The group G is isomorphic to the group labelled by [50, 4] in the Small Groups library. Ordinary character table of  $G \cong (C5 \times C5) : C2$ :

	1 <i>a</i>	2a	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j	5k	5l
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$	1	-1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_3$	2	0	2	$E(5)^2 + E(5)^3$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
$\chi_4$	2	0	2	$E(5) + E(5)^4$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
$\chi_5$	2	0	$E(5)^2 + E(5)^3$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
$\chi_6$	2	0	$E(5) + E(5)^4$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
$\chi_7$	2	0	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	2	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
$\chi_8$	2	0	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	2	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
$\chi_9$	2	0	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	2	2				
$\chi_{10}$	2	0	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	2	2				
$\chi_{11}$	2	0	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
$\chi_{12}$	2	0	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
$\chi_{13}$	2	0	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	2	2	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
$\chi_{14}$	2	0	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5) + E(5)^4$	2	2	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$

Trivial source character table of  $G \cong (C5 \times C5) : C2$  at p = 5:

$N_1$	1 7	$V_2$	N	,	N	J <sub>A</sub>	Λ	$V_5$	Λ	$V_6$	Ι /	$\overline{V_7}$	N		
	_			0		1						<u>'</u>		_	
1	_	-	-		- 1		1 0		Ü		'				
1a  2a	1a	2a	1a	2a	1a	2a	1a	2a	1a	2a	1a	2a	1a	2a	
25 - 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25   1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5 -1	5	-1	0	0	0	0	0	0	0	0	0	0	0	0	
5 1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	
5 -1	0	0	5	-1	0	0	0	0	0	0	0	0	0	0	
5 1	0	0	5	1	0	0	0	0	0	0	0	0	0	0	
5 -1	0	0	0	0	5	-1	0	0	0	0	0	0	0	0	
5 1	0	0	0	0	5	1	0	0	0	0	0	0	0	0	
5 -1	0	0	0	0	0	0	5	-1	0	0	0	0	0	0	
5 1	0	0	0	0	0	0	5	1	0	0	0	0	0	0	
5 -1	0	0	0	0	0	0	0	0	5	-1	0	0	0	0	
5 1	0	0	0	0	0	0	0	0	5	1	0	0	0	0	
5 -1	0	0	0	0	0	0	0	0	0	0	5	-1	0	0	
5 1	0	0	0	0	0	0	0	0	0	0	5	1	0	0	
1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1 - 1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	
2!	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														

 $P_1 = Group([()]) \cong 1$ 

 $P_2 = Group([(1,4,9,16,25)(2,6,12,20,30)(3,8,15,24,34)(5,11,19,29,38)(7,14,23,33,41)(10,18,28,37,44)(13,22,32,40,46)(17,27,36,43,48)(21,31,39,45,49)(26,35,42,47,50)]) \cong C5$ 

 $P_3 = Group([(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50)]) \cong C5$   $P_4 = Group([(1,8,23,40,49)(2,11,28,43,50)(3,14,32,45,25)(4,15,33,46,21)(5,18,36,47,30)(6,19,37,48,26)(7,22,39,16,34)(9,24,41,13,31)(10,27,42,20,38)(12,29,44,17,35)]) \cong C5$ 

 $P_5 = Group([(1, 14, 39, 24, 46)(2, 18, 42, 29, 48)(3, 22, 9, 33, 49)(4, 23, 45, 34, 13)(5, 27, 12, 37, 50)(6, 28, 47, 38, 17)(7, 31, 15, 40, 25)(8, 32, 16, 41, 21)(10, 35, 19, 43, 30)(11, 36, 20, 44, 26)]) \cong C5$ 

 $P_6 = Group([(1,22,15,45,41)(2,27,19,47,44)(3,31,23,16,46)(4,32,24,49,7)(5,35,28,20,48)(6,36,29,50,10)(8,39,33,25,13)(9,40,34,21,14)(11,42,37,30,17)(12,43,38,26,18)]) \cong C5$ 

 $P_7 = Group([(1,31,32,33,34)(2,35,36,37,38)(3,4,39,40,41)(5,6,42,43,44)(7,8,9,45,46)(10,11,12,47,48)(13,14,15,16,49)(17,18,19,20,50)(21,22,23,24,25)(26,27,28,29,30)]) \cong C5$ 

 $P_8 = Group([(1,4,9,16,25)(2,6,12,20,30)(3,8,15,24,34)(5,11,19,29,38)(7,14,23,33,41)(10,18,28,37,44)(13,22,32,40,46)(17,27,36,43,48)(21,31,39,45,49)(26,35,42,47,50),(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,40,45)(20,29,37,43,47)(25,34,41,46,49)(30,38,44,48,50)]) \cong C5 \times C5$ 

 $N_2 = Group([1,4,9,16,25)(2,6,12,20,30)(3,8,15,24,34)(5,11,19,29,38)(7,14,23,33,4)(13,24,24)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35),(1,3,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,44,48,50)] \\ = (C5 \times C5) : C2 \\ N_3 = Group([1,8,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,32,39)(12,19,28,36,42)(16,24,33,44,48,50)] \\ = (C5 \times C5) : C2 \\ N_4 = Group([1,8,7,13,21)(2,5,10,17,26)(4,8,14,22,31)(6,11,18,27,35)(9,15,23,33,41)(10,18,28,34,41,46,49)(30,38,44,48,50)] \\ = (C5 \times C5) : C2 \\ N_4 = Group([1,8,7,13,21)(2,5,10,17,26)(4,8,14,24,31)(10,18,28,34,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41)(10,18,48,41,48,41,48,41)(10,18,48,41,48,41,48,41)(10,18,48,41,48,4$ 

 $N_1 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(7,17)(8,50)(9,20)(10,13)(11,49)(12,16)(4,48)(15,47)(18,46)(19,45)(22,44)(23,43)(43,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35), \\ N_2 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(7,17)(8,50)(9,20)(10,13)(11,49)(12,16)(14,48)(15,47)(18,46)(19,45)(22,44)(23,43)(24,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35), \\ N_3 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(7,17)(8,50)(9,20)(10,13)(11,49)(12,43)(24,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35), \\ N_3 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(7,17)(8,50)(9,20)(10,13)(11,49)(12,43)(24,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35), \\ N_4 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(7,17)(8,50)(9,20)(10,13)(11,49)(12,43)(24,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,35), \\ N_3 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(24,42)(27,41)(28,40)(29,39)(31,38)(22,37)(33,36)(34,35), \\ N_4 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(24,42)(27,41)(28,40)(29,39)(31,38)(22,37)(33,36)(34,35), \\ N_4 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(24,42)(27,41)(28,40)(29,39)(31,38)(22,37)(33,36)(34,35), \\ N_4 = Group([(1,2)(3,26)(4,30)(5,21)(6,25)(24,42)(27,41)(28,40)(29,39)(31,38)(24,42)(27,41)(28,40)(29,39)(31,38)(24,42)(27,41)(28,40)(29,39)(31,38)(24,42)(27,41)(28,40)(29,39)(31,38)(32,37)(33,36)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,38)(34,3$