FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	42.69	V	74	-31.31	Peak	1.25	155	
4806	34.24	V	54	-19.76	Avg	1.25	155	
7209	51.6	V	74	-22.4	Peak	1.25	155	
7209	41.92	V	54	-12.08	Avg	1.25	155	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Low Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	45.26	H	74	-28.74	Peak	1.25	135	
4806	34.28	H	54	-19.72	Avg	1.25	135	
7209	44.1	H	74	-29.9	Peak	1.35	145	
7209	33.44	H	54	-20.56	Avg	1.35	145	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	42.69	V	74	-31.31	Peak	2	135	
4806	29.69	V	54	-24.31	Avg	2	135	
7209	52.21	V	74	-21.79	Peak	1.25	155	
7209	41.86	V	54	-12.14	Avg	1.25	155	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

FCC 15.247 / RSS-GEN
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Model: 65900
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Low Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	42.6	H	74	-31.4	Peak	1.25	135	
4806	33.33	H	54	-20.67	Avg	1.25	135	
7209	52.9	H	74	-21.1	Peak	1.25	135	
7209	42.21	H	54	-11.79	Avg	1.25	135	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

FCC 15.247 / RSS-GEN
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Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
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Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	42.9	V	74	-31.1	Peak	1.25	165	
4806	33.68	V	54	-20.32	Avg	1.25	165	
7209	51.3	V	74	-22.7	Peak	1.25	175	
7209	42.12	V	54	-11.88	Avg	1.25	175	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

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Model: 65900
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Date: 03/05/2013
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Low Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403								N/A
2403								DONE VIA CONDCUTED
4806	43.01	H	74	-30.99	Peak	1.25	155	
4806	34.59	H	54	-19.41	Avg	1.25	155	
7209	50.5	H	74	-23.5	Peak	1.35	165	
7209	41.96	H	54	-12.04	Avg	1.35	165	
9612								No Emission
9612								Detected
12015								No Emission
12015								Detected
14418								No Emission
14418								Detected
16821								No Emission
16821								Detected
19224								No Emission
19224								Detected
21627								No Emission
21627								Detected
24030								No Emission
24030								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	44.01	V	74	-29.99	Peak	1.25	135	
4878	44.26	V	54	-9.74	Avg	1.25	135	
7317	51.4	V	74	-22.6	Peak	1.35	155	
7317	41.96	V	54	-12.04	Avg	1.35	155	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Middle Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	44.21	H	74	-29.79	Peak	1.25	155	
4878	30.56	H	54	-23.44	Avg	1.25	155	
7317	51.4	H	74	-22.6	Peak	1.35	175	
7317	41.92	H	54	-12.08	Avg	1.35	175	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
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mDDL
Model: 65900
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Lab: B
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Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	44.59	V	74	-29.41	Peak	1.25	135	
4878	30.58	V	54	-23.42	Avg	1.25	135	
7317	51.01	V	74	-22.99	Peak	1.35	155	
7317	41.25	V	54	-12.75	Avg	1.35	155	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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Middle Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	43.49	H	74	-30.51	Peak	1.25	155	
4878	30.57	H	54	-23.43	Avg	1.25	155	
7317	52.05	H	74	-21.95	Peak	1.35	165	
7317	42.15	H	54	-11.85	Avg	1.35	165	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	42.21	V	74	-31.79	Peak	1.25	155	
4878	30.68	V	54	-23.32	Avg	1.25	155	
7317	50.95	V	74	-23.05	Peak	1.35	175	
7317	40.68	V	54	-13.32	Avg	1.35	175	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2439								N/A
2439								DONE VIA CONDCUTED
4878	41.69	H	74	-32.31	Peak	1.25	165	
4878	29.86	H	54	-24.14	Avg	1.25	165	
7317	51.05	H	74	-22.95	Peak	1.25	175	
7317	41.26	H	54	-12.74	Avg	1.25	175	
9756								No Emission
9756								Detected
12195								No Emission
12195								Detected
14634								No Emission
14634								Detected
17073								No Emission
17073								Detected
19512								No Emission
19512								Detected
21951								No Emission
21951								Detected
24390								No Emission
24390								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	48.59	V	74	-25.41	Peak	1.25	135	
4950	41.2	V	54	-12.8	Avg	1.25	135	
7425	50.85	V	74	-23.15	Peak	1.35	145	
7425	42.59	V	54	-11.41	Avg	1.35	145	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

High Channel
Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	42.15	H	74	-31.85	Peak	1.25	155	
4950	33.69	H	54	-20.31	Avg	1.25	155	
7425	50.62	H	74	-23.38	Peak	1.35	165	
7425	41.54	H	54	-12.46	Avg	1.35	165	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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High Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	42.59	V	74	-31.41	Peak	1.25	155	
4950	33.41	V	54	-20.59	Avg	1.25	155	
7425	51.26	V	74	-22.74	Peak	1.35	165	
7425	42.29	V	54	-11.71	Avg	1.35	165	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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High Channel
Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	43.68	H	74	-30.32	Peak	1.25	225	
4950	32.59	H	54	-21.41	Avg	1.25	225	
7425	45.29	H	74	-28.71	Peak	1.35	180	
7425	33.89	H	54	-20.11	Avg	1.35	180	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
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High Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	44.58	V	74	-29.42	Peak	1.25	155	
4950	30.67	V	54	-23.33	Avg	1.25	155	
7425	43.97	V	74	-30.03	Peak	1.35	165	
7425	33.88	V	54	-20.12	Avg	1.35	165	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
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Tested By: Kyle Fujmoto

High Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2475								N/A
2475								DONE VIA CONDCUTED
4950	44.26	H	74	-29.74	Peak	1.25	165	
4950	30.58	H	54	-23.42	Avg	1.25	165	
7425	50.26	H	74	-23.74	Peak	1.35	175	
7425	42.25	H	54	-11.75	Avg	1.35	175	
9900								No Emission
9900								Detected
12375								No Emission
12375								Detected
14850								No Emission
14850								Detected
17325								No Emission
17325								Detected
19800								No Emission
19800								Detected
22275								No Emission
22275								Detected
24750								No Emission
24750								Detected

Test Location : Compatible Electronics **Page :** 1/1
Customer : Aerovionrment **Date :** 02 / 14 / 2013
Manufacturer : Aerovironment **Time:** 10:07:43 AM
Eut name : mDDL **Lab:** D
Model : 65900 **Test Distance :** 3.00
Serial # :
Specification : RSS-210/RSS-GEN
Distance correction factor (20 * log(test/spec)) : 0.00
Test Mode : Spurious Emissions: 10 kHz to 1 GHz
Twin Patch Antenna
Qualification Data
Test Engineer: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1V	37.480	36.60	0.50	11.55	38.23	10.42	40.00	-29.58
2H	37.840	51.10	0.50	11.60	38.22	24.98	40.00	-15.02
3H	49.000	46.70	0.77	11.26	38.47	20.26	40.00	-19.74
4V	49.000	51.40	0.77	11.26	38.47	24.96	40.00	-15.04
5H	82.880	48.40	0.83	6.33	38.43	17.13	40.00	-22.87
6V	82.880	51.20	0.83	6.33	38.43	19.93	40.00	-20.07
7H	85.780	50.50	0.86	6.97	38.46	19.87	40.00	-20.13
8H	120.051	49.90	1.08	13.20	38.56	25.62	43.50	-17.88
9V	120.051	51.30	1.08	13.20	38.56	27.02	43.50	-16.48
10H	139.680	53.10	1.22	11.64	38.48	27.47	43.50	-16.03
11H	160.248	56.70	1.34	12.73	38.44	32.33	43.50	-11.17
12H	200.038	62.20	1.40	15.80	38.50	40.90	43.50	-2.60
13V	200.038	58.20	1.40	15.80	38.50	36.90	43.50	-6.60
14H	200.039Qp	59.10	1.40	15.80	38.50	37.80	43.50	-5.70
15H	240.075	62.10	1.62	15.00	38.15	40.57	46.00	-5.43
16H	280.075	59.30	1.82	17.81	38.15	40.78	46.00	-5.22
17V	280.075	44.70	1.82	17.81	38.15	26.18	46.00	-19.82
18V	320.000	42.80	1.98	13.08	38.20	19.66	46.00	-26.34
19H	320.000	50.00	1.98	13.08	38.20	26.86	46.00	-19.14
20V	360.020	43.90	2.14	13.46	38.23	21.27	46.00	-24.73
21H	360.080	50.50	2.14	13.46	38.23	27.87	46.00	-18.13
22V	400.000	43.50	2.30	14.50	38.26	22.04	46.00	-23.96
23H	400.080	51.00	2.30	14.50	38.26	29.54	46.00	-16.46
24V	440.000	45.60	2.30	15.22	37.68	25.44	46.00	-20.56
25H	440.000	49.80	2.30	15.22	37.68	29.64	46.00	-16.36
26V	480.020	46.20	2.60	15.64	37.96	26.48	46.00	-19.52
27V	504.048	61.10	2.80	15.86	38.26	41.50	46.00	-4.50
28H	504.500	51.40	2.80	15.87	38.27	31.81	46.00	-14.19
29V	640.000	44.80	3.26	19.06	38.67	28.45	46.00	-17.55
30H	640.000	50.40	3.26	19.06	38.67	34.05	46.00	-11.95

Test Location : Compatible Electronics **Page :** 1/2
Customer : Aerovionrment **Date :** 02 / 14 / 2013
Manufacturer : Aerovironment **Time:** 11:14:48 AM
Eut name : mDDL **Lab:** D
Model : 65900 **Test Distance :** 3.00
Serial # :
Specification : RSS-GEN/RSS-210
Distance correction factor (20 * log(test/spec)) : 0.00
Test Mode : Spurious Emissions: 10 kHz to 1 GHz
Monopole Antenna
Qualification Data
Test Engineer: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1H	37.606	53.10	0.50	11.56	38.22	26.94	40.00	-13.06
2V	37.618	58.80	0.50	11.57	38.22	32.64	40.00	-7.36
3V	40.008	56.40	0.50	11.90	38.20	30.60	40.00	-9.40
4H	40.039	49.90	0.50	11.89	38.20	24.09	40.00	-15.91
5H	49.126	51.30	0.77	11.28	38.47	24.88	40.00	-15.12
6V	49.134	57.10	0.77	11.28	38.47	30.68	40.00	-9.32
7H	83.160	52.40	0.83	6.40	38.43	21.20	40.00	-18.80
8V	83.168	58.60	0.83	6.40	38.43	27.40	40.00	-12.60
9H	119.843	56.80	1.08	13.18	38.56	32.50	43.50	-11.00
10V	119.851	58.20	1.08	13.18	38.56	33.90	43.50	-9.60
11H	120.051	54.00	1.08	13.20	38.56	29.72	43.50	-13.78
12H	139.680	52.80	1.22	11.64	38.48	27.17	43.50	-16.33
13H	160.000	56.30	1.34	12.70	38.44	31.90	43.50	-11.60
14V	200.008	56.90	1.40	15.80	38.50	35.60	43.50	-7.90
15H	200.039	57.10	1.40	15.80	38.50	35.80	43.50	-7.70
16H	200.039	57.10	1.40	15.80	38.50	35.80	43.50	-7.70
17H	240.039	58.20	1.62	15.00	38.15	36.67	46.00	-9.33
18V	240.047	55.10	1.62	15.00	38.15	33.57	46.00	-12.43
19H	280.324	60.40	1.82	17.83	38.15	41.91	46.00	-4.09
20V	280.332	58.40	1.82	17.83	38.15	39.91	46.00	-6.09
21H	320.043	62.40	1.98	13.08	38.20	39.26	46.00	-6.74
22V	320.048	53.90	1.98	13.08	38.20	30.76	46.00	-15.24
23H	360.043	56.00	2.14	13.46	38.23	33.37	46.00	-12.63
24V	360.048	61.10	2.14	13.46	38.23	38.47	46.00	-7.53
25H	400.043	59.10	2.30	14.50	38.26	37.64	46.00	-8.36
26V	400.048	55.70	2.30	14.50	38.26	34.24	46.00	-11.76
27V	440.048	57.40	2.30	15.22	37.68	37.25	46.00	-8.75
28H	440.075	62.60	2.30	15.22	37.67	42.45	46.00	-3.55
29V	480.048	60.90	2.60	15.64	37.96	41.18	46.00	-4.82
30H	480.075	60.90	2.60	15.64	37.96	41.18	46.00	-4.82
31V	504.048	67.20	2.80	15.86	38.26	47.60	46.00	1.60
32V	504.049Qp	61.68	2.80	15.86	38.26	42.08	46.00	-3.92
33V	518.897	52.50	2.80	16.10	38.35	33.05	46.00	-12.95
34V	520.050	60.90	2.80	16.12	38.36	41.46	46.00	-4.54
35H	520.075	56.30	2.80	16.12	38.36	36.86	46.00	-9.14

Test Location : Compatible Electronics **Page :** 2/2
Customer : Aerovionrment **Date :** 02 / 14 / 2013
Manufacturer : Aerovironment **Time:** 11:14:48 AM
Eut name : mDDL **Lab:** D
Model : 65900 **Test Distance :** 3.00
Serial # :
Specification : RSS-GEN/RSS-210
Distance correction factor (20 * log(test/spec)) : 0.00
Test Mode : Spurious Emissions: 10 kHz to 1 GHz
Monopole Antenna
Qualification Data
Test Engineer: Kyle Fujimoto

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
36V	528.050	49.90	2.80	16.25	38.40	30.55	46.00	-15.45
37V	560.043	50.40	2.86	17.06	38.56	31.76	46.00	-14.24
38V	640.043	50.90	3.26	19.06	38.67	34.55	46.00	-11.45
39V	720.043	52.20	3.54	20.50	38.50	37.74	46.00	-8.26
40V	760.043	53.70	3.62	20.84	38.34	39.82	46.00	-6.18
41V	800.043	52.80	3.70	21.00	38.23	39.27	46.00	-6.73
42V	840.043	47.80	3.86	22.84	37.79	36.71	46.00	-9.29
43V	960.043	40.90	4.14	24.22	36.68	32.58	54.00	-21.42

FCC Class B / FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25000 MHz
Reciever Portion - 1 GHz to 25000 MHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								No Emissions Found for the
								Receiver Portion
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								Tested in the X-Axis, Y-Axis,
								and Z-Axis

FCC Class B / FCC 15.247 / RSS-GEN

AeroVironment
mDDL
Model: 65900
Antenna: Monopole

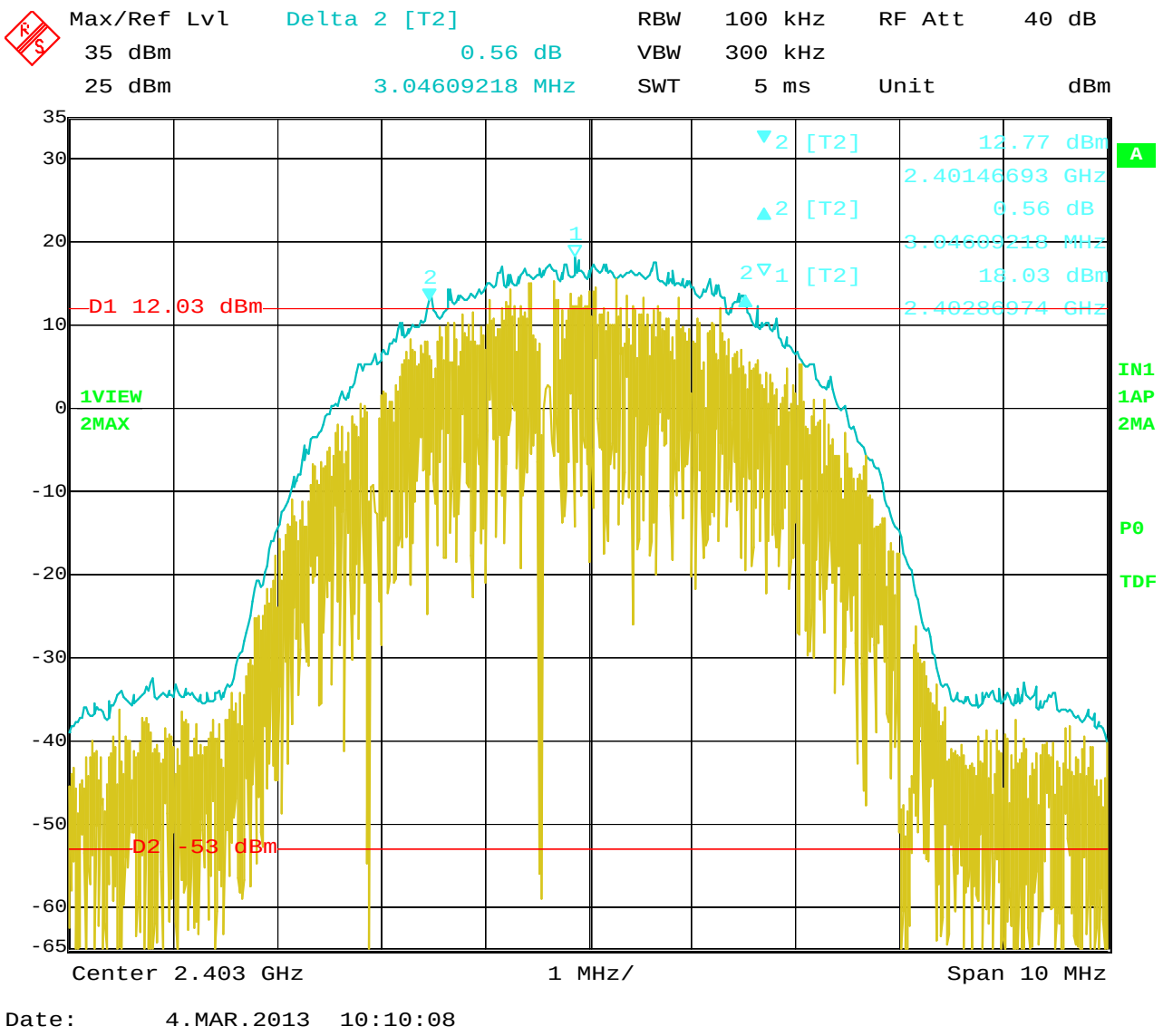
Date: 03/05/2013
Lab: B
Tested By: Kyle Fujmoto

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25000 MHz
Reciever Portion - 1 GHz to 25000 MHz

