

		AT4 wireless, S.A. Parque Tecnológico de Andalucía, c/ Severo Ochoa nº 2 29590 Campanillas/ Málaga/ España Tel. 952 61 91 00 - Fax 952 61 91 13 MÁLAGA, C.I.F. A29 507 456 Registro Mercantil de Málaga, Tomo 1169, Libro 82, Folio 133, Hoja MA3729
ASSESSMENT REPORT		
Report No.: : 44948RRE.001 Approved by : Rafael López (name / position & signature) : EMC LAB Manager Issue date : 2015-01-21		
Identification of item evaluated : INTEL DUAL BAND WIRELESS – AC 3165 Trademark : Not Supplied Model and/or type reference : 3165NGW Serial number : n/a Features : 802.11 a/b/g/n/ac Wireless LAN + BT 4.0 Other identifications : FCC: PD93165NG (factory install sku) : FCC: PD93165NGU (user install allowed) : IC: 1000M-3165NG Description : 2x2 PCIe M.2 adapter card		
Applicant : INTEL MOBILE COMMUNICATIONS Address : 100 Center Point Circle, Suite 200 : Columbia, South Carolina 29210 USA CIF/NIF/Passport : Not Supplied Contact person : Steve Hackett Telephone : 803-216-2344 e-mail: : steven.c.hackett@intel.com		
Manufacturer : INTEL MOBILE COMMUNICATIONS Address : 100 Center Point Circle, Suite 200 : Columbia, South Carolina, 29210 USA CIF/NIF/Passport : Not Supplied Telephone / Fax : 803-216-2344		
Assessment requested Evaluation of the possibility of extending the test results of Intel module 7265NGW contained in the test report 41273REM.001, dated 2014/03/12 to Intel module 3165NGW based on the similarity letter provided by INTEL (See Annex A). Test Report 41273REM.001 reference standard are FCC Rules and Regulations 47 CFR Chapter I Part 15 Subpart B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009: American National standard for Testing Unlicensed Wireless Devices.		
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Competences and guarantees

AT4 wireless guarantees the reliability of the data presented in this report.

AT4 wireless is liable to the client for the maintenance of the confidentiality of all information related to the works executed. All information evaluated will be handled as confidential.

General conditions

1. This report is only referred to the item that has undergone the evaluation.
2. This document is only valid if complete; no partial reproduction can be made without previous written permission of AT4 wireless.
3. This assessment report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of AT4 wireless and the Accreditation Bodies.

Documents used

Documents undergoing used for the evaluation has been provided by: **The applicant.**

<u>Title</u>	<u>Description</u>	<u>Reception date</u>
41273REM.001	Test Report reference standard FCC Rules and Regulations 47 CFR Chapter I Part 15 Subpart B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009: American National standard for Testing Unlicensed Wireless Devices	2014/12/15
Similarity Declaration letter	Similarity declaration between Intel® Dual Band Wireless-AC 7265, model 7265NGW and Intel® Dual Band Wireless-AC 3165, model 3165NGW	2014/12/15

Summary

Considering the differences between Intel® Dual Band Wireless-AC 7265, model 7265NGW and Intel® Dual Band Wireless-AC 3165, model 3165NGW declared by the client (see Annex A), we conclude that the following test result from 41273REM.001 test report are fully applicable to model 3165NGW:

- RADIATED EMISSION. ELECTROMAGNETIC FIELD MEASURE
- CONTINUOUS CONDUCTED EMISSION ON POWER LEADS

See Annex B for test results extracted from 41273REM.001 test report.

NOTE: The results presented in this Assessment Report apply only to the particular item under evaluation established in page 1 of this document.

ANNEX A: Similarity Declaration letter

Similarity Declaration between:

Intel® Dual Band Wireless-AC 7265, model 7265NGW

And

Intel® Dual Band Wireless-AC 3165, model 3165NGW.

To whom it may concern,

This statement letter is to declare that the two following products are exactly the same board, meaning same HW, same schematic, same layout, same BoM:

- Intel® Dual Band Wireless-AC 7265, model 7265NGW
- Intel® Dual Band Wireless-AC 3165, model 3165NGW

The only difference is disabling by EEPROM all MIMO data rate for Intel® Dual Band Wireless-AC 3165, model 3165NGW (Please refer to below table for detailed data rate listing comparison)

Model 7265NGW supports 2 spatial streams and **Model 3165NGW** supports only 1 spatial stream.

HT MCS Index	Modulation and Coding Rate	Spatial Streams	Data Rate (Mbps)						VHT MCS Index
			20 MHz Chan		40 MHz Chan		80 MHz Chan		
			No SGI	SGI	No SGI	SGI	No SGI	SGI	
0	BPSK 1/2	1	6.5	7.2	13.5	15.0	29.3	32.5	0
1	QPSK 1/2	1	13.0	14.4	27.0	30.0	58.5	65.0	1
2	QPSK 3/4	1	19.5	21.7	40.5	45.0	87.8	97.5	2
3	16-QAM 1/2	1	26.0	28.9	54.0	60.0	117.0	130.0	3
4	16-QAM 3/4	1	39.0	43.3	81.0	90.0	175.5	195.0	4
5	64-QAM 2/3	1	52.0	57.8	108.0	120.0	234.0	260.0	5
6	64-QAM 3/4	1	58.5	65.0	121.5	135.0	263.3	292.5	6
7	64-QAM 5/6	1	65.0	72.2	135.0	150.0	292.5	325.0	7
	256-QAM 1/4	1	78.0	86.7	162.0	180.0	351.0	390.0	8
	256-QAM 5/6	1	n/y	n/y	180.0	200.0	390.0	433.3	9
8	BPSK 1/2	2	13.0	14.4	27.0	30.0	58.5	65.0	0
9	QPSK 1/2	2	26.0	28.9	54.0	60.0	117.0	130.0	1
10	QPSK 3/4	2	39.0	43.3	81.0	90.0	175.5	195.0	2
11	16-QAM 1/2	2	52.0	57.8	108.0	120.0	234.0	260.0	3
12	16-QAM 3/4	2	78.0	86.7	162.0	180.0	351.0	390.0	4
13	64-QAM 2/3	2	104.0	115.6	216.0	240.0	468.0	520.0	5
14	64-QAM 3/4	2	117.0	130.0	243.0	270.0	526.5	585.0	6
15	64-QAM 5/6	2	130.0	144.4	270.0	300.0	585.0	650.0	7
	256-QAM 1/4	2	156.0	173.3	324.0	360.0	702.0	780.0	8
	256-QAM 5/6	2	n/y	n/y	360.0	400.0	780.0	866.7	9

Authorized signature by:

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Regulatory Program Manager



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ANNEX B: Test results that apply to model 3165NGW

APPENDIX B CONTENT:

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DESCRIPTION OF THE OPERATION MODES

The operation modes described in this paragraph constitute a functionality of the sample under test for itself. Every operation mode takes a failure criteria for the immunity test that they were applying to it and a monitoring to guarantee performance of the same ones.

