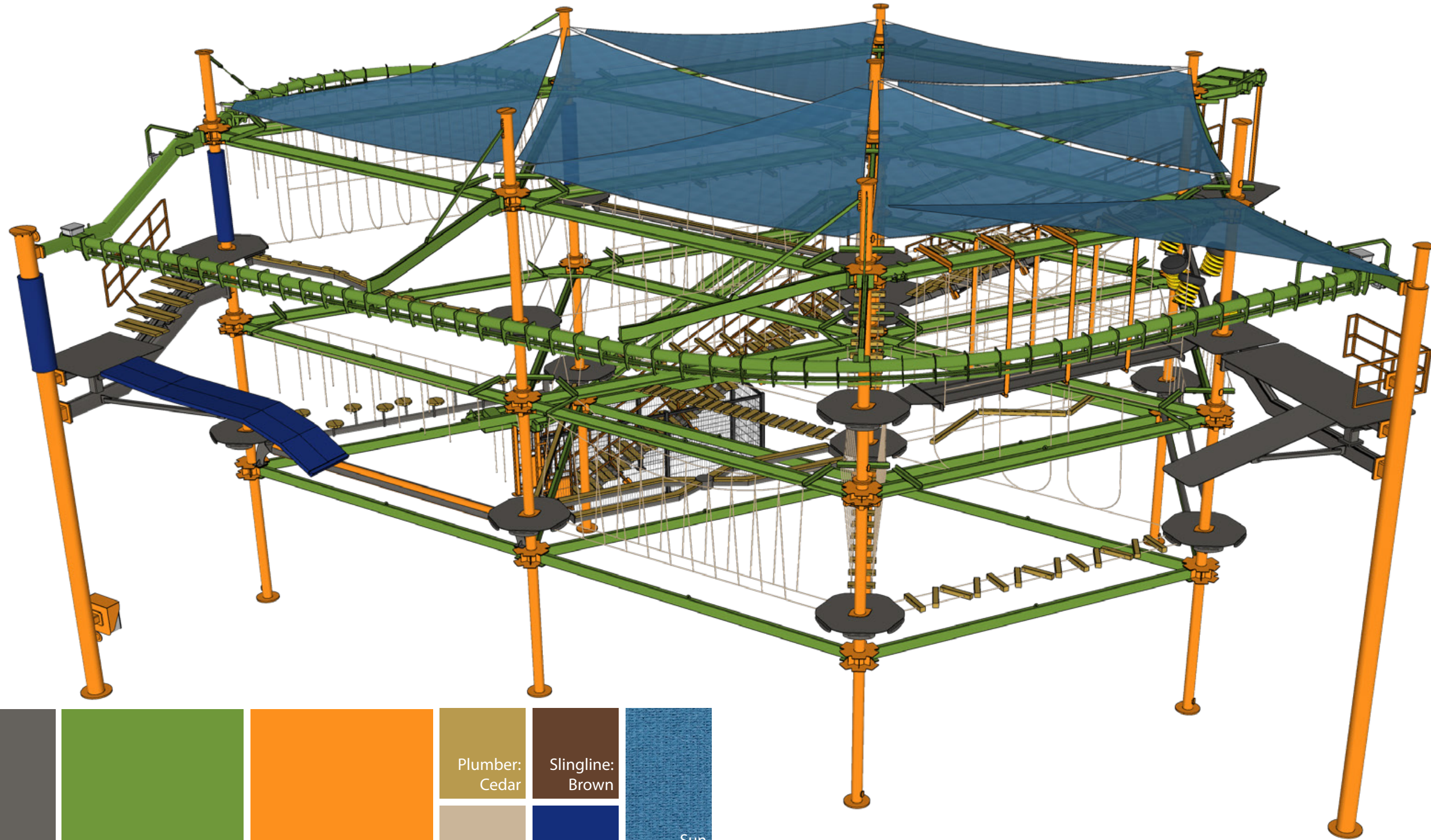


Boondocks Food and Fun - Parker

8 POLE 2 LEVEL SKY TRAIL® WITH (1) 60°SKY RAIL® AND SUN SHADES



Platforms: Iron Horse	Horizontals: Green Gone Wild	Verticals: Mandarin	Plumber: Cedar	Slingline: Brown	Sun Shades: Sky Blue
			Rope: Tan	Pad: Royal Blue	

