

TEST REPORT

Applicant Name: Astera LED Technology GmbH
Address: Schatzbogen 60, 81829 Munich, Germany
Report Number: 2601U62375E-EM

Test Standard (s)

FCC Part 15, Subpart B (Class A); ICES-003, ISSUE 7 OCTOBER 2020

Sample Description

Product Type: PowerFlow for QuikBeam;
TracklightAdapter for 3-Circuit Track Black;
TracklightAdapter for 3-Circuit Track White;
TracklightAdapter for 3-Circuit Track Custom Color;
TracklightAdapter for H-Type Track Black;
TracklightAdapter for H-Type Track White;
TracklightAdapter for H-Type Track Custom Color

Model No.: AST-QUKBM-PWF
Multiple Model(s) No.: AST-QUKBM-TKLEUT;AST-QUKBM-TKLEUT-WT;
AST-QUKBM-TKLEUT-CC;AST-QUKBM-TKLHLT;
AST-QUKBM-TKLHLT-WT;AST-QUKBM-TKLHLT-CC

Trade Mark: ASTERA
Date Received: 2026/06/02
Issue Date: 2026/06/25

Test Result:	Pass▲
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▲ In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Haiguo Li

Haiguo Li
EMC Engineer

Approved By:

Moon Liu
EMC Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2601U62375E-EM	Original Report	2026/06/25

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	PowerFlow for QuikBeam; TracklightAdapter for 3-Circuit Track Black; TracklightAdapter for 3-Circuit Track White; TracklightAdapter for 3-Circuit Track Custom Color; TracklightAdapter for H-Type Track Black; TracklightAdapter for H-Type Track White; TracklightAdapter for H-Type Track Custom Color
Tested Model	AST-QUKBM-PWF
Multiple Model(s)	AST-QUKBM-TKLEUT;AST-QUKBM-TKLEUT-WT; AST-QUKBM-TKLEUT-CC;AST-QUKBM-TKLHLT; AST-QUKBM-TKLHLT-WT;AST-QUKBM-TKLHLT-CC
Voltage Range	AC 100-240V 50/60Hz
Highest operating frequency [#]	below 108MHz
Equipment Class [#]	Class A
Sample number	3NA4-1: Prototype AST-QUKBM-PWF 3NA4-4: Power Cord AST-QUKBM-PWF 3NA4-5: Connecting Cable AST-QUKBM-PWF 3NA4-6: Series Model AST-QUKBM-TKLHLT (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A
Note: The Multiple models are electrically identical with the test model except for model name, AC Input connector, AC Output Connector, AC Input wire, different uses. Please refer to the declaration letter [#] for more detail, which was provided by manufacturer.	

Objective

This test report is in accordance with Part 2-Subpart J, Part 15B Subparts A and B of the Federal Communication Commissions rules and ICES-003 of the Innovation, science and Economic Development Canada.

The objective of the manufacturer is to determine the compliance of the EUT with FCC Part 15B and ICES-003.

Measurement Uncertainty

Item	Frequency Range		Expanded Measurement uncertainty
Conducted Emissions	AC Mains	150 kHz ~30MHz	3.72dB(k=2, 95% level of confidence)
Radiated Disturbance	30MHz~1000MHz	Horizontal	5.10dB(k=2, 95% level of confidence)
	30MHz~1000MHz	Vertical	6.28dB(k=2, 95% level of confidence)

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

Each test item follows test standards and with no deviation.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in normal condition.

Test Mode: working with full load

EUT Exercise Software

No exercise software was used.

Equipment Modifications

No modification was made to the EUT tested.

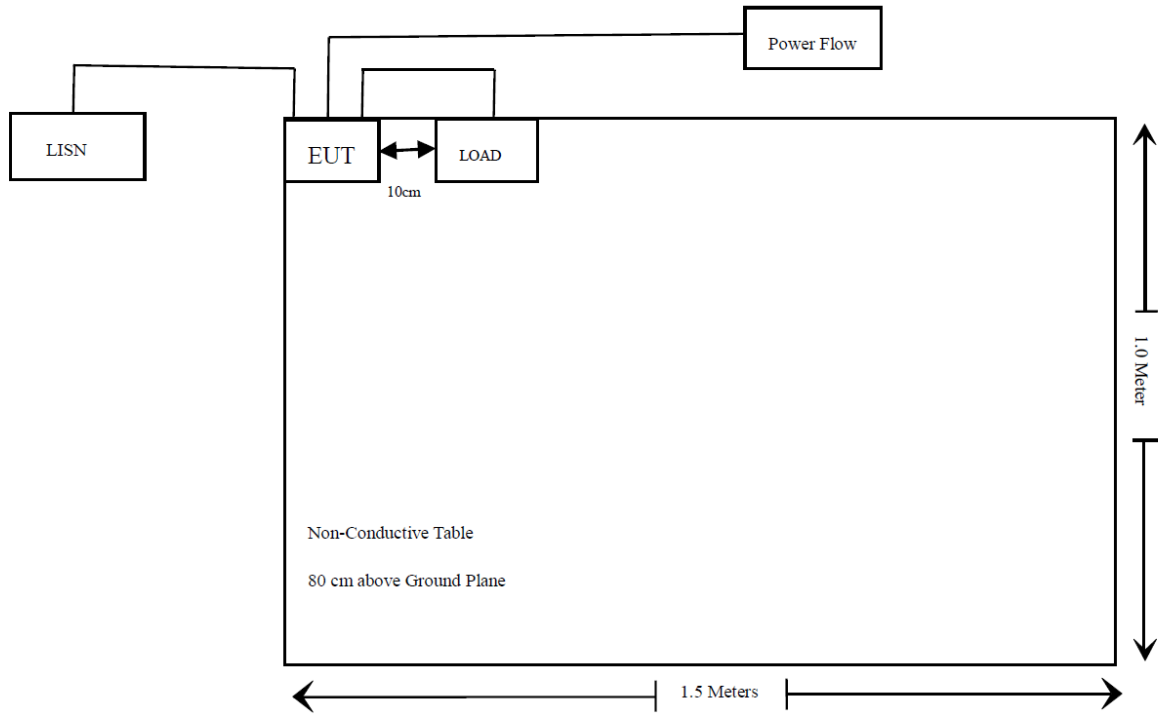
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Astera	Power Flow	AST-QUKBM-TKLHLT	/
N/A	LOAD	RX24 200W6RJ	/

