

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

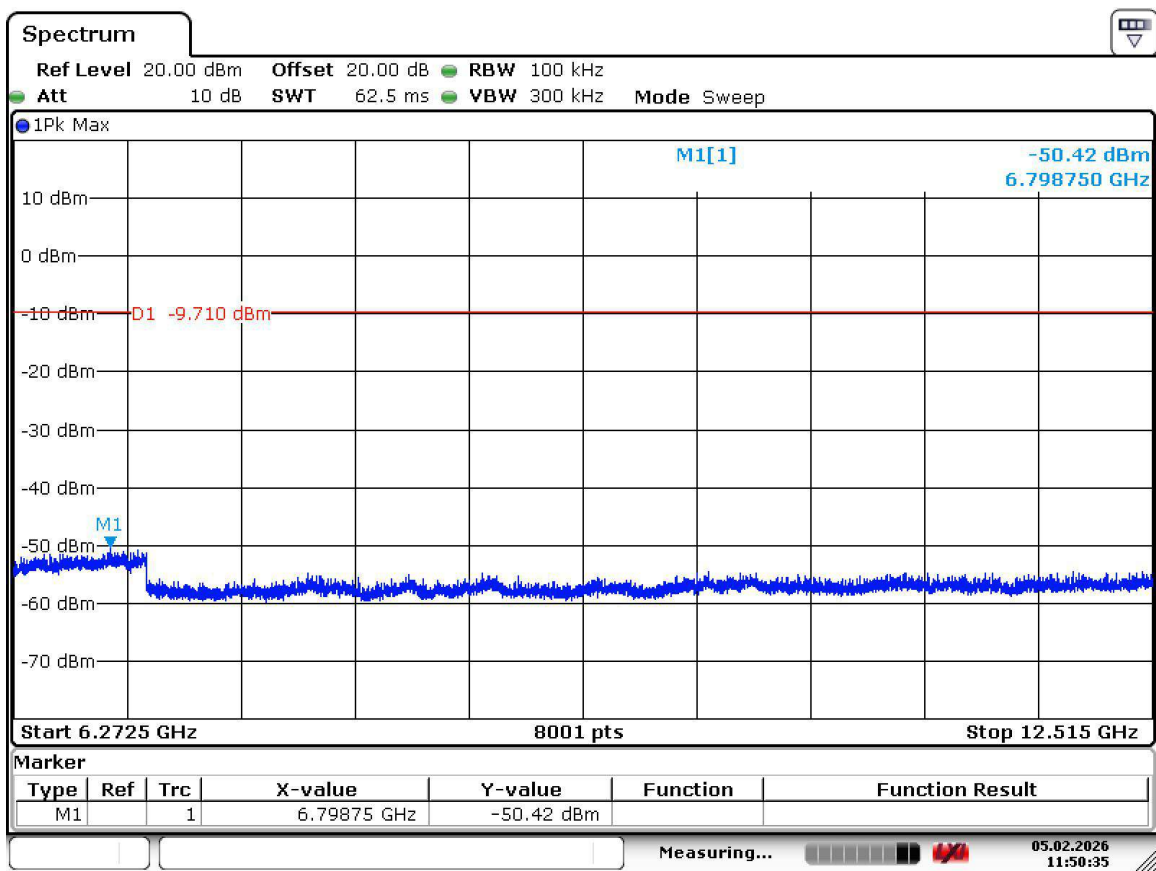
Requirement: Conducted spurious emission <20dB of peak

Tech: CL Payne

Maximum Reading = 10.29 dBm

High Channel: 2480 MHz Requirement = -9.71 dBm

Result: Pass



Date: 5.FEB.2026 11:50:36

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

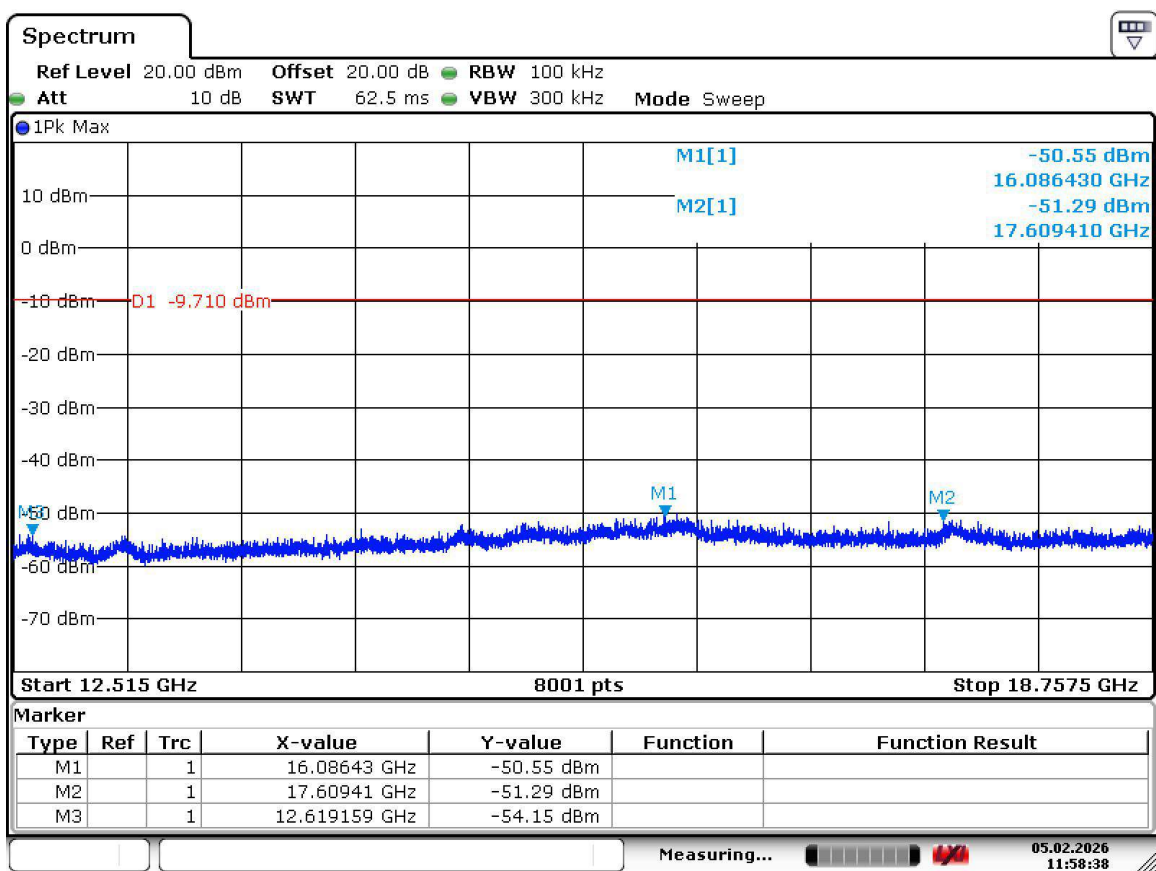
Requirement: Conducted spurious emission <20dB of peak

Tech: CL Payne

Maximum Reading = 10.29 dBm

High Channel: 2480 MHz Requirement = -9.71 dBm

Result: Pass



Date: 5.FEB.2026 11:58:39

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

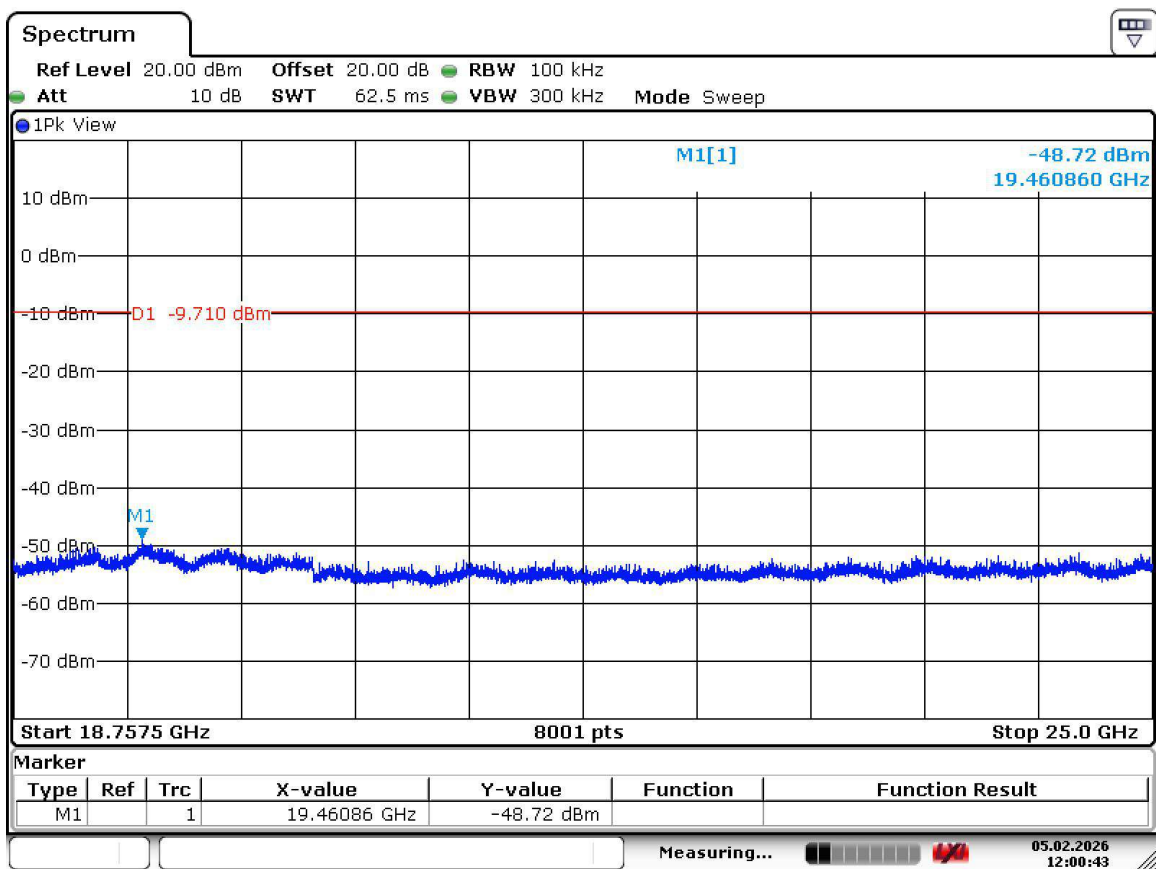
Requirement: Conducted spurious emission <20dB of peak

Tech: CL Payne

Maximum Reading = 10.29 dBm

High Channel: 2480 MHz Requirement = -9.71 dBm

Result: Pass



Date: 5.FEB.2026 12:00:44

An additional consideration when performing conducted measurements of restricted-band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than from the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements, the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in 6.3, 6.5, and 6.6. All detected emissions shall comply with the applicable requirements.

This test is required for any spurious emission or modulation product that falls in an Unrestricted Band, as defined in Section 15.209. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span	=	wide enough to fully capture the emission being measured
RBW	=	1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz
VBW	=	$\geq$ RBW
Sweep	=	auto
Detector function	=	peak
Trace	=	max hold

Follow the guidelines in ANSI C63.10-2020 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Now repeat the measurement using the average detector of the spectrum analyzer. Submit this data.

Note 1: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Note 2: Highest frequency investigated was the tenth harmonic of the fundamental, no radiated emissions were detected above the 2nd harmonic.

Note 3: The worst case emissions are recorded within this test report.

Requirement: FCC Part 15.247 Clause (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

15.247 (d) Restricted Bands ANSI C63.10-2020 Clause 11.12.2

11.12 Emissions in restricted frequency bands

11.12.1 Radiated emission measurements

Because the typical emission requirements are specified in terms of radiated field strength levels, measurements performed to determine compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for determining compliance to the specified requirements; however antenna-port conducted measurements are also now acceptable to determine compliance (see 11.12.2 for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in 6.3, 6.5, and 6.6 shall be followed.

Requirement: FCC Part 15.247 Clause (d)

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Note 4: Limit listed is the general limit as specified in 15.209 in order to show compliance with the restricted bands of operation as well as the out of band limit in 15.247. No other identifiable signals were observed in the restricted bands as specified in 15.205.

