

$HS.2 \pmod{5}$

	blocks	defect	matrix
$G :$	1	3	25×14
	2	1	5×4
	3	1	5×4
	4	0	$1750_1 = \chi_{19,0}, \varphi_{14,0}$
	5	0	$1750_2 = \chi_{19,1}, \varphi_{14,1}$

	blocks	defect	matrix
	6	0	$2750_1 = \chi_{23,0}, \varphi_{16,0}$
	7	0	$2750_2 = \chi_{23,1}, \varphi_{16,1}$
$2.G :$	8	3	16×5
	9	0	$1000_1 = \chi_{32,0}, \varphi_{27,0}$
	$10 = \bar{9}$	0	$1000_2 = \chi_{32,1}, \varphi_{27,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	φ_{5+}	$\varphi_{8,0}$	$\varphi_{8,1}$	φ_{9+}	$\varphi_{11,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.	.	.	.
$22_1 = \chi_{2,0}$	1	.	1	.	.	.	.	.	.	.	.	.	.
$22_2 = \chi_{2,1}$	.	1	.	1	.	.	.	.	.	.	.	.	.
$77_1 = \chi_{3,0}$	1	.	1	.	1	.	.	.	.	.	.	.	.
$77_2 = \chi_{3,1}$	.	1	.	1	.	1	.	.	.	.	.	.	.
$154_1 = \chi_{4,0}$	1	.	.	.	1	.	1	.	.	.	.	.	.
$154_2 = \chi_{4,1}$	.	1	.	.	.	1	.	1	.	.	.	.	.
$308_1 = \chi_{5+}$	.	.	1	1	.	.	.	.	1	.	.	.	.
$231_1 = \chi_{8,0}$	.	.	1	.	.	.	.	.	.	1	.	.	.
$231_2 = \chi_{8,1}$	.	.	.	1	.	.	.	.	.	.	1	.	.
$693_1 = \chi_{9,0}$	1	.	1	.	1	.	1	.	.	.	.	.	1
$693_2 = \chi_{9,1}$	.	1	.	1	.	1	.	1	.	.	.	.	.
$770_1 = \chi_{10,0}$	1	.	2	.	1	.	2	.	1	1	.	.	.
$770_2 = \chi_{10,1}$	.	1	.	2	.	1	.	2	1	.	1	.	.
$1540_1 = \chi_{11+}$	.	.	.	.	.	.	.	.	.	1	1	2	.
$1792_1 = \chi_{14+}$	.	.	.	.	.	.	1	1	.	.	.	1	1
$1056_1 = \chi_{16,0}$	.	.	1	.	1	.	1	1	1	.	.	.	1
$1056_2 = \chi_{16,1}$	.	.	.	1	.	1	1	1	1	.	.	.	.
$1386_1 = \chi_{17,0}$	.	.	.	.	.	.	1	.	.	1	.	1	.
$1386_2 = \chi_{17,1}$	.	.	.	.	.	.	.	1	.	.	1	1	1
$1408_1 = \chi_{18,0}$	1	.	1	.	.	.	1	.	.	1	.	1	1
$1408_2 = \chi_{18,1}$	.	1	.	1	.	.	.	1	.	.	1	1	.
$2520_1 = \chi_{22,0}$	.	.	1	1	.	.	1	1	1	1	1	1	1
$2520_2 = \chi_{22,1}$	.	.	1	1	.	.	1	1	1	1	1	1	1

