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 8th February 2013

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 Walton-on-Thames,  
 Surrey,  
 KT12 2TD

Dear Sir

**Subject: Radiated power calculation for Raymarine E70162 (a65 WIFI) and E70163 (a67 WIFI) display**

Radiated power calculation

Peak Output Power

Operating Mode (Modulation)	Max Average Power Measured (dBm)	Antenna Gain (dBi)	Max Average EIRP(dBm)	Max Average EIRP (mW)
11Mbps 802.11b DSSS 20dBm nominal	12.35	0.8	13.15	13.64
54Mbps 802.11g OFDM 14.5dBm nominal	0.65	0.8	1.45	1.40
1Mbps Bluetooth GFSK 9.5dBm nominal	8.75	0.8	9.55	9.01

Distance to 10W/m<sup>2</sup>

$$Pr = Pt / 4 * \pi * r^2$$

	EIRP (mW)	Pr (W)	r(cm)
	Pt		
11Mbps 802.11b DSSS 20dBm nominal	13.6	10	1.0
54Mbps 802.11g OFDM 14.5dBm nominal	1.4	10	0.3
1Mbps Bluetooth GFSK 9.5dBm nominal	9.0	10	0.8

Therefore distance for 10w/m<sup>2</sup> is rounded up to 1cm from the internal antenna, this keeps the distance common for all displays in the series.

Signature: 

Date: 8<sup>th</sup> February 2013

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**TITLE (Please print or type): Compliance Manager**

**COMPANY (Please print or type): Raymarine Limited**