TEST REPORT

Application No.:	KSCR2209001699AT
FCC ID:	2AH25T6820
Applicant:	Shanghai Sunmi Technology Co.,Ltd.
Address of Applicant:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
Address of Manufacturer:	Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China
Equipment Under Test (EUT):	
EUT Name:	Smart POS system
Model No.:	T6820
Trade Mark:	SUNMI
Standard(s) :	47 CFR Part 2; 47 CFR Part 22 subpart H; 47 CFR Part 24 subpart E; 47 CFR Part 27 subpart C
Date of Receipt:	2022-09-08
Date of Test:	2022-11-29 to 2022-11-29
Date of Issue:	2022-12-09
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Eric Lin
Laboratory Manager

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Revision Record			
Version	**Description**	**Date**	**Remark**
00	*Add two configurations*	2022-12-09	*Based on KSCR220400050308AT*

Authorized for issue by:				
		Damon zhou **Damon_Zhou/Project Engineer**		
		Eric Lin **Eric Lin /Reviewer**		

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2 Test Summary

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Field strength of spurious radiation	47 CFR Part 2; 47 CFR Part 22 subpart H; 47 CFR Part 24 subpart E; 47 CFR Part 27 subpart C	ANSI C63.26, KDB 971168 D01 v03	§2.1051, §22.917, §24.238, §27.53(f), §27.53(g), §27.53(h)	Pass

This report based on KSCR220400050308AT, added two configurations. expressed as SKU5 and SKU6.
SKU5 (HVIN:T6820-1) stand for support HD screen, not support scanner version.
SKU6 (HVIN:T6820-2) stand for support laser scanner version.

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 7.2V by Rechargeable Li-ion Battery charged by Adapter Battery Model: LKPA Nominal voltage:7.2V Limited charge voltage:8.4V Rated capacity:2500mAh/18Wh Typical capacity:2600mAh/18.72Wh Adapter Model 1: UC13US INPUT:100-240V,50/60Hz,0.35A OUTPUT:5V,2A Adapter Model 2: UC11US INPUT:100-240V,50/60Hz,0.2A OUTPUT:5V,1A Adapter Model 3: TPA-46B050100UU INPUT:100-240V,50/60Hz,0.2A OUTPUT:5V,1A Adapter Model 4: TPA-23A050200UU01 INPUT:100-240V,50/60Hz,0.3A OUTPUT:5V,2A
Test voltage:	DC 7.2V
Serial Number:	TJ06P28C20009
Firmware version:	SP6228A_V11_20220501_sunmi
Sample Type:	Portable production
LTE Operation Frequency Band:	LTE Band 2,4,5,7,12,17,25,26,38,41,66
Modulation Type:	QPSK, 16QAM, 64QAM
Antenna Type:	PIFA Antenna
Antenna Gain:	Band 2:1.8dBi(Provided by the manufacturer) Band 4: 0.4dBi(Provided by the manufacturer) Band 5: 1.3dBi(Provided by the manufacturer) Band 7: 1.7dBi(Provided by the manufacturer) Band 12: 1.4dBi(Provided by the manufacturer) Band 17: 1.0dBi(Provided by the manufacturer) Band 25: 2.0dBi(Provided by the manufacturer) Band 26: 1.3dBi(Provided by the manufacturer) Band 38: 1.8dBi(Provided by the manufacturer) Band 41: 1.8dBi(Provided by the manufacturer) Band 66: 0.4dBi(Provided by the manufacturer)
Extreme temp. Tolerance:	-10°C to +50°C
Extreme vol. Limits:	6.12V DC to 8.28V DC (nominal: 7.2V DC)
IMEI:	867223060217692

Note:
The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.

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4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855.0	1880	1905.0
	15	1857.5	1880	1902.5
	20	1860.0	1880	1900.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715.0	1732.5	1750.0
	15	1717.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560

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Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 17	5	706.5	710	713.5
	10	709	710	711
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 25	1.4	1850.7	1880	1914.3
	3	1851.5	1880	1913.5
	5	1852.5	1880	1912.5
	10	1855.0	1880	1910
	15	1857.5	1880	1907.5
	20	1860.0	1880	1905
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 26	1.4	814.7	831.5	848.3
	3	815.5	831.5	847.5
	5	816.5	831.5	846.5
	10	819	831.5	844

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Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE TDD Band 38	5	2572.5	2595.0	2617.5
	10	2575.0	2595.0	2615.0
	15	2577.5	2595.0	2612.5
	20	2580.0	2595.0	2610.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE TDD Band 41	5	2498.5	2593.0	2687.5
	10	2501.0	2593.0	2685.0
	15	2503.5	2593.0	2682.5
	20	2506.0	2593.0	2680.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770

4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	48%	
Atmospheric Pressure:	1015Pa	
Temperature:	TN	25 °C
Voltage:	VL	6.12V
	VN	7.2V
	VH	8.28V

NOTE: VL= lower extreme test voltage
VN= nominal voltage
VH= upper extreme test voltage
TN= normal temperature

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4.4 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--
The EUT has been tested as an independent unit.			

