## Test Report No.10052847 10052848 001

### Appendix D: Radiated and Mains Spurious Emission Data

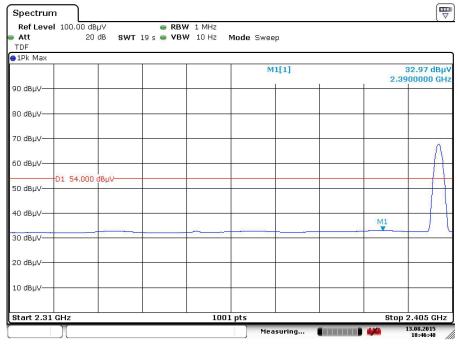
(File: 10052847 10052848AppendixD)

#### Contents

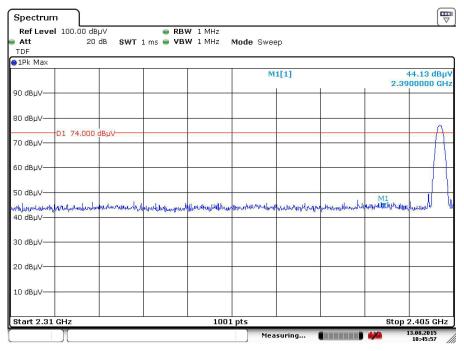
Spurious Emissions, TX Mode, 1-18G
Saurious Emissions TV Mode 19 26C
Spurious Emissions, TX Mode, 18-26G
Spurious Emissions, TX Mode, 30M-1G
Spurious Emissions, RX Mode, 1-18G
Spurious Emissions, RX Mode, 18-26G
Spurious Emissions, RX Mode, 30M-1G
Spurious Emissions, Mains, 150kHz - 30MHz

