

Comparison Document

The EUT (Product Name: Solar Luminaire Controller, Model: 26-0015) is a system-level product that integrates multiple wireless communication modules. The EUT's wireless module is completely consistent with the certified module. The specific correlation factors are as follows:

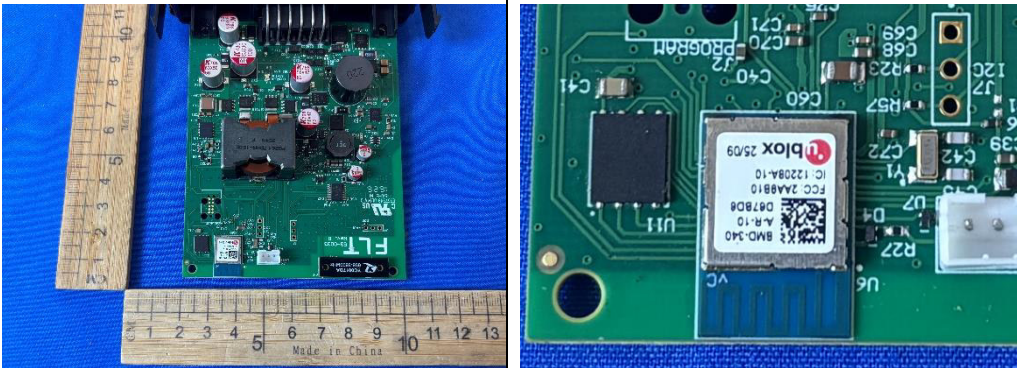
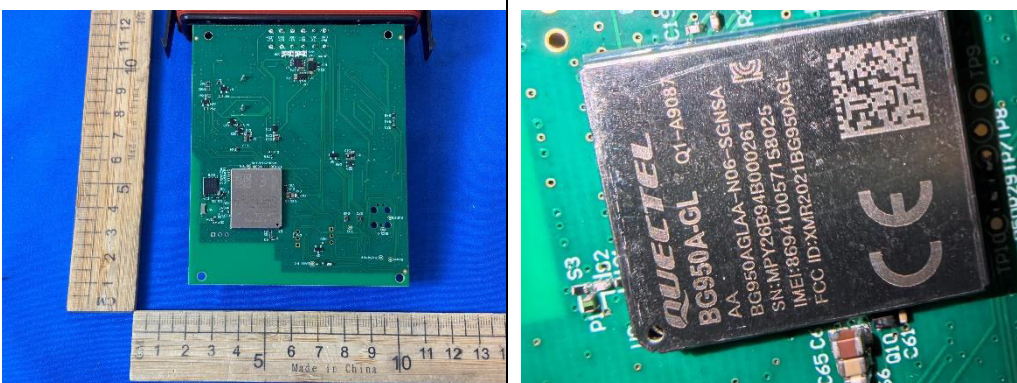
1. Bluetooth section (BLE – 2.4GHz): hardware consistency and RF parameter consistency;
2. LTE section: hardware consistency and key RF parameter consistency.

Wireless module(Bluetooth)	Modulation	Frequency Range(s)
BMD-340	GFSK, Q-QPSK	2402 MHz to 2480 MHz

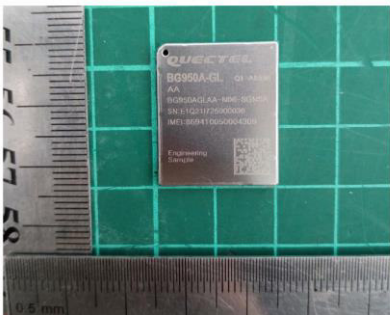
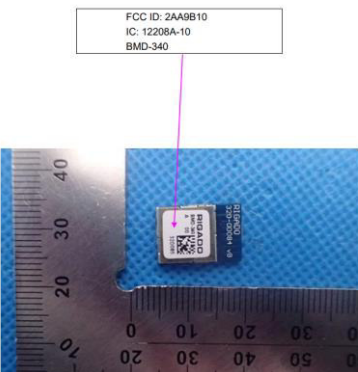
	Modulation	Band	Frequency Range(s)	
			TX (MHz)	Rx (MHz)
Wireless module(LTE) BG950A-GL	BPSK, QPSK, 16QAM			
		NB-IoT Band5	824~ 849	869~894
		NB-IoT Band 2	1850 ~ 1910	1930 ~ 1990
		NB-IoT Band 25	1850 ~ 1915	1930 ~ 1995
		NB-IoT Band 4	1710 ~ 1755	2110~ 2155
		NB-IoT Band 12	699 ~ 716	729~ 746
		NB-IoT Band 13	777~787	746 ~ 756
		NB-IoT Band 17	704~716	734~ 746
		NB-IoT Band 66	1710~1780	2110~2180
		LTE eMTC Band 26	824~ 849	869~894
		LTE eMTC Band 2	1850 ~ 1910	1930 ~ 1990
		LTE eMTC Band 25	1850 ~ 1915	1930 ~ 1995
		LTE eMTC Band 4	1710 ~ 1755	2110~ 2155
		LTE eMTC Band 12	699 ~ 716	729~ 746
		LTE eMTC Band 13	777~787	746 ~ 756
		LTE eMTC Band 66	1710~1780	2110~2180
		LTE eMTC Band 26	814~ 824	859~869
		LTE eMTC Band 5	824~ 849	869~894

