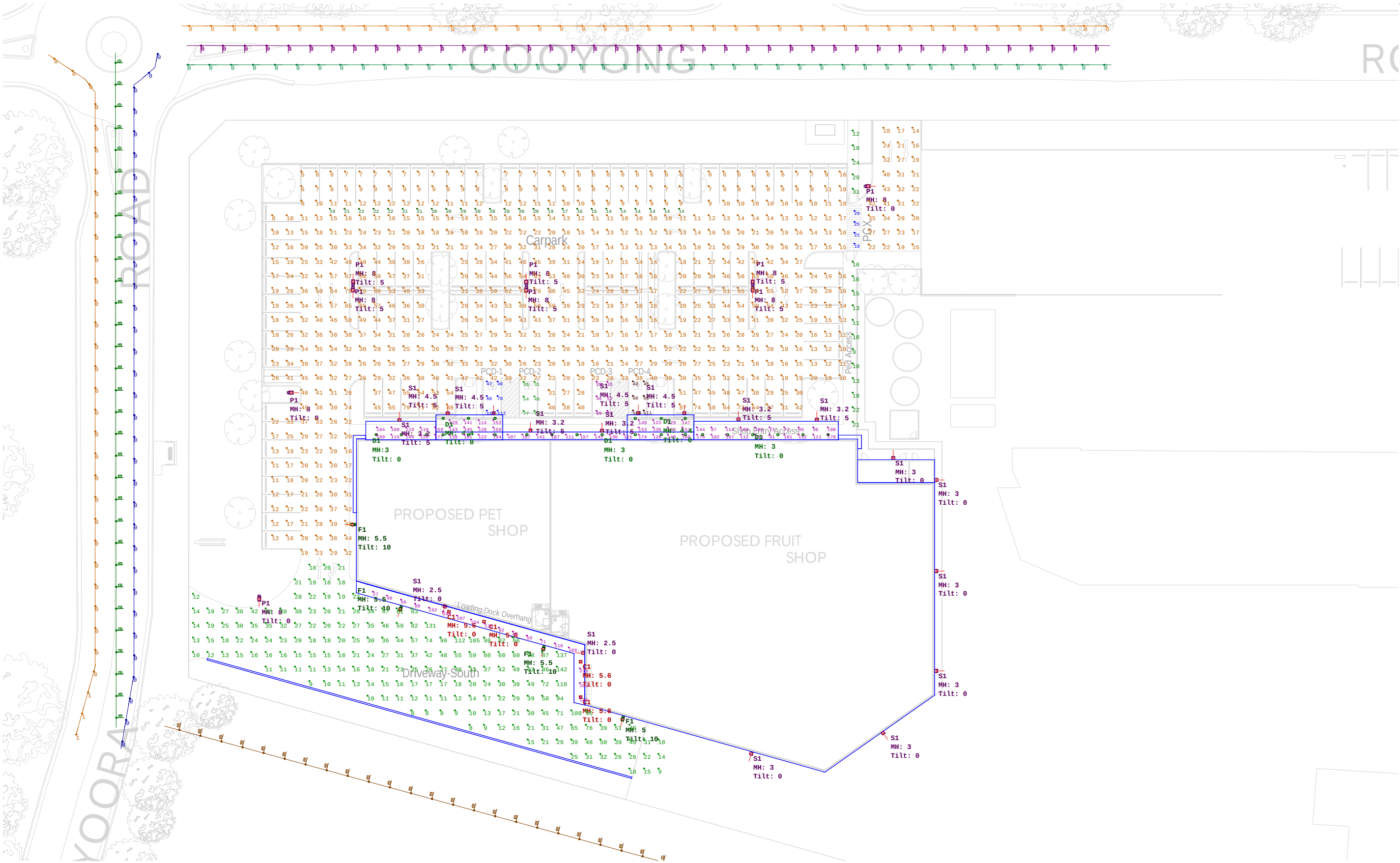




DESIGN NOTES:

1. THIS DESIGN SCHEME WAS PRODUCED ON ARCH BACKGROUND DA15-P3 PROPOSED SITE PLAN PRODUCED BY LEFFLER SIMES ARCHITECTS.
2. THIS DESIGN SATISFY THE AVERAGE HORIZONTAL ILLUMINANCE AS REQUIRED FOR AUSTRALIAN STANDARDS.
*AS1158.3.1:2020 - PC1 CARPARKS 14LUX
*AS1158.3.1:2020 - PR1 DRIVEWAY & CIRCULATION 7LUX
*AS1158.3.1:2020 - PCX PED CROSSING 21LUX
*AS1158.3.1:2020 - PP1 PATHWAYS 10LUX
3. A MAINTENANCE FACTORS HAVE BEEN APPLIED THROUGHOUT THE DESIGN IN ACCORDANCE WITH AS 1158.3.1. A MAINTENANCE PLAN SHALL BE ADOPTED TO COMPLY WITH THESE FACTORS.
4. OBTRUSIVE LIGHT ANALYSIS HAS BEEN CONDUCTED FOR THIS DESIGN IN ACCORDANCE WITH AS4282-2023.
5. WORKPLANE HEIGHT IS TAKEN AT OM FFL.
6. THIS DESIGN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT.
7. LIGHT FITTING SIMULATION AND CALCULATION RESULTS ARE BASED ON IES FILES PROVIDED BY THE LIGHTING MANUFACTURER.

Luminaire Schedule						
Symbol	Qty	Label	Description	Tag	LLF	Total Lamp Lumens
	4	IQCOR-75 IESNA2002 120Degre	IQL CORSA II 75W LOWBAY 120D 4000K	C1	0.800	9721.1
	25	M17C14N84B6 - 60 deg 350mA	SALC MILANO S 170 14W 60D CAN 4000K	D1	0.800	N.A.
	4	VUS50-4080-T3 IES2002	IQL VUSO66 50W 55X125 FLOOD 4000K	F1	0.800	N.A.
	9	ARI-75-4K-T4	IQL ARIZONA II 75W T4 POLE 4000K	P1	0.800	12618
	17	AQUARIUS-WALLPK-30-4080-T3 IE	IQL AQUARIUS 30W T3 WALL PACK 4000K	S1	0.800	4139.1

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		P1	27/05/2025	PRELIMINARY	TP		FLOWER POWER GARDEN CENTRE TERRY HILLS	EXTERNAL LIGHTING
				<u>ADDRESS</u>	277 MONA VALE RD, TERRY HILLS NSW			
		<u>PAPER</u>	<u>PAGES</u>	<u>PROJECT NO.:</u>	<u>DWG NO</u>		<u>REV</u>	
		A3	1/3	CLE-2305	LUX-001	P1		

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	4	VUS50-4080-T3_IES2002	IQL VUSO66 50W 55X125 FLOOD 4000K	F1	0.800	N.A.
	9	ARI-75-4K-T4	IQL ARIZONA II 75W T4 POLE 4000K	P1	0.800	12618
	17	AQUARIUS-WALLPK-30-4080-T3_IE	IQL AQUARIUS 30W T3 WALL PACK 4000K	S1	0.800	4139.1

UWLR Area Summary		
Label	UWLR	Description
LPDArea_1	0.002	

Calculation Summary									
Project: Project_1									
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max	Max/Avg	
Carpark	Illuminance	Lux	25.69	88	5	0.19	0.06	3.43	
Carpark_Vert	Illuminance	Lux	18.36	22	14	0.76	0.64	1.20	
Driveway - South	Illuminance	Lux	33.53	142	8	0.24	0.06	4.24	
Loading Dock Overhang	Illuminance	Lux	122.11	243	27	0.22	0.11	1.99	
PCD-1	Illuminance	Lux	75.50	112	46	0.61	0.41	1.48	
PCD-2	Illuminance	Lux	53.00	77	31	0.58	0.40	1.45	
PCD-3	Illuminance	Lux	51.00	77	29	0.57	0.38	1.51	
PCD-4	Illuminance	Lux	74.17	113	43	0.58	0.38	1.52	
PCX	Illuminance	Lux	23.50	29	19	0.81	0.66	1.23	
Ped Access	Illuminance	Lux	16.94	31	9	0.53	0.29	1.83	
Shop Entry Access	Illuminance	Lux	133.05	194	73	0.55	0.38	1.46	

Calculation Summary							
Project: Compliance							
Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max
ObtrusiveLight_North_Cd_Seg1	Obtrusive - Cd	N.A.	277.39	1155	54	0.19	0.05
ObtrusiveLight_North_Ill_Seg1	Obtrusive - Ill	Lux	0.46	3	0	0.00	0.00
ObtrusiveLight_South_Cd_Seg1	Obtrusive - Cd	N.A.	144.03	432	4	0.03	0.01
ObtrusiveLight_South_Ill_Seg1	Obtrusive - Ill	Lux	0.27	1	0	0.00	0.00
ObtrusiveLight_TI_1 Cooyong Road	Obtrusive - TI	%	0.00	0	0	N.A.	N.A.
ObtrusiveLight_TI_1 Myoora Road	Obtrusive - TI	%	0.00	0	0	N.A.	N.A.
ObtrusiveLight_TI_2 Cooyong Road	Obtrusive - TI	%	0.00	0	0	N.A.	N.A.
ObtrusiveLight_TI_2 Myoora Road	Obtrusive - TI	%	0.09	1	0	0.00	0.00
ObtrusiveLight_West_Cd_Seg1	Obtrusive - Cd	N.A.	243.63	1039	40	0.16	0.04
ObtrusiveLight_West_Ill_Seg1	Obtrusive - Ill	Lux	0.40	2	0	0.00	0.00

Obtrusive Light - Compliance Report

AS/NZS 4282:2023, A2 - Low District Brightness, Non-Curfew L1
Filename: External Lighting Calc
27/05/2025 12:28:59 PM

Illuminance

Maximum Allowable Value: 5 Lux

Calculations Tested (3):

Calculation Label	Test Results	Max. Illum.
ObtrusiveLight_North_Ill_Seg1	PASS	3
ObtrusiveLight_South_Ill_Seg1	PASS	1
ObtrusiveLight_West_Ill_Seg1	PASS	2

Luminous Intensity (Cd) At Vertical Planes

Maximum Allowable Value: 7500 Cd

Calculations Tested (3):

Calculation Label	Test Results
ObtrusiveLight_North_Cd_Seg1	PASS
ObtrusiveLight_South_Cd_Seg1	PASS
ObtrusiveLight_West_Cd_Seg1	PASS

Threshold Increment (TI)

Maximum Allowable Value: 20 %

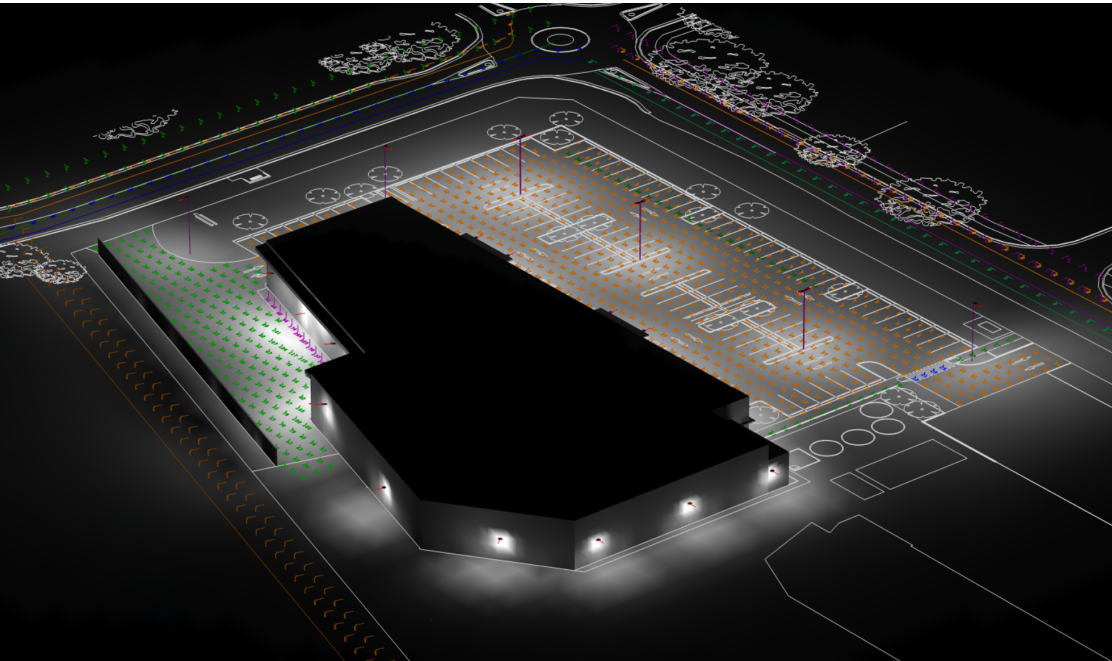
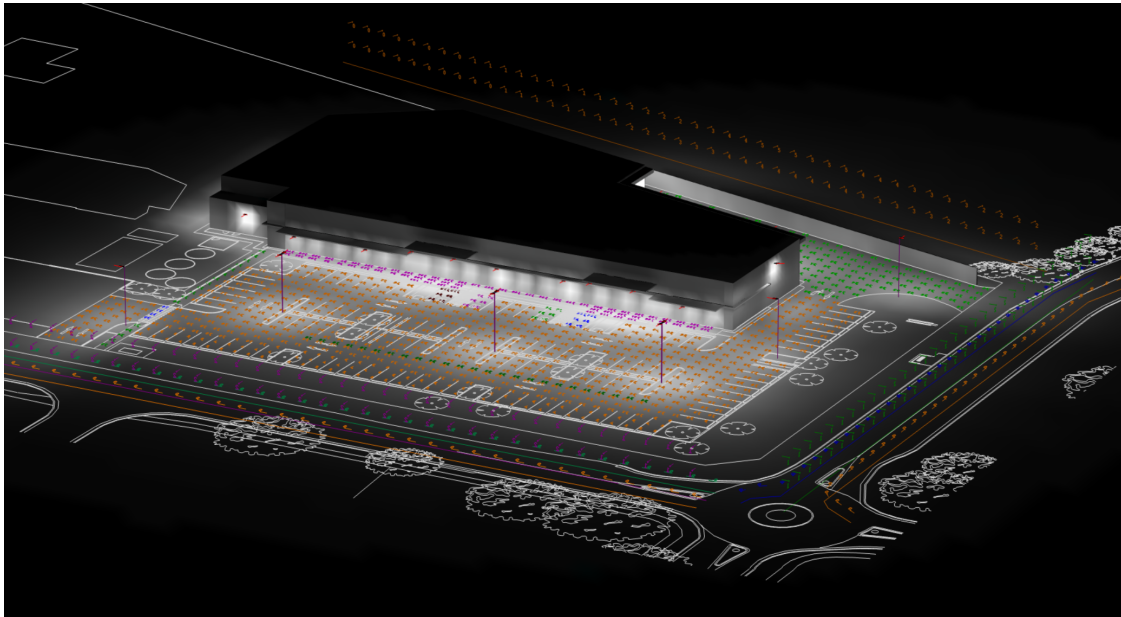
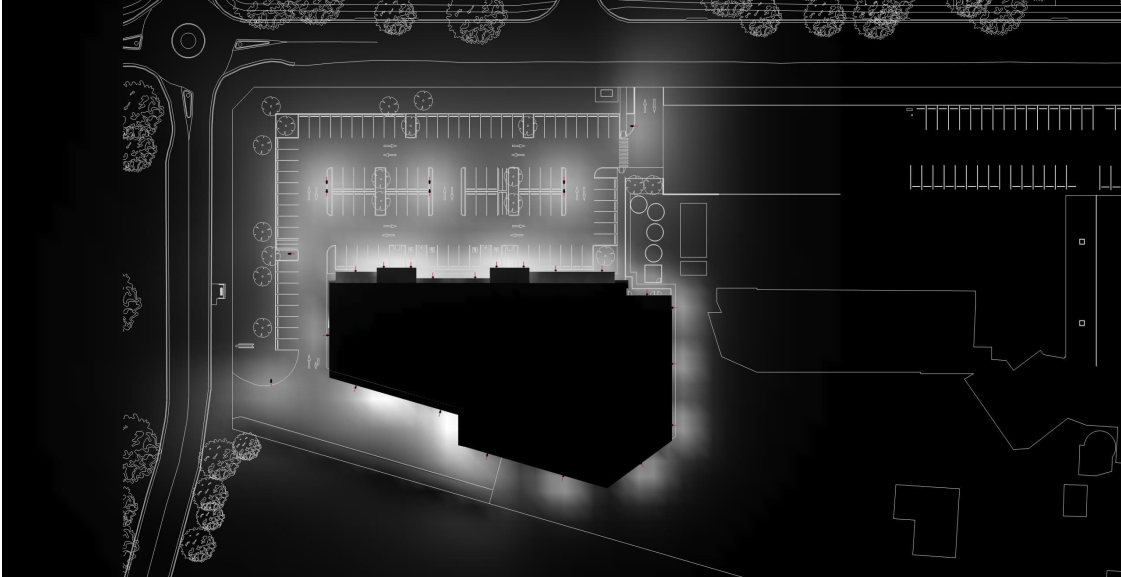
Calculations Tested (4):

Calculation Label	Adaptation Test Luminance	Test Results
ObtrusiveLight_TI_2 Myoora Road	1	PASS
ObtrusiveLight_TI_1 Cooyong Road	1	PASS
ObtrusiveLight_TI_2 Cooyong Road	1	PASS
ObtrusiveLight_TI_1 Myoora Road	1	PASS

Upward Waste Light Ratio (UWLR)

Maximum Allowable Value: 1.0 %

Calculated UWLR: 0.2 %
Test Results: PASS



DESIGN NOTES:

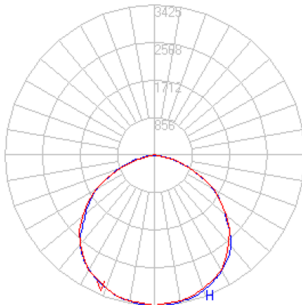
- OBSTRUSIVE CALCULATIONS PER AS4282:2023 CAT A2 LOW DISTRICT BRIGHTNESS.
- OBSTRUSIVE CALCS TAKEN FROM 2M TO 10M.
ROADWAY TI CALCS AT 1.5 WITH A WINDSHIELD CUTOFF ANGLE OF 20DEG.

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		P1	27/05/2025	PRELIMINARY	TP		FLOWER POWER TERRY HILLS	EXTERNAL LIGHTING	
		277 MONA VALE RD, TERRY HILLS NSW							
		PAPER	PAGES	PROJECT NO.	DWG NO.		REV		
		A3	2/3	CLE-2305	LUX-001		P1		

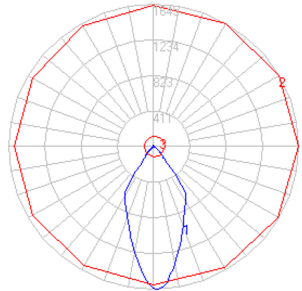
Luminaire Tag

Polar Curve

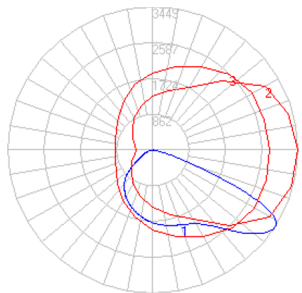
C1



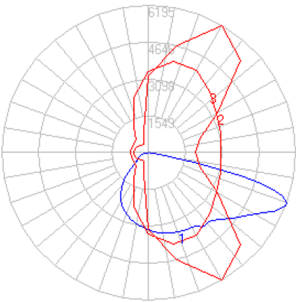
D1



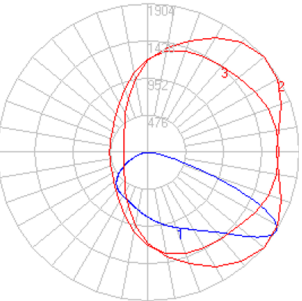
F1



P1



S1



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		ADDRESS 277 MONA VALE RD, TERRY HILLS NSW						
		PAPER A3	PAGES 3/3	PROJECT NO. CLE-2305	DWG NO LUX-001		REV P1	