



REGULATORY TESTING FROM START TO CERTIFICATE

Intro

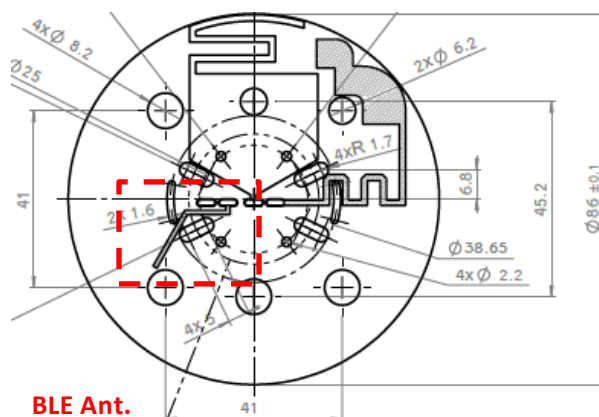
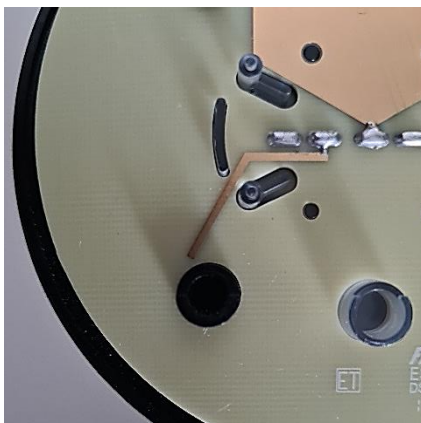
Antenna gain documentation required for all FCC Part 15 devices. Must provide either an antenna datasheet/ specification or a test report with gain measurements and plots. This Information cannot be held confidential. Additionally, proprietary information of the design itself can remain confidential in either the 'operational description' or 'schematic'.

Antenna specification:

1. **Company:** AradTech
2. **Product name:** CAT-M PIT Module
3. **RF module/chip:** *Blue NRG-1*
4. **Antenna description**

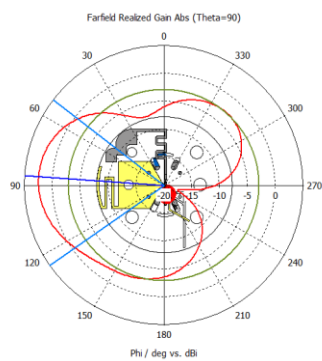
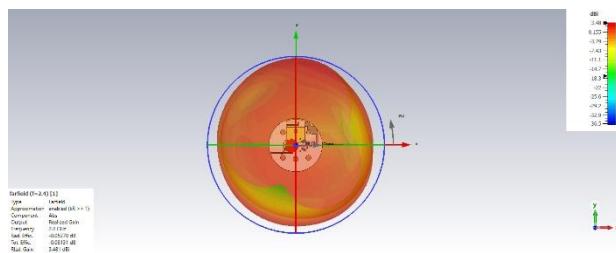
Antenna type	Monopole		
Antenna manufacturer	N/A (In-house design)		
Antenna dimensions	Ø 86mm		
Frequency range	2400MHz to 2480MHz		
Modulation	GFSK		
Antenna gain max (peak)	2400MHz	2440MHz	2480MHz
	2.43dBi	2.63dBi	2.67dBi
VSWR	1.17:1	1.21:1	1.27:1
Cable loss	N/A		
Connector type	N/A (direct soldering)		

5. Antenna layout



Channel 0
2400MHz

2400MHz

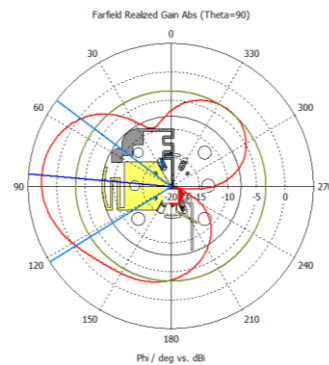
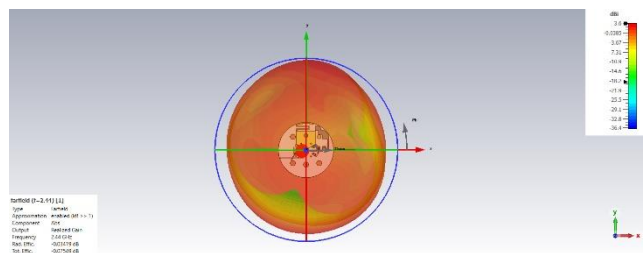


— farfield (f=2.4) [1]

Frequency = 2.4 GHz
Main lobe magnitude = 2.43 dBi
Main lobe direction = 86.0 deg.
Angular width (3 dB) = 72.6 deg.
Side lobe level = -5.3 dB

Channel 19
2440MHz

2440MHz:



— farfield (f=2.44) [1]

Frequency = 2.44 GHz
Main lobe magnitude = 2.63 dBi
Main lobe direction = 85.0 deg.
Angular width (3 dB) = 68.9 deg.
Side lobe level = -5.9 dB

