Viewing Location	North of SIMTA site, Corner of Yulong Close and Anzac Road			
Cumulative Visual Adaptation				
Approximate Viewing Distance	500m to SIMTA site boundary (approx.)			
Prominence of Cumulative DLTP Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the DLTP proposal.			
	Although there is insufficient information at present to determine whether the DLTP proposal includes any visual shielding, it is likely given the proposed development occupies land in the immediate foreground of the view that the visual prominence would be significant. Based on the DLTP concept masterplan, it is likely that an extensive array of fixed and movable structures and vehicles will be visible. However, the addition of any new industrial type development within this viewpoint may have little to no impact on the existing landscape amenity as it is generally consistent with development in the area and the concept masterplan suggests the DLTP buildings are well set-back from the site boundary.			
Prominence of SIMTA Development	The inclusion of the DLTP proposal will likely provide a visual shield from this viewpoint to the SIMTA proposal. In addition, SIMTA proposes that there will be an extensive landscape treatment and buffer zone along the northern boundary of tis site which will help reduce any change to the existing landscape amenity and prominence of the SIMTA development.			
Cumulative Visual Sensitivity	It could be assumed that the inclusion of the DLTP proposal is consistent with the industrial land-use at this location and results in a low visual sensitivity (Moorebank Southern Industrial precinct).			
Cumulative Visual Impact	The proposed DLTP development would be highly prominent at this location from Anzac Road looking South onto the site. There is little to no visual sensitivity from this viewpoint as the viewpoint is within an already established industrial zone. Therefore there will be a low visual impact from this viewpoint.			







Cumulative Impact Foreground Boundary Line - Land affected by DLTP Proposal

Viewing Location	North-East of SIMTA site, Anzac Road			
Cumulative Visual Adaptation				
Approximate Viewing Distance	700m to SIMTA site boundary (approx.)			
Prominence of Cumulative DLTP Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the DLTP proposal.			
	Although there is insufficient information at present to determine whether the DLTP proposal includes any visual shielding, it is likely given the proposed development occupies land in the immediate foreground of the view that the visual prominence would be significant. Based on the DLTP concept masterplan, it is likely that an extensive array of fixed and movable structures and vehicles will be visible. However, the addition of any new industrial type development within this viewpoint may have little to no impact on the existing landscape amenity as it is generally consistent with development in the area and the concept masterplan suggests the DLTP buildings are well set-back from the site boundary.			
Prominence of SIMTA Development	The inclusion of the DLTP proposal will likely provide a visual shield from this viewpoint to the SIMTA proposal. In addition, there is already established vegetation shielding the SIMTA proposal further reducing the prominence of the SIMTA development.			
Cumulative Visual Sensitivity	The visual sensitivity would be relatively high as the view location is sitting along Anzac Road within a low density residential zone (RE2).			
	The existing landscape amenity would be changed as prominent views of the DLTP development would be visible along this section of Anzac Road.			
Cumulative Visual Impact	The DLTP development would be relatively prominent at this location. The change in the landscape amenity coupled with the zoning in which the viewpoint is situated will make this visual impact moderate to high.			







Cumulative Impact Foreground Boundary Line - Land affected by DLTP Proposal

North-East of SIMTA site, Castlerock Court, Wattle Grove			
700m to SIMTA site boundary (approx.)			
The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the DLTP proposal.			
Although there is insufficient information at present to determine whether the DLTP proposal includes any visual shielding, it is likely given the proposed development occupies land in the immediate foreground of the view that the visual prominence would be significant.			
Based on the DLTP concept masterplan, it is likely that an extensive array of fixed and movable structures and vehicles will be visible. However, the addition of any new industrial type development within this viewpoint may have little to no impact on the existing landscape amenity as it is generally consistent with development in the area and the concept masterplan suggests the DLTP buildings are well set- back from the site boundary.			
The inclusion of the DLTP proposal will likely provide a visual shield from this viewpoint to the SIMTA proposal. In addition, there is already established vegetation shielding the SIMTA proposal further reducing the prominence of the SIMTA development.			
The visual sensitivity of the DLTP proposal would be relatively high as the view location is within a low density residential zone. The existing landscape amenity would be changed as significant views of the DLTP development would be visible from this location.			
The DLTP proposal would be relatively prominent at this location. The change in the landscape amenity together with the zoning in which the viewpoint is situated will make this visual impact moderate to high.			