External I/O Cable

Cable Description	Length (m)	From/Port	To
Un-shielding Detachable AC Cable	1.2	LISN	EUT
Un-shielding Detachable DC Cable	0.3	EUT	LOAD
Un-shielding Detachable Cable	1.5	EUT	Power Flow

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

Description of Test	Results
AC Line Conducted Emissions	Compliant
Radiated Emissions	Compliant

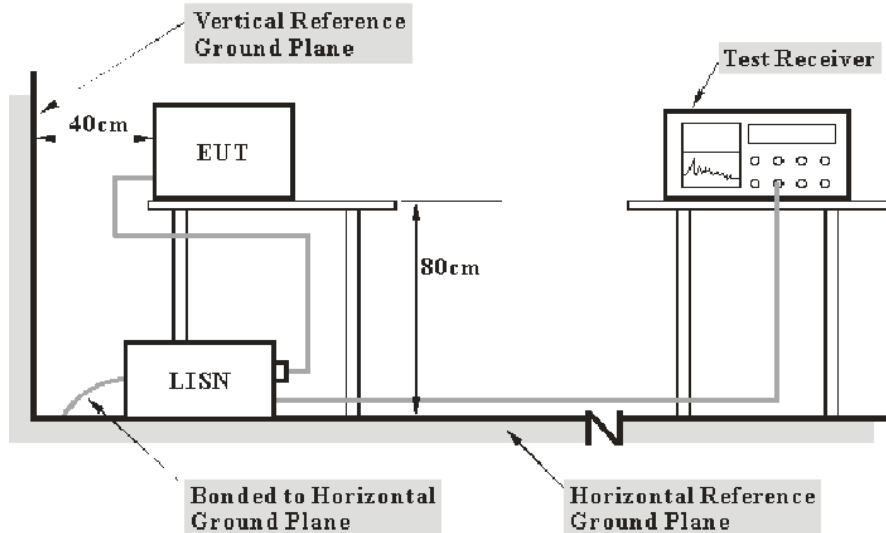
TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2025/09/01	2026/08/31
Rohde & Schwarz	LISN	ENV216	101613	2025/09/18	2026/09/17
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2025/09/18	2026/09/17
Unknown	CE Cable	Unknown	UF A210B-1-0720-504504	2025/09/18	2026/09/17
Audix	EMI Test software	E3	191218 V9(c)	NCR	NCR
Narda	LISN	L3-100	210WT600902	2025/09/22	2026/09/21
Radiated Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2025/09/01	2026/08/31
Sonoma instrument	Pre-amplifier	310 N	186238	2025/09/08	2026/09/07
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Chamber A Cable	Cable A1	Cable A1	2025/09/08	2026/09/07
Unknown	Chamber A Cable	Cable A2	Cable A2	2025/09/08	2026/09/07
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR
TDK	Chamber	Chamber A	2#	2023/07/12	2026/07/11

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

AC LINE CONDUCTED EMISSIONS

EUT Setup



- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.4-2014 and CAN/CSA-CISPR 32:17. The related limit was specified in FCC Part 15.107 and ICES-003.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Level & Over Limit Calculation

The Level is calculated by adding the LISN Factor, Cable Loss and the Read Level. The basic equation is as follows:

$$\text{Level (dBuV)} = \text{Read Level (dBuV)} + \text{LISN Factor} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit.

$$\text{Over Limit (dB)} = \text{Level (dBuV)} - \text{Limit Line (dBuV)}$$

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

Test Data

Environmental Conditions

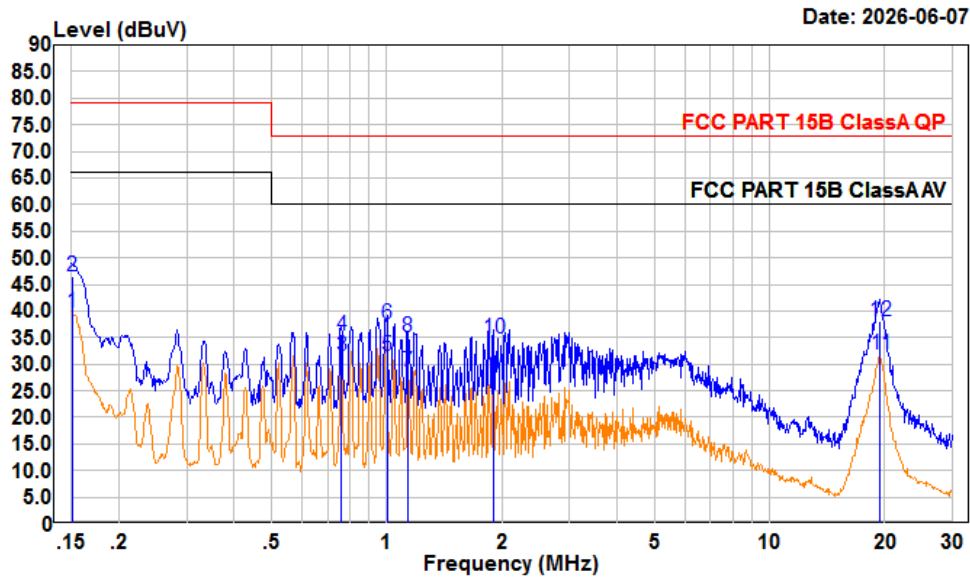
Temperature:	24.9 °C
Relative Humidity:	62 %
ATM Pressure:	100.5 kPa

The testing was performed by Macy Shi on 2026-06-07.

