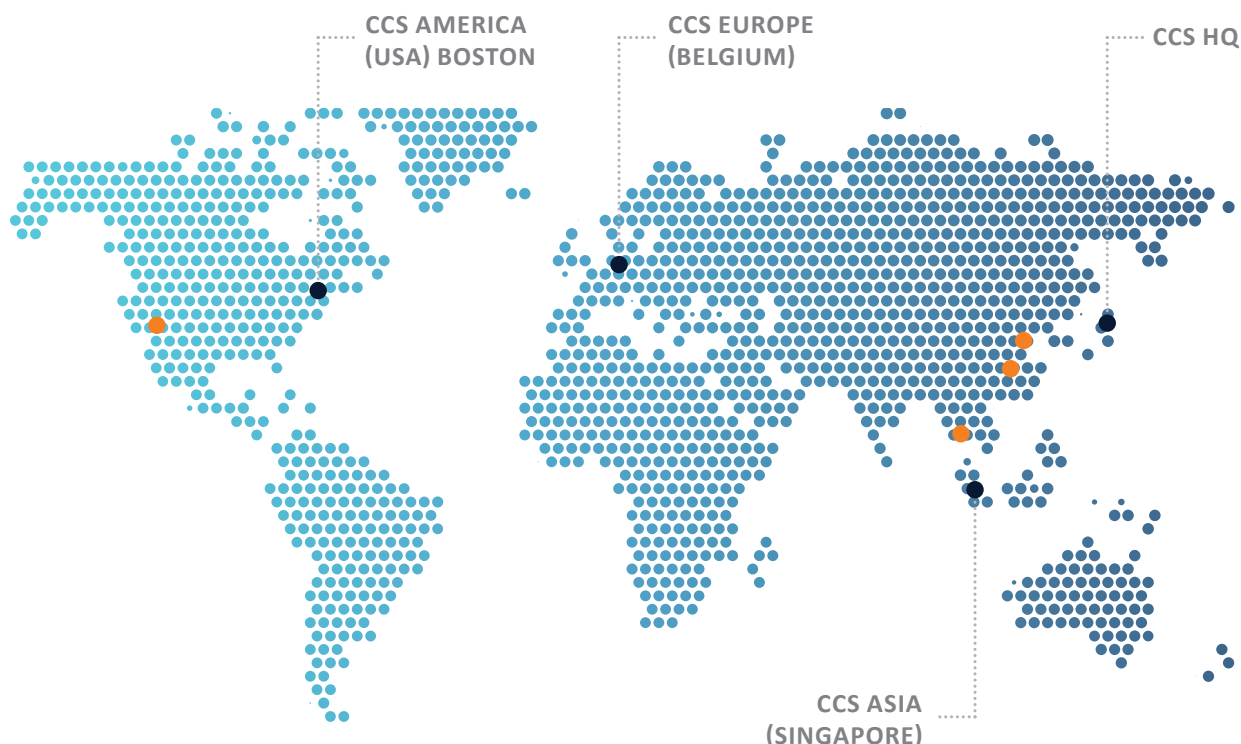


LAK 2016

MACHINE VISION LIGHTING LAK PRODUCT CATALOG



WORLDWIDE NETWORK



CCS has world-wide network to support you throughout the world.

We are dedicated to providing you with the optimized lighting solution for image processing applications to improve the product quality and production yield.

LOCAL SUPPORT

We have testing lab in each region with wide range of demo loaners to provide technical support in timely manner. We also have R&D team in Japan & Singapore to develop a customized solution for your specific need.

CUSTOMER CARE

Our sales team always listen to customers' voice and propose the optimum solution. We do our utmost efforts to maximize your satisfaction.

QUALITY PRODUCTS

We commit to deliver quality products from both CCS and LAK range as we believe product quality and reliability is the most important part for our industry.

QUICK DELIVERY

Each office has off-the-shelf stock and deliver CCS & LAK products in short lead time to cope with your sudden demands.

DIRECT ILLUMINATION

Near-Axis High Angle Ring Light	4
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NEAR-AXIS HIGH ANGLE RING LIGHT

SR SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SR	SR-32R	Red	630nm	1.6	D*	P*	A	Fig. 1
SR	SR-32G	Green	525nm	1.6	D*	P*	A	
SR	SR-32B	Blue	470nm	1.6	D*	P*	A	
SR	SR-32W	White	5,500k	2.6	D*	P*	A	
SR	SR-32IR	Infrared	940nm	1.6	D*	P*	A	
SR	SR-42R	Red	630nm	2.2	D*	P*	A	Fig. 2
SR	SR-42G	Green	525nm	2.2	D*	P*	A	
SR	SR-42B	Blue	470nm	2.2	D*	P*	A	
SR	SR-42W	White	5,500k	3.2	D*	P*	A	
SR	SR-42IR	Infrared	940nm	2.2	D*	P*	A	
SR	SR-50R	Red	630nm	3.1	D*	P*	A	Fig. 3
SR	SR-50G	Green	525nm	3.1	D*	P*	A	
SR	SR-50B	Blue	470nm	3.1	D*	P*	A	
SR	SR-50W	White	5,500k	4.7	D*	P*	A	
SR	SR-50IR	Infrared	940nm	3.1	D*	P*	A	
SR	SR-70R	Red	630nm	5.8	D*	P*	A	Fig. 4
SR	SR-70G	Green	525nm	5.8	D*	P*	A	
SR	SR-70B	Blue	470nm	5.8	D*	P*	A	
SR	SR-70W	White	5,500k	7.8	D*	P*	A	
SR	SR-70IR	Infrared	940nm	5.8	D*	P*	A	
SR	SR-90R	Red	630nm	11	D*	P*	A	Fig. 5
SR	SR-90G	Green	525nm	11	D*	P*	A	
SR	SR-90B	Blue	470nm	11	D*	P*	A	
SR	SR-90W	White	5,500k	13	D*	P*	A	
SR	SR-90IR	Infrared	940nm	11	D*	P*	A	

Note: The following codes are used to indicate the options.

- D = Diffuser, P = Polarizer, A = Adapter

- * = Requires adapter

OPTIONS

Diffuser		Polarizer		Adapter	
Part Number	Applicable LED Unit	Part Number	Applicable LED Unit	Part Number	Applicable LED Unit
DF-LDR-32	SR-32x	PL-LDR-32	SR-32x	AD-LDR-32	SR-32x
DF-LDR-42	SR-42x	PL-LDR-42	SR-42x	AD-LDR-42	SR-42x
DF-LDR-50	SR-50x	PL-LDR-50	SR-50x	AD-LDR-50	SR-50x
DF-LDR-70	SR-70x	PL-LDR-70	SR-70x	AD-LDR-70	SR-70x
DF-LDR-90	SR-90x	PL-LDR-90	SR-90x	AD-LDR-90	SR-90x

DIMENSIONS (MM)

Fig. 1

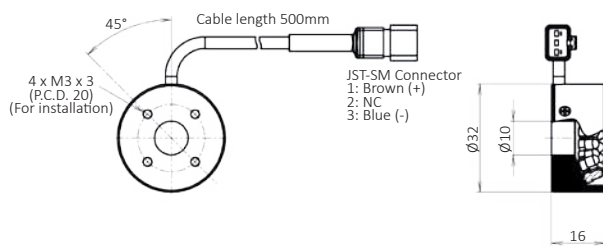


Fig. 2

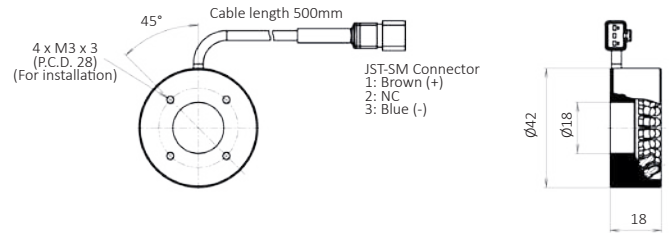


Fig. 3

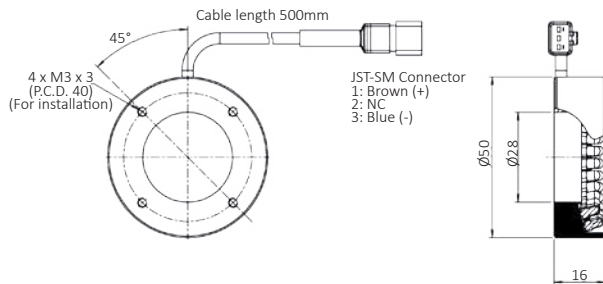


Fig. 4

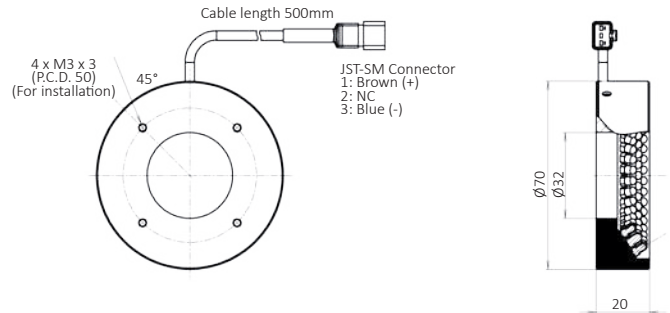
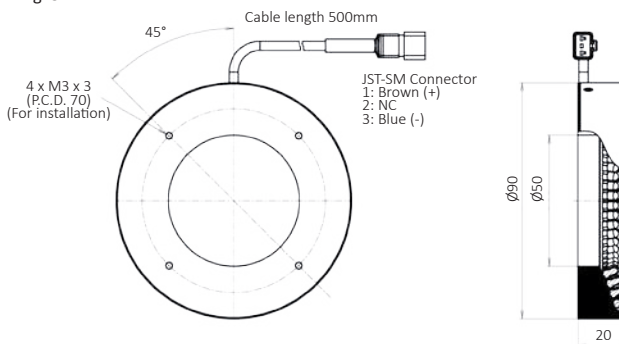
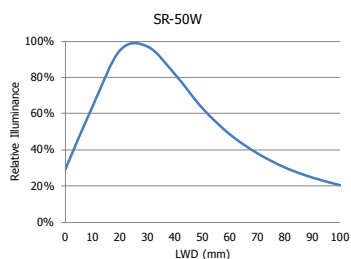


Fig. 5

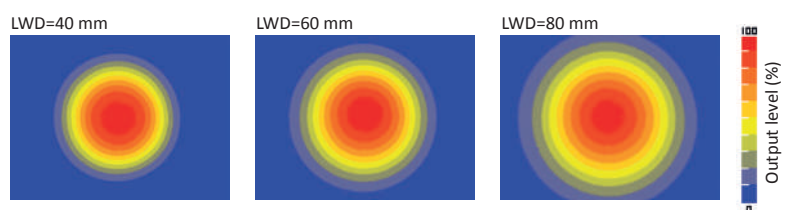


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)

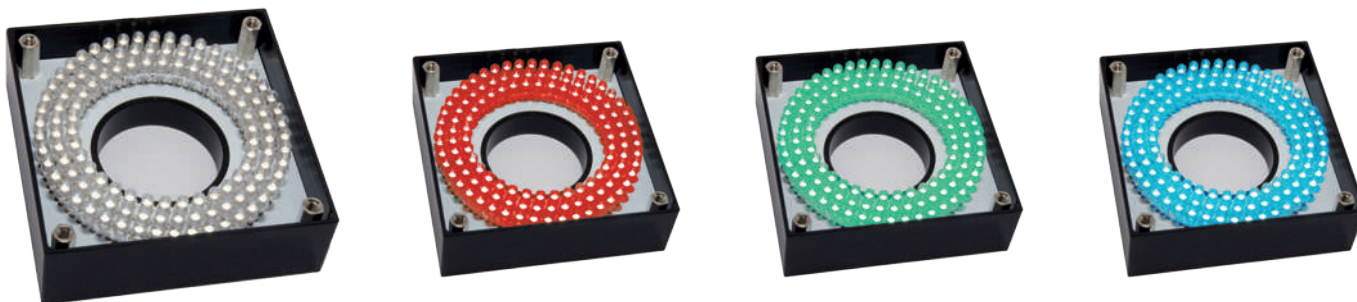


Uniformity Data SR-50W



NEAR-AXIS HIGH ANGLE SQUARE LIGHT

SRQ SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SRQ	SRQ-56R	Red	630nm	3.1	D	P	-	Fig. 1
SRQ	SRQ-56G	Green	525nm	3.1	D	P	-	
SRQ	SRQ-56B	Blue	470nm	3.1	D	P	-	
SRQ	SRQ-56W	White	5,500k	5.6	D	P	-	
SRQ	SRQ-56IR	Infrared	940nm	3.1	D	P	-	
SRQ	SRQ-70R	Red	630nm	6.1	D	P	-	Fig. 2
SRQ	SRQ-70G	Green	525nm	6.1	D	P	-	
SRQ	SRQ-70B	Blue	470nm	6.1	D	P	-	
SRQ	SRQ-70W	White	5,500k	11	D	P	-	
SRQ	SRQ-70IR	Infrared	940nm	6.1	D	P	-	

OPTIONS

Diffuser		Polarizer	
Part Number	Applicable LED Unit	Part Number	Applicable LED Unit
DF-SRQ-56	SRQ-56x	PL-SRQ-56	SRQ-56x
DF-SRQ-70	SRQ-70x	PL-SRQ-70	SRQ-70x

DIMENSIONS (MM)

