

Appendix B: Test Results of General 2.4GHz

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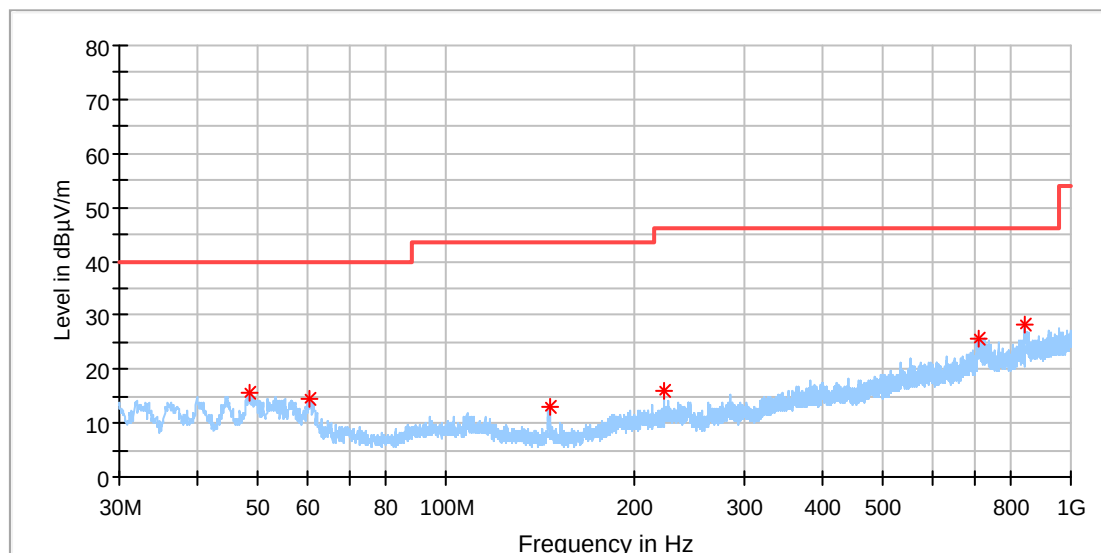
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz -26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix B.1: Fundamental & Harmonics Radiated Emission

30MHz - 1GHz

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 24 Humi:47%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

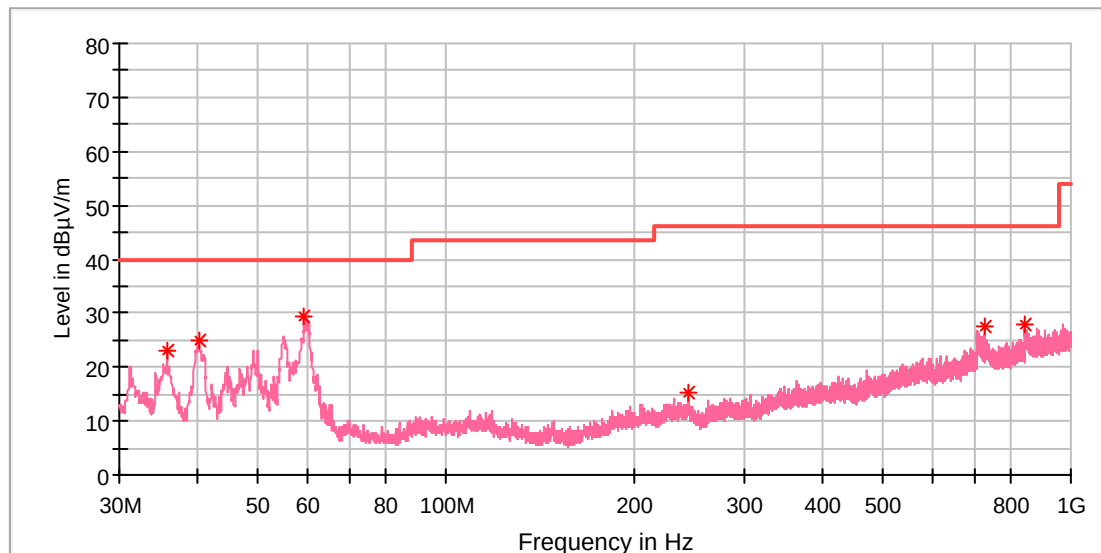


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.527000	15.57	40.00	24.43	100.0	H	262.0	-18.7
60.506500	14.55	40.00	25.45	100.0	H	243.0	-19.4
146.303000	12.96	43.50	30.54	100.0	H	291.0	-22.6
224.000000	16.03	46.00	29.97	100.0	H	53.0	-18.7
710.794500	25.69	46.00	20.31	100.0	H	34.0	-8.2
845.188000	28.34	46.00	17.66	100.0	H	281.0	-6.0

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 24 Humi:47%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

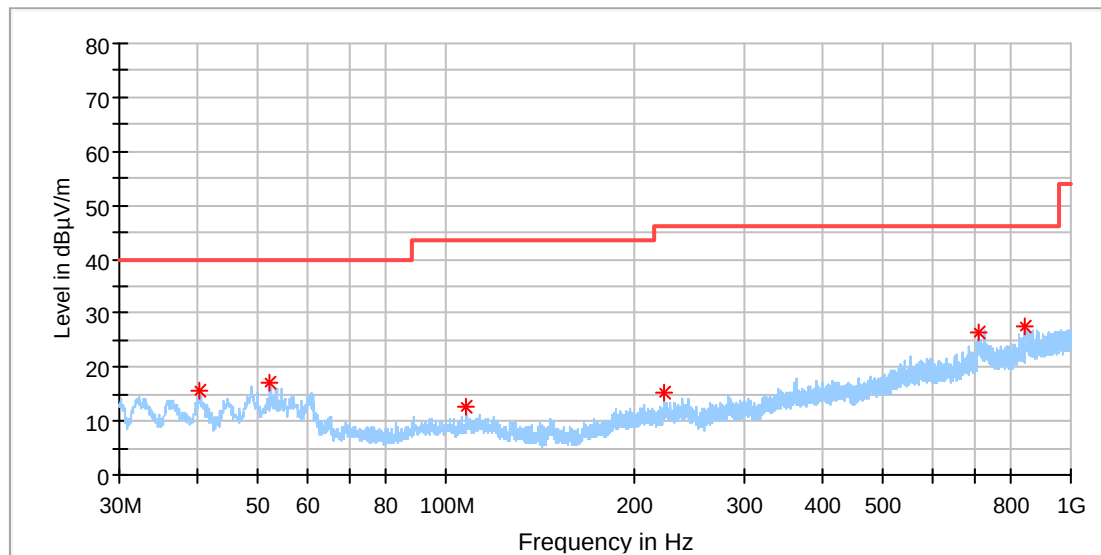


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
35.771500	22.93	40.00	17.07	100.0	V	213.0	-21.9
40.282000	25.07	40.00	14.93	100.0	V	71.0	-20.3
59.342500	29.25	40.00	10.75	100.0	V	115.0	-19.2
244.321500	15.28	46.00	30.72	100.0	V	346.0	-17.9
729.418500	27.57	46.00	18.43	100.0	V	286.0	-7.9
844.848500	28.05	46.00	17.95	100.0	V	146.0	-6.0

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 24 Humi:47%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

