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**May 4, 2017**

Mr. James D. Bradshaw  
Deputy Chief, Audio Division  
Media Bureau  
Federal Communications Commission  
Washington, DC 20554

RE: Interference Complaint  
1800B3-PPD

Dear Mr. Bradshaw:

I am writing on behalf of Siga Broadcasting Corporation ("Siga"), permittee of FM Translator Station K237GS in response to your above referenced letter of April 5, 2017, in which you advised Siga that the Commission had received complaints that K237GS was causing interference to reception of LPFM Station KHEP-LP, Friendswood, Texas, in areas where KHEP-LP had established listenership and directed Siga to investigate each of the complaints and take appropriate action to resolve the complaints.

Attached hereto is a Declaration Under Penalty of Perjury by Siga's President Gabriel Arango which details the actions that Siga has taken to investigate and resolve each of the 172 interference complaints that have been brought to its attention. As the first step towards resolving the complaints, Siga's president sent emails to each of the 172 complainants asking them for information that Siga would need to investigate and resolve the complaints. Only 22 of the 172 complaints responded to Mr. Arango's request for information which was a necessary prerequisite to Siga investigating and resolving the individual complaints. Siga submits that as to the 150 complainants who did not respond to its request for information, it has fully discharged its obligations under Section 74.1230(b) of the Rules.

Attached to Mr. Arango's Declaration are the 22 responses to its request for information that Siga did receive from complainants. What the responses reveal is that none of the complainants are experiencing interference to the reception of KHEP-LP at a fixed location, for example at their residence or place of work, but rather all allege that they experience interference at various locations while they are driving to and fro. It is Siga's understanding that translator licensees are not responsible for investigating and resolving interference that listeners to an FM station claim to experience while they are driving. In fact, it would be next to impossible for a translator licensee to investigate and resolve such

2017 MAY -8 PM 2:55

mobile interference as to do so would necessitate that the translator operator be driven around by the complainant in the complainants car and try to ascertain the cause of interference and resolve it while the vehicle is in motion, often at high speed, on busy highways.

Mr. Arango also points out in his Declaration that the areas in which many of the complainants allegedly are experiencing interference are more than 30 kilometers from the KHEP-LP transmitter site. The Commission can take official notice of the fact that at a distance of 30, or even 20 kilometers from an LPFM station's transmitter site, the station's signal would be too weak to be clearly and reliably received on a car radio if the station were operating at its authorized power level. In other words, the claims by complainants that they had been regularly listening to KHEP-LP on car radios at distances of 20, 30 and even 40 kilometers from the station's transmitter site are simply not credible.

While this response is specifically directed to the interference complaints, in view of the fact that the parties that petitioned for reconsideration of the grant of Siga's application for a license to cover its construction permit for K327GS also alleged that the station had not been constructed in accordance with the terms of its construction permit, I am attaching to this response a Declaration under Penalty of perjury from Siga's consulting engineer Charles W, Staples which establishes that there is no merit to such allegations.

If you have any further questions concerning this response, please call me.

Sincerely,

A handwritten signature in cursive script, appearing to read "David Tillotson", with a long horizontal flourish extending to the right.

David Tillotson

C: John F. Garziglia (via email)

## DECLARATION OF GABRIEL ARANGO

May 4, 2017

Case: 1800B3-PPD

I, Gabriel Arango, do hereby state under penalty of perjury as follows:

1. I am the president of SIGA Broadcasting, Inc. owner of K237GS FM Translator, which is an existing radio station broadcasting with FCC facility ID 147229.
2. On 3-04-17, an informal objection to the license application of K237GS was filed by James B. Davis, on behalf of KEPH and Calvary Chapel Southeast Houston. This objection was in response to the application for license BLFT-20170302AEV. On April 8, an additional informal objection was filed by Davis. This second objection was accompanied by an attachment in the form of a letter from Adam Sylvester and included 172 complaint forms from Calvary Chapel Southeast Houston congregants.

- In the first informal objection, Davis states that:

“established listeners of KEPH-LP and KTTF-LP Tomball, started receiving interference. Specifically, that in some areas the signal was garbled and in others the K260AS signal completely covered up the KEPH-LP & KTTF-LP signal. And that checking the signal strength in the Willow Brook Area, South of Tomball, appeared to show K260AS has a signal strength about 10 dB stronger than it should have for their authorized power and antenna system as specified in its FCC authorization. That an observation of the K260AS antenna at the KLVL transmitter site showed the antenna was not the one specified in their license authorization and was in fact a single bay instead of the dual bay phased antenna necessary to produce the twin null pattern needed to protect KEPH-LP and construction permit #BNPL-20131114BXE.”

- In the second filing, Davis alleges:

“this is clearly not the two bay antenna SIGA said was being used on their license to cover application for K260AS/K237GS; and produces a 180 degree front pattern only with no side nulls required for KEPH-LP and interference to LZLD-LP’

3. As requested by the FCC, by letter dated April 5, 2017, File 1800B3-PPD, SIGA Broadcasting, Inc. has responded to each 172 complainants individually. Please see attached sample letter.\* Of 172 only 22 have responded. Please see attached responses. They all basically responded with their original complaint but not a single one responded to the FCC’S request of the following:

1. name and address of complainant (if not correct on letter)

\* Exhibit A

2. specific devices receiving the interference, including
  - a. device manufacturer's name
  - b. device model number
  - c. serial number of device

It is obvious to me that all 172 of these complaint letters were filled out on a form provided by Calvary Chapel Southeast Houston, all on the same Sunday and with virtually the same information. I therefore assert that these complaints were solicited from members of the Church. All of the locations specified in the complaints were vague and/or well beyond the 5.6 kilometer LP FM service contour.

As to the antenna, please see the attached response by Mr. Charles Staples.

On 4-24-2017, I personally met with Mr. Randy Infante and Mr. Santos Venegas, at the invitation of Mr. Infante. Randy Infante (of 1921 Oak Top Dr., Pearland TX 77581) is a KEPH listener and one of the complainants. Mr. Venegas represented himself as the engineer for KEPH-LP at both this meeting and during a previous meeting with the general manager of KEPH-LP 95.3 MHz, Mr. Adam Sylvester,.

I drove from my home (located at 3333 Allen Parkway Houston TX 77019) to Friendswood via I45 South. As I went under the Beltway 8 and I45 South intersection I noticed that we lost our FM translator's signal and the KEPH-LP was clearly heard. I made a phone recording of this fact, then headed towards FM2531 and FM518, turning right towards the City of Friendswood. As agreed, the three of us met at the intersection of FM 2351 and FM 518. Mr. Infante drove us around the city of Friendswood in his Ford pickup and eventually towards the city of Pearland, where Mr. Infante has allegedly experience our interference. Pearland is 13.16 kilometers from KEPH-LP and outside the 60 dBu F50-50 LP FM service contour of 5.6 kilometers.

It is worthy to note that neither Mr. Infante nor Mr. Santos, were able to point out any interference from our FM translator to KEPH-LP at any time.

4. In my opinion, SIGA Broadcasting, Inc. has complied with its obligation to investigate the complaints as reflected above only 22 complainants have responded (please see attached responses) to our investigation and all of these refer to mobile interference and not to a fixed location.
5. SIGA Broadcasting, Inc, owner of K237GS FM translator has met the requirement of the FCC and is not interfering with the signal of KEPH-LP in their city of license or within their city grade contour.
6. Based on the information provided by the complainants, it is evident, that the complaints of interference from the listeners of KEPH-LP and worshippers of Calvary Chapel Southeast Houston are unfounded as they took place in areas located outside the 60 dBu F50-50 LP FM service contour, which is 5.6 kilometers or 3.5 miles. It is

doubtful that in the past the complainants were used to listening to KEPH-LP in areas this far beyond the useful coverage of a LP FM's.

Here are some examples of the above:

- a) Curtis Wilson: "In and around the Alvin area"  
-- 12.1 kilometers away from the KEPH-LP transmitter site.
- b) Celia Corley-Davis: "In the Santa Fe area"  
-- 15.53 kilometers away from the KEPH-LP transmitter site.
- c) Ismael Ariza: "Downtown Houston, South Houston, Dear Park"  
-- 53, 44, 28 kilometers, respectively, away from the KEPH-LP transmitter site.
- d) Amy Hallett: "Seabrook TX"  
-- 14.7 kilometers away from the KEPH-LP transmitter site.
- e) Cynthia Muecke: "146 north to Baytown"  
-- 31.13 kilometers away from the KEPH-LP transmitter site.
- f) Tom Kalinoski: "Houston"  
-- 33.17 kilometers away from the KEPH-LP transmitter site.
- g) Amber Evans: "Pasadena all the way to downtown on 45" Houston" -- 33 or more kilometers from the KEPH-LP transmitter site.
- h) Tommy Thompson: "When I drive into downtown Houston, I would be able to hear "Revive 95.3FM" up 45 north till I get to the 610 loop.  
-- This intersection is 39.8 kilometers away from the KEPH-LP transmitter site.
- i) Bobby Keubler: "Galveston"  
-- 40 plus kilometers away from the KEPH-LP transmitter site.
- j) Adrian Williams: "Hwy 35"  
-- 23.85 kilometers away from the KEPH-LP transmitter site.
- k) **Joni Couvillain: "We also heard interference from the Spanish station closer to Friendswood"**

In light of the statement made by complainant k) above, I respectfully submit to the FCC Commission that KEPH-LP may have interference from other stations and blaming us. Our format is Indian/Pakistani. It is possible that there is another station, in Spanish, interfering with KEPH-LP.

