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9th March 2017

Statement of justification for compliance for RF Exposure
SAR evaluation in accordance with KDB 447498 D01 v06 Section 4.3.1

EUT Raymarine AP6212 Module (AX905)

Product is a multifunction display which is dashboard mounted, therefore 1 and 10-g extremity SAR evaluation will be used for the SAR exemption evaluation.

Test Frequency	2.4	GHz
Wifi Peak Power	40	mW
Wifi Duty Cycle	1	
Wifi Average Power	40	mW
Bluetooth Peak Power	10	mW
Bluetooth Duty Cycle	1	
Bluetooth Average Power	10	mW
Recommened Extremity distance	10	mm
Recommened body distance	25	mm

When distance is less than 5mm, 5mm shall be used
according to 5) in section 4.1 of the above document

Extremity requirement

$$\frac{(Max.power\ of\ channel\ including\ tune-up\ tolerance,mW)}{(min.test\ deparation\ distance,mm)} \times (\sqrt{f_{(GHz)}}) \leq 7.5$$

WIFI - Extremity (<7.5)

$$\frac{40 * 1}{10} * \sqrt{2.4} = 6.2$$

Bluetooth - Extremity (<7.5)

$$\frac{10 * 1}{10} * \sqrt{2.4} = 1.55$$

Body requirement

$$\frac{(Max.power\ of\ channel\ including\ tune-up\ tolerance,mW)}{(min.test\ deparation\ distance,mm)} \times (\sqrt{f_{(GHz)}}) \leq 3.0$$

Wifi - body (<3)

$$\frac{40 * 1}{25} * \sqrt{2.4} = 2.48$$

Bluetooth - body (<3)

$$\frac{10 * 1}{25} * \sqrt{2.4} = 0.62$$

The front of the display is below the 10-g SAR evaluation level, therefore no warning is required

At a distance of 10mm the front of the display is below the 1-g SAR evaluation level, therefore a warning of 10mm seperation is included in the manual

Review completed by Andrew Little
Compliance Manager
Raymarine UK Ltd