		Δ f2max (kHz)	169.68	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.68	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.59	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	170.22	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.51	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.77	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	168.73	≥ 115 kHz	Pass
	6	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.35	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.90	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	171.71	≥ 115 kHz	Pass
	7	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.10	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.87	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.03	≥ 115 kHz	Pass
	8	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.70	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	165.12	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	170.54	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.26	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	165.34	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	169.57	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	162.63	N/A	N/A	
		Δ f2avg/Δf1avg	0.98	≥ 0.8	Pass
TTI-1		Δ flavg (kHz)	169.04	140 kHz≤∆flavg≤175 kHz	Pass
High operating	1	Δ f2max (kHz)	168.65	≥ 115 kHz	Pass
Frequency	1	Δ f2max(%)	100%	≥99.9%	Pass
(2480 MHz)		Δ f2avg(kHz)	158.99	N/A	N/A

Δ flavg/Δflavg         0.94         ≥ 0.8         Pass           Δ flavg (kHz)         168.44         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         165.59         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/Δflavg         0.95         ≥ 0.8         Pass           Δ f1avg (kHz)         168.32         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/Δflavg         0.94         ≥ 0.8         Pass           Δ f1avg (kHz)         168.55         ≥ 115 kHz         Pass           Δ f2max (kHz)         168.55         ≥ 115 kHz         Pass           Δ f2max (kHz)         168.50         ≥ 115 kHz         Pass           Δ f1avg (kHz)         168.50         140 kHz≤Δflavg≤175 kHz         Pass           Δ f1avg (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%						
Δ £2max (kHz)         165.59         ≥ 115 kHz         Pass           Δ £2max(%)         100%         ≥99.9%         Pass           Δ £2avg(kHz)         159.72         N/Λ         N/Λ           Δ £2avg(kHz)         168.32         140 kHz≤Δf1avg≤175 kHz         Pass           Δ £2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ £2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ £2max (kHz)         168.687         ≥ 115 kHz         Pass           Δ £2avg(λHz)         158.69         N/Λ         N/Λ           Δ £2avg(λHz)         158.69         N/Λ         N/Λ           Δ £2avg(kHz)         158.69         N/Λ         N/Λ           Δ £2avg(λHz)         158.69         N/Λ         N/Λ           Δ £2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ £2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ £2avg(λHz)         158.78         N/Λ         N/Λ           Δ £2avg(λHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ £2max(kHz)         165.62         ≥ 115 kHz         Pass           Δ £2avg(λHz)         168.50         140 kHz≤Δf1avg≤175 kHz			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
2         Δ f2avg(kHz)         159.72         N/A         N/A           Δ f2avg(kHz)         159.72         N/A         N/A           Δ f2avg(kHz)         0.95         ≥ 0.8         Pass           Δ f1avg (kHz)         168.32         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.69         N/A         N/A           Δ f2avg(kHz)         158.69         N/A         N/A           Δ f2avg(kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max(kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max(kHz)         168.59         ≥ 115 kHz         Pass           Δ f2avg(kHz)         168.50         ≥ 0.8         Pass           Δ f1avg (kHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max(kHz)         165.62         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.76         N/A         N/A           Δ f2avg(kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(kHz)         167.28 <td< td=""><td></td><td></td><td>Δ flavg (kHz)</td><td>168.44</td><td>140 kHz≤∆f1avg≤175 kHz</td><td>Pass</td></td<>			Δ flavg (kHz)	168.44	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)         159.72         N/A         N/A           Δ f2avg/Δf1avg         0.95         ≥ 0.8         Pass           Δ f1avg (kHz)         168.32         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.69         N/A         N/A           Δ f2avg(kHz)         168.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max (kHz)         158.78         N/A         N/A           Δ f2avg(kHz)         158.78         N/A         N/A           Δ f2avg(kHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max (kHz)         158.76         N/A         N/A           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2avg(kHz)         167.28         ≥ 115 kHz         Pass           Δ f2avg/Δf1avg         0.94         ≥ 0.8			Δ f2max (kHz)	165.59	≥ 115 kHz	Pass
Δ f2avg/Δf1avg         0.95         ≥ 0.8         Pass           Δ f1avg (kHz)         168.32         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.69         N/Λ         N/Λ           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2max (kHz)         168.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max (kHz)         158.78         N/Λ         N/Λ           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2max (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2avg/KHz)         158.76         N/Λ         N/Λ           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f2avg/kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.28         ≥ 115 kHz <td></td> <td>2</td> <td>Δ f2max(%)</td> <td>100%</td> <td>≥99.9%</td> <td>Pass</td>		2	Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz)         168.32         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.69         N/Λ         N/Λ           Δ f2avg(kHz)         158.69         N/Λ         N/Λ           Δ f2avg(kHz)         168.35         140 kHz≤Δflavg≤175 kHz         Pass           Δ f1avg (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.78         N/Λ         N/Λ           Δ f2avg(kHz)         168.50         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.76         N/A         N/A           Δ f2avg(kHz)         169.72         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         167.28         ≥ 115 kHz         Pass           Δ f2avg(kHz)         169.14         140 kH			Δ f2avg(kHz)	159.72	N/A	N/A
Δ f2max (kHz)         166.87         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.69         N/A         N/A           Δ f1avg (kHz)         168.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.78         N/A         N/A           Λ f2avg(kHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         165.50         ≥ 115 kHz         Pass           Δ f2max (kHz)         165.50         ≥ 115 kHz         Pass           Δ f2max (kHz)         165.50         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.76         N/A         N/A           Λ f2avg(kHz)         158.76         N/A         N/A           Δ f2avg(kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.28         ≥ 115 kHz         Pass           Δ f2avg/λf1avg         0.94         ≥ 0.8         Pass           Δ f2avg/λf1avg         0.94         ≥ 0.8			Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
3         Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.69         N/A         N/A           Δ f1avg (kHz)         168.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.78         N/A         N/A           Δ f2avg(kHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2max(kHz)         165.62         ≥ 115 kHz         Pass           Δ f2avg/Af1avg         0.94         ≥ 0.8         Pass           Δ f2avg/Af1avg         0.94         ≥ 0.8         Pass           Δ f1avg (kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(kHz)         167.28         ≥ 115 kHz         Pass           Δ f2avg/Af1avg         0.94         ≥ 0.8         Pass           Δ f2avg(kHz)         158.87         N/A         N/A           Δ f2avg(kHz)         166.12         ≥ 115 k			Δ flavg (kHz)	168.32	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)         158.69         N/A         N/A           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f1avg (kHz)         168.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2avg(kHz)         158.78         N/A         N/A           Δ f2avg/Δf1avg         0.94         ≥ 0.8         Pass           Δ f1avg (kHz)         168.50         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         165.62         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         158.76         N/A         N/A           Δ f1avg (kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         169.72         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(%Hz)         167.28         ≥ 115 kHz         Pass           Δ f2avg/Af1avg         0.94         ≥ 0.8         Pass           Δ f2avg/Af1avg         0.94         ≥ 0.8         Pass           Δ f1avg (kHz)         169.14         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(%)         100%			Δ f2max (kHz)	166.87	≥ 115 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		3	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg(kHz)	158.69	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ flavg (kHz)	168.35	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)       158.78       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       168.50       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       165.62       ≥ 115 kHz       Pass         Δ f2avg(kHz)       158.76       N/A       N/A         Δ f2avg(kHz)       158.76       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       169.72       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       167.28       ≥ 115 kHz       Pass         Δ f2avg(kHz)       158.87       N/A       N/A         Δ f2avg(kHz)       158.87       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       169.14       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       166.12       ≥ 115 kHz       Pass         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f2avg(kHz)       159.52       N/A       N/A         Δ f2avg(kHz)       168.21       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       168.07       ≥ 115 kHz <td< td=""><td></td><td></td><td>Δ f2max (kHz)</td><td>168.59</td><td>≥ 115 kHz</td><td>Pass</td></td<>			Δ f2max (kHz)	168.59	≥ 115 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		4	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg(kHz)	158.78	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       158.76       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       169.72       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       167.28       ≥ 115 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       158.87       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       169.14       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       166.12       ≥ 115 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       159.52       N/A       N/A         Δ f2avg/Δf1avg       0.94       ≥ 0.8       Pass         Δ f1avg (kHz)       168.21       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg/Δf1avg       0.95       ≥ 0.8       Pass			Δ flavg (kHz)	168.50	140 kHz≤∆flavg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2max (kHz)	165.62	≥ 115 kHz	Pass
$\begin{array}{ c c c c c }\hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.72 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 167.28 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (\%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg/kHz) & 158.87 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.14 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 166.12 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 168.21 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 168.07 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.95 & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 0.95 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & P$		5	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg(kHz)	158.76	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ flavg (kHz)	169.72	140 kHz≤∆flavg≤175 kHz	Pass
$\begin{array}{ c c c c c c }\hline \Delta \ f2avg(kHz) & 158.87 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 169.14 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 166.12 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg \ (kHz) & 159.52 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 0.94 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 168.21 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 168.07 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2avg \ (kHz) & 168.07 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2avg \ (kHz) & 160.14 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 0.95 & \geq 0.8 & Pass \\ \hline Q \ \Delta \ f1avg \ (kHz) & 169.27 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \end{array}$			Δ f2max (kHz)	167.28	≥ 115 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		6	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg(kHz)	158.87	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ flavg (kHz)	169.14	140 kHz≤∆f1avg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2max (kHz)	166.12	≥ 115 kHz	Pass
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		7	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg(kHz)	159.52	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		8	Δ flavg (kHz)	168.21	140 kHz≤∆f1avg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2max (kHz)	168.07	≥ 115 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz) 169.27 140 kHz≤Δflavg≤175 kHz Pass			Δ f2avg(kHz)	160.14	N/A	N/A
9			Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
$\Delta$ f2max (kHz) 167.46 $\geq$ 115 kHz Pass		0	Δ flavg (kHz)	169.27	140 kHz≤∆flavg≤175 kHz	Pass
		9	Δ f2max (kHz)	167.46	≥ 115 kHz	Pass

	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	159.82	N/A	N/A
	Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
	Δ flavg (kHz)	168.43	140 kHz≤∆flavg≤175 kHz	Pass
	Δ f2max (kHz)	167.15	≥ 115 kHz	Pass
10	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	158.40	N/A	N/A
	Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass

# 3.3.8. Test Case: TRM/CA/08/C - Initial Carrier Frequency Tolerance

## Expected Outcome:

All values as measured must fulfill the following conditions:

Each of the EUT's carrier frequency f0 as measured must be within ±75kHz from the Eut's chosen nominal carrier frequency fTX

1.  $fTX - 75 \text{ kHz} \le f \ 0 \le fTX + 75 \text{ kHz}$ .

Test Frequency	Packets	Carrier	Limit	Verdict
(MHz)	No.	Frequency	(kHz)	
		(KHz)		
	1	-5.53	$-75 \le f0 \le +75$	Pass
	2	-9.11	$-75 \le f0 \le +75$	Pass
	3	-9.81	$-75 \le f0 \le +75$	Pass
Lovy operating	4	-7.14	$-75 \le f0 \le +75$	Pass
Low operating	5	-7.23	$-75 \le f0 \le +75$	Pass
Frequency (2402 MHz)	6	-8.37	$-75 \le f0 \le +75$	Pass
(2402 WIIIZ)	7	-6.92	$-75 \le f0 \le +75$	Pass
	8	-6.09	$-75 \le f0 \le +75$	Pass
	9	-8.82	$-75 \le f0 \le +75$	Pass
	10	-7.93	$-75 \le f0 \le +75$	Pass
	1	-1.54	$-75 \le f0 \le +75$	Pass
	2	-4.62	$-75 \le f0 \le +75$	Pass
	3	-2.32	$-75 \le f0 \le +75$	Pass
Mid an austin a	4	0.02	$-75 \le f0 \le +75$	Pass
Mid operating	5	-3.81	$-75 \le f0 \le +75$	Pass
Frequency	6	-0.94	$-75 \le f0 \le +75$	Pass
(2441 MHz)	7	-3.56	$-75 \le f0 \le +75$	Pass
	8	-1.08	$-75 \le f0 \le +75$	Pass
	9	0.09	$-75 \le f0 \le +75$	Pass
	10	-0.18	-75≤ f0 ≤ +75	Pass

	1	1.71	$-75 \le \text{f0} \le +75$	Pass
	2	-2.03	$-75 \le f0 \le +75$	Pass
	3	-0.60	$-75 \le \text{f0} \le +75$	Pass
IIi ah amanatin a	4	-1.20	$-75 \le f0 \le +75$	Pass
High operating	5	-3.52	$-75 \le \text{f0} \le +75$	Pass
Frequency (2480 MHz)	6	-1.64	$-75 \le \text{f0} \le +75$	Pass
(2400 MHZ)	7	0.95	-75≤ f0 ≤ +75	Pass
	8	-2.10	$-75 \le \text{f0} \le +75$	Pass
	9	-0.48	$-75 \le \text{f0} \le +75$	Pass
	10	0.27	$-75 \le \text{f0} \le +75$	Pass

# 3.3.9. Test Case: TRM/CA/09/C - Carrier Frequency Drift

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

- 1. One slot packet -25kHz≤ MAX Frequency Drift ≤+25kHz
- 2. Three slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 3. Five slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 4. The maximum drift rate is  $20000 \text{ Hz} / 50 \mu s$ .

Packet Type: DH1

Test Frequency	Packets	1 acket Type. Diff		Limit (%)	Verdict
Test Frequency		Result		LIIIII (76)	verdict
(MHz)	No.		1		
	1	MAX Frequency Drift(kHz)	-9.14	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	2.03	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-8.85	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	2.49	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-9.38	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	2.52	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-8.95	-25≤ fmax≤+25	Pass
Low operating	4	Maximum Drift Rate(kHz/50μs)	1.67	≤ 20	Pass
Frequency	5	MAX Frequency Drift(kHz)	-9.07	-25≤ fmax≤+25	Pass
(2402 MHz)	5	Maximum Drift Rate(kHz/50μs)	2.76	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	-8.80	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	1.62	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-8.68	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	2.80	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-9.63	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	2.96	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-8.43	-25≤ fmax≤+25	Pass

	9	Maximum Drift Rate(kHz/50μs)	2.00	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-9.07	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	2.99	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-7.54	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	4.03	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-8.14	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	7.02	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-7.75	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	3.45	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-7.70	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	4.46	≤ 20	Pass
NC 1 (*)	5	MAX Frequency Drift(kHz)	-6.90	-25≤ fmax≤+25	Pass
Mid operating	5	Maximum Drift Rate(kHz/50μs)	3.22	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	-7.08	-25≤ fmax≤+25	Pass
(2441 MHz)	6	Maximum Drift Rate(kHz/50μs)	4.17	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-7.44	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-7.99	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	5.68	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-7.72	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	5.18	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-7.56	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	5.50	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-5.09	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	4.58	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-6.21	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.81	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-5.37	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	3.45	≤ 20	Pass
High operating Frequency	4	MAX Frequency Drift(kHz)	-5.02	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.05	≤ 20	Pass
(2480 MHz)	5	MAX Frequency Drift(kHz)	-5.44	-25≤ fmax≤+25	Pass
,	5	Maximum Drift Rate(kHz/50μs)	3.84	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	-6.27	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	3.54	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-4.73	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	2.02	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-7.06	-25≤ fmax≤+25	Pass
·	•				i

		·			
	8	Maximum Drift Rate(kHz/50μs)	3.43	≤ 20	Pass
9 9		MAX Frequency Drift(kHz)	-5.89	-25≤ fmax≤+25	Pass
		Maximum Drift Rate(kHz/50μs)	3.37	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-5.27	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.77	≤ <b>20</b>	Pass
		Packet Type: DH3			
Test Frequency	Packets	Result		Limit (%)	Verdict
(MHz)	No.	Result			
	1	MAX Frequency Drift(kHz)	-9.71	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	2.77	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-9.12	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	2.47	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-9.84	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	3.74	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-9.07	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.27	≤ 20	Pass
T	5	MAX Frequency Drift(kHz)	-9.09	-25≤ fmax≤+25	Pass
Low operating	5	Maximum Drift Rate(kHz/50μs)	2.32	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	-10.11	-25≤ fmax≤+25	Pass
(2402 MHz)	6	Maximum Drift Rate(kHz/50μs)	3.22	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-9.23	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	2.50	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-10.37	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	3.58	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-9.67	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	2.89	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-9.25	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.86	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-8.13	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	5.94	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-7.86	-25≤ fmax≤+25	Pass
NC 1	2	Maximum Drift Rate(kHz/50μs)	4.05	≤ 20	Pass
Mid operating	3	MAX Frequency Drift(kHz)	-7.95	-25≤ fmax≤+25	Pass
Frequency	3	Maximum Drift Rate(kHz/50μs)	3.37	≤ 20	Pass
(2441 MHz)	4	MAX Frequency Drift(kHz)	-8.15	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	4.43	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	-7.61	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	4.82	≤ 20	Pass

	6	MAX Frequency Drift(kHz)	-8.01	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	5.13	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-8.45	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	3.71	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-7.46	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	3.33	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-8.03	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	5.15	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-7.99	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.75	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-6.04	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	3.48	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-6.49	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	5.88	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-5.73	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	4.48	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-6.24	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	5.01	≤ 20	Pass
TT' 1	5	MAX Frequency Drift(kHz)	-5.95	-25≤ fmax≤+25	Pass
High operating	5	Maximum Drift Rate(kHz/50μs)	2.94	≤ 20	Pass
Frequency (2480 MHz)	6	MAX Frequency Drift(kHz)	-5.99	-25≤ fmax≤+25	Pass
(2400 MITZ)	6	Maximum Drift Rate(kHz/50μs)	3.77	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-5.76	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	3.34	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-5.79	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	4.41	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-5.83	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.81	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-6.58	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	4.06	≤ 20	Pass
		Packet Type: DH5			
Test Frequency	Packets	D coult		Limit (%)	Verdict
(MHz)	No.	Result			
	1	MAX Frequency Drift(kHz)	-9.86	-25≤ fmax≤+25	Pass
Low operating	1	Maximum Drift Rate(kHz/50μs)	4.91	≤ 20	Pass
Frequency	2	MAX Frequency Drift(kHz)	-9.31	-25≤ fmax≤+25	Pass
(2402 MHz)	2	Maximum Drift Rate(kHz/50μs)	2.91	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-9.66	-25≤ fmax≤+25	Pass
		Part A-171 of 322	•		

	3	Maximum Drift Rate(kHz/50μs)	3.29	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-9.43	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.32	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	-9.97	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	3.33	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	-9.84	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	3.37	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-9.53	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	4.13	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-9.59	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	3.01	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-9.51	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	4.84	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-9.58	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.05	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-8.35	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	5.23	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-7.91	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.48	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-8.64	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	4.08	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-7.72	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	4.60	≤ 20	Pass
N. 4. 1	5	MAX Frequency Drift(kHz)	-7.94	-25≤ fmax≤+25	Pass
Mid operating	5	Maximum Drift Rate(kHz/50μs)	3.83	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	-7.96	-25≤ fmax≤+25	Pass
(2441 MHz)	6	Maximum Drift Rate(kHz/50μs)	4.10	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-8.09	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	7.16	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-8.08	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	4.22	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-8.31	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.53	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-8.25	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.56	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	-6.81	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	5.56	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-6.58	-25≤ fmax≤+25	Pass
•	•	Part A-172 of 322			

	2	Maximum Drift Rate(kHz/50μs)	4.31	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	-5.73	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	2.81	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-5.78	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.78	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	-6.25	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	3.98	≤ 20	Pass
High operating	6	MAX Frequency Drift(kHz)	-6.48	-25≤ fmax≤+25	Pass
Frequency	6	Maximum Drift Rate(kHz/50μs)	4.94	≤ 20	Pass
(2480 MHz)	7	MAX Frequency Drift(kHz)	-6.31	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	6.31	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-6.30	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	4.07	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-6.40	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	5.75	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	-5.89	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.88	≤ 20	Pass

## 3.3.10. Test Case: TRM/CA/10/C - EDR Relative Transmit Power

## Expected Outcome:

All values as measured must fulfill the following conditions:

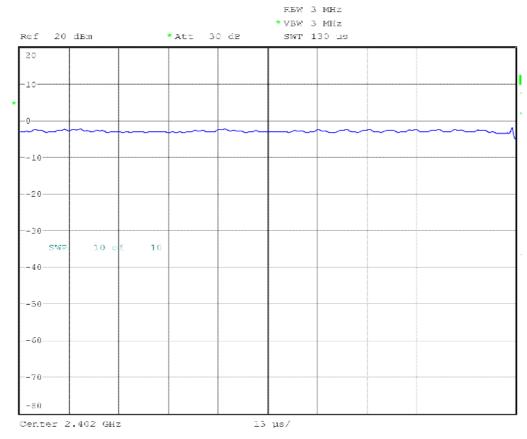
1. For all pairs of results: (PGFSK-4dB) < PDPSK < (PGFSK + 1dB)

	Pacl	ket T	ype:2I	DH5
--	------	-------	--------	-----

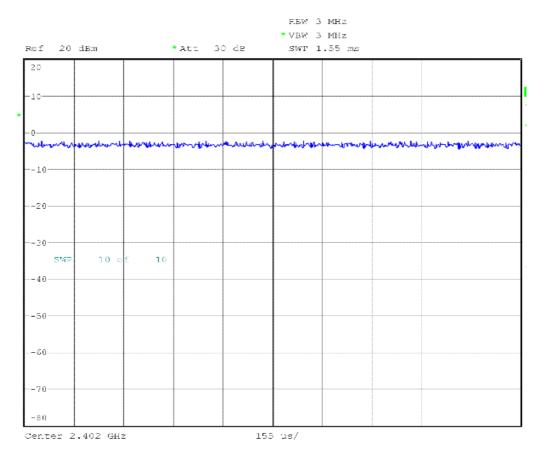
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.60	7.22	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.26	-22.51	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	7.27	6.92	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.46	-22.74	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.48	6.18	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.19	-23.42	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass

Packet Type: 3DH5

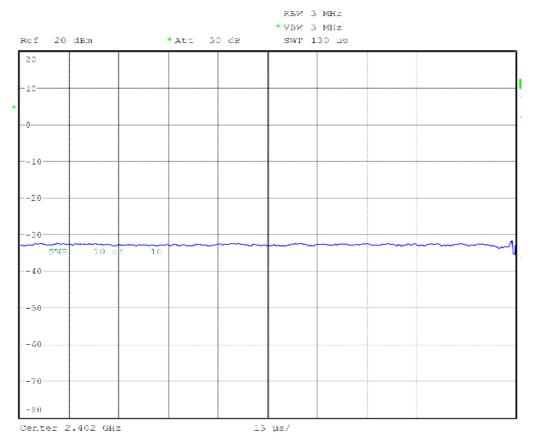
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.60	7.28	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.24	-22.55	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	7.27	6.85	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.47	-22.78	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.50	6.14	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.17	-23.48	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass



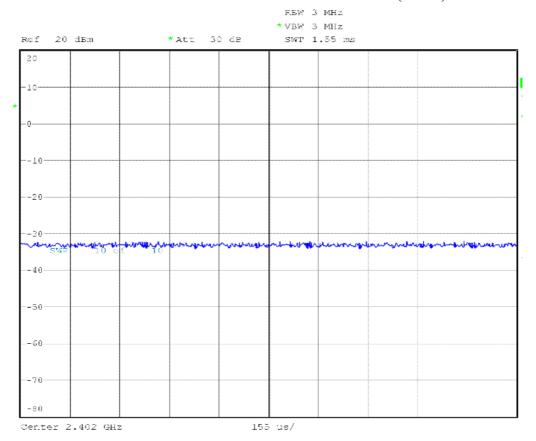
EDR Relative Transmit Power GFSK Low Max (2DH5)



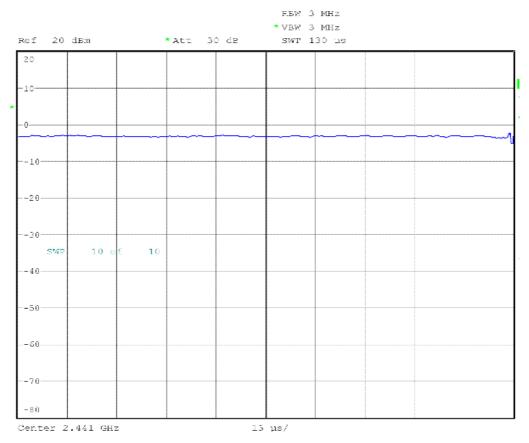
EDR Relative Transmit Power DPSK Low Max (2DH5)
Part A-175 of 322



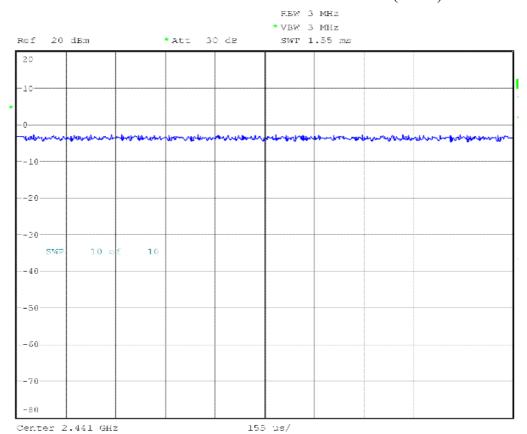
EDR Relative Transmit Power GFSK Low Min (2DH5)



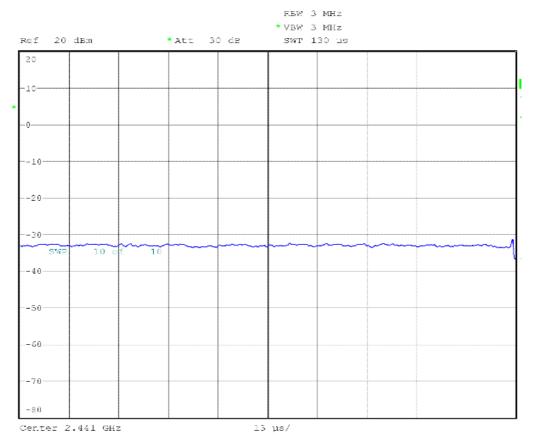
EDR Relative Transmit Power DPSK Low Min (2DH5)
Part A-176 of 322



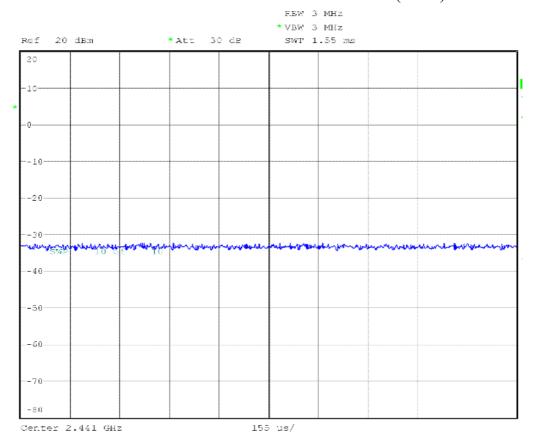
EDR Relative Transmit Power GFSK Mid Max (2DH5)



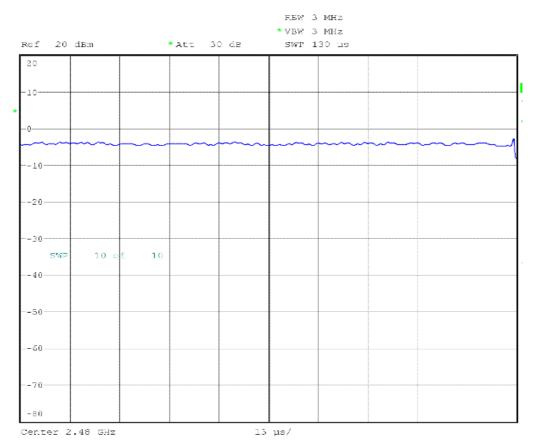
EDR Relative Transmit Power DPSK Mid Max (2DH5)
Part A-177 of 322



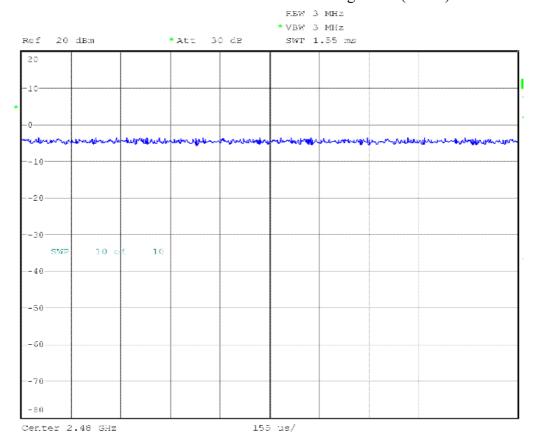
EDR Relative Transmit Power GFSK Mid Min (2DH5)



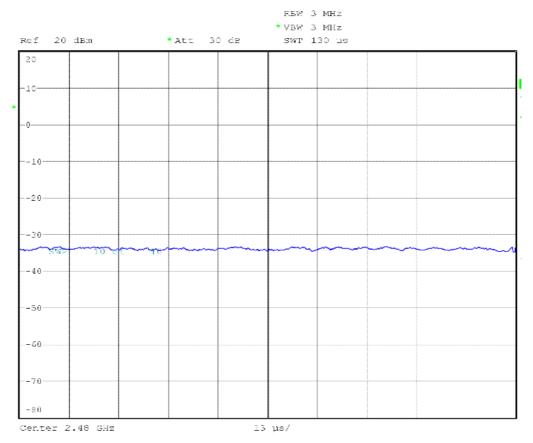
EDR Relative Transmit Power DPSK Mid Min (2DH5)
Part A-178 of 322



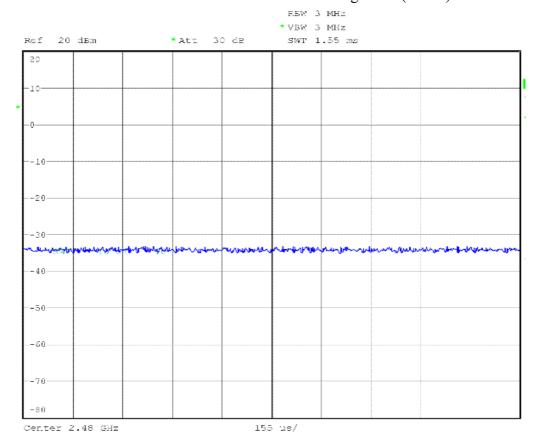
EDR Relative Transmit Power GFSK High Max (2DH5)



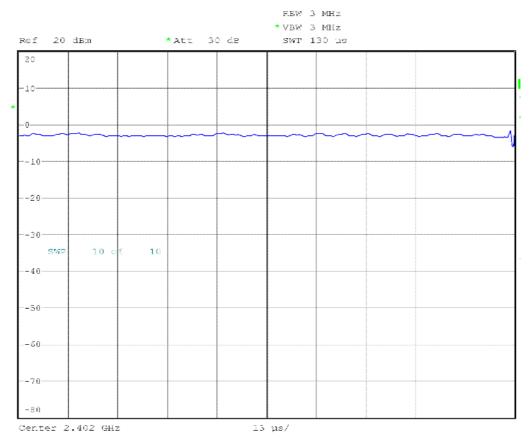
EDR Relative Transmit Power DPSK High Max (2DH5)
Part A-179 of 322



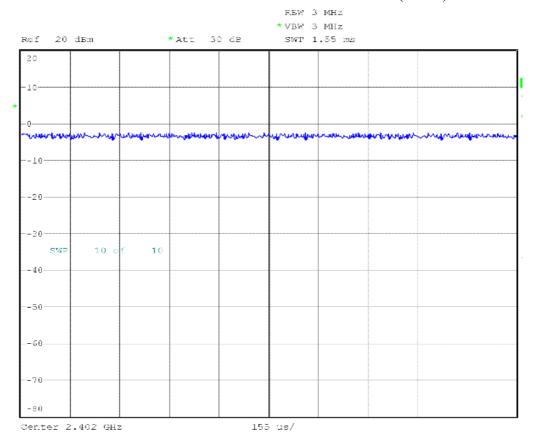
EDR Relative Transmit Power GFSK High Min (2DH5)



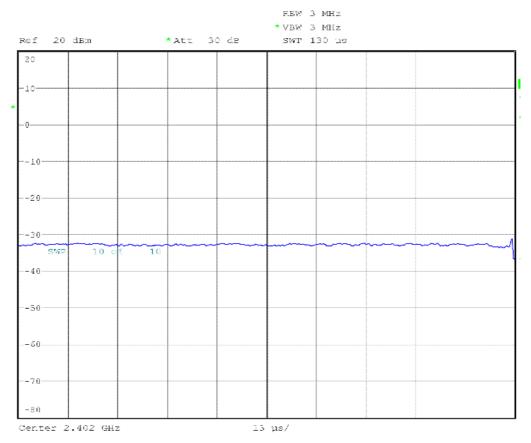
EDR Relative Transmit Power DPSK High Min (2DH5)
Part A-180 of 322



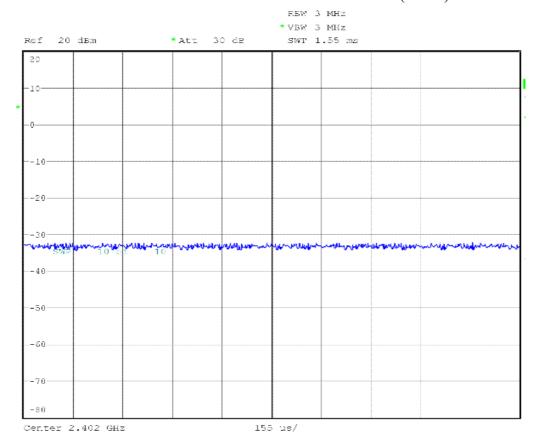
EDR Relative Transmit Power GFSK Low Max (3DH5)



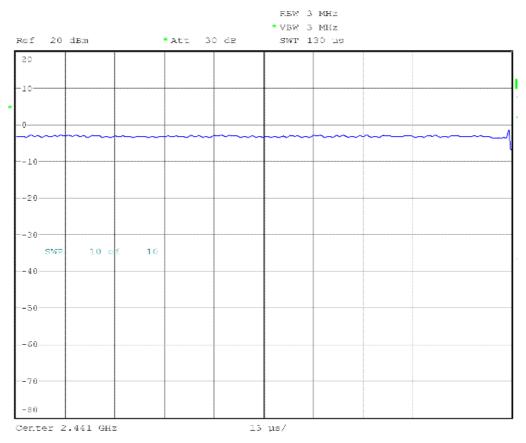
EDR Relative Transmit Power DPSK Low Max (3DH5)
Part A-181 of 322



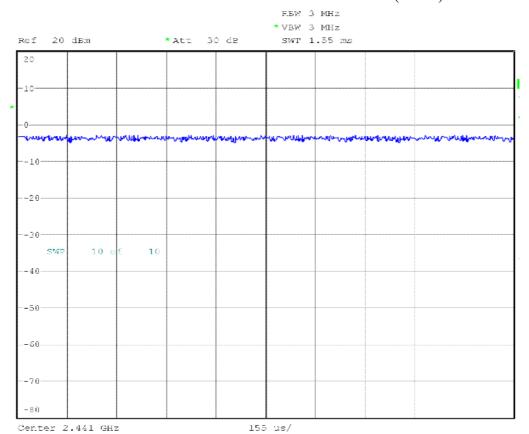
EDR Relative Transmit Power GFSK Low Min (3DH5)



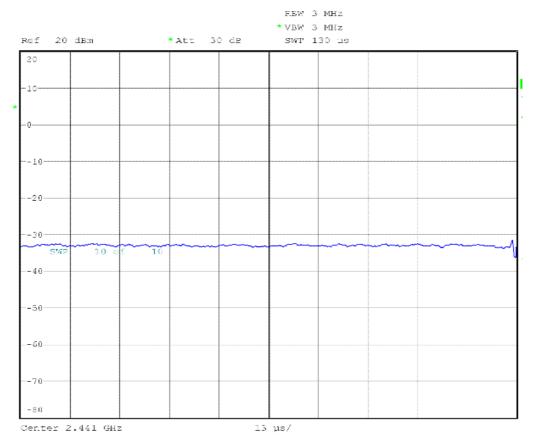
EDR Relative Transmit Power DPSK Low Min (3DH5)
Part A-182 of 322



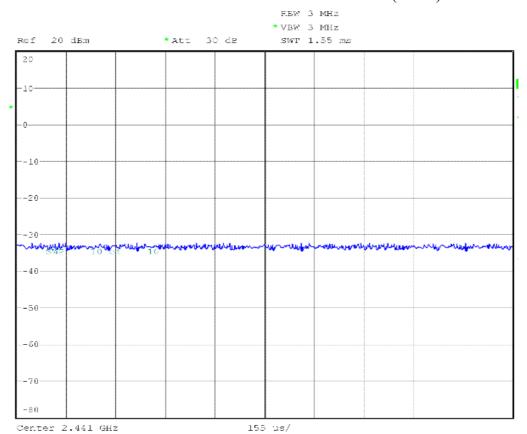
EDR Relative Transmit Power GFSK Mid Max (3DH5)



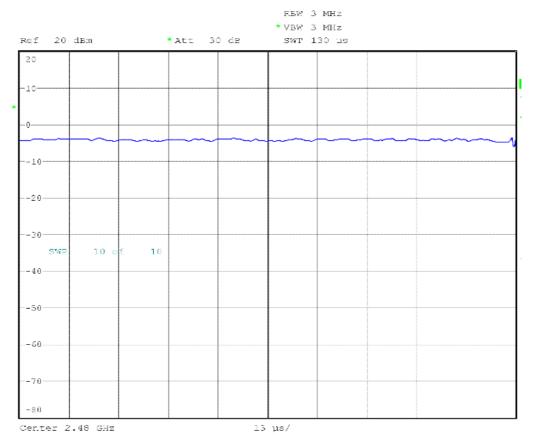
EDR Relative Transmit Power DPSK Mid Max (3DH5)
Part A-183 of 322



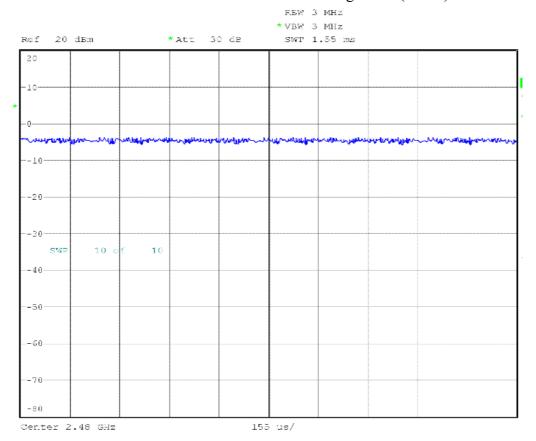
EDR Relative Transmit Power GFSK Mid Min (3DH5)



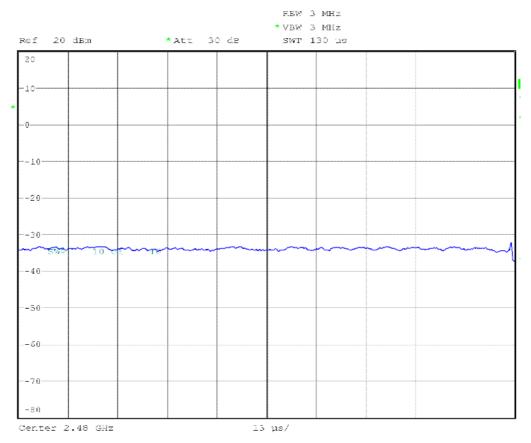
EDR Relative Transmit Power DPSK Mid Min (3DH5)
Part A-184 of 322



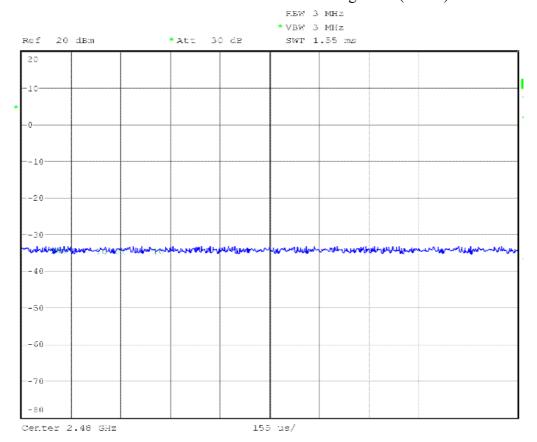
EDR Relative Transmit Power GFSK High Max (3DH5)



EDR Relative Transmit Power DPSK High Max (3DH5)
Part A-185 of 322



EDR Relative Transmit Power GFSK High Min (3DH5)



EDR Relative Transmit Power DPSK High Min (3DH5)
Part A-186 of 322

# 3.3.11. Test Case: TRM/CA/11/C - EDR Carrier Frequency Stability and Modulation Accuracy

#### Expected Outcome:

If the EUT does not support 8DPSK modulation then the outcomes based on this modulation do not apply..

