

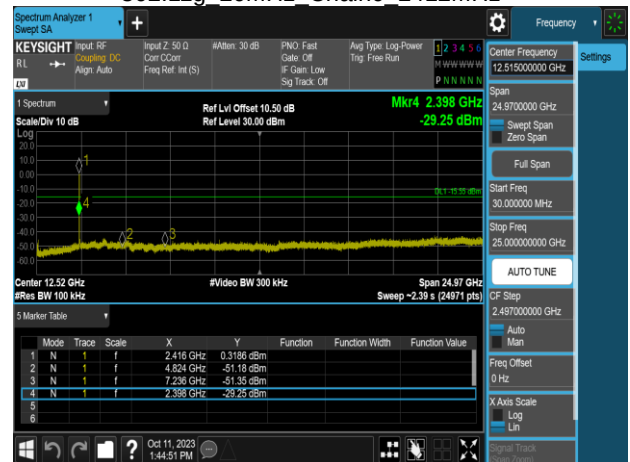
Report No.: TMWK2305001408KR

Conducted Spurious Emission

802.11b 20MHz Chain0 2412MHz



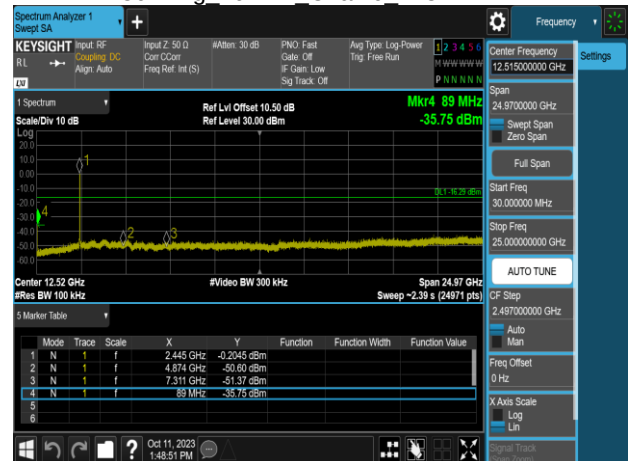
802.11g 20MHz Chain0 2412MHz



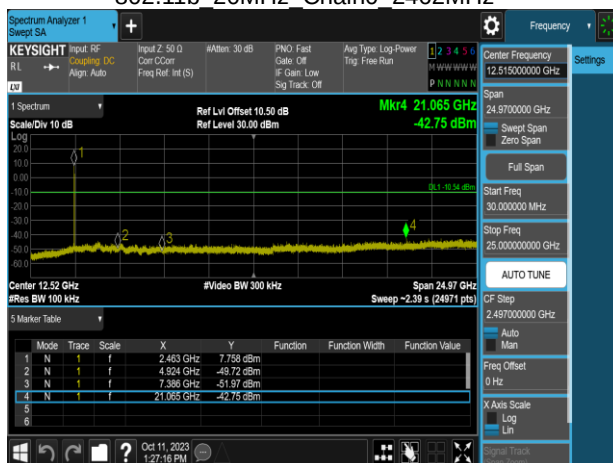
802.11b 20MHz Chain0 2437MHz



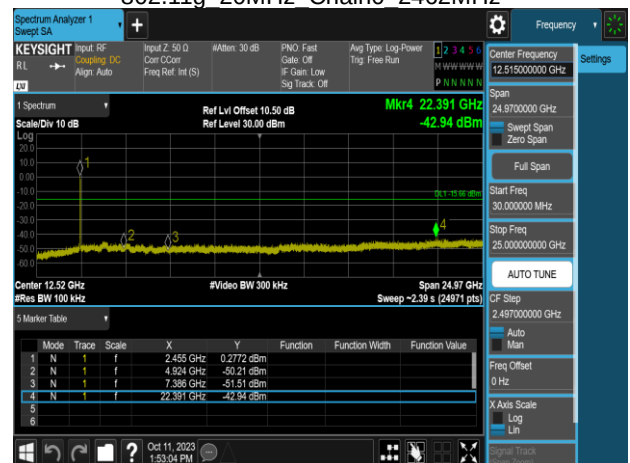
802.11g 20MHz Chain0 2437MHz



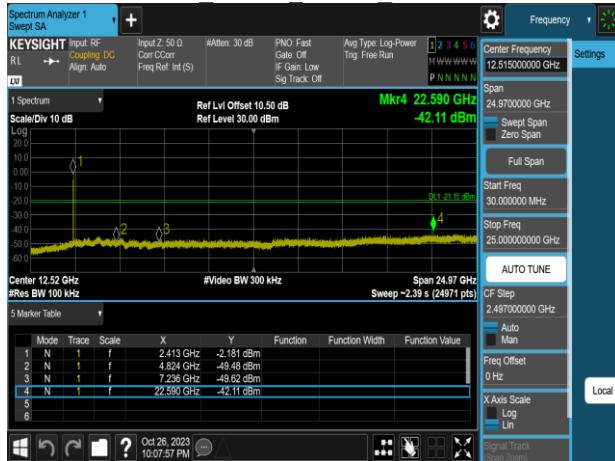
802.11b 20MHz Chain0 2462MHz



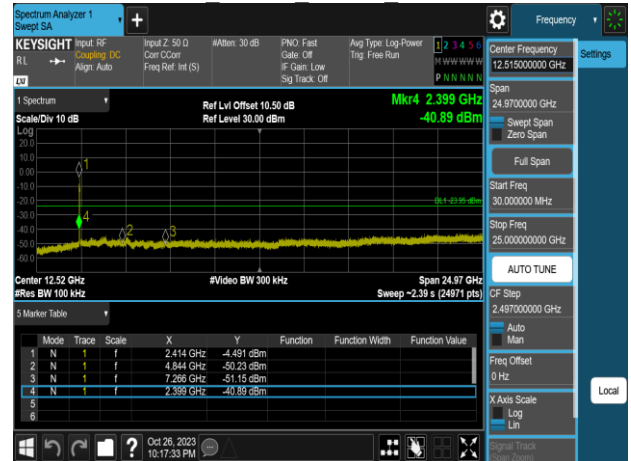
802.11g 20MHz Chain0 2462MHz



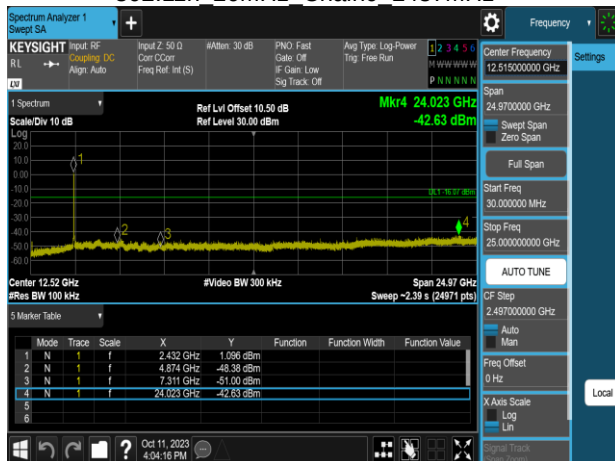
802.11n 20MHz Chain0 2412MHz



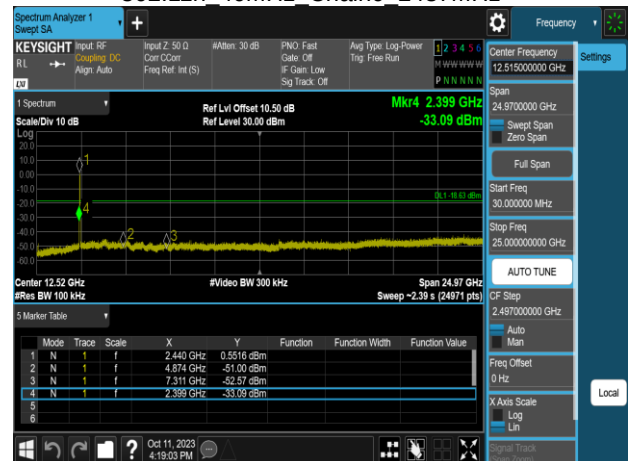
802.11n 40MHz Chain0 2422MHz



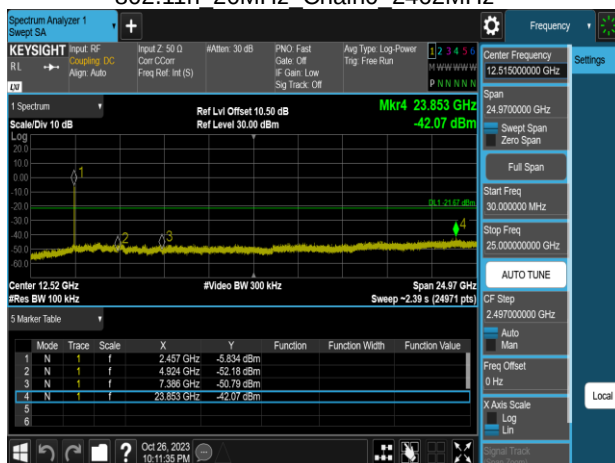
802.11n 20MHz Chain0 2437MHz



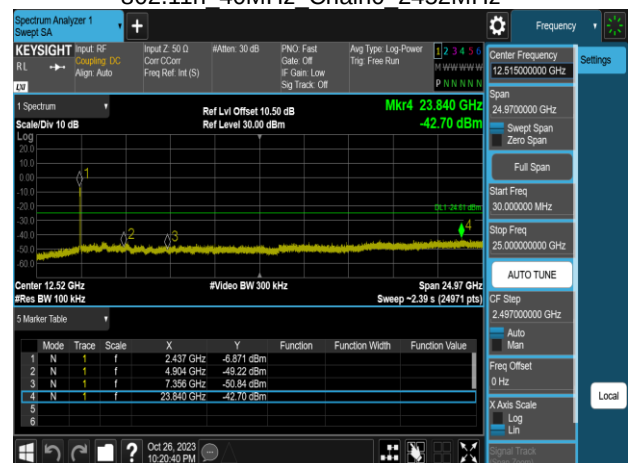
802.11n 40MHz Chain0 2437MHz



802.11n 20MHz Chain0 2462MHz



802.11n 40MHz Chain0 2452MHz



5.6 RADIATION BANDEDGE AND SPURIOUS EMISSION

5.6.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Above 30 MHz

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz (Note)

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Note: Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (m)
9-490 kHz ^{Note}	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

5.6.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.
3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

Note: No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

4. The SA setting following :

- (1) Below 1G : RBW = 100kHz, VBW $\geq$ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
- (2) Above 1G :
 - (2.1) For Peak measurement : RBW = 1MHz, VBW $\geq$ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
 - (2.2) For Average measurement : RBW = 1MHz, VBW
 - *If Duty Cycle $\geq$ 98%, VBW=10Hz.
 - *If Duty Cycle < 98%, VBW=1/T.

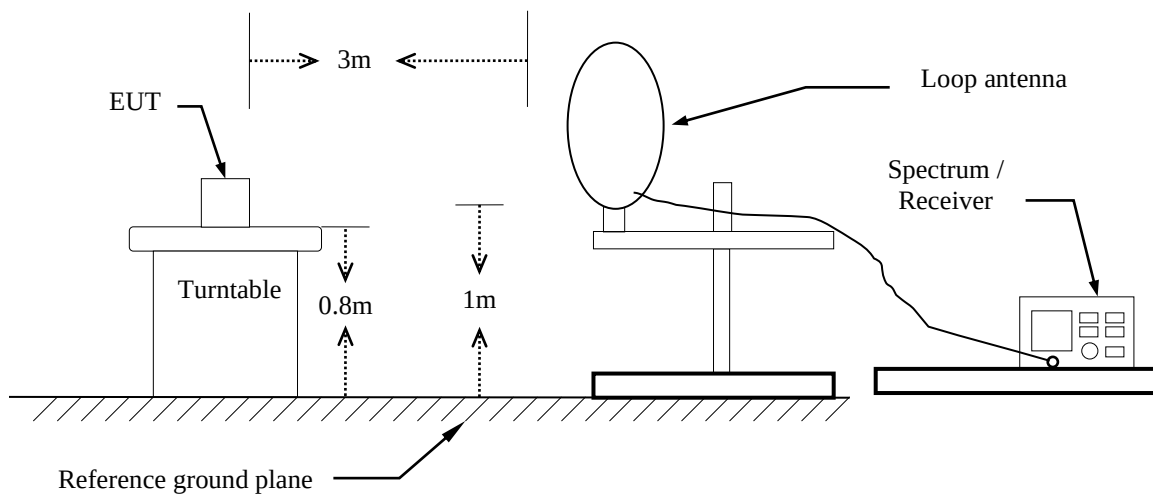
5. Data result :

Actual FS=Spectrum Reading Level + Factor

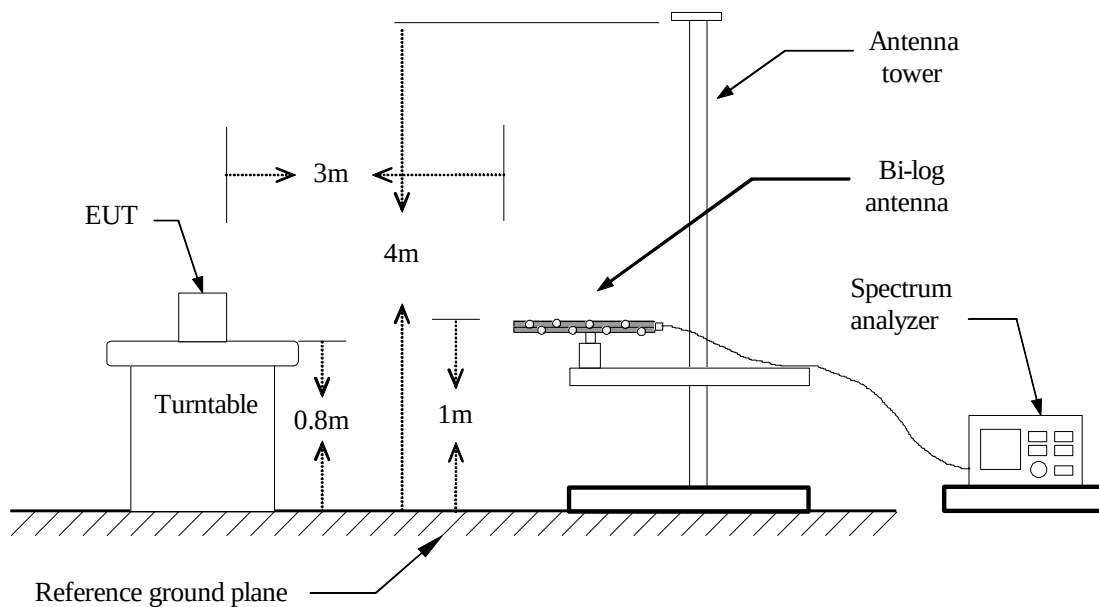
Margin=Actual FS- Limit

5.6.3 Test Setup

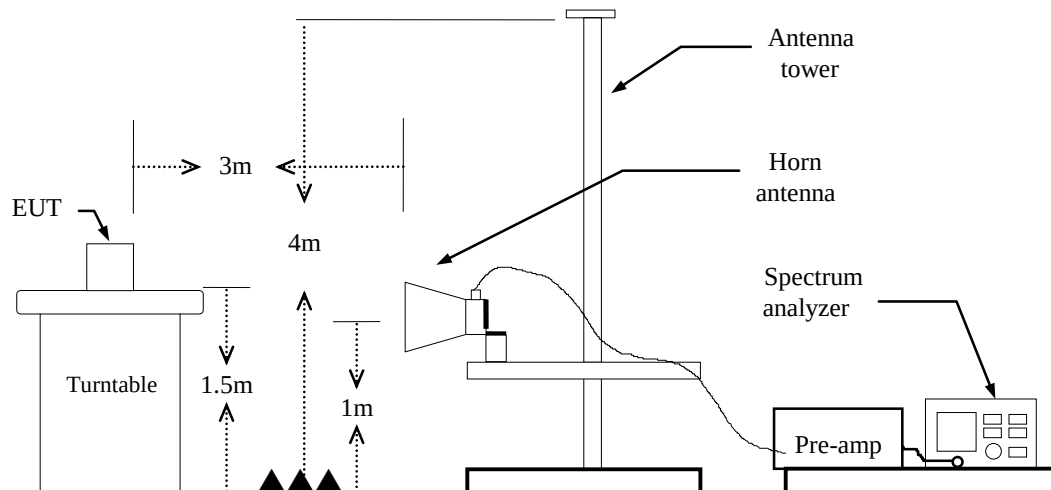
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

