

Product Information

Project Name	Type
Catalog Number	Date

SPECIFICATIONS

Features

- Upgrade to modern architectural aesthetics providing controlled uniform light distribution.
- Improves facial recognition for enhanced security.
- Energy-efficient dark sky compliant canopy solution without color shift.
- Cast aluminum housing with gasket seals the fixture for IP65 rating.
- Recessed and surface mount options available.
- Quick driver access for easy maintenance.
- Designed to fit into existing 4 inch round opening in canopy.
- Long-life LEDs at L95 (95% lumen maintenance) at 60,000 hours reduce life cycle maintenance costs.
- Choice of four lumen packages and dimming option available.
- Configurative acrylic optics designed to illuminate both area and fuel pumps.
- Up to 108 lumens per watt.
- Suitable for dry, damp and wet location applications, IP65 rated.
- Made in USA. Meets ARRA & Buy American requirements.

Construction

- Finned cast aluminum housing for heat dissipation
- Tool less driver access
- Modular LED light engine
- Certain airborne contaminants can diminish integrity of acrylic. Consult factory for chemical compatibility.
- Optional surface mount box
- Weight: 18 lbs.

Electrical

- Input Voltage Range: 120-277 VAC Nom. (90-305 V Min/Max)
- Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)
- Active Power Factor Correction
- Power Factor: >0.90 @ full load, 100V through 277V
- Harmonic Distortion: THD < 20% @ full load
- Protection: Over-Voltage, Over-Temperature (110°) & Short Circuit with self-recovery
- Compliant to FCC Part 15 requirements for EM/RFI emissions
- NEC/CEC compliant ballast disconnect is standard.
- Standard surge protection: ANSI Std. C62.4.2 Category A (10 kv)



Certifications

- CSA listed for U.S. & Canada. Tested to UL 1598 & UL 8750 standards.
- Luminaires bear appropriate listing labels.
- Adheres to LM79, LM80 and TM21 industry standards.
- DesignLights Consortium® (DLC) qualified.
- Please refer to the DLC website for specific product qualifications at www.designlights.org.

Application

- Suitable for use with most wired or wireless lighting control systems
- Target opportunities include:
 - C-Store fuel centers
 - Big box retail fuel centers
 - Truck stops
 - Banks
 - Most any outdoor canopy
 - Road tunnels
 - Cold storage
 - Hotels

Warranty

- Five-year warranty. (Terms and Conditions Apply)

CERTIFICATION



ORDERING INFORMATION

EXAMPLE QCF-UL-60C-F-51K-GCO

MODEL	DRIVER VOLTAGE	QTY OF LED CHIPS	DRIVER OUTPUT	COLOR TEMP	OPTICS	MOUNTING OPTIONS
QCF LED Gas Canopy Fixture	UL 120/277 VAC	24C 24 Chip Board	F Fixed	51K 5100	GCO Gas Canopy Optic	SDC Single Deck Canopy
	347 347 VAC (non DLC)	36C 36 Chip Board	DM 0-10v Dimming ¹		WAO Wide Area Optics (non DLC)	DDC Double Deck Canopy
	480 480 VAC (non DLC)	48C 48 Chip Board			WQO Wide Square Optics (non DLC)	SMB Surface Mount Box
		60C 60 Chip Board			OAO Open Area Optics	QCK-1 Whiteway Riviera 2, Whiteway Vision, Cooper CLS, Whiteway LeSabre 3
						QCK-2 LSI/Master Dakota, Jet Philips Houstonian (Old Style), Whiteway Riviera
						QCK-3 Jet-Philips Houstonian (SHO/RHO), Guardian MC-1411
						QCK-4 LSI Richmond
						QCK-5 Whiteway Civic

FOOTNOTES

¹Must be used in conjunction with lighting controls. Contact factory for assistance.