Since we are receiving complaints signed, under penalty of perjury, by the parishioners of Calvary Chapel Southeast Houston, owners of KEPH-LP, in which they give testimony to the fact that they are capable of listening to the Revive 95.3 KEPH-LP signal as far away as 40 kilometers, then I respectfully suggest that the FCC investigates whether this station is operating at appropriate power levels.

  
Sincerely,

Gabriel Arango  
SIGA Broadcasting, Inc.

4-19-2017

COMPLAINANT E MAIL RESPONSE:

Christopher DeClaire

Apr 19 (7 days ago)



me

Dear Mr. Arango,

1. My name is Christopher DeClaire, I live at 304 Fieldcreek Dr Friendswood Texas 77546.
2. I have had interference issues while driving my 2015 BMW Alpina B6 radio

I have received interference in several locations including:

1. 45 at 528 7:45am and throughout the day
2. Downtown Friendswood on 518 3:30pm and throughout the day
3. 2351 at 45 4:00pm and throughout the day

All the times referenced include the overriding of 93.5 Revive with an Indian radio station I have no interest in listening too. This has been going on for the past 2 plus months and is very frustrating.

Feel free to contact me if you have any further questions.

I look forward to resolution of this issue soon.

Thank you

**The information requested by SIGA Broadcasting, Inc:**

**a. device manufacturer's name b. device model number**

**c. serial number of device, was not addressed.**

4-25-2017

COMPLAINANT E MAIL RESPONSE:

Apr 25 (1 day ago)



me

Clint West  
903-245-6995

I am using my car radio and therefore do not have a model number or serial number.  
There isnt even a brand on it.

I have a toyota corolla and its a stock car radio.

I already put the locations of interference on the letter that was sent to you but here are some of the locations where i get radio interference:

Webster TX intersections:  
El Dorado and Hwy 3  
El Dorado and El Camino  
El Camino and Bay Area Blvd

An Indian and/or Mexican station takes over and garbles my station. It used to be clear and now i have to just turn off the radio.

Please fix this. Thanks

Clint West  
Sent from my iPhone

""The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

3. c. serial number of device, was not addressed.

4-15-2017

COMPLAINANT E MAIL RESPONSE:



me

My devise is a 2008 Infiniti sport G37

And the interference begins as turn into Siuth Shore Blvd. from Hwy 96. The static grows stronger as travel north on South Shore blvd.

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*



4-18-2017

COMPLAINANT E MAIL RESPONSE:

Apr 18 (8 days ago)



me

Thank you for responding to my complaint. My address is correct. I experienced interference at the intersection of Beamer and Dixie Farm Road while driving my 2011 Toyota Tacoma. As to the type of interference, I would call it just that. I could not receive the signal from Revive radio, 95.3, which is the call signal for Calvary Chapel radio broadcasts. Thank you again for your time.

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-18-2017

COMPLAINANT E MAIL RESPONSE:

Derek Thompson

Apr 19 (7 days ago)



adam |

me

Thank you for the request for additional information.

My name is Derek Thompson and I reside at 312 Forest Creek Drive, League City Tx 77573 as was listed on the original form I submitted.

The interference occurred while driving my vehicle. The radio in my 2013 Ford F-150 was not able to receive clear signal while driving on the 45 Freeway at any point north of the Clear Lake Blvd exit. Another station apparently occupies the same frequency.

I hope

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-25-2017

COMPLAINANT E MAIL RESPONSE:

Gabriela Collins

6:45 PM (21 hours ago)



adam |

me

Dear Gabriel Arango,  
I have been listening to Revive 95.3 since it began broadcasting and I am constantly being interrupted by your station everywhere I regularly travel (Clear Lake, Friendswood, and Pearland). I would like these interruptions to stop.

1. name and address of complainant (if not correct on letter)  
It is correct, listed again for clarity:

Gabriela Collins  
16014 Spring Forest Drive  
Houston TX 77059

2. specific devices receiving the interference, including
  - a. device manufacturer's name
  - b. device model number
  - c. serial number of device
  - 2014 Dodge Ram Pickup radio
  - 2012 Nissan Quest radio
  - Device Manf.: Naxa      Model: NPB-261      SN: N/A

Thank you,  
Gabriela Collins

The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name   b. device model number

4. c. serial number of device, was not addressed.

4-15-2017

COMPLAINANT E MAIL RESPONSE:

Apr 15 (11 days ago)



adam

me

SIGA Broadcasting:

In response to your email we would first like to request that you stop the contradicting signal with Revive 95.3FM. It is a great blessing and help to us in our daily walks with Jesus during our "car time". The signal is interrupted from our home on Pineloch drive on HWY 3 up to Space Center and all the way down to NASA Road 1. It is interrupted throughout this entire square route consistently. Both my vehicle radios are affected, 2013 Hyundai Santa Fe and our 2006 Mazda 3. Thank you for your attention to this matter.

[alixbabich@gmail.com](mailto:alixbabich@gmail.com), [hipchickindustries@gmail.com](mailto:hipchickindustries@gmail.com)  
696 Pineloch Dr #2605  
Webster, TX 77598

Always,  
Alix and Heather Babich

Sent from my iPhone

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-22-2017

COMPLAINANT E MAIL RESPONSE:

Apr 22 (4 days ago)



adam

me

Dear Gabriel Arango,  
I have been listening to Revive 95.3 since it began broadcasting and I am constantly being interrupted by your station everywhere I regularly travel (Clear Lake, Friendswood, and Pearland). I would like these interruptions to stop.

1. name and address of complainant (If not correct on letter)  
It is correct, listed again for clarity:

Jacob Collins  
16014 Spring Forest Dr  
Houston TX 77059

2. specific devices receiving the interference, including
  - a. device manufacturer's name
  - b. device model number
  - c. serial number of device

- 2014 Dodge Ram Pickup radio
- 2012 Nissan Quest radio
- 2006 Chrysler 300C radio
- Device Manf.: Naxa      Model: NPB-261      SN: N/A

Thank you,  
Jacob Collins

**""The information requested by SIGA Broadcasting, Inc:**

**a. device manufacturer's name b. device model number**

**c. serial number of device, was not addressed.**

4-20-2017

COMPLAINANT E MAIL RESPONSE:

Jeremiah Rossland

Apr 20 (6 days ago)



me

Gabriel Arango  
Siga Broadcasting,

Gabriel, here is my information-

Jeremiah Rossland  
11310 Sageriver Dr.  
Houston TX 77089

I have a 2016 Toyota Tacoma that is experiencing interference at the above address, as well as a 2010 Ford Fusion that is also getting the same interference, at the same address. The interference we are experiencing is from your radio station broadcasting on the same frequency (95.3) as KEPH-LP. Your broadcast continually cuts into, and overpowers the broadcast from KEPH-LP. I have also experienced this interference as far south as 45 South and Eldorado Blvd. I look forward to seeing you resolve this issue by dampening your signal in the appropriate method.

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-16-2017

COMPLAINANT E MAIL RESPONSE:



Joreen Lee

Apr 16 (10 days ago)



me

Dear Sir and Madam,

In response to your questions, please see below:

- a. device manufacturer's name - Car radio
- b. device model number - Toyota Car radio
- c. serial number of the device - not sure how this is related to the broadcasting quality.

thank you

**The information requested by SIGA Broadcasting, Inc:**

**a. device manufacturer's name b. device model number**

**c. serial number of device, was not addressed.**

4-20-2017

COMPLAINANT E MAIL RESPONSE:

I got your letter in the mail. My email is [joycelbowen@yahoo.com](mailto:joycelbowen@yahoo.com). (You had a misprint.) I have been unable to listen to our Calvary Chapel station 95.3 because whenever I am at my house or north of my house the signal breaks up and starts playing Indian music or talking. I live in north Friendswood. My car is a 2008 Honda CRV and I also have trouble in our 2015 Ford Escape and 2004 Honda Odyssey. We are very disappointed that your station continues to keep us from listening to the Calvary teaching. There are many other numbers that you could have picked not to conflict with anyone.

We would appreciate it if you would rectify the situation.

Thanks,

Joyce L. Bowen

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*



4-19-2017

COMPLAINANT E MAIL RESPONSE:

Julie Mckechnie

Apr 19 (7 days ago)



Revive953

me

Dear Mr. Arango:

I am happy to provide the requested information regarding the interference I've been receiving as I attempt to listen to KEPH-LP. You have my personal information correct in the attached letter.