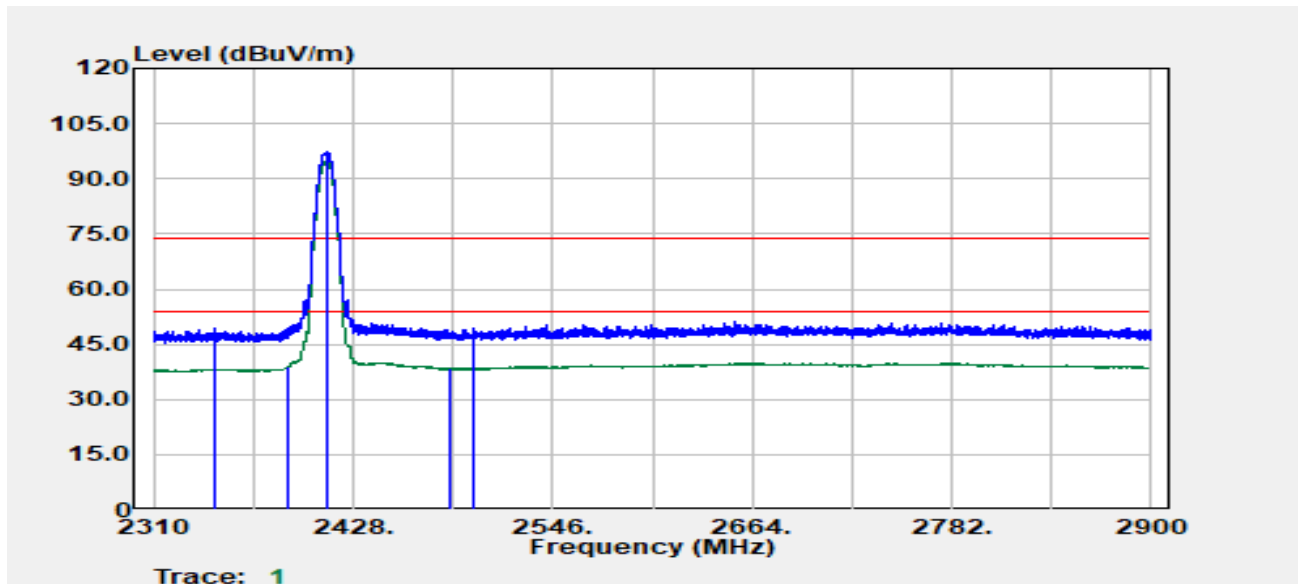


5.6.4 Test Result

Band Edge Test Data

Project No :TM-2305000074P
Operation Band :802.11b
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :20

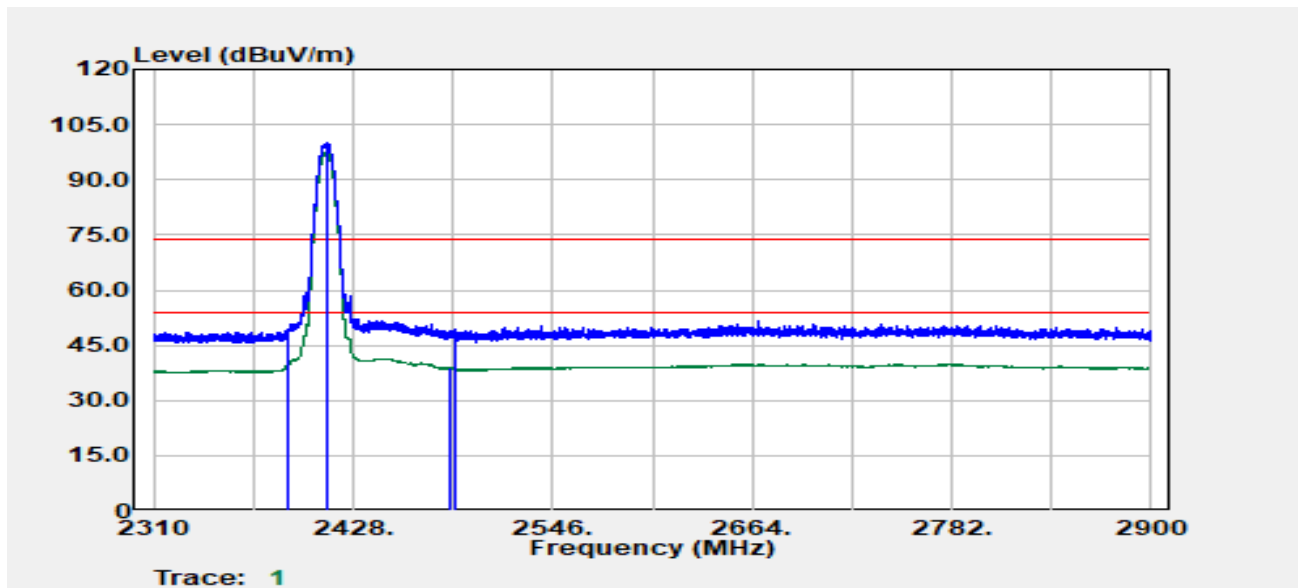
Test Date :2023-10-13
Temp./Humi. :24.5/58
Antenna Pol. :VERTICAL
Engineer :Ray.Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2346.46	Peak	44.44	4.92	49.36	74.00	-24.64
2390.00	Average	34.11	4.98	39.09	54.00	-14.91
2412.00	Peak	92.54	4.84	97.37	--	--
2412.00	Average	89.89	4.84	94.73	--	--
2484.99	Average	33.25	5.26	38.51	54.00	-15.49
2499.63	Peak	44.00	5.28	49.28	74.00	-24.72

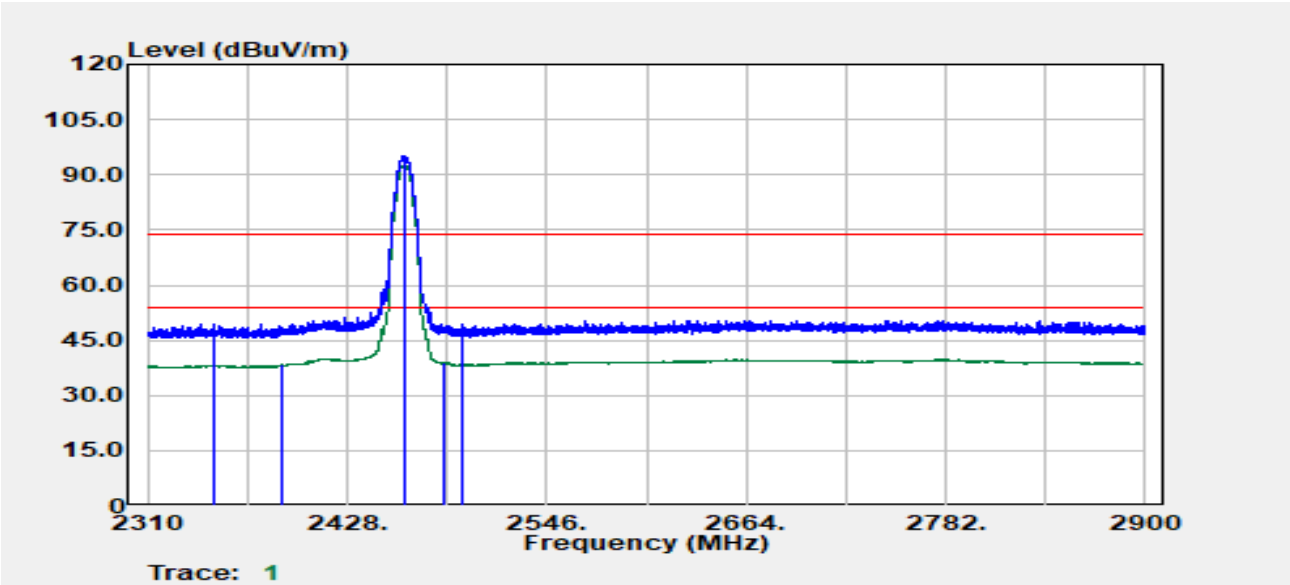
Project No :TM-2305000074P
Operation Band :802.11b
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :20

Test Date :2023-10-13
Temp./Humi. :24.5/58
Antenna Pol. :HORIZONTAL
Engineer :Ray.Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.30	Peak	44.21	4.97	49.18	74.00	-24.82
2389.89	Average	34.85	4.98	39.83	54.00	-14.17
2412.00	Peak	95.07	4.84	99.91	--	--
2412.00	Average	92.42	4.84	97.26	--	--
2485.11	Average	33.58	5.27	38.84	54.00	-15.16
2487.59	Peak	44.21	5.27	49.48	74.00	-24.52

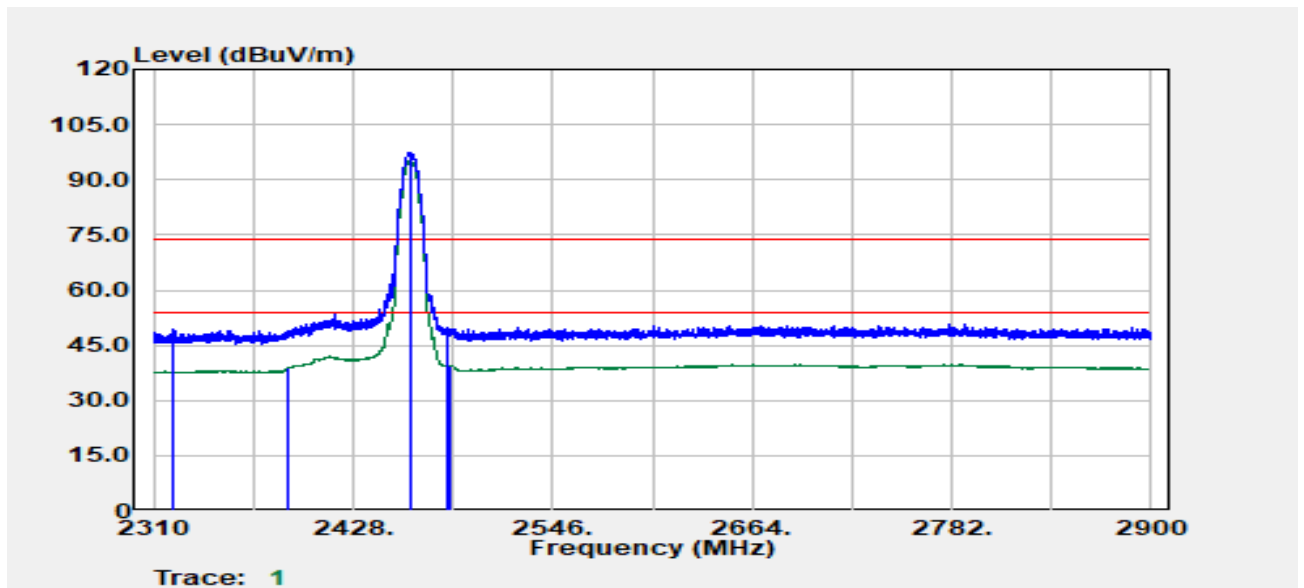
Project No	:TM-2305000074P	Test Date	:2023-10-14
Operation Band	:802.11b	Temp./Humi.	:24.5/58
Frequency	:2462 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2349.77	Peak	44.47	4.96	49.43	74.00	-24.57
2390.00	Average	33.29	4.98	38.27	54.00	-15.73
2462.00	Peak	89.95	5.16	95.11	--	--
2462.00	Average	87.42	5.16	92.59	--	--
2485.70	Average	33.77	5.27	39.04	54.00	-14.96
2495.38	Peak	44.01	5.28	49.28	74.00	-24.72

Project No :TM-2305000074P
Operation Band :802.11b
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :20

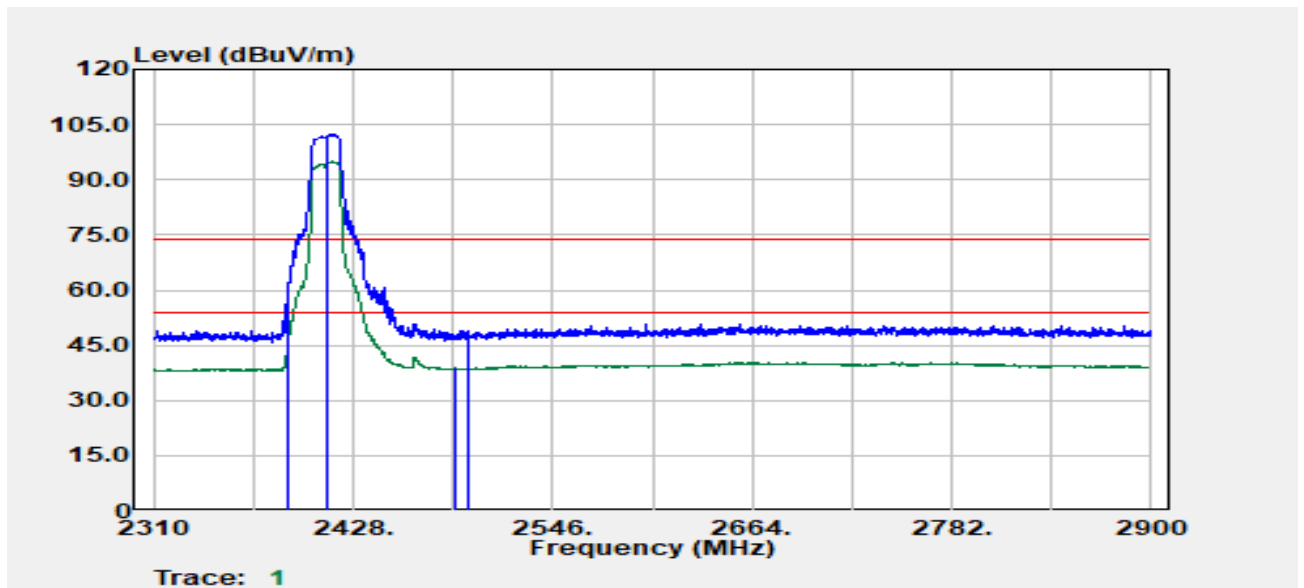
Test Date :2023-10-14
Temp./Humi. :24.5/58
Antenna Pol. :HORIZONTAL
Engineer :Ray.Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2320.86	Peak	44.68	4.72	49.40	74.00	-24.60
2390.00	Average	33.78	4.98	38.76	54.00	-15.24
2462.00	Peak	92.25	5.16	97.41	--	--
2462.00	Average	89.78	5.16	94.94	--	--
2484.17	Peak	44.38	5.26	49.65	74.00	-24.35
2485.47	Average	34.19	5.27	39.45	54.00	-14.55

Project No :TM-2305000074P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :16

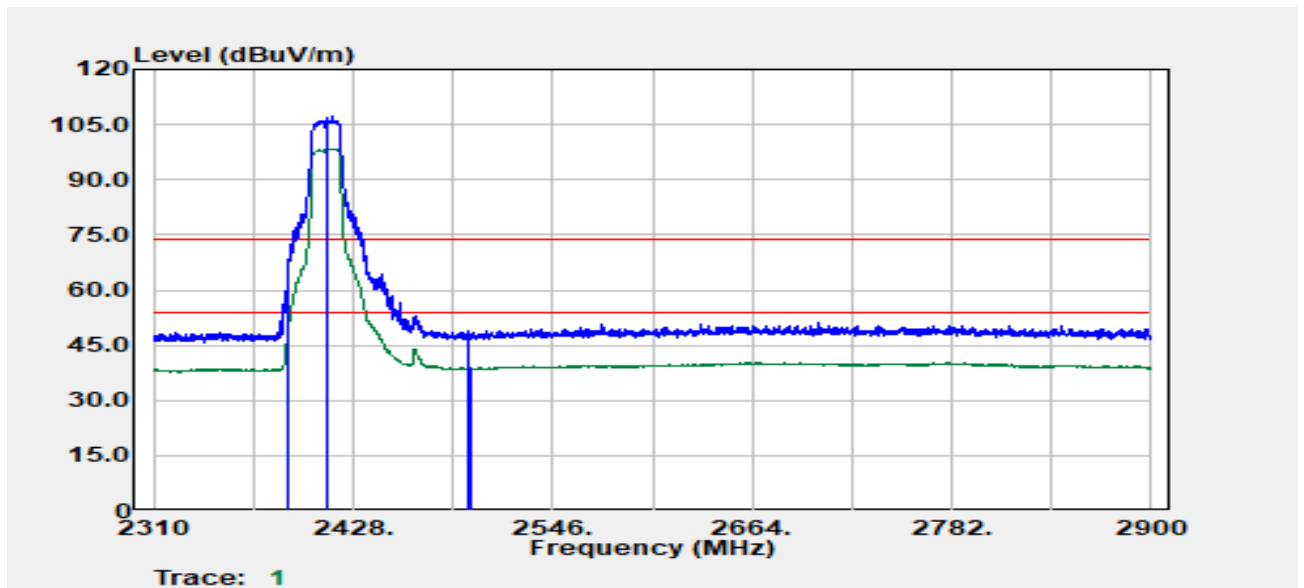
Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.78	Peak	56.85	4.97	61.83	74.00	-12.17
2390.00	Average	42.01	4.98	46.99	54.00	-7.01
2412.00	Peak	97.55	4.84	102.39	--	--
2412.00	Average	90.04	4.84	94.87	--	--
2488.83	Average	33.46	5.27	38.73	54.00	-15.27
2495.83	Peak	43.78	5.28	49.06	74.00	-24.94

Project No :TM-2305000074P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :16