Fig. 1

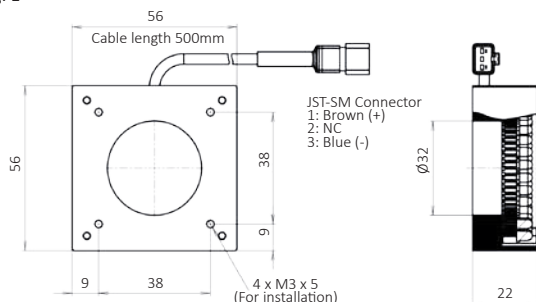
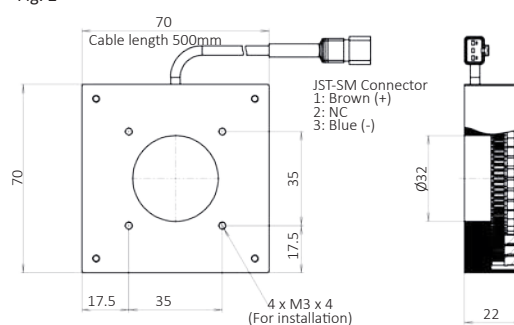
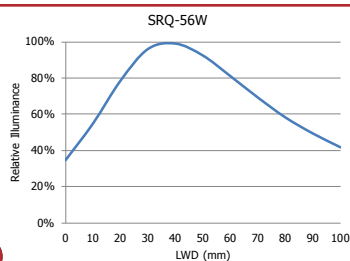


Fig. 2

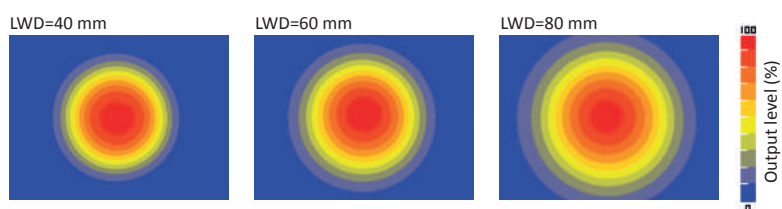


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)



Uniformity Data SRQ-56W





OFF-AXIS LOW ANGLE RING LIGHT

SRL SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SRL	SRL-74R	Red	630nm	4.6	D	-	-	Fig. 1
SRL	SRL-74G	Green	525nm	4.6	D	-	-	
SRL	SRL-74B	Blue	470nm	4.6	D	-	-	
SRL	SRL-74W	White	5,500k	7.8	D	-	-	
SRL	SRL-74IR	Infrared	940nm	4.6	D	-	-	
SRL	SRL-100R	Red	630nm	9.1	D	-	-	Fig. 2
SRL	SRL-100G	Green	525nm	9.1	D	-	-	
SRL	SRL-100B	Blue	470nm	9.1	D	-	-	
SRL	SRL-100W	White	5,500k	16	D	-	-	
SRL	SRL-100IR	Infrared	940nm	9.1	D	-	-	
SRL	SRL-132R	Red	630nm	13	D	-	-	Fig. 3
SRL	SRL-132G	Green	525nm	13	D	-	-	
SRL	SRL-132B	Blue	470nm	13	D	-	-	
SRL	SRL-132W	White	5,500k	20	D	-	-	
SRL	SRL-132IR	Infrared	940nm	13	D	-	-	
SRL	SRL-208R	Red	630nm	22	D	-	-	Fig. 4
SRL	SRL-208G	Green	525nm	22	D	-	-	
SRL	SRL-208B	Blue	470nm	22	D	-	-	
SRL	SRL-208W	White	5,500k	33	D	-	-	
SRL	SRL-208IR	Infrared	940nm	22	D	-	-	

Note: The following codes are used to indicate the options.
- D = Diffuser

OPTIONS

Diffuser	
Part Number	Applicable LED Unit
DF-LDR-74LA	SRL-74x
DF-LDR-100LA	SRL-100x
DF-LDR-132LA	SRL-132x
DF-LDR-208LA	SRL-208x

DIMENSIONS (MM)

Fig. 1

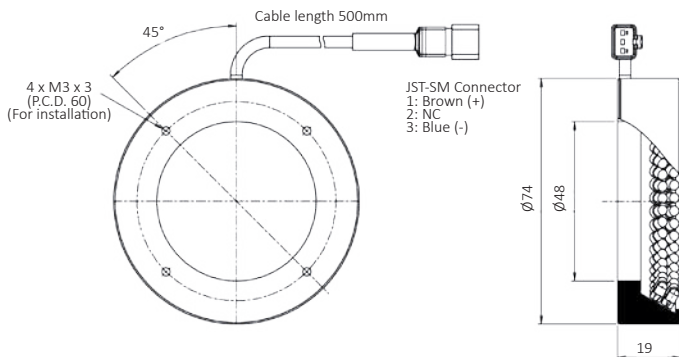


Fig. 2

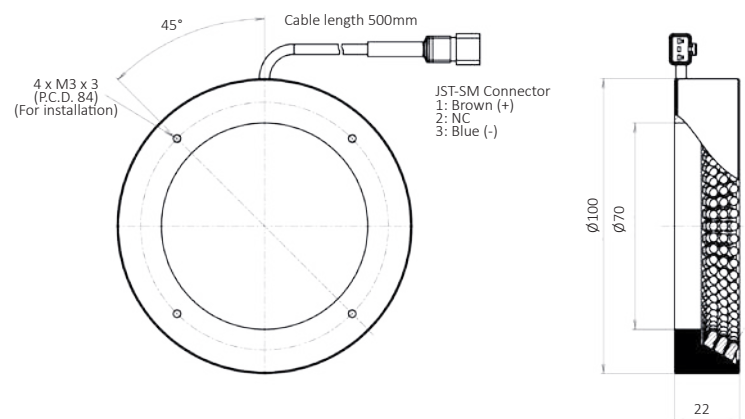


Fig. 3

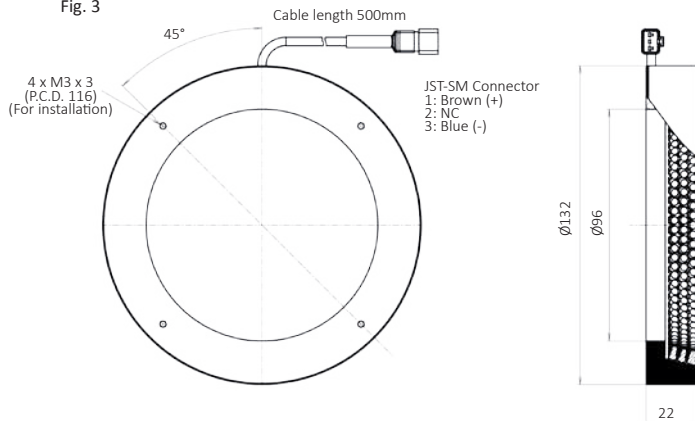
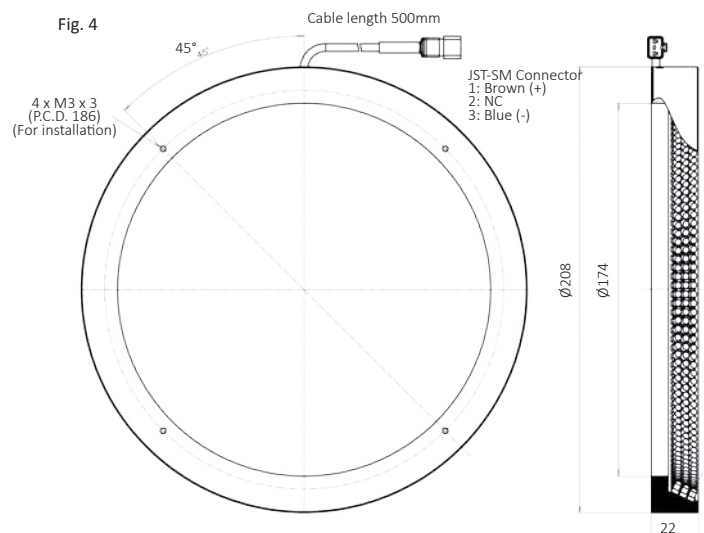
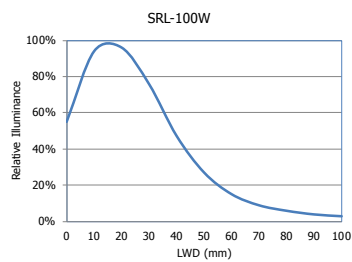


Fig. 4

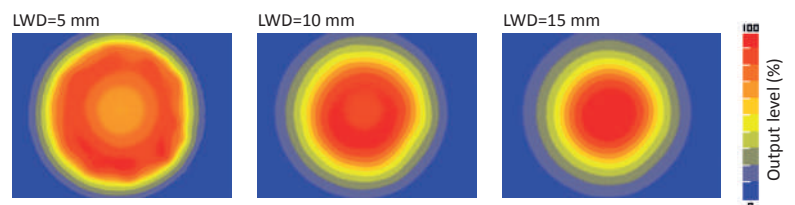


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)

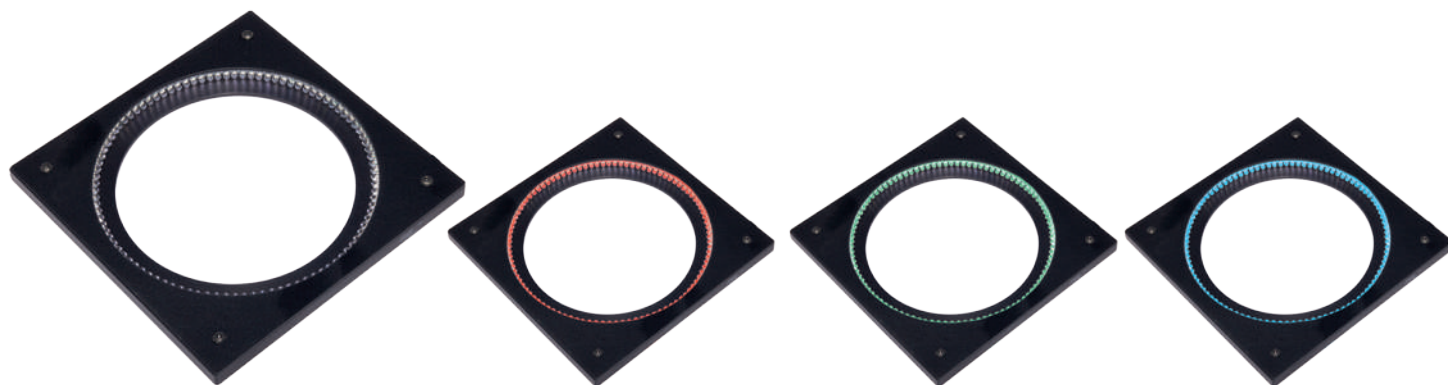


Uniformity Data SRL-100W



OFF-AXIS LOW ANGLE RING LIGHT

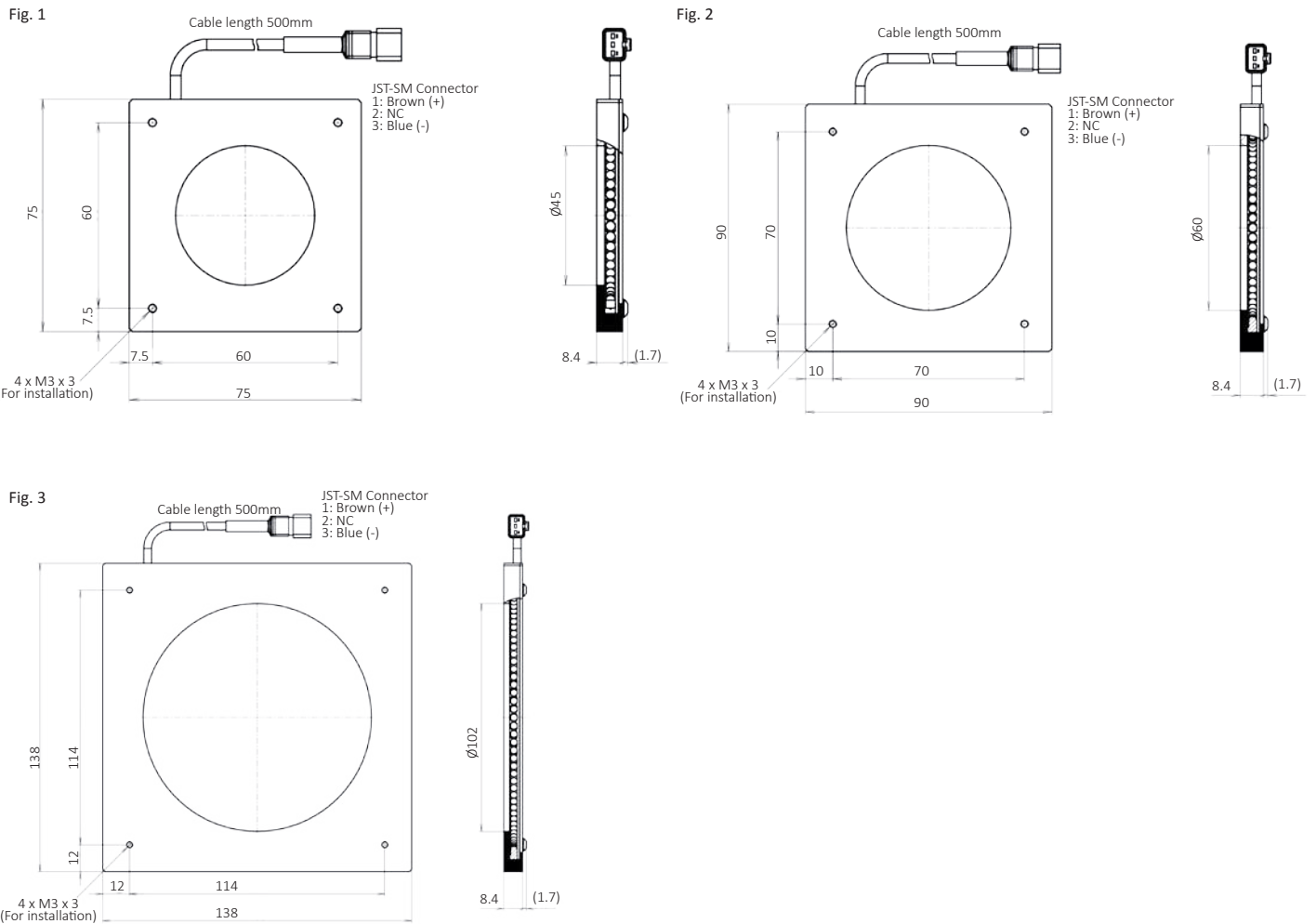
SRZ SERIES



PRODUCT LINE UP

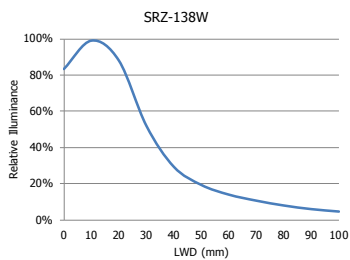
Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SRZ	SRZ-75R	Red	630nm	2.6	-	-	-	Fig. 1
SRZ	SRZ-75G	Green	525nm	2.6	-	-	-	
SRZ	SRZ-75B	Blue	470nm	2.6	-	-	-	
SRZ	SRZ-75W	White	5,500k	4.3	-	-	-	
SRZ	SRZ-90R	Red	630nm	3.1	-	-	-	Fig. 2
SRZ	SRZ-90G	Green	525nm	3.1	-	-	-	
SRZ	SRZ-90B	Blue	470nm	3.1	-	-	-	
SRZ	SRZ-90W	White	5,500k	5.2	-	-	-	
SRZ	SRZ-138R	Red	630nm	5.1	-	-	-	Fig. 3
SRZ	SRZ-138G	Green	525nm	5.1	-	-	-	
SRZ	SRZ-138B	Blue	470nm	5.1	-	-	-	
SRZ	SRZ-138W	White	5,500k	8.6	-	-	-	

