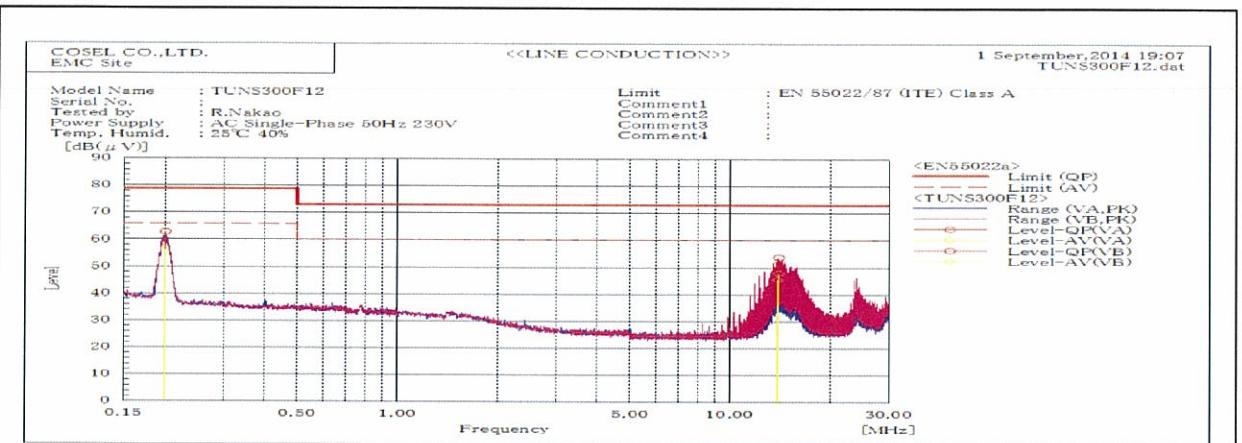
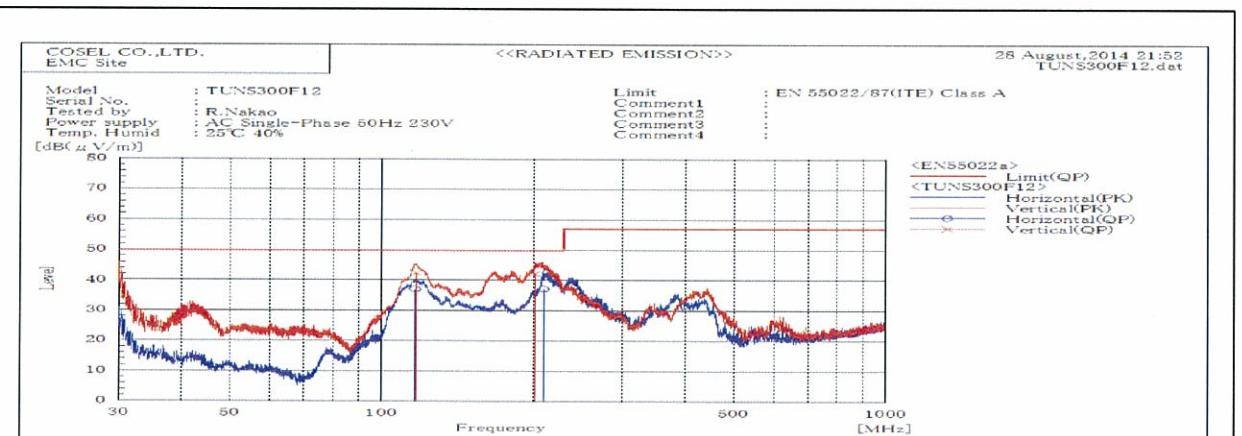


| DATA SHEET | | | | Date | 14-Sep-14 |
|------------|-------------------------------------|--|--|-----------|------------|
| Model | TUNS300F12 | | | Temp. | 25 degreeC |
| Test | EMI | | | Humid. | 40 %RH |
| | Line conduction & Radiated emission | | | Tested by | R.Nakao |



