FRN: 0030682314 STA: 0369-EX-ST-2021

EMISSION BANDWIDTH SUPPLIMENT

This document is supplement to FRN 0030382314 / STA 0369-EX-ST-2021 for emission bandwidth occupation. Calculations for emission bandwidth were performed as prescribed in 47CFR 2.201 and 47CFR 2.202.

Digisat has submitted request for the following emission designators at frequency 29750MHz and 5% frequency tolerance. Emission bandwidths are calculated for BPSK, QPSK, 8PSK, 16PSK and 32PSK modulation waveforms.

1K0G1N modulated xPSK signal 10K0G1N modulated xPSK signal 50K0G1N modulated xPSK signal 20M0G1N modulated xPSK signal

Table 1: Emission Bandwidths

Bn=(2RK)/log2(S)

R (rate)	K (bit)	S (xPSK)	Bn (bandwidth)
1000	1	2	2,000.00
10000	1	2	20,000.00
50000	1	2	100,000.00
2000000	1	2	40,000,000.00
1000	1	4	1,000.00
10000	1	4	10,000.00
50000	1	4	50,000.00
2000000	1	4	20,000,000.00
1000	1	8	666.67
10000	1	8	6,666.67
50000	1	8	33,333.33
2000000	1	8	13,333,333.33
1000	1	16	500.00
10000	1	16	5,000.00
50000	1	16	25,000.00
2000000	1	16	10,000,000.00
1000	1	32	400.00
10000	1	32	4,000.00
50000	1	32	20,000.00
2000000	1	32	8,000,000.00
1000	1	64	333.33
10000	1	64	3,333.33
50000	1	64	16,666.67
2000000	1	64	6,666,666.67