DIMENSIONS (MM)

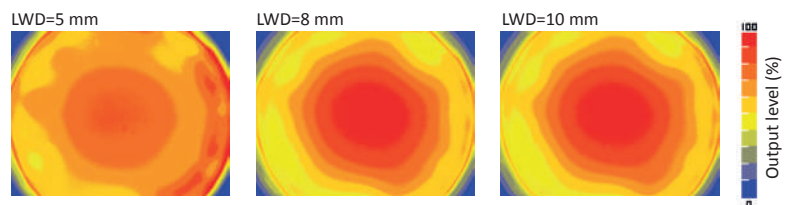


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)

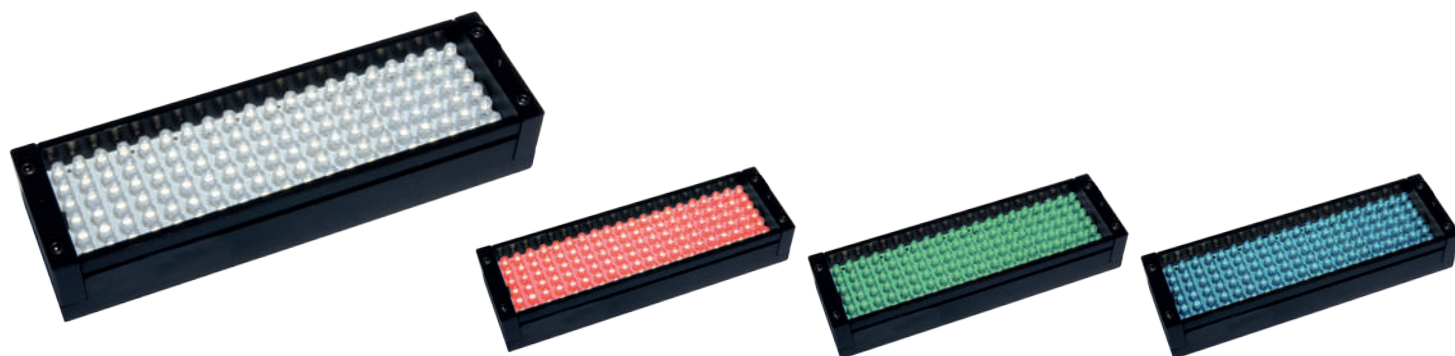


Uniformity Data SRZ-138W



BAR LIGHT

SL SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SL	SL-33X8R	Red	630nm	1.3	D	P	-	Fig. 1
SL	SL-33X8G	Green	525nm	1.3	D	P	-	
SL	SL-33X8B	Blue	470nm	1.3	D	P	-	
SL	SL-33X8W	White	5,500k	2.1	D	P	-	
SL	SL-33X8IR	Infrared	940nm	1.3	D	P	-	
SL	SL-50X15R	Red	630nm	1.6	D	P	-	Fig. 2
SL	SL-50X15G	Green	525nm	1.6	D	P	-	
SL	SL-50X15B	Blue	470nm	1.6	D	P	-	
SL	SL-50X15W	White	5,500k	2.6	D	P	-	
SL	SL-50X15IR	Infrared	940nm	1.6	D	P	-	
SL	SL-100X15R	Red	630nm	3.1	D	P	-	Fig. 3
SL	SL-100X15G	Green	525nm	3.1	D	P	-	
SL	SL-100X15B	Blue	470nm	3.1	D	P	-	
SL	SL-100X15W	White	5,500k	5.2	D	P	-	
SL	SL-100X15IR	Infrared	940nm	3.1	D	P	-	
SL	SL-150X15R	Red	630nm	4.6	D	P	-	Fig. 4
SL	SL-150X15G	Green	525nm	4.6	D	P	-	
SL	SL-150X15B	Blue	470nm	4.6	D	P	-	
SL	SL-150X15W	White	5,500k	7.8	D	P	-	
SL	SL-150X15IR	Infrared	940nm	4.6	D	P	-	
SL	SL-200X15R	Red	630nm	6.1	D	P	-	Fig. 5
SL	SL-200X15G	Green	525nm	6.1	D	P	-	
SL	SL-200X15B	Blue	470nm	6.1	D	P	-	
SL	SL-200X15W	White	5,500k	11	D	P	-	
SL	SL-200X15IR	Infrared	940nm	6.1	D	P	-	
SL	SL-250X15R	Red	630nm	7.6	D	P	-	Fig. 6
SL	SL-250X15G	Green	525nm	7.6	D	P	-	
SL	SL-250X15B	Blue	470nm	7.6	D	P	-	
SL	SL-250X15W	White	5,500k	13	D	P	-	
SL	SL-250X15IR	Infrared	940nm	7.6	D	P	-	

Note: The following codes are used to indicate the options.

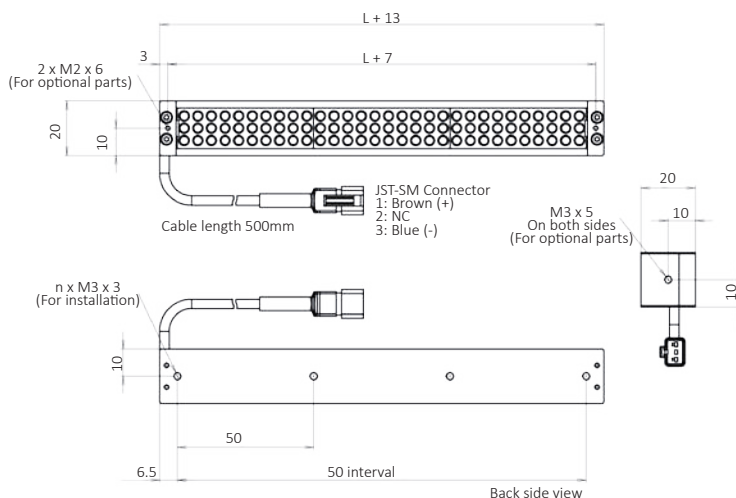
- D = Diffuser, P = Polarizer

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SL	SL-300X15R	Red	630nm	9.1	D	P	-	Fig. 7
SL	SL-300X15G	Green	525nm	9.1	D	P	-	
SL	SL-300X15B	Blue	470nm	9.1	D	P	-	
SL	SL-300X15W	White	5,500k	16	D	P	-	
SL	SL-300X15IR	Infrared	940nm	9.1	D	P	-	
SL	SL-75X30R	Red	630nm	4.6	D	P	-	Fig. 8
SL	SL-75X30G	Green	525nm	4.6	D	P	-	
SL	SL-75X30B	Blue	470nm	4.6	D	P	-	
SL	SL-75X30W	White	5,500k	6.1	D	P	-	
SL	SL-75X30IR	Infrared	940nm	4.6	D	P	-	
SL	SL-100X30R	Red	630nm	6.1	D	P	-	Fig. 9
SL	SL-100X30G	Green	525nm	6.1	D	P	-	
SL	SL-100X30B	Blue	470nm	6.1	D	P	-	
SL	SL-100X30W	White	5,500k	8.1	D	P	-	
SL	SL-100X30IR	Infrared	940nm	6.1	D	P	-	
SL	SL-150X30R	Red	630nm	9.1	D	P	-	Fig. 10
SL	SL-150X30G	Green	525nm	9.1	D	P	-	
SL	SL-150X30B	Blue	470nm	9.1	D	P	-	
SL	SL-150X30W	White	5,500k	13	D	P	-	
SL	SL-150X30IR	Infrared	940nm	9.1	D	P	-	
SL	SL-200X30R	Red	630nm	13	D	P	-	Fig. 11
SL	SL-200X30G	Green	525nm	13	D	P	-	
SL	SL-200X30B	Blue	470nm	13	D	P	-	
SL	SL-200X30W	White	5,500k	17	D	P	-	
SL	SL-200X30IR	Infrared	940nm	13	D	P	-	
SL	SL-300X30R	Red	630nm	19	D	P	-	Fig. 12
SL	SL-300X30G	Green	525nm	19	D	P	-	
SL	SL-300X30B	Blue	470nm	19	D	P	-	
SL	SL-300X30W	White	5,500k	25	D	P	-	
SL	SL-300X30IR	Infrared	940nm	19	D	P	-	

SEMI-CUSTOMIZATION

50X15mm Module

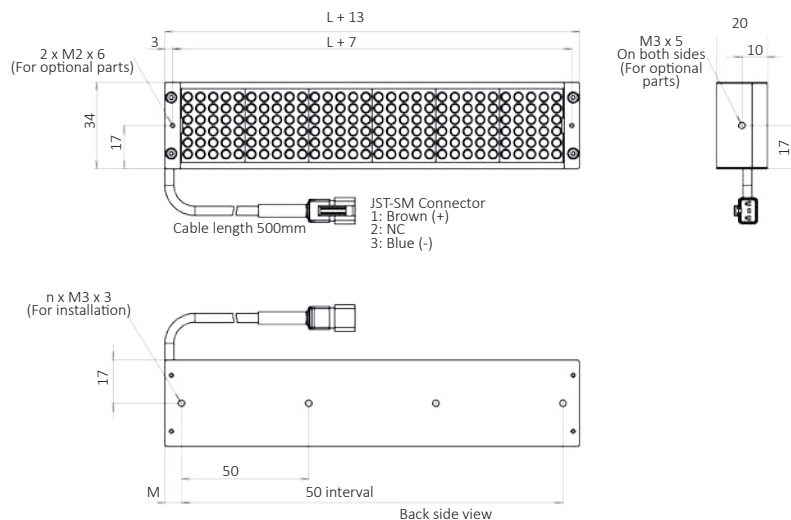
Formula	SL-50NX15C
Factor N	N = x1 ~ 20 (maximum length is 1,000mm)
Factor C	C = R/G/B/W/IR (choice of Red, Green, Blue, White or IR940nm)



Part Number	L (Emitting Surface)	n	Power Consumption (W)
SL-350X15x	350	8	11
SL-400X15x	400	9	13
SL-450X15x	450	10	14
SL-500X15x	500	11	16
SL-550X15x	550	12	17
SL-600X15x	600	13	19
SL-650X15x	650	14	20
SL-700X15x	700	15	22
SL-750X15x	750	16	23
SL-800X15x	800	17	25
SL-850X15x	850	18	26
SL-900X15x	900	19	28
SL-950X15x	950	20	29
SL-1000X15x	1000	21	31

25X30mm Module

Formula	SL-25NX30C
Factor N	$N = x2 \sim 20$ (maximum length is 500mm)
Factor C	C = R/G/B/W/IR (choice of Red, Green, Blue, White or IR940nm)



Part Number	L (Emitting Surface)	M	n	Power Consumption (W)
SL-50X30x	50	6.5	2	3.1
SL-125X30x	125	19	3	7.6
SL-175X30x	175	19	4	11
SL-225X30x	225	19	5	14
SL-250X30x	250	6.5	6	16
SL-275X30x	275	19	6	17
SL-325X30x	325	19	7	20
SL-350X30x	350	6.5	8	22
SL-375X30x	375	19	8	23
SL-400X30x	400	6.5	9	25
SL-425X30x	425	19	9	26
SL-450X30x	450	6.5	10	28
SL-475X30x	475	19	10	29
SL-500X30x	500	6.5	11	31

x = R, B, G, W, IR

OPTIONS

Diffuser		Polarizer	
Part Number	Applicable LED Unit	Part Number	Applicable LED Unit
DF-SL-33X8	SL-33X8x	PL-SL-33X8	SL-33X8x
DF-SL-50X15	SL-50X15x	PL-SL-50X15	SL-50X15x
DF-SL-100X15	SL-100X15x	PL-SL-100X15	SL-100X15x
DF-SL-150X15	SL-150X15x	PL-SL-150X15	SL-150X15x
DF-SL-200X15	SL-200X15x	PL-SL-200X15	SL-200X15x
DF-SL-250X15	SL-250X15x	PL-SL-250X15	SL-250X15x
DF-SL-300X15	SL-300X15x	PL-SL-300X15	SL-300X15x
DF-SL-75X30	SL-75X30x	PL-SL-75X30	SL-75X30x
DF-SL-100X30	SL-100X30x	PL-SL-100X30	SL-100X30x
DF-SL-150X30	SL-150X30x	PL-SL-150X30	SL-150X30x
DF-SL-200X30	SL-200X30x	PL-SL-200X30	SL-200X30x
DF-SL-300X30	SL-300X30x	PL-SL-300X30	SL-300X30x

