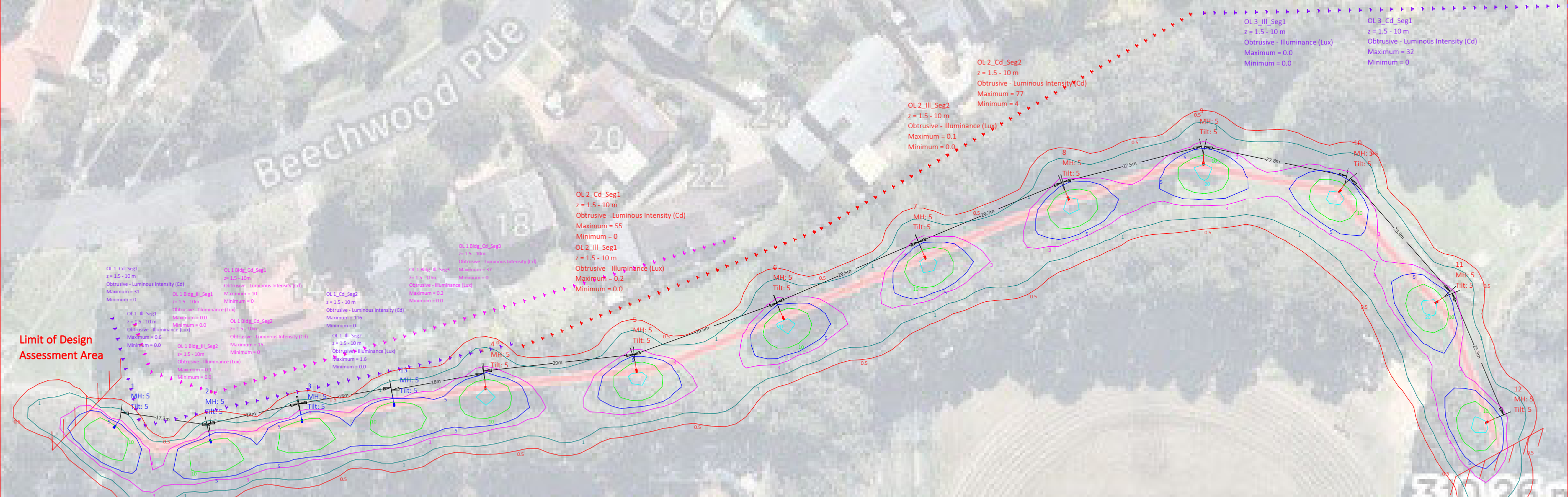




The values of light technical parameters shown in this lighting design calculation are nominal. They are based on parameters provided by the client and the specific details as reported in this document. Results in practice may be different due to variations such as luminaire positioning/aiming, surface reflectance, supply voltage, local luminaire ambient temperature, obstacles/furniture, etc. They are also subject to normally accepted photometric tolerances, and calculation/program uncertainties. Apex Lighting shall be under no liability to the Customer for failure to attain such performance figures. Commercial in confidence.



UWLR Area Summary	
Label	UWLR
ULR	0.001

Ev I			
Project: Ev I			
Label	CalcType	Description	Max
OL 1 Bldg_Cd_Seg1	Obtrusive - Cd	z= 1.5 - 10m	10
OL 1 Bldg_Cd_Seg2	Obtrusive - Cd	z= 1.5 - 10m	15
OL 1 Bldg_Cd_Seg3	Obtrusive - Cd	z= 1.5 - 10m	37
OL 1 Bldg_III_Seg1	Obtrusive - III	z= 1.5 - 10m	0.0
OL 1 Bldg_III_Seg2	Obtrusive - III	z= 1.5 - 10m	0.1
OL 1 Bldg_III_Seg3	Obtrusive - III	z= 1.5 - 10m	0.2
OL 1_Cd_Seg1	Obtrusive - Cd	z = 1.5 - 10 m	31
OL 1_Cd_Seg2	Obtrusive - Cd	z = 1.5 - 10 m	116
OL 1_III_Seg1	Obtrusive - III	z = 1.5 - 10 m	0.6
OL 1_III_Seg2	Obtrusive - III	z = 1.5 - 10 m	1.6
OL 2_Cd_Seg1	Obtrusive - Cd	z = 1.5 - 10 m	55
OL 2_Cd_Seg2	Obtrusive - Cd	z = 1.5 - 10 m	77
OL 2_III_Seg1	Obtrusive - III	z = 1.5 - 10 m	0.2
OL 2_III_Seg2	Obtrusive - III	z = 1.5 - 10 m	0.1
OL 3_Cd_Seg1	Obtrusive - Cd	z = 1.5 - 10 m	32
OL 3_III_Seg1	Obtrusive - III	z = 1.5 - 10 m	0.0

Luminaire Schedule							
Symbol	Qty	Arm	Label	Description	Source	Power	LLF
	4	1.5	BRLC-N183K+RS	Apex BRISA LC-N Road dist., w. Rear Shield, 60mm spigot, 7-Pin NEMA Socket (PE cell by others), Black	LED 3000K	21	1.000
	9	1.5	BRLC-N183K	Apex BRISA LC-N Road dist., 60mm spigot, 7-Pin NEMA Socket (PE cell by others), Black	LED 3000K	21	1.000

I-table Filename: BRLLC-N18.cie

Job Name: 23011-01 Greenway Park Path

Luminaire Description: BRLLC-N183K

Initial Lamp Flux: 2257 lms

Maintenance Factor: 0.8

Stores Code:

Upcast Angle: 5 degrees

Arrangement: Single Side

Offset Distance: 1 m [ie. over Path]

Upward Waste Light Ratio: .1 %

Light Source: LED - Light Emitting Diode

Luminaire Classification: Not specified

Lighting Category: User Defined

Illuminance Criteria: Average Illuminance (Eav) >= 3.00 lx
(Maintained values) Minimum Illuminance (Eph) >= 0.50 lx
Illuminance Uniformity (Up) <= 5
Vertical Illuminance (Epv) >= 0.10 lx
(Epv calculated on plane 1.5m above ground
and contribution from luminaire in adjacent
span used in calculations)

Calculation Grid: Dependant on Path width (refer Figure 3.8
of AS/NZS 1158.2)

Mounting Height	Maximum Spacing for different Path Widths
-----	-----
2.0 2.5 3.0	

5.0 30.4 30.1 30.2	

Value/s in above table are all in metres.

The table contains maximum spacings which, for the specified luminaire and lamp combination, provide compliance with the User Defined light technical parameters (LTEs) nominated above.

I-table Filename: BRLC-N103K+RS.cie

Job Name: 23011-01 Greenway Park Path

Luminaire Description: BRLC-N183K +RS
Initial Lamp Flux: 1622 lms
Maintenance Factor: 0.8
Stores Code:
Upcast Angle: 5 degrees
Arrangement: Single Side
Offset Distance: 1 m [ie. over Path]
Upward Waste Light Ratio: .1 %
Light Source: LED - Light Emitting Diode
Luminaire Classification: Not specified

Lighting Category: User Defined

Illuminance Criteria: Average Illuminance (Eav) >= 3.00 lx
(Maintained values) Minimum Illuminance (Eph) >= 0.50 lx
Illuminance Uniformity (Up) <= 5
Vertical Illuminance (Epv) >= 0.10 lx
(Epv calculated on plane 1.5m above ground
and contribution from luminaire in adjacent
span used in calculations)

Calculation Grid: Dependant on Path width (refer Figure 3.8
of AS/NZS 1158.2)

Mounting Height	Maximum Spacing for different Path Widths
-----	-----
	2.0 2.5 3.0
	-----+-----
5.0	19.1 18.9 19.0
	-----+-----

Value/s in above table are all in metres.

The table contains maximum spacings which, for the specified luminaire and lamp combination, provide compliance with the User Defined light technical parameters (LTPs) nominated above.

