$$d^{\ell}_{m,0} = \sqrt{\frac{4\pi}{2\ell+1}}\, Y^m_\ell\, e^{-im\phi}$$

$$d^{j}_{m',m} = (-1)^{m-m'} d^{j}_{m,m'} = d^{j}_{-m,-m'}$$

$$d^{1/2}_{1/2,1/2} = \cos\frac{\theta}{2} \qquad d^{1/2}_{1/2,-1/2} = -\sin\frac{\theta}{2}$$

$$d^{1}_{1,1} = \frac{1+\cos\theta}{2} \qquad d^{1}_{1,0} = -\frac{\sin\theta}{\sqrt{2}} \qquad d^{1}_{1,-1} = \frac{1-\cos\theta}{2} \qquad d^{1}_{0,0} = \cos\theta$$

2×2

	+2 +2	+2 +1	+1 +2	+2 0	+1 1	0 2
4	1					
4		1/2	1/2			
3		1/2	−1/2			
4				3/14	1/2	2/7
2				4/7	0	−3/7
2				3/14	−1/2	2/7

2×3/2

	+2+3/2	+2 +1/2	+1 +3/2	+2 −1/2	+1 1/2	0 3/2
7/2	1					
7/2		3/7	4/7	1/7	16/35	2/5
5/2		4/7	−3/7	4/7	1/35	−2/5
3/2		2/7	−18/35	1/5		

3/2×3/2

	+3/2 +3/2	+3/2 +1/2	+1/2 +3/2	+3/2 −1/2	+1/2 +1/2	−1/2 +3/2	+3/2 −3/2	+1/2 −1/2	−1/2 +1/2	−3/2 +3/2
3	1									
3		1/2	1/2							
3		1/2	−1/2							
3				1/5	1/2	3/10				
2				3/5	0	−2/5				
1				1/5	−1/2	3/10				
3							1/20	1/4	9/20	1/4
2							9/20	1/4	−1/20	−1/4
1							9/20	−1/4	−1/20	1/4
0							1/20	−1/4	9/20	−1/4

2×5/2

	+2 −3/2	+1 −1/2	0 1/2	−1 3/2
7/2	1/35	6/35	2/5	2/5
5/2	12/35	5/14	0	−3/10
3/2	18/35	−3/35	−1/5	1/5
1/2	4/35	−27/70	2/5	−1/10

3/2×5/2

	+1 −3/2	0 −1/2	−1 1/2	−2 3/2
7/2	4/35	27/70	2/5	1/10
5/2	18/35	3/35	−1/5	−1/5
3/2	12/35	−5/14	0	3/10
1/2	1/35	−6/35	2/5	−2/5

3×5/2

	0 −3/2	−1 −1/2	−2 1/2
7/2	2/7	18/35	1/5
5/2	4/7	−1/35	−2/5
3/2	1/7	−16/35	2/5

4×5/2

	−1 −3/2	−2 −1/2
7/2	4/7	3/7
5/2	3/7	−4/7
3/2	1/14	−16/35

2×4

	+2 −2	+1 −1	0 0	−1 1	−2 2
4	1/70	1/10	2/7	2/5	1/5
4	8/35	2/5	1/14	−1/10	−1/5
4	18/35	0	−2/7	0	1/5
4	8/35	−2/5	1/14	1/10	−1/5
4	1/70	−1/10	2/7	−2/5	1/5

3/2×4

	+1 −2	0 −1	−1 0	−2 1
7/2	1/14	3/10	3/7	1/5
5/2	3/7	1/5	−1/14	−3/10
3/2	3/7	−1/5	−1/14	3/10
1/2	1/14	−3/10	3/7	−1/5

3×4

	0 −2	−1 −1	−2 0
7/2	3/14	1/2	2/7
5/2	4/7	0	−3/7
3/2	3/14	−1/2	2/7

4×4

	−1 −2	−2 −1
7/2	1/2	1/2
5/2	1/2	−1/2

2×2

	−2 −2
4	1

$$d^{3/2}_{3/2,3/2} = \frac{1+\cos\theta}{2}\cos\frac{\theta}{2}$$

$$d^{3/2}_{3/2,1/2} = -\sqrt{3}\frac{1+\cos\theta}{2}\sin\frac{\theta}{2}$$

$$d^{3,2}_{3/2,-1/2} = \sqrt{3}\frac{1-\cos\theta}{2}\cos\frac{\theta}{2}$$

$$d^{3,2}_{3/2,-3/2} = -\frac{1-\cos\theta}{2}\sin\frac{\theta}{2}$$

$$d^{3/2}_{1/2,1/2} = \frac{3\cos\theta-1}{2}\cos\frac{\theta}{2}$$

$$d^{3/2}_{1/2,-1/2} = -\frac{3\cos\theta+1}{2}\sin\frac{\theta}{2}$$

$$d^{2}_{2,2} = \left(\frac{1+\cos\theta}{2}\right)^2$$

$$d^{2}_{2,1} = -\frac{1+\cos\theta}{2}\sin\theta$$

$$d^{2}_{2,0} = \frac{\sqrt{6}}{4}\sin^2\theta$$

$$d^{2}_{2,-1} = -\frac{1-\cos\theta}{2}\sin\theta$$

$$d^{2}_{2,-2} = \left(\frac{1-\cos\theta}{2}\right)^2$$

$$d^{2}_{1,1} = \frac{1+\cos\theta}{2}(2\cos\theta-1)$$

$$d^{2}_{1,0} = -\sqrt{\frac{3}{2}}\sin\theta\cos\theta$$

$$d^{2}_{1,-1} = \frac{1-\cos\theta}{2}(2\cos\theta+1)$$

$$d^{2}_{0,0} = \left(\frac{3}{2}\cos^2\theta-\frac{1}{2}\right)$$