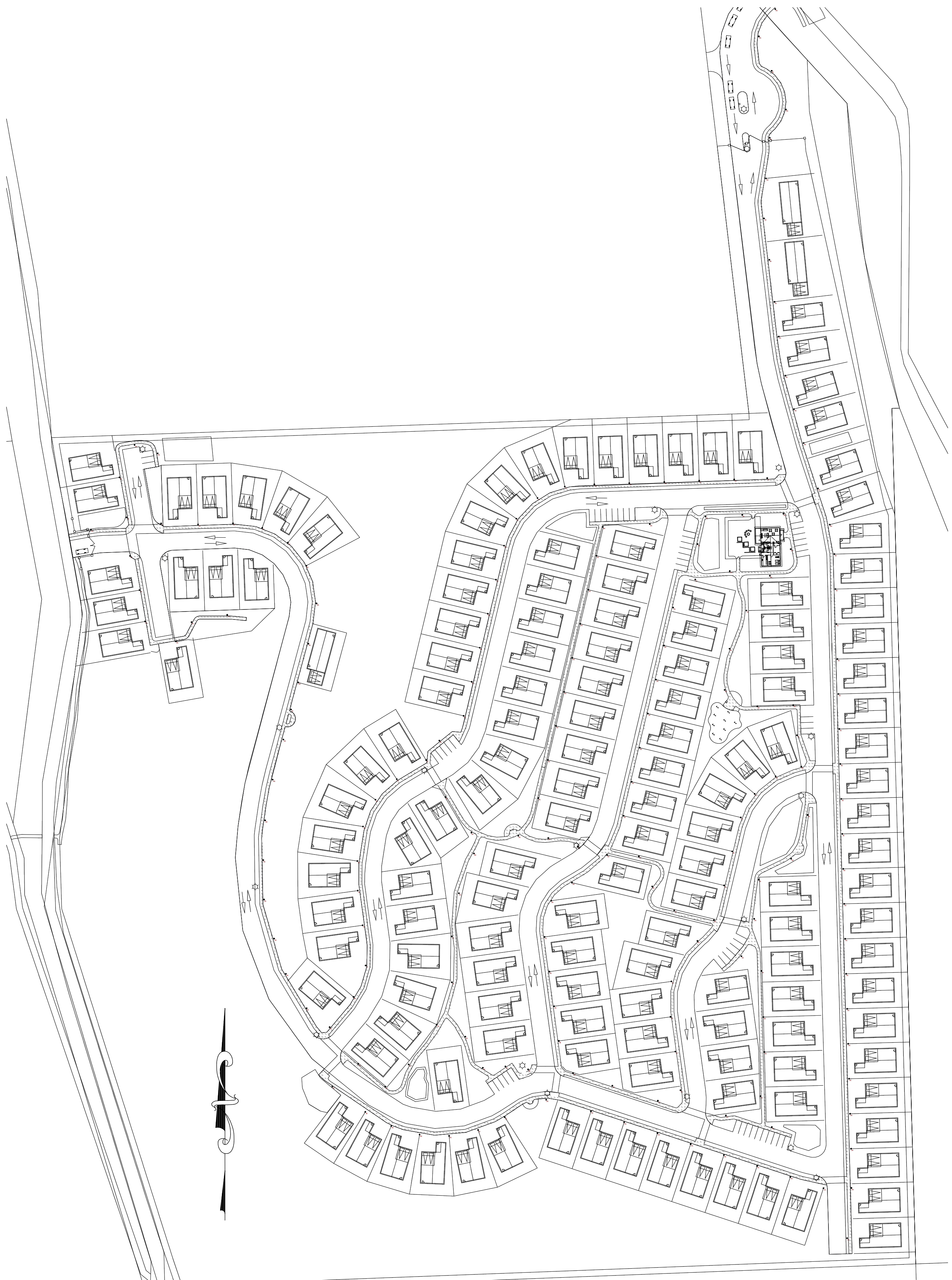