Cumulative Impact Foreground Boundary Line - Land affected by DLTP Proposal

Viewing Location	East of SIMTA site, Martindale Court, Wattle Grove			
Cumulative Visual Adaptation				
Approximate Viewing Distance	800m to SIMTA site boundary (approx.)			
Prominence of Cumulative DLTP Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the DLTP proposal.			
	Although there is insufficient information at present to determine whether the DLTP proposal includes any visual shielding, it is likely given the proposed development occupies land in the immediate foreground of the view that the visual prominence would be significant.			
	Based on the DLTP concept masterplan, there is limited suggestion that any building or structures may be erected within this view, however the land may be utilised for vehicular and other storage as per the proposals documented planned works. It is unlikely that this portion of land for the DLTP proposal will not be utilised and given its proximity to adjacent residential areas it will probably be quite prominent.			
Prominence of SIMTA Development	Due to the distance of the SIMTA proposal to the nearest residential area, as well as substantive boundary vegetation offering shielding, the SIMTA proposal is relatively unobtrusive on its own. The addition of the DLTP proposal is likely to further reduce the visual impact of the SIMTA proposal.			
Cumulative Visual Sensitivity	The cumulative visual sensitivity with the addition of the DLTP proposal would likely be relatively high as the view location is within a low density residential zone (RE2).			
Cumulative Visual Impact	The proposed DLTP development would likely be relatively prominent at this location.			
	The change in the landscape amenity coupled with the zoning in which the viewpoint is situated will make this visual impact moderate to high.			







Cumulative Impact Foreground Boundary Line - Land affected by MICL Proposal

Viewing Location	South of SIMTA site, Moorebank Avenue			
Cumulative Visual Adaptation				
Approximate Viewing Distance	50m to SIMTA site boundary (approx.)			
Prominence of Cumulative MICL Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the MICL proposal.			
	There is a relatively unobstructed view from this portion of Moorebank Avenue to the MICL proposed development fronting Moorebank Avenue, and although there is insufficient information at present to determine whether the MICL proposal includes any visual shielding, it is likely given the extent and angle of the view to the proposed development that the visual prominence would be significant.			
	Based on the MICL concept masterplan, it is likely that a number of medium and large format warehouses, heavy and light vehicle entry points and car parks may be visible.			
Prominence of SIMTA Development	The prominence of the SIMTA development in this viewpoint remains unchanged and is as previously described in Section 7 of this report.			
Cumulative Visual Sensitivity	The industrial land-use at this location creates a low cumulative visual sensitivity (Moorebank Southern Industrial precinct). Most views from within this area looking north towards the proposed development will be from existing industrial areas or from commuters travelling along Moorebank Avenue. Consideration may need to be given to the change of land use, building heights and densities for the MICL proposal in relation to it existing use as the SME.			
Cumulative Visual Impact	Both the SIMTA and MICL developments would be highly prominent at this location. It is assumed that there is little to no visual sensitivity from this viewpoint as the viewpoint is within an already established industrial zone. Therefore there will be a low cumulative visual impact from this viewpoint.			







