

# SParkle power amplifier module measurements 27.01.2021 SP9BSL.

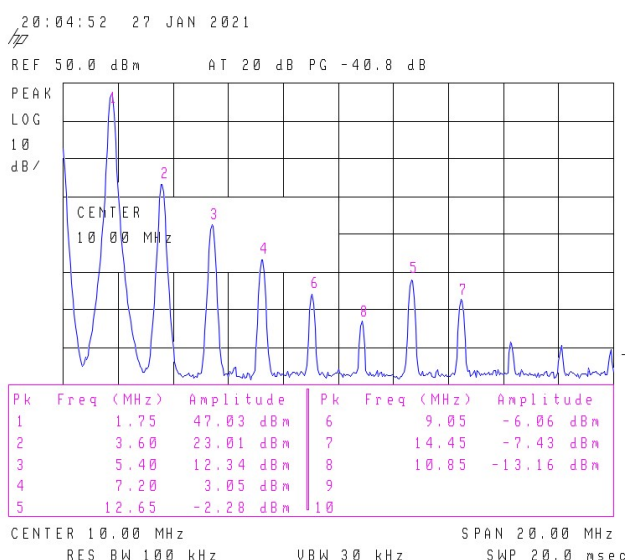
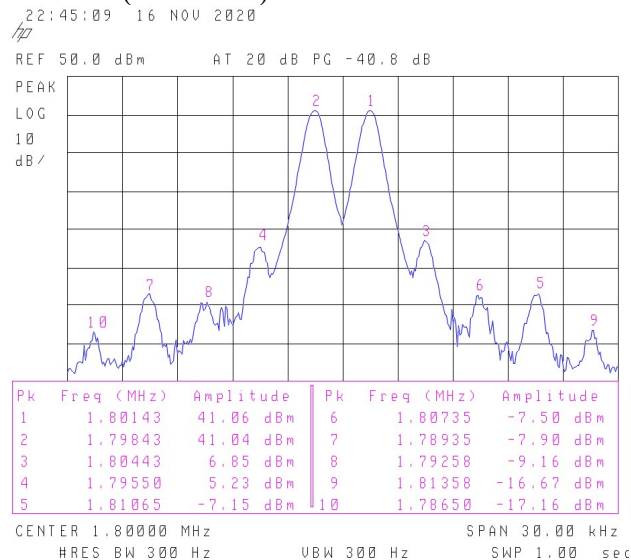
Standalone Amplifier (no filters at output).

MRF186 IDQ 0.8A (summary) 24V.

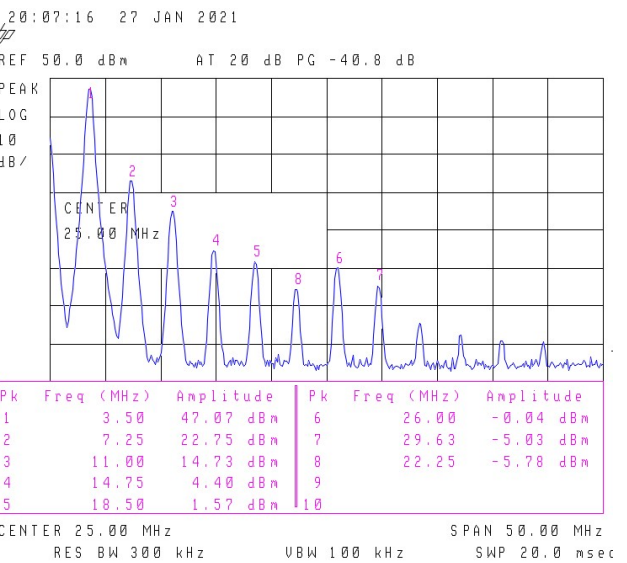
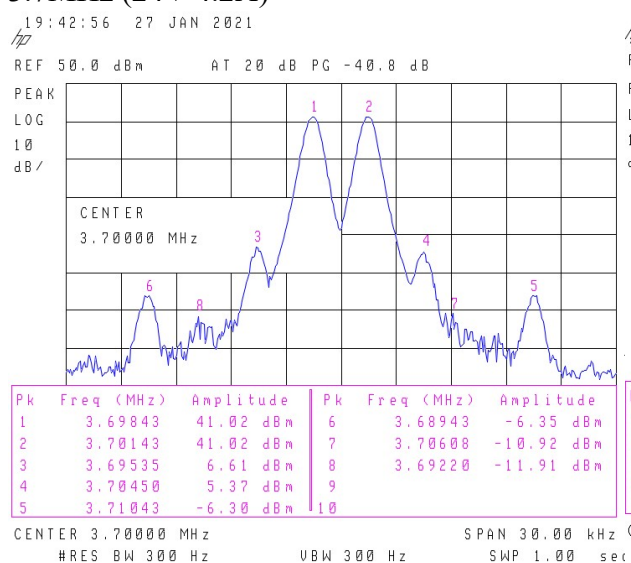
AFT(40mA)+2xAFT05MS003 40mA (summary) 12V