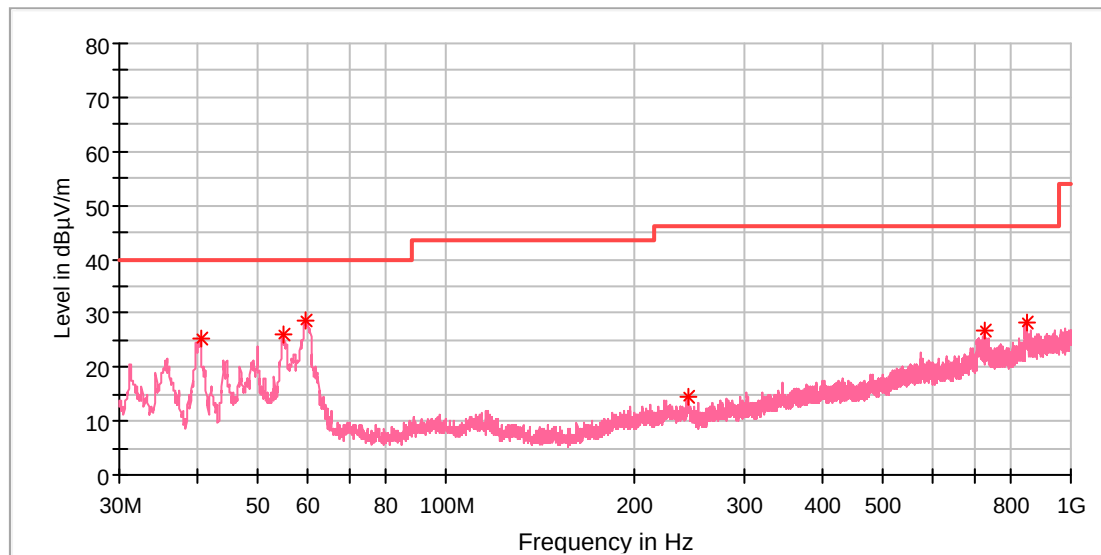


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.330500	15.67	40.00	24.33	100.0	H	98.0	-20.3
52.358500	17.19	40.00	22.81	100.0	H	52.0	-18.6
107.891000	12.48	43.50	31.02	100.0	H	235.0	-19.3
223.951500	15.15	46.00	30.85	100.0	H	1.0	-18.7
709.873000	26.56	46.00	19.44	100.0	H	256.0	-8.3
844.848500	27.66	46.00	18.34	100.0	H	61.0	-6.0

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 24 Humi:47%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin



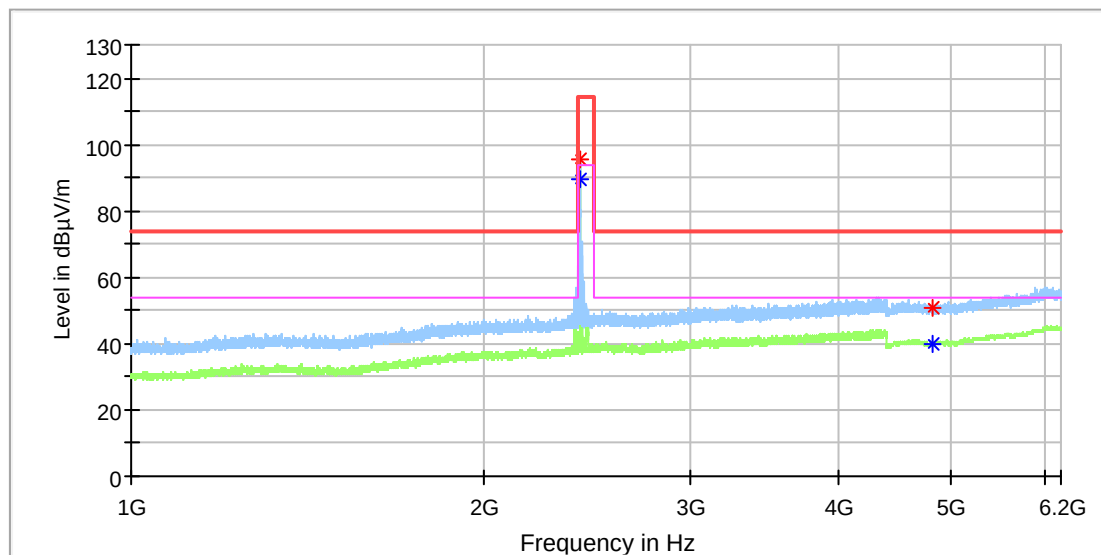
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.524500	25.33	40.00	14.67	100.0	V	227.0	-20.3
55.026000	26.02	40.00	13.98	100.0	V	91.0	-18.7
59.633500	28.74	40.00	11.26	100.0	V	247.0	-19.3
243.739500	14.40	46.00	31.60	100.0	V	24.0	-17.9
728.545500	26.75	46.00	19.25	100.0	V	161.0	-7.9
849.068000	28.10	46.00	17.90	100.0	V	342.0	-5.9

1GHz - 18GHz

EUT Information

EUT Name:	RC Race Car
Model:	0388
Test Mode:	SRD2.4G_2415MHz
Test Voltage::	Battery
Remark:	Temp 22 Humi:50%
Test Standard:	FCC 15.249
Tested By:	Alano Qu
Reviewed By:	Terry Yin

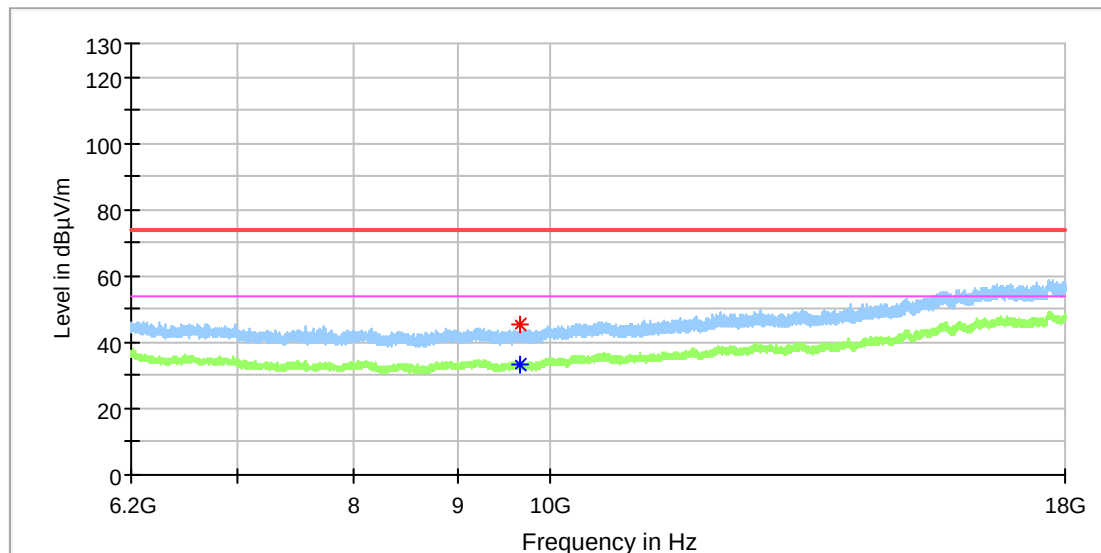


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2415.080000	95.53	---	114.00	18.47	100.0	H	173.0	7.1
2415.760000	---	89.64	94.00	4.36	100.0	H	223.0	7.1
4829.500000	50.65	---	74.00	23.35	100.0	H	251.0	11.8
4829.500000	---	40.12	54.00	13.88	100.0	H	251.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

