TROV® Flex

OVERVIEW • SPECIFICATIONS • ORDERING

EXTERIOR | **L09 FLEX**

DATE	PROJECT	FIRM	TYPE

THE ALL-SILICONE, FLEXIBLE LUMINAIRE WITH OPTICS, TROV FLEX L09 PACKS 2-STEP COLOR CONSISTENCY INTO A DURABLE PACKAGE SUITABLE FOR BOTH EXTERIOR AND INTERIOR USE. ITS ULTRA-DISCREET PROFILE MAKES IT AN IDEAL FIT FOR APPLICATIONS WHERE SPACE IS A PREMIUM.

FEATURES:

- DIMMABLE TO 0%
- 3 BEAM ANGLES
- FIELD CUTTABLE EVERY 6 INCHES
- 24 VDC CLASS 2
- 90+ CRI
- IP67 RATED FOR OUTDOOR AND INDOOR APPLICATIONS

MODEL SIZE	INTERIOR/ EXTERIOR	LENGTH	POWER	CCT	CRI	VOLTAGE	OPTICS
	E	120			90	CV24 - 24VDC	
L09	E	120 - 120"	05 - 5W/ft 09 - 9W/ft	27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	90 - 90CRI 80 CRI is available as Build to Order. Longer lead times apply. Consult your Ecosense Sales Rep for more information.	CV24 - 24VDC	10x10 15x40 ASYM

EXAMPLE: L09-E-120-05-27-90-CV24-15x40

PERFORMANCE	WATTS	OPTIC	LUMEN OUTPUT	EFFICACY	CBCP
	05	10x10	440 lm/FT (1,443 lm/m)	92 lm/W	4,345
		15x40	441 lm/FT (1,447 lm/m)	92 lm/W	700
		ASYM	428 lm/FT (1,405 lm/m)	89 lm/W	385
	09	10x10	714 lm/FT (2,344 lm/m)	84 lm/W	7,056
		15x40	716 lm/FT (2,350 lm/m)	84 lm/W	1,137
		ASYM	696 lm/FT (2,282 lm/m)	82 lm/W	626

ALL LUMEN DATA IS FROM 4000K 90CRI FIXTURES. PLEASE SEE PHOTOMETRY SPEC SHEET FOR ADDITIONAL LUMEN DATA.

COLOR RENDERING INDEX	90+	
COLOR CONSISTENCY	2-STEP MACADAM ELLIPSE	
LUMEN DEPRECIATION / RATED LIFE	WATTS	L70 @ 25C
	5W-9W	>50,000

*CALCULATIONS FOR LED FIXTURES ARE BASED ON MEASUREMENTS THAT COMPLY WITH IES LM-80 TESTING PROCEDURES AND IES TM-21 CALCULATOR.

ELECTRICAL	**MAX POWER CONSUMPTION**	5W/ft = 4.8W (15.7W/m) ; 9W/ft = 8.7W/ft (28.5W/m)
	MAX FIXTURE RUN LENGTH	5W/ft = 20ft (Interior) 10ft (Exterior), 9W/ft = 10ft
	OPERATING VOLTAGE	24VDC
	DRIVER	REMOTE DRIVER SOLD SEPARATELY
	STARTUP TEMPERATURE	-4˚F TO 122˚F (-20˚C TO 50˚C)
	OPERATING TEMPERATURE	-4˚F TO 122˚F (-20˚C TO 50˚C)
	STORAGE TEMPERATURE	-40˚F TO 176˚F (-40˚C TO 80˚C)
PHYSICAL	**HOUSING/LENS**	SILICONE HOUSING AND LENS
	WEIGHT	2.22oz/ft ; (206.5g/m)
	CONNECTORS	INTEGRAL MALE AND FEMALE CONNECTORS
	ENVIRONMENT	OUTDOOR WET LOCATION IP67 FOR OUTDOOR, MARINE, AND NATATORIUM APPLICATIONS
	MOUNTING OPTIONS	STAINLESS STEEL MOUNTING BRACKET NEEDED EVERY 6 INCHES. **SOLD SEPERATELY.**
	CUT LENGTH	CUTTABLE EVERY 6 INCHES (152.4MM)
	BEND RADIUS	3IN (75MM) VERTICAL, 0IN (0MM) HORIZONTAL
CONTROL	**DIMMING**	0%-100%
FIXTURE RATING & CERTIFICATIONS	**UL AND CE LISTED** **RoHS COMPLIANT** **TITLE 24 JA8**	
LIMITED WARRANTY	**5 YEARS**	

