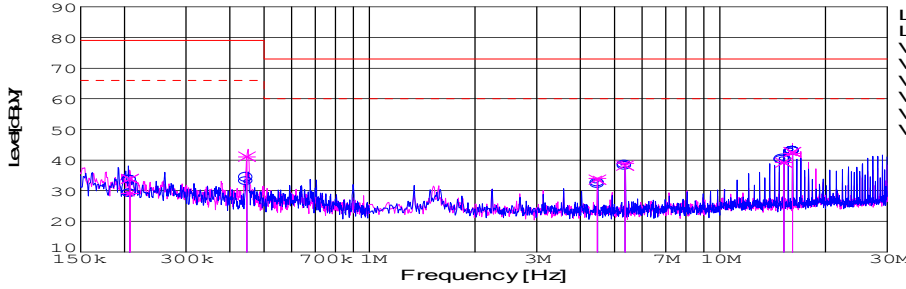
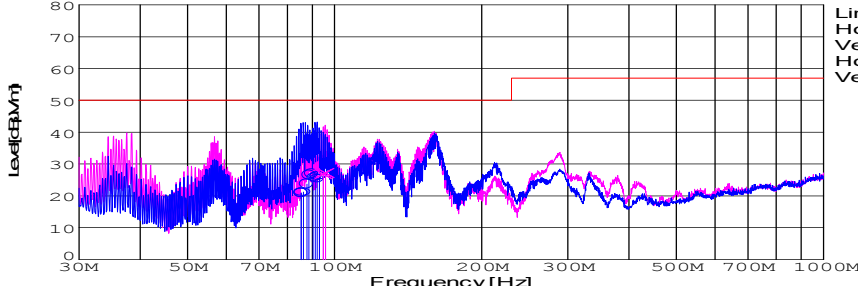
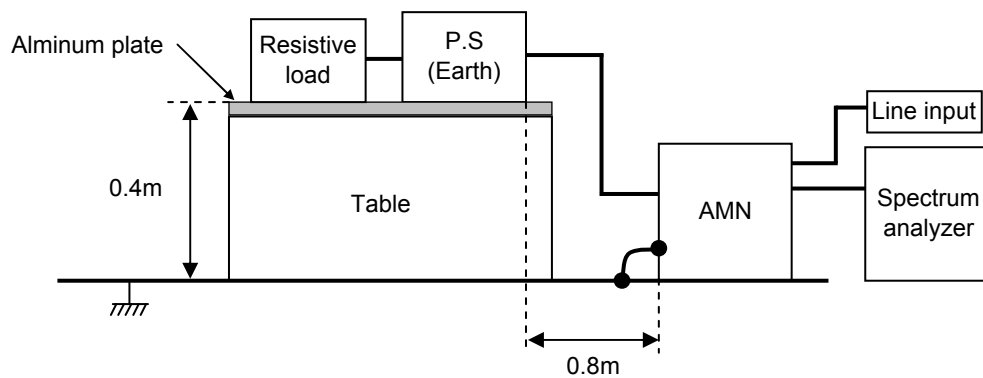