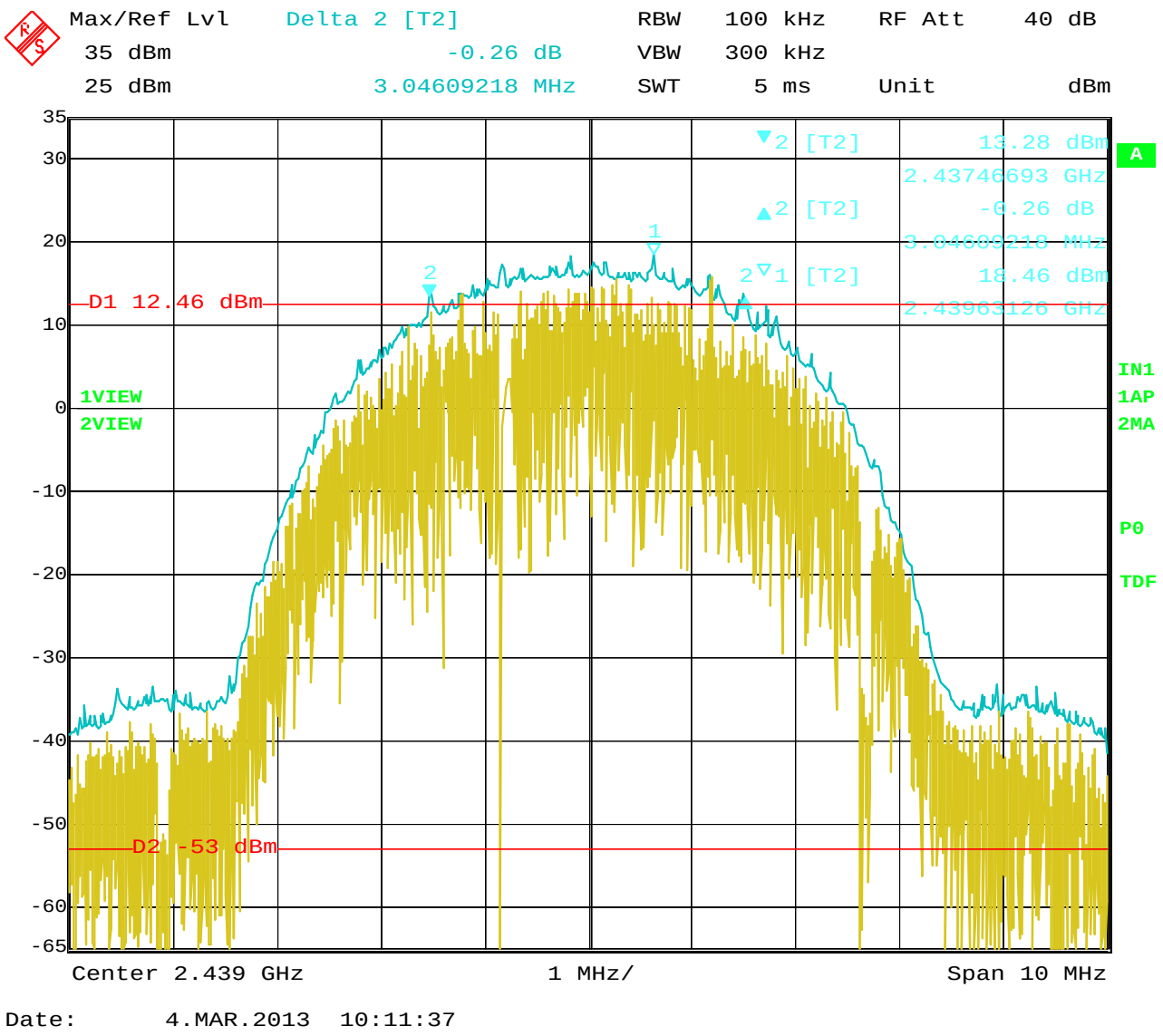
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Found for the
								Digital Portion
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								No Non Harmonic Emissions Found
								for the Tx Mode
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								No Emissions Found for the
								Receiver Portion
								from 1 GHz to 25000 MHz
								for both Vertical and Horizontal
								Polarizations
								Tested in the X-Axis, Y-Axis,
								and Z-Axis

-6 dB BANDWIDTH

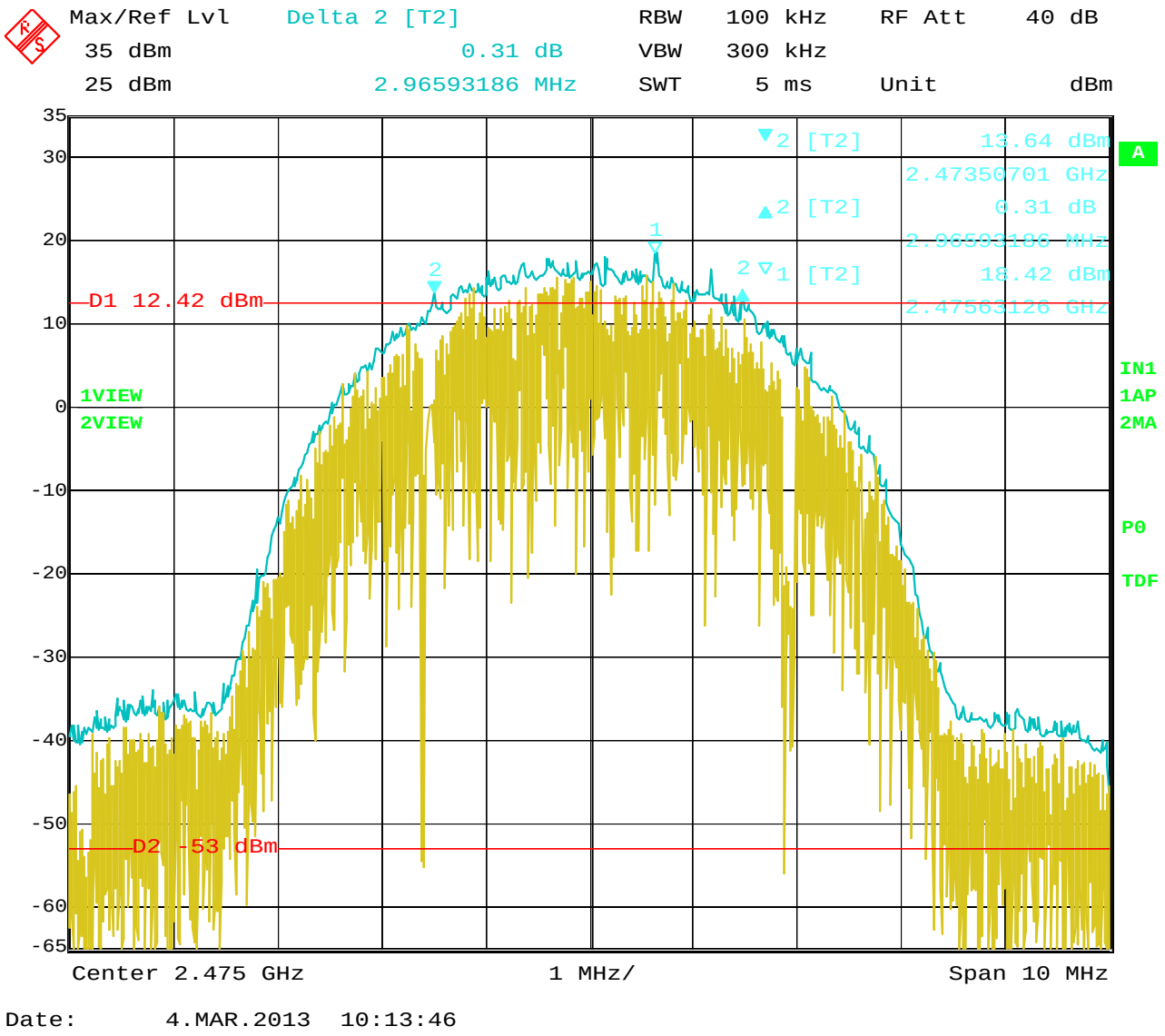
DATA SHEETS



Bandwidth 6 dB – Low Channel



Bandwidth 6 dB – Middle Channel



Bandwidth 6 dB – High Channel

PEAK POWER OUTPUT

DATA SHEETS

PEAK OUTPUT POWER

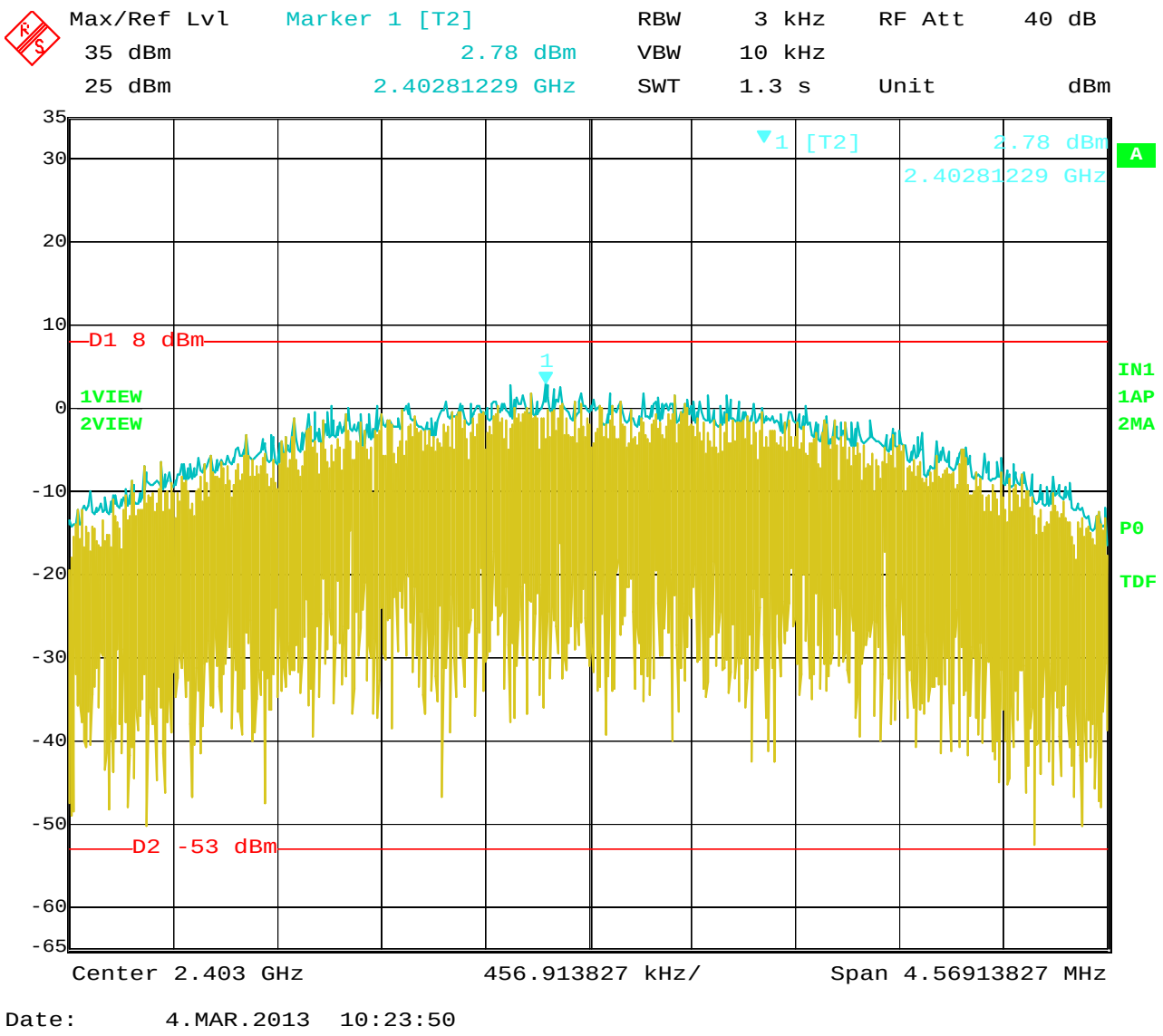
mDDL

Model: 65900

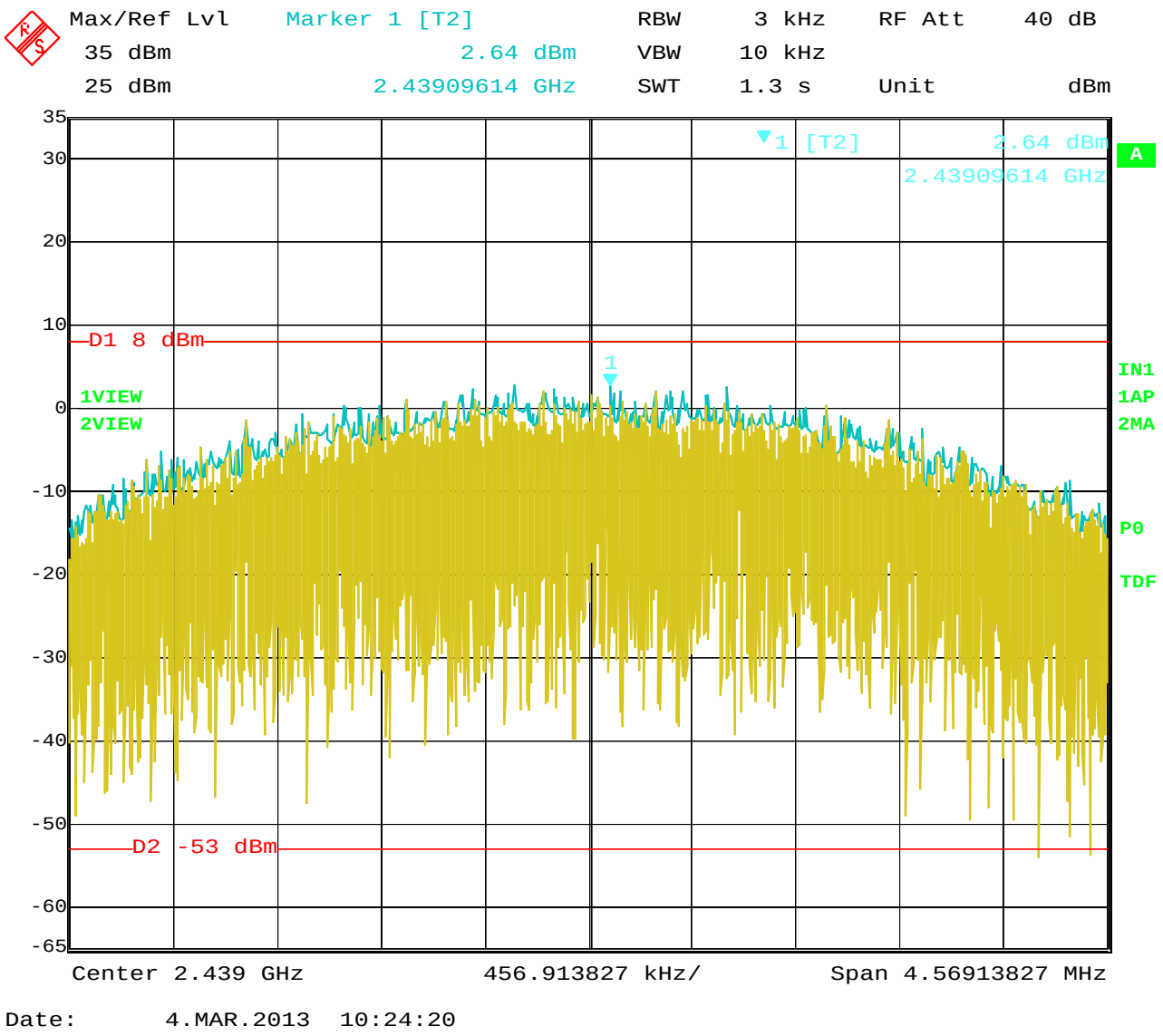
CHANNEL	PEAK POWER OUTPUT (dBm)
LOW (2403 MHz)	25.43
MIDDLE (2439 MHz)	25.38
HIGH (2475 MHz)	26.01