Client: Snap One LLC

Date: 8 Apr 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: General limit of 15.209

Result: Pass

Tech: CL Payne

Radiated Surious Emissions													
FREQ (Mhz)	S/A Reading (dBuV/m)	Correction Factors (dB)			dBuV/m			Positions					
		Amp	Cbl	Ant	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	Axis	Chl
4812.888	36.01	25.67	6.14	33.30	49.78	74.00	-24.22	223	2.00	H	PK	X	Low
4812.888	24.50	25.67	6.14	33.30	38.27	54.00	-15.73	223	2.00	H	AVE	X	Low
4812.613	40.43	25.67	6.14	33.30	54.20	74.00	-19.80	30	1.02	V	PK	X	Low
4812.613	35.63	25.67	6.14	33.30	49.40	54.00	-4.60	30	1.02	V	AVE	X	Low
4812.838	34.14	25.67	6.14	33.30	47.91	74.00	-26.09	43	1.00	V	PK	Y	Low
4812.838	24.12	25.67	6.14	33.30	37.89	54.00	-16.11	43	1.00	V	AVE	Y	Low
4812.695	36.10	25.67	6.14	33.30	49.87	74.00	-24.13	27	1.17	H	PK	Y	Low
4812.695	24.93	25.67	6.14	33.30	38.70	54.00	-15.30	27	1.17	H	AVE	Y	Low
4812.727	37.00	25.67	6.14	33.30	50.77	74.00	-23.23	165	2.43	H	PK	Z	Low
4812.727	25.44	25.67	6.14	33.30	39.21	54.00	-14.79	165	2.43	H	AVE	Z	Low
4812.647	35.80	25.67	6.14	33.30	49.57	74.00	-24.43	10	1.00	V	PK	Z	Low
4812.647	26.31	25.67	6.14	33.30	40.08	54.00	-13.92	10	1.00	V	AVE	Z	Low
4862.721	38.19	25.65	6.18	33.50	52.22	74.00	-21.78	29	1.00	V	PK	X	Mid
4862.721	32.57	25.65	6.18	33.50	46.60	54.00	-7.40	29	1.00	V	AVE	X	Mid
4862.726	34.35	25.65	6.18	33.50	48.38	74.00	-25.62	200	1.80	H	PK	X	Mid
4862.726	21.53	25.65	6.18	33.50	35.56	54.00	-18.44	200	1.80	H	AVE	X	Mid
4862.616	34.78	25.65	6.18	33.50	48.81	74.00	-25.19	217	1.00	H	PK	Y	Mid
4862.616	25.48	25.65	6.18	33.50	39.51	54.00	-14.49	217	1.00	H	AVE	Y	Mid
4862.705	34.53	25.65	6.18	33.50	48.56	74.00	-25.44	30	1.00	V	PK	Y	Mid
4862.705	23.28	25.65	6.18	33.50	37.31	54.00	-16.69	30	1.00	V	AVE	Y	Mid
4862.740	34.61	25.65	6.18	33.50	48.64	74.00	-25.36	0	2.00	V	PK	Z	Mid
4862.740	24.02	25.65	6.18	33.50	38.05	54.00	-15.95	0	2.00	V	AVE	Z	Mid
4862.792	34.33	25.65	6.18	33.50	48.36	74.00	-25.64	333	3.13	H	PK	Z	Mid
4862.792	24.34	25.65	6.18	33.50	38.37	54.00	-15.63	333	3.13	H	AVE	Z	Mid
4962.717	35.45	25.61	6.27	33.90	50.00	74.00	-24.00	317	2.59	V	PK	X	Hi
4962.717	27.43	25.61	6.27	33.90	41.98	54.00	-12.02	317	2.59	V	AVE	X	Hi
4962.771	33.22	25.61	6.27	33.90	47.77	74.00	-26.23	158	1.15	H	PK	X	Hi
4962.771	21.80	25.61	6.27	33.90	36.35	54.00	-17.65	158	1.15	H	AVE	X	Hi
4962.700	35.55	25.61	6.27	33.90	50.10	74.00	-23.90	0	3.24	H	PK	Y	Hi
4962.700	25.29	25.61	6.27	33.90	39.84	54.00	-14.16	0	3.24	H	AVE	Y	Hi
4962.616	33.84	25.61	6.27	33.90	48.39	74.00	-25.61	0	1.00	V	PK	Y	Hi
4962.616	21.70	25.61	6.27	33.90	36.25	54.00	-17.75	0	1.00	V	AVE	Y	Hi
4962.930	33.50	25.61	6.27	33.90	48.05	74.00	-25.95	34	1.31	V	PK	Z	Hi
4962.930	21.22	25.61	6.27	33.90	35.77	54.00	-18.23	34	1.31	V	AVE	Z	Hi
4962.785	34.90	25.61	6.27	33.90	49.45	74.00	-24.55	260	2.45	H	PK	Z	Hi
4962.785	21.42	25.61	6.27	33.90	35.97	54.00	-18.03	260	2.45	H	AVE	Z	Hi

11.12.2 Antenna-port conducted measurements

11.12.2.1 General

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case emissions is required.

11.12.2.2 General procedure for conducted measurements in restricted bands

The general procedure for conducted measurements in restricted bands is as follows:

- a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).
- c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
- d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).
- e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log d + 104.8$$

where

E is the electric field strength in dB μ V/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

- f) Compare the resultant electric field strength level with the applicable regulatory limit.
- g) Perform the radiated spurious emission test.

15.247 (d) Restricted Bands - *continued*

Note: With respect to steps e) and f) a limit line (EIRP) based upon the dBuV/m limit was calculated and put on the plots to satisfy the requirement of step f) above. Formula is: $(E + 20 \log d) - 104.8 = (\text{EIRP limit})$. The appropriate correction factor from step c) was included in the final calculation.

Limit Calculation:

Formula: $E - 104.8 + 20\log(3) - \text{antenna gain} - \text{ground reflection factor}$

30 MHz - 88 MHz	$40 - 104.8 + 20\log(d) - (1.84) - 4.7 = -61.80 \text{ dBm}$
88 MHz - 216 MHz	$43 - 104.8 + 20\log(d) - (1.84) - 4.7 = -58.80 \text{ dBm}$
216 MHz - 960 MHz	$46 - 104.8 + 20\log(d) - (1.84) - 4.7 = -55.80 \text{ dBm}$
960 MHz - 1000 MHz	$54 - 104.8 + 20\log(d) - (1.84) - 4.7 = -47.80 \text{ dBm}$
> 1000 MHz	$54 - 104.8 + 20\log(d) - (1.84) - 0 = -43.10 \text{ dBm}$

Note: $(d) = \text{Measurement distance in meters} = 3 \text{ meters}$

Requirement: FCC Part 15.247 Clause (d)

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

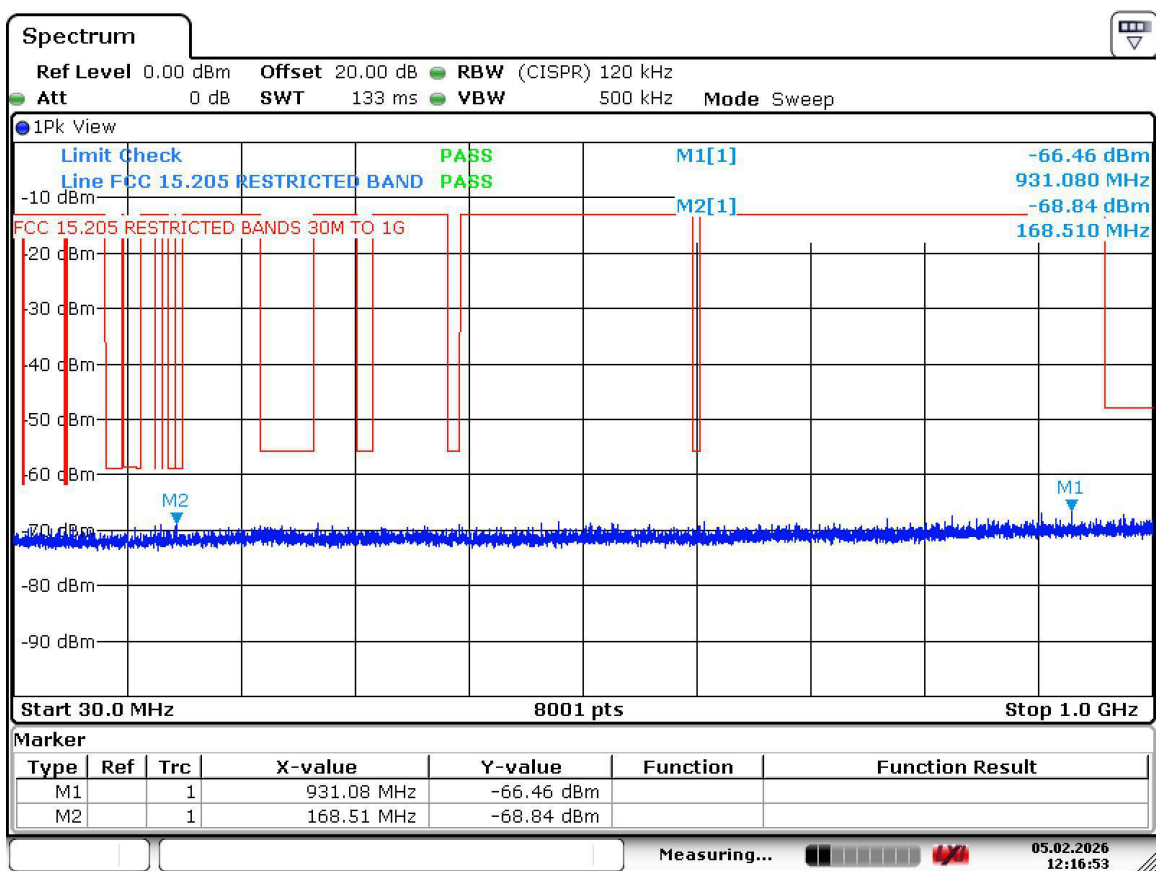
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 30 MHz to 1,000 MHz

Result: Pass



Date: 5.FEB.2026 12:16:54

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

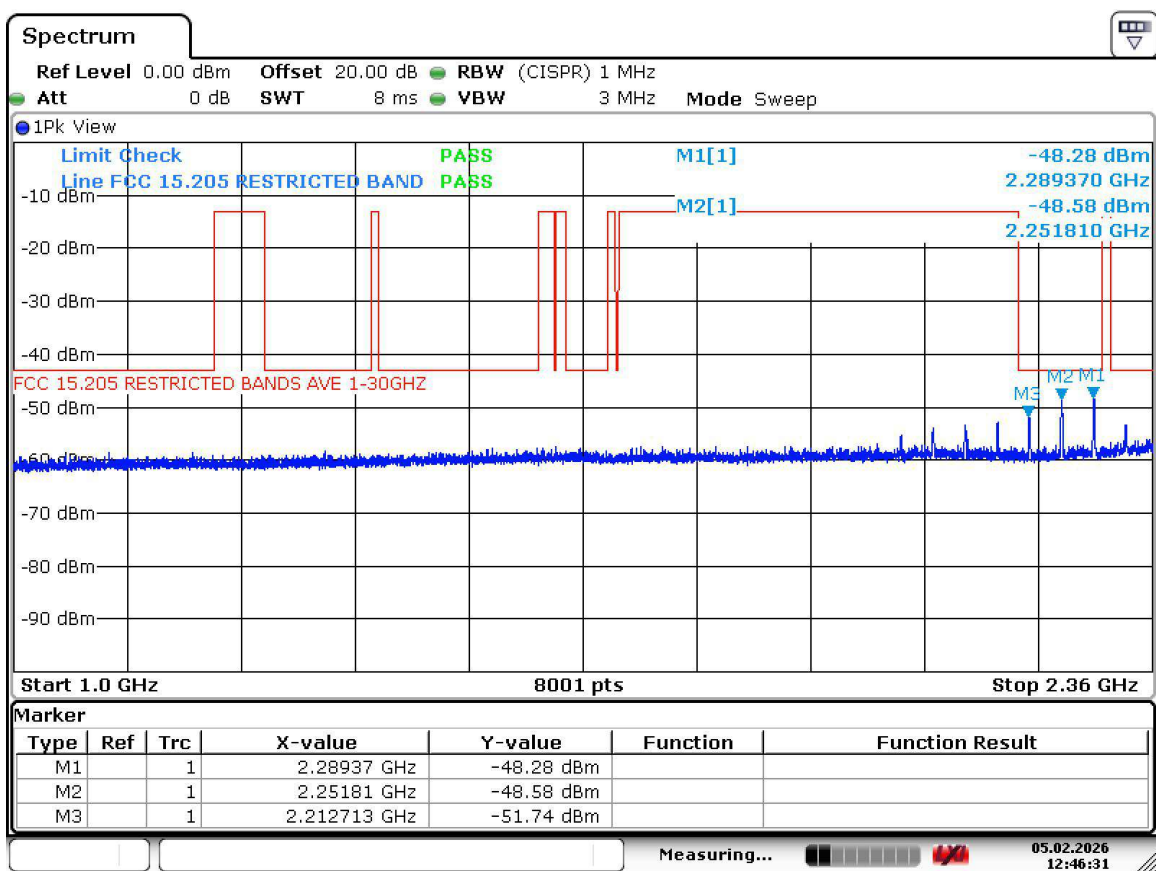
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 1,000 MHz to 2,360 MHz