All values as measured must fulfill the following conditions:

- 1. Carrier frequency stability:
- $-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$ , for all packets
- $-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$ , for all blocks
- -10 kHz  $\leq \omega 0 \leq +10$  kHz, for all blocks
- 2. RMS DEVM:

RMS DEVM  $\leq 0.20$ , for all  $\pi/4$ -DQPSK blocks

RMS DEVM  $\leq 0.13$ , for all 8DPSK blocks

3. Peak DEVM:

DEVM  $\leq$  0.35 for all  $\pi/4$ -DQPSK symbols

DEVM  $\leq$  0.25 for all 8DPSK symbols

4. 99% DEVM:

DEVM  $\leq$  0.30, for 99% of  $\pi/4$ -DQPSK symbols

DEVM  $\leq$  0.20, for 99% of 8DPSK symbols

Packet Type:2DH5

	Tacket Type.2D115						
Test Frequency	Test Parameter	Result	Limit	Verdict			
	ωi (kHz)	-0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass			
I any an anatin a	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			
Frequency	RMS DEVM	0.08	RMS DEVM ≤ 0.2	Pass			
(2402MHz)	Peak DEVM	0.14	DEVM ≤ 0.35	Pass			
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass			
	ωi (kHz)	-0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass			
Mid an austin a	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			
Frequency (2441MHz)	RMS DEVM	0.07	RMS DEVM ≤ 0.2	Pass			
(2441WIIIZ)	Peak DEVM	0.14	$DEVM \le 0.35$	Pass			
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass			
High operating	ωi (kHz)	-0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass			
Frequency	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
(2480MHz)	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			

	RMS DEVM	0.10	RMS DEVM ≤ 0.2	Pass
	Peak DEVM	0.18	$DEVM \le 0.35$	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	Packet	Type: 3DH	15	
Test Frequency	Test Parameter	Result	Limit	Verdict
	ωi (kHz)	-0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
I avy an anatin a	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.07	RMS DEVM $\leq 0.13$	Pass
(2402MHz)	Peak DEVM	0.15	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	-0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
Midanadina	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.06	RMS DEVM ≤ 0.13	Pass
(2441MHz)	Peak DEVM	0.14	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	-0.01	-75 kHz ≤ ωi ≤ +75 kHz	Pass
TT' 1	$(\omega i + \omega 0)(kHz)$	-0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
High operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.09	RMS DEVM ≤ 0.13	Pass
(2480MHz)	Peak DEVM	0.20	DEVM ≤ 0.25	Pass
	DEVM for 99%	99.98 %	Error symbols > 99 %	Pass

#### 3.3.12. Test Case: TRM/CA/13/C - EDR In-Band Spurious Emissions

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

- 1.  $PTx-26dB (f) \le PTxref -26 dB for |M-N|= 1$
- 2. PTx (f)  $\leq$  20 dBm for |M-N| = 2
- 3. PTx (f)  $\leq$  40 dBm for |M-N|  $\geq$  3.

For each operating frequency exceptions in up to three bands of 1 MHz width centered on a frequency that is an integer multiple of 1 MHz are allowed. They must however comply with an absolute value of -20 dBm.

	Packet Type: 2DH5					
Test Frequency	Measurement Frequency	Ptx(f)	Limit	Verdict		
(MHz)	(MHz)	(dBm)	(dBm)			
2405	2402	-44.84	<b>≤-40</b>	Pass		
2405	2403	-36.45	≤-20	Pass		
2405	2404	-34.72	≤ 7.64 -26	Pass		
2405	2405	7.64	N/A	N/A		
2405	2406	-34.74	≤ 7.64 -26	Pass		
2405	2407	-36.9	≤-20	Pass		
2405	2408	-44.43	<b>≤-40</b>	Pass		
2405	2409	-47.68	<b>≤-40</b>	Pass		
2405	2410	-48.47	<b>≤-40</b>	Pass		
2405	2411	-47.93	<b>≤-40</b>	Pass		
2405	2412	-47.48	<b>≤-40</b>	Pass		
2405	2413	-47.1	<b>≤-40</b>	Pass		
2405	2414	-47.42	<b>≤-40</b>	Pass		
2405	2415	-47.28	<b>≤-40</b>	Pass		
2405	2416	-46.58	<b>≤-40</b>	Pass		
2405	2417	-46.4	<b>≤-40</b>	Pass		
2405	2418	-46.53	<b>≤-40</b>	Pass		
2405	2419	-46.78	<b>≤-40</b>	Pass		
2405	2420	-46.95	<b>≤-40</b>	Pass		
2405	2421	-46.63	<b>≤-40</b>	Pass		
2405	2422	-47.15	<b>≤-40</b>	Pass		
2405	2423	-46.91	<b>≤-40</b>	Pass		
2405	2424	-47.01	<b>≤-40</b>	Pass		
2405	2425	-47.85	<b>≤-40</b>	Pass		
2405	2426	-47.42	<b>≤-40</b>	Pass		

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass Pass Pass Pass Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass Pass Pass Pass Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass Pass Pass Pass Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass Pass Pass Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Pass Pass Pass Pass
2405     2434     -49.46     ≤-40       2405     2435     -49.9     ≤-40	Pass Pass Pass
2405 2435 -49.9 ≤-40	Pass Pass
	Pass
2405 2436 -50.2 ≤-40	
	Pacc
2405 2437 -50.36 ≤-40	1 455
2405 2438 -50.7 ≤-40	Pass
2405 2439 -50.88 ≤-40	Pass
2405 2440 -51.36 ≤-40	Pass
2405 2441 -50.91 ≤-40	Pass
2405 2442 -51.9 ≤-40	Pass
2405 2443 -51.98 ≤-40	Pass
2405 2444 -52.3 ≤-40	Pass
2405 2445 -52.37 ≤-40	Pass
2405 2446 -52.94 ≤-40	Pass
2405 2447 -53.34 ≤-40	Pass
2405 2448 -53.58 ≤-40	Pass
2405 2449 -53.74 ≤-40	Pass
2405 2450 -54.08 ≤-40	Pass
2405 2451 -54.12 ≤-40	Pass
2405 2452 -54.37 ≤-40	Pass
2405 2453 -54.59 ≤-40	Pass
2405 2454 -54.76 ≤-40	Pass
2405 2455 -55.09 ≤-40	Pass
2405 2456 -55.25 ≤-40	Pass
2405 2457 -53.71 ≤-40	Pass
2405 2458 -55.17 ≤-40	Pass
2405 2459 -55.56 ≤-40	Pass
2405 2460 -55.56 ≤-40	Pass
2405 2461 -55.94 ≤-40	Pass
2405 2462 -55.88 ≤-40	Pass
2405 2463 -56 ≤-40	Pass
2405 2464 -56.16 ≤-40	

2465 2466	-56.31	<b>≤-40</b>	Pass
2466			i i
	-55.94	<b>≤-4</b> 0	Pass
2467	-55.83	<b>≤-40</b>	Pass
2468	-56.32	<b>≤-40</b>	Pass
2469	-56.11	<b>≤-40</b>	Pass
2470	-56.01	<b>≤-40</b>	Pass
2471	-56.07	<b>≤-40</b>	Pass
2472	-56.17	<b>≤-40</b>	Pass
2473	-56.21	<b>≤-40</b>	Pass
2474	-56.31	<b>≤-40</b>	Pass
2475	-56.34	<b>≤-40</b>	Pass
2476	-56.36	<b>≤-40</b>	Pass
2477	-56.07	<b>≤-40</b>	Pass
2478	-56.02	<b>≤-40</b>	Pass
2479	-56.44	<b>≤-40</b>	Pass
2480	-55.91	<b>≤-40</b>	Pass
2402	-52.17	<b>≤-40</b>	Pass
2403	-51.83	<b>≤-40</b>	Pass
2404	-50.94	<b>≤-40</b>	Pass
2405	-51.31	<b>≤-40</b>	Pass
2406	-50.73	<b>≤-40</b>	Pass
2407	-50.72	<b>≤-40</b>	Pass
2408	-50.24	<b>≤-40</b>	Pass
2409	-49.91	<b>≤-40</b>	Pass
2410	-49.68	<b>≤-40</b>	Pass
2411	-49.21	<b>≤-40</b>	Pass
2412	-49.33	<b>≤-40</b>	Pass
2413	-48.75	<b>≤-40</b>	Pass
2414	-48.42	<b>≤-40</b>	Pass
2415	-48.31	<b>≤-40</b>	Pass
2416	-48.29	<b>≤-4</b> 0	Pass
2417	-47.93	<b>≤-40</b>	Pass
2418	-47.9	<b>≤-40</b>	Pass
2419	-47.49	<b>≤-40</b>	Pass
2420	-47.46	<b>≤-40</b>	Pass
2421	-47.59	<b>≤-40</b>	Pass
2422	-47.09	<b>≤-40</b>	Pass
2423	-46.99	<b>≤-40</b>	Pass
	2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2478 2479 2480 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421	2468       -56.32         2469       -56.11         2470       -56.01         2471       -56.07         2472       -56.17         2473       -56.21         2474       -56.31         2475       -56.34         2476       -56.36         2477       -56.07         2478       -56.02         2479       -56.44         2480       -55.91         2402       -52.17         2403       -51.83         2404       -50.94         2405       -51.31         2406       -50.73         2407       -50.72         2408       -50.24         2409       -49.91         2410       -49.68         2411       -49.68         2411       -49.33         2412       -49.33         2413       -48.75         2414       -48.42         2415       -48.31         2416       -48.29         2417       -47.93         2418       -47.9         2419       -47.46         2421       -47.59         242	2468       -56.32       ≤-40         2469       -56.11       ≤-40         2470       -56.07       ≤-40         2471       -56.07       ≤-40         2472       -56.17       ≤-40         2473       -56.21       ≤-40         2474       -56.31       ≤-40         2475       -56.34       ≤-40         2476       -56.36       ≤-40         2477       -56.07       ≤-40         2478       -56.02       ≤-40         2479       -56.44       ≤-40         2480       -55.91       ≤-40         2402       -52.17       ≤-40         2403       -51.83       ≤-40         2404       -50.94       ≤-40         2405       -51.31       ≤-40         2406       -50.73       ≤-40         2407       -50.72       ≤-40         2408       -50.24       ≤-40         2409       -49.91       ≤-40         2410       -49.68       ≤-40         2411       -49.21       ≤-40         2412       -49.33       ≤-40         2413       -48.75       ≤-40

2441	2424	-47.42	<b>≤-40</b>	Pass
2441	2425	-47.1	<b>≤-40</b>	Pass
2441	2426	-46.82	<b>≤-40</b>	Pass
2441	2427	-46.81	<b>≤-40</b>	Pass
2441	2428	-46.52	<b>≤-40</b>	Pass
2441	2429	-46.77	<b>≤-40</b>	Pass
2441	2430	-46.95	<b>≤-40</b>	Pass
2441	2431	-46.88	<b>≤-40</b>	Pass
2441	2432	-47.04	<b>≤-40</b>	Pass
2441	2433	-48.03	<b>≤-40</b>	Pass
2441	2434	-47.66	<b>≤-40</b>	Pass
2441	2435	-48.39	<b>≤-40</b>	Pass
2441	2436	-47.47	<b>≤-40</b>	Pass
2441	2437	-47.31	<b>≤-40</b>	Pass
2441	2438	-45.27	<b>≤-40</b>	Pass
2441	2439	-37.1	<b>≤-20</b>	Pass
2441	2440	-36	≤ 7.19 <b>-</b> 26	Pass
2441	2441	7.19	N/A	N/A
2441	2442	-36.17	≤ 7.19 <b>-</b> 26	Pass
2441	2443	-36.75	<b>≤-20</b>	Pass
2441	2444	-44.56	<b>≤-40</b>	Pass
2441	2445	-47.14	<b>≤-40</b>	Pass
2441	2446	-47.73	<b>≤-40</b>	Pass
2441	2447	-48.33	<b>≤-40</b>	Pass
2441	2448	-48.25	<b>≤-40</b>	Pass
2441	2449	-47.74	<b>≤-40</b>	Pass
2441	2450	-47.13	<b>≤-40</b>	Pass
2441	2451	-47.21	<b>≤-40</b>	Pass
2441	2452	-47.11	<b>≤-40</b>	Pass
2441	2453	-46.92	<b>≤-40</b>	Pass
2441	2454	-46.98	<b>≤-40</b>	Pass
2441	2455	-47.16	<b>≤-40</b>	Pass
2441	2456	-47.01	<b>≤-40</b>	Pass
2441	2457	-47.4	<b>≤-40</b>	Pass
2441	2458	-47.11	<b>≤-40</b>	Pass
2441	2459	-47.43	<b>≤-40</b>	Pass
2441	2460	-47.55	<b>≤-40</b>	Pass
2441	2461	-47.89	<b>≤-40</b>	Pass

2441	2462	-47.69	<b>≤-40</b>	Pass
2441	2463	-48.28	<b>≤-40</b>	Pass
2441	2464	-48.67	<b>≤-40</b>	Pass
2441	2465	-48.31	<b>≤-40</b>	Pass
2441	2466	-48.76	<b>≤-40</b>	Pass
2441	2467	-49.06	<b>≤-40</b>	Pass
2441	2468	-49.12	<b>≤-40</b>	Pass
2441	2469	-49.61	<b>≤-40</b>	Pass
2441	2470	-49.58	<b>≤-40</b>	Pass
2441	2471	-49.95	<b>≤-40</b>	Pass
2441	2472	-50.73	<b>≤-40</b>	Pass
2441	2473	-50.42	<b>≤-40</b>	Pass
2441	2474	-50.86	<b>≤-40</b>	Pass
2441	2475	-50.91	<b>≤-40</b>	Pass
2441	2476	-51.55	<b>≤-40</b>	Pass
2441	2477	-51.79	<b>≤-40</b>	Pass
2441	2478	-52.33	<b>≤-40</b>	Pass
2441	2479	-52.31	<b>≤-40</b>	Pass
2441	2480	-52.58	<b>≤-40</b>	Pass
2477	2402	-56.45	<b>≤-40</b>	Pass
2477	2403	-56.52	<b>≤-40</b>	Pass
2477	2404	-56.32	<b>≤-40</b>	Pass
2477	2405	-56.75	<b>≤-40</b>	Pass
2477	2406	-56.31	<b>≤-40</b>	Pass
2477	2407	-56.77	<b>≤-40</b>	Pass
2477	2408	-56.86	<b>≤-40</b>	Pass
2477	2409	-56.55	<b>≤-40</b>	Pass
2477	2410	-56.38	<b>≤-40</b>	Pass
2477	2411	-56.37	<b>≤-40</b>	Pass
2477	2412	-56.25	<b>≤-40</b>	Pass
2477	2413	-56.43	≤-40	Pass
2477	2414	-56.57	<b>≤-40</b>	Pass
2477	2415	-56.41	<b>≤-40</b>	Pass
2477	2416	-56.51	≤-40	Pass
2477	2417	-56.54	<b>≤-40</b>	Pass
2477	2418	-56.01	<b>≤-40</b>	Pass
2477	2419	-56.36	≤-40	Pass
2477	2420	-56	<b>≤-40</b>	Pass

2477	2421	-56.28	<b>≤-40</b>	Pass
2477	2422	-56.06	<b>≤-40</b>	Pass
2477	2423	-55.83	<b>≤-40</b>	Pass
2477	2424	-55.65	<b>≤-40</b>	Pass
2477	2425	-55.16	<b>≤-40</b>	Pass
2477	2426	-55.06	<b>≤-40</b>	Pass
2477	2427	-55.05	<b>≤-40</b>	Pass
2477	2428	-54.98	<b>≤-40</b>	Pass
2477	2429	-54.69	≤-40	Pass
2477	2430	-54.13	<b>≤-40</b>	Pass
2477	2431	-54.13	<b>≤-40</b>	Pass
2477	2432	-54.1	<b>≤-40</b>	Pass
2477	2433	-53.79	<b>≤-40</b>	Pass
2477	2434	-53.33	<b>≤-40</b>	Pass
2477	2435	-52.99	<b>≤-40</b>	Pass
2477	2436	-53.32	<b>≤-40</b>	Pass
2477	2437	-52.7	<b>≤-40</b>	Pass
2477	2438	-52.21	<b>≤-40</b>	Pass
2477	2439	-52.28	<b>≤-40</b>	Pass
2477	2440	-51.95	<b>≤-40</b>	Pass
2477	2441	-51.37	<b>≤-40</b>	Pass
2477	2442	-51.42	<b>≤-40</b>	Pass
2477	2443	-51.01	<b>≤-40</b>	Pass
2477	2444	-50.73	<b>≤-40</b>	Pass
2477	2445	-50.42	<b>≤-40</b>	Pass
2477	2446	-49.78	<b>≤-40</b>	Pass
2477	2447	-49.64	<b>≤-40</b>	Pass
2477	2448	-49.67	≤-40	Pass
2477	2449	-49.03	<b>≤-40</b>	Pass
2477	2450	-49.01	<b>≤-40</b>	Pass
2477	2451	-48.88	<b>≤-40</b>	Pass
2477	2452	-48.96	≤-40	Pass
2477	2453	-48.29	<b>≤-40</b>	Pass
2477	2454	-48.2	<b>≤-40</b>	Pass
2477	2455	-47.89	≤-40	Pass
2477	2456	-47.9	≤-40	Pass
2477	2457	-48	≤-40	Pass
2477	2458	-47.43	<b>≤-40</b>	Pass

2477	2459	-47.74	<b>≤-40</b>	Pass
2477	2460	-47.84	<b>≤-40</b>	Pass
2477	2461	-47.54	<b>≤-40</b>	Pass
2477	2462	-47.11	<b>≤-40</b>	Pass
2477	2463	-47.17	<b>≤-40</b>	Pass
2477	2464	-47.17	<b>≤-40</b>	Pass
2477	2465	-47.29	<b>≤-40</b>	Pass
2477	2466	-47.6	<b>≤-40</b>	Pass
2477	2467	-47.45	<b>≤-40</b>	Pass
2477	2468	-47.33	<b>≤-40</b>	Pass
2477	2469	-48.26	<b>≤-40</b>	Pass
2477	2470	-48.09	<b>≤-40</b>	Pass
2477	2471	-48.57	<b>≤-40</b>	Pass
2477	2472	-48.43	<b>≤-40</b>	Pass
2477	2473	-48.09	<b>≤-40</b>	Pass
2477	2474	-45.56	<b>≤-40</b>	Pass
2477	2475	-38.68	<b>≤-20</b>	Pass
2477	2476	-35.17	≤ 6.51 <b>-</b> 26	Pass
2477	2477	6.51	N/A	N/A
2477	2478	-36.07	≤ 6.51 <b>-</b> 26	Pass
2477	2479	-38.16	<b>≤-20</b>	Pass
2477	2480	-45.36	<b>≤-40</b>	Pass
	Packet Type:	3DH5		•
Test Frequency	Measurement Frequency	Ptx(f)	Limit	Verdict
(MHz)	(MHz)	(dBm)	(dBm)	
2405	2402	-43.5	<b>≤-40</b>	Pass
2405	2403	-36.89	<b>≤-20</b>	Pass
2405	2404	-35.42	≤ 7.63 -26	Pass
2405	2405	7.63	N/A	N/A
2405	2406	-34.73	≤ 7.63 -26	Pass
2405	2407	-36.25	<b>≤-20</b>	Pass
2405	2408	-44.1	<b>≤-40</b>	Pass
2405	2409	-46.23	<b>≤-40</b>	Pass
2405	2410	-47.07	<b>≤-40</b>	Pass
2405	2411	-47.77	<b>≤-40</b>	Pass
2405	2412	-47.53	<b>≤-40</b>	Pass
2405	2413	-47.41	≤-40	Pass
2405	2414	-47.12	≤-40	Pass

2405	2415	-46.84	<b>≤-40</b>	Pass
2405	2416	-46.76	<b>≤-40</b>	Pass
2405	2417	-46.79	<b>≤-40</b>	Pass
2405	2418	-47.17	<b>≤-40</b>	Pass
2405	2419	-46.74	<b>≤-40</b>	Pass
2405	2420	-46.95	<b>≤-40</b>	Pass
2405	2421	-46.95	<b>≤-40</b>	Pass
2405	2422	-47.08	<b>≤-40</b>	Pass
2405	2423	-47.03	<b>≤-40</b>	Pass
2405	2424	-46.48	<b>≤-40</b>	Pass
2405	2425	-47.43	<b>≤-40</b>	Pass
2405	2426	-47.6	<b>≤-40</b>	Pass
2405	2427	-47.49	<b>≤-40</b>	Pass
2405	2428	-47.81	<b>≤-40</b>	Pass
2405	2429	-48.28	<b>≤-40</b>	Pass
2405	2430	-48.48	<b>≤-40</b>	Pass
2405	2431	-48.72	<b>≤-40</b>	Pass
2405	2432	-49.05	<b>≤-40</b>	Pass
2405	2433	-49.21	<b>≤-40</b>	Pass
2405	2434	-49.26	<b>≤-40</b>	Pass
2405	2435	-49.68	<b>≤-40</b>	Pass
2405	2436	-50.3	<b>≤-40</b>	Pass
2405	2437	-50.56	<b>≤-40</b>	Pass
2405	2438	-50.48	<b>≤-40</b>	Pass
2405	2439	-50.65	<b>≤-40</b>	Pass
2405	2440	-51.07	<b>≤-40</b>	Pass
2405	2441	-51.43	<b>≤-40</b>	Pass
2405	2442	-51.83	<b>≤-40</b>	Pass
2405	2443	-52.43	<b>≤-40</b>	Pass
2405	2444	-52.3	<b>≤-40</b>	Pass
2405	2445	-52.75	<b>≤-40</b>	Pass
2405	2446	-53.11	<b>≤-40</b>	Pass
2405	2447	-53.3	<b>≤-40</b>	Pass
2405	2448	-53.45	<b>≤-40</b>	Pass
2405	2449	-53.63	<b>≤-40</b>	Pass
2405	2450	-54.14	<b>≤-40</b>	Pass
2405	2451	-54.34	<b>≤-40</b>	Pass
2405	2452	-54.59	<b>≤-40</b>	Pass
	· · · · · · · · · · · · · · · · · · ·			

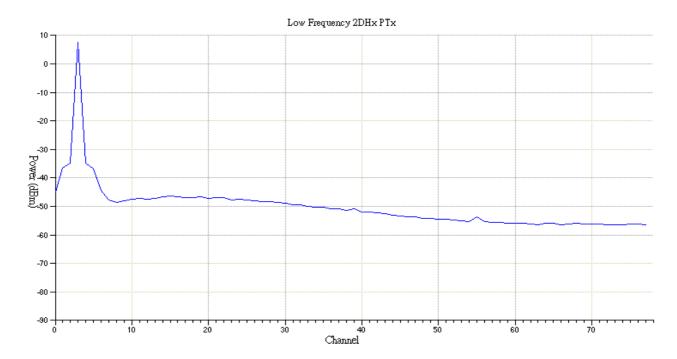
2453	-54.81	<b>≤-40</b>	Pass
2454	-54.9	<b>≤-40</b>	Pass
2455	-55.59	<b>≤-40</b>	Pass
2456	-55.02	<b>≤-40</b>	Pass
2457	-53.62	<b>≤-40</b>	Pass
2458	-55.69	<b>≤-40</b>	Pass
2459	-55.37	<b>≤-40</b>	Pass
2460	-55.94	<b>≤-40</b>	Pass
2461	-55.95	<b>≤-40</b>	Pass
2462	-55.67	<b>≤-40</b>	Pass
2463	-56.32	<b>≤-40</b>	Pass
2464	-56.12	<b>≤-40</b>	Pass
2465	-55.91	<b>≤-40</b>	Pass
2466	-55.93	<b>≤-40</b>	Pass
2467	-56.35	<b>≤-40</b>	Pass
2468	-56.51	<b>≤-40</b>	Pass
2469	-56.25	<b>≤-40</b>	Pass
2470	-55.76	<b>≤-40</b>	Pass
2471	-56.05	<b>≤-40</b>	Pass
2472	-55.97	<b>≤-40</b>	Pass
2473	-56.31	<b>≤-40</b>	Pass
2474	-56.24	<b>≤-40</b>	Pass
2475	-56.23	<b>≤-40</b>	Pass
2476	-55.98	<b>≤-40</b>	Pass
2477	-55.88	<b>≤-4</b> 0	Pass
2478	-56.13	<b>≤-40</b>	Pass
2479	-56.2	<b>≤-40</b>	Pass
2480	-56.46	<b>≤-40</b>	Pass
2402	-51.82	<b>≤-4</b> 0	Pass
2403	-51.79	<b>≤-40</b>	Pass
2404	-51.37	<b>≤-4</b> 0	Pass
2405	-50.62	<b>≤-40</b>	Pass
2406	-50.61	<b>≤-40</b>	Pass
2407	-50.66	<b>≤-40</b>	Pass
2408	-50.53	<b>≤-40</b>	Pass
2409	-50.01	<b>≤-40</b>	Pass
2410	-49.57	<b>≤-40</b>	Pass
2411	-49.08	<b>≤-40</b>	Pass
	2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2478 2476 2477 2478 2479 2480 2402 2403 2404 2405 2406 2407 2408 2409 2410	2454       -54.9         2455       -55.59         2456       -55.02         2457       -53.62         2458       -55.69         2459       -55.37         2460       -55.94         2461       -55.95         2462       -55.67         2463       -56.32         2464       -56.12         2465       -55.91         2466       -55.93         2467       -56.35         2468       -56.51         2469       -56.25         2470       -55.76         2471       -56.05         2472       -55.97         2473       -56.31         2474       -56.24         2475       -56.23         2476       -55.98         2477       -55.88         2479       -56.2         2480       -56.46         2402       -51.82         2403       -51.79         2404       -51.37         2405       -50.61         2407       -50.66         2408       -50.53         2409       -50.01         2410	2454       -54.9       ≤40         2455       -55.59       ≤40         2456       -55.02       ≤40         2457       -53.62       ≤40         2458       -55.69       ≤40         2459       -55.37       ≤40         2460       -55.94       ≤40         2461       -55.95       ≤40         2462       -55.67       ≤40         2463       -56.32       ≤40         2464       -56.12       ≤40         2465       -55.91       ≤40         2466       -55.93       ≤40         2467       -56.35       ≤40         2468       -56.51       ≤40         2469       -56.25       ≤40         2470       -55.76       ≤40         2471       -56.05       ≤40         2472       -55.97       ≤40         2473       -56.31       ≤40         2474       -56.24       ≤40         2475       -56.23       ≤40         2476       -55.98       ≤40         2477       -55.88       ≤40         2478       -56.2       ≤40         2479       <

2441	2412	-49.26	<b>≤-40</b>	Pass
2441	2413	-48.75	<b>≤-40</b>	Pass
2441	2414	-48.71	<b>≤-40</b>	Pass
2441	2415	-48.82	<b>≤-40</b>	Pass
2441	2416	-48.38	<b>≤-40</b>	Pass
2441	2417	-48.17	<b>≤-40</b>	Pass
2441	2418	-47.92	<b>≤-40</b>	Pass
2441	2419	-47.49	<b>≤-40</b>	Pass
2441	2420	-47.09	<b>≤-40</b>	Pass
2441	2421	-47.5	<b>≤-40</b>	Pass
2441	2422	-47.36	<b>≤-40</b>	Pass
2441	2423	-47.12	<b>≤-40</b>	Pass
2441	2424	-47.1	<b>≤-40</b>	Pass
2441	2425	-46.86	<b>≤-40</b>	Pass
2441	2426	-46.56	<b>≤-40</b>	Pass
2441	2427	-46.91	<b>≤-40</b>	Pass
2441	2428	-46.73	<b>≤-40</b>	Pass
2441	2429	-46.66	<b>≤-40</b>	Pass
2441	2430	-46.65	<b>≤-40</b>	Pass
2441	2431	-46.84	<b>≤-40</b>	Pass
2441	2432	-47.29	<b>≤-40</b>	Pass
2441	2433	-47.53	<b>≤-40</b>	Pass
2441	2434	-47.48	<b>≤-40</b>	Pass
2441	2435	-47.89	<b>≤-40</b>	Pass
2441	2436	-47.41	<b>≤-4</b> 0	Pass
2441	2437	-46.46	<b>≤-40</b>	Pass
2441	2438	-43.59	<b>≤-40</b>	Pass
2441	2439	-37.11	≤-20	Pass
2441	2440	-36.9	≤ 7.28 <b>-</b> 26	Pass
2441	2441	7.28	N/A	N/A
2441	2442	-36.01	≤ 7.28 -26	Pass
2441	2443	-36.47	<b>≤-20</b>	Pass
2441	2444	-44.44	<b>≤-40</b>	Pass
2441	2445	-46.41	<b>≤-40</b>	Pass
2441	2446	-46.7	<b>≤-40</b>	Pass
2441	2447	-47.84	<b>≤-40</b>	Pass
2441	2448	-47.79	<b>≤-40</b>	Pass
2441	2449	-47.6	<b>≤-40</b>	Pass

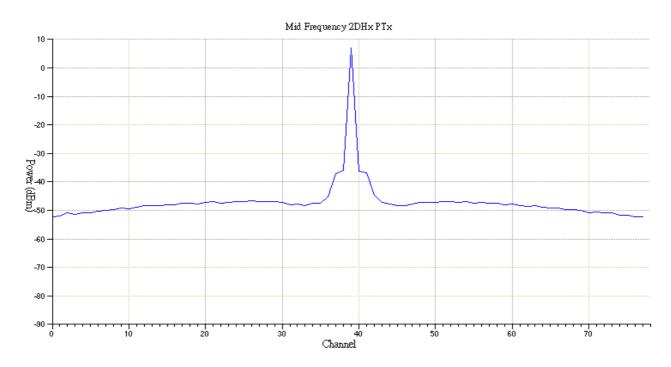
2441	2450	-47.61	<b>≤-40</b>	Pass
2441	2451	-47.51	<b>≤-40</b>	Pass
2441	2452	-46.79	<b>≤-40</b>	Pass
2441	2453	-46.71	<b>≤-40</b>	Pass
2441	2454	-46.89	<b>≤-40</b>	Pass
2441	2455	-47.11	<b>≤-40</b>	Pass
2441	2456	-47.1	<b>≤-40</b>	Pass
2441	2457	-47.47	<b>≤-40</b>	Pass
2441	2458	-47.41	<b>≤-40</b>	Pass
2441	2459	-47.81	<b>≤-40</b>	Pass
2441	2460	-46.98	<b>≤-40</b>	Pass
2441	2461	-48.06	<b>≤-40</b>	Pass
2441	2462	-47.81	<b>≤-40</b>	Pass
2441	2463	-47.74	<b>≤-40</b>	Pass
2441	2464	-48.19	<b>≤-40</b>	Pass
2441	2465	-48.5	<b>≤-40</b>	Pass
2441	2466	-48.45	<b>≤-40</b>	Pass
2441	2467	-49.05	<b>≤-40</b>	Pass
2441	2468	-49.14	<b>≤-40</b>	Pass
2441	2469	-49.47	<b>≤-40</b>	Pass
2441	2470	-49.77	<b>≤-40</b>	Pass
2441	2471	-50.17	<b>≤-40</b>	Pass
2441	2472	-50.45	<b>≤-40</b>	Pass
2441	2473	-50.93	<b>≤-40</b>	Pass
2441	2474	-50.95	<b>≤-40</b>	Pass
2441	2475	-51.41	<b>≤-40</b>	Pass
2441	2476	-51.58	<b>≤-40</b>	Pass
2441	2477	-51.68	<b>≤-40</b>	Pass
2441	2478	-51.61	<b>≤-40</b>	Pass
2441	2479	-52.35	<b>≤-40</b>	Pass
2441	2480	-52.89	<b>≤-40</b>	Pass
2477	2402	-56.36	<b>≤-40</b>	Pass
2477	2403	-56.45	<b>≤-40</b>	Pass
2477	2404	-56.47	<b>≤-40</b>	Pass
2477	2405	-56.75	<b>≤-40</b>	Pass
2477	2406	-56.57	<b>≤-40</b>	Pass
2477	2407	-56.78	<b>≤-40</b>	Pass
2477	2408	-56.49	<b>≤-40</b>	Pass

2477	2409	-56.55	<b>≤-40</b>	Pass
2477	2410	-56.22	<b>≤-40</b>	Pass
2477	2411	-56.33	<b>≤-40</b>	Pass
2477	2412	-56.52	<b>≤-40</b>	Pass
2477	2413	-55.74	<b>≤-40</b>	Pass
2477	2414	-56.76	<b>≤-40</b>	Pass
2477	2415	-56.36	<b>≤-40</b>	Pass
2477	2416	-56.57	<b>≤-40</b>	Pass
2477	2417	-56.32	<b>≤-40</b>	Pass
2477	2418	-56.25	<b>≤-40</b>	Pass
2477	2419	-56.08	<b>≤-40</b>	Pass
2477	2420	-56.01	<b>≤-40</b>	Pass
2477	2421	-56.24	<b>≤-40</b>	Pass
2477	2422	-55.46	<b>≤-40</b>	Pass
2477	2423	-55.74	<b>≤-40</b>	Pass
2477	2424	-55.66	<b>≤-40</b>	Pass
2477	2425	-55.13	<b>≤-40</b>	Pass
2477	2426	-55.29	<b>≤-40</b>	Pass
2477	2427	-55.24	<b>≤-40</b>	Pass
2477	2428	-54.99	<b>≤-40</b>	Pass
2477	2429	-54.78	<b>≤-40</b>	Pass
2477	2430	-54.76	<b>≤-40</b>	Pass
2477	2431	-54.25	<b>≤-40</b>	Pass
2477	2432	-53.99	<b>≤-40</b>	Pass
2477	2433	-53.9	<b>≤-40</b>	Pass
2477	2434	-53.43	<b>≤-40</b>	Pass
2477	2435	-53.43	<b>≤-40</b>	Pass
2477	2436	-53.05	<b>≤-40</b>	Pass
2477	2437	-52.44	<b>≤-40</b>	Pass
2477	2438	-52.13	<b>≤-40</b>	Pass
2477	2439	-51.7	<b>≤-40</b>	Pass
2477	2440	-51.71	<b>≤-40</b>	Pass
2477	2441	-51.39	<b>≤-40</b>	Pass
2477	2442	-51.27	<b>≤-40</b>	Pass
2477	2443	-50.83	<b>≤-40</b>	Pass
2477	2444	-50.8	<b>≤-40</b>	Pass
2477	2445	-50.46	<b>≤-40</b>	Pass
2477	2446	-50.04	<b>≤-40</b>	Pass
L			•	<u> </u>

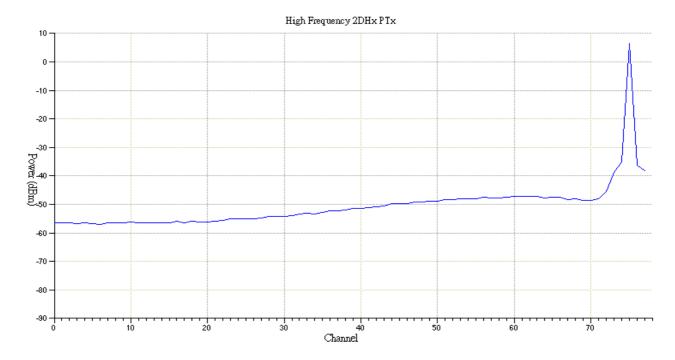
2477	2447	-49.64	<b>≤-40</b>	Pass
2477	2448	-49.7	<b>≤-40</b>	Pass
2477	2449	-49.33	<b>≤-40</b>	Pass
2477	2450	-49.06	<b>≤-40</b>	Pass
2477	2451	-49.17	<b>≤-40</b>	Pass
2477	2452	-48.94	<b>≤-40</b>	Pass
2477	2453	-48.26	<b>≤-40</b>	Pass
2477	2454	-48.05	<b>≤-40</b>	Pass
2477	2455	-47.73	<b>≤-40</b>	Pass
2477	2456	-47.54	<b>≤-40</b>	Pass
2477	2457	-48.03	≤-40	Pass
2477	2458	-47.52	<b>≤-40</b>	Pass
2477	2459	-47.55	<b>≤-40</b>	Pass
2477	2460	-47.69	≤-40	Pass
2477	2461	-47.54	<b>≤-40</b>	Pass
2477	2462	-47.15	<b>≤-40</b>	Pass
2477	2463	-47.18	≤-40	Pass
2477	2464	-47.45	<b>≤-40</b>	Pass
2477	2465	-47.32	<b>≤-40</b>	Pass
2477	2466	-47.23	<b>≤-40</b>	Pass
2477	2467	-47.22	<b>≤-40</b>	Pass
2477	2468	-47.69	<b>≤-40</b>	Pass
2477	2469	-48.01	<b>≤-40</b>	Pass
2477	2470	-48.26	<b>≤-40</b>	Pass
2477	2471	-47.84	<b>≤-40</b>	Pass
2477	2472	-48.32	<b>≤-40</b>	Pass
2477	2473	-47.39	<b>≤-40</b>	Pass
2477	2474	-44.43	<b>≤-40</b>	Pass
2477	2475	-39.34	<b>≤-20</b>	Pass
2477	2476	-37.82	≤ 6.4 -26	Pass
2477	2477	6.4	N/A	N/A
2477	2478	-36.95	≤ 6.4 -26	Pass
2477	2479	-38.39	≤-20	Pass
2477	2480	-45.02	<b>≤-40</b>	Pass



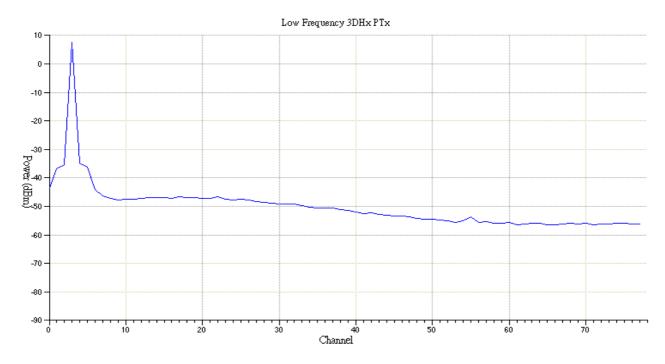
EDR In Band Spurious Emissions - 2DH5 Low



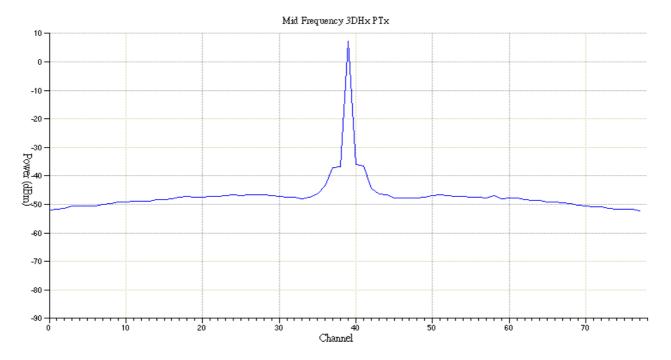
EDR In Band Spurious Emissions - 2DH5 Mid



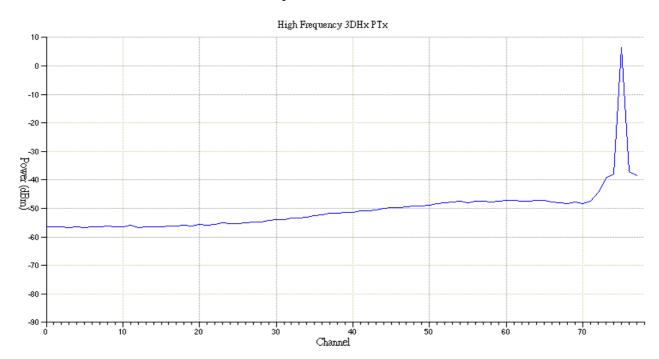
EDR In Band Spurious Emissions - 2DH5 High



EDR\_In\_Band\_Spurious\_Emissions - 3DH5 Low



EDR In Band Spurious Emissions - 3DH5 Mid



EDR In Band Spurious Emissions - 3DH5 High

## 3.3.13. Test Case: RCV/CA/01/C - Sensitivity - Single Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.)

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass

#### 3.3.14. Test Case: RCV/CA/02/C - Sensitivity - Multi-Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass

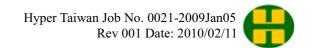
## 3.3.15. Test Case: RCV/CA/07/C - EDR Sensitivity

#### **Expected Outcome:**

All values as measured must fulfill the following conditions at low, medium and high frequencies:

1.Either BER < 0.007% after 1,600,000 bits or BER < 0.01% after 16,000,000 bit

Packet Type	Test Frequency	BER	Limit	Verdict
	(MHz)	(%)	(%)	
	2402	0	≤0.007	Pass
2DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass
	2402	0	≤0.007	Pass
3DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass



# 3.4. Test Case List for Low Temperature High Voltage

### 3.4.1. RF Description

EUT Power Class

EUT Antenna Gain

Class 1

2.5 dBi

Low Temperature High Voltage

EUT To Spectrum Loss (Low)

EUT To Spectrum Loss (Mid)

EUT To Spectrum Loss (High)

9.61

EUT To Spectrum Loss (High)

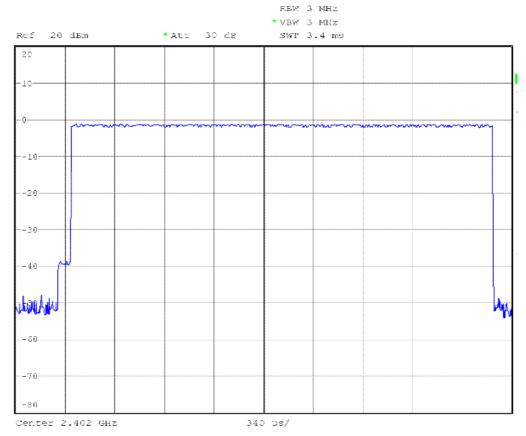
## 3.4.2. Test Case: TRM/CA/01/C - Output Power

#### **Expected Outcome:**

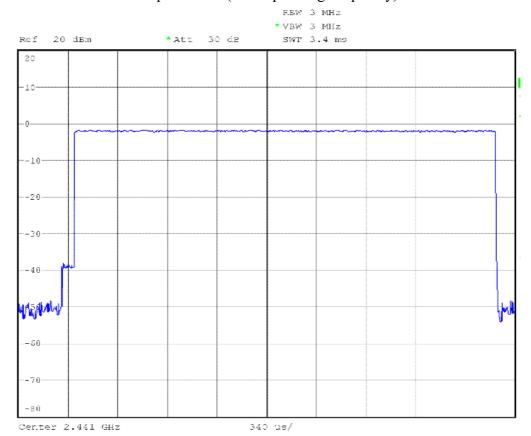
All values as measured must fulfill the following conditions:

- 1. P av < 100 mW (20 dBm) EIRP
- 2. P pk < 200mW (23 dBm) EIRP
- 3. If the EUT is a power class 1 equipment :P av > 1mW (0dBm)
- 4. If the EUT is a power class 2 equipment :0.25mW (-6 dBm) < P av < 2.5mW (4dBm)
- 5. If the EUT is a power class 3 equipment :P av < 1mW (0dBm)

