



TEST REPORT

Application No.: GZCR2112021591AT
Applicant: Poynt, LLC
Address of Applicant: 3032 Bunker Hill Lane Santa Clara California 95054 United States
Manufacturer: Beijing Wiseasy Technology CO., Ltd.
Address of Manufacturer: 7thFloor, Block B, Wangxin Mansion, No.28 Xiaoyun Road, Chaoyang District, 100027, Beijing, China.
Factory: BYD Precision Manufacture Co., Ltd.
Address of factory: Baolong Industrial Park, 3001 Baohe Rd., Longgang District, Shenzhen, P.R.C
Equipment Under Test (EUT):
EUT Name: Poynt Smart Terminal V3.0
Model No.: PST3
Trade mark: POYNT
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: 2021-11-30
Date of Test: 2021-12-01 to 2021-12-30
Date of Issue: 2022-01-06

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

Kobe Jian
EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2022-01-06		Original

Authorized for issue by:				
				
		Curry Wu/Project Engineer		
				
		Ricky Liu/Reviewer		



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2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Field strength of spurious radiation	§2.1051, §22.917, §24.238 §27.53(h)	≤ -13dBm	PASS

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

This report is prepared for FCC class II permissive change.

The Original grant approval by TCB, FCC ID:2AFD7-PST3, Granted on 11/02/2021.

Review this report and original report, this report just changed the 5-inch screen.

According to the declaration from the applicant, the model in this report and the model in original report is identical in electrical circuit design, layout, components used, antenna type, antenna gain and internal wiring, with only difference on the 5-inch screen.

Therefore in this report Field strength of spurious radiation were fully retested on model PST3.



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4 General Information

4.1 Details of E.U.T.

Switching Adapter

Model: ASSA13W-050300

Input: AC 100-240V, 50/60Hz, 0.6A

Output: DC 5.0V, 3.0A, 15.0W

Power supply:

Battery

DESAY Model No.: 2532002

DC 3.7V, 5900mAh, 21.83Wh

DOCKING STATION

Rating: DC 5V, 3A

AC 120V, 60Hz or AC 240V, 50Hz

Test Voltage:

Note: Both nominal AC 120V, 60Hz and AC 240 V, 50Hz are required for testing in accordance with FCC KDB174176, this report only shows the results of the worst test result(AC 120V, 60Hz);

Cable(s):

DC cable:98cm unshielded

Sample Type:

Portable production

Support Network:

RMC, HSDPA, HSUPA

Operation Frequency

Band:

UMTS FDD Band II/V/IV

Modulation Type:

QPSK for WCDMA

Supported Channel

Bandwidth:

5MHz for WCDMA

UMTS Power Class:

Level 3

Antenna Type:

FPC

Antenna Gain:

-1dBi



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4.2 Test Frequency

Test Mode	TX/RX	RF Channel		
		Low(L)	Middle (M)	High (H)
WCDMA Band V	TX	Channel 4132	Channel 4183	Channel 4233
		826.4 MHz	836.6 MHz	846.6 MHz
	RX	Channel 4357	Channel 4407	Channel 4458
		871.4 MHz	881.4 MHz	891.6 MHz
Test Mode	TX/RX	RF Channel		
		Low(L)	Middle (M)	High (H)
WCDMA Band IV	TX	Channel	Channel	Channel
		1712.4 MHz	1732.6 MHz	1752.6 MHz
	RX	Channel 9662	Channel 9800	Channel 9938
		2112.4	2132.6MHz	2152.6MHz
Test Mode	TX/RX	RF Channel		
		Low(L)	Middle (M)	High (H)
WCDMA Band II	TX	Channel 9262	Channel 9400	Channel 9538
		1852.4 MHz	1880.0 MHz	1907.6 MHz
	RX	Channel 9662	Channel 9800	Channel 9938
		1932.4 MHz	1960.0 MHz	1987.6 MHz

4.3 Description of Support Units

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



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4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25×10^{-8}
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF conducted power	0.75dB
5	RF power density	2.84dB
6	Conducted Spurious emissions	0.75dB
7	RF Radiated power	5.14dB (below 1GHz)
		5.08dB (above 1GHz)
8	Radiated Spurious emission test	5.14dB (below 1GHz)
		5.08dB (above 1GHz)
9	Temperature test	1°C
10	Humidity test	3%
11	Supply voltages	1.5%
12	Time	3%

4.5 Test Location

All tests were performed at:

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Guangzhou, China 510663

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No tests were sub-contracted.



