

Optimal Commutator 2-gen Sune (Mirror)

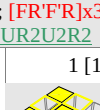
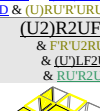
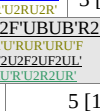
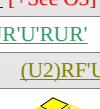
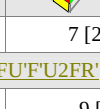
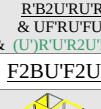
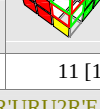
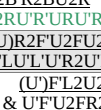
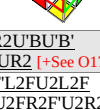
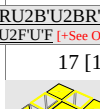
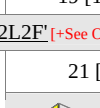
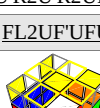
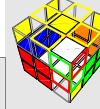
		<u>OLL [FURU'R' / FRUR'U'F]</u>	
		<u>R2B'R'BU2B'RBR2'</u>	
<u>(U'F'L'U'L2FL'F2; (U'R2BR'BU2BR; F'U2L'F2L'U'F2; F'URBR'BU2B'R'</u>		3-flip	
1-flip		F'U'2'FRUR' (U')F'UF	
		0	
1		<u>FR'F'R; (U')RUR'F'UF</u>	
<u>RUR'F'U'F; (U')RBUB'R'</u>		2	
3		F'UF2R'F'R; F'U2L'F'L'F2	
		4	
F'U'F2R'F'R; RU2R'F'U2F		FL2UFU'F2L'; (U')FU2L'ULF F'U'FRUR'F'UF	
		6	
5			
<u>U2F'L'U2L'F; F'U2F2R'F'R</u>			
7		<u>RBUB2B2RBR2; RU2R'F'L'U2L'F</u>	

“−” & “+” : DFR corner at FUR

	0	<u>L'D2LU2L'D2L';</u> <u>BD2B'U2BD2B'</u> & <u>B'DBU'B'D'B</u> & <u>FL'FR'FL'FR'</u>
	1	<u>(U2)F2UBU'F2UB'</u> ; <u>R2U'L'UR2U'L</u> & <u>FD'FU2F'DFU2F2</u>
	2	<u>(U')RU'R'UR2U'R'</u> ; <u>(U)F'UFUF'U2F</u> & (U2)RB2B'U'BU'B'R' & <u>FR2FL'FR2FL'F2</u>
	3	<u>R'D'L2DRD'L2D;</u> <u>FDB2D'F'DB2D'</u> & <u>F'LFR'FL'FR'</u>
	4	<u>LR'F2RU2F'U2F'L'</u> (=M'U2'lD2RU2R'F'); <u>B'FR2F'UR2UR2B</u> & <u>FU2F'U2RU2FU2F'R'</u>
	5	<u>(U')FU2LFL'U2R'FR';</u> <u>(U'R'U2B'RB'U2FR')</u> & <u>B'DR2D'F'BU2F'U'F2</u>
	6	<u>(U)F'U2FU'F'U'F;</u> <u>(U')RU2R'UR'UR'</u> & <u>R'FL2F'RFL2F'</u> & <u>RB'U'BU'B'U2BU'R'</u> & <u>(U2)FL'U'LU'L'U2LF</u>
	7	<u>(U2)RU2B2D2F2LF2D2B2;</u> <u>(U2)F'U2L2D2R2B'R2D2L2</u> & <u>B2UR'B2UB2U'R'B2</u> & <u>BD2B'L2UL2U'BU'BD2</u>

