

Parking Areas
Building Entrances
Pedestrian Walkways
Shopping Malls
Large Areas



Specifications



RATED SYSTEM LIFE (LED LIFE PER L70)	Driver and LED life are rated up to 80,000 hrs @ 40°C (104°F).
PREDICTED LED LIFE	See page 8 for predicted LED life.
CONSTRUCTION	Die-cast aluminum housing with corrosion resistant hardware. QLA 64G1 and 80G1 have 22" optical opening. Optic chamber and separate driver housing constructed to IP66. Die-cast aluminum heatsink allows for long life of LEDs up to 40°C ambient.
THERMAL MANAGEMENT	IP66 rated thermal Pod frame management system creates a vortex of airflow with passthrough convective cooling system and heat extraction.
LED BOARD AND ARRAY	QLA series small housing: 64 or 80 Rebel ES LEDs. Color temperature: Neutral White 4000K +/- 250K; CRI ≥ 60. Metal core printed circuit board. RoHS compliant.
DRIVER	High efficiency multi-volt driver (50 or 60 Hz), maintains constant current flow to LEDs to accommodate LED variations. High power factor (>90% standard). Constant current: 350, 530 or 700 mA. Voltage: 120-277, 347-480. Temperature range: -40°C (-40°F) to 40°C (104°F). Exception: 700 mA unit: -40°C (-22°F) to 35°C (95°F). Open / short circuit protection. RoHS compliant. Surge protector standard. The surge protector is in accordance with IEEE / ANSI C62.41.2 guidelines, with a surge current rating of 10,000 amps.
LED OPTICAL SYSTEM	Factory set and field rotatable LED Pod optical assemblies. Type II, III, IV or V distribution. Meets IES Full Cutoff criteria. Fully gasketed Dust-Tite construction. Employs Philips LEDGINE technology & Rebel ES LEDs.
MOUNTING	Field installed die-cast aluminum straight arm mount for mounting to 4" to 5" O.D. round poles. Square pole adapters included. Round pole adapter accessories required for mounting to 3.0-3.9" round poles. Wall mount also available.
FINISH	Standard textured finishes available. Polyester powder coat, electrostatically applied, which is preceded by a five step pre-treatment process including an iron phosphate priming stage for superior coating adhesion. This process meets or exceeds all ASTM testing requirements, including those for 1,000 hour salt spray endurance testing.
LISTINGS	ETL/cETL Listed luminaire, to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). QLA is a DesignLights Consortium qualified product.
WARRANTY	Mechanical, finish and LED engine & components shall be covered by a limited 5-year warranty. See terms and conditions for details.

PROJECT
FIXTURE TYPE
CATALOG#

ORDERING EXAMPLE QLA-64G1-700-NW-3L0-120-SAM-F1-TPG

ORDERING INFORMATION

SERIES	# OF LEDS	DRIVER	LED COLOR	DISTRIBUTION	VOLTAGE	MOUNTING	OPTIONS ⁹	FINISH	ACCESSORIES
QLA	64G1	700	NW	2L0	120	SAM	F1 ² DS25 ⁷	TSA	F1-KIT ² DYN-KIT1
				2L90	208		F2 ² DS50 ⁷	TDB	F2-KIT ² DYN-KIT2
	80G1	350		2L270	240		F3 ² DS75 ⁷	TBK	F3-KIT ² HSS ⁵
		530		3L0	277		PCB ^{2,3} DM25 ⁷	TWHT	WM-QLA SG-QLA1
				3L90	347		TLR DM50 ⁷	TGR	RPTA-190-DT13 SPTA-190-DT13
				3L270	480		TLRPC ^{2,4} DM75 ⁷	TPG	RPTA-290-DT13 SPTA-290-DT13
				4L0	UNV ¹		HSS ⁵ DE25 ⁷	TGN	RPTA-2180-DT13 SPTA-2180-DT13
				4L90			DD ⁶ DE50 ⁷	RAL(*)	RPTA-390-DT13 SPTA-390-DT13
				4L270			DE75 ⁷		RPTA-3120-DT13 SPTA-490-DT13
				5L			DCP ⁷		RPTA-490-DT13 RPA339-QLA ⁹