Result: Pass



Date: 5.FEB.2026 12:46:31

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

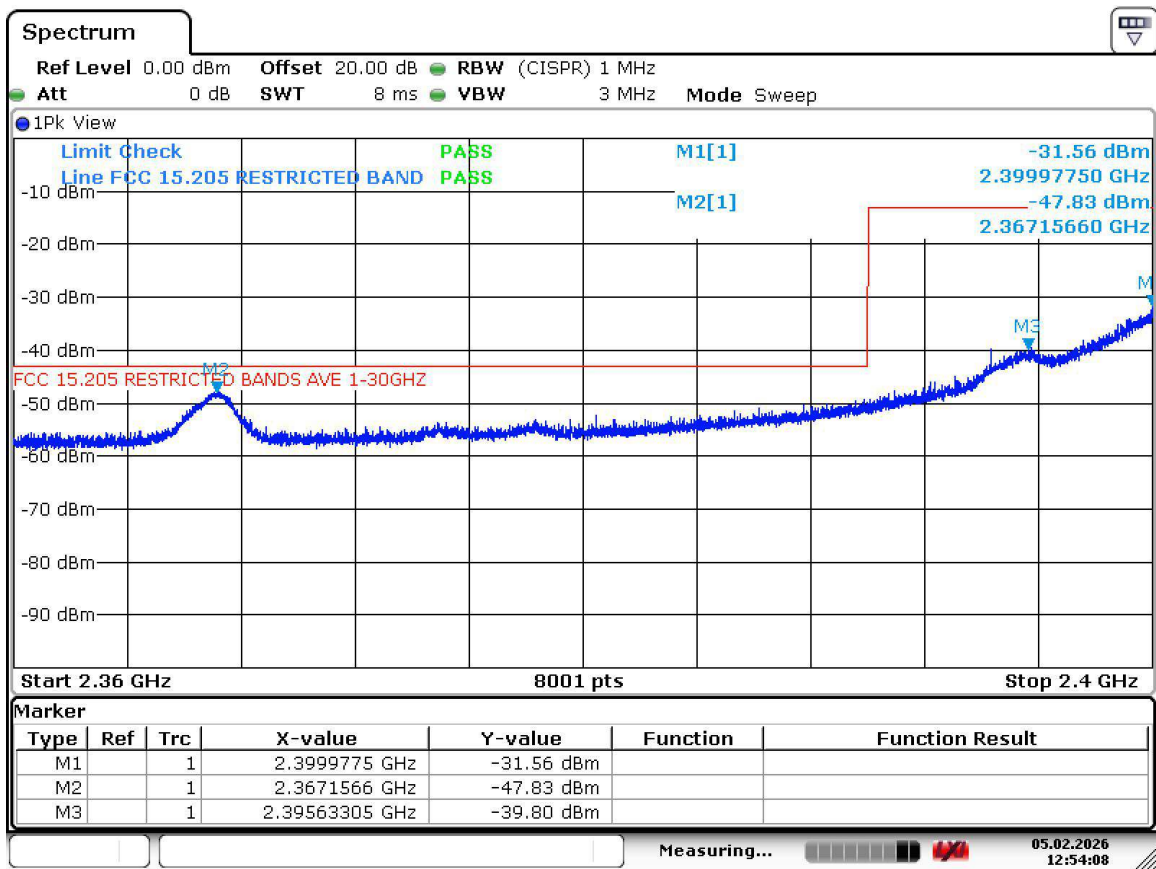
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 2,360 MHz to 2,400 MHz

Result: Pass



Date: 5.FEB.2026 12:54:09

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

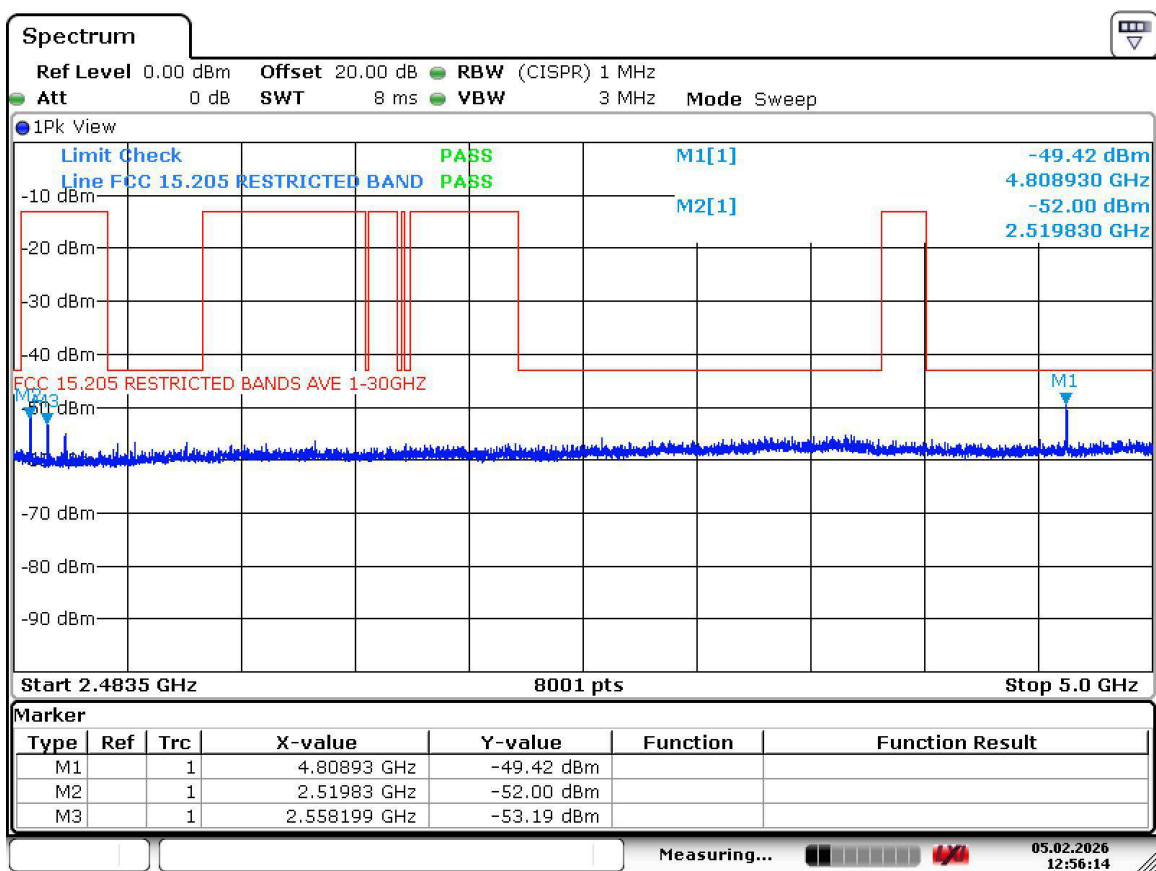
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 2,483.5 MHz to 5,000 MHz

Result: Pass



Date: 5.FEB.2026 12:56:15

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

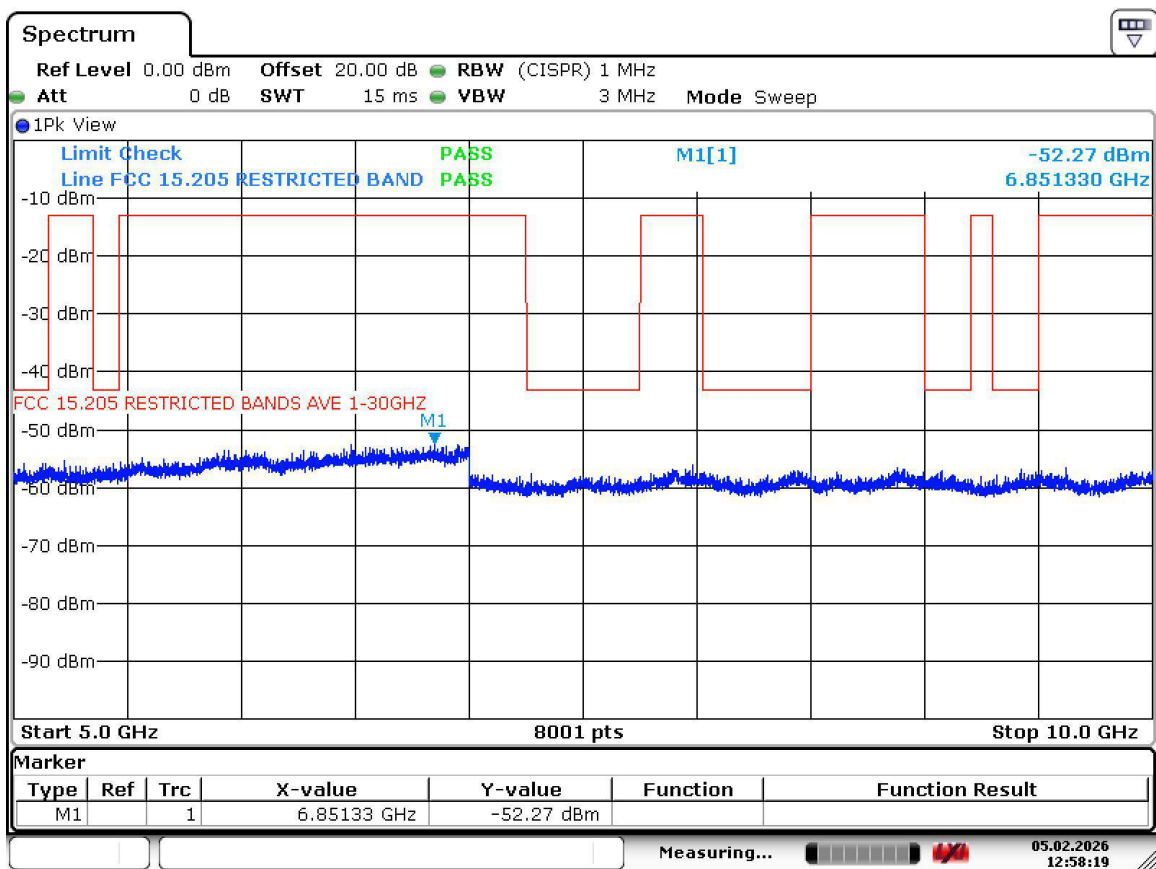
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 5,000 MHz to 10,000 MHz

