The group G is isomorphic to the group labelled by [8, 3] in the Small Groups library.
Ordinary character table of $G \cong$ D8:

	$1a$	$2a$	$4a$	$2b$	$2c$
χ_1	1	1	1	1	1
χ_2	1	1	1	−1	−1
χ_3	1	1	−1	1	−1
χ_4	1	1	−1	−1	1
χ_5	2	−2	0	0	0

Trivial source character table of $G \cong$ D8 at $p = 2$:

Normalisers N_i	N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8
p-subgroups of G up to conjugacy in G	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8
Representatives $n_j \in N_i$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$
$1\cdot\chi_1 + 1\cdot\chi_2 + 1\cdot\chi_3 + 1\cdot\chi_4 + 2\cdot\chi_5$	8	0	0	0	0	0	0	0
$1\cdot\chi_1 + 1\cdot\chi_2 + 1\cdot\chi_3 + 1\cdot\chi_4 + 0\cdot\chi_5$	4	4	0	0	0	0	0	0
$1\cdot\chi_1 + 0\cdot\chi_2 + 1\cdot\chi_3 + 0\cdot\chi_4 + 1\cdot\chi_5$	4	0	2	0	0	0	0	0
$1\cdot\chi_1 + 0\cdot\chi_2 + 0\cdot\chi_3 + 1\cdot\chi_4 + 1\cdot\chi_5$	4	0	0	2	0	0	0	0
$1\cdot\chi_1 + 0\cdot\chi_2 + 1\cdot\chi_3 + 0\cdot\chi_4 + 0\cdot\chi_5$	2	2	2	0	2	0	0	0
$1\cdot\chi_1 + 0\cdot\chi_2 + 0\cdot\chi_3 + 1\cdot\chi_4 + 0\cdot\chi_5$	2	2	0	2	0	2	0	0
$1\cdot\chi_1 + 1\cdot\chi_2 + 0\cdot\chi_3 + 0\cdot\chi_4 + 0\cdot\chi_5$	2	2	0	0	0	0	2	0
$1\cdot\chi_1 + 0\cdot\chi_2 + 0\cdot\chi_3 + 0\cdot\chi_4 + 0\cdot\chi_5$	1	1	1	1	1	1	1	1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,4)(2,6)(3,7)(5,8)]) \cong$ C2
$P_3 = Group([(1,3)(2,5)(4,7)(6,8)]) \cong$ C2
$P_4 = Group([(1,2)(3,8)(4,6)(5,7)]) \cong$ C2
$P_5 = Group([(1,4)(2,6)(3,7)(5,8),(1,3)(2,5)(4,7)(6,8)]) \cong$ C2 x C2
$P_6 = Group([(1,4)(2,6)(3,7)(5,8),(1,2)(3,8)(4,6)(5,7)]) \cong$ C2 x C2
$P_7 = Group([(1,4)(2,6)(3,7)(5,8),(1,8,4,5)(2,7,6,3)]) \cong$ C4
$P_8 = Group([(1,4)(2,6)(3,7)(5,8),(1,3)(2,5)(4,7)(6,8),(1,2)(3,8)(4,6)(5,7)]) \cong$ D8

$N_1 = Group([(1,2)(3,8)(4,6)(5,7),(1,3)(2,5)(4,7)(6,8),(1,4)(2,6)(3,7)(5,8)]) \cong$ D8
$N_2 = Group([(1,2)(3,8)(4,6)(5,7),(1,3)(2,5)(4,7)(6,8),(1,4)(2,6)(3,7)(5,8)]) \cong$ D8
$N_3 = Group([(1,3)(2,5)(4,7)(6,8),(1,4)(2,6)(3,7)(5,8)]) \cong$ C2 x C2
$N_4 = Group([(1,2)(3,8)(4,6)(5,7),(1,6)(2,4)(3,5)(7,8)]) \cong$ C2 x C2
$N_5 = Group([(1,3)(2,5)(4,7)(6,8),(1,4)(2,6)(3,7)(5,8),(1,2)(3,8)(4,6)(5,7)]) \cong$ D8
$N_6 = Group([(1,2)(3,8)(4,6)(5,7),(1,4)(2,6)(3,7)(5,8),(1,3)(2,5)(4,7)(6,8)]) \cong$ D8
$N_7 = Group([(1,8,4,5)(2,7,6,3),(1,4)(2,6)(3,7)(5,8),(1,2)(3,8)(4,6)(5,7)]) \cong$ D8
$N_8 = Group([(1,2)(3,8)(4,6)(5,7),(1,3)(2,5)(4,7)(6,8),(1,4)(2,6)(3,7)(5,8)]) \cong$ D8