| Frequency MHz | Harm | Line Phase | Reading dB(uV) | | Factor dB | Level dB(uV) | | Limit dB(uV) | | Margin dB | | Pass/ Fail | Remark |
|------------------|------|---------------|-------------------|------|--------------|-----------------|------|-----------------|------|--------------|------|---------------|--------|
| | | | QP | AV | | QP | AV | QP | AV | QP | AV | | |
| 0.2007 | | VB | 42.6 | 36.1 | 20.2 | 62.8 | 56.3 | 79.0 | 66.0 | 16.2 | 9.7 | Pass | |
| 0.20045 | | VA | 42.6 | 36.1 | 20.2 | 62.8 | 56.3 | 79.0 | 66.0 | 16.2 | 9.7 | Pass | |
| 13.897 | | VA | 30.3 | 24.8 | 20.8 | 51.1 | 45.6 | 73.0 | 60.0 | 21.9 | 14.4 | Pass | |
| 13.99675 | | VB | 33.1 | 27.2 | 20.7 | 53.8 | 47.9 | 73.0 | 60.0 | 19.2 | 12.1 | Pass | |



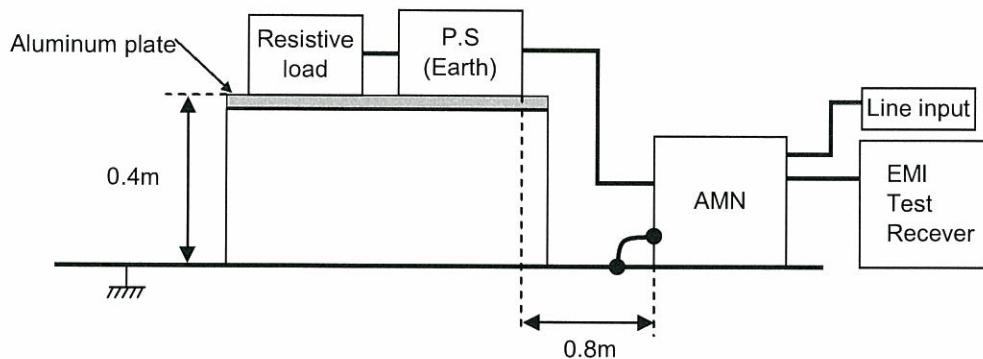
| Frequency MHz | Polarization | Stability | Reading dB(uV) | | Space Loss dB | Level dB(mW) | | Limit dB(mW) | Margin dB | Pass/Fail | Height cm | Angle deg | Remark |
|------------------|--------------|-----------|-------------------|-------|---------------------|-----------------|----|-----------------|--------------|-----------|--------------|--------------|--------|
| | | | QP | dB | | QP | QP | | | | | | |
| 116.045 | H | Stable | 56.4 | -19.4 | | 37.0 | | 50.0 | 13.0 | Pass | 157 | 323 | |
| 116.376 | V | Stable | 60.1 | -17.6 | | 42.5 | | 50.0 | 7.5 | Pass | 100 | 94 | |
| 201.2 | V | Stable | 57.9 | -15.6 | | 42.3 | | 50.0 | 7.7 | Pass | 100 | 353 | |
| 209.31 | H | Stable | 58.6 | -21.4 | | 37.2 | | 50.0 | 12.8 | Pass | 154 | 0 | |

