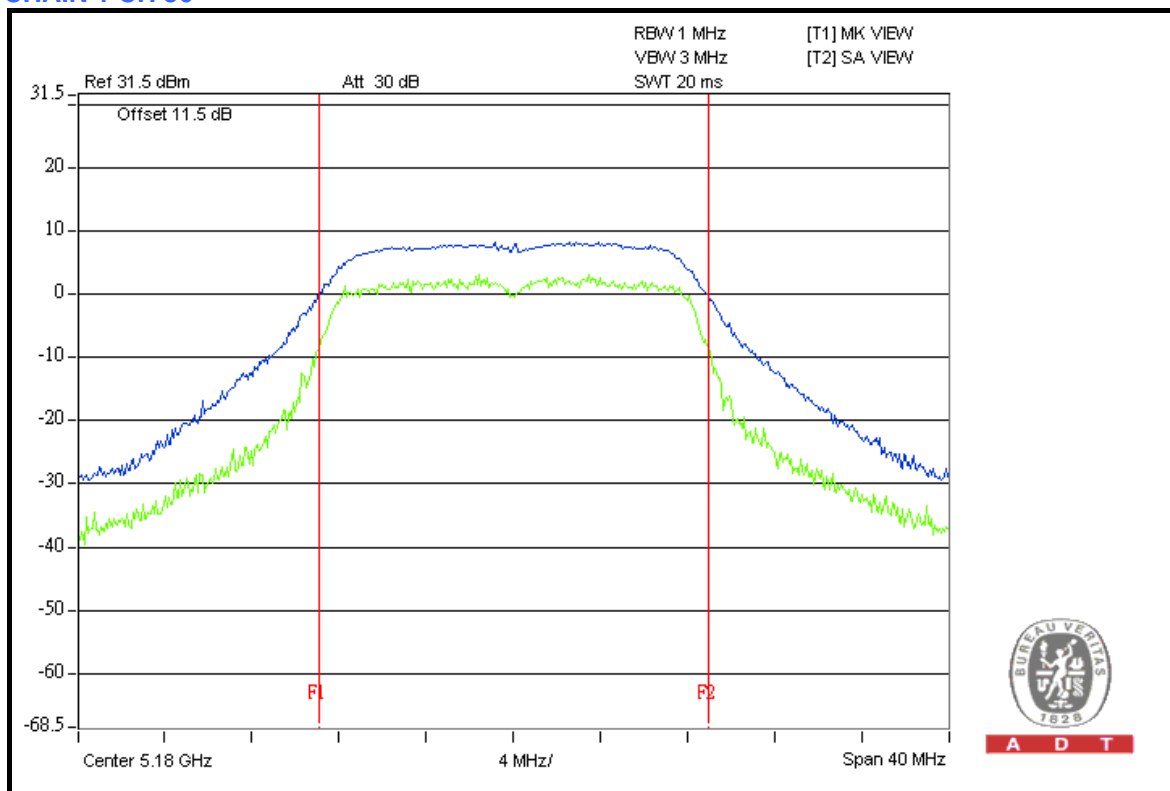


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A D T

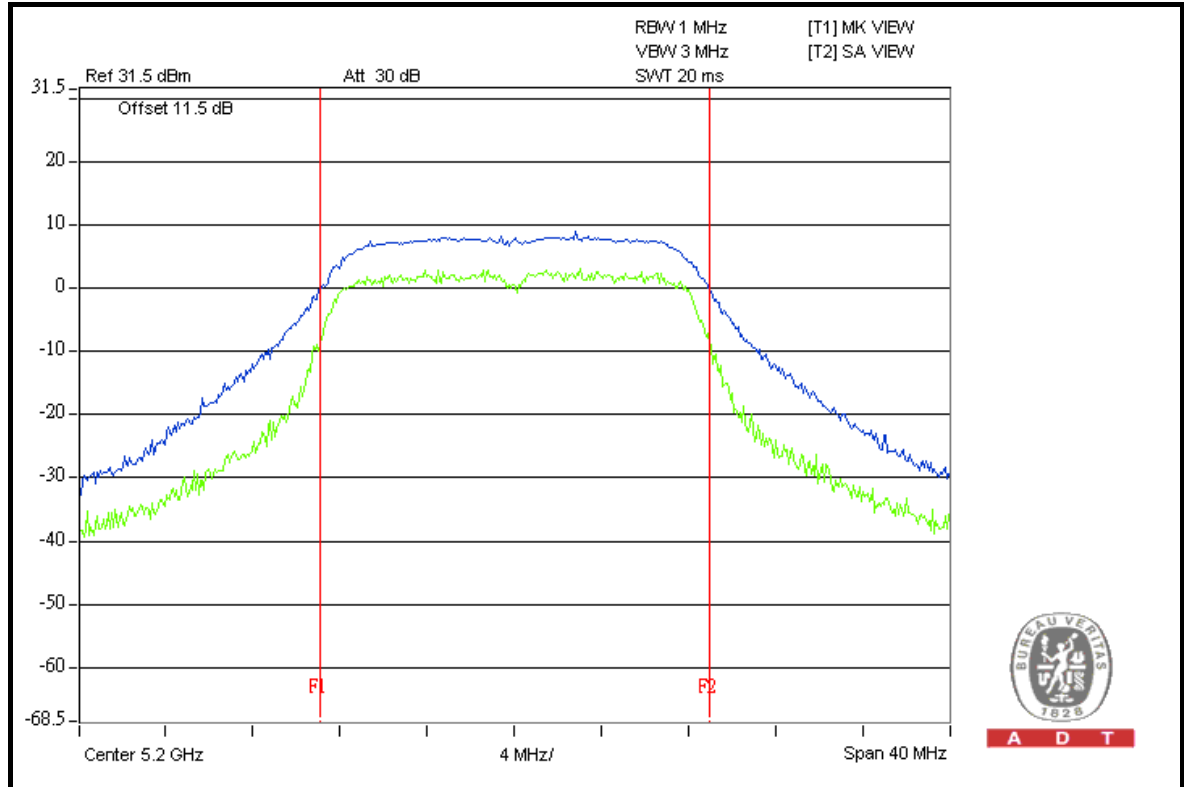
### CHAIN 1 CH 36



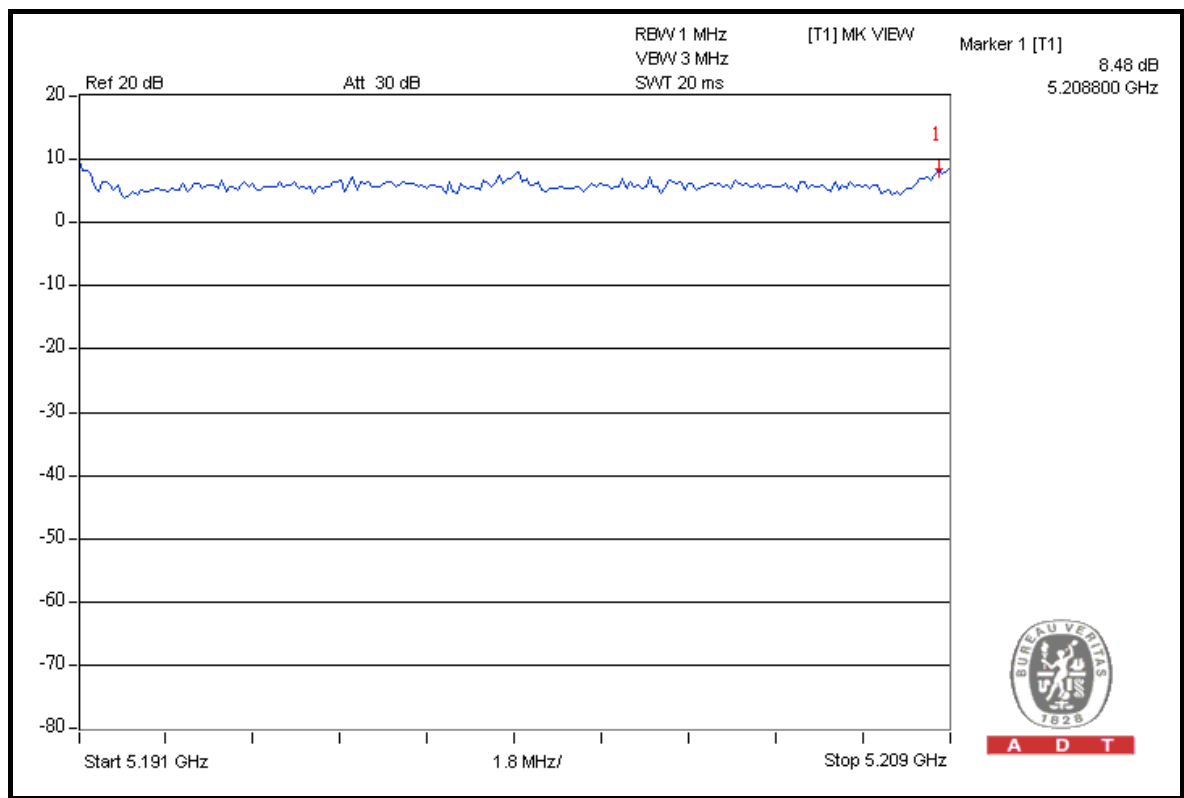


A D T

CH 40



A D T

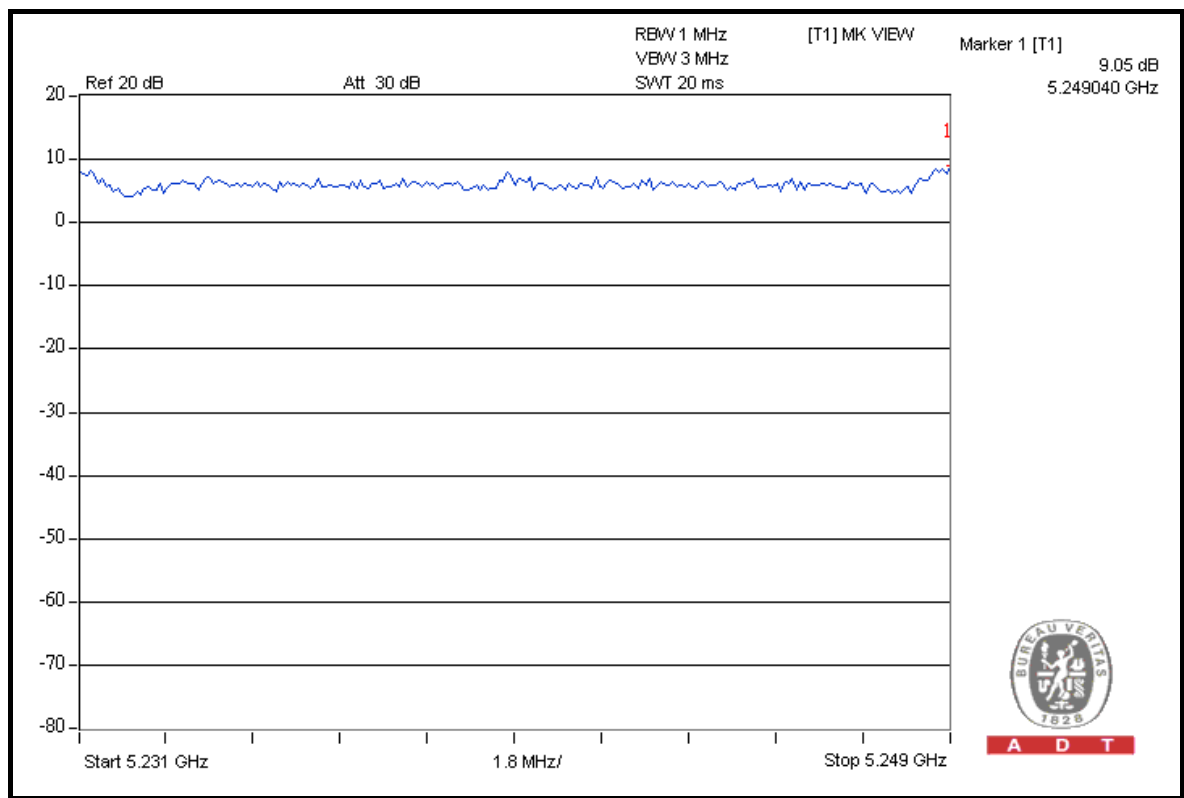
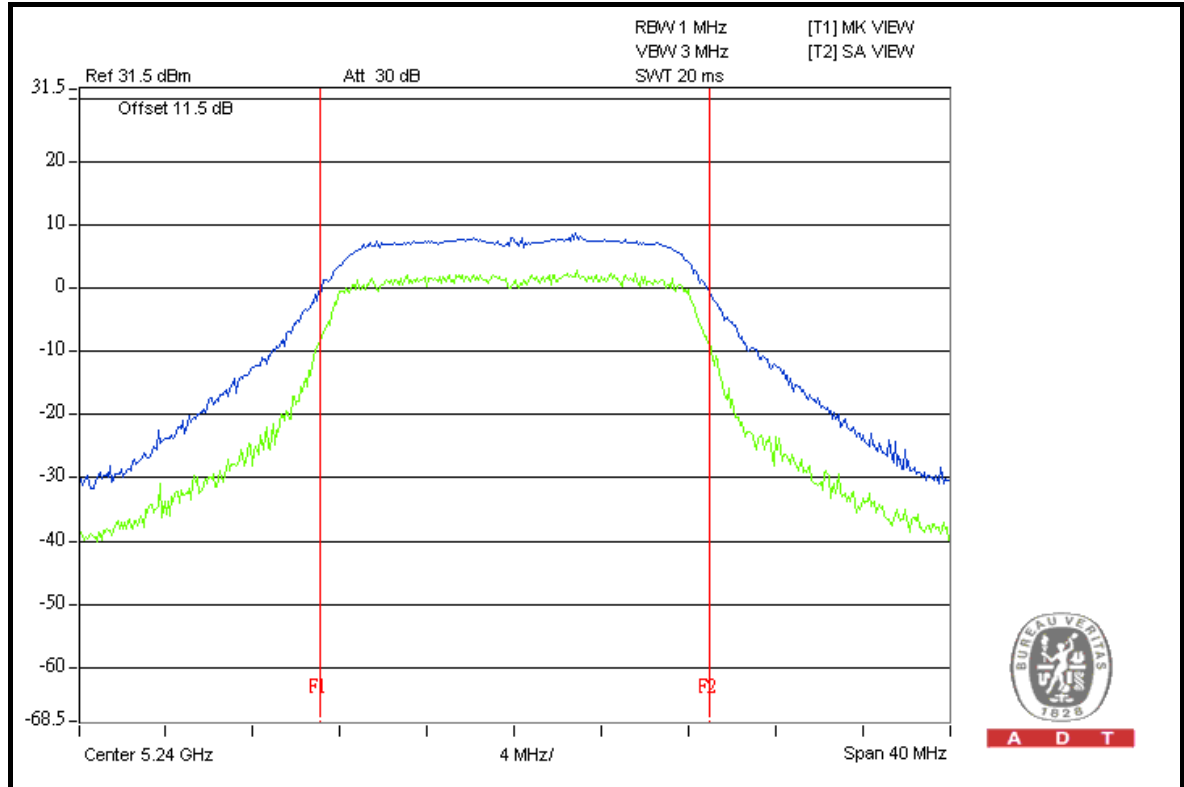


A D T



A D T

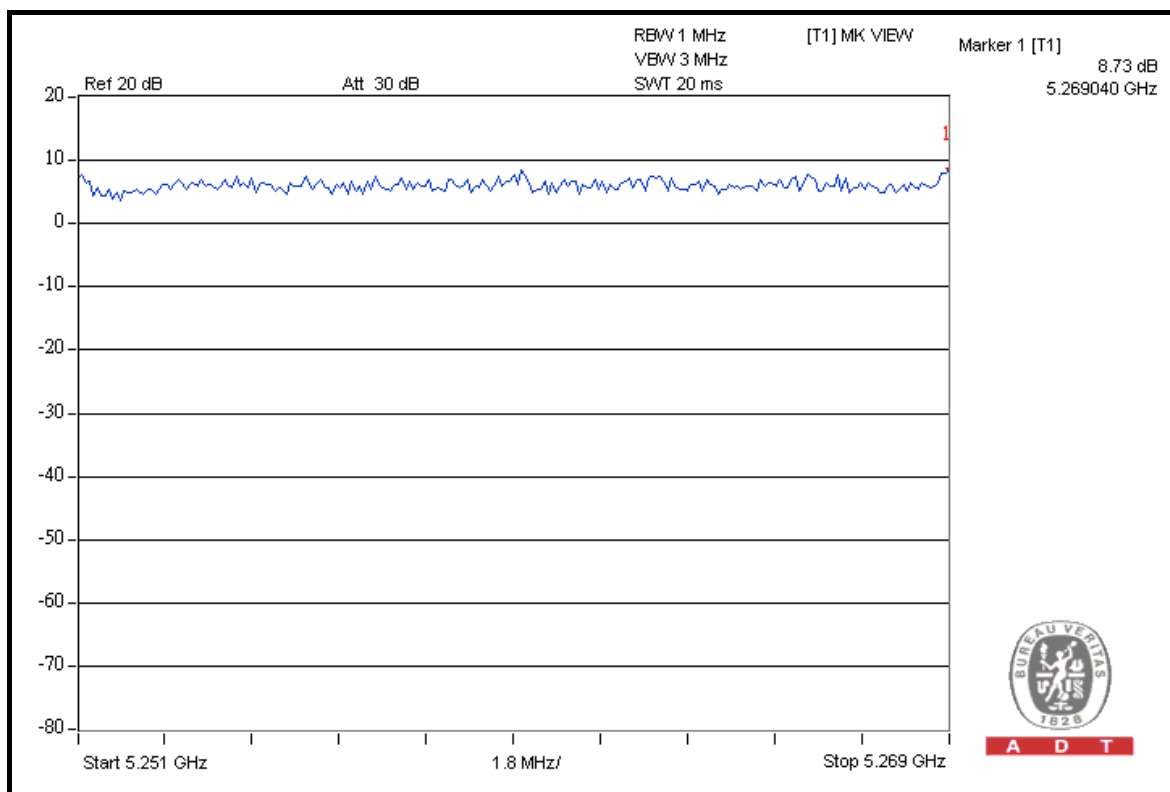
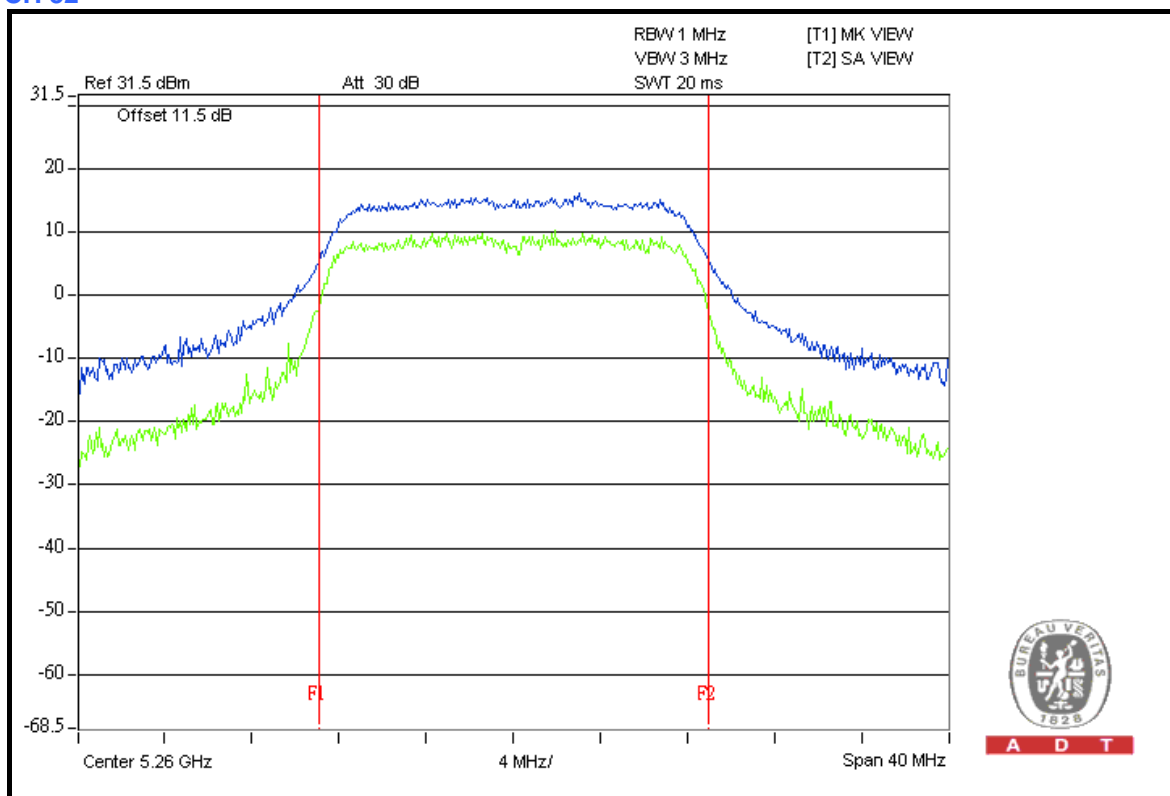
CH 48





A D T

### CH 52

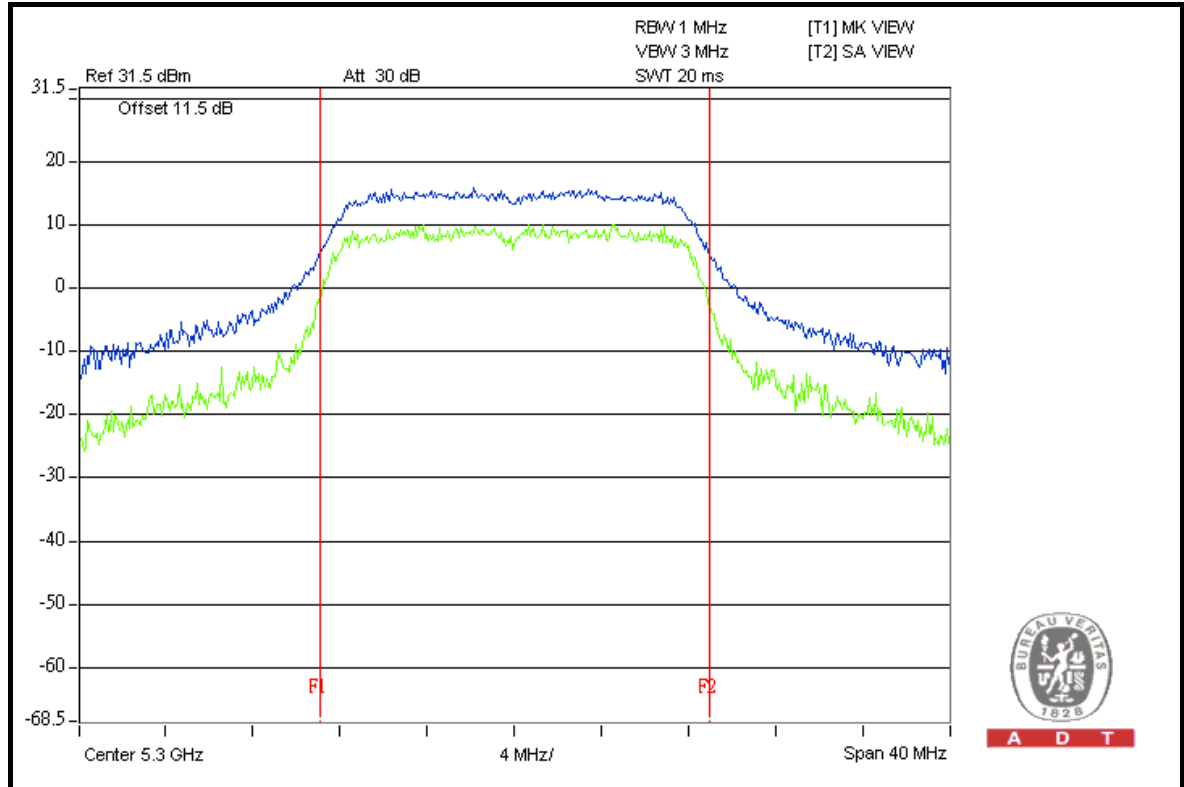




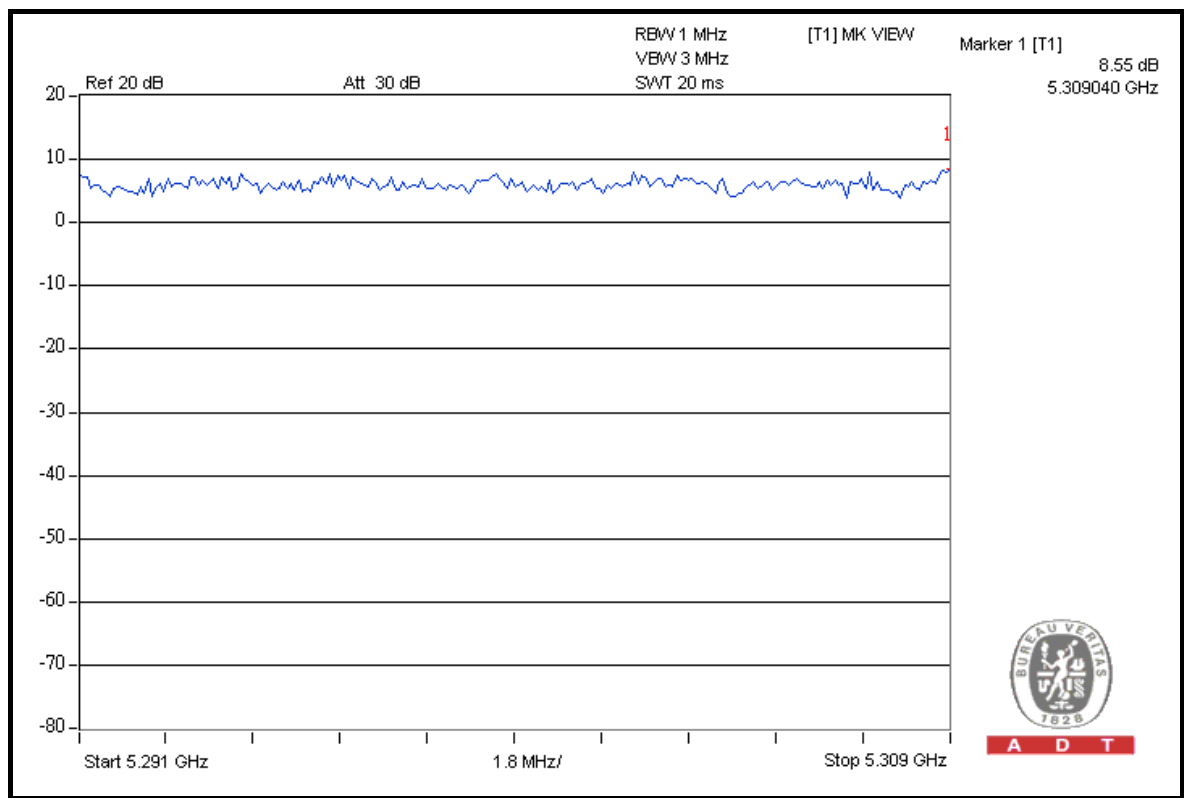


A D T

CH 60



A D T

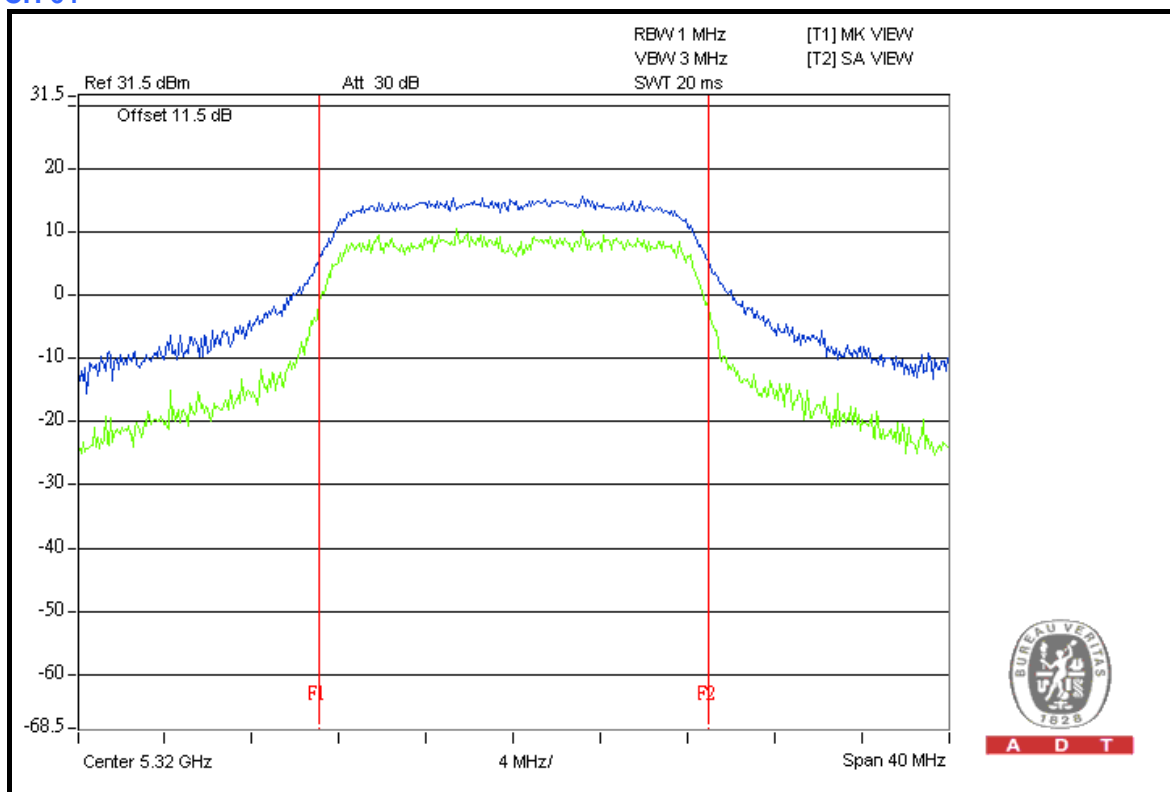


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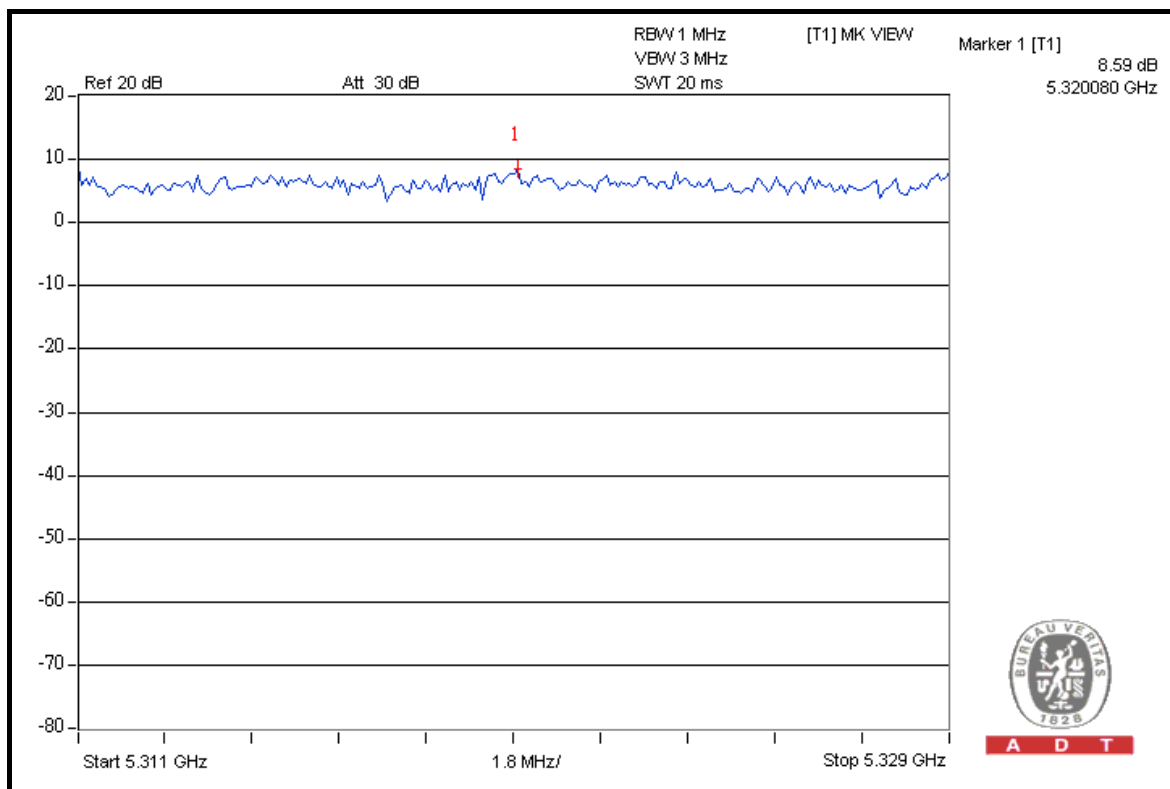


A D T

### CH 64



A D T

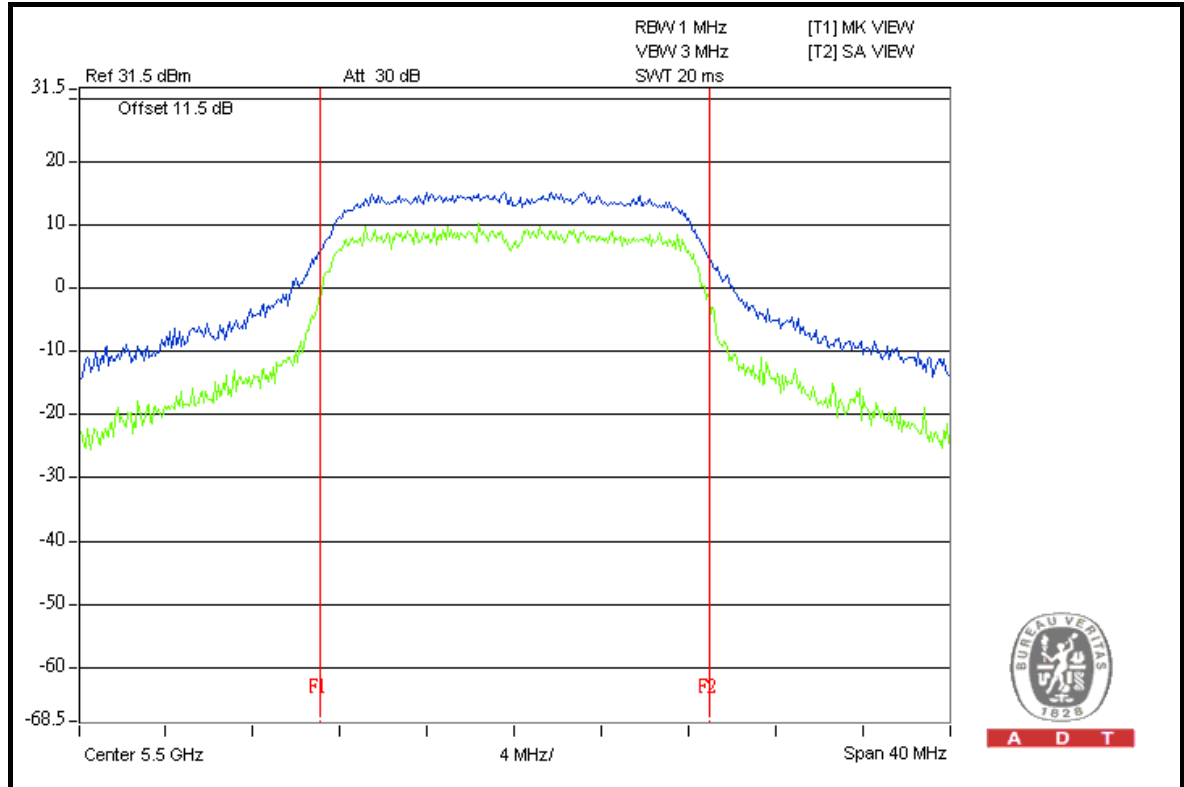


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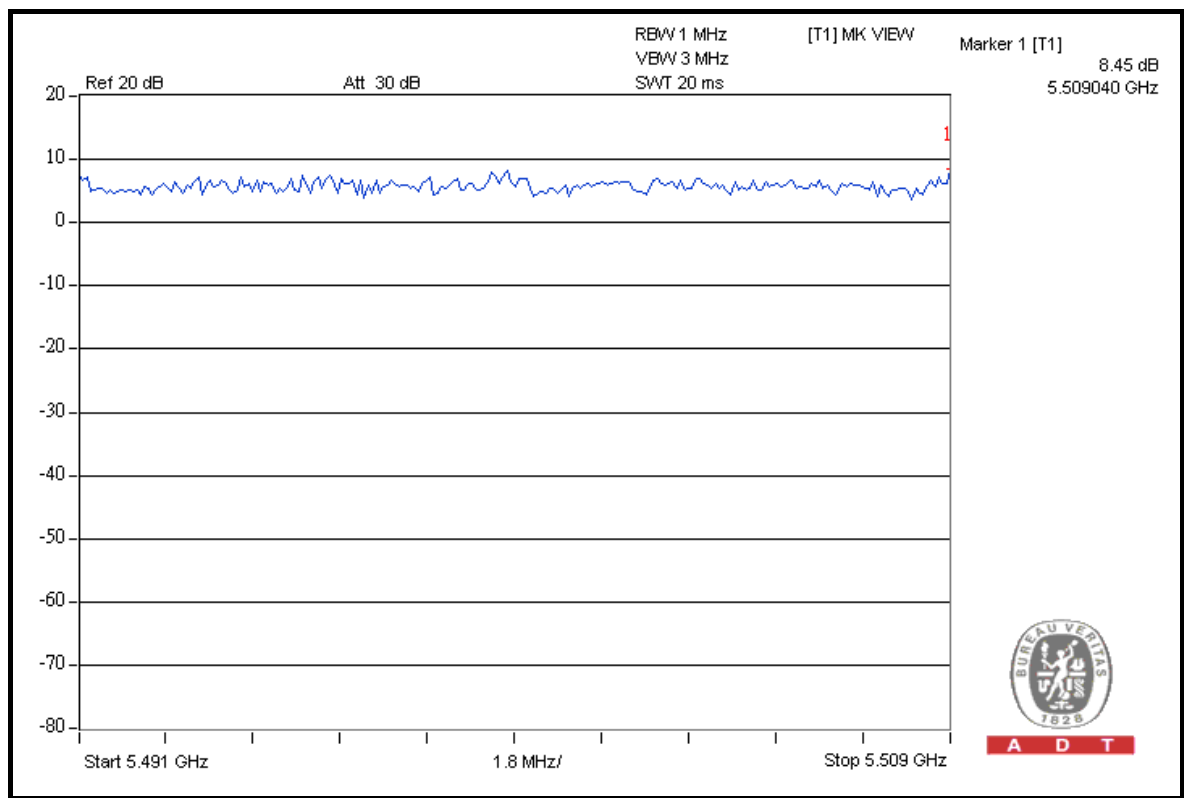


A D T

CH 100



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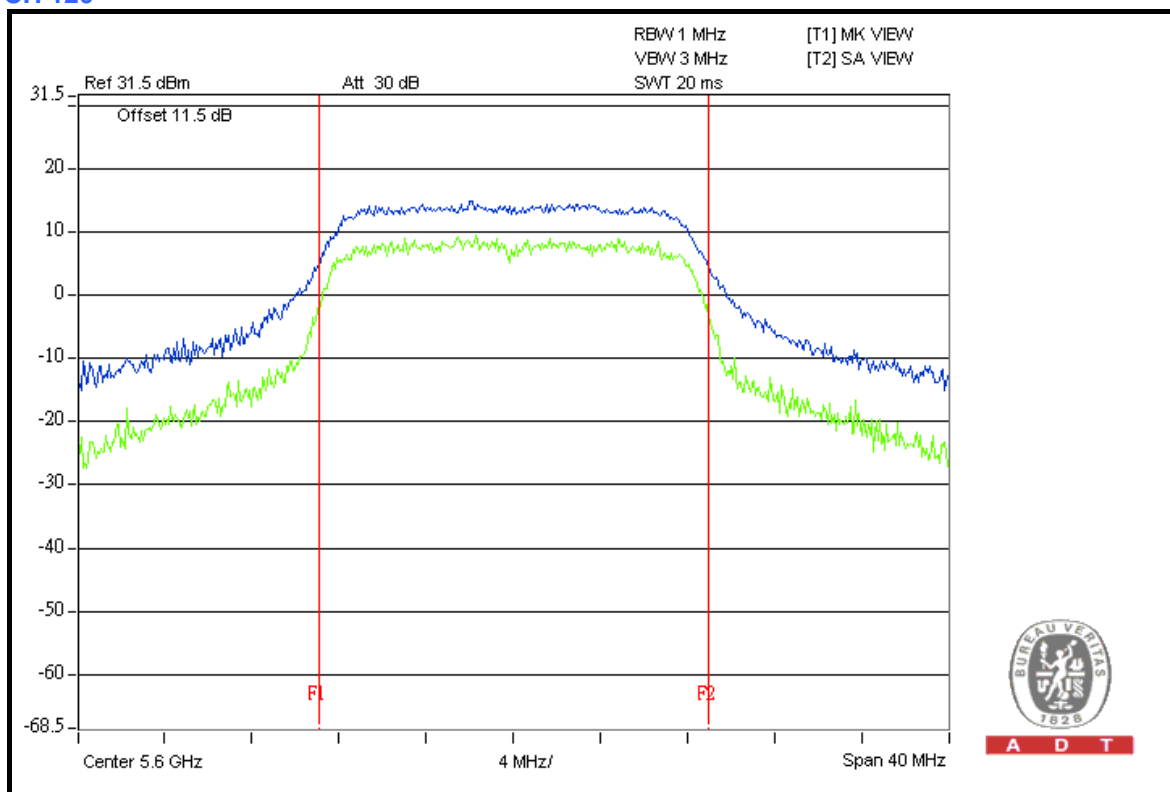


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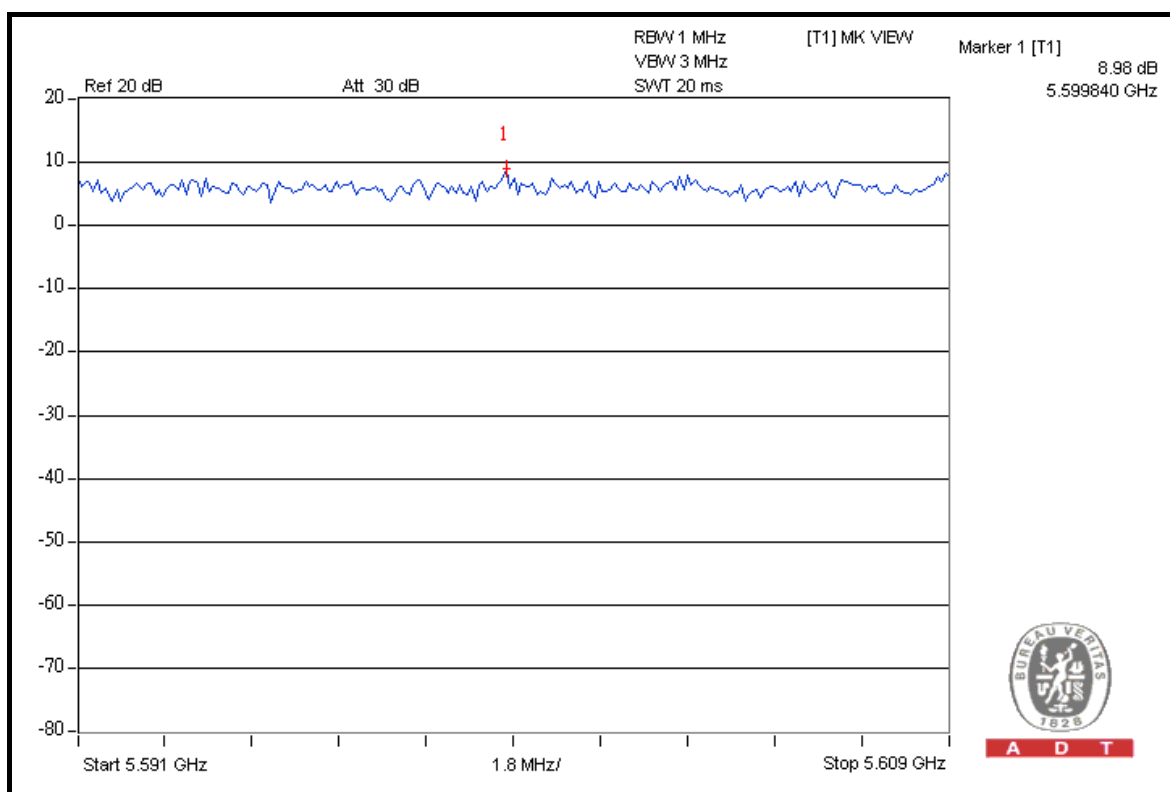


A D T

### CH 120



A D T

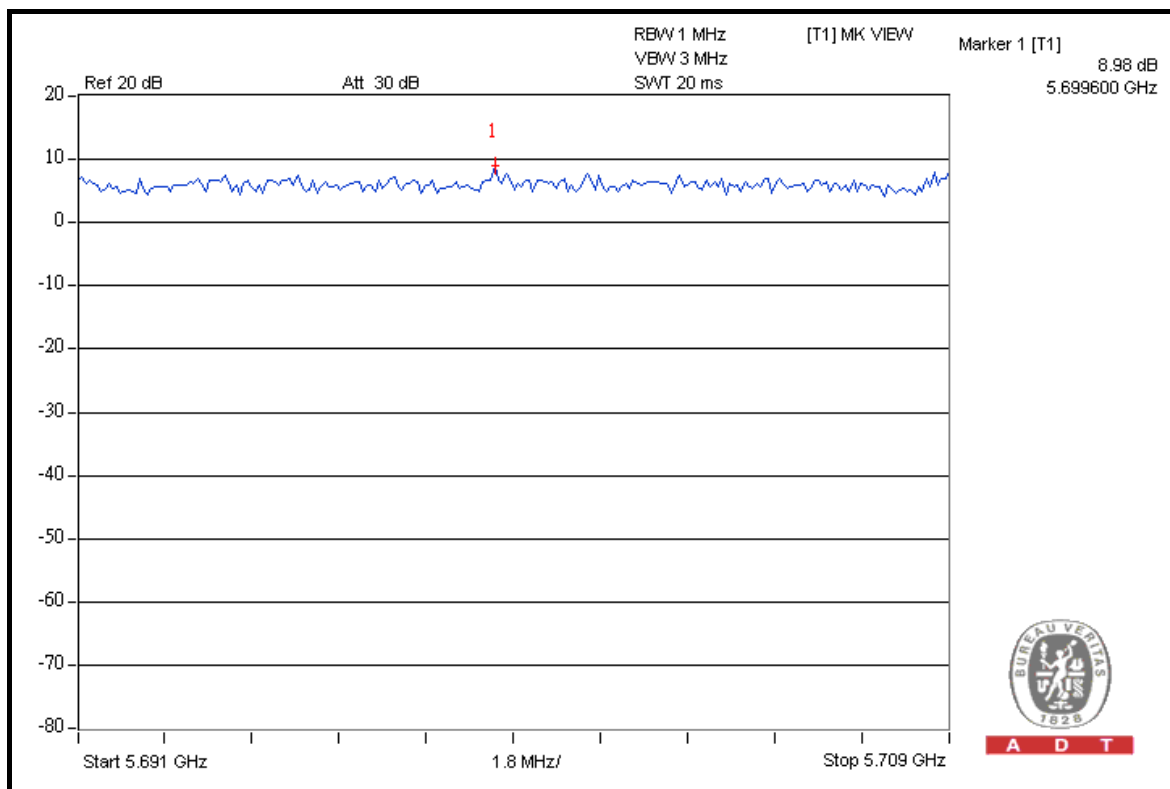
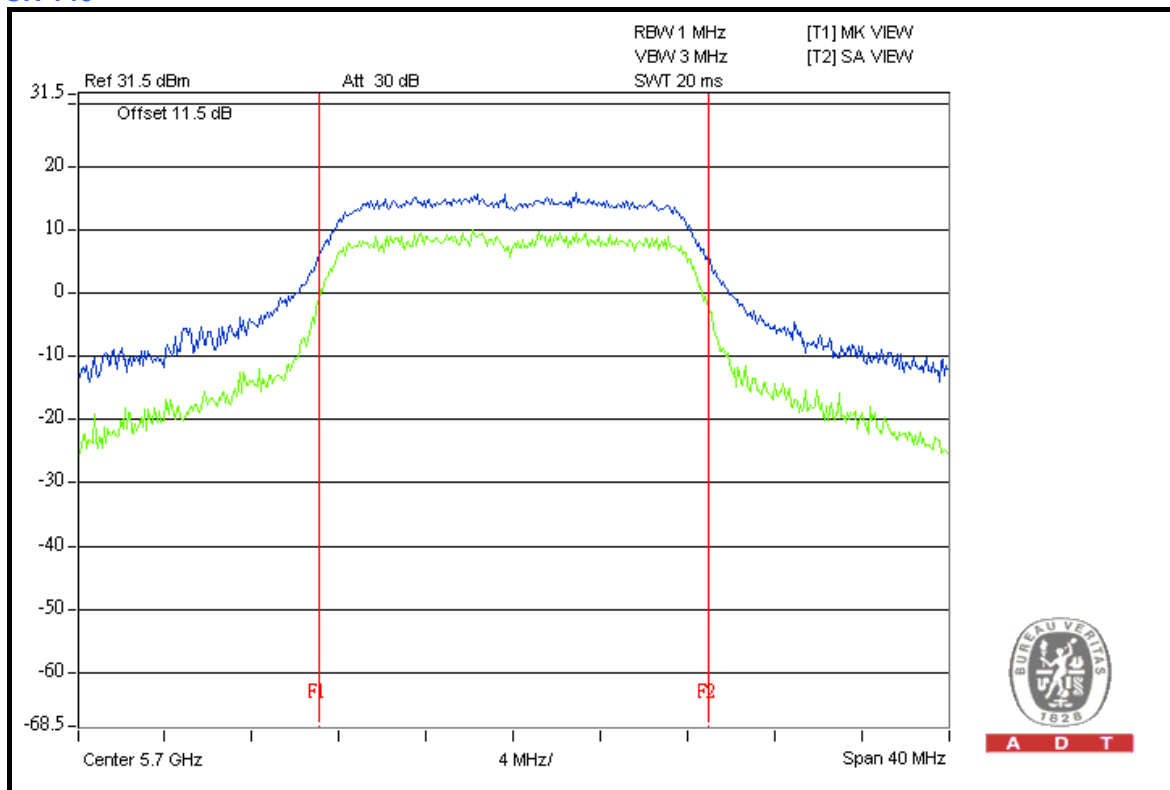


A D T



A D T

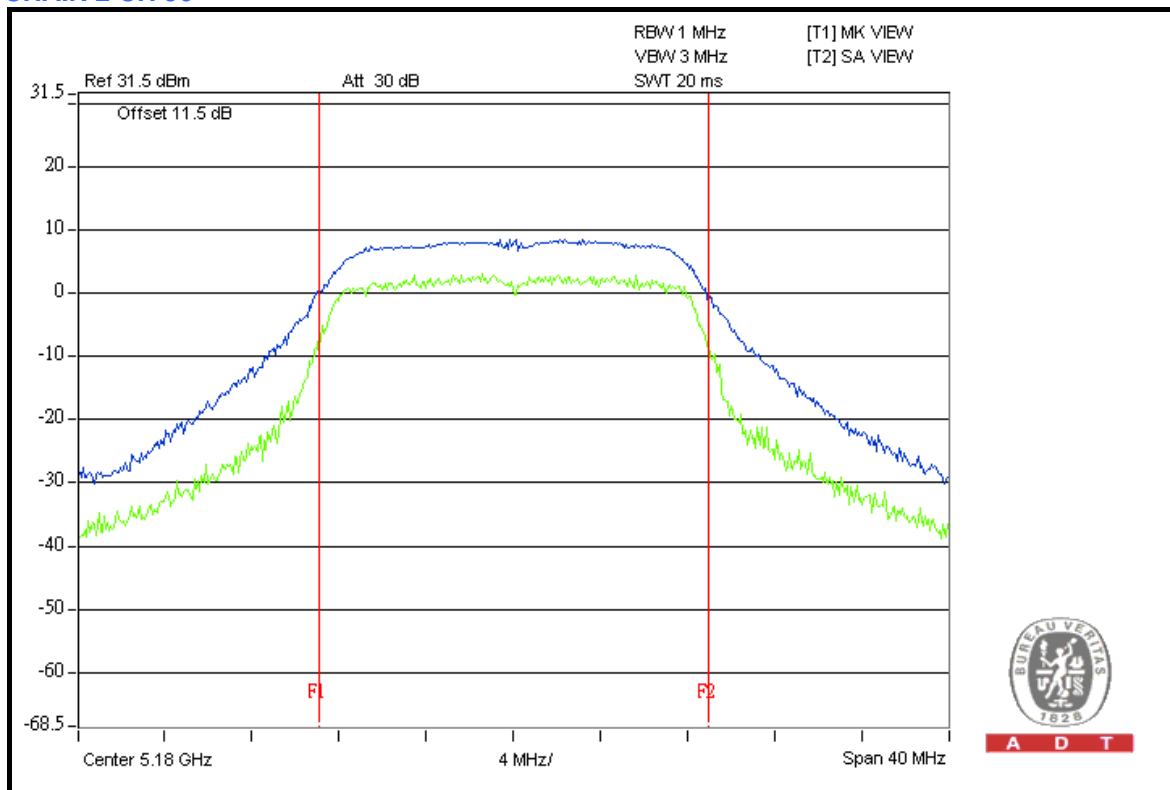
### CH 140



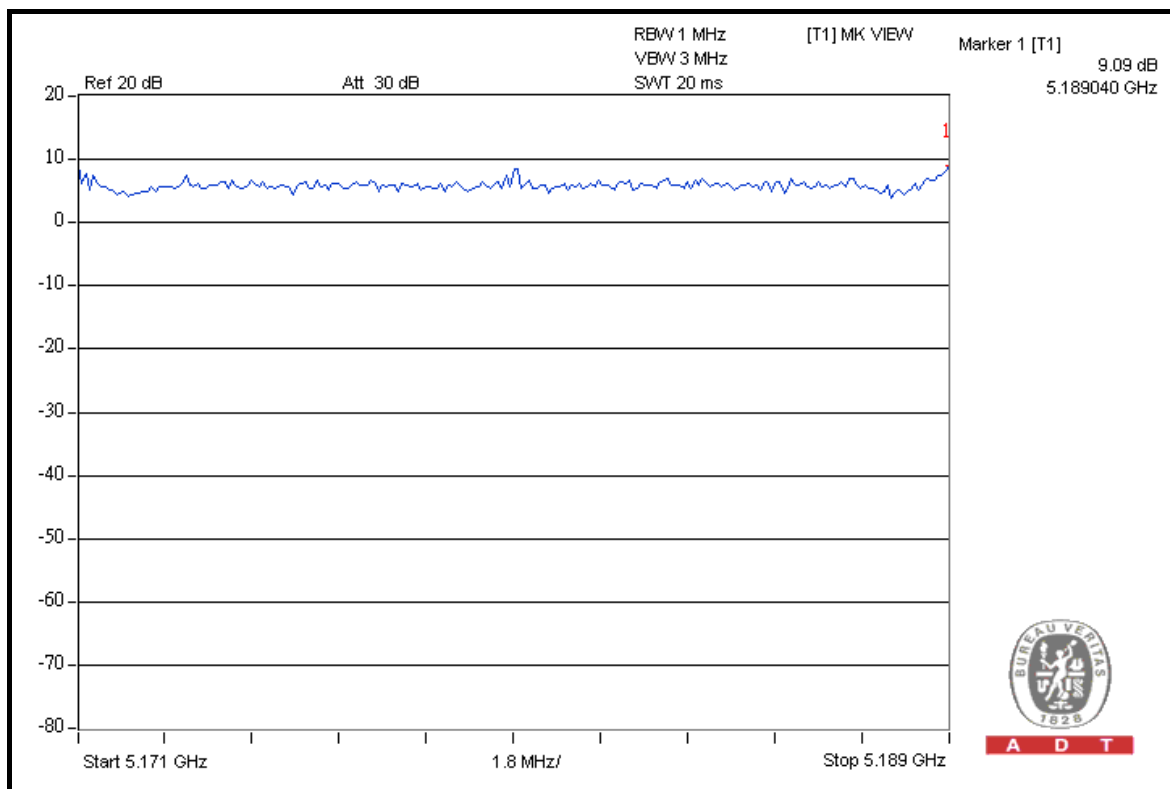


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### CHAIN 2 CH 36



A D T

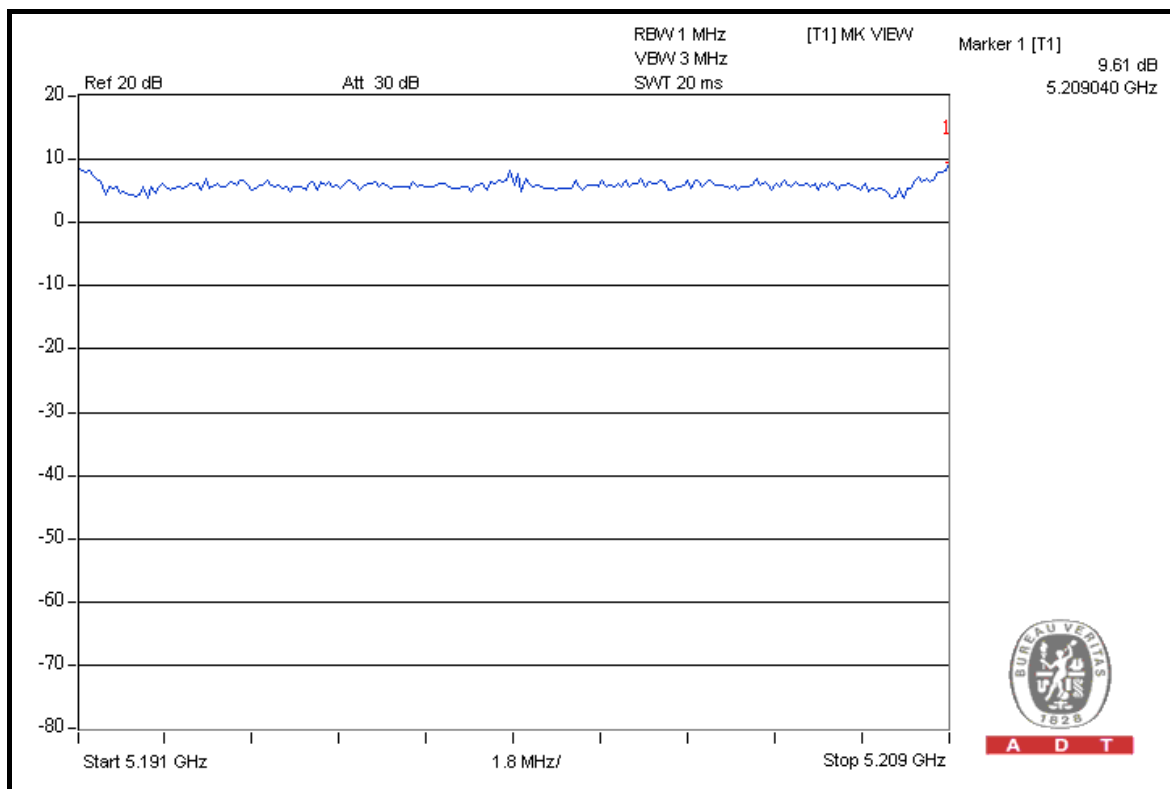
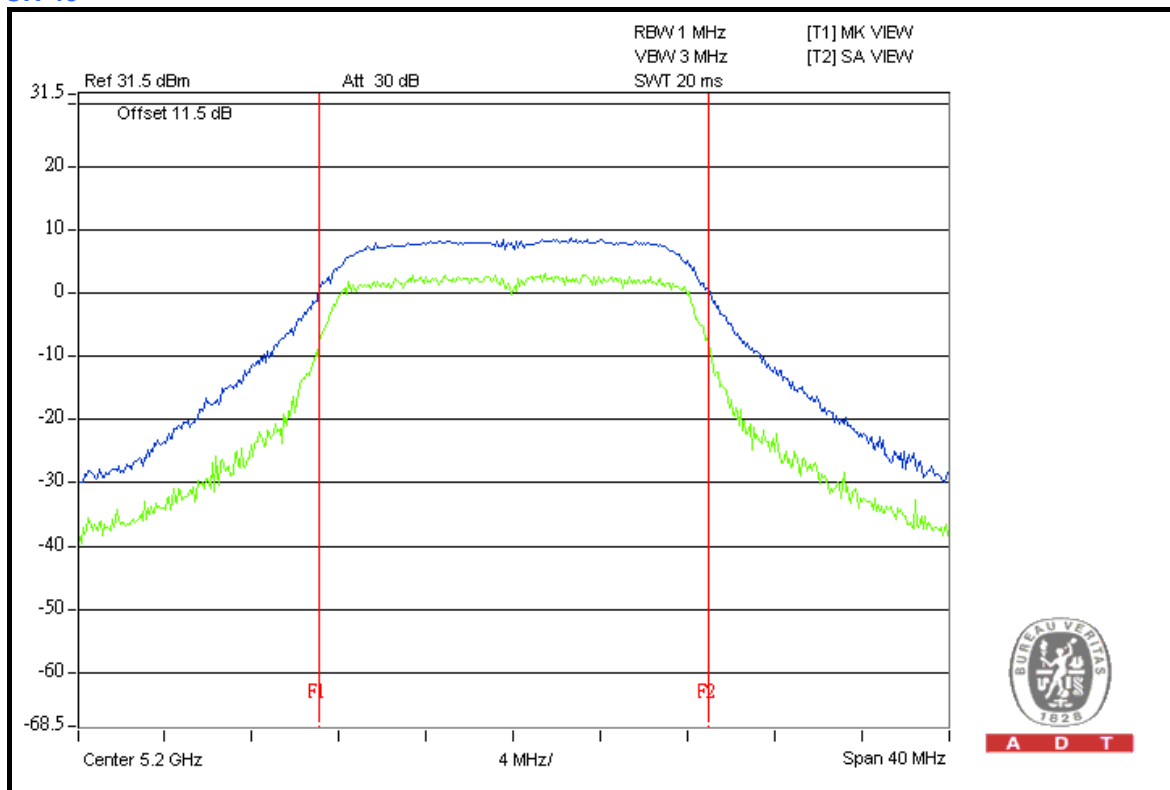


A D T



A D T

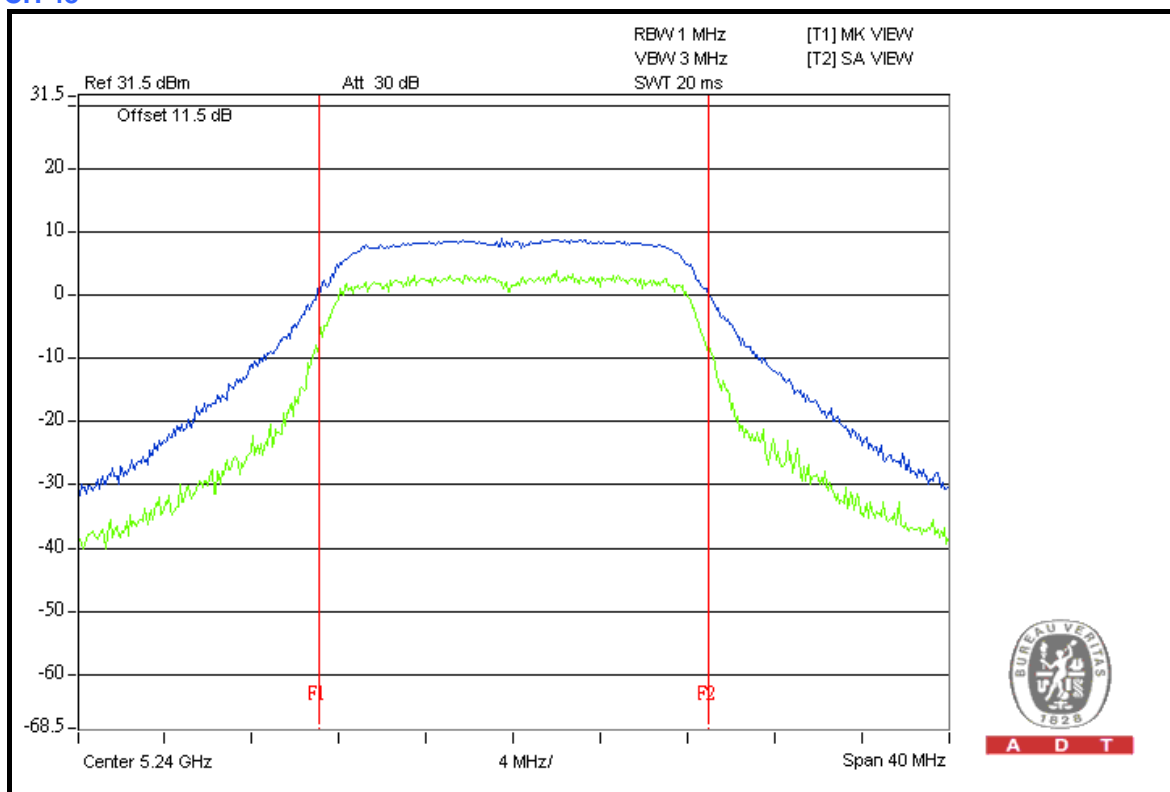
### CH 40



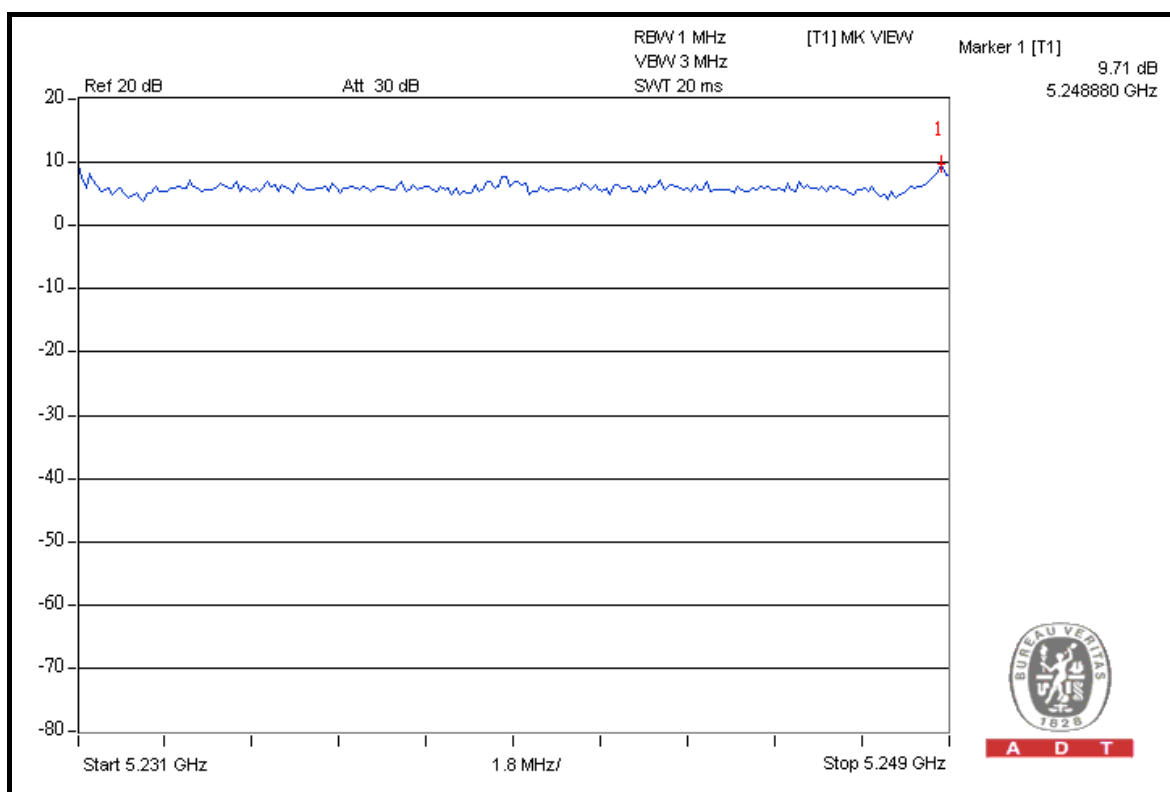


A D T

### CH 48



A D T



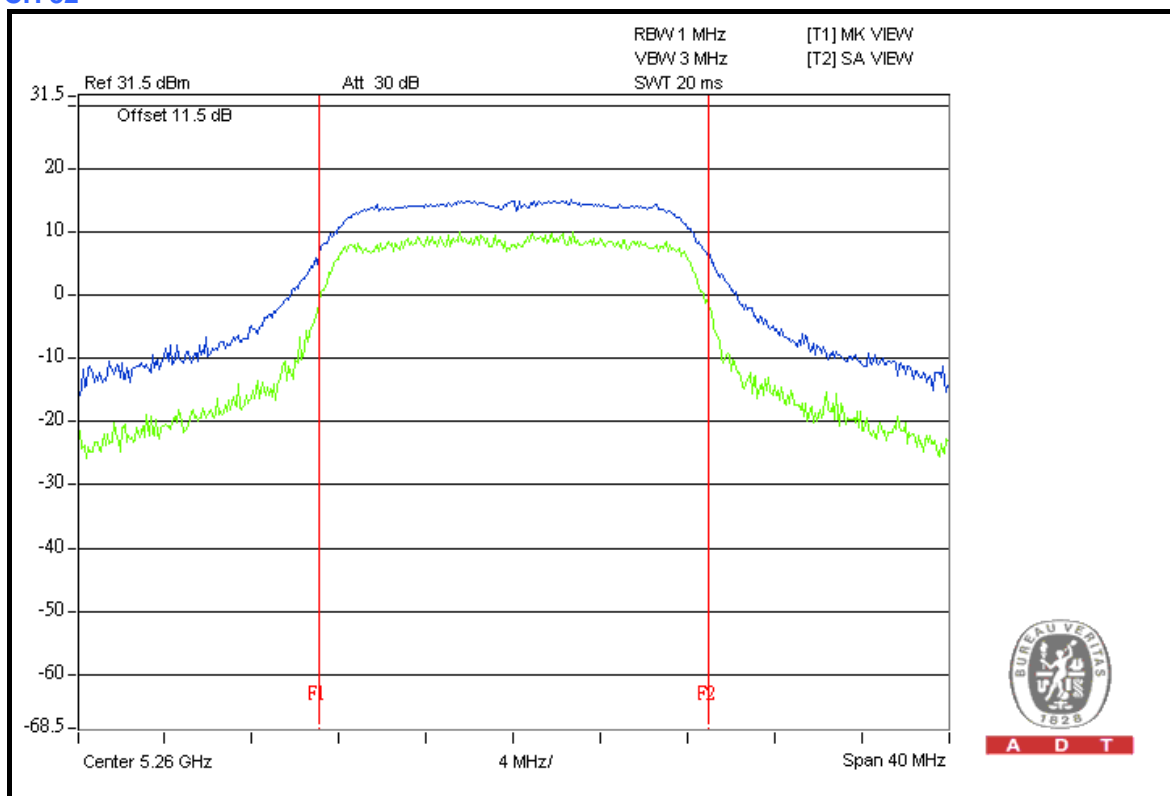
A D T



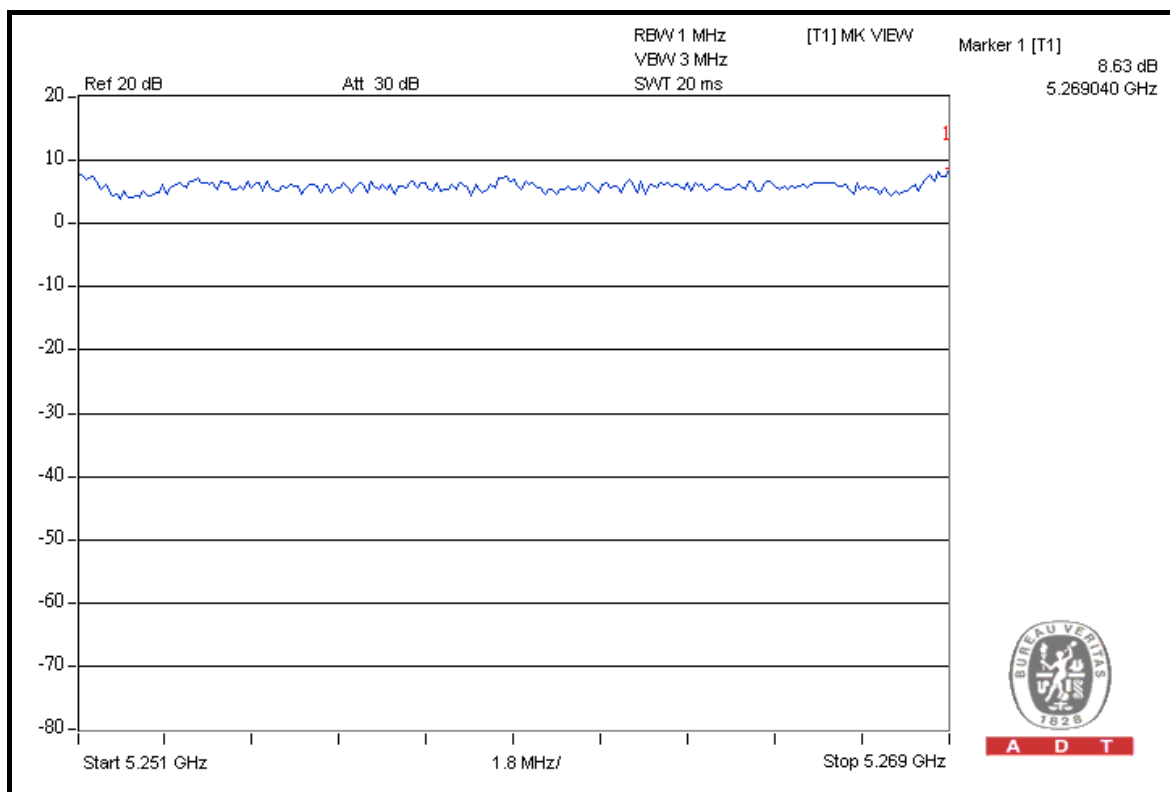


A D T

### CH 52



A D T

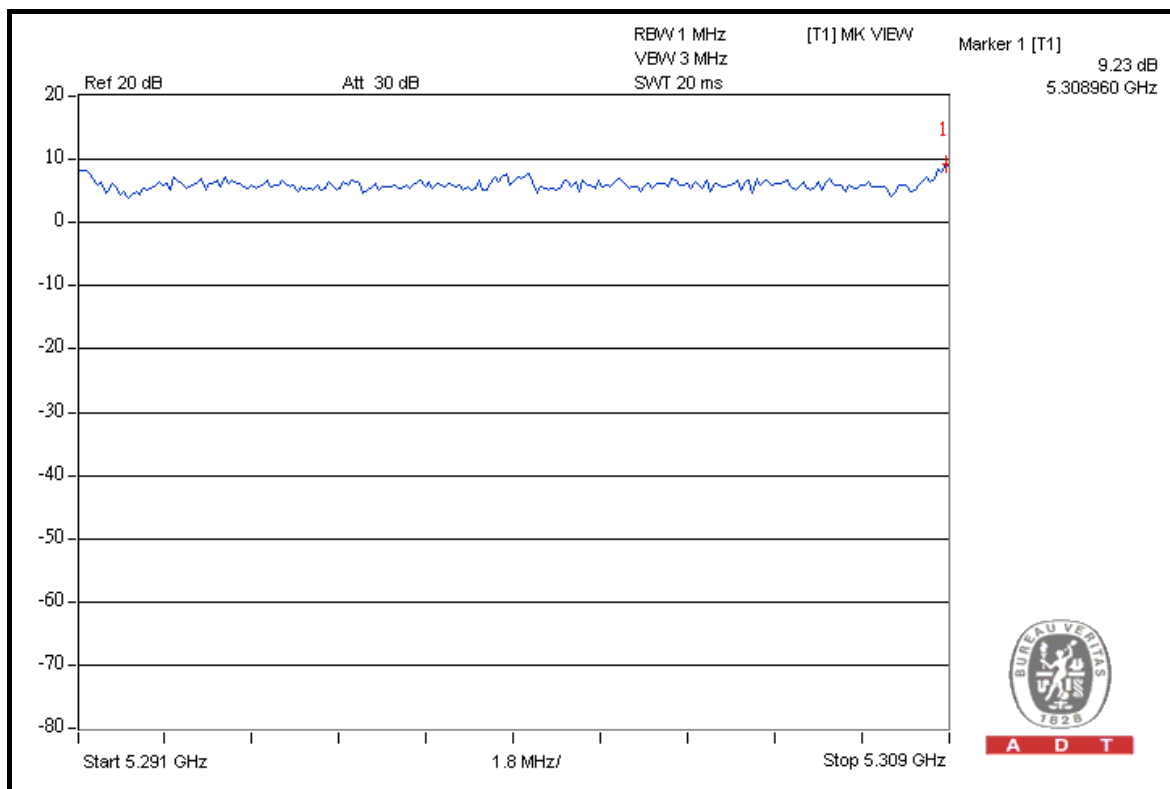
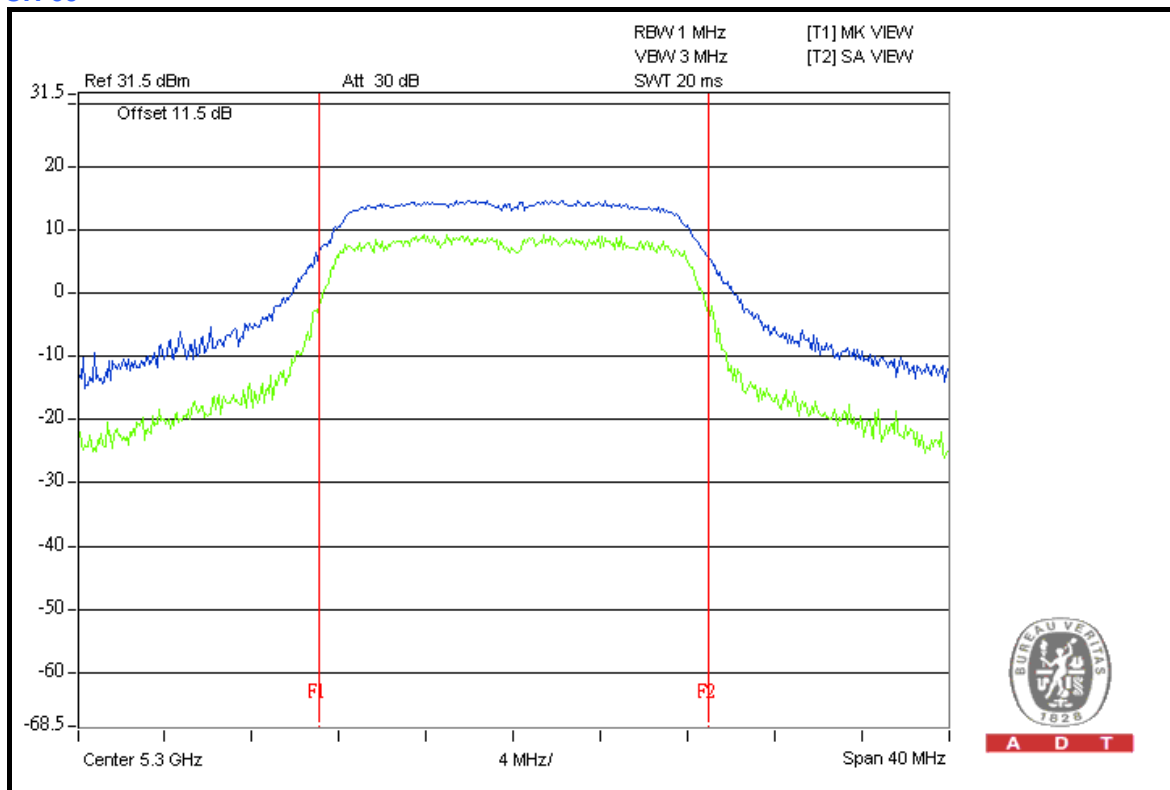


A D T



A D T

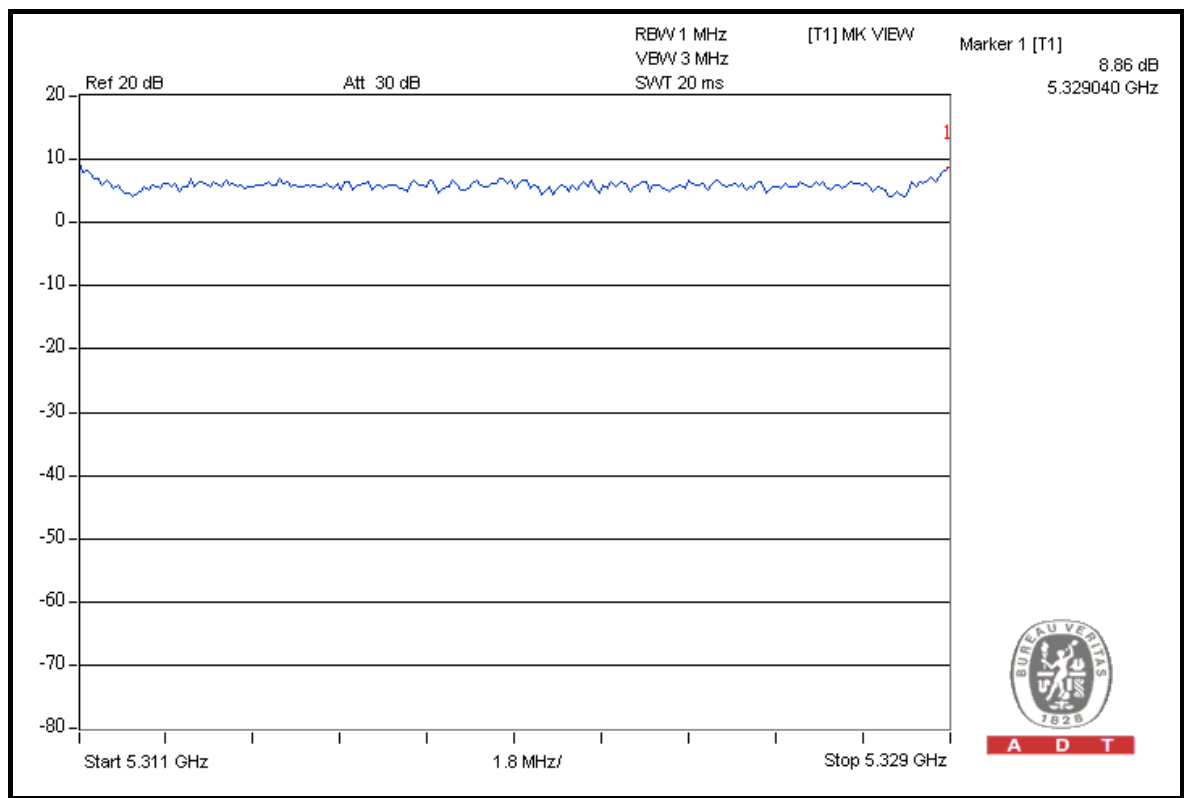
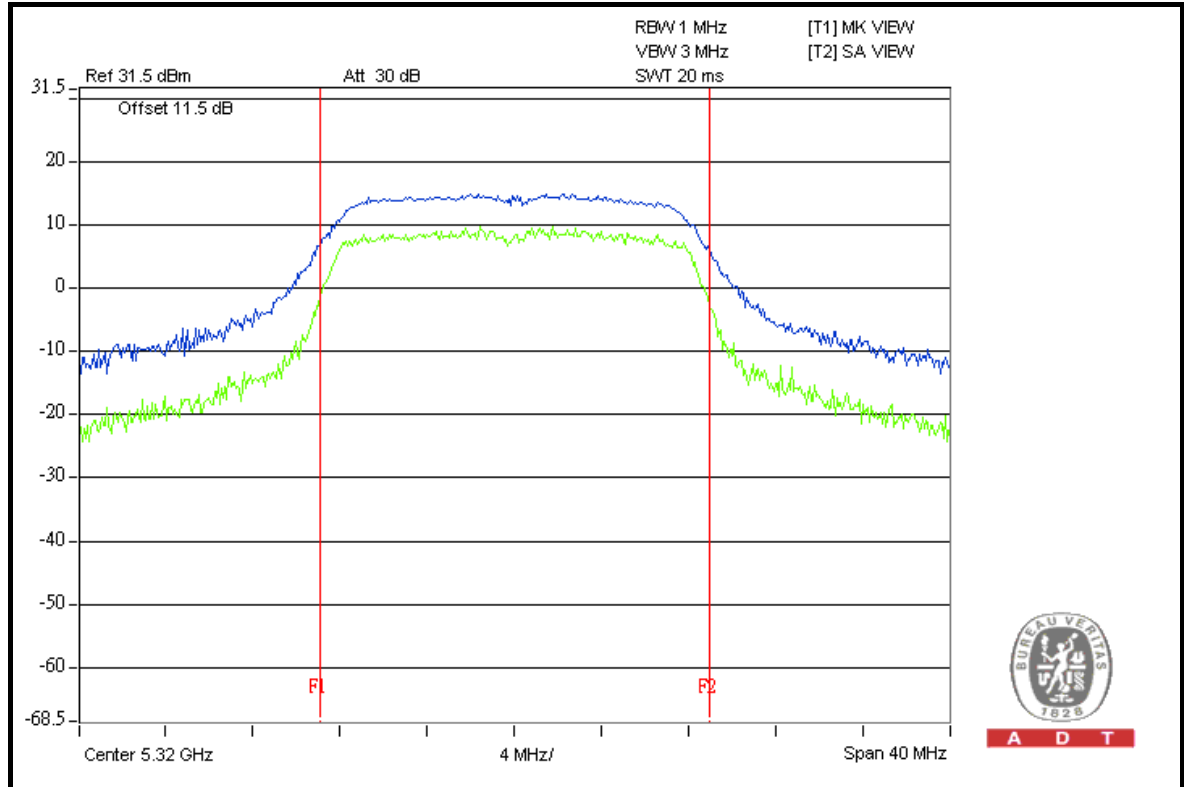
### CH 60





A D T

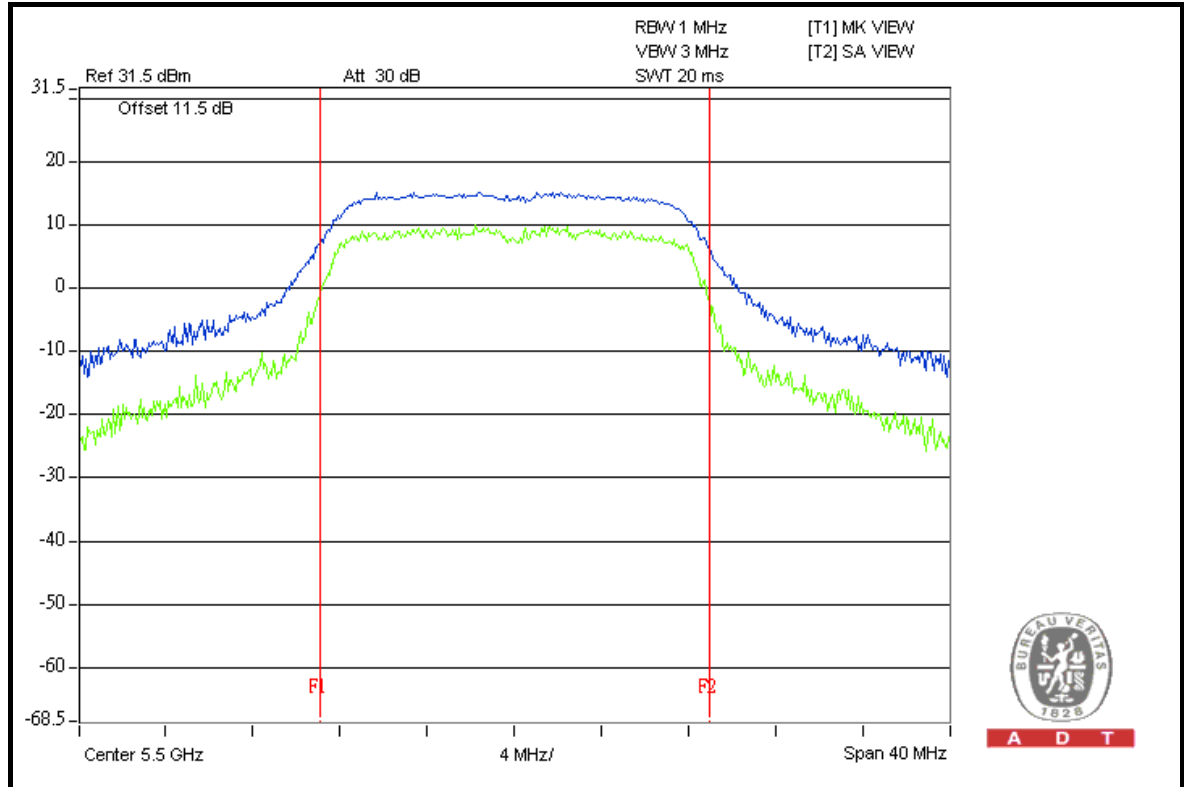
CH 64



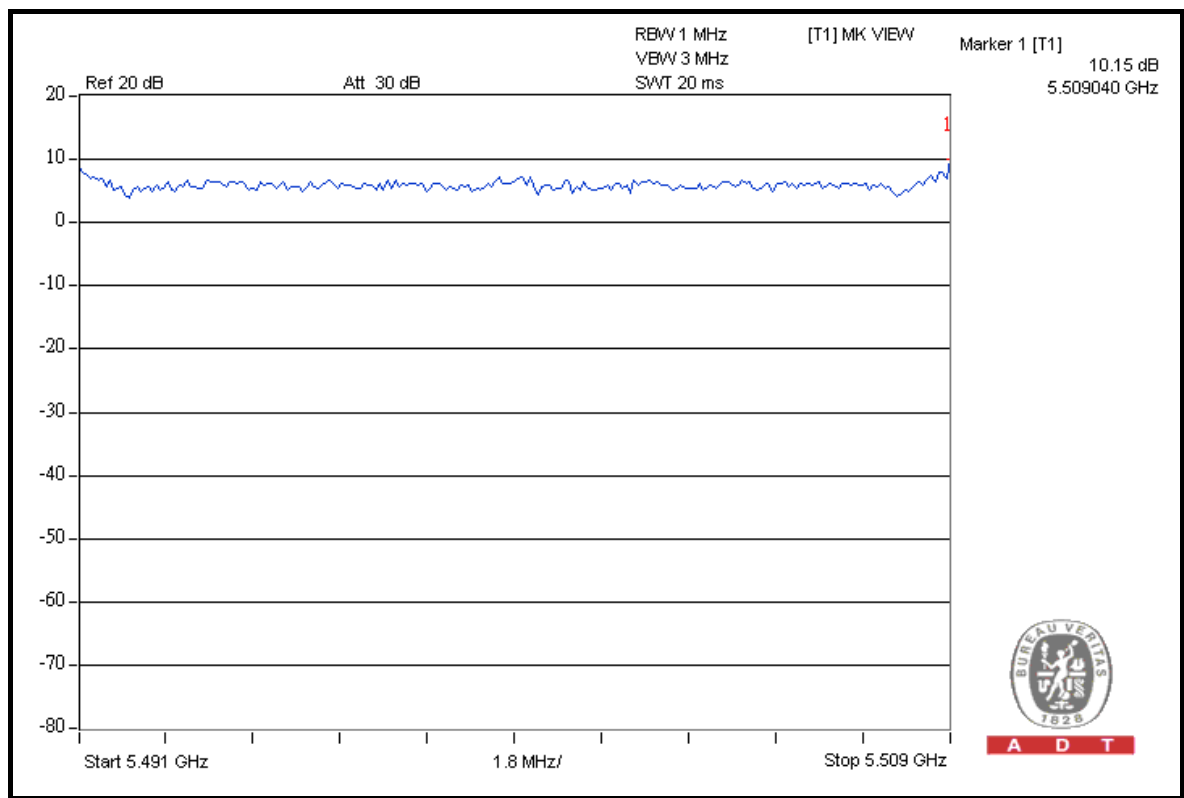


A D T

CH 100



A D T

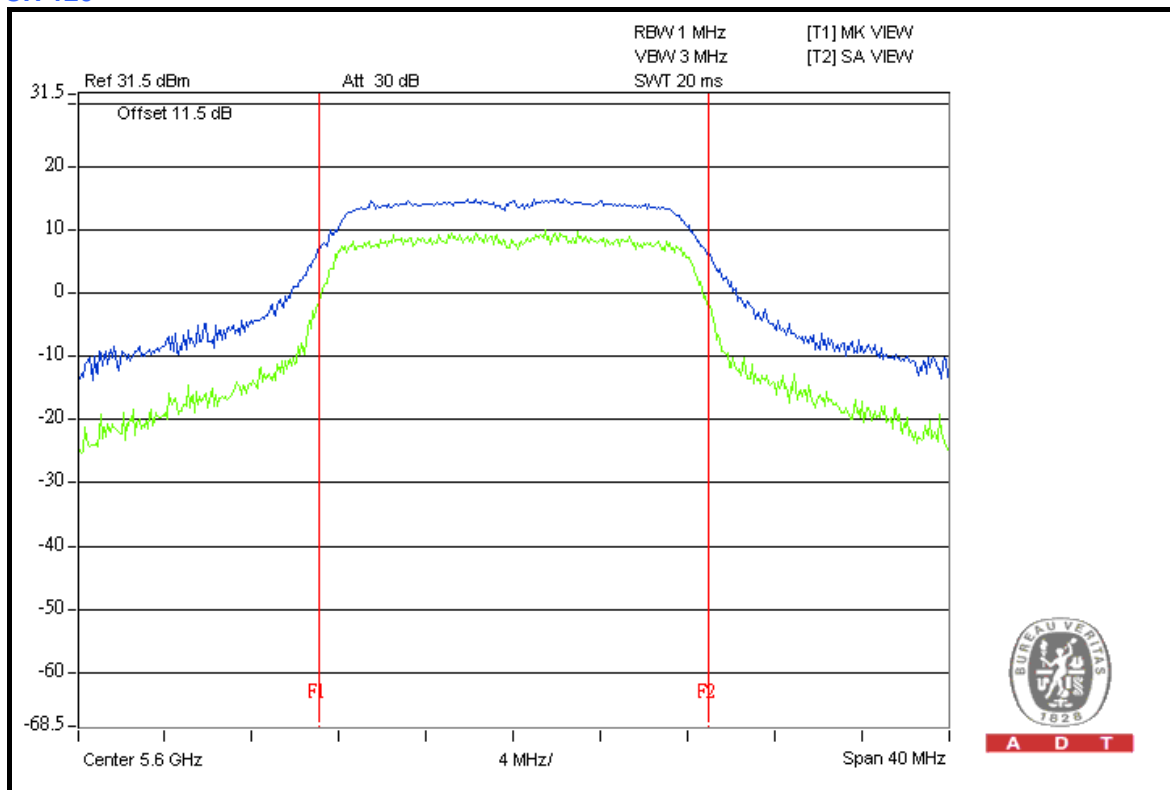


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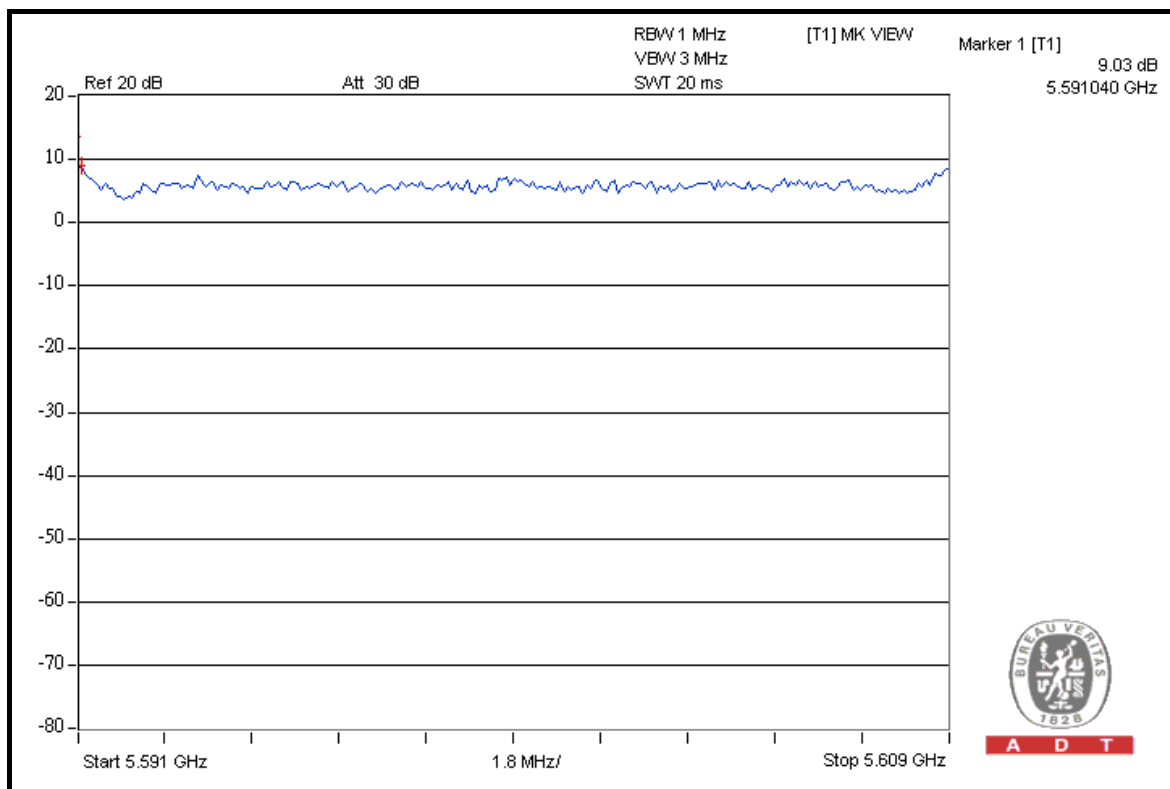


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### CH 120



A D T

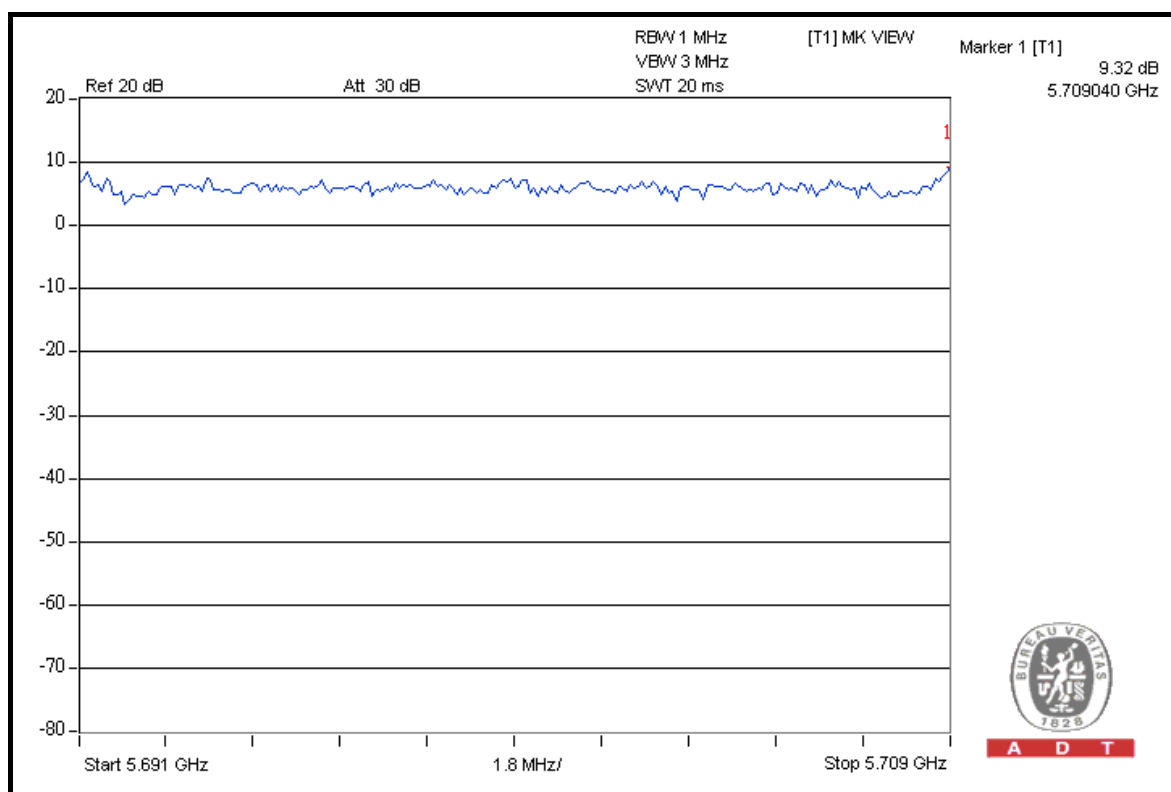
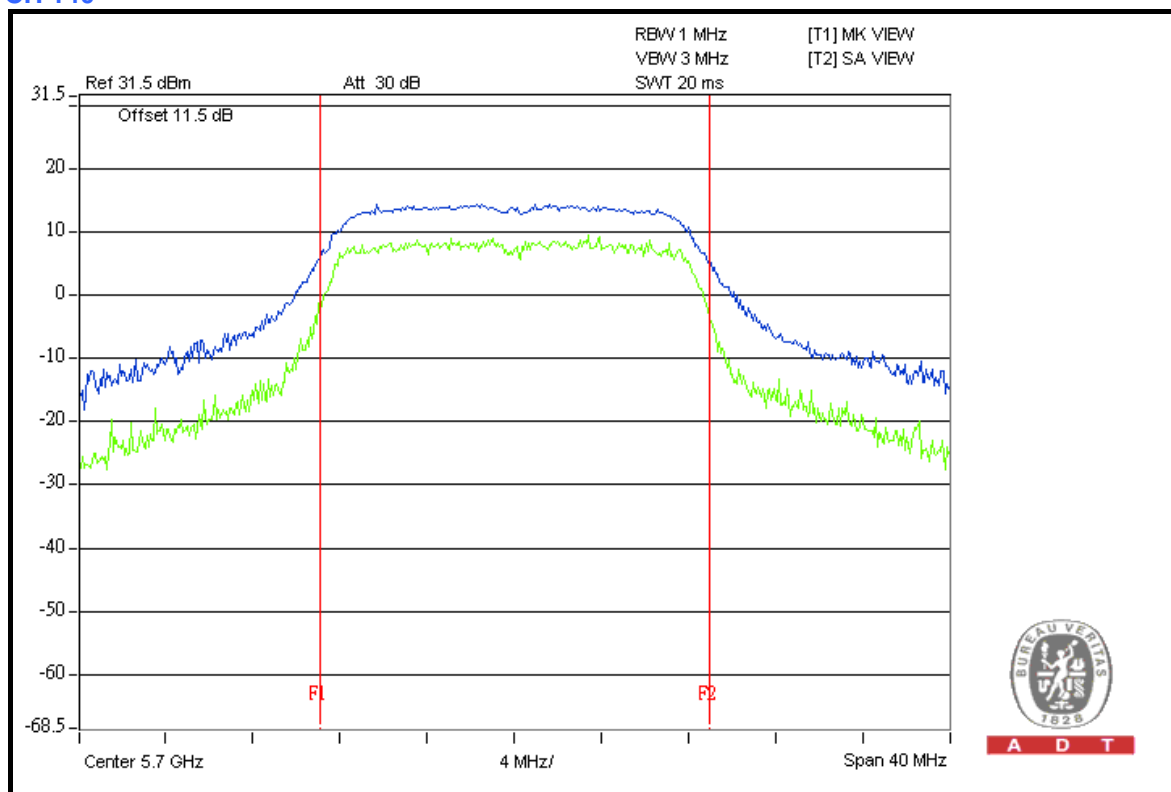


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A D T

### CH 140





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### 802.11a OFDM MODULATION

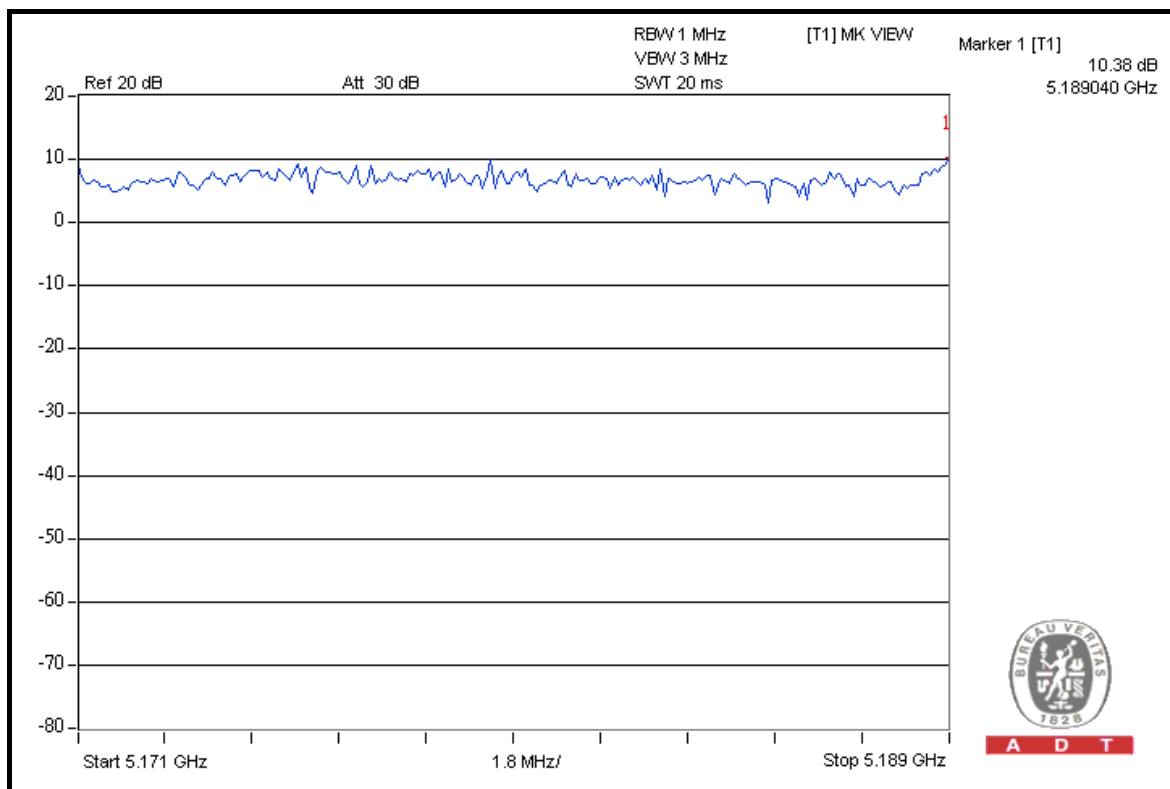
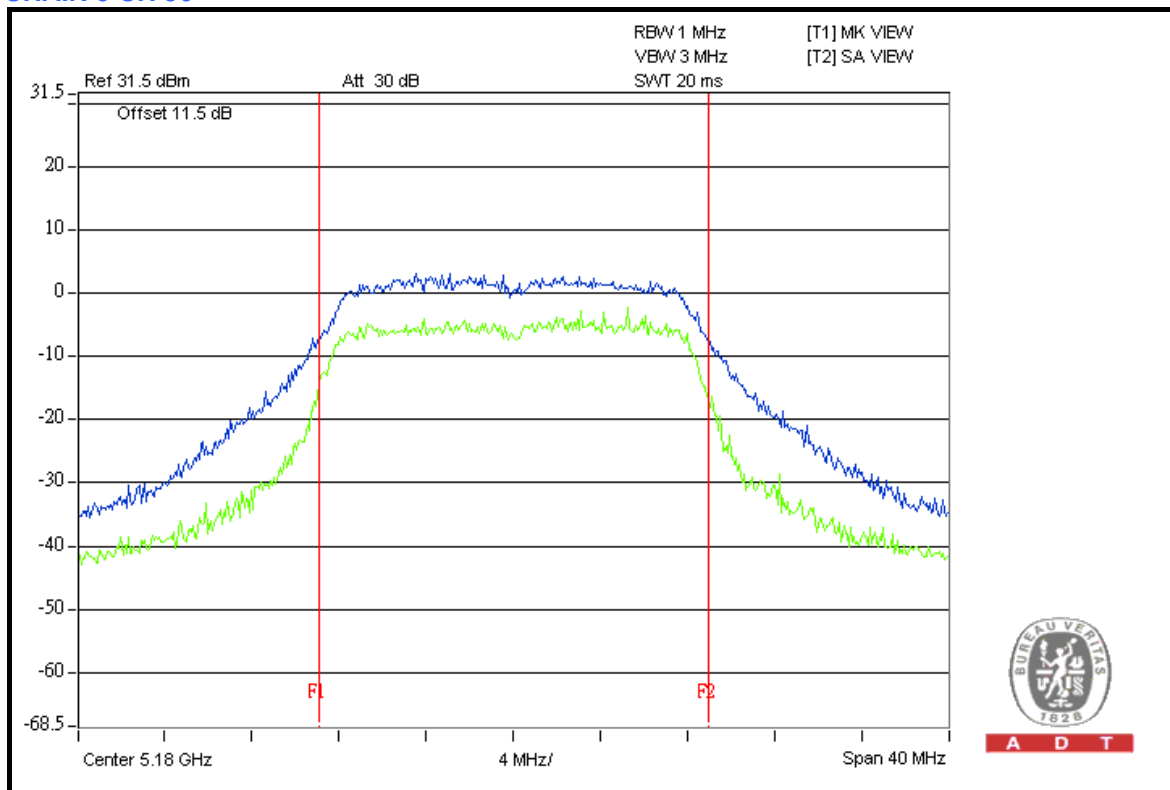
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.0Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
36	5180	10.38	9.07	13	PASS
40	5200	10.81	9.12	13	PASS
48	5240	9.40	9.38	13	PASS
52	5260	10.71	10.27	13	PASS
60	5300	9.29	9.52	13	PASS
64	5320	9.31	9.47	13	PASS
100	5500	8.45	9.67	13	PASS
120	5600	9.89	8.99	13	PASS
140	5700	9.35	9.05	13	PASS



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### CHAIN 0 CH 36

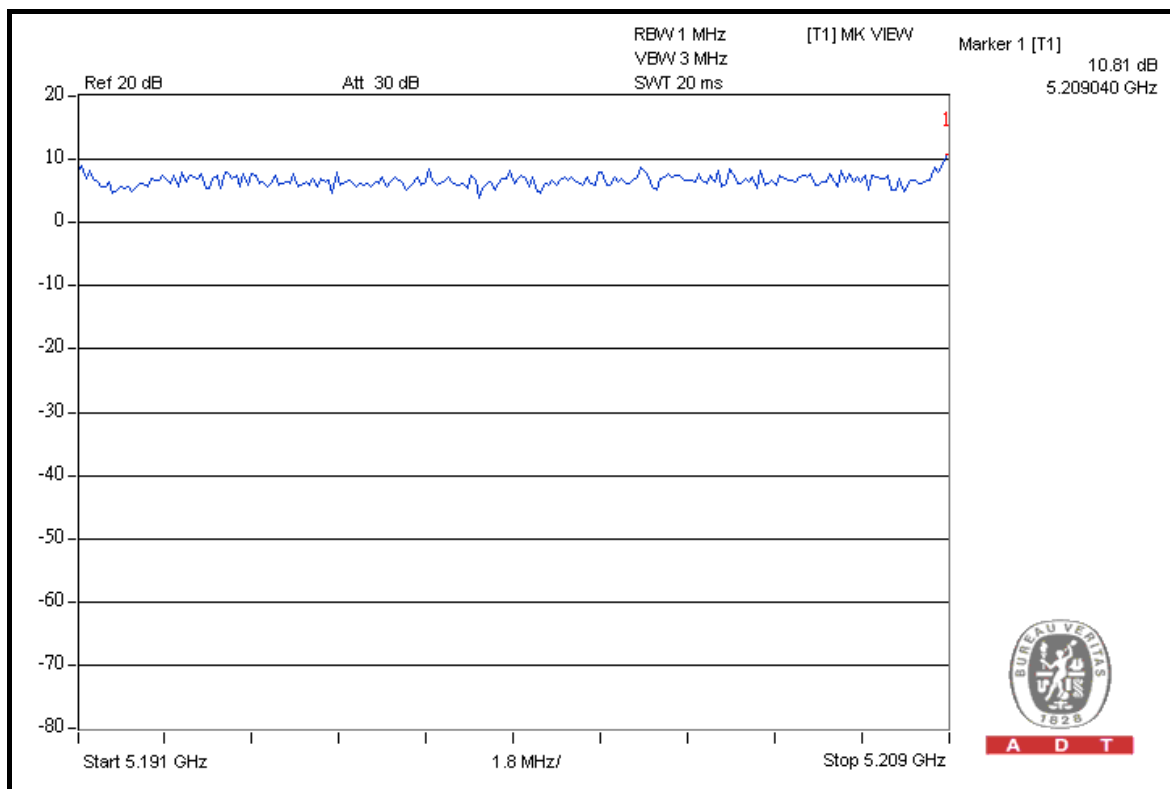
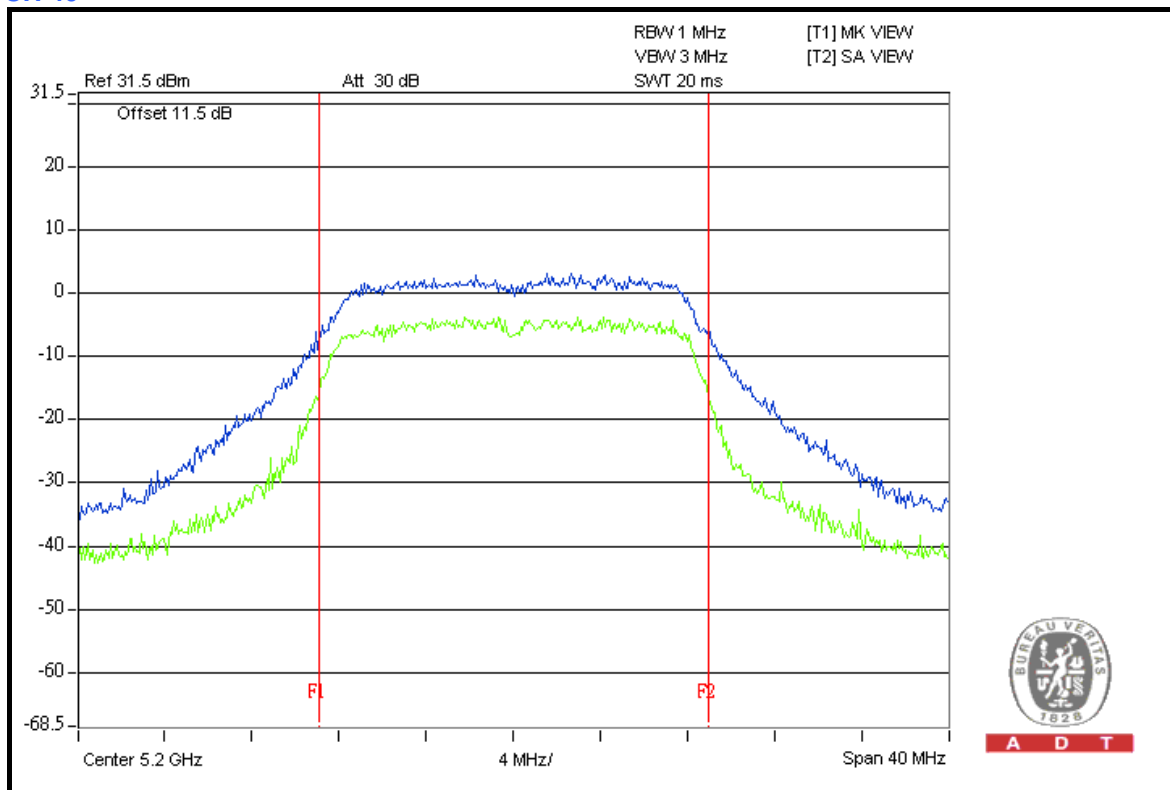






A D T

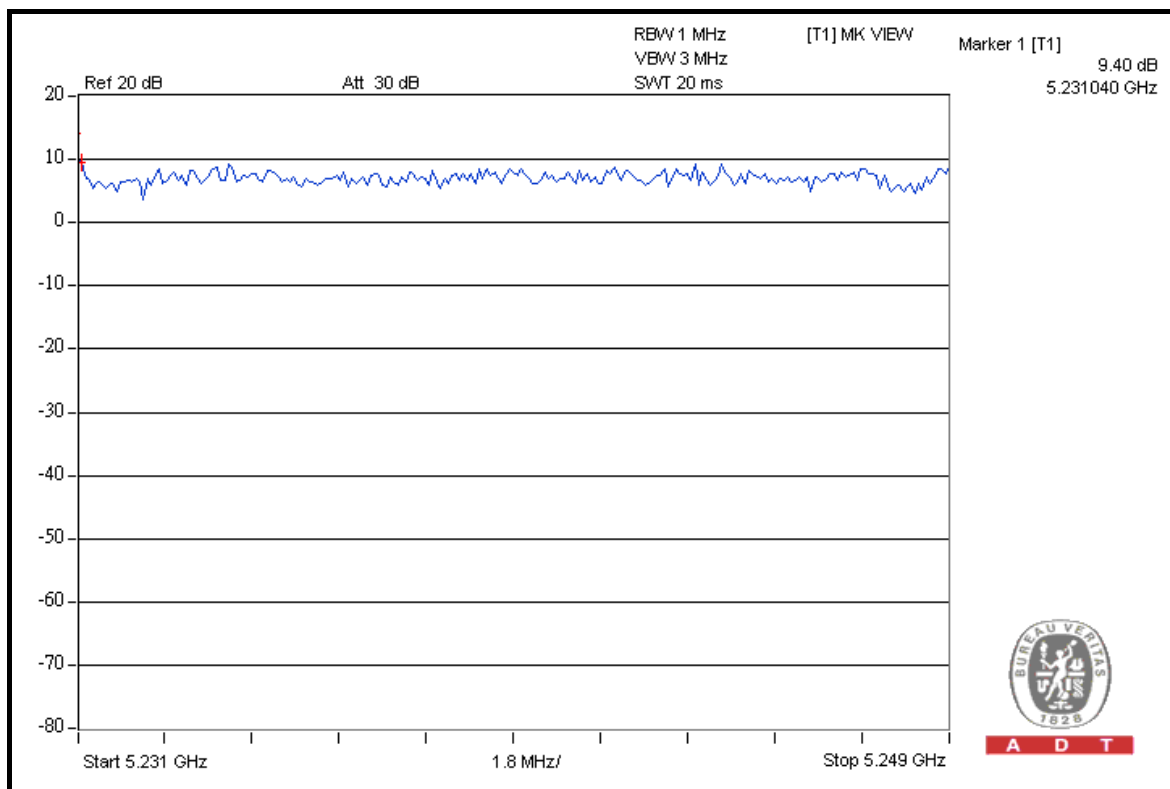
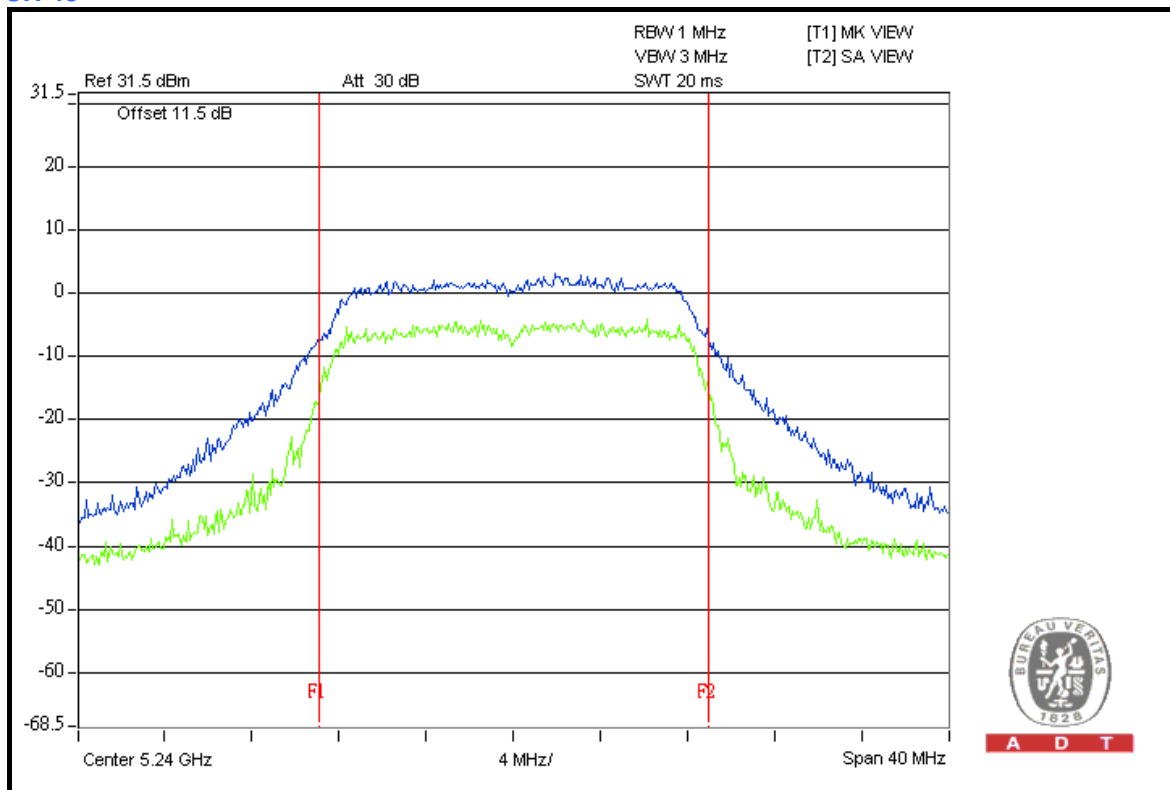
### CH 40





A D T

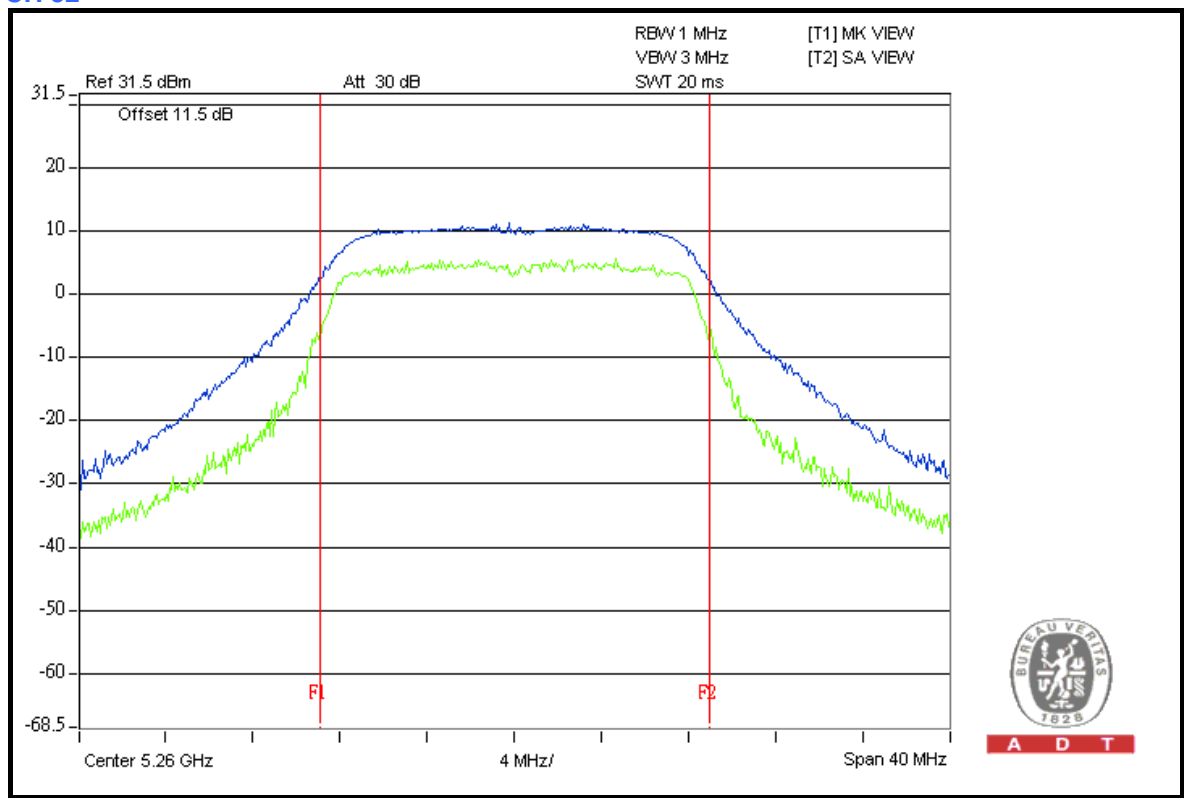
### CH 48



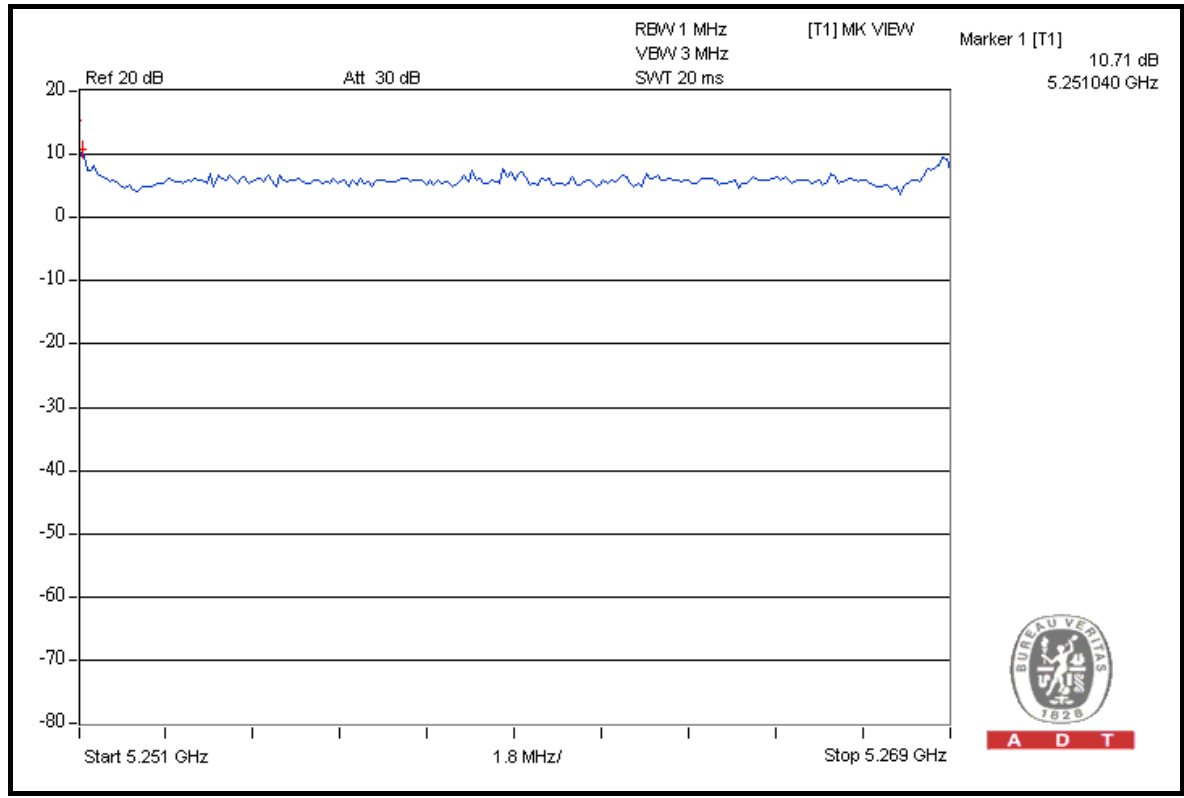


A D T

CH 52



A D T

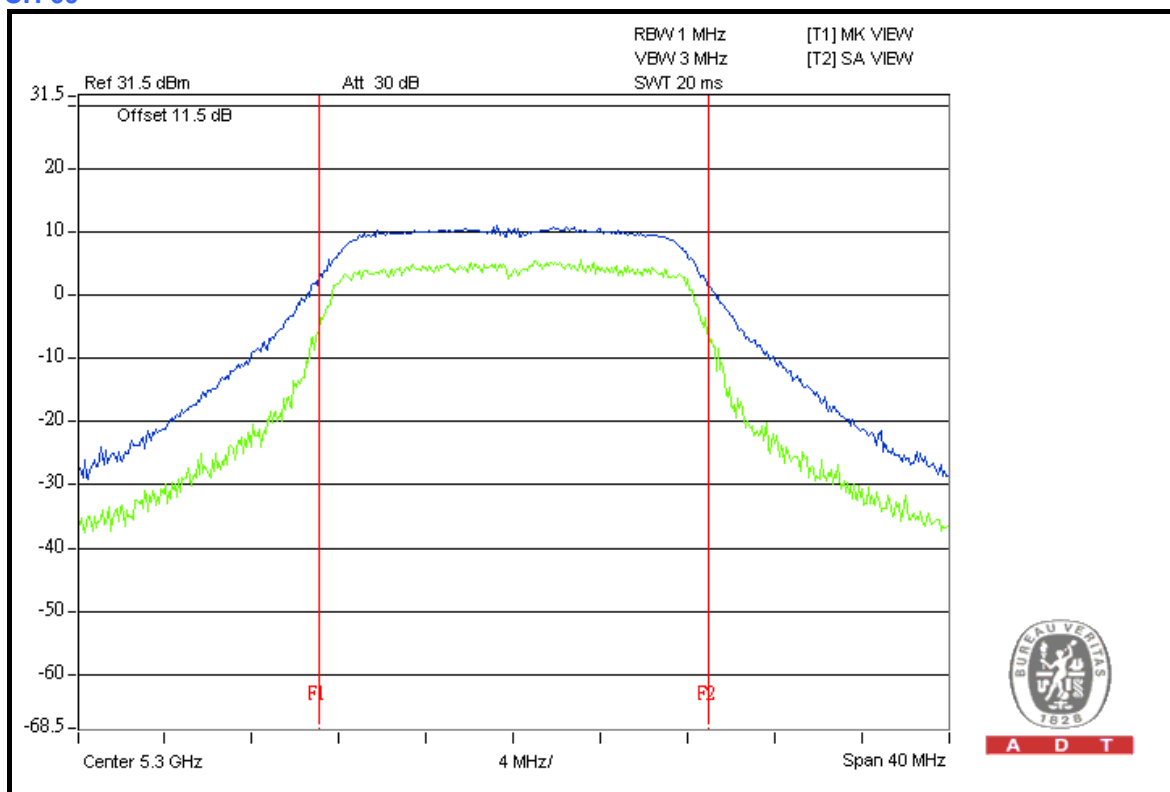


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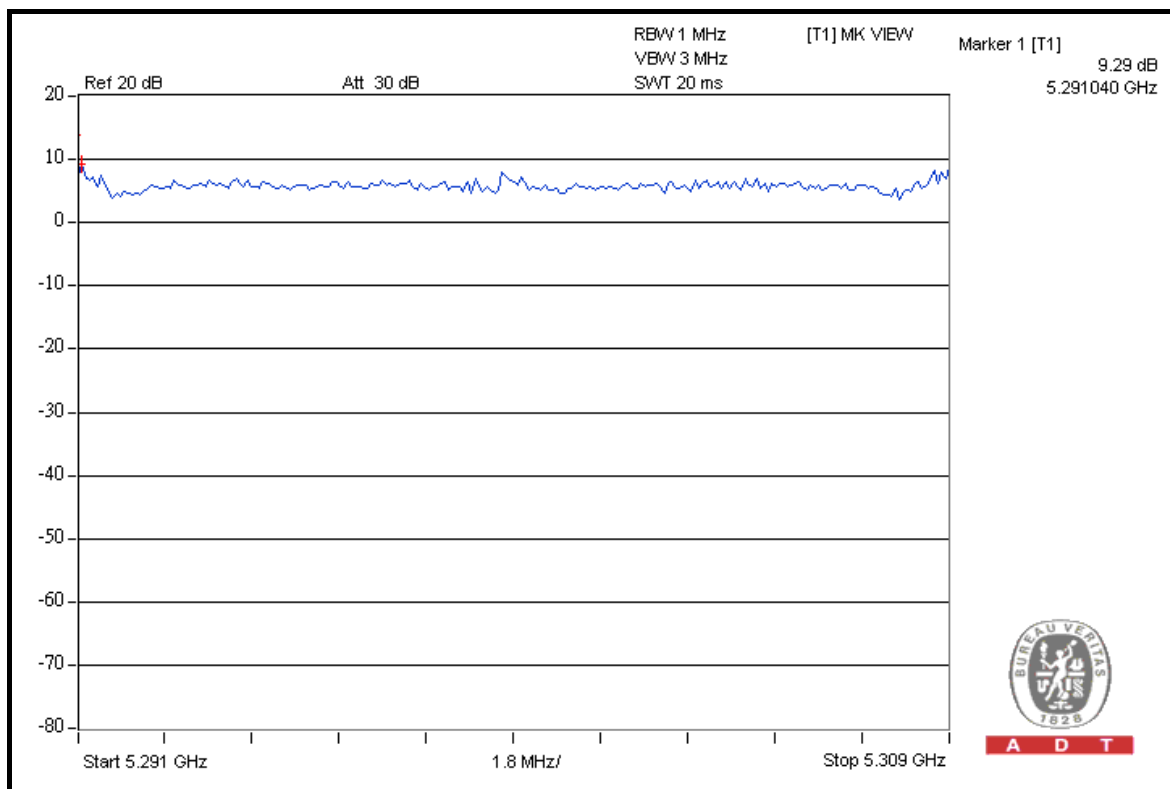