I have been receiving interference in my car as I drive around the city on errands and to and from work. I drive a 2015 Audi A4 and the radio is the stock radio from the factory. I can not give you any model or serial number as my car is currently in the body shop for repairs due to a parking lot collision. My travels where I've experienced interference have included traveling north on I45 as far as Hobby Airport, at which point I lose the station anyway; in a large square area as I travel on State Highway 3 from Bay Area Blvd. heading south to Pineloch Blvd, east down to Space Center Blvd, back north to Gemini and eastward to El Camino Real and at my office on Gemini and El Camino Real. I also have been receiving interference in my home in Friendswood on my Sony radio in the kitchen. It is mounted under the kitchen cabinet and there is no visible model or serial number. It is a Sony AM/FM/CD player. The type of interference has been an overriding or loss of what I've been listening to on KEPH-LP and typically I hear a woman's voice with a foreign accent. What she is saying is never really clear and I don't listen long enough to discern it anyway. I generally change the channel in frustration. Thank you for working to resolve this interference. Sincerely,

Julie McKechnie, DC

NASA Chiropractic  
940 Gemini, Suite 101  
Houston, TX 77058  
281-486-1675  
[www.nasachiropractic.com](http://www.nasachiropractic.com)

The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

c. serial number of device, was not addressed.

4-26-2017

COMPLAINANT E MAIL RESPONSE:

kj

11:43 PM (16 hours ago)



me

Thank you for taking time to address my complaint.

My contact information is correct in the letter.

I primarily listen on my vehicle radio - 1998 Jeep Grand Cherokee car stereo system with a digital tuner.

Interference occurs during morning, afternoon, and evenings on I-45 between Dickinson, TX and Webster, TX. Also along NASA Parkway east of I-45 to the vicinity of the Johnson Space Center. Also in the vicinity of Dickinson TX along Hughes Rd between I-45 and Hwy 3. The interference ranges from 'fuzzy' static and 'popping' to full breakthrough where voice and music from the interfering station is heard clearly. Interfering programming has ranged from what sounds like Spanish language/music to Asian (India) language/music. Mostly the former, occasionally the latter.

I hope this information is helpful in resolving the interference issue. Thank you.

Kevin Jackson

**The information requested by SIGA Broadcasting, Inc:**

**a. device manufacturer's name b. device model number**

6. **c. serial number of device, was not addressed.**

4-17-2017

COMPLAINANT E MAIL RESPONSE:



David Peel

Apr 17 (9 days ago)



me

This is in reply to the complaint FCC SIGA BROADCASTING interference to KEPH-LP  
My name is Lillias Peel  
Address: 416 Cottonwood Drive, Friendswood Texas 77546  
My car is Honda Accord 2003  
The areas where I was unable to broadcast to Pearland Parkway, Alvin, and Fairmont  
in Pasadena and I was able to  
get reception previously.

Sincerely  
Lillias Peel

Romans 10:9

New King James Version (NKJV)

<sup>9</sup>that if you confess with your mouth the Lord Jesus and believe in your heart that  
God has raised Him from the dead, you will be saved.

The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

c. serial number of device, was not addressed.

Gabriel Arango, President  
SIGA Broadcasting Corporation  
1302 North Shepherd  
Houston, Texas 77008

4/19/17

VIA: [lfwash@hotmail.com](mailto:lfwash@hotmail.com)  
LINDA WASHINGTON  
16806 David Glen Drive  
Friendswood, Texas 77546

Mr. Arango,  
Initially I contacted you about the interference I was getting from KEHP-LP. (Revive 95.3).  
The specifics that you also requested is below:

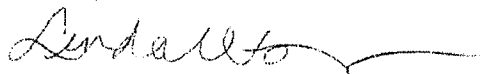
While driving my 2006 Chevrolet HHR, I frequently listen to the radio station; and I'm having a terrible experience.

My route to and from work includes driving down several roads in the Pearland area..  
FM 528 starting at Dixie Farm Road, I start getting static. Revive comes in and out, but mainly there is static. Continuing to Pearland Parkway, a lot more static is experienced. Then turning onto Magnolia/Southfork road, the Indian station is the only thing that comes through the radio. Their interference goes all the way until I get to Highway 288.

I travel these roads on Monday through Friday, 7 -8am and again at 2 -4pm.

The interference still continues and I hope that this information will be resolved quickly.

Sincerely,



Linda Washington

4-19-2017

COMPLAINANT E MAIL RESPONSE:

Please see attached PDF response.

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-21-2017

COMPLAINANT E MAIL RESPONSE:

Apr 21 (5 days ago)



adam |

me

The vehicle I have experienced the signal interference in is a 2005 Toyota Sienna radio. The locations were around the intersection of Hwy 35 and County Road 281 in Alvin, Texas.

R/Mark Harmonson

<

""The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

c. serial number of device, was not addressed.

mlbmcguire@aol.com

9:57 AM (11 minutes ago)



me |

adam

5/3/2017

*My response to your request for information is shown in red, below.*

SIGA Broadcasting Corporation  
1302 North Shepherd Drive  
Houston, TX 77008

04-11-2017

VIA: E-MAIL      mlbmcguire@aol.com

Melanie McGuire – 301 Blossomwood Drive, League City, TX 77573

Dear Melanie McGuire,

We have received your complaint of interference to KEPH-LP.  
In order to resolve your complaint, the Federal Communications Commission has required us to obtain the following information from you:

1. name and address of complainant (if not correct on letter)  
*Name and Address are correct.*

2. specific devices receiving the interference, including  
a. device manufacturer's name  
b. device model number  
c. serial number of device

*Automobile, 2016 Toyota Highlander, JVC.*

In addition, we need specific location(s) where interference is being received in order to resolve the complaints, and a description of the type and source of the interference.

*The interference by your station plays over Revive 95.3's signal so that the resulting broadcast alternates between the two stations, making it impossible to understand either one.*

*I experience the interference all along NASA Parkway from Interstate 45 to the NASA center, and on-site at NASA as well. The problem continues.*

We look forward to receiving the above information so that we may resolve your complaint.

Sincerely,

Gabriel Arango  
President of SIGA Broadcasting Corporation  
832-860-9586  
sigabroadcasting@gmail.com

4-25-2017

COMPLAINANT E MAIL RESPONSE:



M. Green

Apr 25 (1 day ago)



me

Dear Mr. Arango,

Yes I am complaining about the interference your station has been causing to KEPH-LP (Revive 95.3) Your Hindu music overpowers KEPH-LP in places it shouldn't. I try listen to Revive in my car, a 2016 Lexus ES300 with a premium radio, as I drive on El Dorado Blvd between Friendswood and my home. Address below. I encourage you to get a different frequency.

Sincerely,

Montgomery Green  
16331 Laurelfeld Dr.  
Houston, TX 77059

The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

c. serial number of device, was not addressed.



4-17-2017

COMPLAINANT E MAIL RESPONSE:

Apr 17 (9 days ago)



me |

adam

Mr. Arango, please see attached returned letter requested.

Thank you for contacting me in regards to the 95.3 FM radio station interference. It would be greatly appreciated if the problem would be corrected as we listen to it on our way to church every Sunday morning and during the week as well. This is the area where there is the most high interference.

Thank you and have a Blessed week!

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-22-2017

COMPLAINANT E MAIL RESPONSE:

Apr 22 (4 days ago)



me

adam

Hello Gabriel,

I hope your day is going well.

I am pleased to hear you have received my complaint of the interference to KEPH-LP. I look forward to helping to resolve these ongoing continuous interference issues. Below is my attached vehicle information.

1. Randy Infante – 1921 Oak Top Drive, Pearland, TX 77581
2. 2009 Chevrolet Silverado FM radio tuner.

I do not have the specific serial number or model number of the factory radio.

As for Specific location(s) where interference is occurring are as follows:

First most noticeable location is at my house and neighborhood (see above address) Sunset and FM 2351 to Hwy 35 area in Friendswood.

Another frequented area is from 45s to Dixie farm rd. to Hwy 35 and on to Beltway 8 is pure interference.

I would like it to stop. The interference was not an issue till Jan 25 2017. Prior to this date this was the broadcast range of KEPH-LP and My family and I could enjoy listening.

Since that date I have had on going issues with your radio station.

In order to resolve the complaints, I recommend coming out here for a leisurely drive to Friendswood / Pearland as to get a feel for the complaints first hand. I would be more than welcoming as to showing you around in the area where interference is occurring. Thank you for your time and response to my complaint.

God Bless you.

Best Regards,

Randy Infante  
832-677-0212

“”The information requested by SIGA Broadcasting, Inc:

a. device manufacturer's name b. device model number

3. c. serial number of device, was not addressed.

4-19-2017

COMPLAINANT E MAIL RESPONSE:



Wendy Schram

Apr 19 (7 days ago)



me

Dear Gabriel,

The vehicle in which I noticed the interference on 95.3 FM was a 2012 Dodge Charger.

You have the correct address as noted in your letter to me. You have already received the dates and locations from my original notices.

Please resolve the interference and allow me to hear Revive 95.3 when I choose.

Wendy

Sent from my iPhone

*The information requested by SIGA Broadcasting, Inc:*

*a. device manufacturer's name b. device model number*

*c. serial number of device, was not addressed.*

4-18-2017

COMPLAINANT E MAIL RESPONSE:

Zach Ewan <zman7791@outlook.com>

Apr 18 (8 days ago)



me

Good Afternoon,

This notice is in regards to interference affecting the broadcast signal of KEPH Revive 95.3 FM. Below I have included my personal information for the complaint as well as your requested details of the interference.