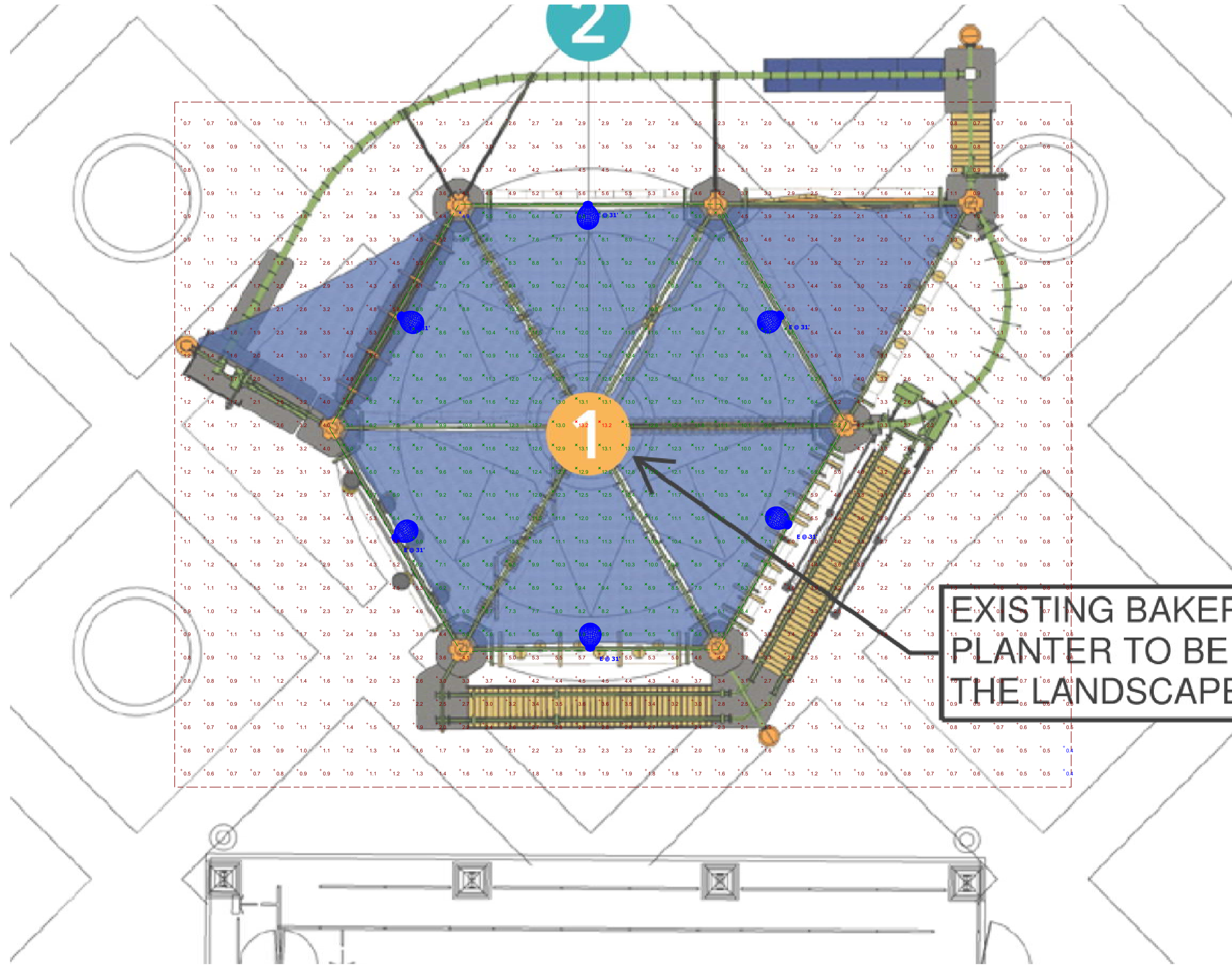
PRELIMINARY COLOR SCHEME

Notes:
 Additional design work may be required
 Final course design subject to change per engineering
 Product pictured may contain custom components
 Colors shown may vary from delivered product. Physical samples available upon request
 Field verify all dimensions, heights and clearances prior to engineering

