Antenna Test Report

REPORT NO.		**OQ241204001**
APPLICANT	:	**Tesla**
MANUFACTURER	:	**Tesla**
EQUIPMENT	:	**Mobile Connector Gen 3**
DATE OF TEST	:	**March 6, 2025**
ISSUE DATE	:	**March 25, 2025**

Reviewed by:

Neil Kao / Manager

We, SPORTON INTERNATIONAL (USA) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (USA) INC., the test report shall not be reproduced except in full.

The declared product specification for EUT presented in this report is provided by the manufacturer / applicant, and the manufacturer / applicant takes all the responsibilities for the accuracy of product specification.

SPORTON INTERNATIONAL (USA) INC.

Table of Contents

Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
OQ241204001	1.0	Initial issue of report	March 25, 2025

1. Test Laboratory

Test Site	Sporton International Inc. ☐ EMC & Wireless Communications Laboratory ☐ Wensan Laboratory ■ Sporton International (USA) Inc.
Telephone Number	EMC & Wireless Communications Laboratory: TEL: +886-3-327-3456; FAX: +886-3-328-4978 Wensan Laboratory: TEL: +886-3-327-0838; FAX: +886-3-327-0855 Sporton International (USA) Inc. TEL: +1-408-904-3300
Address	EMC & Wireless Communications Laboratory: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan Wensan Laboratory: No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist., Taoyuan City 333, Taiwan Sporton International (USA) Inc.: 1175 Montague Expressway, Milpitas, CA 95035 USA
Chamber	EMC & Wireless Communications Laboratory: ☐ OTA01-HY ☐ OTA03-HY ☐ OTA04-HY ☐ OTA05-HY Wensan Laboratory: ☐ OTA07-HY ☐ OTA08-HY ☐ OTA10-HY Sporton International (USA) Inc.: ☐ OTA01-CA ■ OTA02-CA

■ : The chamber(s) which used to perform the test in this test report.

2. Client Information

2.1 Applicant

Company Name	Tesla
Address	3500 Deer Creek Road, Palo Alto CA 94304, U.S.A.
Contact Person	Viraj Andrabadu Kurundu Patabendige / vandrabadukurundu@tesla.com

2.2 Manufacturer

Company Name	Tesla
Address	3500 Deer Creek Road, Palo Alto CA 94304, U.S.A.
Contact Person	Viraj Andrabadu Kurundu Patabendige / vandrabadukurundu@tesla.com

3. Equipment Under test (EUT) Information

3.1 Description of EUT

Product Feature & Specification	
EUT Type	Mobile Connector Gen 3
Brand Name	Tesla
Model Name	1937825-XX-Y
Antenna Type	PCBA

4. Measurement Environment

Ambient Condition

Temperature (°C):	25℃ +/- 5℃	Humidity (%):	<60%

Test Equipment List

Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Spectrum Analyzer	R&S	FSV13	101559	2024/08/07	2025/08/06
RF Switch	ETS-Lindgren	EMCenter	00160138	NCR	NCR
Multi-Axis Positioner Controller	ETS-Lindgren	2090	N/A	NCR	NCR
Measurement Horn Antenna	EMCO	3164-08	N/A	NCR	NCR

5. Summary of Test Results

5.1 Declaration

Declaration of Conformity:
The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.
Comments and Explanations:
None

5.2 Abbreviations and Definitions

Please note the following abbreviations in this section:

FS = Free Space

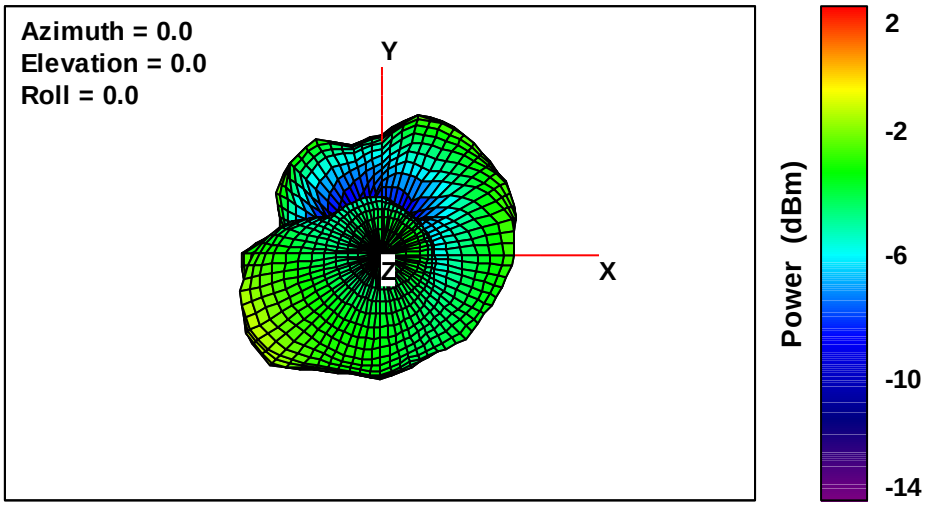
5.3 Summary Table

SC V4 NA Handle	BLE RF OTA Performance		
Frequency (MHz)	2402	2440	2480
Power Setting	5	5	5
Conducted Power (dBm) *From the Conducted unit*	1.98	1.76	1.3
Peak EIRP (dBm) *Active Antenna Measurements*	0.95	2.34	2.56
Peak Antenna Gain **(Peak EIRP – Conducted Tx Power)**	**-1.03**	**0.58**	**1.26**

