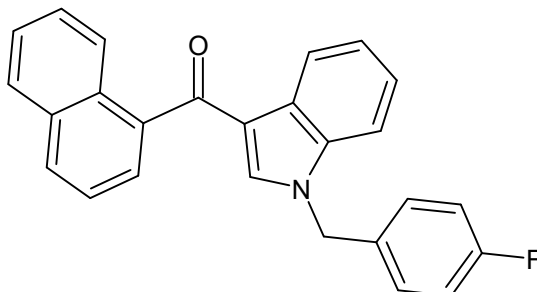




## FUB-JWH-018

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



### 1. GENERAL INFORMATION

**IUPAC Name:** [1-(4-fluorobenzyl)-1H-indol-3-yl](naphthalen-1-yl)methanone

**CAS#:** NA

**Synonyms:** {1-[(4-fluorophenyl)methyl]-1H-indol-3-yl}(naphthalen-1-yl)methanone

**Source:** DEA Reference Material Collection

**Appearance:** White Powder

**UV<sub>max</sub>(nm):** Not determined

### 2. CHEMICAL AND PHYSICAL DATA

#### 2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
Neutral	C <sub>26</sub> H <sub>18</sub> FNO	379	122.3



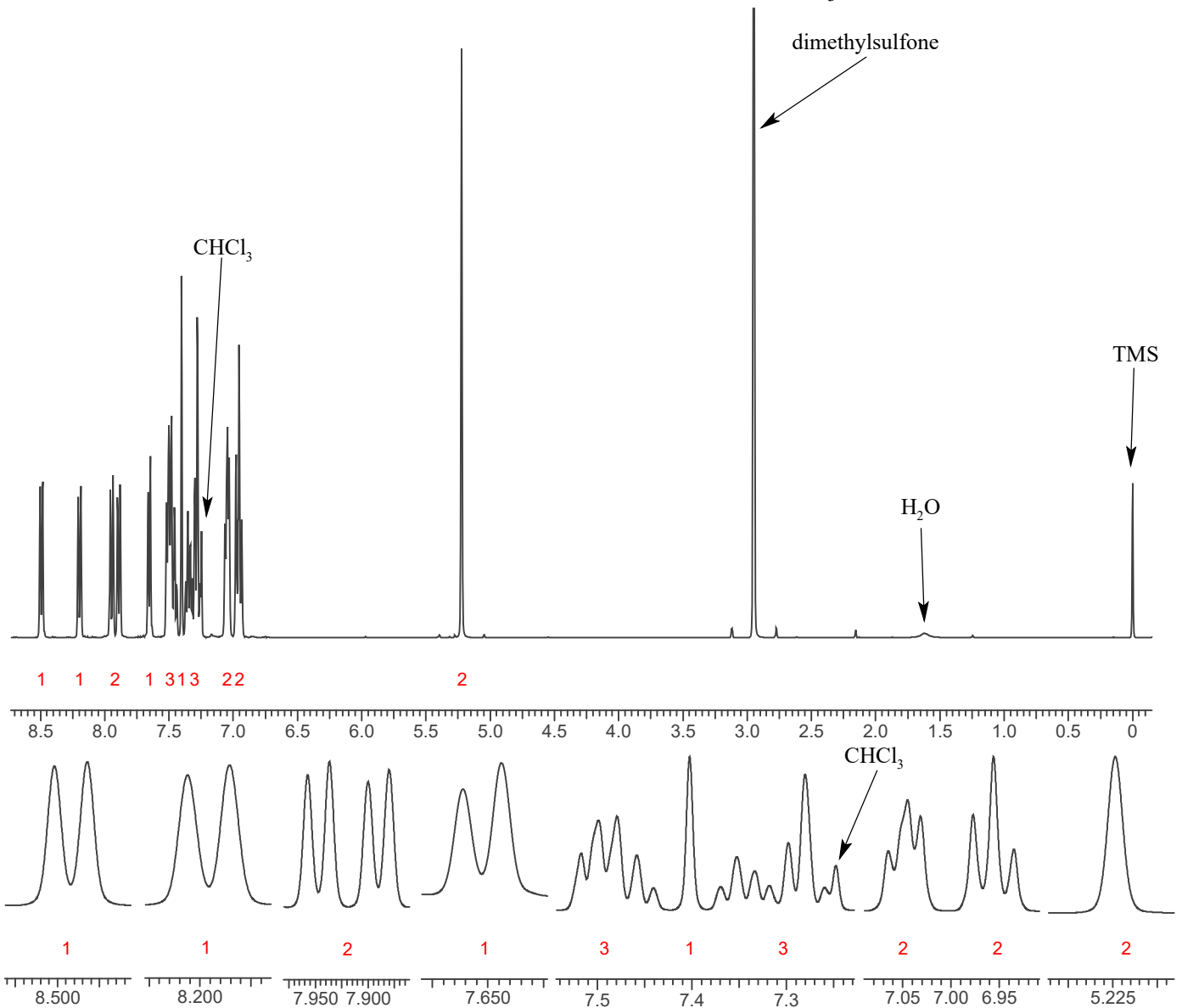
