

EN300328 V1.9.1 Test Report

Model : LBWA1ZZ1CA for IB-35, IB-36 and Wireless LAN Standard models.

既存規格 V1.8.1 の適合試験結果に対し、V1.9.1 5.3.9 項 Transmitter unwanted emissions in the out-of-band domainのみ測定を行う事により、V1.9.1 全てに適合可能と判断する。

To cover all the requirements of EN300328 V1.9.1, we conducted testing according to V1.9.1 Cl.5.3.9 Transmitter unwanted emissions in the out-of-band domain, in addition to the current test report V1.8.1.

In accordance with these results, we consider that this product complies with EN300328 V1.9.1.

Laboratory : Cosmos Cooperation Oonoki EMC Laboratory

KYOCERA Document solutions Inc.
Seiji Kanayama



Manager
Reliability Assurance Section 12
Reliability Assurance Department

規格 : EN 300 328 V1.9.1

測定項目 : Transmitter unwanted emissions in the Out-Of-Band domain

測定日 : 2016.10.20

製品 : 無線 LAN モジュール

モデル : LBWA1ZZ1CA

IEEE802.11b 測定結果

4.3.2.7 Occupied Channel Bandwidth

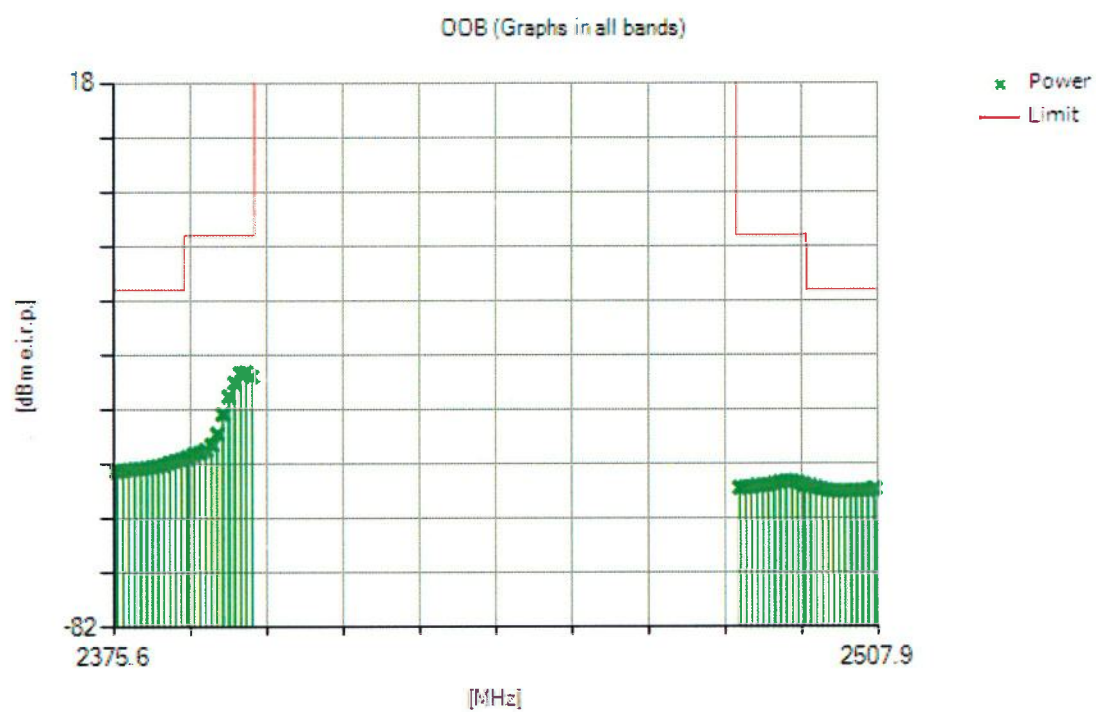
Operating Frequency	Test Detail	Result [MHz]
2412 MHz	Bandwidth	12.200
2472 MHz	Bandwidth	12.240

