

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 referring 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 <= 50	0.31	0	0
50 < x° <= 55	1.38	0	0
55 < x° <= 60	2.63	0	0
60 < x° <= 65	4.07	1.07	0
65 < x° <= 70	5.71	2.71	0.94
70 < x° <= 75	7.52	4.52	2.75
75 < x° <= 80	9.35	6.35	4.58
80 < x° <= 85	10.82	7.82	6.05
85 < x° <= 90	12.25	9.25	7.48

Please let me know if you need further information.

Steve