

Site validation for radiation emission measurements below 30MHz (Open Area Test Site (OATS) and 10m Anechoic Chamber)

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(Date) 12/03/2018

이정배

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(Date) 12/03/2018



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TABLE OF CONTENTS

1. Definition	3
2. Test equipment	3
3. Test set-up (Block diagram)	3
4. Test result	4
4.1 Measurement value result table	4
4.2 Graph table of result.....	4
4.3 Plot data (Rawdata).....	5

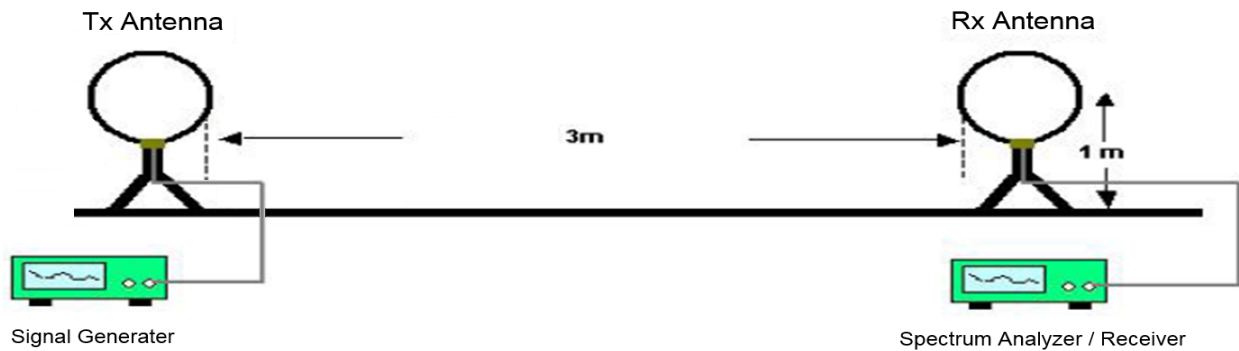
1. Definition

This test is a performed test to determine if a 10m anechoic chamber can be alternative site that OATS in the below 30 MHz.

2. Test equipment

Equipment	Model	Manufacturer	Serial number	Calibration Due date (year/month/date)
Loop Antenna	FMZB1519	SCHWARZBECK	00025	2020/01/04
SPECTRUM ANALYZER	FSP	ROHDE & SCHWARZ	100631	2019/11/07
Signal Generator	SMT 06	ROHDE & SCHWARZ	825076/099	2019/01/02

