

DATE: 6 January 2025
DESIGNER: Eon Highways Lighting
PROJECT No: 02137
PROJECT NAME: Wain Homes - Dinting Vale, Glossop



Designed in accordance with Derbyshire County Council Street Lighting Specification dated 01/01/2021 Hierarchy Group NH7 E2 Zone - P4/P5 (P4 Spine Road).
Due to the number of optic/wattage variations used to fulfill the target values, road calculations have not been supplied as part of the submission. Road calcs have been cast to get a benchmark for spacings. The grids contained within this rtma report have been masked out every 3 columns to ensure that each section is compliant and not relying on high values in certain sections skewing the results.

02137 AR1 Area Lighting Report

PREPARED BY: E.ON Highways Lighting
Unit S37
Stanley Matthews Way
Trentham Lakes South
Stoke-on-Trent
Staffordshire
ST4 8GR

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Road 1 P4	401877.00	394145.00	165.00	235.00	1.50	1.50
2	Road 2 P5	401930.00	394230.00	85.00	55.00	1.49	1.49
3	Road 3 P5	401952.00	394150.00	55.00	75.00	1.49	1.50
4	Road 4 P5	401924.00	394085.00	65.00	65.00	1.48	1.48
5	Road 5 P5	401825.00	394121.00	120.00	35.00	1.50	1.46
6	Road 6 P5	401830.00	394036.00	90.00	80.00	1.50	1.48

Luminaires

Luminaire A Data



Supplier	C U Phosco
Type	P852K-12-C1-WW-CA0600-23W
Lamp(s)	730C WW
Lamp Flux (klm)	2.81
File Name	P852K-12-C1-WW-CA0600-23W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	490.8, 74.7, 0.0
No. in Project	6

Luminaire B Data



Supplier	C U Phosco
Type	P852K-12-C1-WW-CA0450-18W
Lamp(s)	730C WW
Lamp Flux (klm)	2.19
File Name	P852K-12-C1-WW-CA0450-18W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	490.8, 74.7, 0.0
No. in Project	6

Luminaire C Data



Supplier	C U Phosco
Type	P852K-12-C1-WW-CA0200-9W
Lamp(s)	730C WW
Lamp Flux (klm)	1.05
File Name	P852K-12-C1-WW-CA0200-9W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	490.8, 74.7, 0.0
No. in Project	3

Luminaire D Data



Supplier	C U Phosco
Type	P852K-12-F2-WW-CA0350-15W
Lamp(s)	730C WW
Lamp Flux (klm)	1.68
File Name	P852K-12-F2-WW-CA0350-15W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	750.5, 280.0, 34.0
No. in Project	3

Luminaire E Data



Supplier	C U Phosco
Type	P852K-12-F2-WW-CA0450-18W
Lamp(s)	730C WW
Lamp Flux (klm)	2.10
File Name	P852K-12-F2-WW-CA0450-18W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	750.5, 280.0, 34.0
No. in Project	1

Luminaire F Data



Supplier	C U Phosco
Type	P852K-12-C1-WW-CA0300-13W
Lamp(s)	730C WW
Lamp Flux (klm)	1.52
File Name	P852K-12-C1-WW-CA0300-13W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	490.8, 74.7, 0.0
No. in Project	10