PHOTOMETRIC DATA

PHOTOMETRIC DATA: QCF-UL-60C-F-51K-GCO

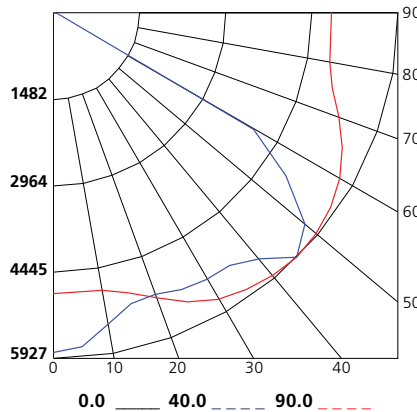
All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP certified lab.

Test: L10138803R01
Test Date: 12/6/13

LUMINAIRE DATA

Luminaire	QCF-UL-60C-F-51K-GCO
	LED Gas Canopy Fixture LLP
Ballast	LLP 150W 0.7A 30-54V DRIVER
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	15169
Watts	141
Mounting	Surface & Recessed
Shielding Angle	N.A.
Spacing Criterion	0° = 1.32 90° = 1.32
Luminous Opening in feet	Length: 0.69 Width: 0.69 Height: 0.00

INDOOR CANDELA PLOT



ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2025	N.A.	13
0-30	4415	N.A.	29
0-40	7637	N.A.	50
0-60	14450	N.A.	95
0-80	15118	N.A.	100
0-90	15169	N.A.	100

COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80				70				50				0
		70	50	30	10	70	50	30	10	50	30	10	0	
0	119	119	119	119	116	116	116	116	111	111	111	111	100	
1	111	107	104	101	108	105	102	99	101	98	96	88	88	
2	102	95	90	85	100	94	88	84	90	86	82	76	76	
3	94	85	78	72	92	83	77	72	81	75	70	66	66	
4	87	76	68	62	84	75	67	62	72	66	61	57	57	
5	80	68	60	54	78	67	59	53	65	58	53	50	50	
6	74	61	53	47	72	60	52	47	59	52	46	44	44	
7	68	55	47	41	67	55	47	41	53	46	41	38	38	
8	63	50	42	37	62	50	42	37	48	41	36	34	34	
9	59	46	38	33	58	45	38	33	44	37	33	30	30	
10	55	42	35	30	54	42	34	29	41	34	29	27	27	

RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0	25	45	65	90
	0	5828	5828	5828	5828
5	5746	5752	5747	5746	5742
10	5377	5405	5433	5406	5377
15	5253	5209	5159	5202	5244
20	5271	5201	5141	5182	5258
25	5187	5168	5241	5144	5185
30	5015	5074	5280	5057	5018
35	4915	5079	5298	5061	4915
40	5079	533	5518	5320	5064
45	4790	5489	5927	5471	4811
50	4408	4893	5644	4906	4460
55	2171	2596	4877	2592	2182
60	643	1197	3988	1137	615
65	201	188	326	185	198
70	137	135	151	135	137
75	106	107	121	107	107
80	83	79	76	79	82
85	53	55	54	55	52

OPERATING ENVIRONMENT

Proposed System	Min Temp	Max Temp
QCF-24C-GCO	-30°C/-22°F	45°C/113°F
QCF-36C-GCO	-30°C/-22°F	45°C/113°F
QCF-48C-GCO	-30°C/-22°F	45°C/113°F
QCF-60C-GCO	-30°C/-22°F	45°C/113°F

Application Notes

1. Application temperatures are provided to ensure the longevity and performance of the driver and LEDs.
2. Results are based off the In-Situ Temperature Measurement Test (ISTMT) along with the drivers' temperature and life curves.
3. Precision-Paragon [P2]'s 5 year warranty assumes operation at the maximum ambient temperature range.

LUMEN PACKAGE OPTIONS

Proposed System	Light Source Quantity & Type	CRI	CCT	Lumens Per Fixture	Input Watts	Lumens Per Watt
QCF-24C-GCO	1 QCF-58W	67	5100K	6160	58	106
QCF-36C-GCO	1 QCF-88W	67	5100K	8982	88	103
QCF-48C-GCO	1 QCF-114W	67	5100K	12033	114	106
QCF-60C-GCO	1 QCF-141W	67	5100K	15169	141	108

*Lumen values shown are initial delivered lumens tested at 25°C per IES LM-79 standards.

