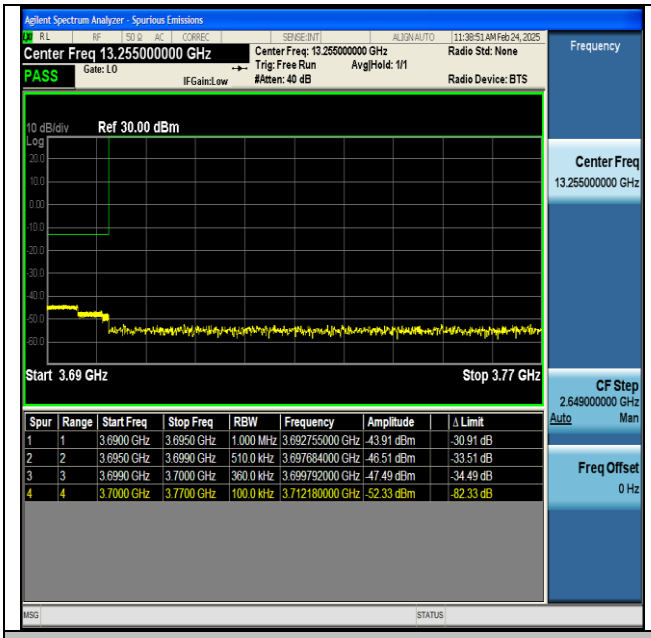
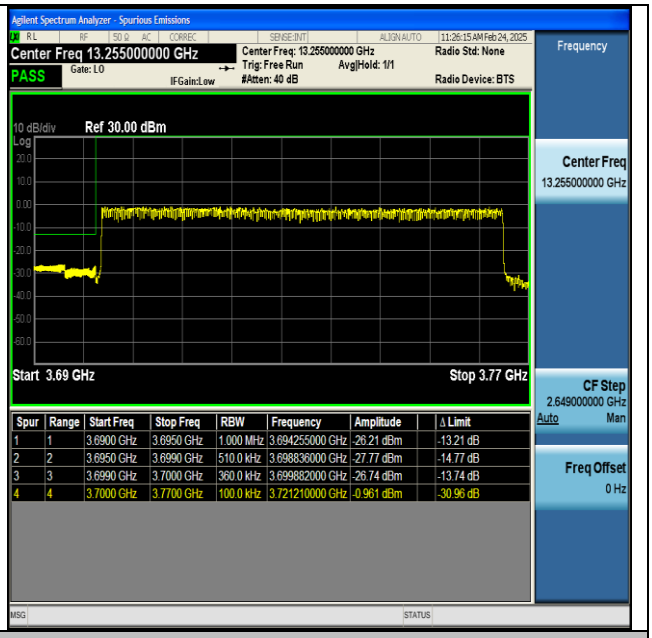
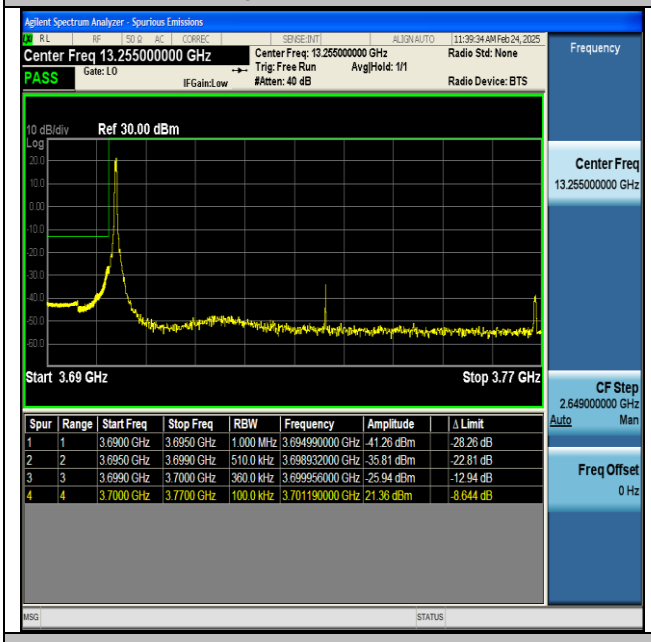