A D T

### CH 60



A D T

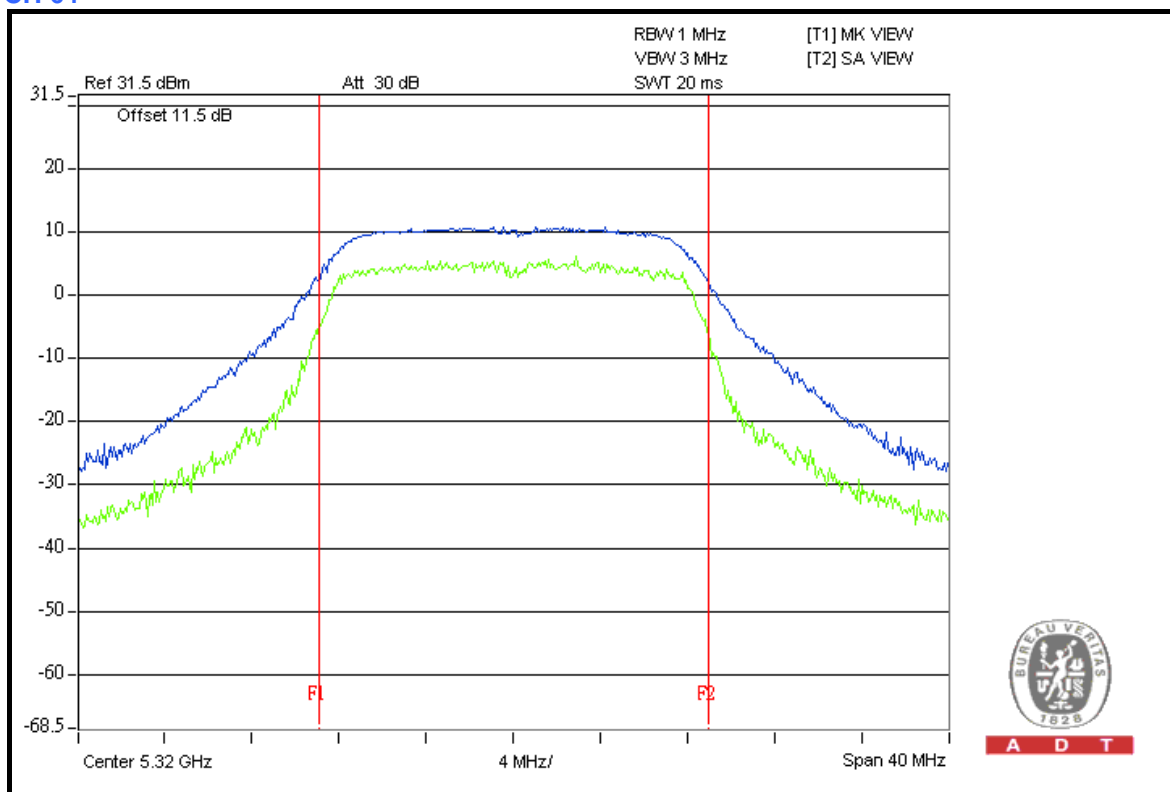


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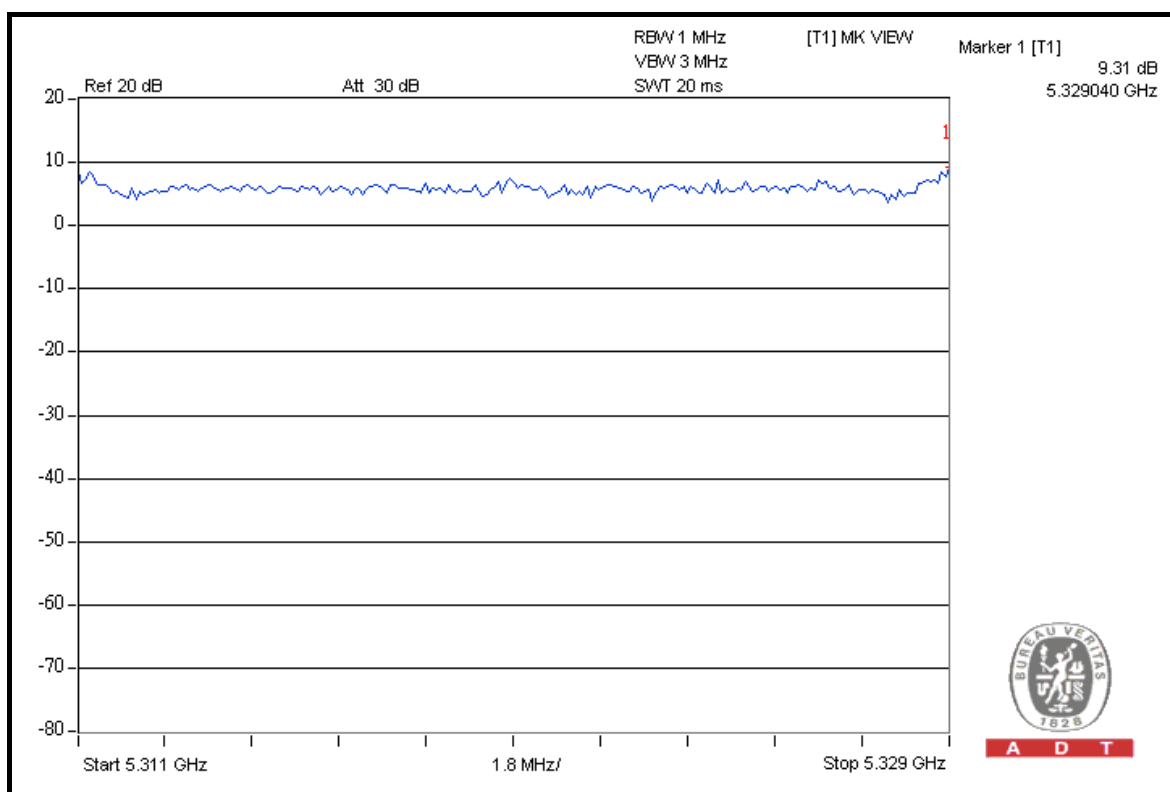


A D T

### CH 64



A D T

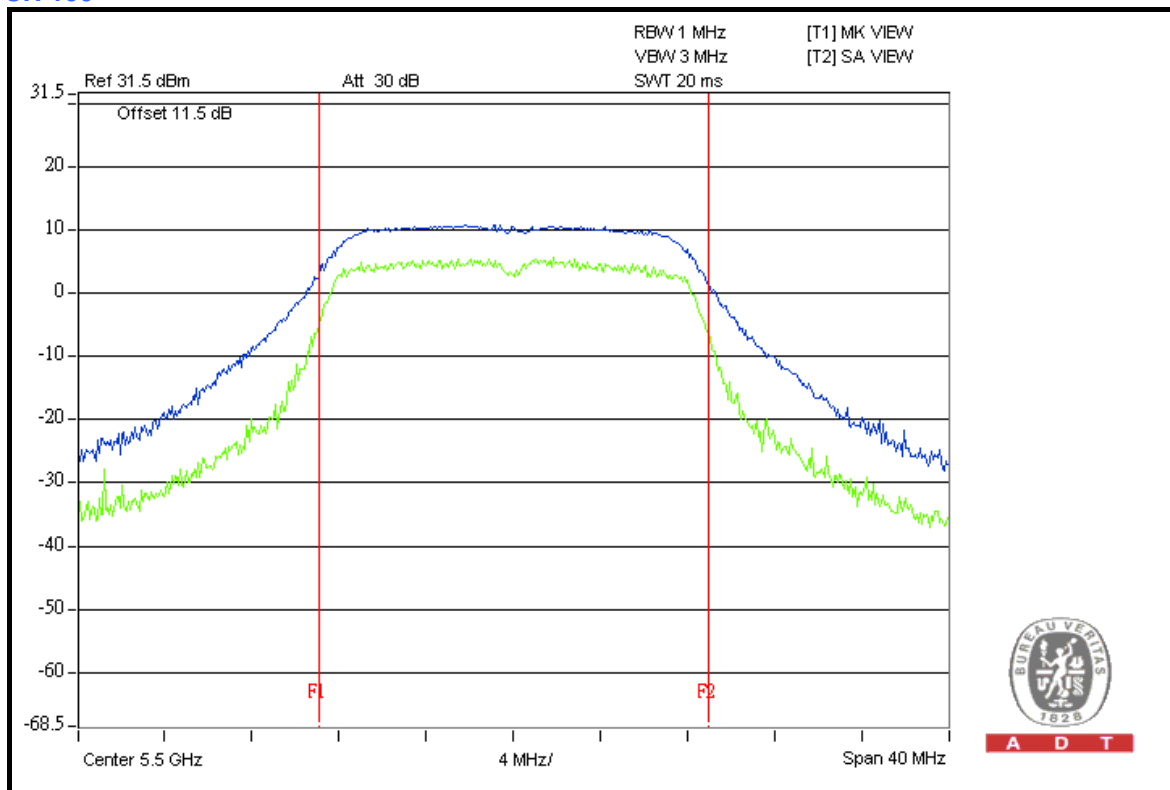


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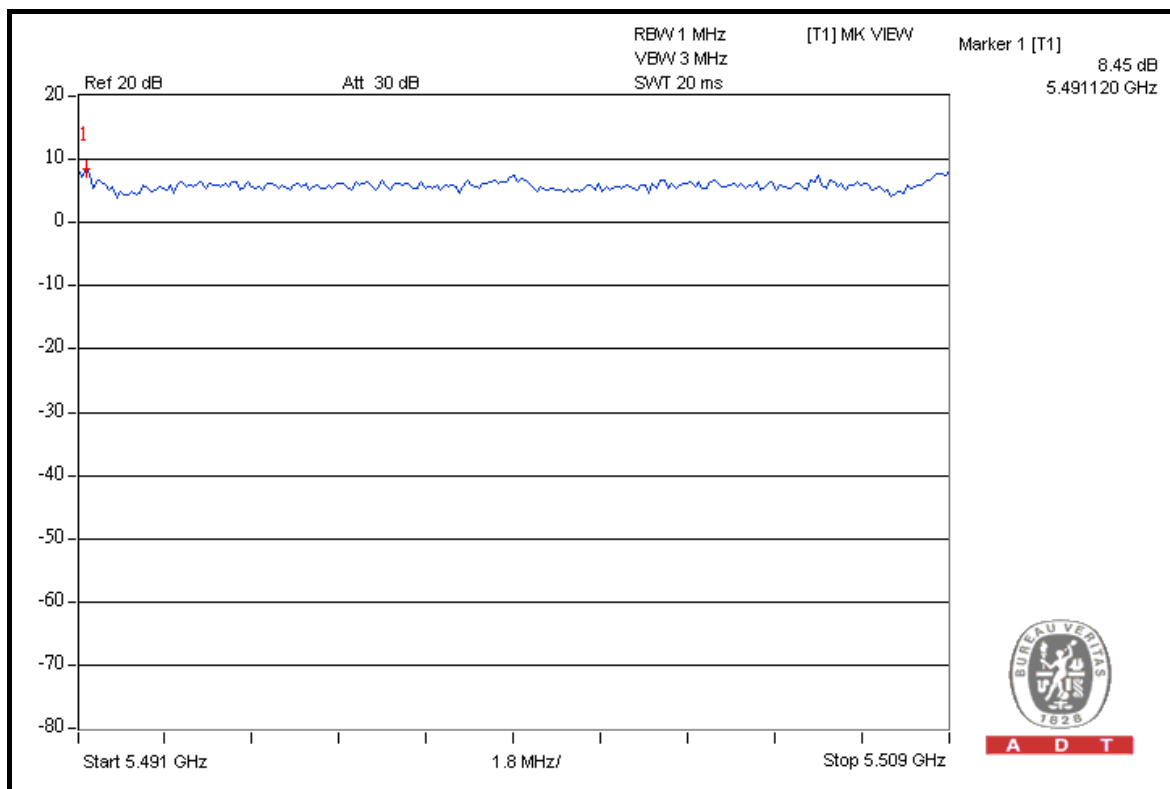


A D T

### CH 100



A D T

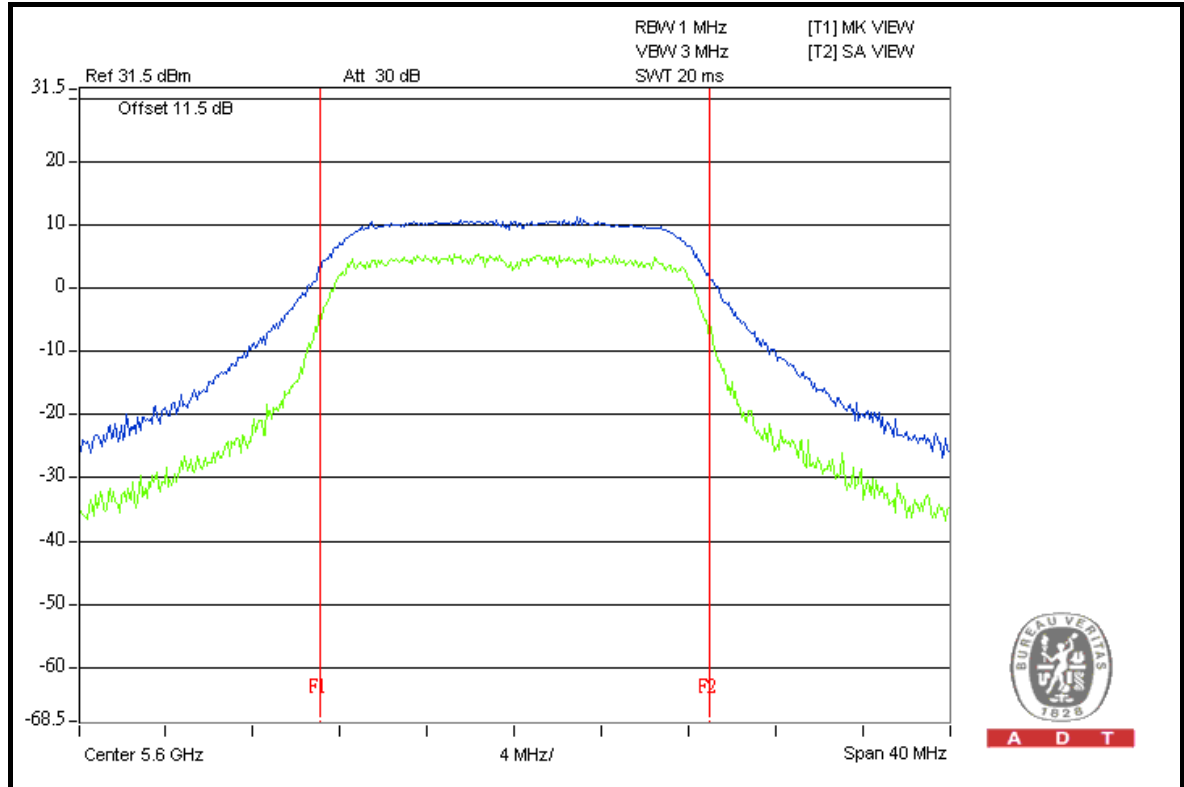


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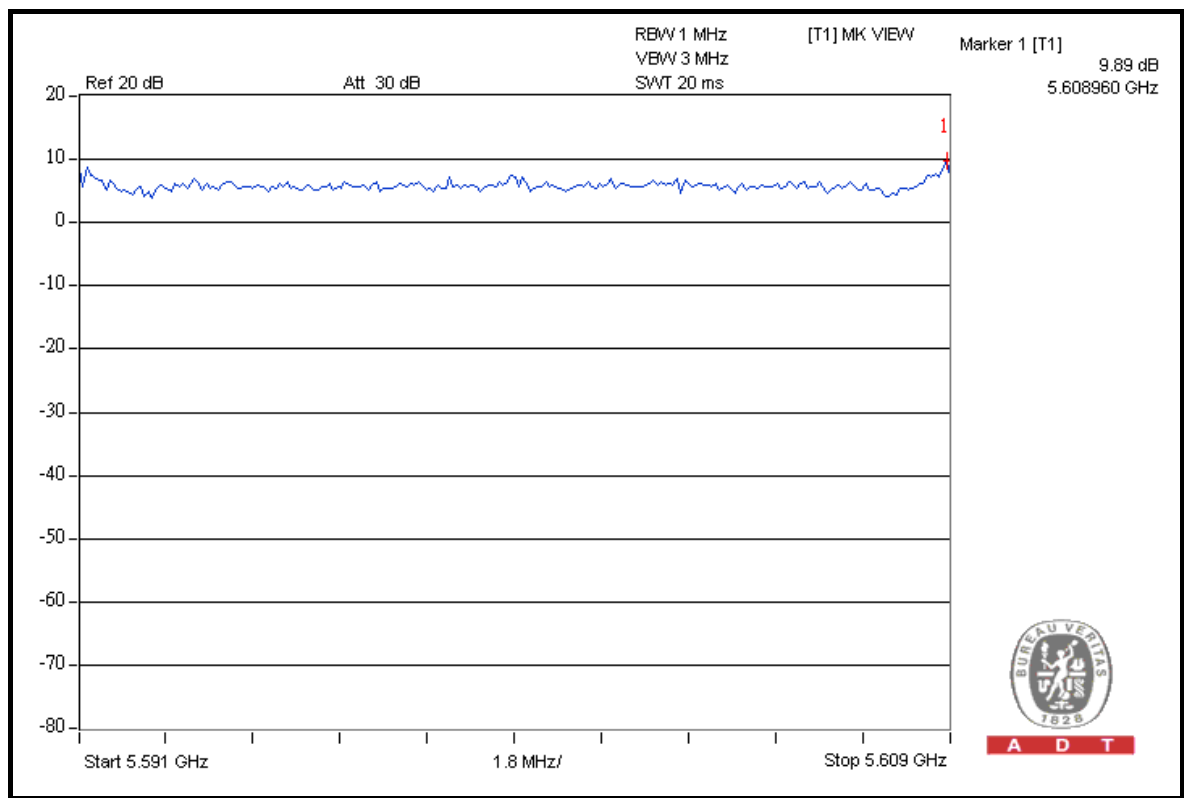


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CH 120



A D T

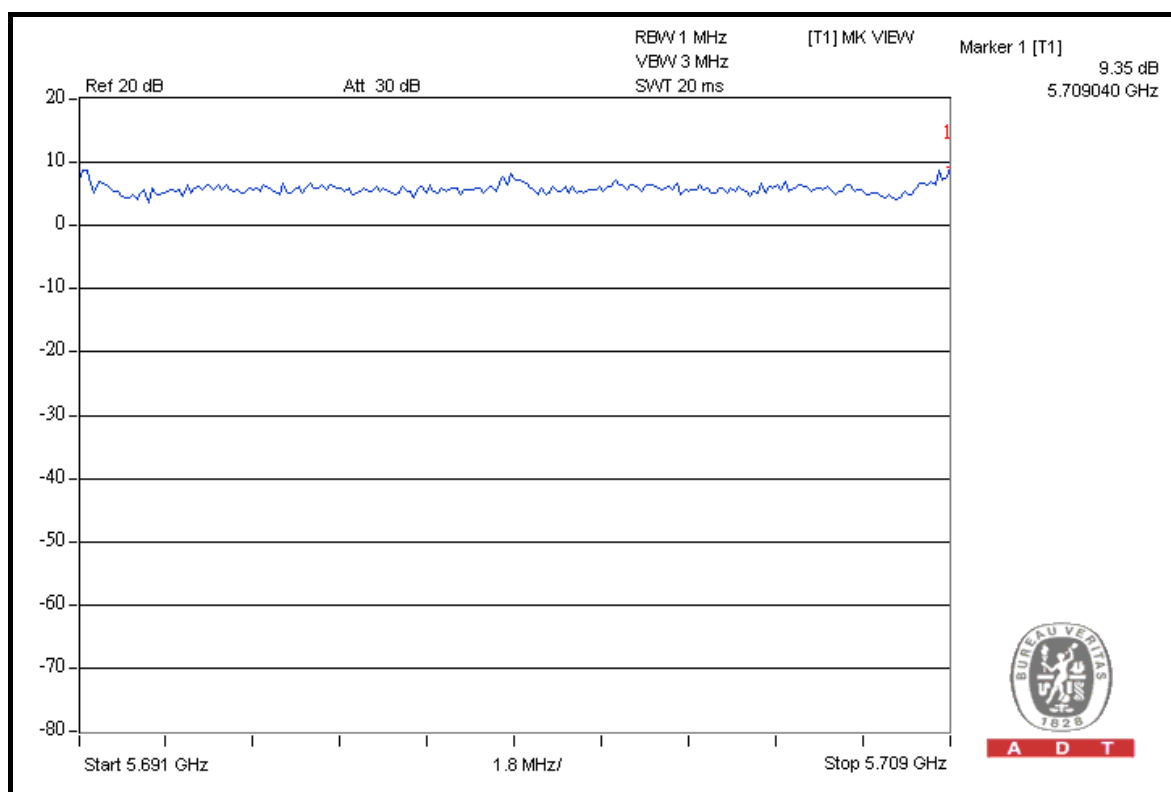
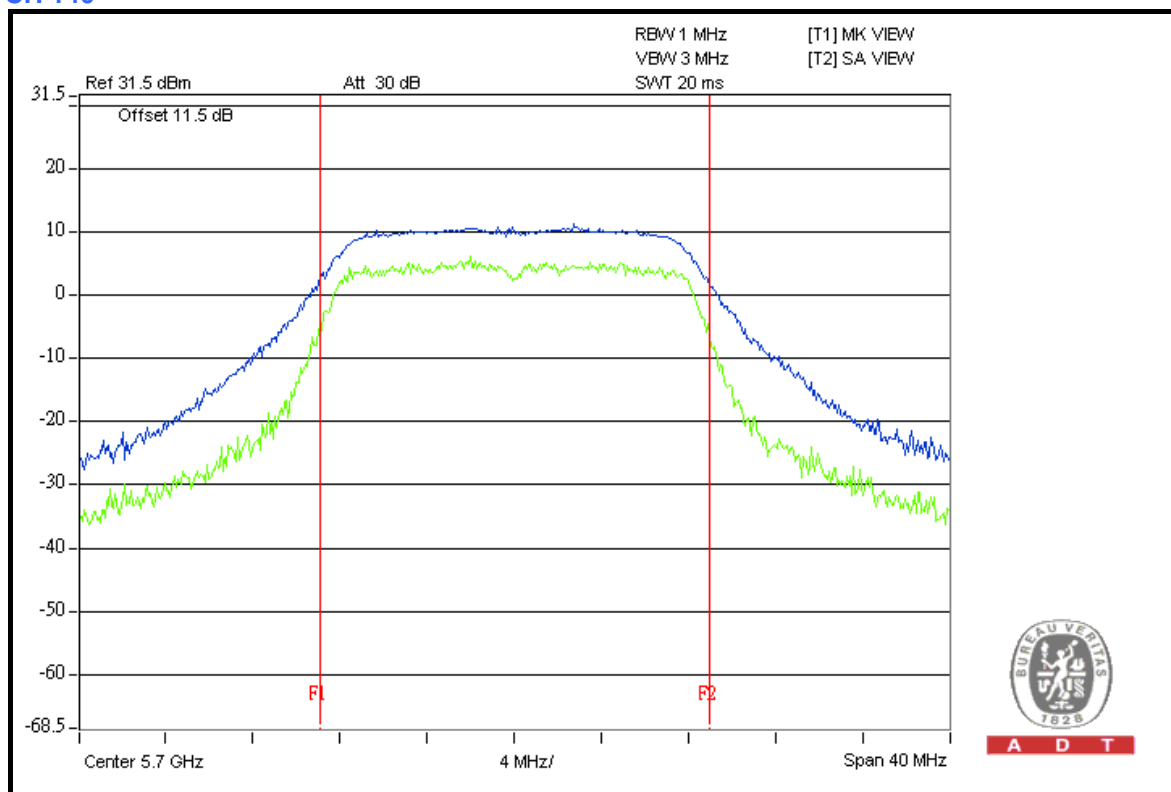


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A D T

### CH 140

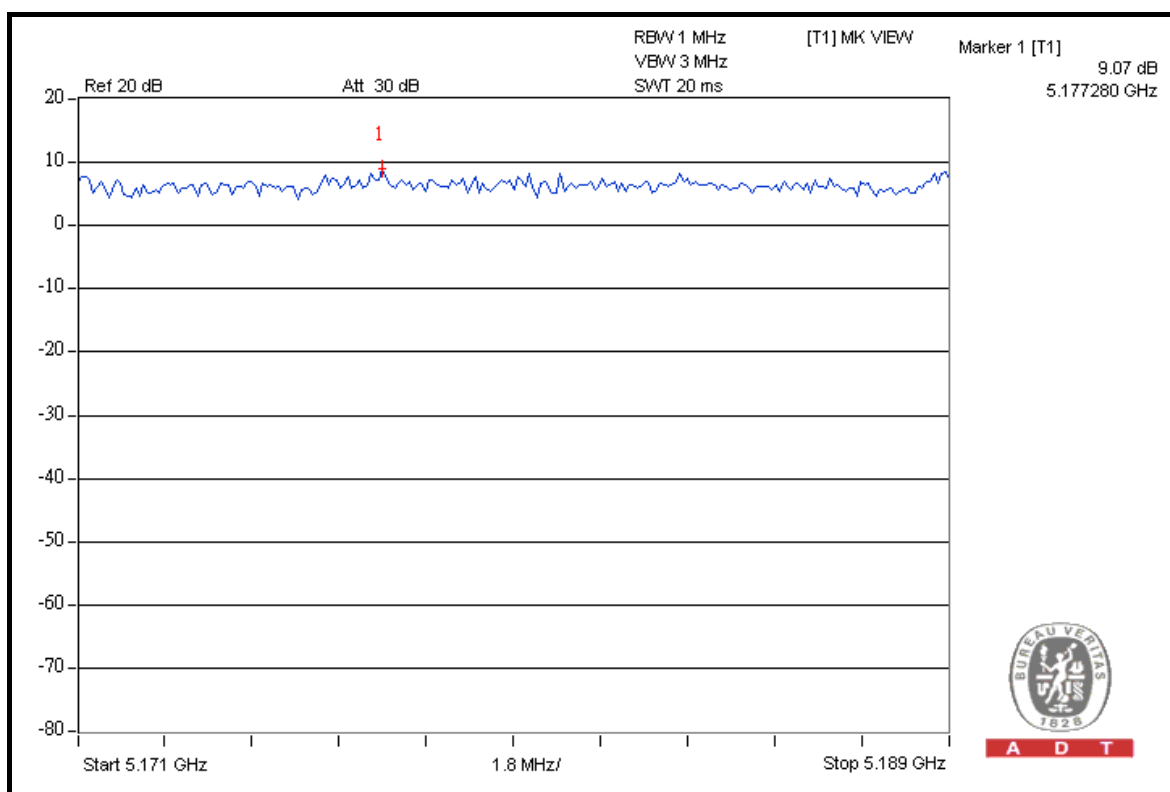
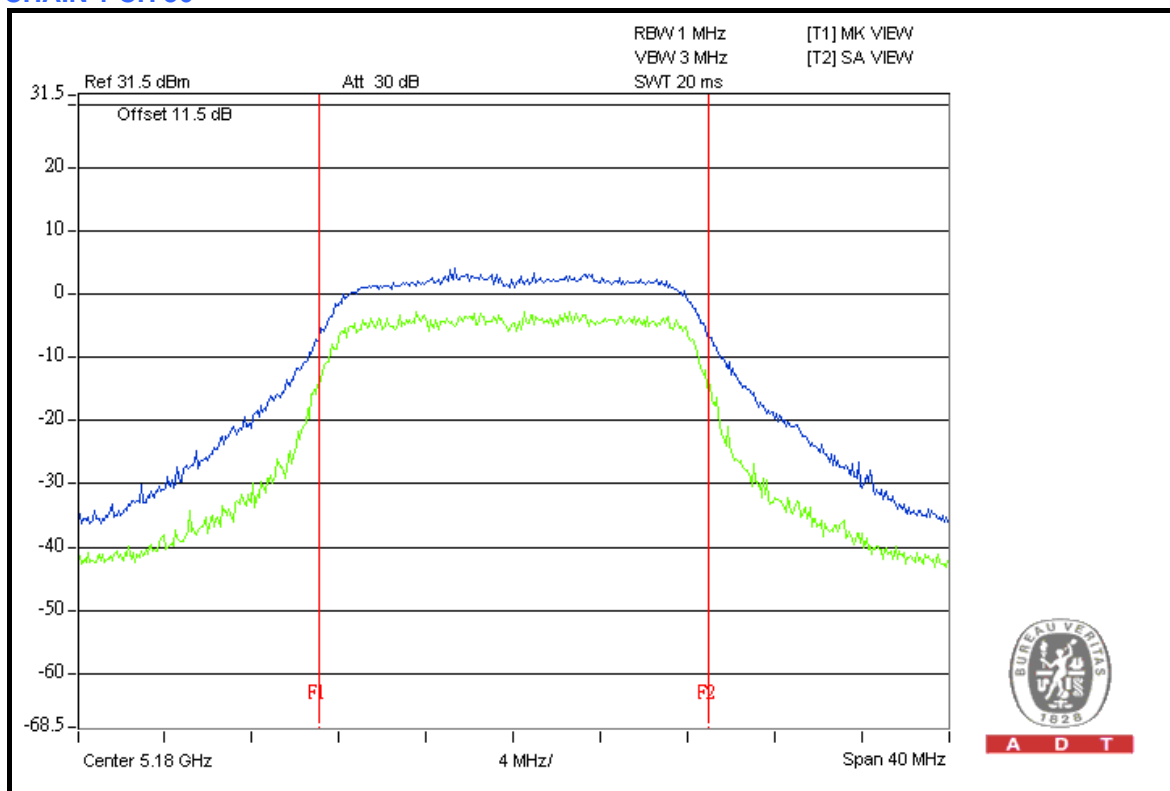






A D T

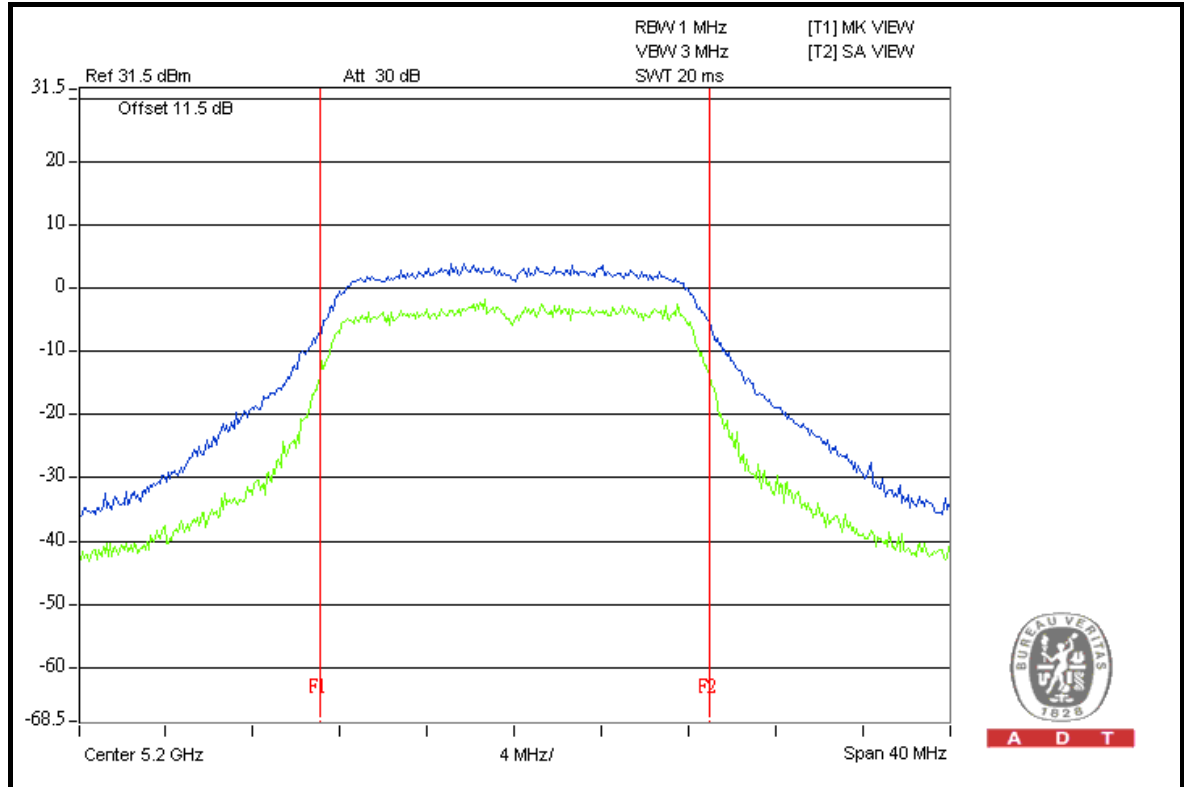
### CHAIN 1 CH 36



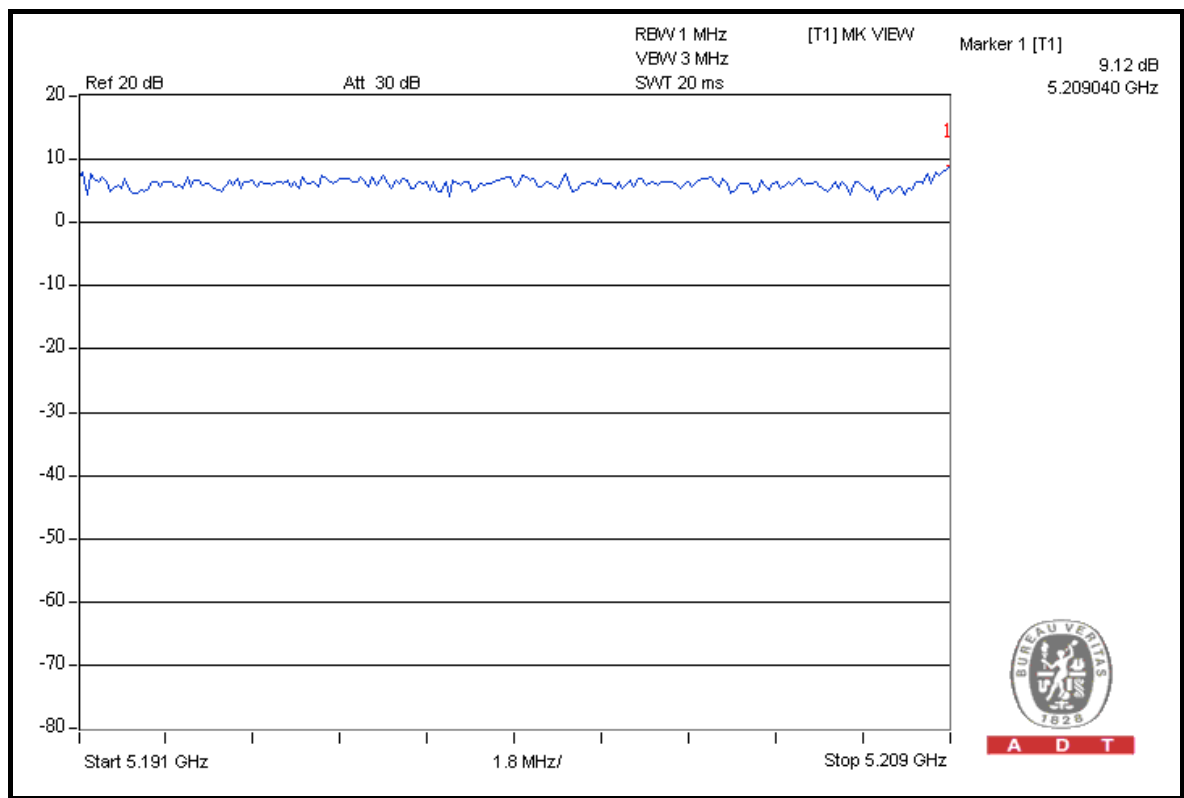


A D T

CH 40



A D T

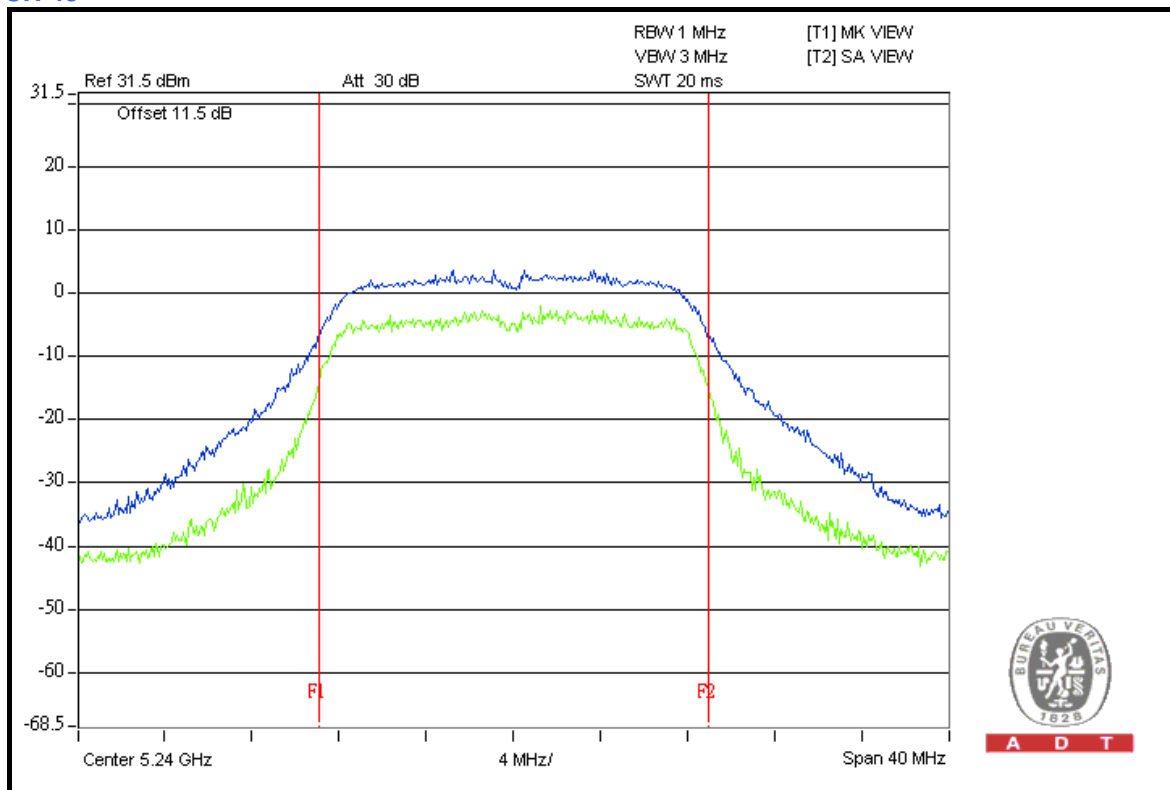


A D T

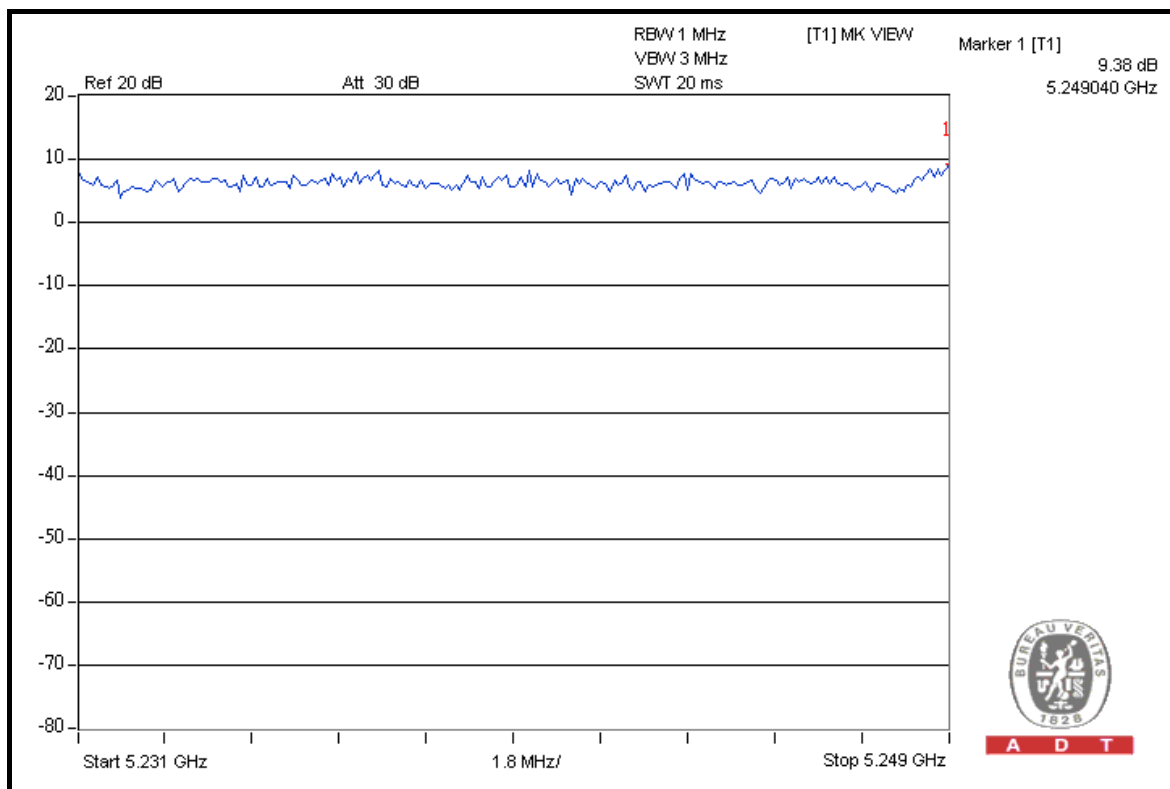


A D T

### CH 48



A D T

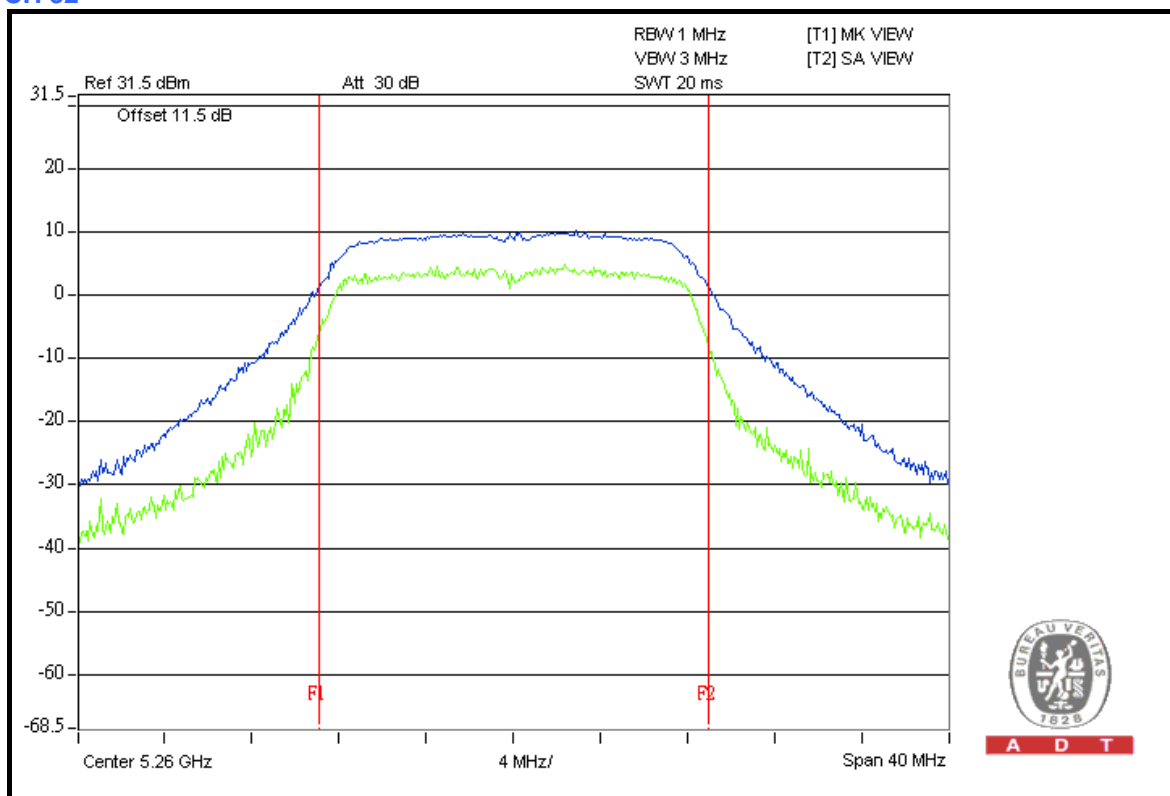


A D T

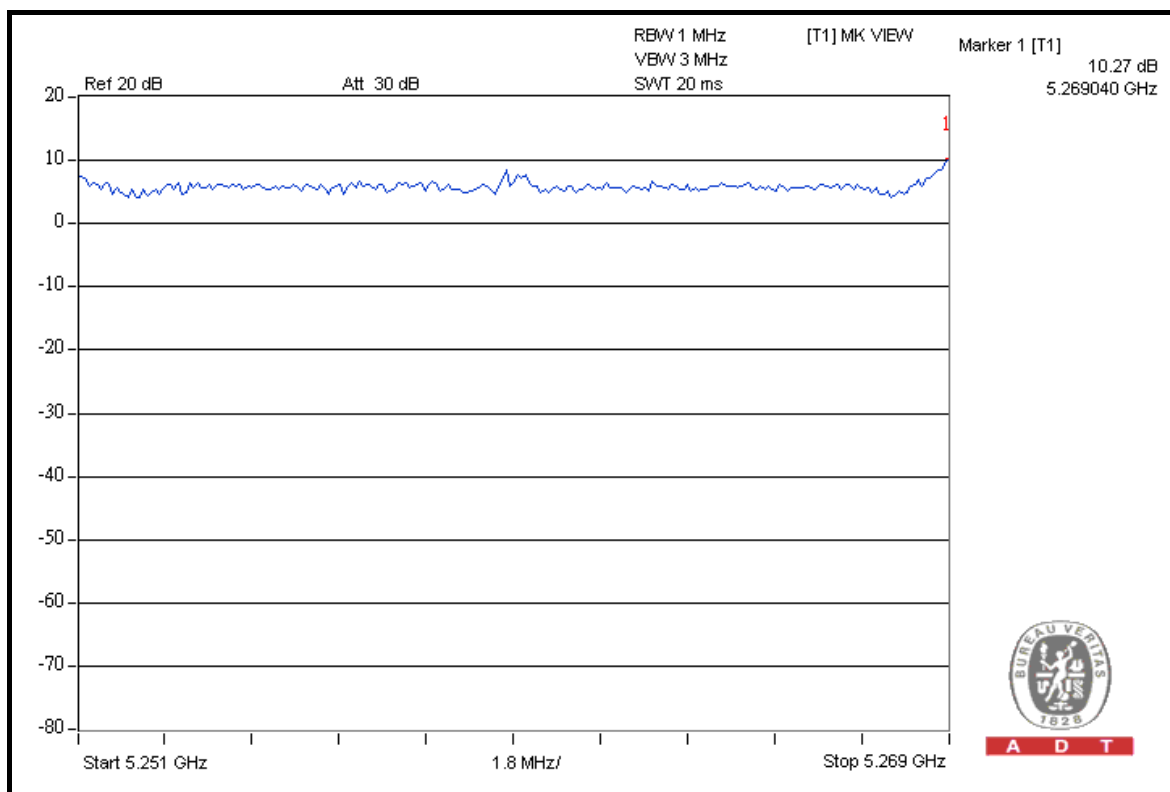


A D T

### CH 52



A D T

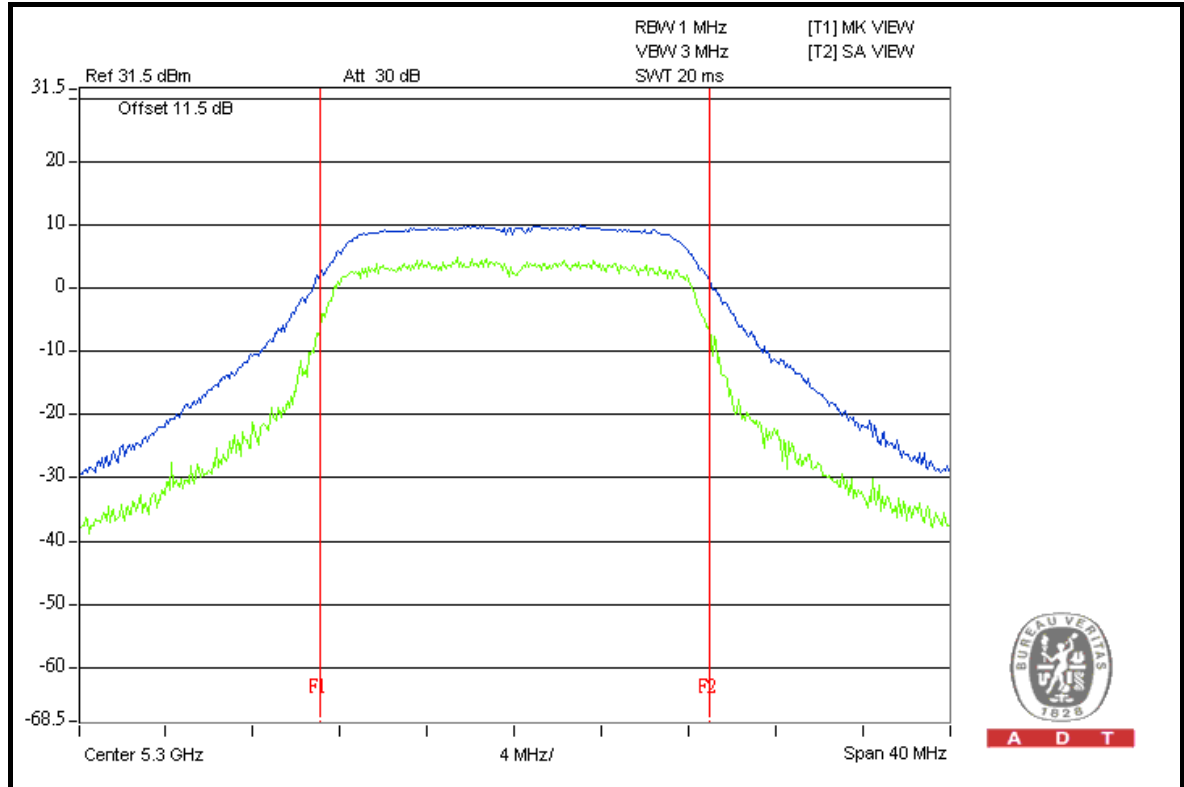


A D T

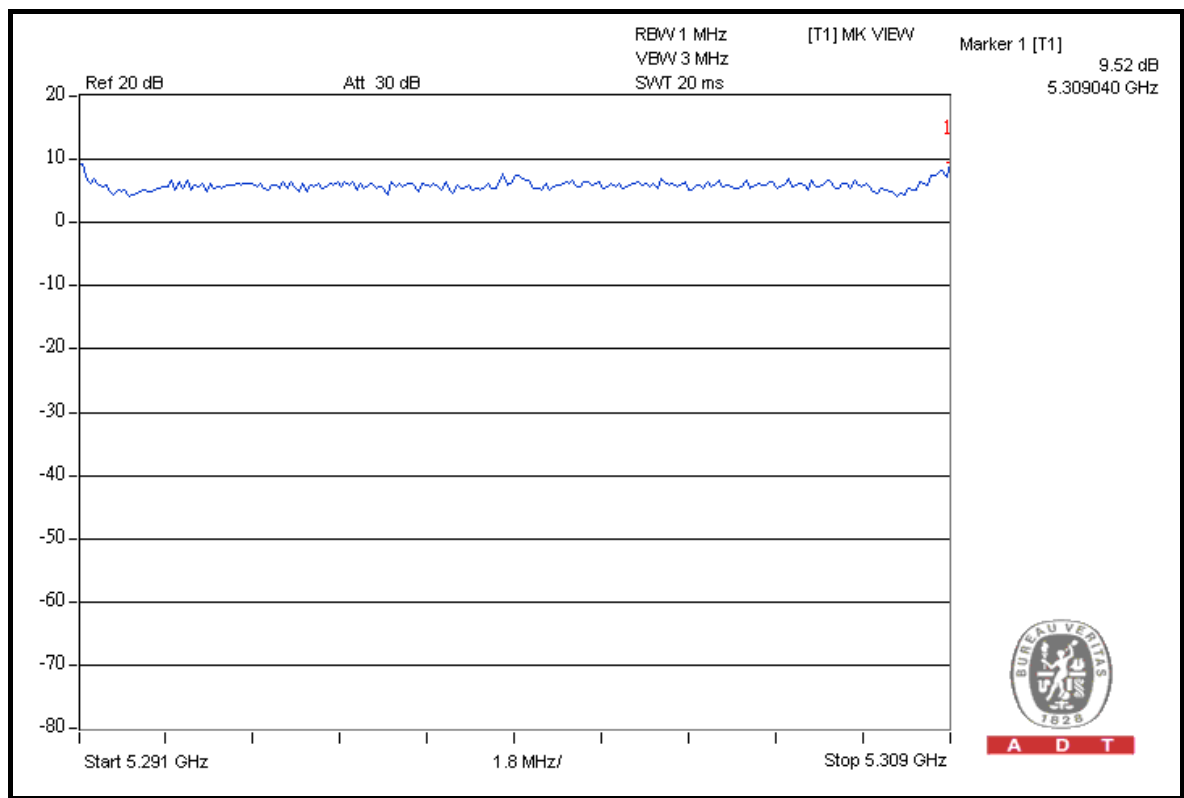


A D T

CH 60



A D T

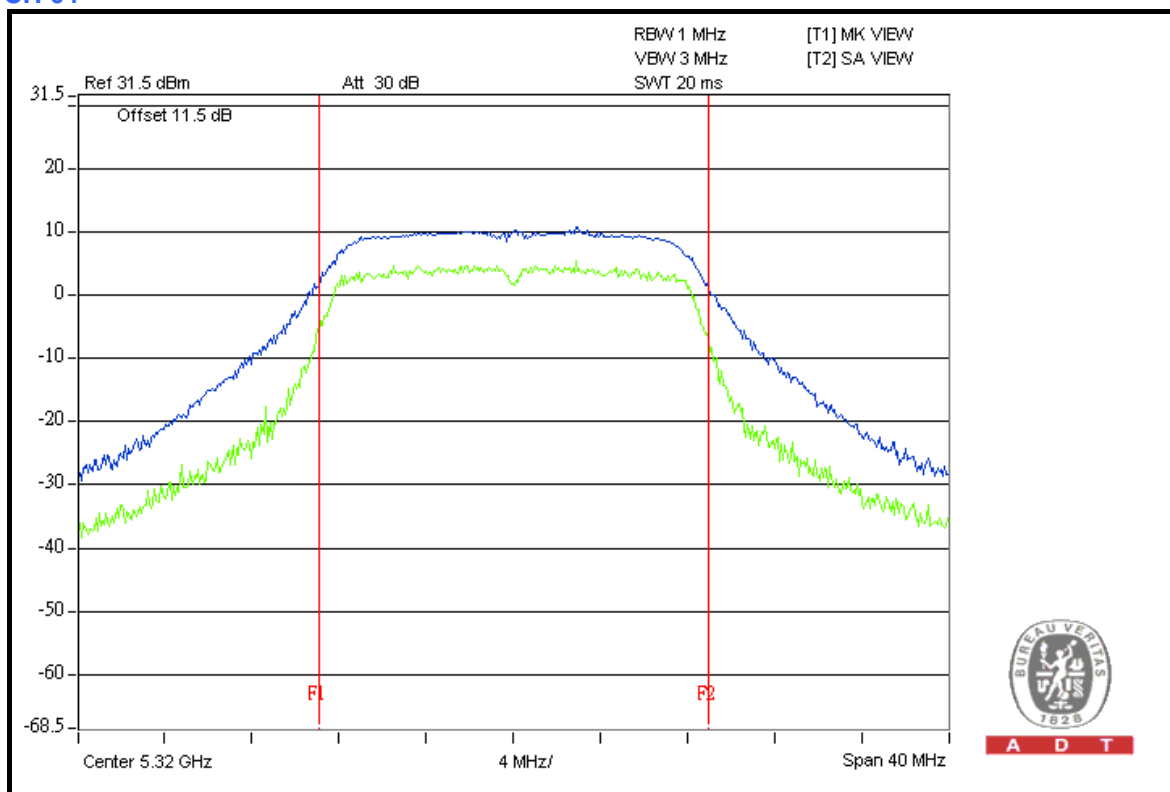


A D T

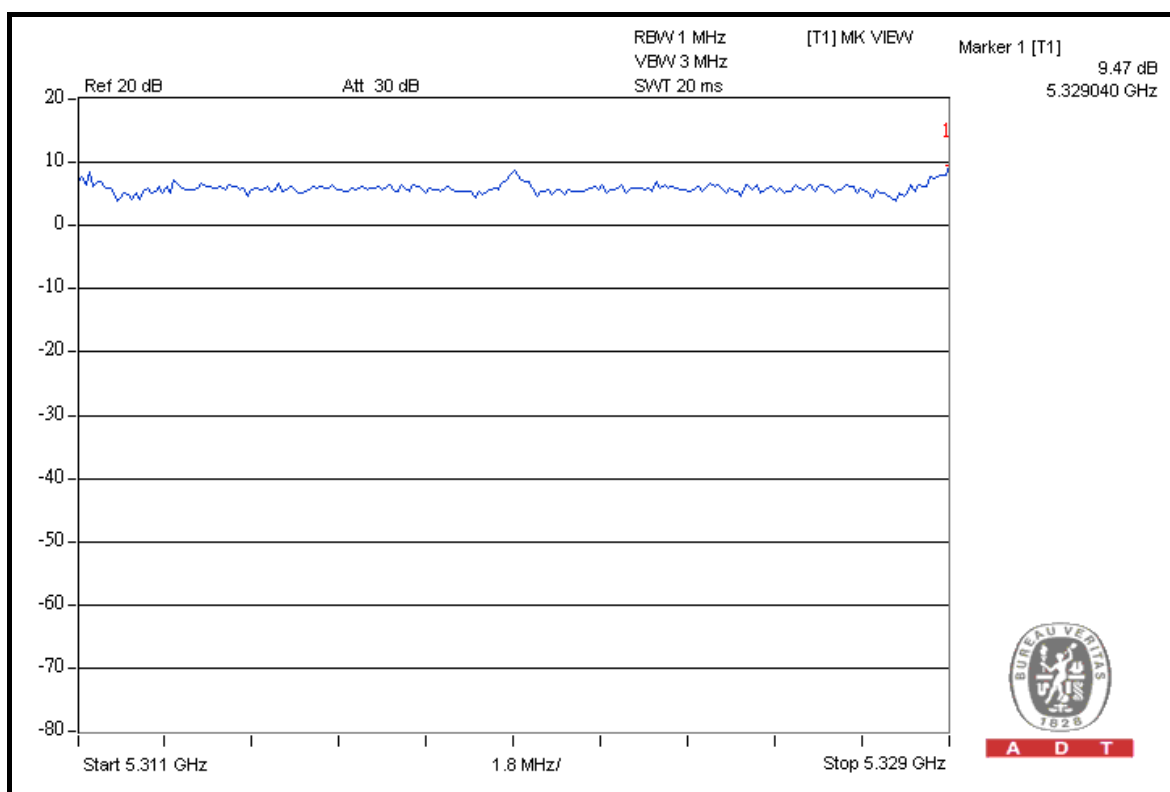


A D T

### CH 64



A D T

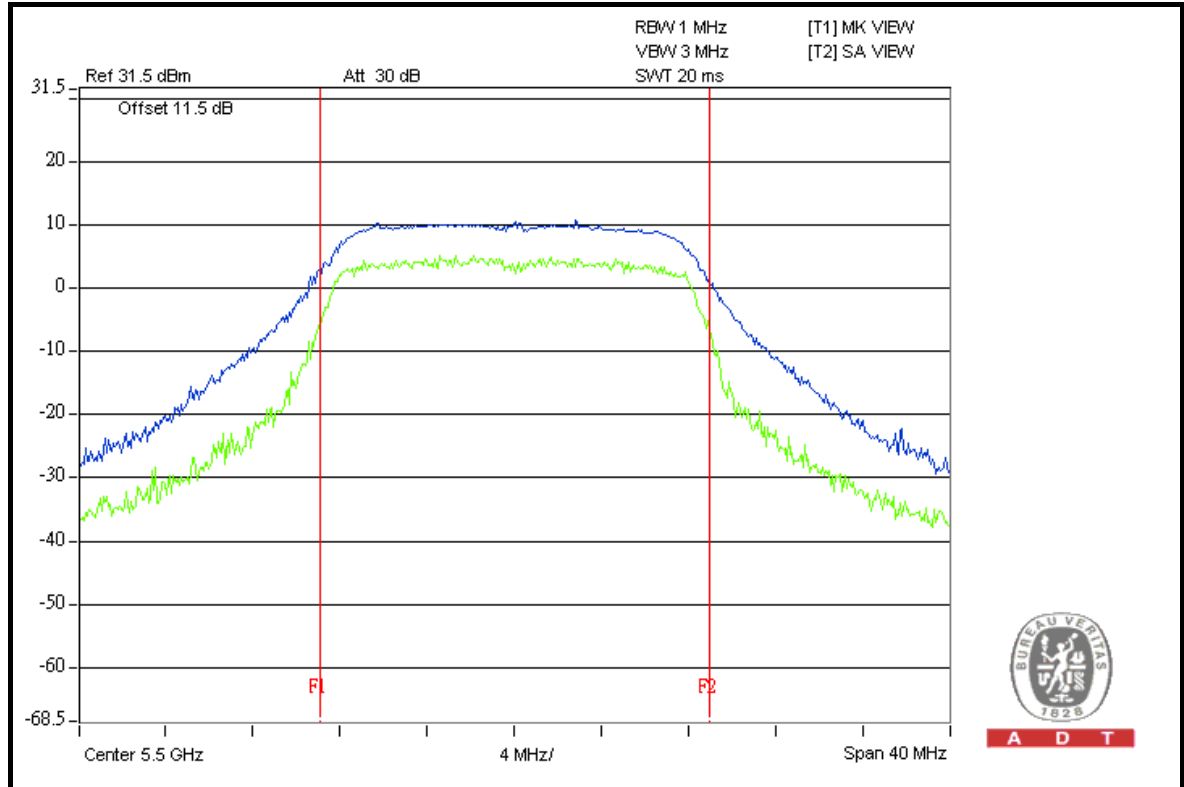


A D T

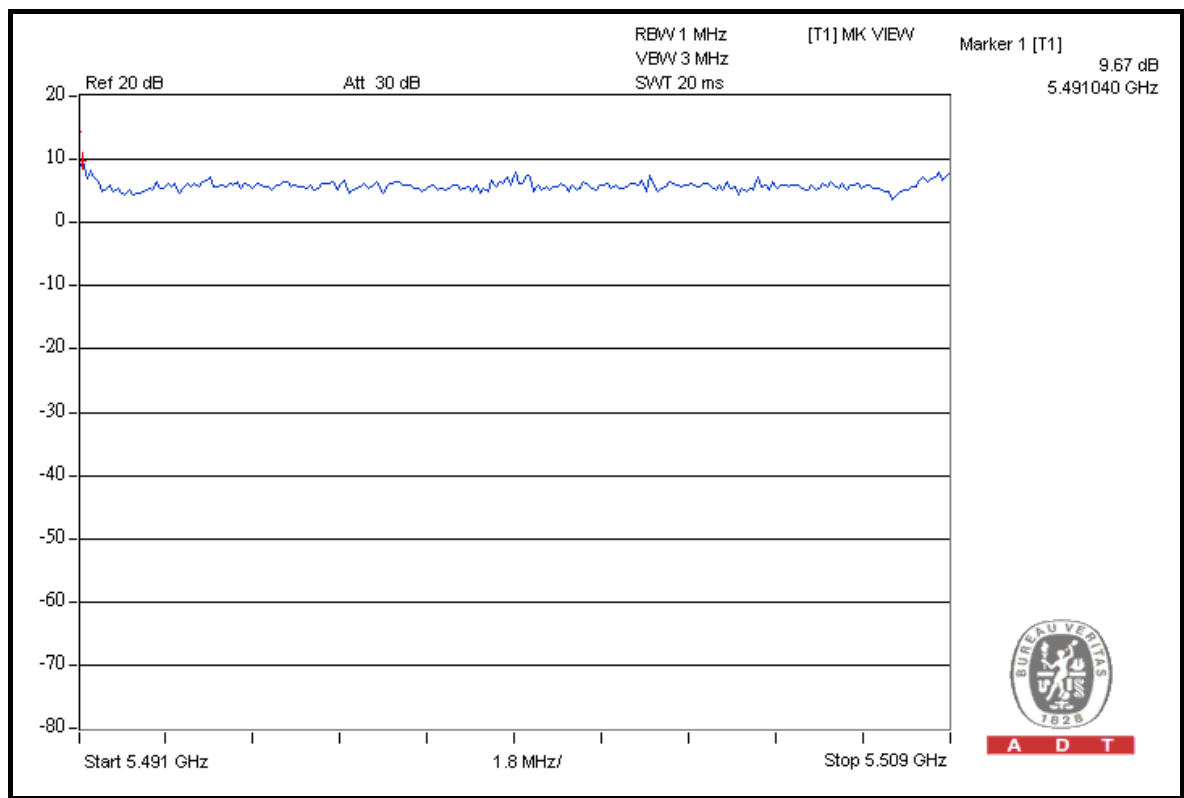


A D T

CH 100



A D T

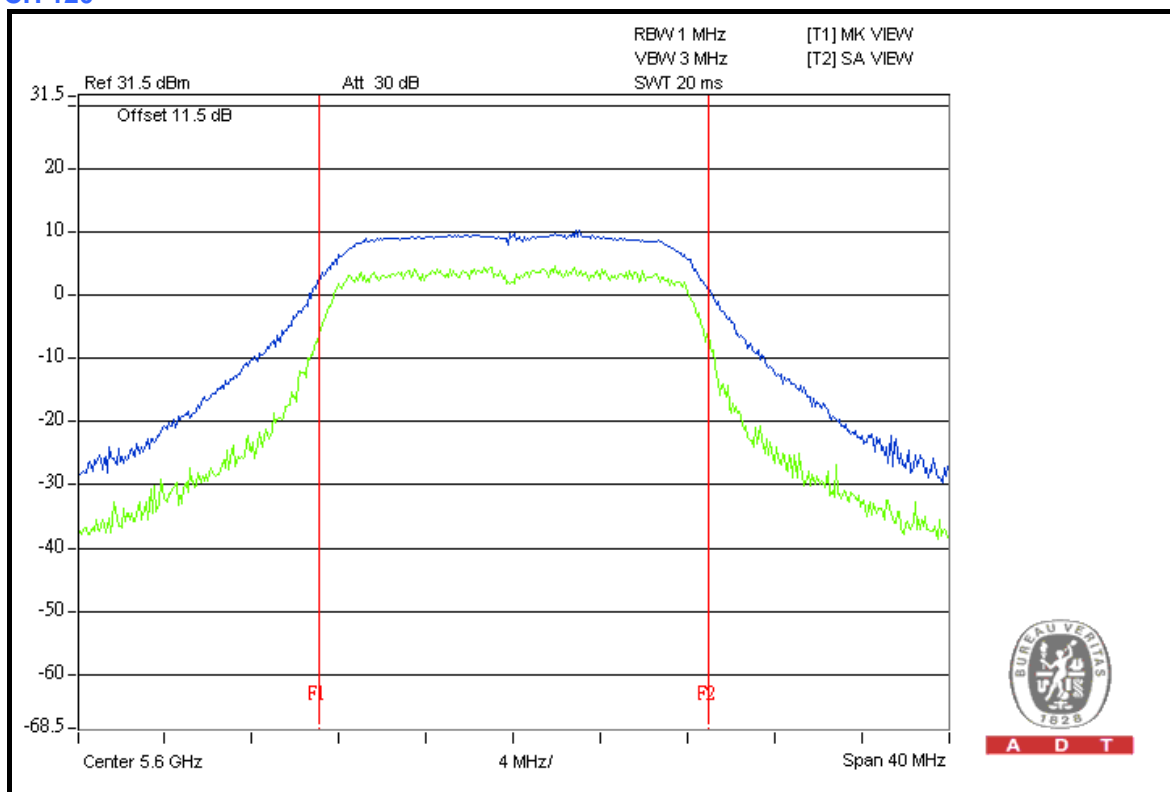


A D T

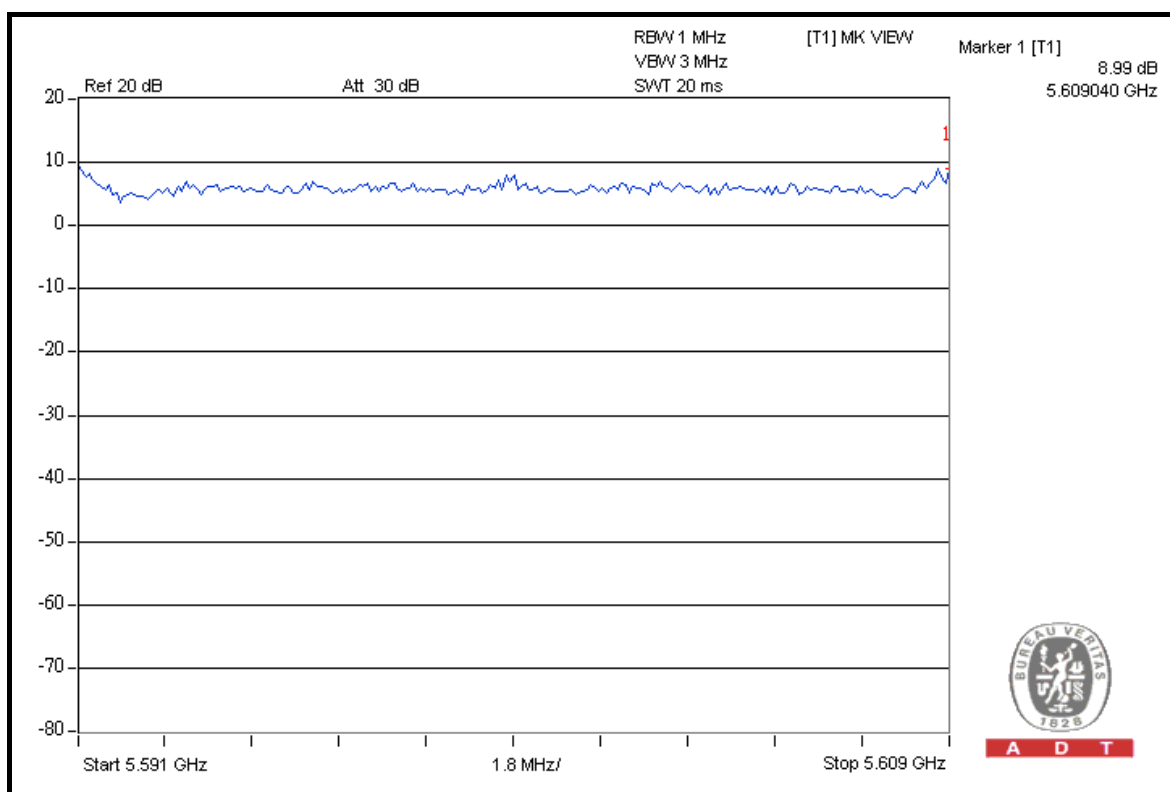


A D T

### CH 120



A D T



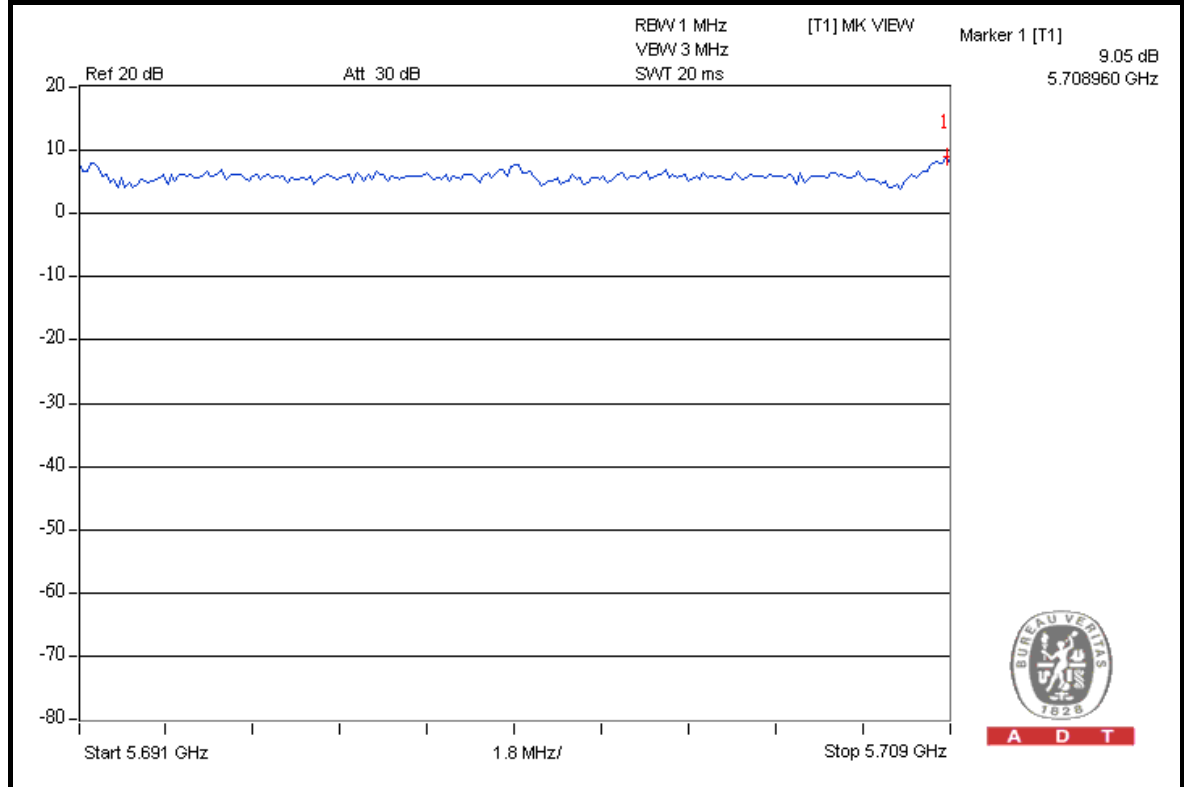
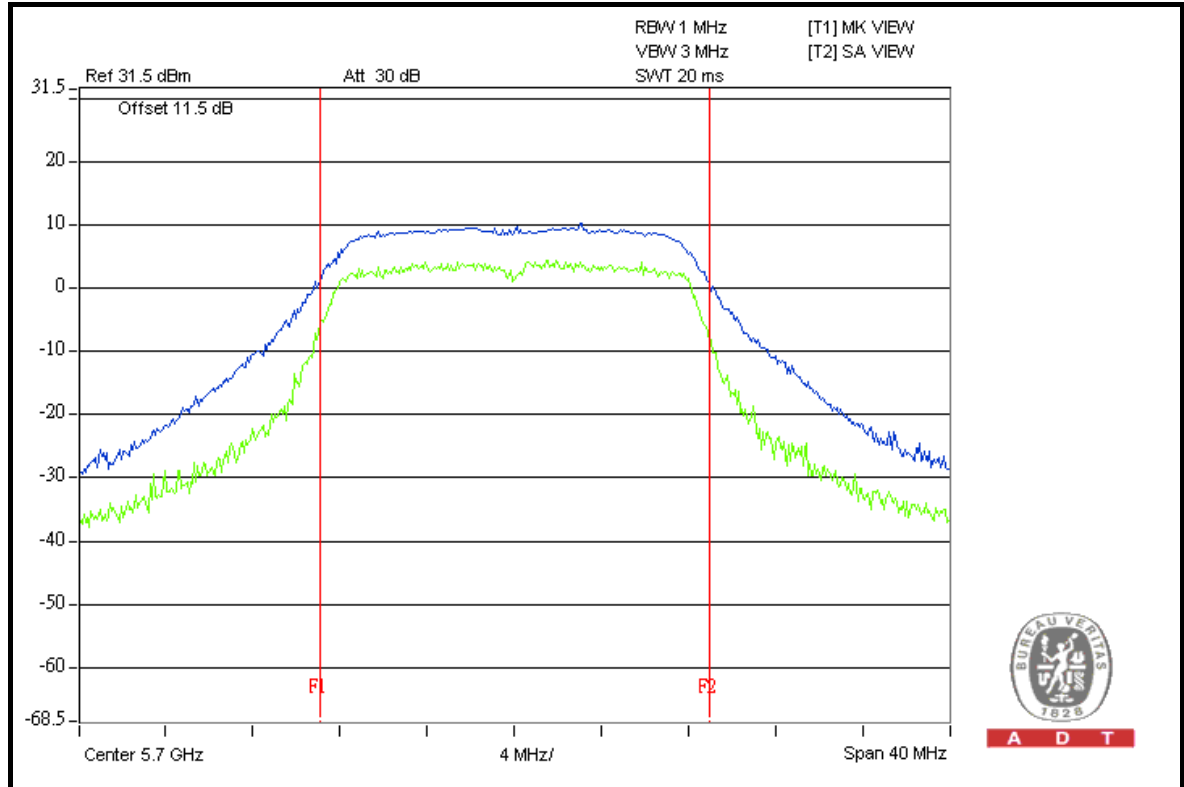
A D T





A D T

CH 140





A D T

### DRAFT 802.11n (20MHz) OFDM MODULATION

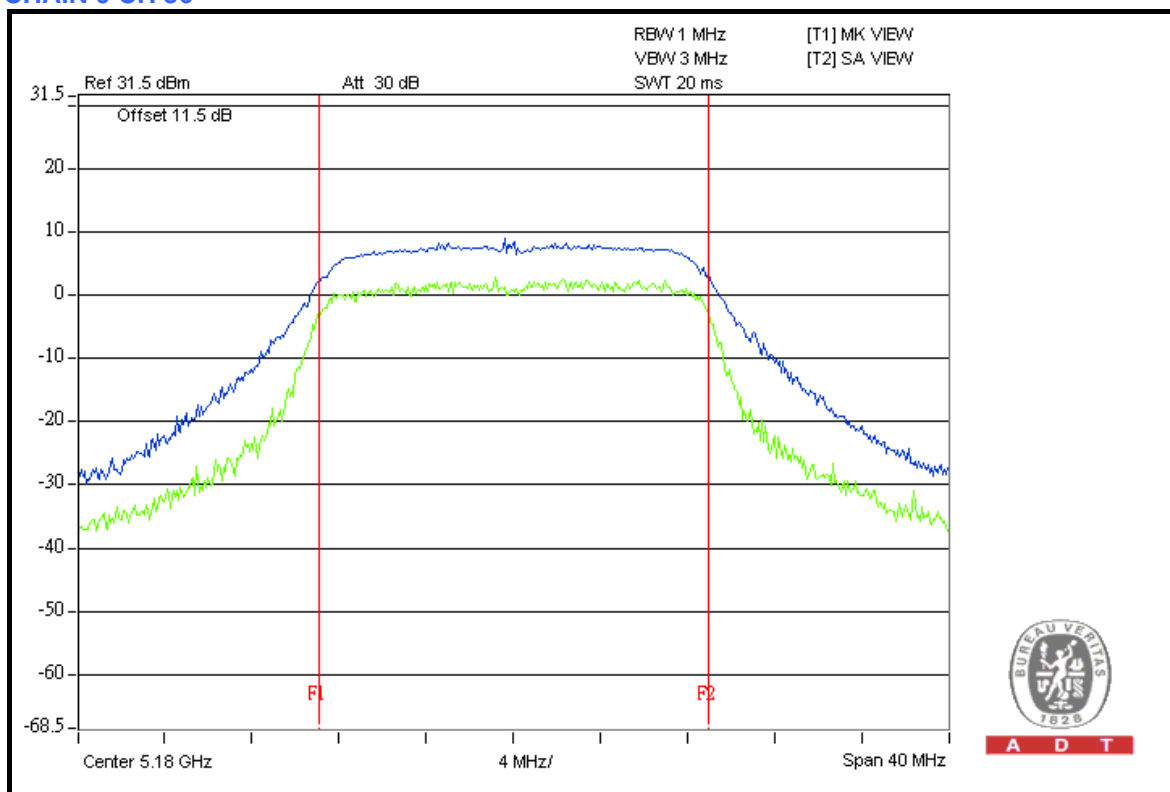
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN2		
36	5180	7.83	8.27	8.57	13	PASS
40	5200	8.22	9.11	8.64	13	PASS
48	5240	8.08	7.61	7.44	13	PASS
52	5260	8.06	7.54	7.21	13	PASS
60	5300	8.01	7.66	7.17	13	PASS
64	5320	7.57	8.03	8.17	13	PASS
100	5500	7.13	7.41	7.49	13	PASS
120	5600	7.61	7.47	7.95	13	PASS
140	5700	7.58	8.11	8.15	13	PASS

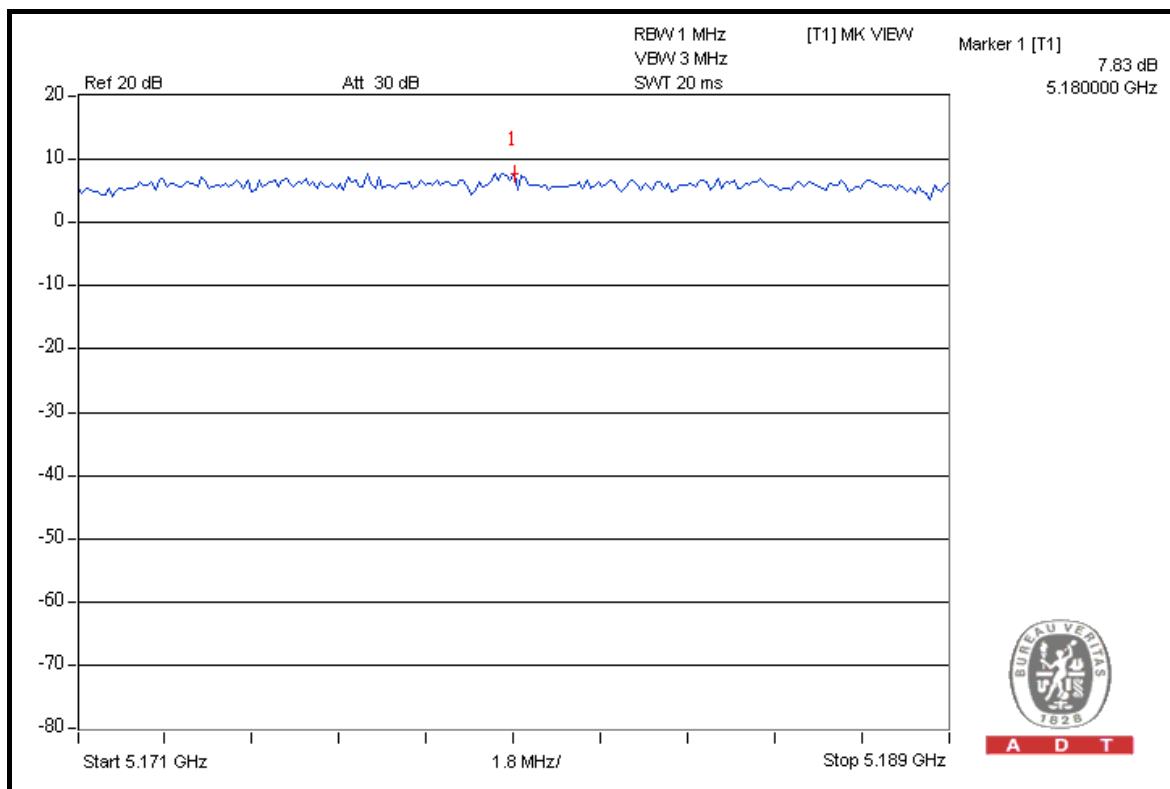


A D T

### CHAIN 0 CH 36



A D T

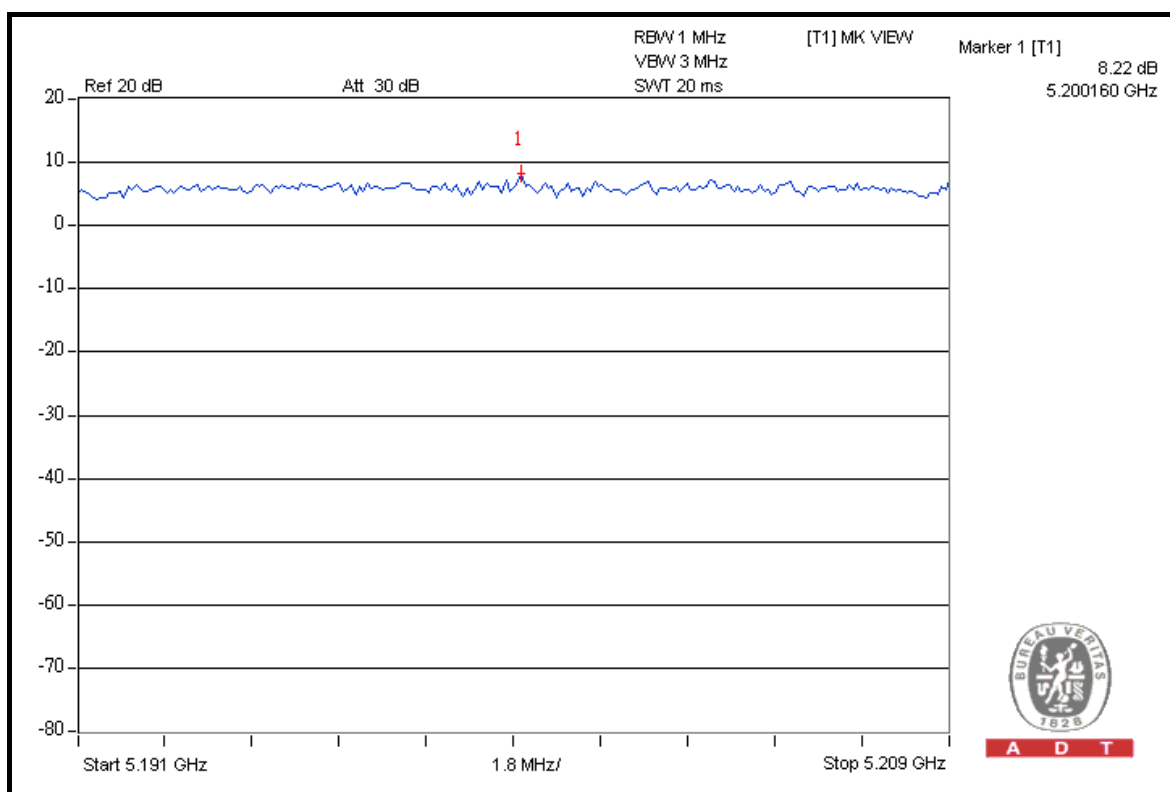
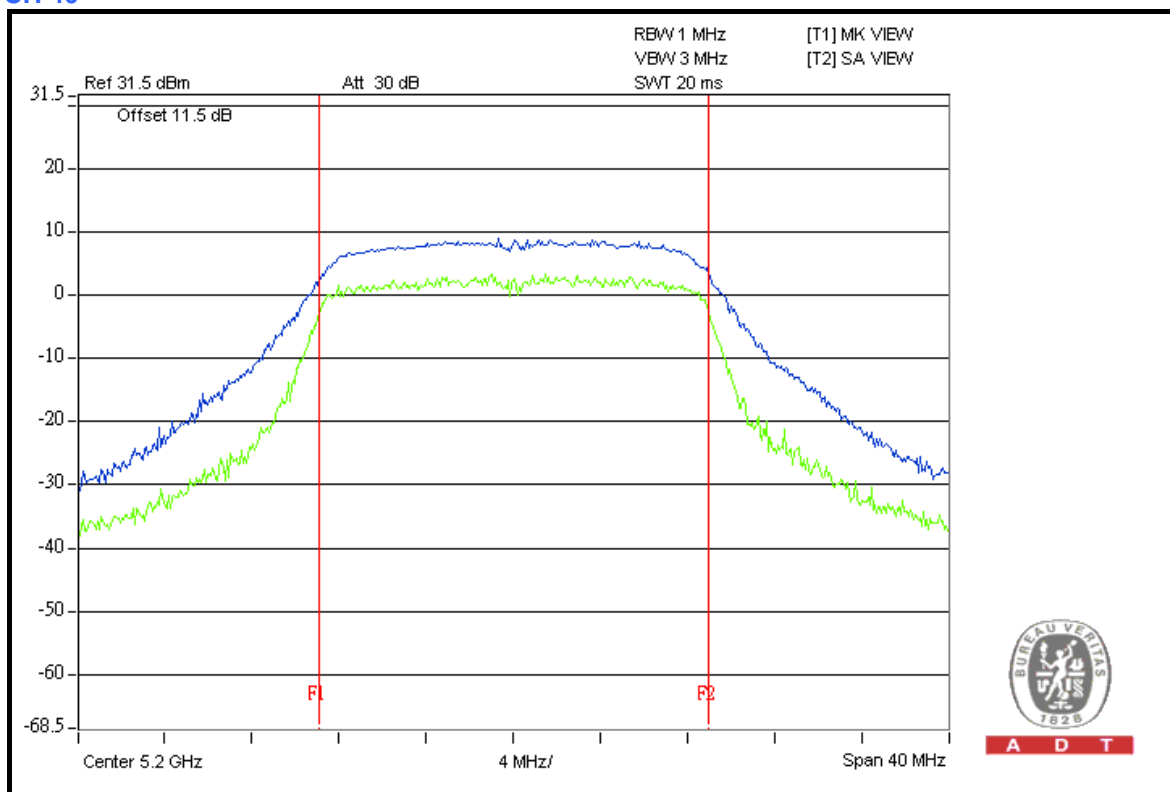


A D T



A D T

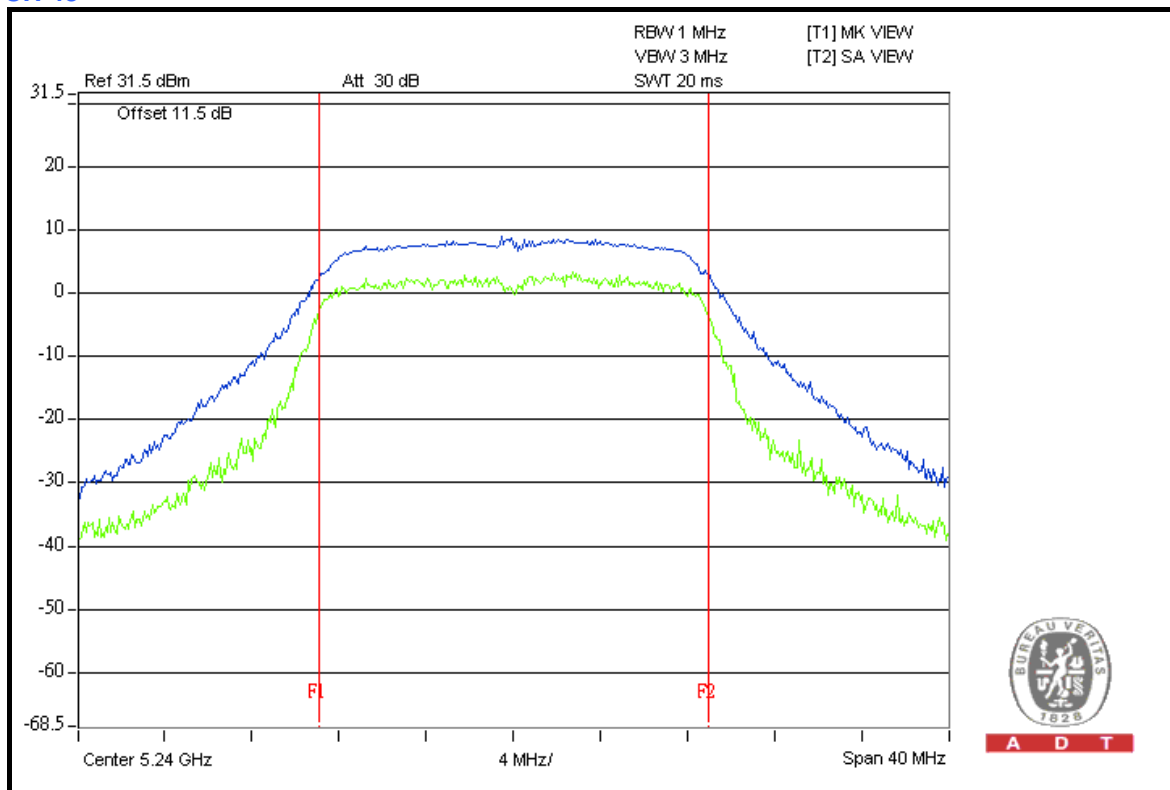
### CH 40



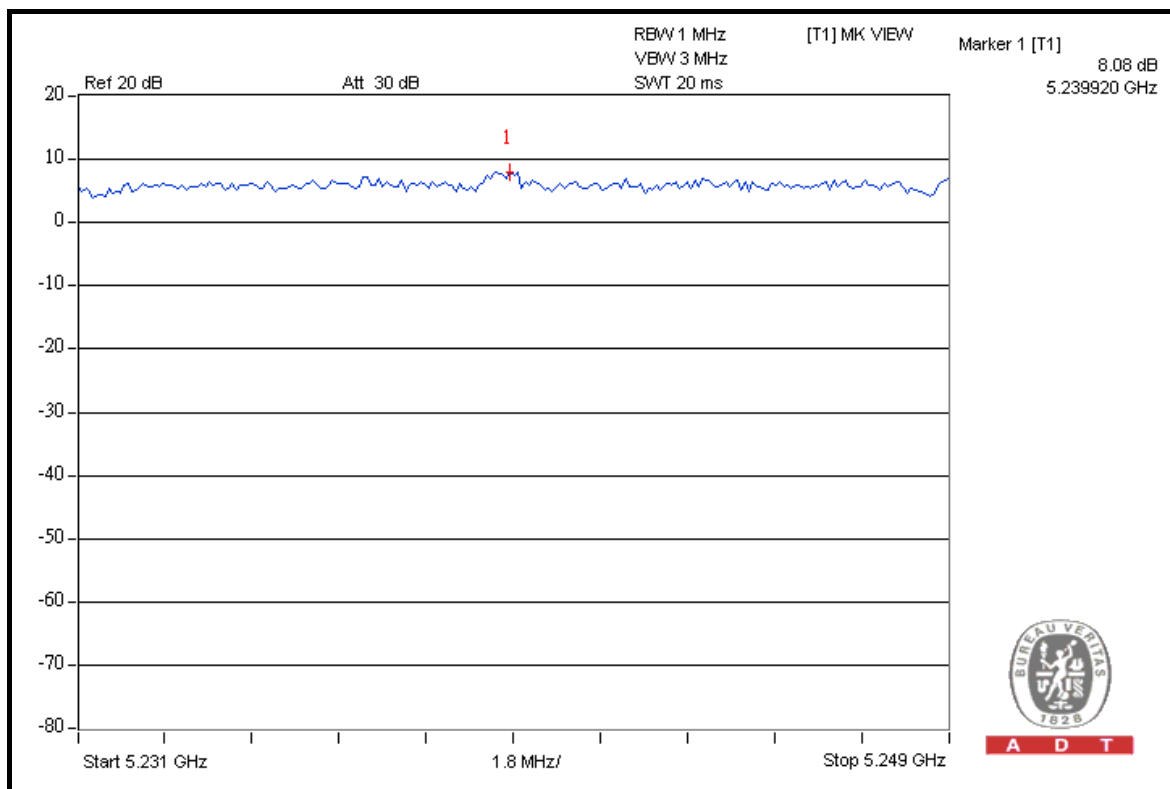


A D T

### CH 48



A D T

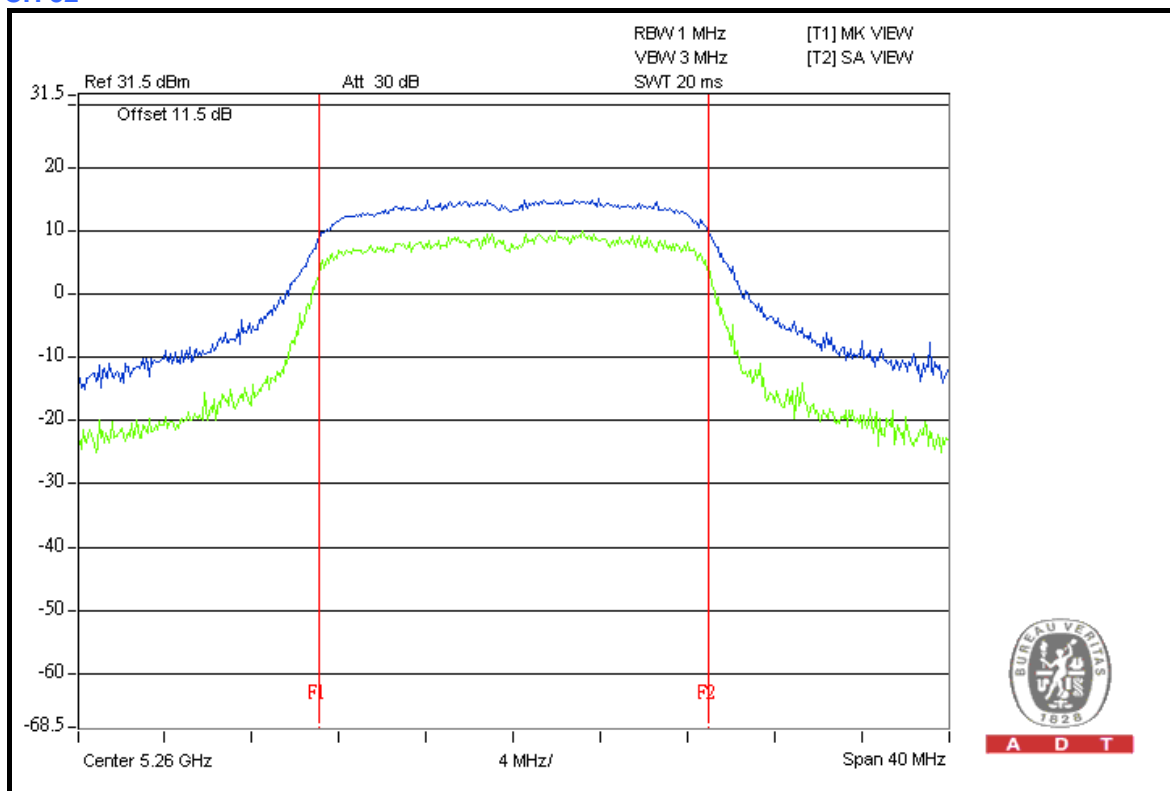


A D T

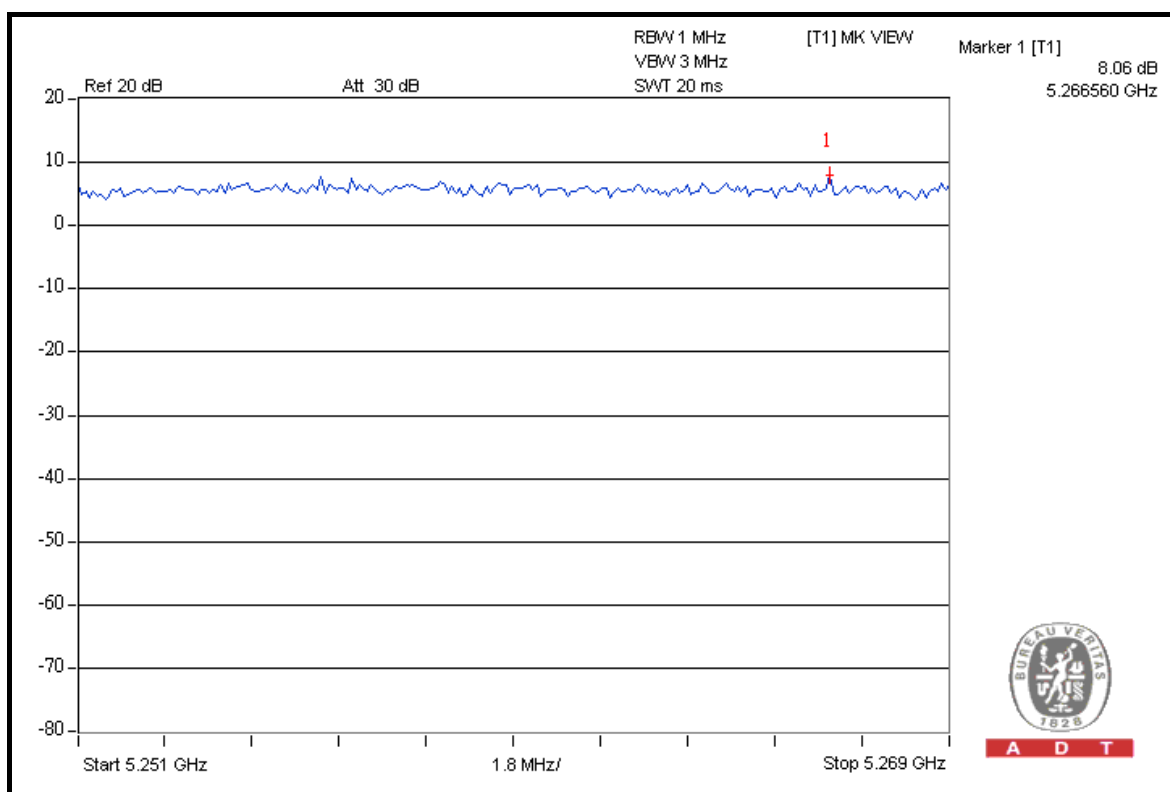


A D T

### CH 52



A D T

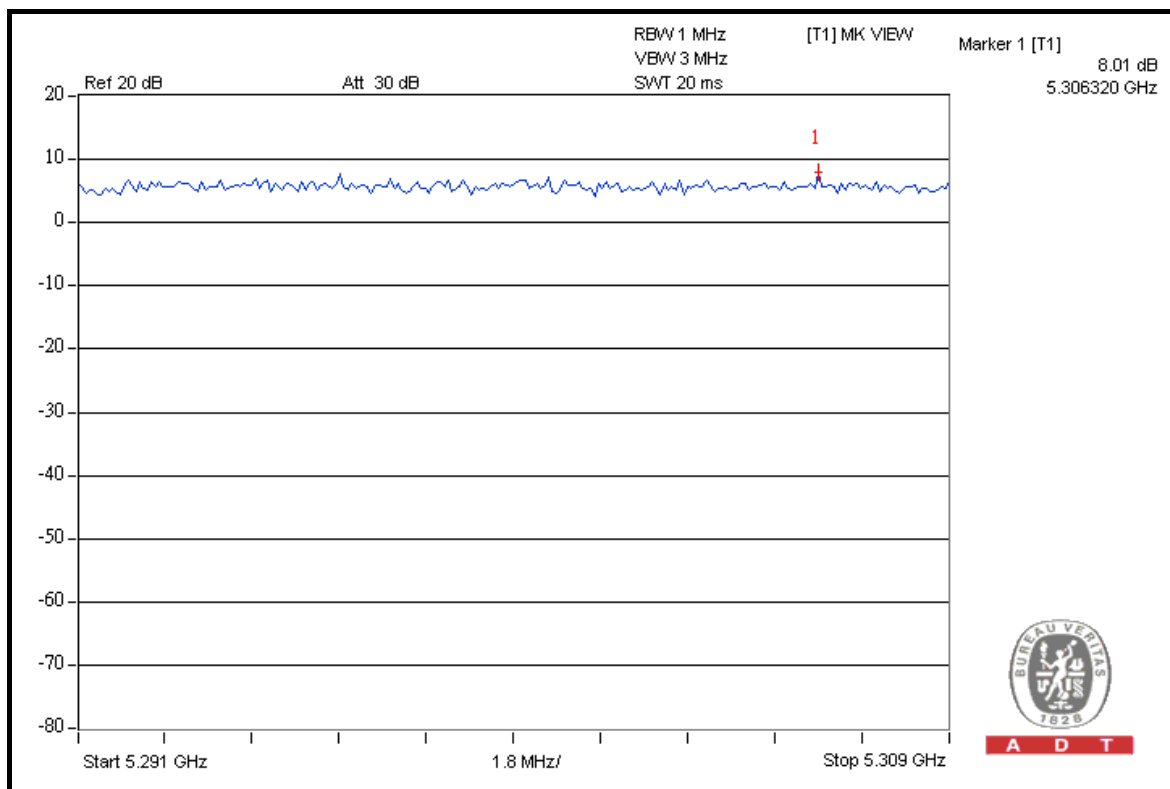
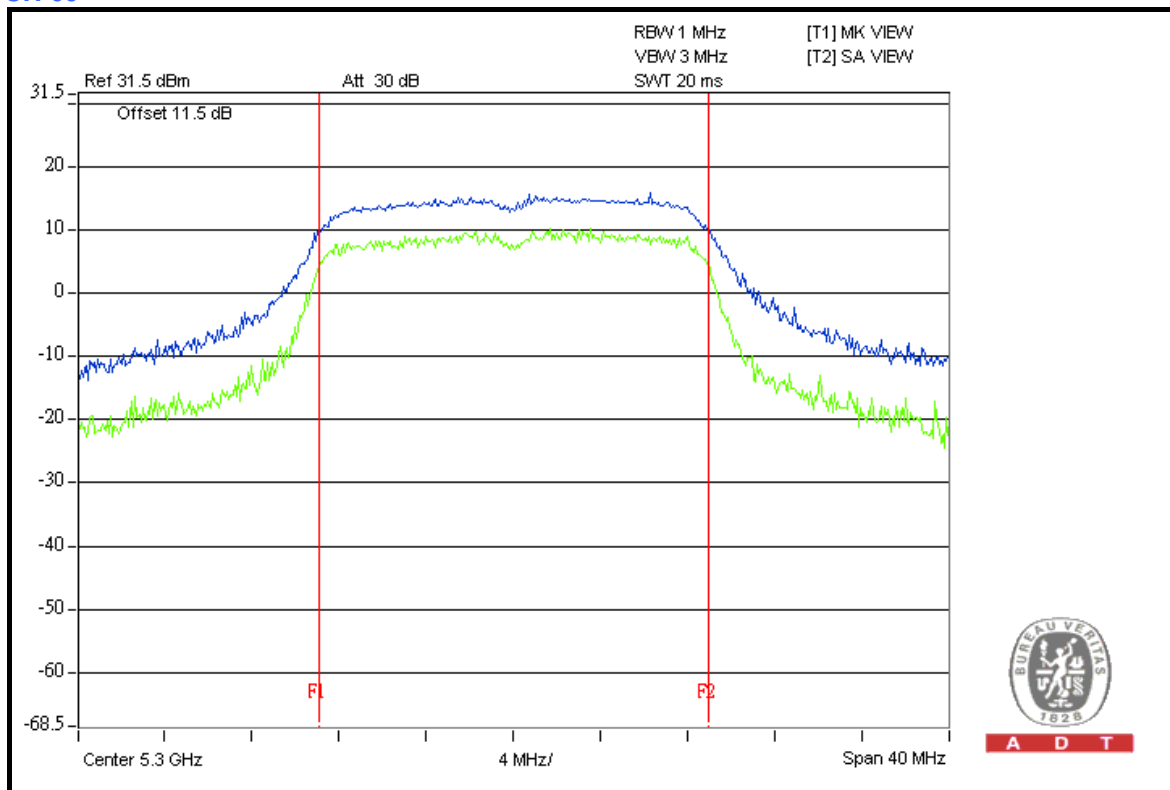


A D T



A D T

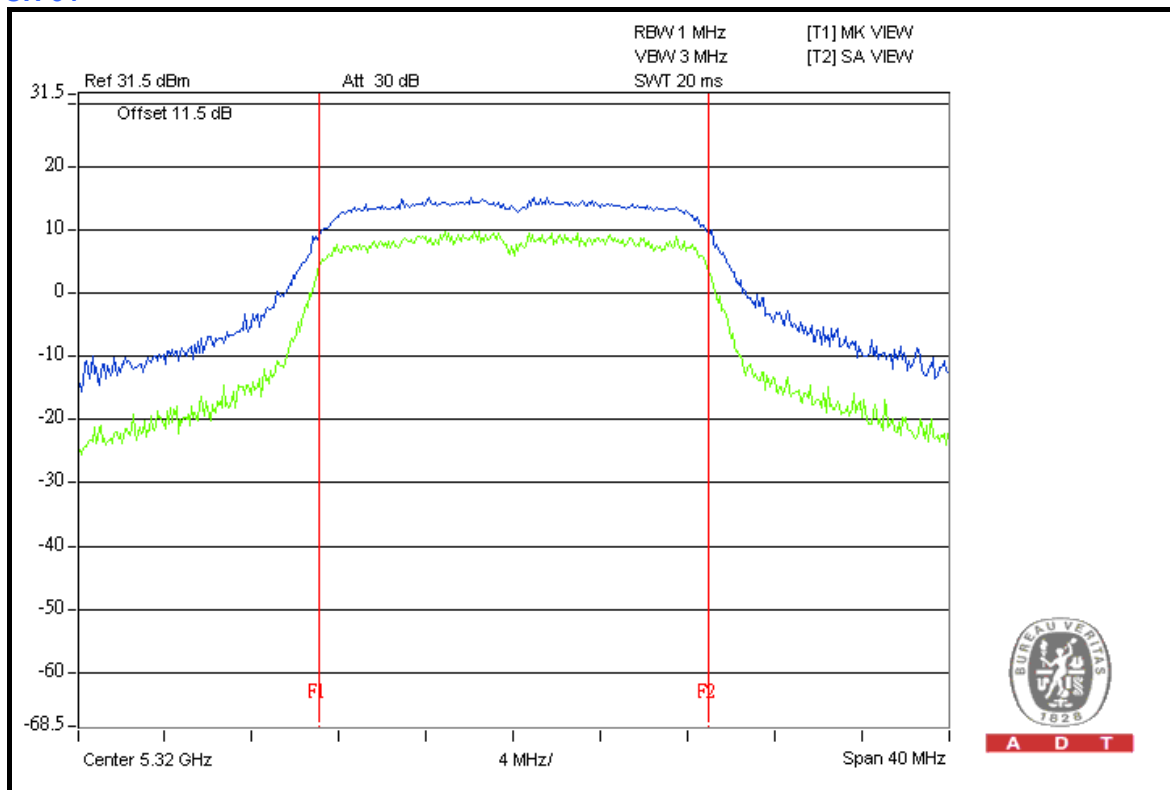
### CH 60



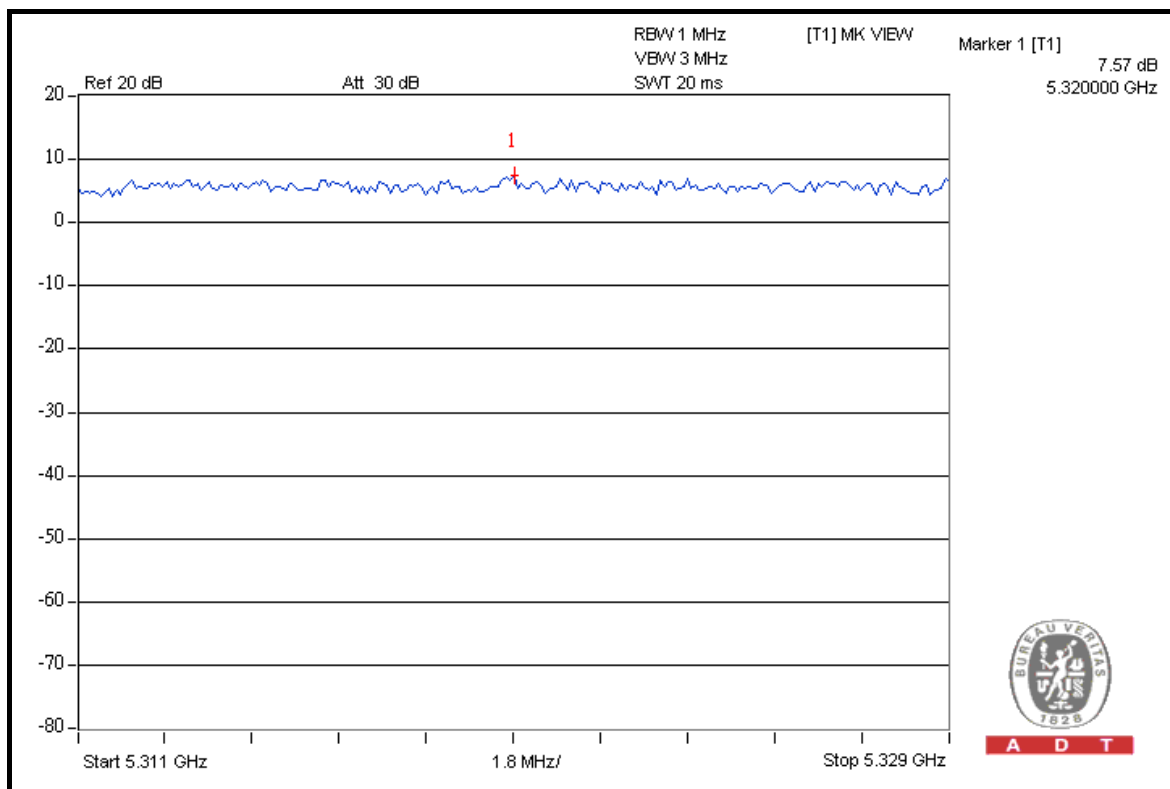


A D T

### CH 64



A D T



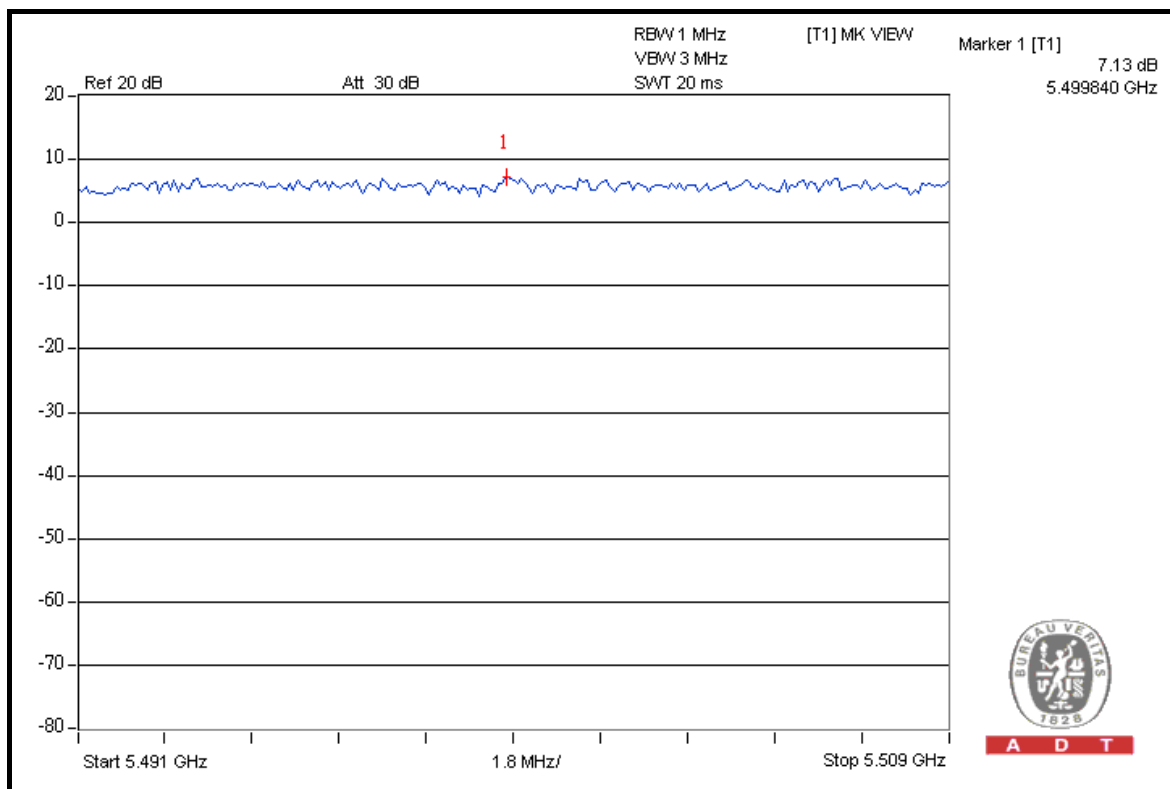
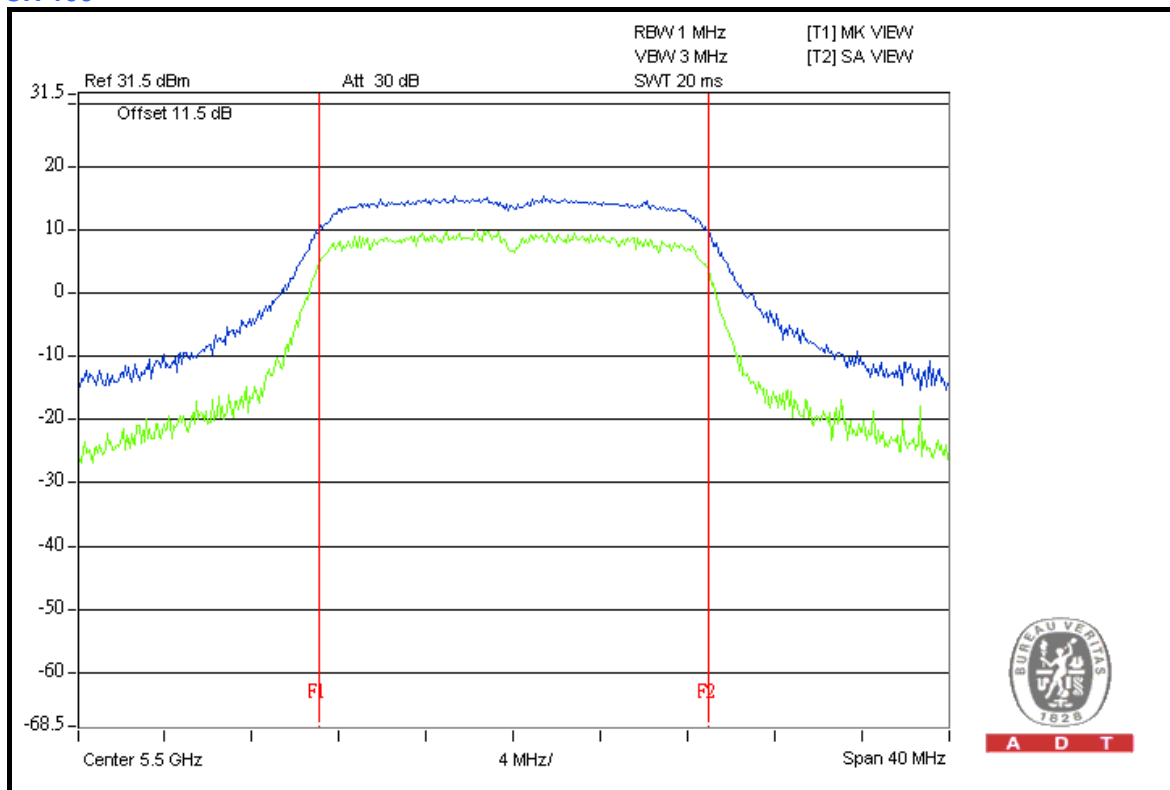
A D T





A D T

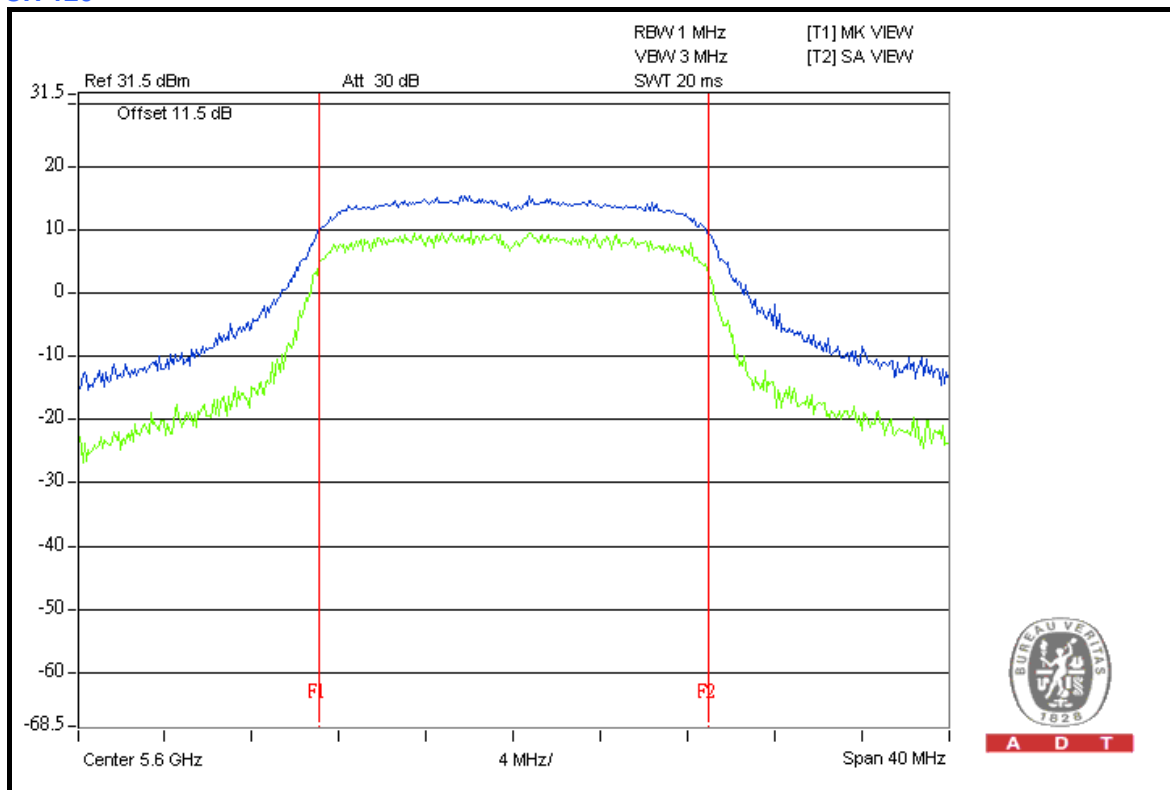
### CH 100



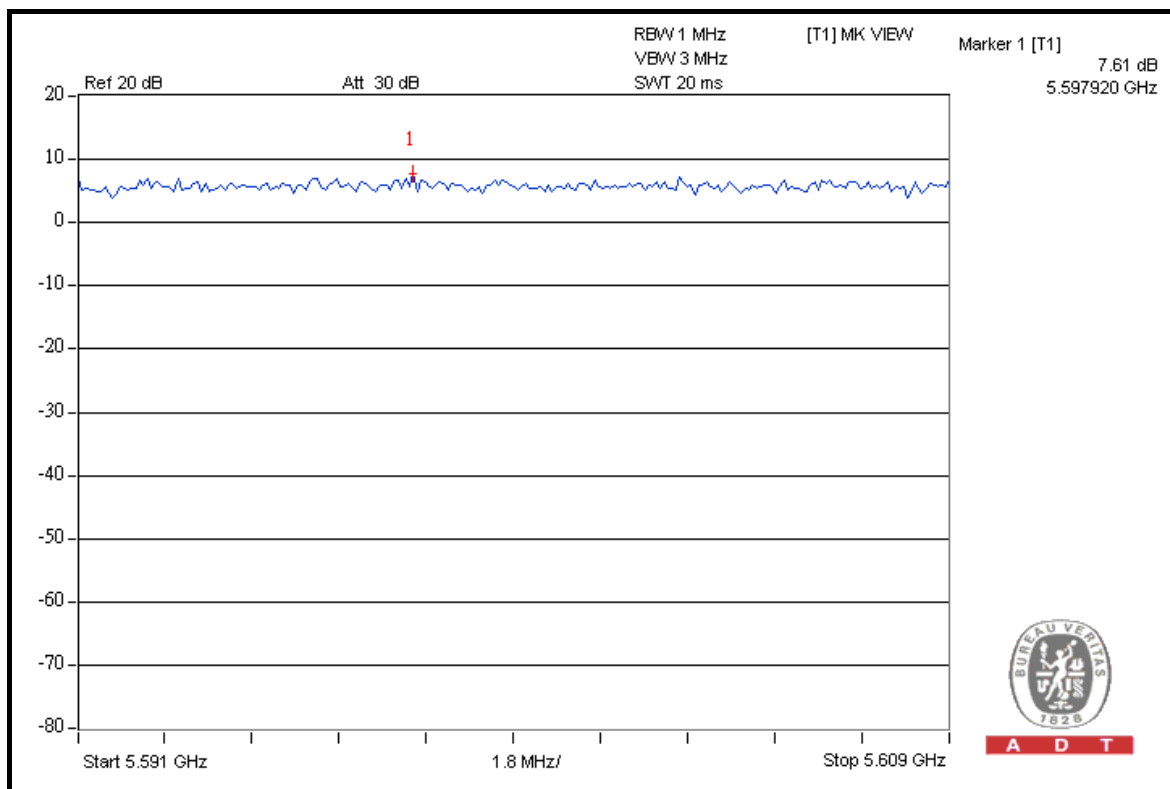


A D T

### CH 120



A D T

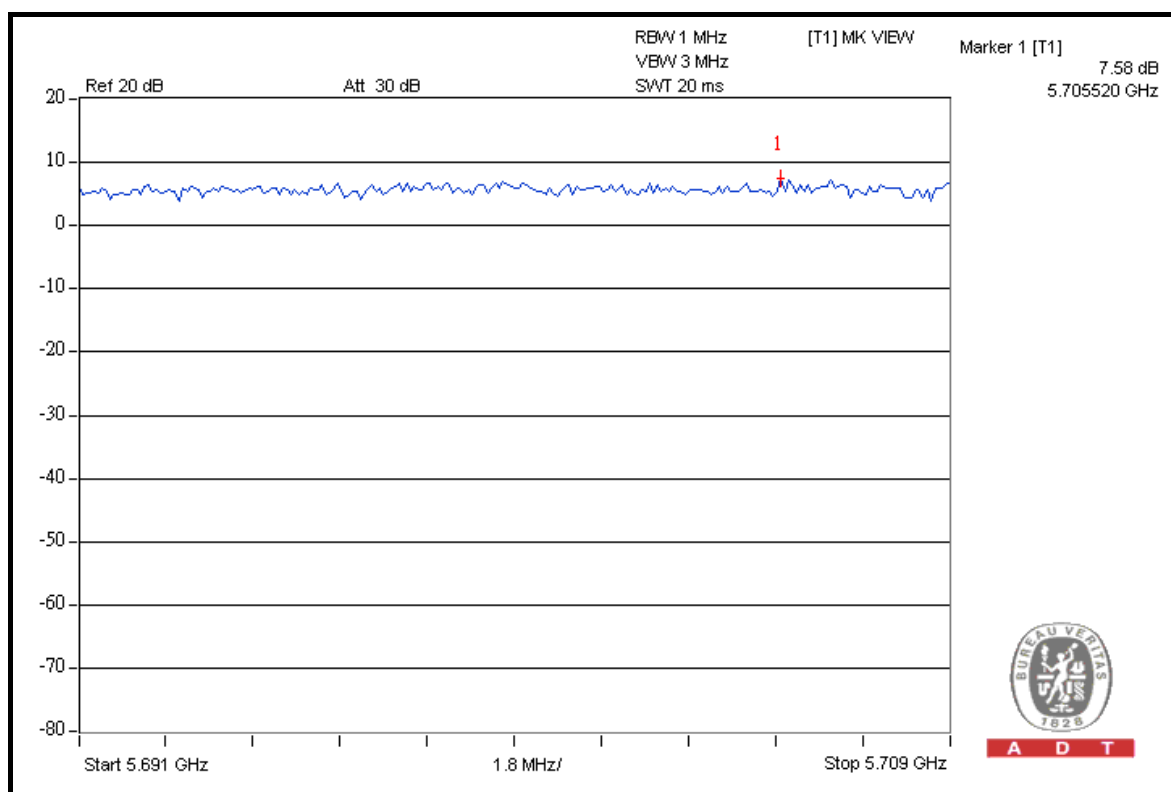
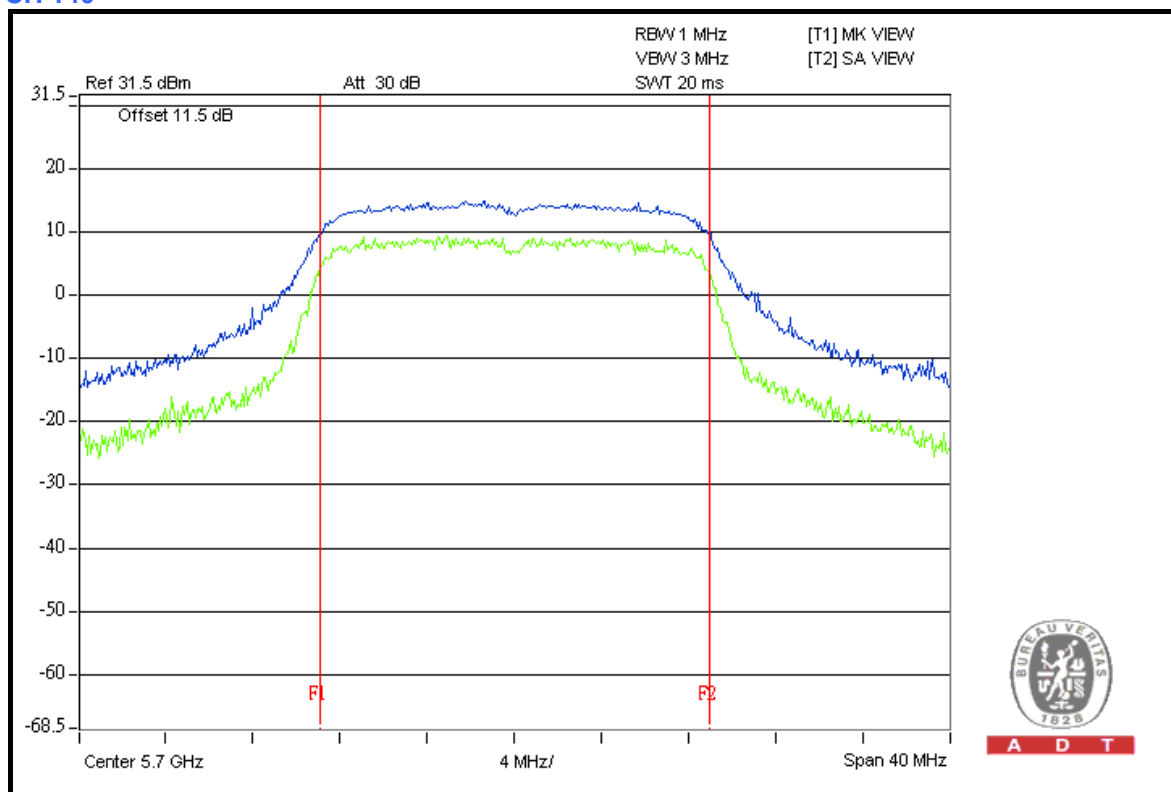