Luminaires



Luminaire G Data

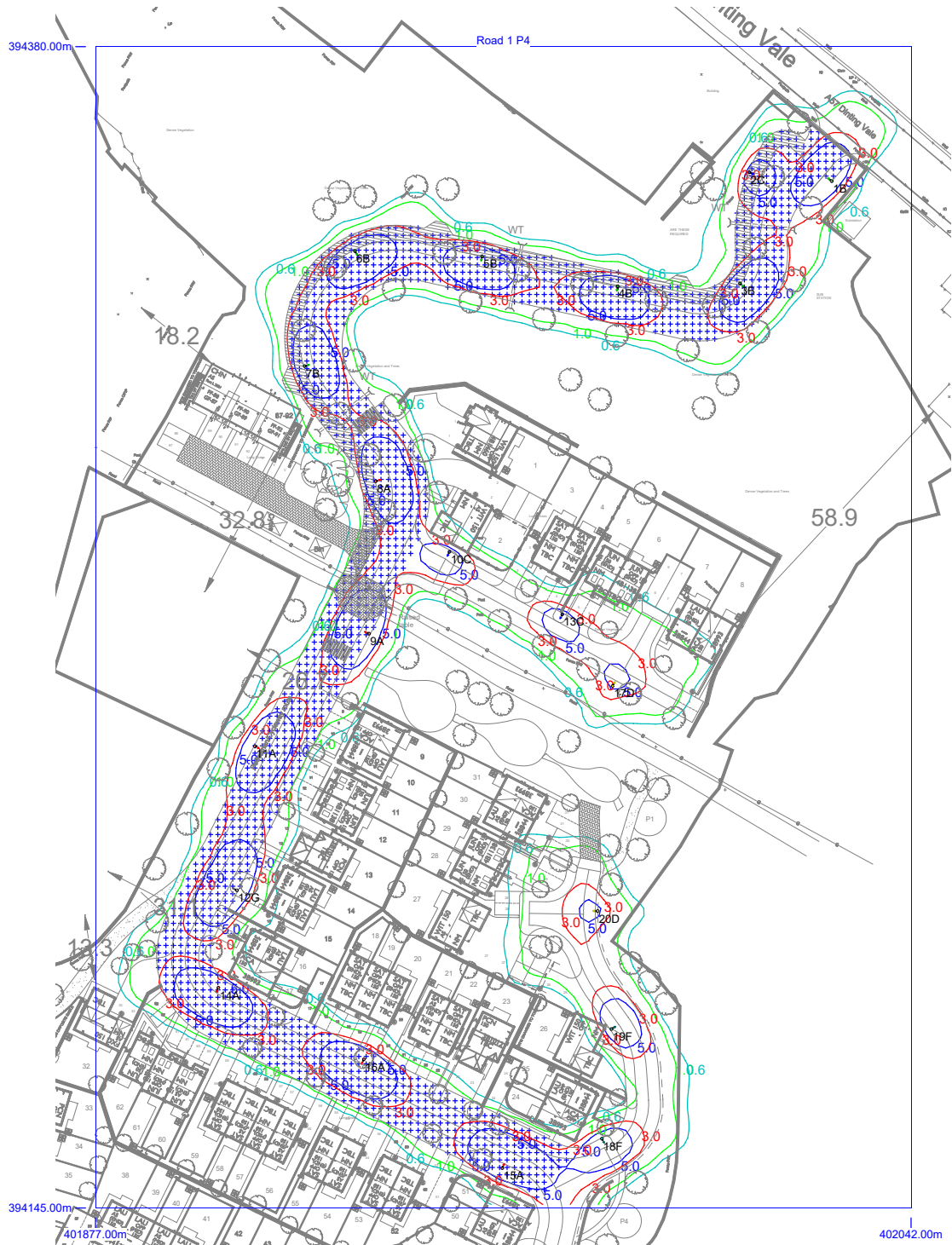
Supplier	C U Phosco
Type	P852K-12-C1-NW-CB0650-25W
Lamp(s)	740C NW
Lamp Flux (klm)	3.21
File Name	P852K-12-C1-NW-CB0650-25W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	513.0, 81.8, 0.0
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	402025.92	394352.80	6.00	141.00	0.00	0.00	0.30			
2	C	402009.26	394354.57	6.00	336.00	0.00	0.00	0.30			
3	B	402007.35	394332.09	6.00	320.00	0.00	0.00	0.30			
4	B	401982.61	394331.51	6.00	258.00	0.00	0.00	0.30			
5	B	401955.20	394337.59	6.00	257.00	0.00	0.00	0.30			
6	B	401929.49	394338.63	6.00	300.00	0.00	0.00	0.30			
7	B	401919.31	394315.39	6.00	16.00	0.00	0.00	0.30			
8	A	401933.69	394292.08	6.00	16.00	0.00	0.00	0.30			
9	A	401932.33	394261.24	6.00	156.00	0.00	0.00	0.30			
10	C	401948.60	394277.81	6.00	245.00	0.00	0.00	0.30			
11	A	401909.24	394238.46	6.00	332.00	0.00	0.00	0.30			
12	G	401905.61	394209.30	6.00	152.00	0.00	0.00	0.30			
13	C	401971.44	394265.15	6.00	242.00	0.00	0.00	0.30			
14	A	401901.85	394189.60	6.00	244.00	0.00	0.00	0.30			
15	A	401959.28	394153.09	6.00	65.00	0.00	0.00	0.30			
16	A	401931.29	394175.11	6.00	243.00	0.00	0.00	0.30			
17	D	401981.60	394250.64	6.00	60.00	0.00	0.00	0.30			
18	F	401979.44	394159.05	6.00	297.00	0.00	0.00	0.30			
19	F	401981.37	394181.23	6.00	32.00	0.00	0.00	0.30			
20	D	401978.57	394205.10	6.00	178.00	0.00	0.00	0.30			
21	F	401965.03	394134.31	6.00	347.00	0.00	0.00	0.30			
22	F	401941.18	394113.03	6.00	311.00	0.00	0.00	0.30			
23	F	401927.34	394091.21	6.00	338.00	0.00	0.00	0.30			
24	F	401911.54	394104.89	6.00	67.00	0.00	0.00	0.30			
25	F	401886.17	394116.57	6.00	61.00	0.00	0.00	0.30			
26	F	401862.58	394127.95	6.00	73.00	0.00	0.00	0.30			
27	D	401837.81	394138.81	6.00	343.00	0.00	0.00	0.30			
28	F	401910.13	394071.25	6.00	304.00	0.00	0.00	0.30			
29	F	401884.03	394062.42	6.00	284.00	0.00	0.00	0.30			
30	E	401856.98	394045.27	6.00	119.00	0.00	0.00	0.30			