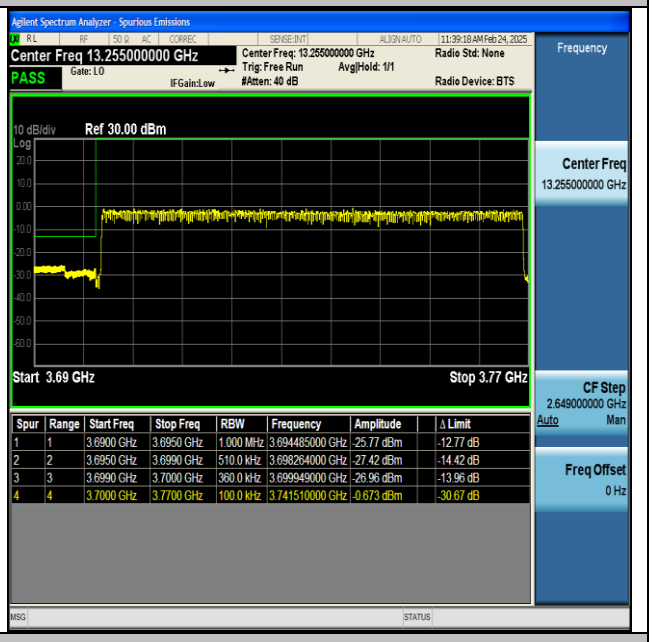

NTNV-n77(3700-3980)-PC2-30-70-L-DFT-BPSK-Edge_1RB_Left-PASS




NTNV-n77(3700-3980)-PC2-30-70-L-DFT-BPSK-Outer_Full-PASS

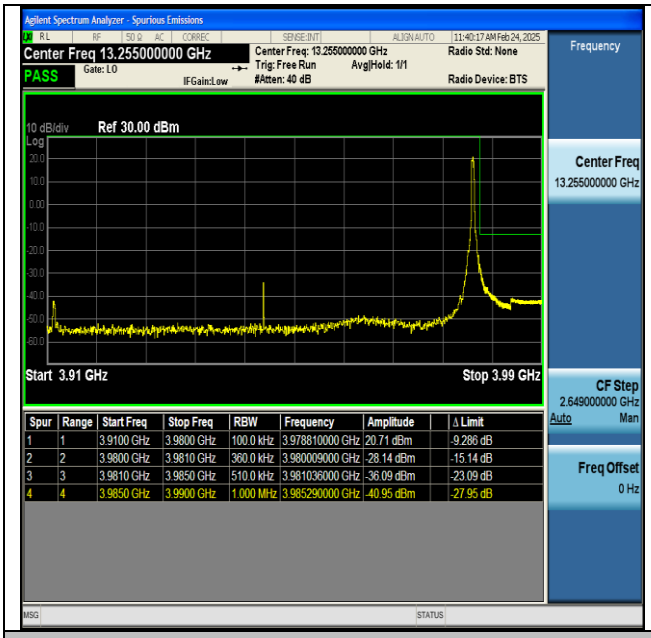



NTNV-n77(3700-3980)-PC2-30-70-L-CP-QPSK-Edge_1RB_Left-PASS

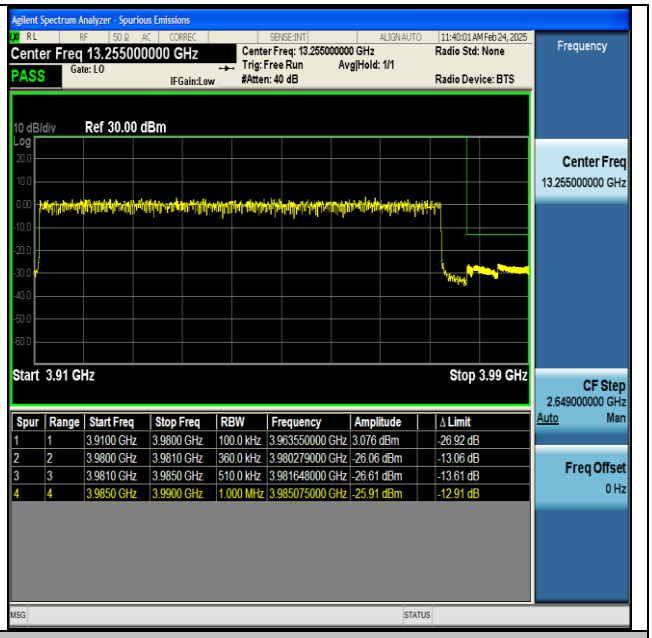



NTNV-n77(3700-3980)-PC2-30-70-L-CP-QPSK-Outer_Full-PASS

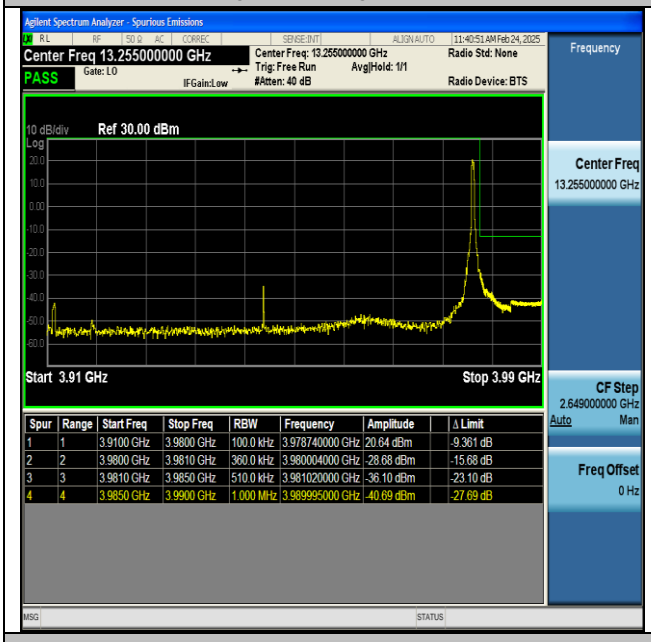

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



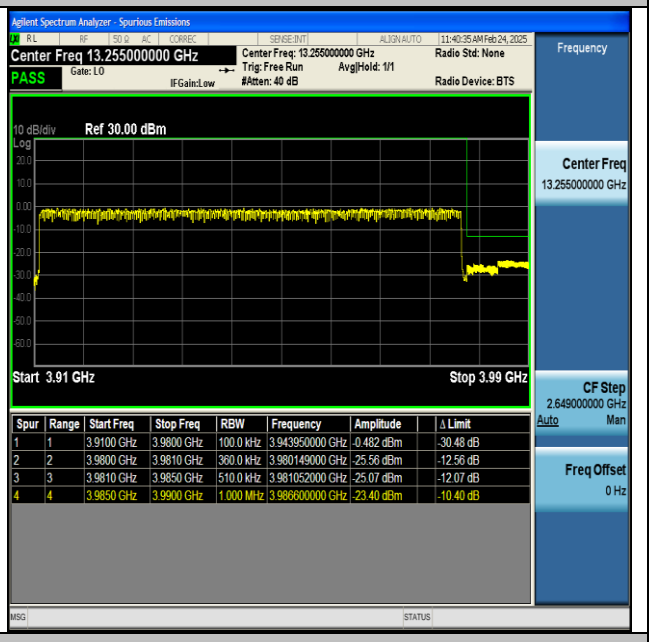

NTNV-n77(3700-3980)-PC2-30-70-H-DFT-BPSK-Edge_1RB_Right-PASS




NTNV-n77(3700-3980)-PC2-30-70-H-DFT-BPSK-Outer_Full-PASS

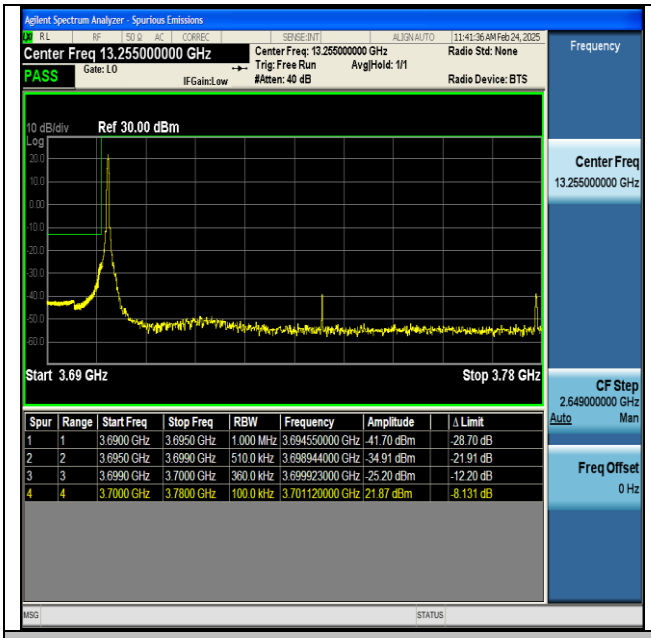



NTNV-n77(3700-3980)-PC2-30-70-H-CP-QPSK-Edge_1RB_Right-PASS

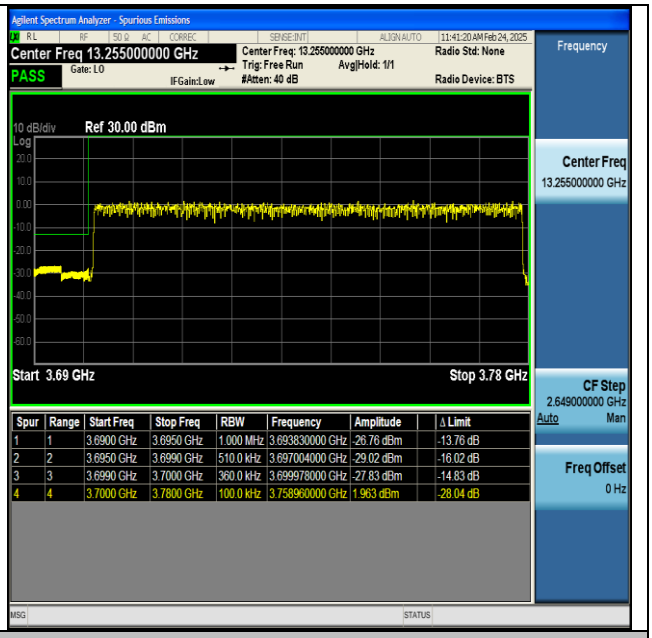



NTNV-n77(3700-3980)-PC2-30-70-H-CP-QPSK-Outer_Full-PASS

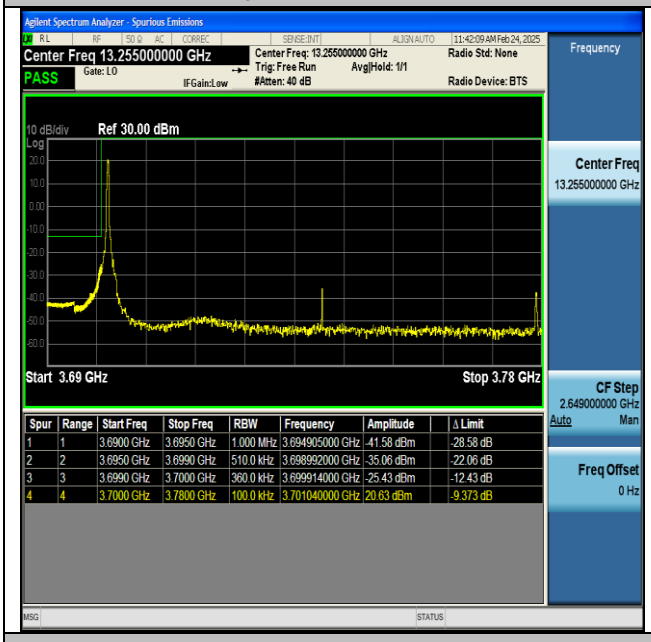

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



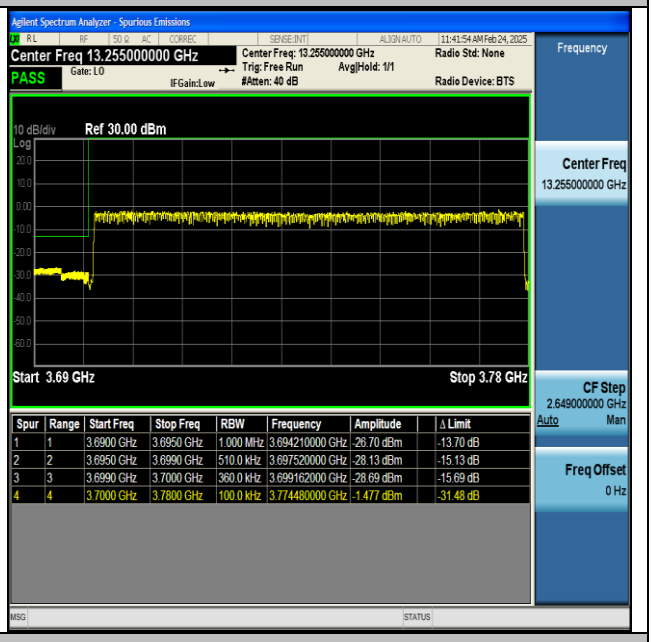

NTNV-n77(3700-3980)-PC2-30-80-L-DFT-BPSK-Edge_1RB_Left-PASS




NTNV-n77(3700-3980)-PC2-30-80-L-DFT-BPSK-Outer_Full-PASS

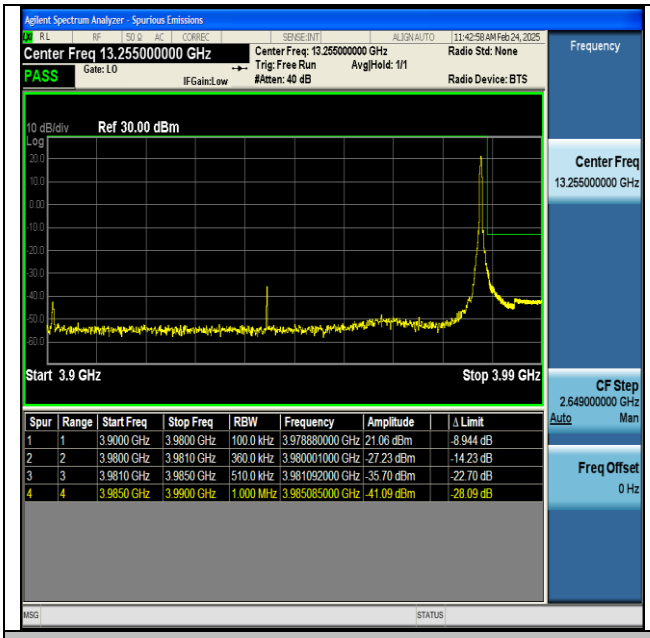



NTNV-n77(3700-3980)-PC2-30-80-L-CP-QPSK-Edge_1RB_Left-PASS