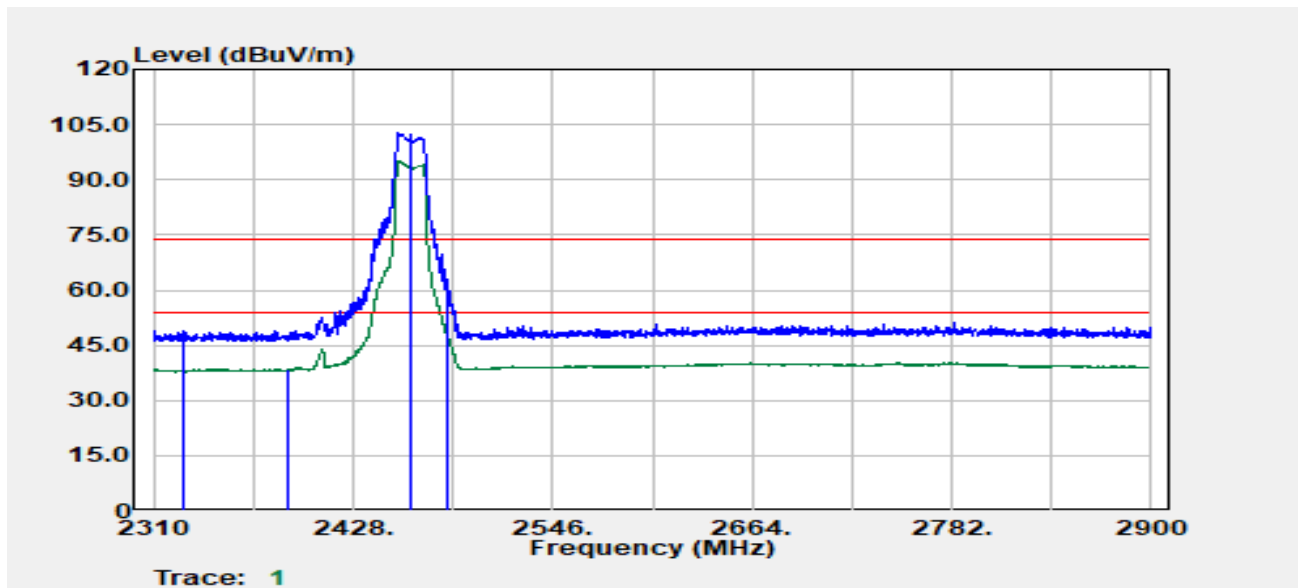
Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :HORIZONTAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBUV/m	Limit dBUV/m	Margin dB
2390.00	Peak	63.19	4.98	68.16	74.00	-5.84
2390.00	Average	45.66	4.98	50.64	54.00	-3.36
2412.00	Peak	102.54	4.84	107.38	--	--
2412.00	Average	93.65	4.84	98.49	--	--
2495.33	Peak	43.49	5.28	48.76	74.00	-25.24
2497.83	Average	33.51	5.28	38.79	54.00	-15.21

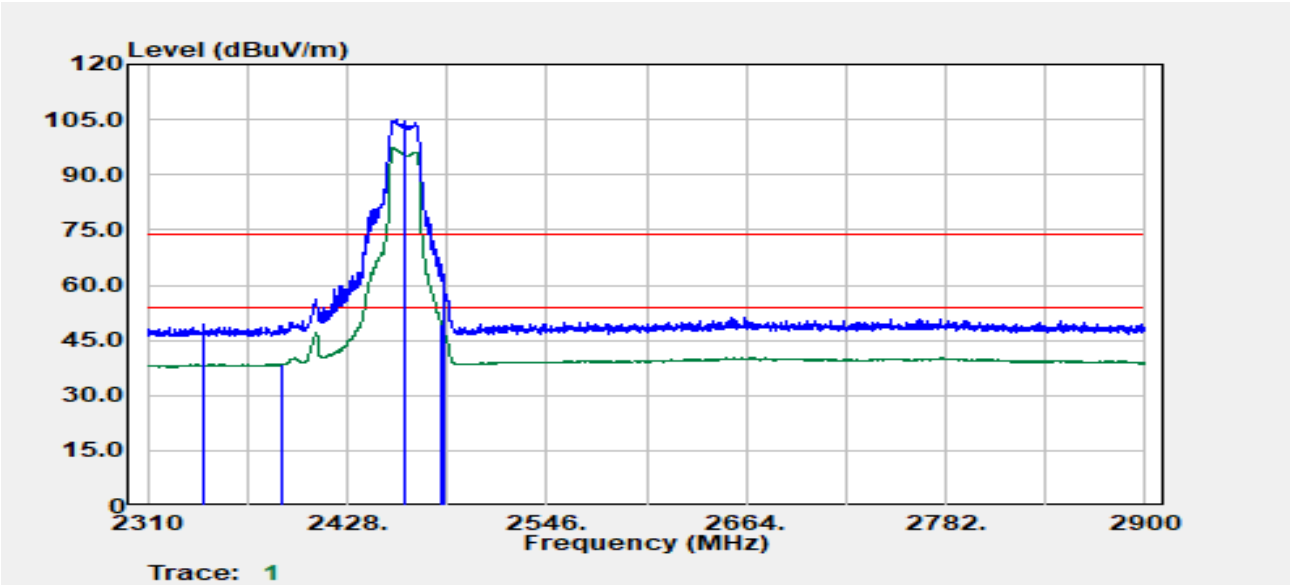
Project No :TM-2305000074P
Operation Band :802.11g
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :16

Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBUV/m	Limit dBUV/m	Margin dB
2328.01	Peak	44.26	4.73	48.99	74.00	-25.01
2389.78	Average	33.47	4.97	38.44	54.00	-15.56
2462.00	Peak	97.66	5.16	102.82	--	--
2462.00	Average	89.92	5.16	95.08	--	--
2483.57	Peak	57.52	5.26	62.78	74.00	-11.22
2483.57	Average	42.59	5.26	47.85	54.00	-6.15

Project No	:TM-2305000074P	Test Date	:2023-10-16
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



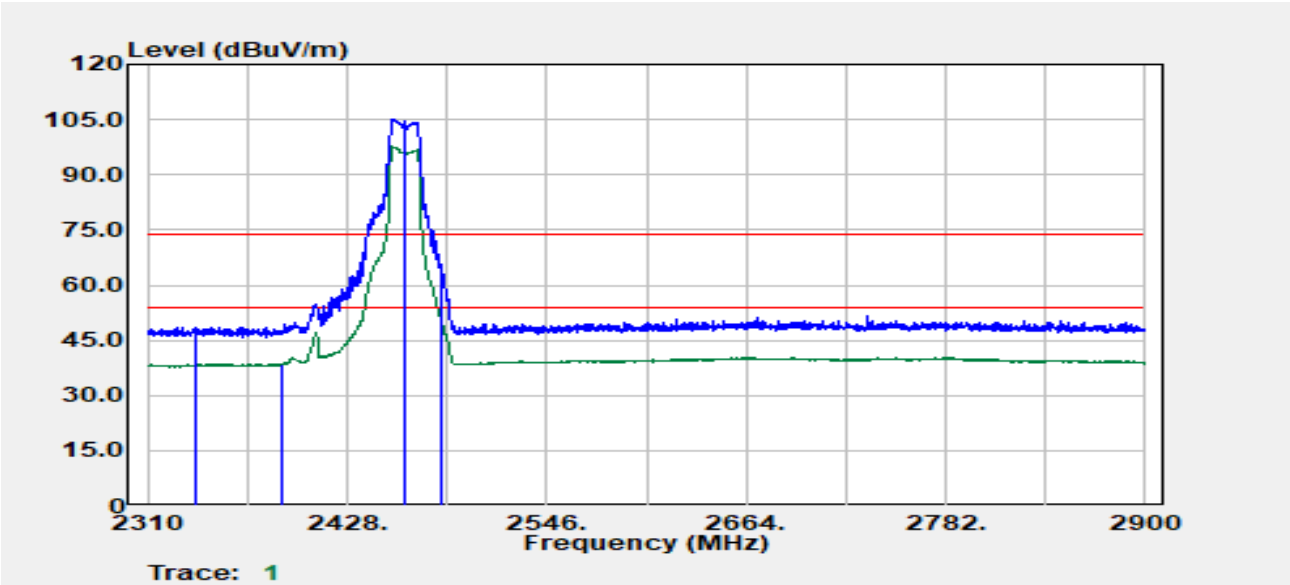
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2342.51	Peak	44.54	4.88	49.42	74.00	-24.58
2390.00	Average	33.53	4.98	38.51	54.00	-15.49
2462.00	Peak	99.72	5.16	104.88	--	--
2462.00	Average	92.26	5.16	97.42	--	--
2483.57	Average	44.19	5.26	49.45	54.00	-4.55
2484.57	Peak	57.76	5.26	63.02	74.00	-10.98



Report No.: TMWK2305001408KR

Page: 58 / 92
Rev.: 00

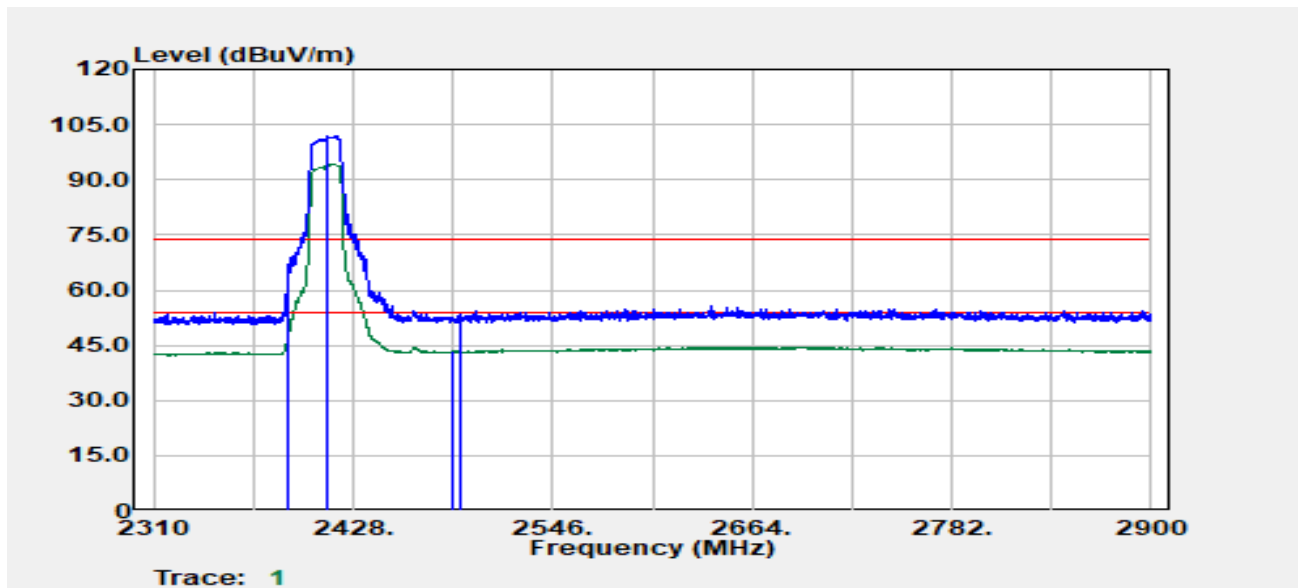
Project No	:TM-2305000074P	Test Date	:2023-10-16
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2338.01	Peak	43.74	4.83	48.56	74.00	-25.44
2389.78	Average	33.61	4.97	38.59	54.00	-15.41
2462.00	Peak	99.95	5.16	105.11	--	--
2462.00	Average	92.44	5.16	97.60	--	--
2483.57	Average	45.07	5.26	50.33	54.00	-3.67
2483.82	Peak	60.48	5.26	65.75	74.00	-8.25

Project No :TM-2305000074P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :15

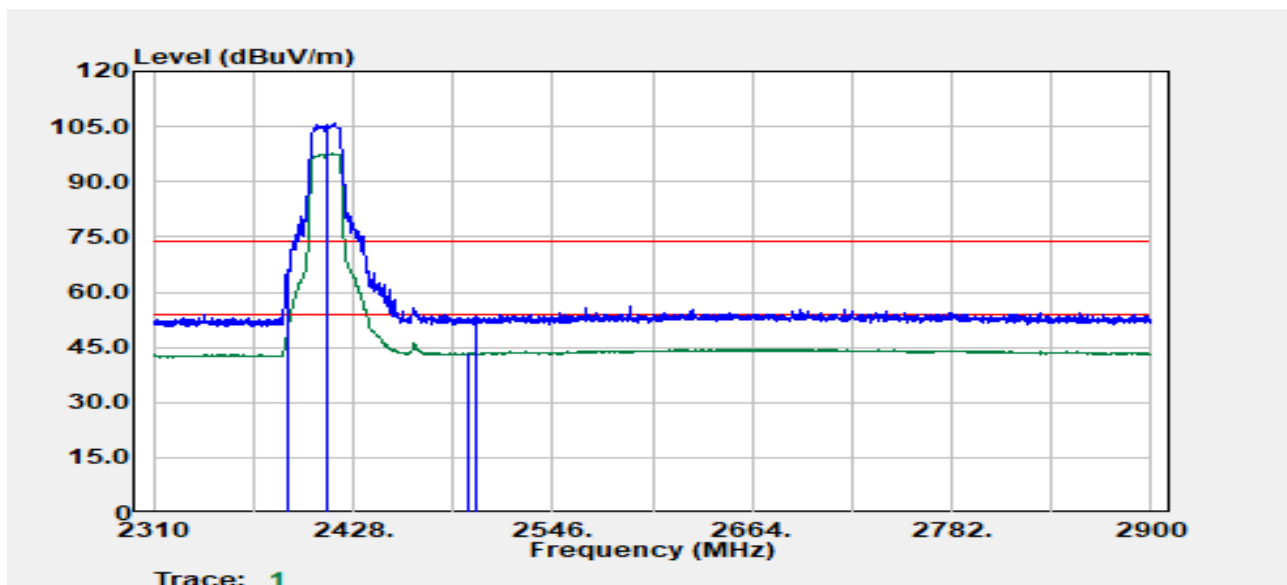
Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.53	Peak	61.84	4.97	66.81	74.00	-7.19
2390.00	Average	43.53	4.98	48.50	54.00	-5.50
2412.00	Peak	97.25	4.84	102.08	--	--
2412.00	Average	89.42	4.84	94.25	--	--
2486.08	Average	38.13	5.27	43.40	54.00	-10.60
2491.08	Peak	48.23	5.27	53.50	74.00	-20.50

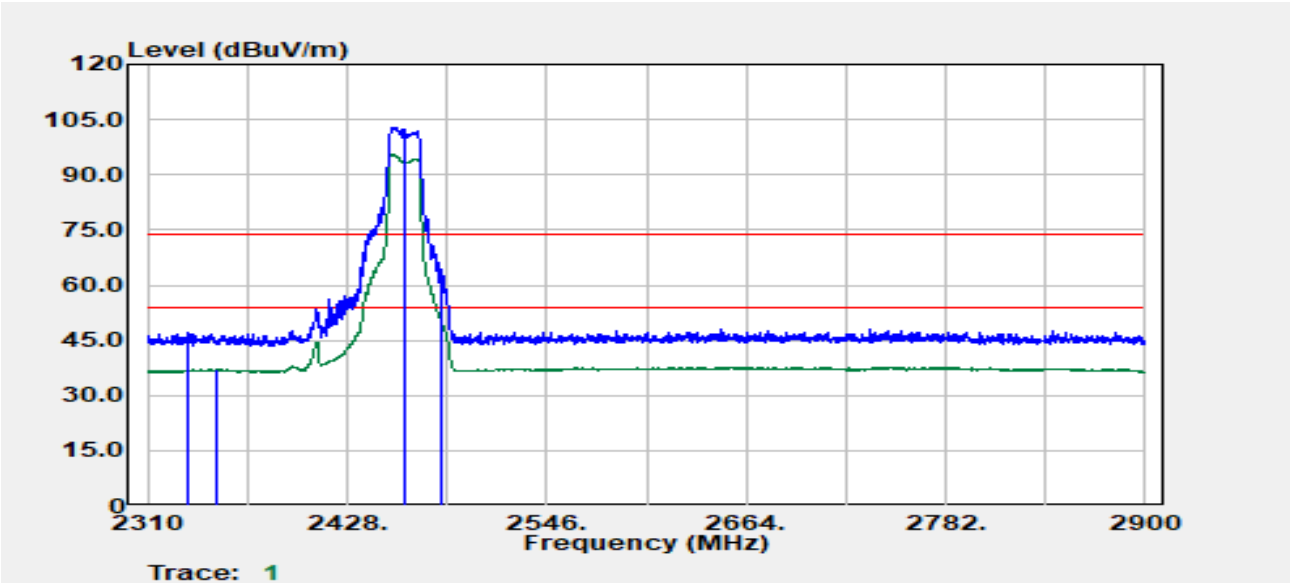
Project No :TM-2305000074P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :15

Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :HORIZONTAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2390.00	Peak	61.33	4.98	66.30	74.00	-7.70
2390.00	Average	46.95	4.98	51.92	54.00	-2.08
2412.00	Peak	100.99	4.84	105.83	--	--
2412.00	Average	92.77	4.84	97.60	--	--
2496.58	Average	38.08	5.28	43.35	54.00	-10.65
2500.08	Peak	48.18	5.28	53.46	74.00	-20.54