### 3. QUALITATIVE DATA

#### 3.1 NUCLEAR MAGNETIC RESONANCE

*Sample Preparation:* Dilute analyte to ~25 mg/mL in CDCl<sub>3</sub> containing TMS for 0 ppm reference and dimethylsulfone as quantitative internal standard.

**Instrument:** 400 MHz NMR spectrometer  
**Parameters:** Spectral width: at least containing -3 ppm through 13 ppm  
Pulse angle: 90°  
Delay between pulses: 45 seconds

<sup>1</sup>HNMR: FUB-JWH-018; Lot# RM-140805-04; CDCl<sub>3</sub>; 400MHz





# FUB-JWH-018

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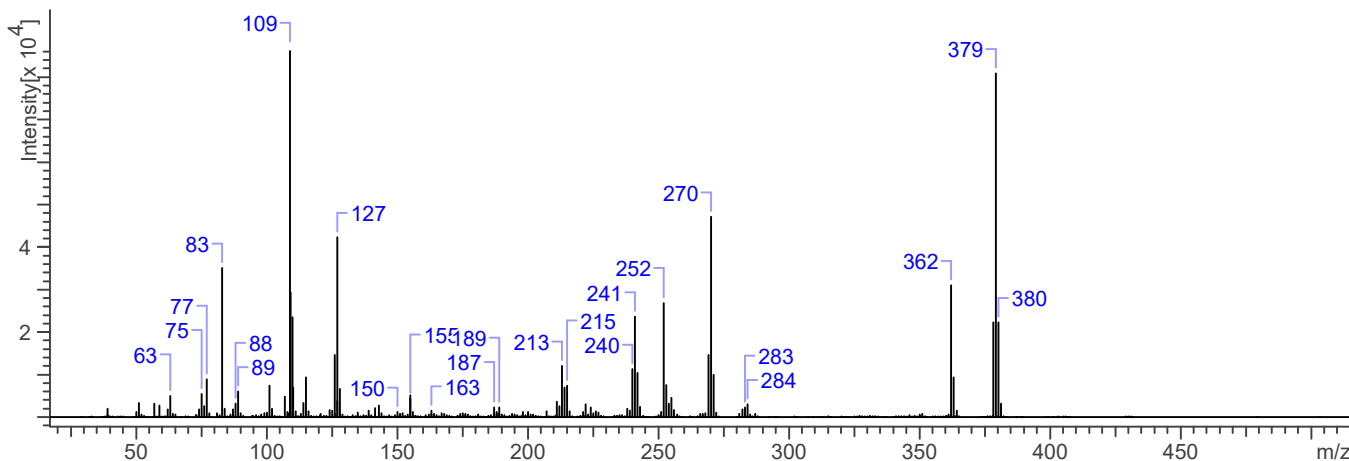
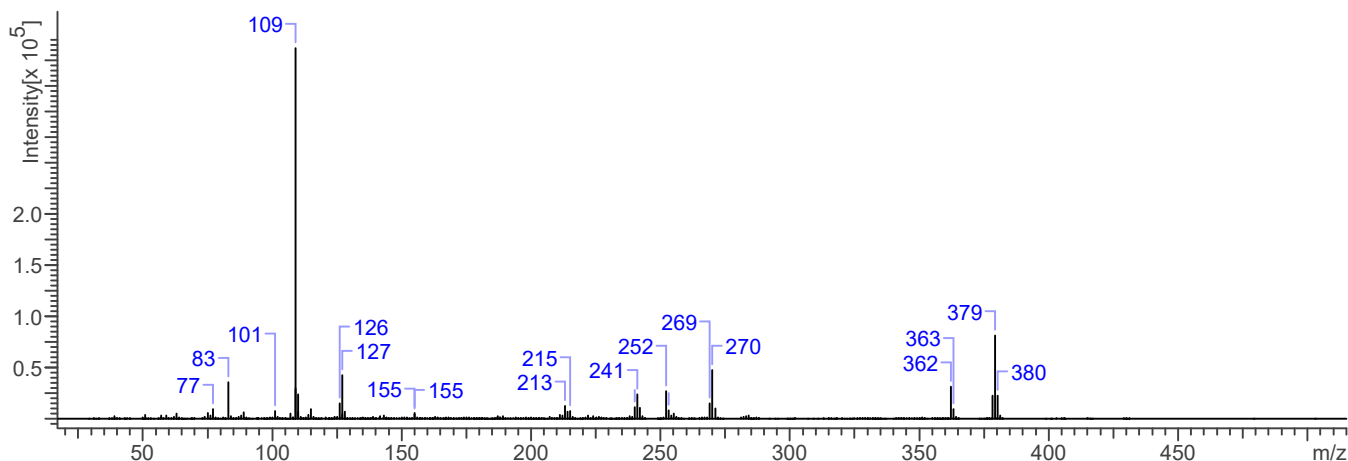