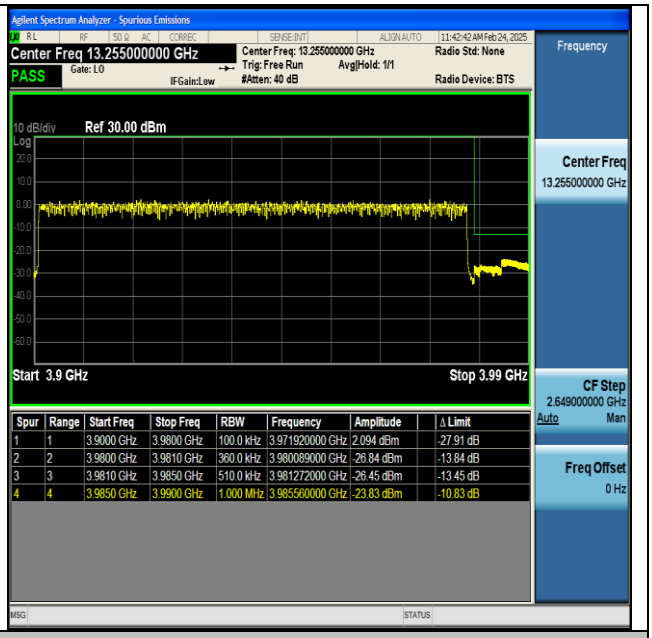



NTNV-n77(3700-3980)-PC2-30-80-L-CP-QPSK-Outer_Full-PASS

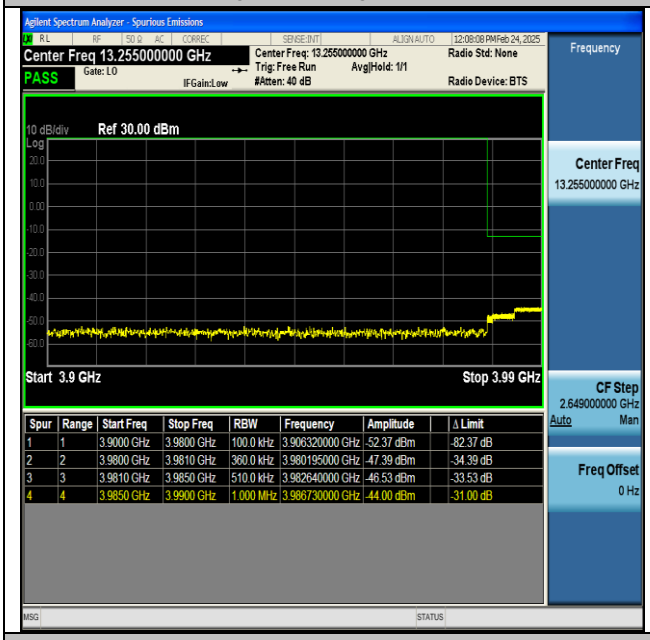

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



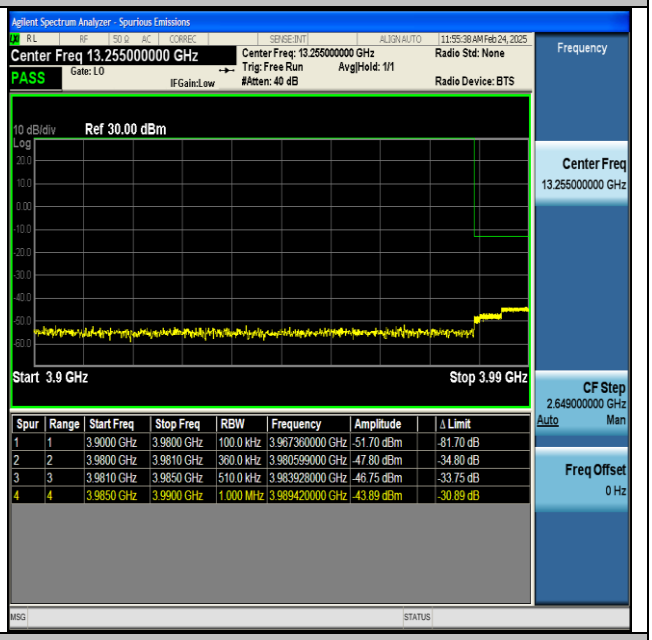

NTNV-n77(3700-3980)-PC2-30-80-H-DFT-BPSK-Edge_1RB_Right-PASS




NTNV-n77(3700-3980)-PC2-30-80-H-DFT-BPSK-Outer_Full-PASS

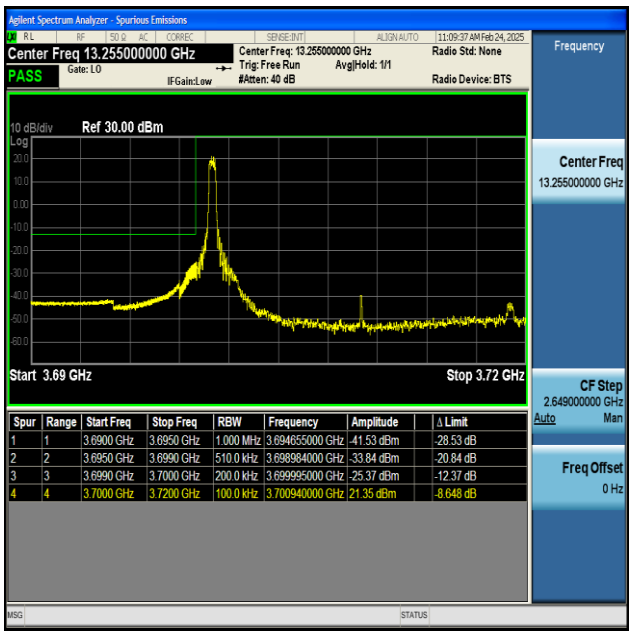



NTNV-n77(3700-3980)-PC2-30-80-H-CP-QPSK-Edge_1RB_Right-PASS

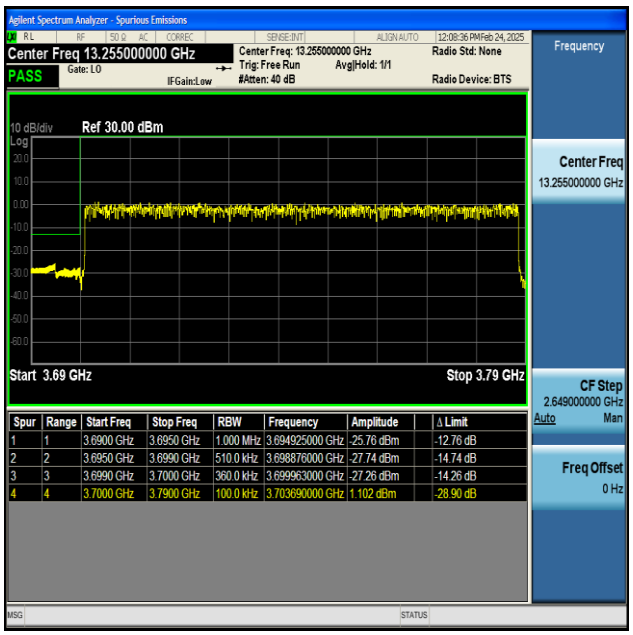



NTNV-n77(3700-3980)-PC2-30-80-H-CP-QPSK-Outer_Full-PASS

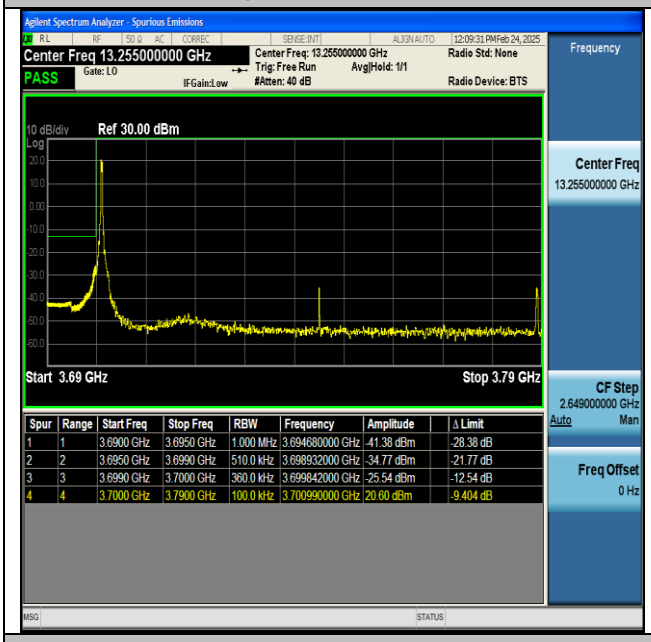

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



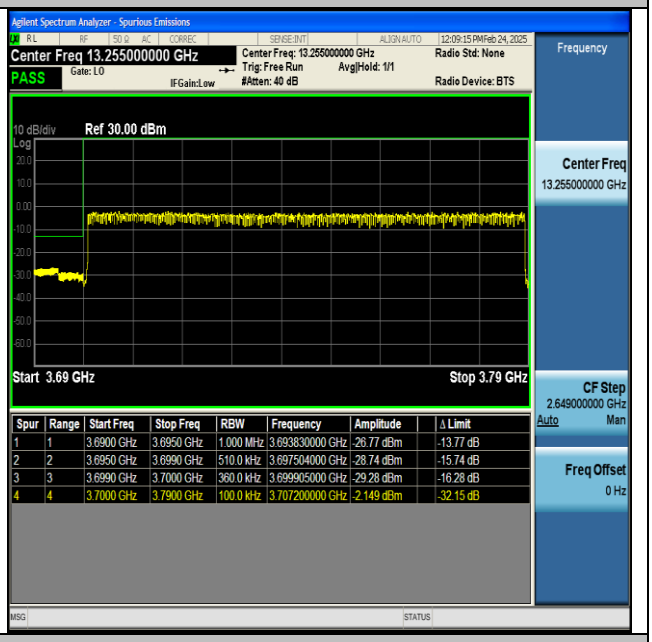

NTNV-n77(3700-3980)-PC2-30-90-L-DFT-BPSK-Edge_1RB_Left-PASS




NTNV-n77(3700-3980)-PC2-30-90-L-DFT-BPSK-Outer_Full-PASS

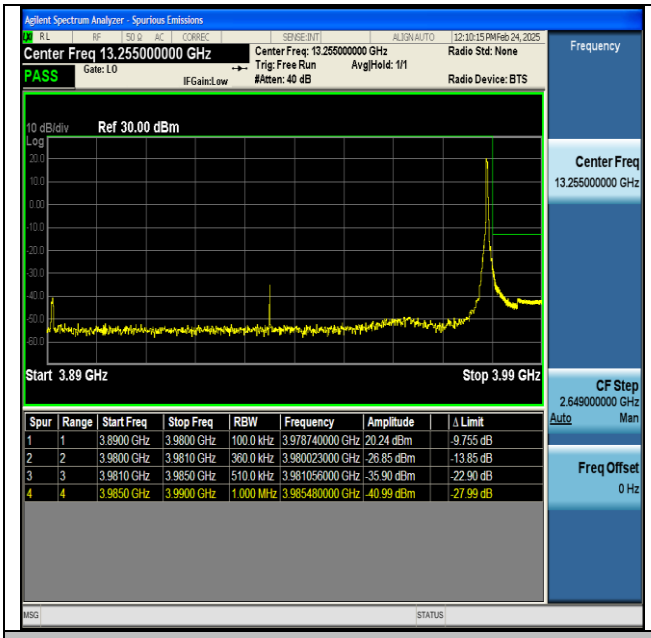



NTNV-n77(3700-3980)-PC2-30-90-L-CP-QPSK-Edge_1RB_Left-PASS

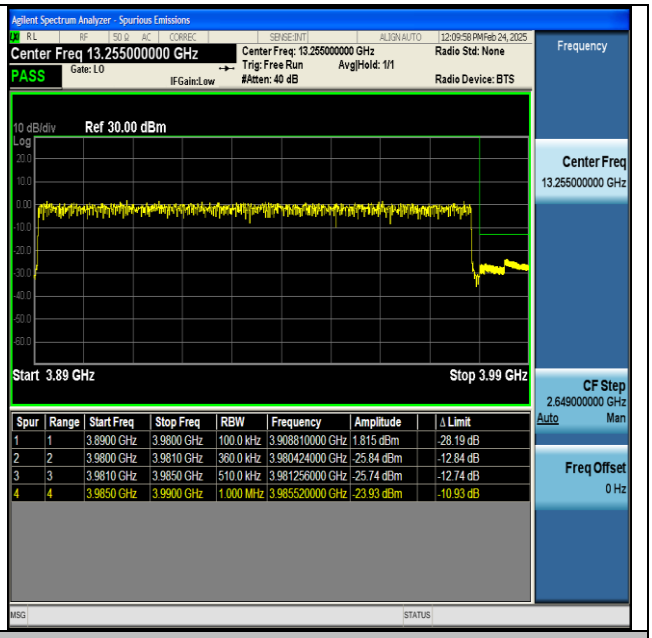



NTNV-n77(3700-3980)-PC2-30-90-L-CP-QPSK-Outer_Full-PASS

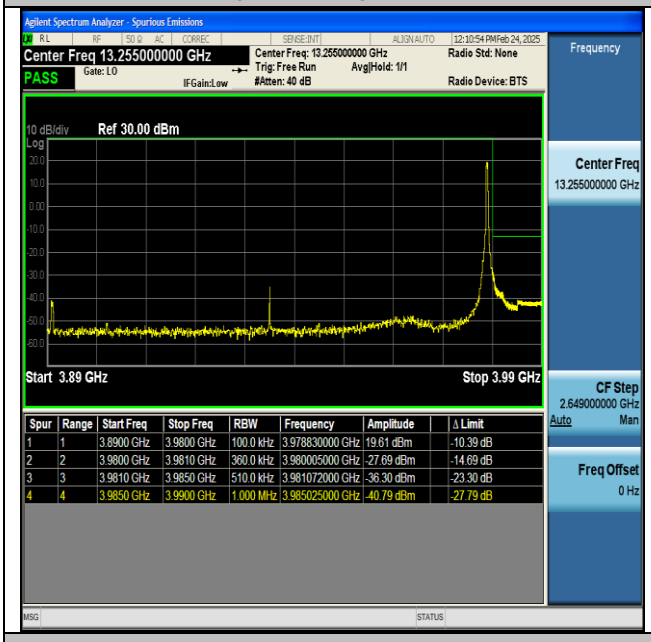

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