SERIES	# OF LEDS	DRIVER	LED COLOR	DISTRIBUTION	VOLTAGE	MOUNTING	OPTIONS ⁹	FINISH
☒ QLA	☐ 64G1 → ☐ 700	☒ NW Neutral White	☐ 2L0 Type II optics @ 0° (standard)	☐ 120	☒ SAM Straight Arm Mount	☐ F1 ² Single Fusing 120, 277, 347 V	☐ DS25 ⁷ Dynadimmer Safety Profile (25% Low)	☐ TSA Textured Satin Aluminum
	☐ 80G1 → ☐ 350		☐ 2L90 Type II optics rotated @ 90°	☐ 208		☐ F2 ² Double Fusing 208, 240, 480 V	☐ DS50 ⁷ Dynadimmer Safety Profile (50% Low)	☐ TDB Textured Dark Bronze
	☐ 530		☐ 2L270 Type II optics rotated @ 270°	☐ 240		☐ F3 ² Double Fusing 208, 240, 480 V Canadian Double Pull	☐ DS75 ⁷ Dynadimmer Safety Profile (75% Low)	☐ TBK Textured Black
			☐ 3L0 Type III optics @ 0° (standard)	☐ 277		☐ PCB ^{2,3} Photocell Button	☐ DM25 ⁷ Dynadimmer Median Profile (25% Low)	☐ TWHT Textured White
			☐ 3L90 Type III optics rotated @ 90°	☐ 347		☐ TLR Twist Lock Photocell Receptacle	☐ DM50 ⁷ Dynadimmer Median Profile (50% Low)	☐ TGR Textured Gray
			☐ 3L270 Type III optics rotated @ 270°	☐ 480		☐ TLRPC ^{2,4} Twist Lock Receptacle with Photocontrol	☐ DM75 ⁷ Dynadimmer Median Profile (75% Low)	☐ TPG Textured Philips Gray
			☐ 4L0 Type IV optics @ 0° (standard)	☐ UNV ¹		☐ HSS ⁵ House Side Shield	☐ DE25 ⁷ Dynadimmer Economy Profile (25% Low)	☐ TGN Textured Green
			☐ 4L90 Type IV optics rotated @ 90°			☐ DD ⁶ Dimming Driver	☐ DE50 ⁷ Dynadimmer Economy Profile (50% Low)	☐ RAL(*) Custom Color (*=Specify RAL #)
			☐ 4L270 Type IV optics rotated @ 270°				☐ DE75 ⁷ Dynadimmer Economy Profile (75% Low)	
			☐ 5L Type V				☐ DCP ⁷ Dynadimmer Custom Programming	

NOTES:

- 1) 'UNV' universal voltage, 120-277 V.
- 2) Specify voltage. Fusing not available with 'UNV' voltage option.
- 3) 'PCB' option not available in 480 V.
- 4) 'TLRPC' option not available in 347 or 480 V.
- 5) 'HSS' House Side Shield option and accessory are available for Type-II, Type-III, and Type-IV only.
- 6) 0-10V leads exiting luminaire arm supplied for connection to external secondary controls (by others).
- 7) Dynadimmer options and accessories are only available in 120-277 V. Dimming Driver option ('DD') included.
- 8) QLA is compatible with a wide range of non-programmable and programmable occupancy sensors, wireless controls and asset management systems (by others). Contact factory.
- 9) RPA339-QLA is not available in 2@90, 3@90, or 4@90 mounting configurations.

ACCESSORIES

☐ F1-KIT ²	Single Fusing Field Installed Kit (120, 277, 347 V)
☐ F2-KIT ²	Double Fusing Field Installed Kit (208, 240, 480 V)
☐ F3-KIT ²	Double Fusing Field Installed Kit (208, 240, 480 V) Canadian Double Pull
☐ WM-QLA	Wall Mount
☐ DYN-KIT1	Dynadimmer USB Cable Kit (for field programming)
☐ DYN-KIT2	Dynadimmer Handheld Programmer Kit (for field programming)
☐ 2LHSS-64	2L House Side Shield for 64G1 units
☐ 2LHSS-80	2L House Side Shield for 80G1 units
☐ 3LHSS-64	3L House Side Shield for 64G1 units
☐ 3LHSS-80	3L House Side Shield for 80G1 units
☐ 4LHSS-64	4L House Side Shield for 64G1 units
☐ 4LHSS-80	4L House Side Shield for 80G1 units
☐ SG-QLA1	Stone Guard

Round Pole Tenon Adapters

☐ RPTA-190-DT13 1@90
☐ RPTA-290-DT13 2@90
☐ RPTA-2180-DT13 2@180
☐ RPTA-390-DT13 3@90
☐ RPTA-3120-DT13 3@120
☐ RPTA-490-DT13 4@90

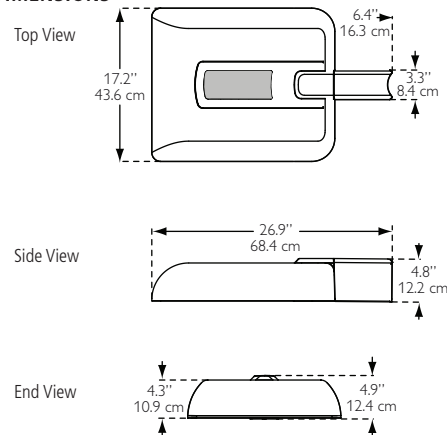
Round Pole Adapter for 3.0-3.9" pole

☐ RPA339-QLA ⁹ (one required per luminaire)

