



Setup Photos to FCC Test Report

For:
Banner Engineering Corp.

Brand:
Banner Engineering Corp.

Marketing Name:
60 GHz Industrial Radar Presence Detector

Model Name:
Q90R2-12040-6KDQ

Product Description:
Industrial Radar Presence Detector

FCC ID: UE3Q90R2-6

Applied Rules and Standards:
47 CFR Part 15.255

REPORT #: EMC_BANNE-008-24001_FCC15.255

DATE: 2024-03-26



A2LA Accredited

IC recognized #
3462B
CABID: US0187

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1 Test setup photos: radiated test

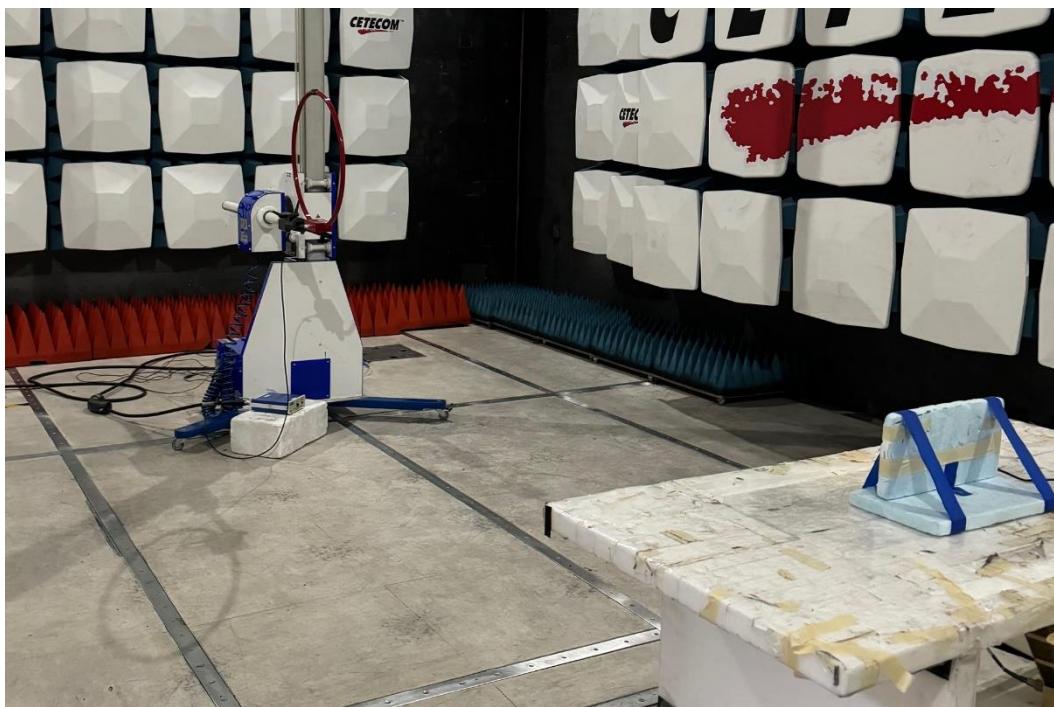


Photo 1: Emissions in frequency range 9 kHz to 30 MHz

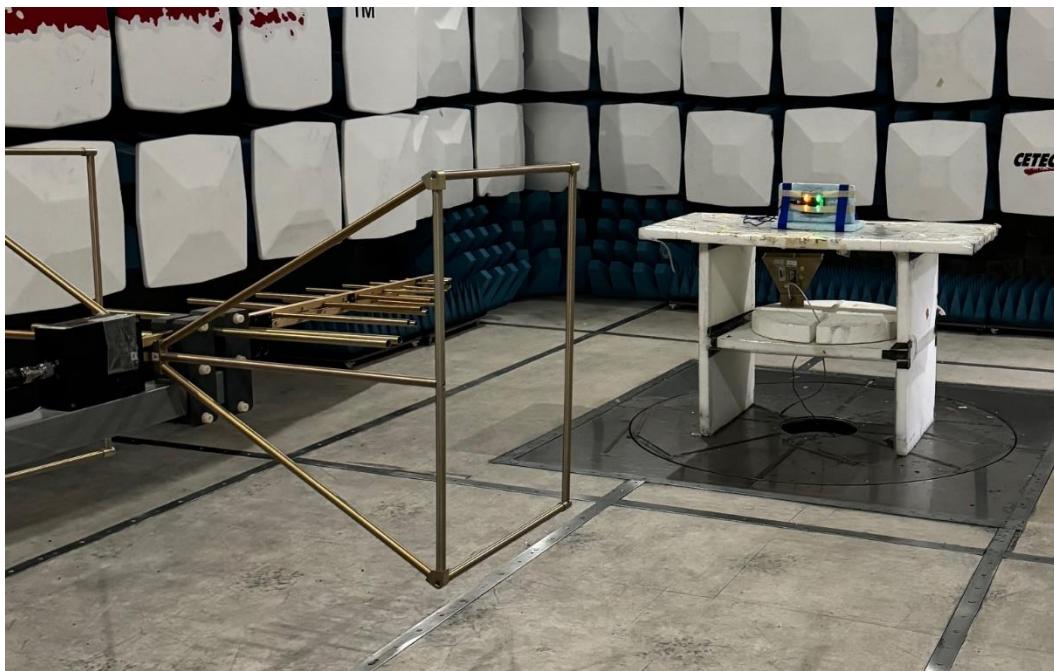


Photo 2: Emissions in frequency range 30 MHz to 1 GHz