Test Mode: working with full load

FCC Part 15B

AC 120V/60 Hz, Line



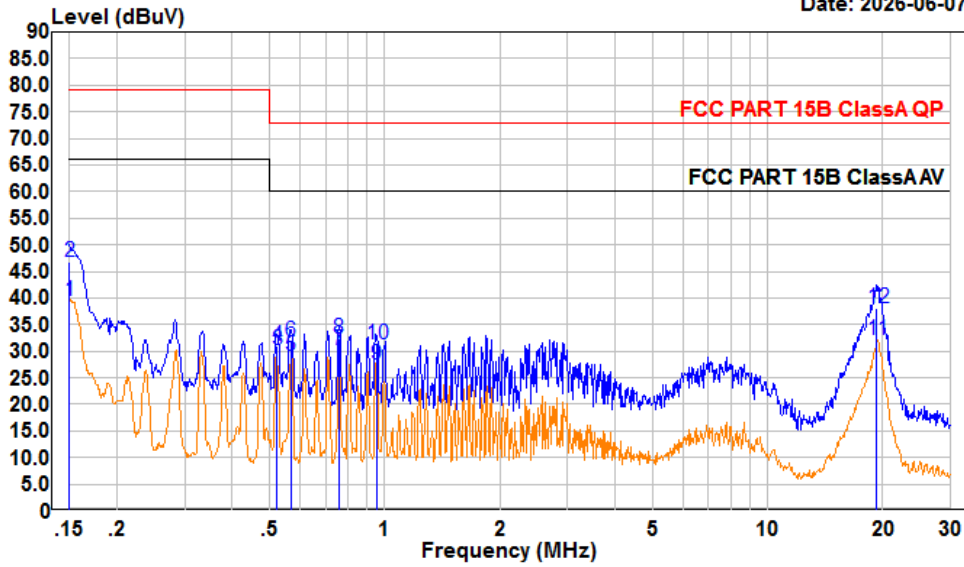
Date: 2026-06-07

Condition: Line
 Project : 2601U62375E-EM
 test Mode: working with full load
 tester : Macy.shi Setting:RBW:9kHz

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.151	19.88	39.60	9.70	10.02	66.00	-26.40	Average
2	0.151	26.82	46.54	9.70	10.02	79.00	-32.46	QP
3	0.763	11.57	31.43	9.82	10.04	60.00	-28.57	Average
4	0.763	15.51	35.37	9.82	10.04	73.00	-37.63	QP
5	1.003	11.30	31.42	9.90	10.22	60.00	-28.58	Average
6	1.003	17.50	37.62	9.90	10.22	73.00	-35.38	QP
7	1.134	8.51	28.63	9.90	10.22	60.00	-31.37	Average
8	1.134	14.93	35.05	9.90	10.22	73.00	-37.95	QP
9	1.907	7.75	27.85	9.90	10.20	60.00	-32.15	Average
10	1.907	14.77	34.87	9.90	10.20	73.00	-38.13	QP
11	19.407	11.44	31.76	9.90	10.42	60.00	-28.24	Average
12	19.407	17.65	37.97	9.90	10.42	73.00	-35.03	QP

AC 120V/60 Hz, Neutral

Date: 2026-06-07



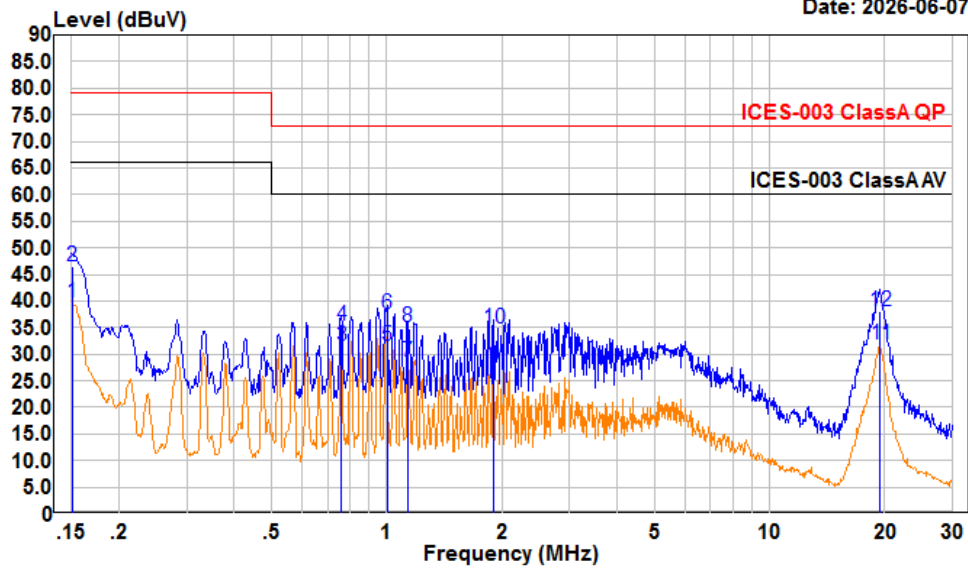
Condition: neutral
 Project : 2601U62375E-EM
 test Mode: working with full load
 tester : Macy.shi Setting:RBW:9kHz