In the following table appears the operation modes used by the samples tested to that it refers the present test report.

OPERATION MODE	DESCRIPTION
OM#01	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz.
OM#02	EUT ON. WiFi transmitting in 2.4GHz. Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz.
OM#03	EUT ON. WiFi transmitting in 5GHz. Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz.
OM#04	EUT ON. Bluetooth in transmission mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz.

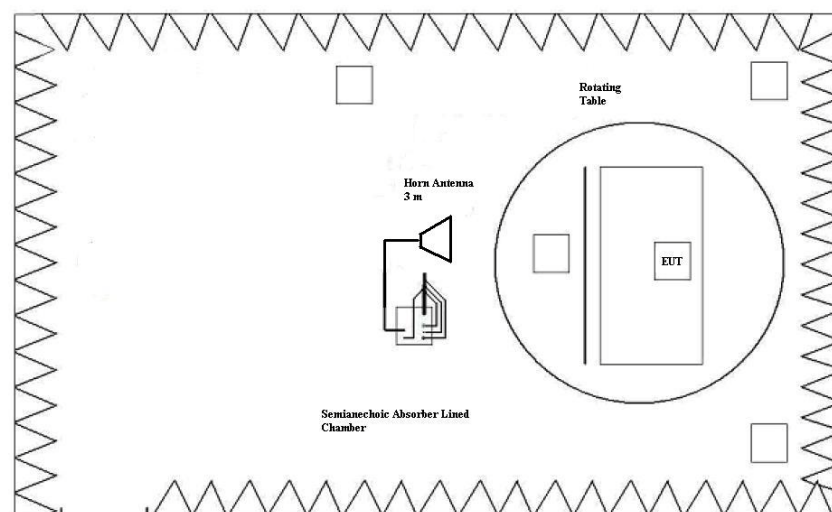
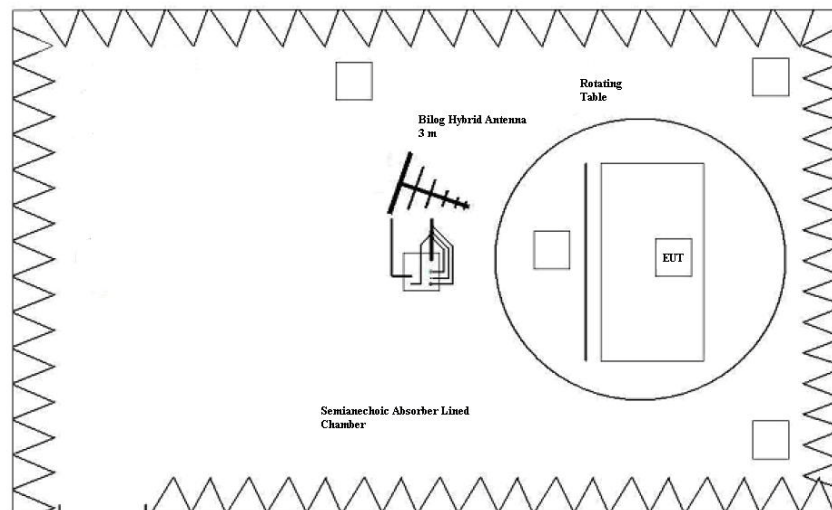
RADIATED EMISSION. ELECTROMAGNETIC FIELD MEASURE.

LIMITS:	Product standard:	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009
	Test standard:	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009

LIMITS OF INTERFERENCE CLASS B

The applied limit for radiated emissions, 3 m distance, according with the requirements of FCC Rules and Regulations 47 CFR Part 15.109, Subpart B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009 in the frequency range 30 MHz to 26 GHz, for Class B equipment, which is a transmitter in a band over 500 MHz, was:

Frequency range (MHz)	Limit for 3 m ($\mu\text{V/m}$)	Limit for 3 m ($\text{dB}\mu\text{V/m}$)
30 to 88	100	40
88 to 216	150	43,52
216 to 960	200	46,02
Above 960	500	53,98