Photo 3: Emissions in frequency range 1-3 GHz



Photo 4: Emissions in frequency range 3-18 GHz



Photo 5: Emissions in frequency range 18-40 GHz



Photo 6: Emissions in frequency range 50-75 GHz (for other frequency ranges above 40 GHz, other external mixer and antenna are applied)

2 Test setup photos: EIRP test



Photo 7: Test setup for step 1: measuring the main beam of the EUT with RF detector and DSO.

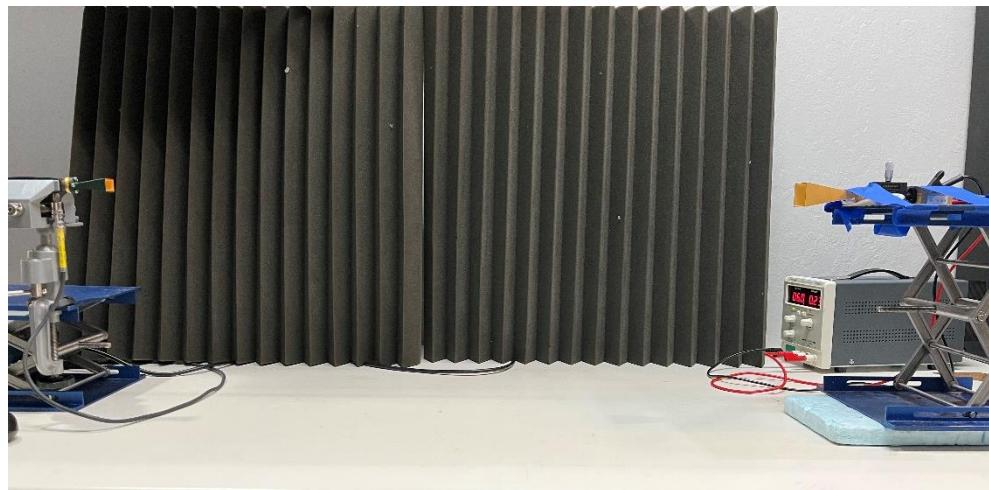


Photo 8: Test setup for step 2: substitute the EUT with a known signal source including signal generator, frequency multiplier, variable attenuator and horn antenna. The output level is adjusted to the same level measured at the EUT in step 1.

