

FCC MPE Calculation (Portable Device)

EUT Description: 3D Glasses
Company: LG Electronics USA
Model: AG-S350
FCC ID: BEJS350

Typical distance or use: < 2.5 cm
Mobile position: head
Frequency: 2402-2480 MHz (79 channels)
Modulation: FHSS (GFSK)
Mid-Channel: 2.441 GHz (channel 39)
Mid-Channel Peak Power, Conducted: 1.31 dBm == 1.35 mW
Antenna Gain: G = 3.6 dBi

For devices intended for the **General Population** and used in an **uncontrolled** manner, routine evaluation (SAR) for this device is not required, because the source-based time-averaged power (average conducted power or average radiated EIRP, whichever is the highest) is below the:

- ☒ Low threshold of $60/f$ for distances < 2.5 cm.
- ☐ High threshold of $60/f$ for distances < 20 cm.

Calculation:

$$\text{Limit} = 60/2.441 = \underline{24.58 \text{ mW}}$$

$$P_{\text{radiated, max}} = P_{\text{conducted, dBm}} + G_{\text{dBi}} = 1.31 \text{ dBm} + 3.6 \text{ dBi} == 4.91 \text{ dBm} = \underline{3.1 \text{ mW}}$$

Conclusion:

The emitted power appears to be (far) below the required limit, so PASS.

Note 1: f shall be the mid-band frequency expressed in GHz; the limit calculated with this mid-band frequency applies to all channels. For PTT with body-worn or face-held modes, d is the distance from the device case to a person's body; for modules with antennas inside laptops, d is the distance from the antenna to the person's body.

Note 2: Average Power levels are always equal or below the measured Peak Power levels, which means that calculating the EIRP using the Peak power can be considered as worst case.)