

From: Hemple, Steven <Steven.Hemple@viasat.com>
Sent: Tuesday, July 21, 2020 7:55 PM
To: Trang Nguyen <Trang.Nguyen@fcc.gov>
Cc: Cindy Spiers <Cindy.Spiers@fcc.gov>; Paul Blais <Paul.Blais@fcc.gov>
Subject: Re: Viasat pending ESIMs app SES-MFS-20200204-00112

Trang,

The 6 Mbd carrier can be converted into necessary bandwidth using the conversion

$$\text{Necessary Bandwidth} = 6 \text{ MBd} * 1 \text{ Hz/Bd} = 6 \text{ MHz}$$

I believe this is the emission designator you are refereeing to in Schedule B. For this emission the reduction in EIRP density is applied to the 6 MHz BW.

I believe you are asking for an equivalent table for the 12 and 18 MHz emissions:

| Skew Angle [°] | 6 MHz Reduction in EIRP to Protect GSO [dB] | 12 MHz Reduction in EIRP to Protect GSO [dB] | 18 MHz Reduction in EIRP to Protect GSO [dB] |
|------------------------|---|--|--|
| ≤ 45 | 0 | 0 | 0 |
| $45 < x \leq 50$ | 0.31 | 0 | 0 |
| $50 < x^\circ \leq 55$ | 1.38 | 0 | 0 |
| $55 < x^\circ \leq 60$ | 2.63 | 0 | 0 |
| $60 < x^\circ \leq 65$ | 4.07 | 1.07 | 0 |
| $65 < x^\circ \leq 70$ | 5.71 | 2.71 | 0.94 |
| $70 < x^\circ \leq 75$ | 7.52 | 4.52 | 2.75 |
| $75 < x^\circ \leq 80$ | 9.35 | 6.35 | 4.58 |
| $80 < x^\circ \leq 85$ | 10.82 | 7.82 | 6.05 |
| $85 < x^\circ \leq 90$ | 12.25 | 9.25 | 7.48 |

Please let me know if you need further information.

Steve