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An IIA Company

# FCC CFR 74 D Test Report

APPLICANT	STANDARD COMMUNICATIONS PTY.LTD.		
ADDRESS	17 GIBBON ROAD WINSTON HILLS 2153 AUSTRALIA		
FCC ID	TXJCM60V25		
MODEL NUMBER	CM60-V25B, CM60-V25D, CM60-V25L, CM60-V25P, CM60-V25R, CM60-V25S		
PRODUCT DESCRIPTION	VHF TRANSCEIVER		
DATE SAMPLE RECEIVED	4/9/2018		
FINAL TEST DATE	4/16/2018		
TESTED BY	Franklin Rose		
APPROVED BY	Tim Royer		
TEST RESULTS	PASS 🗌 FAIL		

Report Number	Report Version	Description	Issue Date
477BUT18 PT74_TestReport_	Rev1	Initial Issue	04/30/2018
477BUT18 PT74_TestReport_	Rev2	Updated Model Numbers and Emission Designator	11/06/2018
477BUT18 PT74_TestReport_	Rev3	Updated Address	12/28/2018

THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.



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### **GENERAL REMARKS**

# Summary

The device under test does:

Fulfill the general approval requirements as identified in this test report and was selected by the customer.

Not fulfill the general approval requirements as identified in this test report

# Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

Timco Engineering Inc. 849 NW State Road 45 Newberry, FL 32669 Designation #: US1070

**Tested by:** 



Name and TitleFranklin Rose, Project Manager / EMC Testing TechnicianDate04/26/2018

# **Reviewed and Approved by:**



Name and TitleTim Royer, Project Manager / EMC Testing EngineerDate04/26/2018

Applicant:STANDARD COMMUNICATIONS PTY.LTD.FCC ID:TXJCM60V25Report:477BUT18 PT74\_TestReport\_Rev3

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# **GENERAL INFORMATION**

#### **EUT Specification**

EUT Description	VHF TRANSCEIVER		
FCC ID	TXJCM60V25		
Model Number	CM60-V25B, CM60-V25D, CM60-V25L, CM60-V25P, CM60- V25R, CM60-V25S		
Operating Frequency	Band 1: 161.625 - 161.775 MHz		
Type of Emission	11K2F3E (Narrowband Analog FM Voice), 8K10F1E (P25 Phase I C4FM Voice), 8K10F1D (P25 Phase I C4FM Data)		
Modulation	FM		
	☐ 110–120Vac/50– 60Hz		
EUT Power Source	DC Power (13.8 V)		
	Battery Operated Exclusively		
	Prototype		
Test Item	Pre-Production		
	Production		
	Fixed		
Type of Equipment	🖾 Mobile		
	Portable		
Antenna Connector	BNC		
Test Conditions	The temperature was 26°C Relative humidity of 50%.		
Modification to the EUT	No Modification to EUT.		
Test Exercise	The EUT was placed in continuous transmit and was operated in "Test Mode" for digital emissions tests.		
Applicable Standards	ANSI/TIA 603-E:2016, ANSI C63.26, FCC CFR 47 Part 2, Part 74, Part 90		
Test Facility	Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA. Designation #: US1070		



# **RESULTS SUMMARY**

Rule Part No.	Test Item	Results
74.451(a)	Part 90 Testing & Certification	PASS
74.451(a), 74.461(b)	Power Output	PASS

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# Part 90 Testing & Certification

#### FCC Rule Parts: FCC Part 74.451(a)

(a) Applications for new remote pickup broadcast stations or systems or for changing transmitting equipment of an existing station will not be accepted unless the transmitters to be used have been certificated by the FCC pursuant to the provisions of this subpart, or have been certificated for licensing under part 90 of this chapter and do not exceed the output power limits specified in §74.461(b).

#### The following test results from FCC CFR 47, Part 90 test report "477AUT18 PT90\_TestReport\_Rev3" are shown below, for reference:

Rule Part No.	Test Item	Results
2.1046(a), 90.205(d)	RF Power Output	PASS
2.1033(c)(4), 90.209(b)(5)	Modulation Characteristics	PASS
2.1047(a)	Audio Frequency Response and Low Filter	PASS
2.1047(b)	Modulation Limiting	PASS
2.1049 (c)	Occupied Bandwidth	PASS
90.210(d)(1), (2)	Emission Masks	PASS
2.1051(a), 90.210(d)(3)	Spurious Emissions at Antenna Terminals	PASS
2.1053(a), 90.210(d)(3)	Field Strength of Spurious Emissions	PASS
2.1055(a)(2), 90.213	Frequency Stability < 5 ppm	PASS
90.214	Transient Frequency Behavior	PASS

#### Result: Meets Requirements

Applicant:STANDARD COMMUNICATIONS PTY.LTD.FCC ID:TXJCM60V25Report:477BUT18 PT74\_TestReport\_Rev3



#### **RF POWER OUTPUT**

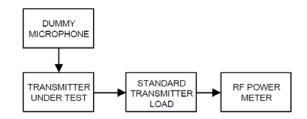
#### FCC Rule Parts: FCC Part 74.461(b)

(b) The authorized transmitter power for a remote pickup broadcast station shall be limited to that necessary for satisfactory service and, in any event, shall not be greater than 100 watts, except that a station to be operated aboard an aircraft shall normally be limited to a maximum authorized power of 15 watts. Specific authorization to operate stations on board aircraft with an output power exceeding 15 watts will be issued only upon an adequate engineering showing of need, and of the procedures that will be taken to avoid harmful interference to other licensees.

**Note:** Per 74.461(b), under no circumstance shall the EUT operate aboard an aircraft above the power output level of 15 Watts.

#### The following test data from FCC CFR 47, Part 90 test report "477AUT18 PT90\_TestReport\_Rev3" is shown below, for reference:

#### Method of Measurement: TIA-603-E, 2.2.1



#### Test Data: Power Measurement Table

Peak Power Output					
dBm		Watts			
High	Med	Low	High	Med	Low
43.81	39.84	30.02	24.04	9.64	1.00

#### **Result:** Meets Requirements