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FCC PART 15.227 TEST REPORT

LOW POWER UNLICENSED TRANSMITTER

| | |
|----------------------|--|
| Applicant | DICKIE-SPIELZEUG GmbH & CO KG |
| Address | WERKSTRABE 1 D-90765 FUERTH D-90765 GERMANY |
| FCC ID | NLB27099TX |
| Product Description | 27 MHZ REMOTE CONTROL TRANSMITTER |
| Date Sample Received | 11/19/2007 |
| Date Tested | 11/28/2007 |
| Tested By | JOSEPH SCOGLIO |
| Approved By | MARIO DE ARANZETA |
| Timco Report No. | 3589UT7TestReport.doc |
| Test Results | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail |

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



Testing Certificate # 0955-01

APPLICANT: DICKIE-SPIELZEUG GmbH & CO KG
 FCC ID: NLB27099TX
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GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

Summary

The device under test does:

- fulfill the general approval requirements as identified in this test report
 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.



Testing Certificate # 0955-01

I attest that the necessary measurements were made, under my supervision, at:

Timco Engineering Inc.
849 NW State Road 45
Newberry, Fl 32669

Authorized Signatory Name: *Mario de Aranzeta*

Mario de Aranzeta C.E.T.
Compliance Engineer/ Lab. Supervisor

Date: 11/28/2007

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REPORT SUMMARY

| | |
|----------------------------------|--|
| Disclaimer | The test results only relate to the item tested. |
| Applicable Rule(s) | FCC Pt 15.227, ANSI C63.4: 2003 |
| Related Report(s) or Approval(s) | None |

TEST ENVIRONMENT

| | |
|-----------------|--|
| Test Facility | The test sites are located at 849 NW State Road 45 Newberry, FL 32669 USA. |
| Test Condition: | Temperature: 26°C Relative humidity: 50% |

TEST SETUP

| | |
|--|---|
| Test Exercise (e.g software description, test signal, etc.): | The DUT was placed in continuous transmit mode of operation. |
| Deviation from the standard(s) | No deviation from the standard(s) |
| Modification to the DUT: | No modification was made to the DUT. |
| Supporting Peripheral Equipment | Not applicable. The device is a stand-alone remote control radio. |

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DUT SPECIFICATION

| | | | |
|-------------------|--|--|--|
| Applicant | DICKIE-SPIELZEUG GmbH & CO KG | | |
| Description | 27 MHZ REMOTE CONTROL TRANSMITTER | | |
| FCC ID | NLB27099TX | | |
| Frequency Range | 27.145-27.145 MHz | | |
| DUT Power Source | <input type="checkbox"/> 110–120Vac/50– 60Hz | | |
| | <input type="checkbox"/> DC Power | | |
| | <input checked="" type="checkbox"/> Battery Operated Exclusively | | |
| Test Item | <input type="checkbox"/> Prototype | <input checked="" type="checkbox"/> Pre-Production | <input type="checkbox"/> Production |
| Type of Equipment | <input type="checkbox"/> Fixed | <input type="checkbox"/> Mobile | <input checked="" type="checkbox"/> Portable |

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TEST EQUIPMENT LIST

| Device | Manufacturer | Model | Serial Number | Cal/Char Date | Due Date |
|---|------------------|--------------|--------------------------|-------------------|----------|
| 3/10-Meter OATS | TEI | N/A | N/A | Listed 3/20/07 | 3/19/10 |
| 3-Meter OATS | TEI | N/A | N/A | Listed 1/11/06 | 1/10/09 |
| Antenna: Biconnical | Eaton | 94455-1 | 1057 | CAL 12/12/05 | 12/12/07 |
| Antenna: Biconnical | Eaton | 94455-1 | 1096 | CAL 10/11/06 | 10/11/08 |
| Antenna: Biconnical | Electro-Metrics | BIA-25 | 1171 | CAL 7/18/07 | 7/18/09 |
| Analyzer Blue Tower Quasi-Peak Adapter | HP | 85650A | 2811A01279 | CAL 5/17/07 | 5/17/09 |
| Analyzer Blue Tower RF Preselector | HP | 85685A | 2926A00983 | CAL 5/17/07 | 5/17/09 |
| Analyzer Blue Tower Spectrum Analyzer | HP | 8568B | 2928A04729 2848A18049 | CAL 5/17/07 | 5/17/09 |
| LISN | Electro-Metrics | ANS-25/2 | 2604 | CAL 10/5/06 | 10/5/08 |
| LISN | Electro-Metrics | EM-7820 | 2682 | CAL 7/23/07 | 7/23/09 |
| Antenna: Log- Periodic | Eaton | 96005 | 1243 | CAL 12/14/05 | 12/14/07 |
| Antenna: Passive Loop | EMC Test Systems | EMCO 6512 | 9706-1211 | CAL 4/27/06 | 4/27/08 |

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TEST PROCEDURES

Radiated Spurious Emissions: The test procedure used was ANSI C63.4-2003 using a spectrum analyzer with a preselector. The bandwidth of the spectrum analyzer was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was always greater than the RBW.

Occupied Bandwidth: A small sample of the transmitter output was fed into the spectrum analyzer and the following plot was generated. The vertical scale is set to 10 dB per division.

Formula Of Conversion Factors: The field strength at 3m was established by adding the meter reading of the spectrum analyzer to the antenna correction factor supplied by the antenna manufacturer plus the coax loss. The antenna correction factors are stated in terms of dB/m. The gain of the preselector was accounted for in the spectrum analyzer reading.