## 3.2 GAS CHROMATOGRAPHY/MASS SPECTROMETRY

*Sample Preparation:* Dilute analyte ~ 3mg/mL in CHCl<sub>3</sub>

**Instrument:** Agilent gas chromatograph operated in split mode with MS detector  
**Column:** HP-5 MS (or equivalent); 30m x 0.25 mm x 0.25 μm  
**Carrier Gas:** Helium at 0.6 mL/min  
**Temperatures:** Injector: 280°C                      MSD transfer line: 280°C  
MS Source: 230°C                      MS Quad: 150°C  
Oven program:  
    1) 100°C initial temperature for 1.0 min  
    2) Ramp to 300°C at 12 °C/min  
    3) Hold final temperature for 15.0 min  
**Injection Parameters:** Split Ratio = 25:1, 1 μL injected  
**MS Parameters:** Mass scan range: 30-550 amu                      Threshold: 150  
Tune file: stune.u                      Acquisition mode: scan  
**Retention Time:** 26.355 min

EI Mass Spectrum: FUB-JWH-018; Lot# RM-140805-04





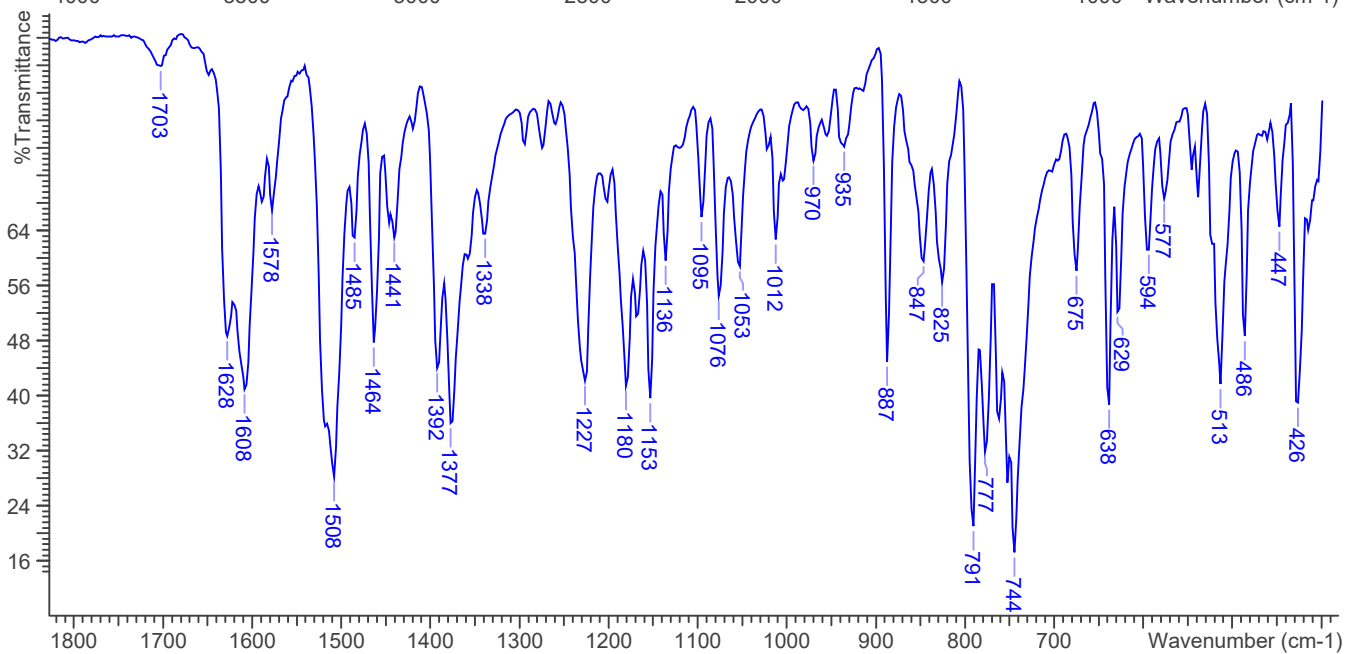
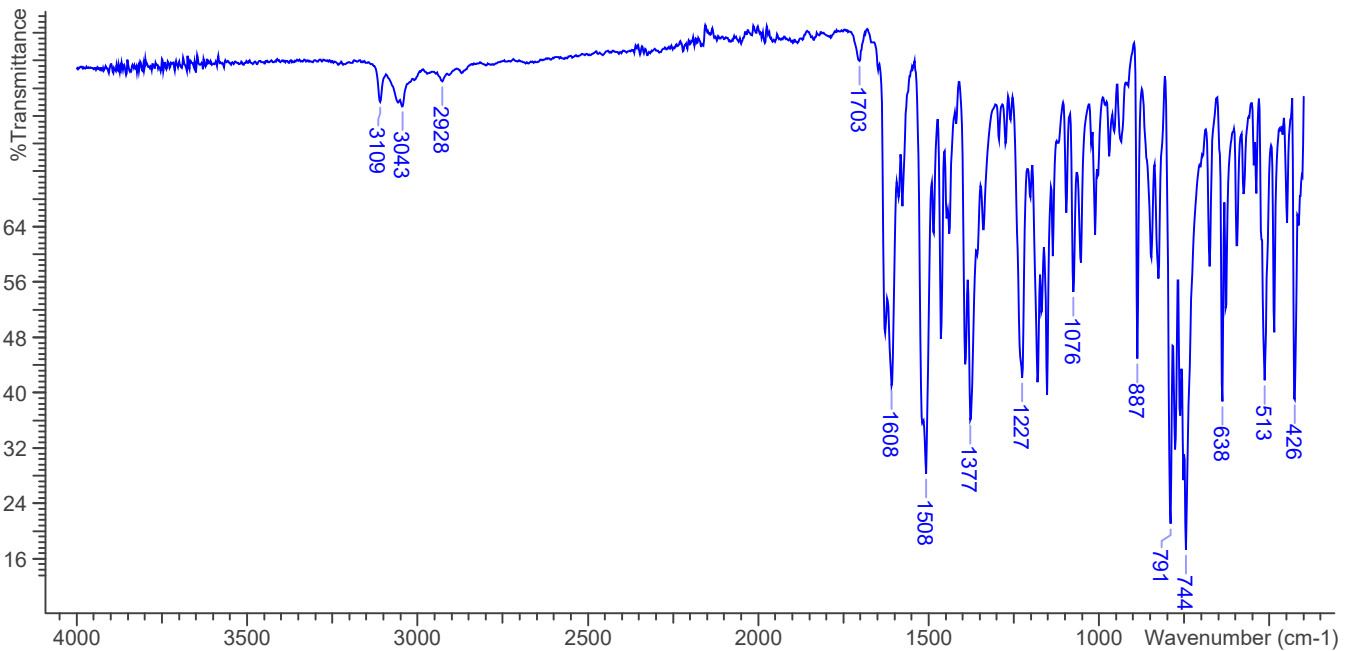
The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.

### 3.3 INFRARED SPECTROSCOPY (FTIR)

**Instrument:** FTIR with diamond ATR attachment (1 bounce)

**Scan Parameters:**  
Number of scans: 32  
Number of background scans: 32  
Resolution: 4 cm<sup>-1</sup>  
Sample gain: 8  
Aperture: 150

FTIR ATR (Diamond 1 Bounce): FUB-JWH-018; Lot# RM-140805-04





**FUB-JWH-018**

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#### **4. ADDITIONAL RESOURCES**

*[Wikipedia](#)*