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Indoor Carparks Design Criteria

General Lighting: Lux levels required as per AS/NZS 1680.2.1

Area	Maintained Illuminance (lux)		Product	Note
	Day	Night		
Entrance 0 – 15 m	800	160	Tauro Blu with SmartSense / Chamaeleon / Vico (Permanently On)	No lights for a distance twice the height of entrance, if enough daylight penetration. Allow for emergency lighting
Entrance 15 – 19 m	160	160		
Boom gates	160	160	Chamaeleon / Vico	Permanently On both at entry & exit. One or two lights required
Driveways, ramps	40	40	Chamaeleon / Vico	Permanently On or Time On set at 5-10 min. See spacing guide
Parking bays	40	40	Chamaeleon / Vico	Refer Spacing Guides
Loading bays	80	80	Tauro Blu/Tauro Eco/Stargate/Chamaeleon/Vico	Permanently On or Time On Set at 5-10 min

Emergency Lighting: Maximum allowed distances between emergency lights as per AS/NZS 2293.1

Classification / Height (m)	2.1	2.4	2.7	3	3.3	3.6	4	4.5	5	Note
D32	15.4	16.1	16.7	17.2	17.6	18	18.5	19.1	19.5	Distance between a luminaire and adjacent wall/boundary should not be greater than half of the distances mentioned
D40	16.7	17.4	18	18.6	19.1	19.6	20.1	20.8	21.3	
D50	18.0	18.7	19.4	20.1	20.7	21.2	21.8	22.5	23.2	
D80	21.1	22.0	22.8	23.6	24.3	25.0	25.8	26.7	27.5	

Audit Procedure

Entrance (includes vehicle entry paths ONLY, not the EXIT)

1. Draw/obtain map of area showing driveway width, ceiling heights & existing lighting locations
2. Mark 0-15 m and 15-19 m separately for all entry paths
3. Mark entry/exit boom gates if not within 0-19 m from entrance

Driveways & Parking Bays

1. If distances fall within spacing tables, just count the lights.
2. Count should show driveway & parking bay lights separately. Standard & emergency count should be separate as well.
3. If distances fall outside spacing tables, draw/obtain map showing driveway width; parking bay length & width; ceiling height(s); & existing light locations showing distances between driveway lights & parking bay lights.

Pictures

Click pictures of entrance and car park showing: Type/colour of ceiling, walls & floor; Type of existing fittings; Mounting method of existing fittings

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Car Park Luminaire Spacings for >40 Lux Average with >0.3 Uniformity

Products	Chamaeleon III		Chamaeleon Eco	Vico 44W (5ft)	Vico 36W (4ft)	Vico 18W (2 ft)
Ceiling Heights	Max Spacings	Dim Level[3]	Max Spacings	Max Spacings	Max Spacings	Max Spacings
2.2	5.5 x 5.5	50%	5.6 x 5.6	6.5 x 6.5	6.4 x 6.4	5.6 x 5.6
2.4	6 x 6	60%	6 x 6	6.8 x 6.8	6.8 x 6.8	5.4 x 5.4
2.6	6.3 x 6.3	67%	6.1 x6.1	7.1 x 7.1	7 x 7	5.1 x 5.1
2.8	6.8 x 6.8	78%	6 x 6	7.4 x 7.4	7.3 x 7.3	4.9 x 4.9
3	7.1 x 7.1	87%	5.8 x 5.8	7.7 x 7.7	7.3 x 7.3	4.8 x 4.8
3.2	7.3 x 7.3	95%	5.7 x 5.7	7.9 x 7.9	7.1 x 7.1	4.6 x 4.6
3.4	7.4 x 7.4	100%	5.6 x 5.6	7.7 x 7.7	7 x 7	4.3 x 4.3

Important Notes:

1. All distances in **meters** and taken from the centre of lights
2. All surface finishes taken as **concrete**
3. Dim level for CHAM-C refers to the percentage to which the full output can be dimmed to achieve >40 lux