

Exiv2 - Support #1379

Camera calibration tag from canon CR2 file

26 Apr 2019 10:41 - D Anderson

Status:	New	Start date:	26 Apr 2019
Priority:	Normal	Due date:	
Assignee:	Phil Harvey	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
<p>I asked a long time ago about a certain camera calibration tag which I cannot find either when using exiv2 or exiftool. This tag is present in a dng file after it's been processed with adobe dng converter. Now I still wonder if this tag is extractable already from the cr2 file?</p> <p>Checking the "Standard Exif tags" the camera calibration tag is clearly there but where exactly :)?</p> <p>https://www.exiv2.org/tags.html</p> <p>0xc623 50723 Image Exif.Image.CameraCalibration1 SRational</p> <p>CameraCalibration1 defines a calibration matrix that transforms reference camera native space values to individual camera native space values under the first calibration illuminant. The matrix is stored in row scan order. This matrix is stored separately from the matrix specified by the ColorMatrix1 tag to allow raw converters to swap in replacement color matrices based on UniqueCameraModel tag, while still taking advantage of any per-individual camera calibration performed by the camera manufacturer.</p>			

History

#1 - 26 Apr 2019 12:12 - Phil Harvey

I know that for many cameras Adobe uses its own calibrations. So I don't expect this information to necessarily exist in a RAW file.

#2 - 26 Apr 2019 12:27 - D Anderson

Phil Harvey wrote:

I know that for many cameras Adobe uses its own calibrations. So I don't expect this information to necessarily exist in a RAW file.

Well, thanks again for response. I tested different cams and after running through dng converter there are different camera calibration tags. Hm, so maybe the tag is produced by checking against camera color calibration tags which do exist. Example from a CR2:

```
Camera Color Calibration 01 -335 394 949 (10900K)
Camera Color Calibration 02 -315 405 924 (10000K)
Camera Color Calibration 03 -267 427 862 (8300K)
Camera Color Calibration 04 -215 456 801 (7000K)
Camera Color Calibration 05 -158 486 739 (6000K)
Camera Color Calibration 06 -133 501 712 (5600K)
Camera Color Calibration 07 -101 522 681 (5200K)
Camera Color Calibration 08 -56 545 633 (4700K)
Camera Color Calibration 09 2 584 580 (4200K)
Camera Color Calibration 10 58 628 536 (3800K)
Camera Color Calibration 11 111 672 496 (3500K)
Camera Color Calibration 12 172 723 452 (3200K)
Camera Color Calibration 13 219 765 418 (3000K)
Camera Color Calibration 14 264 819 397 (2800K)
Camera Color Calibration 15 380 963 340 (2400K)
```

Would be very nice to hear your thoughts on this theory.

#3 - 26 Apr 2019 12:28 - D Anderson

#4 - 26 Apr 2019 12:32 - Phil Harvey

I'm not really the expert here since I deal only with metadata, but I suspect you may be right. With any luck, Iliah Borg will see this because he knows a lot more about this type of thing.

#5 - 26 Apr 2019 12:42 - D Anderson

Phil Harvey wrote:

I'm not really the expert here since I deal only with metadata, but I suspect you may be right. With any luck, Iiah Borg will see this because he knows a lot more about this type of thing.

Ok, hopefully. I will wait some and then test to contact him. Thanks!