A D T



A D T

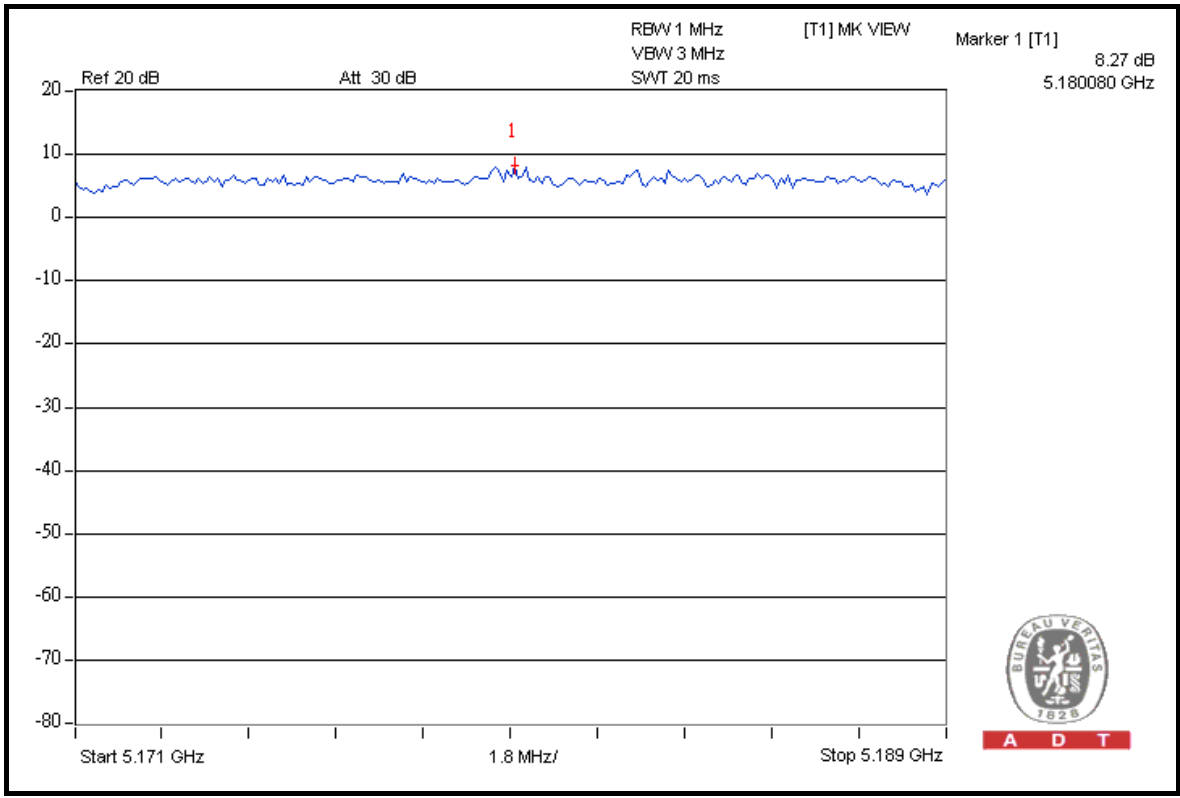
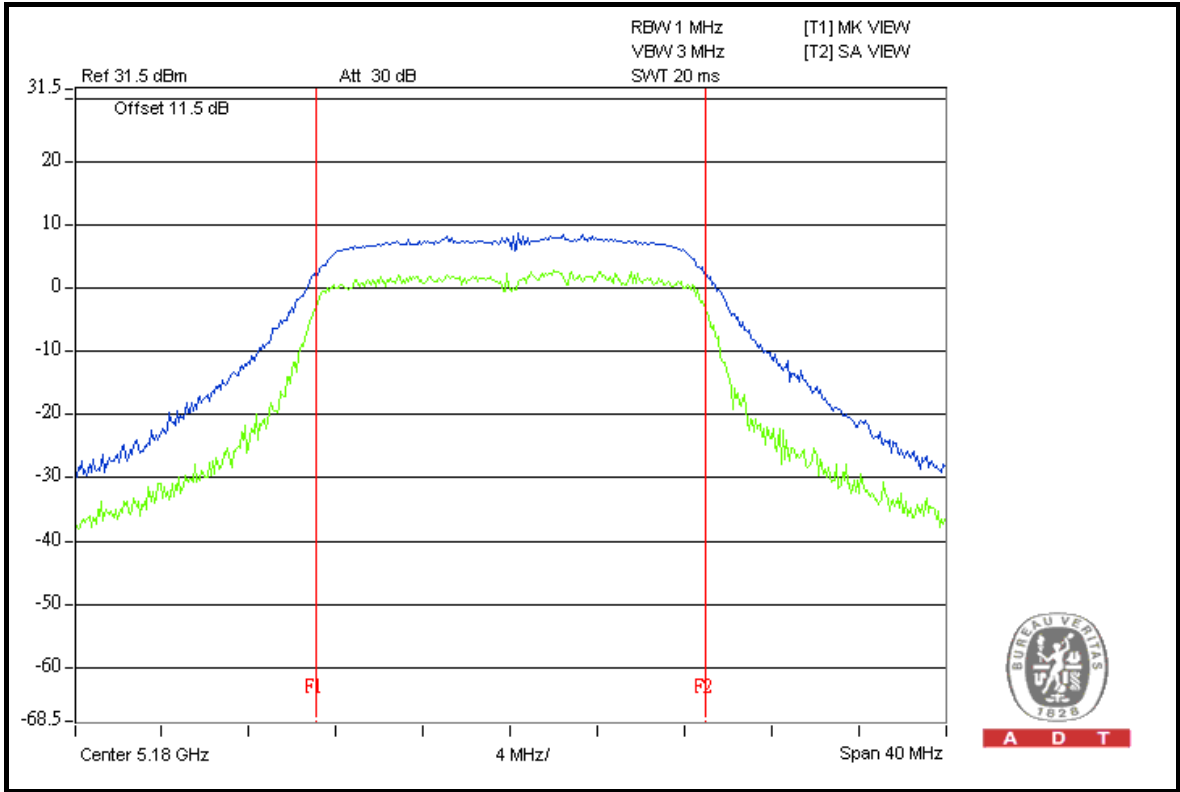
### CH 140





A D T

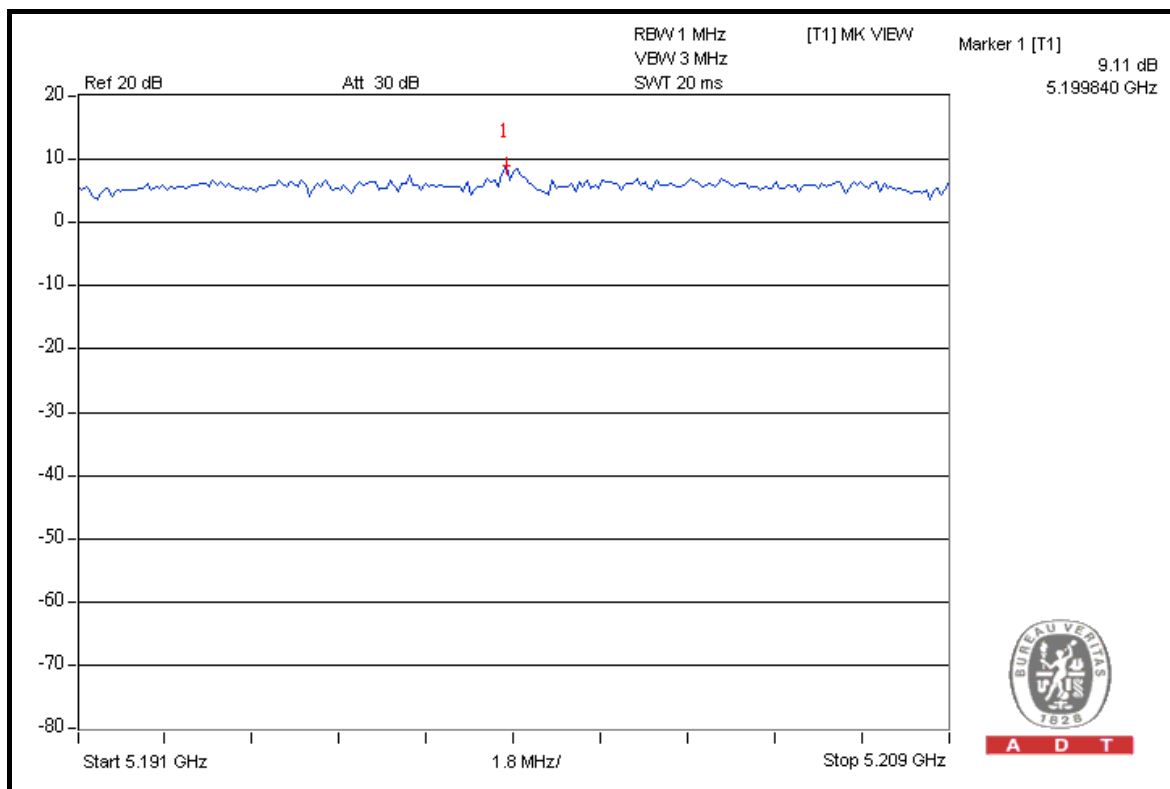
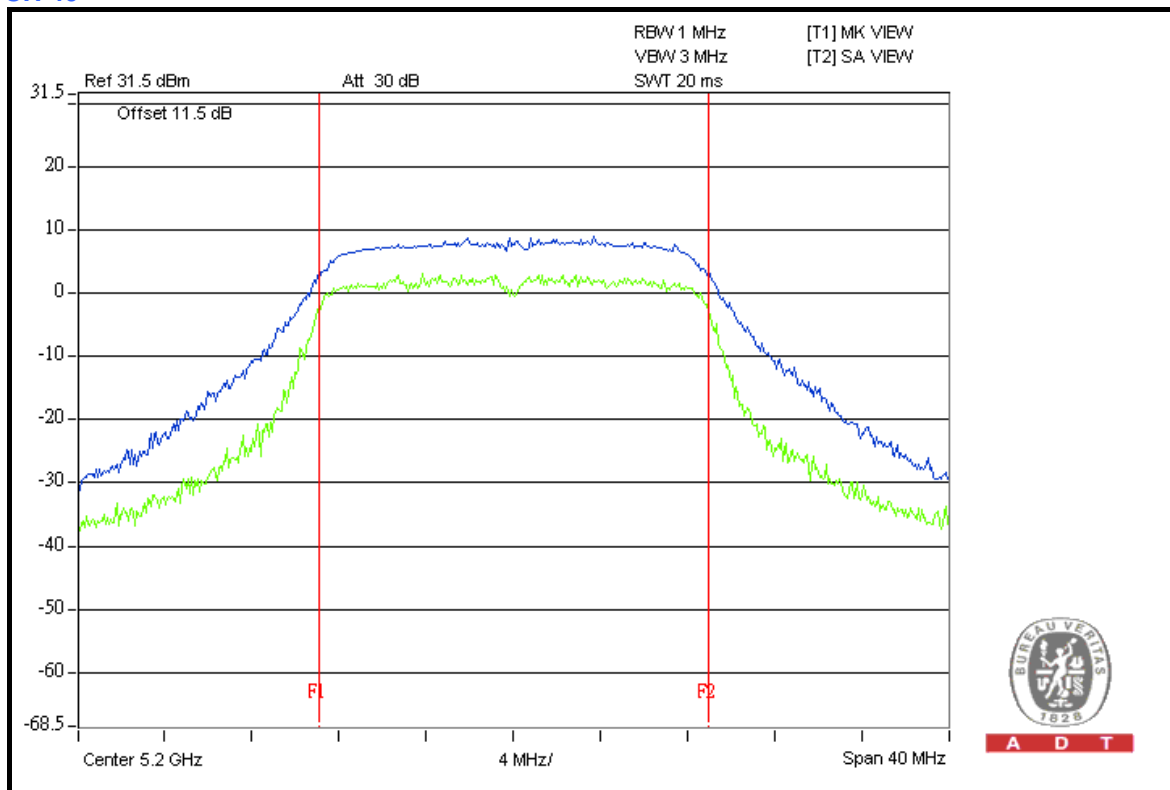
CHAIN 1 CH 36





A D T

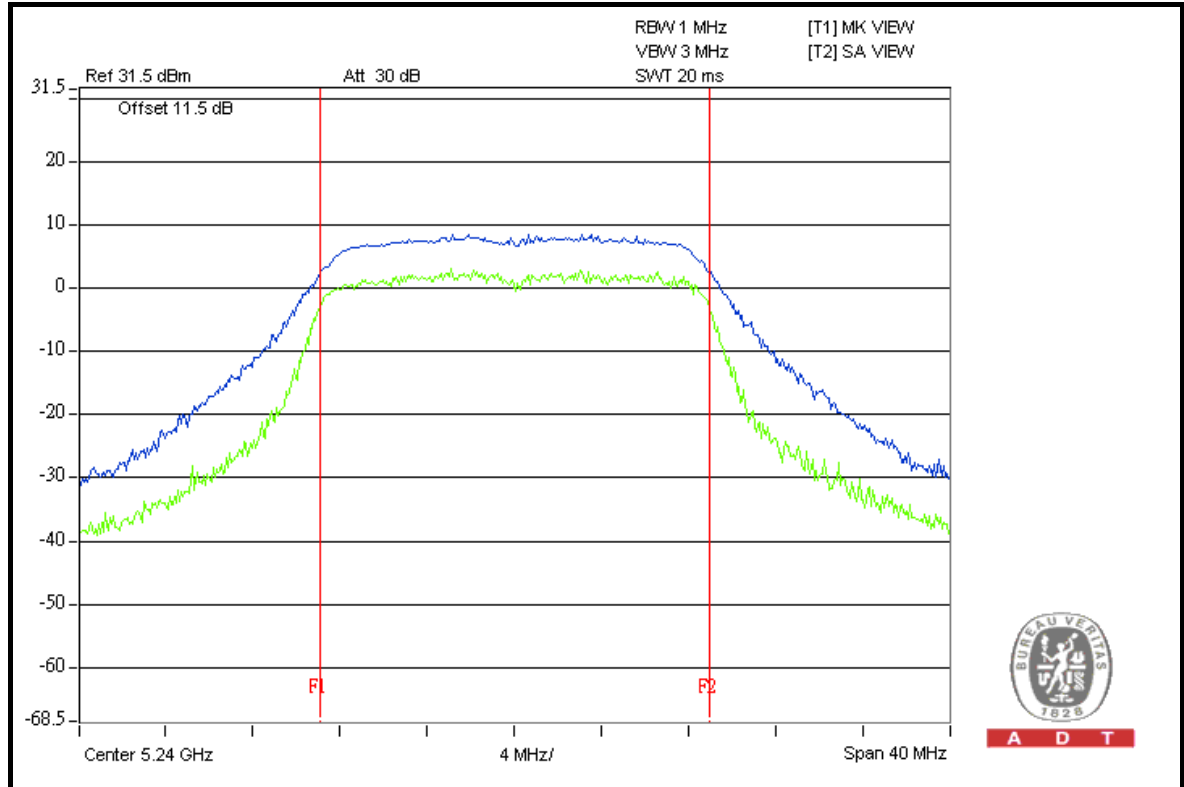
### CH 40



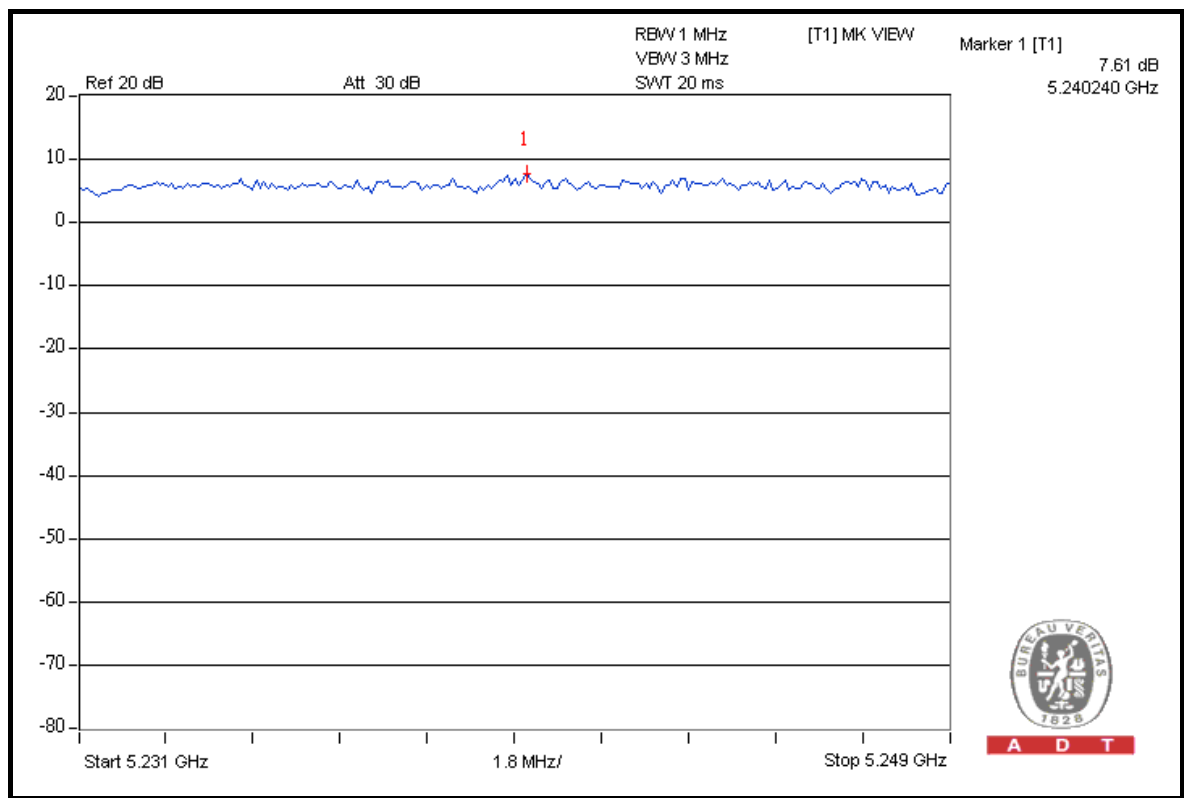


A D T

CH 48



A D T

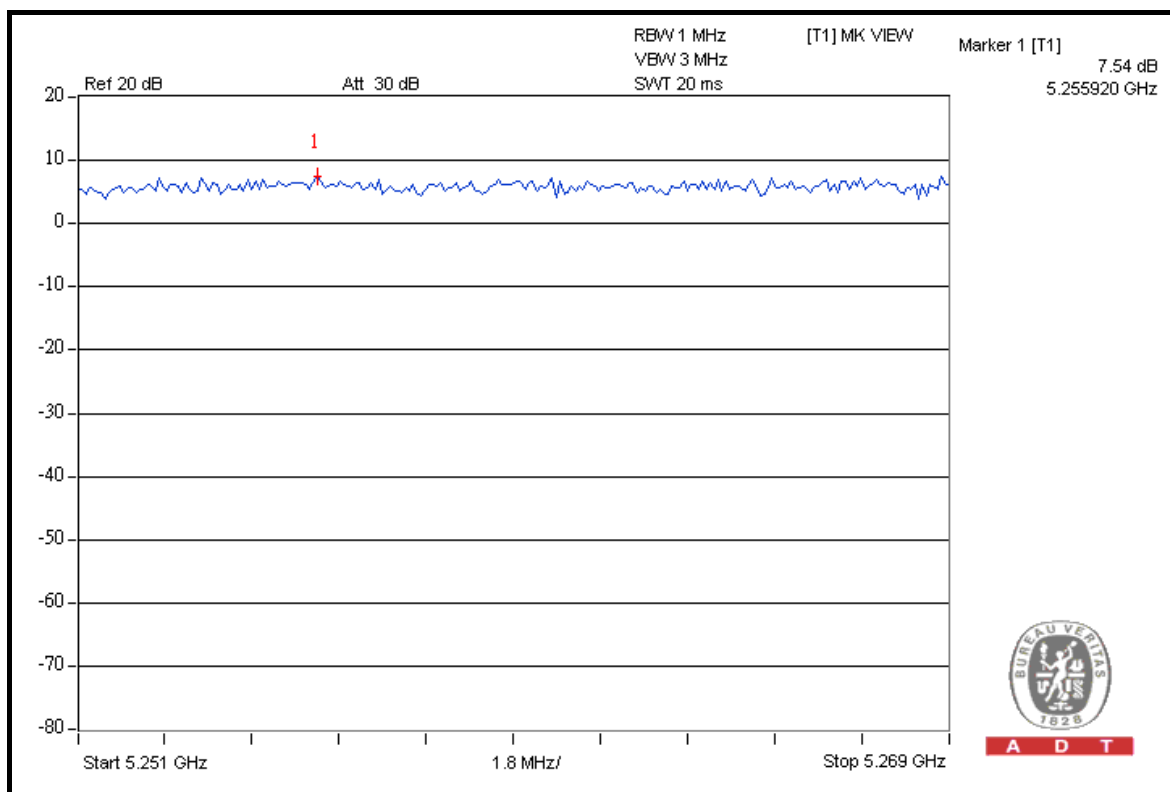
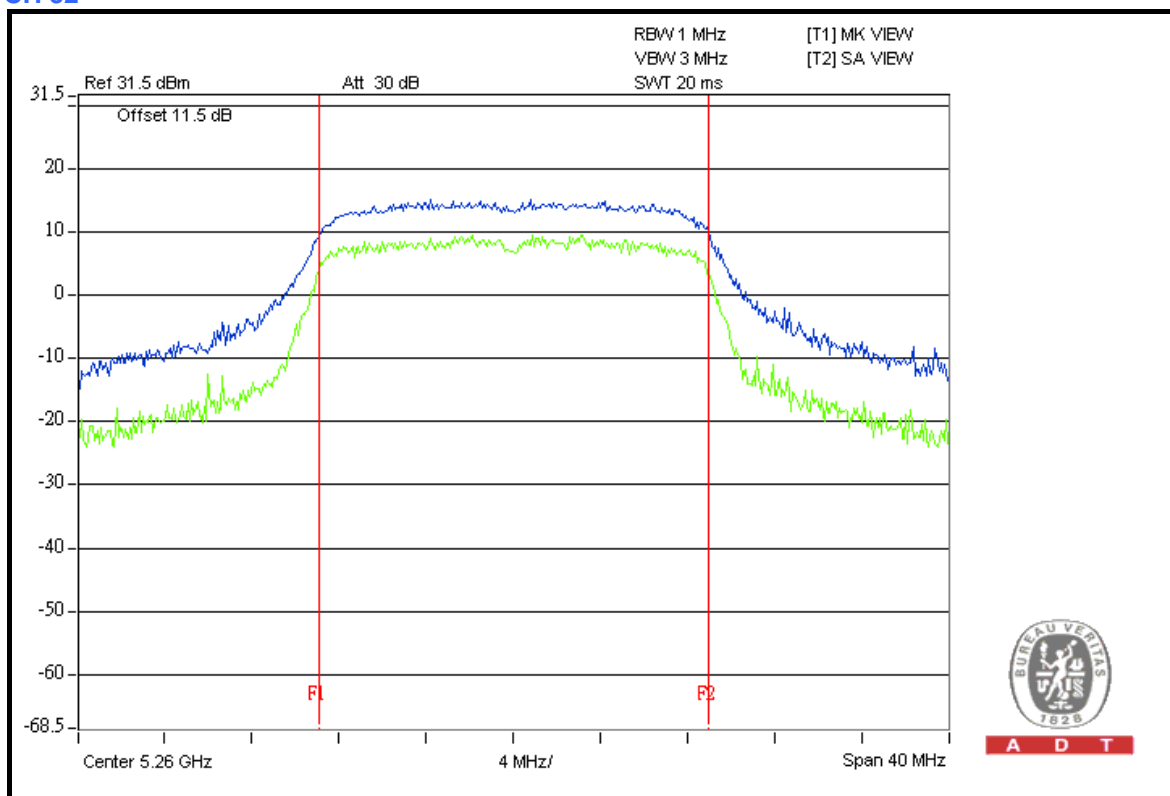


A D T



A D T

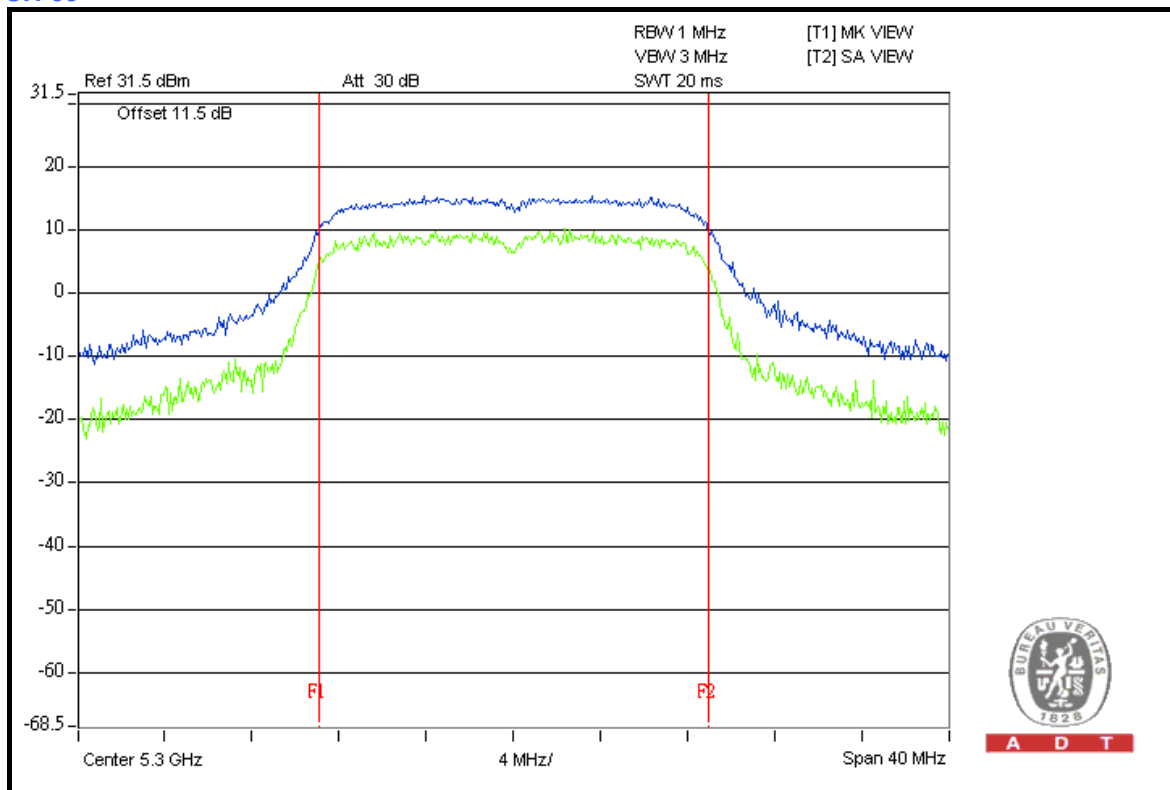
### CH 52



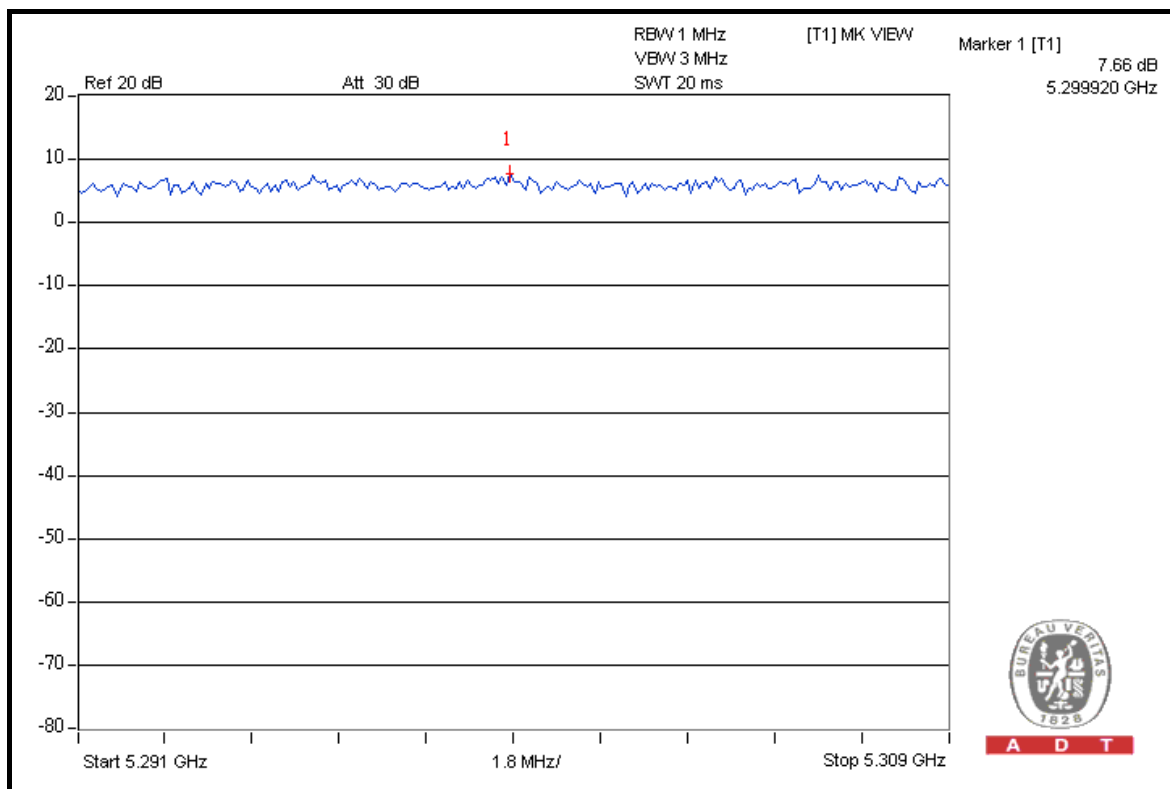


A D T

### CH 60



A D T



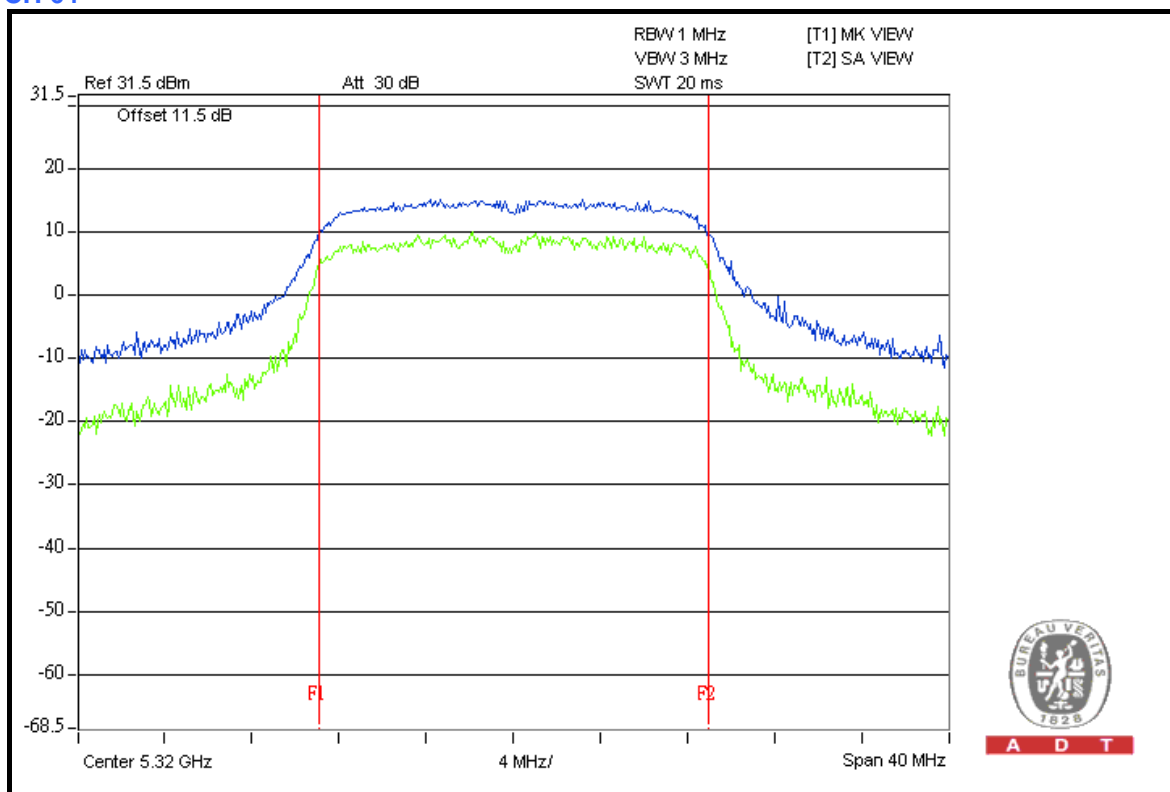
A D T



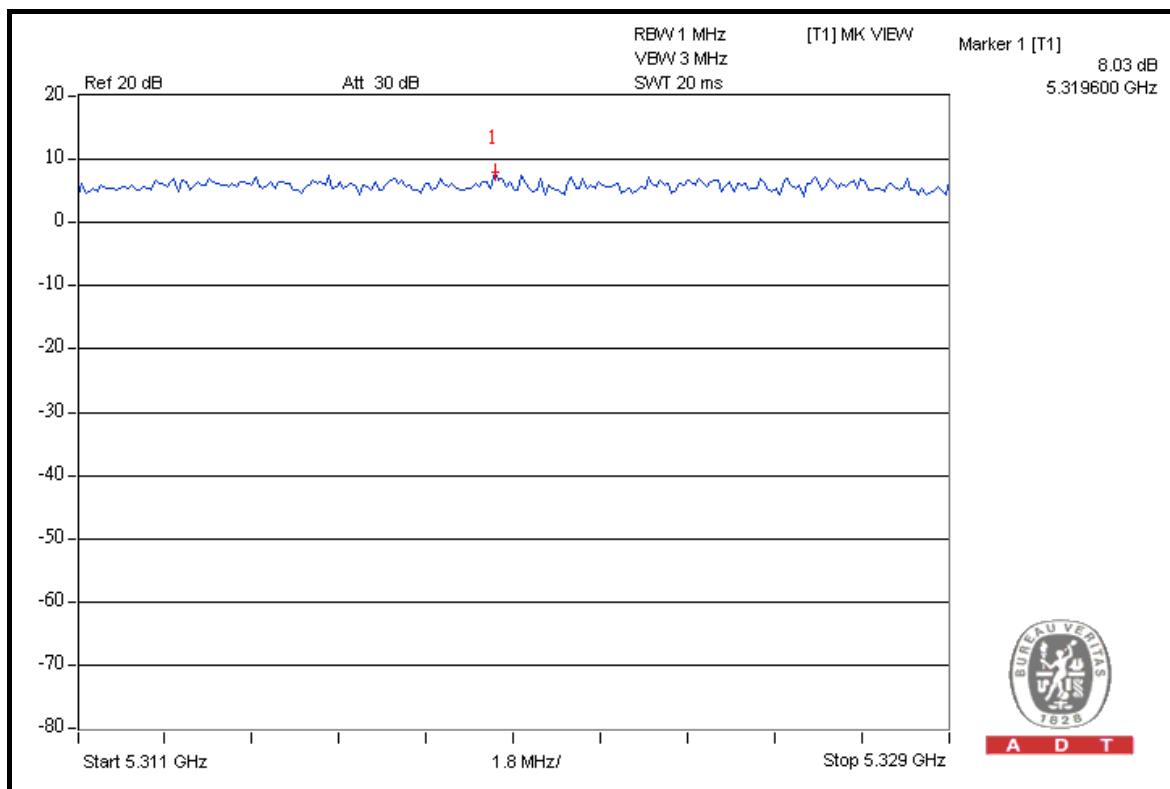


A D T

### CH 64



A D T

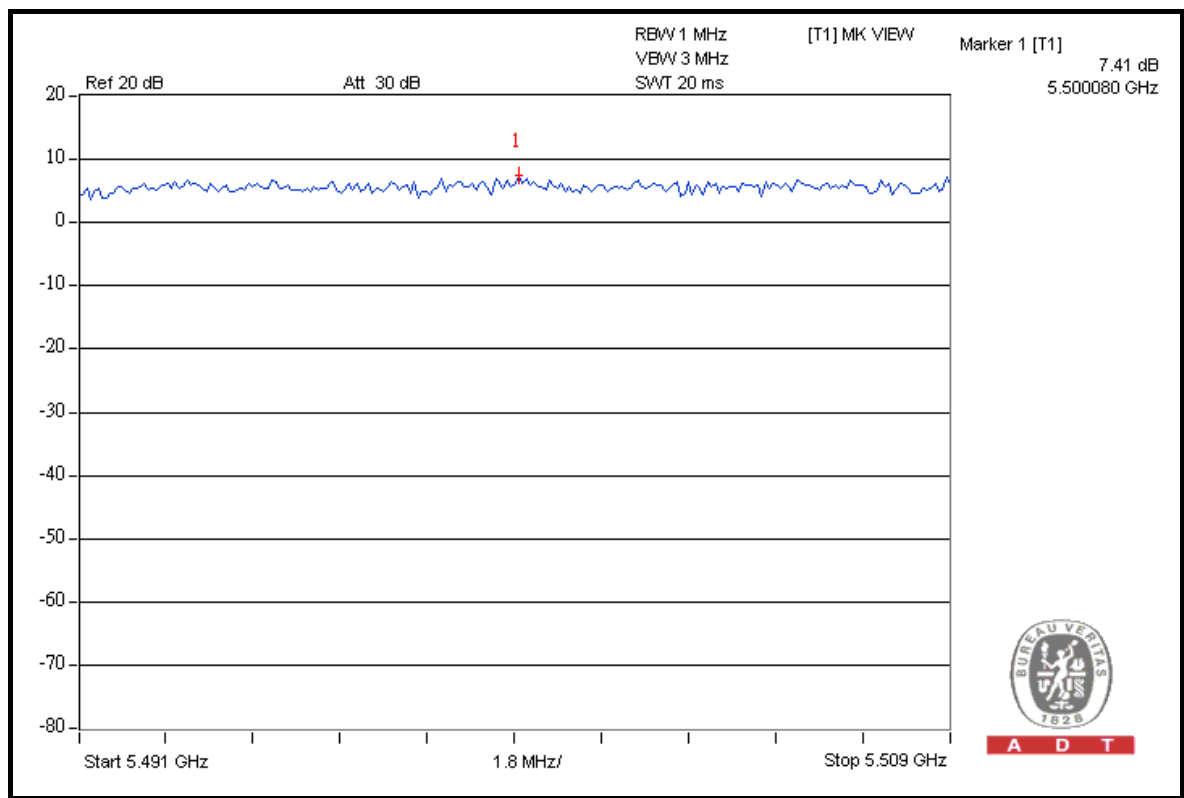
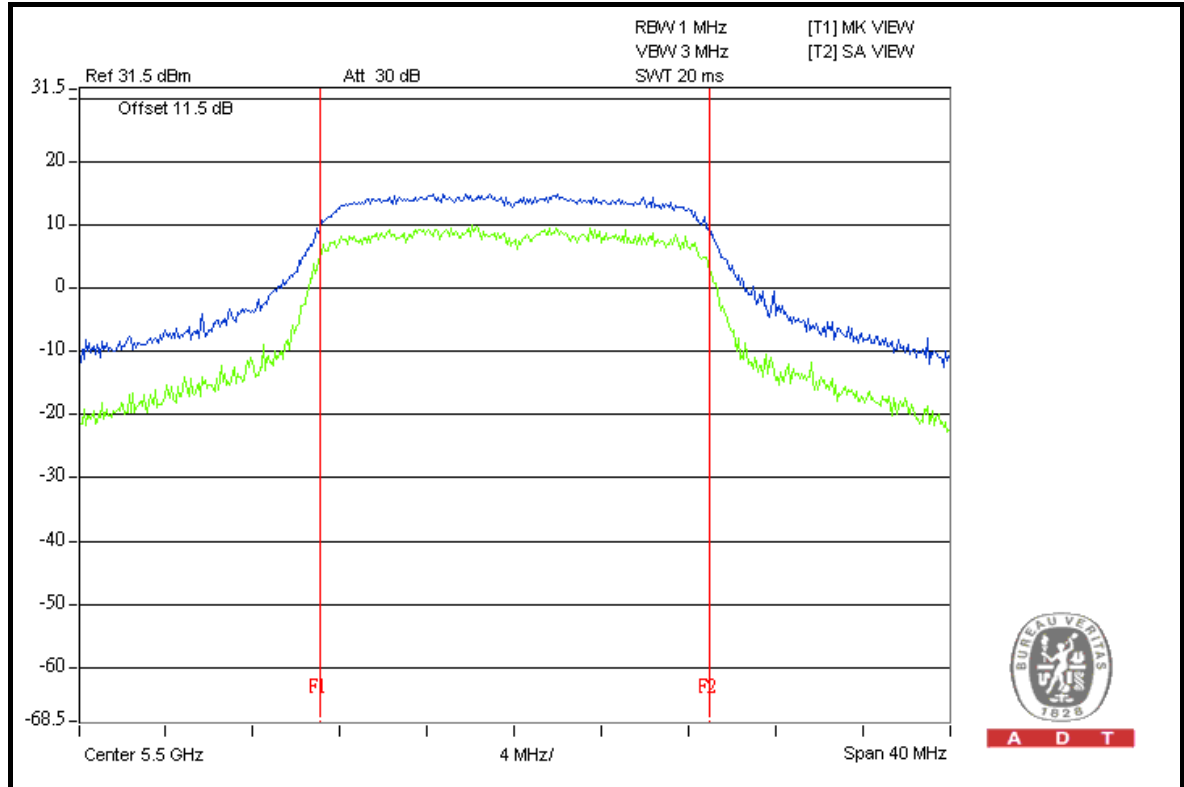


A D T



A D T

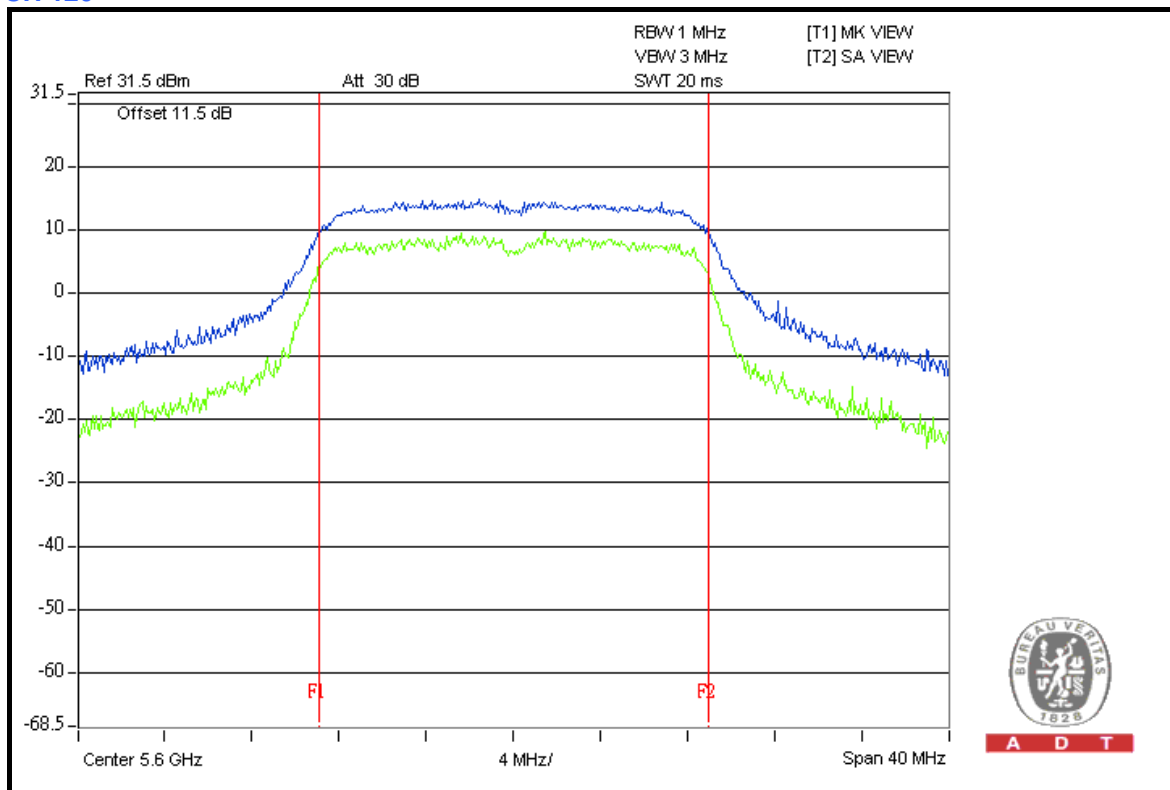
CH 100



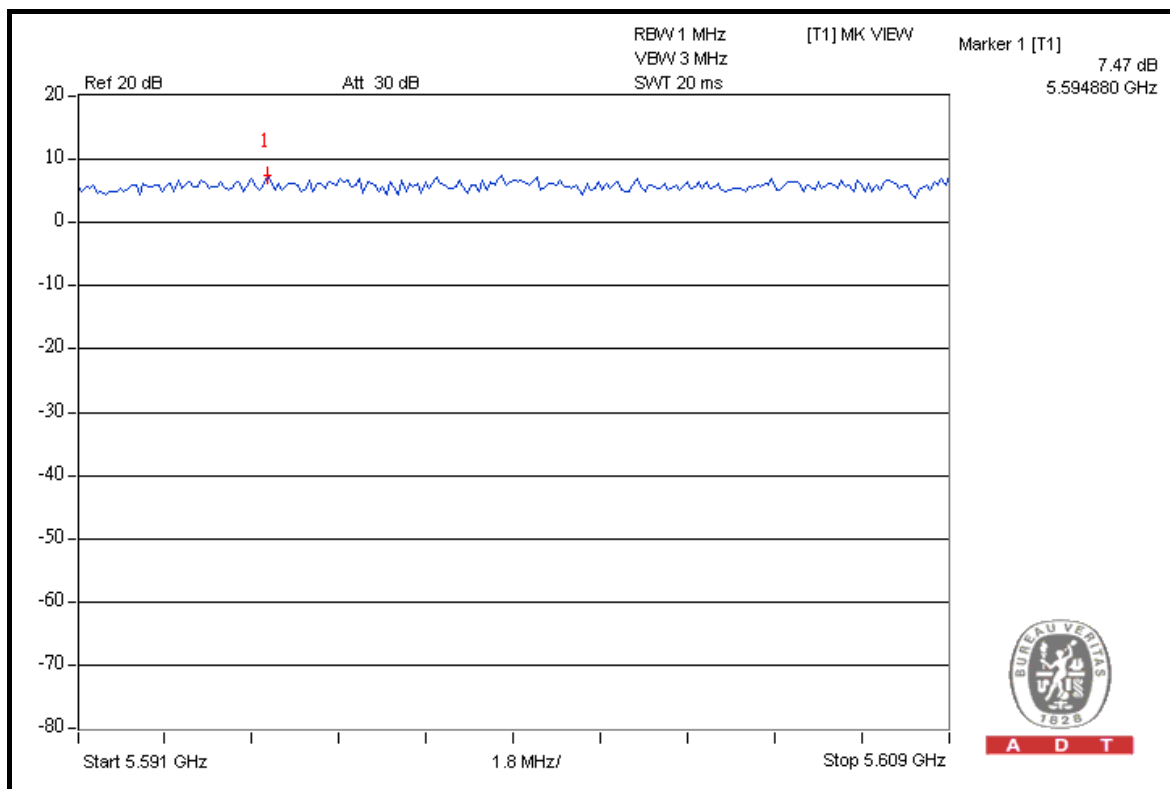


A D T

### CH 120



A D T

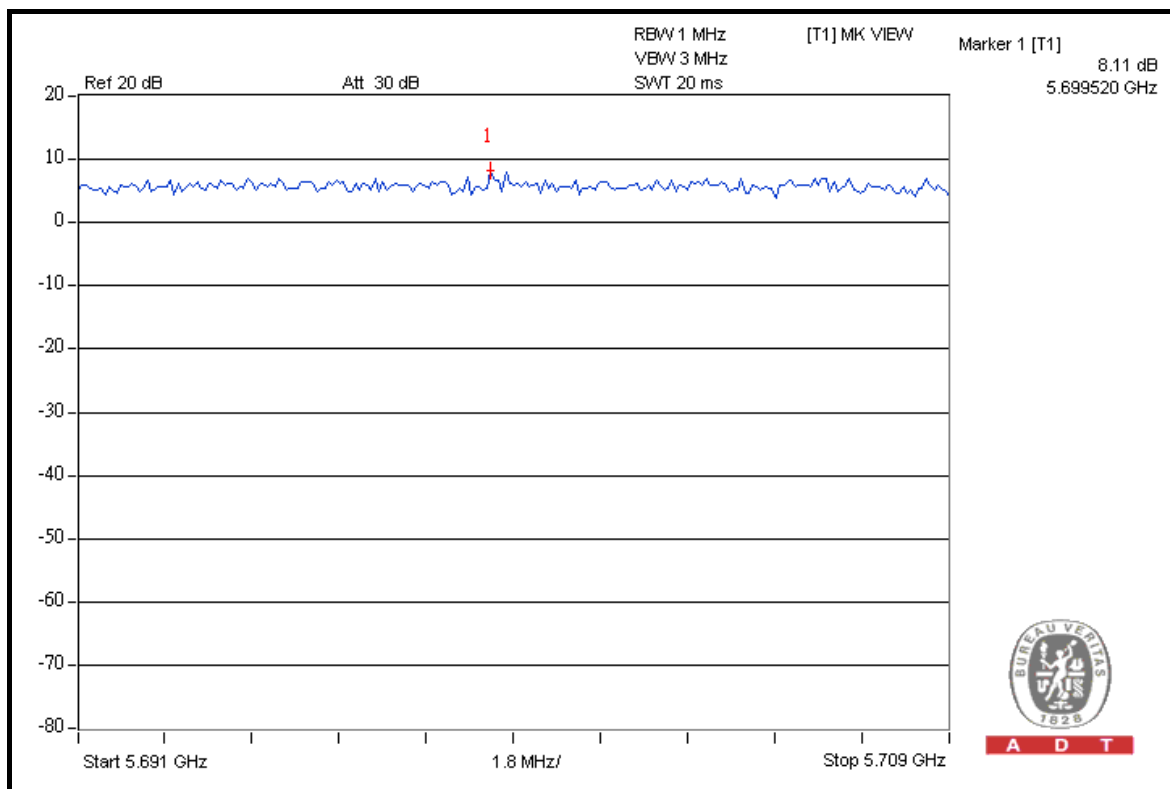
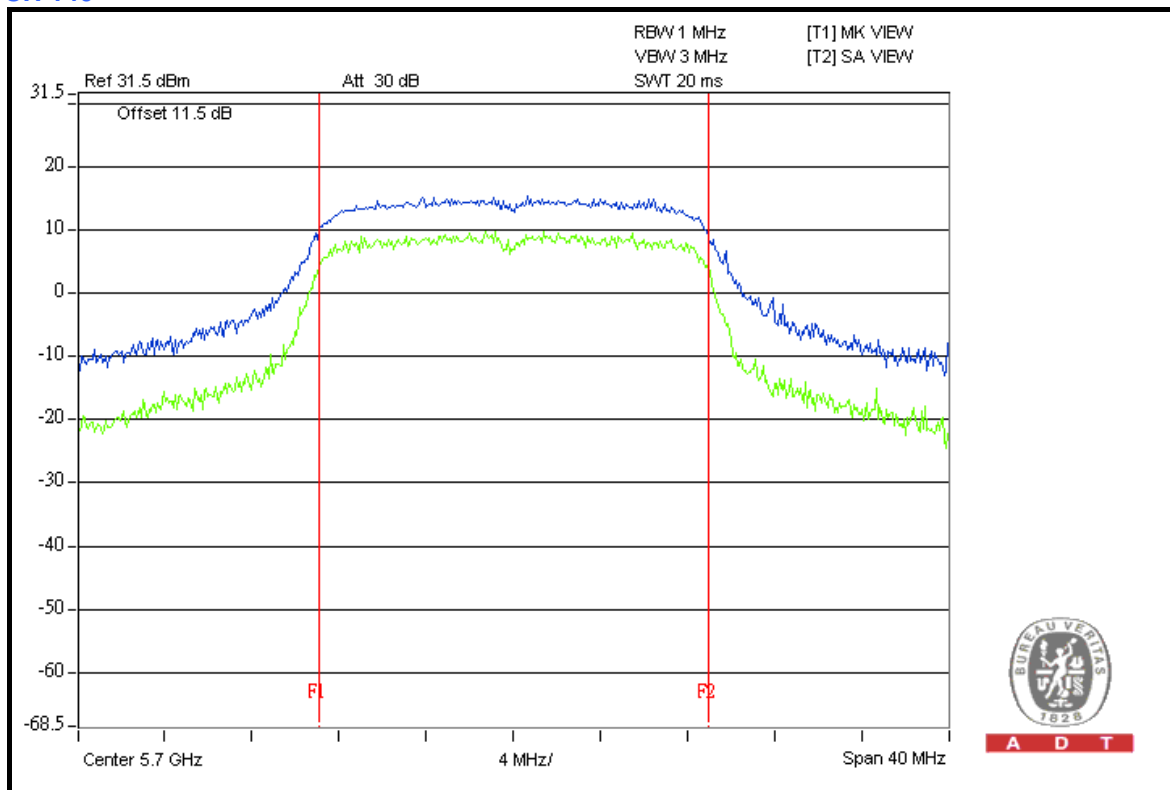


A D T



A D T

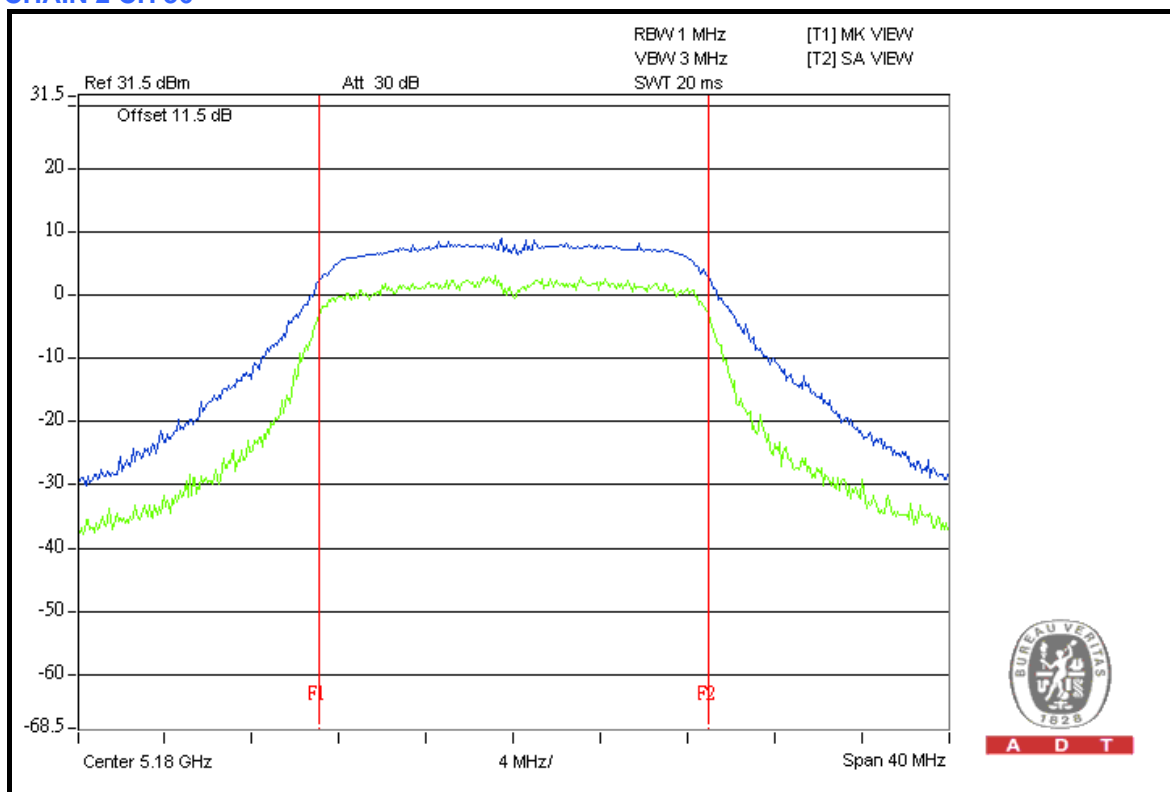
### CH 140



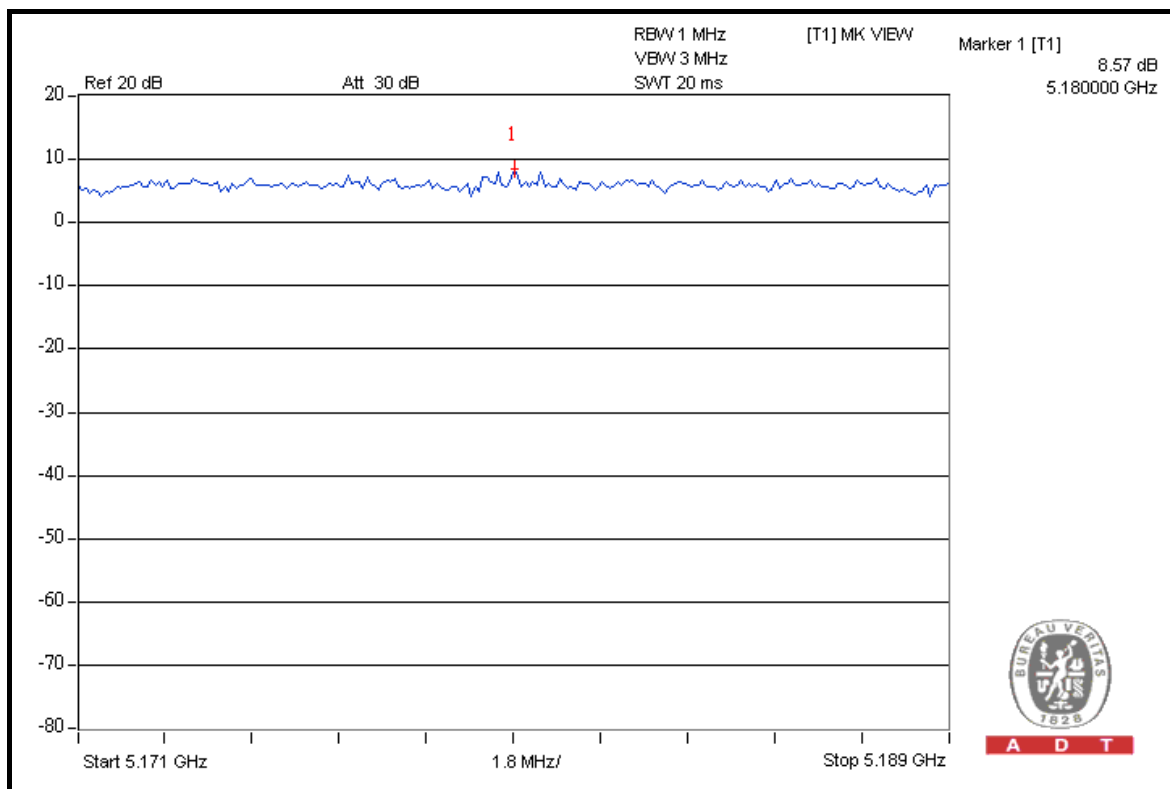


A D T

### CHAIN 2 CH 36



A D T

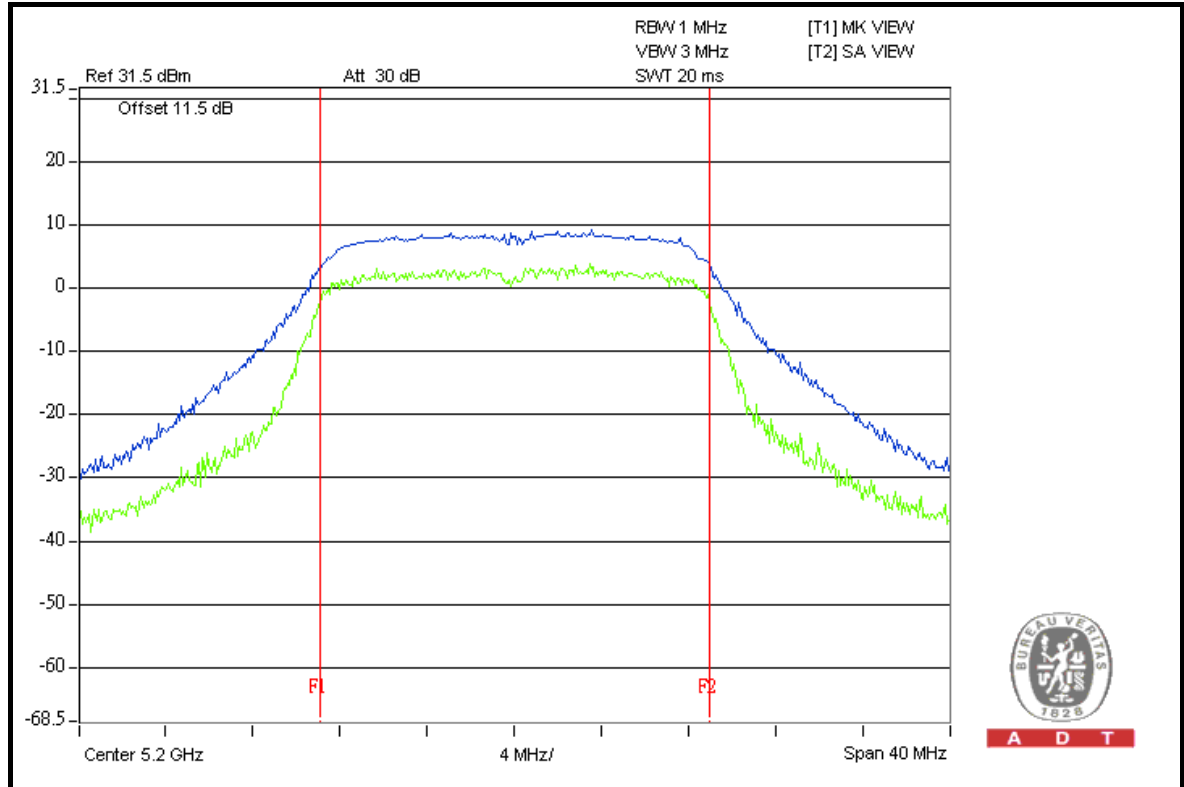


A D T

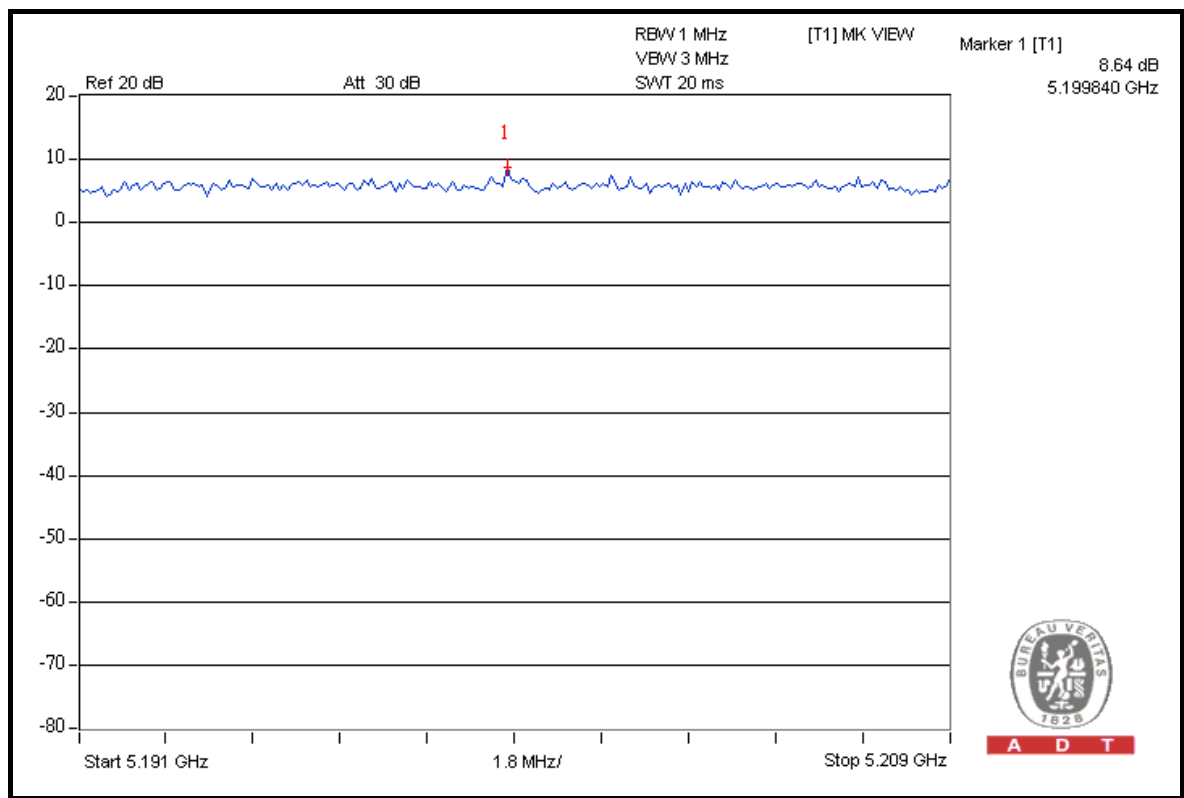


A D T

CH 40



A D T

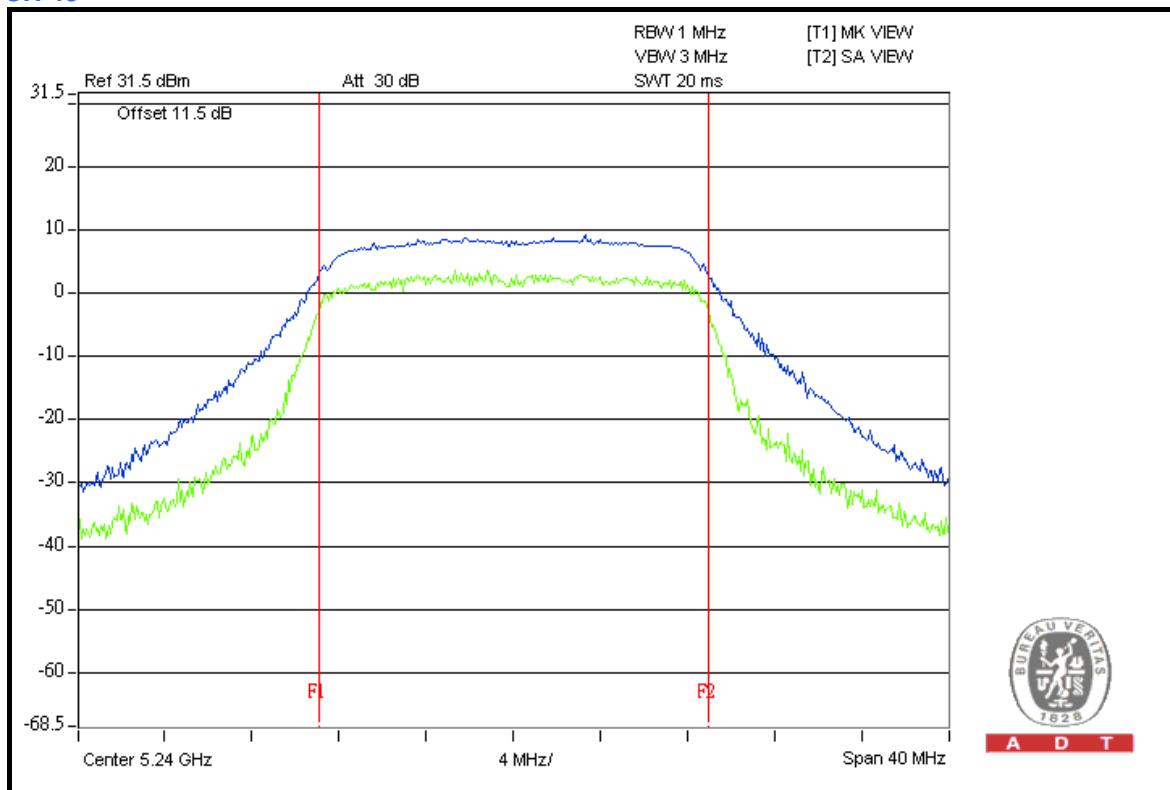


A D T

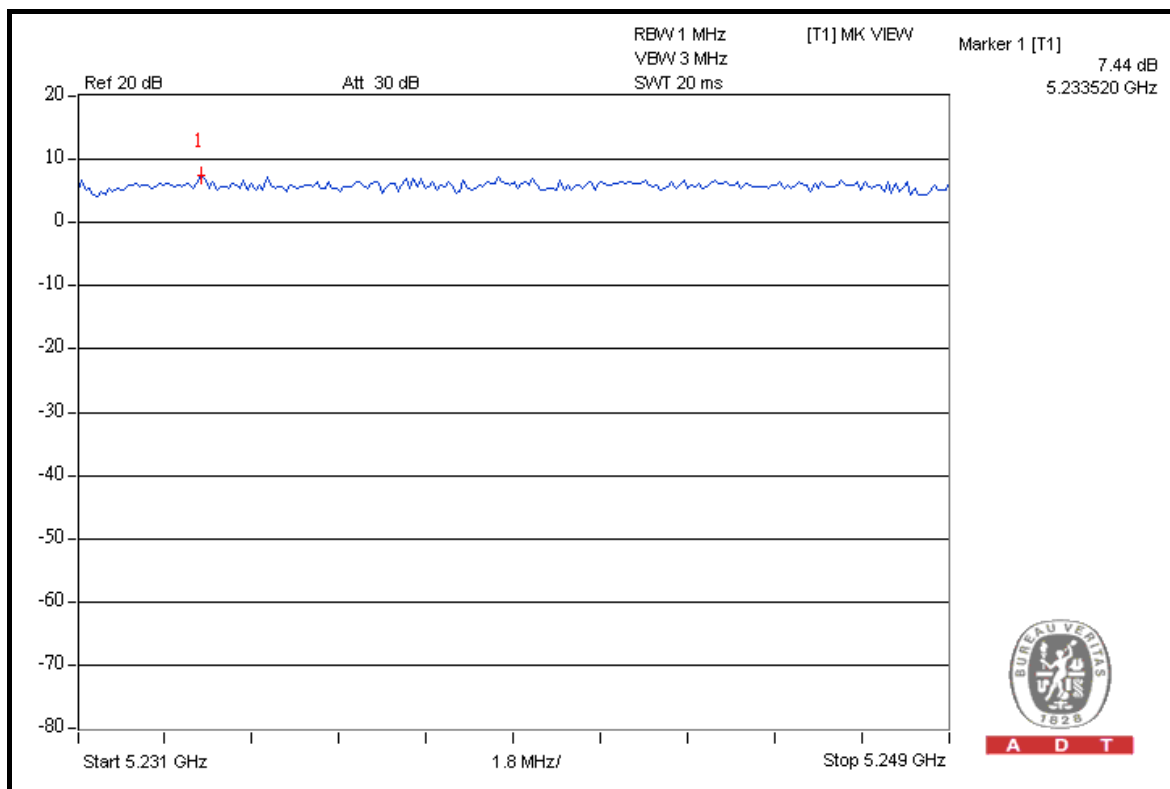


A D T

### CH 48



A D T

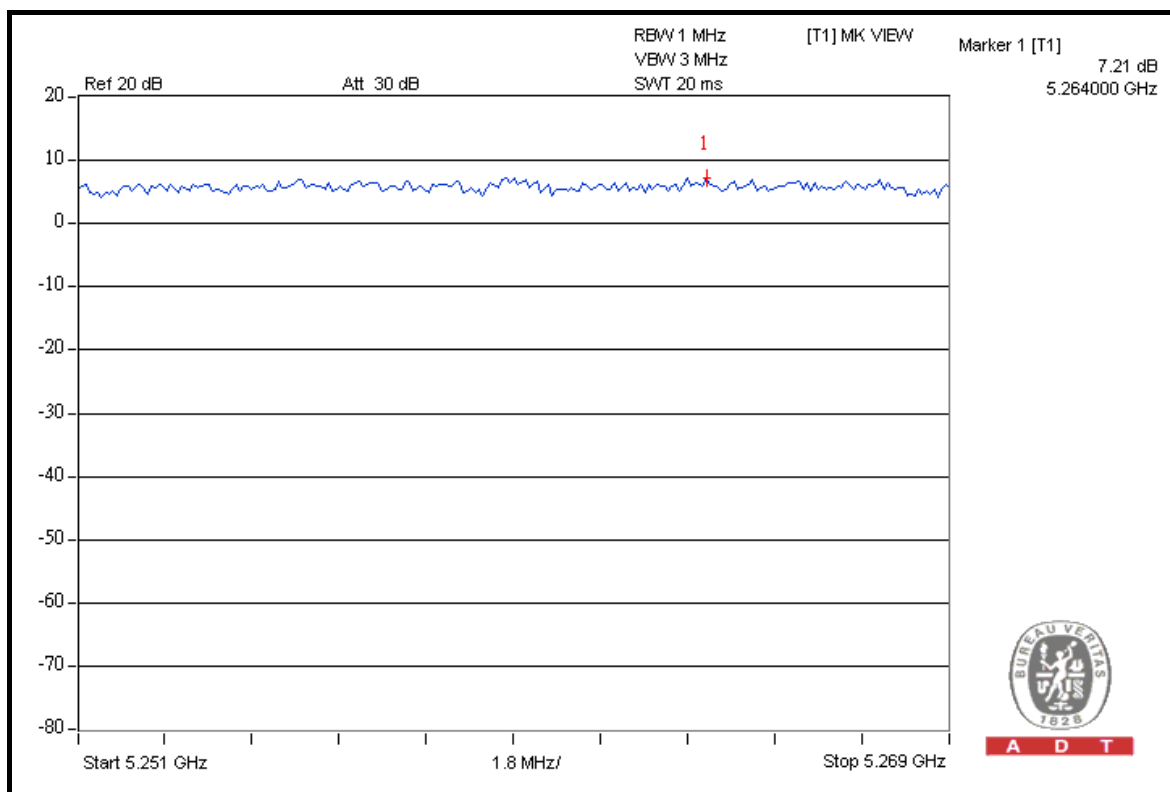
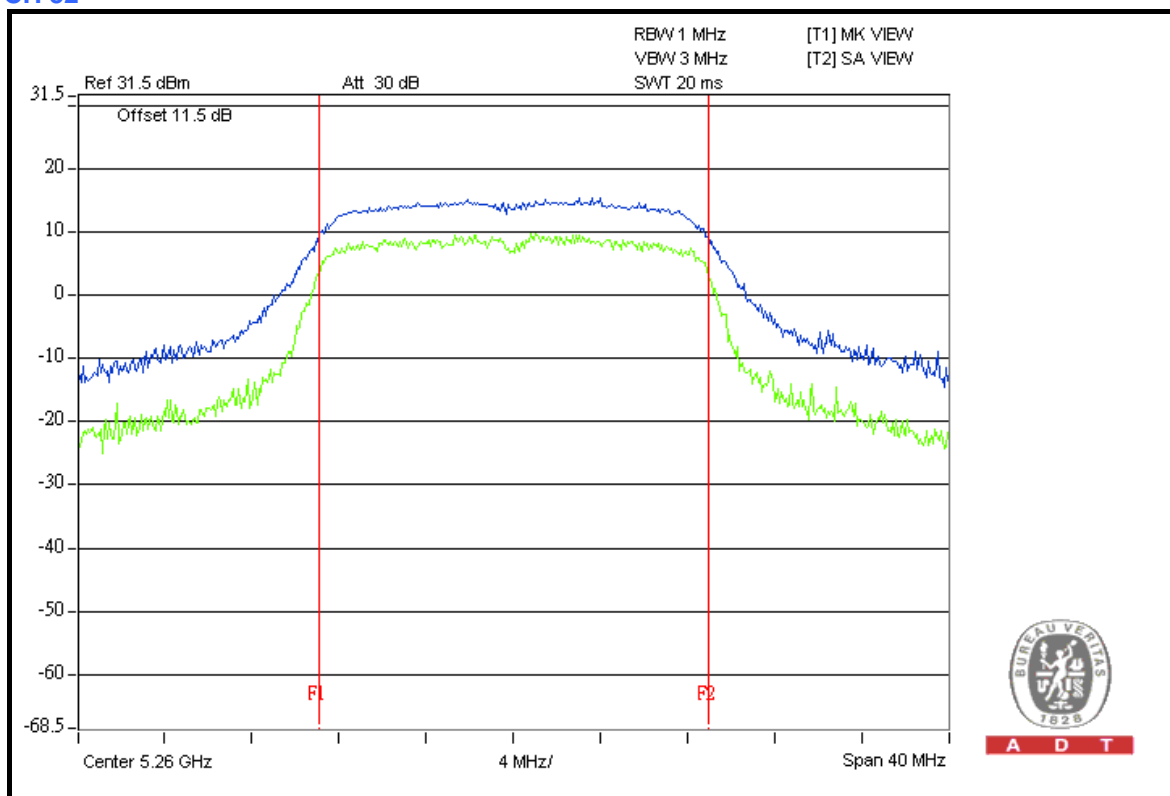


A D T



A D T

### CH 52

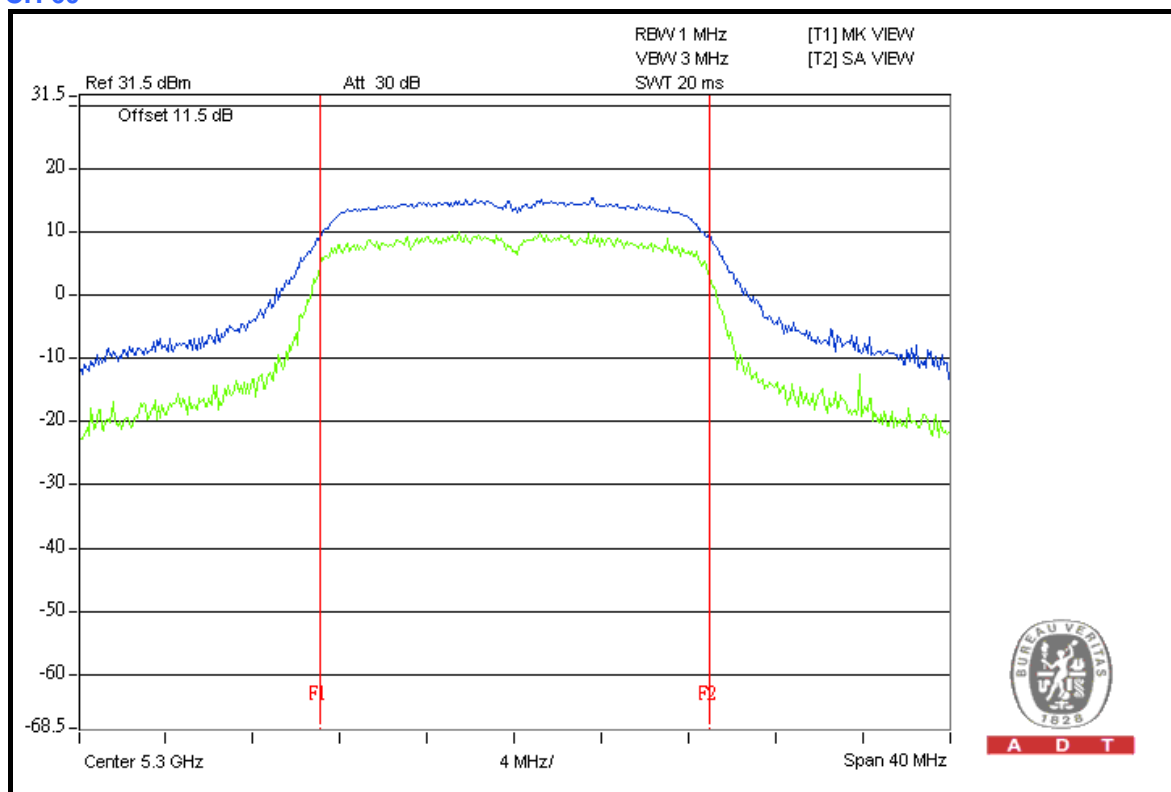




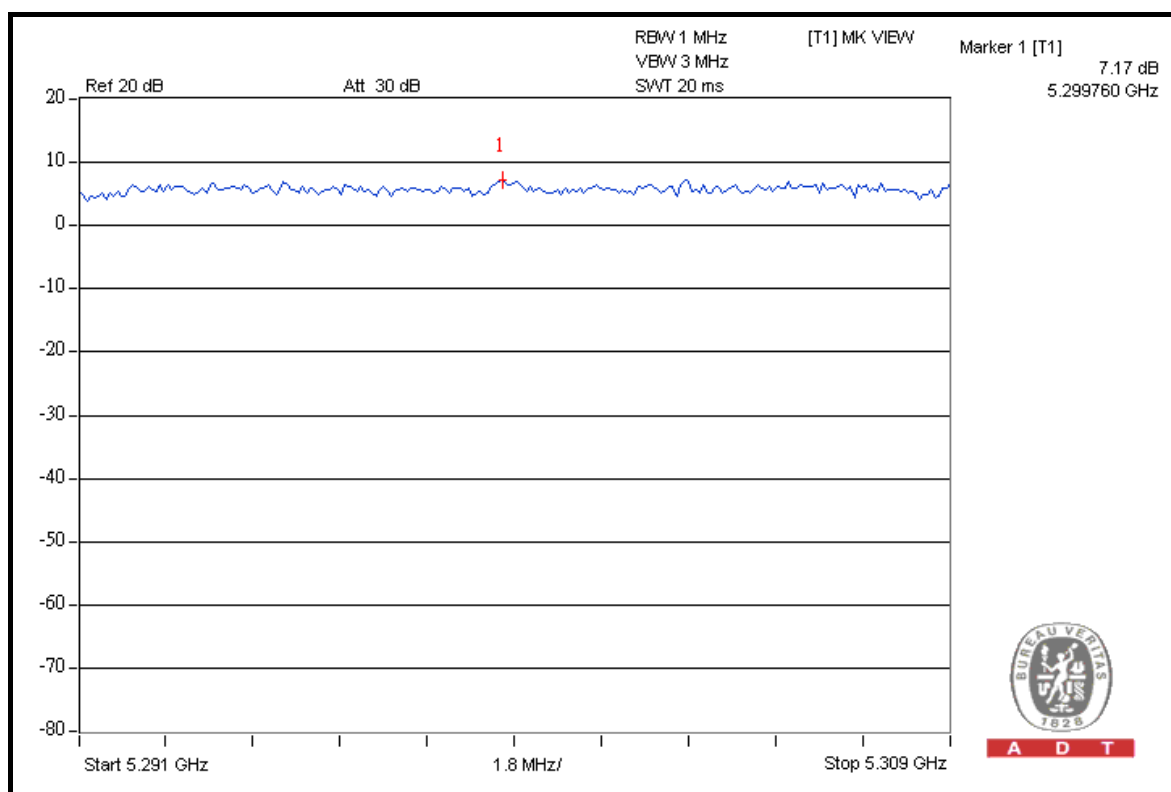


A D T

### CH 60



A D T

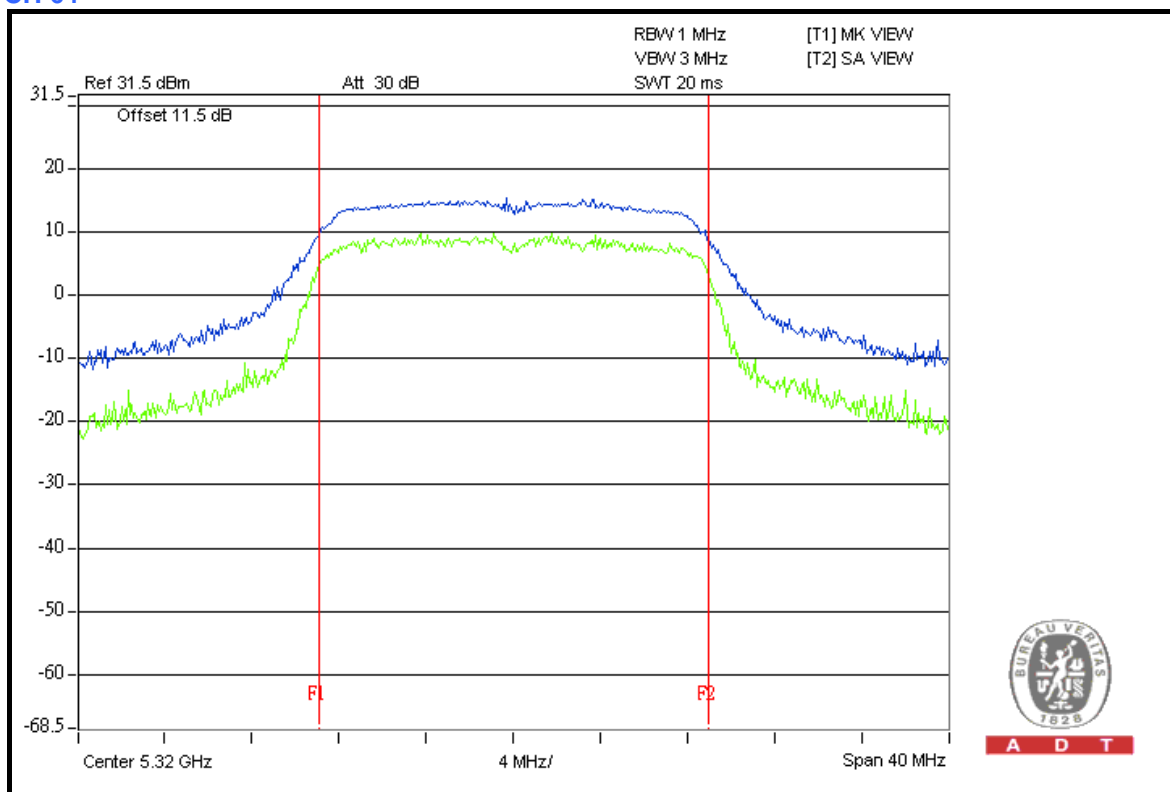


A D T

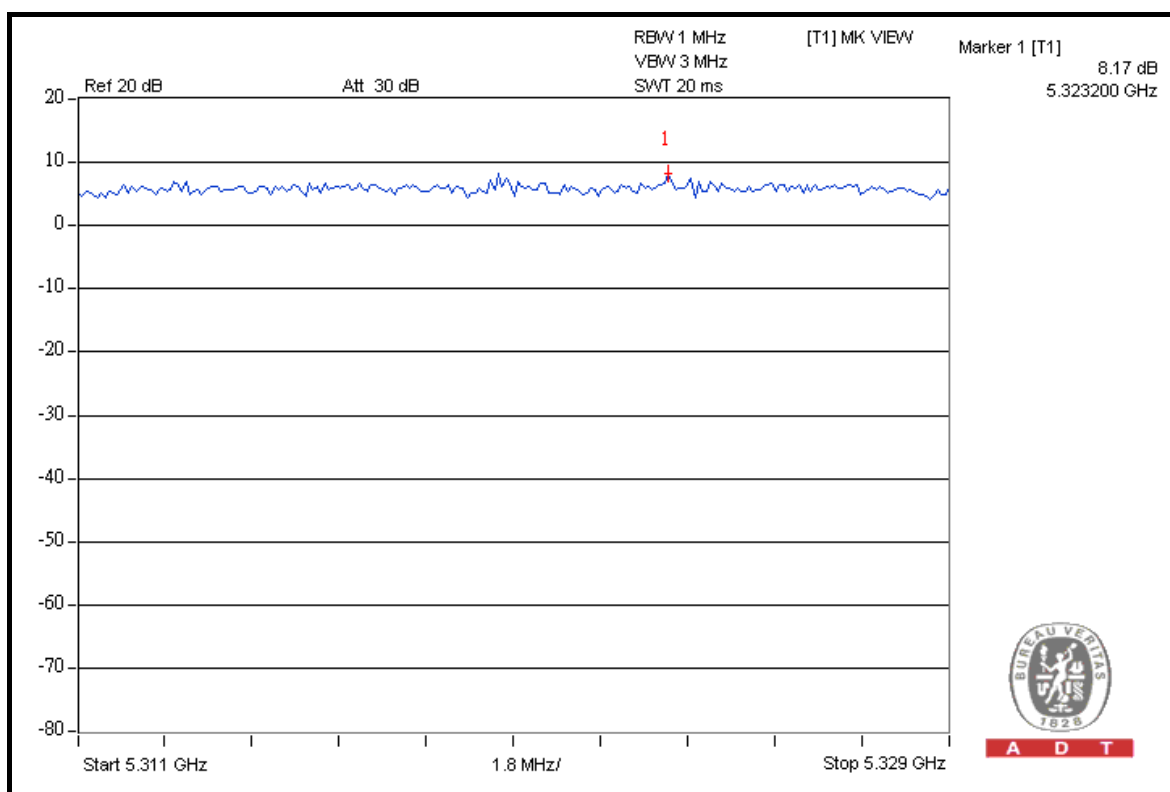


A D T

### CH 64



A D T

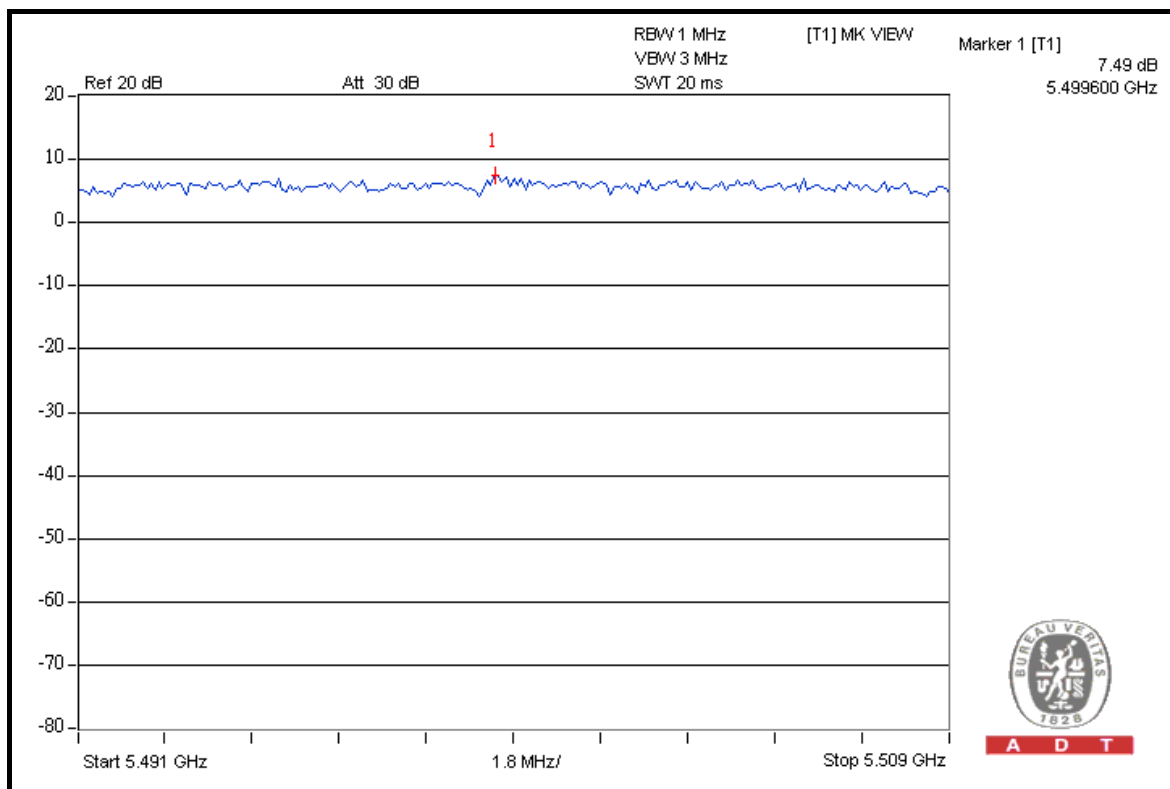
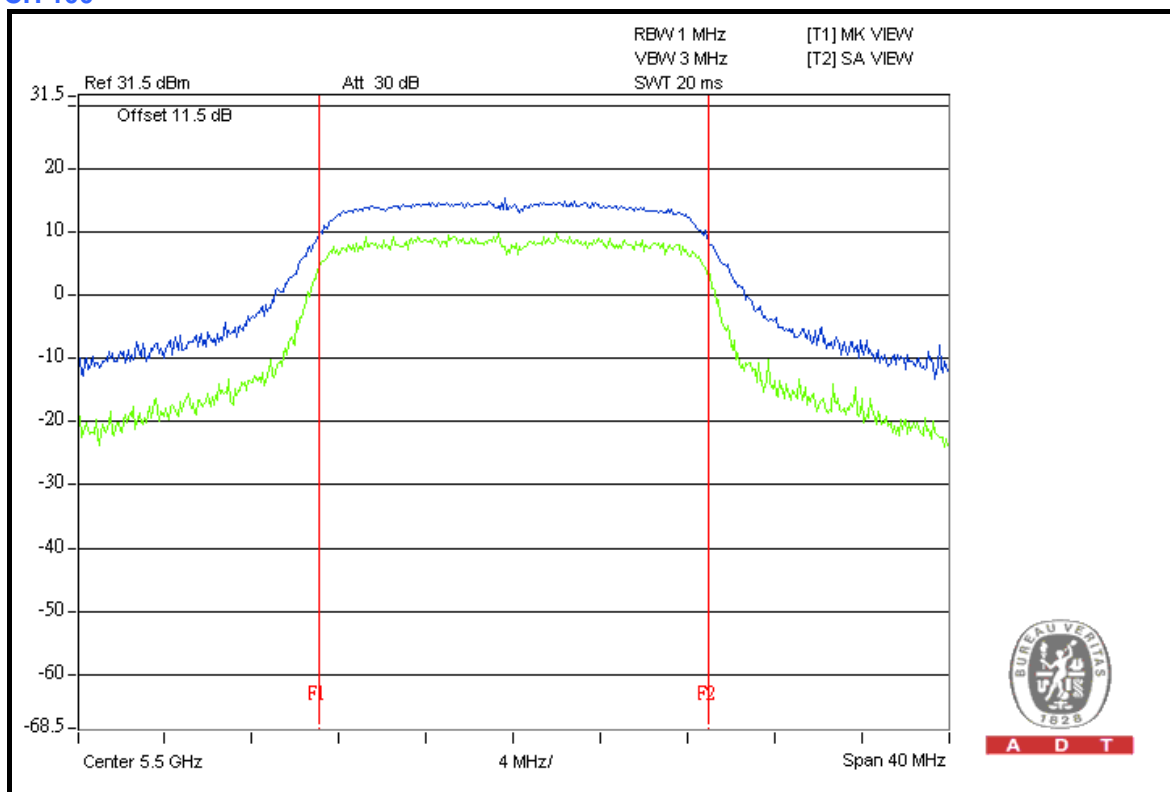


A D T



A D T

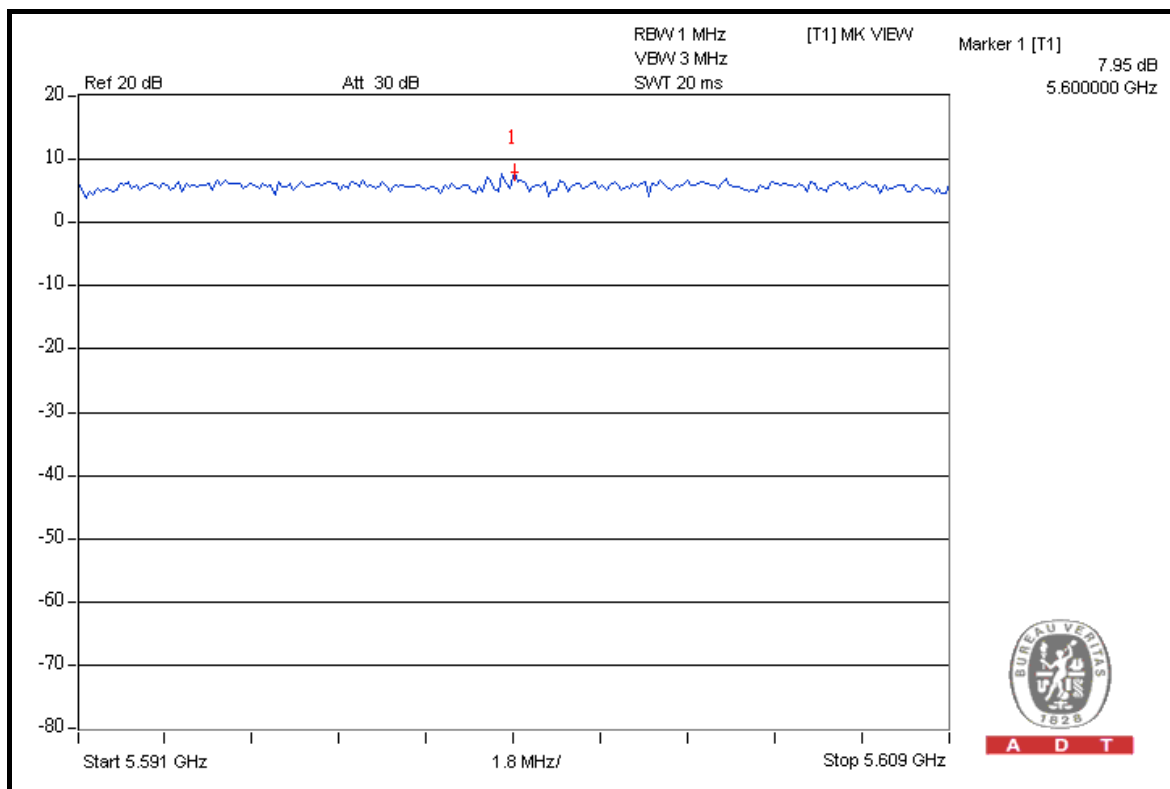
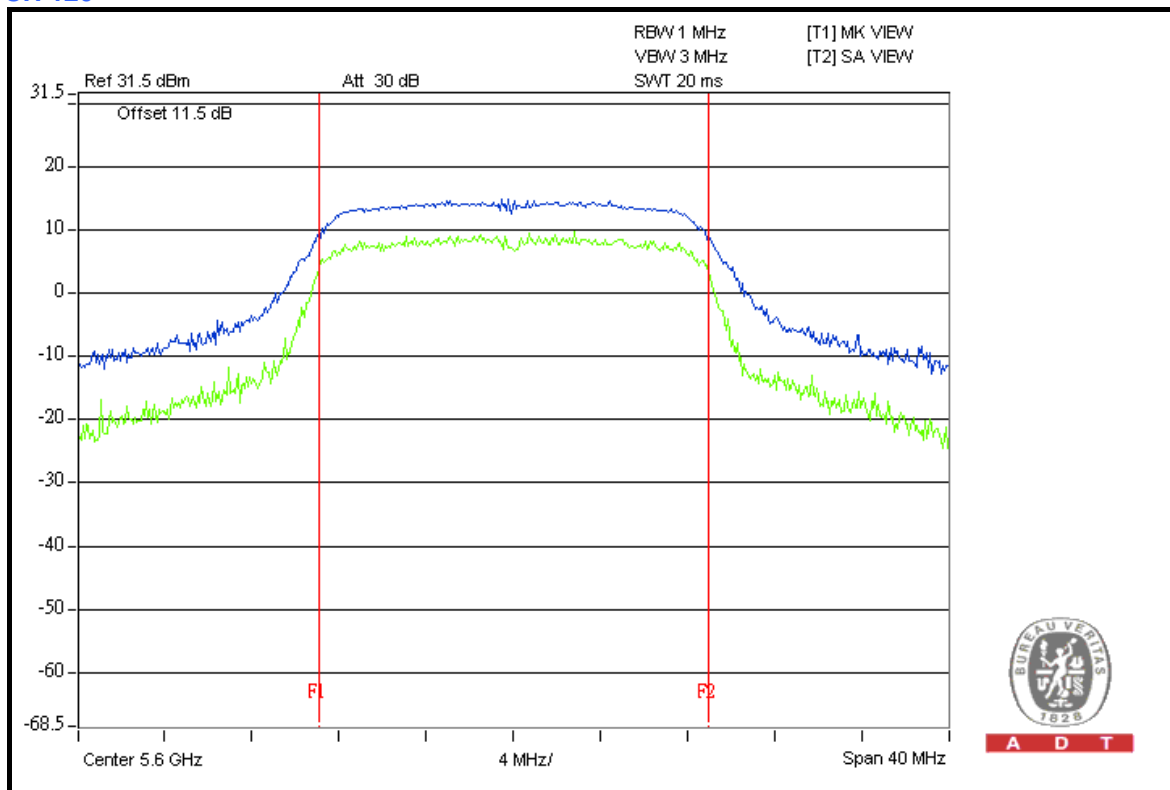
### CH 100





A D T

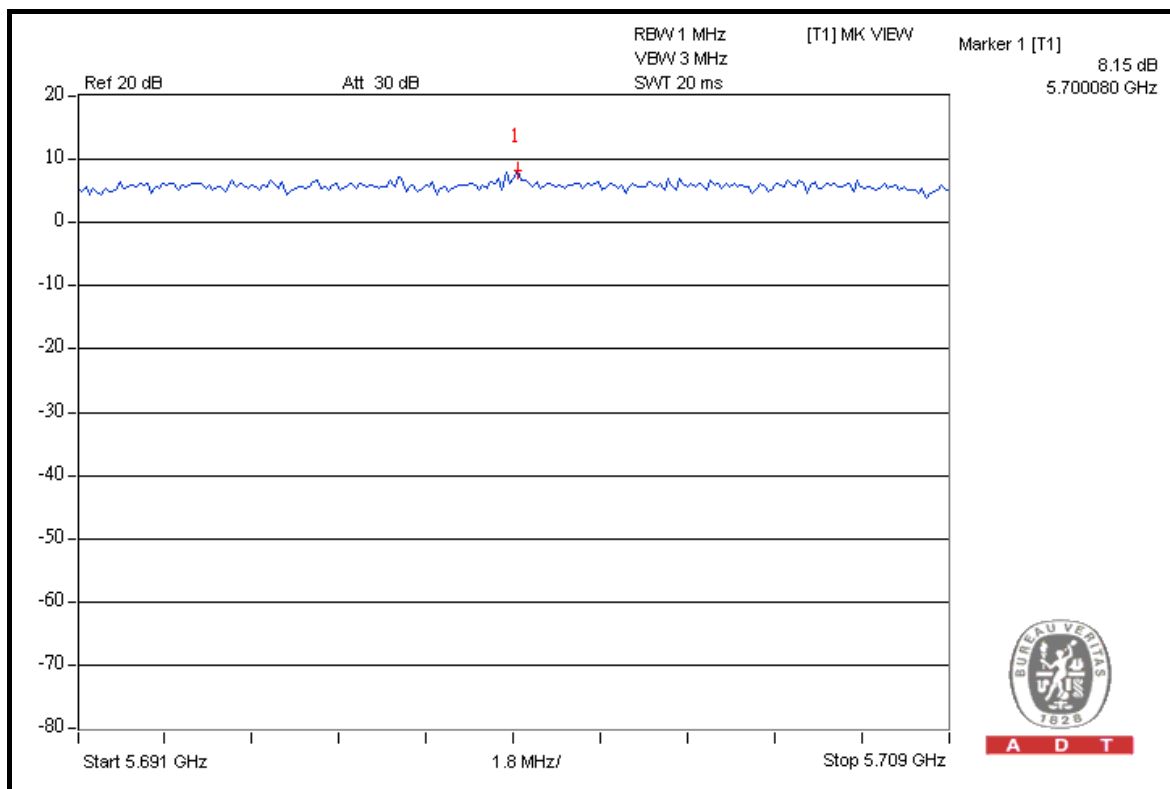
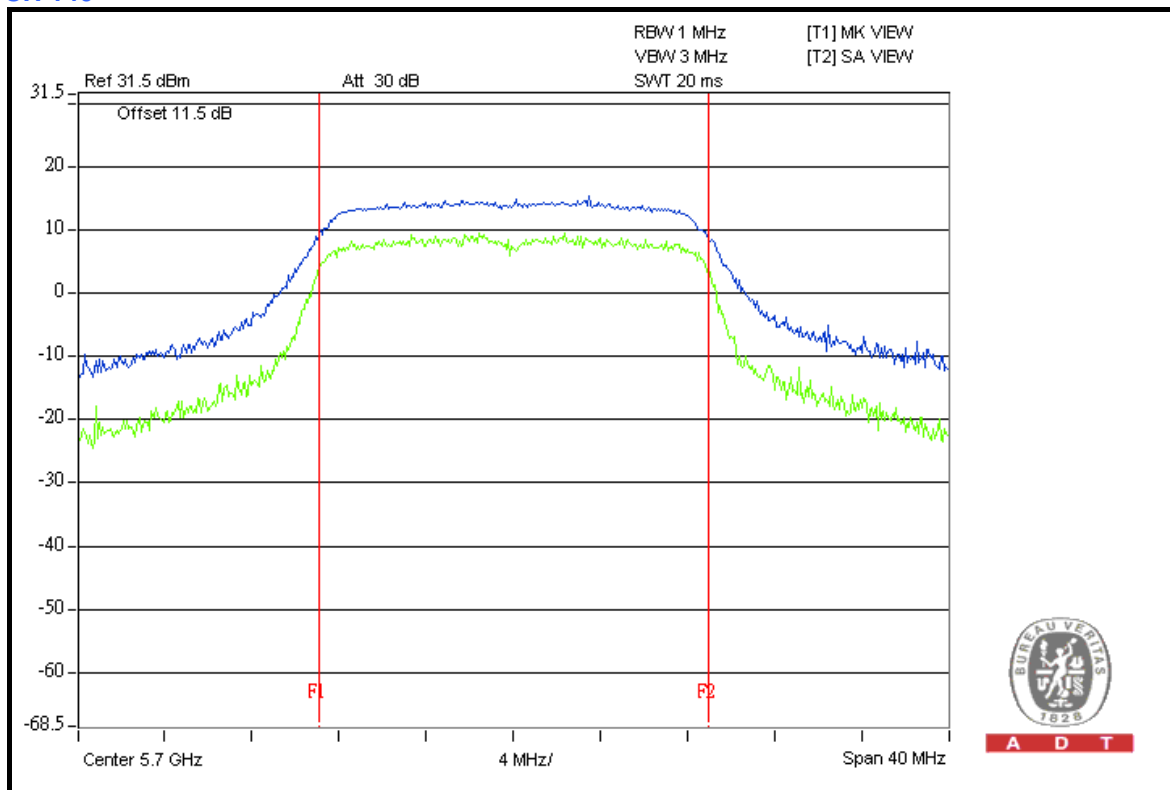
### CH 120





A D T

### CH 140





A D T

### DRAFT 802.11n (20MHz) OFDM MODULATION

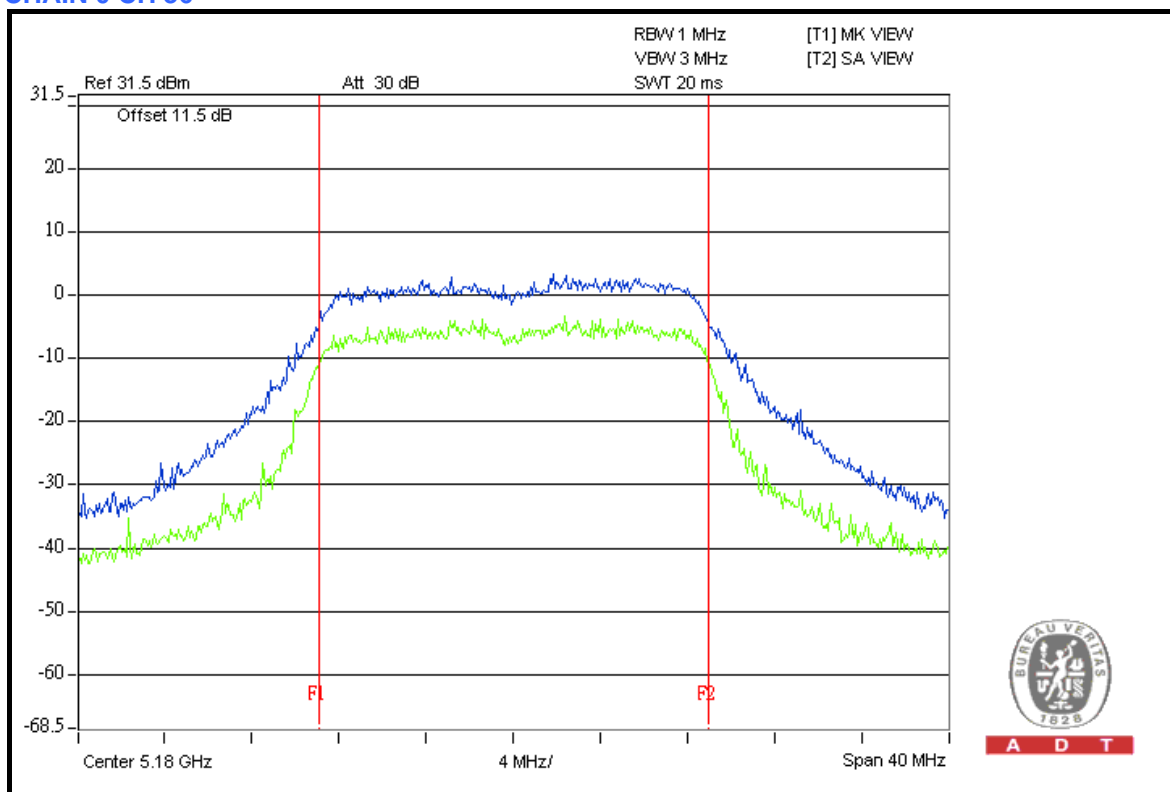
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
36	5180	9.28	7.65	13	PASS
40	5200	9.07	8.09	13	PASS
48	5240	8.88	8.30	13	PASS
52	5260	8.20	8.48	13	PASS
60	5300	8.61	7.45	13	PASS
64	5320	7.58	8.64	13	PASS
100	5500	8.01	8.12	13	PASS
120	5600	9.02	7.61	13	PASS
140	5700	8.33	7.74	13	PASS

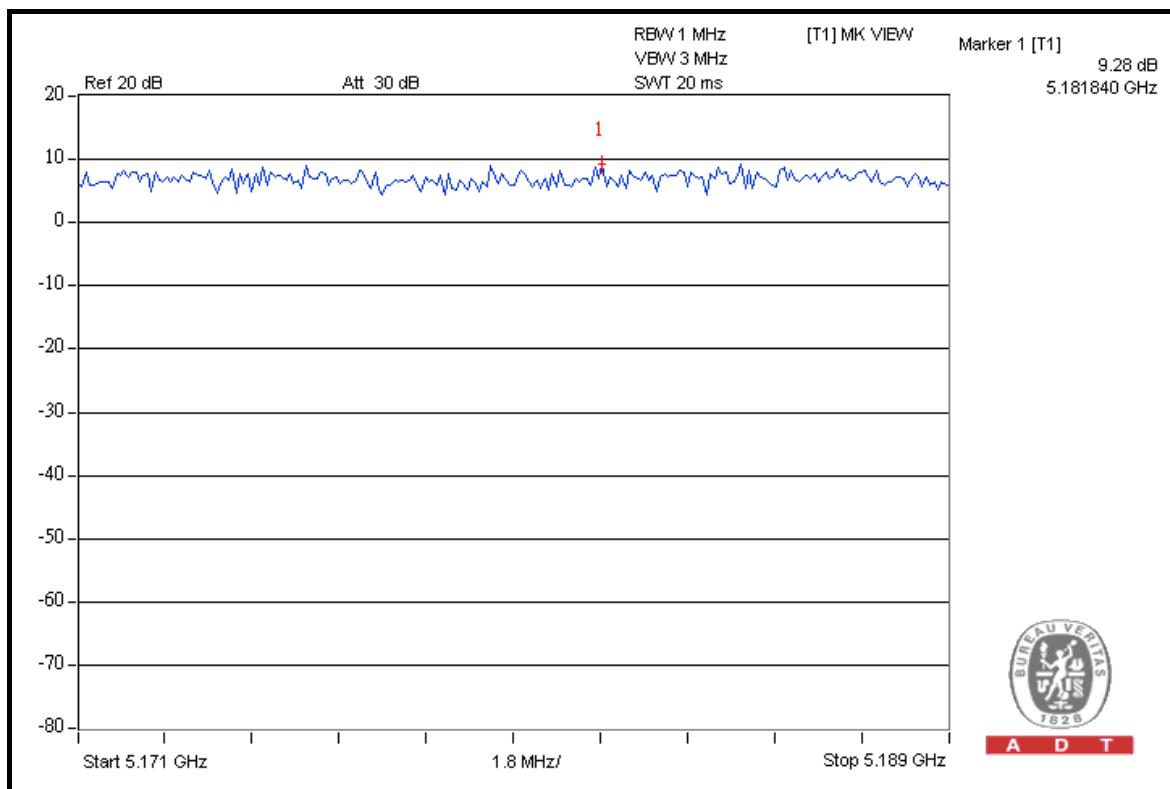


A D T

### CHAIN 0 CH 36



A D T

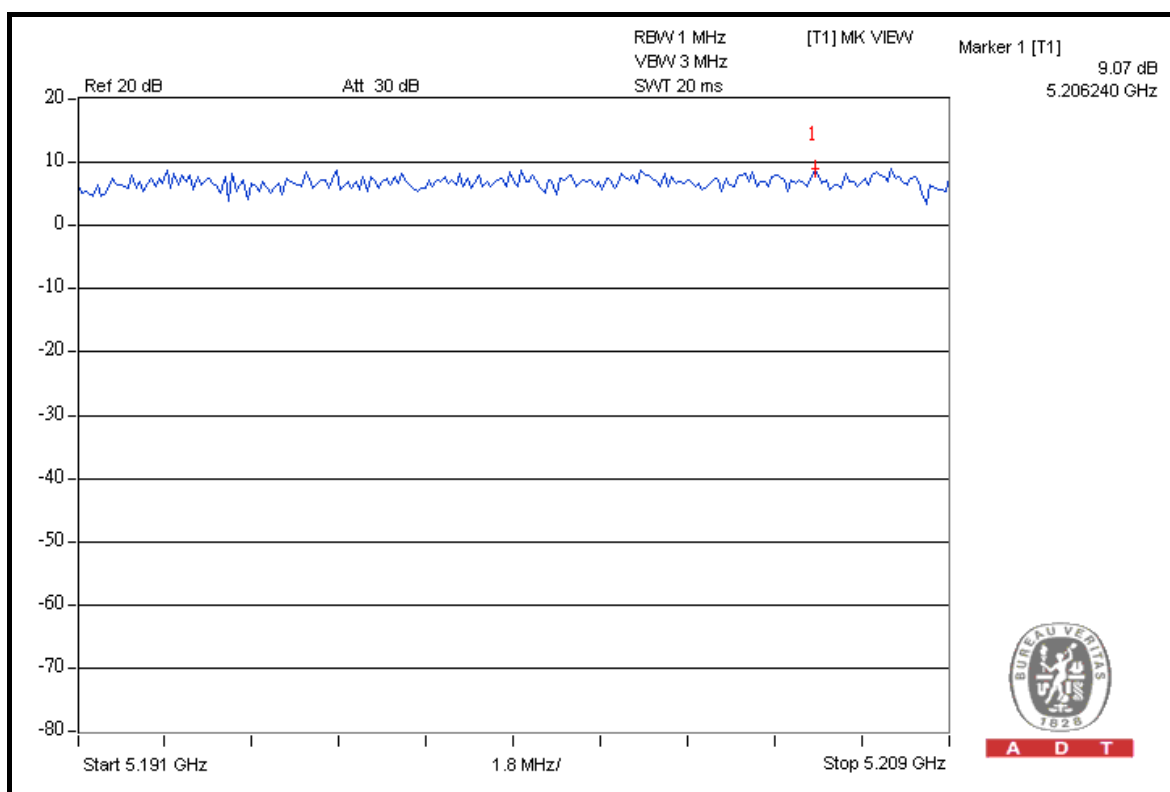
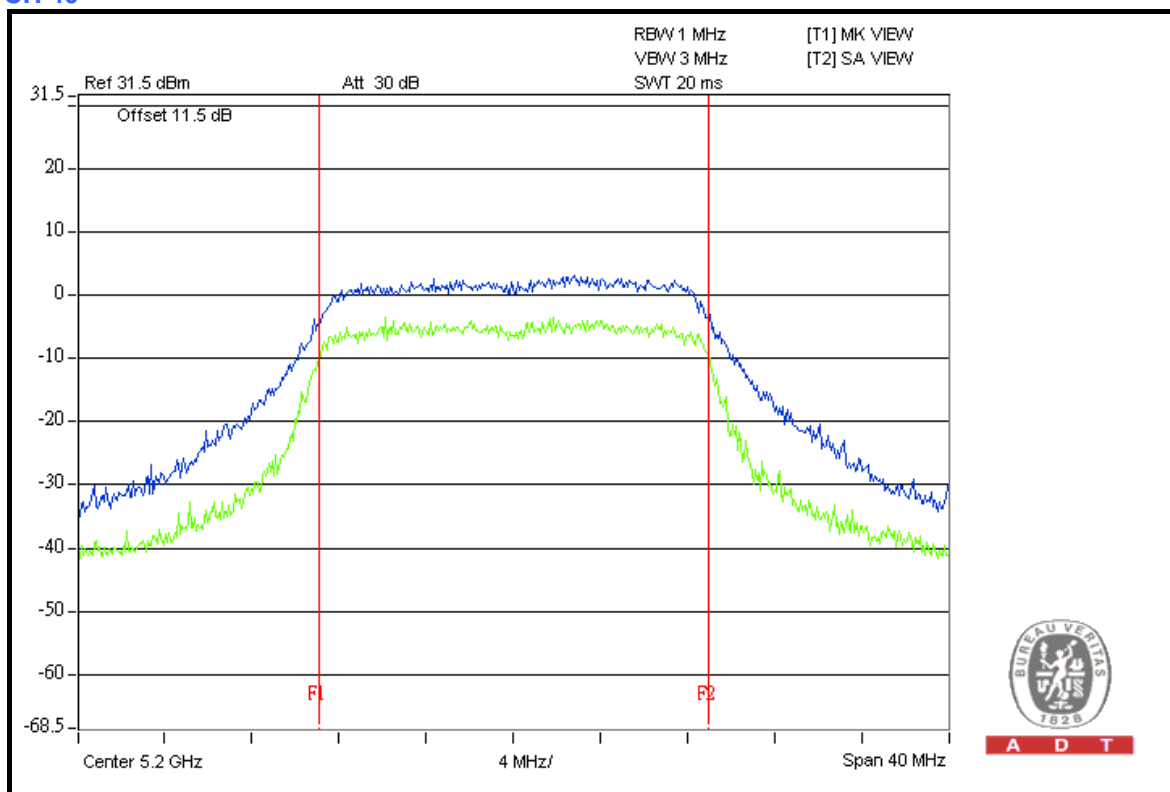


A D T



A D T

### CH 40

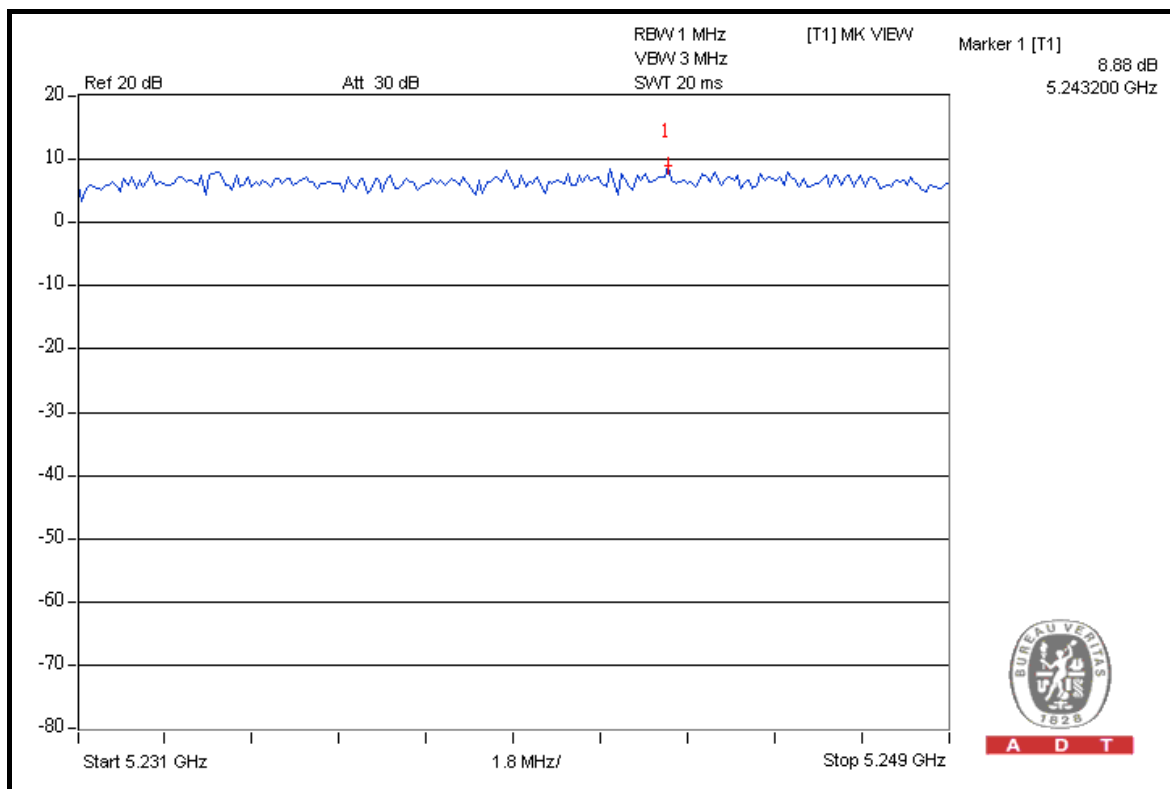
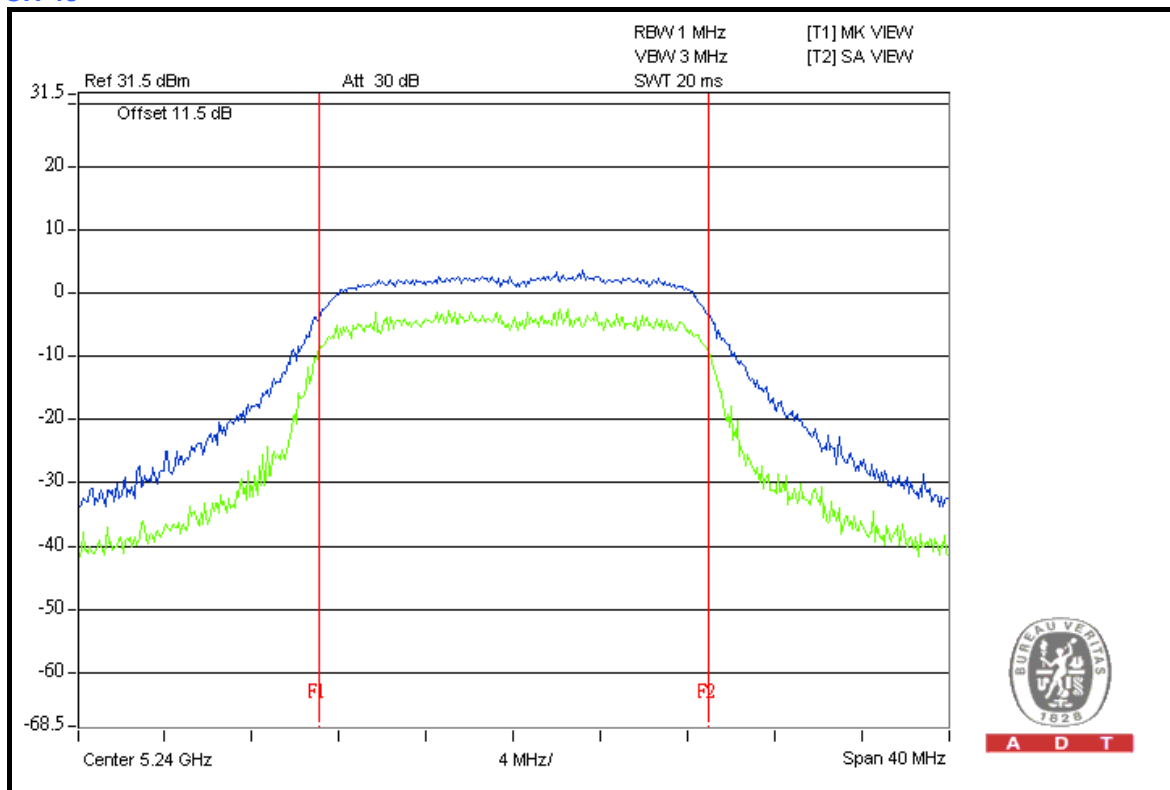






A D T

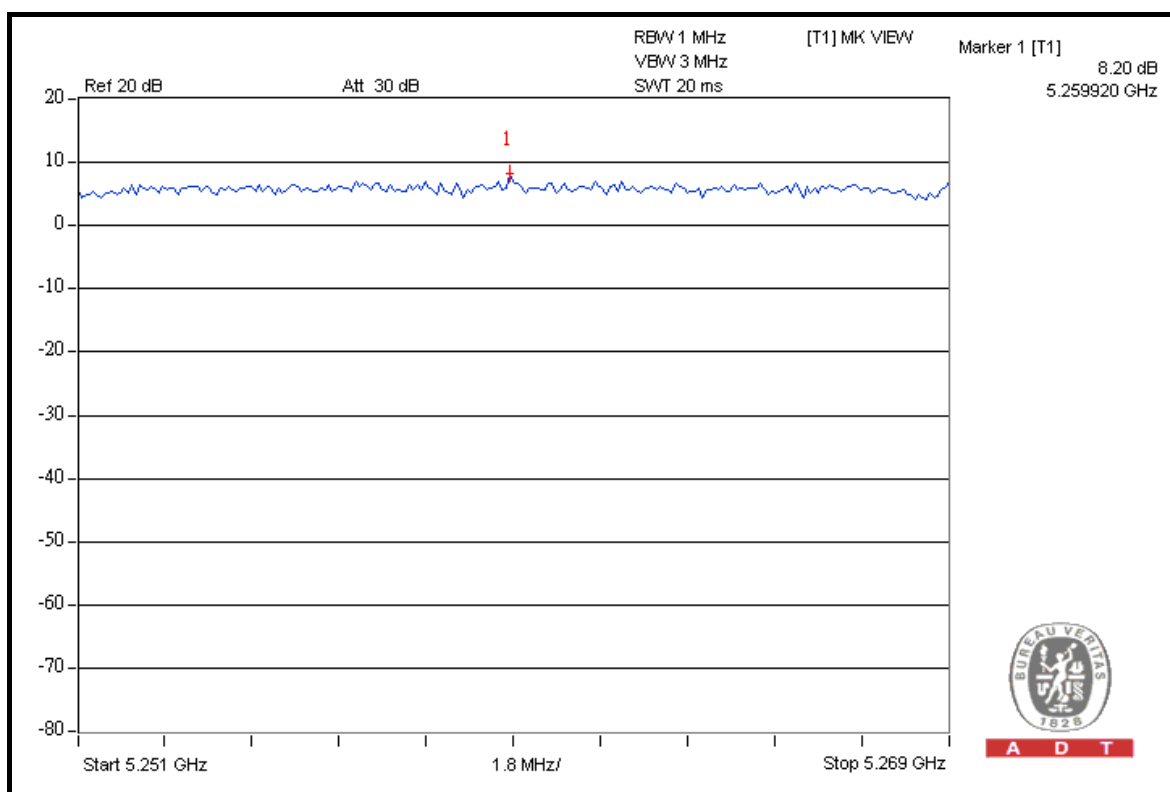
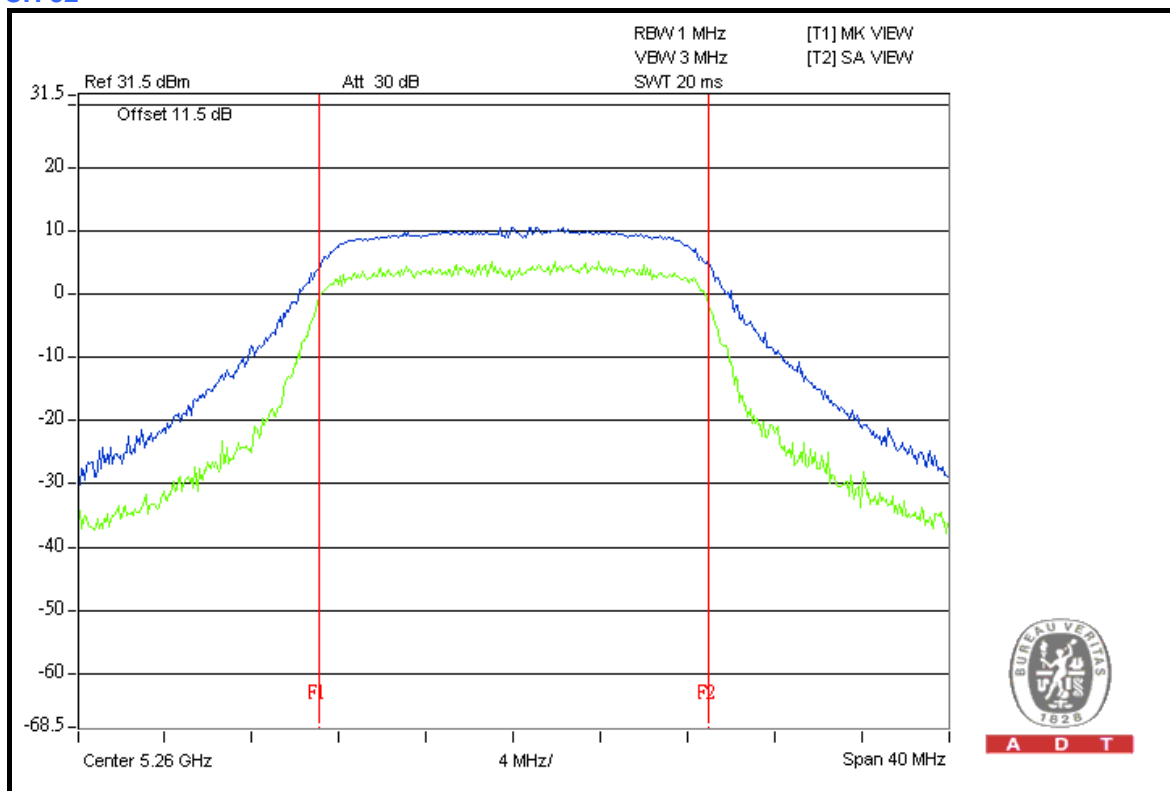
### CH 48