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.150	19.94	39.56	9.60	10.02	66.00	-26.44	Average
2	0.150	27.19	46.81	9.60	10.02	79.00	-32.19	QP
3	0.523	10.65	30.29	9.60	10.04	60.00	-29.71	Average
4	0.523	11.39	31.03	9.60	10.04	73.00	-41.97	QP
5	0.568	9.53	29.17	9.60	10.04	60.00	-30.83	Average
6	0.568	12.15	31.79	9.60	10.04	73.00	-41.21	QP
7	0.760	10.67	30.31	9.60	10.04	60.00	-29.69	Average
8	0.760	12.72	32.36	9.60	10.04	73.00	-40.64	QP
9	0.953	7.73	27.38	9.60	10.05	60.00	-32.62	Average
10	0.953	11.51	31.16	9.60	10.05	73.00	-41.84	QP
11	19.311	11.93	32.05	9.70	10.42	60.00	-27.95	Average
12	19.311	17.91	38.03	9.70	10.42	73.00	-34.97	QP

ICES-003

AC 120V/60 Hz, Line

Date: 2026-06-07

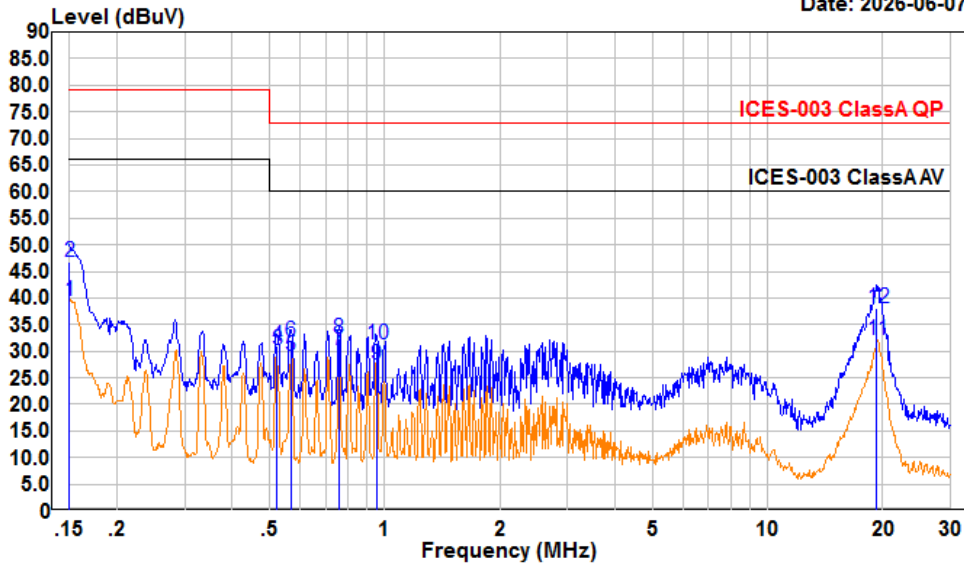


Condition: Line
 Project : 2601U62375E-EM
 test Mode: working with full load
 tester : Macy.shi Setting:RBW:9kHz

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.151	19.88	39.60	9.70	10.02	66.00	-26.40	Average
2	0.151	26.82	46.54	9.70	10.02	79.00	-32.46	QP
3	0.763	11.57	31.43	9.82	10.04	60.00	-28.57	Average
4	0.763	15.51	35.37	9.82	10.04	73.00	-37.63	QP
5	1.003	11.30	31.42	9.90	10.22	60.00	-28.58	Average
6	1.003	17.50	37.62	9.90	10.22	73.00	-35.38	QP
7	1.134	8.51	28.63	9.90	10.22	60.00	-31.37	Average
8	1.134	14.93	35.05	9.90	10.22	73.00	-37.95	QP
9	1.907	7.75	27.85	9.90	10.20	60.00	-32.15	Average
10	1.907	14.77	34.87	9.90	10.20	73.00	-38.13	QP
11	19.407	11.44	31.76	9.90	10.42	60.00	-28.24	Average
12	19.407	17.65	37.97	9.90	10.42	73.00	-35.03	QP

AC 120V/60 Hz, Neutral

Date: 2026-06-07



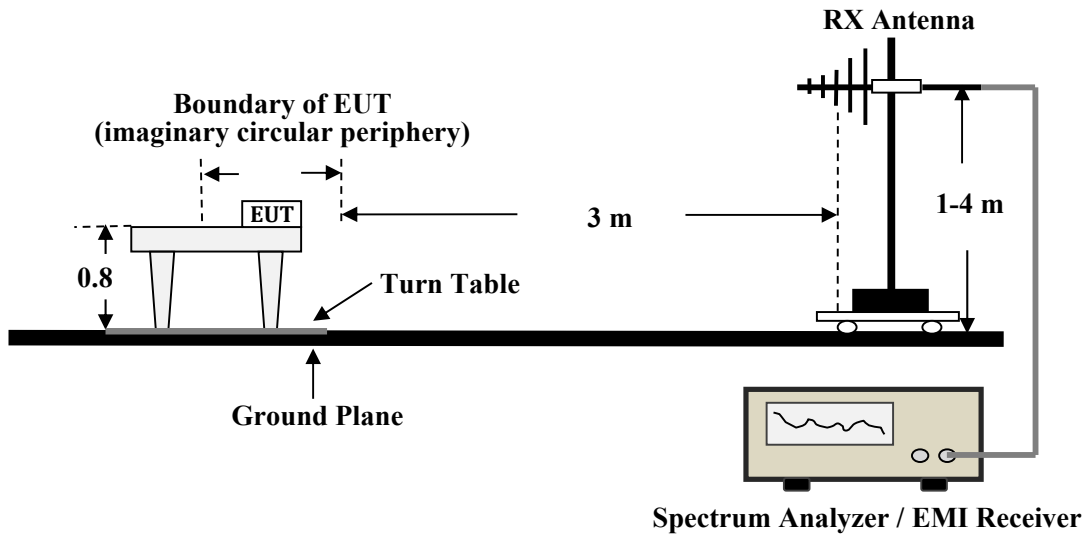
Condition: neutral
 Project : 2601U62375E-EM
 test Mode: working with full load
 tester : Macy.shi Setting:RBW:9kHz