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz)
		5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz)
		4.5dB (30MHz-1GHz)
		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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4.6 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).

2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED (CAB identifier CN0072)

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

• VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/22/2022	08/21/2023
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/22/2022	08/21/2023
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/22/2022	01/21/2023
4	Signal Generator	R&S	SMW200A	KSEM020-1	08/22/2022	08/21/2023
5	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/22/2022	08/21/2023
6	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/22/2022	08/21/2023
7	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	04/01/2022	03/31/2023
8	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/22/2022	08/21/2023
9	Switcher	CCSRF	FY562	KUS2001M001-3	08/22/2022	08/21/2023
10	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
11	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	01/16/2022	01/15/2023
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	04/01/2021	03/31/2023
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	04/14/2022	04/13/2023
15	Software	BST	TST-PASS	/	N/A	N/A
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/22/2022	08/21/2023
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	04/01/2022	03/31/2023
3	Signal Generator	Agilent	E8257C	KS301066	08/22/2022	08/21/2023
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	04/13/2021	04/12/2023
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2021	06/28/2023
6	Bilog Antenna	SCHWARZBECK	VULB9160	CZ301016	04/13/2021	04/12/2024
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	04/02/2022	04/01/2024
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	02/22/2021	02/21/2023
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	03/17/2022	03/16/2023
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/22/2022	01/21/2023
11	Amplifier(18~40GHz)	COM-POWER	PAM-840A	KUS1710E001	01/22/2022	01/21/2023
12	RE Test Cable	REBES MICROWAVE	/	CZ301097	11/13/2022	11/12/2023
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	01/04/2022	31/03/2023
14	Software	Faratronic	EZ_EMC-v 3A1	/	N/A	N/A

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6 Radio Spectrum Matter Test Results

6.1 Field strength of spurious radiation

Test Requirement §2.1051, §22.917, §24.238, §27.53(f), §27.53(g), §27.53(h)
Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit:
Limit: ≤ -13dBm(LTE Band2,4,5,12)
≤ -13dBm(LTE Band13, limit out of band 1559-1610MHz)
≤ -40dBm(LTE Band13, limit in the band 1559-1610MHz)

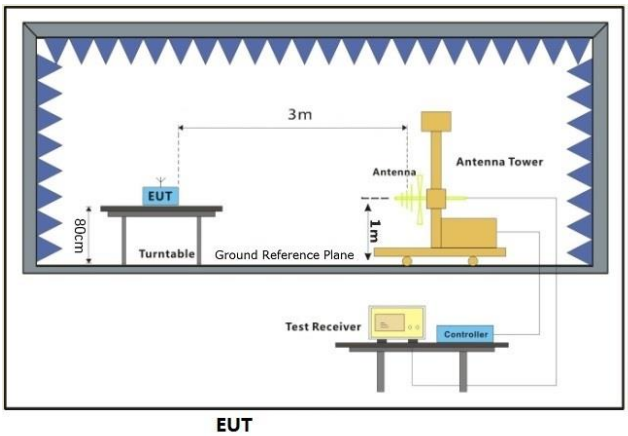
6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 23.3 °C Humidity: 47.4 % RH Atmospheric Pressure: 1010 mbar

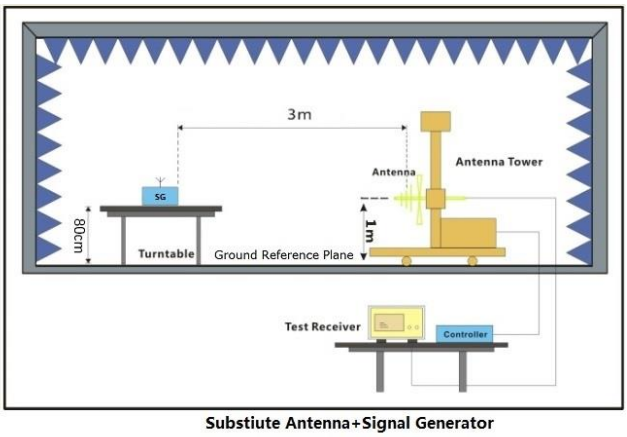
6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	17	TX mode_Keep the EUT (SKU6) with adapter 1 in transmitting mode
Final test	08	TX mode_Keep the EUT (SKU5) with adapter 1 in transmitting mode