	8	(U')L'U2LU2RU2U'L'ULR2; (U')BU2B'U2FU2BU'B'F2 & RU'R2UR2URUR2UR' & F'U2FUR2B'DB'D'B2R2
	9	L2D2LU2L'D2LU2L; B2D2B'U2BD2B'U2B'
	10	(U')F'U'FU2F'U'F; (U)RUR'U2RUR' & U'FLU2L'U'LU'U'F
	11	RU'RF2U2R'U'RU'F2R2; F'UR'F2U2R'F'UF'UR2F2
	12	(U')RU'R'U2RU'R'; (U')F'UFU2F'UF & RU'B'U'BU'B'U2BR'
	13	(U)RB2UB2UB2U2B2R2; (U')FL2U'L2U'L2U2L2F
	14	L'U'LU'F2U2RU2R'F2; BUB'RU2F2U2F2R2 & (U')FU'FULU'FU'FL'
	15	RU'RU2R'U'RU'R2; F'UF'U2FUF'UF2 & RFU2F'U'FU'F'U'R'
	16	(U')F'LU2L'U2FULU'L'; (U)RB'U2BU2R'U'B'UB
	17	(U')F'U2FUF'B'UFU'B; (U')RU2R'U'RLU'R'UL' & (U')F'U2L'UF'UFU2L & (U)LU'RUR'L'UR'UR'
	18	(U)LU'RUL'U'R'; (U')B'UF'U'BUF & (U')F'UB'UFUB & R'DLDRD'L'D & (U')F'R'UR'U'RU2RU'F R'FRU2LFL'U2F'; FR'F'U2B'R'BU2R & (U)R2UR'URU2R'UR' & (U2)F2LF2UF2U'L'UF2
	19	RB2RU2R'UR'UB2R; FL2U2F'U'FU'L2F' & (U2)FUDF'U2U2D'F' (U2)F2UFU2FB'DR2D'B'; (U2)R2U'R'U2R'LD'F2DL' & B'U2BU2R2U'B'UBUR2
	20	(U')RU2R'UF2L'U'LUF2; (U')U2F'U2R2BUB'U'R2 & (U')R2B'R'U2L'B'LU2BR'
	21	(U)RU'L'RB2D'RDB2L; (U')F'UBFL2DF'D2LB' & FR'FR'FU2F'LFL'F & FU'FLDF'UFU'D'L' & BU'FUB'U2B'UFU'B (U2)F'RU2R'U'RU'R'F; (U2)RF'U2FUF'UFR' & (U2)RUR2U2R2UR2UR R2UDB'U'B'DR2F'UF; F2U'D'L'ULDF2RUR' & (U)RUR'URUR'U'RU2R'
	22	(U)RU2R'UF2L'U'LUF2; (U')U2F'U2R2BUB'U'R2 & (U')R2B'R'U2L'B'LU2BR'
	23	(U)RU'L'RB2D'RDB2L; (U')F'UBFL2DF'D2LB' & FR'FR'FU2F'LFL'F & FU'FLDF'UFU'D'L' & BU'FUB'U2B'UFU'B (U2)F'RU2R'U'RU'R'F; (U2)RF'U2FUF'UFR' & (U2)RUR2U2R2UR2UR R2UDB'U'B'DR2F'UF; F2U'D'L'ULDF2RUR' & (U)RUR'URUR'U'RU2R'
	24	(U)RU2R'UF2L'U'LUF2; (U')U2F'U2R2BUB'U'R2 & (U')R2B'R'U2L'B'LU2BR'
	25	(U)RU2R'UF2L'U'LUF2; (U')U2F'U2R2BUB'U'R2 & (U')R2B'R'U2L'B'LU2BR'
	26	(U2)RB2U2B2U'B2U'B2R2; (U2)F'L2U2L2UL2UL2F

