This is to answer the questions concerning the message and the project

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<u>1) The reporting readings in the pulsed mode requested in item 4 of the last reply were calculated with the device in the long pulse mode. Since the device has two modes, (long and short), provide the same data in the short pulse mode. Make sure you correct the pulse desensitization factor for the short pulse mode.</u>

ANSWER: The plots in Annex 5 of our last reply show the spectrum of the modulated, i.e. pulsed carrier. The spectrum is a combination of the two line spectra with the short pulse and the long pulse. The broad and low "hill" results from the short pulse (1/36ns = 27.7MHz), on which the narrow and high tip is located, generated by the long pulse drain (1/400ns = 2.5MHz). The top of the broad spectrum is hidden by the narrow spectrum and therefore impossible to measure.
The difference of the pulse desensitization factor for the long and short pulse is 20 log (36ns/400ns) = -20.9 dB.
The differences of the visible top of the narrow spectrum and the invisible, thought top of the broad spectrum in the plots of Annex 5 are approximately 20 dB, just in the same range as the calculated difference of the pulse desensitization factor, as shown above. Therefore the result for the PEAK in dBm/cm² as shown in the last table in our last reply are valid both for the long and the short pulse.

<u>2) In section 6.4.6 of the report the effective antenna correction factor is 5.8. In Section 6.4.11 this correction factor is -9.1. Why do you have two different correction factors?</u>
<u>What antenna was used?</u>
<u>What is the area of the antenna?</u>

ANSWER: The measurement in section 6.4.6 were performed with the antenna model WG27-25 as listed in section 6.4.1 in the test report. The gain is 25 dB.
The measurement in section 6.4.11 were performed with the antenna model 27240-10 as listed in section 6.4.7 in the test report. The gain is 10 dB.
The effective area is related to gain and wavelength as follows:
$A = G * \lambda^2 / 4 * \pi$
A ... area
G ... gain
λ ... wavelength (3.9 mm @ 76.5 GHz).
For 25 dB gain the effective area is A = 3.82 cm² or 5.8 dB.
For 10 dB gain the effective area is A = 0.12 cm² or –9.1 dB.
Or in other words: the difference between the 25 dB antenna and the 10 dB antenna is 15 dB.

<u>What is the correct factor?</u>

ANSWER: Both factors are correct as shown above.

<u>Please correct the level of the fundamental in the CW mode accordingly and what is this level?</u>

ANSWER: The levels are given correct in the report. There is no need to change.

<u>Use the proper correction factor and list the level when the device is in motion and when the device is not in motion?</u>

ANSWER: In the test report all the factors are correct. There is no need to change. The emissions listed in section 6.5.5 in the test report are:
Number 1: emission of local oscillator with constant level in motion state, not in motion state, CW mode and pulse mode.
Number 2: emission of carrier in motion state. Carrier is suppressed during not in motion state, and therefore not listed.

<u>Provide plots of both emissions in motion and not in motion?</u>

ANSWER: Please refer to annexed pretest plot of pulsed carrier spectrum in motion state and not in motion state.

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