6.1.3 Test Setup Diagram



EUT



Substiute Antenna+Signal Generator

6.1.4 Measurement Procedure and Data

Test Procedure:

(1)On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
(2)The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
(3)The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
(4)The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
(5)The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
(6)The transmitter shall than be rotated through 360°in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
(7)The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
(8)The maximum signal level detected by the measuring receiver shall be noted.
(9)The measurement shall be repeated with the test antenna set to horizontal polarization.
(10) Replace the antenna with a proper Antenna (substitution antenna).
(11)The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
(12)The substitution antenna shall be connected to a calibrated signal generator.
(13)If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
(14)The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
(15)The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
(16)The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
(17)The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.

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LTE BAND 2-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3720.000	-51.81	-13	-38.81	Horizontal
5580.000	-60.20	-13	-47.20	Horizontal
7440.000	-53.73	-13	-40.73	Horizontal
3720.000	-59.31	-13	-46.31	Vertical
5580.000	-58.61	-13	-45.61	Vertical
7440.000	-55.05	-13	-42.05	Vertical

LTE BAND 2-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3760.000	-57.43	-13	-44.43	Horizontal
5640.000	-59.83	-13	-46.83	Horizontal
7520.000	-55.41	-13	-42.41	Horizontal
3760.000	-54.47	-13	-41.47	Vertical
5640.000	-61.73	-13	-48.73	Vertical
7520.000	-59.32	-13	-46.32	Vertical

LTE BAND 2-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3800.000	-60.53	-13	-47.53	Horizontal
5700.000	-60.29	-13	-47.29	Horizontal
7600.000	-54.28	-13	-41.28	Horizontal
3800.000	-57.44	-13	-44.44	Vertical
5700.000	-62.54	-13	-49.54	Vertical
7600.000	-53.16	-13	-40.16	Vertical

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LTE BAND 4-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3440.000	-57.03	-13	-44.03	Horizontal
5160.000	-56.12	-13	-43.12	Horizontal
6880.000	-55.12	-13	-42.12	Horizontal
3440.000	-56.02	-13	-43.02	Vertical
5160.000	-60.34	-13	-47.34	Vertical
6880.000	-53.33	-13	-40.33	Vertical

LTE BAND 4-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3465.000	-57.83	-13	-44.83	Horizontal
5197.500	-59.34	-13	-46.34	Horizontal
6930.000	-58.00	-13	-45.00	Horizontal
3465.000	-55.70	-13	-42.70	Vertical
5197.500	-59.42	-13	-46.42	Vertical
6930.000	-56.11	-13	-43.11	Vertical

LTE BAND 4-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3490.000	-55.78	-13	-42.78	Horizontal
5235.000	-63.54	-13	-50.54	Horizontal
6980.000	-55.97	-13	-42.97	Horizontal
3490.000	-61.23	-13	-48.23	Vertical
5235.000	-63.19	-13	-50.19	Vertical
6980.000	-56.38	-13	-43.38	Vertical

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LTE BAND 5-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1658.000	-52.85	-13	-39.85	Horizontal
2487.000	-57.35	-13	-44.35	Horizontal
3316.000	-52.98	-13	-39.98	Horizontal
1658.000	-56.69	-13	-43.69	Vertical
2487.000	-59.07	-13	-46.07	Vertical
3316.000	-54.88	-13	-41.88	Vertical

LTE BAND 5-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1673.000	-50.76	-13	-37.76	Horizontal
2509.500	-57.67	-13	-44.67	Horizontal
3346.000	-59.33	-13	-46.33	Horizontal
1673.000	-58.53	-13	-45.53	Vertical
2509.500	-61.30	-13	-48.30	Vertical
3346.000	-55.27	-13	-42.27	Vertical

LTE BAND 5-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1688.000	-60.53	-13	-47.53	Horizontal
2532.000	-56.01	-13	-43.01	Horizontal
3376.000	-55.12	-13	-42.12	Horizontal
1688.000	-61.39	-13	-48.39	Vertical
2532.000	-52.89	-13	-39.89	Vertical
3376.000	-60.53	-13	-47.53	Vertical

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LTE BAND 7-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5020.000	-57.80	-13	-44.80	Horizontal
7530.000	-58.70	-13	-45.70	Horizontal
10040.000	-54.06	-13	-41.06	Horizontal
5020.000	-57.57	-13	-44.57	Vertical
7530.000	-57.01	-13	-44.01	Vertical
10040.000	-55.01	-13	-42.01	Vertical

