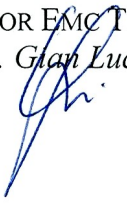


				G.S.D. S.r.l. Certified in accordance with UNI EN ISO 9001:2008 by TÜV Rheinland Italia S.r.l. Certificate N. 39 00 1850509	
G.S.D. S.r.l. PISA - Italy		Test Report n. 15850-FCC		Rev. 03	
Manufacturer		Power-One Italy S.p.A.			
Address		Via San Giorgio, 642 52028 Terranuova Bracciolini (AR) Italy			
Test Family Name		VSN400 CELLULAR LOGGER CARD			
Testing Laboratory Name		G.S.D. S.r.l.			
Address		Via Marmiceto, 8 56121 Ospedaletto Pisa (PI) Italy			
Tel/Fax		+39 050 984254 / +39 050 984262			
P.IVA/VAT		01343950505			
http – e-mail		www.gsd.it - info@gsd.it			
		FCC Listed: Registration Number: 424037			
Location and Date of Issue		Pisa, 2016 October 26			
G.S.D. s.r.l. Via Marmiceto, 8 56121 OSPEDALETTO - PISA Tel. 050.984254 - Fax 050.984262 P. IVA 01343950505 SENIOR EMC TEST MANAGER <i>Dr. Gian Luca Genovesi</i>  QUALITY MANAGER <i>Dr. David Pelliccia</i> 					

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Report Revision History

Revision details

<i>Date</i>	<i>Page No.(s)</i>	<i>Details</i>
2015 November 30	93	Rev. 00 Initial draft issue
2015 November 30	93	Rev. 01 Minor changes
2016 October 26	93	Rev. 02 Test Item description changes
2016 October 26	93	Rev. 03 Report Revision History added

1. MANUFACTURER AND EUT IDENTIFICATION¹	
Manufacturer	Power-One Italy S.p.A..
Address	Via San Giorgio, 642 52028 Terranuova Bracciolini (AR) Italy
Test Family Name	VSN400 CELLULAR LOGGER CARD
Date of reception	2015 November 12
Sampling	Laboratory sample for certification
Test Item Description	WiFi Device
	Cellular card equipped with WiFi module EPCOS R078 (WL1801) / D7021 and an internal modem SIMCOM SIM7100A, FCC ID: UDV-SIM7100A
Nominal Input Voltage	12 Vdc
Frequency Range	2400-2483.5 MHz
Std 802.11	IEEE Std 802.11b, 802.11g and 802.11n
Modulation Technology	DSSS for 802.11b OFDM for 802.11g/n
Transfer Rate	802.11b: 11 / 5.5 / 2 / 1 Mbps 802.11g: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps 802.11n: 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5 Mbps
Antenna Connector /Types :	RSMA connector
Antenna Type	EA-79F
Antenna Gain	-1.87 dBi
FCC ID	X6W-3N89E

¹A detailed documentation is preserved in the internal fascicle.

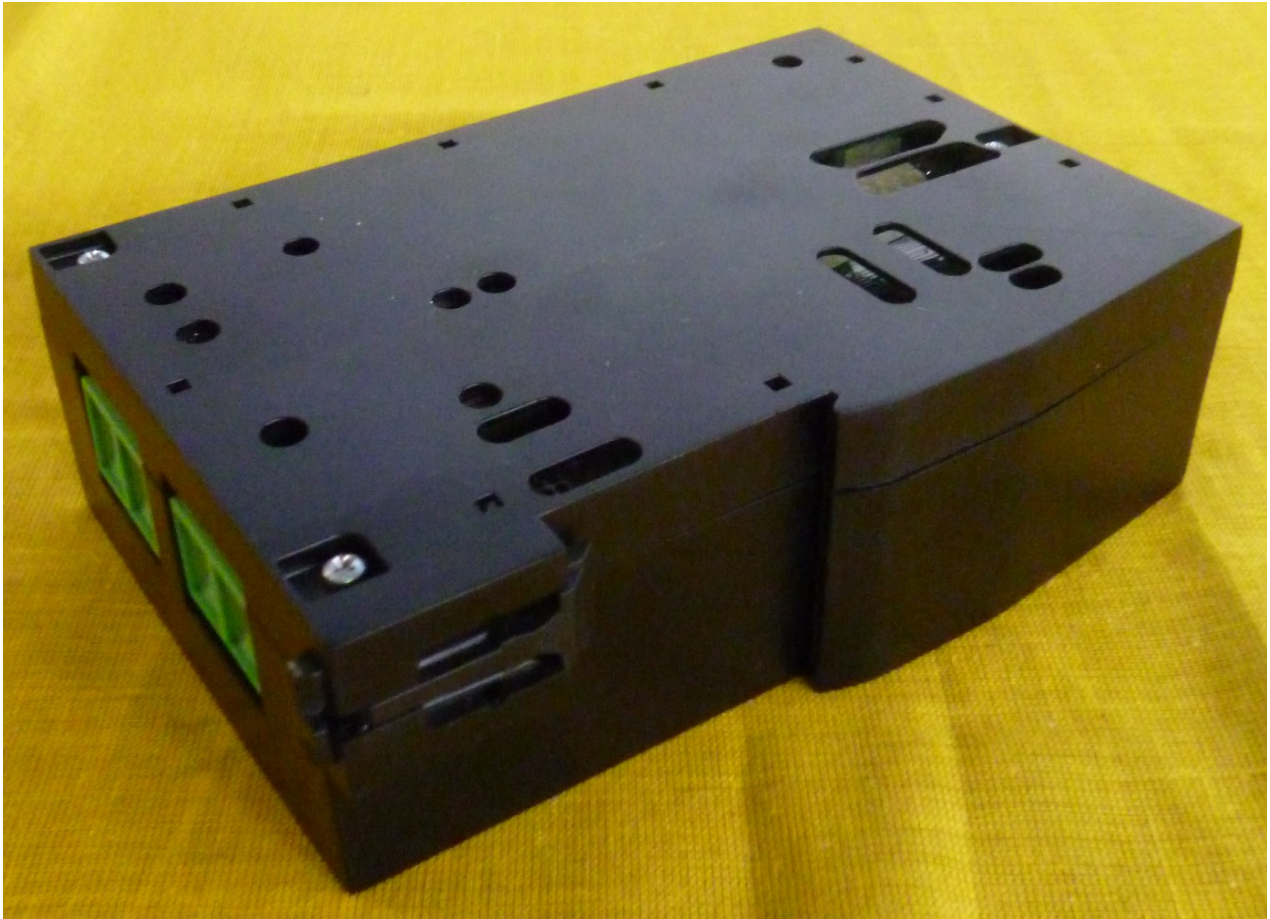
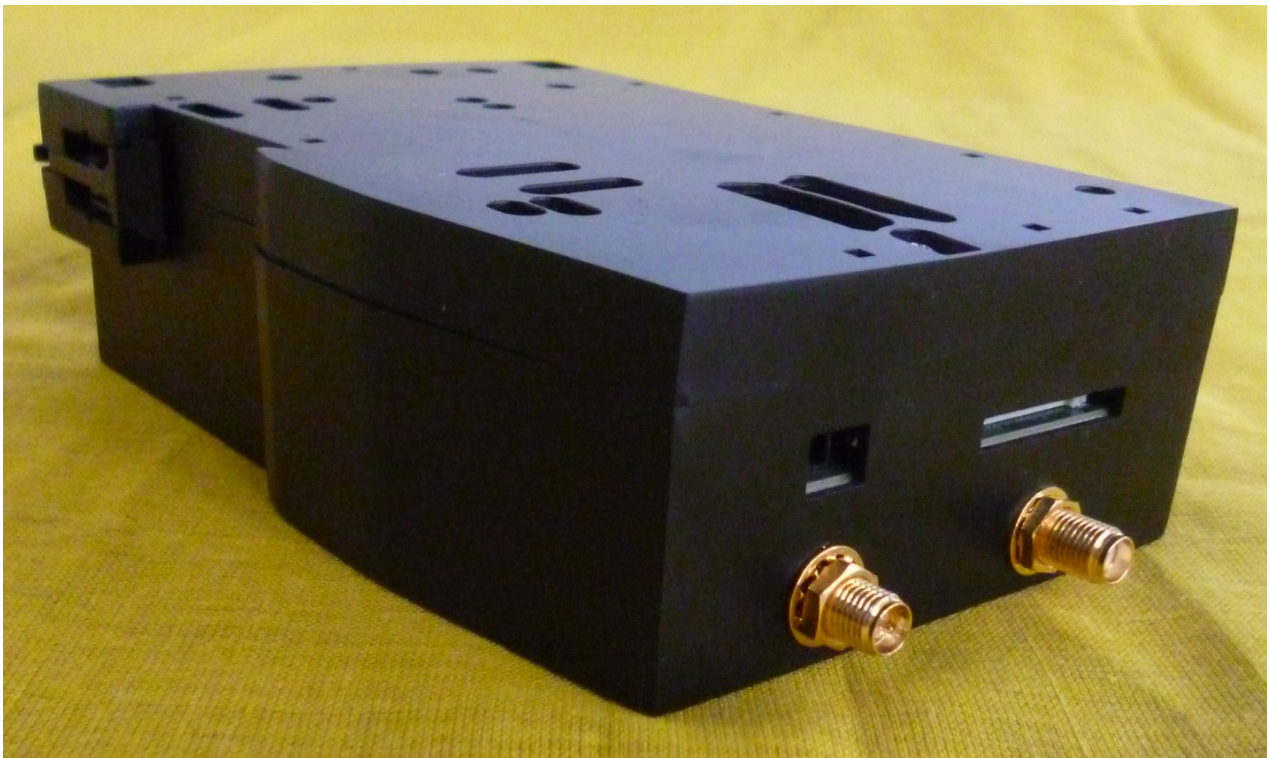
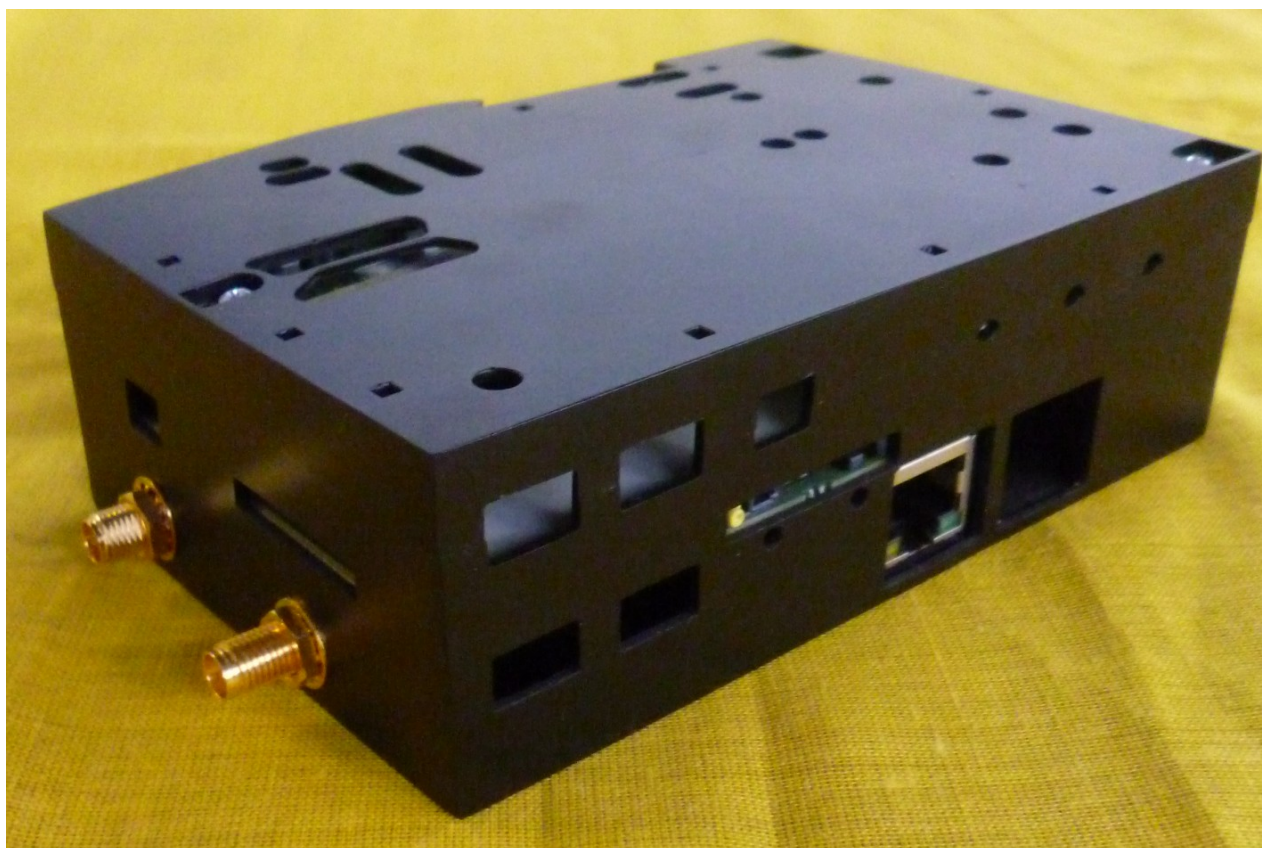


Fig. 1.1
Equipment Under Test - Photo



*Fig. 1.2
Equipment Under Test - Photo*



*Fig. 1.3
Equipment Under Test - Photo*

2. REFERENCE STANDARDS

Tests and measurements are performed accordingly to the reference standards given in the table below:

<i>TEST</i>	<i>STANDARD</i>
Operation within the band 2400-2483,5 MHz: Test Procedures 15.247 (a)(2), (b)(3), (d), (e)	FCC Rules and Regulations, Title 47 Part 15 – Sub part C ANSI C63.4 – American National Standard for Methods of Measuring of Radio-Noise Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz – 40 GHz: 2014 KDB 558074 D01 DTS Meas Guidance v03r04 Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 ANSI C63.10 - American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices: 2013
Maximum Permissible Exposure	OET Bulletin 65 Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields FCC Rules and Regulations, Title 47 Part 15

3. RESULT, CONDITION, MEASUREMENT UNCERTAINTY, ANTENNA REQUIREMENTSSummary of Test Results

<i>TEST</i>	<i>RESULT</i>
6 dB bandwidth Section 15.247 (a) (2)	Pass
Peak Conducted Output Power: Section 15.247 (b) (3)	Pass
Band Edge Section 15.247 (d)	Pass
Power Spectral Density Section 15.247 (e)	Pass
Power Line Conducted Emissions Section 15.207	Pass
Radiated Emissions Section 15.209	Pass

Internal Procedures:

APR01: internal procedure for antenna port measurement Revision 01

CE22R01: internal procedure for power lead port measurement Revision 01

RE22R02: internal procedure for radiated emissions measurement Revision 02

Measurement uncertainty

<i>TEST</i>	<i>EXPANDED UNCERTAINTY</i>
Conducted Emission – 50Ω/50μH AMN (150 kHz - 30 MHz)	± 3.5 dB
Radiated Emission – (Semianechoic Room) (30 MHz - 40 GHz)	± 4.7 dB

Climatic Conditions

<i>PARAMETER</i>	<i>VALUE</i>
Temperature	(293 ± 3) K
Relative humidity	(50 ± 5) %

Power during the tests: 12 Vdc

Antenna Requirements:

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

than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Results:

The antennas used for this product are antenna with RPSMA, the maximum peak gain of the transmit antenna is only -1.87dBi.

Extensions

The results refer only to the sampled EUT and under the specified conditions.

4. 6 dB BANDWIDTH

Peak Output Power

Equipment shall meet the limits below .

<i>FREQUENCY RANGE</i> (MHz)	Limit
2400 2483,5	The minimum 6 dB Bandwidth shall be at least 500 kHz

Results: 6dB Bandwidth > 500 kHz

802.11b Mode, 11 Mbs

<i>Channel</i>	<i>Frequency</i> (MHz)	<i>6 dB Bandwidth</i> (MHz)	<i>Minimum Limit</i> (MHz)	<i>Margin</i> (MHz)
Low	2412	9.8	0.5	9.3
Mid	2437	9.65	0.5	9.15
High	2462	9.91	0.5	9.41

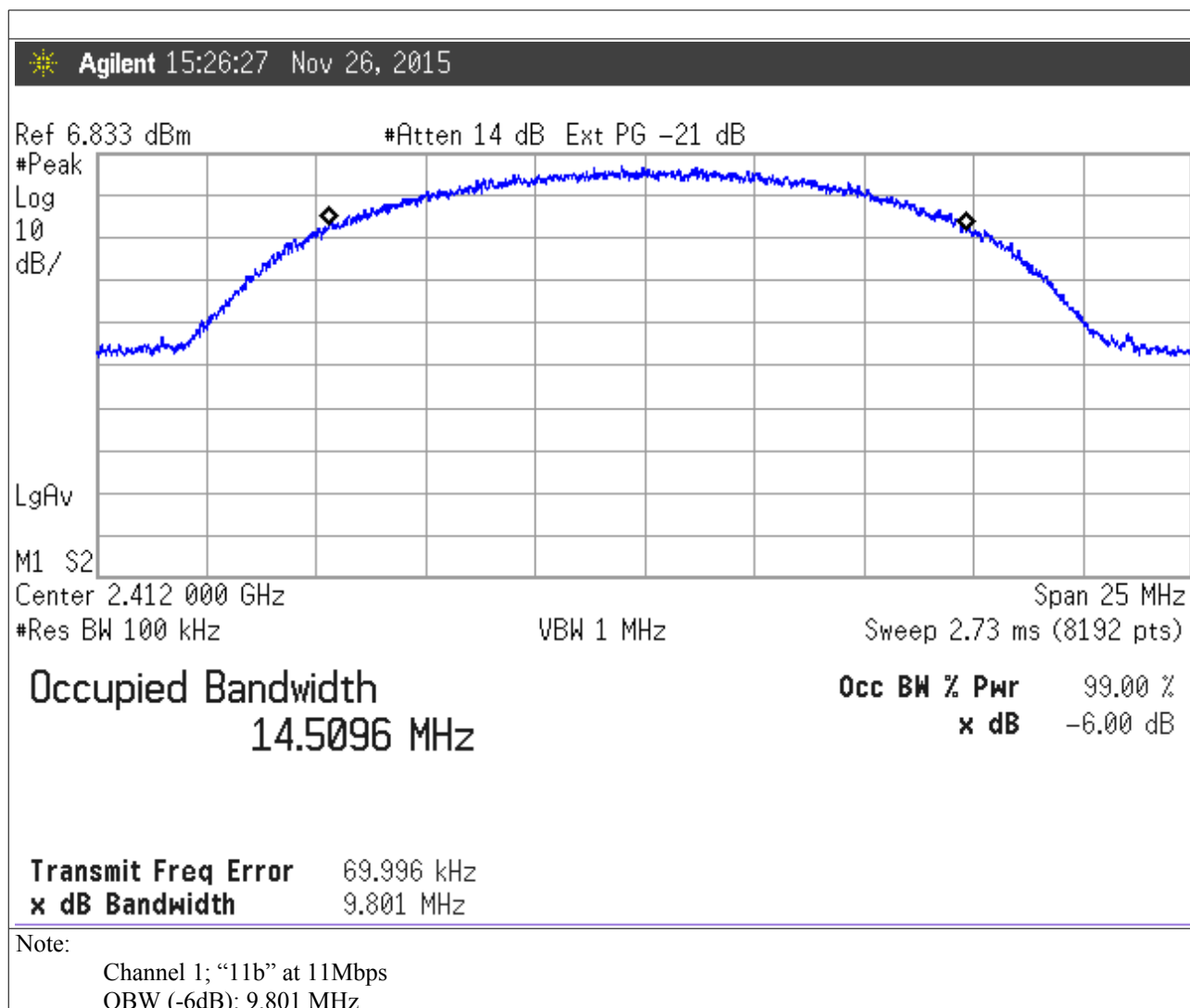
802.11g Mode, 54 Mbs

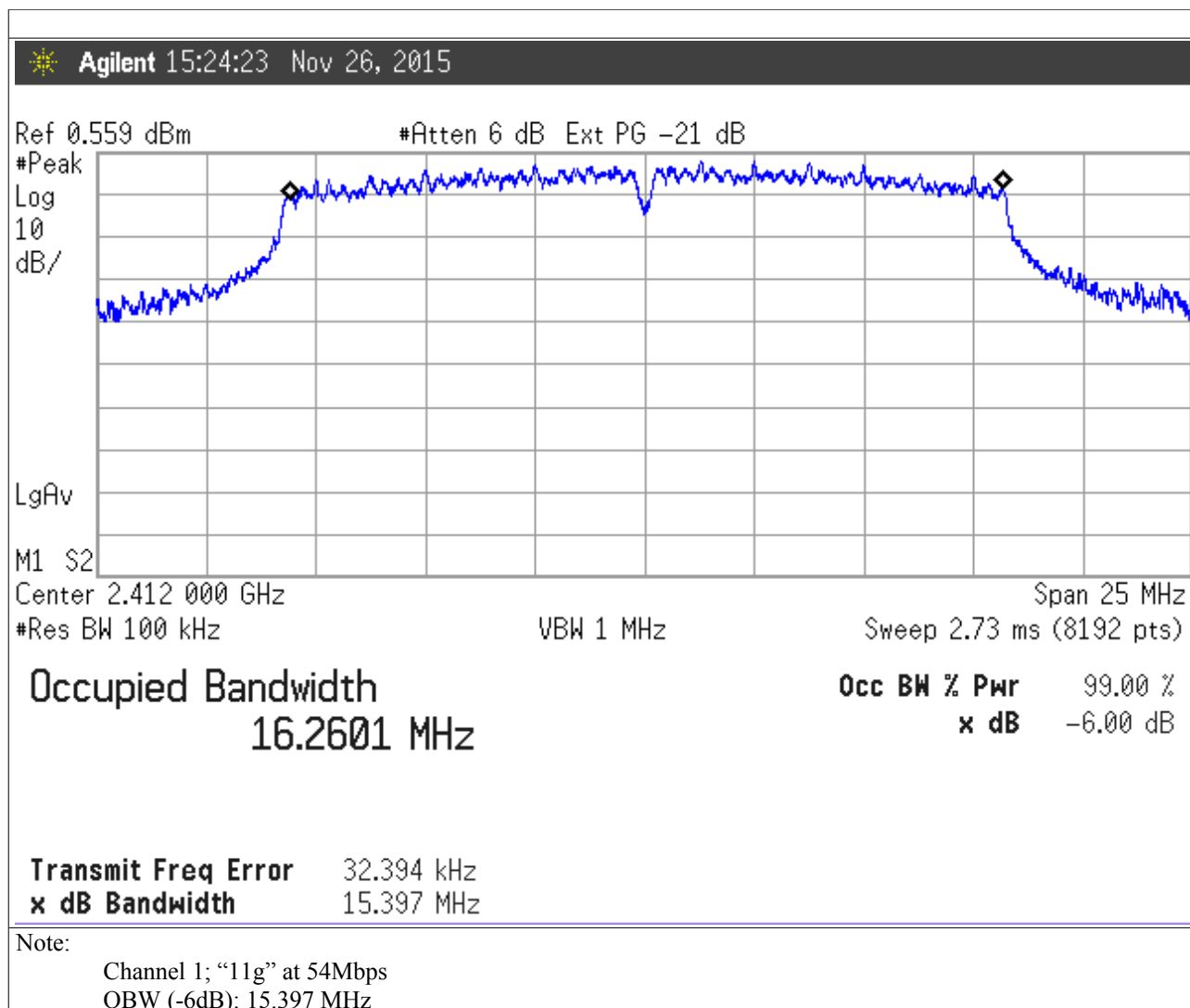
<i>Channel</i>	<i>Frequency</i> (MHz)	<i>6 dB Bandwidth</i> (MHz)	<i>Minimum Limit</i> (MHz)	<i>Margin</i> (MHz)
Low	2412	15.26	0.5	14.76
Mid	2437	16.33	0.5	15.83
High	2462	15.12	0.5	14.62

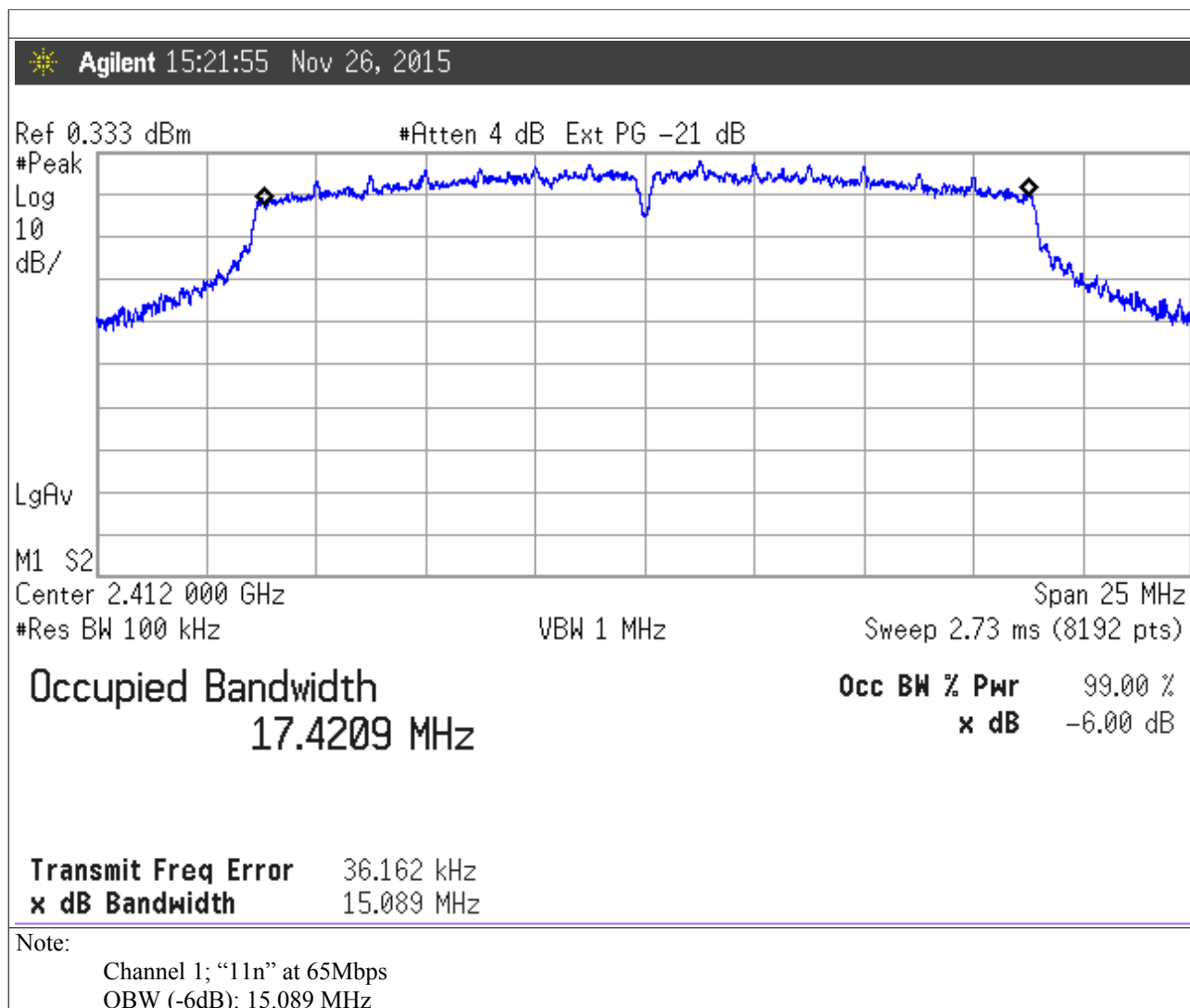
802.11n Mode, 65 Mbs

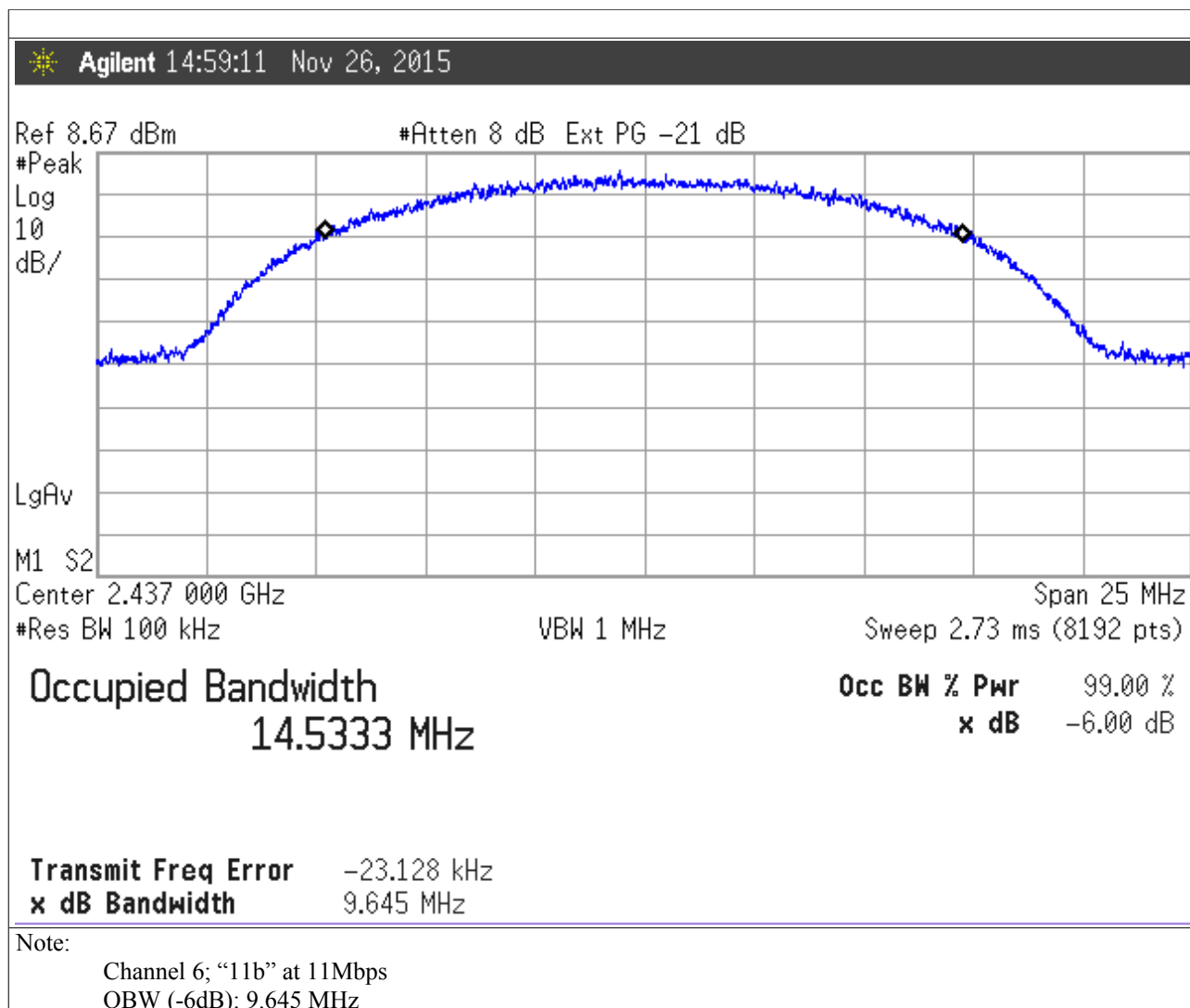
<i>Channel</i>	<i>Frequency</i> (MHz)	<i>6 dB Bandwidth</i> (MHz)	<i>Minimum Limit</i> (MHz)	<i>Margin</i> (MHz)
Low	2412	15.09	0.5	14.59
Mid	2437	15.08	0.5	14.58
High	2462	15.1	0.5	14.6

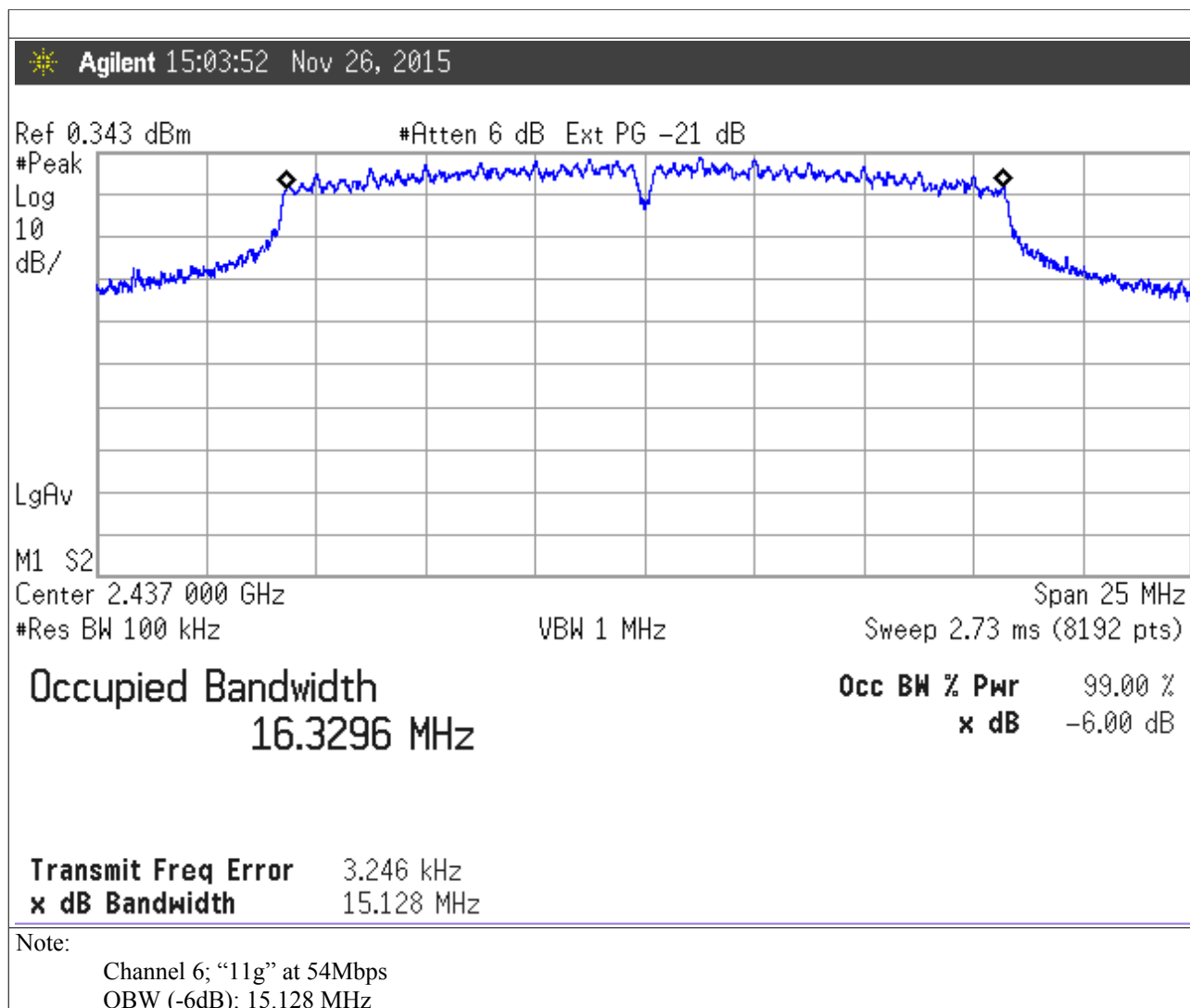
<u>Test Equipment</u>			
EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	Agilent	E4440A	01/2016
<u>Test procedure:</u> APR01			
Test performed on low, middle and high channels and in the b,g,n protocols at maximum and minimum data rate for each protocol.			
In the following graphs results are shown:			