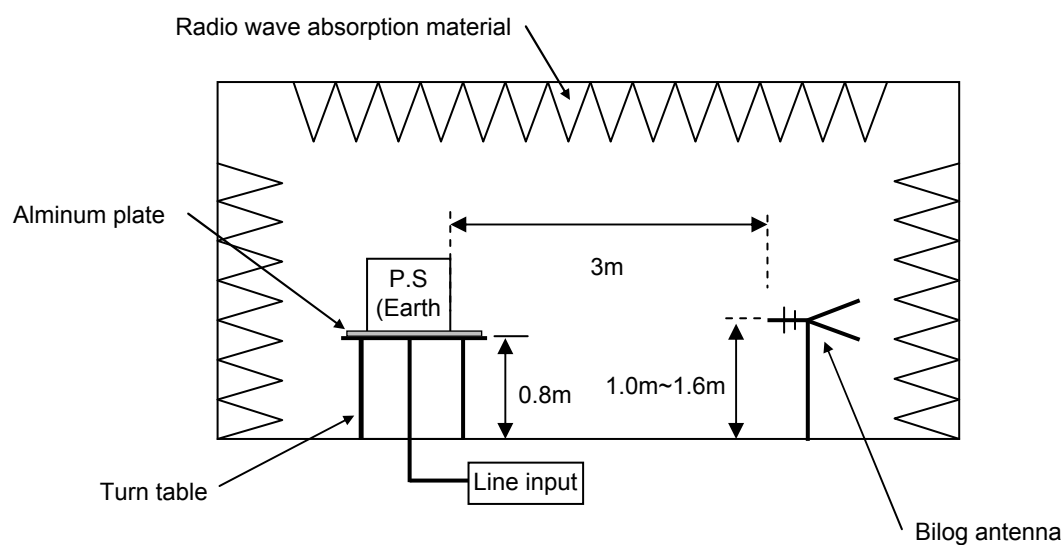
DATA SHEET							Date	11-Dec-07																																																																				
Model	CES48015-30						Temp.	25degC																																																																				
Test	EMI Line conduction & Radiated emission						Humid.	44 %RH																																																																				
							Tested by	shuuhei.sawada																																																																				
LINE CONDUCTION																																																																												
Model Name : CES48015-30			Temp. : 25degC																																																																									
Model No. :			Humi. : 44%																																																																									
Serial No. :			Date : 2007/12/11 10:26																																																																									
Points : 6			Test Equip. : R3132,ESPC																																																																									
Detector : PEAK/QP/Ave.			Load Line : 150mm																																																																									
Line Mode : VA/VB			Comment : shuuhei.sawada																																																																									
Power Supply : DC 48V																																																																												
Limit1: [EN 55022] Class A(QP)																																																																												
Limit2: [EN 55022] Class A(Ave.)																																																																												
							Limit1(QP) --- Limit2(Ave.) - - - VA(PEAK) --- VB(PEAK) --- VA(QP) --- VA(Ave.) --- VB(QP) --- VB(Ave.) ---																																																																					
							Vin:DC48V Vo:1.5V Io:30A																																																																					
<table><tr><th>Frequency [MHz]</th><th>Meter Reading (Ave.) [dBuV]</th><th>Meter Reading (QP) [dBuV]</th><th>Factor [dB]</th><th>Level(Ave.) [dBuV]</th><th>Level(QP) [dBuV]</th><th>Line</th><th>Limit(Ave.) [dBuV]</th><th>Limit(QP) [dBuV]</th><th>Margin(Ave.) [dB]</th><th>Margin(QP) [dB]</th></tr><tr><td>15.2043</td><td>30.1</td><td>29.8</td><td>10.2</td><td>40.3</td><td>40</td><td>VA</td><td>60</td><td>73</td><td>19.7</td><td>33</td></tr><tr><td>16.0974</td><td>32.9</td><td>32.9</td><td>10.2</td><td>43.1</td><td>43.1</td><td>VA</td><td>60</td><td>73</td><td>16.9</td><td>29.9</td></tr><tr><td>16.097</td><td>32</td><td>32.4</td><td>10.2</td><td>42.2</td><td>42.6</td><td>VB</td><td>60</td><td>73</td><td>17.8</td><td>30.4</td></tr></table>											Frequency [MHz]	Meter Reading (Ave.) [dBuV]	Meter Reading (QP) [dBuV]	Factor [dB]	Level(Ave.) [dBuV]	Level(QP) [dBuV]	Line	Limit(Ave.) [dBuV]	Limit(QP) [dBuV]	Margin(Ave.) [dB]	Margin(QP) [dB]	15.2043	30.1	29.8	10.2	40.3	40	VA	60	73	19.7	33	16.0974	32.9	32.9	10.2	43.1	43.1	VA	60	73	16.9	29.9	16.097	32	32.4	10.2	42.2	42.6	VB	60	73	17.8	30.4																						
Frequency [MHz]	Meter Reading (Ave.) [dBuV]	Meter Reading (QP) [dBuV]	Factor [dB]	Level(Ave.) [dBuV]	Level(QP) [dBuV]	Line	Limit(Ave.) [dBuV]	Limit(QP) [dBuV]	Margin(Ave.) [dB]	Margin(QP) [dB]																																																																		
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16.0974	32.9	32.9	10.2	43.1	43.1	VA	60	73	16.9	29.9																																																																		
