

**Annex acc. to FCC Title 47 CFR Part 95 M
relating to
s.m.s, smart microwave sensors GmbH
TOPGRD 171**

Annex no. 3 Occupied Bandwidth

**Title 47 - Telecommunication
Part 95 - Personal Radio Services
Subpart M – The 76 – 81 GHz Band Radar Service
Measurement Procedure:
ANSI C63.26-2015**



Deutsche
Akkreditierungsstelle
D-PL-12053-01-03

Test plots – Measured 26 dB Bandwidth

EUT Waveform 6



EUT Waveform 9



EUT Waveform 10



EUT Waveform 11



EUT: TOPGRD 171 FCC ID: W34UMRRA4AB-T FCC Title 47 CFR Part 95 M Date of issue: 2023-12-04

EUT Waveform 12



Test plots – Frequency stability (EUT Waveform 6)

99% BW +25°C 24V DC



99% BW +25°C 10V DC



99% BW +25°C 32V DC

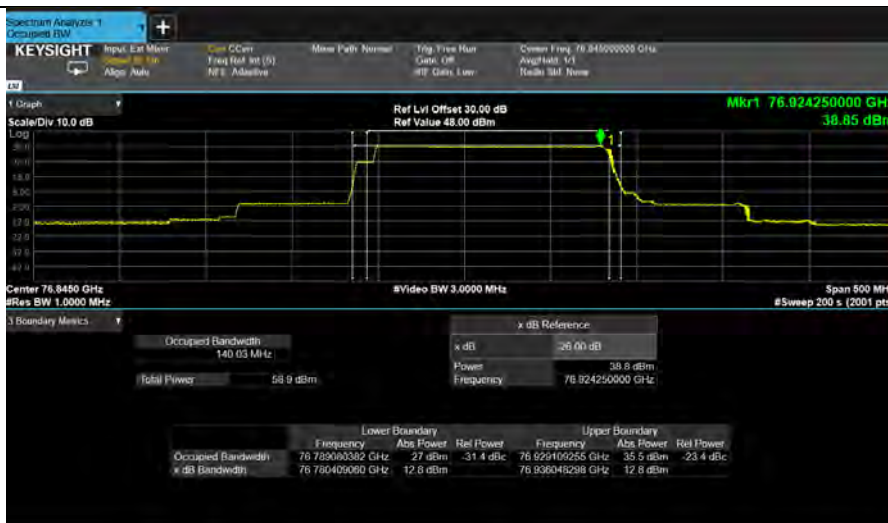


Test plots – Frequency stability (EUT Waveform 9)

99% BW +25°C 24V DC



99% BW +25°C 10V DC



99% BW +25°C 32V DC



Test plots – Frequency stability (EUT Waveform 10)

99% BW +25°C 24V DC



99% BW +25°C 10V DC



99% BW +25°C 32V DC

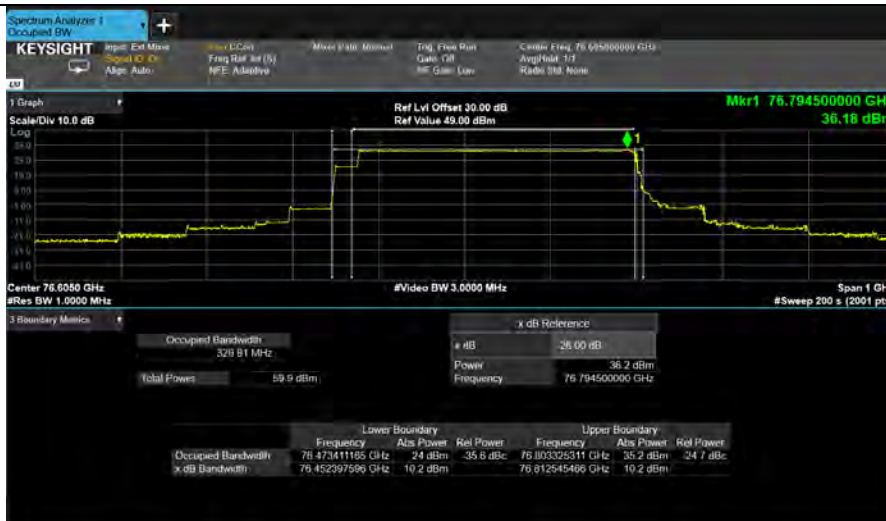


Test plots – Frequency stability (EUT Waveform 11)