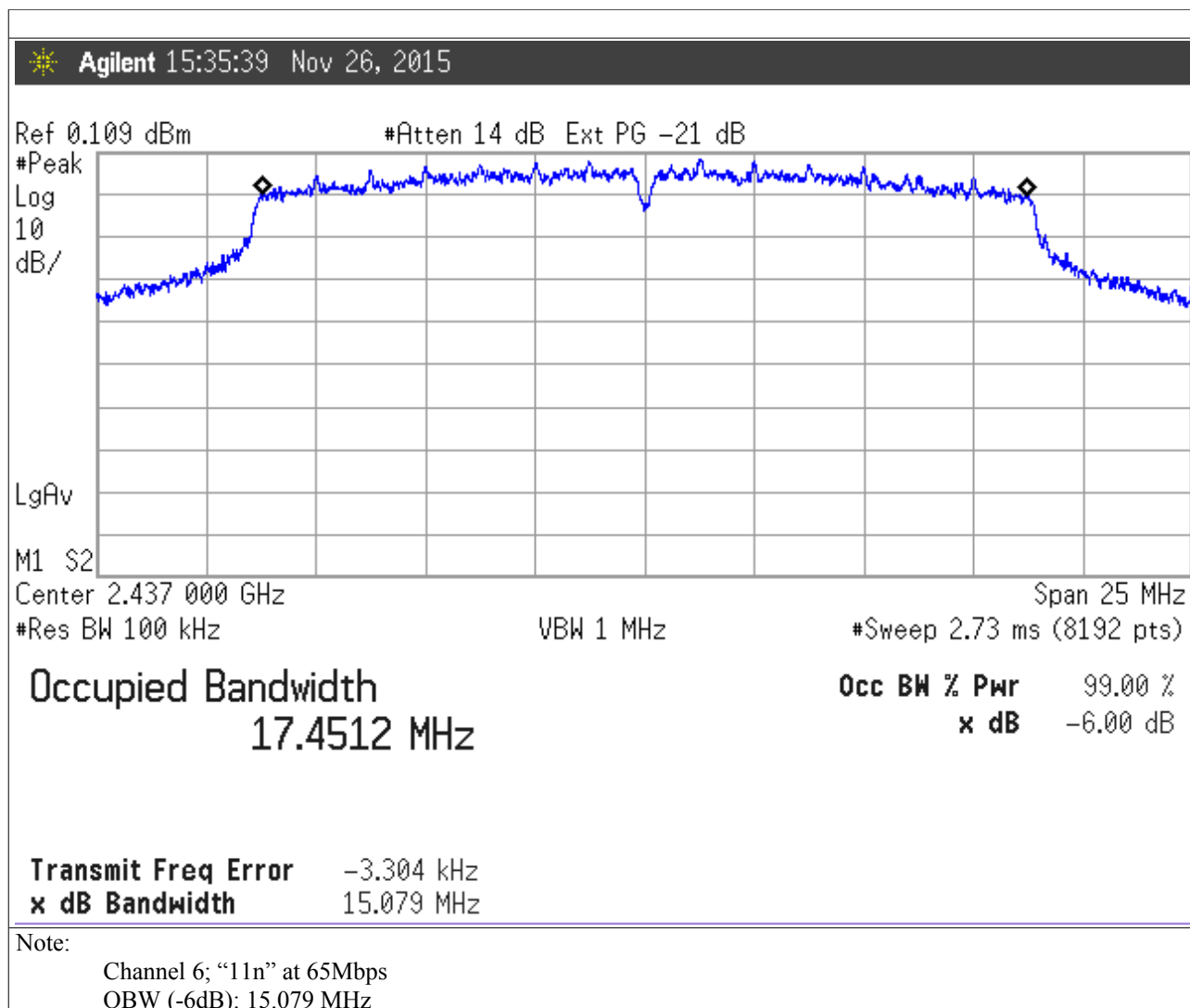


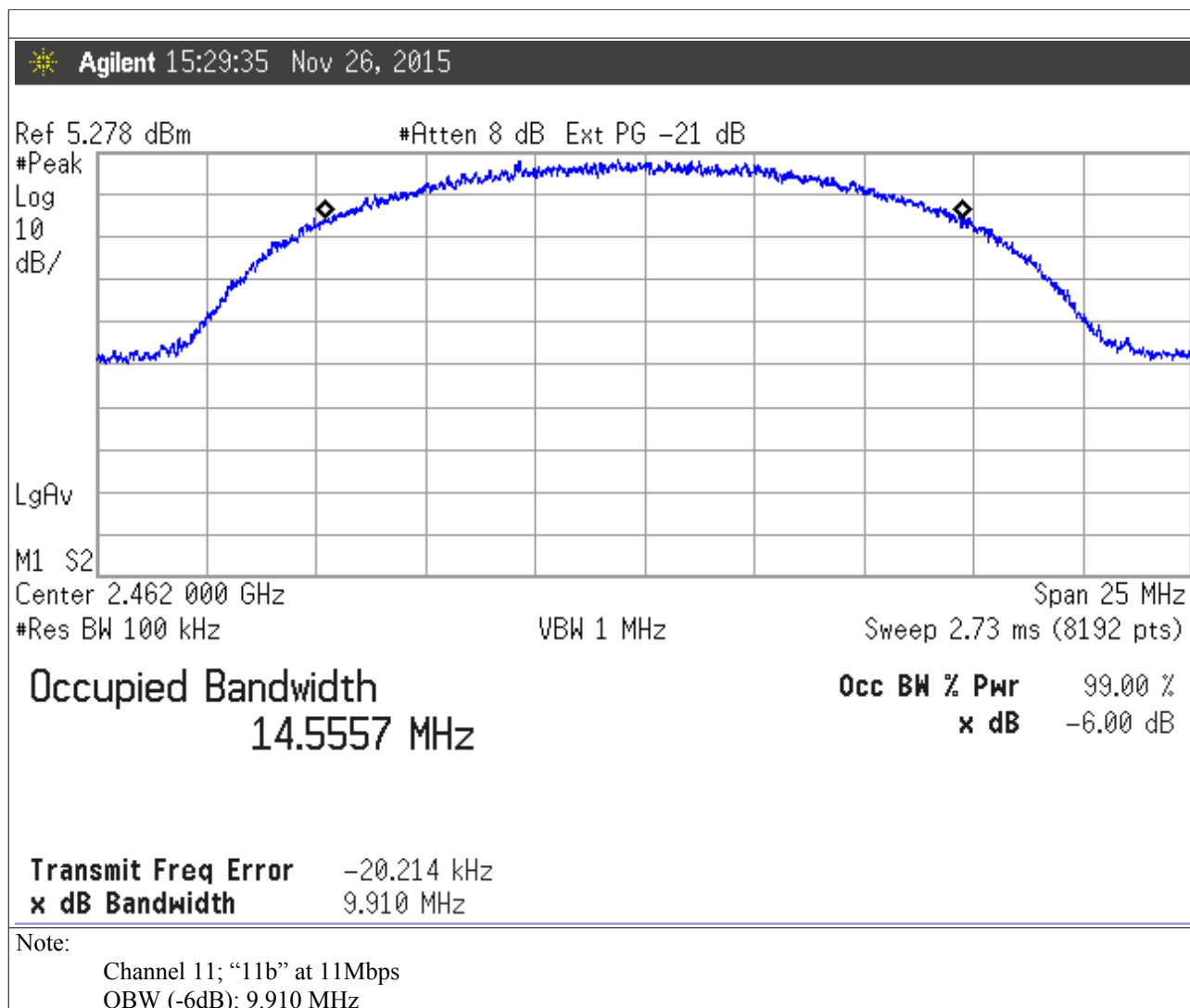


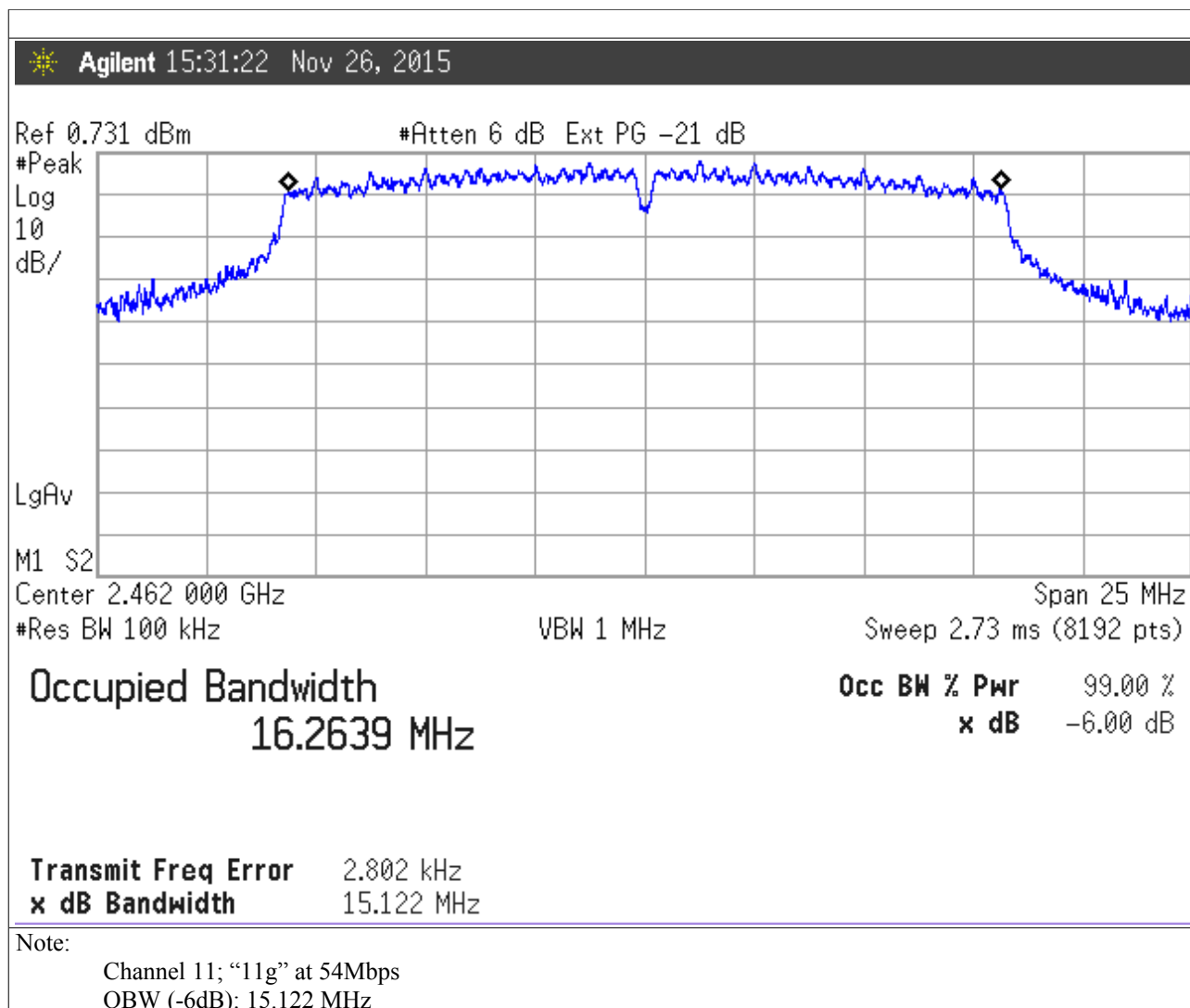


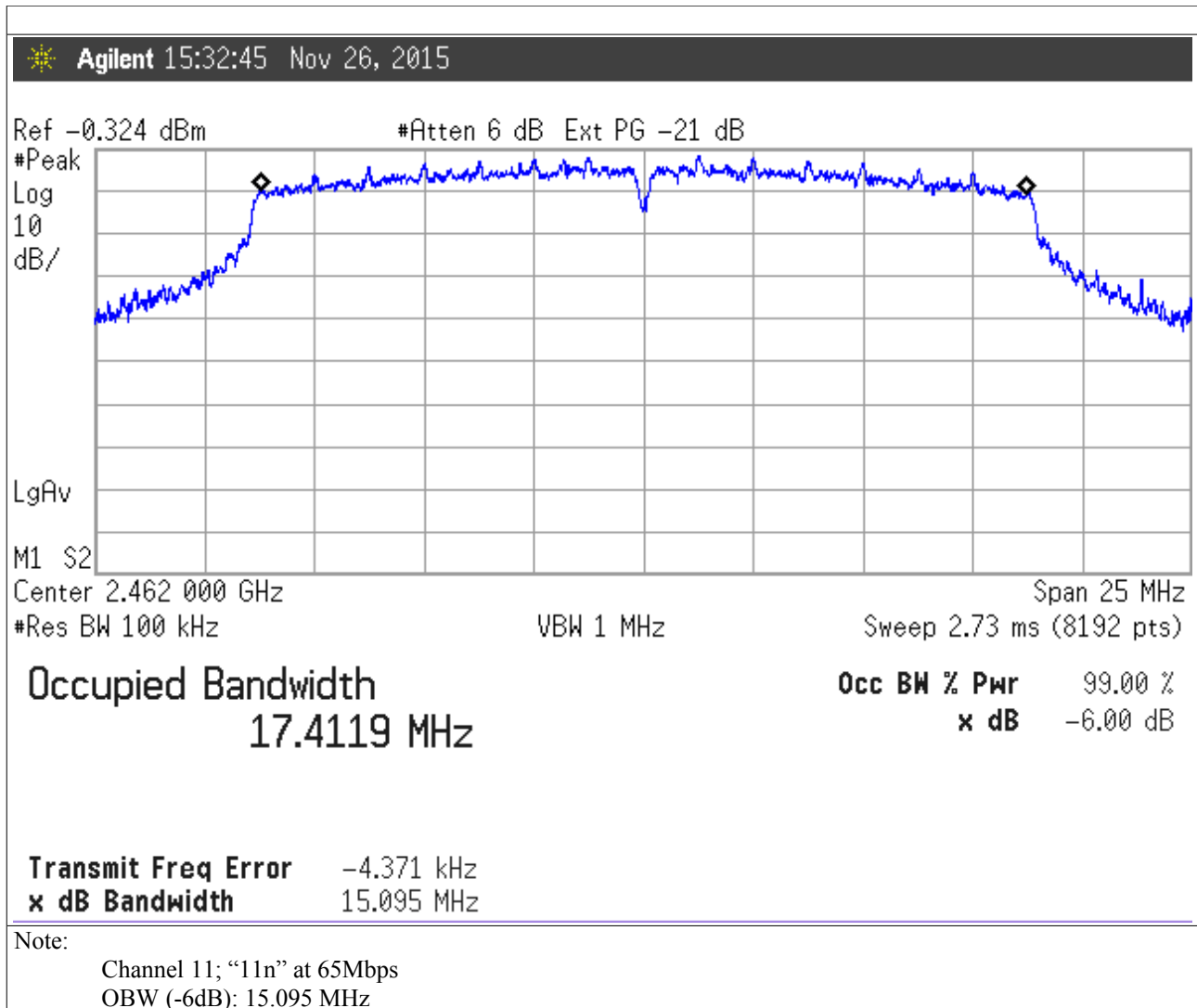












5. MAXIMUM PEAK OUTPUT POWER

Equipment shall meet the limits below .

For systems using digital modulation in the 2400-2483.5 MHz: 1 Watt (+30 dBm).

Test Equipment

EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	Agilent	E4440A	01/2016
Peak Power Meter	Agilent	U2021X	01/2016

Test procedure: APR01

The transmitter output is connected to a spectrum analyzer and the analyzer internal channel power integration is used to integrate the power over a bandwidth greater than or equal to the 26 dB bandwidth.

Test performed on low, middle and high channels and in the b,g,n protocols at maximum data rate for each protocol.

Results:

No non-compliance noted

802.11b Mode, 11 Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Peak Power (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	14.89	30	-15.11
Mid	2437	16.96	30	-13.04
High	2462	16.94	30	-13.06
802.11g Mode, 54 Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Peak Power (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	16.94	30	-13.06
Mid	2437	17.73	30	-12.27
High	2462	17.54	30	-12.46
802.11n Mode, 65Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>Peak Power (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	14.81	30	-15.19
Mid	2437	17.15	30	-12.85
High	2462	17.05	30	-12.95

6. BAND EDGE AND CONDUCTED SPURIOUS EMISSIONS

Equipment shall meet the limits below .

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

Test Equipment

EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	Agilent	E4440A	01/2016

Test procedure: APR01

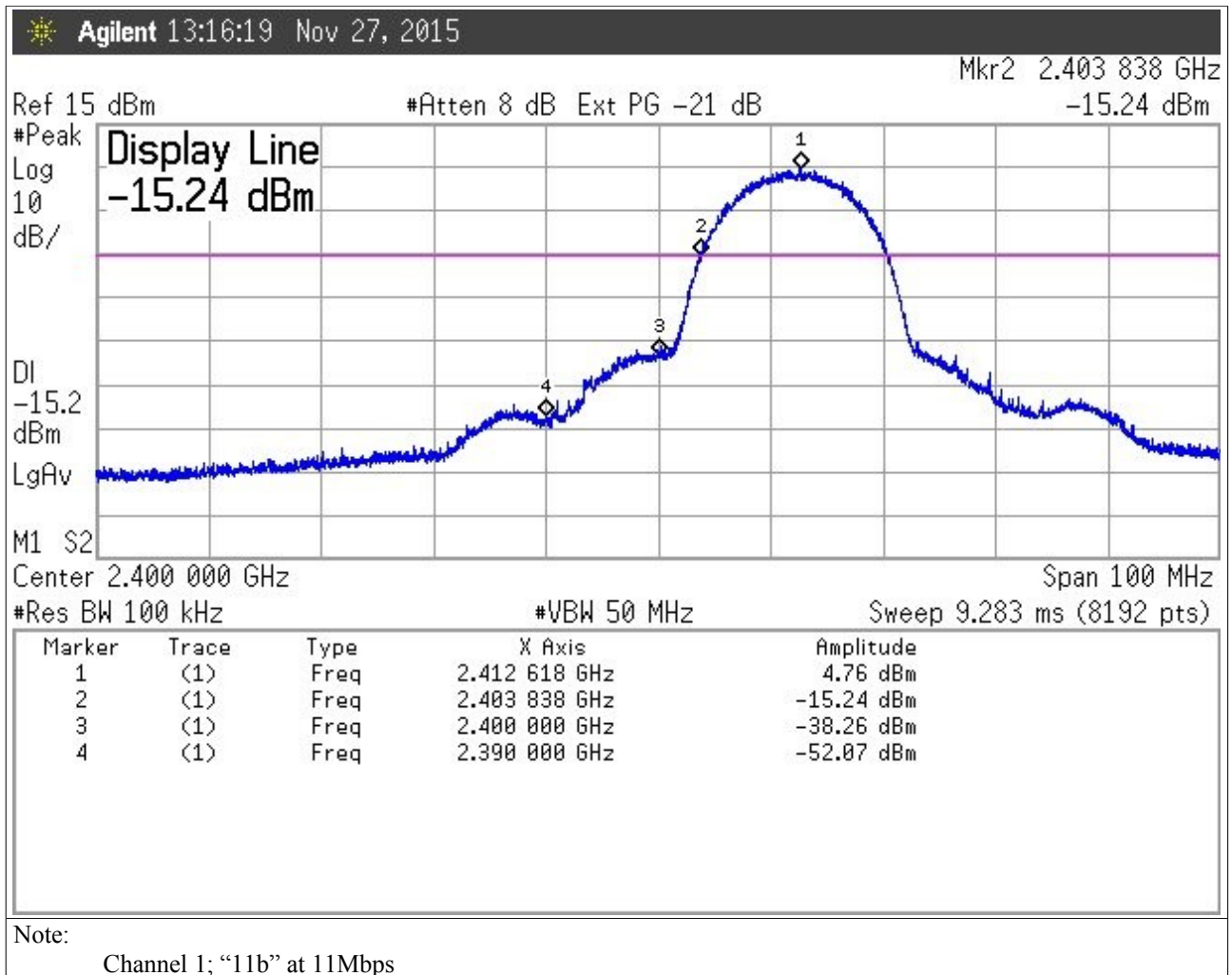
Test performed on low, middle and high channels and in the b,g,n protocols at maximum and minimum data rate for each protocol.

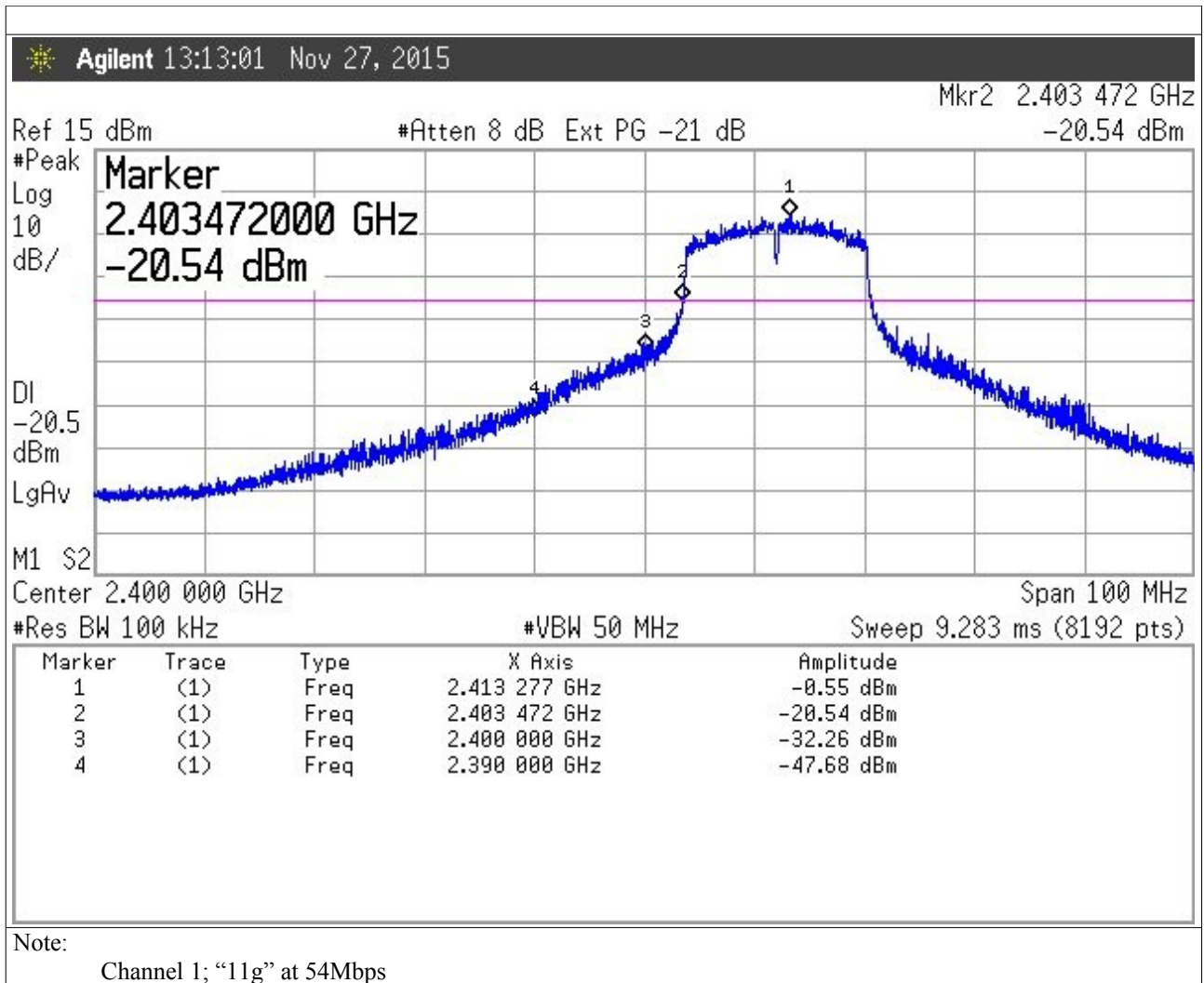
Results:

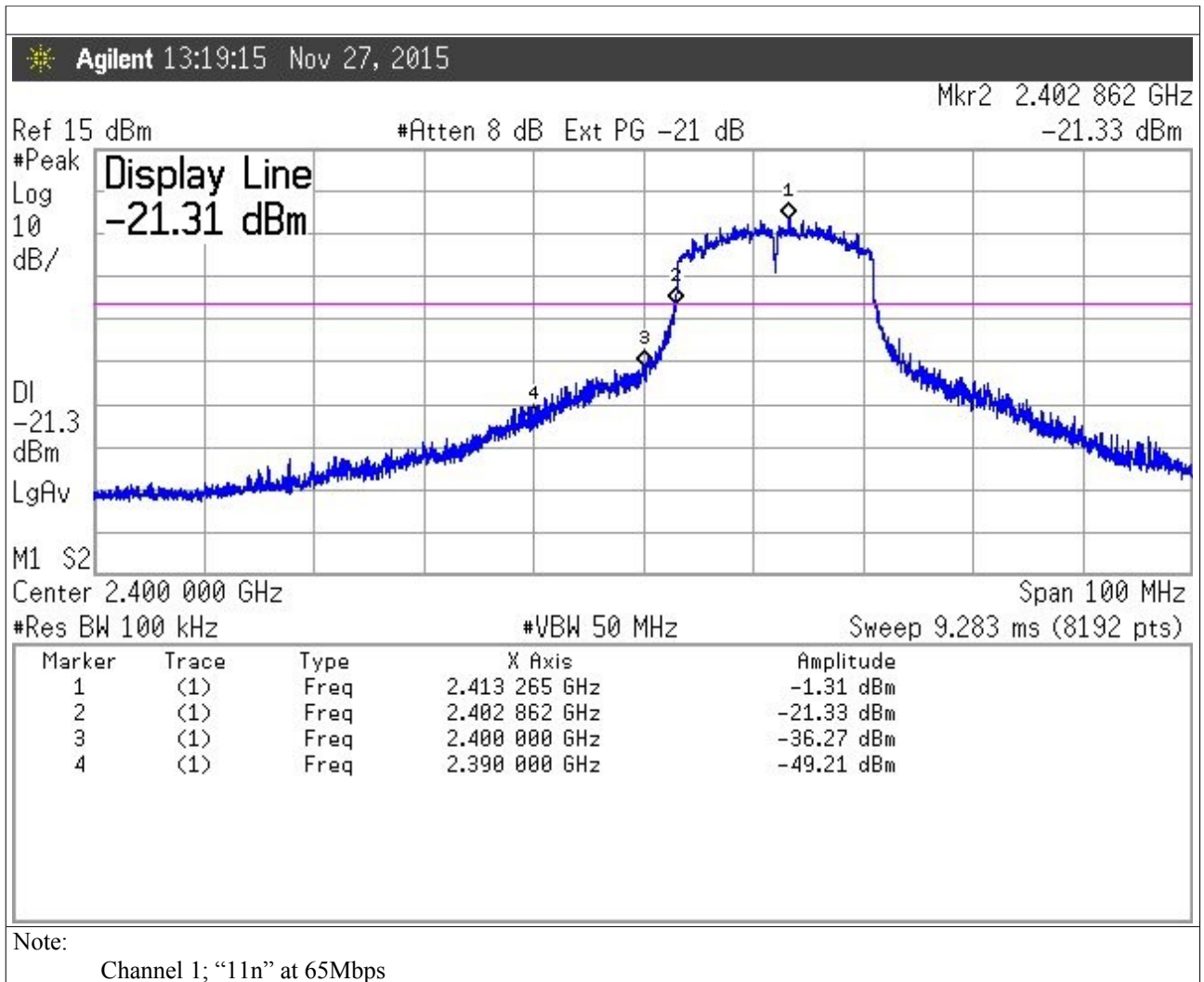
No non-compliance noted

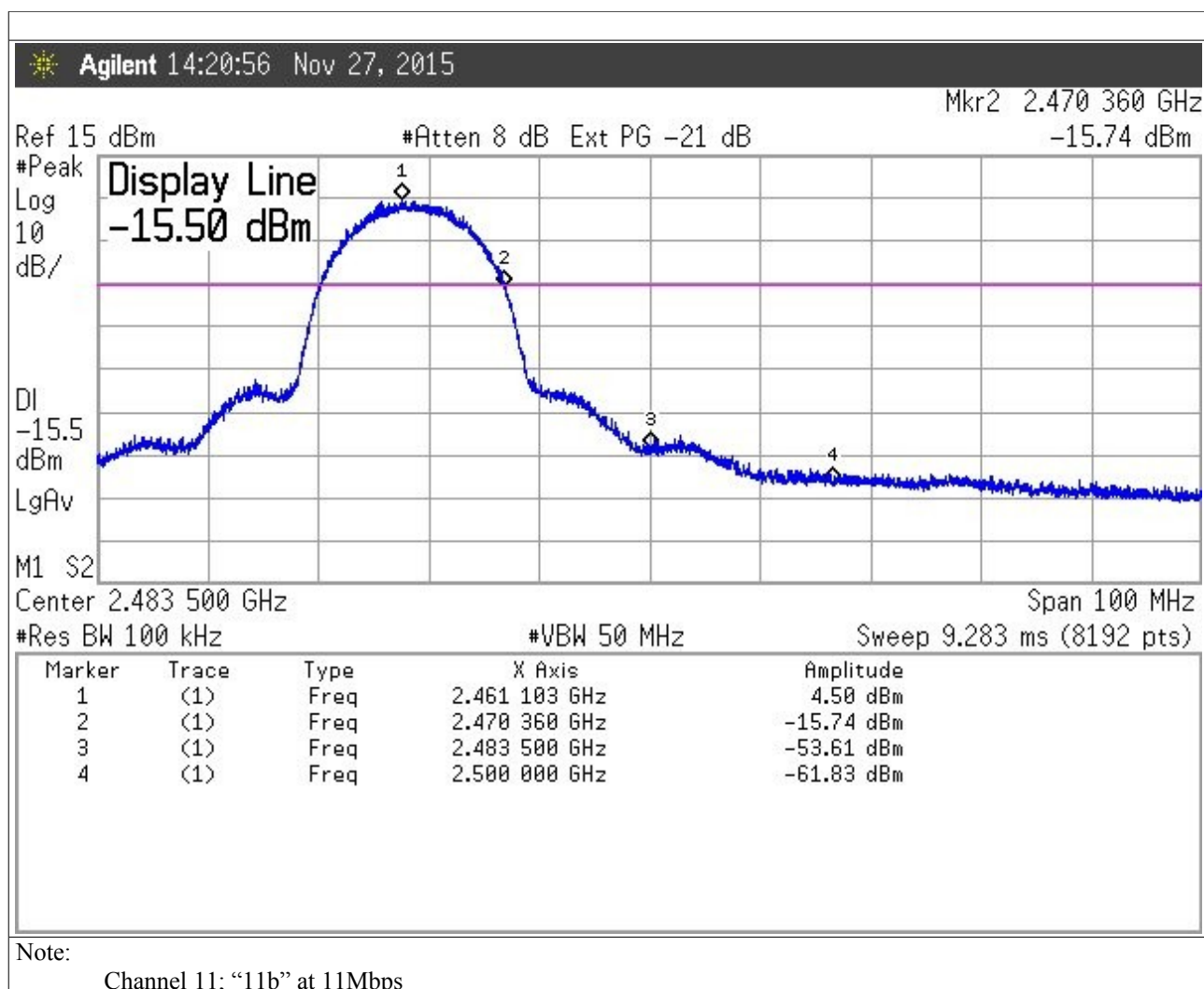
The following figures show the results.