current measurement for CW 50W (50MHz @40W), IMD @PEP50W

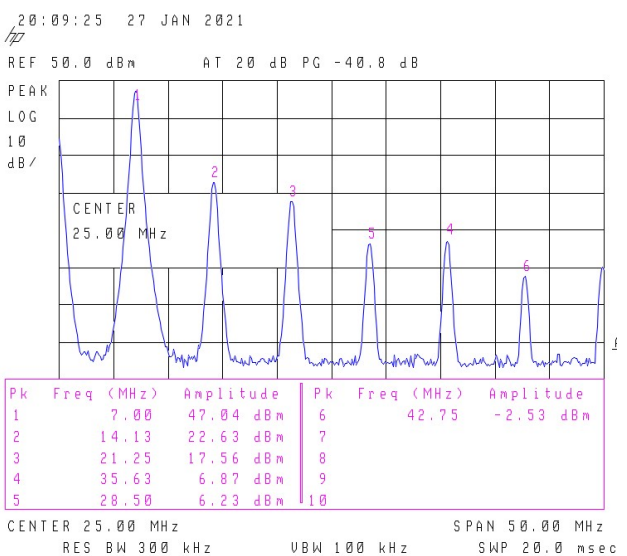
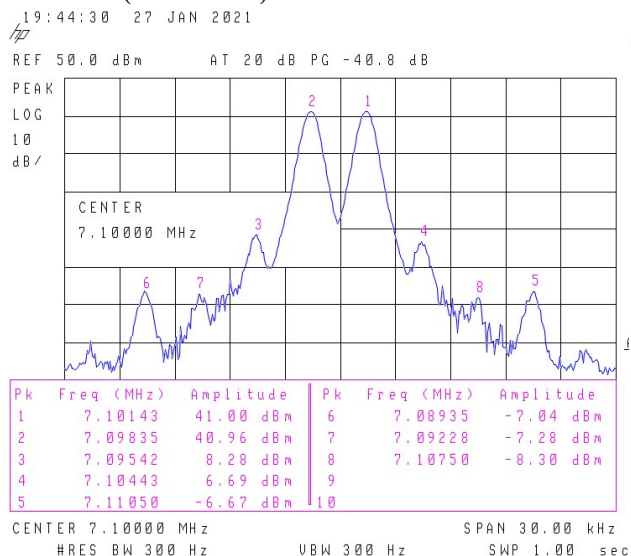
## 1.8MHz (24V 4.2A)



