$Fi_{22}.2$

$O_8^+(2).3 \quad \leq$ $O_8^+(2).3.2 \times 2$	247104	$1a^{\pm} + 1001a^{\pm} + 3080a^{\pm} + 10725a^{\pm} +$ $13650a^{\pm} + 45045a^{\pm} + 50050a^{\pm}$	14

Character Numbers: [1, 2, 7, 8, 13, 14, 15, 16, 17, 18, 25, 26, 29, 30]

	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}	S_{13}	S_{14}
χ_1	1	1	1	1	1575	1575	1575	1575	22400	22400	22400	22400	75600	75600
χ_2	1	−1	1	−1	−1575	1575	−1575	1575	22400	−22400	22400	−22400	75600	−75600
χ_3	1	1	−1	−1	−225	−225	225	225	800	800	−800	−800	0	0
χ_4	1	−1	−1	1	225	−225	−225	225	800	−800	−800	800	0	0
χ_5	1	1	1	1	171	171	171	171	−64	−64	−64	−64	−216	−216
χ_6	1	−1	1	−1	−171	171	−171	171	−64	64	−64	64	−216	216
χ_7	1	−1	−1	1	−63	63	63	−63	224	−224	−224	224	0	0
χ_8	1	1	−1	−1	63	63	−63	−63	224	224	−224	−224	0	0
χ_9	1	1	1	1	−9	−9	−9	−9	224	224	224	224	−432	−432
χ_{10}	1	−1	1	−1	9	−9	9	−9	224	−224	224	−224	−432	432
χ_{11}	1	1	1	1	−9	−9	−9	−9	−64	−64	−64	−64	144	144
χ_{12}	1	−1	1	−1	9	−9	9	−9	−64	64	−64	64	144	−144
χ_{13}	1	−1	−1	1	9	−9	−9	9	−64	64	64	−64	0	0
χ_{14}	1	1	−1	−1	−9	−9	9	9	−64	−64	64	64	0	0

Ramanujan Graphs: [2, 3], [2, 3, 4], [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14], [2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14], [2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14], [2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14], [2, 3, 4, 9, 10, 11, 12, 13, 14], [2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [2, 3, 5, 6, 9, 10, 11, 12, 13, 14], [2, 3, 5, 8, 9, 10, 11, 12, 13, 14], [2, 3, 6, 7, 9, 10, 11, 12, 13, 14], [2, 3, 7, 8, 9, 10, 11, 12, 13, 14], [2, 3, 9, 10, 11, 12, 13, 14], [2, 4], [2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [2, 4, 5, 6, 9, 10, 11, 12, 13, 14], [2, 4, 5, 7, 10, 12], [2, 4, 5, 7, 10, 12, 14], [2, 4, 5, 7, 14], [2, 4, 5, 8, 9, 10, 11, 12, 13, 14], [2, 4, 5, 10, 12, 14], [2, 4, 5, 10, 14], [2, 4, 5, 14], [2, 4, 6, 7, 9, 10, 11, 12, 13, 14], [2, 4, 7, 8, 9, 10, 11, 12, 13, 14], [2, 4, 7, 10, 12, 14], [2, 4, 7, 12, 14], [2, 4, 7, 14], [2, 4, 9, 10, 11, 12, 13, 14], [2, 4, 10, 12, 14], [2, 4, 14], [2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [2, 5, 6, 9, 10, 11, 12, 13, 14], [2, 5, 7, 10, 12], [2, 5, 7, 10, 12, 14], [2, 5, 7, 14], [2, 5, 8, 9, 10, 11, 12, 13, 14], [2, 5, 10, 12, 14], [2, 5, 10, 14], [2, 5, 14], [2, 6, 7, 9, 10, 11, 12, 13, 14], [2, 7, 8, 9, 10, 11, 12, 13, 14], [2, 7, 10, 12, 14], [2, 7, 12, 14], [2, 7, 14], [2, 9, 10, 11, 12, 13, 14], [2, 10, 12, 14], [2, 14], [3, 4], [3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [3, 4, 5, 6, 9, 10, 11, 12, 13, 14], [3, 4, 5, 8, 9, 10, 11, 12, 13, 14], [3, 4, 6, 7, 9, 10, 11, 12, 13, 14], [3, 4, 7, 8, 9, 10, 11, 12, 13, 14], [3, 4, 9, 10, 11, 12, 13, 14], [3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [3, 5, 6, 9, 10, 11, 12, 13, 14], [3, 5, 8, 9, 10, 11, 12, 13, 14], [3, 6, 7, 9, 10, 11, 12, 13, 14], [3, 6, 8, 9, 11], [3, 6, 8, 9, 11, 13], [3, 6, 8, 13], [3, 6, 9, 11, 13], [3, 6, 9, 13], [3, 6, 13], [3, 7, 8, 9, 10, 11, 12, 13, 14], [3, 8, 9, 11, 13], [3, 8, 11, 13], [3, 8, 13], [3, 9, 10, 11, 12, 13, 14], [3, 9, 11, 13], [3, 13], [4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [4, 5, 6, 9, 10, 11, 12, 13, 14], [4, 5, 7, 10, 12], [4, 5, 7, 10, 12, 14], [4, 5, 7, 14], [4, 5, 8, 9, 10, 11, 12, 13, 14], [4, 5, 10, 12, 14], [4, 5, 10, 14], [4, 5, 14], [4, 6, 7, 9, 10, 11, 12, 13, 14], [4, 7, 8, 9, 10, 11, 12, 13, 14], [4, 7, 10, 12, 14], [4, 7, 12, 14], [4, 7, 14], [4, 9, 10, 11, 12, 13, 14], [4, 10, 12, 14], [4, 14], [5, 6, 7, 8, 9, 10, 11, 12, 13, 14], [5, 6, 9, 10, 11, 12, 13, 14], [5, 7, 10, 12], [5, 7, 10, 12, 14], [5, 7, 14], [5, 8, 9, 10, 11, 12, 13, 14], [5, 10, 12, 14], [5, 10, 14], [5, 14], [6, 7, 9, 10, 11, 12, 13, 14], [6, 8, 9, 11], [6, 8, 9, 11, 13], [6, 8, 13], [6, 9, 11, 13], [6, 9, 13], [6, 13], [7, 8, 9, 10, 11, 12, 13, 14], [7, 10, 12, 14], [7, 12, 14], [7, 14], [8, 9, 11, 13], [8, 11, 13], [8, 13], [9, 10, 11, 12, 13, 14], [9, 11, 13], [10, 12, 14], [13], [14]