Square Pole Tenon Adapters

☐ SPTA-190-DT13 1@90
☐ SPTA-290-DT13 2@90
☐ SPTA-2180-DT13 2@180
☐ SPTA-390-DT13 3@90
☐ SPTA-490-DT13 4@90

DIMENSIONS



Weight:	28 Lbs 12.7 Kg
EPA:	0.52 sq ft

PROJECT
FIXTURE TYPE
CATALOG#

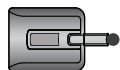
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QLA 64G1 & 80G1

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MOUNTING CONFIGURATIONS

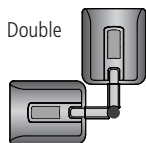
Single



1@90

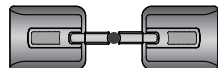
EPA: 0.52 sq ft

Double



2@90

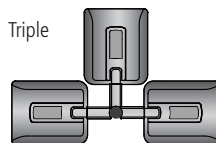
EPA: 1.01 sq ft



2@180

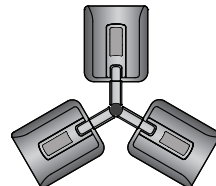
EPA: 1.04 sq ft

Triple



3@90

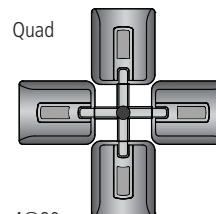
EPA: 1.48 sq ft



3@120

EPA: 1.34 sq ft

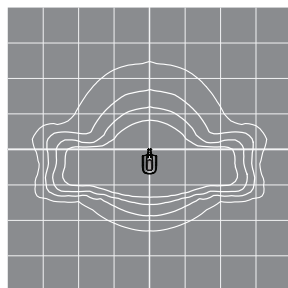
Quad



4@90

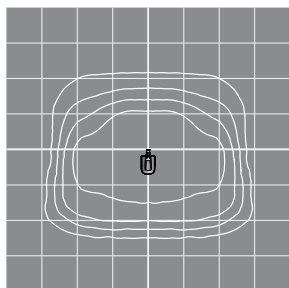
EPA: 1.60 sq ft

DISTRIBUTION PATTERNS



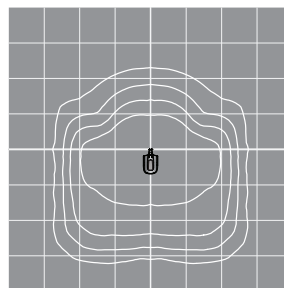
2L0

2L0 is designed to IES Type II.



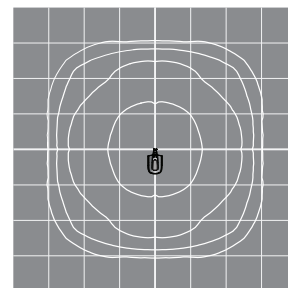
3L0

3L0 is designed to IES Type III.



4L0

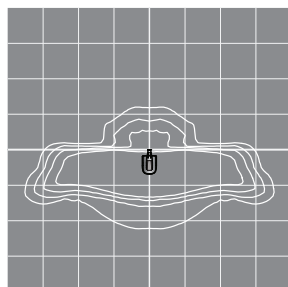
4L0 is designed to IES Type IV.



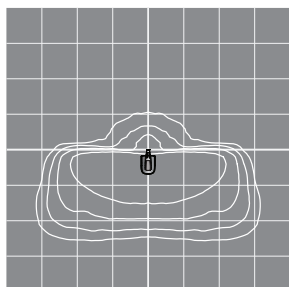
5L

5L is designed to IES Type V.

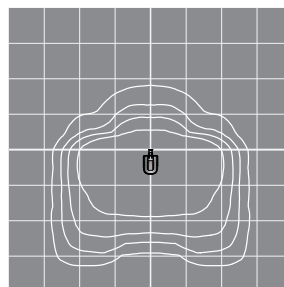
House side shield¹



2L - HSS¹



3L - HSS¹



4L - HSS¹

NOTES:

- 1) 'HSS' factory installed options and field installed accessories will produce the same distribution results.