## Radiated Bandedge (GFSK)

#### Low Channel (Hor)

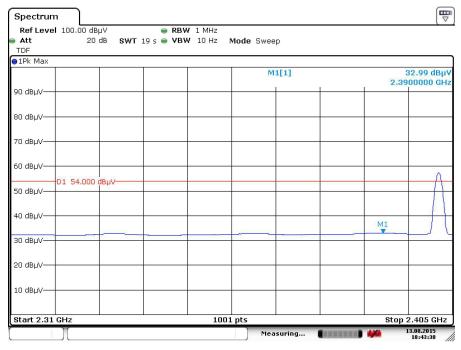


Date: 13.AUG.2015 18:46:48

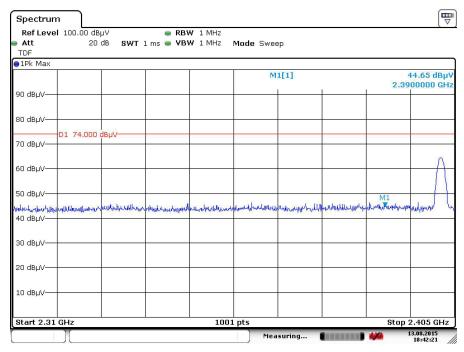


Date: 13.AUG.2015 18:45:57

#### Low Channel (Ver)



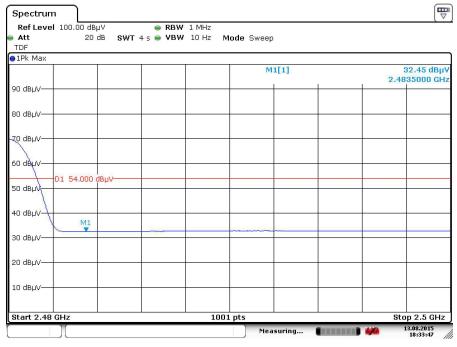
Date: 13.AUG.2015 18:43:38



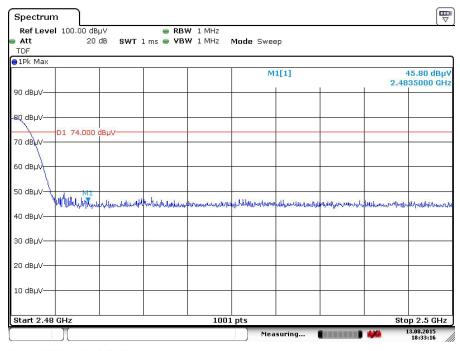
Date: 13.AUG.2015 18:42:21

## Radiated Bandedge (GFSK)

#### **High Channel (Hor)**

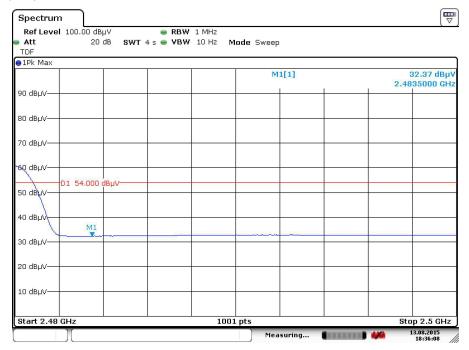


Date: 13.AUG.2015 18:33:47

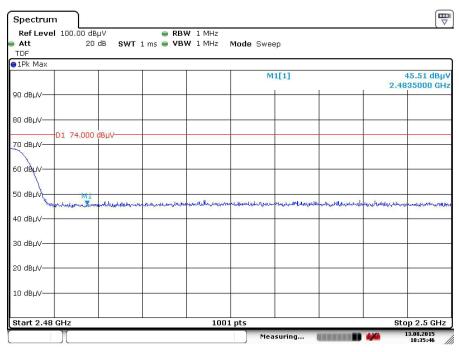


Date: 13.AUG.2015 18:33:17

#### **High Channel (Ver)**



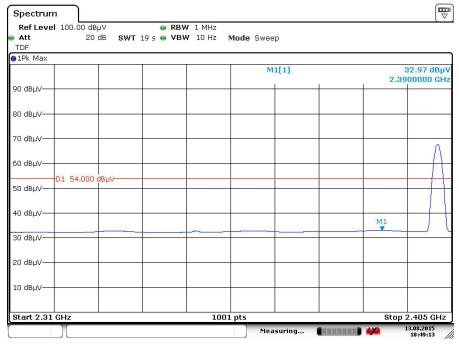
Date: 13.AUG.2015 18:36:08



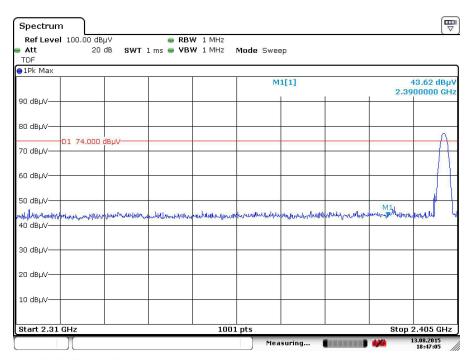
Date: 13.AUG.2015 18:35:46

## Radiated Bandedge (8DPSK)

#### Low Channel (Hor)

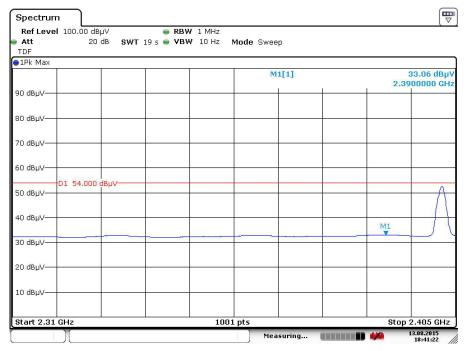


Date: 13.AUG.2015 18:49:13

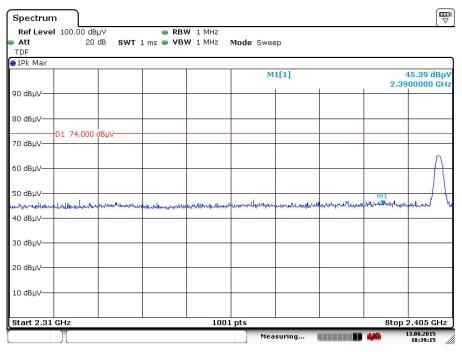


Date: 13.AUG.2015 18:47:05

#### Low Channel (Ver)



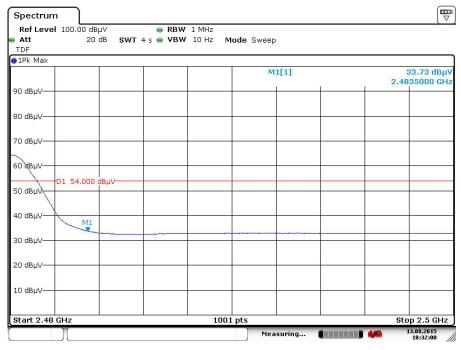
Date: 13.AUG.2015 18:41:22



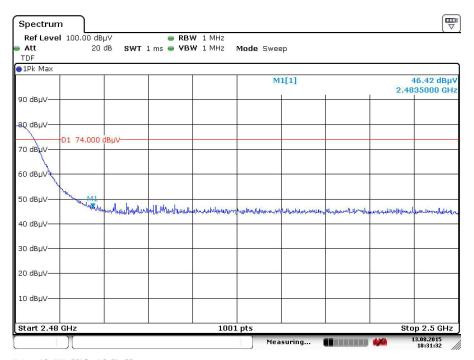
Date: 13.AUG.2015 18:39:15

## Radiated Bandedge (8DPSK)

#### **High Channel (Hor)**

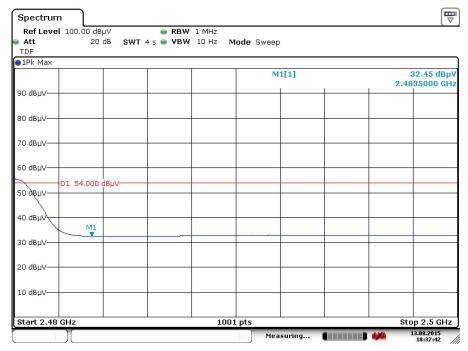


Date: 13.AUG.2015 18:32:01

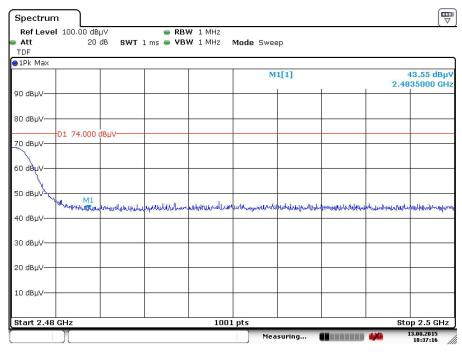


Date: 13.AUG.2015 18:31:32

#### **High Channel (Ver)**



Date: 13.AUG.2015 18:37:42



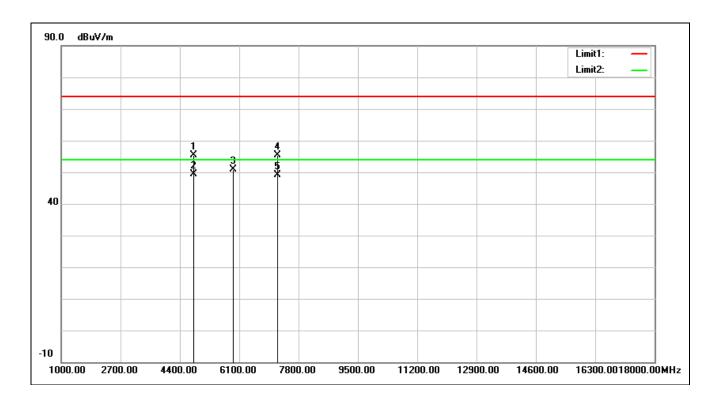
Date: 13.AUG.2015 18:37:16



#### **TUV Taiwan**

#### 11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:07:54

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ )/Hum.( $^{\circ}$ ): 21( $^{\circ}$ )/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2402-TX

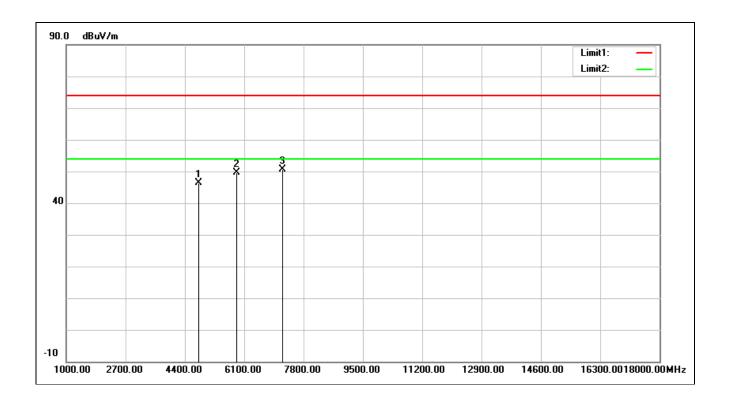
No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4804.000	-2.35	57.72	55.37	74.00	-18.63	peak	100	313	
2	4804.000	-2.35	51.72	49.37	54.00	-4.63	AVG	100	313	
3	5930.000	3.62	47.16	50.78	74.00	-23.22	peak	100	127	
4	7206.000	5.78	49.67	55.45	74.00	-18.55	peak	100	321	
5	7206.000	5.78	43.24	49.02	54.00	-4.98	AVG	100	321	



#### **TUV Taiwan**

#### 11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:08:57

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

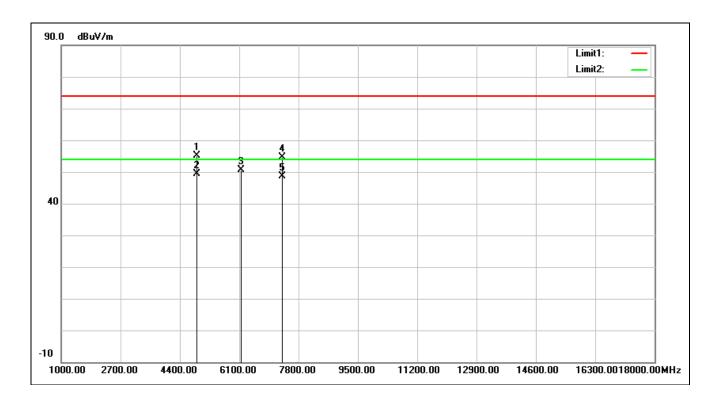
Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4804.000	-2.35	48.78	46.43	74.00	-27.57	peak			
2	5879.000	3.30	46.42	49.72	74.00	-24.28	peak	100	222	
3	7206.000	5.78	44.82	50.60	74.00	-23.40	peak			





Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:12:12

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

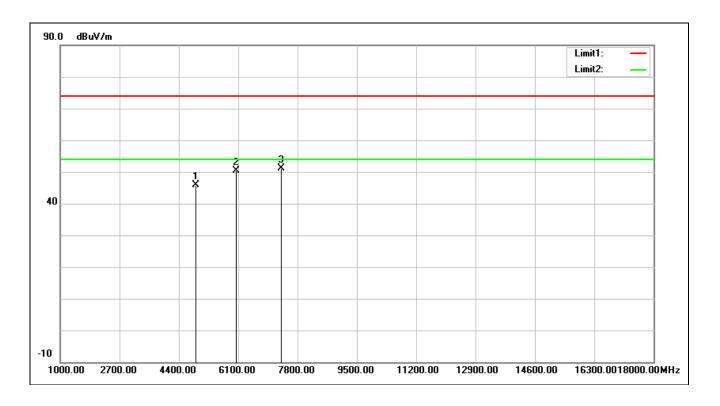
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4882.000	-2.16	57.31	55.15	74.00	-18.85	peak	100	321	
2	4882.000	-2.16	51.55	49.39	54.00	-4.61	AVG	100	321	
3	6151.000	4.67	45.97	50.64	74.00	-23.36	peak	100	329	
4	7323.000	6.13	48.39	54.52	74.00	-19.48	peak	100	337	
5	7323.000	6.13	42.54	48.67	54.00	-5.33	AVG	100	337	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:13:15

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

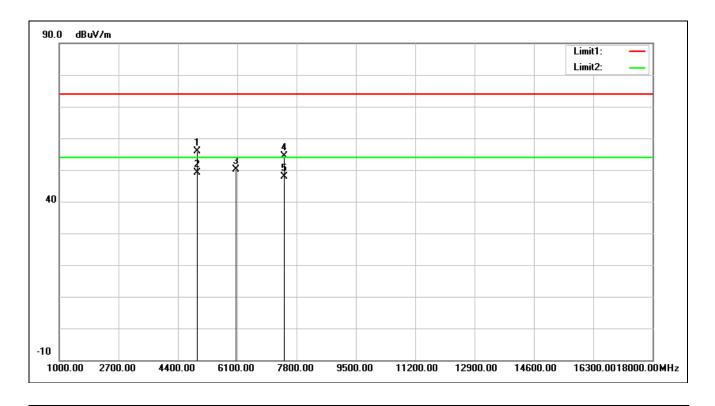
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4882.000	-2.16	48.01	45.85	74.00	-28.15	peak			
2	6032.000	4.21	46.09	50.30	74.00	-23.70	peak	100	205	
3	7323.000	6.13	44.88	51.01	74.00	-22.99	peak			





Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:03:27

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

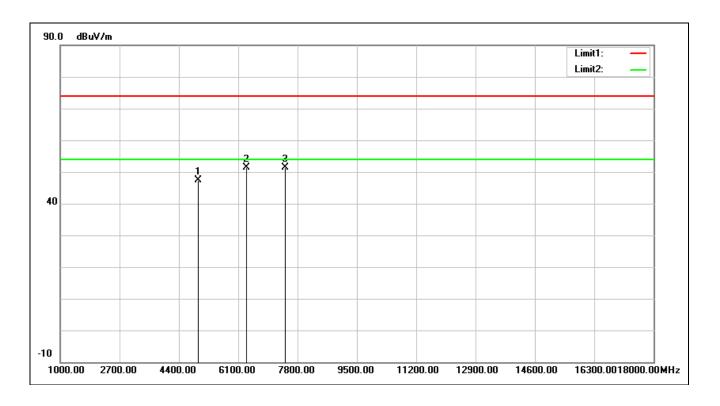
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4960.000	-1.97	57.79	55.82	74.00	-18.18	peak		0	
2	4960.000	-1.97	50.98	49.01	54.00	-4.99	AVG		0	
3	6066.000	4.34	45.81	50.15	74.00	-23.85	peak	100	324	
4	7440.000	6.47	47.98	54.45	74.00	-19.55	peak		0	
5	7440.000	6.47	41.29	47.76	54.00	-6.24	AVG		0	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:04:30

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

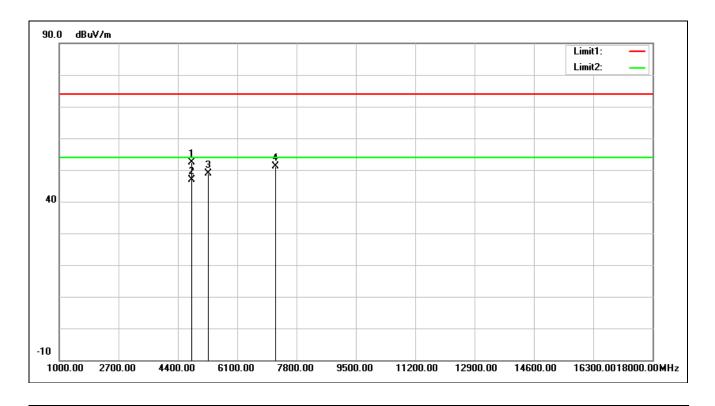
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4960.000	-1.97	49.44	47.47	74.00	-26.53	peak			
2	6338.000	5.41	46.07	51.48	74.00	-22.52	peak	100	20	
3	7440.000	6.47	44.88	51.35	74.00	-22.65	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:16:15

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

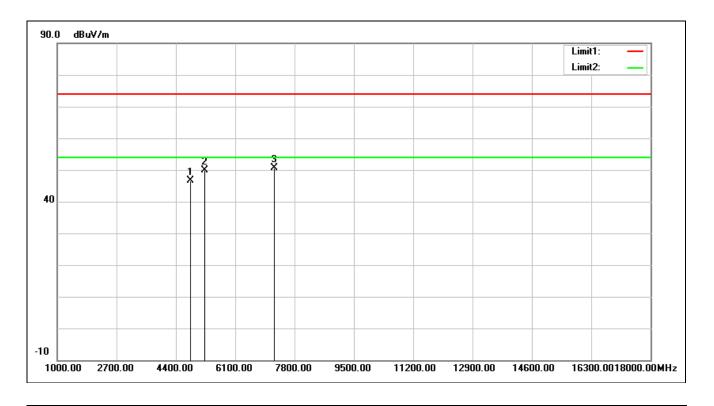
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4804.000	-2.35	54.72	52.37	74.00	-21.63	peak			
2	4804.000	-2.35	49.16	46.81	54.00	-7.19	AVG			
3	5267.000	-0.42	49.42	49.00	74.00	-25.00	peak	100	316	
4	7206.000	5.78	45.32	51.10	74.00	-22.90	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:17:17

