

ZenHEVC R-D Performance Dataset
(Update by Dec/2013)

Table1. ZenHEVC								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	35.56	37.41	38.89	40.52	3.21	5.91	12.53	40.21
BQTerrace@60fps	31.32	33.81	36.52	40.09	3.09	10.09	37.21	108.00
Cactus@50fps	33.15	35.31	37.23	39.59	3.16	6.33	14.91	61.46
Kimono@24fps	36.71	39.10	41.03	42.43	1.65	3.04	5.60	11.58
ParkScene@24fps	32.87	35.38	38.00	40.66	1.33	2.96	6.77	16.81

Table2. HM10.0 Low-delay (standard low delay)								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	34.38	36.42	38.22	39.77	1.49	2.86	5.96	16.52
BQTerrace@60fps	30.97	33.23	35.35	39.07	1.45	3.85	13.80	65.67
Cactus@50fps	32.10	34.41	36.50	38.54	1.59	3.21	7.24	26.13
Kimono@24fps	34.68	37.38	40.07	42.00	0.85	1.71	3.46	7.18
ParkScene@24fps	31.85	34.35	37.07	39.85	0.72	1.64	3.82	9.54

Table3. HM10.0 Low-delay (standard low-delay except one ref)(constant QP)								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	36.13	37.92	39.38	41.62	2.86	5.49	12.67	54.26
BQTerrace@60fps	31.97	34.77	38.05	42.65	4.21	14.87	57.14	140.18
Cactus@50fps	33.30	35.70	37.93	41.22	2.93	6.42	19.27	94.95
Kimono@24fps	37.52	39.90	41.67	43.03	1.65	3.12	5.87	13.17
ParkScene@24fps	33.27	36.10	38.91	41.76	1.38	3.27	7.77	22.04

Table4. HM10.0 Low-delay (same configure with ZenHEVC)(constant QP)								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	36.04	37.80	39.22	41.08	2.85	5.46	12.10	46.29
BQTerrace@60fps	31.93	34.46	37.13	41.12	4.08	12.64	43.52	121.42
Cactus@50fps	33.29	35.59	37.66	40.19	2.96	6.30	16.77	73.43
Kimono@24fps	37.19	39.54	41.37	42.79	1.61	3.02	5.68	12.73
ParkScene@24fps	33.24	35.96	38.63	41.22	1.38	3.19	7.30	18.80

Table5. JM18.4 Low-delay (GOP=I+49P, 1 ref, RDO, EPZS, subME with Hadmard)								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	34.92	36.97	38.77	40.65	3.42	6.40	14.27	43.76
BQTerrace@60fps	30.45	33.45	36.71	41.35	3.94	11.83	44.31	129.94
Cactus@50fps	32.54	34.95	37.18	39.88	3.18	6.64	16.28	70.35
Kimono@24fps	35.85	38.70	41.00	42.42	1.71	3.34	6.59	13.71
ParkScene@24fps	32.20	34.95	38.01	40.84	1.39	3.09	7.41	18.95

Table6. x264 Low-delay (preset = fast)								
Sequence \ QP	37	32	27	22	37	32	27	22
	PSNR	PSNR	PSNR	PSNR	Mbps	Mbps	Mbps	Mbps
BasketballDrive@50fps	34.31	36.34	38.21	40.19	3.33	6.07	12.60	34.99
BQTerrace@60fps	30.04	32.95	36.04	40.24	3.43	9.52	31.66	105.43
Cactus@50fps	32.03	34.46	36.80	39.32	3.27	6.49	14.62	53.44
Kimono@24fps	35.42	37.85	40.14	41.86	1.83	3.36	6.42	13.00
ParkScene@24fps	31.92	34.59	37.47	40.33	1.40	2.94	6.53	15.72