PROJECT
FIXTURE TYPE
CATALOG#

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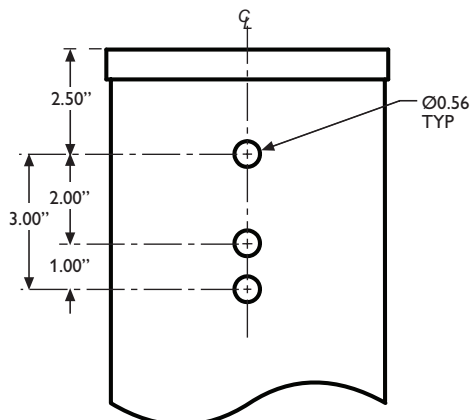
QLA

64G1 & 80G1

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ARM MOUNT DETAILS

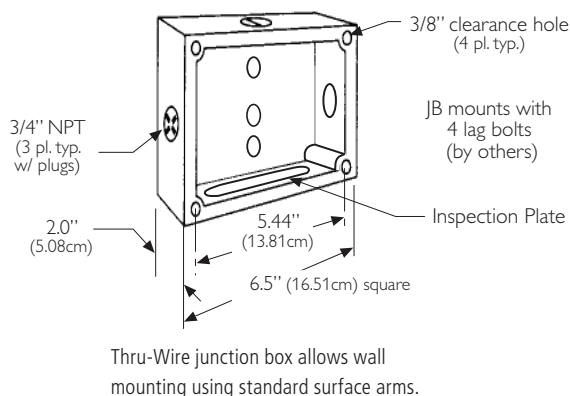
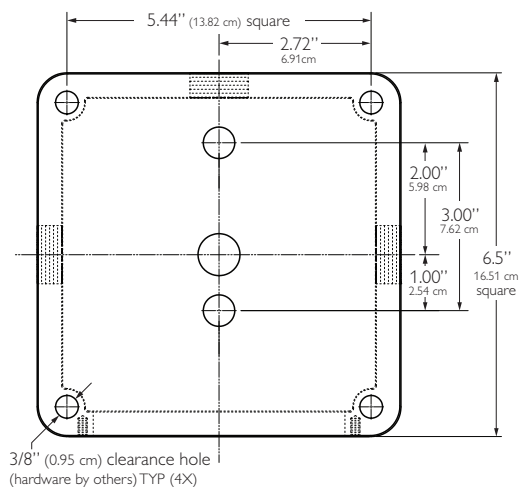
Straight Arm Mount Drill Template (NTS)



DRILL TEMPLATE NO. 13

Arm Mount to 4" - 5" Round or Square Pole

WALL MOUNT DETAILS



MOUNTING ACCESSORY DETAILS

Round Pole Tenon Adapters

Round Pole Tenon adapter allows mounting of QLA with straight arm to round pole with 2-3/8" O.D. X 4" tall pole top tenon.

RPTA-190-DT13	1 @ 90°
RPTA-290-DT13	2 @ 90°
RPTA-2180-DT13	2 @ 180°
RPTA-390-DT13	3 @ 90°
RPTA-3120-DT13	3 @ 120°
RPTA-490-DT13	4 @ 90°



Square Pole Tenon Adapters

Square Pole Tenon adapter allows mounting of QLA with straight arm to square pole with 2-3/8" O.D. X 4" tall pole top tenon.

SPTA-190-DT13	1 @ 90°
SPTA-290-DT13	2 @ 90°
SPTA-2180-DT13	2 @ 180°
SPTA-390-DT13	3 @ 90°
SPTA-490-DT13	4 @ 90°



Round Pole Adapter for 3.0-3.9" pole

(one required for each luminaire)

Not available in 2@90, 3@90, or 4@90 mounting configurations

RPA339-QLA



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QLA 64G1 & 80G1

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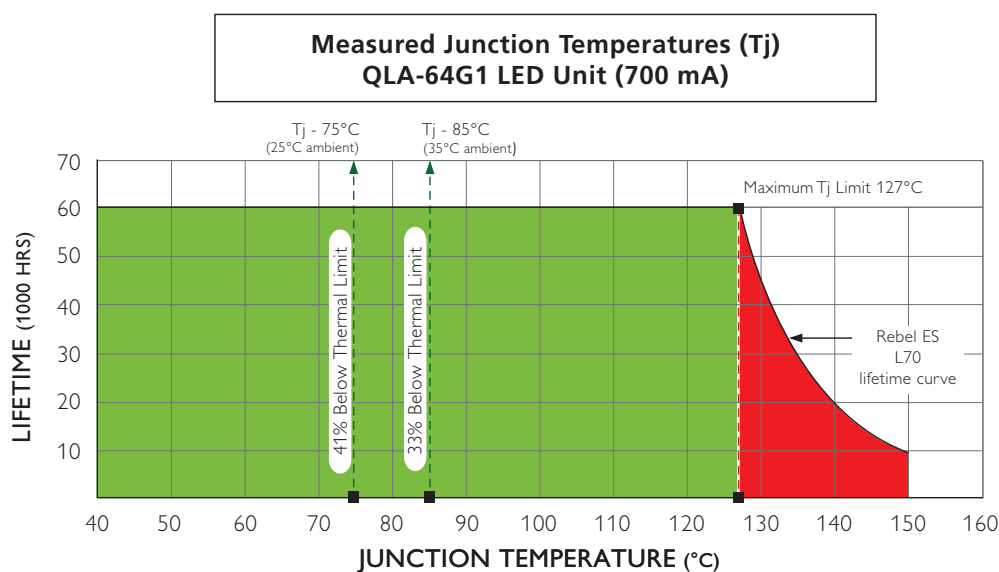
TECHNICAL DATA - QLA-64G1 @ 700 mA

