



REGULATORY TESTING FROM START TO CERTIFICATE

Intro

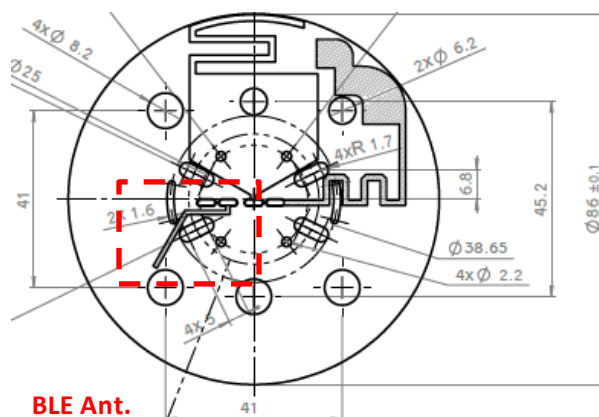
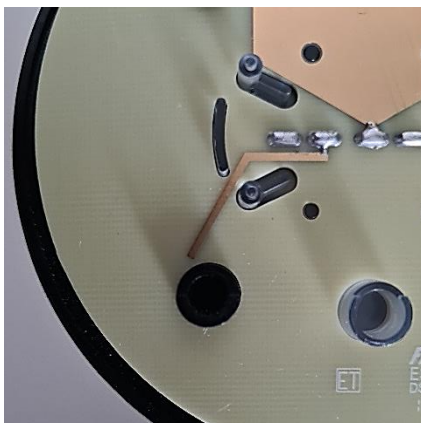
Antenna gain documentation required for all FCC Part 15 devices. Must provide either an antenna datasheet/ specification or a test report with gain measurements and plots. This Information cannot be held confidential. Additionally, proprietary information of the design itself can remain confidential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

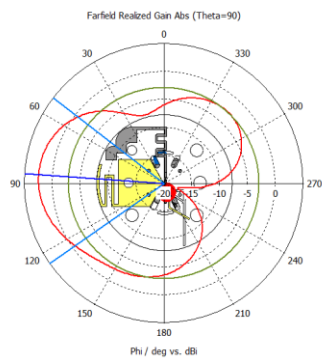
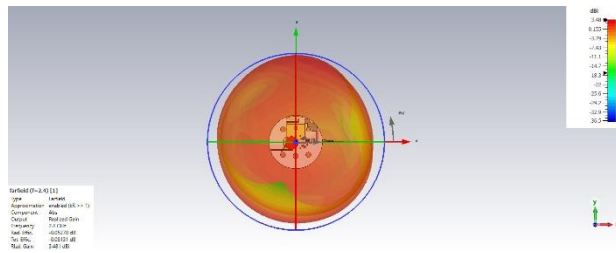
Antenna type	Monopole		
Antenna manufacturer	N/A (In-house design)		
Antenna dimensions	Ø 86mm		
Frequency range	2400MHz to 2480MHz		
Modulation	GFSK		
Antenna gain max (peak)	2400MHz	2440MHz	2480MHz
	2.43dBi	2.63dBi	2.67dBi
VSWR	1.17:1	1.21:1	1.27:1
Cable loss	N/A		
Connector type	N/A (direct soldering)		

5. Antenna layout



Channel 0
2400MHz

2400MHz

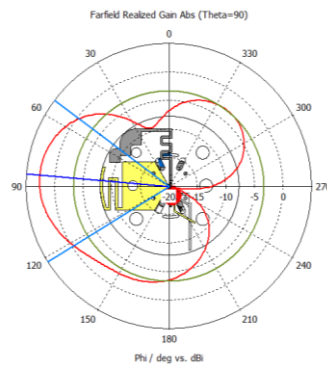
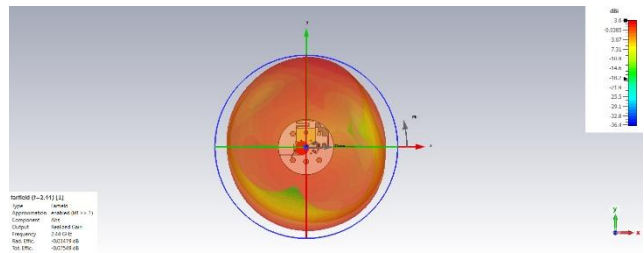


— farfield (f=2.4) [1]

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 dBi

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 dBi