	Read Freq	Read Level	LISN Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.150	19.94	39.56	9.60	10.02	66.00	-26.44	Average
2	0.150	27.19	46.81	9.60	10.02	79.00	-32.19	QP
3	0.523	10.65	30.29	9.60	10.04	60.00	-29.71	Average
4	0.523	11.39	31.03	9.60	10.04	73.00	-41.97	QP
5	0.568	9.53	29.17	9.60	10.04	60.00	-30.83	Average
6	0.568	12.15	31.79	9.60	10.04	73.00	-41.21	QP
7	0.760	10.67	30.31	9.60	10.04	60.00	-29.69	Average
8	0.760	12.72	32.36	9.60	10.04	73.00	-40.64	QP
9	0.953	7.73	27.38	9.60	10.05	60.00	-32.62	Average
10	0.953	11.51	31.16	9.60	10.05	73.00	-41.84	QP
11	19.311	11.93	32.05	9.70	10.42	60.00	-27.95	Average
12	19.311	17.91	38.03	9.70	10.42	73.00	-34.97	QP

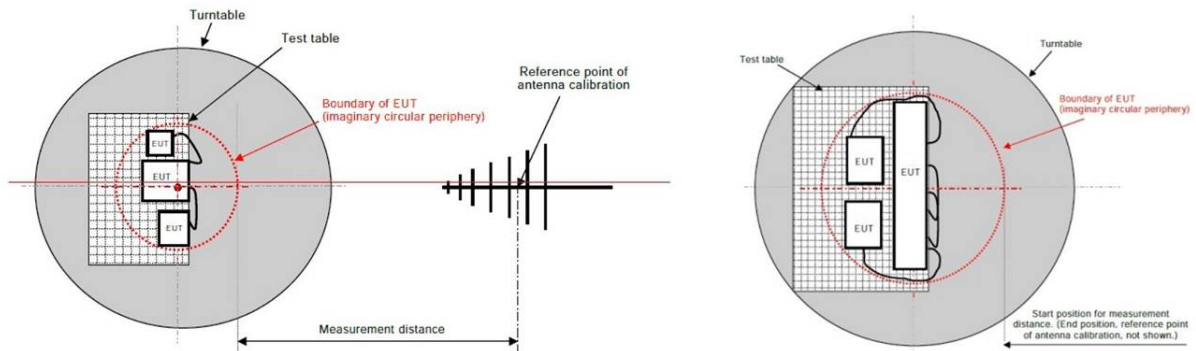
RADIATED EMISSIONS

EUT Setup

Below 1GHz for Radiated Emissions



Radiated Emissions Setup Configuration



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 and ICES-003 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	120 kHz	500 kHz	/	PK
	/	/	120 kHz	QP

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

If the emission level of the EUT in Peak mode was 6dB lower than the limit specified, Peak values of EUT will be reported. Otherwise, the emission will be repeated by using the Quasi-Peak method and reported for frequency range below 1GHz.

Level & Over Limit Calculation

The Level is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Read Level. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

$$\text{Level} = \text{Read Level} + \text{Factor}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -6 dB means the emission is 6dB below the limit. The equation for Over Limit calculation is as follows:

$$\text{Over limit} = \text{Level} - \text{Limit}$$

Test Data

Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	53 %
ATM Pressure:	99.7 kPa

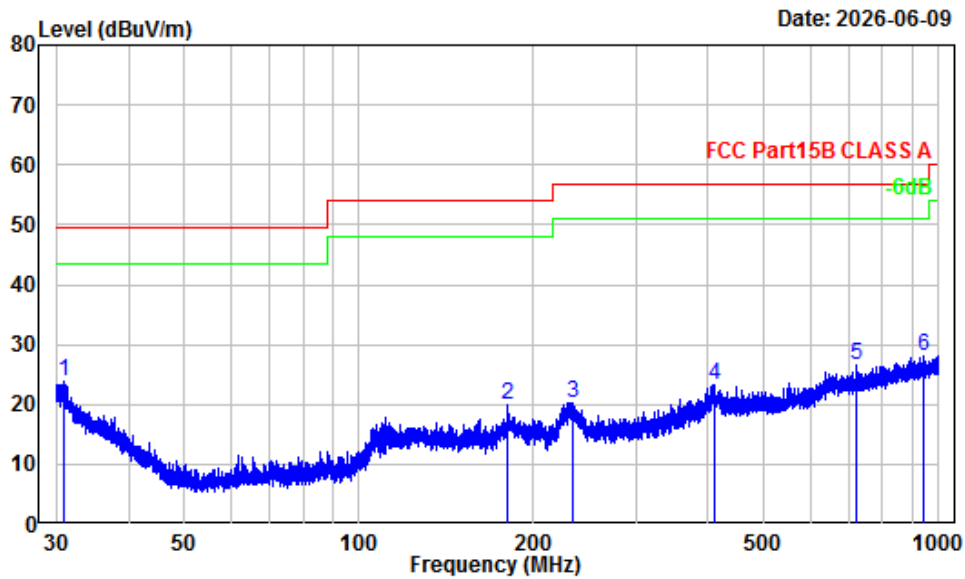
The testing was performed by Alex Yan on 2026-06-09.

