

# **VQEG Image Quality Evaluation Tool (VIQET) (VIQET)**

## **Introduction**

VIQET is an easy to use no-reference photo quality evaluation tool. In order to perform photo quality evaluation, VIQET requires a set of photos from a test device. It computes an overall image MOS score for a device based on the individual computed photo qualities of each image in the set. The overall MOS is computed based on a number of features extracted from each image. The mapping from extracted features to MOS is based on a psychophysics study that was conducted to create a large dataset of photos and associated subjective mean opinion ratings. The study was used to learn a mapping from features to scores. The predicted quality score falls in the range of 1 to 5, where 1 corresponds to a low quality score and 5 corresponds to excellent quality

## **Test Results**

Device Name: original-11-photos  
Total number of photos: 11  
Tool Version: 2.3.117.87

**Overall Score: N/A**

# **Photo Category Results**

## **Category Name: Outdoor Day**

MOS: 2.50 +/- 0.20  
Multi-scale Edge Acutance: 12.70 +/- 3.90  
Noise Signature Index: 373.80 +/- 54.00  
Saturation: 145.80 +/- 12.10  
Illumination: 102.40 +/- 14.80  
Dynamic Range: 103.70 +/- 1.80

## **Category Name: Indoor**

MOS: N/A  
Multi-scale Edge Acutance: N/A  
Noise Signature Index: N/A  
Saturation: N/A  
Illumination: N/A  
Dynamic Range: N/A

## **Category Name: Outdoor Night**

MOS: N/A  
Multi-scale Edge Acutance: N/A  
Noise Signature Index: N/A  
Saturation: N/A  
Illumination: N/A  
Dynamic Range: N/A

# Photos in Outdoor Day Category (11 photos)

Details for 2people1.jpg

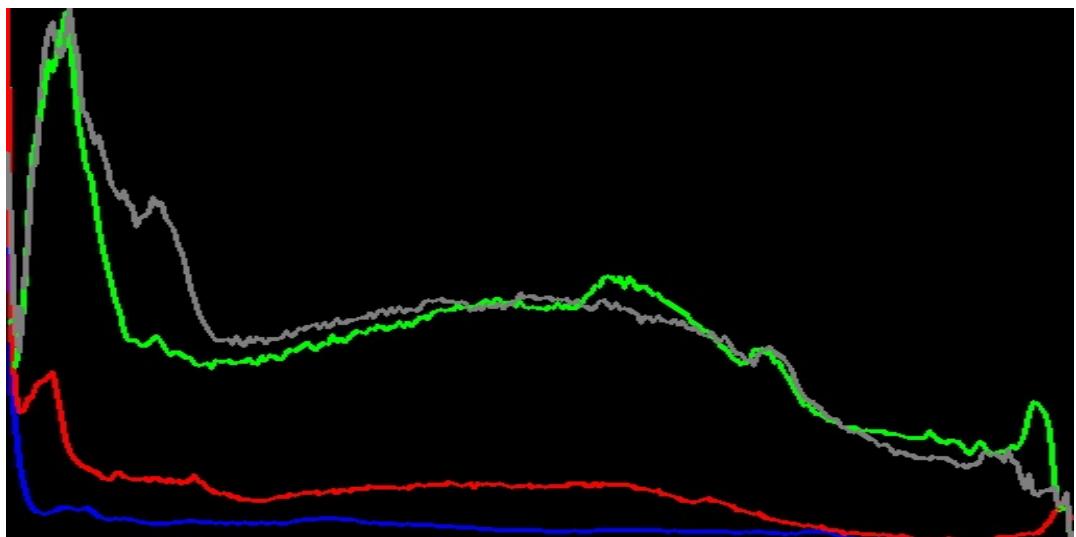


Source Photo

Parameter	Value
MOS	3.47
Resolution (Mega Pixels)	2.16
Multi-scale Edge Acutance	43.90
Noise Signature Index	513.65
Flat Region Index	NaN
Multi-scale Texture Acutance	94.03
Saturation	158.81
Color Warmth	119.10
Illumination	214.28
Dynamic Range	109.92
Over Exposed (%)	0.00
Under Exposed (%)	0.02
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## **Details for 2people2.jpg**