4.3.2.8 Transmitter unwanted emissions in the OOB domain

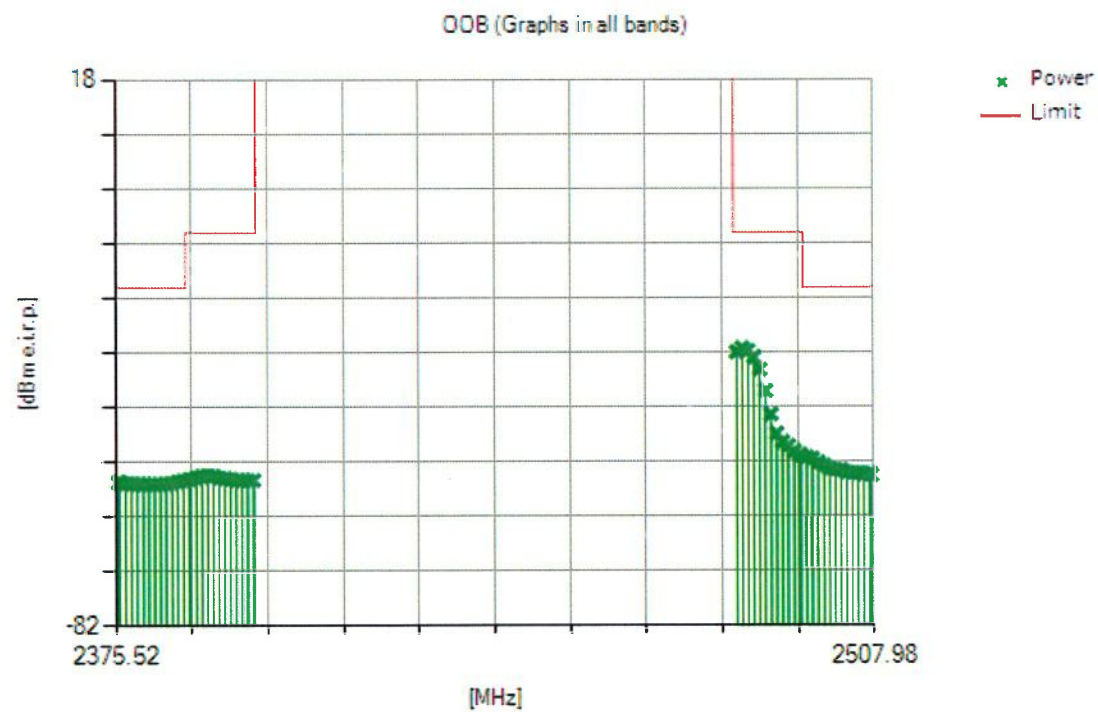
Operating Frequency	Frequency Range	Reading [dBm/MHz]	Correction Factor [dB]	Result		Limit [dBm/MHz e.i.r.p.]	Margin [dB]
				[MHz]	[dBm/MHz e.i.r.p.]		
2412 MHz	2400MHz-BW to 2400MHz	-39.7210	4.6424	2398.50	-35.08	-10	25.08
	2400MHz-2BW to 2400MHz-BW	-55.8176	4.6311	2387.30	-51.19	-20	31.19
	2483.5MHz to 2483.5MHz+BW	-59.7115	4.5979	2492.00	-55.11	-10	45.11
	2483.5MHz+BW to 2483.5MHz+2BW	-60.6937	4.6123	2496.20	-56.08	-20	36.08
2472 MHz	2400MHz-BW to 2400MHz	-59.1320	4.6353	2391.50	-54.50	-10	44.50
	2400MHz-2BW to 2400MHz-BW	-60.0097	4.6311	2387.26	-55.38	-20	35.38
	2483.5MHz to 2483.5MHz+BW	-35.8373	4.5739	2485.00	-31.26	-10	21.26
	2483.5MHz+BW to 2483.5MHz+2BW	-55.8432	4.6124	2496.24	-51.23	-20	31.23

