

5.5.1 TLF20 4160 3.6 RWLB 277-400V WC3 QB SP

Performed measurements

The following configuration(s) and parameter(s) was/were used for testing:

Port under test	Enclosure (with cabling)	
Test method	X	Semi Anechoic Chamber
		Open Area Test Site (OATS)
		In-Situ (at user/manufacturer premises)
		GTEM cell
	Other:	---
Test set-up	X	Equipment on a table of 80 cm height
		Equipment on the floor (insulated from the reference ground plane)
	Other:	The EUT is installed on a support of 1.5 m above the ground plane.

Technology	Sample	Mode / Modulation	Channel / Freq.	Frequency range	Antenna Polar. / axis	P/F	Sup. Info / Remark
ZigBee	01	OM#2	11 / 2405 MHz	30 - 1000 MHz	H/V	P	(1)
ZigBee	01	OM#2	18 / 2440 MHz	30 - 1000 MHz	H/V	P	(1)
ZigBee	01	OM#2	26 / 2480 MHz	30 - 1000 MHz	H/V	P	(1)

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Supplementary information / Remark:

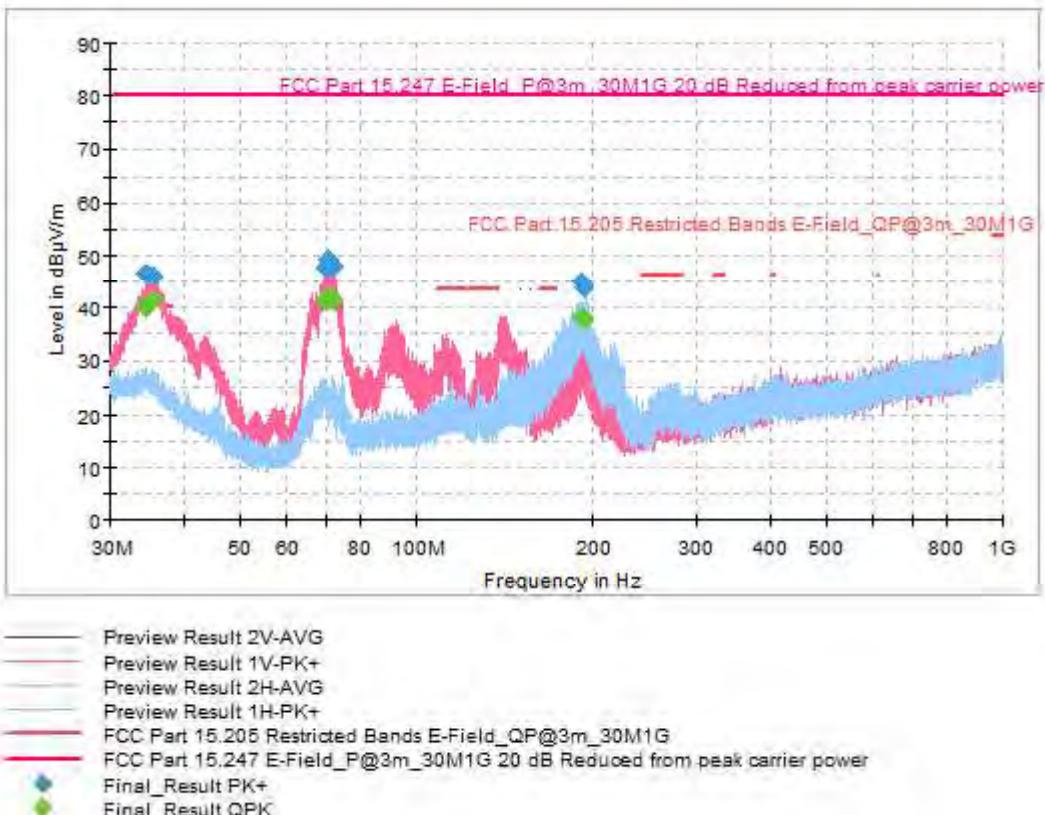
- 1) The spurious frequencies do not depend on the operating channel.

FREQUENCY RANGE 30 MHz – 1 GHz:

Measurement data	<input checked="" type="checkbox"/>	Horizontal	<input checked="" type="checkbox"/>	Vertical
Operating mode / Info	Mode 2 / TX All Channels			

Common Information

EUT/Sample # / OM# : TLF20 4160 3.6 RWLB 277-400V WC3 QB SP
 Voltage/Frequency : 277-400 Vac
 Port/Terminal under test : Enclosure
 Remark/Comment : EUT ON. ZigBee All Channels


Final Results

Frequency (MHz)	MaxPeak (dB μ V/m)	Height (cm)	Pol
34.415833	46.50	105.0	V
34.504500	46.31	100.0	V
35.491000	46.17	100.0	V
70.264500	47.77	105.0	V
70.715500	49.32	118.0	V
72.369167	47.82	136.0	V
191.997500	45.17	128.0	H
193.448500	44.10	136.0	H

NOTE: As the spurious frequencies are outside the restricted bands as defined in § 15.205 (a), the maximum peak radiated carrier power was measured at 3 m to be 79.74 dB μ V/m, and a new limit line of 20 dB below that value was applied, as stated in § 15.247 (d).

Supplementary information:

- The "Azimuth/Pol/Height" indicates the turn-table azimuth, the antenna polarization and the antenna height where the maximum emissions level was measured.
- The "Margin" is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.

Performed measurements

The following configuration(s) and parameter(s) was/were used for testing:

Port under test	Enclosure (with cabling)	
Test method	X	Semi Anechoic Chamber
		Open Area Test Site (OATS)
		In-Situ (at user/manufacturer premises)
		GTEM cell
	Other:	---
Test set-up		Equipment on a table of 80 cm height
		Equipment on the floor (insulated from the reference ground plane)
	X	Other: The EUT is installed on a support of 1.5 m above the ground plane.

Technology	Sample	Mode / Modulation	Channel / Freq.	Frequency range	Antenna Polar. / axis	P/F	Sup. Info / Remark
ZigBee	01	OM#02	11 / 2405 MHz	1 – 3 GHz	H/V	P	---
ZigBee	01	OM#02	18 / 2440 MHz	1 – 3 GHz	H/V	P	---
ZigBee	01	OM#02	26 / 2480 MHz	1 – 3 GHz	H/V	P	---
ZigBee	01	OM#02	11 / 2405 MHz	3 – 18 GHz	H/V	P	---
ZigBee	01	OM#02	18 / 2440 MHz	3 – 18 GHz	H/V	P	---
ZigBee	01	OM#02	26 / 2480 MHz	3 – 18 GHz	H/V	P	---
ZigBee	01	OM#02	11 / 2405 MHz	18 – 26 GHz	H/V	P	(1)
ZigBee	01	OM#02	18 / 2440 MHz	18 – 26 GHz	H/V	P	(1)
ZigBee	01	OM#02	26 / 2480 MHz	18 – 26 GHz	H/V	P	(1)

Supplementary information / Remark:

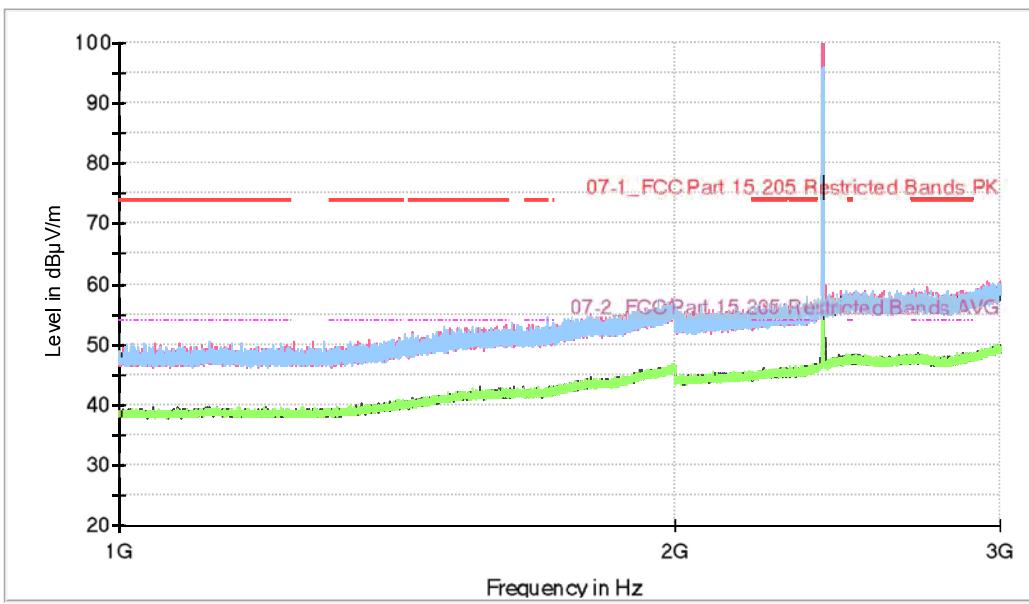
1) The spurious frequencies do not depend on the operating channel.

