

SAR Report

EUT Model: SIT-03-0-X

FCC ID: 2ASMPNB2IOT

Prepared for:

Lyft

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USA

Prepared by:

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Report/Issue Date: May 15, 2019 Report Number: 31952265.001 Job Number: 234105634

TABLE OF CONTENTS

EX	ECUTIVE SUMMARY	. 4
1.1 1.2	SCOPE DEVIATIONS FROM THE SPECIFICATIONS	4
PRO	ODUCT INFORMATION	. 5
2.1		
2.3	AIR INTERFACES	. 5
2.4 2.5		
SAI	R MEASUREMENT RESULTS	. 7
3.1		
- '		
	1.1 1.2 PRO 2.1 2.2 2.3 2.4 2.5 SAI 3.1 3.2	1.2 DEVIATIONS FROM THE SPECIFICATIONS. PRODUCT INFORMATION. 2.1 PRODUCT DESCRIPTION

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X

Statement of Compliance

Manufacturer: Lyft

185 Berry Street Suite 5000 San Francisco CA 94107

USA

Name of Equipment: SIT-03-0-X
Model Number: SIT-03-0-X
FCC ID: 2ASMPNB2IOT
Evaluation Dates: May 13, 2019

Guidance Documents:

FCC Code of Federal Regulations Title 47, FCC KDB 447498

Evaluation Methods:

FCC Code of Federal Regulations Title 47, FCC KDB 447498

The RF exposure test and documented data described in this report has been performed and recorded by TÜV Rheinland, in accordance with the standards and procedures listed herein. As the responsible authorized agent of the EMC laboratory, I hereby declare that the equipment described above has been shown to be compliant with the RF exposure requirements of the stated regulations and standards based on these results. If any special accessories and/or modifications were required for compliance, they are listed in this report.

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Engineer Name	May 15, 2019	Manager Name	May 15, 2019	
Test Engineer	Date	Laboratory Signatory	Date	



Test Cert. # 3331.02

1 Executive Summary

1.1 Scope

This report is intended to document the status of conformance with the applicable RF exposure requirements based on the results of testing performed on May 13, 2019 on the SIT-03-0-X model SIT-03-0-X manufactured by Lyft. It is the responsibility of the manufacturer to assure that production units of this model are manufactured with identical or equivalent electrical and mechanical components. This report is further intended to document changes and modifications to the EUT throughout its life cycle. All documentation will be included as a supplement.

1.2 Deviations from the Specifications

None

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X

2 Product Information

2.1 Product Description

The control module SIT-03-0-X is part of the Ninebot 2.0 Scooter. The LTE and NFC radios are used to register rental payment for the scooter.

2.2 Equipment Under Test (EUT)

	EUT Specification			
Power Input	36 VDC			
Exposure Type	☑ General Population / Uncontrolled☐ Occupational / Controlled			
Exposure Condition	 □ Next to the Ear □ Head Worn □ Body Worn ⋈ Next to the Body □ Limb □ Personal Wireless Router (Hotspot) 			
Power Reduction Modes	None			

2.3 Air Interfaces

Air Interface	Supported Capabilities	Modulation	Maximum Duty Cycle	Band	Frequency Range (MHz)	Maximum Conducted Output Power Including Tolerance (dBm)
LTE - FDD	Rel. 9UE Category 1	• QPSK	100%	Band 4	1710 - 1755	24
	• Power Class 3	2 61 210	10070	Band 13	777 – 787	24
NFC	N/A	• ASK	100%	N/A	13.56	18

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X

2.4 Antenna Information

	Internal /		Frequency Range	Antenna Gain
Antenna	External	Antenna Type	(MHz)	(dBi)
LTE - FDD	Intonnol	CMT Chin	1710 - 1880	-0.21
LIE-FDD	Internal	SMT Chip	698 – 803	3.05
NFC	Internal	PCB	13.56	-18

Notes

- 1. LTE antenna gain declared by manufacturer.
- 2. NFC antenna gain declared by manufacturer

2.5 Simultaneous Transmission Configurations

1 st Ra	1 st Radio		2 nd Radio		
Antenna	Band	Antenna	Band	Simultaneously Transmit?	
LTE	4	NFC	-	Yes	
LTE	13	NFC	-	Yes	

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X

3 SAR Measurement Results

3.1 SAR Evaluation Exclusions

3.1.1 KDB 447498 section 4.3.1 Low Power Exclusions

The equations according to KDB 447498 section 4.3.1 are used to determine if the standalone radios can be excluded from SAR testing. The antenna to user distances used for evaluation are worst case during normal operation.

Body Exposure

Antenna	Frequency (MHz)	Antenna to User distance (mm)	Power (dBm)	Power (mW)	Power exclusion threshold (mW)	Percentage of Exclusion Threshold	Excluded?
LTE	1754.3	152	24	251	1133	22.1%	Yes
LTE	779.5	152	24	251	700	35.9%	Yes
NFC	13.56	50	18	63	443	11.3%	Yes

Limb Exposure

Antenna	Frequency (MHz)	Antenna to User distance (mm)	Power (dBm)	Power (mW)	Power exclusion threshold (mW)	Percentage of Exclusion Threshold	Excluded?
LTE	1754.3	70	24	251	483	52.0%	Yes
LTE	779.5	70	24	251	529	47.4%	Yes
NFC	13.56	50	18	63	1107	5.6%	Yes

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X

3.2 Simultaneous Transmission Analysis

For each simultaneous transmission configuration, the sum of the percentages to the limit of each radio should not exceed 100%.

Body Exposure

Simultaneous Transmission Configuration	Percentage of Limit	Sum of Percentages
LTE Band 4	22.1%	33.4%
NFC	11.3%	33.470
LTE Band 13	35.9%	47.20/
NFC	11.3%	47.2%

Limb Exposure

Simultaneous Transmission Configuration	Percentage of Limit	Sum of Percentages
LTE Band 4	52%	57 60/
NFC	5.6%	57.6%
LTE Band 13	47.4%	520/
NFC	5.6%	53%

4 Revision History

The latest revision replaces all previous versions

Revision No.	Date	Reason for change	Author
0	May 13, 2019	Original	DF

Report Number: 31952265.001 EUT: SIT-03-0-X | Model: SIT-03-0-X