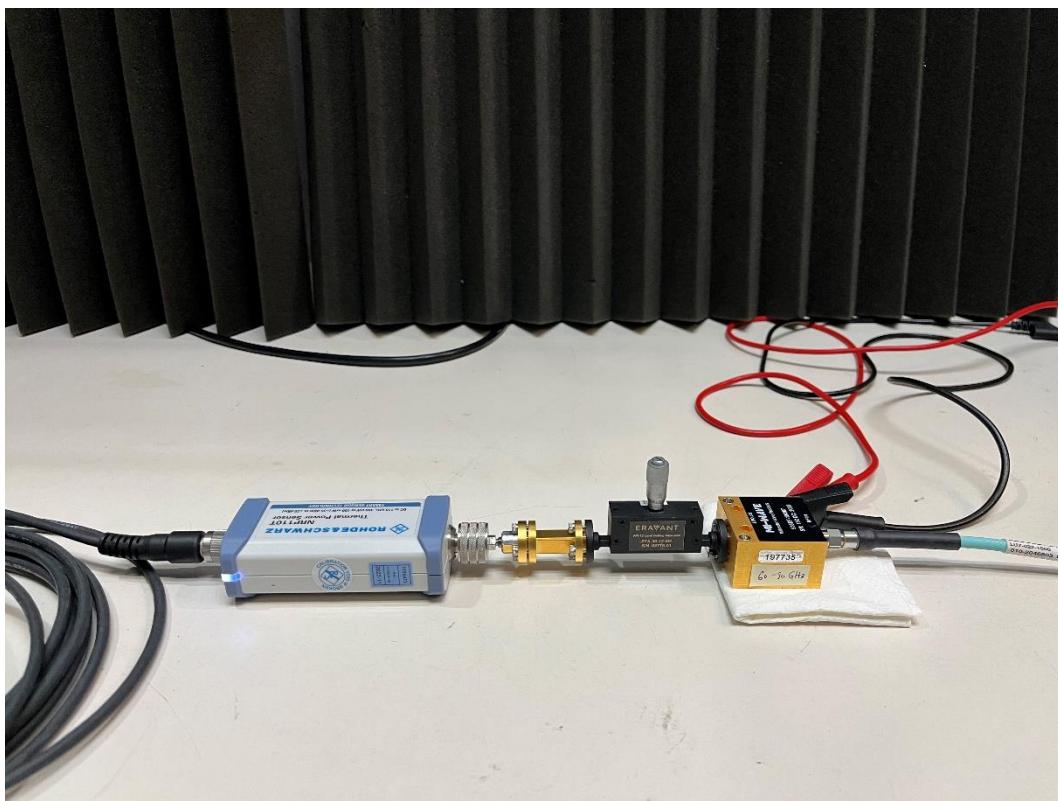


Photo 9: Test setup for step 3: Measure the output level of the known signal source without any change. The measurement is done in the conducted way with a power meter with a thermocouple detector.

3 Test setup photos: Frequency stability test

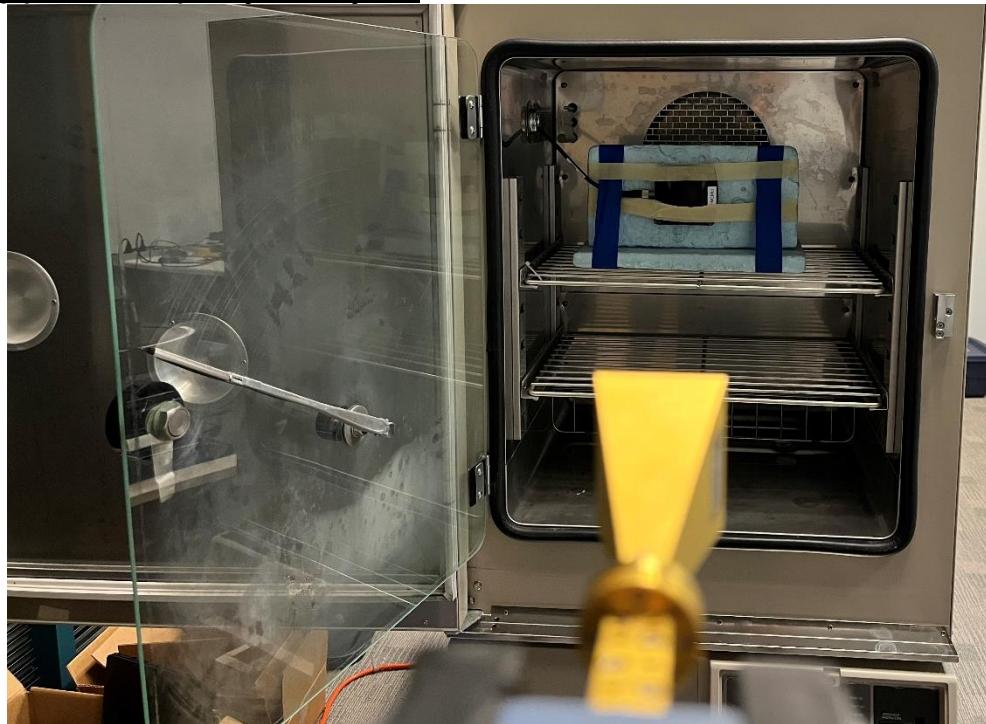


Photo 10: Test setup for in the climatic chamber

4 Test setup photos: AC main conducted emission



Photo 11: Test setup for AC main conducted emission

5 Revision History

Date	Report name	Changes to report	Prepared by
2024-03-26	EMC_BANNE-008-24001_FCC15.255	Initial version	Guangcheng Huang

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