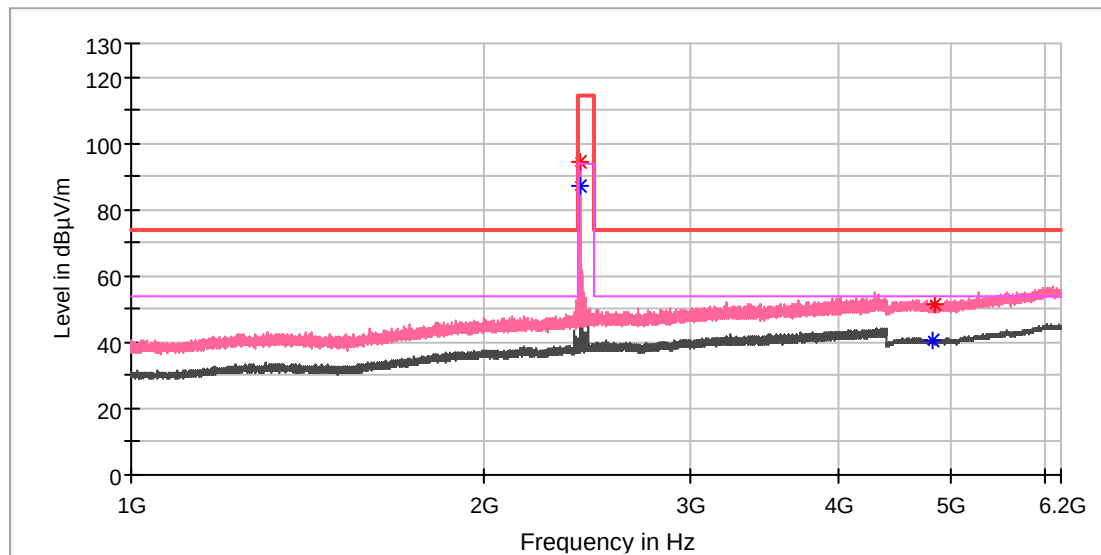


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9655.433333	45.35		74.00	28.65	100.0	H	93.0	10.4
9662.808333	---	33.4	54.00	20.60	100.0	H	0.0	10.4

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

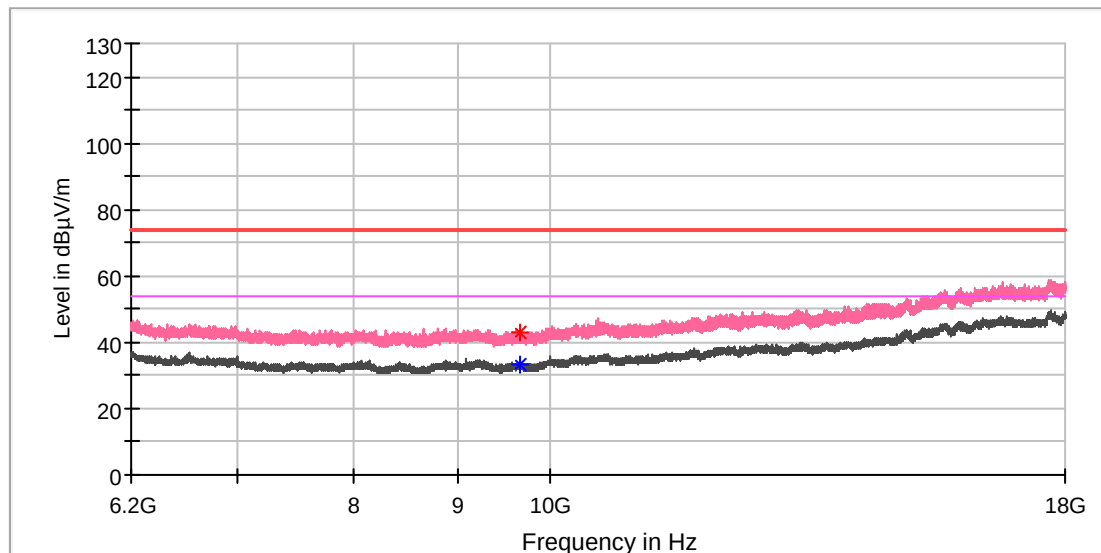


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2414.060000	---	86.78	94.00	7.22	100.0	V	0.0	7.1
2414.910000	94.34	---	114.00	19.66	100.0	V	0.0	7.1
4829.000000	---	40.46	54.00	13.54	100.0	V	138.0	11.8
4832.000000	51.31	---	74.00	22.69	100.0	V	32.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

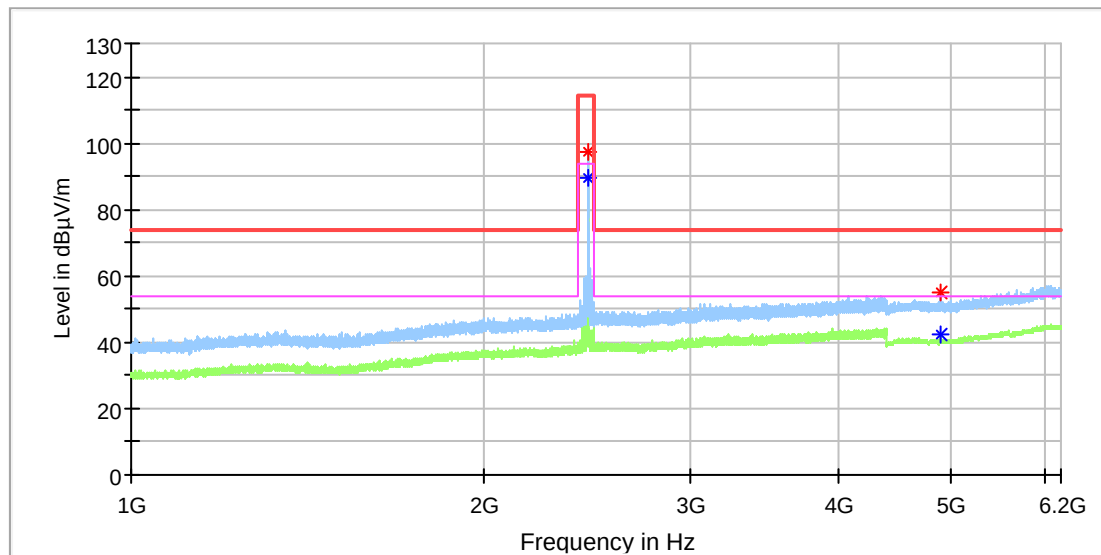


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9658.383333	42.99		74.00	31.01	100.0	V	184.0	10.4
9660.350000	---	33.27	54.00	20.73	100.0	V	4.0	10.4

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2450MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

