

Behnam Ghaffari

From: Dustin Stock <dustin.stock@mimosa.co>
Sent: Tuesday, August 08, 2017 3:16 PM
To: Behnam Ghaffari
Cc: Bob Koppel
Subject: FW: Mimosa Application for Experimental Authorization: FCC Inquiry re: 0606-EX-CN-2017

1. ERP Calculations:

The stated power of the A5c includes all four chains. It's very linear up to about 25dBm.

That's 0.32W, conducted.

We operate into a panel antenna that has 16.5dBi of gain, using cables with about 0.5dB loss (LMR400).

Net gain is 16dBi, and then we get 3dB more from beamforming between the two cross-polarized arrays inside the panel.

The physical and processed antenna gain is thus 19dBi.

EIRP = 25dBm (conducted) + 19dBi (total antenna gain) = 44dBm

That's 25W EIRP = 0.025kW EIRP.

I believe I miscalculated before which gave me incorrect data.

2. Both radios will transmit and receive data from one another.

3. 73 degrees is for the Azimuth of the antenna on Private Property #1 facing Private Property #2.

I hope this helps.

Dustin Stock • Mimosa • Senior RF Support Engineer

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469 El Camino Real, Suite 100, Santa Clara, CA 95050

From: Bob Koppel <Bob.Koppel@fcclaw.com>

Date: Tuesday, August 8, 2017 at 9:31 AM

To: Dustin Stock <dustin.stock@mimosa.co>

Cc: Brian Hinman <brian@mimosa.co>

Subject: Mimosa Application for Experimental Authorization: FCC Inquiry re: 0606-EX-CN-2017

Hi Justin,

Please see the FCC's inquiry below.

You might want to revise the contact point so that inquiries are sent directly to you.

Bob

From: oetech@fccsun27w.fcc.gov [mailto:oetech@fccsun27w.fcc.gov]
Sent: Tuesday, August 08, 2017 12:07 PM
To: Bob Koppel <Bob.Koppel@fcclaw.com>
Subject: 0606-EX-CN-2017



Office of Engineering and Technology

Robert Koppel, Mimosa Networks

To:

bkoppel@fcclaw.com

Behnam Ghaffari

From:

Behnam.Ghaffari@fcc.gov

Mimosa Networks

Applicant:

File Number:

38303

Correspondence Reference Number:

08/08/2017

Date of Original Email:

Please provide the following information for clarification:

Our analysis showed that there is a discrepancy between your provided ERP value of 2 kW. We noted that the output power is given as 0.1 watt which equal -10 dBW.

Calculating the ERP from both antenna gain provided does not match anything close to the ERP value of 2 kW.

Please explain how the 2 kW ERP value was derive and show your detail calculation.

Also, please indicate if this fixed microwave link with transmit at both ends points from Private Property #2 to Private Property #1 and vice versa.

Moreover, can Mimosa Networks explain if the intended operation of 73 degrees is an azimuth angle or is this angle a vertical angle from the horizontal plane (horizon)?