99% BW +25°C 24V DC



99% BW +25°C 10V DC



99% BW +25°C 32V DC



Test plots – Frequency stability (EUT Waveform 12)

99% BW +25°C 24V DC



99% BW +25°C 10V DC



99% BW +25°C 32V DC



Test plots – Frequency stability (EUT Waveform 6)

-40°C with 24V DC



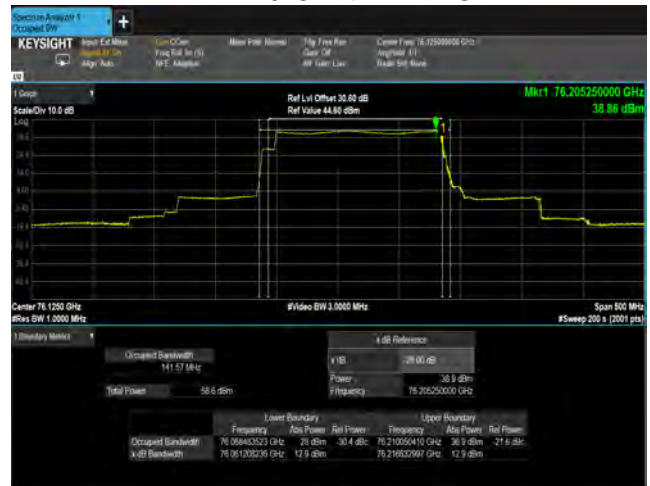
-20°C with 24V DC



-10°C with 24V DC



0°C with 24V DC



10°C with 24V DC



20°C with 24V DC



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+30°C with 24V DC



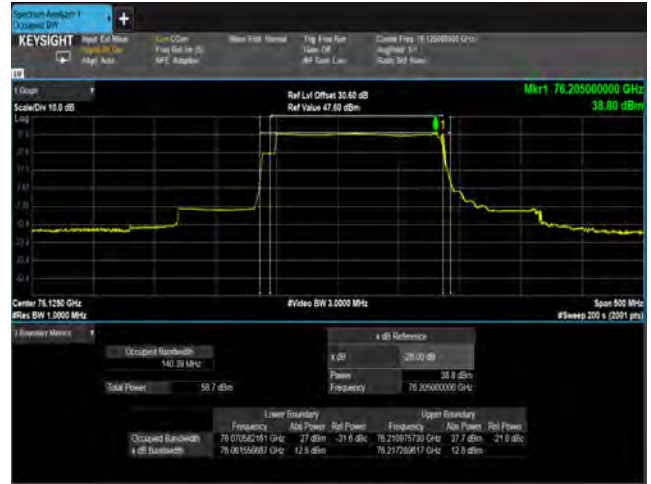
+40°C with 24V DC



+50°C with 24V DC

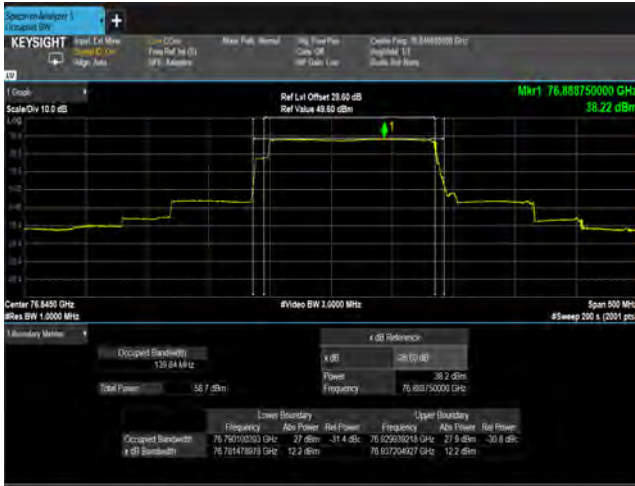


+85°C with 24V DC



Test plots – Frequency stability (EUT Waveform 9)