QLA 64G1 @ 700 mA¹ (Type III '3L0' distribution, 4000 K +/- 250K CCT standard)

Input Watts	136
Initial Lumens @ 25°C Ambient	10,292
Lumens per Watt @ 25°C Ambient	76
Initial Lumens @ 35°C Ambient	10,069
Lumens per Watt @ 35°C Ambient	74

Notes: 1. Technical data and performance are subject to change.
2. Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.

JUNCTION TEMPERATURES



Green shaded portion represents junction temperatures below LED manufacturer's recommended limit to ensure a minimum of 60,000 hours of rated life.

LIFE EXPECTANCY

**Predicted Life Expectancy Table Above the minimum 60,000 Rated LED Life at Multiple Ambient Temperatures
QLA 64G1 LED Unit (700mA, L70)**

Note: LED rated life per the L70 curve above is 60,000 hrs. The tables below showing predicted LED life expectancy are based on QLA's superior thermal management, actual junction temperature (T_j) and projected L70 curves. The projected life in years may be extended even further if used with dimming options.

QLA 64G1 LED (700mA)

Average Outdoor Ambient Temp	Fixture Junction Temp (T _j)	Predicted LED Life Expectancy L70 (Hrs)	Fixture Efficacy (Lumens / Watt)	Predicted LED Life Expectancy @ 10 Hrs/Day (Yrs)
-20°C / -4°F	30	170,467	82	47
-10°C / 14°F	40	159,038	81	44
0°C / 32°F	50	147,919	79	41
10°C / 50°F	60	137,110	77	38
25°C / 77°F	75	121,478	76	33
30°C / 86°F	80	116,423	75	32
35°C / 95°F	85	111,445	74	31
40°C / 104°F	-	-	-	-

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QLA

64G1 & 80G1

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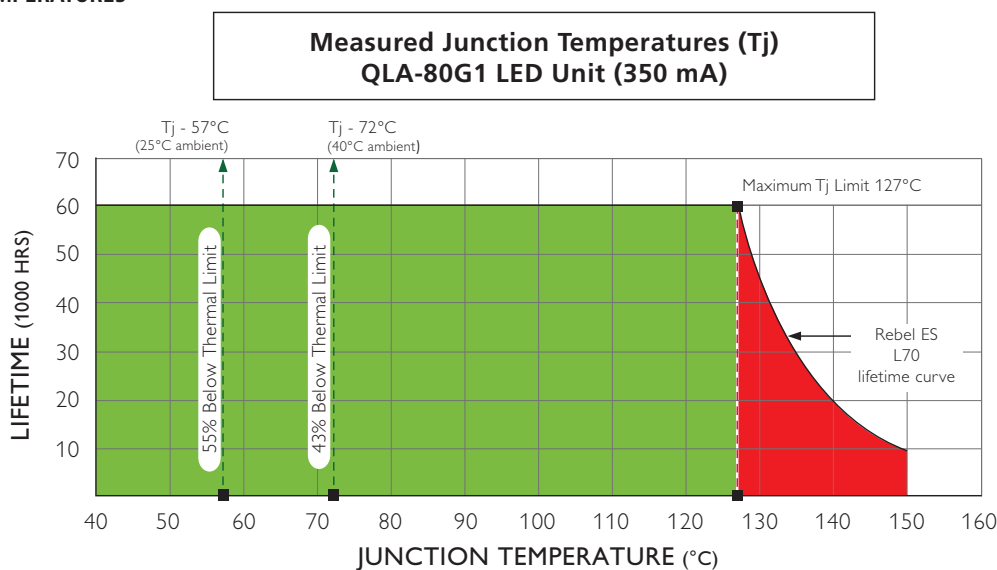
TECHNICAL DATA - QLA-80G1 @ 350 mA

QLA 80G1 @ 350 mA¹ (Type III '3L0' distribution, 4000 K +/- 250K CCT standard)

Input Watts	90
Initial Lumens @ 25°C Ambient	7,555
Lumens per Watt @ 25°C Ambient	84
Initial Lumens @ 40°C Ambient	7,395
Lumens per Watt @ 40°C Ambient	82

Notes: 1. Technical data and performance are subject to change.
2. Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.

