



FONROCHE
lighting AMERICA

*Integrated Solar
Street Light*

SMARTLIGHT SINGLE ROADFOCUS RFS



Project: G5163 - Coalinga, CA - Sewer Plant and Lift Station Phase 2

Notes: Runs at 38W for 4 hours pre-dusk.
Dims to 20% for the rest of the night.

[RFS-35W16LED]	-	4K	-	T4	-	BK	-	-	-	[P140F-T1]	-	-	3P	-	20	-	RTA-20E-8B4-1S2C	-	BK
Fixture		Temp		Type		Color (Fixture)		HS		Solar-Mount		Option	Power Center		Tilt		Pole		Color (Pole)

zero

Trenching and
Wiring Expense

zero

Emissions and
Electric Bills

zero

Maintenance for a
Minimum of 10 Years

The SmartLight solar powered street lighting system rivals traditional grid-tied light poles with infrastructure grade lighting, low maintenance and avoided installation costs. The advanced 365 Power Center features advanced NiMH battery technology and anti-blackout controls. The result is a sleek profile, 10-year battery life and a great value proposition.



Solar Assembly

- Black Tie panel backing creates a finished appearance and disappears in the night sky
- Steel powder coated and galvanized mounting
- 140W to 305W solar power



Power 365 Assembly

- Components are pre-wired inside of the sealed compartment
- Activated with two weather tight connections for true plug-and-play installation
- Extreme environment batteries deliver 365 nights of lighting for 10 or more years



RFS Luminaire

- Dark Sky Friendly Options
- 5 Distribution Types
- 35W or 72W Options
- Integrated Bubble Level

Note: Illustrated Arm Style by special order only

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Datasheet-SmartLight Single HW-RFS-10082020

RFS SmartLight Single Specifications



LUMINAIRE PRODUCT CODE	COLOR TEMP	DISTRIBUTION	COLOR	HOUSE SIDE SHIELD OPTION	WEIGHT LBS	EPA Ft²
RFS-35W16LED	2.7K, 3K,4K	R2M,R2S,R3M,R3S,T4,T5	BK-Black	HS (16LED) / 2 HS (32LED)	9.4	0.52
RFS-72W32LED	2.7K, 3K,4K	R2M,R2S,R3M,R3S,T4,T5	BK-Black	2 HS (32LED)	9.4	0.52
Custom						

SOLAR MODULE ASSEMBLY PRODUCT CODE / DESCRIPTION	DIMENSIONS SOLAR MODULE	MODULE FRAME & BACK SHEET	PERFORMANCE WARRANTY
P140F-T1 140W PolyCrystalline Solar Module with Steel Mount - Tilt Adjustment (0,10,20 or 45 Degree) Galvanized and Powder Coated	43.31 x 33.46 x 1.57	Black	25 Years
P260F-T3 260W PolyCrystalline Solar Module with Steel Mount - Tilt Adjustment (0,10,20 or 45 Degree) Galvanized and Powder Coated	66.93 x 40.55 x 1.81	Black	25 Years
P305F-T4 305W PolyCrystalline Solar Module with Steel Mount - Tilt Adjustment (0,10,20 or 45 Degree) Galvanized and Powder Coated	66.93 x 42.13 x 1.57	Black	25 Years

Heavy Duty Mount Adder (Required with 45 degree tilt)	
HW-MC	Heavy Duty Mount Galvanized with Marine Powder Coat Upgrade

POWER 365 ASSEMBLY PRODUCT CODE / DESCRIPTION	
1P	Power 365 Power Center with 312Wh NiMH Battery Capacity -IP65
2P	Power 365 Power Center with 624 Wh NiMH Battery Capacity-IP65
3P	Power 365 Power Center with 936 Wh NiMH Battery Capacity-IP65
4P	Power 365 Power Center with 1248 Wh NiMH Battery Capacity-IP65
CONTROLLER	
Battery Management System (BMS) Anti-Black Out Control Real Time Scheduling Option 3-Level Programmable Lighting Profiles LoRa Enabled for Wireless Network*	
* Requires Fonroche Connect Gateway-See SolarOne for Details	