-40°C with 24V DC



-20°C with 24V DC



-10°C with 24V DC



0°C with 24V DC



10°C with 24V DC



20°C with 24V DC



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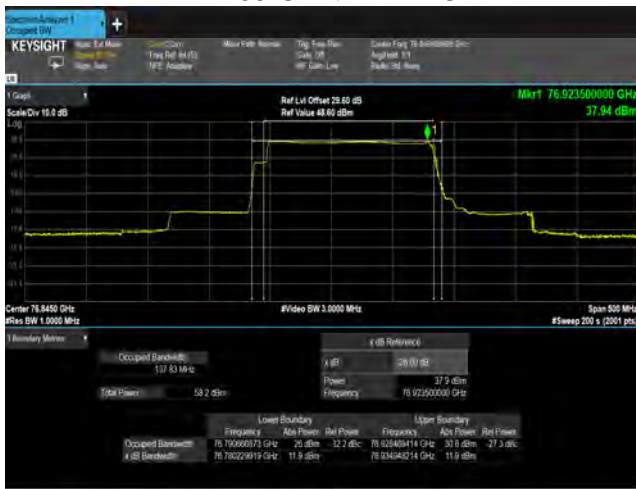
+30°C with 24V DC



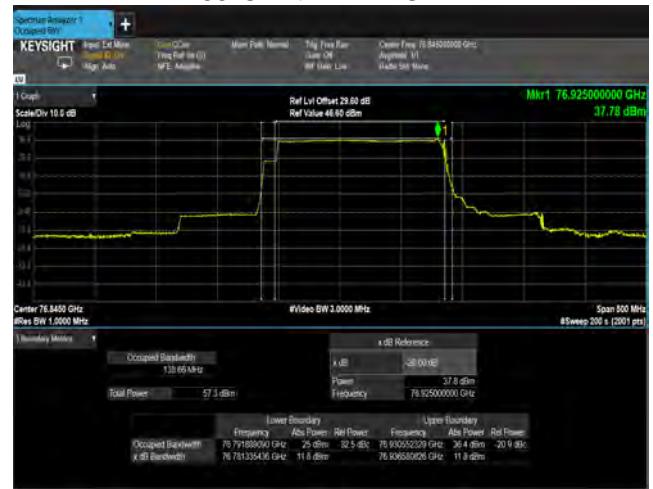
+40°C with 24V DC



+50°C with 24V DC



+85°C with 24V DC



Test plots – Frequency stability (EUT Waveform 10)