Horizontal Illuminance (lux)

Road 1 P4



Results

Eav	5.29
Emin	1.07
Emax	22.11
Emin/Emax	0.05
Emin/Eav	0.20

Horizontal Illuminance (lux)

Road 2 P5

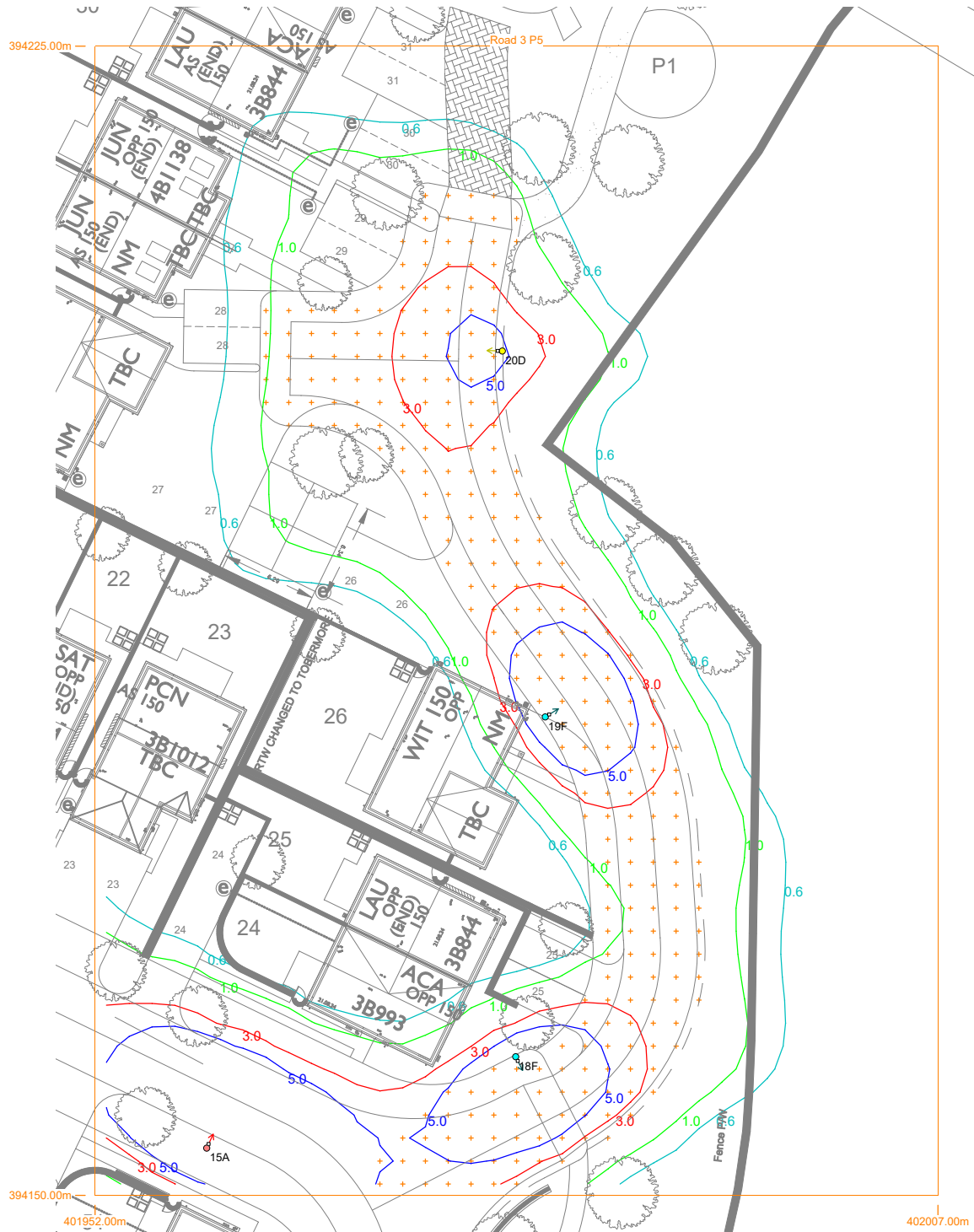


Results

Eav	3.29
Emin	0.68
Emax	7.58
Emin/Emax	0.09
Emin/Eav	0.21

Horizontal Illuminance (lux)