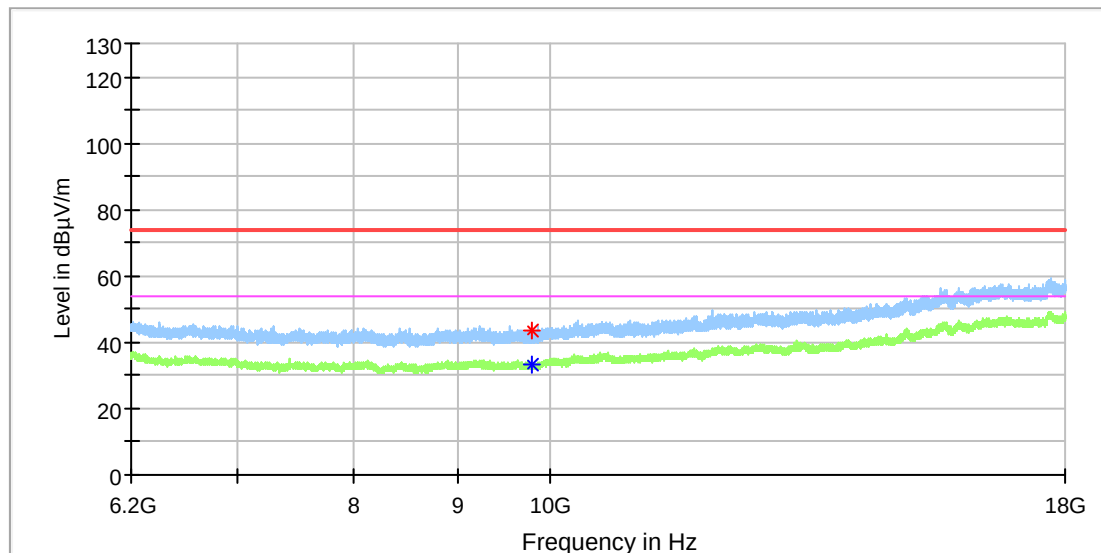


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2449.930000	97.57	---	114.00	16.43	100.0	H	237.0	7.5
2450.780000	---	89.34	94.00	4.66	100.0	H	237.0	7.5
4898.000000	55.16	---	74.00	18.84	100.0	H	350.0	11.8
4899.500000	---	42.51	54.00	11.49	100.0	H	257.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2450MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

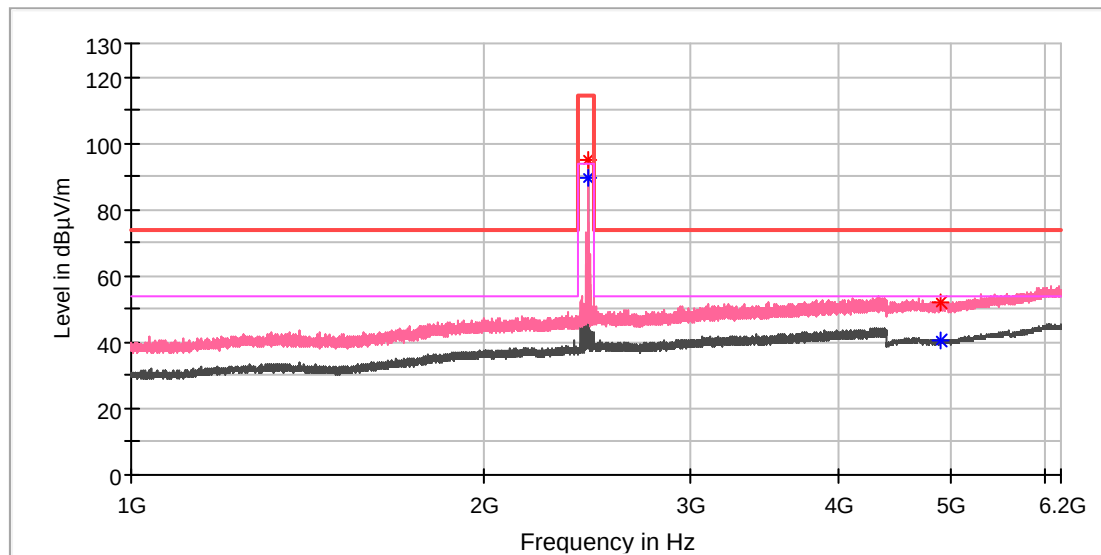


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9799.491667	43.48		74.00	30.52	100.0	H	178.0	10.5
9799.491667	---	33.00	54.00	21.00	100.0	H	178.0	10.5

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2450MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

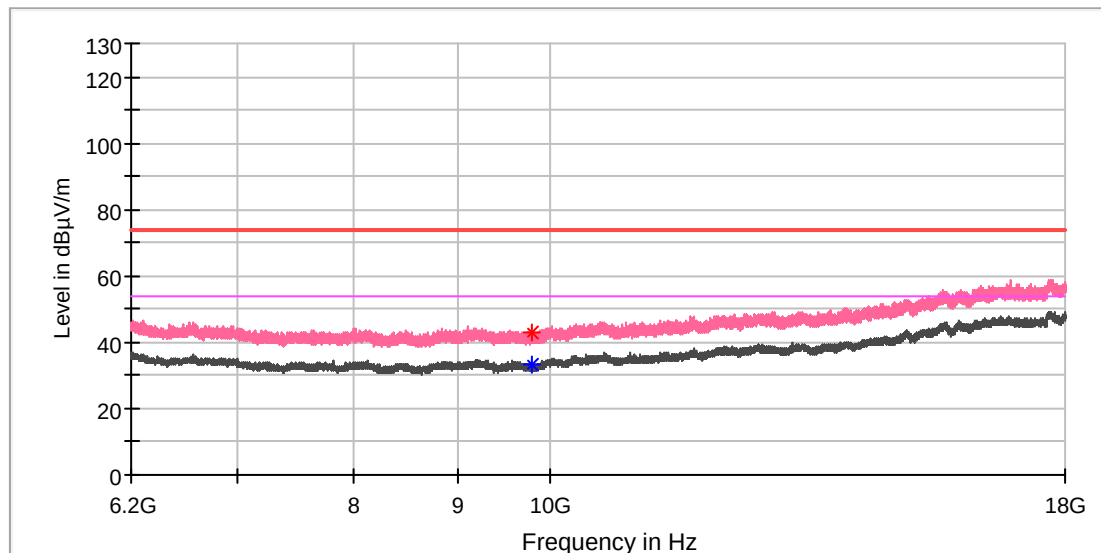


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2449.930000	94.80	---	114.00	19.20	100.0	V	3.0	7.5
2450.610000	---	89.43	94.00	4.57	100.0	V	3.0	7.5
4897.500000	51.78	---	74.00	22.22	100.0	V	251.0	11.8
4899.000000	---	40.58	54.00	13.42	100.0	V	299.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2450MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

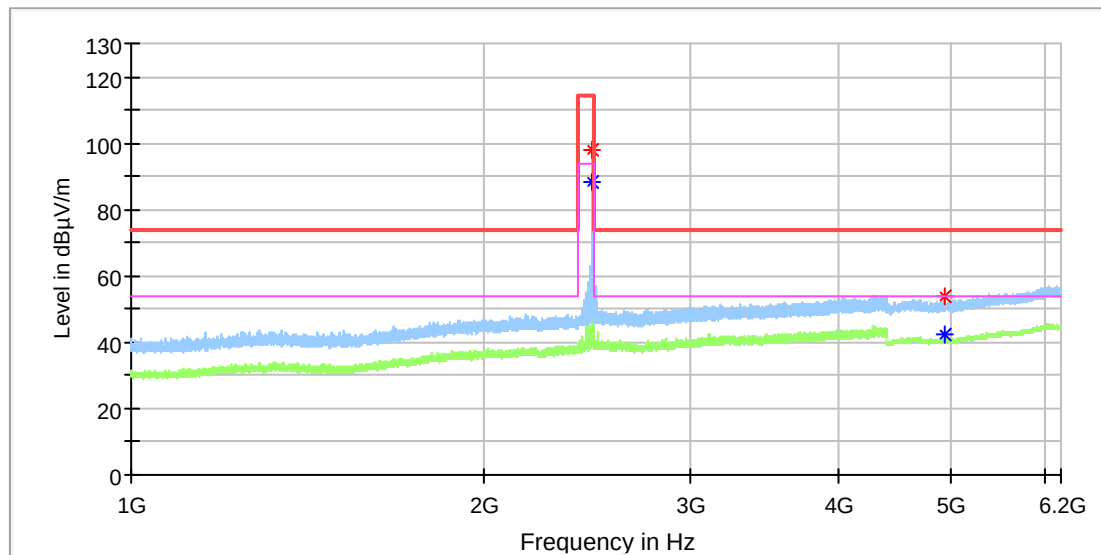


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9795.066667	42.73		74.00	31.27	100.0	V	344.0	10.4
9803.425000	---	33.06	54.00	20.94	100.0	V	324.0	10.5