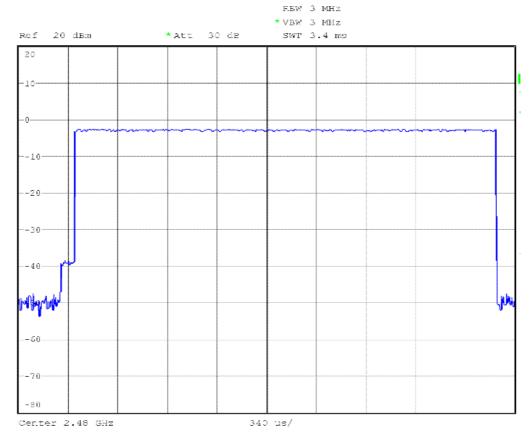
Test Frequency	Item	Value(mW)	Verdict
I am an austin a	Peak Power	6.71	N/A
Low operating	Average Power	6.29	Pass
frequency (2402MHz)	Peak Power (EIRP)	11.94	Pass
(2402MHZ)	Average Power (EIRP)	11.18	Pass
Mid an austin a	Peak Power	5.82	N/A
Mid operating	Average Power	5.61	Pass
frequency (2441MHz)	Peak Power (EIRP)	10.35	Pass
(2441WI11Z)	Average Power (EIRP)	9.98	Pass
IIi ah an anatin a	Peak Power	4.97	N/A
High operating	Average Power	4.76	Pass
frequency (2480MHz)	Peak Power (EIRP)	8.83	Pass
(2400WI11Z)	Average Power (EIRP)	8.47	Pass



#### Output Power (Low operating frequency)



Output Power (Mid operating frequency)



Output Power (High operating frequency)

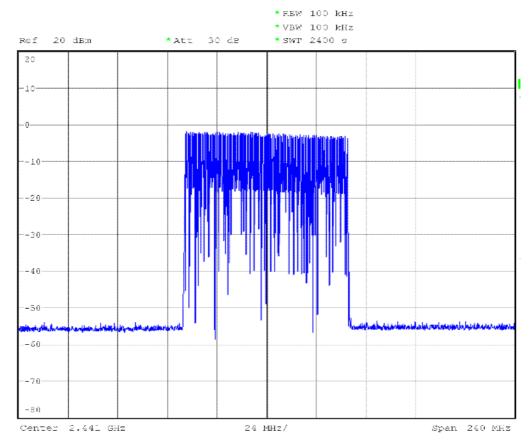
# 3.4.3. Test Case: TRM/CA/02/C - Power Density

## Expected Outcome:

All values as measured must fulfill the following conditions:

1. Power Density < 100 mW (20dBm) per 100 kHz EIRP

Max Frequency	Peak Power	Power Density	Limit	Verdict
(MHz)	(mW)	(mW/100KHz)	(mW/100KHz)	
2402.00 MHz	5.70	9.10	<100	Pass



#### Power Density (Step1)

RBW 100 kHz

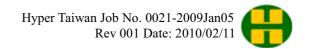
\*VBW 100 kHz

Ref 20 dbm \*Att 30 de SWT 60 9

20
-10
-10
-20
-30
-50
-70
-80

Center 2.402 GHz 6 s/

Power Density (Step2)



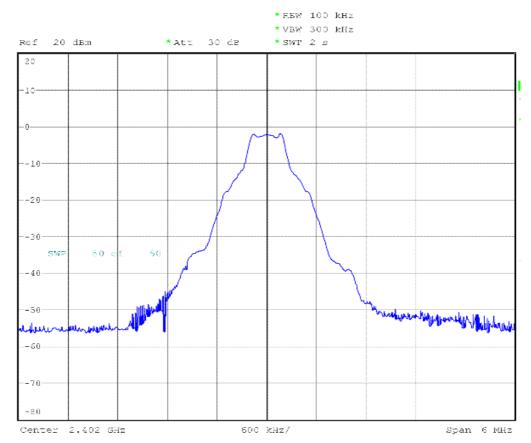
# 3.4.4. Test Case: TRM/CA/04/C - TX Output Spectrum - Frequency Range

### **Expected Outcome:**

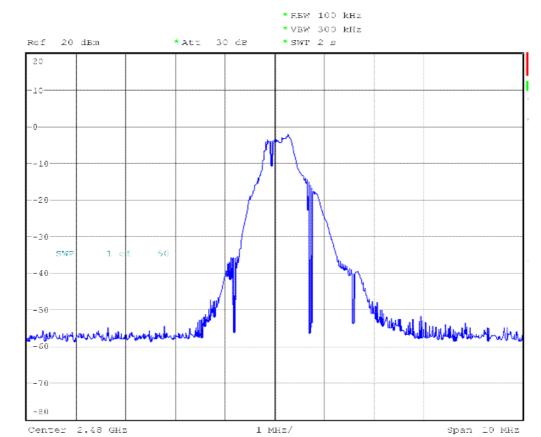
All values as measured must fulfill the following conditions:

1. fL, fH within the allowed frequency band :2.4 GHz – 2.4835 GHz

Free	quency (MHz)	Limit(MHz)	Verdict
Lowest(fL)	2400.98	fL>2400.0	Pass
Highest(fH)	2478.42	fH <2483.5	Pass



TX Output Spectrum – Frequency range (fL)



TX Output Spectrum – Frequency range (fH)

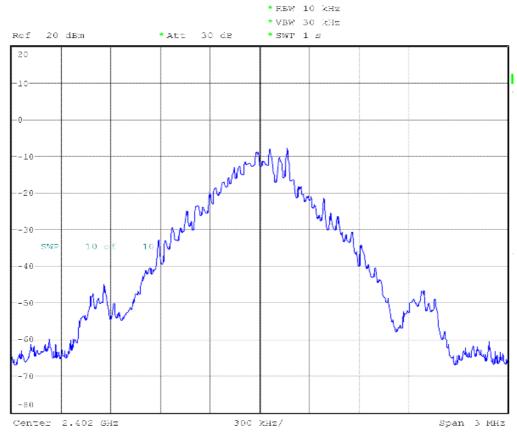
# 3.4.5. Test Case: TRM/CA/05/C - TX Output Spectrum - 20 dB Bandwidth

#### **Expected Outcome:**

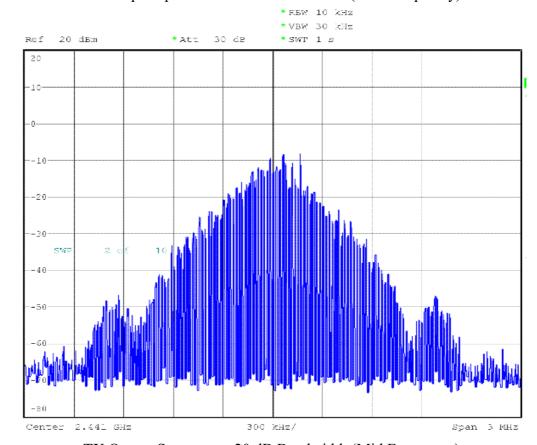
All values as measured must fulfill the following conditions:

1. The Transmit spectrum shall fulfill the following mask : $\Delta f = |fH - fL| \le 1.0 \text{ MHz}$ 

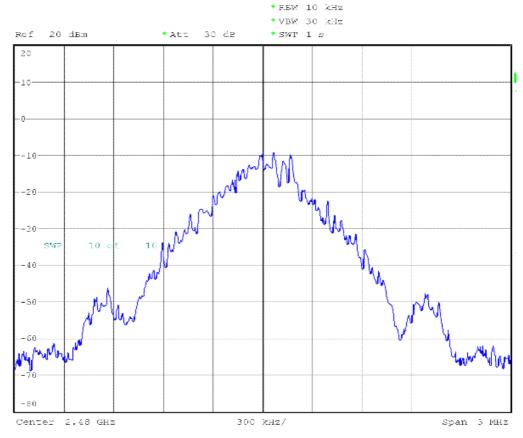
Test Frequency		fL	fH	$\Delta f =   fH - fL  $	Limit	Verdict
(MHz)		(MHz)	(MHz)	(MHz)		
Low Frequency	2402	2402.05	2402.98	0.93	≤1.0	Pass
Mid Frequency	2441	2441.49	2441.51	0.02	≤1.0	Pass
High Frequency	2480	2480.10	2480.87	0.76	≤1.0	Pass



TX Output Spectrum – 20 dB Bandwidth (Low Frequency)



TX Output Spectrum – 20 dB Bandwidth (Mid Frequency)



TX Output Spectrum – 20 dB Bandwidth (High Frequency)

## 3.4.6. Test Case: TRM/CA/06/C - TX Output Spectrum - Adjacent Channel Power

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

For each operating frequency exceptions in up to three bands of 1 MHz width centered on a frequency which is an integer multiple of 1 MHz are allowed. They must however comply with an absolute value of –20 dBm.

1. Ptx (f)  $\leq$  - 20 dBm for | M-N | = 2

2. Ptx (f)  $\leq$  - 40 dBm for | M-N |  $\geq$  3

Test Frequency	Adjacent Channel	Ptx(f)	Limit	Verdict
(MHz)	Frequency	(dBm)	(dBm)	
	(MHz)			
I F	2402	-55.35	≤ <b>-</b> 40	Pass
	2403	-51.61	≤ -20	Pass
Low Frequency	2404	-17.96	N/A	N/A
(2402 MHz)	2405	8.12	N/A	N/A
	2406	-18.12	N/A	N/A

2407         -51.86         ≤ -20         Pass           2408         -54.64         ≤ -40         Pass           2409         -55.93         ≤ -40         Pass           2410         -56.10         ≤ -40         Pass           2411         -56.23         ≤ -40         Pass           2412         -55.66         ≤ -40         Pass           2413         -55.45         ≤ -40         Pass           2414         -55.31         ≤ -40         Pass           2415         -55.45         ≤ -40         Pass           2416         -55.09         ≤ -40         Pass           2417         -55.10         ≤ -40         Pass           2418         -55.40         ≤ -40         Pass           2419         -55.26         ≤ -40         Pass           2420         -55.42         ≤ -40         Pass           2421         -55.16         ≤ -40         Pass           2422         -55.73         ≤ -40         Pass           2423         -55.61         ≤ -40         Pass           2424         -55.55         ≤ -40         Pass           2425         -55.69				
2409       -55.93       ≤ -40       Pass         2410       -56.10       ≤ -40       Pass         2411       -56.23       ≤ -40       Pass         2412       -55.66       ≤ -40       Pass         2413       -55.45       ≤ -40       Pass         2414       -55.31       ≤ -40       Pass         2415       -55.45       ≤ -40       Pass         2416       -55.09       ≤ -40       Pass         2417       -55.10       ≤ -40       Pass         2418       -55.40       ≤ -40       Pass         2419       -55.26       ≤ -40       Pass         2420       -55.42       ≤ -40       Pass         2421       -55.16       ≤ -40       Pass         2422       -55.73       ≤ -40       Pass         2423       -55.61       ≤ -40       Pass         2424       -55.55       ≤ -40       Pass         2425       -55.96       ≤ -40       Pass         2426       -55.69       ≤ -40       Pass         2427       -56.05       ≤ -40       Pass         2428       -56.35       ≤ -40       Pass	2407	-51.86	≤ -20	Pass
2410         -56.10         ≤ -40         Pass           2411         -56.23         ≤ -40         Pass           2412         -55.66         ≤ -40         Pass           2413         -55.45         ≤ -40         Pass           2414         -55.31         ≤ -40         Pass           2415         -55.45         ≤ -40         Pass           2416         -55.99         ≤ -40         Pass           2417         -55.10         ≤ -40         Pass           2418         -55.40         ≤ -40         Pass           2419         -55.26         ≤ -40         Pass           2420         -55.42         ≤ -40         Pass           2421         -55.16         ≤ -40         Pass           2422         -55.73         ≤ -40         Pass           2423         -55.61         ≤ -40         Pass           2424         -55.55         ≤ -40         Pass           2425         -55.56         ≤ -40         Pass           2426         -55.69         ≤ -40         Pass           2427         -56.05         ≤ -40         Pass           2428         -56.35	2408	-54.64	≤ <b>-</b> 40	Pass
2411       -56.23       ≤ -40       Pass         2412       -55.66       ≤ -40       Pass         2413       -55.45       ≤ -40       Pass         2414       -55.31       ≤ -40       Pass         2415       -55.45       ≤ -40       Pass         2416       -55.09       ≤ -40       Pass         2417       -55.10       ≤ -40       Pass         2418       -55.40       ≤ -40       Pass         2419       -55.26       ≤ -40       Pass         2420       -55.42       ≤ -40       Pass         2421       -55.16       ≤ -40       Pass         2421       -55.516       ≤ -40       Pass         2422       -55.73       ≤ -40       Pass         2423       -55.55       ≤ -40       Pass         2424       -55.55       ≤ -40       Pass         2425       -55.96       ≤ -40       Pass         2426       -55.69       ≤ -40       Pass         2427       -56.05       ≤ -40       Pass         2428       -56.35       ≤ -40       Pass         2429       -56.81       ≤ -40       Pass	2409	-55.93	≤ <b>-</b> 40	Pass
2412       -55.66       ≤ -40       Pass         2413       -55.45       ≤ -40       Pass         2414       -55.31       ≤ -40       Pass         2415       -55.45       ≤ -40       Pass         2416       -55.09       ≤ -40       Pass         2417       -55.10       ≤ -40       Pass         2418       -55.40       ≤ -40       Pass         2419       -55.26       ≤ -40       Pass         2420       -55.42       ≤ -40       Pass         2421       -55.16       ≤ -40       Pass         2422       -55.73       ≤ -40       Pass         2423       -55.61       ≤ -40       Pass         2424       -55.55       ≤ -40       Pass         2425       -55.61       ≤ -40       Pass         2426       -55.69       ≤ -40       Pass         2427       -56.05       ≤ -40       Pass         2428       -56.35       ≤ -40       Pass         2429       -56.81       ≤ -40       Pass         2430       -56.58       ≤ -40       Pass         2431       -57.99       ≤ -40       Pass	2410	-56.10	≤ <b>-</b> 40	Pass
2413         -55.45         ≤ -40         Pass           2414         -55.31         ≤ -40         Pass           2415         -55.45         ≤ -40         Pass           2416         -55.09         ≤ -40         Pass           2417         -55.10         ≤ -40         Pass           2418         -55.40         ≤ -40         Pass           2419         -55.26         ≤ -40         Pass           2420         -55.42         ≤ -40         Pass           2421         -55.16         ≤ -40         Pass           2421         -55.16         ≤ -40         Pass           2422         -55.73         ≤ -40         Pass           2423         -55.61         ≤ -40         Pass           2424         -55.55         ≤ -40         Pass           2425         -55.96         ≤ -40         Pass           2426         -55.59         ≤ -40         Pass           2427         -56.05         ≤ -40         Pass           2428         -56.35         ≤ -40         Pass           2430         -56.58         ≤ -40         Pass           2431         -57.56	2411	-56.23	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2412	-55.66	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2413	-55.45	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2414	-55.31	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2415	-55.45	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2416	-55.09	≤ <b>-</b> 40	Pass
2419       -55.26       ≤ -40       Pass         2420       -55.42       ≤ -40       Pass         2421       -55.16       ≤ -40       Pass         2422       -55.73       ≤ -40       Pass         2423       -55.61       ≤ -40       Pass         2424       -55.55       ≤ -40       Pass         2425       -55.96       ≤ -40       Pass         2426       -55.69       ≤ -40       Pass         2427       -56.05       ≤ -40       Pass         2428       -56.35       ≤ -40       Pass         2429       -56.81       ≤ -40       Pass         2430       -56.58       ≤ -40       Pass         2431       -57.09       ≤ -40       Pass         2432       -57.56       ≤ -40       Pass         2433       -57.34       ≤ -40       Pass         2434       -57.48       ≤ -40       Pass         2435       -58.07       ≤ -40       Pass         2436       -58.68       ≤ -40       Pass         2437       -58.26       ≤ -40       Pass         2439       -59.18       ≤ -40       Pass	2417	-55.10	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2418	-55.40	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2419	-55.26	≤ -40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2420	-55.42	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2421	-55.16	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2422	-55.73	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2423	-55.61	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2424	-55.55	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2425	-55.96	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2426	-55.69	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2427	-56.05	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2428	-56.35	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2429	-56.81	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2430	-56.58	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2431	-57.09	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2432	-57.56	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2433	-57.34	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2434	-57.48	≤ <b>-4</b> 0	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2435	-58.07	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2436	-58.68	≤ -40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2437	-58.26	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2438	-58.85	≤ -40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2439	-59.18	≤ <b>-</b> 40	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2440	-59.54	≤ -40	Pass
2443 -60.42 ≤ -40 Pass	2441	-59.27	≤ -40	Pass
	2442	-60.09	≤ -40	Pass
2444 -60.70 ≤-40 Pass	2443	-60.42	≤ <b>-</b> 40	Pass
	2444	-60.70	≤ -40	Pass

2445	-60.87	≤ <b>-4</b> 0	Pass
2446	-61.29	≤ <b>-</b> 40	Pass
2447	-61.56	≤ <b>-</b> 40	Pass
2448	-61.78	≤ <b>-</b> 40	Pass
2449	-62.10	≤ <b>-</b> 40	Pass
2450	-62.29	≤ <b>-</b> 40	Pass
2451	-62.61	≤ <b>-</b> 40	Pass
2452	-62.89	≤ <b>-</b> 40	Pass
2453	-63.05	≤ <b>-</b> 40	Pass
2454	-63.37	≤ <b>-</b> 40	Pass
2455	-63.48	≤ <b>-</b> 40	Pass
2456	-63.85	≤ <b>-</b> 40	Pass
2457	-61.29	≤ <b>-</b> 40	Pass
2458	-63.99	≤ <b>-</b> 40	Pass
2459	-63.98	≤ <b>-</b> 40	Pass
2460	-64.17	≤ <b>-</b> 40	Pass
2461	-64.16	≤ <b>-</b> 40	Pass
2462	-64.32	≤ <b>-</b> 40	Pass
2463	-64.40	≤ <b>-</b> 40	Pass
2464	-64.39	≤ <b>-</b> 40	Pass
2465	-64.46	≤ <b>-</b> 40	Pass
2466	-64.47	≤ <b>-</b> 40	Pass
2467	-64.39	≤ <b>-</b> 40	Pass
2468	-64.58	≤ <b>-</b> 40	Pass
2469	-64.44	≤ <b>-</b> 40	Pass
2470	-64.50	≤ <b>-</b> 40	Pass
2471	-64.27	≤ <b>-</b> 40	Pass
2472	-64.53	≤ <b>-</b> 40	Pass
2473	-64.39	≤ <b>-</b> 40	Pass
2474	-64.46	≤ <b>-</b> 40	Pass
2475	-64.57	≤ <b>-</b> 40	Pass
2476	-63.60	≤ <b>-</b> 40	Pass
2477	-44.33	≤ <b>-</b> 40	Pass
2478	-63.63	≤ <b>-</b> 40	Pass
2479	-53.90	≤ <b>-</b> 40	Pass
2480	-64.56	≤ <b>-</b> 40	Pass
2402	-60.18	≤ <b>-</b> 40	Pass
2403	-59.82	≤ <b>-</b> 40	Pass

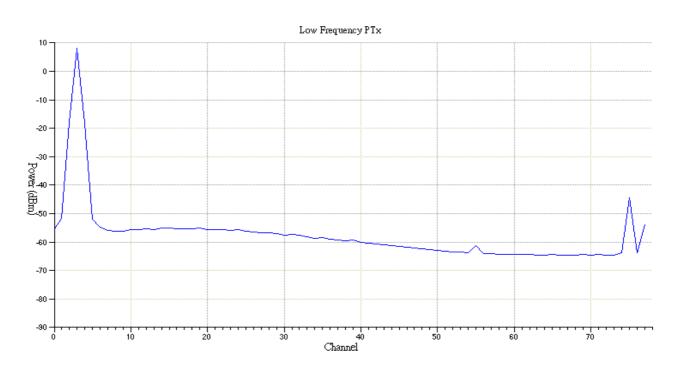
	2404	-59.51	≤ -40	Pass
	2405	-44.34	≤ -40	Pass
	2406	-58.84	≤ -40	Pass
	2407	-52.05	≤ -40	Pass
	2408	-58.33	≤ -40	Pass
	2409	-58.05	≤ -40	Pass
	2410	-58.20	≤ -40	Pass
	2411	-57.35	≤ <b>-4</b> 0	Pass
	2412	-57.26	≤ <b>-</b> 40	Pass
	2413	-57.03	≤ <b>-</b> 40	Pass
	2414	-56.83	≤ -40	Pass
	2415	-56.76	≤ -40	Pass
	2416	-56.35	≤ <b>-</b> 40	Pass
	2417	-56.18	≤ <b>-</b> 40	Pass
	2418	-56.13	≤ <b>-</b> 40	Pass
	2419	-55.74	≤ -40	Pass
	2420	-55.57	≤ -40	Pass
NC 1 E	2421	-55.51	≤ -40	Pass
Mid Frequency	2422	-55.51	≤ -40	Pass
(2441 MHz)	2423	-55.30	≤ -40	Pass
	2424	-55.21	≤ -40	Pass
	2425	-55.19	≤ -40	Pass
	2426	-54.86	≤ -40	Pass
	2427	-55.05	≤ -40	Pass
	2428	-54.94	≤ -40	Pass
	2429	-55.03	≤ -40	Pass
	2430	-55.10	≤ -40	Pass
	2431	-54.84	≤ -40	Pass
	2432	-55.43	≤ -40	Pass
	2433	-55.98	≤ -40	Pass
	2434	-55.98	≤ -40	Pass
	2435	-56.27	≤ -40	Pass
	2436	-55.45	≤ -40	Pass
	2437	-55.81	≤ -40	Pass
	2438	-55.59	≤ -40	Pass
	2439	-52.00	≤ -20	Pass
	2440	-18.29	N/A	N/A
	2441	7.94	N/A	N/A
ı.			1	1

2442	-18.12	N/A	N/A
2443	-52.00	≤ -20	Pass
2444	-55.08	≤ <b>-</b> 40	Pass
2445	-55.88	≤ <b>-</b> 40	Pass
2446	-55.70	≤ <b>-</b> 40	Pass
2447	-56.27	≤ <b>-</b> 40	Pass
2448	-56.30	≤ <b>-</b> 40	Pass
2449	-55.66	≤ <b>-</b> 40	Pass
2450	-55.49	≤ <b>-</b> 40	Pass
2451	-55.69	≤ <b>-</b> 40	Pass
2452	-55.34	≤ <b>-4</b> 0	Pass
2453	-55.23	≤ <b>-4</b> 0	Pass
2454	-55.34	≤ <b>-</b> 40	Pass
2455	-55.88	≤ <b>-4</b> 0	Pass
2456	-55.55	≤ <b>-4</b> 0	Pass
2457	-55.44	≤ <b>-4</b> 0	Pass
2458	-55.83	≤ <b>-4</b> 0	Pass
2459	-55.68	≤ <b>-4</b> 0	Pass
2460	-55.66	≤ <b>-4</b> 0	Pass
2461	-56.18	≤ <b>-4</b> 0	Pass
2462	-56.43	≤ <b>-4</b> 0	Pass
2463	-56.45	≤ <b>-</b> 40	Pass
2464	-56.59	≤ <b>-4</b> 0	Pass
2465	-57.10	≤ <b>-4</b> 0	Pass
2466	-57.00	≤ <b>-4</b> 0	Pass
2467	-57.03	≤ <b>-4</b> 0	Pass
2468	-57.62	≤ <b>-4</b> 0	Pass
2469	-57.83	≤ <b>-4</b> 0	Pass
2470	-58.06	≤ <b>-4</b> 0	Pass
2471	-58.16	≤ <b>-4</b> 0	Pass
2472	-58.71	≤ <b>-</b> 40	Pass
2473	-58.61	≤ <b>-</b> 40	Pass
2474	-59.11	≤ <b>-</b> 40	Pass
2475	-59.30	≤ <b>-</b> 40	Pass
2476	-59.66	≤ -40	Pass
2477	-60.07	≤ <b>-</b> 40	Pass
2478	-60.25	≤ <b>-</b> 40	Pass
2479	-60.49	≤ -40	Pass

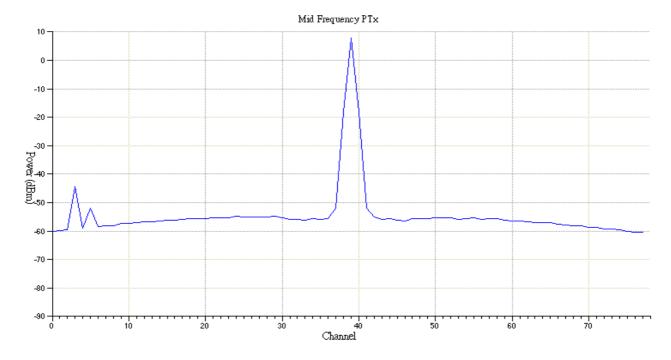
2480 2402 2403 2404 2405	-60.55 -65.00 -64.86 -63.88 -44.01	≤ -40 ≤ -40 ≤ -40	Pass Pass Pass
2403 2404	-64.86 -63.88	≤ -40	
2404	-63.88	+	Pass
		< AO	1
2405	-44.01	≤ <b>-</b> 40	Pass
· · · · · · · · · · · · · · · · · · ·	· · · =	≤ -40	Pass
2406	-63.75	≤ <b>-</b> 40	Pass
2407	-52.76	≤ -40	Pass
2408	-64.80	≤ -40	Pass
2409	-64.73	≤ -40	Pass
2410	-64.89	≤ -40	Pass
2411	-64.84	≤ <b>-</b> 40	Pass
2412	-64.78	≤ <b>-</b> 40	Pass
2413	-64.77	≤ <b>-</b> 40	Pass
2414	-64.73	≤ <b>-</b> 40	Pass
2415	-64.68	≤ <b>-</b> 40	Pass
2416	-64.75	≤ -40	Pass
2417	-64.71	≤ -40	Pass
2418	-64.40	≤ -40	Pass
2419	-64.45	≤ -40	Pass
High Frequency 2420	-64.35	≤ -40	Pass
(2480 MHz) 2421	-64.48	≤ -40	Pass
2422	-64.36	≤ -40	Pass
2423	-63.92	≤ -40	Pass
2424	-63.77	≤ <b>-</b> 40	Pass
2425	-63.27	≤ <b>-</b> 40	Pass
2426	-63.50	≤ -40	Pass
2427	-63.48	≤ -40	Pass
2428	-63.18	≤ -40	Pass
2429	-62.95	≤ <b>-</b> 40	Pass
2430	-62.63	≤ -40	Pass
2431	-62.38	≤ -40	Pass
2432	-62.37	≤ <b>-</b> 40	Pass
2433	-61.76	≤ <b>-</b> 40	Pass
2434	-61.77	≤ <b>-</b> 40	Pass
2435	-61.31	≤ <b>-</b> 40	Pass
2436	-60.96	≤ <b>-</b> 40	Pass
2437	-60.78	≤ <b>-</b> 40	Pass
2438	-60.56	≤ <b>-</b> 40	Pass

 2439	-60.24	≤ <b>-</b> 40	Pass
2440	-60.09	≤ <b>-</b> 40	Pass
2441	-59.24	≤ -40	Pass
2442	-59.17	≤ -40	Pass
2443	-59.04	≤ -40	Pass
2444	-58.75	≤ -40	Pass
2445	-58.54	≤ -40	Pass
2446	-58.59	≤ <b>-</b> 40	Pass
2447	-57.86	≤ <b>-</b> 40	Pass
2448	-57.61	≤ -40	Pass
2449	-57.40	≤ -40	Pass
2450	-57.10	≤ <b>-</b> 40	Pass
2451	-56.94	≤ -40	Pass
2452	-56.84	≤ -40	Pass
2453	-56.51	≤ -40	Pass
2454	-56.53	≤ <b>-</b> 40	Pass
2455	-56.09	≤ -40	Pass
2456	-56.13	≤ -40	Pass
2457	-55.80	≤ <b>-</b> 40	Pass
2458	-55.92	≤ <b>-</b> 40	Pass
2459	-55.61	≤ -40	Pass
2460	-55.75	≤ <b>-</b> 40	Pass
2461	-55.77	≤ -40	Pass
2462	-55.39	≤ -40	Pass
2463	-55.54	≤ -40	Pass
2464	-55.45	≤ -40	Pass
2465	-55.43	≤ -40	Pass
2466	-55.64	≤ -40	Pass
2467	-55.33	≤ -40	Pass
2468	-56.16	≤ -40	Pass
2469	-56.31	≤ <b>-</b> 40	Pass
2470	-56.64	≤ <b>-</b> 40	Pass
2471	-56.76	≤ <b>-</b> 40	Pass
2472	-56.96	≤ <b>-</b> 40	Pass
2473	-56.65	≤ <b>-</b> 40	Pass
2474	-55.98	≤ <b>-</b> 40	Pass
2475	-52.68	≤ <b>-</b> 20	Pass
2476	-19.05	N/A	N/A
 			- 1

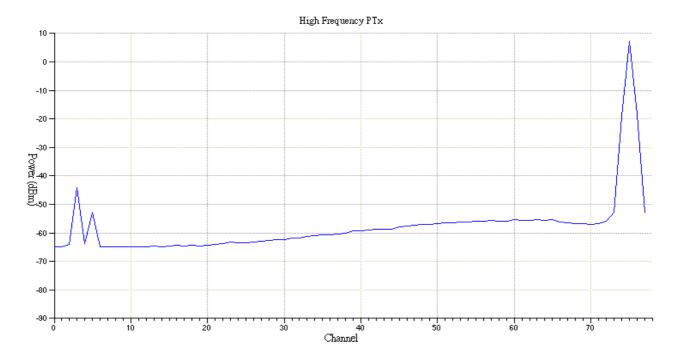
2477	7.23	N/A	N/A
2478	-18.63	N/A	N/A
2479	-52.66	≤ <b>-</b> 20	Pass
2480	-55.58	≤ <b>-</b> 40	Pass



TX Output Spectrum - Adjacent channel power (Low Frequency)



TX Output Spectrum – Adjacent channel power (Mid Frequency)



TX Output Spectrum – Adjacent channel power (High Frequency)

#### 3.4.7. Test Case: TRM/CA/07/C - Modulation Characteristics

## Expected Outcome:

All values as measured must fulfill the following conditions:

- 1.  $140 \text{ kHz} \le \Delta \text{flavg} \le 175 \text{ kHz}$
- 2.  $\Delta f2max \ge 115$  kHz for at least 99.9% of all  $\Delta f2max$
- 3.  $\Delta f2avg/\Delta f1avg \ge 0.8$

Test Frequency	Packet	Test	Result	Limit	Verdict
(MHz)	Number	Parameter			
		Δ flavg (kHz)	163.27	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.54	≥ 115 kHz	Pass
	1	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	164.13	N/A	N/A
T		Δ f2avg/Δf1avg	1.01	≥ 0.8	Pass
Low operating		Δ flavg (kHz)	163.28	140 kHz≤∆flavg≤175 kHz	Pass
Frequency (2402 MHz)		Δ f2max (kHz)	172.95	≥ 115 kHz	Pass
(2402 MHZ)	2	Δ f2max(%)	100%	≥99.9%	Pass
		$\Delta$ f2avg(kHz)	163.88	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
	3	$\Delta$ flavg (kHz)	163.96	140 kHz≤∆flavg≤175 kHz	Pass
	3	Δ f2max (kHz)	169.45	≥ 115 kHz	Pass

Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/kHz)         164.18         N/A         N/A           Δ f1avg (kHz)         164.18         N/A         N/A           Δ f1avg (kHz)         163.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.73         ≥115 kHz         Pass           Δ f2max(kHz)         163.51         N/A         N/A           Δ f2avg/df1avg         1         ≥0.8         Pass           Δ f2max (kHz)         164.07         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.61         ≥115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg(kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2avg(kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2avg(kHz)         163.4					
Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.35         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.73         ≥ 115 kHz         Pass           Δ f2avg/Δf1avg         1 00%         ≥99.9%         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2max (kHz)         168.61         ≥ 115 kHz         Pass           Δ f2max (kHz)         163.57         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass		Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz)         163.35         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         167.73         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.51         N/A         N/A           Δ f2avg(kHz)         164.07         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         166.61         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2max(kHz)         163.57         N/A         N/A           Δ f2avg(kHz)         163.28         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         163.28         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max(kHz)         163.44         N/A         N/A           Δ f2avg(kHz)         163.41		Δ f2avg(kHz)	164.18	N/A	N/A
Δ £2max (kHz)         167.73         ≥ 115 kHz         Pass           Δ £2avg(kHz)         100%         ≥99.9%         Pass           Δ £2avg(kHz)         163.51         N/A         N/A           Δ £2avg(kHz)         1 64.07         140 kHz≤Δflavg≤175 kHz         Pass           Δ £2max (kHz)         168.61         ≥ 115 kHz         Pass           Δ £2avg(kHz)         163.57         N/A         N/A           Δ £2avg(kHz)         163.57         N/A         N/A           Δ £2avg(kHz)         163.28         140 kHz≤Δflavg≤175 kHz         Pass           Δ £2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ £2max(kHz)         162.87         N/A         N/A           Δ £2avg(kHz)         162.87         N/A         N/A           Δ £2avg(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ £2avg(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ £2max(kHz)         167.20         ≥ 115 kHz         Pass           Δ £2avg(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ £2avg(kHz)         163.64         N/A         N/A           Λ £2avg(kHz)         163.64		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
4       Δ t2avg(kHz)       100%       ≥99.9%       Pass         Δ t2avg(kHz)       163.51       N/A       N/A         Δ t2avg(kHz)       1       ≥ 0.8       Pass         Δ flavg (kHz)       164.07       140 kHz≤Δflavg≤175 kHz       Pass         Δ t2max (kHz)       168.61       ≥ 115 kHz       Pass         Δ t2max(%)       100%       ≥99.9%       Pass         Δ t2avg(kHz)       163.57       N/A       N/A         Δ t2avg(kHz)       163.28       140 kHz≤Δflavg≤175 kHz       Pass         Δ t2max (kHz)       167.68       ≥ 115 kHz       Pass         Δ t2max (kHz)       162.87       N/A       N/A         Δ t2avg(kHz)       163.48       140 kHz≤Δflavg≤175 kHz       Pass         Δ t2max (kHz)       167.20       ≥ 115 kHz       Pass         Δ t2max (kHz)       167.20       ≥ 115 kHz       Pass         Δ t2max (kHz)       163.48       140 kHz≤Δflavg≤175 kHz       Pass         Δ t2max (kHz)       163.64       N/A       N/A         Δ t2max (kHz)       163.64       N/A       N/A         Δ t2max (kHz)       168.31       ≥ 115 kHz       Pass         Δ t2max (kHz)       168.31       ≥		Δ flavg (kHz)	163.35	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)         163.51         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         164.07         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.61         ≥ 115 kHz         Pass           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2max (kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.64         N/A         N/A		Δ f2max (kHz)	167.73	≥ 115 kHz	Pass
Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         164.07         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.61         ≥ 115 kHz         Pass           Δ f2max (kHz)         163.57         N/A         N/A           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2max(%h)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Λ f2avg(kHz)         163.64         N/A         N/A           Δ f1avg (kHz)         163.64         N/A         N/A           Δ f1avg (kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.64         N/A         N/A <td>4</td> <td>Δ f2max(%)</td> <td>100%</td> <td>≥99.9%</td> <td>Pass</td>	4	Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz)         164.07         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         168.61         ≥115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg(kHz)         163.28         140 kHz≤Δflavg≤175 kHz         Pass           Δ f1avg (kHz)         167.68         ≥115 kHz         Pass           Δ f2max (kHz)         167.68         ≥115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/Δflavg         1         ≥0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max(kHz)         167.20         ≥115 kHz         Pass           Δ f2max(kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2avg/Δflavg         1         ≥0.8         Pass           Δ f2avg/Δflavg         1         ≥0.8         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.19         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2avg(kHz)         163.31         ≥		Δ f2avg(kHz)	163.51	N/A	N/A
Δ f2max (kHz)         168.61         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg/kHz)         163.64         N/A         N/A           Δ f2avg/kHz)         163.19         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/kHz)         163.08         N/A         N/A           Δ f2avg(kHz)         163.97         140 kHz≤Δf1av		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
5         Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg/Δf1avg         1         ≥0.8         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg(kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥115 kHz         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg/Δf1avg         1         ≥0.8         Pass           Δ f2max (kHz)         163.19         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2avg(kHz)         163.08         N/A         N/A           Δ f2avg(kHz)         163.08         N/A         N/A <td></td> <td>Δ flavg (kHz)</td> <td>164.07</td> <td>140 kHz≤∆f1avg≤175 kHz</td> <td>Pass</td>		Δ flavg (kHz)	164.07	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)         163.57         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.28         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2avg(kHz)         100%         ≥99.9%         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.19         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥ 115 kHz         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg(kHz)         163.97         140 kHz≤Δf1avg≤175 kHz <td< td=""><td></td><td>Δ f2max (kHz)</td><td>168.61</td><td>≥ 115 kHz</td><td>Pass</td></td<>		Δ f2max (kHz)	168.61	≥ 115 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz)         163.28         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         167.68         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/kHz)         162.87         N/A         N/A           Δ f2avg/dflavg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2max(kHz)         163.64         N/A         N/A           Δ f2avg/kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.19         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥ 115 kHz         Pass           Δ f2max (kHz)         163.08         N/A         N/A           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f2max (kHz)         163.97         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         163.41         N/A         <		Δ f2avg(kHz)	163.57	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
6       Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       162.87       N/A       N/A         Δ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.48       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       167.20       ≥ 115 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       163.64       N/A       N/A         Δ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.19       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.97       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max(%)       163.97       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.41       N/A       N/A         Δ f2max (kHz)       163.91       140 kHz≤Δf1avg≤175 kHz <t< td=""><td></td><td>Δ flavg (kHz)</td><td>163.28</td><td>140 kHz≤∆f1avg≤175 kHz</td><td>Pass</td></t<>		Δ flavg (kHz)	163.28	140 kHz≤∆f1avg≤175 kHz	Pass
Δ f2avg(kHz)         162.87         N/A         N/A           Δ f2avg/Δf1avg         1         ≥0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg(kHz)         163.19         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥115 kHz         Pass           Δ f2max (kHz)         163.08         N/A         N/A           Δ f2avg(kHz)         163.08         N/A         N/A           Δ f2avg(kHz)         163.97         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.59         ≥115 kHz         Pass           Δ f2avg(kHz)         163.41         N/A         N/A           Δ f2avg/Δf1avg         1         ≥0.8         Pass           Δ f2avg(kHz)         163.41         N/A         N/A           Δ f2avg/Δf1avg         1         ≥0.8         Pass           Δ f2avg/Δf1avg         1         ≥0.8         Pass		Δ f2max (kHz)	167.68	≥ 115 kHz	Pass
Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.48         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.19         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.08         N/A         N/A           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.97         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/Δf1avg         1         ≥ 0.8         Pass           Δ f2avg/kHz)         163.41         N/A         N/A           Δ f2avg (kHz)         163.91         140 kHz≤Δf1avg≤175 kHz         Pass           Δ f2max (kHz)         166.77         ≥ 115 kHz <td< td=""><td>6</td><td>Δ f2max(%)</td><td>100%</td><td>≥99.9%</td><td>Pass</td></td<>	6	Δ f2max(%)	100%	≥99.9%	Pass
Δ flavg (kHz)         163.48         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         167.20         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg(kHz)         163.64         N/A         N/A           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.19         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         168.31         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%         Pass           Δ f2avg/kHz)         163.08         N/A         N/A           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f1avg (kHz)         163.97         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         168.59         ≥ 115 kHz         Pass           Δ f2avg/Δflavg         1         ≥ 0.8         Pass           Δ f2avg/kHz)         163.41         N/A         N/A           Δ f2avg (kHz)         163.91         140 kHz≤Δflavg≤175 kHz         Pass           Δ f2max (kHz)         166.77         ≥ 115 kHz         Pass           Δ f2max(%)         100%         ≥99.9%		Δ f2avg(kHz)	162.87	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
Λ f2max(%)       100%       ≥99.9%       Pass         Λ f2avg(kHz)       163.64       N/A       N/A         Λ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.19       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       168.31       ≥ 115 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       163.08       N/A       N/A         Λ f2avg/Δf1avg       1       ≥ 0.8       Pass         Δ f1avg (kHz)       163.97       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       168.59       ≥ 115 kHz       Pass         Δ f2avg(kHz)       163.41       N/A       N/A         Δ f2avg(kHz)       163.41       N/A       N/A         Δ f1avg (kHz)       163.91       140 kHz≤Δf1avg≤175 kHz       Pass         Δ f2max (kHz)       166.77       ≥ 115 kHz       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2max(%)       100%       ≥99.9%       Pass         Δ f2avg(kHz)       163.41       N/A       N/A		Δ flavg (kHz)	163.48	140 kHz≤∆flavg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2max (kHz)	167.20	≥ 115 kHz	Pass
$\begin{array}{ c c c c c c }\hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 163.19 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 168.31 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg \ (kHz) & 163.08 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 163.97 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 168.59 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 163.41 & N/A & N/A \\ \hline \Delta \ f2max \ (kHz) & 163.91 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 166.77 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg \ (kHz) & 163.41 & N/A & N/A \\ \hline \end{array}$	7	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg(kHz)	163.64	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ flavg (kHz)	163.19	140 kHz≤∆flavg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2max (kHz)	168.31	≥ 115 kHz	Pass
$ \begin{array}{ c c c c c c } \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 163.97 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 168.59 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (\%) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg \ (kHz) & 163.41 & N/A & N/A \\ \hline \Delta \ f2avg/\Delta f1avg & 1 & \geq 0.8 & Pass \\ \hline \Delta \ f1avg \ (kHz) & 163.91 & 140 \ kHz \leq \Delta f1avg \leq 175 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 166.77 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2max \ (kHz) & 166.77 & \geq 115 \ kHz & Pass \\ \hline \Delta \ f2avg \ (kHz) & 100\% & \geq 99.9\% & Pass \\ \hline \Delta \ f2avg \ (kHz) & 163.41 & N/A & N/A \\ \hline \end{array} $	8	Δ f2max(%)	100%	≥99.9%	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg(kHz)	163.08	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ flavg (kHz)	163.97	140 kHz≤∆f1avg≤175 kHz	Pass
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2max (kHz)	168.59	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.41	N/A	N/A
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
10		Δ flavg (kHz)	163.91	140 kHz≤∆flavg≤175 kHz	Pass
Δ f2avg(kHz) 163.41 N/A N/A		Δ f2max (kHz)	166.77	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
$\Delta \text{ f2avg/}\Delta \text{f1avg}$ 1 $\geq 0.8$ Pass		Δ f2avg(kHz)	163.41	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass

		T		T	
		Δ flavg (kHz)	163.66	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.63	≥ 115 kHz	Pass
	1	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.59	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.29	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	168.37	≥ 115 kHz	Pass
	2	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.99	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.97	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.03	≥ 115 kHz	Pass
	3	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.77	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.37	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.47	≥ 115 kHz	Pass
36:1	4	Δ f2max(%)	100%	≥99.9%	Pass
Mid operating		Δ f2avg(kHz)	163.00	N/A	N/A
Frequency		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
(2441 MHz)		Δ flavg (kHz)	163.30	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.71	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.41	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.10	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.41	≥ 115 kHz	Pass
	6	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.40	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.57	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.47	≥ 115 kHz	Pass
	7	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.40	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.63	 140 kHz≤Δf1avg≤175 kHz	Pass
	8	Δ f2max (kHz)	172.34	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
	I .	\ /	L	_	

		Δ f2avg(kHz)	163.77	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.28	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	171.19	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	164.53	N/A	N/A
		Δ f2avg/Δf1avg	1.01	≥ 0.8	Pass
		Δ flavg (kHz)	162.86	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.39	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	164.03	N/A	N/A
		Δ f2avg/Δf1avg	1.01	≥ 0.8	Pass
		Δ flavg (kHz)	168.52	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	165.95	≥ 115 kHz	Pass
	1	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	158.94	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
	2	Δ flavg (kHz)	168.20	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.50	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	158.36	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	168.49	140 kHz≤∆f1avg≤175 kHz	Pass
*** 1		Δ f2max (kHz)	166.21	≥ 115 kHz	Pass
High operating	3	Δ f2max(%)	100%	≥99.9%	Pass
Frequency		Δ f2avg(kHz)	158.72	N/A	N/A
(2480 MHz)		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	168.17	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	165.43	≥ 115 kHz	Pass
	4	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	158.96	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
		Δ flavg (kHz)	168.04	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	166.48	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.01	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
	6	Δ flavg (kHz)	168.03	140 kHz≤∆flavg≤175 kHz	Pass
<u> </u>	I .		l .		