DIMENSIONS (MM)

Fig. 1

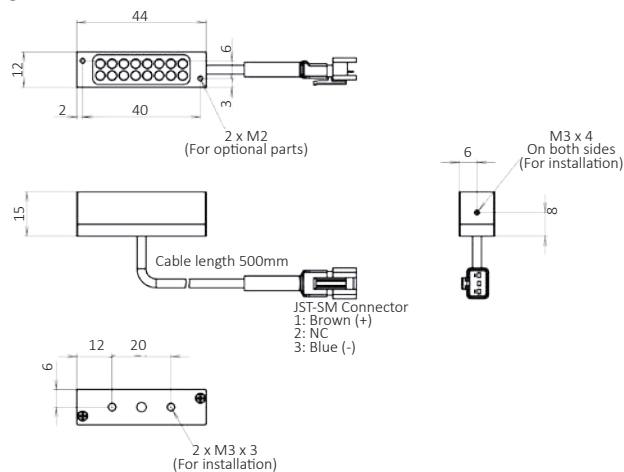


Fig. 2

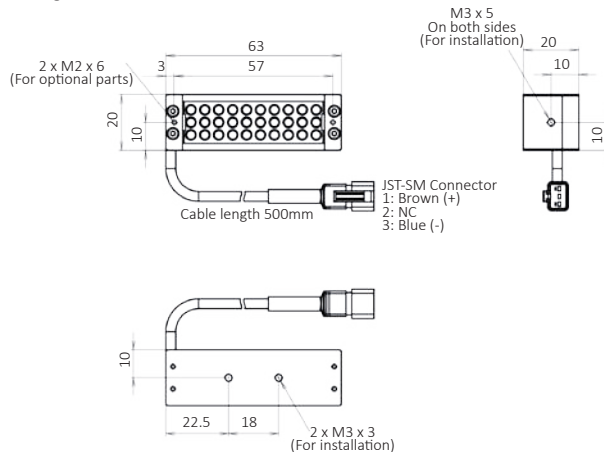


Fig. 3

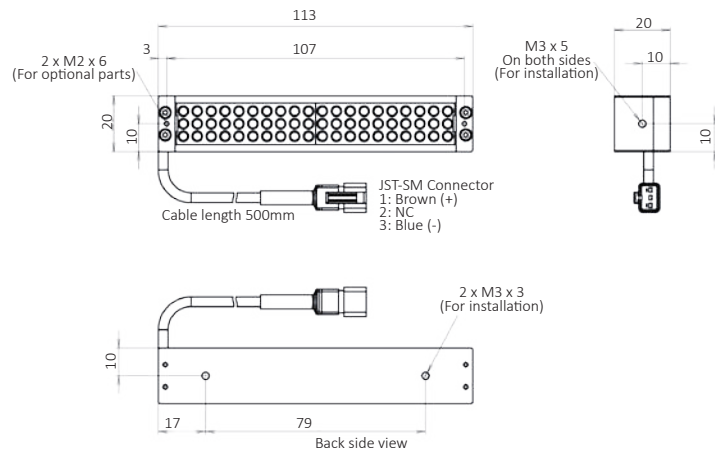


Fig. 4

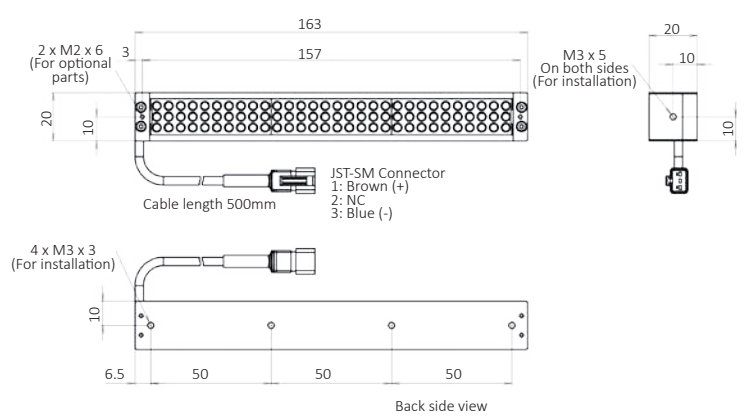


Fig. 5

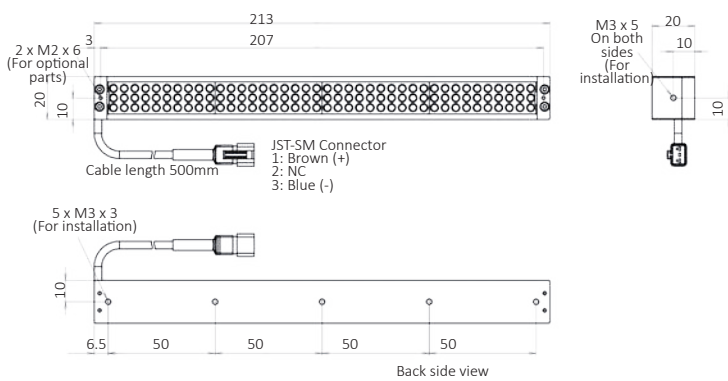


Fig. 6

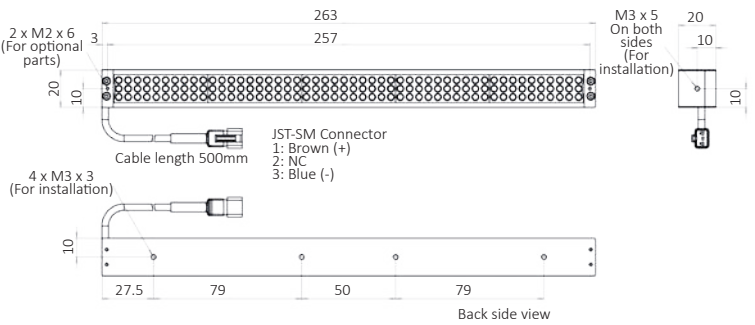


Fig. 7

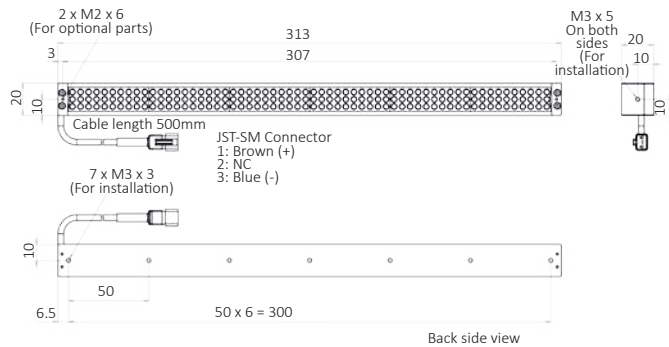


Fig. 8

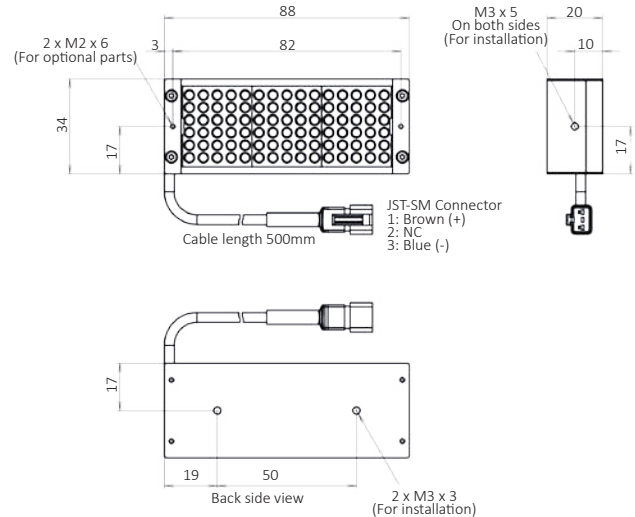


Fig. 8

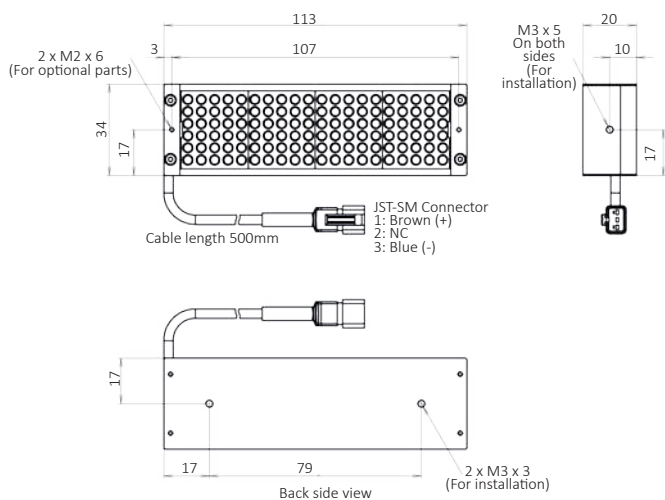


Fig. 10

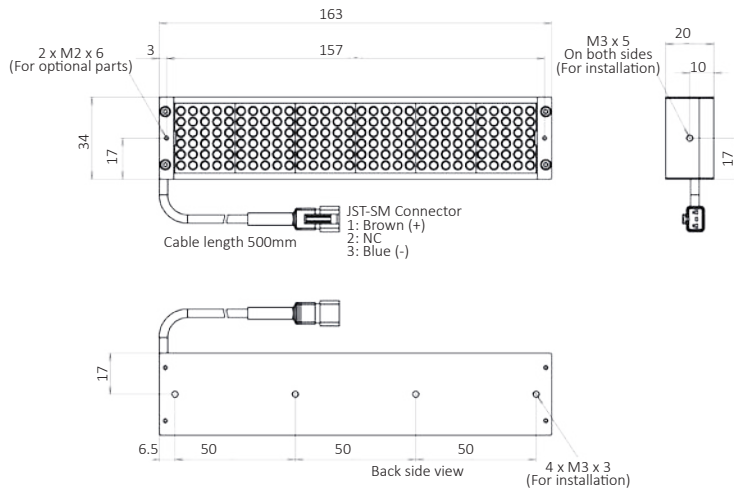


Fig. 11

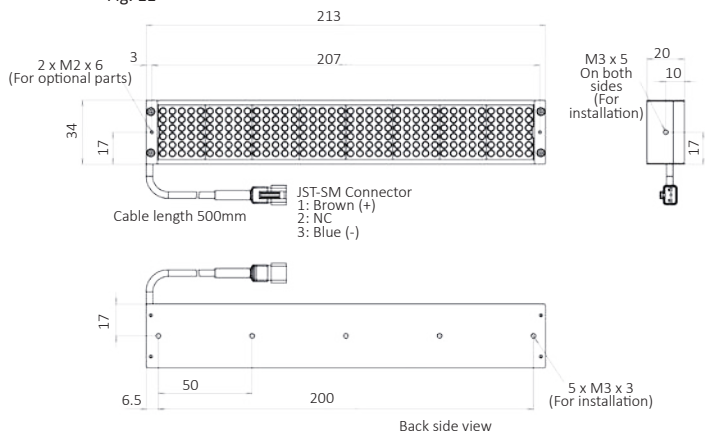
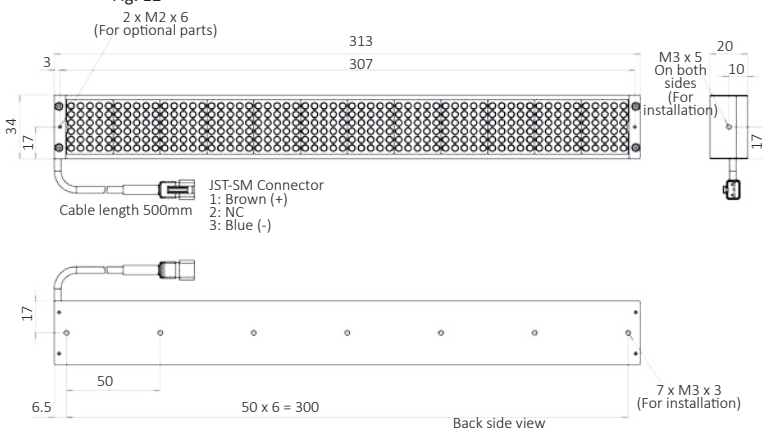
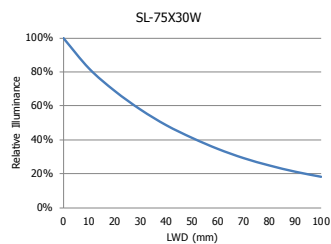