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

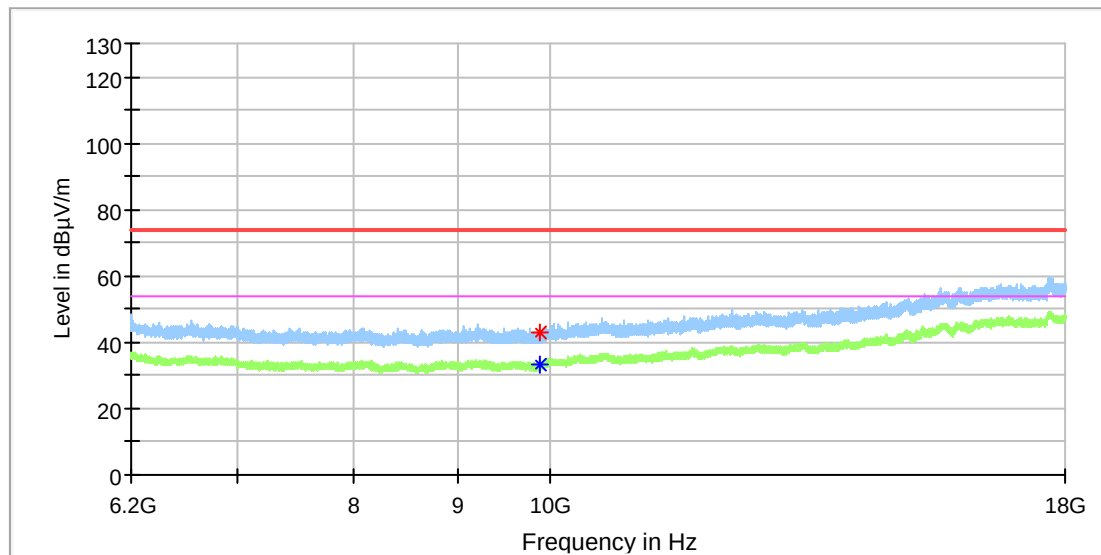


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2471.010000	---	88.03	94.00	5.97	100.0	H	308.0	7.4
2471.520000	97.97	---	114.00	16.03	100.0	H	308.0	7.4
4942.500000	53.82	---	74.00	20.18	100.0	H	56.0	11.8
4943.500000	---	42.25	54.00	11.75	100.0	H	119.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

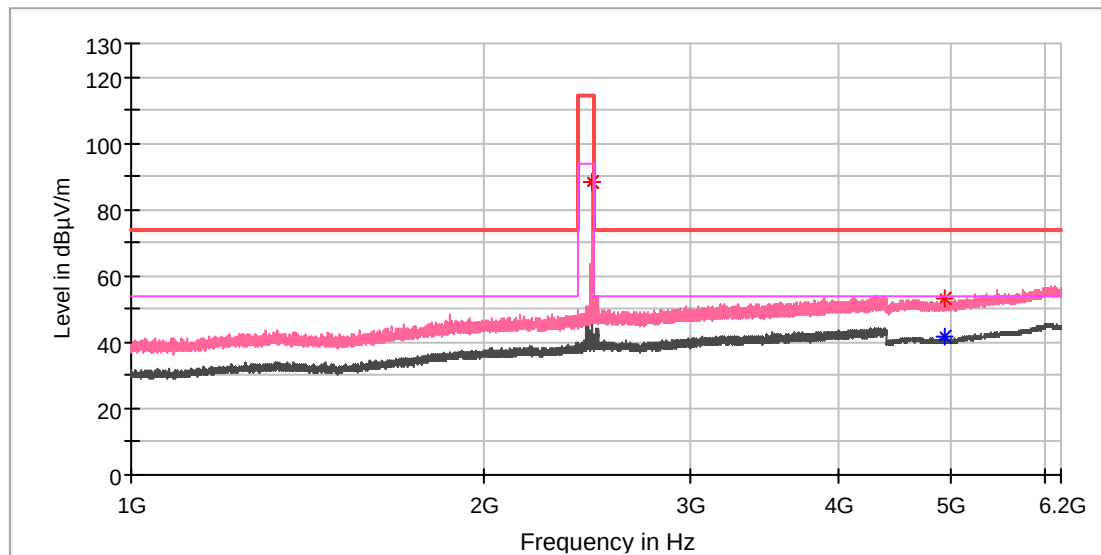


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9886.025000	43.19		74.00	30.81	100.0	H	0.0	10.7
9888.975000	---	33.15	54.00	20.85	100.0	H	313.0	10.7

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

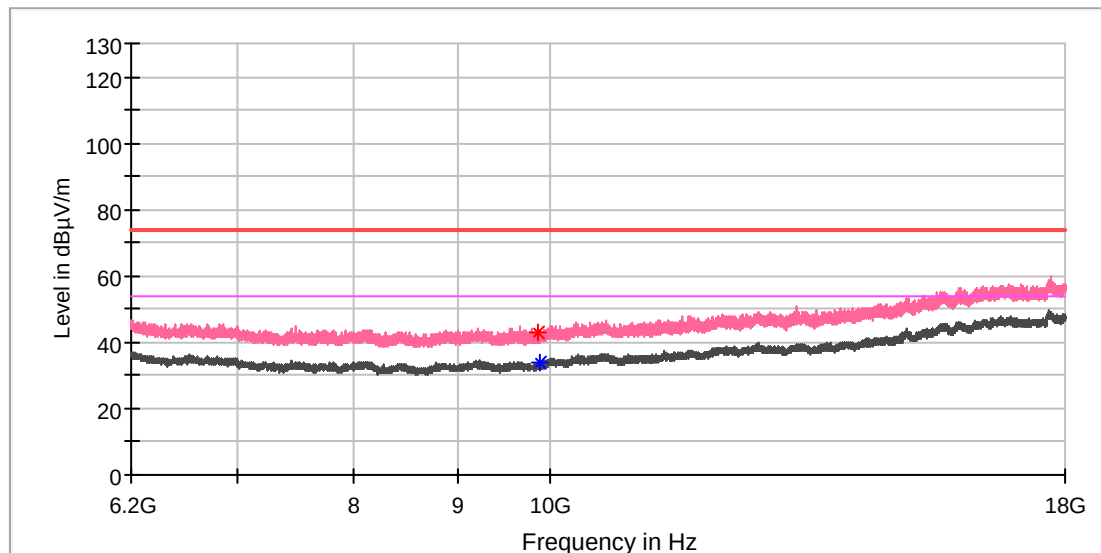


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2471.690000	88.31	---	114.00	25.69	100.0	V	171.0	7.4
2472.030000	---	88.05	94.00	5.95	100.0	V	171.0	7.4
4939.000000	53.33	---	74.00	20.67	100.0	V	224.0	11.8
4943.500000	---	41.58	54.00	12.42	100.0	V	331.0	11.8

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

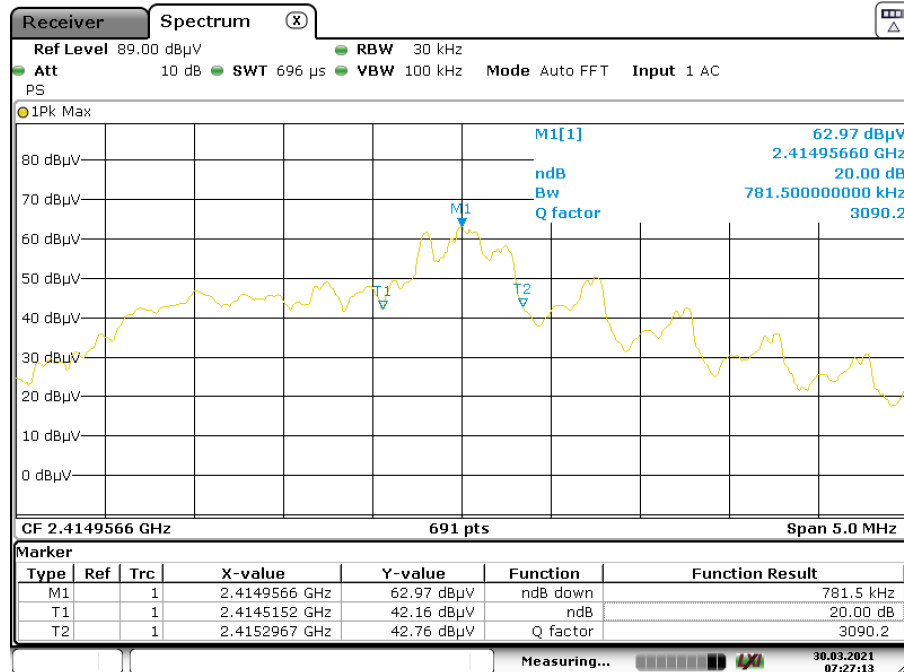


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9870.783333	43.12		74.00	30.88	100.0	V	313.0	10.6
9880.125000	---	33.70	54.00	20.30	100.0	V	37.0	10.7

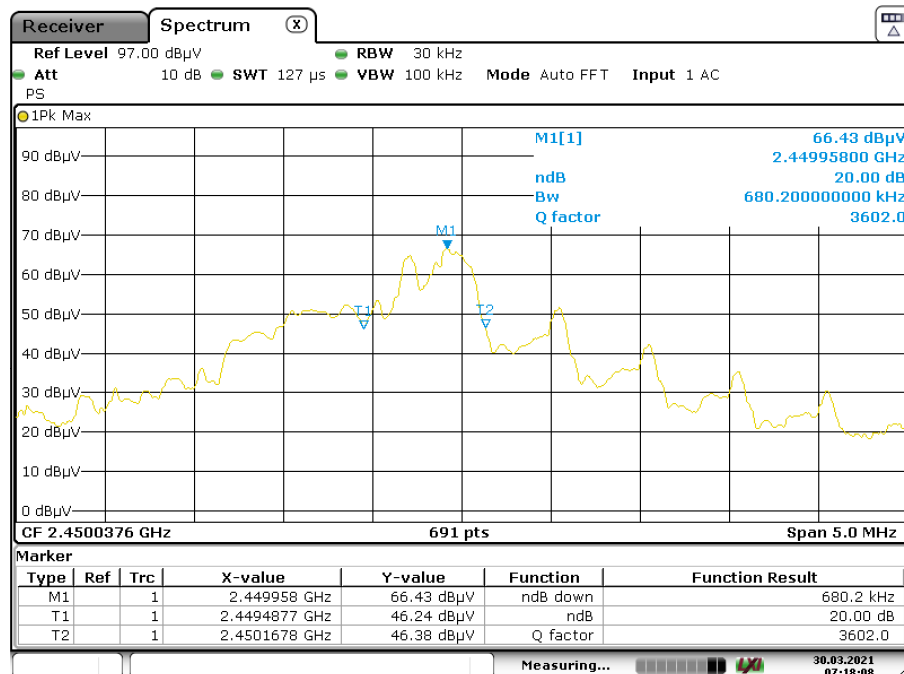
Appendix B.2: Test Results of 20dB Bandwidth

2415MHz

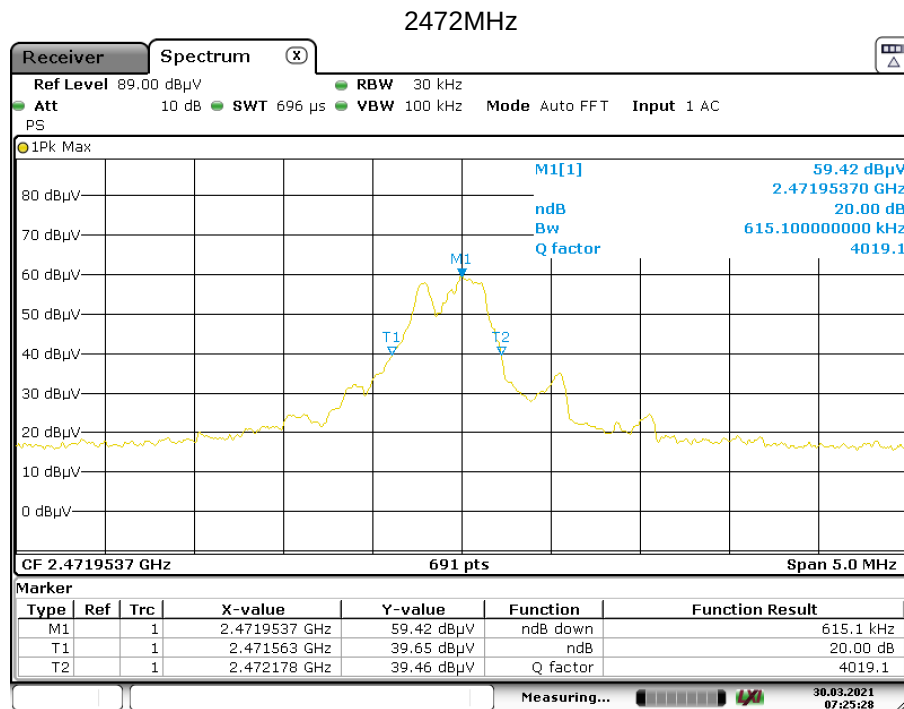


Date: 30.MAR.2021 07:27:13

2450MHz



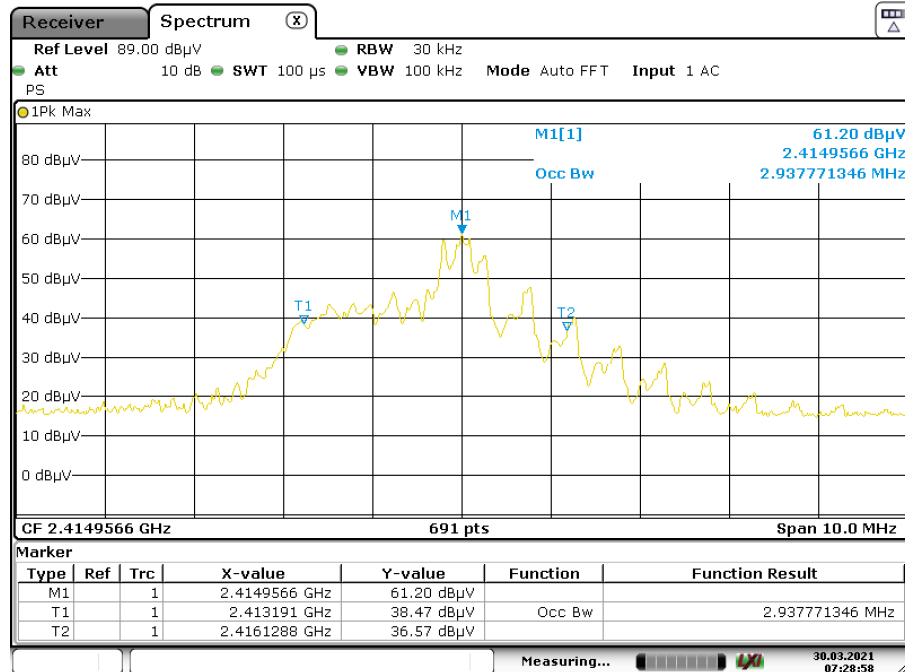
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Date: 30.MAR.2021 07:25:28

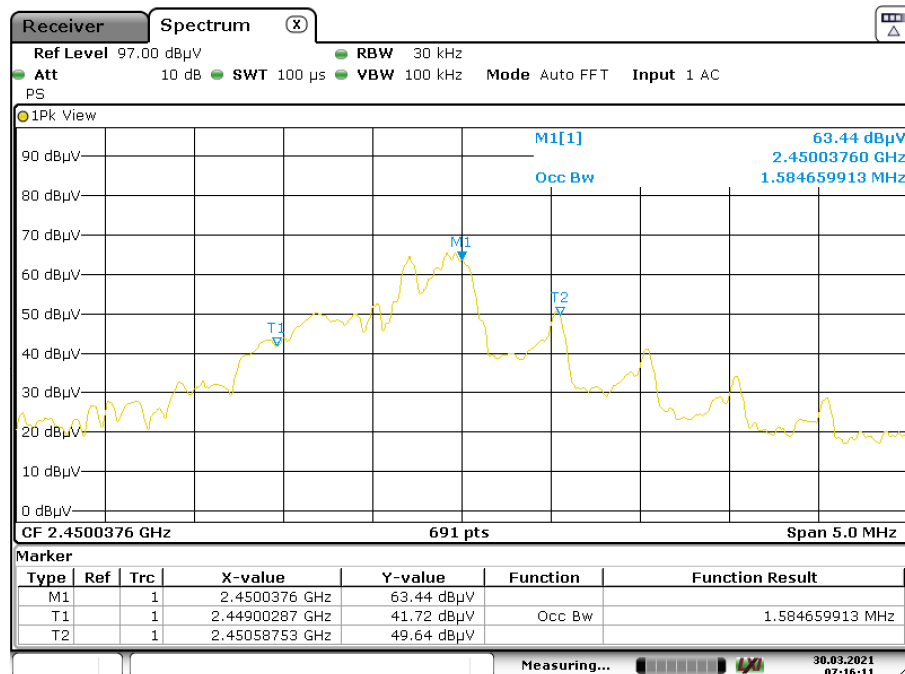
Appendix B.3: Test Results of 99% Bandwidth

2415MHz



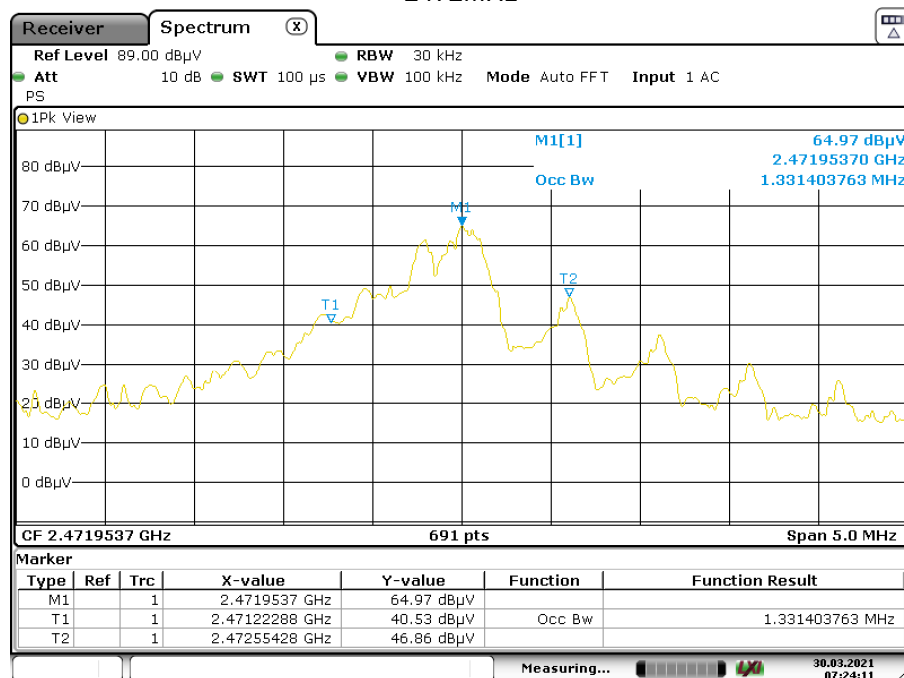
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2450MHz