Test Mode: working with full load

30 MHz~1 GHz

FCC Part 15B

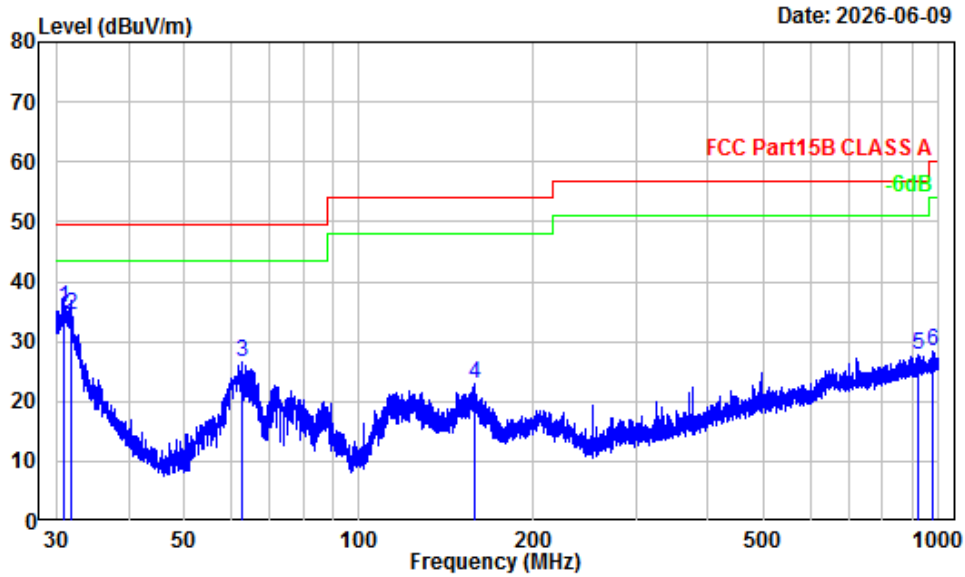
Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number : 2601U62375E-EM
 Test Mode : working with full load
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

	Freq Factor		Read Level		Limit Line		Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB		
1	30.95	-6.22	30.15	23.93	49.54	-25.61	Peak	
2	180.17	-13.54	33.56	20.02	53.98	-33.96	Peak	
3	233.96	-13.54	33.83	20.29	56.90	-36.61	Peak	
4	410.02	-8.17	31.36	23.19	56.90	-33.71	Peak	
5	722.36	-3.21	29.74	26.53	56.90	-30.37	Peak	
6	941.72	-0.45	28.62	28.17	56.90	-28.73	Peak	

Vertical

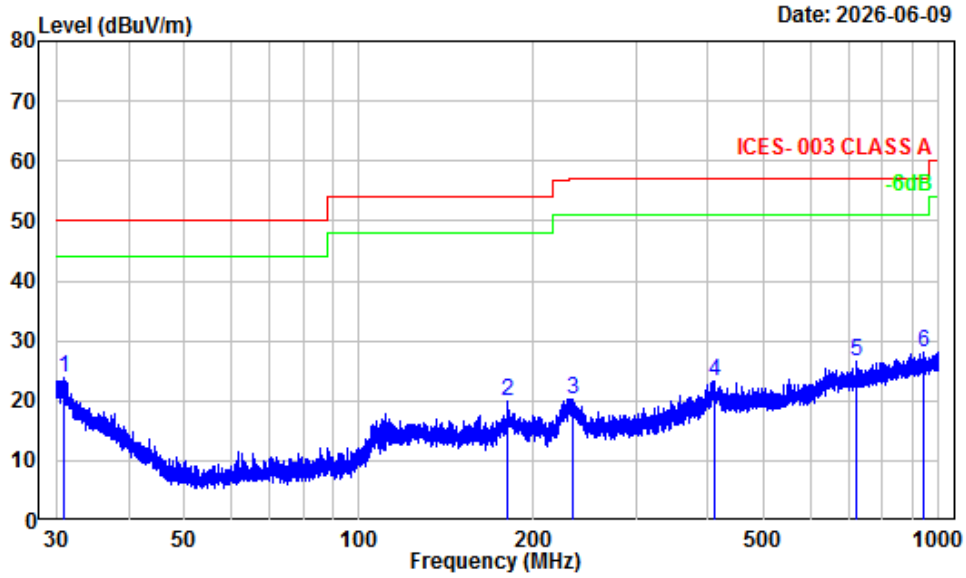


Site : Chamber A
 Condition : 3m Vertical
 Project Number : 2601U62375E-EM
 Test Mode : working with full load
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

	Read	Limit	Over				
Freq	Level	Level	Line	Limit Remark			
MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB		
1	30.98	-6.24	41.75	35.51	49.54	-14.03	QP
2	31.94	-6.81	41.26	34.45	49.54	-15.09	QP
3	62.87	-17.97	44.39	26.42	49.54	-23.12	Peak
4	158.11	-12.56	35.64	23.08	53.98	-30.90	Peak
5	922.11	-0.63	28.46	27.83	56.90	-29.07	Peak
6	978.75	0.16	28.32	28.48	60.00	-31.52	Peak