## 3.7MHz (24V 4.2A)

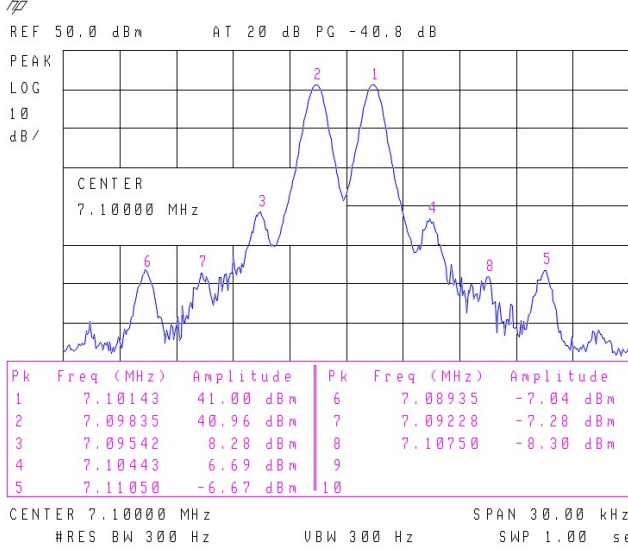


## 7.1MHz (24V 4.2A)

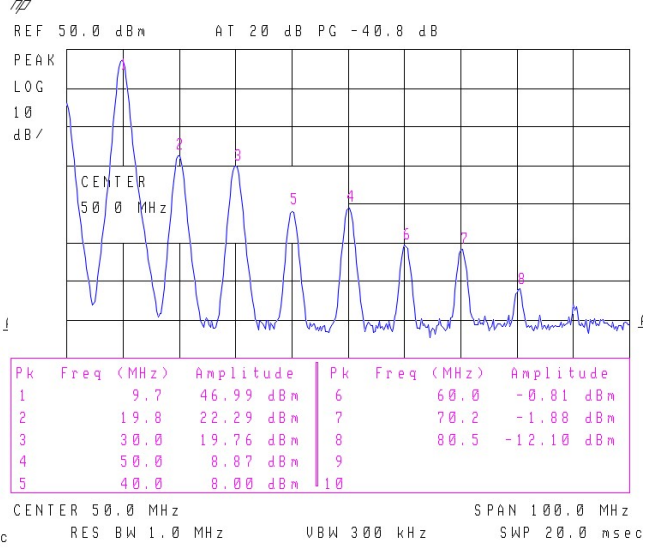


### 10MHz (24V 4.3A)

19:44:30 27 JAN 2021

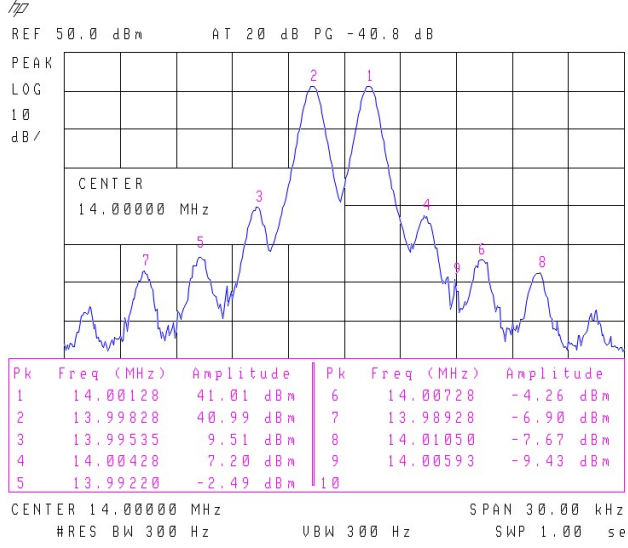


20:11:13 27 JAN 2021

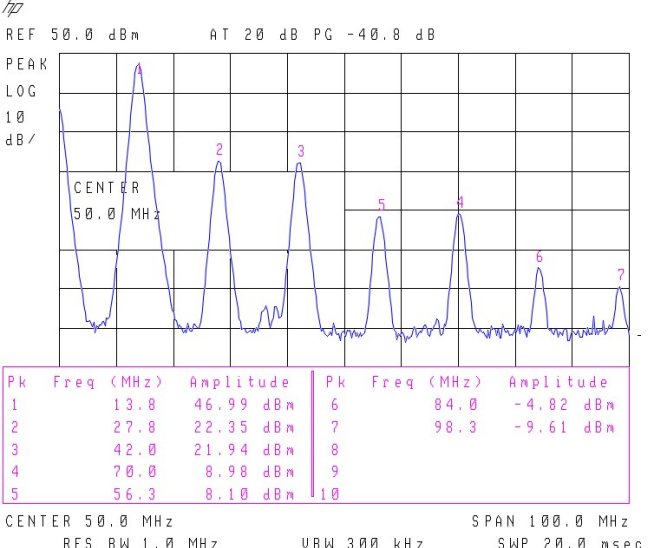


### 14MHz (24V 4.4A)

19:47:58 27 JAN 2021

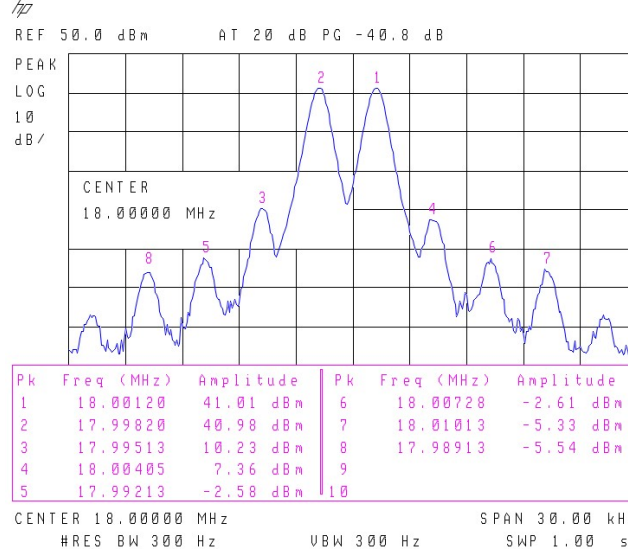


20:13:10 27 JAN 2021

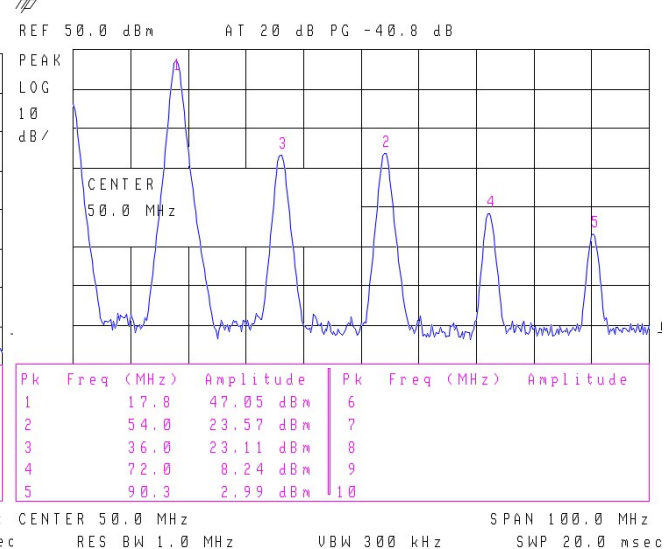


### 18MHz (24V 4.4A)

19:50:33 27 JAN 2021



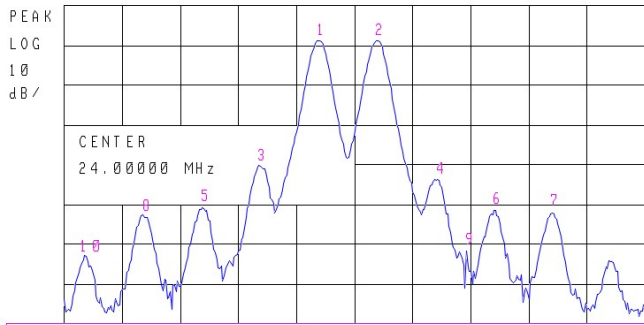
20:16:01 27 JAN 2021



## 24MHz (24V 4.6A)

19:52:33 27 JAN 2021

REF 50.0 dBm AT 20 dB PG -40.8 dB

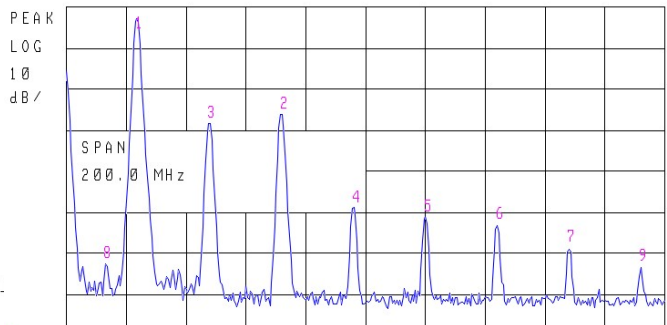


Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	23.99813	41.01 dBm	6	24.00720	-1.52 dBm
2	24.00113	41.01 dBm	7	24.01020	-2.18 dBm
3	23.99505	9.65 dBm	8	23.98913	-3.02 dBm
4	24.00428	6.15 dBm	9	24.00578	-11.92 dBm
5	23.99213	-1.03 dBm	10	23.98620	-13.22 dBm

CENTER 24.00000 MHz SPAN 30.00 kHz  
#RES BW 300 Hz VBW 300 Hz SWP 1.00 sec

20:19:09 27 JAN 2021

REF 50.0 dBm AT 20 dB PG -40.8 dB



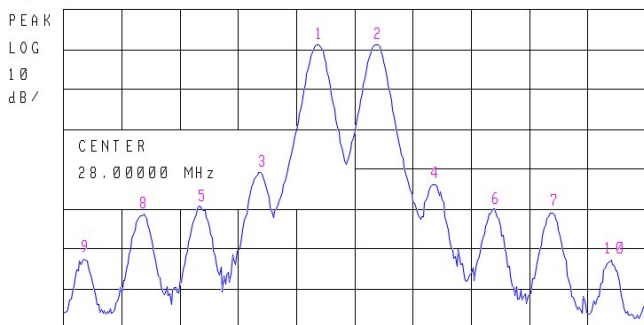
Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	23.5	47.01 dBm	6	144.0	-3.40 dBm
2	72.0	23.69 dBm	7	168.0	-9.06 dBm
3	47.5	21.50 dBm	8	13.0	-12.73 dBm
4	96.0	0.97 dBm	9	192.0	-13.57 dBm
5	120.0	-1.20 dBm	10		