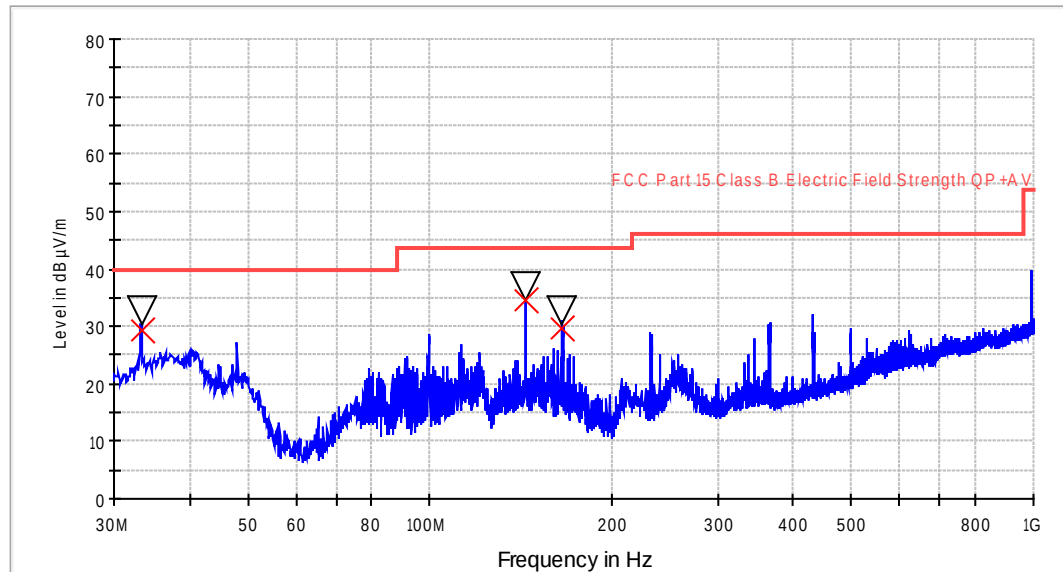


TESTED SAMPLES:		S/01																		
TESTED OPERATION MODES:		OM#01																		
TEST RESULTS :		CRmmnn: CR, Radiation Condition; mm: Sample number; nn: Operation mode, xx: Polarisation.																		
<table> <tr> <th>CRmmnn</th><th>Description</th><th>Result</th></tr> <tr> <td>CR0101</td><td>EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 30-1000 MHz.</td><td>P</td></tr> <tr> <td>CR0101_RA1_PH</td><td>EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Horizontal pol.</td><td>P</td></tr> <tr> <td>CR0101_RA1_PV</td><td>EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Vertical pol.</td><td>P</td></tr> <tr> <td>CR0101_RA2_PH</td><td>EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Horizontal pol.</td><td>P</td></tr> <tr> <td>CR0101_RA2_PV</td><td>EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Vertical pol.</td><td>P</td></tr> </table>			CRmmnn	Description	Result	CR0101	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 30-1000 MHz.	P	CR0101_RA1_PH	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Horizontal pol.	P	CR0101_RA1_PV	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Vertical pol.	P	CR0101_RA2_PH	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Horizontal pol.	P	CR0101_RA2_PV	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Vertical pol.	P
CRmmnn	Description	Result																		
CR0101	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 30-1000 MHz.	P																		
CR0101_RA1_PH	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Horizontal pol.	P																		
CR0101_RA1_PV	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 1-18 GHz. Vertical pol.	P																		
CR0101_RA2_PH	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Horizontal pol.	P																		
CR0101_RA2_PV	EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Range 18-26 GHz. Vertical pol.	P																		

Radiated Emission: CR0101 (30MHz to 1GHz)

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz.

FCC class B



— FCC Part 15 Class B Electric Field Strength QP +A V
 ▽ MaxPeak
 — Peak Preview
 × QuasiPeak

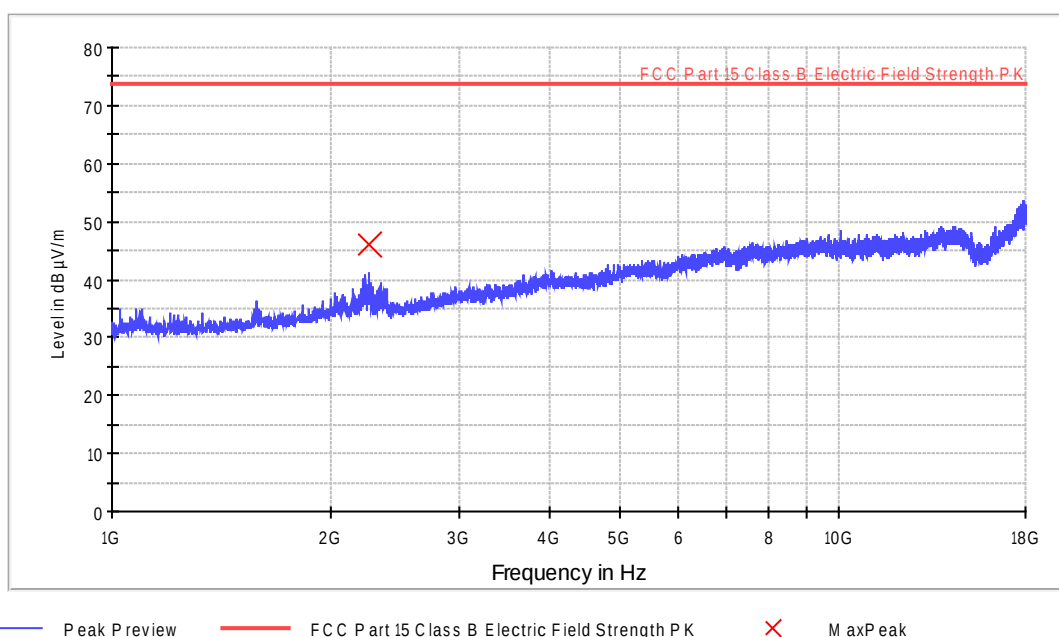
Maximizations

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)
33.327054	32.8	29.2	98.0	V	141.0
144.017034	37.1	34.5	103.0	V	174.0
166.015030	32.7	29.8	109.0	V	84.0

Radiated Emission: CR0101_RA1_PH (1 – 18 GHz)

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Horizontal polarization.

FCC 1-18GHz class B ESIB Horn0245 AMP3783



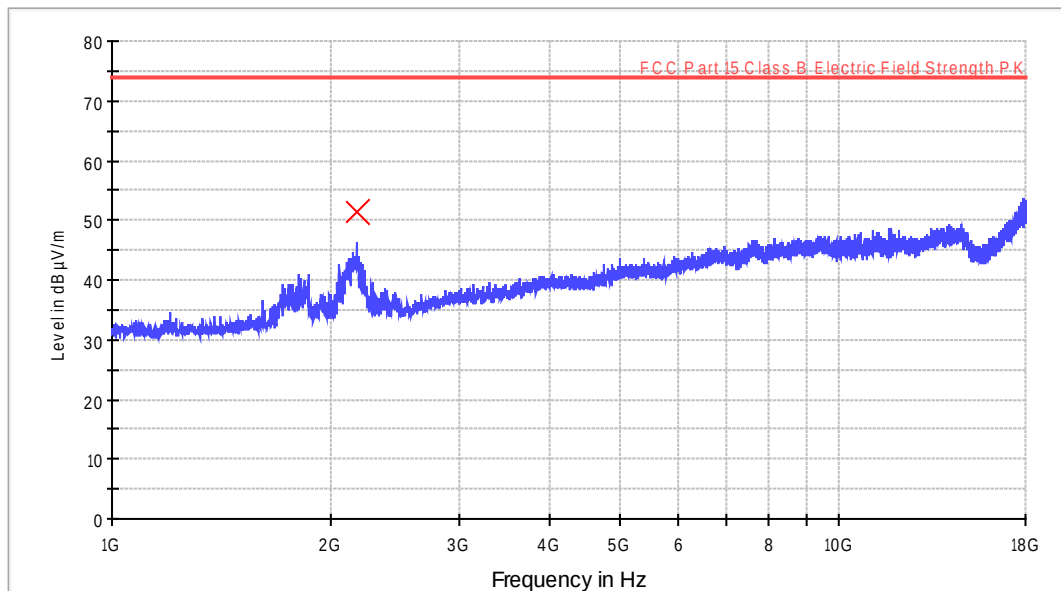
Maximizations

Frequency (MHz)	MaxPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Comment
2258.025000	46.2	98.0	H	112.0	

Radiated Emission: CR0101_RA1_PV (1 – 18 GHz)

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Vertical polarization.