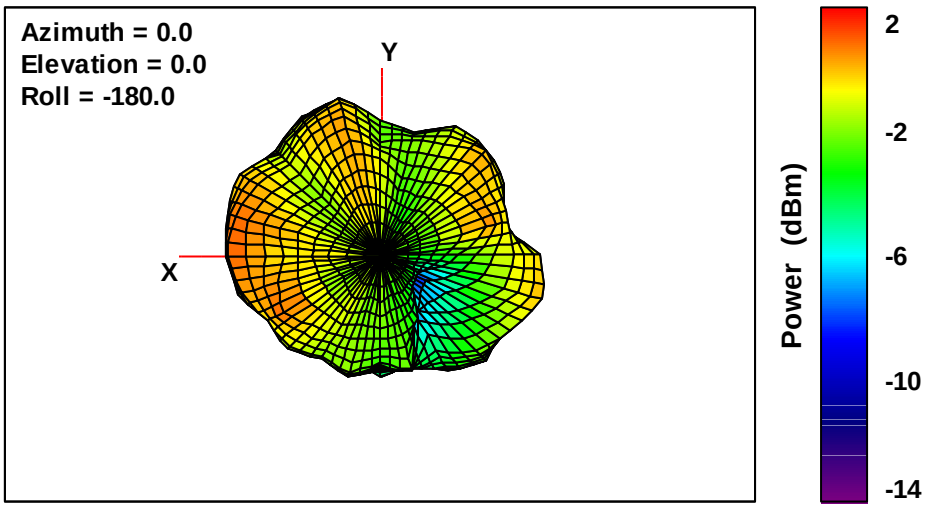
Appendix A 3D pattern

Tesla_TRP_FS_BLE_2402MHz

Total

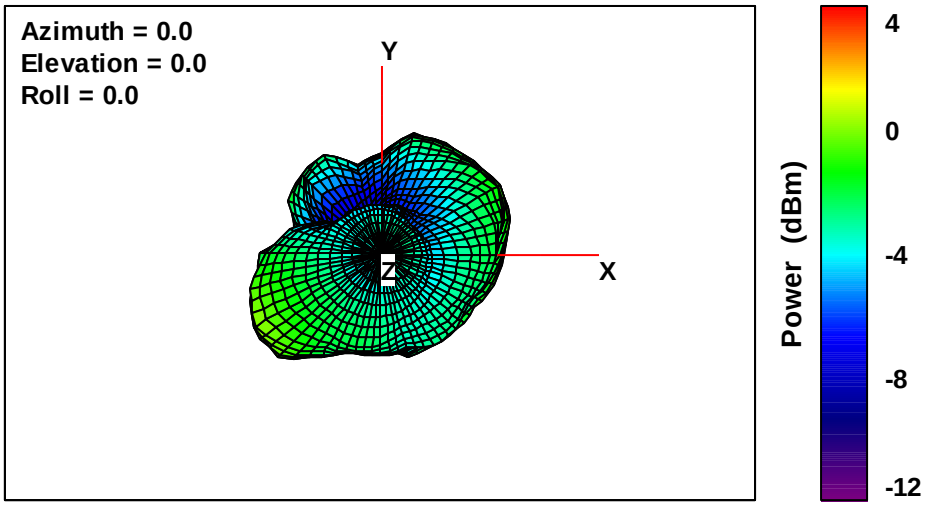


Total

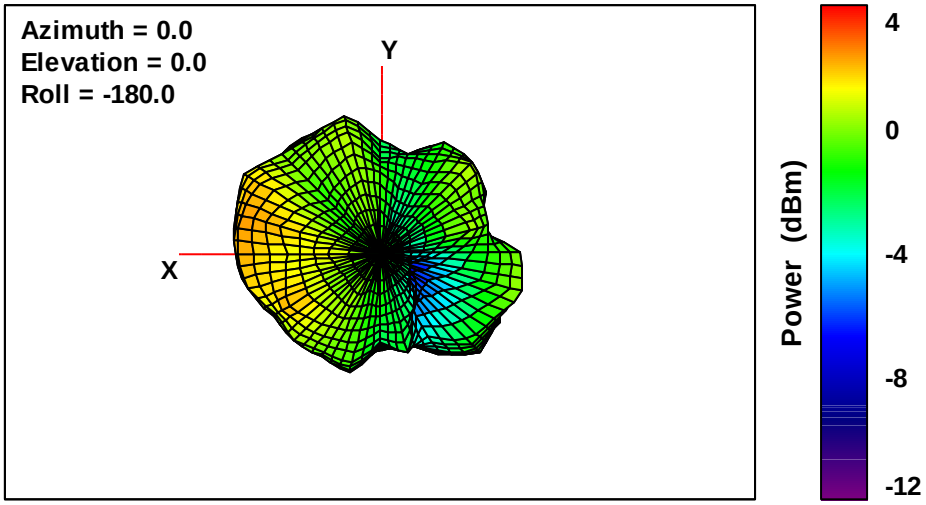


Tesla_TRP_FS_BLE_2440MHz

Total

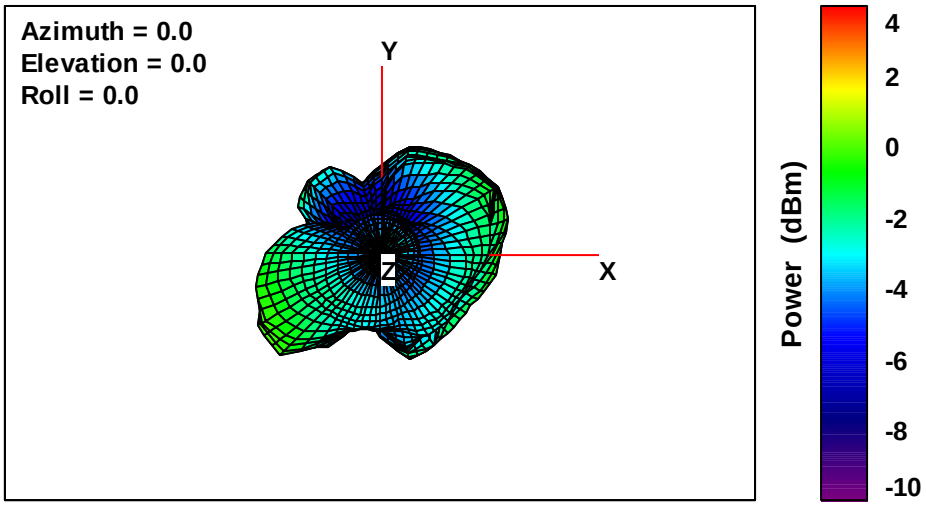


Total



Tesla_TRP_FS_BLE_2480MHz

Total



Total