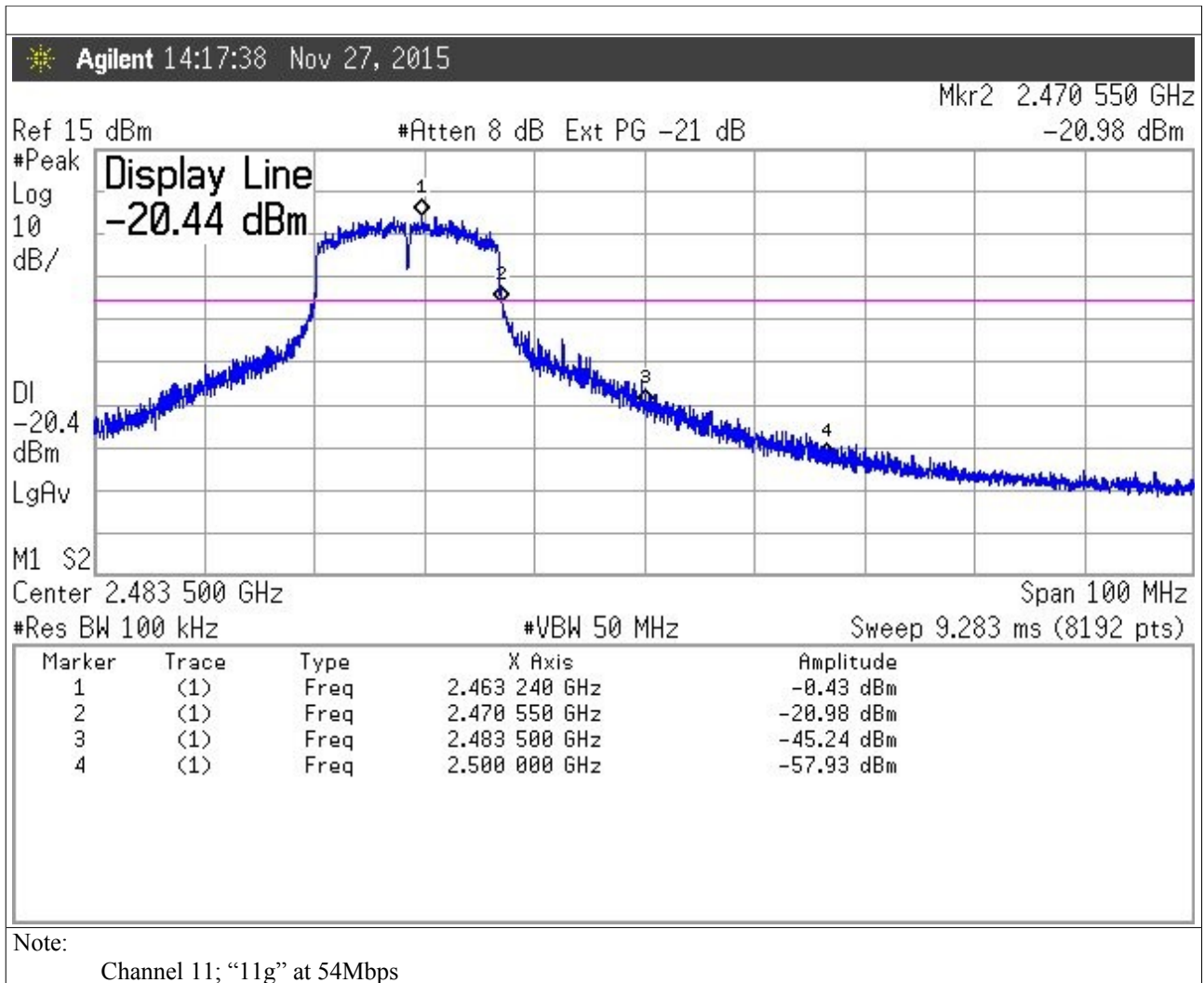
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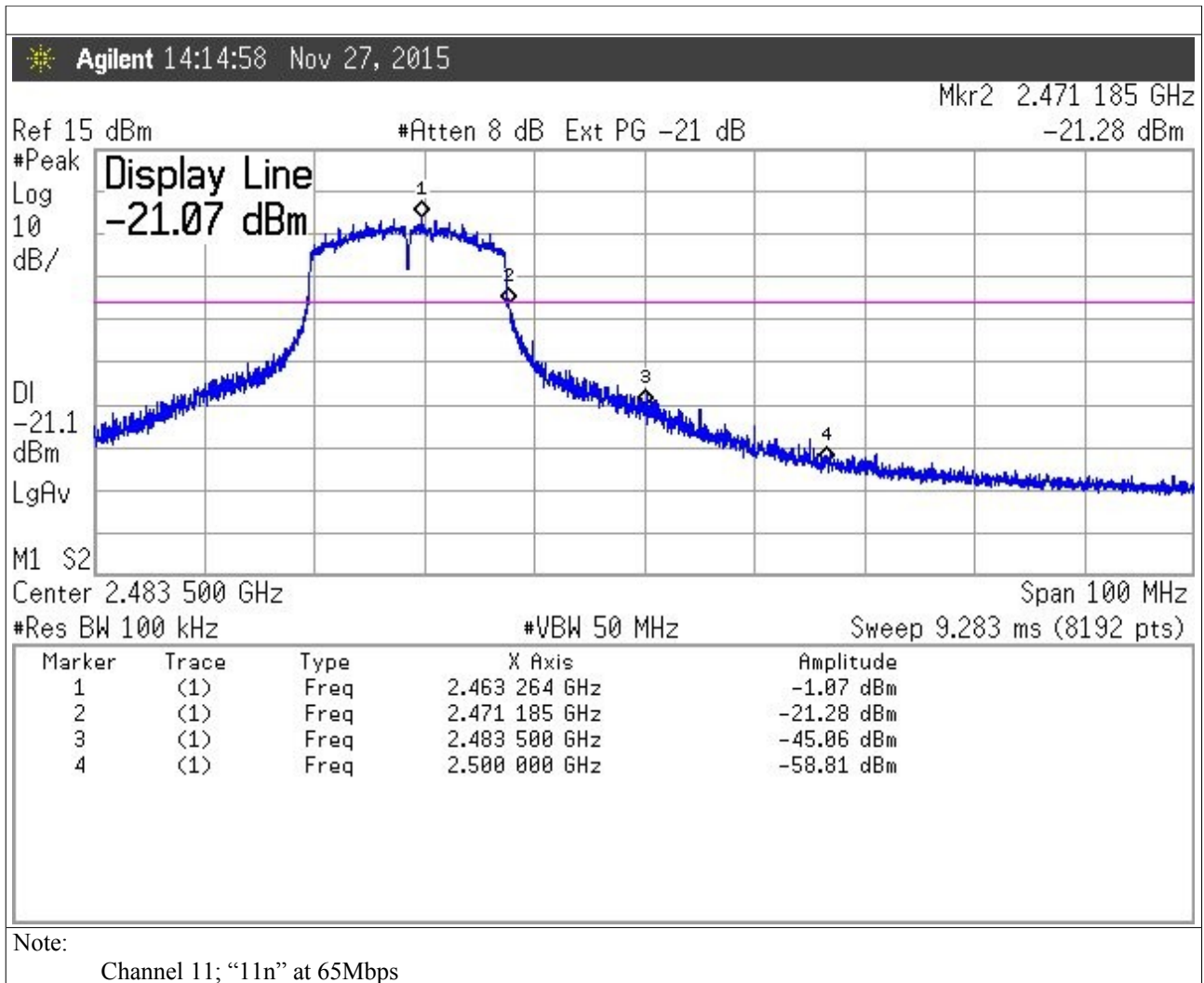


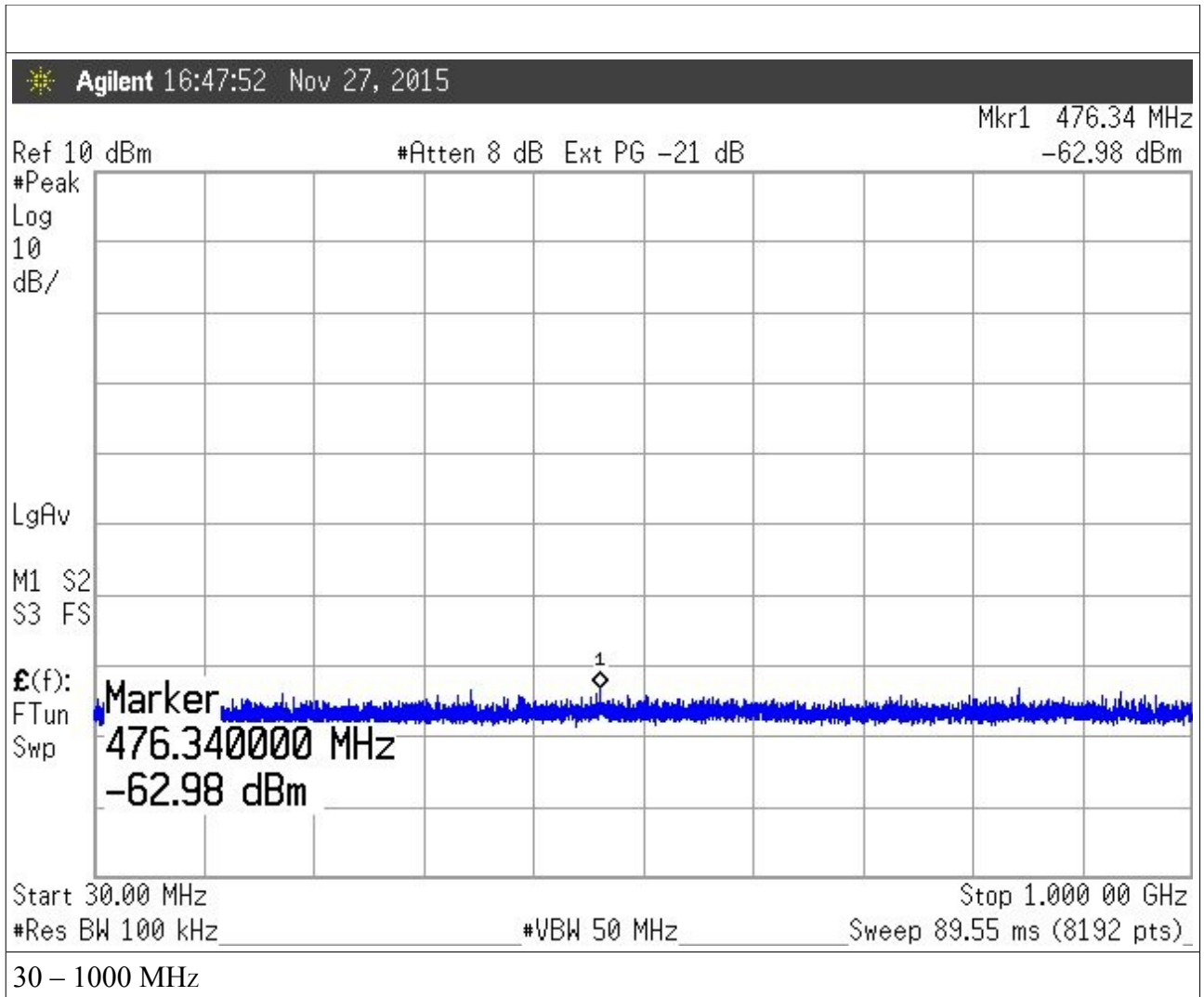


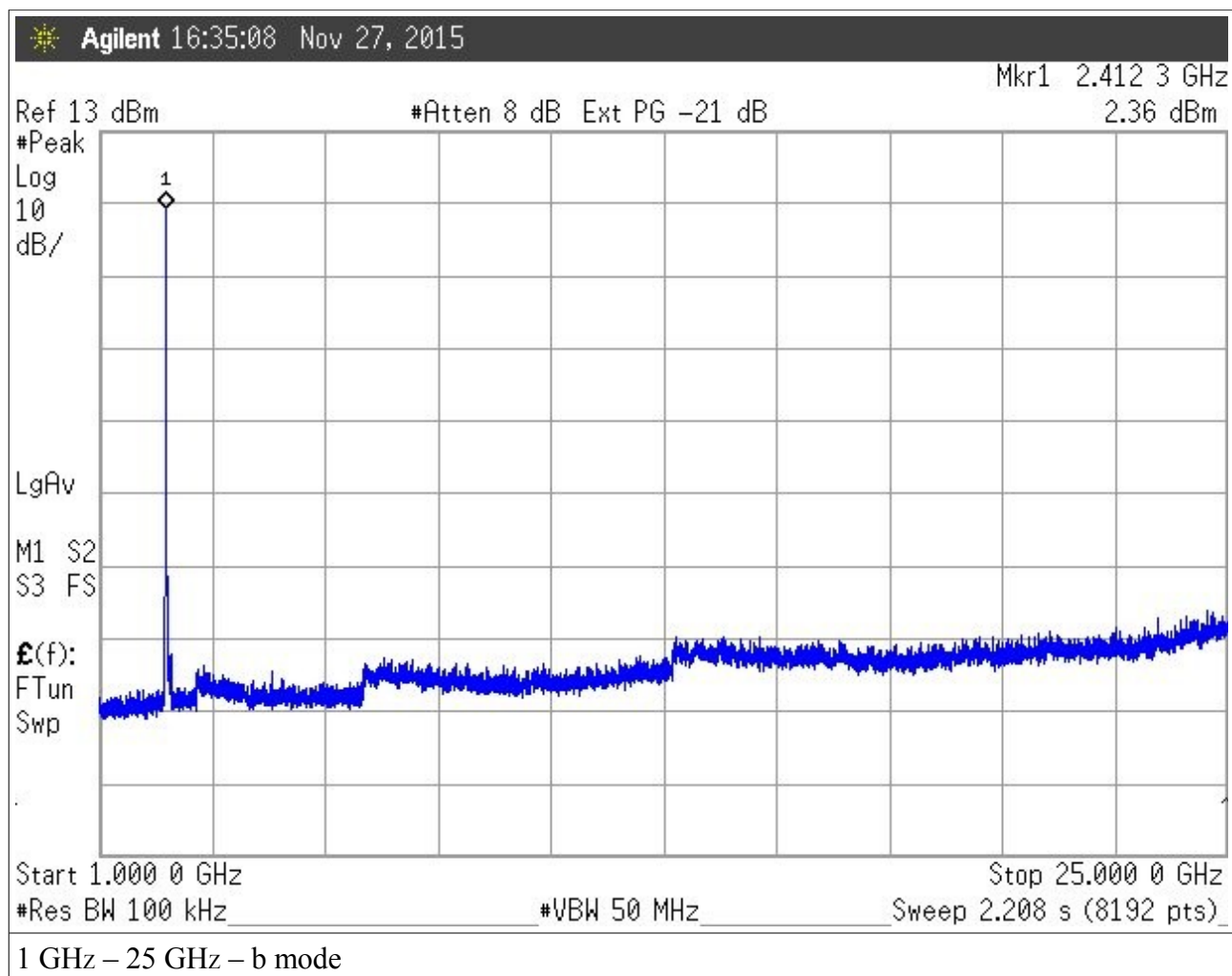


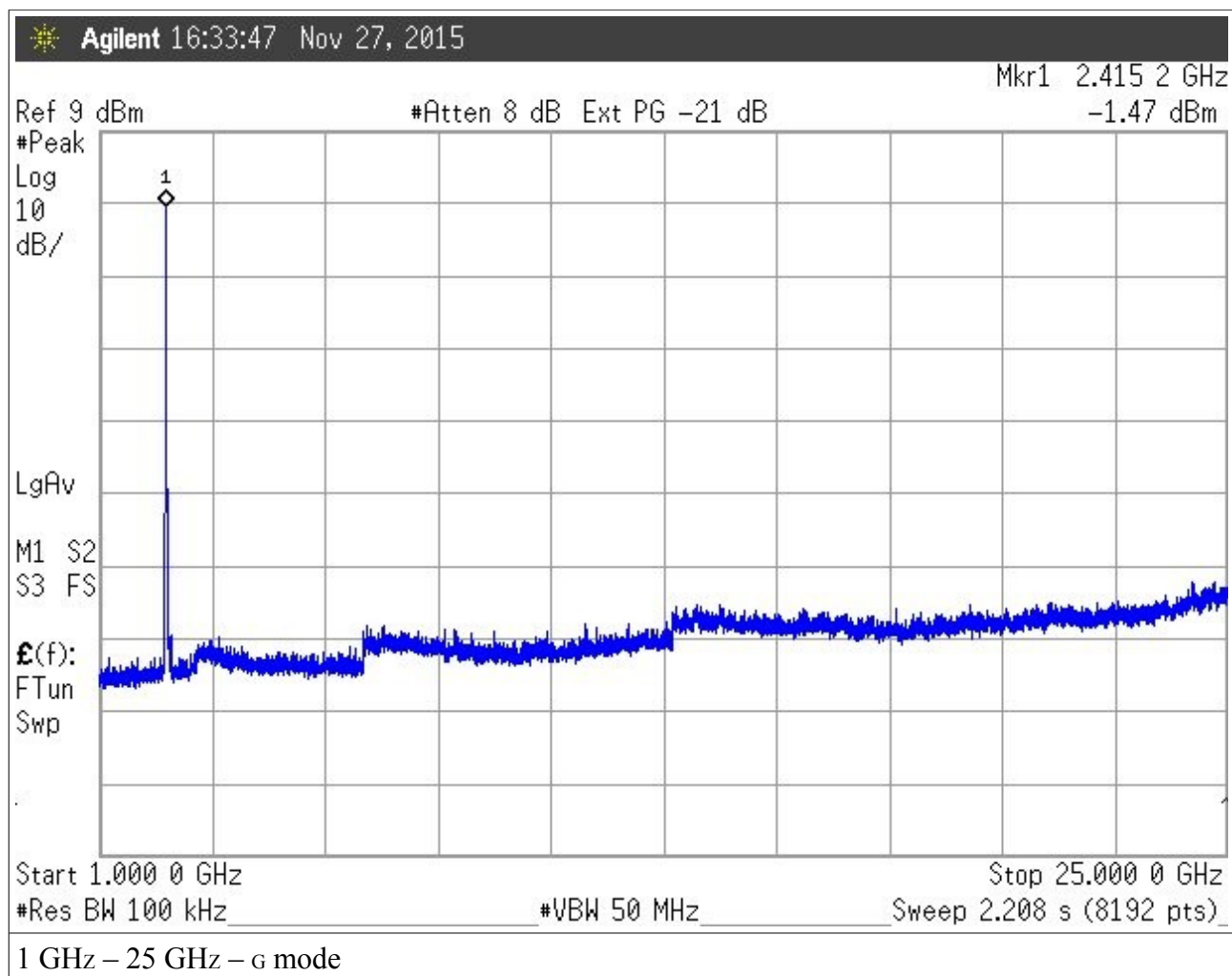


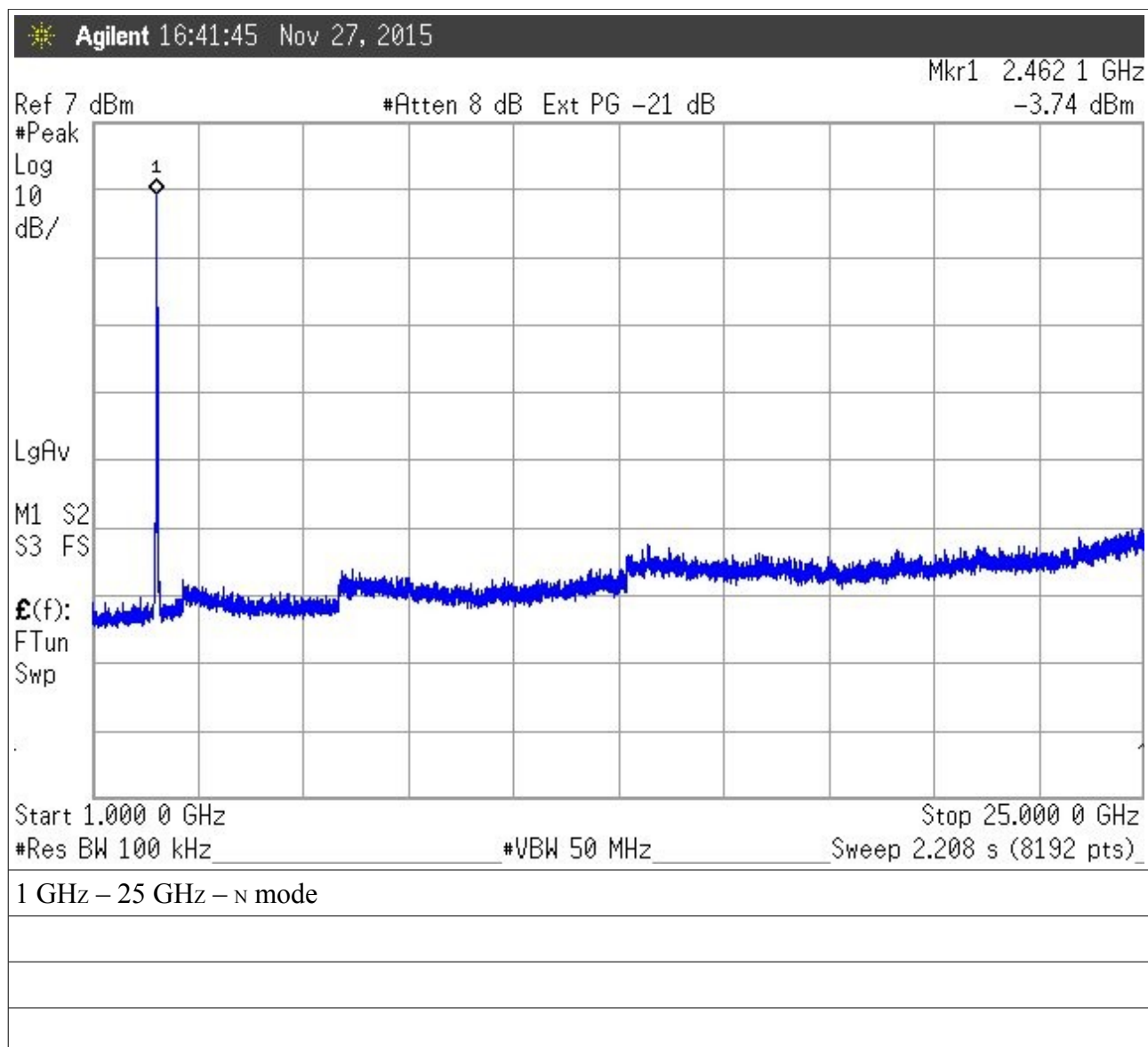












7. PEAK POWER SPECTRAL DENSITY

Equipment shall meet the limits below .

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Test Equipment

EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	Agilent	E4440A	01/2016

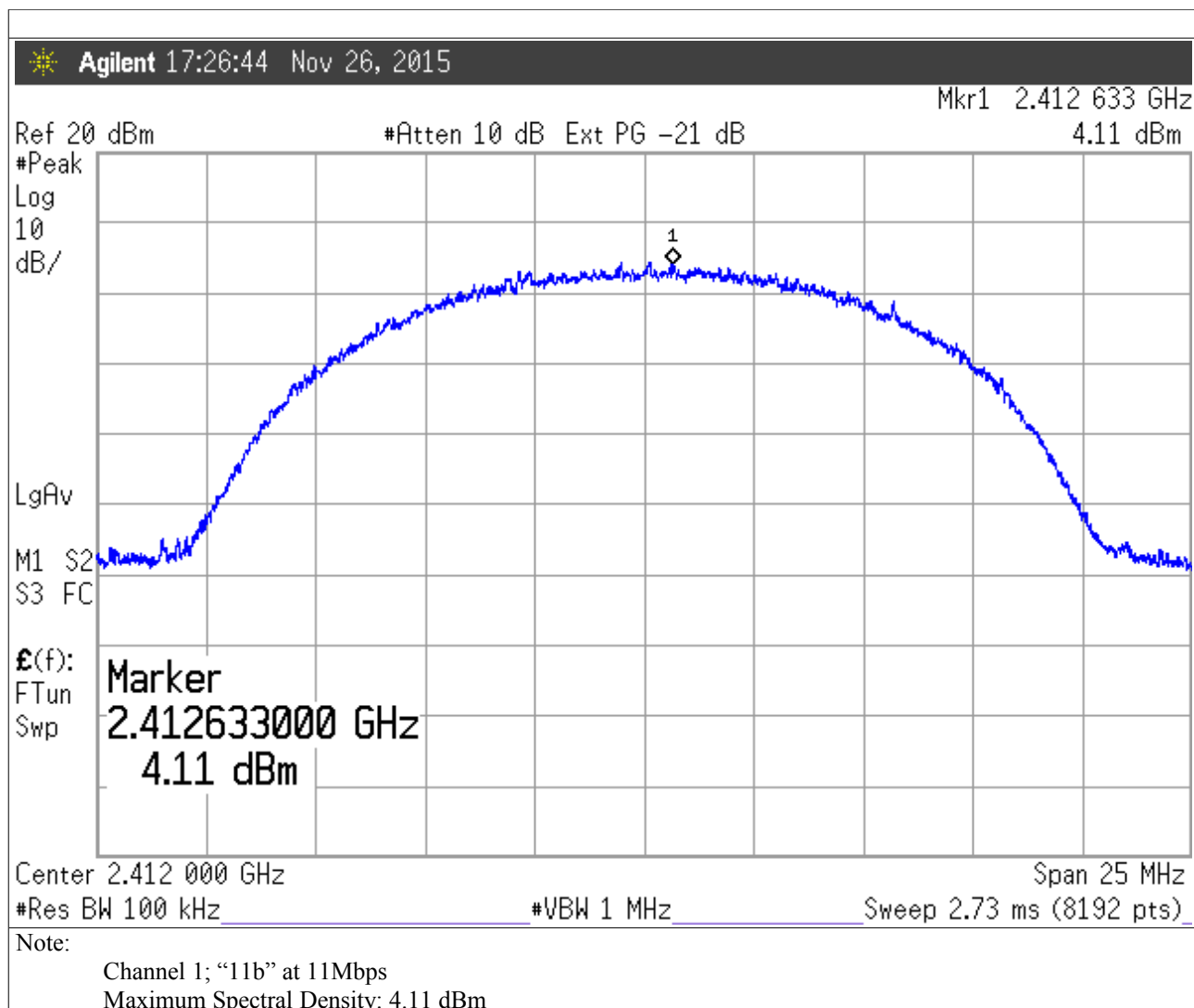
Test procedure: APR01

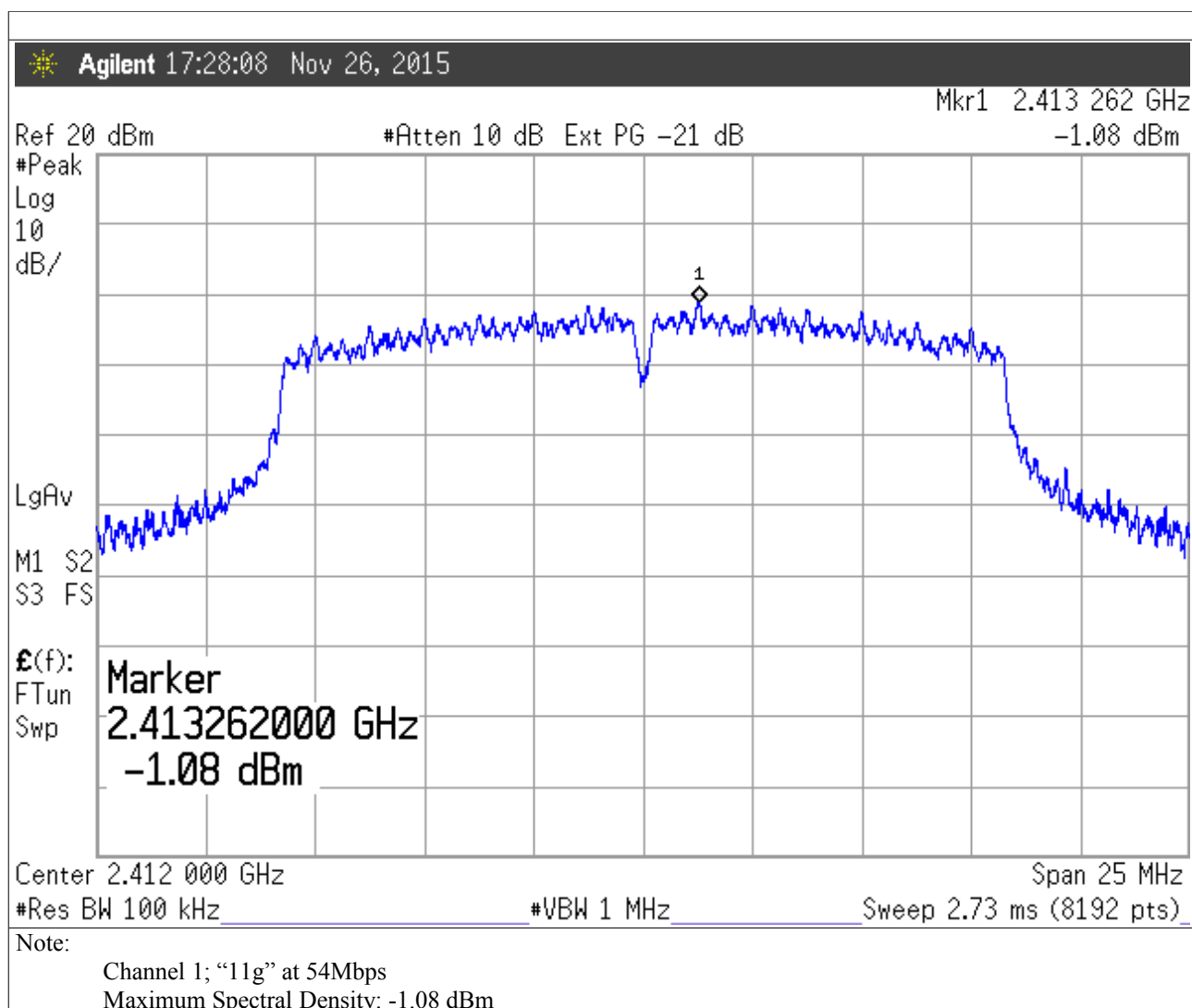
Test performed on low, middle and high channels and in the b,g,n protocols at maximum and minimum data rate for each protocol.