JUNCTION TEMPERATURES



Green shaded portion represents junction temperatures below LED manufacturer's recommended limit to ensure a minimum of 60,000 hours of rated life.

LIFE EXPECTANCY

Predicted Life Expectancy Table Above the minimum 60,000 Rated LED Life at Multiple Ambient Temperatures QLA 80G1 LED Unit (350mA, L70)

Note: LED rated life per the L70 curve above is 60,000 hrs. The tables below showing predicted LED life expectancy are based on QLA's superior thermal management, actual junction temperature (Tj) and projected L70 curves. The projected life in years may be extended even further if used with dimming options.

QLA 80G1 LED (350mA)

Average Outdoor Ambient Temp	Fixture Junction Temp (Tj)	Predicted LED Life Expectancy L70 (Hrs)	Fixture Efficacy (Lumens / Watt)	Predicted LED Life Expectancy @ 10 Hrs/Day (Yrs)
-20°C / -4°F	12	219,528	91	60
-10°C / 14°F	22	205,704	90	56
0°C / 32°F	32	192,246	88	53
10°C / 50°F	42	179,155	86	49
25°C / 77°F	57	160,204	84	44
30°C / 86°F	62	154,070	83	42
40°C / 104°F	72	142,077	82	39

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QLA 64G1 & 80G1

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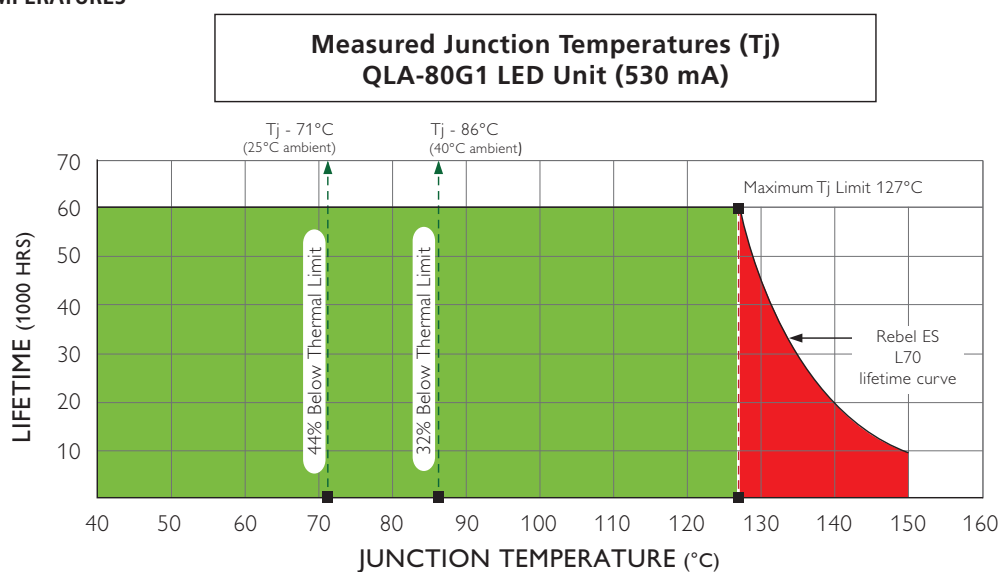
TECHNICAL DATA - QLA-80G1 @ 530 mA

QLA 80G1 @ 530 mA¹ (Type III '3L0' distribution, 4000 K +/- 250K CCT standard)

Input Watts	129
Initial Lumens @ 25°C Ambient	10,454
Lumens per Watt @ 25°C Ambient	81
Initial Lumens @ 40°C Ambient	10,117
Lumens per Watt @ 40°C Ambient	78

Notes: 1. Technical data and performance are subject to change.
2. Due to LED forward voltage variations and driver efficiency, total system watts could vary +/-4%.

JUNCTION TEMPERATURES



LIFE EXPECTANCY

Predicted Life Expectancy Table Above the minimum 60,000 Rated LED Life at Multiple Ambient Temperatures QLA 80G1 LED Unit (530mA, L70)

Note: LED rated life per the L70 curve above is 60,000 hrs. The tables below showing predicted LED life expectancy are based on QLA's superior thermal management, actual junction temperature (Tj) and projected L70 curves. The projected life in years may be extended even further if used with dimming options.

