Company: Rockwell Collins

MPE Evaluation of: IMS-6010

To: FCC CFR 47 Subpart §1.1310

Report No.: ROCK28 – MPE FCC Rev A

MPE TEST REPORT

MPE REPORT

FROM

MiCOM Labs
opening wireless markets

MPE Evaluation of: Rockwell Collins IMS-6010

To: FCC CFR 47 Subpart §1.1310

Report Serial No.: ROCK28 – MPE FCC Rev A

This report supersedes: NONE

Applicant:	Rockwell Collins 400 Collins Road NE Cedar Rapids, IA 52498 USA
Product Function:	Wireless connectivity for aircraft systems
Issue Date:	20th June 2018

This Report is Issued Under the Authority of:

MiCOM Labs, Inc.
575 Boulder Court
Pleasanton California 94566
USA
Phone: +1 (925) 462-0304
Fax: +1 (925) 462-0306
www.micomlabs.com

A2LA ACCREDITED
TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels
Power Density = Pd (mW/cm^2) = EIRP/ ($4*\pi*d^2$)
EIRP = P * G
P = Peak output power (mW)
G = Antenna numeric gain (numeric)
d = Separation distance (cm)
Numeric Gain = 10 ^ (G (dBi)/10)

EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm^2

These calculations represent worst case in terms of the exposure levels.

Freq. Band (MHz)	Total Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Power Density @ 20cm	Power Density Limit (mW/cm^2)	Calculated Safe Distance @ $1mW/cm^2$	Minimum Separation Distance (cm)
2400.0 - 2483.5	4.8	3.02	19.65	92.26	0.055	1	4.71	20.00

Note: For mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

The Transmitter power used in the above calculations demonstrate the worst case power from the modes 802.11 b/g/n. In this case, 802.11b shows higher output power hence higher Power Density compared to 11g; HT20;and HT40 modes.

Specification
Maximum Permissible Exposure Limits
FCC §1.1310 Limit = $1mW / cm^2$ from 1.310 Table 1

575 Boulder Court
Pleasanton, California 94566, USA
Tel: +1 (925) 462 0304
Fax: +1 (925) 462 0306
www.micomlabs.com