FCC 1-18GHz class B ESIB Horn0245 AMP3783



— Peak Preview — FCC Part 15 Class B Electric Field Strength P.K. X MaxPeak

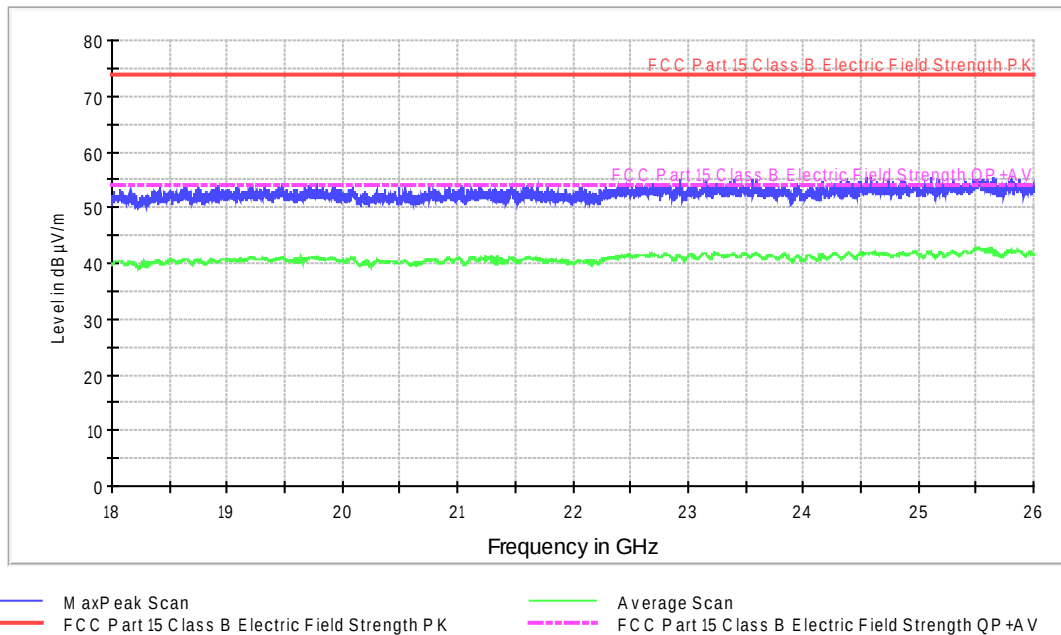
Maximizations

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Comment
2165.327054	51.4	29.2	98.0	V	141.0	

Radiated Emission: CR0101_RA2_PH (18 – 26 GHz)

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Horizontal polarization.

FCC 18-26GHz class B ESIB Horn1920 AMP1975



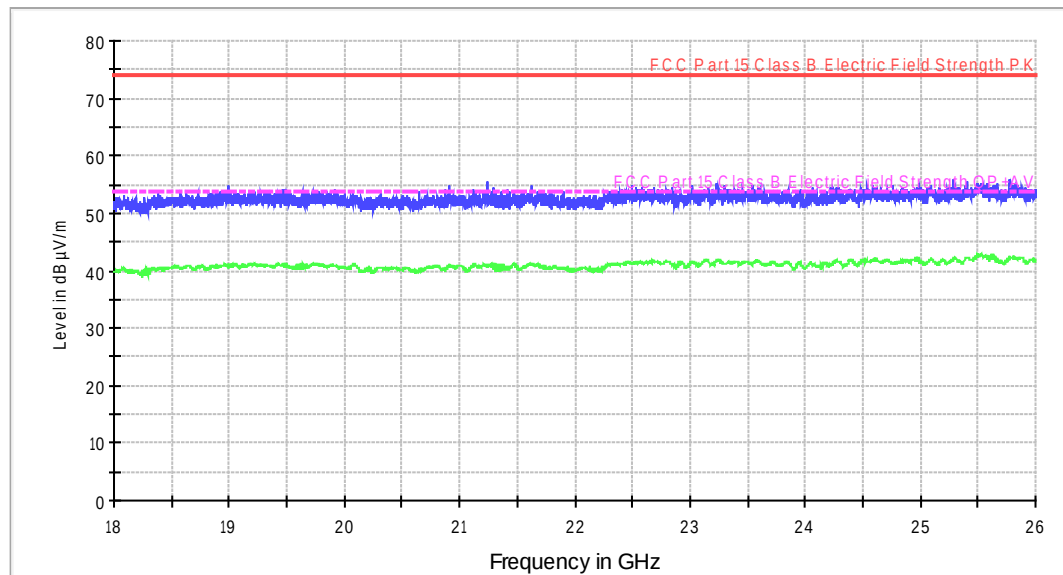
Max PK-AVG

Frequency (GHz)	MaxPeak-ClearWrite (dB μ V/m)	Average-ClearWrite (dB μ V/m)
18.652000	53.5	40.6
19.332000	54.3	40.9
19.727000	54.4	41.1
20.755000	54.6	40.7
21.037000	54.2	40.6
22.410000	53.9	41.3
22.925000	55.0	41.4
23.401000	55.3	41.6
24.596000	55.4	41.9
25.110000	55.3	41.9

Radiated Emission: CR0101_RA2_PV (18 -26 GHz)

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Vertical polarization.