ICES-003

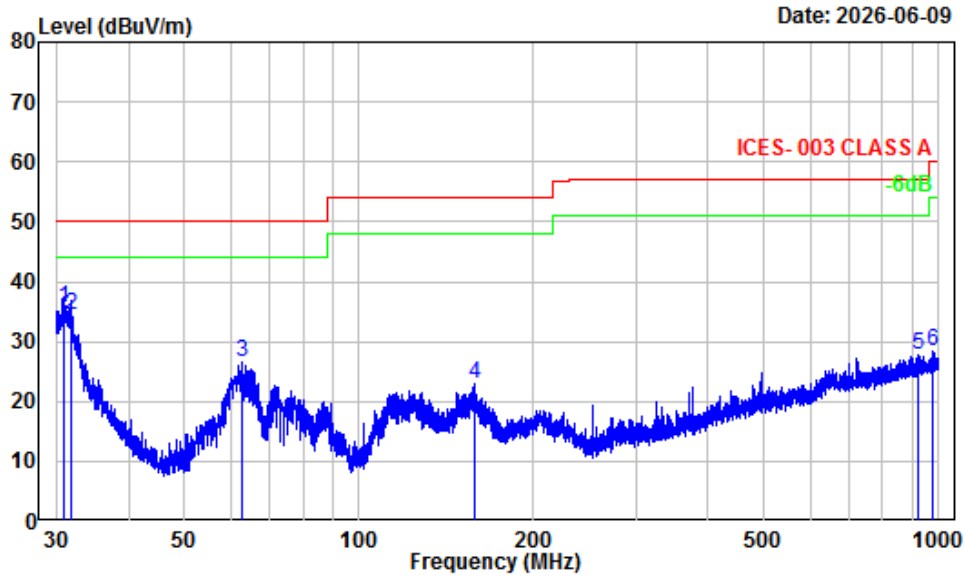
Horizontal



Site : Chamber A
 Condition : 3m Horizontal
 Project Number : 2601U62375E-EM
 Test Mode : working with full load
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.95	-6.22	30.15	23.93	50.00	-26.07	Peak
2	180.17	-13.54	33.56	20.02	54.00	-33.98	Peak
3	233.96	-13.54	33.83	20.29	57.00	-36.71	Peak
4	410.02	-8.17	31.36	23.19	57.00	-33.81	Peak
5	722.36	-3.21	29.74	26.53	57.00	-30.47	Peak
6	941.72	-0.45	28.62	28.17	57.00	-28.83	Peak

Vertical



Site : Chamber A
 Condition : 3m Vertical
 Project Number : 2601U62375E-EM
 Test Mode : working with full load
 Detector: Peak RBW/VBW: 120/500kHz
 Tester : Alex Yan

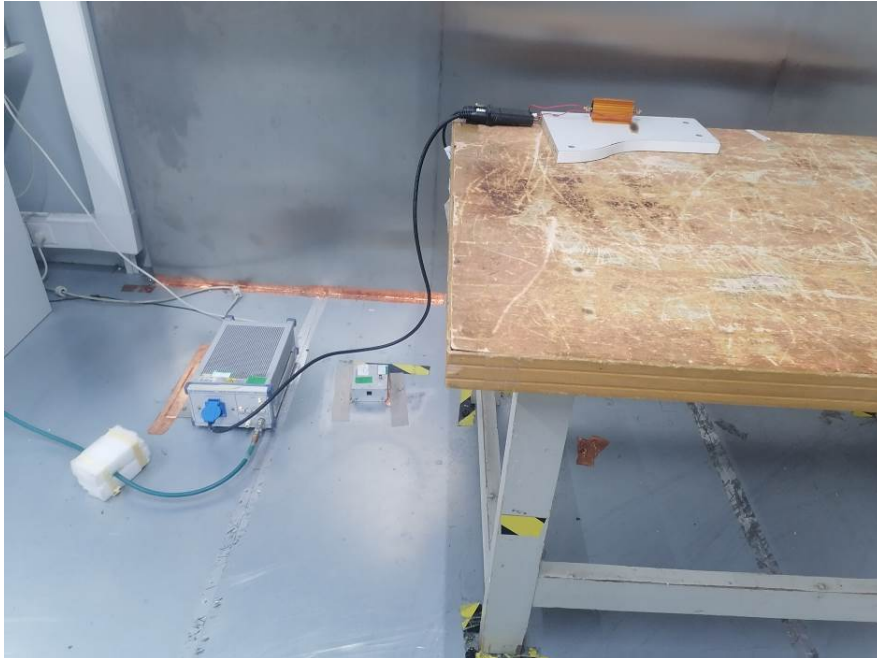
	Read	Limit	Over				
Freq	Level	Level	Line	Limit Remark			
MHz	dB/m	dBuV	dBuV/m	dBuV/m			
1	30.98	-6.24	41.75	35.51	50.00	-14.49	QP
2	31.94	-6.81	41.26	34.45	50.00	-15.55	QP
3	62.87	-17.97	44.39	26.42	50.00	-23.58	Peak
4	158.11	-12.56	35.64	23.08	54.00	-30.92	Peak
5	922.11	-0.63	28.46	27.83	57.00	-29.17	Peak
6	978.75	0.16	28.32	28.48	60.00	-31.52	Peak

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the report number is 2601U62375E-EUT.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