SPECTRAL DENSITY OUTPUT

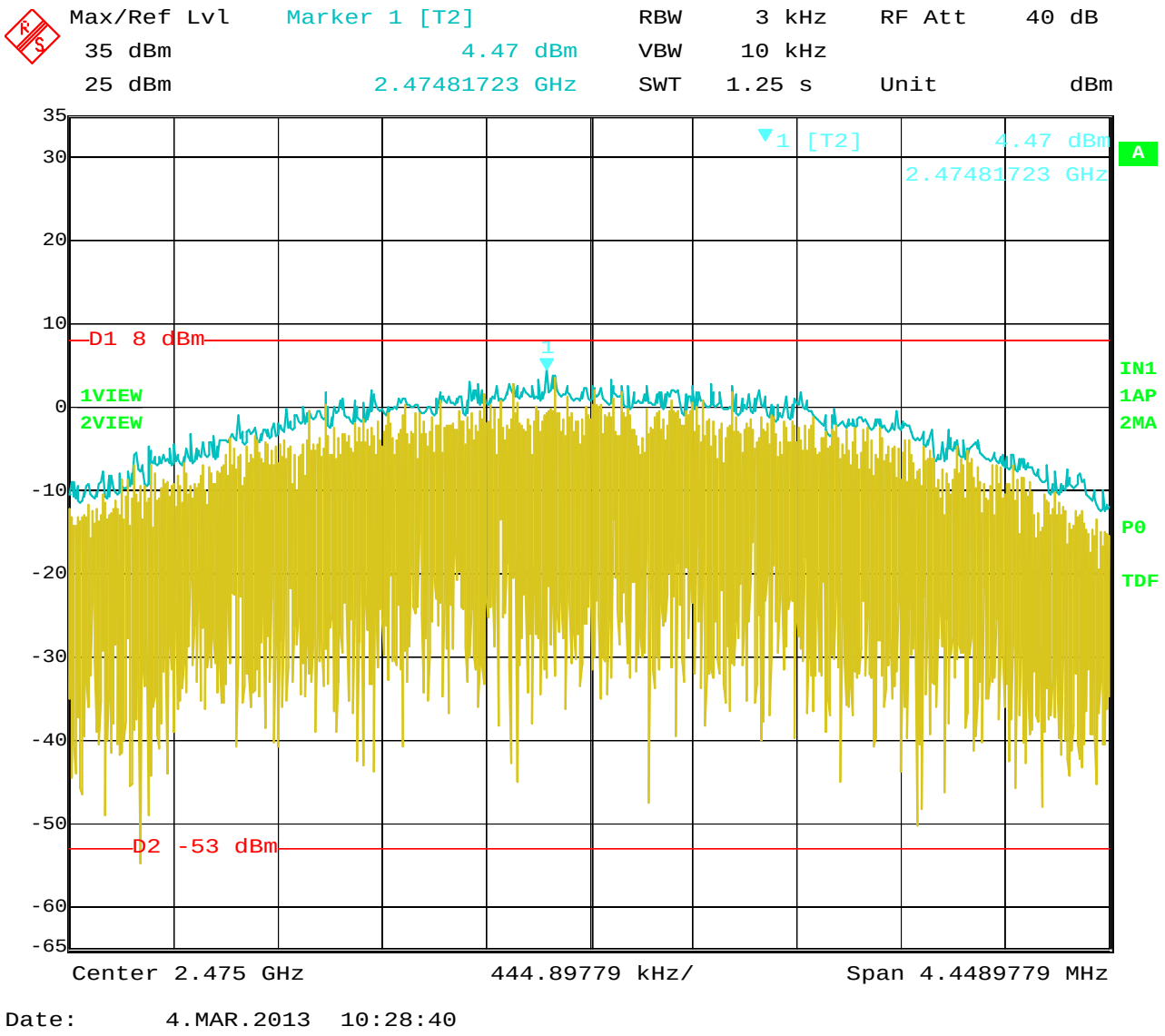
DATA SHEETS



Spectral Density Output – Low Channel



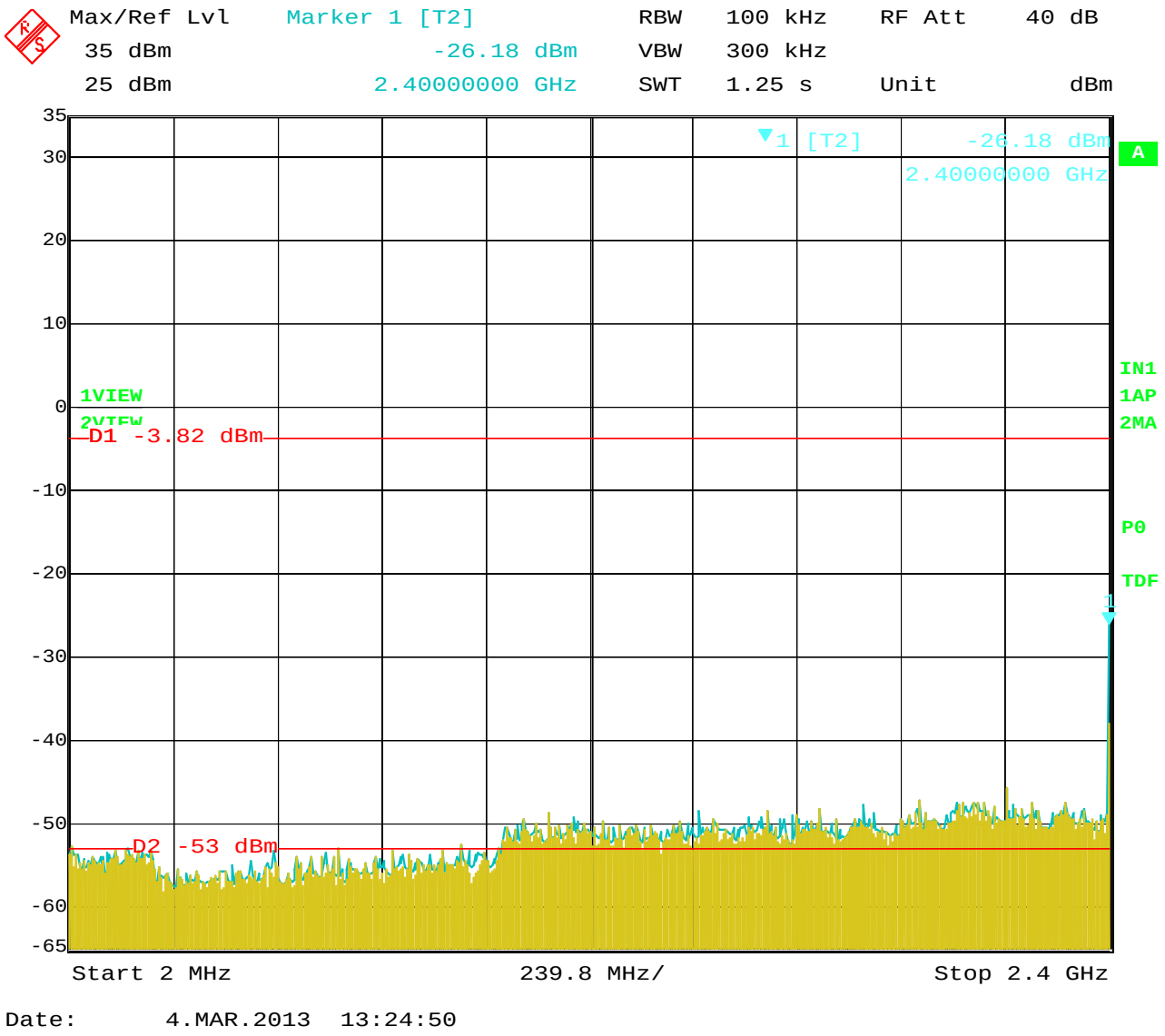
Spectral Density Output – Middle Channel



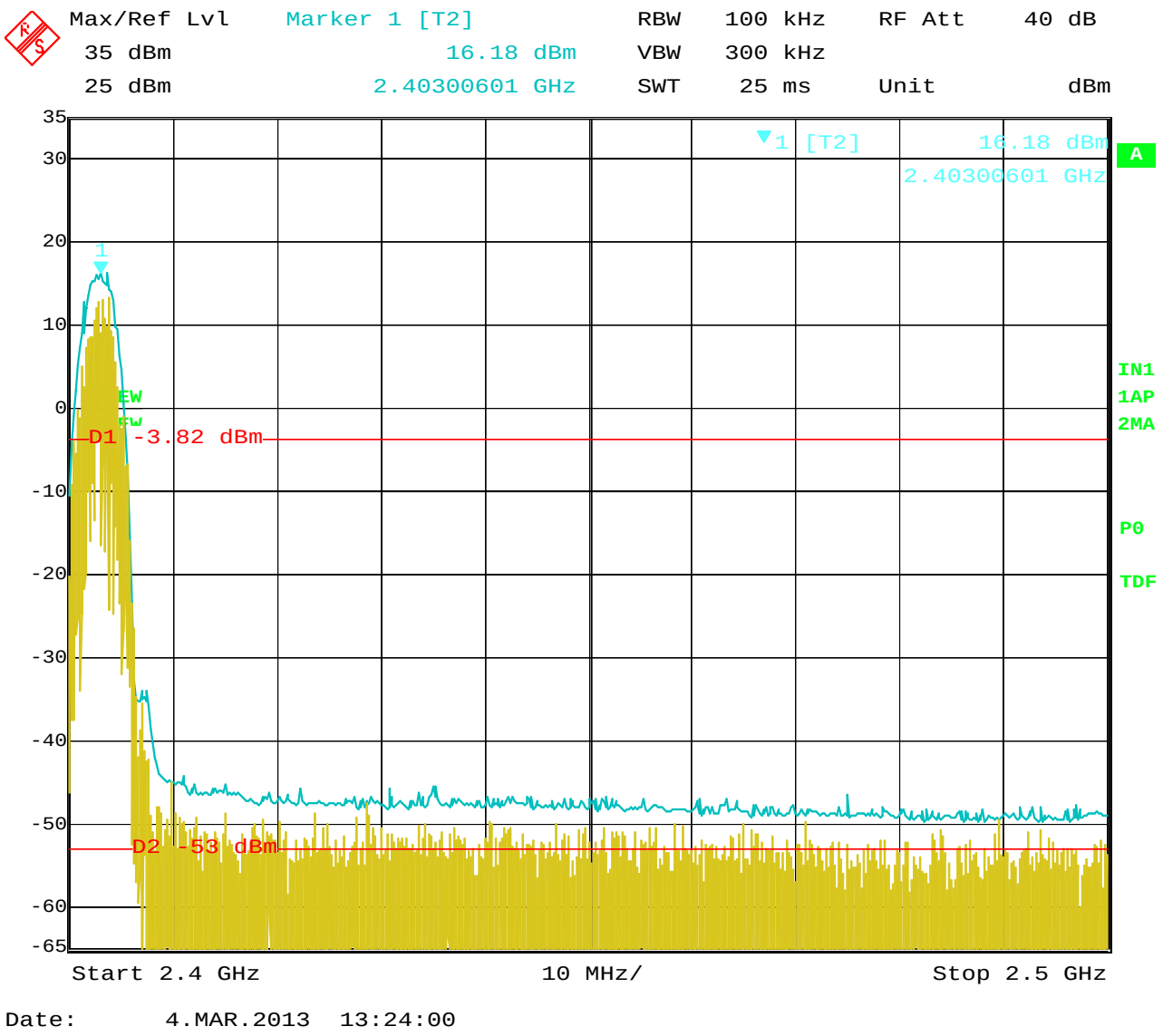
Spectral Density Output – High Channel

RF ANTENNA CONDUCTED

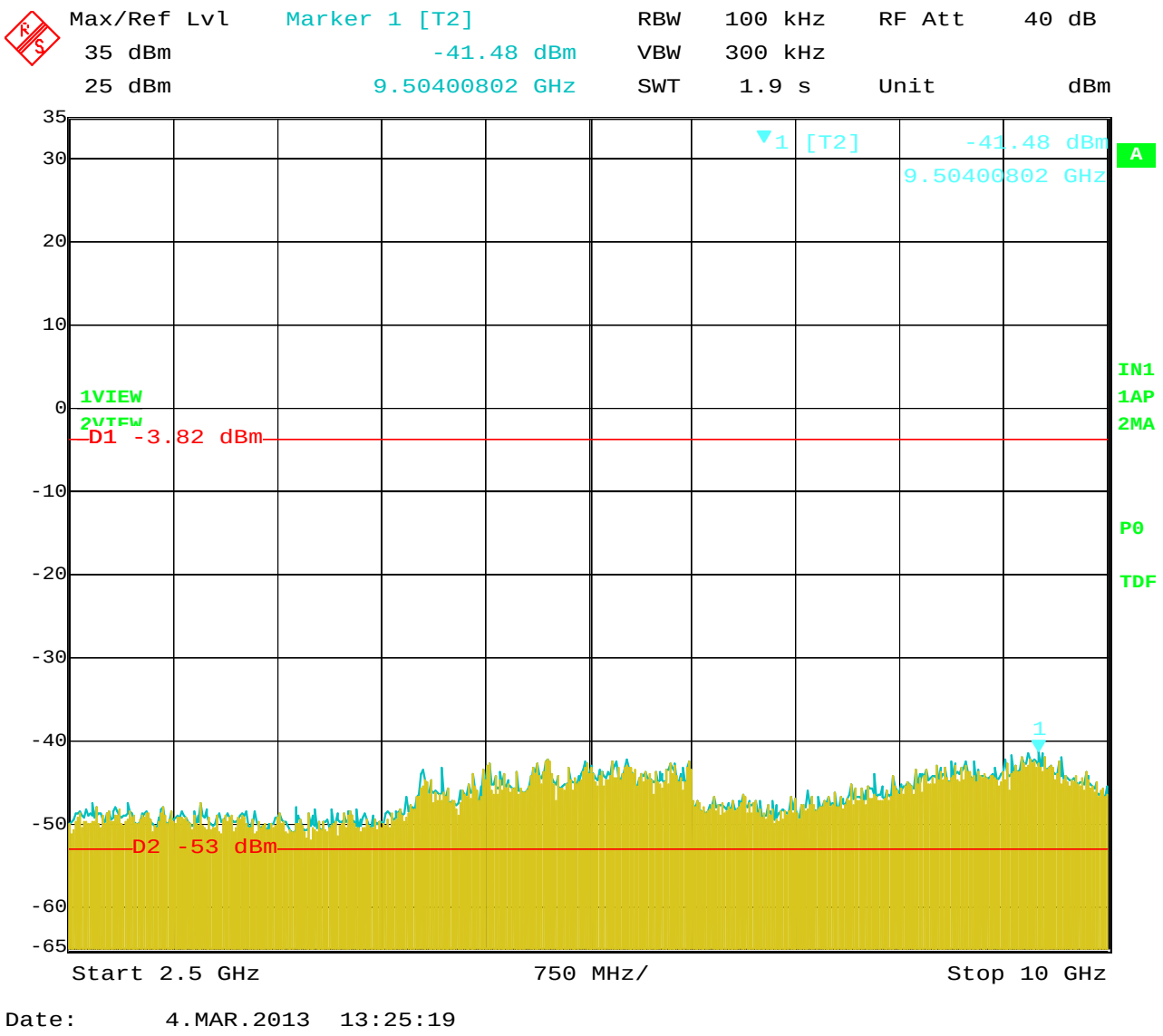
DATA SHEETS



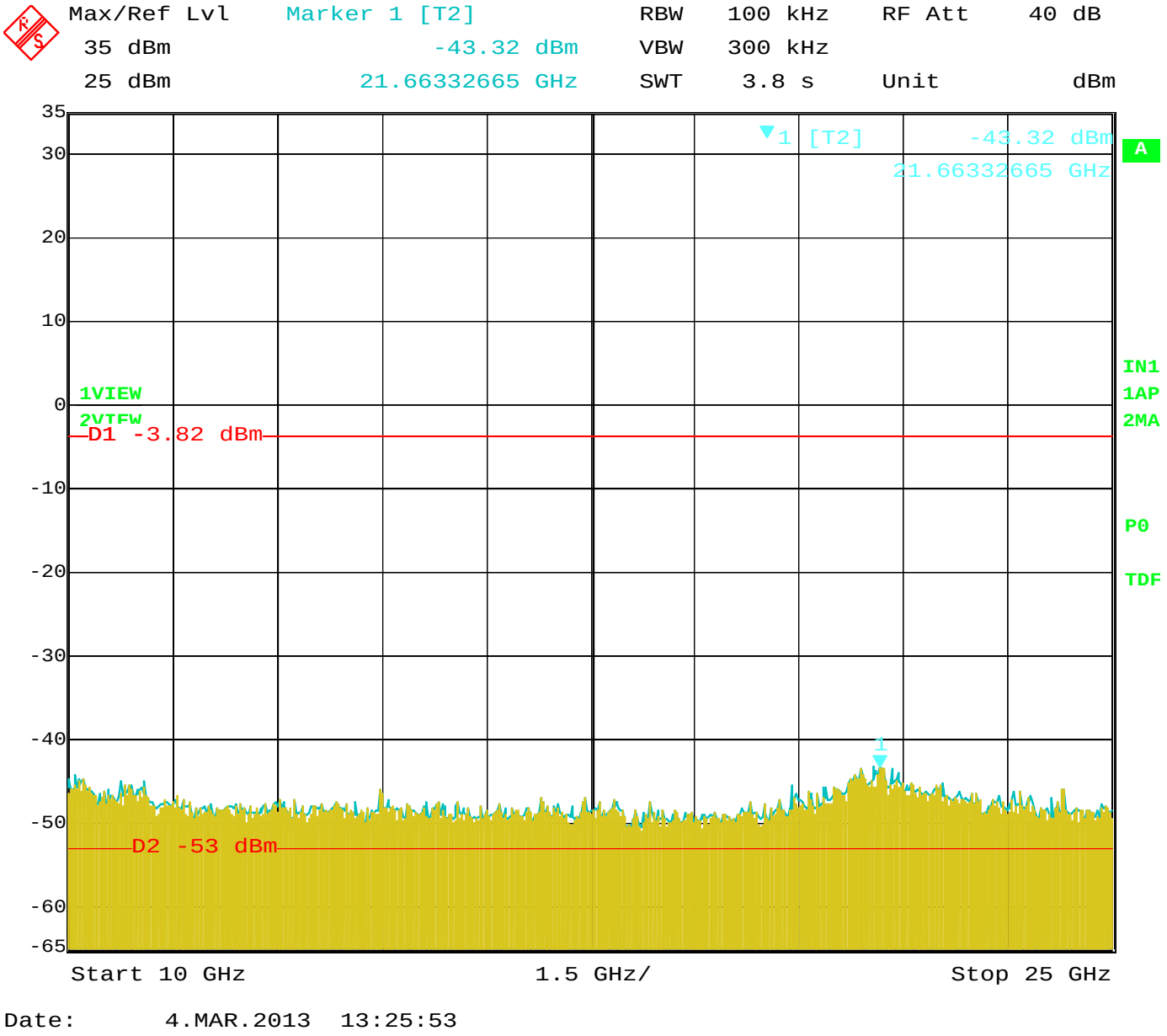
RF Antenna Conducted Test – Low Channel – 2 MHz to 2.4 GHz



