	airplane	barbara	boats	lena	mandril	peppers	tiffany	zelda		max	min
	510x510	510x510	510x510	510x510	510x510	510x510	510x510	510x510			
	annularvar	annularvar	annularvar	annularvar	annularvar	annularvar	annularvar	annularvar			
brightness -20%	7.4	7.8	12.5	7	5.4	10.9	2.7	14.1		14.1	
brightness -15%	4.7	6.2	7.4	7.4	6.2	7.8	2.7	11.7		11.7	
brightness -10%	3.1	6.2	6.2	6.6	5	7	2.7	8.2		8.2	
brightness -5%	2.3	0.7	4.7	3.9	7.8	5.8	2.7	7.8		7.8	
brightness 5%	0	0	0.7	4.7	1.5	2.7	3.5	1.5		4.7	
brightness 10%	2.7	3.1	2.3	7	3.1	2.7	5	3.1		7	
brightness 15%	3.5	6.2	3.5	6.2	1.1	5.4	7.8	9.4		9.4	
brightness 20%	4.7	4.7	7.8	5.4	4.7	5.8	13.3	9.4		13.3	
contrast -20%	0.3	2.3	1.1	1.1	1.5	3.9	2.7	3.1		3.9	
contrast -15%	0.3	1.1	0.3	1.1	1.1	3.1	2.3	4.7		4.7	
contrast -10%	0	0.7	1.1	1.5	0.7	6.6	3.5	3.5		6.6	
contrast -5%	1.9	3.9	2.7	1.5	1.1	5.8	3.1	4.3		5.8	
contrast 5%	5.4	4.7	7	4.3	7.4	7.4	2.7	8.6		8.6	
contrast 10%	3.5	1.9	5.8	7	7.4	7.8	3.5	8.6		8.6	
contrast 15%	3.9	5.8	6.2	8.2	7	8.6	5.4	9.4		9.4	
contrast 20%	2.7	4.7	9	5.8	5	6.6	8.2	9		9	
gamma 0.75	5.4	8.6	5	7.8	4.3	7.8	3.9	10.1		10.1	
gamma 0.8	5	9	7	7	5.8	8.2	3.9	10.9		10.9	
gamma 0.85	4.3	9	7	7	4.7	6.2	2.3	10.5		10.5	
gamma 0.9	3.9	7	6.6	7.4	5.8	5	2.7	9.8		9.8	
gamma 1.05	4.7	9	2.3	5.4	3.9	3.5	3.1	10.1		10.1	
gamma 1.1	4.7	4.7	3.9	3.1	5.4	5.8	2.7	9.4		9.4	
gamma 1.15	5	6.6	5	7.8	5.8	8.6	1.5	5.8		8.6	
gamma 1.2	4.7	6.2	3.9	6.2	5.4	8.6	2.7	7		8.6	
gamma 1.25	4.3	5.8	4.7	7.4	7.4	8.6	3.1	9.8		9.8	
blur 0.5	3.9	8.2	3.9	5	4.7	9	2.7	7.4		9	
blur 1	4.3	5.4	4.7	9.8	6.2	4.7	2.3	9		9.8	
blur 2	9.4	8.6	6.6	10.9	8.6	8.6	5	11.3		11.3	
blur 3	15.6	10.5	12.1	11.7	11.3	12.9	10.1	13.3		15.6	
compress 5	13.3	8.6	8.6	9.8	12.5	10.5	9	11.7		13.3	
compress 10	6.6	7	5.4	9.8	9.4	7.8	2.7	8.6		9.8	
compress 25	5	7	6.6	10.1	4.7	7.8	3.9	6.6		10.1	
compress 50	3.9	2.7	7.8	5	3.1	7.8	3.1	7.4		7.8	
compress 75	4.3	5	1.5	7.8	5	5	3.1	7		7.8	
compress 100	0.3	0.7	0.3	1.9	3.1	4.3	1.9	2.7		4.3	
color noise 0.5	3.9	9.4	5	7	6.2	6.6	3.9	8.2		9.4	
color noise 1	4.7	8.6	6.2	7	7.4	8.2	5.8	9.4		9.4	
color noise 1.5	7.8	10.9	5.8	10.1	8.6	6.6	6.6	11.3		11.3	
color noise 2	9.4	10.5	6.6	9.8	9.8	9.8	7.8	15.2		15.2	