QLA 80G1 LED (530mA)

Average Outdoor Ambient Temp	Fixture Junction Temp (Tj)	Predicted LED Life Expectancy L70 (Hrs)	Fixture Efficacy (Lumens / Watt)	Predicted LED Life Expectancy @ 10 Hrs/Day (Yrs)
-20°C / -4°F	26	189,674	88	52
-10°C / 14°F	36	177,145	87	49
0°C / 32°F	46	164,954	84	45
10°C / 50°F	56	152,200	83	42
25°C / 77°F	71	135,957	81	37
30°C / 86°F	76	130,411	80	36
40°C / 104°F	86	119,573	78	33

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QLA

64G1 & 80G1

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PHOTOMETRIC DATA

Cat No.	Optic (distribution)	System Wattage	Fixture Lumens	Efficacy	B (backlight)	U (uplight)	G (glare)	CCT	IES File #
QLA-64G1-700	Type II (2L)*	138	10,563	76	3	0	3	4000 K +/- 250K	QLA-64G1-700-2LIES
	Type III (3L)	136	10,292	76	3	0	3	4000 K +/- 250K	QLA-64G1-700-3LIES
	Type IV (4L)	136	10,397	76	2	0	2	4000 K +/- 250K	QLA-64G1-700-4LIES
	Type V (5L)	136	9,684	71	4	0	2	4000 K +/- 250K	QLA-64G1-700-5LIES
QLA-800G1-350	Type II (2L)*	86	7,684	89	2	0	2	4000 K +/- 250K	QLA-80G1-350-2LIES
	Type III (3L)	90	7,555	84	2	0	2	4000 K +/- 250K	QLA-80G1-350-3LIES
	Type IV (4L)	90	7,672	85	2	0	2	4000 K +/- 250K	QLA-80G1-350-4LIES
	Type V (5L)	90	7,557	84	3	0	2	4000 K +/- 250K	QLA-80G1-350-5LIES
QLA-80G1-530	Type II (2L)	126	10,360	83	2	0	2	4000 K +/- 250K	QLA-80G1-530-2LIES
	Type III (3L)	126	10,454	83	3	0	3	4000 K +/- 250K	QLA-80G1-530-3LIES
	Type IV (4L)	126	10,615	85	2	0	2	4000 K +/- 250K	QLA-80G1-530-4LIES
	Type V (5L)	126	10,456	83	4	0	2	4000 K +/- 250K	QLA-80G1-530-5LIES

* LM-79 test report data was generated by a 3rd party independent lab - Luminaire Testing Laboratory (LTL).

- Backlight** - refers to light directed opposite the target area, which may create light trespass. Backlight is commonly behind the luminaire.
- Uplight** - is illumination directed above the horizontal plane of the luminaire (90°) which causes artificial sky glow.
- Glare** - is the amount of light from the luminaire emitted in directions or at angles that cause glare, which can be annoying or visually disabling.