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4.6 Test Facility

● NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

● ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

● SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

● FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

● ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

● CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



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5 Equipment List

RE in Chamber(below 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Chamber cable	HangTianXing	N/A	EMC0542	2020-09-09	2022-09-08
Trilog Broadband Antenna(25MHz-1GHz)-Lab	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	SEM003-18	2019-02-22	2022-02-22
Amplifier(9kHz-1.3GHz)	HP	8447F	EMC2065	2021-05-19	2022-05-18
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
EMI Test Receiver(1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2220	2021/5/26	2022/5/25
Substitution Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	SEM003-18	2019-02-22	2022-02-22
Signal Generator (10MHz-20GHz)	Rohde & Schwarz	SMR20	EMC0516	2021-01-11	2022-01-10

RE in Chamber(above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver(20Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-01-08	2022-01-07
Chamber cable(Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2020-09-09	2022-09-08
Horn Antenna(1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2021-01-08	2022-01-07
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2021-01-08	2022-01-07
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
MXE EMI Receiver(10Hz-8.4GHz)	Keysight	N9038A	EMC2139	2021-11-12	2022-11-11
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2021-09-16	2022-09-15
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2021-07-29	2022-07-28
Horn Antenna(14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27



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Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2021-09-08	2022-09-07
Substitution Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24
Signal Generator (10MHz-20GHz)	Rohde & Schwarz	SMR20	EMC0516	2021-01-11	2022-01-10

General used equipment

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2021-07-05	2022-07-05
DMM	Fluke	73	EMC0007	2021-07-05	2022-07-05



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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(h)

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: $\leq -13\text{dBm}$

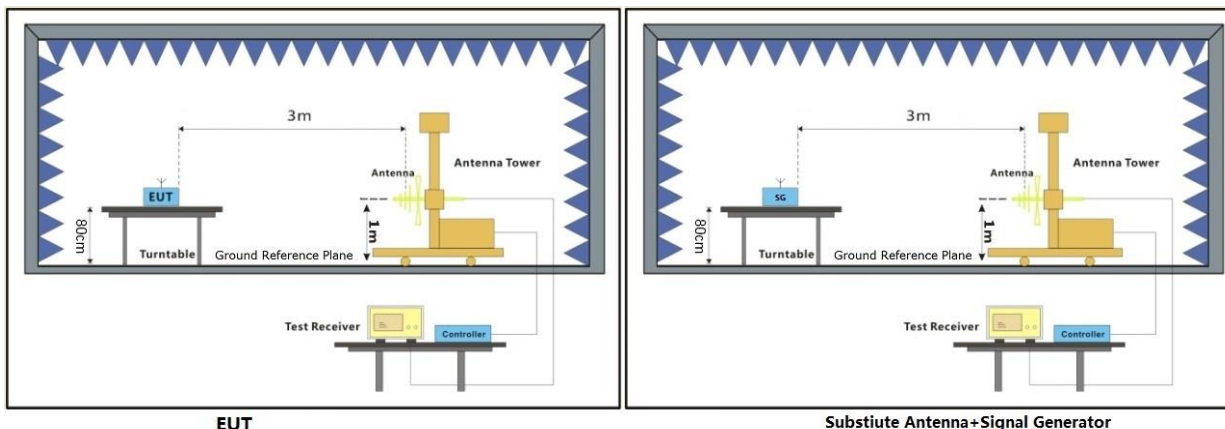
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C Humidity: 53.8 % RH Atmospheric Pressure: 1020 mbar

Test mode: 45: TX mode_Keep the EUT in transmitting mode.

6.1.2 Test Setup Diagram



6.1.3 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 then 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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WCDMA Band II-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3704.8	-50.34	-13	-37.34	-60.02	2.92	12.6	Horizontal	Pass
5557.2	-47.21	-13	-34.21	-57.16	3.15	13.1	Horizontal	Pass
7409.6	-42.71	-13	-29.71	-51.01	3.4	11.7	Horizontal	Pass
3704.8	-50.32	-13	-37.32	-60	2.92	12.6	Vertical	Pass
5557.2	-47.1	-13	-34.1	-57.05	3.15	13.1	Vertical	Pass
7409.6	-43.83	-13	-30.83	-52.13	3.4	11.7	Vertical	Pass

WCDMA Band II-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3760	-48.81	-13	-35.81	-58.49	2.92	12.6	Horizontal	Pass
5640	-46.28	-13	-33.28	-56.23	3.15	13.1	Horizontal	Pass
7520	-42.47	-13	-29.47	-50.02	3.85	11.4	Horizontal	Pass
3760	-47.37	-13	-34.37	-57.05	2.92	12.6	Vertical	Pass
5640	-47	-13	-34	-56.95	3.15	13.1	Vertical	Pass
7520	-43.39	-13	-30.39	-50.94	3.85	11.4	Vertical	Pass