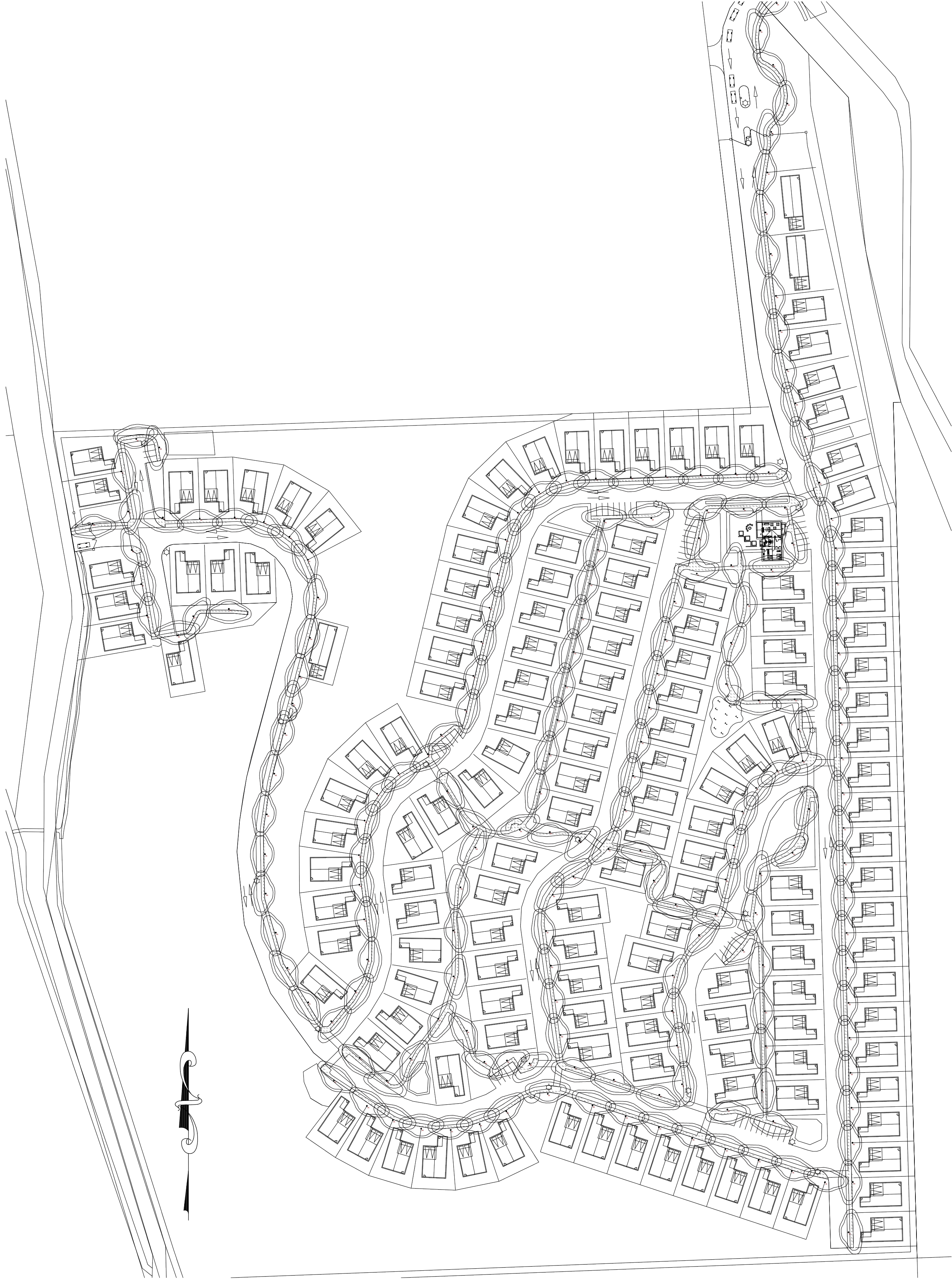