3. Test set-up (Block diagram)



4. Test result

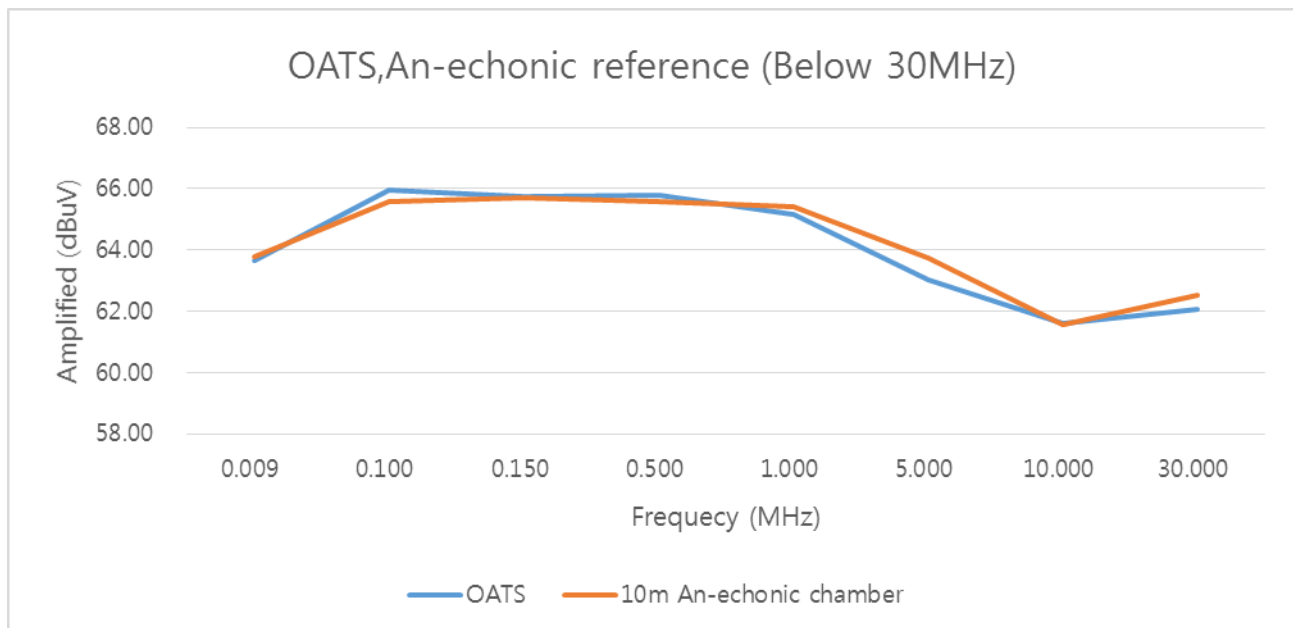
4.1 Measurement value result table

Frequency (MHz)	Measurement Value (dBuV)		Difference Value (dB)
	Open Area Test Site	10m Anechoic chamber	
0.009	63.66	63.77	-0.11
0.100	65.96	65.60	0.36
0.150	65.76	65.70	0.06
0.500	65.79	65.57	0.22
1.000	65.15	65.40	-0.25
5.000	63.04	63.74	-0.70
10.000	61.60	61.55	0.05
30.000	62.08	62.52	-0.44

Note 1 : In this test, We used the same cables, antennas, equipment for both locations.

Note 2 : This data didn't apply antenna factor and cable loss because it's only for checking the performance between two places.

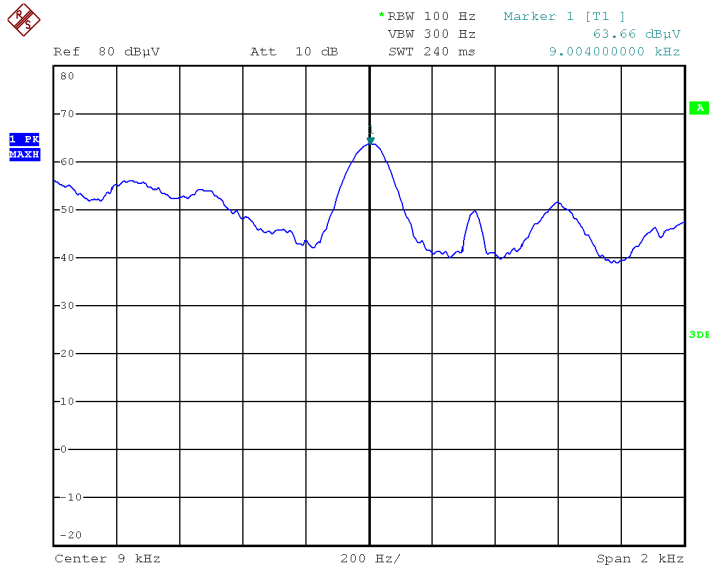
4.2 Graph table of result.



4.3 Plot data (Rawdata)

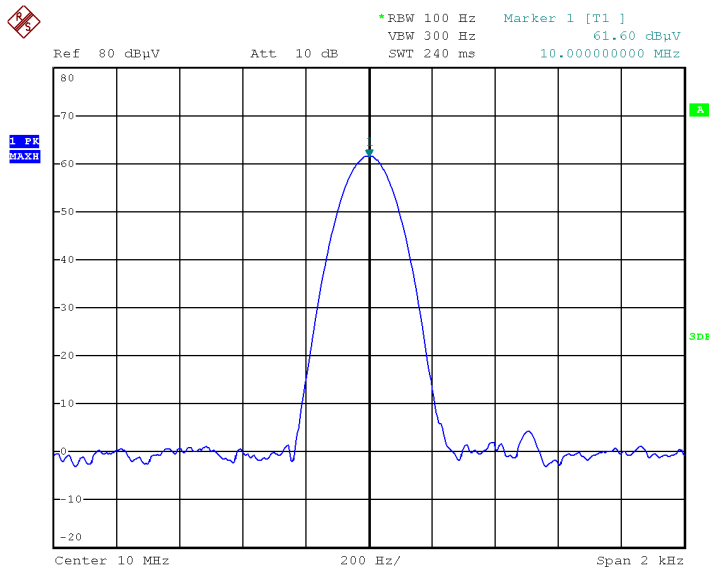
Open Area Test Site (OATS)

