

## **EXHIBIT 12**

**TECHNICAL NARRATIVE  
IOWA CITY, IA  
BNPFT 20030317HOX  
FAC ID 156462  
E-STRING WIRELESS, LTD  
CHANNEL 247**

Per FCC DA 12 – 1871, Applicant E-String Wireless, LTD files this long form proposal for a translator station located in Iowa City, IA. This application does make some technical changes that are different from the short form application. The original tower that the short form indicated was dismantled after the short form filing. This necessitated that a new tower for the antenna be specified for this application.

This application is greater than 39 km from any Grid Market and therefore will not preclude any future LPFM opportunities.

This application makes the following Section III Tech Box changes:

Item 4 – New antenna location: (NAD27) 41 – 41 – 10 N, 91 – 30 – 46 W

Item 5 – New ASRN: 1023689

Item 6 – Site Elevation AMSL: 240 meters

Item 7 – Overall Tower Height AGL: 102 meters

Item 8 – RCAGL: 83 meters (H) and (V)

This application is 696.6 km from the Canadian Border and thus does not require coordination with Canada.

The channel study indicates that this application clears all licensed stations, CPs, and applications.

This is a Fill-in translator and is allowed 0.250 kW ERP per 74.1235(a) and (b).

### CHANNEL 247 STUDY

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance_km	Sep	Clr
KHDK	IA	NEW LONDON	97.3	247	3800	A	LIC	98.83	0	7.49 dB
KMYQ	IA	NORTH ENGLISH	97.1	246	3900	A	LIC	56.05	0	10.30 dB
KGRR	IA	EPWORTH	97.3	247	25000	C3	LIC	105.13	0	11.10 dB
KHDK	IA	NEW LONDON	97.3	247	0	A	USE	84.84	0	12.13 dB
KMYQ	IA	NORTH ENGLISH	97.1	246	500	A	APP	50.64	0	12.49 dB
NEW	IA	BETTENDORF	97.3	247	40	D	APP	92.02	0	14.02 dB
WXLN	IL	MOLINE	96.9	245	50000	B	LIC	102.25	0	14.52 dB
NEW	IA	BETTENDORF	97.3	247	1	D	APP	92.02	0	15.26 dB
KGRR	IA	EPWORTH	97.3	247	0	C3	USE	97.04	0	17.65 dB
KMYQ*	IA	NORTH ENGLISH	97.1	246	0	A	USE	56.99	0	18.72 dB
WFYR	IL	ELMWOOD	97.3	247	23500	B1	LIC	179.48	0	20.91 dB
KHKI	IA	DES MOINES	97.3	247	105000	C1	LIC	186.83	0	21.91 dB
NEW	IA	DAVENPORT	97.5	248	96	D	APP	75.39	0	23.41 dB
NEW	IA	DAVENPORT	97.5	248	41	D	APP	79.78	0	24.65 dB
K250BD	IA	STOCKTOWN	97.9	250	250	D	CP	48.37	0	24.44 dB
KHKI	IA	DES MOINES	97.3	247	43000	C1	LIC	186.83	0	24.35 dB
881221MS	IL	ELMWOOD	97.3	247	0	B1	USE	164.01	0	26.01 dB
KOTM-FM	IA	OTTUMWA	97.7	249	19000	C3	LIC	109.45	0	29.59 dB
KCRR	IA	GRUNDY CENTER	97.7	249	16000	C3	LIC	115.13	0	31.45 dB
KHKI	IA	DES MOINES	97.3	247	0	C1	USE	186.78	0	32.91 dB
WZOK	IL	ROCKFORD	97.5	248	50000	B	LIC	215.47	0	33.87 dB
KIIC	IA	ALBIA	96.7	244	10000	C3	LIC	126.49	0	33.95 dB
NEW	IA	KEOKUK	97.5	248	205	D	APP	142.95	0	36.45 dB
NEW	IA	KEOKUK	97.5	248	205	D	APP	142.95	0	36.45 dB
KTCM	MO	MADISON	97.3	247	12000	C3	LIC	254.91	0	37.26 dB
WMOI	IL	MONMOUTH	97.7	249	3400	A	LIC	116.42	0	37.23 dB
WGLR-FM	WI	LANCASTER	97.7	249	11500	C3	LIC	146.83	0	38.46 dB

Exhibit 10 – Fill-in map showing that KZIA’s 60-dbu contour completely encompasses the 60-dbu of the NEW proposed translator.

Exhibit 13 - Overlap compliance

### Environmental and RFR.

Maximum power density is  $0.37 \mu\text{W}/\text{cm}^2$ , 0.27 % of maximum allowed uncontrolled public access. As this less than 5% of the maximum allowable public uncontrolled access, no further study required. Applicant will either reduce power or cease operations whenever there are personnel working on the tower.