Date: 30.MAR.2021 07:16:12

2472MHz

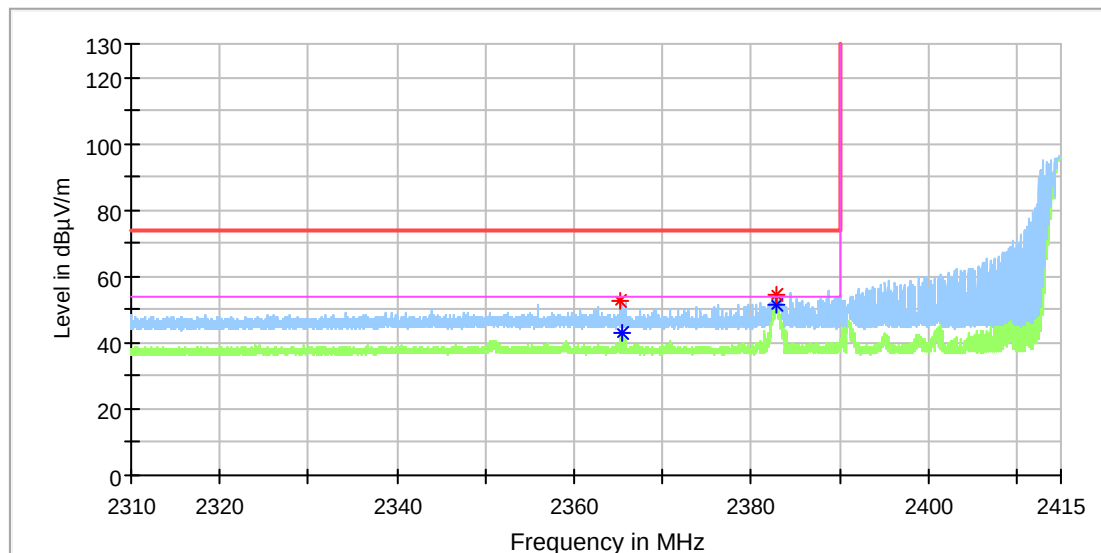


Date: 30.MAR.2021 07:24:10

Appendix B.4: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

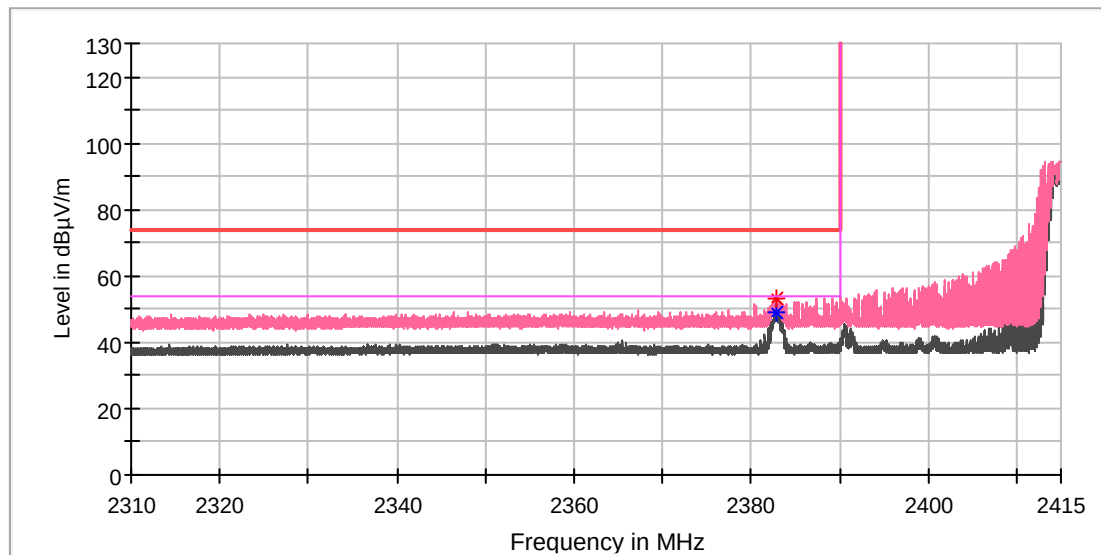


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2365.125000	52.77	---	74.00	21.23	100.0	H	0.0	6.9
2365.539750	---	43.20	54.00	10.80	100.0	H	325.0	6.9
2382.817500	54.35	---	74.00	19.65	100.0	H	169.0	7.0
2382.817500	---	50.84	54.00	3.16	100.0	H	169.0	7.0

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2415MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

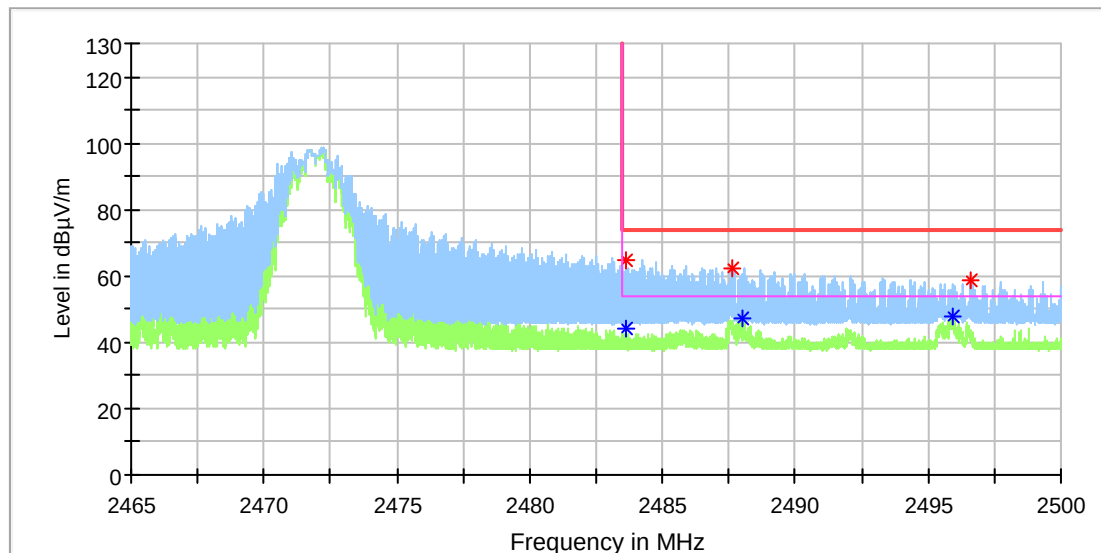


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2382.786000	52.92	---	74.00	21.08	100.0	V	0.0	7.0
2382.906750	---	49.26	54.00	4.74	100.0	V	343.0	7.0

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin

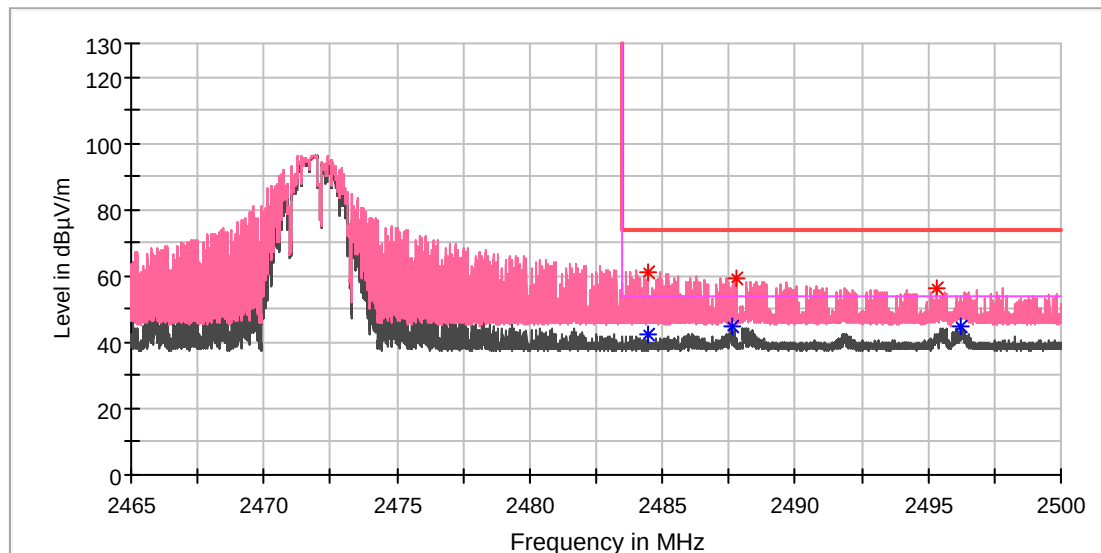


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.599000	64.98	---	74.00	9.02	100.0	H	234.0	7.4
2483.599000	---	44.14	54.00	9.86	100.0	H	234.0	7.4
2487.594250	62.52	---	74.00	11.48	100.0	H	317.0	7.4
2487.989750	---	46.98	54.00	7.02	100.0	H	234.0	7.4
2495.917250	---	47.48	54.00	6.52	100.0	H	234.0	7.4
2496.622500	58.42	---	74.00	15.58	100.0	H	317.0	7.4

EUT Information

EUT Name: RC Race Car
Model: 0388
Test Mode: SRD2.4G_2472MHz
Test Voltage:: Battery
Remark: Temp 22 Humi:50%
Test Standard: FCC 15.249
Tested By: Alano Qu
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.428500	61.27	---	74.00	12.73	100.0	V	2.0	7.4
2484.428500	---	42.15	54.00	11.85	100.0	V	2.0	7.4
2487.592500	---	44.72	54.00	9.28	100.0	V	0.0	7.4
2487.811250	59.42	---	74.00	14.58	100.0	V	2.0	7.4
2495.353750	56.27	---	74.00	17.73	100.0	V	143.0	7.4
2496.239250	---	44.61	54.00	9.39	100.0	V	342.0	7.4