PROJECTED LUMEN MAINTENANCE

Operating Hours	0	10,000	20,000	25,000	35,000	50,000	60,000	75,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95

LUMENS VS. AMBIENT TEMPERATURE

Ambient °C	Ambient °F	Lumen Multiplier
-15	5	1.11
-7	20	1.09
2	35	1.07
10	50	1.05
18	65	1.02
27	80	1.00
35	95	0.96
43	110	0.92
52	125	0.87
60	140	0.71

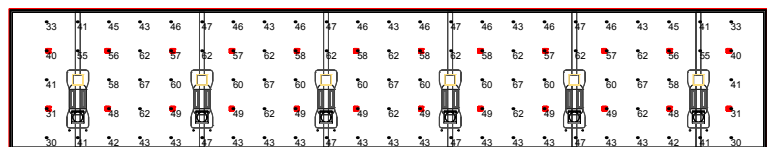
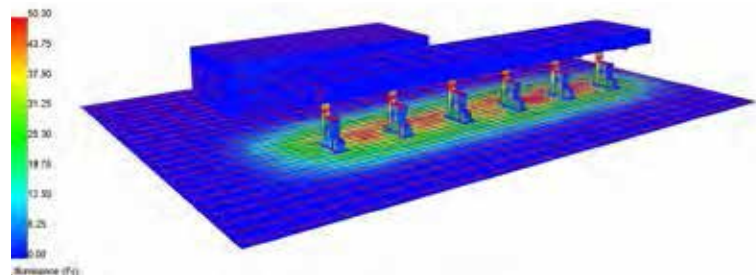
ENERGY USAGE AND SAVINGS DATA

Existing System	Typical Wattage	New Led System	Typical Wattage	kWh Savings Total Site	Annual \$ Savings \$ 0.095 kWh	Annual \$ Savings \$ 0.125 kWh	Annual \$ Savings \$ 0.155 kWh
MH175	210	QCF-24C	58	15977	\$1,517.80	\$1,997.11	\$2,476.41
MH250	295	QCF-36C	88	21812	\$2,072.18	\$2,726.55	\$3,380.92
MH320PS	368	QCF-48C	114	26700	\$2,536.55	\$3,337.56	\$4,138.57
MH400	458	QCF-60C	141	33323	\$3,165.69	\$4,165.38	\$5,165.07

*kWh savings are based on 4,380 Annual Hours.

ACTUAL ONE-FOR-ONE REPLACEMENT

- 17' Mounting Height, 6 Pump Islands, 24 Fixtures
- Average Maintained FC MH400 = 21
- Average Initial FC QCF-60C-GCO = 55 FC
- Excellent Uniformity



QCF PERFORMANCE

LED System	Initial Lumens	Wattage	Efficacy	CCT (K)	CRI	Power Factor	THD %
QCF-60C-GCO	15169	141	108	5100	67	>.90	<20%
QCF-48C-GCO	12033	114	106	5100	67	>.90	<20%
QCF-36C-GCO	8982	88	103	5100	67	>.90	<20%
QCF-24C-GCO	6160	58	106	5100	67	>.90	<20%

Efficacy= Lumens Per Watt **CCT**= Correlated Color Temperature **CRI**= Color Rendering Index **THD**= Total Harmonic Distortion