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

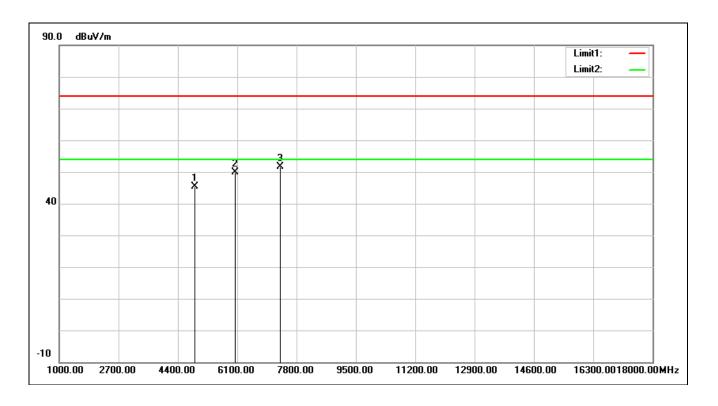
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4804.000	-2.35	48.94	46.59	74.00	-27.41	peak			
2	5233.000	-0.62	50.59	49.97	74.00	-24.03	peak	100	208	
3	7206.000	5.78	44.92	50.70	74.00	-23.30	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:19:43

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

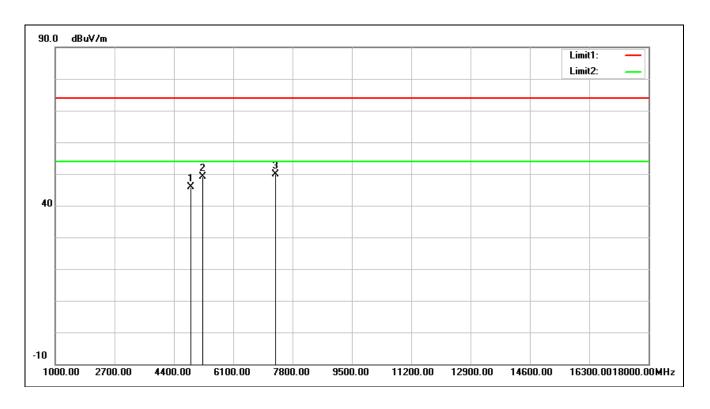
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4882.000	-2.16	47.56	45.40	74.00	-28.60	peak			
2	6032.000	4.21	45.73	49.94	74.00	-24.06	peak	100	161	
3	7323.000	6.13	45.43	51.56	74.00	-22.44	peak			





Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:20:45

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

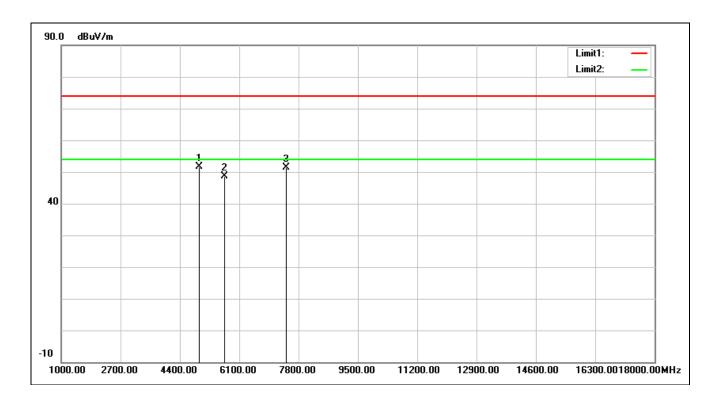
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4882.000	-2.16	47.95	45.79	74.00	-28.21	peak			
2	5233.000	-0.62	49.85	49.23	74.00	-24.77	peak	100	72	
3	7323.000	6.13	43.85	49.98	74.00	-24.02	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:23:09

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

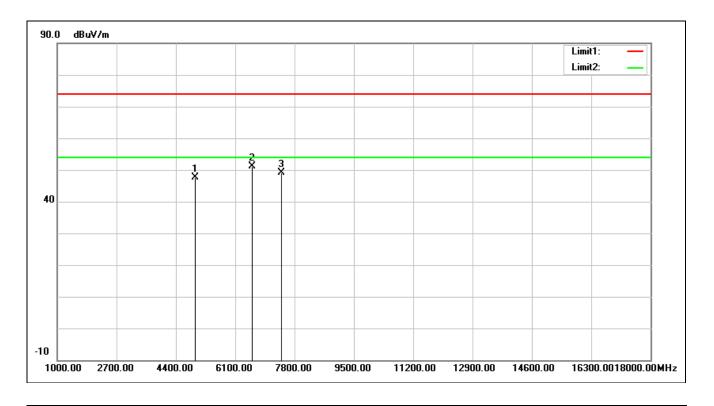
Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4960.000	-1.97	53.53	51.56	74.00	-22.44	peak			
2	5675.000	1.96	46.63	48.59	74.00	-25.41	peak	100	359	
3	7440.000	6.47	44.79	51.26	74.00	-22.74	peak			





Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:24:12

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 3DH5-2480-TX

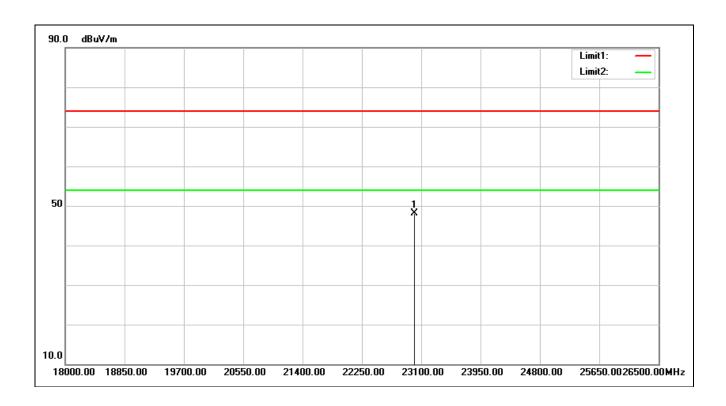
No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4960.000	-1.97	49.57	47.60	74.00	-26.40	peak			
2	6576.000	5.91	45.12	51.03	74.00	-22.97	peak	100	73	
3	7440.000	6.47	42.57	49.04	74.00	-24.96	peak			



#### **TUV Taiwan**

#### 11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:51:38

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

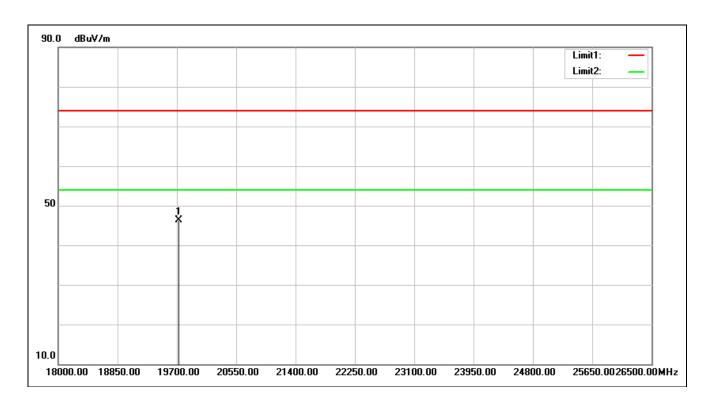
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	23006.500	29.91	18.25	48.16	74.00	-25.84	peak	100	224	





Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:51:47

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

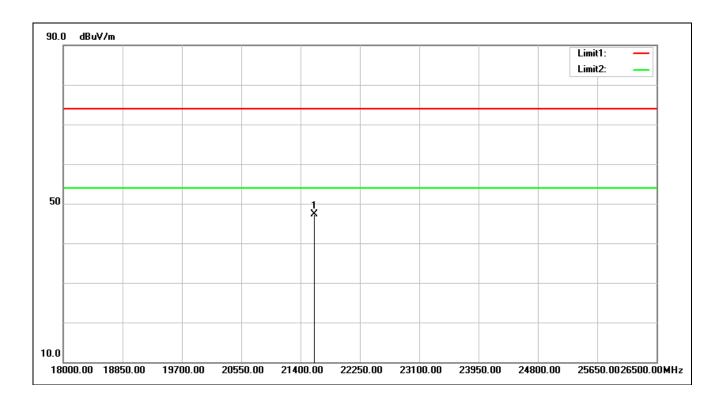
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	19725.500	28.95	17.36	46.31	74.00	-27.69	peak	100	50	



#### 11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:52:02

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

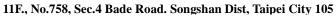
Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2441-TX

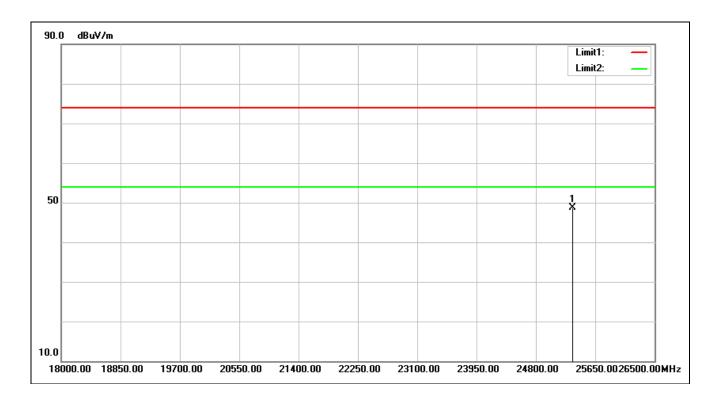
No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	21595.500	28.82	18.46	47.28	74.00	-26.72	peak	100	116	



#### **TUV Taiwan**



Tel:+886-2172-7000 fax:+886-2528-0018



Service No.: 114037719-NCC **Test Distance:** 3m

**Test Standard:** NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: **Radiation Emission** 2015/8/13 18:52:13 **Test Time:** 

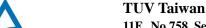
**Applicant:** Zeroplus **Test Rating:** DC 5V

**Product:** Temp.(℃)/Hum.(%): 21(°C)/52% **Controller Adapter** 

Model No.: P3 to P4 Controller Adapter **Test Engineer: Hugo Chang** 

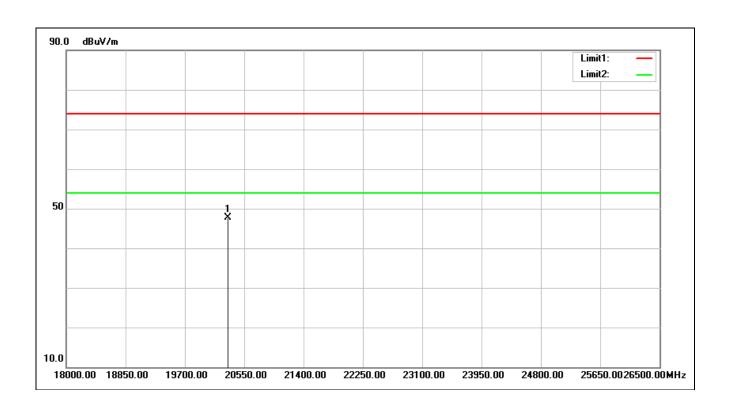
**Test Mode:** 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	25327.000	31.06	17.59	48.65	74.00	-25.35	peak	100	83	



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:52:30

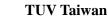
Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

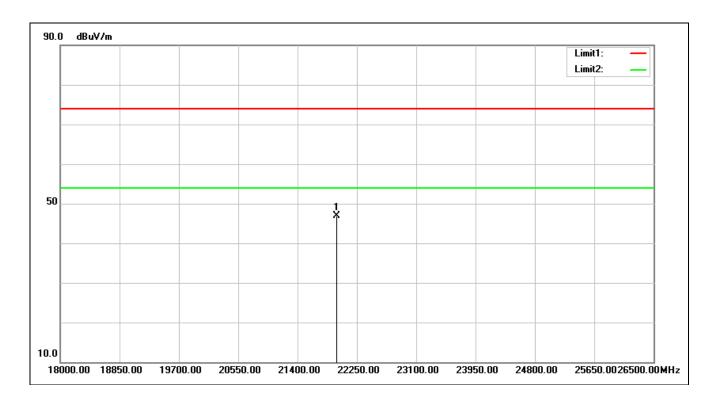
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	20320.500	29.13	18.66	47.79	74.00	-26.21	peak	100	249	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:52:40

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

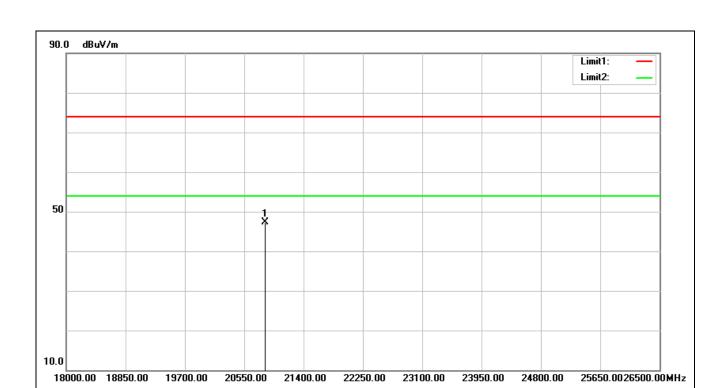
**Test Mode:** 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	21961.000	28.46	18.35	46.81	74.00	-27.19	peak	100	313	



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:52:58

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

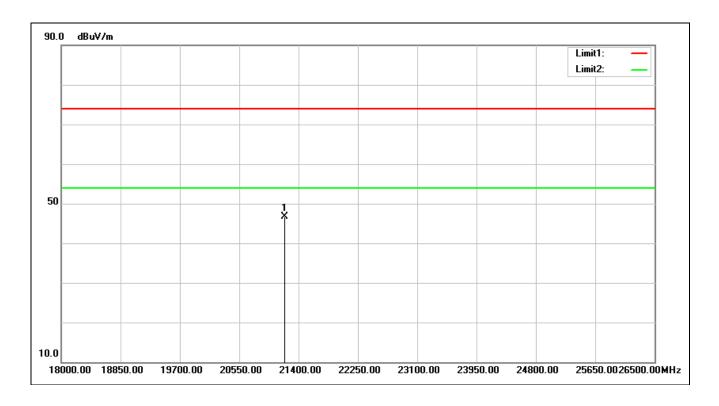
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	20847.500	29.32	17.89	47.21	74.00	-26.79	peak	100	172	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:53:10

