
From: Sangjin Han]
Sent: Friday, July 03, 2009 9:45 AM
To: 'PCTEST TCB/CB'
Subject: RE: Questions Regarding FCC ID: BEJLTGEN90L

Dear Mr. Gregory Czumak

Thank you for your comment of BEJLTGEN90L.

I would like to provide additional information as below.

1. Please provide a photo/drawing showing the proposed location of the FCC ID label.
→ Per Gen9, FCC ID label locates as shown in Operational Description.doc page 12.
2. The licensed transmitter Block Diagram does not show the values of the clocks/oscillators. Please revise and resubmit.
→ Sleep crystal and TCXO are added.
3. Please submit an Operational Description of the licensed transmitter that describes the RF operation of the EUT.
→ Operational description of the licensed transmitter is described in Operational Description.doc
4. What antenna(s) are marketed for use with the BT transmitter? Is it an internal antenna? What is its gain?
→ External Bluetooth antenna is connected to the FAKRA connector of the EUT.
External antenna is passive antenna and its gain is $-3\text{dBi} < \text{BT antenna gain} < 0\text{dBi}$
5. Please submit the Schematic Diagrams of the BT transmitter.
→ Schematic Diagrams of the BT transmitter is added in Operational Description.doc
6. Please submit the Block Diagram of the BT transmitter.
→ Block Diagram of the BT transmitter is added in Operational Description.doc
7. Please submit the Operational Description of the BT transmitter.
→ Operational Description of the BT transmitter is added in Operational Description.doc
8. The User's Manual does not contain the statements required by Sections 15.19 and 15.21, nor does it contain the required RFx warning statement.
Please revise and resubmit.
→ Sections 15.19 and 15.21 are included in Users Manual for LG Telematics.pdf
9. What antenna is used for the licensed transmitter? Is this the only antenna to be used with the EUT?
Is it provided with the EUT? If there is a specific antenna intended for use, how is this controlled?
How are the installers informed of this? The User's Manual should contain this additional information. Please address.
→ External CDMA/GPS antenna is used for EUT and it is provided with GMonstar.
GMonstar supports all of the installation

Thank you
Best regards
Sangjin Han

From: PCTEST TCB/CB
Sent: Wednesday, July 01, 2009 4:12 AM
To: LGE - Sangjin Han
Subject: Questions Regarding FCC ID: BEJLTGEN90L

To: Mr. Sangjin Han / LG Electronics Inc.
From: Mr. Gregory Czumak / PCTEST TCB

RE: FCC ID: BEJLTGEN90L

Applicant: LG Electronics Inc.

Correspondence Reference Number: BEJ90481
Confirmation Number: 904240481-82
Date of Original Email: June 30, 2009

Subject: Request for additional information

In regards to your recent TCB application referenced above, we kindly request that you provide the following additional information.

1. Please provide a photo/drawing showing the proposed location of the FCC ID label.
2. The licensed transmitter Block Diagram does not show the values of the clocks/oscillators. Please revise and resubmit.
3. Please submit an Operational Description of the licensed transmitter that describes the RF operation of the EUT.
4. What antenna(s) are marketed for use with the BT transmitter? Is it an internal antenna? What is its gain?
5. Please submit the Schematic Diagrams of the BT transmitter.
6. Please submit the Block Diagram of the BT transmitter.
7. Please submit the Operational Description of the BT transmitter.
8. The User's Manual does not contain the statements required by Sections 15.19 and 15.21, nor does it contain the required RFx warning statement. Please revise and resubmit.

9. What antenna is used for the licensed transmitter? Is this the only antenna to be used with the EUT? Is it provided with the EUT? If there is a specific antenna intended for use, how is this controlled? How are the installers informed of this? The User's Manual should contain this additional information. Please address.

The item indicated above must be submitted before processing can continue on the above referenced application.

Sincerely,
Gregory Czumak
Senior Certification Engineer
Quality Manager

PCTEST Engineering Laboratory, Inc.
6660-B Dobbin Road
Columbia, MD 21045
410-290-6652
410-290-6654 (Fax)
gregory@pctestlab.com

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From: Sangjin Han
Sent: Thursday, July 09, 2009 10:11 AM
To: 'PCTEST TCB/CB'
Subject: RE: Follow-Up Questions for FCC ID: BEJLTGEN90L

Dear Mr. Gregory Czumak

I am very appreciate your comment and I would like to provide additional information as below.

1. Thank you for your email.

Regarding your response to question #4, please confirm the antenna used with the BT is the same as the antenna sent for testing purposes.

Also, please confirm that this is the GIS-91A model.