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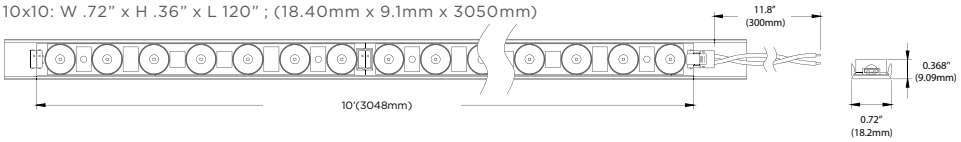
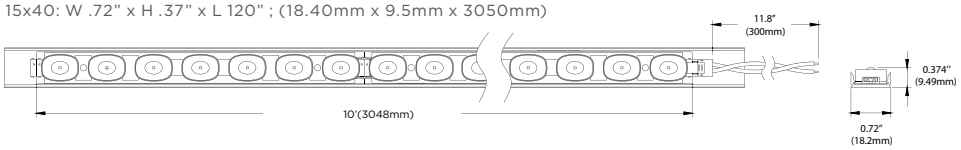
PHYSICAL

DIMENSIONS

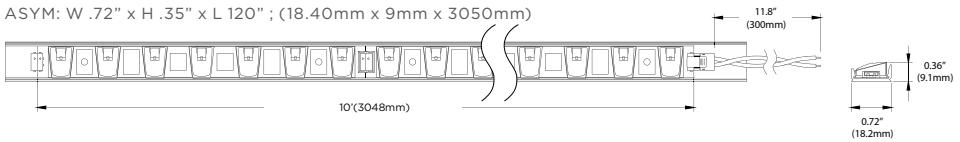
10x10: W .72" x H .36" x L 120" ; (18.40mm x 9.1mm x 3050mm)



15x40: W .72" x H .37" x L 120" ; (18.40mm x 9.5mm x 3050mm)



ASYM: W .72" x H .35" x L 120" ; (18.40mm x 9mm x 3050mm)



WIRING OPTIONS (Interior Use Only)

Cable Assembly, AVX Connector, Leader, 6 feet CBL-AVX-LDR-6ft
Cable Assembly, AVX Connector, Jumper, 4 inches CBL-AVX-JMP-4in
Cable Assembly, AVX Connector, Jumper, 12 inches CBL-AVX-JMP-12in
Cable Assembly, AVX Connector, Jumper, 6 feet CBL-AVX-JMP-6ft

L09 120 inch spools come with 12" wired leads. Leader and jumper cables are only needed when cutting to shorter lengths.

REMOTE DRIVER OPTIONS

MAGNETIC NORTH AMERICA

Driver, Magnetic, Exterior, MLV & TRIAC, 96W, 120/277V Dual Tap DRV-M-E-96W-120/277-SBC
Driver, Magnetic, Exterior, MLV & TRIAC, 60W, 120/277V Dual Tap DRV-M-E-60W-120/277-SBC
Driver, Magnetic, Exterior, MLV & TRIAC, 40W, 120/277V Dual Tap DRV-M-E-40W-120/277-SBC

ELECTRONIC NORTH AMERICA

Driver, Electronic, Exterior, 0-10V & TRIAC & ELV, 96W, 120-277V Multi-Volt DRV-E10-E-96W-120-277-LTF
Driver, Electronic, Exterior, 0-10V & TRIAC & ELV, 60W, 120-277V Multi-Volt DRV-E10-E-60W-120-277-LTF
Driver, Electronic, Exterior, 0-10V & TRIAC & ELV, 40W, 120-277V Multi-Volt DRV-E10-E-40W-120-277-LTF

