

TABLE 3.4 VALUES OF LIGHT TECHNICAL PARAMETERS FOR PATHWAYS AND CYCLIST PATHS

1	2	3	4	5
		Light technical pa	rameters (LTP)	
Lighting subcategory	Average horizontal illuminance (\overline{E}_h)	Point horizontal illuminance ^{a,b,d} (E _{Ph})	Illuminance (horizontal) uniformity ^c Cat. P	Point vertical illuminance ^{a,t} (E _{Pv})
	lx	lx	(U_{E2})	lx

AS/NZS 1158.3.1:2020

TABLE 2.2 LIGHTING SUBCATEGORIES FOR PEDESTRIAN AND CYCLIST PATHS

1	2	3	4	5	
Type of pathway		Selection	Selection criteriaa,b,c		
General description	Basic operating characteristics	Pedestrian/ cycle activity	Fear of crime	lighting subcategory	
Pedestrian or cycle orientated pathway, e.g. footpaths, including those along local roads ² and arterial roads ² , walkways, lanes, park paths, cyclist paths	Pedestrian and or cycle traffic only	Medium Medium Low	Medium Low Low	PP3 PP4 PP5	

PP3	3	0.5		0.1	
PP4	1.5	0.25	5	0.05°	
PP5	0.85	0.14	5	0.02°	

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description		
0	2	B1	SINGLE	1954.8	0.850	BL01-024-4080-R03201_IES2002		

Calculation Summary								
Label	CalcType	Units	Avg	Min	Max/Avg			
RoadOpt_1_Illum	Illuminance	Lux	36.19	1.74	3.18			

SPACING HAS BEEN DONE TO ACHIEVE CAT PP3
OF ASNZS 1158.3.1 2020 LTPs
DUE TO 1M HEIGHT OF TYPICAL BOLLARDS
VERTICAL CALCULATIONS HAS NOT BEEN DONE AT 1.5M



Project Client	Rev:	Date:	Comment:	DRAFT:		
BOLLARD SPACING CAT PP3				DRAFTED BY PERTH LIGHTING CONSULTANTS		S
ESTIMATED				Designer	: FWS	Scale:
This solution is based upon specified perameters supplied by the outsomer, and other assumed design parameters, as detailed in this document. In practice, the accuracy of the values will differ due to environmental variations such as actual unimain positioning, room surface reflectioners, supply vallage, local fundamental environmental variations actual unimain practical process. The surface of the scalar process o					Mies Lighting	
any representation or warranty of any kind and is not a statement of conformity. Integrated Power is under no lability to the customer for failure to attain complying figures as the responsibility for windication of compliance is such the sustaince is such the sustaince is such the sustaince is such that such as the responsibility for windication of compliance is such that such as the sustain is such as the su				Date:		Page No:
ne emergency escape lighting & exit sign design (where applicable) is based on our review of the site plans & our interpretation of AS2293.12005 & BCA 2012 CLAUSE E4 2, E4.4 TEGRATED POWER is not an appropriate regulatory authority, so this design is not a statement of compliance.					28/06/202	1 -