16.097	32	32.4	10.2	42.2	42.6	VB	60	73	17.8	30.4																																																																		
RADIATED EMISSION																																																																												
Model Name : CES48015-30			Temp. : 25degC																																																																									
Model No. :			Humi. : 45%																																																																									
Serial No. :			Date : 2007/12/10 19:00																																																																									
Points : 10			Test Equip. : R3132,ESPC																																																																									
Detector : PEAK/QP			Load Line :																																																																									
Polarization : Hori. & Vert.			Comment : shuuhei.sawada																																																																									
Power Supply : DC 48V																																																																												
Limit: [EN 55022] Class A<3m>																																																																												
							Limit(QP) --- Horizontal(PEAK) --- Vertical(PEAK) --- Horizontal(QP) --- Vertical(QP) ---																																																																					
							Vin:DC48V Vo:1.5V Io:30A																																																																					
<table><tr><th>Frequency [MHz]</th><th>MeterReading (QP) [dBuV]</th><th>Ant. Type</th><th>Antenna Factor [dB/m]</th><th>Cable & Preamp [dB]</th><th>Level(QP) [dBuV/m]</th><th>Angle [°]</th><th>Height [cm]</th><th>Polar.</th><th>Limit [dBuV/m]</th><th>Margin [dB]</th></tr><tr><td>88.601</td><td>50</td><td>BL</td><td>8.4</td><td>-31.9</td><td>26.5</td><td>187</td><td>155</td><td>Hori.</td><td>50</td><td>23.5</td></tr><tr><td>90.39</td><td>50.2</td><td>BL</td><td>8.6</td><td>-31.8</td><td>27</td><td>196</td><td>144</td><td>Hori.</td><td>50</td><td>23</td></tr><tr><td>93.079</td><td>49.2</td><td>BL</td><td>9</td><td>-31.8</td><td>26.4</td><td>357</td><td>158</td><td>Hori.</td><td>50</td><td>23.6</td></tr><tr><td>94.859</td><td>49.4</td><td>BL</td><td>9.3</td><td>-31.8</td><td>26.9</td><td>97</td><td>155</td><td>Vert.</td><td>50</td><td>23.1</td></tr><tr><td>95.773</td><td>49.6</td><td>BL</td><td>9.4</td><td>-31.8</td><td>27.2</td><td>101</td><td>150</td><td>Vert.</td><td>50</td><td>22.8</td></tr></table>											Frequency [MHz]	MeterReading (QP) [dBuV]	Ant. Type	Antenna Factor [dB/m]	Cable & Preamp [dB]	Level(QP) [dBuV/m]	Angle [°]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	88.601	50	BL	8.4	-31.9	26.5	187	155	Hori.	50	23.5	90.39	50.2	BL	8.6	-31.8	27	196	144	Hori.	50	23	93.079	49.2	BL	9	-31.8	26.4	357	158	Hori.	50	23.6	94.859	49.4	BL	9.3	-31.8	26.9	97	155	Vert.	50	23.1	95.773	49.6	BL	9.4	-31.8	27.2	101	150	Vert.	50	22.8
Frequency [MHz]	MeterReading (QP) [dBuV]	Ant. Type	Antenna Factor [dB/m]	Cable & Preamp [dB]	Level(QP) [dBuV/m]	Angle [°]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]																																																																		
88.601	50	BL	8.4	-31.9	26.5	187	155	Hori.	50	23.5																																																																		
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94.859	49.4	BL	9.3	-31.8	26.9	97	155	Vert.	50	23.1																																																																		
95.773	49.6	BL	9.4	-31.8	27.2	101	150	Vert.	50	22.8																																																																		