WCDMA Band II-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3815.2	-50.38	-13	-37.38	-60.06	2.92	12.6	Horizontal	Pass
5722.8	-47	-13	-34	-56.95	3.15	13.1	Horizontal	Pass
7630.4	-44.31	-13	-31.31	-51.86	3.85	11.4	Horizontal	Pass
3815.2	-50.24	-13	-37.24	-59.92	2.92	12.6	Vertical	Pass
5722.8	-47.34	-13	-34.34	-57.29	3.15	13.1	Vertical	Pass
7630.4	-44.61	-13	-31.61	-52.16	3.85	11.4	Vertical	Pass



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WCDMA BAND IV-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3424.8	-47.39	-13	-34.39	-55.9	2.99	11.5	Horizontal	Pass
5137.2	-45.17	-13	-32.17	-54.87	3	12.7	Horizontal	Pass
6849.6	-45.28	-13	-32.28	-54.7	3.08	12.5	Horizontal	Pass
3424.8	-46.07	-13	-33.07	-54.58	2.99	11.5	Vertical	Pass
5137.2	-45.66	-13	-32.66	-55.36	3	12.7	Vertical	Pass
6849.6	-46.18	-13	-33.18	-55.6	3.08	12.5	Vertical	Pass

WCDMA BAND IV-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3465.2	-44.57	-13	-31.57	-53.08	2.99	11.5	Horizontal	Pass
5197.8	-46.19	-13	-33.19	-55.89	3	12.7	Horizontal	Pass
6930.4	-44.3	-13	-31.3	-53.72	3.08	12.5	Horizontal	Pass
3465.2	-47.99	-13	-34.99	-56.5	2.99	11.5	Vertical	Pass
5197.8	-45.59	-13	-32.59	-55.29	3	12.7	Vertical	Pass
6930.4	-43.62	-13	-30.62	-53.04	3.08	12.5	Vertical	Pass

WCDMA BAND IV-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3505.2	-48.02	-13	-35.02	-57.7	2.92	12.6	Horizontal	Pass
5257.8	-46.23	-13	-33.23	-55.93	3	12.7	Horizontal	Pass
7010.4	-44.22	-13	-31.22	-52.52	3.4	11.7	Horizontal	Pass
3505.2	-49.77	-13	-36.77	-59.45	2.92	12.6	Vertical	Pass
5257.8	-46.23	-13	-33.23	-55.93	3	12.7	Vertical	Pass
7010.4	-44.41	-13	-31.41	-52.71	3.4	11.7	Vertical	Pass



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WCDMA BAND V-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1652.8	-55.45	-13	-42.45	-60.62	3.33	8.5	Horizontal	Pass
2479.2	-48.75	-13	-35.75	-55.75	3.4	10.4	Horizontal	Pass
3305.6	-49.77	-13	-36.77	-58.28	2.99	11.5	Horizontal	Pass
1652.8	-55.97	-13	-42.97	-61.14	3.33	8.5	Vertical	Pass
2479.2	-49.96	-13	-36.96	-56.96	3.4	10.4	Vertical	Pass
3305.6	-49.83	-13	-36.83	-58.34	2.99	11.5	Vertical	Pass

WCDMA BAND V-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1672.8	-54.53	-13	-41.53	-59.7	3.33	8.5	Horizontal	Pass
2509.2	-49.56	-13	-36.56	-56.95	3.21	10.6	Horizontal	Pass
3345.6	-48.39	-13	-35.39	-56.9	2.99	11.5	Horizontal	Pass
1672.8	-54.83	-13	-41.83	-60	3.33	8.5	Vertical	Pass
2509.2	-49.04	-13	-36.04	-56.43	3.21	10.6	Vertical	Pass
3345.6	-48.36	-13	-35.36	-56.87	2.99	11.5	Vertical	Pass

WCDMA BAND V-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1693.2	-55.94	-13	-42.94	-61.11	3.33	8.5	Horizontal	Pass
2539.8	-49.86	-13	-36.86	-57.25	3.21	10.6	Horizontal	Pass
3386.4	-49.82	-13	-36.82	-58.33	2.99	11.5	Horizontal	Pass
1693.2	-53.91	-13	-40.91	-59.08	3.33	8.5	Vertical	Pass
2539.8	-49.68	-13	-36.68	-57.07	3.21	10.6	Vertical	Pass
3386.4	-50.33	-13	-37.33	-58.84	2.99	11.5	Vertical	Pass

Note:

For WCDMA, all modes have been tested and we found RMC Test mode has the worst test result. Only record the worst test result.

EIRP= S.G. Power- Cable loss+ Antenna Gain



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7 Test Setup Photo

Refer to appendix - setup photos for GZCR2112021591AT

8 EUT Constructional Details (EUT Photos)

Refer to appendix - external and internal photos for GZCR2112021591AT

- End of the Report -



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