Result: Pass



Date: 5.FEB.2026 12:58:20

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

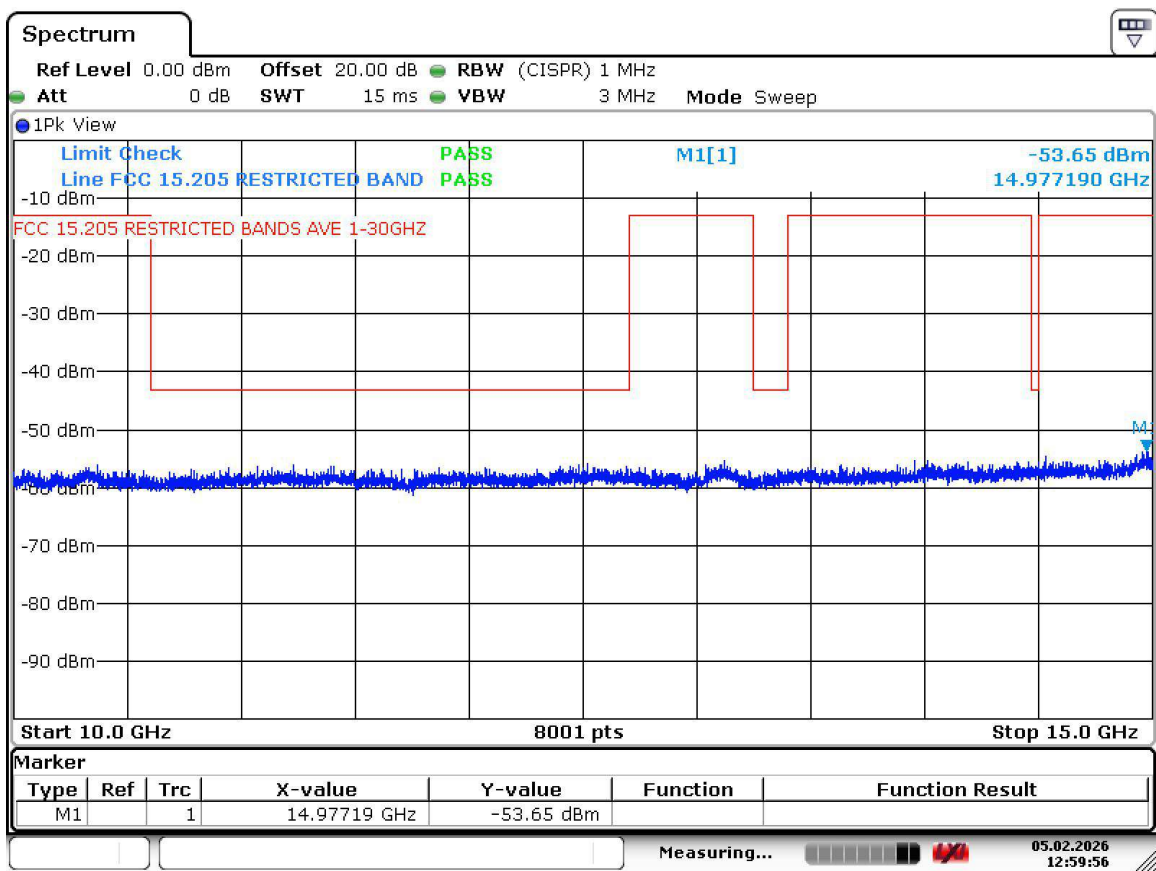
Tech: CL Payne

Low Channel: 2405 MHz

Detector Function: Peak

Frequency Range: 10,000 MHz to 15,000 MHz

Result: Pass



Date: 5.FEB.2026 12:59:56

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

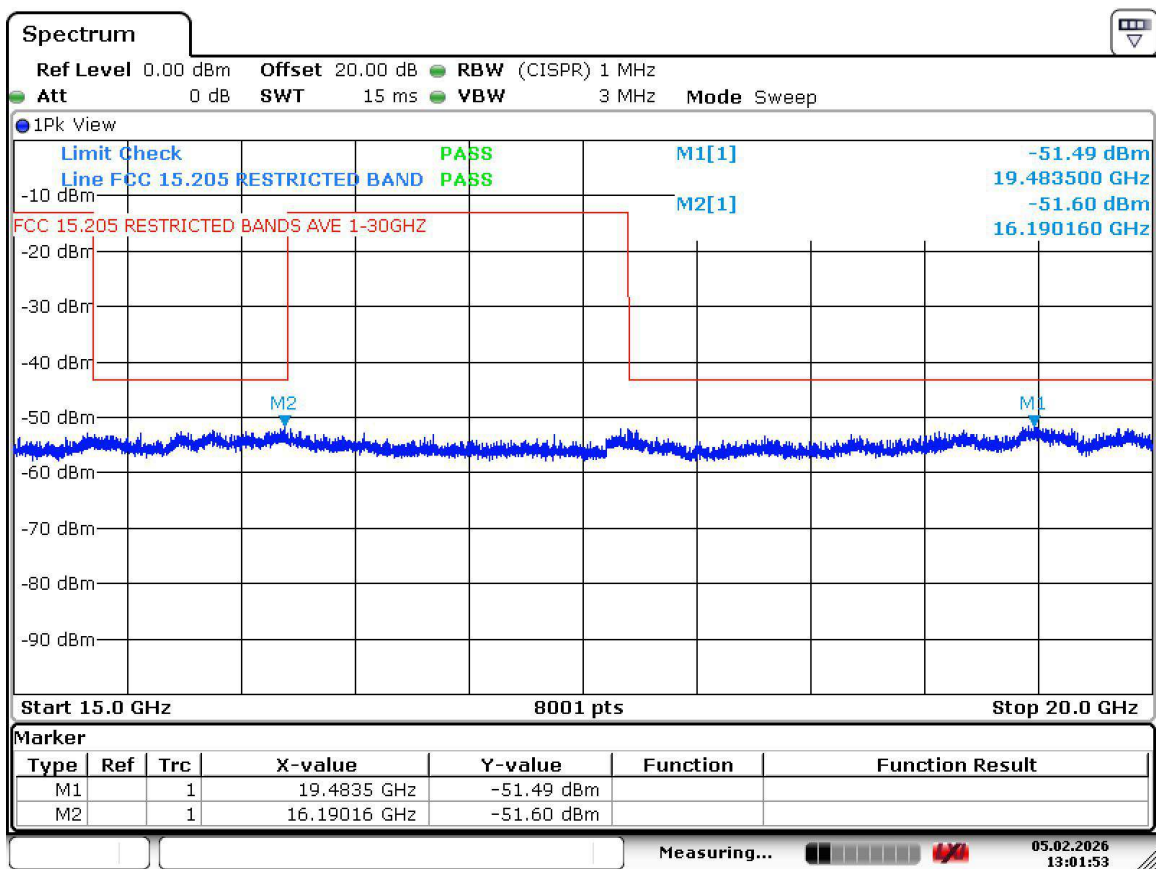
Requirement: Emissions Below Restricted Band Limits

Tech: CL Payne

Low Channel: 2405 MHz Detector Function: Peak

Frequency Range: 15,000 MHz to 20,000 MHz

Result: Pass



Date: 5.FEB.2026 13:01:53

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

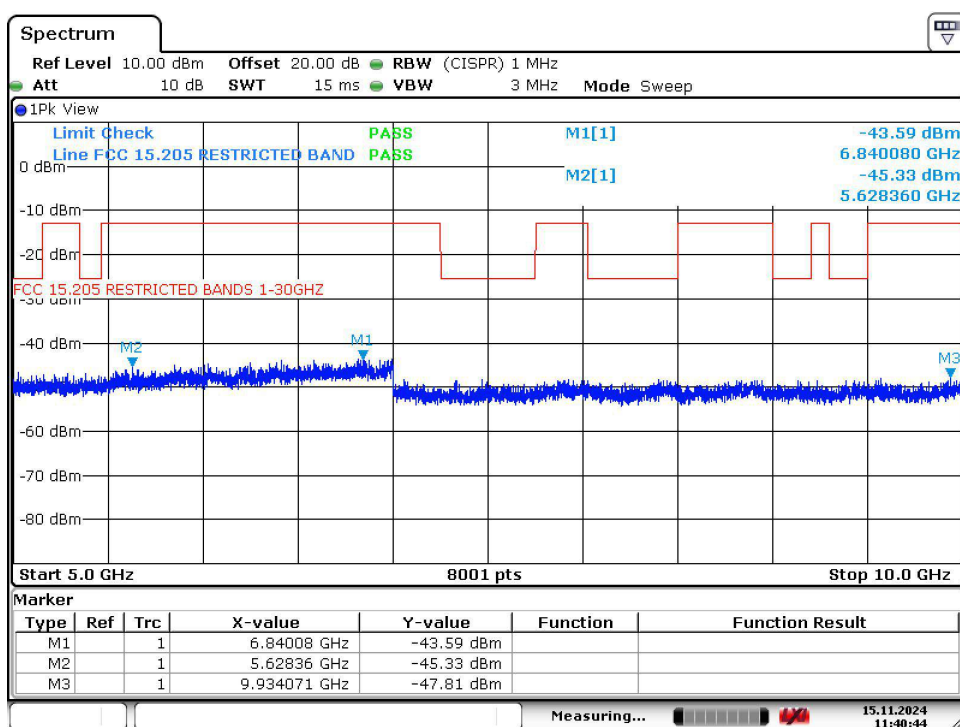
Requirement: Emissions Below Restricted Band Limits

Tech: CL Payne

Low Channel: 2405 MHz Detector Function: Peak

Frequency Range: 20,000 MHz to 25,000 MHz

Result: Pass



Date: 15.NOV.2024 11:40:44

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

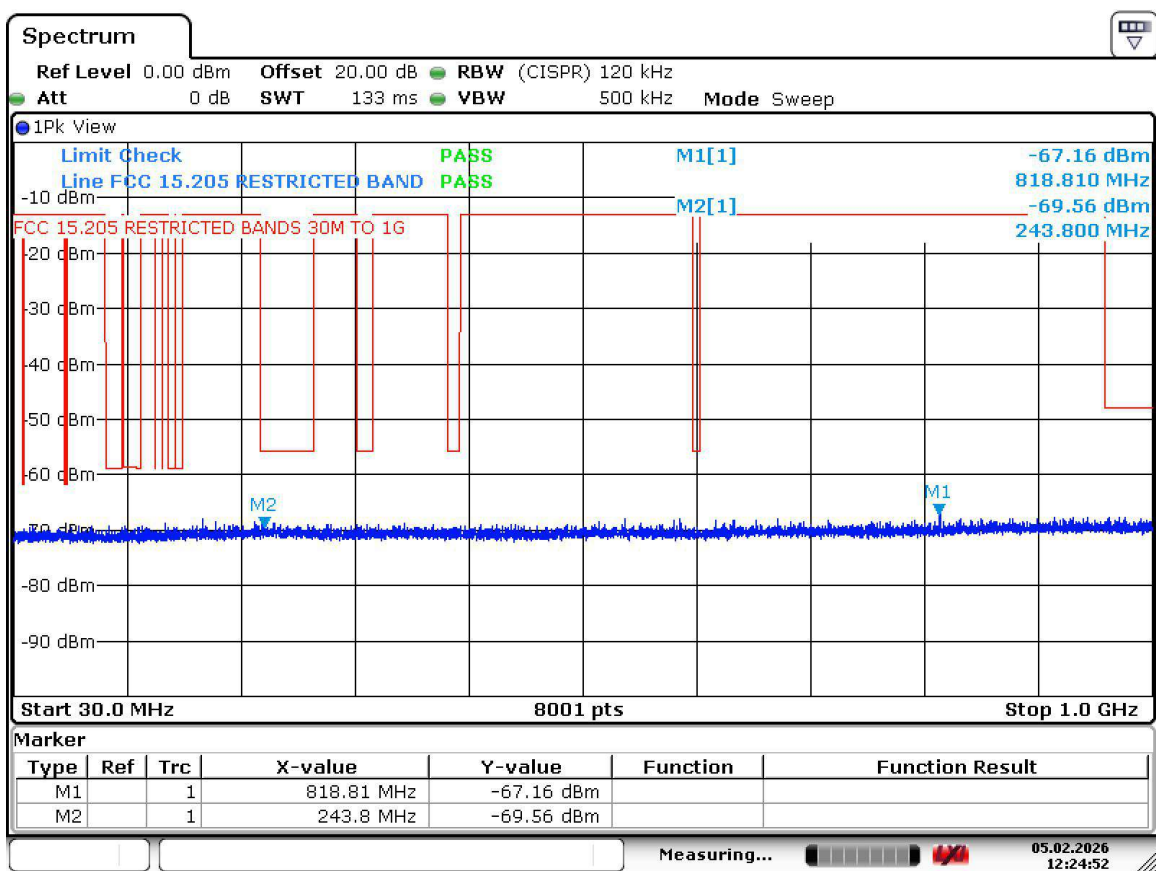
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 30 MHz to 1,000 MHz