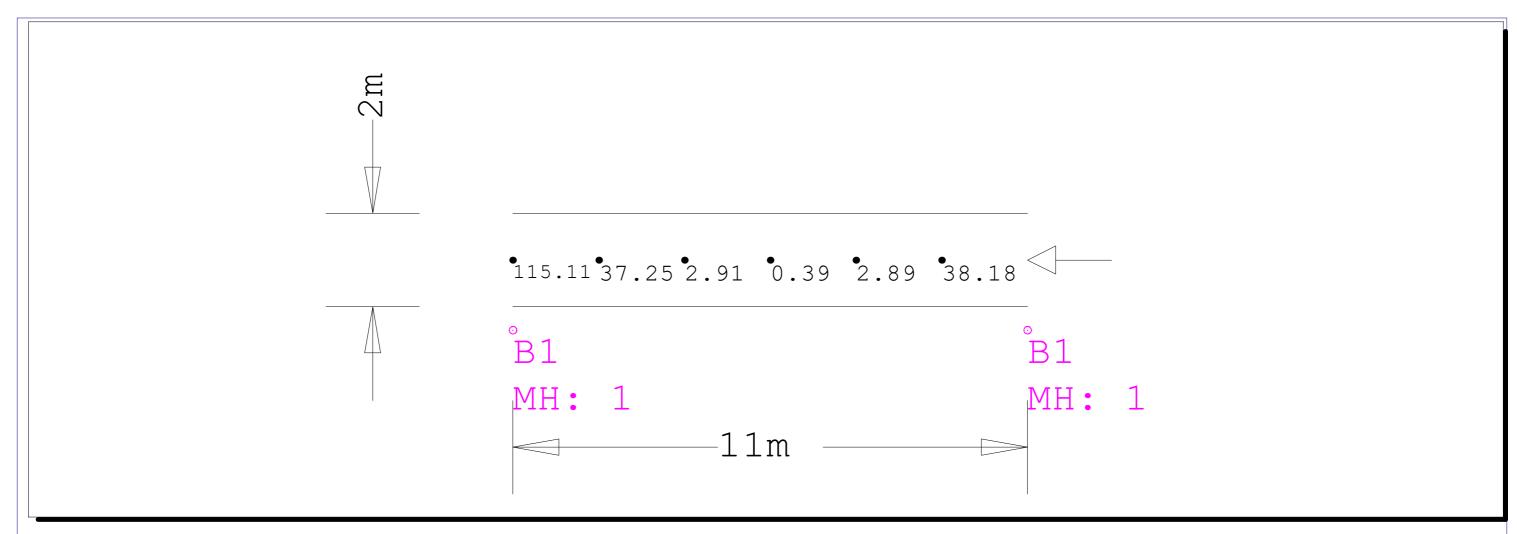


TABLE 3.4

VALUES OF LIGHT TECHNICAL PARAMETERS FOR PATHWAYS AND CYCLIST PATHS

1	2	3	4	5
		Light technical pa	rameters (LTP)	
Lighting subcategory	Average horizontal illuminance (\overline{E}_h)	Point horizontal illuminance ^{a,b,d} (E _{Ph})	Illuminance (horizontal) uniformity ^c Cat. P	Point vertical illuminance ^{a,l} (E _{Pv})
	lx	lx	(U_{E2})	lx

 ${\bf TABLE~2.2}$ LIGHTING SUBCATEGORIES FOR PEDESTRIAN AND CYCLIST PATHS

1	2	3	4	5
Type of pathway	Selection	Selection criteriaa,b,c		
General description	Basic operating characteristics	Pedestrian/ cycle activity	Fear of crime	lighting subcategory
Pedestrian or cycle orientated pathway, e.g. footpaths, including those along local roads ^a and arterial roads ^a , walkways, lanes, park paths, cyclist paths	Pedestrian and or cycle traffic only	Medium Medium Low	Medium Low Low	PP3 PP4 PP5

PP3	3	0.5	5	0.1	
PP4	1.5	0.25	5	0.05°	
PP5	0.85	0.14	5	0.02°	

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description		
0	2	B1	SINGLE	1954.8	0.850	BL01-024-4080-R03201_IES2002		

Calculation Summary					
Label	CalcType	Units	Avg	Min	Max/Avg
RoadOpt_1_Illum	Illuminance	Lux	32.79	0.39	3.51

SPACING HAS BEEN DONE TO ACHIEVE CAT PP4
OF ASNZS 1158.3.1 2020 LTPs
DUE TO 1M HEIGHT OF TYPICAL BOLLARDS
VERTICAL CALCULATIONS HAS NOT BEEN DONE AT 1.5M



Project Client	Rev:	Date:	Comment:	DRAFT:		
BOLLARD SPACING CAT PP5					DRAFTED BY PERTH LIGHTING CONSULTANT:	S
ESTIMATED				Designer:	: FWS	Scale:
This consistion is based upon specified parameters supplied by the customer, and other assumed design parameters, an debated in this document. In produce, the sources of the values will differ due to environmental variationsouch as actual luminaries positioning; once surface reflections, supply voltage, local furnitaries embient temperature, obtacles—furniture, etc. These results are also subject to normally accepted photometric betwernes, and calculation/program uncertainties integrated Prever provide this discultation. Yes A COUNCET ONLY without any representation or warranged variation and is not a statement of conformity. Integrated Prever is under no lability to the outstoner for failure to attain complying figures as the responsibility for vertication of complements with the outstoner.					Mies Lighting	
				Date:	28/06/202	Page No:
The emergency escape lighting & exit sign design (where applicable) is based on our review of the site plans & our interpretation of AS2293.1:2005 & BCA 2012 CLAUSE E4.2, E4.4 INTEGRATED POWER is not an appropriate regulatory authority, so this design is not a statement of compliance.				28/06/20		1 -