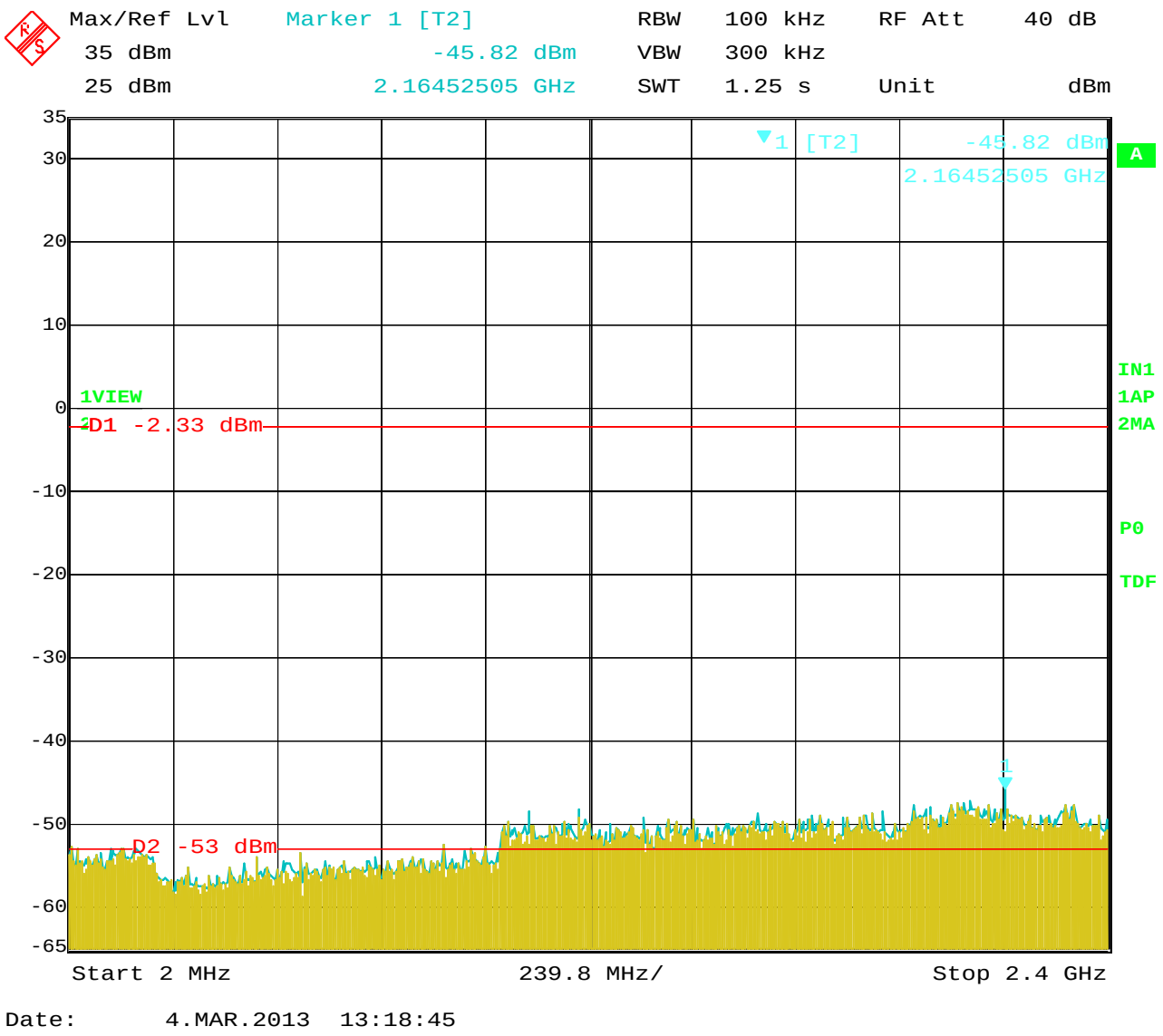
RF Antenna Conducted Test – Low Channel – 2.4 GHz to 2.5 GHz



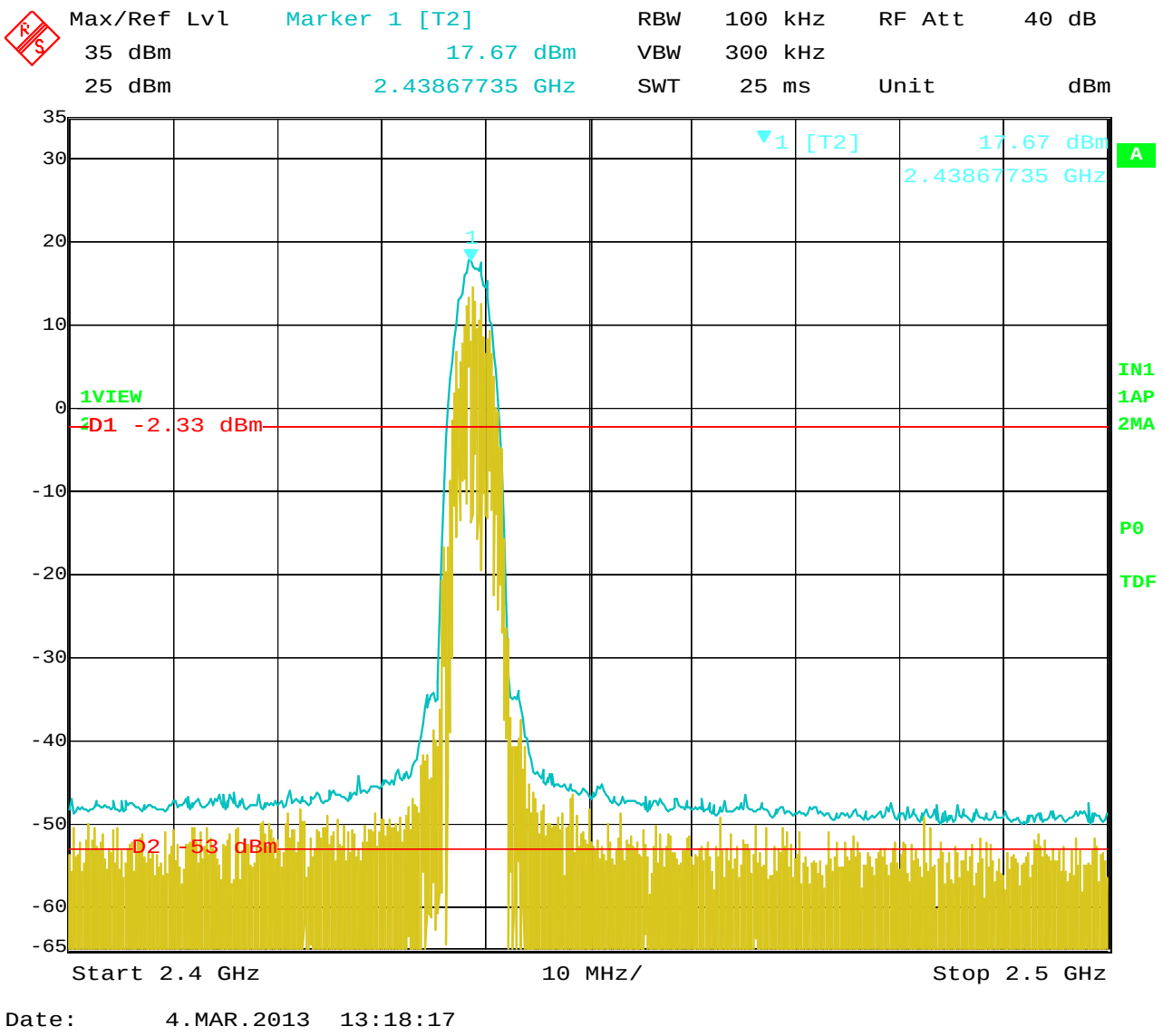
RF Antenna Conducted Test – Low Channel – 2.5 GHz to 10 GHz



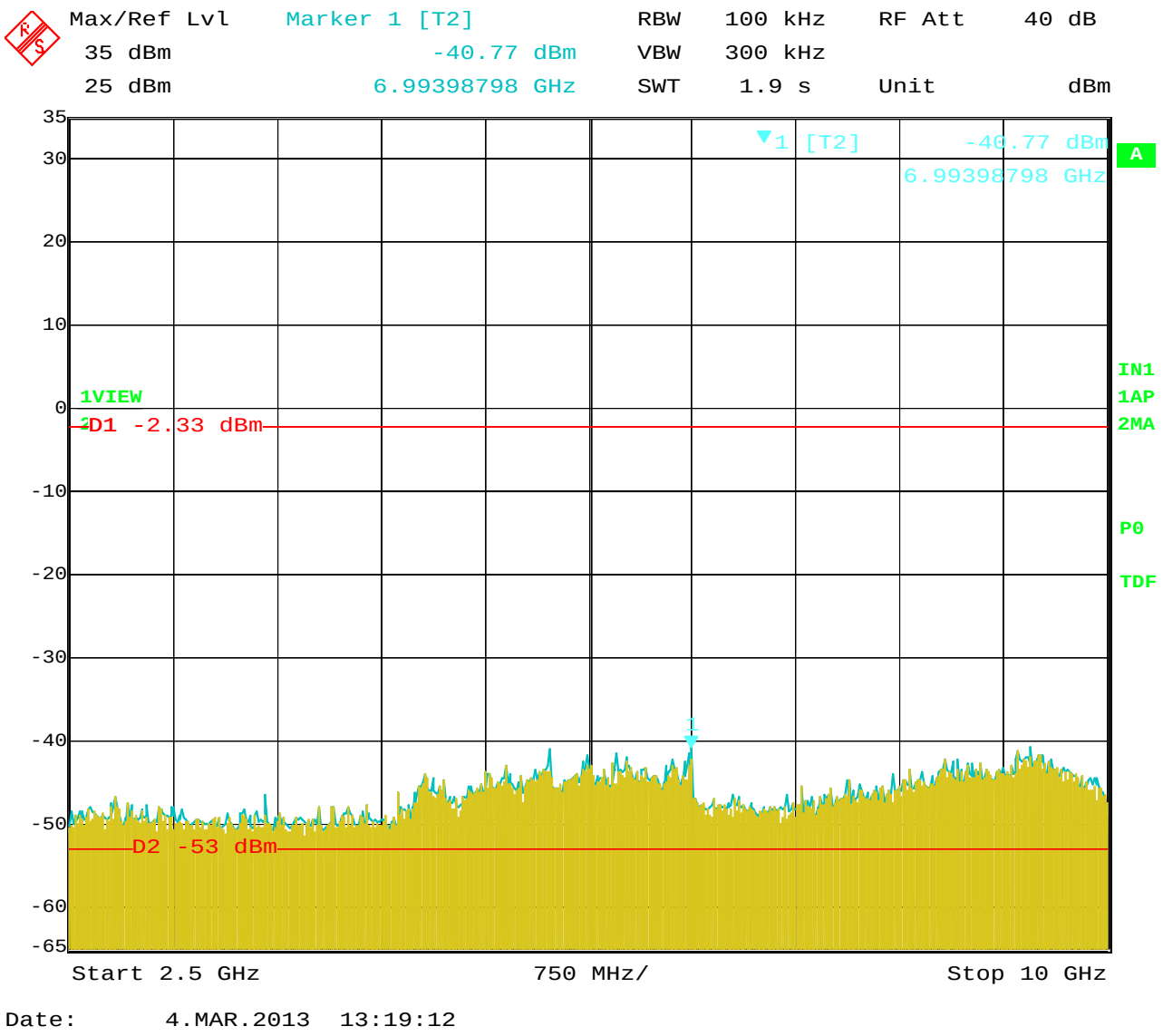
RF Antenna Conducted Test – Low Channel – 10 GHz to 25 GHz



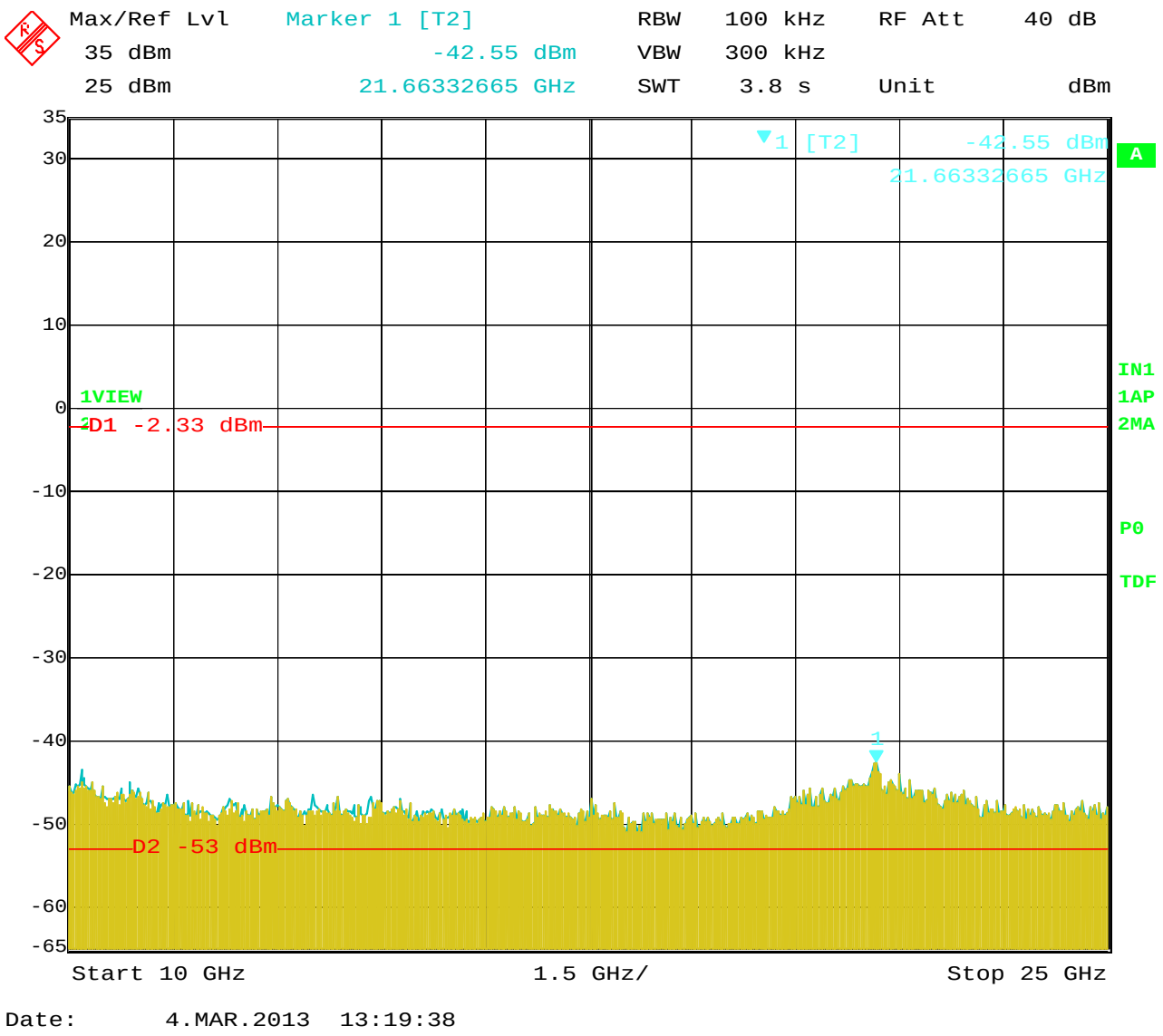
RF Antenna Conducted Test – Middle Channel – 2 MHz to 2.4 GHz



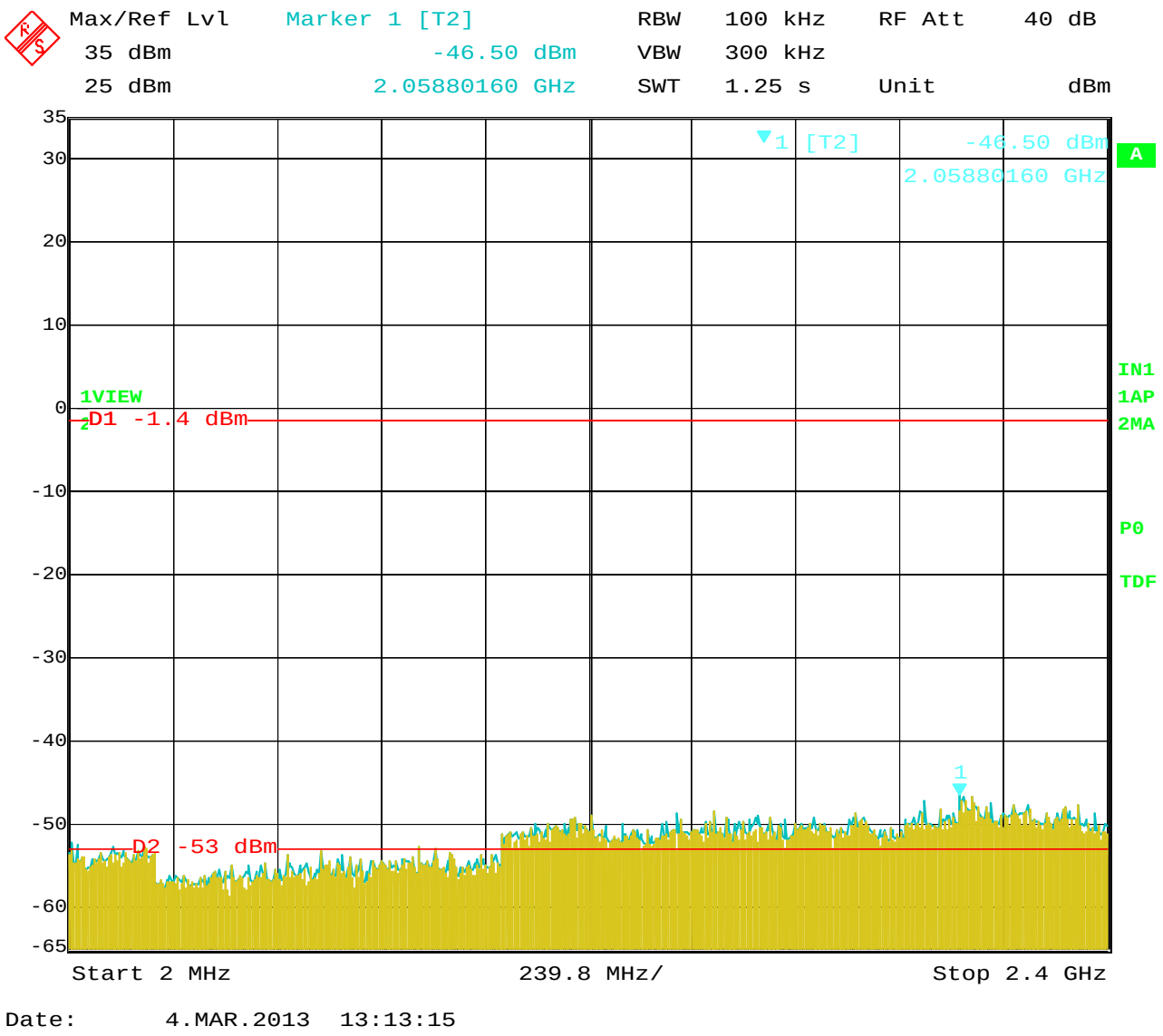
RF Antenna Conducted Test – Middle Channel – 2.4 GHz to 2.5 GHz



