





# CampPUF Dataset

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## Raw Images (CamPUF\_dataset/raw)

Set Number	Sensor Type	Sensor ID					ISO	Shutter Speed	Count	Image Size (w/ margin)		Image Margin		Image Size (w/o margin)		Flip Direction	Temperature	Quality Factor (QF)	Object
		#1	#2	#3	#4	#5				Height	Width	Rows (front/back)	Columns (front/back)	Height	Width				
set-01	IMX377	O	O	O	O	O	7,656	1/4	50	4,080	3,028	0/48	2/2	4,032	3,024	Vertical	25	N/A (raw)	N/A (dark)
set-02	IMX377	O					7,656	1/4	20	4,080	3,028	0/48	2/2	4,032	3,024	Vertical	45	N/A (raw)	N/A (dark)
set-03	IMX377	O					7,656	1/4	20	4,080	3,028	0/48	2/2	4,032	3,024	Vertical	35	N/A (raw)	N/A (dark)
set-04	IMX179	O	O	O	O	O	10,000	1	50	3,280	2,464	0/16	16/0	3,264	2,448	Lateral	25	N/A (raw)	N/A (dark)

## JPEG Images (CamPUF\_dataset/jpeg)

Set Number	Sensor Type	Sensor ID					ISO	Shutter Speed	Count					Image Size		Flip Direction	Temperature	Quality Factor (QF)	Object
		#1	#2	#3	#4	#5								Height	Width				
set-01	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	95	White plain wall 
set-02	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	85	
set-03	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	75	
set-04	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	95	Night sky 
set-05	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	85	
set-06	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	75	
set-07	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	95	Classroom 
set-08	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	85	
set-09	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	75	
set-10	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	95	Desktop 
set-11	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	85	
set-12	IMX377	O					Auto	Auto	50					4,032	3,024	N/A	25	75	

### Download

<https://wisest.ece.wisc.edu/research/mobile-and-embedded-security/campuf-dataset/>

### Reference

Younghyun Kim and Yongwoo Lee, “CampPUF: Physically Unclonable Function Based on CMOS Image Sensor Fixed Pattern Noise,” in *Proceedings of the Design Automation Conference (DAC)*, pp. 66:1–66:6, 2018 [doi.org/10.1145/3195970.3196005]