“O” : DFR corner at URF

	Algorithm	# [mirror %]
Cube		[R'FR'F]x3; [FR'F'R]x3 & R2UR2UR2UR2R2
0 [0]		1 [18]
	(U2)L'UR2U'LUR2	
2 [9]	(U)L'U2L'D2LU2L'D2L2	
	(U)L'BLF2L'B'LF2 & (U2)F'BR'FBR' & (UR2)DLDR2DL'D & (U)RU'RUR'U'RU2R'	3 [6]
		(U2)R2UR2F2'UBUB'R2 & F'R2UR'U'RUR'UR'U'F & (U)LF2UF2UF2UF2UL' & RU'R2UR'U'RU2RU2R'
		5 [15]
4 [24]	(U)RB2U2RB2R'U2B2R' & (U)RU2R'F2U2R'F2RU2F2	
6 [3]	(U)F2DB'D'F2DBD' [+See O3]	
	RUR'U'RUR'U'RUR'	7 [21]
		(U2)RFU'FU'FU2FR'
		9 [2]
8 [12]	(U2)LU2LD'L'U2LDL2 & LD'F2DL'D'LF2L'D	
10 [20]	R'B2UR'U'R'U2B2R & UFRU'FU'FU2RF & (U')R'U'R2U'R2UR2U'R'	
	F2BU'F2UB'U2F2U2F2	11 [11]
		(U2)F'RU'R'URU2R'F
		13 [26]
12 [8]	RB2U'B'R2U2B'R2BU2R & (U2)RU2R'U2RU'U'RUR'	
14 [17]	(U)R2F'U2FU2R2U'BU'B' & L'U'LU'L'U'R2U'LU2 [+See O17]	
	(U)FL2U2F'L2FU2L2F & U'FU2FR2U2FU2R2U2R2	15 [5]
		(U2)B'U'URU2B'U2BR' & FU'FU2FU2FU2F'U'F [+See O14]
		17 [14]
16 [23]		
	U2F2U'L'ULF2U'RU2R' [+See O14]	
18 [1]	(U2)BU'F2UB'UF2	
	(U)RU2U2R2FU'R2U'RU2UF'	19 [19]
		FL2UF'UFU2L2F' [+See O10]
		21 [7]
20 [10]	F'U'FU'F'UF'UF'UF	
22 [25]	(U)L'URU'LR'U2RU'R' & R'U'R2U2R2U2RU2R & U2B'R'U'UBURU'R'	

	(U)RB'U2L'BLU2RBR2 [+See O16]	23 [16]
	(U)B'R2U'R2U2R2U'R2U'F [+See O4]	25 [22]
24 [4]	U'BU'FUFB'U2F'UF [+See O22]	
26 [13]	F'L'U2LF2U2LF2L'U2F' & (U'RUR'U'UR'U2RU2R' [+See O13]	

“I” : DFR at FRD

	D'L2ULU2LDR'F2R'; <u>DB2U'B'U2B'D'FR2F'</u> & (U')F2L'U'F2U'F2'UL'UF2
	<u>RUR'URU2'R'UR'</u> ; <u>L'U'LUL2L'UL'</u> & <u>F'UFU'F'U2F'UF</u>
	(U')RUR'F2L'U'UF2; <u>(U')F'UF2R2BUB'U'R2</u> & <u>RF'U2FUF'U'FUF'UF'</u>
	RU'R'F2L2D2L'U'L'D2L2UF2; <u>F'UF2R2B2D2B'UBD2B2U'R2</u> & R2F2U2R'U'RU'F2R2U'RU'R'
	(U)R2UBU'B'R2F'U'F'; <u>(U')F2U'L'ULF2RUR'</u> & (U')F'RUR'URU'R'URU2R'F
	RF'L'BUB'U2LUF'R'; <u>FRBL'U'LU2B'U'RF</u> & R2F2U2R'U'RU'F2R'U2R'
	<u>R2U2R'U'RU'R'U2R'</u> ; <u>F2U2FUF'UFU2F</u>
	F'U'FU2F2D'FU'F'DF2; <u>RU'R2R2DR'UR'UR2</u> & (U)RU2R'U2RU2R'U'RU'R'

DRF corner in place (COLL)

	<u>RUR'UR2R';</u> <u>F'U'FU'FU2F</u> & <u>R'U'L'UR'U'L' & F'U2FUFUFU</u>	Sune	
Double-Sune	<u>RUR'URU'R'URU2R';</u> <u>RU2R'U'RUR'U'RUR'</u>		
	<u>RU2R2'U'R2U'R2'U2R;</u> <u>F'U2F2'UF2UF2'U2F'</u> & <u>R'UL'URU'L'UL'U'L'</u> <u>B'RLB'RLB'L</u> & <u>RB'R'FRBR'F'</u>	Pi (π)	
Triple-Sune	<u>L'U'L'UL'UL'UL'UL'UL'</u>		
	<u>RBR'FRB'R'F'</u> & <u>FRB'F'R'FRBR'</u> <u>R2DR'U2RD'R'U2R';</u> <u>F2D'FU2F'DFU2F</u> & <u>RUR'URU'L'UL'U'L'</u>	Chameleon	
Headlights			

Idea: Shotaro Makisumi

Algs: Lucas Garron

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