BATTERIES							
Chemistry		Nickel Metal Hydride					
Operating Temperature		-40°C to +70°C					
Warranty		5 Year Full Replacement					
Certifications		EN 550 14-1 ; EN 55014-2 ; EN 61000-6-2 ; EN 61000-6-3					
TOTAL TOP OF POLE ASSEMBLY -PANEL, MOUNTING, 365 POWER CENTER							
		Weight - (Pounds)				EPA (Sq.Ft.)	
Solar Assembly	1P	2P	3P	4P	10° Tilt	20° Tilt	45° Tilt
P140F-T1-HW-MC	102.73	113.31	123.89	134.48	2.67	3.89	7.45
P260F-T3-HW-MC	120.37	130.95	141.53	152.12	4.48	7.24	13.93
P305F-T4-HW-MC	120.37	130.95	141.53	152.12	4.48	7.38	14.36

POLE ASSEMBLIES	RATED FOR MINIMUM 100MPH (DEPENDING ON TILT AND POWER CENTER SPECIFICATION)
RTA-14D-7B4-1S2C	Round tapered aluminum 14' x 7" x .188 wall, tenon top, with 2' Slipfit arm assembly and solar mounting provisions (15'-5" MH)
RTA-20E-8B4-1S2C	Round tapered aluminum 20' x 8" x .219 wall, tenon top, with 2' Slipfit arm assembly and solar mounting provisions (21'-5" MH)
RTA-25F-9B4-1S2C	Round tapered aluminum 25' x 9" x .250 wall, tenon top, with 2' Slipfit arm assembly and solar mounting provisions (26'-5" MH)
RTA-25F-9B4-1S6A	Round tapered aluminum 25' x 9" x .250 wall, tenon top, with 6' Slipfit arm assembly and solar mounting provisions (26'-8" MH)
Custom	

System	
System Warranty	5 Years
System Certification	CE

Ordering Selections

[RFS-35W16LED]	-	[4K]	-	[T4]	-	[BK]	-	[-]	-	[P140F-T1]	-	[-]	-	[3P]	-	[20]	-	[RTA-20E-8B4-1S2C]	-	[BK]
Fixture		Temp		Type		Color (Fixture)		HS		Solar-Mount		Option		Power Center		Tilt		Pole		Color (Pole)



Road Focus Small

The versatile Road Focus has a sleek, unobtrusive design that is at home in all types of environments. With three color temperature choices, six light distribution patterns, zero uplight and optional shielding, it is a great solution for pathways, bike paths, streets, general area lighting and parking lots. The luminaire's superior optics allow you to get the most out of your solar lighting systems by using your lumens exactly where you need them. Optional house side shields protect neighboring properties.

Project:

Notes:

Lumen Values

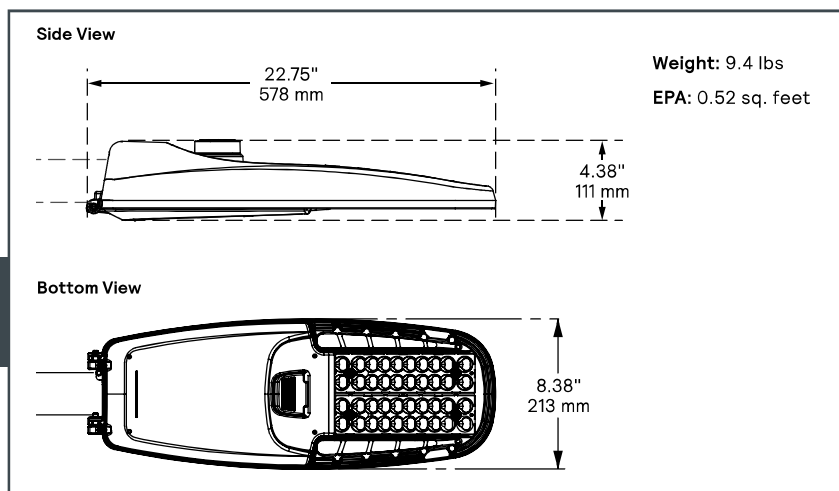
Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R2S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-35W16LED	4000	4,810	127	B1- U0-G1	5,007	132	B1- U0-G1	4,795	126	B1- U0-G1	4,859	128	B1- U0-G1	4,772	126	B1- U0-G1	4,964	131	B1- U0-G1
RFS-72W32LED	4000	9,408	129	B2- U0-G2	9,794	134	B2- U0-G2	9,379	128	B2- U0-G2	9,505	130	B2- U0-G2	9,336	128	B2- U0-G2	9,711	133	B2- U0-G2
RFS-35W16LED	3000	4,512	119	B1- U0-G1	4,697	124	B1- U0-G1	4,498	118	B1- U0-G1	4,558	120	B1- U0-G1	4,477	118	B1- U0-G1	4,657	123	B3- U0-G1
RFS-72W32LED	3000	8,826	121	B2- U0-G2	9,188	126	B2- U0-G1	8,799	121	B2- U0-G2	8,917	122	B1- U0-G2	8,758	120	B2- U0-G2	9,110	125	B3- U0-G2
RFS-35W16LED	2700	4,138	109	B1- U0-G1	4,307	113	B1- U0-G1	4,125	109	B1- U0-G1	4,180	110	B1- U0-G1	4,105	108	B1- U0-G1	4,271	112	B3- U0-G1
RFS-72W32LED	2700	8,094	111	B2- U0-G2	8,426	115	B2- U0-G1	8,069	111	B2- U0-G2	8,177	112	B1- U0-G2	8,031	110	B2- U0-G2	8,354	114	B3- U0-G2

Ordering Guide

Model	CCT	Distribution	Finish	Options
RFS-35W16LED	4K	T4	BK	-
RFS-35W16LED	4K	TR2S Type 2 Short	BK Black	HS House Side Shield (16LED)
RFS-72W32LED	3K	TR2M Type 2 Medium	DBZ Bronze	2HS House Side Shield (32LED)
	2.7K	TR3S Type 3 Short	WH White	
		TR3M Type 3 Medium		
		T4 Type 4		
		T5 Type 5		

Roadfocus Small

Specifications



Housing

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 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 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. Clearance of 13" (330mm) at the rear is required to remove the door. Complete with a bird guard protecting against birds and similar intruders. Housing (including electrical compartment) rated IP54 per ANSI C136.37.

Light Engine

Composed of 4 main components: LED Module /Optical System / Heat Sink / Driver. IP66 sealed light engine equipped LEDs tested by ISO17025-2005 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.

LED Module: Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin 2700 Kelvin nominal (2725 ±145K), 3000Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K), CRI 70 Min. 75 Typical. Other CCT/CRI also available, consult factory.

Optical System: Composed of high performance 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.

Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.

Driver: Constant Current, Dimmable driver is integrated the SmartLight Controller. High power factor of 90% min. Voltage input 24VDC. Operating temperature of -40°C / -40°F - +70°C / +158°F. MTBF – 1170.3Khrs min. MIL-HDBK-217F. EMC Compliance – EN55015 Emissions and EN61547, EN61000-4-2,3,4,6,8 Immunity.

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 LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 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.