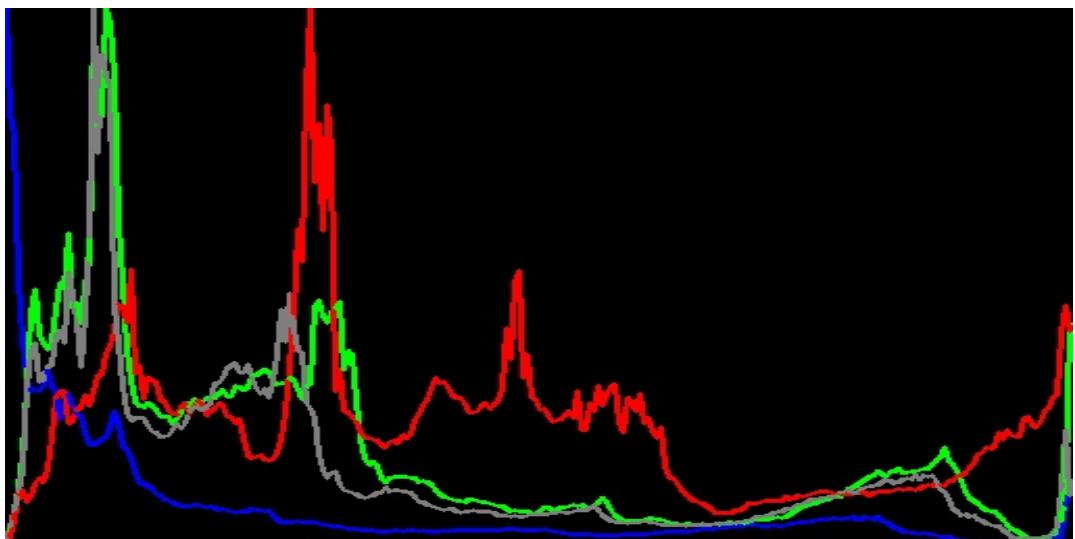


Source Photo

<b>Parameter</b>	<b>Value</b>
MOS	2.12
Resolution (Mega Pixels)	1.13
Multi-scale Edge Acutance	1.06
Noise Signature Index	177.99
Flat Region Index	96.59
Multi-scale Texture Acutance	10.32
Saturation	200.00
Color Warmth	174.33
Illumination	61.67
Dynamic Range	105.45
Over Exposed (%)	0.01
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for car.jpg

