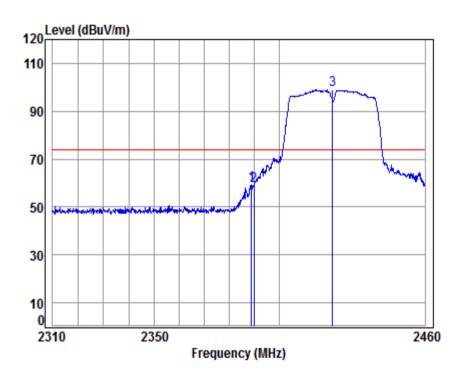
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4.10.1.25 802.11N40_Lowest Channel_ Peak_ Vertical



Site : chamber

Condition: 3m VERTICAL

Job No : 90032

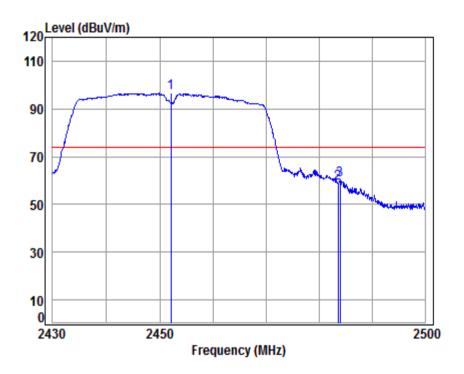
1 2 3

Mode : 2422 Band edge

				_						
	Freq				Read Level				Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
	2388.925								•	
	2390.000	5.47	28.52	41.87	66.67	58.79	74.00	-15.21	peak	
*	2422 000	5 52	28 57	41 89	106 69	98 89	74 00	24 89	neak	

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4.10.1.26 802.11N40_ Highest Channel_ Peak_ Vertical



Site : chamber

Condition: 3m VERTICAL

Job No : 90032

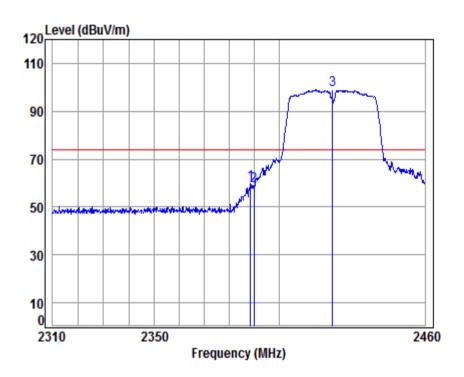
1 2 3

Mode : 2452 Band edge

	Freq			Preamp Factor					Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
*	2452.000	5.56	28.62	41.90	104.29	96.57	74.00	22.57	peak	
	2483.500	5.60	28.67	41.91	66.70	59.06	74.00	-14.94	peak	
	2483.865	5.60	28.67	41.91	67.64	60.00	74.00	-14.00	peak	

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4.10.1.27 802.11N40_Lowest Channel_ Peak_ Horizontal



Site : chamber

Condition: 3m HORIZONTAL

Job No : 90032

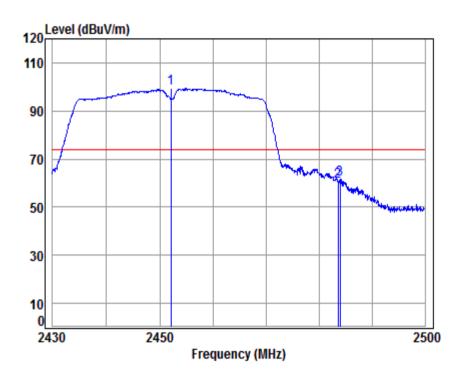
1

Mode : 2422 Band edge

				-						
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
	2388.474	5.47	28.52	41.87	67.65	59.77	74.00	-14.23	peak	
	2390.000	5.47	28.52	41.87	66.89	59.01	74.00	-14.99	peak	
*	2422 000	5.52	28.57	41.89	106.81	99.01	74 00	25.01	neak	