Test Frequency : 9 kHz



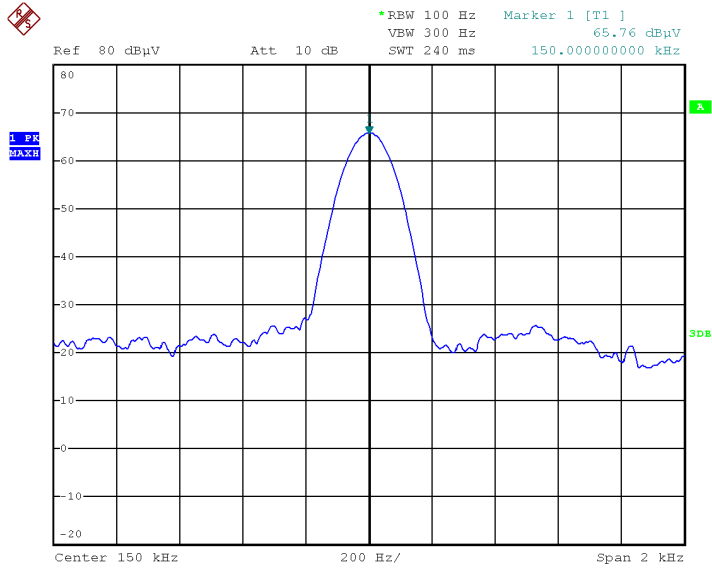
Date: 30.NOV.2018 15:01:15

Test Frequency : 100 kHz



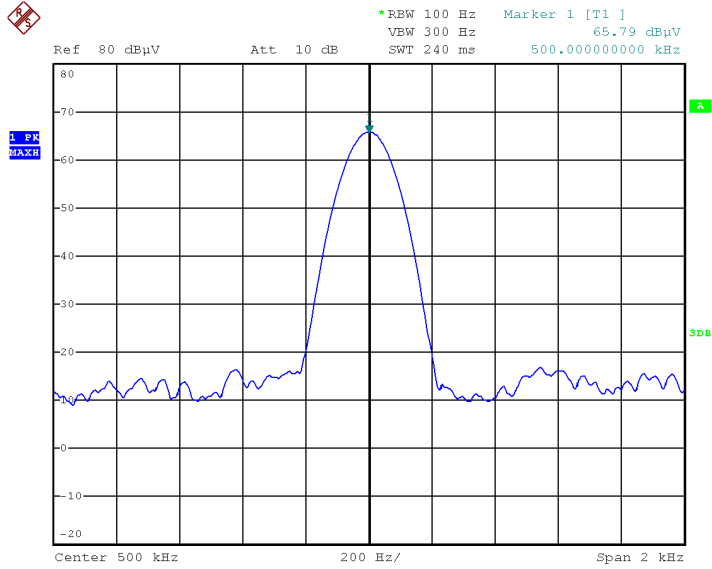
Date: 30.NOV.2018 15:34:36

Test Frequency : 150 kHz



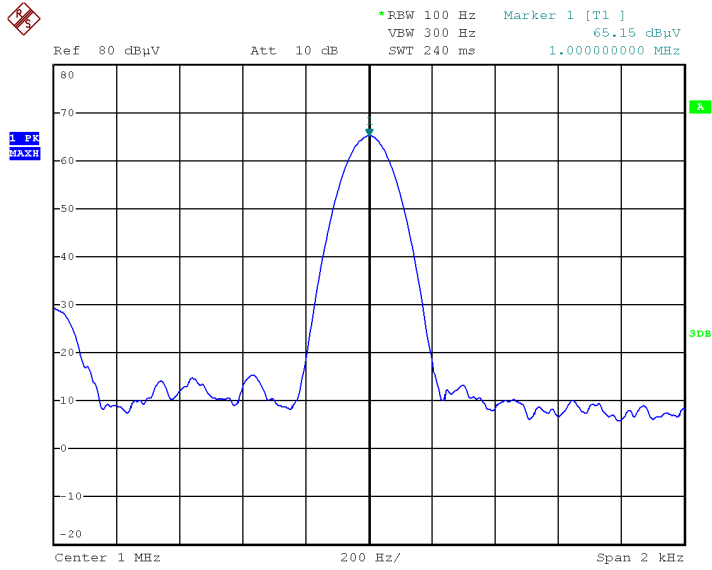
Date: 30.NOV.2018 15:03:10

Test Frequency : 500 kHz