color noise 2.5	10.1	12.1	5.4	12.9	10.1	12.1	9	17.6		17.6	
color noise 3	12.1	12.9	7	13.7	12.1	12.1	11.7	18.8		18.8	
gray noise 0.5	4.3	7.8	5.4	7	5.8	6.6	4.7	7.8		7.8	
gray noise 1	5.4	8.2	5.8	9	8.6	9	4.7	7.8		9	
gray noise 1.5	5.8	10.1	5.4	8.2	7.8	8.2	6.2	10.1		10.1	
gray noise 2	7.8	10.5	5.4	7.8	9.4	9	8.6	11.3		11.3	
gray noise 2.5	11.7	12.1	8.2	9	10.5	12.5	13.3	12.9		13.3	
gray noise 3	11.3	14.1	10.5	9.4	14.1	16	15.2	12.5		16	
resize 25%	5.8	9	5.8	8.6	7.8	5.4	3.9	9		9	
resize 50%	3.9	7.4	5	6.6	6.2	7	3.1	7.4		7.4	
resize 75%	1.1	0.3	0.7	0.7	1.1	3.1	3.1	1.9		3.1	
resize 150%	3.1	5.4	0.7	2.3	0.3	1.9	2.3	6.6		6.6	
resize 200%	4.7	4.7	0.7	1.9	1.9	2.7	2.7	5.4		5.4	

resize 400%	2.3	3.5	1.5	2.3	1.1	3.5	1.9	4.3		4.3	
rotation -90	0.7	0.7	0	0	0.7	0.3	1.1	1.9		1.9	
rotation -45	40.7	64.3	64.7	59.6	47.4	54.9	49	61.1			
rotation -30	45.8	57.2	58	63.1	52.5	54.5	50.9	51.3			
rotation -15	45	57.2	60	61.5	63.1	33.7	42.3	53.3			
rotation -5	55.6	42.7	37.2	40.3	38.4	36.8	36.4	56.4			
rotation 5	56	42.7	37.2	39.6	39.2	38	36.8	56			
rotation 15	45	56.8	60	60.3	63.9	34.1	40.3	53.3			
rotation 30	45.8	57.6	58.4	61.9	52.1	55.2	51.3	51.7			
rotation 45	40.7	64.3	64.7	59.6	48.2	54.9	48.6	61.5			
rotation 90	0.7	0.7	0	0	0.7	0.3	1.1	1.9		1.9	
rotcrop 1	4.7	6.6	3.5	6.2	4.3	5	4.7	8.6		8.6	
rotcrop 2	4.3	9.4	5.4	9.4	5.8	8.6	4.3	11.3		11.3	
rotcrop 5	3.9	7.8	6.2	5.8	4.7	7.8	5	9.8		9.8	
rotcrop 7	7	5.4	1.9	3.5	1.5	4.7	3.5	6.6		7	
rotcrop 10	4.7	6.2	1.1	4.3	4.7	7	6.2	7.8		7.8	
rotcrop 15	4.7	9	5	6.2	3.1	3.5	6.6	7.8		9	
rotcrop 20	4.3	7	2.7	6.6	3.9	5	7	6.2		7	
rotcrop 30	5.4	9.4	5.4	7.8	4.3	6.2	4.3	9.4		9.4	
rotcrop 45	3.5	8.2	0.3	3.5	2.7	5.4	3.1	3.5		8.2	
rotcrop 90	0.7	0.7	0	0	0.7	0.3	1.1	1.9		1.9	
flop	0	0	0	0	0	0	0	0		0	
flip	0	0	0	0	0	0	0	0		0	
transpose	0.7	0.7	0	0	0.7	0.3	1.1	1.9		1.9	
transverse	0.7	0.7	0	0	0.7	0.3	1.1	1.9		1.9	
translate north (black)	47	43.9	38	40.7	48.6	38.4	56	49			
traslate west (black)	62.3	46.2	57.6	44.3	56.4	51.7	63.1	42.7			
translate northwest (black)	41.5	41.9	51.7	44.3	47	32.5	53.3	50.1			
translate north vs west (black)	47	43.9	38	40.7	48.6	38.4	56	49			