DATA SHEET		Date	25degC
Model	Circuit used for measurement	Temp.	25 degreeC
Test	EMI Line conduction & Radiated emission	Humid.	45 %RH
		Tested by	

1. Line conduction



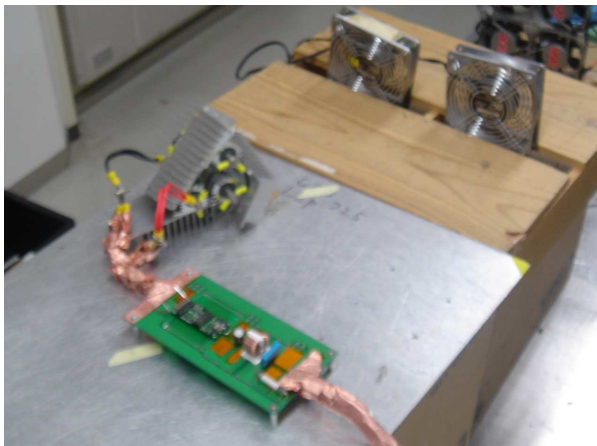
2. Radiated emission



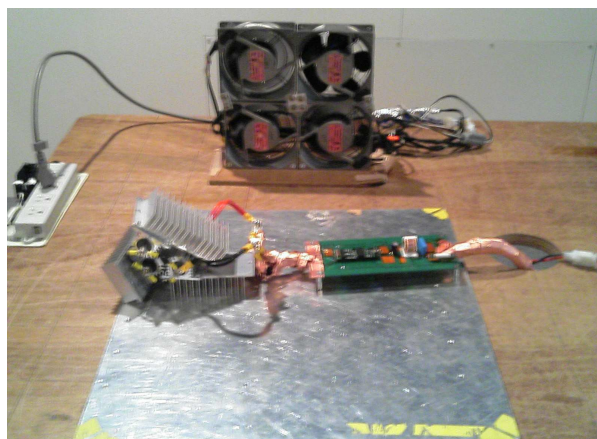
TEST : EMI
Model Name : CES48015-30

Date 2007/12/11

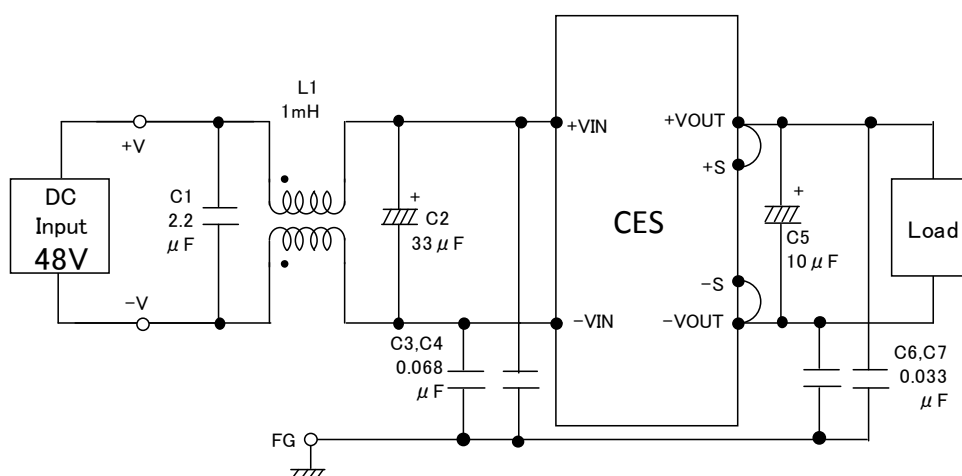
Photographs of Test Set-Up
LINE CONDUCTION



RADIATED EMISSION



Testing circuitry



- L1 : 1mH 5A Inductor
- C1 : 2.2 μ F Film capacitor
- C2 : 100V 33 μ F Electric capacitor
- C3,4 : 630V 0.068 μ F Film capacitor
- C5 : 10V 10 μ F Electric capacitor
- C6,7 : 630V 0.1 μ F Film capacitor