Name: Zach Ewan

Address of Complaint: 2428 Parkview Dr. Pearland, Tx 77581 (and surrounding areas)

Phone Number: 832 884 3615

Email: [zman7791@outlook.com](mailto:zman7791@outlook.com)

The following is a picture of 95.3's standard broadcast range:

<http://radio-locator.com/cgi-bin/patg?id=KEPH-FL>

The following is the noted interference in this range:

Interference has been noticed consistently on all devices utilizing a standard FM radio signal, and primarily on my car stereo with the following specifications:

## **Statement of Charles W. Staples**

Case: 1800B3-PPD

**I, Charles W. Staples, do state:**

I am a technical consultant working on behalf of Gabriel Arango of SIGA Broadcasting

I am a graduate of Texas Christian University.

I am President of CS Broadcast Technical Services, Inc.

I hold a General Class Lifetime Radiotelephone Operator License with a ship radar endorsement, which was previously a First Class Radio Operator License.

I have worked in the broadcast industry for over 45 years. My qualifications are a matter of record with the Commission.

I have examined the informal objections filed by James B. Davis on behalf of Calvary Chapel Southeast Houston against SIGA and K237GS. The statements made in the objection that allege the antenna utilized was not the proper antenna and did not achieve the proper pattern to protect interference to the two co-channel LP FM facilities is both unfounded and inaccurate.

- As represented to me by SIGA, the antenna utilized was an SWR FMPV panel antenna. I obtained a copy of the pattern of this antenna for analysis. When oriented at 277.5 degrees true, no 40 dBu F50-10 interference contour overlaps the 60 dBu F50-50 service contour of either LP FM.
- This antenna is a "double V" type that is virtually identical to the FMEC 2 antenna specified in the construction permit. The 70" X 70" screen behind the radiating elements is the parasitic element that achieves the directional pattern. As for the difference between one and two bays, the 2 bay was not required as the vertical, or downward, radiation pattern has no bearing on protection to the two co-channel LP FM facilities. The previously specified 2 bay antenna, is only for protection of the second adjacent, KKHH which is adequately protected by the one bay SWR FMPV antenna utilized.
- Please see the attached technical exhibit demonstrating no interference to any facility with the actual antenna utilized in compliance with 47 C.F.R 74.1204 (a) (3)

- Also please note the contours and interference analysis, performed using the computer program FM Commander and V-Soft Probe 4 utilizing NED 30 second terrain data, included in the attached technical exhibit.
- Of particular interest is Davis' mention of "checking out the signal in the Willowbrook area south Tomball and that it was 10 dB stronger than it should have" which is exceedingly vague. How did he "check out" the signal? Did he use a device to measure it? He lists no exact location, measurement details, equipment type, serial number, and calibration date, or methodology.

I have reviewed the statements made in the 172 odd complaints and find them vague at best. All appear to list areas that are well outside the 5.6 kilometer radius or 60 dBu F50-50 service contour of KEPH-LP. Most of these complaints are at distances of twice or more that of the expected reliable coverage of the LP FM facility. From the complaint letters I have reviewed, as well as the twenty-seven responses made when SIGA requested details from the complainants, all appear to be in automotive radios and in mobile situations that are well beyond the expected coverage of the LP-FM. The definition of F50-50 means that the specified signal level is available at 50% of the locations 50% of the time at a receive antenna height of 9 meters. Some of these complainants claim to have listened to the Calvary Chapel Southeast Houston LP FM more than 30 kilometers away from the licensed location. The common fact in all complaints is they are not in any exact location as they are in their cars, and the provided information is too vague. The policy of the FCC protects fixed locations and not mobile users! One would expect a LP FM with the equivalent contour to 100 Watts at a height above average terrain of 30 meters to have a very difficult time achieving any reliable coverage on a mobile radio more than several miles from the origin.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles W. Staples". The signature is stylized with a large, sweeping "C" and a long, horizontal stroke at the end.

Charles W. Staples

Technical Exhibit Case: 1800B3-PPD

Summary of Exhibit

SWR FMPV Pattern

K237GS BLFT0302ACV compared to K237GS BPFT0729AFT

K237GS Vertical Pattern no interference to KKHH

KEPH-LP FMOVER K237GS

KZLD-LP FMOVER K237GS

## Technical Exhibit Case: 1800B3-PPD

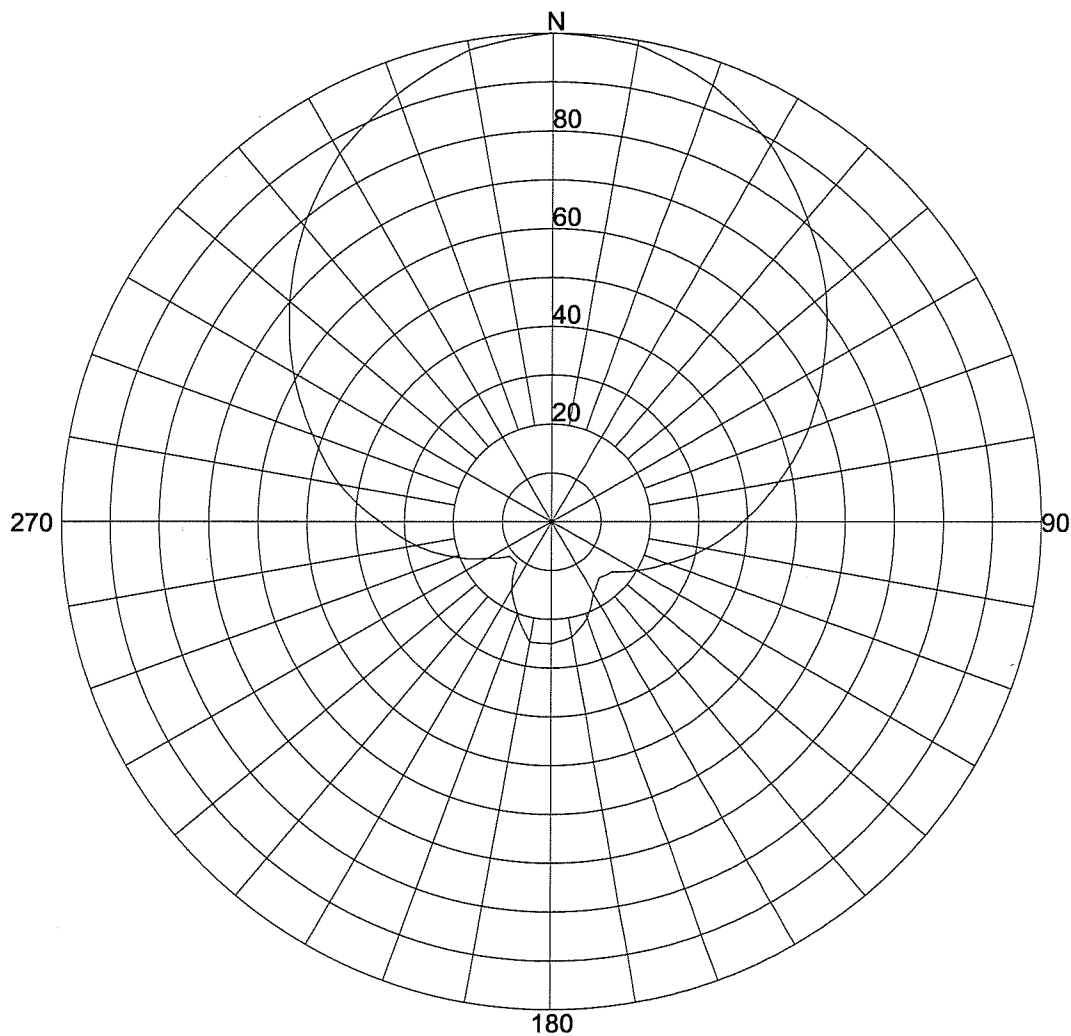
### SUMMARY OF EXHIBIT

The first pages demonstrate the pattern of the FMPV utilized to construct K237GS. This is followed by a map of the K237GS 40 dBu 50-10 interference contour and the two LP FM 60 dBu service contours, demonstrating compliance with 47 C.F.R 74.1204 (a) (3) with respect to the Co-channel LP FMs. The following page has a vertical radiation pattern of the FMPV that demonstrates compliance of this rule with respect to second adjacent KKHH. The 125.23 dBu 50-10 contour never reaches ground level. At the lowest point it is 43.78 meters above ground level.

FMOVER Reports for both KEPH-LP and KZLD-LP follow.