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

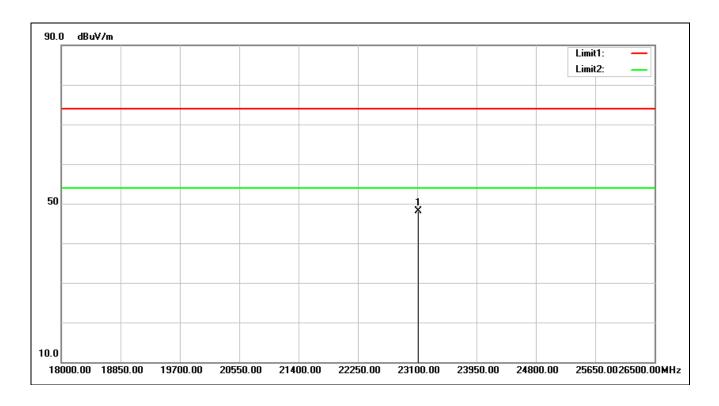
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	21204.500	29.19	17.58	46.77	74.00	-27.23	peak	100	2	



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:53:32

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

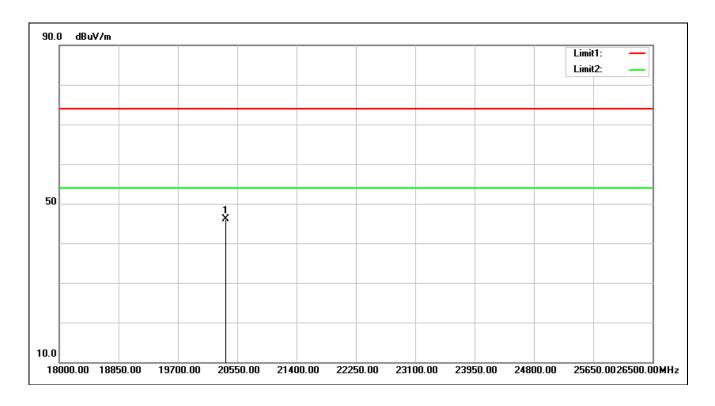
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	23117.000	29.80	18.33	48.13	74.00	-25.87	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:53:43

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ): 21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

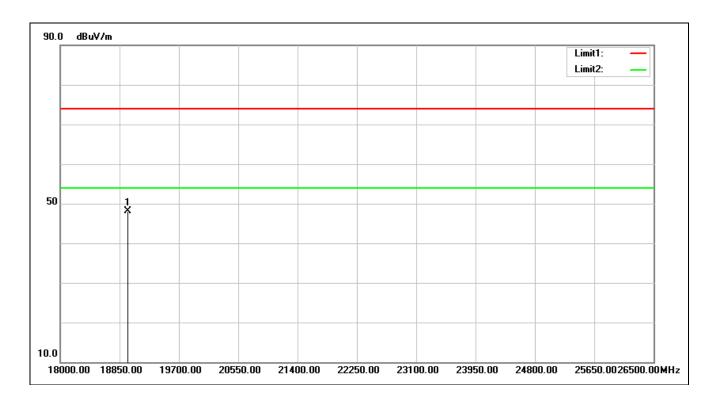
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	20380.000	29.16	16.89	46.05	74.00	-27.95	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:53:59

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.( $^{\circ}$ )/Hum.( $^{\circ}$ ): 21( $^{\circ}$ )/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

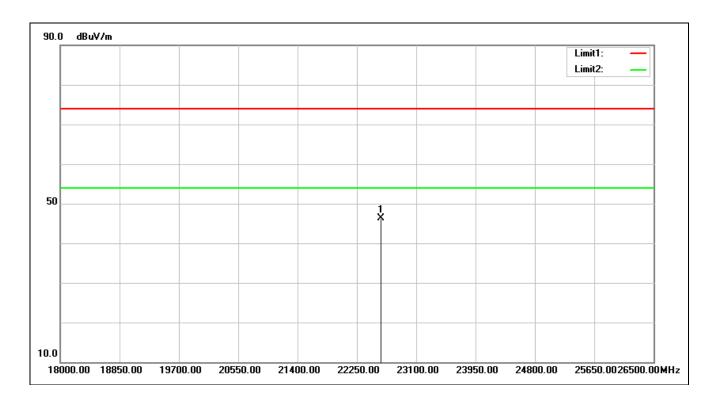
Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	18969.000	28.85	19.17	48.02	74.00	-25.98	peak			





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:54:09

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	22590.000	29.36	16.97	46.33	74.00	-27.67	peak			

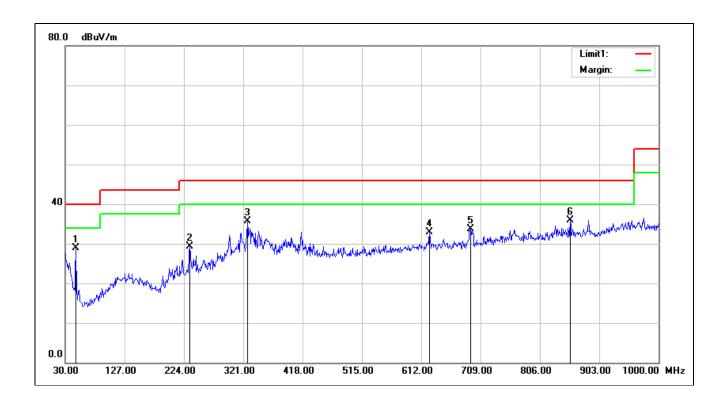
#### Spurious Emissions, TX Mode, 30M-1G



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 19:07:27

Applicant:ZeroplusTest Rating:DC 5VProduct:Controller AdapterTemp.( $^{\circ}$ C)/Hum.( $^{\circ}$ ):21( $^{\circ}$ C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

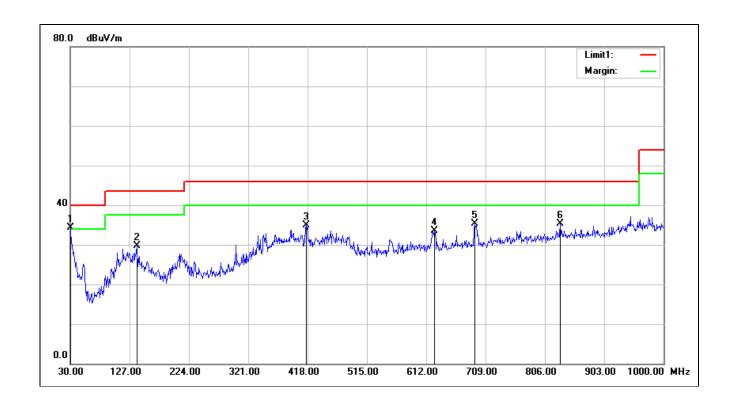
Test Mode: 1DH5-2441-TX
Remark: POWER=14