Result: Pass



Date: 5.FEB.2026 12:24:53

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

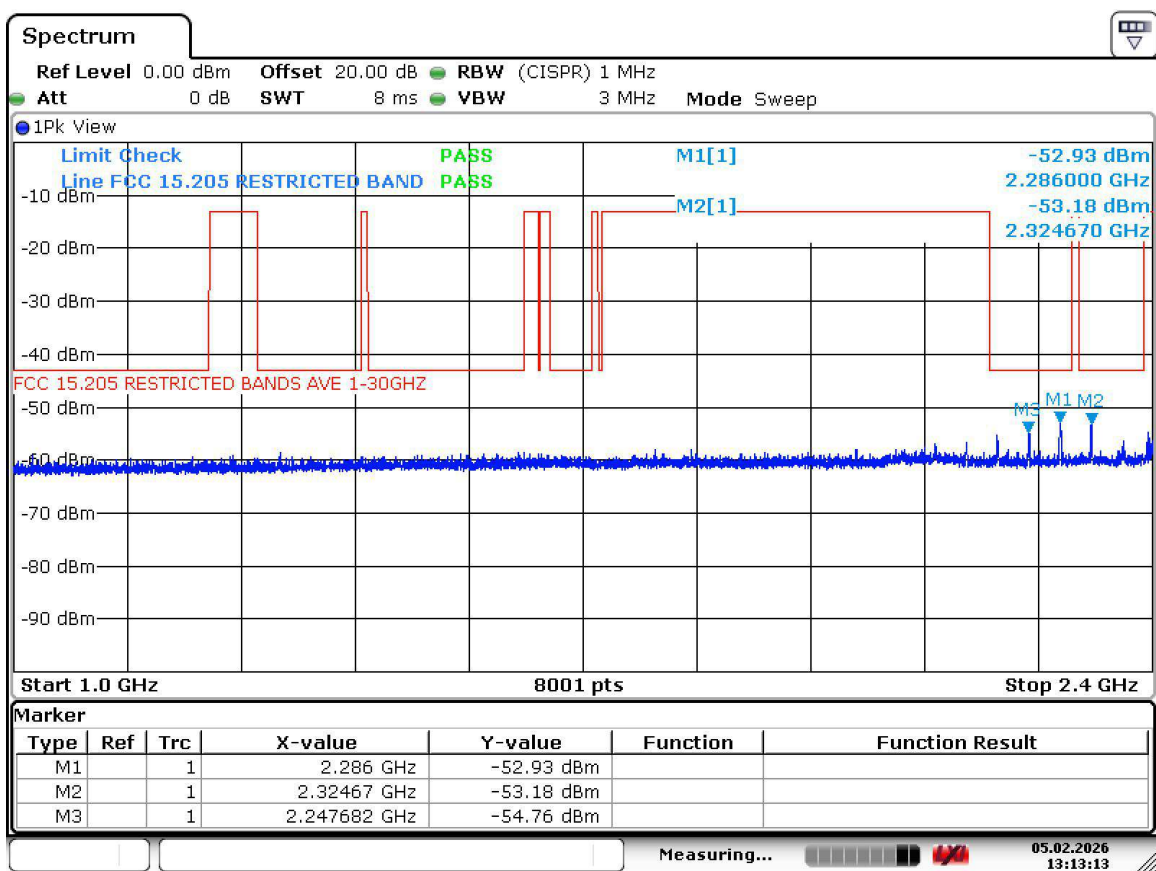
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 1,000 MHz to 2,400 MHz

Result: Pass



Date: 5.FEB.2026 13:13:14

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

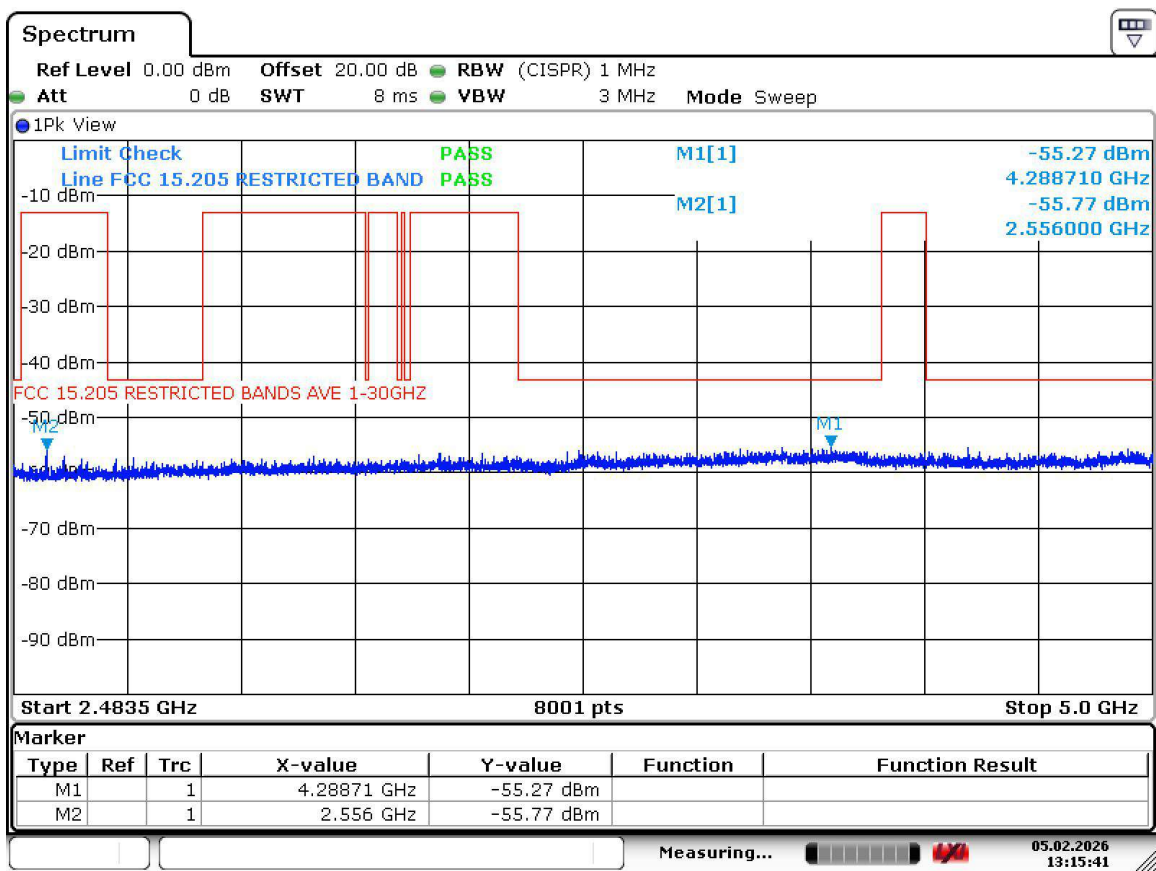
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 2,483.5 MHz to 5,000 MHz

Result: Pass



Date: 5.FEB.2026 13:15:42

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

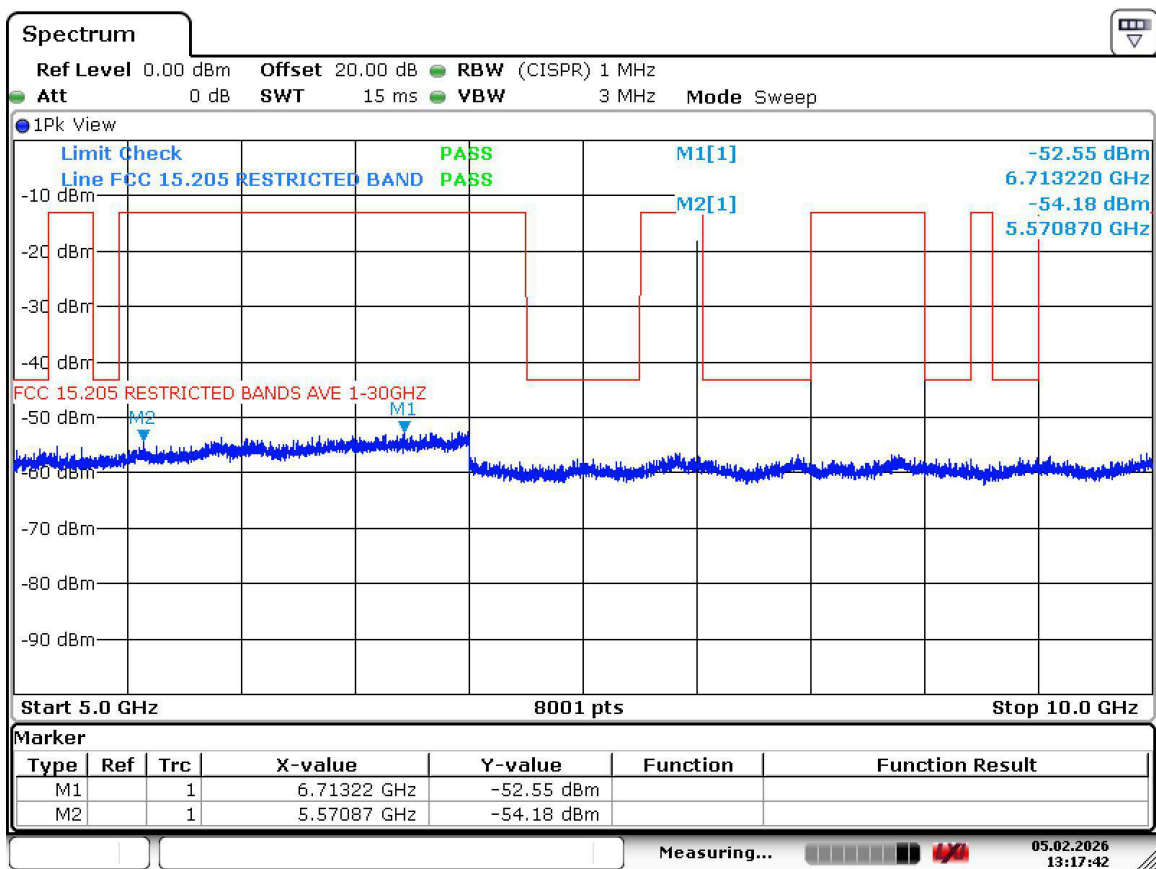
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 5,000 MHz to 10,000 MHz

Result: Pass



Date: 5.FEB.2026 13:17:42

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

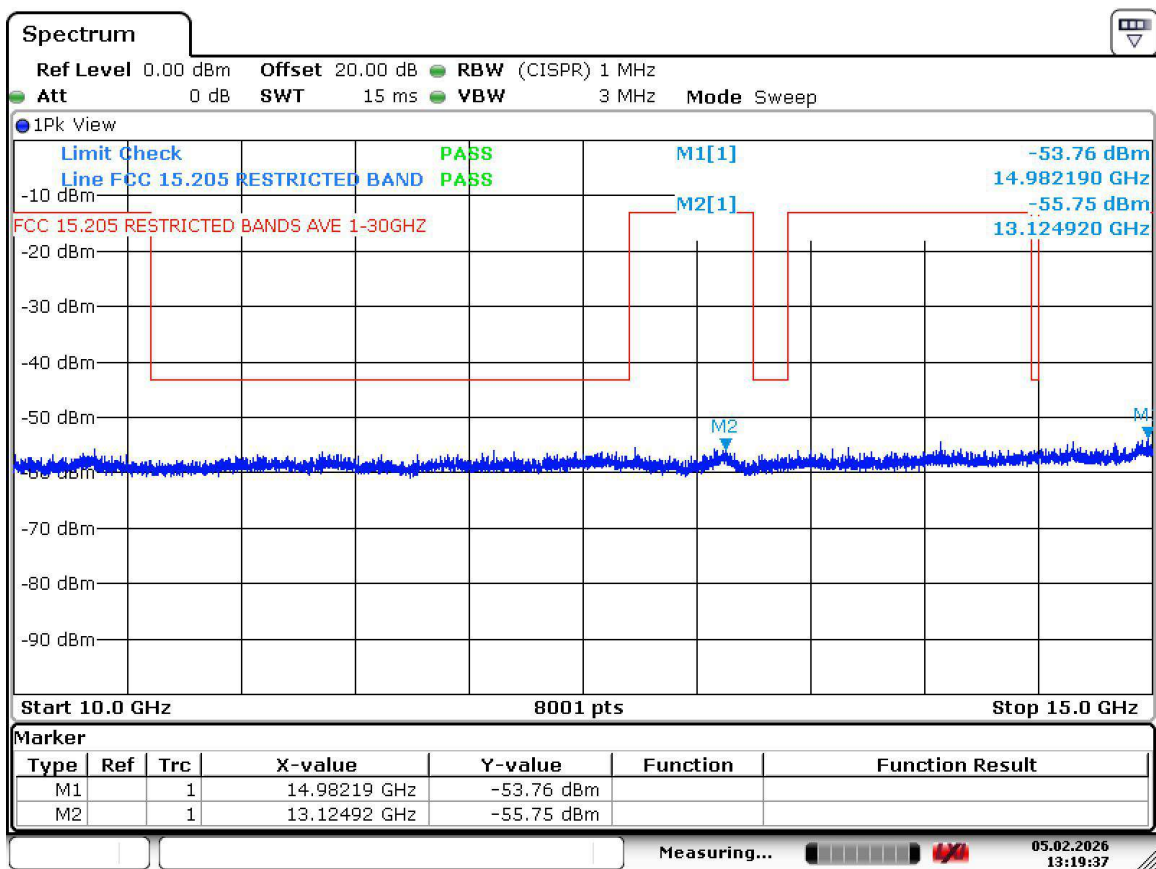
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 10,000 MHz to 15,000 MHz