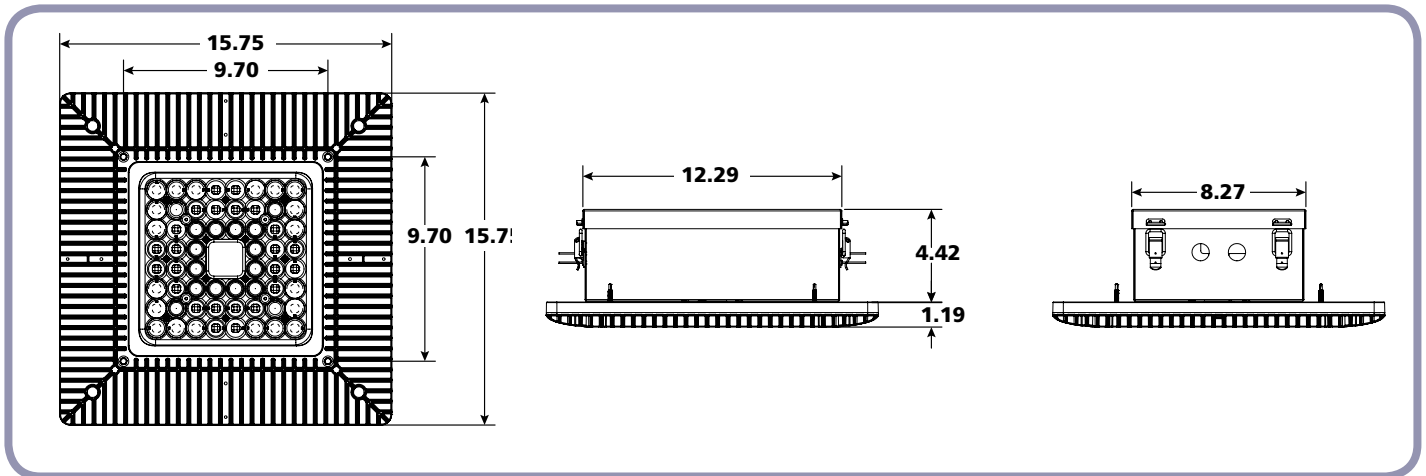
*System values shown are a general reference intended to supply a quick comparison of several common HID systems and the associated energy consumption.

*QCF Performance values shown are based on LM-79 testing in a 25°C ambient.

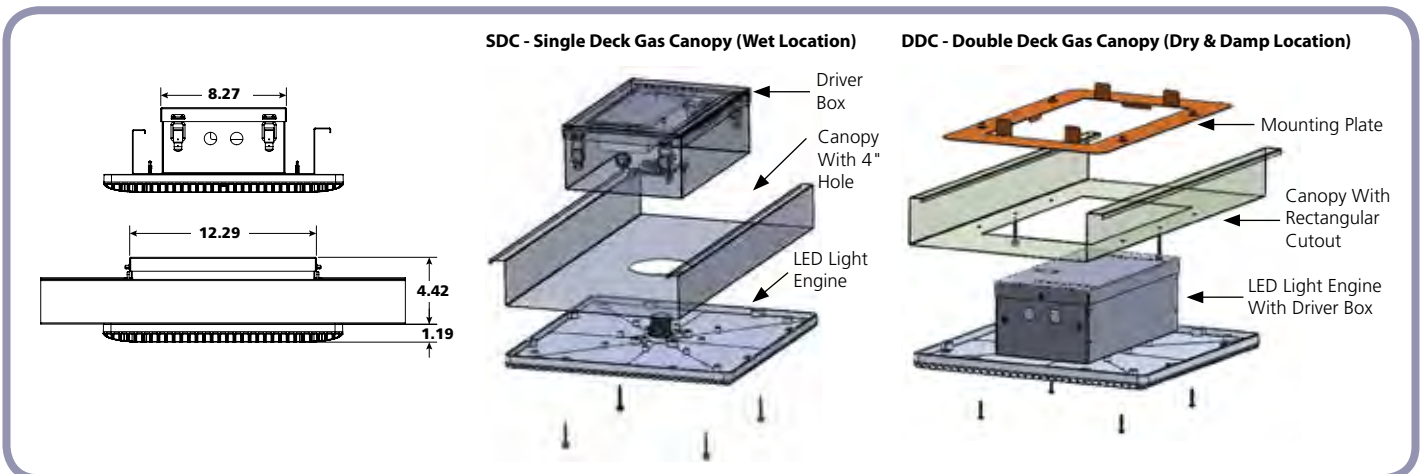
*Dollar savings are based on several average power consumption rates and a total site consisting of 24 fixtures.

*Precision-Paragon [P2] recommends test installation for luminance verification.