Luminaire Schedule				
Qty	Label	Manufacturer	Description	Lum. Watts
190	S1	VISIONAIRE	LSO-M-T2-5L-4K-UNV-PTD-XX-CLS	52

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
LATAH MHP PATHWAYS	Fc	3.46	7.5	0.8	4.33	9.38

PROJECT

LATAH GLEN
RESIDENTIAL COMMUNITY

SITE LIGHTING CALCULATIONS

AEI
Engineering
Incorporated

1038 W. Davidson Avenue
Coeur d'Alene, ID 83814
(208) 666-4001 office (208) 666-4021 fax

ENGR RECORD

BY DATE

DRAWN DESIGNED CHECKED PROJ. ENG APPROVED

REVISIONS

REV DESCRIPTION

BY DATE

ONE INCH
AT FULL SIZE

IF NOT ONE INCH
SCALE
ACCORDINGLY
NOTED

PROJECT NO:

C21305

ACAD. FILE NAME:

C21305-E1

SHEET:

REV:

DRAWING NUMBER

E1

LUSSO ARRAY M-PT Serenity Lens LED Specifications



Project Name:

Catalog Number:

Type:

Contemporary design meets the new generation of LED green technology in this stunning luminaire, the **Lusso Array**. The Lusso Array series provides over fifty percent energy savings over traditional HID light sources; and offers excellent beam control and LED life beyond 100,000 hours for 1400 milliamp systems. The Lusso Array is offered in ten optical distributions.

The Lusso Array's fully-sealed housing features an exceptionally well-designed thermal management system that provides superior heat dissipation.

The Lusso Array fixture is built with cast aluminum.

The **Lusso Array** is the perfect compliment to any university campus, business park, or walkway project where contemporary, architectural design is desired.

Ordering Information

MODEL	OPTICS	LUMENS	KELVIN	VOLTAGE	MOUNTING	FINISH	SERENITY LENS	OPTIONS	OPTIONS
LSO-M	T1 Type 1 T2 Type 2 T3L Type 3 Long T4L Type 4 Long T5LS Type 5 Long Square	5L 8L 11L 14L 17L	3K 3000K 4K 4000K 5K 5000K	UNV 120-277V 8 347V 5 480V	PTS Post Top Single Arm PTD Post Top Double Arm *The Lusso Medium Post Top will slip over a 3" O.D. X 4" Tall tenon	BK Black SBK Smooth Black BZ Bronze GP Graphite GY Grey SL Silver Metallic WH White SWH Smooth White FG Forest Green VD Verdigris Green CC Custom Color	LDL Lightly Diffused Lens HDL High Diffused Lens	PCR-120 PCR-208 PCR-240 PCR-277 PCR-480 Photocell & Receptacle PER 5PINPER 7PINPER 3, 5, or 7 Pin Photo Receptacle w/shorting cap *Requires Dimming Driver DIM 0-10v Dimming Driver VWC Visionaire Wireless Controls *Consult Factory	WSC-8 Motion Sensor 8' Mounting Height WSC-20 Motion Sensor 9-20' Mounting Height WSC-40 Motion Sensor 21-40' Mounting Height *The WSC option will require (1) FSIR 100 remote for programing CLS Cutoff Louver Shield ROT-R Rotated Optics Right Side ROT-L Rotated Optics Left Side

Housing

The Lusso Arrays housing is constructed from durable, corrosion-resistant, cast aluminum. The Cast aluminum top cap is easily removable for service. Silicone gasketing is provided for complete weather and insect protection.

Thermal Management

The Lusso Array provides excellent overall thermal management by maximizing the efficiency of the heat sink in the fixture. This enables the Lusso Array to withstand higher ambient temperatures and higher drive currents without degrading LED life.

Optical System - Serenity Lens

- Serenity Lens is offered in two different diffusion levels, high and lightly diffused.
- The highest lumen output Array LEDs are utilized. High performance acrylic optics feature industry-leading Type 1, 2, 3L, 4L, and 5LS optical distributions.
- L70 life of our LEDs is rated over 100,000 hours
- CRI values are 70.

New LED Array Technology

- 4 Diodes now replace a single Led chip and operate at 25% of the drive current allowing for higher efficiency, less heat and longer life. (10 Year Warranty)
- More LEDs at a lower drive current provides a more comfortable visual effect.

Quali-Guard® Finish

- Fixture components are chemically pretreated through a multiple-stage washer, and finished with an electrostatically-applied, thermoset polyester powder coat textured paint with a 3 to 5 millimeters thickness. Finish is oven-baked at 400 °F for maximum adherence and finish hardness.
- Available in standard and custom colors.
- Finish is guaranteed for five (5) years.