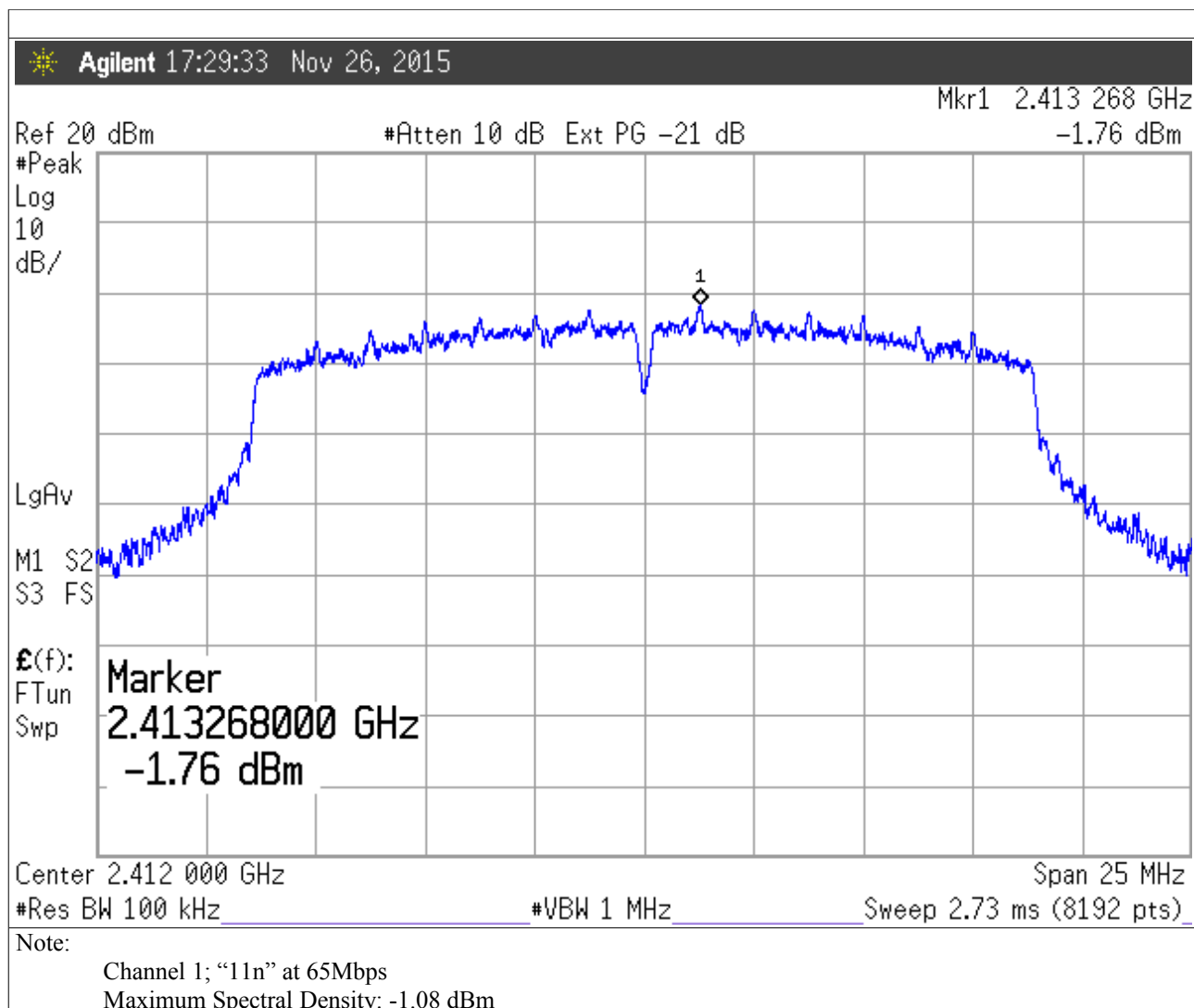
Results:

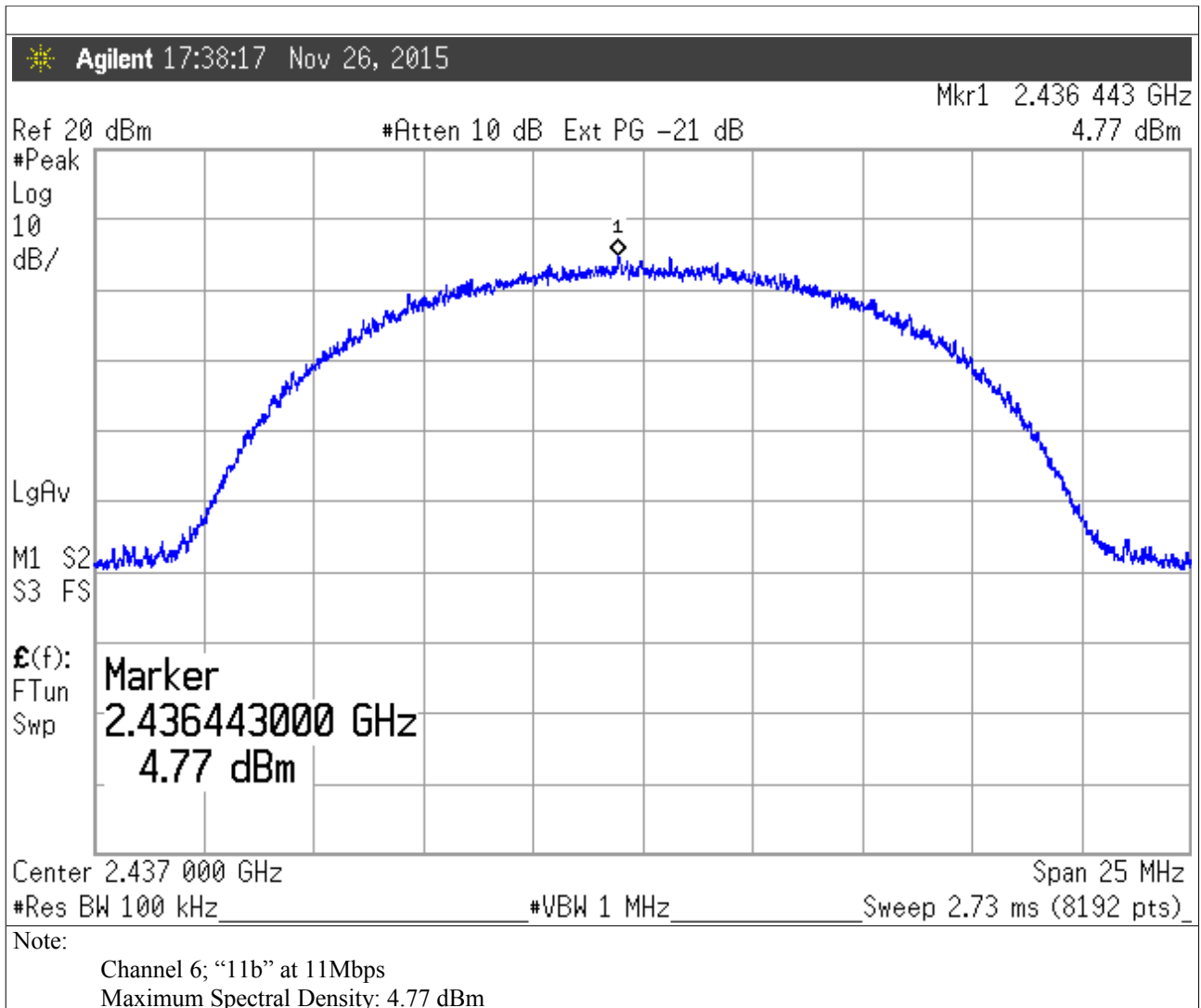
No non-compliance noted

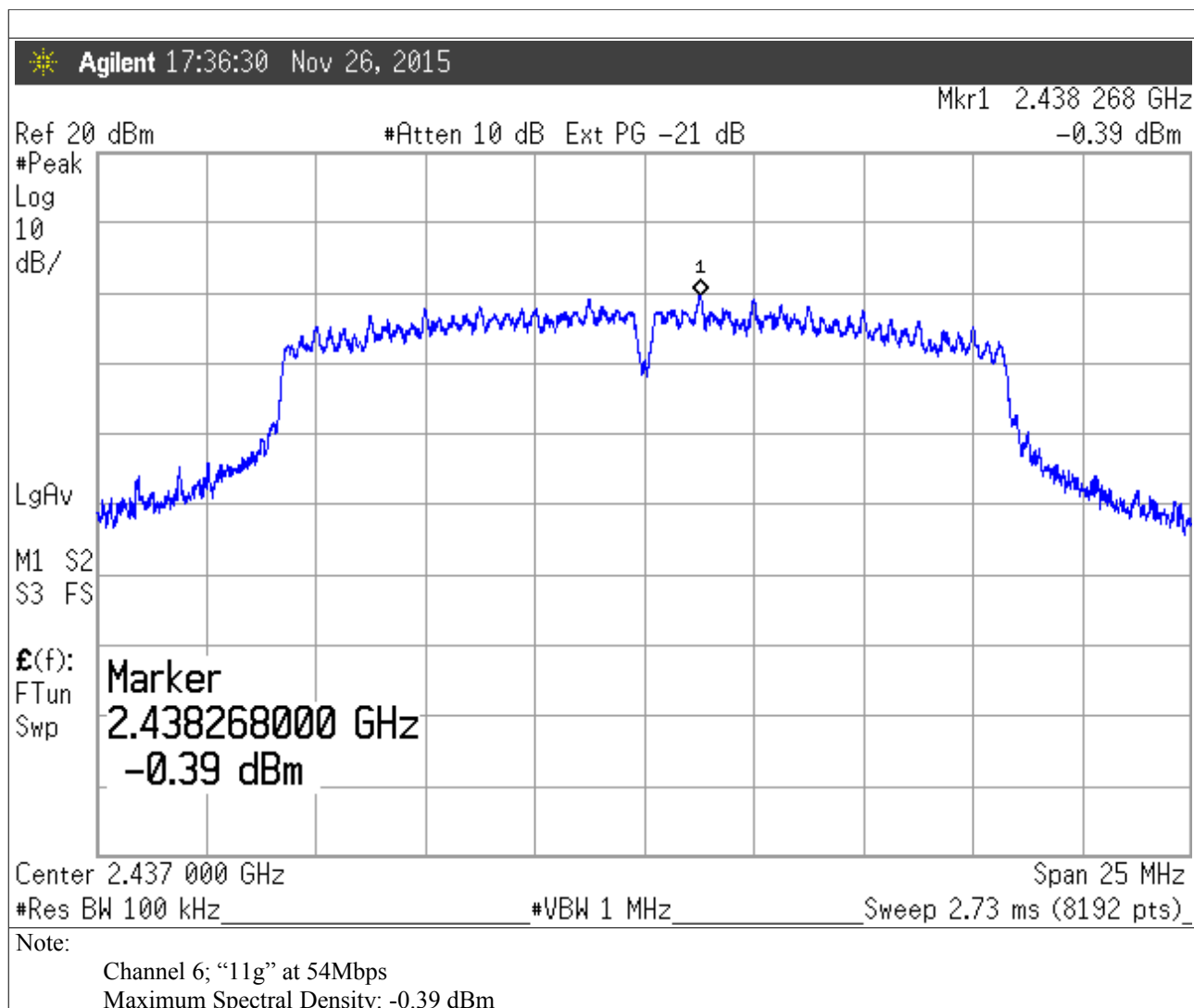
802.11b Mode, 11 Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>PPSD (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	4.11	8	-3.89
Mid	2437	4.77	8	-3.23
High	2462	4.11	8	-3.89
802.11g Mode, 54 Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>PPSD (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	-1.08	8	-9.08
Mid	2437	-0.39	8	-8.39
High	2462	-1.27	8	-9.27
802.11n Mode, 65 Mbs				
<i>Channel</i>	<i>Frequency (MHz)</i>	<i>PPSD (dBm)</i>	<i>Limit (dBm)</i>	<i>Margin (dB)</i>
Low	2412	-1.08	8	-9.08
Mid	2437	-1.38	8	-9.38
High	2462	-1.77	8	-9.77
The following figures show the results.				

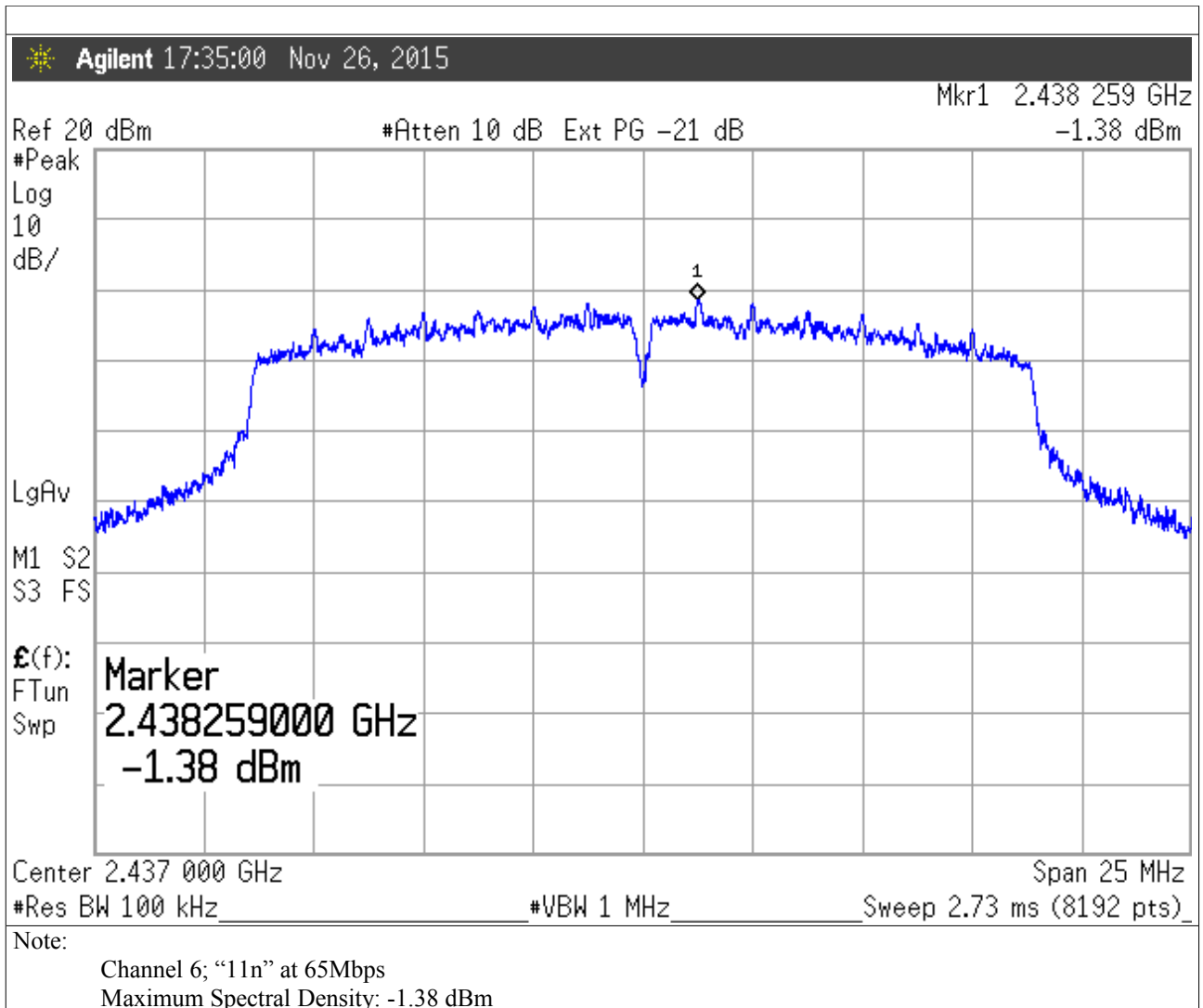


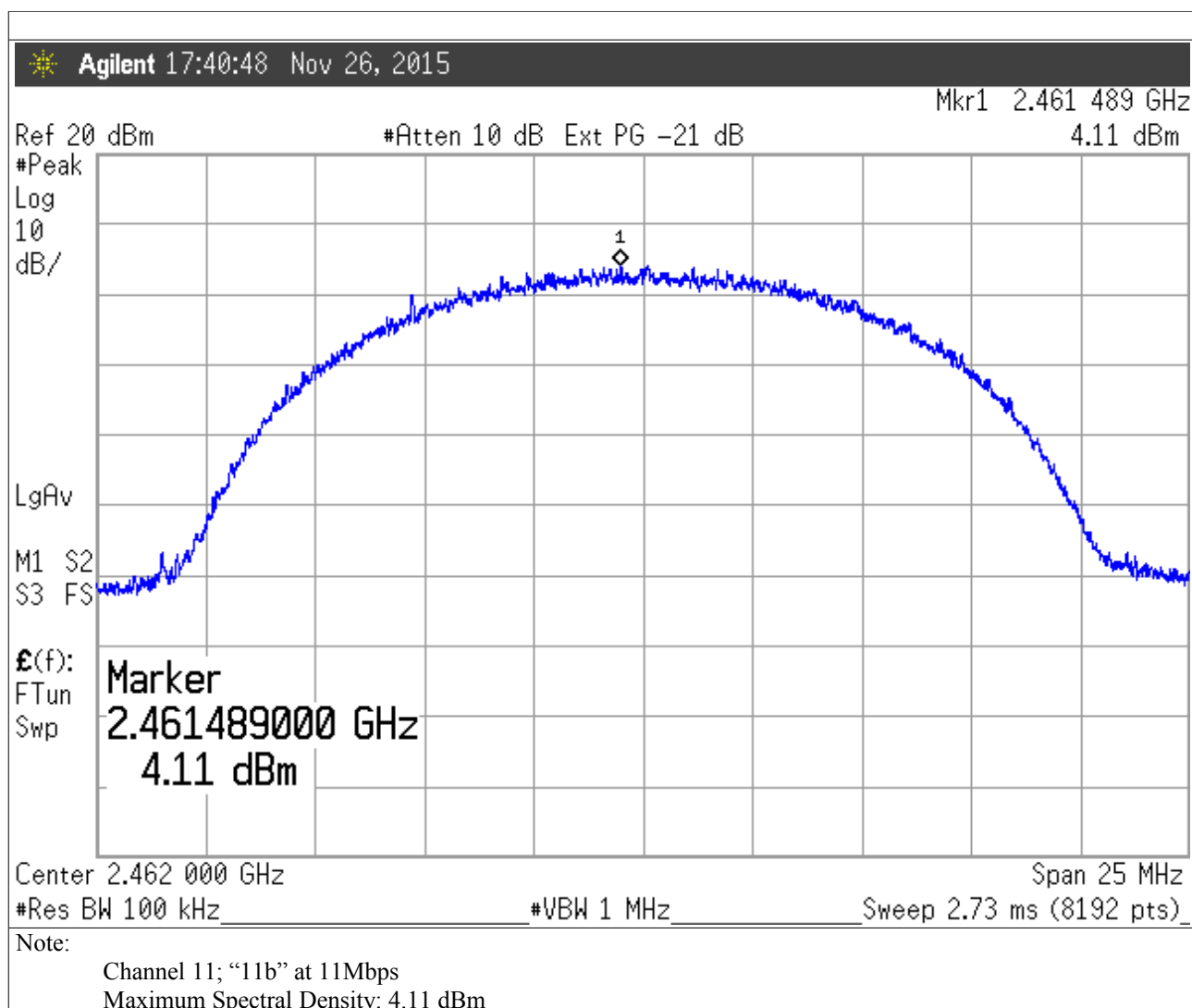


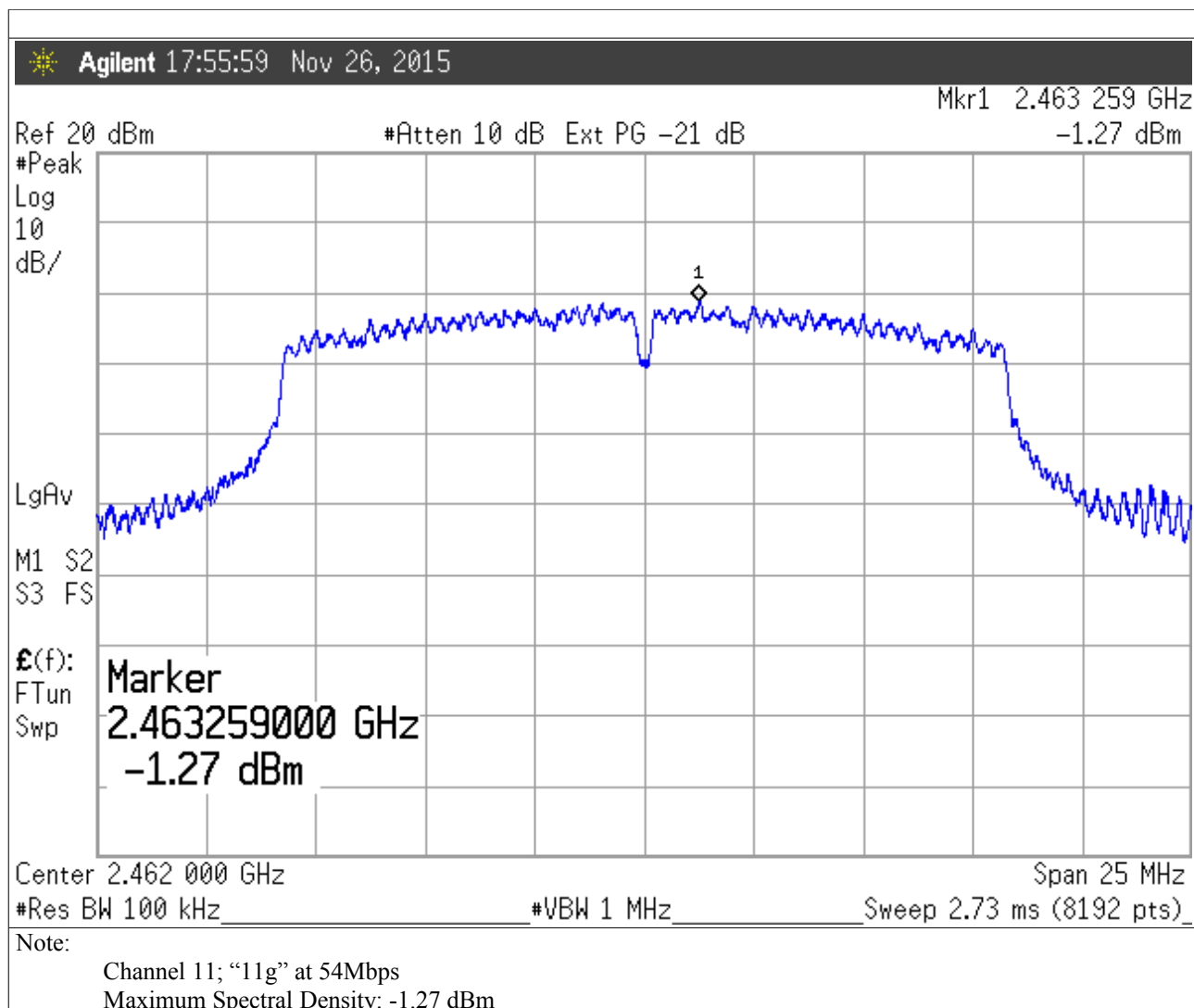


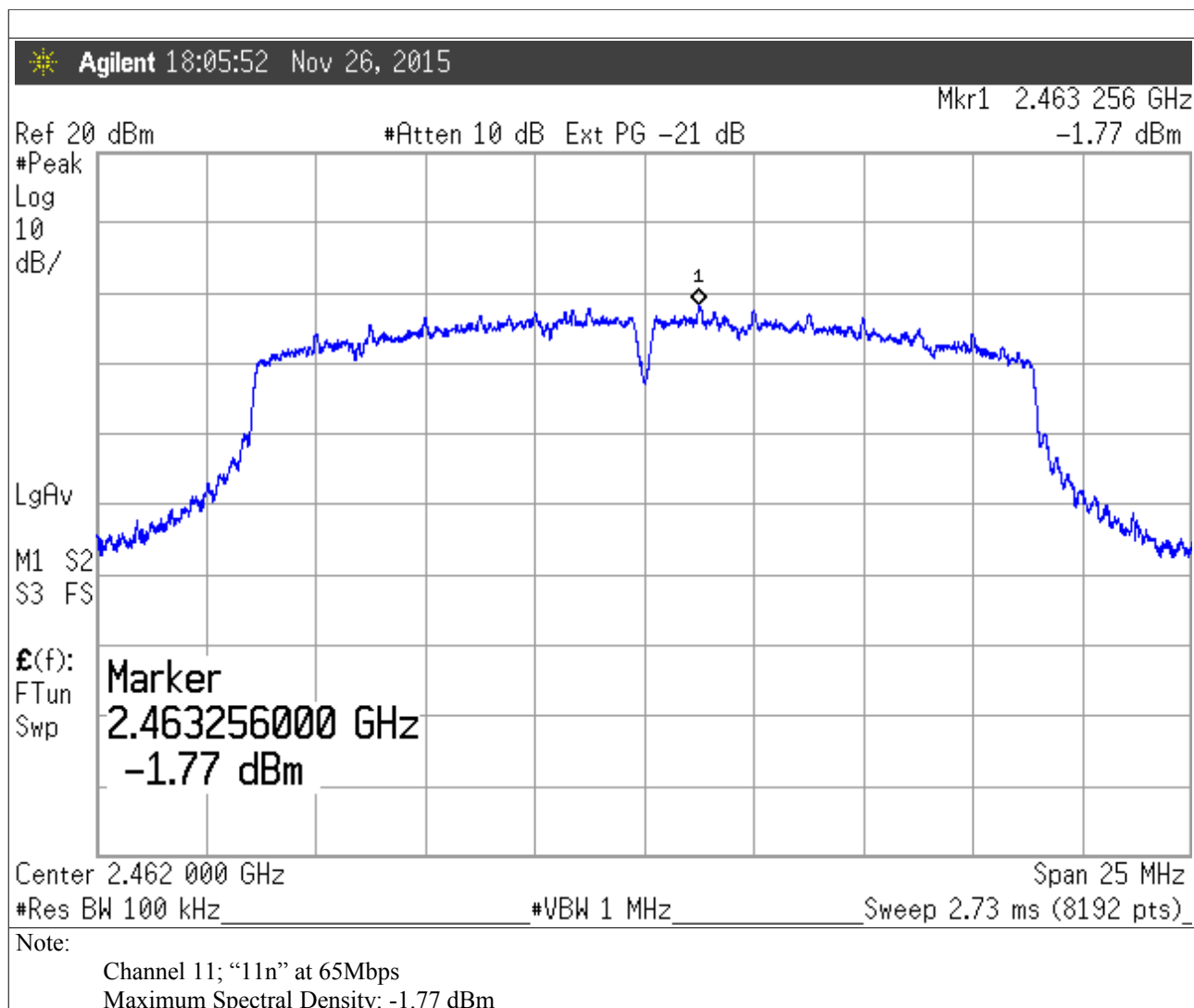












8. CONDUCTED EMISSIONS

Equipment shall meet the limits below when using a CISPR16 quasi-peak and average detector receivers.

^(*) Limit decreasing linearly with logarithm of frequency

FCC, EN 55022 Class B Limit

FREQUENCY RANGE (MHz)	QUASI-PEAK LIMIT [dB (μV)]	AVERAGE LIMIT [dB (μV)]
0.15 – 0.50	66 – 56 ^(*)	56 – 46 ^(*)
0.50 – 5	56	46
5 – 30	60	50

^(*) Limit decreasing linearly with logarithm of frequency

Test Equipment

EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	HP	HP8546A	01/2016
EMI Receiver Filter Section	HP	HP85460A	01/2016
LISN	GSD	NTW01	01/2016
Screened Room	GSD	CSC01	01/2016

Test procedure: CE22R01

Test method

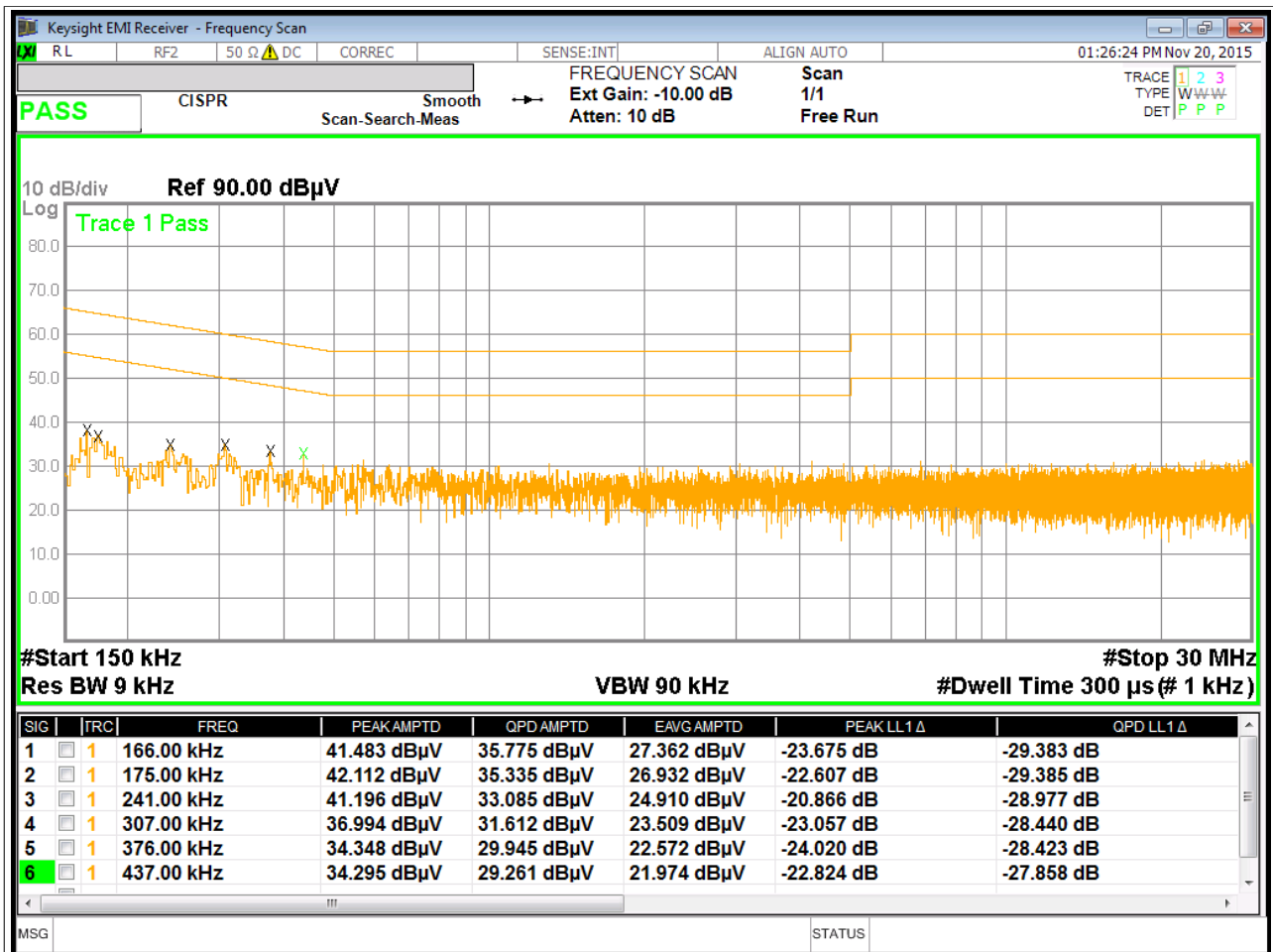
Test method was in accordance with the reference standard.

EUT modes of operations were tested in order to achieve the maximum level of emission.

Results

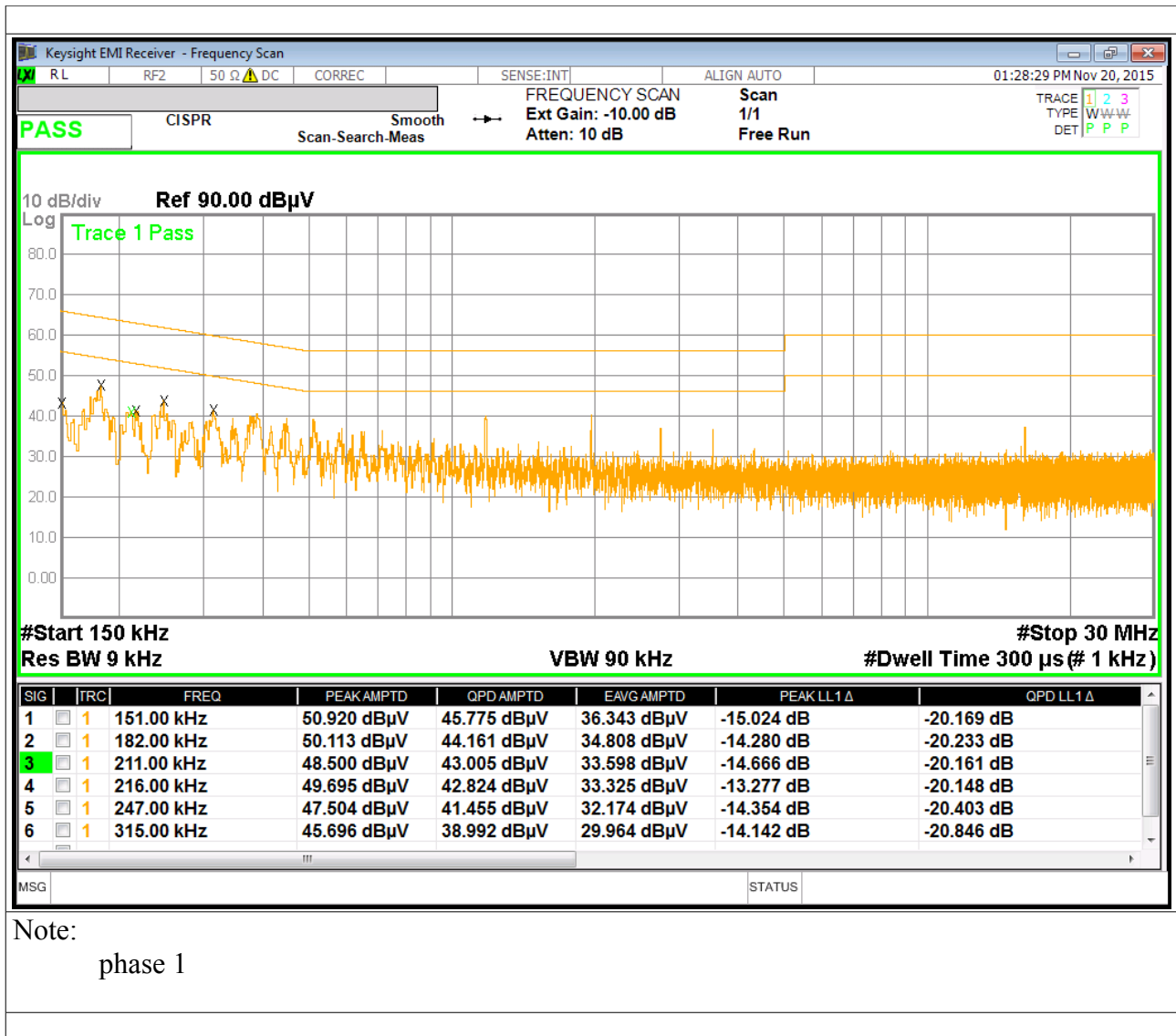
Equipment complied with the test specification limits.

Graphics in following figures show some registrations of the frequency spectrum of the conducted emissions.



Note:

phase 2



9. RADIATED EMISSIONS

In the following table you can find the limits established by the reference standard:

FCC

<i>DISTANCE</i> (m)	<i>FREQUENCY RANGE</i> (MHz)	<i>QUASI-PEAK LIMITS</i> [dB (μV/m)]	<i>AVERAGE LIMITS</i> [dB (μV/m)]
300	0,009 – 0,49	48,52 – 13,8	
30	0,49 – 1,705	33,8 – 22,97	
30	1,705 - 30	29.54	
3	30 – 88	40	--
3	88 – 216	43,5	--
3	216 – 960	46	--
3	960 – 1000	54	--
3	Above 1000	--	54

Test Equipment

EQUIPMENT	MANUFACTURER	MODEL	CAL. DATE
EMI Receiver	HP	HP8546A	01/2016
EMI Receiver Filter Section	HP	HP85460A	01/2016
EMI Receiver	Agilent	E4440A	01/2016
EMI Receiver Filter Section	Agilent	N9039A	01/2016
Anechoic Chamber	Comtest	CSA01	01/2016
Horn Antenna (1-18 GHz)	EMCO	3115	01/2016
Loop Antenna	EMCO	6512	01/2016
Horn Antenna (18-26.5 GHz)	Alpha Ind. Inc.	100655A	01/2016
Bilog Antenna	Schaffner	CBL6112B	01/2016
Controller	Deisel	HD100	01/2016
Turn Table	Deisel	MA240	01/2016

Test procedure: RE22R02**Notes**

Azimuth position EUT-Antenna corresponding to 0° identifies the rotating table orientation (TT) in which the instrument to be tested shows the front part turned towards the antenna. Positive grades individuate clockwise rotations of TT when this one is observed from the top. For negative

degrees, TT rotation is anticlockwise.

Antenna height respect to the mass plane is conventionally individuated with: MA=XXX where XXX indicates the height (always positive for $e > 100$) expressed in cm.