K237GS PATTERN EXHIBIT



**Azimuth Pattern**

Scale: Linear

Unit: Relative Field

## Systems With Reliability

CLIENT: *Charles Staples*

Date: 4/18/2017

ANTENNA TYPE: FMPCV

FREQUENCY: 95.3 MHz

PATTERN POL.: Circular

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 3.17586 / 5.02dB

PATTERN RMS: 0.561

## Relative Field Tabulation(Azimuth)

Azimuth Heading	Normalized Field(dB)	Azimuth Heading	Normalized Field(dB)
0	1.0000 ( 0 )	180	.2500 (-12.04 )
5	.9950 (-0.04 )	185	.2500 (-12.04 )
10	.9900 (-0.09 )	190	.2500 (-12.04 )
15	.9700 (-0.26 )	195	.2250 (-12.96 )
20	.9500 (-0.45 )	200	.2000 (-13.98 )
25	.9200 (-0.72 )	205	.1800 (-14.89 )
30	.8900 (-1.01 )	210	.1600 (-15.92 )
35	.8500 (-1.41 )	215	.1350 (-17.39 )
40	.8100 (-1.83 )	220	.1100 (-19.17 )
45	.7700 (-2.27 )	225	.1100 (-19.17 )
50	.7300 (-2.73 )	230	.1100 (-19.17 )
55	.6850 (-3.29 )	235	.1300 (-17.72 )
60	.6400 (-3.88 )	240	.1500 (-16.48 )
65	.6000 (-4.44 )	245	.1800 (-14.89 )
70	.5600 (-5.04 )	250	.2100 (-13.56 )
75	.5150 (-5.76 )	255	.2450 (-12.22 )
80	.4700 (-6.56 )	260	.2800 (-11.06 )
85	.4300 (-7.33 )	265	.3150 (-10.03 )
90	.3900 (-8.18 )	270	.3500 (-9.12 )
95	.3550 (-9 )	275	.3950 (-8.07 )
100	.3200 (-9.9 )	280	.4400 (-7.13 )
105	.2850 (-10.9 )	285	.4800 (-6.38 )
110	.2500 (-12.04 )	290	.5200 (-5.68 )
115	.2250 (-12.96 )	295	.5650 (-4.96 )
120	.2000 (-13.98 )	300	.6100 (-4.29 )
125	.1800 (-14.89 )	305	.6550 (-3.68 )
130	.1600 (-15.92 )	310	.7000 (-3.1 )
135	.1550 (-16.19 )	315	.7450 (-2.56 )
140	.1500 (-16.48 )	320	.7900 (-2.05 )
145	.1600 (-15.92 )	325	.8300 (-1.62 )
150	.1700 (-15.39 )	330	.8700 (-1.21 )
155	.1900 (-14.42 )	335	.9000 (-0.92 )
160	.2100 (-13.56 )	340	.9300 (-0.63 )
165	.2250 (-12.96 )	345	.9550 (-0.4 )
170	.2400 (-12.4 )	350	.9800 (-0.18 )
175	.2450 (-12.22 )	355	.9900 (-0.09 )

## Systems With Reliability

CLIENT: *Charles Staples*

Date: 4/18/2017

ANTENNA TYPE: FMPCV

FREQUENCY: 95.3 MHz

PATTERN POL.: Circular

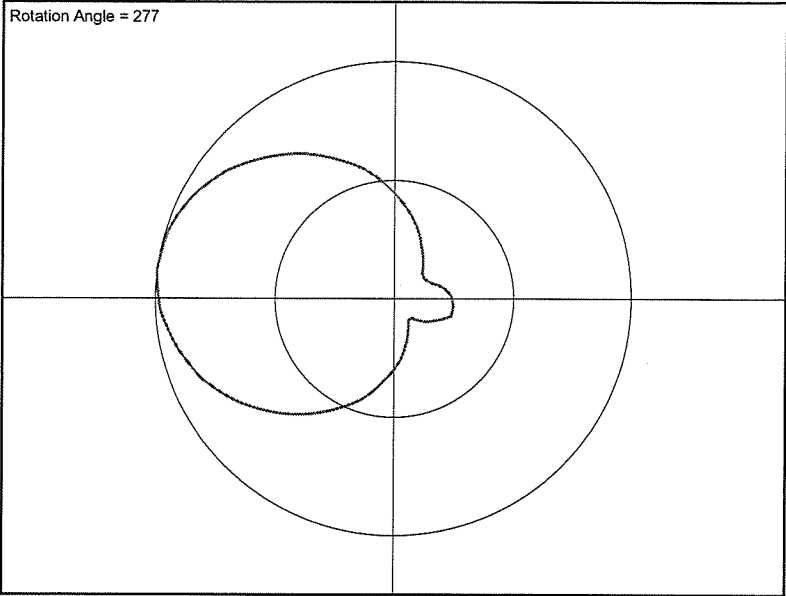
CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 3.17586 / 5.02dB

PATTERN RMS: 0.561

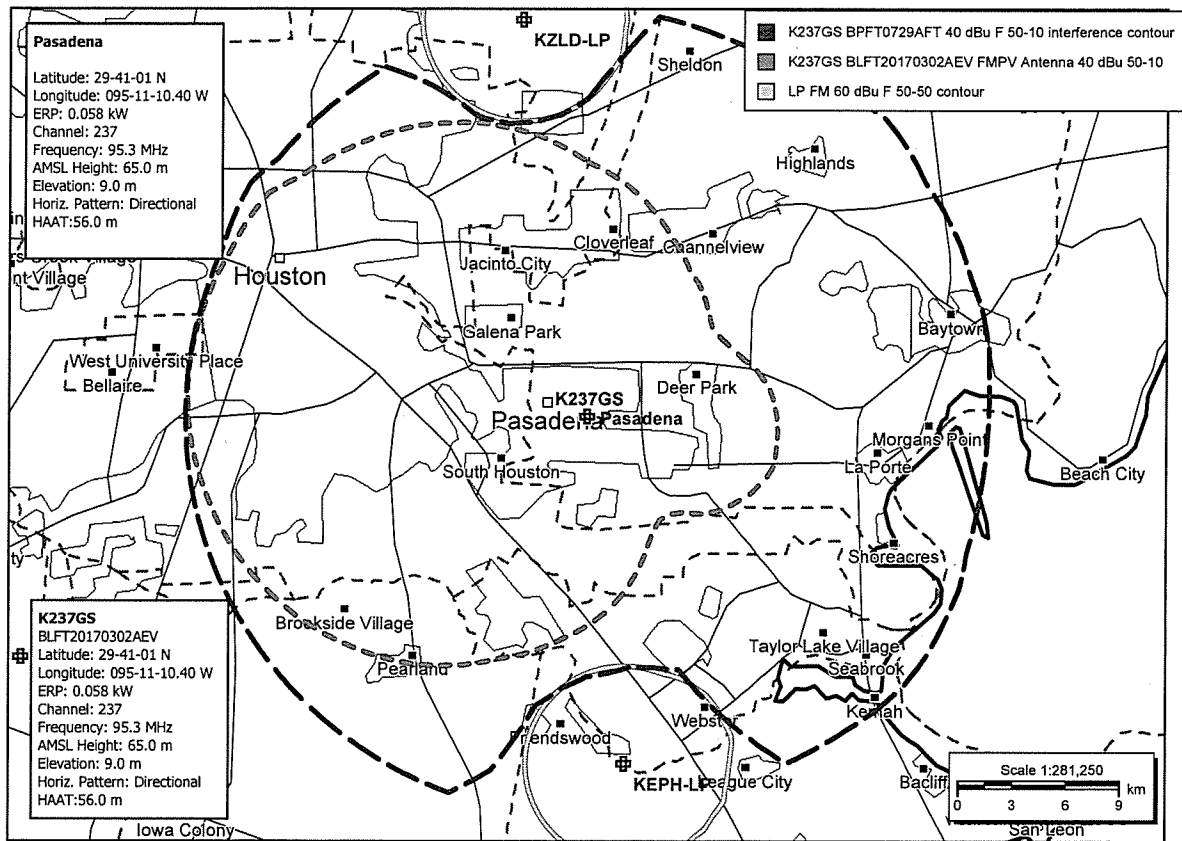
VsoftFMPV  
Post-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
5.0	0.995
10.0	0.99
15.0	0.97
20.0	0.95
25.0	0.92
30.0	0.89
35.0	0.85
40.0	0.81
45.0	0.77
50.0	0.73
55.0	0.685
60.0	0.64
65.0	0.6
70.0	0.56
75.0	0.515
80.0	0.47
85.0	0.43
90.0	0.39
95.0	0.355
100.0	0.32
105.0	0.285
110.0	0.25
115.0	0.225
120.0	0.2
125.0	0.18
130.0	0.16
135.0	0.155
140.0	0.15
145.0	0.16
150.0	0.17
155.0	0.19
160.0	0.21
165.0	0.225
170.0	0.24
175.0	0.245
180.0	0.25
185.0	0.25
190.0	0.25
195.0	0.225
200.0	0.2
205.0	0.18
210.0	0.16
215.0	0.135
220.0	0.11
225.0	0.11
230.0	0.11
235.0	0.13
240.0	0.15
245.0	0.18
250.0	0.21
255.0	0.245
260.0	0.28
265.0	0.315



270.0	0.35
275.0	0.395
280.0	0.44
285.0	0.48
290.0	0.52
295.0	0.565
300.0	0.61
305.0	0.655
310.0	0.7
315.0	0.745
320.0	0.79
325.0	0.83
330.0	0.87
335.0	0.9
340.0	0.93
345.0	0.955
350.0	0.98
355.0	0.99