LTE BAND 7-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5070.000	-55.59	-13	-42.59	Horizontal
7605.000	-63.40	-13	-50.40	Horizontal
10140.000	-52.48	-13	-39.48	Horizontal
5070.000	-57.05	-13	-44.05	Vertical
7605.000	-59.32	-13	-46.32	Vertical
10140.000	-54.60	-13	-41.60	Vertical

LTE BAND 7-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5120.000	-56.94	-13	-43.94	Horizontal
7680.000	-62.18	-13	-49.18	Horizontal
10240.000	-57.34	-13	-44.34	Horizontal
5120.000	-52.83	-13	-39.83	Vertical
7680.000	-58.21	-13	-45.21	Vertical
10240.000	-56.66	-13	-43.66	Vertical

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LTE BAND 12-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1408.000	-57.39	-13	-44.39	Horizontal
2112.000	-57.27	-13	-44.27	Horizontal
2816.000	-53.62	-13	-40.62	Horizontal
1408.000	-56.18	-13	-43.18	Vertical
2112.000	-59.11	-13	-46.11	Vertical
2816.000	-54.45	-13	-41.45	Vertical

LTE BAND 12-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1415.000	-58.16	-13	-45.16	Horizontal
2122.500	-58.10	-13	-45.10	Horizontal
2830.000	-55.50	-13	-42.50	Horizontal
1415.000	-50.18	-13	-37.18	Vertical
2122.500	-60.68	-13	-47.68	Vertical
2830.000	-58.81	-13	-45.81	Vertical

LTE BAND 12-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1422.000	-59.60	-13	-46.60	Horizontal
2133.000	-62.49	-13	-49.49	Horizontal
2844.000	-54.65	-13	-41.65	Horizontal
1422.000	-54.70	-13	-41.70	Vertical
2133.000	-62.70	-13	-49.70	Vertical
2844.000	-55.03	-13	-42.03	Vertical

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LTE BAND 17-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1418.000	-52.19	-13	-39.19	Horizontal
2127.000	-55.79	-13	-42.79	Horizontal
2836.000	-54.29	-13	-41.29	Horizontal
1418.000	-59.18	-13	-46.18	Vertical
2127.000	-59.61	-13	-46.61	Vertical
2836.000	-54.62	-13	-41.62	Vertical

LTE BAND 17-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1420.000	-56.43	-13	-43.43	Horizontal
2130.000	-62.03	-13	-49.03	Horizontal
2840.000	-57.24	-13	-44.24	Horizontal
1420.000	-56.55	-13	-43.55	Vertical
2130.000	-58.70	-13	-45.70	Vertical
2840.000	-55.28	-13	-42.28	Vertical

LTE BAND 17-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1422.000	-53.43	-13	-40.43	Horizontal
2133.000	-62.98	-13	-49.98	Horizontal
2844.000	-55.91	-13	-42.91	Horizontal
1422.000	-58.90	-13	-45.90	Vertical
2133.000	-59.54	-13	-46.54	Vertical
2844.000	-55.50	-13	-42.50	Vertical

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LTE BAND 25-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3720.000	-55.90	-13	-42.90	Horizontal
5580.000	-56.35	-13	-43.35	Horizontal
7440.000	-53.00	-13	-40.00	Horizontal
3720.000	-59.56	-13	-46.56	Vertical
5580.000	-56.19	-13	-43.19	Vertical
7440.000	-56.91	-13	-43.91	Vertical

LTE BAND 25-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3760.000	-52.55	-13	-39.55	Horizontal
5640.000	-59.48	-13	-46.48	Horizontal
7520.000	-57.17	-13	-44.17	Horizontal
3760.000	-57.17	-13	-44.17	Vertical
5640.000	-60.17	-13	-47.17	Vertical
7520.000	-58.14	-13	-45.14	Vertical

LTE BAND 25-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3810.000	-54.22	-13	-41.22	Horizontal
5715.000	-60.57	-13	-47.57	Horizontal
7620.000	-53.19	-13	-40.19	Horizontal
3810.000	-55.93	-13	-42.93	Vertical
5715.000	-61.27	-13	-48.27	Vertical
7620.000	-56.79	-13	-43.79	Vertical

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LTE BAND 26-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1643.000	-55.50	-13	-42.50	Horizontal
2464.500	-58.55	-13	-45.55	Horizontal
3286.000	-53.93	-13	-40.93	Horizontal
1643.000	-53.16	-13	-40.16	Vertical
2464.500	-58.44	-13	-45.44	Vertical
3286.000	-56.25	-13	-43.25	Vertical