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	47.4600	-15.85	44.77	28.92	40.00	-11.08	QP	100	153	
2	233.7000	-13.11	42.47	29.36	46.00	-16.64	QP	100	293	
3	327.7900	-9.77	45.47	35.70	46.00	-10.30	QP	100	258	
4	625.5800	-5.62	38.56	32.94	46.00	-13.06	QP	100	216	
5	692.5100	-4.95	38.61	33.66	46.00	-12.34	QP	100	224	
6	855.4700	-2.23	38.19	35.96	46.00	-10.04	QP	100	4	

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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 19:08:31

Applicant:ZeroplusTest Rating:DC 5VProduct:Controller AdapterTemp.( $^{\circ}$ )/Hum.( $^{\circ}$ ):21( $^{\circ}$ )/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2441-TX
Remark: POWER=14

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	30.0000	-6.03	40.31	34.28	40.00	-5.72	QP	100	139	
2	138.6399	-12.75	42.52	29.77	43.50	-13.73	QP	100	195	
3	416.0600	-8.34	43.32	34.98	46.00	-11.02	QP	100	189	
4	625.5800	-5.62	39.21	33.59	46.00	-12.41	QP	100	136	
5	691.5400	-4.96	40.22	35.26	46.00	-10.74	QP	100	78	
6	831.2200	-2.65	38.00	35.35	46.00	-10.65	QP	100	245	

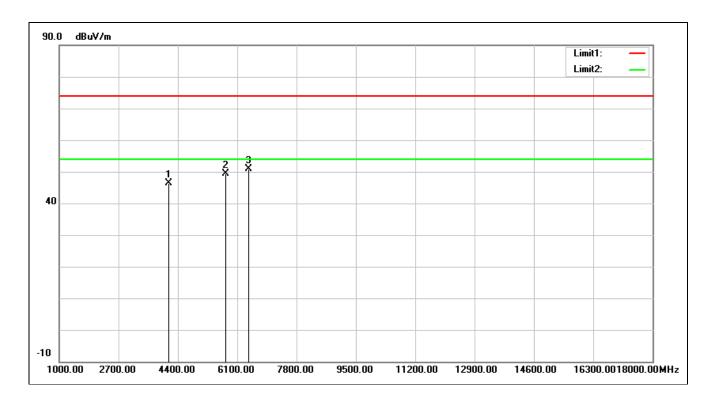
#### Spurious Emissions, RX Mode, 1-18G



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 17:30:30

Applicant: Zeroplus Test Rating: DC 5V Product: Controller Adapter Temp. ( $^{\circ}$ )/Hum. ( $^{\circ}$ ): 21( $^{\circ}$ )/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

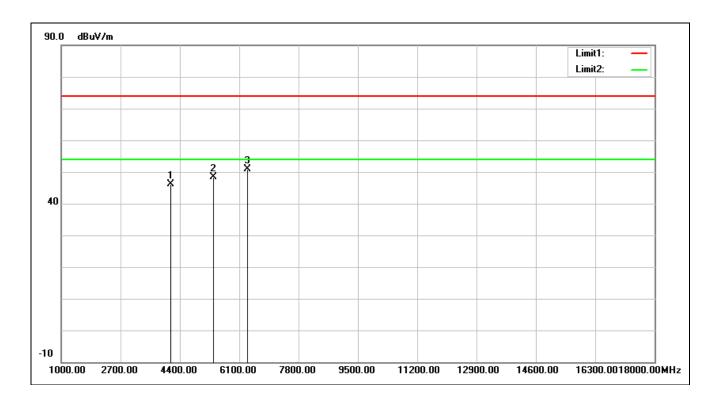
Test Mode: 1DH5-2441-RX Remark: POWER=14

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4145.000	-4.51	50.91	46.40	74.00	-27.60	peak	100	296	
2	5777.000	2.63	46.76	49.39	74.00	-24.61	peak	100	205	
3	6423.000	5.74	45.05	50.79	74.00	-23.21	peak	100	69	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 17:31:33

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2441-RX

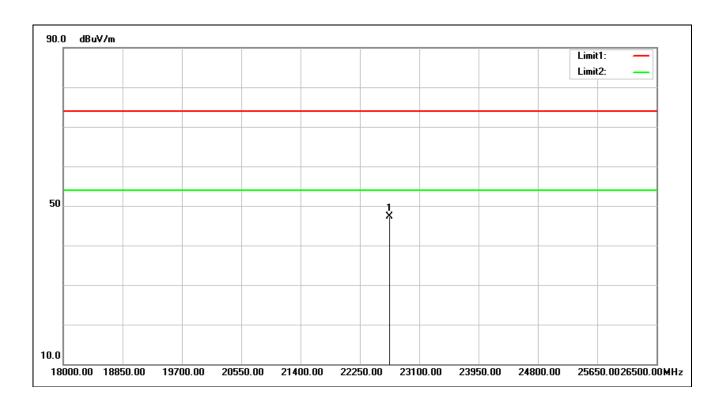
No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4145.000	-4.51	50.64	46.13	74.00	-27.87	peak	100	45	
2	5369.000	0.12	48.17	48.29	74.00	-25.71	peak	100	150	
3	6338.000	5.41	45.52	50.93	74.00	-23.07	peak	100	145	



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 18:51:08

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

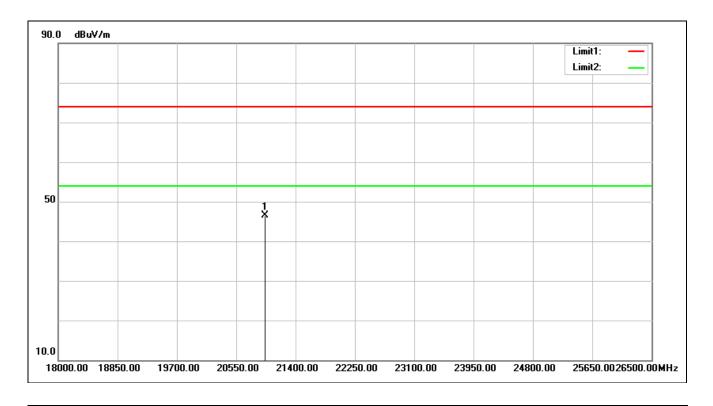
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	22675.000	29.47	17.85	47.32	74.00	-26.68	peak	100	136	





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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 18:51:17

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	20958.000	29.35	17.06	46.41	74.00	-27.59	peak	100	252	

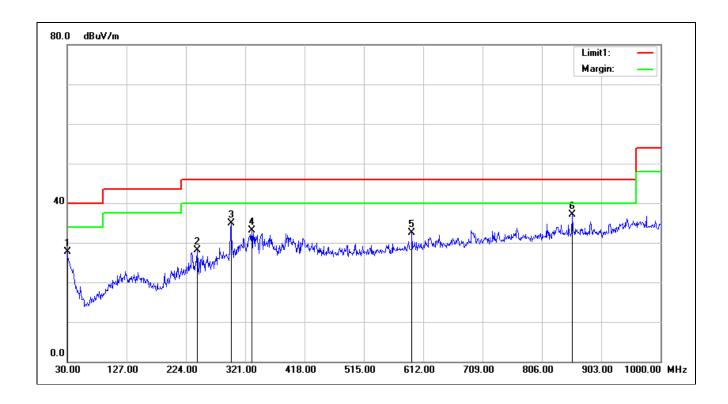
#### Spurious Emissions, RX Mode, 30M-1G