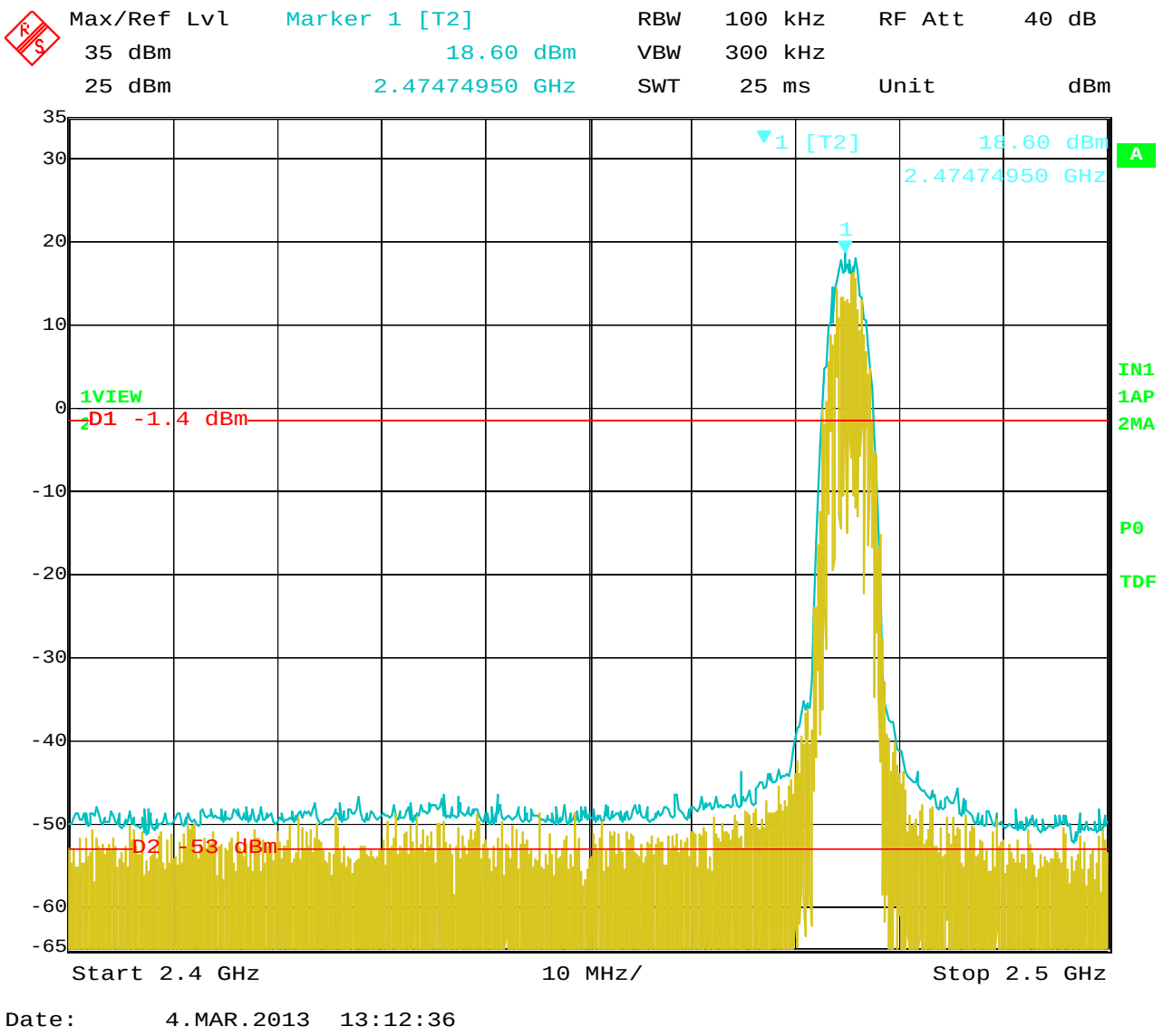
RF Antenna Conducted Test – Middle Channel – 2.5 GHz to 10 GHz



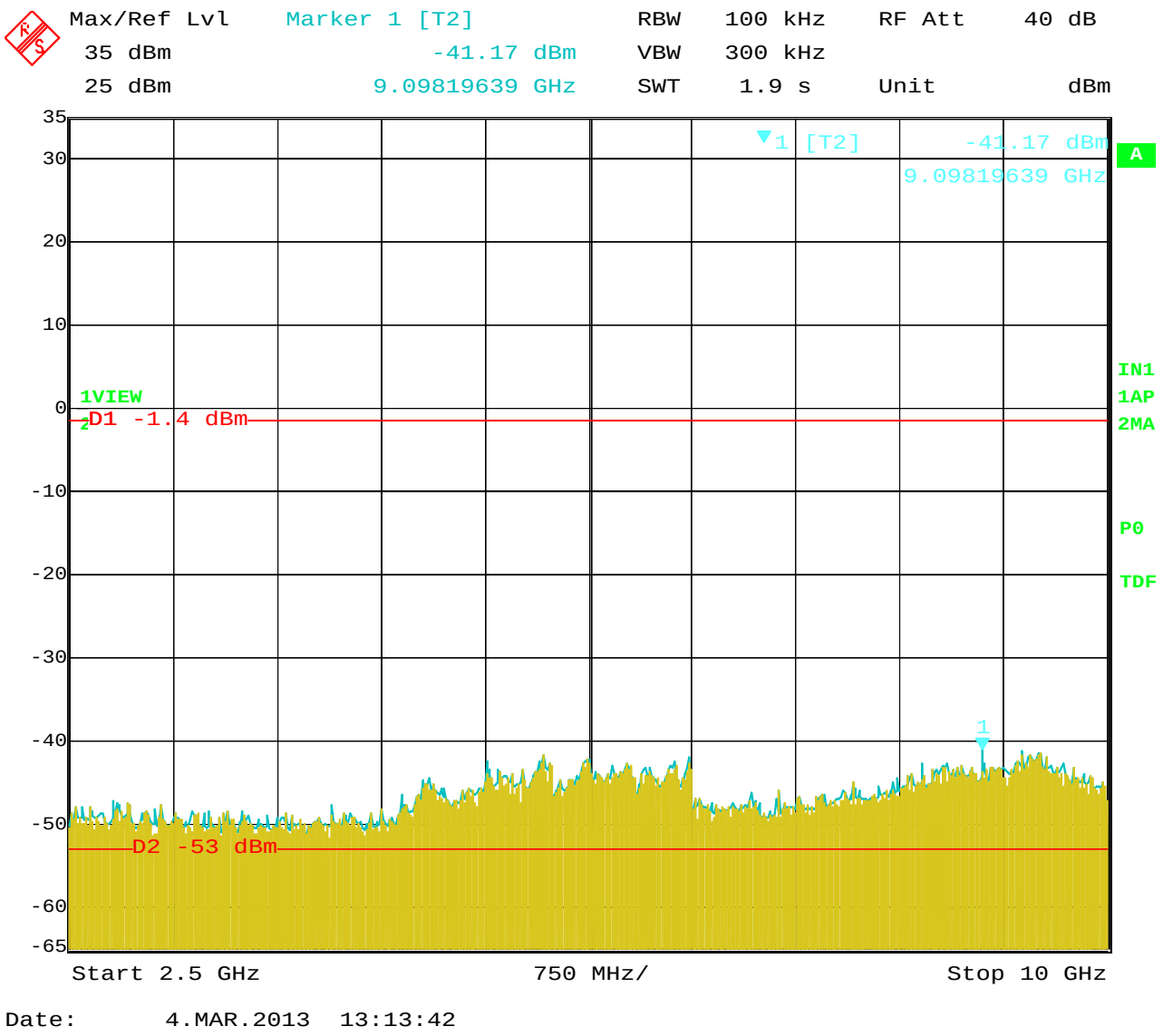
RF Antenna Conducted Test – Middle Channel – 10 GHz to 25 GHz



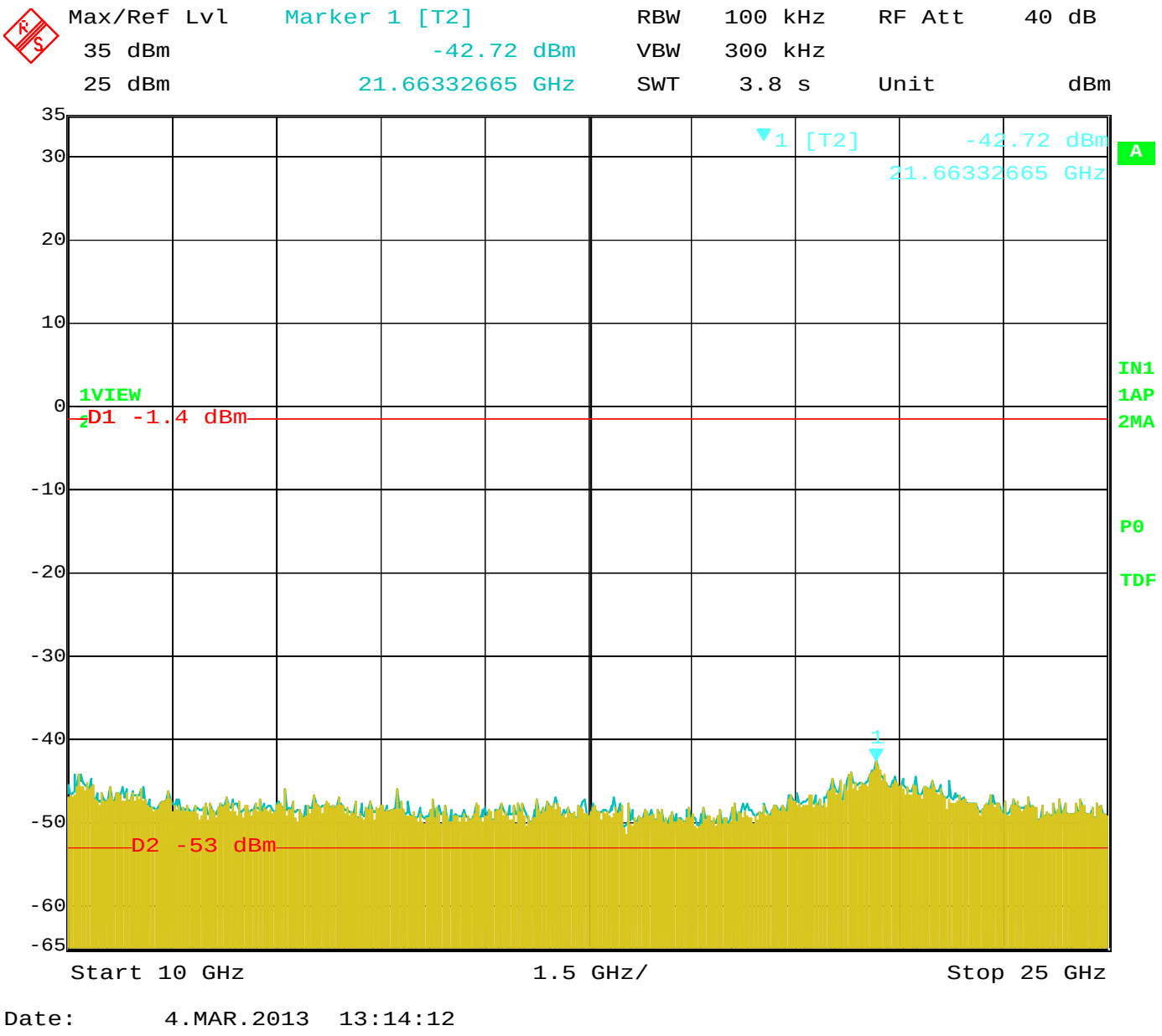
RF Antenna Conducted Test – High Channel – 2 MHz to 2.4 GHz



RF Antenna Conducted Test – High Channel – 2.4 GHz to 2.5 GHz



RF Antenna Conducted Test – High Channel – 2.5 GHz to 10 GHz



RF Antenna Conducted Test – High Channel – 2.5 GHz to 10 GHz

BAND EDGES

DATA SHEETS

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Monopole

Date: 03/04/2013
Lab: B
Tested By: Kyle Fujmoto

Y-Axis (Worst Case) - Low Channel
Y-Axis (Worst Case) - High Channel

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403	115.13	V	--	--	Peak	1.25	45	Fundamental of Low Channel
2403	106.77	V	--	--	Avg	1.25	45	@ 3 meters
2390	59.23	V	74	-14.77	Peak	1.25	45	**No** Marker Delta Method
2390	45.54	V	54	-8.46	Avg	1.25	45	Method Used
2475	113.29	V	--	--	Peak	1.25	45	Fundamental of High Channel
2475	104.85	V	--	--	Avg	1.25	45	@ 3 meters
2483.5	57.42	V	74	-16.58	Peak	1.25	45	**No** Marker Delta Method
2483.5	45.37	V	54	-8.63	Avg	1.25	45	Method Used

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Monopole

Date: 03/04/2013
Lab: B
Tested By: Kyle Fujmoto

X-Axis (Worst Case) - Low Channel
X-Axis (Worst Case) - High Channel

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403	107.19	H	--	--	Peak	1.25	135	Fundamental of Low Channel
2403	98.46	H	--	--	Avg	1.25	135	@ 3 meters
2390	56.63	H	74	-17.37	Peak	1.25	135	**No** Marker Delta Method
2390	45.09	H	54	-8.91	Avg	1.25	135	Method Used
2475	106.1	H	--	--	Peak	1.25	135	Fundamental of High Channel
2475	97.6	H	--	--	Avg	1.25	135	@ 3 meters
2483.5	56.4	H	74	-17.6	Peak	1.25	135	**No** Marker Delta Method
2483.5	44.69	H	54	-9.31	Avg	1.25	135	Method Used

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

Date: 03/04/2013
Lab: B
Tested By: Kyle Fujmoto

Y-Axis (Worst Case) - Low Channel
Y-Axis (Worst Case) - High Channel

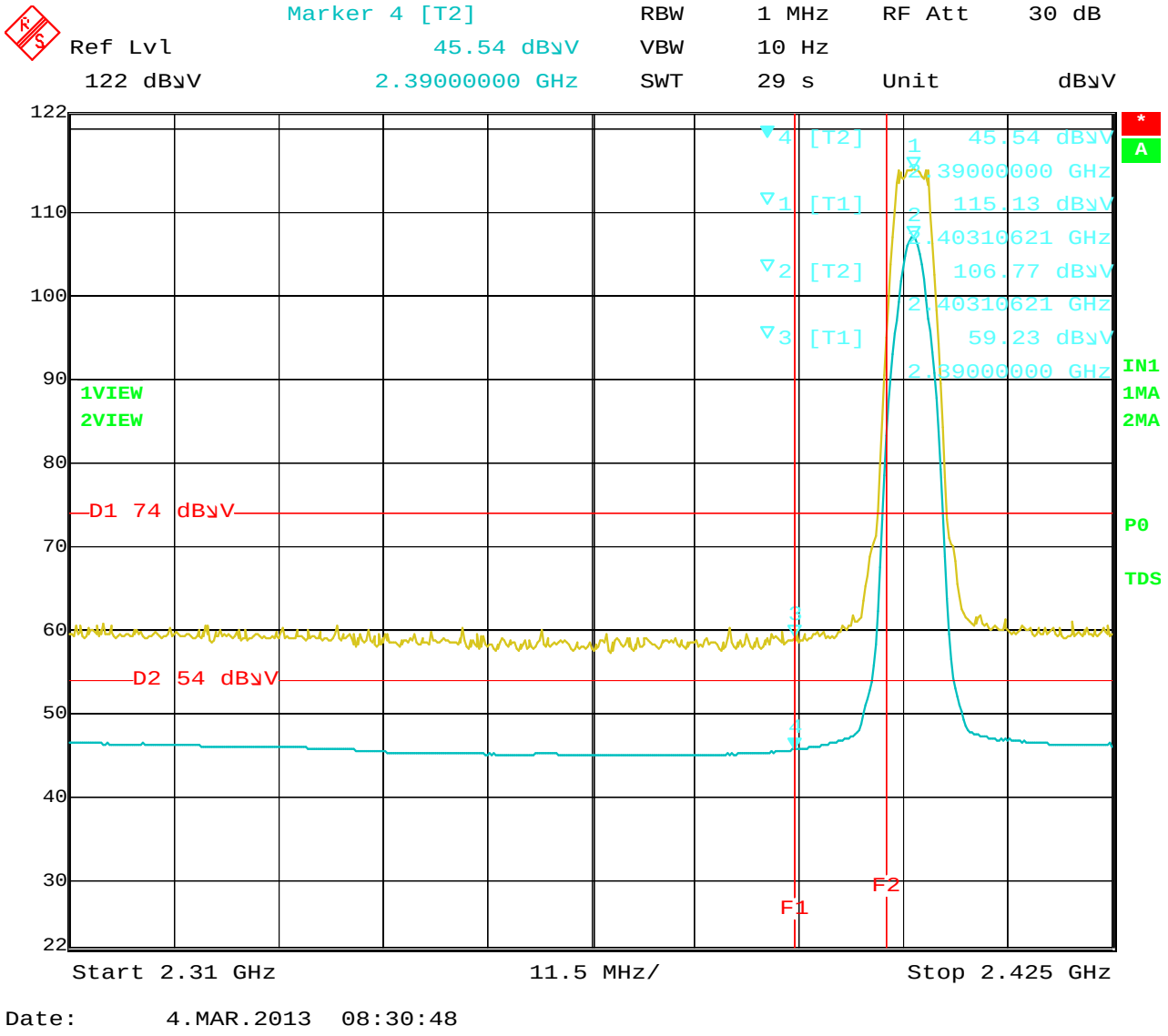
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403	123.82	V	--	--	Peak	1.5	0	Fundamental of Low Channel
2403	115.75	V	--	--	Avg	1.5	0	@ 3 meters
2390	59.14	V	74	-14.86	Peak	1.5	0	**No** Marker Delta Method
2390	47.51	V	54	-6.49	Avg	1.5	0	Method Used
2475	125.06	V	--	--	Peak	1.5	0	Fundamental of High Channel
2475	116.63	V	--	--	Avg	1.5	0	@ 3 meters
2483.5	64.01	V	74	-9.99	Peak	1.5	0	**No** Marker Delta Method
2483.5	51.16	V	54	-2.84	Avg	1.5	0	Method Used