A D T

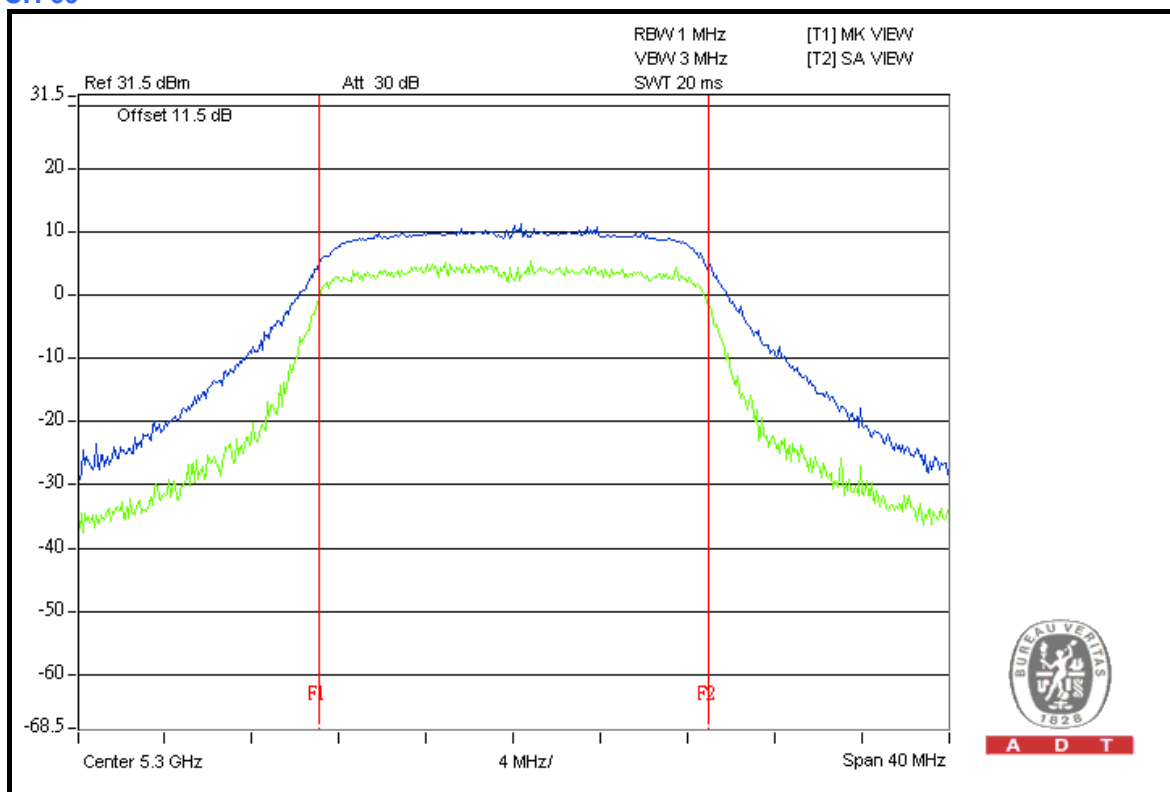
### CH 52



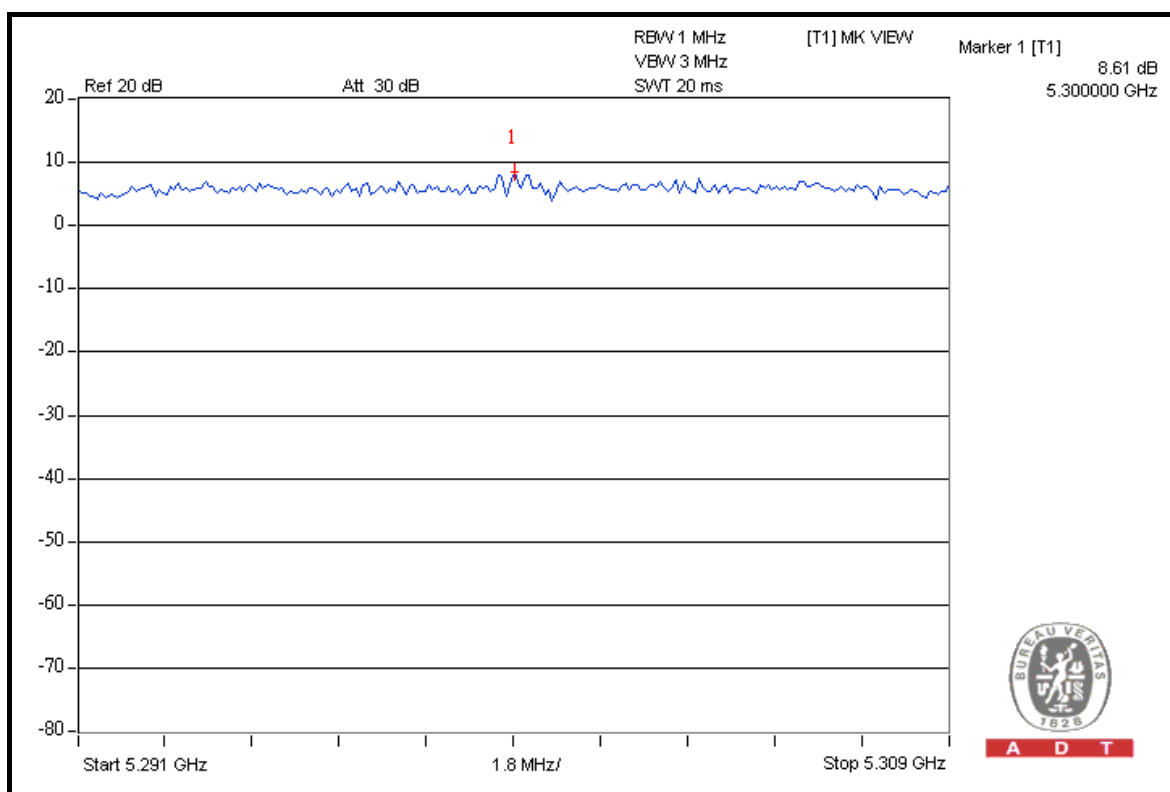


A D T

### CH 60



A D T

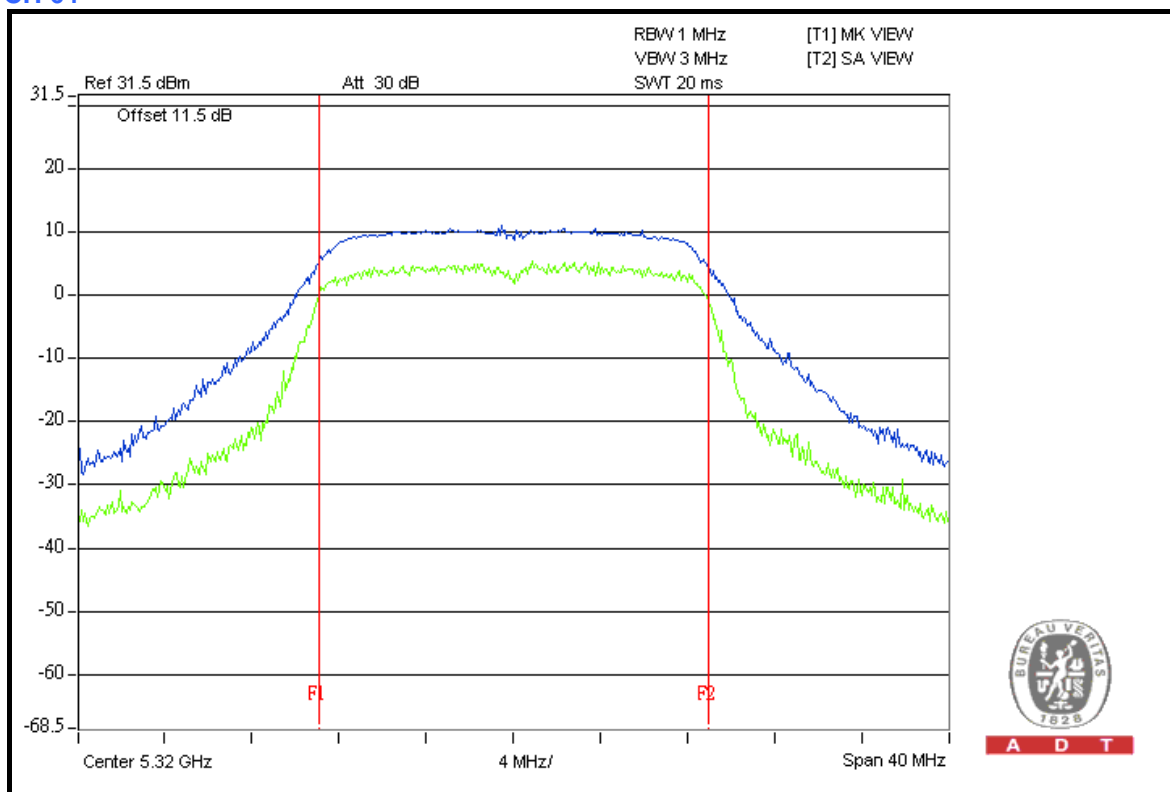


A D T

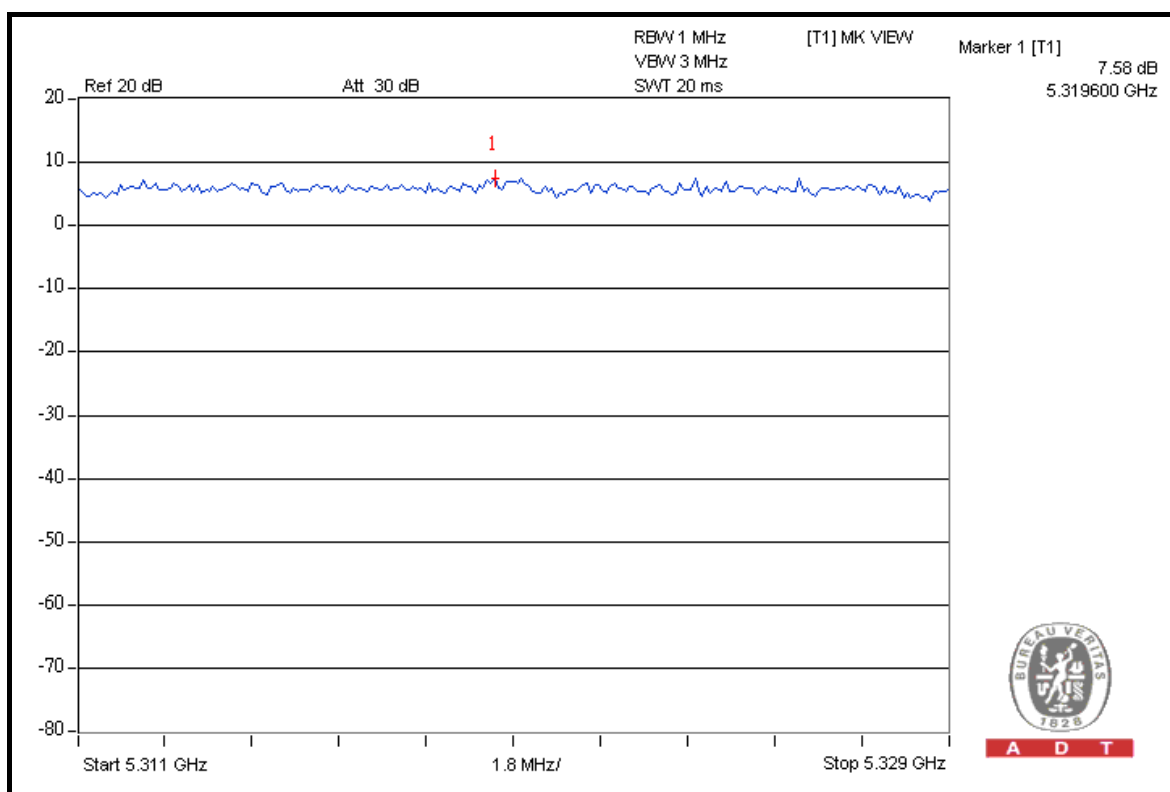


A D T

### CH 64



A D T

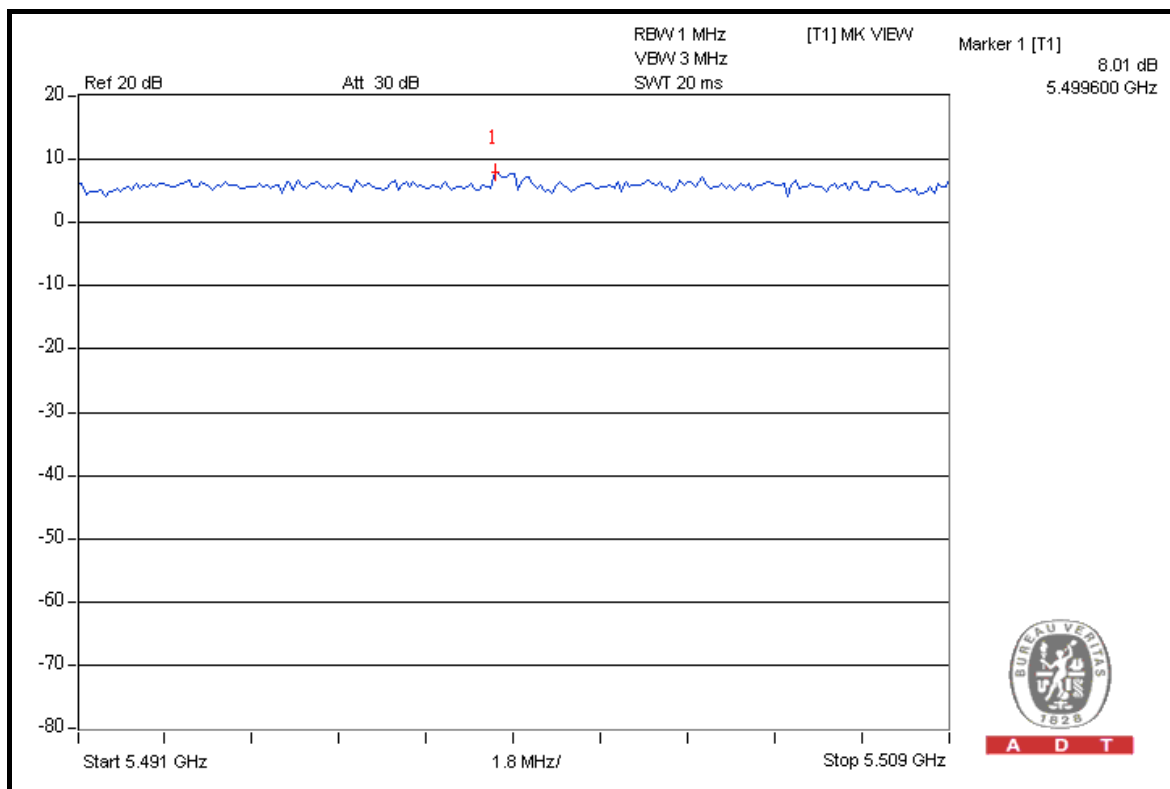
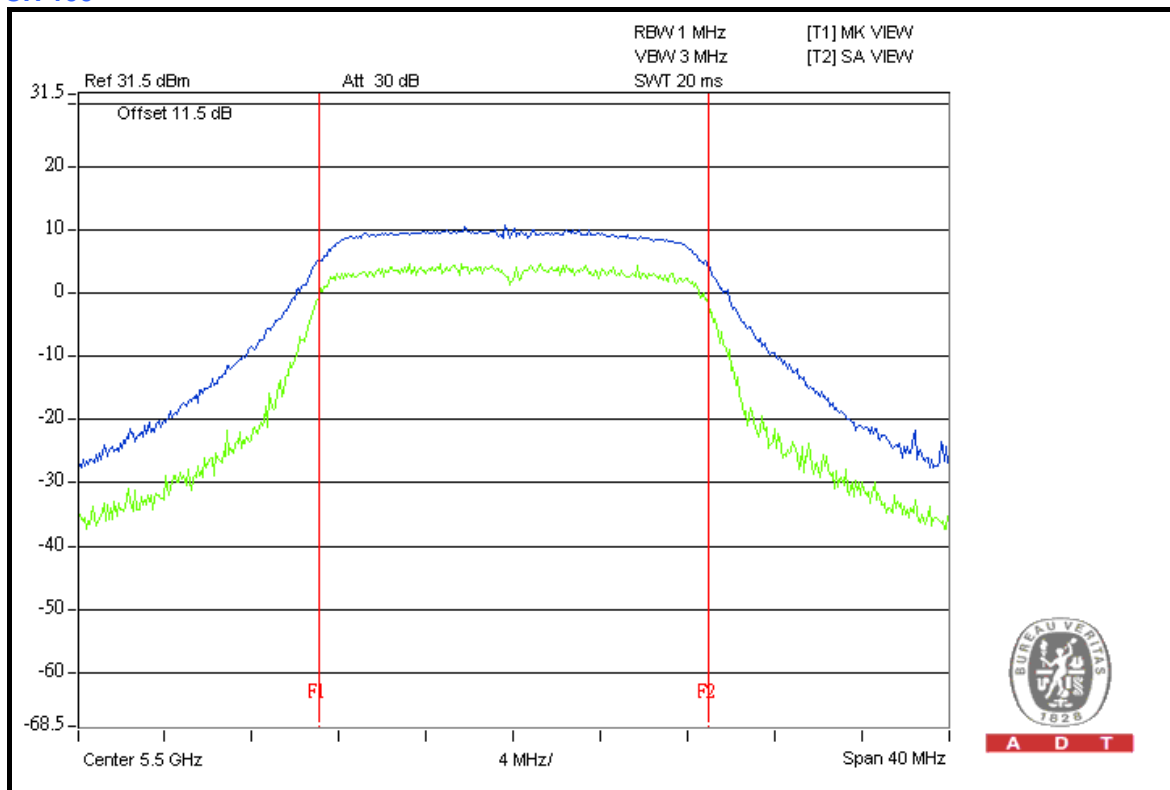


A D T



A D T

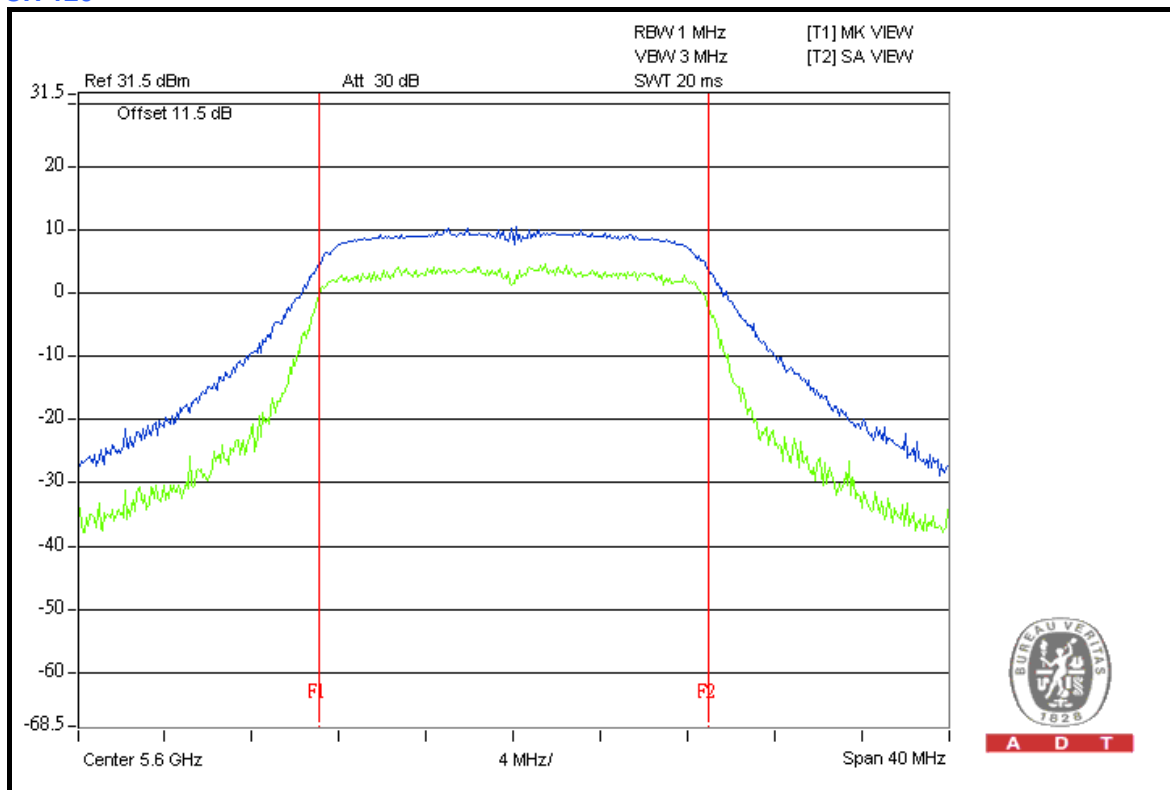
### CH 100



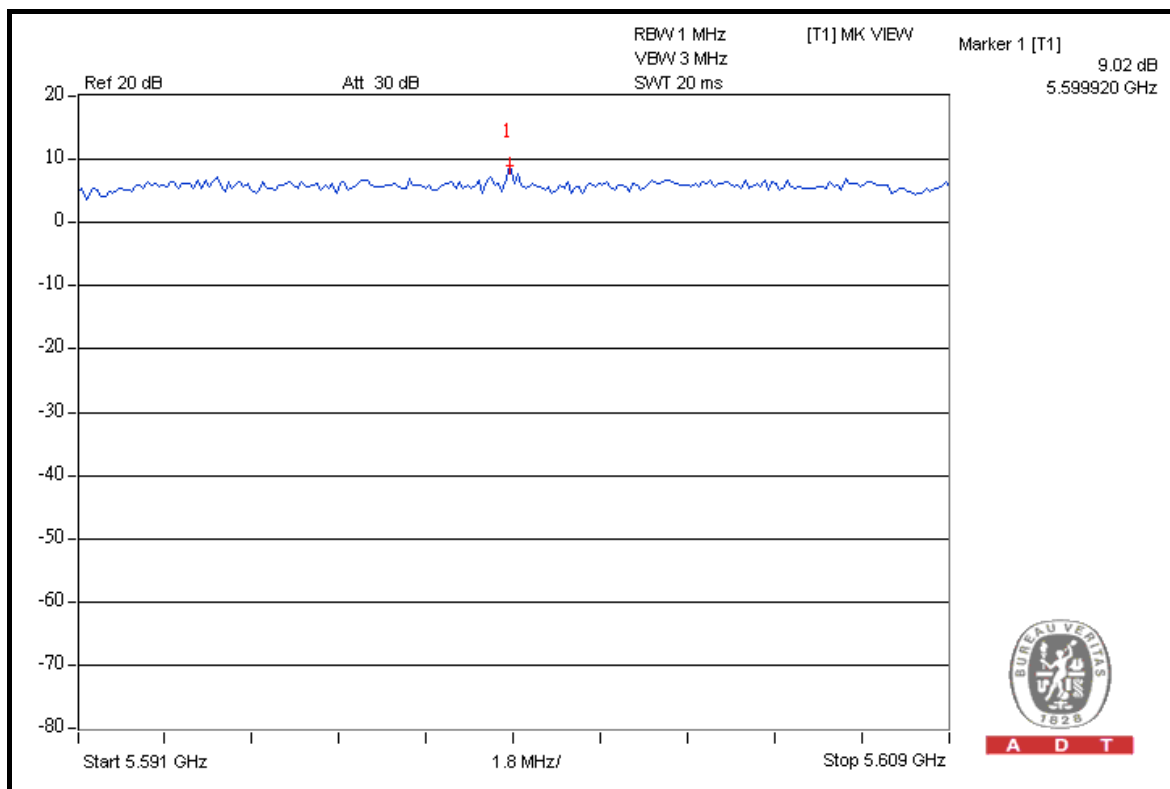


A D T

### CH 120



A D T

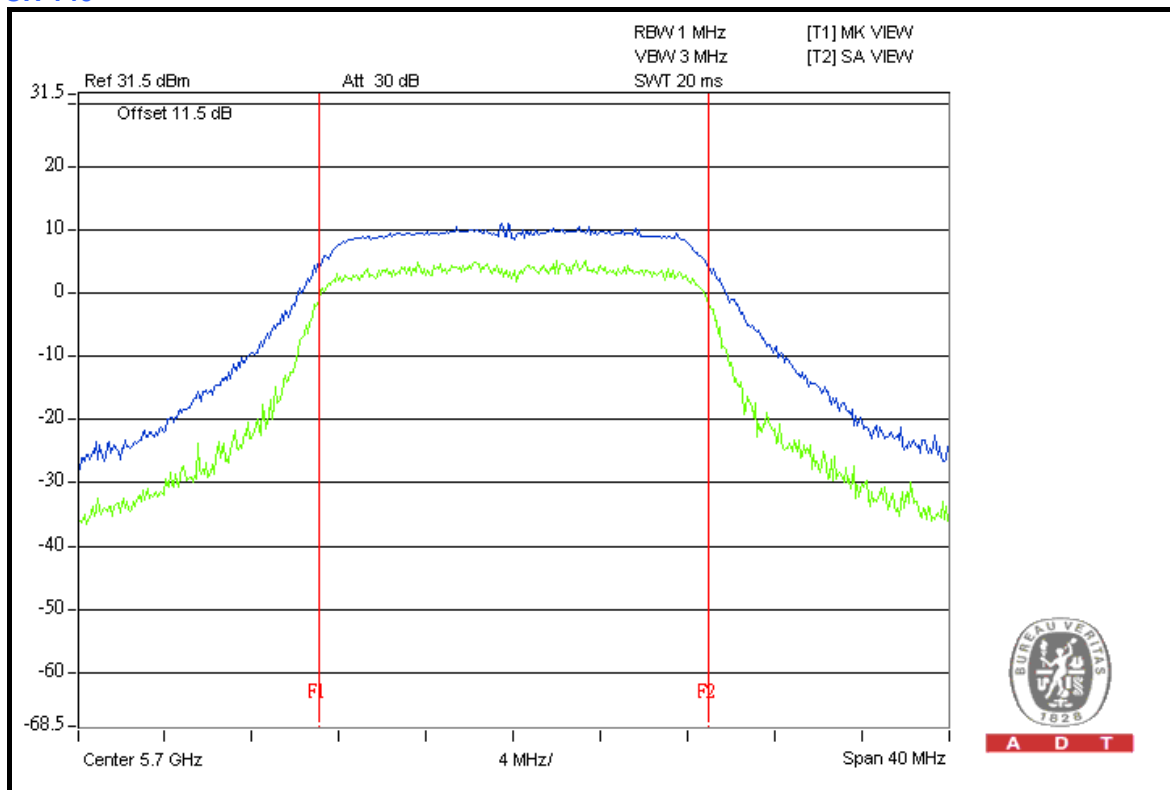


A D T

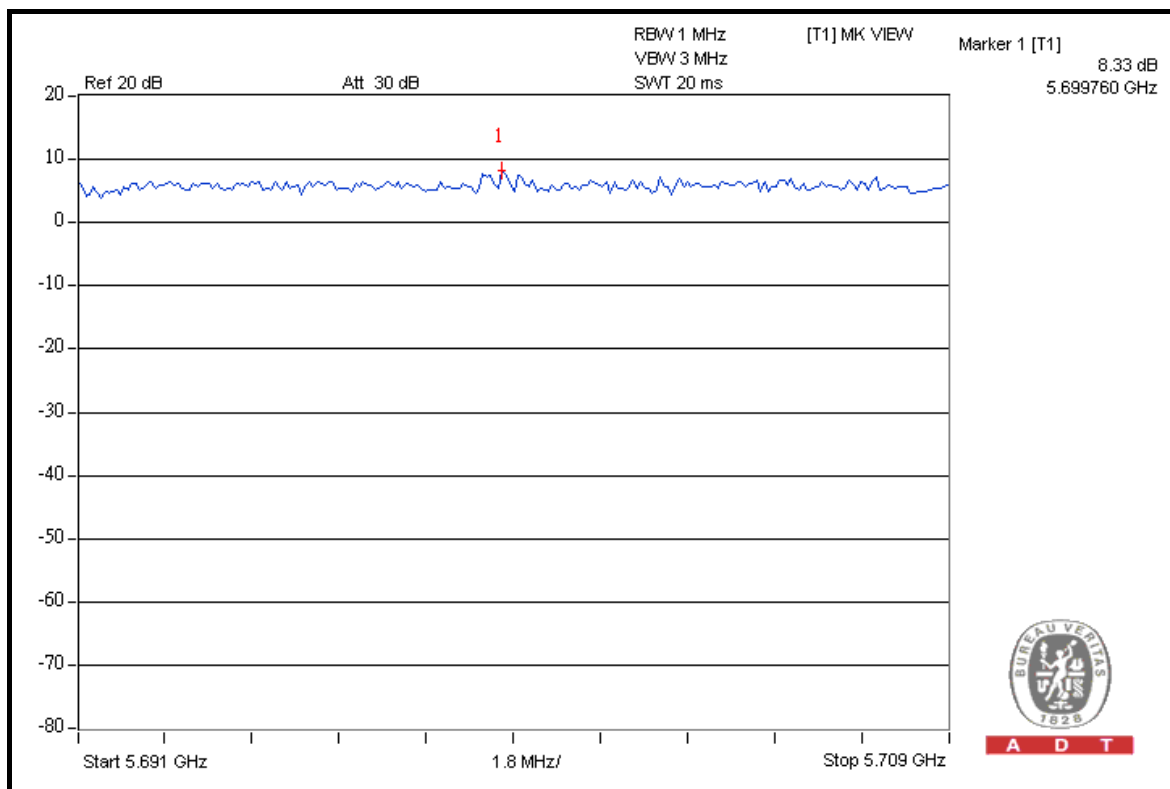


A D T

### CH 140



A D T

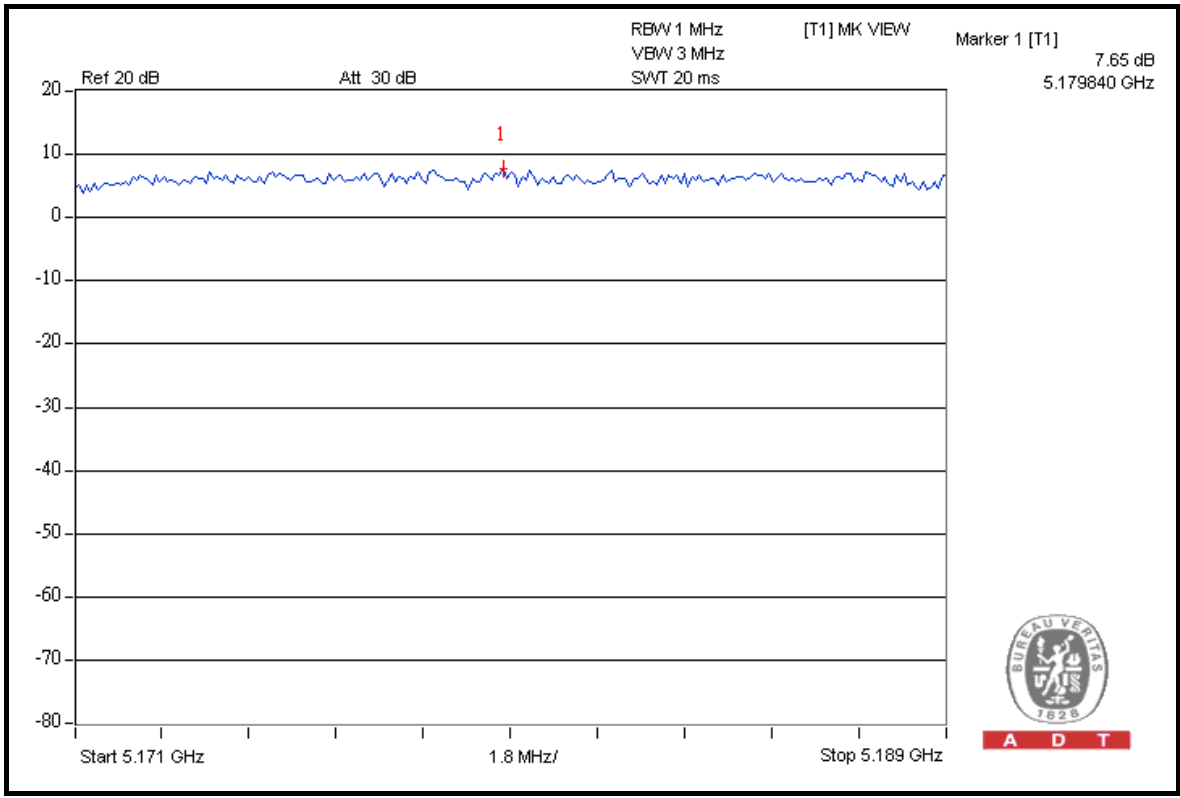
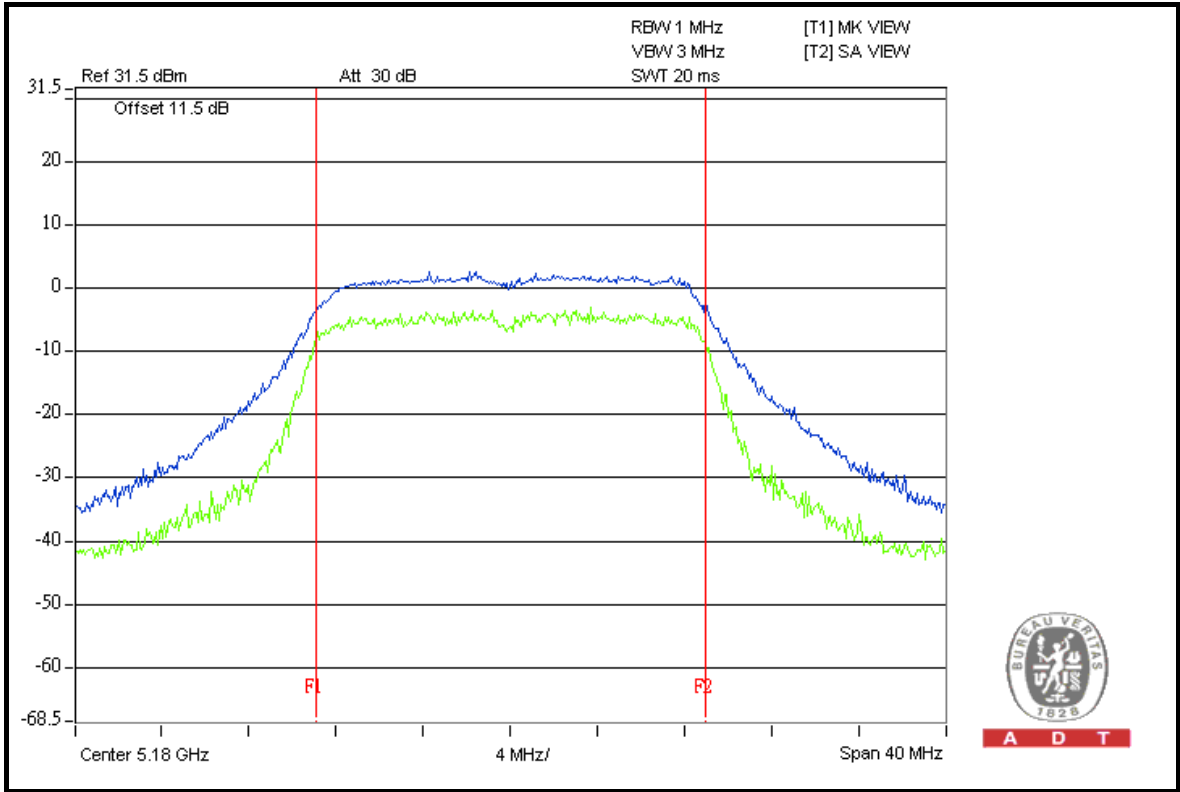


A D T



A D T

CHAIN 1 CH 36

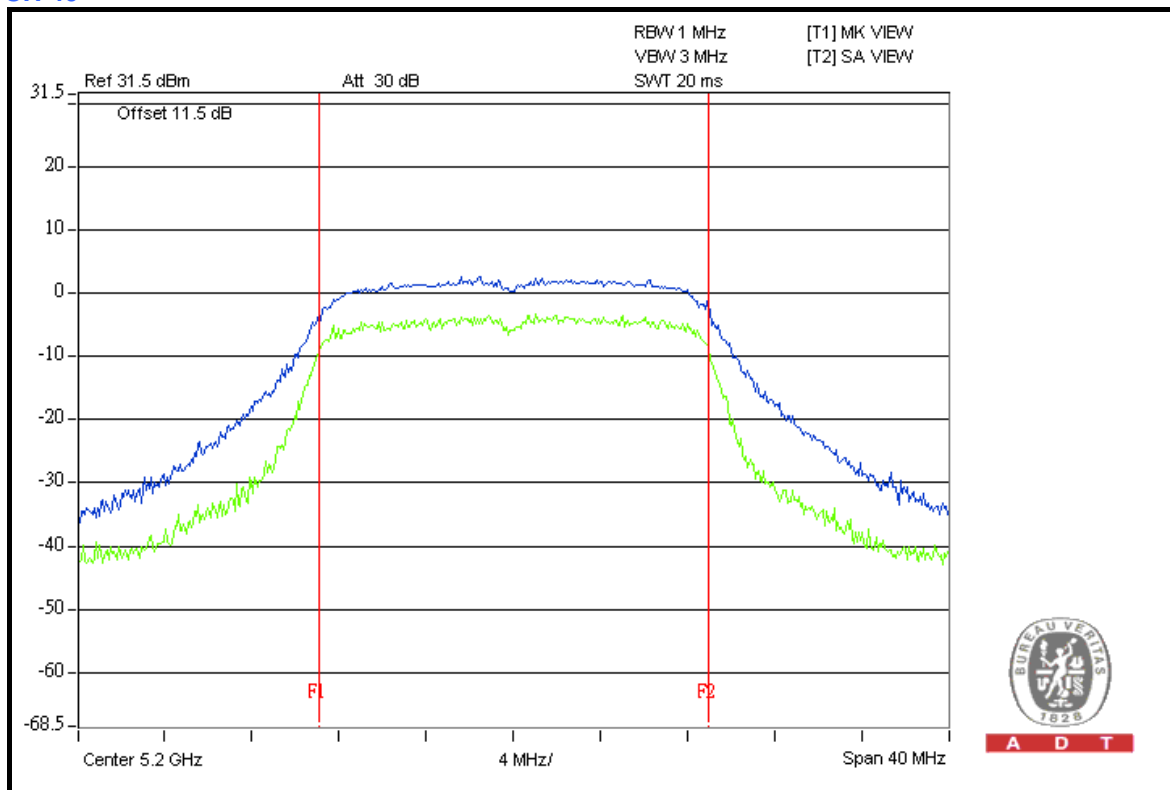




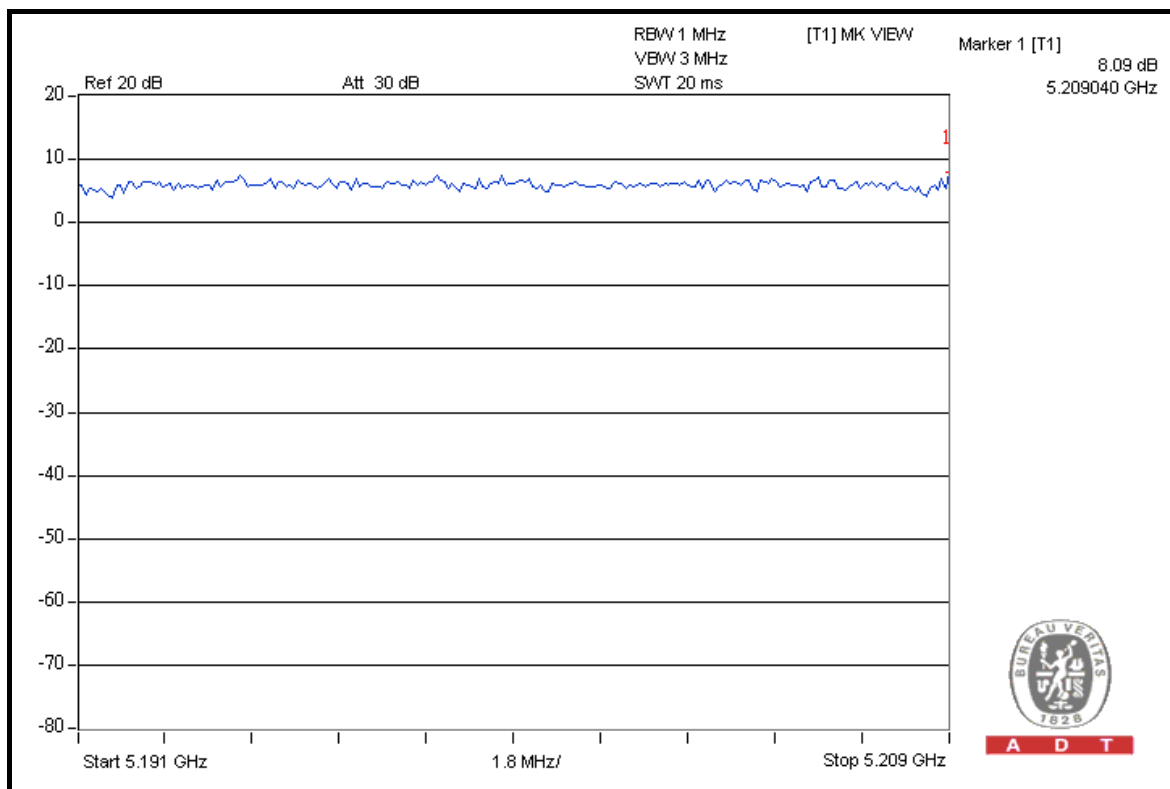


A D T

### CH 40



A D T

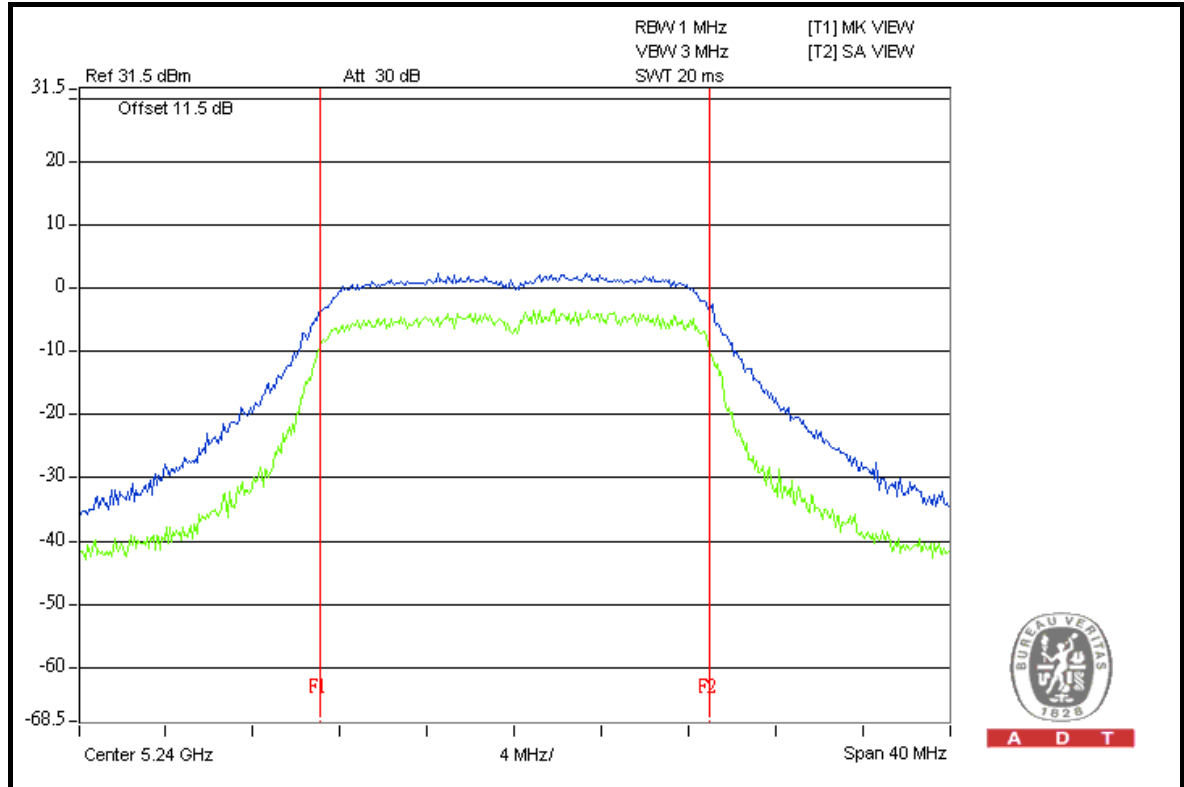


A D T

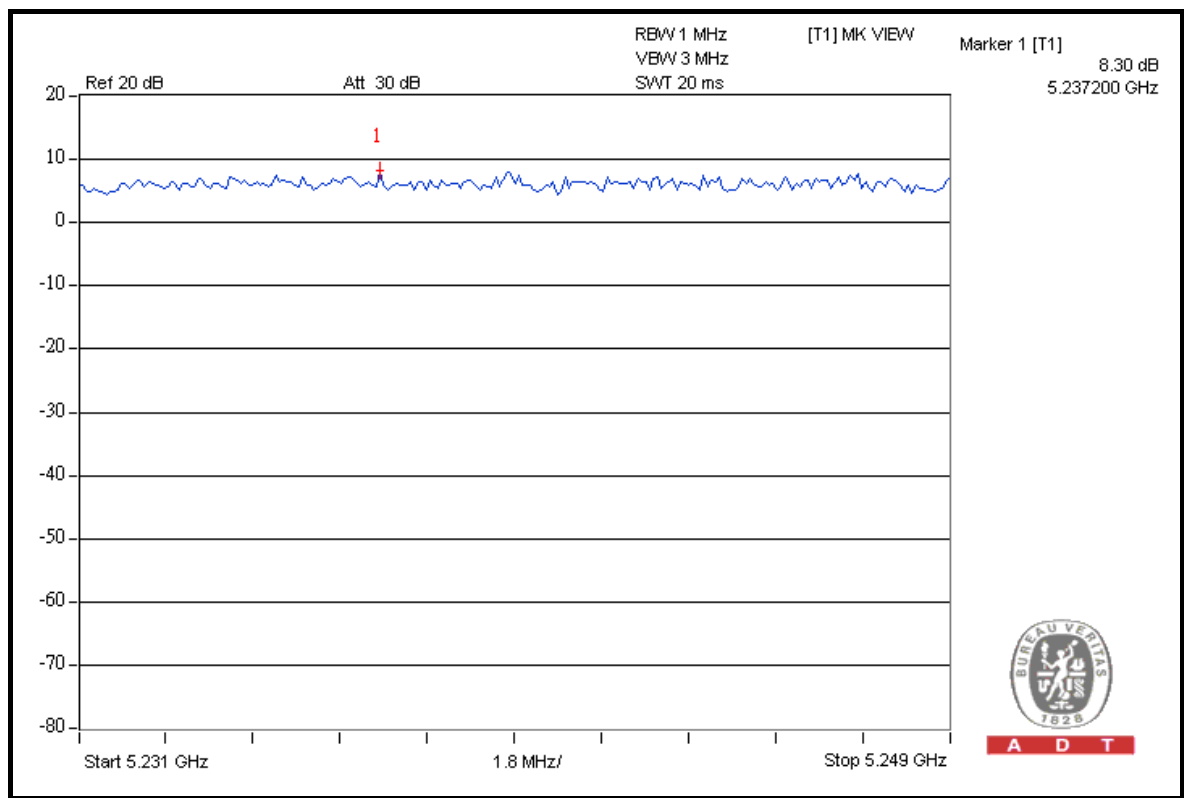


A D T

CH 48



A D T

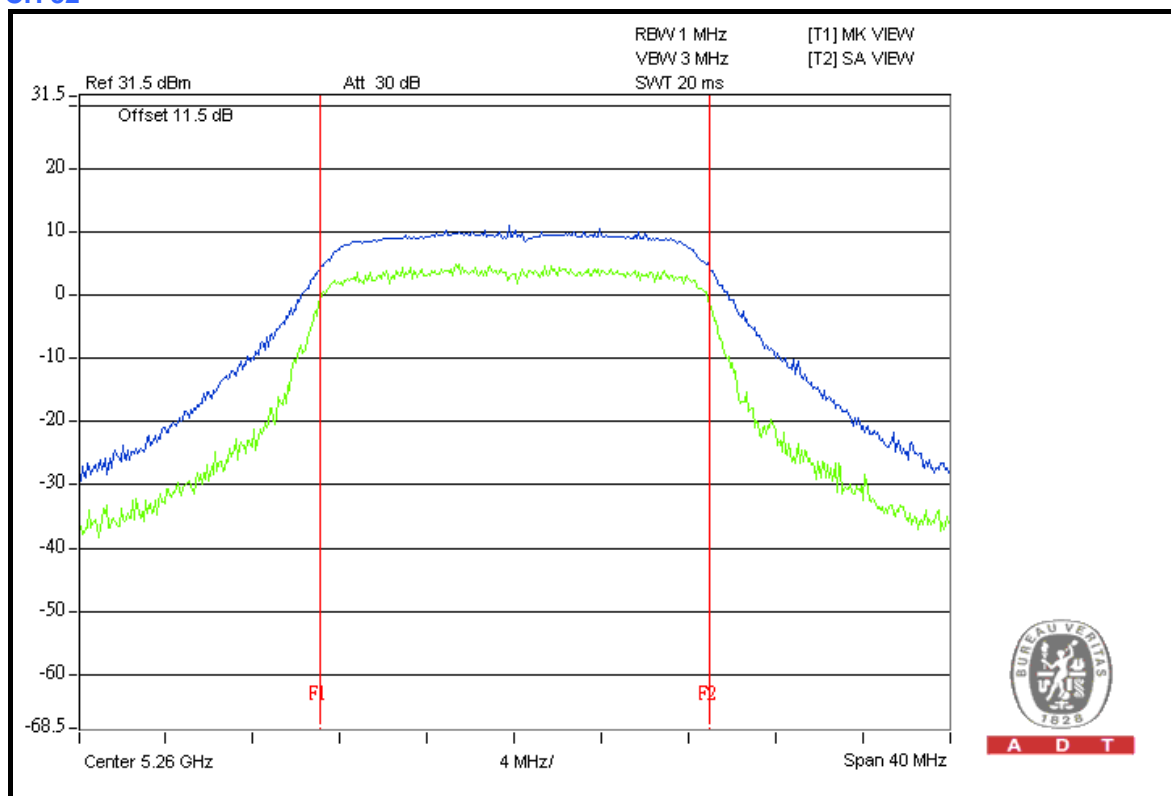


A D T

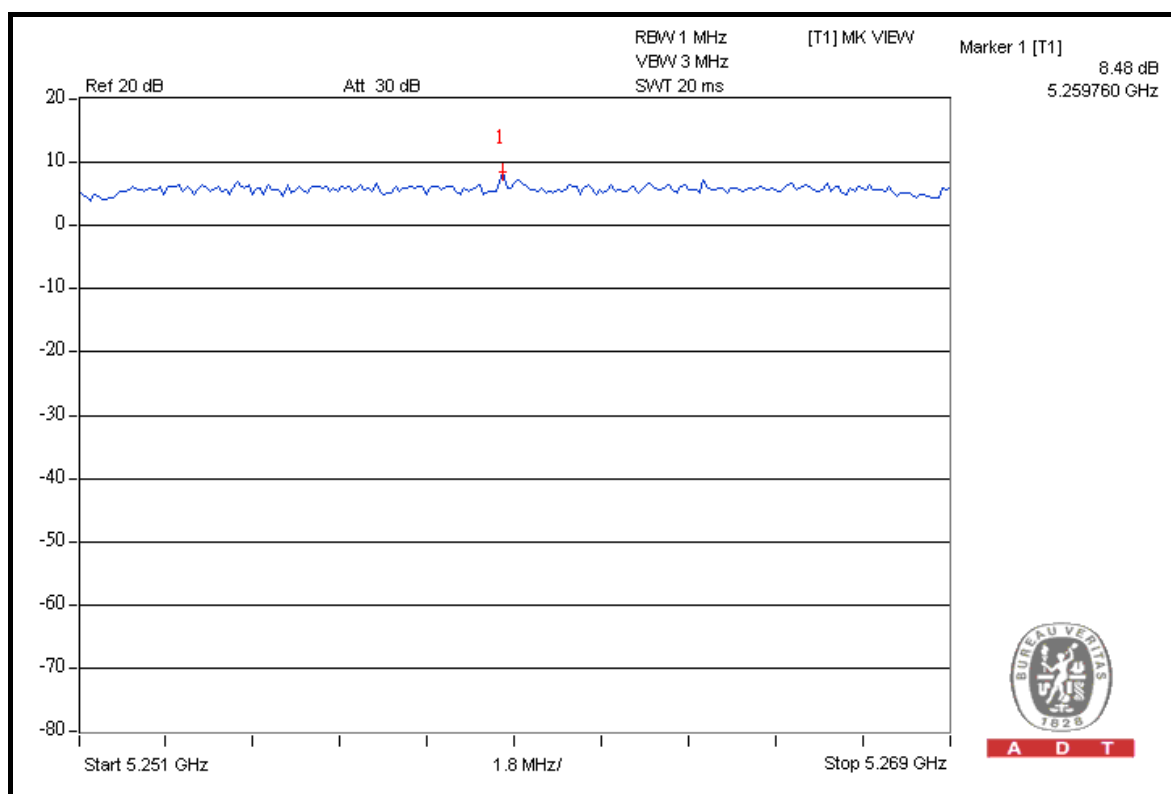


A D T

### CH 52



A D T

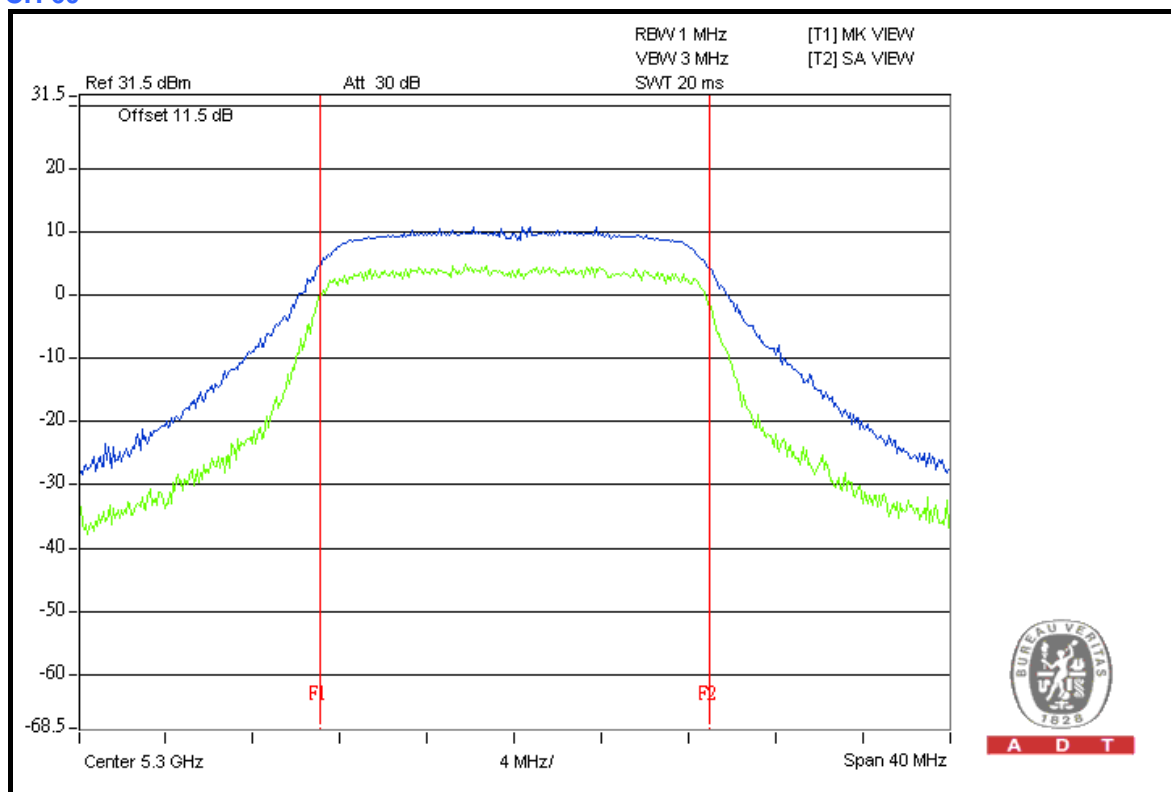


A D T

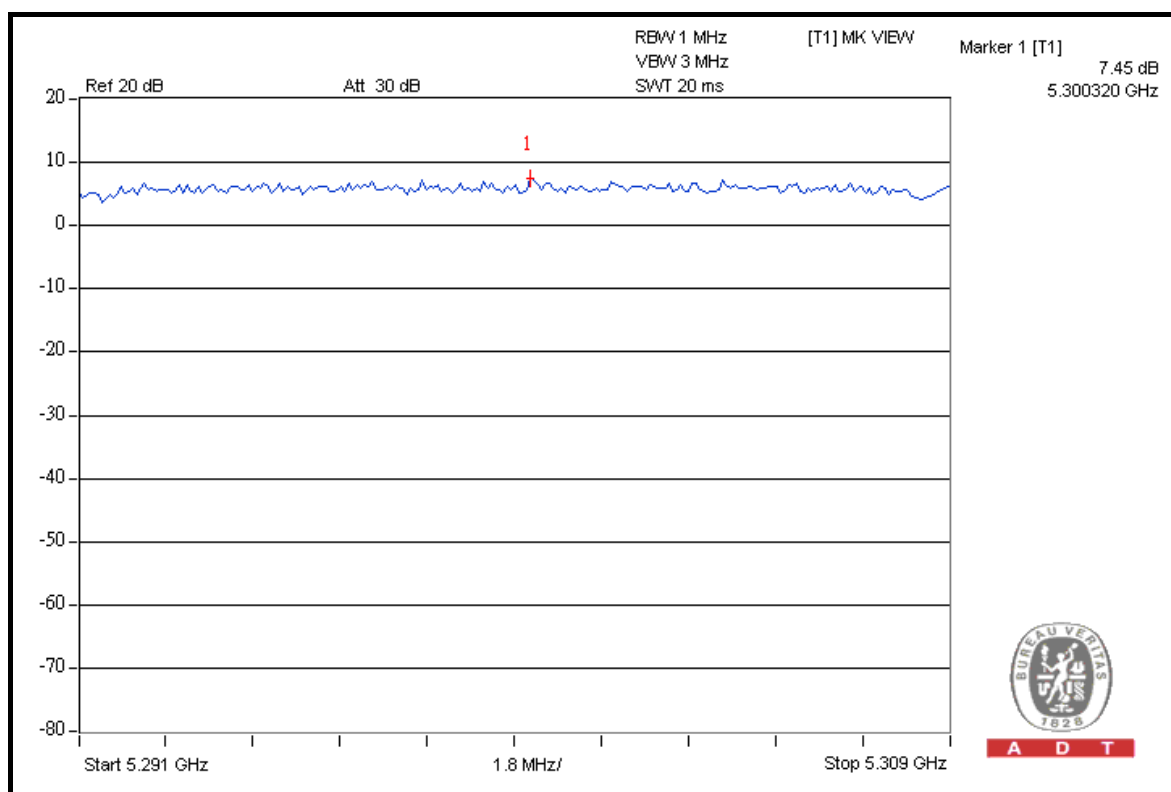


A D T

### CH 60



A D T

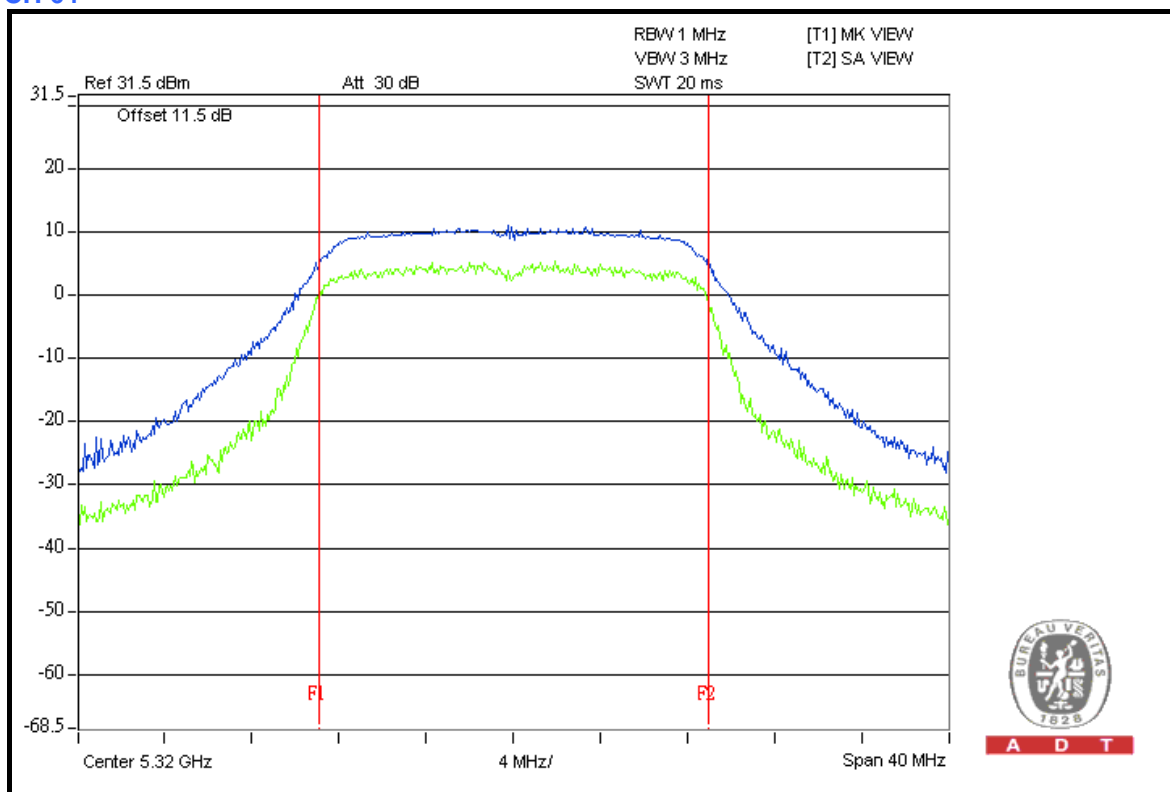


A D T

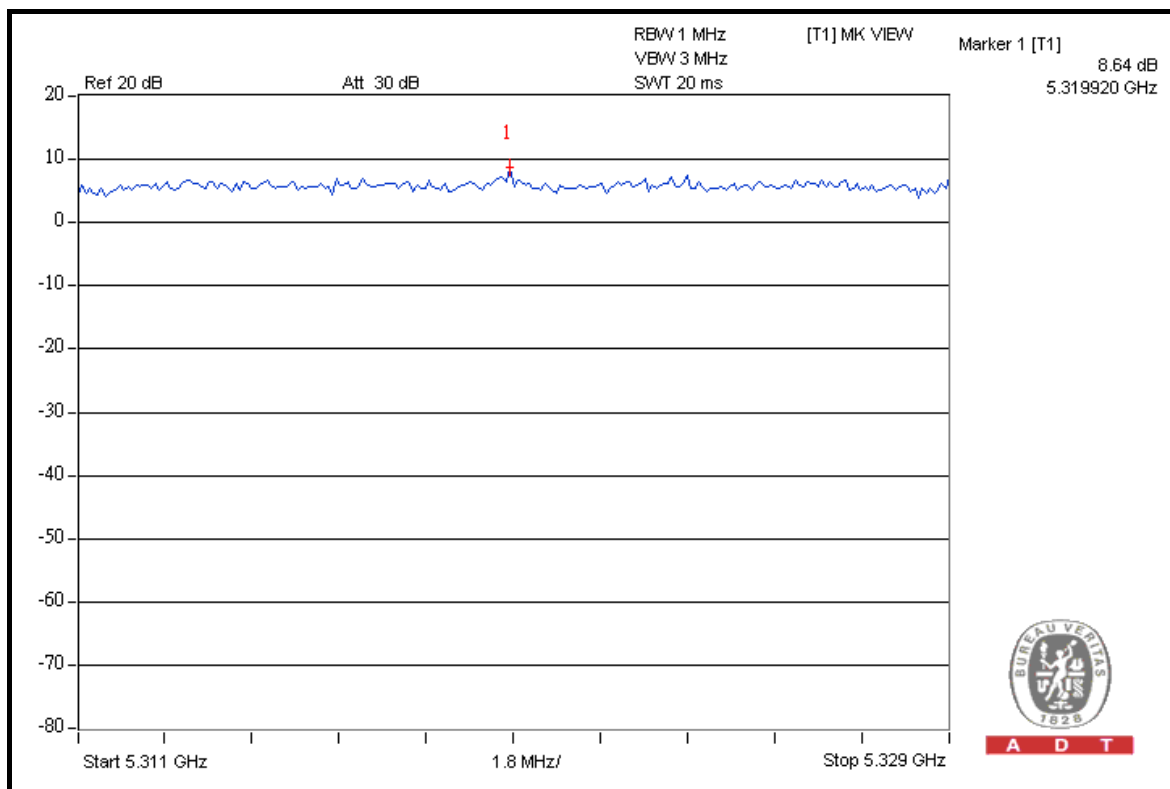


A D T

### CH 64



A D T

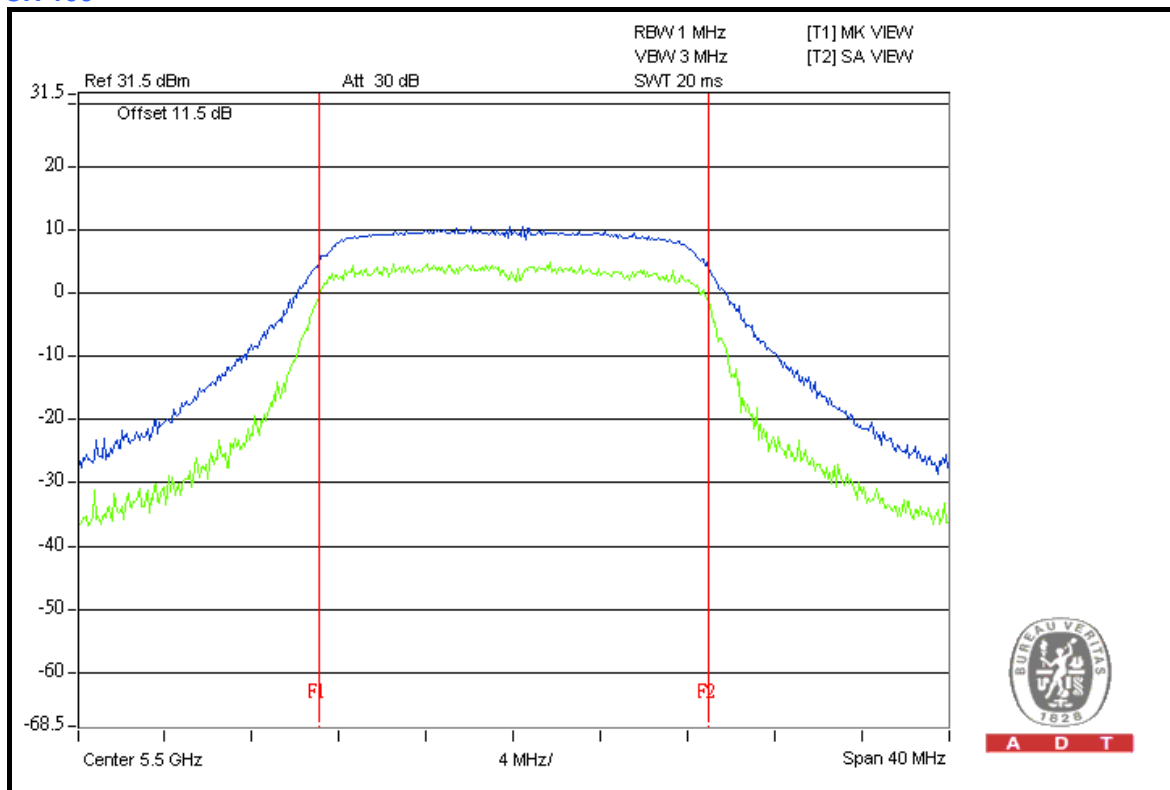


A D T

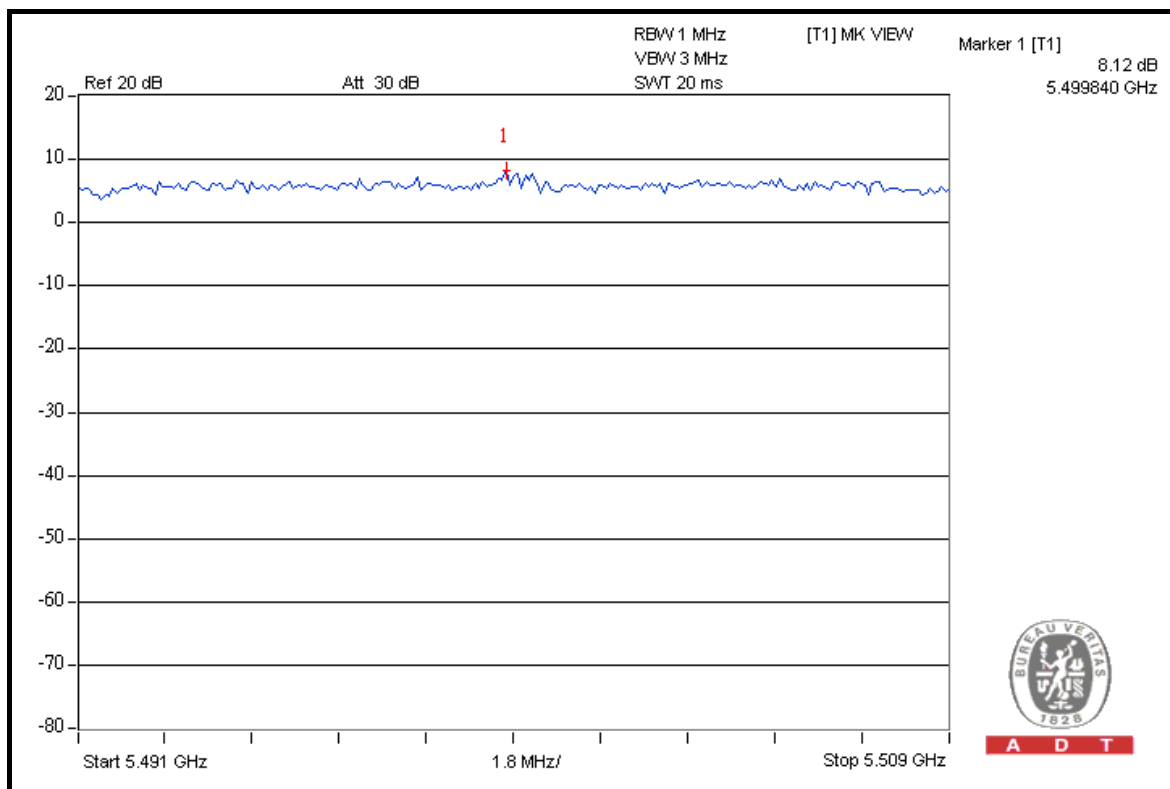


A D T

### CH 100



A D T

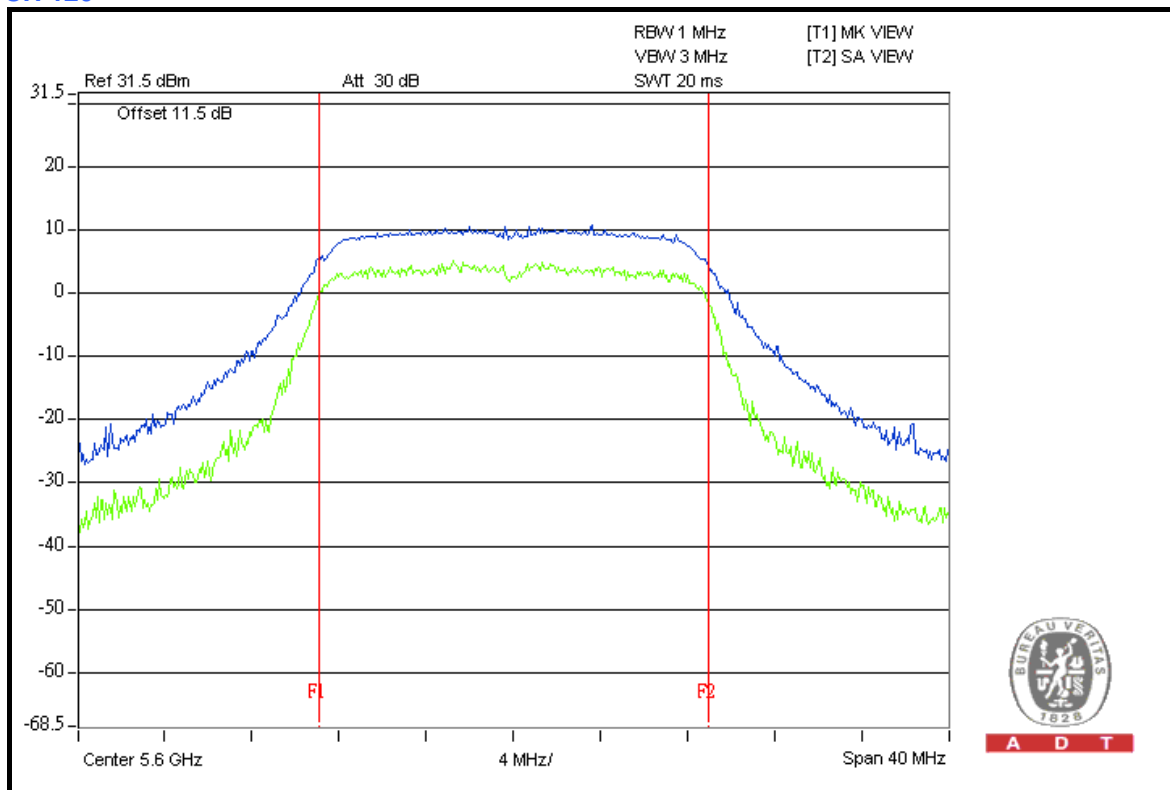


A D T

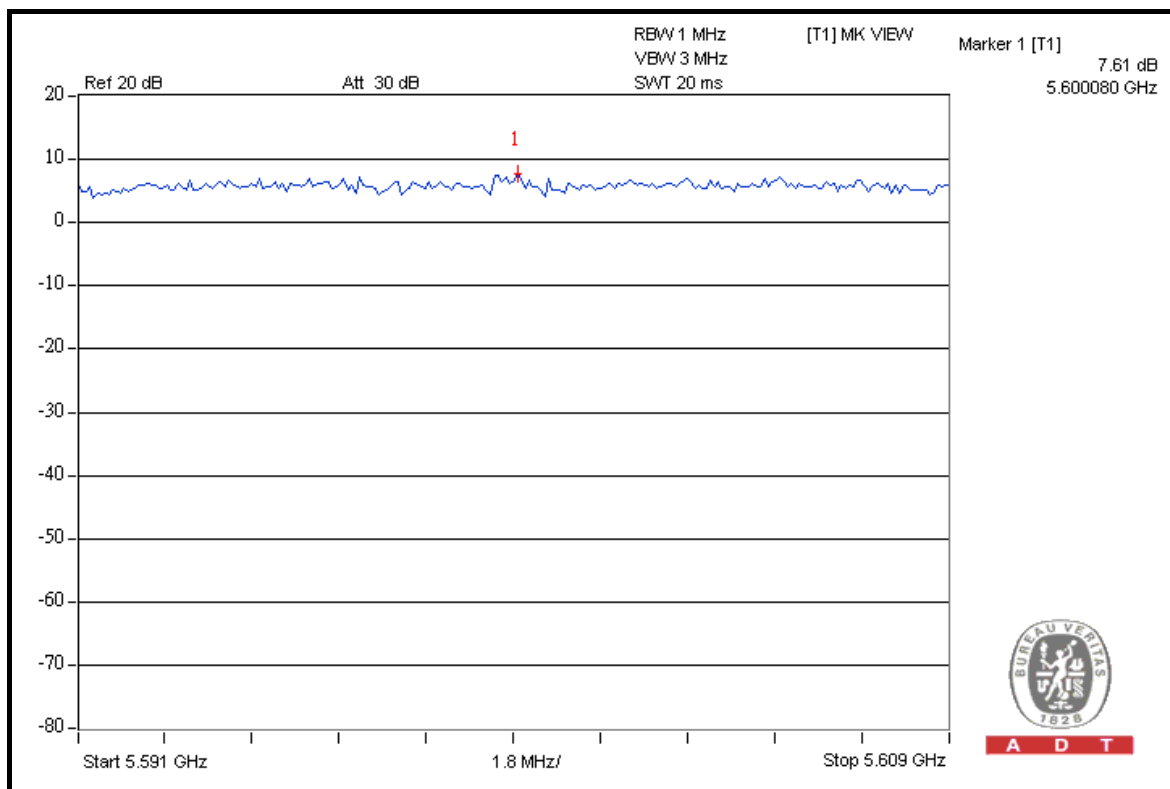


A D T

### CH 120



A D T

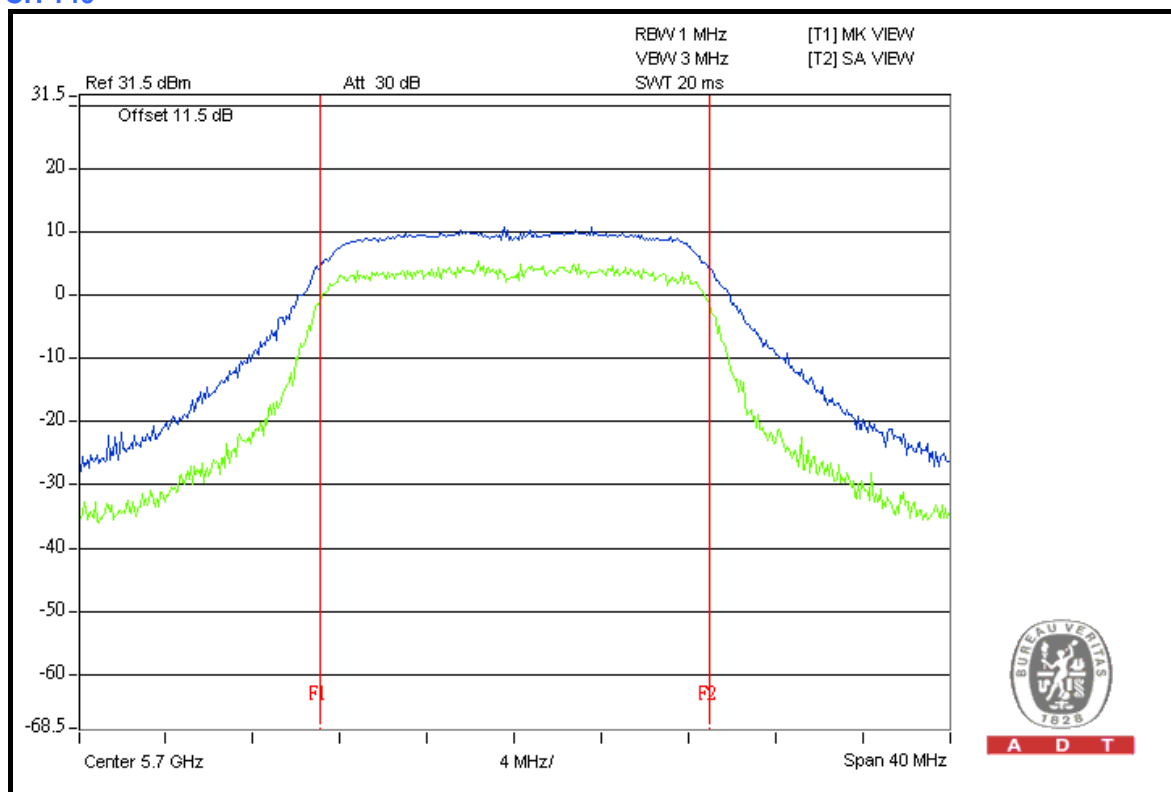


A D T

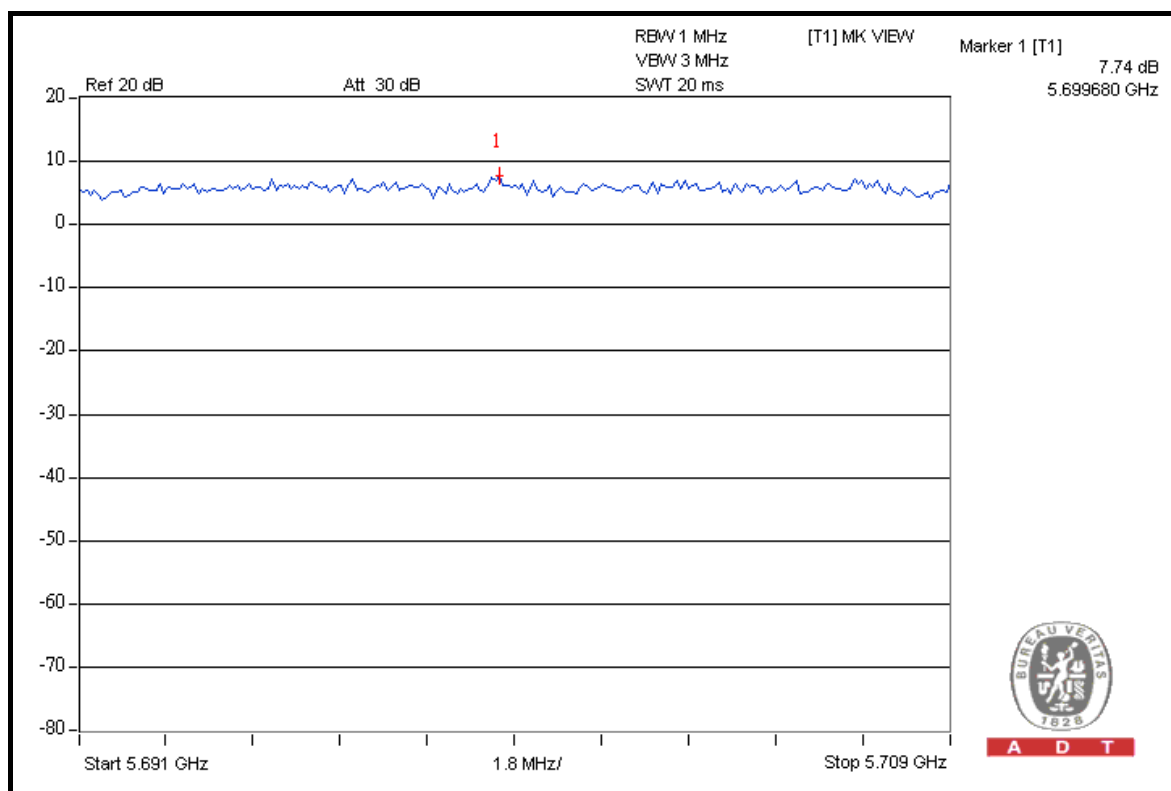


A D T

### CH 140



A D T



A D T





A D T

### DRAFT 802.11n (40MHz) OFDM MODULATION

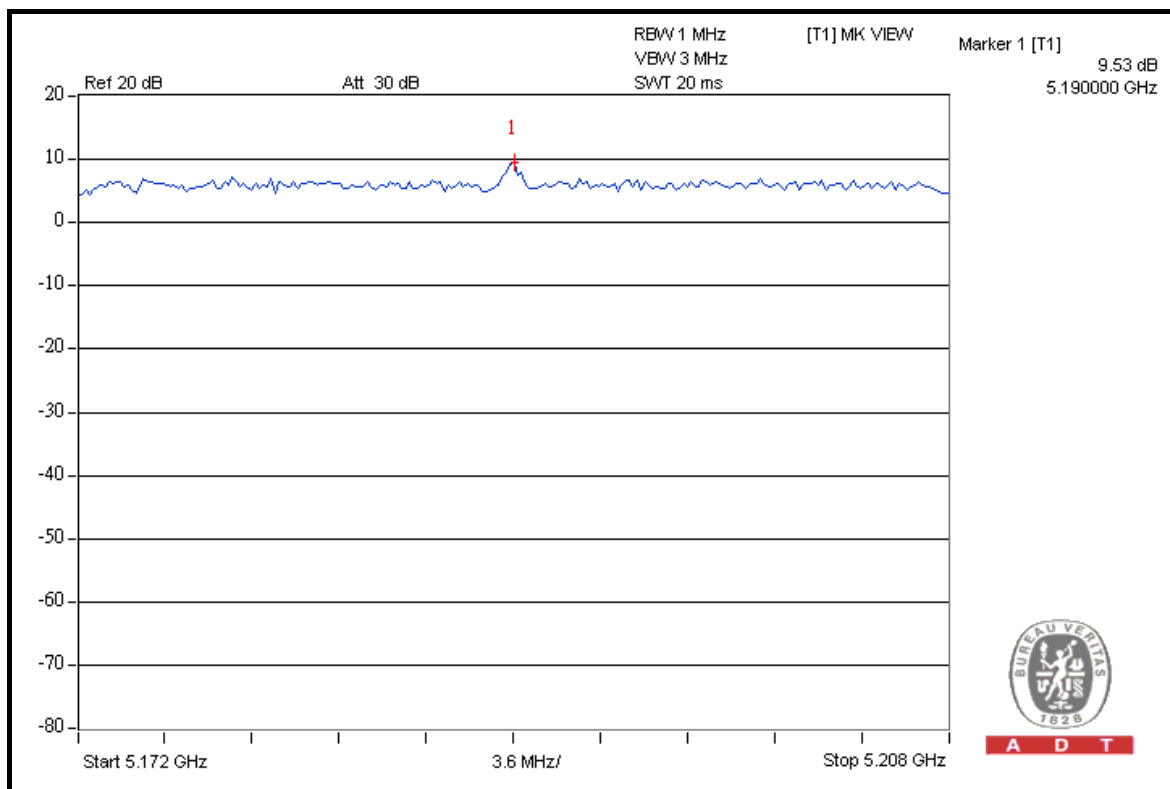
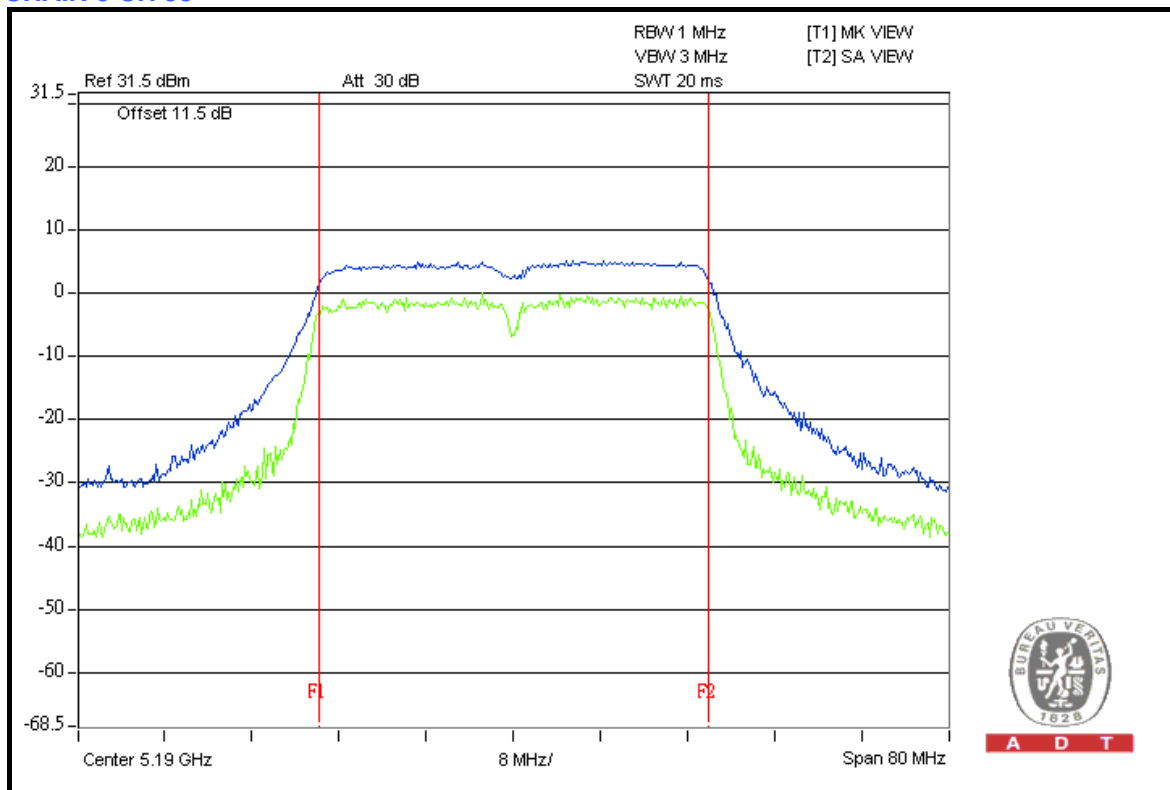
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	13.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)			PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN2		
38	5190	9.53	9.19	8.35	13	PASS
46	5230	8.32	9.03	9.60	13	PASS
54	5270	10.99	9.04	9.37	13	PASS
62	5310	9.87	9.42	8.76	13	PASS
102	5510	10.79	8.76	8.98	13	PASS
118	5590	10.38	8.98	8.74	13	PASS
134	5670	11.40	10.36	9.43	13	PASS



A D T

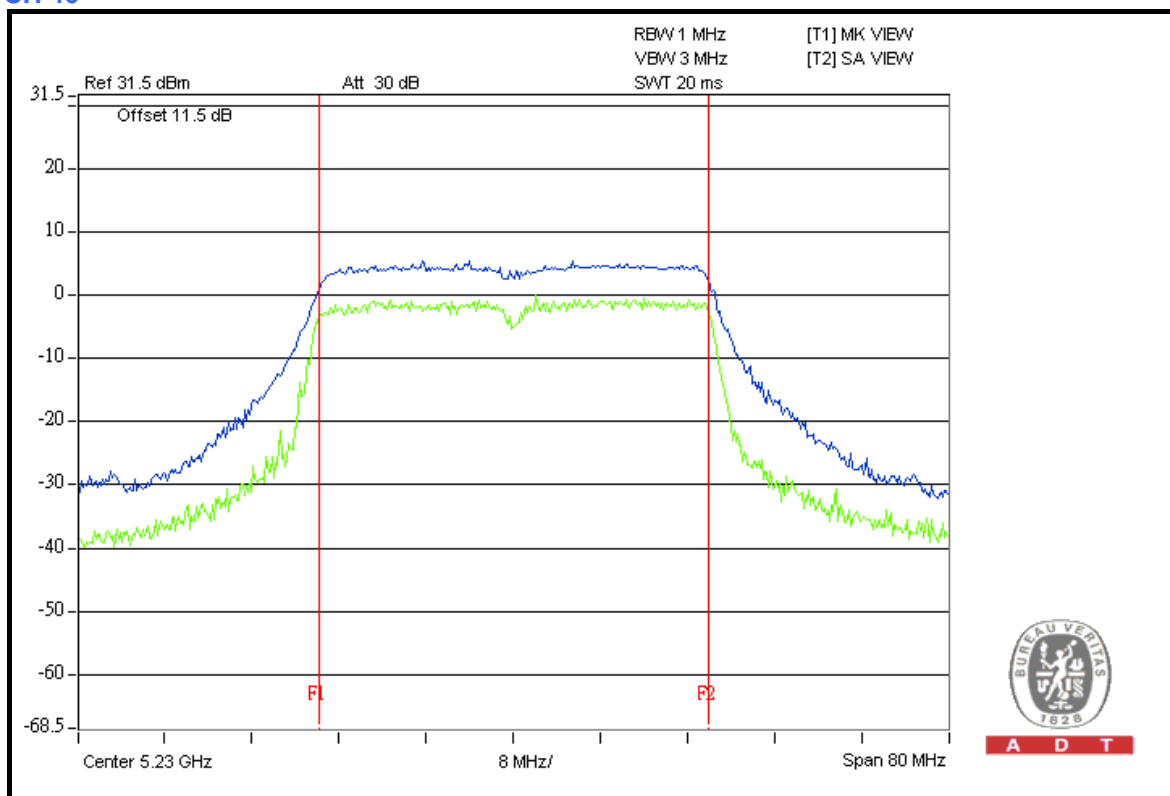
### CHAIN 0 CH 38



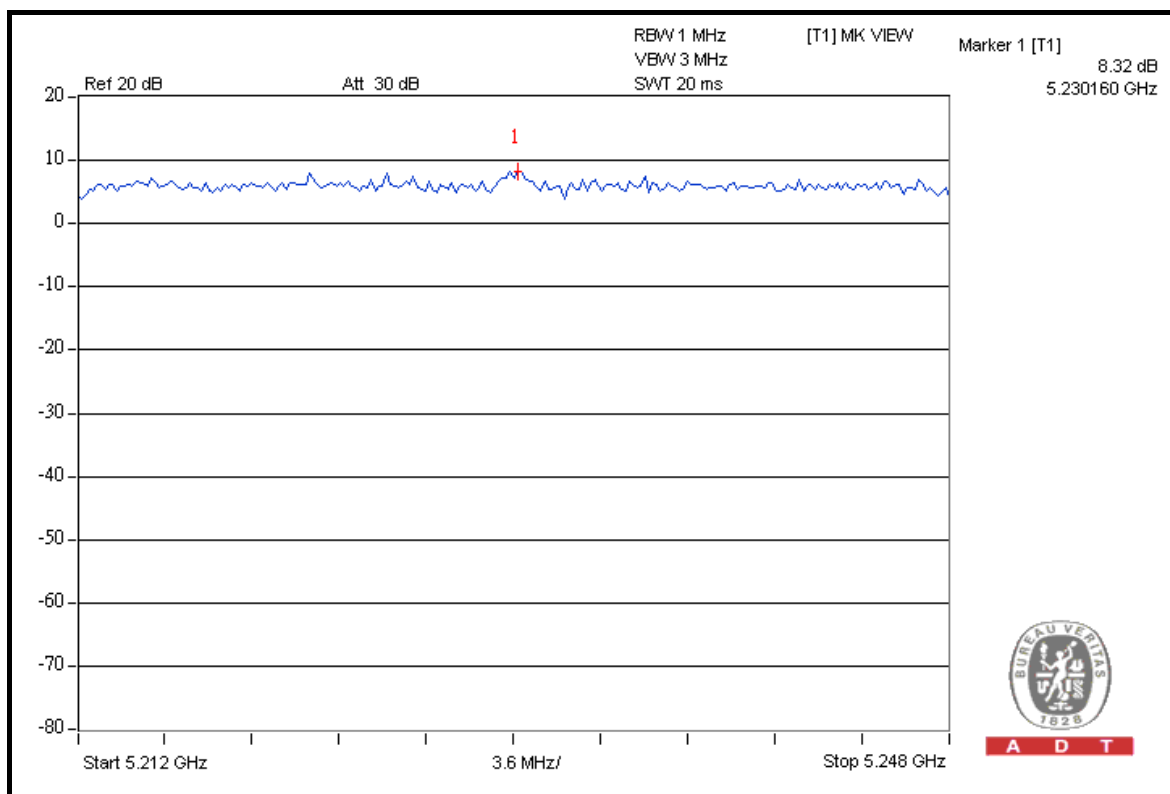


A D T

### CH 46



A D T

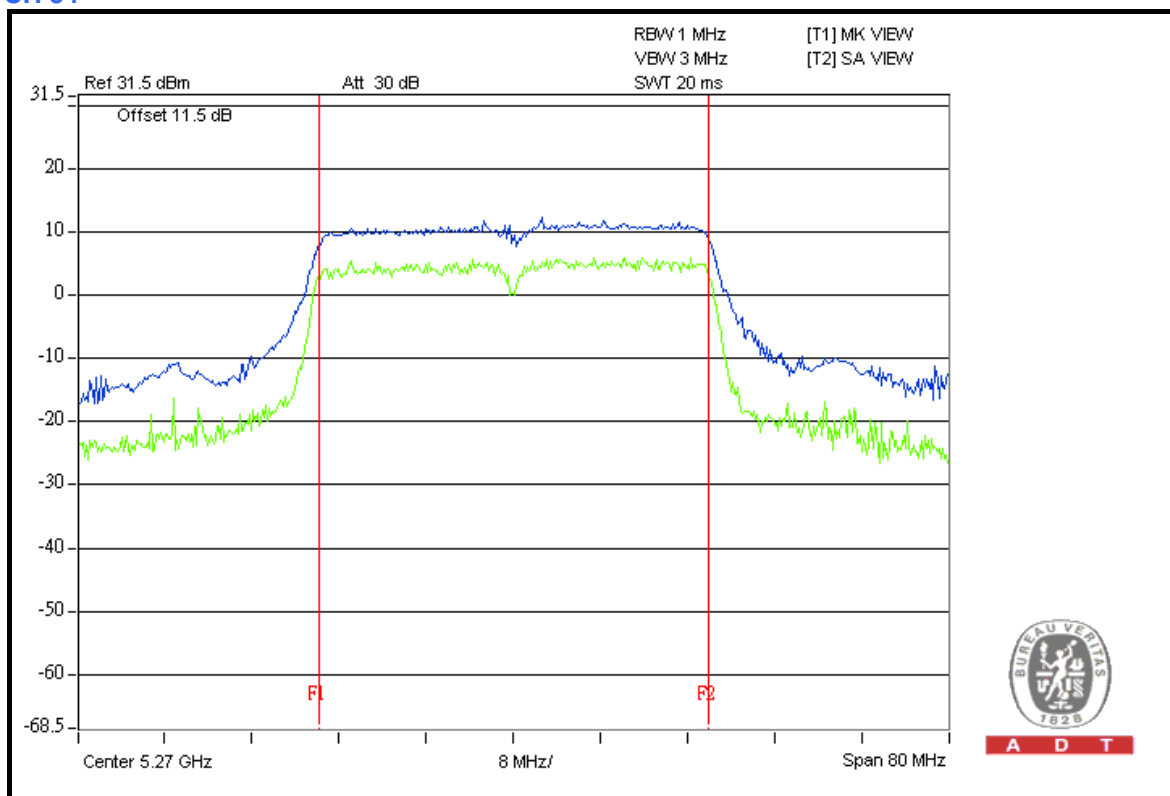


A D T

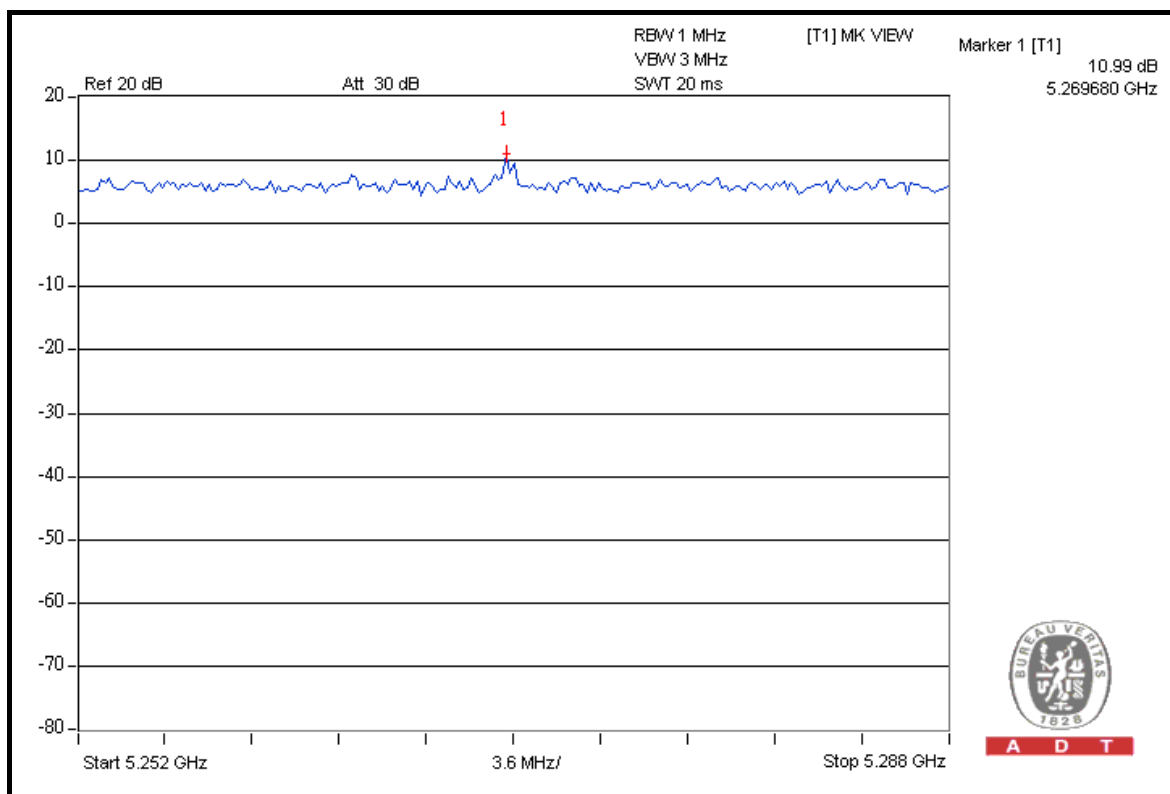


A D T

### CH 54



A D T

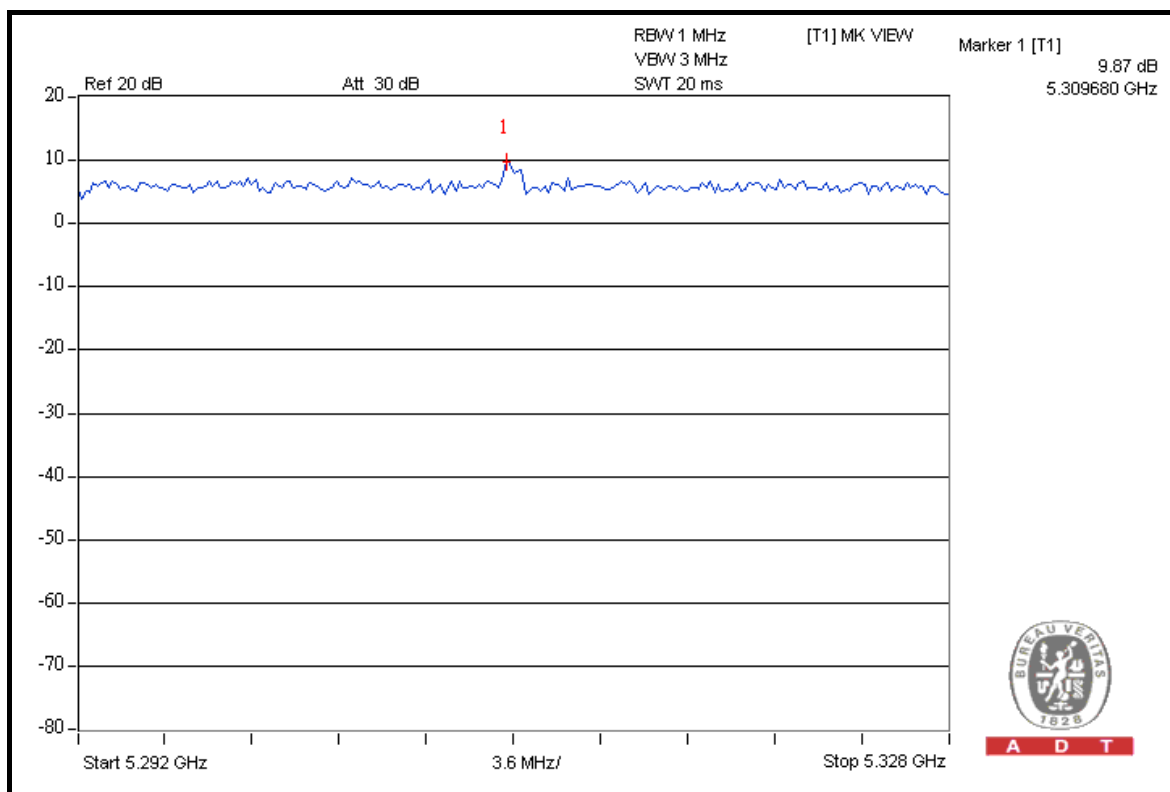
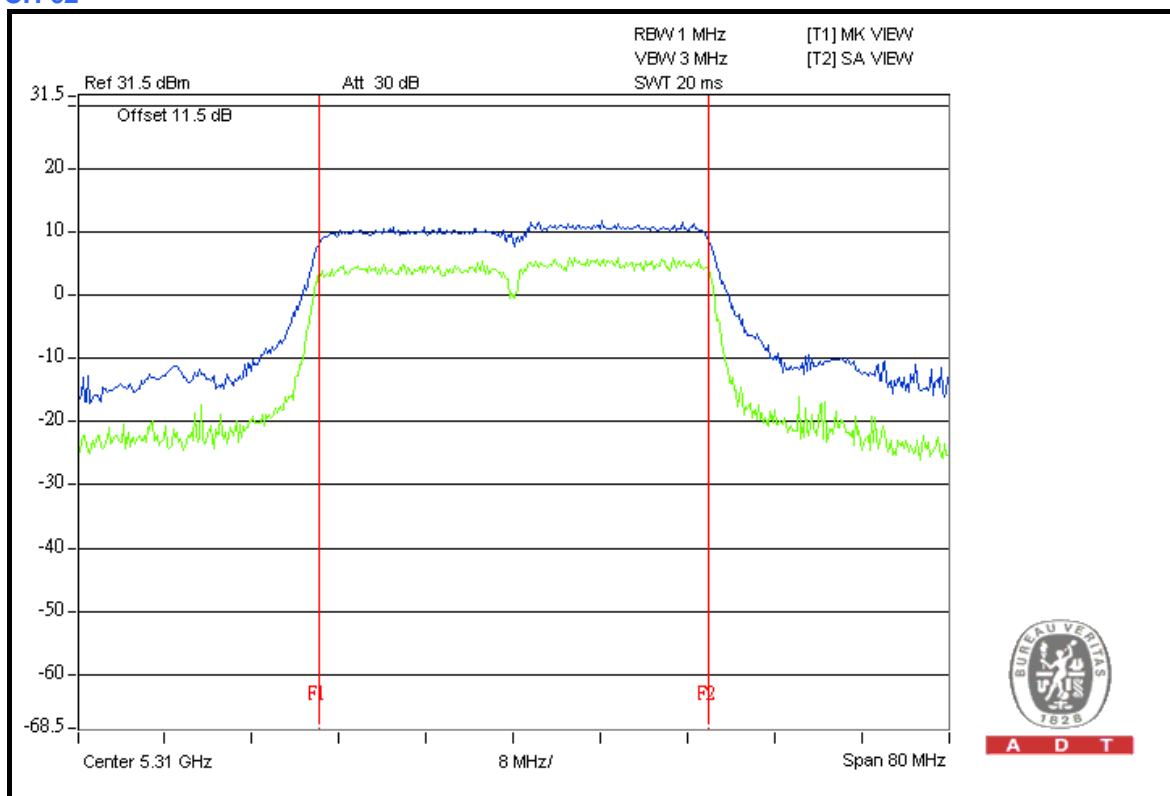


A D T



A D T

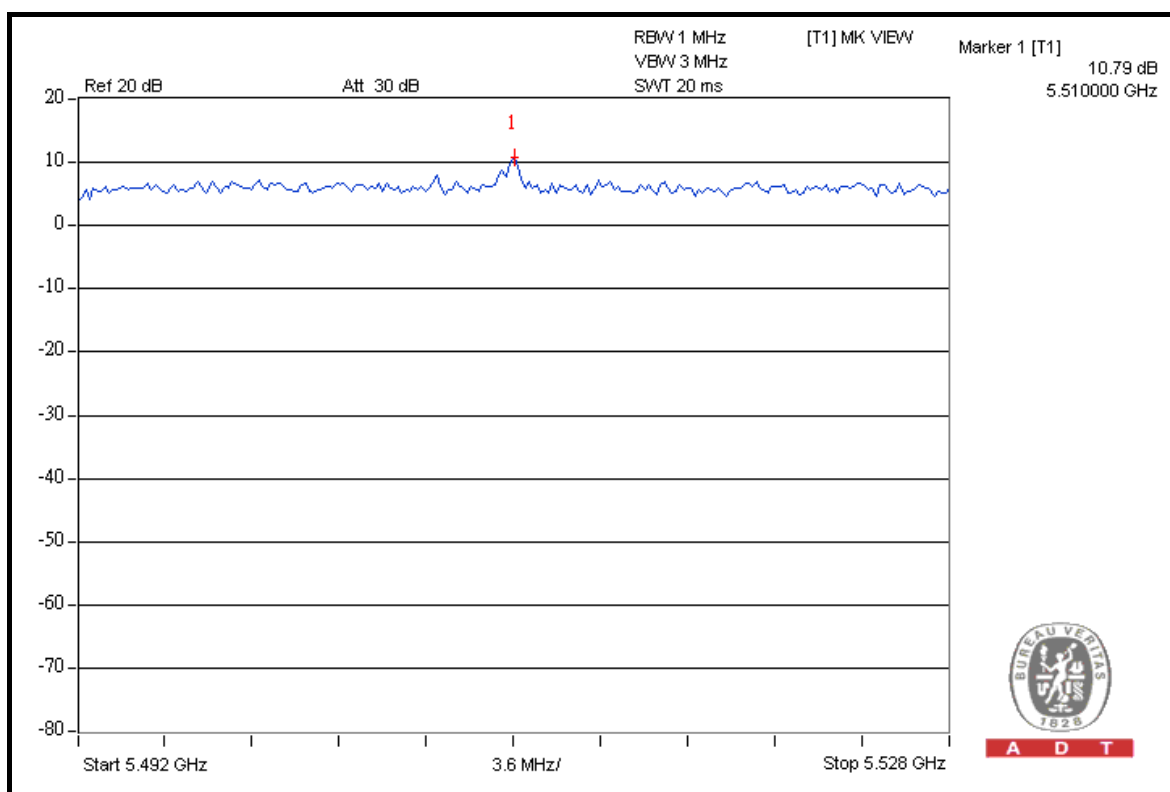
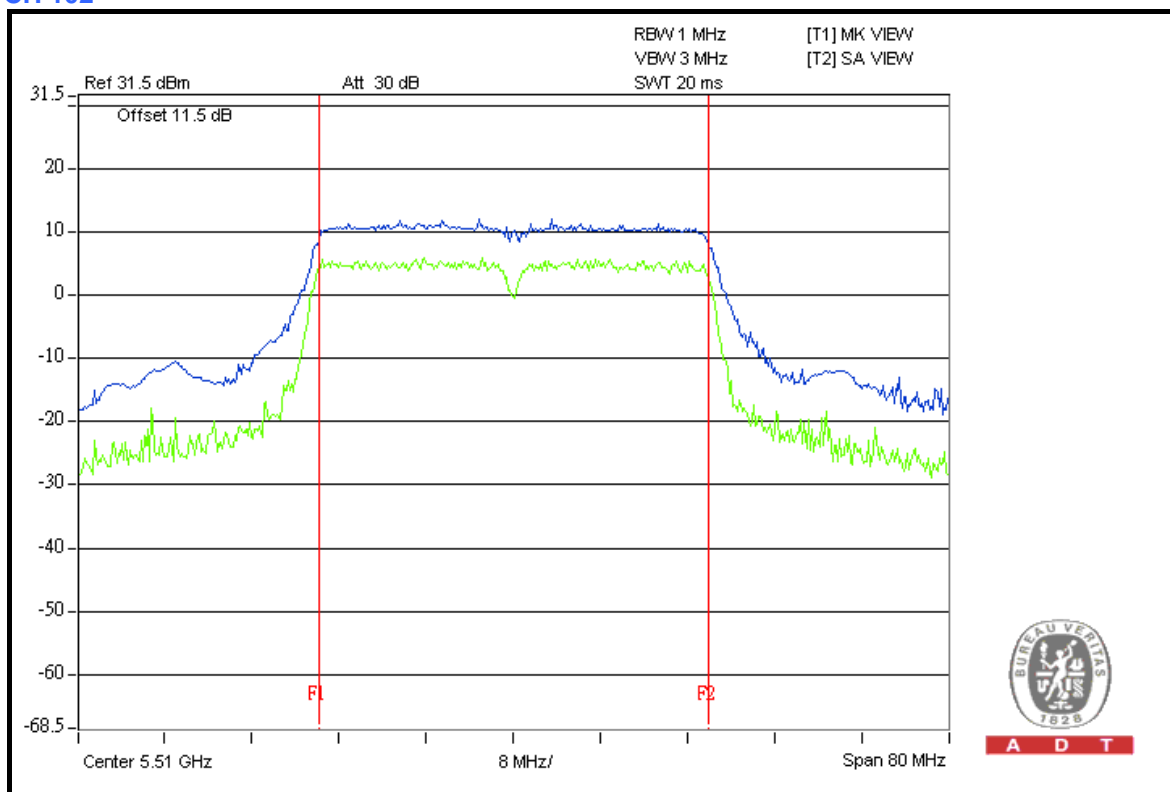
### CH 62





A D T

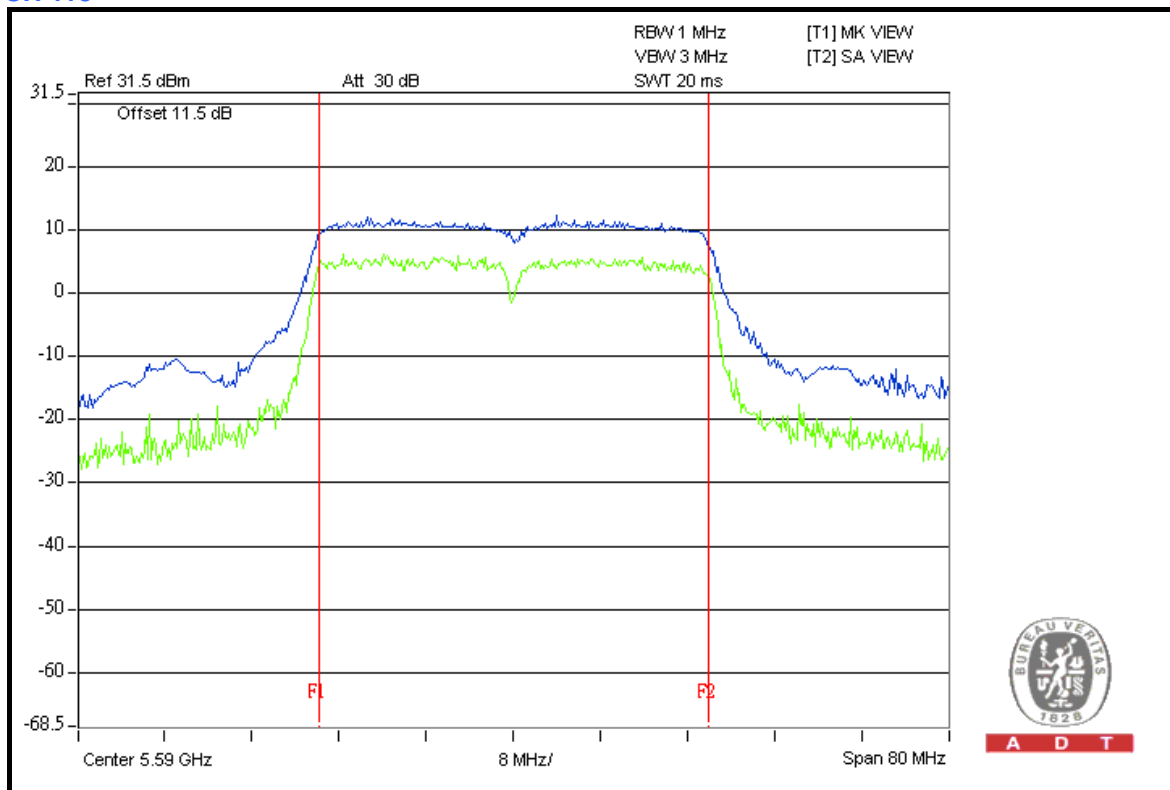
### CH 102



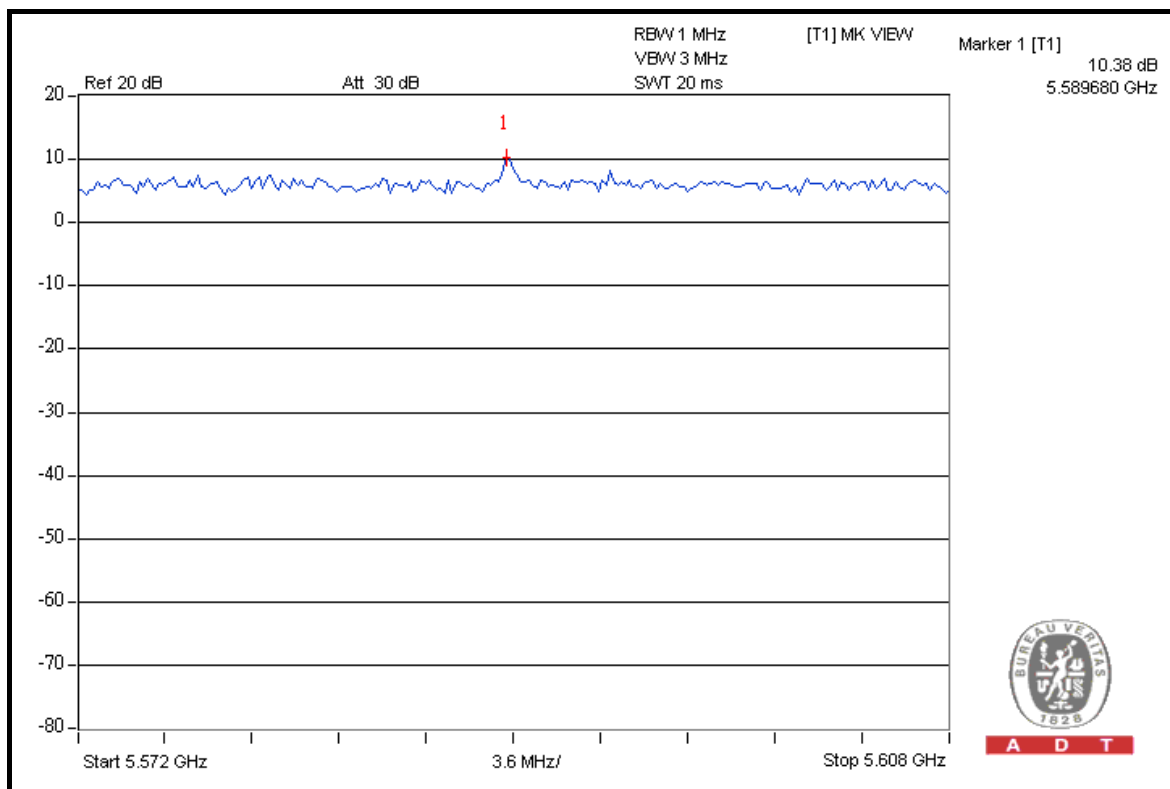


A D T

### CH 118



A D T

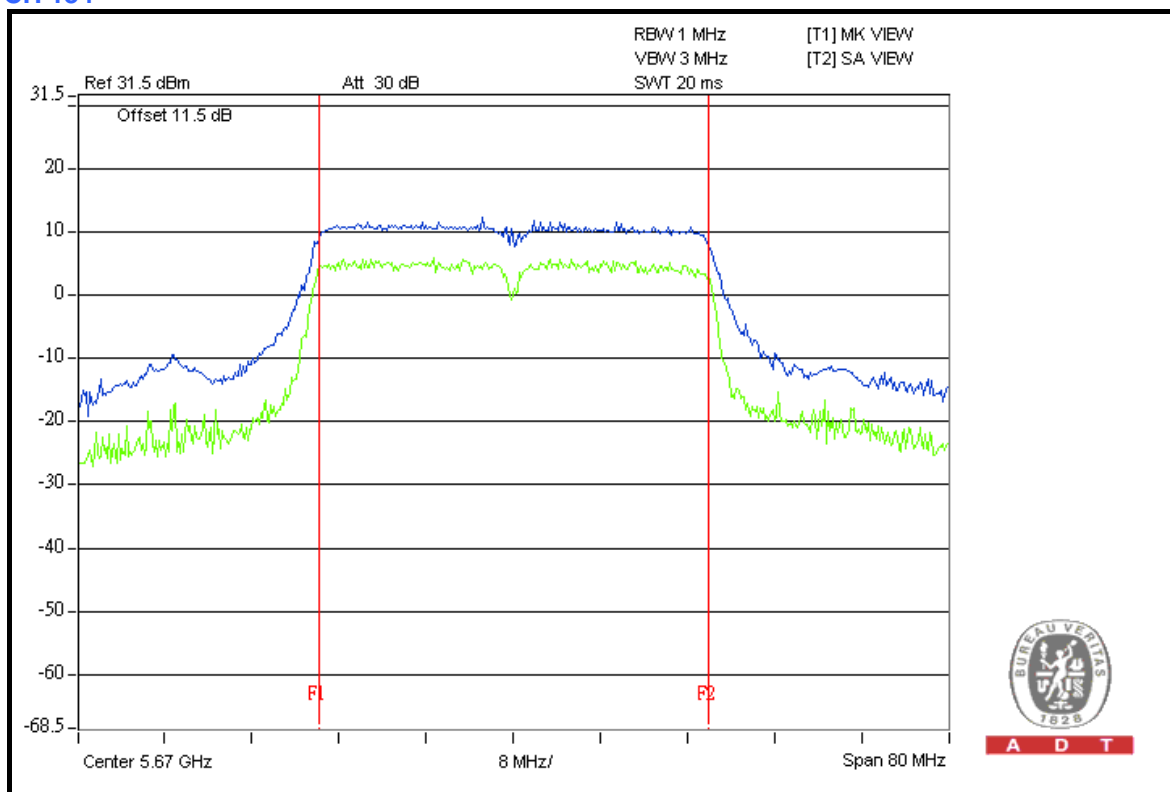


A D T

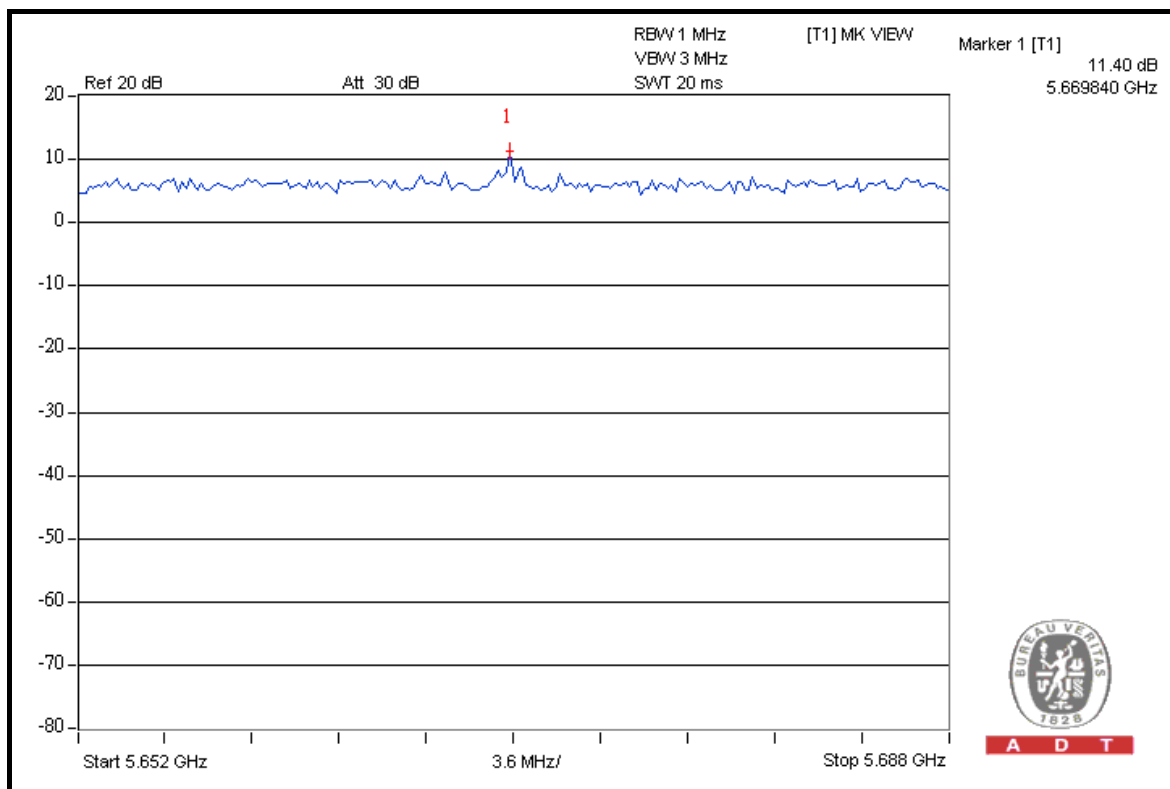


A D T

### CH 134



A D T



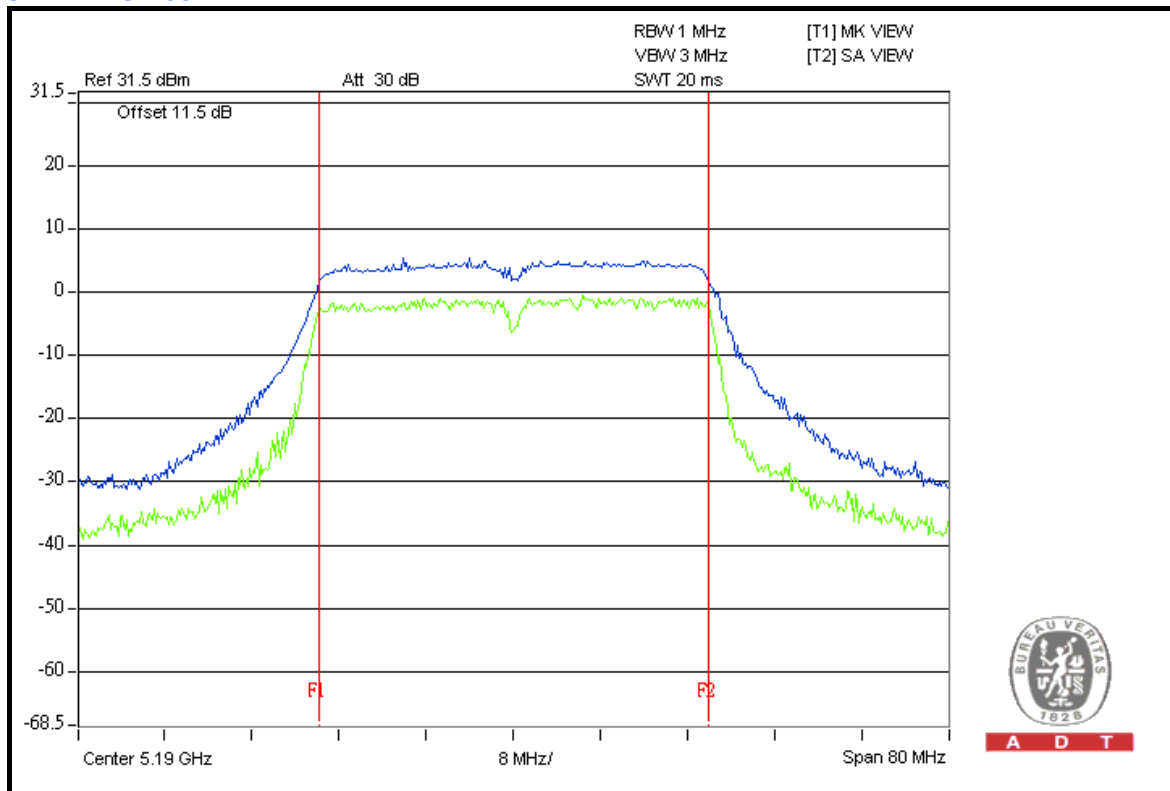
A D T



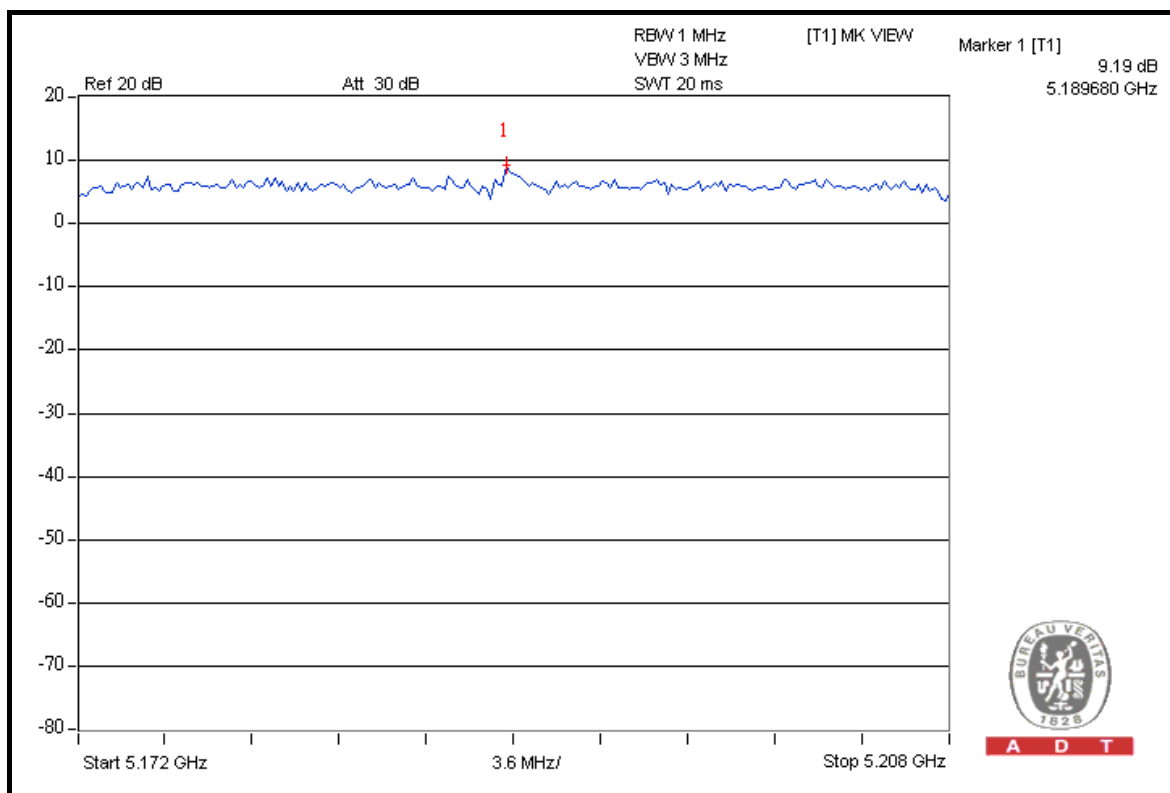


A D T

### CHAIN 1 CH 38



A D T

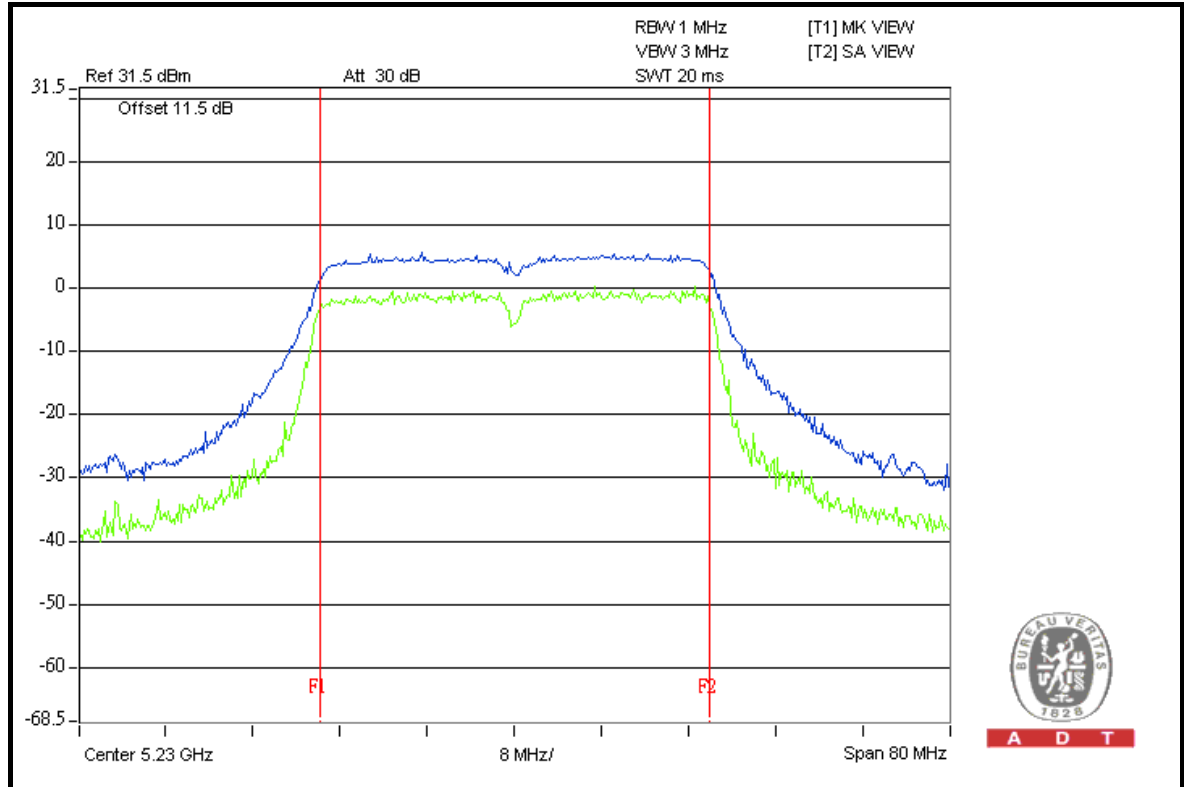


A D T

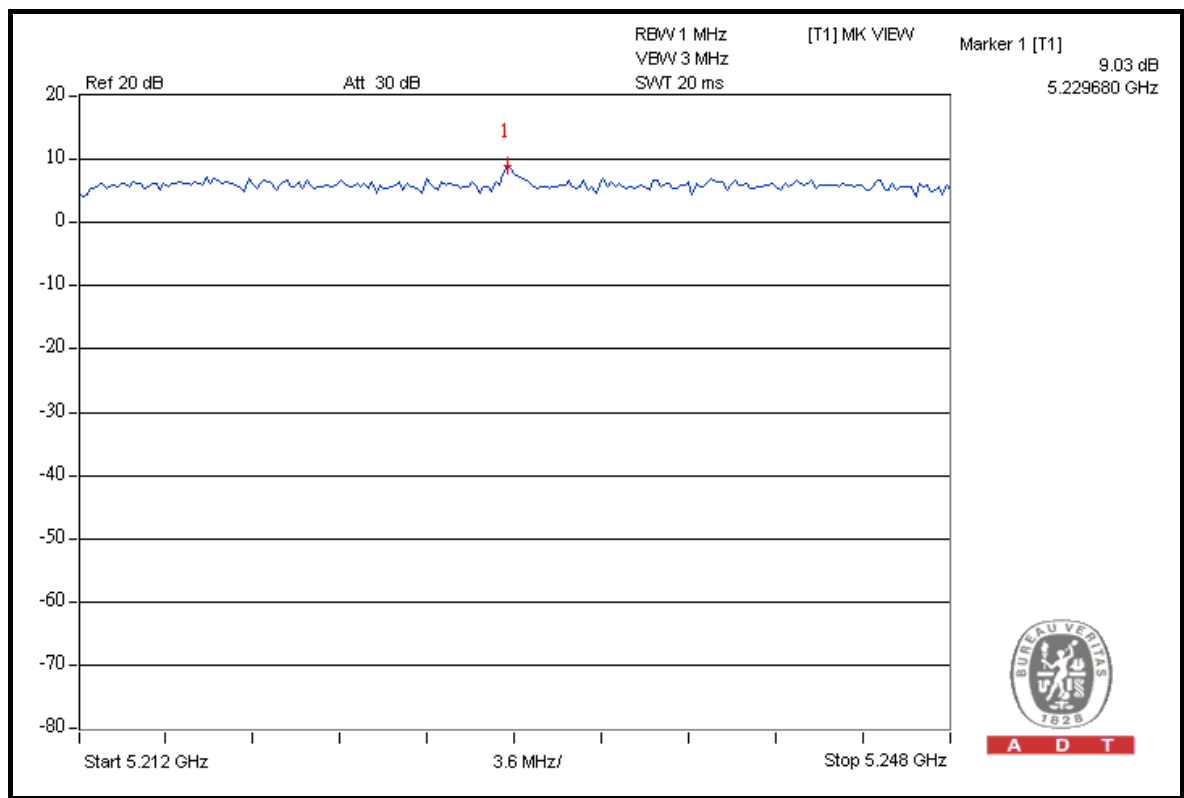


A D T

CH 46



A D T

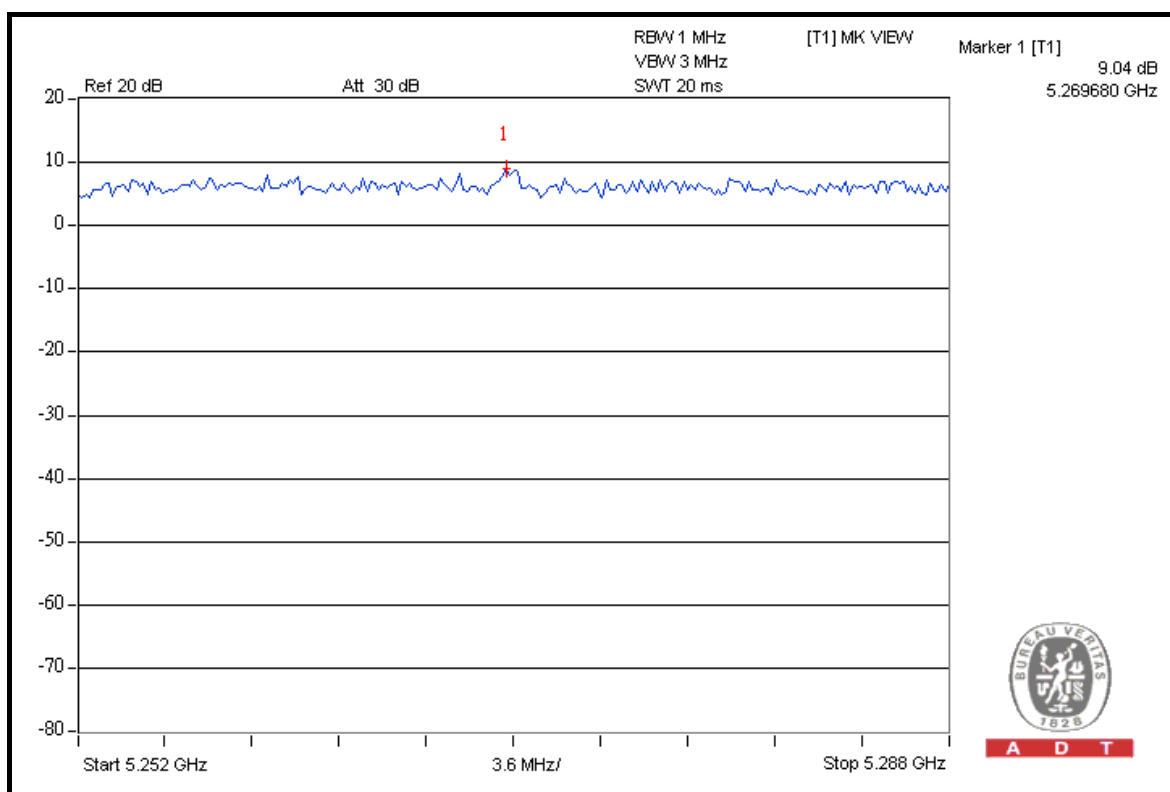
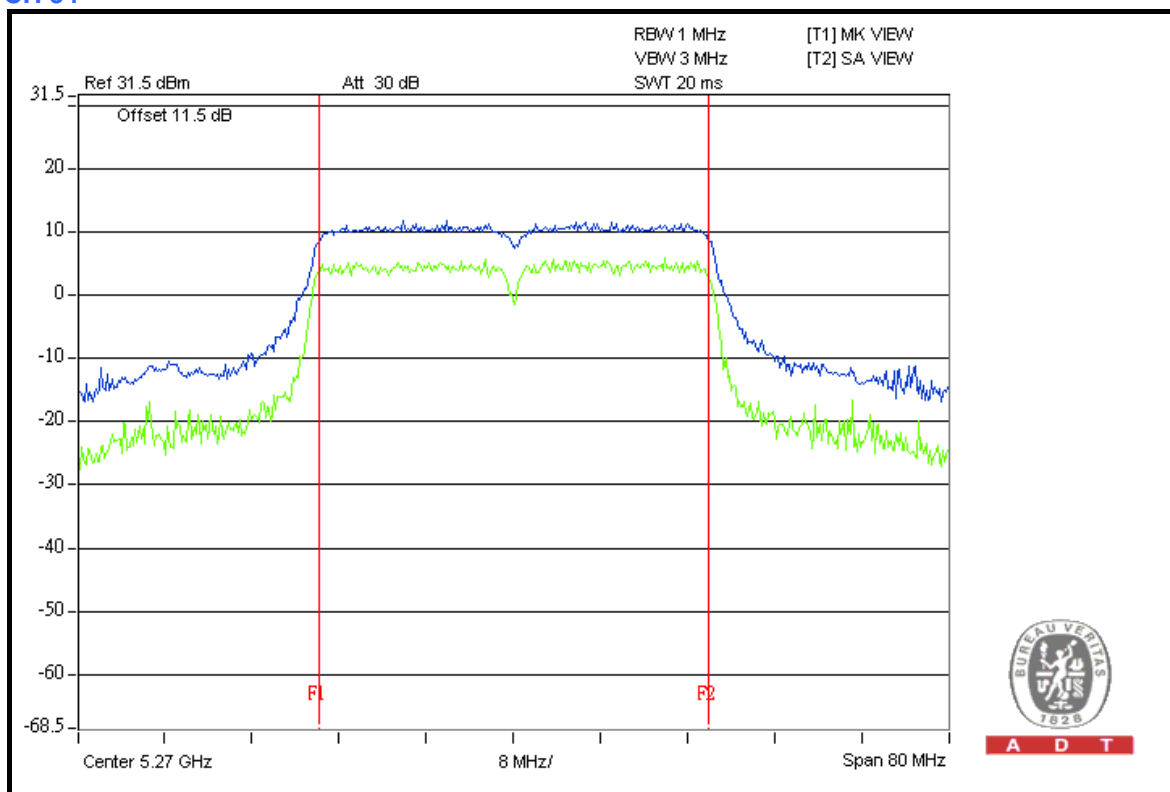