Post Top Mount

- Lusso Arrays contractor-friendly mounting hardware slips over 3" O.D. x 4" tall tenon utilizing stainless steel hardware.
- Round Internal Tenon Adaptors (RITA) are recommended for a smooth-looking connection. Standard for 4" poles, custom size required for 3" or 5" poles.

Electrical Assembly

- The Lusso Array is supplied with a high-performance driver available in 700, 1050, 1200 and 1400 mA. The driver is integrally-located in the housing, and is operational from 120 V through 480 V, 50 Hz to 60 Hz input.
- Power factor is 90%.
- Rated for -40° to 50°C operation.
- 10 kV surge protector supplied as standard.

Warranty

- Ten (10) year Limited Warranty on electrical components.
 - Five (5) year on finish.
- For full warranty information, please visit visionairelighting.com.

Options

- Photocell & Receptacle
 - Photocell Receptacle with shunting cap
 - 0-10v Dimming Driver
 - WattStopper FSP-211 Motion Sensor
 - Wireless Control
 - Lightly Diffused Lens
 - High Diffused Lens
 - Cutoff Louver Shield
- Please consult factory for detailed custom options.

Listings

- cUL Listed
- IP65 Rated
- Powder Coated Tough™
- IDA dark sky certification



DesignLights Consortium (DLC) qualified Product. Some configurations of this product family may not be DesignLights Consortium (DLC) listed, please refer to the DLC qualified products list to confirm listed configurations. <http://www.designlights.org/>
3000K must be selected for IDA certification.
Fixed Mount must be selected for IDA dark sky certification.

Motion Sensor Default Setting		
Type	WSC - Default	WSC Range
High Mode	10V	0 -10V
Low Mode	1V	0 -9.8V
Time Delay	5 Min	5 - 30 Min
Cut Off Delay	1 Hour	1 - 5 Hours
Sensitivity	Max	Low, Med, Max
Hold Off Setpoint	Disabled	1 - 250FC
Photocell On/Off	Disabled	1 - 250FC
Ramp Up Time	Disabled	1 - 60 Dec
Fade Down Time	Disabled	1 - 60 Dec

LUSSO ARRAY M-PT Serenity Lens LED Specifications

Photometric Optical Summary

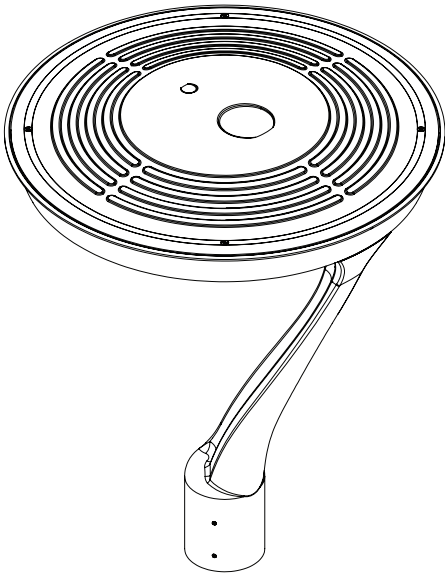
T1 Type 1	T2 Type 2	T3L Type 3 Long	T4L Type 4 Long	T5LS Type 5 Long Square
				

EPA Data

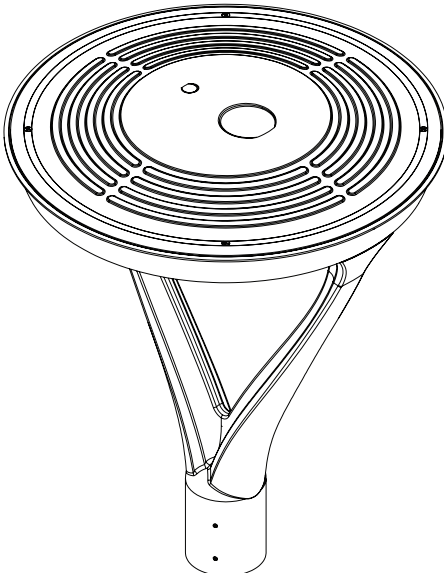

.9

Dimensions

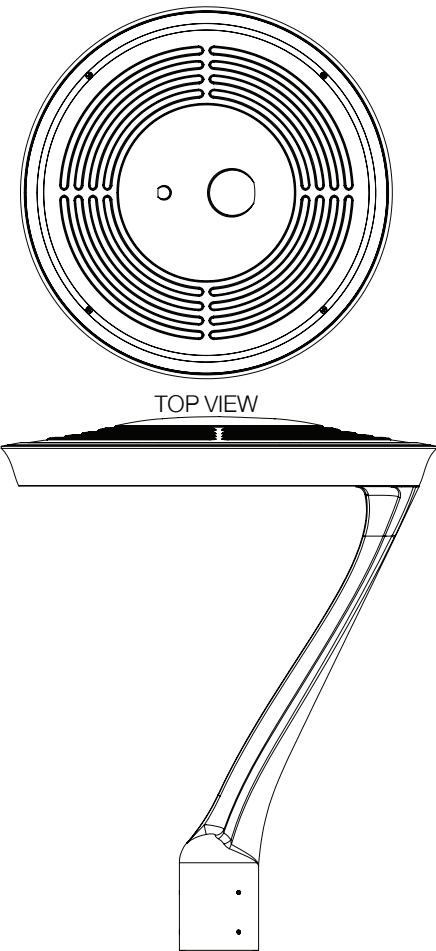
Width:	LSO-M	21"
Depth:	LSO-M	21"
Height:	LSO-M	25.5"
Weight (Single):	LSO-M	30 lbs
Weight (Double):	LSO-M	32 lbs



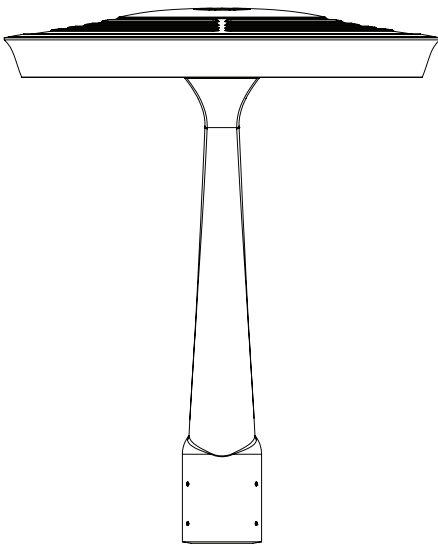
PERSPECTIVE VIEW (SINGLE)



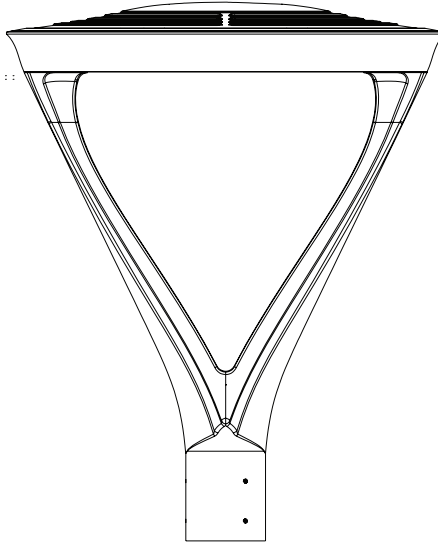
PERSPECTIVE VIEW (DOUBLE)



FRONT VIEW (SINGLE)

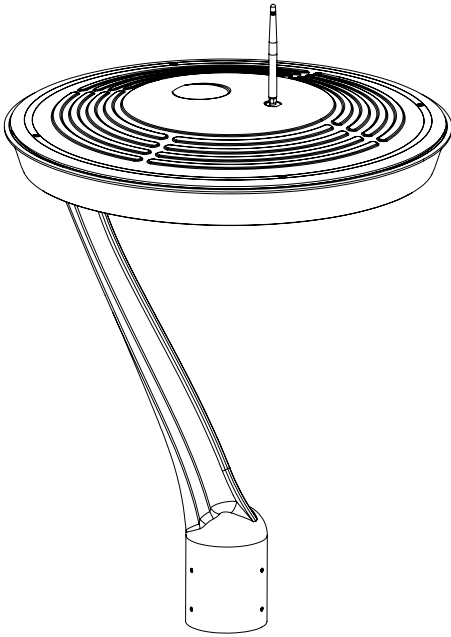


SIDE VIEW

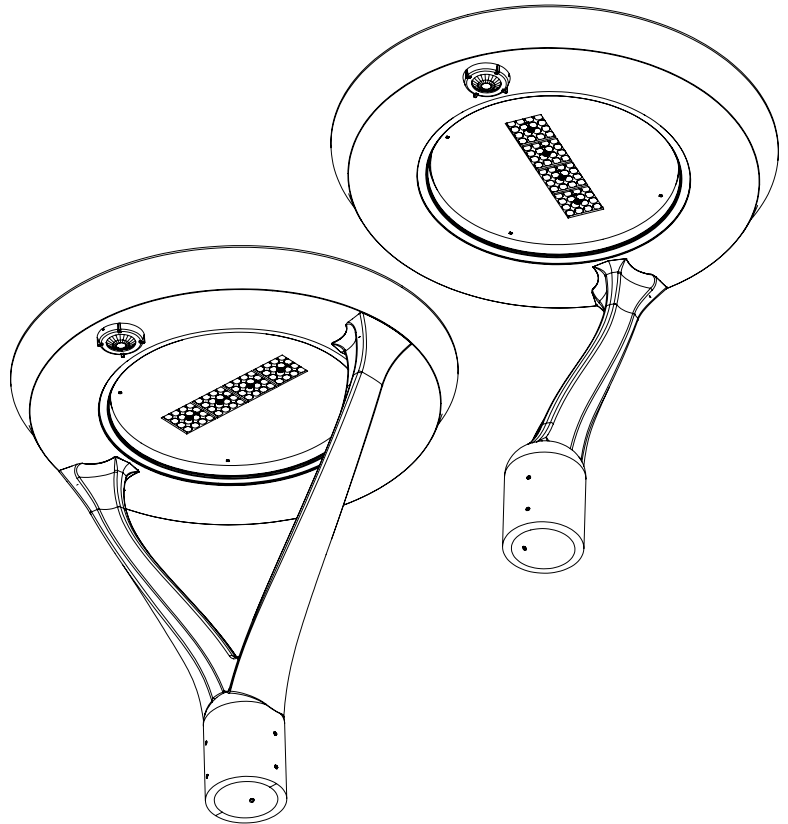


FRONT VIEW (DOUBLE)

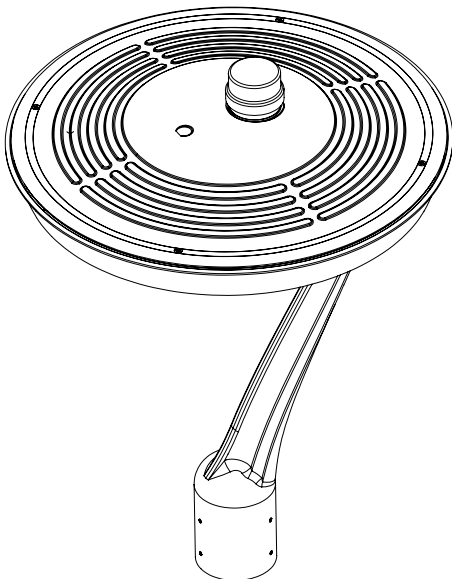
LSO-M-PT Options



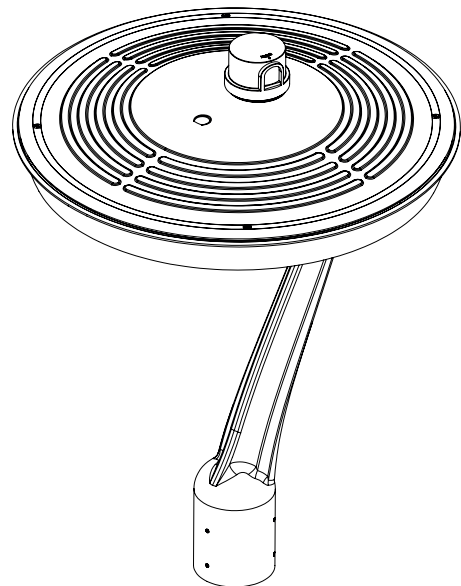
Visionaire Wireless Controls



Motion Sensor



3, 5 or 7 Pin Photo Receptacle w/shorting cap



Photocell & Receptacle

LUSSO ARRAY M-PT Serenity Lens LED Specifications

3K LUMEN DATA - LDL DIFFUSER						
Lumens	T1	T2	T3L	T4L	T5LS	Watts
5L	4990	5063	4587	4612	4887	52
8L	8156	8275	7497	7538	7987	89
11L	11031	11192	10140	10195	10802	124
14L	14095	14301	12957	13027	13803	163
17L	17108	17357	15726	15811	16753	202
4K LUMEN DATA - LDL DIFFUSER						
5L	5178	5253	4759	4785	5070	52
8L	8462	8585	7778	7820	8286	89
11L	11444	11612	10520	10577	11207	124
14L	14624	14837	13443	13515	14321	163
17L	17749	18008	16316	16404	17381	202
5K LUMEN DATA - LDL DIFFUSER						
5L	5289	5366	4862	4888	5179	52
8L	8643	8769	7945	7988	8464	89
11L	11690	11861	10746	10804	11448	124
14L	14937	15156	13731	13805	14628	163
17L	18130	18395	16666	16756	17755	202
3K LPW DATA - LDL DIFFUSER						
Lumens	T1	T2	T3L	T4L	T5LS	Watts
5L	95	97	88	88	93	52
8L	91	93	84	84	89	89
11L	89	90	82	82	87	124
14L	87	88	80	80	85	163
17L	85	86	78	78	83	202
4K LPW DATA - LDL DIFFUSER						
5L	99	100	91	91	97	52
8L	95	96	87	88	93	89
11L	92	93	85	85	90	124
14L	90	91	83	83	88	163
17L	88	89	81	81	86	202
5K LPW DATA - LDL DIFFUSER						
5L	101	102	93	93	99	52
8L	97	98	89	89	95	89
11L	94	95	87	87	92	124
14L	92	93	84	85	90	163
17L	90	91	83	83	88	202

3K LUMEN DATA - HDL DIFFUSER						
Lumens	T1	T2	T3L	T4L	T5LS	Watts
5L	4859	4981	3827	4412	4699	52
8L	7941	8139	6254	7210	7679	89
11L	10740	11009	8459	9752	10386	124
14L	13724	14067	10809	12461	13271	163
17L	16657	17073	13119	15124	16108	202
4K LUMEN DATA - HDL DIFFUSER						
5L	5041	5167	3971	4577	4875	52
8L	8239	8445	6489	7481	7967	89
11L	11143	11421	8776	10118	10775	124
14L	14238	14594	11214	12928	13769	163
17L	17281	17714	13611	15691	16712	202
5K LUMEN DATA - HDL DIFFUSER						
5L	5149	5278	4056	4676	4980	52
8L	8416	8626	6628	7641	8138	89
11L	11382	11667	8965	10335	11007	124
14L	14544	14908	11455	13206	14064	163
17L	17652	18094	13903	16028	17070	202
3K LPW DATA - HDL DIFFUSER						
Lumens	T1	T2	T3L	T4L	T5LS	Watts
5L	93	95	73	84	90	52
10L	89	91	70	81	86	89
15L	86	89	68	79	84	124
20L	84	87	66	77	82	163
25L	83	85	65	75	80	202
4K LPW DATA - HDL DIFFUSER						
5L	5L	96	99	76	87	93
10L	8L	92	94	73	84	89
15L	11L	90	92	71	81	87
20L	14L	88	90	69	80	85
25L	17L	86	88	68	78	83
5K LPW DATA - HDL DIFFUSER						
5L	98	101	77	89	95	52
10L	94	97	74	86	91	89
15L	92	94	72	83	89	124
20L	89	92	70	81	87	163
25L	88	90	69	80	85	202

3K BUG DATA - LDL DIFFUSER																
Lumens	T1			T2			T3L			T4L			T5LS			Watts
	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
5L	2	0	2	2	0	1	2	0	1	2	0	1	2	0	1	52
8L	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	89
11L	3	0	3	3	0	2	2	0	2	2	0	2	3	0	1	124
14L	3	0	3	3	0	2	3	0	3	3	0	3	3	0	2	163
17L	3	0	3	3	0	3	3	0	3	3	0	3	3	0	2	202
4K BUG DATA - LDL DIFFUSER																
5L	2	0	2	2	0	1	2	0	1	2	0	1	2	0	1	52
8L	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	89
11L	3	0	3	3	0	2	3	0	2	2	0	2	3	0	1	124
14L	3	0	3	3	0	3	3	0	3	3	0	3	3	0	2	163
17L	3	0	3	3	0	3	3	0	3	3	0	3	3	0	2	202
5K BUG DATA - LDL DIFFUSER																
5L	2	0	2	2	0	1	2	0	1	2	0	1	2	0	1	52
8L	2	0	2	2	0	2	2	0	2	2	0	2	3	0	1	89
11L	3	0	3	3	0	2	3	0	2	3	0	2	3	0	1	124
14L	3	0	3	3	0	3	3	0	3	3	0	3	3	0	2	163
17L	3	0	3	3	0	3	3	0	3	3	0	3	3	0	2	202

3K BUG DATA - HDL DIFFUSER																
Lumens	T1			T2			T3L			T4L			T5LS			Watts
	B	U	G	B	U	G	B	U	G	B	U	G	B	U	G	
5L	2	0	1	2	0	1	1	0	1	2	0	1	2	0	1	52
8L	2	0	1	2	0	2	2	0	1	2	0	2	2	0	1	89
11L	3	0	1	3	0	2	2	0	2	3	0	2	3	0	1	124
14L	3	0	1	3	0	2	3	0	2	3	0	2	3	0	1	163
17L	3	0	1	3	0	3	3	0	2	3	0	3	3	0	1	202
4K BUG DATA - HDL DIFFUSER																
5L	2	0	1	2	0	1	1	0	1	2	0	1	2	0	1	52
8L	2	0	1	2	0	2	2	0	1	2	0	2	2	0	1	89
11L	3	0	1	3	0	2	2	0	2	3	0	2	3	0	1	124
14L	3	0	1	3	0	2	3	0	2	3	0	2	3	0	1	163
17L	3	0	1	3	0	3	3	0	2	3	0	3	3	0	1	202
5K BUG DATA - HDL DIFFUSER																
5L	2	0	1	2	0	1	1	0	1	2	0	1	2	0	1	52
8L	2	0	1	3	0	2	2	0	1	3	0	2	2	0	1	89
11L	3	0	1	3	0	2	3	0	2	3	0	2	3	0	1	124
14L	3	0	1	3	0	2	3	0	2	3	0	2	3	0	1	163
17L	3	0	1	3	0	3	3	0	2	3	0	3	3	0	1	202

ELECTRICAL LOAD (A)							
Ordering Nomenclature	System Watts	120	208	240	277	347	480
LSO-M-T5LS-5L-4K	52	0.43	0.25	0.22	0.19	0.15	0.11
LSO-M-T5LS-8L-4K	89	0.74	0.43	0.37	0.32	0.26	0.19
LSO-M-T5LS-11L-4K	124	1.03	0.60	0.52	0.45	0.36	0.26
LSO-M-T5LS-14L-4K	163	1.36	0.78	0.68	0.59	0.47	0.34
LSO-M-T5LS-17L-4K	202	1.68	0.97	0.84	0.73	0.58	0.42

Motion Sensor Default Setting									
Type	High Mode	Low Mode	Time Delay	Cut Off Delay	Sensitivity	Hold Off Setpoint	Photocell On/Off	Ramp Up Time	Fade Down Time
WSC - Default	10V	1V	5 Min	1 Hour	Max	Disabled	Disabled	Disabled	Disabled
WSC Range	0-10V	0-9.8V	5-30 Min	1-5 Hours	Low, Med, Max	1-250FC	1-250FC	1-60 Dec	1-60 Dec