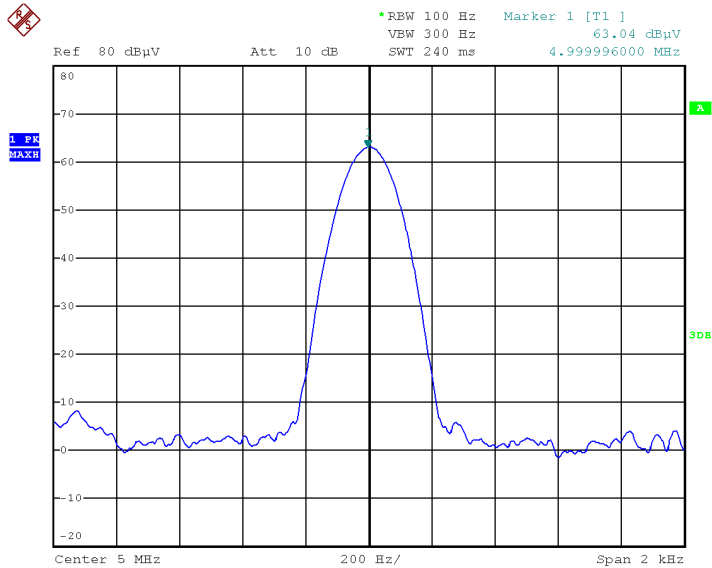
Date: 30.NOV.2018 15:03:55

Test Frequency : 1 MHz



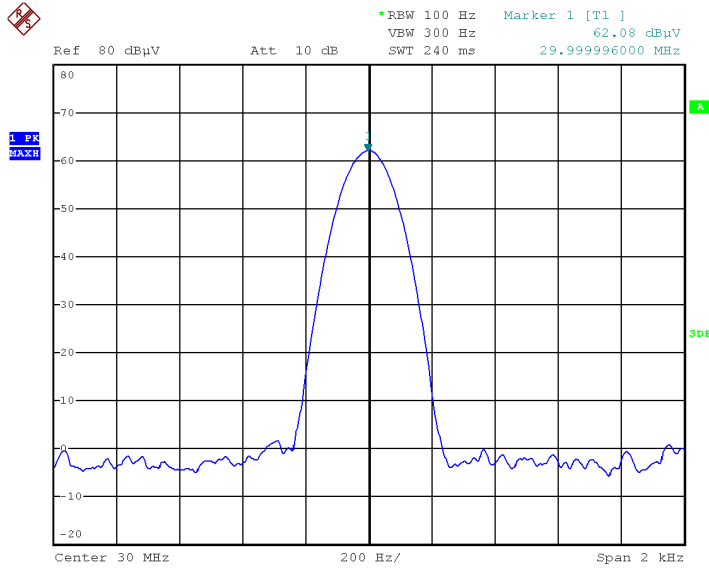
Date: 30.NOV.2018 15:05:25

Test Frequency : 10 MHz



Date: 30.NOV.2018 15:06:06

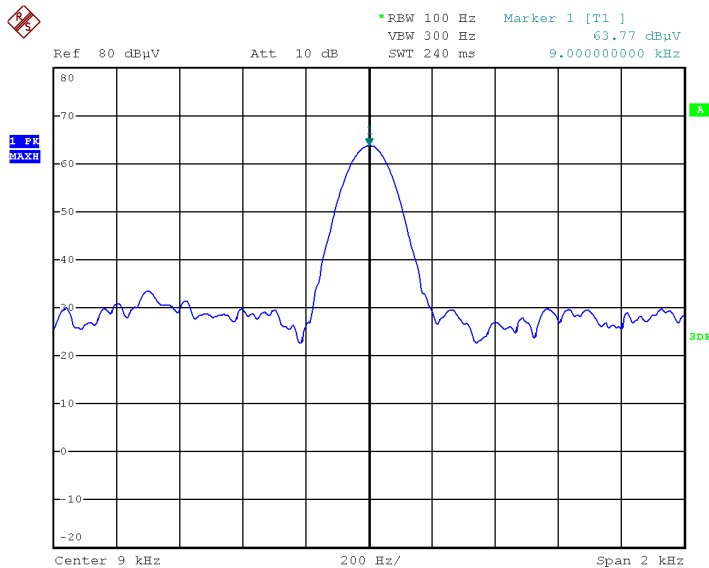
Test Frequency : 30 MHz



Date: 30.NOV.2018 15:07:27