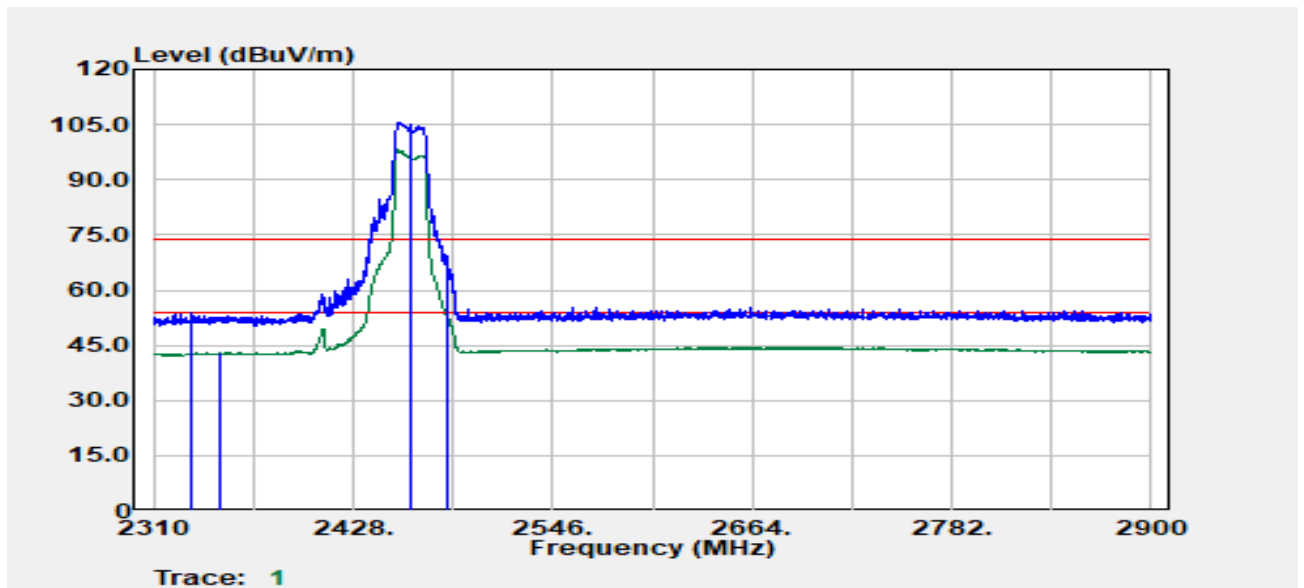
Project No	:TM-2305000074P	Test Date	:2023-10-16
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2333.26	Peak	42.16	4.77	46.93	74.00	-27.07
2350.52	Average	32.07	4.96	37.03	54.00	-16.97
2462.00	Peak	97.79	5.16	102.96	--	--
2462.00	Average	90.41	5.16	95.57	--	--
2483.50	Peak	59.03	5.26	64.29	74.00	-9.71
2483.57	Average	44.78	5.26	50.04	54.00	-3.96

Project No :TM-2305000074P
Operation Band :802.11n20
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :16

Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :HORIZONTAL
Engineer :Tony.Chao
Test Chamber : 966A



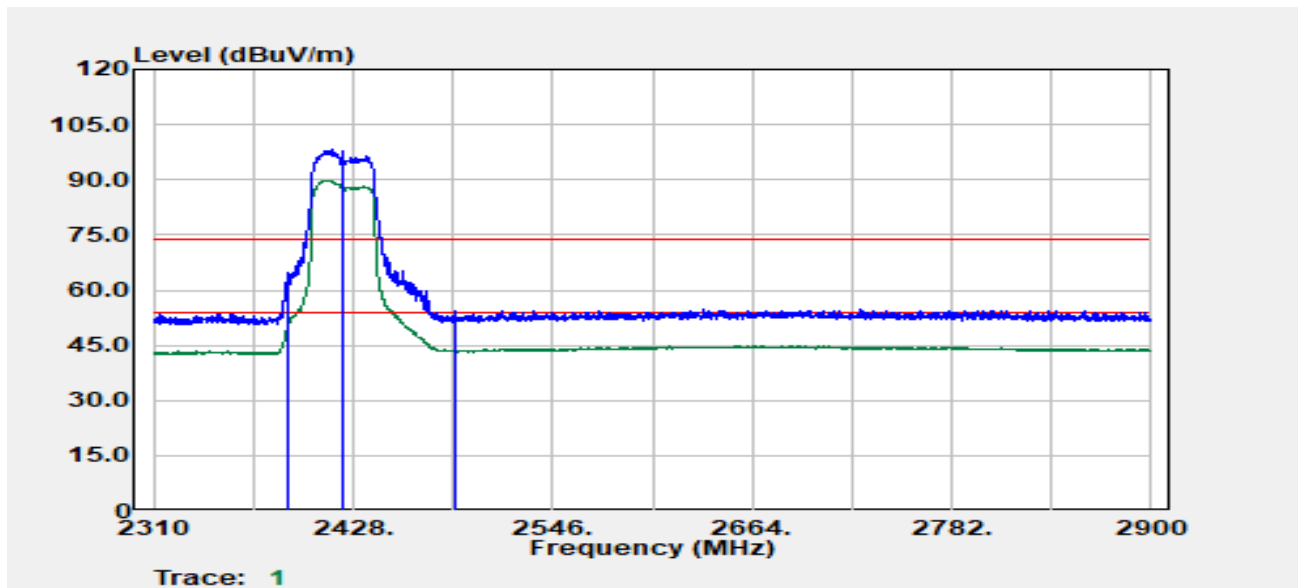
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2331.76	Peak	49.34	4.76	54.09	74.00	-19.91
2349.27	Average	38.06	4.96	43.02	54.00	-10.98
2462.00	Peak	100.31	5.16	105.47	--	--
2462.00	Average	92.90	5.16	98.06	--	--
2483.57	Average	47.58	5.26	52.84	54.00	-1.16
2483.82	Peak	64.22	5.26	69.48	74.00	-4.52

Report No.: TMWK2305001408KR

Page: 63 / 92
Rev.: 00

Project No :TM-2305000074P
Operation Band :802.11n40
Frequency :2422 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :12

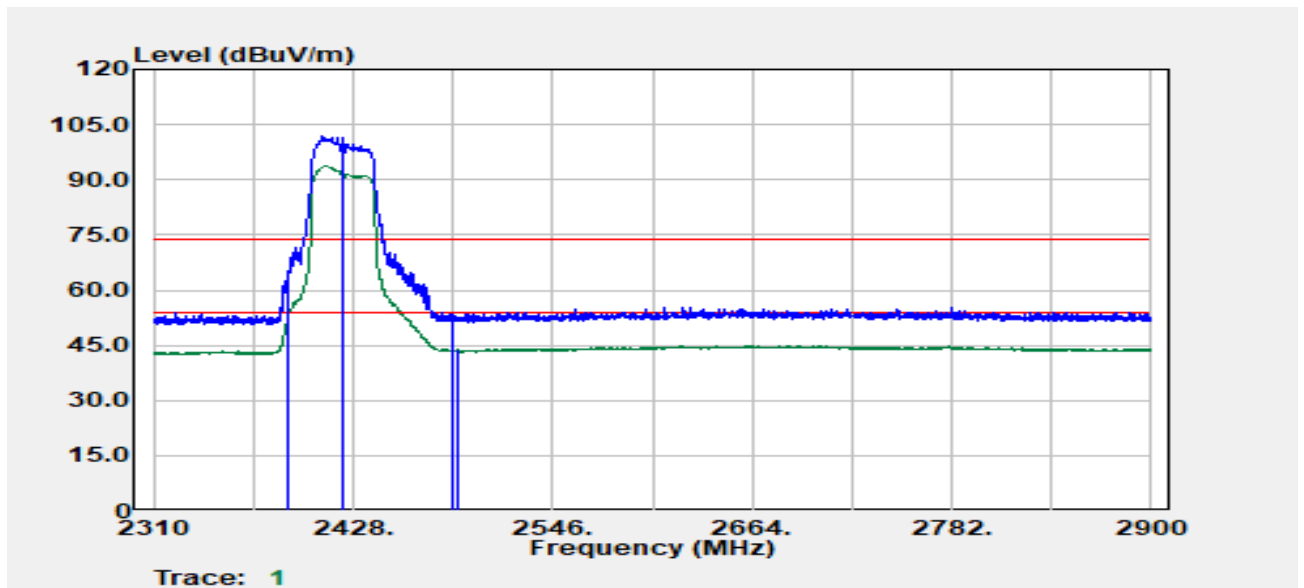
Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.78	Peak	59.69	4.97	64.67	74.00	-9.33
2390.00	Average	45.50	4.98	50.48	54.00	-3.52
2422.00	Peak	93.39	4.95	98.34	--	--
2422.00	Average	84.90	4.95	89.85	--	--
2487.83	Average	38.57	5.27	43.84	54.00	-10.16
2488.58	Peak	48.85	5.27	54.12	74.00	-19.88

Project No :TM-2305000074P
Operation Band :802.11n40
Frequency :2422 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :12

Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :HORIZONTAL
Engineer :Tony.Chao
Test Chamber : 966A



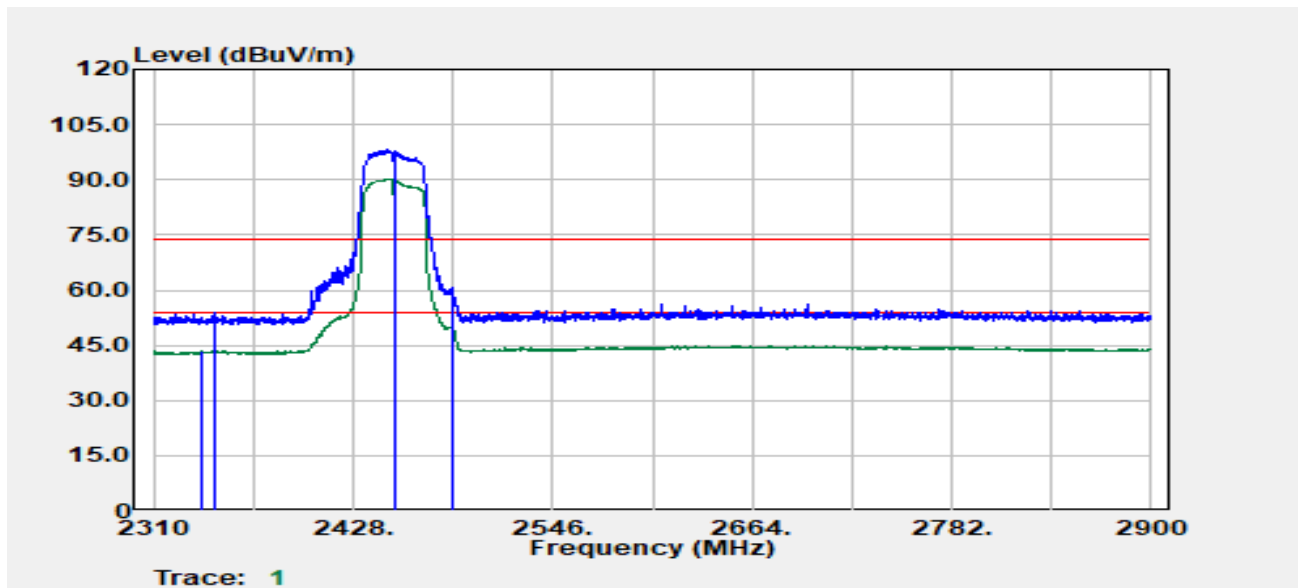
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.03	Peak	60.24	4.97	65.21	74.00	-8.79
2390.00	Average	48.28	4.98	53.26	54.00	-0.74
2422.00	Peak	96.81	4.95	101.75	--	--
2422.00	Average	88.72	4.95	93.67	--	--
2486.83	Peak	48.37	5.27	53.64	74.00	-20.36
2489.83	Average	38.77	5.27	44.04	54.00	-9.96

Report No.: TMWK2305001408KR

Page: 65 / 92
Rev.: 00

Project No :TM-2305000074P
Operation Band :802.11n40
Frequency :2452 MHz
Operation Mode :Bandedge
EUT Pol :E2
Setting :13

Test Date :2023-10-16
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



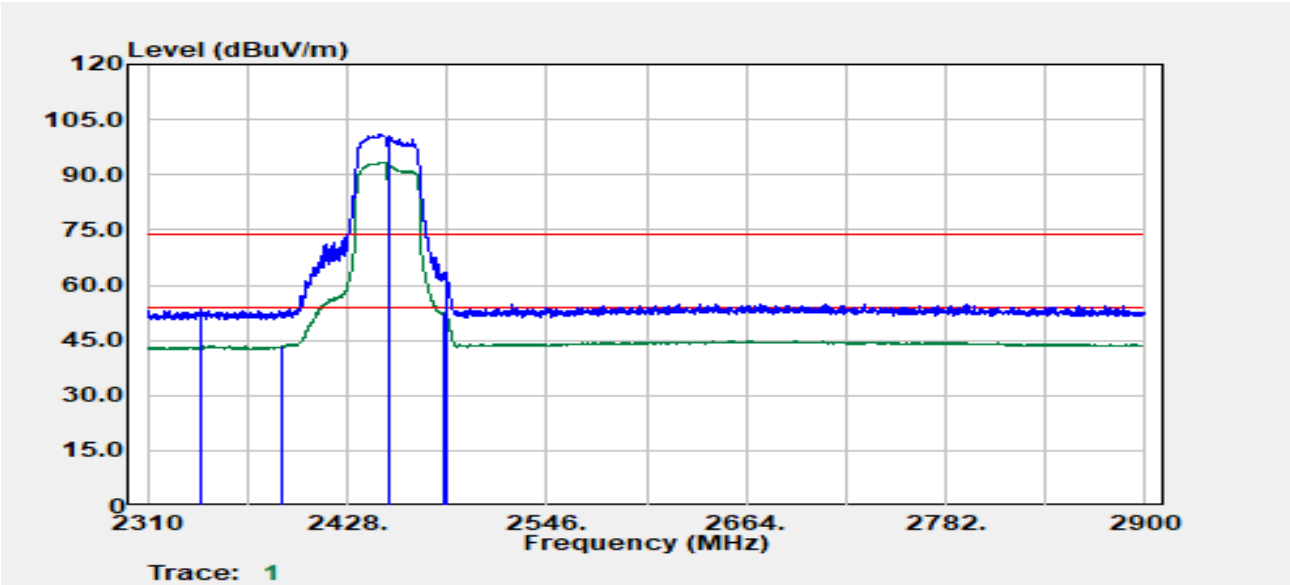
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2338.26	Average	38.68	4.83	43.51	54.00	-10.49
2345.52	Peak	48.88	4.91	53.79	74.00	-20.21
2452.00	Peak	93.34	5.05	98.39	--	--
2452.00	Average	85.24	5.05	90.29	--	--
2486.33	Average	44.85	5.27	50.12	54.00	-3.88
2486.58	Peak	55.33	5.27	60.60	74.00	-13.40



Report No.: TMWK2305001408KR

Page: 66 / 92
Rev.: 00

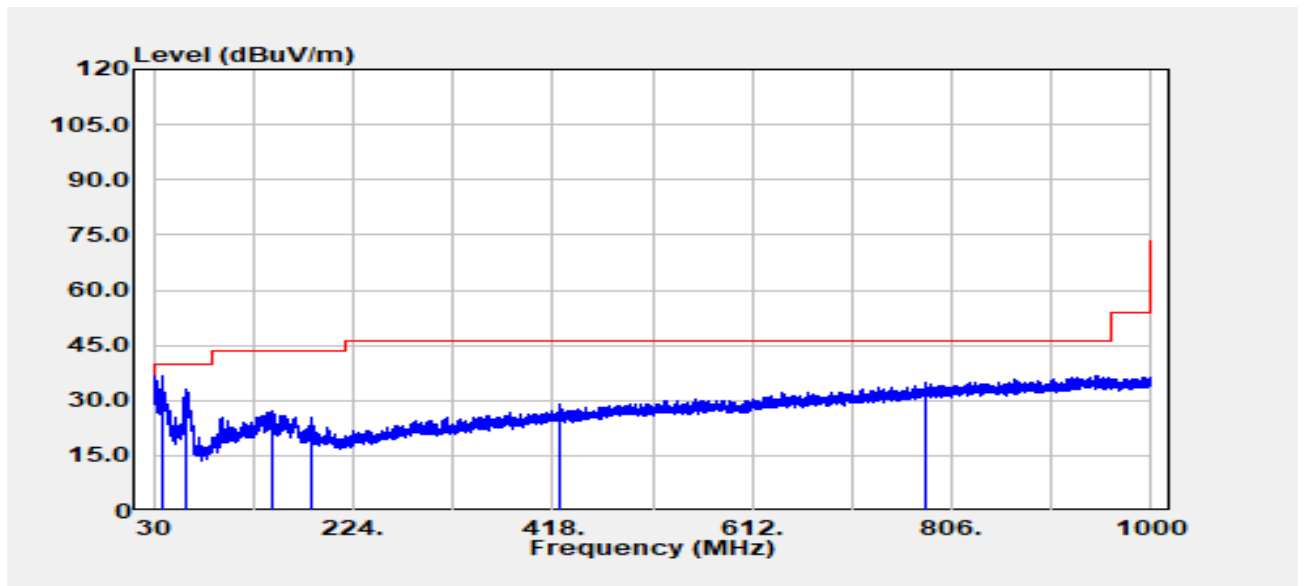
Project No	:TM-2305000074P	Test Date	:2023-10-16
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2452 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:13		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2341.01	Peak	48.55	4.86	53.41	74.00	-20.59
2389.78	Average	38.48	4.97	43.46	54.00	-10.54
2452.00	Peak	96.00	5.05	101.05	--	--
2452.00	Average	88.19	5.05	93.25	--	--
2485.57	Average	47.37	5.27	52.64	54.00	-1.36
2486.08	Peak	58.09	5.27	63.36	74.00	-10.64