R7.01_Boondocks Food and Fun - Parker.skp
 This drawing contains a confidential proprietary design that cannot be reproduced or divulged, in whole or in part, without written authorization from RCI Adventure Products. All design, manufacturing, reproduction, use, sale, or other rights regarding this design are expressly reserved. The information in this drawing may contain patents pending.

September 23, 2022





BOONDOCKS PARKER ROPES COURSE

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
○	E		6	Hydrel	SAF14 LED P1 40K 80CRI 70DEG MVOLT	SAF14 LED P1 4000K 80CRI 70DEG MVOLT	1	5202	0.9	64.8	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE AREA	+	4.2 fc	13.2 fc	0.4 fc	33.0:1	10.5:1
Stat Zone # 1	✖	9.3 fc	13.2 fc	4.9 fc	2.7:1	1.9:1

Lighting calculation software is for estimating purposes only, not generating exact values.

These calculations are for the use and adoption by our clients and theirs' solely at their discretion. This includes evaluation of the calculated lighting levels and model by the Architect, Engineer, Lighting Designer or Owner for adherence to the project's lighting specifications for levels and uniformity.

We make no guarantees of meeting any subjective expectations. Calculations are based on a model only. Space characteristics and electrical supply to fixtures, along with installation details, may alter fixture output and model performance. Model is based on standard reflectance values unless otherwise noted.

Any variance from reflectance values, obstructions, light loss factors (including both physical and electrical in nature) or dimensional data will affect the actual light levels obtained.

Final construction drawings and calculations are the responsibility of a licensed architect or engineer.

The Lighting Agency provides these calculations as a courtesy for evaluation only.



SAF14 LED SPECIALTY ARCHITECTURAL FLOOD MVOLT LED

HIGHLIGHTS

- Suitable for a variety of mounting applications including ground, wall, pole, stanchion
- 0-10V, Reverse phase Dimming
- Taper-Lock technology provides full aiming integrity utilizing both a rugged knuckle and yoke design
- Available in 80CRI and 90CRI
- 9,500lm
- IK10 option available
- Minimalist design that provides clean and intentional lines and transitions
- Slightly convex watershed lens that evades water build up and staining
- Industry leading flow through design achieve with separately sealed optical chamber and driver
- NOM Listed