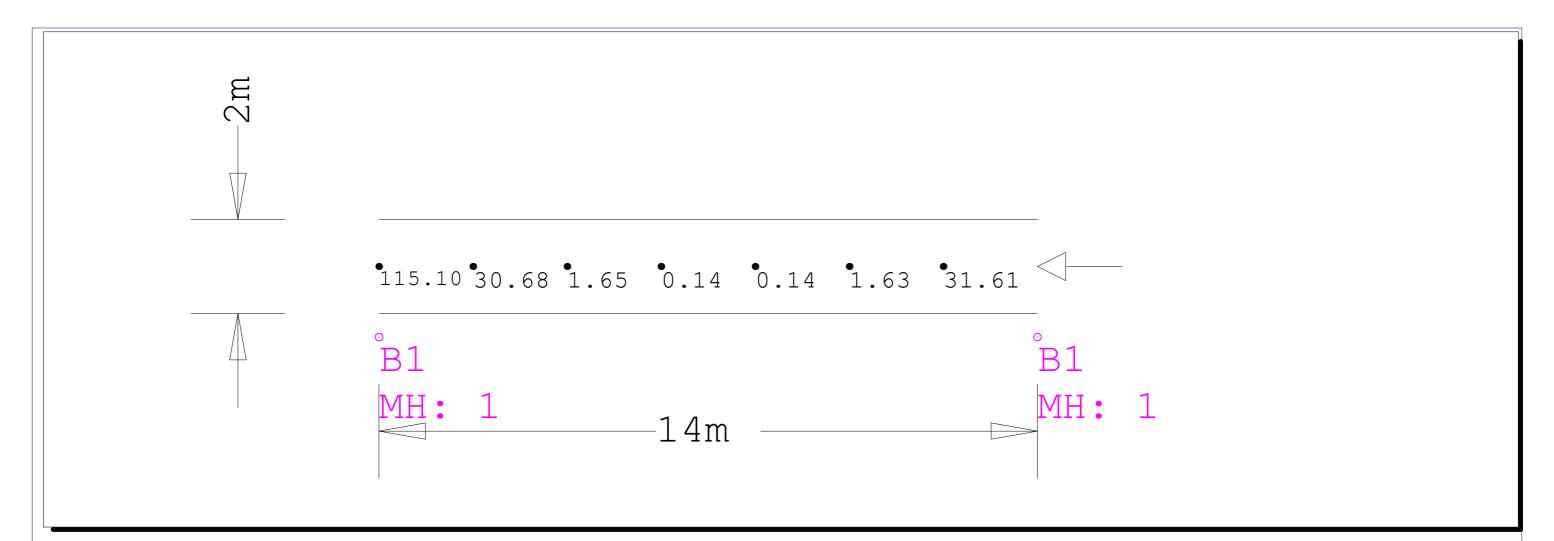


TABLE 3.4

VALUES OF LIGHT TECHNICAL PARAMETERS
FOR PATHWAYS AND CYCLIST PATHS

1	2	3	4	5				
	Light technical parameters (LTP)							
Lighting subcategory	Average horizontal illuminance (\overline{E}_h)	Point horizontal illuminance ^{a,b,d} (E _{Ph})	Illuminance (horizontal) uniformity ^c Cat. P	Point vertica illuminance ^{a,} (E _{Pv})				
	lx	lx	(U_{E2})	lx				

AS/NZS 1158.3.1:2020

TABLE 2.2
LIGHTING SUBCATEGORIES FOR PEDESTRIAN AND CYCLIST PATHS

1	2	3	4	5
Type of pathway	v	Selection	Applicable	
General description	Basic operating characteristics	Pedestrian/ cycle activity	Fear of crime	lighting subcategory
Pedestrian or cycle orientated pathway, e.g. footpaths, including those along local roads ² and arterial roads ⁶ , walkways, lanes, park paths,	Pedestrian and or cycle traffic only	Medium	Medium	PP3
cyclist paths		Medium	Low	PP4
		Low	Low	PP5

PP3	3	0.5	5	0.1
PP4	1.5	0.25	5	0.05
PP5	0.85	0.14	5	0.02

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description			
0	2	B1	SINGLE	1954.8	0.850	BL01-024-4080-R03201_IES2002			

Calculation Summary							
Label	CalcType	Units	Avg	Min	Max/Avg		
RoadOpt_1_Illum	Illuminance	Lux	25.85	0.14	4.45		

SPACING HAS BEEN DONE TO ACHIEVE CAT PP5
OF ASNZS 1158.3.1 2020 LTPs
DUE TO 1M HEIGHT OF TYPICAL BOLLARDS
VERTICAL CALCULATIONS HAS NOT BEEN DONE AT 1.5M



•	Client:	Rev:	Date:	Comment:	DRAFT: DRAFTED BY PERTH LIGHTING CONSULTANTS		
BOLLARD SPACING CAT PP5							S
ESTIMATED					Designer:	FWS	Scale:
This calculation is based upon specified parameters supplied by the oustomer, and other assumed design parameters, as debiled in this document. In practice, the accuracy of the values will offer due to environment in extraction as data luminates positioning, one number selectance, apply voltage, local luminate an arbiert temperature, obtained: "Intuitive etc. These results also subject to formatify accepted principles represent any observable of the order order of the order order of the order of the order of the order					Mies Lighting		
any representation or warranty of any levid and is not a statement of conformity, integrated Power's under no lability to the customer for failure to attain complying figures as the responsibility for training on completion as with the customer.					_ Date:		Page No:
The emergency escape lighting & exit sign design (where applicable) is based on our review of the site plans & our interpretation of AS2293.1:2005 & BCA 2012 CLAUSE E4.2, E4.4 INTEGRATED POWER is not an appropriate regulatory authority, so this design is not a statement of compliance.					Date: 28/06/20		1 -