

Free Full Text from Publisher [Look Up Full Text](#) [Find PDF](#) [Full Text Options](#) [Export...](#) [Add to Marked List](#)

## Measurements of triple-differential cross sections for inclusive isolated-photon plus jet events in pp collisions at root s=8 TeV

By: [Sirunyan, AM](#) (Sirunyan, A. M.)<sup>[1]</sup>; [Tumasyan, A](#) (Tumasyan, A.)<sup>[1]</sup>; [Adam, W](#) (Adam, W.)<sup>[2]</sup>; [Ambrogi, F](#) (Ambrogi, F.)<sup>[2]</sup>; [Asilar, E](#) (Asilar, E.)<sup>[2]</sup>; [Bergauer, T](#) (Bergauer, T.)<sup>[2]</sup>; [Brandstetter, J](#) (Brandstetter, J.)<sup>[2]</sup>; [Dragicevic, M](#) (Dragicevic, M.)<sup>[2]</sup>; [Ero, J](#) (Ero, J.)<sup>[2]</sup>; [Del Valle, AE](#) (Del Valle, A. Escalante)<sup>[2]</sup> ...[More](#)

Group Author(s): CMS Collaboration  
[View Web of Science ResearcherID and ORCID](#)

EUROPEAN PHYSICAL JOURNAL C  
 Volume: 79 Issue: 11  
 Article Number: 969  
 DOI: 10.1140/epjc/s10052-019-7451-7  
 Published: NOV 2019  
 Document Type: Article  
[View Journal Impact](#)

### Abstract

Measurements are presented of the triple-differential cross section for inclusive isolated-photon+jet events in pp collisions at root s = 8 TeV as a function of photon transverse momentum (p(T)(gamma)), photon pseudorapidity (eta(gamma)), and jet pseudorapidity (eta(jet)). The data correspond to an integrated luminosity of 19.7 fb(-1) that probe a broad range of the available phase space, for vertical bar eta(gamma)vertical bar < 1.44 and 1.57 < vertical bar eta(gamma)vertical bar < 2.50, vertical bar eta(jet)vertical bar < 2.5, 40 < p(T)(gamma) < 1000 GeV, and jet transverse momentum, p(T)(jet), > 25 GeV. The measurements are compared to next-to-leading order perturbative quantum chromodynamics calculations, which reproduce the data within uncertainties.

### Author Information

Reprint Address: Sirunyan, AM (reprint author)  
 + Yerevan Phys Inst, Yerevan, Armenia.

#### Addresses:

- + [ 1 ] Yerevan Phys Inst, Yerevan, Armenia
- + [ 2 ] Inst Hochenergiephys, Vienna, Austria
- + [ 3 ] Inst Nucl Problems, Minsk, BELARUS
- + [ 4 ] Univ Antwerp, Antwerp, Belgium
- + [ 5 ] Vrije Univ Brussel, Brussels, Belgium
- + [ 6 ] Univ Libre Bruxelles, Brussels, Belgium
- + [ 7 ] Univ Ghent, Ghent, Belgium
- + [ 8 ] Catholic Univ Louvain, Louvain La Neuve, Belgium
- + [ 9 ] Ctr Brasileiro Pesquisas Fis, Rio De Janeiro, Brazil
- + [ 10 ] Univ Estado Rio de Janeiro, Rio De Janeiro, Brazil
- + [ 11 ] Univ Estadual Paulista, Sao Paulo, Brazil
- + [ 12 ] Univ Fed ABC, Sao Paulo, Brazil
- + [ 13 ] Bulgarian Acad Sci, Inst Nucl Res & Nucl Energy, Sofia, Bulgaria
- + [ 14 ] Univ Sofia, Sofia, Bulgaria
- + [ 15 ] Beihang Univ, Beijing, Peoples R China
- + [ 16 ] Inst High Energy Phys, Beijing, Peoples R China
- + [ 17 ] Peking Univ, State Key Lab Nucl Phys & Technol, Beijing, Peoples R China
- + [ 18 ] Tsinghua Univ, Beijing, Peoples R China
- + [ 19 ] Univ Los Andes, Bogota, Colombia
- + [ 20 ] Univ Split, Fac Elect Engr Mech Engr & Naval Architecture, Split, Croatia
- + [ 21 ] Univ Split, Fac Sci, Split, Croatia
- + [ 22 ] Inst Rudjer Boskovic, Zagreb, Croatia
- + [ 23 ] Univ Cyprus, Nicosia, Cyprus
- + [ 24 ] Charles Univ Prague, Prague, Czech Republic
- + [ 25 ] Escuela Politec Nacl, Quito, Ecuador
- + [ 26 ] Univ San Francisco Quito, Quito, Ecuador
- + [ 27 ] Acad Sci Res & Technol Arab Republ Egypt, Egyptian Network High Energy Phys, Cairo, Egypt

### Citation Network

In Web of Science Core Collection

0

Times Cited

[Create Citation Alert](#)

30

Cited References

[View Related Records](#)

### Use in Web of Science

Web of Science Usage Count

10

Last 180 Days

10

Since 2013

[Learn more](#)

This record is from:

Web of Science Core Collection  
 - Science Citation Index Expanded

#### Suggest a correction

If you would like to improve the quality of the data in this record, please [suggest a correction](#).