SAR TEST EXCLUSION EVALUATION REPORT

Product Name:	LiTYARD 2
Trade Mark:	N/A
Model No. / HVIN:	LiTYARD 2
Add. Model No. / HVIN:	N/A
Report Number:	2303084347RFC-2
Test Standards:	FCC 47 CFR Part 2.1093
FCC ID:	2AYH3LITY2HS
Test Result:	PASS
Date of Issue:	June 30, 2023

Prepared for:

Hobson Property Trust & The Trustee for THE JOHN WEBBER INVESTMENT TRUST & The trustee for the Rust Investment Trust & The trustee for the Weston Investment Trust & G.L WESTON
1/9 Monterey Rd, Dandenong South, Victoria 3175, Australia

Prepared by:

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Approved by:	Kevin Liang Assistant Manager	Date:	June 30, 2023

Version

Version No.	Date	Description
V1.0	June 30, 2023	Original

CONTENTS

1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Hobson Property Trust & The Trustee for THE JOHN WEBBER INVESTMENT TRUST & The trustee for the Rust Investment Trust & The trustee for the Weston Investment Trust & G.L WESTON
Address of Applicant:	1/9 Monterey Rd, Dandenong South, Victoria 3175, Australia
Manufacturer:	Hobson Property Trust & The Trustee for THE JOHN WEBBER INVESTMENT TRUST & The trustee for the Rust Investment Trust & The trustee for the Weston Investment Trust & G.L WESTON
Address of Manufacturer:	1/9 Monterey Rd, Dandenong South, Victoria 3175, Australia

1.2 EUT INFORMATION

Product Name:	LiTYARD 2
Model No. / HVIN:	LiTYARD 2
Add. Model No. / HVIN:	N/A
Trade Mark:	N/A
DUT Stage:	Production Unit
EUT Supports Function: (Provided by the customer)	916 MHz
Software Version:	RM3-SII (Provided by the customer)
Hardware Version:	RM3_U000HS_F6K40 (Provided by the customer)
Sample Received Date:	March 6, 2023
Remark: The above EUT's information was provided by customer. Please refer to the specifications or user's manual for more detailed description.	

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Frequency Band:	916 MHz
Frequency Range:	916 MHz
Type of Modulation:	FSK
Number of Channels:	1
Antenna Type: (Provided by the customer)	Spring Antenna
Antenna Gain: (Provided by the customer)	-16.3 dBi
Maximum Peak Power:	10.33 dBm
Normal Test Voltage:	3.0 Vdc

1.4 OTHER INFORMATION

Type of Modulation	Tx/Rx Frequency	Test RF Channel Lists
FSK	916 MHz	Channel 1
		916 MHz

1.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC 47 CFR Part 2.1093

All test items have been performed and recorded as per the above standards

1.6 TEST LOCATION

All tests were performed at:

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China 518109
Telephone: +86 (0) 755 2823 0888
Fax: +86 (0) 755 2823 0886

1.7 TEST FACILITY

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

CNAS-Lab Code: L9069
The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01
Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories
CAB identifier: CN0032

FCC Accredited Lab.
Designation Number: CN1194
Test Firm Registration Number: 259480

1.8 DEVIATION FROM STANDARDS

None.

1.9 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

2. EQUIPMENT LIST

Please refer to the RF test report.

3. SAR TEST EXCLUSION EVALUATION

3.1 REFERENCE DOCUMENTS FOR EVALUATION

No.	Identity	Document Title
1	FCC 47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices.
2	KDB 447498 D01 General RF Exposure Guidance v06	RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES

3.2 EXEMPTION LIMITS FOR ROUTINE EVALUATION – SAR EVALUATION

3.2.1 SAR Test Exclusion Threshold

3.2.1.1 KDB 447498 D01 v06

Appendix A

***SAR Test Exclusion Thresholds* for 100 MHz – 6 GHz and ≤ 50 mm**

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	*SAR Test Exclusion Threshold* (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

MHz	30	35	40	45	50	mm
150	232	271	310	349	387	*SAR Test Exclusion Threshold* (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g *SAR Test Exclusion Thresholds* indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.

3.2.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3.3 MPE CALCULATION RESULTS

Note: *For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.*

3.3.1 For 916 MHz

For TX function, operating at 916 MHz for FSK.

3.3.1.1 Antenna Type:

Chain 0: Spring Antenna

3.3.1.2 Antenna Gain:

Chain 0: 916 MHz: 2.15 dBi (Provided by the customer)

3.3.1.3 Results for FCC 47 CFR Part 2.1093

Operating Mode	Frequency	Tune-up Power (Average)	Tolerance	Maximum Tune-up Power		Separation Distance	SAR Test Exclusion Threshold
	(MHz)	(dBm)	(dBm)	(dBm)	(mW)	(mm)	(mW)
FSK	916	8.0	1	9.0	7.9433	5	16

So the transmitter complies with the RF exposure requirements and the SAR is not required.

APPENDIX 1 PHOTOS OF TEST SETUP

N/A

APPENDIX 1 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal Photos.

*** End of Report ***