K237GS BLFT0302ACV AND K237GS BPFT0729AFT  
MAPS



K237GS VERTICAL PATTERN NO INTERFERENCE TO  
KKHH

K237GS Pasadena, TX  
 74.1204(d) Showing  
 Translator Maximum Licensed ERP = 0.058  
 Translator Antenna Height AG = 59 Meters  
 K237GS Antenna Model = SWRFMPV\_1\_98\_MHZ\_MIDBAND

Protected Station's Contour = 85.23628 dBu  
 Translator's full Interference contour 125.23628

Review Azimuth = 277 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator ERP on the horizon at Review Azimuth = 0.058 kW  
 Distance between stations = 33.5 km  
 Protected Station= KHHH, 100 kW, 605 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0580	029.2348	029.2348	059.000
05.00	0.997	1.0	0.0577	029.1471	029.0362	056.460
10.00	0.986	1.0	0.0564	028.8255	028.3876	053.995
15.00	0.969	1.0	0.0545	028.3285	027.3632	051.668
20.00	0.946	1.0	0.0519	027.6561	025.9882	049.541
25.00	0.916	1.0	0.0487	026.7791	024.2701	047.683
30.00	0.879	1.0	0.0448	025.6974	022.2546	046.151
35.00	0.837	1.0	0.0406	024.4695	020.0443	044.965
40.00	0.789	1.0	0.0361	023.0662	017.6698	044.173
45.00	0.736	1.0	0.0314	021.5168	015.2147	043.785
50.00	0.679	1.0	0.0267	019.8504	012.7596	043.794
55.00	0.616	1.0	0.0220	018.0086	010.3293	044.248
60.00	0.55	1.0	0.0175	016.0791	008.0396	045.075
65.00	0.48	1.0	0.0134	014.0327	005.9305	046.282
70.00	0.408	1.0	0.0097	011.9278	004.0795	047.792
75.00	0.333	1.0	0.0064	009.7352	002.5197	049.597
80.00	0.241	1.0	0.0034	007.0456	001.2235	052.061
85.00	0.178	1.0	0.0018	005.2038	000.4535	053.816
90.00	0.1	1.0	0.0006	002.9235	000.0000	056.077

X-Field™ By V-Soft Communications@LLC



K237GS KEPH-LP FMOVER REPORT

05-02-2017      Terrain Data: FCC NGDC 30 Sec      FMOver Analysis

KEPH-LP    BLL20150730ACT

K237GS

Channel = 237L1  
 Max ERP = 0.088 kW  
 RCAMSL = 40 m  
 N. Lat. 29 30 32.0  
 W. Lng. 95 09 53.0  
 Protected  
 60 dBu

Channel = 237D  
 Max ERP = 0.058 kW  
 RCAMSL = 65 m  
 N. Lat. 29 41 01.0  
 W. Lng. 95 11 10.4  
 Interfering  
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
294.0	000.0880	0030.0	005.5	189.6	000.0081	0055.0	017.5	35.44	
295.0	000.0880	0030.0	005.5	189.5	000.0080	0055.0	017.4	35.50	
296.0	000.0880	0030.0	005.5	189.4	000.0080	0055.0	017.3	35.56	
297.0	000.0880	0030.0	005.5	189.3	000.0080	0055.0	017.2	35.62	
298.0	000.0880	0030.0	005.5	189.2	000.0079	0055.0	017.1	35.68	
299.0	000.0880	0030.0	005.5	189.1	000.0079	0055.0	017.0	35.73	
300.0	000.0880	0030.0	005.5	189.0	000.0079	0055.0	016.9	35.79	
301.0	000.0880	0030.0	005.5	188.9	000.0078	0055.0	016.8	35.84	
302.0	000.0880	0030.0	005.5	188.8	000.0078	0055.0	016.7	35.89	
303.0	000.0880	0030.0	005.5	188.6	000.0077	0055.0	016.6	35.94	
304.0	000.0880	0030.0	005.5	188.5	000.0077	0055.0	016.6	35.98	
305.0	000.0880	0030.0	005.5	188.3	000.0076	0055.0	016.5	36.03	
306.0	000.0880	0030.0	005.5	188.2	000.0075	0055.0	016.4	36.07	
307.0	000.0880	0030.0	005.5	188.0	000.0075	0055.0	016.3	36.10	
308.0	000.0880	0030.0	005.5	187.9	000.0074	0055.0	016.2	36.14	
309.0	000.0880	0030.0	005.5	187.7	000.0074	0055.0	016.1	36.17	
310.0	000.0880	0030.0	005.5	187.5	000.0073	0055.0	016.1	36.21	
311.0	000.0880	0030.0	005.5	187.3	000.0072	0055.0	016.0	36.23	
312.0	000.0880	0030.0	005.5	187.1	000.0072	0055.0	015.9	36.26	
313.0	000.0880	0030.0	005.5	186.9	000.0071	0055.0	015.8	36.29	
314.0	000.0880	0030.0	005.5	186.7	000.0070	0055.0	015.7	36.32	
315.0	000.0880	0030.0	005.5	186.5	000.0070	0055.0	015.7	36.35	

316.0	000.0880	0030.0	005.5		186.3	000.0069	0055.0	015.6	36.37
317.0	000.0880	0030.0	005.5		186.1	000.0068	0055.0	015.5	36.40
318.0	000.0880	0030.0	005.5		185.8	000.0068	0055.0	015.5	36.42
319.0	000.0880	0030.0	005.5		185.6	000.0067	0055.0	015.4	36.44
320.0	000.0880	0030.0	005.5		185.3	000.0066	0055.0	015.3	36.46
321.0	000.0880	0030.0	005.5		185.1	000.0066	0055.0	015.2	36.47
322.0	000.0880	0030.0	005.5		184.8	000.0065	0055.0	015.2	36.48
323.0	000.0880	0030.0	005.5		184.6	000.0064	0055.0	015.1	36.49
324.0	000.0880	0030.0	005.5		184.3	000.0064	0055.0	015.1	36.50
325.0	000.0880	0030.0	005.5		184.0	000.0063	0055.0	015.0	36.26
326.0	000.0880	0030.0	005.5		183.7	000.0062	0055.0	014.9	36.27
327.0	000.0880	0030.0	005.5		183.4	000.0061	0055.0	014.9	36.28
328.0	000.0880	0030.0	005.5		183.1	000.0060	0055.0	014.8	36.29
329.0	000.0880	0030.0	005.5		182.8	000.0060	0055.0	014.8	36.30
330.0	000.0880	0030.0	005.5		182.5	000.0059	0055.0	014.7	36.30
331.0	000.0880	0030.0	005.5		182.2	000.0058	0055.0	014.7	36.30
332.0	000.0880	0030.0	005.5		181.9	000.0057	0055.0	014.6	36.29
333.0	000.0880	0030.0	005.5		181.6	000.0056	0055.0	014.6	36.28
334.0	000.0880	0030.0	005.5		181.2	000.0056	0055.0	014.5	36.27
335.0	000.0880	0030.0	005.5		180.9	000.0055	0055.0	014.5	36.26
336.0	000.0880	0030.0	005.5		180.6	000.0054	0055.0	014.4	36.24
337.0	000.0880	0030.0	005.5		180.2	000.0053	0055.0	014.4	36.22
338.0	000.0880	0030.0	005.5		179.9	000.0052	0055.0	014.4	36.19
339.0	000.0880	0030.0	005.5		179.5	000.0051	0055.0	014.3	36.16
340.0	000.0880	0030.0	005.5		179.1	000.0050	0055.0	014.3	36.13
341.0	000.0880	0030.0	005.5		178.8	000.0050	0055.0	014.3	36.09
342.0	000.0880	0030.0	005.5		178.4	000.0049	0055.0	014.2	36.05
343.0	000.0880	0030.0	005.5		178.0	000.0048	0055.0	014.2	36.00
344.0	000.0880	0030.0	005.5		177.7	000.0047	0055.0	014.2	35.95
345.0	000.0880	0030.0	005.5		177.3	000.0046	0055.0	014.2	35.90
346.0	000.0880	0030.0	005.5		176.9	000.0045	0055.0	014.2	35.84
347.0	000.0880	0030.0	005.5		176.5	000.0044	0055.0	014.1	35.78
348.0	000.0880	0030.0	005.5		176.2	000.0044	0055.0	014.1	35.71
349.0	000.0880	0030.0	005.5		175.8	000.0043	0055.0	014.1	35.64
350.0	000.0880	0030.0	005.5		175.4	000.0042	0055.0	014.1	35.57
351.0	000.0880	0030.0	005.5		175.0	000.0041	0055.0	014.1	35.49
352.0	000.0880	0030.0	005.5		174.6	000.0040	0055.0	014.1	35.41
353.0	000.0880	0030.0	005.5		174.2	000.0039	0055.0	014.1	35.32
354.0	000.0880	0030.0	005.5		173.8	000.0039	0055.0	014.1	35.23
355.0	000.0880	0030.0	005.5		173.5	000.0038	0055.0	014.1	35.14
356.0	000.0880	0030.0	005.5		173.1	000.0037	0055.0	014.1	35.04
357.0	000.0880	0030.0	005.5		172.7	000.0036	0055.0	014.1	34.94