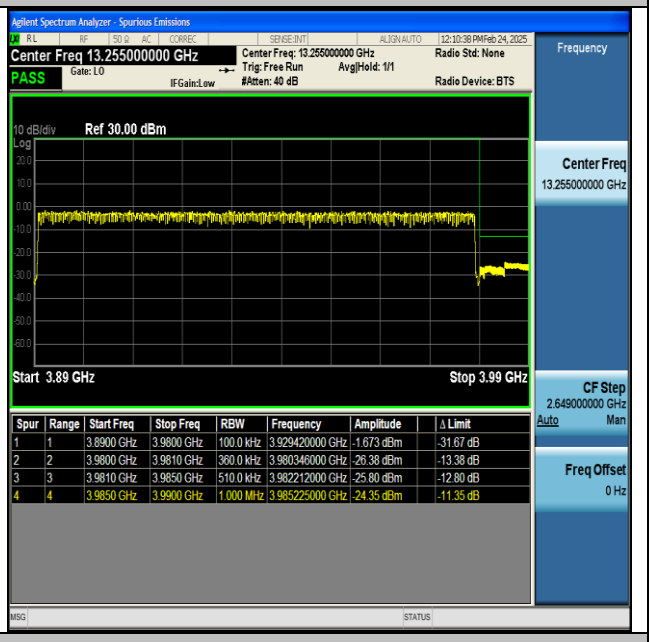

NTNV-n77(3700-3980)-PC2-30-90-H-DFT-BPSK-Edge_1RB_Right-PASS




NTNV-n77(3700-3980)-PC2-30-90-H-DFT-BPSK-Outer_Full-PASS

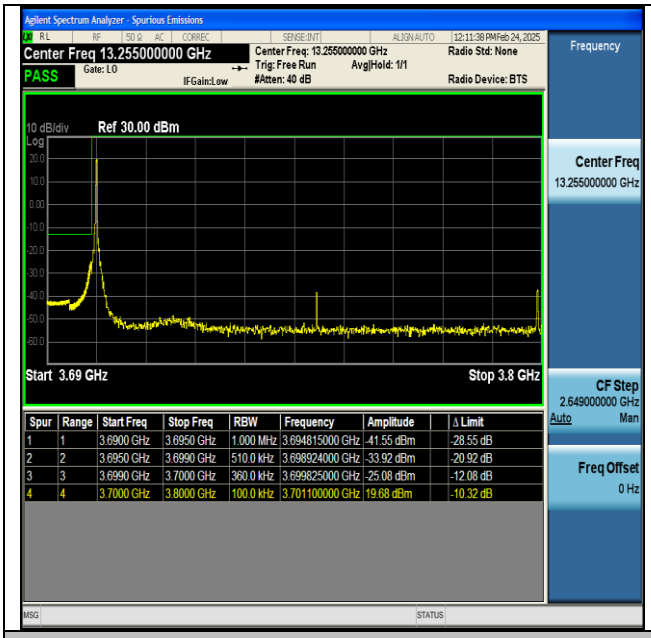



NTNV-n77(3700-3980)-PC2-30-90-H-CP-QPSK-Edge_1RB_Right-PASS

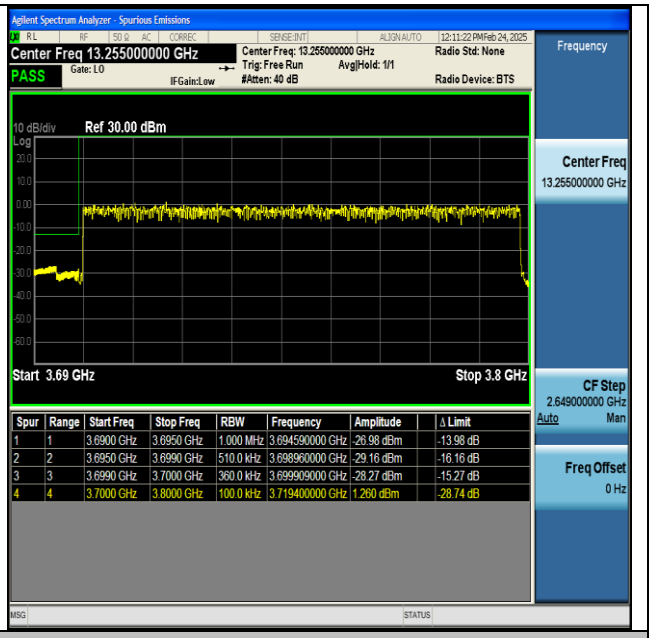



NTNV-n77(3700-3980)-PC2-30-90-H-CP-QPSK-Outer_Full-PASS

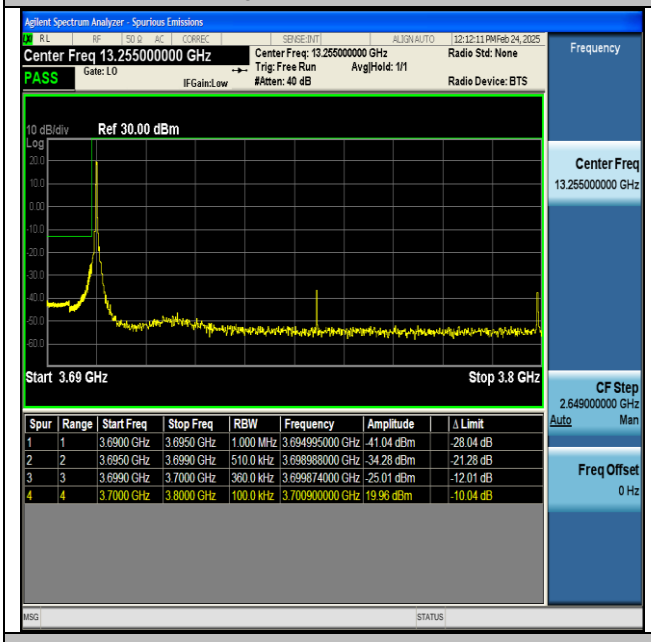

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



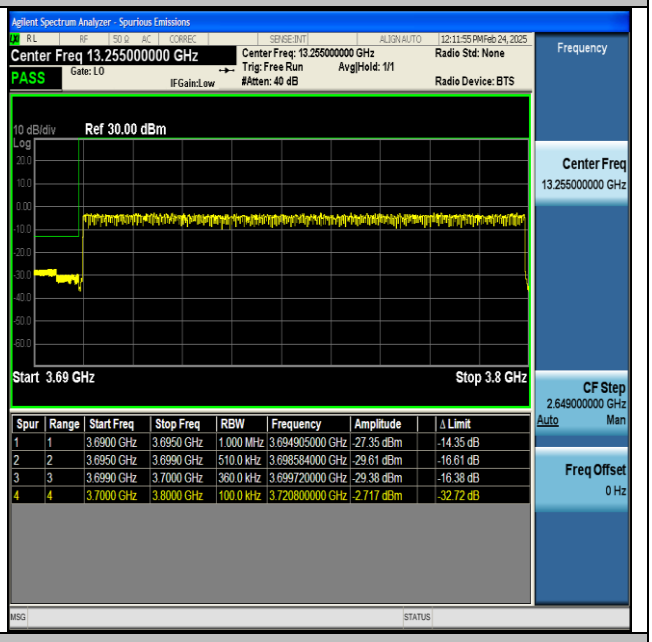

NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-PASS




NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Outer_Full-PASS

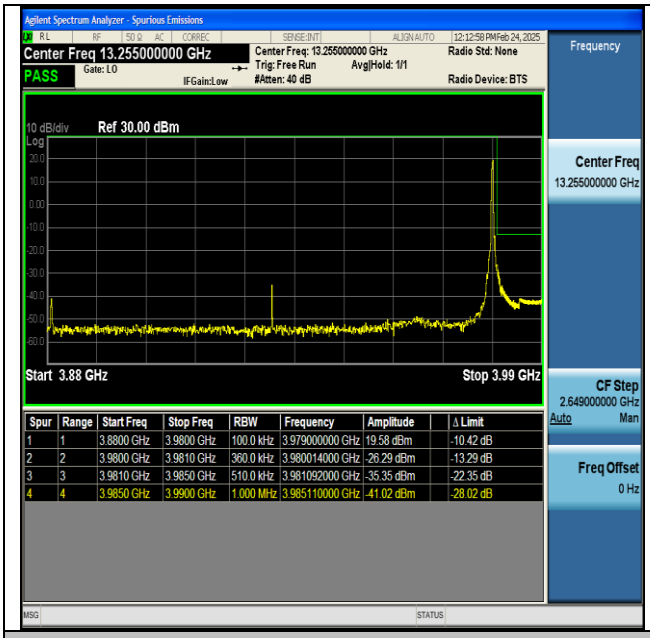



NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-PASS

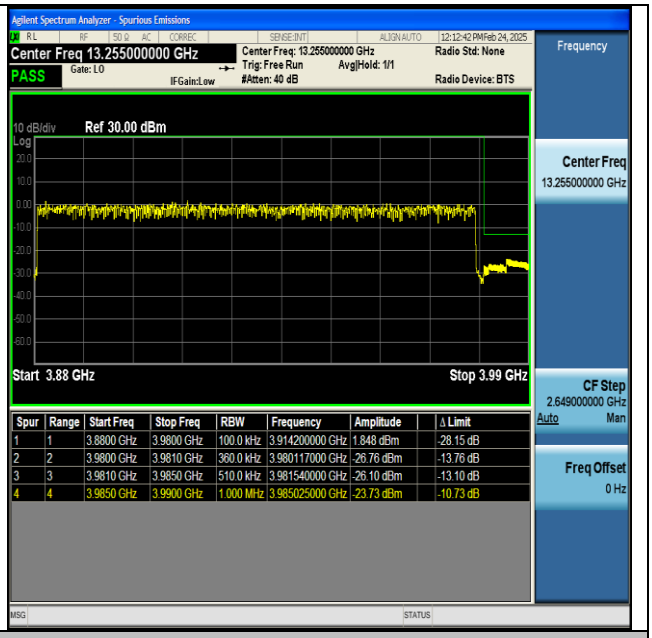



NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Outer_Full-PASS

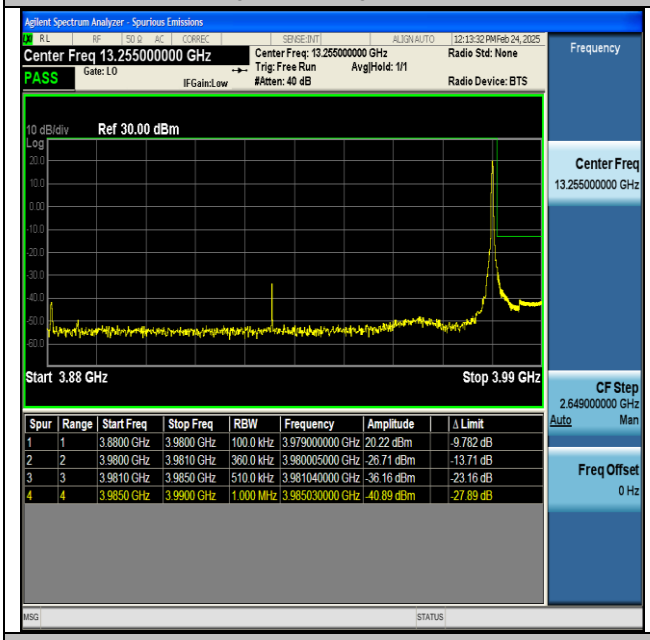

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



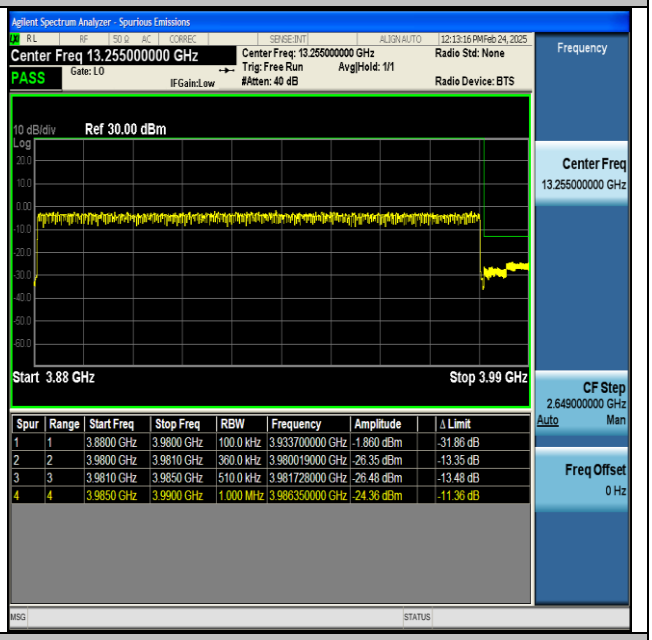

NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Right-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Outer_Full-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Right-PASS

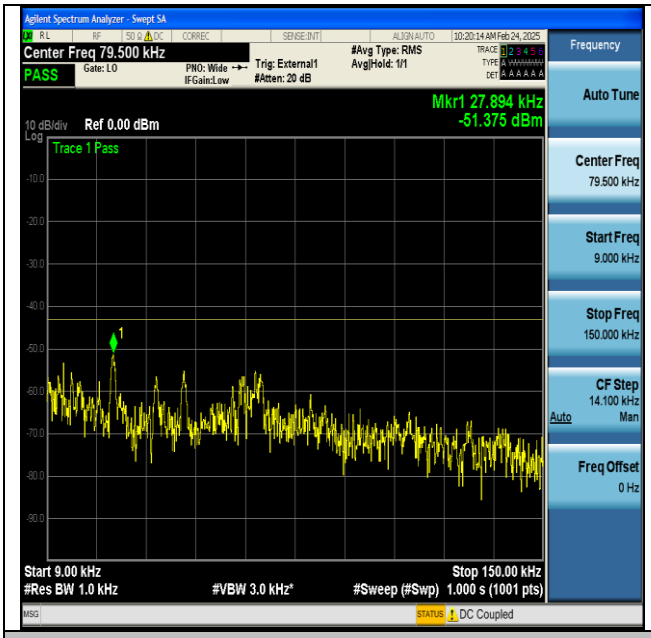



NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Outer_Full-PASS

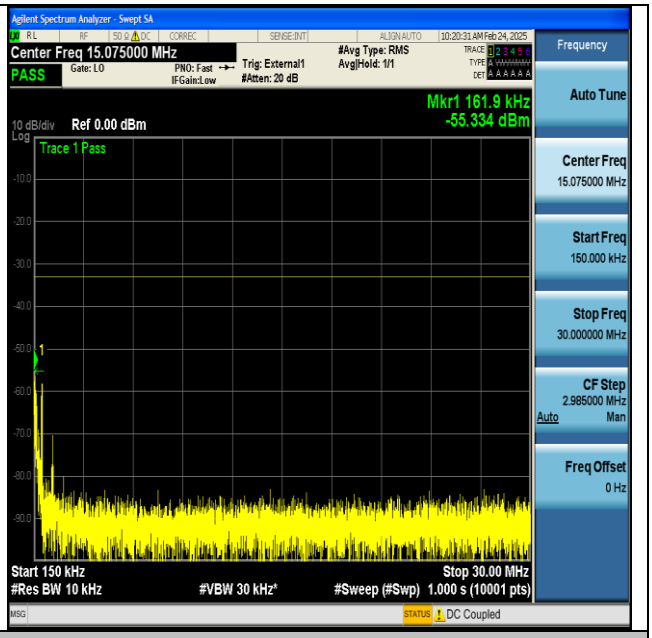

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

# Conducted Spurious Emission for SA

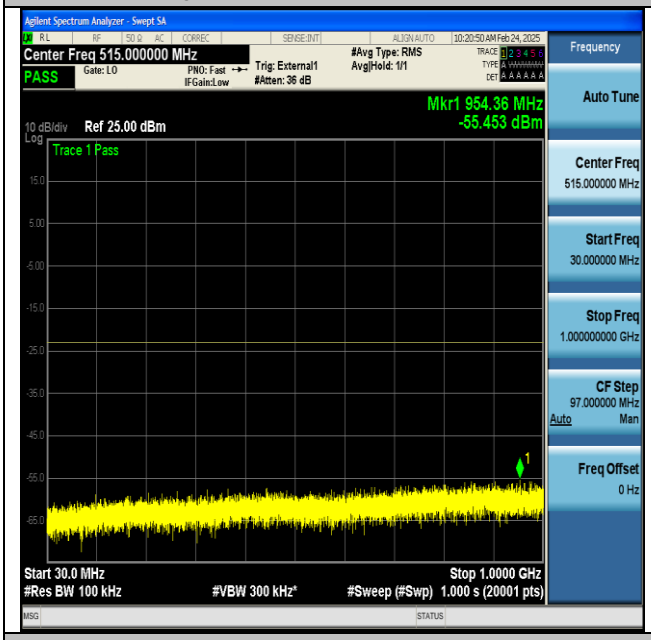
## Test Graphs




NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-0.15-30-PASS

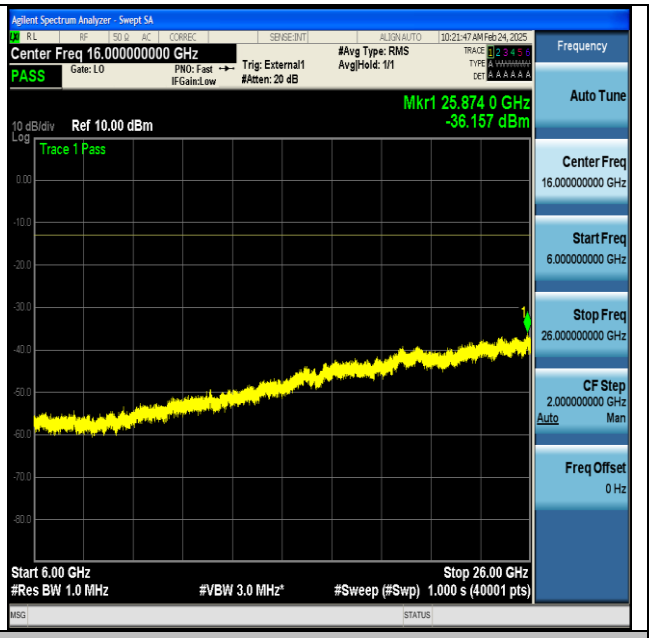



NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-30-1000-PASS

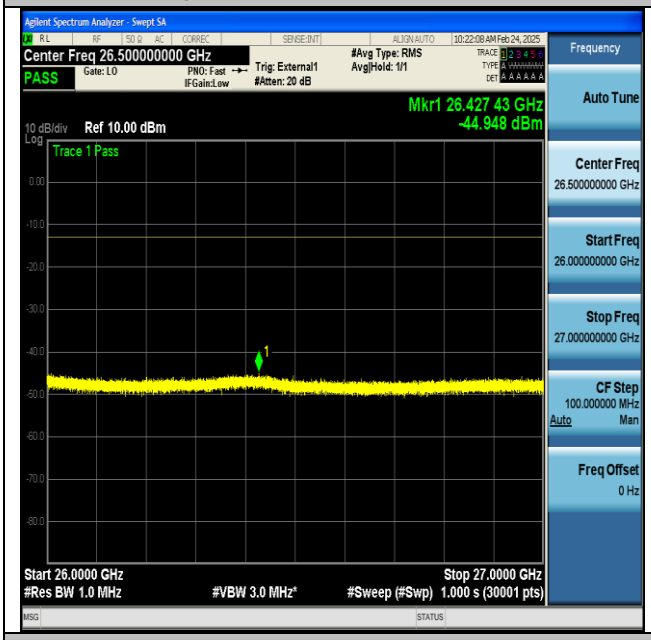
NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

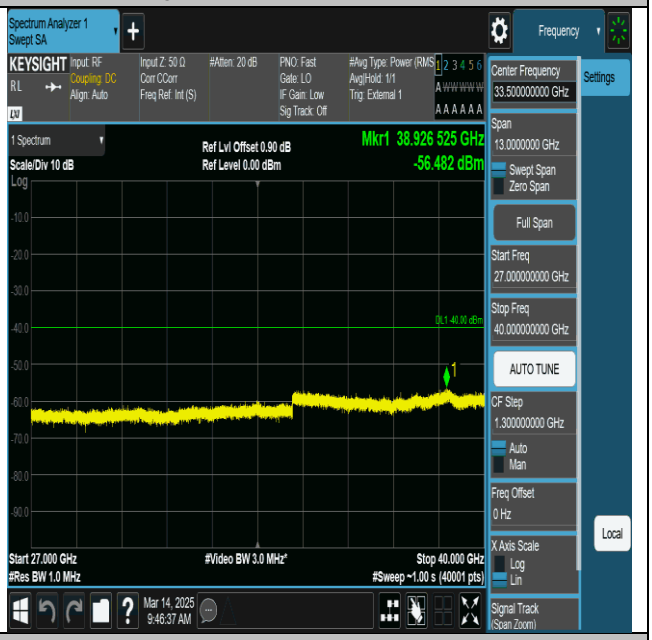
NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-6000-26000-PASS

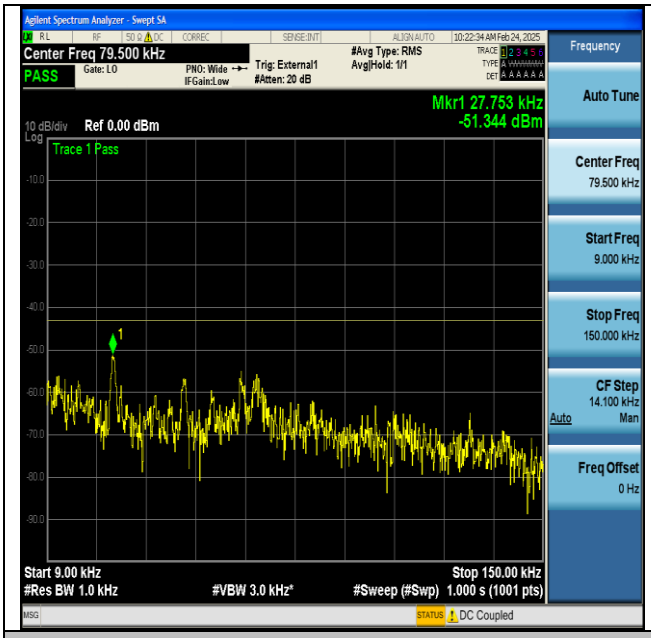



NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-26000-27000-PASS

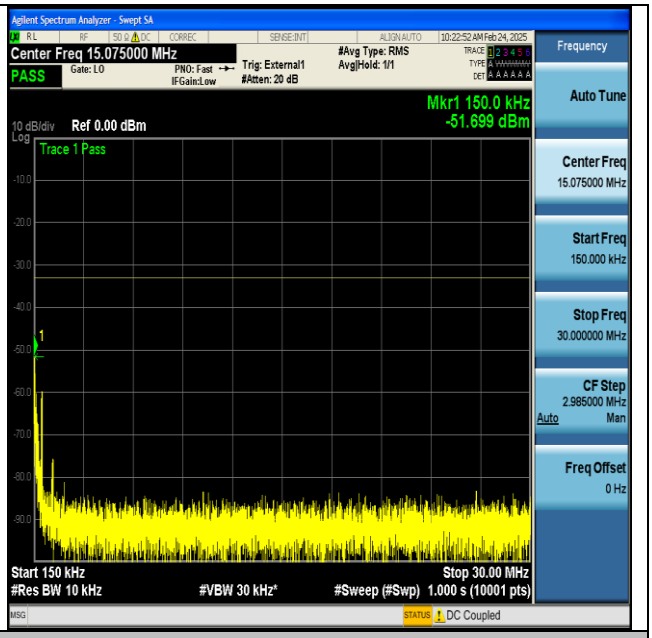



NTNV-n77(3700-3980)-PC2-30-100-L-DFT-BPSK-Edge_1RB_Left-27000-40000-PASS

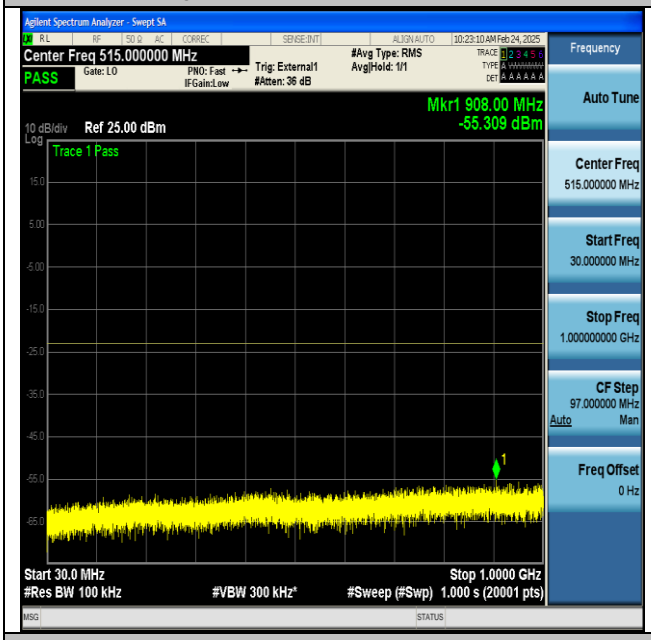

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.




NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-0.15-30-PASS

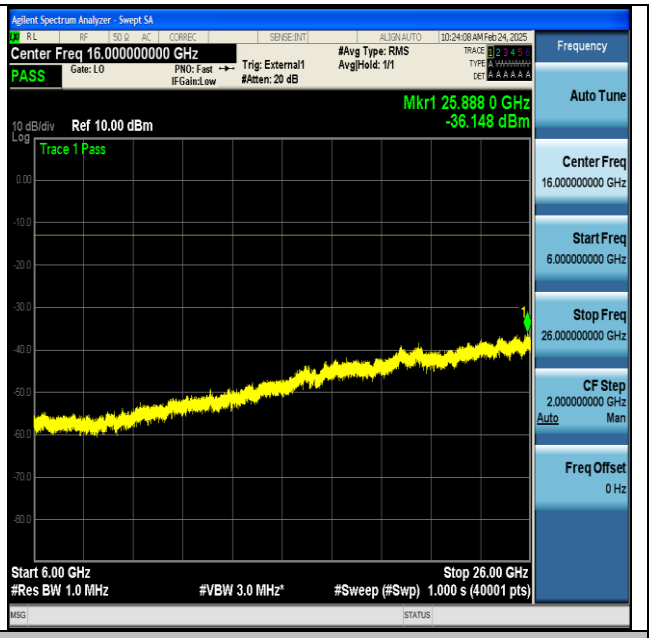



NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-30-1000-PASS

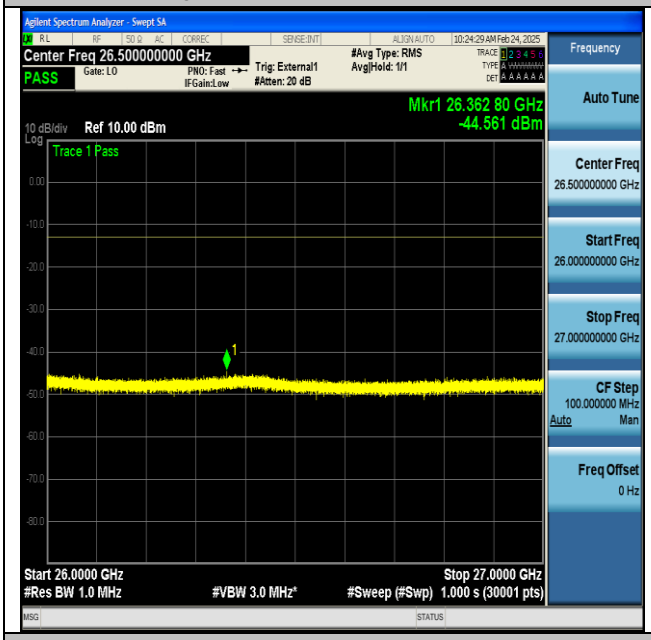
NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

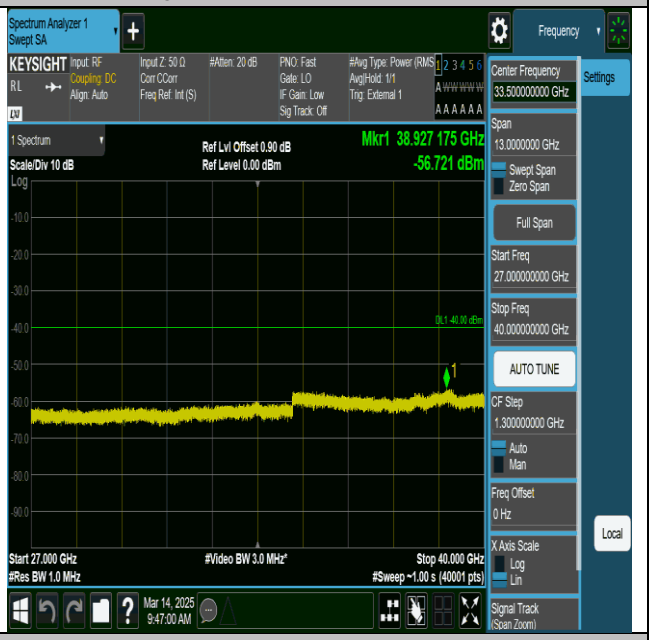
NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-6000-26000-PASS