Result: Pass



Date: 5.FEB.2026 13:19:38

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

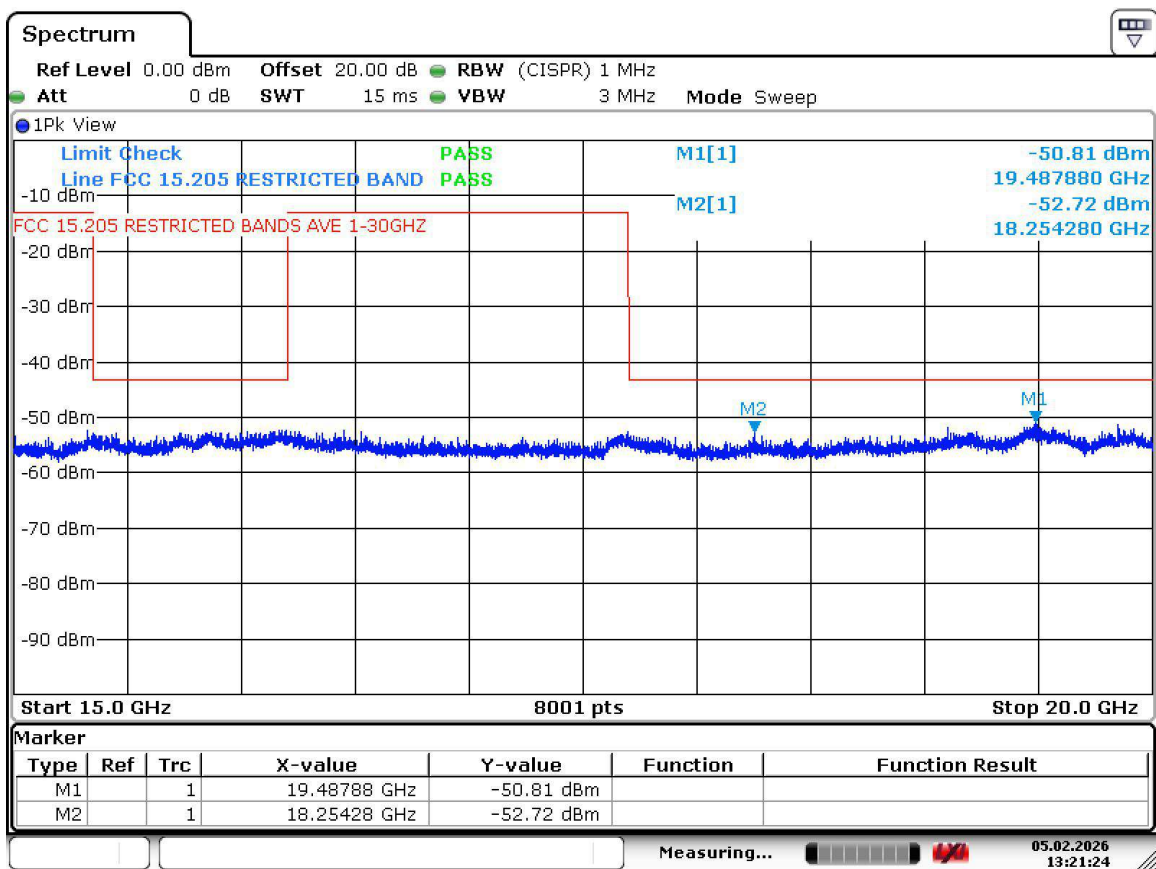
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 15,000 MHz to 20,000 MHz

Result: Pass



Date: 5.FEB.2026 13:21:24

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

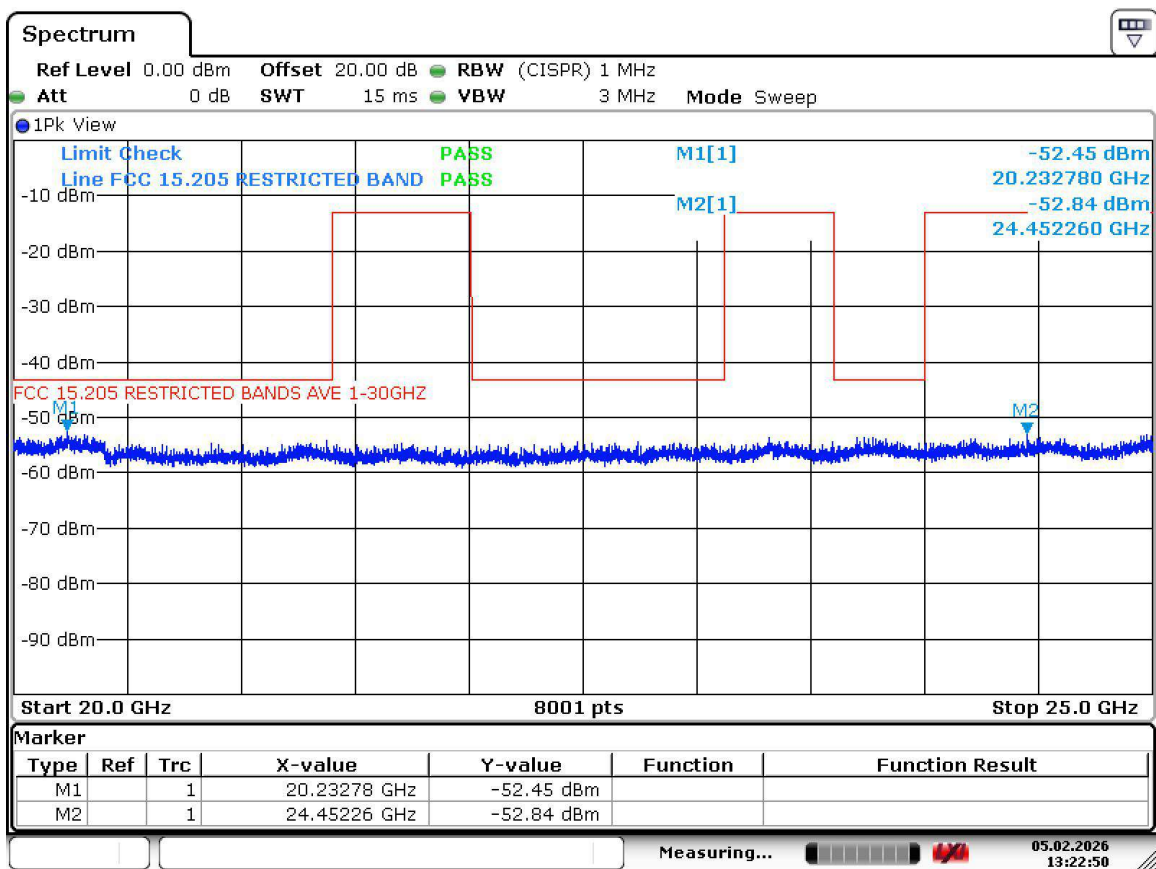
Tech: CL Payne

Mid Channel: 2440 MHz

Detector Function: Peak

Frequency Range: 20,000 MHz to 25,000 MHz

Result: Pass



Date: 5.FEB.2026 13:22:51

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

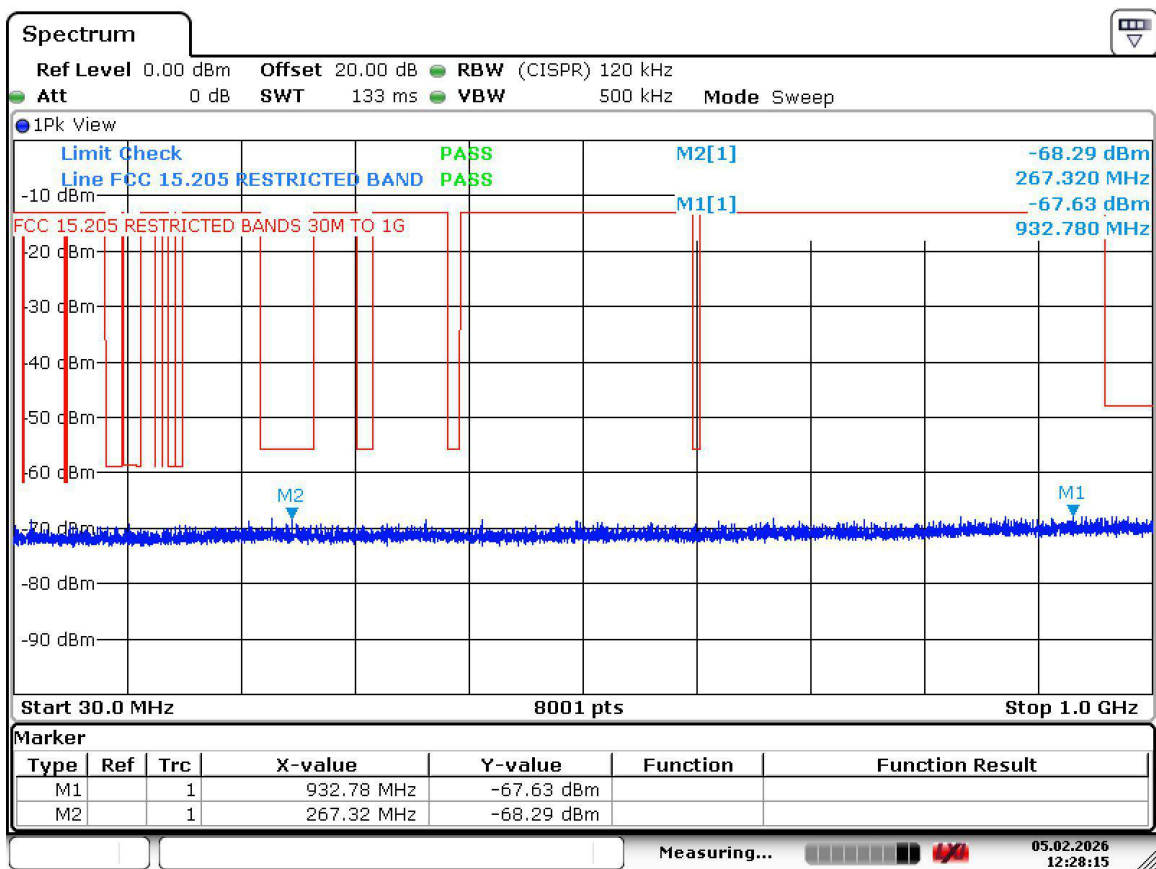
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 30 MHz to 1,000 MHz