358.0	000.0880	0030.0	005.5		172.3	000.0035	0055.0	014.1	34.84
359.0	000.0880	0030.0	005.5		171.9	000.0035	0055.0	014.1	34.73
000.0	000.0880	0030.0	005.5		171.5	000.0034	0055.0	014.1	34.62
001.0	000.0880	0030.0	005.5		171.2	000.0033	0055.0	014.1	34.50
002.0	000.0880	0030.0	005.5		170.8	000.0032	0055.0	014.2	34.38
003.0	000.0880	0030.0	005.5		170.4	000.0032	0055.0	014.2	34.26
004.0	000.0880	0030.0	005.5		170.0	000.0031	0055.0	014.2	34.13
005.0	000.0880	0030.0	005.5		169.6	000.0030	0055.0	014.2	34.01
006.0	000.0880	0030.0	005.5		169.3	000.0030	0055.0	014.2	33.87
007.0	000.0880	0030.0	005.5		168.9	000.0029	0055.0	014.3	33.74
008.0	000.0880	0030.0	005.5		168.6	000.0028	0055.0	014.3	33.60
009.0	000.0880	0030.0	005.5		168.2	000.0028	0055.0	014.3	33.46
010.0	000.0880	0030.0	005.5		167.8	000.0027	0055.0	014.4	33.32
011.0	000.0880	0030.0	005.5		167.5	000.0026	0055.0	014.4	33.18
012.0	000.0880	0030.0	005.5		167.1	000.0026	0055.0	014.5	33.03
013.0	000.0880	0030.0	005.5		166.8	000.0025	0055.0	014.5	32.89
014.0	000.0880	0030.0	005.5		166.5	000.0025	0055.0	014.5	32.76
015.0	000.0880	0030.0	005.5		166.1	000.0024	0055.0	014.6	32.62
016.0	000.0880	0030.0	005.5		165.8	000.0024	0055.0	014.6	32.48
017.0	000.0880	0030.0	005.5		165.5	000.0023	0055.0	014.7	32.34
018.0	000.0880	0030.0	005.5		165.2	000.0023	0055.0	014.7	32.20
019.0	000.0880	0030.0	005.5		164.9	000.0023	0055.0	014.8	32.06
020.0	000.0880	0030.0	005.5		164.6	000.0022	0055.0	014.8	31.92
021.0	000.0880	0030.0	005.5		164.3	000.0022	0055.0	014.9	31.77
022.0	000.0880	0030.0	005.5		164.0	000.0021	0055.0	014.9	31.63
023.0	000.0880	0030.1	005.5		163.7	000.0021	0055.0	015.0	31.72
024.0	000.0880	0030.3	005.5		163.4	000.0021	0055.0	015.1	31.59
025.0	000.0880	0030.7	005.5		163.0	000.0020	0055.0	015.1	31.46
026.0	000.0880	0031.1	005.5		162.7	000.0020	0055.0	015.1	31.32
027.0	000.0880	0031.6	005.6		162.3	000.0019	0055.0	015.2	31.18
028.0	000.0880	0031.9	005.6		161.9	000.0019	0055.0	015.2	31.04
029.0	000.0880	0032.2	005.6		161.6	000.0018	0055.0	015.3	30.90
030.0	000.0880	0032.4	005.7		161.3	000.0018	0055.0	015.3	30.76
031.0	000.0880	0032.6	005.7		161.0	000.0018	0055.0	015.4	30.62
032.0	000.0880	0032.9	005.7		160.8	000.0017	0055.0	015.5	30.47
033.0	000.0880	0033.1	005.7		160.5	000.0017	0055.0	015.5	30.33
034.0	000.0880	0033.4	005.7		160.2	000.0017	0055.0	015.6	30.18
035.0	000.0880	0033.8	005.8		159.9	000.0016	0055.0	015.7	30.03
036.0	000.0880	0034.2	005.8		159.6	000.0016	0055.0	015.7	29.88
037.0	000.0880	0034.5	005.8		159.3	000.0016	0055.0	015.8	29.73
038.0	000.0880	0034.7	005.8		159.1	000.0015	0055.0	015.9	29.58
039.0	000.0880	0034.7	005.8		158.9	000.0015	0055.0	016.0	29.44

040.0	000.0880	0034.7	005.8		158.7	000.0015	0055.0	016.1	29.31
041.0	000.0880	0034.7	005.8		158.5	000.0015	0055.0	016.1	29.17
042.0	000.0880	0034.8	005.8		158.3	000.0014	0055.0	016.2	29.04
043.0	000.0880	0034.9	005.9		158.2	000.0014	0055.0	016.3	28.90
044.0	000.0880	0035.1	005.9		158.0	000.0014	0055.0	016.4	28.76
045.0	000.0880	0035.3	005.9		157.8	000.0014	0055.0	016.5	28.62
046.0	000.0880	0035.5	005.9		157.6	000.0014	0055.0	016.6	28.48
047.0	000.0880	0035.8	005.9		157.4	000.0013	0055.0	016.7	28.33
048.0	000.0880	0036.0	005.9		157.2	000.0013	0055.0	016.8	28.19
049.0	000.0880	0036.3	006.0		157.0	000.0013	0055.0	016.9	28.05
050.0	000.0880	0036.5	006.0		156.9	000.0013	0055.0	016.9	27.93
051.0	000.0880	0036.7	006.0		156.7	000.0013	0055.0	017.0	27.81
052.0	000.0880	0036.9	006.0		156.6	000.0013	0055.0	017.1	27.70
053.0	000.0880	0037.0	006.0		156.5	000.0013	0055.0	017.2	27.58

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## K237GS KZLD-LP FMOVER REPORT

05-02-2017 Terrain Data: FCC NGDC 30 Sec FMOVer Analysis

KZLD-LP BLL20170327ABN

K237GS Pasadena

Channel = 237L1  
Max ERP = 0.057 kW  
RCAMSL = 55 m  
N. Lat. 29 53 00.2  
W. Lng. 95 13 24.7  
Protected  
60 dBu

Channel = 237D  
Max ERP = 0.058 kW  
RCAMSL = 65 m  
N. Lat. 29 41 01.0  
W. Lng. 95 11 10.4  
Interfering  
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
111.0	000.0570	0047.9	006.2	006.1	000.0091	0056.9	020.1	34.02	
112.0	000.0570	0047.7	006.2	006.0	000.0092	0056.9	020.0	34.12	
113.0	000.0570	0047.5	006.1	005.9	000.0092	0056.8	019.9	34.22	
114.0	000.0570	0047.2	006.1	005.7	000.0093	0056.8	019.8	34.32	
115.0	000.0570	0046.9	006.1	005.6	000.0093	0056.8	019.7	34.43	
116.0	000.0570	0046.6	006.1	005.4	000.0094	0056.8	019.6	34.53	
117.0	000.0570	0046.5	006.1	005.3	000.0095	0056.8	019.5	34.63	
118.0	000.0570	0046.4	006.1	005.2	000.0095	0056.8	019.4	34.73	
119.0	000.0570	0046.5	006.1	005.0	000.0095	0056.7	019.3	34.83	
120.0	000.0570	0046.5	006.1	004.9	000.0096	0056.7	019.2	34.93	
121.0	000.0570	0046.4	006.1	004.8	000.0097	0056.7	019.2	35.03	
122.0	000.0570	0046.3	006.1	004.6	000.0097	0056.7	019.1	35.13	
123.0	000.0570	0046.1	006.0	004.4	000.0098	0056.7	019.0	35.23	
124.0	000.0570	0045.8	006.0	004.2	000.0099	0056.6	018.9	35.33	
125.0	000.0570	0045.4	006.0	004.0	000.0100	0056.6	018.8	35.43	
126.0	000.0570	0045.2	006.0	003.8	000.0100	0056.6	018.7	35.53	
127.0	000.0570	0045.0	006.0	003.6	000.0101	0056.6	018.7	35.63	
128.0	000.0570	0045.0	006.0	003.4	000.0102	0056.5	018.6	35.73	
129.0	000.0570	0045.0	006.0	003.2	000.0103	0056.5	018.5	35.83	
130.0	000.0570	0045.0	006.0	003.0	000.0103	0056.5	018.4	35.93	
131.0	000.0570	0045.1	006.0	002.8	000.0104	0056.5	018.3	36.03	
132.0	000.0570	0045.2	006.0	002.6	000.0105	0056.5	018.2	36.13	
133.0	000.0570	0045.2	006.0	002.4	000.0106	0056.4	018.1	36.23	