IEEE802.11b 測定結果

2412 MHz 動作時



2472 MHz 動作時



IEEE802.11g 測定結果

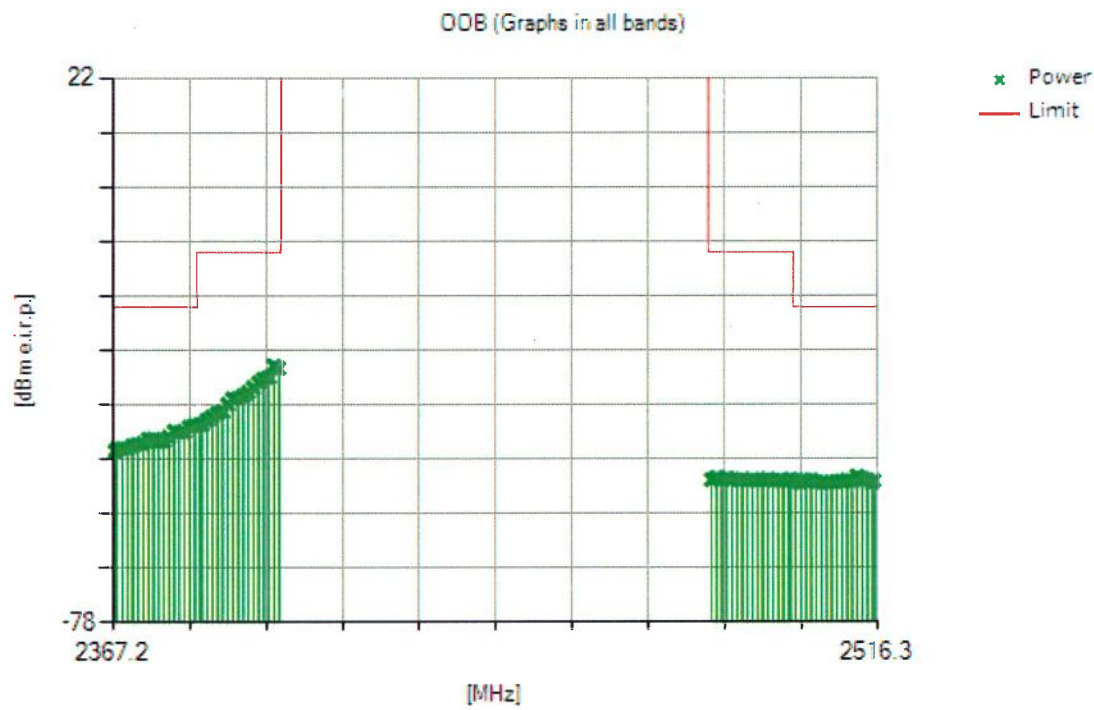
4.3.2.6 Occupied Channel Bandwidth

Operating Frequency	Test Detail	Result [MHz]
2412 MHz	Bandwidth	16.400
2472 MHz	Bandwidth	16.400

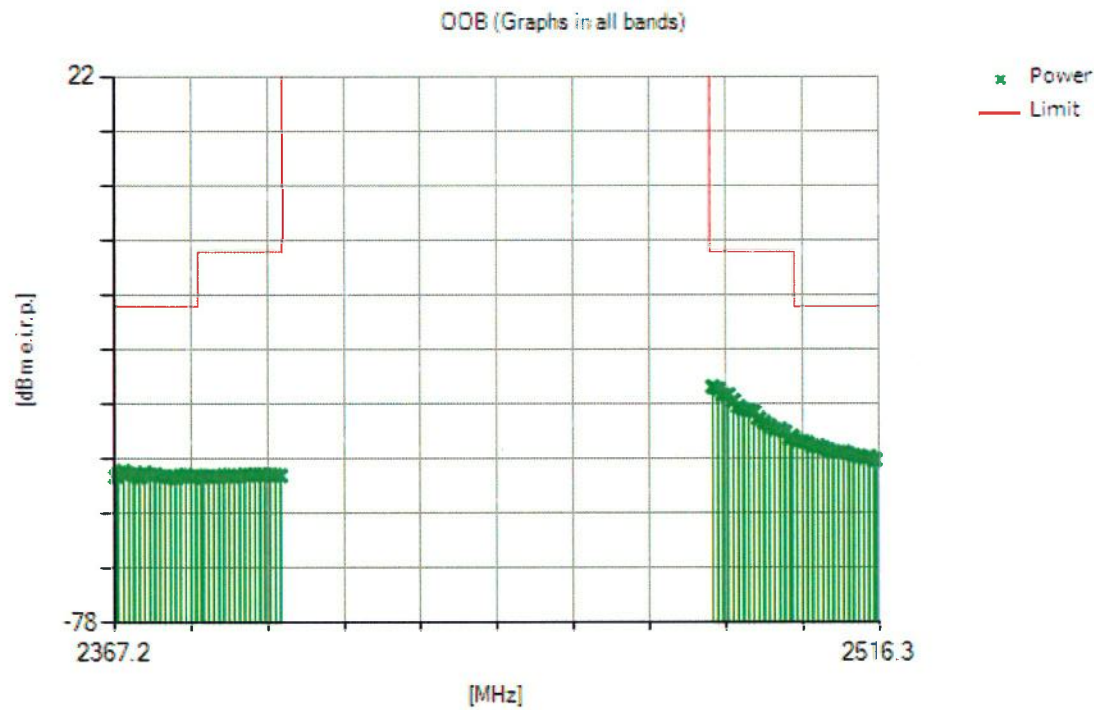
4.3.2.7 Transmitter unwanted emissions in the OOB domain