	Λ £)	16676	> 115 1 II	D
	Δ f2max (kHz)	166.76	≥ 115 kHz	Pass
	Δ f2max(%)	100%	≥99.9%	Pass
	$\Delta$ f2avg(kHz)	158.46	N/A	N/A
	$\Delta$ f2avg/ $\Delta$ f1avg	0.94	≥ 0.8	Pass
	Δ flavg (kHz)	168.17	140 kHz≤∆flavg≤175 kHz	Pass
	Δ f2max (kHz)	164.07	≥ 115 kHz	Pass
7	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	158.55	N/A	N/A
	Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
	Δ flavg (kHz)	167.78	140 kHz≤∆f1avg≤175 kHz	Pass
	Δ f2max (kHz)	165.37	≥ 115 kHz	Pass
8	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	159.17	N/A	N/A
	Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
	Δ flavg (kHz)	167.28	140 kHz≤∆f1avg≤175 kHz	Pass
	Δ f2max (kHz)	163.45	≥ 115 kHz	Pass
9	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	158.04	N/A	N/A
	Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
	Δ flavg (kHz)	167.84	140 kHz≤∆f1avg≤175 kHz	Pass
	Δ f2max (kHz)	169.17	≥ 115 kHz	Pass
10	Δ f2max(%)	100%	≥99.9%	Pass
	Δ f2avg(kHz)	159.15	N/A	N/A
	Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass

# 3.4.8. Test Case: TRM/CA/08/C - Initial Carrier Frequency Tolerance

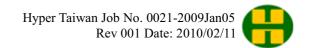
#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

Each of the EUT's carrier frequency f0 as measured must be within  $\pm 75 \text{kHz}$  from the Eut's chosen nominal carrier frequency fTX

1.  $fTX - 75 \text{ kHz} \le f 0 \le fTX + 75 \text{ kHz}$ .

Test Frequency	Packets	Carrier	Limit	Verdic
(MHz)	No.	Frequency	(kHz)	
		(KHz)		
	1	3.87	$-75 \le f0 \le +75$	Pass
	2	5.99	-75≤ f0 ≤ +75	Pass
	3	3.83	-75≤ f0 ≤ +75	Pass
	4	5.06	-75≤ f0 ≤ +75	Pass
Low operating	5	5.49	-75≤ f0 ≤ +75	Pass
Frequency (2402 MHz)	6	6.13	-75≤ f0 ≤ +75	Pass
(2402 MHZ)	7	4.15	-75≤ f0 ≤ +75	Pass
	8	5.91	$-75 \le f0 \le +75$	Pass
	9	6.84	-75≤ f0 ≤ +75	Pass
	10	3.81	-75≤ f0 ≤ +75	Pass
	1	13.49	-75≤ f0 ≤ +75	Pass
	2	9.36	-75≤ f0 ≤ +75	Pass
	3	13.44	-75≤ f0 ≤ +75	Pass
	4	11.55	-75≤ f0 ≤ +75	Pass
Mid operating	5	11.53	-75≤ f0 ≤ +75	Pass
Frequency (2441 MHz)	6	14.38	-75≤ f0 ≤ +75	Pass
	7	11.57	-75≤ f0 ≤ +75	Pass
	8	10.25	-75≤ f0 ≤ +75	Pass
	9	11.71	-75≤ f0 ≤ +75	Pass
	10	14.49	-75≤ f0 ≤ +75	Pass
	1	15.85	-75≤ f0 ≤ +75	Pass
	2	15.07	-75≤ f0 ≤ +75	Pass
TTi-forma di	3	12.33	-75≤ f0 ≤ +75	Pass
Frequency	4	11.25	-75≤ f0 ≤ +75	Pass
	5	9.19	-75≤ f0 ≤ +75	Pass
(2480 MHz)	6	12.08	-75≤ f0 ≤ +75	Pass
	7	15.18	-75≤ f0 ≤ +75	Pass
	8	13.21	-75≤ f0 ≤ +75	Pass



9	15.87	$-75 \le f0 \le +75$	Pass
10	12.18	$-75 \le f0 \le +75$	Pass

## 3.4.9. Test Case: TRM/CA/09/C - Carrier Frequency Drift

## Expected Outcome:

All values as measured must fulfill the following conditions:

- 1. One slot packet -25kHz≤ MAX Frequency Drift ≤+25kHz
- 2. Three slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 3. Five slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 4. The maximum drift rate is 20000 Hz /  $50\mu s$ .

I acket I voc. Dili	Packet	Type:	DH1
---------------------	--------	-------	-----

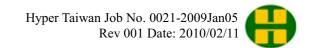
Packet Type: DH1  Test Energyen av Poekets   Limit (0/) Van					
Test Frequency (MHz)	Packets No.	Result	Limit (%)	Verdict	
(MITIZ)		MAX Frequency Drift(kHz) 6.72		25 / fragr.   25	Daga
	1	1 5 7		-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs) 2.9  MAX Frequency Drift(kHz) 7.2		≤ 20	Pass
	2	1 2 ( )		-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs) 2.		≤ 20	Pass
	3	MAX Frequency Drift(kHz)	6.15	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	2.15	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	7.18	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	2.54	≤ 20	Pass
I avy aparating	5	MAX Frequency Drift(kHz)	6.44	-25≤ fmax≤+25	Pass
Low operating	5	Maximum Drift Rate(kHz/50μs) 2.		≤ 20	Pass
Frequency (2402 MHz)	6	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
(2402 MHZ)	6	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	7	MAX Frequency Drift(kHz)	6.92	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	2.47	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	6.22	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	9	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	10	MAX Frequency Drift(kHz) 6		-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	1	MAX Frequency Drift(kHz)	13.10	-25≤ fmax≤+25	Pass
Mid operating	1	Maximum Drift Rate(kHz/50μs)	6.23	≤ 20	Pass
Frequency	equency 2 MAX Frequency Drift(kHz)		8.14	-25≤ fmax≤+25	Pass
(2441 MHz)	2	Maximum Drift Rate(kHz/50μs) 2.04		≤ 20	Pass
	3	MAX Frequency Drift(kHz)	13.51	-25≤ fmax≤+25	Pass

	3	Maximum Drift Rate(kHz/50μs)	5.20	≤ 20	Pass	
	4	MAX Frequency Drift(kHz) 14.39		-25≤ fmax≤+25	Pass	
	4	Maximum Drift Rate(kHz/50μs)	7.98	≤ 20	Pass	
	5	MAX Frequency Drift(kHz) 15.82		-25≤ fmax≤+25	Pass	
	5	Maximum Drift Rate(kHz/50μs) 8.49		<u>≤ 20</u>	Pass	
	6	MAX Frequency Drift(kHz) 14.67		-25≤ fmax≤+25	Pass	
	6	Maximum Drift Rate(kHz/50μs) 6.8		≤ 20	Pass	
	7	MAX Frequency Drift(kHz)	11.80	-25≤ fmax≤+25	Pass	
	7	Maximum Drift Rate(kHz/50μs) 6.43		≤ 20	Pass	
	8	MAX Frequency Drift(kHz)	MAX Frequency Drift(kHz) 11.58		Pass	
	8	Maximum Drift Rate(kHz/50μs) 5.39		≤ 20	Pass	
	9	MAX Frequency Drift(kHz)	11.67	-25≤ fmax≤+25	Pass	
	9	Maximum Drift Rate(kHz/50μs)	3.18	≤ 20	Pass	
	10	MAX Frequency Drift(kHz)	16.31	-25≤ fmax≤+25	Pass	
	10	Maximum Drift Rate(kHz/50μs)	11.07	≤ 20	Pass	
	1	MAX Frequency Drift(kHz)	15.26	-25≤ fmax≤+25	Pass	
	1	Maximum Drift Rate(kHz/50μs)	5.17	≤ 20	Pass	
	2	MAX Frequency Drift(kHz)	11.19	-25≤ fmax≤+25	Pass	
	2	Maximum Drift Rate(kHz/50μs)	2.33	≤ 20	Pass	
	3	MAX Frequency Drift(kHz) 16.6		-25≤ fmax≤+25	Pass	
	3	Maximum Drift Rate(kHz/50μs)	6.86	≤ 20	Pass	
	4	MAX Frequency Drift(kHz)	14.38	-25≤ fmax≤+25	Pass	
	4	Maximum Drift Rate(kHz/50μs)	2.68	≤ 20	Pass	
III: -1	5	MAX Frequency Drift(kHz)	17.01	-25≤ fmax≤+25	Pass	
High operating	5	Maximum Drift Rate(kHz/50μs)	8.04	≤ 20	Pass	
Frequency (2480 MHz)	6	MAX Frequency Drift(kHz)	12.84	-25≤ fmax≤+25	Pass	
(2480 MHZ)	6	Maximum Drift Rate(kHz/50μs)	4.56	≤ 20	Pass	
	7	MAX Frequency Drift(kHz)	15.76	-25≤ fmax≤+25	Pass	
	7	Maximum Drift Rate(kHz/50μs)	6.76	≤ 20	Pass	
	8	MAX Frequency Drift(kHz)	11.18	-25≤ fmax≤+25	Pass	
	8	Maximum Drift Rate(kHz/50μs)	3.09	≤ 20	Pass	
	9	MAX Frequency Drift(kHz)	15.11	-25≤ fmax≤+25	Pass	
	9	Maximum Drift Rate(kHz/50μs)	5.38	≤ 20	Pass	
	10	MAX Frequency Drift(kHz)	13.24	-25≤ fmax≤+25	Pass	
	10	Maximum Drift Rate(kHz/50μs)	4.24	≤ 20	Pass	
		Packet Type: DH3				
Test Frequency (MHz)	Packets No.	Result		Limit (%)	Verdict	
(IVIIIZ)	110.	Part A_228 of 322				

	1	MAX Frequency Drift(kHz)	7.46	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	2.87	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	7.08	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	3	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	4	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	2.57	≤ 20	Pass
T	5	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
Low operating	5	Maximum Drift Rate(kHz/50μs)	3.25	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	6.85	-25≤ fmax≤+25	Pass
(2402 MHz)	6	Maximum Drift Rate(kHz/50μs)	3.14	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	7.24	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	2.59	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	6.94	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	2.62	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	7.14	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.09	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	7.45	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.34	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	9.73	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	4.01	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	11.04	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.27	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	13.31	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	6.39	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	14.24	-25≤ fmax≤+25	Pass
D. 6': 1	4	Maximum Drift Rate(kHz/50μs)	8.19	≤ 20	Pass
Mid operating	5	MAX Frequency Drift(kHz)	11.44	-25≤ fmax≤+25	Pass
Frequency	5	Maximum Drift Rate(kHz/50μs)	4.99	≤ 20	Pass
(2441 MHz)	6	MAX Frequency Drift(kHz)	9.14	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	2.86	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	10.44	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	4.70	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	12.20	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	4.22	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	9.14	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.15	≤ 20	Pass

10 Maximum Drift Rate(kHz/50μs) 2.78 $\leq$ 20 Pass 1 MAX Frequency Drift(kHz) 14.13 -25 $\leq$ fmax $\leq$ +25 Pass 1 Maximum Drift Rate(kHz/50μs) 6.05 $\leq$ 20 Pass 2 MAX Frequency Drift(kHz) 16.20 -25 $\leq$ fmax $\leq$ +25 Pass
1 Maximum Drift Rate(kHz/50 $\mu$ s) 6.05 $\leq$ 20 Pass
2 MAX Frequency Drift(kHz) 16.20 -25< fmay<+25 Dags
2   MAX frequency Diff(kffz)   10.20   -23 \text{ fillax }   23   fass
2 Maximum Drift Rate(kHz/50 $\mu$ s) 6.15 $\leq$ 20 Pass
3 MAX Frequency Drift(kHz) 11.88 -25≤ fmax≤+25 Pass
3 Maximum Drift Rate(kHz/50 $\mu$ s) 3.44 $\leq$ 20 Pass
4 MAX Frequency Drift(kHz) 12.24 -25≤ fmax≤+25 Pass
4 Maximum Drift Rate(kHz/50 $\mu$ s) 3.25 $\leq$ 20 Pass
5 MAX Frequency Drift(kHz) 13.76 -25≤ fmax≤+25 Pass
High operating 5 Maximum Drift Rate(kHz/50 $\mu$ s) 4.16 $\leq$ 20 Pass
Frequency  6 MAX Frequency Drift(kHz) 13.81 -25\(\leq \text{fmax}\leq +25 \) Pass
$(2480 \text{ MHz}) \qquad \qquad 6 \qquad \text{Maximum Drift Rate(kHz/50µs)} \qquad 3.52 \qquad \leq 20 \qquad \text{Pass}$
7 MAX Frequency Drift(kHz) 14.40 -25≤ fmax≤+25 Pass
7 Maximum Drift Rate(kHz/50 $\mu$ s) 5.78 $\leq$ 20 Pass
8 MAX Frequency Drift(kHz) 11.31 -25≤ fmax≤+25 Pass
8 Maximum Drift Rate(kHz/50 $\mu$ s) 2.88 $\leq$ 20 Pass
9 MAX Frequency Drift(kHz) 16.00 -25≤ fmax≤+25 Pass
9 Maximum Drift Rate(kHz/50μs) 6.64 ≤ 20 Pass
10 MAX Frequency Drift(kHz) 14.74 -25≤ fmax≤+25 Pass
10 Maximum Drift Rate(kHz/50 $\mu$ s) 7.46 $\leq$ 20 Pass
Packet Type: DH5
Test Frequency Packets Limit (%) Verdic
(MHz) No. Result
1 MAX Frequency Drift(kHz) 8.32 -25≤ fmax≤+25 Pass
1 Maximum Drift Rate(kHz/50 $\mu$ s) 4.27 $\leq$ 20 Pass
2 MAX Frequency Drift(kHz) 7.51 -25≤ fmax≤+25 Pass
2 Maximum Drift Rate(kHz/50 $\mu$ s) 2.83 $\leq$ 20 Pass
3 MAX Frequency Drift(kHz) 7.35 -25≤ fmax≤+25 Pass
Low operating 3 Maximum Drift Rate(kHz/50 $\mu$ s) 3.37 $\leq$ 20 Pass
Frequency 4 MAX Frequency Drift(kHz) 6.95 -25\le fmax\le +25 Pass
(2402 MHz) 4 Maximum Drift Rate(kHz/50 $\mu$ s) 2.93 $\leq$ 20 Pass
5 MAX Frequency Drift(kHz) 7.53 -25≤ fmax≤+25 Pass
5 Maximum Drift Rate(kHz/50 $\mu$ s) 2.80 $\leq$ 20 Pass
6 MAX Frequency Drift(kHz) 7.77 -25≤ fmax≤+25 Pass
6 Maximum Drift Rate(kHz/50 $\mu$ s) 2.95 $\leq$ 20 Pass
7 MAX Frequency Drift(kHz) 7.35 -25\leq fmax\leq +25 Pass

	7	Maximum Drift Rate(kHz/50μs)	2.88	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	7.46	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	2.82	≤ 20	Pass
	9	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	10	MAX Frequency Drift(kHz) 6		-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.31	≤ 20	Pass
	1	MAX Frequency Drift(kHz) 9.		-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	2.84	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	11.00	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	4.62	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	9.44	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	3.54	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	11.39	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	4.47	≤ 20	Pass
36.1	5	MAX Frequency Drift(kHz)	9.02	-25≤ fmax≤+25	Pass
Mid operating	5	Maximum Drift Rate(kHz/50µs) 2.71		≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	11.97	-25≤ fmax≤+25	Pass
(2441 MHz)	6	Maximum Drift Rate(kHz/50μs)	4.51	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	11.32	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	4.67	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	11.43	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	5.43	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	9.98	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.46	≤ 20	Pass
	10	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	5.81	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	13.74	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	4.58	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	11.82	-25≤ fmax≤+25	Pass
High operating	2	Maximum Drift Rate(kHz/50μs)	3.55	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	12.79	-25≤ fmax≤+25	Pass
Frequency	3	Maximum Drift Rate(kHz/50μs)	4.80	≤ 20	Pass
(2480 MHz)	4	MAX Frequency Drift(kHz)	12.22	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.20	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	13.56	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	5.44	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	12.13	-25≤ fmax≤+25	Pass



6	Maximum Drift Rate(kHz/50μs)	4.23	≤ 20	Pass
7	MAX Frequency Drift(kHz)	12.59	-25≤ fmax≤+25	Pass
7	Maximum Drift Rate(kHz/50μs)	4.61	≤ 20	Pass
8	MAX Frequency Drift(kHz)	13.48	-25≤ fmax≤+25	Pass
8	Maximum Drift Rate(kHz/50μs)	5.81	≤ 20	Pass
9	MAX Frequency Drift(kHz)	15.09	-25≤ fmax≤+25	Pass
9	Maximum Drift Rate(kHz/50μs)	5.96	≤ 20	Pass
10	MAX Frequency Drift(kHz)	12.01	-25≤ fmax≤+25	Pass
10	Maximum Drift Rate(kHz/50μs)	4.26	≤ 20	Pass

# 3.4.10. Test Case: TRM/CA/10/C - EDR Relative Transmit Power

## **Expected Outcome:**

All values as measured must fulfill the following conditions:

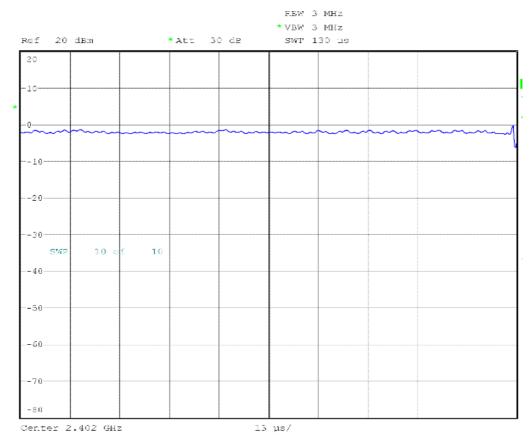
1. For all pairs of results: (PGFSK-4dB) < PDPSK < (PGFSK + 1dB)

#### Packet Type:2DH5

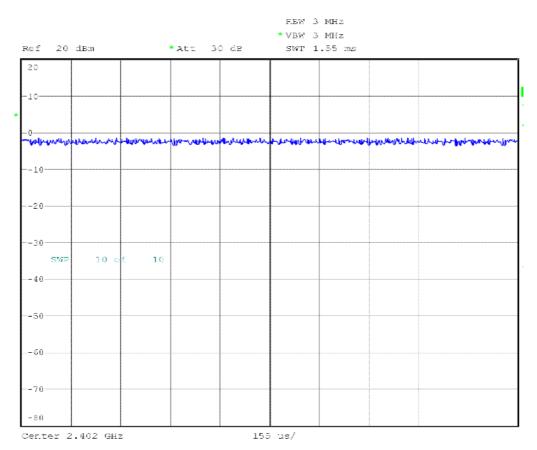
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.48	7.13	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.30	-22.55	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	7.16	6.98	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.48	-22.81	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.47	6.04	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.15	-23.40	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass

Packet Type: 3DH5

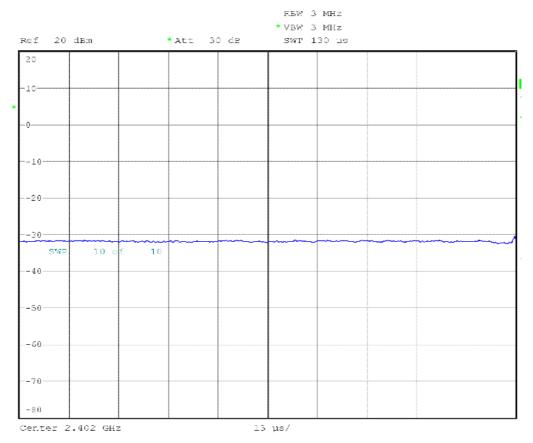
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.49	7.11	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.30	-22.55	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	7.17	6.75	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.44	-22.85	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.47	6.12	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.14	-23.38	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass



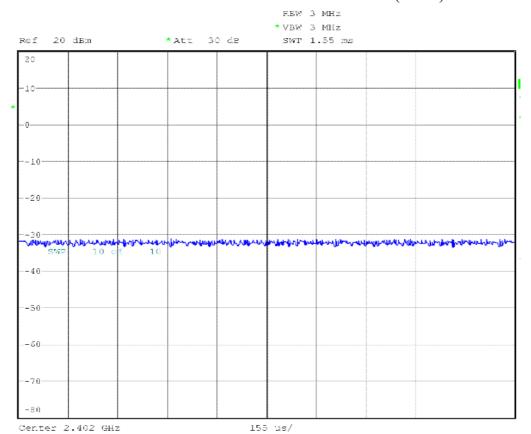
EDR Relative Transmit Power GFSK Low Max (2DH5)



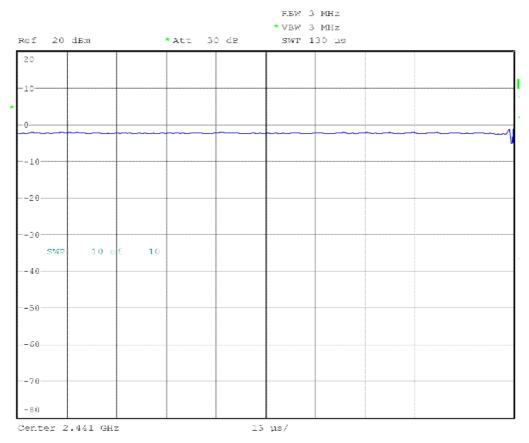
EDR Relative Transmit Power DPSK Low Max (2DH5)
Part A-233 of 322



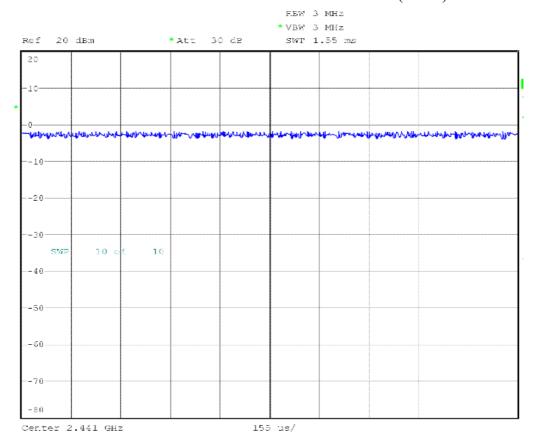
EDR Relative Transmit Power GFSK Low Min (2DH5)



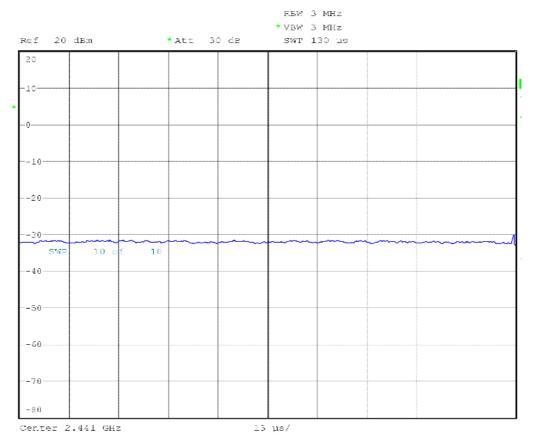
EDR Relative Transmit Power DPSK Low Min (2DH5)
Part A-234 of 322



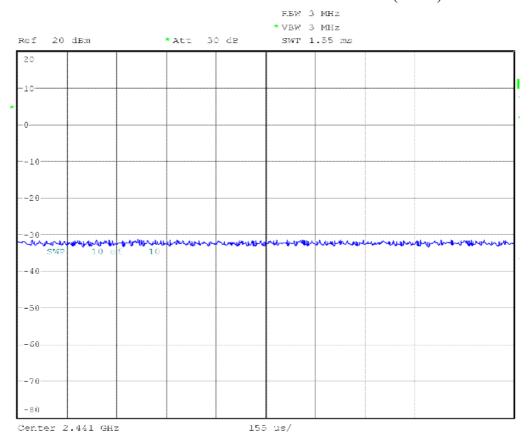
EDR Relative Transmit Power GFSK Mid Max (2DH5)



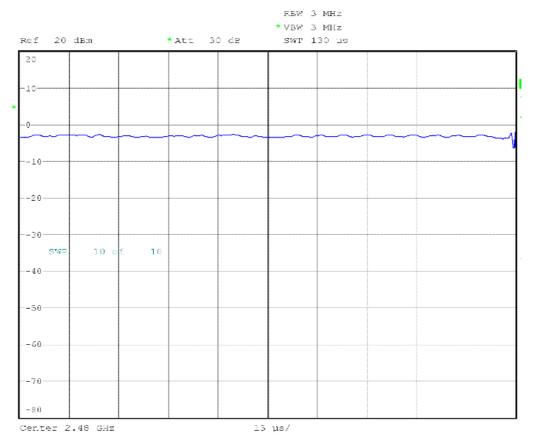
EDR Relative Transmit Power DPSK Mid Max (2DH5)
Part A-235 of 322



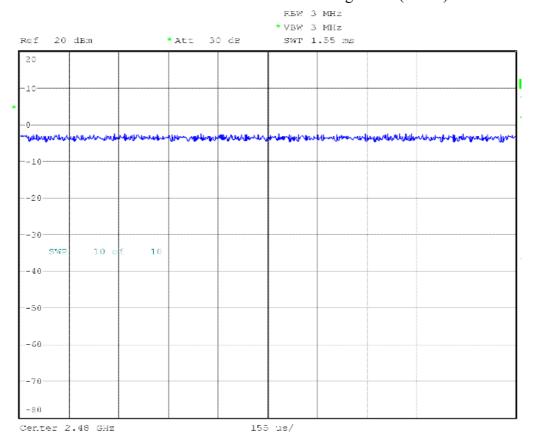
EDR Relative Transmit Power GFSK Mid Min (2DH5)



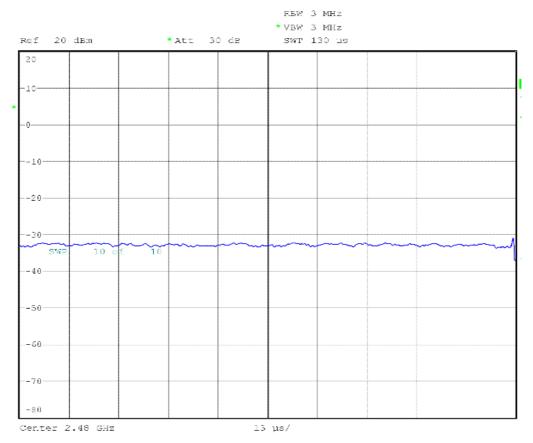
EDR Relative Transmit Power DPSK Mid Min (2DH5)
Part A-236 of 322



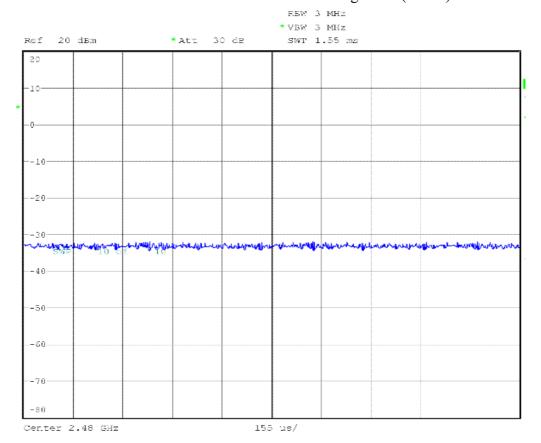
EDR Relative Transmit Power GFSK High Max (2DH5)



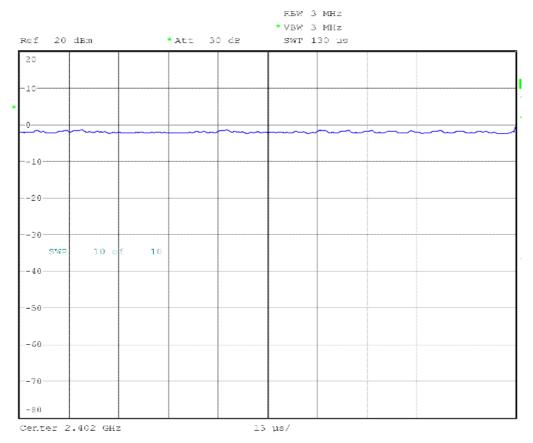
EDR Relative Transmit Power DPSK High Max (2DH5)
Part A-237 of 322



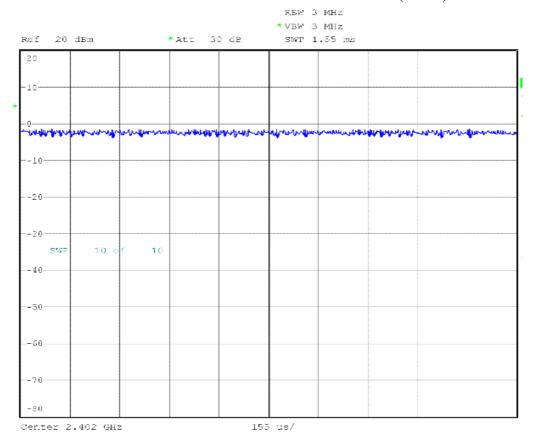
EDR Relative Transmit Power GFSK High Min (2DH5)



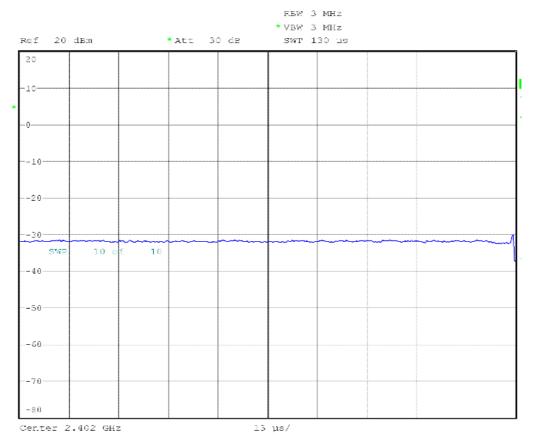
EDR Relative Transmit Power DPSK High Min (2DH5)
Part A-238 of 322



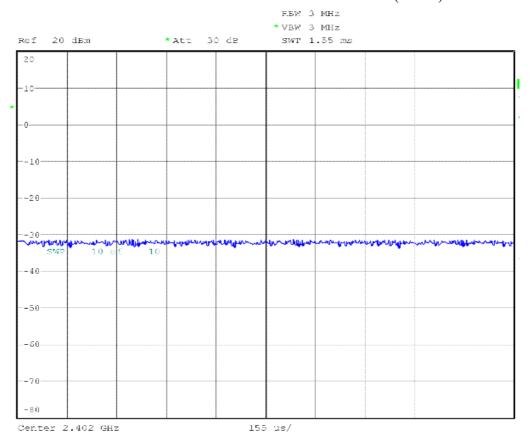
EDR Relative Transmit Power GFSK Low Max (3DH5)



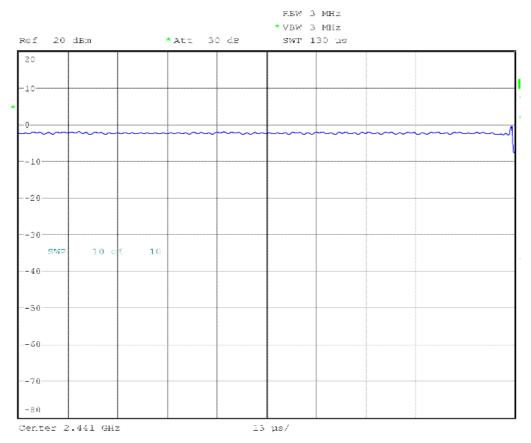
EDR Relative Transmit Power DPSK Low Max (3DH5)
Part A-239 of 322



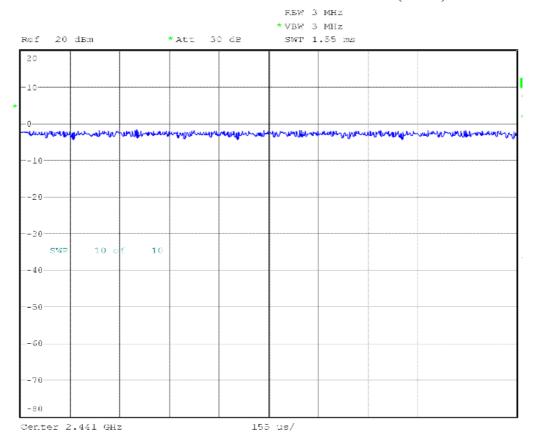
EDR Relative Transmit Power GFSK Low Min (3DH5)



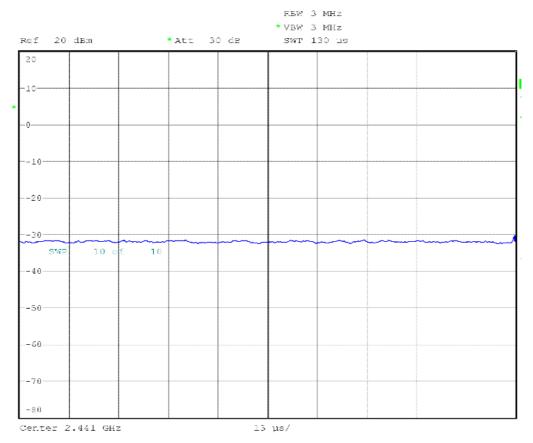
EDR Relative Transmit Power DPSK Low Min (3DH5)
Part A-240 of 322



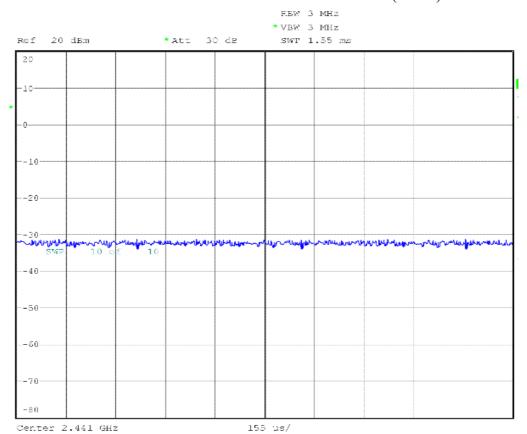
EDR Relative Transmit Power GFSK Mid Max (3DH5)



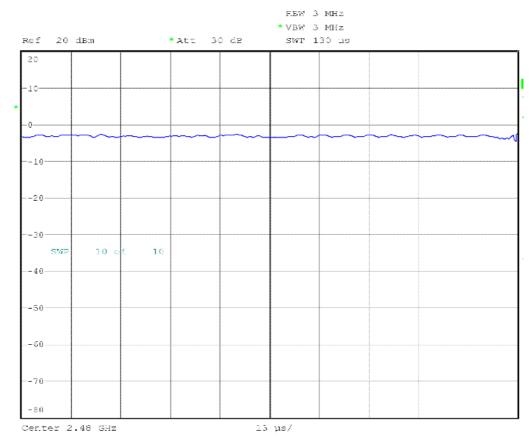
EDR Relative Transmit Power DPSK Mid Max (3DH5)
Part A-241 of 322



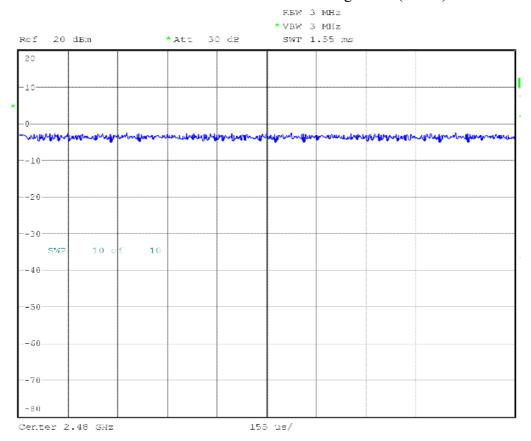
EDR Relative Transmit Power GFSK Mid Min (3DH5)



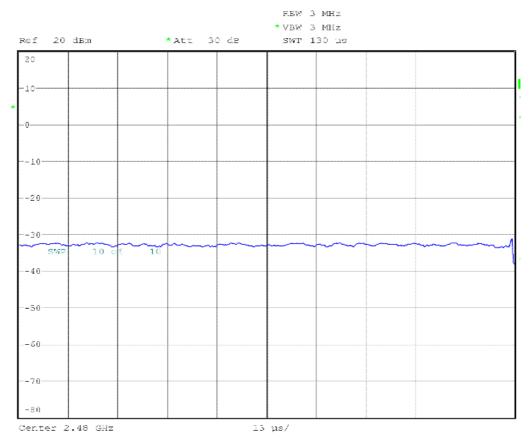
EDR Relative Transmit Power DPSK Mid Min (3DH5)
Part A-242 of 322



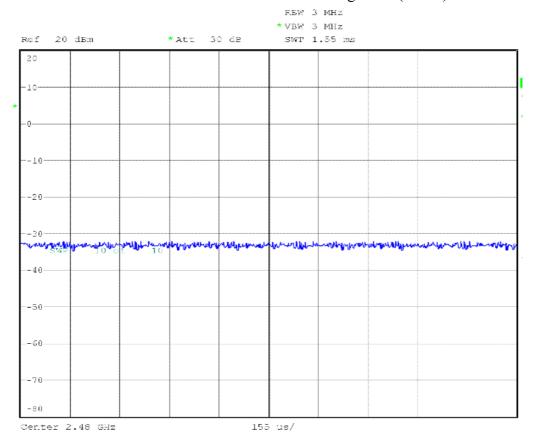
EDR Relative Transmit Power GFSK High Max (3DH5)



EDR Relative Transmit Power DPSK High Max (3DH5)
Part A-243 of 322



EDR Relative Transmit Power GFSK High Min (3DH5)



EDR Relative Transmit Power DPSK High Min (3DH5)
Part A-244 of 322

# 3.4.11. Test Case: TRM/CA/11/C - EDR Carrier Frequency Stability and Modulation Accuracy

#### Expected Outcome:

If the EUT does not support 8DPSK modulation then the outcomes based on this modulation do not apply..

All values as measured must fulfill the following conditions:

- 1. Carrier frequency stability:
- $-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$ , for all packets
- $-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$ , for all blocks
- -10 kHz  $\leq \omega 0 \leq +10$  kHz, for all blocks
- 2. RMS DEVM:

RMS DEVM  $\leq 0.20$ , for all  $\pi/4$ -DQPSK blocks

RMS DEVM  $\leq 0.13$ , for all 8DPSK blocks

3. Peak DEVM:

DEVM  $\leq 0.35$  for all  $\pi/4$ -DQPSK symbols

DEVM  $\leq$  0.25 for all 8DPSK symbols

4. 99% DEVM:

DEVM  $\leq$  0.30, for 99% of  $\pi/4$ -DQPSK symbols

DEVM  $\leq$  0.20, for 99% of 8DPSK symbols

Packet Type:2DH5

	Tucket Type.2D115						
Test Frequency	Test Parameter	Result	Limit	Verdict			
	ωi (kHz)	0.00	-75  kHz ≤ ωi ≤ $+75  kHz$	Pass			
I any an anatin a	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			
Frequency	RMS DEVM	0.07	RMS DEVM $\leq 0.2$	Pass			
(2402MHz)	Peak DEVM	0.13	DEVM ≤ 0.35	Pass			
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass			
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass			
Mid an austin a	$(\omega i + \omega 0)(kHz)$	0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			
Frequency (2441MHz)	RMS DEVM	0.07	RMS DEVM $\leq 0.2$	Pass			
(2441WIIIZ)	Peak DEVM	0.13	$DEVM \le 0.35$	Pass			
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass			
High operating	ωi (kHz)	0.01	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass			
Frequency	$(\omega i + \omega 0)(kHz)$	0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass			
(2480MHz)	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass			

	RMS DEVM	0.11	RMS DEVM ≤ 0.2	Pass
	Peak DEVM	0.20	$DEVM \le 0.35$	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	Packet	t Type: 3DH	15	
Test Frequency	Test Parameter	Result	Limit	Verdict
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
I avy an anatin a	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency (2402MHz)	RMS DEVM	0.06	RMS DEVM $\leq 0.13$	Pass
(2402MHZ)	Peak DEVM	0.13	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
Midanadina	$(\omega i + \omega 0)(kHz)$	0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.07	RMS DEVM ≤ 0.13	Pass
(2441MHz)	Peak DEVM	0.14	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	0.01	-75 kHz ≤ ωi ≤ +75 kHz	Pass
TT' 1 4'	$(\omega i + \omega 0)(kHz)$	0.01	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
High operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.10	RMS DEVM ≤ 0.13	Pass
(2480MHz)	Peak DEVM	0.22	DEVM ≤ 0.25	Pass
	DEVM for 99%	99.86 %	Error symbols > 99 %	Pass

# 3.4.12. Test Case: TRM/CA/13/C - EDR In-Band Spurious Emissions

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

- 1.  $PTx-26dB (f) \le PTxref -26 dB for |M-N|= 1$
- 2. PTx (f)  $\leq$  20 dBm for |M-N| = 2
- 3. PTx (f)  $\leq$  40 dBm for  $|M-N| \geq$  3.