IP68

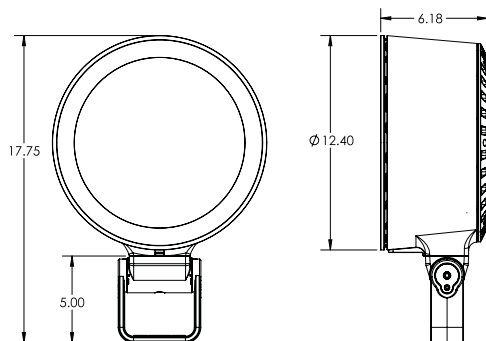


Buy American

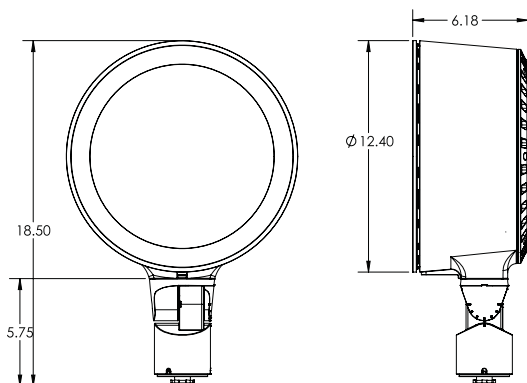
Specifications

Weight:	34lbs
EPA:	KM: 1.24 YM: 1.21

DIMENSIONS



YOKE



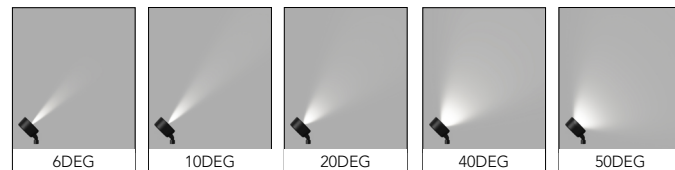
KNUCKLE

LUMEN PACKAGES

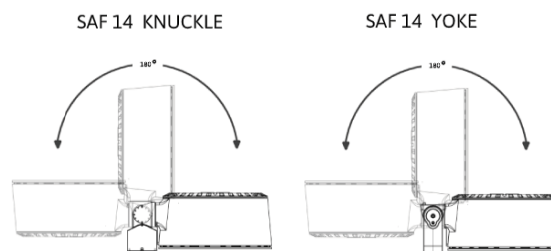
	6DEG	10DEG	15DEG	20DEG	30DEG	40DEG
Delivered Lumens	6,333	6,035	5,715	5,677	5,601	5,510
Watts	86	86	65	65	65	65
LPW	74	70	88	87	86	85
Peak Candela	380,615	151,901	50,868	34,851	14,125	8,210
	50DEG	70DEG	15Vx60H	30Vx60H	60Vx15H	60Vx30H
Delivered Lumens	5,471	5,302	5,844	5,642	5,469	5,390
Watts	65	65	65	65	65	65
LPW	84	82	90	87	84	83
Peak Candela	5,948	3,620	14,623	8,062	15,160	7,667

Note: Information based on 4000K @ P1, 80CRI

STANDARD DISTRIBUTION



AIMING DETAIL



ORDERING INFORMATION
EXAMPLE: SAF14 LED P1 80CRI 27K MVOLT 6DEG CWL KM CJB L1 ZT BL

SAF14													
Series*	Source*	Performance Packages*	CRI*	Color Temperature*		Voltage*	Distribution*		Lens*		Mounting*		
SAF14 Specialty Architectural Flood	LED	P1	80CRI	27K	2700K	MVOLT	6DEG	6°	CWL Clear Watershed Lens	Note: CWL lens IK08. For IK10 use external WRG option.	KM	Knuckle	
		P2	90CRI	30K	3000K		10DEG	10°			YM	Yoke	
		P3	Note: P3 not available in 6DEG & 10DEG		35K		3500K	15DEG			15°		
				40K	4000K		20DEG	20°					
				50K	5000K		30DEG	30°					
				AMBLW ¹	Amber Limited Wavelength (591nm)		40DEG	40°					
				Note: CRI not required with AMBLW			50DEG	50°					
				Note: AMBLW not available in 6DEG			70DEG	70°					
				Note: AMBLW only available in P1			15VX60H	15° x 60°					
							30VX60H	30° x 60°					
				60VX15H	60° x 15°								
				60VX30H	60° x 30°								

