QCTools Cheat Sheet

Graph Domain	Graph(s) Name	8-bit values	10-bit values	Ideal Range (8/10)
Y Channel	Y MIN, Y LoW, Y AVG, Y HIGH, Y MAX	0-255	0-1023	16/64 (Y Low) 128/512 (Y AVG) 235/940 (Y HIGH)
UV Channels	MIN, LoW, AVG, HIGH, MAX	0-255	0-1023	16/64 (Low) 85/341-170/682 (AVG) 240/960 (HIGH)
Saturation	SAT MIN, SAT LoW, SAT AVG, SAT HIGH, SAT MAX	0-88.7 (75 %) 88.7-118.2 (100%) 118.2-181.02 (Illegal YUV)	0-354.8 (75%) 354.8-472.8 (100%) 472.8-724.08 (Illegal YUV)	75% values
Hue	Hue	0-360°	0-360°	120-147°
Temporal outliers	ToUT	0-1		0-0.009
Vertical Line Repetitions	VREP	0-1		0
Mean Square Error per Field	MSEf	0-1		As close to 0 as possible
Peak Signal to Noise Ratio	PNSR	0-60 dB		30-50 dB

SUMMARIZATION STATS

Stat	Description	Ideal Range
ToUTc	The number of frames with a ToUT value greater than 0.005	<10
SATb	The number of frames where the maximum saturation is over 88.7, which would indicate levels outside of broadcast range	<1000
SATi	The number of frames where the maximum saturation is over 118.2, which would indicate levels outside of legal YUV levels	<1000
BRNGav	The percentage of frames with BRNG value greater than zero	<.02 (2%)
BRNGc	The number of frames with a BRNG value greater than 0.02	<1000
MSEfY	The number of frames with a MSEfY value greater than 1000	<10

References

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