Fig. 12

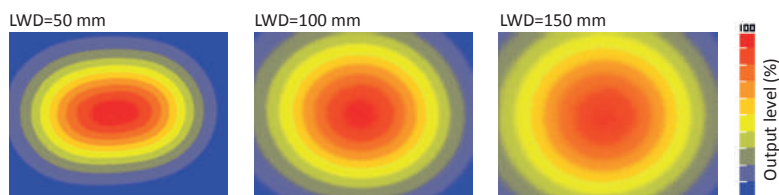


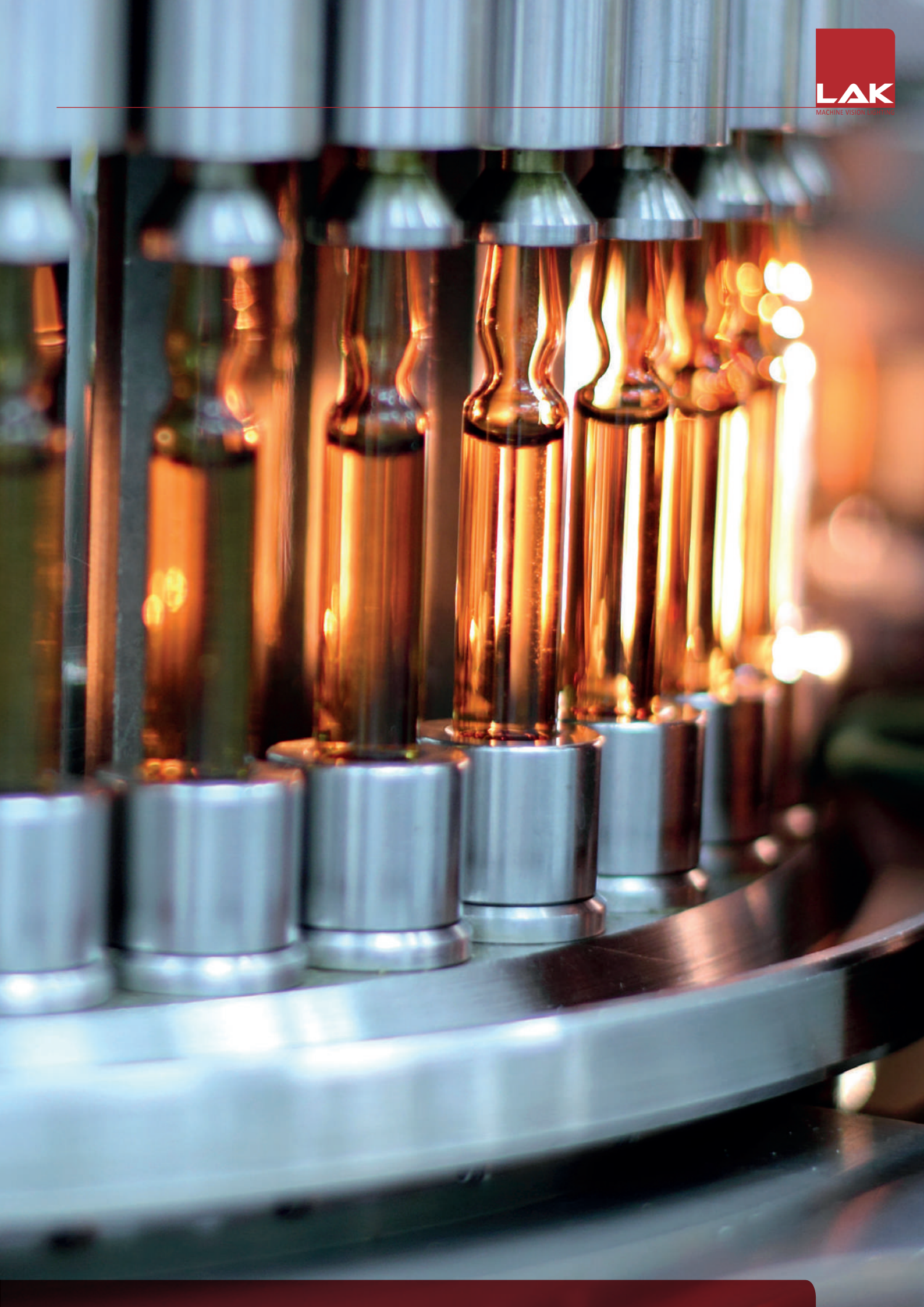
TECHNICAL DATA

Illuminance Graph (Relative Illuminance)



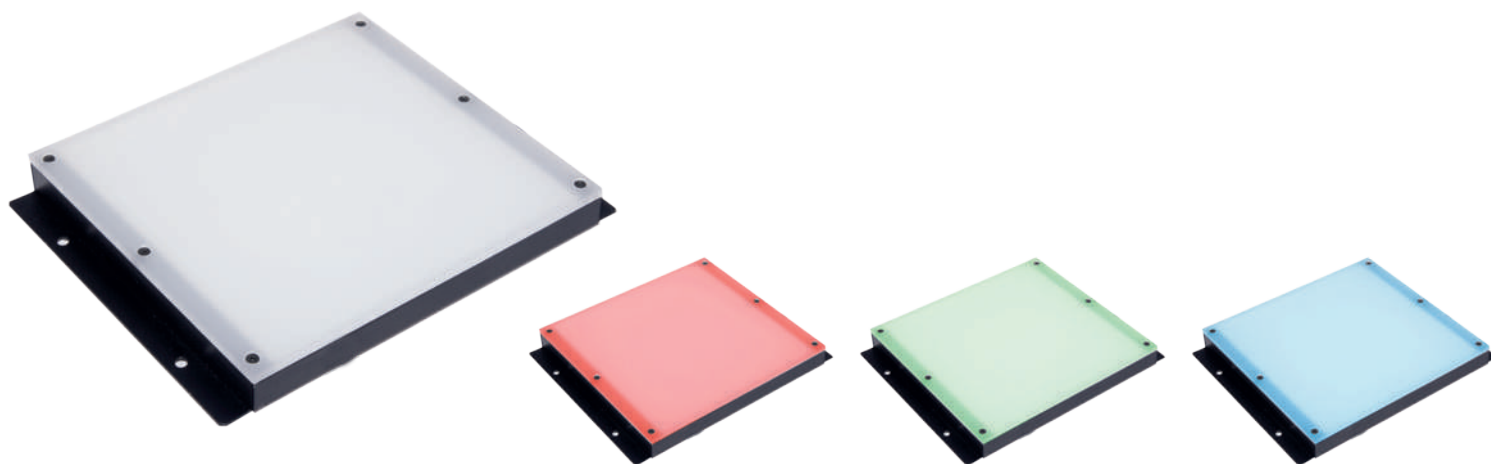
Uniformity Data SL-75X30W





BACK LIGHT

SBL SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SBL	SBL-30X30R	Red	635nm	1.6	-	-	-	Fig. 1
SBL	SBL-30X30G	Green	525nm	1.6	-	-	-	
SBL	SBL-30X30B	Blue	470nm	1.6	-	-	-	
SBL	SBL-30X30W	White	6,000k	1.6	-	-	-	
SBL	SBL-60X60R	Red	635nm	6.1	-	-	-	Fig. 2
SBL	SBL-60X60G	Green	525nm	6.1	-	-	-	
SBL	SBL-60X60B	Blue	470nm	6.1	-	-	-	
SBL	SBL-60X60W	White	6,000k	6.1	-	-	-	
SBL	SBL-120X120R	Red	635nm	20	-	-	-	Fig. 3
SBL	SBL-120X120G	Green	525nm	20	-	-	-	
SBL	SBL-120X120B	Blue	470nm	20	-	-	-	
SBL	SBL-120X120W	White	6,000k	20	-	-	-	
SBL	SBL-180X180R	Red	635nm	44	-	-	-	Fig. 4
SBL	SBL-180X180G	Green	525nm	44	-	-	-	
SBL	SBL-180X180B	Blue	470nm	44	-	-	-	
SBL	SBL-180X180W	White	6,000k	44	-	-	-	

SEMI-CUSTOMIZATION

30X30mm Module

Formula	SBL-30AX30BC
Factor A	A = x1 ~ 7 (maximum length is 210mm)
Factor B	B = x1 ~ 7 (maximum length is 210mm)
Factor C	C = R/G/B/W (choice of Red, Green, Blue or White)

DIMENSIONS (MM)

Fig. 1

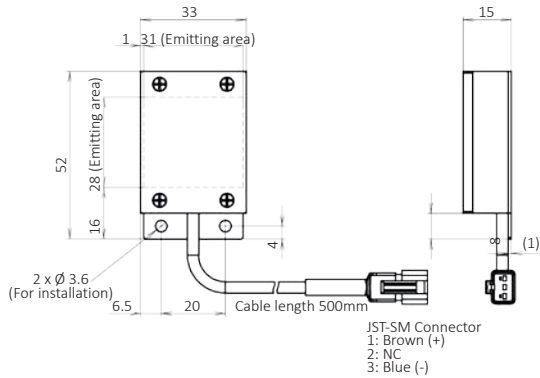


Fig. 2

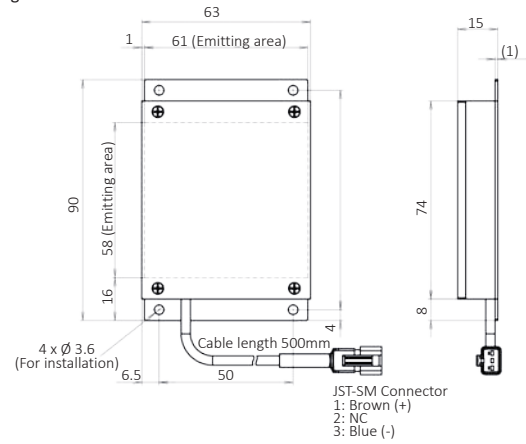


Fig. 3

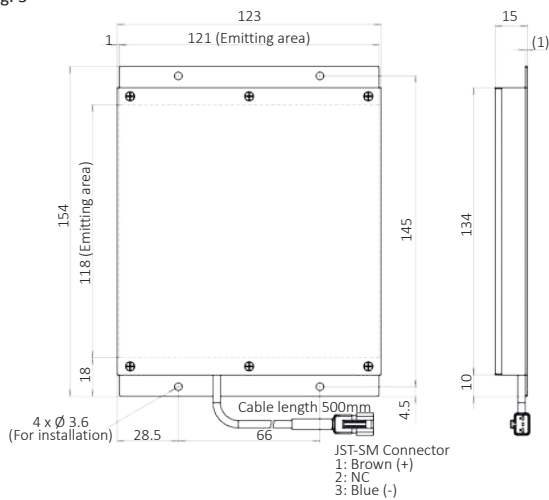
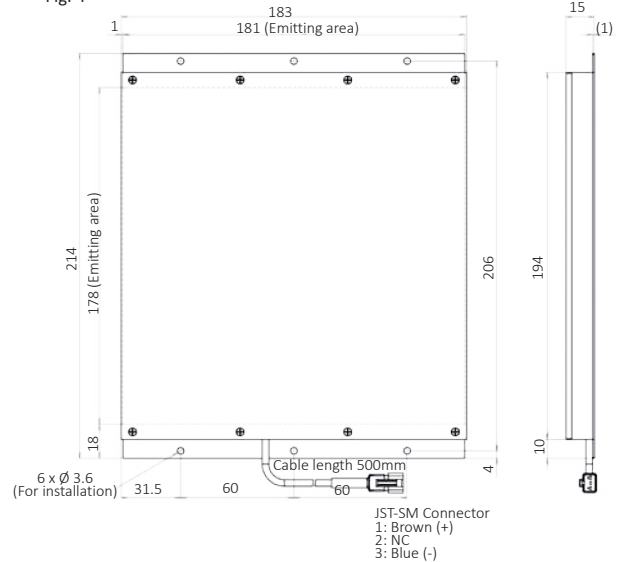


Fig. 4



TECHNICAL DATA

Uniformity Data SBL-120X120W



FLAT LIGHT

SPL & SPL-C40 SERIES



PRODUCT LINE UP

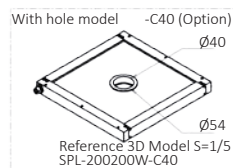
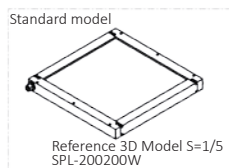
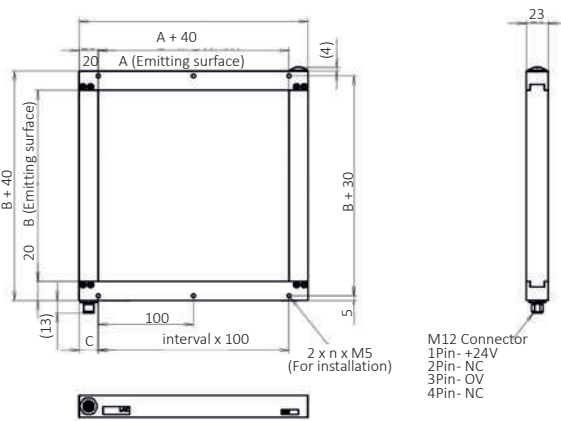
Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SPL	SPL-200X200R	Red	635nm	31	-	-	-	Fig. 1
SPL	SPL-200X200G	Green	525nm	31	-	-	-	
SPL	SPL-200X200B	Blue	470nm	31	-	-	-	
SPL	SPL-200X200W	White	6,000k	31	-	-	-	
SPL	SPL-300X300R	Red	635nm	46	-	-	-	Fig. 2
SPL	SPL-300X300G	Green	525nm	46	-	-	-	
SPL	SPL-300X300B	Blue	470nm	46	-	-	-	
SPL	SPL-300X300W	White	6,000k	46	-	-	-	
SPL	SPL-400X400R	Red	635nm	61	-	-	-	Fig. 3
SPL	SPL-400X400G	Green	525nm	61	-	-	-	
SPL	SPL-400X400B	Blue	470nm	61	-	-	-	
SPL	SPL-400X400W	White	6,000k	61	-	-	-	
SPL	SPL-500X400R	Red	635nm	76	-	-	-	Fig. 4
SPL	SPL-500X400G	Green	525nm	76	-	-	-	
SPL	SPL-500X400B	Blue	470nm	76	-	-	-	
SPL	SPL-500X400W	White	6,000k	76	-	-	-	
SPL	SPL-600X400R	Red	635nm	91	-	-	-	Fig. 5
SPL	SPL-600X400G	Green	525nm	91	-	-	-	
SPL	SPL-600X400B	Blue	470nm	91	-	-	-	
SPL	SPL-600X400W	White	6,000k	91	-	-	-	

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SPL-C40	SPL-200X200R-C40	Red	635nm	31	-	-	-	Fig. 6
SPL-C40	SPL-200X200G-C40	Green	525nm	31	-	-	-	
SPL-C40	SPL-200X200B-C40	Blue	470nm	31	-	-	-	
SPL-C40	SPL-200X200W-C40	White	6,000k	31	-	-	-	
SPL-C40	SPL-300X300R-C40	Red	635nm	46	-	-	-	Fig. 7
SPL-C40	SPL-300X300G-C40	Green	525nm	46	-	-	-	
SPL-C40	SPL-300X300B-C40	Blue	470nm	46	-	-	-	
SPL-C40	SPL-300X300W-C40	White	6,000k	46	-	-	-	
SPL-C40	SPL-400X400R-C40	Red	635nm	61	-	-	-	Fig. 8
SPL-C40	SPL-400X400G-C40	Green	525nm	61	-	-	-	
SPL-C40	SPL-400X400B-C40	Blue	470nm	61	-	-	-	
SPL-C40	SPL-400X400W-C40	White	6,000k	61	-	-	-	
SPL-C40	SPL-500X400R-C40	Red	635nm	76	-	-	-	Fig. 9
SPL-C40	SPL-500X400G-C40	Green	525nm	76	-	-	-	
SPL-C40	SPL-500X400B-C40	Blue	470nm	76	-	-	-	
SPL-C40	SPL-500X400W-C40	White	6,000k	76	-	-	-	
SPL-C40	SPL-600X400R-C40	Red	635nm	91	-	-	-	Fig. 10
SPL-C40	SPL-600X400G-C40	Green	525nm	91	-	-	-	
SPL-C40	SPL-600X400B-C40	Blue	470nm	91	-	-	-	
SPL-C40	SPL-600X400W-C40	White	6,000k	91	-	-	-	

SEMI-CUSTOMIZATION

50X50mm Module

Formula	SPL-50AX50BC
Factor A	A = x4 ~ 24 (minimum length 200mm and maximum length is 1,200mm)
Factor B	B = x4 ~ 20 (minimum length 200mm and maximum length is 1,000mm)
Factor C	C = R/G/B/W (choice of Red, Green, Blue or White)



Camera hole

Size of hole	Possible to change. Please consult CCS sales engineer.
No of hole	Possible to add. Please consult CCS sales engineer.
Position of hole	Possible to change. Please consult CCS sales engineer.