TX Test Data

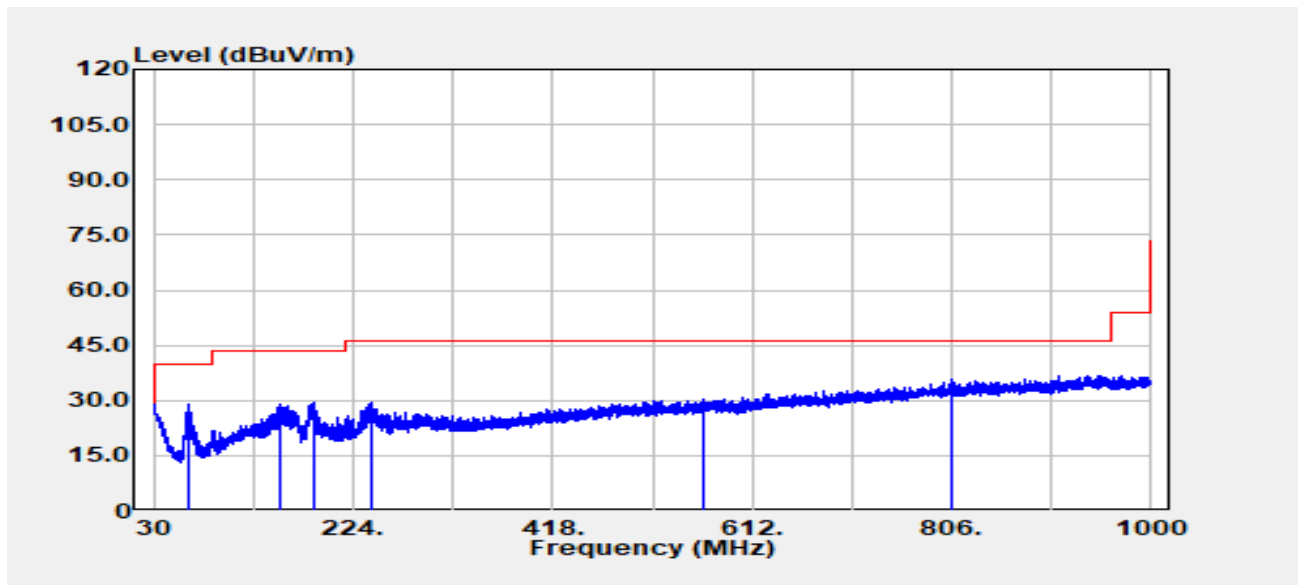
Project No	:TM-2305000074P	Test Date	:2023-10-13
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2422 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:12		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
37.40	Peak	44.16	-7.54	36.62	40.00	-3.38
62.62	Peak	48.79	-15.72	33.08	40.00	-6.92
145.31	Peak	37.25	-10.29	26.96	43.50	-16.54
184.47	Peak	37.12	-11.62	25.49	43.50	-18.01
425.88	Peak	33.92	-5.12	28.80	46.00	-17.20
781.63	Peak	33.82	1.26	35.09	46.00	-10.91

Project No :TM-2305000074P
Operation Band :802.11n40
Frequency :2422 MHz
Operation Mode :TX
EUT Pol :E2
Setting :12

Test Date :2023-10-13
Temp./Humi. :24.7/57
Antenna Pol. :Horizontal
Engineer :Tony.Chao
Test Chamber : 966A



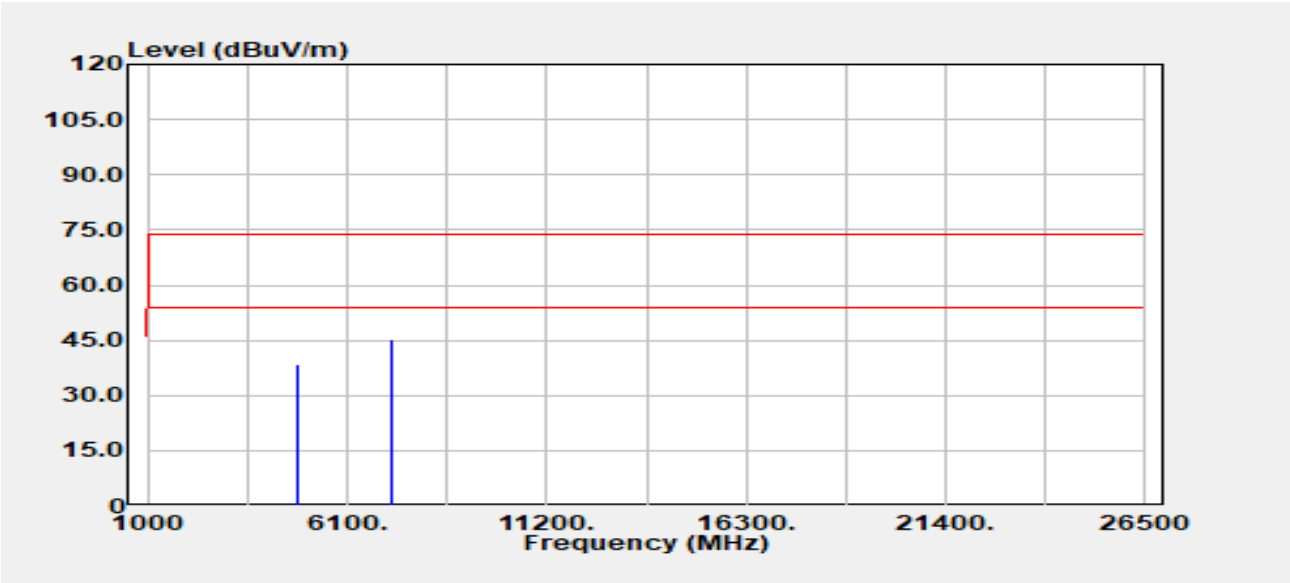
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
63.34	Peak	44.57	-15.63	28.93	40.00	-11.07
153.55	Peak	39.53	-10.53	28.99	43.50	-14.51
184.96	Peak	40.96	-11.62	29.34	43.50	-14.16
241.70	Peak	40.11	-10.82	29.29	46.00	-16.71
564.11	Peak	32.96	-2.49	30.47	46.00	-15.53
805.52	Peak	34.29	1.34	35.64	46.00	-10.36



Report No.: TMWK2305001408KR

Page: 69 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



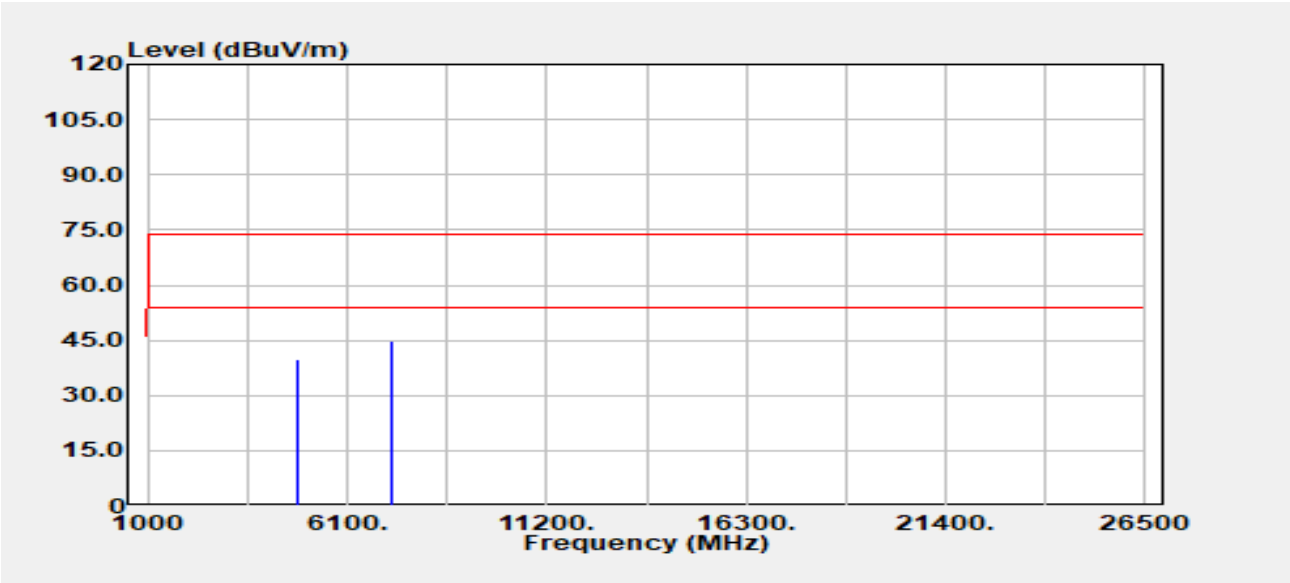
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	36.63	1.98	38.61	74.00	-35.39
4824.00	Average	34.63	1.98	36.61	54.00	-17.39
7236.00	Peak	36.76	8.64	45.41	74.00	-28.59
7236.00	Average	30.83	8.64	39.47	54.00	-14.53



Report No.: TMWK2305001408KR

Page: 70 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



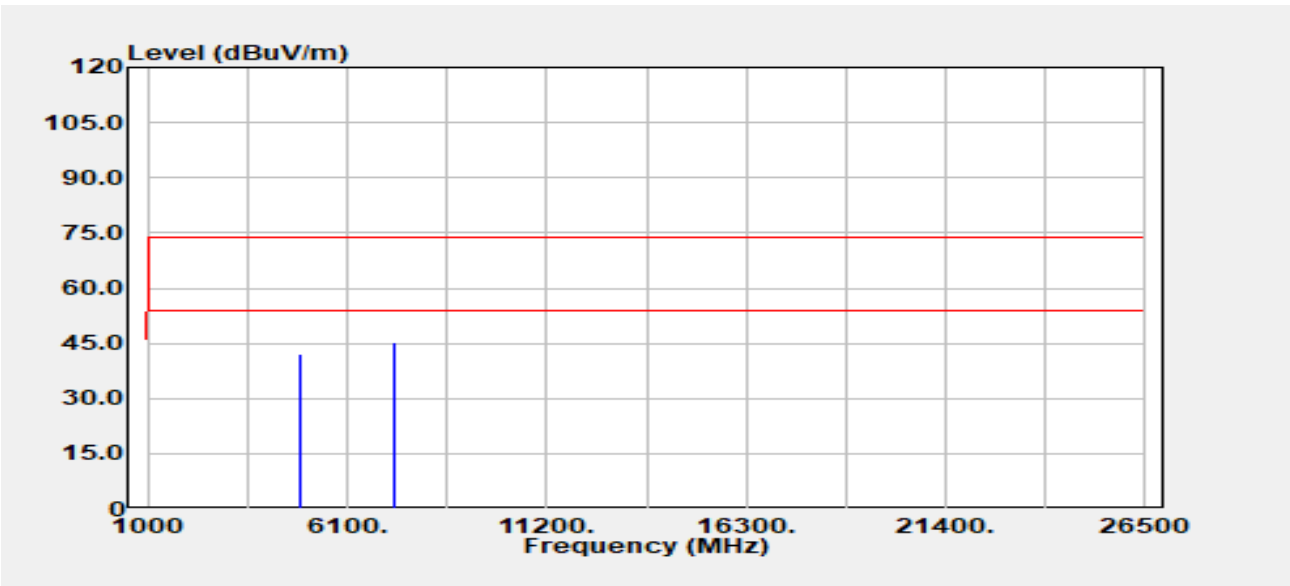
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	37.97	1.98	39.95	74.00	-34.05
4824.00	Average	32.73	1.98	34.71	54.00	-19.29
7236.00	Peak	36.13	8.64	44.77	74.00	-29.23
7236.00	Average	28.21	8.64	36.85	54.00	-17.15



Report No.: TMWK2305001408KR

Page: 71 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



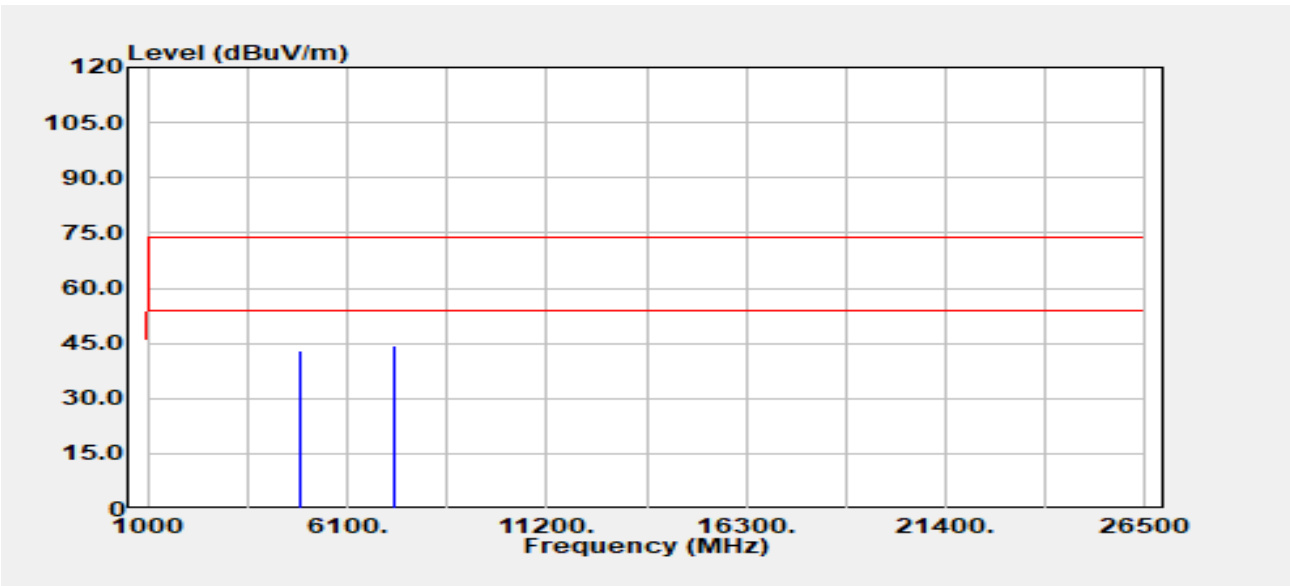
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	40.08	2.19	42.27	74.00	-31.73
4874.00	Average	38.62	2.19	40.81	54.00	-13.19
7311.00	Peak	36.89	8.59	45.48	74.00	-28.52
7311.00	Average	28.43	8.59	37.02	54.00	-16.98



Report No.: TMWK2305001408KR

Page: 72 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



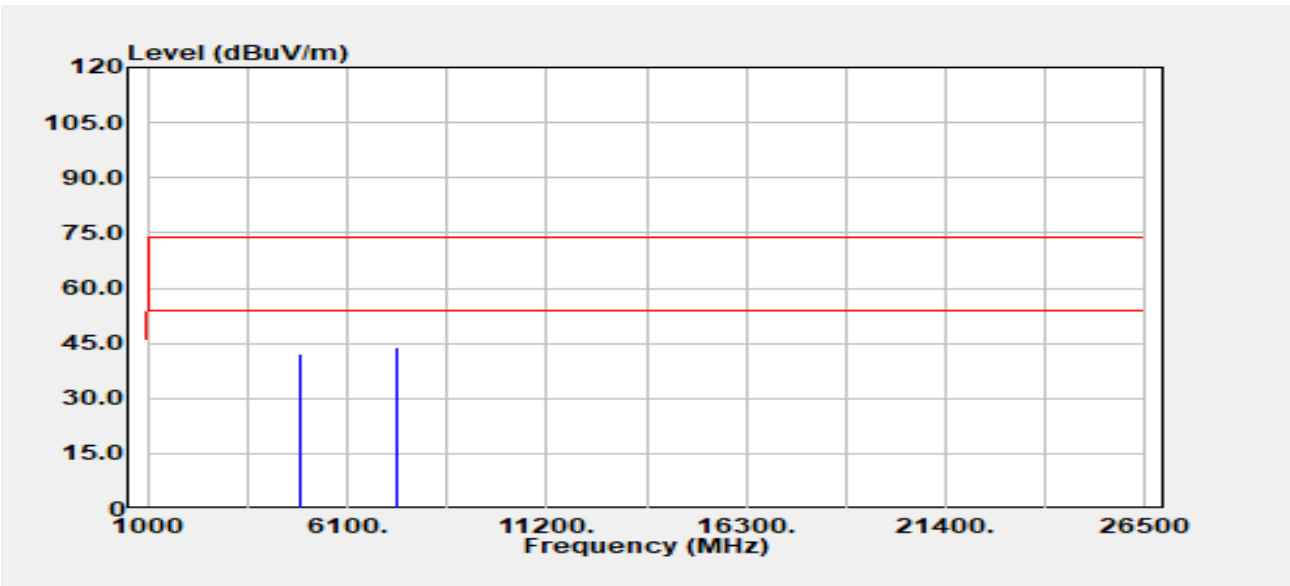
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	40.66	2.19	42.84	74.00	-31.16
4874.00	Average	36.42	2.19	38.61	54.00	-15.39
7311.00	Peak	35.99	8.59	44.59	74.00	-29.41
7311.00	Average	27.58	8.59	36.17	54.00	-17.83



Report No.: TMWK2305001408KR

Page: 73 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



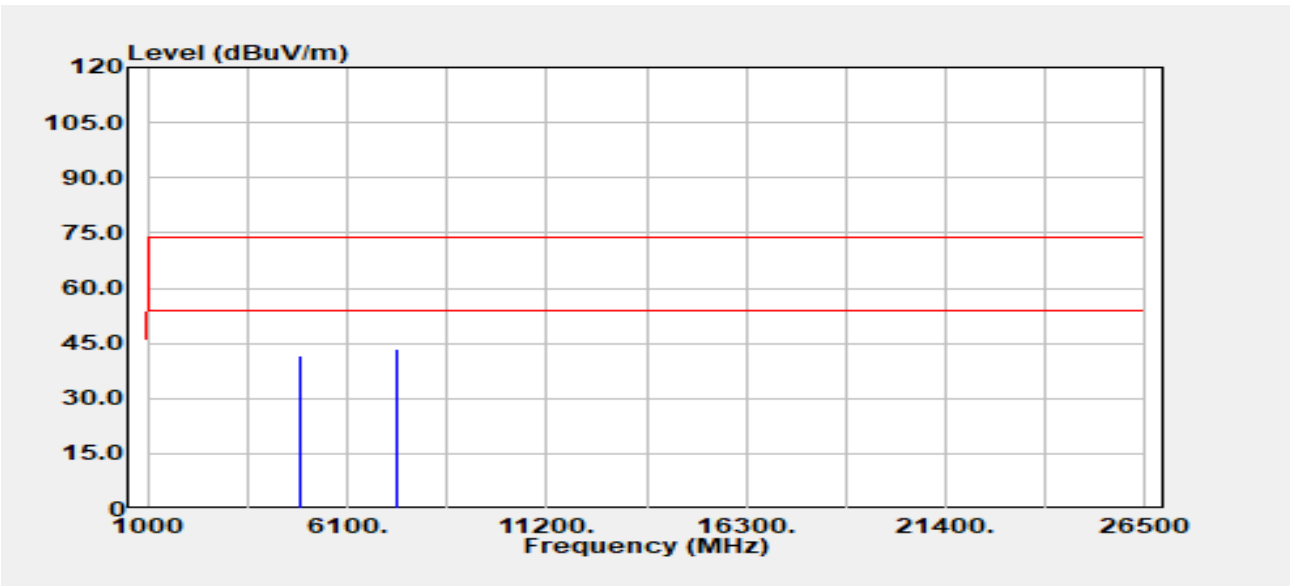
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	39.61	2.54	42.15	74.00	-31.85
4924.00	Average	35.99	2.54	38.53	54.00	-15.47
7386.00	Peak	35.16	8.60	43.76	74.00	-30.24
7386.00	Average	28.27	8.60	36.87	54.00	-17.13



Report No.: TMWK2305001408KR

Page: 74 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11b	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



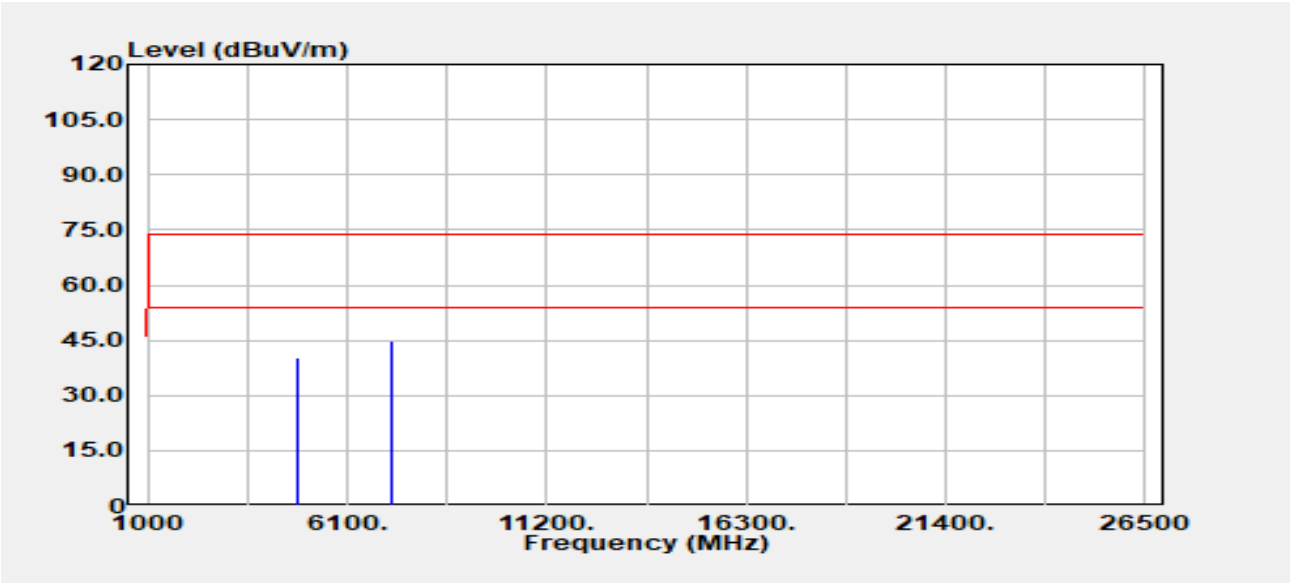
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	39.20	2.54	41.75	74.00	-32.25
4924.00	Average	35.10	2.54	37.64	54.00	-16.36
7386.00	Peak	34.94	8.60	43.55	74.00	-30.45
7386.00	Average	27.59	8.60	36.19	54.00	-17.81



Report No.: TMWK2305001408KR

Page: 75 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



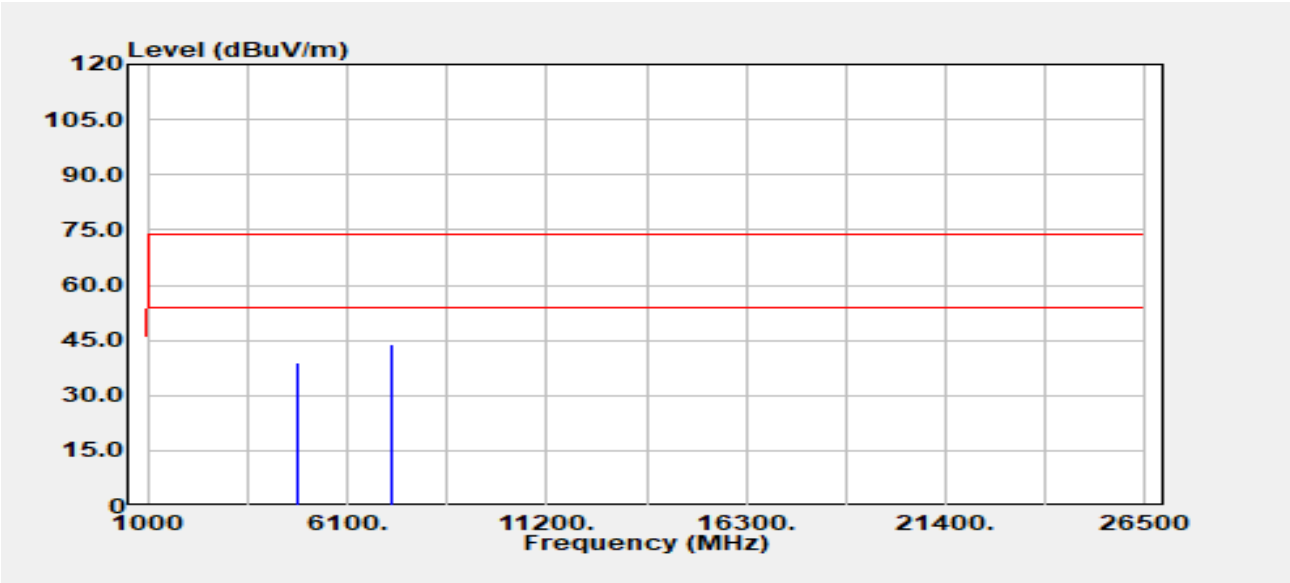
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	38.36	1.98	40.34	74.00	-33.66
4824.00	Average	29.99	1.98	31.97	54.00	-22.03
7236.00	Peak	36.09	8.64	44.73	74.00	-29.27
7236.00	Average	27.19	8.64	35.84	54.00	-18.16



Report No.: TMWK2305001408KR

Page: 76 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



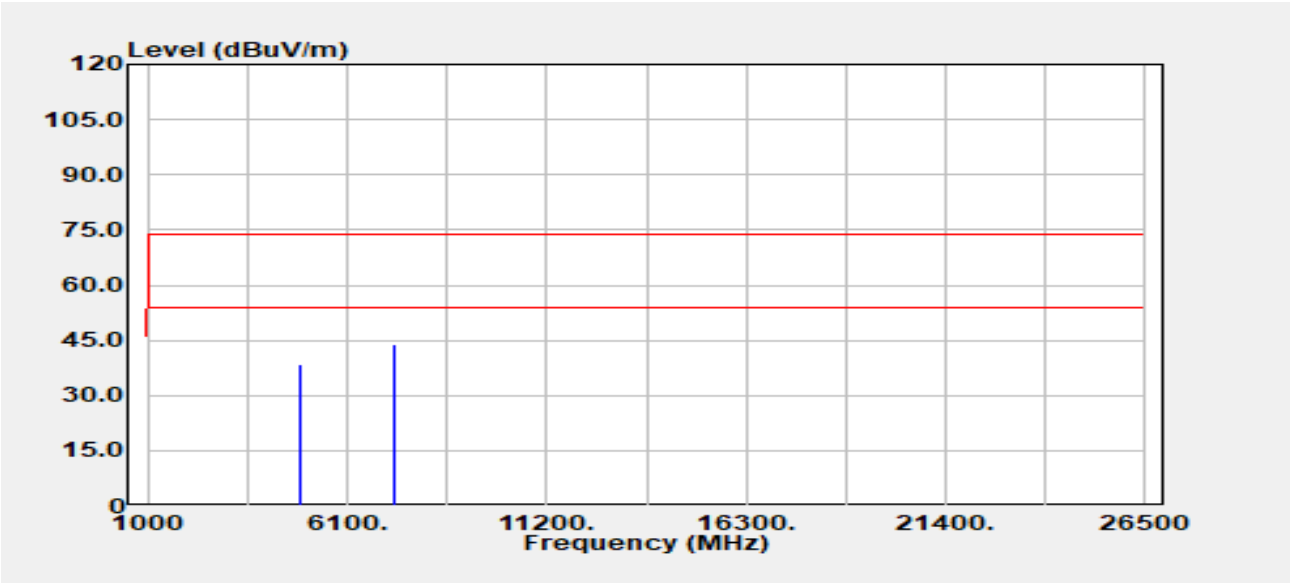
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	36.79	1.98	38.77	74.00	-35.23
4824.00	Average	28.29	1.98	30.27	54.00	-23.73
7236.00	Peak	35.11	8.64	43.75	74.00	-30.25
7236.00	Average	27.00	8.64	35.64	54.00	-18.36



Report No.: TMWK2305001408KR

Page: 77 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



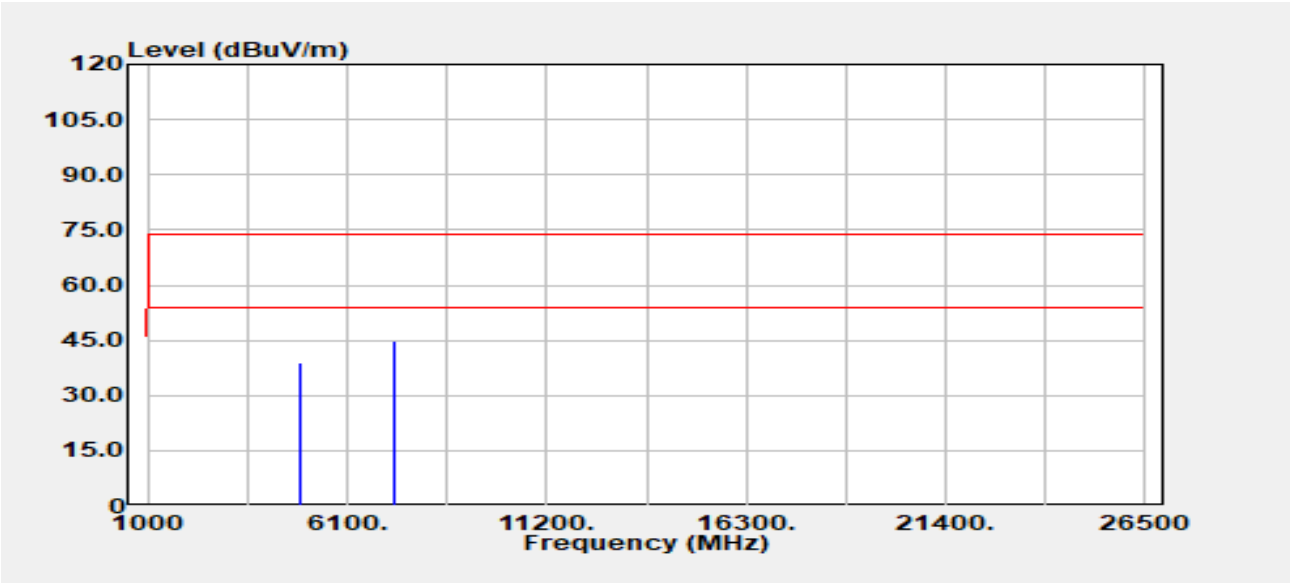
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	36.22	2.19	38.41	74.00	-35.59
4874.00	Average	29.17	2.19	31.36	54.00	-22.64
7311.00	Peak	35.50	8.59	44.09	74.00	-29.91
7311.00	Average	27.03	8.59	35.62	54.00	-18.38



Report No.: TMWK2305001408KR

Page: 78 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



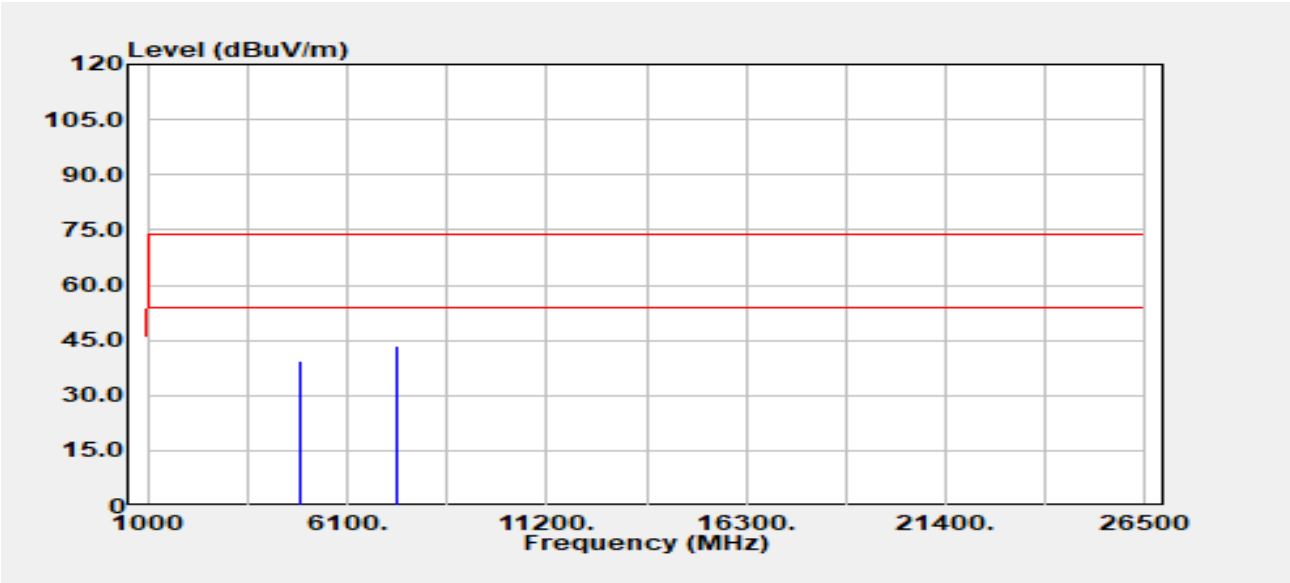
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	36.72	2.19	38.91	74.00	-35.09
4874.00	Average	29.51	2.19	31.70	54.00	-22.30
7311.00	Peak	36.01	8.59	44.61	74.00	-29.39
7311.00	Average	26.93	8.59	35.52	54.00	-18.48



Report No.: TMWK2305001408KR

Page: 79 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



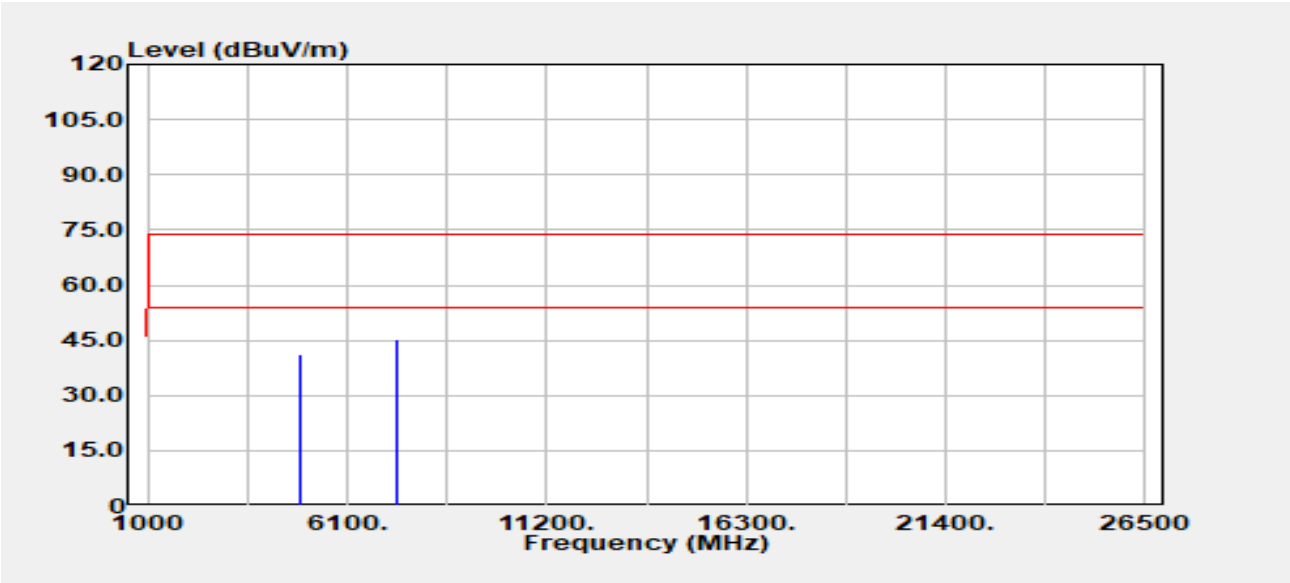
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	36.95	2.54	39.50	74.00	-34.50
4924.00	Average	28.98	2.54	31.52	54.00	-22.48
7386.00	Peak	35.01	8.60	43.62	74.00	-30.38
7386.00	Average	27.01	8.60	35.61	54.00	-18.39