Mounting Accessories		Options Internal Accessory		Options ⁶	Control Input*	External		Finish*		
ADPMR	Architectural Decorative Pole Mount Round	L1	Prismatic Lens	CSL_ 10' - 50' of cord available in 5' increments	ZT	0-10V dimming to 1%	GS	Glare shield	BL	Black Textured
ADPMS	Architectural Decorative Pole Mount Square	L2	Linear Spread Lens		ELV	Reverse phase	FGS	Full Glare Shield	BRS	Bronze Smooth
AMPC_/_	Architectural Mid Pole Clamp available to fit on a 4" or 6" pole with 1 or 2 fixtures	L3	Softening Lens				WRG	Wire Rock Guard	BRT	Bronze Textured
APAR	Round 18" Pole Mount	IHL	Honeycomb Louver	Note: Cord length required for Yoke Mounting only				DBL	Black Smooth	
APAS	Square 18" Pole Mount	Note: Only one Internal accessory can be chosen						DDB	Designer Bronze	
AWSC	Architectural Wall Splice Cover	Hardware						DNA	Natural Aluminum	
CAJB	Cylindrical Architectural Junction box	TPH	Tamper proof hardware					NBS	Natural Bronze Smooth	
CJB	Cylindrical Junction Box	LASC	Safety Cable					VET	Verde Textured	
CPM	Cylindrical Pedestal Mount							WH	White Textured	
CPMSA	Cylindrical Pole Mount Splice Access							WHS	White Smooth	
CSM_	Cylindrical Stacion Mount 12"-48" available in 6" increments							_Z	Zinc Undercoat (i.e.BLZ) Note: Zinc Undercoat provides corrosion protection for Marine Environment and Natatorium Construction	
CWMA_T	Cylindrical Wall Mount Arm Top 12"-48" (available in 6" increments)							CF	Custom Finish	
								RALTB	RAL Paint Finishes	
								Note: RALTB for pricing only, replace with applicable RAL call out when ready to order. See the RALBROCHURE for available options. It is recommended that Hydrel products only use textured paint.		

*Required Fields

Notes:

1 Lumens not reflective of Amber output. See below chart

DIMMING CHART

Voltage	Control Input	Min Dimming Level
MVOLT	ZT	1%
MVOLT	ELV Reserve Phase	1%

PERFORMANCE DATA

LUMEN OUTPUT – SAF14

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		27K (2700K, 80CRI)			30K (3000K, 80CRI)			35K (3500K, 80CRI)			40K (4000K, 80CRI)			50K (5000K, 80CRI)		
			°H	°V	°H	°V	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW
P1	86	6DEG	11	11	6	6	336,192	5,593	65	353,360	5,879	68	375,500	6,247	73	380,615	6,333	74	394,439	6,563	76
		10DEG	18	18	9	9	134,172	5,331	62	141,024	5,603	65	149,859	5,954	69	151,901	6,035	70	157,418	6,254	73
		15DEG	32	32	16	16	46,894	5,269	81	48,847	5,488	84	50,285	5,650	87	50,868	5,715	88	54,225	6,092	94
		20DEG	39	39	20	20	32,128	5,234	81	334,661	5,452	84	34,452	5,612	86	34,851	5,677	87	37,151	6,052	93
		30DEG	61	61	33	33	13,022	5,163	79	13,564	5,378	83	13,964	5,537	85	14,125	5,601	86	15,058	5,970	92
	65	40DEG	78	78	47	47	7,568	5,079	78	7,883	5,291	81	8,116	5,447	84	8,210	5,510	85	8,751	5,873	90
		50DEG	90	90	56	56	5,483	5,043	78	5,711	5,253	81	5,880	5,408	83	5,948	5,471	84	6,340	5,832	90
		70DEG	111	111	77	77	3,337	4,888	75	3,476	5,092	78	3,578	5,242	81	3,620	5,302	82	3,859	5,652	87
		15Vx60H	95	34	66	16	13,480	5,387	83	14,042	5,612	86	14,455	5,777	89	14,623	5,844	90	15,588	6,229	96
		30Vx60H	98	61	66	33	7,432	5,201	80	7,742	5,417	83	7,970	5,577	86	8,062	5,642	87	8,594	6,014	93
P2	115	60Vx15H	33	93	16	65	13,976	5,042	78	14,558	5,251	81	14,986	5,406	83	15,160	5,469	84	16,160	5,830	90
		60Vx30H	62	100	34	68	7,068	4,969	76	7,362	5,176	80	7,579	5,328	82	7,667	5,390	83	8,173	5,746	88
		6DEG	11	11	6	6	394,324.7	6,561	57	414,462	6,896	60	440,430	7,328	64	446,429	7,428	65	462,644	7,697	67
		10DEG	18	18	9	9	157,372	6,253	54	165,409	6,572	57	175,772	6,984	61	178,167	7,079	62	184,638	7,336	64
		15DEG	32	32	16	16	58,594	6,583	79	61,033	6,857	83	62,831	7,059	85	63,558	7,141	86	67,753	7,612	92
	83	20DEG	39	39	20	20	40,144	6,539	79	41,816	6,812	82	43,047	7,012	84	43,546	7,093	85	46,419	7,562	91
		30DEG	61	61	33	33	16,271	6,451	78	16,948	6,720	81	17,448	6,918	83	17,650	6,998	84	18,814	7,460	90
		40DEG	78	78	47	47	9,456	6,347	76	9,850	6,611	80	10,140	6,806	82	10,258	6,884	83	10,935	7,339	88
		50DEG	90	90	56	56	6,851	6,302	76	7,136	6,564	79	7,347	6,757	81	7,432	6,836	82	7,922	7,287	88
		70DEG	111	111	77	77	4,169	6,108	74	4,343	6,362	77	4,471	6,549	79	4,523	6,625	80	4,821	7,062	85
P3	115	15Vx60H	95	34	66	16	16,843	6,731	81	17,545	7,012	84	18,062	7,218	87	18,271	7,302	88	19,476	7,784	94
		30Vx60H	98	61	66	33	9,287	6,498	78	9,673	6,769	82	9,958	6,968	84	10,073	7,049	85	10,738	7,514	91
		60Vx15H	33	93	16	65	17,462	6,299	76	18,190	6,562	79	18,725	6,755	81	18,942	6,833	82	20,192	7,284	88
		60Vx30H	62	100	34	68	8,831	6,208	75	9,199	6,467	78	9,470	6,657	80	9,579	6,735	81	10,212	7,179	86
		15DEG	32	32	16	16	71,659	8,051	70	74,643	8,386	73	76,841	8,633	75	77,731	8,733	76	82,861	9,309	81
		20DEG	39	39	20	20	49,096	7,998	70	51,140	8,330	72	52,646	8,576	75	53,256	8,675	75	56,770	9,248	80
		30DEG	61	61	33	33	19,899	7,890	69	20,728	8,219	71	21,338	8,461	74	21,585	8,559	74	23,010	9,123	79
		40DEG	78	78	47	47	11,565	7,762	67	12,047	8,085	70	12,401	8,323	72	12,545	8,420	73	13,373	8,975	78
		50DEG	90	90	56	56	8,379	7,707	67	8,728	8,028	70	8,985	8,264	72	9,089	8,360	73	9,689	8,912	77
		70DEG	111	111	77	77	5,099	7,469	65	5,311	7,780	68	5,468	8,010	70	5,531	8,102	70	5,896	8,637	75