(Block 1:)	$\varphi_{11,1}$		
$1_1 = \chi_{1,0}$	.		
$1_2 = \chi_{1,1}$	.		
$22_1 = \chi_{2,0}$	.		
$22_2 = \chi_{2,1}$	.		
$77_1 = \chi_{3,0}$	.		
$77_2 = \chi_{3,1}$	.	$\varphi_{1,0} = 1_1$	
$154_1 = \chi_{4,0}$	.	$\varphi_{1,1} = 1_2$	
$154_2 = \chi_{4,1}$	.	$\varphi_{2,0} = 21_1$	
$308_1 = \chi_{5+}$	.	$\varphi_{2,1} = 21_2$	
$231_1 = \chi_{8,0}$	.	$\varphi_{3,0} = 55_1$	
$231_2 = \chi_{8,1}$	.	$\varphi_{3,1} = 55_2$	
$693_1 = \chi_{9,0}$	.	$\varphi_{4,0} = 98_1$	
$693_2 = \chi_{9,1}$	1	$\varphi_{4,1} = 98_2$	
$770_1 = \chi_{10,0}$	.	$\varphi_{5+} = 266_1$	
$770_2 = \chi_{10,1}$	.	$\varphi_{8,0} = 210_1$	
$1540_1 = \chi_{11+}$	.	$\varphi_{8,1} = 210_2$	
$1792_1 = \chi_{14+}$	1	$\varphi_{9+} = 560_1$	
$1056_1 = \chi_{16,0}$	.	$\varphi_{11,0} = 518_1$	
$1056_2 = \chi_{16,1}$	1	$\varphi_{11,1} = 518_2$	
$1386_1 = \chi_{17,0}$	1		
$1386_2 = \chi_{17,1}$	.		
$1408_1 = \chi_{18,0}$	.		
$1408_2 = \chi_{18,1}$	1		
$2520_1 = \chi_{22,0}$	1		
$2520_2 = \chi_{22,1}$	1		

Block 2:	$\varphi_{7,0}$	$\varphi_{12,0}$	$\varphi_{13,0}$	$\varphi_{15,0}$	
$175_1 = \chi_{7,0}$	1	.	.	.	$\varphi_{7,0} = 175_1$
$825_1 = \chi_{13,0}$	1	1	.	.	$\varphi_{12,0} = 650_1$
$1925_1 = \chi_{20,0}$	.	1	1	.	$\varphi_{13,0} = 1275_1$
$1925_3 = \chi_{21,0}$	.	.	.	1	$\varphi_{15,0} = 1925_1$
$3200_1 = \chi_{24,0}$	.	.	1	1	

Block 3:	$\varphi_{7,1}$	$\varphi_{12,1}$	$\varphi_{13,1}$	$\varphi_{15,1}$	
$175_2 = \chi_{7,1}$	1	.	.	.	$\varphi_{7,1} = 175_2$
$825_2 = \chi_{13,1}$	1	1	.	.	$\varphi_{12,1} = 650_2$
$1925_2 = \chi_{20,1}$	.	1	1	.	$\varphi_{13,1} = 1275_2$
$1925_4 = \chi_{21,1}$	.	.	.	1	$\varphi_{15,1} = 1925_2$
$3200_2 = \chi_{24,1}$	.	.	1	1	

Block 8:	φ_{17+}	φ_{19+}	φ_{21+}	φ_{23+}	φ_{25+}	
$56_1 = \chi_{25,0}$	1	.	.	.	.	
$56_2 = \chi_{25,1}$	1	.	.	.	.	
$352_1 = \chi_{26+}$	2	1	.	.	.	
$1232_1 = \chi_{28+}$	2	1	1	.	.	
$1848_1 = \chi_{30+}$	1	1	.	.	1	
$2464_1 = \chi_{33+}$	.	.	.	1	1	$\varphi_{17+} = 56_1$
$1792_2 = \chi_{35,0}$	.	.	1	1	.	$\varphi_{19+} = 240_1$
$1792_3 = \chi_{35,1}$	.	.	1	1	.	$\varphi_{21+} = 880_1$
$1848_2 = \chi_{36,0}$	1	.	1	1	.	$\varphi_{23+} = 912_1$
$1848_3 = \chi_{36,1}$	1	.	1	1	.	$\varphi_{25+} = 1552_1$
$3960_1 = \chi_{37+}$	3	1	3	1	.	
$4608_1 = \chi_{39+}$	2	1	1	2	1	
$2520_3 = \chi_{41,0}$	1	.	.	1	1	
$2520_4 = \chi_{41,1}$	1	.	.	1	1	
$2520_5 = \chi_{42,0}$	1	.	.	1	1	
$2520_6 = \chi_{42,1}$	1	.	.	1	1	