Report No.: TMWK2305001408KR

Page: 80 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11g	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



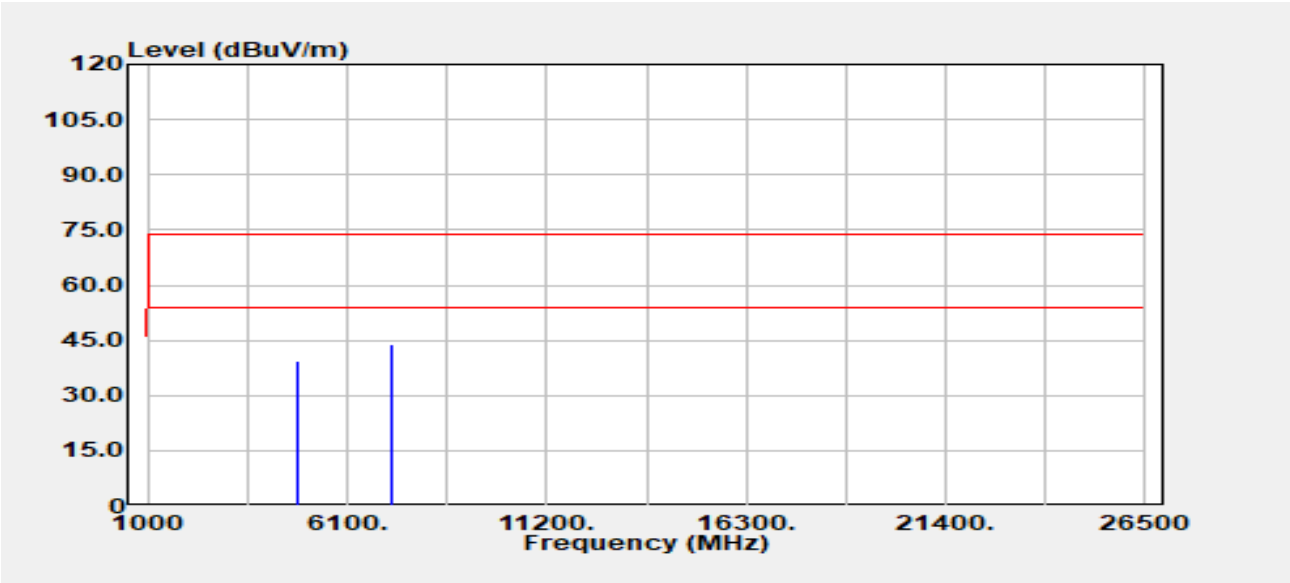
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	38.61	2.54	41.15	74.00	-32.85
4924.00	Average	28.72	2.54	31.26	54.00	-22.74
7386.00	Peak	36.50	8.60	45.11	74.00	-28.89
7386.00	Average	27.04	8.60	35.64	54.00	-18.36



Report No.: TMWK2305001408KR

Page: 81 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:15		



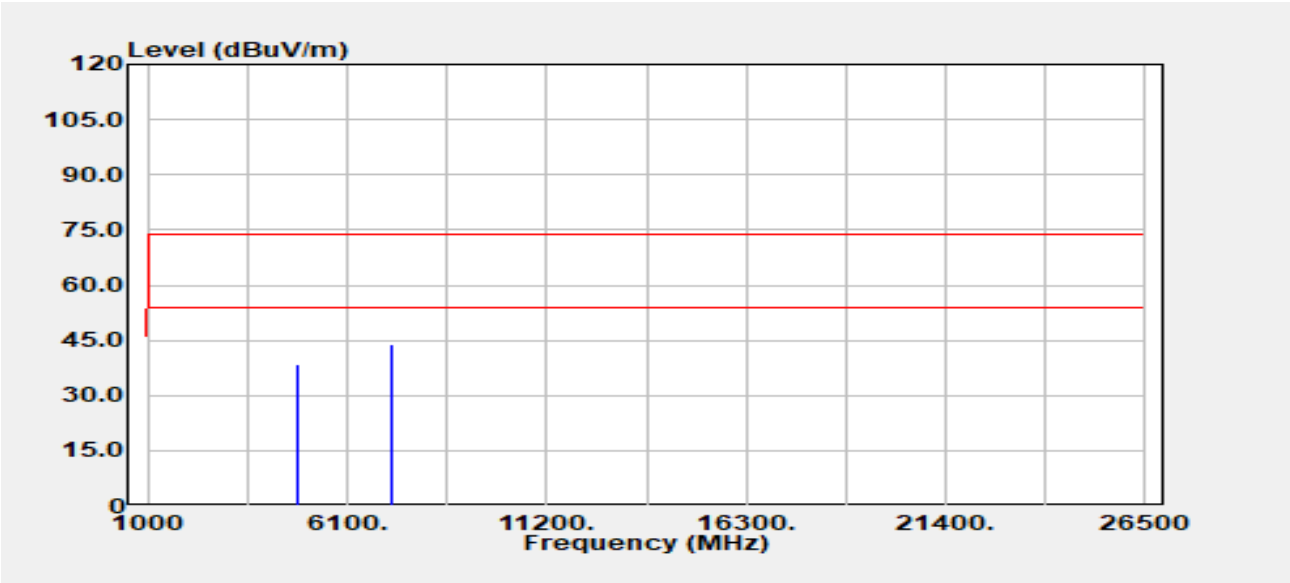
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	37.25	1.98	39.23	74.00	-34.77
4824.00	Average	29.16	1.98	31.14	54.00	-22.86
7236.00	Peak	35.23	8.64	43.87	74.00	-30.13
7236.00	Average	27.04	8.64	35.68	54.00	-18.32



Report No.: TMWK2305001408KR

Page: 82 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2412 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:15		



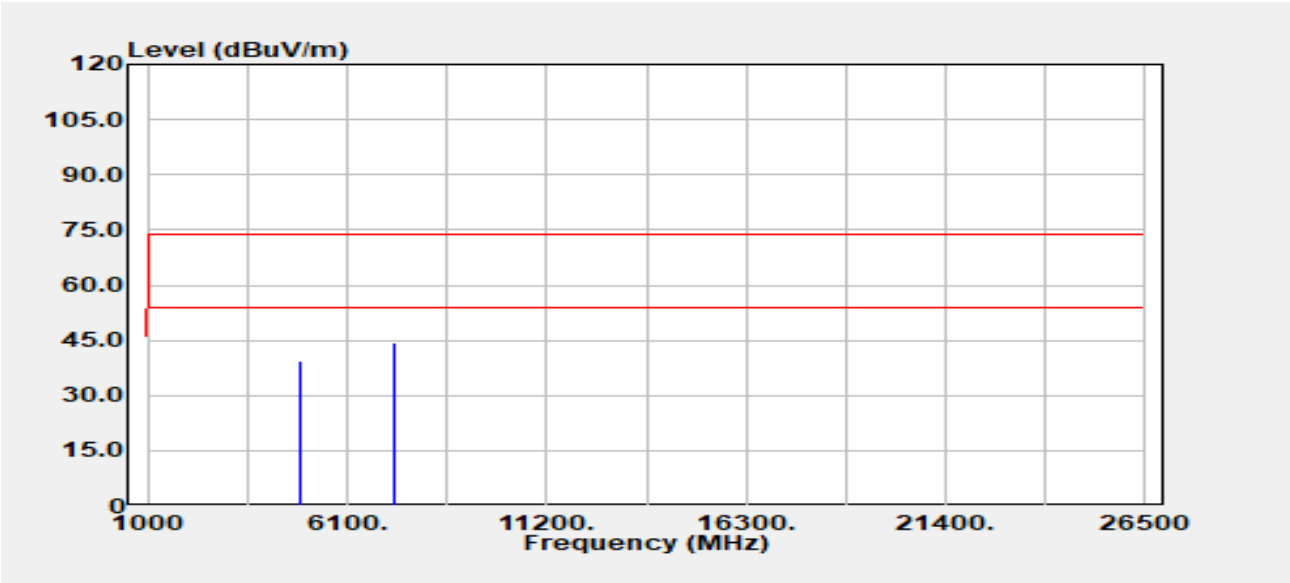
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	36.54	1.98	38.52	74.00	-35.48
4824.00	Average	29.20	1.98	31.18	54.00	-22.82
7236.00	Peak	35.25	8.64	43.90	74.00	-30.10
7236.00	Average	27.00	8.64	35.64	54.00	-18.36



Report No.: TMWK2305001408KR

Page: 83 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:17		



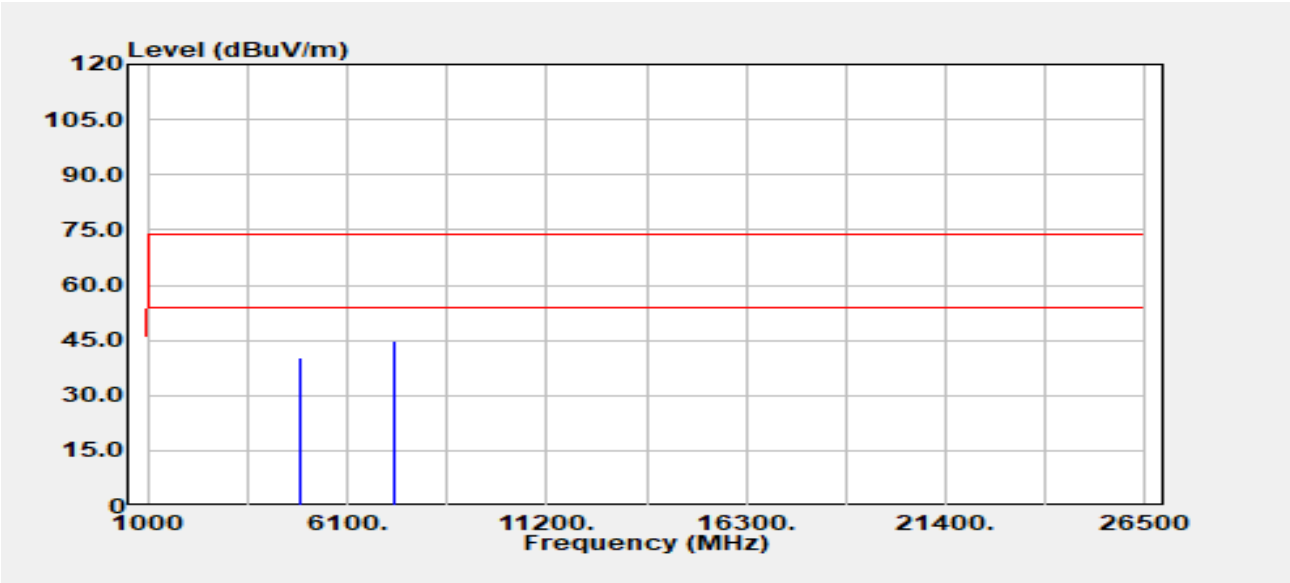
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	37.25	2.19	39.44	74.00	-34.56
4874.00	Average	29.04	2.19	31.23	54.00	-22.77
7311.00	Peak	35.82	8.59	44.42	74.00	-29.58
7311.00	Average	29.68	8.59	38.27	54.00	-15.73



Report No.: TMWK2305001408KR

Page: 84 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:17		



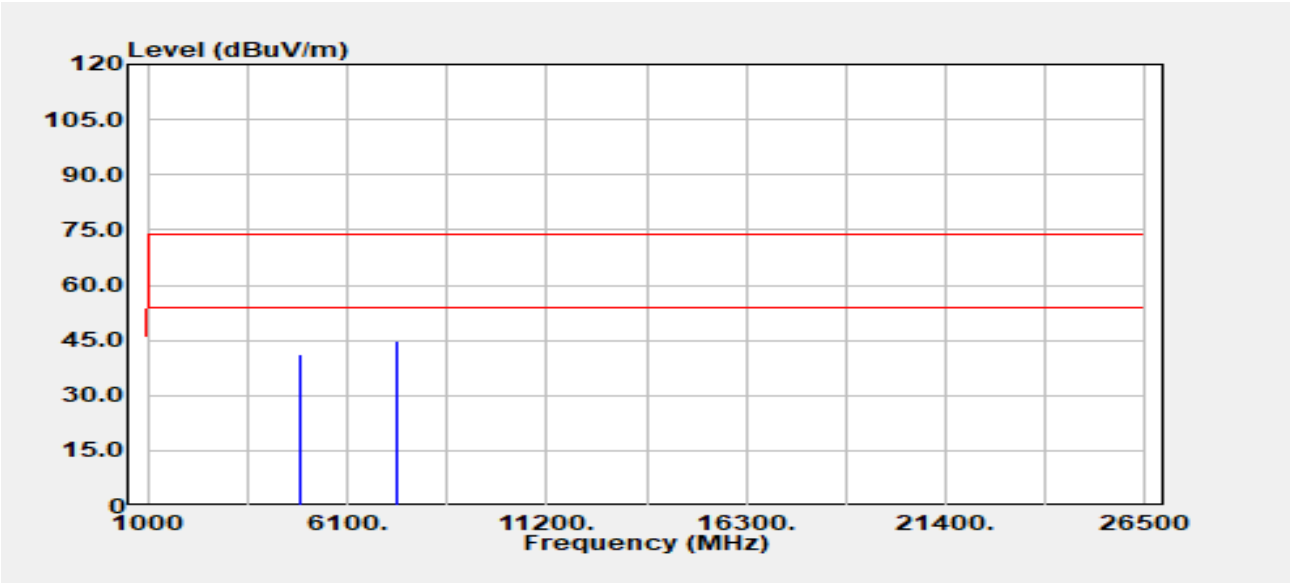
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	37.90	2.19	40.08	74.00	-33.92
4874.00	Average	29.13	2.19	31.32	54.00	-22.68
7311.00	Peak	36.16	8.59	44.76	74.00	-29.24
7311.00	Average	27.12	8.59	35.71	54.00	-18.29



Report No.: TMWK2305001408KR

Page: 85 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



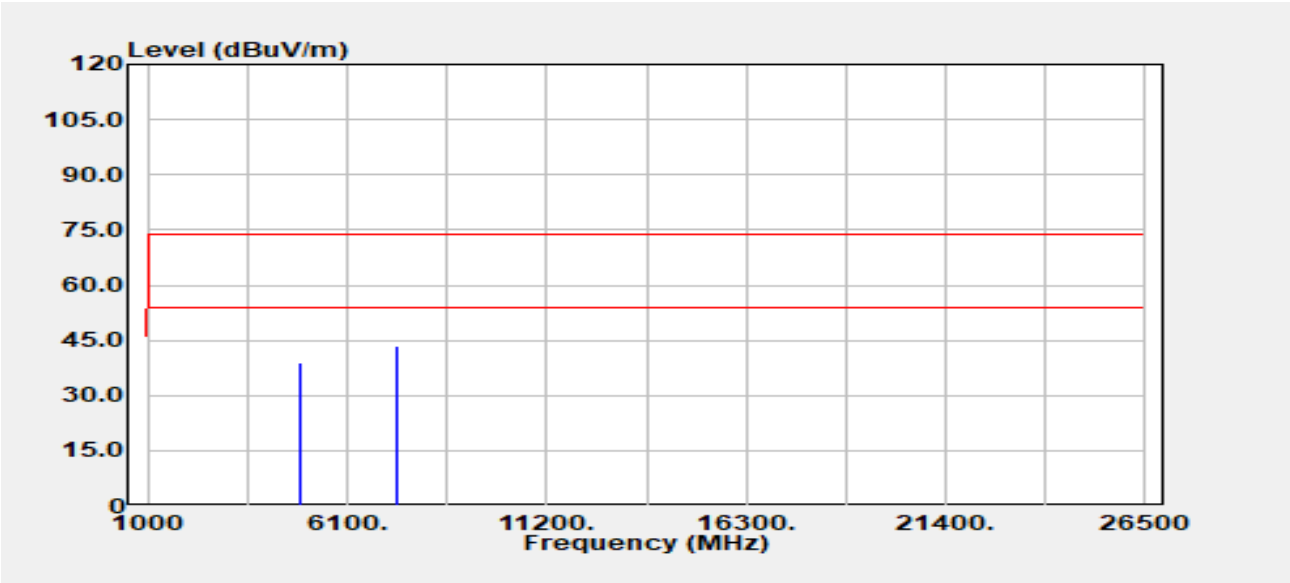
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	38.51	2.54	41.05	74.00	-32.95
4924.00	Average	28.90	2.54	31.44	54.00	-22.56
7386.00	Peak	36.06	8.60	44.67	74.00	-29.33
7386.00	Average	26.85	8.60	35.45	54.00	-18.55