For each operating frequency exceptions in up to three bands of 1 MHz width centered on a frequency that is an integer multiple of 1 MHz are allowed. They must however comply with an absolute value of -20 dBm.

Packet Type: 2DH5

Test Frequency	Measurement Frequency	Ptx(f)	Limit	Verdict
(MHz)	(MHz)	(dBm)	(dBm)	
2405	2402	-45.24	<b>≤-40</b>	Pass
2405	2403	-35.84	≤-20	Pass

2405	2404	-33.62	≤ 7.13 <b>-</b> 26	Pass
2405	2405	7.13	N/A	N/A
2405	2406	-32.37	≤ 7.13 <b>-</b> 26	Pass
2405	2407	-34.95	<b>≤-20</b>	Pass
2405	2408	-44.32	<b>≤-40</b>	Pass
2405	2409	-47.52	<b>≤-40</b>	Pass
2405	2410	-48.47	<b>≤-40</b>	Pass
2405	2411	-48.12	<b>≤-40</b>	Pass
2405	2412	-47.85	<b>≤-40</b>	Pass
2405	2413	-47.48	<b>≤-40</b>	Pass
2405	2414	-47.26	<b>≤-40</b>	Pass
2405	2415	-47.63	<b>≤-40</b>	Pass
2405	2416	-46.83	<b>≤-40</b>	Pass
2405	2417	-46.56	<b>≤-40</b>	Pass
2405	2418	-46.56	<b>≤-40</b>	Pass
2405	2419	-47.27	<b>≤-40</b>	Pass
2405	2420	-47.14	<b>≤-40</b>	Pass
2405	2421	-47.12	<b>≤-40</b>	Pass
2405	2422	-47.19	<b>≤-40</b>	Pass
2405	2423	-47.21	<b>≤-40</b>	Pass
2405	2424	-47.34	<b>≤-40</b>	Pass
2405	2425	-47.83	<b>≤-40</b>	Pass
2405	2426	-47.96	<b>≤-40</b>	Pass
2405	2427	-48.26	<b>≤-40</b>	Pass
2405	2428	-48.36	<b>≤-40</b>	Pass
2405	2429	-48.71	<b>≤-40</b>	Pass
2405	2430	-48.71	<b>≤-40</b>	Pass
2405	2431	-48.75	<b>≤-40</b>	Pass
2405	2432	-49.35	<b>≤-40</b>	Pass
2405	2433	-49.63	<b>≤-40</b>	Pass
2405	2434	-49.72	<b>≤-40</b>	Pass
2405	2435	-50.29	<b>≤-40</b>	Pass
2405	2436	-50.5	<b>≤-40</b>	Pass
2405	2437	-50.42	<b>≤-40</b>	Pass
2405	2438	-50.93	<b>≤-40</b>	Pass
2405	2439	-51.14	<b>≤-40</b>	Pass
2405	2440	-51.34	<b>≤-40</b>	Pass
2405	2441	-51.85	<b>≤-40</b>	Pass

2405	2442	-52.31	<b>≤-40</b>	Pass
2405	2443	-52.98	<b>≤-40</b>	Pass
2405	2444	-52.68	<b>≤-40</b>	Pass
2405	2445	-52.91	<b>≤-40</b>	Pass
2405	2446	-53.5	<b>≤-40</b>	Pass
2405	2447	-54	<b>≤-40</b>	Pass
2405	2448	-54.13	<b>≤-40</b>	Pass
2405	2449	-54.47	<b>≤-40</b>	Pass
2405	2450	-54.56	<b>≤-40</b>	Pass
2405	2451	-55.13	<b>≤-40</b>	Pass
2405	2452	-54.81	<b>≤-40</b>	Pass
2405	2453	-55.26	<b>≤-40</b>	Pass
2405	2454	-55.77	<b>≤-40</b>	Pass
2405	2455	-56.03	<b>≤-40</b>	Pass
2405	2456	-55.94	<b>≤-40</b>	Pass
2405	2457	-53.67	<b>≤-40</b>	Pass
2405	2458	-56.44	<b>≤-40</b>	Pass
2405	2459	-56.6	<b>≤-40</b>	Pass
2405	2460	-56.38	<b>≤-40</b>	Pass
2405	2461	-56.9	<b>≤-40</b>	Pass
2405	2462	-56.58	<b>≤-40</b>	Pass
2405	2463	-57.09	<b>≤-40</b>	Pass
2405	2464	-57.34	<b>≤-40</b>	Pass
2405	2465	-56.96	<b>≤-40</b>	Pass
2405	2466	-57.32	<b>≤-4</b> 0	Pass
2405	2467	-57.08	<b>≤-40</b>	Pass
2405	2468	-57.3	<b>≤-40</b>	Pass
2405	2469	-57.15	<b>≤-4</b> 0	Pass
2405	2470	-57.1	<b>≤-40</b>	Pass
2405	2471	-57.22	<b>≤-40</b>	Pass
2405	2472	-57.15	<b>≤-4</b> 0	Pass
2405	2473	-57.25	<b>≤-4</b> 0	Pass
2405	2474	-56.97	<b>≤-40</b>	Pass
2405	2475	-57.45	<b>≤-40</b>	Pass
2405	2476	-57.06	<b>≤-40</b>	Pass
2405	2477	-57.27	<b>≤-40</b>	Pass
2405	2478	-56.84	<b>≤-40</b>	Pass
2405	2479	-56.88	<b>≤-40</b>	Pass

2405	2480	-56.96	<b>≤-40</b>	Pass
2441			<u> </u>	1 433
2441	2402	-52.5	<b>≤-40</b>	Pass
2441	2403	-52.16	<b>≤-40</b>	Pass
2441	2404	-51.58	<b>≤-40</b>	Pass
2441	2405	-51.61	<b>≤-40</b>	Pass
2441	2406	-50.96	<b>≤-40</b>	Pass
2441	2407	-50.97	<b>≤-40</b>	Pass
2441	2408	-50.83	<b>≤-40</b>	Pass
2441	2409	-50.29	<b>≤-40</b>	Pass
2441	2410	-49.84	<b>≤-40</b>	Pass
2441	2411	-49.52	<b>≤-40</b>	Pass
2441	2412	-49.51	<b>≤-40</b>	Pass
2441	2413	-49.02	<b>≤-40</b>	Pass
2441	2414	-48.88	<b>≤-40</b>	Pass
2441	2415	-48.72	<b>≤-40</b>	Pass
2441	2416	-48.7	<b>≤-40</b>	Pass
2441	2417	-48.3	<b>≤-40</b>	Pass
2441	2418	-48.07	<b>≤-40</b>	Pass
2441	2419	-47.72	<b>≤-40</b>	Pass
2441	2420	-47.57	<b>≤-40</b>	Pass
2441	2421	-47.72	<b>≤-40</b>	Pass
2441	2422	-47.39	<b>≤-40</b>	Pass
2441	2423	-47.2	<b>≤-40</b>	Pass
2441	2424	-47.63	<b>≤-40</b>	Pass
2441	2425	-47.31	<b>≤-40</b>	Pass
2441	2426	-47.36	<b>≤-40</b>	Pass
2441	2427	-46.88	<b>≤-40</b>	Pass
2441	2428	-46.97	<b>≤-40</b>	Pass
2441	2429	-46.96	<b>≤-40</b>	Pass
2441	2430	-46.98	<b>≤-40</b>	Pass
2441	2431	-47.06	<b>≤-40</b>	Pass
2441	2432	-47.17	<b>≤-40</b>	Pass
2441	2433	-48.09	<b>≤-40</b>	Pass
2441	2434	-47.92	<b>≤-40</b>	Pass
2441	2435	-48.62	<b>≤-40</b>	Pass
2441	2436	-47.9	<b>≤-40</b>	Pass
2441	2437	-47.63	<b>≤-40</b>	Pass
2441	2438	-45.14	<b>≤-40</b>	Pass

2439	-36.64	<b>≤-20</b>	Pass
2440	-35.46	≤ 6.7 <b>-</b> 26	Pass
2441	6.7	N/A	N/A
2442	-34.48	≤ 6.7 <b>-</b> 26	Pass
2443	-34.18	≤-20	Pass
2444	-44.88	<b>≤-40</b>	Pass
2445	-47.68	<b>≤-40</b>	Pass
2446	-47.92	<b>≤-40</b>	Pass
2447	-48.04	<b>≤-40</b>	Pass
2448	-48.06	<b>≤-40</b>	Pass
2449	-47.79	<b>≤-40</b>	Pass
2450	-47.57	<b>≤-40</b>	Pass
2451	-47.56	<b>≤-40</b>	Pass
2452	-47.29	<b>≤-40</b>	Pass
2453	-47.02	<b>≤-40</b>	Pass
2454	-47.33	<b>≤-40</b>	Pass
2455	-47.29	<b>≤-40</b>	Pass
2456	-46.98	<b>≤-40</b>	Pass
2457	-47.9	<b>≤-40</b>	Pass
2458	-47.64	<b>≤-40</b>	Pass
2459	-47.94	<b>≤-40</b>	Pass
2460	-47.9	<b>≤-40</b>	Pass
2461	-48.07	<b>≤-40</b>	Pass
2462	-48.07	<b>≤-40</b>	Pass
2463	-48.44	<b>≤-40</b>	Pass
2464	-49.03	<b>≤-40</b>	Pass
2465	-48.84	<b>≤-40</b>	Pass
2466	-48.99	<b>≤-40</b>	Pass
2467	-49.47	<b>≤-40</b>	Pass
2468	-49.34	<b>≤-4</b> 0	Pass
2469	-50.23	<b>≤-40</b>	Pass
2470	-49.89	<b>≤-40</b>	Pass
2471	-50.43	<b>≤-40</b>	Pass
2472	-50.62	<b>≤-40</b>	Pass
2473	-51.14	<b>≤-40</b>	Pass
2474	-51.49	<b>≤-40</b>	Pass
2475	-51.57	<b>≤-40</b>	Pass
2476	-52.05	<b>≤-40</b>	Pass
	2440 2441 2442 2443 2443 2444 2445 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475	2440       -35.46         2441       6.7         2442       -34.48         2443       -34.18         2444       -44.88         2445       -47.68         2446       -47.92         2447       -48.04         2448       -48.06         2449       -47.79         2450       -47.57         2451       -47.56         2452       -47.29         2453       -47.02         2454       -47.33         2455       -47.29         2456       -46.98         2457       -47.9         2458       -47.64         2459       -47.94         2460       -47.9         2461       -48.07         2462       -48.07         2463       -48.44         2464       -49.03         2465       -48.84         2466       -48.99         2467       -49.47         2468       -49.34         2469       -50.23         2470       -49.89         2471       -50.62         2473       -51.14         2474 <td>2440       -35.46       ≤ 6.7 -26         2441       6.7       N/A         2442       -34.48       ≤ 6.7 -26         2443       -34.18       ≤ -20         2444       -44.88       ≤ -40         2445       -47.68       ≤ -40         2446       -47.92       ≤ -40         2447       -48.04       ≤ -40         2448       -48.06       ≤ -40         2449       -47.79       ≤ -40         2450       -47.57       ≤ -40         2451       -47.56       ≤ -40         2452       -47.29       ≤ -40         2453       -47.02       ≤ -40         2454       -47.33       ≤ -40         2455       -47.29       ≤ -40         2456       -46.98       ≤ -40         2457       -47.9       ≤ -40         2458       -47.64       ≤ -40         2459       -47.94       ≤ -40         2460       -47.9       ≤ -40         2461       -48.07       ≤ -40         2462       -48.07       ≤ -40         2463       -48.84       ≤ -40         2464       -49.03       ≤ -</td>	2440       -35.46       ≤ 6.7 -26         2441       6.7       N/A         2442       -34.48       ≤ 6.7 -26         2443       -34.18       ≤ -20         2444       -44.88       ≤ -40         2445       -47.68       ≤ -40         2446       -47.92       ≤ -40         2447       -48.04       ≤ -40         2448       -48.06       ≤ -40         2449       -47.79       ≤ -40         2450       -47.57       ≤ -40         2451       -47.56       ≤ -40         2452       -47.29       ≤ -40         2453       -47.02       ≤ -40         2454       -47.33       ≤ -40         2455       -47.29       ≤ -40         2456       -46.98       ≤ -40         2457       -47.9       ≤ -40         2458       -47.64       ≤ -40         2459       -47.94       ≤ -40         2460       -47.9       ≤ -40         2461       -48.07       ≤ -40         2462       -48.07       ≤ -40         2463       -48.84       ≤ -40         2464       -49.03       ≤ -

2441	2477	-51.74	<b>≤-4</b> 0	Pass
2441	2478	-52.58	<b>≤-4</b> 0	Pass
2441	2479	-53.01	<b>≤-4</b> 0	Pass
2441	2480	-53.23	<b>≤-40</b>	Pass
2477	2402	-57.58	<b>≤-4</b> 0	Pass
2477	2403	-57.57	<b>≤-4</b> 0	Pass
2477	2404	-57.47	<b>≤-4</b> 0	Pass
2477	2405	-57.55	<b>≤-4</b> 0	Pass
2477	2406	-57.29	<b>≤-40</b>	Pass
2477	2407	-57.55	<b>≤-4</b> 0	Pass
2477	2408	-57.6	<b>≤-40</b>	Pass
2477	2409	-57.79	<b>≤-4</b> 0	Pass
2477	2410	-57.31	<b>≤-4</b> 0	Pass
2477	2411	-57.35	<b>≤-40</b>	Pass
2477	2412	-57.57	<b>≤-4</b> 0	Pass
2477	2413	-57.12	<b>≤-40</b>	Pass
2477	2414	-57.39	<b>≤-40</b>	Pass
2477	2415	-57.37	<b>≤-4</b> 0	Pass
2477	2416	-57.24	<b>≤-4</b> 0	Pass
2477	2417	-56.85	<b>≤-40</b>	Pass
2477	2418	-57.48	<b>≤-40</b>	Pass
2477	2419	-57.16	<b>≤-4</b> 0	Pass
2477	2420	-57.41	<b>≤-40</b>	Pass
2477	2421	-56.86	<b>≤-40</b>	Pass
2477	2422	-56.65	<b>≤-40</b>	Pass
2477	2423	-56.21	<b>≤-4</b> 0	Pass
2477	2424	-56.24	<b>≤-40</b>	Pass
2477	2425	-55.8	≤-40	Pass
2477	2426	-55.89	<b>≤-40</b>	Pass
2477	2427	-55.71	≤-40	Pass
2477	2428	-55.49	<b>≤-40</b>	Pass
2477	2429	-55.18	≤-40	Pass
2477	2430	-55.29	≤-40	Pass
2477	2431	-55.12	≤-40	Pass
2477	2432	-54.63	<b>≤-40</b>	Pass
2477	2433	-54.44	≤-40	Pass
2477	2434	-53.7	≤-40	Pass
2477	2435	-53.72	<b>≤-40</b>	Pass

2477	2436	-53.3	<b>≤-40</b>	Pass
2477	2437	-52.93	<b>≤-40</b>	Pass
2477	2438	-52.77	<b>≤-40</b>	Pass
2477	2439	-52.5	<b>≤-40</b>	Pass
2477	2440	-52.24	<b>≤-40</b>	Pass
2477	2441	-52.17	<b>≤-40</b>	Pass
2477	2442	-51.17	<b>≤-40</b>	Pass
2477	2443	-51	<b>≤-40</b>	Pass
2477	2444	-50.76	<b>≤-40</b>	Pass
2477	2445	-50.73	<b>≤-40</b>	Pass
2477	2446	-50.43	<b>≤-40</b>	Pass
2477	2447	-50.04	<b>≤-40</b>	Pass
2477	2448	-49.93	<b>≤-40</b>	Pass
2477	2449	-49.22	<b>≤-40</b>	Pass
2477	2450	-49.37	<b>≤-40</b>	Pass
2477	2451	-48.92	<b>≤-40</b>	Pass
2477	2452	-49.07	<b>≤-40</b>	Pass
2477	2453	-48.53	<b>≤-40</b>	Pass
2477	2454	-48.47	<b>≤-40</b>	Pass
2477	2455	-47.89	<b>≤-40</b>	Pass
2477	2456	-48.08	<b>≤-40</b>	Pass
2477	2457	-48.24	<b>≤-40</b>	Pass
2477	2458	-47.75	<b>≤-40</b>	Pass
2477	2459	-47.99	<b>≤-40</b>	Pass
2477	2460	-47.97	<b>≤-40</b>	Pass
2477	2461	-47.85	<b>≤-40</b>	Pass
2477	2462	-47.67	<b>≤-40</b>	Pass
2477	2463	-47.69	<b>≤-40</b>	Pass
2477	2464	-47.53	<b>≤-40</b>	Pass
2477	2465	-47.38	<b>≤-40</b>	Pass
2477	2466	-47.34	≤-40	Pass
2477	2467	-47.69	<b>≤-40</b>	Pass
2477	2468	-47.68	<b>≤-40</b>	Pass
2477	2469	-48.56	≤-40	Pass
2477	2470	-48.32	<b>≤-40</b>	Pass
2477	2471	-49.23	<b>≤-40</b>	Pass
2477	2472	-49.04	≤-40	Pass
2477	2473	-48.12	<b>≤-40</b>	Pass

2477	2474	-45.85	<b>≤-40</b>	Pass
2477	2475	-38.13	≤-20	Pass
2477	2476	-35	≤ 5.98 -26	Pass
2477	2477	5.98	N/A	N/A
2477	2478	-34.33	≤ 5.98 -26	Pass
2477	2479	-36.35	≤-20	Pass
2477	2480	-45.5	<b>≤-40</b>	Pass
	Packet Type:	3DH5		
Test Frequency	Measurement Frequency	Ptx(f)	Limit	Verdict
(MHz)	(MHz)	(dBm)	(dBm)	
2405	2402	-43.65	<b>≤-40</b>	Pass
2405	2403	-36.21	≤-20	Pass
2405	2404	-34.04	≤ 7.14 <b>-</b> 26	Pass
2405	2405	7.14	N/A	N/A
2405	2406	-32.45	≤ 7.14 <b>-</b> 26	Pass
2405	2407	-34.79	≤-20	Pass
2405	2408	-44.15	≤-40	Pass
2405	2409	-46.66	≤-40	Pass
2405	2410	-47.31	<b>≤-40</b>	Pass
2405	2411	-48.02	≤-40	Pass
2405	2412	-47.46	≤-40	Pass
2405	2413	-47.71	≤-40	Pass
2405	2414	-47.35	≤-40	Pass
2405	2415	-47.34	≤-40	Pass
2405	2416	-47.06	≤-40	Pass
2405	2417	-47.16	≤-40	Pass
2405	2418	-47.35	≤-40	Pass
2405	2419	-46.86	≤-40	Pass
2405	2420	-47.19	≤-40	Pass
2405	2421	-47.58	≤-40	Pass
2405	2422	-47.51	≤-40	Pass
2405	2423	-47.25	≤-40	Pass
2405	2424	-46.94	≤-40	Pass
2405	2425	-47.22	≤-40	Pass
2405	2426	-47.92	≤-40	Pass
2405	2427	-48.11	≤-40	Pass
2405	2428	-48.17	≤-40	Pass
2405	2429	-48.55	<b>≤-40</b>	Pass

2405	2430	-48.96	<b>≤-40</b>	Dogg
		10.70	<u> </u>	Pass
2405	2431	-49.02	<b>≤-40</b>	Pass
2405	2432	-49.45	<b>≤-40</b>	Pass
2405	2433	-49.32	<b>≤-40</b>	Pass
2405	2434	-49.6	<b>≤-40</b>	Pass
2405	2435	-49.62	<b>≤-40</b>	Pass
2405	2436	-50.75	<b>≤-40</b>	Pass
2405	2437	-50.85	<b>≤-40</b>	Pass
2405	2438	-51.14	≤-40	Pass
2405	2439	-51.52	<b>≤-40</b>	Pass
2405	2440	-51.77	<b>≤-40</b>	Pass
2405	2441	-51.72	≤-40	Pass
2405	2442	-52.28	<b>≤-40</b>	Pass
2405	2443	-52.98	<b>≤-40</b>	Pass
2405	2444	-53.02	≤-40	Pass
2405	2445	-53.32	<b>≤-40</b>	Pass
2405	2446	-53.55	<b>≤-40</b>	Pass
2405	2447	-53.57	<b>≤-40</b>	Pass
2405	2448	-53.78	<b>≤-40</b>	Pass
2405	2449	-54.44	<b>≤-40</b>	Pass
2405	2450	-54.34	≤-40	Pass
2405	2451	-54.87	<b>≤-40</b>	Pass
2405	2452	-55.36	≤-40	Pass
2405	2453	-55.2	≤-40	Pass
2405	2454	-55.6	≤-40	Pass
2405	2455	-56.11	<b>≤-40</b>	Pass
2405	2456	-56.13	≤-40	Pass
2405	2457	-54.04	≤-40	Pass
2405	2458	-56.36	<b>≤-40</b>	Pass
2405	2459	-56.64	≤-40	Pass
2405	2460	-56.69	≤-40	Pass
2405	2461	-57.06	≤-40	Pass
2405	2462	-56.8	≤-40	Pass
2405	2463	-56.51	≤-40	Pass
2405	2464	-56.94	<b>≤-40</b>	Pass
2405	2465	-57.18	≤-40	Pass
2405	2466	-57.37	≤-40	Pass
2405	2467	-57.29	≤-40	Pass

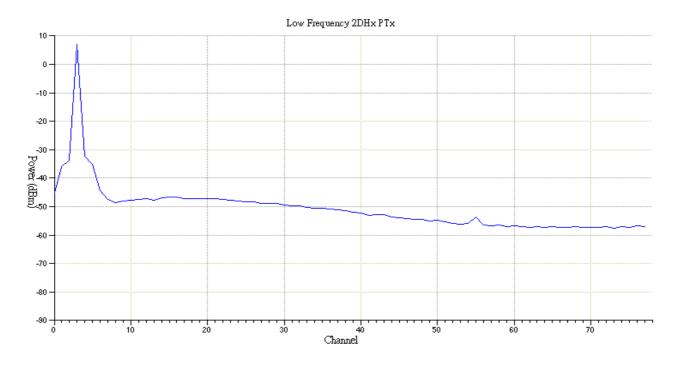
2405	2468	-57.11	<b>≤-4</b> 0	Pass
2405	2469	-56.99	<b>≤-4</b> 0	Pass
2405	2470	-57.14	<b>≤-4</b> 0	Pass
2405	2471	-57.44	<b>≤-40</b>	Pass
2405	2472	-57.04	<b>≤-4</b> 0	Pass
2405	2473	-57.07	<b>≤-4</b> 0	Pass
2405	2474	-57.12	<b>≤-40</b>	Pass
2405	2475	-56.88	<b>≤-4</b> 0	Pass
2405	2476	-56.99	<b>≤-40</b>	Pass
2405	2477	-57.18	<b>≤-4</b> 0	Pass
2405	2478	-57.09	<b>≤-40</b>	Pass
2405	2479	-56.87	<b>≤-40</b>	Pass
2405	2480	-57.23	<b>≤-40</b>	Pass
2441	2402	-52.04	<b>≤-40</b>	Pass
2441	2403	-51.86	<b>≤-40</b>	Pass
2441	2404	-51.75	<b>≤-40</b>	Pass
2441	2405	-51.29	<b>≤-40</b>	Pass
2441	2406	-50.91	<b>≤-40</b>	Pass
2441	2407	-50.61	<b>≤-40</b>	Pass
2441	2408	-50.38	<b>≤-40</b>	Pass
2441	2409	-50.33	<b>≤-40</b>	Pass
2441	2410	-49.91	<b>≤-40</b>	Pass
2441	2411	-49.69	<b>≤-40</b>	Pass
2441	2412	-49.61	<b>≤-40</b>	Pass
2441	2413	-48.95	<b>≤-40</b>	Pass
2441	2414	-48.94	<b>≤-40</b>	Pass
2441	2415	-49.21	<b>≤-4</b> 0	Pass
2441	2416	-48.34	<b>≤-40</b>	Pass
2441	2417	-48.23	<b>≤-4</b> 0	Pass
2441	2418	-48.04	<b>≤-40</b>	Pass
2441	2419	-47.35	<b>≤-40</b>	Pass
2441	2420	-47.43	<b>≤-40</b>	Pass
2441	2421	-47.72	<b>≤-40</b>	Pass
2441	2422	-47.54	<b>≤-40</b>	Pass
2441	2423	-47.36	<b>≤-40</b>	Pass
2441	2424	-47.18	<b>≤-40</b>	Pass
2441	2425	-47.2	<b>≤-40</b>	Pass
2441	2426	-47.13	<b>≤-40</b>	Pass

2427 2428 2429	-47.13 -47.08	≤-40 ≤-40	Pass
	-47.08	<-40	D
2429		10	Pass
- 1-2	-46.76	<b>≤-40</b>	Pass
2430	-47.05	<b>≤-40</b>	Pass
2431	-47.02	<b>≤-40</b>	Pass
2432	-47.25	<b>≤-40</b>	Pass
2433	-47.92	<b>≤-40</b>	Pass
2434	-47.92	<b>≤-40</b>	Pass
2435	-48.04	<b>≤-40</b>	Pass
2436	-47.48	<b>≤-40</b>	Pass
2437	-46.62	<b>≤-40</b>	Pass
2438	-43.69	<b>≤-40</b>	Pass
2439	-36.48	<b>≤-20</b>	Pass
2440	-36.4	≤ 6.87 <b>-</b> 26	Pass
2441	6.87	N/A	N/A
2442	-34.75	≤ 6.87 <b>-</b> 26	Pass
2443	-34.51	<b>≤-20</b>	Pass
2444	-44.53	<b>≤-40</b>	Pass
2445	-46.48	<b>≤-40</b>	Pass
2446	-46.94	<b>≤-40</b>	Pass
2447	-47.82	<b>≤-40</b>	Pass
2448	-48.01	<b>≤-40</b>	Pass
2449	-47.79	<b>≤-40</b>	Pass
2450	-47.75	<b>≤-40</b>	Pass
2451	-47.64	<b>≤-40</b>	Pass
2452	-47.32	<b>≤-40</b>	Pass
2453	-47.06	<b>≤-40</b>	Pass
2454	-47.4	<b>≤-40</b>	Pass
2455	-47.35	<b>≤-40</b>	Pass
2456	-47.41	<b>≤-40</b>	Pass
2457	-47.57	<b>≤-40</b>	Pass
2458	-47.61	<b>≤-40</b>	Pass
2459	-47.84	<b>≤-40</b>	Pass
2460	-47.38	<b>≤-40</b>	Pass
2461	-48.52	<b>≤-40</b>	Pass
2462	-48.17	<b>≤-40</b>	Pass
2463	-48.17	<b>≤-40</b>	Pass
2464	-48.82	<b>≤-40</b>	Pass
	2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463	2430       -47.05         2431       -47.02         2432       -47.25         2433       -47.92         2434       -47.92         2435       -48.04         2436       -47.48         2437       -46.62         2438       -43.69         2439       -36.48         2440       -36.4         2441       6.87         2442       -34.75         2443       -34.51         2444       -44.53         2445       -46.48         2446       -46.94         2447       -47.82         2448       -48.01         2449       -47.79         2450       -47.75         2451       -47.64         2452       -47.32         2453       -47.06         2454       -47.4         2455       -47.35         2456       -47.41         2457       -47.57         2458       -47.61         2459       -47.84         2460       -47.38         2461       -48.52         2462       -48.17         2463 </td <td>2430     -47.05     ≤-40       2431     -47.02     ≤-40       2432     -47.25     ≤-40       2433     -47.92     ≤-40       2434     -47.92     ≤-40       2435     -48.04     ≤-40       2436     -47.48     ≤-40       2437     -46.62     ≤-40       2438     -43.69     ≤-40       2439     -36.48     ≤-20       2440     -36.4     ≤ 6.87-26       2441     6.87     N/A       2442     -34.75     ≤ 6.87-26       2443     -34.51     ≤-20       2444     -44.53     ≤-40       2445     -46.48     ≤-40       2446     -46.94     ≤-40       2447     -47.82     ≤-40       2448     -48.01     ≤-40       2449     -47.79     ≤-40       2450     -47.32     ≤-40       2451     -47.64     ≤-40       2452     -47.32     ≤-40       2453     -47.06     ≤-40       2454     -47.4     ≤-40       2455     -47.35     ≤-40       2456     -47.41     ≤-40       2457     -47.84     ≤-40       2458     -47.61     &lt;</td>	2430     -47.05     ≤-40       2431     -47.02     ≤-40       2432     -47.25     ≤-40       2433     -47.92     ≤-40       2434     -47.92     ≤-40       2435     -48.04     ≤-40       2436     -47.48     ≤-40       2437     -46.62     ≤-40       2438     -43.69     ≤-40       2439     -36.48     ≤-20       2440     -36.4     ≤ 6.87-26       2441     6.87     N/A       2442     -34.75     ≤ 6.87-26       2443     -34.51     ≤-20       2444     -44.53     ≤-40       2445     -46.48     ≤-40       2446     -46.94     ≤-40       2447     -47.82     ≤-40       2448     -48.01     ≤-40       2449     -47.79     ≤-40       2450     -47.32     ≤-40       2451     -47.64     ≤-40       2452     -47.32     ≤-40       2453     -47.06     ≤-40       2454     -47.4     ≤-40       2455     -47.35     ≤-40       2456     -47.41     ≤-40       2457     -47.84     ≤-40       2458     -47.61     <

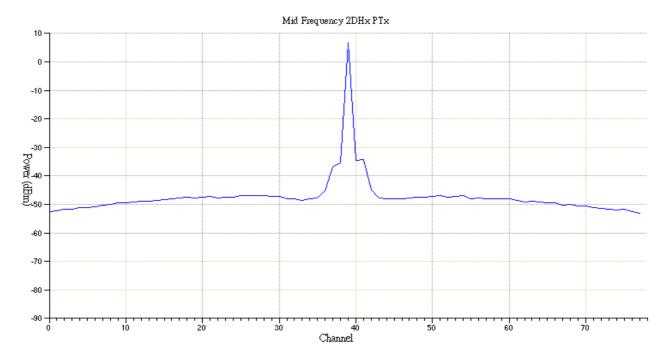
2441	2465	-49.02	<b>≤-40</b>	Pass
2441	2466	-49.09	<b>≤-40</b>	Pass
2441	2467	-49.27	<b>≤-40</b>	Pass
2441	2468	-49.45	<b>≤-40</b>	Pass
2441	2469	-49.46	<b>≤-40</b>	Pass
2441	2470	-50.17	<b>≤-40</b>	Pass
2441	2471	-50.47	<b>≤-40</b>	Pass
2441	2472	-50.69	<b>≤-40</b>	Pass
2441	2473	-51.09	<b>≤-40</b>	Pass
2441	2474	-51.62	<b>≤-40</b>	Pass
2441	2475	-51.72	<b>≤-40</b>	Pass
2441	2476	-51.96	<b>≤-40</b>	Pass
2441	2477	-52.36	<b>≤-40</b>	Pass
2441	2478	-52.31	<b>≤-40</b>	Pass
2441	2479	-52.87	<b>≤-40</b>	Pass
2441	2480	-53.18	<b>≤-40</b>	Pass
2477	2402	-57.54	<b>≤-40</b>	Pass
2477	2403	-57.38	<b>≤-40</b>	Pass
2477	2404	-57.63	<b>≤-40</b>	Pass
2477	2405	-57.5	<b>≤-40</b>	Pass
2477	2406	-57.54	<b>≤-40</b>	Pass
2477	2407	-57.88	<b>≤-40</b>	Pass
2477	2408	-57.43	<b>≤-40</b>	Pass
2477	2409	-57.57	<b>≤-40</b>	Pass
2477	2410	-57.5	<b>≤-40</b>	Pass
2477	2411	-57.35	<b>≤-40</b>	Pass
2477	2412	-57.31	<b>≤-40</b>	Pass
2477	2413	-57.31	<b>≤-40</b>	Pass
2477	2414	-57.1	<b>≤-40</b>	Pass
2477	2415	-57.17	<b>≤-40</b>	Pass
2477	2416	-57.3	<b>≤-40</b>	Pass
2477	2417	-57.44	<b>≤-40</b>	Pass
2477	2418	-56.99	<b>≤-40</b>	Pass
2477	2419	-57.07	<b>≤-40</b>	Pass
2477	2420	-56.67	<b>≤-40</b>	Pass
2477	2421	-56.65	<b>≤-40</b>	Pass
2477	2422	-56.84	<b>≤-40</b>	Pass
2477	2423	-56.71	<b>≤-40</b>	Pass
	· · · · · · · · · · · · · · · · · · ·			

2477	2424	-56.27	<b>≤-40</b>	Pass
2477	2425	-55.65	<b>≤-40</b>	Pass
2477	2426	-56.19	<b>≤-40</b>	Pass
2477	2427	-55.87	<b>≤-40</b>	Pass
2477	2428	-55.62	<b>≤-40</b>	Pass
2477	2429	-55.22	<b>≤-40</b>	Pass
2477	2430	-55.35	<b>≤-40</b>	Pass
2477	2431	-54.94	<b>≤-40</b>	Pass
2477	2432	-54.64	<b>≤-40</b>	Pass
2477	2433	-54.03	<b>≤-40</b>	Pass
2477	2434	-53.8	<b>≤-40</b>	Pass
2477	2435	-53.8	<b>≤-40</b>	Pass
2477	2436	-53.44	<b>≤-40</b>	Pass
2477	2437	-52.81	<b>≤-40</b>	Pass
2477	2438	-52.5	<b>≤-40</b>	Pass
2477	2439	-52.55	<b>≤-40</b>	Pass
2477	2440	-52.28	<b>≤-40</b>	Pass
2477	2441	-51.99	<b>≤-40</b>	Pass
2477	2442	-51.26	<b>≤-40</b>	Pass
2477	2443	-51.17	<b>≤-40</b>	Pass
2477	2444	-51.17	<b>≤-40</b>	Pass
2477	2445	-50.61	<b>≤-40</b>	Pass
2477	2446	-50.21	<b>≤-40</b>	Pass
2477	2447	-49.95	<b>≤-40</b>	Pass
2477	2448	-49.65	<b>≤-40</b>	Pass
2477	2449	-49.7	<b>≤-40</b>	Pass
2477	2450	-49.17	<b>≤-40</b>	Pass
2477	2451	-49.09	<b>≤-40</b>	Pass
2477	2452	-49.01	<b>≤-40</b>	Pass
2477	2453	-48.76	<b>≤-40</b>	Pass
2477	2454	-48.34	<b>≤-40</b>	Pass
2477	2455	-47.95	<b>≤-40</b>	Pass
2477	2456	-47.74	<b>≤-40</b>	Pass
2477	2457	-48.05	<b>≤-40</b>	Pass
2477	2458	-47.99	<b>≤-40</b>	Pass
2477	2459	-47.68	<b>≤-40</b>	Pass
2477	2460	-47.63	<b>≤-40</b>	Pass
2477	2461	-47.69	<b>≤-40</b>	Pass
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			

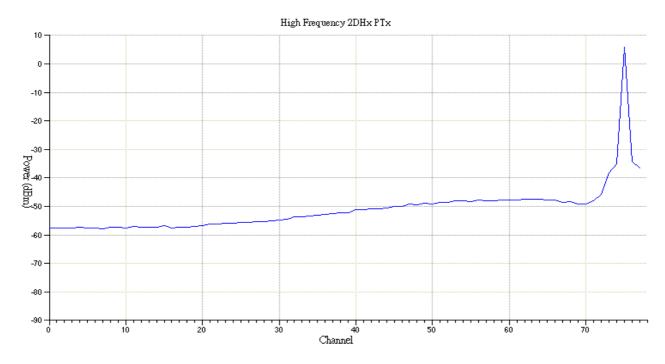
2477	2462	-47.5	<b>≤-40</b>	Pass
2477	2463	-47.53	<b>≤-40</b>	Pass
2477	2464	-47.53	<b>≤-40</b>	Pass
2477	2465	-47.36	<b>≤-40</b>	Pass
2477	2466	-47.4	<b>≤-40</b>	Pass
2477	2467	-47.58	<b>≤-40</b>	Pass
2477	2468	-47.69	<b>≤-40</b>	Pass
2477	2469	-48.08	<b>≤-40</b>	Pass
2477	2470	-48.23	<b>≤-40</b>	Pass
2477	2471	-48.43	<b>≤-40</b>	Pass
2477	2472	-48.58	<b>≤-40</b>	Pass
2477	2473	-47.42	<b>≤-40</b>	Pass
2477	2474	-44.67	<b>≤-40</b>	Pass
2477	2475	-38.71	≤-20	Pass
2477	2476	-36.64	≤ 6.24 <b>-</b> 26	Pass
2477	2477	6.24	N/A	N/A
2477	2478	-34.92	≤ 6.24 <b>-</b> 26	Pass
2477	2479	-36.1	<b>≤-20</b>	Pass
2477	2480	-44.77	<b>≤-40</b>	Pass



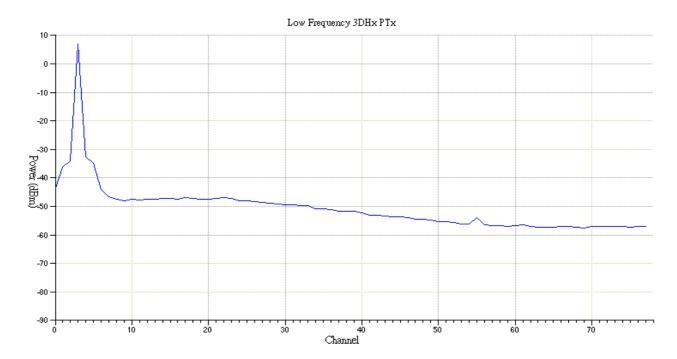
EDR In Band Spurious Emissions - 2DH5 Low



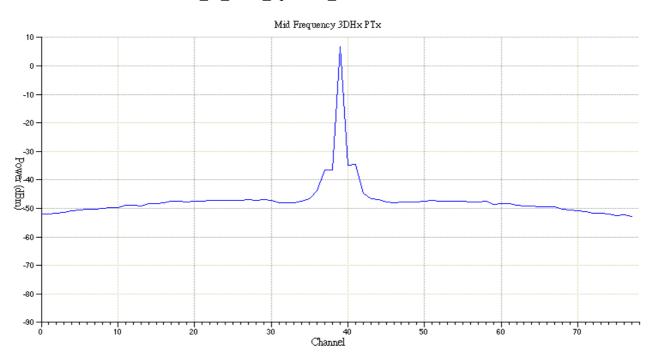
EDR In Band Spurious Emissions - 2DH5 Mid



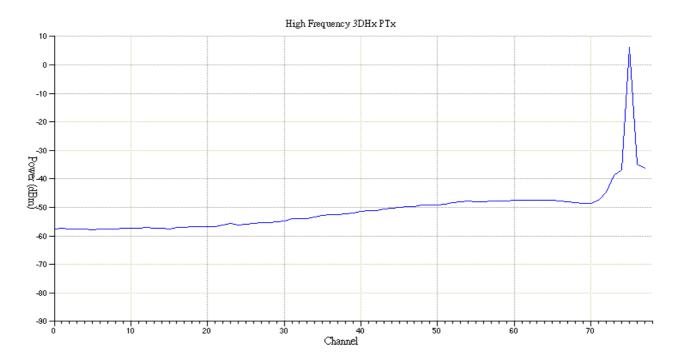
EDR In Band Spurious Emissions - 2DH5 High



EDR\_In\_Band\_Spurious\_Emissions - 3DH5 Low



EDR In Band Spurious Emissions - 3DH5 Mid



EDR In Band Spurious Emissions - 3DH5 High

## 3.4.13. Test Case: RCV/CA/01/C - Sensitivity - Single Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.)

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass

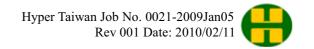
#### 3.4.14. Test Case: RCV/CA/02/C - Sensitivity - Multi-Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass



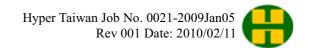
# 3.4.15. Test Case: RCV/CA/07/C - EDR Sensitivity

#### Expected Outcome:

All values as measured must fulfill the following conditions at low, medium and high frequencies:

1.Either BER < 0.007% after 1,600,000 bits or BER < 0.01% after 16,000,000 bit

Packet Type	Test Frequency	BER	Limit	Verdict
	(MHz)	(%)	(%)	
	2402	0	≤0.007	Pass
2DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass
	2402	0	≤0.007	Pass
3DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass



# 3.5. Test Case List for Low Temperature Low Voltage

## 3.5.1. RF Description

EUT Power Class

EUT Antenna Gain

Test Condition

EUT To Spectrum Loss (Low)

EUT To Spectrum Loss (Mid)

EUT To Spectrum Loss (High)

EUT To Spectrum Loss (High)

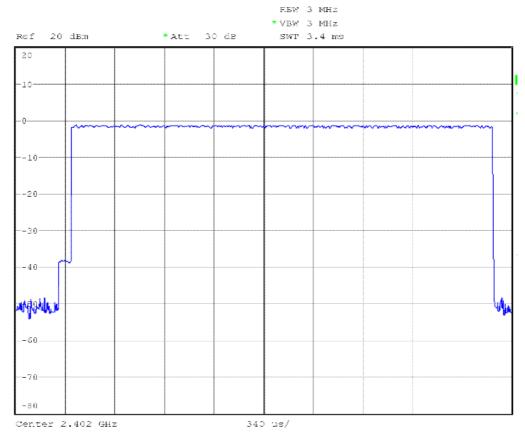
## 3.5.2. Test Case: TRM/CA/01/C - Output Power