ELECTRONIC INTERNATIONAL

Driver, Electronic, Exterior, 0-10V, 100W, 100-305V Multi-Volt, CE Only DRV-E10-E-100W-100-305-ELG
Driver, Electronic, Exterior, DALI, 100W, 100-305V, Multi-Volt, CE Only DRV-DALI-E-100W-100-305-ELG
Driver, Electronic, Exterior, 0-10V, 120W, 90-305V Multi-Volt, CE Only..... DRV-E10-E-120W-90-305-PWM
Driver, Electronic, Exterior, DALI, 120W, 90-305V Multi-Volt, CE Only DRV-DALI-E-120W-90-305-PWM

See Remote Driver Spec Sheet for more details.
Drivers can be fully loaded.

MAXIMUM DRIVER TO FIXTURE WIRE LENGTH CHART

	Total Wattage per Run									
Wire Gauge	**10W .42 A**	**20W .83 A**	**30W 1.3 A**	**40W 1.7 A**	**50W 2.1 A**	**60W 2.5 A**	**70W 2.9 A**	**80W 3.3 A**	**90W 3.75 A**	**100W 4.2 A**
20 AWG	85 ft.	43 ft.	27 ft.	21 ft.	17 ft.	14 ft.	12 ft.	11 ft.	9 ft.	8 ft.
18 AWG	134 ft.	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.	19 ft.	17 ft.	15 ft.	14 ft.
16 AWG	215 ft.	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.	31 ft.	27 ft.	24 ft.	22 ft.
14 AWG	345 ft.	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.	49 ft.	43 ft.	39 ft.	36 ft.
12 AWG	539 ft.	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.	77 ft	68 ft.	61 ft.	56 ft.
10 AWG	784 ft.	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.	112 ft.	98 ft.	97 ft.	82 ft.

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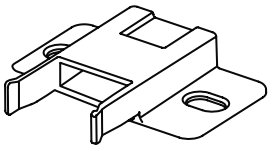
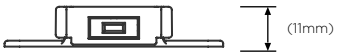
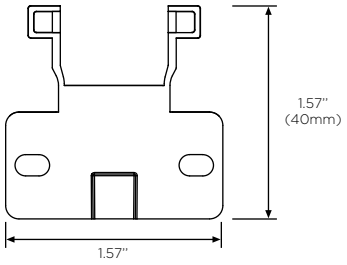
L09 MOUNTING AND CONNECTING ACCESSORIES

Terminator Cap..... **L09-A-CAP**

The terminator cap is only needed to seal the cut end of the fixture in wet locations. If the fixtures are not cut or are being installed in damp/dry locations, the terminator cap is not needed. One cap per cut is needed.

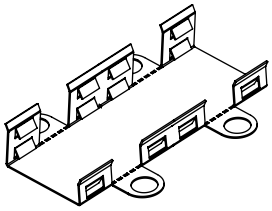


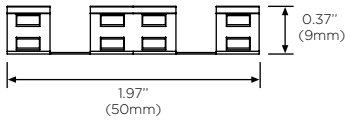


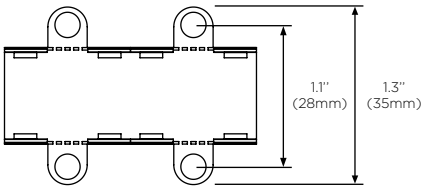


Mounting Bracket..... **L09-A-MNT-BRKT**

Mounting brackets need to be installed every 6 inches of fixtures

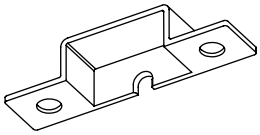


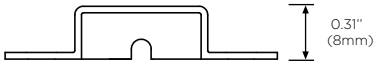


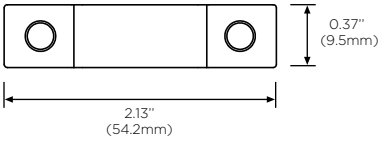


Strain Relief..... **L09-A-SR**

Strain reliefs are used to prevent accidental pull out of the AVX connector used on leader and jumper cables. They are not required but recommended for applications where the fixtures are accessible. Use one strain relief per leader cable and two per jumper cable.