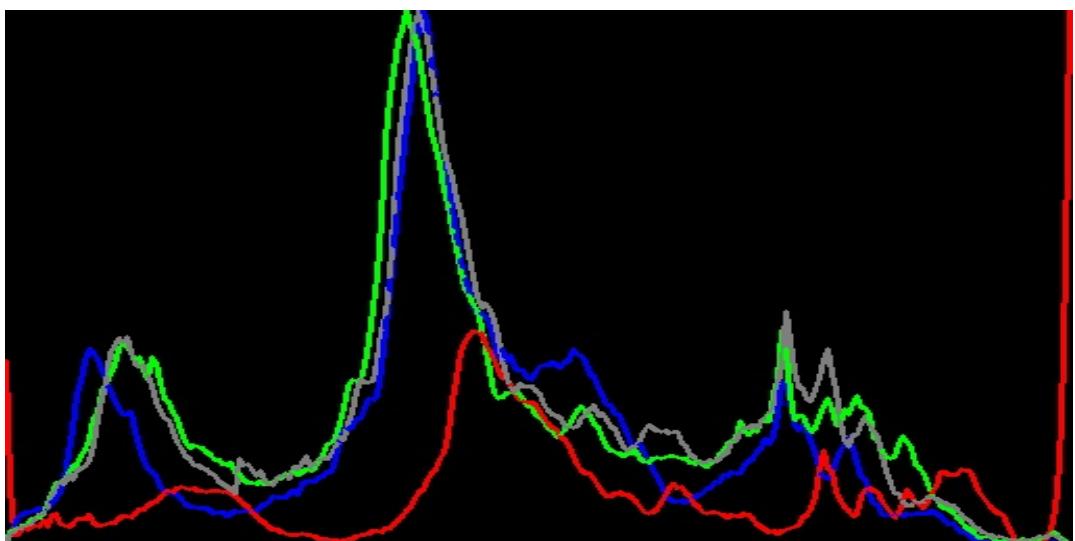


Source Photo

Parameter	Value
MOS	2.45
Resolution (Mega Pixels)	0.94
Multi-scale Edge Acutance	7.54
Noise Signature Index	261.85
Flat Region Index	NaN
Multi-scale Texture Acutance	21.03
Saturation	95.04
Color Warmth	70.72
Illumination	75.51
Dynamic Range	106.36
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for cat.jpg

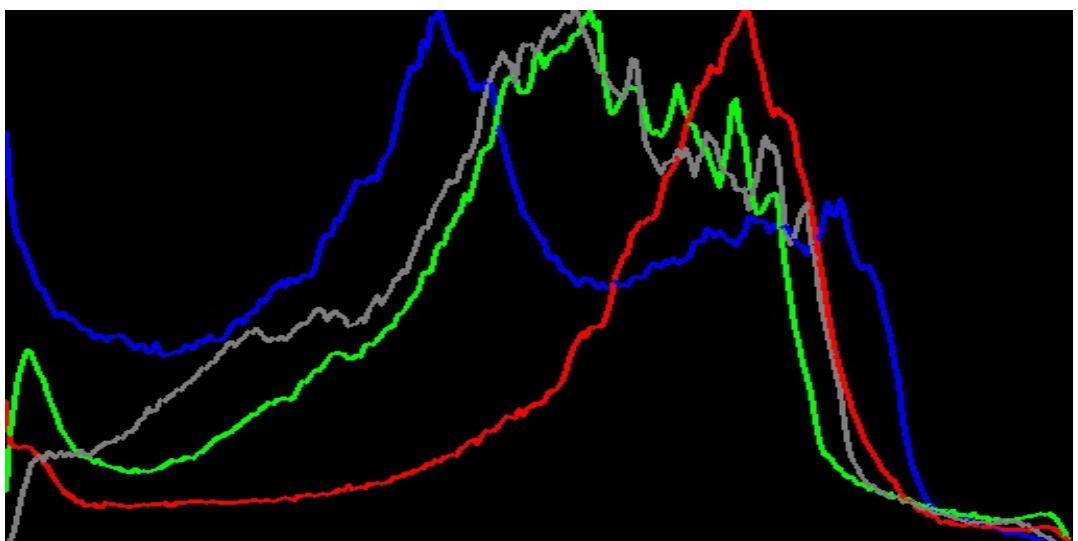


Source Photo

Parameter	Value
MOS	2.43
Resolution (Mega Pixels)	0.67
Multi-scale Edge Acutance	26.65
Noise Signature Index	588.24
Flat Region Index	NaN
Multi-scale Texture Acutance	36.49
Saturation	135.20
Color Warmth	58.41
Illumination	129.99
Dynamic Range	104.78
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for catPerson.jpg