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QLA

64G1 & 80G1

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LED LUMEN MAINTENANCE DATA

		QLA-64G1 @ 700 mA								QLA-80 G1 @ 350 mA								QLA-80G1 @ 530 mA							
Outdoor Ambient Temp (°C) ¹		5	10	15	20	25	30	35	40	5	10	15	20	25	30	35	40	5	10	15	20	25	30	35	40
Junction Temperature ²		55.3	60.3	65.3	70.3	75.3	80.3	85.3	-	36.9	41.9	46.9	51.9	56.9	61.9	66.9	71.9	51.1	56.1	61.1	66.1	71.1	76.1	81.1	86.1
Thermal Factor ³		1.04	1.03	1.02	1.01	1.00	0.99	0.98	-	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97
Predicted Life Hours of operation / Years based on 10 hrs/day burn cycle	0	1.04	1.03	1.02	1.01	1.00	0.99	0.98	-	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97
	8,000 / 2.2	1.03	1.02	1.01	1.00	0.99	0.98	0.97	-	1.04	1.03	1.02	1.01	0.99	0.98	0.97	0.96	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96
	16,000 / 4.4	1.02	1.01	1.00	0.99	0.98	0.96	0.95	-	1.03	1.02	1.01	1.00	0.99	0.97	0.96	0.95	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.94
	24,000 / 6.6	1.01	1.00	0.99	0.98	0.96	0.95	0.93	-	1.02	1.01	1.00	0.99	0.98	0.97	0.95	0.94	1.02	1.00	0.99	0.98	0.97	0.96	0.94	0.93
	32,000 / 8.8	1.00	0.99	0.98	0.96	0.95	0.93	0.92	-	1.01	1.00	0.99	0.98	0.97	0.96	0.94	0.93	1.01	0.99	0.98	0.97	0.96	0.94	0.93	0.91
	40,000 / 11.0	0.99	0.98	0.96	0.95	0.93	0.92	0.90	-	1.01	1.00	0.98	0.97	0.96	0.95	0.93	0.92	1.00	0.98	0.97	0.96	0.94	0.93	0.91	0.90
	48,000 / 13.2	0.98	0.97	0.95	0.94	0.92	0.90	0.88	-	1.00	0.99	0.98	0.96	0.95	0.94	0.92	0.91	0.99	0.97	0.96	0.95	0.93	0.92	0.90	0.88
	56,000 / 15.3	0.97	0.95	0.94	0.92	0.91	0.88	0.86	-	0.99	0.98	0.97	0.95	0.94	0.93	0.91	0.90	0.98	0.96	0.95	0.94	0.92	0.90	0.89	0.86
	64,000 / 17.5	0.96	0.94	0.93	0.91	0.89	0.86	0.84	-	0.98	0.97	0.96	0.95	0.93	0.92	0.90	0.89	0.97	0.95	0.94	0.92	0.91	0.89	0.87	0.84
	72,000 / 19.7	0.95	0.93	0.91	0.89	0.86	0.84	0.81	-	0.98	0.96	0.95	0.94	0.92	0.91	0.89	0.88	0.96	0.94	0.93	0.91	0.89	0.87	0.84	0.82
	80,000 / 21.9	0.94	0.91	0.89	0.87	0.84	0.82	0.79	-	0.97	0.96	0.94	0.93	0.91	0.90	0.88	0.86	0.95	0.93	0.92	0.90	0.87	0.85	0.82	0.80
	88,000 / 24.1	0.91	0.89	0.87	0.84	0.82	0.79	0.77	-	0.96	0.95	0.94	0.92	0.91	0.89	0.86	0.84	0.94	0.92	0.90	0.88	0.85	0.83	0.80	0.78
	96,000 / 26.3	0.89	0.87	0.85	0.82	0.79	0.77	0.74	-	0.96	0.94	0.93	0.91	0.89	0.87	0.85	0.82	0.93	0.90	0.88	0.86	0.83	0.81	0.78	0.76
	104,000 / 28.5	0.87	0.85	0.82	0.79	0.76	0.74	0.72	-	0.95	0.93	0.92	0.90	0.87	0.85	0.83	0.80	0.91	0.88	0.86	0.84	0.81	0.78	0.76	0.73
	112,000 / 30.7	0.85	0.83	0.79	0.76	0.74	0.71	0.69	-	0.94	0.93	0.90	0.88	0.86	0.83	0.81	0.79	0.89	0.86	0.84	0.82	0.79	0.76	0.73	0.71
	120,000 / 32.9	0.83	0.79	0.76	0.73	0.71	0.68	-	-	0.93	0.91	0.89	0.86	0.84	0.82	0.79	0.76	0.87	0.84	0.82	0.79	0.76	0.73	0.71	0.69
	128,000 / 35.1	0.78	0.75	0.72	0.70	0.68	-	-	-	0.91	0.89	0.87	0.85	0.82	0.80	0.77	0.74	0.85	0.83	0.79	0.76	0.73	0.71	0.68	-
	136,000 / 35.1	0.73	0.71	0.68	-	-	-	-	-	0.90	0.87	0.85	0.83	0.80	0.77	0.74	0.71	0.83	0.79	0.75	0.72	0.70	0.68	-	-
	144,000 / 39.5	0.69	0.67	-	-	-	-	-	-	0.88	0.86	0.83	0.81	0.77	0.74	0.71	0.69	0.78	0.74	0.72	0.69	-	-	-	-
	152,000 / 41.6	-	-	-	-	-	-	-	-	0.86	0.84	0.82	0.77	0.74	0.71	0.68	-	0.73	0.70	0.68	-	-	-	-	-
	160,000 / 43.8	-	-	-	-	-	-	-	-	0.85	0.82	0.77	0.73	0.70	0.68	-	-	0.69	-	-	-	-	-	-	-
	168,000 / 46.0	-	-	-	-	-	-	-	-	0.82	0.76	0.72	0.69	-	-	-	-	-	-	-	-	-	-	-	-
	176,000 / 48.2	-	-	-	-	-	-	-	-	0.75	0.71	0.67	-	-	-	-	-	-	-	-	-	-	-	-	-
	184,000 / 50.4	-	-	-	-	-	-	-	-	0.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. **Outdoor ambient temperature** is based on annual average operating air temperature as seen by the fixture within its environmental conditions.
2. **Junction temperature** is calculated from in-situ, solder point measurement per LED manufacturers recommendation, and will vary based on drive current and nominal forward voltage of the LED.
3. **Thermal factor** is a prorate or derate value based on the in-situ solder point measurement and the relative luminous flux provided by the LED manufacturer.
4. **LED Lumen Maintenance Data chart** is actual lumen adjustment per the operating ambient. No additional prorate or derate required.