A D T



A D T

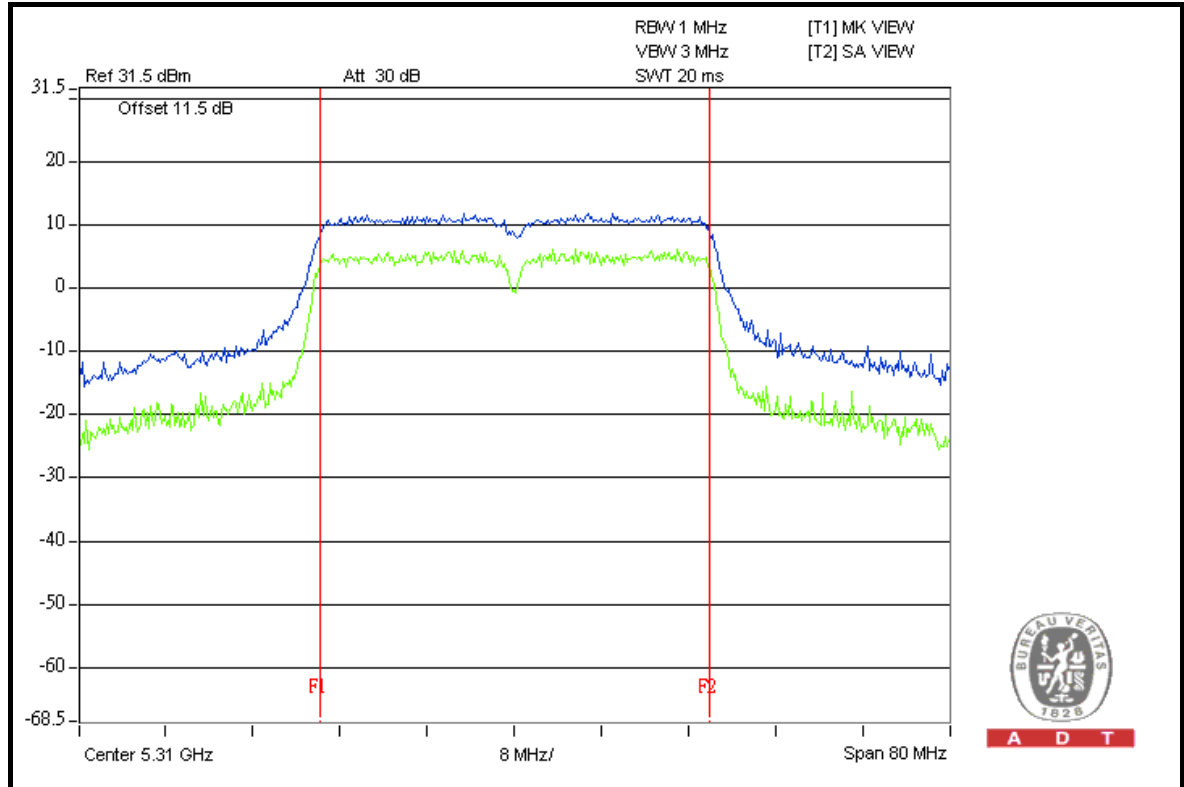
### CH 54



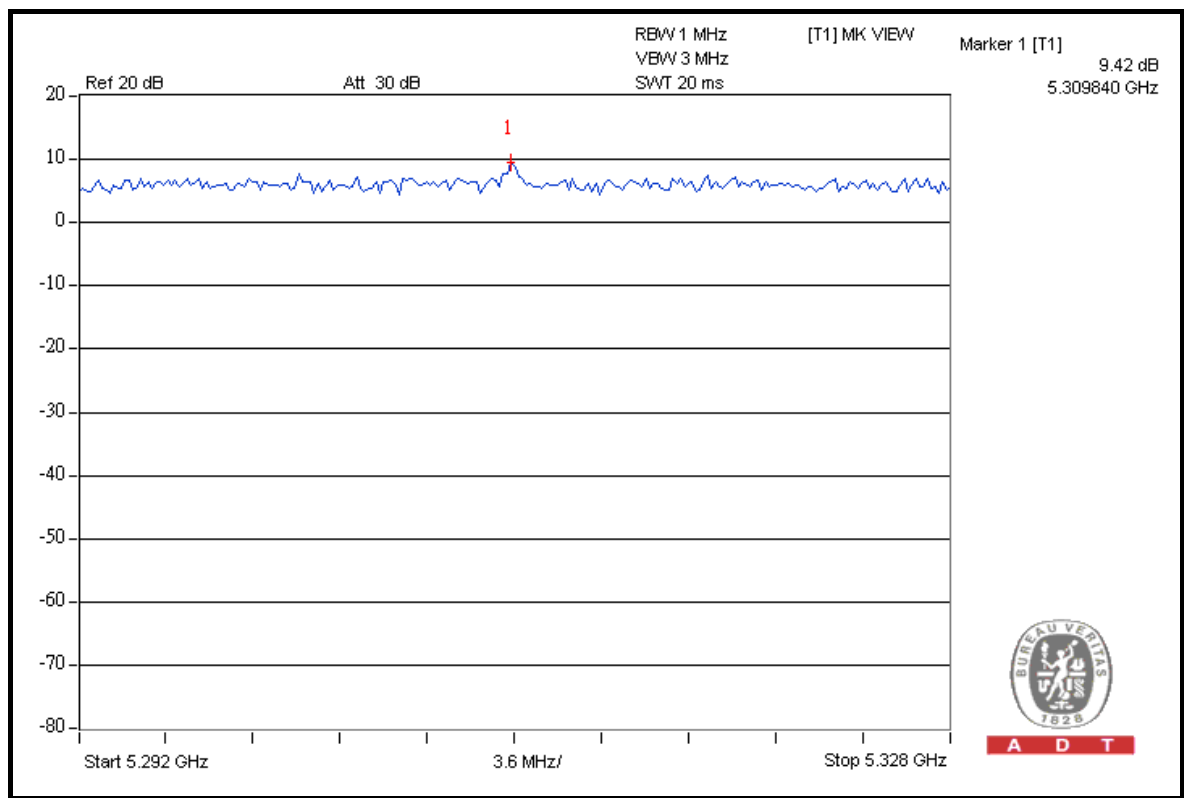


A D T

CH 62



A D T

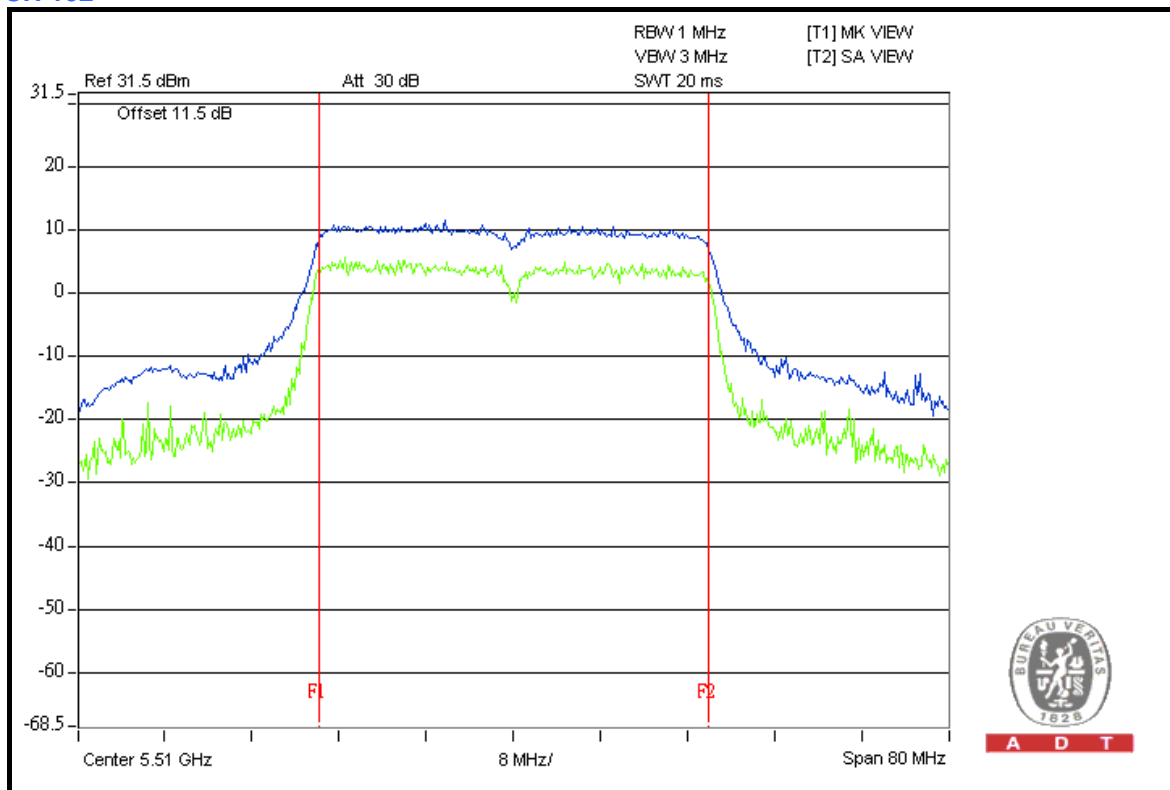


A D T

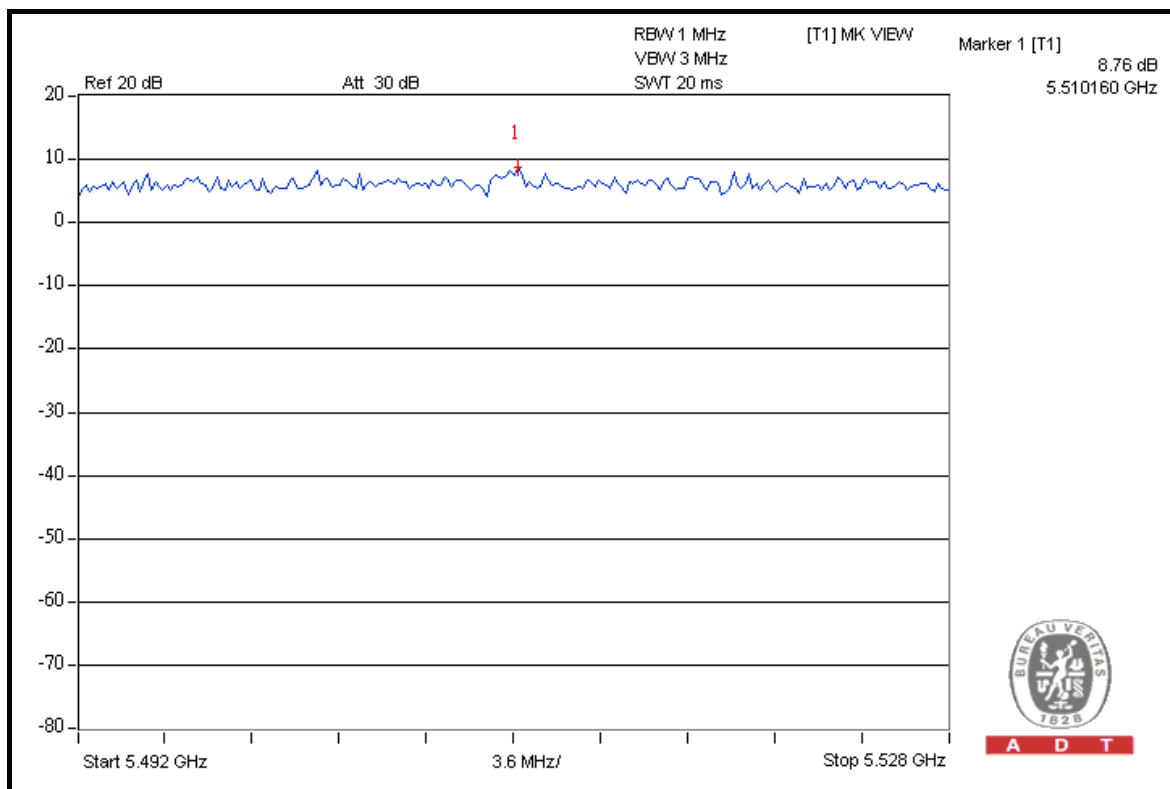


A D T

### CH 102



A D T

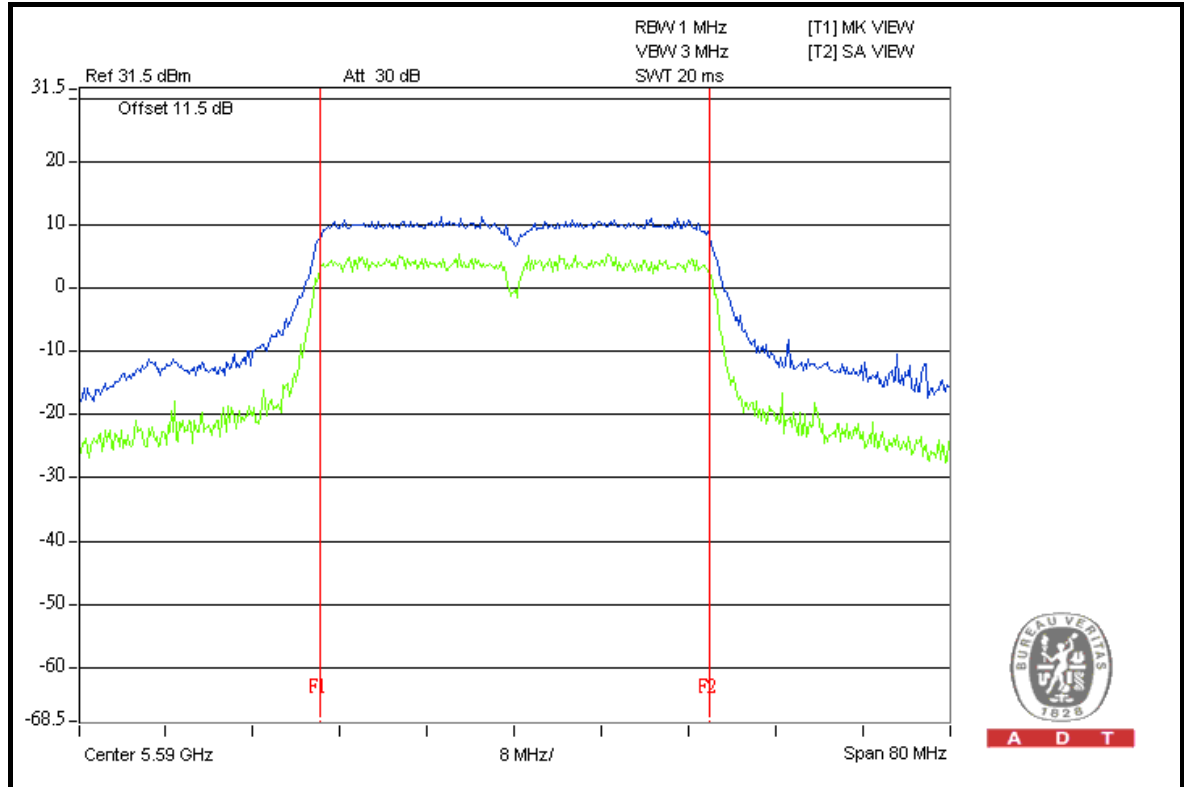


A D T

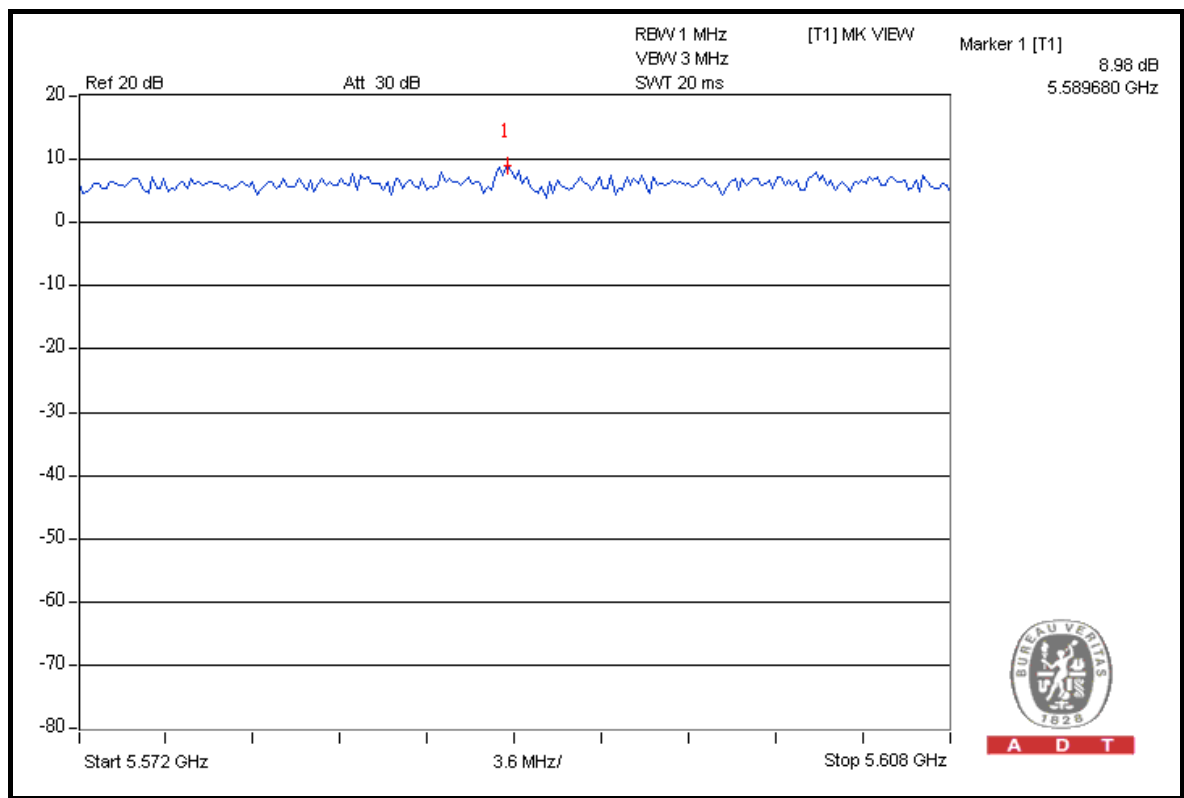


A D T

CH 118



A D T

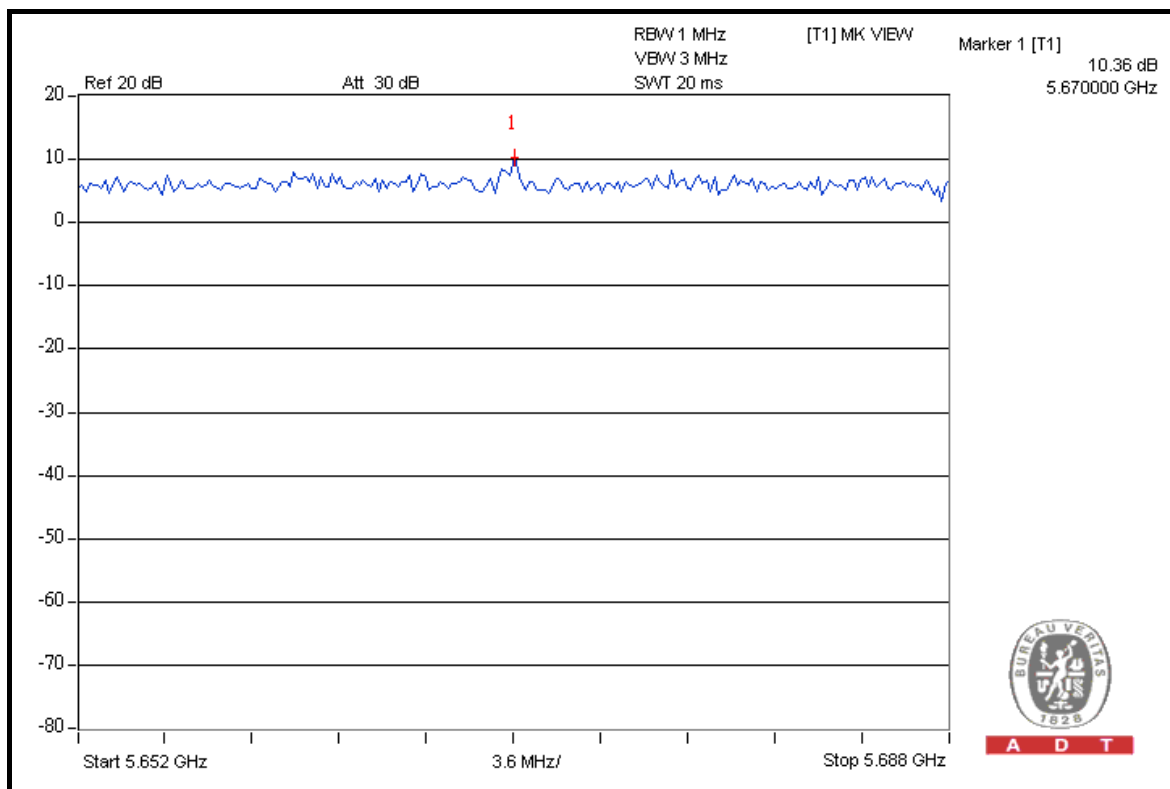
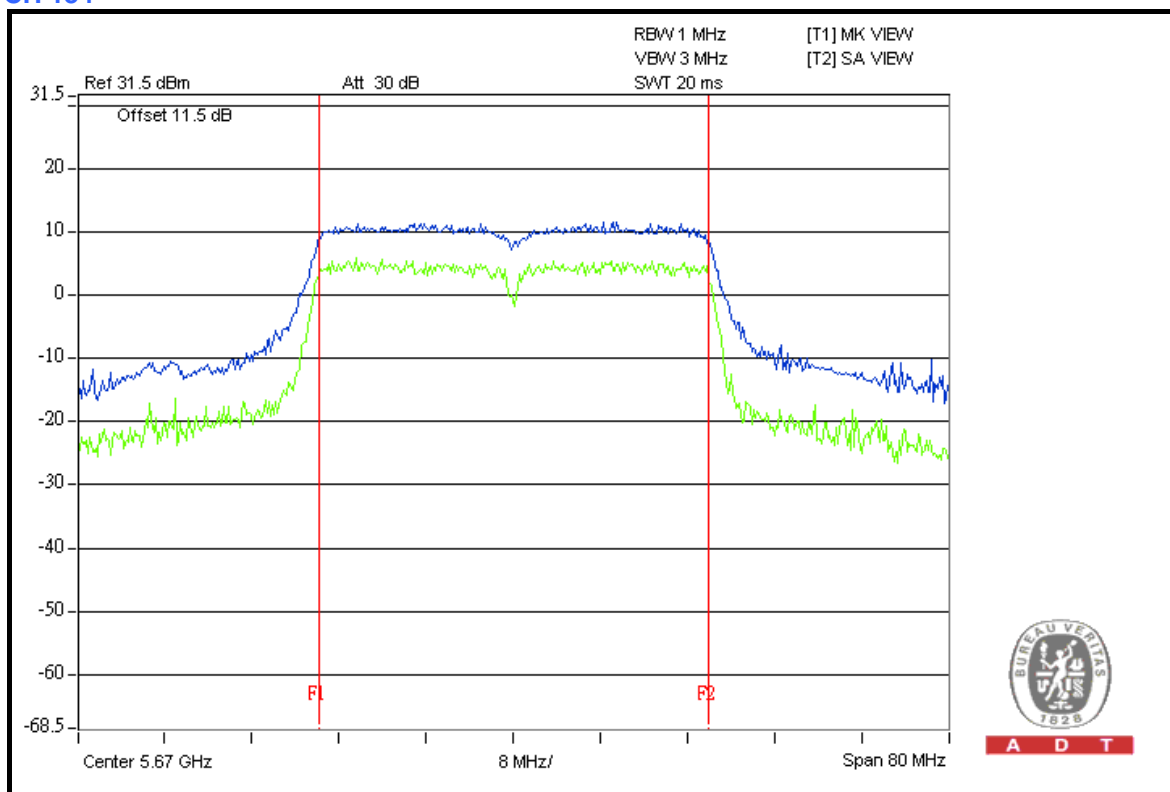


A D T



A D T

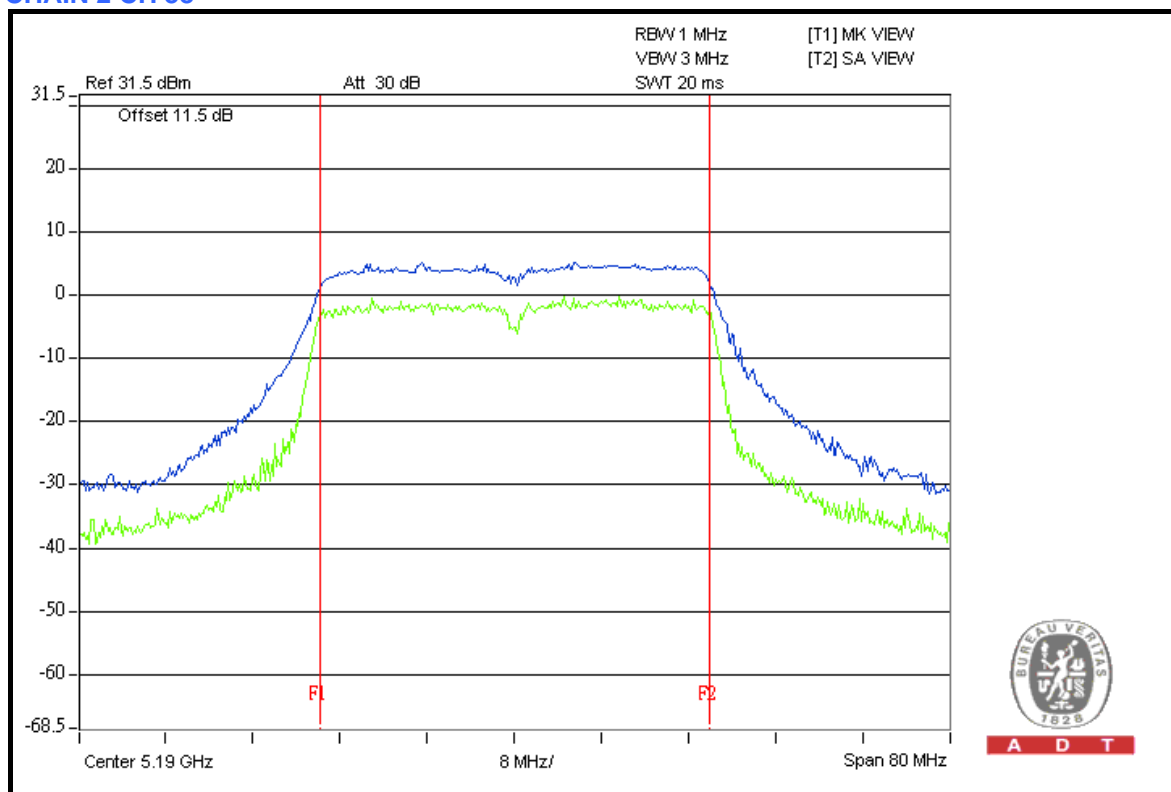
### CH 134



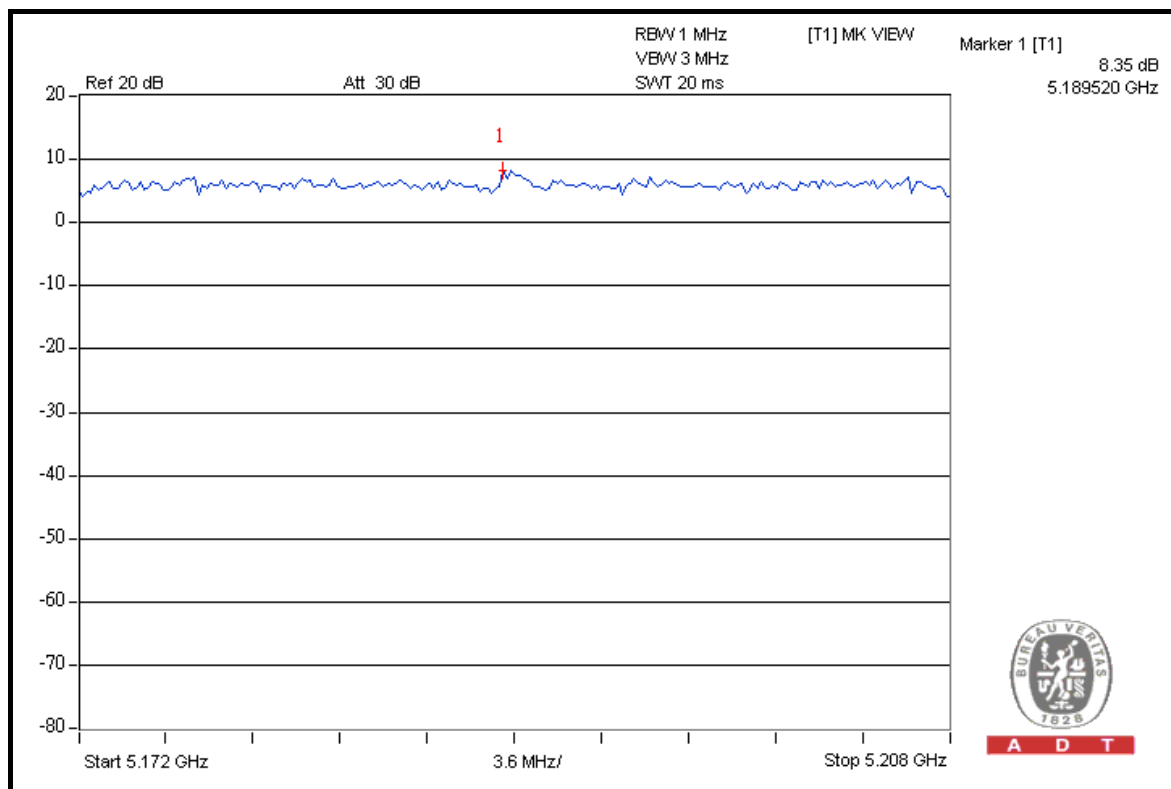


A D T

### CHAIN 2 CH 38



A D T



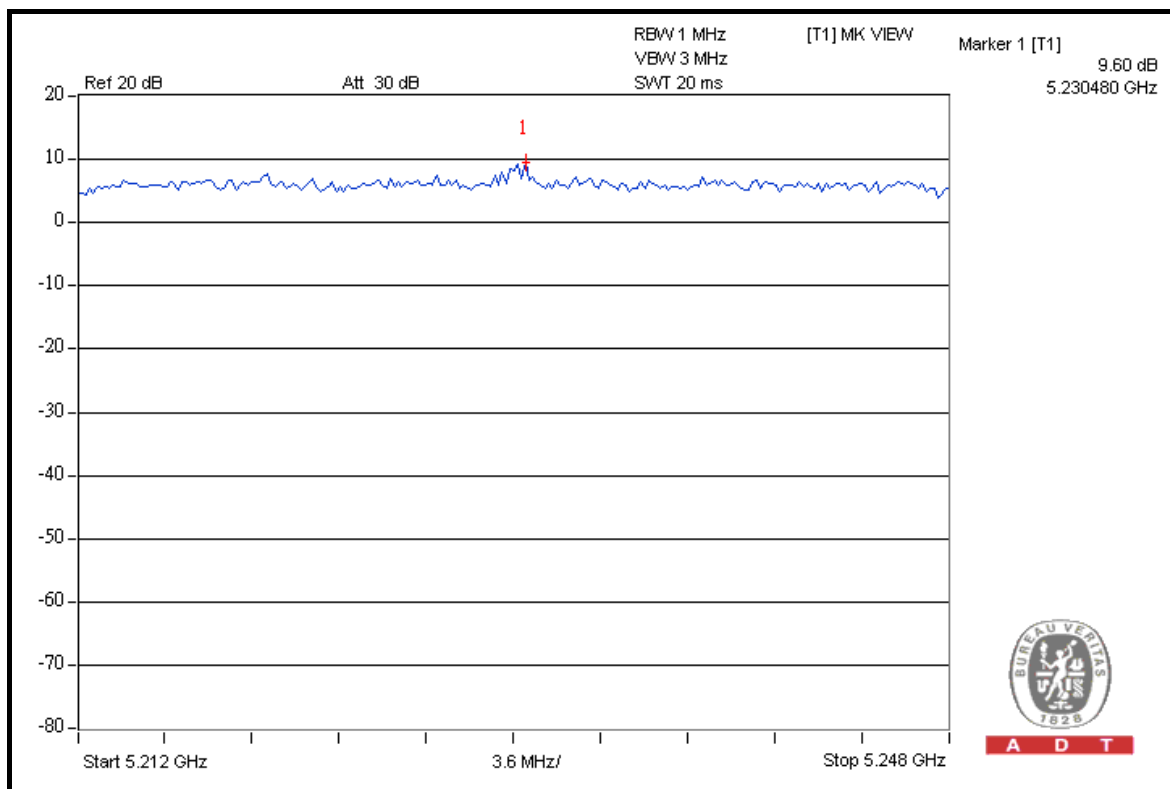
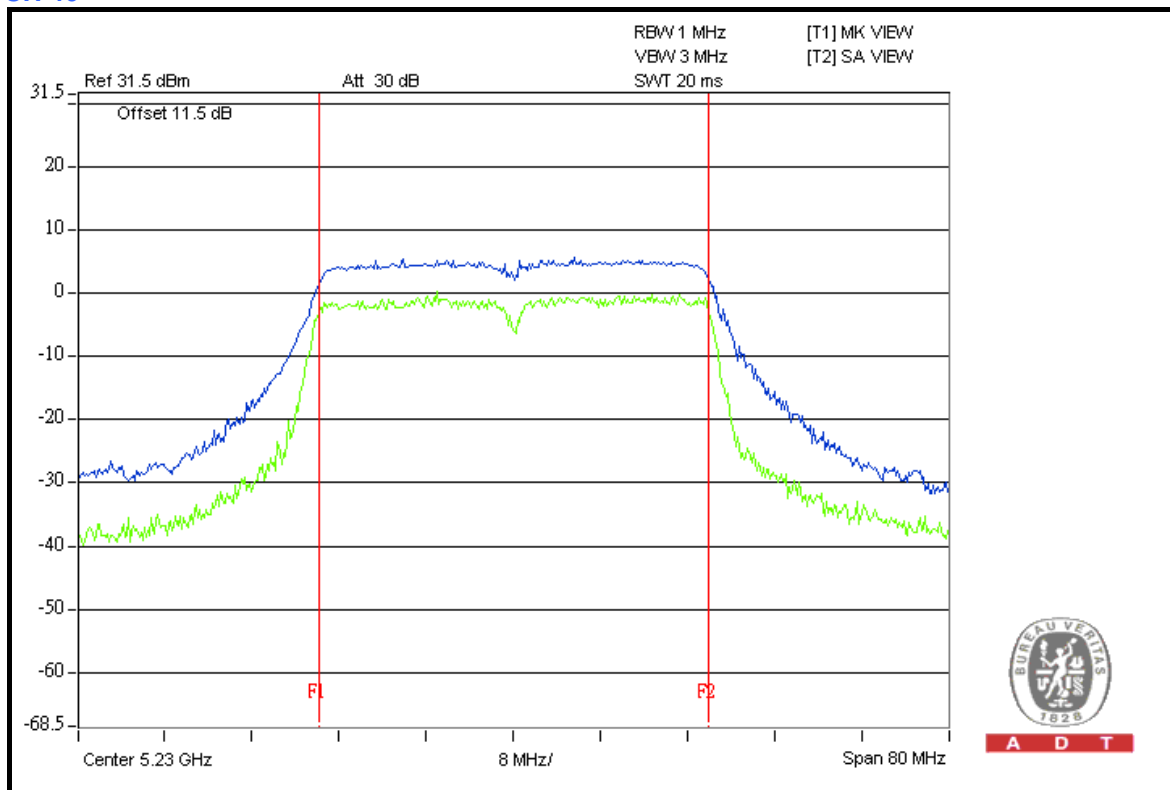
A D T





A D T

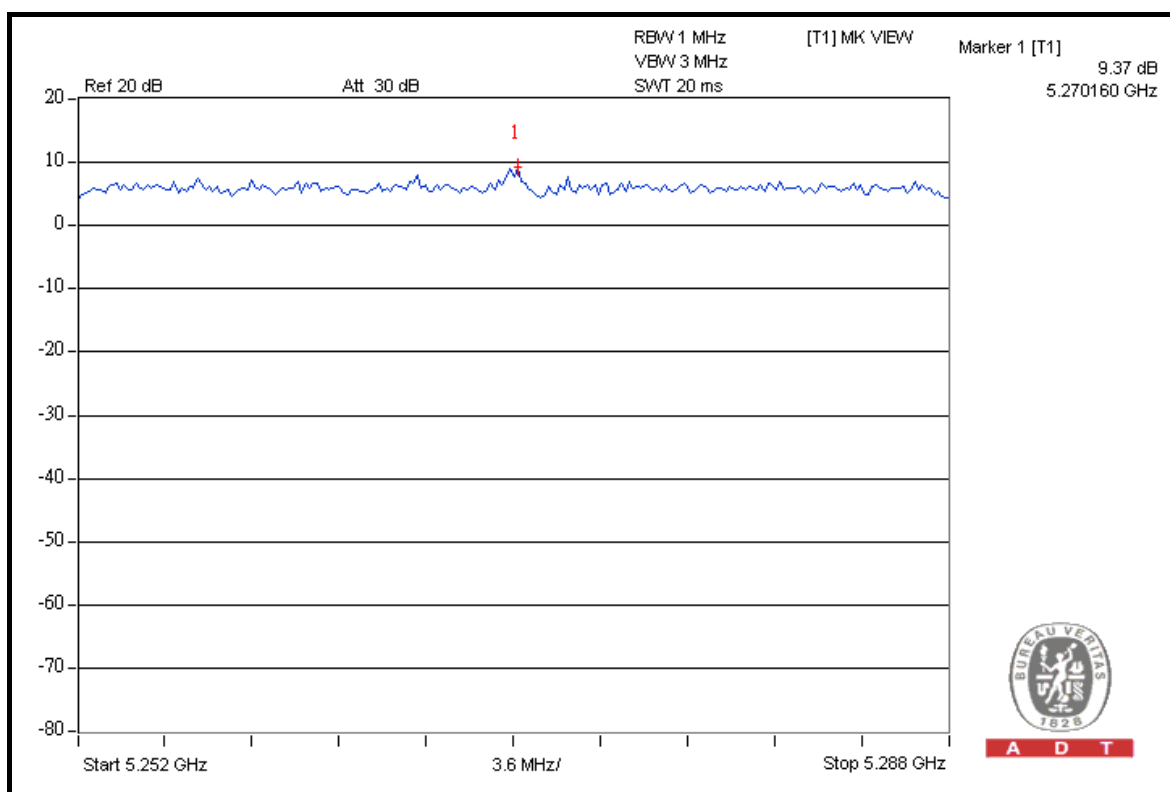
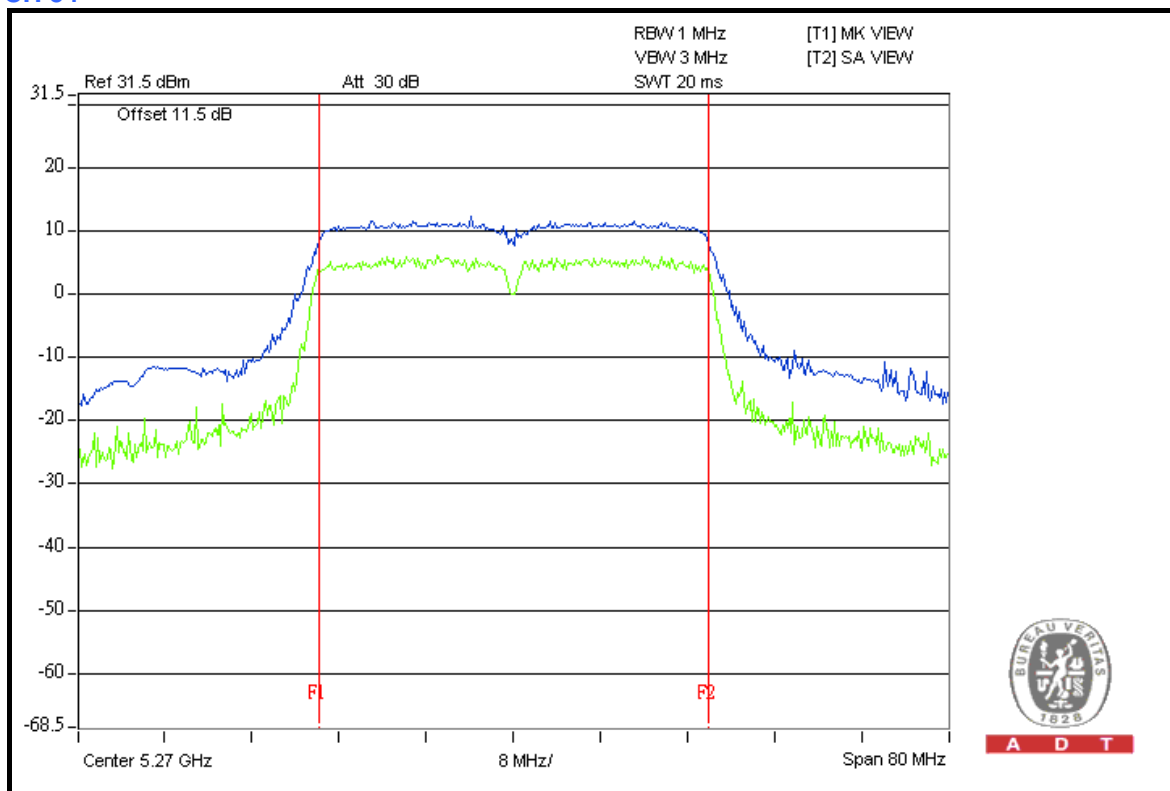
### CH 46





A D T

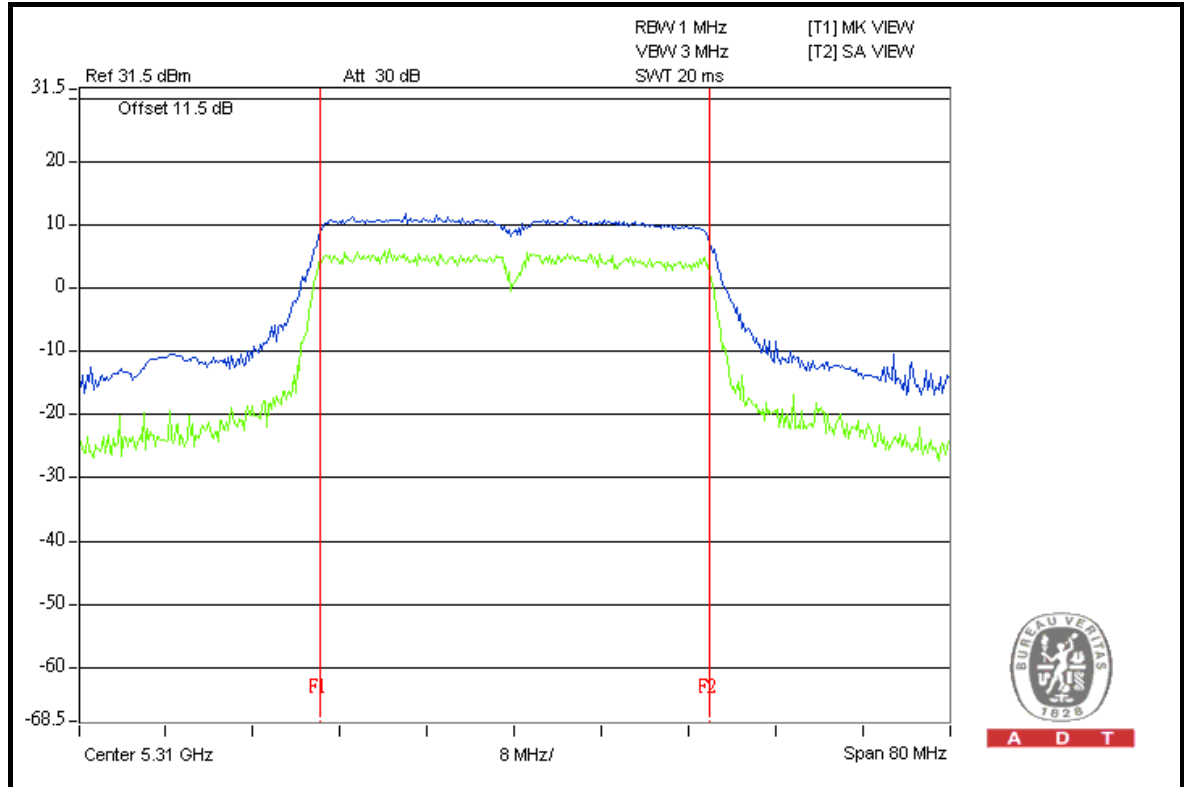
### CH 54



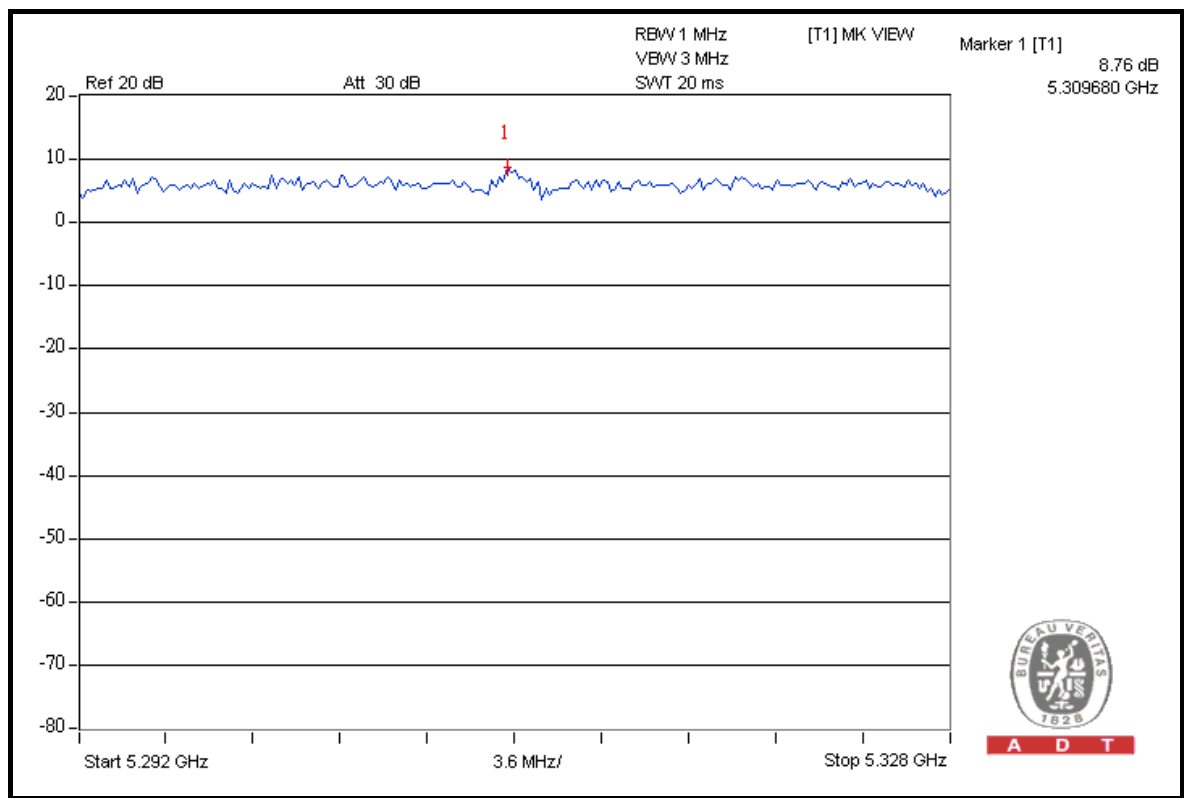


A D T

CH 62



A D T

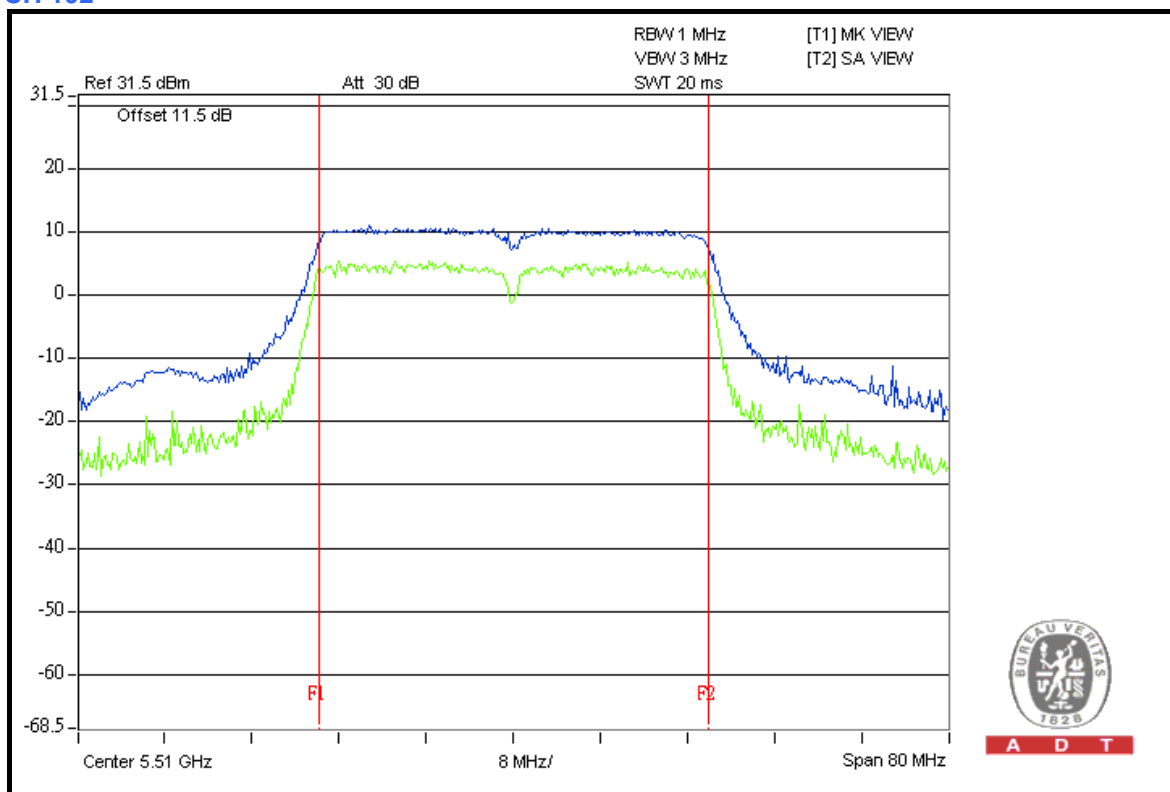


A D T

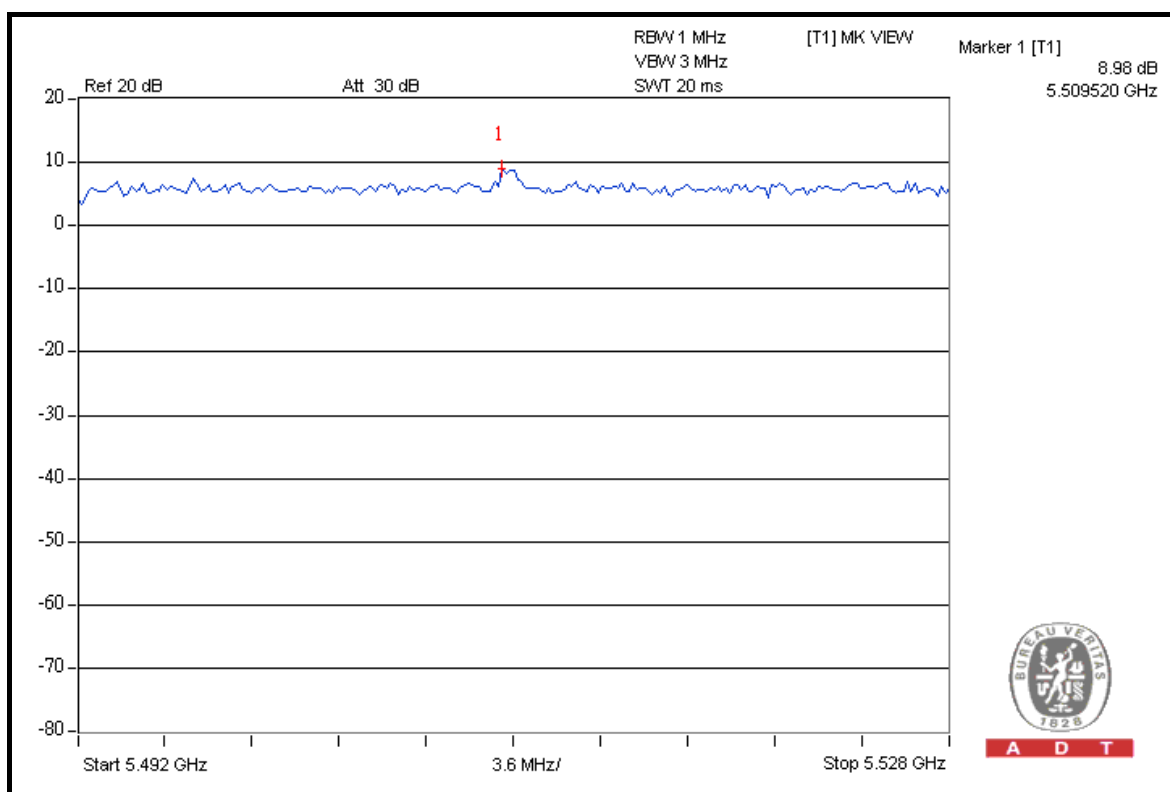


A D T

### CH 102



A D T

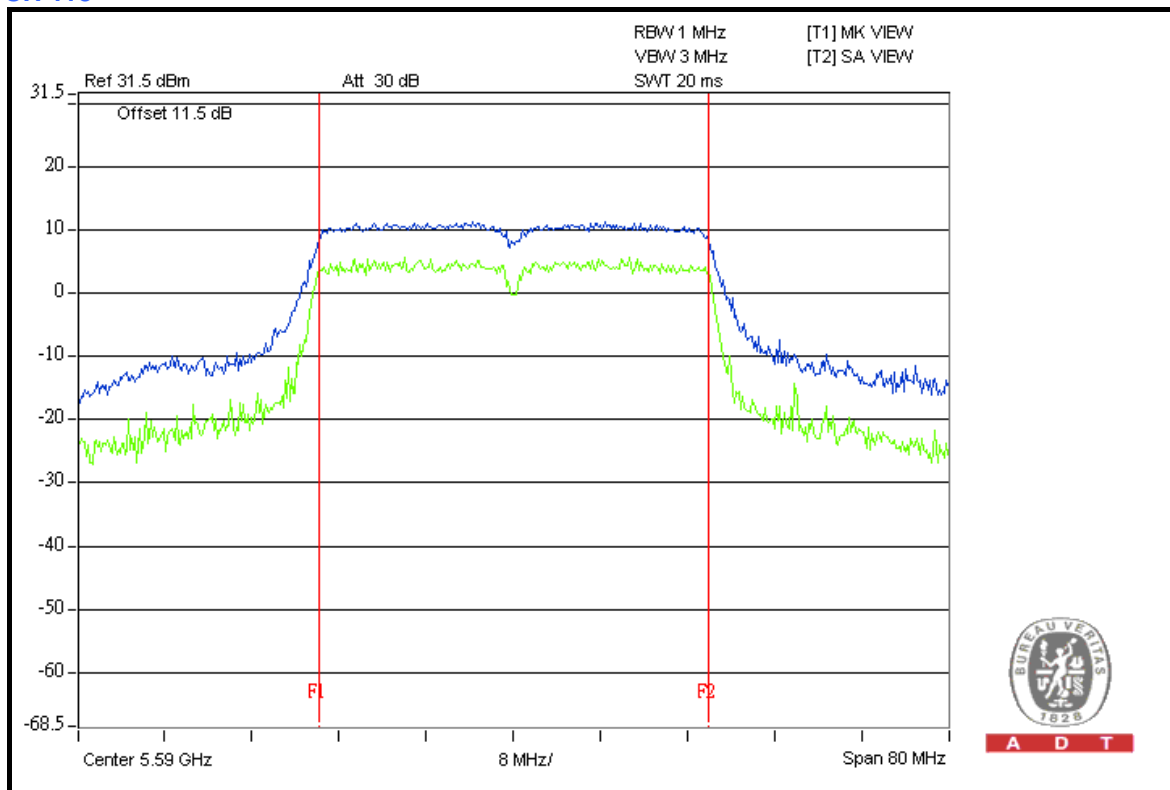


A D T

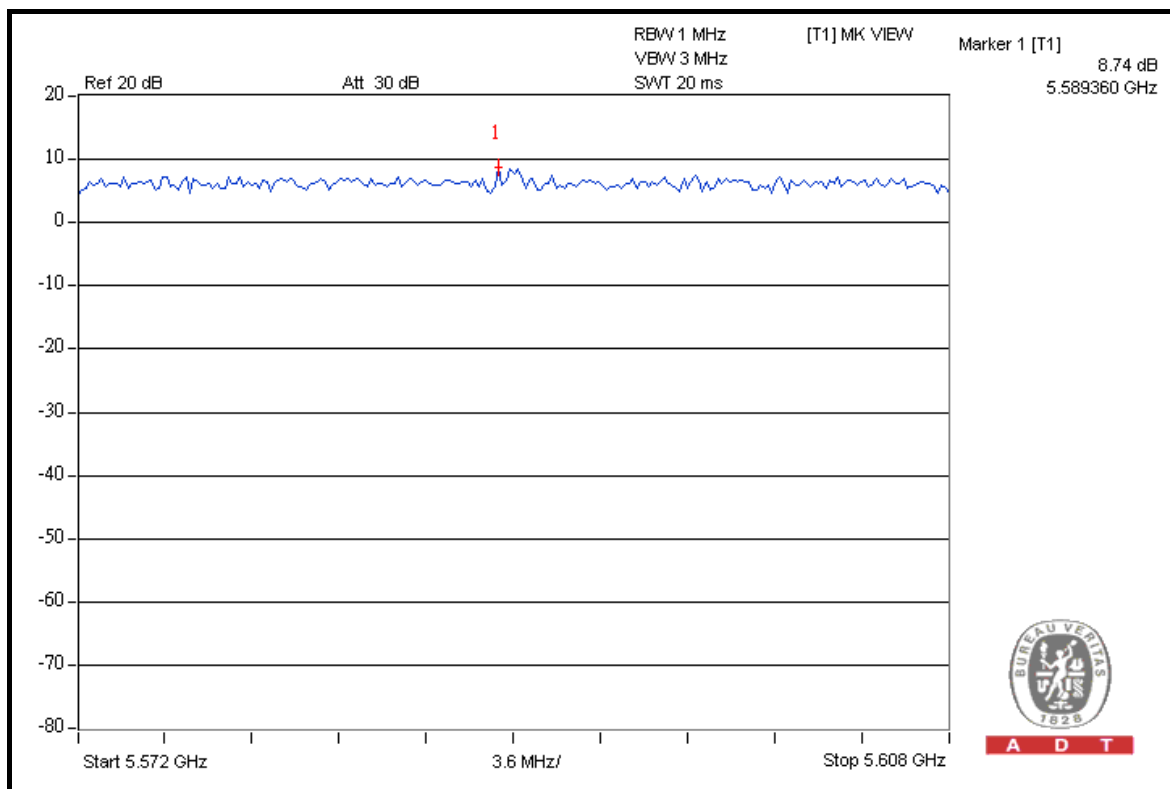


A D T

### CH 118



A D T

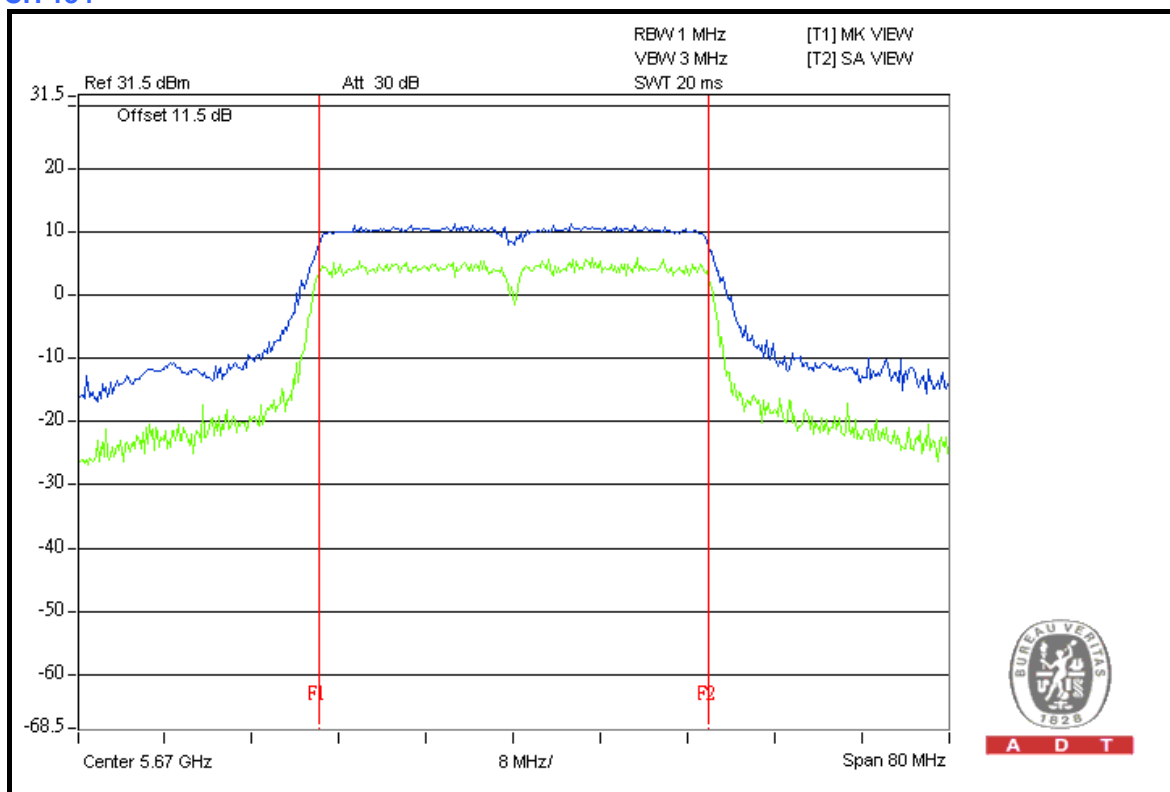


A D T

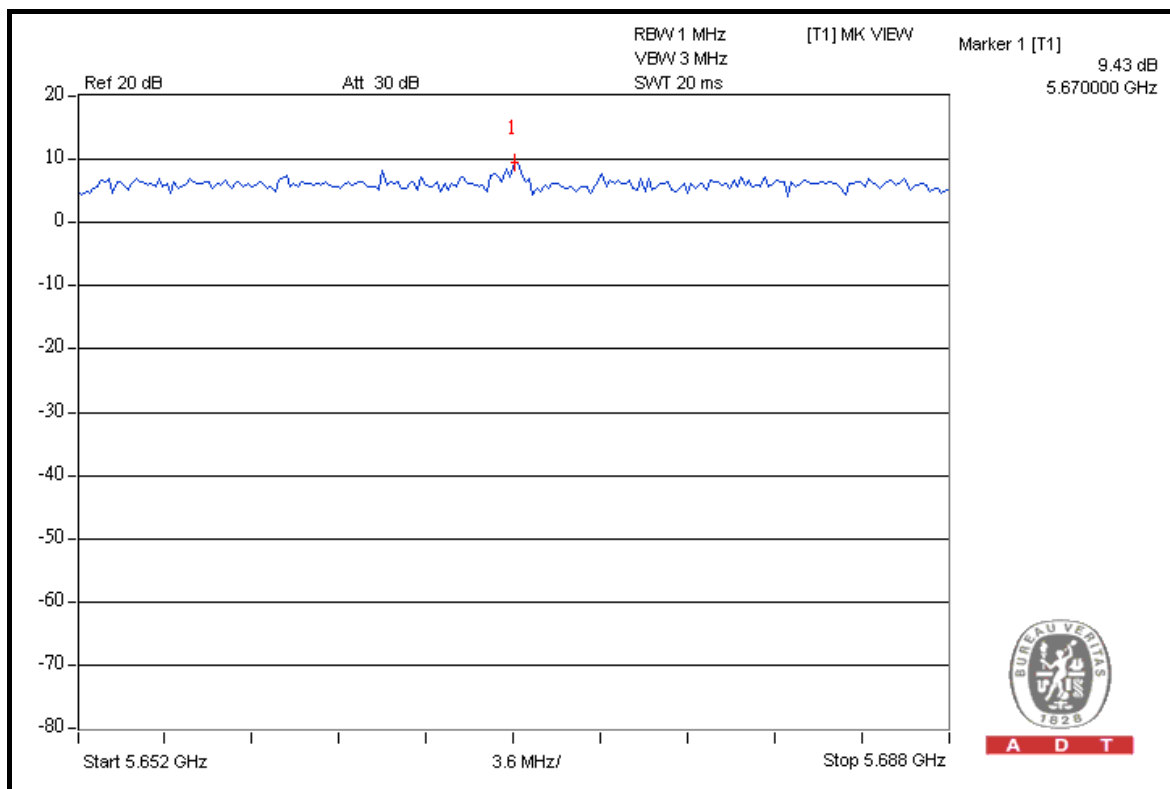


A D T

### CH 134



A D T



A D T



A D T

**DRAFT 802.11n (40MHz) OFDM MODULATION**

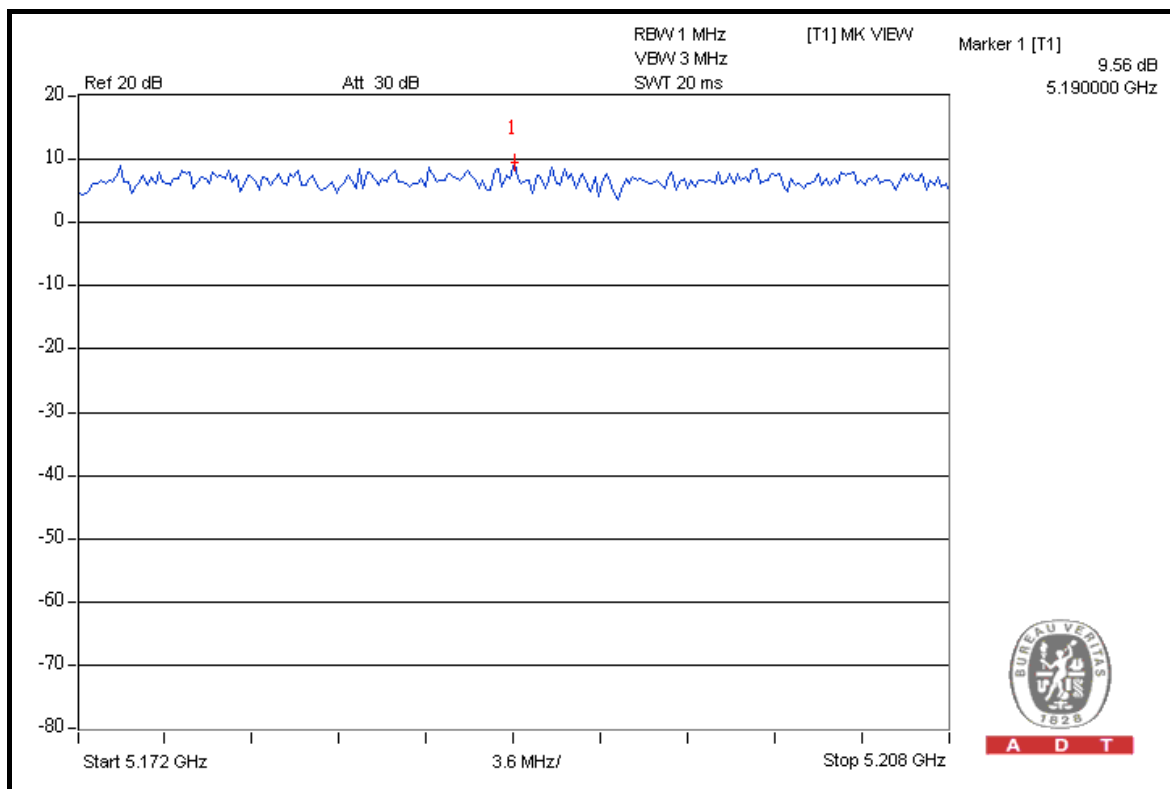
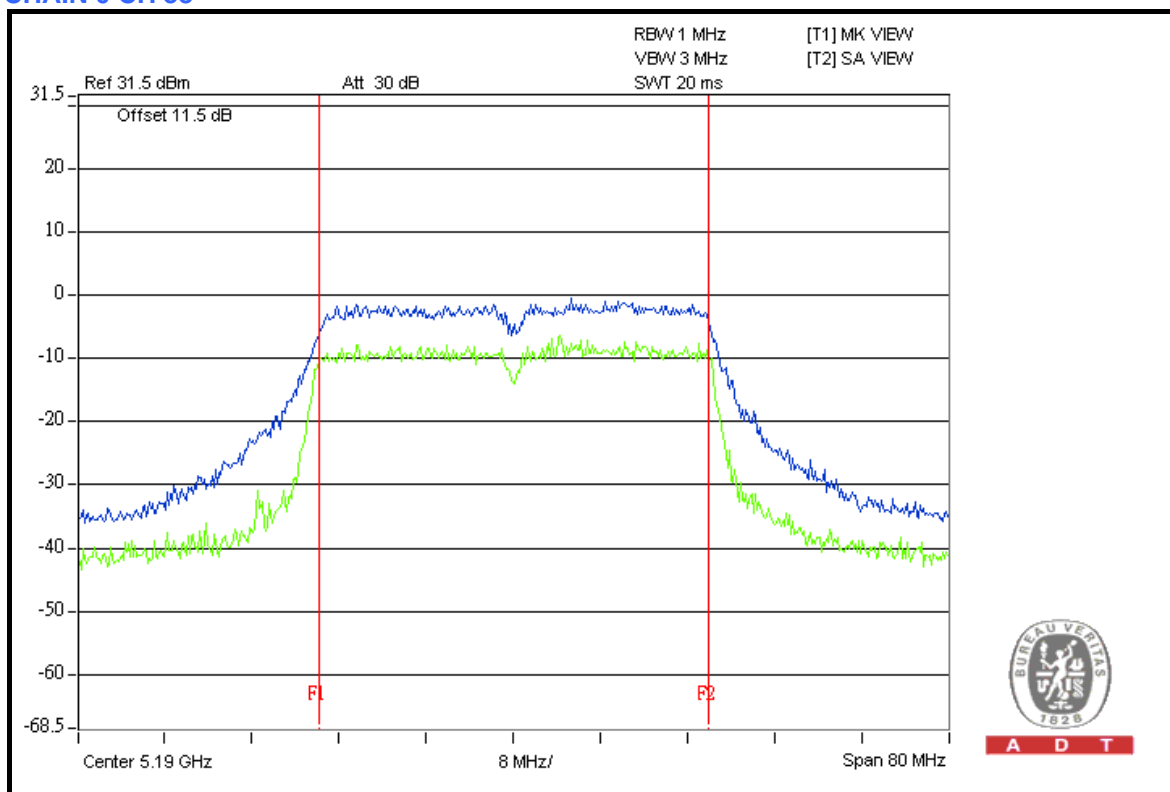
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	13.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
38	5190	9.56	9.06	13	PASS
46	5230	8.91	10.26	13	PASS
54	5270	8.23	7.63	13	PASS
62	5310	9.09	9.08	13	PASS
102	5510	10.22	9.70	13	PASS
118	5590	9.25	8.21	13	PASS
134	5670	10.48	10.32	13	PASS



A D T

### CHAIN 0 CH 38

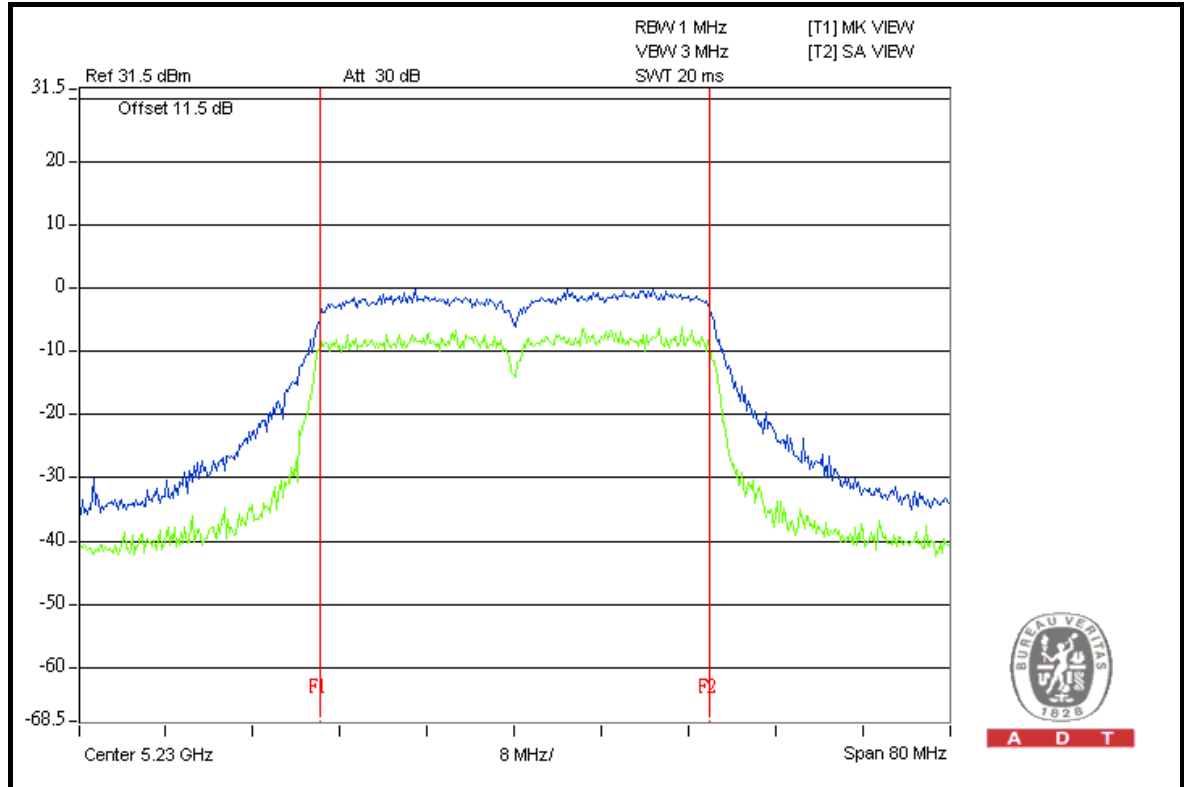




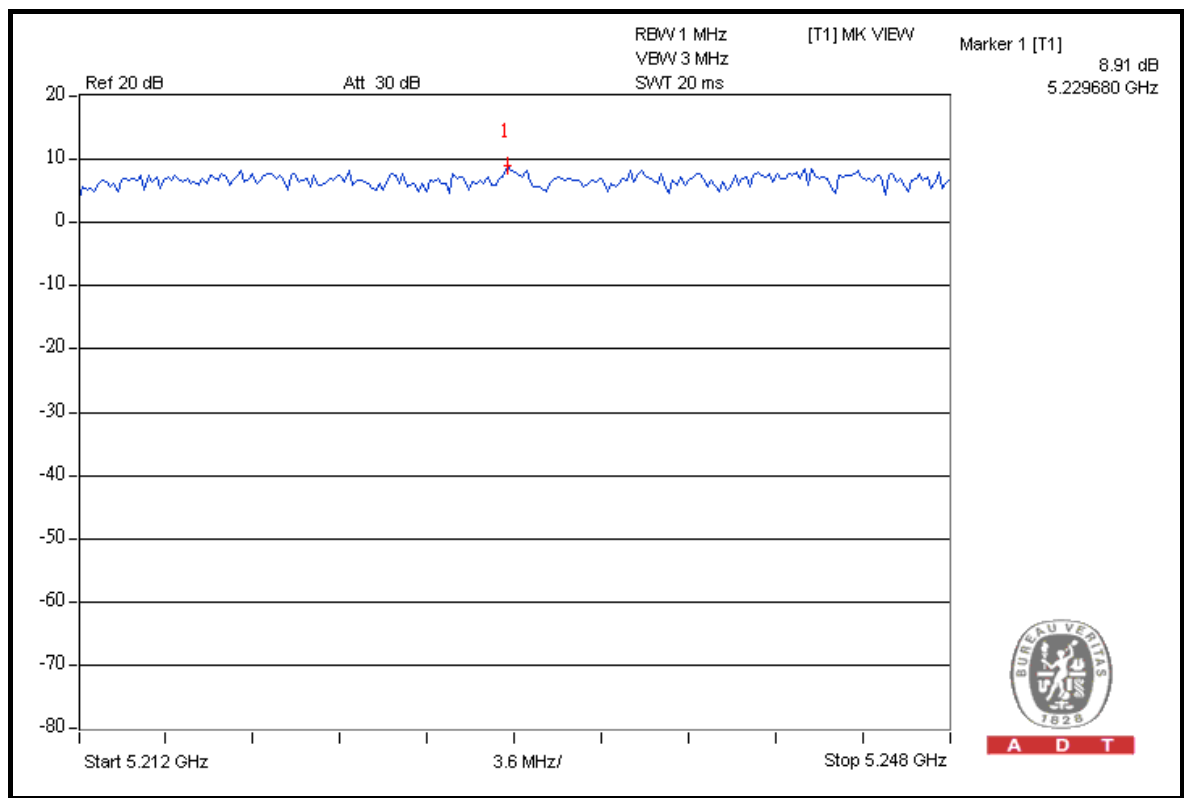


A D T

CH 46



A D T

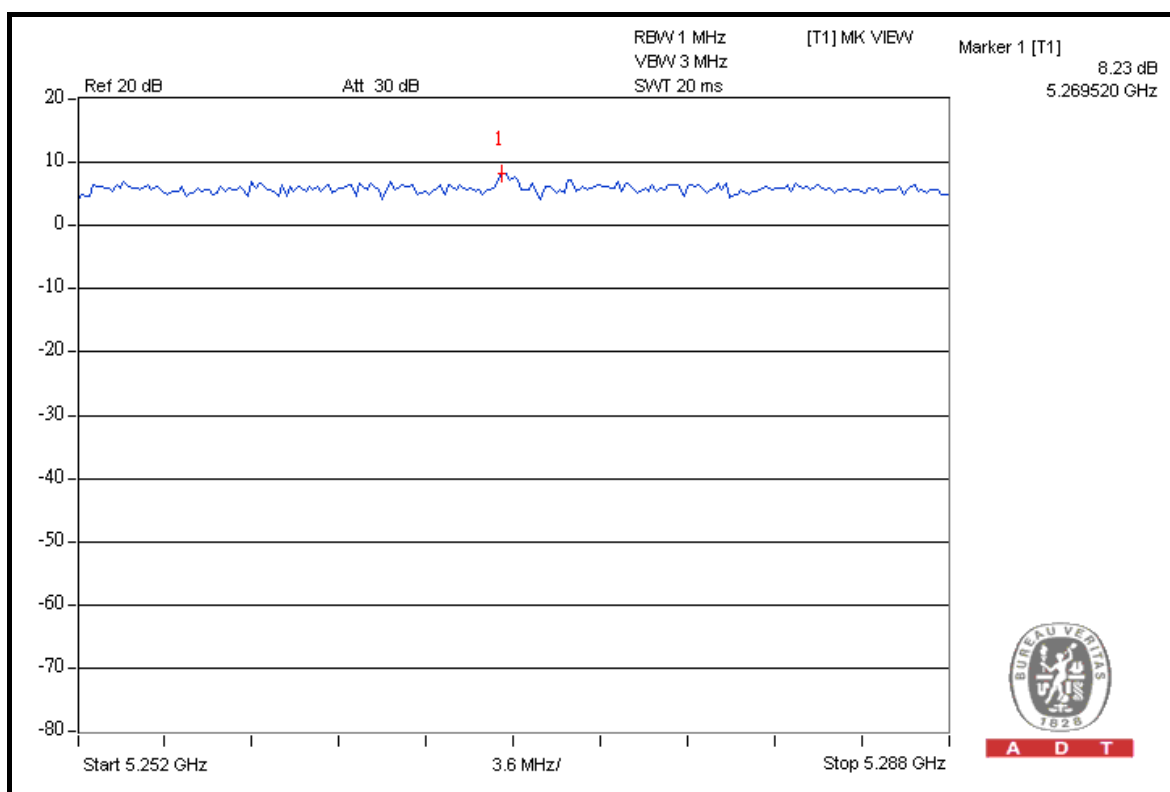
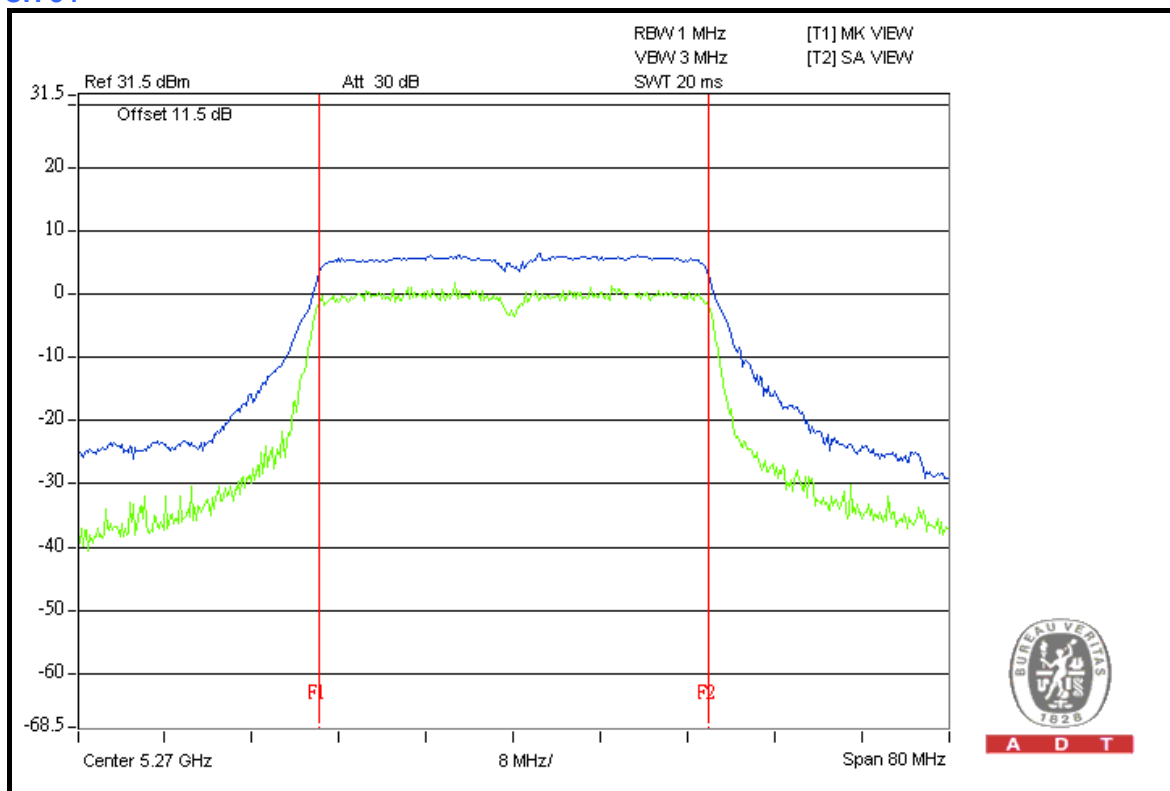


A D T



A D T

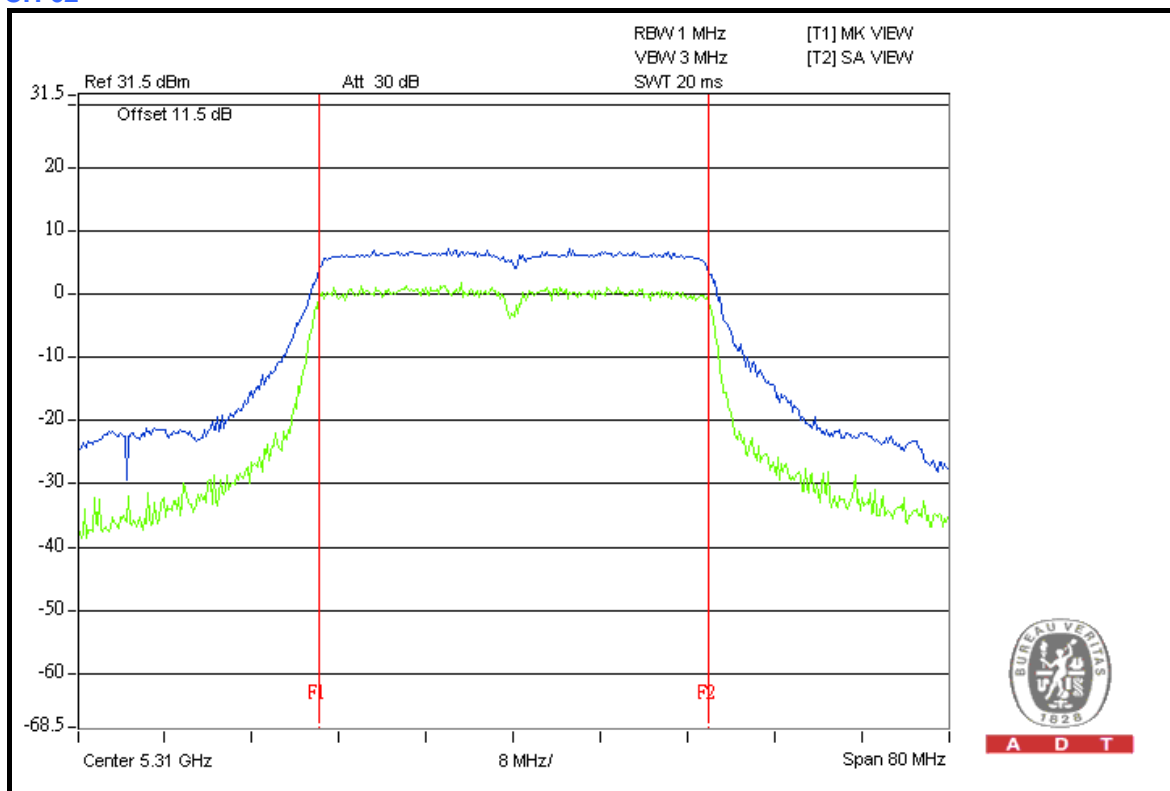
### CH 54



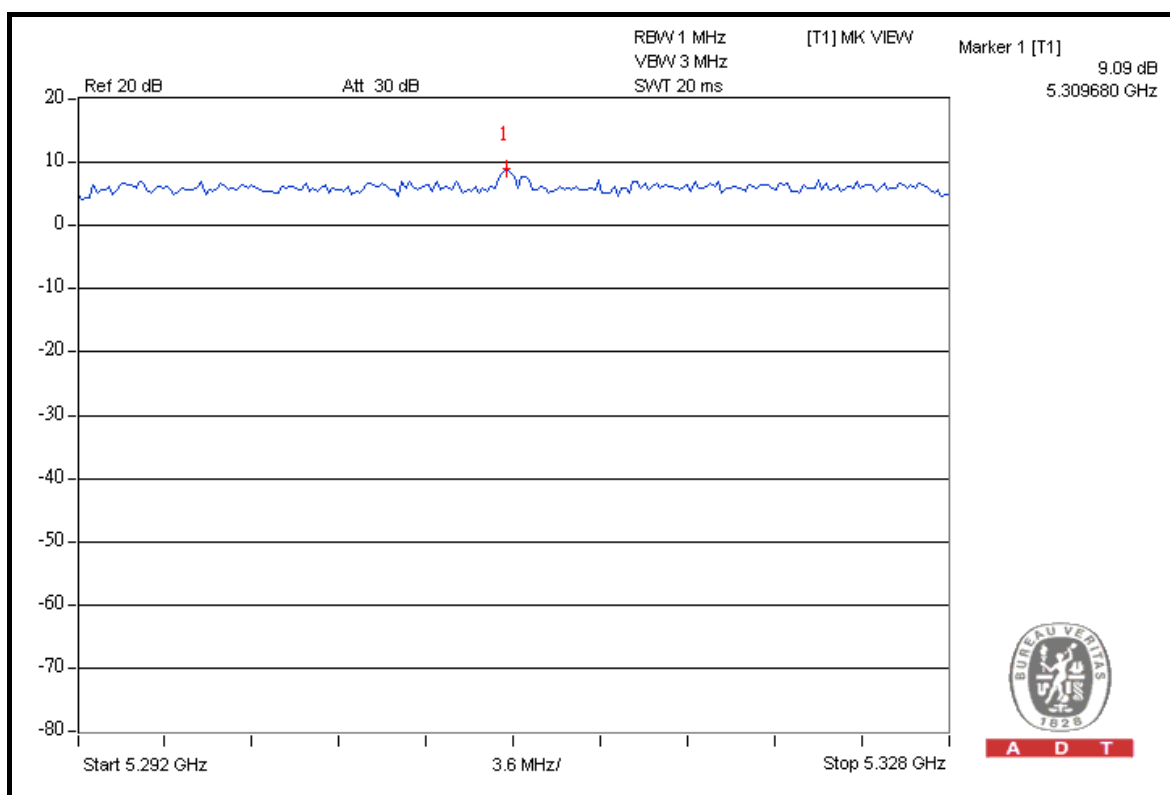


A D T

### CH 62



A D T

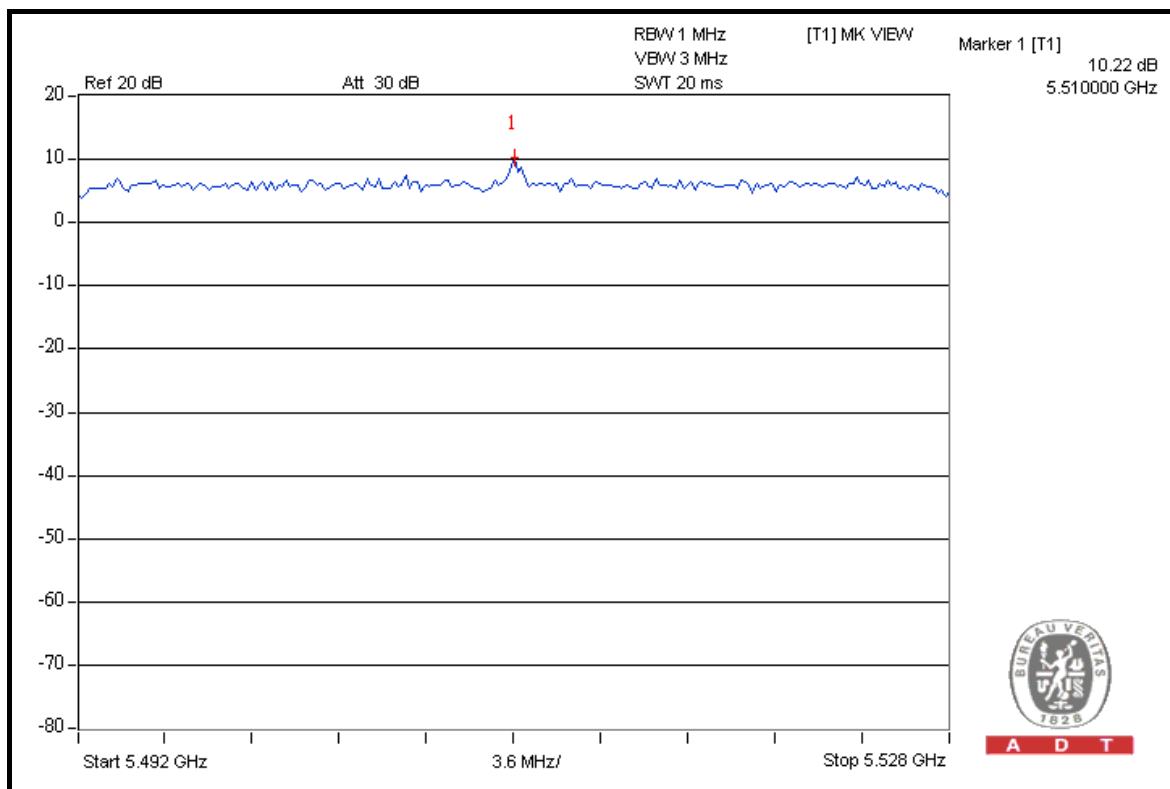
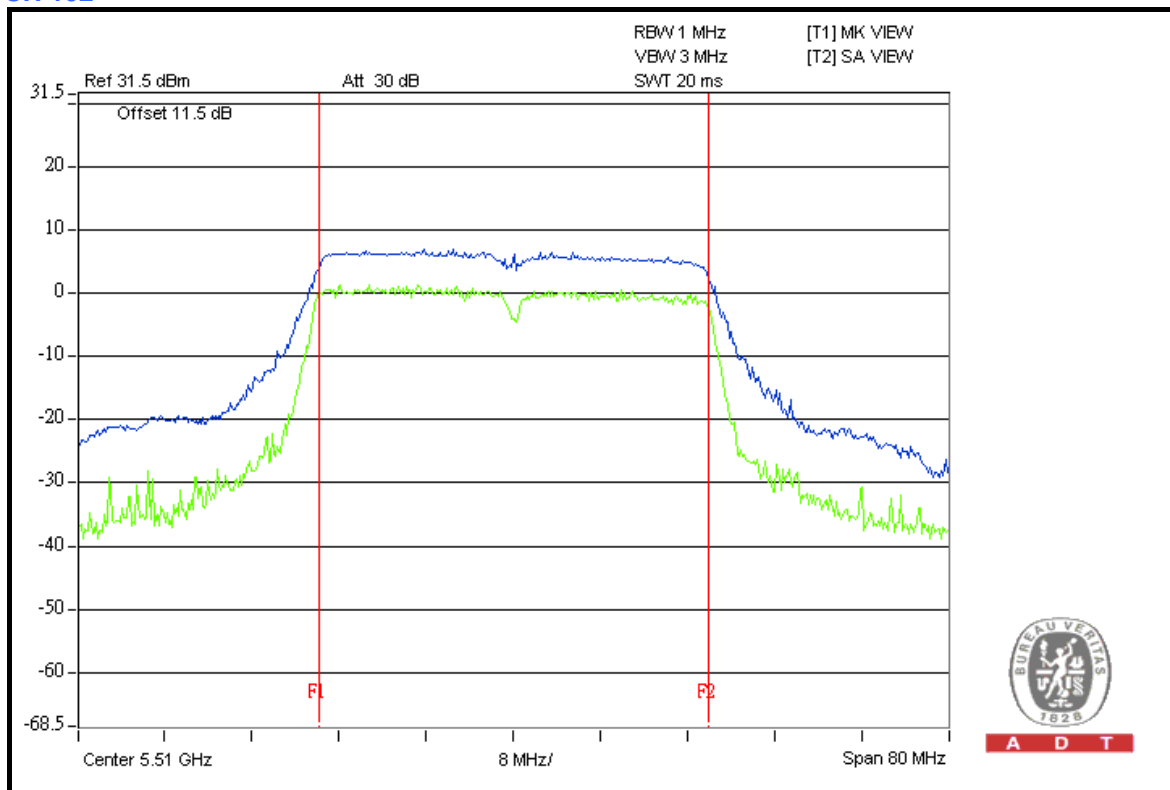


A D T



A D T

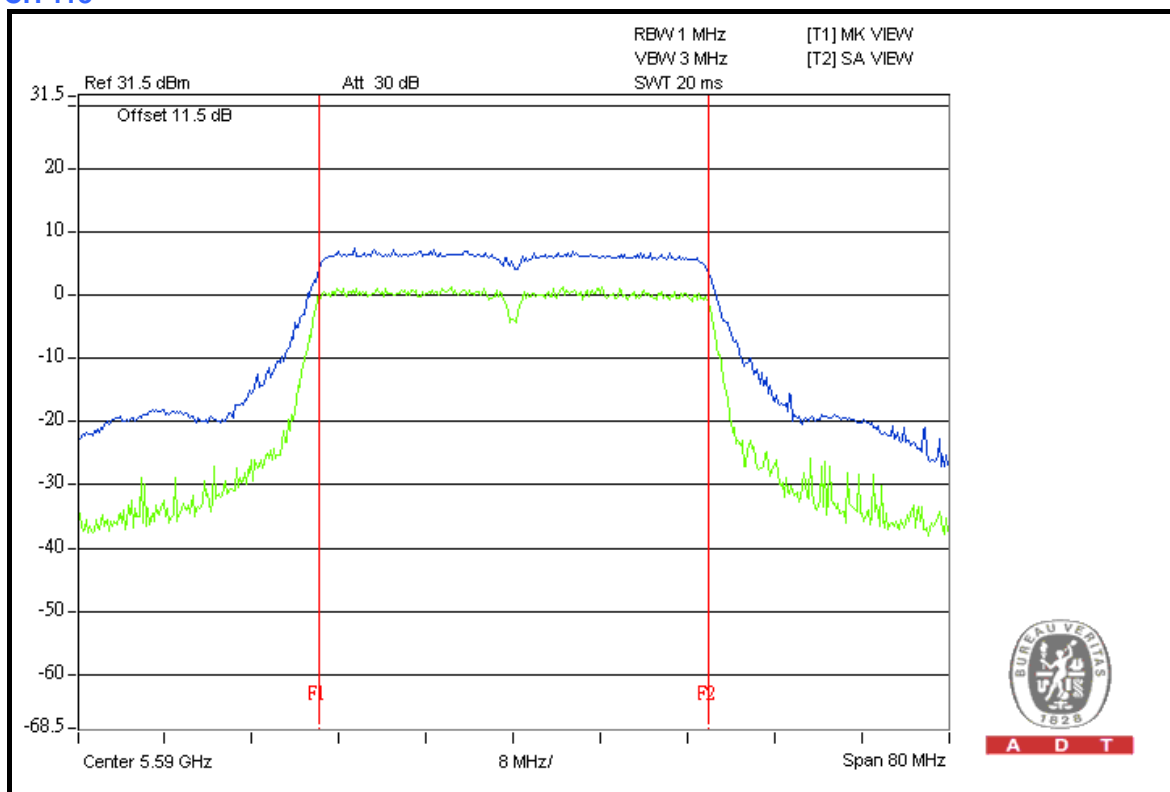
### CH 102



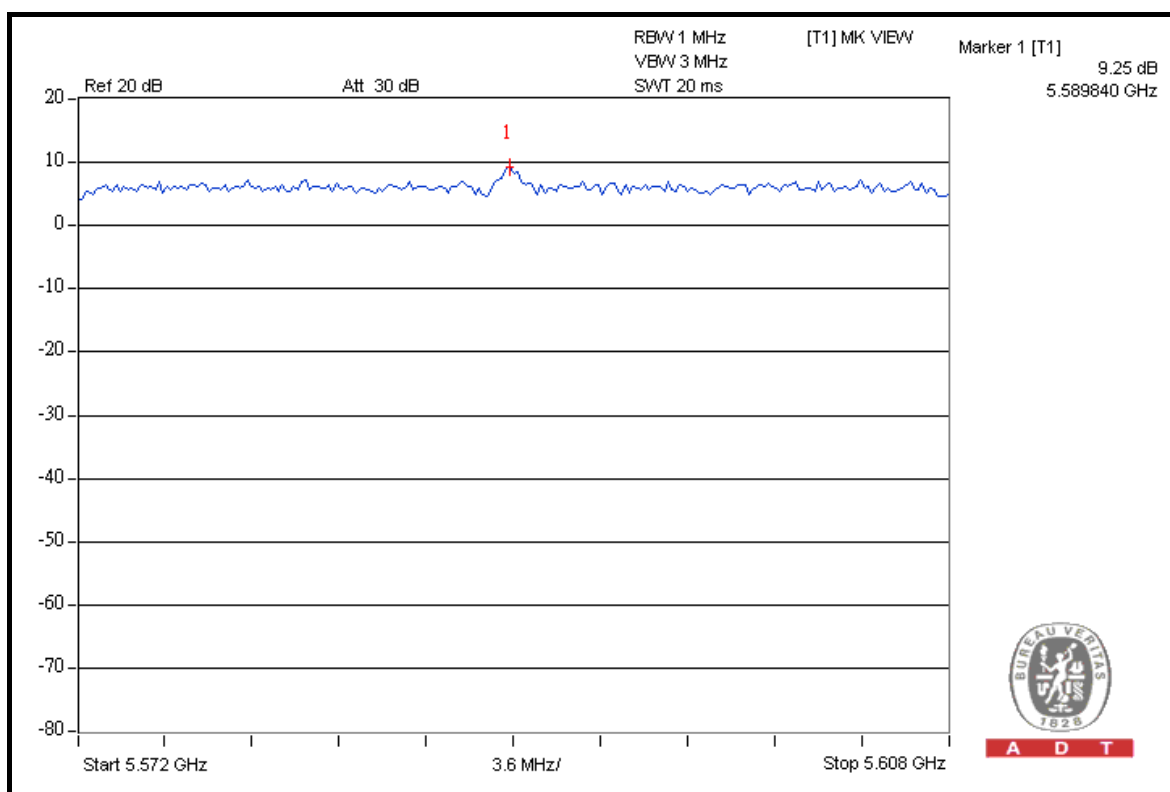


A D T

### CH 118



A D T

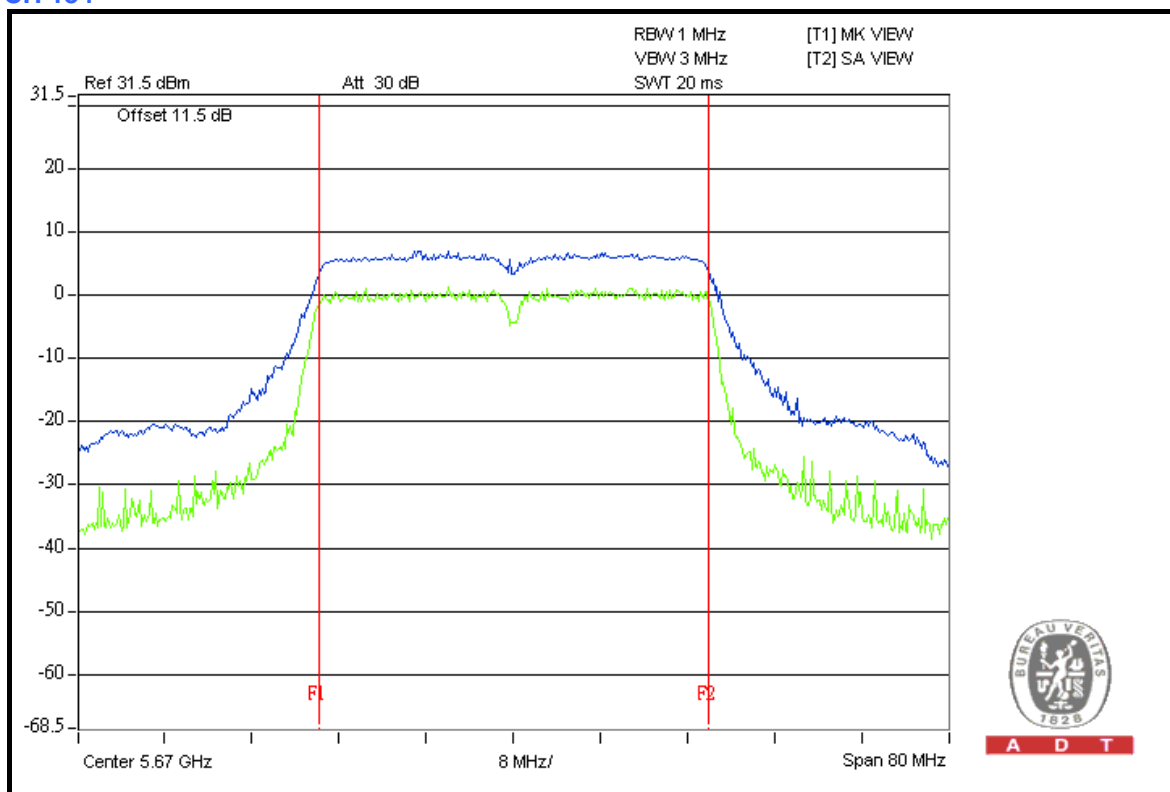


A D T

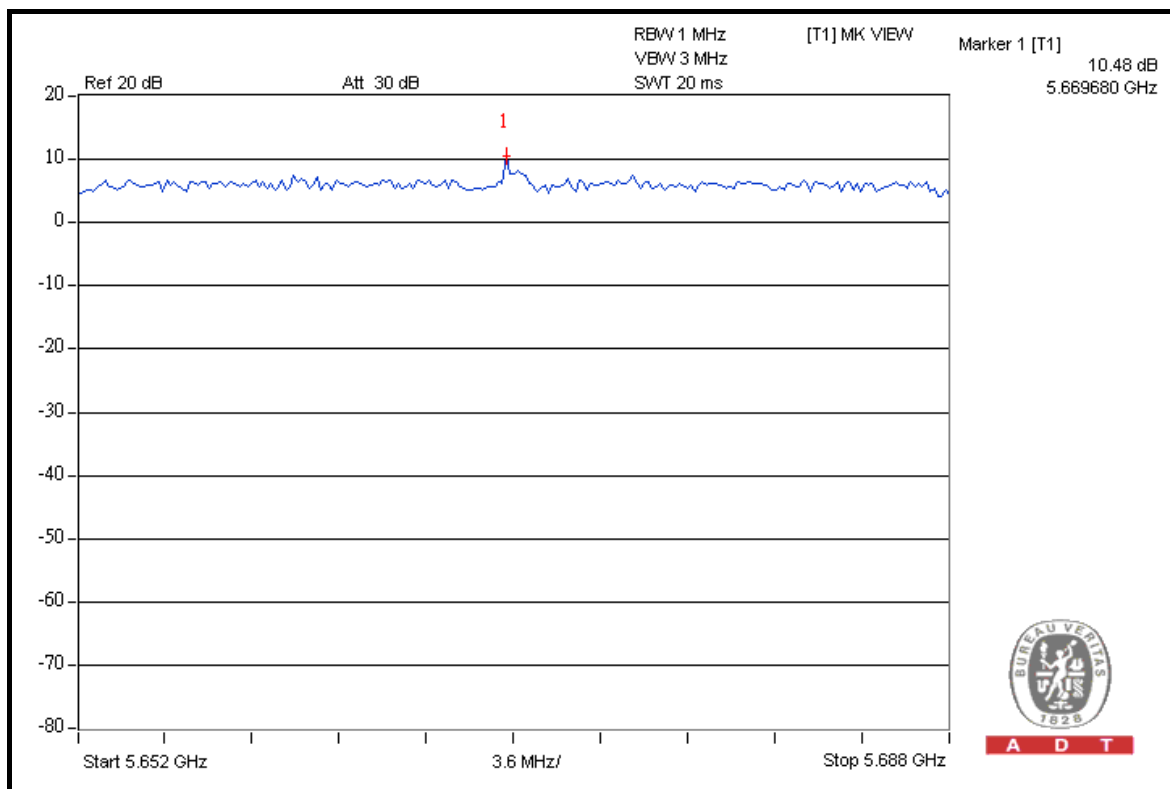


A D T

### CH 134



A D T

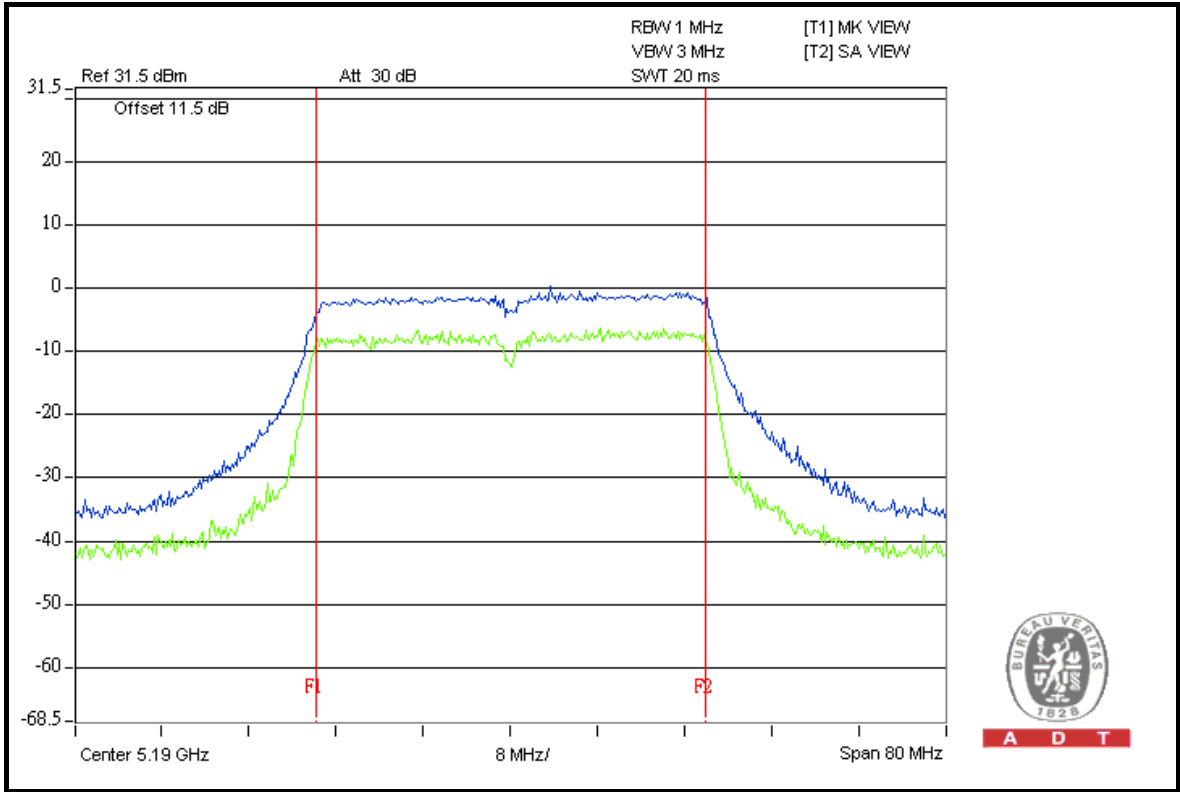


A D T

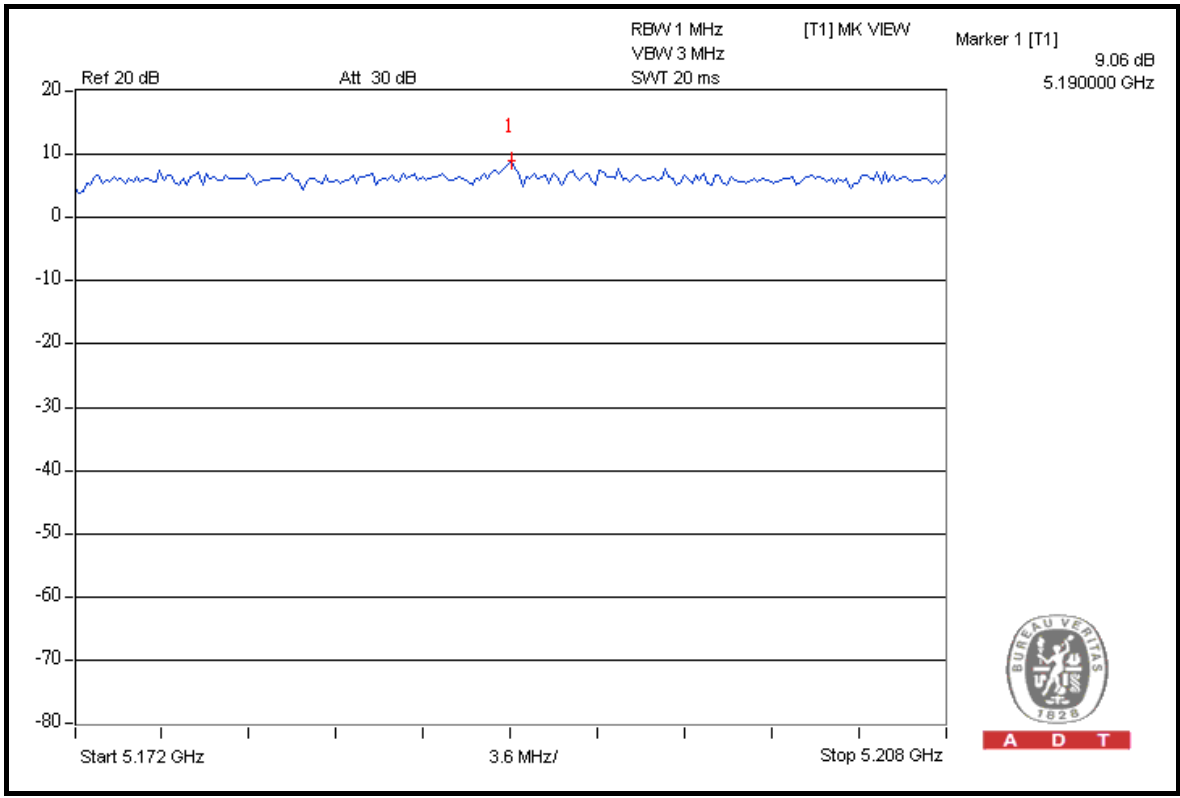


A D T

CHAIN 1 CH 38



A D T

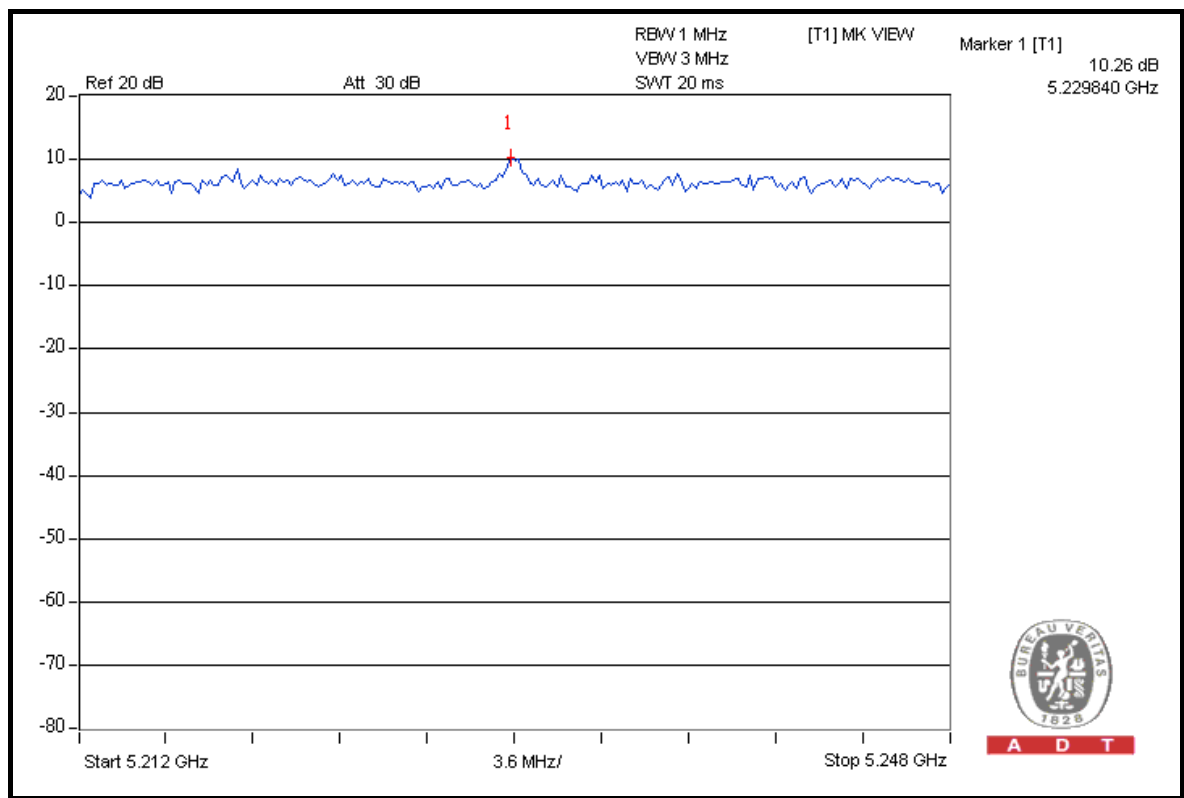
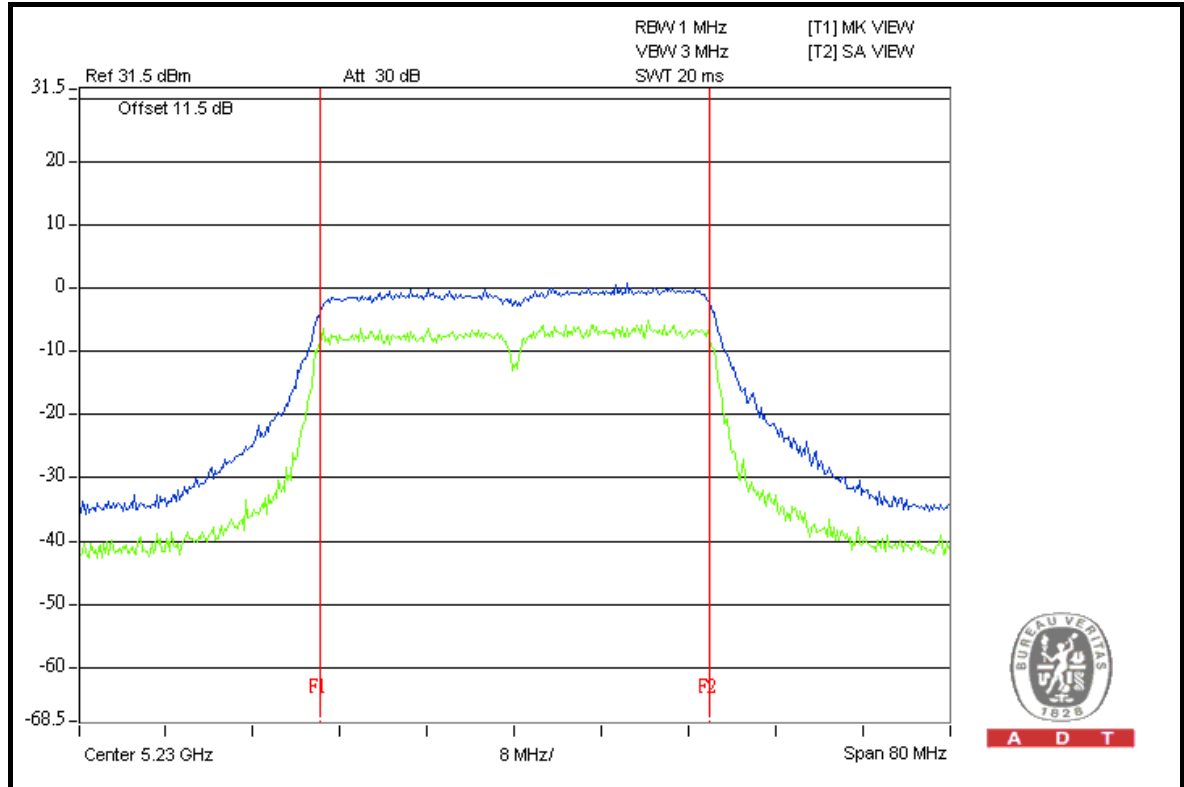