Operating Frequency	Frequency Range	Reading [dBm/MHz]	Correction Factor [dB]	Result		Limit [dBm/MHz e.i.r.p.]	Margin [dB]
				[MHz]	[dBm/MHz e.i.r.p.]		
2412 MHz	2400MHz-BW to 2400MHz	-35.4157	4.6424	2398.50	-30.77	-10	20.77
	2400MHz-2BW to 2400MHz-BW	-46.3776	4.6269	2383.10	-41.75	-20	21.75
	2483.5MHz to 2483.5MHz+BW	-55.9755	4.5739	2485.00	-51.40	-10	41.40
	2483.5MHz+BW to 2483.5MHz+2BW	-55.7910	4.6313	2512.40	-51.16	-20	31.16
2472 MHz	2400MHz-BW to 2400MHz	-55.5069	4.6394	2395.50	-50.87	-10	40.87
	2400MHz-2BW to 2400MHz-BW	-54.8967	4.6128	2369.10	-50.28	-20	30.28
	2483.5MHz to 2483.5MHz+BW	-39.4373	4.5705	2484.00	-34.87	-10	24.87
	2483.5MHz+BW to 2483.5MHz+2BW	-49.4003	4.6255	2500.40	-44.77	-20	24.77

IEEE802.11g 測定結果
2412 MHz 動作時



2472 MHz 動作時



IEEE802.11n 測定結果

4.3.2.6 Occupied Channel Bandwidth

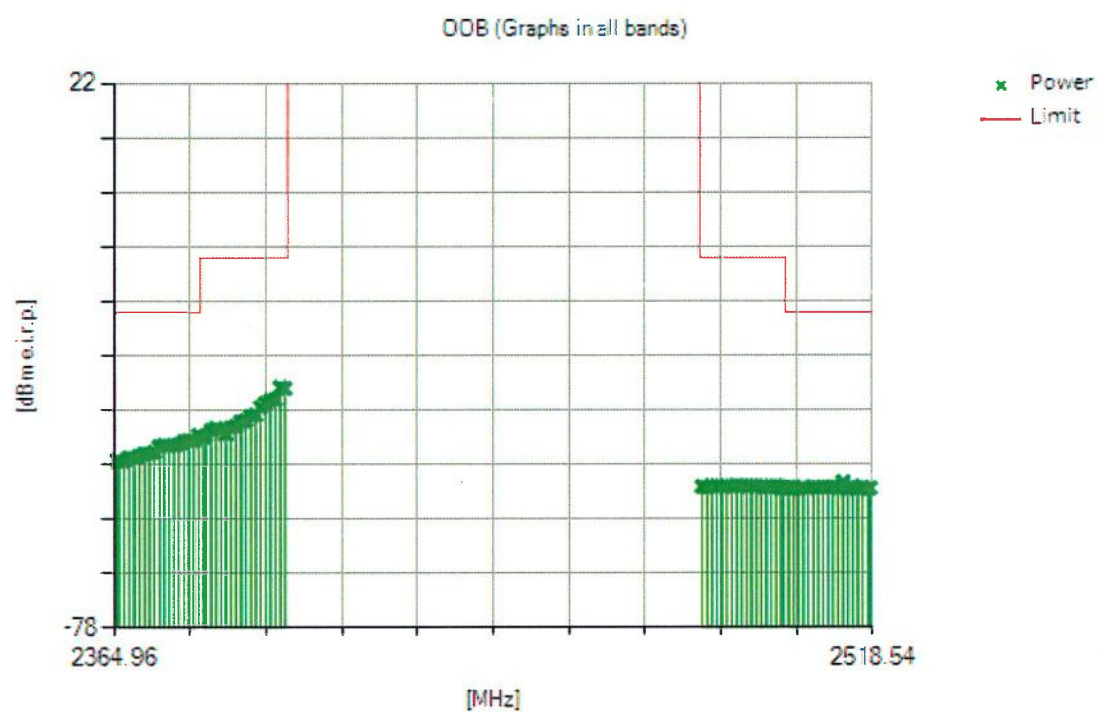
Operating Frequency	Test Detail	Result [MHz]
2412 MHz	Bandwidth	17.520
2472 MHz	Bandwidth	17.520

