

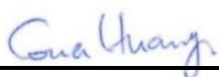
RF EXPOSURE EVALUATION REPORT

Equipment : CC2745R10-Q1 LaunchPad™ Development Kit
Brand Name : Texas Instruments
Model Name : LP-EM-CC2745R10-Q1
Marketing Name : LP-EM-CC2745R10-Q1
Applicant : Texas Instruments Incorporated
12500 TI BLVD., Dallas, Texas, 75243
Manufacturer : Texas Instruments Incorporated
12500 TI BLVD., Dallas, Texas, 75243
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA4O0417	Rev. 01	Initial issue of report	Dec. 24, 2024

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	CC2745R10-Q1 LaunchPad™ Development Kit
Brand Name	Texas Instruments
Model Name	LP-EM-CC2745R10-Q1
Marketing Name	LP-EM-CC2745R10-Q1
Wireless Technology and Frequency Range	Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	Bluetooth LE

Reviewed by: Jason Wang**Report Producer: Daisy Peng****2. Maximum RF average output power among production units**

Band / Mode	Average Power (dBm)			
	LE			
	1Mbps	2Mbps	125kbps	500kbp
Bluetooth_5dBm	4.62	4.64	4.83	4.89

Band / Mode	Average Power (dBm)			
	LE			
	1Mbps	2Mbps	125kbps	500kbp
Bluetooth_10dBm	9.70	9.69	9.83	9.80

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
Bluetooth	3.30	9.83	13.1	20.56	0.004	1.000

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.