FCC 15.247 / RSS-GEN
AeroVironment
mDDL
Model: 65900
Antenna: Twin Patch

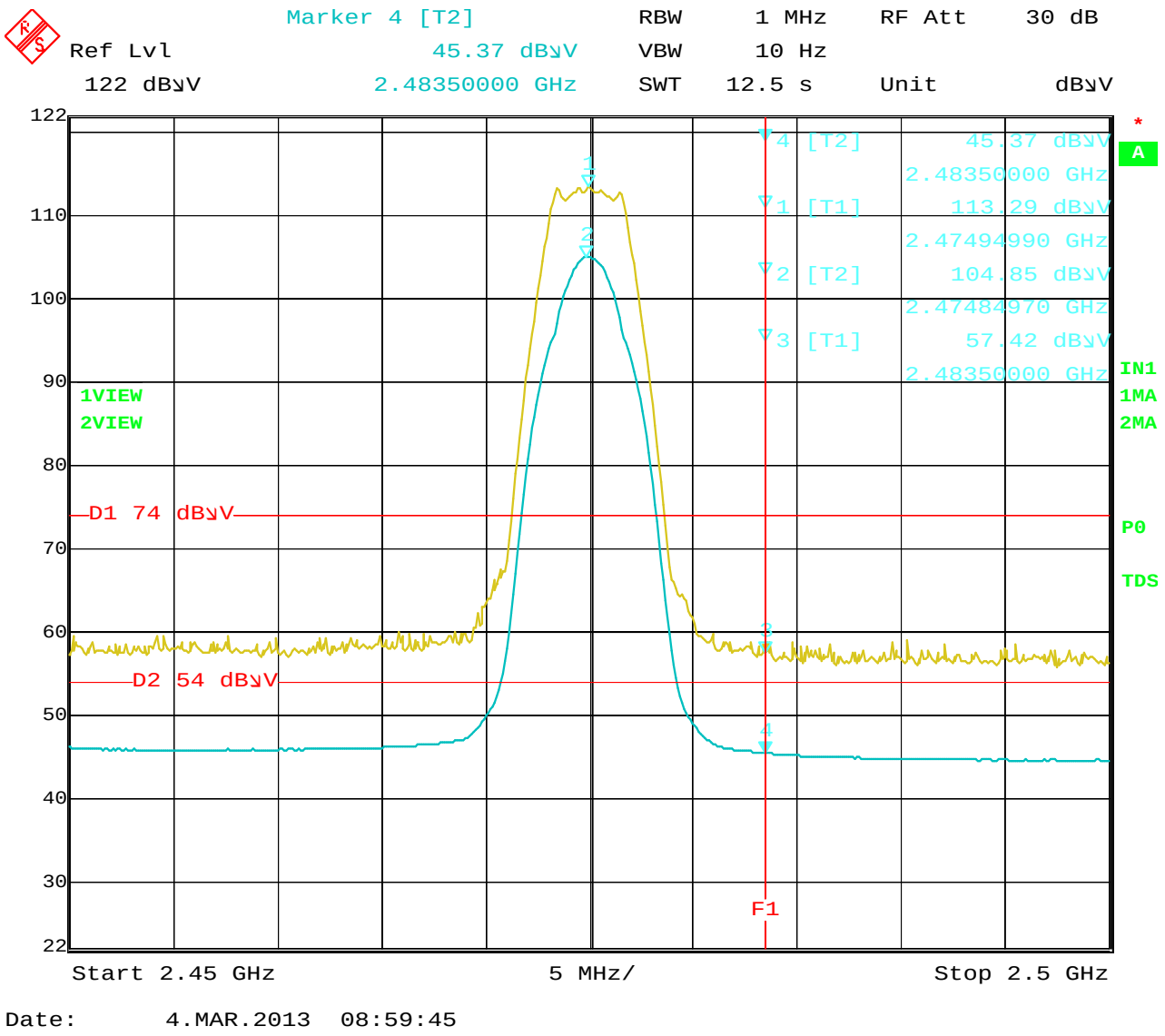
Date: 03/04/2013
Lab: B
Tested By: Kyle Fujmoto

Y-Axis (Worst Case) - Low Channel
Y-Axis (Worst Case) - High Channel

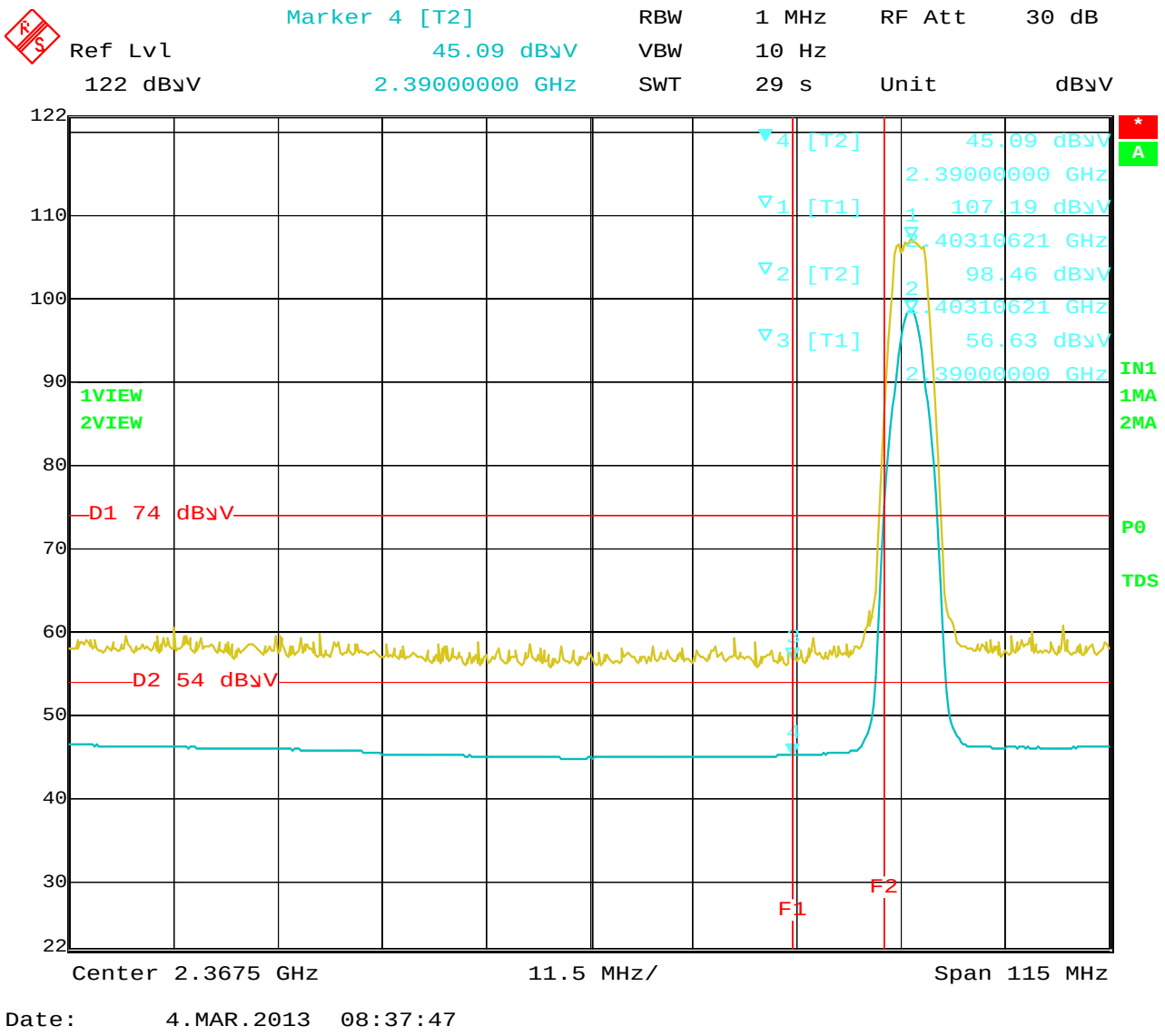
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2403	113.06	H	--	--	Peak	1	0	Fundamental of Low Channel
2403	104.9	H	--	--	Avg	1	0	@ 3 meters
2390	57.13	H	74	-16.87	Peak	1	0	**No** Marker Delta Method
2390	45.17	H	54	-8.83	Avg	1	0	Method Used
2475	114.06	H	--	--	Peak	1.5	315	Fundamental of High Channel
2475	105.69	H	--	--	Avg	1.5	315	@ 3 meters
2483.5	57.94	H	74	-16.06	Peak	1.5	315	**No** Marker Delta Method
2483.5	45.92	H	54	-8.08	Avg	1.5	315	Method Used



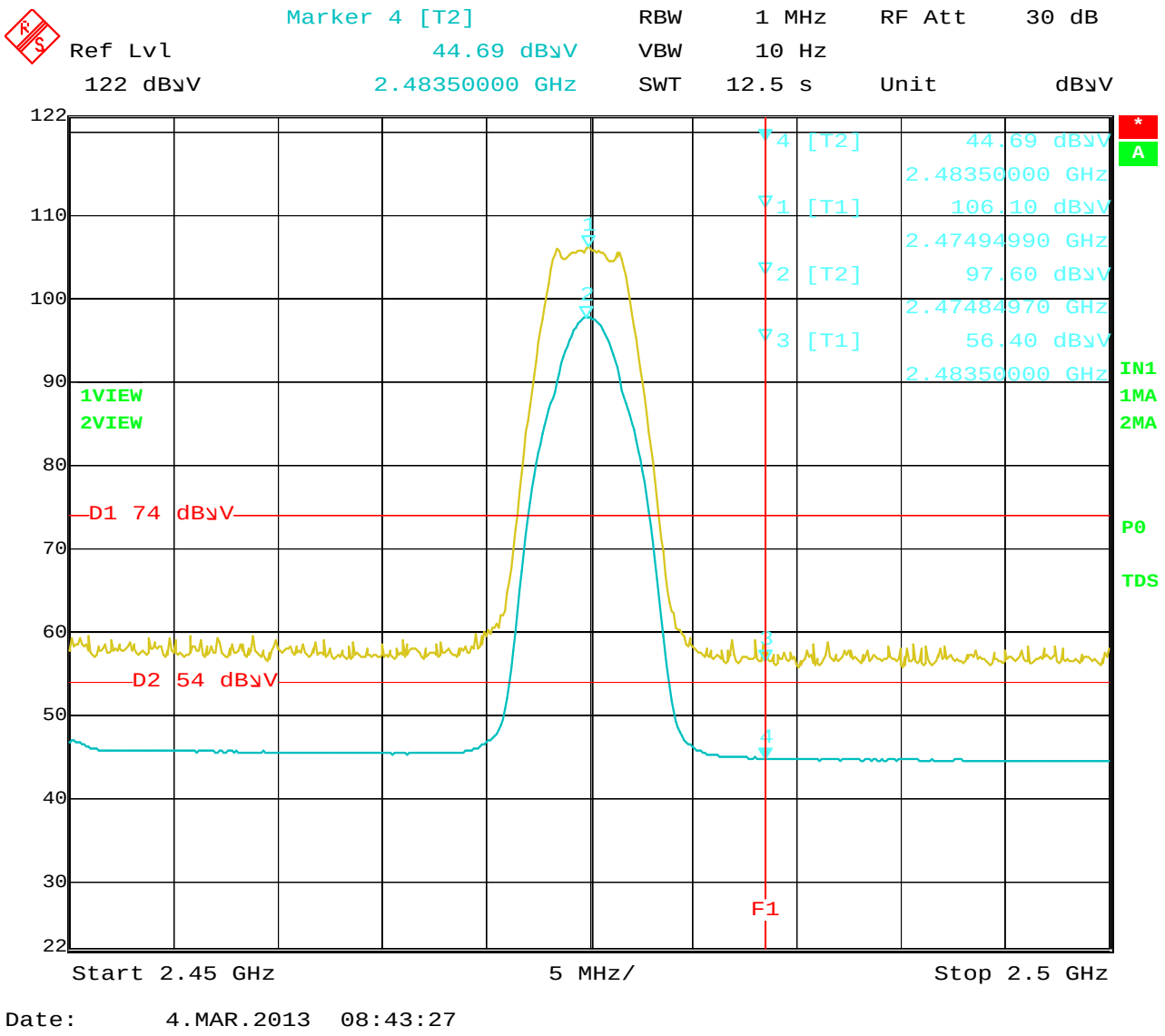
Band Edge – Low Channel – Vertical Polarization – Monopole Antenna – Y-Axis (Worst Case)



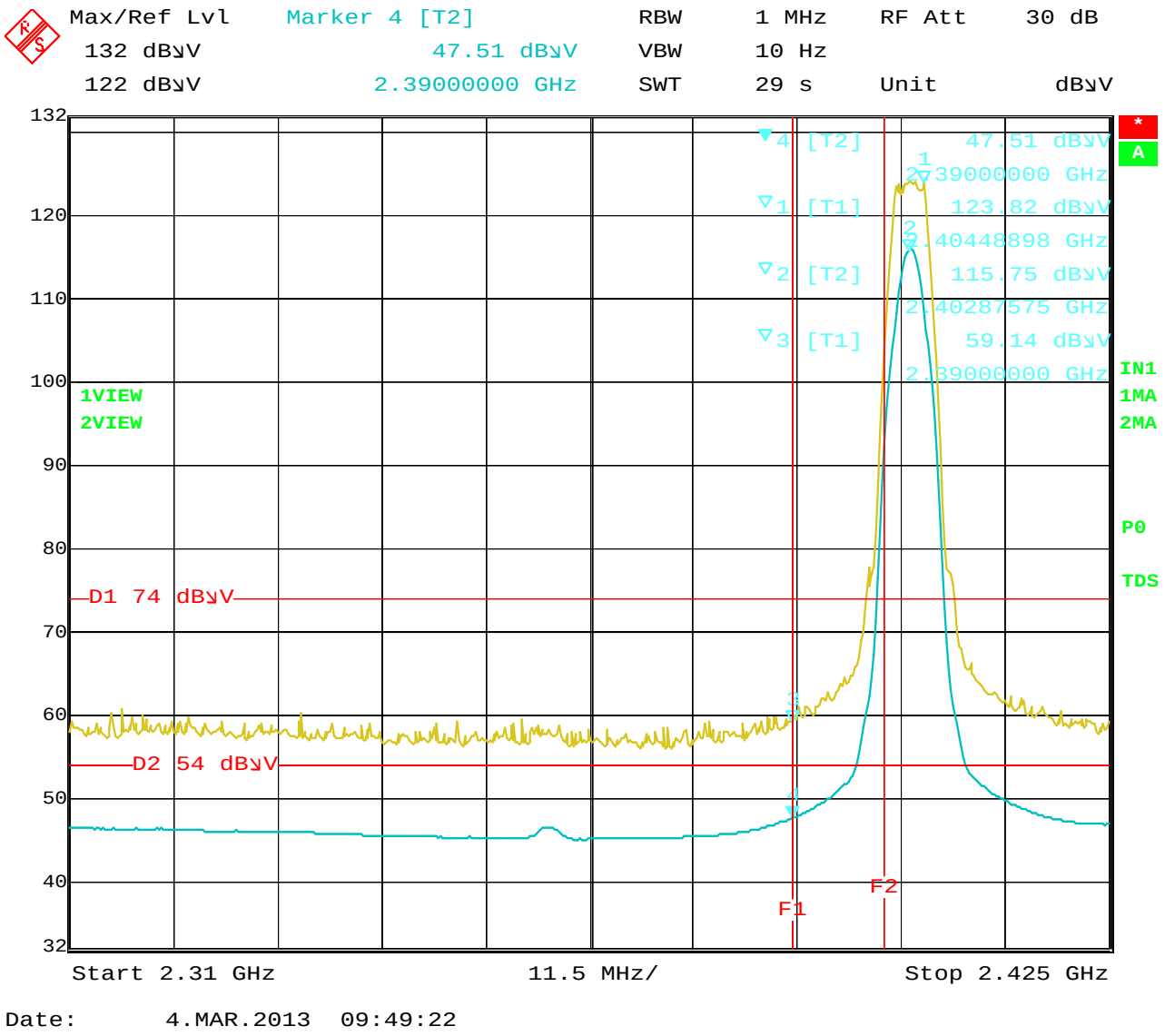
Band Edge – High Channel – Vertical Polarization – Monopole Antenna – Y-Axis (Worst Case)



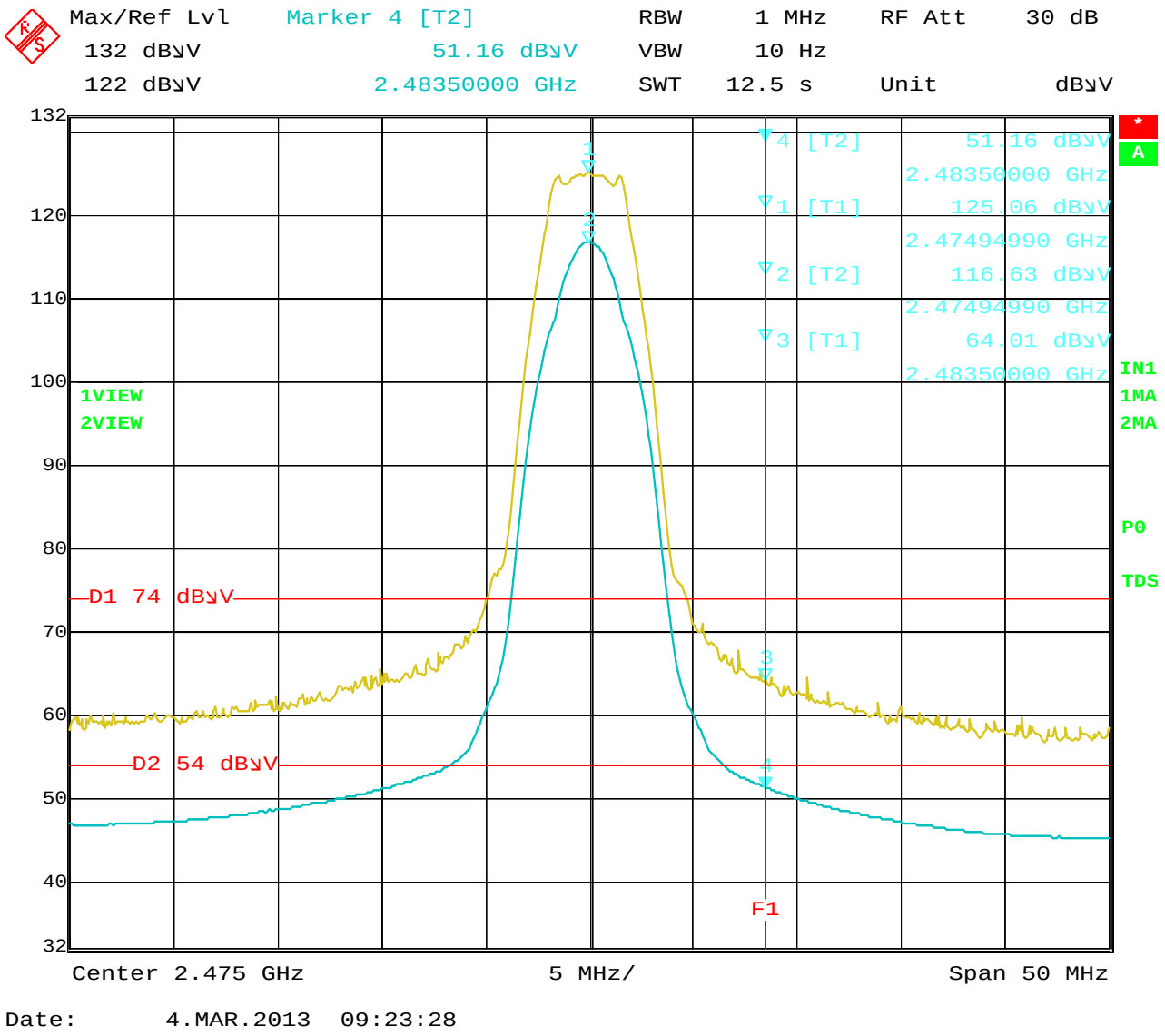
Band Edge – Low Channel – Horizontal Polarization – Monopole Antenna – X-Axis (Worst Case)