Part Number	A	B	C	n	Power Consumption
SPL-250200x	250	200	45	3	38
SPL-300200x	300	200	20	4	46
SPL-350200x	350	200	45	4	53
SPL-400200x	400	200	20	5	61
SPL-450200x	450	200	45	5	69
SPL-500200x	500	200	20	6	76
SPL-550200x	550	200	45	6	84
SPL-600200x	600	200	20	7	91
SPL-250250x	250	250	45	3	38
SPL-300250x	300	250	20	4	46
SPL-350250x	350	250	45	4	53
SPL-400250x	400	250	20	5	61
SPL-450250x	450	250	45	5	69
SPL-500250x	500	250	20	6	76
SPL-550250x	550	250	45	6	84
SPL-600250x	600	250	20	7	91
SPL-350300x	350	300	20	4	53
SPL-400300x	400	300	45	5	61
SPL-450300x	450	300	20	5	69
SPL-500300x	500	300	45	6	76
SPL-550300x	550	300	20	6	84
SPL-600300x	600	300	45	7	91
SPL-350350x	350	350	20	4	53
SPL-400350x	400	350	45	5	61
SPL-450350x	450	350	20	5	69
SPL-500350x	500	350	45	6	76
SPL-550350x	550	350	20	6	84
SPL-600350x	600	350	45	7	91
SPL-450400x	450	400	45	5	69
SPL-550400x	550	400	45	6	84

x= R, G, B, W

DIMENSIONS (MM)

Fig. 1

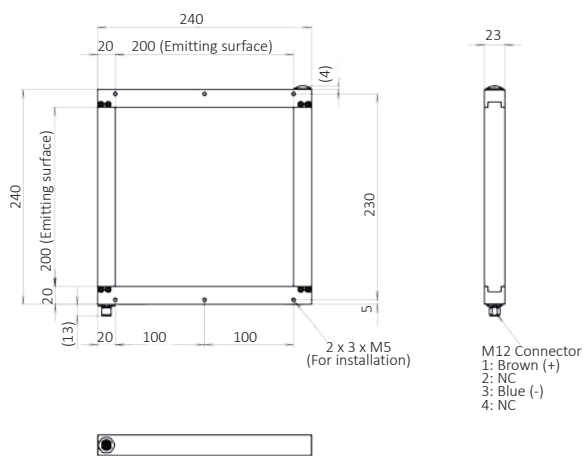


Fig. 2

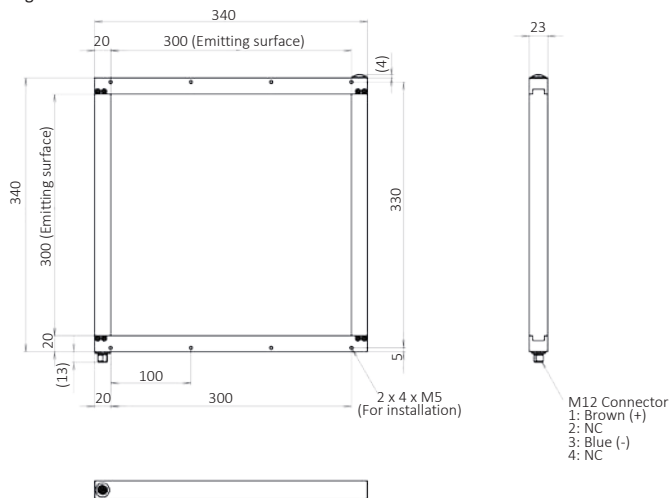


Fig. 3

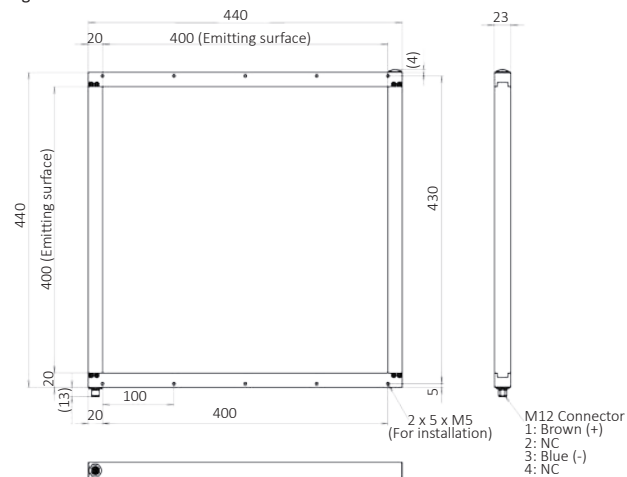


Fig. 4

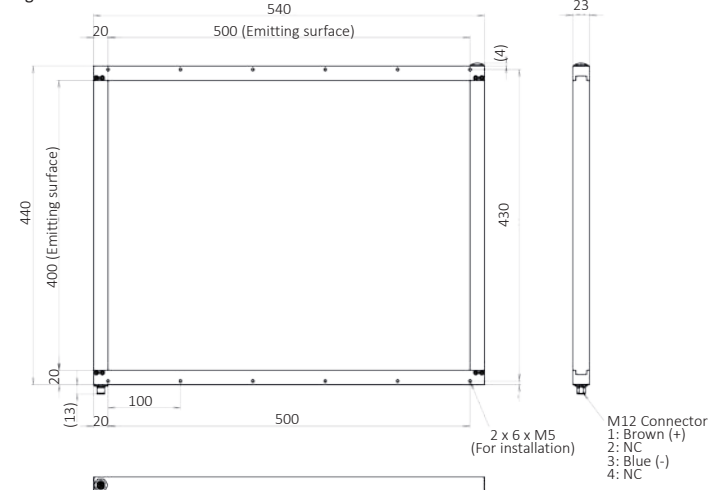


Fig. 5

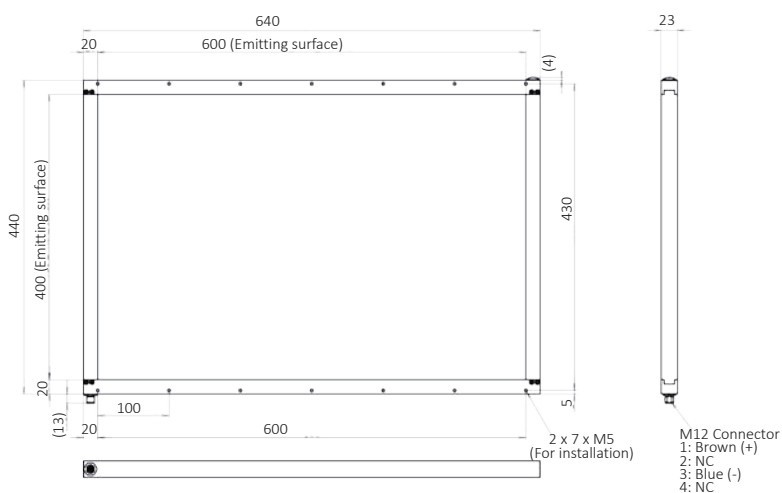


Fig. 6

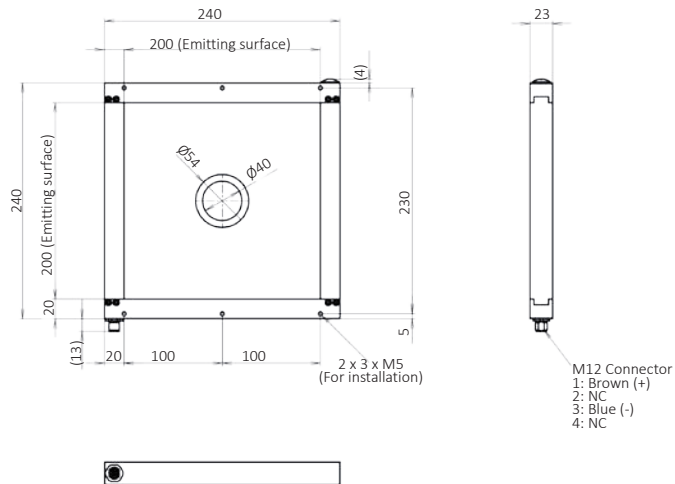


Fig. 7

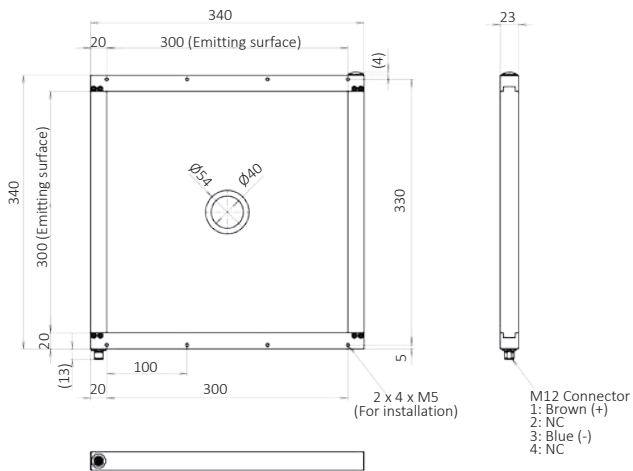


Fig. 8

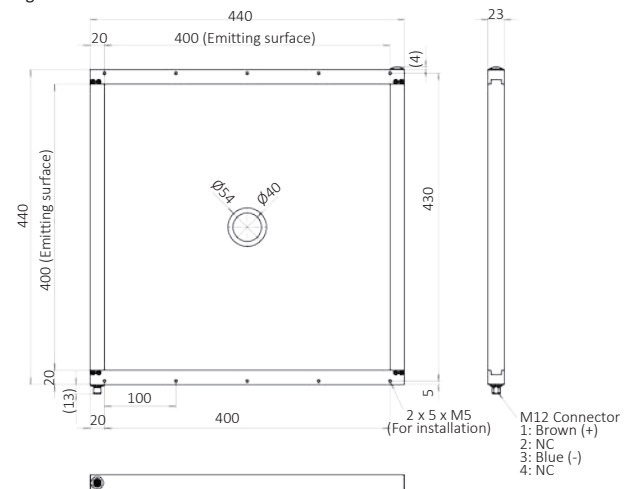


Fig. 9

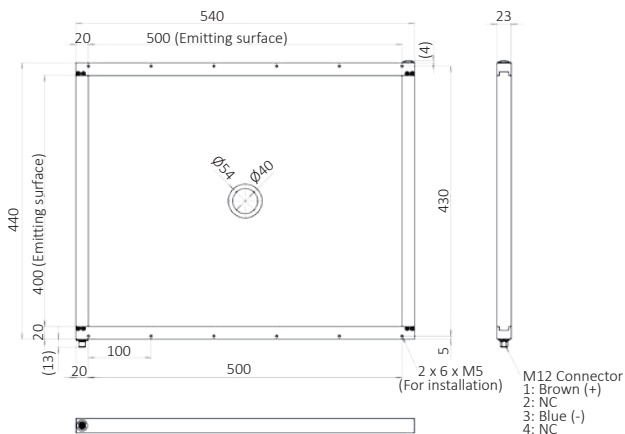
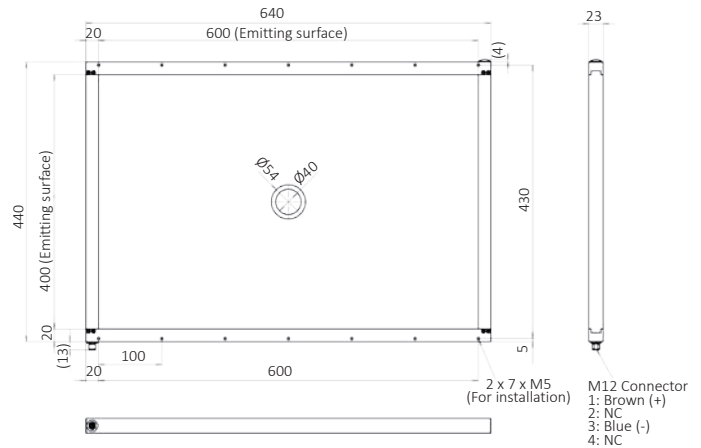
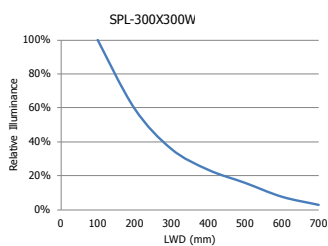