FREQUENCY RANGE 1 – 3 GHz:

Measurement data	<input checked="" type="checkbox"/>	Horizontal	<input checked="" type="checkbox"/>	Vertical
Operating mode / Info		Mode 2 / TX Channel Low 2405 MHz		

Common Information

EUT/Sample # / OM# : TLF20 4160 3.6 RWLB 277-400V WC3 QB SP
 Voltage/Frequency : 277-400 Vac
 Port/Terminal under test : Enclosure
 Remark/Comment : EUT ON. ZigBee Low CH (2405 MHz)



No significant values were measured with a margin less than 6 dB to the limits.

Supplementary information:

- The "Azimuth/Pol/Height" indicates the turn-table azimuth, the antenna polarization and the antenna height where the maximum emissions level was measured.
- The "Margin" is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.

Measurement data	<input checked="" type="checkbox"/>	Horizontal	<input checked="" type="checkbox"/>	Vertical
Operating mode / Info		Mode 2 / TX Channel Low 2405 MHz		

Restricted band 2.31-2.39 GHz

Common Information

EUT/Sample # / OM#

: TLF20 4160 3.6 RWLB 277-400V WC3 QB SP

Voltage/Frequency

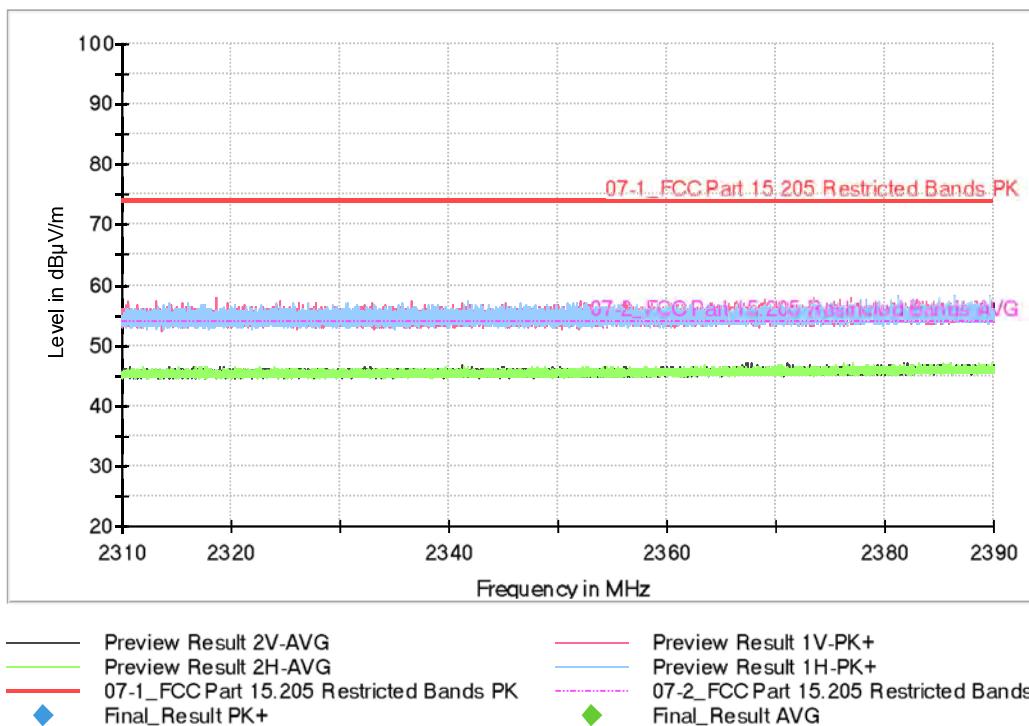
: 277-400 Vac

Port/Terminal under test

: Enclosure

Remark/Comment

: EUT ON. Restricted band 2.31-2.39 GHz. ZigBee Low CH (2405 MHz)



No significant values were measured.

Supplementary information:

- The "Azimuth/Pol/Height" indicates the turn-table azimuth, the antenna polarization and the antenna height where the maximum emissions level was measured.
- The "Margin" is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.