

Contribution to the Wikipedia *Circle of Confusion* Article

My claim to having authored the CoC equation documented at Wikipedia: [Circle of Confusion](#)

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February 2017

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I am the author of the Wikipedia *Circle of Confusion* article's equation for calculating a **CoC** diameter that will take into account the anticipated image viewing distance, the user's desired final-image resolution (in lp/mm) for a 25cm viewing distance and the anticipated enlargement factor.

The equation has withstood the test of time in the Wikipedia crucible of debate since March of 2007 - almost ten years and counting – without contention from other contributors.

Quoting Wikipedia's [Circle of Confusion](#) article, here is the text of my contribution:

All three factors above are accommodated with this formula:

CoC (mm) = viewing distance (cm) / desired final-image resolution (lp/mm) for a 25 cm viewing distance / enlargement / 25

For example, to support a final-image resolution equivalent to 5 lp/mm for a 25 cm viewing distance when the anticipated viewing distance is 50 cm and the anticipated enlargement is 8:

$$\text{CoC} = 50 / 5 / 8 / 25 = 0.05 \text{ mm}$$

The following pages of this document contain some annotated screenshots which support my contention.

Despite my having contributed the CoC equation anonymously (perhaps foolishly), identified only as IP address 71.96.68.110, it's apparent that Wikipedia user "Zilch0MD" made an update and additional contributions that same day, 11 March 2007, to the "*Circle of Confusion*" article and five days earlier, to Wikipedia's "*Depth of Field*" article.

And: An IP Address Lookup, performed on 30 January 2017, shows that the IP address 71.96.68.110 still comes from a location in North Texas, where I still reside.

https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115502797

Circle of confusion: Difference between revisions

From Wikipedia, the free encyclopedia

Revision as of 04:50, 5 March 2007 (edit)
 Srieffler (talk | contribs)
 (Category:Geometrical optics; portal link in correct place.)
 ← Previous edit

Revision as of 06:32, 16 March 2007 (edit) (undo)
 71.96.68.110 (talk)
 (→Basis for circle of confusion diameter limit)
 Next edit →

This was my IP address when I posted these contributions anonymously, in 2007.

Line 51:

the CoC for the original image is 0.2 mm/7, or 0.029 mm.

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the CoC for the original image is 0.2 mm/7, or 0.029 mm.

 +
 + All three factors are accommodated with this formula:
 +
 + :CoC Diameter Limit (mm) = anticipated viewing distance (cm) / desired print resolution for a 25cm viewing distance (lp/mm) / anticipated enlargement factor / 25
 +
 + For example, to support a print resolution equivalent to 5 lp/mm for a 25cm viewing distance when the anticipated viewing distance is 50 cm and the anticipated enlargement factor is 8:
 +
 + :CoC Diameter Limit = 50 / 5 / 8 / 25 = 0.05mm

Since the final image size is not usually known at the time of taking a

Annotated screenshot from: https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115502797

https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115567682

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Article | Talk | Read | Edit | View history | Search Wikipedia

Circle of confusion: Difference between revisions

From Wikipedia, the free encyclopedia

Revision as of 06:32, 16 March 2007 (edit)
 71.96.68.110 (talk)
 (→Basis for circle of confusion diameter limit)
 ← Previous edit

Revision as of 15:09, 16 March 2007 (edit) (undo)
 ● Zilch0md (talk | contribs)
 m (→Basis for circle of confusion diameter limit)
 Next edit →

An update I made, later that same day, logged in as Wikipedia user Zilch0md (not anonymously)

Line 56:

:CoC Diameter Limit (mm) = anticipated viewing distance (cm) / desired print resolution for a 25cm viewing distance (lp/mm) / anticipated enlargement factor / 25

- For example, to support a print resolution equivalent to 5 lp/mm for a 25cm viewing distance when the anticipated viewing distance is **50 cm** and the anticipated enlargement factor is 8:

:CoC Diameter Limit = 50 / 5 / 8 / 25 = 0.05mm

Line 56:

:CoC Diameter Limit (mm) = anticipated viewing distance (cm) / desired print resolution for a 25cm viewing distance (lp/mm) / anticipated enlargement factor / 25

+ For example, to support a print resolution equivalent to 5 lp/mm for a 25cm viewing distance when the anticipated viewing distance is **50cm** and the anticipated enlargement factor is 8:

:CoC Diameter Limit = 50 / 5 / 8 / 25 = 0.05mm

Revision as of 15:09, 16 March 2007

For the closely related topic in microscopy, see Point spread function.