FCC 18-26GHz class B ESIB Horn1920 AMP1975



— MaxPeak Scan
 — Average Scan
 — FCC Part 15 Class B Electric Field Strength P.K
 - - - FCC Part 15 Class B Electric Field Strength QP +AV

Max PK-AVG

Frequency (MHz)	MaxPeak-ClearWrite (dBµV/m)	Average-ClearWrite (dBµV/m)
18583.000000	53.5	40.4
18990.000000	54.7	41.1
19910.000000	54.3	40.9
20653.000000	53.9	40.4
21246.000000	55.4	41.1
22441.000000	54.2	41.3
23232.000000	55.2	41.9
23307.000000	54.9	41.3
24983.000000	55.3	42.1
25779.000000	55.9	42.1

CONTINUOUS CONDUCTED EMISSION ON POWER LEADS

LIMITS:	Product standard :	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-10 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009
	Test standard :	FCC RULES AND REGULATIONS 47 CFR PART 15, SUBPART B (10-01-10 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009

CLASS B

The applied limit for continuous conducted emissions in power leads, according with the requirements of FCC Rules and Regulations 47 CFR Part 15, Subpart B (10-01-10 Edition); ICESS-003 ISSUE 5 & ANSI C63.10-2009, in the frequency range 0,15 to 30 MHz, for Class B equipment was:

Frequency range (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0,15 to 0,5	66-56	56-46
0,5 to 5	56	46
5 to 30	60	50

TESTED SAMPLES:	S/01
TESTED OPERATION MODES:	OM#01; 02; 03 & 04
TEST RESULTS :	CCmmnnhh: CC, Conducted Condition; mm: Sample number; nn: Operation mode; hh: wire

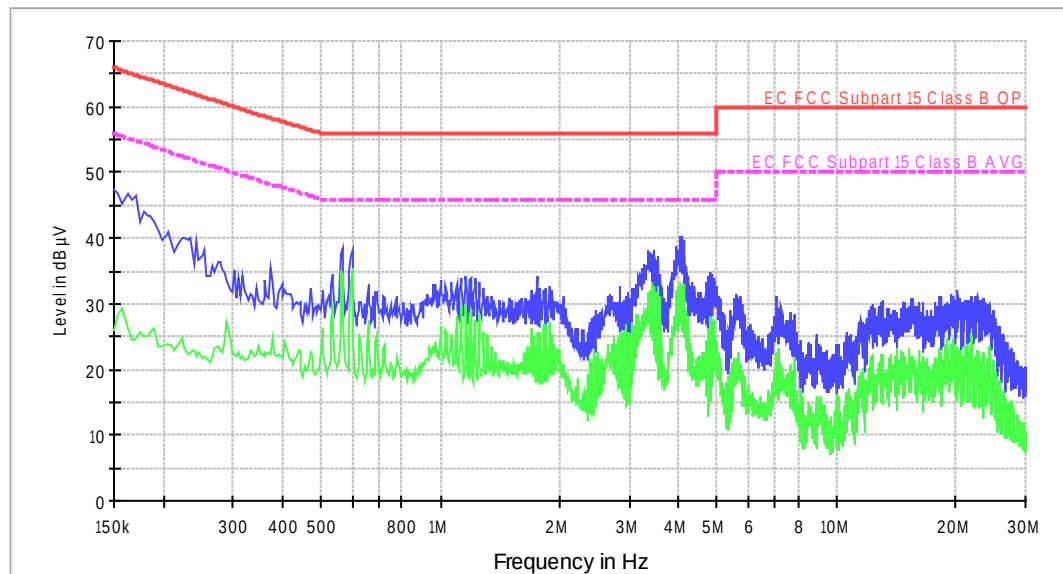
CCmmnnhh	Description	Result
CC01010N	Neutral wire noise	P
CC0101L1	Phase wire noise	P
CC01020N	Neutral wire noise	P
CC0102L1	Phase wire noise	P
CC01030N	Neutral wire noise	P
CC0103L1	Phase wire noise	P
CC01040N	Neutral wire noise	P
CC0104L1	Phase wire noise	P

Continuous Conducted emission : CC01010N

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Neutral wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



MaxPeak
 EC FCC Subpart 15 Class B QP
 Average
 EC FCC Subpart 15 Class B AVG

Subrange Maxima

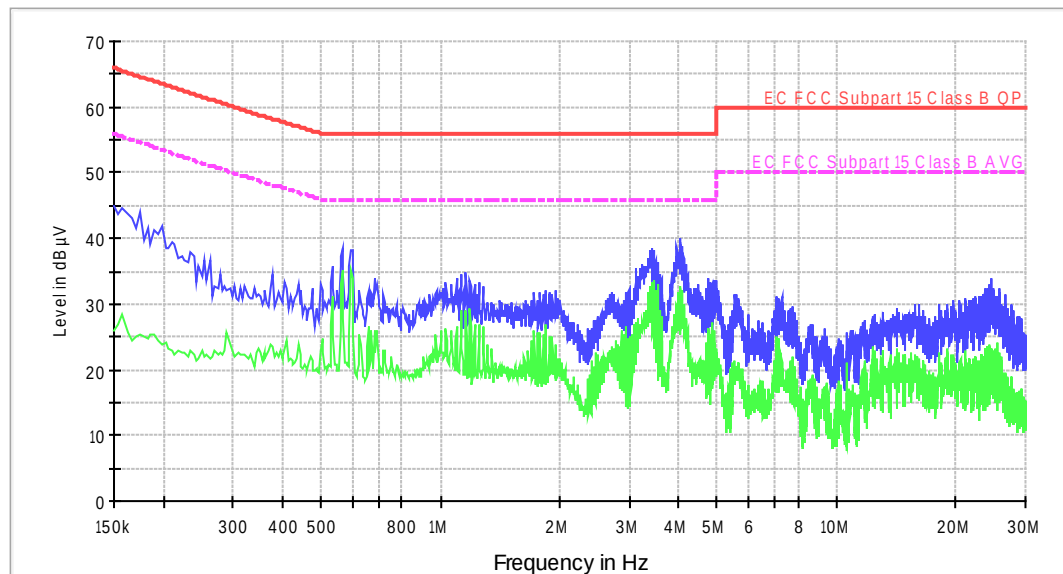
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.150000	47.4	25.9
0.278000	36.5	23.0
0.566000	38.4	34.5
1.158000	34.3	30.0
1.750000	34.4	21.6
3.354000	38.2	29.5
4.018000	40.4	32.8
7.058000	31.3	22.7
15.618000	30.9	21.4
20.114000	32.2	21.0

Continuous Conducted emission : CC0101L1

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#01
 Description: EUT ON. WiFi and Bluetooth in IDLE mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Phase wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



— MaxPeak — Average
 — EC FCC Subpart 15 Class B QP - - - EC FCC Subpart 15 Class B AVG