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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2015/8/13 19:11:24

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No: P3 to P4 Controller Adapter Test Engineer: Hugo Change

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

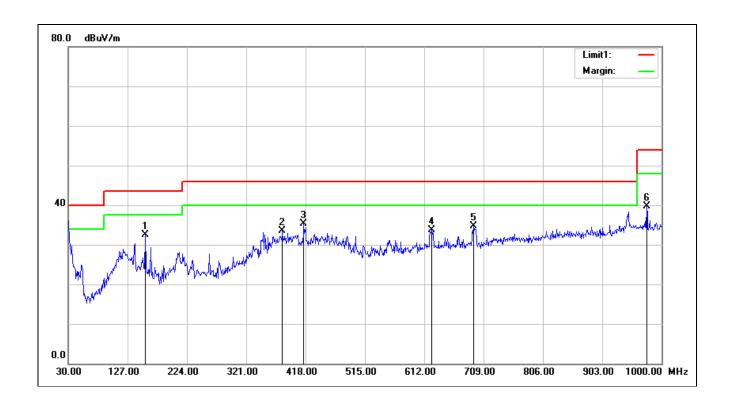
Test Mode: 1DH5-2441-RX
Remark: POWER=14

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	30.0000	-6.03	33.73	27.70	40.00	-12.30	QP	100	179	
2	242.4300	-12.35	40.47	28.12	46.00	-17.88	QP	100	325	
3	297.7200	-10.46	45.34	34.88	46.00	-11.12	QP	100	245	
4	331.6700	-9.68	42.71	33.03	46.00	-12.97	QP	100	229	
5	593.5700	-5.99	38.54	32.55	46.00	-13.45	QP	100	251	
6	855.4700	-2.23	39.42	37.19	46.00	-8.81	QP	100	176	

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Service No.: 114037719-NCC Test Distance: 3m

Test Standard: NCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2015/8/13 19:12:28

Applicant: Zeroplus Test Rating: DC 5V

Product: Controller Adapter Temp.(°C)/Hum.(%): 21(°C)/52%

Model No.: P3 to P4 Controller Adapter Test Engineer: Hugo Chang

Test Mode: 1DH5-2441-RX Remark: POWER=14

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	156.1000	-13.42	46.02	32.60	43.50	-10.90	QP	100	274	
2	380.1700	-8.84	42.36	33.52	46.00	-12.48	QP	100	171	
3	415.0899	-8.37	43.63	35.26	46.00	-10.74	QP	100	200	
4	624.6100	-5.63	39.35	33.72	46.00	-12.28	QP	100	133	
5	692.5100	-4.95	39.65	34.70	46.00	-11.30	QP	100	69	
6	975.7500	-0.26	39.98	39.72	54.00	-14.28	QP	100	245	

## Mains Spurious Emissions



#### **TUV Rheinland Taiwan**

Site: Conduction

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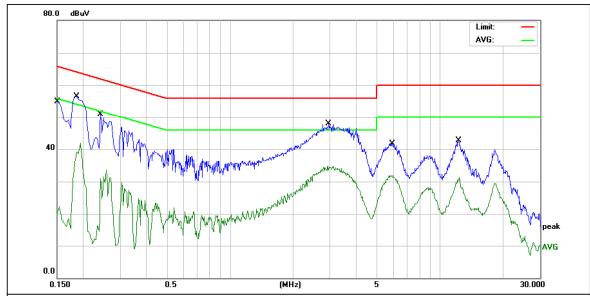
Tel:+886-2-2172-7000 Fax:+886-2-2528-0018

Test Time: 2015/9/9

Phase:

L1

20:31:52



Service No.: 114037719

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Applicant: Zeroplus Temp.(℃)/Hum.(%): 23.1(℃) / 45 %

Product: Controller Adapter Power Rating: DC 5V

Model No.: ZPPN001 Test Engineer: Kai Wang

Test Mode: (a)ZPPN001:BT link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.65	35.07	44.72	65.99	-21.27	QP	Р	
2	0.1500	9.65	8.28	17.93	55.99	-38.06	AVG	Р	
3	0.1860	9.63	44.16	53.79	64.21	-10.42	QP	Р	
4	0.1860	9.63	26.71	36.34	54.21	-17.87	AVG	Р	
5	0.2420	9.63	36.94	46.57	62.02	-15.45	QP	Р	
6	0.2420	9.63	15.26	24.89	52.02	-27.13	AVG	Р	
7	2.9580	9.66	33.23	42.89	56.00	-13.11	QP	Р	
8	2.9580	9.66	23.63	33.29	46.00	-12.71	AVG	Р	
9	5.9300	9.69	26.37	36.06	60.00	-23.94	QP	А	
10	5.9300	9.69	20.79	30.48	50.00	-19.52	AVG	Р	
11	12.2660	9.79	26.62	36.41	60.00	-23.59	QP	Р	
12	12.2660	9.79	17.98	27.77	50.00	-22.23	AVG	Р	



#### **TUV Rheinland Taiwan**

Site: Conduction

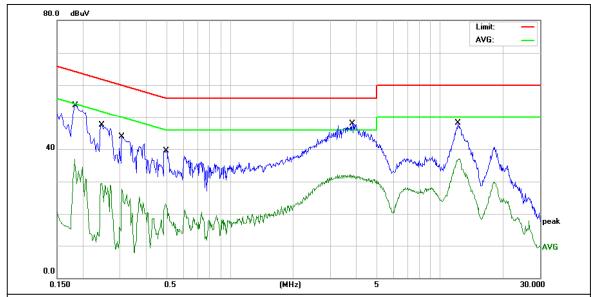
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Tel:+886-2-2172-7000 Fax:+886-2-2528-0018

Test Time: 2015/9/9

Phase:

20:39:35



Service No.: 114037719

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Applicant: Zeroplus Temp.(℃)/Hum.(%): 23.1(℃) / 45 %

Product: Controller Adapter Power Rating: DC 5V

Model No.: ZPPN001 Test Engineer: Kai Wang

Test Mode: (a)ZPPN001:BT link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1819	9.65	41.78	51.43	64.39	-12.96	QP	Р	
2	0.1819	9.65	20.94	30.59	54.39	-23.80	AVG	Р	
3	0.2460	9.65	34.70	44.35	61.89	-17.54	QP	Р	
4	0.2460	9.65	16.97	26.62	51.89	-25.27	AVG	Р	
5	0.3060	9.64	31.27	40.91	60.08	-19.17	QP	Р	
6	0.3060	9.64	12.50	22.14	50.08	-27.94	AVG	Р	
7	0.4940	9.64	26.26	35.90	56.10	-20.20	QP	Р	
8	0.4940	9.64	10.17	19.81	46.10	-26.29	AVG	Р	
9	3.8340	9.68	30.46	40.14	56.00	-15.86	QP	Р	
10	3.8340	9.68	20.58	30.26	46.00	-15.74	AVG	Р	
11	12.1980	9.83	31.46	41.29	60.00	-18.71	QP	Р	
12	12.1980	9.83	24.76	34.59	50.00	-15.41	AVG	Р	