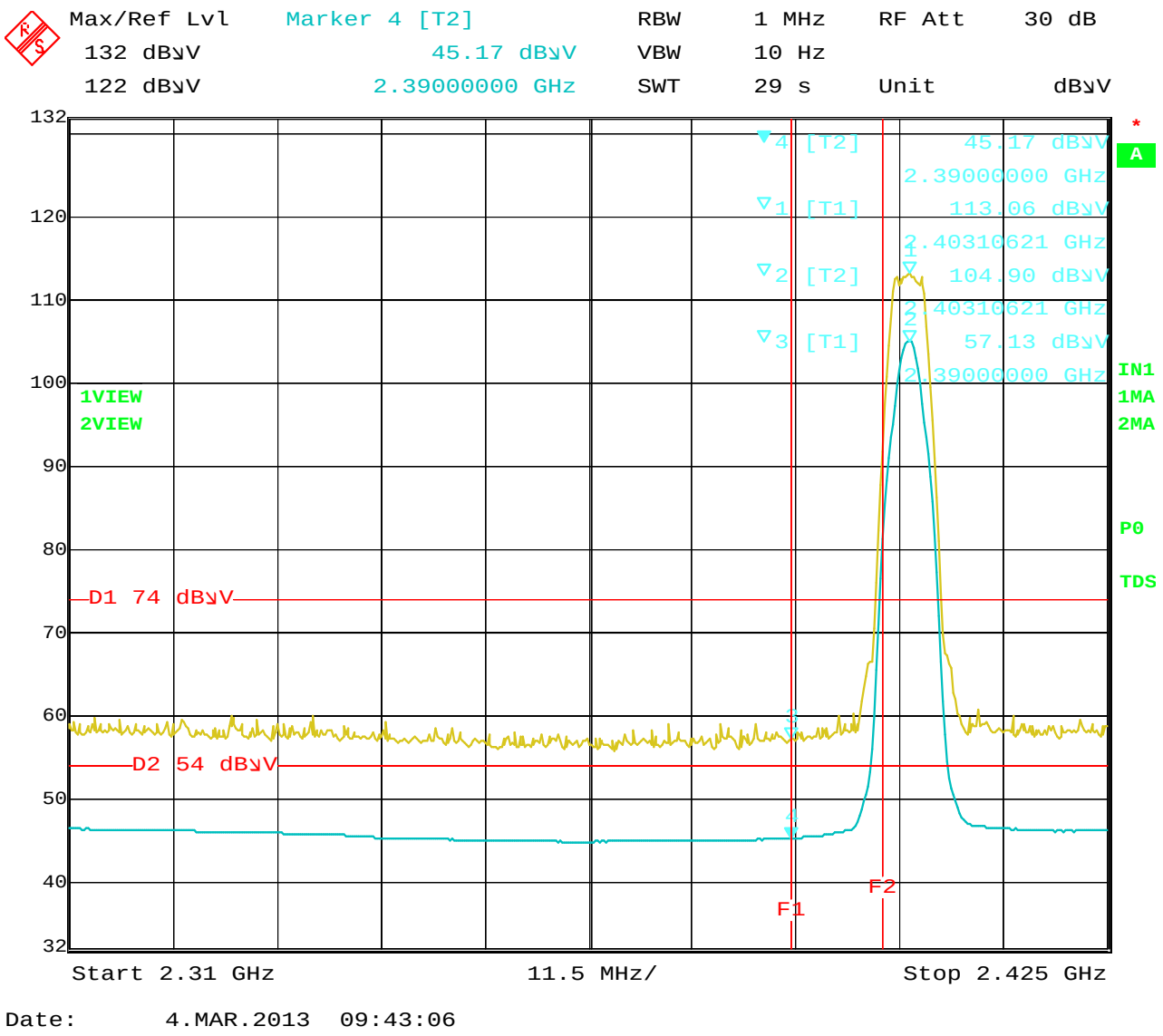
Band Edge – High Channel – Horizontal Polarization – Monopole Antenna – X-Axis (Worst Case)



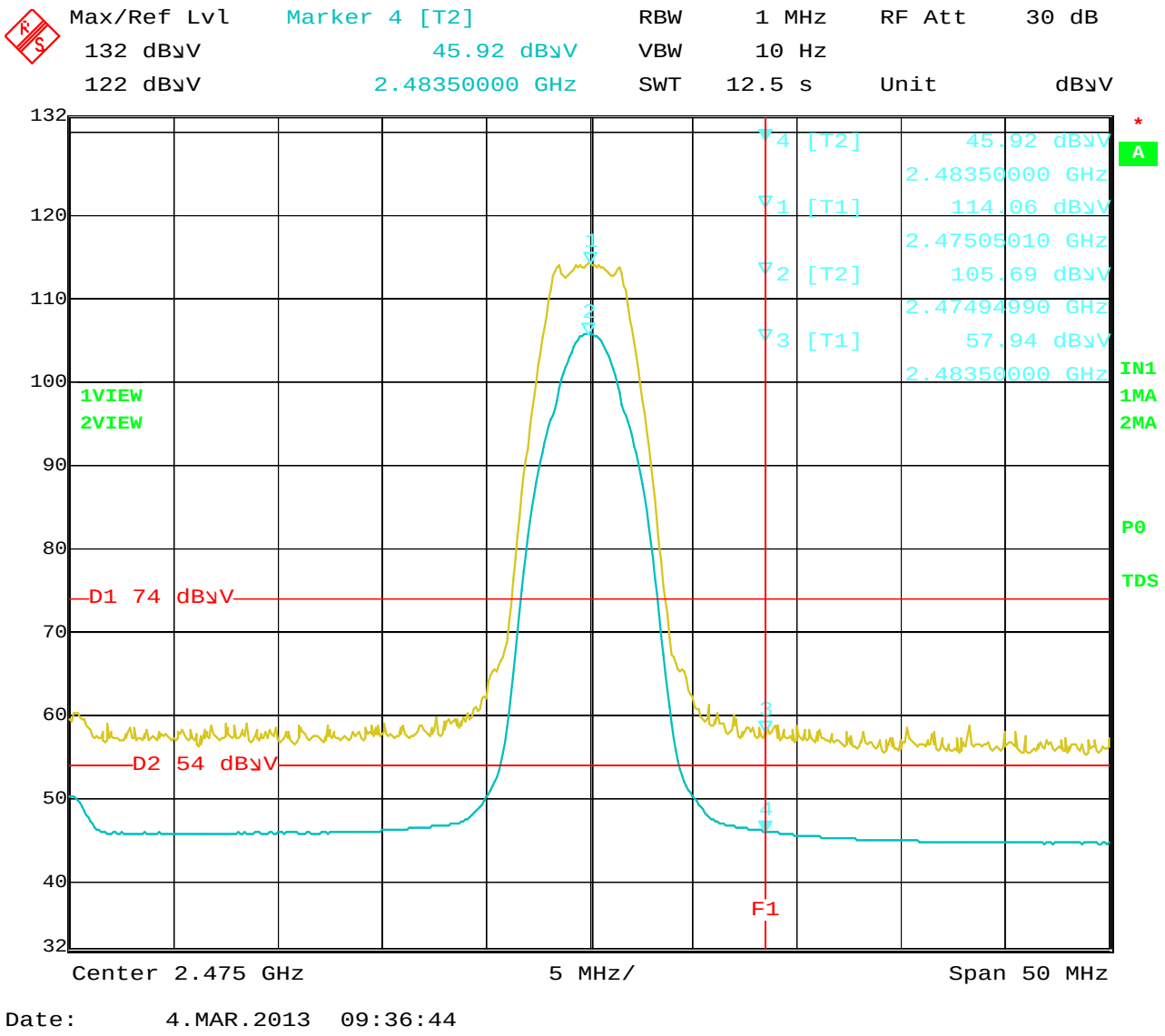
Band Edge – Low Channel – Vertical Polarization – Twin Patch Antenna – Y-Axis (Worst Case)



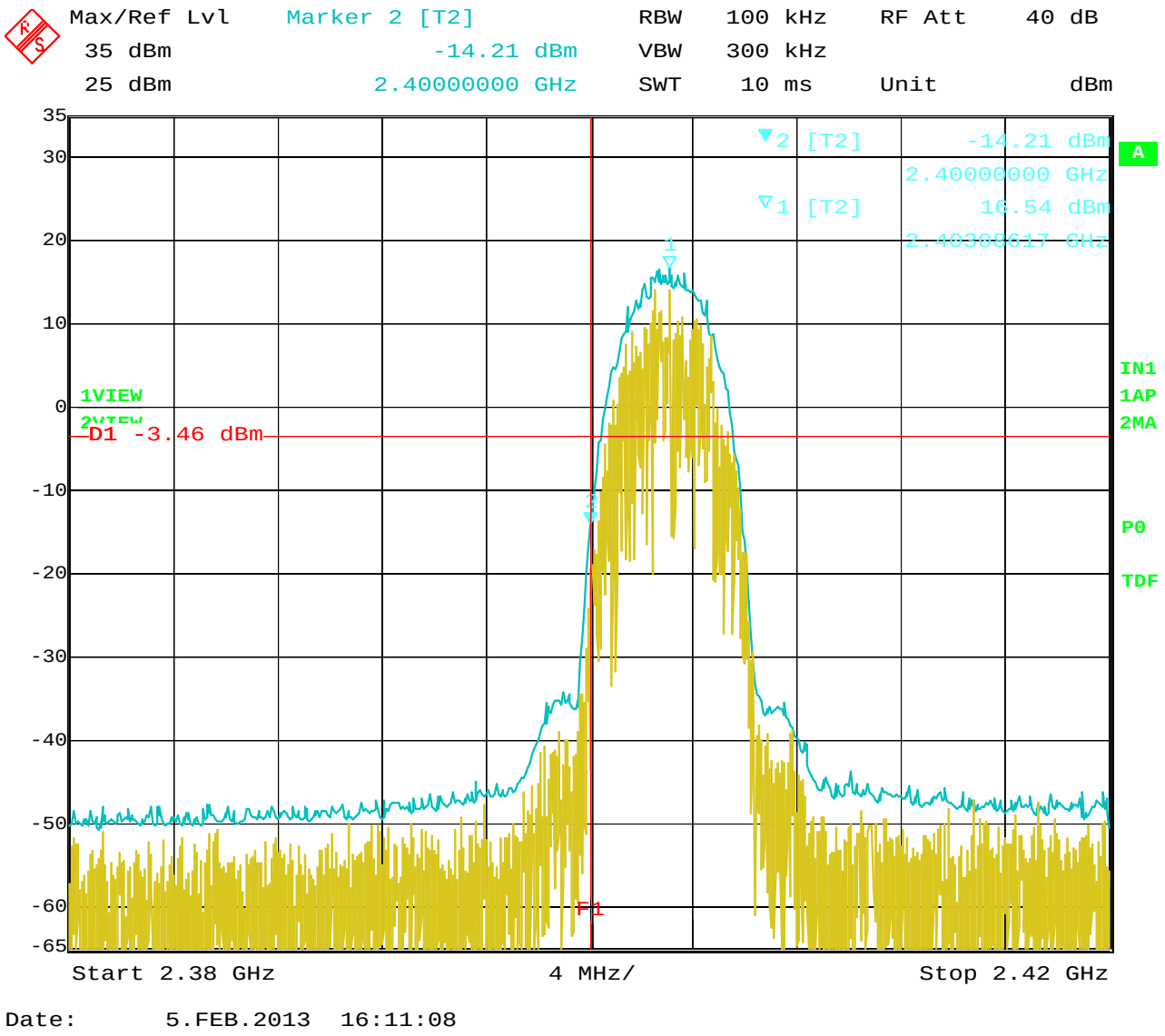
Band Edge – High Channel – Vertical Polarization – Twin Patch Antenna – Y-Axis (Worst Case)



Band Edge – Low Channel – Horizontal Polarization – Twin Patch Antenna – Y-Axis (Worst Case)



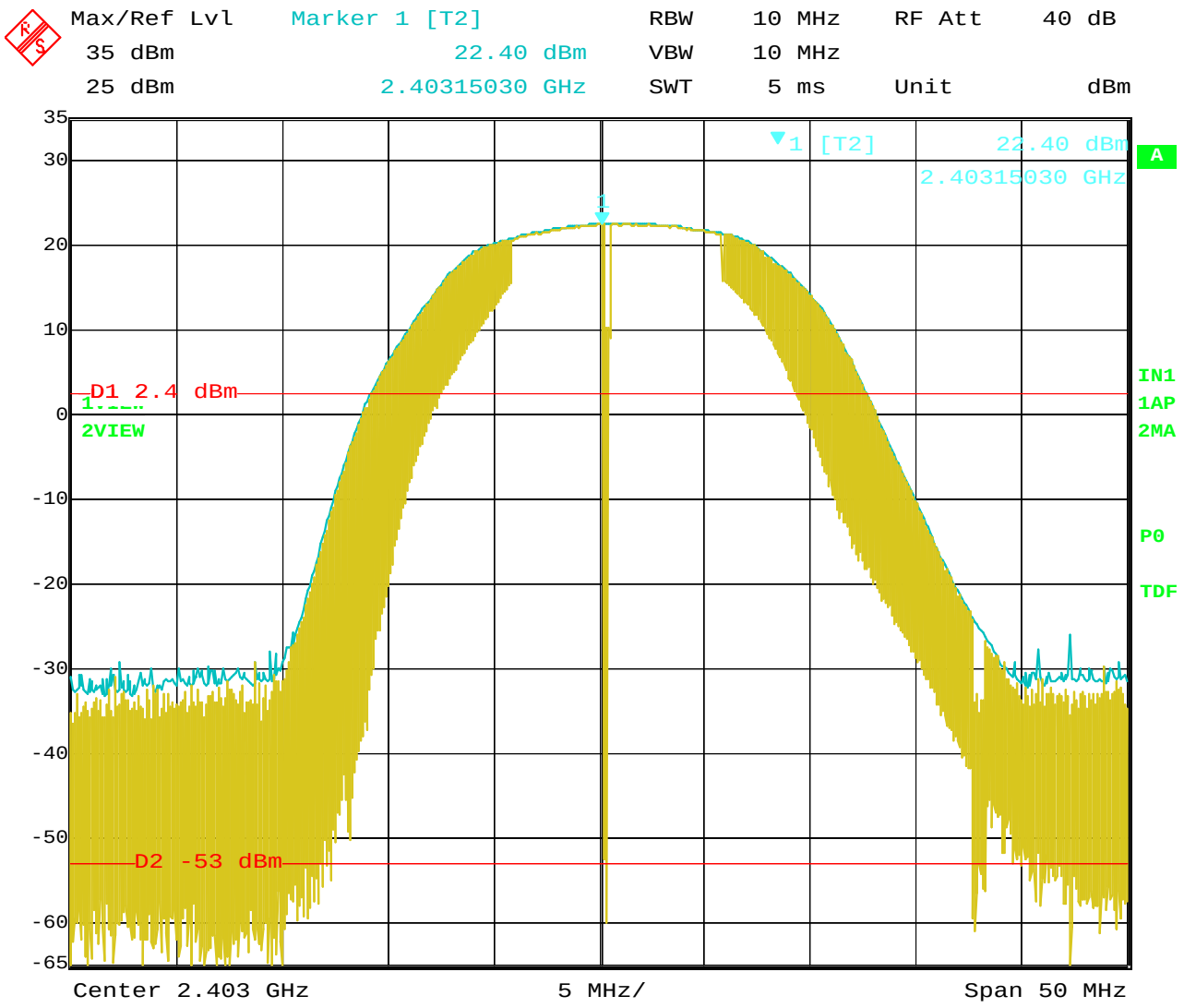
Band Edge – High Channel – Horizontal Polarization – Twin Patch Antenna – Y-Axis (Worst Case)



Band Edge at 2400 MHz using Conducted Measurements – 2400 MHz is a non-restricted frequency