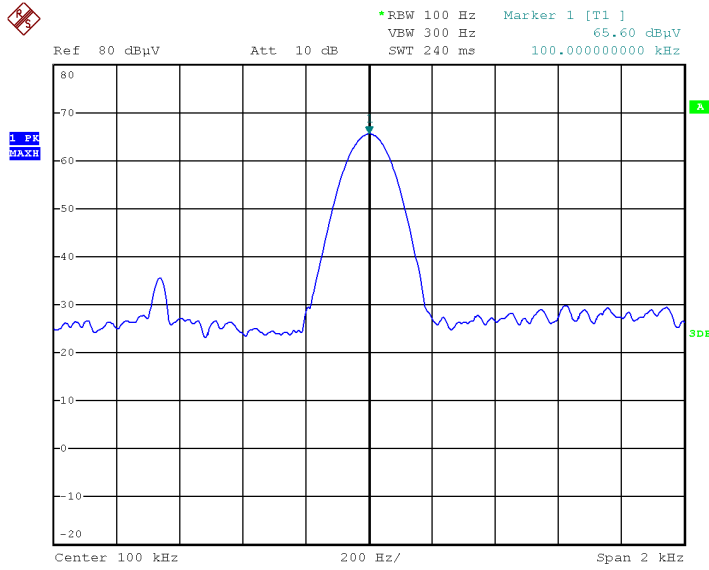
10m Anechoic Chamber

Test Frequency : 9 kHz



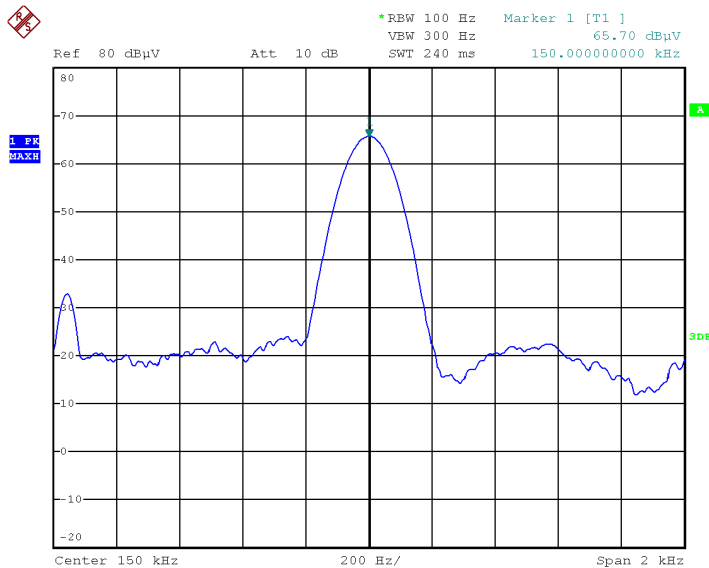
Date: 30.NOV.2018 15:30:22

Test Frequency : 100 kHz



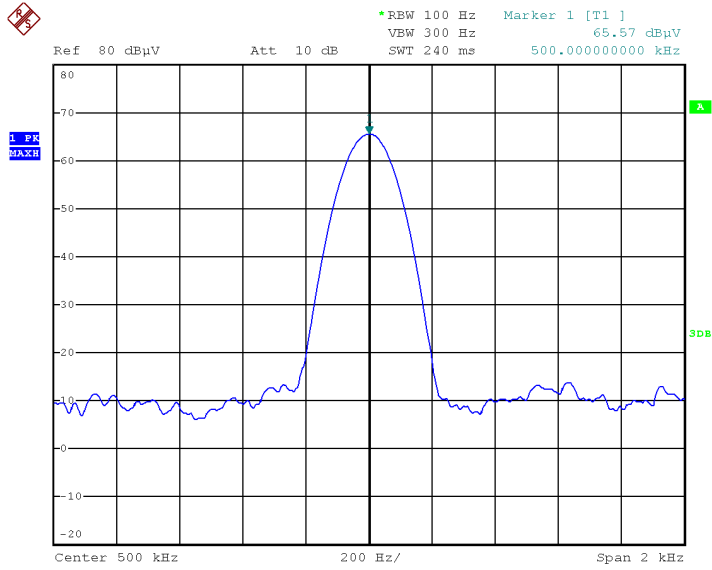
Date: 30.NOV.2018 15:30:51

Test Frequency : 150 kHz



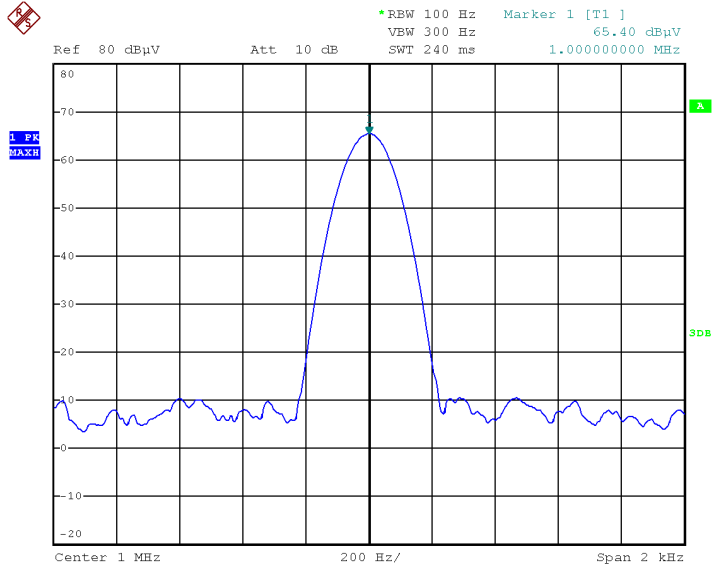