For the Bluetooth and 4G functions, the EUT uses exactly the same certified modules.

EUT Photo External:

BLE	
LTE	

Module EUT Photo External:

LTE	EUT Appearance 
BLE	

Bluetooth Module (BMD-340)			
Comparison Item	Original Certified Module (BMD-340)	Current Product (26-0015)	Difference Description
FCC ID	2AA9B10	Same (using the same module)	No difference – the current product directly uses the same certified module.
IC	12208A-10	Same (using the same module)	No difference – the current product directly uses the same certified module.
Power	4.579 dBm	Same (using the same module)	No difference – module RF parameters remain consistent.
Antenna	PCB Antenna	Same (using the same module)	No difference – no antenna design change.
Modulation	GFSK, Q-QPSK	Same (using the same module)	No difference
Frequency Range	2402 MHz ~ 2480 MHz	Same (using the same module)	No difference

Conclusion: For the Bluetooth section, the original module (FCC ID: 2AA9B10, IC: 12208A-10) is completely identical to the module used in the current product. Hardware design, RF parameters, power, and antenna show no differences.

LTE Cellular Module (BG950A-GL)						
Comparison Item	Original Certified Module (BG950A-GL)		Current Product (26-0015)		Difference Description	
FCC ID	XMR2021BG950AGL		Same (using the same module)		No difference – the current product directly uses the same certified module.	
IC	10224A-2021BG950A		Same (using the same module)		No difference – the current product directly uses the same certified module.	
Power	NB-IoT Band5	24.05dBm	NB-IoT Band5	23.12dBm	The power level setting is the same as the original module, and the antenna gain value is slightly higher than the original one.	
	NB-IoT Band 2:	25.04dBm	NB-IoT Band 2:	26.67dBm		
	NB-IoT Band 25:	24.95dBm	NB-IoT Band 25:	26.76dBm		
	NB-IoT Band 4	25.91dBm	NB-IoT Band 4	28.17dBm		
	NB-IoT Band 12	25.29dBm	NB-IoT Band 12	18.24dBm		
	NB-IoT Band 13	25.87dBm	NB-IoT Band 13	23.07dBm		
	NB-IoT Band 17	25.29dBm	NB-IoT Band 17	18.24dBm		
	NB-IoT Band 66	25.91dBm	NB-IoT Band 66	28.17dBm		
	LTE eMTC Band 26	24.11dBm	LTE eMTC Band 26	23.43dBm		
	LTE eMTC Band 2	25.52dBm	LTE eMTC Band 2	27.03dBm		
	LTE eMTC Band 25	25.54dBm	LTE eMTC Band 25	27.09dBm		
	LTE eMTC Band 4	25.99dBm	LTE eMTC Band 4	28.19dBm		
	LTE eMTC Band 12	25.08dBm	LTE eMTC Band 12	23.05dBm		
	LTE eMTC Band 13	25.08dBm	LTE eMTC Band 13	27.99dBm		
	LTE eMTC Band 66	25.86dBm	LTE eMTC Band 66	28.19dBm		
	LTE eMTC	24.88dBm	LTE eMTC	23.44dBm		

	Band 26		Band 26		
	LTE eMTC Band 5	24.32dBm	LTE eMTC Band 5	23.43dBm	
Antenna	External antenna required (module is LGA package, no integrated antenna)		Integral antenna		The existing antenna gain value > the module-certified antenna gain value.
Modulation	BPSK, QPSK, 16QAM		Same (using the same module)		No difference
Supported Bands	NB-IoT Band 2/4/5/12/13/17/25/66; LTE eMTC Band 2/4/5/12/13/25/26/66		Same (using the same module)		No difference

Conclusion: For the LTE section, the original module (FCC ID: XMR2021BG950AGL, IC: 10224A-2021BG950A) and the module used in the current product are hardware-identical and RF-parameter-consistent.

Therefore, referencing the RF test data from the original certification reports is technically justified and well-supported. This approach aligns with FCC and ISED guidelines on modular certification and data reuse, avoids unnecessary redundant testing, and ensures consistency and efficiency in product compliance assessment.