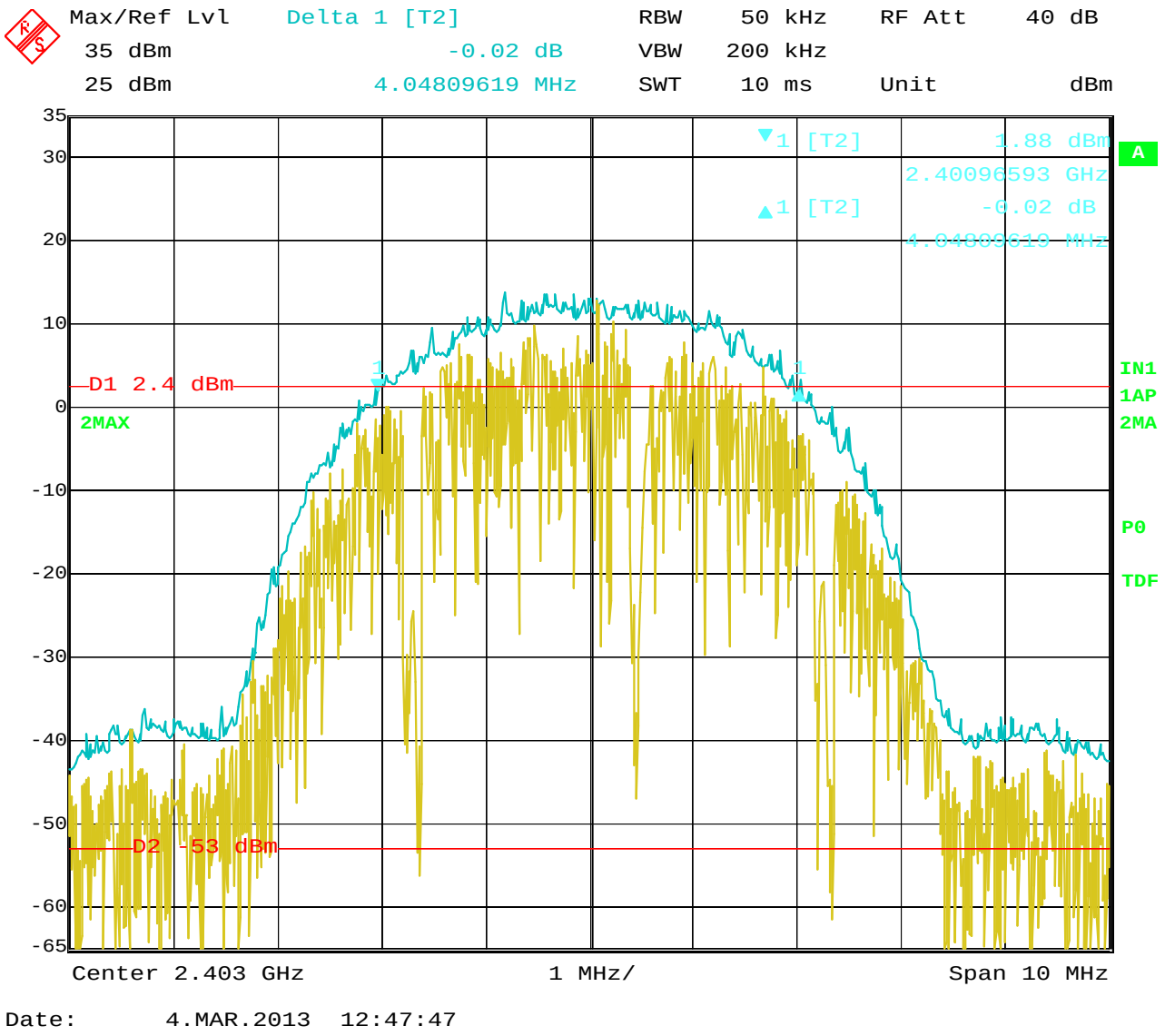
-20 dB BANDWIDTH

DATA SHEETS

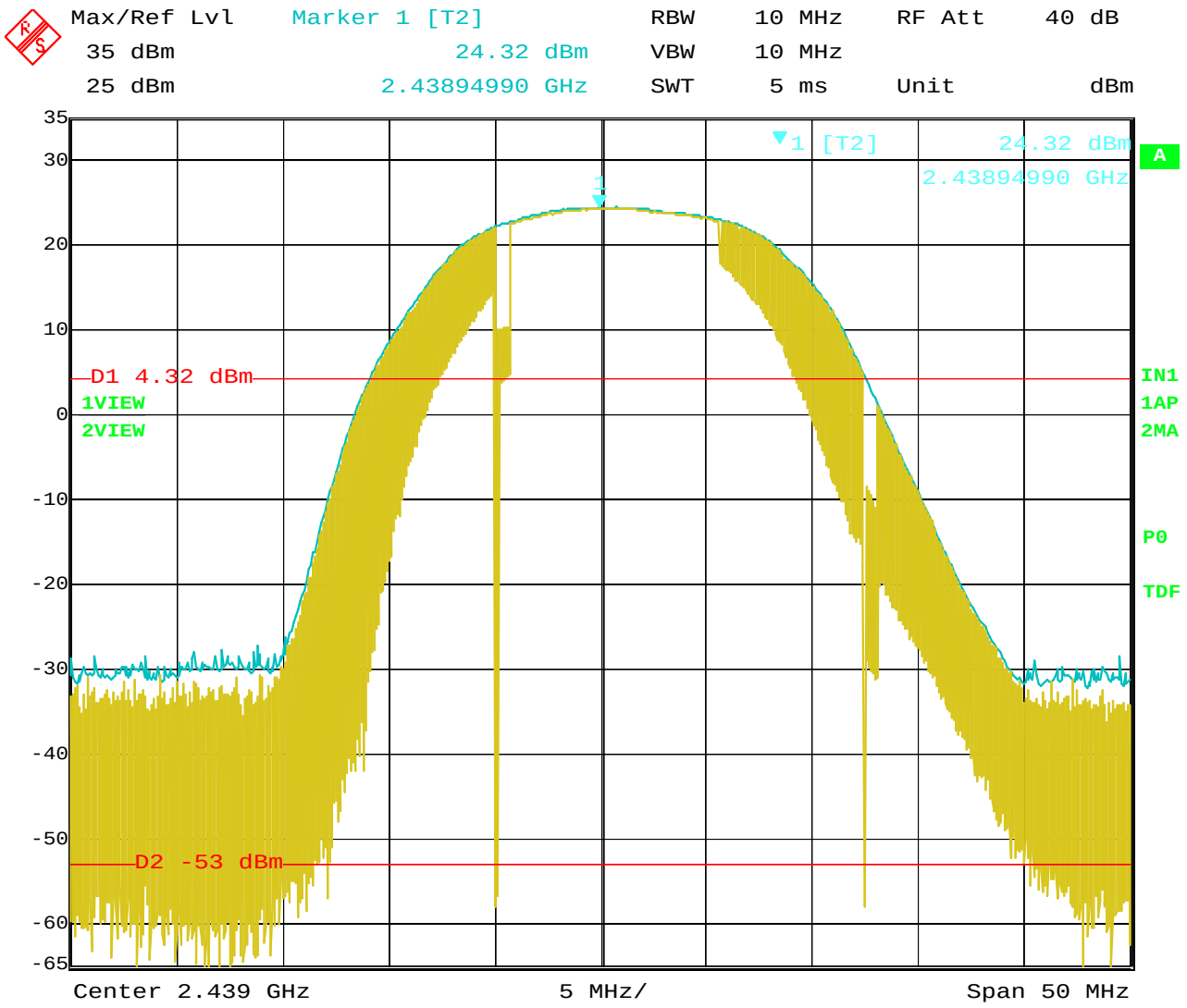


Date: 4.MAR.2013 12:47:05

Reference level being established by using a resolution bandwidth that exceeds the signal bandwidth
Low Channel

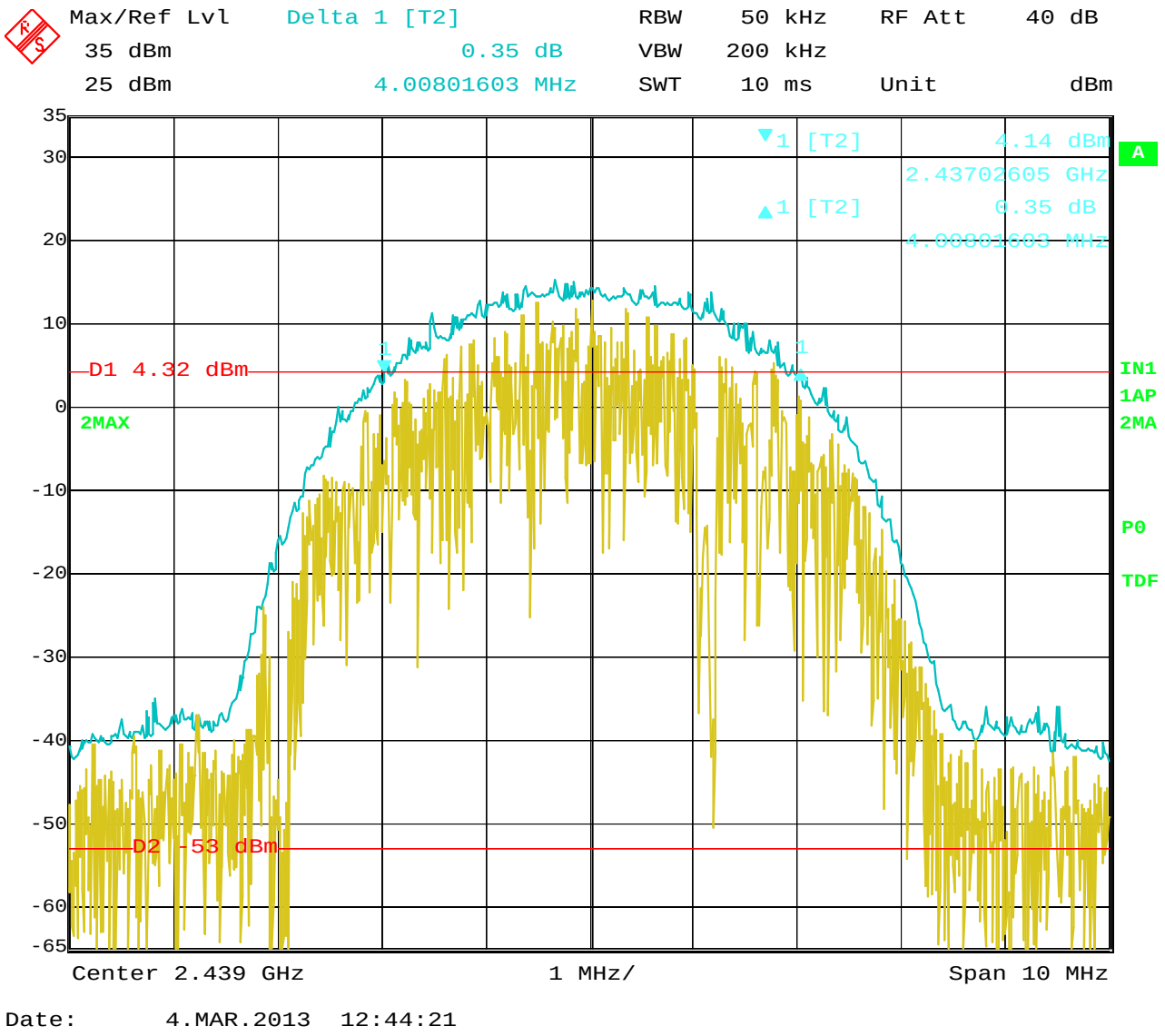


Bandwidth using RBW > 1% of the estimated emission bandwidth, VBW set to > 3 times RBW.
Markers moved to the –20 dB point of the reference level shown on the previous page.
Low Channel

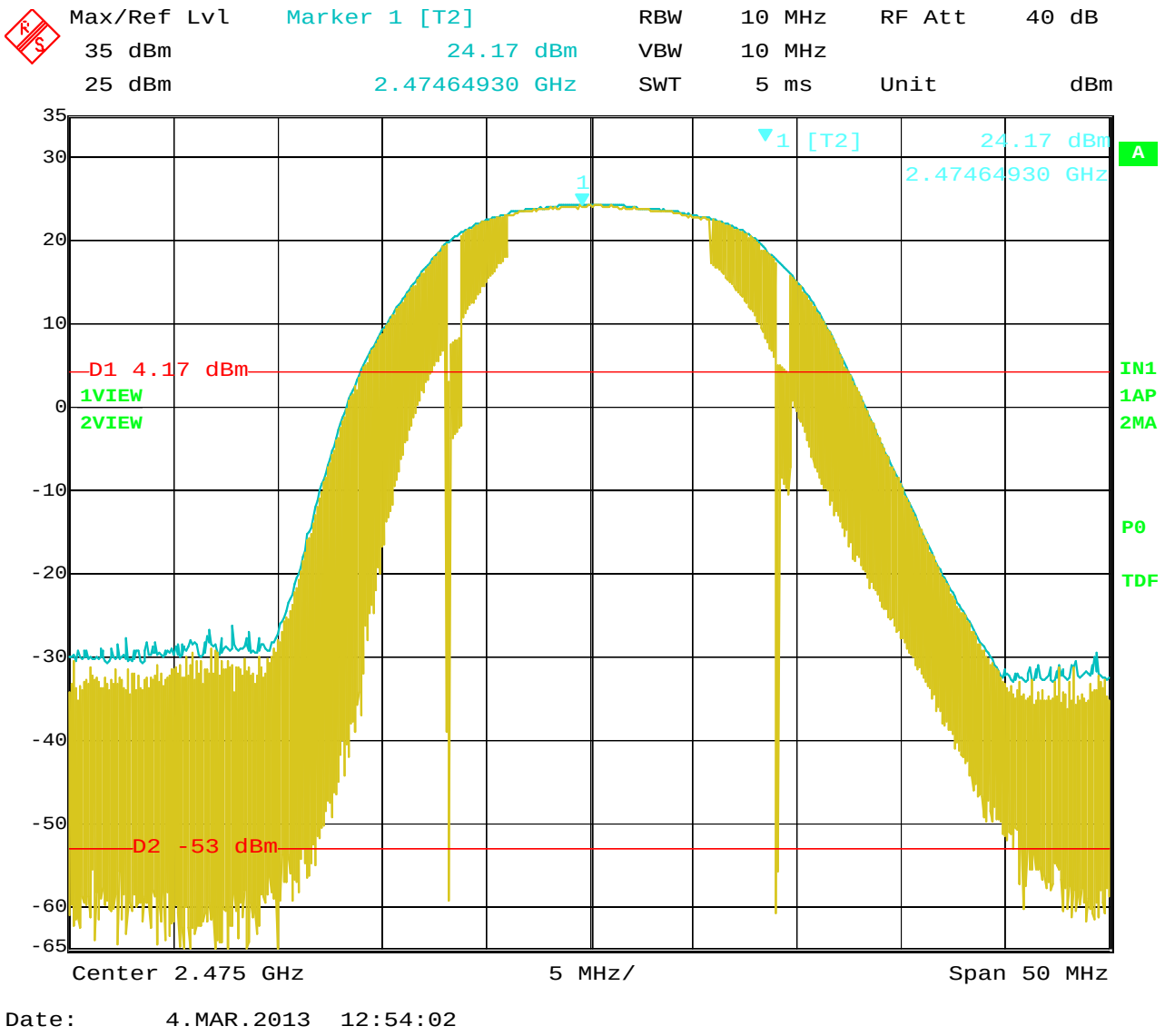


Date: 4.MAR.2013 12:43:22

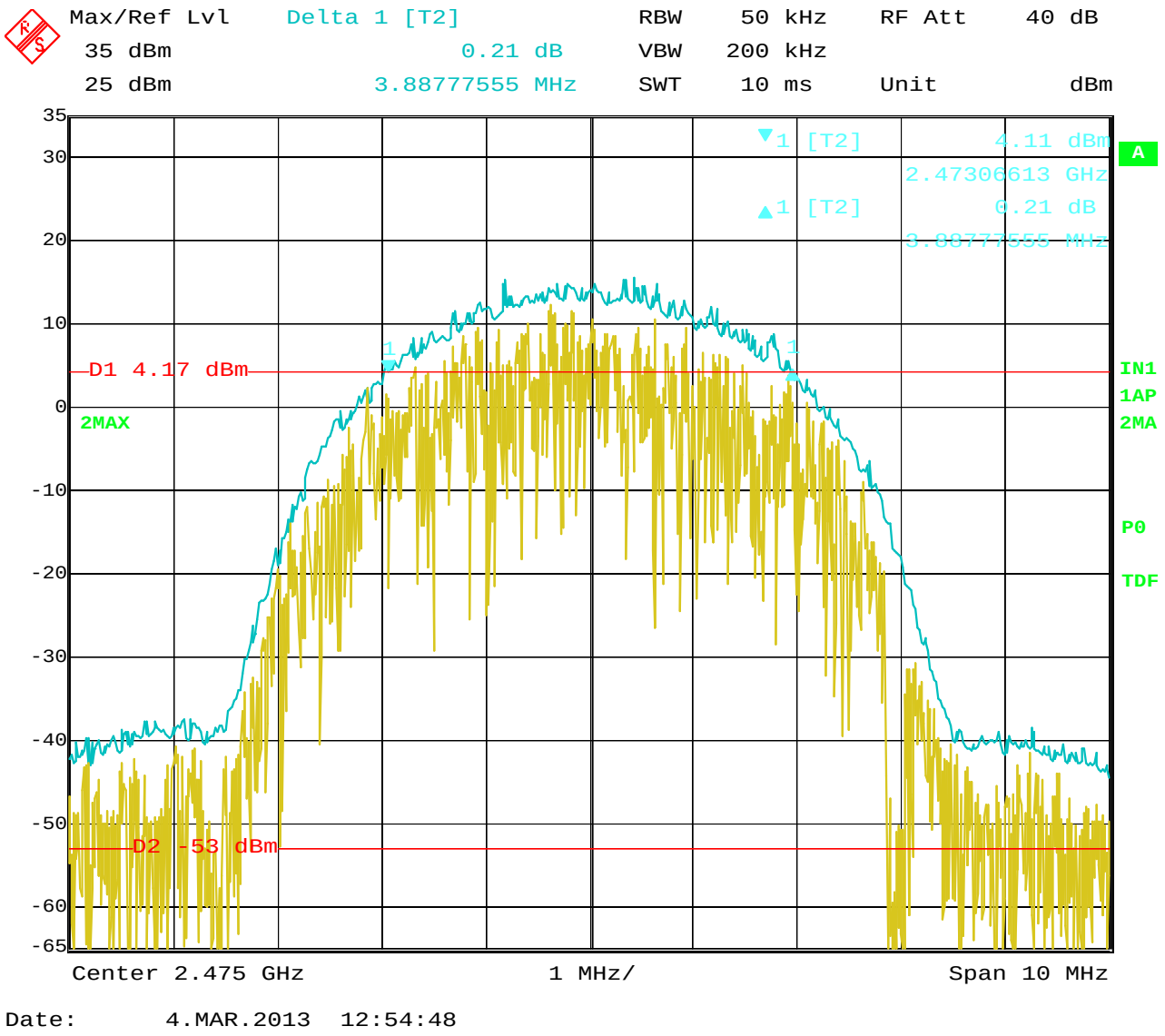
Reference level being established by using a resolution bandwidth that exceeds the signal bandwidth
Middle Channel



Bandwidth using RBW > 1% of the estimated emission bandwidth, VBW set to > 3 times RBW.
Markers moved to the –20 dB point of the reference level shown on the previous page.
Middle Channel



Reference level being established using a resolution bandwidth that exceeds the signal bandwidth.
High Channel



Bandwidth using RBW > 1% of the estimated emission bandwidth, VBW set to > 3 times RBW.
Markers moved to the –20 dB point of the reference level shown on the previous page.
High Channel