#### **Expected Outcome:**

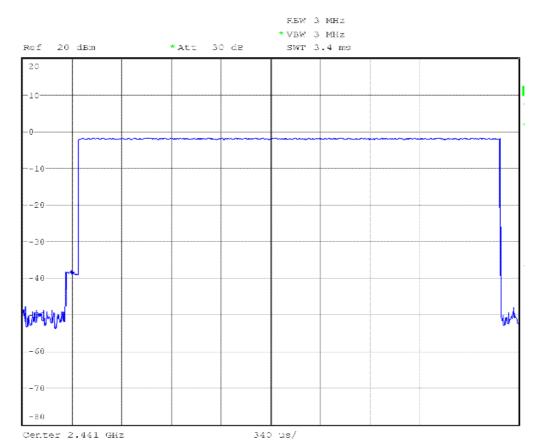
All values as measured must fulfill the following conditions:

- 1. P av < 100 mW (20 dBm) EIRP
- 2. P pk < 200mW (23 dBm) EIRP
- 3. If the EUT is a power class 1 equipment :P av > 1mW (0dBm)
- 4. If the EUT is a power class 2 equipment :0.25mW (-6 dBm) < P av < 2.5mW (4dBm)
- 5. If the EUT is a power class 3 equipment :P av < 1mW (0dBm)

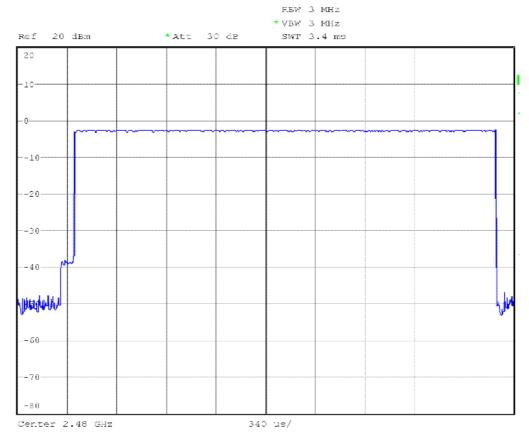
Test Frequency	Item	Value(mW)	Verdict
T	Peak Power	6.73	N/A
Low operating	Average Power	6.31	Pass
frequency (2402MHz)	Peak Power (EIRP)	11.97	Pass
(2402MHZ)	Average Power (EIRP)	11.22	Pass
3.4:1	Peak Power	5.87	N/A
Mid operating	Average Power	5.67	Pass
frequency (2441MHz)	Peak Power (EIRP)	10.45	Pass
(2441MITIZ)	Average Power (EIRP)	10.08	Pass
III ah an anatin a	Peak Power	5.13	N/A
High operating frequency (2480MHz)	Average Power	4.91	Pass
	Peak Power (EIRP)	9.12	Pass
(2400WI1IZ)	Average Power (EIRP)	8.72	Pass



Output Power (Low operating frequency)



Output Power (Mid operating frequency)
Part A-265 of 322



Output Power (High operating frequency)

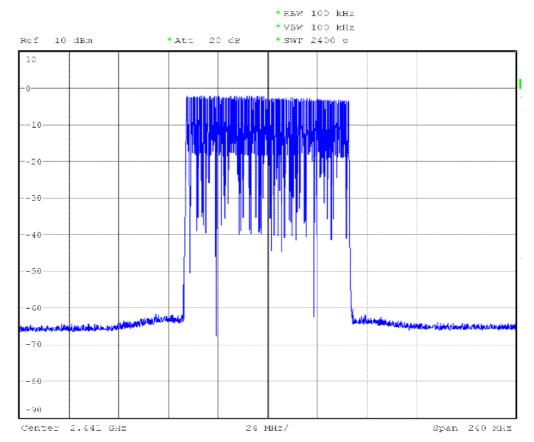
# 3.5.3. Test Case: TRM/CA/02/C - Power Density

**Expected Outcome:** 

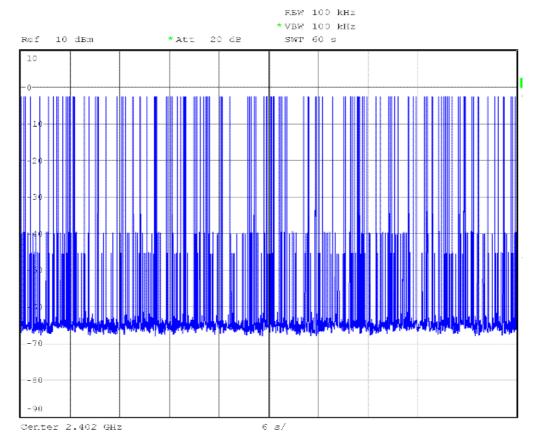
All values as measured must fulfill the following conditions:

1. Power Density < 100 mW (20dBm) per 100 kHz EIRP

Max Frequency	Peak Power	Power Density	Limit	Verdict
(MHz)	(mW)	(mW/100KHz)	(mW/100KHz)	
2402.00 MHz	5.47	8.96	<100	Pass



Power Density (Step1)



Power Density (Step2) Part A-267 of 322

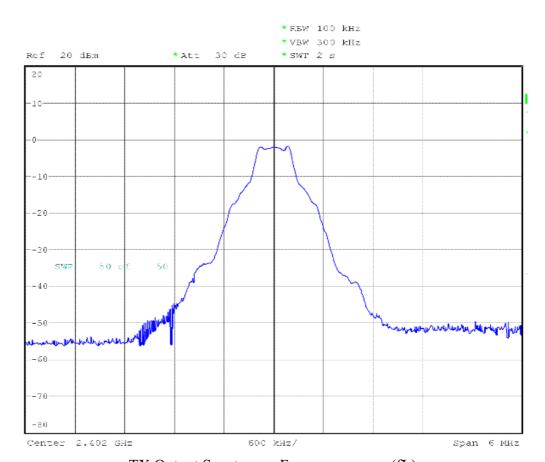
# 3.5.4. Test Case: TRM/CA/04/C - TX Output Spectrum - Frequency Range

#### **Expected Outcome:**

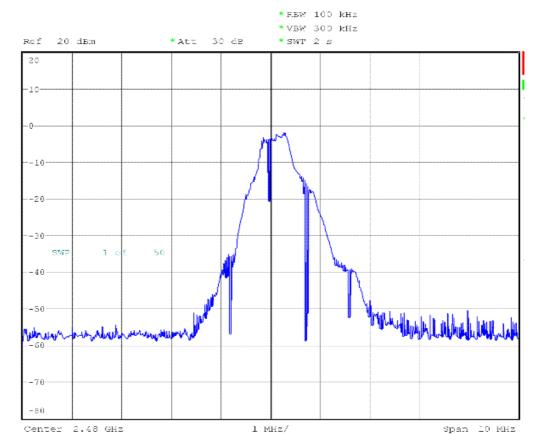
All values as measured must fulfill the following conditions:

1. fL, fH within the allowed frequency band :2.4 GHz – 2.4835 GHz

Frequency (MHz)		Limit(MHz)	Verdict
Lowest(fL)	2400.98	fL>2400.0	
Highest(fH)	2478.42	fH <2483.5	Pass



TX Output Spectrum – Frequency range (fL)



TX Output Spectrum – Frequency range (fH)

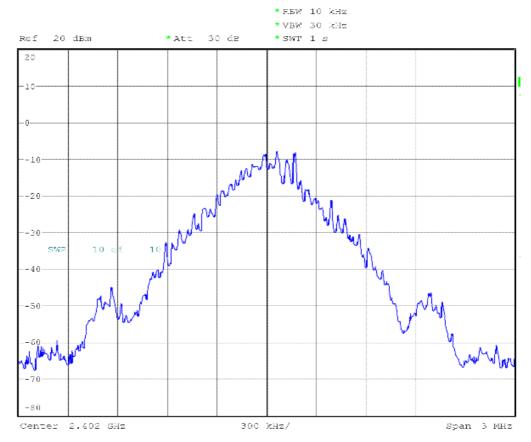
# 3.5.5. Test Case: TRM/CA/05/C - TX Output Spectrum - 20 dB Bandwidth

#### **Expected Outcome:**

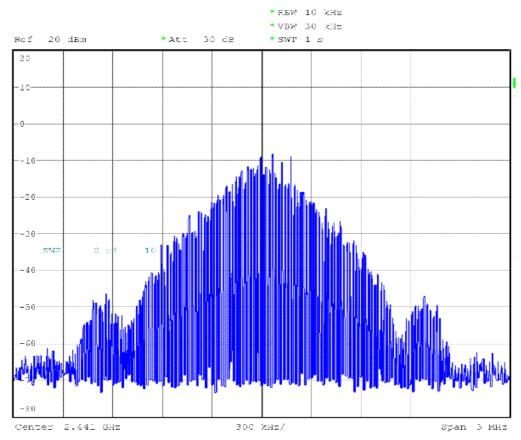
All values as measured must fulfill the following conditions:

1. The Transmit spectrum shall fulfill the following mask : $\Delta f = |fH - fL| \le 1.0 \text{ MHz}$ 

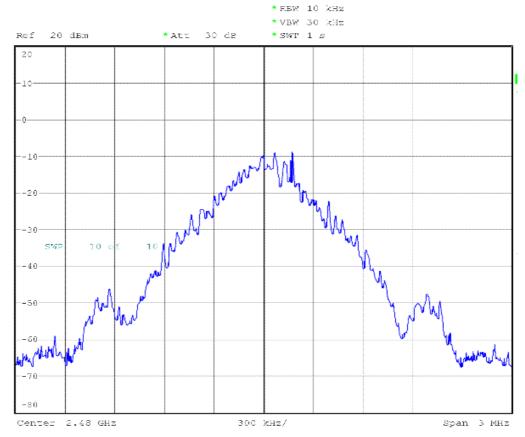
Test Frequency		fL	fH	$\Delta f =   fH - fL  $	Limit	Verdict
(MHz)		(MHz)	(MHz)	(MHz)		
Low Frequency	2402	2402.04	2402.98	0.94	≤1.0	Pass
Mid Frequency	2441	2441.48	2441.52	0.03	≤1.0	Pass
High Frequency	2480	2480.10	2480.87	0.77	≤1.0	Pass



TX Output Spectrum – 20 dB Bandwidth (Low Frequency)



TX Output Spectrum – 20 dB Bandwidth (Mid Frequency)
Part A-270 of 322



TX Output Spectrum – 20 dB Bandwidth (High Frequency)

# 3.5.6. Test Case: TRM/CA/06/C - TX Output Spectrum - Adjacent Channel Power

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

For each operating frequency exceptions in up to three bands of 1 MHz width centered on a frequency which is an integer multiple of 1 MHz are allowed. They must however comply with an absolute value of –20 dBm.

- 1. Ptx (f)  $\leq$  20 dBm for | M-N | = 2
- 2. Ptx (f)  $\leq$  40 dBm for  $\mid$  M-N  $\mid$   $\geq$  3

Test Frequency	Adjacent Channel	Ptx(f)	Limit	Verdict
(MHz)	Frequency	(dBm)	(dBm)	
	(MHz)			
	2402	-55.29	≤ <b>-</b> 40	Pass
Low Frequency	2403	-51.44	≤ <b>-</b> 20	Pass
(2402 MHz)	2404	-17.86	N/A	N/A
	2405	8.29	N/A	N/A

2406	-17.92	N/A	N/A
2407	-51.77	≤ -20	Pass
2408	-54.55	≤ <b>-</b> 40	Pass
2409	-55.72	≤ <b>-</b> 40	Pass
2410	-55.98	≤ <b>-</b> 40	Pass
2411	-56.21	≤ <b>-</b> 40	Pass
2412	-55.62	≤ <b>-</b> 40	Pass
2413	-55.29	≤ <b>-</b> 40	Pass
2414	-55.18	≤ <b>-</b> 40	Pass
2415	-55.38	≤ <b>-</b> 40	Pass
2416	-54.95	≤ <b>-</b> 40	Pass
2417	-55.06	≤ <b>-</b> 40	Pass
2418	-55.23	≤ <b>-</b> 40	Pass
2419	-55.16	≤ <b>-</b> 40	Pass
2420	-55.36	≤ <b>-</b> 40	Pass
2421	-54.96	≤ <b>-</b> 40	Pass
2422	-55.67	≤ <b>-</b> 40	Pass
2423	-55.57	≤ <b>-</b> 40	Pass
2424	-55.55	≤ <b>-</b> 40	Pass
2425	-55.97	≤ <b>-</b> 40	Pass
2426	-55.76	≤ <b>-</b> 40	Pass
2427	-56.05	≤ <b>-</b> 40	Pass
2428	-56.38	≤ <b>-</b> 40	Pass
2429	-56.73	≤ <b>-</b> 40	Pass
2430	-56.53	≤ <b>-</b> 40	Pass
2431	-57.10	≤ <b>-</b> 40	Pass
2432	-57.46	≤ <b>-</b> 40	Pass
2433	-57.45	≤ <b>-</b> 40	Pass
2434	-57.36	≤ <b>-</b> 40	Pass
2435	-58.02	≤ <b>-</b> 40	Pass
2436	-58.60	≤ <b>-</b> 40	Pass
2437	-58.24	≤ <b>-</b> 40	Pass
2438	-58.91	≤ <b>-</b> 40	Pass
2439	-59.03	≤ <b>-</b> 40	Pass
2440	-59.46	≤ <b>-</b> 40	Pass
2441	-59.27	≤ <b>-</b> 40	Pass
2442	-60.16	≤ <b>-</b> 40	Pass
2443	-60.44	≤ <b>-</b> 40	Pass
			1

2444	-60.71	≤ <b>-</b> 40	Pass
2445	-60.72	≤ <b>-</b> 40	Pass
2446	-61.42	≤ -40	Pass
2447	-61.67	≤ -40	Pass
2448	-61.80	≤ -40	Pass
2449	-62.14	≤ -40	Pass
2450	-62.43	≤ -40	Pass
2451	-62.66	≤ -40	Pass
2452	-62.85	≤ -40	Pass
2453	-62.96	≤ -40	Pass
2454	-63.39	≤ <b>-</b> 40	Pass
2455	-63.59	≤ <b>-</b> 40	Pass
2456	-63.54	≤ -40	Pass
2457	-61.30	≤ <b>-</b> 40	Pass
2458	-64.04	≤ <b>-</b> 40	Pass
2459	-64.09	≤ -40	Pass
2460	-64.14	≤ -40	Pass
2461	-64.31	≤ -40	Pass
2462	-64.29	≤ <b>-</b> 40	Pass
2463	-64.33	≤ -40	Pass
2464	-64.36	≤ <b>-</b> 40	Pass
2465	-64.39	≤ -40	Pass
2466	-64.56	≤ -40	Pass
2467	-64.57	≤ <b>-</b> 40	Pass
2468	-64.53	≤ -40	Pass
2469	-64.41	≤ <b>-</b> 40	Pass
2470	-64.71	≤ -40	Pass
2471	-64.56	≤ -40	Pass
2472	-64.38	≤ -40	Pass
2473	-64.42	≤ -40	Pass
2474	-64.40	≤ <b>-</b> 40	Pass
2475	-64.43	≤ <b>-</b> 40	Pass
2476	-63.64	≤ <b>-</b> 40	Pass
2477	-44.40	≤ <b>-</b> 40	Pass
2478	-63.58	≤ <b>-</b> 40	Pass
2479	-53.93	≤ <b>-</b> 40	Pass
2480	-64.55	≤ <b>-</b> 40	Pass
2402	-60.19	≤ <b>-</b> 40	Pass

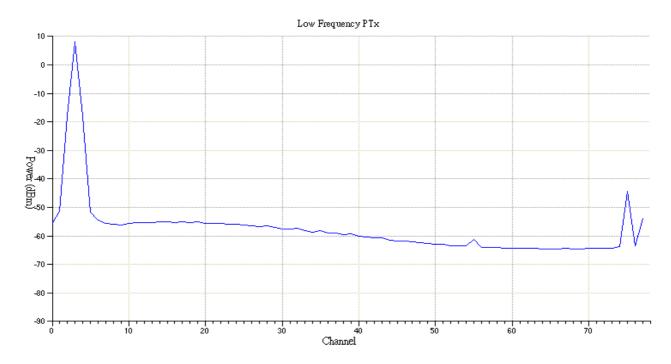
	T	I		1
	2403	-59.90	≤ -40	Pass
	2404	-59.61	≤ -40	Pass
	2405	-44.31	≤ <b>-</b> 40	Pass
	2406	-58.83	≤ -40	Pass
	2407	-52.08	≤ -40	Pass
	2408	-58.36	≤ <b>-</b> 40	Pass
	2409	-58.02	≤ -40	Pass
	2410	-58.17	≤ <b>-</b> 40	Pass
	2411	-57.54	≤ <b>-</b> 40	Pass
	2412	-57.19	≤ <b>-</b> 40	Pass
	2413	-56.97	≤ <b>-</b> 40	Pass
	2414	-56.73	≤ <b>-</b> 40	Pass
	2415	-56.76	≤ <b>-</b> 40	Pass
	2416	-56.45	≤ <b>-</b> 40	Pass
	2417	-56.19	≤ <b>-</b> 40	Pass
	2418	-56.19	≤ <b>-</b> 40	Pass
	2419	-55.71	≤ <b>-</b> 40	Pass
NC 15	2420	-55.73	≤ <b>-</b> 40	Pass
Mid Frequency	2421	-55.51	≤ <b>-</b> 40	Pass
(2441 MHz)	2422	-55.56	≤ <b>-</b> 40	Pass
	2423	-55.40	≤ <b>-</b> 40	Pass
	2424	-55.38	≤ <b>-</b> 40	Pass
	2425	-55.40	≤ <b>-</b> 40	Pass
	2426	-55.00	≤ <b>-</b> 40	Pass
	2427	-55.14	≤ <b>-</b> 40	Pass
	2428	-55.04	≤ <b>-</b> 40	Pass
	2429	-55.22	≤ <b>-</b> 40	Pass
	2430	-55.11	≤ <b>-</b> 40	Pass
	2431	-54.95	≤ <b>-</b> 40	Pass
	2432	-55.80	≤ <b>-</b> 40	Pass
	2433	-56.08	≤ <b>-</b> 40	Pass
	2434	-56.16	≤ <b>-</b> 40	Pass
	2435	-56.52	≤ <b>-</b> 40	Pass
	2436	-55.64	≤ <b>-</b> 40	Pass
	2437	-55.99	≤ <b>-</b> 40	Pass
	2438	-55.62	≤ <b>-</b> 40	Pass
	2439	-52.12	≤ <b>-</b> 20	Pass
	2440	-18.41	N/A	N/A
	ı	<u>i</u>	i	<u> </u>

	2441	7.74	N/A	N/A
	2442	-18.40	N/A	N/A
	2443	-52.21	≤ <b>-</b> 20	Pass
	2444	-55.26	≤ <b>-</b> 40	Pass
	2445	-56.16	≤ <b>-</b> 40	Pass
	2446	-55.54	≤ <b>-</b> 40	Pass
	2447	-56.53	≤ <b>-</b> 40	Pass
	2448	-56.24	≤ <b>-</b> 40	Pass
	2449	-55.82	≤ <b>-</b> 40	Pass
	2450	-55.66	≤ <b>-</b> 40	Pass
	2451	-55.87	≤ <b>-</b> 40	Pass
	2452	-55.46	≤ <b>-</b> 40	Pass
	2453	-55.28	≤ <b>-</b> 40	Pass
	2454	-55.48	≤ <b>-</b> 40	Pass
	2455	-55.92	≤ <b>-</b> 40	Pass
	2456	-55.61	≤ <b>-</b> 40	Pass
	2457	-55.50	≤ <b>-</b> 40	Pass
	2458	-55.94	≤ <b>-</b> 40	Pass
	2459	-55.76	≤ <b>-</b> 40	Pass
	2460	-55.85	≤ <b>-</b> 40	Pass
	2461	-56.25	≤ <b>-</b> 40	Pass
	2462	-56.51	≤ <b>-</b> 40	Pass
	2463	-56.63	≤ <b>-</b> 40	Pass
	2464	-56.68	≤ <b>-</b> 40	Pass
	2465	-57.22	≤ <b>-</b> 40	Pass
	2466	-57.18	≤ <b>-</b> 40	Pass
	2467	-57.32	≤ <b>-</b> 40	Pass
	2468	-57.78	≤ <b>-</b> 40	Pass
	2469	-57.94	≤ <b>-</b> 40	Pass
	2470	-58.18	≤ <b>-</b> 40	Pass
	2471	-58.22	≤ <b>-</b> 40	Pass
	2472	-58.91	≤ <b>-</b> 40	Pass
	2473	-58.79	≤ <b>-</b> 40	Pass
	2474	-59.30	≤ <b>-</b> 40	Pass
	2475	-59.61	≤ <b>-</b> 40	Pass
	2476	-59.76	≤ <b>-</b> 40	Pass
	2477	-60.19	≤ <b>-</b> 40	Pass
	2478	-60.33	≤ -40	Pass
· · · · · · · · · · · · · · · · · · ·				

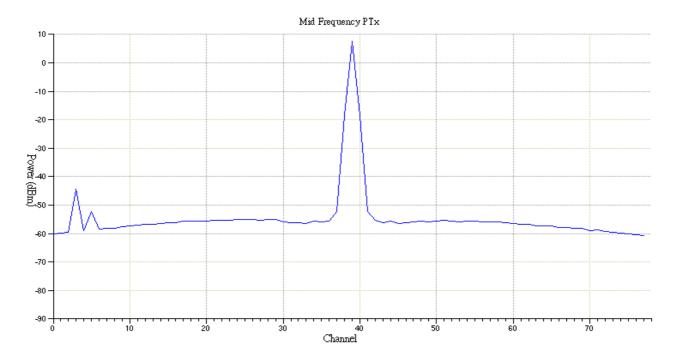
	2479	-60.56	≤ -40	Pass
	2480	-60.75	≤ -40	Pass
	2402	-64.97	≤ -40	Pass
	2403	-64.79	≤ -40	Pass
	2404	-63.87	≤ -40	Pass
	2405	-44.00	≤ -40	Pass
	2406	-63.86	≤ -40	Pass
	2407	-53.33	≤ -40	Pass
	2408	-64.89	≤ -40	Pass
	2409	-64.92	≤ -40	Pass
	2410	-64.83	≤ -40	Pass
	2411	-64.90	≤ -40	Pass
	2412	-64.97	≤ -40	Pass
	2413	-64.89	≤ -40	Pass
	2414	-64.73	≤ -40	Pass
	2415	-64.86	≤ -40	Pass
	2416	-64.77	≤ -40	Pass
	2417	-64.76	≤ -40	Pass
	2418	-64.67	≤ -40	Pass
High Frequency	2419	-64.62	≤ -40	Pass
(2480 MHz)	2420	-64.73	≤ -40	Pass
	2421	-64.38	≤ -40	Pass
	2422	-64.26	≤ -40	Pass
	2423	-64.11	≤ -40	Pass
	2424	-64.07	≤ -40	Pass
	2425	-63.45	≤ -40	Pass
	2426	-63.70	≤ -40	Pass
	2427	-63.57	≤ -40	Pass
	2428	-63.55	≤ -40	Pass
	2429	-63.13	≤ -40	Pass
	2430	-62.68	≤ -40	Pass
	2431	-62.42	≤ -40	Pass
	2432	-62.40	≤ -40	Pass
	2433	-61.99	≤ <b>-</b> 40	Pass
	2434	-61.86	≤ -40	Pass
	2435	-61.37	≤ -40	Pass
	2436	-61.02	≤ -40	Pass
	2437	-60.92	≤ -40	Pass
	Dom	+ A 276 af 222	•	

2438	-60.66	≤ -40	Pass
2439	-60.38	≤ -40	Pass
2440	-60.03	≤ -40	Pass
2441	-59.48	≤ -40	Pass
2442	-59.46	≤ <b>-</b> 40	Pass
2443	-59.26	≤ <b>-</b> 40	Pass
2444	-58.97	≤ -40	Pass
2445	-58.67	≤ -40	Pass
2446	-58.66	≤ -40	Pass
2447	-57.98	≤ <b>-</b> 40	Pass
2448	-57.86	≤ <b>-</b> 40	Pass
2449	-57.64	≤ -40	Pass
2450	-57.36	≤ <b>-</b> 40	Pass
2451	-57.24	≤ -40	Pass
2452	-56.95	≤ <b>-</b> 40	Pass
2453	-56.73	≤ -40	Pass
2454	-56.73	≤ -40	Pass
2455	-56.33	≤ -40	Pass
2456	-56.28	≤ <b>-</b> 40	Pass
2457	-56.06	≤ -40	Pass
2458	-56.14	≤ <b>-</b> 40	Pass
2459	-55.98	≤ -40	Pass
2460	-55.96	≤ -40	Pass
2461	-56.01	≤ <b>-</b> 40	Pass
2462	-55.64	≤ -40	Pass
2463	-55.82	≤ -40	Pass
2464	-55.74	≤ <b>-</b> 40	Pass
2465	-55.68	≤ <b>-</b> 40	Pass
2466	-55.82	≤ -40	Pass
2467	-55.62	≤ -40	Pass
2468	-56.31	≤ <b>-</b> 40	Pass
2469	-56.48	≤ -40	Pass
2470	-56.81	≤ -40	Pass
2471	-56.97	≤ -40	Pass
2472	-57.18	≤ <b>-</b> 40	Pass
2473	-56.99	≤ <b>-</b> 40	Pass
2474	-56.50	≤ <b>-</b> 40	Pass
2475	-52.91	≤ -20	Pass

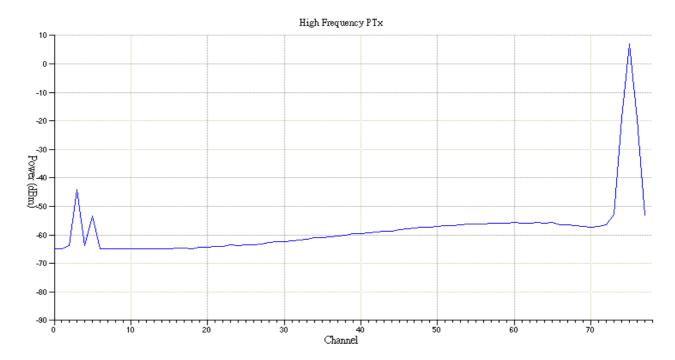
2476	-19.05	N/A	N/A
2477	6.94	N/A	N/A
2478	-19.28	N/A	N/A
2479	-53.18	≤ -20	Pass
2480	-55.92	≤ <b>-</b> 40	Pass



TX Output Spectrum - Adjacent channel power (Low Frequency)



TX Output Spectrum – Adjacent channel power (Mid Frequency)
Part A-278 of 322



TX Output Spectrum – Adjacent channel power (High Frequency)

## 3.5.7. Test Case: TRM/CA/07/C - Modulation Characteristics

#### Expected Outcome:

All values as measured must fulfill the following conditions:

- 1.  $140 \text{ kHz} \le \Delta \text{flavg} \le 175 \text{ kHz}$
- 2.  $\Delta f2max \ge 115$  kHz for at least 99.9% of all  $\Delta f2max$
- 3.  $\Delta f2avg/\Delta f1avg \ge 0.8$

5, 212u, g 211u	S. Alzavg Allavg = 0.0						
Test Frequency	Packet	Test	Result	Limit	Verdict		
(MHz)	Number	Parameter					
		Δ flavg (kHz)	164.25	140 kHz≤∆flavg≤175 kHz	Pass		
		Δ f2max (kHz)	169.63	≥ 115 kHz	Pass		
	1	Δ f2max(%)	100%	≥99.9%	Pass		
		Δ f2avg(kHz)	163.49	N/A	N/A		
Low operating		Δ f2avg/Δf1avg	1	≥ 0.8	Pass		
Frequency		Δ flavg (kHz)	164.10	140 kHz≤∆flavg≤175 kHz	Pass		
(2402 MHz)		Δ f2max (kHz)	168.56	≥ 115 kHz	Pass		
	2	Δ f2max(%)	100%	≥99.9%	Pass		
		Δ f2avg(kHz)	162.62	N/A	N/A		
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass		
	3	$\Delta$ flavg (kHz)	164.36	140 kHz≤∆flavg≤175 kHz	Pass		

		Δ f2max (kHz)	167.78	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.37	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.73	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	165.96	≥ 115 kHz	Pass
	4	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.37	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	163.78	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.61	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.84	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.24	140 kHz≤∆f1avg≤175 kHz	Pass
	6	Δ f2max (kHz)	169.86	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.49	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
	7	Δ flavg (kHz)	164.58	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	168.35	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.84	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	164.47	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.07	≥ 115 kHz	Pass
	8	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.29	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	163.87	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.68	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.25	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.08	140 kHz≤∆flavg≤175 kHz	Pass
	10	Δ f2max (kHz)	167.91	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	162.79	N/A	N/A

		A 02 /A 01	0.00		
		$\Delta$ flave (I-II-)	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	163.98	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.35	≥ 115 kHz	Pass
	1	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.51	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.11	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	170.99	≥ 115 kHz	Pass
	2	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.70	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.18	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	170.52	≥ 115 kHz	Pass
	3	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	164.16	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.61	140 kHz≤∆flavg≤175 kHz	Pass
	4	Δ f2max (kHz)	167.42	≥ 115 kHz	Pass
Mid operating		Δ f2max(%)	100%	≥99.9%	Pass
Frequency		Δ f2avg(kHz)	163.26	N/A	N/A
(2441 MHz)		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.00	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.70	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.05	N/A	N/A
		Δ f2avg/Δf1avg	0.99	≥ 0.8	Pass
		Δ flavg (kHz)	163.87	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	168.91	≥ 115 kHz	Pass
	6	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.18	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	164.01	 140 kHz≤Δf1avg≤175 kHz	Pass
		Δ f2max (kHz)	166.59	≥ 115 kHz	Pass
	7	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.20	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.39	140 kHz≤∆flavg≤175 kHz	Pass
	8	Δ f2max (kHz)	172.61	≥ 115 kHz	Pass
		<u> </u>			

		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	164.28	N/A	N/A
		Δ f2avg/Δf1avg	1.01	≥ 0.8	Pass
		Δ flavg (kHz)	163.57	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	169.48	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.75	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	163.79	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	168.42	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	163.27	N/A	N/A
		Δ f2avg/Δf1avg	1	≥ 0.8	Pass
		Δ flavg (kHz)	168.49	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	163.26	≥ 115 kHz	Pass
	1	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.16	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
	2	Δ flavg (kHz)	168.20	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	166.50	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	158.31	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	167.86	140 kHz≤∆flavg≤175 kHz	Pass
High operating		Δ f2max (kHz)	164.35	≥ 115 kHz	Pass
Frequency	3	Δ f2max(%)	100%	≥99.9%	Pass
(2480 MHz)		Δ f2avg(kHz)	159.28	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
		Δ flavg (kHz)	168.29	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.38	≥ 115 kHz	Pass
	4	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.17	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
		Δ flavg (kHz)	168.88	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.57	≥ 115 kHz	Pass
	5	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.65	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
Ĺ	I		l		

		Δ flavg (kHz)	169.08	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	167.05	≥ 115 kHz	Pass
	6	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.79	N/A	N/A
		Δ f2avg/Δf1avg	0.95	≥ 0.8	Pass
		Δ flavg (kHz)	168.42	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	169.32	≥ 115 kHz	Pass
	7	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.03	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	168.96	140 kHz≤∆flavg≤175 kHz	Pass
	8	Δ f2max (kHz)	165.11	≥ 115 kHz	Pass
		Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.03	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	168.47	140 kHz≤∆flavg≤175 kHz	Pass
		Δ f2max (kHz)	165.43	≥ 115 kHz	Pass
	9	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	158.43	N/A	N/A
		Δ f2avg/Δf1avg	0.94	≥ 0.8	Pass
		Δ flavg (kHz)	168.08	140 kHz≤∆f1avg≤175 kHz	Pass
		Δ f2max (kHz)	164.43	≥ 115 kHz	Pass
	10	Δ f2max(%)	100%	≥99.9%	Pass
		Δ f2avg(kHz)	159.09	N/A	N/A
		$\Delta$ f2avg/ $\Delta$ f1avg	0.95	≥ 0.8	Pass

# 3.5.8. Test Case: TRM/CA/08/C - Initial Carrier Frequency Tolerance

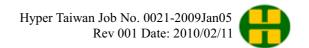
#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

Each of the EUT's carrier frequency f0 as measured must be within ±75kHz from the Eut's chosen nominal carrier frequency fTX

1.  $fTX - 75 \text{ kHz} \le f 0 \le fTX + 75 \text{ kHz}$ .

Test Frequency	Packets	Carrier	Limit	Verdict
(MHz)	No.	Frequency	(kHz)	
		(KHz)		
	1	-6.42	-75≤ f0 ≤ +75	Pass
	2	-0.86	-75≤ f0 ≤ +75	Pass
	3	-0.86	$-75 \le f0 \le +75$	Pass
I avy aparating	4	-2.60	-75≤ f0 ≤ +75	Pass
Low operating Frequency	5	-2.35	-75≤ f0 ≤ +75	Pass
(2402 MHz)	6	-3.15	-75≤ f0 ≤ +75	Pass
(2402 WIIIZ)	7	-0.66	-75≤ f0 ≤ +75	Pass
	8	-1.69	-75≤ f0 ≤ +75	Pass
	9	3.32	$-75 \le f0 \le +75$	Pass
	10	-2.29	-75≤ f0 ≤ +75	Pass
	1	2.56	-75≤ f0 ≤ +75	Pass
	2	3.84	$-75 \le f0 \le +75$	Pass
	3	4.52	-75≤ f0 ≤ +75	Pass
Mid amounting	4	4.21	-75≤ f0 ≤ +75	Pass
Mid operating	5	6.59	-75≤ f0 ≤ +75	Pass
Frequency (2441 MHz)	6	6.49	-75≤ f0 ≤ +75	Pass
(2441 WIIIZ)	7	5.47	-75≤ f0 ≤ +75	Pass
	8	3.97	-75≤ f0 ≤ +75	Pass
	9	5.34	-75≤ f0 ≤ +75	Pass
	10	5.99	-75≤ f0 ≤ +75	Pass
	1	6.22	-75≤ f0 ≤ +75	Pass
	2	5.16	-75≤ f0 ≤ +75	Pass
III als agreeding	3	4.73	-75≤ f0 ≤ +75	Pass
High operating	4	8.76	-75≤ f0 ≤ +75	Pass
Frequency	5	10.80	-75≤ f0 ≤ +75	Pass
(2480 MHz)	6	7.53	-75≤ f0 ≤ +75	Pass
	7	6.78	-75≤ f0 ≤ +75	Pass
	8	8.37	-75≤ f0 ≤ +75	Pass



9	7.04	$-75 \le f0 \le +75$	Pass
10	6.27	$-75 \le f0 \le +75$	Pass

## 3.5.9. Test Case: TRM/CA/09/C - Carrier Frequency Drift

## Expected Outcome:

All values as measured must fulfill the following conditions:

- 1. One slot packet -25kHz≤ MAX Frequency Drift ≤+25kHz
- 2. Three slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 3. Five slot packet -40kHz≤ MAX Frequency Drift ≤+40kHz
- 4. The maximum drift rate is 20000 Hz /  $50\mu s$ .

Packet	Type:	DH1
I WOILU	- , p	

T4 F:-	Packet Type: DH1						
Test Frequency	Packets No.	Result	Limit (%)	Verdict			
(MHz)		MAY Fragues on Drift(Inla)		25/ fm av/   25	Daga		
	1	MAX Frequency Drift(kHz)	-2.82	-25≤ fmax≤+25	Pass		
	1	Maximum Drift Rate(kHz/50μs)	2.46	≤ 20	Pass		
	2	MAX Frequency Drift(kHz)	-2.33	-25≤ fmax≤+25	Pass		
	2	Maximum Drift Rate(kHz/50μs)	2.18	≤ 20	Pass		
	3	MAX Frequency Drift(kHz)	-2.14	-25≤ fmax≤+25	Pass		
	3	Maximum Drift Rate(kHz/50μs)	2.20	≤ 20	Pass		
	4	MAX Frequency Drift(kHz)	-2.22	-25≤ fmax≤+25	Pass		
	4	Maximum Drift Rate(kHz/50μs)	2.88	≤ 20	Pass		
I avy aparating	5	MAX Frequency Drift(kHz)	-2.78	-25≤ fmax≤+25	Pass		
Low operating	5	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass		
Frequency (2402 MHz)	6	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass		
(2402 MHZ)	6	Maximum Drift Rate(kHz/50μs)	3.39	≤ 20	Pass		
	7	MAX Frequency Drift(kHz)	-2.42	-25≤ fmax≤+25	Pass		
	7	Maximum Drift Rate(kHz/50μs)	1.94	≤ 20	Pass		
	8	MAX Frequency Drift(kHz)	-3.05	-25≤ fmax≤+25	Pass		
	8	Maximum Drift Rate(kHz/50μs)	2.64	≤ 20	Pass		
	9	MAX Frequency Drift(kHz)	-3.53	-25≤ fmax≤+25	Pass		
	9	Maximum Drift Rate(kHz/50μs)	3.12	≤ 20	Pass		
	10	MAX Frequency Drift(kHz)	-2.24	-25≤ fmax≤+25	Pass		
	10	Maximum Drift Rate(kHz/50μs)	3.15	≤ 20	Pass		
	1	MAX Frequency Drift(kHz)	3.18	-25≤ fmax≤+25	Pass		
Mid operating	1	Maximum Drift Rate(kHz/50μs)	2.56	≤ 20	Pass		
Frequency	2	MAX Frequency Drift(kHz)	4.82	-25≤ fmax≤+25	Pass		
(2441 MHz)	2	Maximum Drift Rate(kHz/50μs)	5.14	≤ 20	Pass		
	3	MAX Frequency Drift(kHz)	5.35	-25≤ fmax≤+25	Pass		

	3	Maximum Drift Rate(kHz/50μs)	4.39	≤ 20	Pass	
	4	MAX Frequency Drift(kHz)	3.54	-25≤ fmax≤+25	Pass	
	4	Maximum Drift Rate(kHz/50μs)	4.35	≤ 20	Pass	
	5	MAX Frequency Drift(kHz)	6.33	-25≤ fmax≤+25	Pass	
	5	Maximum Drift Rate(kHz/50μs)	5.97	≤ 20	Pass	
	6	MAX Frequency Drift(kHz)	5.60	-25≤ fmax≤+25	Pass	
	6	Maximum Drift Rate(kHz/50μs)	4.28	≤ 20	Pass	
	7	MAX Frequency Drift(kHz)	4.43	-25≤ fmax≤+25	Pass	
	7	Maximum Drift Rate(kHz/50μs)	4.58	≤ 20	Pass	
	8	MAX Frequency Drift(kHz)	5.39	-25≤ fmax≤+25	Pass	
	8	Maximum Drift Rate(kHz/50μs)	4.01	≤ 20	Pass	
	9	MAX Frequency Drift(kHz)	5.63	-25≤ fmax≤+25	Pass	
	9	Maximum Drift Rate(kHz/50μs)	3.66	≤ 20	Pass	
	10	MAX Frequency Drift(kHz)	5.49	-25≤ fmax≤+25	Pass	
	10	Maximum Drift Rate(kHz/50μs)	4.25	≤ 20	Pass	
	1	MAX Frequency Drift(kHz)	6.16	-25≤ fmax≤+25	Pass	
	1	Maximum Drift Rate(kHz/50μs)	3.05	≤ 20	Pass	
	2	MAX Frequency Drift(kHz)	8.00	-25≤ fmax≤+25	Pass	
	2	Maximum Drift Rate(kHz/50μs)	5.19	≤ 20	Pass	
	3	MAX Frequency Drift(kHz)	7.26	-25≤ fmax≤+25	Pass	
	3	Maximum Drift Rate(kHz/50μs)	5.26	≤ 20	Pass	
	4	MAX Frequency Drift(kHz)	5.48	-25≤ fmax≤+25	Pass	
	4	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass	
III: -1,	5	MAX Frequency Drift(kHz)	6.67	-25≤ fmax≤+25	Pass	
High operating	5	Maximum Drift Rate(kHz/50μs)	3.24	≤ 20	Pass	
Frequency (2480 MHz)	6	MAX Frequency Drift(kHz)	6.07	-25≤ fmax≤+25	Pass	
(2480 MHZ)	6	Maximum Drift Rate(kHz/50μs)	4.25	≤ 20	Pass	
	7	MAX Frequency Drift(kHz)	8.28	-25≤ fmax≤+25	Pass	
	7	Maximum Drift Rate(kHz/50μs)	4.12	≤ 20	Pass	
	8	MAX Frequency Drift(kHz)	4.85	-25≤ fmax≤+25	Pass	
	8	Maximum Drift Rate(kHz/50μs)	2.46	≤ 20	Pass	
	9	MAX Frequency Drift(kHz)	6.86	-25≤ fmax≤+25	Pass	
	9	Maximum Drift Rate(kHz/50μs)	3.32	≤ 20	Pass	
	10	MAX Frequency Drift(kHz)	8.72	-25≤ fmax≤+25	Pass	
	10	Maximum Drift Rate(kHz/50μs)	5.61	≤ 20	Pass	
		Packet Type: DH3				
Test Frequency	Packets	Result	Limit (%)	Verdict		
(MHz)	No.					
Part A-286 of 322						

	1	MAX Frequency Drift(kHz)	-2.80	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	2.97	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-2.59	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	2.86	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	3.05	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	4.22	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	-2.18	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.31	≤ 20	Pass
T	5	MAX Frequency Drift(kHz)	-2.62	-25≤ fmax≤+25	Pass
Low operating	5	Maximum Drift Rate(kHz/50μs)	3.42	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	-3.04	-25≤ fmax≤+25	Pass
(2402 MHz)	6	Maximum Drift Rate(kHz/50μs)	4.03	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-3.30	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	3.03	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	2.81	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	3.97	≤ 20	Pass
	9	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.47	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	4.19	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	5.57	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	4.12	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	3.61	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	4.43	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.16	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	6.36	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	6.72	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	8.26	-25≤ fmax≤+25	Pass
N. 6: 1	4	Maximum Drift Rate(kHz/50μs)	7.34	≤ 20	Pass
Mid operating	5	MAX Frequency Drift(kHz)	6.76	-25≤ fmax≤+25	Pass
Frequency	5	Maximum Drift Rate(kHz/50μs)	5.39	≤ 20	Pass
(2441 MHz)	6	MAX Frequency Drift(kHz)	5.20	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	4.23	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	5.69	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	4.57	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	6.56	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	5.95	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	5.02	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.63	≤ 20	Pass
	•				

