

1	$\vdash p \rightarrow p$	A1	✓	
2	$\vdash [p] p \leftrightarrow (p \rightarrow p)$	A11	✓	
3	$\vdash ([p] p \leftrightarrow (p \rightarrow p)) \rightarrow ((p \rightarrow p) \leftrightarrow [p] p)$	A1	✓	
4	$\vdash (p \rightarrow p) \leftrightarrow [p] p$	R1	✓	2, 3
5	$\vdash (p \rightarrow p) \rightarrow [p] p$	EE	✓	4
6	$\vdash [p] p$	R1	✓	1, 5
7	$\vdash K1 [p] p$	R2	✓	6
8	$\vdash K1 [p] p \rightarrow (p \rightarrow K1 [p] p)$	A1	✓	
9	$\vdash p \rightarrow K1 [p] p$	R1	✓	7, 8
10	$\vdash [p] K1 p \leftrightarrow (p \rightarrow K1 [p] p)$	A14	✓	
11	$\vdash ([p] K1 p \leftrightarrow (p \rightarrow K1 [p] p)) \rightarrow ((p \rightarrow K1 [p] p) \leftrightarrow [p] K1 p)$	A1	✓	
12	$\vdash (p \rightarrow K1 [p] p) \leftrightarrow [p] K1 p$	R1	✓	10, 11
13	$\vdash (p \rightarrow K1 [p] p) \rightarrow [p] K1 p$	EE	✓	12
14	$\vdash [p] K1 p$	R1	✓	9, 13

System

PA



Agents

(m)

Goal
[p]K1p



Syntax Overview