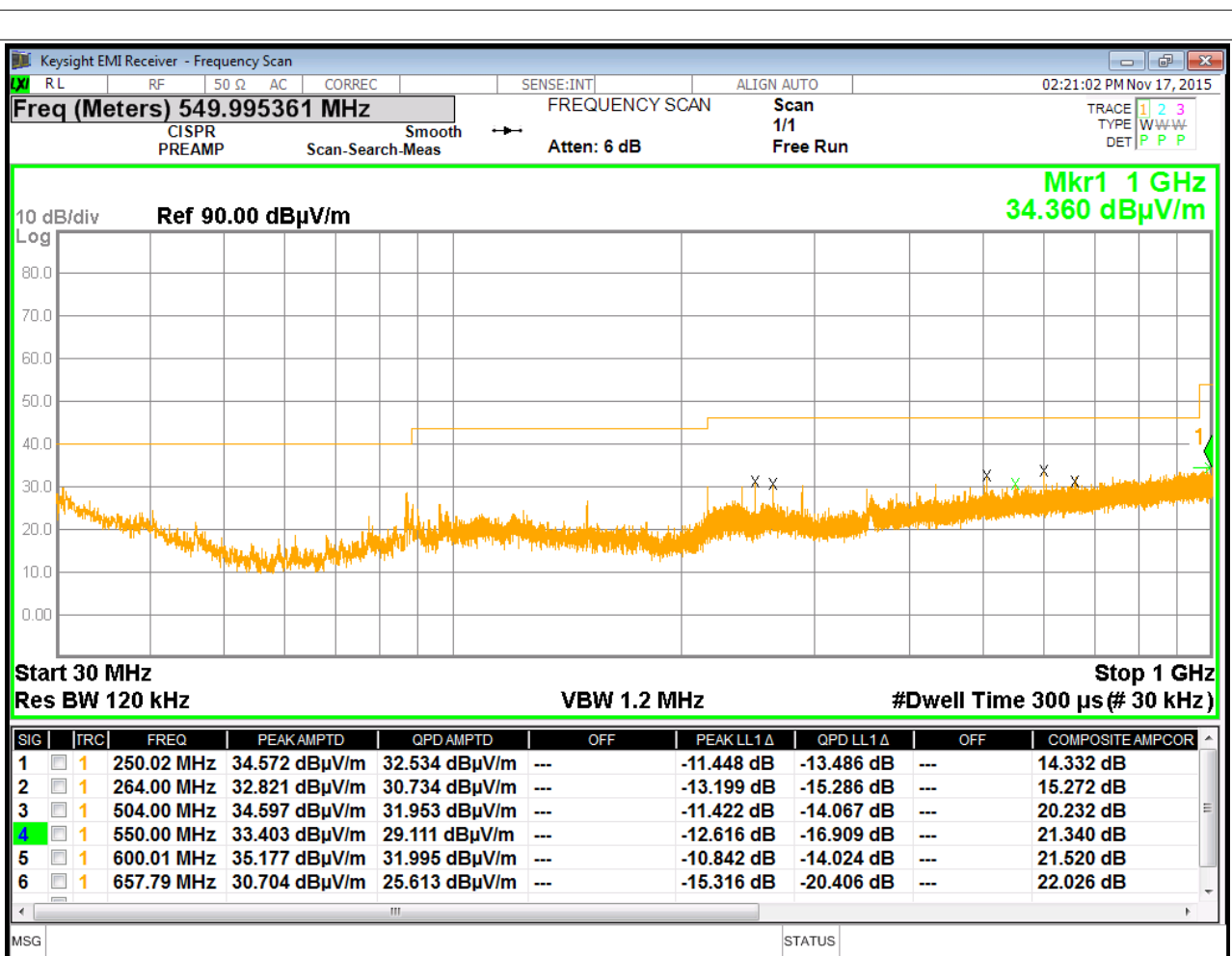
Antenna horizontal polarisation is indicated by POL=H.

Antenna vertical polarisation is indicated by POL=V.

Accordingly to reference standard, a limit relaxing factor equal to 20 dB for decade for measurements performed at 3 m has been used.

Results and conclusions

In all the operative conditions, equipment complied with the standard limits. Graphics in following figures show the most significant registrations of the performed measurements.

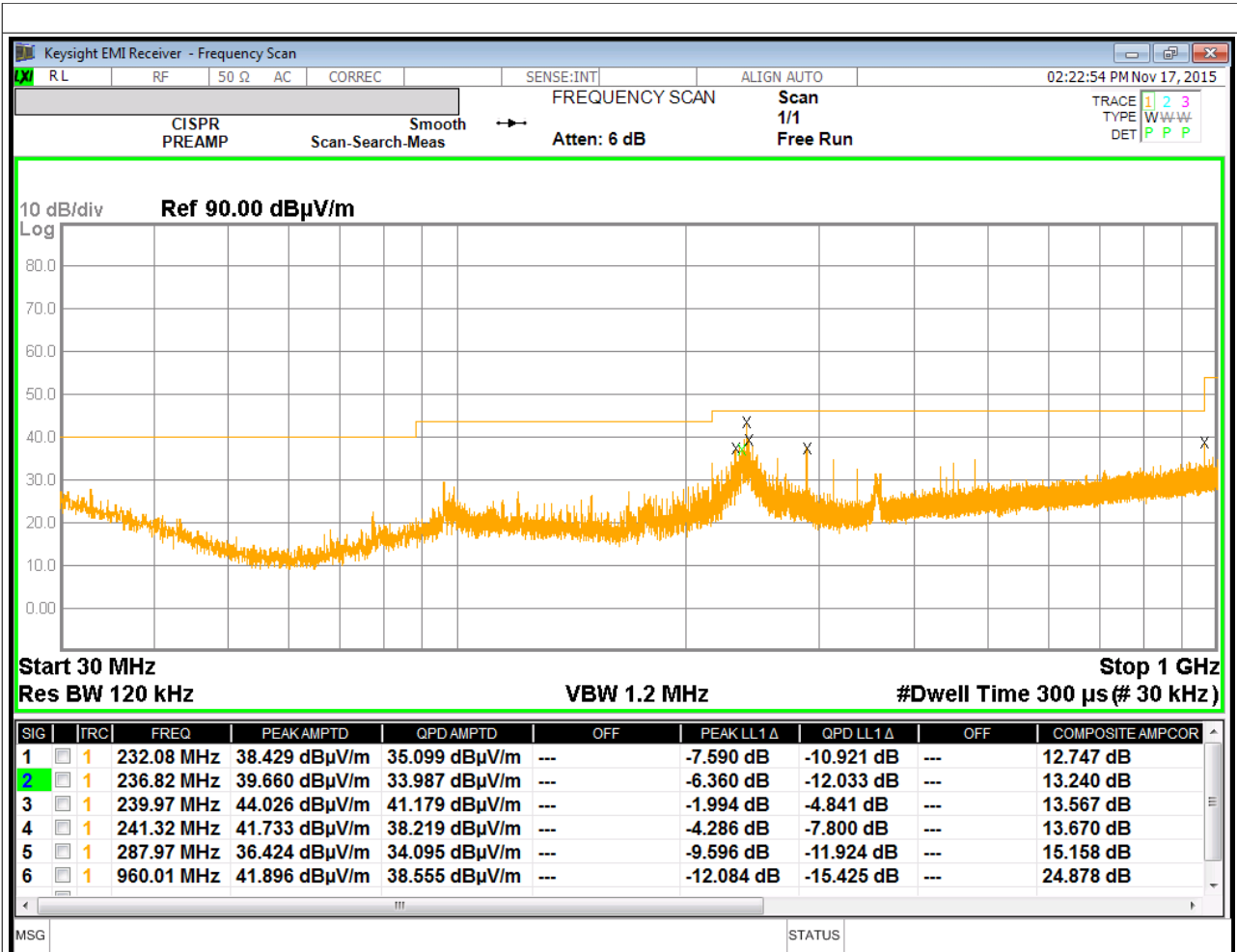


Note:

EUT
Pol. V
TT = 0°
MA = 100 cm
EUT mode: operative
Auxiliary apparatus: all ON
channel 6

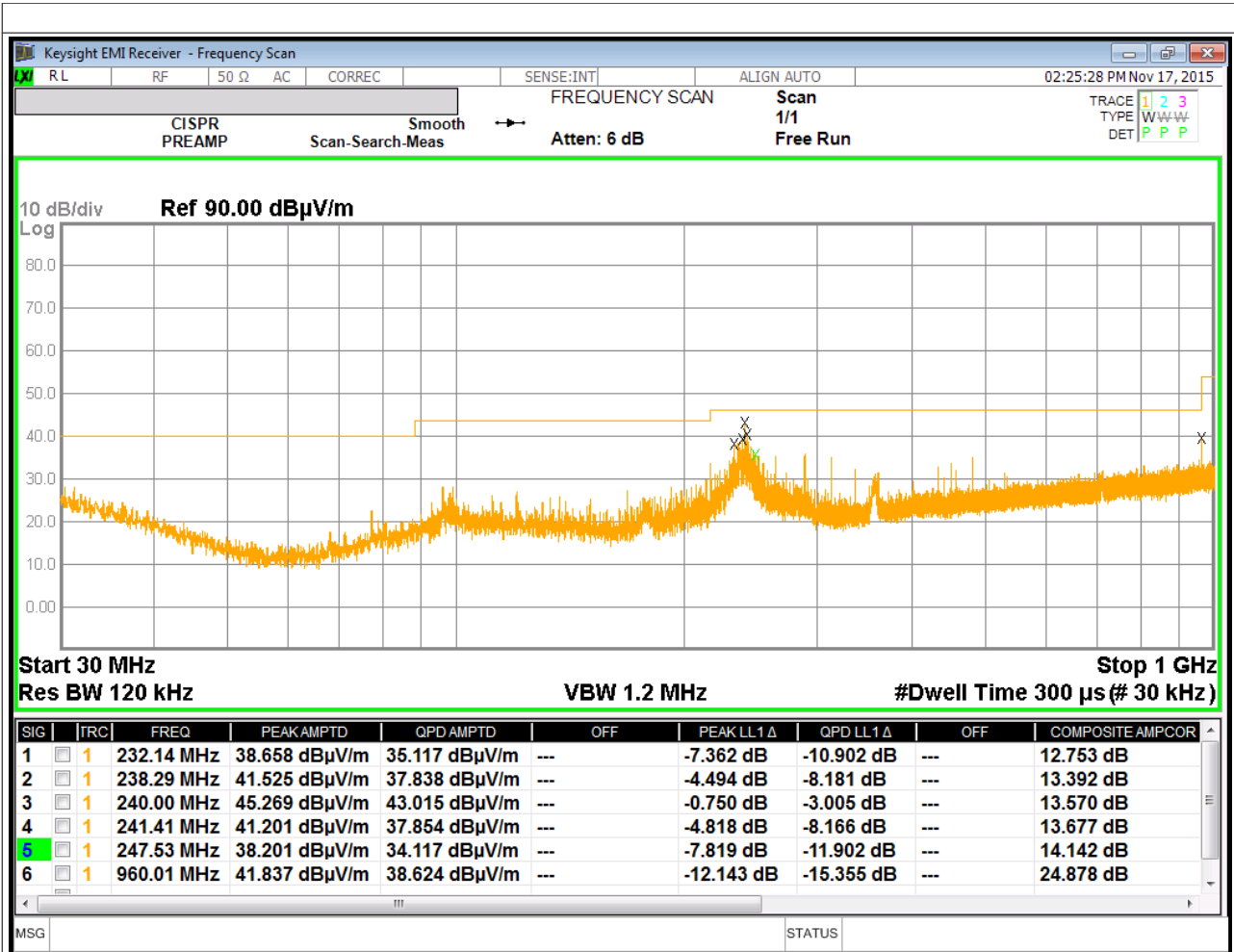
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Report n. 15850-FCC Rev. 03, page 49 / 93*

modulation type b max speed (11 Mbps)



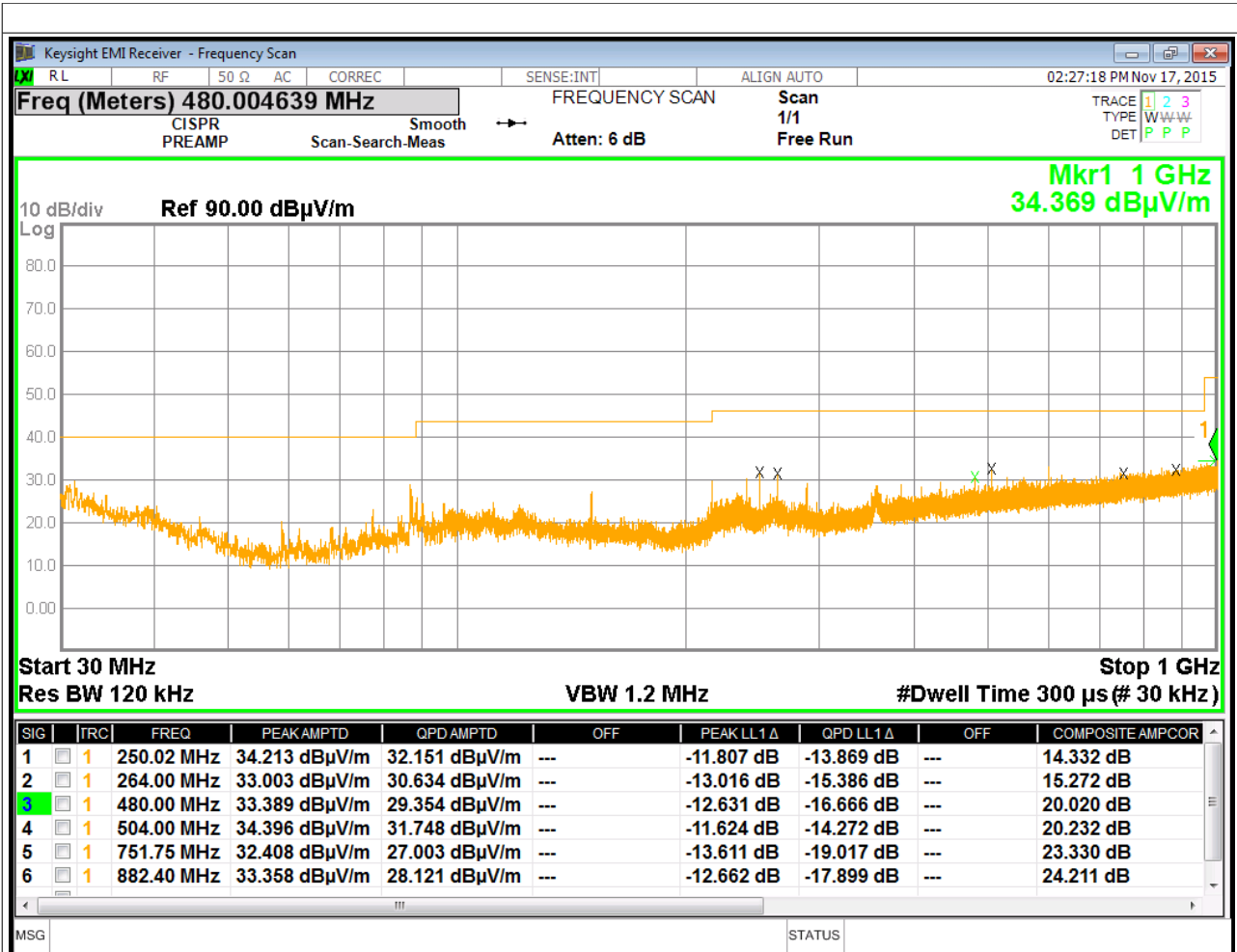
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type b
 max speed (11 Mbps)



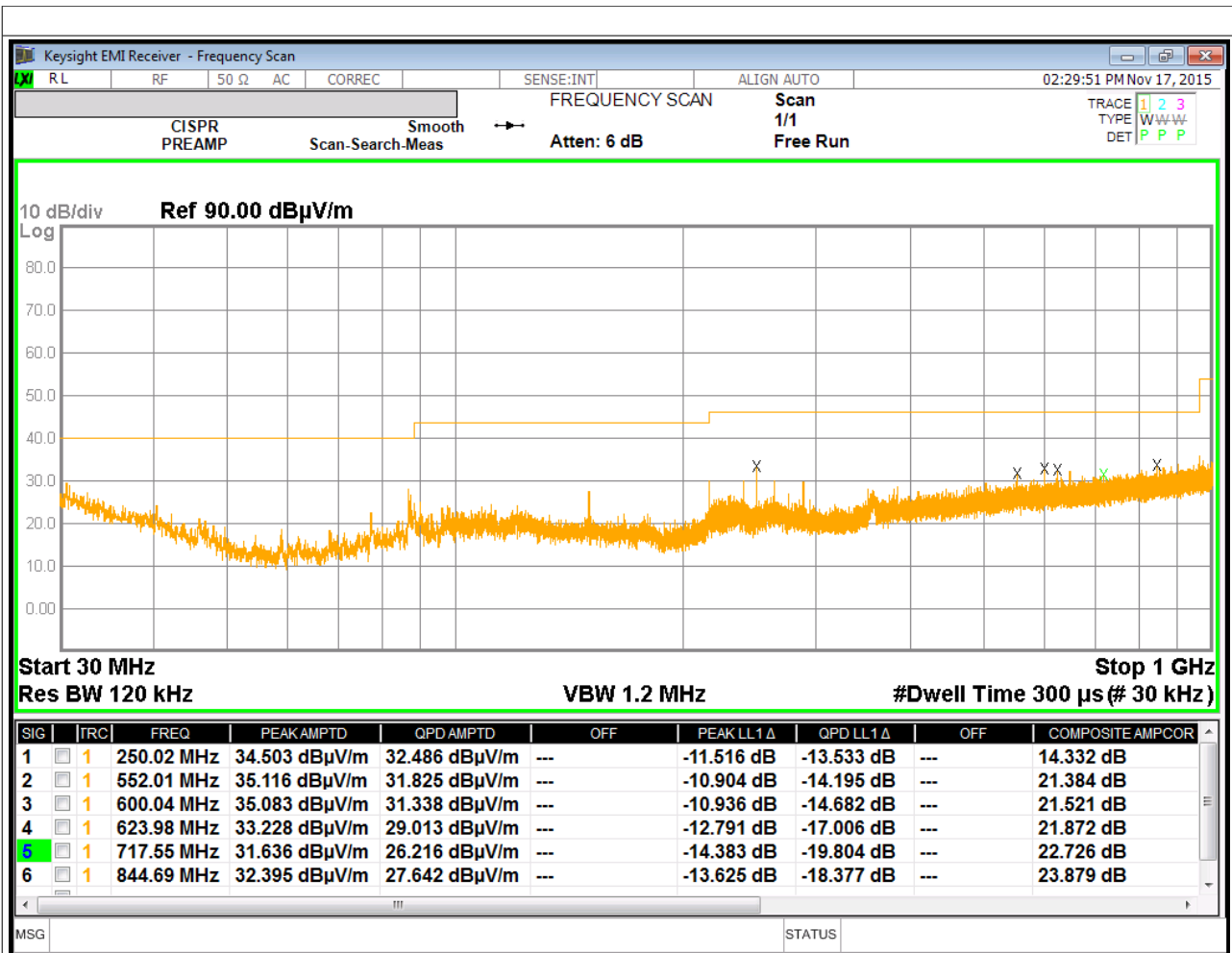
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type g
 max speed (54 Mbps)



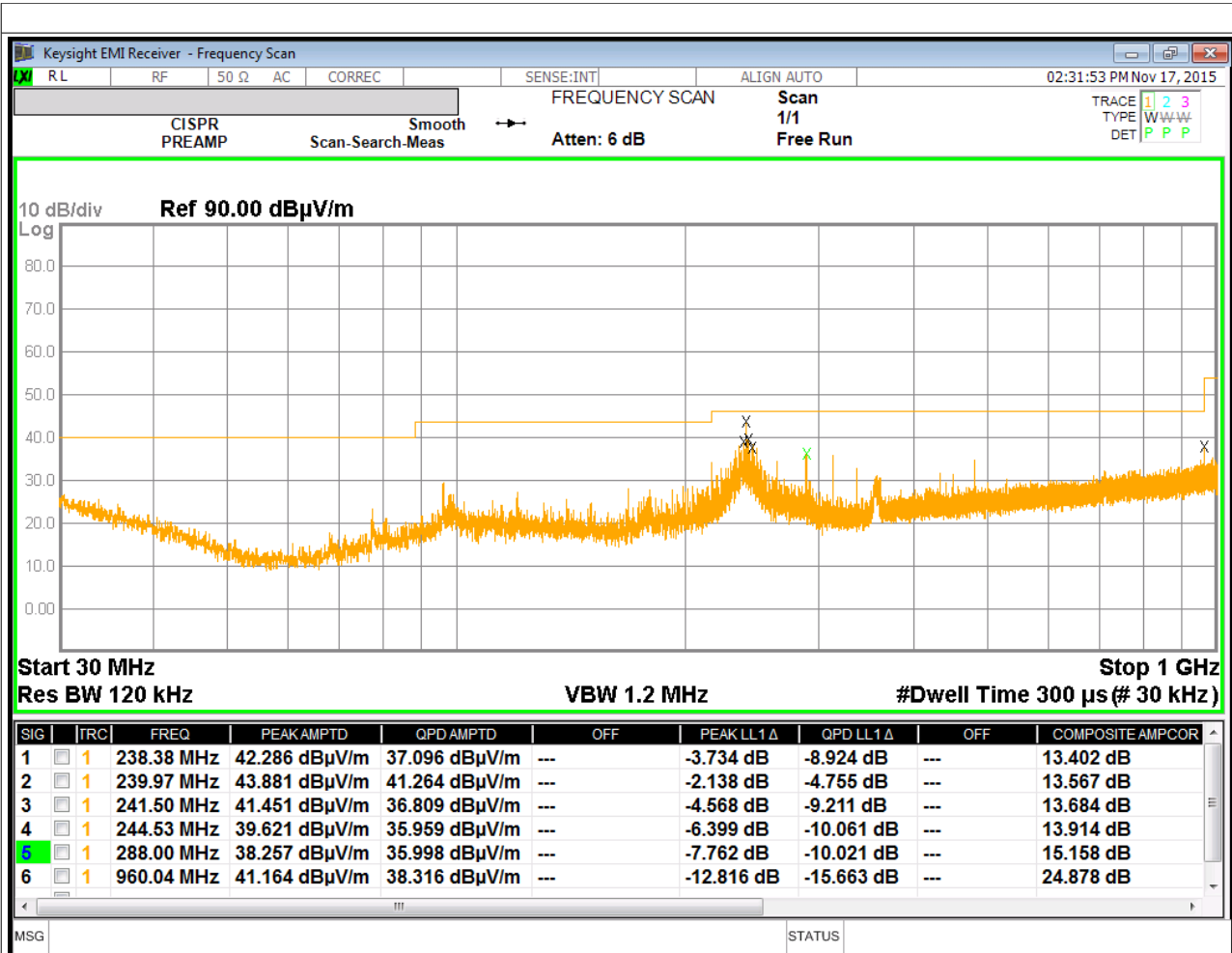
Note:

EUT
Pol. V
TT = 0°
MA = 100 cm
EUT mode: operative
Auxiliary apparatus: all ON
channel 6
modulation type g
max speed (54 Mbps)



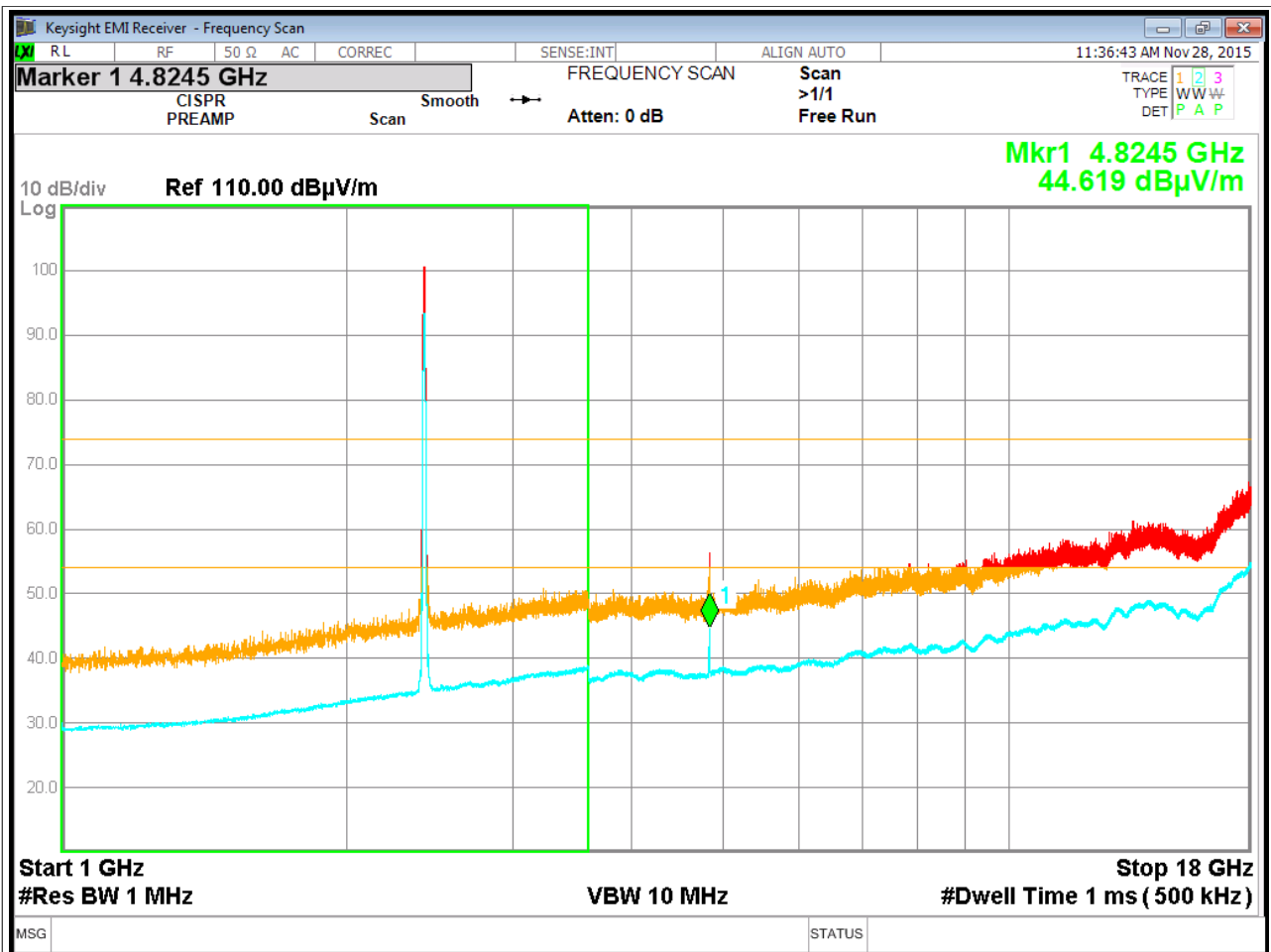
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type n
 max speed (65 Mbps)



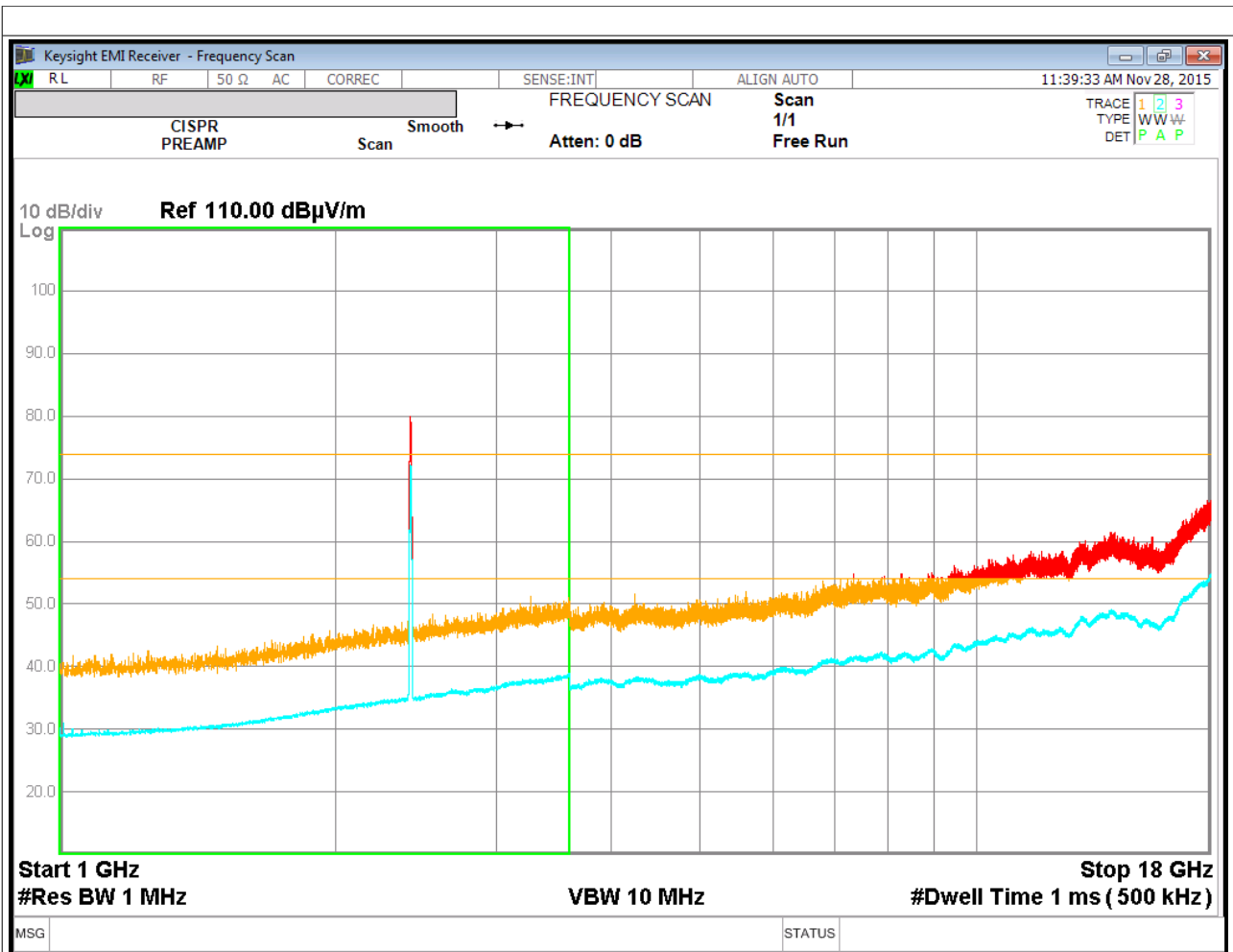
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type n
 max speed (65 Mbps)



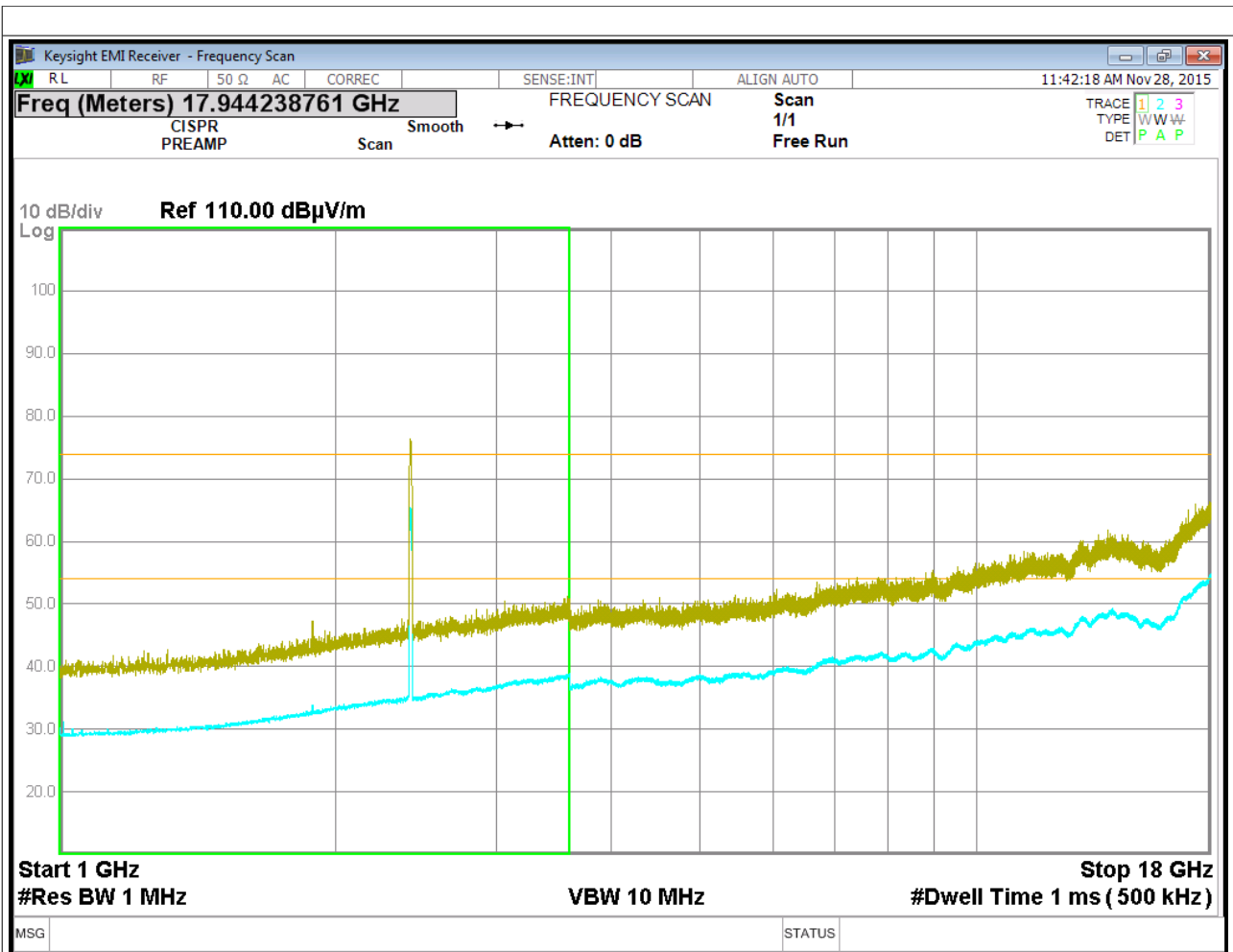
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type b
 max speed (11 Mbps)
 AVG 4.8 GHz= 44.6 dBuV
 PK 4.8 GHz= 56.272 dBuV