Fig. 10

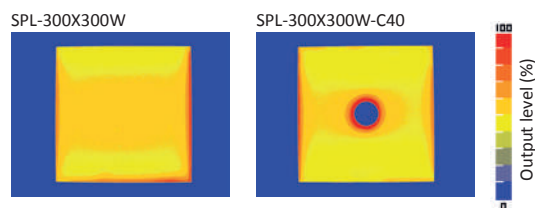


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)



Uniformity Data SPL-300X300W / SPL-300X300W-C40



COAXIAL LIGHT

SOAD SERIES



PRODUCT LINE UP

Series	Part Number	Color	Wavelength/ Color Temp.	Power Consumption (W)	Options			Dimensions
SOAD	SOAD-34R	Red	635nm	3.2	-	-	-	Fig. 1
SOAD	SOAD-34G	Green	525nm	3.2	-	-	-	
SOAD	SOAD-34B	Blue	470nm	3.2	-	-	-	
SOAD	SOAD-34W	White	6,000k	5.3	-	-	-	
SOAD	SOAD-50R	Red	630nm	9.1	-	-	-	Fig. 2
SOAD	SOAD-50G	Green	525nm	9.1	-	-	-	
SOAD	SOAD-50B	Blue	470nm	9.1	-	-	-	
SOAD	SOAD-50W	White	5,500k	13	-	-	-	
SOAD	SOAD-50IR	Infrared	940nm	9.1	-	-	-	
SOAD	SOAD-70R	Red	630nm	16	-	-	-	Fig. 3
SOAD	SOAD-70G	Green	525nm	16	-	-	-	
SOAD	SOAD-70B	Blue	470nm	16	-	-	-	
SOAD	SOAD-70W	White	5,500k	21	-	-	-	
SOAD	SOAD-70IR	Infrared	940nm	11	-	-	-	
SOAD	SOAD-100R	Red	630nm	22	-	-	-	Fig. 4
SOAD	SOAD-100G	Green	525nm	22	-	-	-	
SOAD	SOAD-100B	Blue	470nm	22	-	-	-	
SOAD	SOAD-100W	White	5,500k	36	-	-	-	
SOAD	SOAD-100IR	Infrared	940nm	22	-	-	-	

DIMENSIONS (MM)

Fig. 1

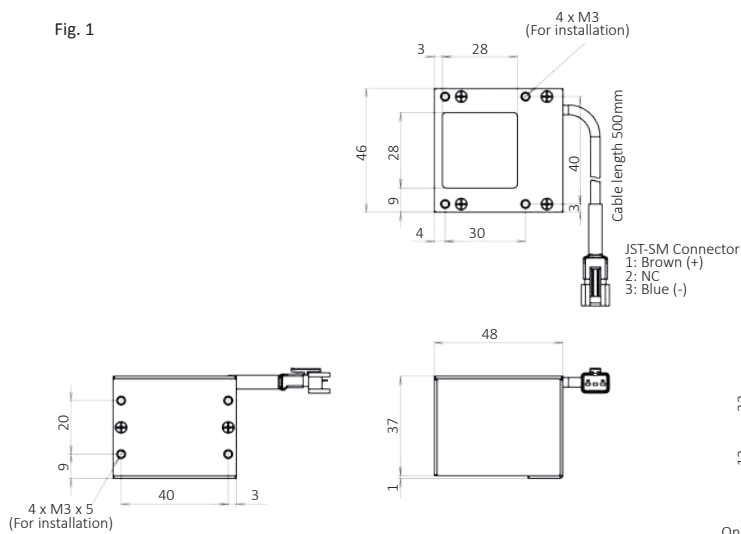


Fig. 2

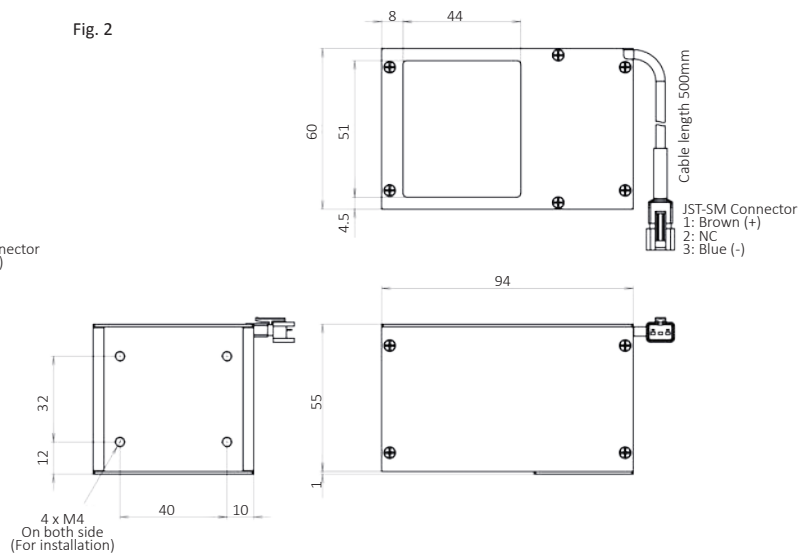


Fig. 3

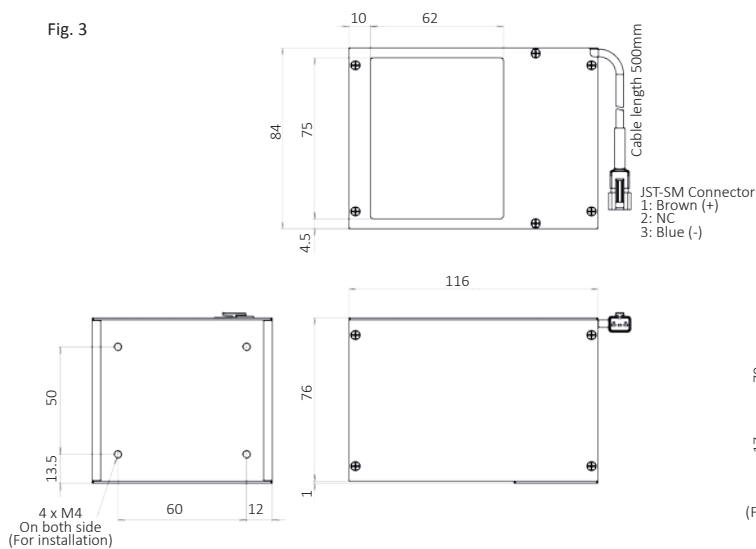
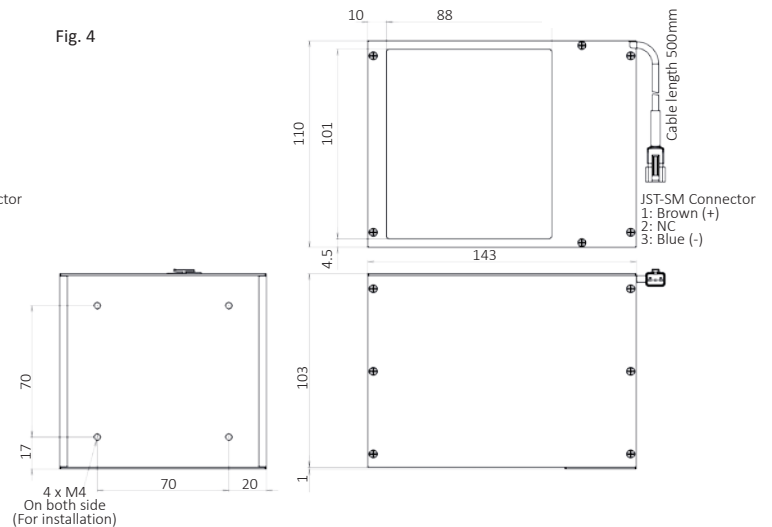
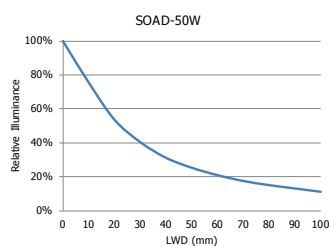


Fig. 4

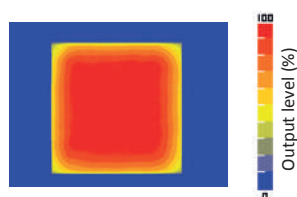


TECHNICAL DATA

Illuminance Graph (Relative Illuminance)



Uniformity Data SOAD-50W



ANALOG POWER SUPPLY

PSR SERIES



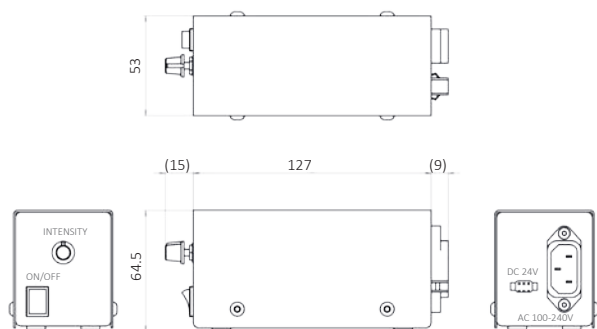
PRODUCT LINE UP

Model name	PSR-2410/PSR-2410(A)	PSR-2430/PSR-2430(A)	PSR-24100TB/PSR-24100TB(A)
Power Consumption (typ.)	10W	30W	100W
Output Voltage	DC24V (rated)		
Drive Method	Constant Voltage		
Intensity Setting	Manual		
No. of Channel	1 channel		
Input Voltage	AC100-240V 50/60Hz		
Operating Temperature and Humidity	Temperature: 0 to 40 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)		
Storage Temperature and Humidity	Temperature: -20 to 60 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)		
Cooling Method	Natural Cooling		

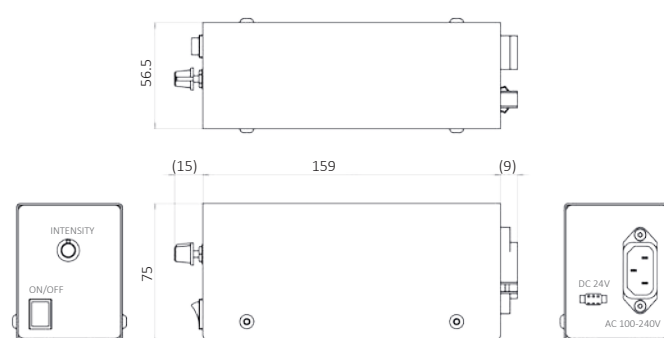
Note:
PSR with (A) comes with AC cable with G or BF-type plug.
PSR without (A) comes with AC cable with B-type plug.

DIMENSIONS (MM)

PSR-2410/PSR-2410(A)



PSR-2430/PSR-2430(A)



PSR-24100TB/PSR-24100TB(A)



ANALOG POWER SUPPLY

P-APS2 SERIES

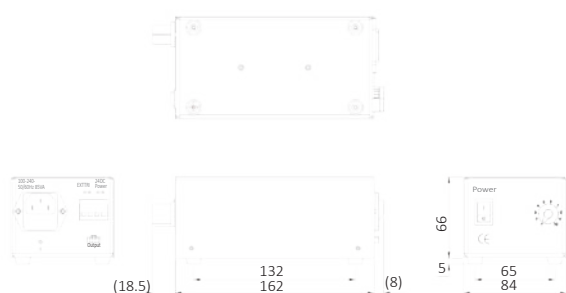


PRODUCT LINE UP

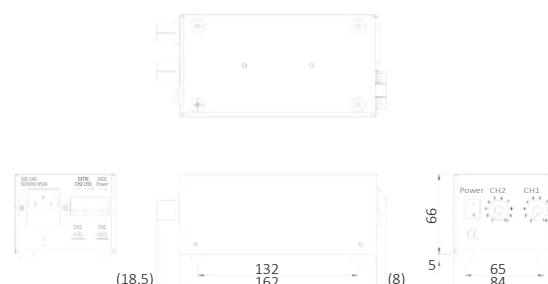
Model name	P-APS2-24W24-1T	P-APS2-24W24-2T	P-APS2-24W60-4T
Power Consumption (typ.)	24W	24W	60W
Output Voltage	DC24V (rated)		
Drive Method	Constant Voltage		
Intensity Setting	Manual		
No. of Channel	1 channel	2 channels	4 channels
Input Voltage	AC100-240V 50/60Hz		
External Trigger	5-24V (approximate current 5.6mA)		
Operating Temperature and Humidity	Temperature: 0 to 40 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)		
Storage Temperature and Humidity	Temperature: -20 to 60 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)		
Cooling Method	Natural Cooling		

DIMENSIONS (MM)

