

Certification Exhibit

FCC ID: VPYLB1CK982

FCC Rule Part: 47 CFR Part 2.1091

ACS Project Number: 16-0186

Manufacturer: Murata Manufacturing Co., Ltd.
Model: LBEE5ZZ1CK-982

RF Exposure

General Information:

Applicant: Murata Manufacturing Co., Ltd.
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: PCB Trace Antenna
 Maximum Antenna Gain: 0 dBi
 Maximum Transmitter Conducted Power: 17.46 dBm, 0.056 mW
 Maximum System EIRP: 17.46 dBm, 0.056 mW
 Exposure Conditions: 20 centimeters or greater

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
2462	17.46	1.00	55.72	0	1.000	20	0.011
2480	4.23	1.00	2.65	0	1.000	20	0.001
2480	10.75	1.00	11.89	0	1.000	20	0.002
5260	12.74	1.00	18.79	0.7	1.175	20	0.004