LTE BAND 26-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1663.000	-55.64	-13	-42.64	Horizontal
2494.500	-61.49	-13	-48.49	Horizontal
3326.000	-59.63	-13	-46.63	Horizontal
1663.000	-50.68	-13	-37.68	Vertical
2494.500	-60.05	-13	-47.05	Vertical
3326.000	-55.65	-13	-42.65	Vertical

LTE BAND 26-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
1683.000	-51.88	-13	-38.88	Horizontal
2524.500	-61.51	-13	-48.51	Horizontal
3366.000	-55.01	-13	-42.01	Horizontal
1683.000	-59.62	-13	-46.62	Vertical
2524.500	-62.91	-13	-49.91	Vertical
3366.000	-52.58	-13	-39.58	Vertical

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LTE BAND 38-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5160.000	-58.89	-25	-33.89	Horizontal
7740.000	-57.42	-25	-32.42	Horizontal
10320.000	-56.77	-25	-31.77	Horizontal
5160.000	-59.45	-25	-34.45	Vertical
7740.000	-58.65	-25	-33.65	Vertical
10320.000	-56.37	-25	-31.37	Vertical

LTE BAND 38-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5190.000	-55.36	-25	-30.36	Horizontal
7785.000	-59.75	-25	-34.75	Horizontal
10380.000	-58.50	-25	-33.50	Horizontal
5190.000	-56.00	-25	-31.00	Vertical
7785.000	-62.05	-25	-37.05	Vertical
10380.000	-57.01	-25	-32.01	Vertical

LTE BAND 38-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5220.000	-57.31	-25	-32.31	Horizontal
7830.000	-60.63	-25	-35.63	Horizontal
10440.000	-52.85	-25	-27.85	Horizontal
5220.000	-53.97	-25	-28.97	Vertical
7830.000	-60.07	-25	-35.07	Vertical
10440.000	-55.31	-25	-30.31	Vertical

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LTE BAND 41-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5012.000	-59.89	-25	-34.89	Horizontal
7518.000	-57.42	-25	-32.42	Horizontal
10024.000	-57.77	-25	-32.77	Horizontal
5012.000	-55.45	-25	-30.45	Vertical
7518.000	-58.65	-25	-33.65	Vertical
10024.000	-55.37	-25	-30.37	Vertical

LTE BAND 41-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5186.000	-55.36	-25	-30.36	Horizontal
7779.000	-59.75	-25	-34.75	Horizontal
10372.000	-57.50	-25	-32.50	Horizontal
5186.000	-53.00	-25	-28.00	Vertical
7779.000	-62.05	-25	-37.05	Vertical
10372.000	-57.01	-25	-32.01	Vertical

LTE BAND 41-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
5360.000	-57.32	-25	-32.32	Horizontal
8040.000	-61.62	-25	-36.62	Horizontal
10720.000	-52.83	-25	-27.83	Horizontal
5360.000	-53.97	-25	-28.97	Vertical
8040.000	-60.07	-25	-35.07	Vertical
10720.000	-55.31	-25	-30.31	Vertical

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LTE BAND 66-Low channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3440.000	-53.02	-13	-40.02	Horizontal
5160.000	-60.12	-13	-47.12	Horizontal
6880.000	-57.58	-13	-44.58	Horizontal
3440.000	-59.60	-13	-46.60	Vertical
5160.000	-59.17	-13	-46.17	Vertical
6880.000	-56.40	-13	-43.40	Vertical

LTE BAND 66-Middle channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3490.000	-58.39	-13	-45.39	Horizontal
5235.000	-58.95	-13	-45.95	Horizontal
6980.000	-59.58	-13	-46.58	Horizontal
3490.000	-55.48	-13	-42.48	Vertical
5235.000	-58.72	-13	-45.72	Vertical
6980.000	-58.25	-13	-45.25	Vertical

LTE BAND 66-High channel				
Frequency (MHz)	Level (dBm)	Limit (dBm)	Over Limit (dB)	Polarization
3540.000	-57.49	-13	-44.49	Horizontal
5310.000	-62.91	-13	-49.91	Horizontal
7080.000	-52.98	-13	-39.98	Horizontal
3540.000	-54.20	-13	-41.20	Vertical
5310.000	-61.90	-13	-48.90	Vertical
7080.000	-55.55	-13	-42.55	Vertical

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7 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2209001699AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2209001699AT

- End of the Report -

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