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		AMBLW		
			°H	°V	°H	°V	Max CD	Lumens	LPW
P1	50	10DEG	18	18	9	9	31,093	1,235	25
		15DEG	32	32	16	16	9,547	1,073	21
		20DEG	39	39	20	20	6,541	1,066	21
		30DEG	61	61	33	33	2,651	1,051	21
		40DEG	78	78	47	47	1,541	1,034	21
		50DEG	90	90	56	56	1,116	1,027	21
		70DEG	111	111	77	77	679	995	20
		15Vx60H	95	34	66	16	2,744	1,097	22
		30Vx60H	98	61	66	33	1,513	1,059	21
		60Vx15H	33	93	16	65	2,845	1,026	21
60Vx30H	62	100	34	68	1,439	1,012	20		

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 13,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	20,000	40,000	60,000
Lumen Maintenance Factor	1	0.9273	0.8658	0.8084

Note: Based on P1 Performance Package 6Deg & 10Deg

Operating Hours	0	20,000	40,000	60,000
Lumen Maintenance Factor	1	0.9525	0.924	0.8963

Note: Based on P1 Performance Package 15+Deg

LED LIFE: L70@ >36,000 hours for 6DEG & 10DEG L70@ >60,000 hours for 15+DEG
CSA LISTING TEMPERATURE: -30°C through 50°C (P1), -30°C through 35°C (P2 6DEG & 10DEG), -30°C through 40°C (P2 15+DEG), -30°C through 25°C (P3 15+DEG)

PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product, visit www.hydrrel.com