Cumulative Impact Foreground Boundary Line - Land affected by MICL Proposal

Viewing Location	North-West of SIMTA site, Moorebank Avenue			
Cumulative Visual Adaptation				
Approximate Viewing Distance	30m to SIMTA site boundary (approx.)			
Prominence of Cumulative MICL Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the MICL proposal.			
	There is a relatively unobstructed view from this portion of Moorebank Avenue to the MICL proposed development fronting Moorebank Avenue, and although there is insufficient information at present to determine whether the MICL proposal includes any visual shielding, it is likely given the extent and angle of the view to the proposed development that the visual prominence would be significant.			
	Based on the MICL concept masterplan, it is likely that a number of medium and large format warehouses, heavy and light vehicle entry points and car parks may be visible.			
Prominence of SIMTA Development	The prominence of the SIMTA development in this viewpoint remains unchanged and is as previously described in Section 7 of this report.			
Cumulative Visual Sensitivity	The industrial land-use at this location creates a low cumulative visual sensitivity (Moorebank Southern Industrial precinct). Most views from within this area looking north towards the proposed development will be from existing industrial areas or from commuters travelling along Moorebank Avenue. Consideration may need to be given to the change of land use, building heights and densities for the MICL proposal in relation to it existing use as the SME.			
Cumulative Visual Impact	Both the SIMTA and MICL developments would be highly prominent at this location. It is assumed that there is little to no visual sensitivity from this viewpoint as the viewpoint is within an already established industrial zone. Therefore there will be a low cumulative visual impact from this viewpoint.			





Cumulative Impact Foreground Boundary Line - Land affected by MICL Proposal

view R01

Viewing Location	South of SIMTA site, Moorebank Avenue (rail overpass)				
Cumulative Visual Adaptation					
Approximate Viewing Distance	60m from viewpoint line of sight to proposed SIMTA rail line (approx.)				
Prominence of Cumulative MICL Development	The adjacent image shows an indicative view of the land area which would notionally be utilised for the development of the MICL proposal.				
	Although there is insufficient information at present to determine whether the MICL proposal includes any visual shielding, it is likely given the extent and angle of the view to the proposed development that the visual prominence would be significant.				
	Based on the MICL concept masterplan, it is likely that an extensive array of fixed and movable structures and vehicles including materials handling equipment, containers, rail tracks, freight trains, warehousing, ancillary facilities, heavy and light vehicles will be visible.				
Prominence of SIMTA Development	Only the proposed SIMTA Rail Link is visible from this location. The main SIMTA development proposal is not. The prominence and visual impact of the SIMTA proposal remain unchanged from the description provided in Section 7 of this report.				
Quandative					
Cumulative Visual Sensitivity	Traffic that passes along this portion of Moorebank Avenue will have access to prominent views of the MICL proposal. Although the views will likely be brief, the importance of amenity to the viewers may need to be considered due to the possible removal of significant vegetation. As such the visual sensitivity at this location may be considered moderate.				
Cumulative Visual Impact	The addition of the MICL proposal line may be a substantial change to the existing landscape amenity.				
	The cumulative visual impact of the MICL proposal at this location may be considered to be moderate to high, however is limited due to the brevity of viewing times.				

09.3 limitations of cumulative assessment

It is important to note that the requested assessment of the potential cumulative impact of the MICL and DLTP proposal is limited by a set of broad based assumptions and is provided to inform the reader of the likely cumulative scale of development in the Moorebank precinct of all three proposals proceeding.

In this regard, the assessment should not be relied upon for accuracy and is indicative only based upon the limited publicly available information on the MICL and DLTP proposals at the time of authoring.

Specifically, the following limitations should be considered in the cumulative evaluation of both the MICL and DLTP proposals in this report:

- The extent of planned works for each proposal, land boundaries, bulk and scale of fixed and movable components of each project are based around very limited and conceptual information in the public domain at the time of authoring. SIMTA and its consultants have not been privy to any further detail planning or changes to planning that may effect this assessment at present or in the future;
- View points being the subject of the SIMTA proposal visual impact assessment were selected via a viewshed analysis which was undertaken for the site in Geographical Information System (ArcGIS Spatial Analyst Extension) by Hyder Consulting Engineers. A selection of these view points where elements of the SIMTA proposal are likely to have some prominence were used for the evaluation of the cumulative assessment. It is likely and evident in Figures 10 and 11 that there are possibly many other view points that may be subject to high degrees of visual impact due to the MICL and DLTP proposal, primarily due to their proximity to surrounding existing and established residential areas and other developments;
- The extent of the cumulative visual impact is subject to detail information of the MICL and DLTP developments, and in particular the effect of the MICLs application for amendments to the Liverpool Local Environment Plan 2008;
- It is not known whether either the DLTP or MICL proposals include provisions for substantive visual shielding of development in the form of soft or hard landscaping, buffering elements or other devices, however in particular given the topography and location of the MICL proposal it is likely to be highly prominent from the Casula residential area and along the Georges River; and
- It is anticipated that a Visual Impact assessment for each of the MICL and DLTP proposals would be undertaken utilising a similar methodology, which would enable a more thorough assessment of the potential cumulative impact of the development proposals.