→ GIS-91A model is the CDMA/GPS Antenna. I did not send the BT antenna by my mistake.

I thought PCTEST have the BT antenna because same as Gen8 BT antenna.

I will send the BT antenna immediately, if you confirm.

2. Regarding your response to question #6, the BT Block Diagram does not show the clock/oscillator values. Please revise and resubmit.

→ Clock value information is updated in the document. (Operational Description[Gen90L].doc)

3. Regarding your response to question #7, the Operational Description does not describe the RF operation of the BT transmitter.

Please revise and resubmit.

→ For BT operation of the BT transmitter, I would like to send more details of BT operation file. BT operational description_Gen90L.doc

4. Regarding your response to question #8, in the LG Telematics manual, the Section 15.21 statement is incomplete.

In addition, it does not provide the installers with the required RFx installation requirements (including minimum separation distance and maximum permitted antenna gains per band), nor does it instruct the OEM to include all of the required FCC information in their User's Manual (the OnStar manual does not contain any of the required info). Please revise and resubmit.

→ I would like to carefully request about the samples. Because I am not understand your comment.

But, I would like to send revised version. User manual for FCC_Gen90L.doc

I can not revised the Onstar manual, so I make the User manual for FCC_Gen90L.doc

Thank you
Best regards
Sangjin Han

From: PCTEST TCB/CB
Sent: Tuesday, July 07, 2009 11:22 AM
To: LGE - Sangjin Han

Subject: Follow-Up Questions for FCC ID: BEJLTGEN90L

To: Mr. Sangjin Han / LG Electronics Inc.

From: Mr. Gregory Czumak / PCTEST TCB

RE: FCC ID: BEJLTGEN90L

Applicant: LG Electronics Inc.

Correspondence Reference Number: BEJ90481-A

Confirmation Number: 904240481-82

Date of Original Email: July 6, 2009

Subject: Follow-up information

1. Thank you for your email. Regarding your response to question #4, please confirm the antenna used with the BT is the same as the antenna sent for testing purposes. Also, please confirm that this is the GIS-91A model.
2. Regarding your response to question #6, the BT Block Diagram does not show the clock/oscillator values. Please revise and resubmit.
3. Regarding your response to question #7, the Operational Description does not describe the RF operation of the BT transmitter. Please revise and resubmit.
4. Regarding your response to question #8, in the LG Telematics manual, the Section 15.21 statement is incomplete. In addition, it does not provide the installers with the required RFx installation requirements (including minimum separation distance and maximum permitted antenna gains per band), nor does it instruct the OEM to include all of the required FCC information in their User's Manual (the OnStar manual does not contain any of the required info). Please revise and resubmit.

The item indicated above must be submitted before processing can continue on the above referenced application.

Sincerely,

Gregory Czumak
Senior Certification Engineer
Quality Manager

PCTEST Engineering Laboratory, Inc.
6660-B Dobbin Road
Columbia, MD 21045
410-290-6652
410-290-6654 (Fax)
gregory@pctestlab.com

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From: Sangjin Han
Sent: Wednesday, July 15, 2009 2:43 AM
To: 'PCTEST - Gregory Czumak'
Subject: RE: Follow-Up Questions for FCC ID: BEJLTGEN90L

Dear Gregory and Channy Park.

Thank you for help and comment.

I would like to update the Onstar manual which is added to warn the user/installer of correct installation.
Onstar manual complying with the RF Exposure requirements .

"In order to comply with RF Exposure requirements the antenna or radiating element of this device must be installed to ensure that it is at least 20cm from end users. The antenna supplied with this device must not exceed a maximum gain of 9.74dBi in the cellular band and 8.25dBi in the PCS band."

Please refer to the attached final package file.

Thank you
Best regards
Sangjin Han

From: Sangjin Han
Sent: Monday, July 13, 2009 10:16 PM
To: 'PCTEST - Gregory Czumak'
Subject: RE: Follow-Up Questions for FCC ID: BEJLTGEN90L

Dear Gregory and Channy Park.

I would like to response for BT antenna

I send the BT antenna last Friday. (Receiver : Channy Park, UPS Tracking # = H8283109675)
You will be received Monday or Tuesday.

Per #4 I will response until tomorrow morning after review.

Thank you
Best regards
Sangjin Han

From: PCTEST TCB/CB
Sent: ~~Friday, July 10, 2009 11:30 AM~~
To: 'Sangjin Han'
Subject: RE: Follow-Up Questions for FCC ID: BEJLTGEN90L

Dear Mr. Han.

Thank you for your email.

Please see below our responses with additional follow-up questions in red.

