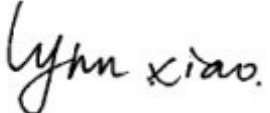
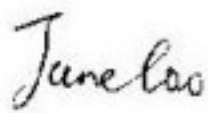
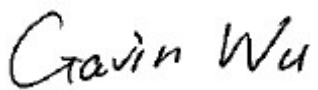




TEST REPORT

Report No.:	EM201300375-2	Application No.:	ZJ00029362
Client:	Harman International Industries, Incorporated		
Address:	8500 Balboa Blvd, Northridge, CA 91329, United States		
Sample Description:	Blu-RAY DISC SYSTEM		
Model:	BDS 280		
Adding Model:	/		
FCC ID	APIBDS280		
Test Specification:	FCC Part 15, Subpart C(Section 15.247)		
Test Date:	2013-05-15 to 2013-06-28		
Issue Date:	2013-06-28		
Test Result:	Pass.		
Prepared By:	Reviewed By:	Approved By:	
Lynn Xiao / Test Engineer	Jane Cao / Test Engineer	Gavin Wu / Manager	
			
Date:2013-06-28	Date:2013-06-28	Date:2013-06-28	
Other Aspects:			
Abbreviations: ok / P = passed; fail / F = failed; n.a. / N = not applicable			
The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.			

GRG Metrology and Test Technology Co., Ltd.

Address: 163, Pingyun Road, West of Huangpu Avenue, Guangzhou, Guangdong, P.R. China

Tel:+86-20-38699960

Fax:+86-20-38695185

Email: cert-center@grg.net.cn<http://www.grgtest.com>

Ver.:1.0 / 01.Jan.2011

DIRECTIONS OF TEST

1. This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.
2. The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.
3. If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.

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1. TEST RESULT SUMMARY

Section B of FCC Part 15.247:2010			
Standard	Item	Limit / Severity	Result
FCC Part 15, Subpart C (15.247)	Antenna Requirement	§15.203	PASS
	Conducted Emissions	§15.207 (a)	PASS
	Radiated Electromagnetic Disturbance	§15.247(d)	PASS
	6 Db Bandwidth	§15.247 (a)(2)	PASS
	Maximum Peak Output Power	§15.247(b)(3)	PASS
	Power Spectral Density	§15.247(e)	PASS
	Emissions In Non-Rest ricted Frequency Bands	§15.247(d)	PASS
	Emissions In Restricted Frequency Bands	§15.205	PASS
	Band-Edge Measurements	§15.247(d)	PASS

2. GENERAL DESCRIPTION OF EUT

2.1 APPLICANT

Name: Harman International Industries, Incorporated
Address: 8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES

2.2 MANUFACTURER

Name: TCL TECHNOLOGY ELECTRONICS (HUIZHOU) CO., LTD
Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China.

2.3 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: Blu-RAY DISC SYSTEM
Model No.: BDS 280
Adding Model /
Trade Name: harman/kardon
Power Supply: 100-240V~50/60Hz
Operating Frequency Range: 2.4GHz Band:2412MHz-2472MHz, ;
5.8GHz Band:5745MHz-5825MHz
Test Frequency: 5.8GHz Band:5745MHz-5825MHz
Antenna gain: 3dBi
Type of emission WIFI
Modulation type OFDM (802.11a/n20/n40)
Note: /

3. LABORATORY AND ACCREDITATIONS

3.1 LABORATORY

The tests and measurements refer to this report were performed by Guangzhou GRG Metrology and Test CO., LTD.

Add. : 163 Pingyun Rd, West of Huangpu Ave, Guangzhou, 510656, P. R. China

Telephone: +86-20-38699959, 38699960, 38699961

Fax : +86-20-38695185

3.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC Listed Lab (No. 688188)
China	CNAS (No.L0446)
China	DILAC (No.DL175)
Canada	Registration No.:8355A-1

3.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	30MHz~1000MHz	4.2dB
		1GHz~26.5GHz	4.2dB
	Vertical	30MHz~1000MHz	4.4dB
		1GHz~26.5GHz	4.4dB
Conducted Emission		9kHz~30MHz	3.1 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.4 LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Conducted Emissions				
EMI Receiver	R&S	ESU40	100529	2014-01-24
L.I.S.N	SCHWARZBECK	NSLK 8127	8127450	2013-08-05
Spurious Emissions at Antenna Port				
Receiver	R&S	ESU40	100106	2014-01-24
Restricted Bands				
Receiver	R&S	ESU40	100106	2014-01-24
Spurious Emissions				
Receiver	R&S	ESU40	100106	2014-01-24
Signal Generator	R&S	SML03	103002	2013-11-13
Biconical Log-periodic Antenna	ETS.LINDGREN	3142C	00075971	2014-05-26
Horn antenna	SCHWARZBECK	BBHA9120D	D752	2013-10-14
6 dB Bandwidth				
Receiver	R&S	ESU40	100106	2014-01-24
Maximum Peak Output Power				
Receiver	R&S	ESU40	100106	2014-01-24
100kHz Bandwidth of Frequency Band Edge				
Receiver	R&S	ESU40	100106	2014-01-24
Power Spectral Density				
Receiver	R&S	ESU40	100106	2014-01-24

4. ANTENNA REQUIREMENT

The EUT has one antenna. The antenna is exposed antenna.

The gain of antenna 3dBi .which accordance 15.203 is considered sufficient to comply with the provisions of this section.

5. CONDUCTED EMISSION MEASUREMENT

5.1 LIMITS

Frequency range	Limits (dB μ V)	
	Quasi-peak	Average
150kHz ~ 0.5MHz	66~56	56~46
0.5 MHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range of 150 kHz to 0.5MHz.

5.2 TEST PROCEDURES

Procedure of Preliminary Test

For measurement of the disturbance voltage the equipment under test (EUT) is connected to the power supply mains and any other extended network via one or more artificial network(s). An EUT, whether intended to be grounded or not, and which is to be used on a table is configured as follows:

- Either the bottom or the rear of the EUT shall be at a controlled distance of 40 cm from a reference ground plane. This ground plane is normally the wall or floor of a shielded room. It may also be a grounded metal plane of at least 2 m by 2 m. This is physically accomplished as follows:

- 1) place the EUT on a table of non-conducting material which is at least 80 cm high. Place the EUT so that it is 40 cm from the wall of the shielded room, or

- 2) place the EUT on a table of non-conducting material which is 40 cm high so that the bottom of the EUT is 40 cm above the ground plane;

- All other conductive surfaces of the EUT shall be at least 80 cm from the reference ground plane;

- The EUT are placed on the floor that one side of the housings is 40 cm from the vertical reference ground plane and other metallic parts;

- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 cm to 40 cm long, hanging approximately in the middle between the ground plane and the table.

- I/O cables that are connected to a peripheral shall be bundled in the centre. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 m.

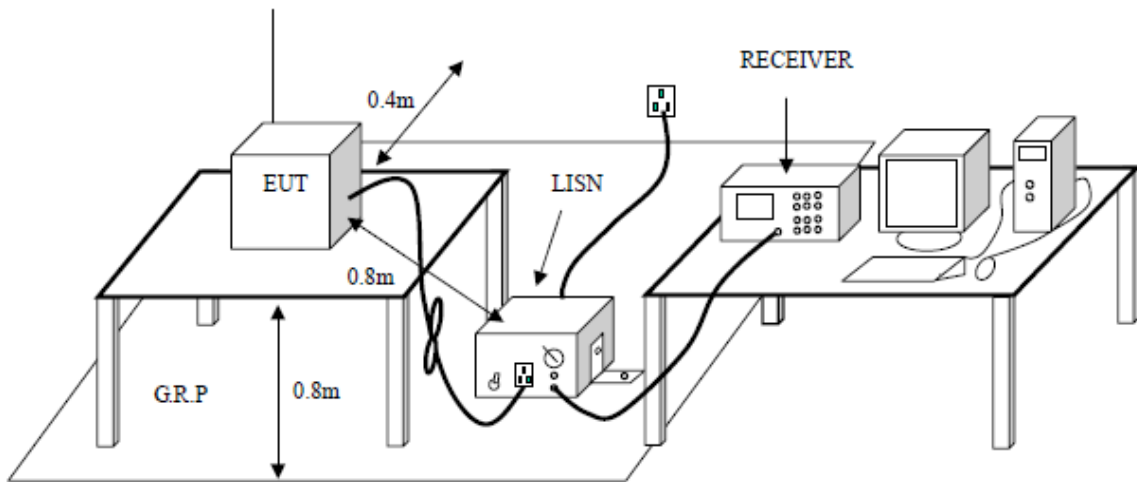
The test mode(s) described in Item 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.4 producing the highest emission level. The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and

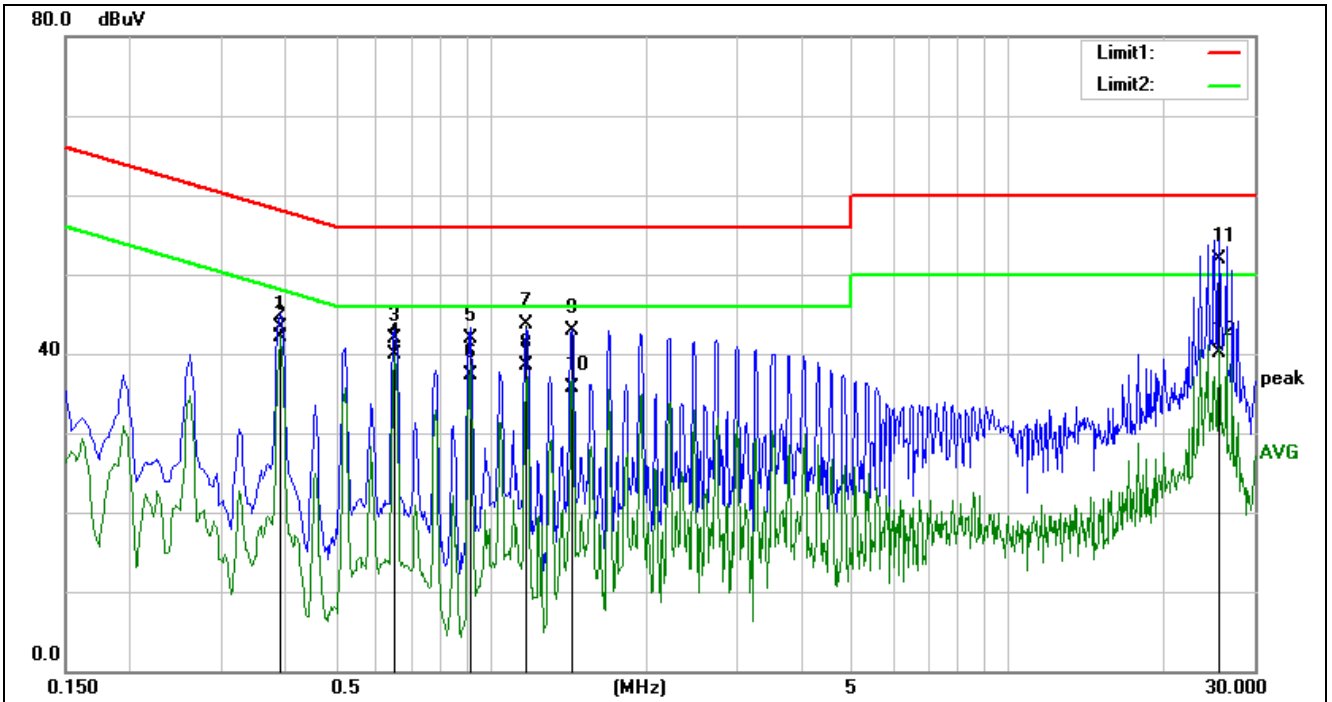
compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

5.3 TEST SETUP



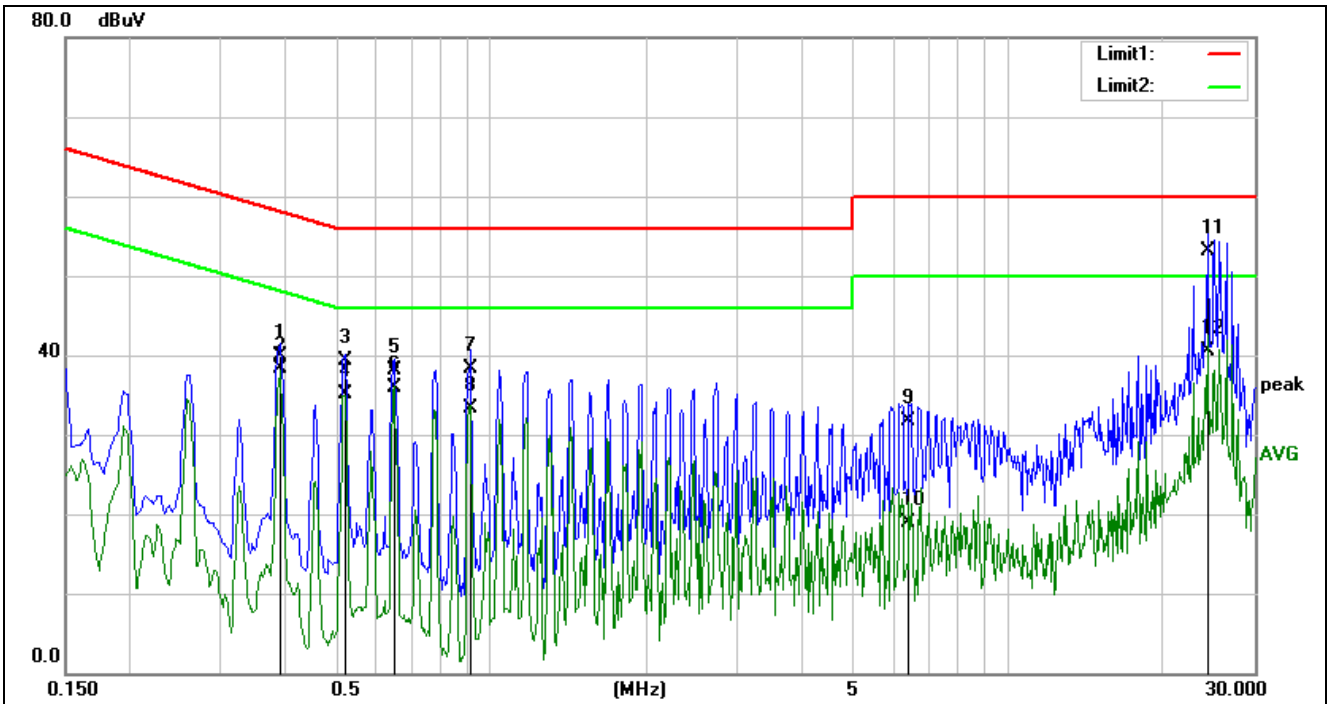
5.4 TEST RESULTS

Project No.:	ZJ00029362	Probe:	L1
Standard:	(CE)FCC PART 15 class B_QP	Power Source:	AC 120V/60Hz
Test item:	Conduction Test	Date:	2013-6-8
Temp./Hum.(%RH):	23/61%RH	Time:	23:04:50
EUT:	Blu-RAY DISC SYSTEM	Test Result:	Pass
Model:	BDS280		
Note:	WIFI-5.8G		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.3897	39.80	3.51	43.31	58.07	-14.76	QP
2	0.3897	38.56	3.51	42.07	48.07	-6.00	AVG
3	0.6523	38.35	3.48	41.83	56.00	-14.17	QP
4	0.6523	36.52	3.48	40.00	46.00	-6.00	AVG
5	0.9093	38.37	3.46	41.83	56.00	-14.17	QP
6	0.9093	33.91	3.46	37.37	46.00	-8.63	AVG
7	1.1717	40.18	3.52	43.70	56.00	-12.30	QP
8	1.1717	34.96	3.52	38.48	46.00	-7.52	AVG
9	1.4328	39.29	3.53	42.82	56.00	-13.18	QP
10	1.4328	32.26	3.53	35.79	46.00	-10.21	AVG
11	25.7118	47.85	4.08	51.93	60.00	-8.07	QP
12	25.7118	35.99	4.08	40.07	50.00	-9.93	AVG

Project No.:	ZJ00029362	Probe:	N
Standard:	(CE)FCC PART 15 class B_QP	Power Source:	AC 120V/60Hz
Test item:	Conduction Test	Date:	2013-6-8
Temp./Hum.(%RH):	23/61%RH	Time:	22:59:01
EUT:	Blu-RAY DISC SYSTEM	Test Result:	Pass
Model:	BDS280		
Note:	WIFI -5.8G		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.3899	36.49	3.51	40.00	58.06	-18.06	QP
2	0.3899	34.79	3.51	38.30	48.06	-9.76	AVG
3	0.5211	35.85	3.51	39.36	56.00	-16.64	QP
4	0.5211	31.61	3.51	35.12	46.00	-10.88	AVG
5	0.6507	34.67	3.48	38.15	56.00	-17.85	QP
6	0.6507	32.49	3.48	35.97	46.00	-10.03	AVG
7	0.9131	34.76	3.46	38.22	56.00	-17.78	QP
8	0.9131	29.78	3.46	33.24	46.00	-12.76	AVG
9	6.4570	27.96	3.75	31.71	60.00	-28.29	QP
10	6.4570	15.06	3.75	18.81	50.00	-31.19	AVG
11	24.2866	49.09	3.93	53.02	60.00	-6.98	QP
12	24.2866	36.53	3.93	40.46	50.00	-9.54	AVG

6. RADIATED ELECTROMAGNETIC DISTURBANCE

6.1 LIMITS

Frequency (MHz)	Quasi-peak(dB μ V/m)
30 ~ 88	40
88~216	43.5
216 ~ 960	46
Above 960	54

NOTE: (1) The lower limit shall apply at the transition frequencies.

Frequency (GHz)	Quasi-peak(dB μ V/m)
1 ~ 26.5	74
1~ 26.5	54

6.2 TEST PROCEDURES

Procedure of Preliminary Test

Radiated emission tests shall be made with the receive or transmit antenna located at a horizontal distance of 3 m plus half of the maximum width of the EUT being tested, measured from the centre of the EUT. The tests shall be performed with the equipment configured as closely as possible to its typical, practical operation. Unless stated otherwise, cables and wiring shall be as specified by the manufacturer and the equipment shall be in its housing (or cabinet) with all covers and access panels in place. Any deviation from normal EUT operating conditions shall be included in the test report.

The EUT (on a non-conductive support structure, where applicable) shall be placed on a remotely operated turntable, to allow the EUT to be rotated. The height of the EUT above the ground plane shall be according to the following requirements.

- Table-top equipment is placed on a non-conductive set-up table with height 0,8 m \pm 0,01 m, ANSI C63.4 specifies the method to determine the impact of the non-conductive set-up table on test results.
- Floor-standing equipment is placed on a non-conductive support, as specified in the applicable product standard. If there are no EUT height placement requirements in the product standard, the EUT shall be placed on a non-conductive support at a height of 5 cm to 15 cm above the ground plane.

Interface cables, loads, and devices should be connected to at least one of each type of the interface ports of the EUT and, where practical, each cable shall be terminated in a device typical for its actual use. Where there are multiple interface ports of the same type, a typical number of these devices shall be connected to devices or loads. It is sufficient to connect only one of the loads, provided that it can be shown, for example by preliminary testing, that the connection of further ports would not significantly increase the level of disturbance (that is, more than 2 dB) or significantly degrade the immunity level.

The test mode(s) described in Item 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.4 producing the highest emission level. The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

Procedure of Final Test

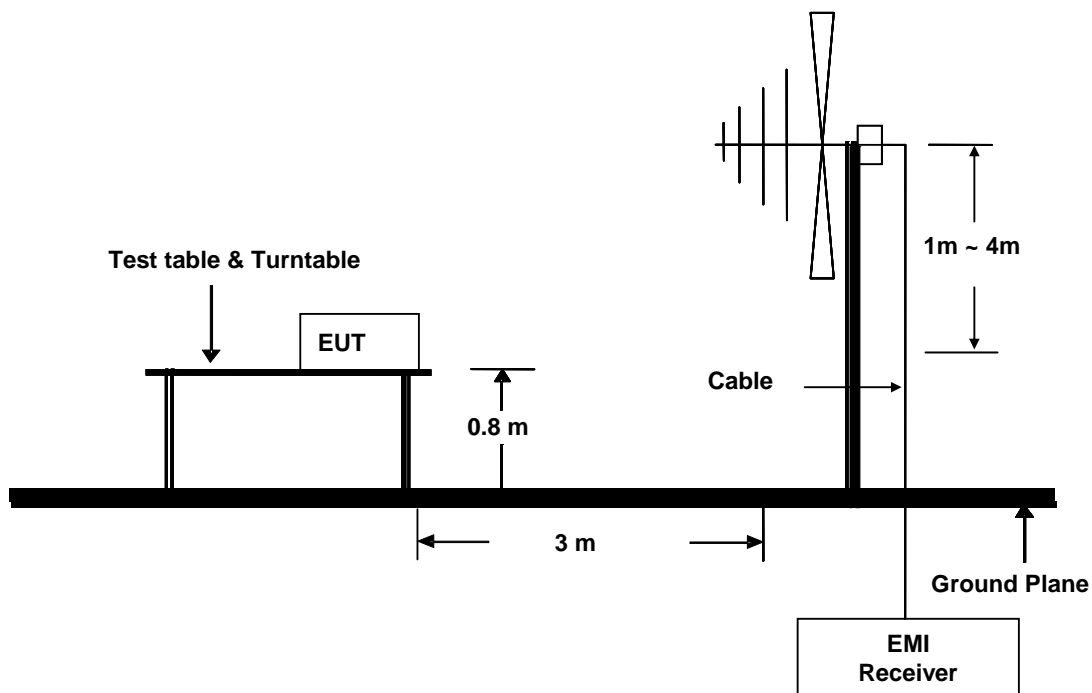
EUT and support equipment were set up on the turntable as per the configuration with highest

emission level in the preliminary test. The Analyzer / Receiver scanned from 30MHz to 1000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level. Record at least six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only QP reading is presented. The test data of the worst-case condition(s) was recorded.

Procedure of Final Test

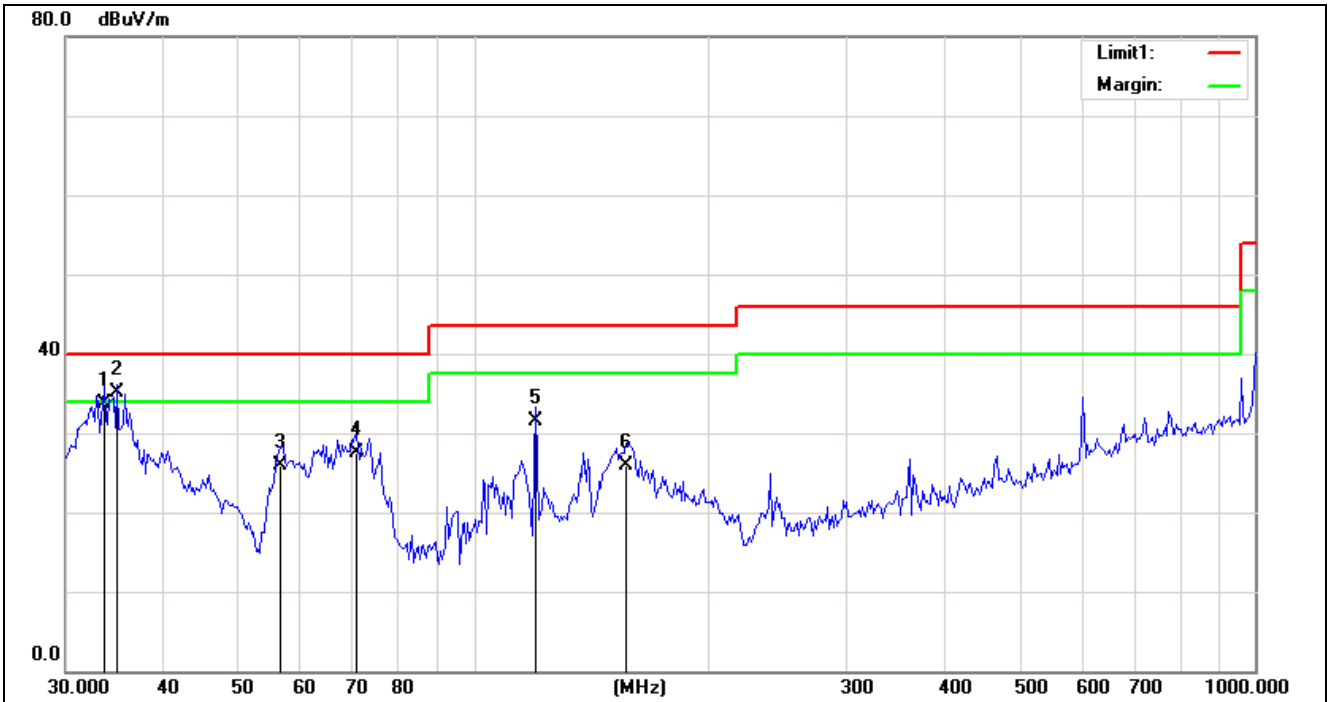
EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

6.3 TEST SETUP



6.4 TEST RESULTS

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:25:57
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-a-5745		

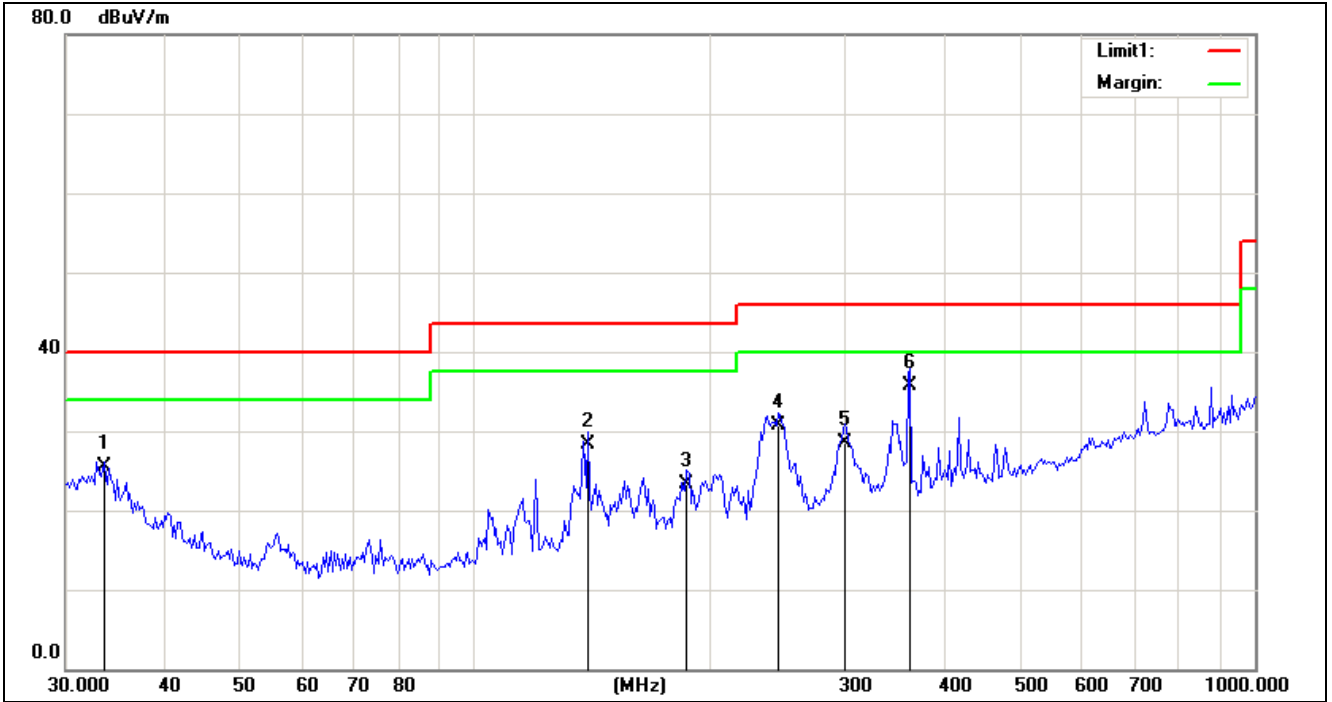


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	16.54	17.26	33.80	40.00	-6.20	QP
2	34.9151	18.66	16.44	35.10	40.00	-4.90	QP
3	56.6107	17.31	8.59	25.90	40.00	-14.10	QP
4	70.8793	19.78	7.72	27.50	40.00	-12.50	QP
5	120.2064	22.63	8.87	31.50	43.50	-12.00	QP
6	156.5422	15.40	10.50	25.90	43.50	-17.60	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2022.306	41.71	14.19	55.90	74.00	-18.10	peak
2	2022.306	33.60	14.19	47.79	54.00	-6.21	AVG
3	2511.279	36.40	17.10	53.50	74.00	-20.50	peak
4	2511.279	20.50	17.10	37.60	54.00	-16.40	AVG
5	12826.912	30.28	27.61	57.89	74.00	-16.11	peak
6	12826.912	11.79	27.61	39.40	54.00	-14.60	AVG
7	17591.230	30.98	35.62	66.60	74.00	-7.40	peak
8	17591.230	13.48	35.62	49.10	54.00	-4.90	AVG

Project No.:	ZJ00029362	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:01:05
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-a-5745		

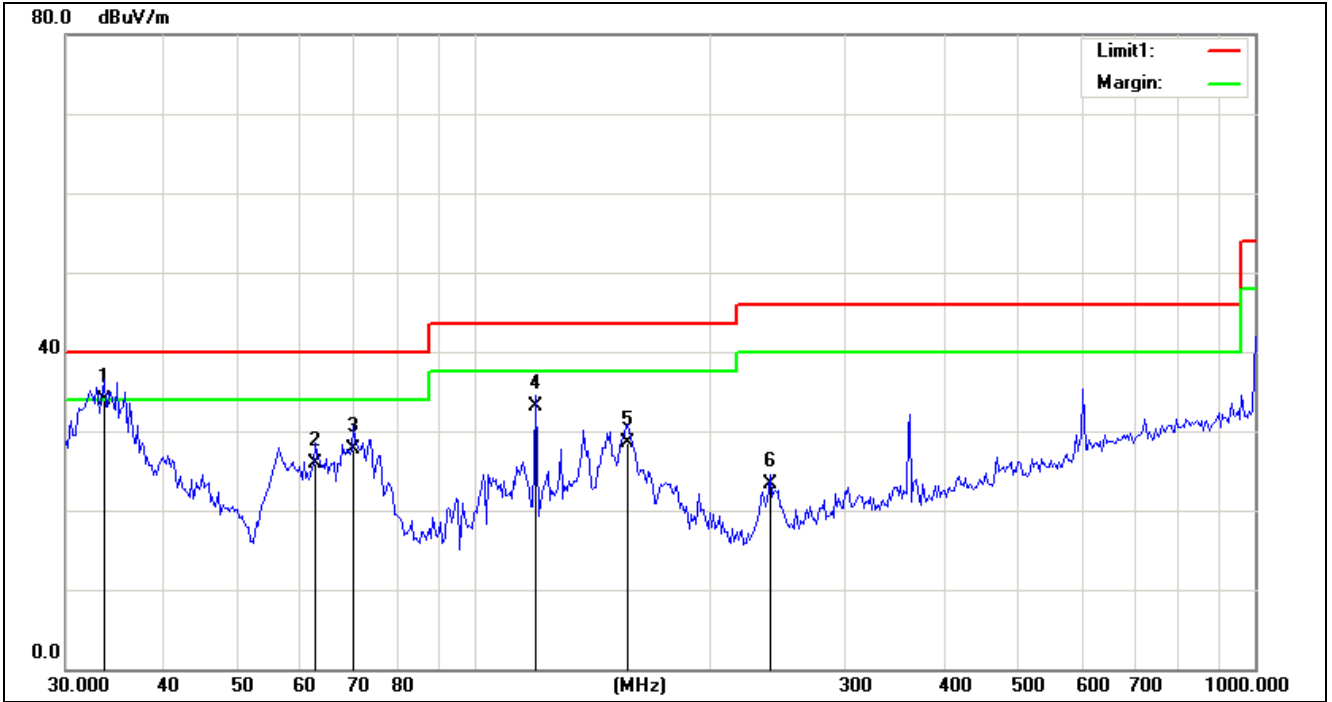


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	8.34	17.26	25.60	40.00	-14.40	QP
2	139.9011	19.21	9.19	28.40	43.50	-15.10	QP
3	187.3820	12.04	11.36	23.40	43.50	-20.10	QP
4	245.3985	17.21	13.49	30.70	46.00	-15.30	QP
5	298.7377	13.49	15.01	28.50	46.00	-17.50	QP
6	361.6326	18.33	17.47	35.80	46.00	-10.20	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1594.497	41.16	12.14	53.30	74.00	-20.70	peak
2	1594.497	35.20	12.14	47.34	54.00	-6.66	AVG
3	2022.306	30.61	14.19	44.80	74.00	-29.20	peak
4	2022.306	22.40	14.19	36.59	54.00	-17.41	AVG
5	12826.912	29.54	27.61	57.15	74.00	-16.85	peak
6	12826.912	11.79	27.61	39.40	54.00	-14.60	AVG
7	16801.328	30.78	34.94	65.72	74.00	-8.28	peak
8	16801.328	12.96	34.94	47.90	54.00	-6.10	AVG

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:26:26
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-a-5825		

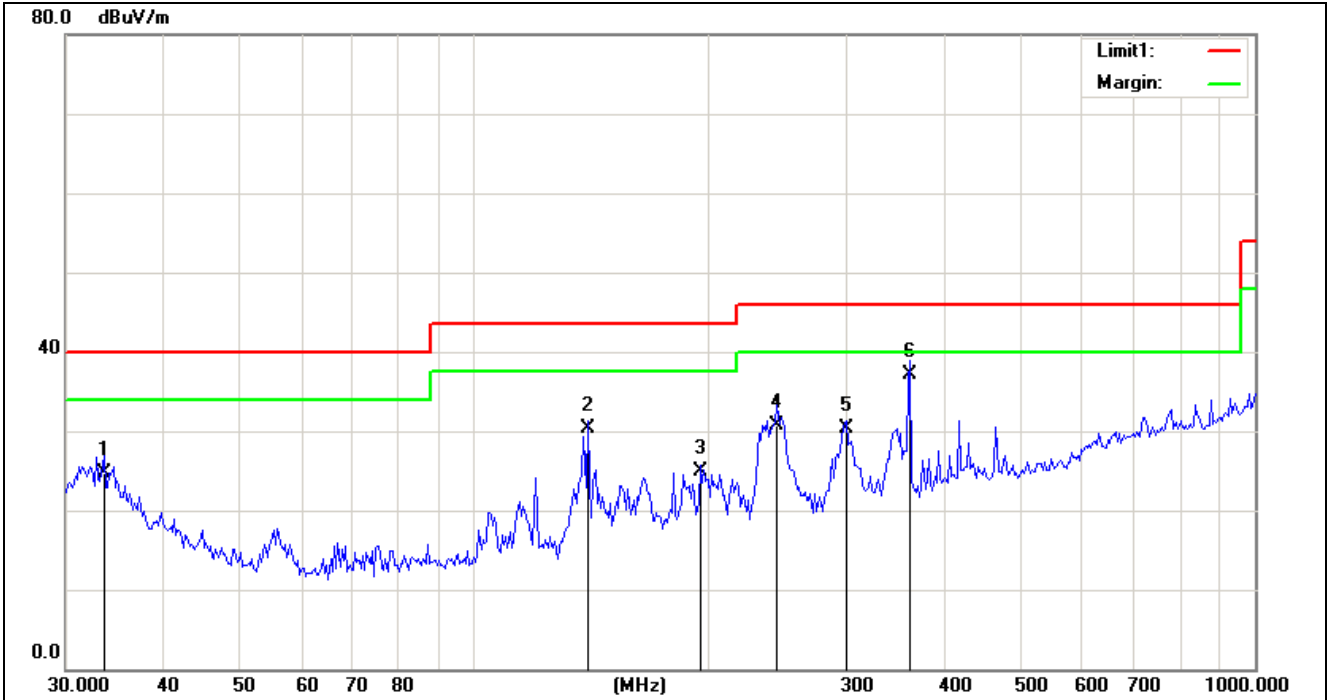


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	16.64	17.26	33.90	40.00	-6.10	QP
2	62.6366	17.96	7.94	25.90	40.00	-14.10	QP
3	70.0870	20.15	7.65	27.80	40.00	-12.20	QP
4	120.2064	24.23	8.87	33.10	43.50	-10.40	QP
5	157.4243	17.94	10.56	28.50	43.50	-15.00	QP
6	239.9441	10.12	13.28	23.40	46.00	-22.60	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	42.75	13.58	56.33	74.00	-17.67	peak
2	1864.982	22.11	13.58	35.69	54.00	-18.31	AVG
3	2560.387	41.78	17.64	59.42	74.00	-14.58	peak
4	2560.387	19.77	17.64	37.41	54.00	-16.59	AVG
5	12546.148	29.15	28.02	57.17	74.00	-16.83	peak
6	12546.148	10.38	28.02	38.40	54.00	-15.60	AVG
7	16849.641	31.25	35.14	66.39	74.00	-7.61	peak
8	16849.641	14.56	35.14	49.70	54.00	-4.30	AVG

Project No.:	ZJ00029362	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:01:58
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-a-5825		

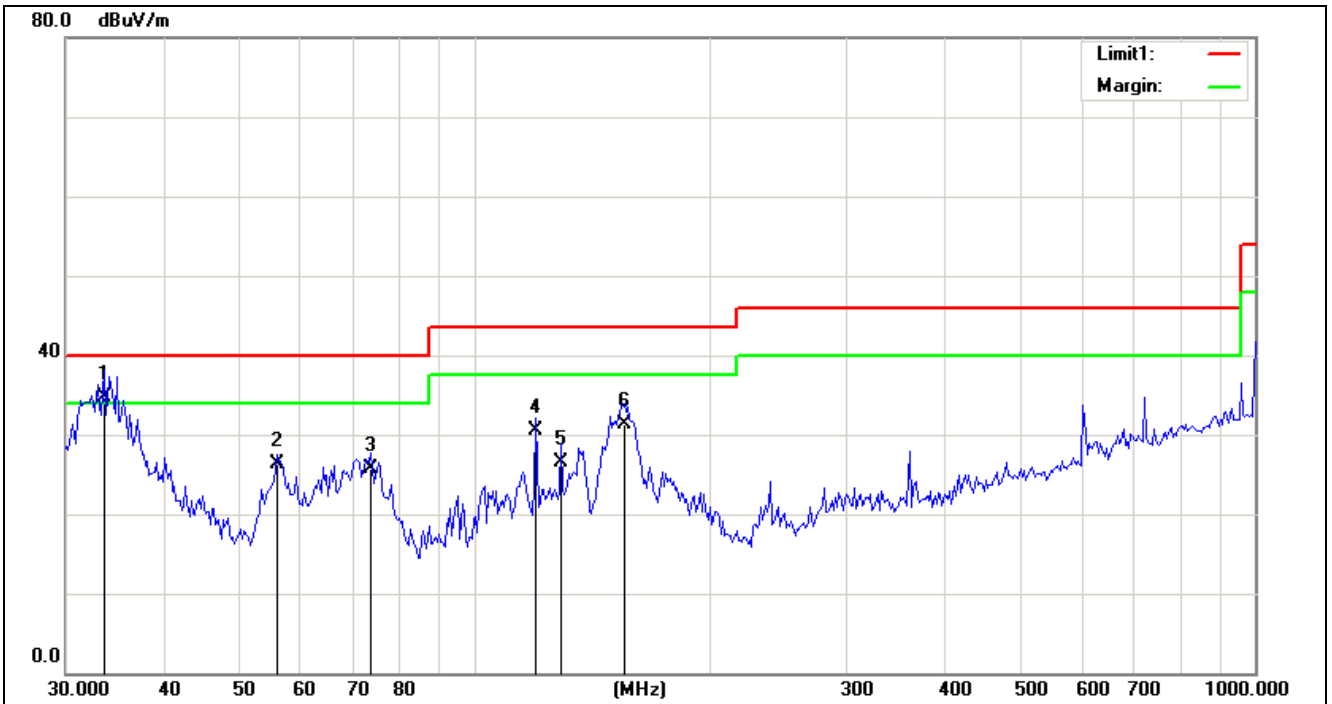


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	7.44	17.26	24.70	40.00	-15.30	QP
2	139.9011	21.21	9.19	30.40	43.50	-13.10	QP
3	194.8996	13.57	11.43	25.00	43.50	-18.50	QP
4	244.0235	17.26	13.44	30.70	46.00	-15.30	QP
5	300.4211	15.33	15.07	30.40	46.00	-15.60	QP
6	361.6326	19.63	17.47	37.10	46.00	-8.90	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	41.90	13.58	55.48	74.00	-18.52	peak
2	1864.982	19.92	13.58	33.50	54.00	-20.50	AVG
3	2022.306	40.29	14.19	54.48	74.00	-19.52	peak
4	2022.306	21.71	14.19	35.90	54.00	-18.10	AVG
5	13546.148	29.15	29.02	58.17	74.00	-15.83	peak
6	13546.148	10.38	29.02	39.40	54.00	-14.60	AVG
7	16849.641	31.25	35.14	66.39	74.00	-7.61	peak
8	16849.641	14.56	35.14	49.70	54.00	-4.30	AVG

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:26:59
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n20-5745		

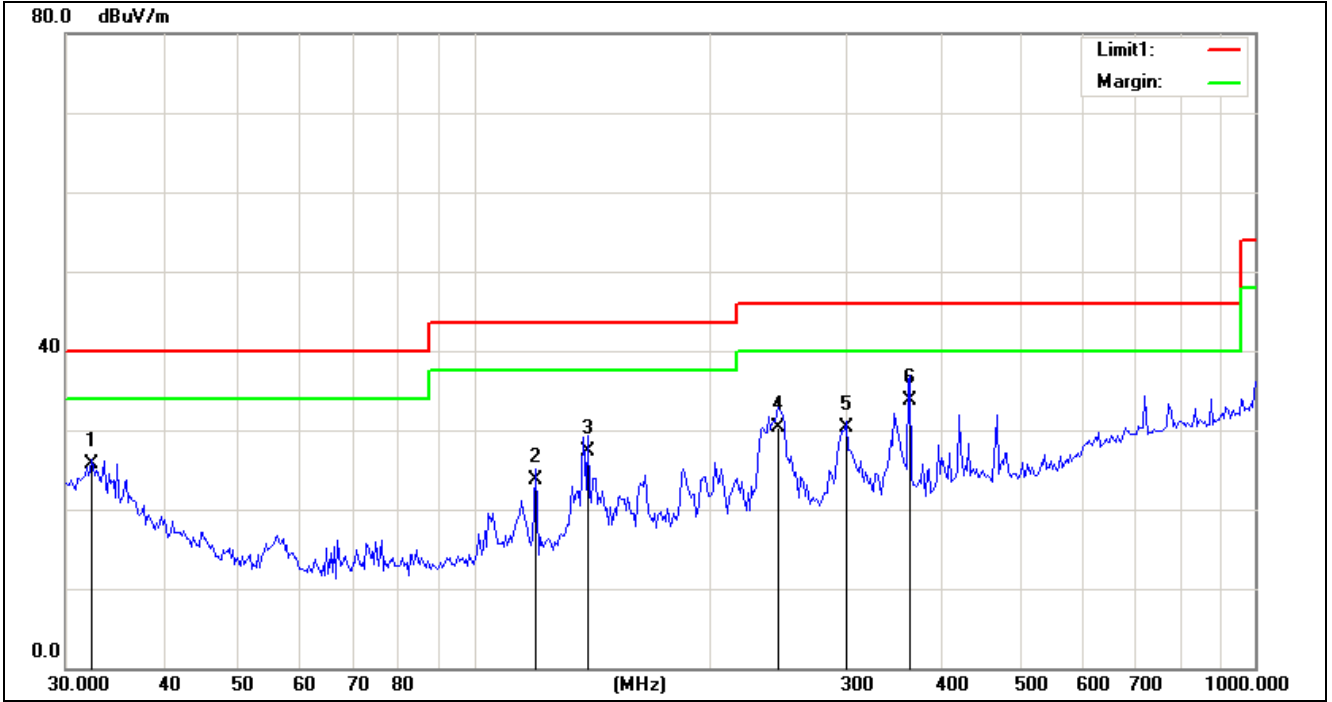


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	17.54	17.26	34.80	40.00	-5.20	QP
2	55.9780	17.59	8.71	26.30	40.00	-13.70	QP
3	73.7229	17.72	7.98	25.70	40.00	-14.30	QP
4	120.2064	21.63	8.87	30.50	43.50	-13.00	QP
5	129.3164	17.81	8.69	26.50	43.50	-17.00	QP
6	155.6649	20.94	10.46	31.40	43.50	-12.10	QP

Emission above 1GHz:

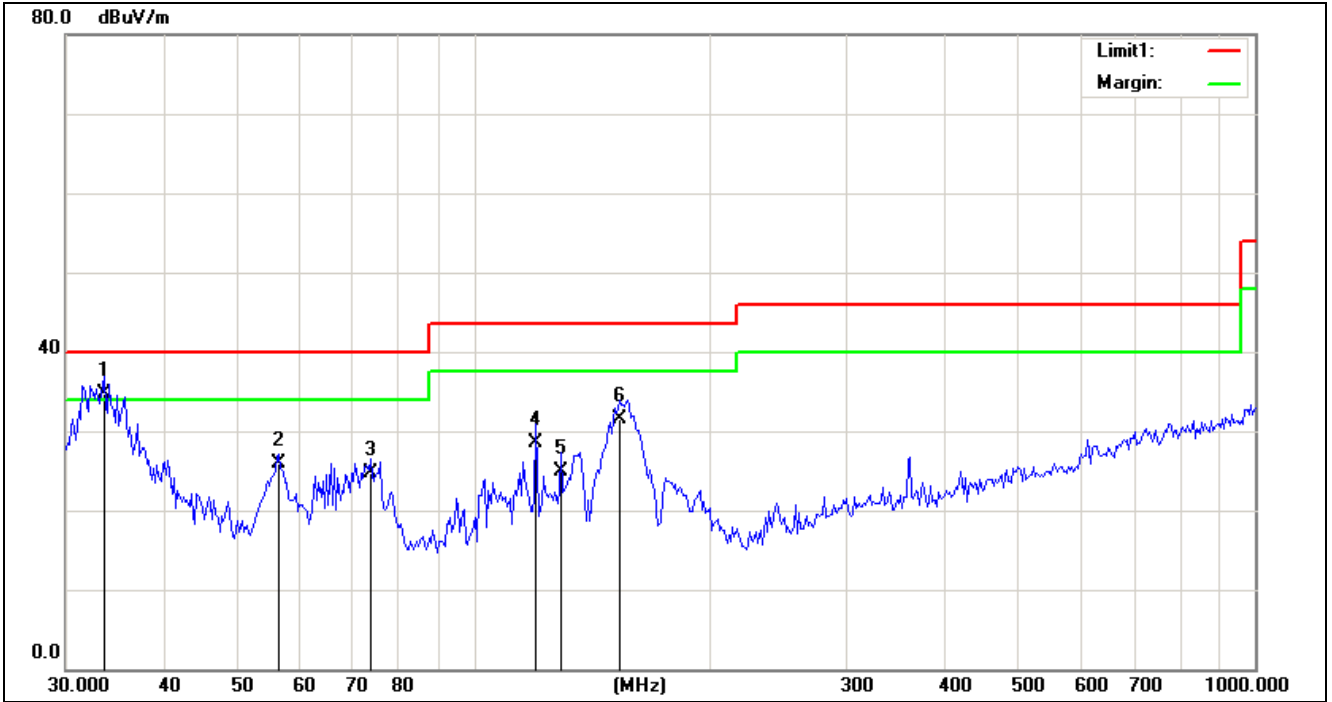
o.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1594.497	42.16	12.14	54.30	74.00	-19.70	peak
2	1594.497	20.76	12.14	32.90	54.00	-21.10	AVG
3	2022.306	40.16	14.19	54.35	74.00	-19.65	peak
4	2022.306	18.11	14.19	32.30	54.00	-21.70	AVG
5	13546.148	30.21	29.02	59.23	74.00	-14.77	peak
6	13546.148	11.48	29.02	40.50	54.00	-13.50	AVG
7	16801.328	30.65	34.94	65.59	74.00	-8.41	peak
8	16801.328	13.36	34.94	48.30	54.00	-5.70	AVG

Project No.:	ZJ00029362	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:04:15
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n20-5745		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.4555	7.78	17.92	25.70	40.00	-14.30	QP
2	120.2064	14.93	8.87	23.80	43.50	-19.70	QP
3	139.9011	18.21	9.19	27.40	43.50	-16.10	QP
4	245.3985	16.91	13.49	30.40	46.00	-15.60	QP
5	300.4211	15.33	15.07	30.40	46.00	-15.60	QP
6	361.6326	16.33	17.47	33.80	46.00	-12.20	QP

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:27:28
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n20-5825		

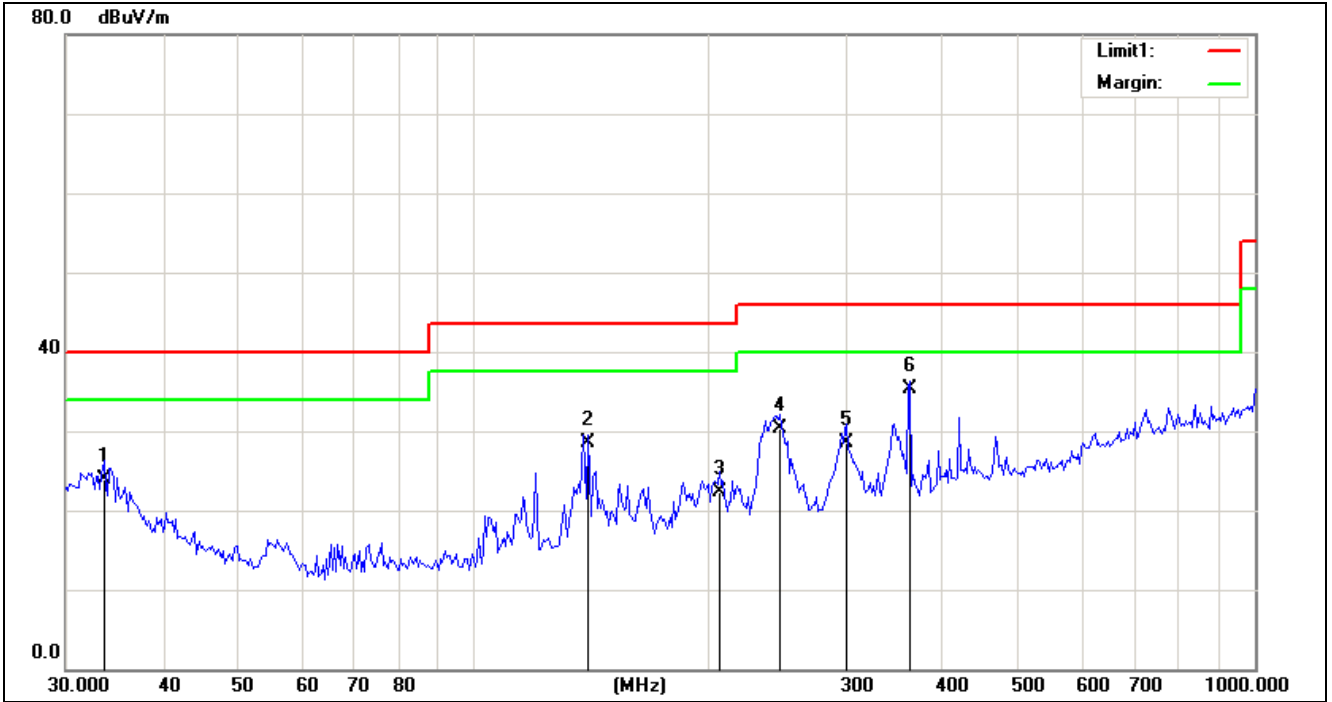


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	17.44	17.26	34.70	40.00	-5.30	QP
2	56.2935	17.25	8.65	25.90	40.00	-14.10	QP
3	73.7229	16.72	7.98	24.70	40.00	-15.30	QP
4	120.2064	19.63	8.87	28.50	43.50	-15.00	QP
5	129.3164	16.21	8.69	24.90	43.50	-18.60	QP
6	153.9252	21.14	10.36	31.50	43.50	-12.00	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1765.921	41.81	13.14	54.95	74.00	-19.05	peak
2	1765.921	30.84	13.14	43.98	54.00	-10.02	AVG
3	2022.306	42.84	14.19	57.03	74.00	-16.97	peak
4	2022.306	31.56	14.19	45.75	54.00	-8.25	AVG
5	13546.148	29.66	29.02	58.68	74.00	-15.32	peak
6	13546.148	11.18	29.02	40.20	54.00	-13.80	AVG
7	16753.154	30.50	34.75	65.25	74.00	-8.75	peak
8	16753.154	12.05	34.75	46.80	54.00	-7.20	AVG

Project No.:	ZJ00029362	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:05:01
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n20-5825		

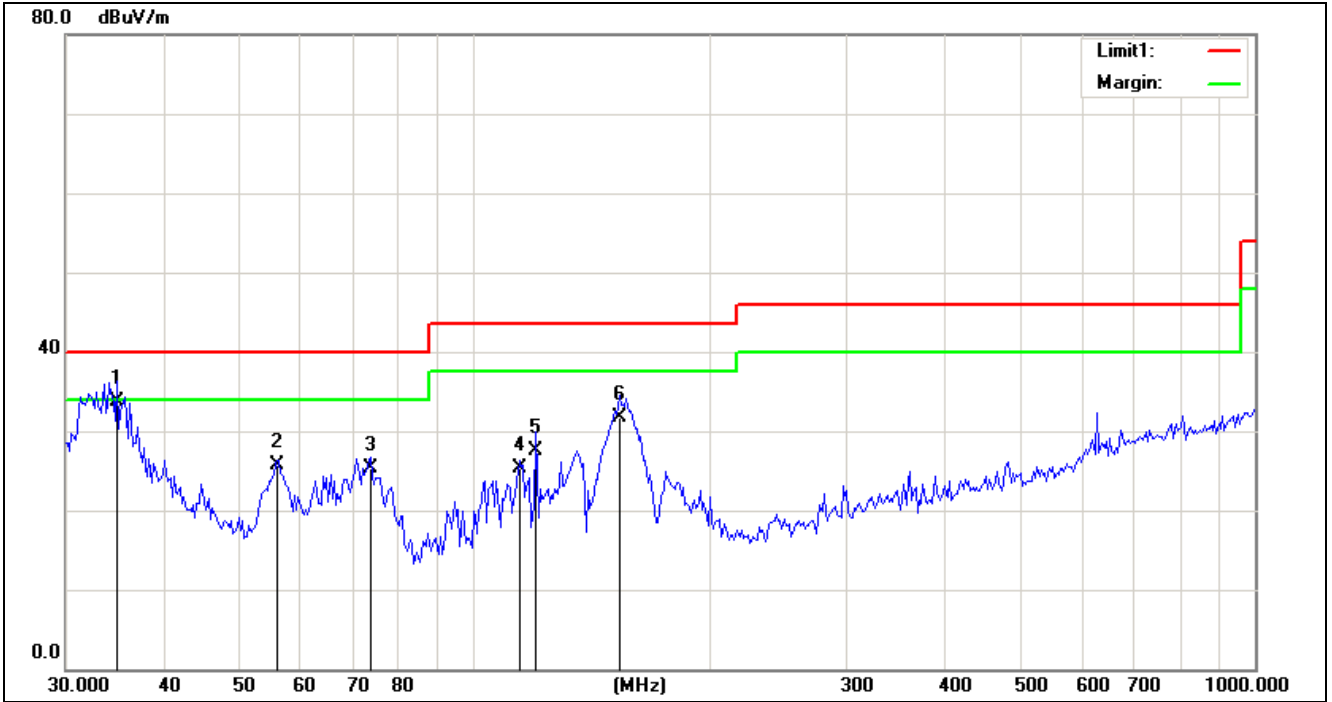


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.5684	6.64	17.26	23.90	40.00	-16.10	QP
2	139.9011	19.31	9.19	28.50	43.50	-15.00	QP
3	206.1656	10.68	11.72	22.40	43.50	-21.10	QP
4	246.7814	16.86	13.54	30.40	46.00	-15.60	QP
5	300.4211	13.43	15.07	28.50	46.00	-17.50	QP
6	361.6326	17.93	17.47	35.40	46.00	-10.60	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	42.30	13.58	55.88	74.00	-18.12	peak
2	1864.982	20.62	13.58	34.20	54.00	-19.80	AVG
3	2520.137	36.60	17.19	53.79	74.00	-20.21	peak
4	2520.137	15.71	17.19	32.90	54.00	-21.10	AVG
5	12790.133	30.58	27.47	58.05	74.00	-15.95	peak
6	12790.133	13.23	27.47	40.70	54.00	-13.30	AVG
7	17845.610	29.76	35.96	65.72	74.00	-8.28	peak
8	17845.610	13.14	35.96	49.10	54.00	-4.90	AVG

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:28:05
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n40-5755		

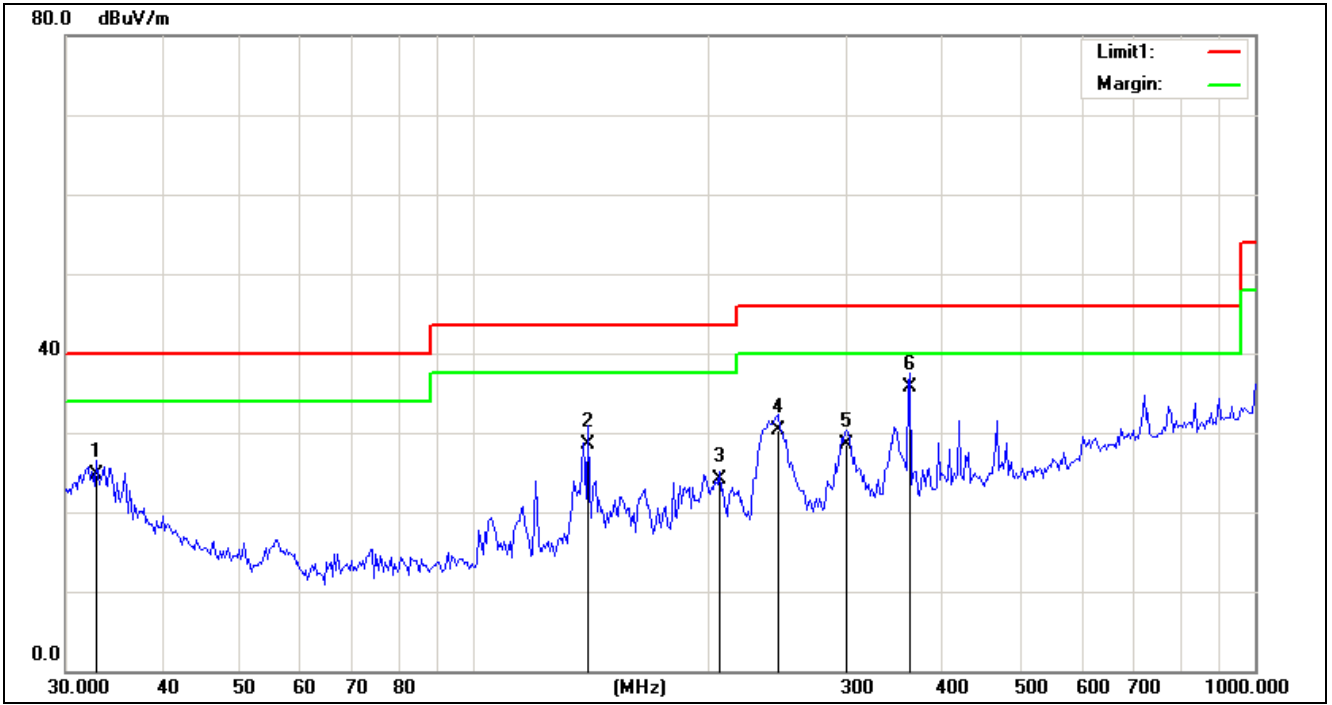


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.9151	17.26	16.44	33.70	40.00	-6.30	QP
2	55.9780	16.99	8.71	25.70	40.00	-14.30	QP
3	73.7229	17.32	7.98	25.30	40.00	-14.70	QP
4	114.2780	16.17	9.23	25.40	43.50	-18.10	QP
5	120.2064	18.63	8.87	27.50	43.50	-16.00	QP
6	153.9252	21.34	10.36	31.70	43.50	-11.80	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	41.15	13.58	54.73	74.00	-19.27	peak
2	1864.982	22.52	13.58	36.10	54.00	-17.90	AVG
3	2524.578	37.44	17.23	54.67	74.00	-19.33	peak
4	2524.578	16.68	17.23	33.91	54.00	-20.09	AVG
5	13702.631	28.15	29.40	57.55	74.00	-16.45	peak
6	13702.631	9.50	29.40	38.90	54.00	-15.10	AVG
7	16849.641	30.93	35.14	66.07	74.00	-7.93	peak
8	16849.641	13.96	35.14	49.10	54.00	-4.90	AVG

Project No.:	ZJ00029362	Polarization:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:07:28
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n40-5755		

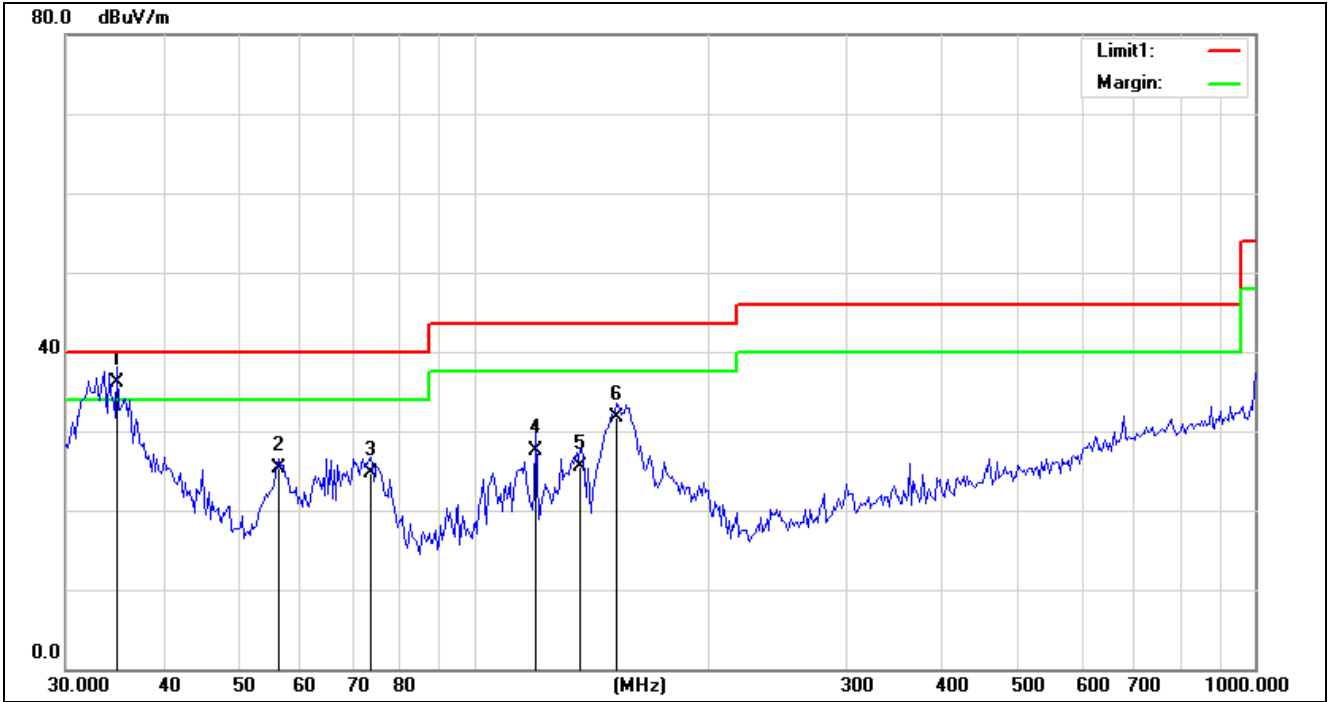


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.8222	6.99	17.71	24.70	40.00	-15.30	QP
2	139.9011	19.41	9.19	28.60	43.50	-14.90	QP
3	206.1656	12.48	11.72	24.20	43.50	-19.30	QP
4	245.3985	16.91	13.49	30.40	46.00	-15.60	QP
5	300.4211	13.43	15.07	28.50	46.00	-17.50	QP
6	361.6326	18.23	17.47	35.70	46.00	-10.30	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	40.42	13.58	54.00	74.00	-20.00	peak
2	1864.982	19.92	13.58	33.50	54.00	-20.50	AVG
3	2619.665	36.92	18.37	55.29	74.00	-18.71	peak
4	2619.665	18.13	18.37	36.50	54.00	-17.50	AVG
5	9991.481	30.22	25.68	55.90	74.00	-18.10	peak
6	9991.481	11.82	25.68	37.50	54.00	-16.50	AVG
7	16849.641	29.51	35.14	64.65	74.00	-9.35	peak
8	16849.641	12.76	35.14	47.90	54.00	-6.10	AVG

Project No.:	ZJ00029362	Polarization:	Vertical
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:28:52
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n40-5805		

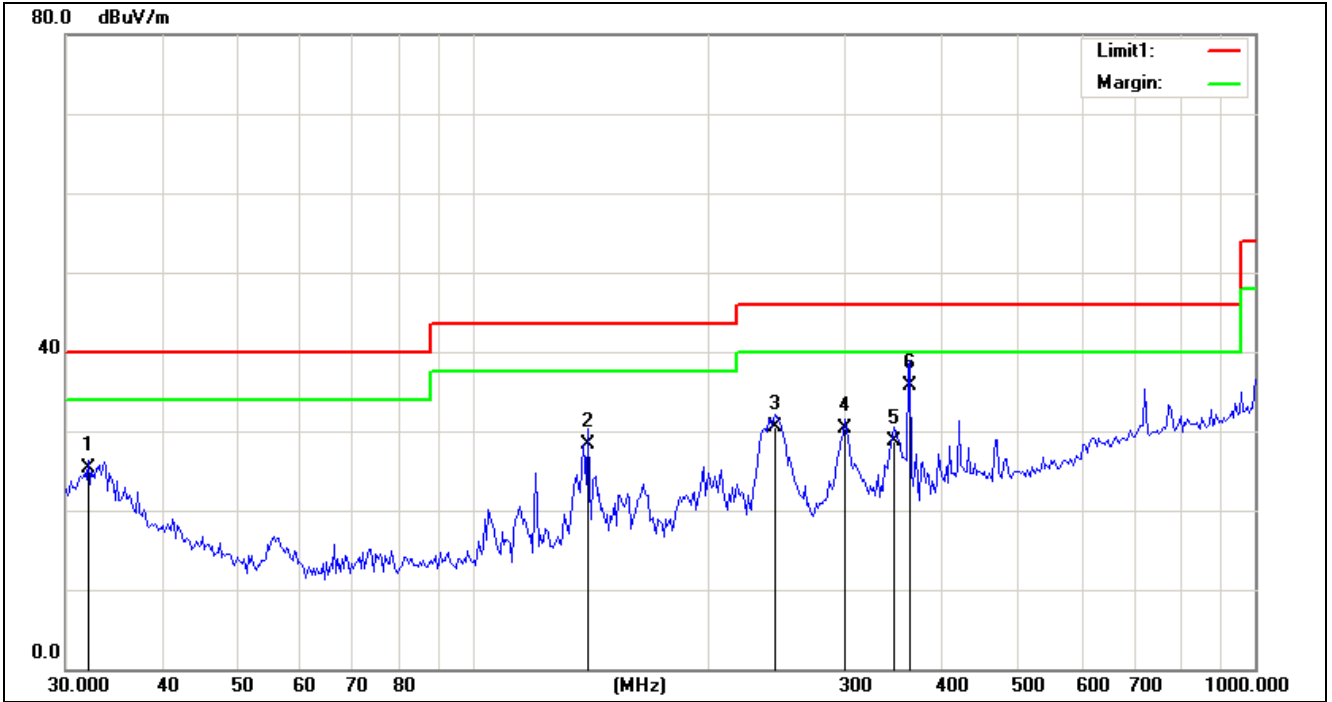


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.9151	19.76	16.44	36.20	40.00	-3.80	QP
2	56.2935	16.75	8.65	25.40	40.00	-14.60	QP
3	73.7229	16.72	7.98	24.70	40.00	-15.30	QP
4	120.2064	18.63	8.87	27.50	43.50	-16.00	QP
5	136.7915	16.58	9.02	25.60	43.50	-17.90	QP
6	152.2050	21.44	10.26	31.70	43.50	-11.80	QP

Emission above 1GHz:

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1864.982	40.54	13.58	54.12	74.00	-19.88	peak
2	1864.982	21.92	13.58	35.50	54.00	-18.50	AVG
3	2551.388	37.70	17.53	55.23	74.00	-18.77	peak
4	2551.388	18.77	17.53	36.30	54.00	-17.70	AVG
5	12826.912	29.81	27.61	57.42	74.00	-16.58	peak
6	12826.912	12.19	27.61	39.80	54.00	-14.20	AVG
7	16801.328	30.45	34.94	65.39	74.00	-8.61	peak
8	16801.328	11.76	34.94	46.70	54.00	-7.30	AVG

Project No.:	ZJ00029362	Polarziation:	Horizontal
Standard:	(RE)FCC PART 15 class B 3m	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2013-6-7
Temp./Hum.(%RH):	21/56%RH	Time:	14:08:15
EUT:	Blu-RAY DISC SYSTEM	Distance:	3m
Model:	BDS280	Test Result:	Pass
Note:	WIFI-n40-5805		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	32.0927	7.16	18.14	25.30	40.00	-14.70	QP
2	139.9011	19.21	9.19	28.40	43.50	-15.10	QP
3	242.6561	17.12	13.38	30.50	46.00	-15.50	QP
4	298.7377	15.39	15.01	30.40	46.00	-15.60	QP
5	345.7349	11.56	17.14	28.70	46.00	-17.30	QP
6	361.6326	18.23	17.47	35.70	46.00	-10.30	QP

Emission above 1GHz:

1	1868.268	44.23	13.59	57.82	74.00	-16.18	peak
2	1868.268	25.31	13.59	38.90	54.00	-15.10	AVG
3	2511.279	39.16	17.10	56.26	74.00	-17.74	peak
4	2511.279	20.30	17.10	37.40	54.00	-16.60	AVG
5	12826.912	30.61	27.61	58.22	74.00	-15.78	peak
6	12826.912	11.59	27.61	39.20	54.00	-14.80	AVG
7	16801.328	30.13	34.94	65.07	74.00	-8.93	peak
8	16801.328	14.16	34.94	49.10	54.00	-4.90	AVG

Note: Below 30MHz, since the radiated emission of the EUT is too weak to be detected.

7. 6dB BANDWIDTH TESTING

7.1 LIMITS

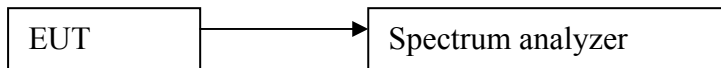
Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

7.2 TEST PROCEDURES

Test procedures follow ANSI C63.4:2009 and KDB 558074 D01 DTS Measurement Guidance v03r01.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Set resolution bandwidth (RBW) = 100kHz. Set the video bandwidth (VBW) $\geq 3 \times$ RBW. Detector = Peak. Trace mode = max hold. Sweep = auto couple. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission. Compare the resultant bandwidth with the RBW setting of the analyzer.
5. Repeat above procedures until all frequencies measured were complete.

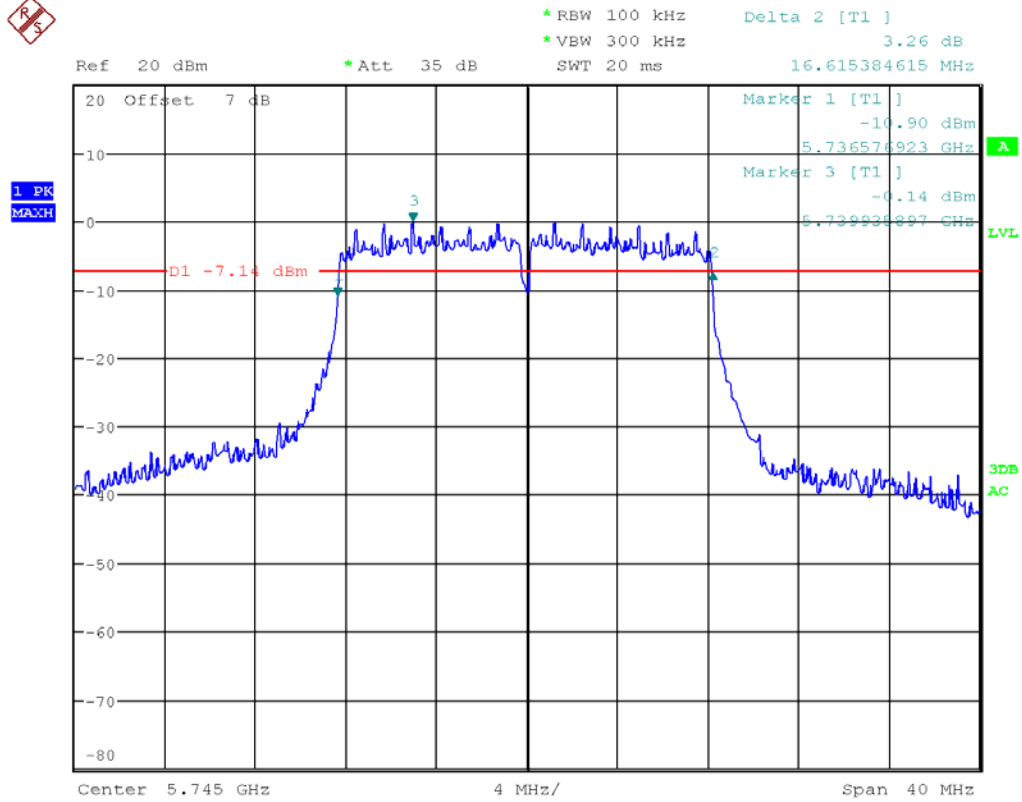
7.3 TEST SETUP



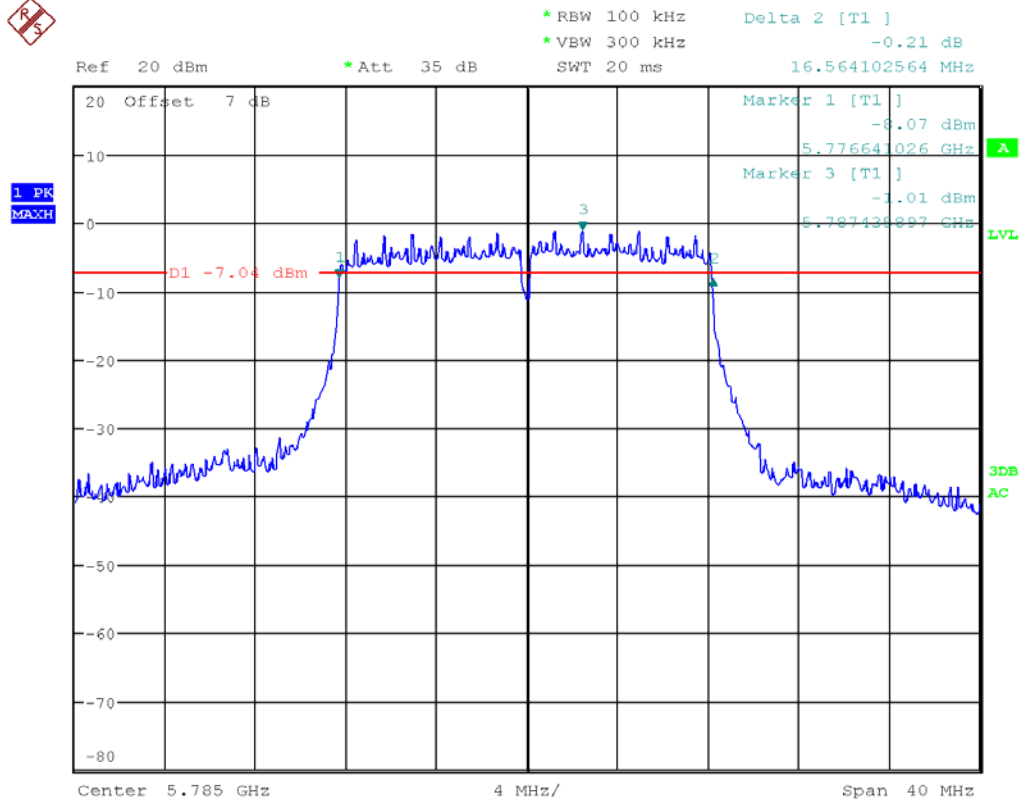
7.4 TEST RESULTS

Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11a Mode				
Low Channel	5745	54	16.62	> 500
Middle Channel	5785	54	16.56	> 500
High Channel	5825	54	16.60	> 500

802.11a mode:
Channel 5745MHz

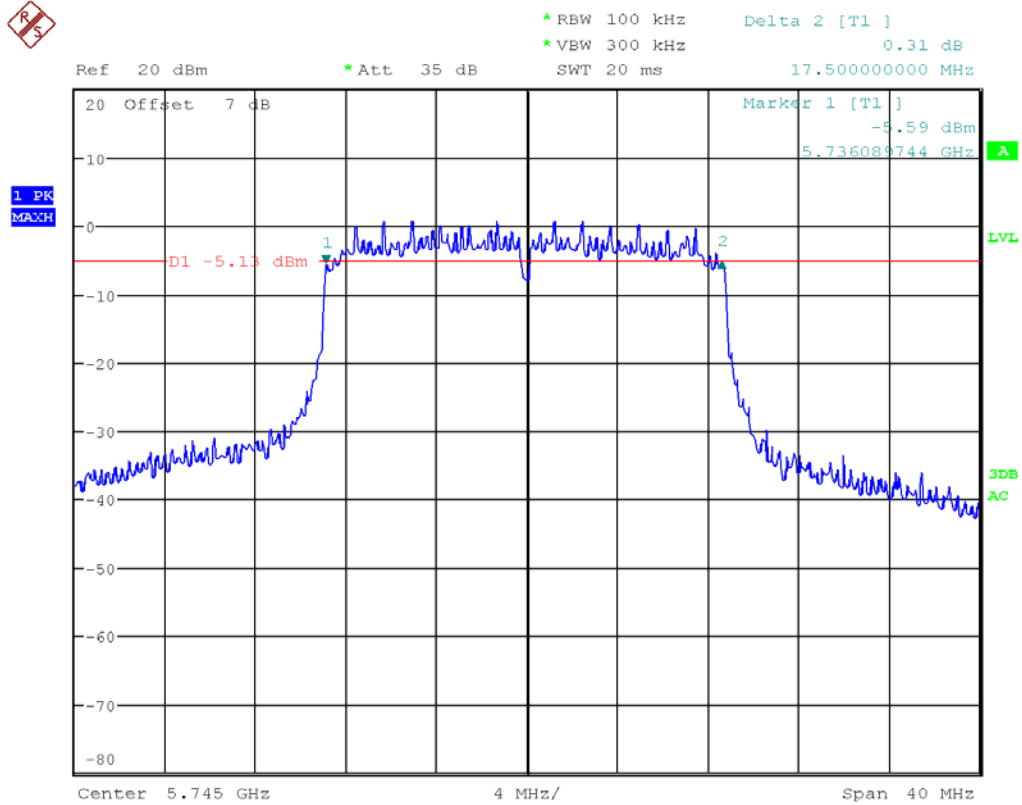


Channel 5785MHz

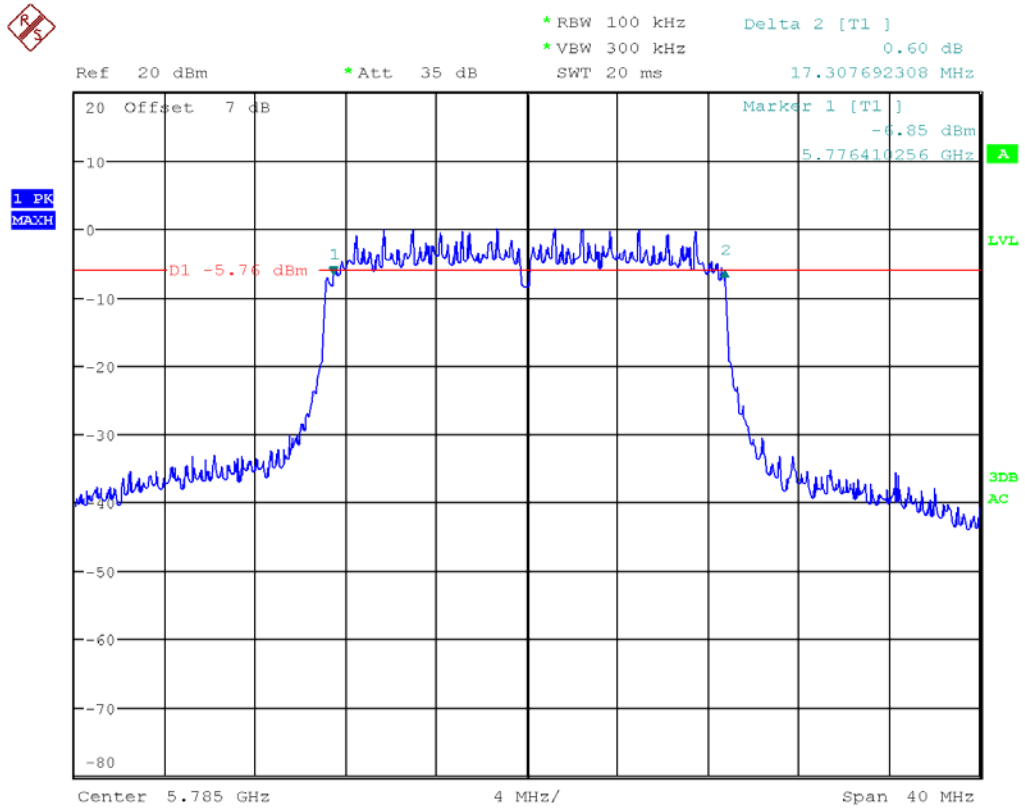


Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11n Mode (HT20)				
Low Channel	5745	MCS7	17.50	> 500
Middle Channel	5785	MCS7	17.31	> 500
High Channel	5825	MCS7	17.37	> 500

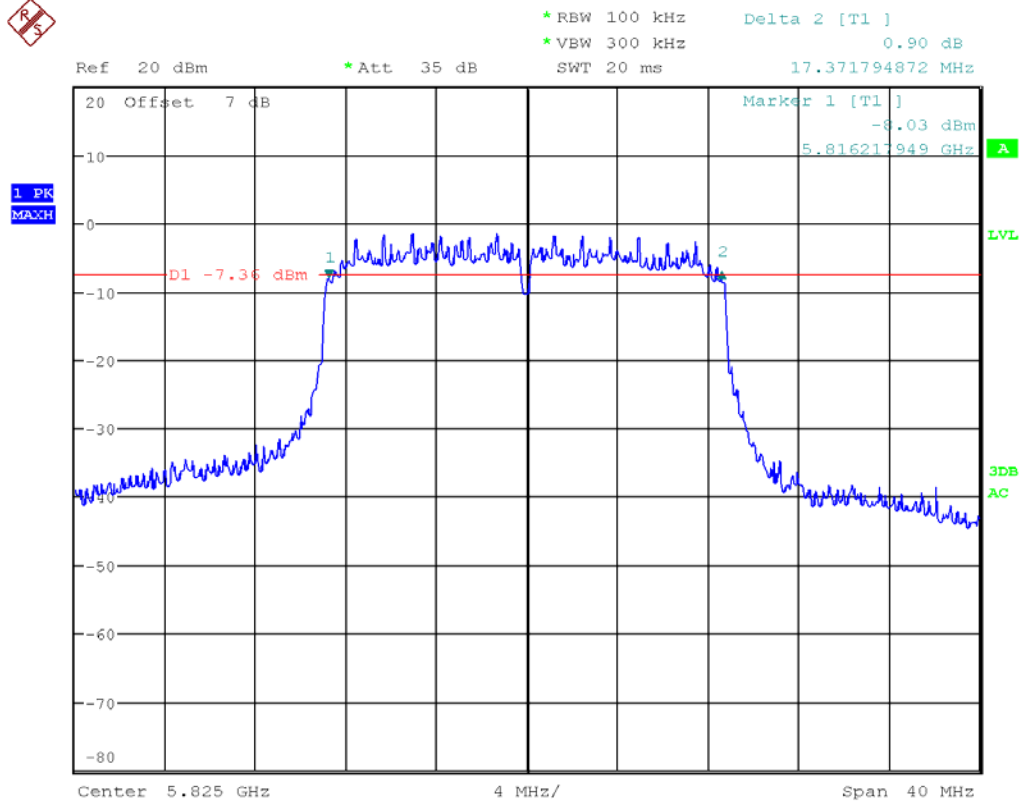
Channel 5745MHz:



Channel 5785MHz:

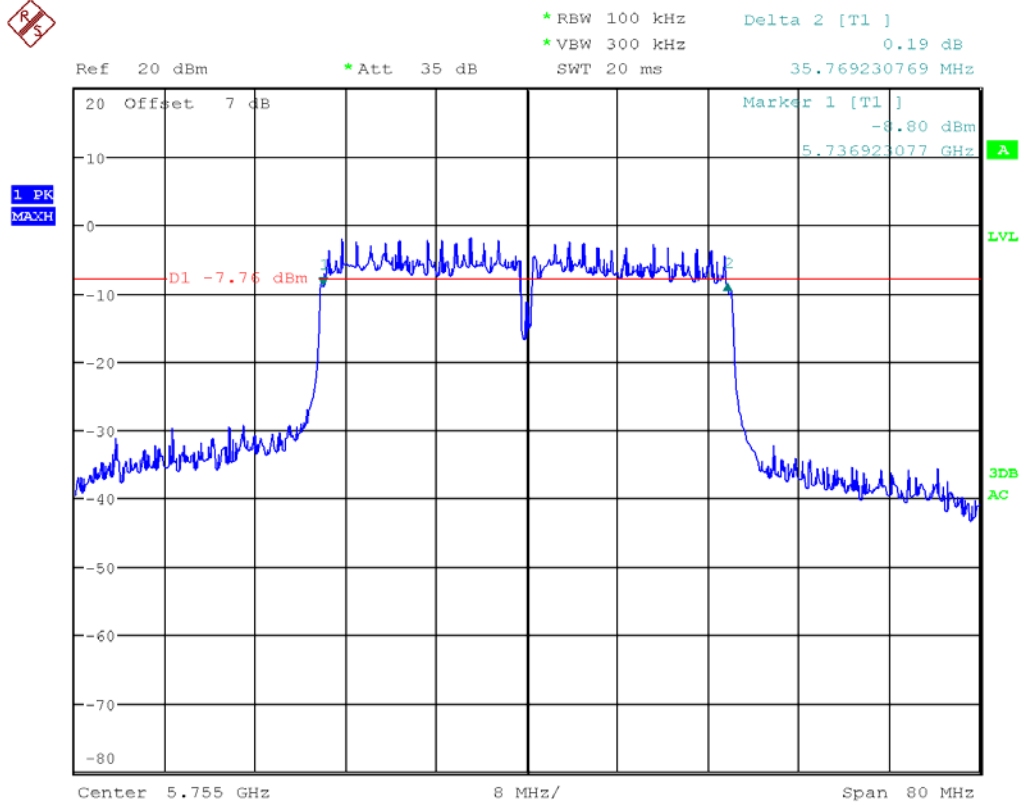


Channel 5825MHz:

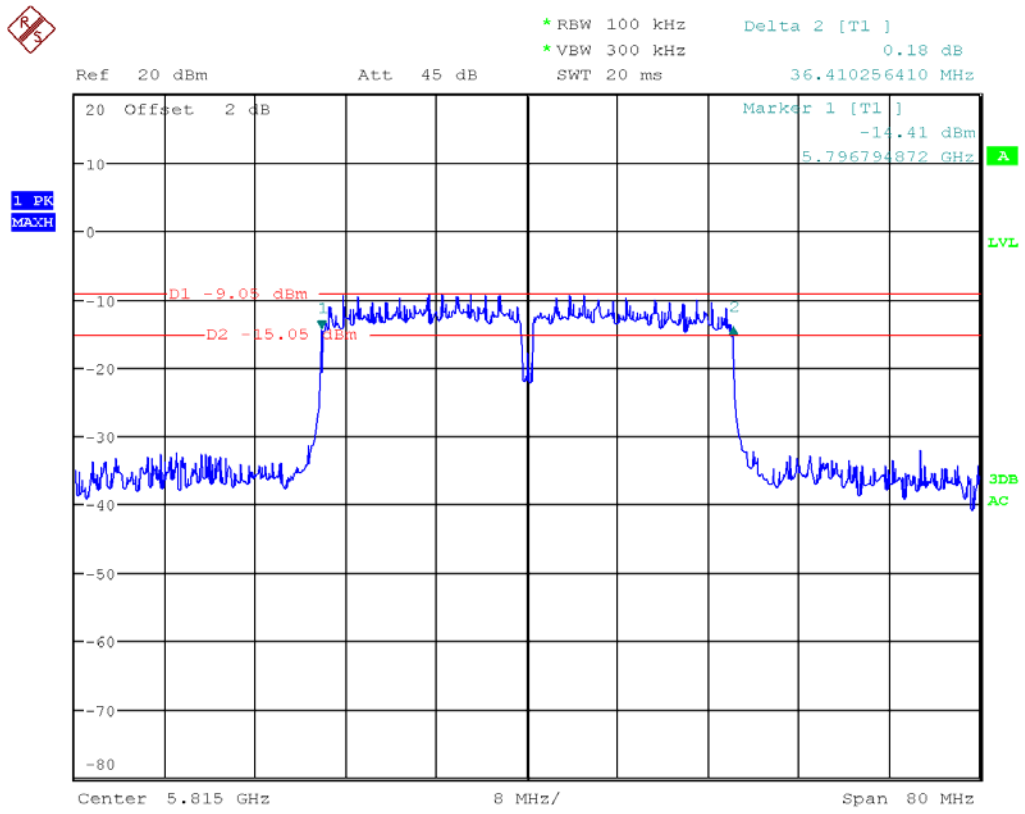


Channel	Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	Limit (kHz)
802.11n Mode (HT40)				
Low Channel	5755	MCS15	35.77	>500
High Channel	5815	MCS15	36.41	>500

Channel 5755MHz:



Channel 5815MHz:



8. MAXIMUM PEAK OUTPUT POWER

8.1 LIMITS

The maximum Peak output power measurement is 1W

8.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance v03r01.

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3. The spectrum analyzer resolution bandwidth that is \leq EBW. So we test the Maximum Conducted Output Power — Integrated band power method.
4. Set the analyzer span \geq 1.5 x DTS bandwidth. Set the RBW = 1 MHz. Set the VBW \geq 3 MHz. Sweep time = auto couple. Detector = peak. Allow trace to fully stabilize.

8.3 TEST SETUP

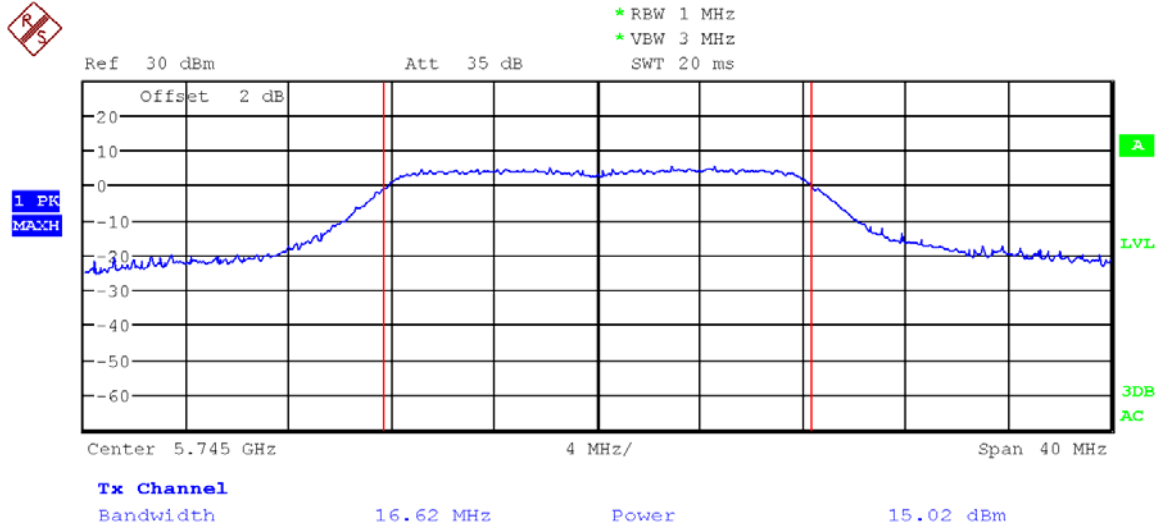


8.4 TEST RESULTS

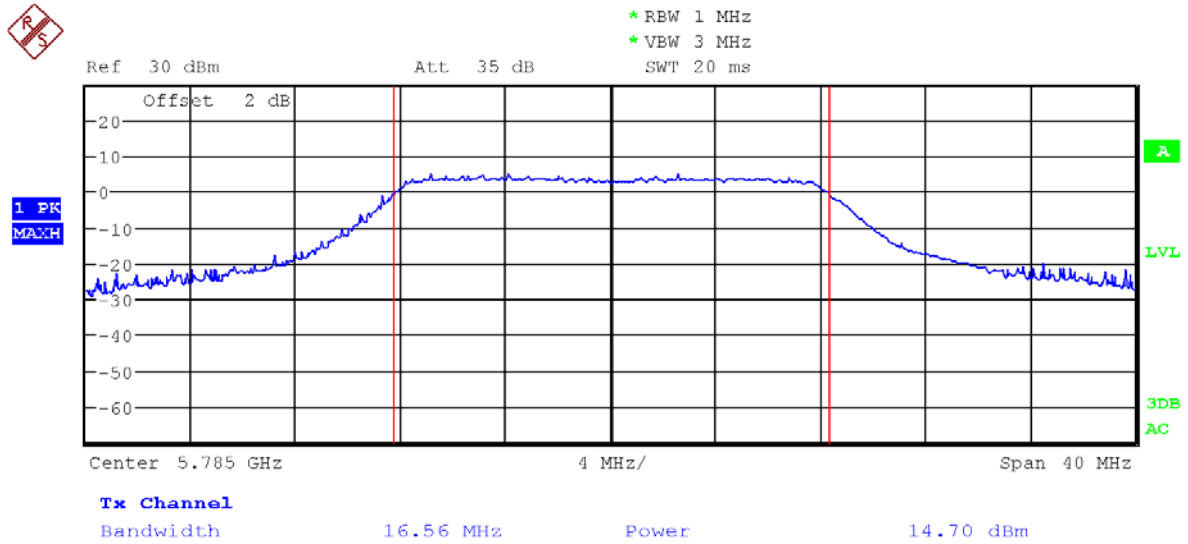
802.11a Mode:

Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Channel Power (dBm)	Limit	Result
149	5745	802.11n (HT20)	54Mbps	15.02	1W(30dbm)	Pass
157	5785			14.70		Pass
165	5825			14.05		Pass
149	5745		48 Mbps	14.89		Pass
157	5785			14.66		Pass
165	5825			14.05		Pass
149	5745		36 Mbps	14.74		Pass
157	5785			14.52		Pass
165	5825			14.02		Pass
149	5745		24 Mbps	14.69		Pass
157	5785			14.38		Pass
165	5825			13.86		Pass
149	5745		18 Mbps	14.63		Pass
157	5785			14.32		Pass
165	5825			13.73		Pass
149	5745		12 Mbps	14.39		Pass
157	5785			14.19		Pass
165	5825			13.73		Pass
149	5745		9 Mbps	14.35		Pass
157	5785			14.16		Pass
165	5825			13.67		Pass
149	5745		6 Mbps	14.21		Pass
157	5785			14.02		Pass
165	5825			14.65		Pass

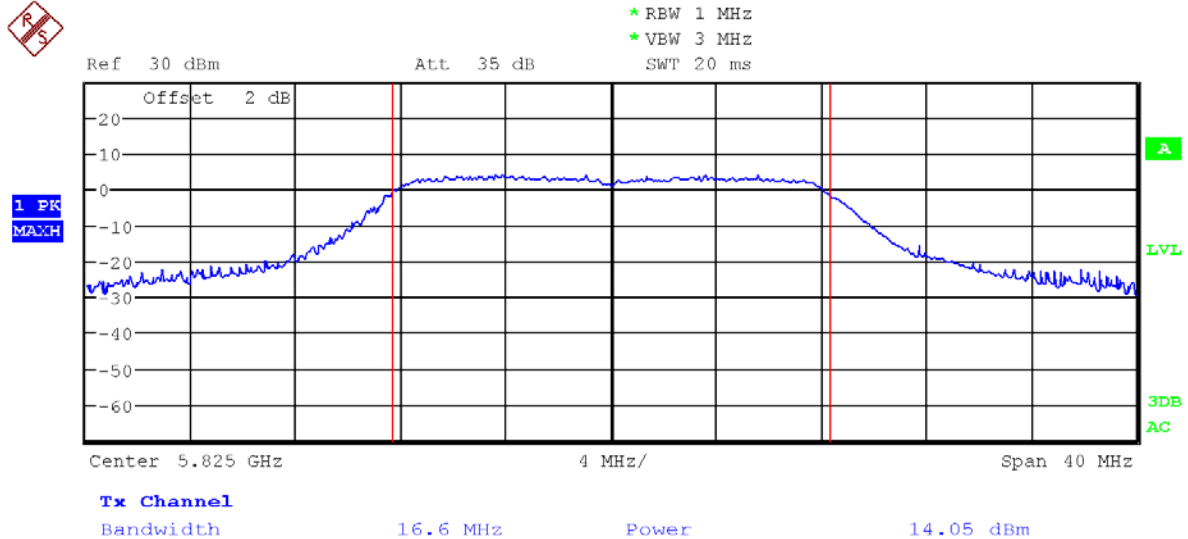
802.11a mode:
Channel 5745MHz



Channel 5785MHz



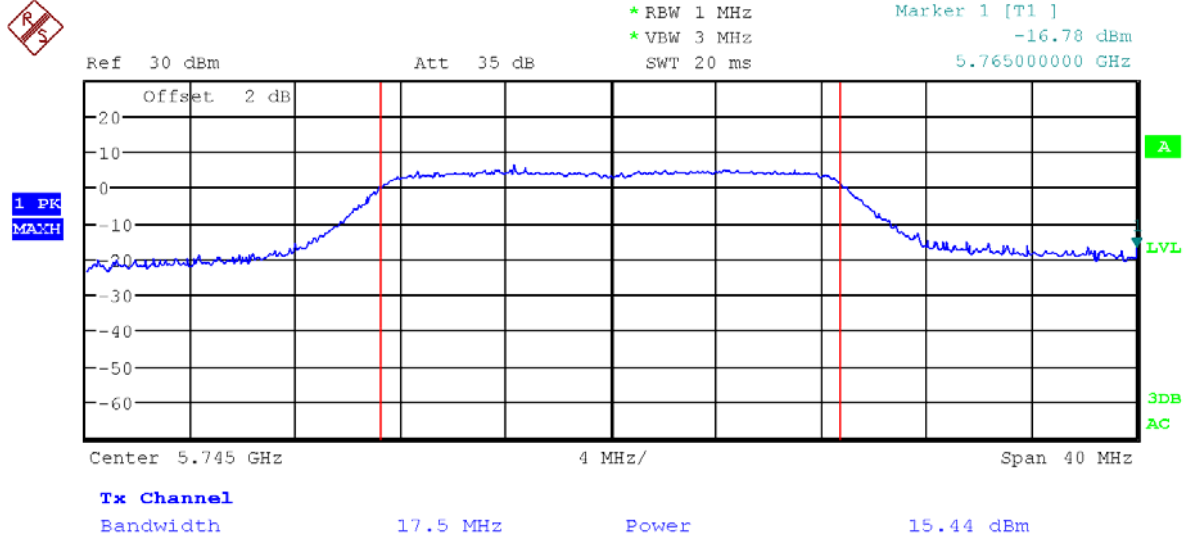
Channel 5825MHz



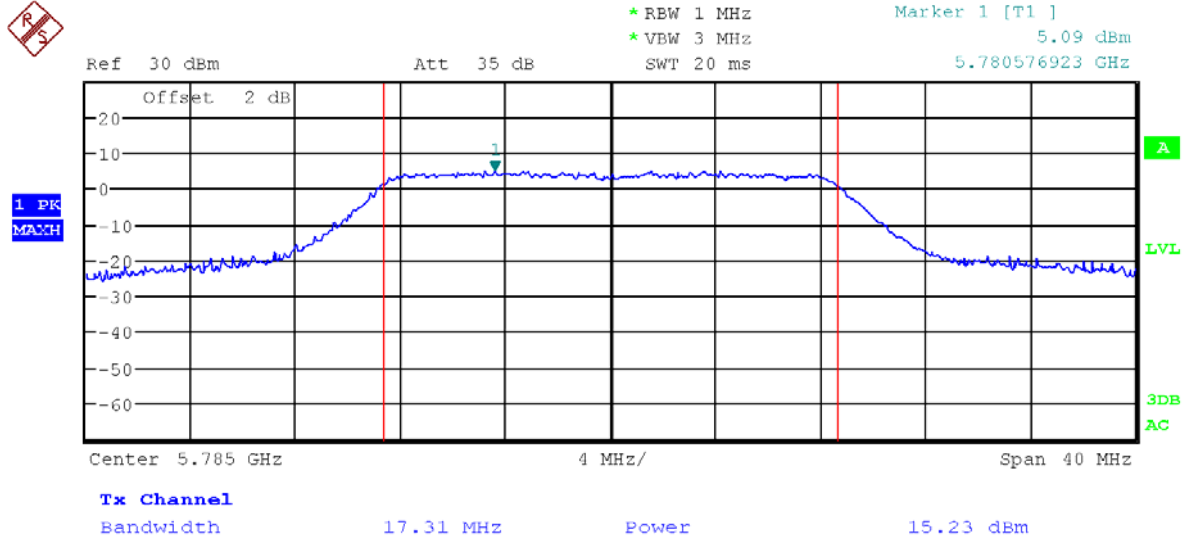
802.11n Mode (HT20):

Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Channel Power (dBm)	Limit	Result
149	5745	802.11n (HT20)	MCS7	15.44	1W(30dbm)	Pass
157	5785			15.23		Pass
165	5825			15.04		Pass
149	5745		MCS6	15.39		Pass
157	5785			15.16		Pass
165	5825			15.02		Pass
149	5745		MCS5	15.24		Pass
157	5785			15.12		Pass
165	5825			14.90		Pass
149	5745		MCS4	15.19		Pass
157	5785			15.08		Pass
165	5825			14.76		Pass
149	5745		MCS3	15.03		Pass
157	5785			15.02		Pass
165	5825			14.63		Pass
149	5745		MCS2	14.99		Pass
157	5785			14.89		Pass
165	5825			14.59		Pass
149	5745		MCS1	14.85		Pass
157	5785			14.76		Pass
165	5825			14.57		Pass
149	5745	MCS0	14.71	Pass		
157	5785		14.62	Pass		
165	5825		14.45	Pass		

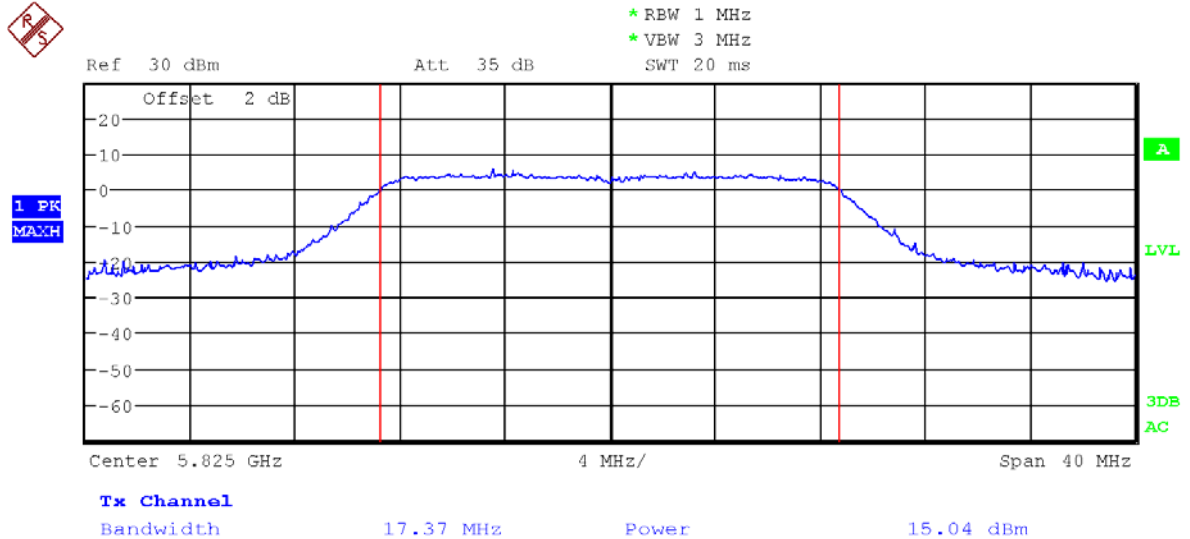
802.11n mode (HT20):
Channel 5745MHz



Channel 5785MHz



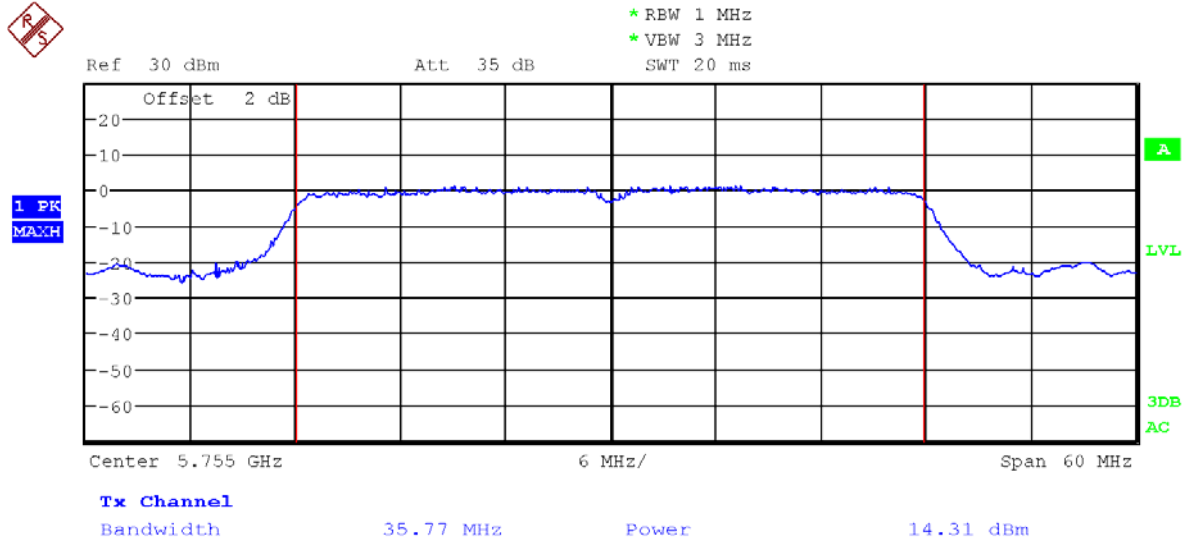
Channel 5825MHz



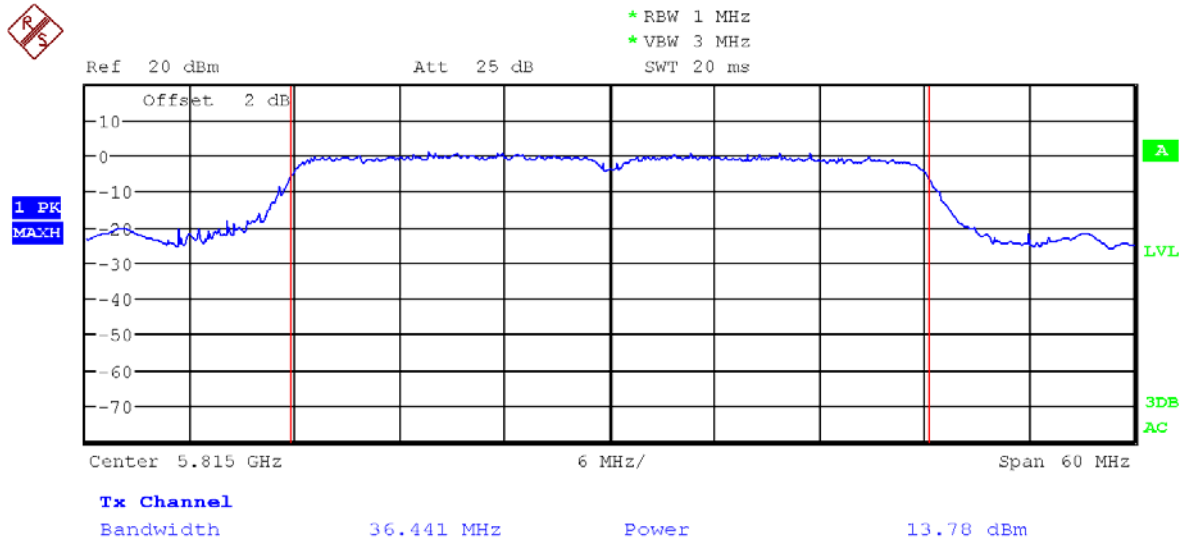
802.11n Mode (HT40):

Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Channel Power (dBm)	Limit	Result
153	5755	802.11n (HT40)	MCS15	14.31	1W(30dbm)	Pass
163	5815			13.78		Pass
153	5755		MCS14	14.29		Pass
163	5815			13.75		Pass
153	5755		MCS13	14.24		Pass
163	5815			13.70		Pass
153	5755		MCS12	14.19		Pass
163	5815			13.66		Pass
153	5755		MCS11	14.13		Pass
163	5815			13.53		Pass
153	5755		MCS10	14.09		Pass
163	5815			13.49		Pass
153	5755		MCS9	14.05		Pass
163	5815			13.37		Pass
153	5755		MCS8	14.01		Pass
163	5815			13.35		Pass

802.11n mode (HT40):
Channel 5755MHz



Channel 5815MHz



9. POWER SPECTRAL DENSITY

9.1 LIMITS

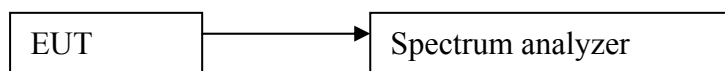
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

9.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance v03r01.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set the analyzer span to 1.5 times the DTS bandwidth. Set the RBW = 3 kHz. Set the VBW ≥ 3 RBW. Detector = peak. Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span/RBW}$ (use of a greater number of measurement points than this minimum requirement is recommended).
4. Repeat above procedures until all frequencies measured were complete.

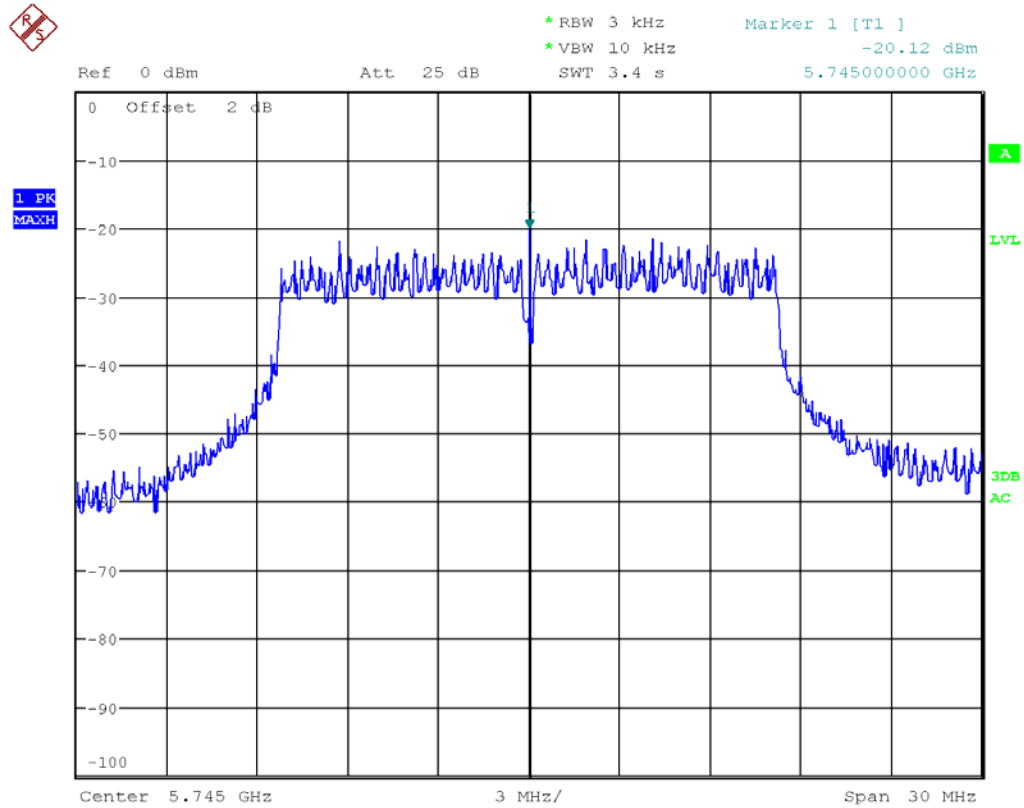
9.3 TEST SETUP



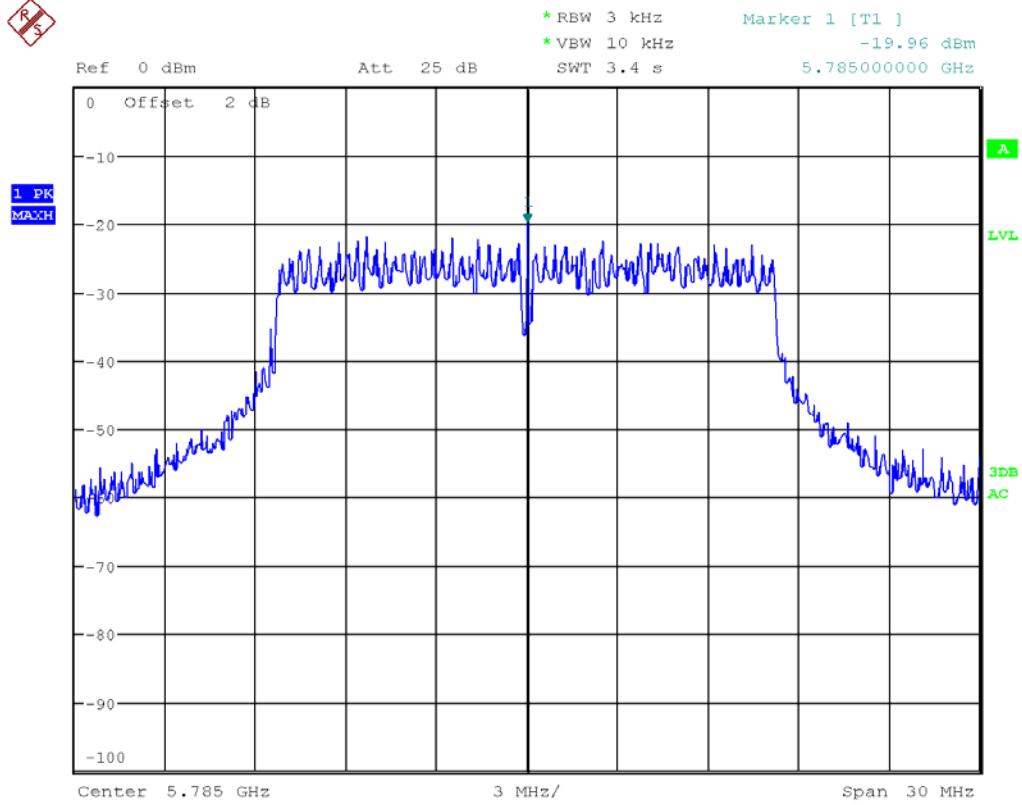
9.4 TEST RESULTS

Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Peak Power Spectral Density (dBm/3KHz)	Limit	Result
149	5745	802.11a	54M	-20.12	8dBm/3KHz	Pass
157	5785			-19.96		Pass
165	5825			-20.71		Pass

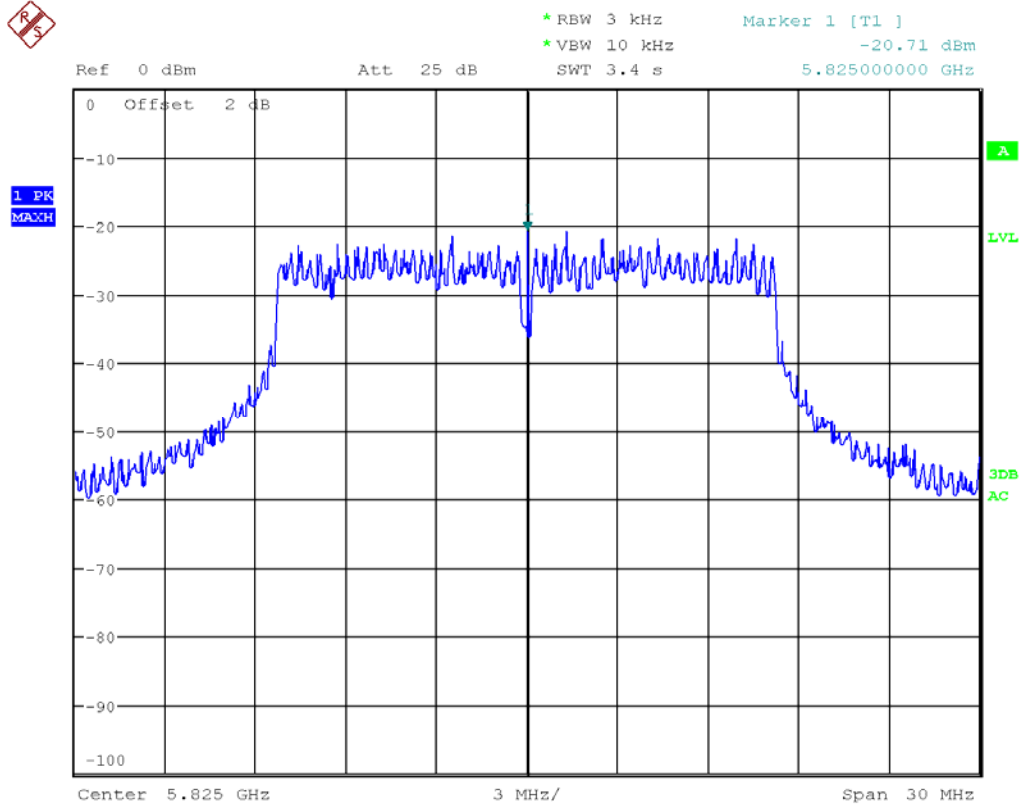
802.11n mode (HT20):
Channel 5745MHz



Channel 5785MHz



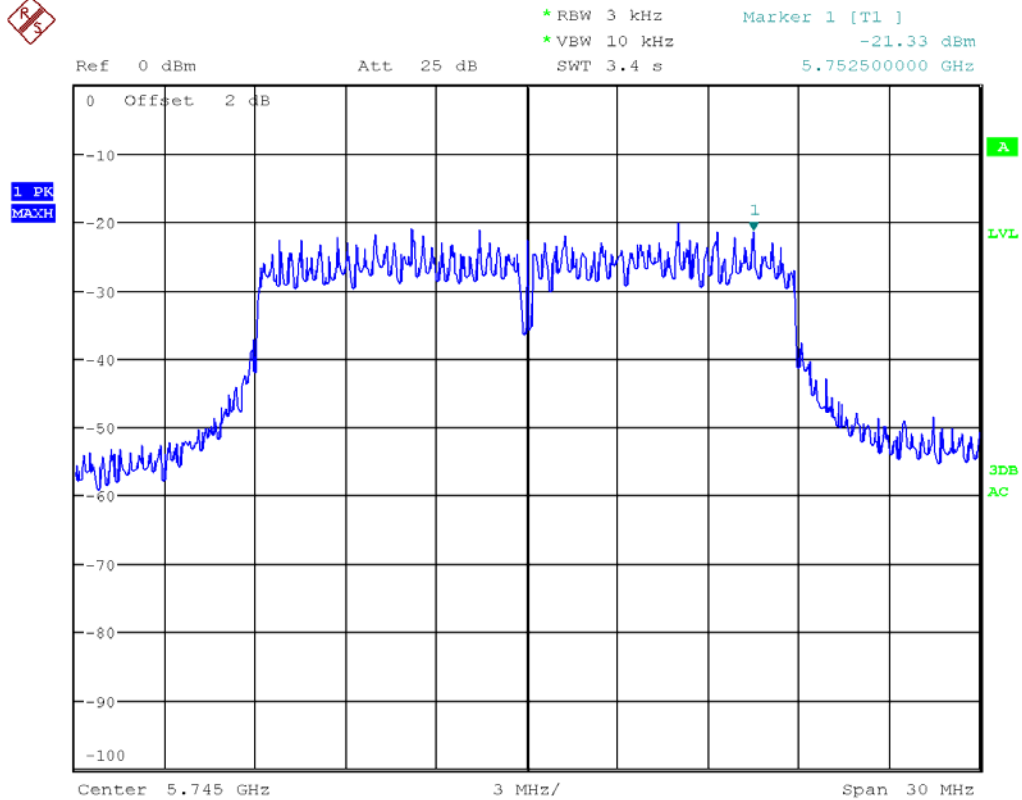
Channel 5825MHz



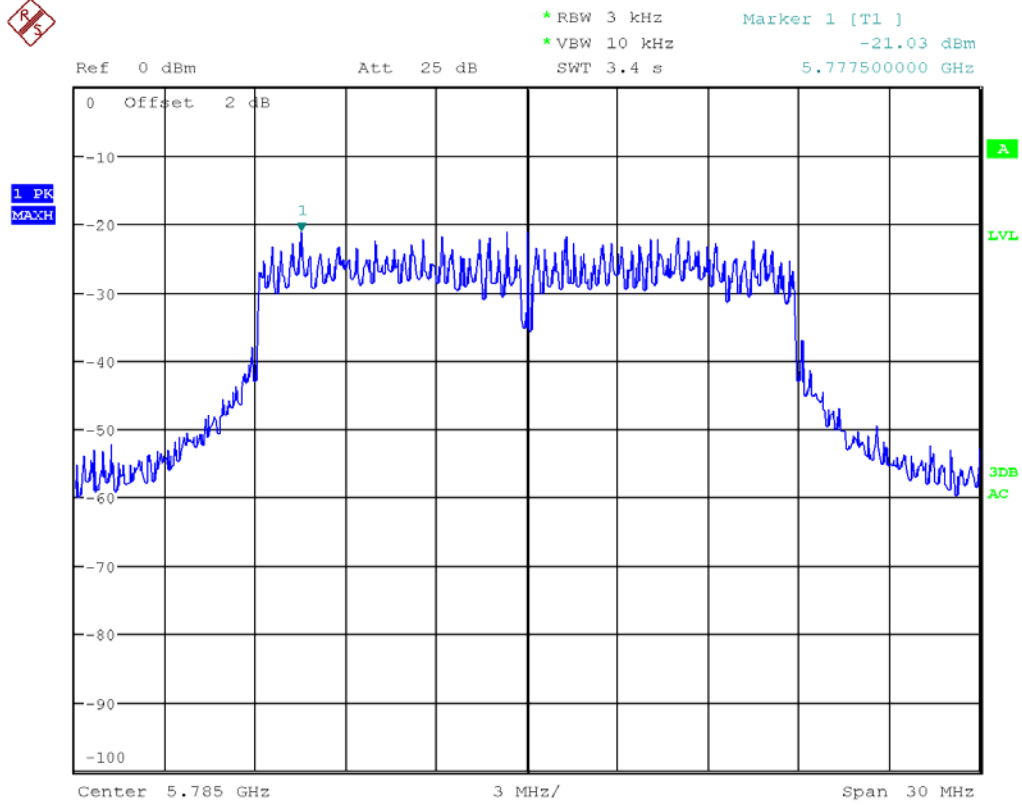
Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Peak Power Spectral Density (dBm/3KHz)	Limit	Result
149	5745	802.11n (HT20)	MCS15	-21.33	8dBm/3KHz	Pass
157	5785			-21.03		Pass
165	5825			-21.25		Pass

802.11n mode (HT20):

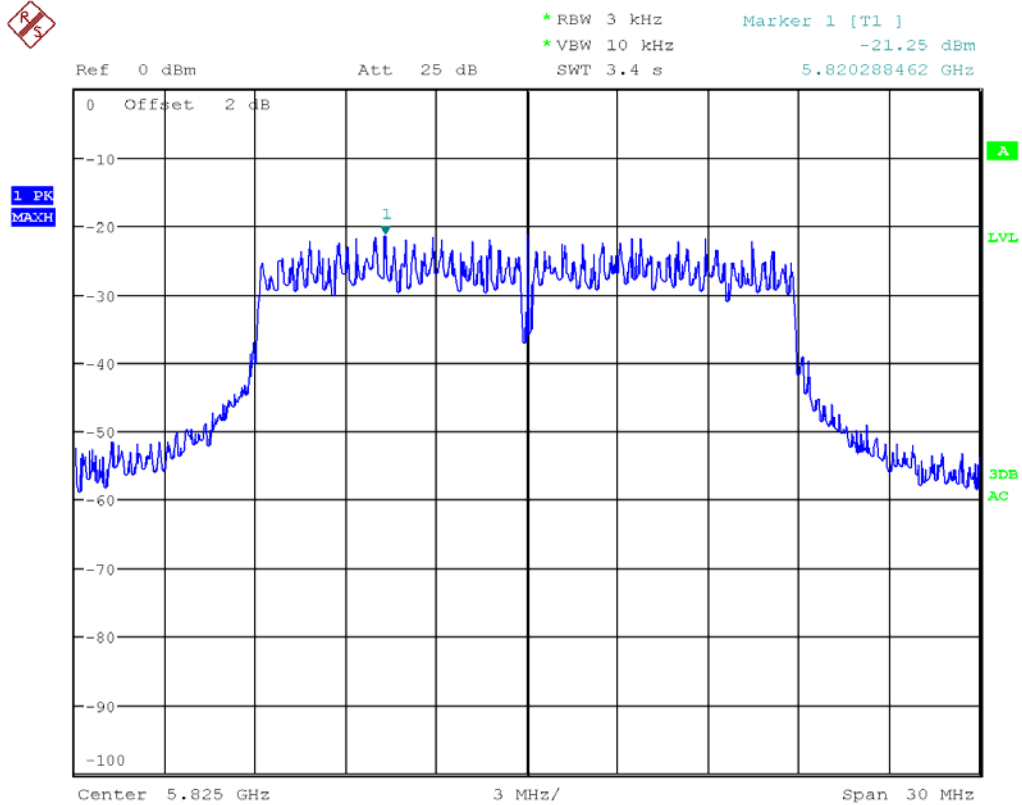
Channel 5745MHz



Channel 5785MHz

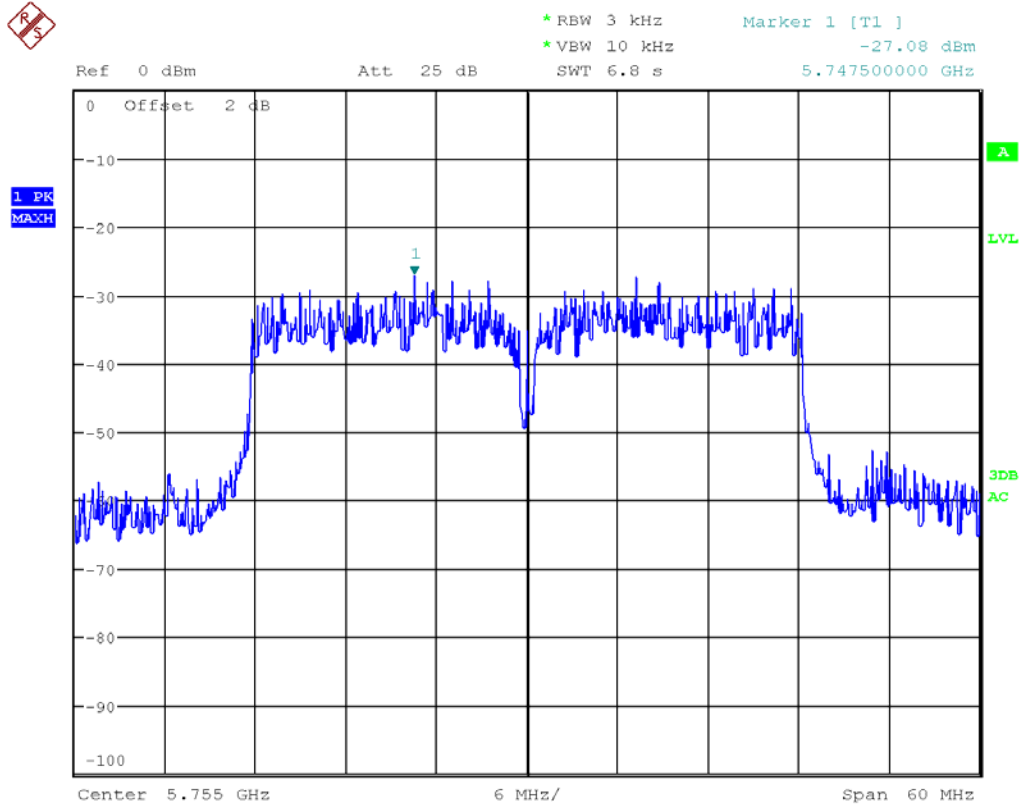


Channel 5825MHz

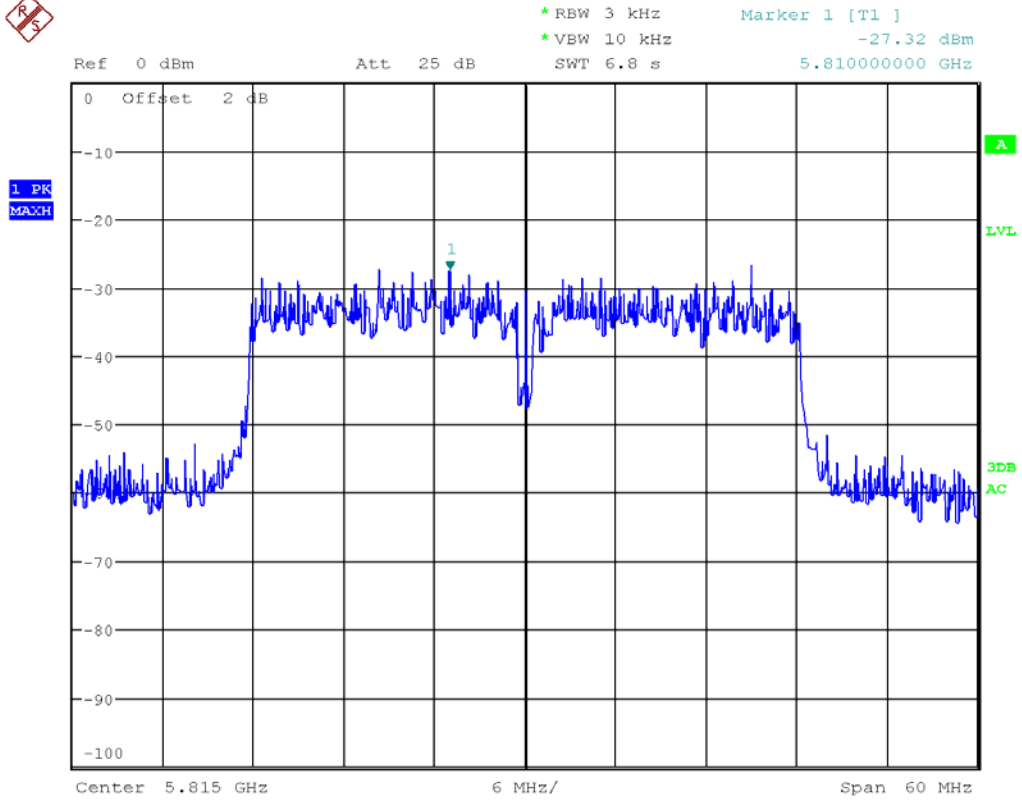


Channel No.	Frequency (MHz)	Mode	Data Rate	Measured Peak Power Spectral Density (dBm/3KHz)	Limit	Result
153	5755	802.11n (HT40)	MCS15	-27.08	8dBm/3KHz	Pass
162	5815			-27.32		Pass

802.11n mode (HT40):
Channel 5755 MHz:



Channel 5815 MHz:



10. EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

10.1 LIMITS

FCC 15.247(d) & 15.209

10.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance v03r01.

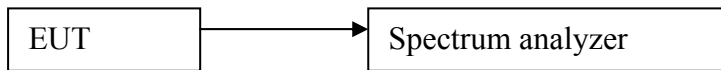
Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

1. Reference level measurement

Below 1GHz Set the spectrum analyzer: RBW =100KHz VBW >= 3*RBW, Set the span to >= 1.5 times the DTS bandwidth. Sweep = auto; Detector Function = peak. Trace = Max-hold. Allow the trace to stabilize.

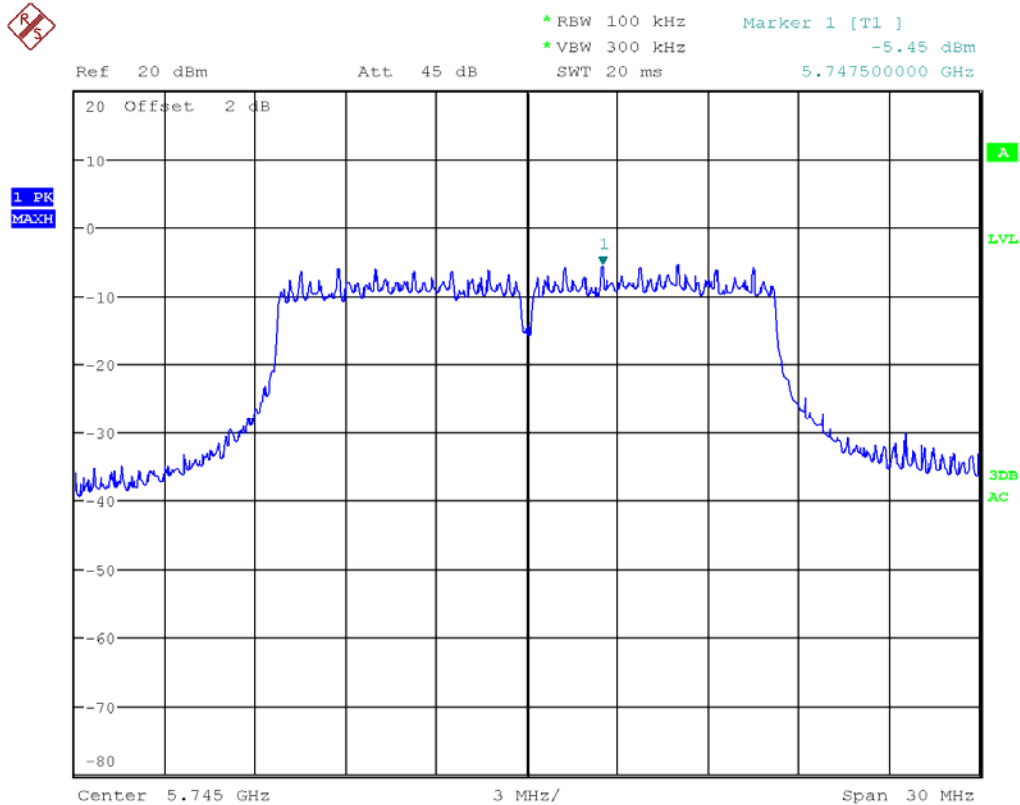
2. Set the spectrum analyzer: RBW =100KHz VBW >= 3*RBW, Set the span to >= 1.5 times the DTS bandwidth. Sweep = auto; Detector Function = peak. Trace = Max-hold. Allow the trace to stabilize.

10.3 TEST SETUP



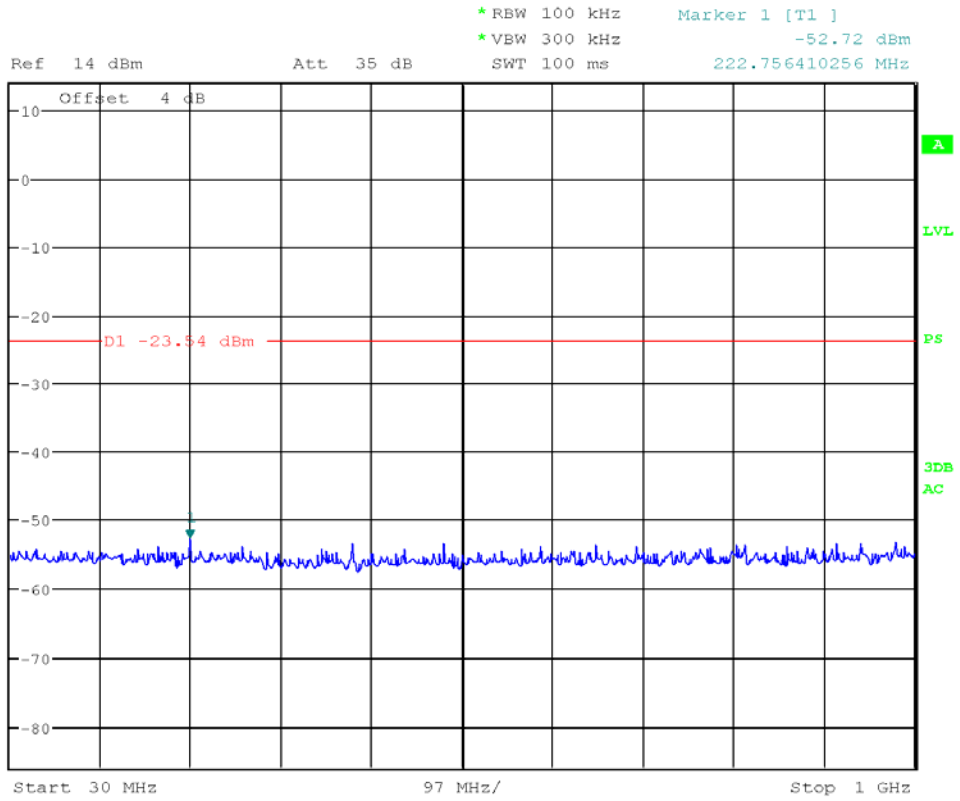
10.4 TEST RESULTS

802.11a mode:
Channel 5745MHz
reference level:

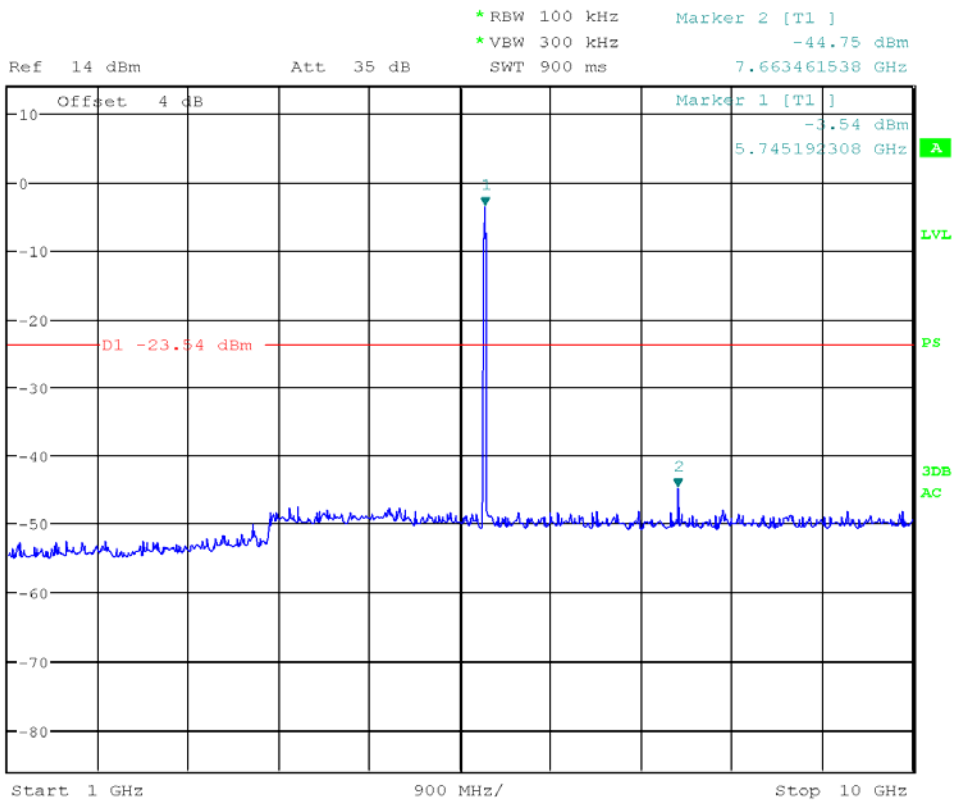


So limit is -25.45dBm

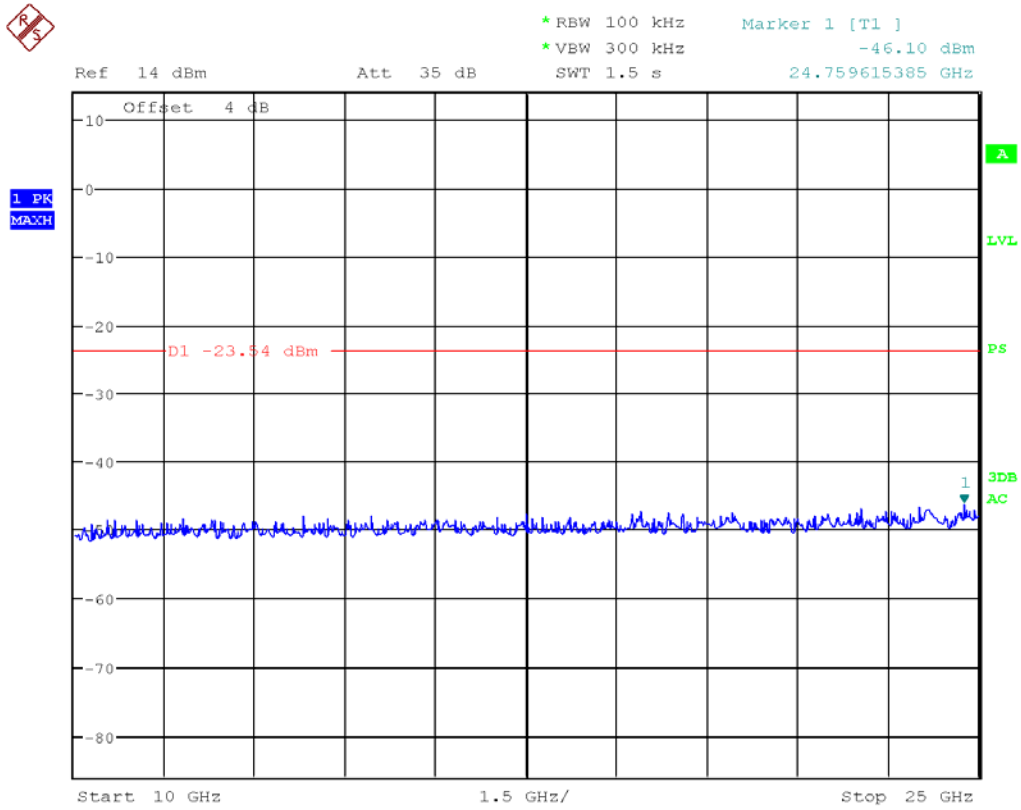
30M-1G



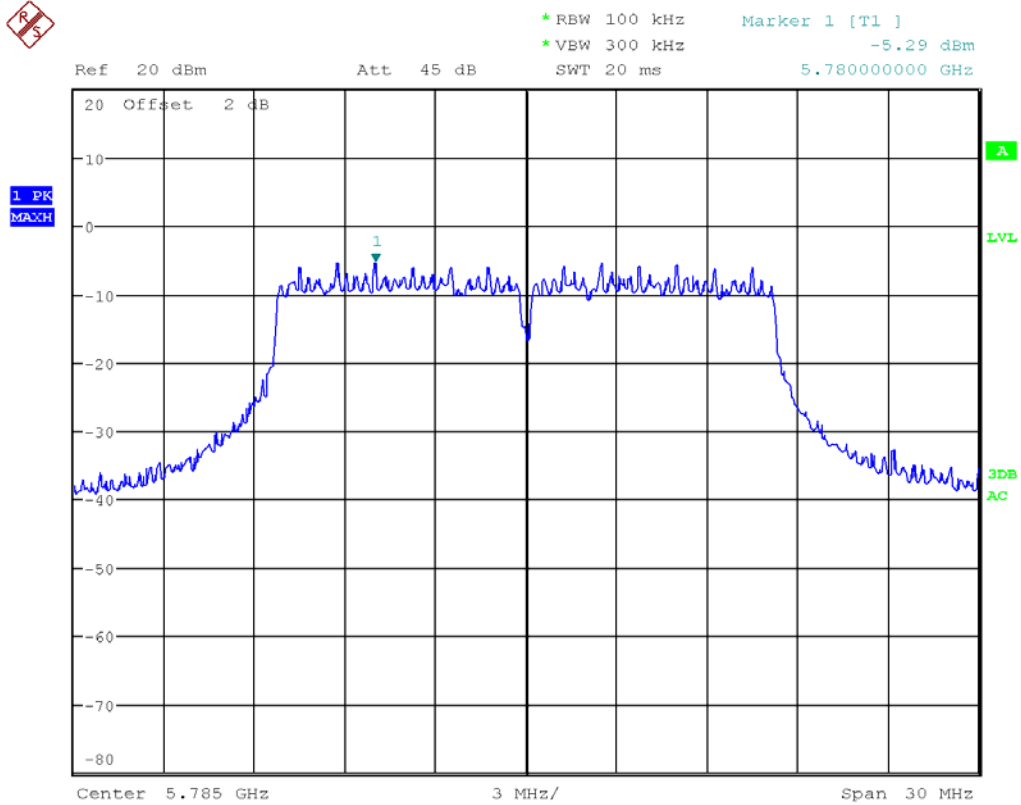
1G-10G



10G-25G



802.11a mode:
Channel 5785MHz
Reference level

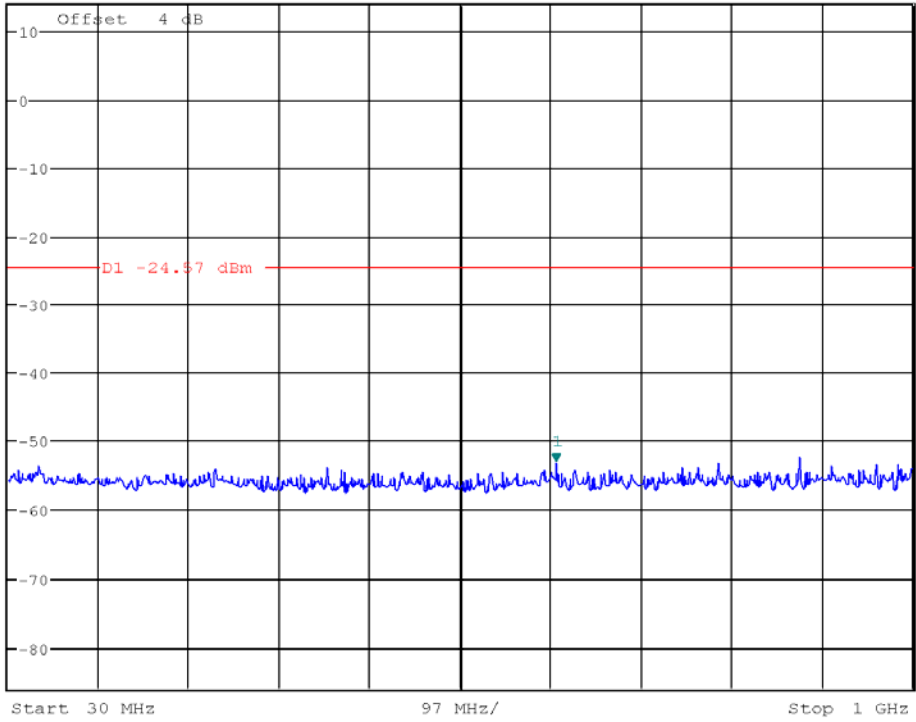


So the limit is -25.29dBm

30M-1G



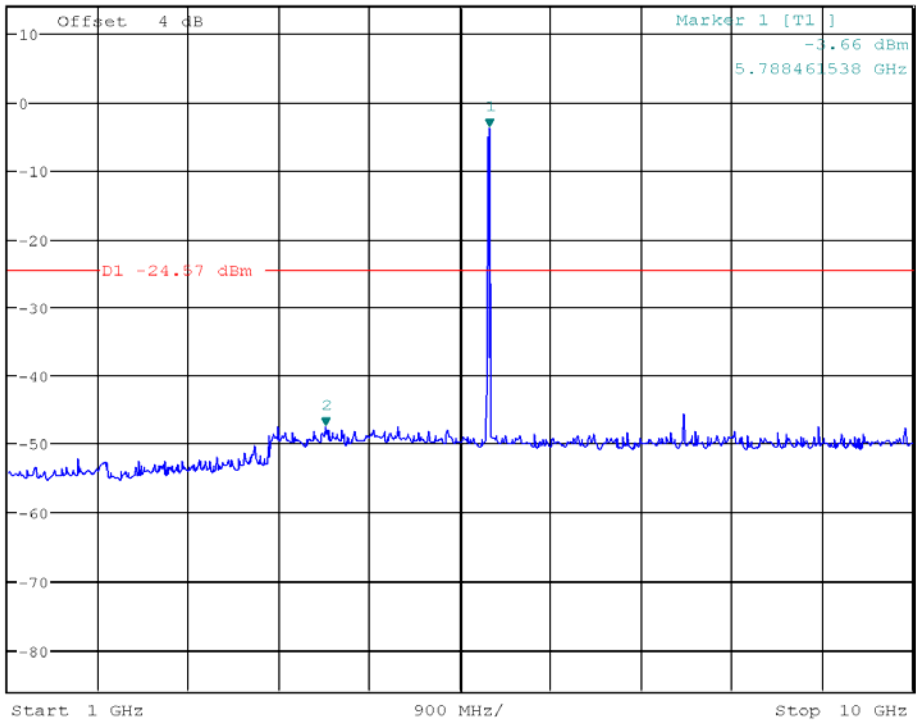
Ref 14 dBm Att 35 dB Offset 4 dB
*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -53.09 dBm
SWT 100 ms 617.596153846 MHz



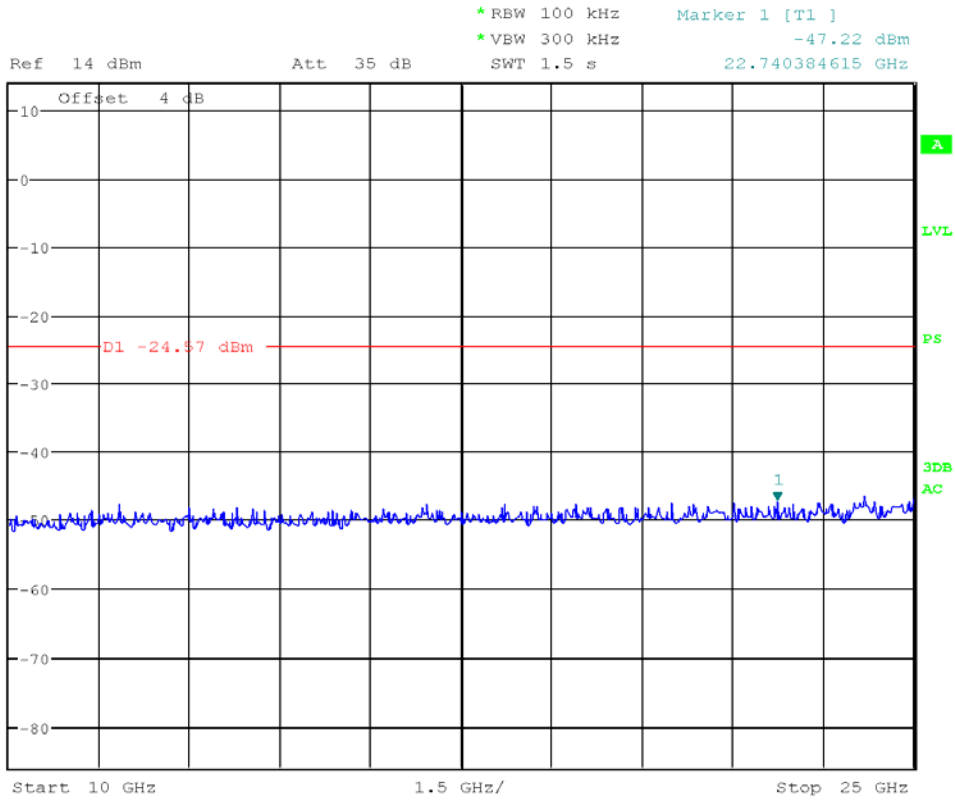
1G-10G



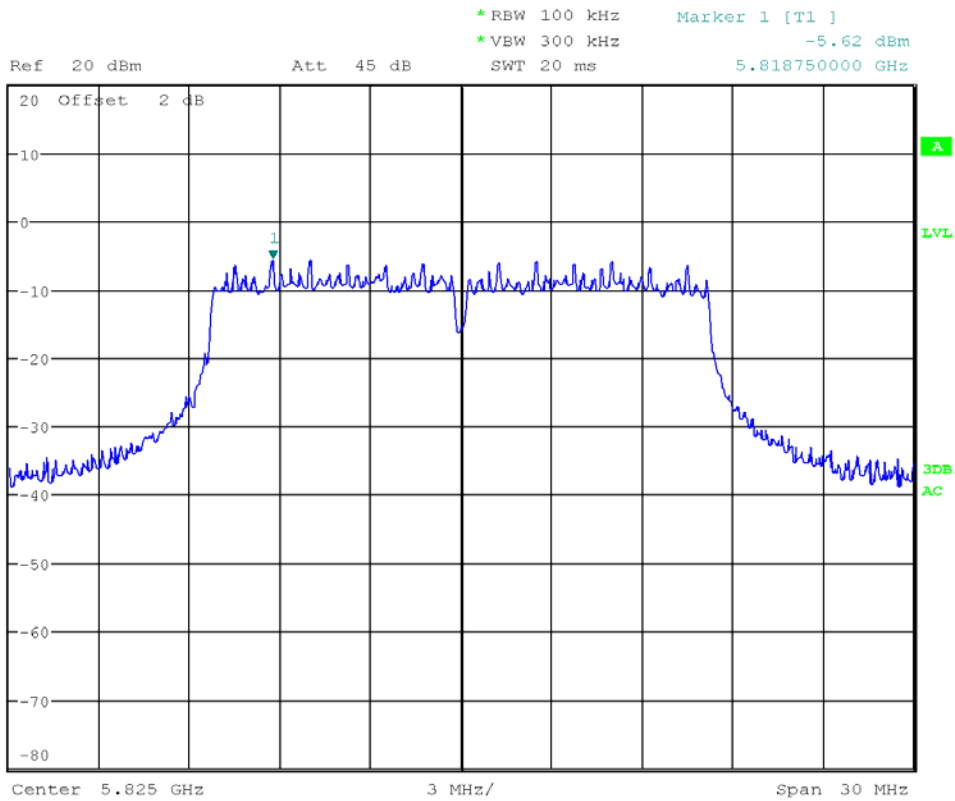
Ref 14 dBm Att 35 dB Offset 4 dB
*RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -47.36 dBm
SWT 900 ms 4.158653846 GHz



10G-25G

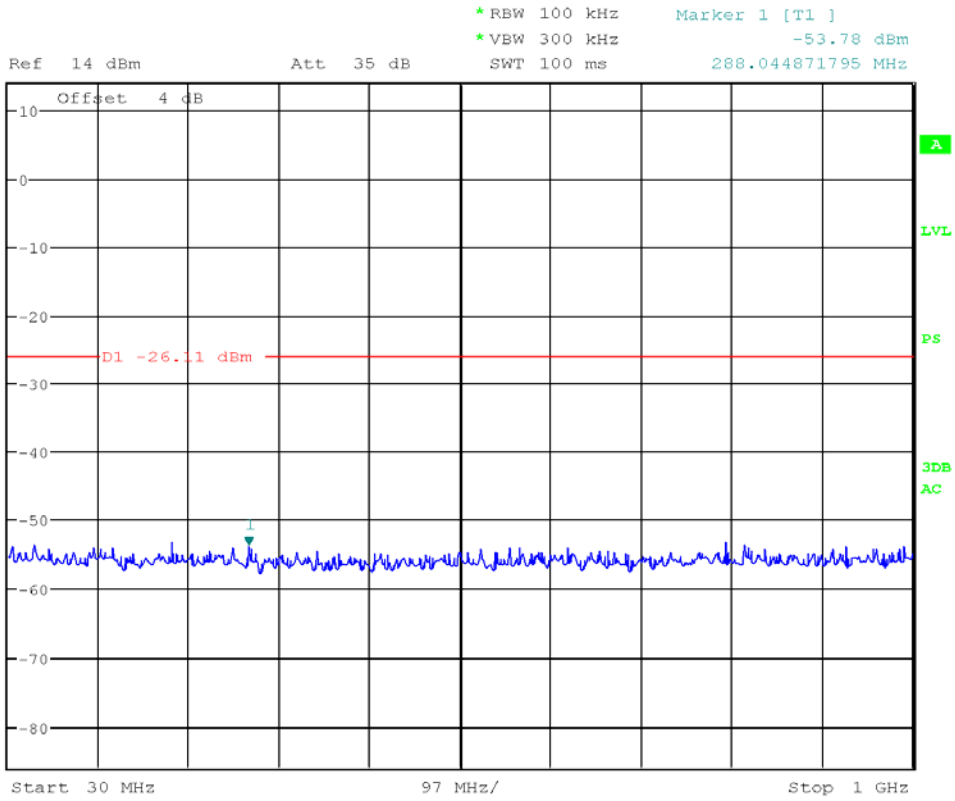


802.11a mode:
Channel 5825MHz
Reference level

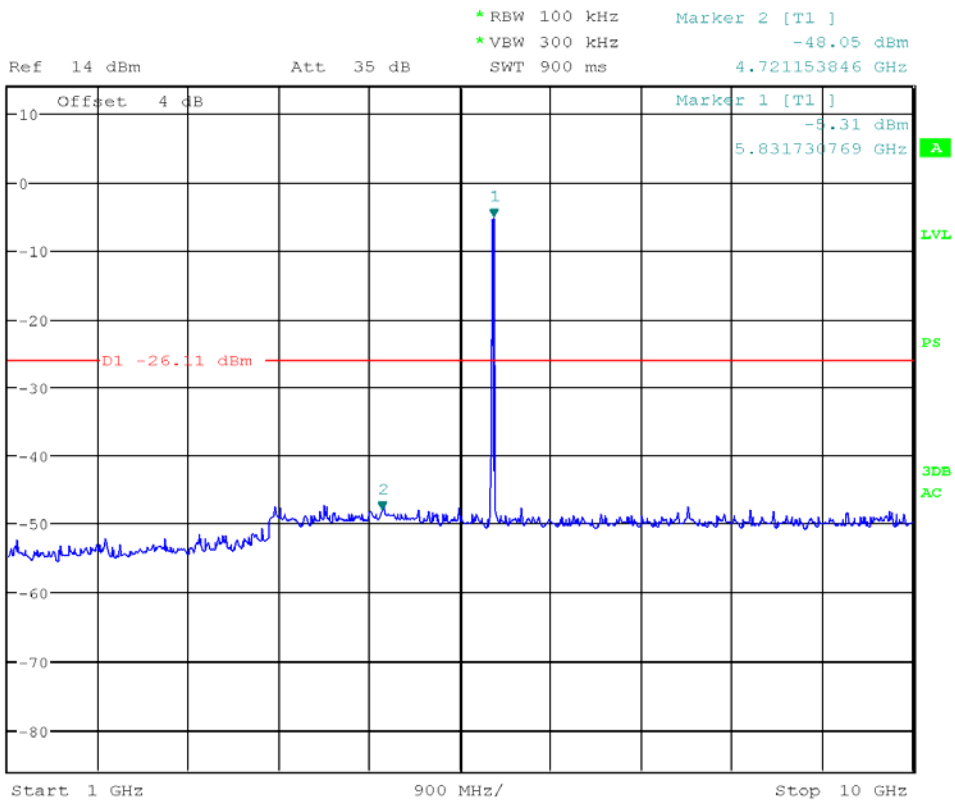


So the limit is -25.62dBm

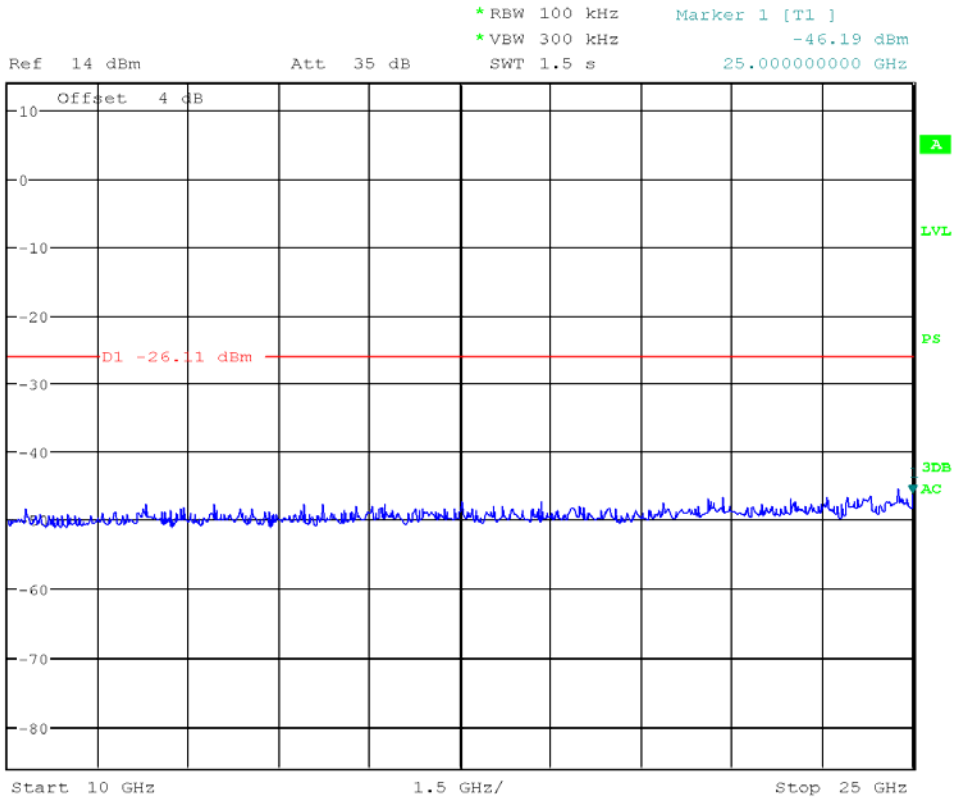
30M-1G



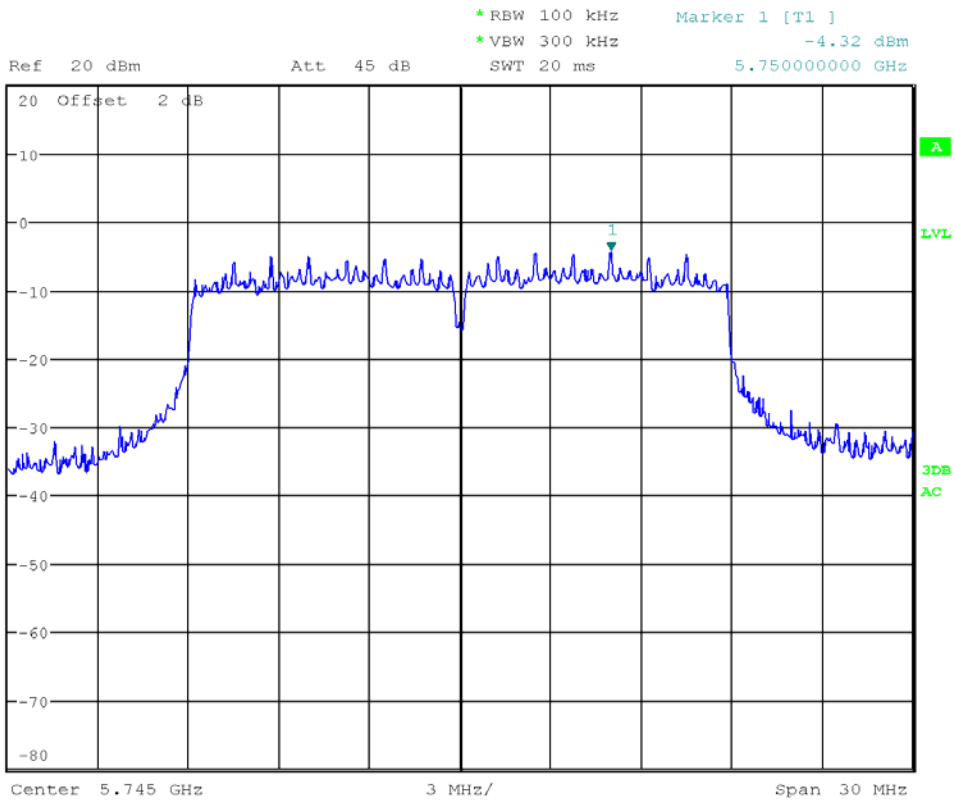
1G-10G



10G-25G

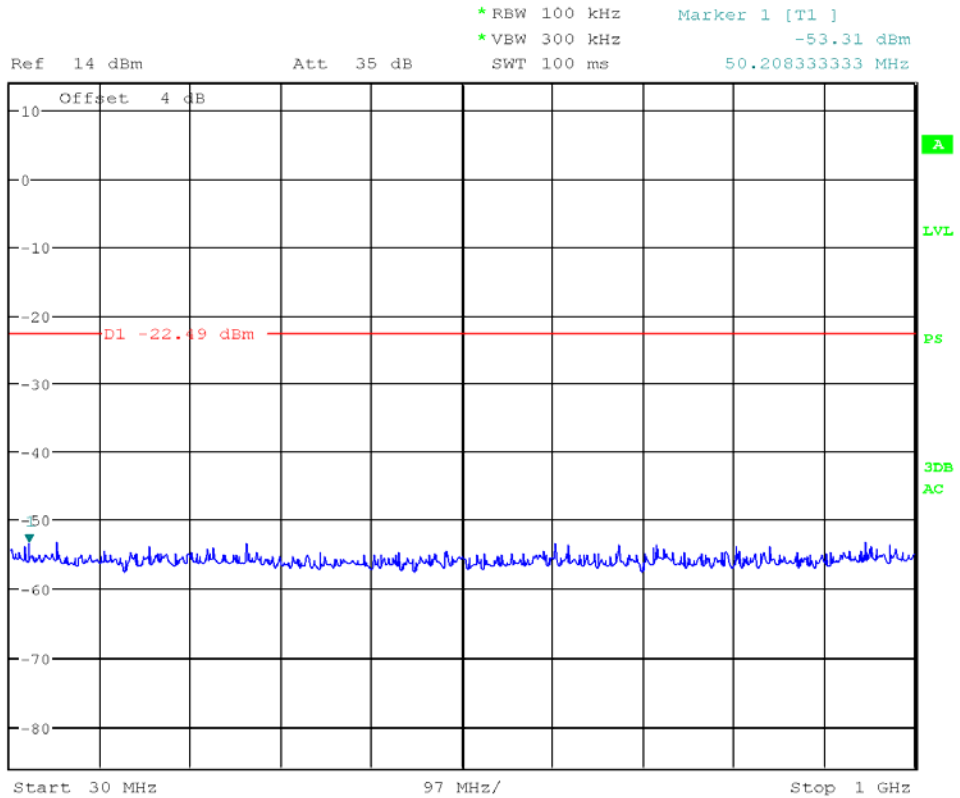


802.11n20 mode:
Channel 5745MHz
reference level:

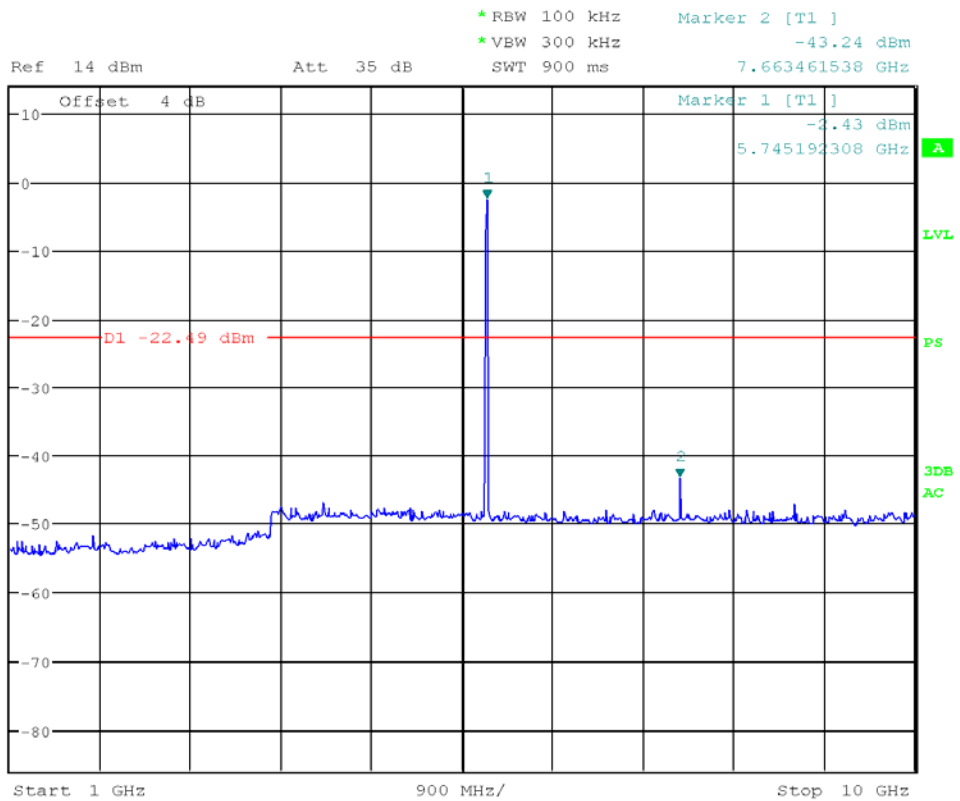


So limit is -24.32dBm

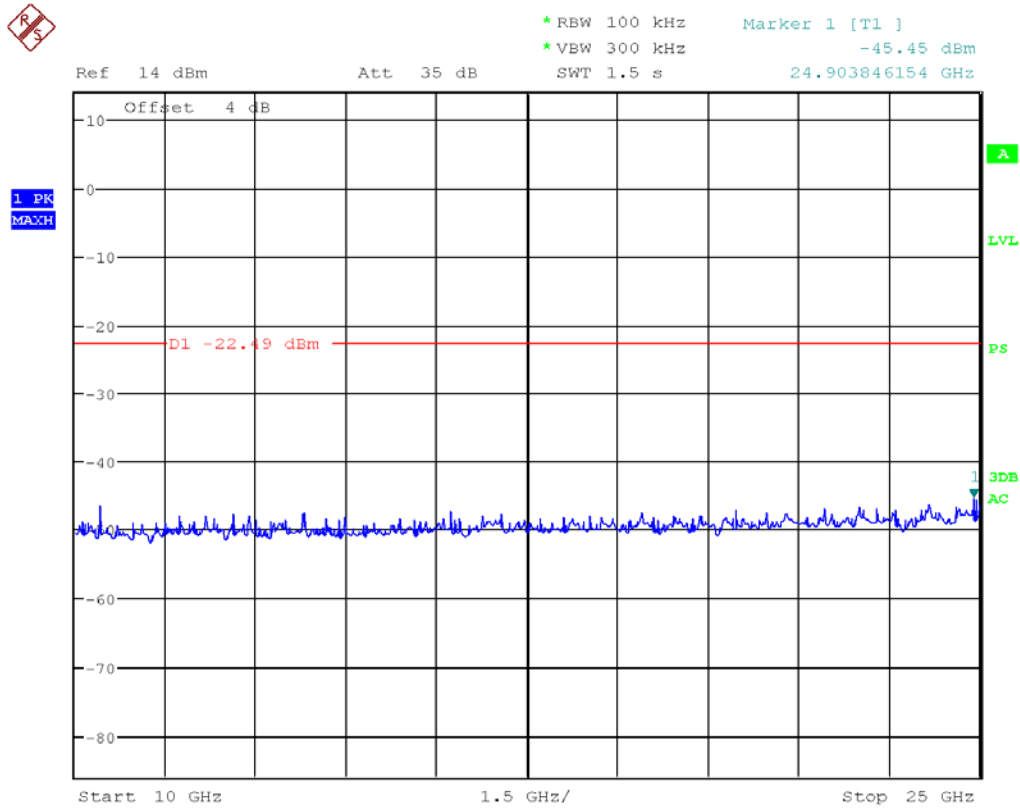
30M-1G



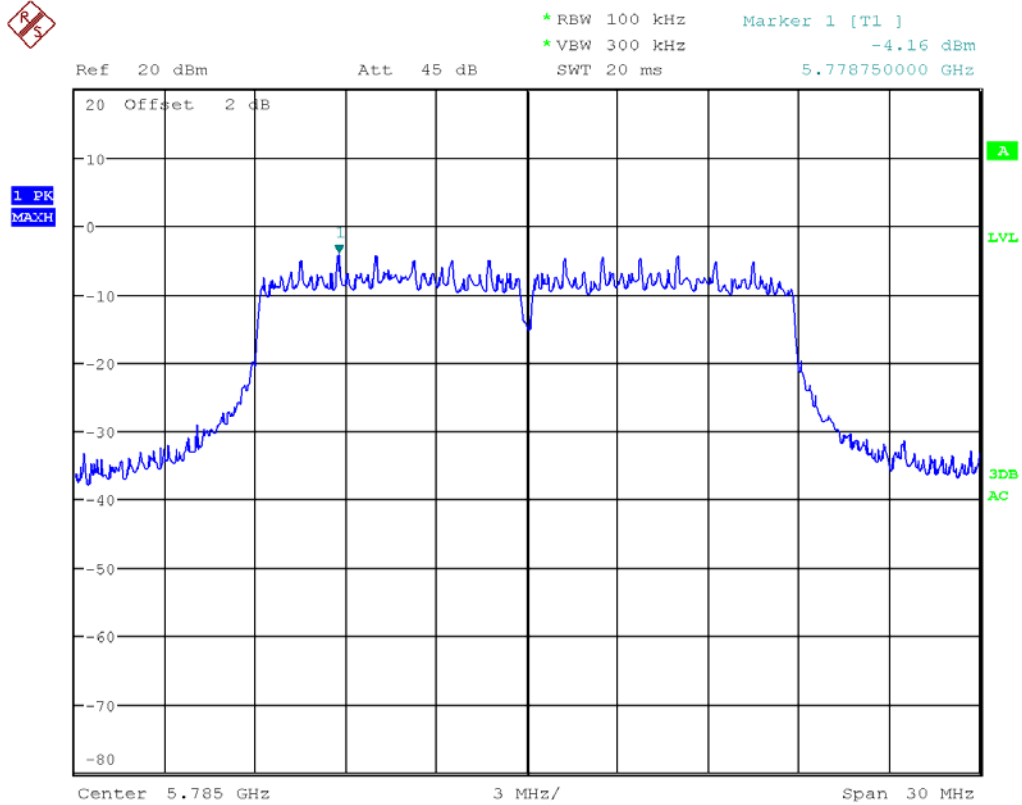
1G-10G



10G-25G



802.11n20 mode:
Channel 5785MHz
Reference level

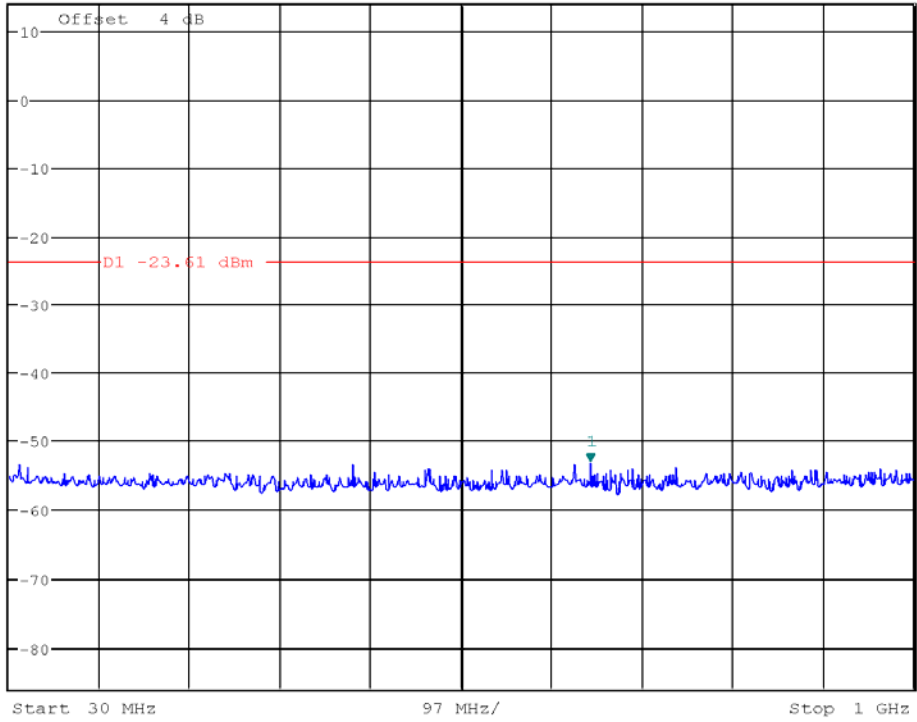


So the limit is -24.16dBm

30M-1G



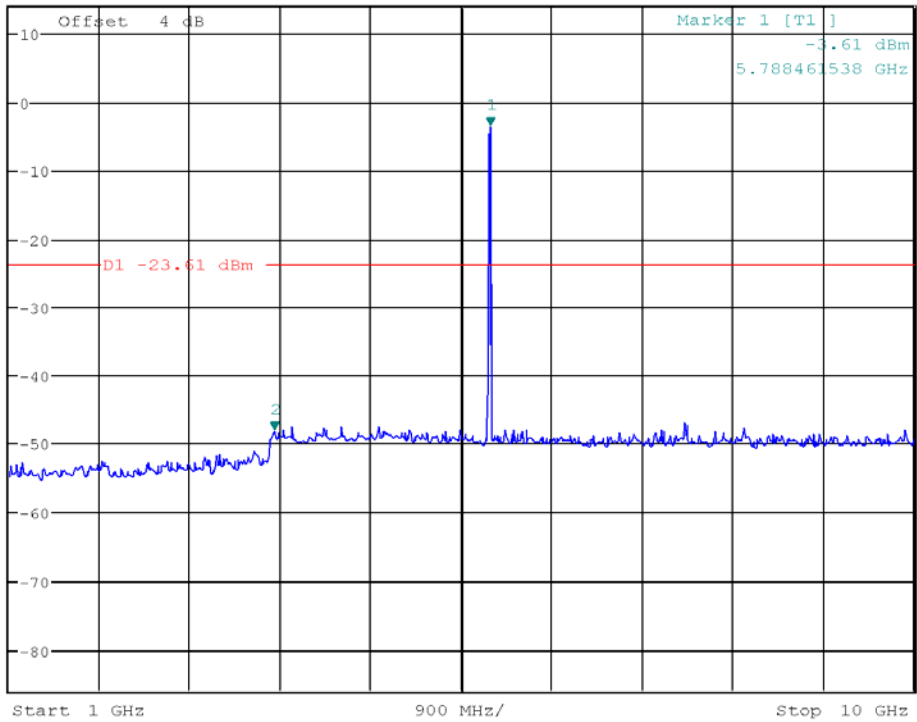
Ref 14 dBm Att 35 dB Offset 4 dB
*RBW 100 kHz Marker 1 [T1] -53.07 dBm
*VBW 300 kHz
SWT 100 ms 653.349358974 MHz



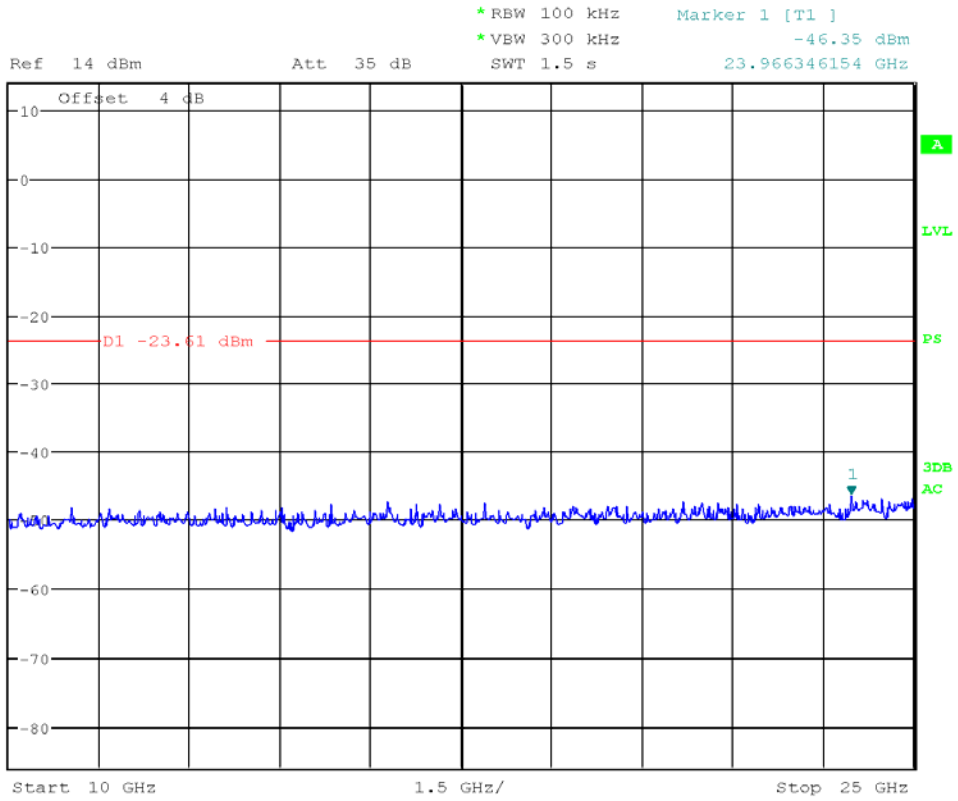
1G-10G



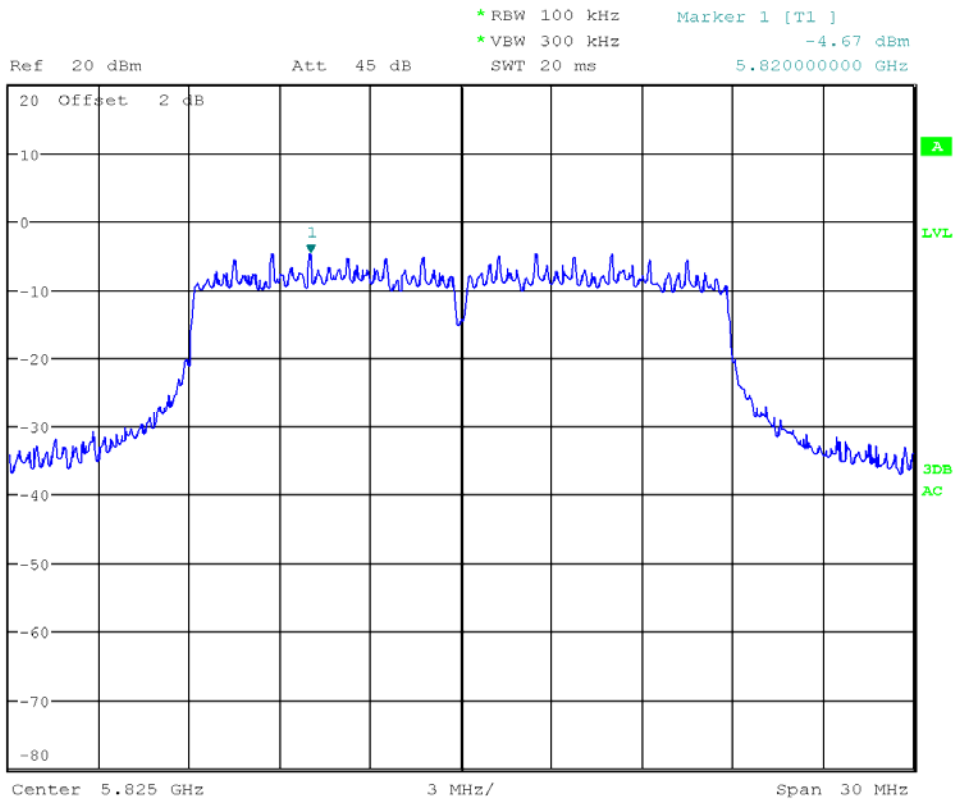
Ref 14 dBm Att 35 dB Offset 4 dB
*RBW 100 kHz Marker 2 [T1] -47.99 dBm
*VBW 300 kHz
SWT 900 ms 3.639423077 GHz



10G-25G



802.11n20 mode:
Channel 5825MHz
Reference level

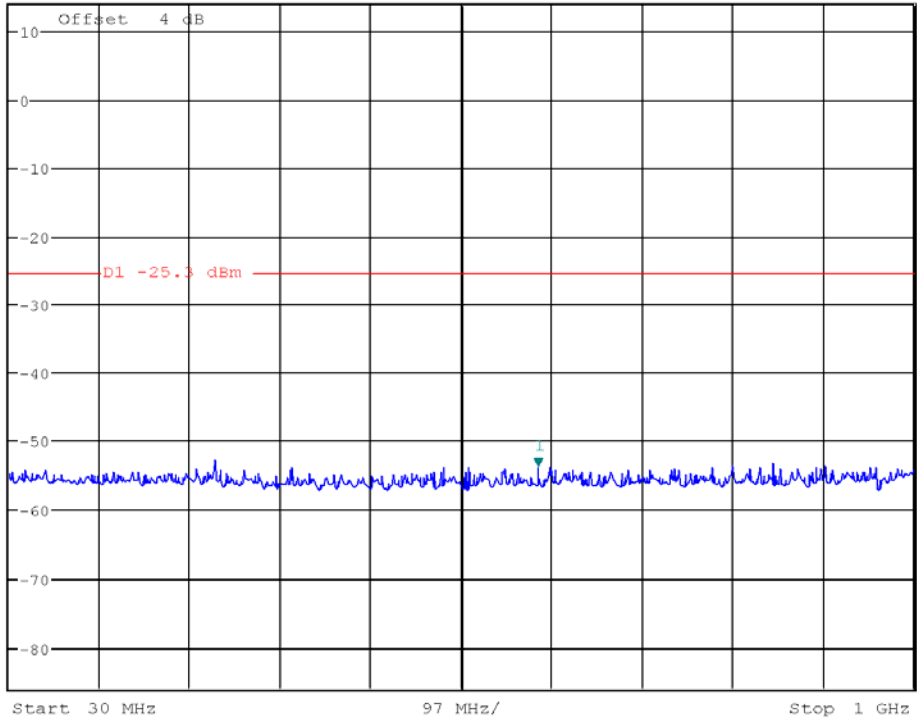


So the limit is -24.67dBm

30M-1G



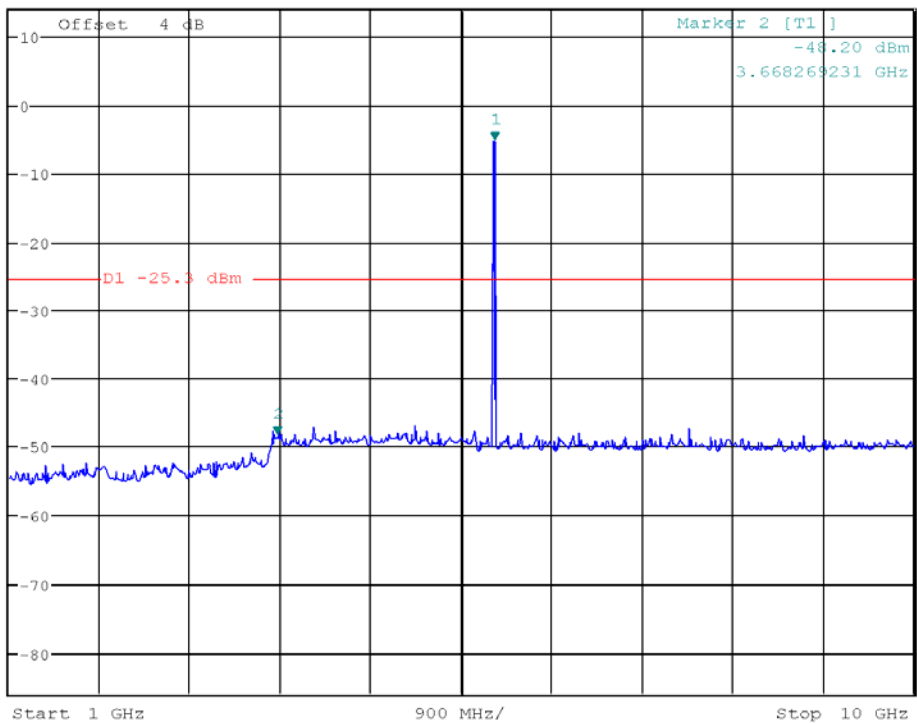
Ref 14 dBm Att 35 dB *RBW 100 kHz Marker 1 [T1] -53.67 dBm
*VBW 300 kHz 597.387820513 MHz
SWT 100 ms



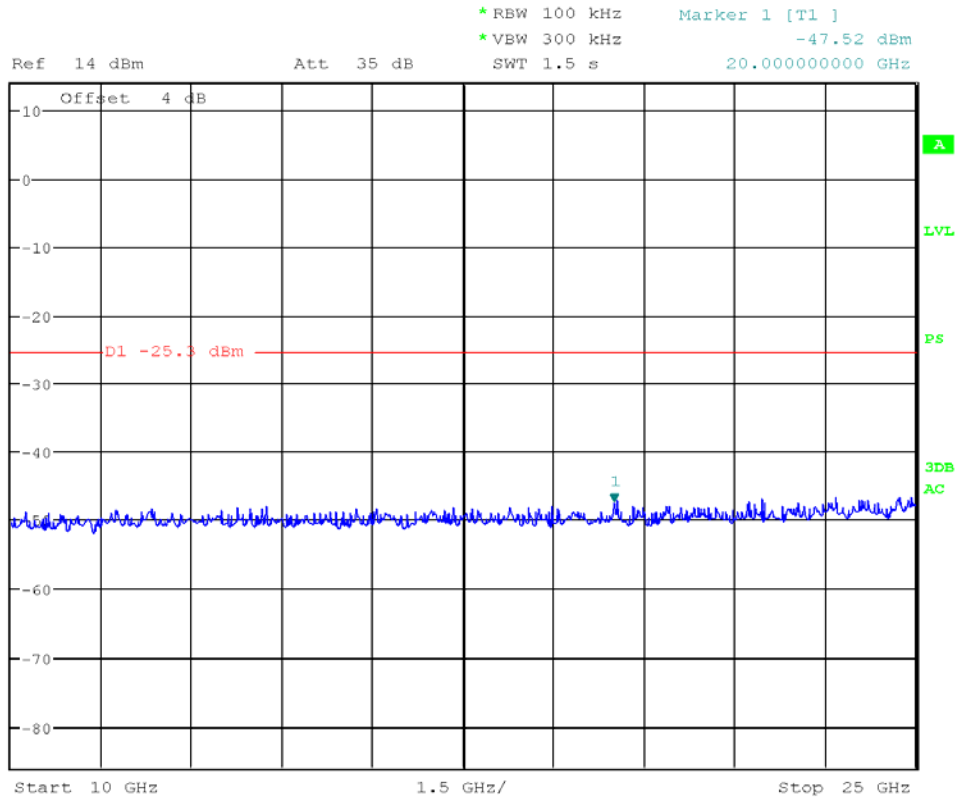
1G-10G



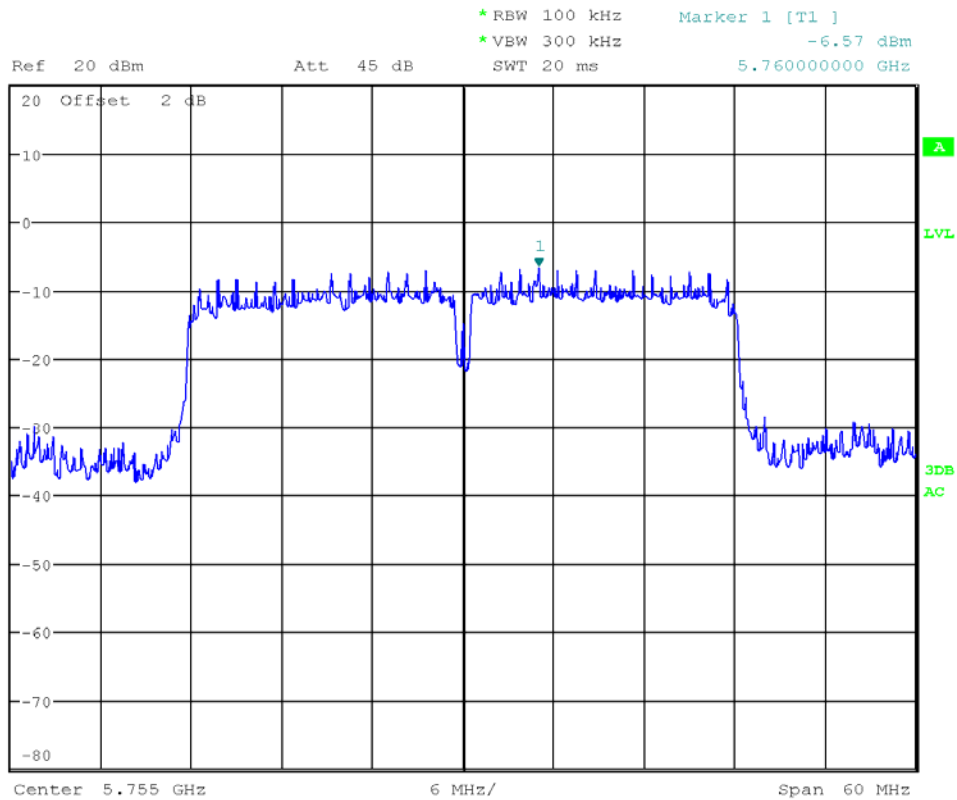
Ref 14 dBm Att 35 dB *RBW 100 kHz Marker 1 [T1] -48.20 dBm
*VBW 300 kHz 3.668269231 GHz
SWT 900 ms



10G-25G

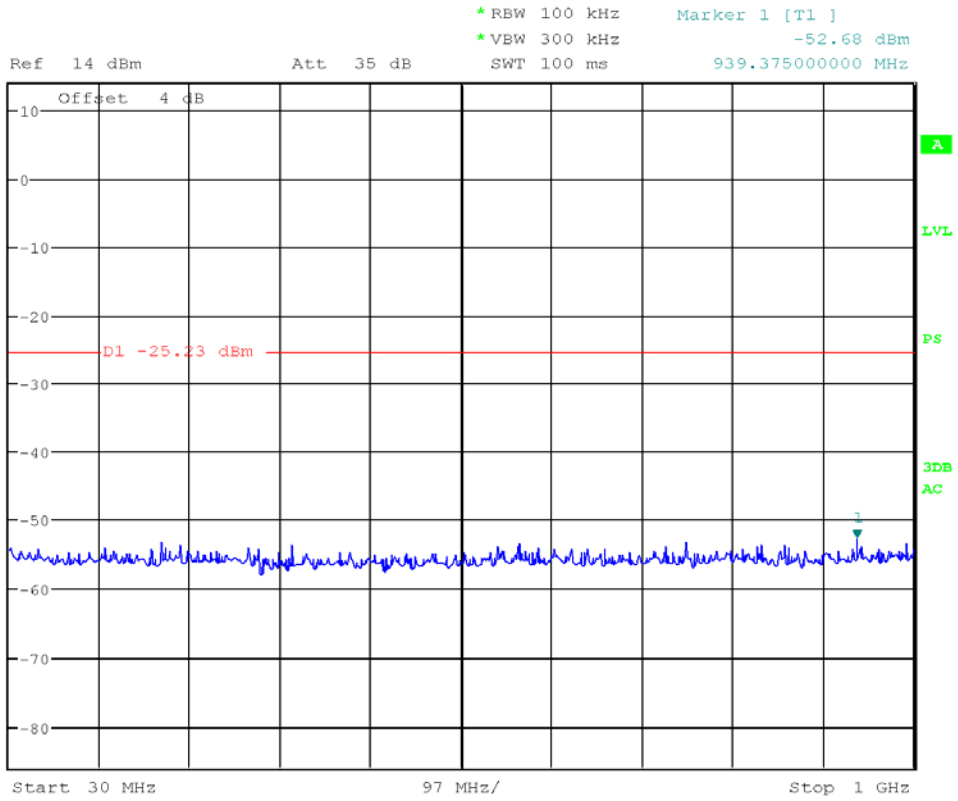


802.11n40 mode:
Channel 5755MHz
reference level:

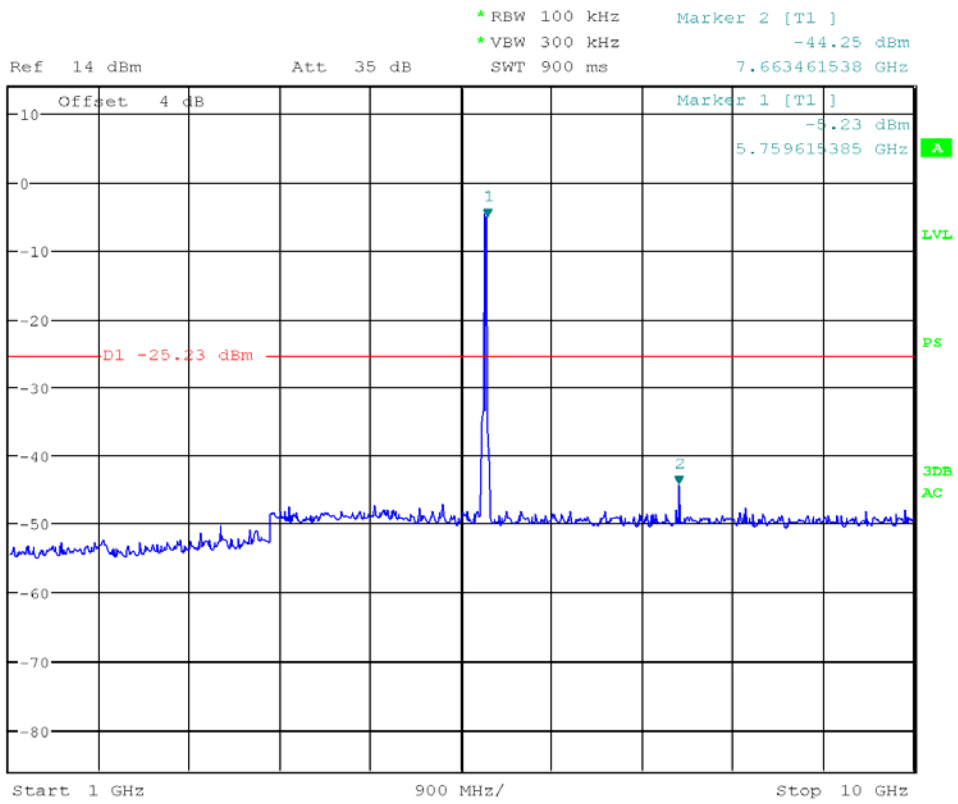


So limit is -26.57dBm

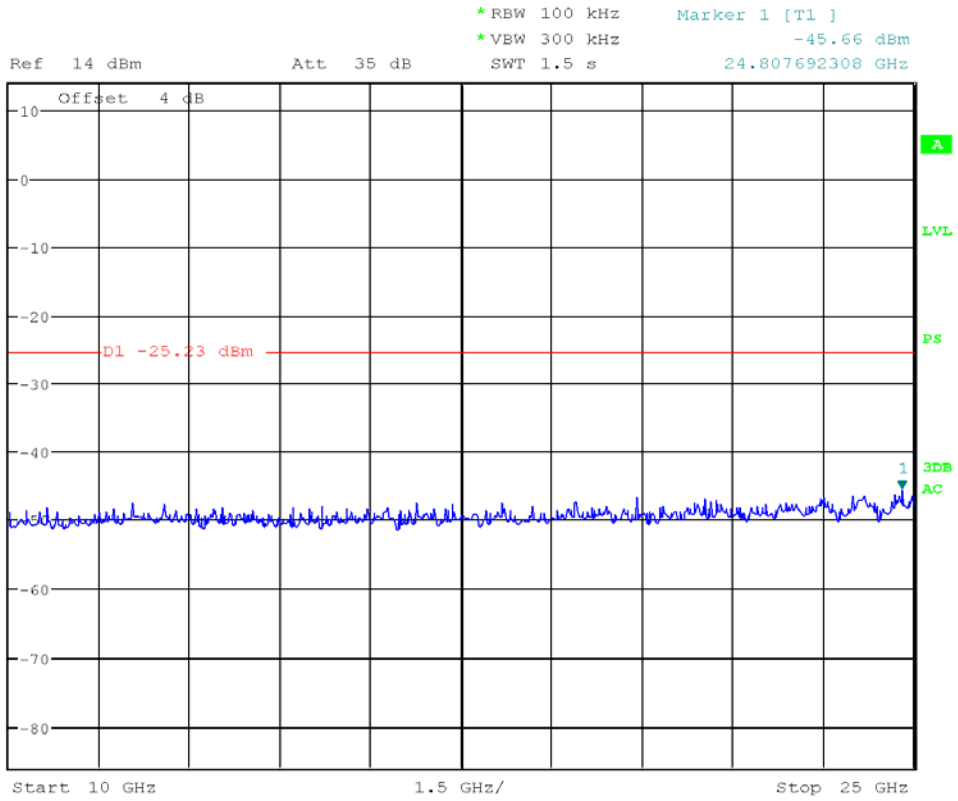
30M-1G



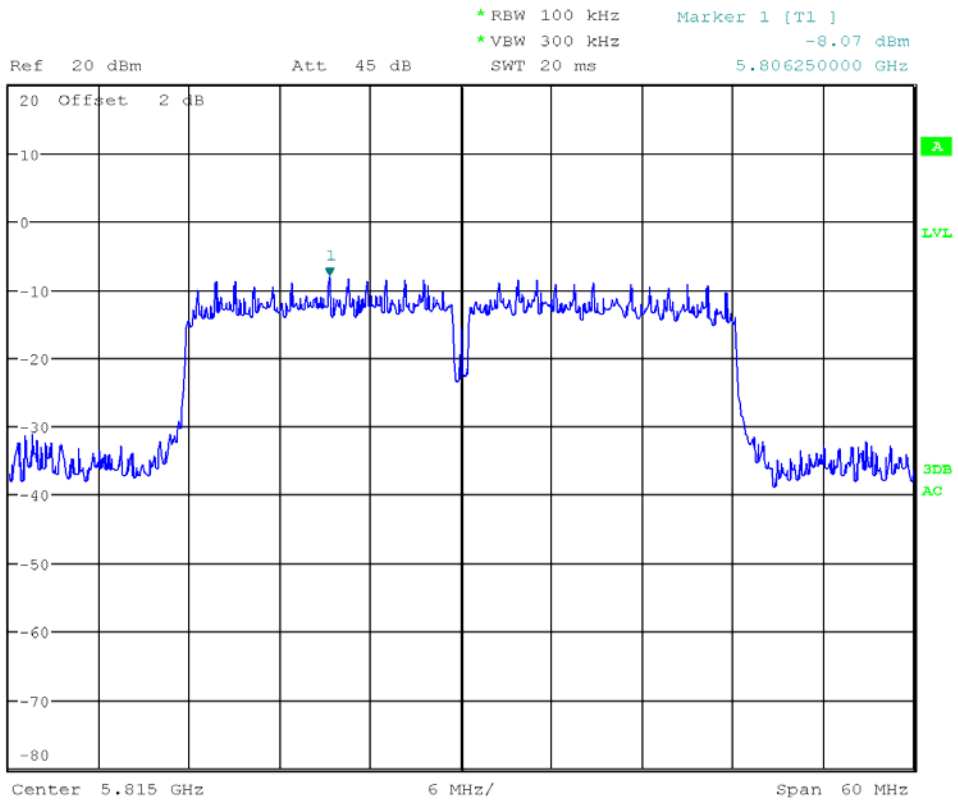
1G-10G



10G-25G



802.11n40 mode:
Channel 5815MHz
Reference level

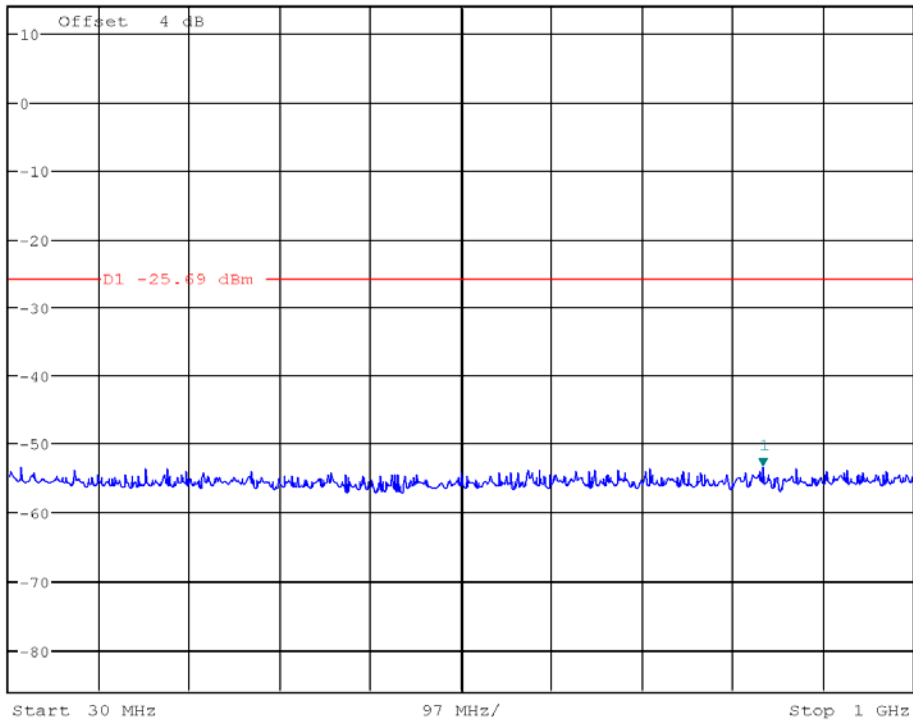


So the limit is -28.07dBm

30M-1G



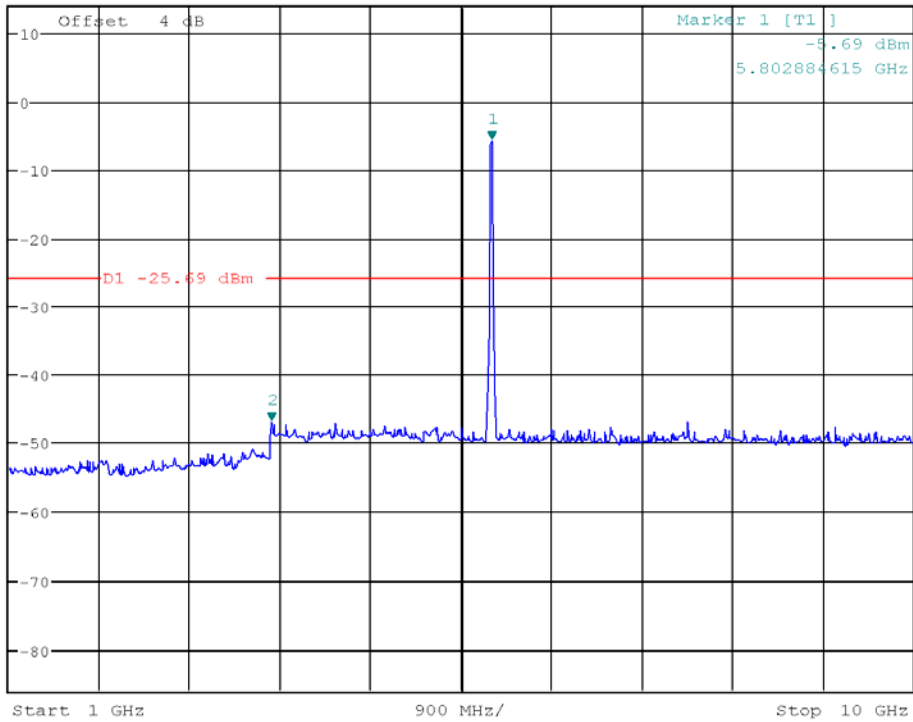
Ref 14 dBm Att 35 dB *RBW 100 kHz Marker 1 [T1] -53.30 dBm
*VBW 300 kHz
SWT 100 ms 838.333333333 MHz



1G-10G



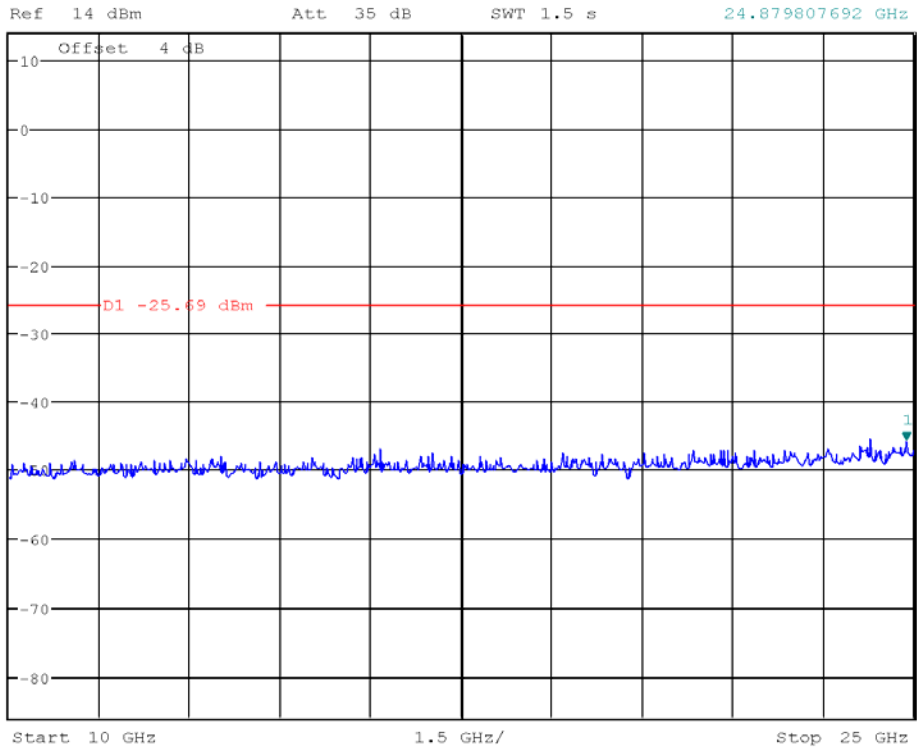
Ref 14 dBm Att 35 dB *RBW 100 kHz Marker 2 [T1] -46.89 dBm
*VBW 300 kHz
SWT 900 ms 3.610576923 GHz



10G-25G



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -45.83 dBm
SWT 1.5 s 24.879807692 GHz



11. BAND-EDGE MEASUREMENTS

11.1 LIMITS

FCC 15.247(d) & 15.209

11.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance v03r01.

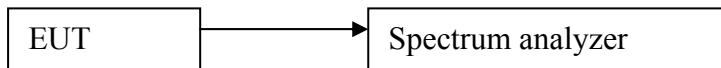
Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

1. Reference level measurement

Below 1GHz Set the spectrum analyzer: RBW =100KHz VBW \geq 3*RBW, Set the span to \geq 1.5 times the DTS bandwidth. Sweep = auto; Detector Function = peak. Trace = Max-hold. Allow the trace to stabilize.

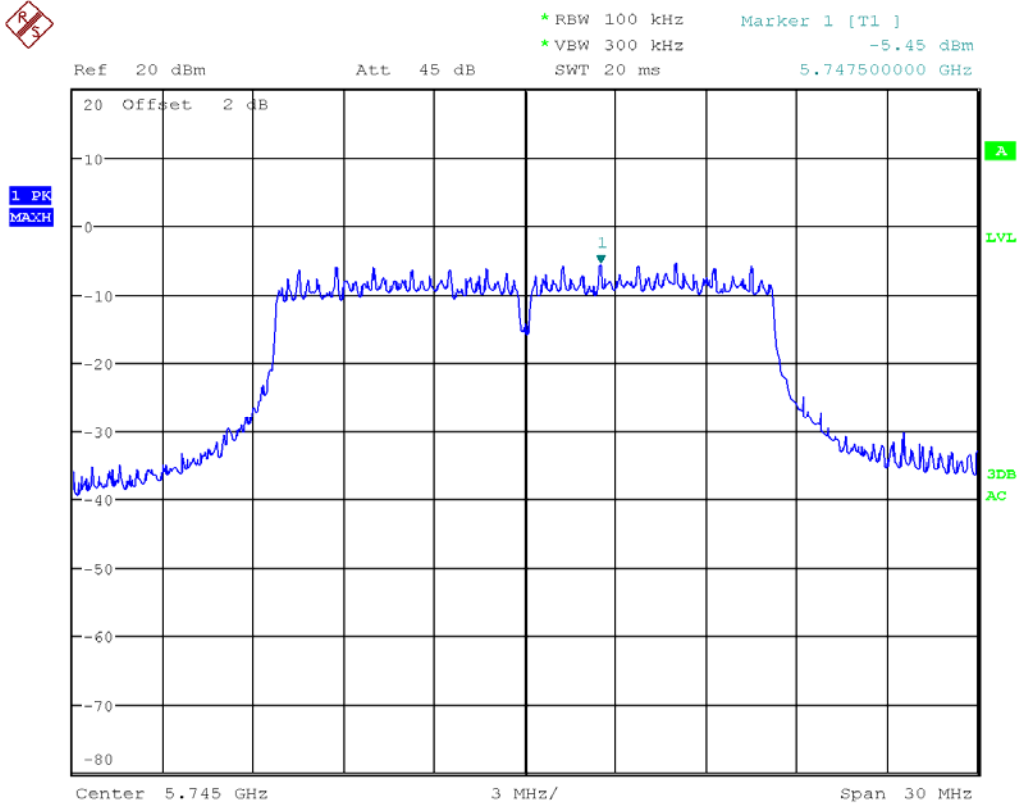
2. Set the spectrum analyzer: RBW =100KHz VBW \geq 3*RBW, Set the span to \geq 1.5 times the DTS bandwidth. Sweep = auto; Detector Function = peak. Trace = Max-hold. Allow the trace to stabilize.

11.3 TEST SETUP

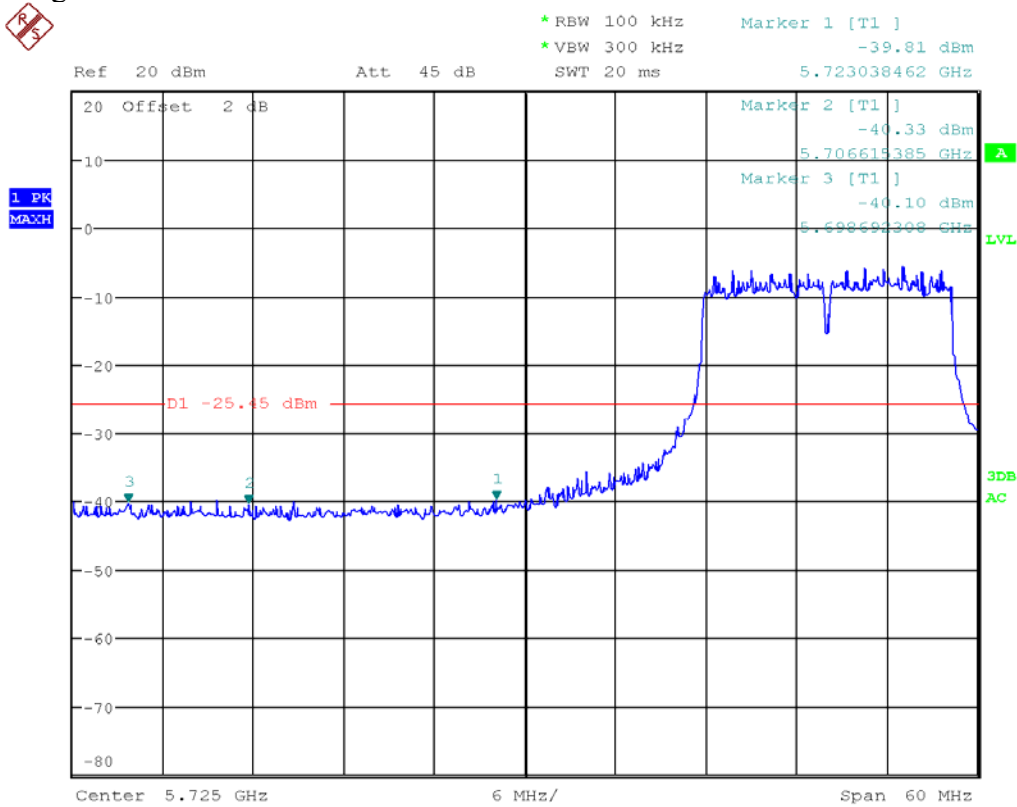


11.4 TEST RESULTS

802.11a mode:
Channel 5745MHz
reference level:



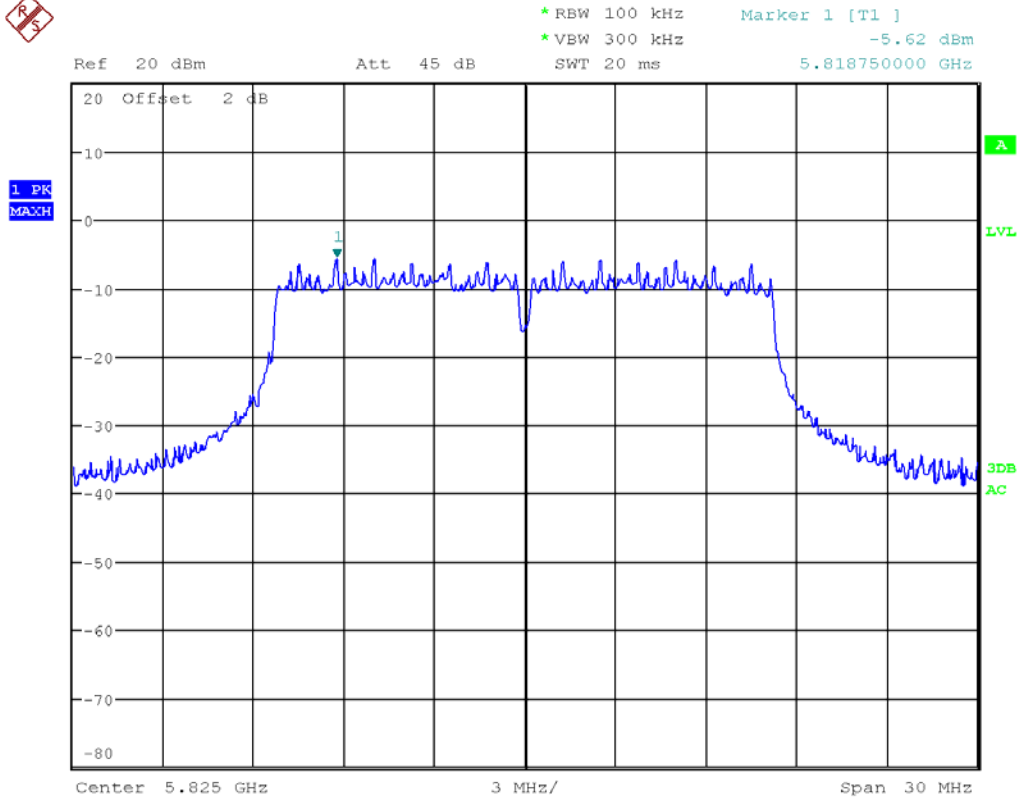
Band edge:



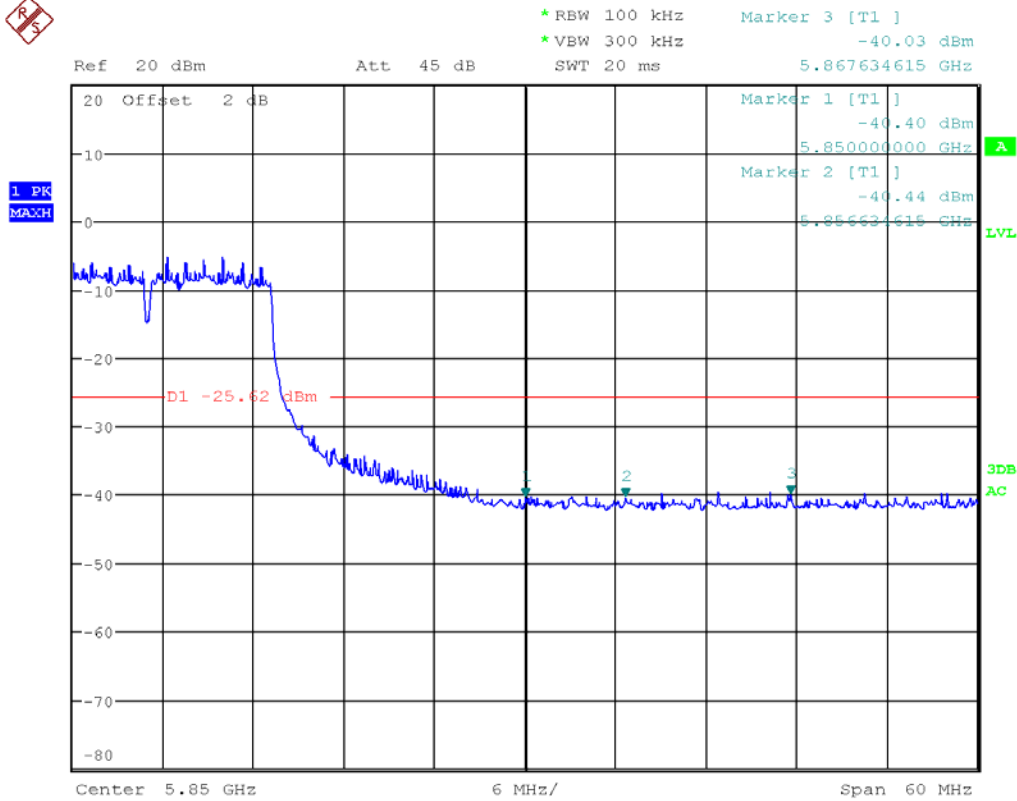
802.11a mode:

Channel 5825MHz

reference level:



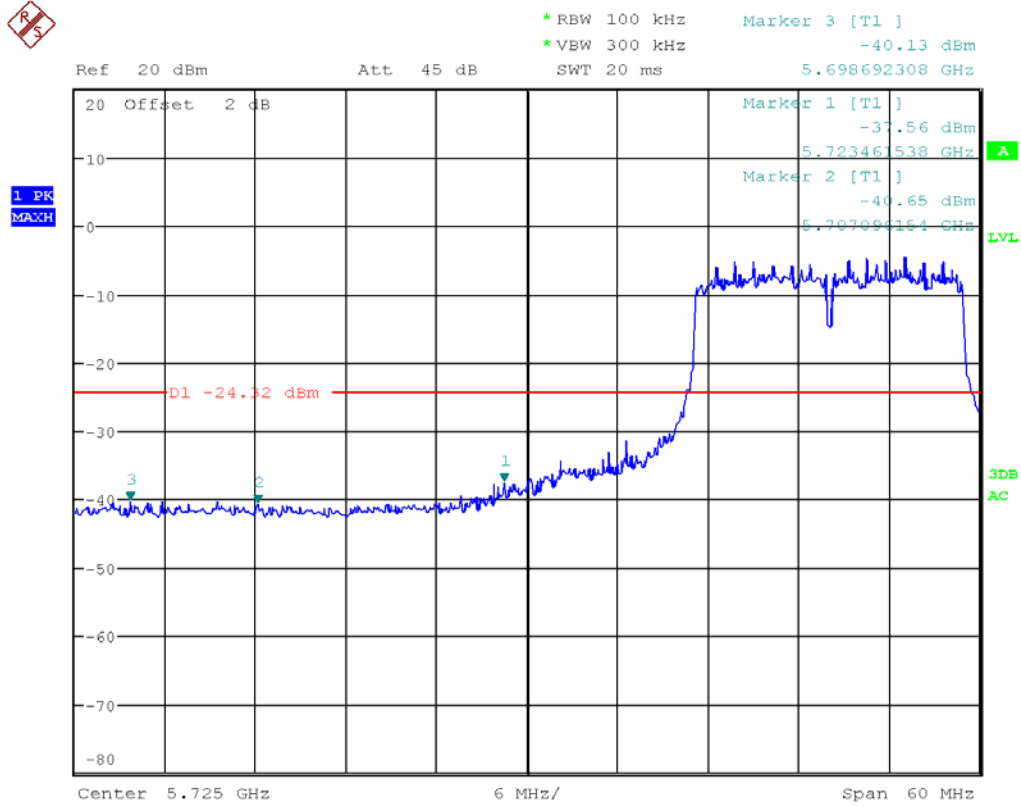
Band edge:



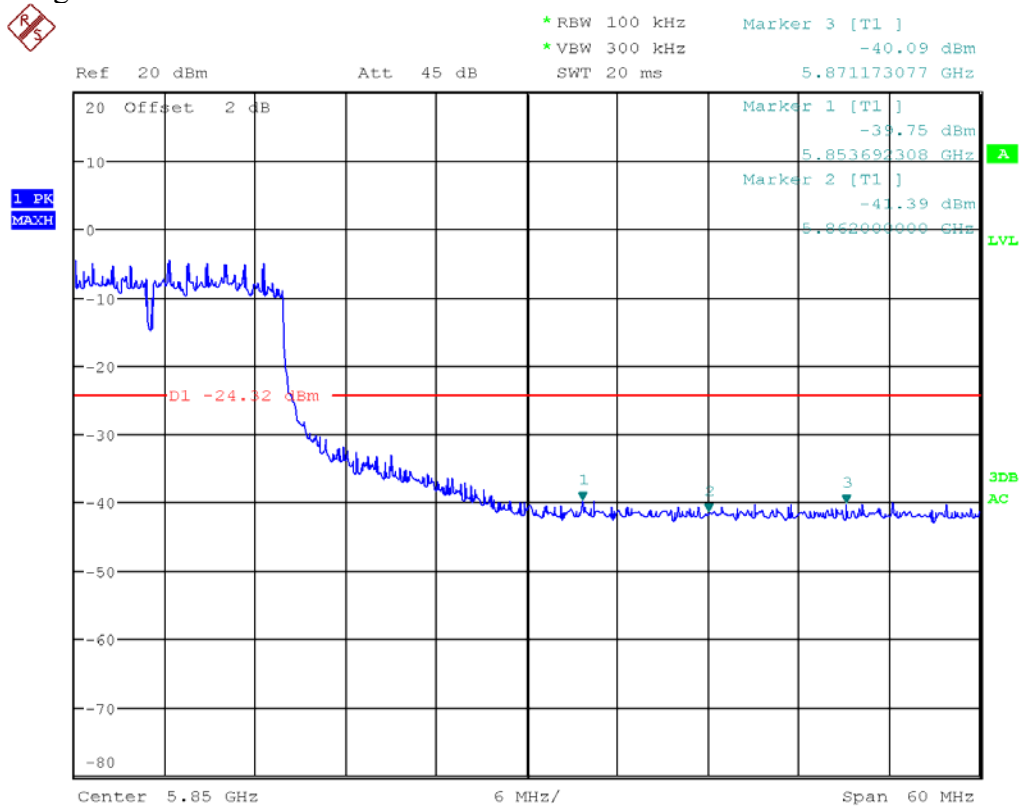
802.11n20 mode:

Channel 5745MHz

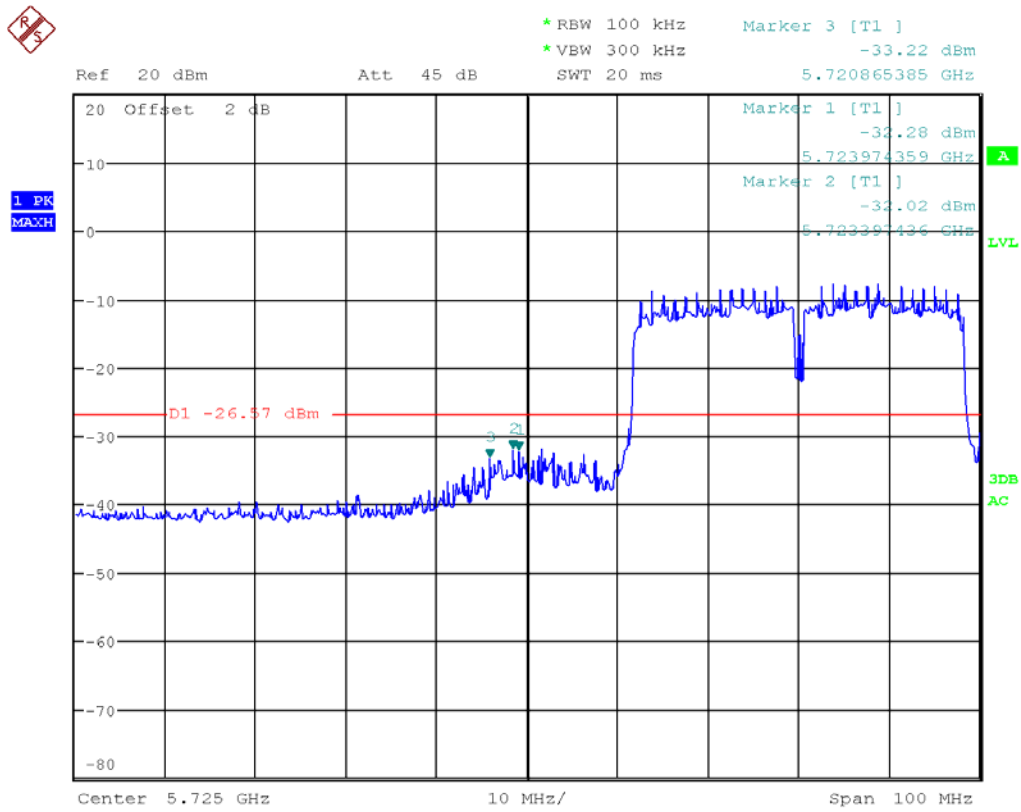
reference level:



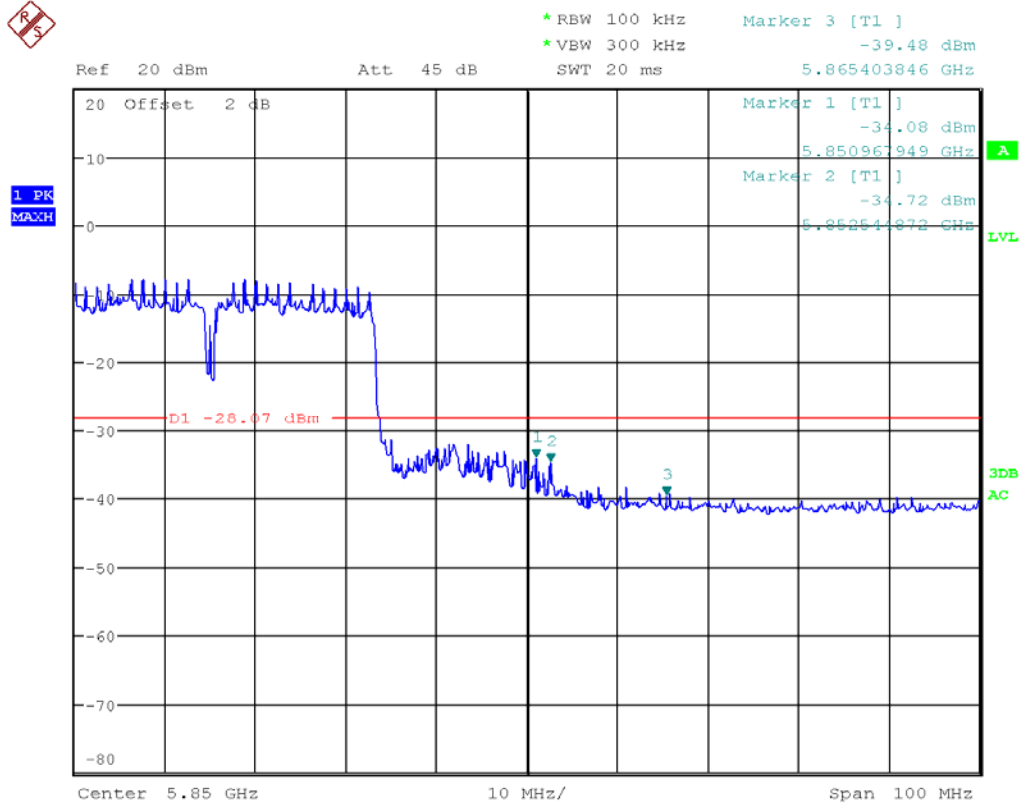
Band edge:



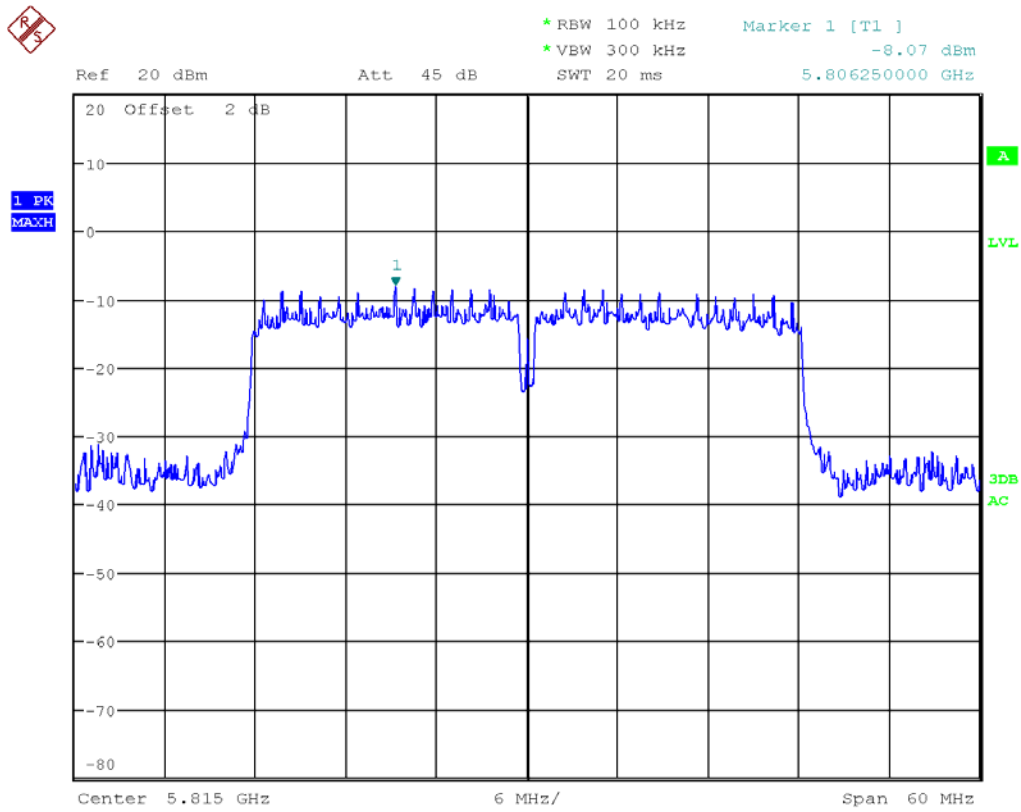
802.11n40 mode:
Channel 5755MHz
reference level:



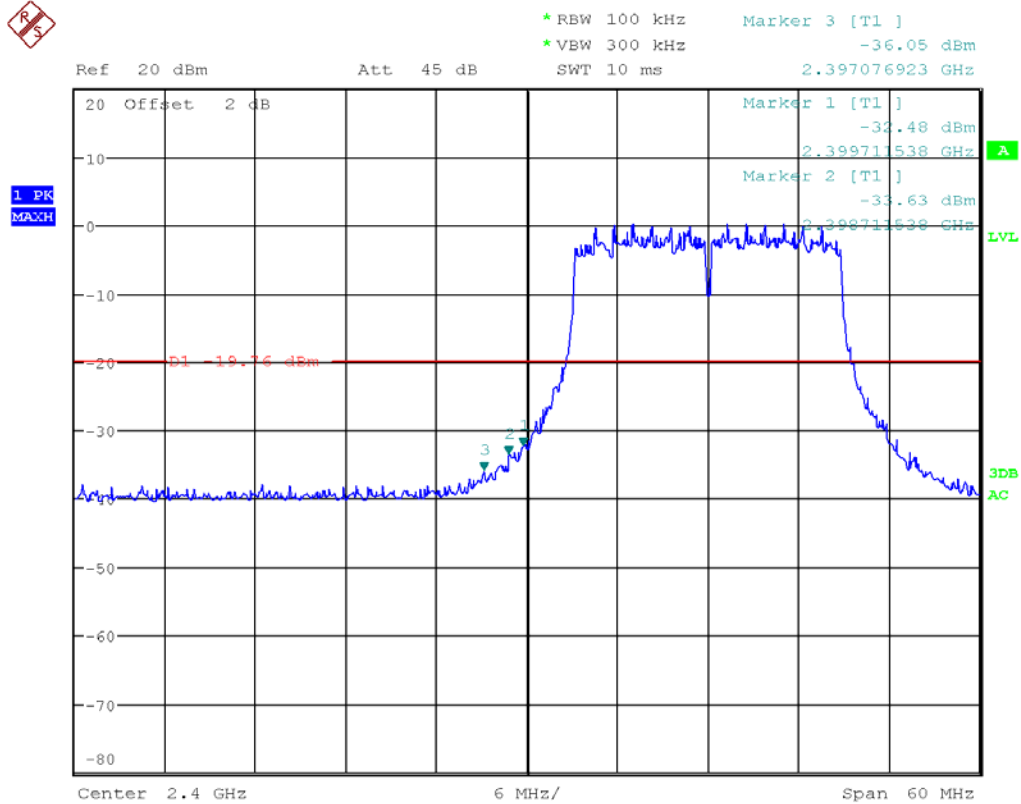
Band edge:



802.11n40 mode:
Channel 5815MHz
reference level:



Band edge:



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