09.4 cumulative assessment conclusion & recommendations

A high level assessment of the cumulative impact of the SIMTA, MICL and DLTP proposals has been undertaken to inform the reader of the possible visual sensitivity to the surrounding area based on likely developments combined scale in the Moorebank Precinct.

Limited and conceptual information is publicly available on both the MICL and DLTP proposals to undertake a comprehensive and reliable assessment on the potential cumulative visual impact of the proposals, however assumptions were made on the basis of:

- Available descriptions of the planned works including size, bulk and scale of the MICL and DLTP proposals;
- Overlay of MICL and DLTP concept masterplans to provide a precinct view of cumulative development and proximity of these proposals to key receptors, existing residential areas and development; and
- Visualisation of notional land areas occupied by the MICL and DLTP proposals at view points selected on the basis of a level of prominence of the SIMTA proposal on its own.

It is envisaged that the MICL and DLTP proposals, as well as the cumberland woodplain to the south, southeast, and part of the eastern boundary of the SIMTA site will create a 'visual shield' to the bulk of the SIMTA proposal, to an extent negating any visual impact that the SIMTA proposal may have on its own.

It is anticipated that both the MICL and DLTP proposals may have a potentially high visual impact on surrounding existing residential areas and developments due to the proximity of their land boundaries to these communities.

Due to the limitations of the assessment, it is recommended that both the MICL and DLTP undertake visual impact assessments of their respective proposals utilising a similarly comprehensive methodology, including selection of viewpoints utilising industry accepted tools, as well as photographic studies, digital modelling and photomontages to allow a more comprehensive understanding by the reader of the potential cumulative impact.

10 conclusion

The proposed SIMTA Intermodal Terminal is to be developed on a site that has been occupied by the Department of Defence for many years and has been primarily utilised for warehouse and distribution/ logistics related activities. Many of the facilities on the existing site are old and have reached or are beyond their useful life.

Besides secure perimeter fencing there is very little landscaping or other visual screening to shield operations from the public view and that of surrounding developments.

The site is surrounded by expanisve areas of natural dense bushland and other lands owned and occupied by the Department of Defence for industrial and Military related uses.

The next closest developments to the site are also largely industrial, with the closest residential areas being Wattle Grove to the north and east, and Casula approximately 1km to the west across the Georges River.

The proposed development would generally be in keeping with the existing character of the area. Some relatively high and/or bulky structures/ equipment may however increase the visibility of the site beyond its current levels, with some limited and highly localised visual impacts.

The pattern of development surrounding the site described above will screen the development from much of the surrounding area. Potential views do occur along viewing corridors created by streets bounding the site (Moorebank Avenue and Anzac Road), and where topography provides some elevation above potential obstructions to views.

Visual impact has been assessed from locations with potential views of the development as identified through a digital viewshed analysis. The anticipated visual impact of each viewpoint has been analysed using a range and combination of qualitative criteria.

Given the nature of the proposed development and its consistency with general industry within the local area, higher visual impact locations would be primarily those in residential areas that have prominent views of site elements. This study found minimal visual impact to residential areas during daylight hours.

The limited visual impact to residential areas is mainly due to distance, existing visual barriers and undulating topography between the site and these residential zones.

The most prominent views of the development would occur at localised boundary points such as Moorebank Avenue and Anzac Road, as well as the residential boundary to the Wattle Grove residential areas, however these impacts are regarded as relatively low because of their existing and unobstructed views of the DNSDC operations which are resonably compatible with the proposed SIMTA development.

A number of visual impact mitigation measures have been proposed including significant and intensive landscaping, planting, built-form screening and mounding, that would reduce the visibility of the development and improve the overall visual amenity of the site and area generally.