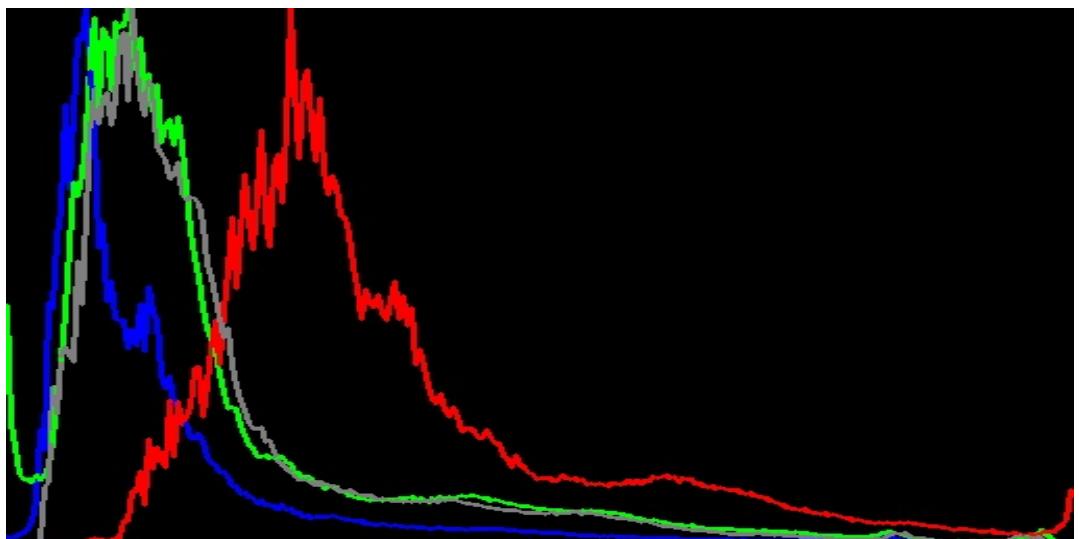


Source Photo

Parameter	Value
MOS	1.89
Resolution (Mega Pixels)	2.56
Multi-scale Edge Acutance	1.20
Noise Signature Index	189.37
Flat Region Index	210.73
Multi-scale Texture Acutance	9.17
Saturation	218.52
Color Warmth	224.87
Illumination	44.13
Dynamic Range	94.52
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## **Details for dog.jpg**

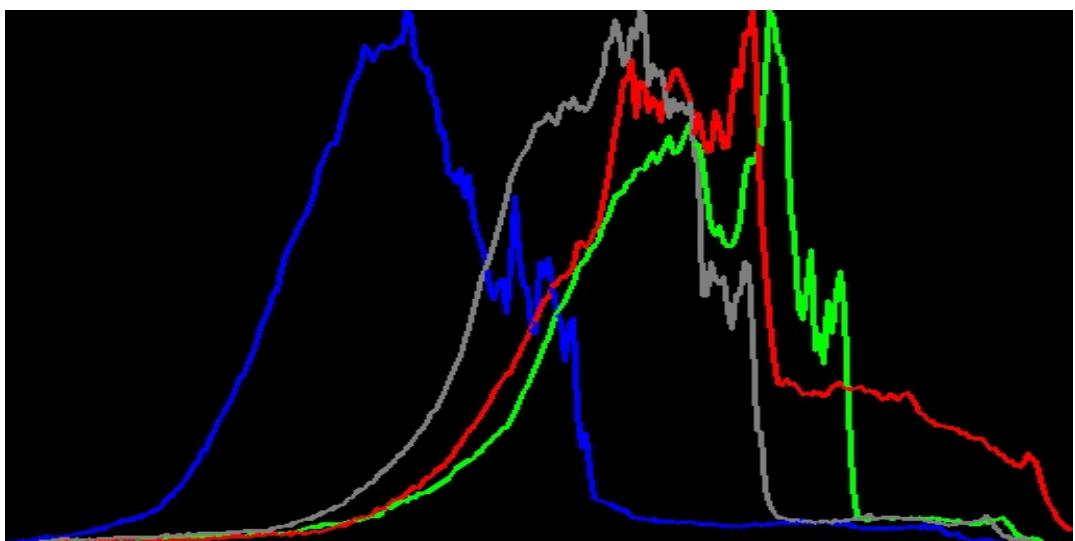


Source Photo

<b>Parameter</b>	<b>Value</b>
MOS	2.25
Resolution (Mega Pixels)	0.72
Multi-scale Edge Acutance	2.53
Noise Signature Index	109.53
Flat Region Index	71.72
Multi-scale Texture Acutance	15.92
Saturation	148.43
Color Warmth	22.46
Illumination	42.54
Dynamic Range	95.65
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for dog2.jpg