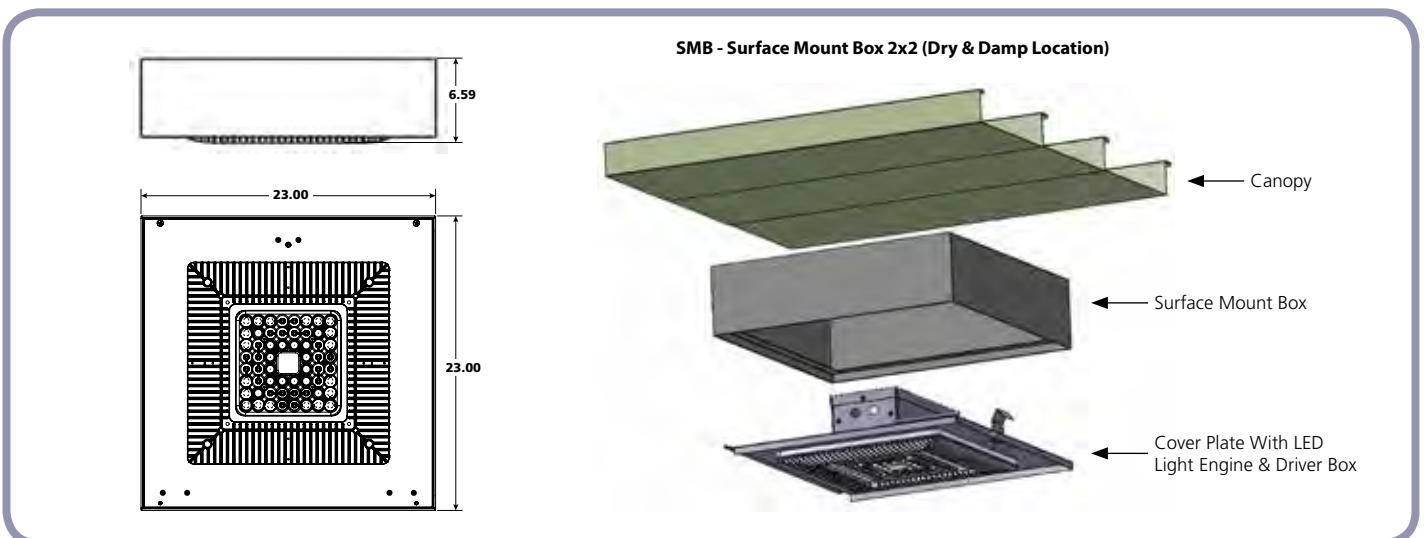
FIXTURE DIMENSIONS



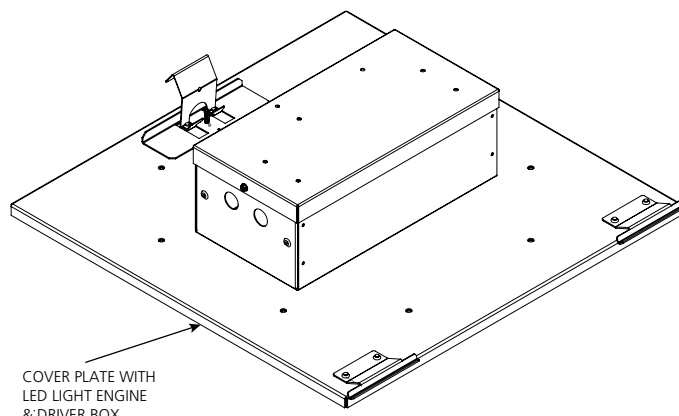
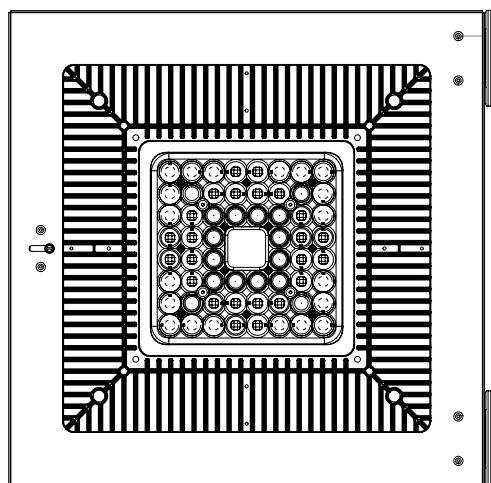
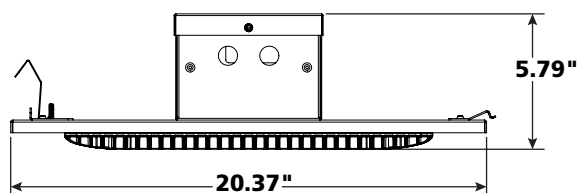
FIXTURE DIMENSIONS - INSTALLED IN 12" CANOPY - SDC & DDC