Subrange Maxima

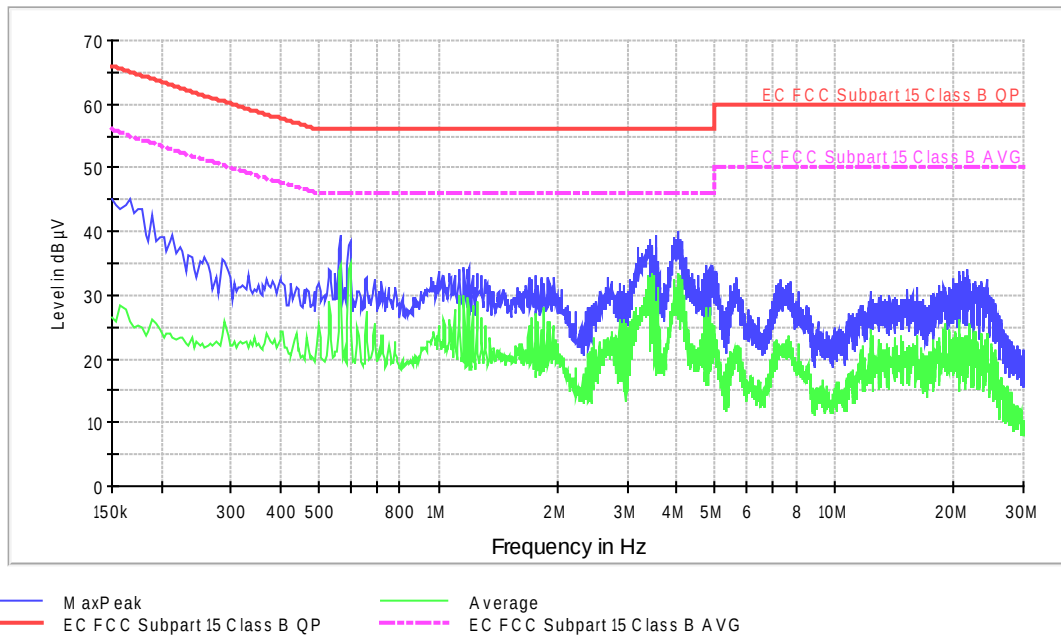
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.150000	44.9	26.0
0.262000	36.7	21.6
0.566000	38.5	35.3
1.162000	34.7	28.9
1.254000	33.3	26.9
3.426000	38.5	33.3
4.018000	39.9	32.4
7.090000	31.2	24.3
15.826000	30.0	20.3
24.678000	33.8	21.5

Continuous Conducted emission : CC01020N

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#02
 Description: EUT ON. WiFi transmitting in 2.4GHz. Bluetooth in IDLE mode.
 Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Neutral wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



Subrange Maxima

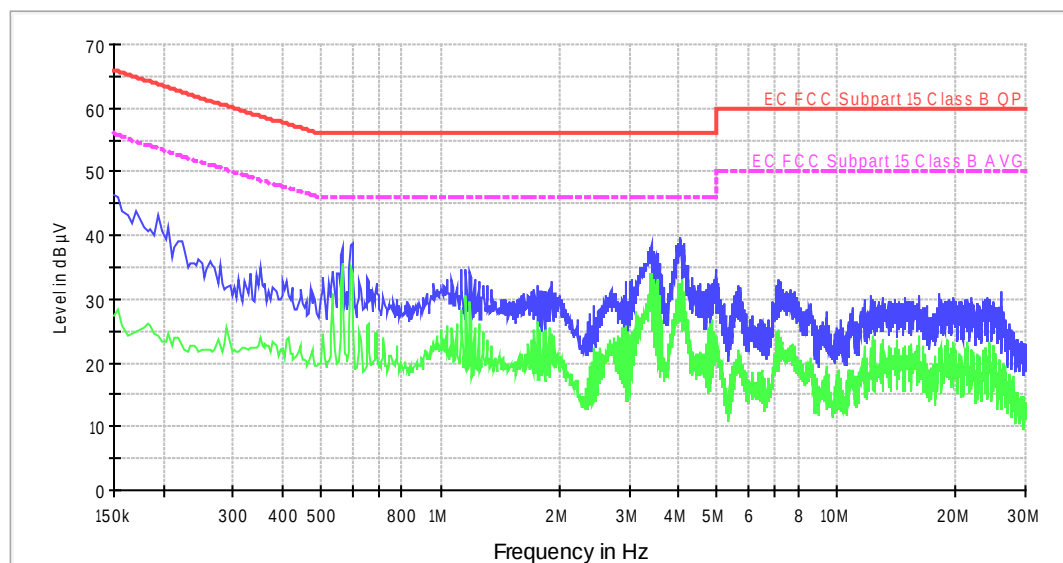
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.150000	45.2	26.4
0.258000	35.8	21.7
0.566000	39.5	34.7
1.162000	34.4	29.1
1.254000	33.6	29.1
3.542000	39.5	29.1
4.018000	39.9	33.6
7.310000	32.4	22.0
16.170000	31.4	23.6
21.614000	34.1	20.0

Continuous Conducted emission : CC0102L1

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#02
 Description: EUT ON. WiFi transmitting in 2.4GHz. Bluetooth in IDLE mode.
 Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Phase wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



MaxPeak
 EC FCC Subpart 15 Class B QP
 Average
 EC FCC Subpart 15 Class B AVG

Subrange Maxima

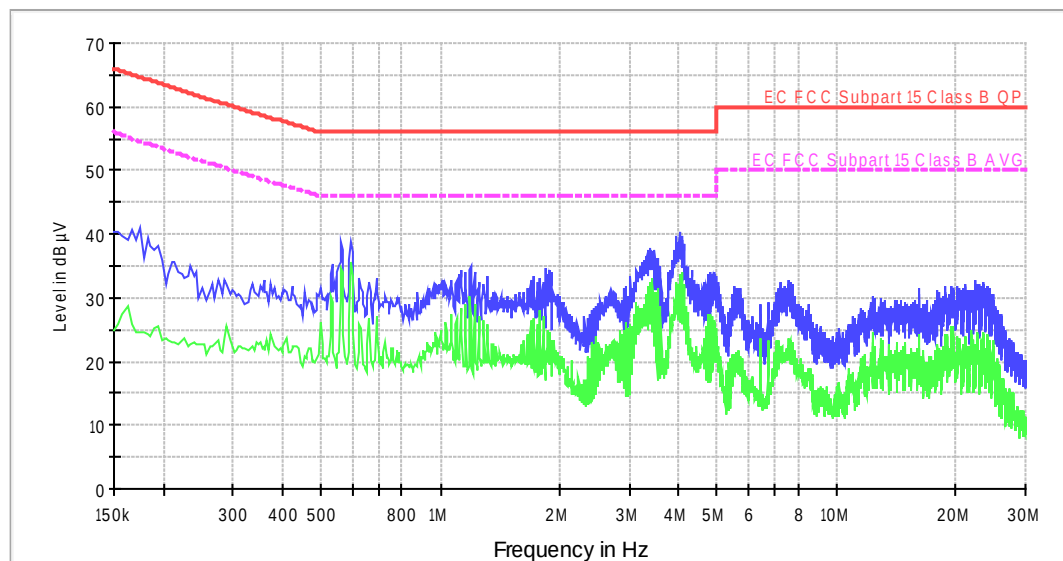
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.150000	46.2	27.6
0.262000	35.9	22.0
0.598000	38.8	34.1
1.162000	34.6	30.7
1.910000	32.8	24.6
3.406000	38.9	28.4
4.026000	39.8	29.0
7.122000	33.3	25.4
16.230000	30.7	24.3
25.942000	31.3	17.3

Continuous Conducted emission : CC01030N

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#03
 Description: EUT ON. WiFi transmitting in 5GHz. Bluetooth in IDLE mode.
 Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Neutral Wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



MaxPeak
 EC FCC Subpart 15 Class B QP
 Average
 EC FCC Subpart 15 Class B AVG

Subrange Maxima

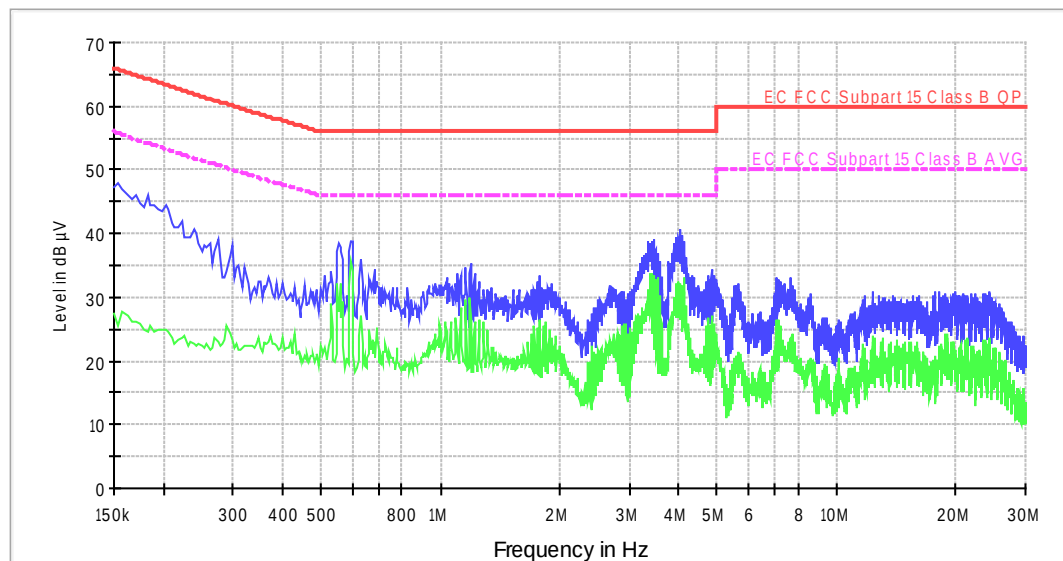
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.174000	41.0	24.6
0.274000	32.8	23.2
0.562000	38.8	34.7
1.194000	35.0	26.6
1.846000	34.8	20.2
3.382000	37.8	30.9
4.010000	40.2	31.7
7.582000	32.8	23.5
16.230000	31.7	24.4
22.514000	32.8	21.4

Continuous Conducted emission : CC0103L1

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#03
 Description: EUT ON. WiFi transmitting in 5GHz. Bluetooth in IDLE mode.
 Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Phase Wire Noise

EMI EC FCC Subpart 15 Class B ESPI CC



MaxPeak EC FCC Subpart 15 Class B QP
 Average EC FCC Subpart 15 Class B AVG

Subrange Maxima

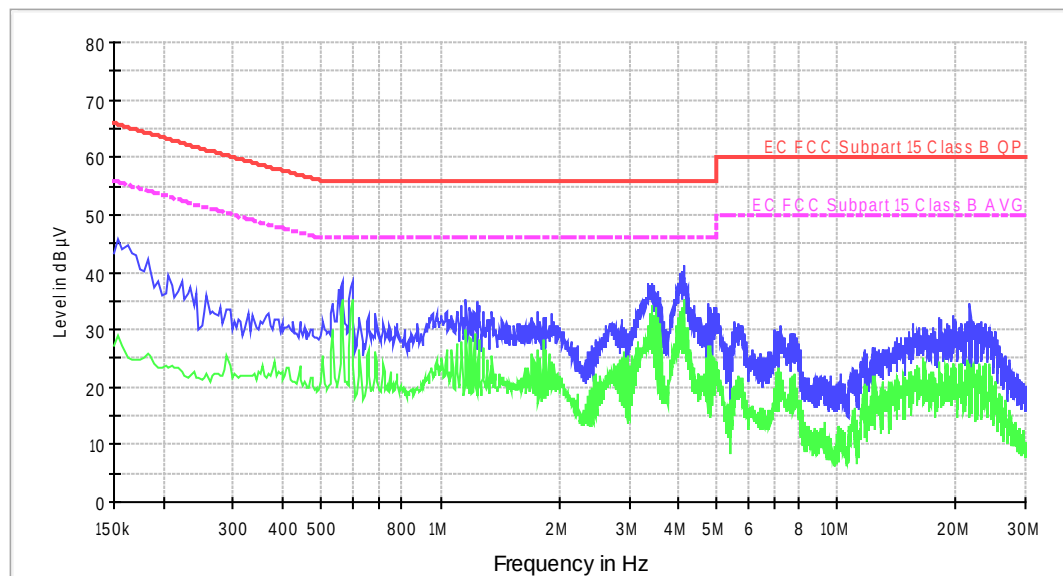
Frequency (MHz)	MaxPeak-ClearWrite (dBμV)	Average-ClearWrite (dBμV)
0.154000	47.8	25.5
0.274000	39.1	23.1
0.598000	38.9	33.9
1.194000	35.5	26.4
1.786000	33.4	26.3
3.450000	39.1	33.3
4.034000	40.8	32.2
7.058000	33.2	20.8
12.418000	30.9	24.1
19.942000	31.0	21.2

Continuous Conducted emission : CC01040N

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#04
 Description: EUT ON. Bluetooth in transmission mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Neutral wire noise.