The light spill from the site has been modelled based on a preliminary lighting concept and results suggest that 1 lux in residential dark surrounds during curfew hours is achieved approximately 150 metre from the light source (as shown in Figure 9). The nearest residential properties are approximately 400 metres away and hence the impact of spill light to the residential properties will be well within the required criteria as specified in Australian Standard AS4282-1997 'Control of the Obtrusive Effect of Outdoor Lighting'.

An indicative high level cumulative impact assessment of the addition of the Moorebank Intermodal Terminal Company Limited (MICL - previously known as the Moorebank Project Office) and Defence Logistics Transformation Project (DLTP) proposals has been considered, however this is limited in accuracy based on available information of each proposal in the public domain.

THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY



appendix A

Table 2.1 - AS4282 - 1997

TABLE 2.1

RECOMMENDED MAXIMUM VALUES OF LIGHT TECHNICAL PARAMETERS FOR THE CONTROL OF OBTRUSIVE LIGHT

(See Clause 2.7)

1	2	3	4	5	
		Recommended maximum values			
Light technical	Application or calculation conditions (see also Figure 2.1 and Section 5)	In commercial areas or at boundary of	Residential areas		
parameter		commercial and residential areas*	Light surrounds†	Dark surrøunds‡	
Illuminance in vertical plane (E.)	Pre-curfew: Limits apply at relevant boundaries of nearby residential properties, in a vertical plane parallel to the relevant boundary, to a height commensurate with the height of the potentially affected dwellings. Values given are for the direct component of illuminance	25 lx	10 lx	10 lx	
	Curfewed hours: Limits apply in the plane of the windows of habitable rooms of dwellings on nearby residential properties. In the absence of development (i.e. vacant allotment), the limits apply on the potentially affected property, in a vertical plane parallel to the relevant boundary, at the minimum setback permitted for a dwelling, to a height commensurate with land use zoning provisions. Values given are for the direct component of illuminance	4 lx	2 ix	1 lx	
Luminous intensity emitted by luminaires (1)	Pre-curfew: Limits apply to each luminaire (irrespective of the number on a head frame) in the principal plane, for all angles at and above the control direction, when aimed in accordance with the installation design	Alternatively, the associated with o	hits as determined from Table 2.2. ematively, the limits and method of assessment ociated with curfewed hours may be applied, discretion of the designer (see Clauses 2.7.1 (2.7.2)		
	Curfewed hours: Limits apply in directions where views of bright surfaces of luminaires are likely to be troublesome to residents, from positions where such views are likely to be maintained, i e not where momentary or short-term viewing is involved	2 500 cd	1 000 cd	500 cd	
Threshold increment (II)	Limits apply at all times where users of transport systems are subject to a reduction in the ability to see essential information. Values given are for relevant positions and viewing directions in the path of travel	20% based on adaptation _ luminance (L) of 10 cd/m ²	20% based on adaptation luminance (L) of 1 cd/m ²	20% based on adaptation luminance (L) of 0.1 cd/m ²	

7 Where the affected property abuts roads that are ht to Category V5 or higher in accordance with AS/NZS 1158.1.1.

‡ Where the affected property abuts roads that are lit to Category B1 or lower in accordance with AS 1158.1, or where there is no lighting.



appendix B

Phillips Optivision Brochure

OptiVision Tame your floodlighting









Putting people's rights in a new light



People near floodlight installations have a right to peace and tranquillity.

> In urban areas, artificial lighting should meet everybody's needs in terms of pleasure, safety and productivity.

> However, for players, pedestrians and residents to be able to go about their business without disturbing each other, floodlighting must be specially designed to ensure that **everyone's rights and needs are respected.**

> Good artificial lighting should prevent uncontrolled stray light and light spillage beyond, for example, the boundaries of a harbour, a parking area or a sports field, so that it does not affect people who live in the vicinity.