-40°C with 24V DC



-20°C with 24V DC



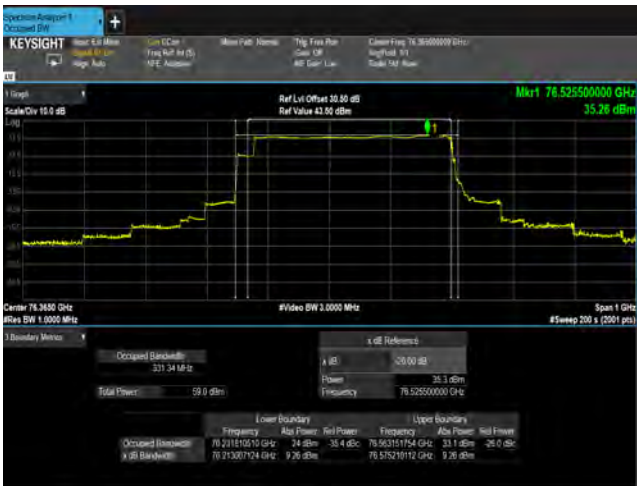
-10°C with 24V DC



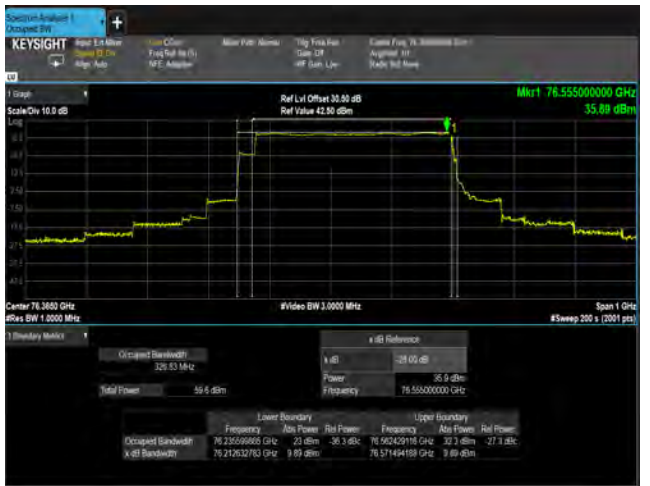
0°C with 24V DC



10°C with 24V DC

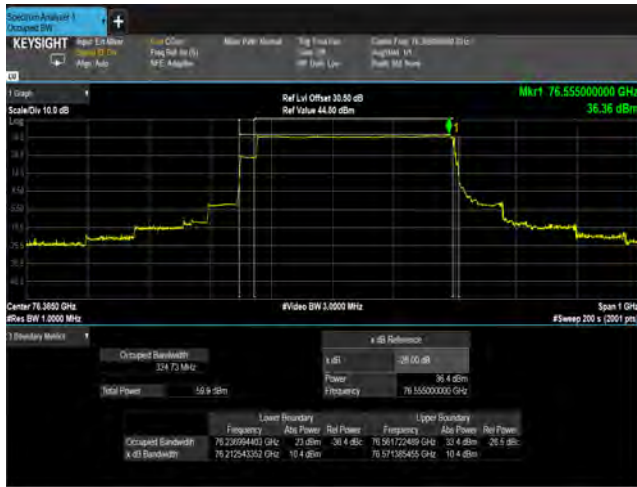


20°C with 24V DC



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+30°C with 24V DC



+40°C with 24V DC



+50°C with 24V DC



+85°C with 24V DC



Test plots – Frequency stability (EUT Waveform 11)