	10	MAX Frequency Drift(kHz)	4.08	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	3.29	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	5.92	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	3.37	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	7.47	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	5.27	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	6.52	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	3.75	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	8.46	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	4.37	≤ 20	Pass
TT' 1	5	MAX Frequency Drift(kHz)	7.56	-25≤ fmax≤+25	Pass
High operating	5	Maximum Drift Rate(kHz/50μs)	3.38	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	6.52	-25≤ fmax≤+25	Pass
(2480 MHz)	6	Maximum Drift Rate(kHz/50μs)	4.27	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	7.53	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	5.53	≤ 20	Pass
	8	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
	9	MAX Frequency Drift(kHz)	5.78	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.61	≤ 20	Pass
	10	MAX Frequency Drift(kHz)		-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)		≤ 20	Pass
		Packet Type: DH5			
Test Frequency	Packets	D14		Limit (%)	
(MHz)	No.	Result			
	1	MAX Frequency Drift(kHz)	-3.10	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	3.21	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	-2.95	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.29	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	4.14	-25≤ fmax≤+25	Pass
Low operating	3	Maximum Drift Rate(kHz/50μs)	5.78	≤ 20	Pass
Frequency	4	MAX Frequency Drift(kHz)	3.72	-25≤ fmax≤+25	Pass
(2402 MHz)	4	Maximum Drift Rate(kHz/50μs)	3.31	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	-2.54	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	2.88	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	-2.25	-25≤ fmax≤+25	Pass
	6	Maximum Drift Rate(kHz/50μs)	2.84	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	-3.10	-25≤ fmax≤+25	Pass
<u>.</u>	1	Part A-288 of 322	1	1	<u> </u>

	7	Maximum Drift Rate(kHz/50μs)	2.67	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	-3.63	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	2.60	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	-2.68	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	2.94	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	3.68	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	5.39	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	5.91	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	4.40	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	3.56	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	3.82	≤ 20	Pass
	3	MAX Frequency Drift(kHz)	5.49	-25≤ fmax≤+25	Pass
	3	Maximum Drift Rate(kHz/50μs)	4.34	≤ 20	Pass
	4	MAX Frequency Drift(kHz)	4.10	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	3.44	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	3.35	-25≤ fmax≤+25	Pass
Mid operating	5	Maximum Drift Rate(kHz/50μs)	3.17	≤ 20	Pass
Frequency	6	MAX Frequency Drift(kHz)	4.37	-25≤ fmax≤+25	Pass
(2441 MHz)	6	Maximum Drift Rate(kHz/50μs)	3.00	≤ 20	Pass
	7	MAX Frequency Drift(kHz)	5.94	-25≤ fmax≤+25	Pass
	7	Maximum Drift Rate(kHz/50μs)	5.38	≤ 20	Pass
	8	MAX Frequency Drift(kHz)	5.39	-25≤ fmax≤+25	Pass
	8	Maximum Drift Rate(kHz/50μs)	5.88	≤ 20	Pass
	9	MAX Frequency Drift(kHz)	3.58	-25≤ fmax≤+25	Pass
	9	Maximum Drift Rate(kHz/50μs)	3.83	≤ 20	Pass
	10	MAX Frequency Drift(kHz)	6.58	-25≤ fmax≤+25	Pass
	10	Maximum Drift Rate(kHz/50μs)	5.48	≤ 20	Pass
	1	MAX Frequency Drift(kHz)	6.39	-25≤ fmax≤+25	Pass
	1	Maximum Drift Rate(kHz/50μs)	3.53	≤ 20	Pass
	2	MAX Frequency Drift(kHz)	6.89	-25≤ fmax≤+25	Pass
	2	Maximum Drift Rate(kHz/50μs)	4.04	≤ 20	Pass
High operating	3	MAX Frequency Drift(kHz)	5.60	-25≤ fmax≤+25	Pass
Frequency	3	Maximum Drift Rate(kHz/50μs)	3.52	≤ 20	Pass
(2480 MHz)	4	MAX Frequency Drift(kHz)	8.17	-25≤ fmax≤+25	Pass
	4	Maximum Drift Rate(kHz/50μs)	5.74	≤ 20	Pass
	5	MAX Frequency Drift(kHz)	6.39	-25≤ fmax≤+25	Pass
	5	Maximum Drift Rate(kHz/50μs)	3.73	≤ 20	Pass
	6	MAX Frequency Drift(kHz)	7.73	-25≤ fmax≤+25	Pass
l .		•			

6	Maximum Drift Rate(kHz/50μs)	4.91	≤ 20	Pass
7	MAX Frequency Drift(kHz)	7.21	-25≤ fmax≤+25	Pass
7	Maximum Drift Rate(kHz/50μs)	4.89	≤ 20	Pass
8	MAX Frequency Drift(kHz)	6.94	-25≤ fmax≤+25	Pass
8	Maximum Drift Rate(kHz/50μs)	3.64	≤ 20	Pass
9	MAX Frequency Drift(kHz)	6.04	-25≤ fmax≤+25	Pass
9	Maximum Drift Rate(kHz/50μs)	3.64	≤ 20	Pass
10	MAX Frequency Drift(kHz)	8.97	-25≤ fmax≤+25	Pass
10	Maximum Drift Rate(kHz/50μs)	5.35	≤ 20	Pass

# 3.5.10. Test Case: TRM/CA/10/C - EDR Relative Transmit Power

## **Expected Outcome:**

All values as measured must fulfill the following conditions:

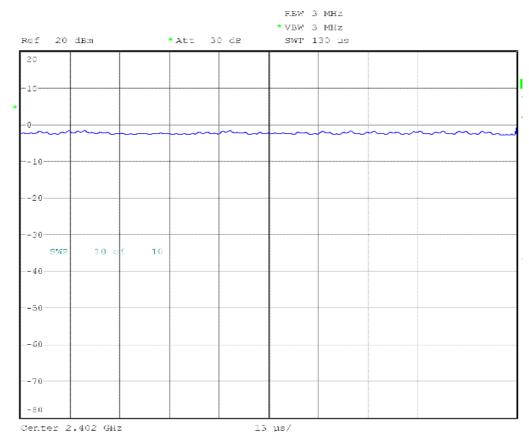
1. For all pairs of results: (PGFSK-4dB) < PDPSK < (PGFSK + 1dB)

## Packet Type:2DH5

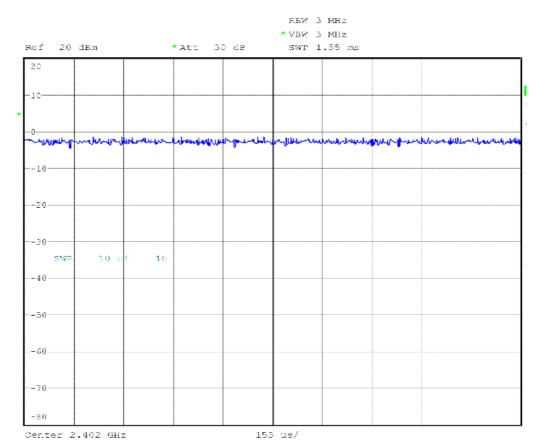
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.20	6.90	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.62	-22.90	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	6.87	6.53	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.83	-23.07	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.15	5.92	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.51	-23.74	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass

Packet Type: 3DH5

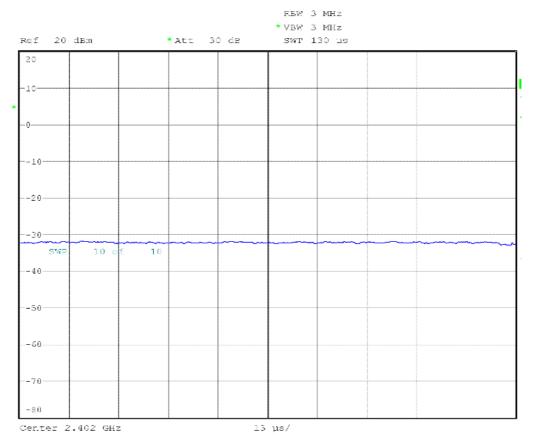
Test Frequency	Average Power	Average Power	Limit	Verdict
(MHz)	PGFSK	PDPSK	(dBm)	
	(dBm)	(dBm)		
2402	7.21	6.96	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2402	-22.61	-22.86	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	6.88	6.51	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2441	-22.77	-23.00	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	6.15	5.88	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass
2480	-23.50	-23.68	(PGFSK-4dB) <pdpsk<(pgfsk+1db)< td=""><td>Pass</td></pdpsk<(pgfsk+1db)<>	Pass



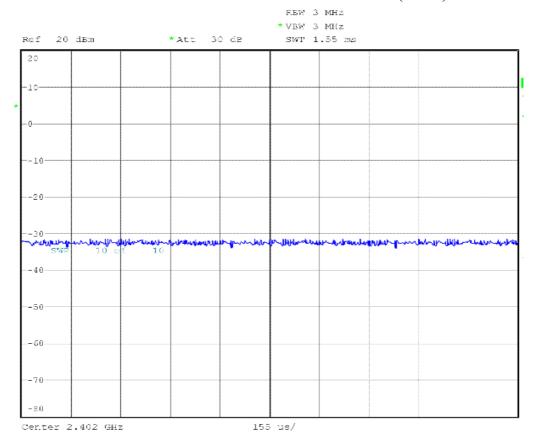
EDR Relative Transmit Power GFSK Low Max (2DH5)



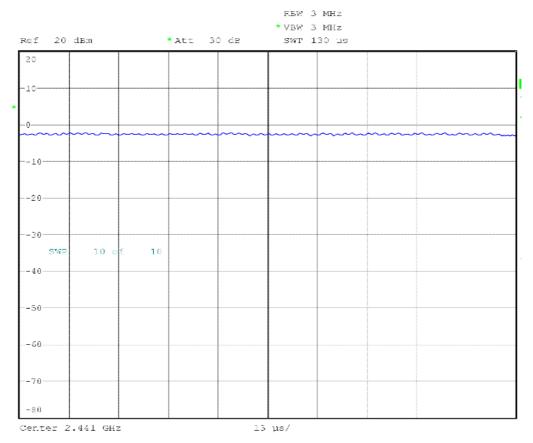
EDR Relative Transmit Power DPSK Low Max (2DH5)
Part A-291 of 322



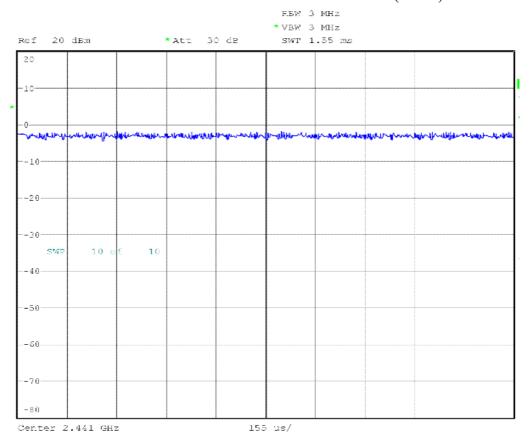
EDR Relative Transmit Power GFSK Low Min (2DH5)



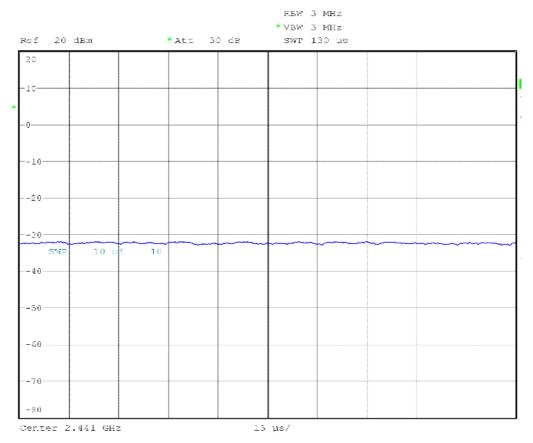
EDR Relative Transmit Power DPSK Low Min (2DH5)
Part A-292 of 322



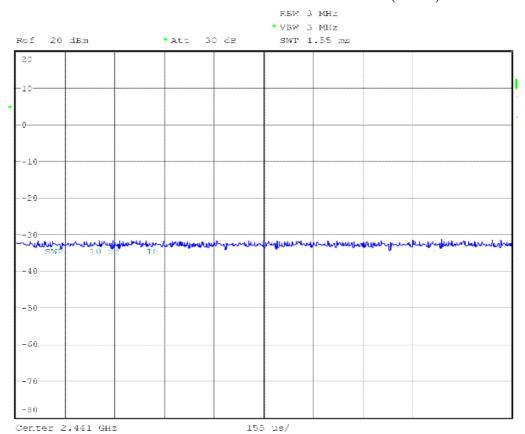
EDR Relative Transmit Power GFSK Mid Max (2DH5)



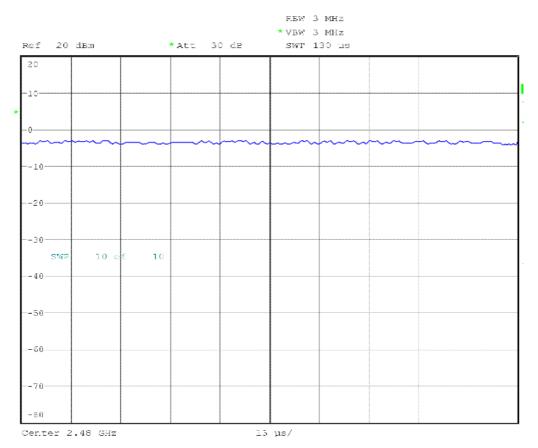
EDR Relative Transmit Power DPSK Mid Max (2DH5)
Part A-293 of 322



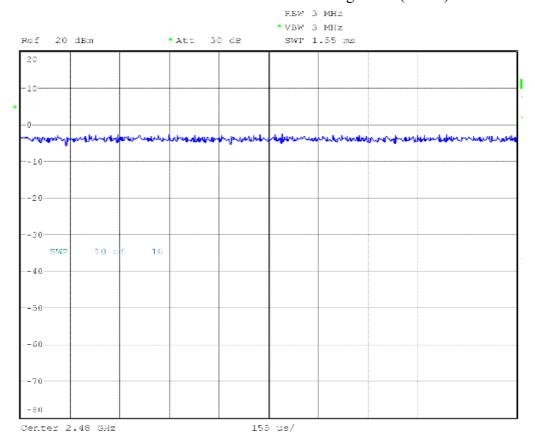
EDR Relative Transmit Power GFSK Mid Min (2DH5)



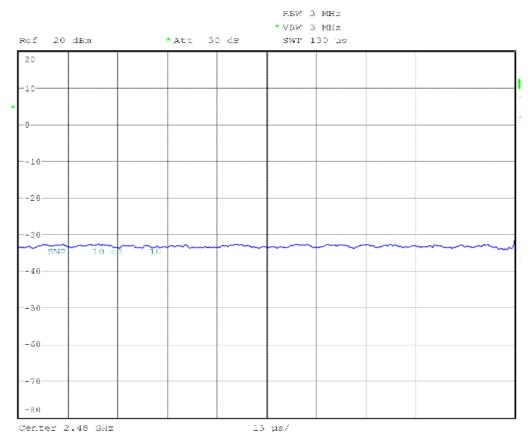
EDR Relative Transmit Power DPSK Mid Min (2DH5)
Part A-294 of 322



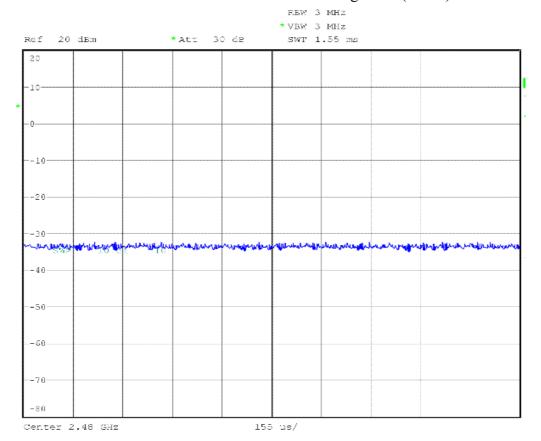
EDR Relative Transmit Power GFSK High Max (2DH5)



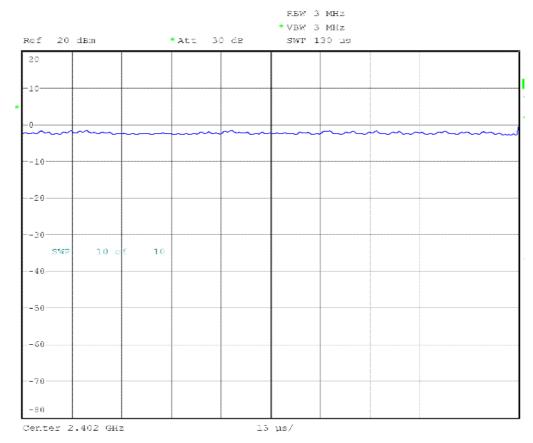
EDR Relative Transmit Power DPSK High Max (2DH5)
Part A-295 of 322



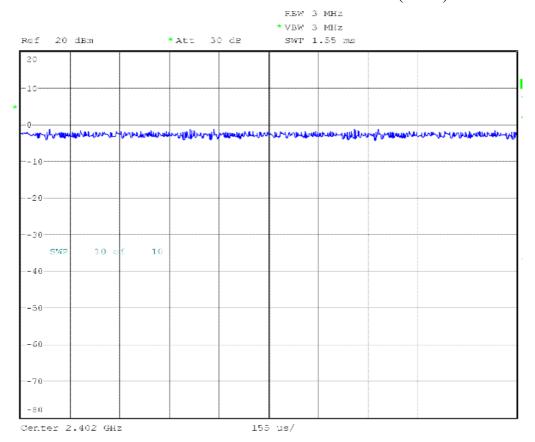
EDR Relative Transmit Power GFSK High Min (2DH5)



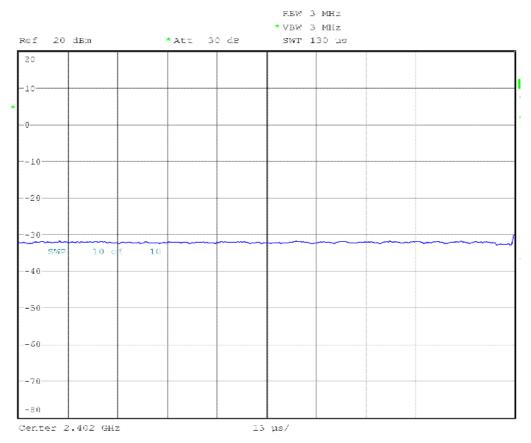
EDR Relative Transmit Power DPSK High Min (2DH5)
Part A-296 of 322



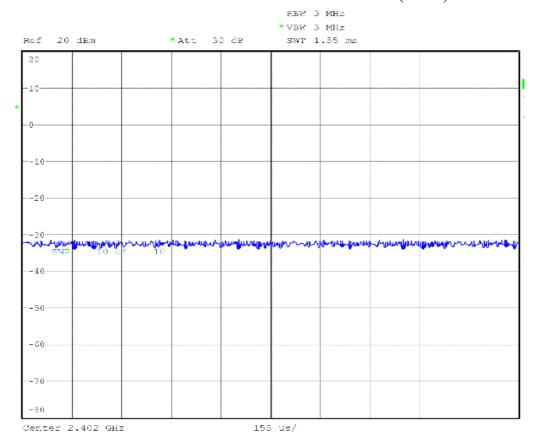
EDR Relative Transmit Power GFSK Low Max (3DH5)



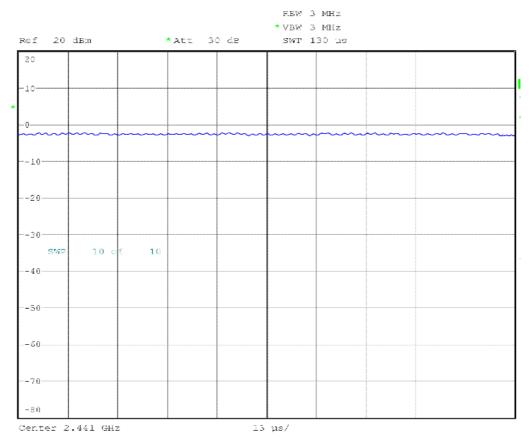
EDR Relative Transmit Power DPSK Low Max (3DH5)
Part A-297 of 322



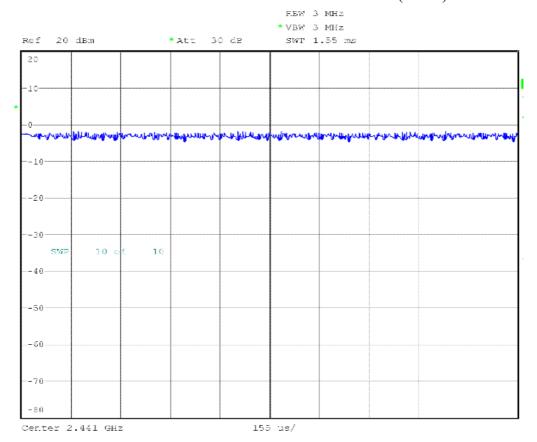
EDR Relative Transmit Power GFSK Low Min (3DH5)



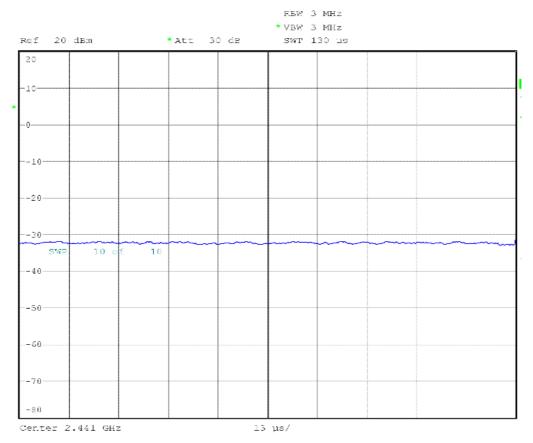
EDR Relative Transmit Power DPSK Low Min (3DH5)
Part A-298 of 322



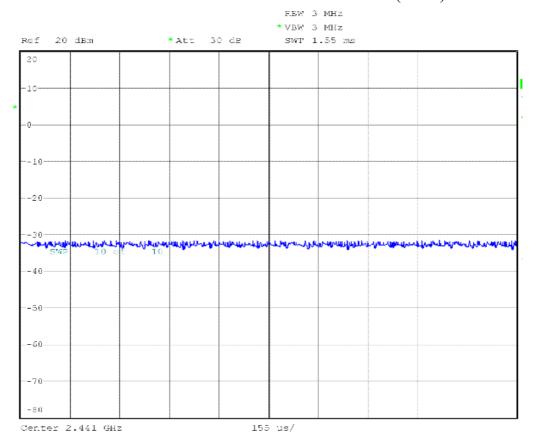
EDR Relative Transmit Power GFSK Mid Max (3DH5)



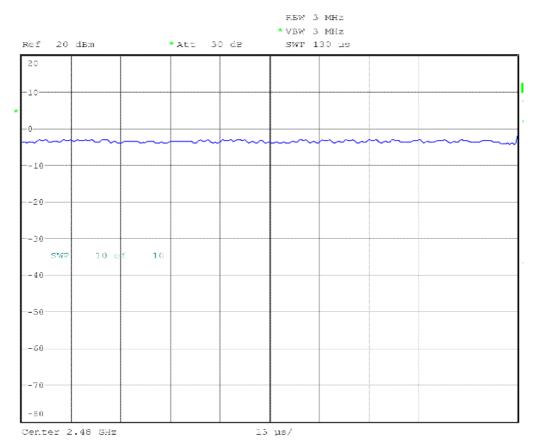
EDR Relative Transmit Power DPSK Mid Max (3DH5)
Part A-299 of 322



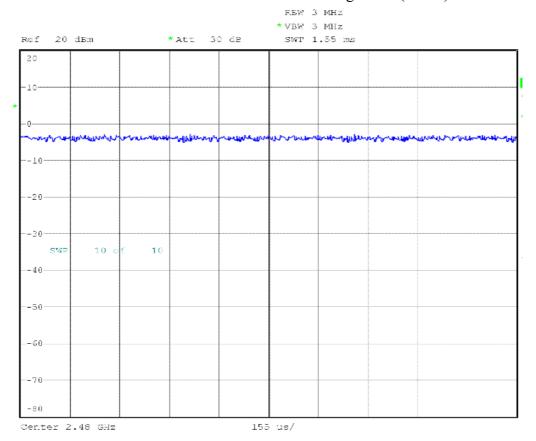
EDR Relative Transmit Power GFSK Mid Min (3DH5)



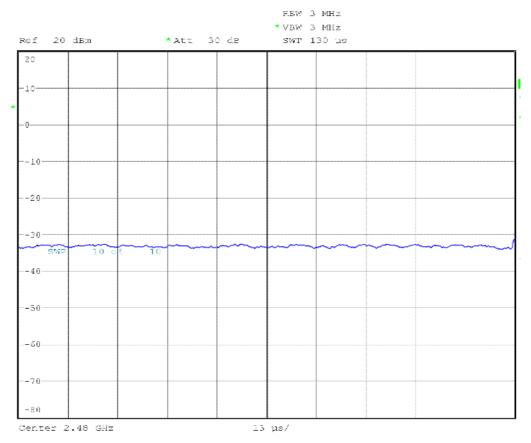
EDR Relative Transmit Power DPSK Mid Min (3DH5)
Part A-300 of 322



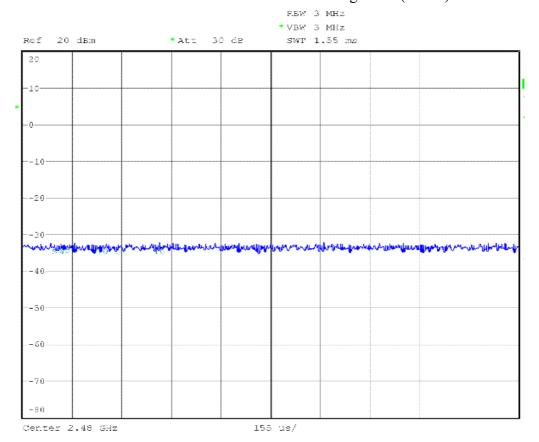
EDR Relative Transmit Power GFSK High Max (3DH5)



EDR Relative Transmit Power DPSK High Max (3DH5)
Part A-301 of 322



EDR Relative Transmit Power GFSK High Min (3DH5)



EDR Relative Transmit Power DPSK High Min (3DH5)
Part A-302 of 322

# 3.5.11. Test Case: TRM/CA/11/C - EDR Carrier Frequency Stability and Modulation Accuracy

#### **Expected Outcome:**

If the EUT does not support 8DPSK modulation then the outcomes based on this modulation do not apply..

All values as measured must fulfill the following conditions:

- 1. Carrier frequency stability:
- $-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$ , for all packets
- $-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$ , for all blocks
- -10 kHz  $\leq \omega 0 \leq +10$  kHz, for all blocks
- 2. RMS DEVM:
  - RMS DEVM  $\leq 0.20$ , for all  $\pi/4$ -DQPSK blocks
  - RMS DEVM  $\leq 0.13$ , for all 8DPSK blocks
- 3. Peak DEVM:
  - DEVM  $\leq 0.35$  for all  $\pi/4$ -DQPSK symbols
  - $DEVM \le 0.25$  for all 8DPSK symbols
- 4. 99% DEVM:
  - DEVM  $\leq$  0.30, for 99% of  $\pi/4$ -DQPSK symbols
  - DEVM  $\leq$  0.20, for 99% of 8DPSK symbols

#### Packet Type:2DH5

	1 401.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
Test Frequency	Test Parameter	Result	Limit	Verdict				
	ωi (kHz)	0.00	-75  kHz ≤ ωi ≤ $+75  kHz$	Pass				
T	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass				
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass				
Frequency	RMS DEVM	0.07	RMS DEVM ≤ 0.2	Pass				
(2402MHz)	Peak DEVM	0.13	DEVM ≤ 0.35	Pass				
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass				
	ωi (kHz)	0.00	-75 kHz ≤ ωi ≤ +75 kHz	Pass				
Midonostino	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass				
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass				
Frequency	RMS DEVM	0.07	RMS DEVM ≤ 0.2	Pass				
(2441MHz)	Peak DEVM	0.14	DEVM ≤ 0.35	Pass				
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass				
High operating	ωi (kHz)	0.00	-75 kHz ≤ ωi ≤ +75 kHz	Pass				
Frequency	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass				
(2480MHz)	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass				

	RMS DEVM	0.11	RMS DEVM ≤ 0.2	Pass
	Peak DEVM	0.19	$DEVM \le 0.35$	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	Packe	t Type: 3DH	15	
Test Frequency	Test Parameter	Result	Limit	Verdict
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
I avy an anatin a	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Low operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency (2402MHz)	RMS DEVM	0.07	RMS DEVM $\leq 0.13$	Pass
(24021/1112)	Peak DEVM	0.14	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
Midamantina	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
Mid operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.07	RMS DEVM ≤ 0.13	Pass
(2441MHz)	Peak DEVM	0.14	DEVM ≤ 0.25	Pass
	DEVM for 99%	100.00 %	Error symbols > 99 %	Pass
	ωi (kHz)	0.00	$-75 \text{ kHz} \le \omega i \le +75 \text{ kHz}$	Pass
TT' 1	$(\omega i + \omega 0)(kHz)$	0.00	$-75 \text{ kHz} \le (\omega i + \omega 0) \le +75 \text{ kHz}$	Pass
High operating	ω 0 (kHz)	0.00	$-10 \text{ kHz} \le \omega 0 \le +10 \text{ kHz}$	Pass
Frequency	RMS DEVM	0.09	RMS DEVM ≤ 0.13	Pass
(2480MHz)	Peak DEVM	0.21	DEVM ≤ 0.25	Pass
	DEVM for 99%	99.92 %	Error symbols > 99 %	Pass

# 3.5.12. Test Case: TRM/CA/13/C - EDR In-Band Spurious Emissions

#### **Expected Outcome:**

All values as measured must fulfill the following conditions:

- 1.  $PTx-26dB (f) \le PTxref -26 dB for |M-N|= 1$
- 2. PTx (f)  $\leq$  20 dBm for |M-N| = 2
- 3. PTx (f)  $\leq$  40 dBm for  $|M-N| \geq$  3.

For each operating frequency exceptions in up to three bands of 1 MHz width centered on a frequency that is an integer multiple of 1 MHz are allowed. They must however comply with an absolute value of -20 dBm.

Packet Type: 2DH5 Test Frequency Limit Verdict Measurement Frequency Ptx(f) (MHz) (MHz) (dBm) (dBm) ≤-40 2405 2402 -45.3 Pass 2405 -35.98 ≤-20 Pass 2403

2405	2404	-34.28	≤ 7.1 <b>-</b> 26	Pass
2405	2405	7.1	N/A	N/A
2405	2406	-33.67	≤ 7.1 -26	Pass
2405	2407	-36.52	<b>≤-20</b>	Pass
2405	2408	-44.78	<b>≤-40</b>	Pass
2405	2409	-48.08	<b>≤-40</b>	Pass
2405	2410	-48.7	<b>≤-40</b>	Pass
2405	2411	-48.2	<b>≤-40</b>	Pass
2405	2412	-47.96	<b>≤-40</b>	Pass
2405	2413	-47.67	<b>≤-40</b>	Pass
2405	2414	-47.55	<b>≤-40</b>	Pass
2405	2415	-47.67	<b>≤-40</b>	Pass
2405	2416	-47.21	<b>≤-40</b>	Pass
2405	2417	-46.9	<b>≤-40</b>	Pass
2405	2418	-46.99	<b>≤-40</b>	Pass
2405	2419	-46.96	<b>≤-40</b>	Pass
2405	2420	-47.53	<b>≤-40</b>	Pass
2405	2421	-47.45	<b>≤-40</b>	Pass
2405	2422	-47.44	<b>≤-40</b>	Pass
2405	2423	-47.69	<b>≤-40</b>	Pass
2405	2424	-47.44	<b>≤-40</b>	Pass
2405	2425	-48.2	<b>≤-40</b>	Pass
2405	2426	-48.24	<b>≤-40</b>	Pass
2405	2427	-48.53	<b>≤-40</b>	Pass
2405	2428	-48.53	<b>≤-40</b>	Pass
2405	2429	-49	<b>≤-40</b>	Pass
2405	2430	-49	<b>≤-40</b>	Pass
2405	2431	-48.89	<b>≤-40</b>	Pass
2405	2432	-49.38	<b>≤-40</b>	Pass
2405	2433	-49.77	<b>≤-40</b>	Pass
2405	2434	-50.1	<b>≤-40</b>	Pass
2405	2435	-50.41	<b>≤-40</b>	Pass
2405	2436	-51.08	<b>≤-40</b>	Pass
2405	2437	-51.1	<b>≤-40</b>	Pass
2405	2438	-51.42	<b>≤-40</b>	Pass
2405	2439	-51.66	<b>≤-40</b>	Pass
2405	2440	-52.1	<b>≤-40</b>	Pass
2405	2441	-52.1	<b>≤-40</b>	Pass

2405	2442	-52.54	<b>≤-40</b>	Dogg
		32.31		Pass
2405	2443	-52.73	<b>≤-40</b>	Pass
2405	2444	-52.89	<b>≤-40</b>	Pass
2405	2445	-53.42	<b>≤-40</b>	Pass
2405	2446	-54.11	<b>≤-40</b>	Pass
2405	2447	-53.82	<b>≤-40</b>	Pass
2405	2448	-54.08	<b>≤-40</b>	Pass
2405	2449	-54.66	<b>≤-40</b>	Pass
2405	2450	-54.84	<b>≤-40</b>	Pass
2405	2451	-55.33	<b>≤-40</b>	Pass
2405	2452	-55.15	<b>≤-40</b>	Pass
2405	2453	-55.27	<b>≤-40</b>	Pass
2405	2454	-55.74	<b>≤-40</b>	Pass
2405	2455	-56.05	<b>≤-40</b>	Pass
2405	2456	-55.76	<b>≤-40</b>	Pass
2405	2457	-54.26	<b>≤-40</b>	Pass
2405	2458	-56.55	<b>≤-40</b>	Pass
2405	2459	-56.54	<b>≤-40</b>	Pass
2405	2460	-56.94	<b>≤-40</b>	Pass
2405	2461	-57.07	<b>≤-40</b>	Pass
2405	2462	-56.9	<b>≤-40</b>	Pass
2405	2463	-57	<b>≤-40</b>	Pass
2405	2464	-57.04	<b>≤-40</b>	Pass
2405	2465	-57.18	<b>≤-40</b>	Pass
2405	2466	-57.27	<b>≤-40</b>	Pass
2405	2467	-57.16	<b>≤-40</b>	Pass
2405	2468	-57.14	<b>≤-40</b>	Pass
2405	2469	-56.71	<b>≤-40</b>	Pass
2405	2470	-57.6	<b>≤-40</b>	Pass
2405	2471	-57.43	<b>≤-40</b>	Pass
2405	2472	-56.95	<b>≤-40</b>	Pass
2405	2473	-57.21	<b>≤-40</b>	Pass
2405	2474	-57.1	<b>≤-40</b>	Pass
2405	2475	-56.86	≤-40	Pass
2405	2476	-57.35	<b>≤-40</b>	Pass
2405	2477	-56.84	<b>≤-40</b>	Pass
2405	2478	-57.11	≤-40	Pass
2405	2479	-57.04	≤-40	Pass

2480	-57.34	<b>≤-40</b>	Pass
2402	-52.52	<b>≤-40</b>	Pass
2403	-51.94	<b>≤-40</b>	Pass
2404	-51.56	<b>≤-40</b>	Pass
2405	-51.42	<b>≤-40</b>	Pass
2406	-51.25	<b>≤-40</b>	Pass
2407	-50.95	<b>≤-40</b>	Pass
2408	-50.63	<b>≤-40</b>	Pass
2409	-50.22	<b>≤-40</b>	Pass
2410	-49.89	<b>≤-40</b>	Pass
2411	-49.92	<b>≤-40</b>	Pass
2412	-49.6	<b>≤-40</b>	Pass
2413	-49.03	<b>≤-40</b>	Pass
2414	-49.1	<b>≤-40</b>	Pass
2415	-48.77	<b>≤-40</b>	Pass
2416	-48.53	<b>≤-40</b>	Pass
2417	-48.47	<b>≤-40</b>	Pass
2418	-47.99	<b>≤-40</b>	Pass
2419	-47.7	<b>≤-40</b>	Pass
2420	-47.88	<b>≤-40</b>	Pass
2421	-47.88	<b>≤-40</b>	Pass
2422	-47.67	<b>≤-40</b>	Pass
2423	-47.24	<b>≤-40</b>	Pass
2424	-47.54	<b>≤-40</b>	Pass
2425	-47.45	<b>≤-40</b>	Pass
2426	-47.14	<b>≤-40</b>	Pass
2427	-47.05	<b>≤-40</b>	Pass
2428	-47.08	<b>≤-40</b>	Pass
2429	-46.84	<b>≤-40</b>	Pass
2430	-46.92	<b>≤-40</b>	Pass
2431	-47.33	<b>≤-40</b>	Pass
2432	-47.25	<b>≤-40</b>	Pass
2433	-47.96	<b>≤-40</b>	Pass
2434	-48.09	≤-40	Pass
2435	-48.75	<b>≤-40</b>	Pass
2436	-47.92	<b>≤-40</b>	Pass
2437	-47.63	<b>≤-40</b>	Pass
2438	-45.24	<b>≤-40</b>	Pass
	2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437	2402       -52.52         2403       -51.94         2404       -51.56         2405       -51.42         2406       -51.25         2407       -50.95         2408       -50.63         2409       -50.22         2410       -49.89         2411       -49.92         2412       -49.6         2413       -49.03         2414       -49.1         2415       -48.77         2416       -48.53         2417       -48.47         2418       -47.99         2419       -47.7         2420       -47.88         2421       -47.88         2422       -47.67         2423       -47.24         2424       -47.54         2425       -47.45         2426       -47.14         2427       -47.05         2428       -47.08         2429       -46.84         2430       -46.92         2431       -47.33         2432       -47.25         2433       -47.96         2434       -48.09         2435<	2402       -52.52       ≤40         2403       -51.94       ≤40         2404       -51.56       ≤40         2405       -51.42       ≤40         2406       -51.25       ≤40         2407       -50.95       ≤40         2408       -50.63       ≤40         2409       -50.22       ≤40         2410       -49.89       ≤40         2411       -49.92       ≤40         2412       -49.6       ≤40         2413       -49.03       ≤40         2414       -49.1       ≤40         2415       -48.77       ≤40         2416       -48.53       ≤40         2417       -48.47       ≤40         2418       -47.99       ≤40         2419       -47.7       ≤40         2420       -47.88       ≤40         2421       -47.88       ≤40         2422       -47.67       ≤40         2423       -47.24       ≤40         2424       -47.54       ≤40         2425       -47.45       ≤40         2426       -47.14       ≤40         2427 <t< td=""></t<>

2439	-36.25	<b>≤-20</b>	Pass
2440	-35.64	≤ 6.69 <b>-</b> 26	Pass
2441	6.69	N/A	N/A
2442	-34.64	≤ 6.69 <b>-</b> 26	Pass
2443	-35.29	≤-20	Pass
2444	-45.05	<b>≤-40</b>	Pass
2445	-47.8	<b>≤-40</b>	Pass
2446	-48.14	<b>≤-40</b>	Pass
2447	-48.53	<b>≤-40</b>	Pass
2448	-48.35	<b>≤-40</b>	Pass
2449	-48.24	<b>≤-40</b>	Pass
2450	-47.5	<b>≤-40</b>	Pass
2451	-47.6	<b>≤-40</b>	Pass
2452	-47.55	<b>≤-40</b>	Pass
2453	-47.07	<b>≤-40</b>	Pass
2454	-47.51	<b>≤-40</b>	Pass
2455	-47.49	<b>≤-40</b>	Pass
2456	-47.22	<b>≤-40</b>	Pass
2457	-47.87	<b>≤-40</b>	Pass
2458	-47.57	<b>≤-40</b>	Pass
2459	-47.78	<b>≤-40</b>	Pass
2460	-47.85	<b>≤-40</b>	Pass
2461	-48.38	<b>≤-40</b>	Pass
2462	-48.11	<b>≤-40</b>	Pass
2463	-48.79	<b>≤-40</b>	Pass
2464	-48.83	<b>≤-40</b>	Pass
2465	-48.74	<b>≤-40</b>	Pass
2466	-49.42	<b>≤-40</b>	Pass
2467	-49.21	<b>≤-40</b>	Pass
2468	-49.77	<b>≤-40</b>	Pass
2469	-50.15	<b>≤-40</b>	Pass
2470	-50.22	<b>≤-40</b>	Pass
2471	-50.26	<b>≤-40</b>	Pass
2472	-50.86	<b>≤-40</b>	Pass
2473	-50.93	<b>≤-40</b>	Pass
2474	-51.4	<b>≤-40</b>	Pass
2475	-51.65	<b>≤-40</b>	Pass
2476	-52.14	<b>≤-40</b>	Pass
	2440 2441 2442 2443 2444 2445 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475	2440       -35.64         2441       6.69         2442       -34.64         2443       -35.29         2444       -45.05         2445       -47.8         2446       -48.14         2447       -48.53         2448       -48.35         2449       -48.24         2450       -47.5         2451       -47.6         2452       -47.55         2453       -47.07         2454       -47.51         2455       -47.49         2456       -47.22         2457       -47.87         2458       -47.57         2459       -47.78         2460       -47.85         2461       -48.38         2462       -48.11         2463       -48.79         2464       -48.83         2465       -48.74         2468       -49.77         2469       -50.15         2470       -50.22         2471       -50.26         2472       -50.86         2473       -50.93         2474       -51.4         2475 <td>2440       -35.64       ≤ 6.69 -26         2441       6.69       N/A         2442       -34.64       ≤ 6.69 -26         2443       -35.29       ≤ -20         2444       -45.05       ≤ -40         2445       -47.8       ≤ -40         2446       -48.14       ≤ -40         2447       -48.53       ≤ -40         2448       -48.35       ≤ -40         2449       -48.24       ≤ -40         2450       -47.5       ≤ -40         2451       -47.6       ≤ -40         2452       -47.55       ≤ -40         2453       -47.07       ≤ -40         2454       -47.51       ≤ -40         2453       -47.07       ≤ -40         2454       -47.51       ≤ -40         2455       -47.49       ≤ -40         2456       -47.22       ≤ -40         2457       -47.87       ≤ -40         2458       -47.57       ≤ -40         2459       -47.78       ≤ -40         2460       -48.38       ≤ -40         2461       -48.83       ≤ -40         2462       -48.11       ≤</td>	2440       -35.64       ≤ 6.69 -26         2441       6.69       N/A         2442       -34.64       ≤ 6.69 -26         2443       -35.29       ≤ -20         2444       -45.05       ≤ -40         2445       -47.8       ≤ -40         2446       -48.14       ≤ -40         2447       -48.53       ≤ -40         2448       -48.35       ≤ -40         2449       -48.24       ≤ -40         2450       -47.5       ≤ -40         2451       -47.6       ≤ -40         2452       -47.55       ≤ -40         2453       -47.07       ≤ -40         2454       -47.51       ≤ -40         2453       -47.07       ≤ -40         2454       -47.51       ≤ -40         2455       -47.49       ≤ -40         2456       -47.22       ≤ -40         2457       -47.87       ≤ -40         2458       -47.57       ≤ -40         2459       -47.78       ≤ -40         2460       -48.38       ≤ -40         2461       -48.83       ≤ -40         2462       -48.11       ≤