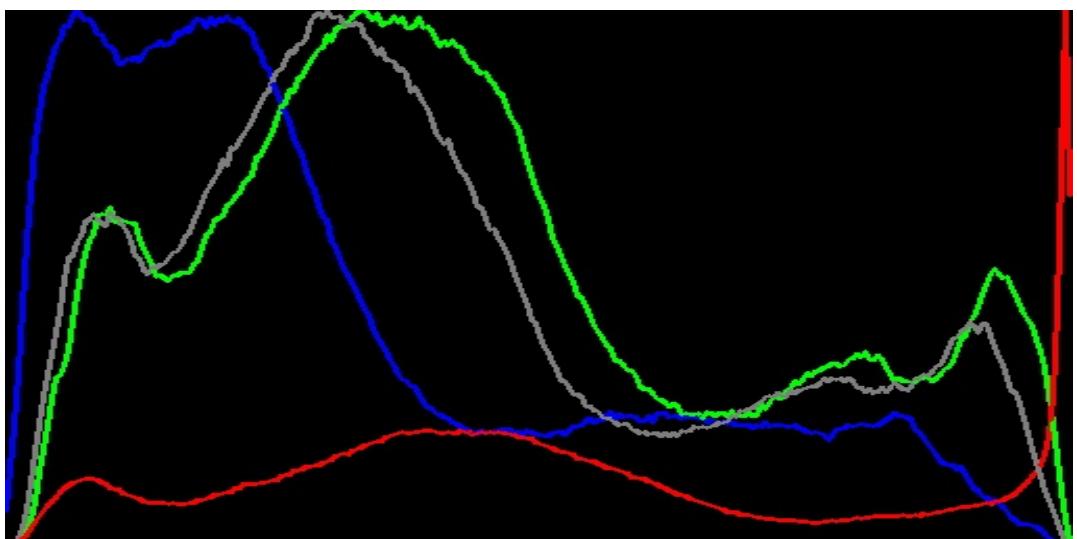


Source Photo

Parameter	Value
MOS	3.04
Resolution (Mega Pixels)	1.18
Multi-scale Edge Acutance	23.07
Noise Signature Index	513.37
Flat Region Index	NaN
Multi-scale Texture Acutance	52.85
Saturation	152.61
Color Warmth	103.81
Illumination	139.96
Dynamic Range	108.82
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for milanBandic.jpg