Result: Pass



Date: 5.FEB.2026 12:28:16

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

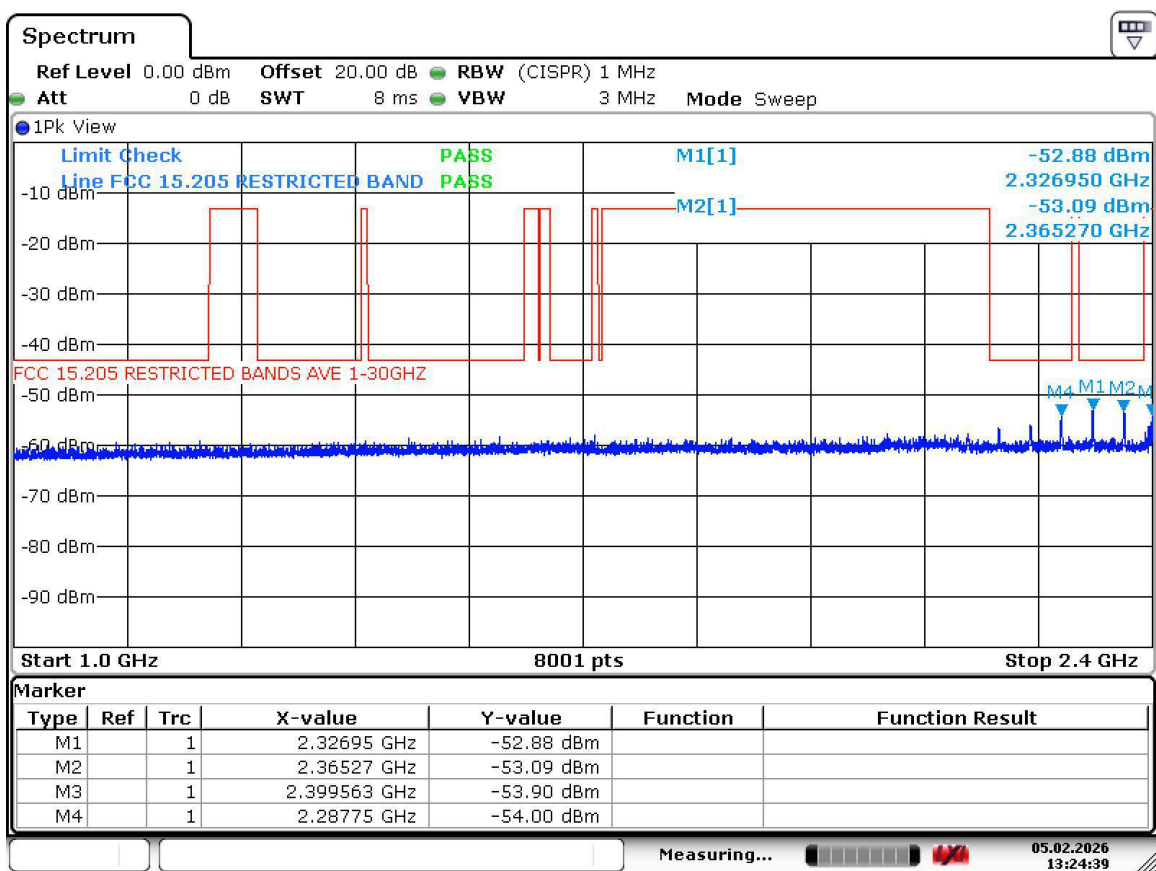
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 1,000 MHz to 2,400 MHz

Result: Pass



Date: 5.FEB.2026 13:24:39

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

Tech: CL Payne

High Channel: 2480 MHz

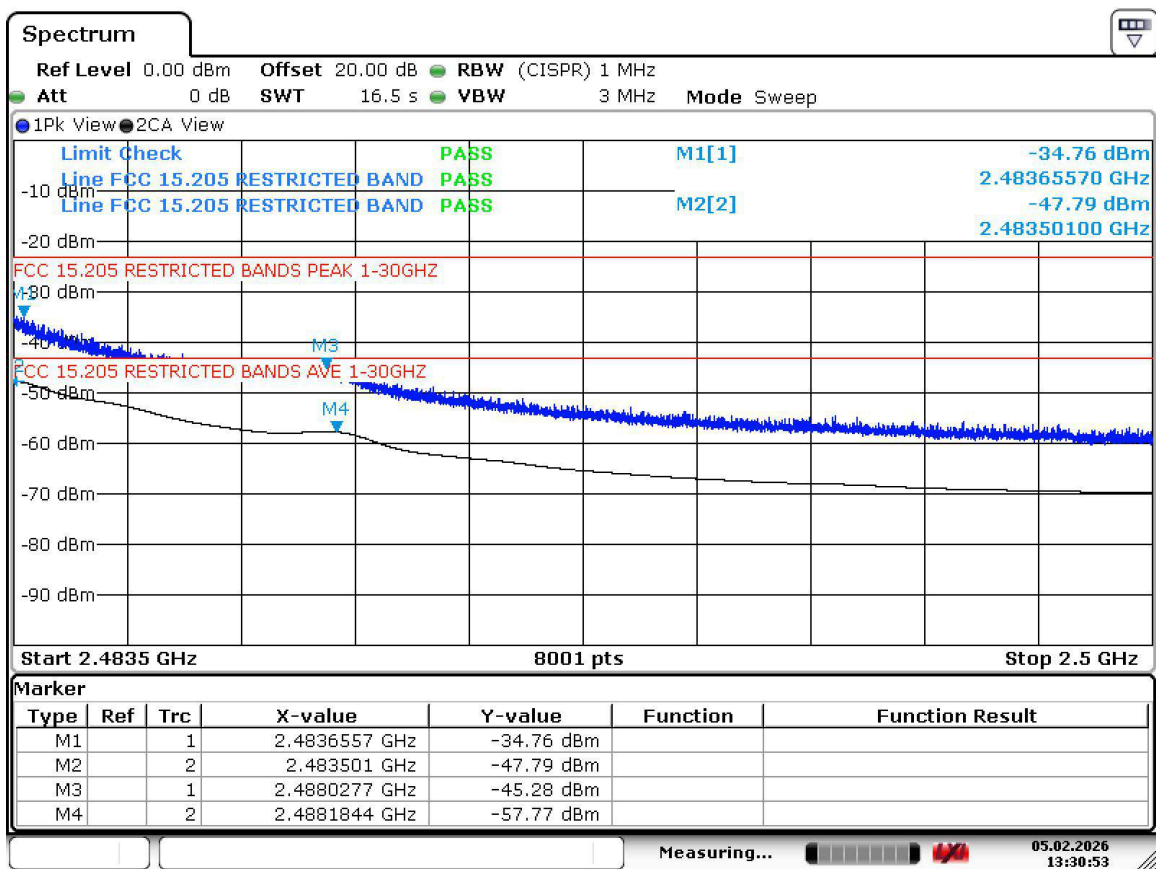
Detector Function: Peak

Frequency Range: 2,483.5 MHz to 2,500 MHz

Result: Pass

Top Trace - Peak

Bottom Trace - Average



Date: 5.FEB.2026 13:30:54

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

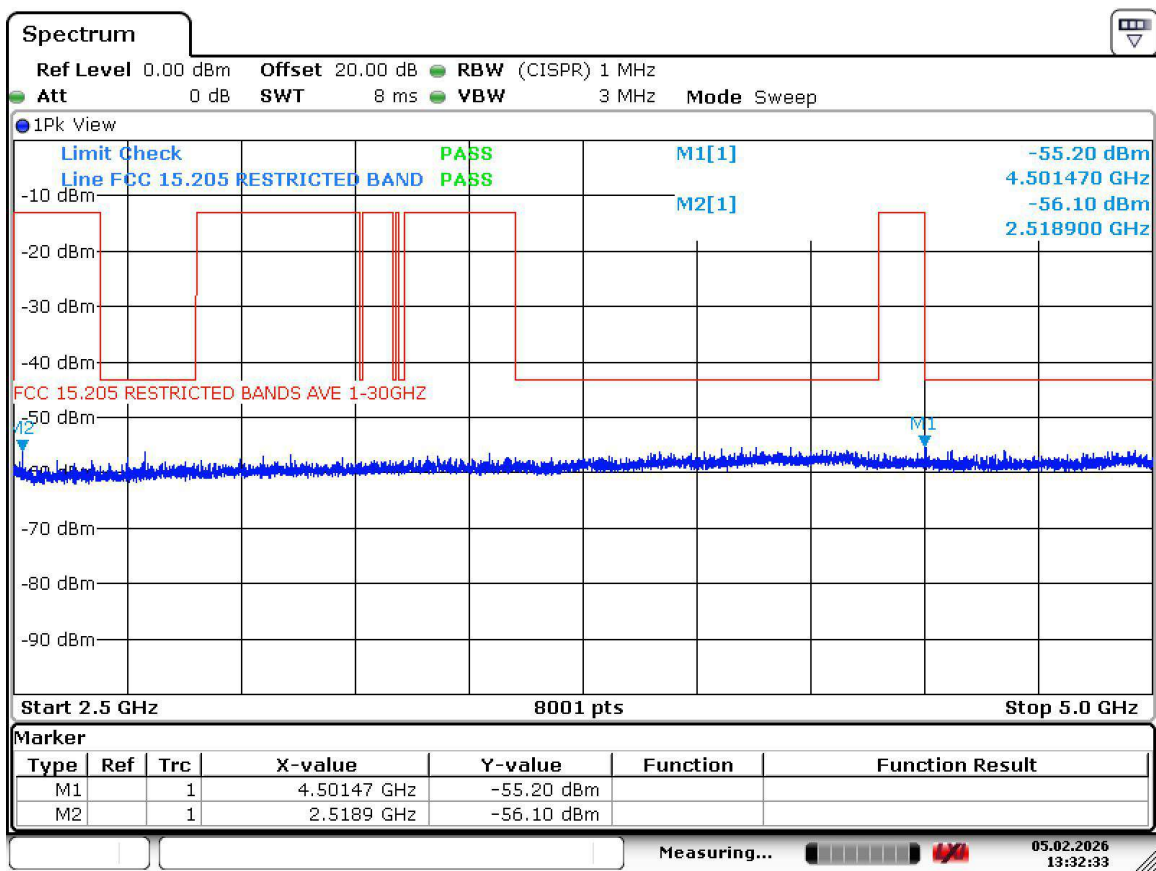
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 2,500 MHz to 5,000 MHz

Result: Pass



Date: 5.FEB.2026 13:32:34

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

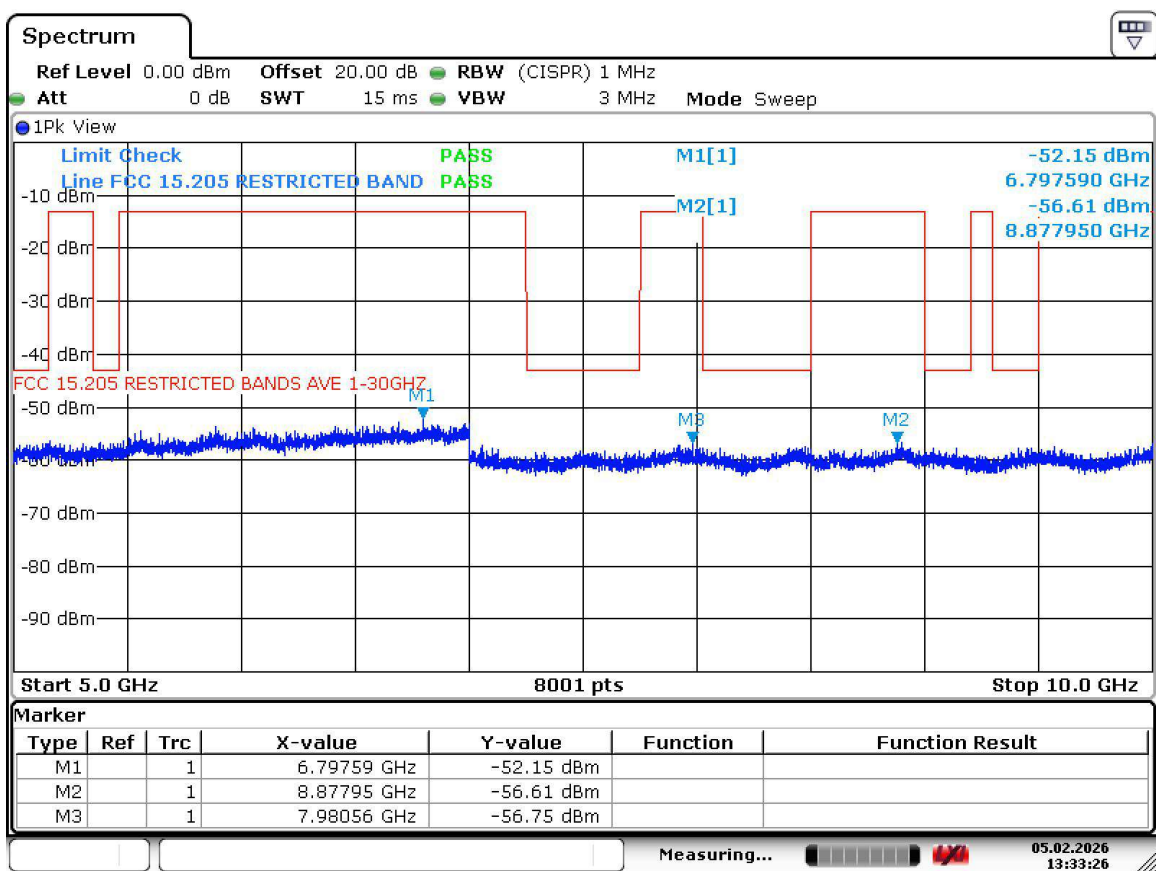
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 5,000 MHz to 10,000 MHz