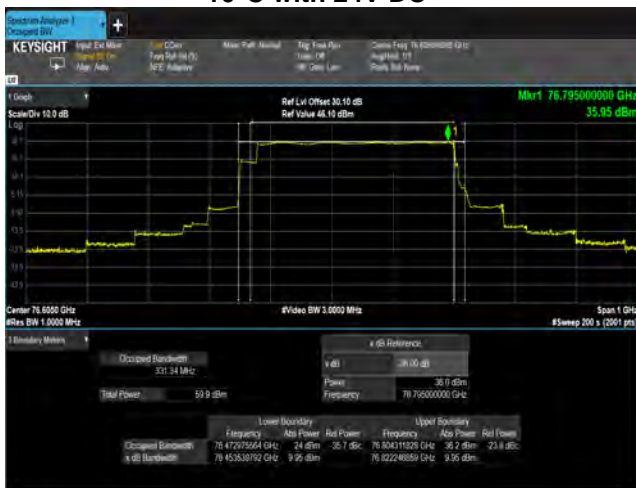
-40°C with 24V DC



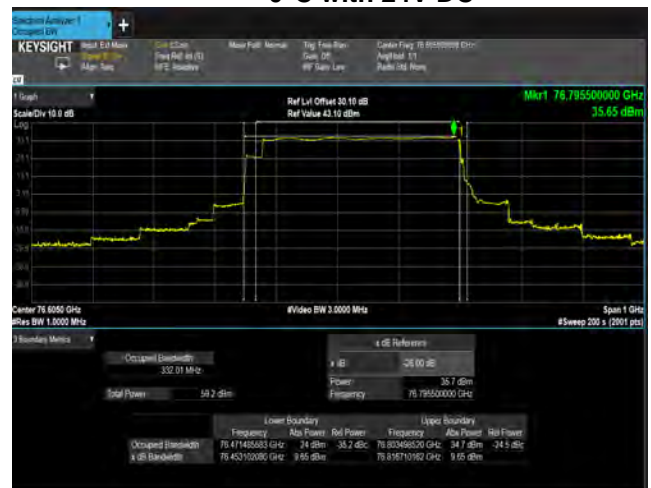
-20°C with 24V DC



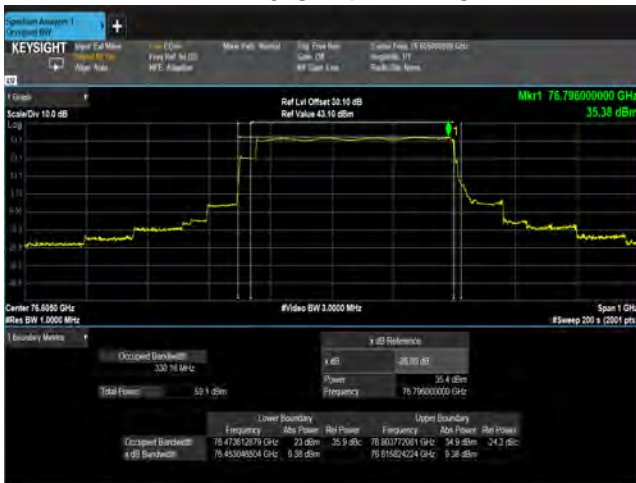
-10°C with 24V DC



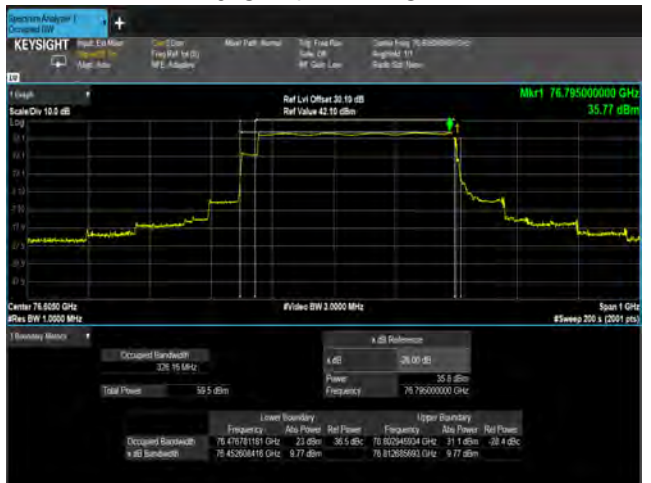
0°C with 24V DC



10°C with 24V DC

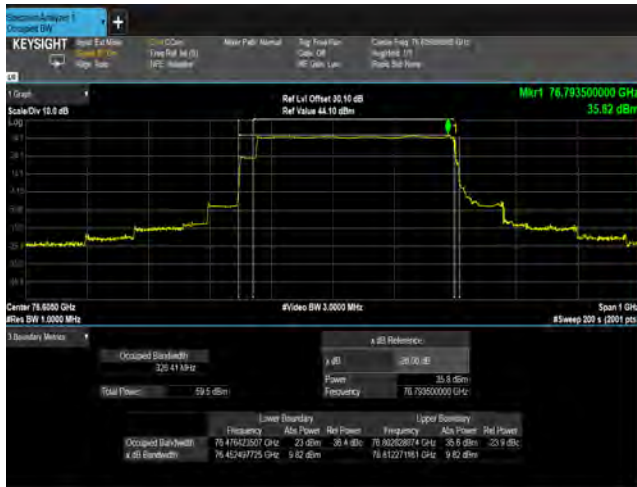


20°C with 24V DC