ELECTRICAL LOAD

Light Engines	Drive Current (mA)	System Watts	Current (A)			
			120	208	240	277
Static White P1 6Deg & 10Deg	1700	88	0.73	0.42	0.37	0.33
Static White P2 6Deg & 10Deg	2200	115	0.96	0.58	0.5	0.44
Static White P1 15+Deg	700	64	0.54	0.31	0.28	0.25
Static White P2 15+Deg	920	85	0.71	0.41	0.36	0.32
Static White P3 15+Deg	1220	114	0.95	0.54	0.47	0.41
Amber P1 15+Deg	700	52	0.43	0.25	0.22	0.19

CRI Scaling Chart	
90CRI	0.87

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Static White - 6&10Deg Lumen Multiplier	Static White - ≥15Deg Lumen Multiplier	Amber Lumen Multiplier
0°C	32°F	1.06	1.03	1.21
10°C	50°F	1.04	1.02	1.11
20°C	68°F	1.01	1.01	1.04
25°C	77°F	1.00	1.00	1.00
30°C	86°F	0.99	0.99	0.97
40°C	104°F	0.96	0.97	0.93

Optical Scaling Charts*	
Symmetric Distributions (6DEG - 70DEG)	
GS	0.96
FGS	0.95
IHL	0.76
L1	0.95
L2	0.95
L3	0.97
WRG	0.81

*Wider distributions will have a lower scaling factor - see individual IES files for full details





Asymmetric Distributions (xxVxH)	
GS	0.93*
FGS	0.85*
IHL	0.35
L1	0.88
L2	0.86
L3	0.95
WRG	0.71

Note: This table can be used to approximate the lumen values with different accessories. Please see IES files for exact lumen outputs.

SAF MOUNTING ACCESSORIES

		Part #
	<p>ADPMR/ADPMS Architectural Decorative Pole Mount Round or Square</p> <ul style="list-style-type: none"> • Architectural opulent design for seamless pole integration and fixture aiming • Intended for 4" round and tapered poles or minimum 4" square poles • Mounting location on the top of each arm accepts one lighting fixture • Designed for SAF7 & SAF14 fixtures 	<p>Examples: ADPMR 78C BL See spec sheet for more options</p>
	<ul style="list-style-type: none"> • AMPC Architectural Mid Pole Clamp • Clamp pole mount design for quick install and fixture aiming • Intended for 4" or 6" round straight pole • Mount one or two fixtures • Mounting location mid pole • Designed for SAF7 and SAF14 series with safety cable option 	<p>Example: AMPC4/1 78C BL See spec sheet for more options</p>
	<p>APAR/APAS Architectural Pole Arm Round or Square</p> <ul style="list-style-type: none"> • Intended for 4" round and tapered poles or minimum 4" square poles • Mounting location on the top of each arm accepts one lighting fixture • Designed for SAF7 & SAF14 fixtures 	<p>Example: APAS XLSC BRS See spec sheet for more options</p>
	<p>AWSC Architectural Wall Splice Cover</p> <ul style="list-style-type: none"> • Designed to be mounted over a recessed wall box or can be surface mounted for direct conduit entrance • Supplied with an integral splice access compartment for easy fixture connections • Designed for SAF7 & SAF14 fixtures 	<p>Example: AWSC 78C DNA See spec sheet for more options</p>
	<p>CAJB Cylindrical Architectural Junction Box</p> <ul style="list-style-type: none"> • Designed for architectural and landscape applications • Recommended for mounting on a rigid metallic conduit • For direct mounting of the SAF7 & SAF14 series light fixtures 	<p>Example: CAJB 34B XLSC DBL See spec sheet for more options</p>
	<p>CJB Cylindrical Junction Box</p> <ul style="list-style-type: none"> • Drilled and tapped to 3/4" NPT specifications • For larger hole sizes, consult factory • Recommended to seal conduit to maintain dry components • Compatible with SAF7 & SAF14 Flood luminaries 	<p>Example: CJB 34S XLSC VET See spec sheet for more options</p>