2441	2477	-52.07	<b>≤-40</b>	Pass
2441	2478	-52.29	<b>≤-40</b>	Pass
2441	2479	-52.95	<b>≤-40</b>	Pass
2441	2480	-53.19	<b>≤-40</b>	Pass
2477	2402	-57.66	<b>≤-40</b>	Pass
2477	2403	-57.74	<b>≤-40</b>	Pass
2477	2404	-57.54	<b>≤-40</b>	Pass
2477	2405	-58	<b>≤-40</b>	Pass
2477	2406	-57.51	<b>≤-40</b>	Pass
2477	2407	-57.48	<b>≤-40</b>	Pass
2477	2408	-57.75	<b>≤-40</b>	Pass
2477	2409	-57.72	<b>≤-40</b>	Pass
2477	2410	-57.2	<b>≤-40</b>	Pass
2477	2411	-57.61	<b>≤-40</b>	Pass
2477	2412	-57.41	<b>≤-40</b>	Pass
2477	2413	-57.63	<b>≤-40</b>	Pass
2477	2414	-57.29	<b>≤-40</b>	Pass
2477	2415	-57.38	<b>≤-40</b>	Pass
2477	2416	-57.39	<b>≤-40</b>	Pass
2477	2417	-57.2	<b>≤-40</b>	Pass
2477	2418	-57.21	<b>≤-40</b>	Pass
2477	2419	-56.98	<b>≤-40</b>	Pass
2477	2420	-56.92	<b>≤-40</b>	Pass
2477	2421	-57.1	<b>≤-40</b>	Pass
2477	2422	-56.82	<b>≤-40</b>	Pass
2477	2423	-56.56	<b>≤-40</b>	Pass
2477	2424	-56.33	<b>≤-40</b>	Pass
2477	2425	-55.89	<b>≤-40</b>	Pass
2477	2426	-55.95	<b>≤-40</b>	Pass
2477	2427	-55.71	≤-40	Pass
2477	2428	-55.67	<b>≤-40</b>	Pass
2477	2429	-55.39	<b>≤-40</b>	Pass
2477	2430	-55.11	<b>≤-40</b>	Pass
2477	2431	-54.81	<b>≤-40</b>	Pass
2477	2432	-54.66	<b>≤-40</b>	Pass
2477	2433	-54.24	<b>≤-40</b>	Pass
2477	2434	-53.91	<b>≤-40</b>	Pass
2477	2435	-53.6	≤ <b>-</b> 40	Pass

2477	2436	-53.33	<b>≤-40</b>	Pass
2477	2437	-53.46	<b>≤-40</b>	Pass
2477	2438	-52.81	<b>≤-40</b>	Pass
2477	2439	-52.34	<b>≤-40</b>	Pass
2477	2440	-52.13	<b>≤-40</b>	Pass
2477	2441	-52.01	<b>≤-40</b>	Pass
2477	2442	-51.27	<b>≤-40</b>	Pass
2477	2443	-51.28	<b>≤-40</b>	Pass
2477	2444	-50.81	<b>≤-40</b>	Pass
2477	2445	-50.5	<b>≤-40</b>	Pass
2477	2446	-50.27	<b>≤-40</b>	Pass
2477	2447	-49.87	<b>≤-40</b>	Pass
2477	2448	-49.74	<b>≤-40</b>	Pass
2477	2449	-49.45	<b>≤-40</b>	Pass
2477	2450	-49.23	<b>≤-40</b>	Pass
2477	2451	-49.16	<b>≤-40</b>	Pass
2477	2452	-49.04	<b>≤-40</b>	Pass
2477	2453	-48.55	<b>≤-40</b>	Pass
2477	2454	-48.7	<b>≤-40</b>	Pass
2477	2455	-48.22	<b>≤-40</b>	Pass
2477	2456	-47.99	<b>≤-40</b>	Pass
2477	2457	-48.05	<b>≤-40</b>	Pass
2477	2458	-47.76	<b>≤-40</b>	Pass
2477	2459	-47.88	<b>≤-40</b>	Pass
2477	2460	-47.78	<b>≤-40</b>	Pass
2477	2461	-47.92	<b>≤-40</b>	Pass
2477	2462	-47.56	<b>≤-40</b>	Pass
2477	2463	-47.48	<b>≤-4</b> 0	Pass
2477	2464	-47.59	<b>≤-40</b>	Pass
2477	2465	-47.44	<b>≤-40</b>	Pass
2477	2466	-47.56	<b>≤-40</b>	Pass
2477	2467	-47.46	<b>≤-40</b>	Pass
2477	2468	-47.73	<b>≤-40</b>	Pass
2477	2469	-48.31	<b>≤-40</b>	Pass
2477	2470	-48.34	<b>≤-40</b>	Pass
2477	2471	-48.94	<b>≤-40</b>	Pass
2477	2472	-48.91	<b>≤-40</b>	Pass
2477	2473	-48.17	<b>≤-40</b>	Pass

2477	2474	-45.79	<b>≤-40</b>	Pass
2477	2475	-37.72	≤-20	Pass
2477	2476	-34.59	≤ 5.92 <b>-</b> 26	Pass
2477	2477	5.92	N/A	N/A
2477	2478	-34.16	≤ 5.92 <b>-</b> 26	Pass
2477	2479	-36.5	≤-20	Pass
2477	2480	-45.87	<b>≤-40</b>	Pass
	3DH5			
Test Frequency	Measurement Frequency	Ptx(f)	Limit	Verdict
(MHz)	(MHz)	(dBm)	(dBm)	
2405	2402	-43.74	<b>≤-40</b>	Pass
2405	2403	-36.32	<b>≤-20</b>	Pass
2405	2404	-33.93	≤ 7.25 <b>-</b> 26	Pass
2405	2405	7.25	N/A	N/A
2405	2406	-32.24	≤ 7.25 <b>-</b> 26	Pass
2405	2407	-35.57	≤-20	Pass
2405	2408	-44.05	<b>≤-40</b>	Pass
2405	2409	-46.65	<b>≤-40</b>	Pass
2405	2410	-47.62	<b>≤-40</b>	Pass
2405	2411	-47.79	<b>≤-40</b>	Pass
2405	2412	-47.61	<b>≤-40</b>	Pass
2405	2413	-47.68	<b>≤-40</b>	Pass
2405	2414	-47.18	<b>≤-40</b>	Pass
2405	2415	-47.31	<b>≤-40</b>	Pass
2405	2416	-47.27	<b>≤-40</b>	Pass
2405	2417	-47.04	<b>≤-40</b>	Pass
2405	2418	-47.25	<b>≤-40</b>	Pass
2405	2419	-46.92	<b>≤-40</b>	Pass
2405	2420	-47.11	<b>≤-40</b>	Pass
2405	2421	-47.59	<b>≤-40</b>	Pass
2405	2422	-47.38	<b>≤-40</b>	Pass
2405	2423	-47.56	<b>≤-40</b>	Pass
2405	2424	-47.1	<b>≤-40</b>	Pass
2405	2425	-47.35	<b>≤-40</b>	Pass
2405	2426	-47.89	<b>≤-40</b>	Pass
2405	2427	-47.86	<b>≤-40</b>	Pass
2405	2428	-48.43	<b>≤-40</b>	Pass
2405	2429	-48.68	≤-40	Pass

2405	2430	-48.85	<b>≤-40</b>	Pass
2405	2431	-48.8	<b>≤-40</b>	Pass
2405	2432	-49.79	<b>≤-40</b>	Pass
2405	2433	-49.06	<b>≤-40</b>	Pass
2405	2434	-49.66	<b>≤-40</b>	Pass
2405	2435	-49.9	<b>≤-40</b>	Pass
2405	2436	-50.65	<b>≤-40</b>	Pass
2405	2437	-50.71	<b>≤-40</b>	Pass
2405	2438	-51.14	<b>≤-40</b>	Pass
2405	2439	-50.92	<b>≤-40</b>	Pass
2405	2440	-51.8	<b>≤-40</b>	Pass
2405	2441	-52.12	<b>≤-40</b>	Pass
2405	2442	-52.19	<b>≤-40</b>	Pass
2405	2443	-53.1	<b>≤-40</b>	Pass
2405	2444	-52.78	<b>≤-40</b>	Pass
2405	2445	-53.27	<b>≤-40</b>	Pass
2405	2446	-53.58	<b>≤-40</b>	Pass
2405	2447	-53.88	<b>≤-40</b>	Pass
2405	2448	-54.19	<b>≤-40</b>	Pass
2405	2449	-54.71	<b>≤-40</b>	Pass
2405	2450	-54.49	<b>≤-40</b>	Pass
2405	2451	-55.16	<b>≤-40</b>	Pass
2405	2452	-54.96	<b>≤-40</b>	Pass
2405	2453	-55.07	<b>≤-40</b>	Pass
2405	2454	-55.87	<b>≤-40</b>	Pass
2405	2455	-55.93	<b>≤-40</b>	Pass
2405	2456	-56.28	<b>≤-40</b>	Pass
2405	2457	-53.81	<b>≤-40</b>	Pass
2405	2458	-56.26	<b>≤-40</b>	Pass
2405	2459	-56.48	<b>≤-40</b>	Pass
2405	2460	-56.79	<b>≤-40</b>	Pass
2405	2461	-56.8	<b>≤-40</b>	Pass
2405	2462	-56.63	<b>≤-40</b>	Pass
2405	2463	-56.97	<b>≤-40</b>	Pass
2405	2464	-57.21	<b>≤-40</b>	Pass
2405	2465	-57.07	<b>≤-40</b>	Pass
2405	2466	-57.09	<b>≤-40</b>	Pass
2405	2467	-56.91	<b>≤-40</b>	Pass

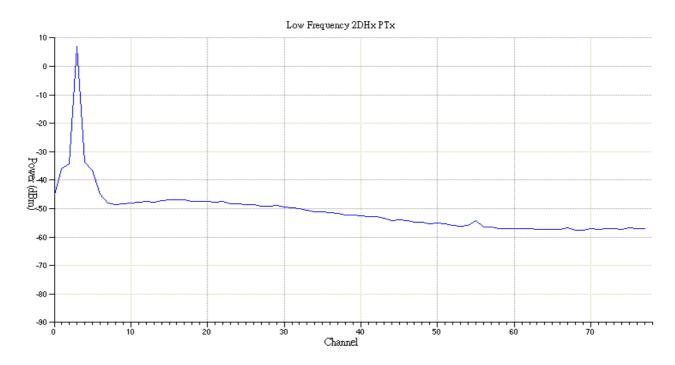
2405	2468	-57.22	<b>≤-4</b> 0	Pass
2405	2469	-57.17	<b>≤-4</b> 0	Pass
2405	2470	-57.04	<b>≤-4</b> 0	Pass
2405	2471	-57.25	<b>≤-40</b>	Pass
2405	2472	-57.35	<b>≤-4</b> 0	Pass
2405	2473	-57.21	<b>≤-4</b> 0	Pass
2405	2474	-57.26	<b>≤-40</b>	Pass
2405	2475	-57.57	<b>≤-4</b> 0	Pass
2405	2476	-57.34	<b>≤-40</b>	Pass
2405	2477	-57.07	<b>≤-4</b> 0	Pass
2405	2478	-57.16	<b>≤-4</b> 0	Pass
2405	2479	-57.17	<b>≤-4</b> 0	Pass
2405	2480	-57.36	<b>≤-40</b>	Pass
2441	2402	-52.02	<b>≤-40</b>	Pass
2441	2403	-51.83	<b>≤-40</b>	Pass
2441	2404	-51.85	<b>≤-40</b>	Pass
2441	2405	-51.45	<b>≤-40</b>	Pass
2441	2406	-50.57	<b>≤-40</b>	Pass
2441	2407	-50.62	<b>≤-40</b>	Pass
2441	2408	-50.6	<b>≤-40</b>	Pass
2441	2409	-50.22	<b>≤-40</b>	Pass
2441	2410	-49.91	<b>≤-40</b>	Pass
2441	2411	-49.59	<b>≤-40</b>	Pass
2441	2412	-49.55	<b>≤-4</b> 0	Pass
2441	2413	-48.94	<b>≤-4</b> 0	Pass
2441	2414	-48.6	<b>≤-40</b>	Pass
2441	2415	-48.74	<b>≤-4</b> 0	Pass
2441	2416	-48.59	<b>≤-40</b>	Pass
2441	2417	-48.23	<b>≤-4</b> 0	Pass
2441	2418	-47.96	<b>≤-40</b>	Pass
2441	2419	-47.41	<b>≤-4</b> 0	Pass
2441	2420	-47.4	<b>≤-40</b>	Pass
2441	2421	-47.73	<b>≤-40</b>	Pass
2441	2422	-47.84	<b>≤-40</b>	Pass
2441	2423	-47.29	<b>≤-40</b>	Pass
2441	2424	-47.32	<b>≤-40</b>	Pass
2441	2425	-47.2	<b>≤-40</b>	Pass
2441	2426	-46.99	<b>≤-40</b>	Pass

2441	2427	-47.07	<b>≤-40</b>	Pass
2441	2428	-47.1	<b>≤-40</b>	Pass
2441	2429	-46.76	<b>≤-40</b>	Pass
2441	2430	-46.97	<b>≤-40</b>	Pass
2441	2431	-46.67	<b>≤-40</b>	Pass
2441	2432	-47.47	<b>≤-40</b>	Pass
2441	2433	-47.75	<b>≤-4</b> 0	Pass
2441	2434	-47.65	<b>≤-40</b>	Pass
2441	2435	2435 -47.85 ≤-40		Pass
2441	2436	-47.53	<b>≤-40</b>	Pass
2441	2437	-46.85	<b>≤-40</b>	Pass
2441	2438	-43.7	<b>≤-4</b> 0	Pass
2441	2439	-36.54	<b>≤-20</b>	Pass
2441	2440	-36.45	≤ 6.88 <b>-</b> 26	Pass
2441	2441	6.88	N/A	N/A
2441	2442	-34.61	≤ 6.88 <b>-</b> 26	Pass
2441	2443	-34.51	<b>≤-20</b>	Pass
2441	2444	-44.47	<b>≤-40</b>	Pass
2441	2445	-46.57	<b>≤-40</b>	Pass
2441	2446	-46.87	<b>≤-40</b>	Pass
2441	2447	-48.04	<b>≤-40</b>	Pass
2441	2448	-48.07	<b>≤-40</b>	Pass
2441	2449	-47.97	<b>≤-40</b>	Pass
2441	2450	-47.71	<b>≤-4</b> 0	Pass
2441	2451	-47.66	<b>≤-4</b> 0	Pass
2441	2452	-47.22	<b>≤-40</b>	Pass
2441	2453	-47.11	<b>≤-4</b> 0	Pass
2441	2454	-47.4	<b>≤-40</b>	Pass
2441	2455	-47.45	<b>≤-4</b> 0	Pass
2441	2456	-47.47	<b>≤-4</b> 0	Pass
2441	2457	-47.57	<b>≤-40</b>	Pass
2441	2458	-47.55	<b>≤-40</b>	Pass
2441	2459	-48.18	<b>≤-40</b>	Pass
2441	2460	-47.55	<b>≤-40</b>	Pass
2441	2461	-48.26	<b>≤-40</b>	Pass
2441	2462	-48.01	<b>≤-40</b>	Pass
2441	2463	-48.31	<b>≤-40</b>	Pass
2441	2464	-48.66	<b>≤-40</b>	Pass

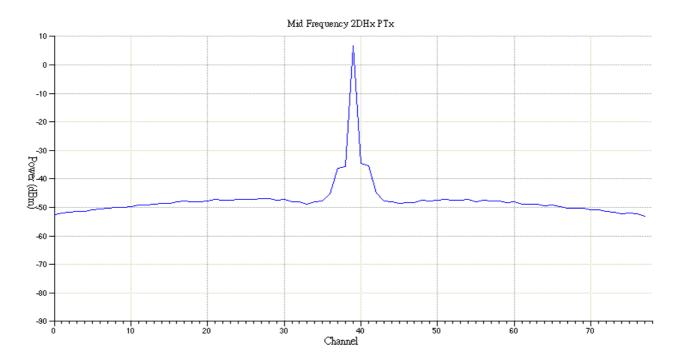
2441	2465	-49.1	<b>≤-40</b>	Pass
2441	2466	-48.81	<b>≤-40</b>	Pass
2441	2467	-49.48	<b>≤-40</b>	Pass
2441	2468	-49.59	<b>≤-40</b>	Pass
2441	2469	-49.74	<b>≤-40</b>	Pass
2441	2470	-50.23	<b>≤-40</b>	Pass
2441	2471	-50.28	<b>≤-40</b>	Pass
2441	2472	-50.76	<b>≤-40</b>	Pass
2441	2473	-51.31	<b>≤-40</b>	Pass
2441	2474	-51.64	<b>≤-40</b>	Pass
2441	2475	-51.71	<b>≤-40</b>	Pass
2441	2476	-51.92	<b>≤-40</b>	Pass
2441	2477	-52.4	<b>≤-40</b>	Pass
2441	2478	-52.45	<b>≤-40</b>	Pass
2441	2479	-52.99	<b>≤-40</b>	Pass
2441	2480	-53.18	<b>≤-40</b>	Pass
2477	2402	-57.86	<b>≤-40</b>	Pass
2477	2403	-57.38	<b>≤-40</b>	Pass
2477	2404	-57.39	<b>≤-40</b>	Pass
2477	2405	-57.33	<b>≤-40</b>	Pass
2477	2406	-57.79	<b>≤-40</b>	Pass
2477	2407	-57.63	<b>≤-40</b>	Pass
2477	2408	-56.8	<b>≤-40</b>	Pass
2477	2409	-57.51	<b>≤-40</b>	Pass
2477	2410	-57.27	<b>≤-40</b>	Pass
2477	2411	-57.27	<b>≤-40</b>	Pass
2477	2412	-57.42	<b>≤-40</b>	Pass
2477	2413	-57.57	<b>≤-40</b>	Pass
2477	2414	-57.2	<b>≤-40</b>	Pass
2477	2415	-57.2	<b>≤-40</b>	Pass
2477	2416	-57.4	<b>≤-40</b>	Pass
2477	2417	-57.45	<b>≤-40</b>	Pass
2477	2418	-56.9	<b>≤-40</b>	Pass
2477	2419	-57.36	<b>≤-40</b>	Pass
2477	2420	-57.08	<b>≤-40</b>	Pass
2477	2421	-56.85	<b>≤-40</b>	Pass
2477	2422	-56.65	<b>≤-40</b>	Pass
2477	2423	-56.47	<b>≤-40</b>	Pass

2477	2424	-56.24	<b>≤-40</b>	Pass
2477	2425	-55.8	<b>≤-40</b>	Pass
2477	2426	-56.24	<b>≤-40</b>	Pass
2477	2427	-55.89	<b>≤-40</b>	Pass
2477	2428	-55.65	<b>≤-40</b>	Pass
2477	2429	-55.21	<b>≤-40</b>	Pass
2477	2430	-54.87	<b>≤-4</b> 0	Pass
2477	2431	-54.77	<b>≤-40</b>	Pass
2477	2432	-54.69	<b>≤-40</b>	Pass
2477	2433	-54.36	<b>≤-40</b>	Pass
2477	2434	-53.85	<b>≤-40</b>	Pass
2477	2435	-53.71	<b>≤-40</b>	Pass
2477	2436	-53.47	<b>≤-40</b>	Pass
2477	2437	-53.01	<b>≤-40</b>	Pass
2477	2438	-52.55	<b>≤-40</b>	Pass
2477	2439	-52.23	<b>≤-40</b>	Pass
2477	2440	-52.4	<b>≤-40</b>	Pass
2477	2441	-51.84	<b>≤-4</b> 0	Pass
2477	2442	-51.39	<b>≤-4</b> 0	Pass
2477	2443	-50.9	<b>≤-40</b>	Pass
2477	2444	-51.01	<b>≤-4</b> 0	Pass
2477	2445	-50.77	<b>≤-4</b> 0	Pass
2477	2446	-50.35	<b>≤-40</b>	Pass
2477	2447	-50.08	<b>≤-40</b>	Pass
2477	2448	-50.01	<b>≤-40</b>	Pass
2477	2449	-49.39	<b>≤-4</b> 0	Pass
2477	2450	-49.24	<b>≤-40</b>	Pass
2477	2451	-49.33	<b>≤-40</b>	Pass
2477	2452	-49.03	<b>≤-40</b>	Pass
2477	2453	-48.72	<b>≤-40</b>	Pass
2477	2454	-48.34	<b>≤-40</b>	Pass
2477	2455	-47.93	≤-40	Pass
2477	2456	-47.58	<b>≤-40</b>	Pass
2477	2457	-48.19	≤-40	Pass
2477	2458	-48	<b>≤-40</b>	Pass
2477	2459	-47.86	≤-40	Pass
2477	2460	-47.72	≤-40	Pass
2477	2461	-47.81	<b>≤-40</b>	Pass

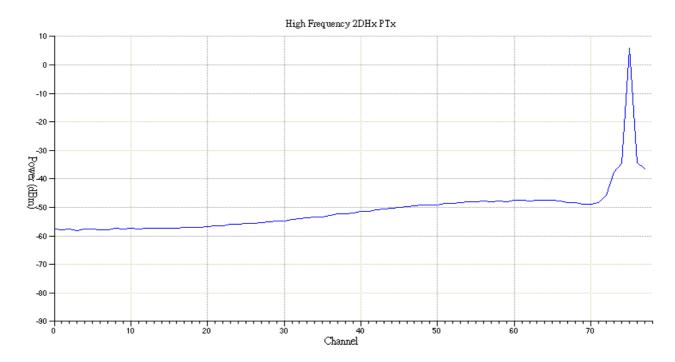
2477	2462	-47.25	<b>≤-40</b>	Pass
2477	2463	-47.33	<b>≤-40</b>	Pass
2477	2464	-47.24	<b>≤-40</b>	Pass
2477	2465	-47.27	<b>≤-40</b>	Pass
2477	2466	-47.27	<b>≤-40</b>	Pass
2477	2467	-47.39	<b>≤-40</b>	Pass
2477	2468	-47.72	<b>≤-40</b>	Pass
2477	2469	-48.43	<b>≤-40</b>	Pass
2477	2470	-48.34	<b>≤-40</b>	Pass
2477	2471	-48.25	<b>≤-40</b>	Pass
2477	2472	-48.55	<b>≤-40</b>	Pass
2477	2473	-47.36	<b>≤-40</b>	Pass
2477	2474	-44.15	<b>≤-40</b>	Pass
2477	2475	-38.27	<b>≤-20</b>	Pass
2477	2476	-36.52	≤ 6.23 -26	Pass
2477	2477	6.23	N/A	N/A
2477	2478	-35.09	≤ 6.23 <b>-</b> 26	Pass
2477	2479	-36.36	<b>≤-20</b>	Pass
2477	2480	-45.16	<b>≤-40</b>	Pass



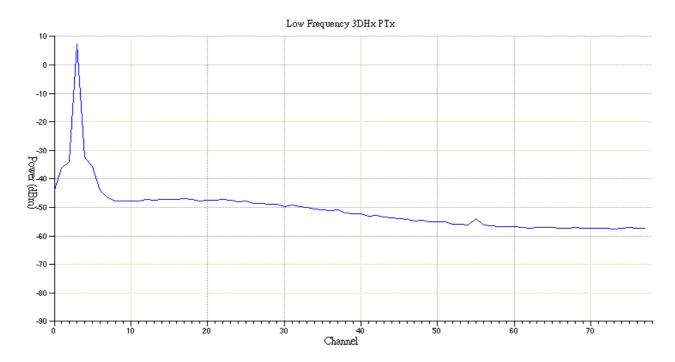
EDR In Band Spurious Emissions - 2DH5 Low



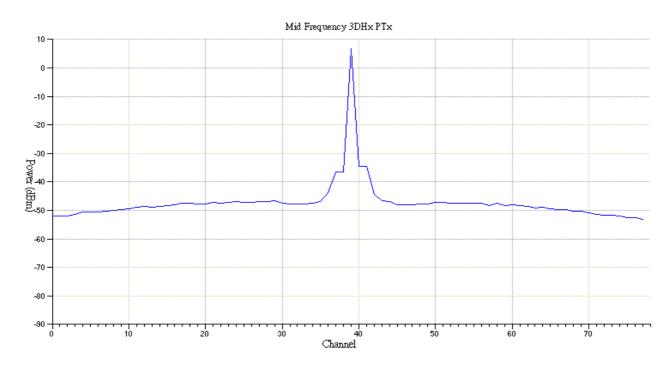
EDR In Band Spurious Emissions - 2DH5 Mid



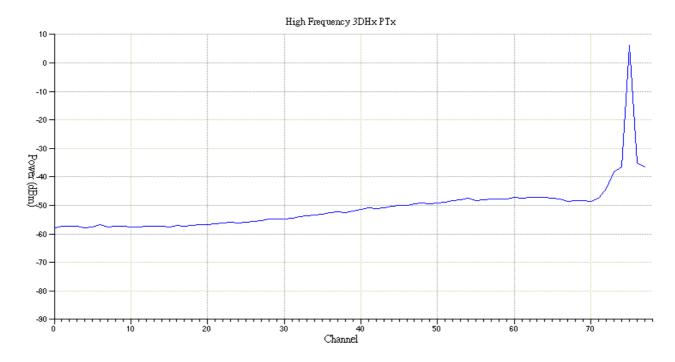
EDR In Band Spurious Emissions - 2DH5 High



EDR\_In\_Band\_Spurious\_Emissions - 3DH5 Low



EDR In Band Spurious Emissions - 3DH5 Mid



EDR In Band Spurious Emissions - 3DH5 High

### 3.5.13. Test Case: RCV/CA/01/C - Sensitivity - Single Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.)

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass

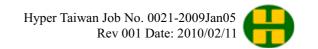
### 3.5.14. Test Case: RCV/CA/02/C - Sensitivity - Multi-Slot Packets

#### **Expected Outcome:**

All values as measured must fulfill the following conditions.

1. BER  $\leq$  0.1% (minimum number of samples, 1,600,000 returned payload bits.

Test Frequency (MHz)	BER (%)	Limit (%)	Verdict
2402	0.00	≤0.1	Pass
2441	0.00	≤0.1	Pass
2480	0.00	≤0.1	Pass

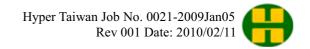


### 3.5.15. Test Case: RCV/CA/07/C - EDR Sensitivity

### Expected Outcome:

All values as measured must fulfill the following conditions at low, medium and high frequencies:  $1.Either\ BER < 0.007\%$  after 1,600,000 bits or BER < 0.01% after 16,000,000 bit

Packet Type	Test Frequency	BER	Limit	Verdict
	(MHz)	(%)	(%)	
	2402	0	≤0.007	Pass
2DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass
	2402	0	≤0.007	Pass
3DH5	2441	0	≤0.007	Pass
	2480	0	≤0.007	Pass



# **Appendix: Test Data**

Test Data for RF Testing: <u>Test Evidence for RF Test.zip</u>

# Part B

# **Profile Interoperability Test Report**

# **Product Name: Bluetooth imager scanner**

# **Signature**

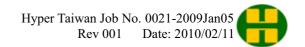
The below listed HYPER Taiwan Technology Inc.

Date : 2010/02/11

Test Engineer: Michael Reng Reviewed/Approved by:

# **Table of Content**

1.	Implementat	tion Conformance Statement	1
	1.1. Inter	operability Test Specification (IOP)	1
	1.2. Huma	an Interface Device (HID)	2
2.	Test Summa	ry	5
		•••••••••••••••••••••••••••••••••••••••	
	2.1.1.	Test Platform for IOPT	5
	2.1.2.	Test Case Result for IOPT	5
	2.2. HID.		6
	2.2.1.	Test Platform for HID (Device Role)	6
	2.2.2.	Test Case Result for HID (Device Role)	7
App		st Case Description	
App	endix B: Te	st Data	. 10



# 1. Implementation Conformance Statement

## 1.1. Interoperability Test Specification (IOP)

**Interoperability Test Specification** 

Item	Capability	Status	Support
1	Interoperability	M	Yes

# 1.2. Human Interface Device (HID)

#### **Roles**

Item	Capability	Status	Support
1	Host, Report protocol	0.1	No
2	HID Role	0.1	Yes
3	Host, Boot protocol	0.1	No

**Host Application Procedures** 

Item	Capability	Status	Support
1	Establish HID connection	M.1	No
2	Accept HID connection	M.1	No
3	Terminate HID connection	M.1	No
4	Accept Termination of HID connection	M.1	No
5	Support for virtual cables	M.1	No
6	HID initiated reconnection	M.1	No
7	Host initiated reconnection	M.1	No
8	Host data transfer to HID	C.1	No
9	HID data transfer to Host	C.1	No
10	HID Boot mode data transfer to Host	C.2	No
11	Host Boot mode data transfer to HID	C.2	No
12	Support for Application to send GET_Report	0	No
13	Support for Application to send SET_REPORT	0	No

#### **Device to Host Transfers**

Item	Capability	Status	Support
1	Data reports larger than host MTU on Control channel	C.1	No
2	Data reports larger than host MTU on Interrupt channel	C.1	No
3	Data reports to host	C.1	No
4	Boot mode reports to host	C.2	No

#### **Host to Device Transfers**

Item	Capability	Status	Support
1	Data reports larger than device MTU on Control channel	C.1	No
2	Data reports larger than device MTU on Interrupt channel	C.1	No
3	Data reports to device	C.2	No
4	Boot mode reports to device	0	No

#### **HID Control Commands**

Item	Capability	Status	Support
1	Set_Protocol command	C.1	No
2	Get_Protocol command	C.1	No
3	Set_ldle command	0	No
4	Get_Idle command	0	No
5	Set_Report command	M.1	No
6	Get_Report command	M.1	No

**Host Link Manager Procedures** 

Item	Capability	Status	Support	
1	Initiate Authentication before connection completed	C.1	No	
2	Initiate Authentication after connection completed	C.1	No	
3	Initiate pairing before connection completed	C.2	No	
4	Initiate pairing after connection completed	C.2	No	
5	Encryption	0	No	
6	Initiate encryption	C.3	No	

Item	Capability	Status	Support
7	Accept encryption requests	C.3	No
8	Role switch (Master/Slave)	M.1	No
9	Request Master Slave switch	M.1	No
10	Accept Master Slave switch requests	M.1	No
11	Hold Mode	0	No
12	Sniff mode	M.1	No
13	Park mode	0	No

**Host Link Control Requirements** 

Item	Capability	Status	Support
1	Supports inquiry, 79 channel	M.1	No
2	Supports inquiry scan, 79 channel	X	No

#### **HID Device Roles**

Item	Capability	Status	Support
1	Pointing HID	0.1	No
2	Keyboard HID	0.1	Yes
3	Identification HID	0.1	No
4	Other HID	0.1	No

**HID Application Procedures** 

Item	Capability	Status	Support
1	Establish HID connection	0	No
2	Accept HID connection	M.1	Yes
3	Terminate HID connection	0	Yes
4	Accept Termination of HID connection	M.1	Yes
5	Support for virtual cables	0	Yes
6	HID initiated reconnection	C.1	Yes
7	Host initiated reconnection	C.1	Yes
8	Host data transfer to HID	C.2	Yes
9	HID data transfer to Host	C.2	Yes
10	HID Boot ode data transfer to Host	C.3	Yes
11	Host Boot mode data transfer to HID	C.4	Yes
12	Output reports declared	C.4	Yes
13	Input reports declared	C.3	Yes
14	Feature reports declared	0	No

#### **Device to Host Transfers**

Item	Capability	Status	Support
1	Data reports larger than host MTU on Control channel	0	No
2	Data reports larger than host MTU on Interrupt channel	0	No
3	Data reports to host	0	No
4	Boot mode reports to host	C.1	Yes

#### **Host to Device Transfers**

Item	Capability	Status	Support
1	Data reports larger than device MTU on Control channel	0	No
2	Data reports larger than device MTU on Interrupt channel	0	No
3	Data reports to device	0	No
4	Boot mode reports to device	C.1	Yes

#### **HID Control Commands**

Item	Capability	Status	Support
1	Set_Protocol command	C.1	Yes
2	Get_Protocol command	C.1	Yes
3	Set_Idle command	C.2	Yes

Hyper Taiwan Job No. 0021-2009Jan05 Rev 001 Date: 2010/02/11

Item	Capability	Status	Support
4	Get_ldle command	C.2	Yes
5	Set_Report command	C.3	Yes
6	Get Report command	C.4	Yes

**HID Link Manager Procedures** 

Item	Capability	Status	Support
1	Initiate Authentication before connection completed	0	No
2	Initiate Authentication after connection	0	No
3	Initiate pairing before connection completed	X	No
4	Initiate pairing after connection completed	Χ	No
5	Encryption	C.1	Yes
6	Initiate encryption	0	Yes
7	Accept encryption requests	C.2	Yes
8	Role switch (Master/Slave)	C.3	Yes
9	Request Master Slave switch	0	No
10	Accept Master Slave switch requests	C.3	Yes
11	Hold mode	0	No
12	Sniff mode	0	Yes
13	Park mode	0	No

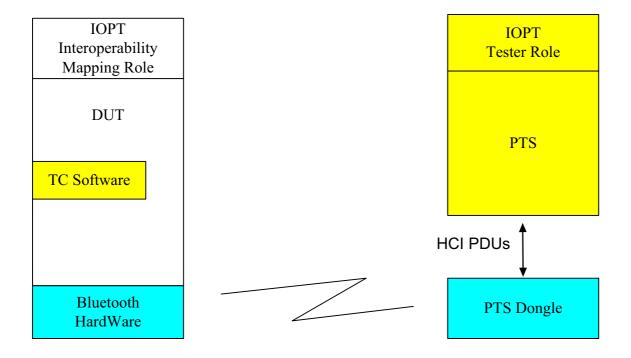
**HID Link Control Requirements** 

Item	Capability	Status	Support
1	Supports inquiry, 79 channel	0	No
2	Supports inquiry scan, 79 channel	M.1	Yes

# 2. Test Summary

### 2.1. IOPT

### 2.1.1. Test Platform for IOPT

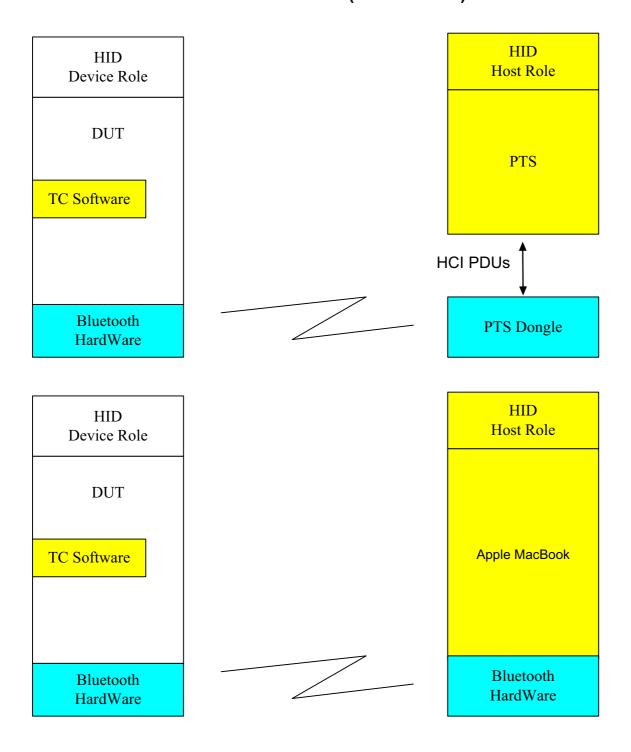


#### 2.1.2. Test Case Result for IOPT

TC identifier	Verdict	Execution Date	Platform	Software Version
TP/COD/BV-01-I	Pass	2010/01/12	PTS	v3.3.1.4
TP/SDSS/BV-02-I	Pass	2010/01/12	PTS	v3.3.1.4
TP/SDAS/BV-03-I	Pass	2010/01/12	PTS	v3.3.1.4
TP/SDR/BV-04-I	Pass	2010/01/12	PTS	v3.3.1.4

#### 2.2. HID

## 2.2.1. Test Platform for HID (Device Role)



# 2.2.2. Test Case Result for HID (Device Role)

TC identifier	Verdict	<b>Execution Date</b>	Platform	Software Version
TP/CON/BV-01-I	Pass	2010/2/8	Apple MacBook	MacOS 10.5.8
TP/HCE/BV-01-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HCE/BV-03-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HCE/BV-04-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HCE/BV-05-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HCR/BV-01-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HCR/BV-02-I	Pass	2010/1/13	PTS	v3.3.0.4
TP/HCR/BV-03-I	Pass	2010/2/8	PTS	v3.3.1.4
TP/HCR/BV-04-I	Pass	2010/2/8	PTS	v3.3.1.4
TP/HDT/BV-01-I	Pass	2010/2/8	PTS	v3.3.1.4
TP/HDT/BV-02-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HDT/BV-03-I	Pass	2010/2/8	PTS	v3.3.1.4
TP/HDT/BV-04-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HDT/BV-04-I	Pass	2010/1/12	PTS	v3.3.1.4
TP/HID/BI-01-C	Pass	2010/2/27	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BI-02-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-01-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-02-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-03-C	Pass	2010/2/27	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-04-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-05-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-06-C	Pass	2010/2/27	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-07-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/HID/BV-08-C	Pass	2010/2/8	PTS + Protocol Viewer	v2.2.0.0
TP/SDD/BV-01-C	Pass	2010/1/12	PTS	v3.3.1.4
TP/SDD/BV-02-C	Pass	2010/1/12	PTS	v3.3.1.4
TP/SDD/BV-03-C	Pass	2010/2/8	Apple MacBook	MacOS 10.5.8
TP/SDD/BV-04-I	Pass	2010/2/8	Apple MacBook	MacOS 10.5.8

# **Appendix A: Test Case Description**

### **IOPT**

TC identifier	Description	Cat.
TP/COD/BV-01-I	Class-of-Device	В
TP/COD/BV-02-I	Class-of-Device	В
TP/SDSS/BV-02-I	Service Discovery – Service Search	В
TP/SDAS/BV-03-I	Service Search – Attribute Search	В
TP/SDR/BV-04-I	Service Search – Response	С

### HID

TC identifier	Description	Cat.
TP/HCE/BV-01-I	Host connection establishment	В
TP/HCE/BV-02-I	Device connection establishment	В
TP/HCE/BV-03-I	Device initiated reconnection	В
TP/HCE/BV-04-I	Host initiated reconnection	В
TP/HCE/BV-05-I	Virtual cable operation	В
TP/HCR/BV-01-I	Host initiated connection release	В
TP/HCR/BV-02-I	Device initiated connection release	В
TP/HCR/BV-03-I	Host initiated virtual cable unplug	В
TP/HCR/BV-04-I	Device initiated virtual cable unplug	В
TP/HDT/BV-01-I	Device data transfer	В
TP/HDT/BV-02-I	Host data transfer	В
TP/HDT/BV-03-I	Device boot protocol mode data transfer	В
TP/HDT/BV-04-I	Host boot protocol mode data transfer	В
TP/HID/BV-01-C	Get_Report	В
TP/HID/BV-02-C	Set_Report	В
TP/HID/BV-03-C	Get_Protocol	В
TP/HID/BV-04-C	Set_Protocol	В
TP/HID/BV-05-C	Get_Idle	В
TP/HID/BV-06-C	Set_ldle	В
TP/HID/BV-07-C	HID_Control (Virtual cable unplug )	В
TP/HID/BV-08-C	Set_Protocol Immediate	В
TP/HID/BV-09-C	Get_Protocol, Boot Mode	В
TP/HID/BV-10-C	Set_Protocol, Boot Mode	В
TP/HID/BI-01-C	Error Message: Invalid report ID	В
TP/HID/BI-02-C	Error Message: Unsupported request	В
TP/DAT/BV-01-C	Short reports	В
TP/DAT/BV-02-C	Large reports on interrupt channel	В
TP/DAT/BV-03-C	Large reports on control channel	В
TP/DAT/BV-04-C	Large Reports on interrupt channel – Device to Host	В
TP/DAT/BI-01-C	Large Reports on interrupt channel rejected - Boot Mode Only Hosts	В
TP/DAT/BI-02-C	Non-Boot Reports on interrupt channel ignored or rejected – Boot Mode Only Hosts	В
TP/SDD/BV-01-C	Retrieve and validate the HID SDP record	В
TP/SDD/BV-03-C	Retrieve the HID SDP Record when HID Control and Interrupt channel connection present	В
TP/SDD/BV-04-I	Retrieve the HID SDP Record when Discoverable	В
TP/CON/BV-01-I	Limited Discoverable Mode	В

Hyper Taiwan Job No. 0021-2009Jan05 Rev 001 Date: 2010/02/11

## Appendix B: Test Data

1. Test Data for Interoperability Testing : <u>Test Evidence for Interoperability Test.zip</u>