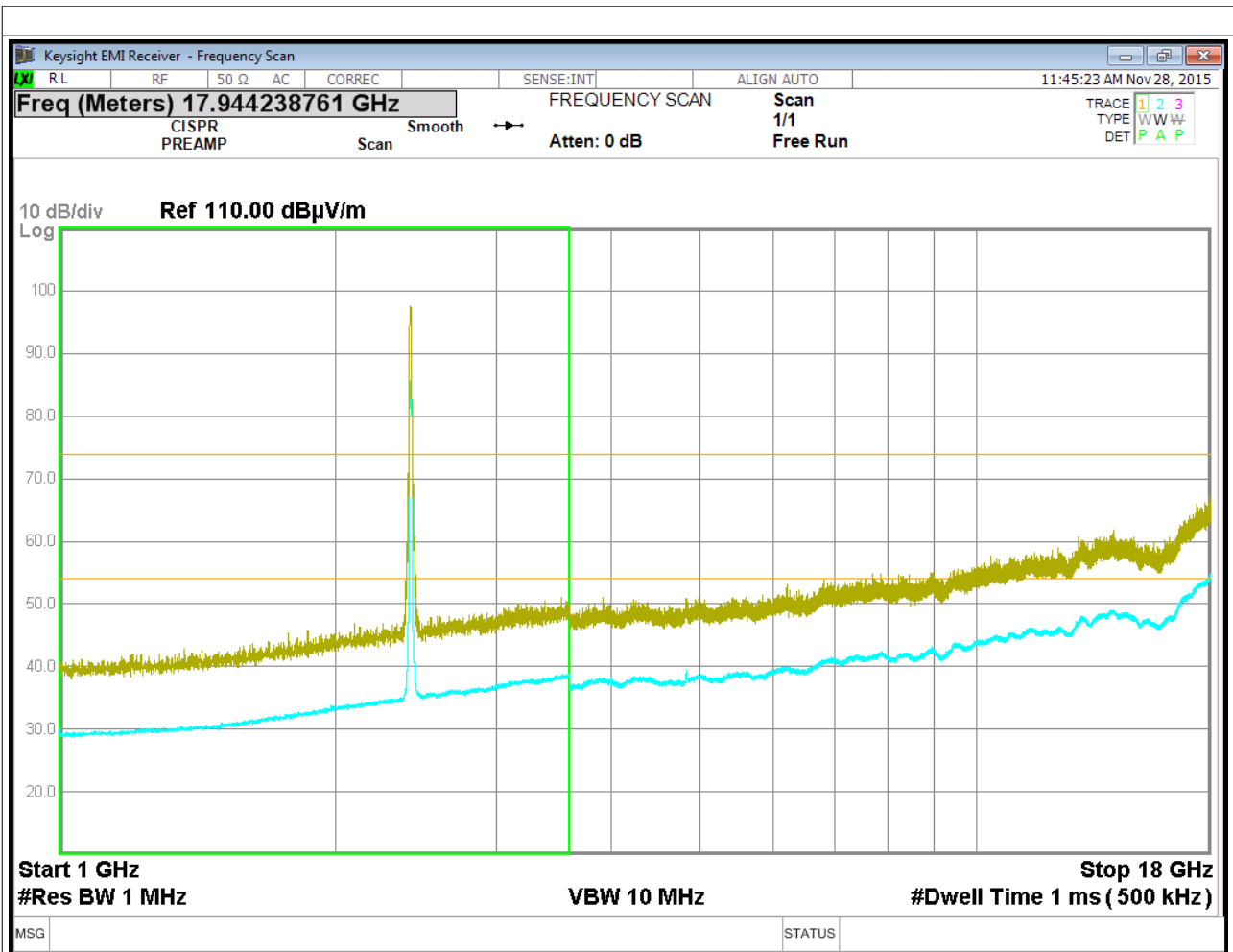
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type b
 max speed (11 Mbps)



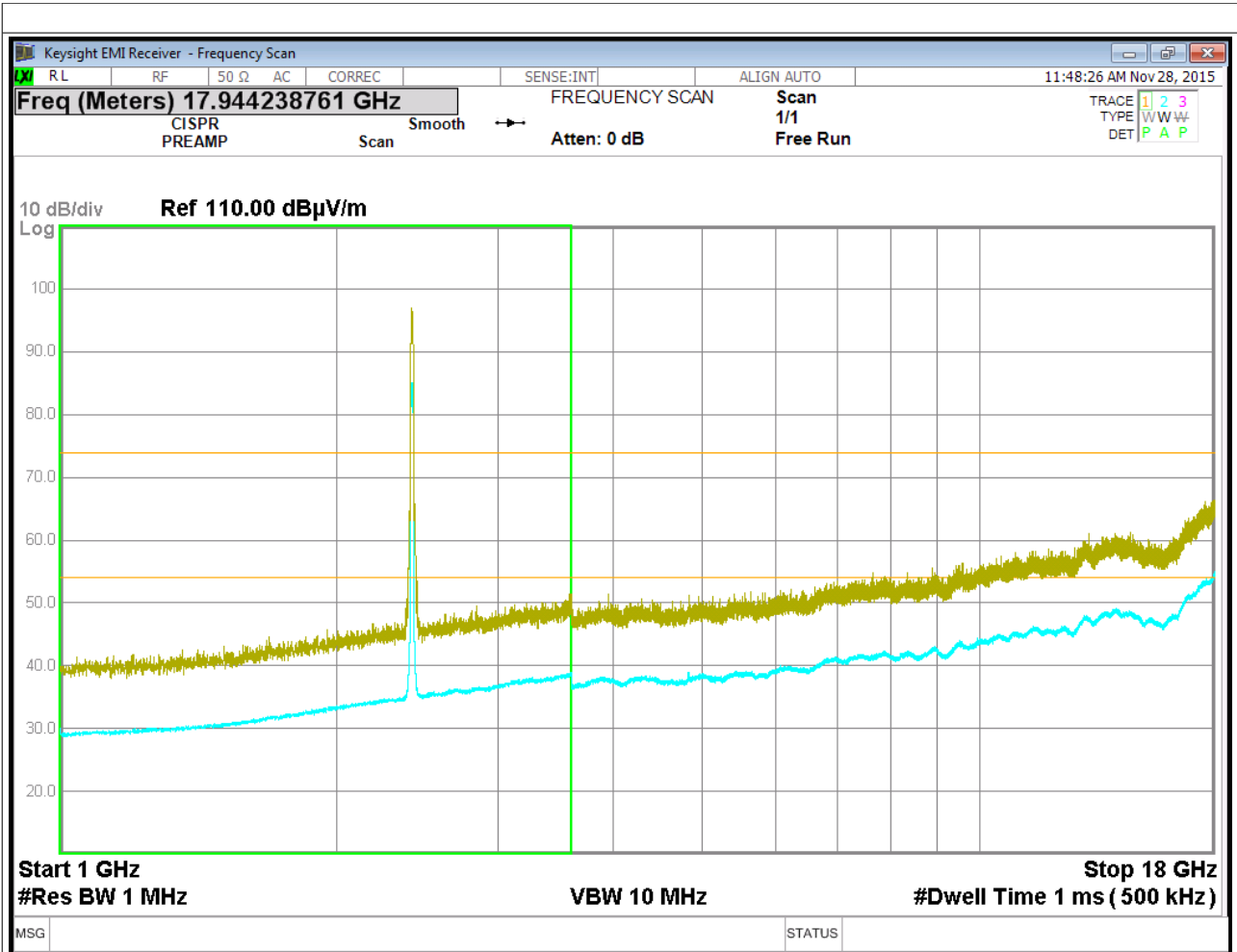
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type g
 max speed (54 Mbps)



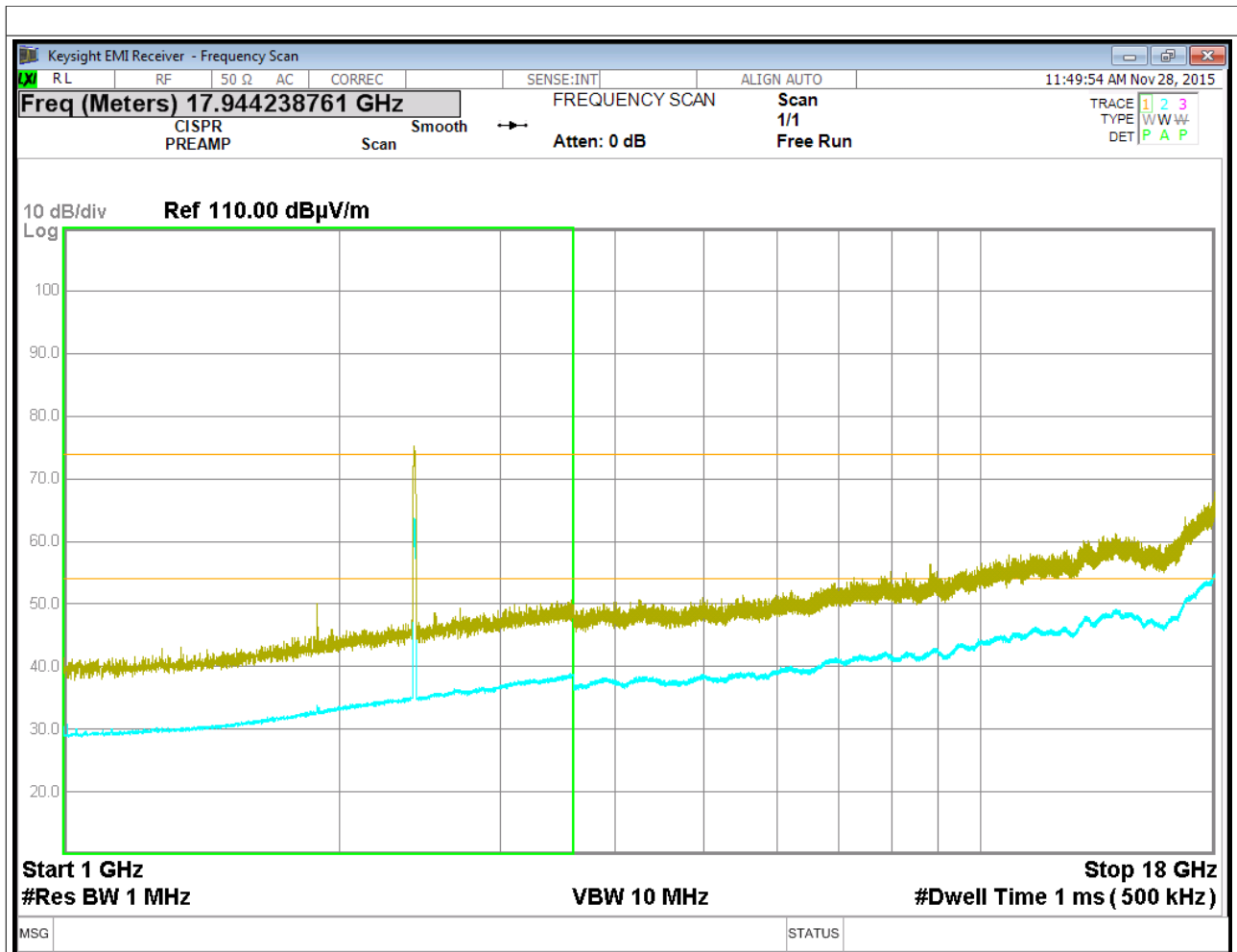
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type g
 max speed (54 Mbps)



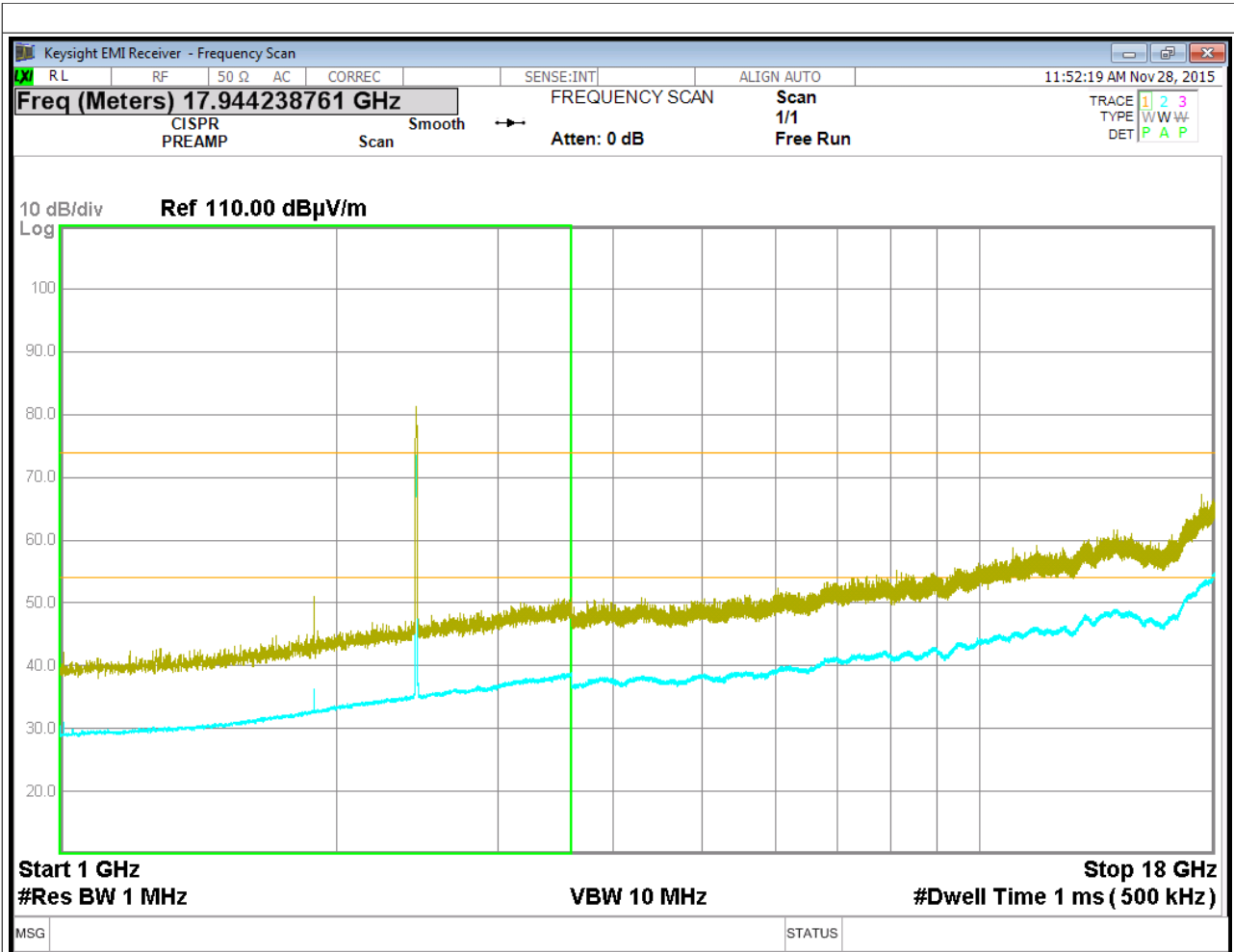
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type n
 max speed (65 Mbps)



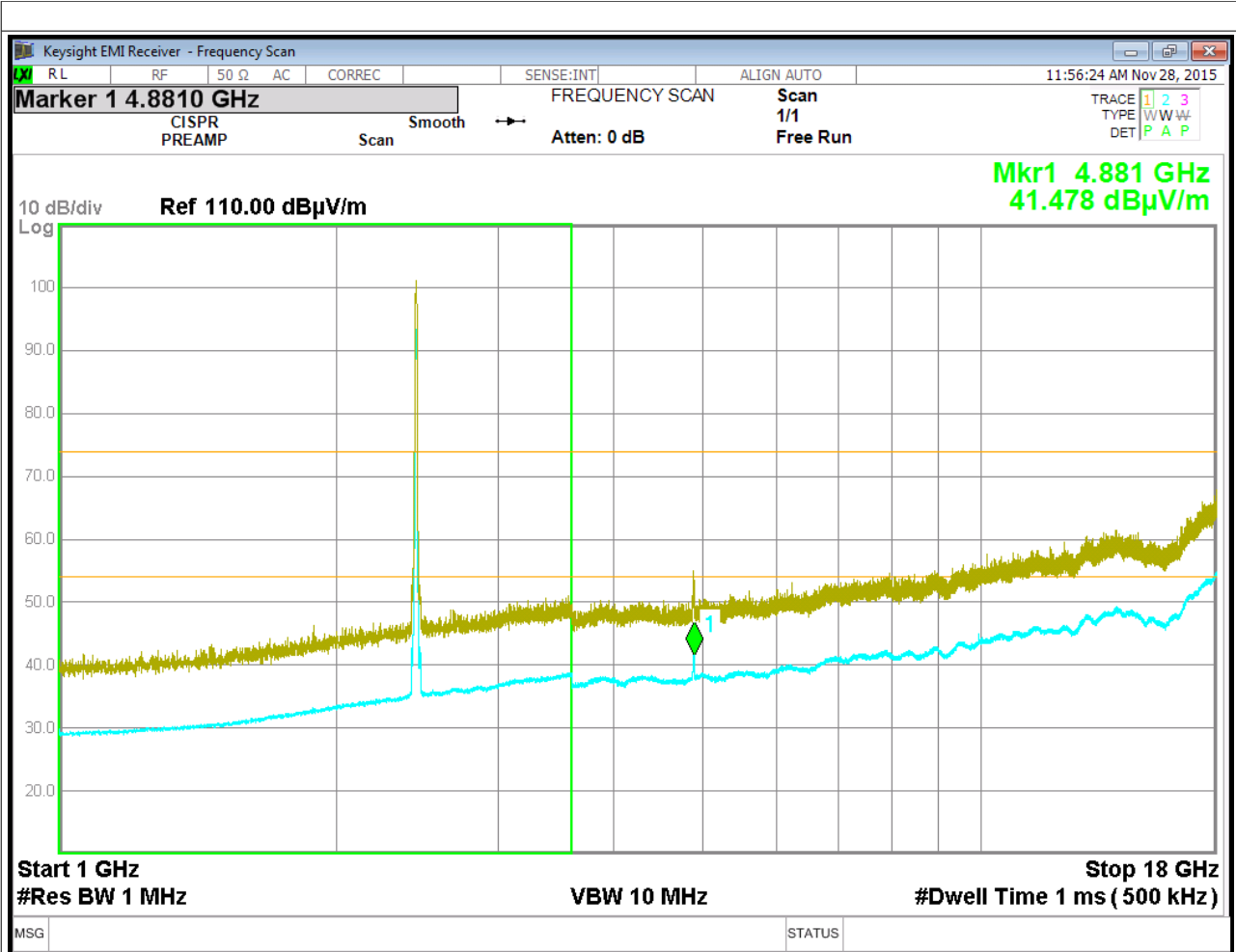
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 1
 modulation type n
 max speed (65 Mbps)



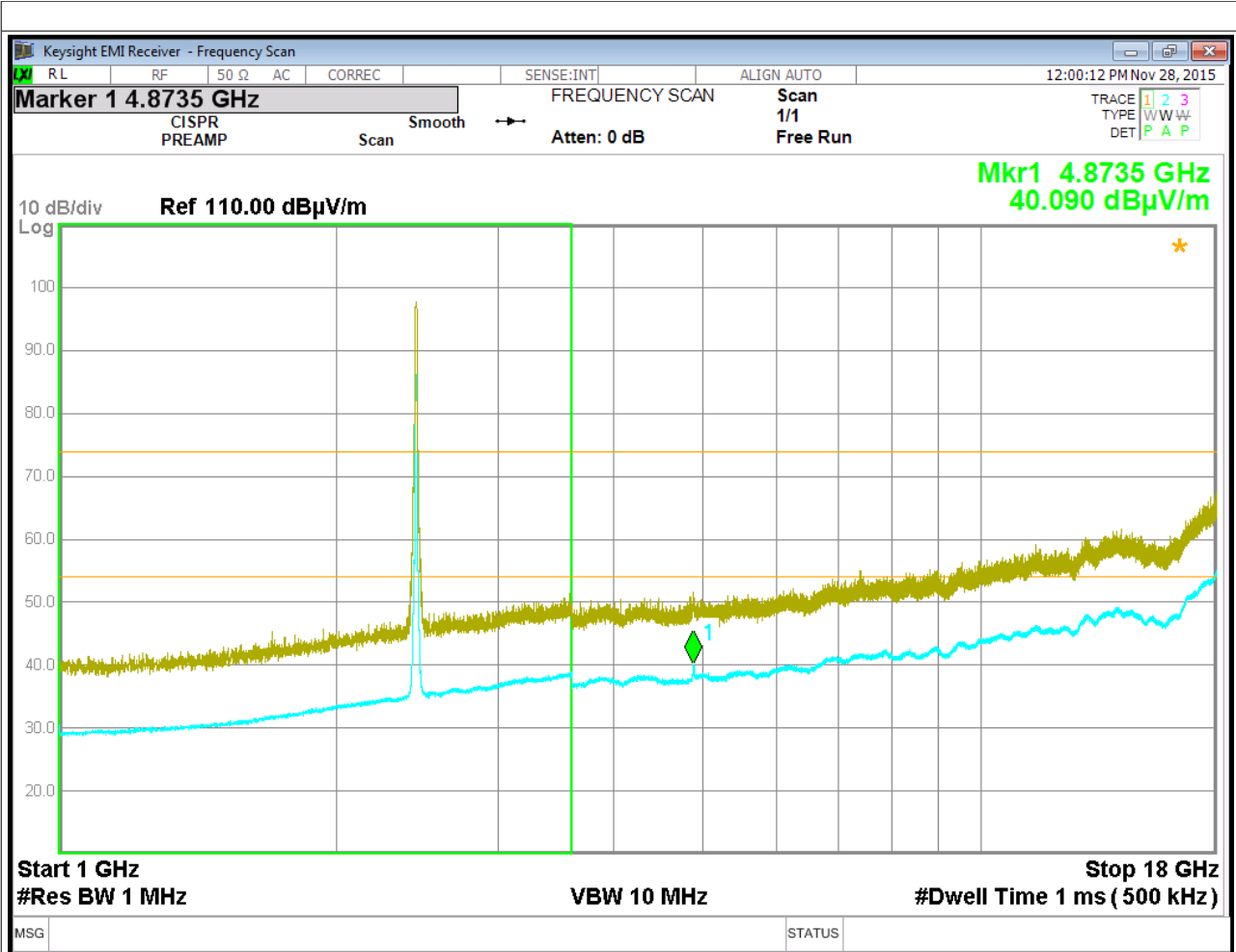
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type b
 max speed (11 Mbps)



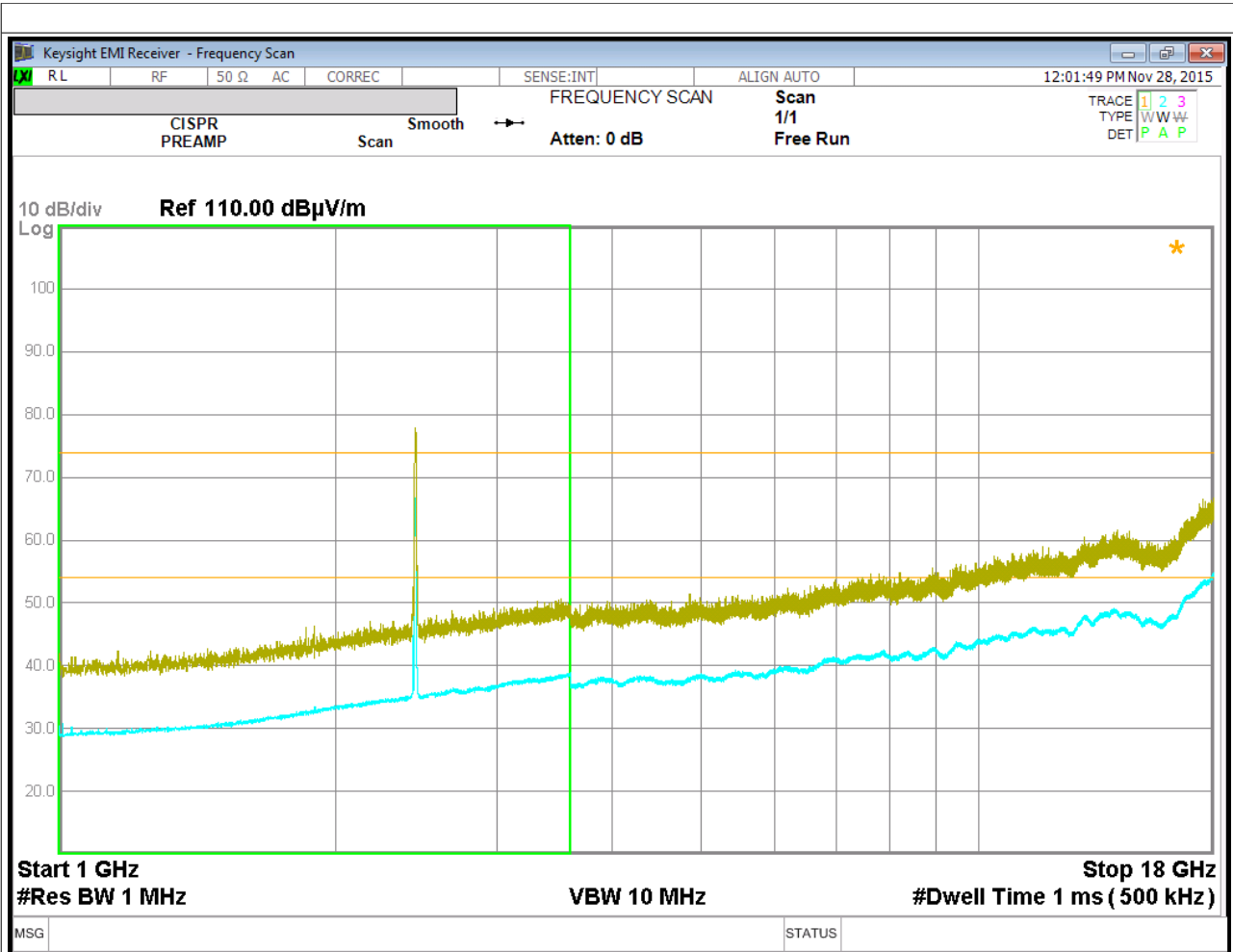
Note:

EUT
Pol. V
TT = 0°
MA = 100 cm
EUT mode: operative
Auxiliary apparatus: all ON
channel 6
modulation type b
max speed (11 Mbps)
AVG 4.8 GHz= 43.03 dBuV
PK 4.8 GHz= 55.046 dBuV



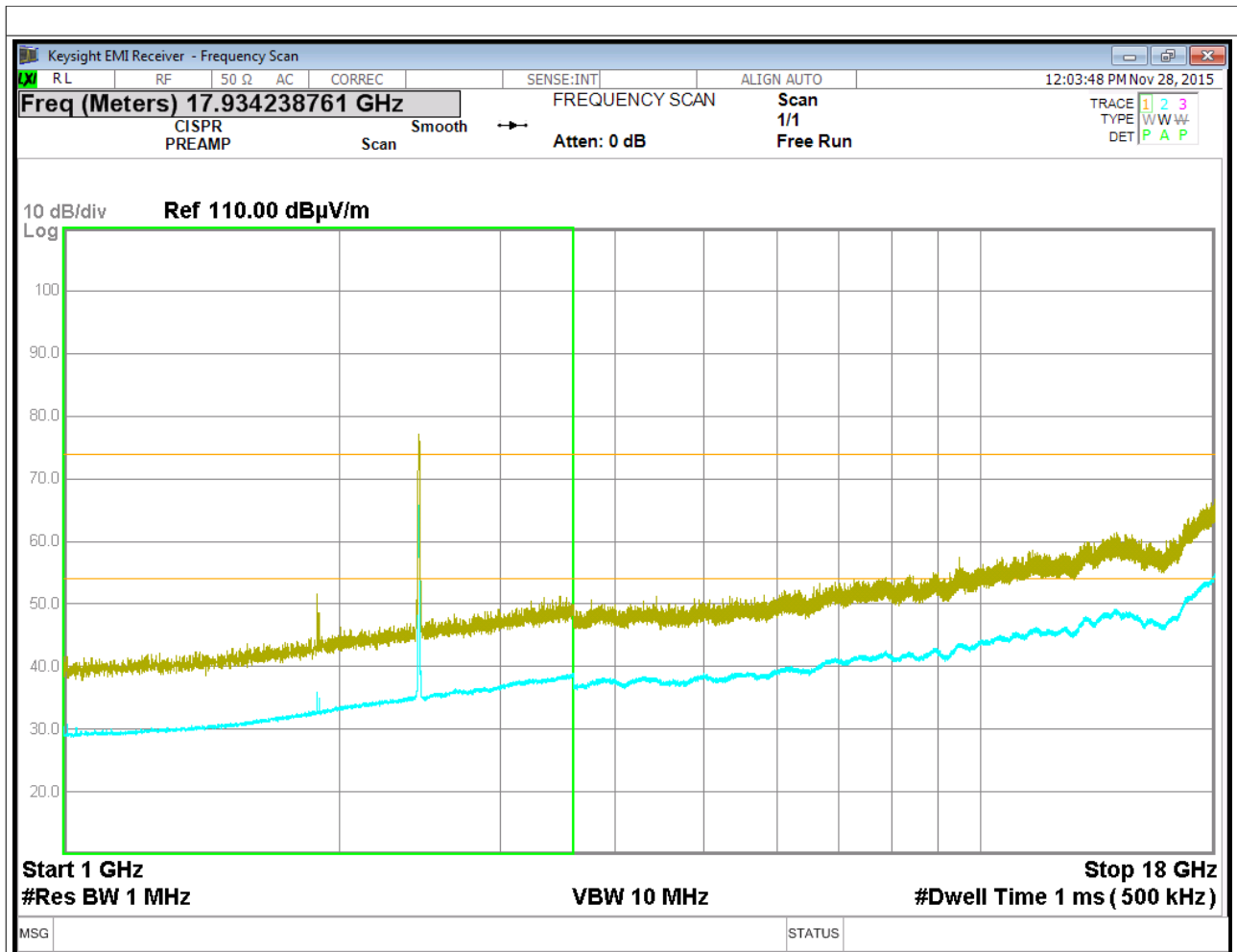
Note:

EUT
Pol. V
TT = 0°
MA = 100 cm
EUT mode: operative
Auxiliary apparatus: all ON
channel 6
modulation type g
max speed (54 Mbps)
AVG 4.8 GHz= 40.09 dBuV
PK 4.8 GHz= at ambient noise level



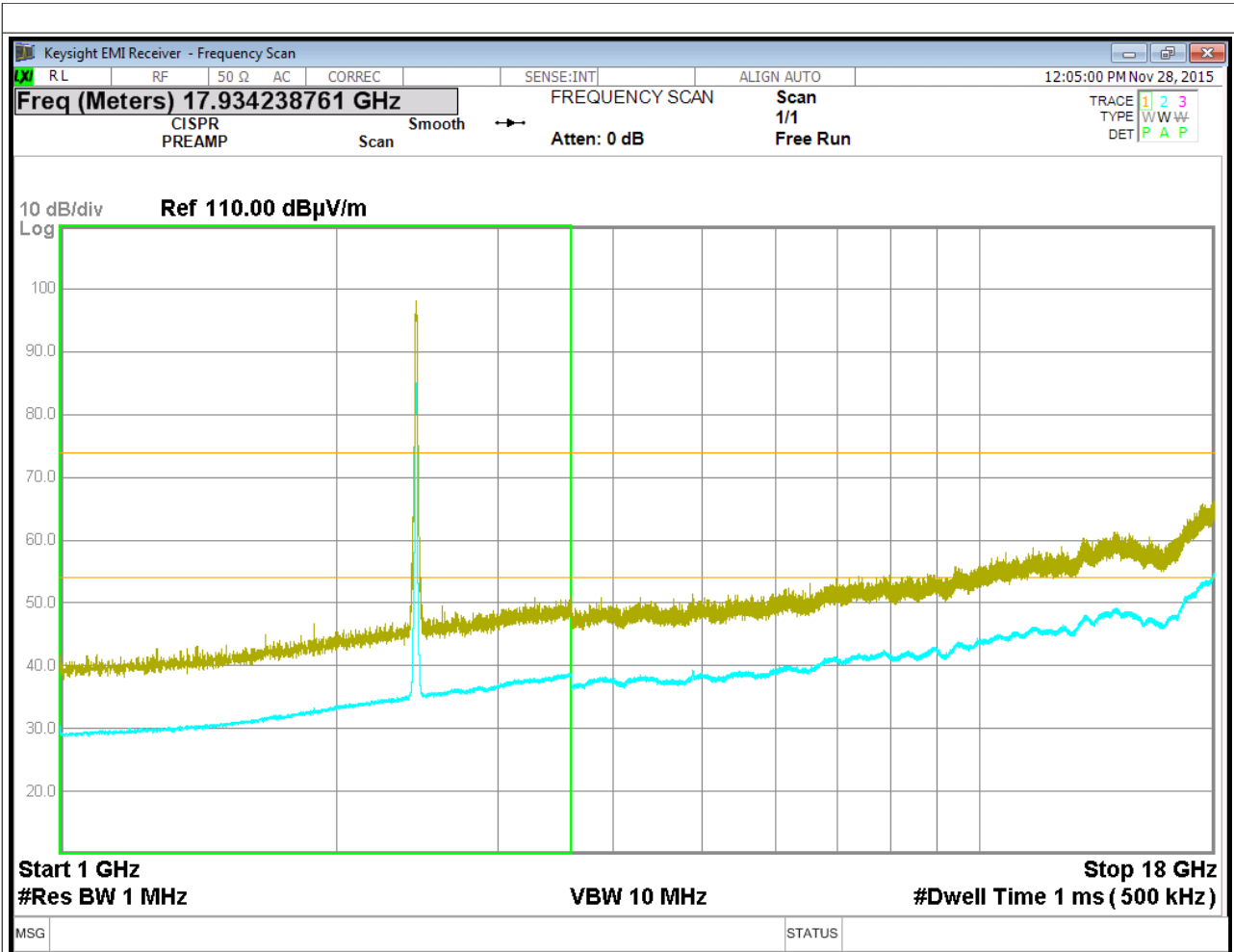
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type g
 max speed (54 Mbps)
 AVG 4.8 GHz= 40.09 dBuV
 PK 4.8 GHz= at ambient noise level