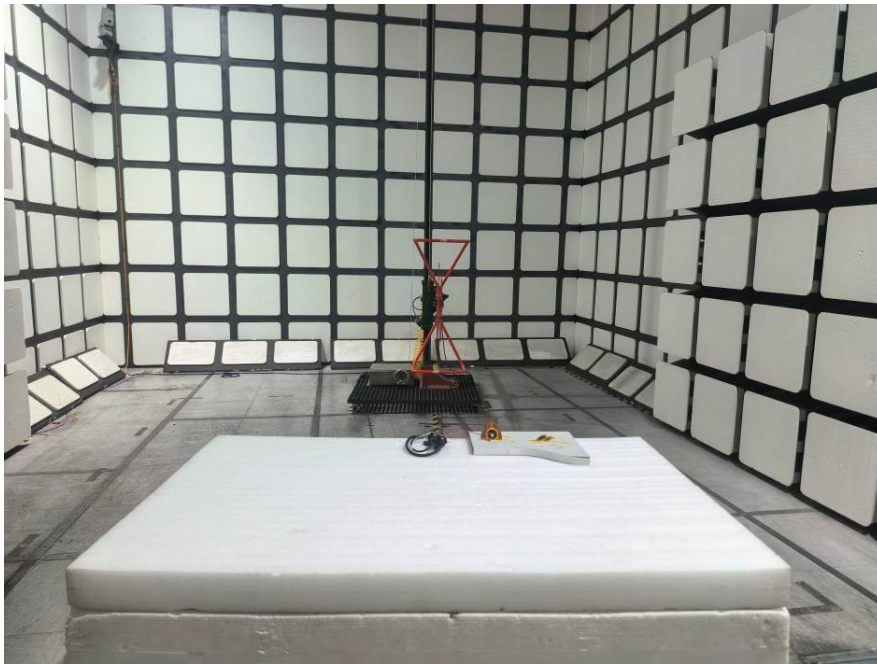
Conducted Emissions - Front View



Conducted Emissions - Side View



Radiated Emissions - Front View



Radiated Emissions - Rear View

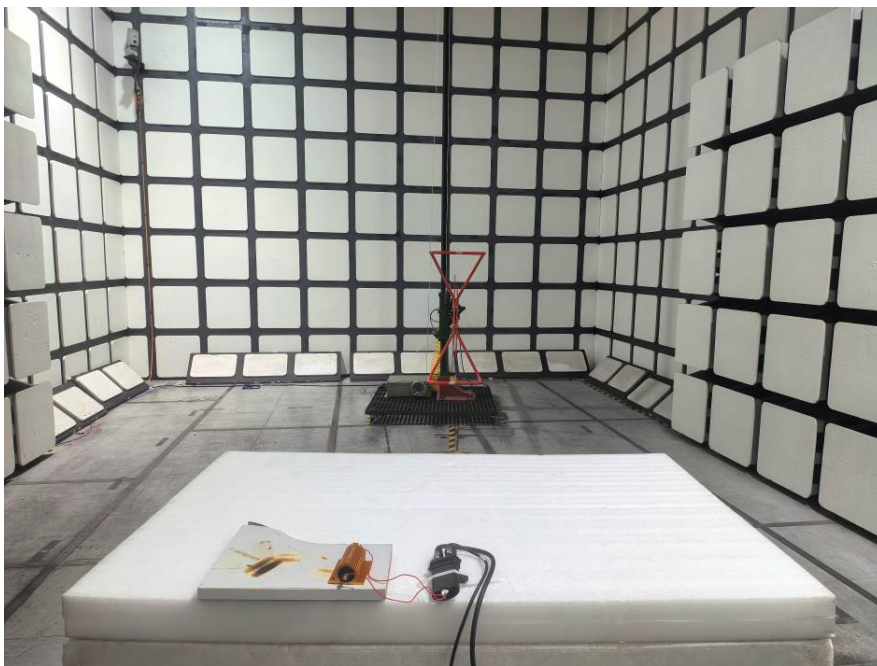


EXHIBIT C - PRODUCT SIMILARITY DECLARATION OF LETTER

Company Name: Astera LED Technology GmbH
 Address: Schatzbogen 60, 81829 Munich, Germany
 Tel: 0755-89954181
 E-mail: Nemo@astera-led.email
 Date: 2026-06-23

Declaration of Similarity

Bay Area Compliance Laboratories Corp.(Shenzhen)
 Dear Sir or Madam,

We, Astera LED Technology GmbH hereby declare that we have a product named as
 PowerFlow for QuikBeam: TracklightAdapter for 3-Circuit Track Black;
 TracklightAdapter for 3-Circuit Track White; TracklightAdapter for 3-Circuit Track Custom Color;
 TracklightAdapter for H-Type Track Black; TracklightAdapter for H-Type Track White;
 TracklightAdapter for H-Type Track Custom Color

the models: AST-QUKBM-PWF , the Series model name. AST-QUKBM-TKLEUT;

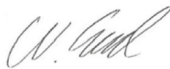
AST-QUKBM-TKLEUT-WT; AST-QUKBM-TKLEUT-CC; AST-QUKBM-TKLHLT; AST-QUKBM-TKLHLT-WT;
 AST-QUKBM-TKLHLT-CC,The differences are described as follows

	Front	Back	Differences
AST-QUKBM-PWF			AC Input connector, AC Output connector

AST-QUKBM-TKLEUT AST-QUKBM-TKLEUT-W T AST-QUKBM-TKLEUT-CC AST-QUKBM-TKLHLT AST-QUKBM-TKLHLT-W T AST-QUKBM-TKLHLT-CC			AC Input wire, different uses
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We confirm that all information above is true, and we'll be responsible for all the consequences. Please contact me if you have any question.

Sincerely

Signature: 
Print name: Norbert Ernst
Title: CEO

******* END OF REPORT *******