FIXTURE DIMENSIONS - 2X2 WITH SURFACE MOUNT BOX - SMB



MOUNTING OPTIONS - QCK 1, QCK 2, QCK 3

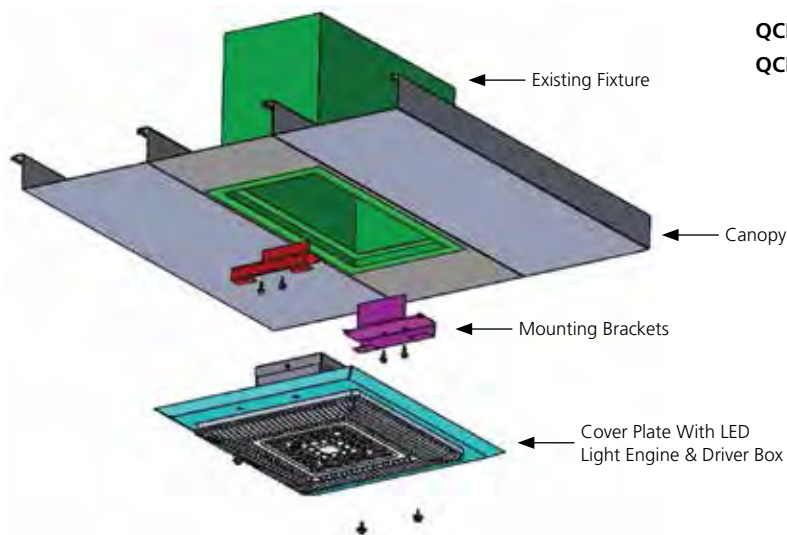


QCK-1 = 20.38" x 20.38" Kit-Whiteway Riviera 2, Whiteway Vision, Cooper CLS, Whiteway LeSabre 3

QCK-2 = 22.00" x 22.00" LSI/Master Dakota, Jet-Philips Houstonian (Old Style), Whiteway Riviera

QCK-3 = 21.25" x 21.25" Jet-Philips Houstonian (SHO/RHO), Guardian MC-1411

MOUNTING OPTIONS - RECESSED RECTANGULAR - QCK 4 & QCK 5



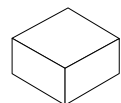
QCK-4 = 19.00" x 22.53" LSI Richmond

QCK-5 = 19.00" x 22.53" Whiteway Civic

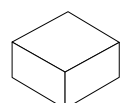
MOUNTING OPTIONS OVERVIEW



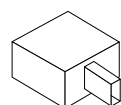
QCK-1



Whitway Riviera 2
Whitway Vision



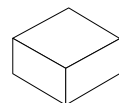
Cooper
CLS



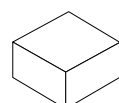
Whitway
LeSabre 3



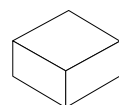
QCK-2



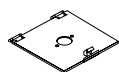
LSI/Master
Dakota



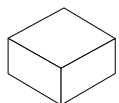
Jet-Philips
Houstonian
(Oldstyle)



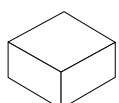
Whitway Riviera



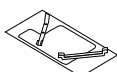
QCK-3



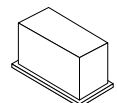
Jet-Philips
Houstonian
(SHO/RHO)



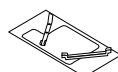
Guardian
MC-1411



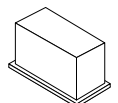
QCK-4



LSI
Richmond



QCK-5



Whitway
Civic

QCK-1 = 20.38" x 20.38"

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(SHO/RHO), Guardian MC-1411

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Whitway Civic