> This "obtrusive" light includes light that falls on or enters a property, glare from an installation that affects passing drivers or the upward leakage of light that artificially brightens and obscures the night sky. Growing awareness of the issue of "obtrusive" lighting has prompted a number of countries to draw up guidelines to control it. Accordingly, the design of

environmentally friendly floodlighting

has become a pressing technical challenge. As the world leader in floodlighting and as a truly green company, Philips has responded to this challenge by designing a completely new asymmetric floodlight – **OptiVision**.







OptiVision is suitable for applications in sports fields, airports, harbours, railway yards, parking areas, etc.



Four exclusive optical features make OptiVision so optimal

Firstly, as the pioneers of asymmetric lighting, Philips'optical engineers have gone one step further by designing the OptiVision reflector system. It delivers its highest peak intensity at 60° and an excellent out-off at 80° in a flat glass (horizontal) position.

Thus, for a given amount of light on the field, OptiVision produces three times less spill-over than other asymmetric floodlights. And ten times less than conventional floodlights!

Secondly, thanks to minimal internal reflection in the OptiVision's optics, a 20% higher light output ratio (LOR) is achieved than with any other asymmetric floodlight.

You may well find, therefore, that you need fewer floodlights in your installation to achieve the required lighting level over a given area.

Thirdly, by designing very compact optics around a 2kW lamp and oversized fins for more effective cooling. Philips has succeeded in making **OptiVision smaller than any** other comparable 2kW floodlight.

The compactness thus achieved leads to a reduced visual impact and means that less robust columns can be used.









Lastly, OptiVision offers three different beam characteristics for the MHIN-LA 2kW lamp; narrow, medium and wide, as well as specific wide beams for MHIN-LA 1kW and SON-T 600W/1000W. The choice of lamps and reflectors allows total flexibility in lighting designs (sports fields and area lighting).

The designers at Philips have drawn on their extensive expertise and experience to create this cutting-edge floodlight system that boasts unequalled lamp performance and optics.

MHN-LA 2kW MB MHN-LA 2kW WB MHN-LA 2kW NB SON-TP 600W WB

Tilted floodlight





OptiVision projects light downwards, ensuring a total cut-off of light above the level of the luminaire, thus avoiding spill light into nearby properties.



Designed with ease of operation in mind



Bracket allows positioning above or below the mast

> All OptiVision features have the effect of reducing initial costs and making installation easier, thus improving installation performance.

> Roughly 15% smaller than other asymmetric floodlights, at 16.8 kilos OptiVision is also the **lightest floodlight on the market.** This slim, smooth design produces a projected area of only 0.16m and an extremely low wind-drag factor; thus allowing lighter mast constructions to be used.

> In addition, OptiVision can be mounted above or below a crossbar simply by inverting the bracket. This allows multiple lights to be fitted on each mast.

> Alignment is also easier and quicker thanks to the large 'protractor-scale' angle indicators at either side of the floodlight, whilst a simple aiming device permits aiming on the mast.

OptiVision is supplied with a pre-cabled connection box. The only connection that remains to be made is from the mains cable to the gear. An optional gear box is available for gear up to 1000W.







Optimal gear box for gear up to 1000W

Easily visible protractor scale simplifies aiming

Pre-cabled connection box: just add mains cable



Fine-tuned down to the smallest detail for optimal reliability

Product reliability is the key in floodlighting because of the inaccessibility of the product in high mast installations and because it is used on a daily basis.

OptiVision is corrosion-resistant even in the most adverse weather conditions, thanks to its **high-purity aluminium housing and** stainless steel clips.



OptiVision ensures precise positioning of the compact double-ended lamp to give excellent beam control. MHN-LA 1000W / 2000W lamps from Philips are widely considered to be the best on the market.

Their average lifetime is 8000 hours, with very little drop-off in output and **extremely** stable colour characteristics.

OptiVision provides optimal working conditions for the lamps because the housing



MHN-LA 2000W/842 MHN-LA 1000W/842

is cooled by means of a unique, large-finned convector system. A built-in safety switch allows the floodlight to be isolated temporarily from the mains, providing the safest possible conditions for installation and maintenance.