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4.10.1.28 802.11N40_ Highest Channel_ Peak_ Horizontal



Site : chamber

Condition: 3m HORIZONTAL

Job No : 90032

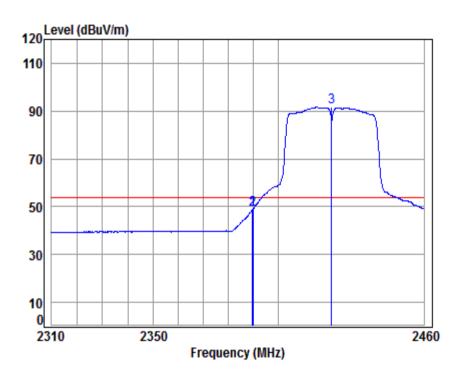
1 2 3

Mode : 2452 Band edge

	Freq			Preamp Factor					Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
*	2452.000	5.56	28.62	41.90	107.00	99.28	74.00	25.28	peak
	2483.500	5.60	28.67	41.91	68.42	60.78	74.00	-13.22	peak
	2483.865	5.60	28.67	41.91	69.28	61.64	74.00	-12.36	neak

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4.10.1.29 802.11N40_Lowest Channel_ Average_ Vertical



Site : chamber

Condition: 3m VERTICAL

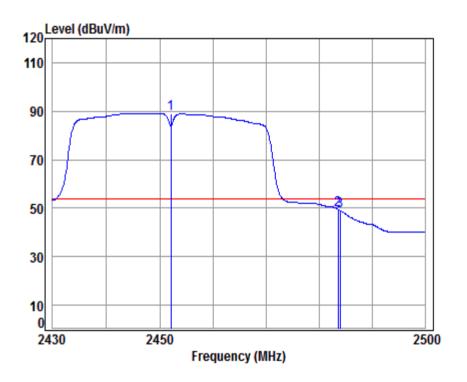
Job No : 90032

Mode : 2422 Band edge

				_						
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		_
1	2389.827	5.47	28.52	41.87	56.71	48.83	54.00	-5.17	Average	
2	2390.000	5.47	28.52	41.87	56.92	49.04	54.00	-4.96	Average	
	2422.000								_	

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4.10.1.30 802.11N40_ Highest Channel_ Average _ Vertical



Site : chamber

Condition: 3m VERTICAL

Job No : 90032

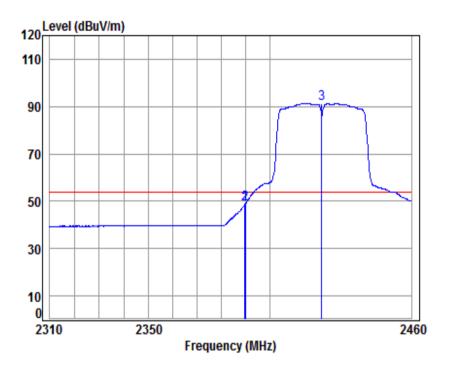
2 3

Mode : 2452 Band edge

				_						
		Cable	Ant	Preamp	Read		Limit	0ver		
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
										_
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
*	2452.000	5.56	28.62	41.90	96.89	89.1/	54.00	35.1/	Average	
	2483.500	5.60	28.67	41.91	57.09	49.45	54.00	-4.55	Average	
	2483.865	5.60	28.67	41.91	56.60	48.96	54.00	-5.04	Average	

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4.10.1.31 802.11N40_Lowest Channel_ Average _ Horizontal



Site : chamber

Condition: 3m HORIZONTAL

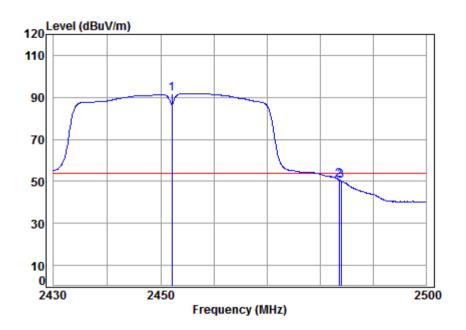
Job No : 90032

Mode : 2422 Band edge

	Freq						Limit Line			
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
	2389.827								_	
2	2390.000	5.47	28.52	41.87	56.78	48.90	54.00	-5.10	Average	
3	* 2422.000	5.52	28.57	41.89	99.22	91.42	54.00	37.42	Average	

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4.10.1.32 802.11N40_ Highest Channel_ Average_ Horizontal



Site : chamber

Condition: 3m HORIZONTAL

Job No : 90032

Mode : 2452 Band edge

: 2.4G Wifi 11N40

Freq			Preamp Factor					Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
* 2452.000 2483.500	5.60	28.67	41.91	58.44	50.80	54.00	-3.20	Average

Remark:

1 2

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

All Modes have been tested, but only the worst case data displayed in this report.

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5 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty				
1	Total RF power, conducted	±0.75dB				
2	RF power density, conducted	±2.84dB				
3	Spurious emissions, conducted	±0.75dB				
4	Dedicted Courieus amission toot	±4.5dB (30MHz-1GHz)				
4	Radiated Spurious emission test	±4.8dB (1GHz-25GHz)				
5	Conduct emission test	±3.12 dB (9KHz- 30MHz)				
6	Temperature test	±1°C				
7	Humidity test	±3%				
8	DC and low frequency voltages	±0.5%				

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6 Equipment List

	Conducted Emission								
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Duedate				
rest Equipment	Manufacturer	Woder No.	inventory No.	(yyyy-mm-dd)	(yyyy-mm-dd)				
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017/5/10	2020/5/9				
LISN	Rohde & Schwarz	ENV216	SEM007-01	2018/9/2	2019/9/2				
LISN	ETS-LINDGREN	Feb-16	SEM007-02	2018/4/2	2019/4/1				
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A				
Coaxial Cable	SGS	N/A	SEM024-01	2018/7/12	2019/7/11				
2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	EMC0122	2018/2/14	2019/2/13				
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2018/4/2	2019/4/1				

	RF conducted test									
Test Equipment	Manufacturer	Model No.	del No. Inventory No. Cal. date		Cal.Duedate					
• • • • • • • • • • • • • • • • • • • •	Manufacturer	Woder No.	inventory No.	(yyyy-mm-dd)	(yyyy-mm-dd)					
DC Power Supply	Agilent Technologies Inc	66311B	W009-09	2018/9/15	2019/9/15					
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2018/3/13	2019/3/12					
Coaxial Cable	SGS	N/A	SEM031-01	2018/7/13	2019/7/12					
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A					
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/9/2	2019/9/2					
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2018/9/2	2019/9/2					

	RE in Chamber									
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date					
rest Equipment	Manufacturer	wiodei No.	inventory No.	(yyyy-mm-dd)	(yyyy-mm-dd)					
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017/8/5	2020/8/4					
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A					
Coaxial Cable	SGS	N/A	SEM025-01	2018/7/12	2019/7/11					
MXE EMI Receiver (20Hz- 8.4GHz)	Agilent Technologies	N9038A	SEM004-05	2018/9/2	2019/9/2					
BiConiLog Antenna (26- 3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017/6/27	2020/6/26					
Pre-amplifier (0.1-1.3GHz)	Agilent Technologies	8447D	SEM005-01	2018/4/2	2019/4/1					

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2018/3/31	2021/3/30
EMI Test Receiver (9k-7GHz)	Rohde & Schwarz	ESR	SEM004-03	2018/4/2	2019/4/1
Trilog-Broadband Antenna(25M-2GHz)	Schwarzbeck	VULB9168	SEM003-18	2016/6/29	2019/6/28
Pre-amplifier (9k-1GHz)	Sonoma	310N	SEM005-03	2018/4/13	2019/4/12
Loop Antenna (9kHz-30MHz)	ETS-Lindgren	6502	SEM003-08	2017/8/22	2020/8/21
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2018/7/12	2019/7/11

7 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for ZR/2018/90032.

The End