In optics, a **circle of confusion**, (also known as *disk of confusion*, *circle of indistinctness*, *blur circle*, etc.), is an optical spot caused by a cone of light rays from a lens not coming to a perfect focus when imaging a point source.

Annotated screenshot from:
https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115567682

https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115571182

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Circle of confusion: Difference between revisions

From Wikipedia, the free encyclopedia

Revision as of 15:09, 16 March 2007 (edit)
Zilch0md (talk | contribs)

m (→Basis for circle of confusion diameter limit)
← Previous edit

Another contribution I made to this article, later still that same day, as user Zilch0md

Revision as of 15:26, 16 March 2007 (edit) (undo)
● Zilch0md (talk | contribs)

m (→Replaced "lines per millimeter" with "line pairs per millimeter" to match the convention defined in the image resolution article)
Next edit →

Line 29:	Line 29:
distance, termed the "near distance for distinct vision"	distance, termed the "near distance for distinct vision"
[[#CITEREFRay2002 (Ray 2002, 216)]]. Is approximately 25 cm. At this	[[#CITEREFRay2002 (Ray 2002, 216)]]. Is approximately 25 cm. At this
distance, a person with good vision can usually distinguish 5 lines per	distance, a person with good vision can usually distinguish an [[image resolution]] of 5 line pairs per
millimeter, equivalent to a CoC of 0.2 mm.	millimeter (lp/mm), equivalent to a CoC of 0.2 mm in the final image .
Viewing conditions. If the final image is viewed at approximately	Viewing conditions. If the final image is viewed at approximately

Revision as of 15:26, 16 March 2007

For the closely related topic in microscopy, see Point spread function.

In optics, a **circle of confusion**, (also known as *disk of confusion*, *circle of indistinctness*, *blur circle*, etc.), is an optical spot caused by a cone of light rays from a lens not coming

Annotated screenshot from:

https://en.wikipedia.org/w/index.php?title=Circle_of_confusion&diff=prev&oldid=115571182

https://en.wikipedia.org/wiki/Special:Contributions/71.96.68.110

Not logged in | Talk | Contributions | Create account | Log in

Special page | Search Wikipedia

User contributions

For 71.96.68.110 (talk | block log | uploads | logs | filter log)

Search for contributions

Show contributions of new accounts only

User:

Namespace: Invert selection Associated namespace

Tag filter:

Only show edits that are latest revisions Only show edits that are page creations Hide minor edits

From year (and earlier): From month (and earlier):

- 06:32, 16 March 2007 (diff | hist) .. (+453) .. Circle of confusion (→Basis for circle of confusion diameter limit)
- 23:40, 11 March 2007 (diff | hist) .. (+37) .. Depth of field (→External links)

This is the contributions page for an IP user, identified by the user's IP address. Some IP addresses change periodically, and may be shared by several users. If you are an IP user, you may create an account or log in to avoid future confusion with other IP users. Registering also hides your IP address.

[WHOIS · rDNS · Traceroute · Geolocate ^(Alternate) · Current blocks · Global contributions] · [RIRs: America · Europe · Africa · Asia-Pacific · Latin America/Caribbean]

Annotated screenshot from: <https://en.wikipedia.org/wiki/Special:Contributions/71.96.68.110>

https://en.wikipedia.org/w/index.php?title=Depth_of_field&diff=prev&oldid=114413499

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Article | Talk | Read | Edit | View history | Search Wikipedia

Depth of field: Difference between revisions

From Wikipedia, the free encyclopedia

Revision as of 12:31, 5 March 2007 (edit)

[Onorem](#) (talk | contribs)

(rv unexplained blanking)

[← Previous edit](#)

Revision as of 23:40, 11 March 2007 (edit) (undo)

● [71.96.68.110](#) (talk)



(→ External links)

[Next edit →](#)