Result: Pass



Date: 5.FEB.2026 13:33:27

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

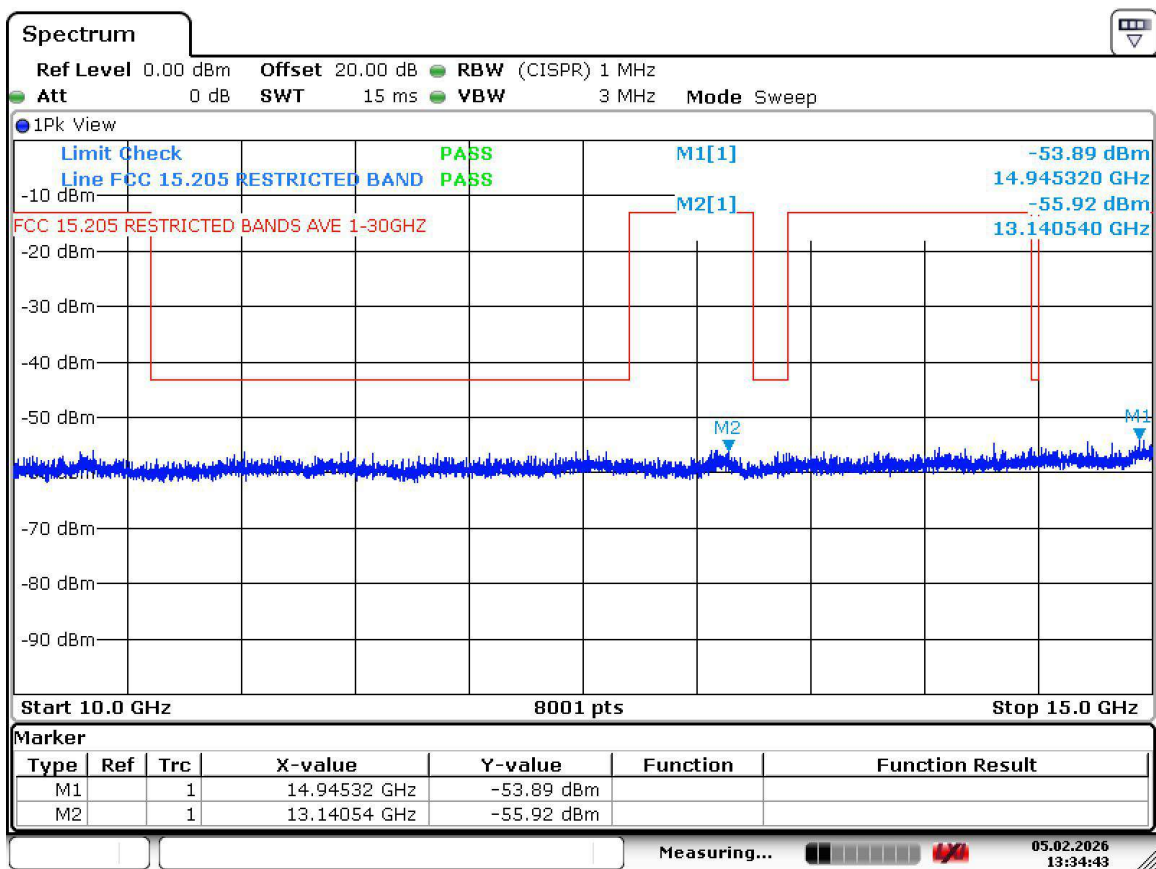
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 10,000 MHz to 15,000 MHz

Result: Pass



Date: 5.FEB.2026 13:34:44

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

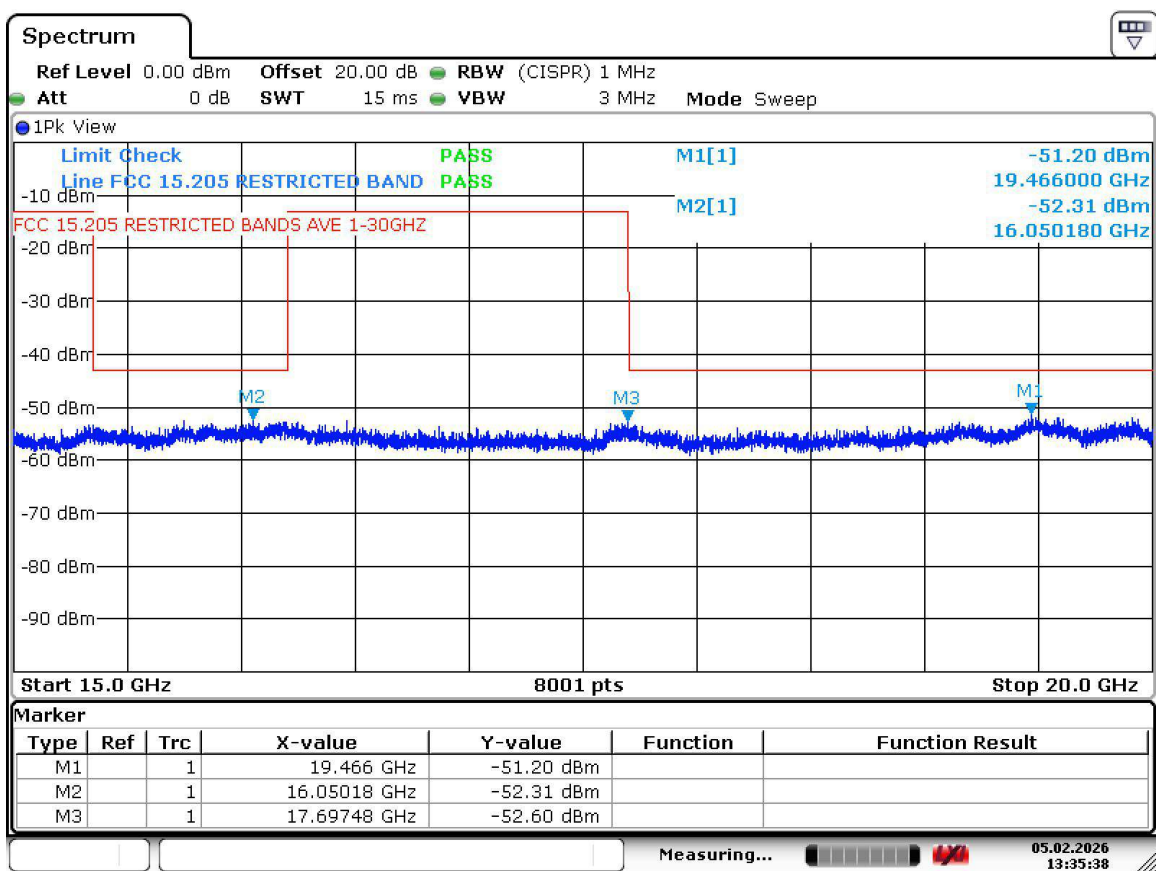
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 15,000 MHz to 20,000 MHz

Result: Pass



Date: 5.FEB.2026 13:35:38

Client: Snap One LLC

Date: 05 Feb 2026

DNB Job: 66068

EUT: Motion Dimmer

Model No: C4-L-MDIM

Requirement: Emissions Below Restricted Band Limits

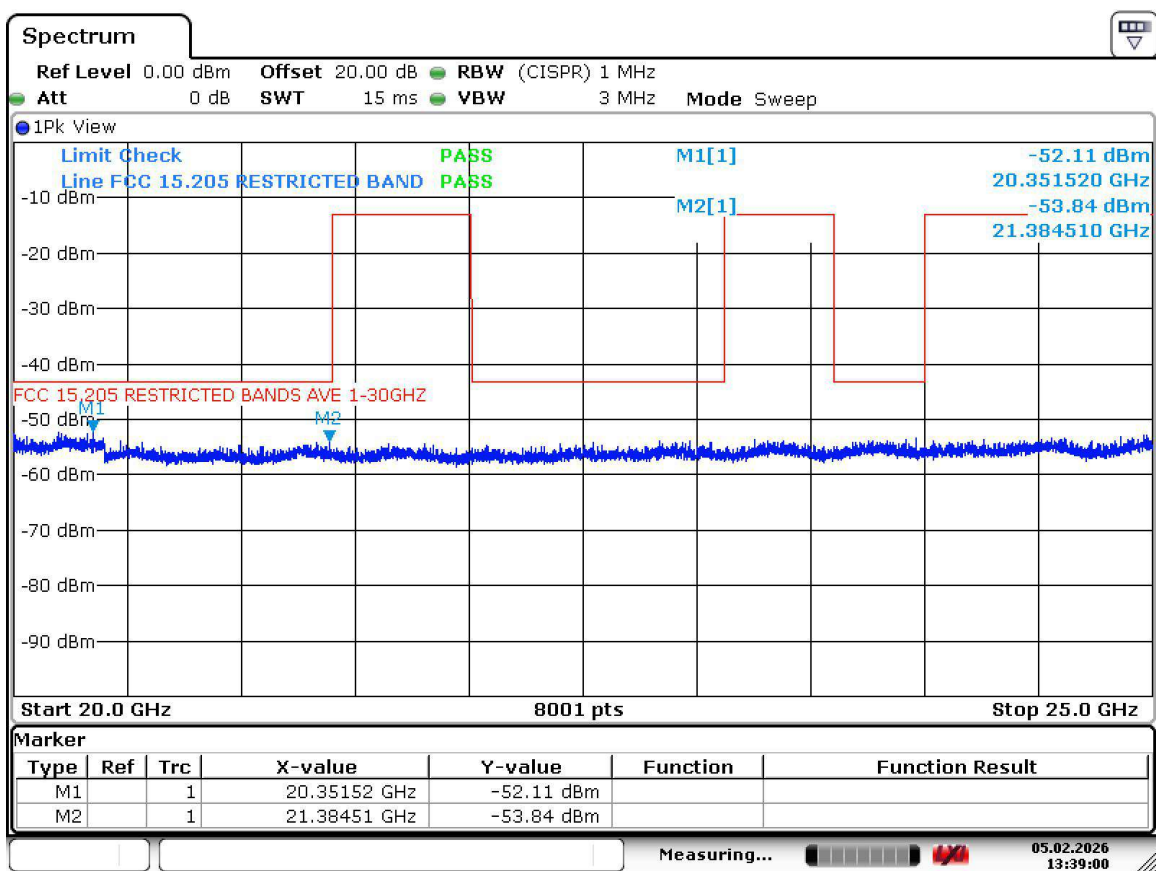
Tech: CL Payne

High Channel: 2480 MHz

Detector Function: Peak

Frequency Range: 20,000 MHz to 25,000 MHz

Result: Pass



Date: 5.FEB.2026 13:39:01

End of Report UT66068A-004