Finally OptiVision is more than just a floodlight. Philps is the only manufacturer to supply all the relevant technologies, from lamp and gear to floodlight, to guarantee optimal performance.



OptiVision's IP65 rating means it is totally impervious to dust and can withstand being cleaned by a high-pressure water jet.



Dimensions in mm









Technical data

Ambient temperature (outd	loor }	32°C
Classification (luminaire)		IP65
Insulation class		1
Complies with		IEC 598
Safety switch		built-in*
Windload data		
Projected surface (horz.posi	tion)	0,16m ¹
Drag factor		0,447
Weight luminaire	MHN SON	17,2 kg 17,3 kg
Weight attached gearbox		9 kg
Weight remote gearbox		8,1 kg
tablish warians and		

*MHN versions only

-12

1

Connection box

PG 11 cable gland for entry of the safety switch cable. PG 16 cable gland for incoming earth & lamp cables.

Terminal block with screw terminals inside for cable cores up to 16 mm¹.







Side view luminaire MVP 507

Side view gearbox ZVP 507



Side view gearbox DK6A

Accessories

Type of gearbox		EOC code
ZVP507 1X MHN-LA 1000W / SON-T 1000W	attachable gearbox ^{$+$}	available mid 2001
ZVP507 1X SON-T-P 600W	attachable gearbox*	svailable mid 2001
DK6A	remote gearbox	24173900
Rechalles was		

*including gear

Ordering data

Luminaire	EOC code	
MVP507 1xSON-T-P 600W 230V K WB	15192200	
MVP507 1xSON-T 1000W 230V K WB	15193900	
MVP507 1xMHN-LA 1000W/842 230V K WB	15195300	
MVP507 1xMHN-LA 2000W/842 400V K WB	15196000	
MVP507 1xMHN-LA 2000W/842 400V K MB	15197700	
MVP507 1xMHN-LA 2000W/842 400V K NB	15198400	
MVP507 1xSON-T-P 600W 230V WB	15199100	
MVP507 1xSON-T 1000W 230V WB	15200400	
MVP507 1xMHN-LA 1000W/842 230V WB	15202800	
MVP507 1xMHN-LA 2000W/842 400V WB	15203500	
MVP507 1xMHN-LA 2000W/842 400V MB	15204200	
MVP507 1xMHN-LA 2000W/842 400V NB	15205900	

(= Kombi Including Jomp IB = Norrow beam IB = Medium beam VB = Wide beam



ZVF320/choice sheet geartrays

dimensions	lamps	mains	type of ballast	ignitor	capacitance	fuse
□ wide (264 x 410 nm) □ long (148 x 610 nm)	SON-T-P 600W	220V-60Hz 230V-50Hz 240V-50Hz	basic	series		⊡yes ⊒no
		230V-50Hz 240V-50Hz	basic	semi-parallel	l nF	
	SON-T 1000W	220V-60Hz 230-240V 50Hz	Obasic	semi-parallel	≤6 nF	
		Ca1230-1404 20H1	Chigh protection	semi-parallel	■ ≤4.5 nF ■ 4-10 nF	
	MHN-LA 2000W	380-415V 50Hz	basic	series		
		380-400V 50Hz	high protection	series		

Lamps

	MHN-LA 1000W/842	MHN-LA 2000W/842	SON-T-P 600W	SON-T 1000W
Luminous flux (Lm)	100.000	220.000	90.000	130.000
Colour temperature (K)	4200	4200	2000	2000
Colour rendering index	80	80	20	25
Life expectancy	8000	8000	16.000	14.000
based on 50 $\%$ failures (hrs)			< 10 % failures	
Average lamp voltage (V)	125	235	115	115
Average lamp watts (W)	1040	2040	600	1000
Max. current during starting (A)	15	15	8.7	14
Run-up time (min)	4	4	10	6
Re-ignition time (min)	max 15	max 15	1	4

Photometric data













🛱 PHILIPS

Opti**V**ision



OptiVision Product Guide CD-Rom



All the technical information regarding OptiVision are in the Product guide CD-Rom. Ask for it to your local Philips representative. THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY