



Lumec **RoadStar LED** architectural roadway luminaire combines the look of a decorative product with the performance of a roadway or site/area luminaire, resulting in highly effective illumination and a stylish appearance. Featuring two different sizes, RoadStar offers a consistent look across pedestrian, general, and street lighting areas Includes Service Tag, innovative way to provide assistance throughout the life of the product

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

example: GPLM-64L700NW-G2-R3M-UNV-RCD-HS-GY3

Series	LED Module	Board Generation <sup>1</sup>	Optical System	Ballast	Driver and Dimming	Luminaire Options	Accessories	Finish
<b>GPLM</b>		<b>G2</b>						
<b>GPLM</b> RoadStar LED roadway luminaire, medium	<i>Neutral White</i> <b>64L530NW</b> <b>64L700NW</b> <b>64L1050NW</b> <b>80L530NW</b> <b>80L700NW</b> <b>80L1050NW</b> <b>96L530NW</b> <b>96L700NW</b> <b>96L1050NW</b>  <i>Warm White</i> <b>64L530WW</b> <b>64L700WW</b> <b>64L1050WW</b> <b>80L530WW</b> <b>80L700WW</b> <b>80L1050WW</b> <b>96L530WW</b> <b>96L700WW</b> <b>96L1050WW</b>	<b>G2</b>	<b>R2S</b> Type II short (ASYM)  <b>R2M</b> Type II Medium (ASYM)  <b>R3S</b> Type III short (ASYM)  <b>R3M</b> Type III Medium (ASYM)  <b>R3W</b> Type III Wide (ASYM)  <b>4</b> Type IV (ASYM)  <b>5<sup>2</sup></b> Type V (SYMM)	<b>UNV</b> 120- 277VAC  <b>HVU</b> 347- 480VAC	<i>Standard:</i> <b>DMG</b> Dimmable driver 0-10V  <i>Optional:</i> <b>Dynadimmer</b>  Economy Profile  <b>CDMGE25<sup>3,4</sup></b> <b>CDMGE50<sup>3,4</sup></b> <b>CDMGE75<sup>3,4</sup></b>  Median Profile  <b>CDMGM25<sup>3,4</sup></b> <b>CDMGM50<sup>3,4</sup></b> <b>CDMGM75<sup>3,4</sup></b>  Safety Profile  <b>CDMGS25<sup>3,4</sup></b> <b>CDMGS50<sup>3,4</sup></b> <b>CDMGS75<sup>3,4</sup></b>  <b>DALI<sup>3,4</sup></b> Digitally Addressable Lighting Interface  <b>DMG-AST<sup>3,4</sup></b> Adjustable Startup Time  <b>DMG-CLO<sup>3,4</sup></b> Constant Light Output  <b>DMG-OTL<sup>3,4</sup></b> Over The Life  <i>*Includes 0-10v dimming</i>	<i>Standard:</i> <b>RCD<sup>5</sup></b> Receptacle for twist-lock photo-cell or shorting cap, 5-pin (standard)  <i>Optional:</i> <b>HS</b> House Side Shield, shield, 1 per 16 LED light engine  <b>RCD<sup>5</sup></b> Receptacle for twist-lock photo-cell or shorting cap, 7-pin (optional)  <b>SP2</b> 20kV / 20kA Surge Protector (optional)	<b>PH8</b> Twist-lock Photoelectric Cell, UNV (120-277VAC)  <b>PH8/347</b> Twist-lock Photoelectric Cell, HVU (347VAC)  <b>PH8/480</b> Twist-lock Photoelectric Cell, HVU (480VAC)  <b>PHXL</b> Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC)  <b>PH9</b> Shorting cap	<b>BK</b> Black finish  <b>BR</b> Bronze finish  <b>GY3</b> Grey finish  <b>WH</b> White finish

1. Consult factory for Warm White (3000K) details.  
 2. Not available with HS option.  
 3. 347V and 480V not available.  
 4. Dimming choices: Select either DMG or one of the CDMG options or DALI.  
 5. Use of photoelectric cell or shorting cap is required to ensure proper illumination.

**Note:** GPLM is compatible to accept the CityTouch wireless lighting control device



# GPLM RoadStar LED Luminaire (medium)

## Roadway

### LED wattage and lumen values

LED CRI = 70, CCT = 4000K nominal (3985K +/- 275K or 3710K to 4260K), System (LED + driver) rated life = 100,000 hrs<sup>1</sup> / 93,000 hrs<sup>2</sup>

LED Module	Typical delivered lumens	Typical system wattage (W) <sup>3</sup>	Typical System Current (A) @						LED current (mA)	Luminaire Efficacy Rating (Lm/W)	BUG rating
			120V	208V	240V	277V	347V	480V			
64L530NW-G2-R2M	12491	105	0.88	0.51	0.45	0.40	0.30	0.22	530	119	B3-U0-G2
64L530NW-G2-R2S	13152	105	0.88	0.51	0.45	0.40	0.30	0.22	530	125	B3-U0-G2
64L530NW-G2-R3M	12512	105	0.88	0.51	0.45	0.40	0.30	0.22	530	119	B3-U0-G2
64L530NW-G2-R3S	12459	105	0.88	0.51	0.45	0.40	0.30	0.22	530	119	B2-U0-G2
64L530NW-G2-R3W	12278	105	0.88	0.51	0.45	0.40	0.30	0.22	530	117	B2-U0-G2
64L530NW-G2-4	12383	105	0.88	0.51	0.45	0.40	0.30	0.22	530	118	B2-U0-G2
64L530NW-G2-5	12854	105	0.88	0.51	0.45	0.40	0.30	0.22	530	122	B4-U0-G2
64L700NW-G2-R2M	15619	141	1.15	0.66	0.58	0.51	0.41	0.30	700	111	B3-U0-G2
64L700NW-G2-R2S	16445	141	1.15	0.66	0.58	0.51	0.41	0.30	700	117	B3-U0-G2
64L700NW-G2-R3M	15645	141	1.15	0.66	0.58	0.51	0.41	0.30	700	111	B3-U0-G3
64L700NW-G2-R3S	15578	141	1.15	0.66	0.58	0.51	0.41	0.30	700	110	B2-U0-G3
64L700NW-G2-R3W	15352	141	1.15	0.66	0.58	0.51	0.41	0.30	700	109	B2-U0-G3
64L700NW-G2-4	15378	141	1.15	0.66	0.58	0.51	0.41	0.30	700	109	B2-U0-G3
64L700NW-G2-5	16073	141	1.15	0.66	0.58	0.51	0.41	0.30	700	114	B4-U0-G2
64L1050NW-G2-R2M	21550	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	99	B3-U0-G3
64L1050NW-G2-R2S	22913	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	106	B3-U0-G2
64L1050NW-G2-R3M	21914	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	101	B3-U0-G3
64L1050NW-G2-R3S	21316	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	98	B3-U0-G3
64L1050NW-G2-R3W	21236	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	98	B3-U0-G4
64L1050NW-G2-4	21290	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	98	B3-U0-G4
64L1050NW-G2-5	22129	217	1.77	1.01	0.89	0.77	0.62	0.45	1050	102	B5-U0-G3
80L530NW-G2-R2M	15549	132	1.11	0.64	0.56	0.50	0.37	0.27	530	118	B3-U0-G2
80L530NW-G2-R2S	16372	132	1.11	0.64	0.56	0.50	0.37	0.27	530	124	B3-U0-G2
80L530NW-G2-R3M	15575	132	1.11	0.64	0.56	0.50	0.37	0.27	530	118	B3-U0-G3
80L530NW-G2-R3S	15508	132	1.11	0.64	0.56	0.50	0.37	0.27	530	117	B2-U0-G3
80L530NW-G2-R3W	15283	132	1.11	0.64	0.56	0.50	0.37	0.27	530	116	B2-U0-G3
80L530NW-G2-4	15414	132	1.11	0.64	0.56	0.50	0.37	0.27	530	117	B2-U0-G3
80L530NW-G2-5	16001	132	1.11	0.64	0.56	0.50	0.37	0.27	530	121	B4-U0-G2
80L700NW-G2-R2M	19383	180	1.46	0.86	0.76	0.69	0.52	0.39	700	108	B3-U0-G3
80L700NW-G2-R2S	20409	180	1.46	0.86	0.76	0.69	0.52	0.39	700	113	B3-U0-G2
80L700NW-G2-R3M	19404	180	1.46	0.86	0.76	0.69	0.52	0.39	700	108	B3-U0-G3
80L700NW-G2-R3S	19333	180	1.46	0.86	0.76	0.69	0.52	0.39	700	107	B2-U0-G3
80L700NW-G2-R3W	19052	180	1.46	0.86	0.76	0.69	0.52	0.39	700	106	B3-U0-G4
80L700NW-G2-4	19215	180	1.46	0.86	0.76	0.69	0.52	0.39	700	107	B3-U0-G4
80L700NW-G2-5	19947	180	1.46	0.86	0.76	0.69	0.52	0.39	700	111	B5-U0-G3
80L1050NW-G2-R2M	26434	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	98	B3-U0-G3
80L1050NW-G2-R2S	28095	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	104	B3-U0-G3
80L1050NW-G2-R3M	26870	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	100	B3-U0-G4
80L1050NW-G2-R3S	26137	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	97	B3-U0-G4
80L1050NW-G2-R3W	26038	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	96	B3-U0-G4
80L1050NW-G2-4	26105	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	97	B3-U0-G4
80L1050NW-G2-5	27136	270	2.22	1.27	1.11	0.96	0.78	0.57	1050	101	B5-U0-G3

1. L<sub>70</sub> = 100,000 hrs (at ambient temperature = 25°C and forward current = 530 to 700 mA).

2. L<sub>90</sub> = 93,000 hrs (at ambient temperature = 25°C and forward current = 1050 mA).

3. System wattage or total luminaire wattage includes the LED module and the LED driver.

Notes: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Signify. IES files with HS house side shield and/or Warm White options are also available – contact the factory.

# GPLM RoadStar LED Luminaire (medium)

## Roadway

### LED wattage and lumen values (continued)

LED CRI = 70, CCT = 4000K nominal (3985K +/- 275K or 3710K to 4260K), System (LED + driver) rated life = 100,000 hrs<sup>1</sup> / 93,000 hrs<sup>2</sup>

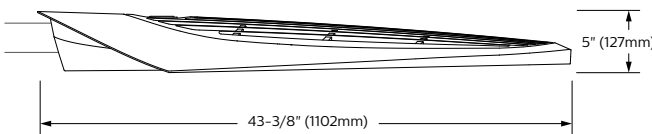
LED Module	Typical delivered lumens	Typical system wattage (W) <sup>3</sup>	Typical System Current (A) @						LED current (mA)	Luminaire Efficacy Rating (Lm/W)	BUG rating
			120V	208V	240V	277V	347V	480V			
96L530NW-G2-R2M	18580	158	1.32	0.78	0.7	0.62	0.47	0.35	530	118	B3-U0-G3
96L530NW-G2-R2S	19564	158	1.32	0.78	0.7	0.62	0.47	0.35	530	124	B3-U0-G2
96L530NW-G2-R3M	17872	158	1.32	0.78	0.7	0.62	0.47	0.35	530	113	B3-U0-G3
96L530NW-G2-R3S	18532	158	1.32	0.78	0.7	0.62	0.47	0.35	530	117	B2-U0-G3
96L530NW-G2-R3W	18263	158	1.32	0.78	0.7	0.62	0.47	0.35	530	116	B3-U0-G3
96L530NW-G2-4	18419	158	1.32	0.78	0.7	0.62	0.47	0.35	530	117	B3-U0-G3
96L530NW-G2-5	19121	158	1.32	0.78	0.7	0.62	0.47	0.35	530	121	B4-U0-G2
96L700NW-G2-R2M	23082	213	1.74	1.01	0.89	0.80	0.62	0.45	700	109	B3-U0-G3
96L700NW-G2-R2S	24304	213	1.74	1.01	0.89	0.80	0.62	0.45	700	114	B3-U0-G2
96L700NW-G2-R3M	23121	213	1.74	1.01	0.89	0.80	0.62	0.45	700	108	B3-U0-G3
96L700NW-G2-R3S	23022	212	1.74	1.01	0.89	0.80	0.62	0.45	700	109	B3-U0-G4
96L700NW-G2-R3W	22688	214	1.74	1.01	0.89	0.80	0.62	0.45	700	106	B3-U0-G4
96L700NW-G2-4	22882	213	1.74	1.01	0.89	0.80	0.62	0.45	700	107	B3-U0-G4
96L700NW-G2-5	23753	213	1.74	1.01	0.89	0.80	0.62	0.45	700	112	B5-U0-G3
96L1050NW-G2-R2M	30975	320	2.66	1.52	1.33	1.15	0.93	0.68	1050	97	B4-U0-G4
96L1050NW-G2-R2S	32924	324	2.66	1.52	1.33	1.15	0.93	0.68	1050	102	B4-U0-G3
96L1050NW-G2-R3M	31496	325	2.66	1.52	1.33	1.15	0.93	0.68	1050	97	B4-U0-G4
96L1050NW-G2-R3S	30629	321	2.66	1.52	1.33	1.15	0.93	0.68	1050	95	B3-U0-G4
96L1050NW-G2-R3W	30519	326	2.66	1.52	1.33	1.15	0.93	0.68	1050	94	B3-U0-G5
96L1050NW-G2-4	30598	326	2.66	1.52	1.33	1.15	0.93	0.68	1050	94	B3-U0-G5
96L1050NW-G2-5	31797	323	2.66	1.52	1.33	1.15	0.93	0.68	1050	98	B5-U0-G4

- L<sub>70</sub> = 100,000 hrs (at ambient temperature = 25°C and forward current = 530 to 700 mA).
- L<sub>70</sub> = 93,000 hrs (at ambient temperature = 25°C and forward current = 1050 mA).
- System wattage or total luminaire wattage includes the LED module and the LED driver.

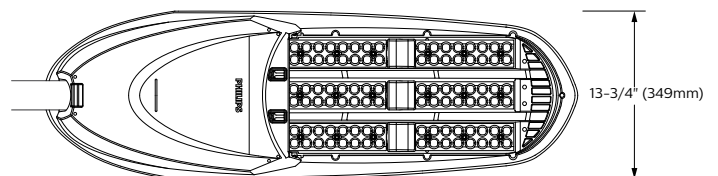
Notes: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Signify. IES files with HS house side shield and/or Warm White options are also available – contact the factory.

### Dimensions

Side View



Bottom View



Weight: 27.0 lbs (12.3 kg)  
EPA: 0.94 sq. ft.

### Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L <sub>70</sub> Hours	L <sub>70</sub> per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 700 mA	>100,000 hours	>60,000 hours	>89%
25°C	1050 mA	>93,200 hours	>60,000 hours	>81%

# GPLM RoadStar LED Luminaire (medium)

## Roadway

### Specifications

#### Housing

The upper grid and lower part of the housing are made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 7 3/4" (197mm) minimum long tenon. Comes with two zinc plated clamps fixed by 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. Complete with a bird guard protecting against birds and similar intruders. ANSI label to identify wattage and source included in box.

#### Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver

Electrical components are RoHS compliant, IP66 sealed light engine. LEDs tested by ISO 17025 2005 accredited lab in accordance with IESNA LM 80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM 21. Metal core board ensures greater heat transfer and longer lifespan.

**Heat Sink:** Built in the housing, designed to ensure high efficacy and superior cooling by natural convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Entire luminaire is rated for operation in ambient temperature of 40°C / 40°F up to +40°C / +104°F.

**LED Module:** Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical. 3000 Kelvin also available

**Optical System:** Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. 0% uplight and U0 per IESNA TM-15. Dark Sky compliant when 3000K option selected.

**Driver:** High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. **Driver comes with dimming compatible 0 10 volts.**

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

**Surge Protector:** Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

#### Driver Options

**AST:** Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

**CLO:** Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

**DALI:** Pre-set driver compatible with the DALI control system.

**OTL:** Pre-set driver to signal end of life of the LED module(s) for better fixture management.

**CDMG:** Dimmable standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.

#### Safety Mode:

CDMG525: 4 hours, 25% power dimming

CDMG550: 4 hours 50% power dimming

CDMG575: 4 hours 75% power dimming

#### Median Mode:

CDMG25: 6 hours 25% power dimming

CDMG50: 6 hours 50% power dimming

CDMG75: 6 hours 75% power dimming

#### Economy Mode:

CDMG25: 8 hours 25% power dimming

CDMG50: 8 hours 50% power dimming

CDMG75: 8 hours 75% power dimming

#### Luminaire Options

**HS:** House side shield, 1 per 16 LED light engine.

**SP2:** 20kV / 20kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

**RCD\***: (standard): Receptacle with 5 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock node or photoelectric cell or a shorting cap.

**RCD7\***: (optional): Receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock node or photoelectric cell or a shorting cap.

Please note: Additional hardware will be required to utilize the additional 2 pins on this receptacle.

\* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

#### Accessories

**PH8:** Twist-lock Photoelectric Cell, UNV (120-277VAC).

**PH8/347:** Twist-lock Photoelectric Cell, HVU (347VAC).

**PH8/480:** Twist-lock Photoelectric Cell, HVU (480VAC).

**PHXL:** Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC).

**PH9:** Shorting cap.

#### Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool, Advance data and Lumileds LM-80/TM-21 data, expected to reach 100,000 + hours with >L<sub>70</sub> lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

#### Wiring

The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2-14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

#### Hardware

All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

#### Finish

In accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 3000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

# GPLM RoadStar LED Luminaire (medium)

## Roadway

### Specifications (continued)

#### LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

#### Vibration Resistance

The GPLS meets the ANSI C136.31, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested for 3G over 100 000 cycles by an independent lab).

#### Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. RoadStar LED roadway luminaires are DesignLights Consortium qualified. Luminaire complies with or exceeds the following ANSI C136 standards:  
.2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

#### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away.

For more details visit: [Signify.com/servicetag](https://www.signify.com/servicetag)

#### Limited Warranty

10-year limited warranty.  
See [Signify.com/warranties](https://www.signify.com/warranties) for details and restrictions.