134.0	000.0570	0045.2	006.0		002.2	000.0106	0056.4	018.1	36.33
135.0	000.0570	0045.1	006.0		002.0	000.0107	0056.4	018.0	36.43
136.0	000.0570	0045.0	006.0		001.7	000.0108	0056.4	017.9	36.53
137.0	000.0570	0045.0	006.0		001.5	000.0109	0056.3	017.9	36.62
138.0	000.0570	0045.0	006.0		001.2	000.0110	0056.3	017.8	36.72
139.0	000.0570	0045.0	006.0		001.0	000.0111	0056.3	017.7	36.81
140.0	000.0570	0045.0	006.0		000.7	000.0112	0056.3	017.6	36.91
141.0	000.0570	0045.0	006.0		000.5	000.0113	0056.2	017.6	37.00
142.0	000.0570	0045.0	006.0		000.2	000.0114	0056.2	017.5	37.09
143.0	000.0570	0045.0	006.0		360.0	000.0116	0056.2	017.4	37.19
144.0	000.0570	0045.2	006.0		359.7	000.0117	0056.1	017.4	37.28
145.0	000.0570	0045.5	006.0		359.4	000.0118	0056.1	017.3	37.38
146.0	000.0570	0045.6	006.0		359.2	000.0119	0056.1	017.2	37.47
147.0	000.0570	0045.5	006.0		358.9	000.0120	0056.0	017.2	37.56
148.0	000.0570	0045.2	006.0		358.5	000.0122	0056.0	017.1	37.63
149.0	000.0570	0045.0	006.0		358.2	000.0123	0055.9	017.1	37.71
150.0	000.0570	0045.0	006.0		357.9	000.0124	0055.9	017.1	37.80
151.0	000.0570	0045.0	006.0		357.6	000.0126	0055.9	017.0	37.88
152.0	000.0570	0045.0	006.0		357.3	000.0127	0055.8	017.0	37.96
153.0	000.0570	0045.0	006.0		357.0	000.0128	0055.8	016.9	38.04
154.0	000.0570	0045.0	006.0		356.6	000.0130	0055.8	016.9	38.13
155.0	000.0570	0045.0	006.0		356.3	000.0132	0055.8	016.8	38.22
156.0	000.0570	0045.0	006.0		356.0	000.0133	0055.9	016.8	38.31
157.0	000.0570	0045.1	006.0		355.6	000.0135	0055.9	016.8	38.41
158.0	000.0570	0045.3	006.0		355.3	000.0137	0056.0	016.7	38.51
159.0	000.0570	0045.7	006.0		355.0	000.0138	0056.0	016.7	38.62
160.0	000.0570	0046.2	006.0		354.7	000.0140	0056.1	016.6	38.73
161.0	000.0570	0046.5	006.1		354.3	000.0142	0056.1	016.6	38.83
162.0	000.0570	0046.6	006.1		354.0	000.0143	0056.2	016.5	38.92
163.0	000.0570	0046.5	006.1		353.6	000.0145	0056.2	016.5	39.00
164.0	000.0570	0046.3	006.1		353.3	000.0147	0056.3	016.5	39.07
165.0	000.0570	0046.0	006.0		352.9	000.0149	0056.3	016.5	39.13
166.0	000.0570	0045.8	006.0		352.5	000.0151	0056.4	016.5	39.19
167.0	000.0570	0045.8	006.0		352.1	000.0153	0056.4	016.5	39.26
168.0	000.0570	0046.0	006.0		351.8	000.0155	0056.3	016.5	39.32
169.0	000.0570	0046.2	006.0		351.4	000.0157	0056.3	016.5	39.38
170.0	000.0570	0046.1	006.0		351.1	000.0159	0056.2	016.5	39.43
171.0	000.0570	0045.9	006.0		350.7	000.0161	0056.1	016.5	39.46
172.0	000.0570	0045.8	006.0		350.3	000.0163	0056.1	016.5	39.50
173.0	000.0570	0045.6	006.0		350.0	000.0165	0056.0	016.5	39.53
174.0	000.0570	0045.7	006.0		349.6	000.0167	0056.0	016.5	39.57
175.0	000.0570	0045.7	006.0		349.2	000.0169	0055.9	016.5	39.61



176.0	000.0570	0045.7	006.0		348.9	000.0171	0055.9	016.5	39.64
177.0	000.0570	0045.6	006.0		348.5	000.0173	0055.8	016.5	39.67
178.0	000.0570	0045.6	006.0		348.2	000.0175	0055.8	016.6	39.70
179.0	000.0570	0045.6	006.0		347.8	000.0177	0055.7	016.6	39.73
180.0	000.0570	0045.6	006.0		347.4	000.0179	0055.7	016.6	39.76
181.0	000.0570	0045.5	006.0		347.1	000.0181	0055.7	016.6	39.78
182.0	000.0570	0045.3	006.0		346.8	000.0183	0055.7	016.7	39.79
183.0	000.0570	0045.1	006.0		346.4	000.0185	0055.8	016.7	39.80
184.0	000.0570	0045.0	006.0		346.1	000.0187	0055.8	016.7	39.81
185.0	000.0570	0045.0	006.0		345.8	000.0188	0055.8	016.8	39.82
186.0	000.0570	0045.0	006.0		345.4	000.0190	0055.8	016.8	39.84
187.0	000.0570	0045.0	006.0		345.1	000.0192	0055.8	016.9	39.85
188.0	000.0570	0045.0	006.0		344.8	000.0194	0055.9	016.9	39.86
189.0	000.0570	0045.0	006.0		344.4	000.0195	0055.9	016.9	39.86
190.0	000.0570	0045.0	006.0		344.1	000.0197	0055.9	017.0	39.87
191.0	000.0570	0045.0	006.0		343.8	000.0199	0056.0	017.0	39.87
192.0	000.0570	0045.0	006.0		343.5	000.0201	0056.0	017.1	39.87
193.0	000.0570	0045.0	006.0		343.2	000.0202	0056.0	017.1	39.87
194.0	000.0570	0045.0	006.0		342.9	000.0204	0056.1	017.2	39.86
195.0	000.0570	0045.0	006.0		342.6	000.0205	0056.1	017.2	39.85
196.0	000.0570	0045.0	006.0		342.3	000.0207	0056.1	017.3	39.84
197.0	000.0570	0045.0	006.0		342.0	000.0209	0056.1	017.4	39.83
198.0	000.0570	0045.0	006.0		341.7	000.0210	0056.2	017.4	39.81
199.0	000.0570	0045.0	006.0		341.5	000.0212	0056.2	017.5	39.80
200.0	000.0570	0045.1	006.0		341.2	000.0213	0056.2	017.5	39.78
201.0	000.0570	0045.0	006.0		340.9	000.0215	0056.3	017.6	39.76
202.0	000.0570	0045.1	006.0		340.7	000.0216	0056.3	017.7	39.73
203.0	000.0570	0045.2	006.0		340.4	000.0218	0056.3	017.7	39.71
204.0	000.0570	0045.3	006.0		340.1	000.0219	0056.3	017.8	39.69
205.0	000.0570	0045.3	006.0		339.9	000.0221	0056.3	017.9	39.65
206.0	000.0570	0045.1	006.0		339.7	000.0222	0056.4	018.0	39.61
207.0	000.0570	0045.0	006.0		339.5	000.0223	0056.4	018.0	39.56
208.0	000.0570	0045.0	006.0		339.3	000.0224	0056.4	018.1	39.52
209.0	000.0570	0045.0	006.0		339.1	000.0225	0056.4	018.2	39.48
210.0	000.0570	0045.0	006.0		338.9	000.0227	0056.4	018.3	39.44
211.0	000.0570	0045.0	006.0		338.7	000.0228	0056.4	018.4	39.39
212.0	000.0570	0045.0	006.0		338.5	000.0229	0056.4	018.4	39.34
213.0	000.0570	0045.0	006.0		338.3	000.0230	0056.4	018.5	39.29
214.0	000.0570	0045.0	006.0		338.1	000.0231	0056.4	018.6	39.24
215.0	000.0570	0045.0	006.0		337.9	000.0232	0056.4	018.7	39.18
216.0	000.0570	0045.0	006.0		337.7	000.0233	0056.4	018.8	39.12
217.0	000.0570	0045.0	006.0		337.6	000.0234	0056.4	018.9	39.06

218.0	000.0570	0045.0	006.0		337.4	000.0235	0056.4	019.0	39.00
219.0	000.0570	0045.0	006.0		337.3	000.0236	0056.4	019.1	38.94
220.0	000.0570	0045.0	006.0		337.1	000.0237	0056.3	019.1	38.88
221.0	000.0570	0045.0	006.0		337.0	000.0238	0056.3	019.2	38.82
222.0	000.0570	0045.0	006.0		336.8	000.0239	0056.3	019.3	38.75
223.0	000.0570	0045.0	006.0		336.7	000.0239	0056.3	019.4	38.69
224.0	000.0570	0045.0	006.0		336.6	000.0240	0056.3	019.5	38.62
225.0	000.0570	0045.0	006.0		336.5	000.0241	0056.3	019.6	38.55
226.0	000.0570	0045.0	006.0		336.4	000.0242	0056.3	019.7	38.48
227.0	000.0570	0045.0	006.0		336.3	000.0242	0056.3	019.8	38.41
228.0	000.0570	0045.0	006.0		336.2	000.0243	0056.3	019.9	38.34
229.0	000.0570	0045.0	006.0		336.1	000.0244	0056.3	020.0	38.27
230.0	000.0570	0045.0	006.0		336.0	000.0244	0056.3	020.1	38.20

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