

APPLICANT: SECURITY ASSOCIATES INTERNATIONAL INC.

FCC ID: NNKECTX

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NO.: 15.231

REQUIREMENTS:

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics and Spurious Emissions (dBuV/m @ 3m)
40.66 to 40.70 MHz	67.04 dBuV	47.04
70 to 130	61.94	41.94
130 to 174	61.94 to 71.48	41.94 to 51.48
174 to 260	71.48	51.48
260 to 470	71.48 to 81.94	51.48 to 61.94
470 and above	81.94	61.94

THE LIMIT FOR AVERAGE FIELD STRENGTH dBuV/m FOR THE FUNDAMENTAL FREQUENCY= 74.96 dBuV/m dBuV/m. NO FUNDAMENTAL IS ALLOWED IN THE RESTRICTED BANDS.

THE LIMIT FOR AVERAGE FIELD STRENGTH dBuV/m FOR THE HARMONICS AND SPURIOUS FREQUENCIES = 54.96 dBuV/m dBuV/m. SPURIOUS IN THE RESTRICTED BANDS MUST BE LESS THAN 54dBuV/m OR 15.209.

TEST DATA:			Quasi-PEAK			
EMISSION	METER	COAX	FIELD	FIELD	MARGIN	
FREQ.	READING	LOSS	ACF	STRNGTH	STRNGTH	
MHz	@ 3m dBuV	dB	dB	dBuV/m	dBuV/m	
608.96R	24.60	1.60	20.30	46.50	41.00 # 5.00 H	

SAMPLE CALCULATION OF LIMIT @ 303 MHz:

$$(470 - 260) \text{MHz} = 210 \text{ MHz}$$

$$(12500 - 3750) \mu\text{V/m} = 8750 \mu\text{V/m}$$

$$8750 \mu\text{V/m} / 210 \text{MHz} = 41.67 \mu\text{V/m/MHz}$$

$$(303 - 260) \text{MHz} = 43 \text{ MHz}$$

$$43 \text{ MHz} * 41.67 \mu\text{V/m/MHz} = 1791.81 \mu\text{V/m}$$

$$(1791.81 + 3750) \mu\text{V/m} = 5541.81 \mu\text{V/m} \text{ limit @ 303 MHz.}$$

The transmitter ceases transmitting when the button is released.

TEST RESULTS: The unit DOES meet the FCC requirements.

PERFORMED BY: S. S. SANDERS

DATE TESTED: 9/11/98

REPORT #: F:\CUS\S\SAI\SAI216TE

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