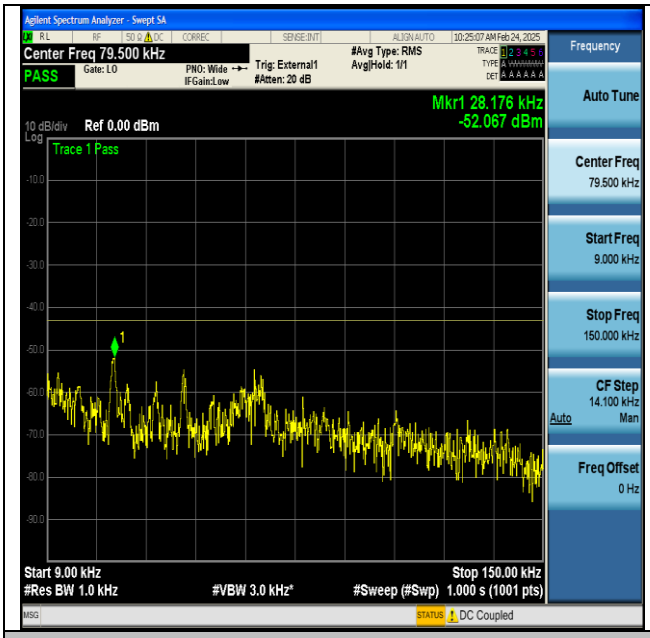



NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-26000-27000-PASS

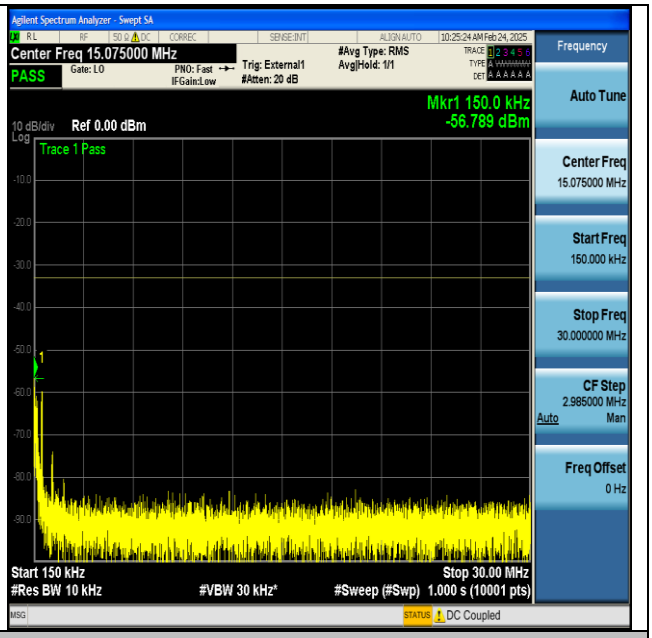



NTNV-n77(3700-3980)-PC2-30-100-L-CP-QPSK-Edge_1RB_Left-27000-40000-PASS

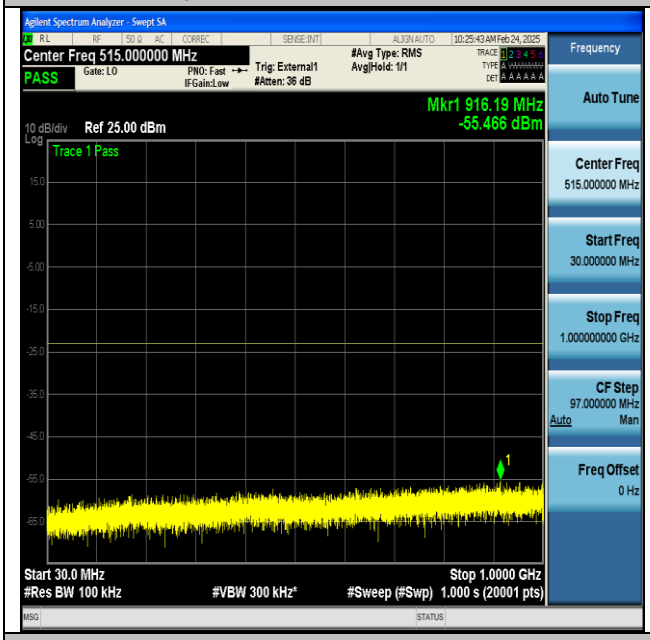

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.




NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-0.15-30-PASS

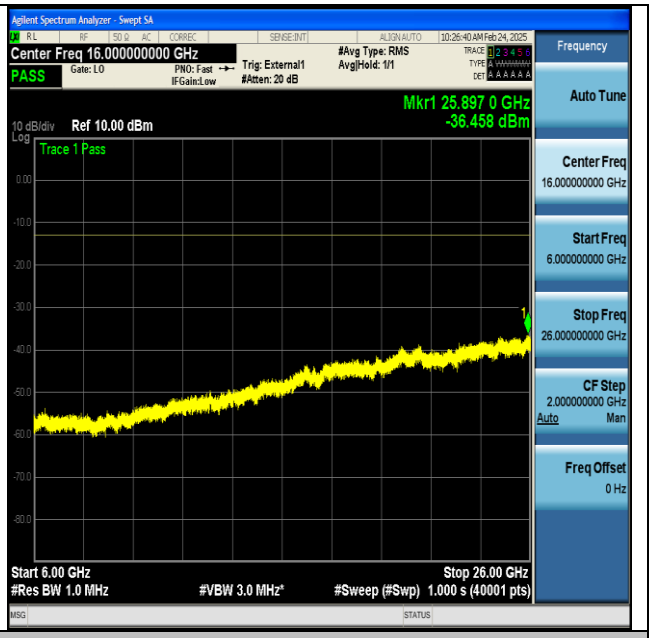



NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-30-1000-PASS

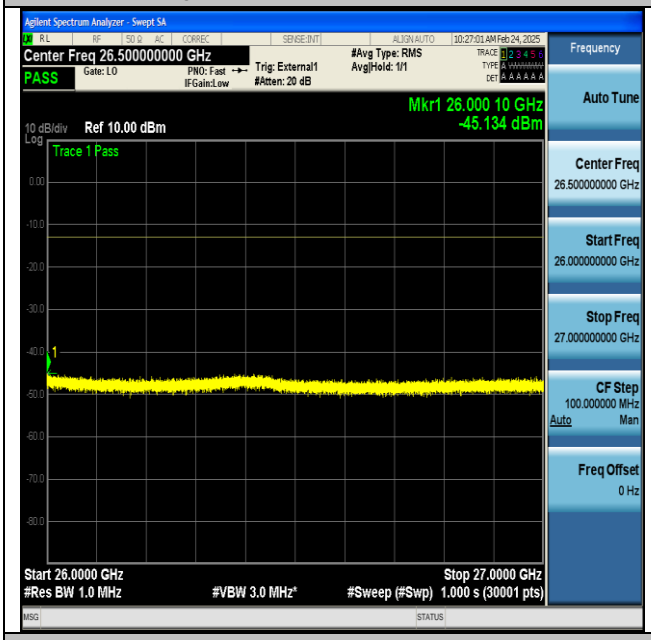
NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

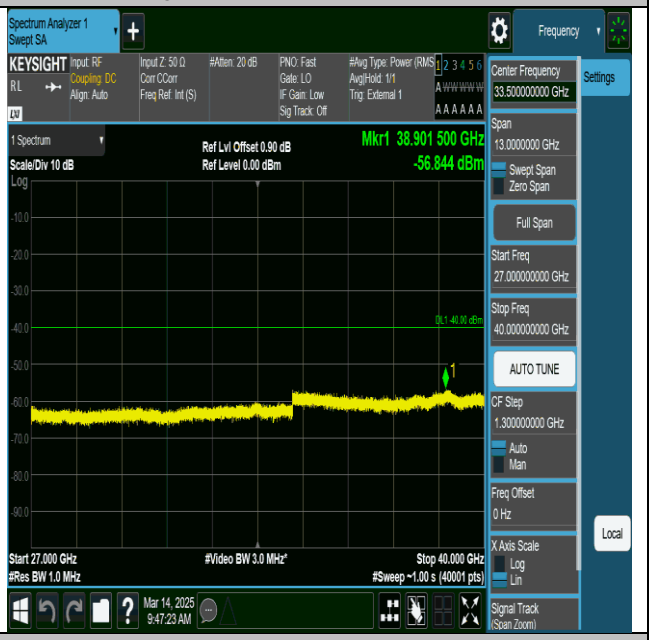
NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-6000-26000-PASS

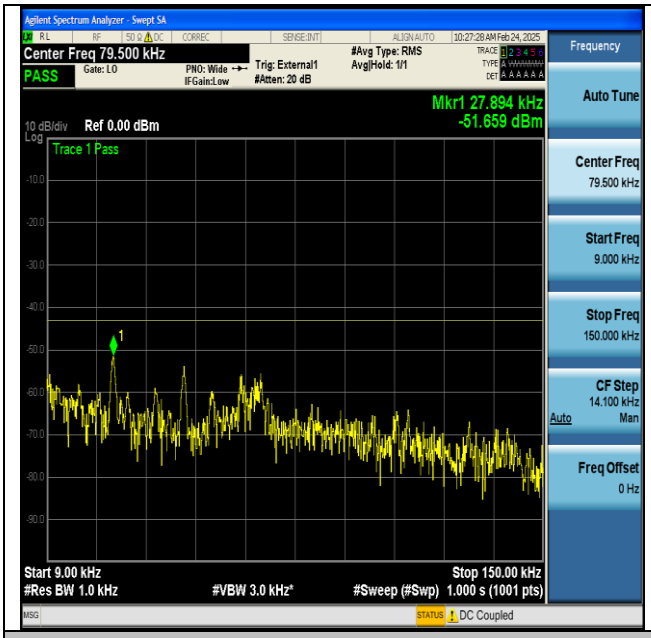



NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-26000-270000-PASS

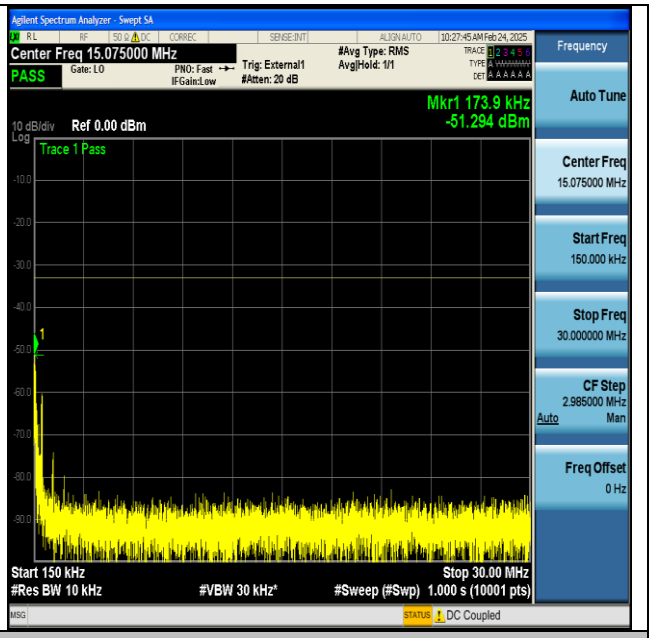



NTNV-n77(3700-3980)-PC2-30-100-M-DFT-BPSK-Edge_1RB_Left-27000-40000-PASS

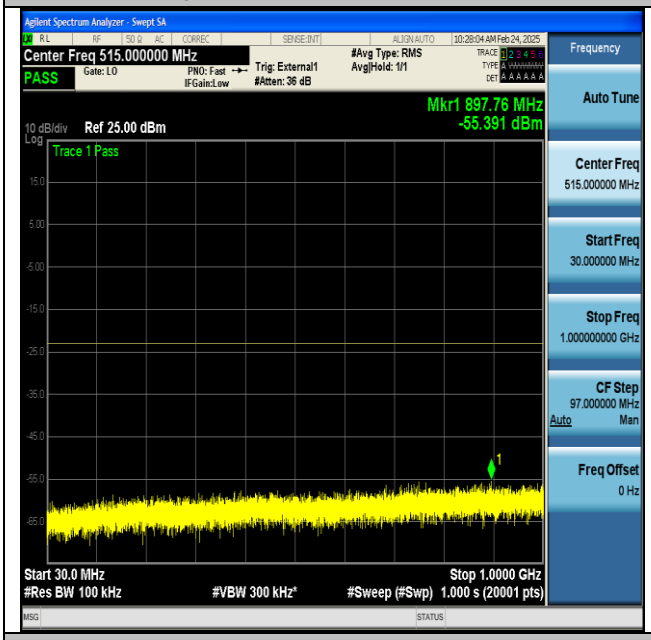

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.




NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-0.15-30-PASS

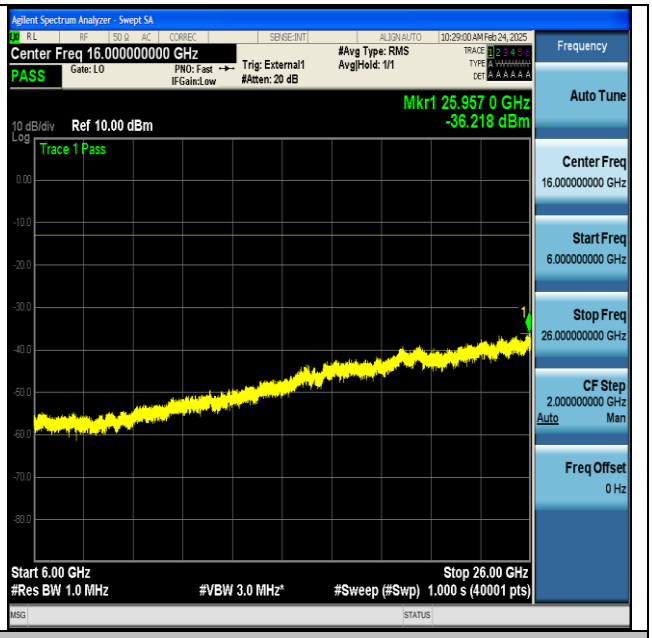



NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-30-1000-PASS

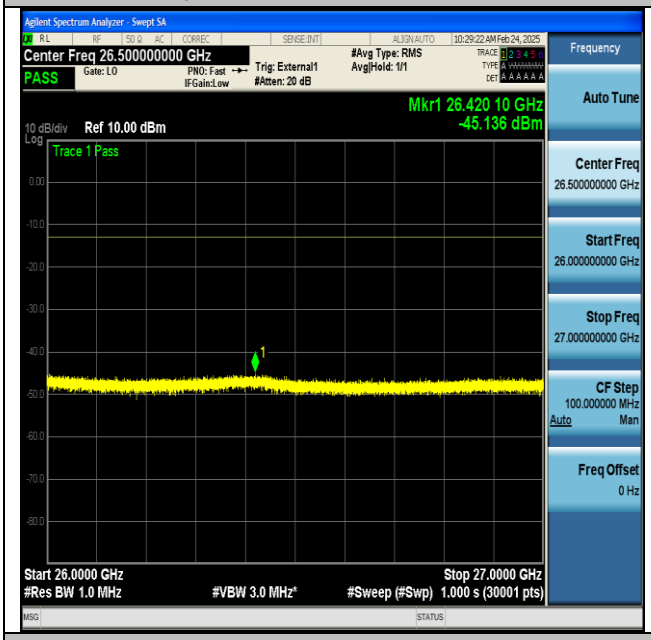
NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

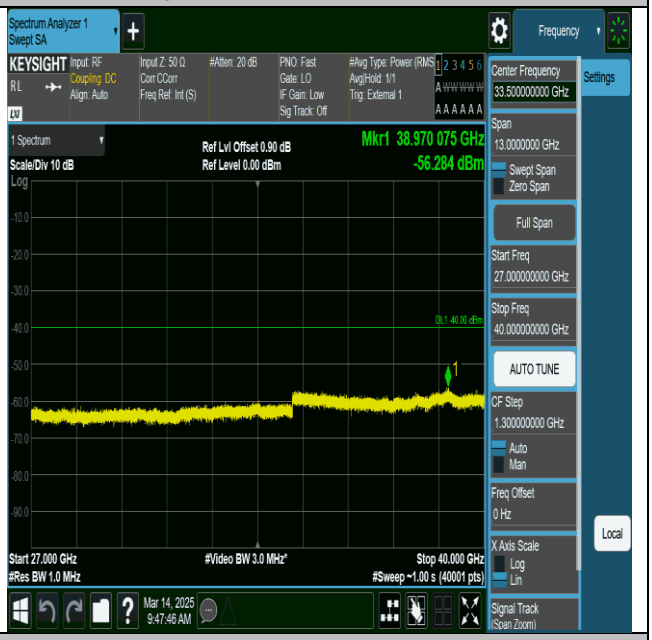
NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-6000-26000-PASS

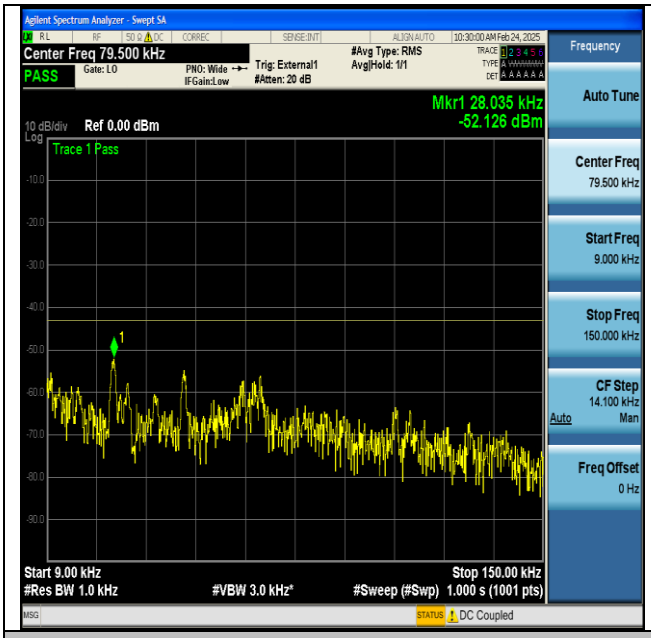



NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-26000-27000-PASS

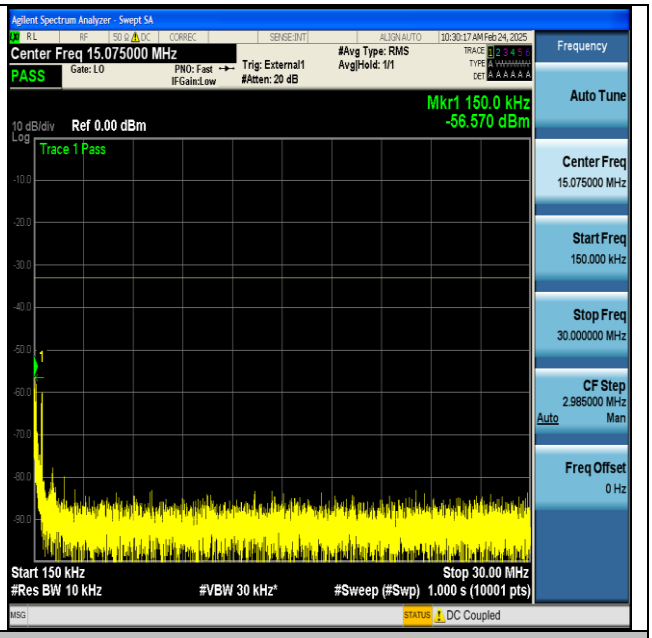



NTNV-n77(3700-3980)-PC2-30-100-M-CP-QPSK-Edge_1RB_Left-27000-40000-PASS

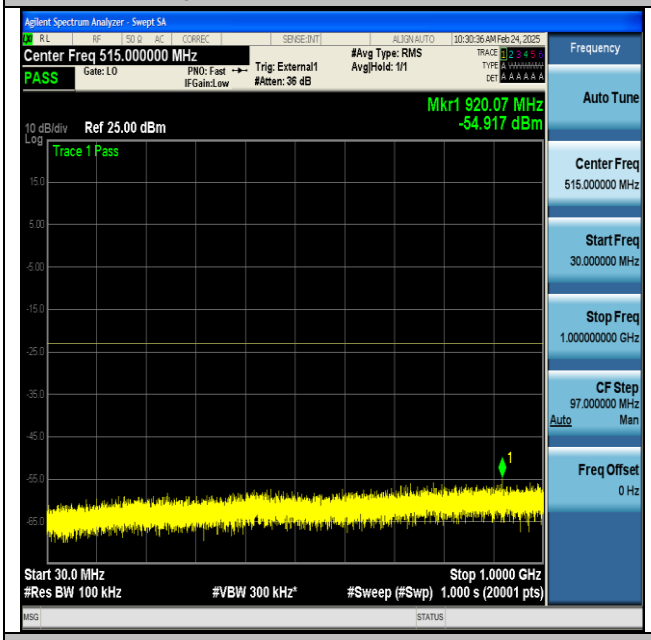

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.




NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-0.15-30-PASS

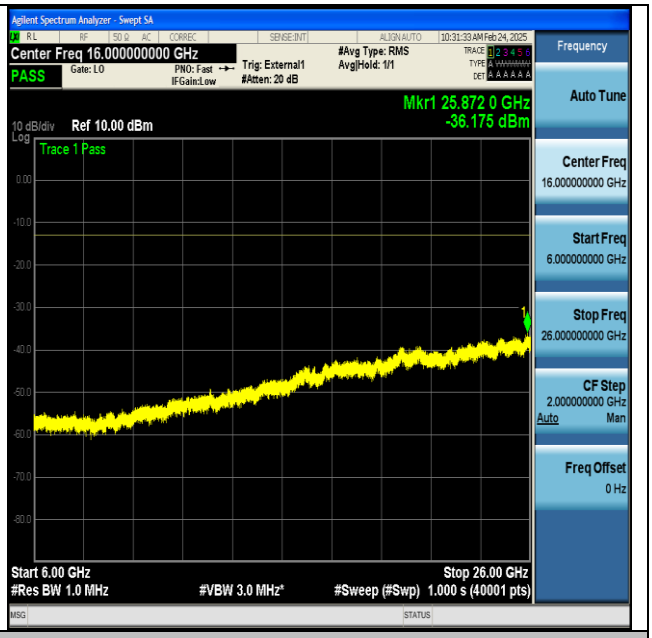



NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-30-1000-PASS

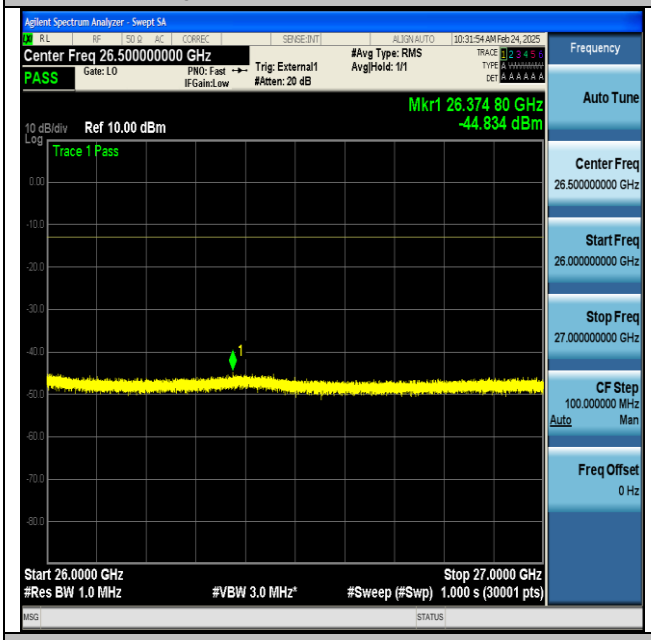
NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

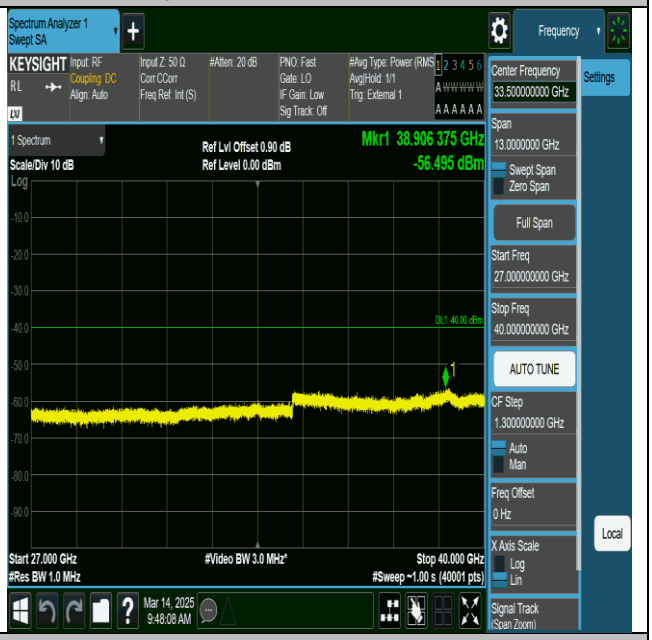
NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-6000-26000-PASS

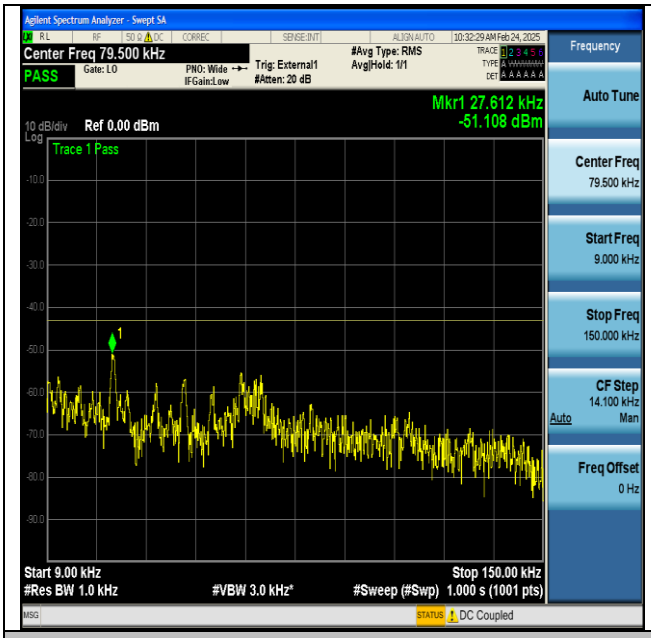



NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-26000-27000-PASS

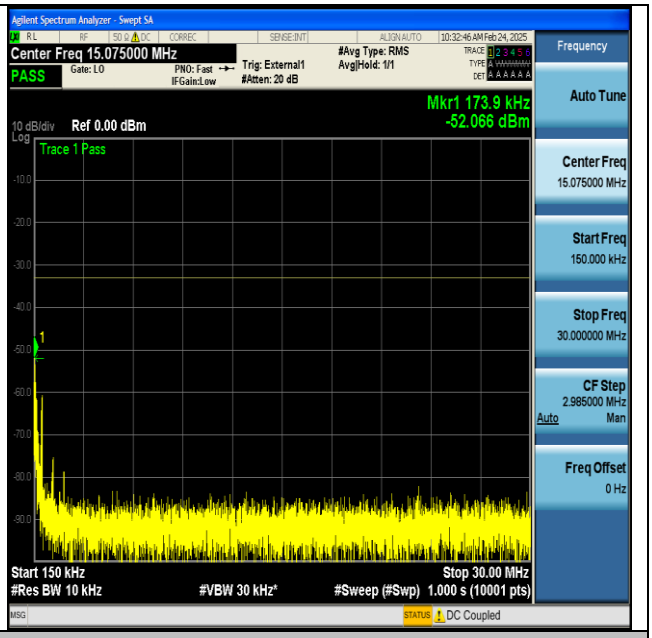



NTNV-n77(3700-3980)-PC2-30-100-H-DFT-BPSK-Edge_1RB_Left-27000-40000-PASS

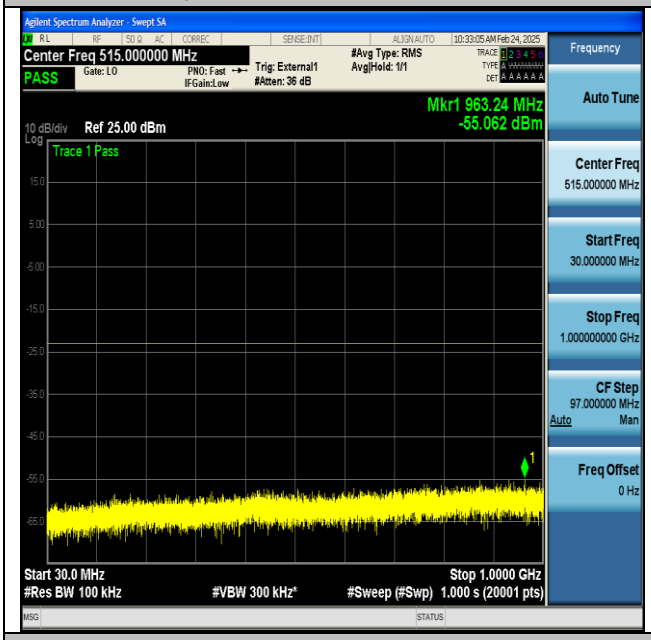

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.



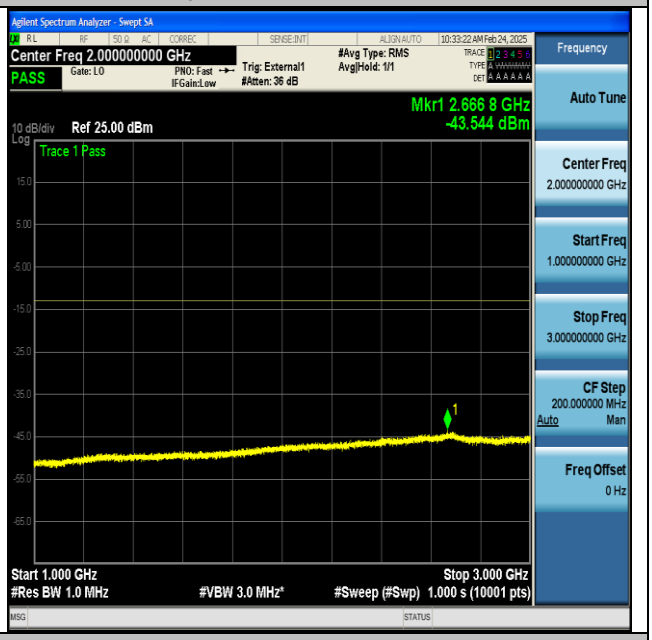

NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-0.009-0.15-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-0.15-30-PASS



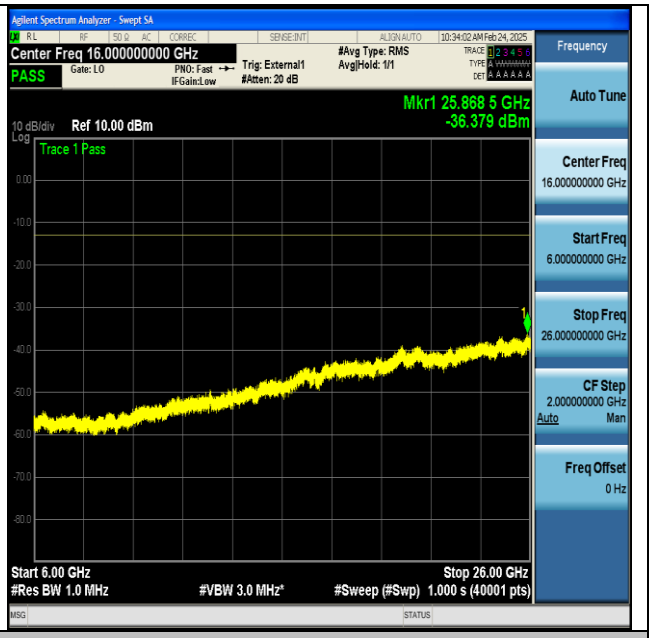

NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-30-1000-PASS



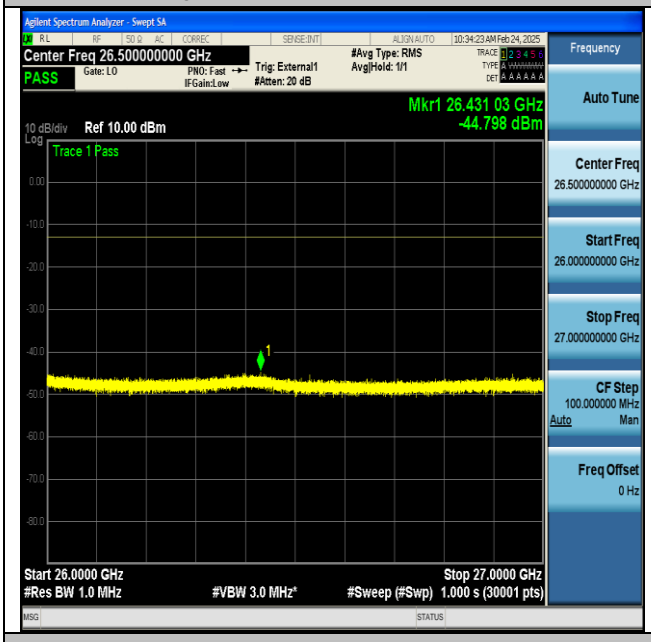

NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-1000-3000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

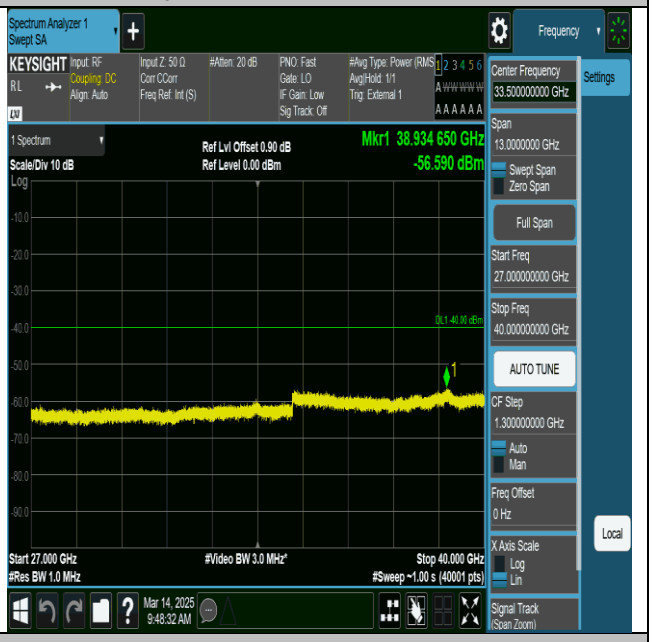
NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-3000-6000-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-6000-26000-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-26000-27000-PASS




NTNV-n77(3700-3980)-PC2-30-100-H-CP-QPSK-Edge_1RB_Left-27000-40000-PASS


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.

# Frequency Stability for SA

## Test Result

### Frequency Error VS. Voltage

| Voltage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Band | SCS | Bandwidth | Modulation | Channel | RB Config | Voltage | Temp | Deviation (Hz) | Deviation (ppm) | Verdict |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | VL | NT | 5.5 | 0.001432 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | VN | NT | 1.8 | 0.000469 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | VH | NT | 7.1 | 0.001849 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | VL | NT | -3.1 | -0.000807 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | VN | NT | 9.1 | 0.00237 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | VH | NT | 2.1 | 0.000547 | PASS |

### Frequency Error VS. Temperature

| Temperature | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Band | SCS | Bandwidth | Modulation | Channel | RB Config | Voltage | Temp | Deviation (Hz) | Deviation (ppm) | Verdict |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | -30 | 6.1 | 0.001589 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | -20 | 6.3 | 0.001641 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | -10 | 1.8 | 0.000469 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 0 | 0.9 | 0.000234 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 10 | -1.1 | -0.000286 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 20 | -1.5 | -0.000391 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 30 | 4.1 | 0.001068 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 40 | 3.9 | 0.001016 | PASS |
| n77(3700-3980) | 30 | 100 | DFT-BPSK | M | Outer_Full | NV | 50 | 2.4 | 0.000625 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | -30 | -10.4 | -0.002708 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | -20 | -5.9 | -0.001536 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | -10 | 8.8 | 0.002292 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 0 | -8 | -0.002083 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 10 | -4.4 | -0.001146 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 20 | -1 | -0.00026 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 30 | -4.4 | -0.001146 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 40 | -6.2 | -0.001615 | PASS |
| n77(3700-3980) | 30 | 100 | CP-QPSK | M | Outer_Full | NV | 50 | 2.8 | 0.000729 | PASS |

~The End~


All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from TOWE.