EMI EC FCC Subpart 15 Class B ESPI CC



— MaxPeak — Average
 — EC FCC Subpart 15 Class B QP - - - EC FCC Subpart 15 Class B AVG

Subrange Maxima

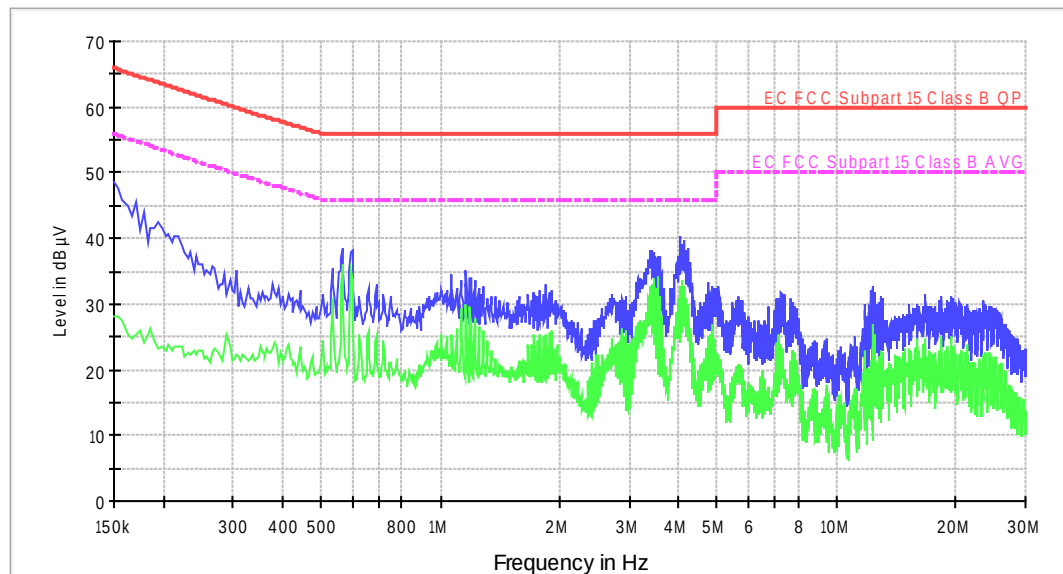
Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.154000	45.9	28.9
0.258000	35.9	22.2
0.598000	38.6	35.3
1.162000	35.2	30.0
1.254000	34.2	28.3
3.434000	38.1	26.9
4.110000	41.0	35.3
7.262000	30.8	19.5
15.618000	31.2	22.2
21.762000	34.5	21.5

Continuous Conducted emission : CC0104L1

Detector : Peak / Average / Cuasi-peak

Project: 41273REM.001
 Company: INTEL
 Sample: S/01
 Operation mode: OM#04
 Description: EUT ON. Bluetooth in transmission mode. Auxiliary Laptop connected to power supply: 120Vac / 60Hz. Phase wire noise

EMI EC FCC Subpart 15 Class B ESPI CC



MaxPeak EC FCC Subpart 15 Class B QP Average EC FCC Subpart 15 Class B AVG

Subrange Maxima

Frequency (MHz)	MaxPeak-ClearWrite (dBµV)	Average-ClearWrite (dBµV)
0.150000	48.6	28.0
0.266000	35.7	22.7
0.566000	38.6	36.1
1.162000	35.1	29.8
1.846000	32.9	24.7
3.426000	38.1	33.0
4.050000	40.3	32.4
7.266000	31.8	22.1
12.326000	32.7	20.1
19.546000	31.3	23.0

Summary

Considering the results of the performed test according to standard **FCC Rules and Regulations 47 CFR Chapter I Part 15 Subpart B (10-01-10 Edition); ICES-003 ISSUE 5 & ANSI C63.10-2009**, the items under test are **IN COMPLIANCE** with the requested specifications specified in the standard.

NOTE: The results presented in this Assessment Report apply only to the particular item under evaluation established in page 1 of this document.

Remarks and comments

The tests have been realized by the technical personnel: Antonio Ruiz & Antonio Jurado.

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 150 kHz to 30 MHz is $I = \pm 3,60$ dB for quasi-peak measurements, $I = \pm 3,48$ dB for peak measurements ($k = 2$).

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 30 MHz to 1 GHz is $I = \pm 4,57$ dB for quasi-peak measurements, $I = \pm 4,48$ dB for peak measurements ($k = 2$) and from 1 to 12,75 GHz is $I = \pm 3,43$ dB for average and peak measurements.

The total uncertainty of the measurement system for the measured radio disturbance characteristics of EUT from 12,75 GHz to 26 GHz is $I = \pm 4,09$ dB for average and peak measurements.

List of equipment used during the test

CONTROL NUMBER	DESCRIPTION	MANUFACTURER	MODEL	LAST CALIBRATION	NEXT CALIBRATION
1999	EMI Receptor	ROHDE & SCHWARZ	ESIB 26	2013-05-30	2015-05-30
1935	EMI Receptor	ROHDE & SCHWARZ	ESPI 3	2013-12-11	2015-12-11
2932	Bilog Hybrid Antenna	SUNOL	JB6	2011-05-11	2014-05-11
0245	Horn Antenna	HP	11966E	2011-05-20	2014-05-20
1920	Horn Antenna	AGILENT	11966J	2011-09-27	2014-09-27
1658	RF Amplifier	SCHAFFNER	CPA9231A	2013-06-11	2015-06-11
1975	RF Amplifier	MITEQ	JS4	2013-04-18	2014-04-18
3783	RF Amplifier	BONN ELEKTRONIK	BLMA 0118-3A	2013-04-23	2014-04-23
0258	Transient Limiter	HP	119471A	2012-09-19	2014-09-19
1650	Artificial Network	SCHWARZBECK	NNLK - 8121	2013-06-25	2015-06-25
3545	Temperature & Humidity probe	PICO TECHNOLOGY	HUMIDIPROBE	2014-01-21	2015-01-21
3548	Temperature & Humidity probe	PICO TECHNOLOGY	HUMIDIPROBE	2014-01-21	2015-01-21
3556	Temperature & Humidity probe	T & D	TR-72W	2014-01-21	2015-01-21