

Climax Technology Co Ltd
No. 258, Sinhu 2nd Rd., Neihu District Taipei City 114 Taiwan

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: Smoke Detector
Model No: SDx-xxxxx-xxxxx Series (x=0~9, A~Z or blank)

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product : Smoke Detector will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21610-16311-C-1 and the accompanying calculations.

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Address: No. 258, Sinhu 2nd Rd., Neihu District Taipei City 114 Taiwan

Date: 2016-10-19

Signature

George Lin



Registration number: W6M21610-16311-C-1
 FCC ID: GX9SD16ZB

3.2 RF Exposure Compliance Requirements

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain (Directional gain)
 EIRP = 12.14 dBm + 2.3 dBi
 = 14.44 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 055

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

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

- S – Power Density
- P – Output power ERP
- R – Distance
- D – Cable Loss
- AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	16.3682	Peak value
D	dB		
AG	dBi	2.3	
G		1.7	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.0055	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm ²)
1500 – 100.000	1.0