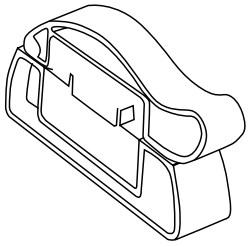






Cutting Tool..... **L09-A-CUTTOOL**

The cutting tool ensuresa clean safe cut that will not damage the optic or AVX connector. One cutter per installer is recommended.



NOTE: Information on this Spec Sheet is subject to change, please visit ecosenselighting.com/downloads/rise for the most updated information.

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PHOTOMETRIC DATA

90 CRI

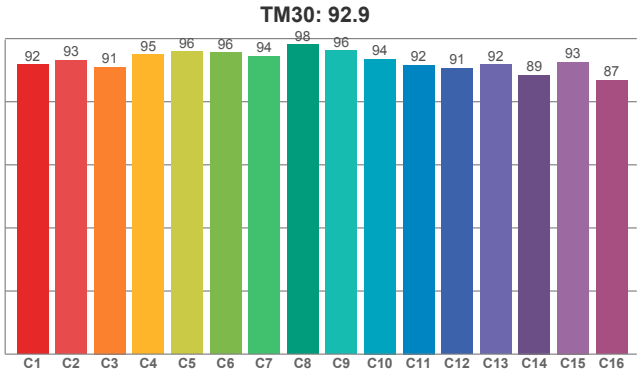
L90 5W

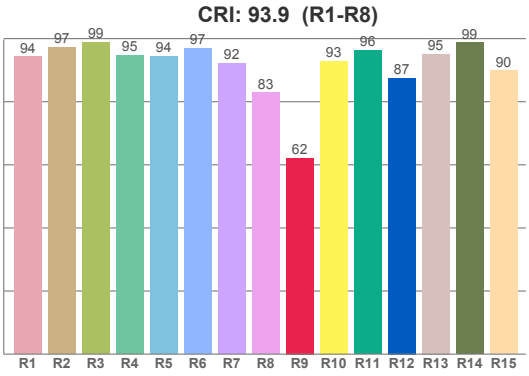
	10˚x10˚	15˚x40˚	ASYM
2700K			
Lumens	393	394	383
Efficacy	82	82	80
CBCP	3,886	720	366
3000K			
Lumens	415	416	404
Efficacy	86	87	84
CBCP	4,124	663	363
3500K			
Lumens	421	422	410
Efficacy	88	88	85
CBCP	3,420	670	272
4000K			
Lumens	440	441	428
Efficacy	92	92	89
CBCP	4,345	700	385

L90 9W

	10˚x10˚	15˚x40˚	ASYM
2700K			
Lumens	639	641	622
Efficacy	75	75	73
CBCP	6,311	1,016	560
3000K			
Lumens	674	676	656
Efficacy	79	79	77
CBCP	6,018	1,072	477
3500K			
Lumens	684	686	666
Efficacy	80	81	78
CBCP	6,371	1,088	492
4000K			
Lumens	714	716	696
Efficacy	84	84	82
CBCP	7,056	1,137	626

L09-E-012-05-27-90-CV24-ASYM (5 Watt, 2700K, 90 CRI, ASYM)





CRI R values, only R1-R8 are used to calculate final CRI value

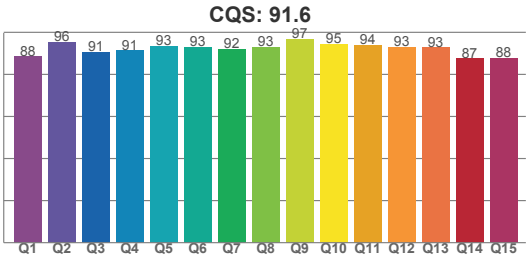
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94.28	97.21	98.79	94.72	94.38	96.97	92.20	82.84	62.18	92.95	96.30	87.50	95.14	98.72	89.85

TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.77	93.08	91.02	94.86	95.88	95.52	94.44	98.14	96.23	93.53	91.61	90.62	91.74	88.51	92.59	86.81

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.44	95.52	90.65	91.29	93.39	92.81	91.96	92.90	96.94	94.51	93.95	93.16	92.72	87.48	87.59



Color parameters

CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Duv
2801 K	93.9	62.2	92.9	100.0	91.6	0.5	0.4	0.3	0.3	-0.0005

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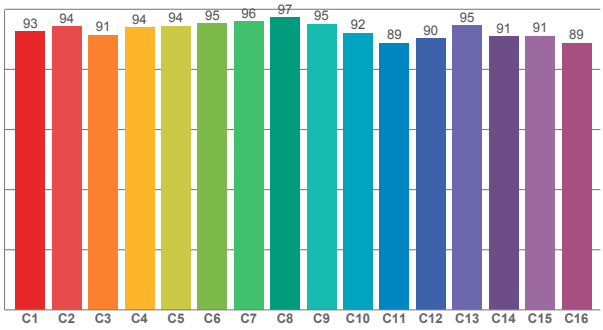
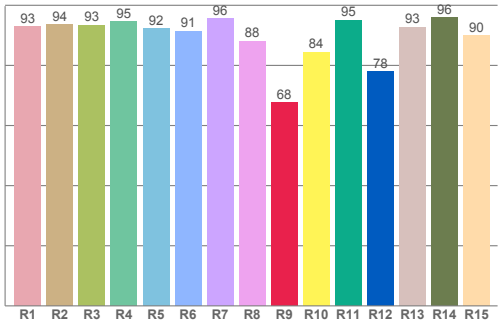
DATE | PROJECT | FIRM | TYPE

L09-E-012-05-35-90-CV24-ASYM (5 Watt, 3500K, 90 CRI, ASYM)

TM30: 92.8



CRI: 92.7 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.00	93.52	93.42	94.64	92.18	91.45	95.53	88.06	67.62	84.46	95.04	77.90	92.74	95.83	89.90

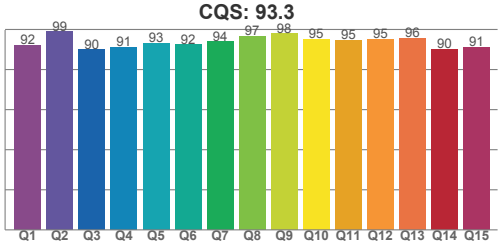
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.59	94.22	91.47	93.94	94.40	95.28	95.91	97.31	95.10	92.05	88.74	90.31	94.52	90.84	91.10	88.81

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.32	98.86	89.87	91.29	93.21	92.47	93.83	96.70	97.91	94.99	94.80	95.19	95.52	90.32	91.02

CQS: 93.3

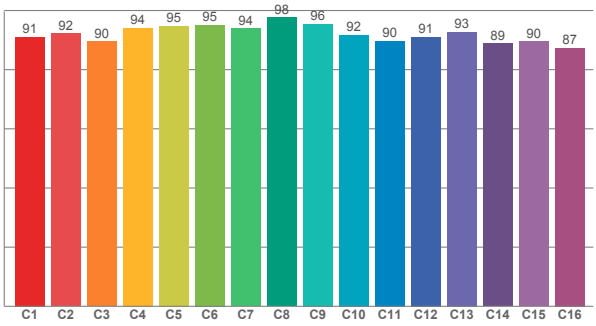


Color parameters

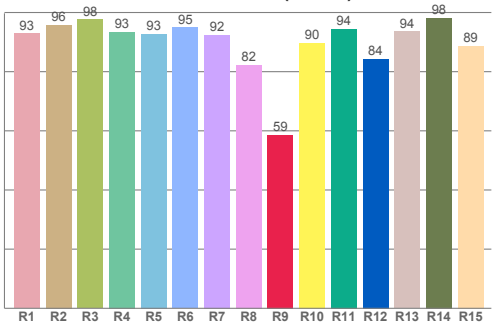
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Duv
3459 K	92.7	67.6	92.8	100.1	93.3	0.4	0.4	0.2	0.3	0.0032