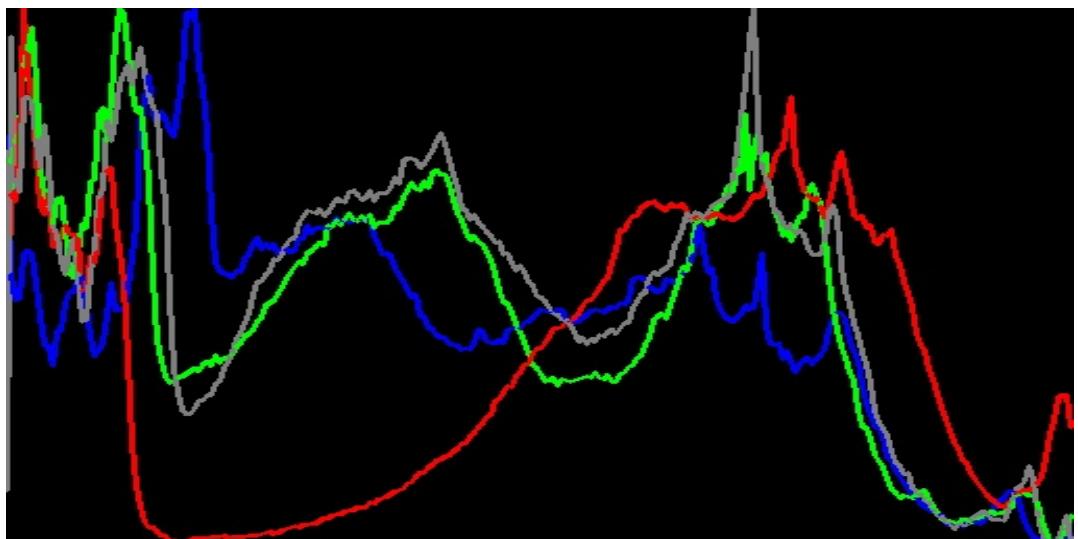


Source Photo

Parameter	Value
MOS	1.80
Resolution (Mega Pixels)	0.31
Multi-scale Edge Acutance	9.03
Noise Signature Index	184.52
Flat Region Index	106.15
Multi-scale Texture Acutance	13.51
Saturation	127.55
Color Warmth	99.14
Illumination	118.44
Dynamic Range	108.57
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for videogameScreenshot1.jpg

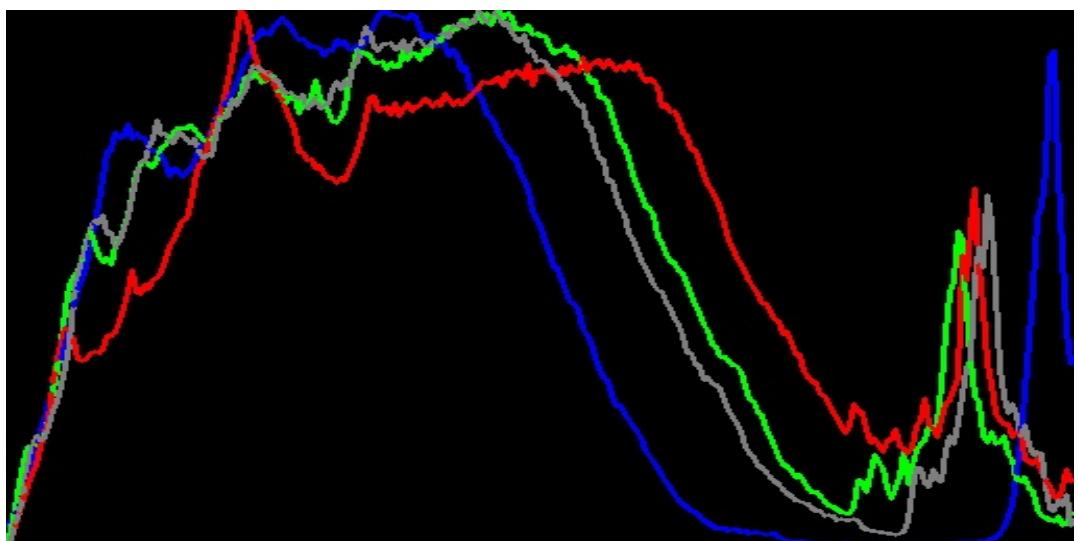


Source Photo

Parameter	Value
MOS	2.81
Resolution (Mega Pixels)	0.65
Multi-scale Edge Acutance	13.39
Noise Signature Index	588.24
Flat Region Index	NaN
Multi-scale Texture Acutance	22.89
Saturation	93.24
Color Warmth	100.17
Illumination	132.78
Dynamic Range	107.76
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## Details for videogameScreenshot2.jpg

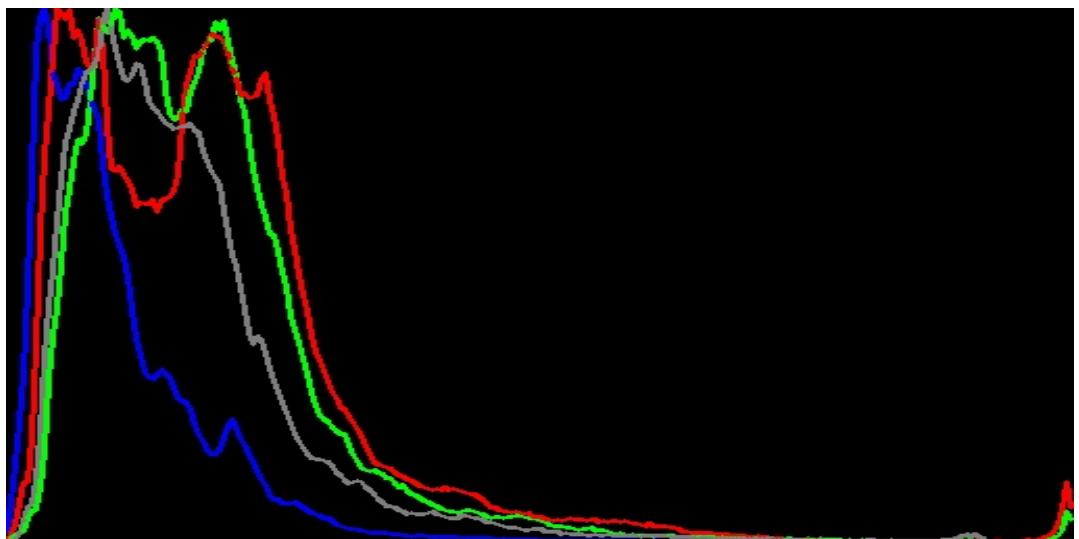


Source Photo

Parameter	Value
MOS	1.29
Resolution (Mega Pixels)	0.31
Multi-scale Edge Acutance	1.95
Noise Signature Index	454.56
Flat Region Index	NaN
Multi-scale Texture Acutance	12.01
Saturation	177.60
Color Warmth	243.09
Illumination	66.97
Dynamic Range	92.80
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms

## **Details for woman.jpg**

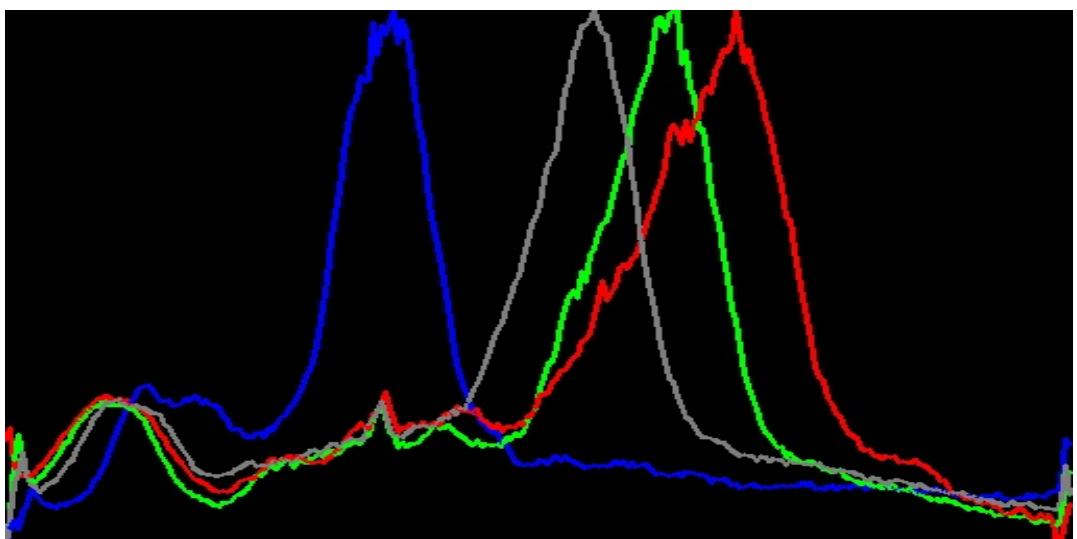


Source Photo

<b>Parameter</b>	<b>Value</b>
MOS	3.69
Resolution (Mega Pixels)	12.19
Multi-scale Edge Acutance	9.56
Noise Signature Index	530.18
Flat Region Index	NaN
Multi-scale Texture Acutance	53.09
Saturation	97.18
Color Warmth	65.94
Illumination	99.66
Dynamic Range	106.14
Over Exposed (%)	0.00
Under Exposed (%)	0.00
Tool Version	117.00



Sharpness Map



RGB and Grayscale Histograms