Report No.: TMWK2305001408KR

Page: 86 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n20	Temp./Humi.	:24.7/57
Frequency	:2462 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	36.50	2.54	39.04	74.00	-34.96
4924.00	Average	29.04	2.54	31.58	54.00	-22.42
7386.00	Peak	34.96	8.60	43.56	74.00	-30.44
7386.00	Average	28.34	8.60	36.94	54.00	-17.06

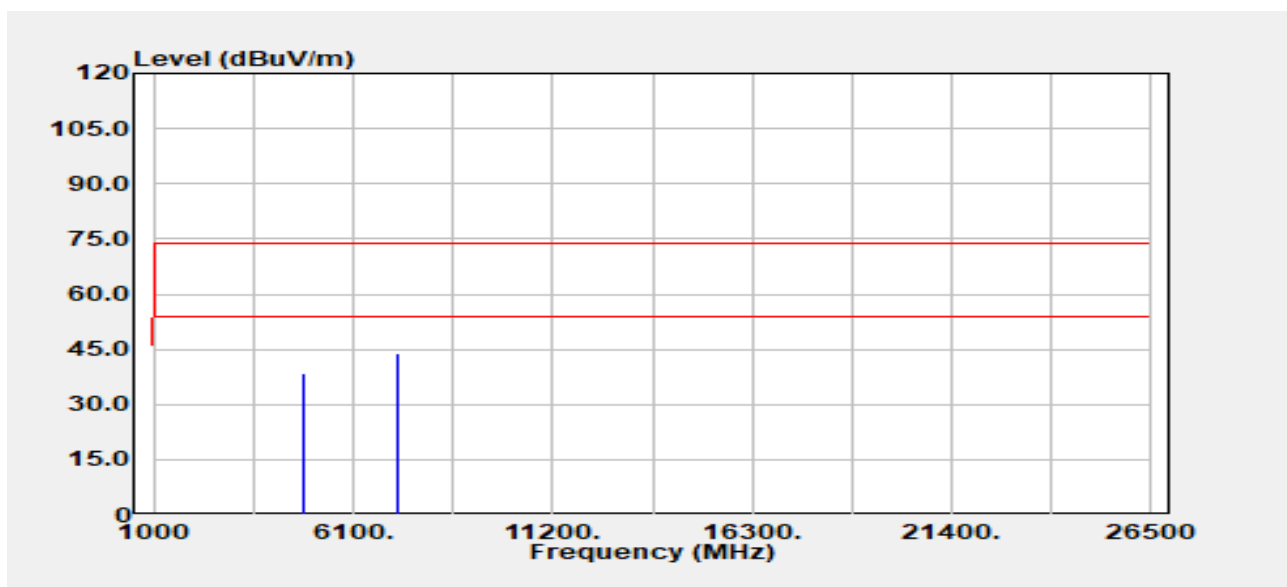


Report No.: TMWK2305001408KR

Page: 87 / 92
Rev.: 00

Project No :TM-2305000074P
Operation Band :802.11n40
Frequency :2422 MHz
Operation Mode :TX
EUT Pol :E2
Setting :12

Test Date :2023-10-18
Temp./Humi. :24.7/57
Antenna Pol. :VERTICAL
Engineer :Tony.Chao
Test Chamber : 966A



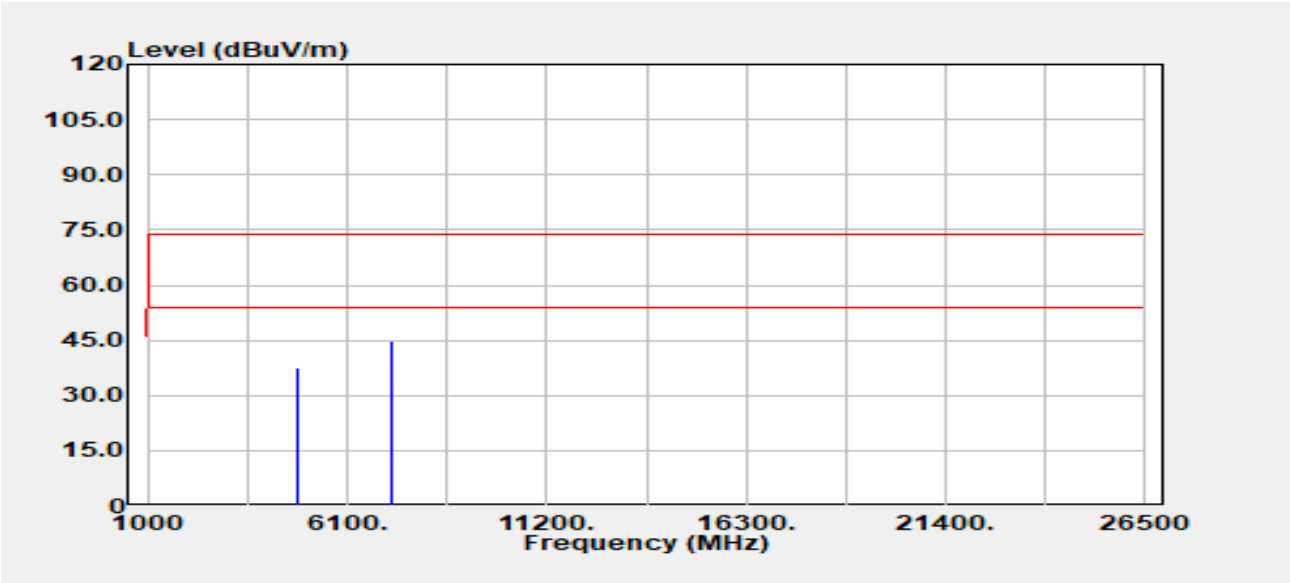
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4844.00	Peak	36.35	2.01	38.37	74.00	-35.63
4844.00	Average	29.15	2.01	31.16	54.00	-22.84
7266.00	Peak	35.46	8.60	44.06	74.00	-29.94
7266.00	Average	26.91	8.60	35.51	54.00	-18.49



Report No.: TMWK2305001408KR

Page: 88 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2422 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:12		



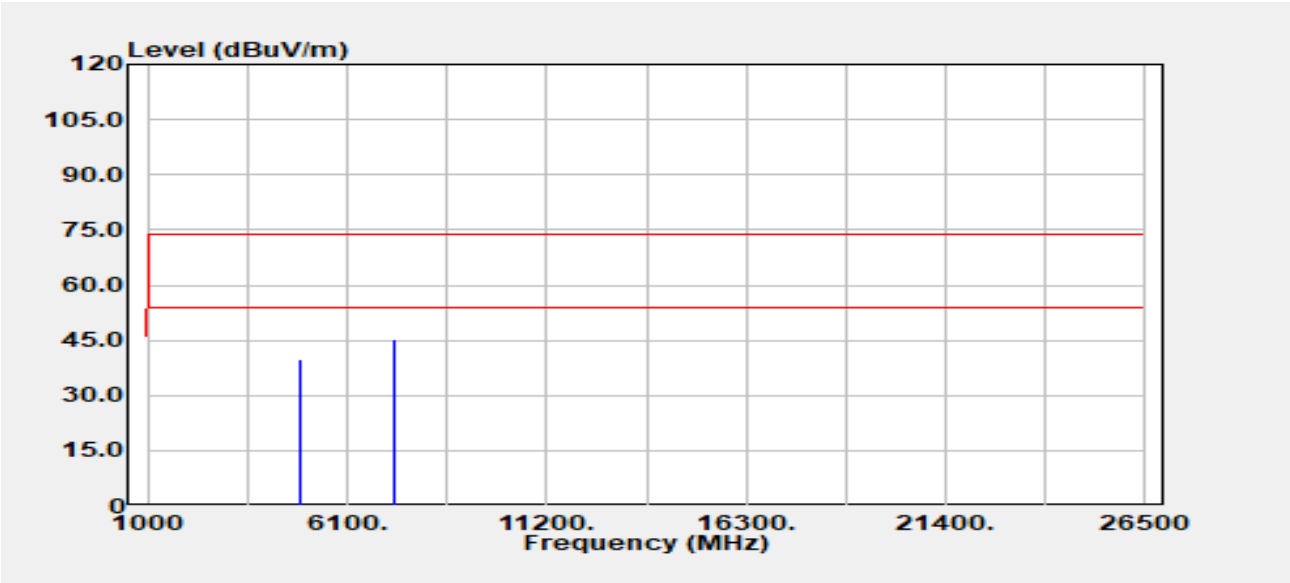
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4844.00	Peak	35.65	2.01	37.67	74.00	-36.33
4844.00	Average	29.07	2.01	31.08	54.00	-22.92
7266.00	Peak	36.29	8.60	44.89	74.00	-29.11
7266.00	Average	27.06	8.60	35.66	54.00	-18.34



Report No.: TMWK2305001408KR

Page: 89 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



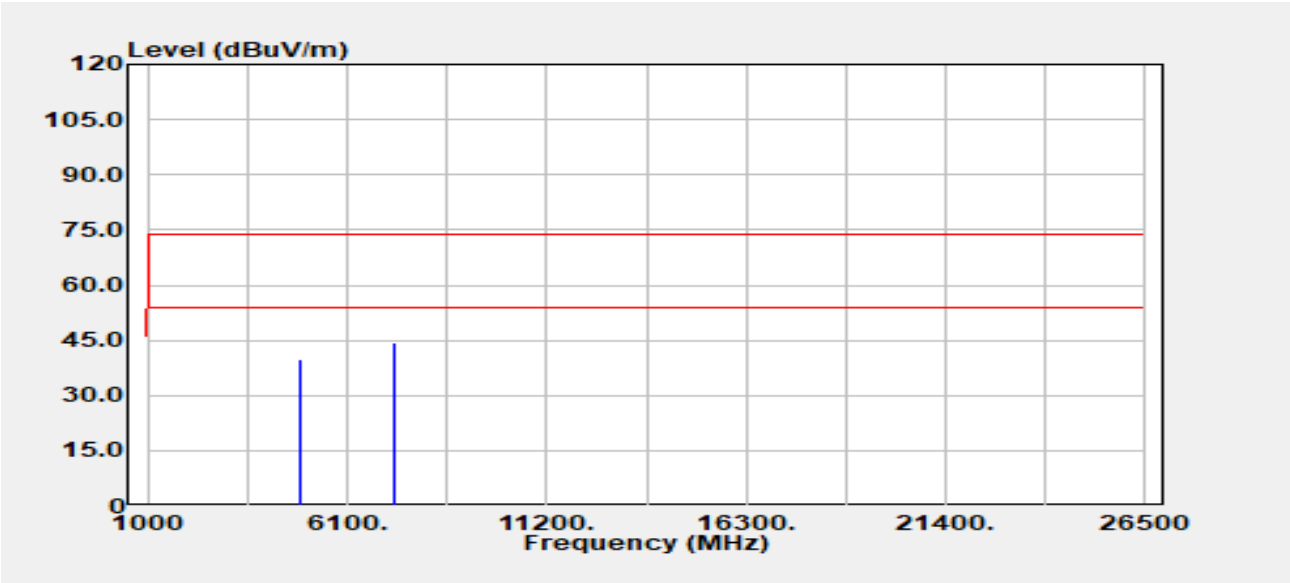
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	37.79	2.19	39.97	74.00	-34.03
4874.00	Average	29.02	2.19	31.21	54.00	-22.79
7311.00	Peak	36.81	8.59	45.41	74.00	-28.59
7311.00	Average	26.91	8.59	35.50	54.00	-18.50



Report No.: TMWK2305001408KR

Page: 90 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2437 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



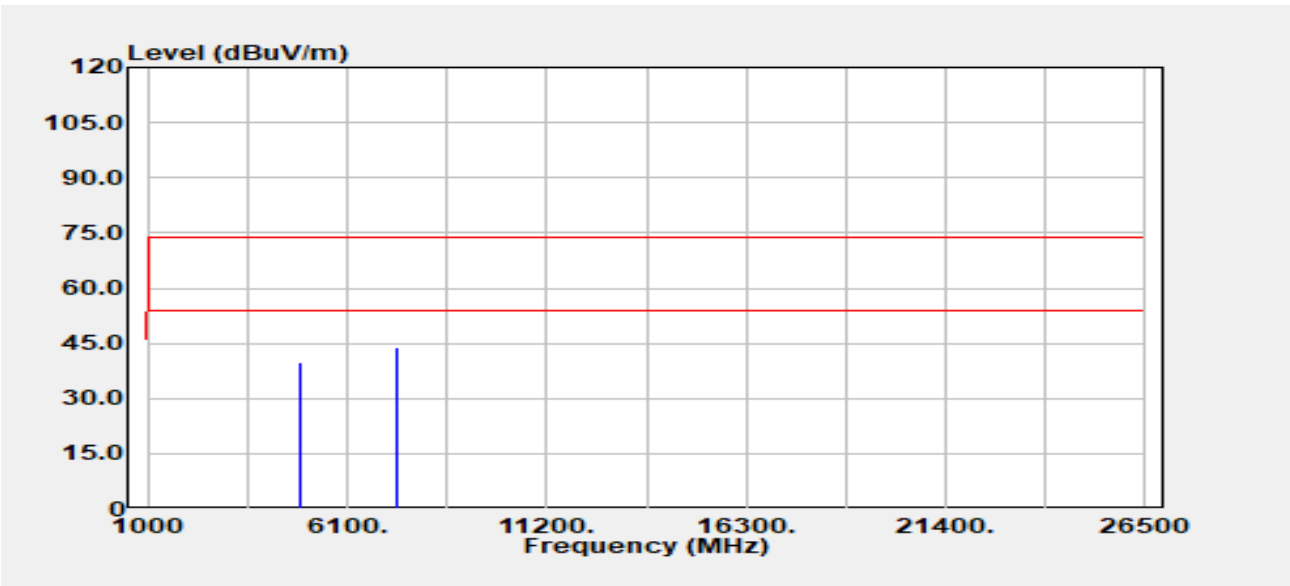
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	37.48	2.19	39.67	74.00	-34.33
4874.00	Average	28.87	2.19	31.06	54.00	-22.94
7311.00	Peak	35.68	8.59	44.28	74.00	-29.72
7311.00	Average	26.94	8.59	35.53	54.00	-18.47



Report No.: TMWK2305001408KR

Page: 91 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2452 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:13		



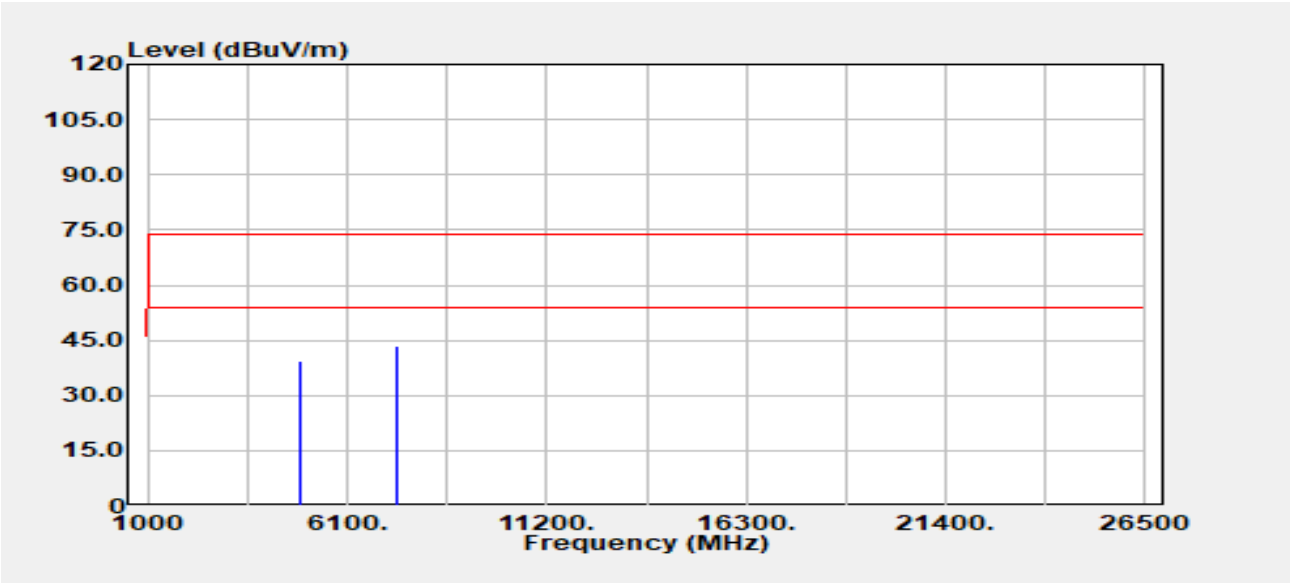
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4904.00	Peak	38.18	1.81	39.99	74.00	-34.01
4904.00	Average	29.41	1.81	31.22	54.00	-22.78
7356.00	Peak	36.29	7.65	43.94	74.00	-30.06
7356.00	Average	27.45	7.65	35.10	54.00	-18.90



Report No.: TMWK2305001408KR

Page: 92 / 92
Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11n40	Temp./Humi.	:24.7/57
Frequency	:2452 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Tony.Chao
EUT Pol	:E2	Test Chamber	: 966A
Setting	:13		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4904.00	Peak	37.80	1.81	39.61	74.00	-34.39
4904.00	Average	29.23	1.81	31.04	54.00	-22.96
7356.00	Peak	35.64	7.65	43.29	74.00	-30.71
7356.00	Average	27.27	7.65	34.92	54.00	-19.08

- End of Test Report -