4.3.2.7 Transmitter unwanted emissions in the OOB domain

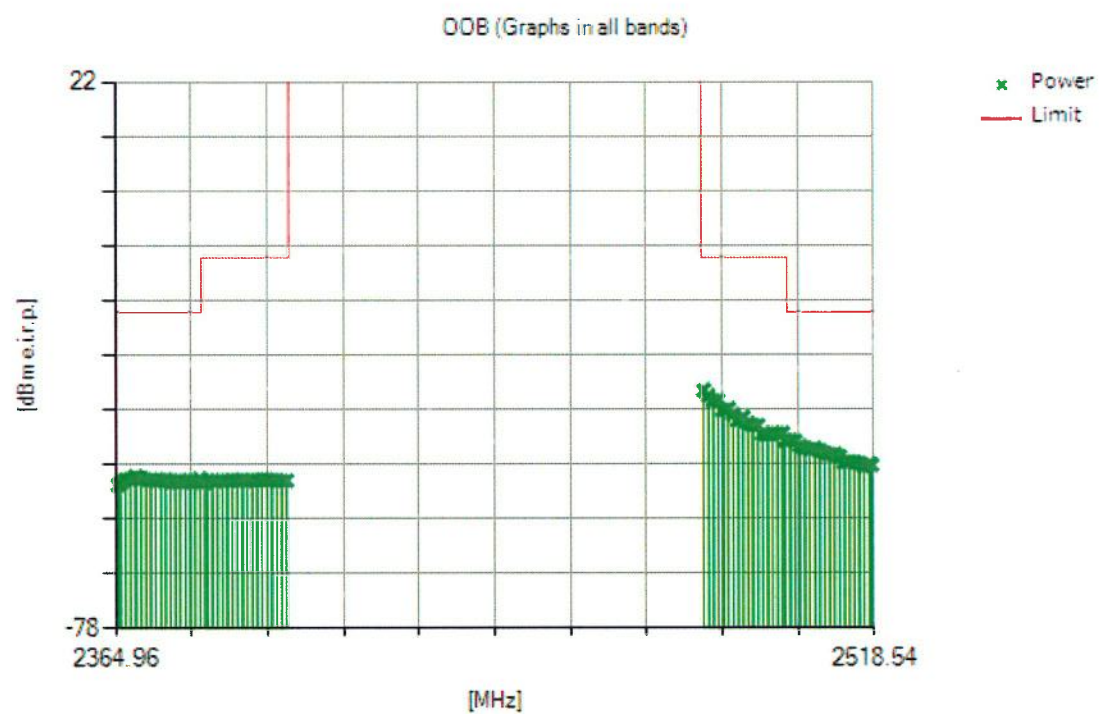
Operating Frequency	Frequency Range	Reading [dBm/MHz]	Correction Factor [dB]	Result		Limit [dBm/MHz e.i.r.p.]	Margin [dB]
				[MHz]	[dBm/MHz e.i.r.p.]		
2412 MHz	2400MHz±BW to 2400MHz	-38.4847	4.6424	2398.50	-33.84	-10	23.84
	2400MHz±2BW to 2400MHz±BW	-47.2759	4.6258	2381.98	-42.65	-20	22.65
	2483.5MHz to 2483.5MHz±BW	-56.4830	4.5945	2491.00	-51.89	-10	41.89
	2483.5MHz±BW to 2483.5MHz±2BW	-55.8749	4.6313	2512.52	-51.24	-20	31.24
2472 MHz	2400MHz±BW to 2400MHz	-55.4119	4.6384	2394.50	-50.77	-10	40.77
	2400MHz±2BW to 2400MHz±BW	-54.8828	4.6127	2368.98	-50.27	-20	30.27
	2483.5MHz to 2483.5MHz±BW	-39.0558	4.5705	2484.00	-34.49	-10	24.49
	2483.5MHz±BW to 2483.5MHz±2BW	-48.3441	4.6260	2501.52	-43.72	-20	23.72

IEEE802.11n 測定結果

2412 MHz 動作時



2472 MHz 動作時



CJ16-140020E 使用測定器

Instruments	Manufacturer	Model	Serial No.	Calibrated Date/Until
EMI Test Receiver	KEYSIGHT TECHNOLOGIES	N9038A	MY55330106	2016/10/03 2017/10/02
RF TEST SET	Agilent Technologies (MORITA TECH Co., Ltd)	MT-747	13326	2015/12/07 2016/12/06
RF Cable	HUBER + SUHNER	SUCOFULEX 102	OC30 OC34	2015/12/07 2016/12/06
Software	KEYSIGHT TECHNOLOGIES	JPJ5A1NN14100 (Ver 1.63)	---	---