If you have any questions, please do not hesitate to contact us. Thank you.

Sincerely,
PCTEST TCB



Tel. 1.410.290.6652

Fax. 1.410.290.6654

pctesttcb@pctestlab.com

www.pctesttcb.com

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From: Sangjin Han
Sent: Thursday, July 09, 2009 10:11 AM
To: 'PCTEST TCB/CB'
Subject: RE: Follow-Up Questions for FCC ID: BEJLTGEN90L

Dear Mr. Gregory Czumak

I am very appreciate your comment and I would like to provide additional information as below.

1. Thank you for your email.

Regarding your response to question #4, please confirm the antenna used with the BT is the same as the antenna sent for testing purposes.

Also, please confirm that this is the GIS-91A model.

→ GIS-91A model is the CDMA/GPS Antenna. I did not send the BT antenna by my mistake.

I thought PCTEST have the BT antenna because same as Gen8 BT antenna.

I will send the BT antenna immediately, if you confirm.

As this is a Part 15 intentional radiator we will need the actual antenna to be used with the BT. Please send the BT antenna asap so that we may perform the testing.

2. Regarding your response to question #6, the BT Block Diagram does not show the clock/oscillator values. Please revise and resubmit.

→ Clock value information is updated in the document. (Operational Description[Gen90L].doc)

The revised operational description now has the BT block diagram with the crystal value listed below the diagram. Please use this for the BT Block Diagram.

3. Regarding your response to question #7, the Operational Description does not describe the RF operation of the BT transmitter.

Please revise and resubmit.

→ For BT operation of the BT transmitter, I would like to send more details of BT operation file. BT operational description_Gen90L.doc

Additional information has been provided on the operational description of the BT although it is more of a technical specification than description. But it is descriptive enough for BT operation.

4. Regarding your response to question #8, in the LG Telematics manual, the Section 15.21 statement is incomplete.

In addition, it does not provide the installers with the required RFx installation requirements (including minimum separation distance and maximum permitted antenna gains per band), nor does it instruct the OEM to include all of the required FCC information in their User's Manual (the OnStar manual does not contain any of the required info). Please revise and resubmit.

→ I would like to carefully request about the samples. Because I am not understand your comment.

But, I would like to send revised version. User manual for FCC_Gen90L.doc

I can not revised the Onstar manual, so I make the User manual for FCC_Gen90L.doc

I hope to clarify what is required.

The LG Telematics manual needs the complete Section 15.21 statement as shown in the FCC_Gen90L.doc that you supplied. The original only had a partial statement. As this information is also required in the Onstar manual please confirm that the FCC_Gen90L.doc will be provided to the end user as a manual supplement.

The LG Telematics manual also needs to warn the user/installer of correct installation for complying with the RF Exposure requirements. A statement similar to:

"In order to comply with RF Exposure requirements the antenna or radiating element of this device must be installed to ensure that it is at least 20cm from end users. The antenna supplied with this device must not exceed a maximum gain of 9.74dBi in the cellular band and 8.25dBi in the PCS band."

Thank you
Best regards
Sangjin Han

From: PCTEST TCB/CB

Sent: Tuesday, July 07, 2009 11:22 AM

To: LGE - Sangjin Han

Subject: Follow-Up Questions for FCC ID: BEJLTGEN90L

To: Mr. Sangjin Han / LG Electronics Inc.

From: Mr. Gregory Czumak / PCTEST TCB

RE: FCC ID: BEJLTGEN90L

Applicant: LG Electronics Inc.

Correspondence Reference Number: BEJ90481-A
Confirmation Number: 904240481-82
Date of Original Email: July 6, 2009

Subject: Follow-up information

1. Thank you for your email. Regarding your response to question #4, please confirm the antenna used with the BT is the same as the antenna sent for testing purposes. Also, please confirm that this is the GIS-91A model.
2. Regarding your response to question #6, the BT Block Diagram does not show the clock/oscillator values. Please revise and resubmit.
3. Regarding your response to question #7, the Operational Description does not describe the RF operation of the BT transmitter. Please revise and resubmit.
4. Regarding your response to question #8, in the LG Telematics manual, the Section 15.21 statement is incomplete. In addition, it does not provide the installers with the required RFx installation requirements (including minimum separation distance and maximum permitted antenna gains per band), nor does it instruct the OEM to include all of the required FCC information in their User's Manual (the OnStar manual does not contain any of the required info). Please revise and resubmit.

The item indicated above must be submitted before processing can continue on the above referenced application.

Sincerely,

Gregory Czumak
Senior Certification Engineer
Quality Manager

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