DATA SHEET

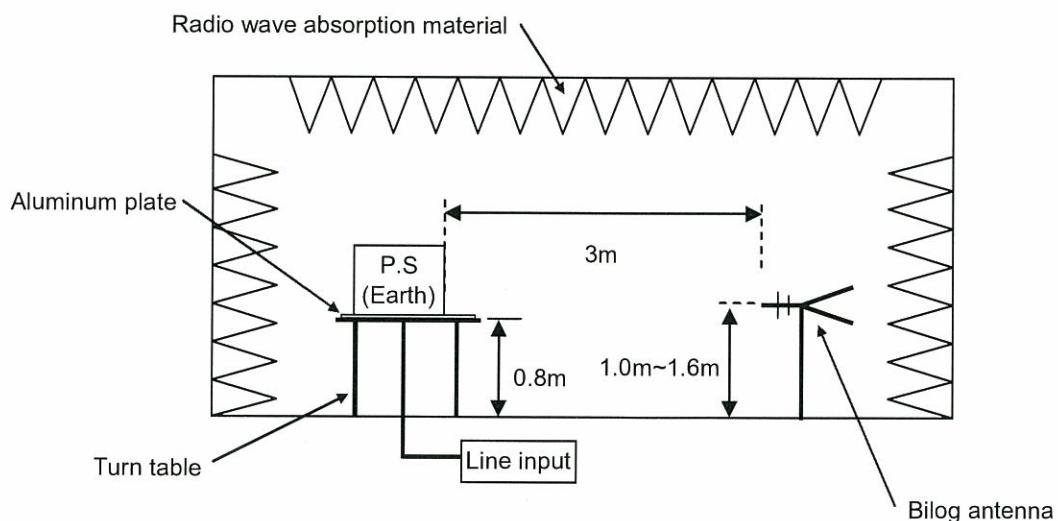
Date 14-Sep-14

| | | | |
|-------|--|--------|------------|
| Model | Circuit used for measurement | Temp. | 25 degreeC |
| Test | EMI Line conduction & Radiated emission | Humid. | 40 %RH |

1. Line conduction



2. Radiated emission



Test: EMI
Model Name:TUNS300F Series

○ Photographs of Test Set-Up

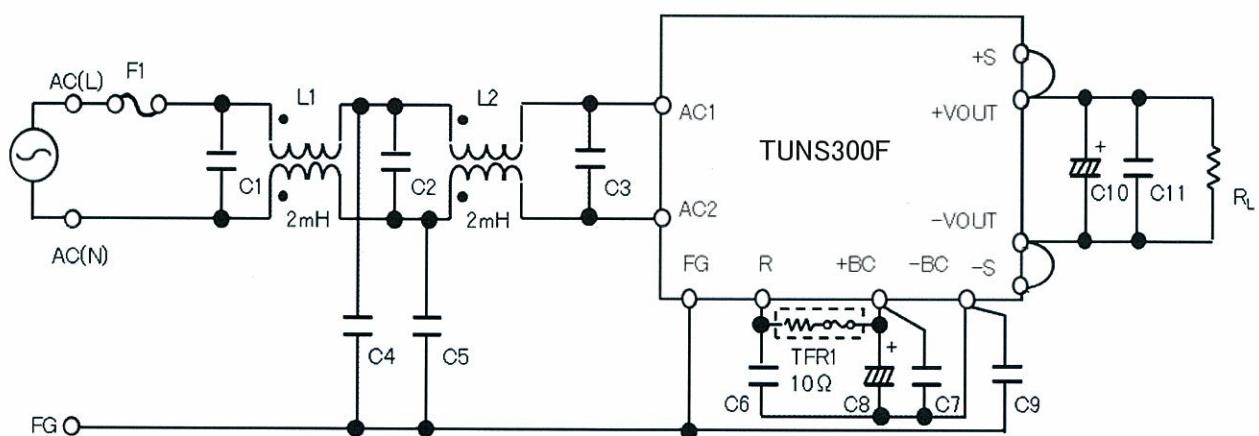
LINE CONDUCTION



RADIATED EMISSION



○ Test circuit



- L1,L2 : SC-15-200(NEC TOKIN)
- C1,C2 : 0.68 μ F 310V Film Capacitor × 2
- C3 : 1.0 μ F 310V Film Capacitor × 2
- C4,C5,C9 : 2200pF Ceramic Capacitor
- C6,C7 : 0.68 μ F 450V Film Capacitor × 2
- C8 : 470 μ F 420V Electrolytic Capacitor
- C10 : TUNS300F12 2200 μ F 25V Electrolytic Capacitor
TUNS300F28 1000 μ F 50V Electrolytic Capacitor
TUNS300F48 470 μ F 63V Electrolytic Capacitor

- C11 : TUNS300F12 10 μ F Ceramic Capacitor
TUNS300F28 4.7 μ F Ceramic Capacitor
TUNS300F48 2.2 μ F Ceramic Capacitor