A D T



A D T

CH 46

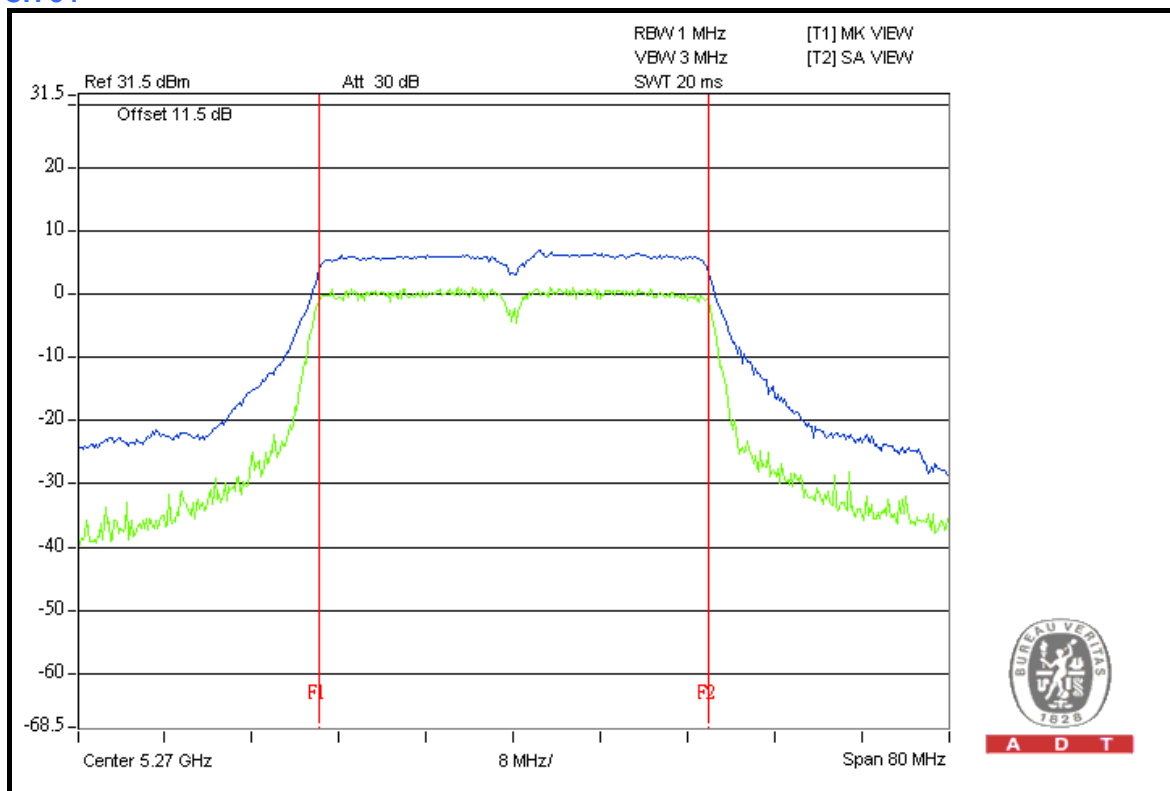




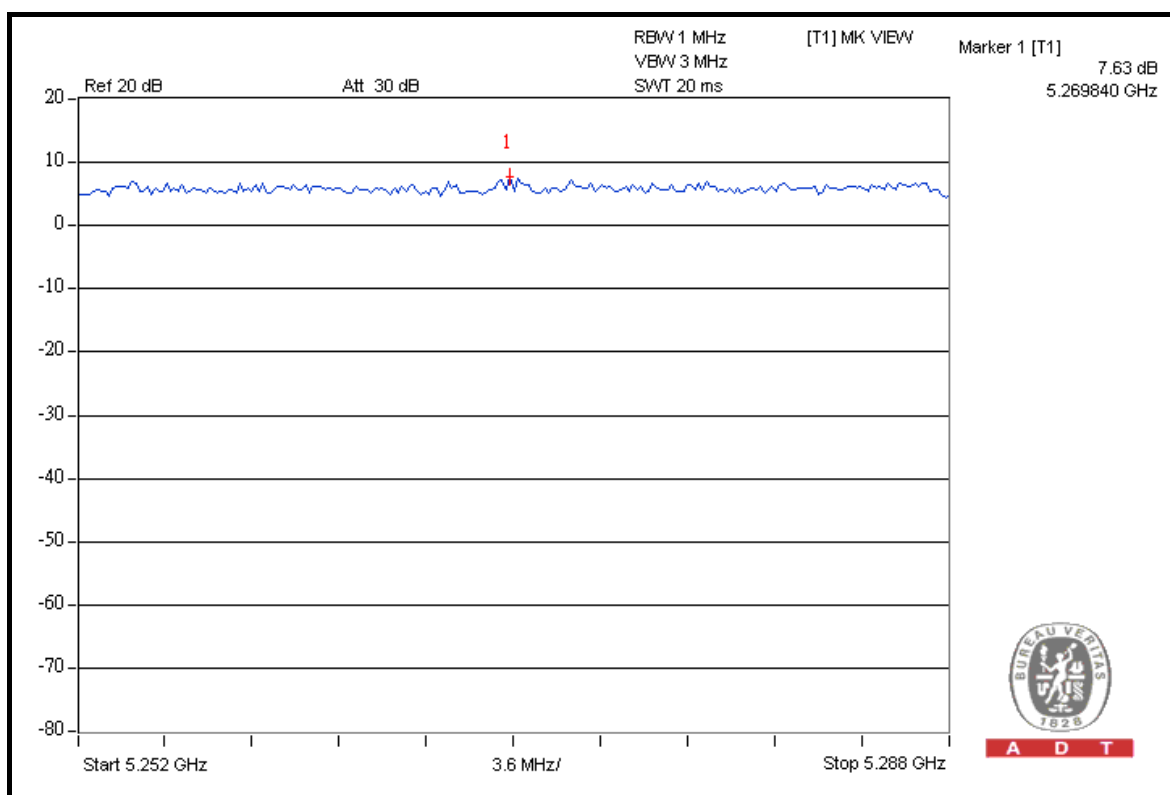


A D T

### CH 54



A D T

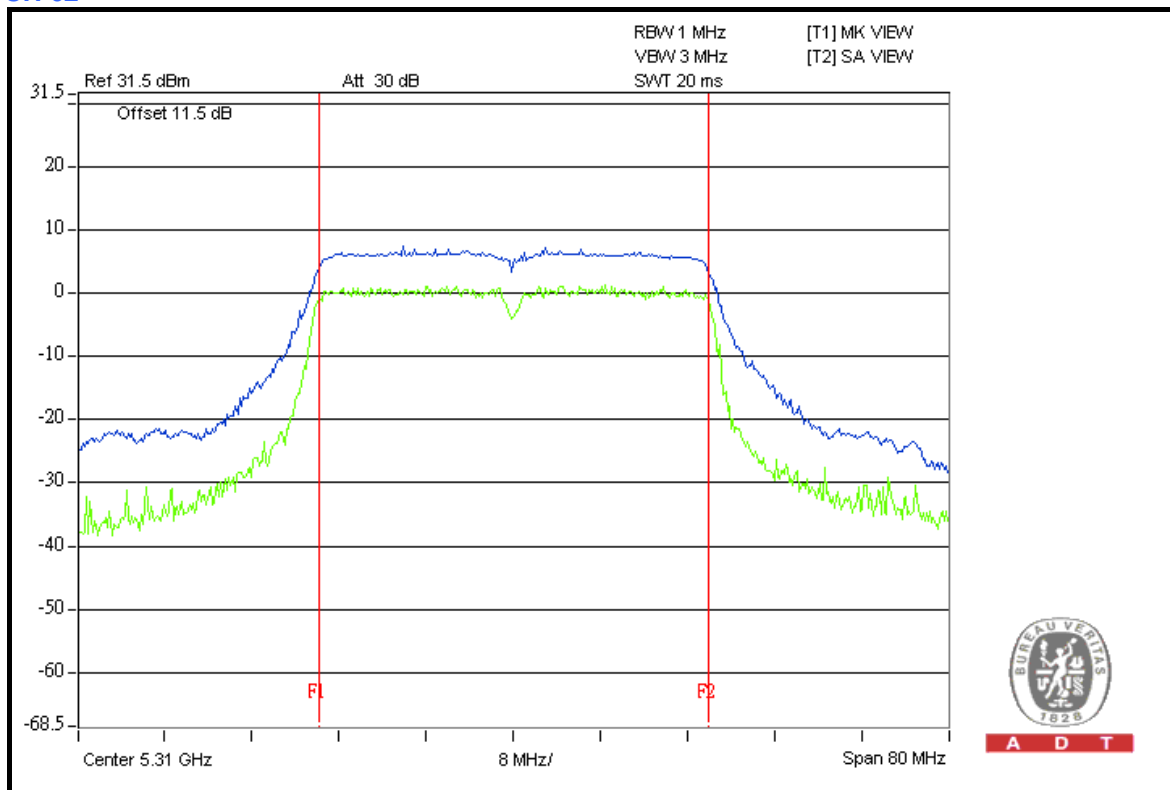


A D T

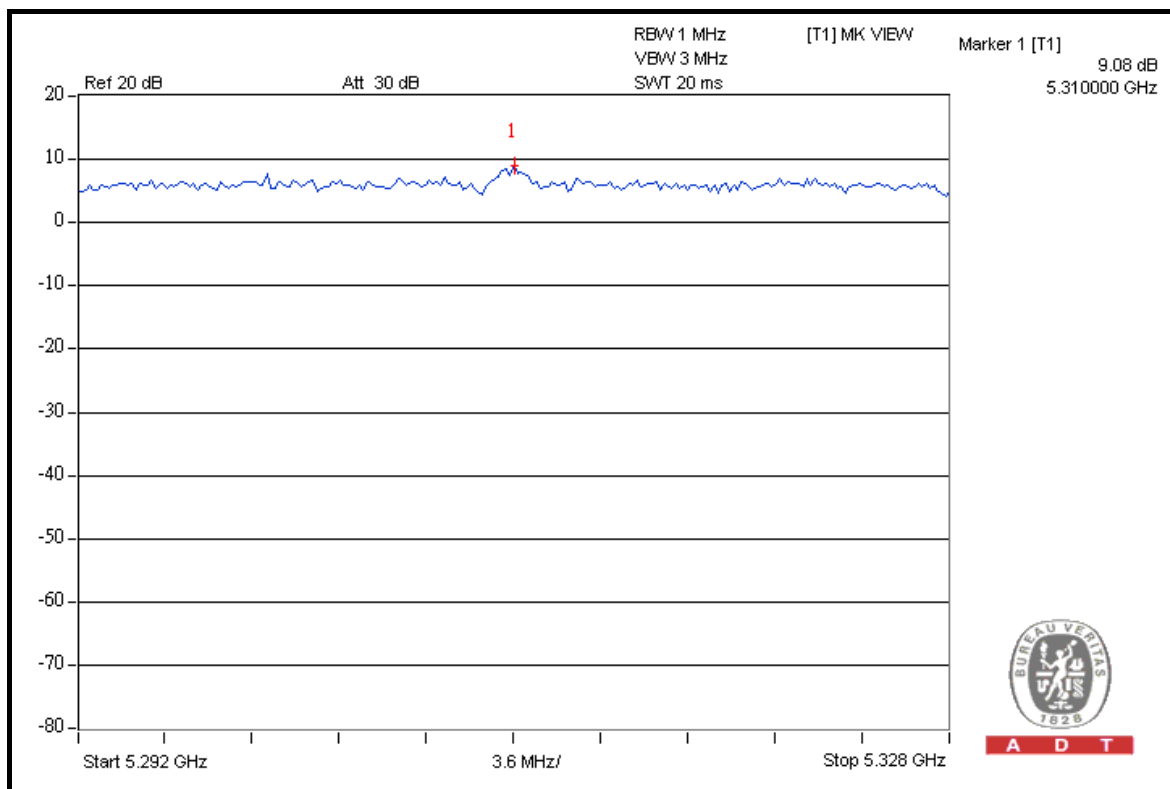


A D T

### CH 62



A D T

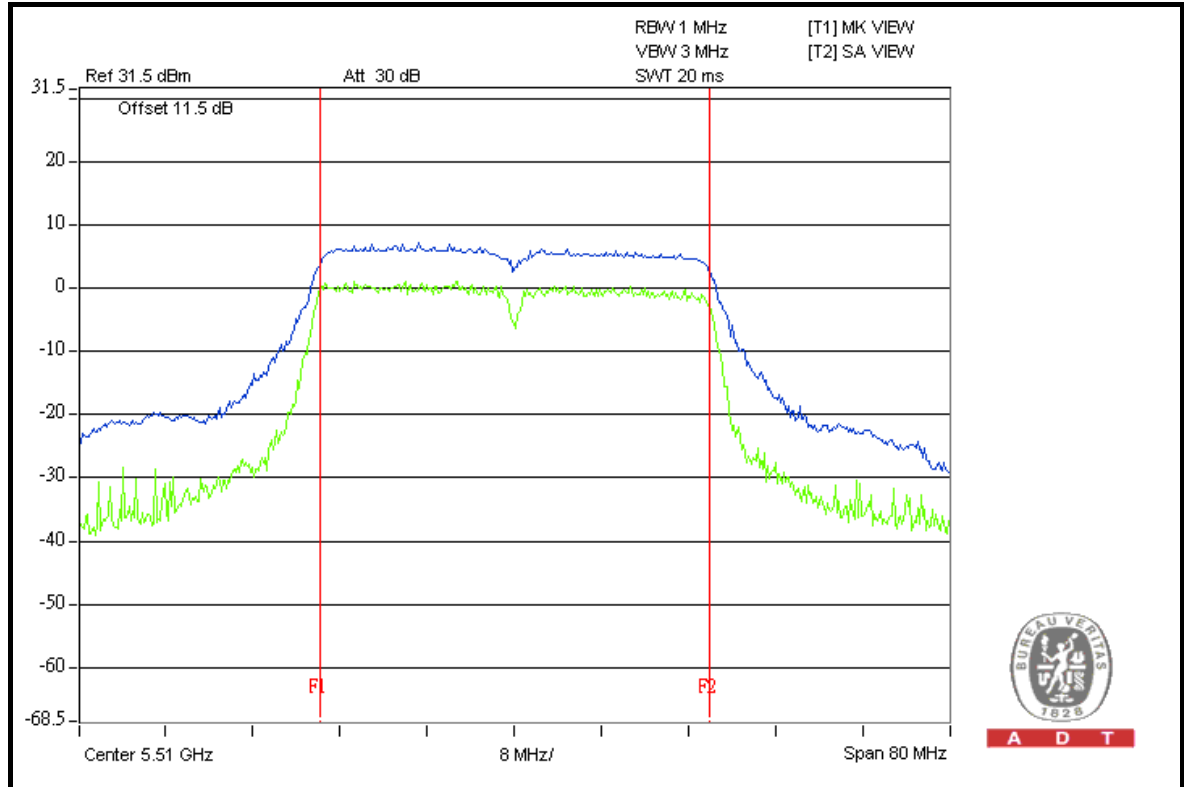


A D T

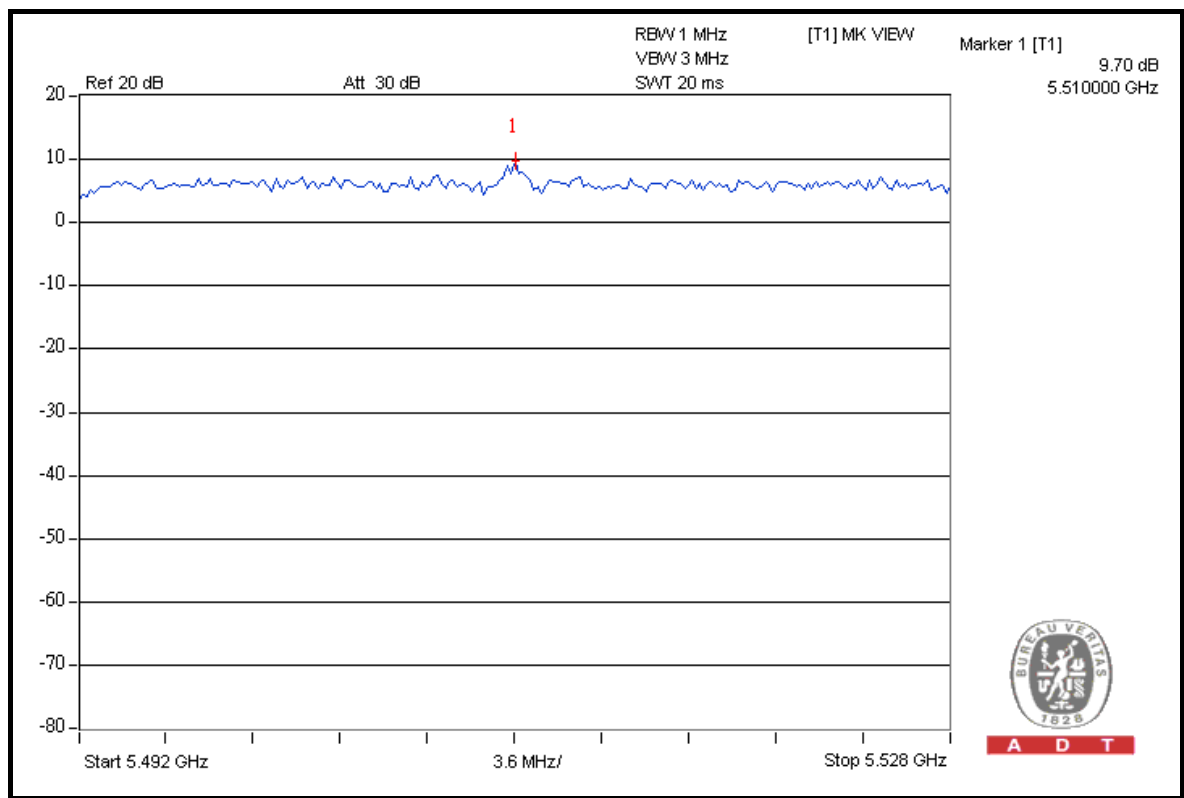


A D T

CH 102



A D T

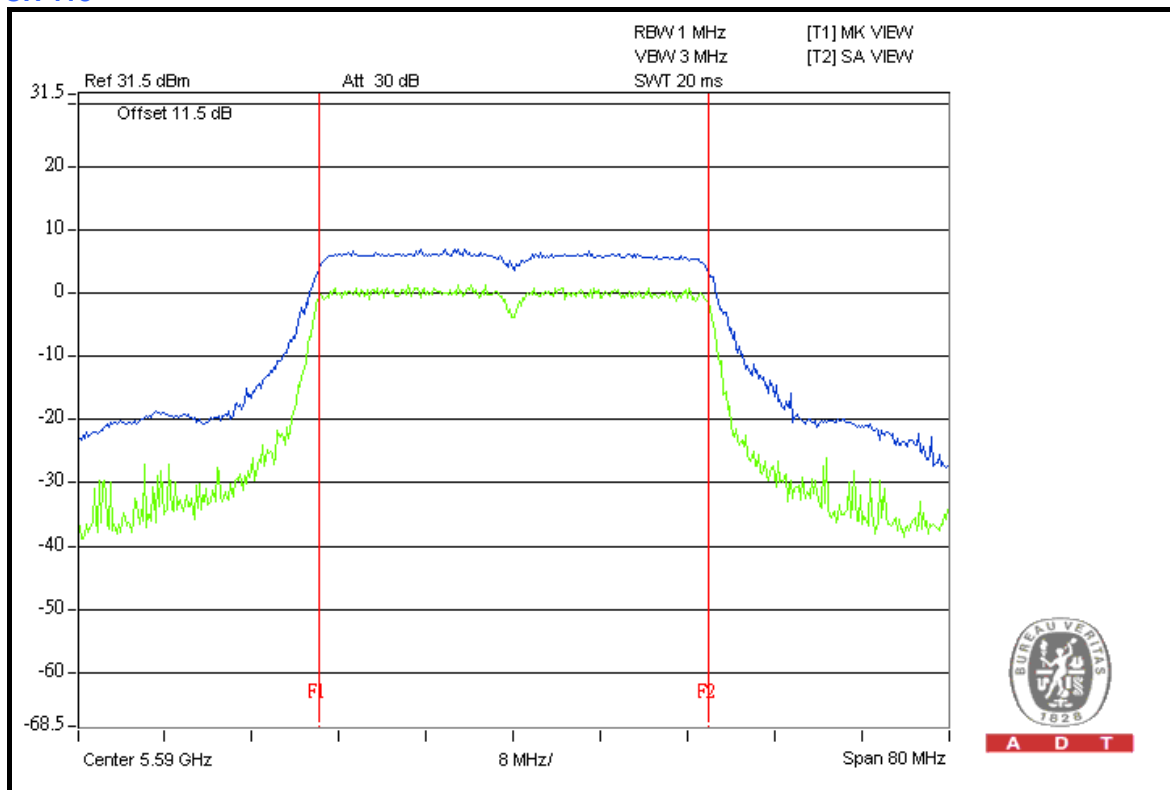


A D T

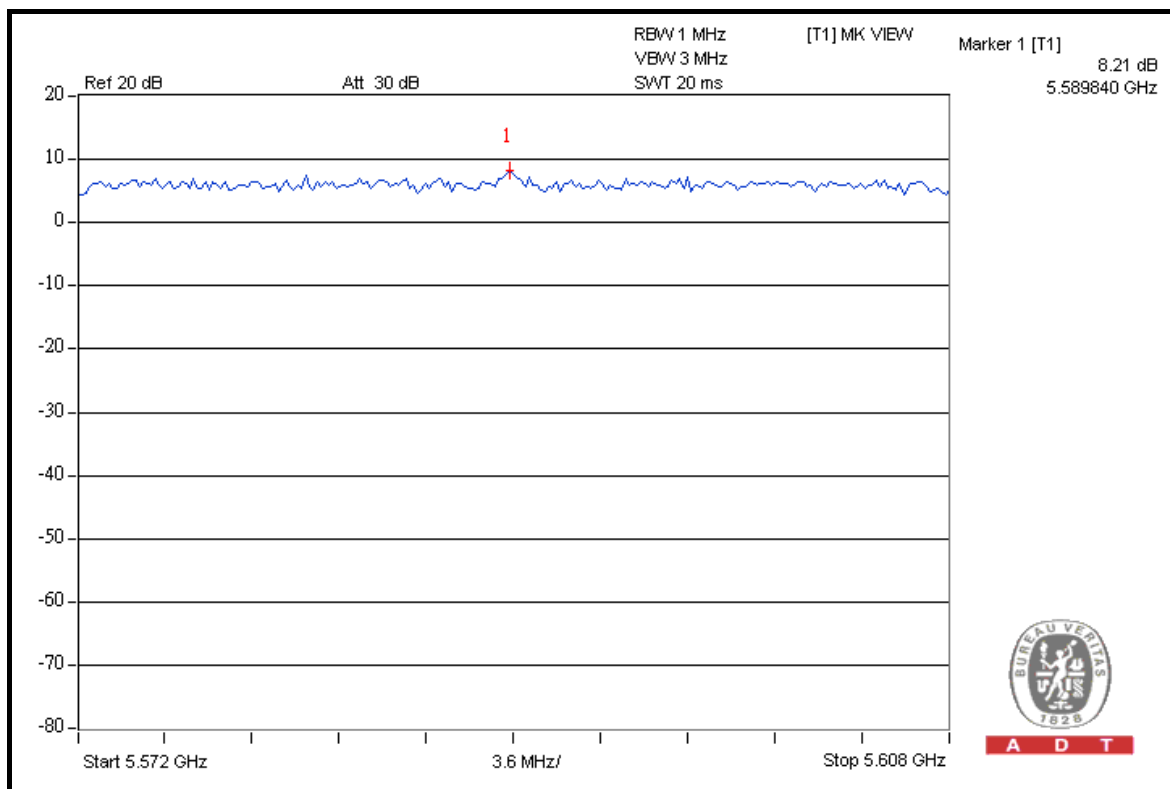


A D T

### CH 118



A D T

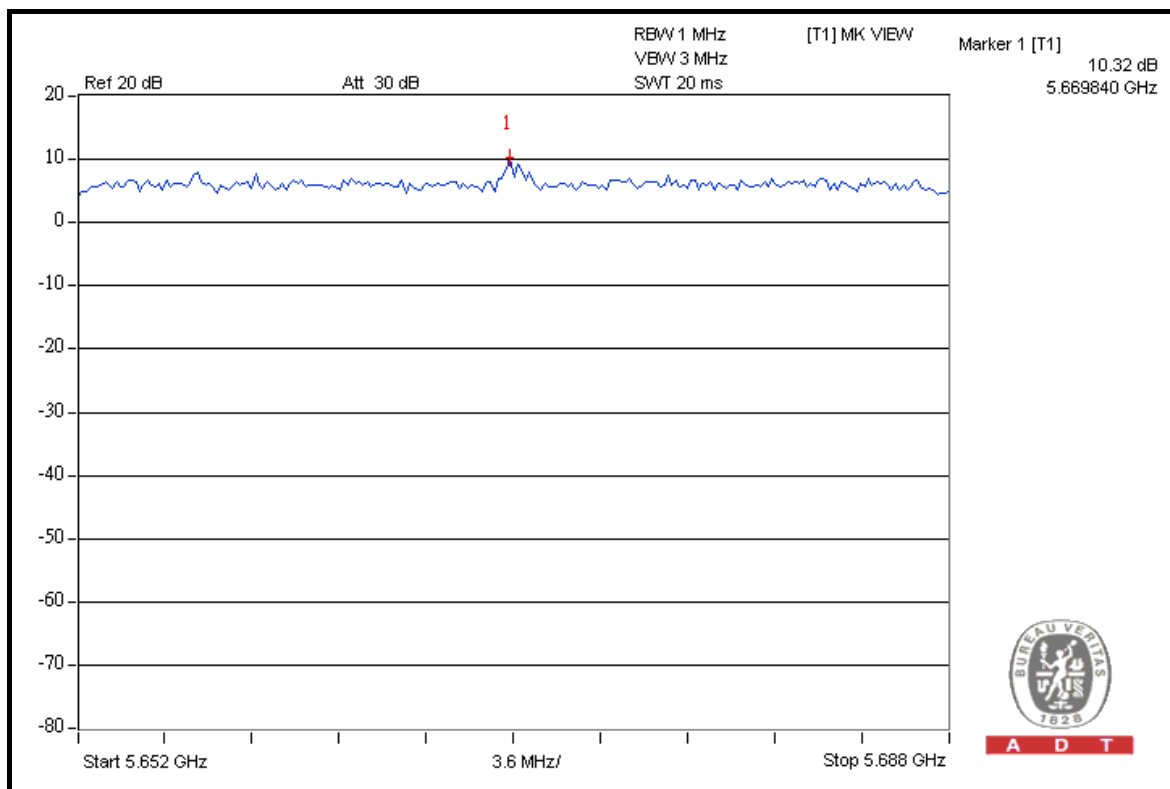
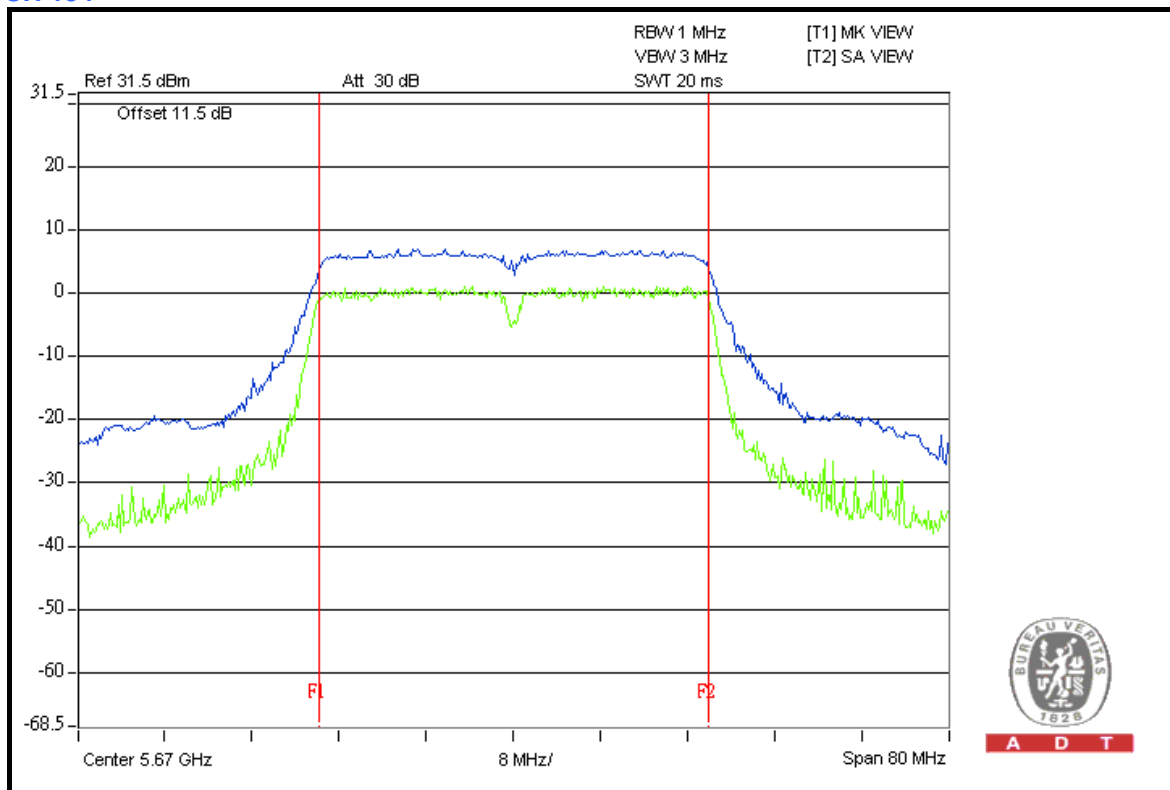


A D T



A D T

### CH 134





## 4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

### 4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100041	May 13, 2009	May 12, 2010

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

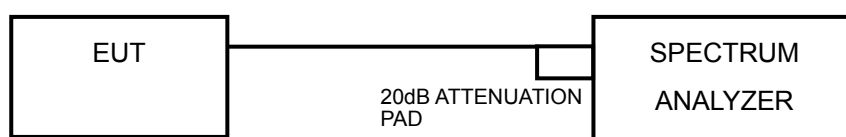
### 4.5.3 TEST PROCEDURES

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW = 1MHz, VBW = 3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

#### 4.5.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.5.5 TEST SETUP



#### 4.5.6 EUT OPERATING CONDITIONS

Same as 4.4.6



A D T

### 4.5.7 TEST RESULTS

#### 802.11a OFDM MODULATION

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.0Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

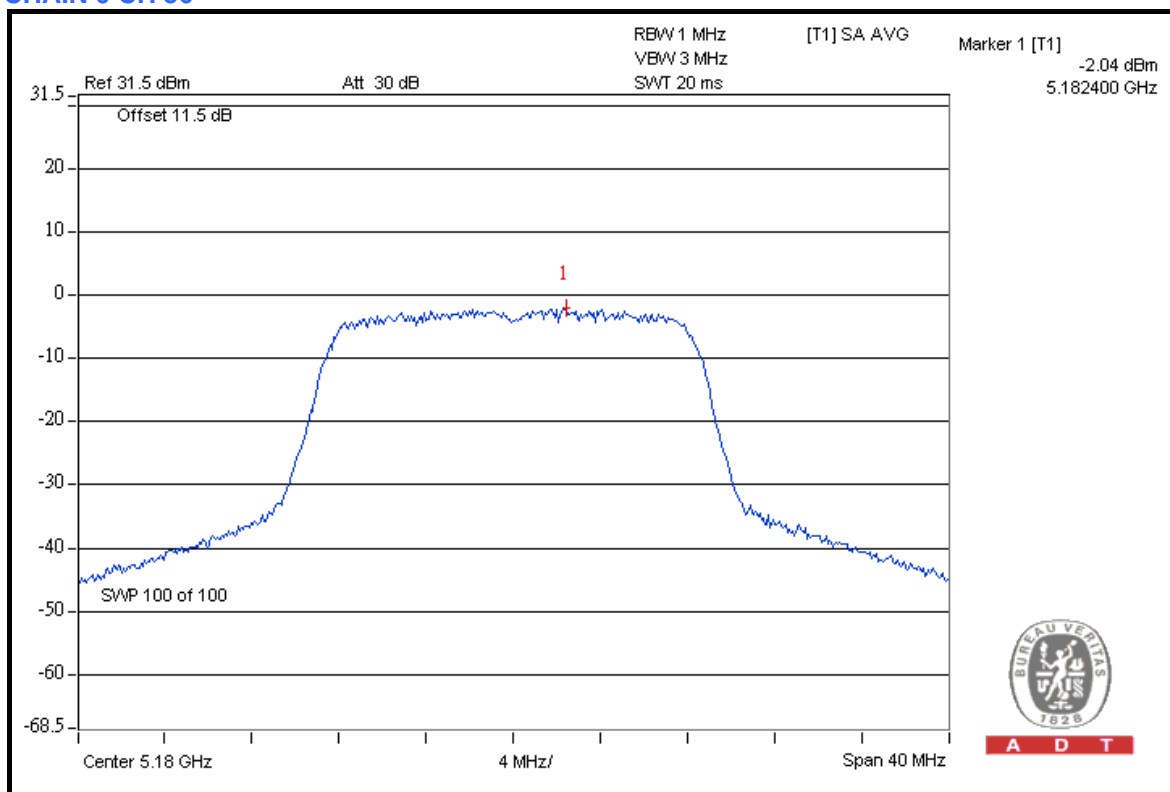
CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	-2.04	-2.24	-2.12	1.836	2.64	4	PASS
40	5200	-2.09	-2.21	-2.31	1.807	2.57	4	PASS
48	5240	-2.16	-2.19	-2.10	1.829	2.62	4	PASS
52	5260	3.85	4.24	4.52	7.91	8.98	11	PASS
60	5300	3.99	4.32	4.70	8.16	9.12	11	PASS
64	5320	4.05	4.38	4.68	8.22	9.15	11	PASS
100	5500	4.05	4.46	4.57	8.20	9.14	11	PASS
120	5600	3.99	4.37	4.62	8.14	9.11	11	PASS
140	5700	4.06	4.14	4.50	7.96	9.01	11	PASS



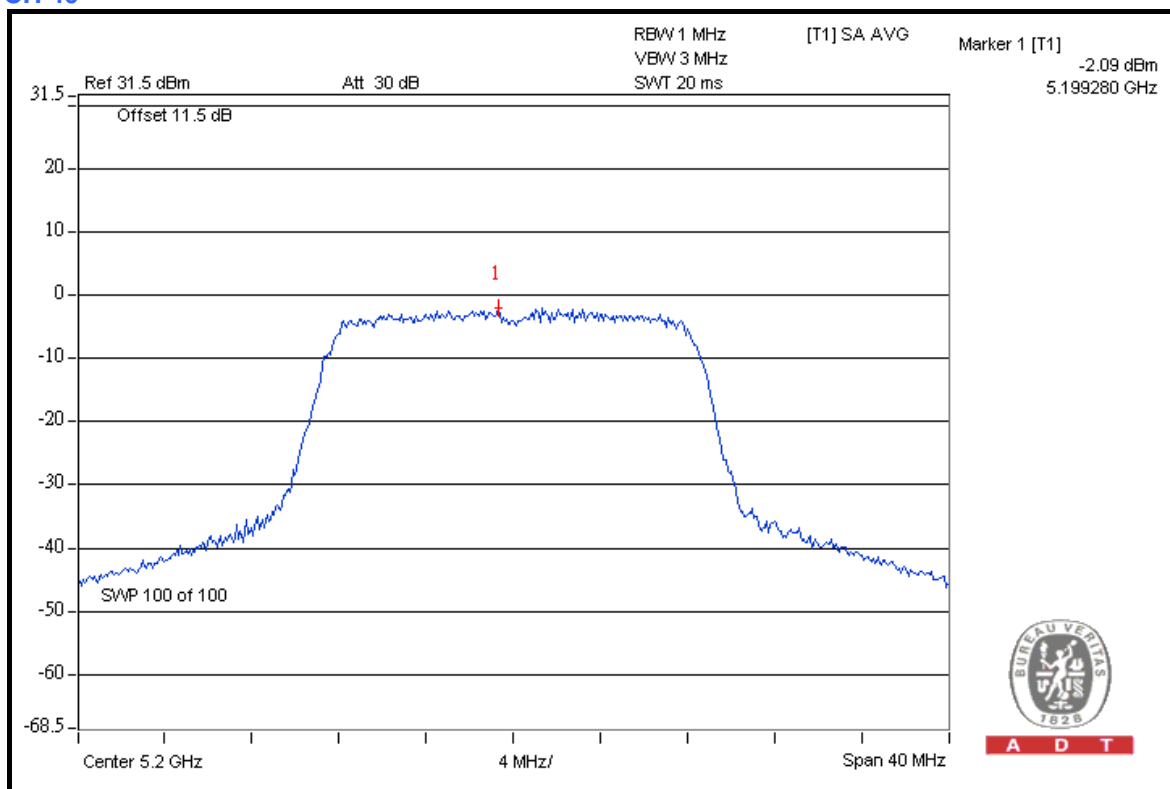


A D T

### CHAIN 0 CH 36



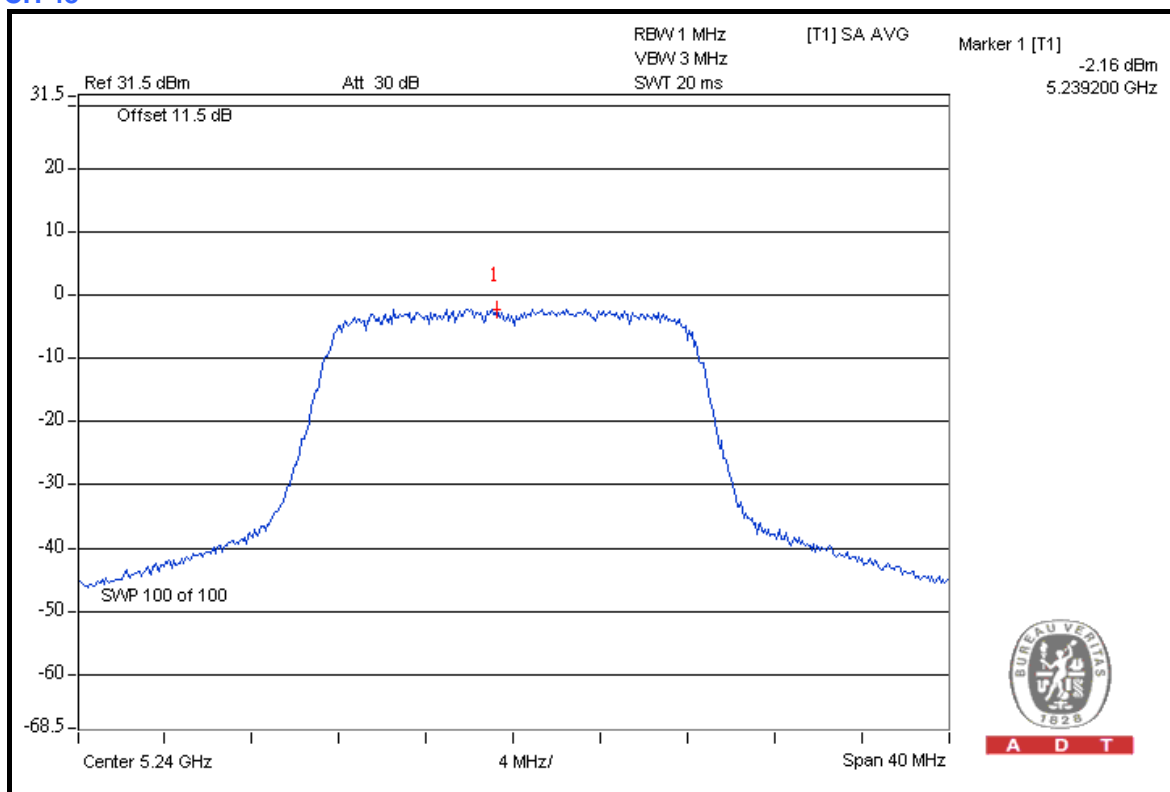
### CH 40



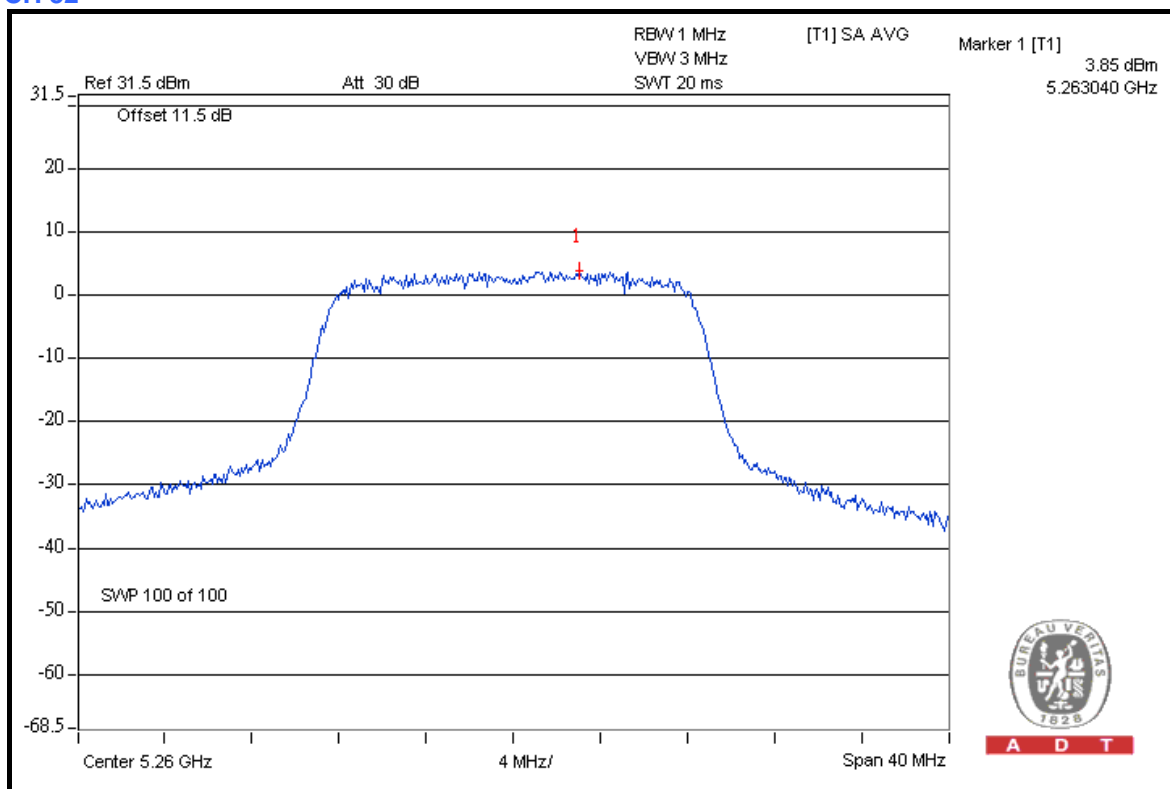


A D T

### CH 48



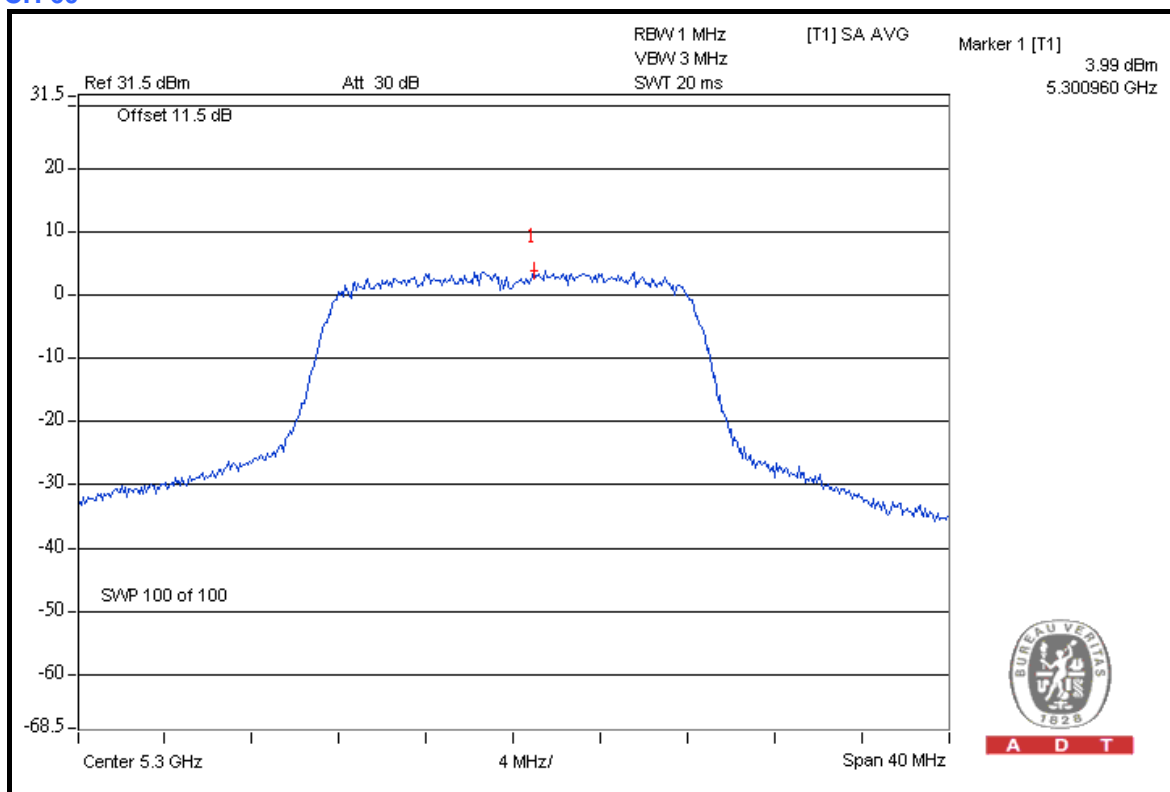
### CH 52



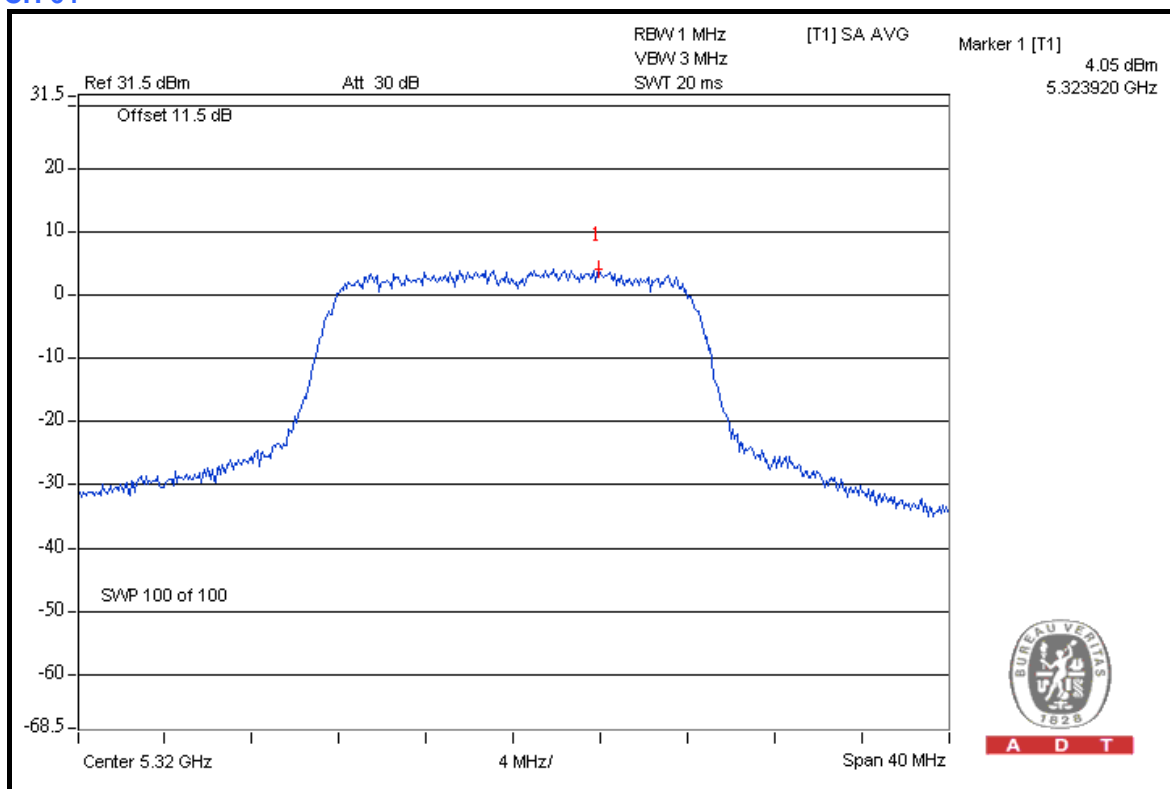


A D T

### CH 60



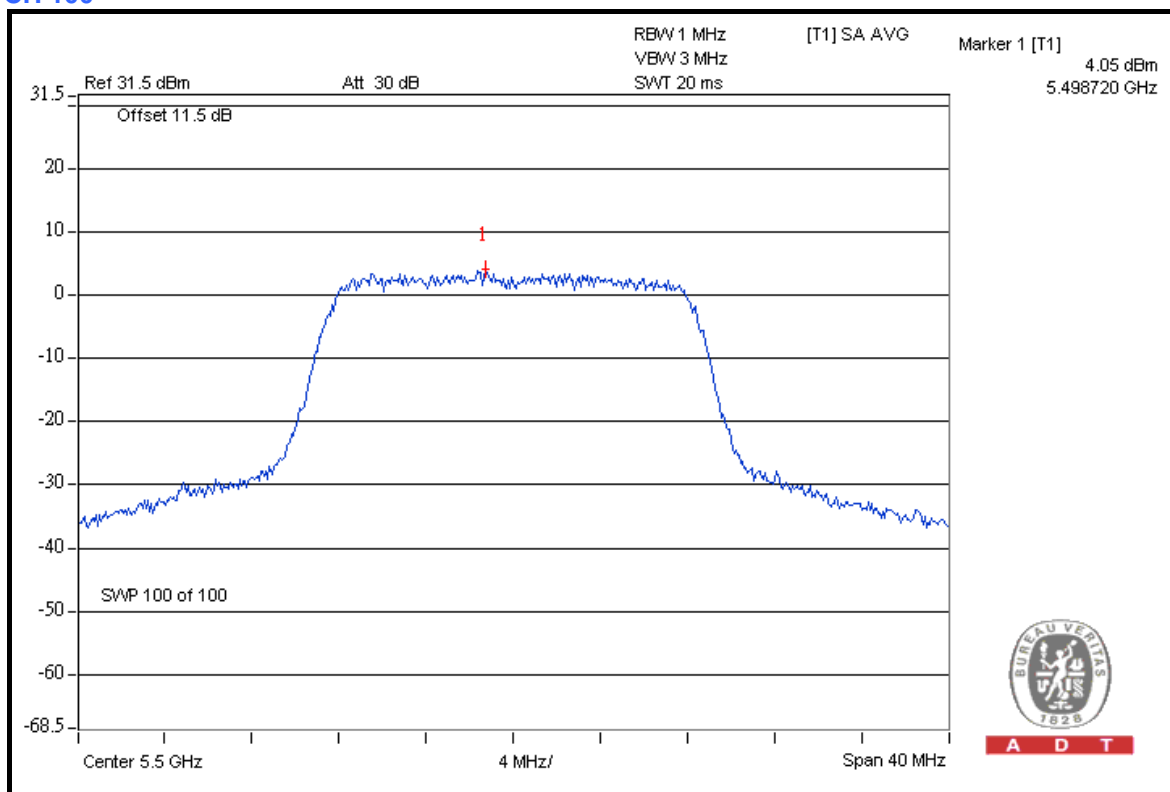
### CH 64



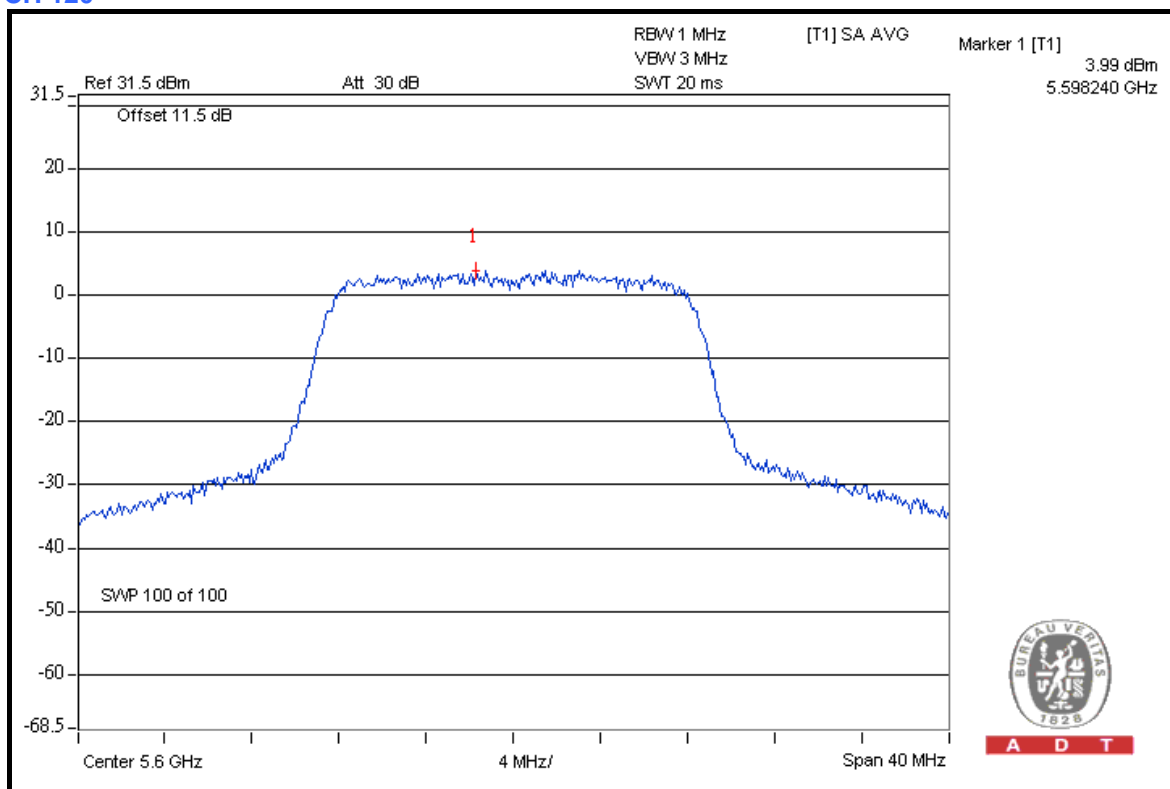


A D T

### CH 100



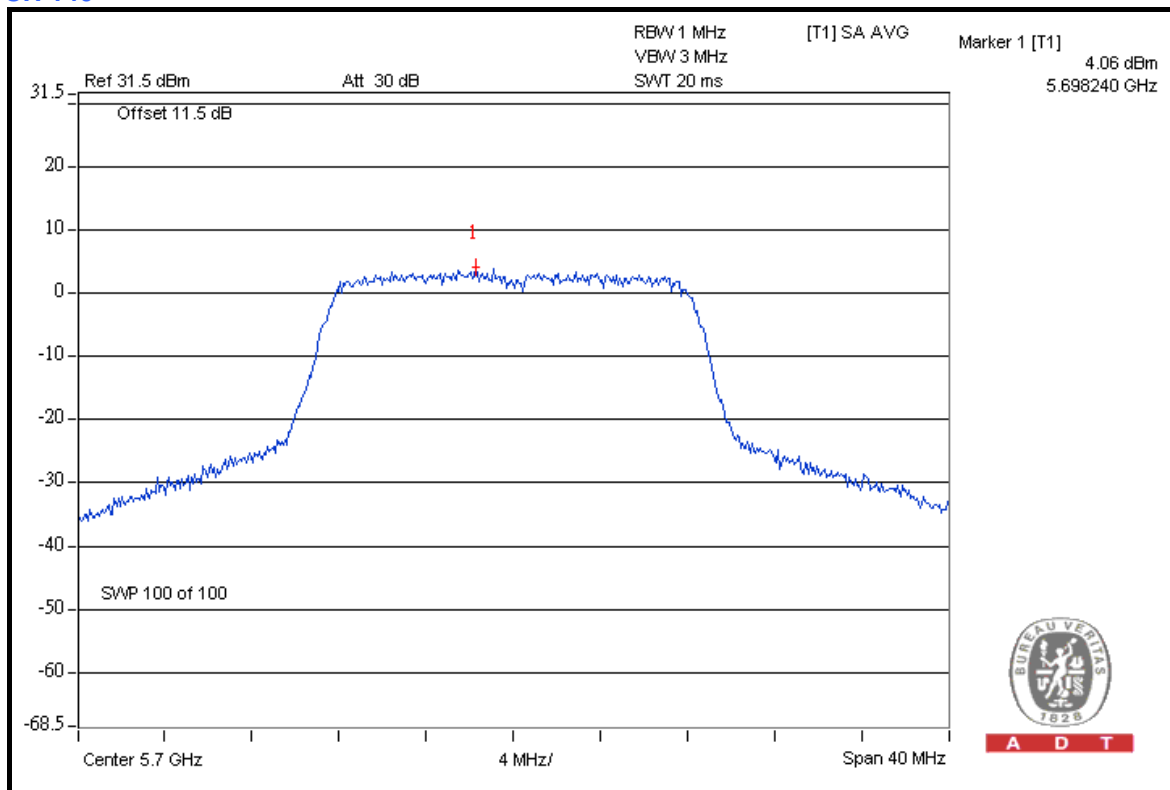
### CH 120





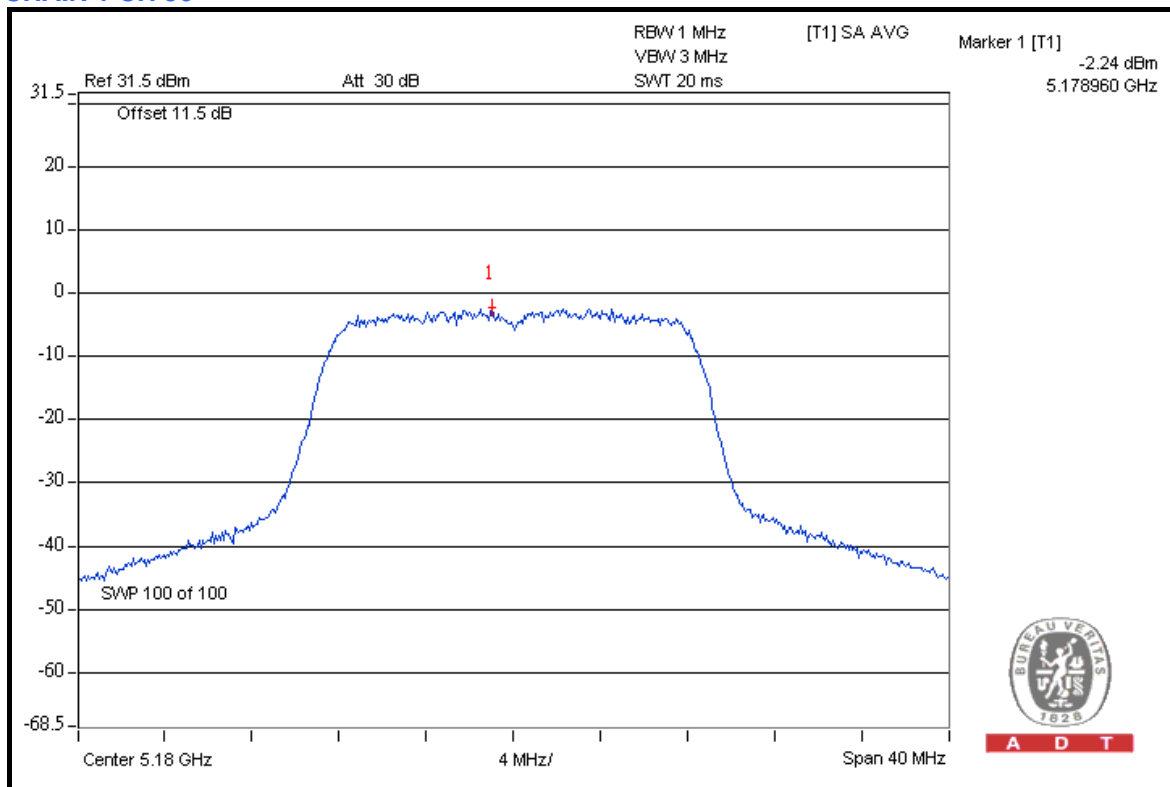
A D T

### CH 140



A D T

### CHAIN 1 CH 36

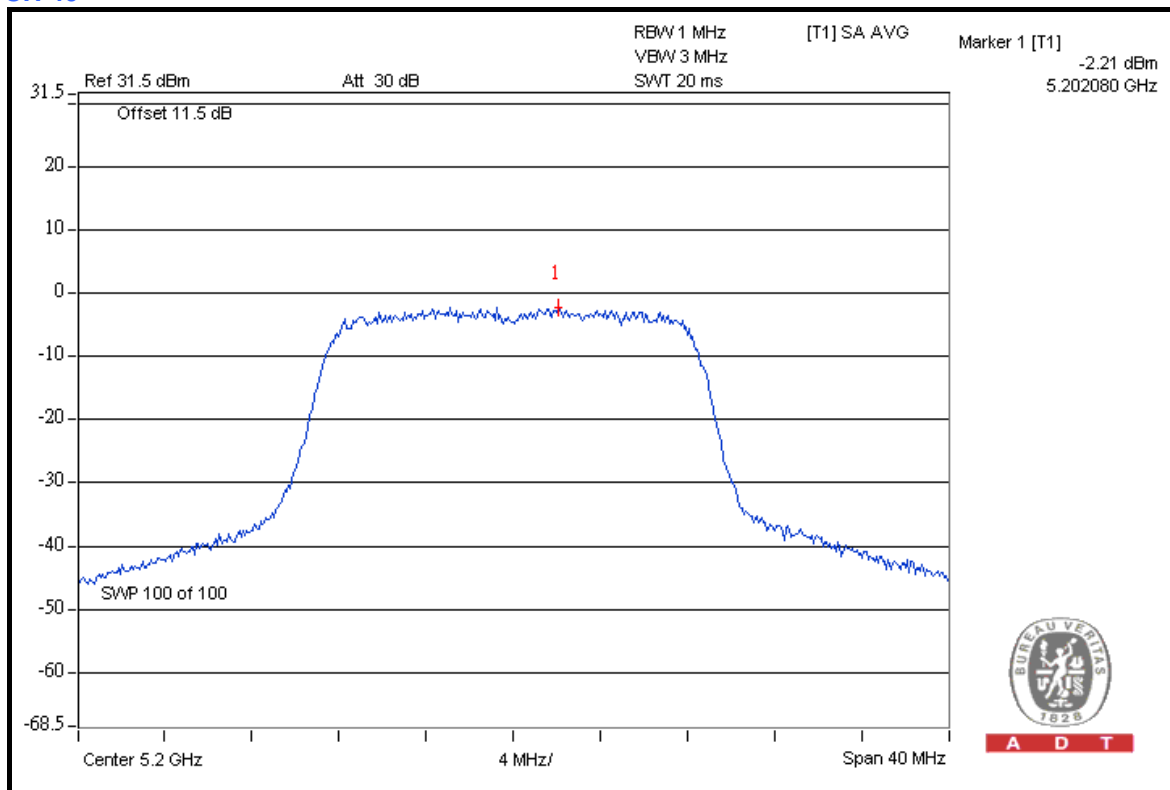


A D T

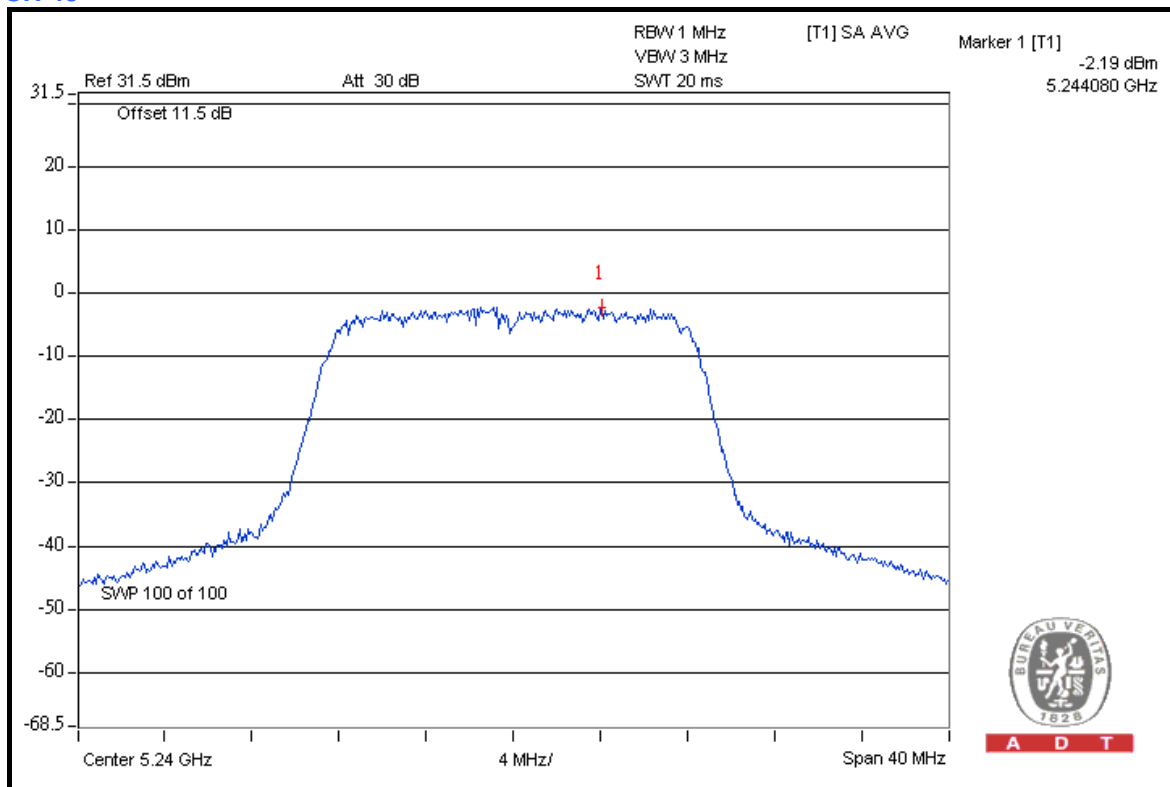


A D T

### CH 40



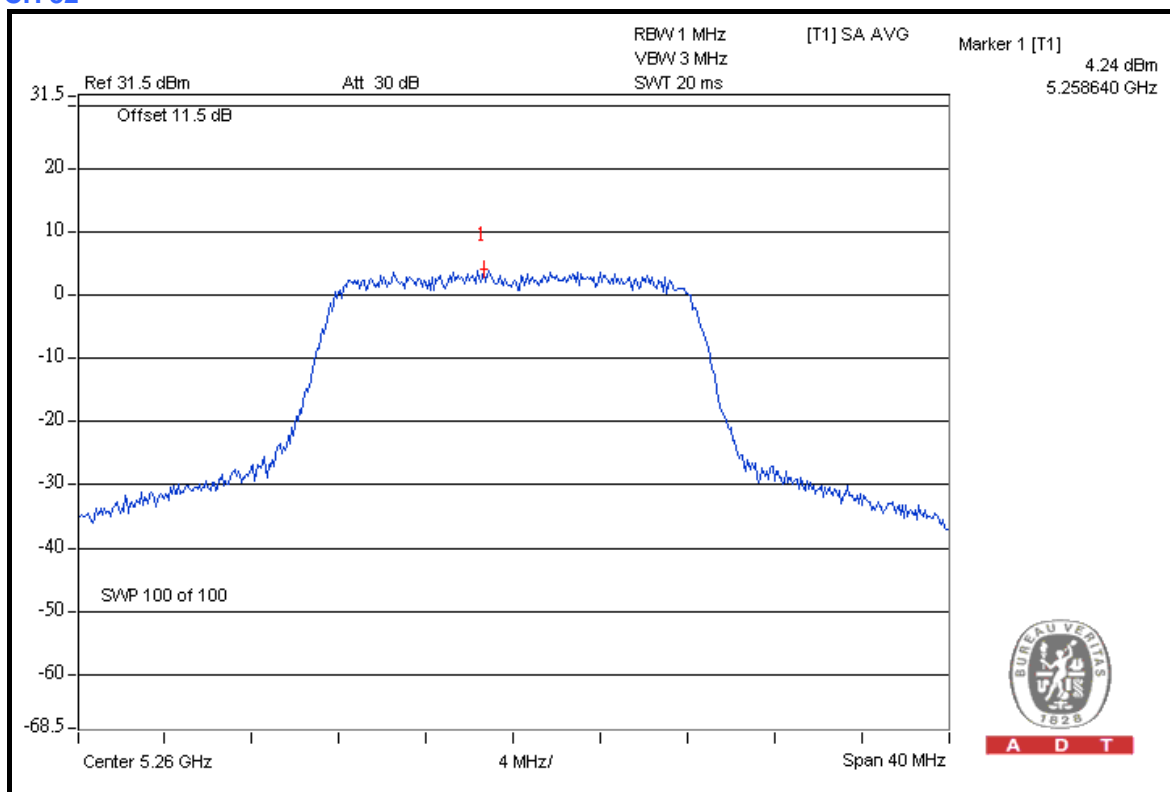
### CH 48



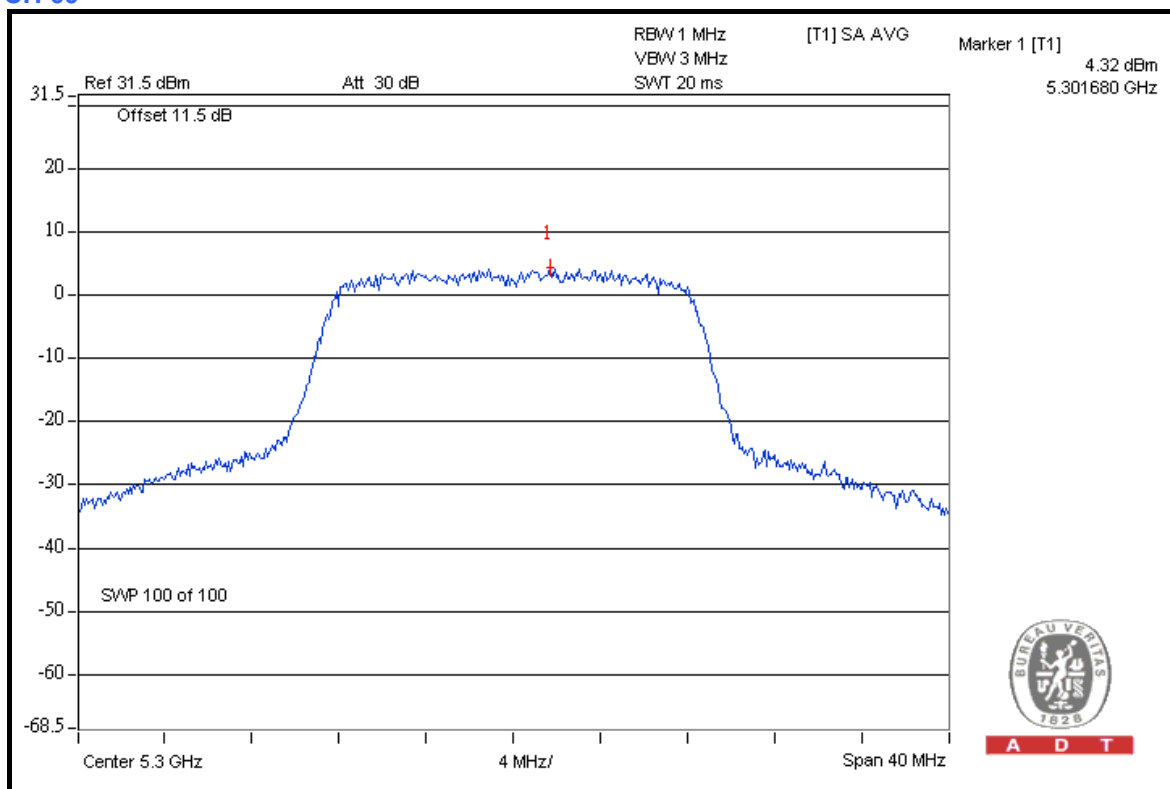


A D T

### CH 52



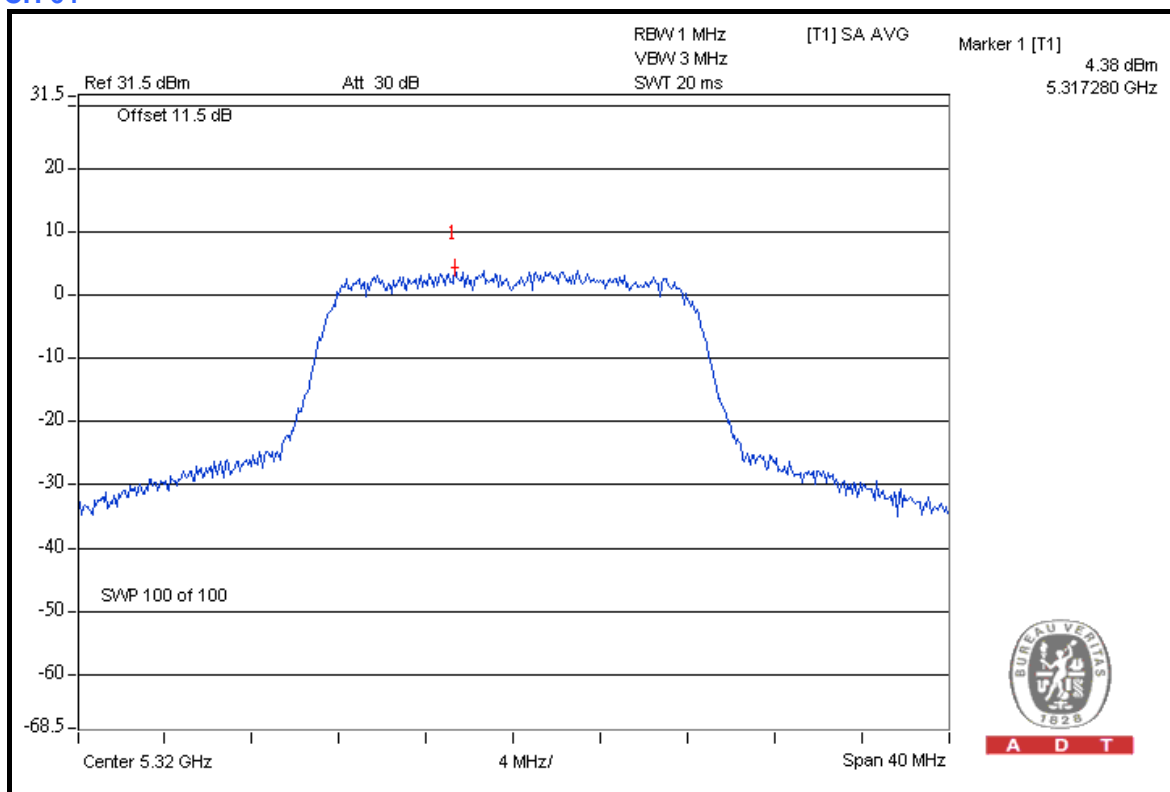
### CH 60





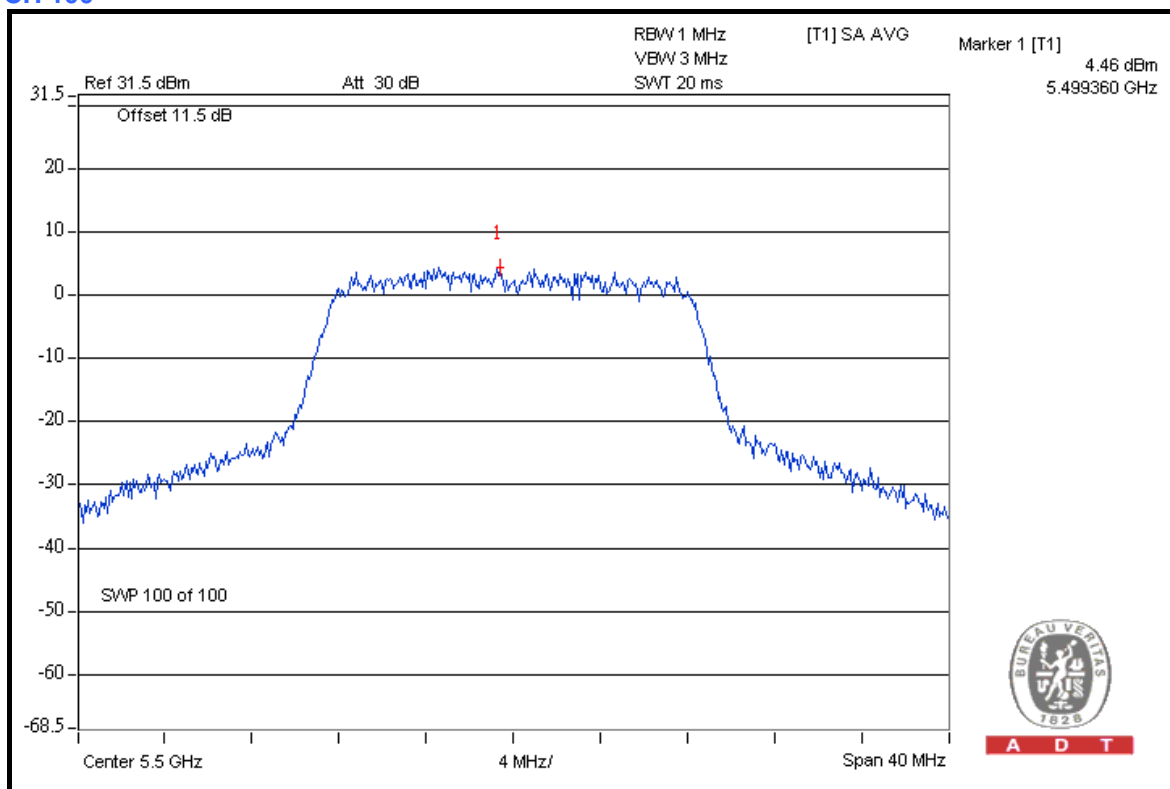
A D T

### CH 64



A D T

### CH 100



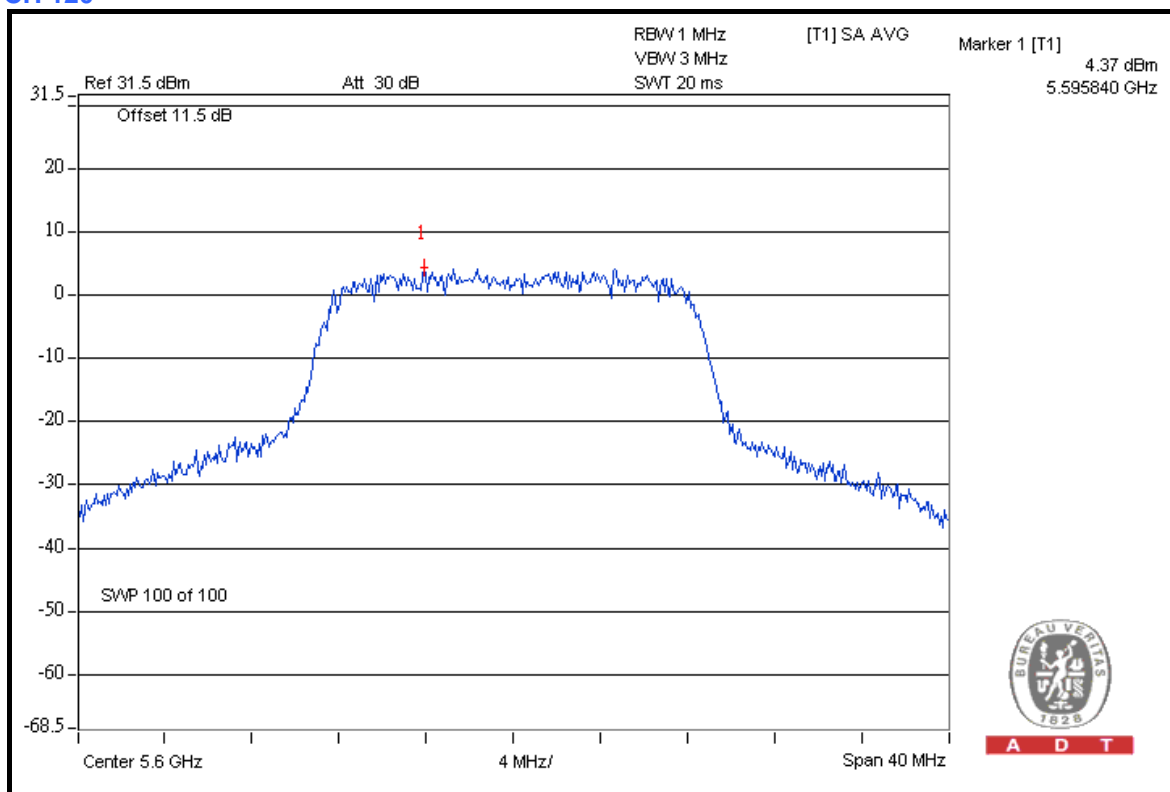
A D T



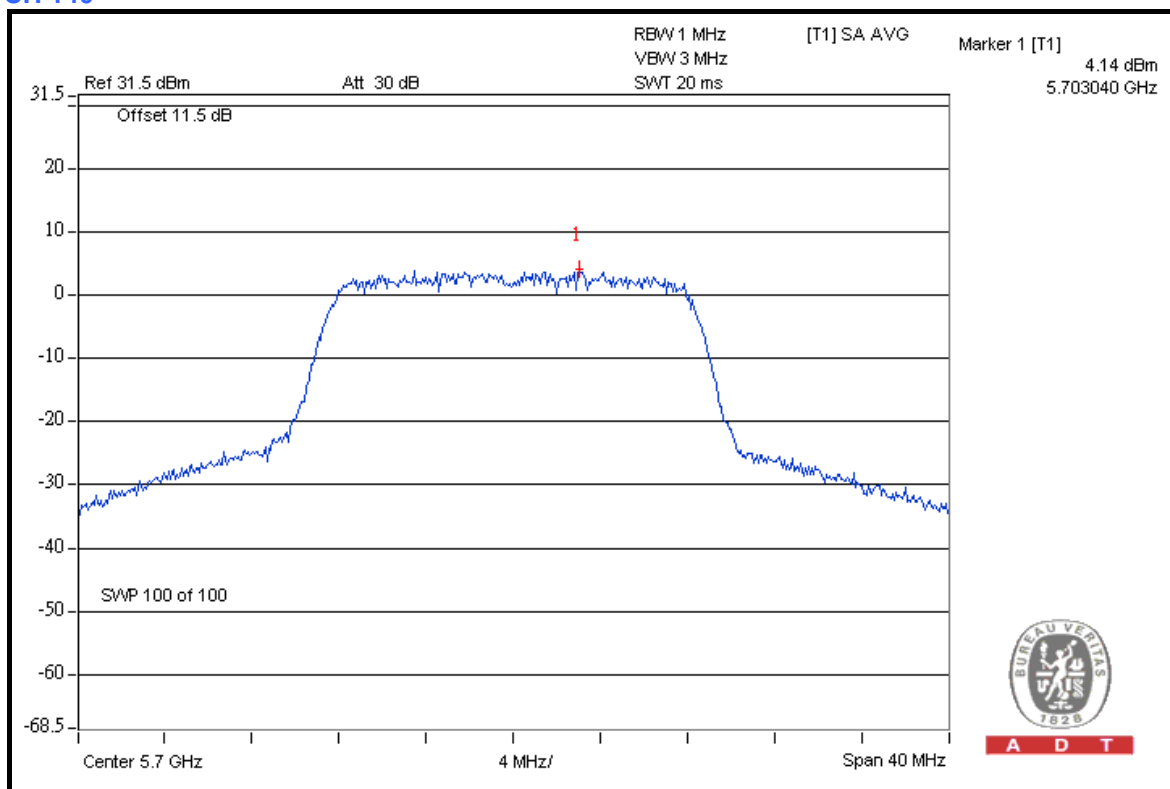


A D T

### CH 120



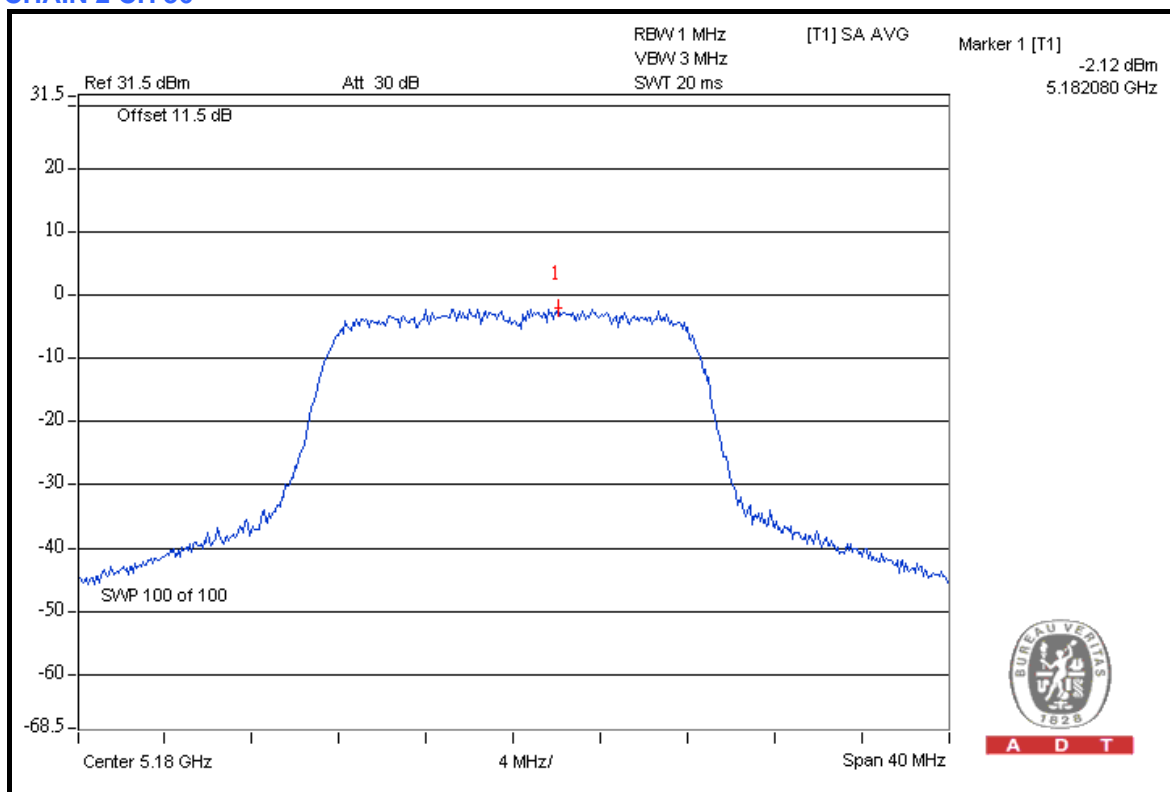
### CH 140



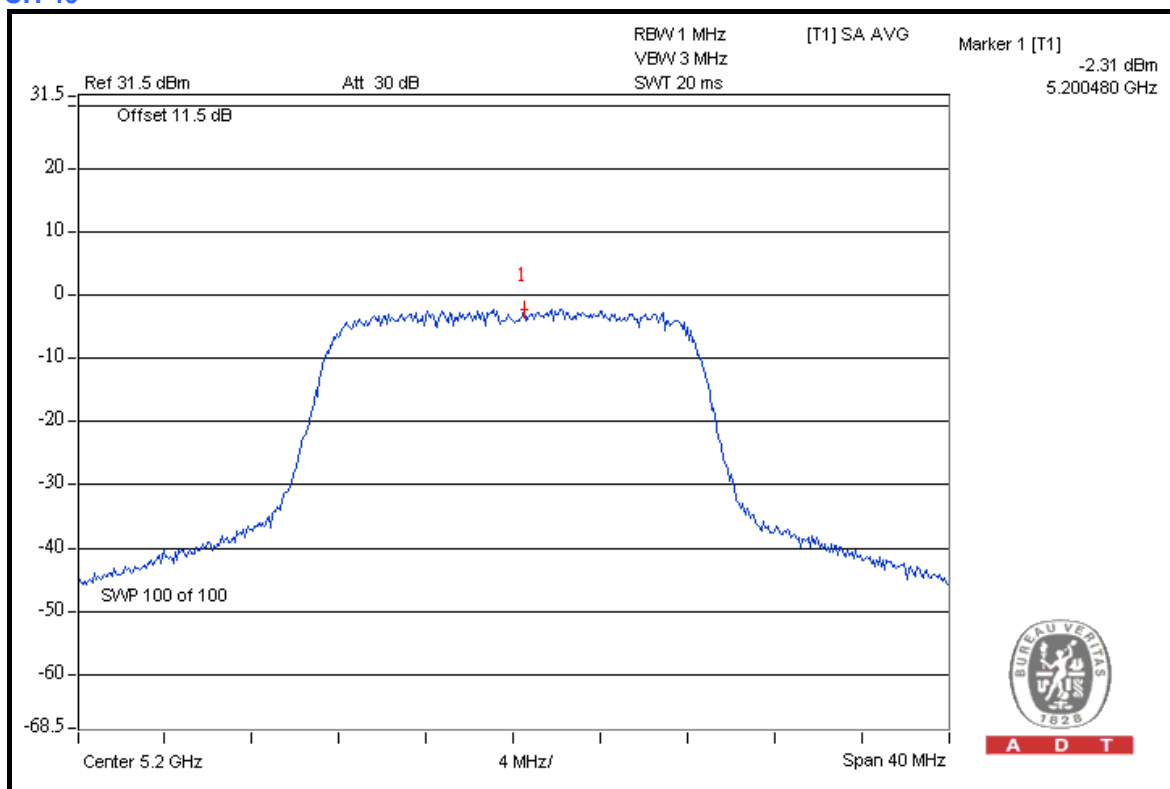


A D T

### CHAIN 2 CH 36



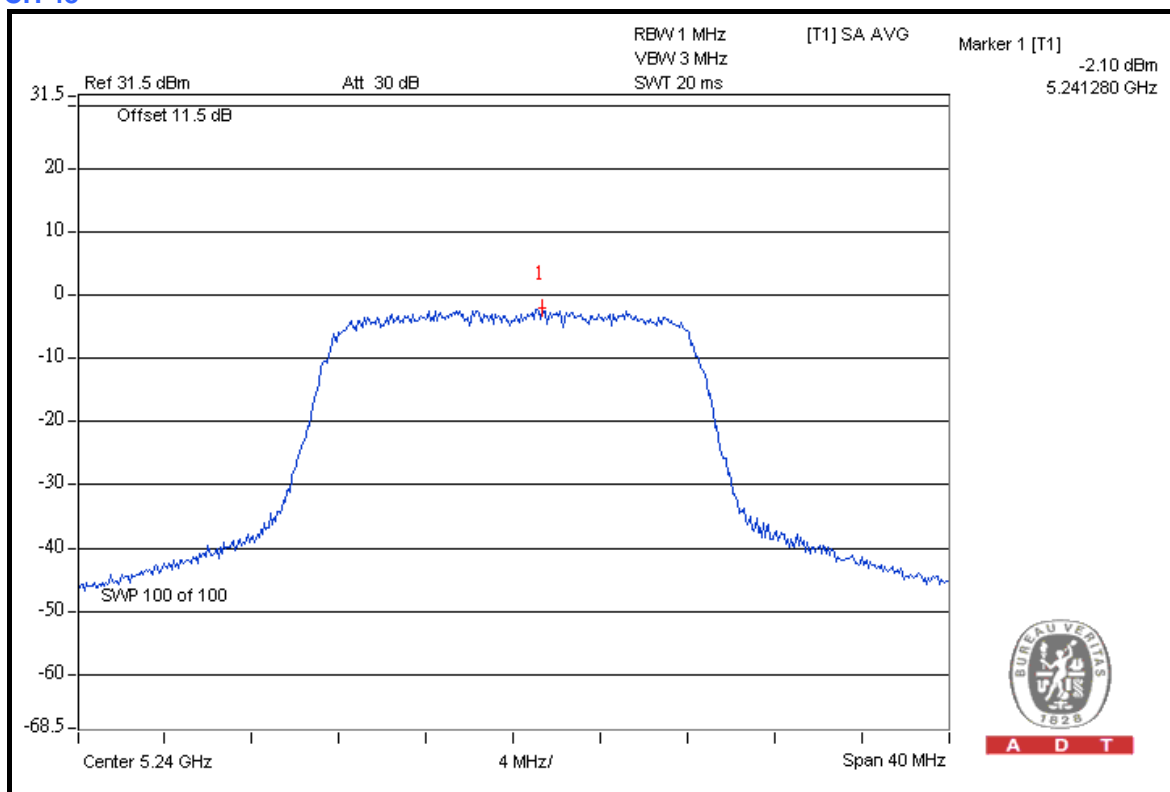
### CH 40



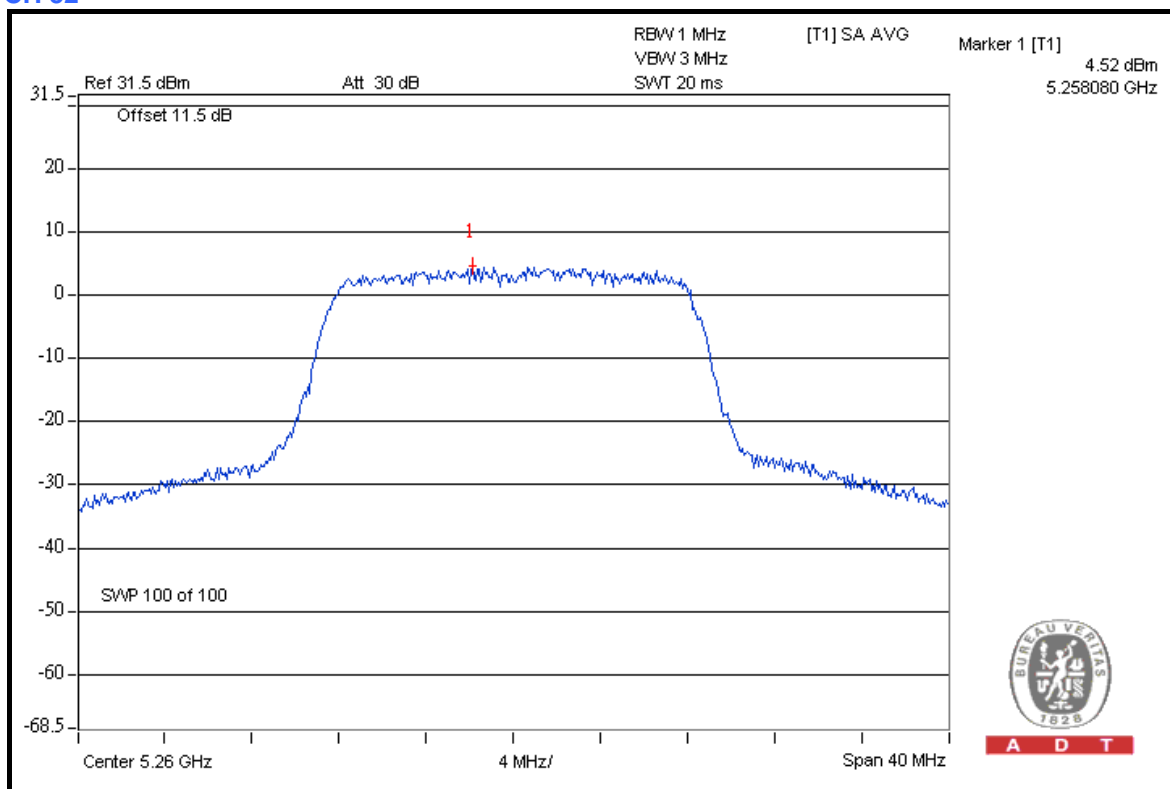


A D T

### CH 48



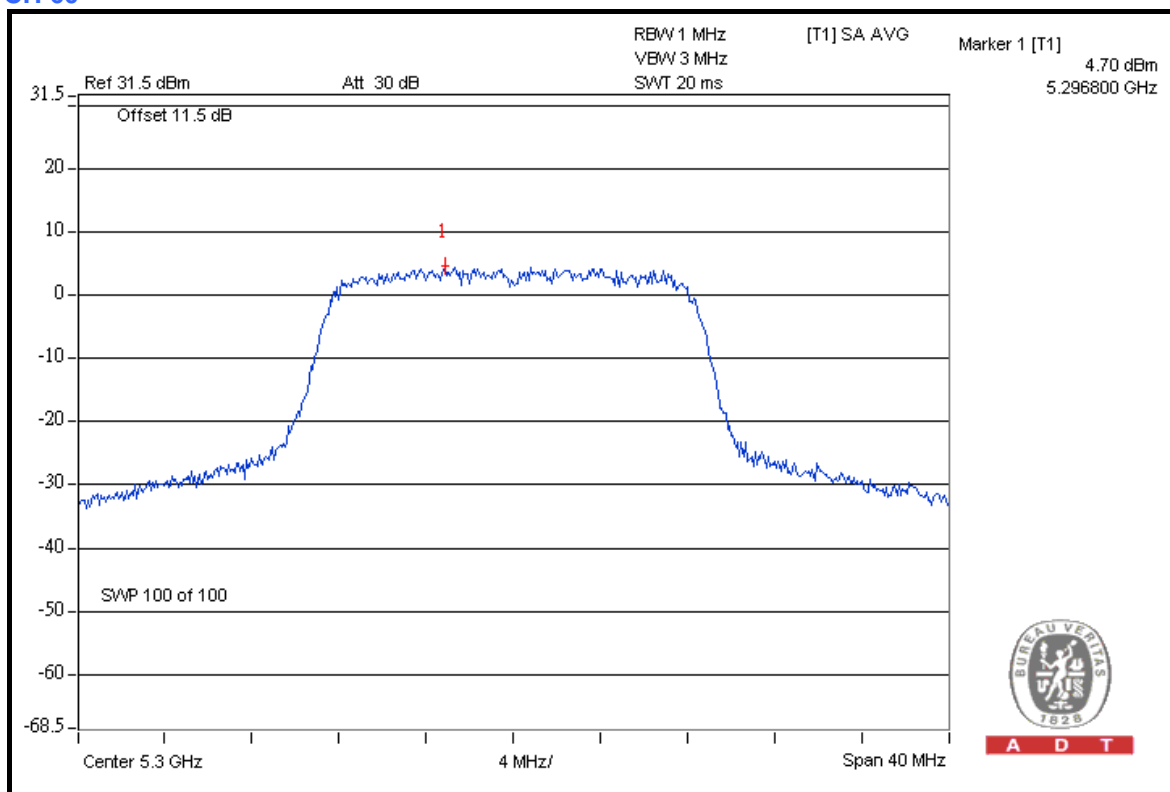
### CH 52



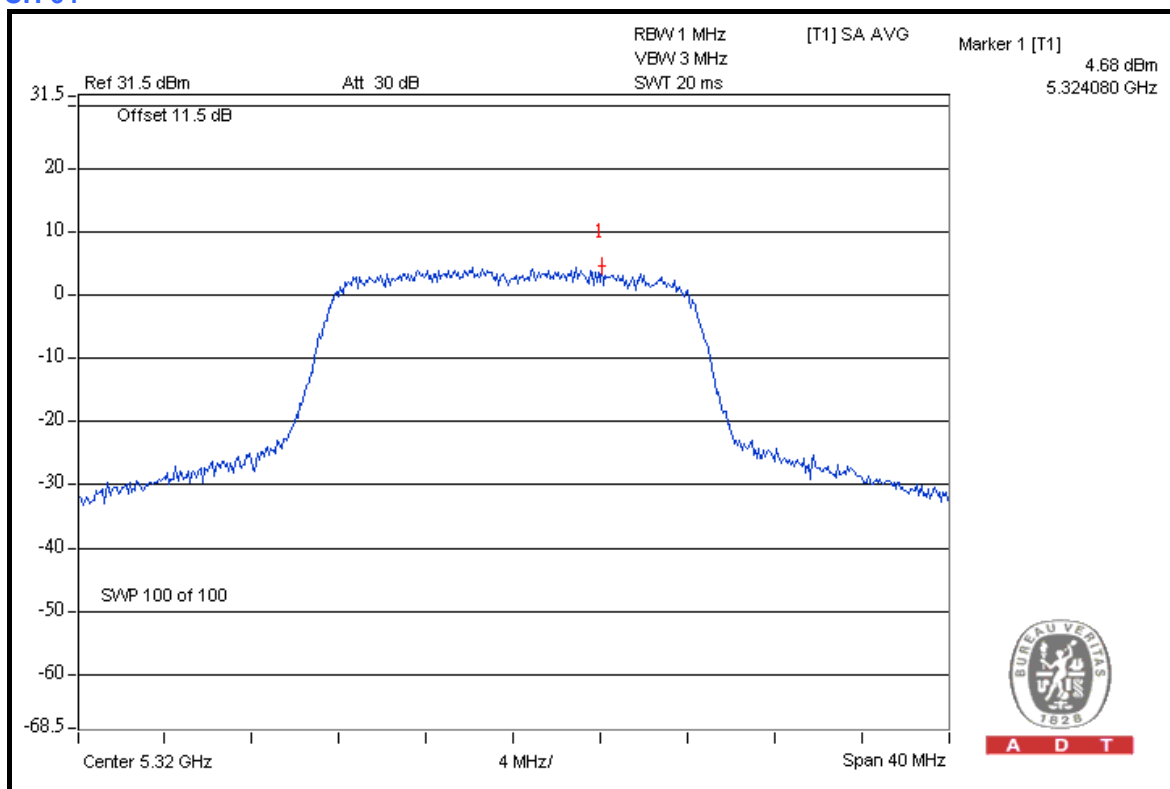


A D T

### CH 60



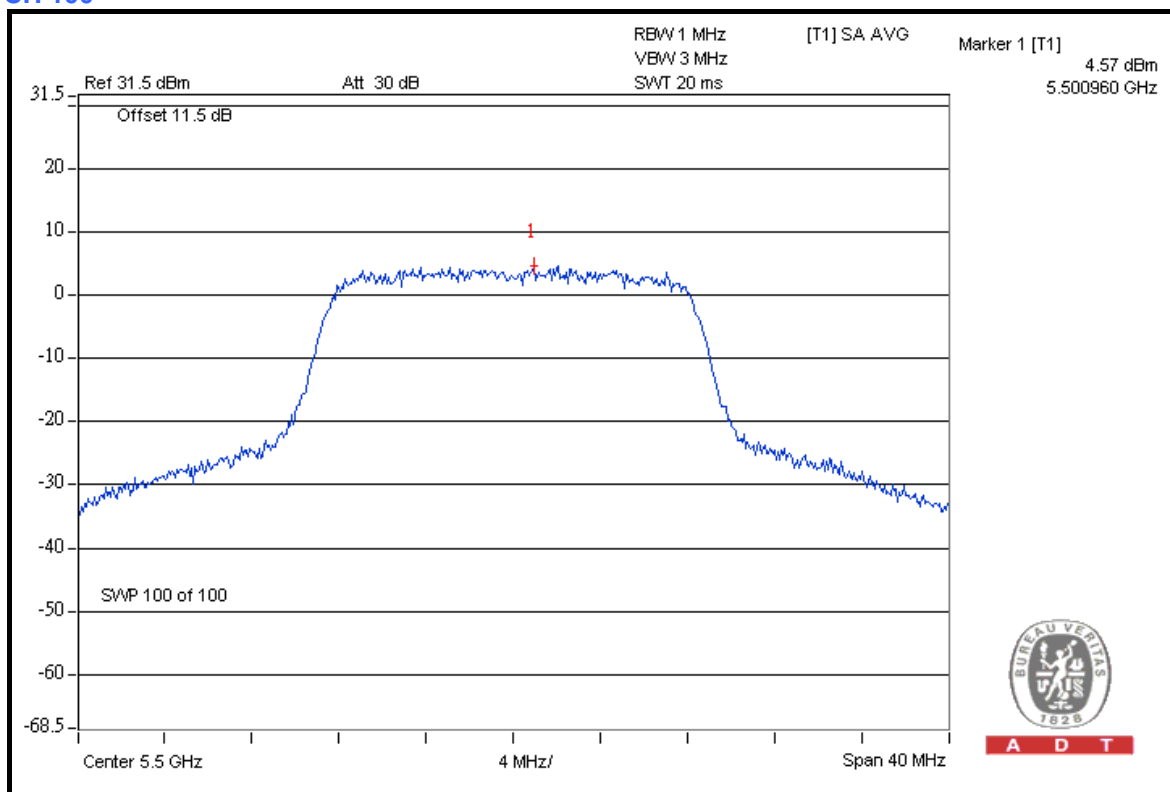
### CH 64



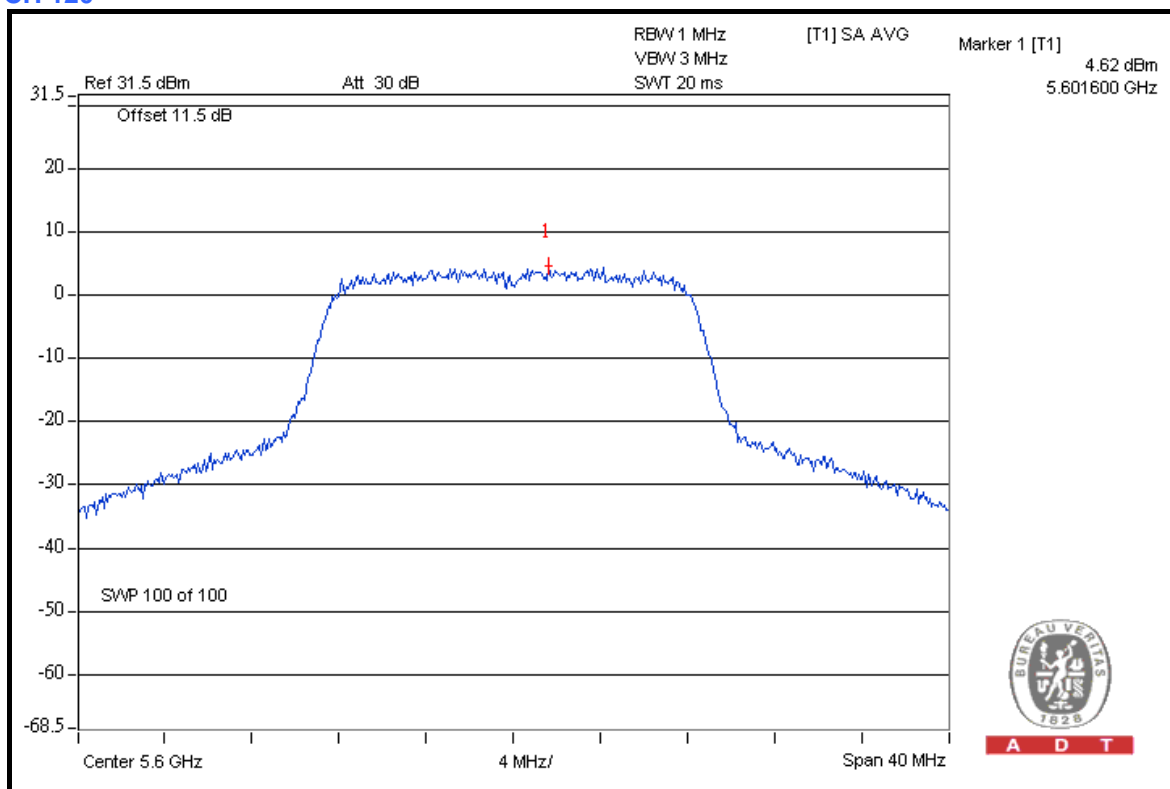


A D T

### CH 100



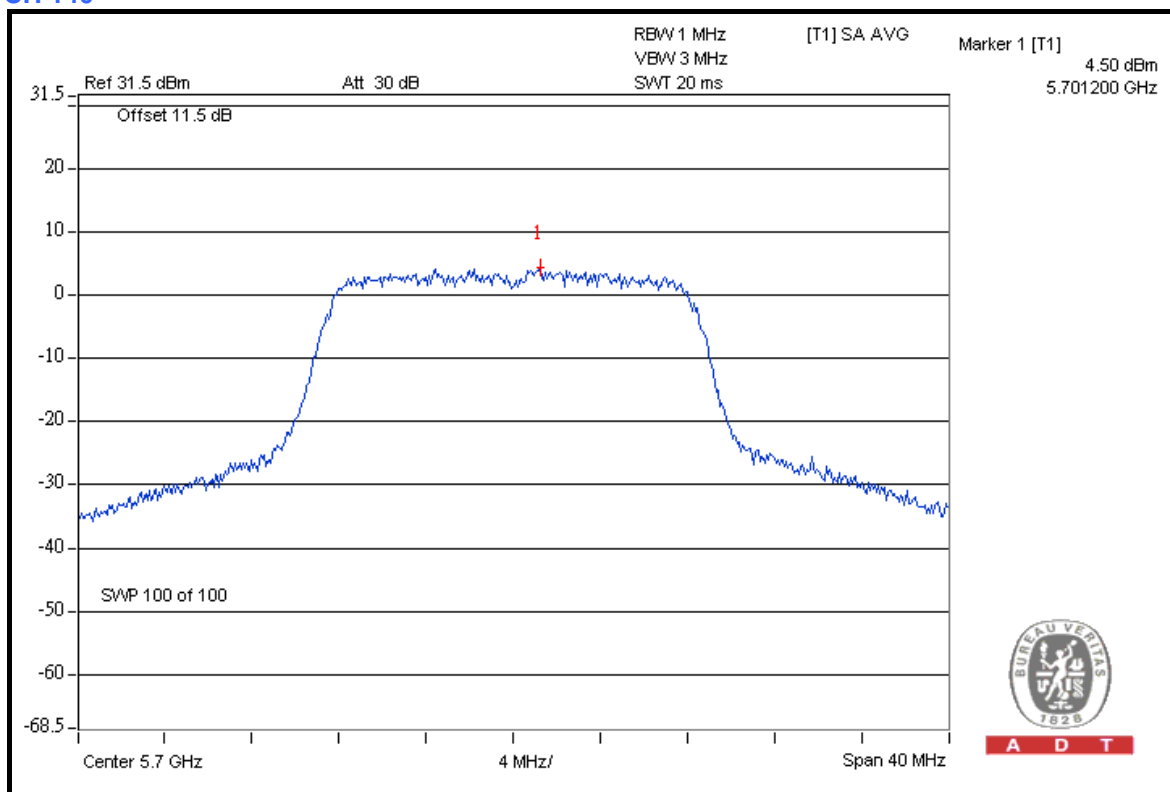
### CH 120





A D T

### CH 140





A D T

### 802.11a OFDM MODULATION

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.0Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

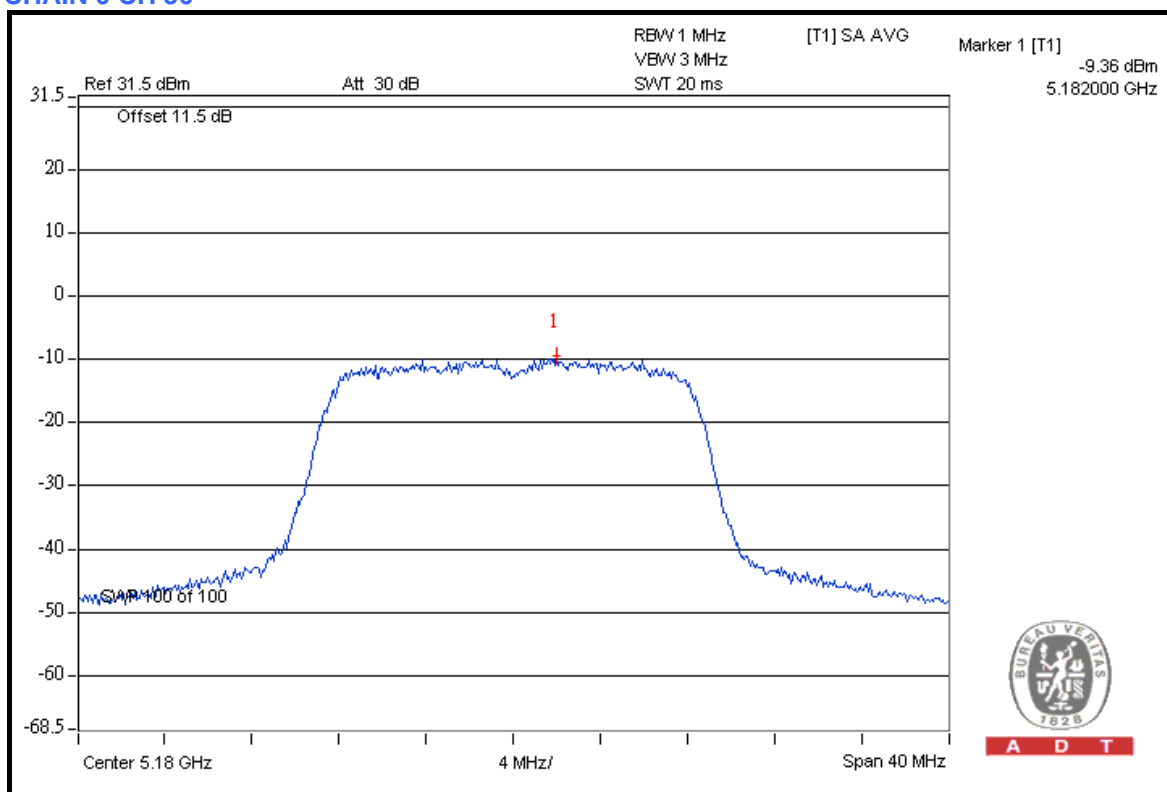
CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	-9.36	-8.82	0.247	-6.07	-4	PASS
40	5200	-9.31	-8.80	0.249	-6.04	-4	PASS
48	5240	-9.49	-8.62	0.250	-6.02	-4	PASS
52	5260	0.05	-0.13	1.98	2.97	3	PASS
60	5300	0.14	-0.27	1.97	2.95	3	PASS
64	5320	0.05	-0.16	1.98	2.96	3	PASS
100	5500	0.05	-0.11	1.99	2.98	3	PASS
120	5600	-0.27	-0.08	1.92	2.84	3	PASS
140	5700	-0.07	-0.14	1.95	2.90	3	PASS

**NOTE:** According to 15.407 (a) (1) (2), the maximum antenna gain 14dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 8 dB.



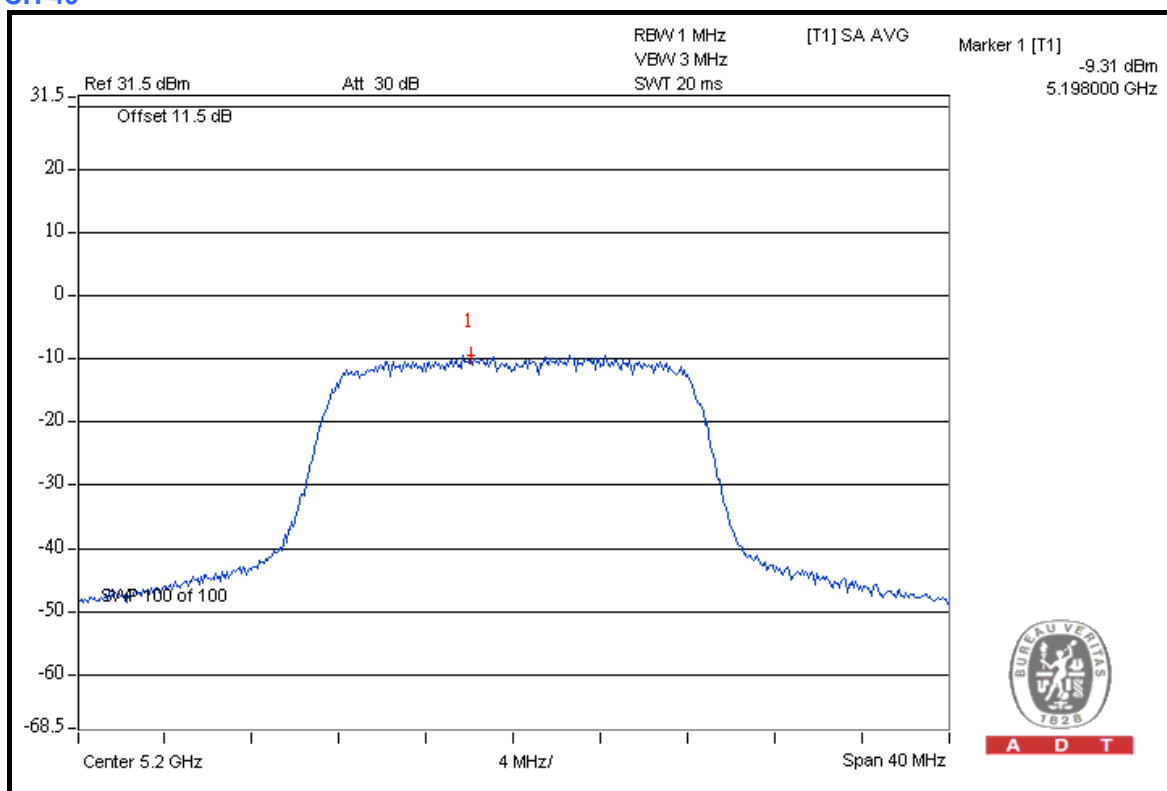
A D T

### CHAIN 0 CH 36



A D T

### CH 40



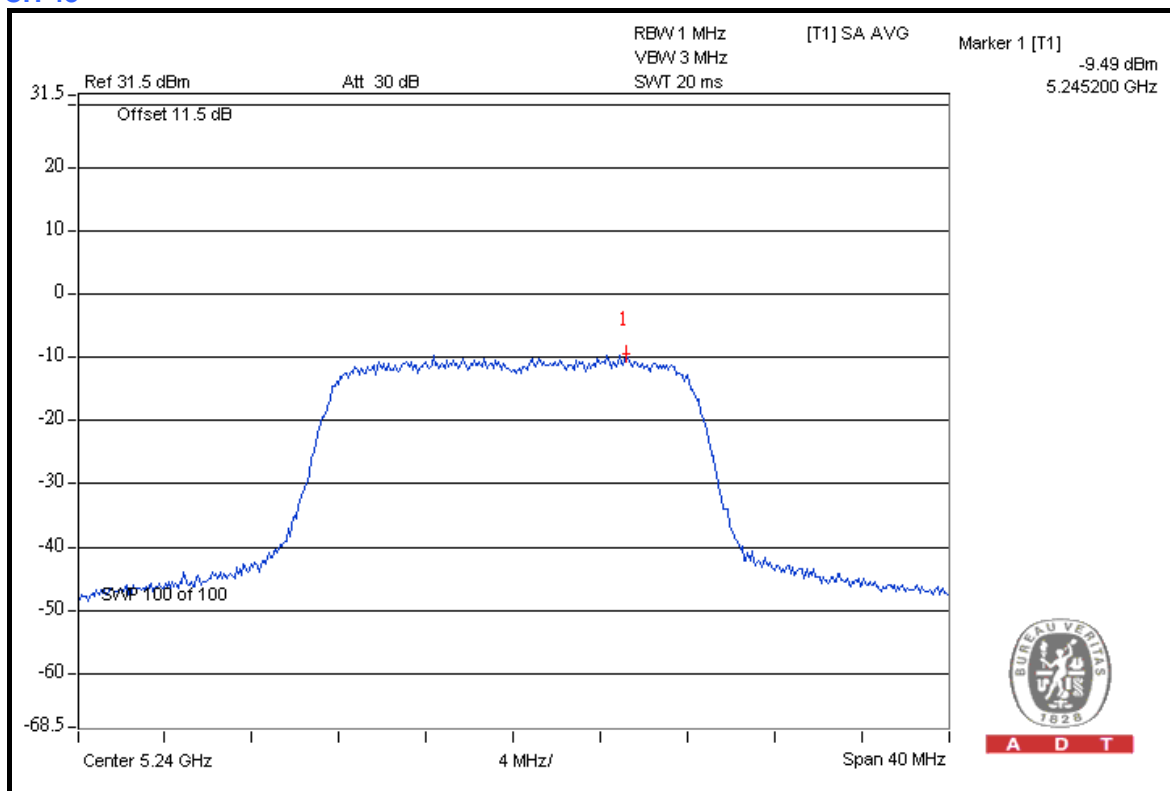
A D T



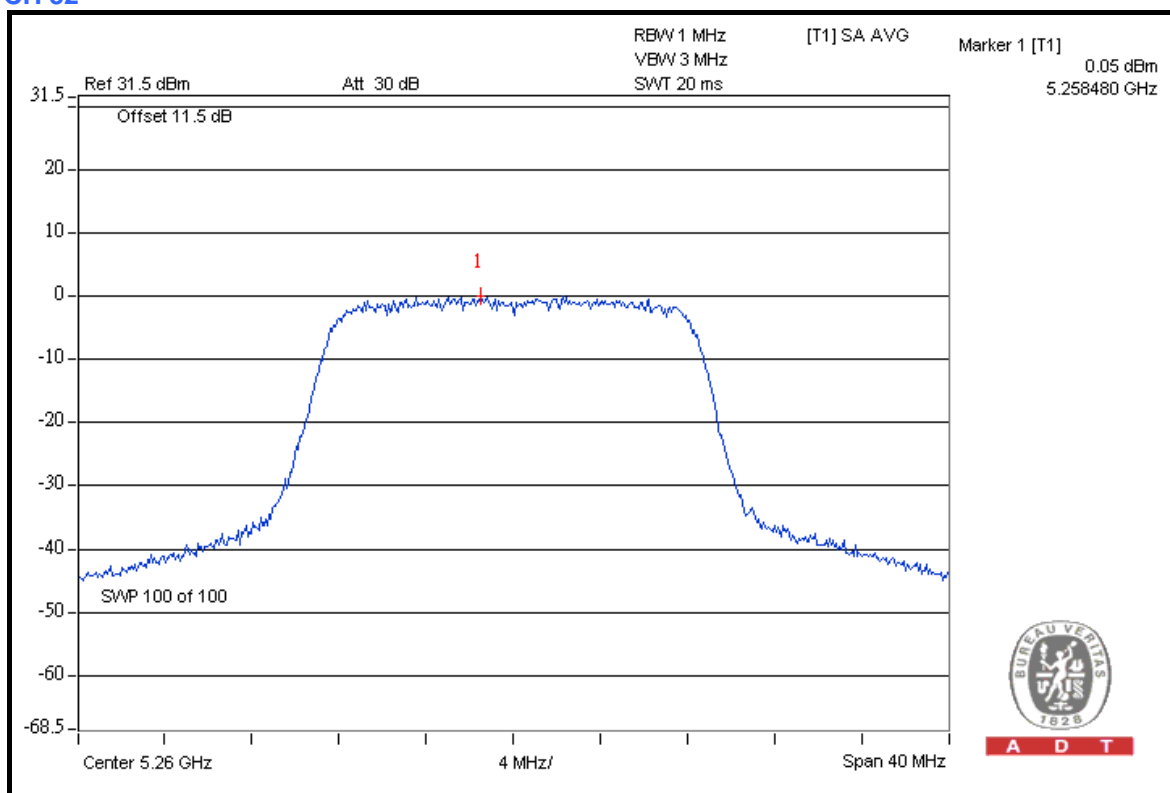


A D T

### CH 48



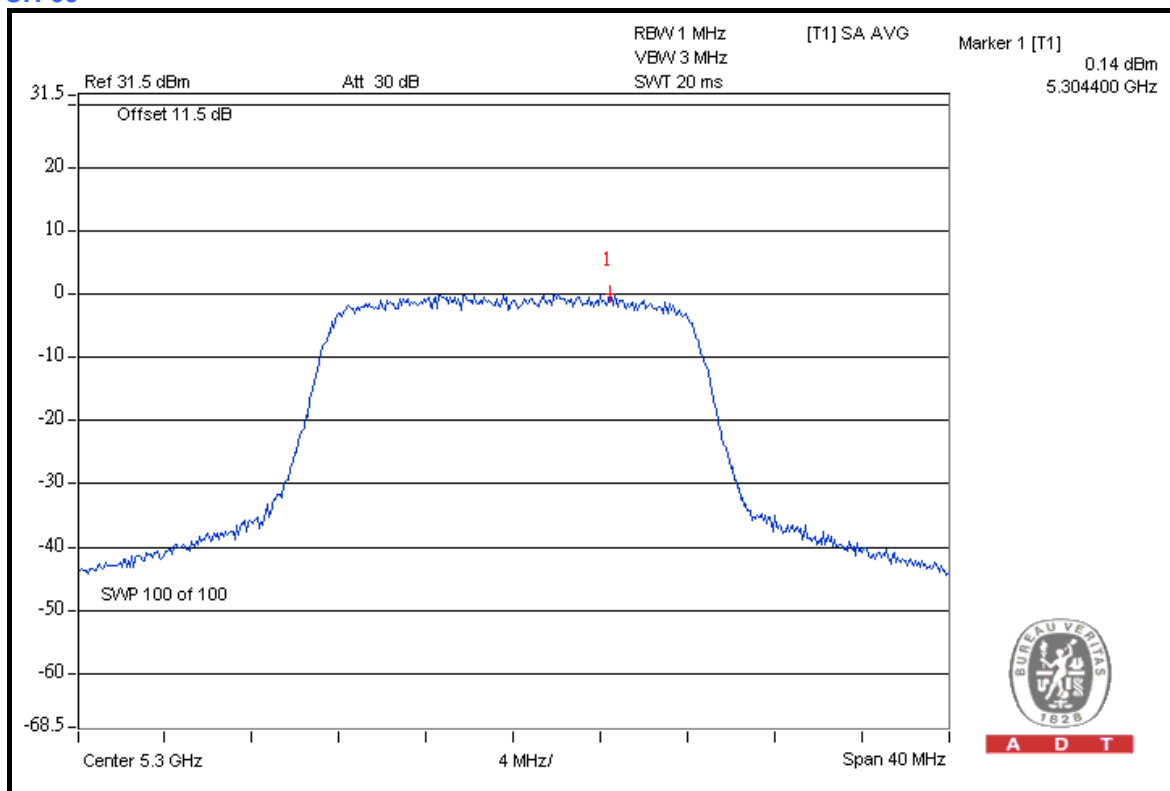
### CH 52



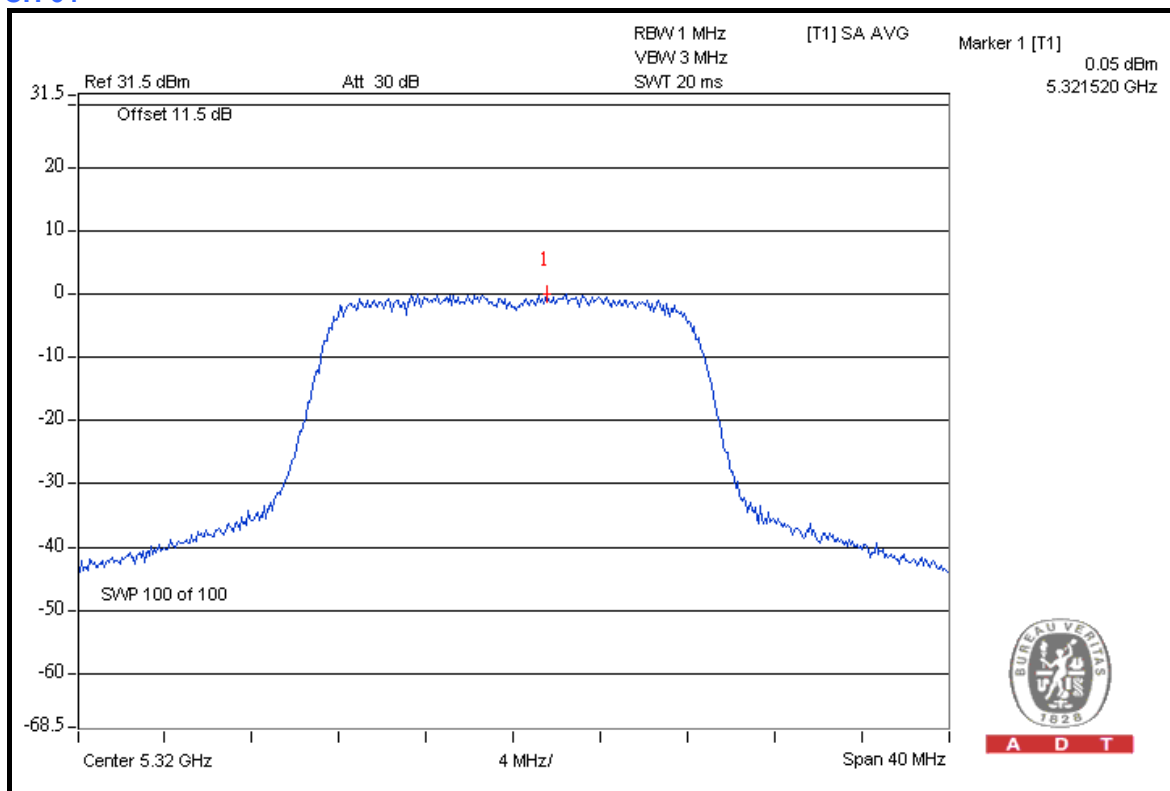


A D T

### CH 60



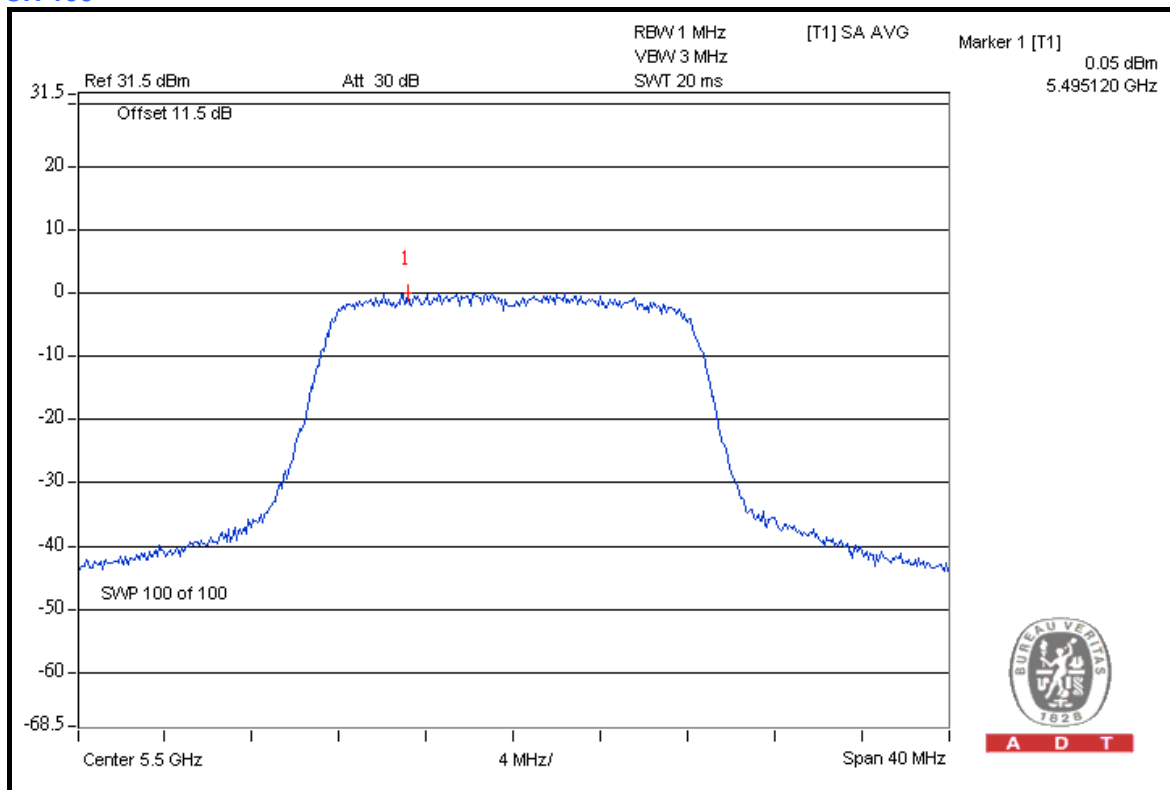
### CH 64



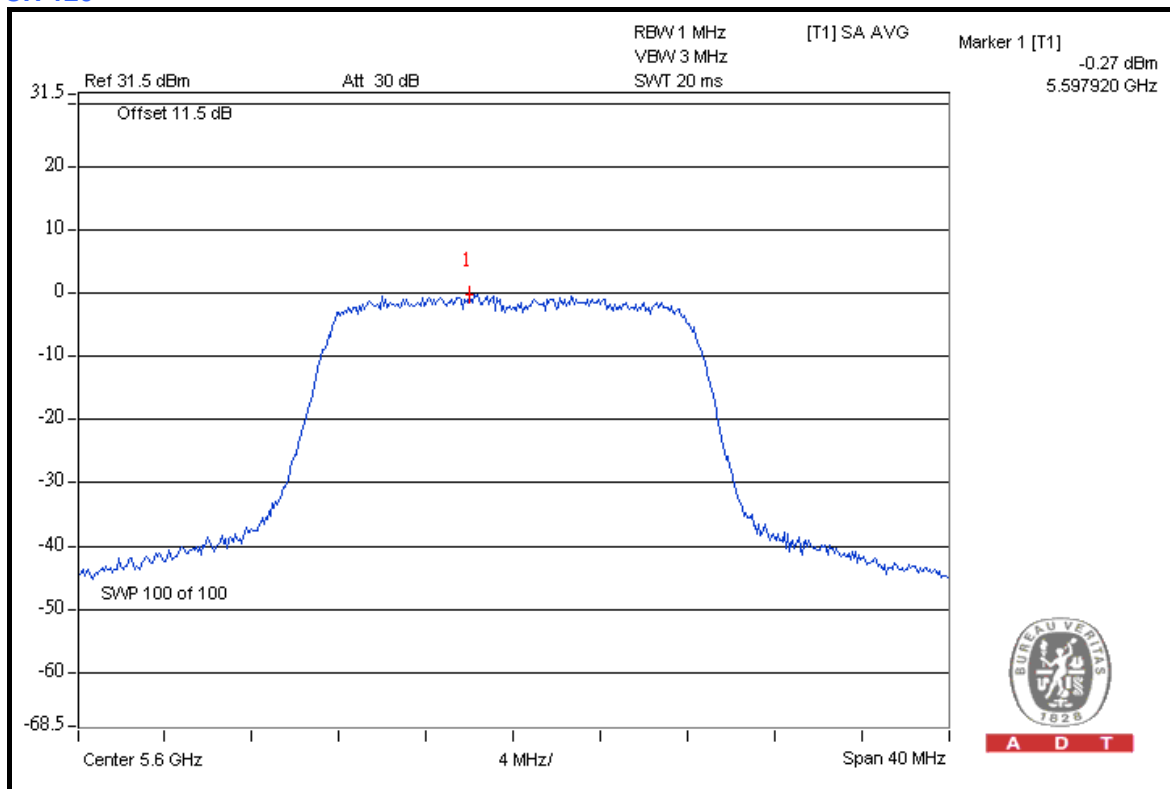


A D T

### CH 100



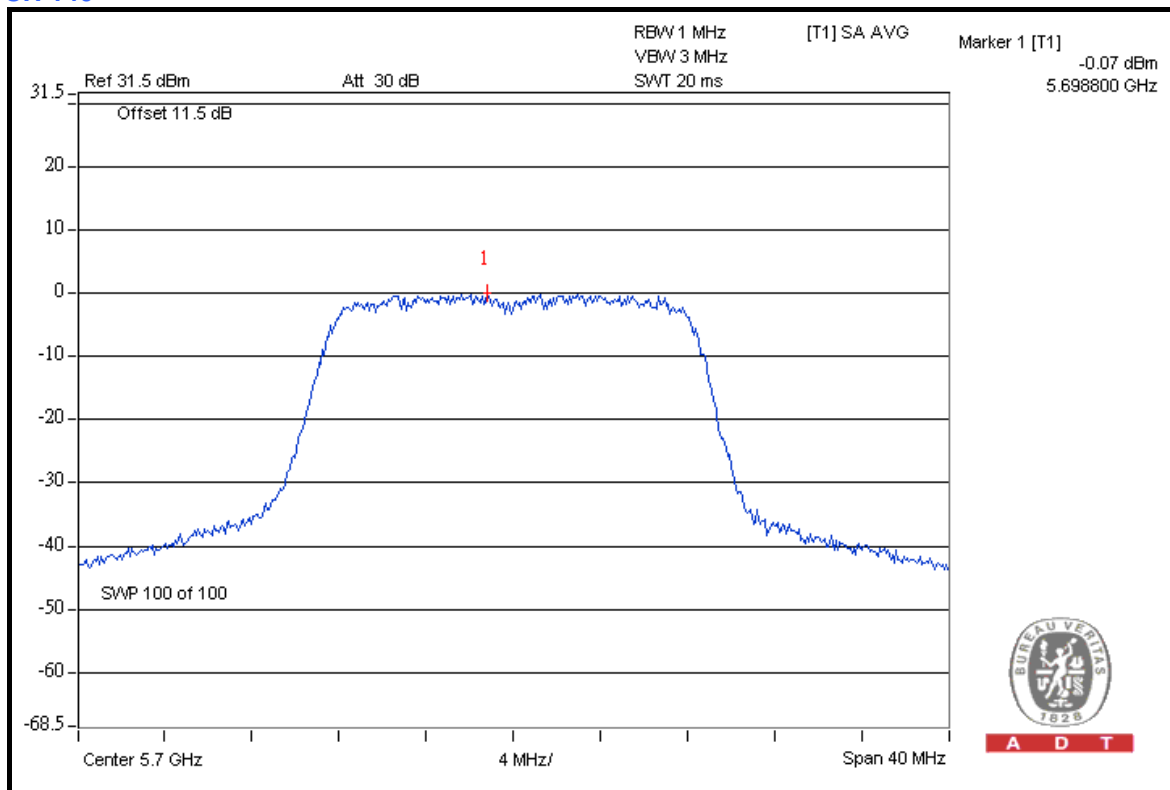
### CH 120



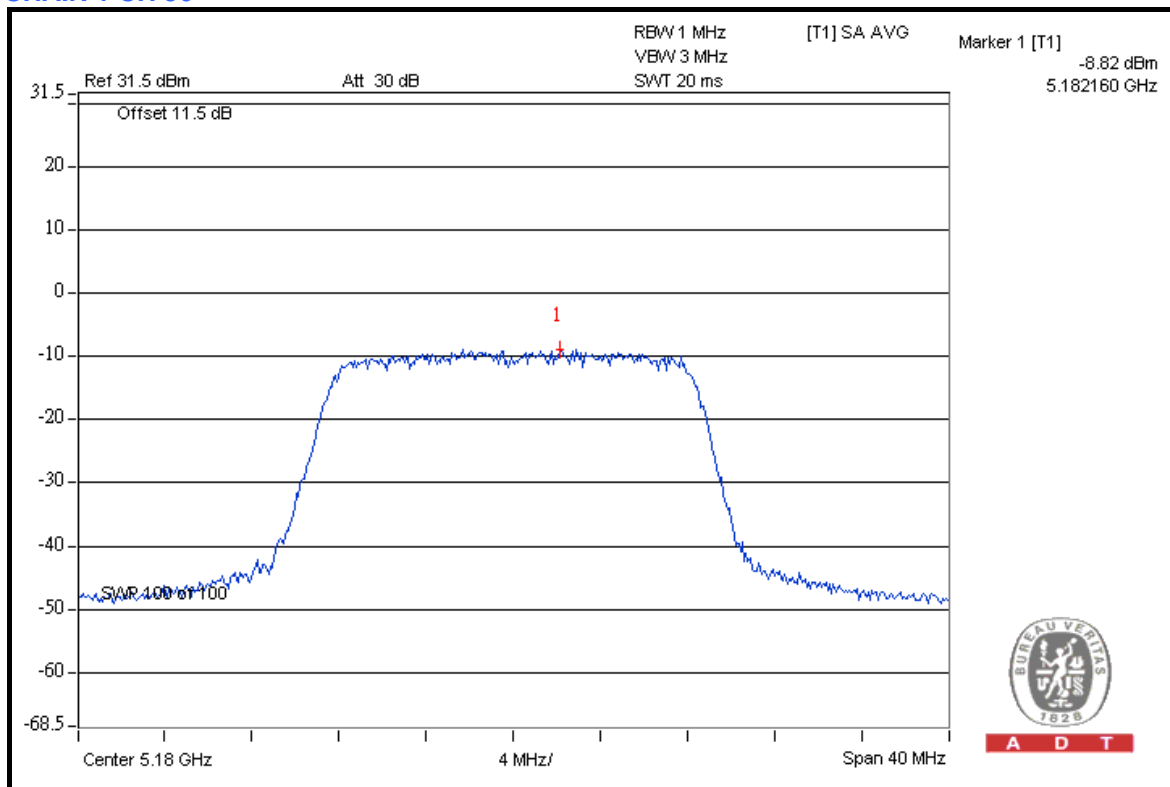


A D T

### CH 140



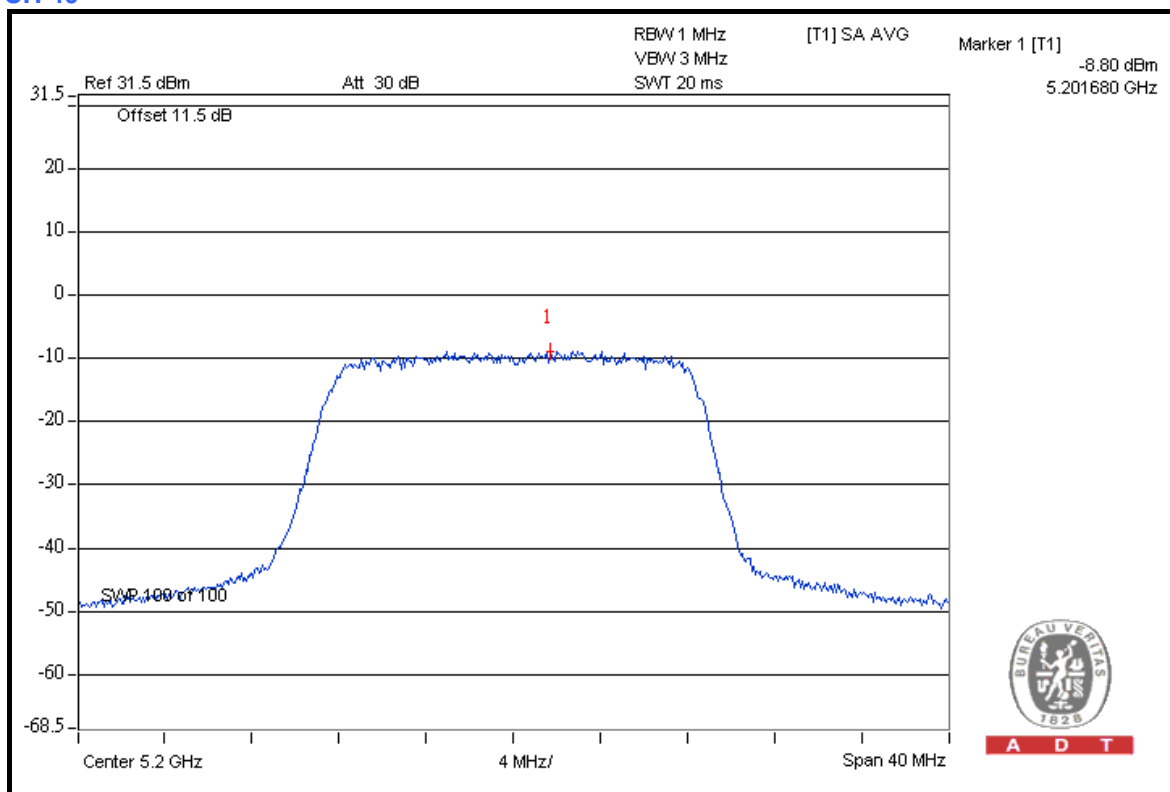
### CHAIN 1 CH 36



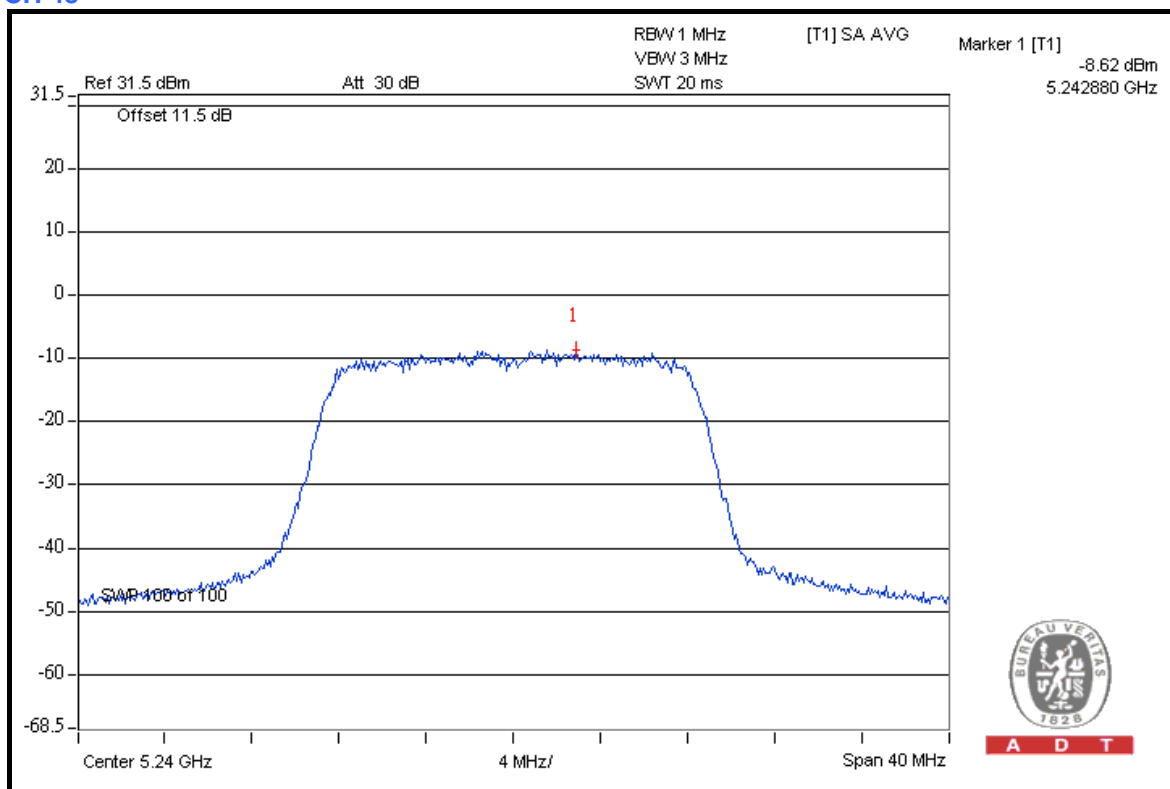


A D T

### CH 40



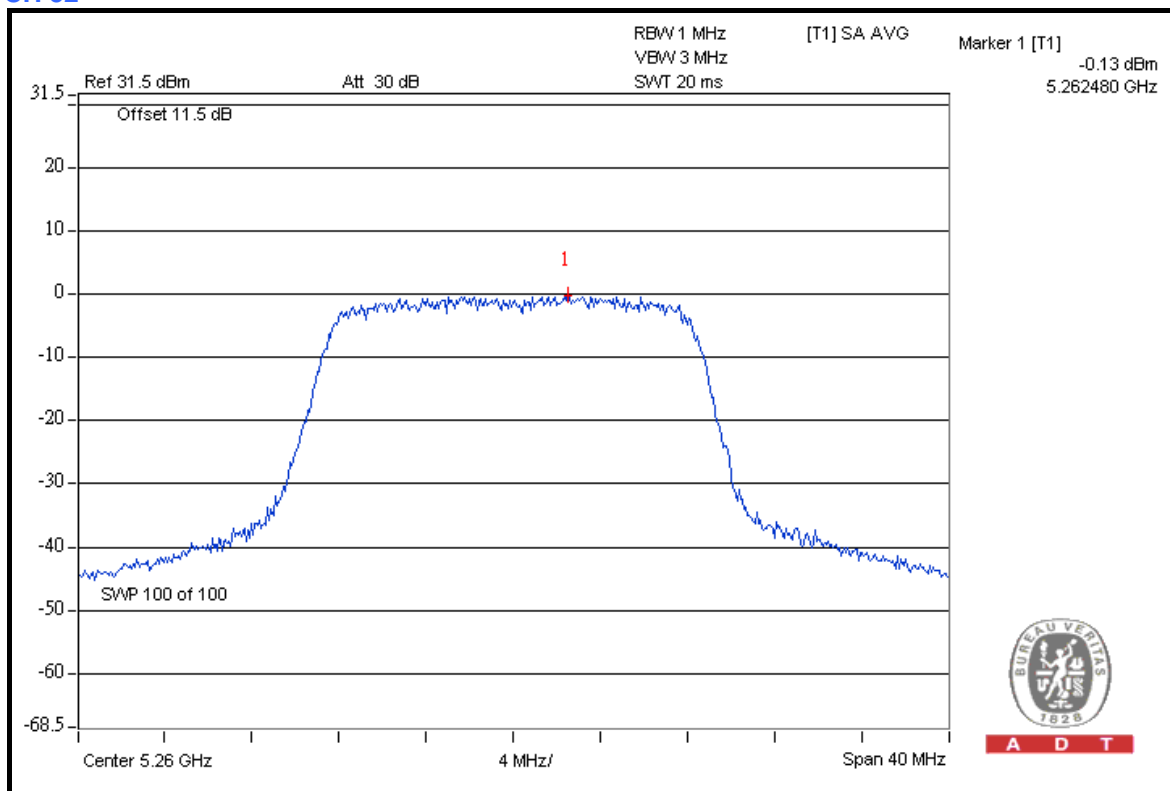
### CH 48



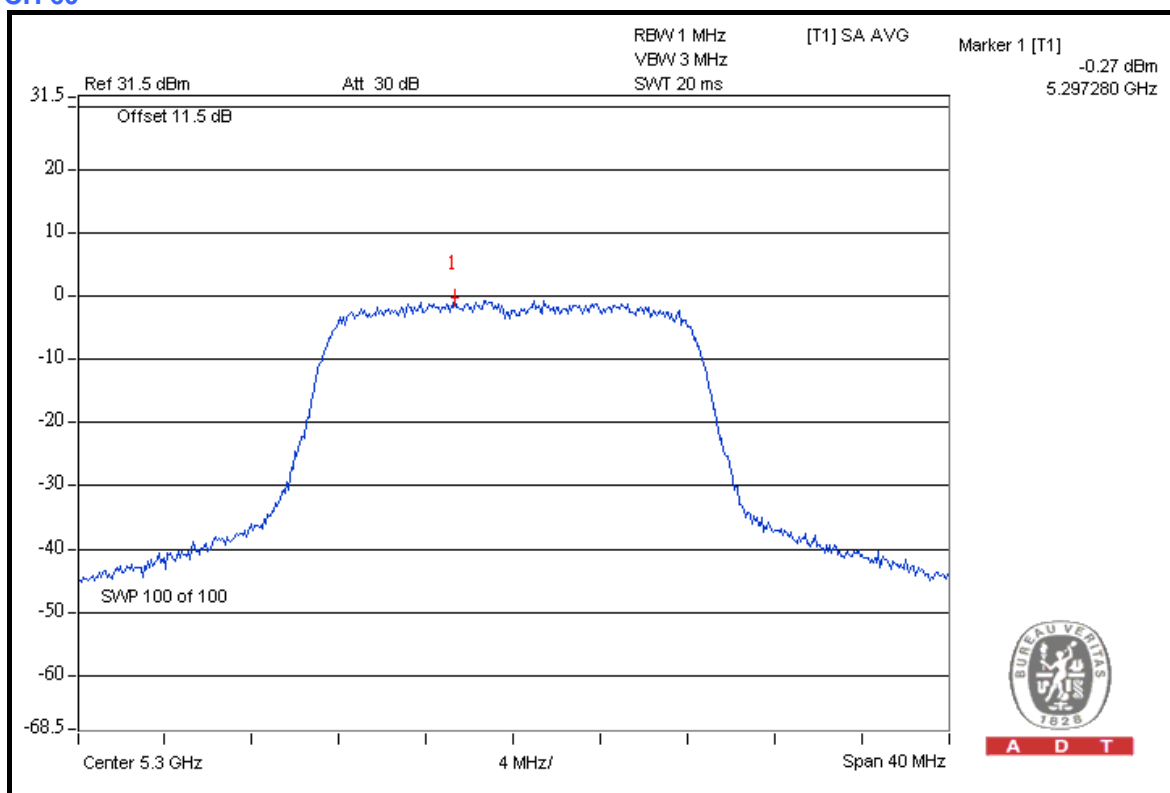


A D T

### CH 52



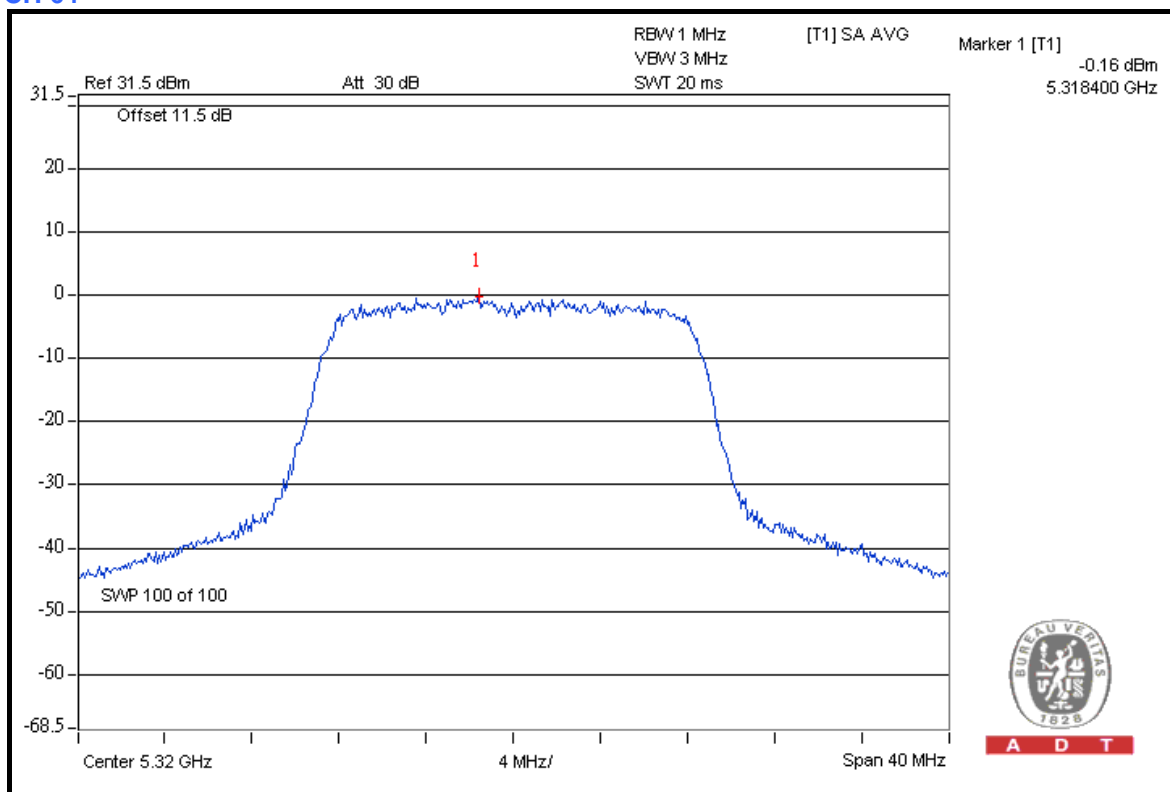
### CH 60



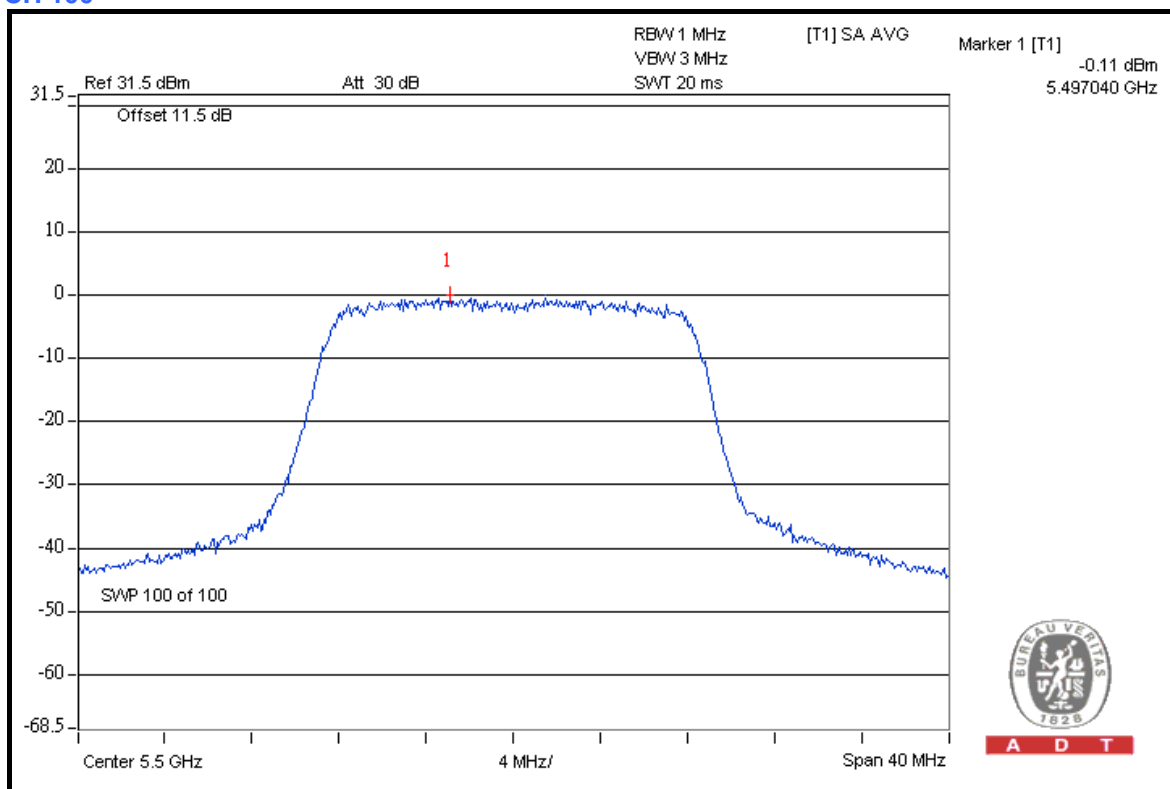


A D T

### CH 64



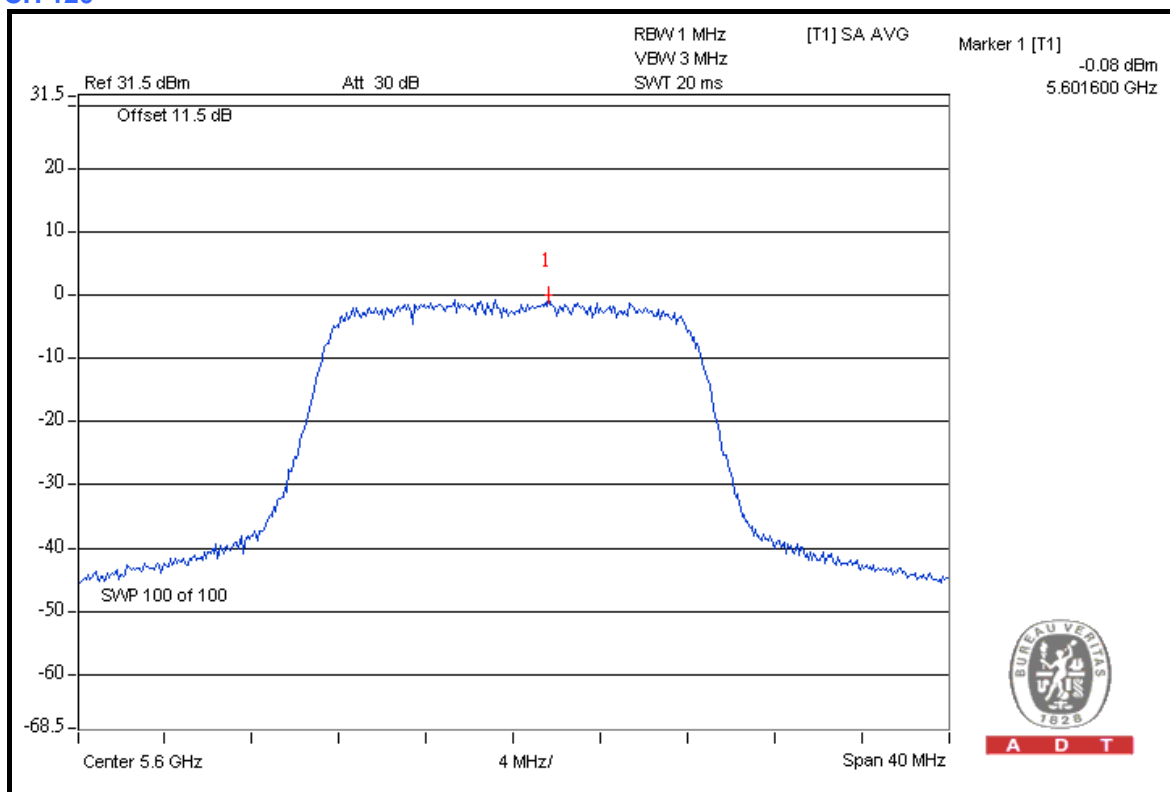
### CH 100



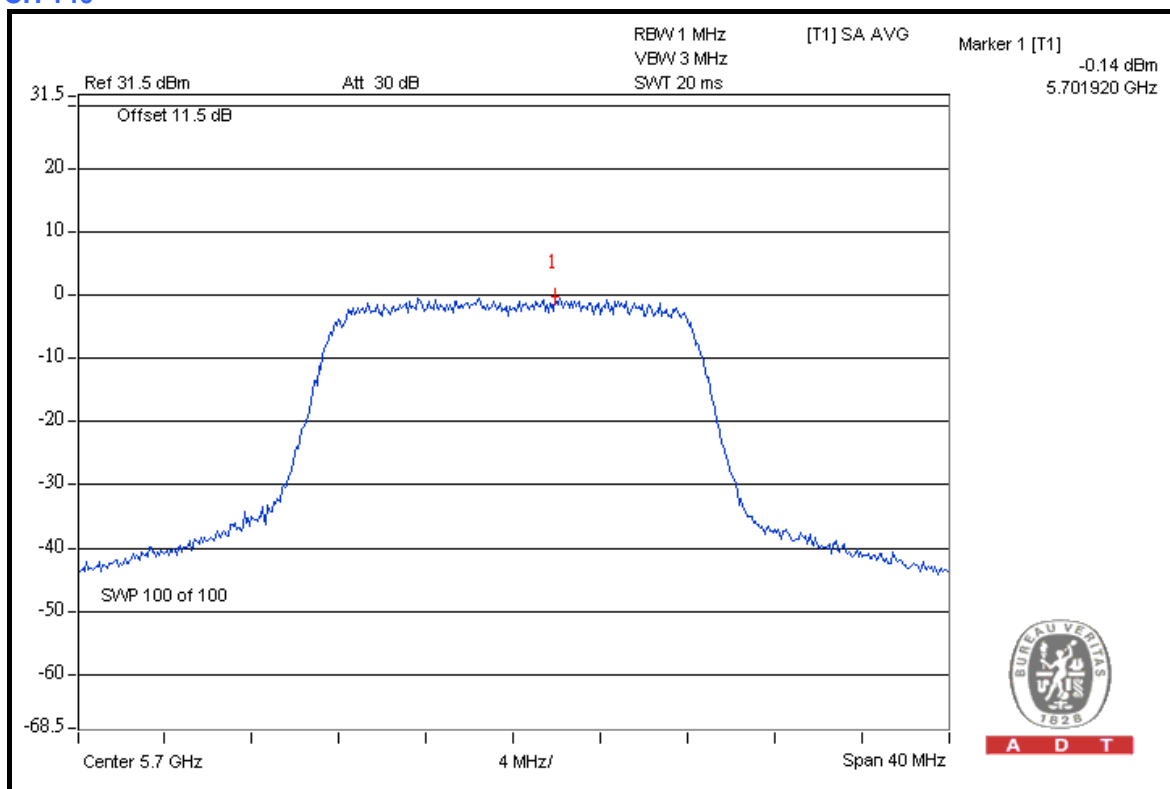


A D T

### CH 120



### CH 140







A D T

### DRAFT 802.11n (20MHz) OFDM MODULATION

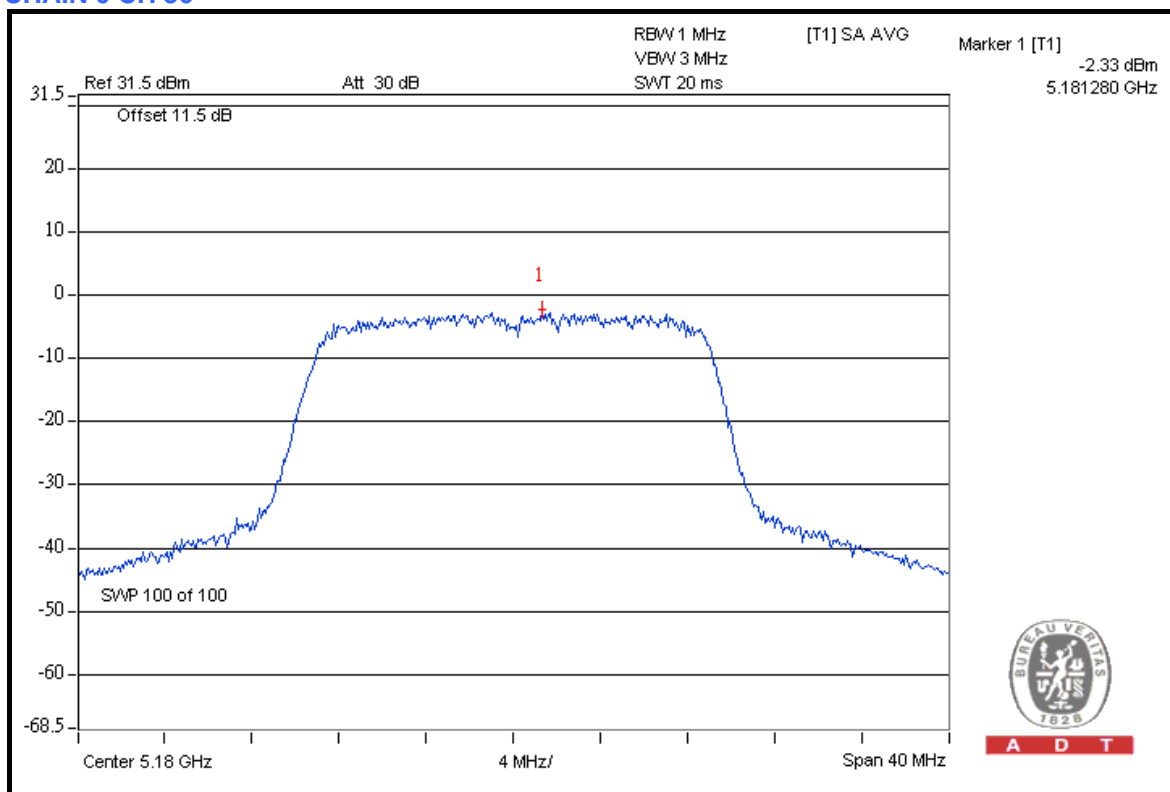
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	-2.33	-2.33	-2.31	1.757	2.45	4	PASS
40	5200	-2.12	-2.17	-2.15	1.830	2.62	4	PASS
48	5240	-2.11	-2.29	-2.17	1.812	2.58	4	PASS
52	5260	4.56	4.01	4.28	8.05	9.06	11	PASS
60	5300	4.80	4.19	4.28	8.32	9.20	11	PASS
64	5320	4.71	3.90	4.19	8.04	9.05	11	PASS
100	5500	4.78	4.00	4.34	8.23	9.16	11	PASS
120	5600	4.59	4.17	4.49	8.30	9.19	11	PASS
140	5700	4.57	3.85	4.04	4.96	6.96	11	PASS

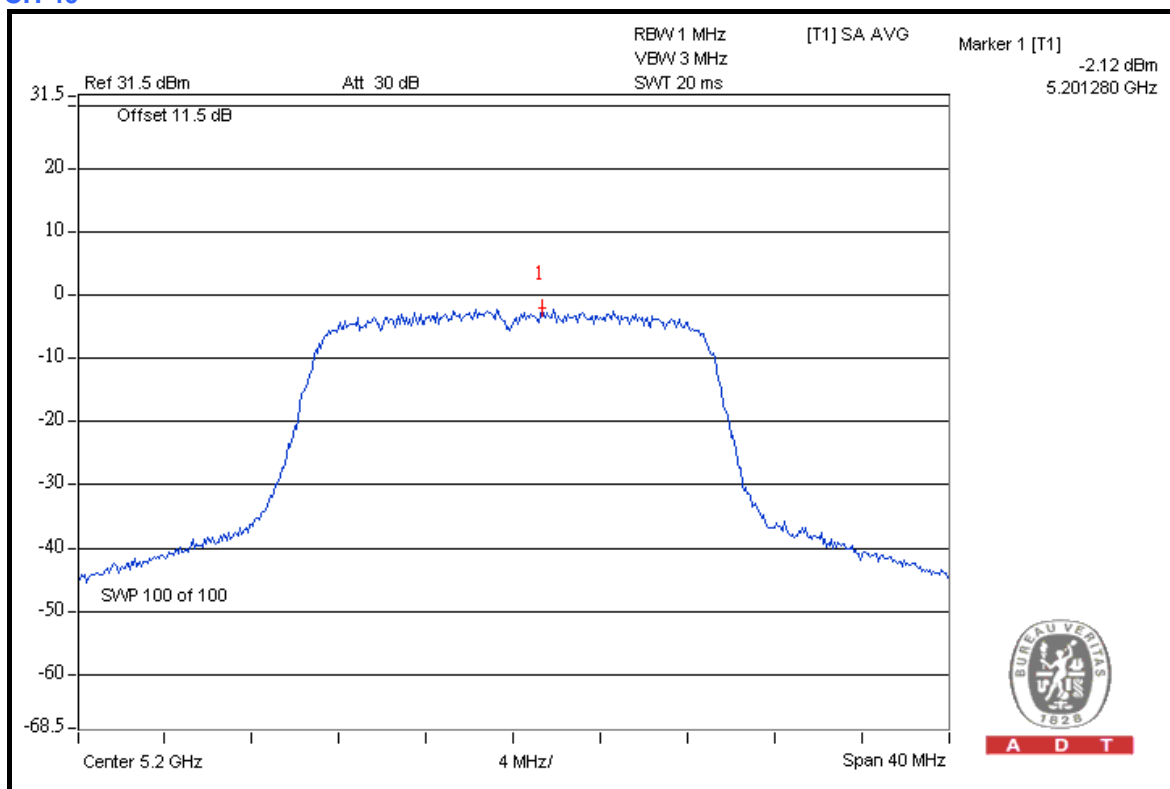


A D T

### CHAIN 0 CH 36



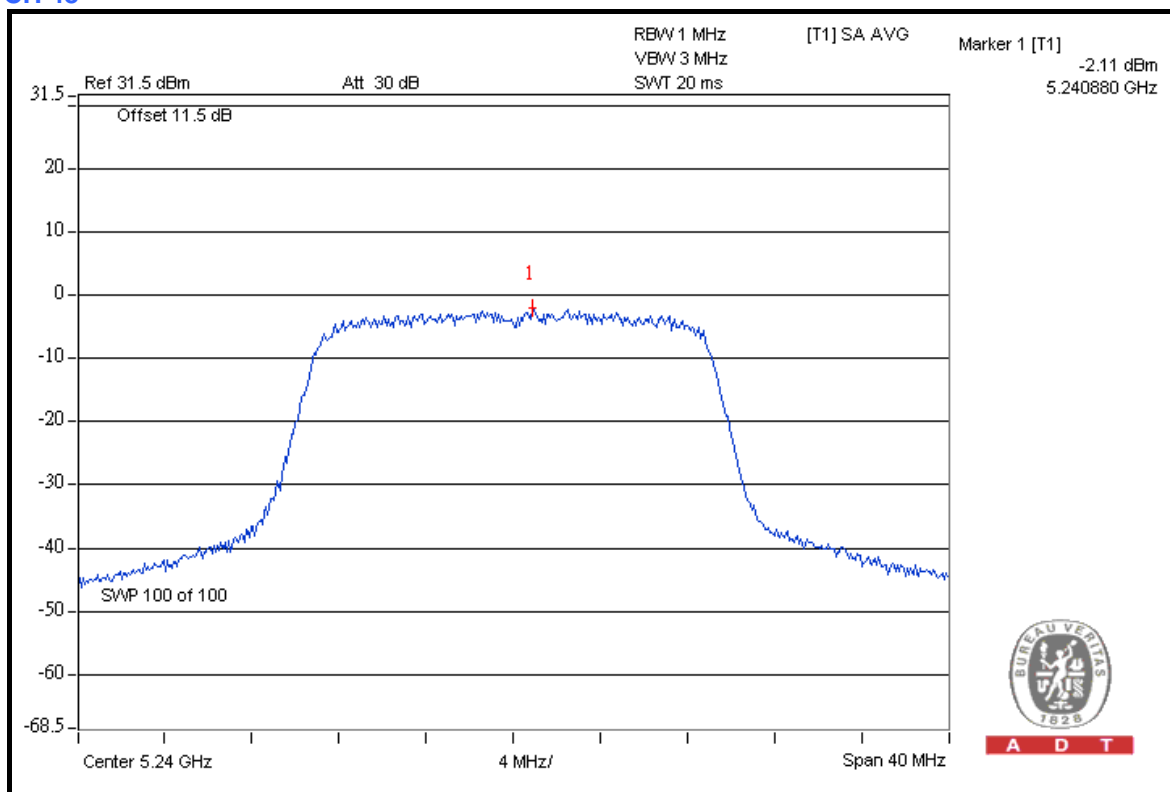
### CH 40



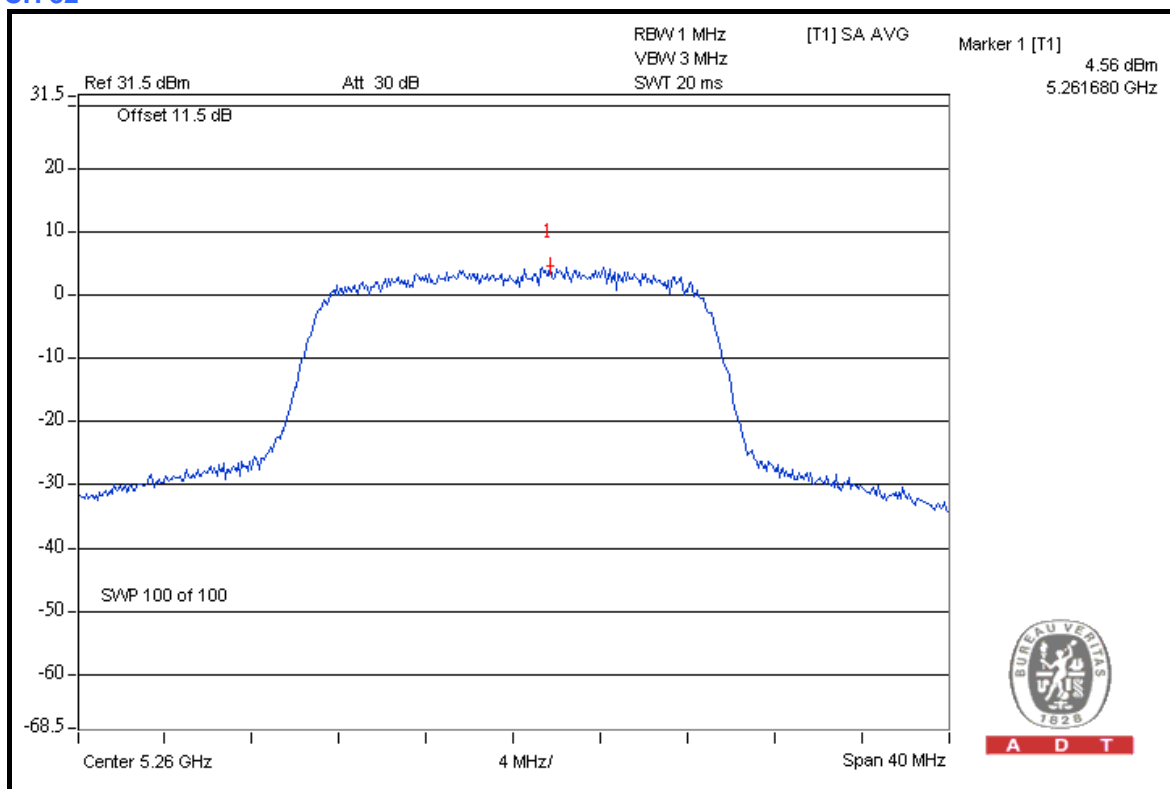


A D T

### CH 48



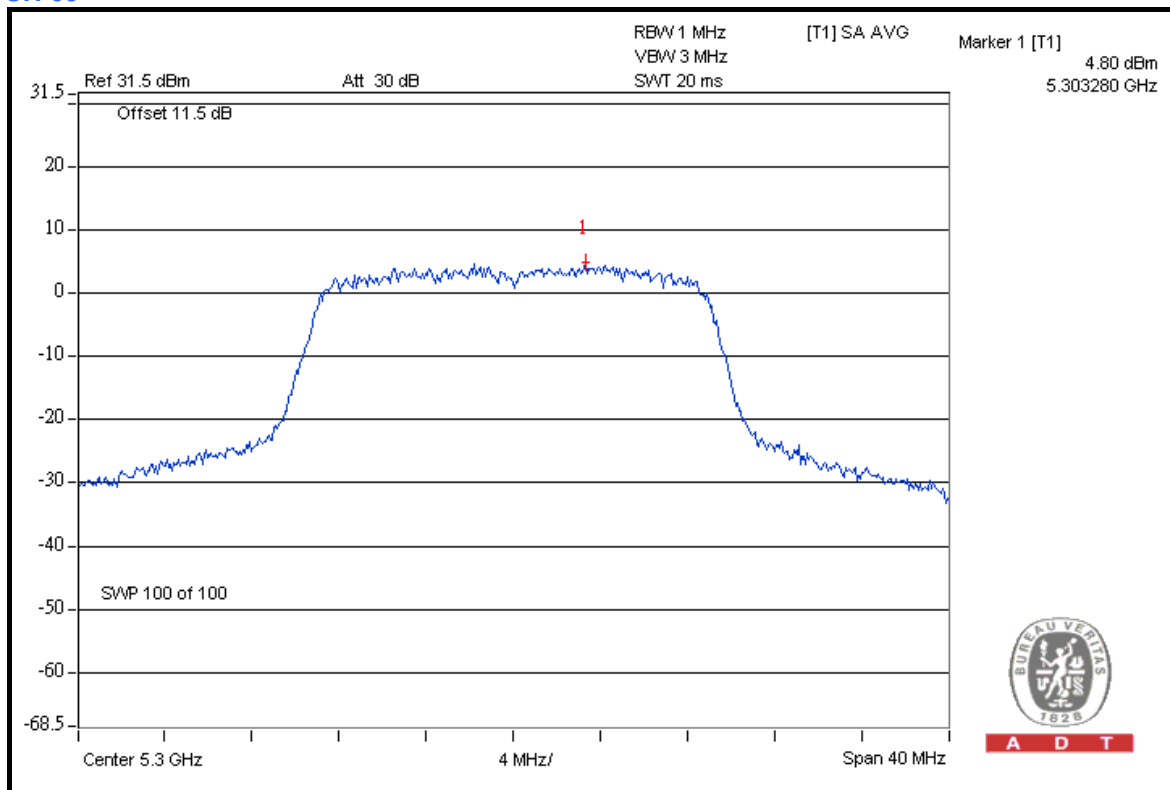
### CH 52



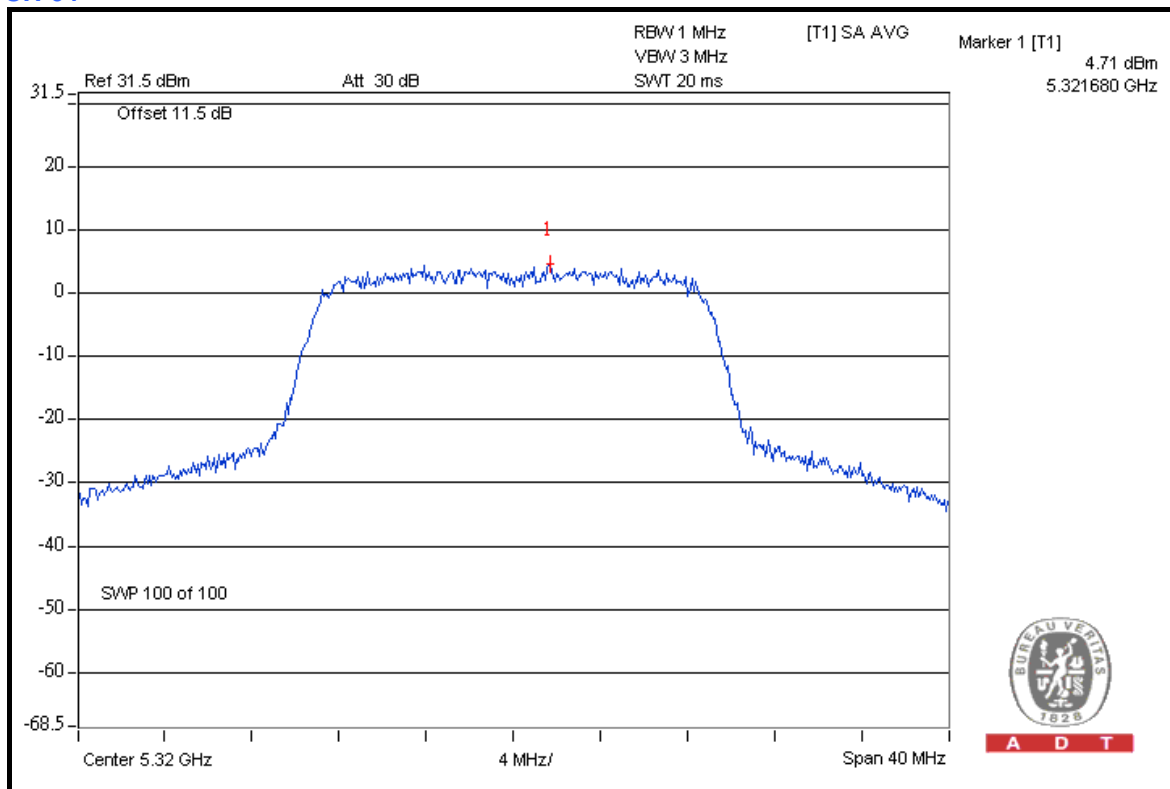


A D T

### CH 60



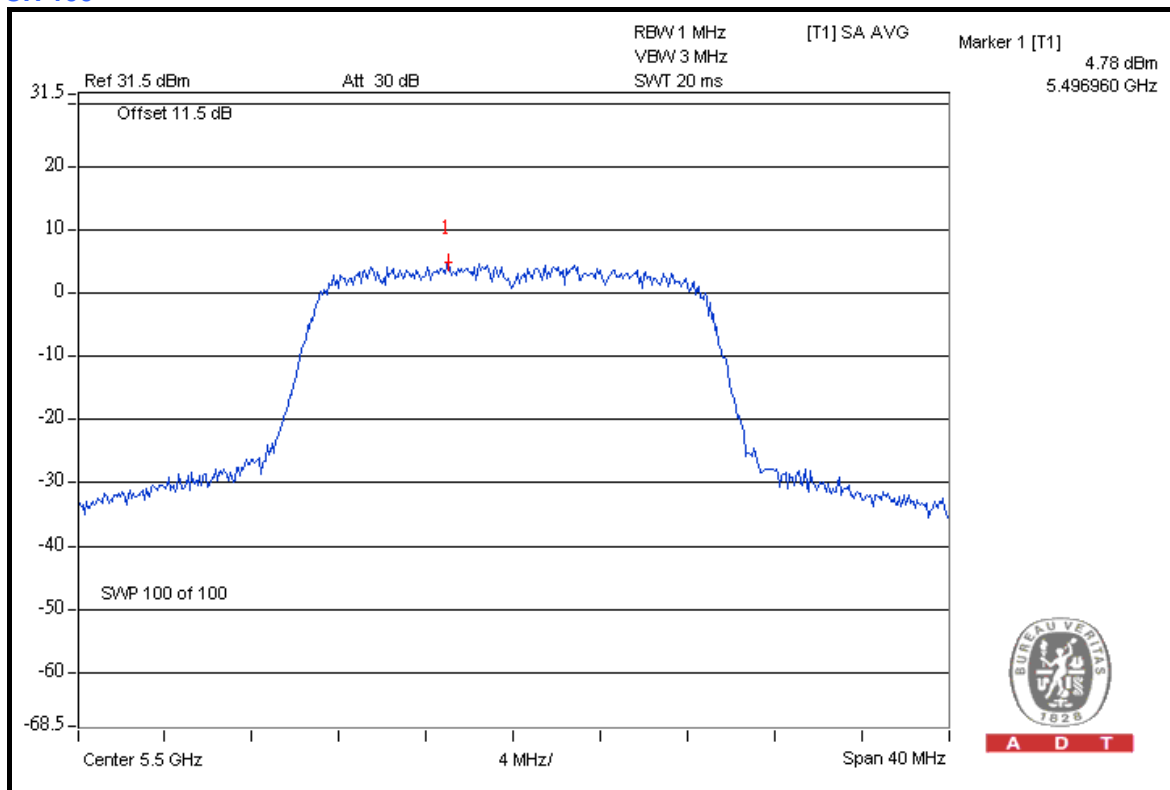
### CH 64





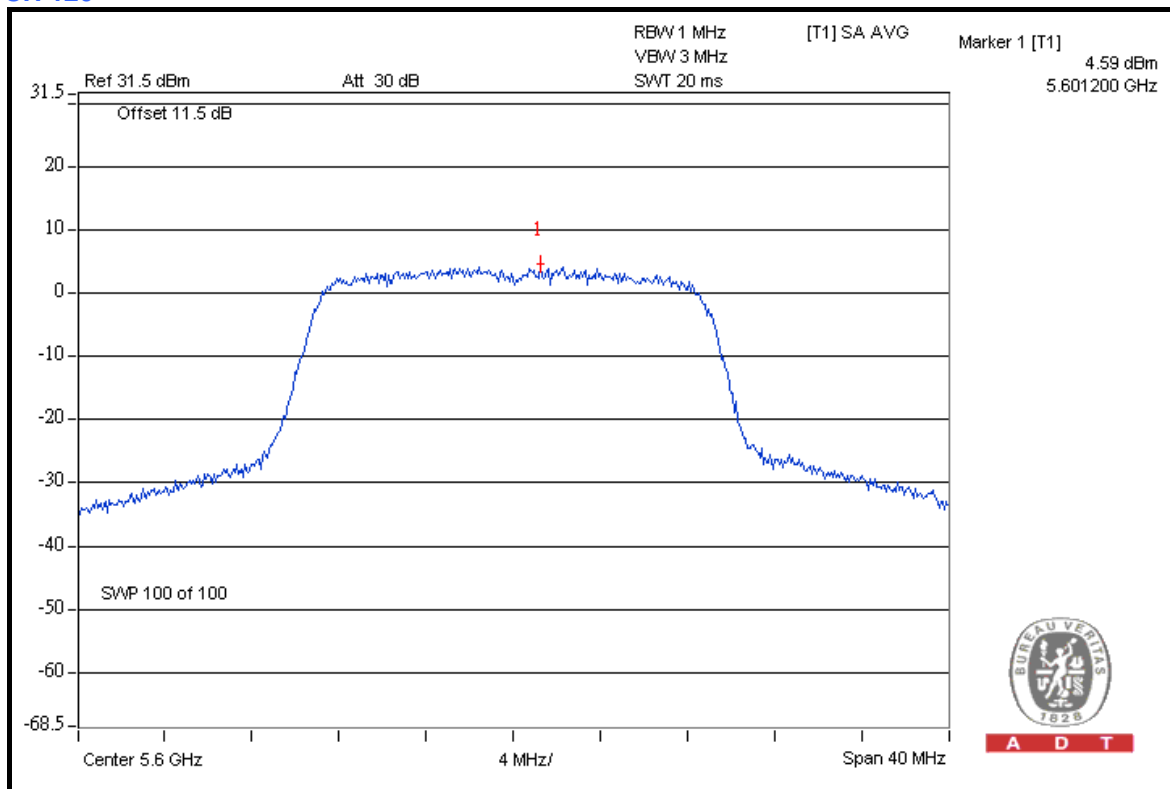
A D T

### CH 100



A D T

### CH 120

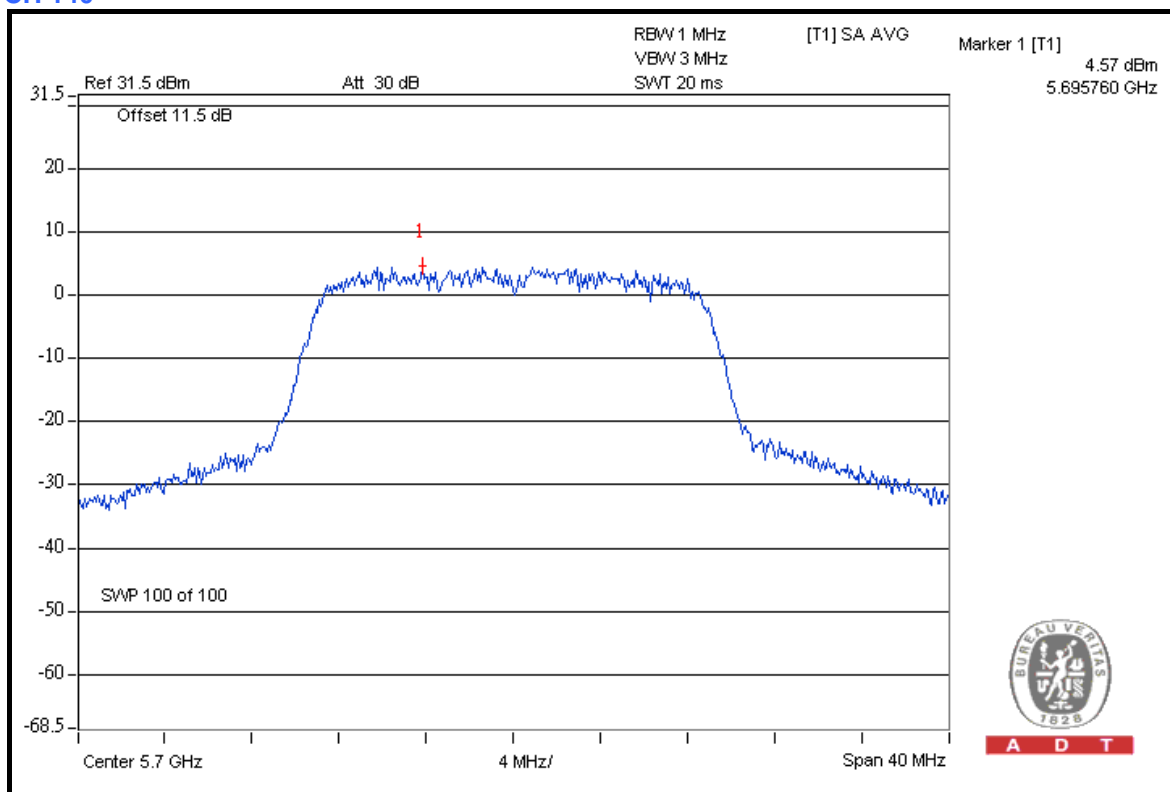


A D T

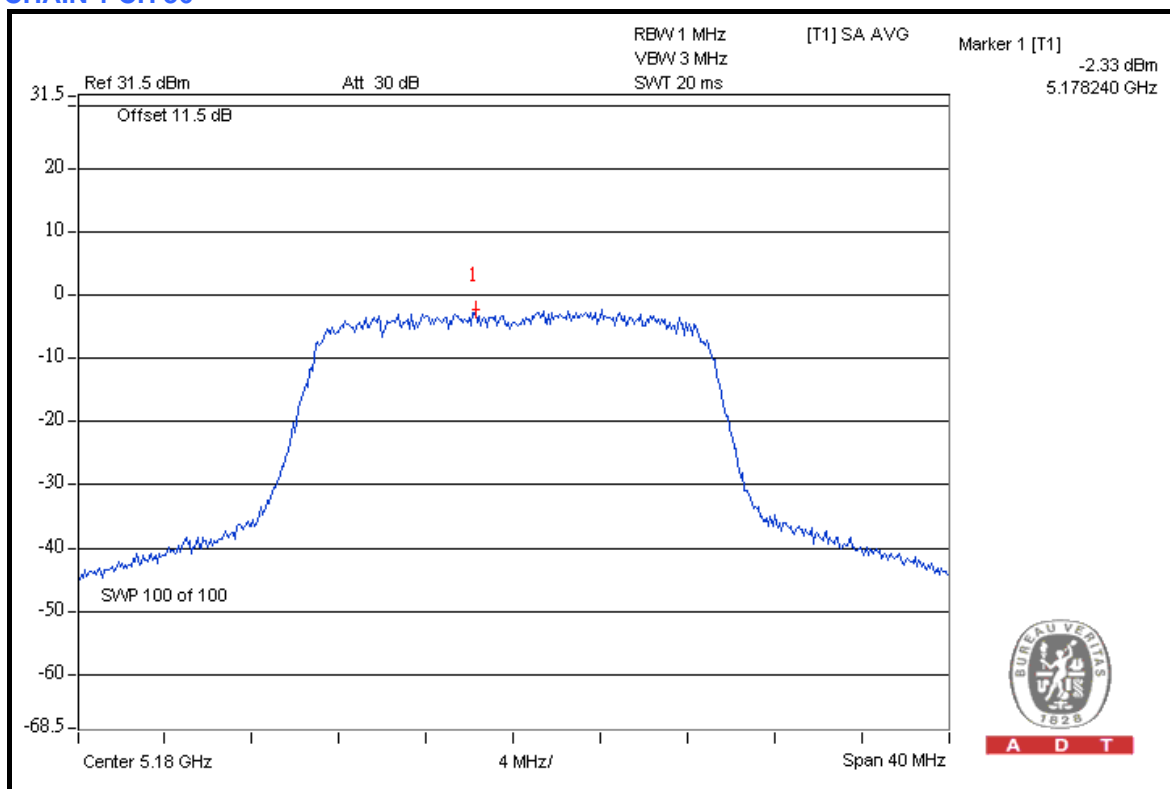


A D T

### CH 140



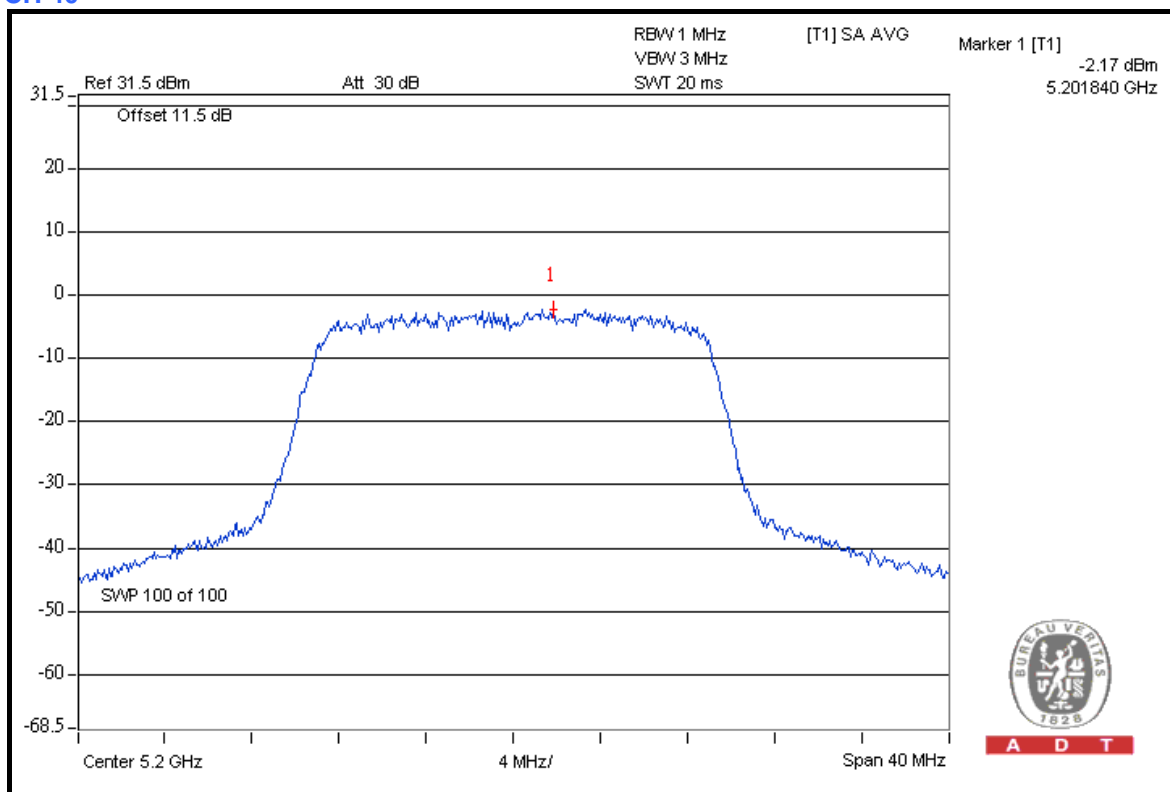
### CHAIN 1 CH 36



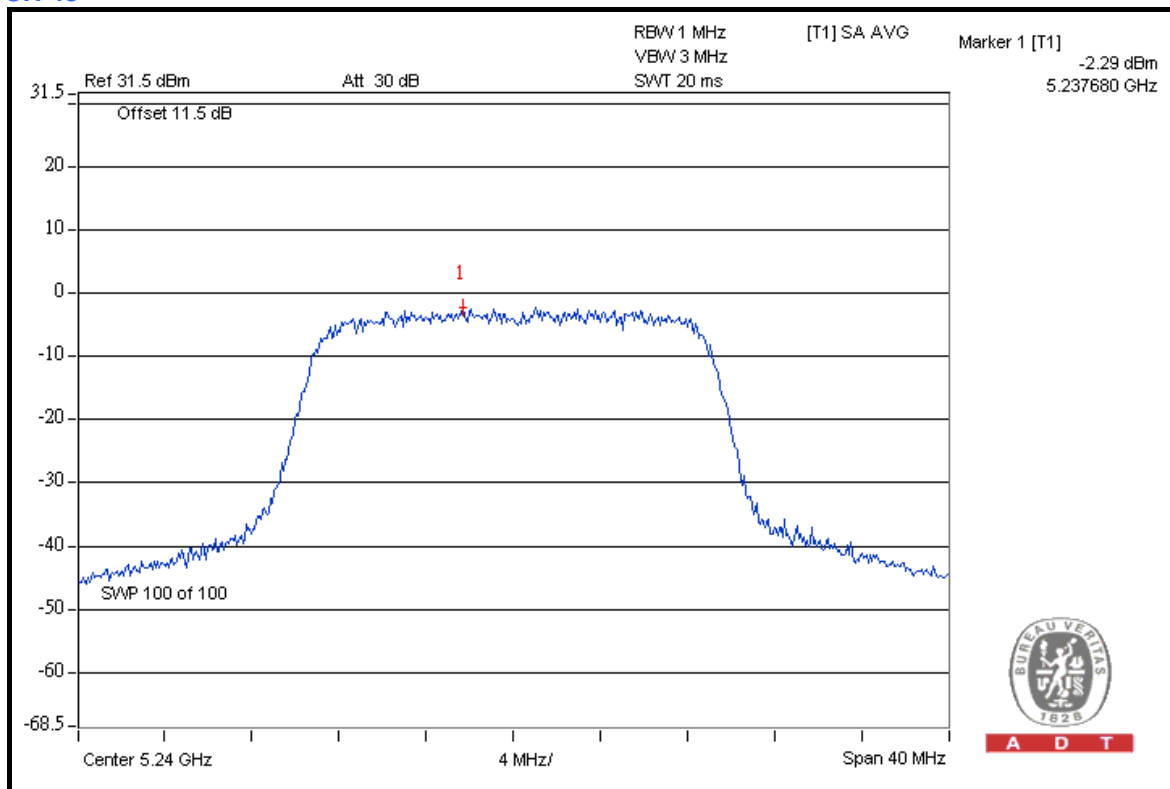


A D T

### CH 40



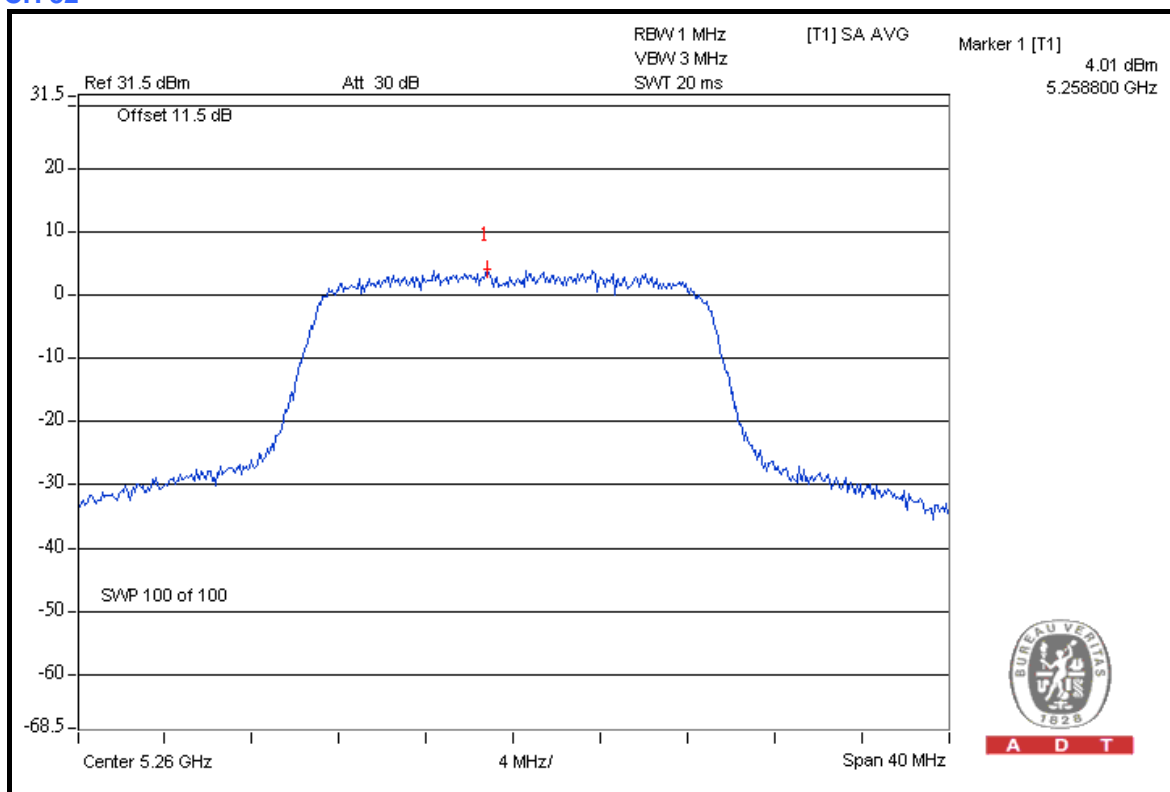
### CH 48



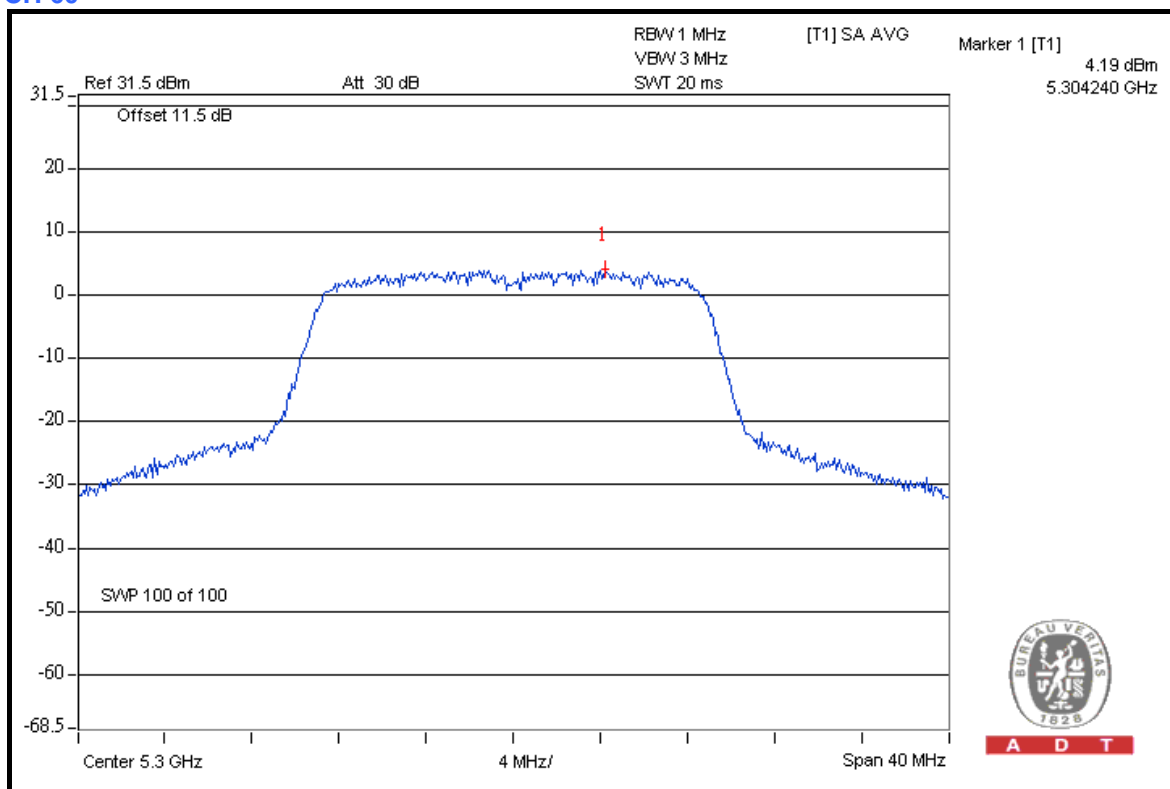


A D T

### CH 52



### CH 60

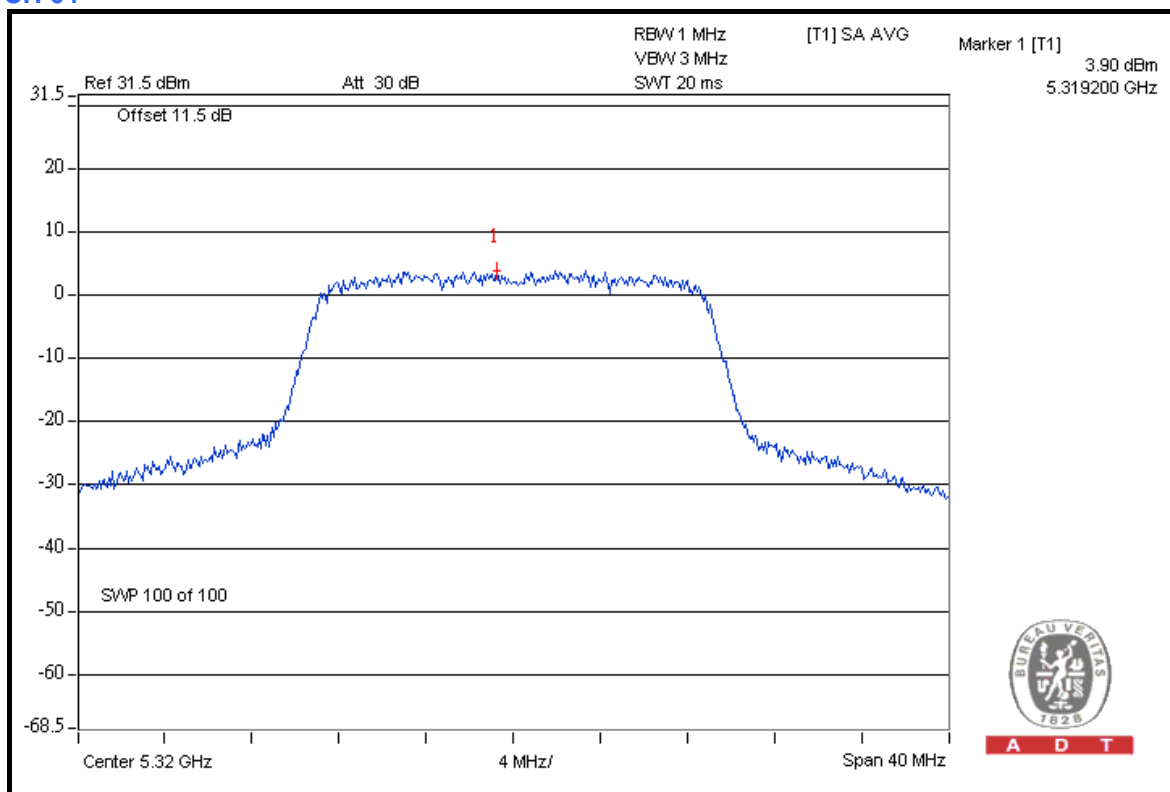




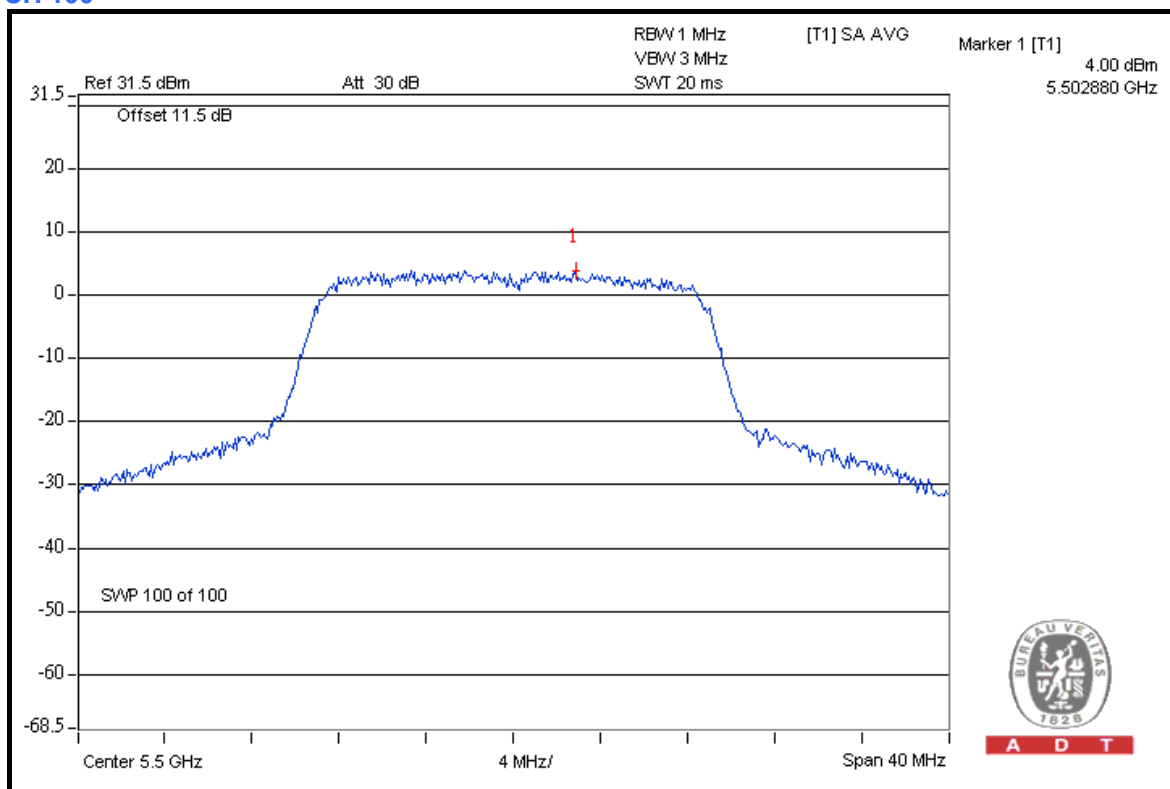


A D T

### CH 64



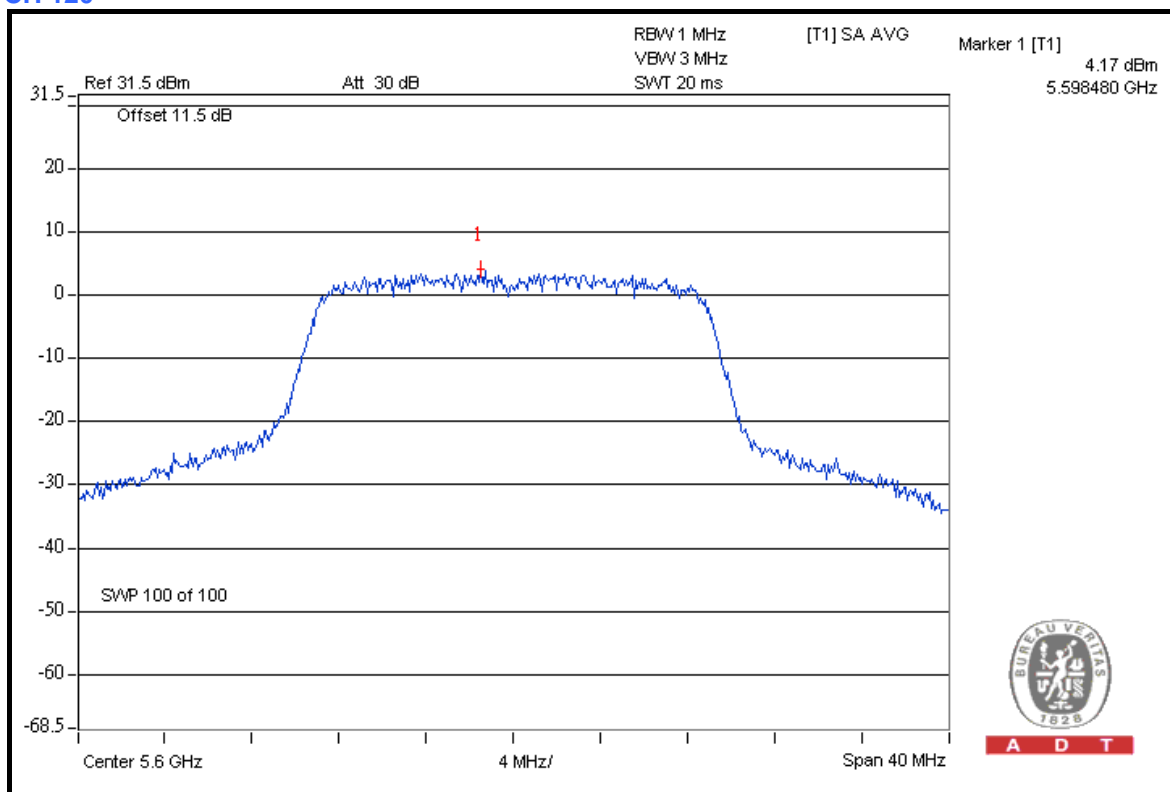
### CH 100



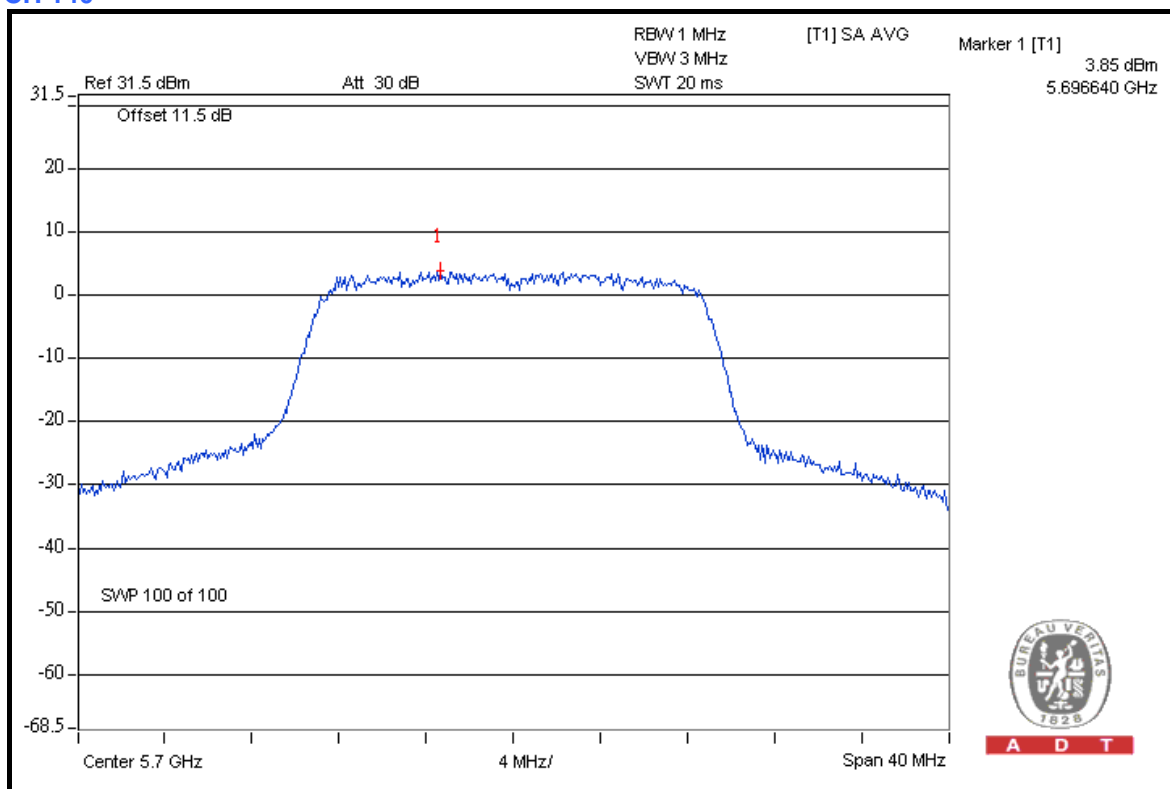


A D T

### CH 120



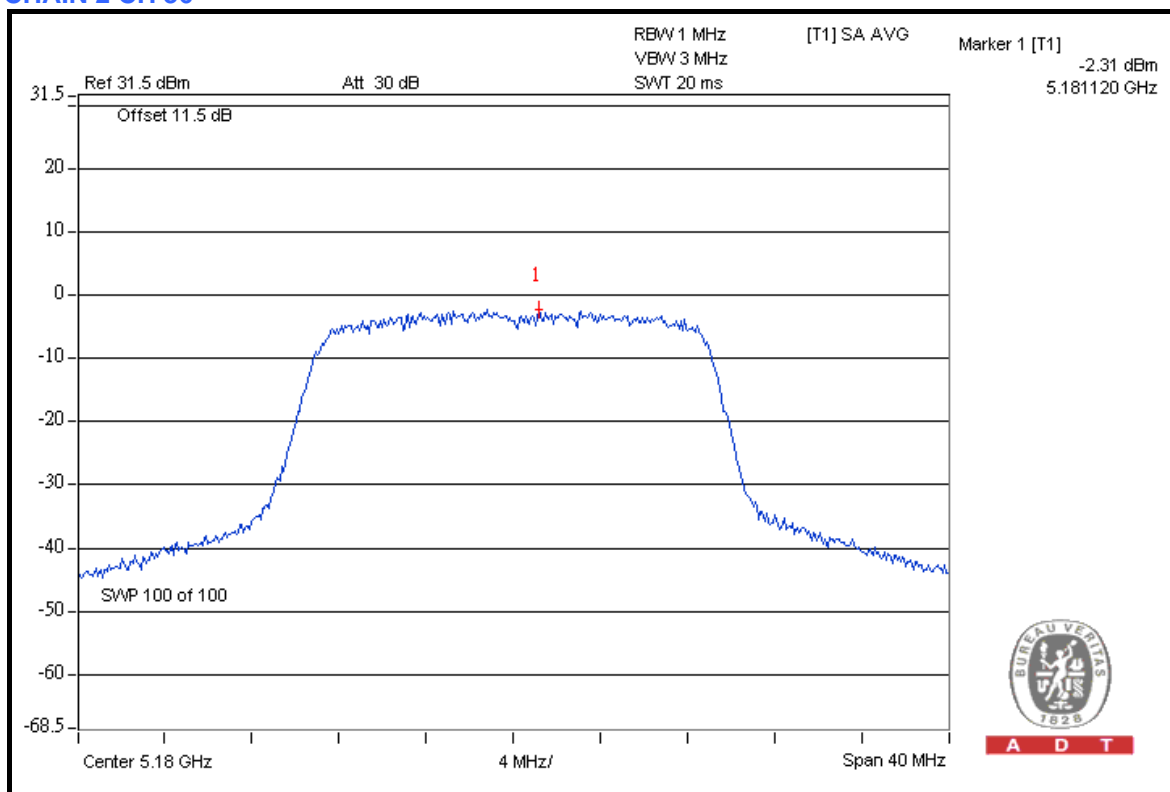
### CH 140



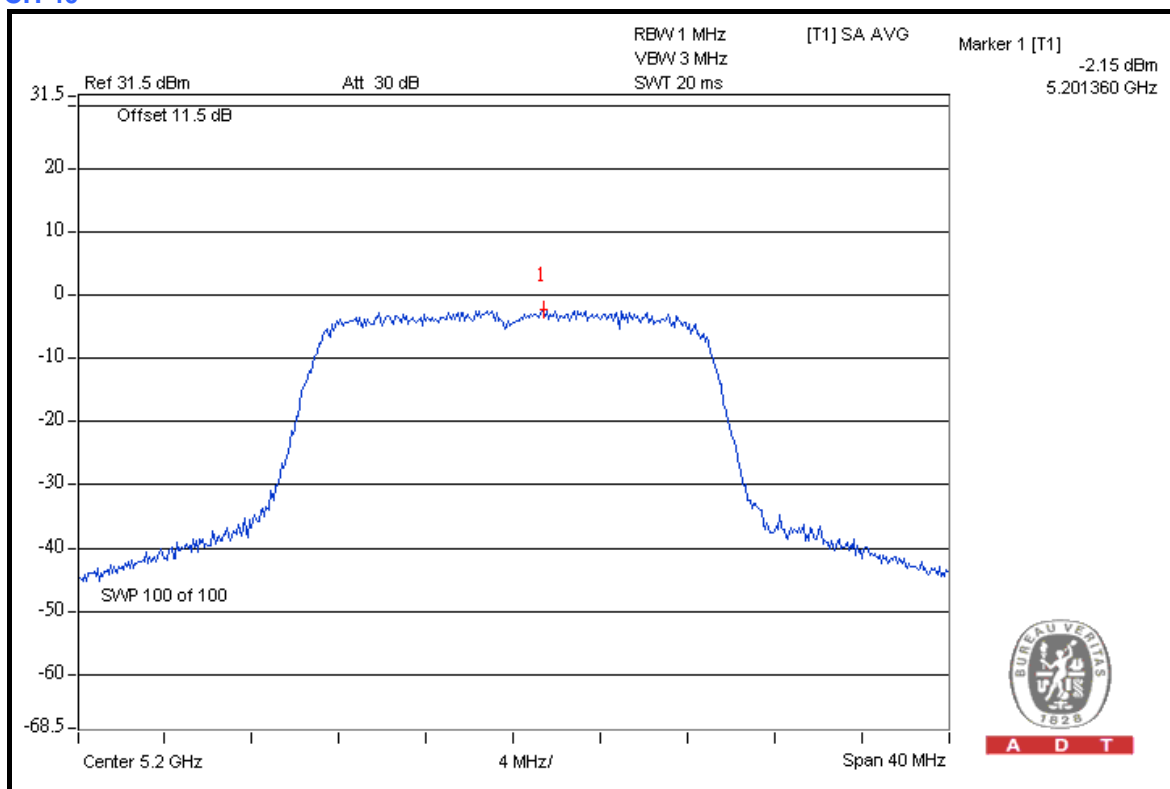


A D T

### CHAIN 2 CH 36



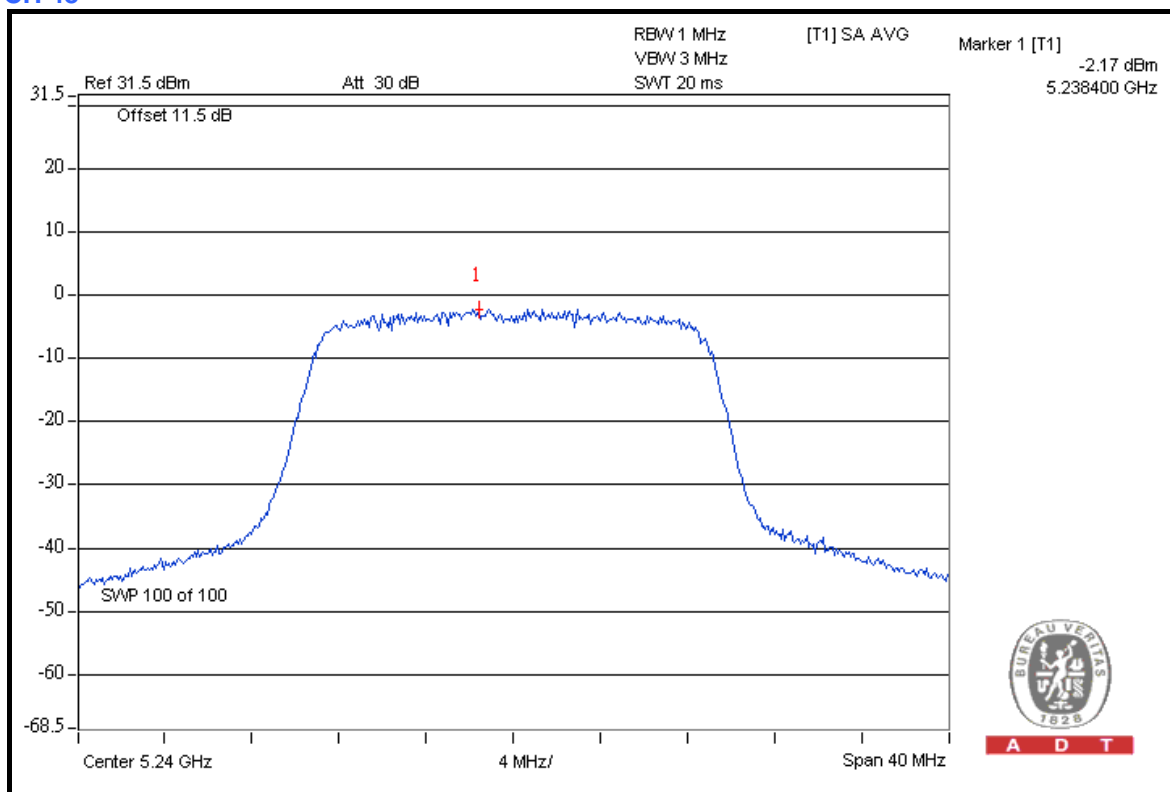
### CH 40



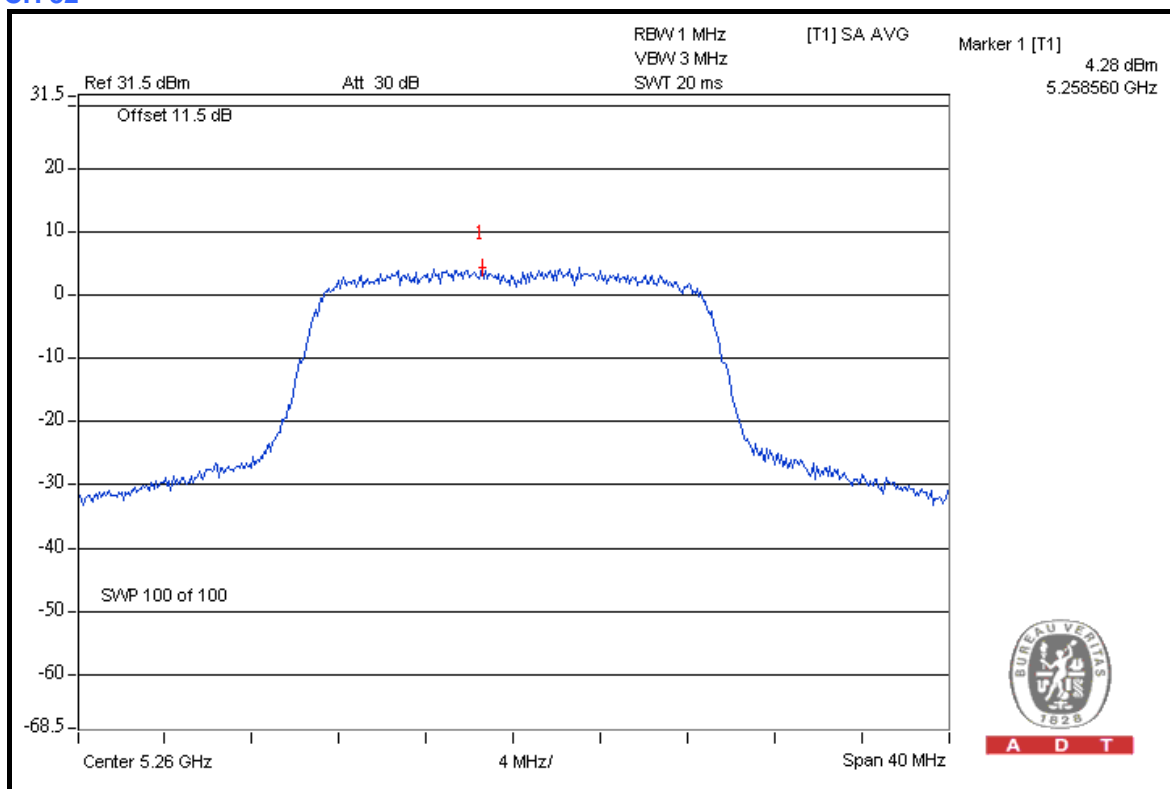


A D T

### CH 48



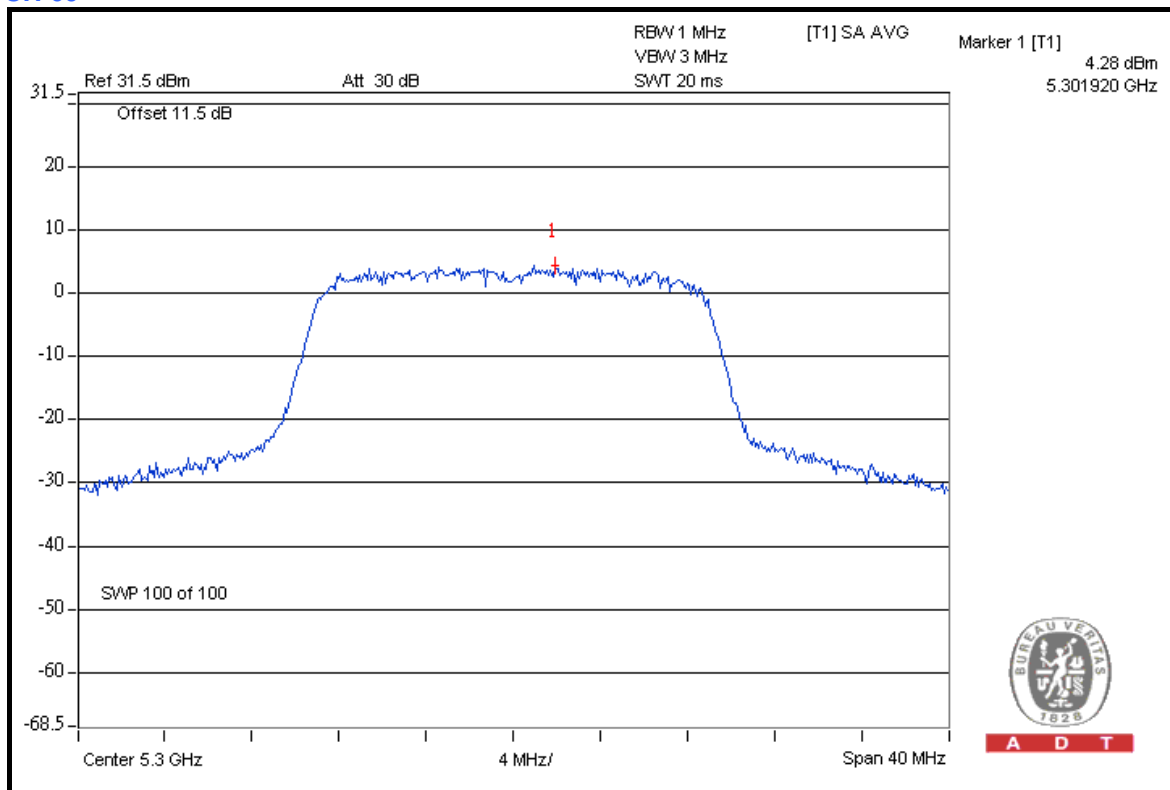
### CH 52



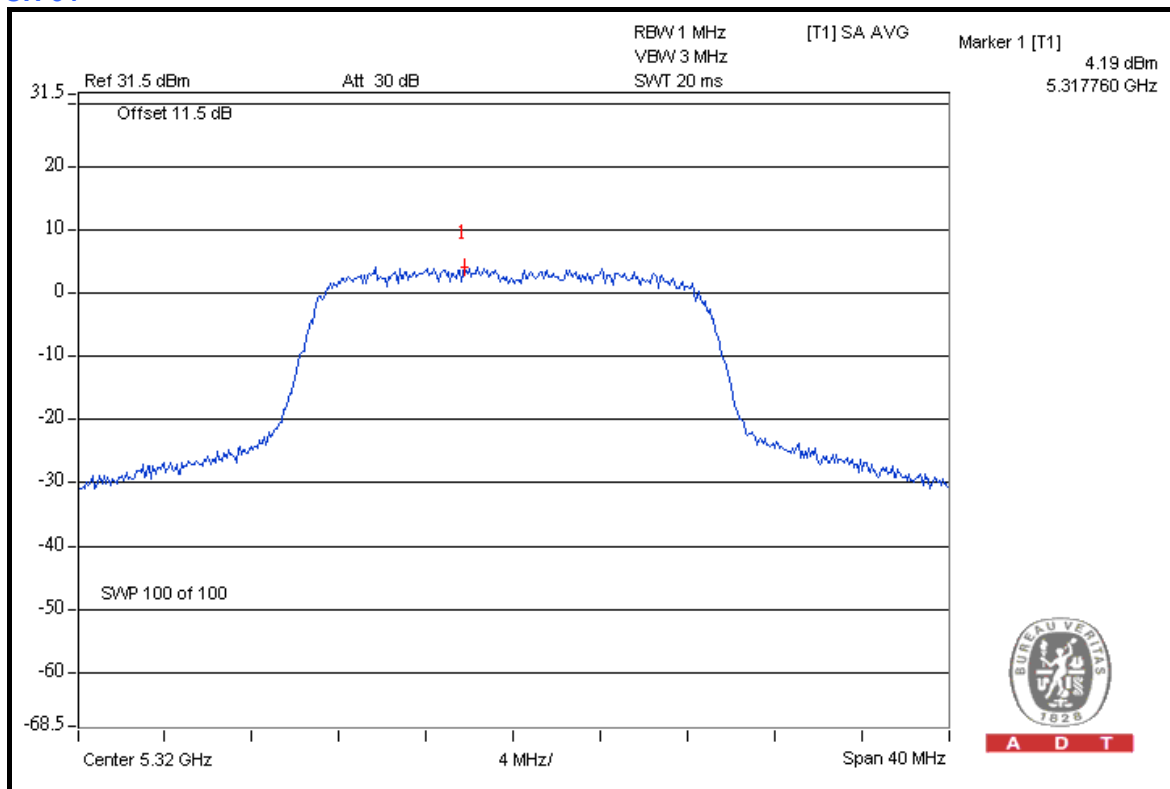


A D T

### CH 60



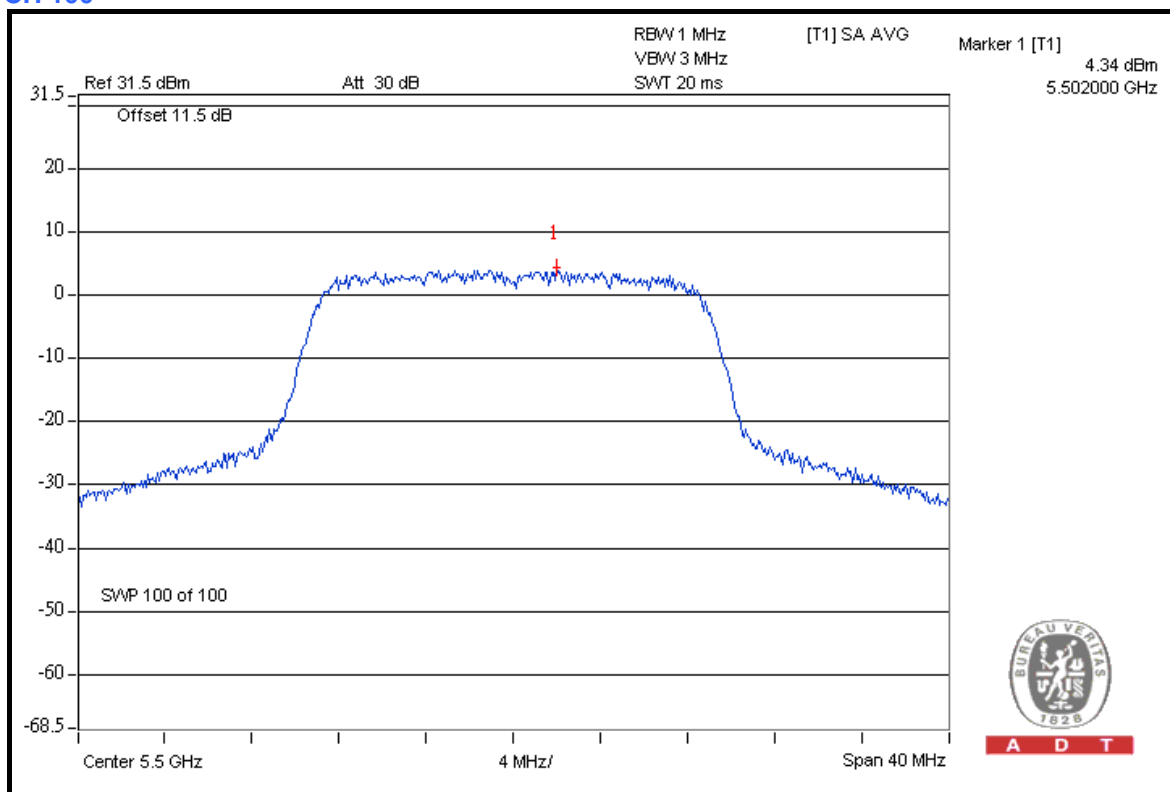
### CH 64



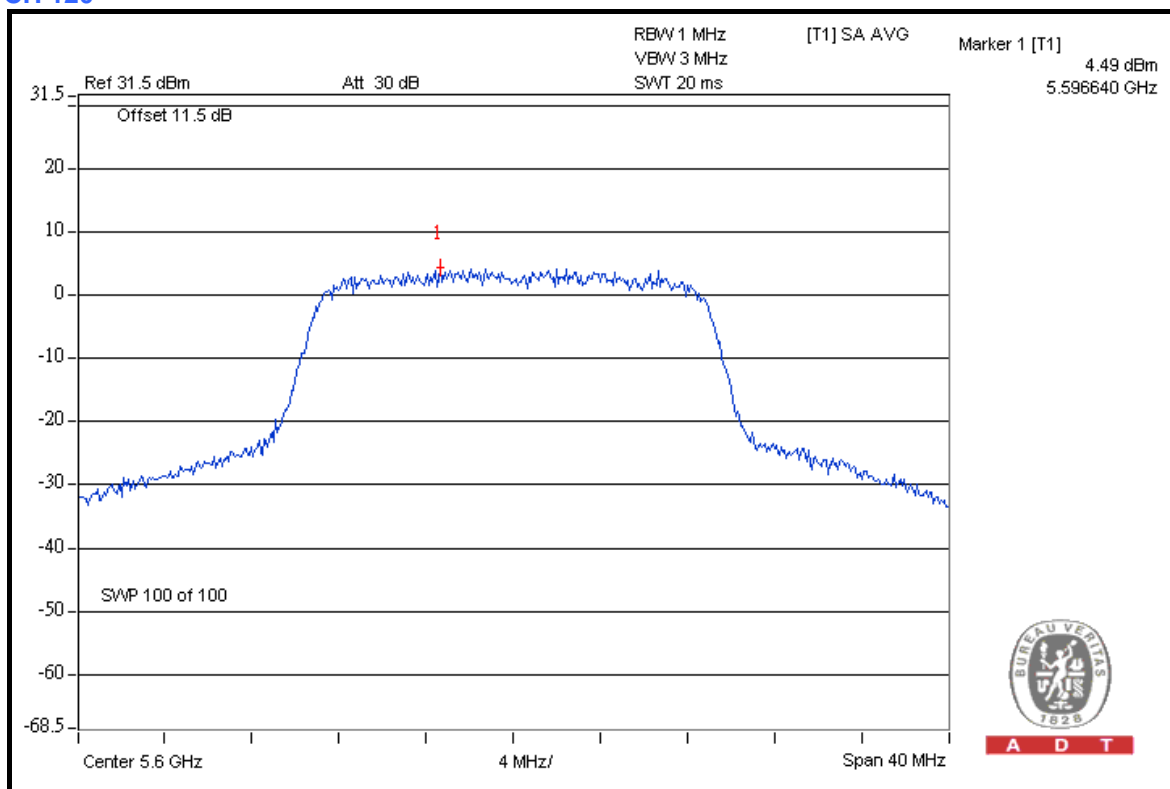


A D T

### CH 100



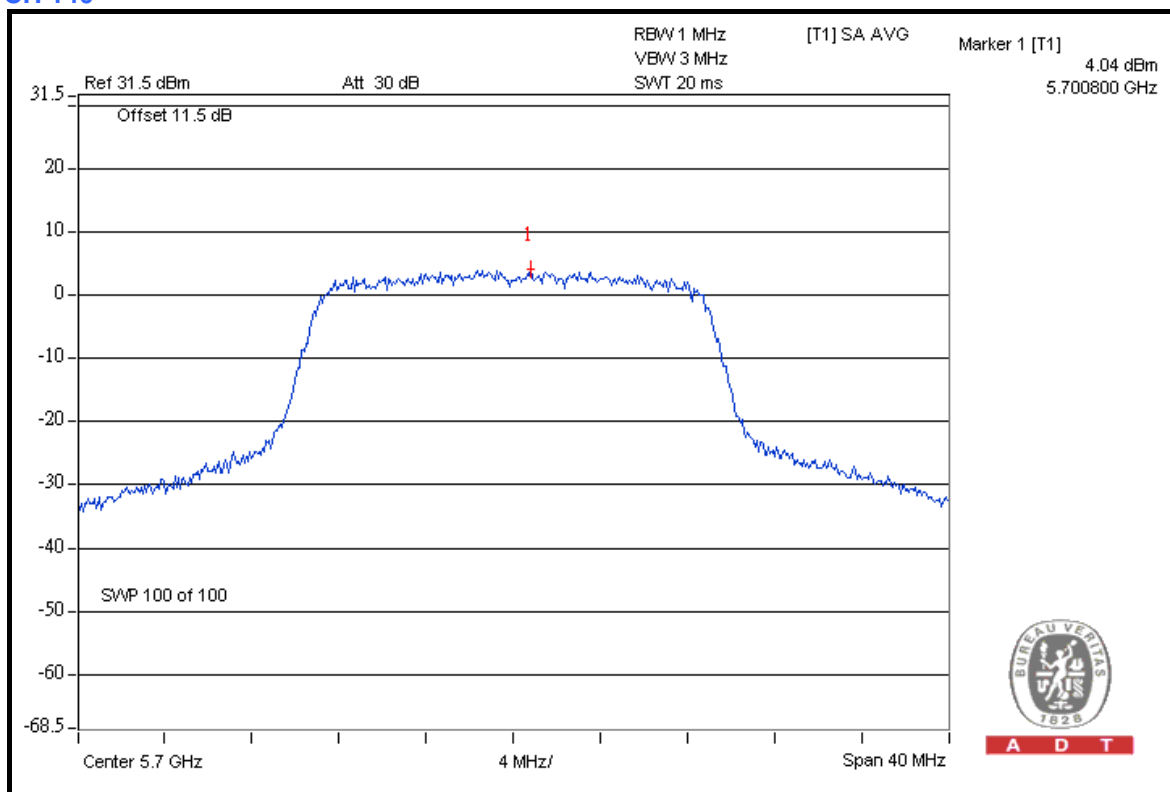
### CH 120





A D T

### CH 140





A D T

### DRAFT 802.11n (20MHz) OFDM MODULATION

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	-10.38	-9.06	0.216	-6.66	-4	PASS
40	5200	-10.33	-8.92	0.221	-6.56	-4	PASS
48	5240	-10.32	-9.04	0.218	-6.62	-4	PASS
52	5260	-0.34	-0.47	1.82	2.61	3	PASS
60	5300	-0.31	-0.46	1.83	2.63	3	PASS
64	5320	-0.17	-0.11	1.94	2.87	3	PASS
100	5500	-0.44	-0.12	1.88	2.73	3	PASS
120	5600	-0.19	-0.16	1.92	2.84	3	PASS
140	5700	-0.43	-0.42	1.81	2.59	3	PASS

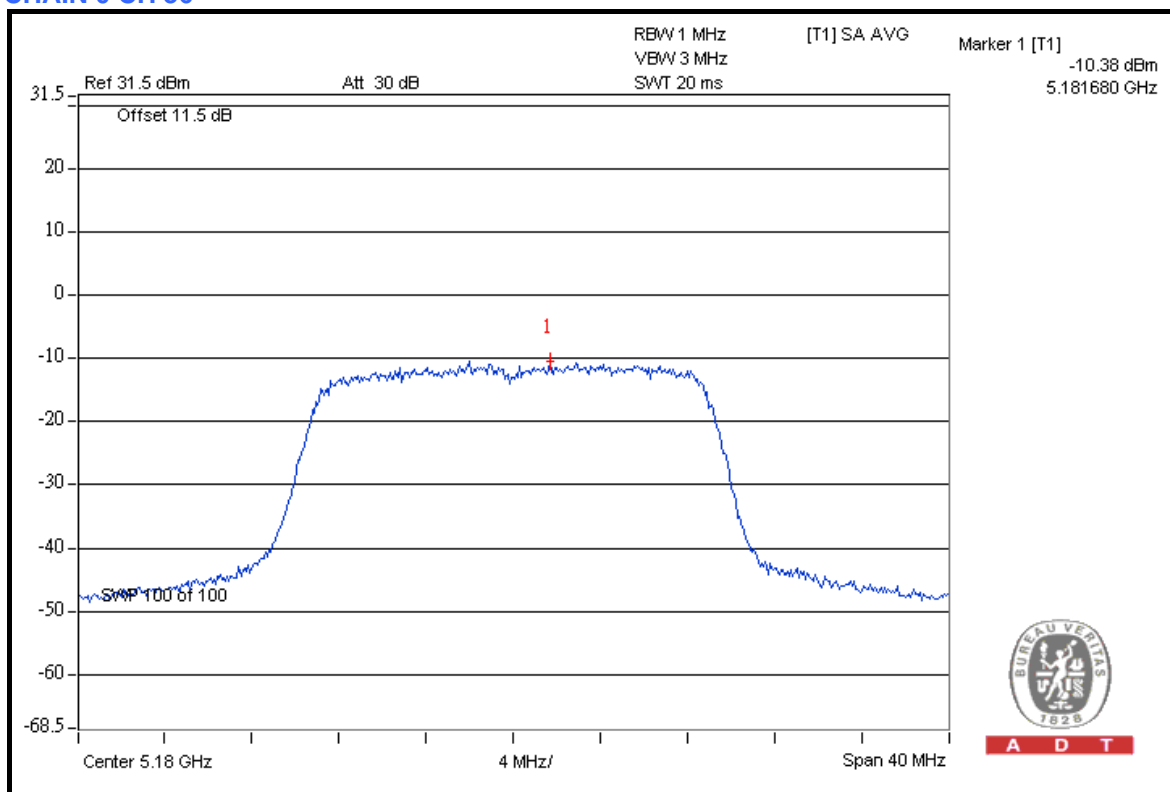
**NOTE:** According to 15.407 (a) (1) (2), the maximum antenna gain 14dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 8 dB.



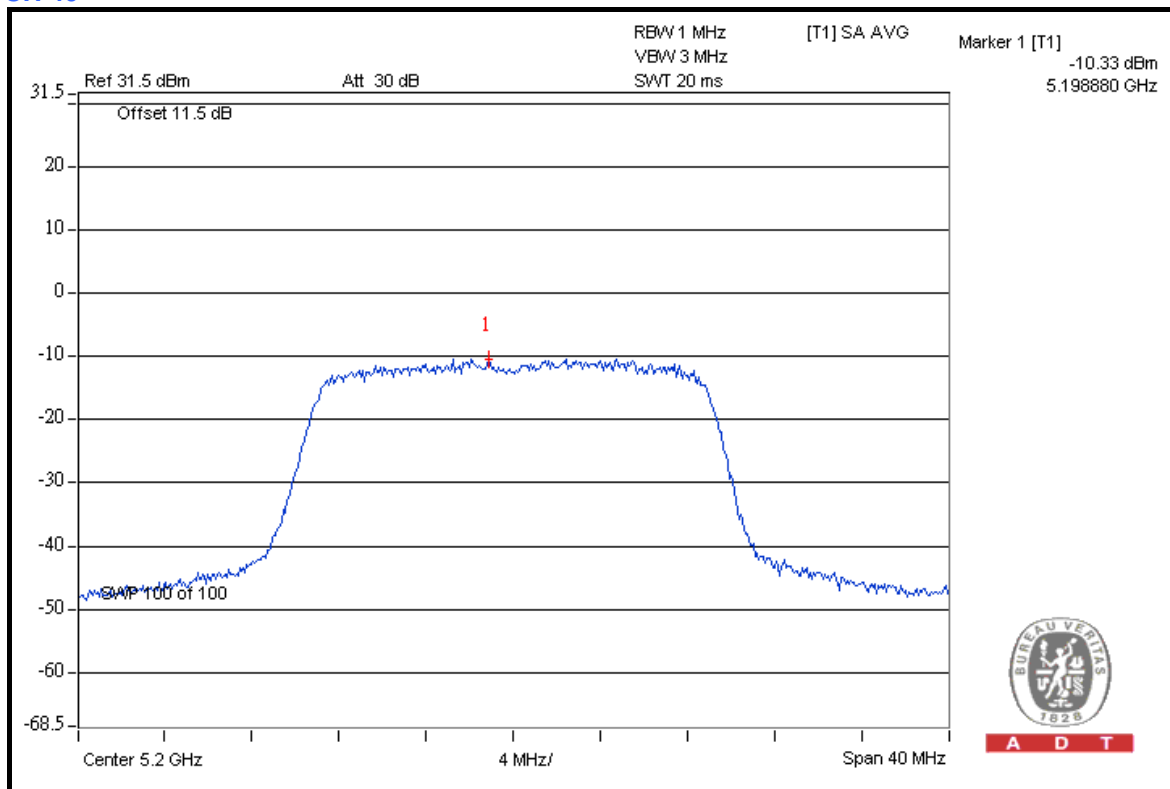


A D T

### CHAIN 0 CH 36



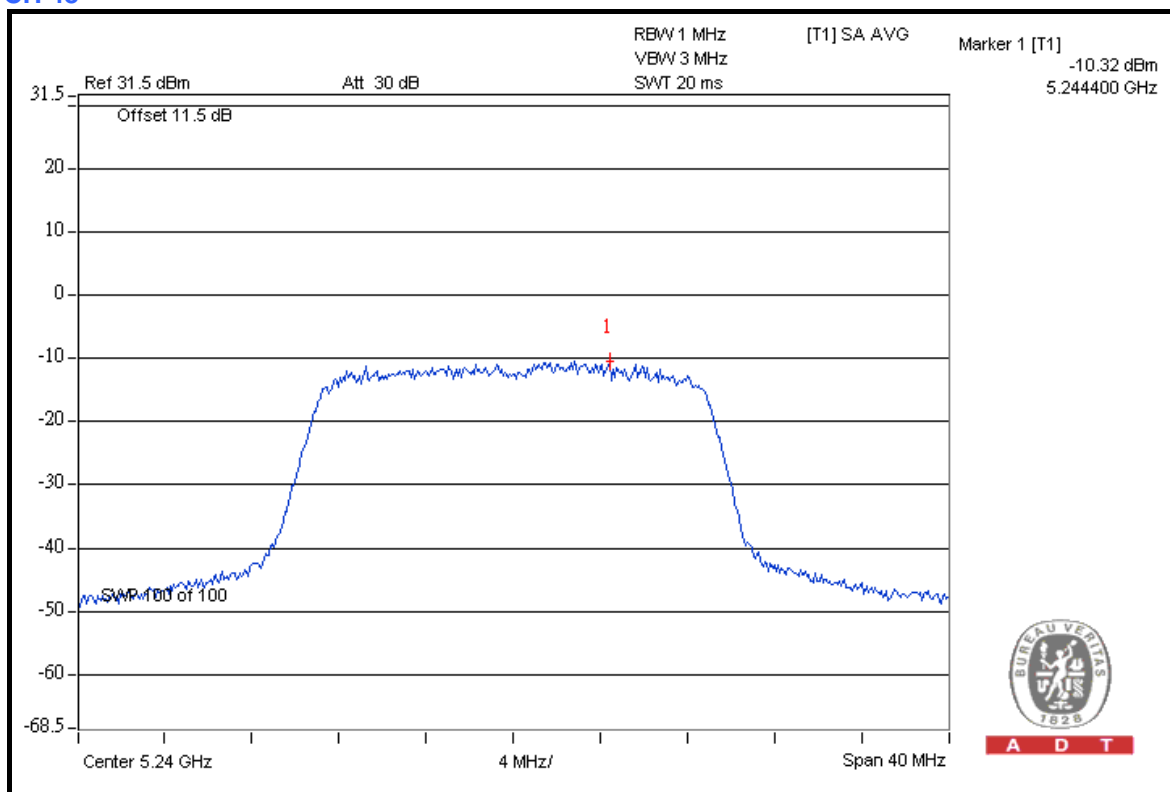
### CH 40



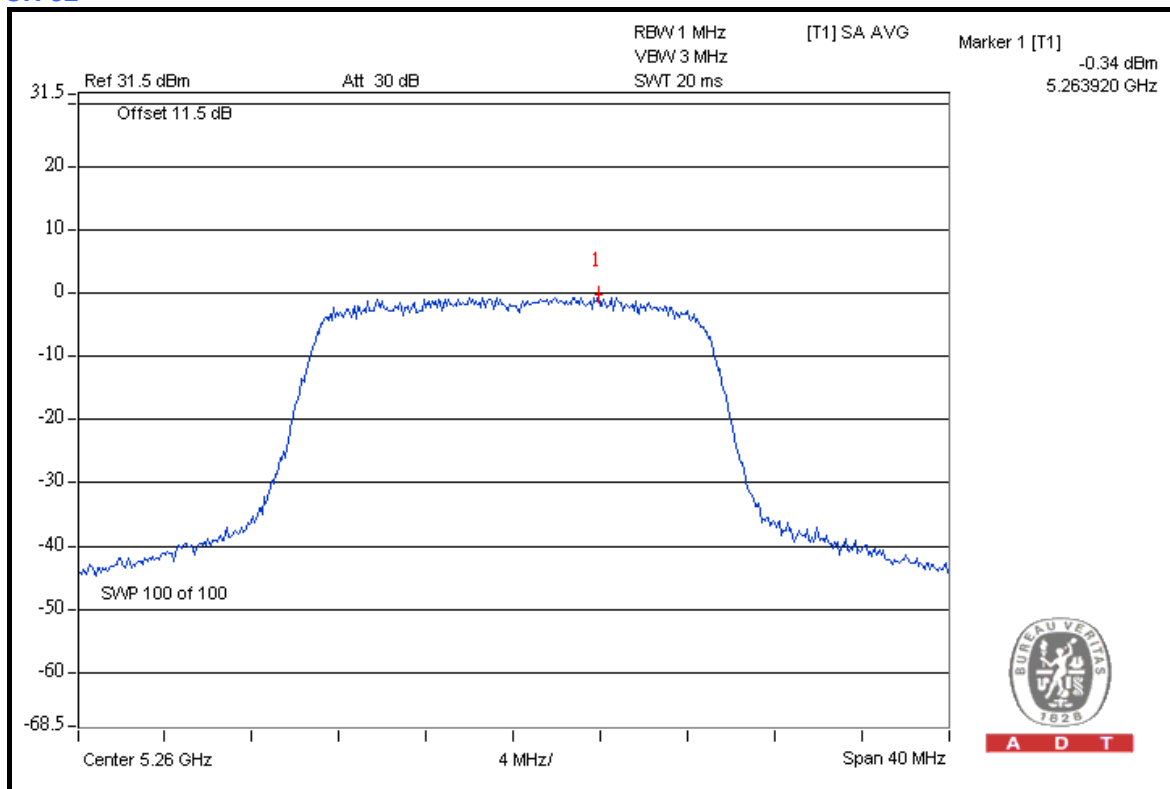


A D T

### CH 48



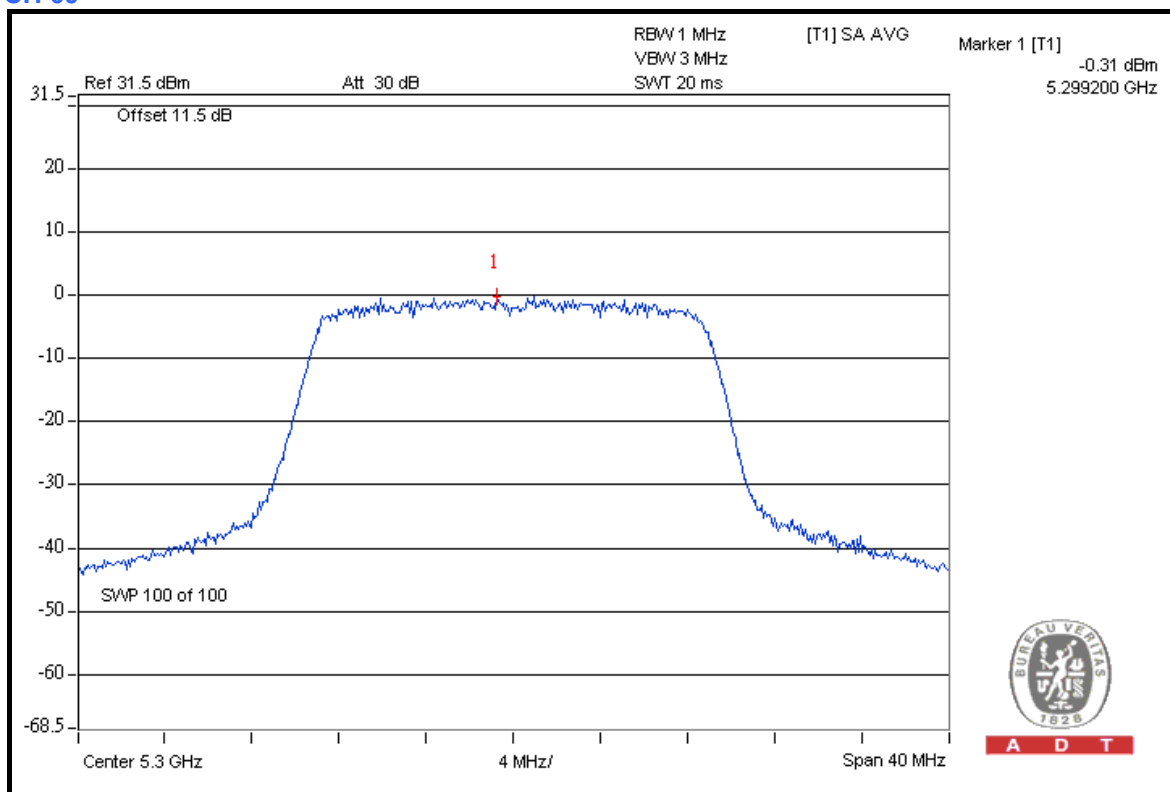
### CH 52



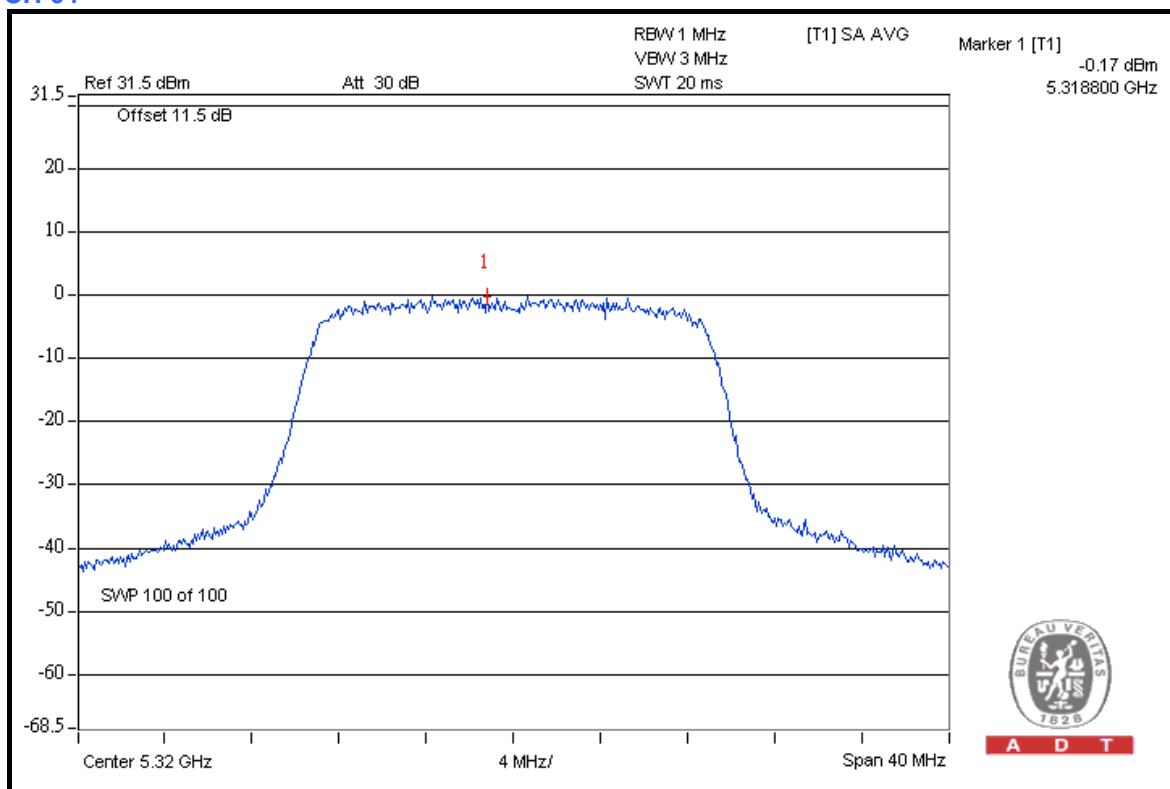


A D T

### CH 60



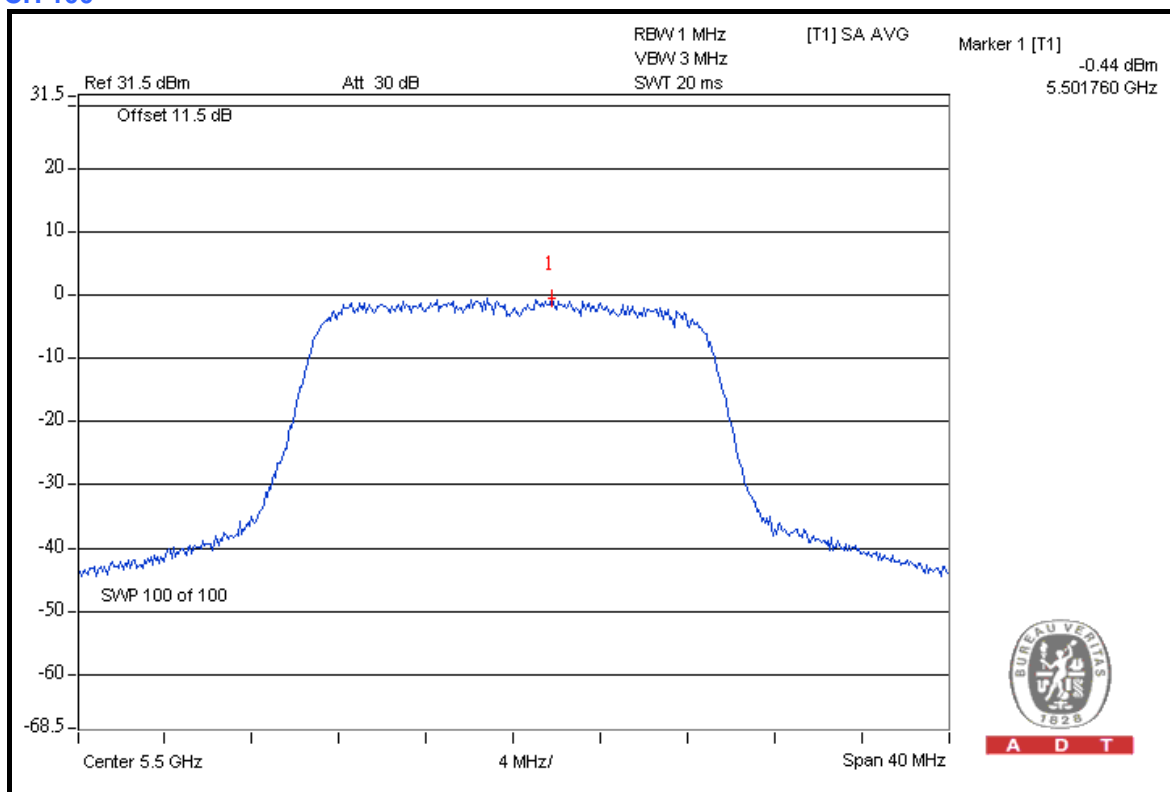
### CH 64



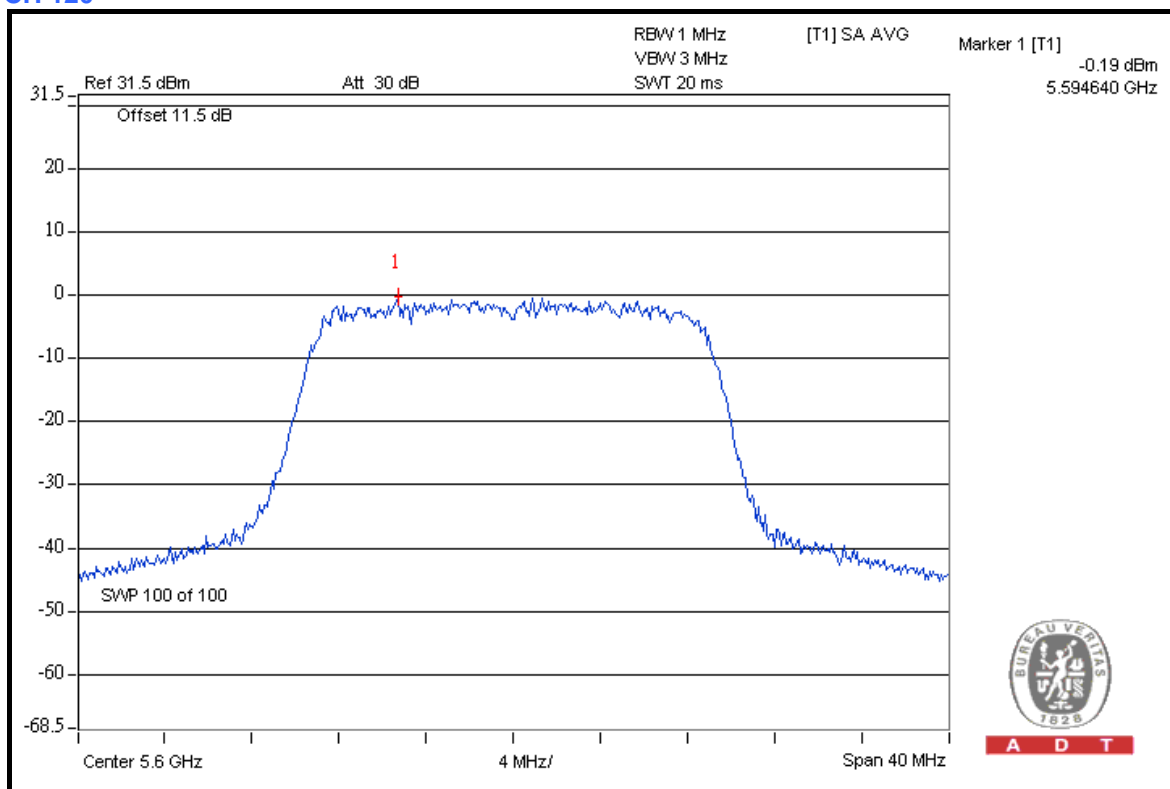


A D T

### CH 100



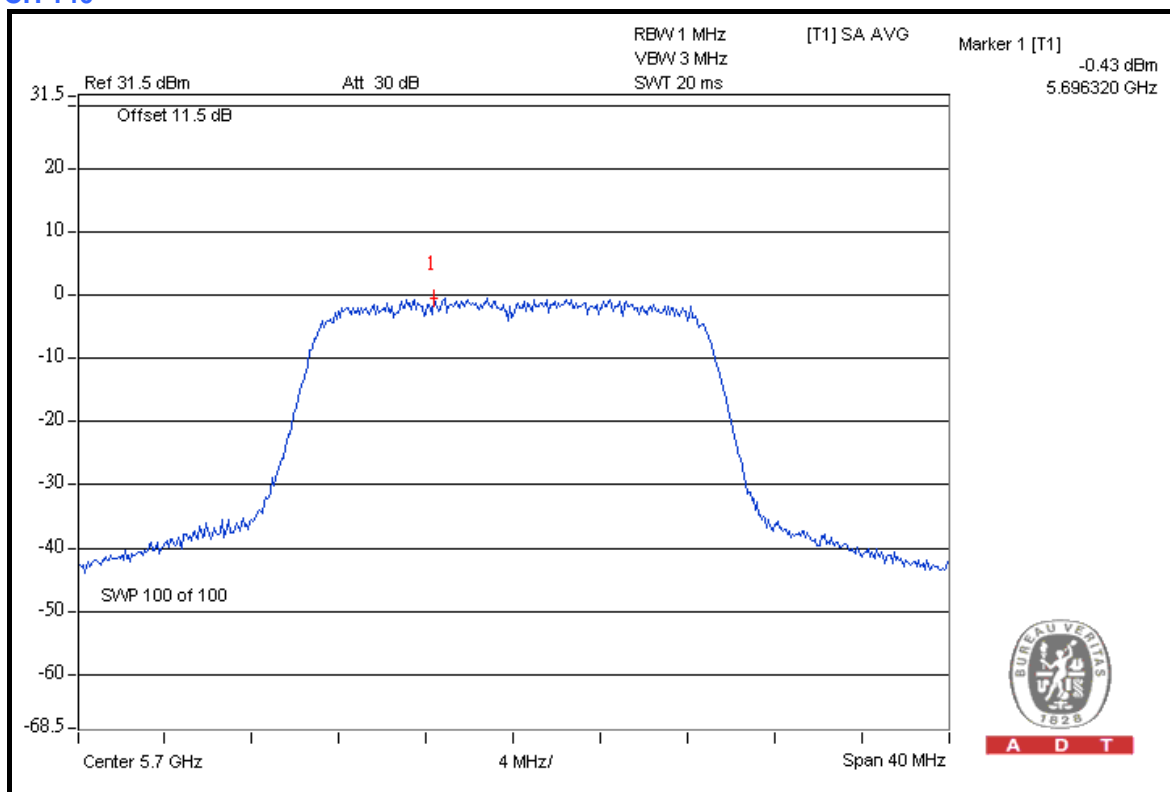
### CH 120



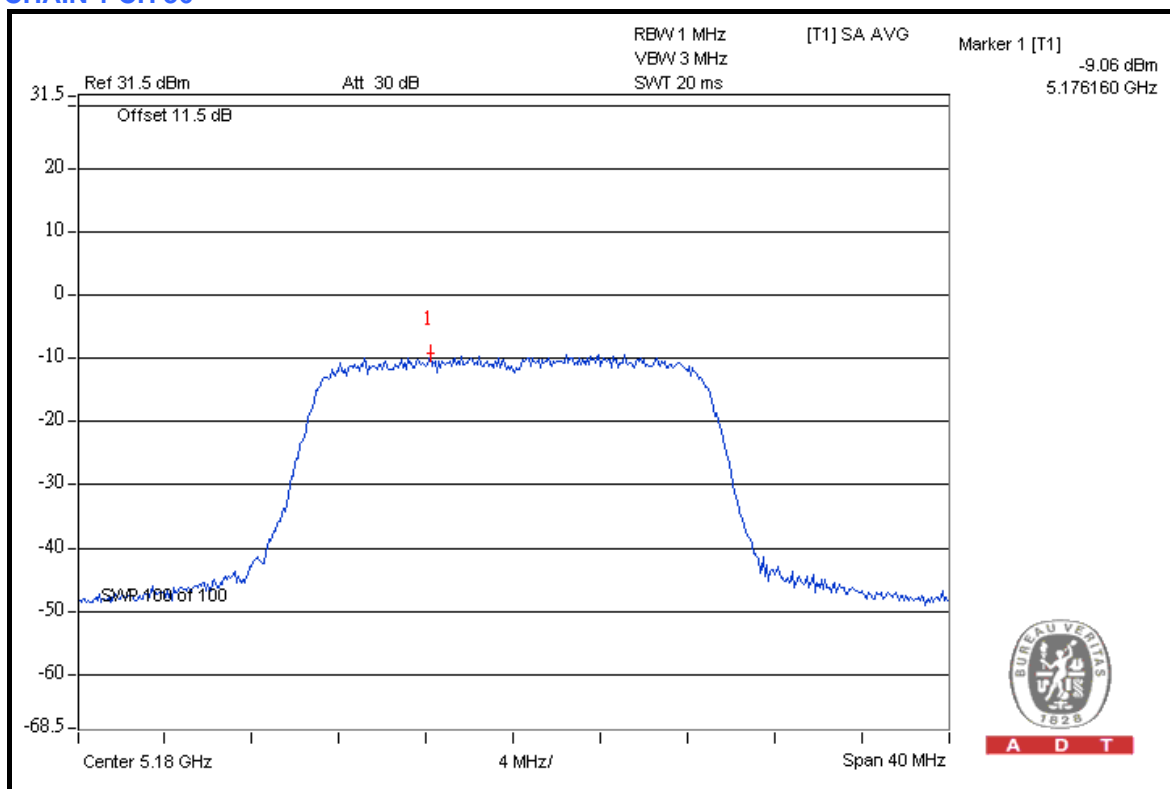


A D T

### CH 140



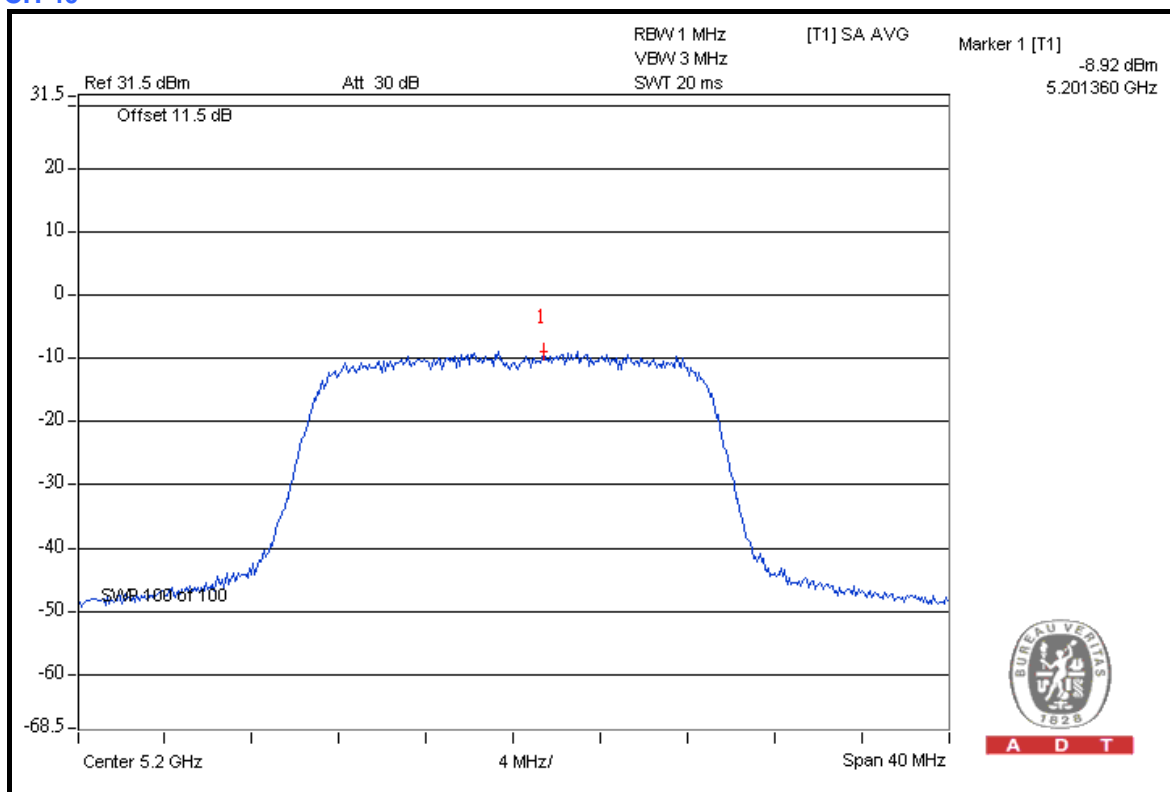
### CHAIN 1 CH 36



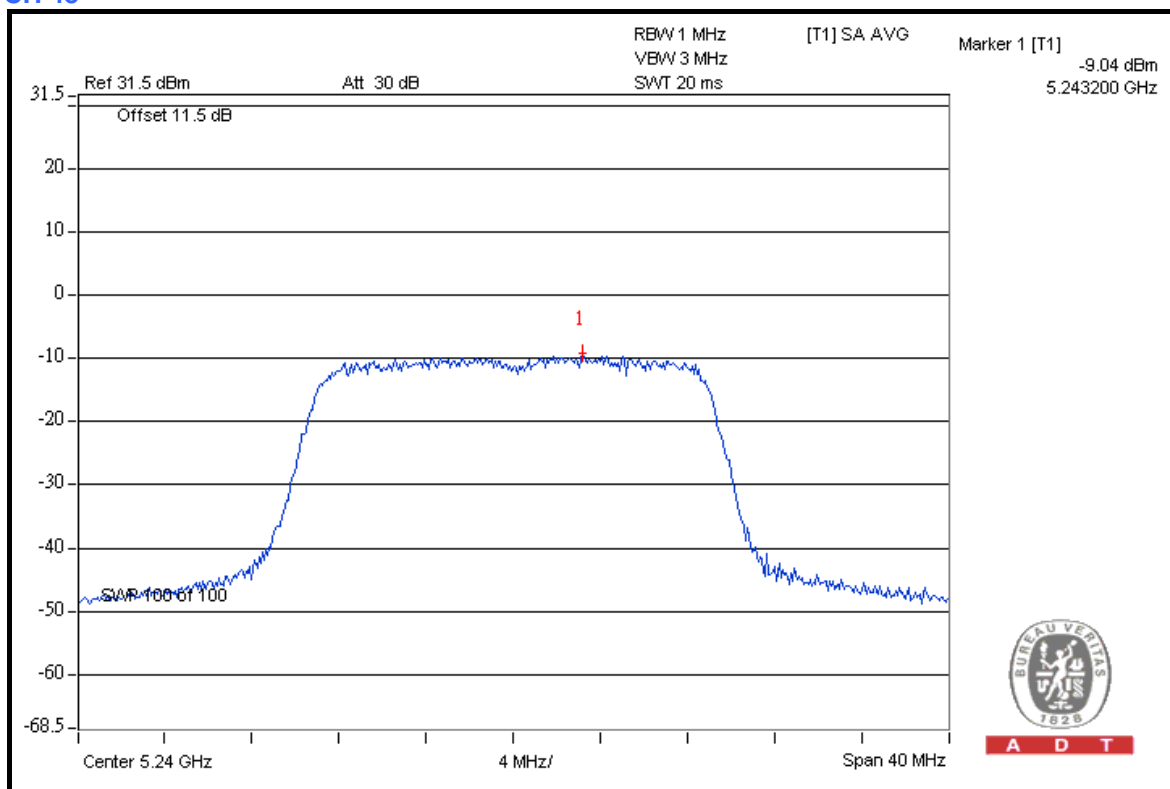


A D T

### CH 40



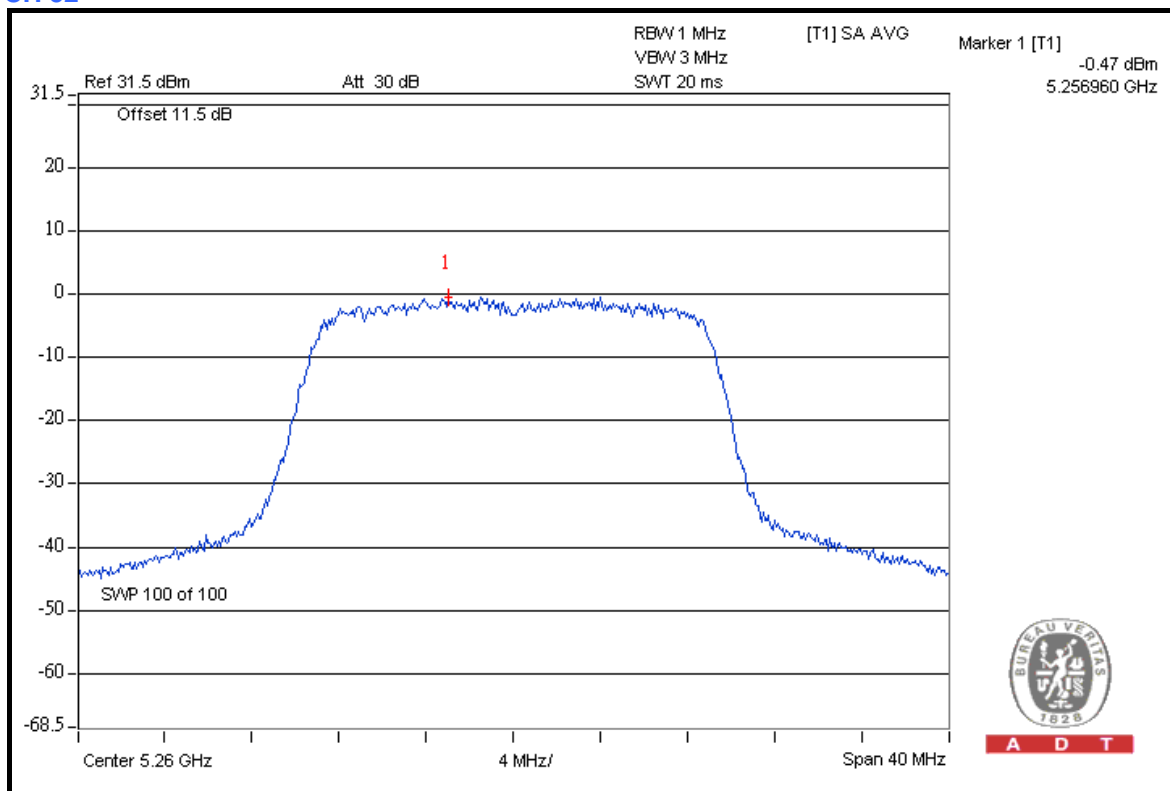
### CH 48



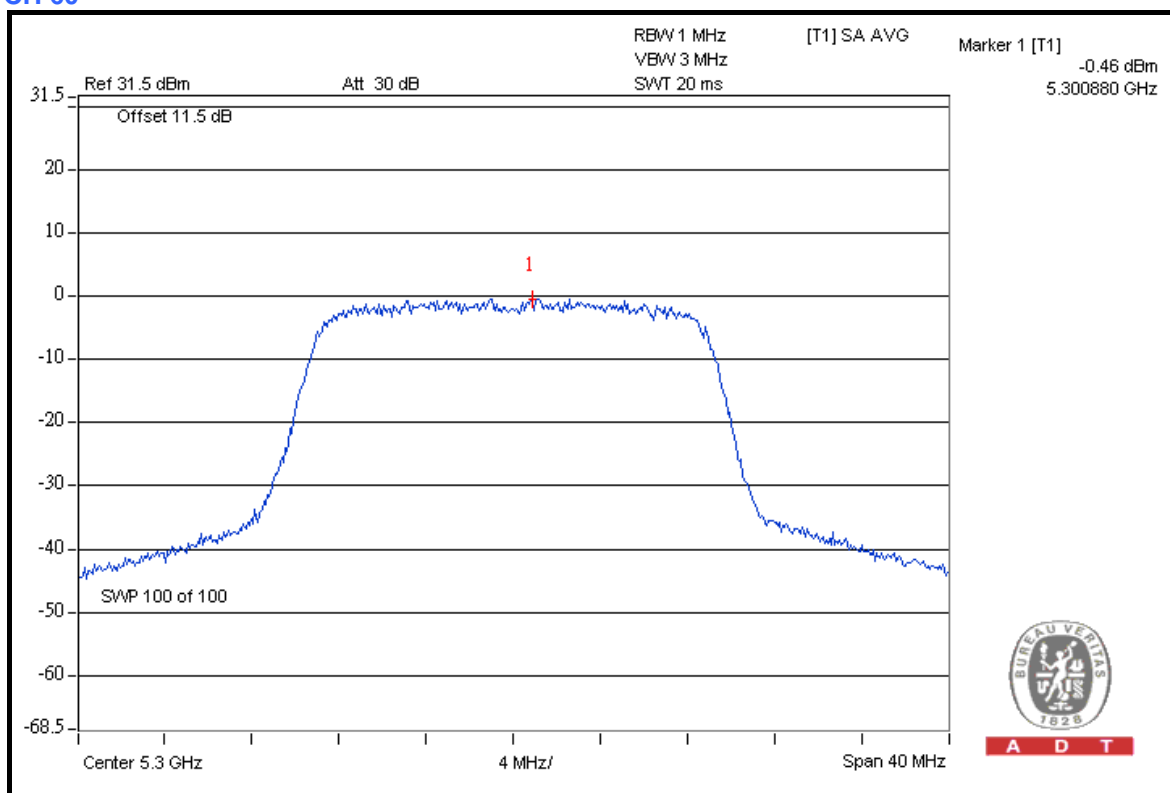


A D T

### CH 52



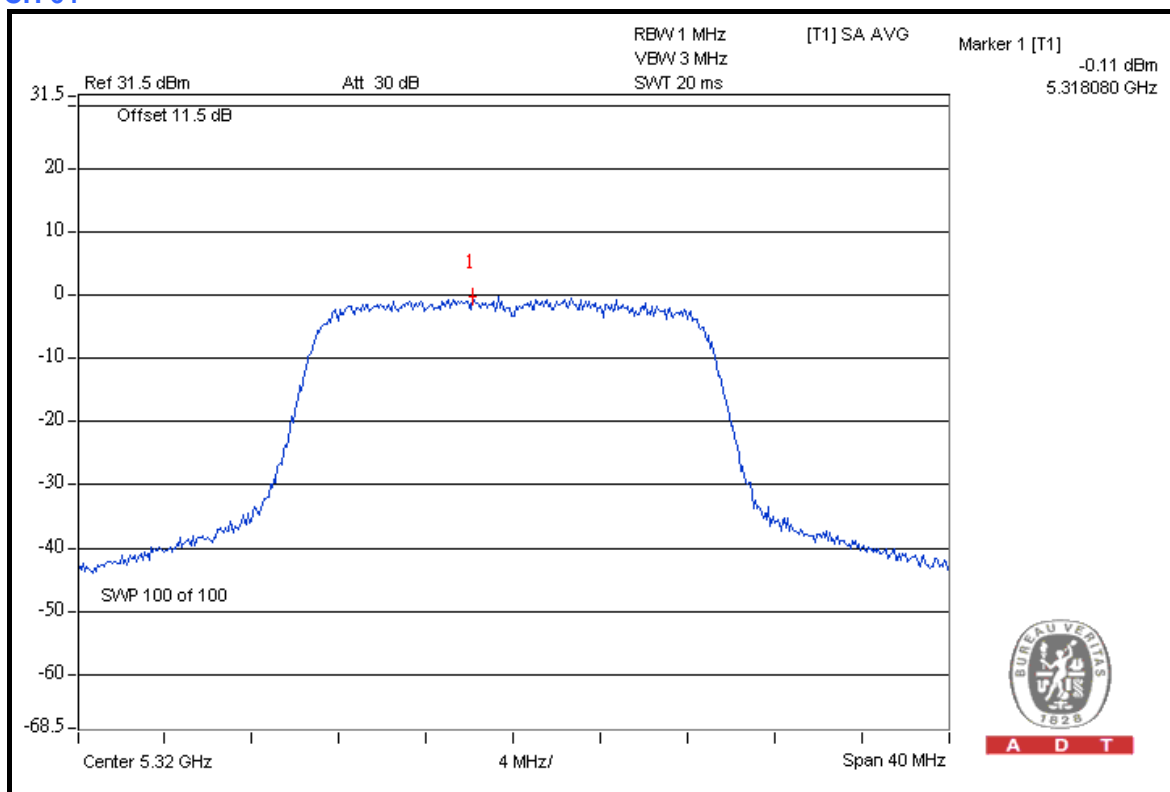
### CH 60



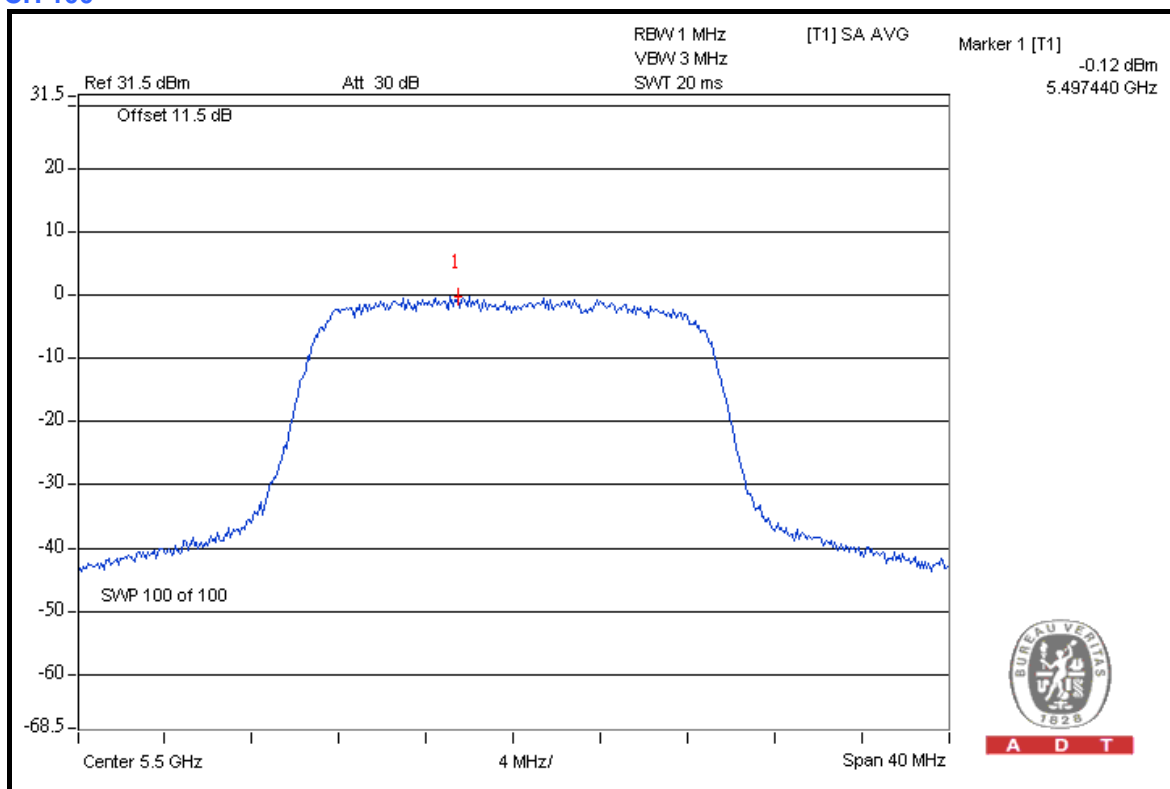


A D T

### CH 64



### CH 100

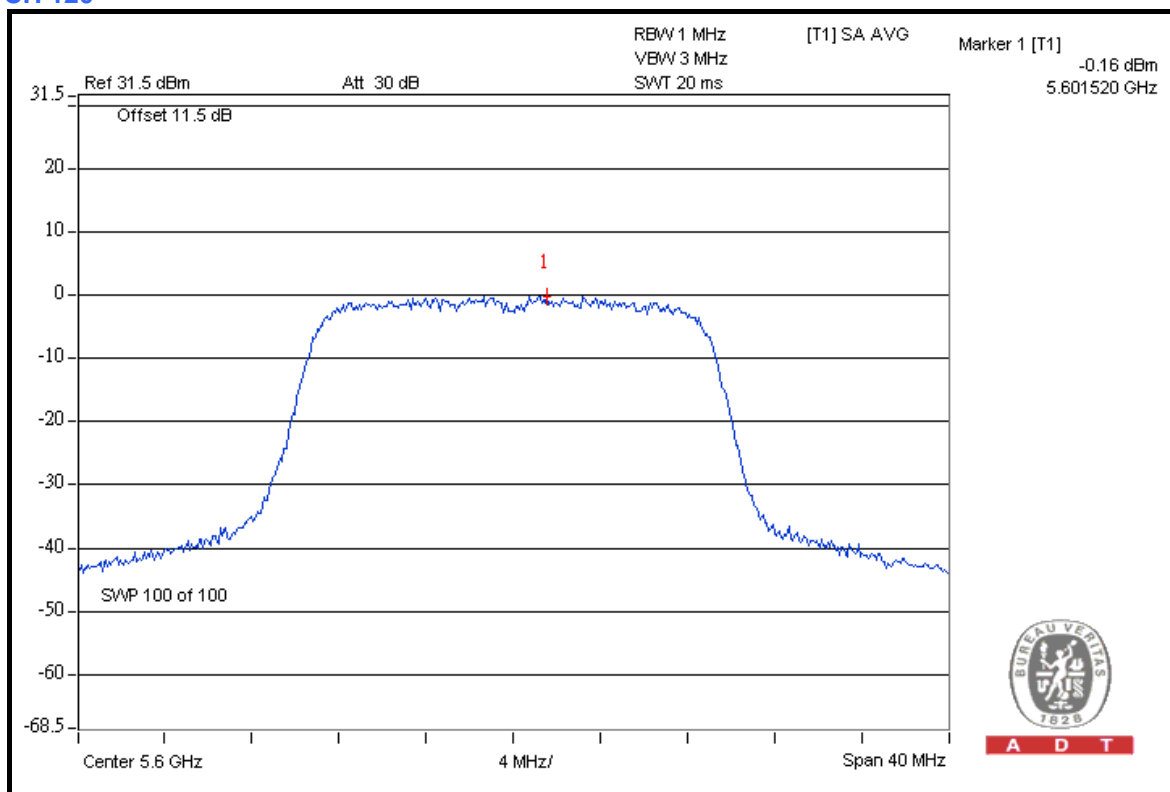




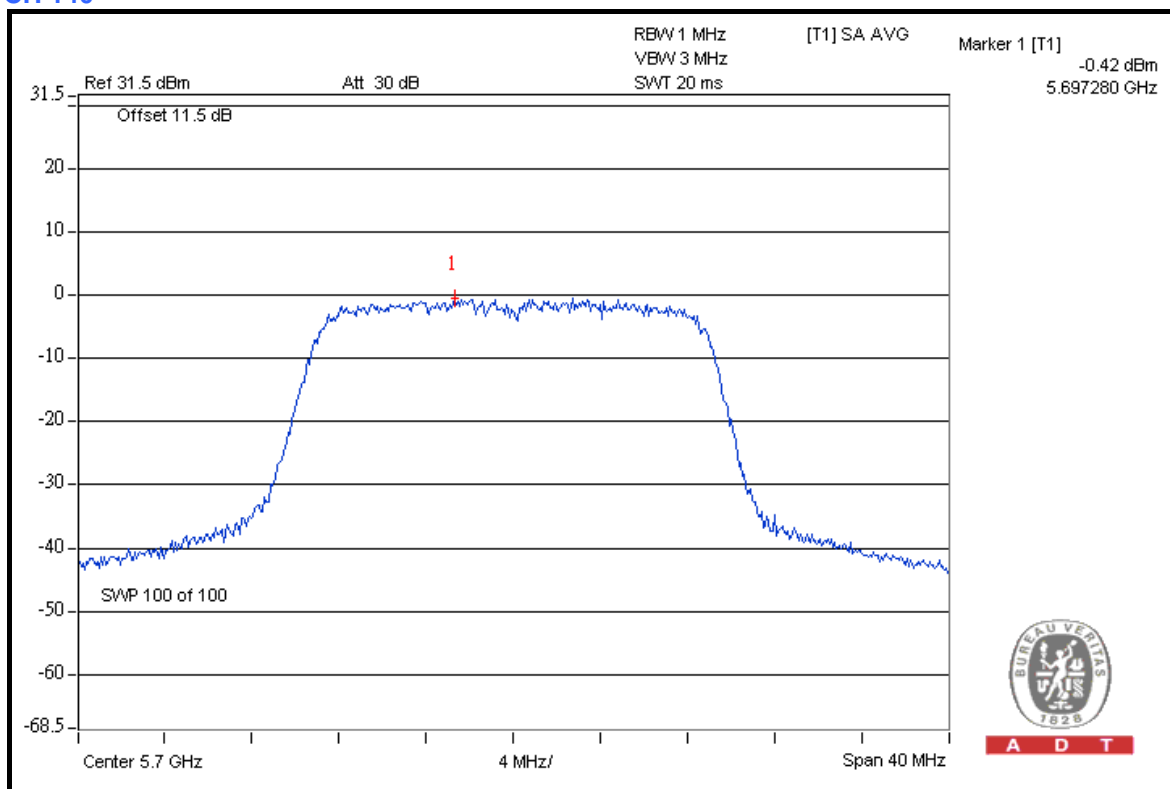


A D T

### CH 120



### CH 140





A D T

### DRAFT 802.11n (40MHz) OFDM MODULATION

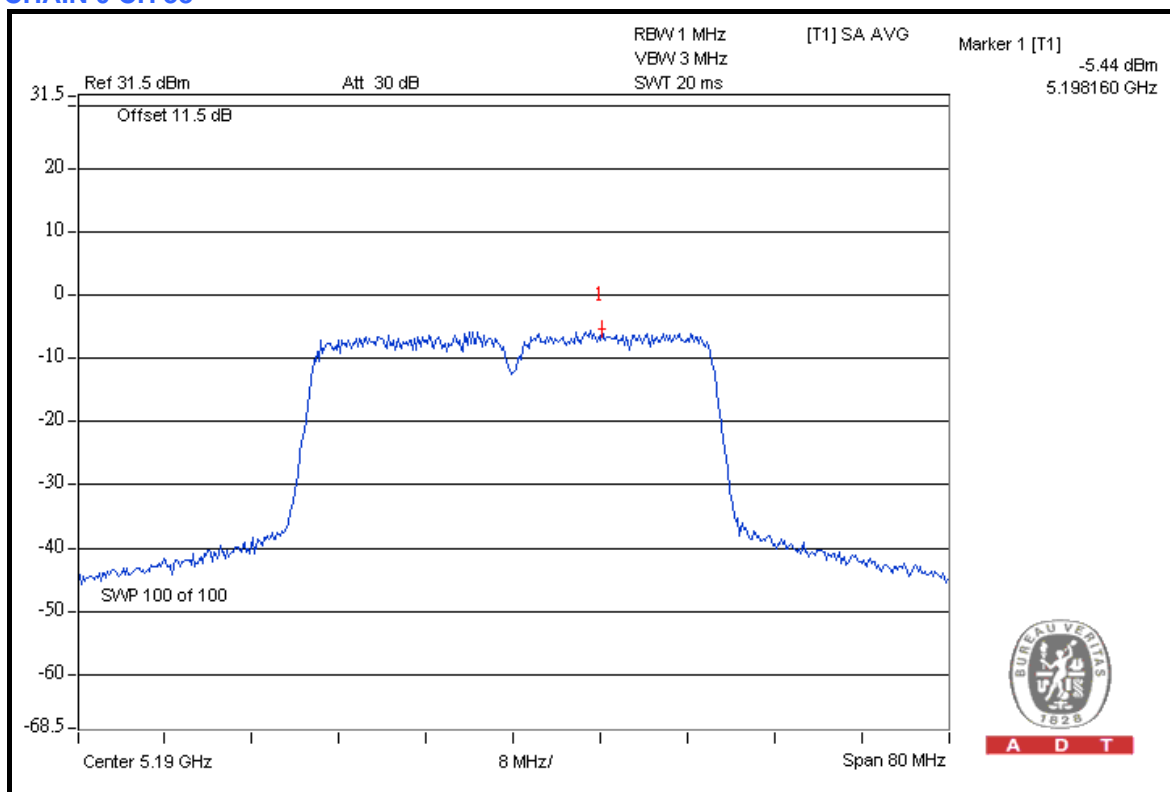
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	13.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	A

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
38	5190	-5.44	-5.72	-5.51	0.835	-0.78	4	PASS
46	5230	-5.23	-5.55	-5.36	0.870	-0.60	4	PASS
54	5270	0.61	0.37	0.98	3.49	5.43	11	PASS
62	5310	0.46	0.52	0.70	3.41	5.33	11	PASS
102	5510	0.85	0.42	0.77	3.51	5.46	11	PASS
118	5590	0.62	0.47	1.06	3.54	5.49	11	PASS
134	5670	0.50	0.46	0.99	3.49	5.43	11	PASS



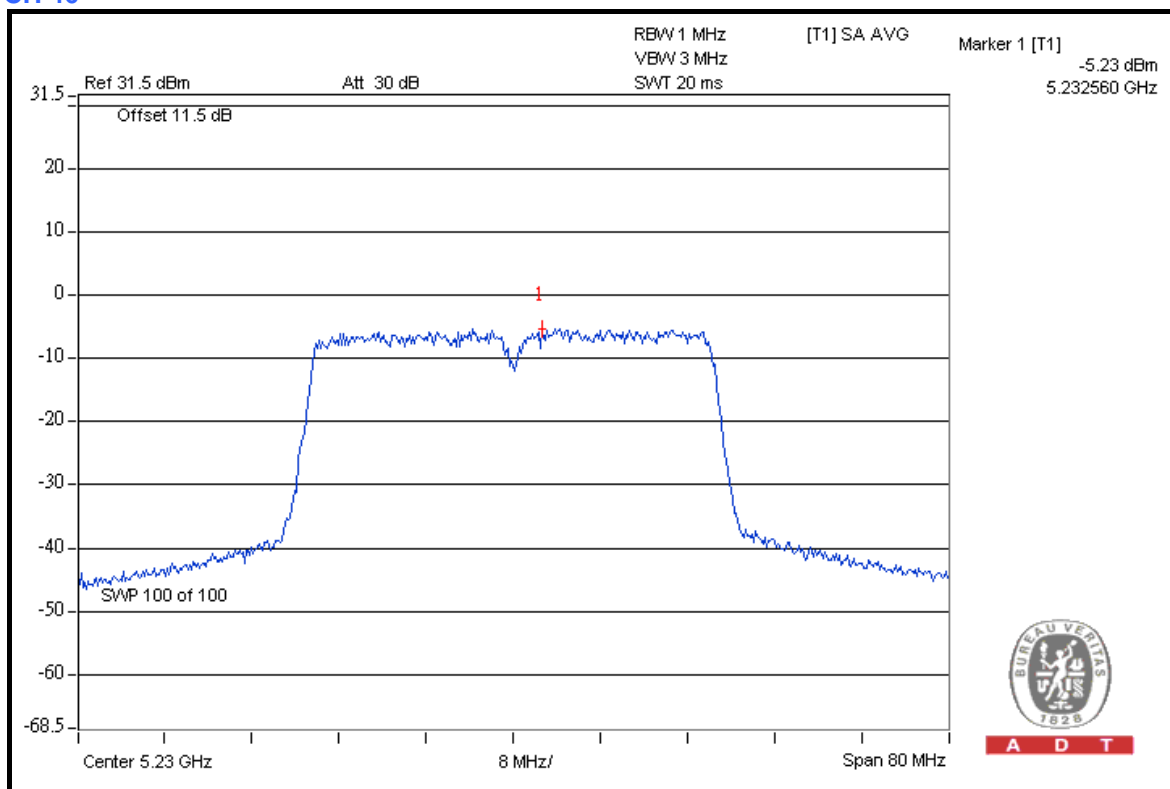
A D T

### CHAIN 0 CH 38



A D T

### CH 46

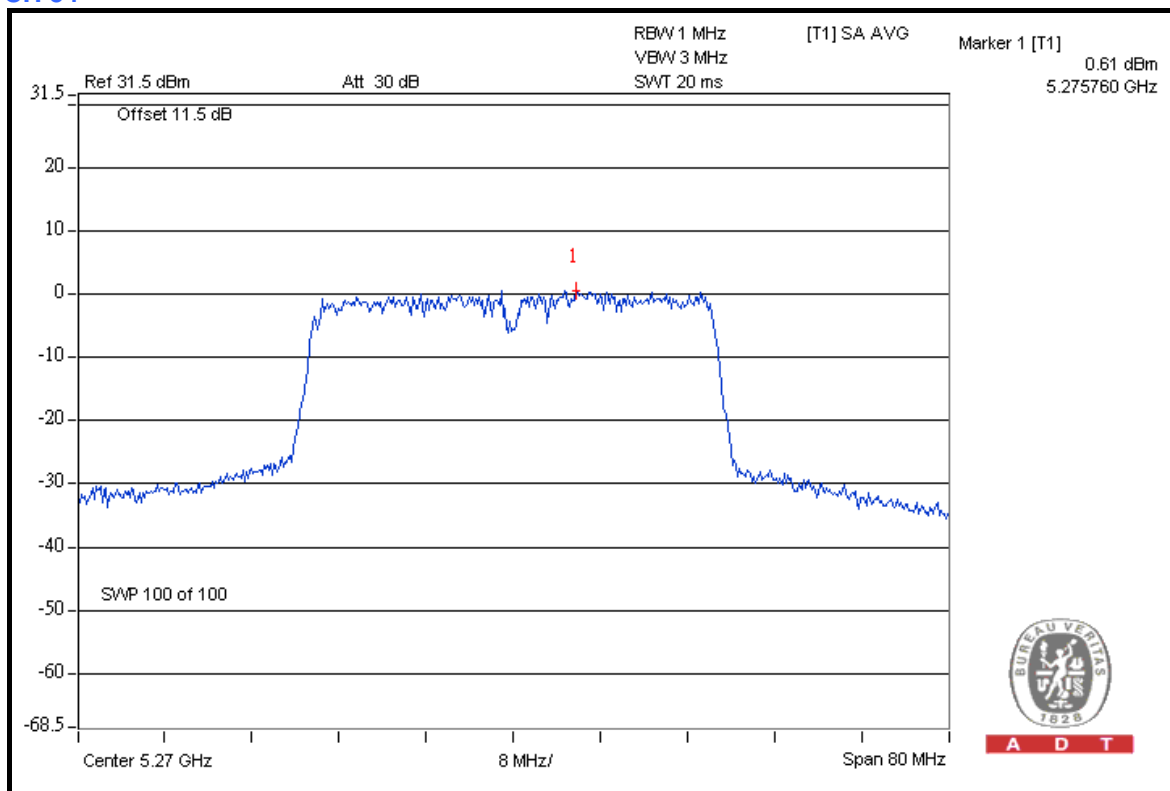


A D T

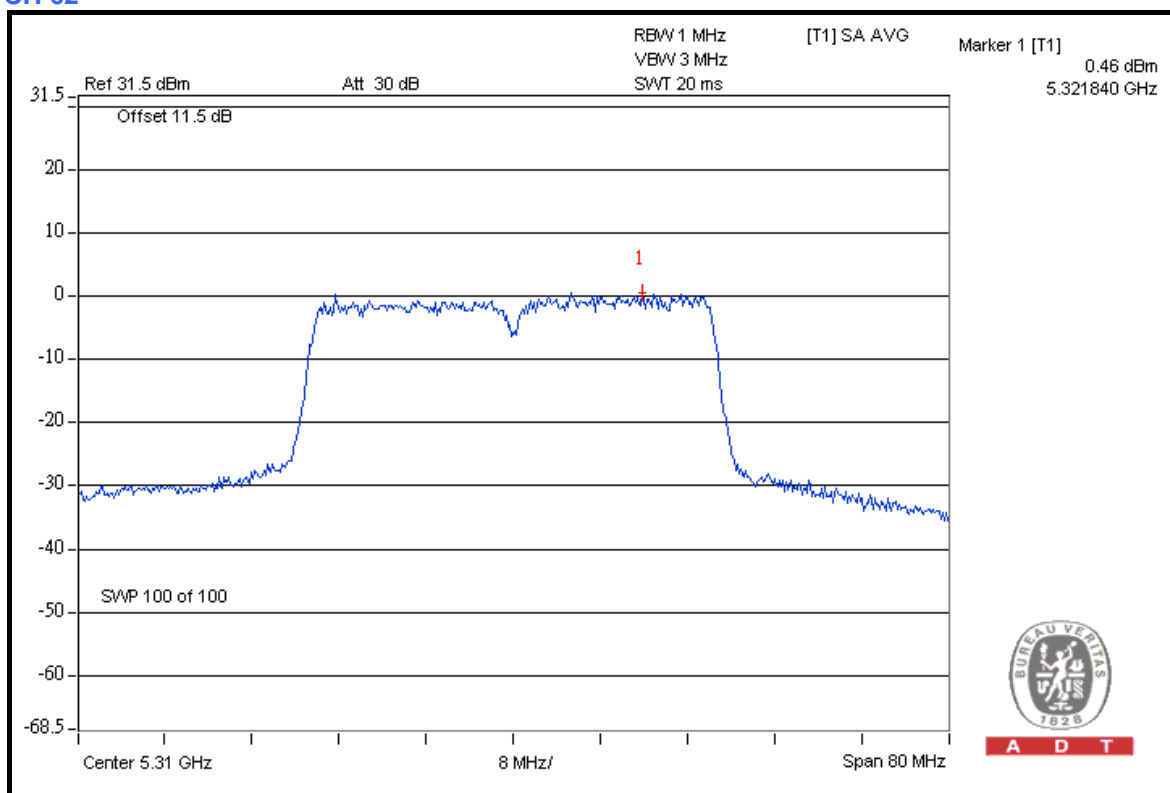


A D T

### CH 54



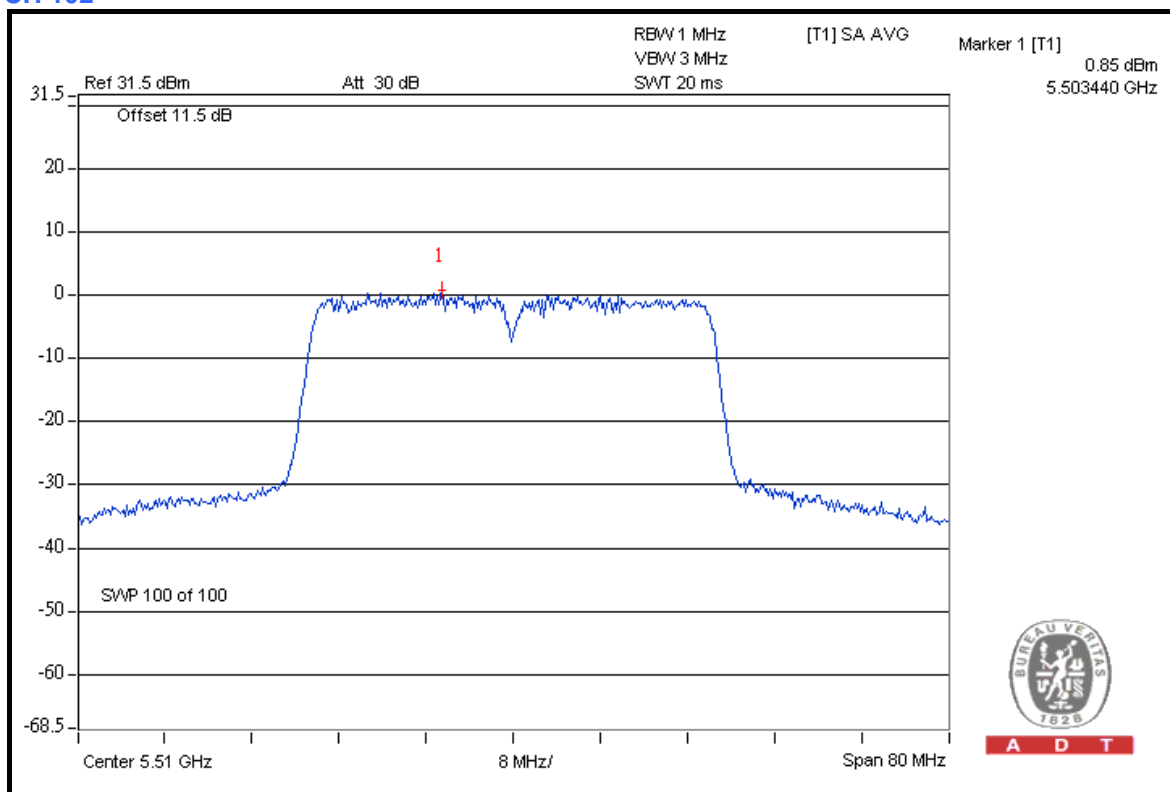
### CH 62



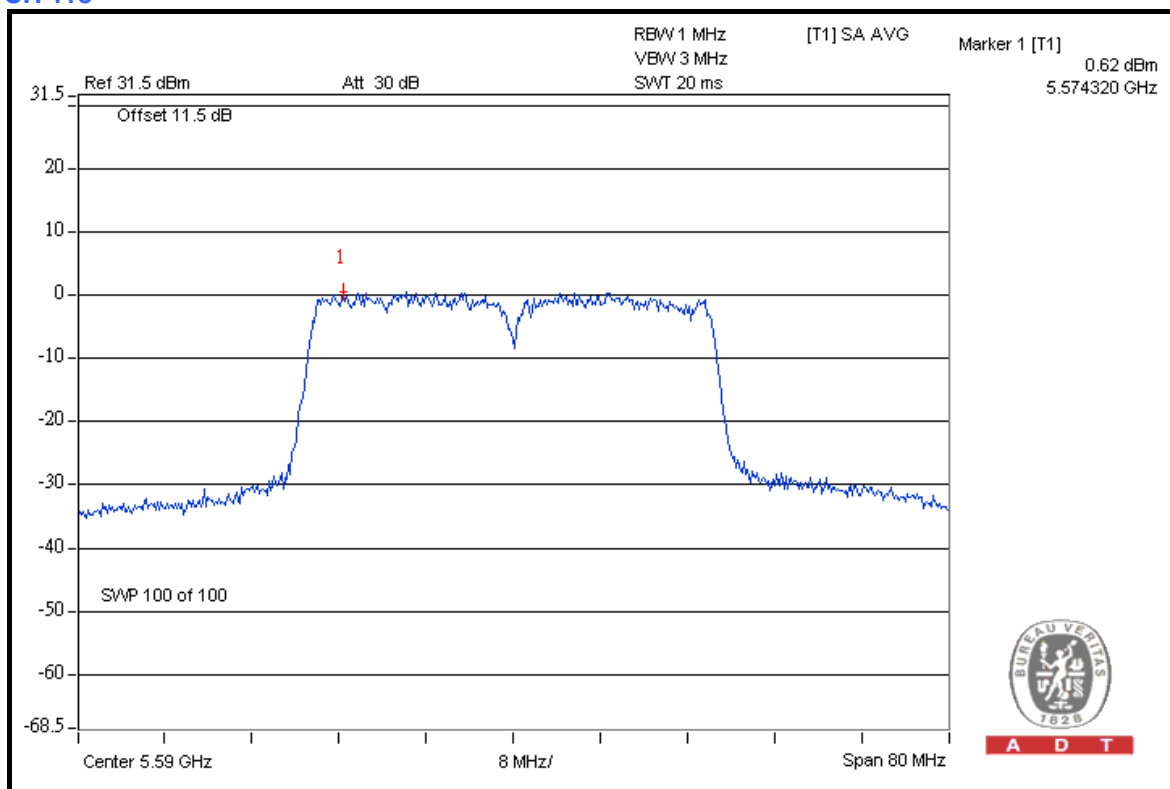


A D T

### CH 102



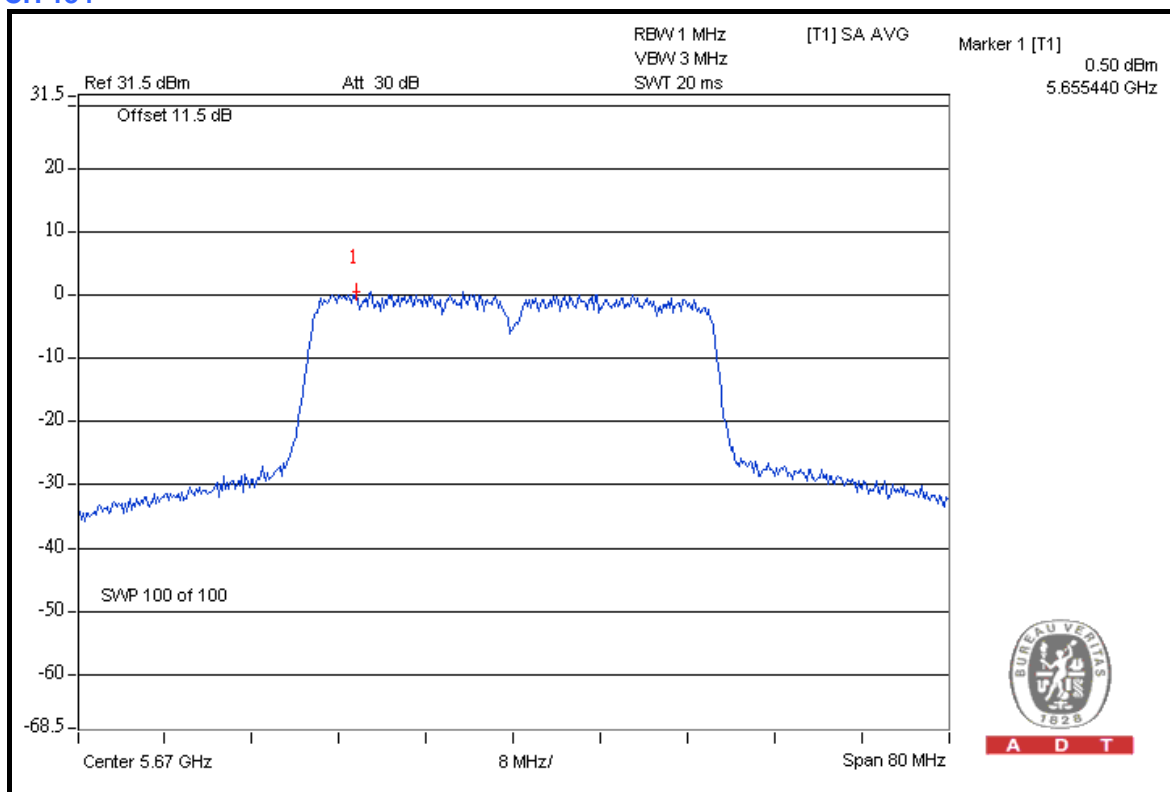
### CH 118



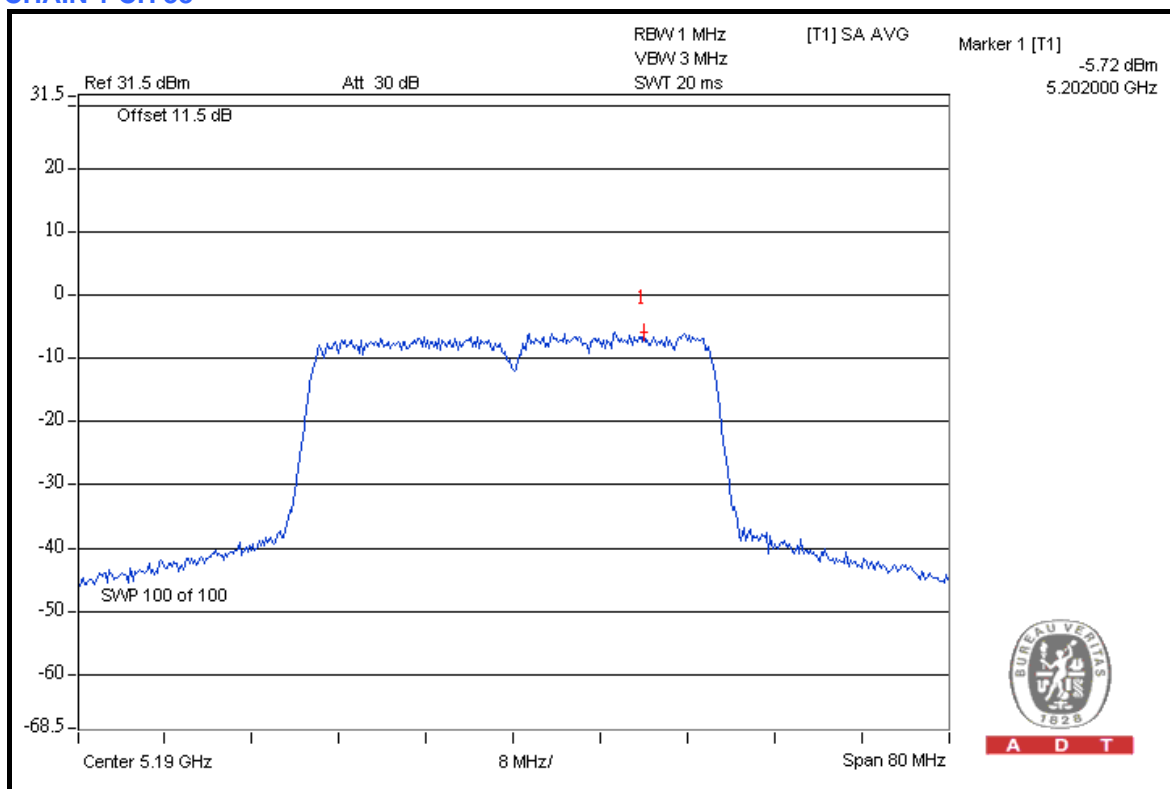


A D T

### CH 134



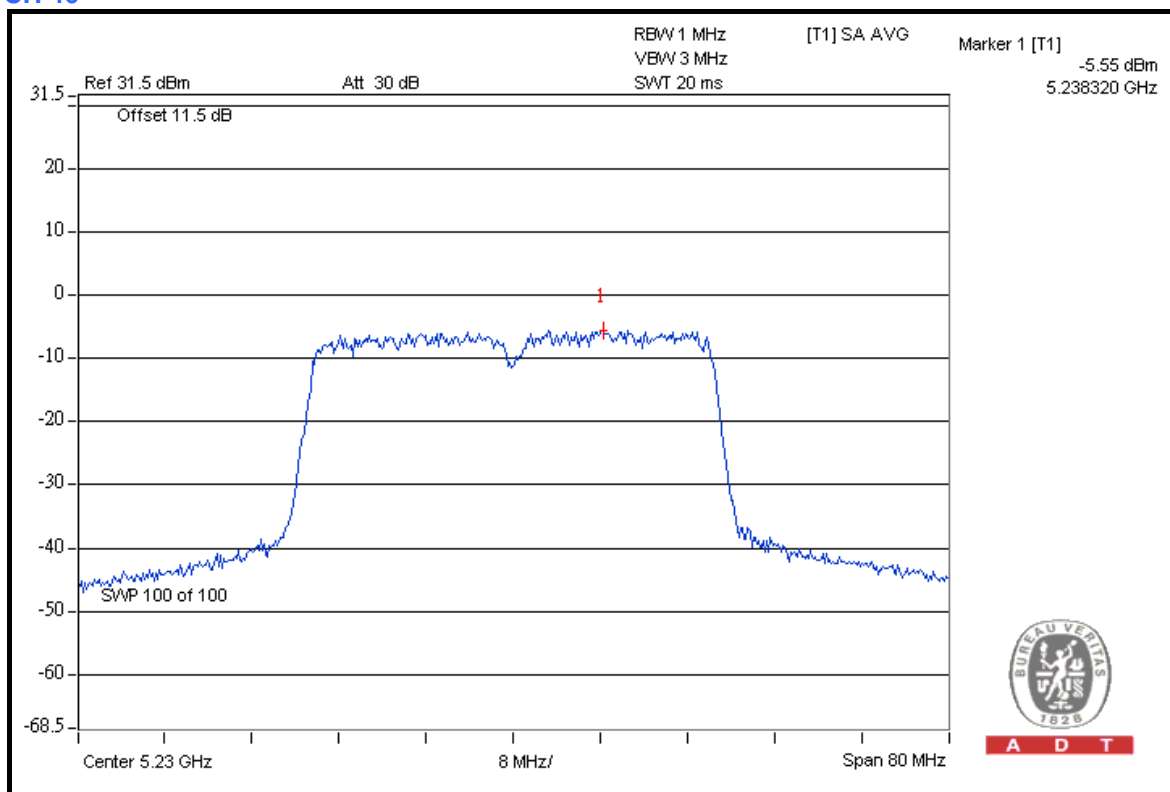
### CHAIN 1 CH 38





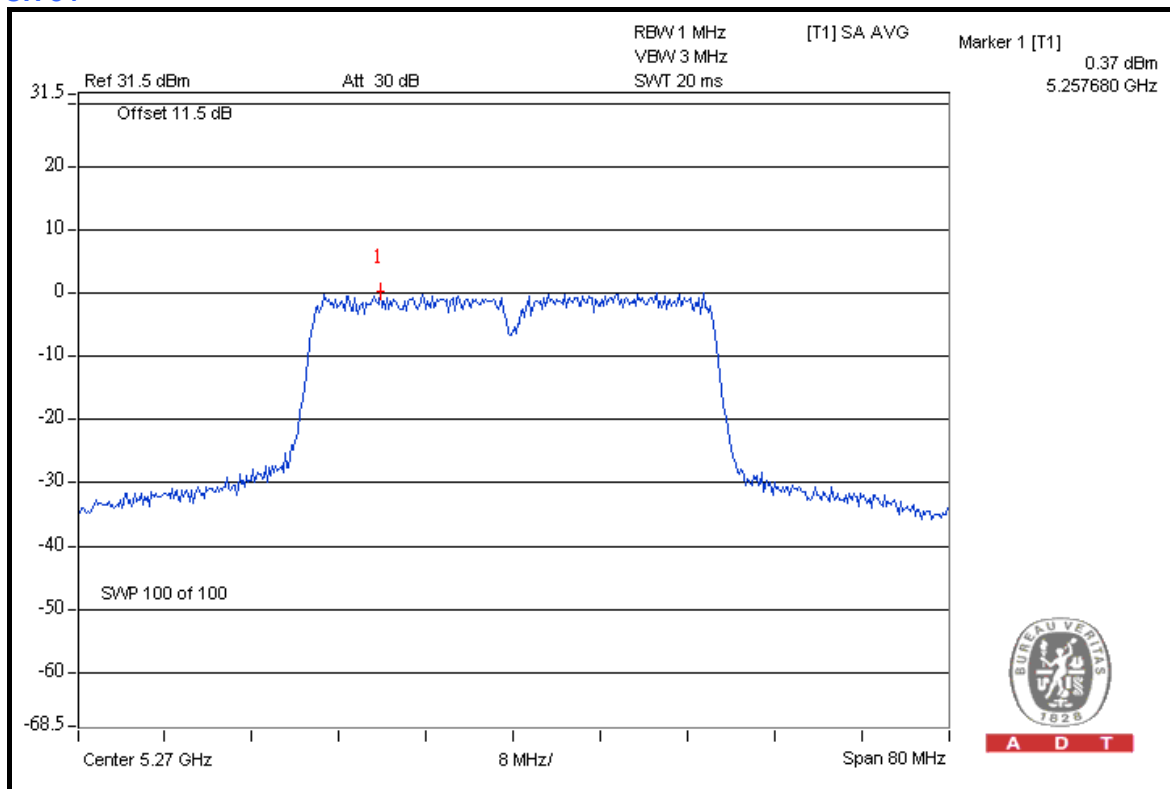
A D T

### CH 46



A D T

### CH 54

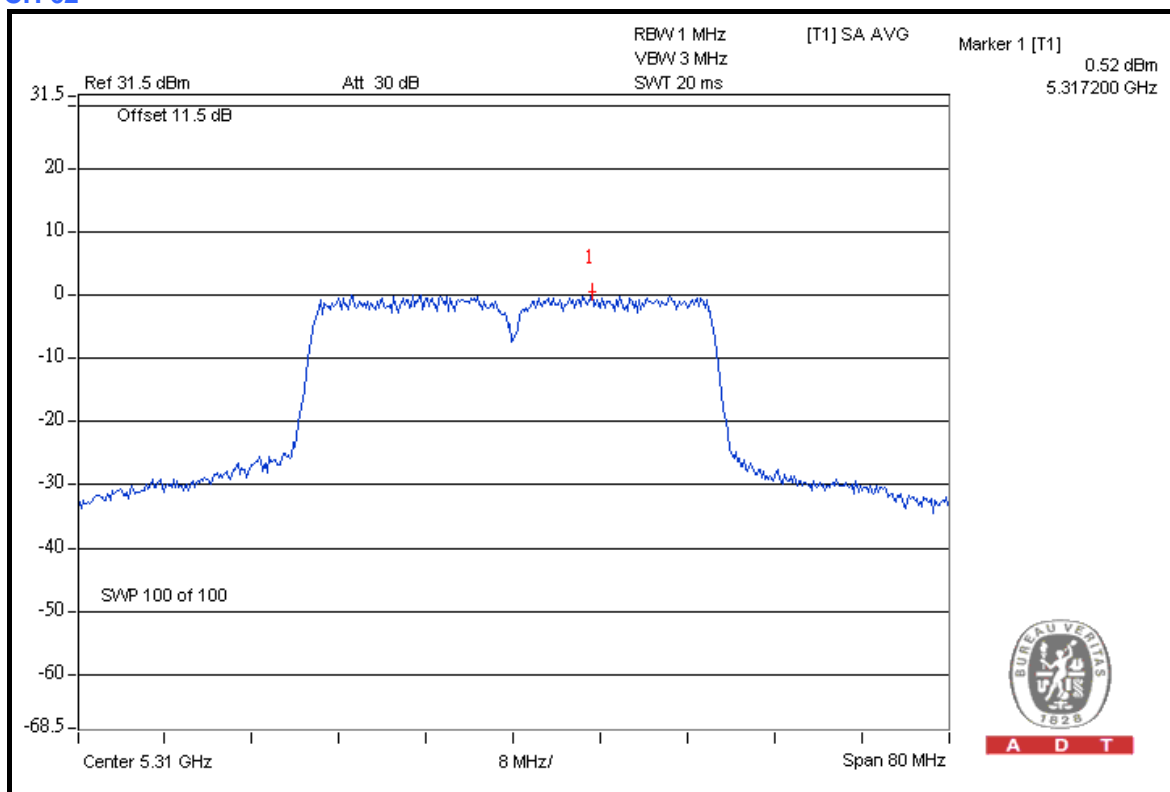


A D T



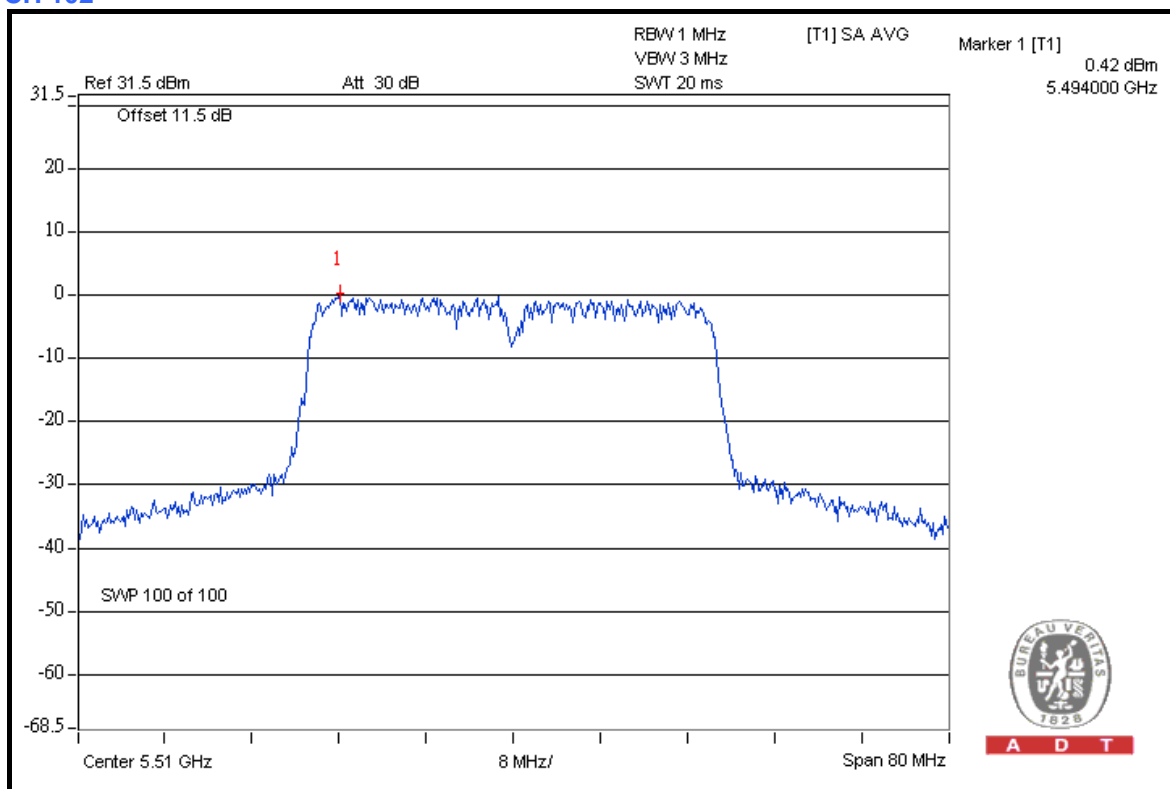
A D T

### CH 62



A D T

### CH 102



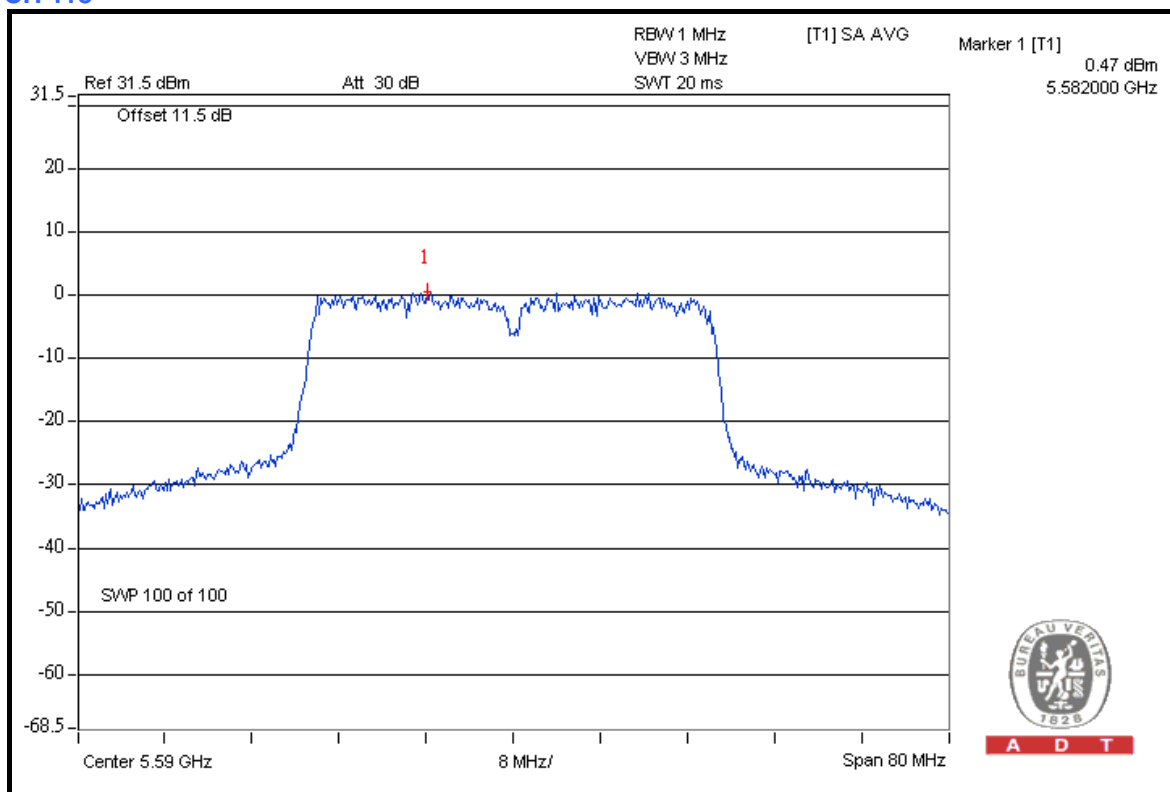
A D T



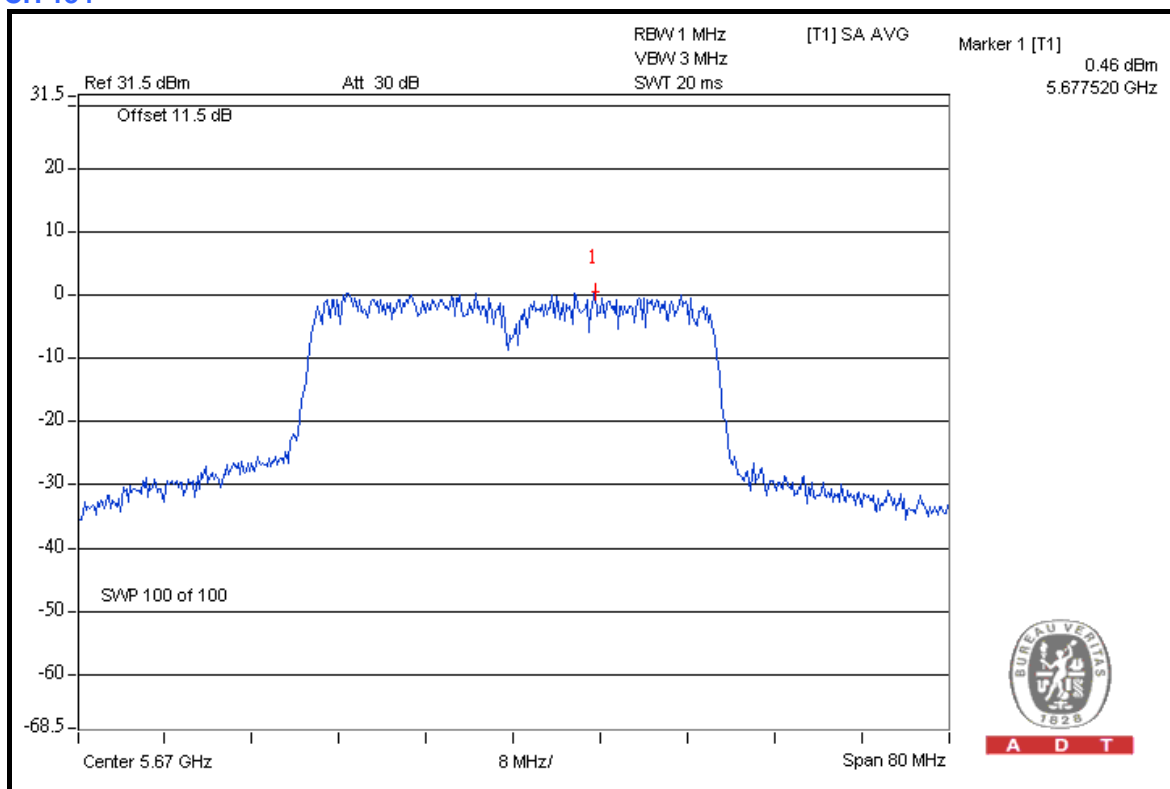


A D T

### CH 118



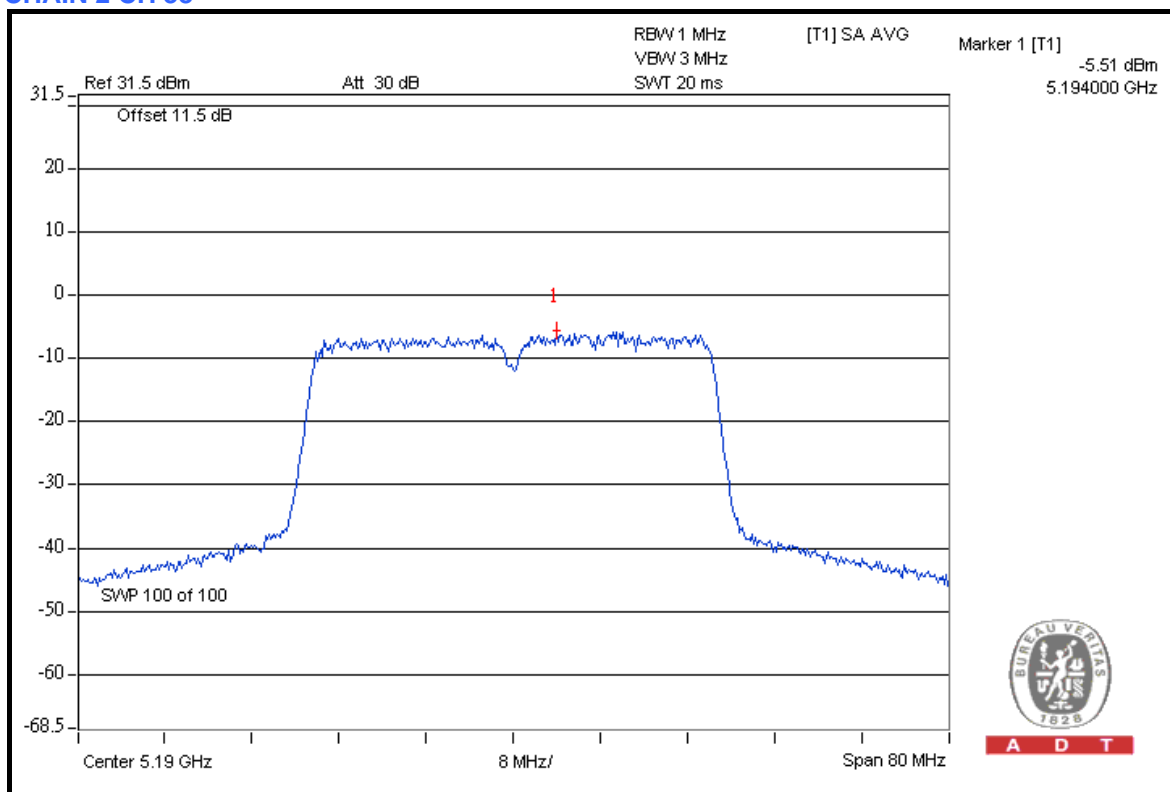
### CH 134



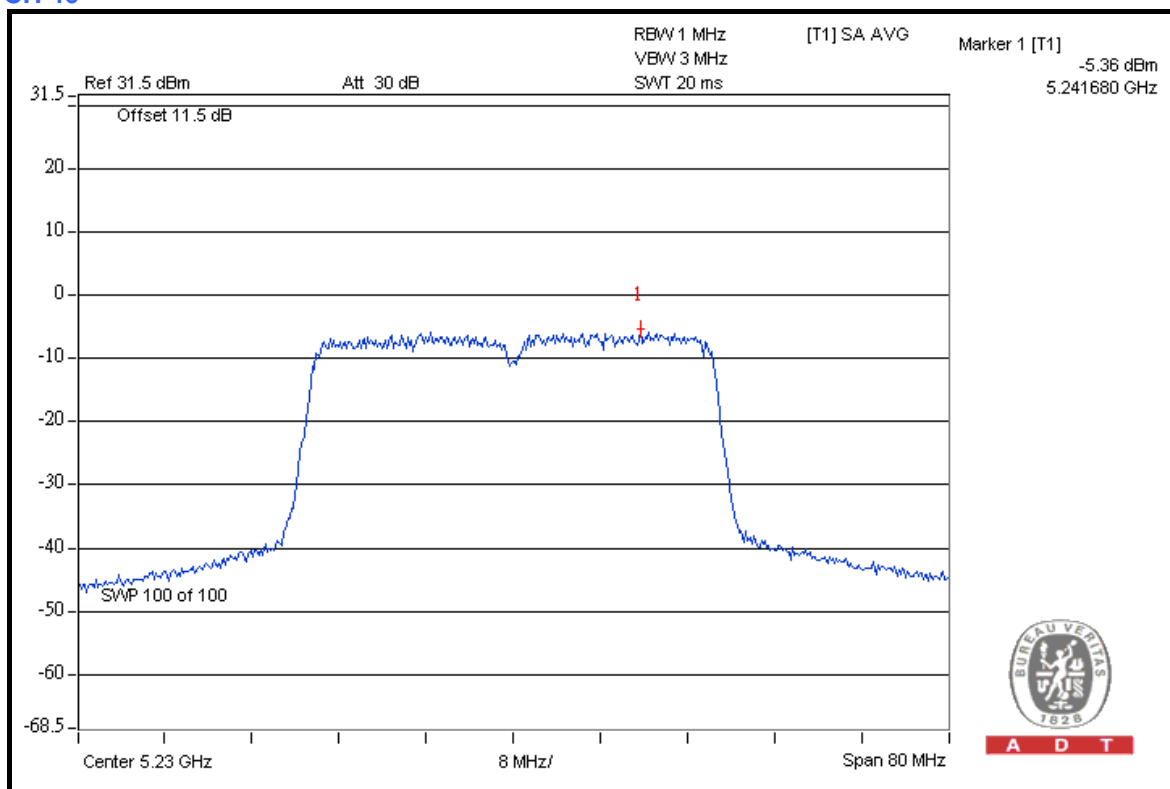


A D T

### CHAIN 2 CH 38



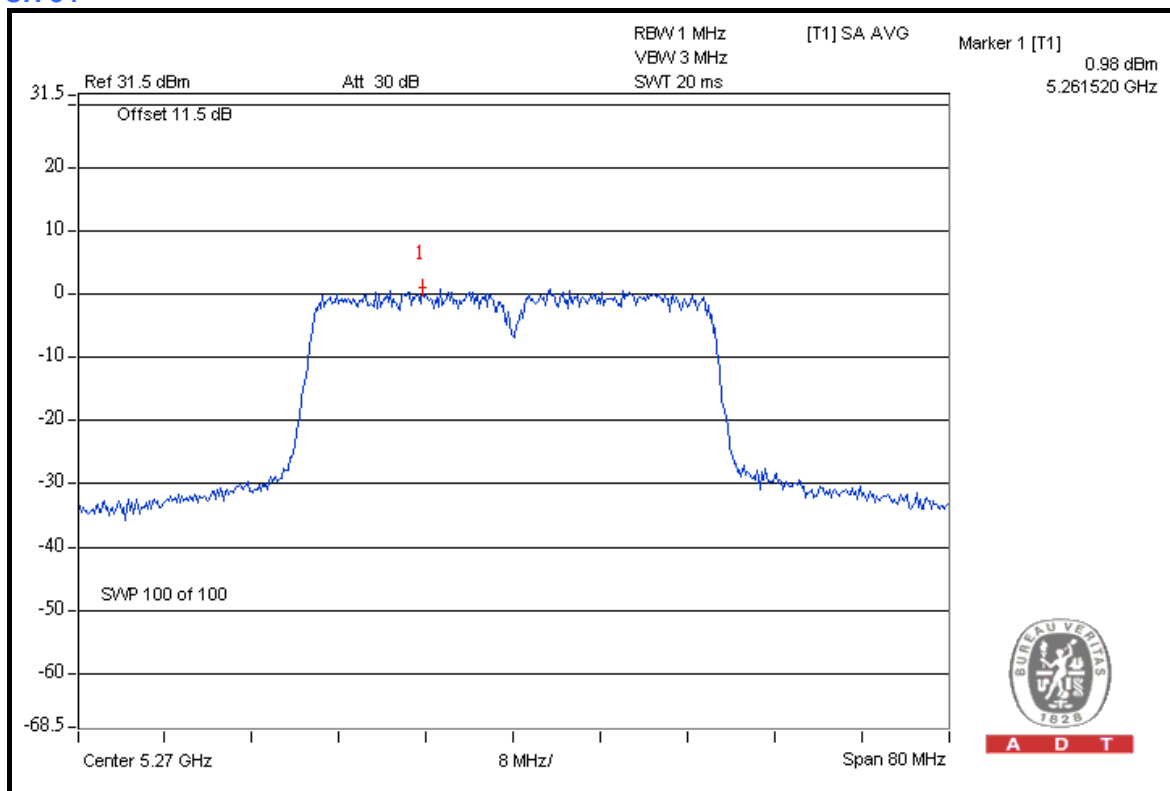
### CH 46



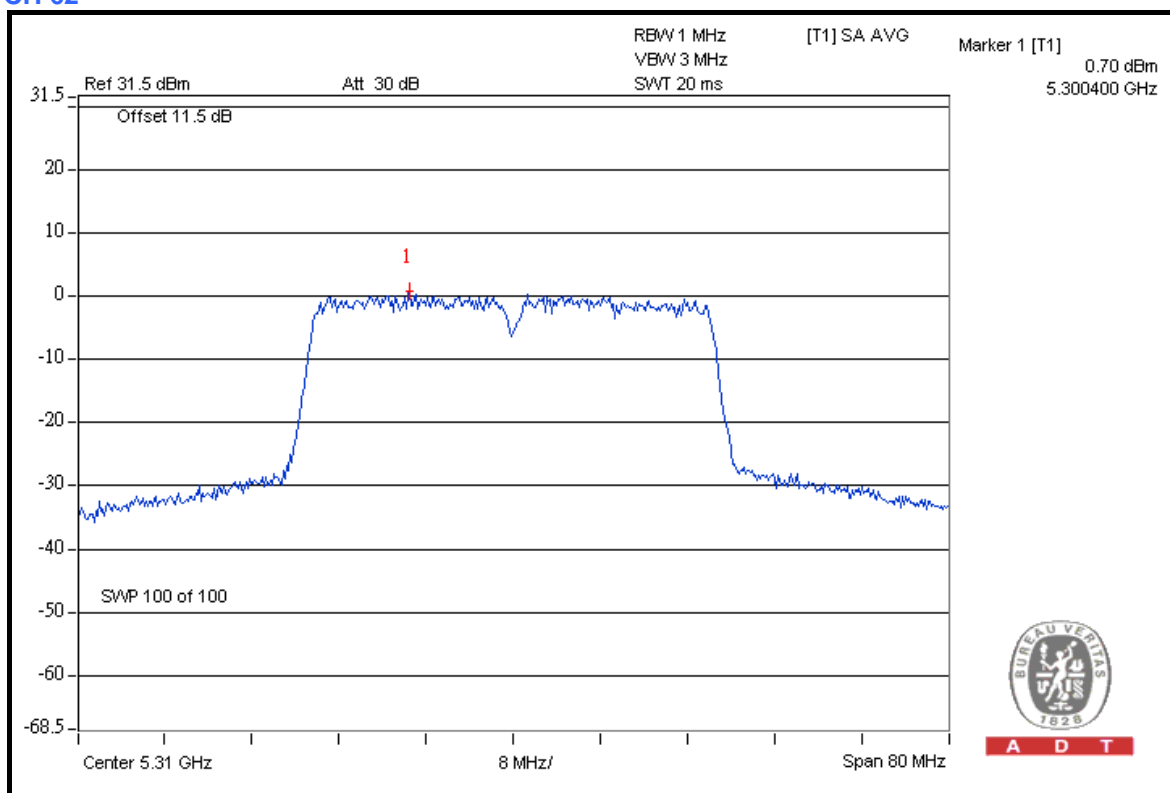


A D T

### CH 54



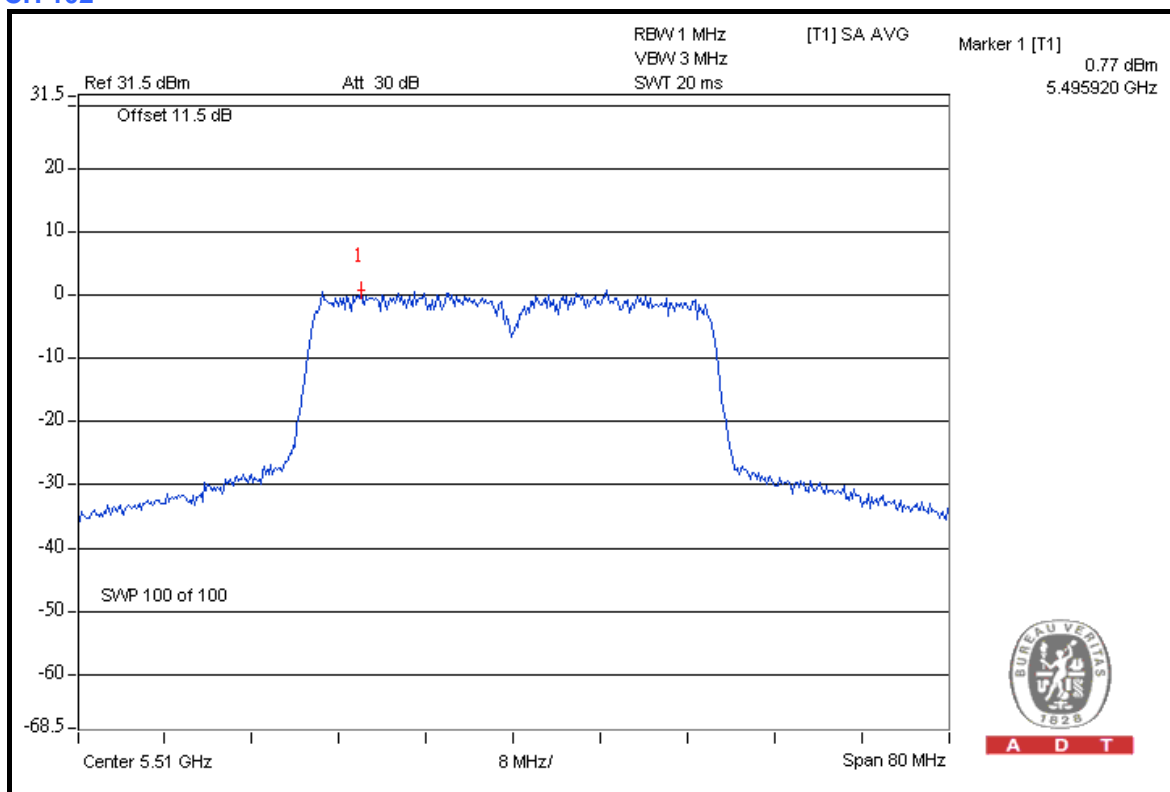
### CH 62



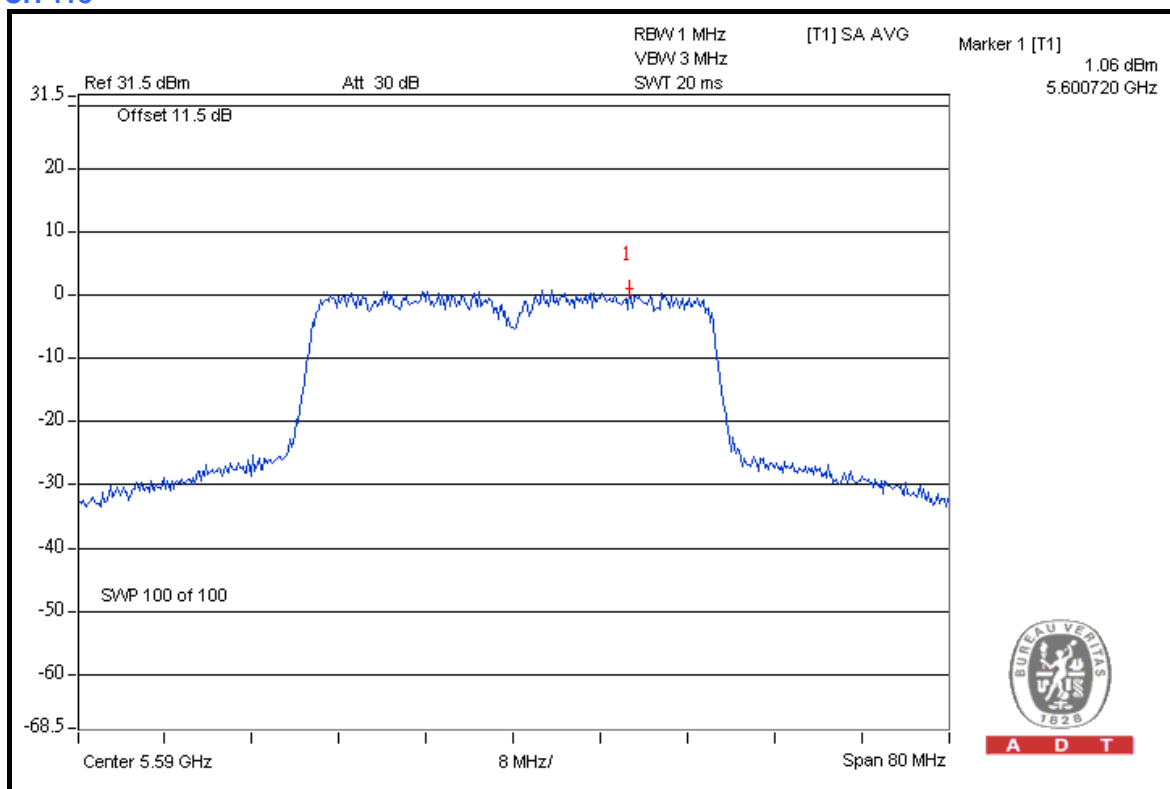


A D T

### CH 102



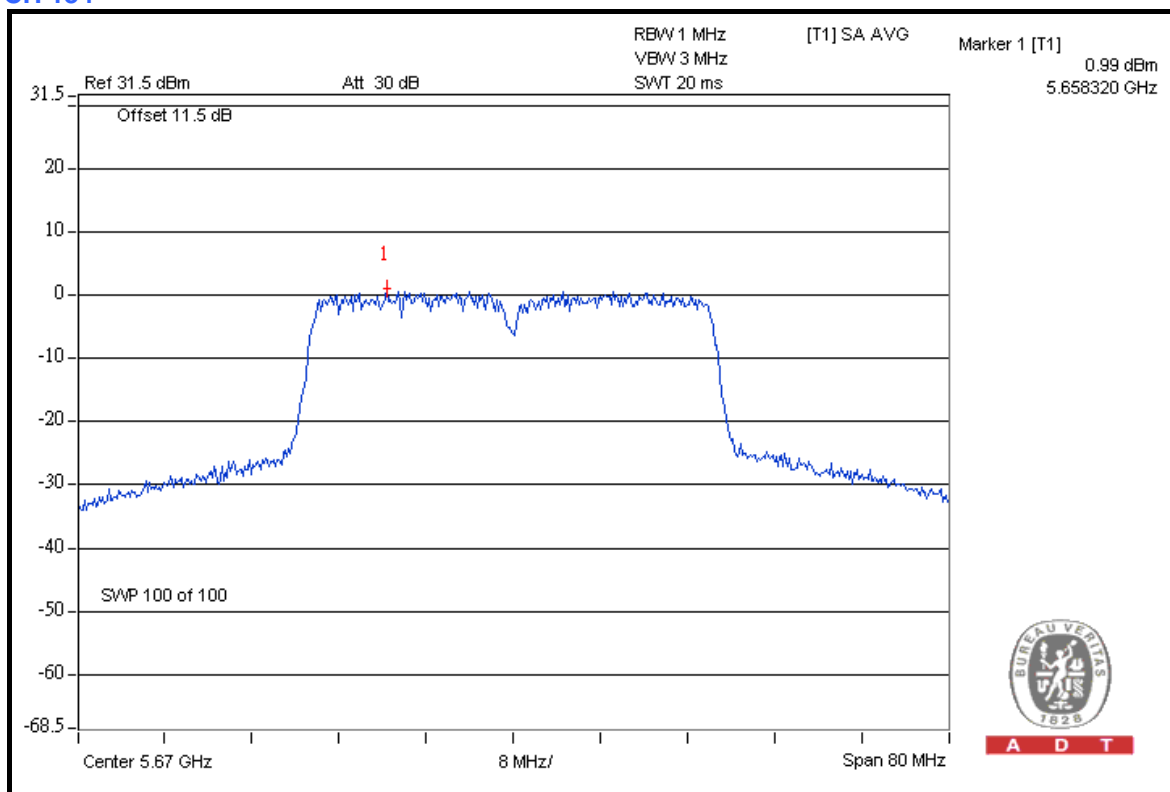
### CH 118





A D T

### CH 134





A D T

### DRAFT 802.11n (40MHz) OFDM MODULATION

<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	13.5Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz	<b>ENVIRONMENTAL CONDITIONS</b>	25deg.C, 65%RH, 991hPa
<b>TESTED BY</b>	Brad Wu	<b>TEST MODE</b>	C

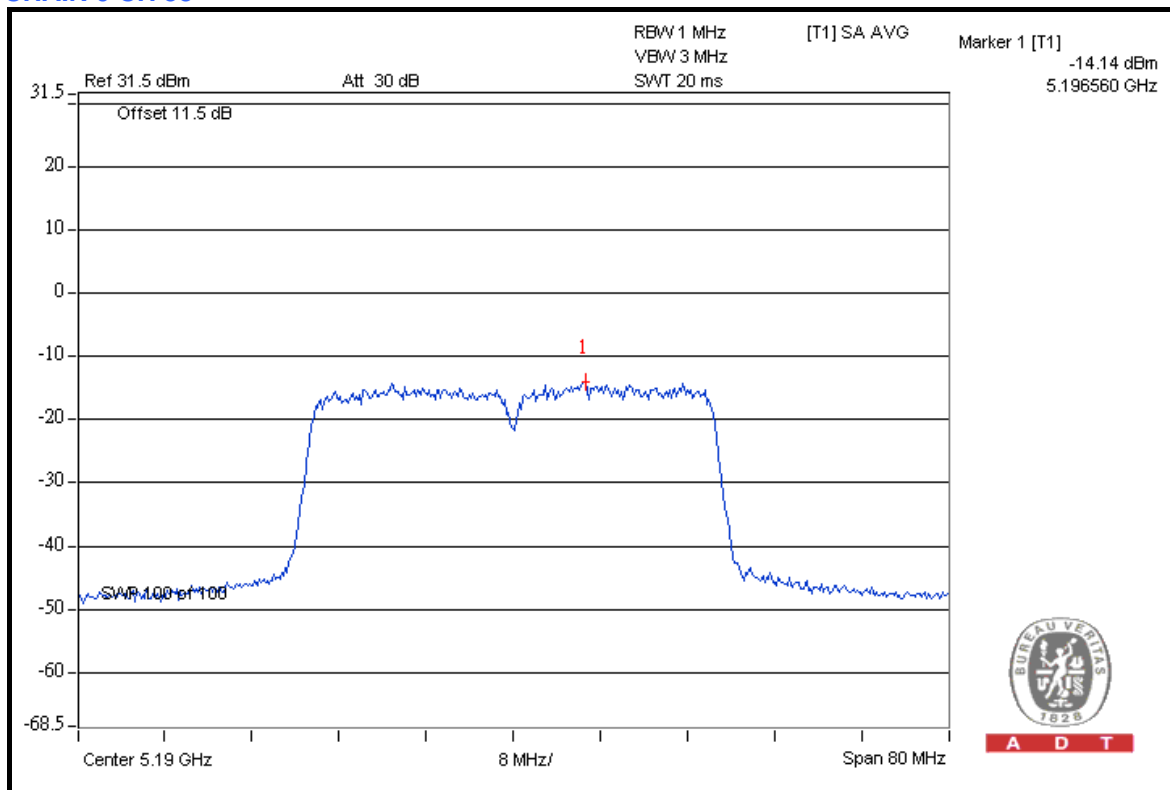
CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	-14.14	-12.21	0.099	-10.04	-4	PASS
46	5230	-14.05	-11.97	0.103	-9.87	-4	PASS
54	5270	-3.22	-3.95	0.88	-0.56	3	PASS
62	5310	-3.59	-3.58	0.88	-0.57	3	PASS
102	5510	-3.54	-3.76	0.86	-0.64	3	PASS
118	5590	-3.54	-3.70	0.87	-0.61	3	PASS
134	5670	-3.51	-3.51	0.89	-0.50	3	PASS

**NOTE:** According to 15.407 (a) (1) (2), the maximum antenna gain 14dBi is higher than 6dBi, so the limit of peak power spectral density shall be reduced by 8 dB.

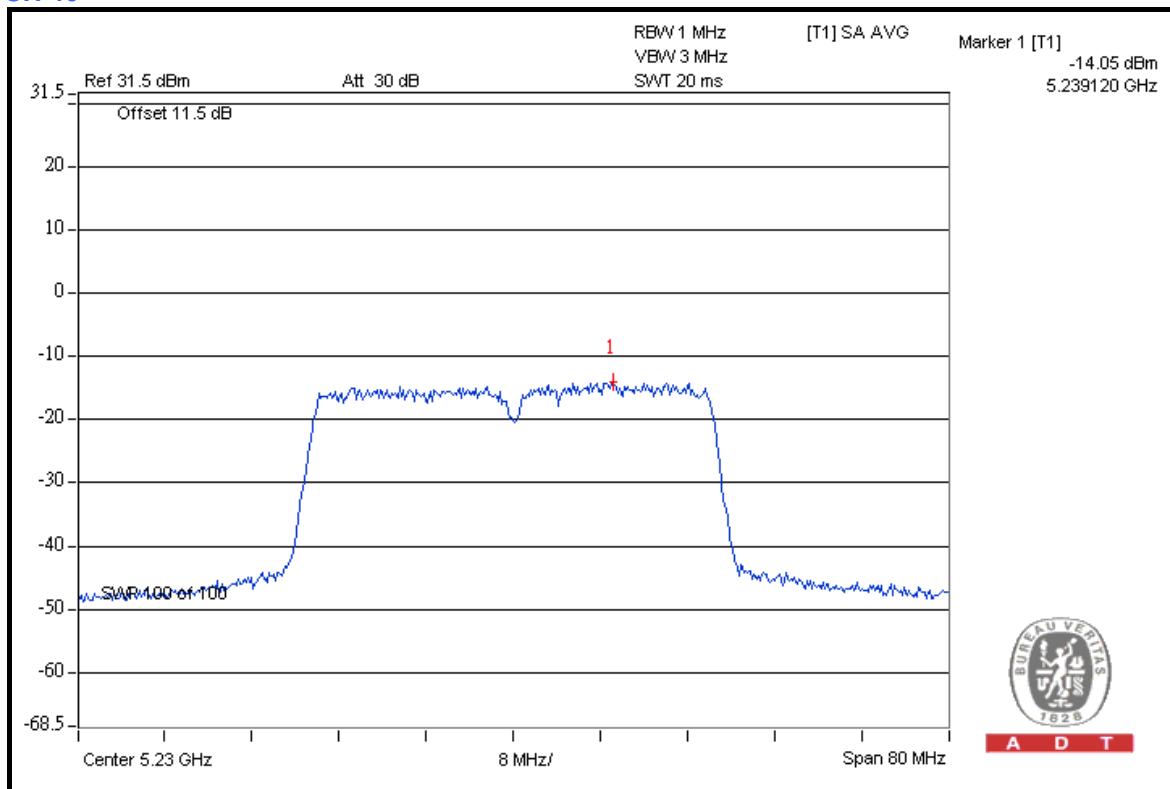


A D T

### CHAIN 0 CH 38



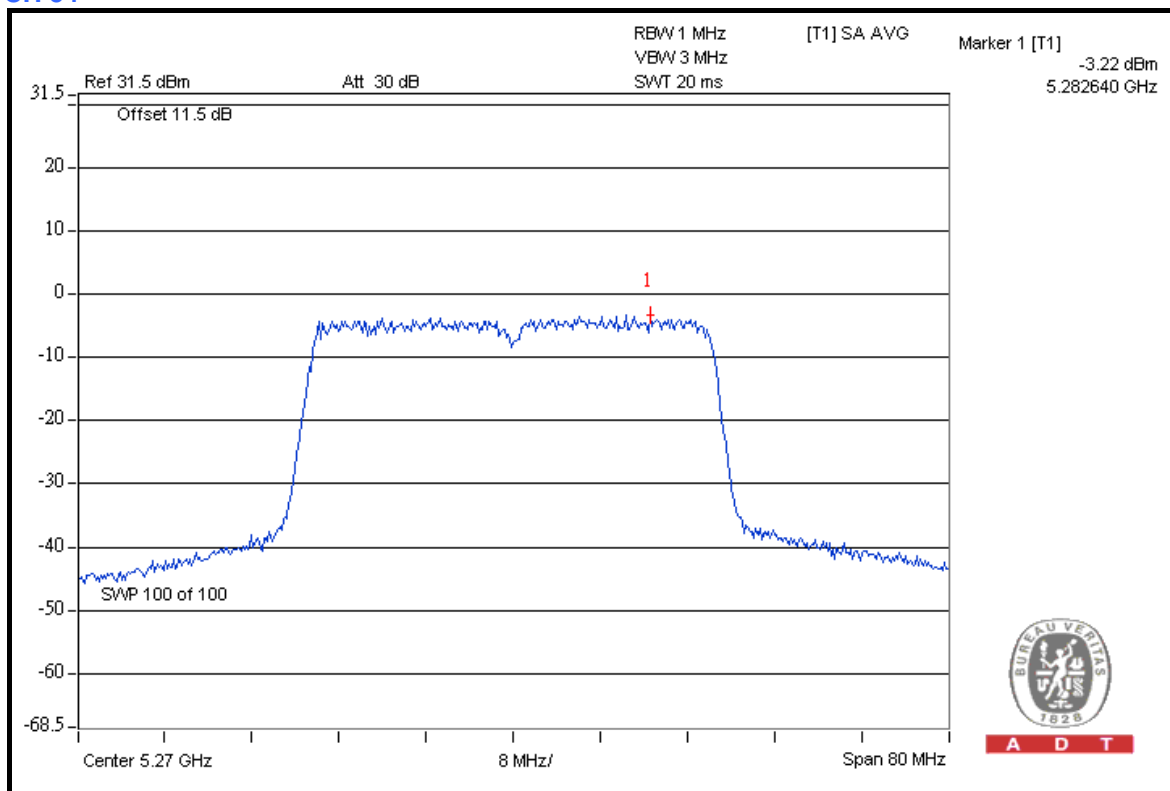
### CH 46



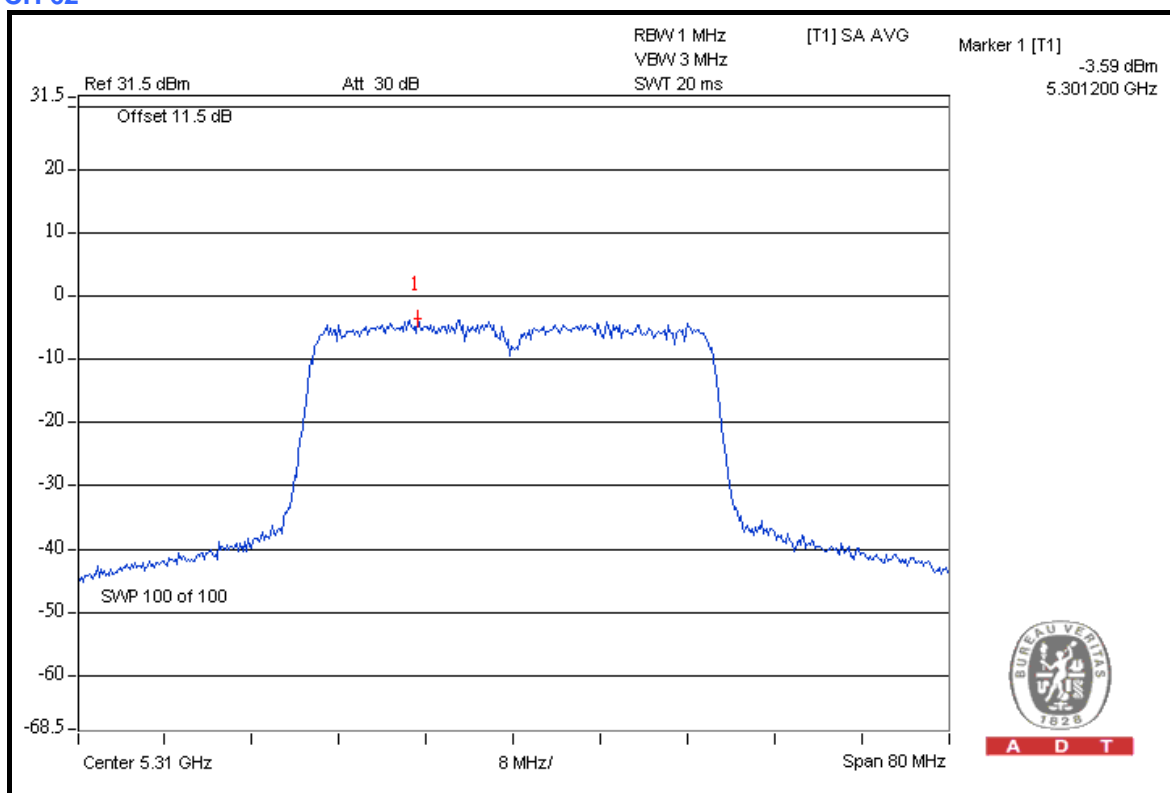


A D T

### CH 54



### CH 62

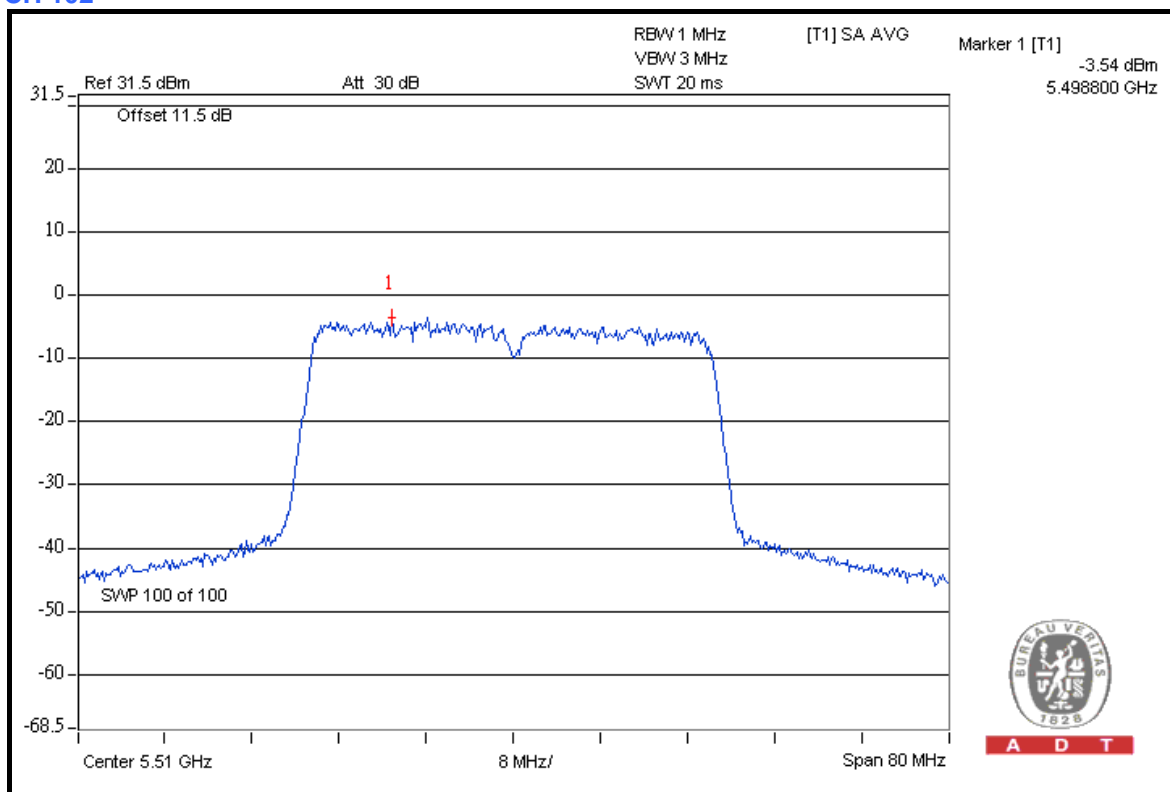




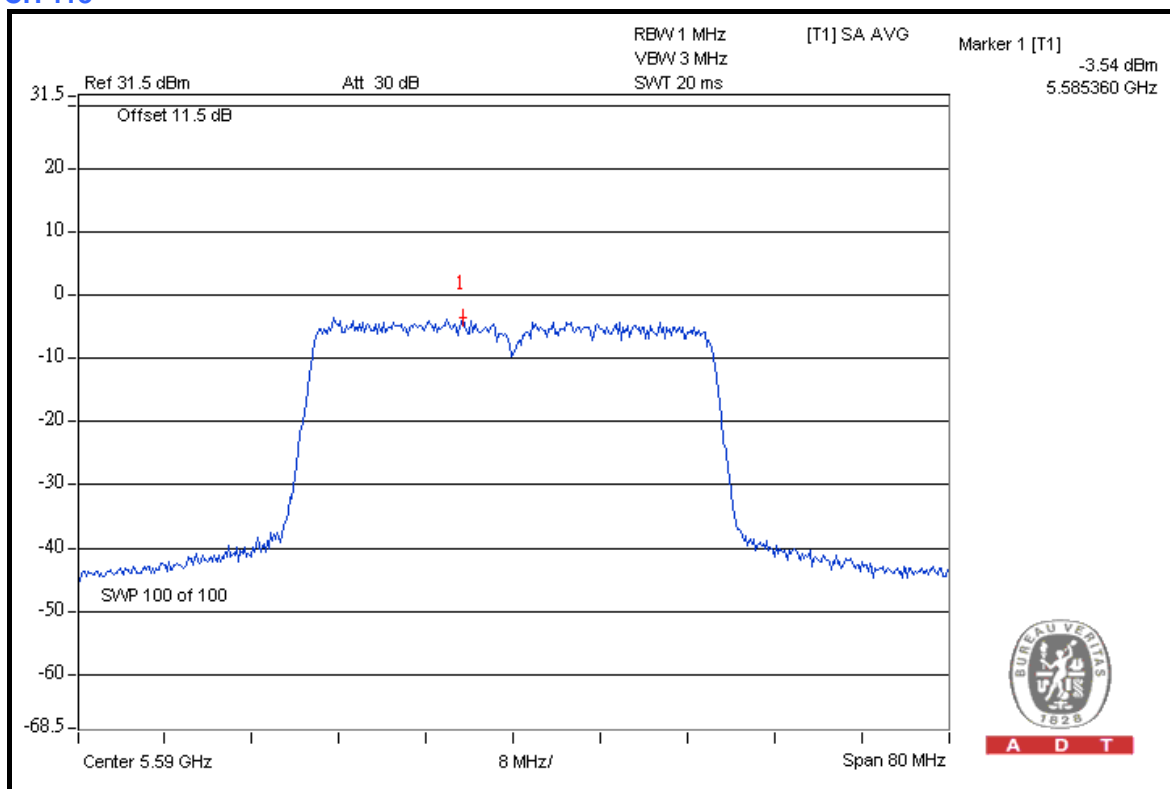


A D T

### CH 102



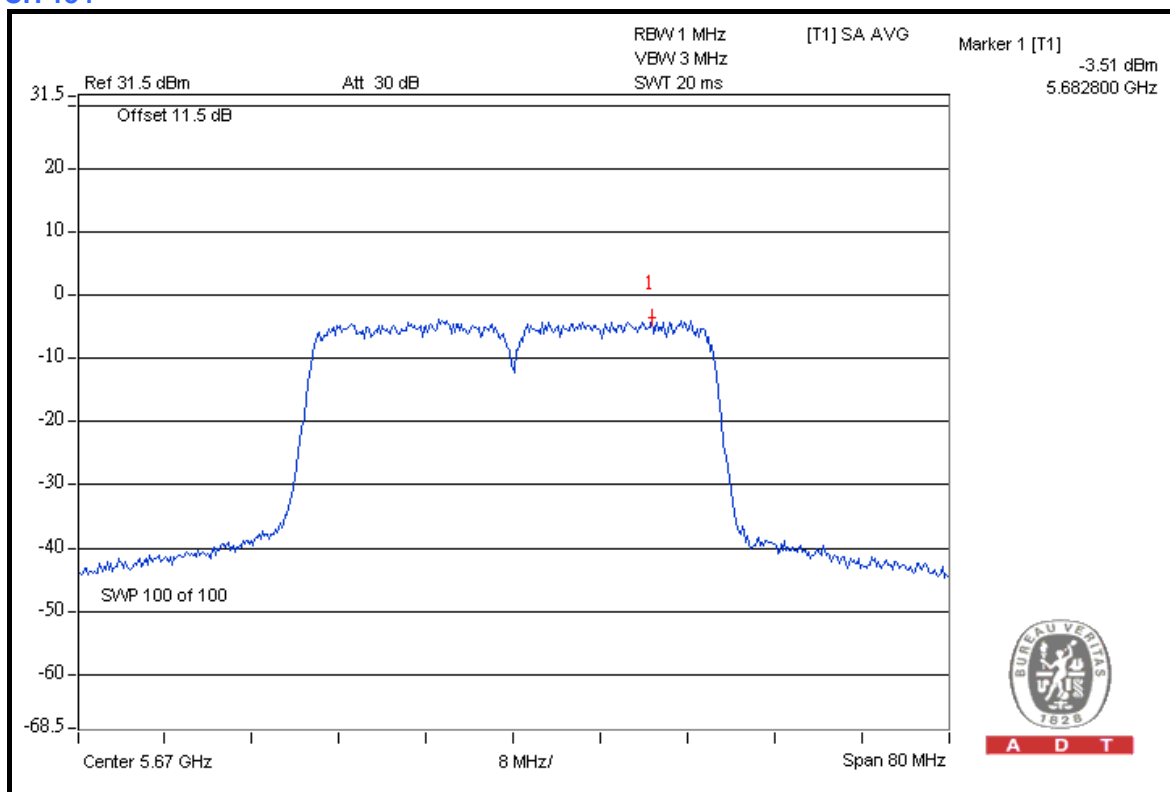
### CH 118



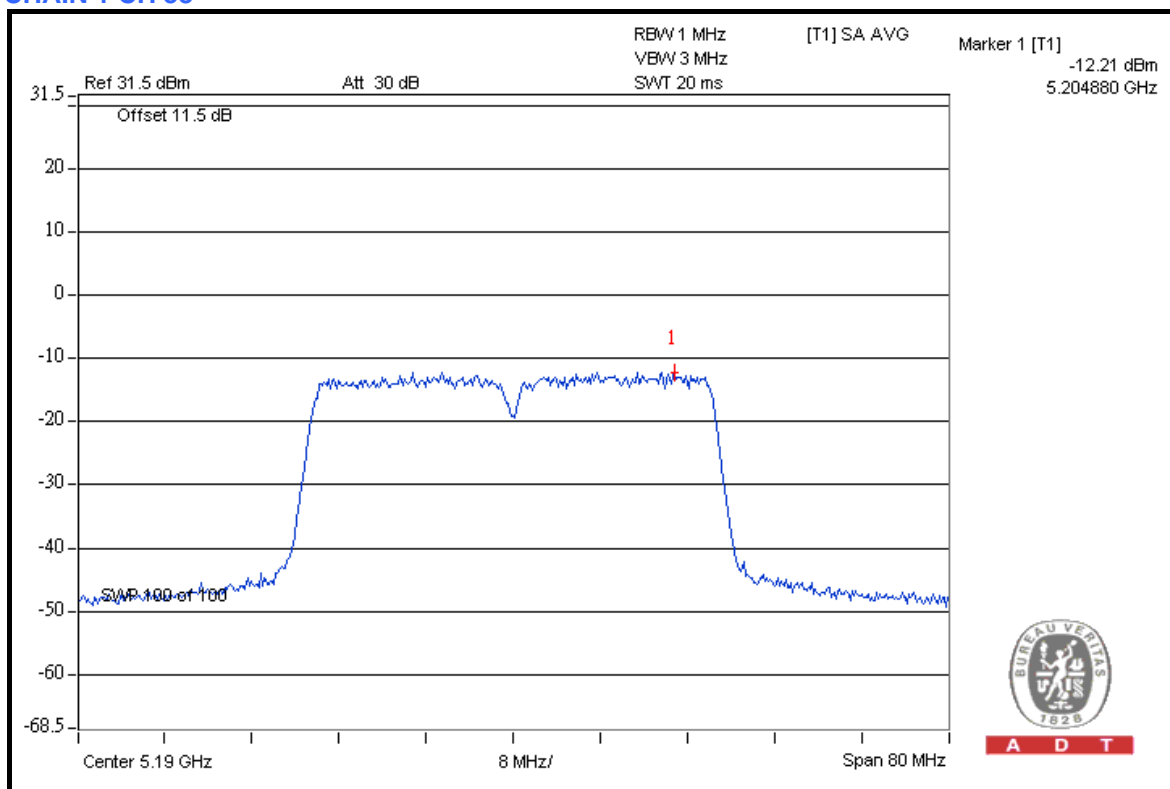


A D T

### CH 134



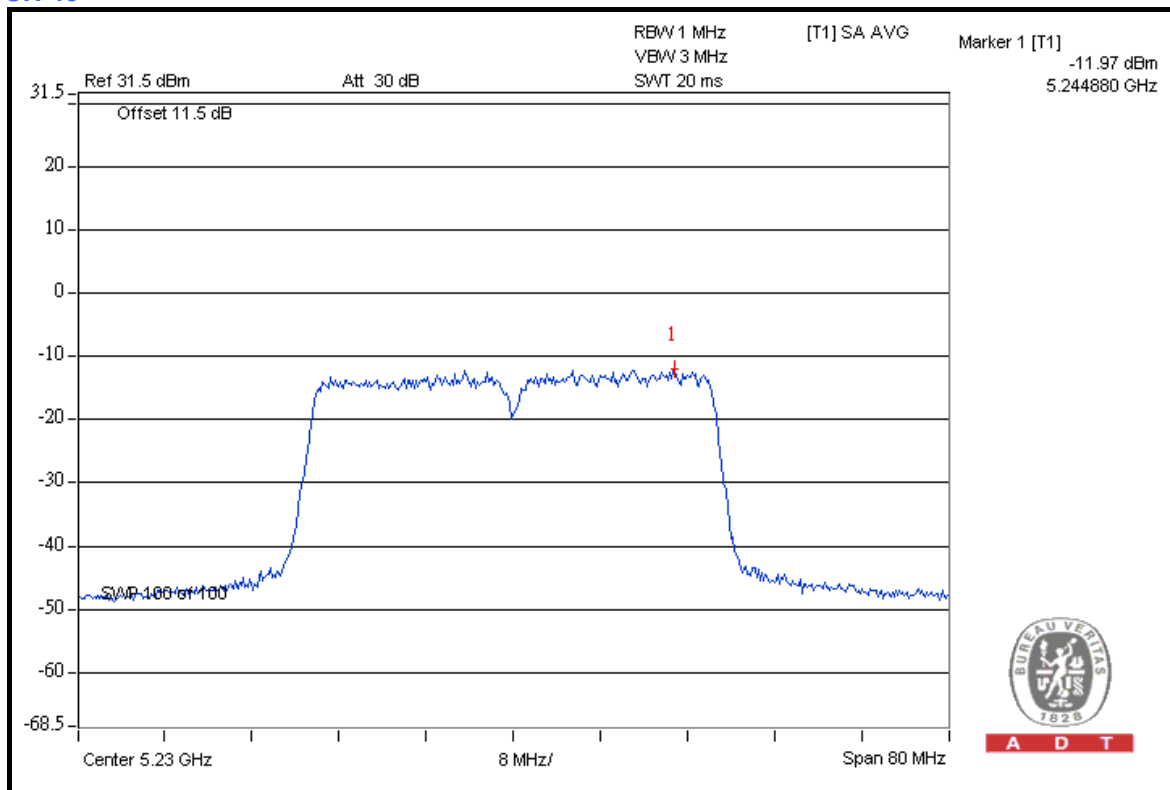
### CHAIN 1 CH 38



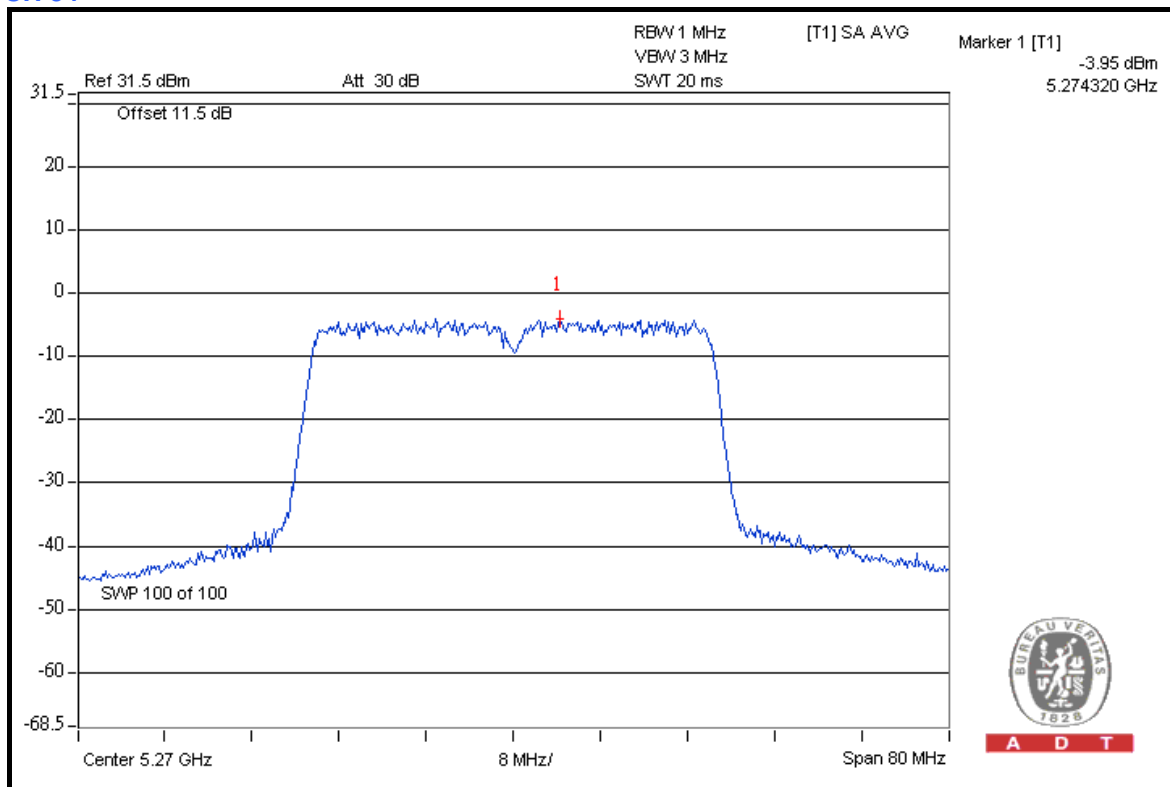


A D T

### CH 46



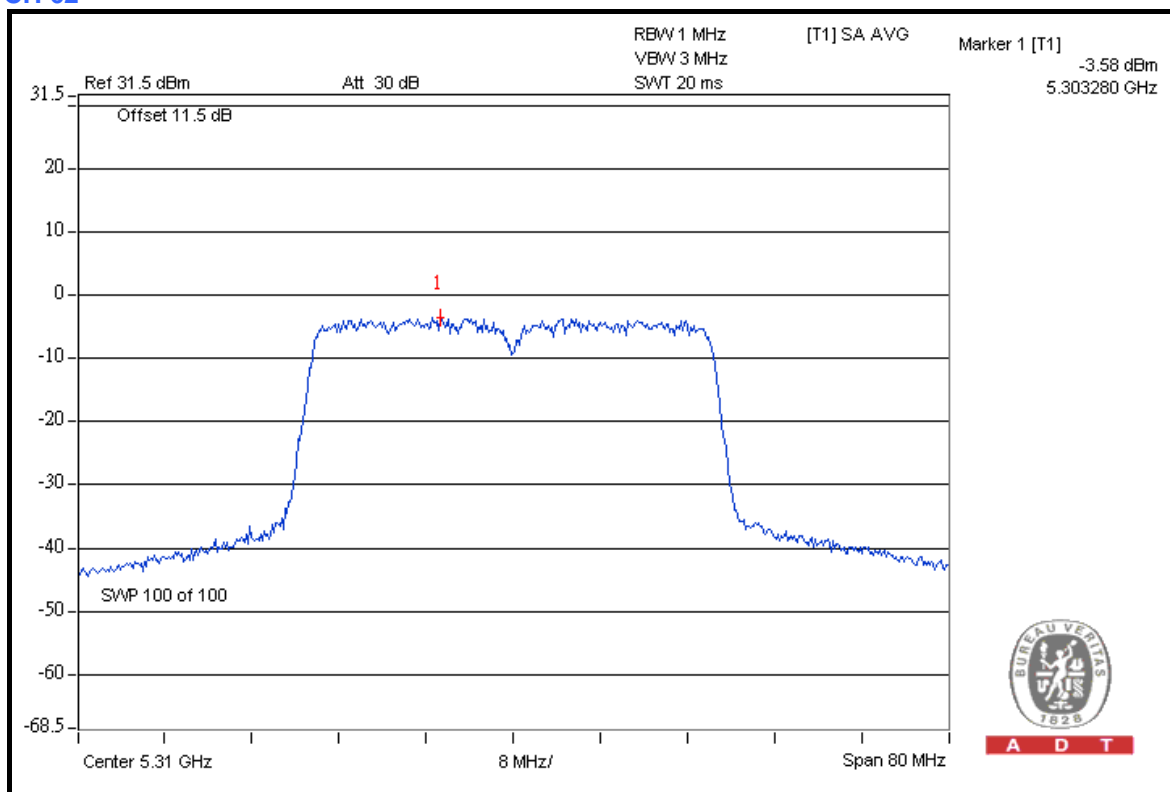
### CH 54



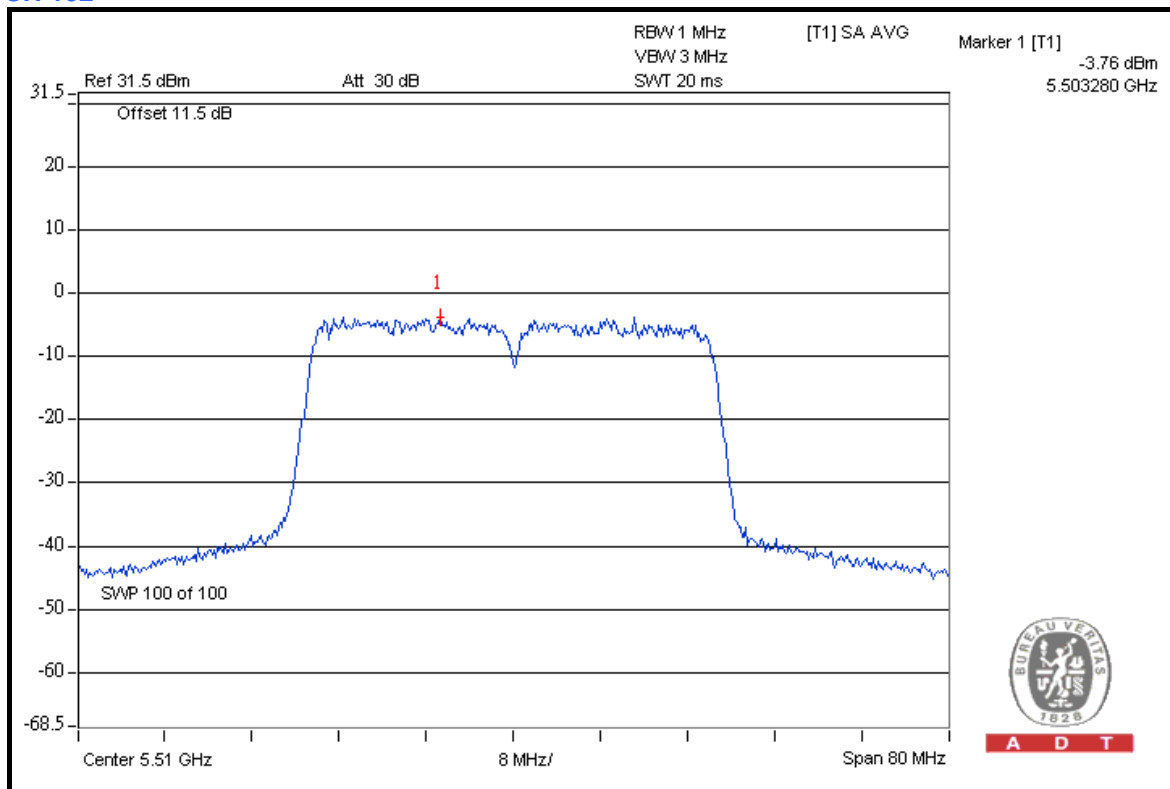


A D T

### CH 62



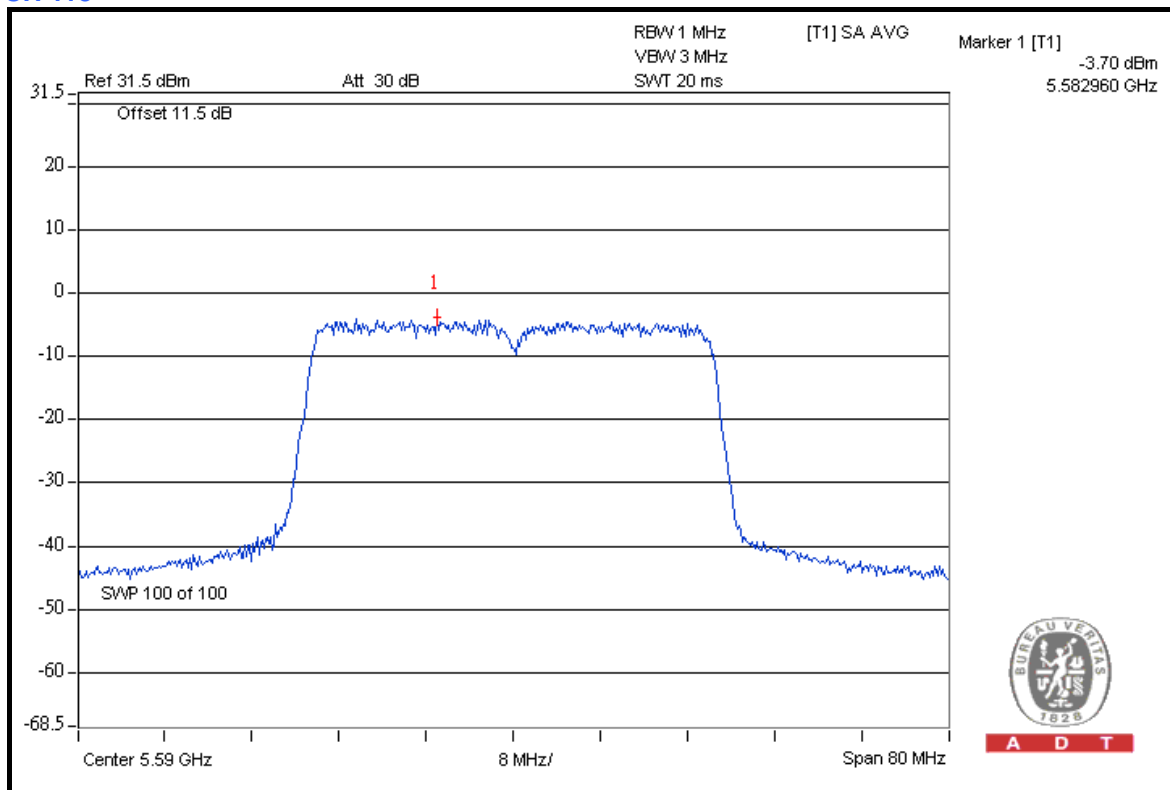
### CH 102





A D T

### CH 118



### CH 134