Line 674:	Line 674:
<p>*[http://www.dofmaster.com/dofjs.html Depth of field calculator]</p> <p>*[http://www.cambridgeincolour.com/tutorials/depth-of-field.htm Depth of Field]: illustrations and terminology for photographers</p> <p>- *[http://www.luminous-landscape.com/tutorials/dof2.shtml Demonstration that all focal lengths have identical depth of field]</p> <p>*[http://www.dofmaster.com/dof_imagesize.html Explanation of why &ldquo;... all focal lengths have identical depth of field&rdquo;] is true only in some circumstances.</p> <p>*[http://www.kevinwilley.com/l3_topic02.htm Depth of Field explanation and comparison photographs]</p>	<p>*[http://www.dofmaster.com/dofjs.html Depth of field calculator]</p> <p>*[http://www.cambridgeincolour.com/tutorials/depth-of-field.htm Depth of Field]: illustrations and terminology for photographers</p> <p>+ *[http://www.luminous-landscape.com/tutorials/dof2.shtml Demonstration that all focal lengths have identical depth of field]; if subject image size is maintained ●</p> <p>*[http://www.dofmaster.com/dof_imagesize.html Explanation of why &ldquo;... all focal lengths have identical depth of field&rdquo;] is true only in some circumstances.</p> <p>*[http://www.kevinwilley.com/l3_topic02.htm Depth of Field explanation and comparison photographs]</p>

Revision as of 23:40, 11 March 2007

In optics, particularly film and photography, the **depth of field** (DOF) is the distance in front of and beyond the subject that appears to be in focus. There is only one distance at which a subject is precisely in focus, but focus falls off gradually on either side of that distance, and there is a region in which the blurring is imperceptible under normal viewing conditions.

 [Photography portal](#)
 [Large format camera](#)

Reset 100

Annotated screenshot related to a contribution I had made five days earlier, using that same IP address, to Wikipedia's [Depth of Field](#) article, as taken from:

https://en.wikipedia.org/w/index.php?title=Depth_of_field&diff=prev&oldid=114413499



IP Details for 71.96.68.110

Like 0 Tweet G+1 0

This information should not be used for emergency purposes, trying to find someone's exact physical address, or other purposes that would require 100% accuracy. Please read about [geolocation accuracy](#) for more information.

71.96.68.110

General IP Information

IP: 71.96.68.110
Decimal: 1197491310
Hostname: 71.96.68.110
ASN: 5650
ISP: Verizon Internet Services
Organization: Frontier Communications
Services: None detected
Type: [Broadband](#)
Assignment: [Dynamic IP](#)
Blacklist:

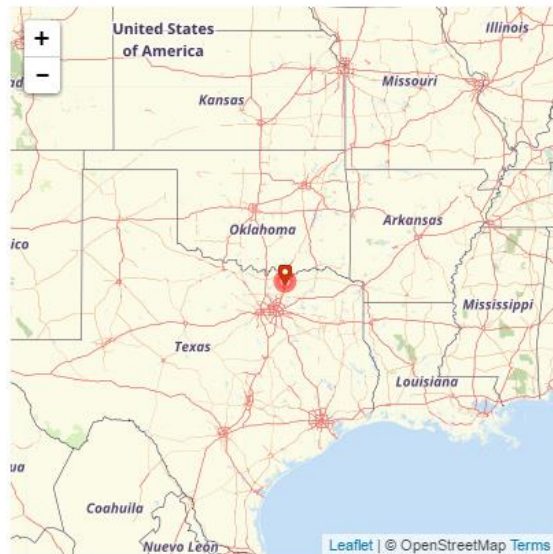
My internet service provider (ISP) was globalcrossing.net in March of 2007, but that account (and apparently, their subnet), has since been transferred to Verizon and then, Frontier Communications (my current provider).

Geolocation Information

Continent: North America
Country: United States
State/Region: Texas
City: Sherman
Latitude: 33.596 (33° 35' 45.60" N)
Longitude: -96.5454 (96° 32' 43.44" W)
Postal Code: 75090

Sherman Texas is north of my location near DFW, where I was living in 2007 and still live, as of this writing, in February of 2017).

Geolocation Map



User Comments