CENTER 100.0 MHz SPAN 200.0 MHz  
RES BW 1.0 MHz VBW 300 kHz SWP 20.0 msec

## 28MHz (24V 4.7A)

19:54:47 27 JAN 2021

REF 50.0 dBm AT 20 dB PG -40.8 dB

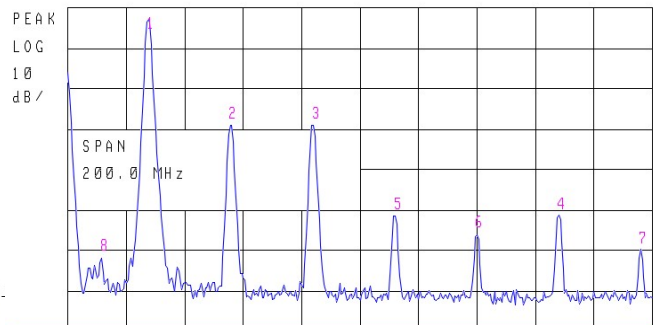


Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	27.99805	41.03 dBm	6	28.00713	-0.04 dBm
2	28.00105	41.00 dBm	7	28.01013	-1.06 dBm
3	27.99513	9.07 dBm	8	27.98898	-1.20 dBm
4	28.00398	5.94 dBm	9	27.98598	-12.49 dBm
5	27.99198	0.54 dBm	10	28.01320	-12.80 dBm

CENTER 28.00000 MHz SPAN 30.00 kHz  
#RES BW 300 Hz VBW 300 Hz SWP 1.00 sec

20:21:06 27 JAN 2021

REF 50.0 dBm AT 20 dB PG -40.8 dB



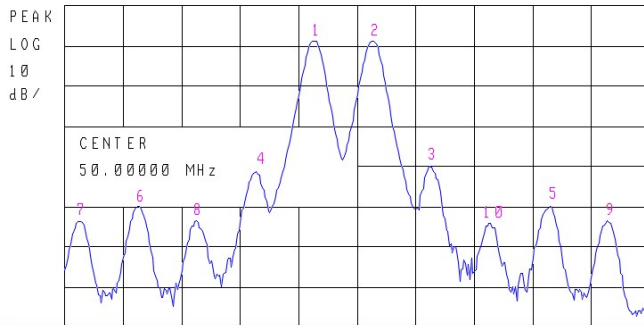
Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	27.5	47.01 dBm	6	140.0	-6.23 dBm
2	55.5	20.85 dBm	7	196.0	-9.74 dBm
3	84.0	20.81 dBm	8	11.5	-12.00 dBm
4	168.0	-1.30 dBm	9		
5	112.0	-1.56 dBm	10		

CENTER 100.0 MHz SPAN 200.0 MHz  
RES BW 1.0 MHz VBW 300 kHz SWP 20.0 msec

## 50MHz (24V 5.1A for 46dBm CW)

19:56:50 27 JAN 2021

REF 50.0 dBm AT 20 dB PG -40.8 dB

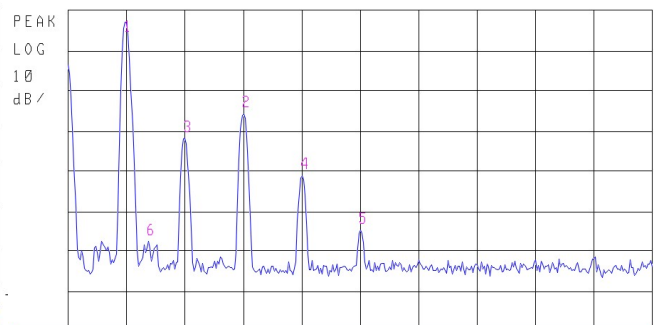


Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	49.99775	41.00 dBm	6	49.98875	-0.17 dBm
2	50.00075	41.00 dBm	7	49.98568	-3.58 dBm
3	50.00368	9.73 dBm	8	49.99168	-3.62 dBm
4	49.99490	8.88 dBm	9	50.01282	-3.69 dBm
5	50.00990	0.04 dBm	10	50.00682	-4.26 dBm

CENTER 50.00000 MHz SPAN 30.00 kHz  
#RES BW 300 Hz VBW 300 Hz SWP 1.00 sec

22:58:39 16 NOV 2020

REF 50.0 dBm AT 20 dB PG -40.8 dB



Pk	Freq (MHz)	Amplitude	Pk	Freq (MHz)	Amplitude
1	48.8	46.98 dBm	6	68.7	-7.73 dBm
2	150.0	24.10 dBm	7		
3	100.0	18.12 dBm	8		
4	200.0	8.65 dBm	9		
5	250.0	-4.87 dBm	10		

CENTER 250.0 MHz SPAN 500.0 MHz  
RES BW 3.0 MHz VBW 3 MHz SWP 20.0 msec