Road 3 P5

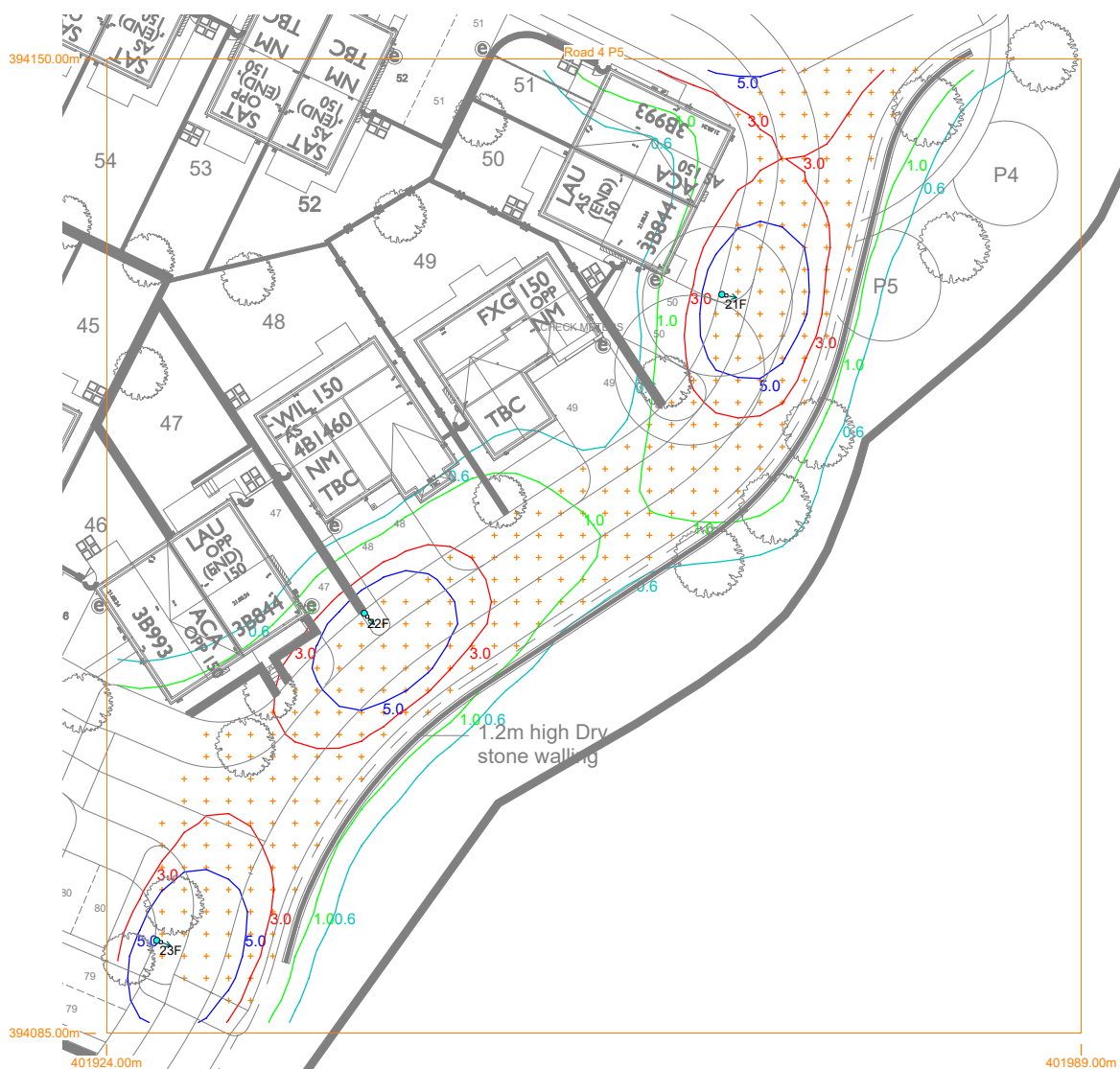


Results

Eav	3.52
Emin	0.81
Emax	10.33
Emin/Emax	0.08
Emin/Eav	0.23

Horizontal Illuminance (lux)

Road 4 P5

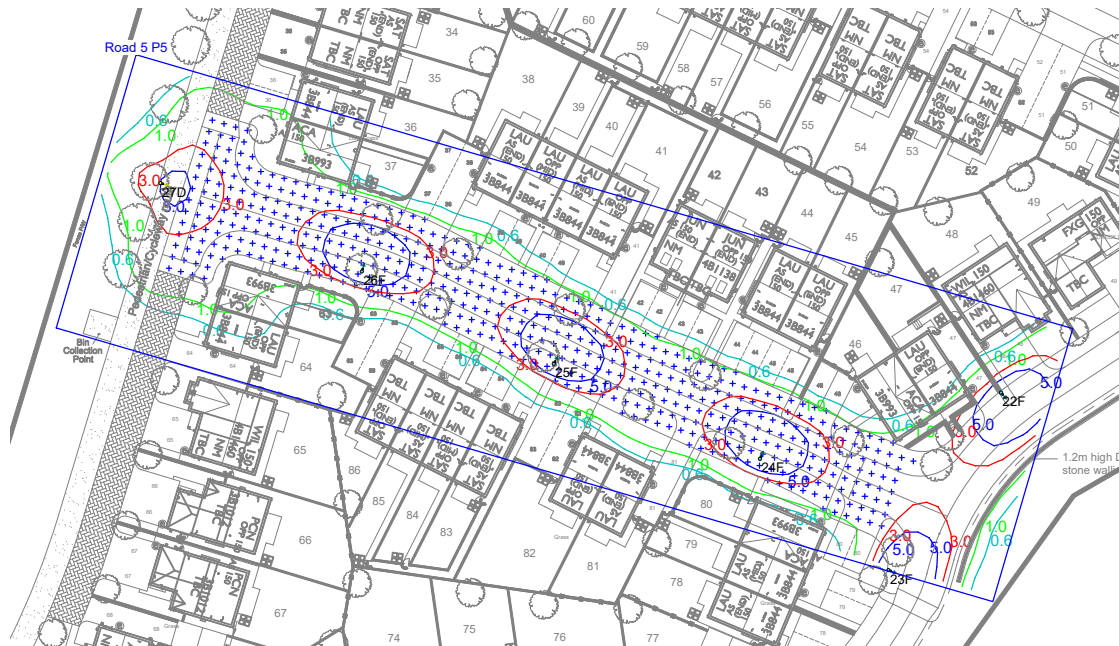


Results

Eav	3.63
Emin	0.72
Emax	10.48
Emin/Emax	0.07
Emin/Eav	0.20

Horizontal Illuminance (lux)

Road 5 P5



Results

Eav	3.23
Emin	0.90
Emax	10.39
Emin/Emax	0.09
Emin/Eav	0.28

Horizontal Illuminance (lux)

Road 6 P5



Results

Eav	3.36
Emin	0.85
Emax	10.40
Emin/Emax	0.08
Emin/Eav	0.25