Hardware

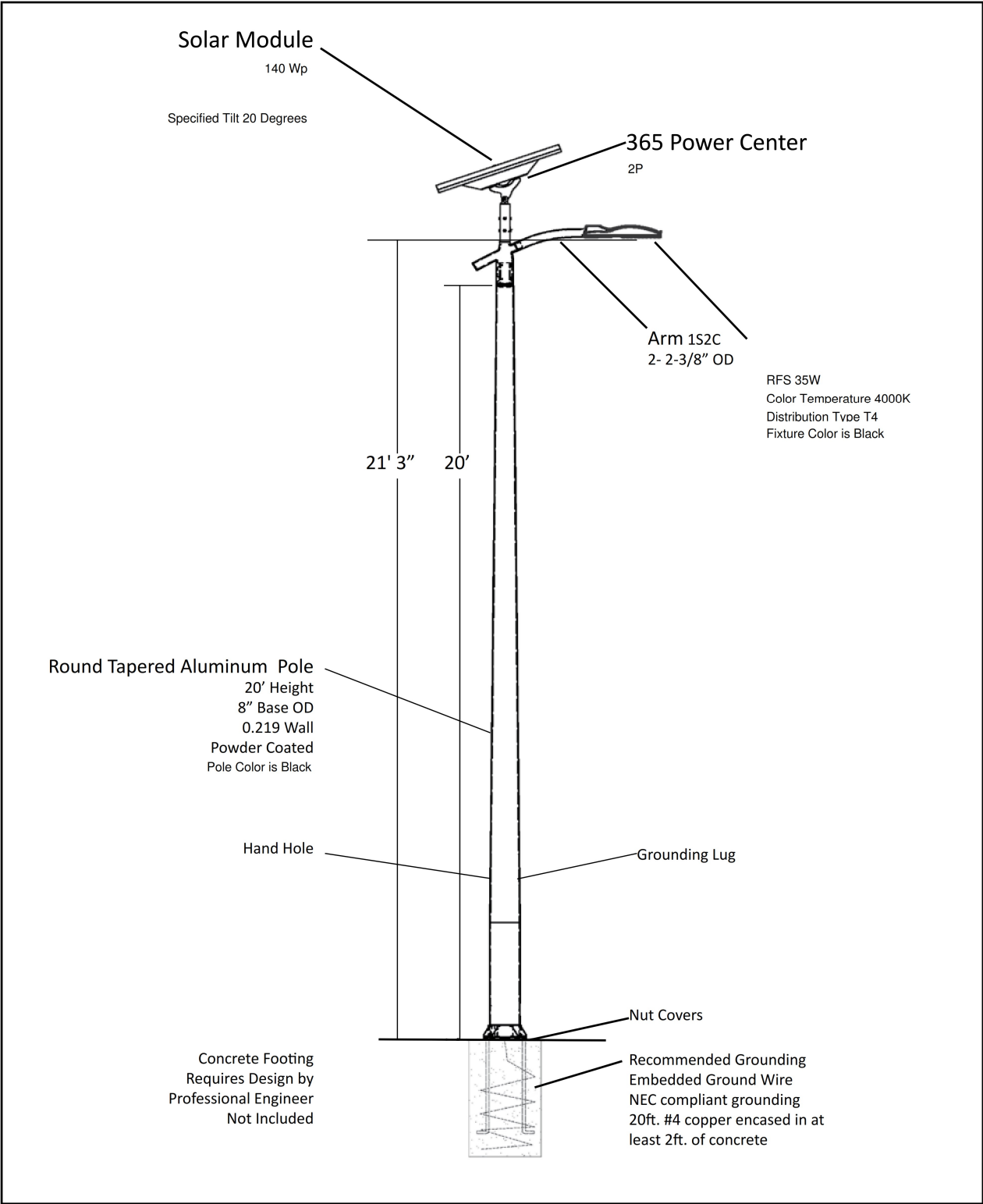
All exposed screws shall be complete with Ceramic primer seal to reduce seizing of the parts, also offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24microns 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 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. LED products manufacturing standard Light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESDS20.20 standards to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

The RFS meets the ANSI C136.31-2018, American National Standard for Roadway Luminaire Vibration specifications for Bridge/over pass applications. (Tested for 3G over 100,000 cycles by independent lab).



TOTAL TOP OF POLE ASSEMBLY - PANEL, MOUNTING, 365 POWER CENTER							
Solar Assembly	Weight - (Pounds)				EPA (Sq.Ft.)		
	1P	2P	3P	4P	10° Tilt	20° Tilt	45° Tilt
P140F-T1-HW-MC	102.73	113.31	123.89	134.48	2.67	3.89	7.45
P260F-T3-HW-MC	120.37	130.95	141.53	152.12	4.48	7.24	13.93
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20' Pole

Ordering Selections

[RFS-35W16LED]	-	4K	-	T4	-	BK	-	-	-	[P140F-T1]	-	-	-	3P	-	20	-	RTA-20E-8B4-1S2C	-	BK
Fixture		Temp		Type		Color (Fixture)		HS		Solar-Mount		Option		Power Center		Tilt		Pole		Color (Pole)