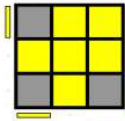
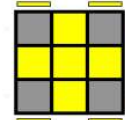


All Edges Oriented Correctly



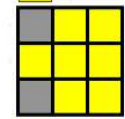
$R U^2 R' U' R U' R'$
 $y' R' U' R U' R' U^2 R$

OCLL6 - 26 - Probability = 1/54



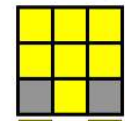
$(R U^2 R') (U' R U R') (U' R U' R')$
 $y (R U R' U) (R U' R' U) (R U^2 R')$

OCLL1 - 21 - Probability = 1/108



$(r U R' U') (r' F R F')$
 $y (R U R D) (R' U' R D') R^2$

OCLL4 - 24 - Probability = 1/54



$R^2 D (R' U^2 R) D' (R' U^2 R')$
 $y^2 R^2 D' (R U^2 R') D (R U^2 R)$

OCLL3 - 23 - Probability = 1/54

$R U R' U R U^2 R'$
 $y' R' U^2 R U R' U R$

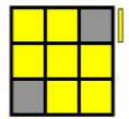
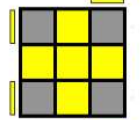
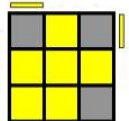
OCLL7 - 27 - Probability = 1/54

$R U^2 R^2 U' R^2 U' R^2 U^2 R$

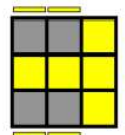
OCLL2 - 22 - Probability = 1/54

$y F' (r U R' U') r' F R$
 $x (R' U R) D' (R' U' R) D x'$

OCLL5 - 25 - Probability = 1/54



T-Shapes

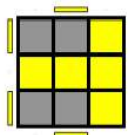


$(R U R' U') (R' F R F')$

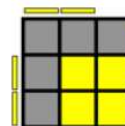
T1 - 33 - Probability = 1/54

$F (R U R' U') F'$

T2 - 45 - Probability = 1/54



Squares

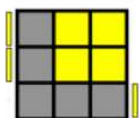


$(r' U^2 R' U R' U r)$

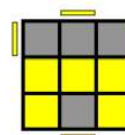
S1 - 5 - Probability = 1/54

$(r U^2 R' U' R U' r')$

S2 - 6 - Probability = 1/54



C-Shapes

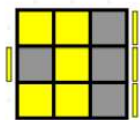


$(R U R^2 U') (R' F R U) R U' F'$

C1 - 34 - Probability = 1/54

$R' U' (R' F R F') U R$

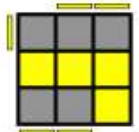
C2 - 46 - Probability = 1/54



Knight Move Shapes

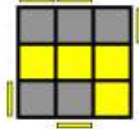
$(r' U' r') (U' r U r') y' (R' U R)$
 $F U R U' R2' F' R U (R U' R')$
K1 - 13 - Probability = 1/54

$(R' F R) (U R' F' R) (F U' F')$
K2 - 14 - Probability = 1/54



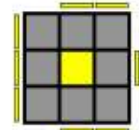
$(r' U r') (R U R' U') (r' U' r')$
K4 - 16 - Probability = 1/54

$(r' U' r) (R' U' R U) (r' U r)$
K3 - 15 - Probability = 1/54



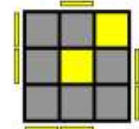
$(R U2') (R2' F R F') U2' (R' F R F')$
O1 - 1 - Probability = 1/108

$F (R U R' U') F' f (R U R' U') f'$
 $y (r' U r') U2 R U2' R' U2 (r' U' r')$
O2 - 2 - Probability = 1/54



$f (R U R' U') f' U' F (R U R' U') F'$
O3 - 3 - Probability = 1/54

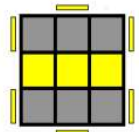
$f (R U R' U') f' U F (R U R' U') F'$
O4 - 4 - Probability = 1/54



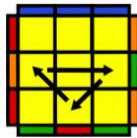
I-Shapes

$f (R U R' U') (R U R' U') f'$
 $y2 F (U R U' R') (U R U' R') F'$
I1 - 51 - Probability = 1/54

$r' U' r (U' R' U R) (U' R' U R) r' U r$
I4 - 56 - Probability = 1/108

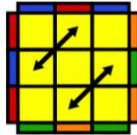
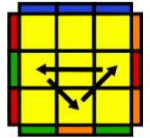


Permutations of Edges Only



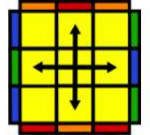
$R2 U (R U R' U') R' U' (R' U R')$
 $y2 (R' U R' U') R' U' (R' U R U) R2'$
 Ub - Probability = 1/18

$(R U' R U) R U (R U' R' U') R2$
 $y2 (R U R' U) (R' U' R2 U') R' U R' U R [U2]$
 $y2 (R2 U' R' U') R U R U (R U' R)$
 Ua - Probability = 1/18

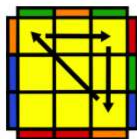


$(M2' U M2' U) (M' U2) (M2' U2 M') [U2]$
 $y' M' U (M2' U M2') U (M' U2 M2) [U']$
 Z - Probability = 1/36

$(M2' U M2') U2 (M2' U M2')$
 H - Probability = 1/72

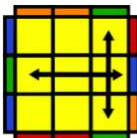
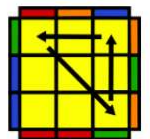


Permutations of Corners Only



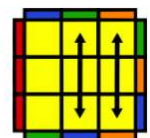
$x (R' U R') D2 (R U' R') D2 R2 x'$
 $y x' R2 D2 (R' U' R) D2 (R' U R') x$
 Aa - Probability = 1/18

$x R2' D2 (R U R') D2 (R U' R) x'$
 $y x' (R' U' R) D2 (R' U R) D2 R2' x$
 Ab - Probability = 1/18

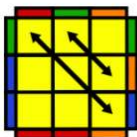


$(R U R' U') (R' F R2 U') R' U' (R U R' F')$
 T - Probability = 1/18

$(R' U' F')(R U R' U')(R' F R2 U')(R' U' R U)(R' U R)$
 $y (R' U2 R' U') y (R' F' R2 U') (R' U R' F) R U' F$
 F - Probability = 1/18



Swap One Set of Diagonal Corners



$(R' U R' U') y (R' F' R2 U') (R' U R' F) R F$
 V - Probability = 1/18

$F (R' U' R' U') (R U R' F') (R U R' U') (R' F R F')$
 Y - Probability = 1/18