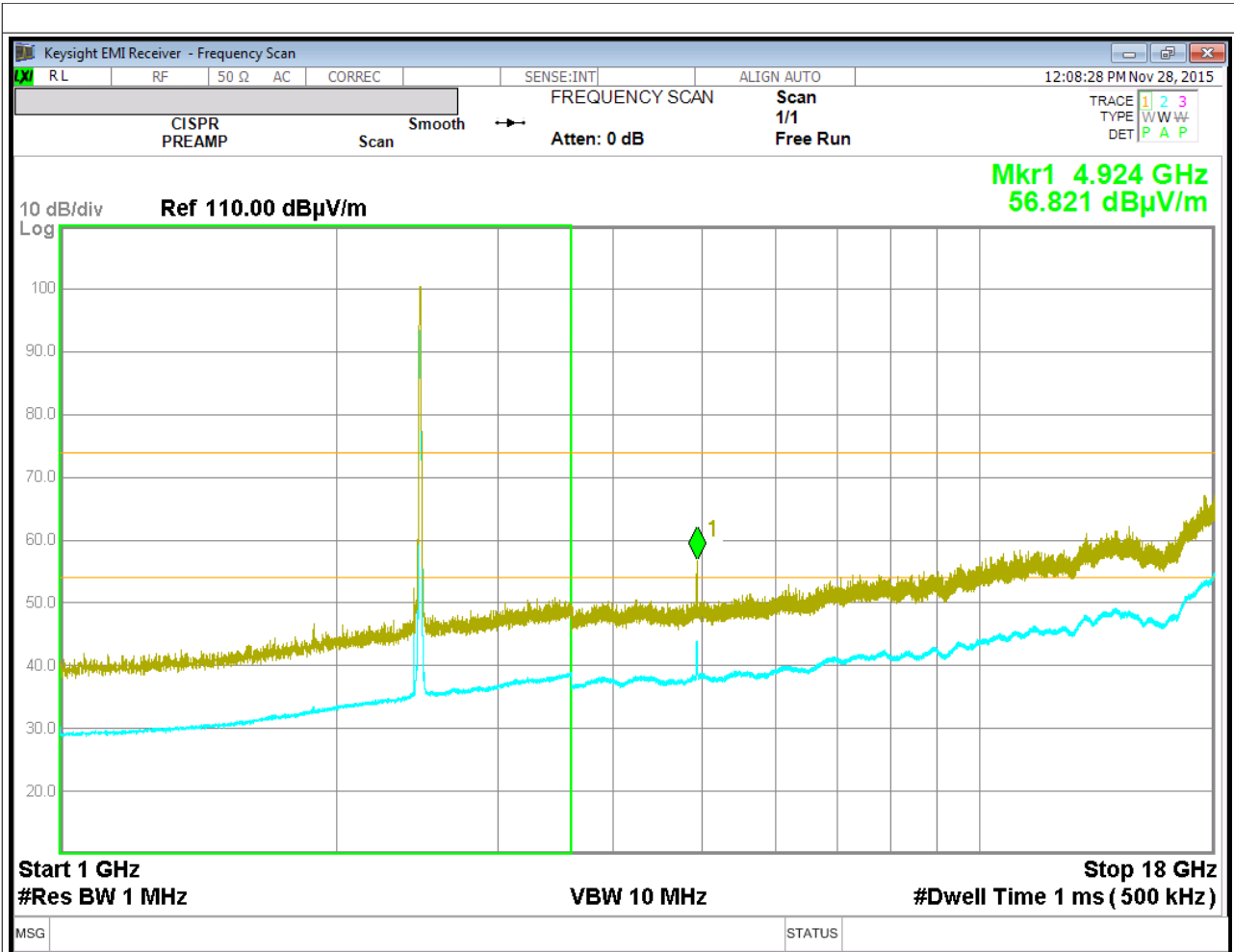
Note:

EUT
Pol. H
TT = 0°
MA = 100 cm
EUT mode: operative
Auxiliary apparatus: all ON
channel 6
modulation type n
max speed (65 Mbps)



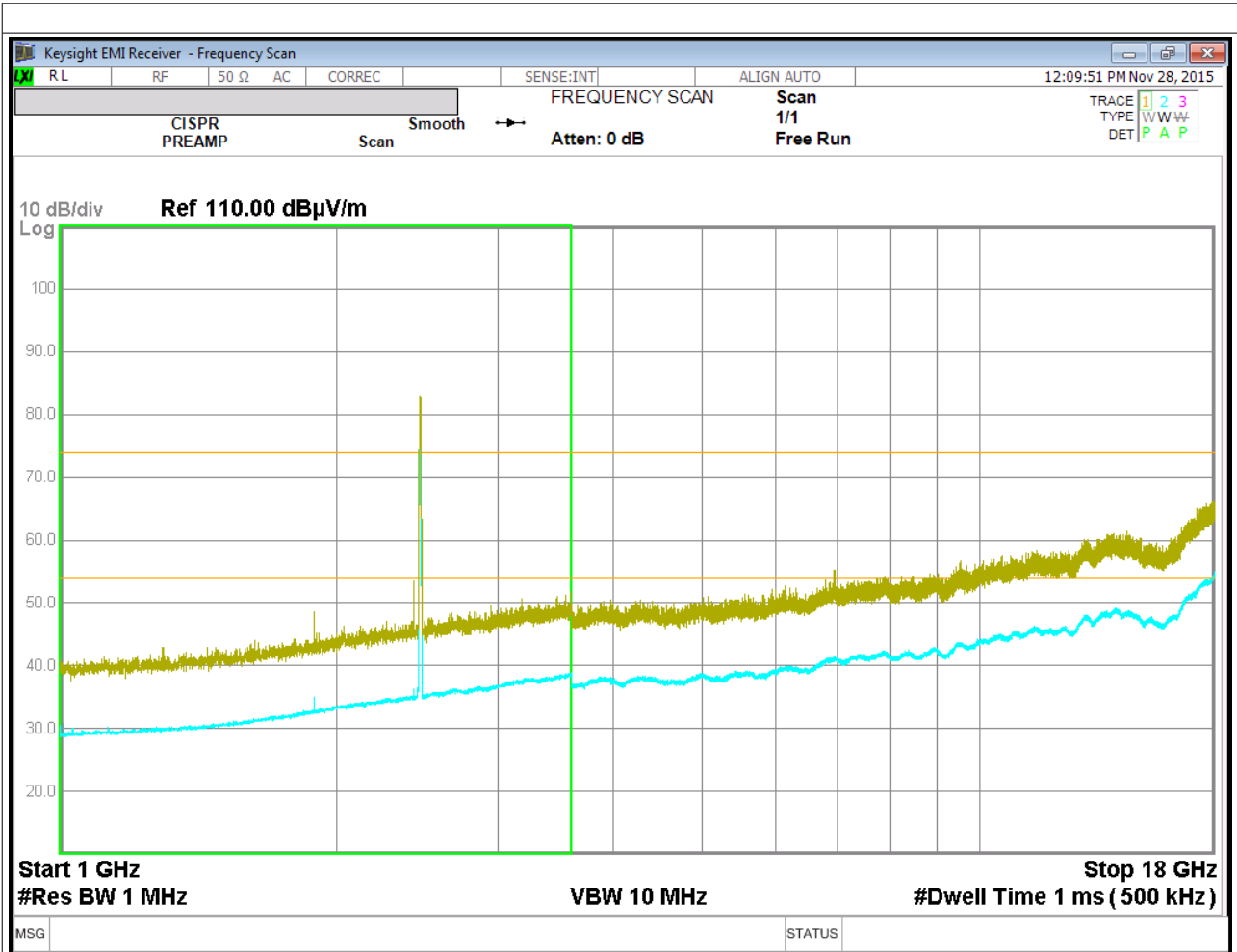
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 6
 modulation type n
 max speed (65 Mbps)



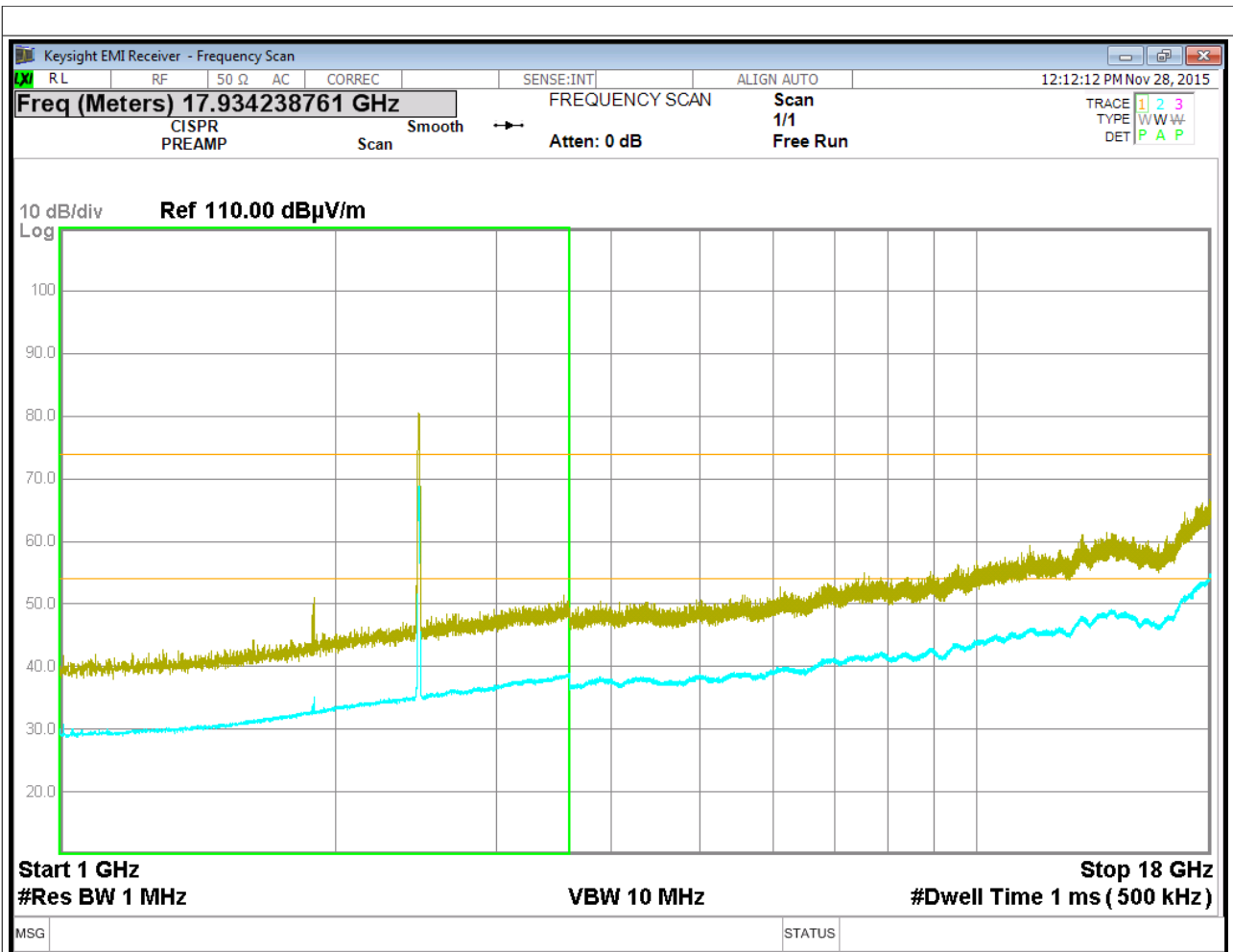
Note:

EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type b
 max speed (11 Mbps)
 AVG 4.8 GHz= 42.42 dBuV
 PK 4.8 GHz= 56.821 dBuV



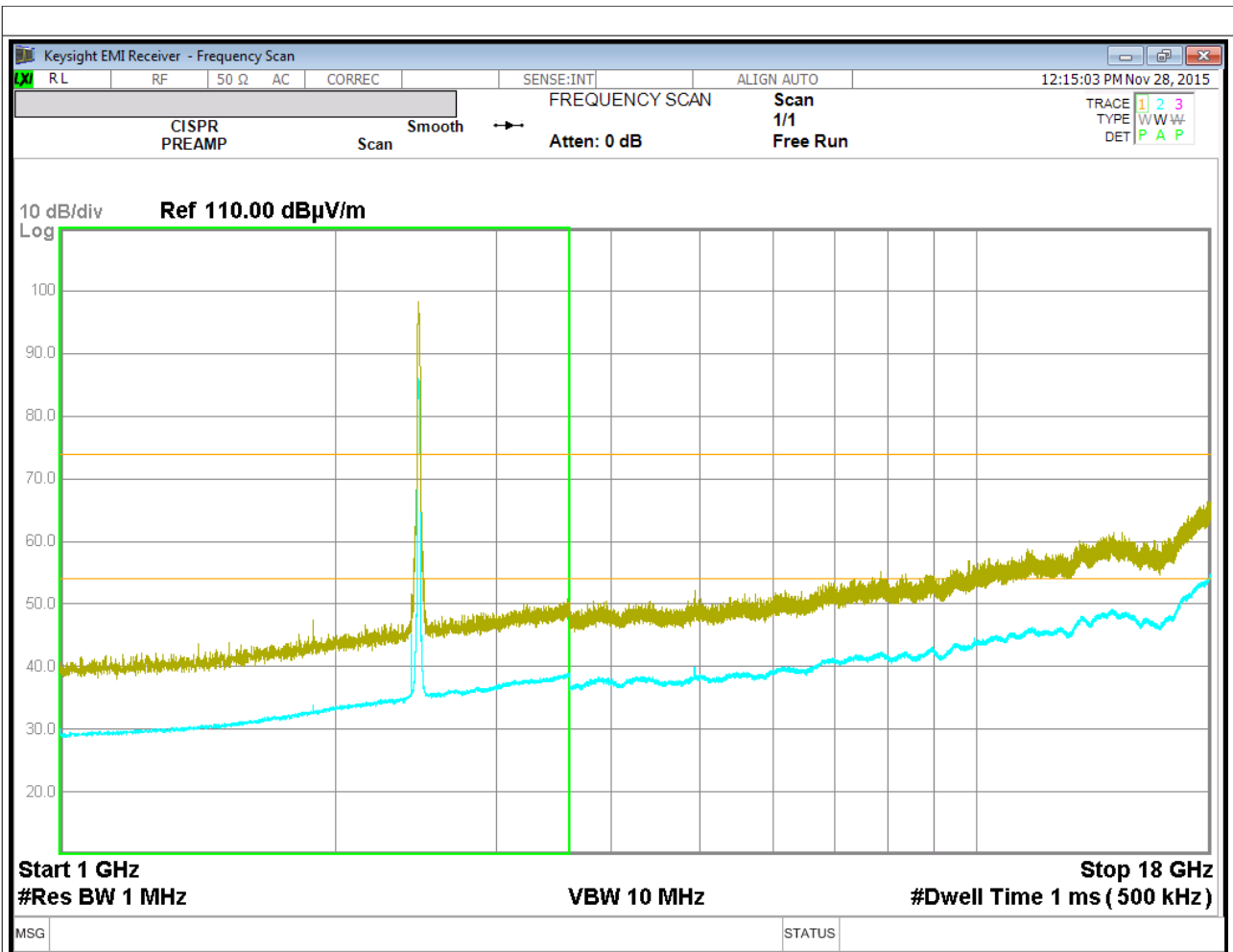
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type b
 max speed (11 Mbps)



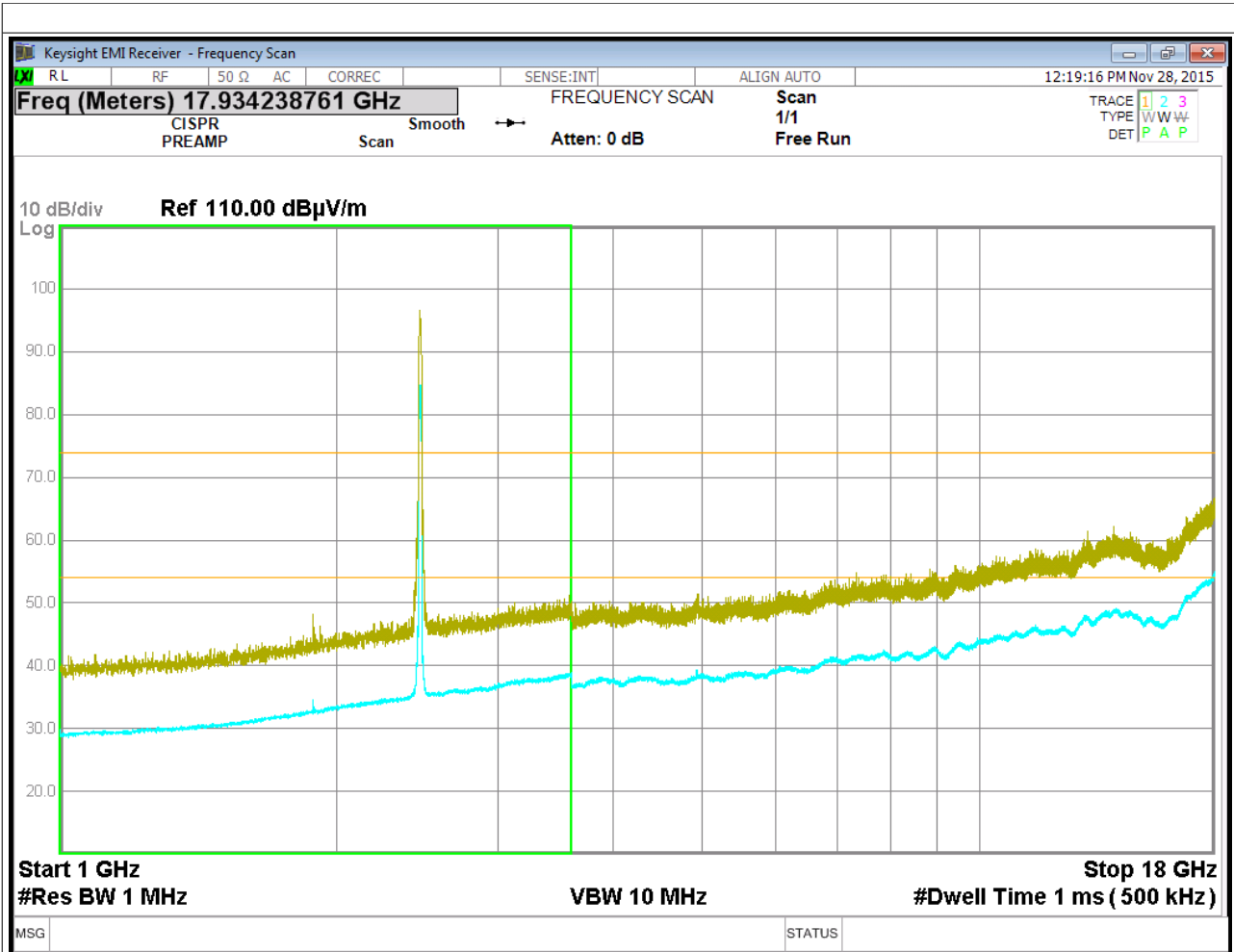
Note:

EUT
 Pol. H
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type g
 max speed (54 Mbps)



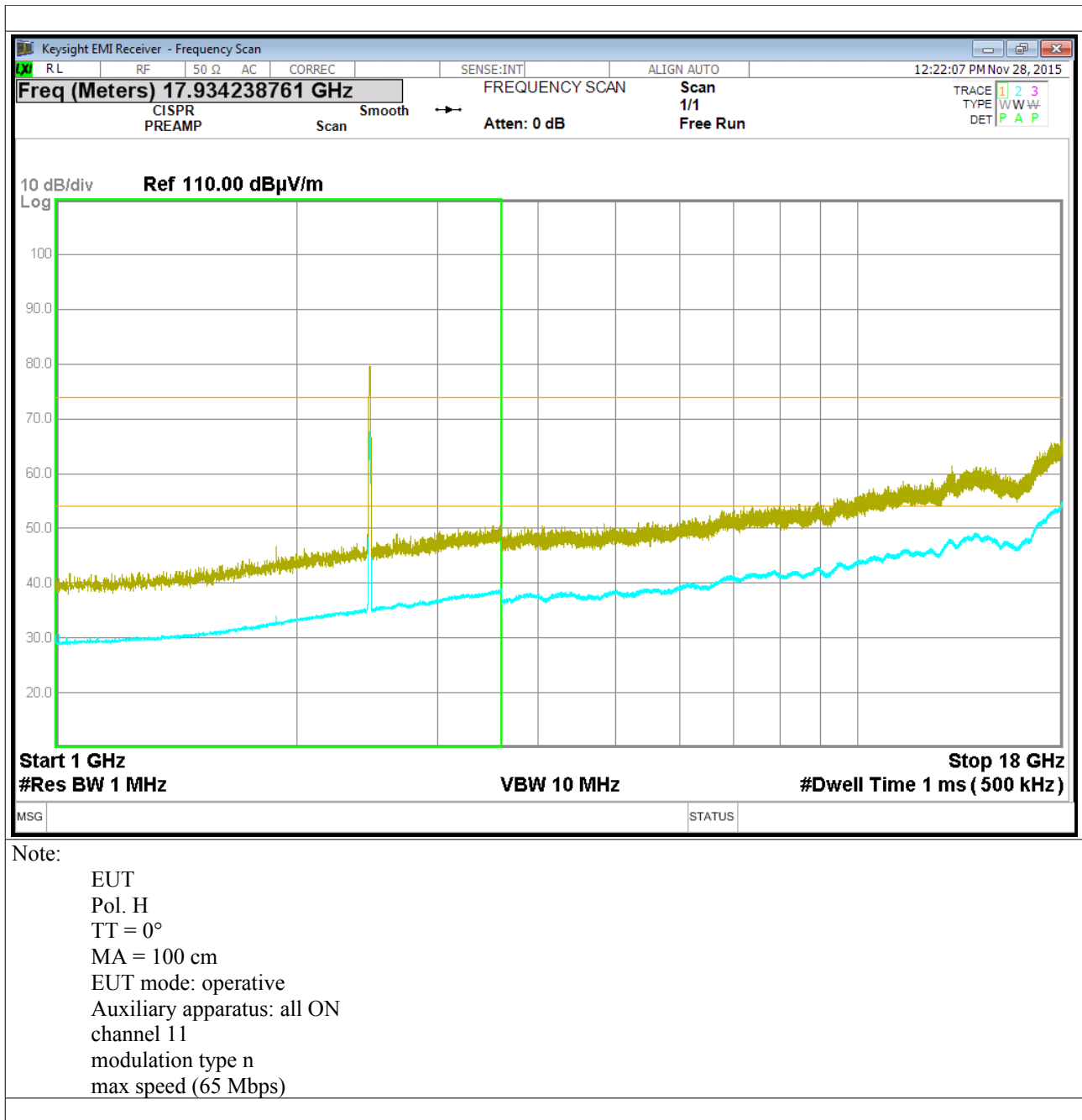
Note:

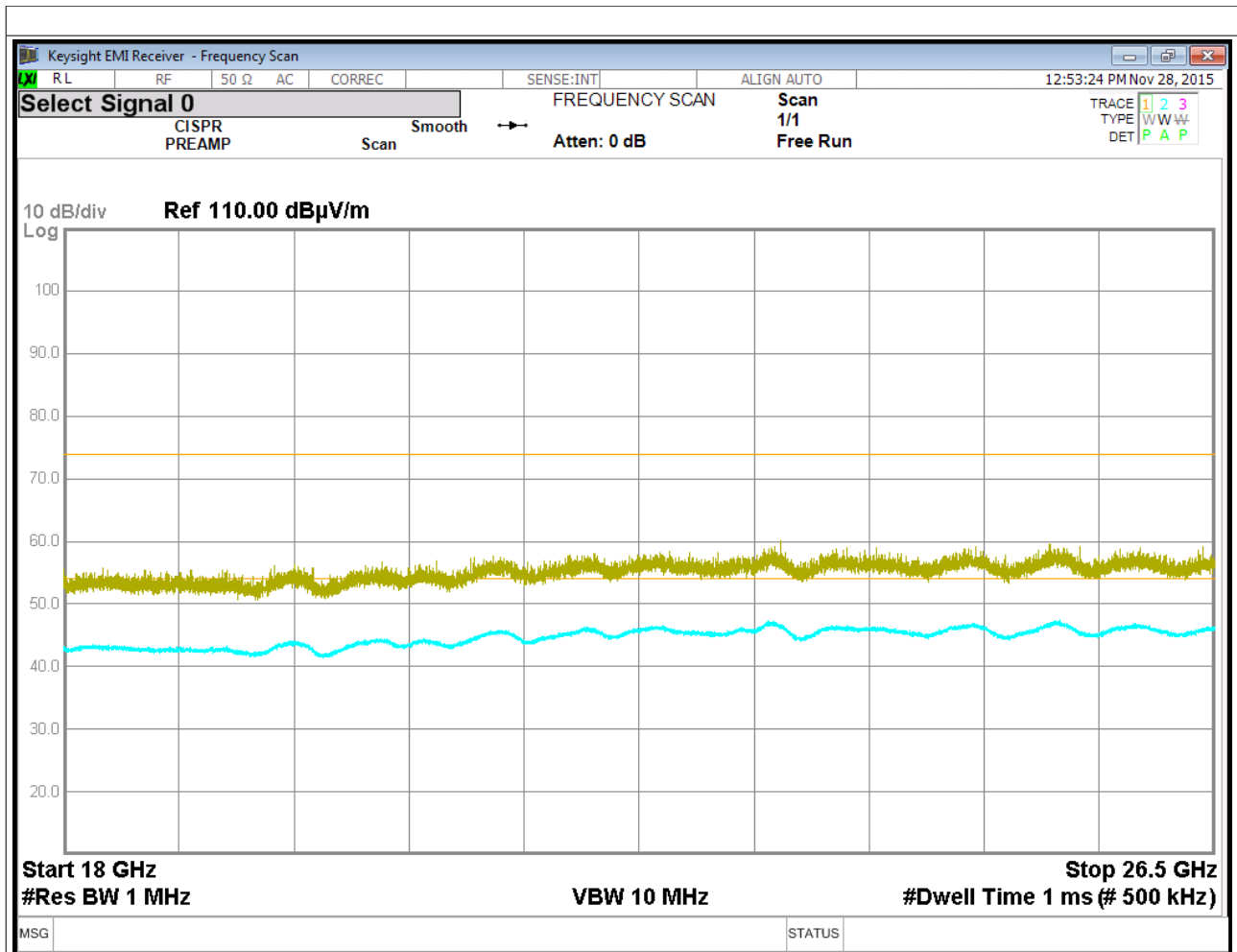
EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type g
 max speed (54 Mbps)
 AVG 4.8 GHz= 39.28 dBuV
 PK 4.8 GHz= 51.15 dBuV



Note:

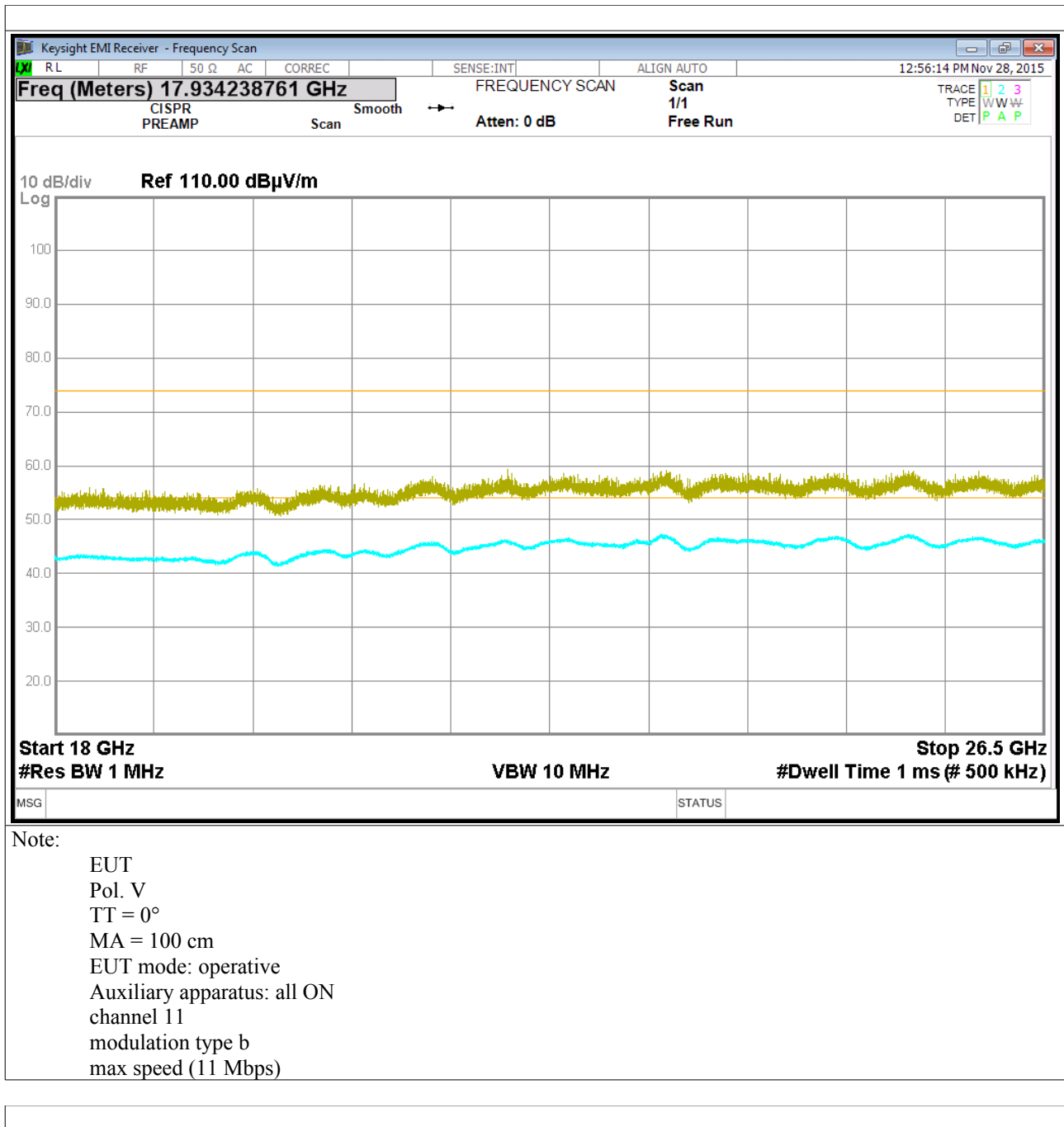
EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type n
 max speed (65 Mbps)
 AVG 4.8 GHz= 39.178 dBuV
 PK 4.8 GHz= 49.55 dBuV

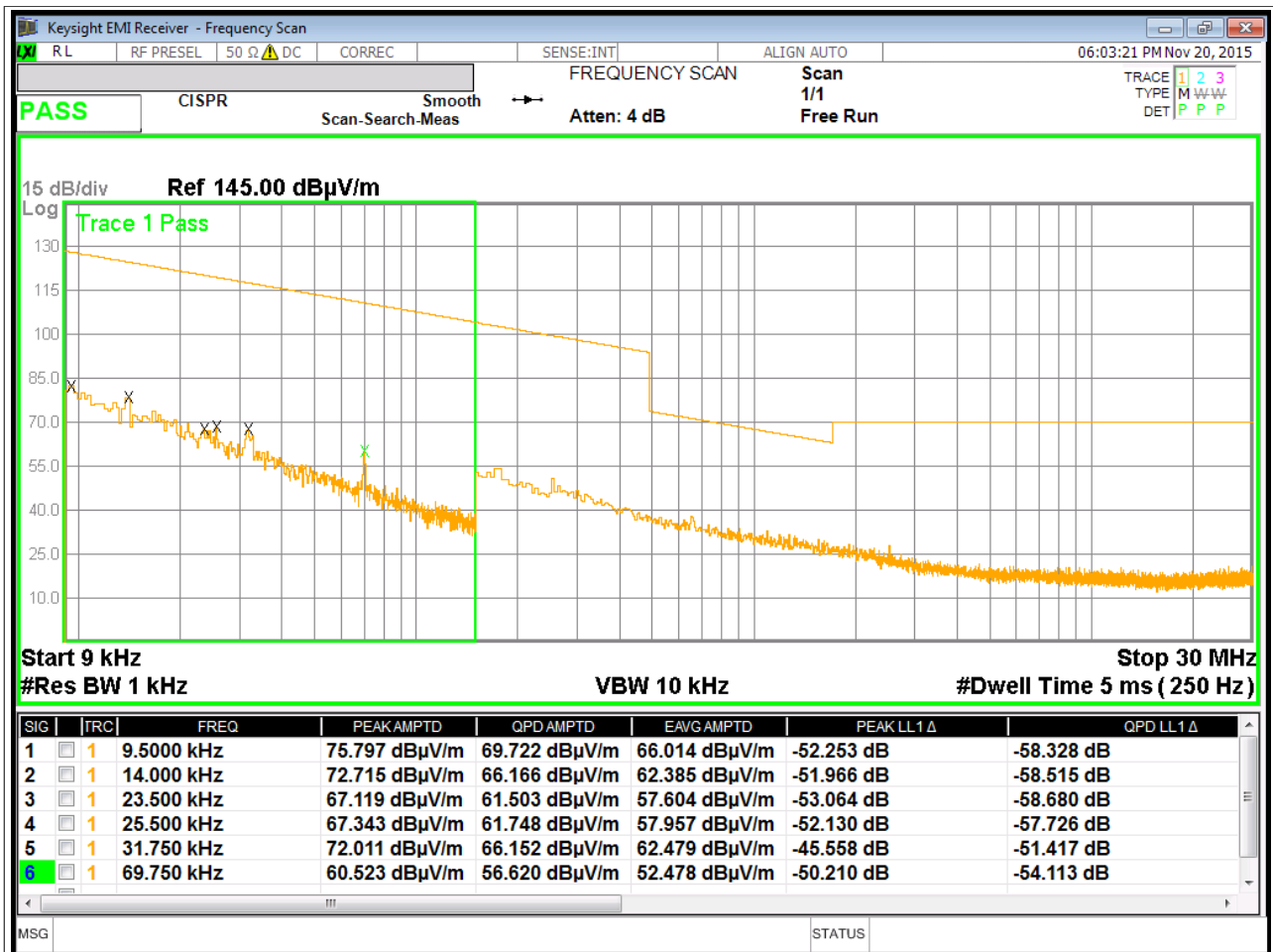




Note:

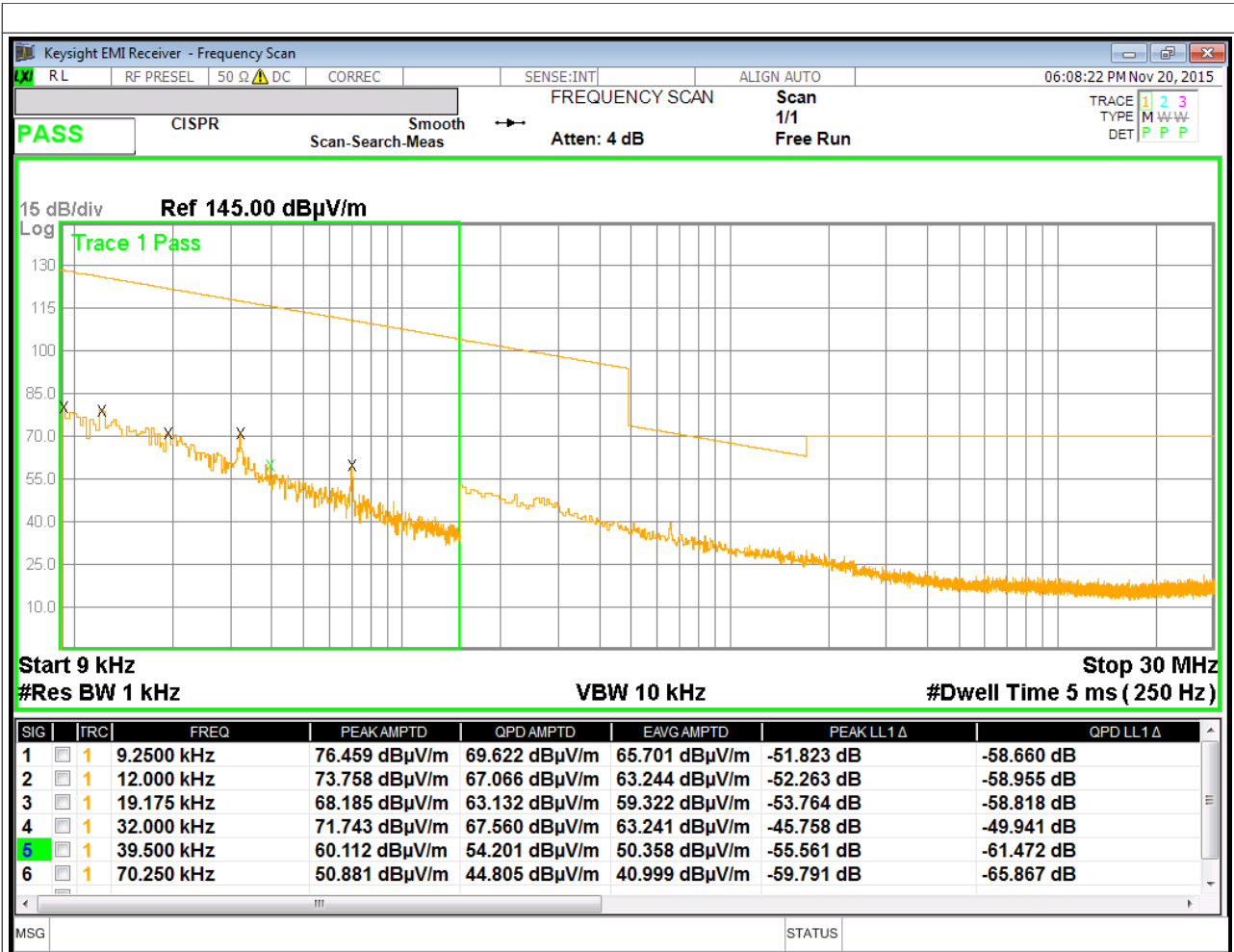
EUT
 Pol. V
 TT = 0°
 MA = 100 cm
 EUT mode: operative
 Auxiliary apparatus: all ON
 channel 11
 modulation type n
 max speed (65 Mbps)





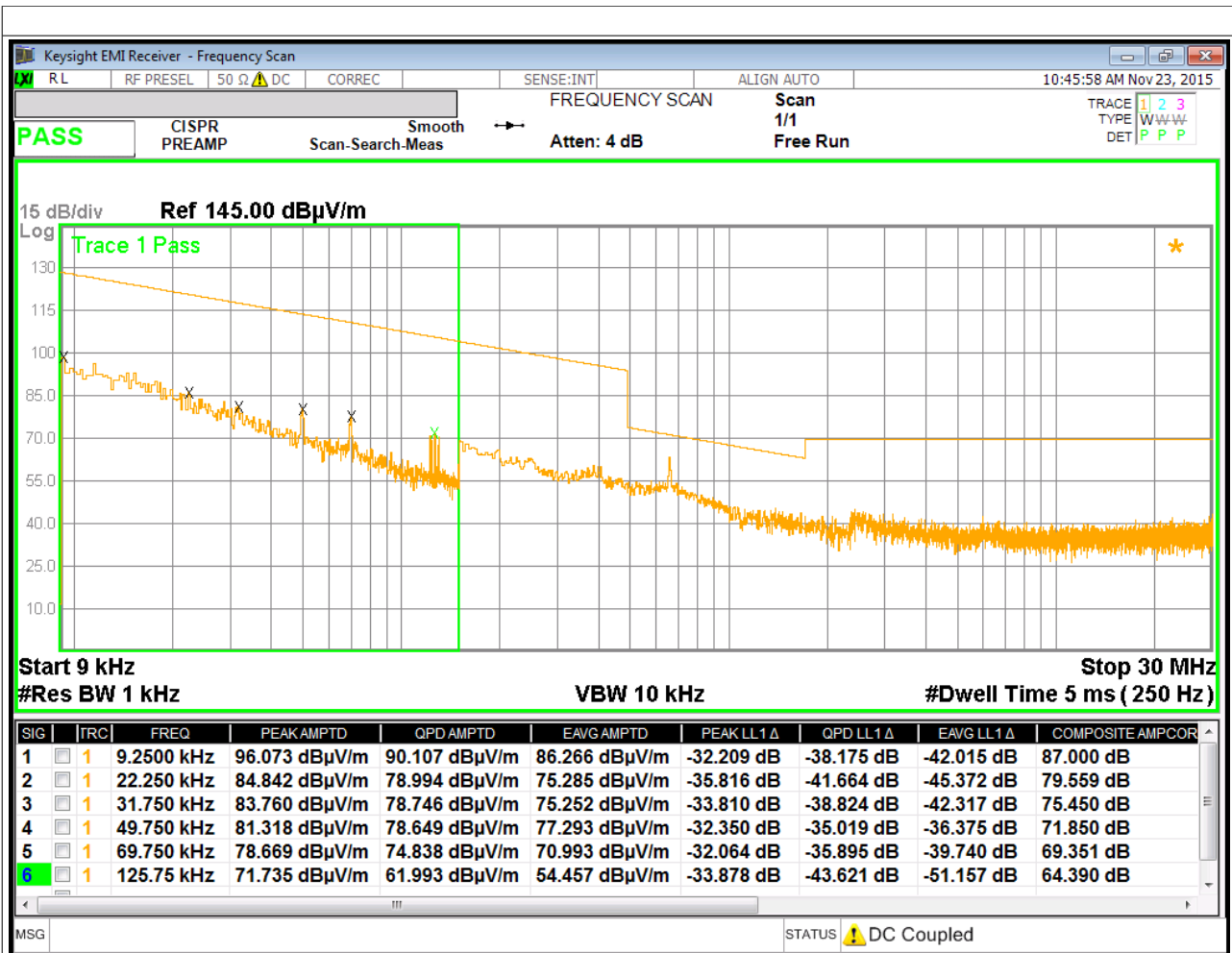
Note:

EUT
 Horizontal Polarization
 TT = 0°
 MA = 150 cm
 EUT mode: Standby
 Auxiliary apparatus: all ON



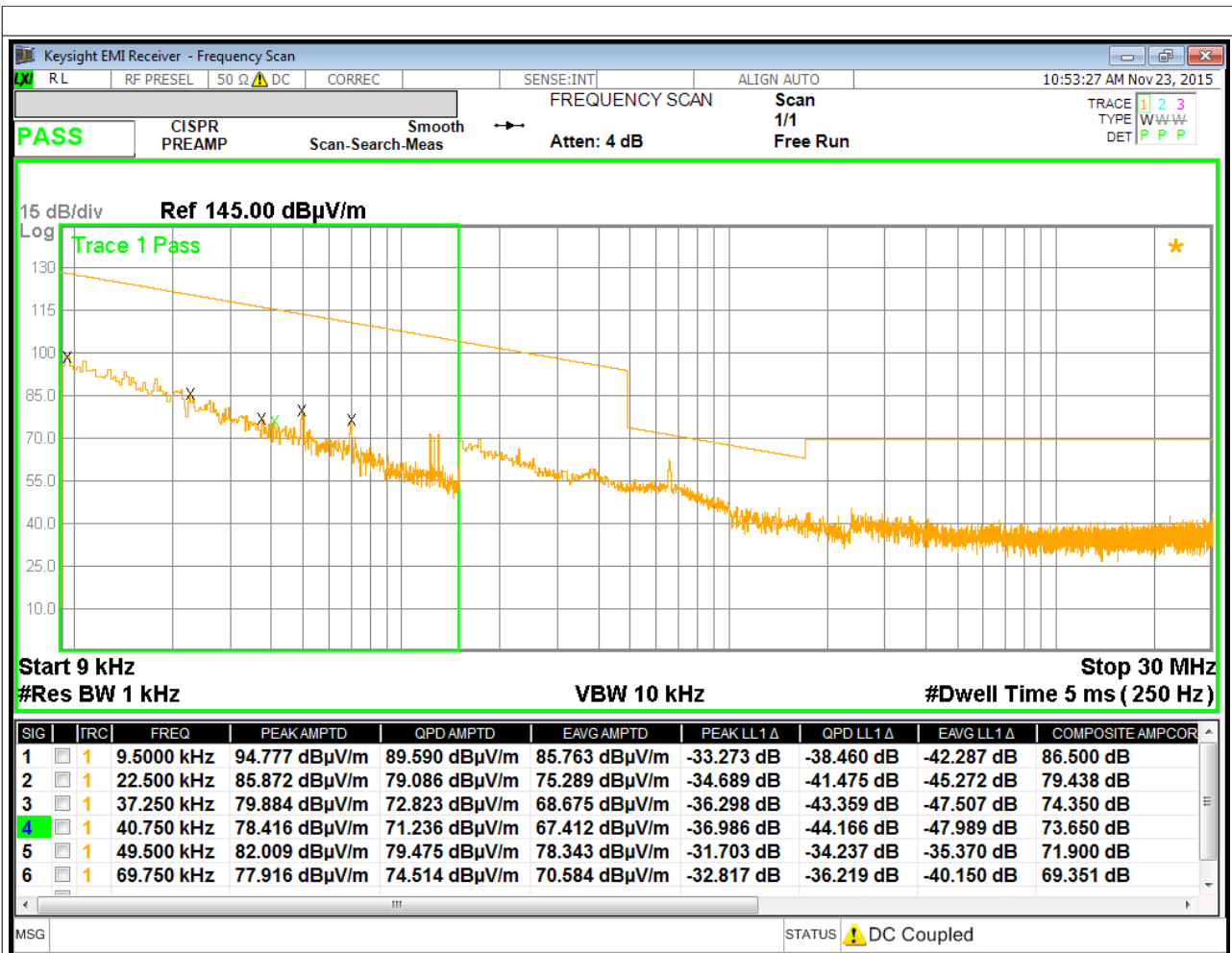
Note:

EUT
Parallel Polarization
TT = 0°
MA = 150 cm
EUT mode: Standby
Auxiliary apparatus: all ON



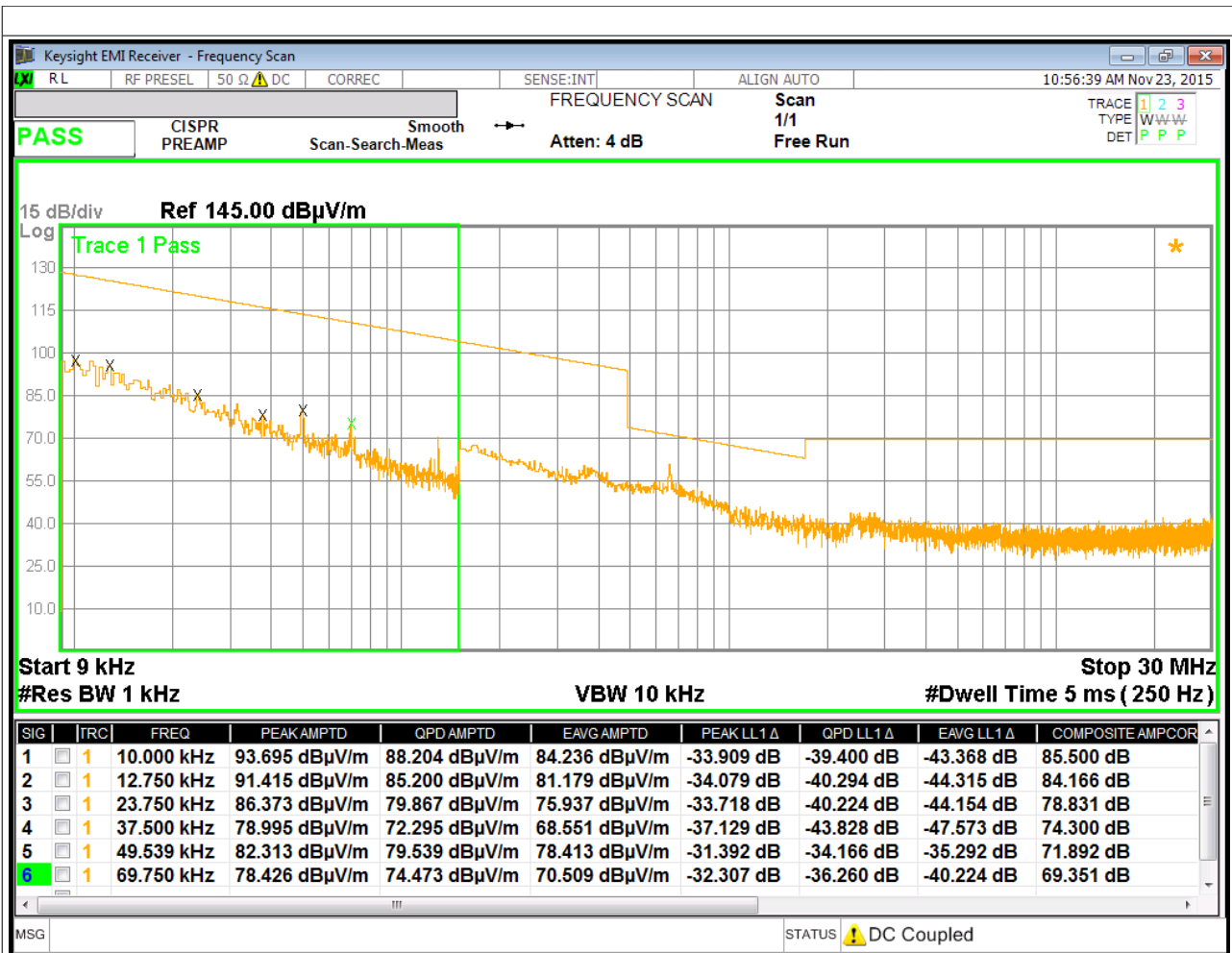
Note:

EUT
Parallel Polarization
TT = 0°
MA = 150 cm
EUT mode: Operative
channel 6
modulation type g
max speed (54 Mbps)
Auxiliary apparatus: all ON



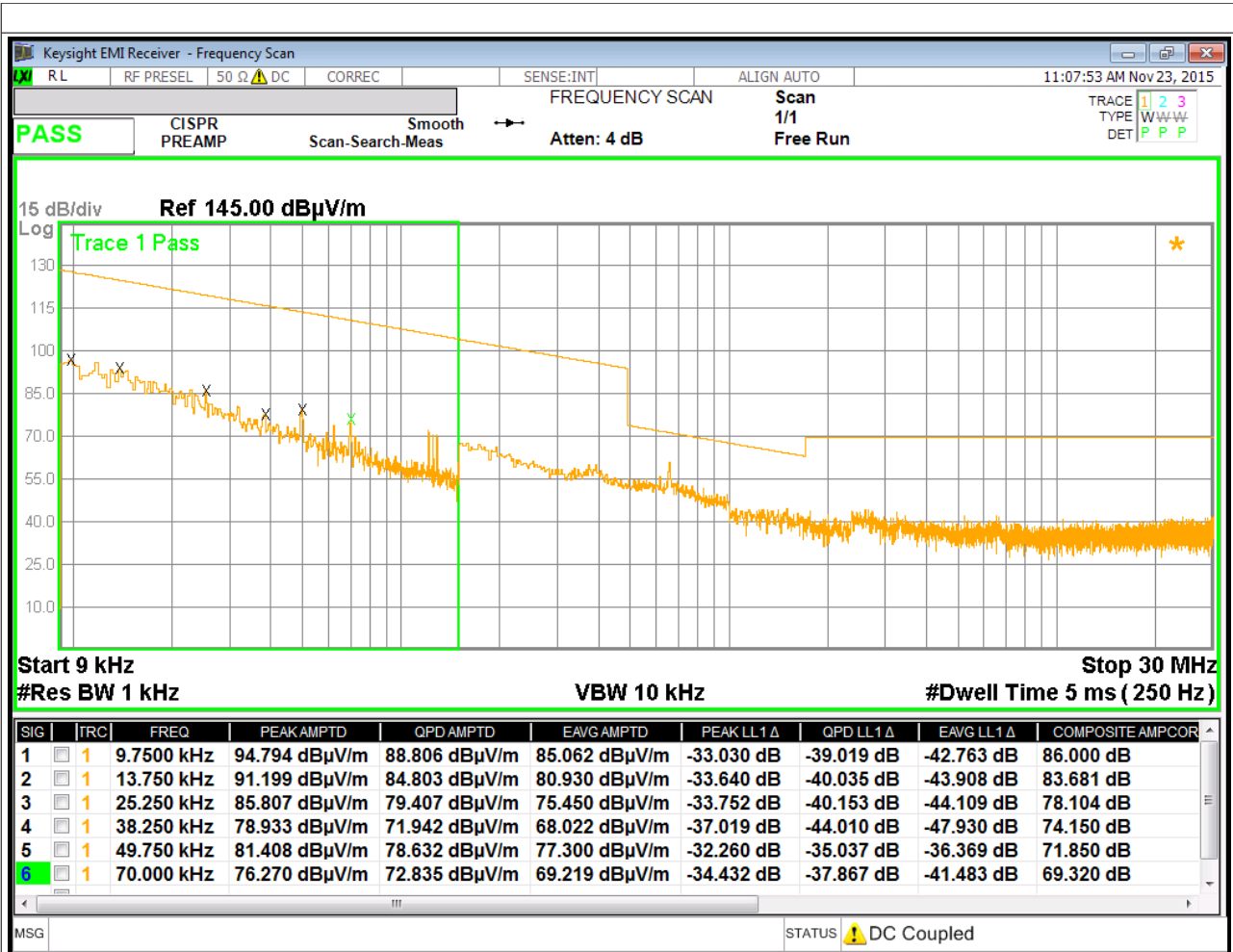
Note:

EUT
Parallel Polarization
TT = 0°
MA = 150 cm
EUT mode: Operative
channel 6
modulation type b
max speed (11 Mbps)
Auxiliary apparatus: all ON



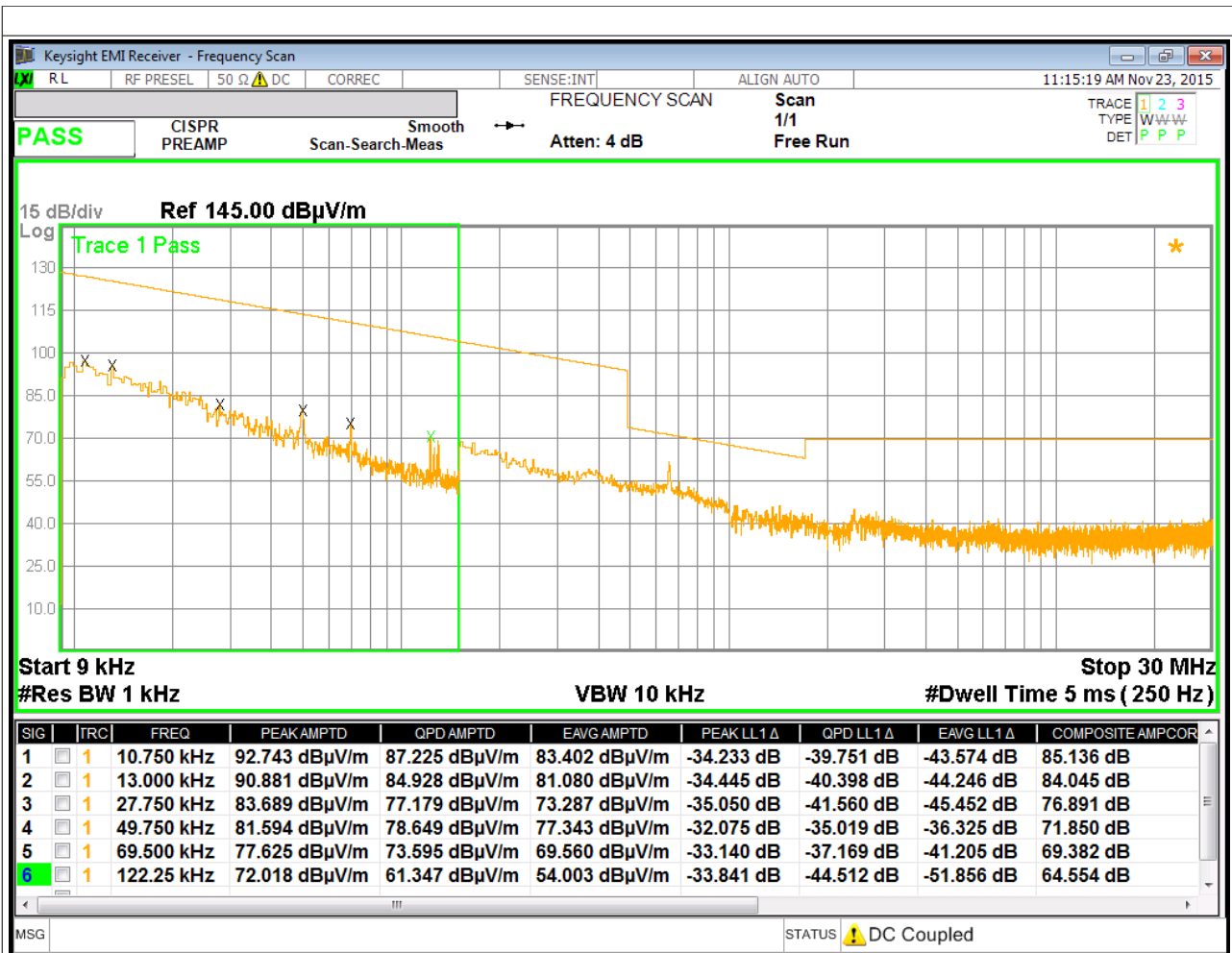
Note:

EUT
Parallel Polarization
TT = 0°
MA = 150 cm
EUT mode: Operative
channel 6
modulation type n
max speed (65 Mbps)
Auxiliary apparatus: all ON



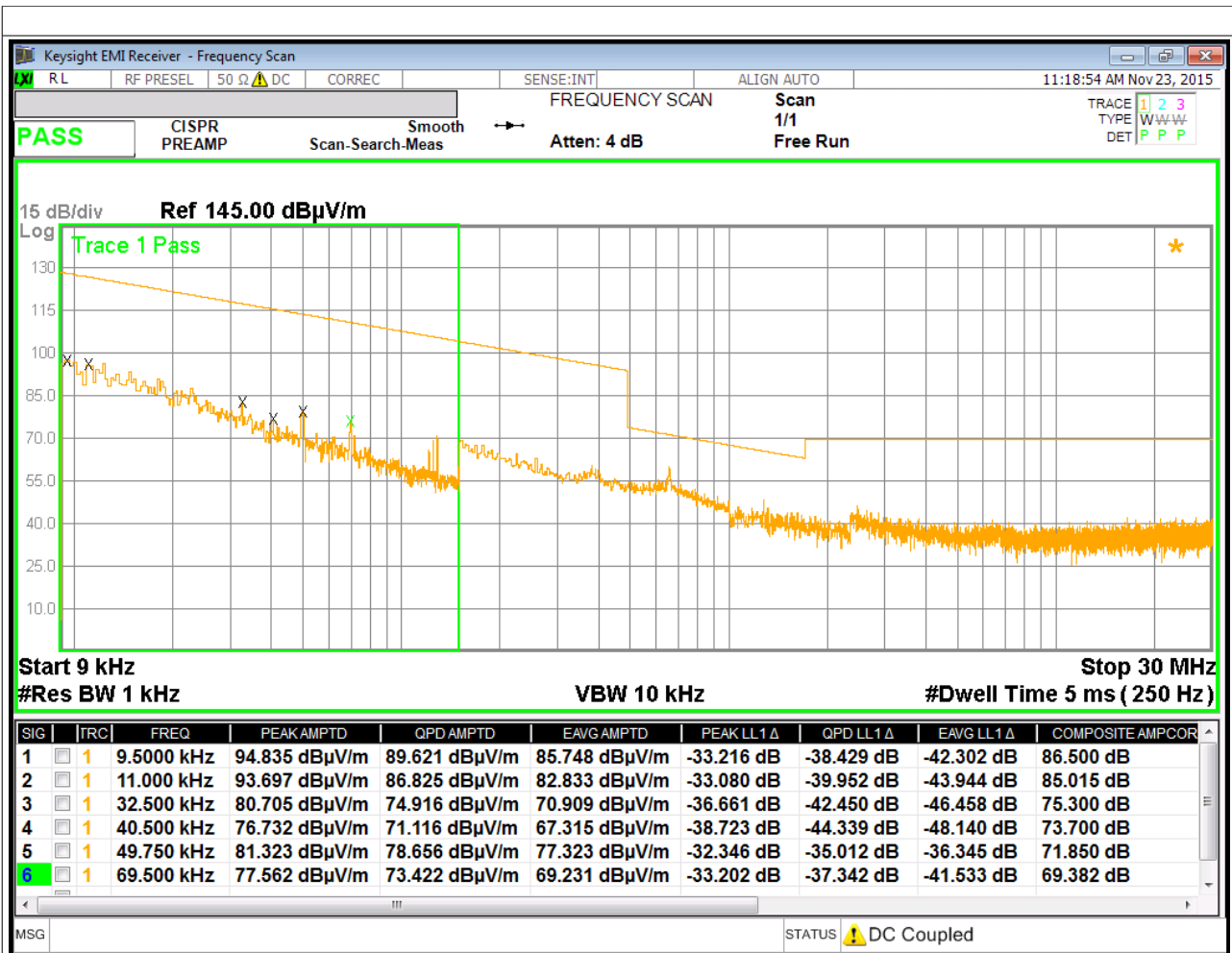
Note:

EUT
 Horizontal Polarization
 TT = 0°
 MA = 150 cm
 EUT mode: Operative
 channel 6
 modulation type n
 max speed (65 Mbps)
 Auxiliary apparatus: all ON



Note:

EUT
 Horizontal Polarization
 TT = 0°
 MA = 150 cm
 EUT mode: Operative
 channel 6
 modulation type g
 max speed (54 Mbps)
 Auxiliary apparatus: all ON



Note:

EUT
 Horizontal Polarization
 TT = 0°
 MA = 150 cm
 EUT mode: Operative
 channel 6
 modulation type b
 max speed (11 Mbps)
 Auxiliary apparatus: all ON

RADIATED SPURIOUS EMISSIONS EXTERNAL ANTENNA					
Low Channel 802.11b mode, 11 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.824	H	-	-	74.0	54.0
4.824	V	56.3	44.6	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					
Low Channel 802.11g mode, 54 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.824	H	-	-	74.0	54.0
4.824	V	-	-	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					

Low Channel 802.11n mode, 65 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.824	H	-	-	74.0	54.0
4.824	V	-	-	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					
Mid Channel 802.11b mode, 11 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.874	H	-	-	74.0	54.0
4.824	V	55.1	43	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOORS					

Mid Channel 802.11g mode, 54 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.874	H	-	-	74.0	54.0
4.824	V	49.1	-	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					
Mid Channel 802.11n mode, 65 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.874	H	-	-	74.0	54.0
4.824	V	-	-	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					

High Channel 802.11b mode, 11 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.924	H	-	-	74.0	54.0
4.924	V	56.9	42.4	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					
High Channel 802.11g mode, 54 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.924	H	-	-	74.0	54.0
4.924	V	51.2	39.3	74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
				74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					

High Channel 802.11n mode, 65 Mbs					
F GHz	Polarization	Peak dBuV/m	Avg dBuV/m	Limit Peak	Limit Avg
4.924	H	-	-	74.0	54.0
4.924	V	49.6	39.2	74.0	54.0
NO OTHER EMISSIONS WERE DETECTED ABOVE SYSTEM NOISE FLOOR					

10. PHOTO



Fig. 10.1

Radiated Emissions Test Set-up (9kHz - 30MHz)

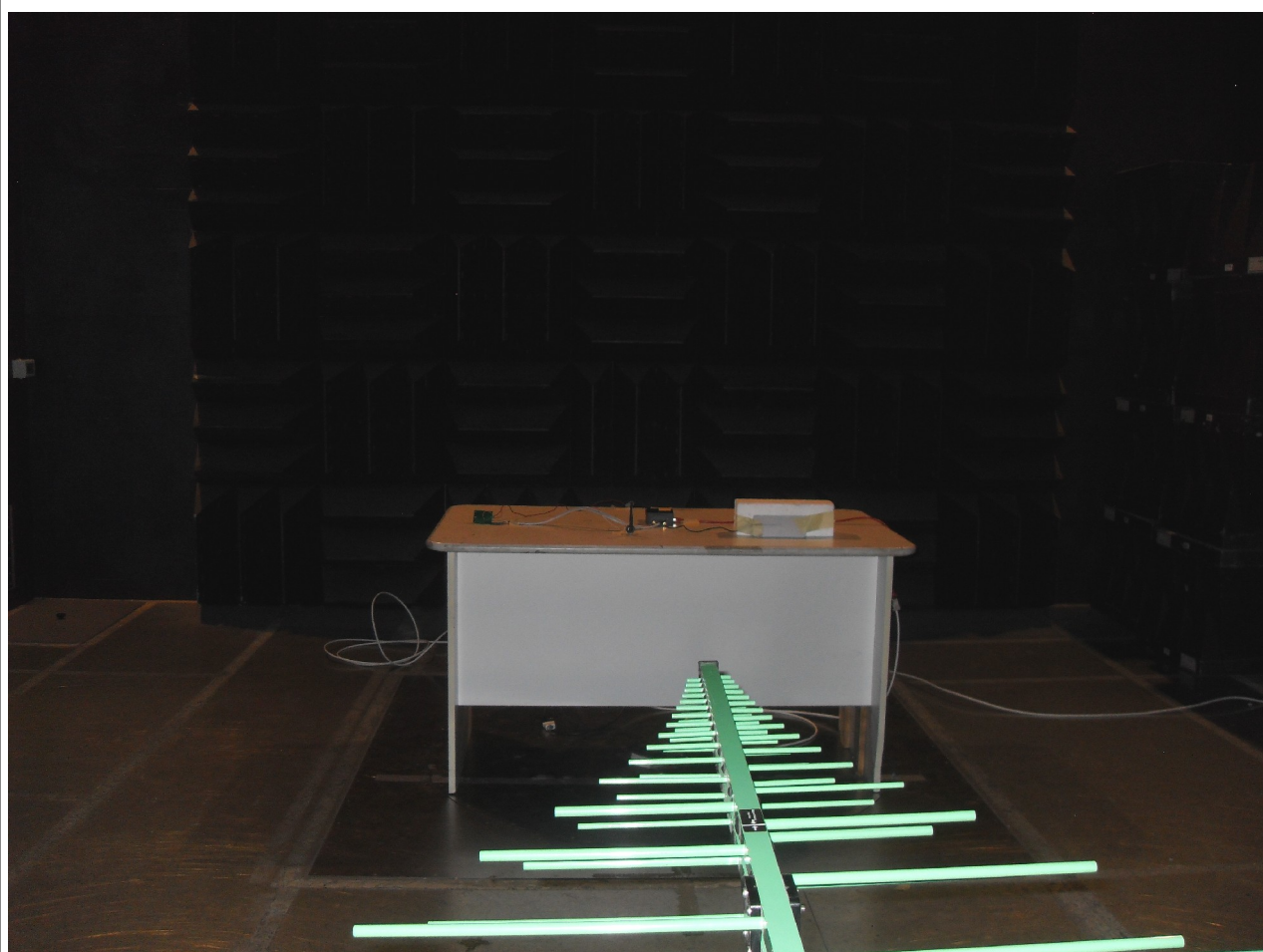


Fig. 10.2

Radiated Emissions Test Set-up (30MHz – 1 GHz)



Fig. 10.3

Radiated Emissions Test Set-up (1GHz - 26GHz)



Fig. 10.4

Power Line Conducted Emissions Test Set-up



Fig. 10.5

Antenna Port Conducted Emissions Test Set-up