

# CE1, Test2.2: Reduced number of edge offsets per LCU

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# Specification changes

## 7.3.4.2. Sample adaptive offset CABAC syntax

sao_offset_cabac( rx, ry, cldx ) {	Descriptor
sao_type_idx[ cldx ][ rx ][ ry ]	ae(v)
if( sao_type_idx[ cldx ][ rx ][ ry ] == 4 ) {	
sao_band_position[ cldx ][ rx ][ ry ]	u(5)
for( i = 0; i < 4; i++ )	
sao_offset [ cldx ][ rx ][ ry ][ i ]	se(v)
} else if( sao_type_idx[ cldx ][ rx ][ ry ] != 0 ) {	
sao_offset [ cldx ][ rx ][ ry ][ 0 ]	ae(v)
sao_offset [ cldx ][ rx ][ ry ][ 0 ]++	
sao_offset [ cldx ][ rx ][ ry ][ 1 ] = sao_offset [ cldx ][ rx ][ ry ][ 0 ] >> 1	
sao_offset [ cldx ][ rx ][ ry ][ 2 ] = - (sao_offset [ cldx ][ rx ][ ry ][ 0 ] >> 1)	
sao_offset [ cldx ][ rx ][ ry ][ 3 ] = - sao_offset [ cldx ][ rx ][ ry ][ 0 ]	
sao_offset [ cldx ][ rx ][ ry ][ 1 ]	ae(v)
sao_offset [ cldx ][ rx ][ ry ][ 2 ]	ae(v)
sao_offset [ cldx ][ rx ][ ry ][ 3 ]	ae(v)
sao_offset [ cldx ][ rx ][ ry ][ 2 ] = - sao_offset [ cldx ][ rx ][ ry ][ 2 ]	
sao_offset [ cldx ][ rx ][ ry ][ 3 ] = - sao_offset [ cldx ][ rx ][ ry ][ 3 ]	
}	
}	

# Test results summary

Including class F

LCU size	1 EO per LCU			2 EOs per LCU		
	Y, BD-rate	U, BD-rate	V, BD-rate	Y, BD-rate	U, BD-rate	V, BD-rate
64x64	-0.1%	0.0%	0.1%	0.0%	0.7%	0.8%
32x32	-0.3%	-0.3%	-0.3%	-0.1%	0.1%	0.1%
16x16	-0.3%	-0.1%	0.0%	-0.2%	-0.1%	-0.2%

Excluding class F

LCU size	1 EO per LCU			2 EOs per LCU		
	Y, BD-rate	U, BD-rate	V, BD-rate	Y, BD-rate	U, BD-rate	V, BD-rate
64x64	-0.1%	-0.1%	0.0%	0.0%	0.7%	0.8%
32x32	-0.3%	-0.3%	-0.4%	-0.2%	0.0%	0.0%
16x16	-0.2%	-0.1%	-0.1%	-0.2%	-0.1%	-0.2%

Anchor is CE1 s/w

8 tests: Intra, RA, LD, LDP main/HE10