

Operation Description

FCC ID: 2BWEQ-X2033

This product is a **Face Recognition Terminal** with 2.4GWIFI/NFC function.

The EUT works on the RF Chip RTL8189FTV ,26MHz

Detail as follows:

Description of Device (EUT)

EUT	: Face Recognition Terminal
Test Model	: X2033
Ratings	: Input: 12.0V==2.0A For AC Adapter: Input: 100-240V~, 50/60Hz, 0.8A Output: 12.0V==2.0A, 24.0W MAX
Hardware Version	: /
Software Version	: /
WIFI(2.4G Band)	:
Frequency Range	: 2412MHz~2462MHz
Channel Number	: 11 Channels for 20MHz bandwidth(2412~2462MHz) 7 Channels for 40MHz bandwidth(2422~2452MHz)
Channel Spacing	: 5MHz
Modulation Type	: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: FPC Antenna, 1.96dBi(max.)
Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.	
NFC	:
Operating Frequency	: 13.56MHz
Modulation Type	: ASK
Antenna Description	: Internal Antenna

WLAN and NFC share difference modular and antenna, WLAN and NFC can support simultaneously transmission.

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Output Power (dBm)
IEEE 802.11b	1	2412	14.35
	6	2437	13.68
	11	2462	12.81
IEEE 802.11g	1	2412	12.53
	6	2437	12.03
	11	2462	11.32

IEEE 802.11n HT20	1	2412	12.72
	6	2437	12.27
	11	2462	11.55
IEEE 802.11n HT40	3	2422	12.13
	6	2437	11.31
	9	2452	11.7

Test Procedure

TX frequency range: 13.56MHz, Limit: $824/13.56=60.77\text{V/m}$

Device category: Mobile device

(Distance: 20cm)

Max. Field Strength:

55.55dBuV/m @3m

@20cm=@3m+40*log(3/0.2)=102.

59dBuV/m

For 13.56MHz: $102.59\text{dBuV/m}=10^{(102.59/20)}/10^6=0.135\text{V/m}< 60.77\text{V/m}$