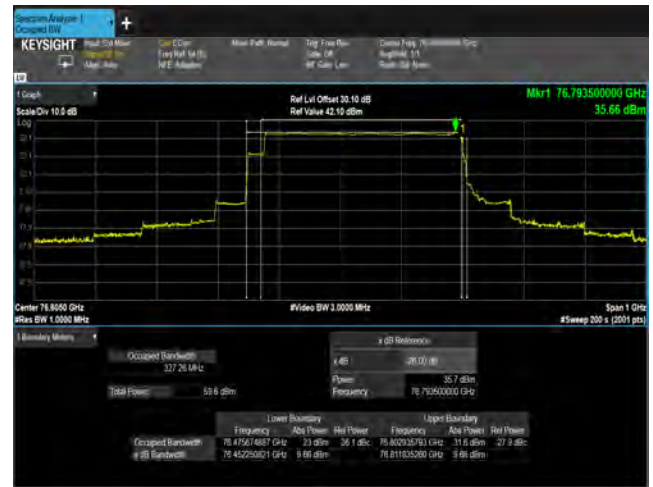


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+30°C with 24V DC



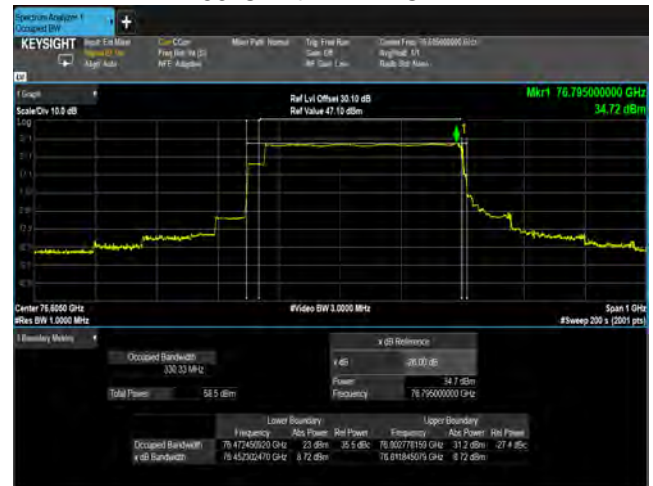
+40°C with 24V DC



+50°C with 24V DC



+85°C with 24V DC

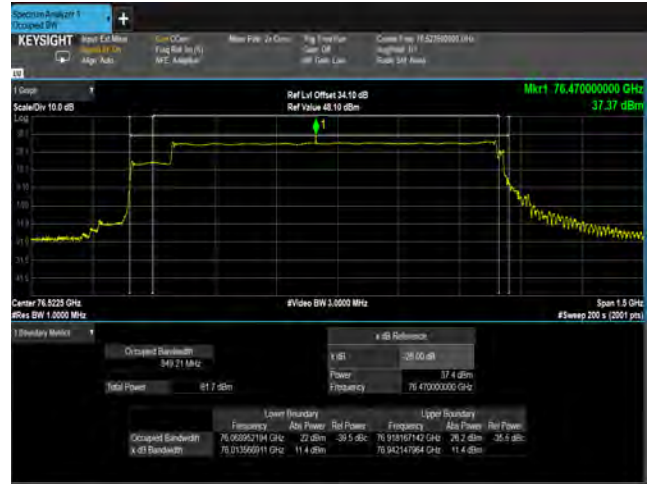


Test plots – Frequency stability (EUT Waveform 12)

-40°C with 24V DC



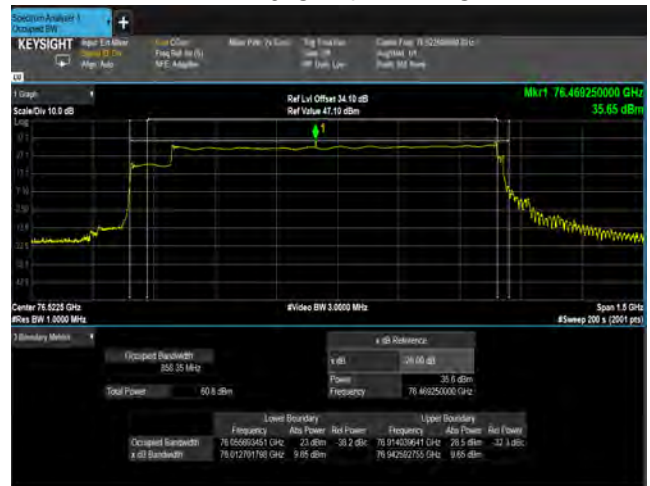
-20°C with 24V DC



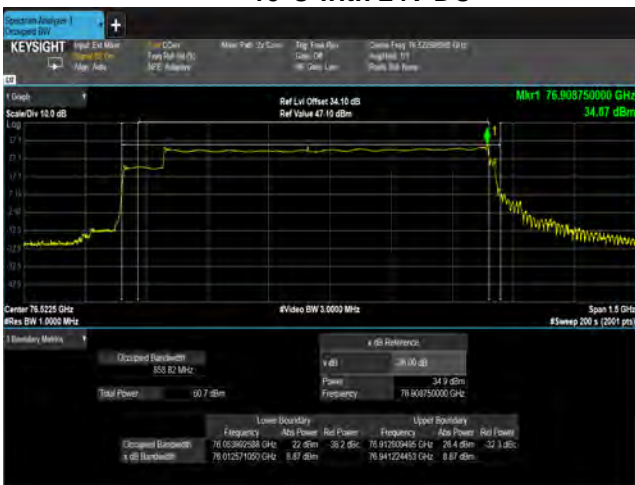
-10°C with 24V DC



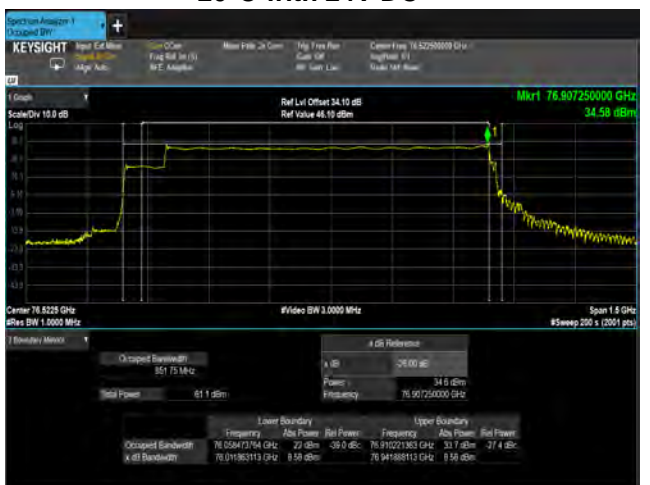
0°C with 24V DC



10°C with 24V DC

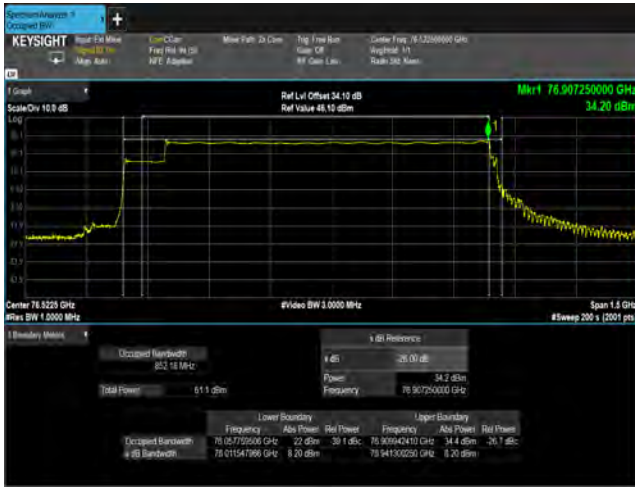


20°C with 24V DC



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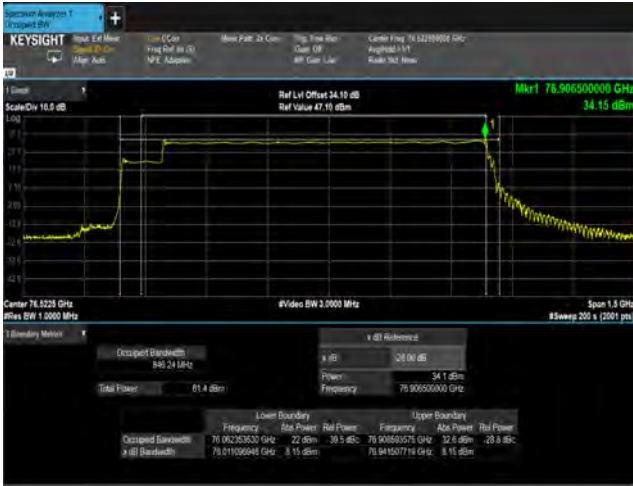
+30°C with 24V DC



+40°C with 24V DC



+50°C with 24V DC



+85°C with 24V DC