SAF MOUNTING ACCESSORIES

		Part #
	<p>CPM Cylindrical Pedestal Mount</p> <ul style="list-style-type: none"> • Suitable for architectural and landscape applications • Provided with front access cover for easy wiring and installation. • Compatible with SAF7 & SAF14 Flood luminaries 	<p>Example: CPM 78C BL See spec sheet for more options</p>
	<p>CPMSA Cylindrical Pole Mount Splice Access</p> <ul style="list-style-type: none"> • Designed to mount atop of 4" round poles • Provided with splice compartment • Compatible with SAF7 & SAF14 Flood luminaries 	<p>Example: CPMSA 78C DBL See spec sheet for more options</p>
	<p>CSM Cylindrical Stanchion Mount</p> <ul style="list-style-type: none"> • Available in heights from 12" to 48" in 6" increments • Provided with front access cover for easy wiring and installation. • Compatible with SAF7 & SAF14 Flood luminaries 	<p>Example: CSM12 XLSC BRT See spec sheet for more options</p>
	<p>CWMA T Cylindrical Wall Mount Arm Top</p> <ul style="list-style-type: none"> • Available in lengths from 12" to 48" in 6" increments • Supplied with splice cover for easy wiring and installation • End mounting only available with SAF7 • Compatible with SAF7 & SAF14 Flood luminaries 	<p>Example: CWMA30T 78C BL CWMA12T XLSC BRS See spec sheet for more options</p>

EXTERNAL ACCESSORIES

		Part #
	<ul style="list-style-type: none"> • WRG- Wire Rock Guard 	<p>Example: WRGSAF14 BL</p>
	<ul style="list-style-type: none"> • FGS- Full Glare Shield 	<p>Example: FGSSAF14 DDB</p>
	<ul style="list-style-type: none"> • GS- Glare Shield 	<p>Example: GSSAF14 BL</p>

FEATURES & SPECIFICATIONS

MATERIAL: Die cast copper-free aluminum (360) housing & doors with separate optical and driver compartments to ensure thermal isolation of the electronic drivers and LEDs.

LIGHT SOURCE: Proprietary PBCA LED technology with correlated color temperatures (CCT) of 2700K, 3000K, 3500K, 4000K or 5000K (>80 CRI). All within 3 MacAdam ellipses

VOLTAGE: MVOLT 120V-277V 50/60Hz.

DISTRIBUTION: Available in 6DEG, 10DEG, 15DEG, 20DEG, 30DEG, 40DEG, 50DEG, 70DEG, 15Vx60H, 30Vx60H, 60Vx15H and 60Vx30H

LENS: Molded from heat strengthened borosilicate glass for superior clarity and strength.

MOUNTING: Adjustable knuckle is 1/2" NPT. Yoke mount is a 7/8" thru hole center and (2) 7/16" thru holes 2.2" on center. Aluminum knuckle, yoke, & stainless steel locking hardware with infinite aiming adjustment capabilities and a wide array of mounting accessories. Yoke mount luminaires are provided with 10' or 25' of 18-6 ST cord for power supply and control. Knuckle mount luminaires are provided with 18" leads (qty 3 #18 for power supply and qty 3 # 22 for control).

GLARE CONTROL: External glare control options include full glare shields and half glare shields.

FINISH: Exterior parts are protected by a zinc-infused durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climates without cracking or peeling.

ELECTRICAL: MVOLT (120-277) LED Class 2 power supply. 50-115 watts, L83 lifetime \geq 100,000 hours at 25°C. Power factor > 90%, THD < 20%. 6KV surge protection meets a minimum Category C low operation per ANSI/IEEE C62.41.2.

FEATURES: Taper lock knuckle and yoke for infinite aiming and an unparalleled locking ability.

EXTERNAL ACCESSORY: Impact resistant rock guard.

BUY AMERICAN: Hydrel products are assembled in the USA. Our products meet the Buy America(n) government procurement requirements under FAR, DFARS, and DOT. Please refer to www.acuitybrands.com/buy-america

LISTING: cCSAus, suitable for outdoor & wet location. IP68 rated.

WARRANTY: 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Consult factory for details

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.