Example:

| Freq MHz | Meter Reading dBuV | ACF dB/m | Coax Loss dB | Field Strength dBuV/m @ 3 m |
|-------------|-----------------------|-------------|-----------------|--------------------------------|
| 33 | 20 | +10.36 | +1.2 | = 31.56 |

ANSI C63.4-2003 Measurement Procedures: The unit under test was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

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RADIATION INTERFERENCE

Rules Part No.: 15.227

Requirements:

CARRIER FREQUENCY WILL NOT EXCEEDS 80 dB μ V/m AT 3M.

| Frequency MHz | Limits |
|---------------|---------------------------------------|
| 30 – 88 | 40.0 dB μ V/m measured @ 3 meters |
| 80 – 216 | 43.5 dB μ V/m measured @ 3 meters |
| 216 – 960 | 46.0 dB μ V/m measured @ 3 meters |
| Above 960 | 54.0 dB μ V/m measured @ 3 meters |

Test Data:

| Tuned Frequency MHz | Emission Frequency MHz | Meter Reading dB μ V | Ant. Pol | Coax Loss dB | Correction Factor dB | Field Strength dB μ V/m | Margin dB |
|---------------------|------------------------|--------------------------|----------|--------------|----------------------|-----------------------------|-----------|
| 27.1 | 27.10 | 35.0 | H | 0.54 | 34.16 | 69.70 | 10.30 |
| 27.1 | 27.10 | 36.1 | V | 0.54 | 34.16 | 70.80 | 9.20 |
| 27.1 | 54.20 | 21.6 | H | 1.11 | 10.98 | 33.69 | 6.31 |
| 27.1 | 54.20 | 26.5 | V | 1.11 | 11.05 | 38.66 | 1.34 |
| 27.1 | 81.40 | 8.1 | H | 1.21 | 6.47 | 15.78 | 24.22 |
| 27.1 | 81.40 | 13.8 | V | 1.21 | 7.64 | 22.65 | 17.35 |
| 27.1 | 108.50 | 5.8 | V | 1.44 | 13.24 | 20.48 | 23.03 |
| 27.1 | 135.70 | 7.0 | V | 1.71 | 12.74 | 21.45 | 22.05 |
| 27.1 | 162.80 | 6.1 | V | 2.00 | 15.14 | 23.24 | 20.26 |

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OCCUPIED BANDWIDTH

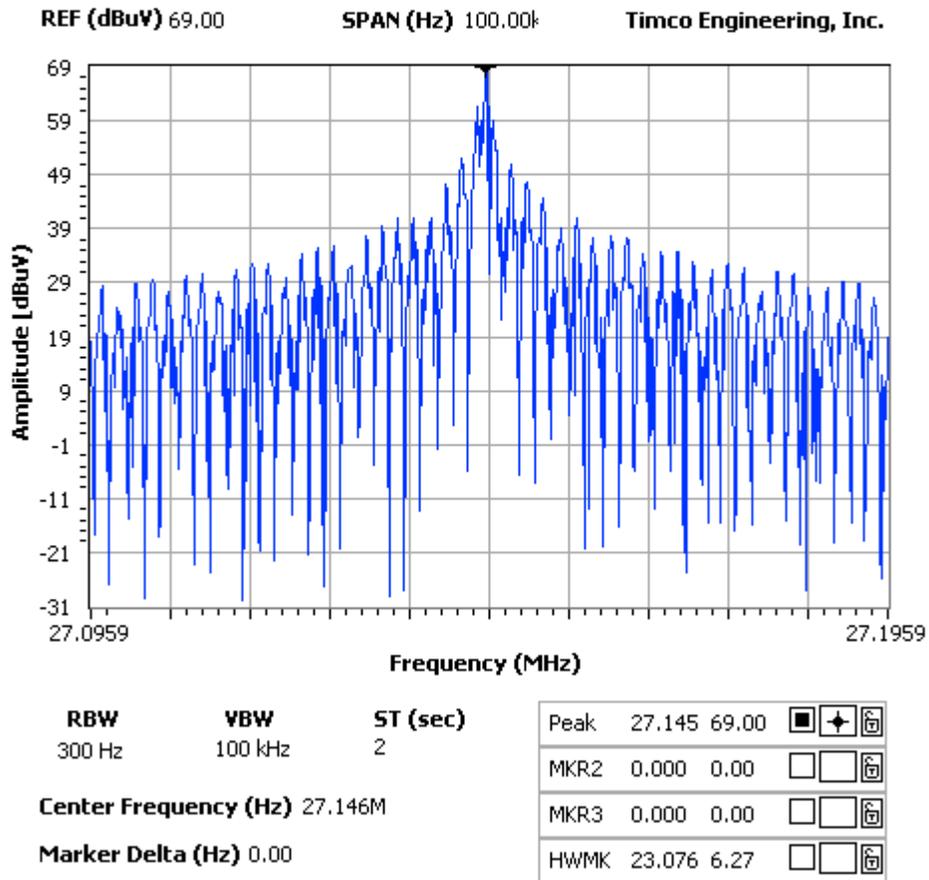
Rules Part No.: 15.227

Requirements: The field strength of any emissions appearing outside of 26.96 and 27.28MHz shall be attenuated to the general limits of 15.209.

Test Data: Please refer to the following plot.

NOTES:

3589ut7 occupied bandwidth



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