L09-E-012-09-30-90-CV24-ASYM (9 Watt, 3000K, 90 CRI, ASYM)

TM30: 92.3



CRI: 92.8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92.86	95.81	97.66	93.48	92.77	94.98	92.42	82.23	58.67	89.68	94.46	84.25	93.61	98.18	88.71

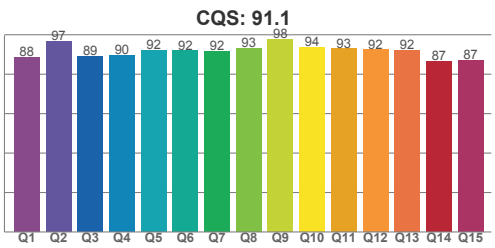
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.12	92.21	89.56	94.11	94.77	95.19	93.90	97.66	95.52	91.80	89.64	91.12	92.73	88.87	89.51	87.29

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.49	96.82	89.20	89.75	92.17	91.96	91.56	93.06	97.74	93.68	93.02	92.44	92.19	86.58	87.06

CQS: 91.1



Color parameters

CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Duv
3107 K	92.8	58.7	92.3	100.0	91.1	0.4	0.4	0.2	0.3	-0.0004

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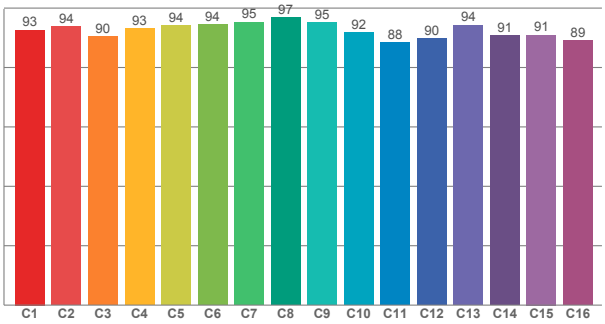
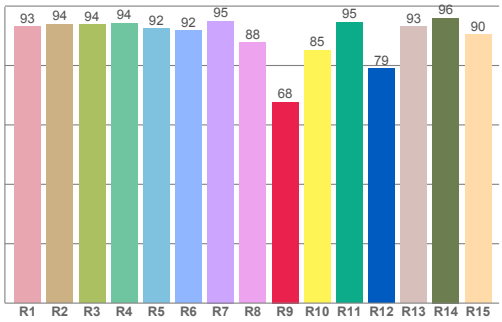
DATE	PROJECT	FIRM	TYPE

L09-E-012-09-35-90-CV24-10x10 (9 Watt, 3500K, 90 CRI, 10x10)

TM30: 92.4



CRI: 92.7 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.17	93.91	93.71	94.24	92.43	91.78	94.96	87.75	67.70	85.14	94.59	79.04	93.06	95.97	90.34

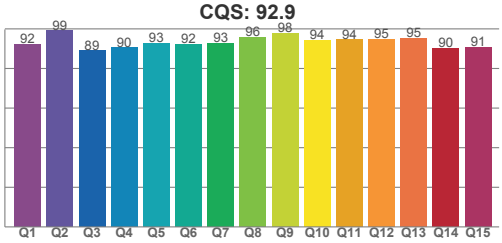
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.61	93.84	90.36	93.03	94.05	94.43	95.26	96.82	95.04	91.84	88.34	89.76	94.24	90.81	90.98	88.97

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.18	99.00	88.95	90.44	92.90	92.14	92.78	95.91	97.87	94.20	94.48	94.86	95.18	90.31	90.88

CQS: 92.9



Color parameters

CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Duv
3469 K	92.7	67.7	92.4	100.6	92.9	0.4	0.4	0.2	0.3	0.0017

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