translate north (white)	52.9	54.9	53.7	42.3	41.5	48.2	50.9	48.2			
traslate west (white)	44.7	41.1	55.2	52.1	44.3	46.2	32.5	47.4			
translate northwest (white)	67.4	45.8	45	56.8	50.9	45.4	38	48.6			
translate north vs west (white)	52.9	54.9	53.7	42.3	41.5	48.2	50.9	48.2			
watermark 20%	14.5	14.5	11.7	13.7	9.8	14.5	10.5	15.2		15.2	
watermark 40%	15.2	18.8	15.2	19.6	16	17.6	16.8	17.2			
watermark 60%	19.6	19.2	15.2	22.7	19.2	21.5	23.9	21.1			
watermark 80%	22.3	23.5	17.2	27	18.8	19.6	27	21.5			
watermark 100%	25	20.7	16	27.8	20.3	20.3	27.8	21.5			
shear 1	29.8	16	14.9	17.2	13.7	15.2	21.1	16.4			
shear 2	43.9	29	21.9	25.4	18	21.9	27.4	24.3			
shear 3	48.2	31.7	27	30.5	22.3	30.1	32.9	26.2			
shear 4	49.4	32.1	29	31.7	28.2	31.3	37.2	33.3			
shear 5	50.1	34.1	27.4	30.5	31.7	28.6	33.7	36.8			
shear 10	55.2	47.4	32.5	36.8	35.2	28.6	33.7	32.5			
arc 1	27.4	12.5	13.3	11.7	13.3	14.1	14.9	18.4			
arc 2	34.9	17.6	16.8	16.4	16	16	20.3	22.7			
arc 3	43.5	24.3	23.5	23.1	22.7	23.1	26.6	27.8			
arc 4	46.6	26.6	29.4	25.4	26.2	24.7	30.5	34.9			
arc 5	50.9	32.1	32.5	26.6	26.6	25.4	32.5	35.6			
arc 10	55.2	40.7	34.5	39.2	36	32.9	34.1	38			
barrel 0.1	40.7	28.6	25.8	23.5	24.3	26.2	30.9	38.4			
barrel 0.2	41.9	37.2	33.7	35.2	33.7	30.9	38	48.6			
barrel 0.3	48.6	42.3	41.5	38.8	45.8	42.3	43.1	42.3			

barrel 0.4	47.4	45.8	43.5	41.9	54.9	38	44.3	43.1			
pincushion -0.1	53.3	42.7	43.1	45.8	48.6	36	38.4	39.6			
pincusion -0.2	56.8	42.7	43.1	50.9	53.3	37.2	38.4	39.6			
pincusion -0.3	52.5	44.7	47.4	54.1	59.2	36.4	40.3	56.4			
pincusion -0.4	56.4	45.8	48.6	51.3	51.7	34.9	37.6	55.6			
airplane	0	56	61.5	60	55.2	47.8	53.7	48.2			
barbara	56	0	41.5	36	36	38.8	47.8	34.5			
boats	61.5	41.5	0	47.8	43.1	52.9	54.9	44.7			
lena	60	36	47.8	0	32.1	37.2	41.5	47			32.1
mandril	55.2	36	43.1	32.1	0	42.7	49.4	40			
peppers	47.8	38.8	52.9	37.2	42.7	0	41.1	34.9			
tiffany2	53.7	47.8	54.9	41.5	49.4	41.1	0	47.8			
zelda	48.2	34.5	44.7	47	40	34.9	47.8	0			
Threshold Range										18.8	32.1
Separability (max-min)											13.3
Insensitive: rotation-crop, flip-flop-trans and watermark 20%											
Sensitive: all distortions											