Date: 30.NOV.2018 15:31:24

Test Frequency : 500 kHz



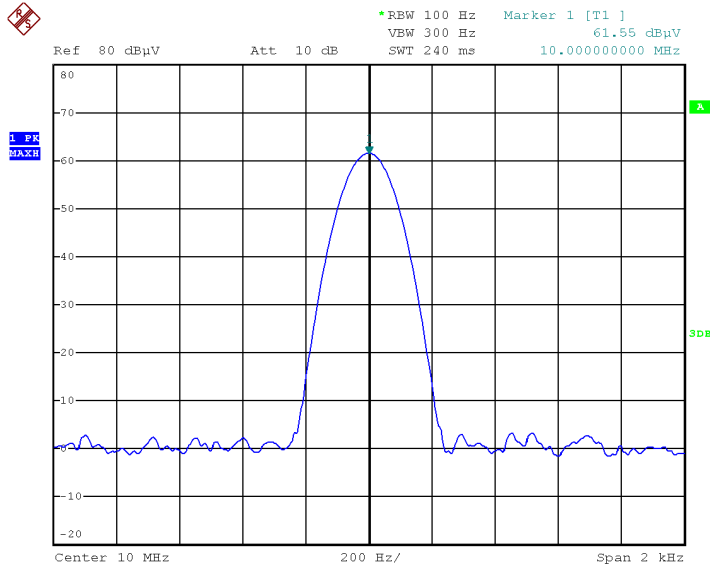
Date: 30.NOV.2018 15:32:14

Test Frequency : 1 MHz



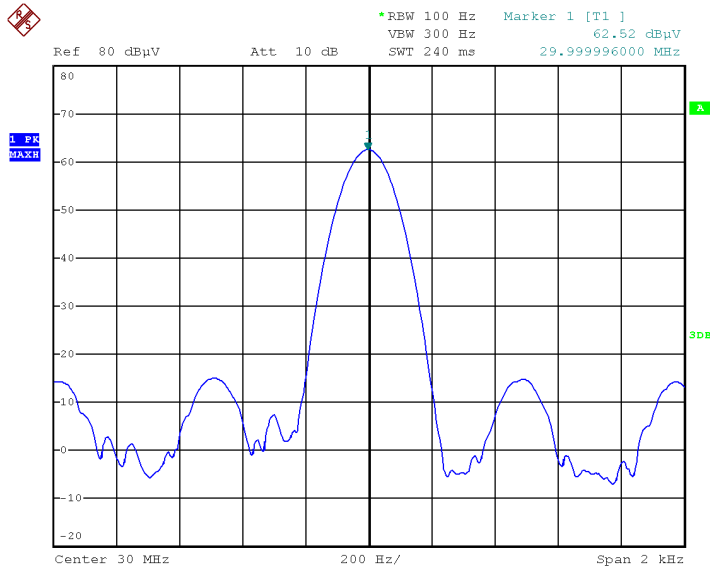
Date: 30.NOV.2018 15:32:41

Test Frequency : 10 MHz



Date: 30.NOV.2018 15:34:13

Test Frequency : 30 MHz



Date: 30.NOV.2018 15:36:15