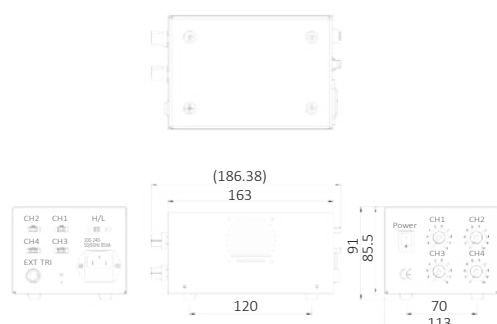
P-APS2-24W24-1T



P-APS2-24W24-2T



P-APS2-24W60-4T



DIGITAL POWER SUPPLY

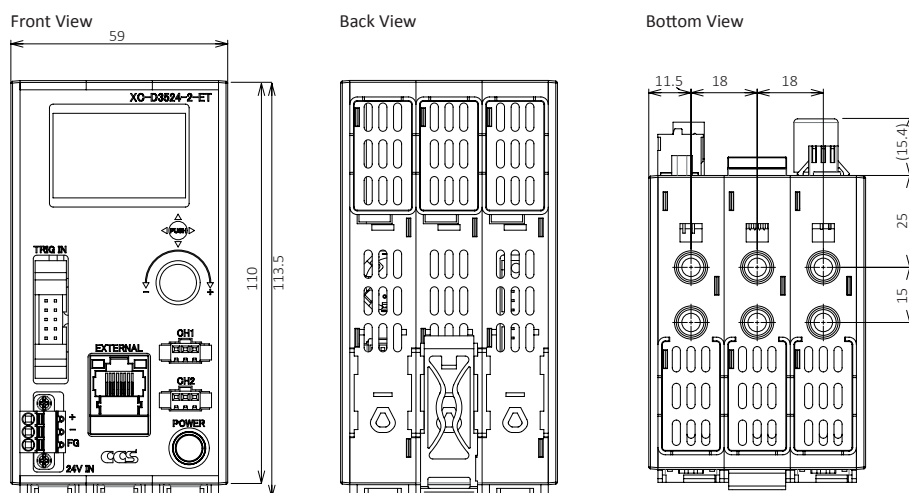
XC SERIES



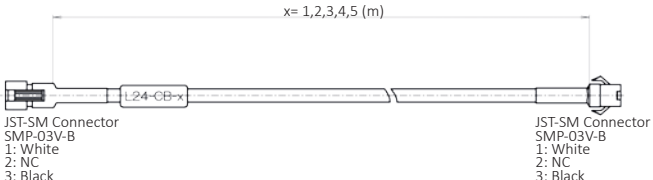
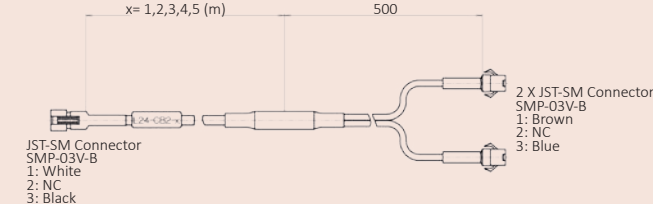
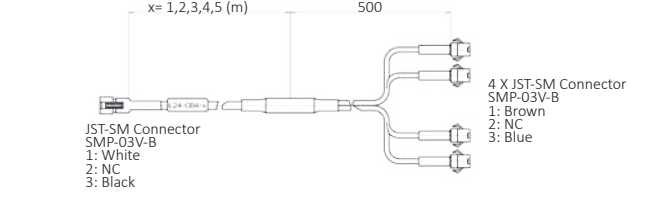
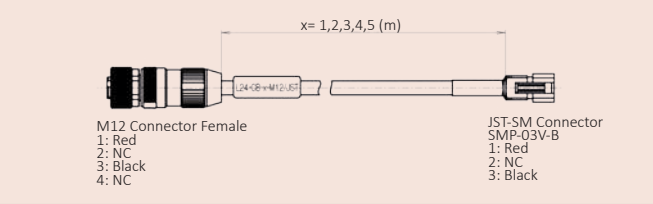
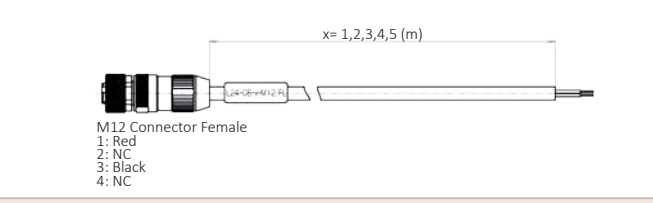
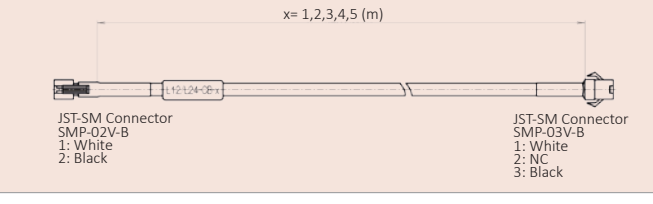
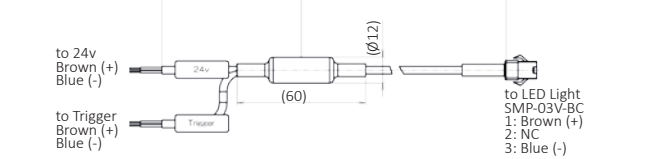
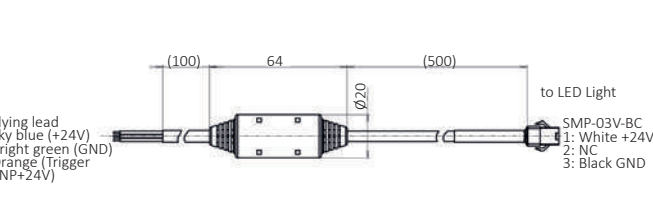
PRODUCT LINE UP

Model name		XC-D3524-2-ET(A)
Applicable Light Unit (rated)		DC24V 35W (2CH total)
Power Consumption (typ.)		40W
Output Voltage		DC24V (rated)
Output Current (rated)		1.4A (2CH total)
Drive Method		Constant voltage
Intensity Control Method		PWM control (frequency 125.1kHz) and lighting time control
Intensity Setting	Manual	1024-steps using the front operation panel
	External	Command input via TCP/IP or UPD/IP communication (1024-steps)
Lighting Method Setting	Manual	11-steps using the front operation panel
	External	Command input via TCP/IP or UPD/IP communication (11-steps)
No. of Channel		2 channels
Input Voltage		DC24V (DC21.6 to 26.4V)
Operating Temperature and Humidity		Temperature: 0 to 40 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)
Storage Temperature and Humidity		Temperature: -20 to 60 degrees Celsius, Humidity: 20 to 85%RH (with no condensation)
Cooling Method		Natural air cooling
CE Marking		EMC: EN61000-6-2, EN61000-6-4 compliant
Environmental Regulations		RoHS compliant
Weight		250g
Accessories		Operation manual x 1

DIMENSIONS (MM)

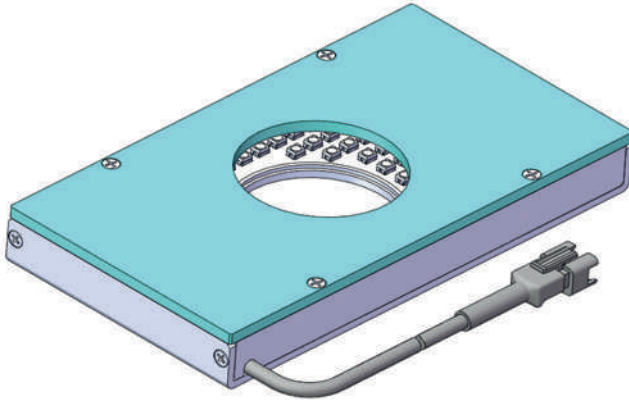


EXTENSION CABLE

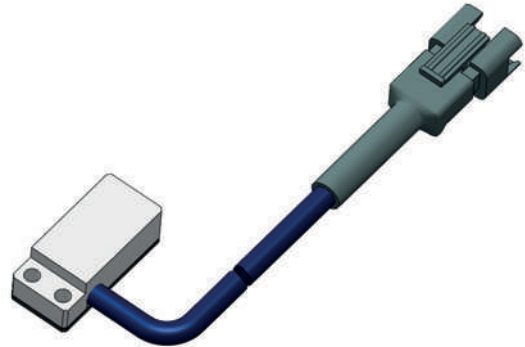
Series	Remarks	Part Number	Lenght	Dimensions
L24-CB	For 24V LED Single Branch	L24-CB-1	1m	 JST-SM Connector SMP-03V-B 1: White 2: NC 3: Black JST-SM Connector SMP-03V-B 1: White 2: NC 3: Black
		L24-CB-2	2m	
		L24-CB-3	3m	
		L24-CB-4	4m	
		L24-CB-5	5m	
L24-CB2	For 24V LED 2-Branch	L24-CB2-1	1m	 JST-SM Connector SMP-03V-B 1: White 2: NC 3: Black 2 X JST-SM Connector SMP-03V-B 1: Brown 2: NC 3: Blue
		L24-CB2-2	2m	
		L24-CB2-3	3m	
		L24-CB2-4	4m	
		L24-CB2-5	5m	
L24-CB4	For 24V LED 4-Branch	L24-CB4-1	1m	 JST-SM Connector SMP-03V-B 1: White 2: NC 3: Black 4 X JST-SM Connector SMP-03V-B 1: Brown 2: NC 3: Blue
		L24-CB4-2	2m	
		L24-CB4-3	3m	
		L24-CB4-4	4m	
		L24-CB4-5	5m	
L24-CB-M12/JST	For 24V LED M12 Connector & JST Connector	L24-CB-1-M12/JST	1m	 M12 Connector Female 1: Red 2: NC 3: Black 4: NC JST-SM Connector SMP-03V-B 1: Red 2: NC 3: Black
		L24-CB-2-M12/JST	2m	
		L24-CB-3-M12/JST	3m	
		L24-CB-4-M12/JST	4m	
		L24-CB-5-M12/JST	5m	
L24-CB-M12/FL	For 24V LED M12 Connector & Flying-lead	L24-CB-1-M12/FL	1m	 M12 Connector Female 1: Red 2: NC 3: Black 4: NC
		L24-CB-2-M12/FL	2m	
		L24-CB-3-M12/FL	3m	
		L24-CB-4-M12/FL	4m	
		L24-CB-5-M12/FL	5m	
L12/24-CB	For 24V LED 3PIN to 2PIN Conversion	L12/24-CB-1	1m	 JST-SM Connector SMP-02V-B 1: White 2: Black JST-SM Connector SMP-03V-B 1: White 2: NC 3: Black
		L12/24-CB-2	2m	
		L12/24-CB-3	3m	
		L12/24-CB-4	4m	
		L12/24-CB-5	5m	
L24-CB-TR	For 24V LED ON/OFF Cable	L24-CB-0.3-TR	0.3m	 to 24v Brown (+) Blue (-) to LED Light SMP-03V-BC 1: Brown (+) 2: NC 3: Blue (-)
IFL-CB	For 24V LED Trigger Cable	IFL-CB-0.5-FL-SM	0.5m	 Flying lead Sky blue (+24V) Bright green (GND) Orange (Trigger PNP+24V) to LED Light SMP-03V-BC 1: White +24V 2: NC 3: Black GND

Design and/or fabrication of customized solution is available for your specific Needs.

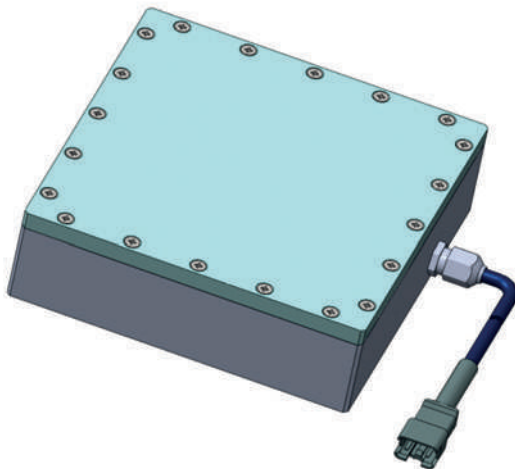
Example 1: Flat light with center hole



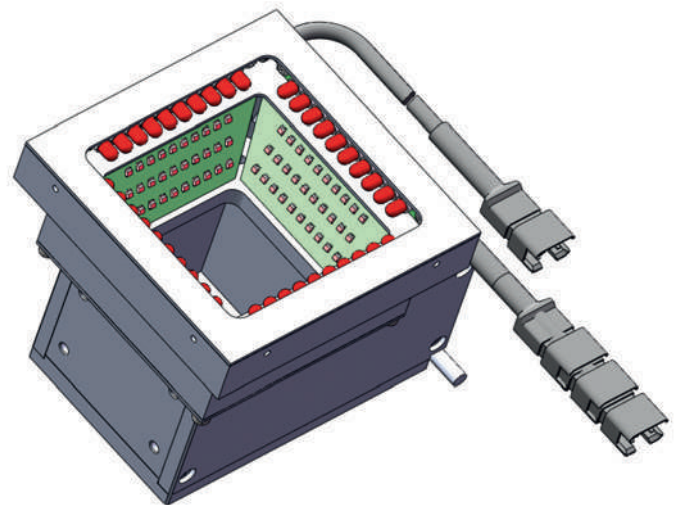
Example 2: Miniature size



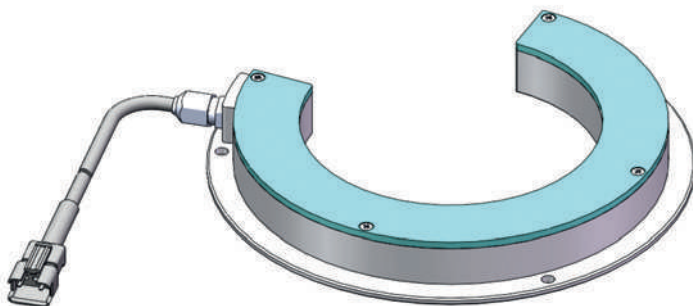
Example 3: IP67 casing



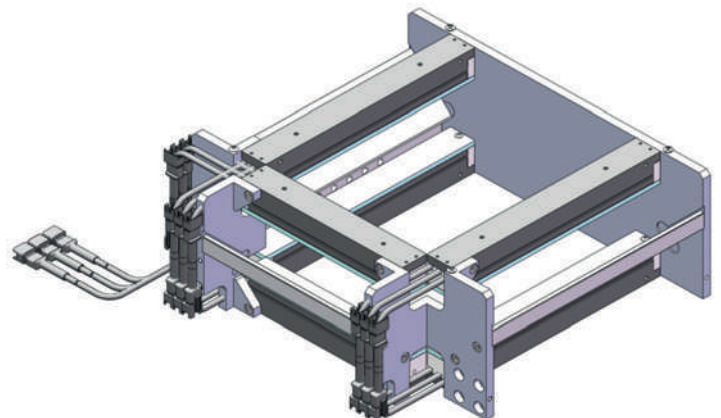
Example 4: Multi-channel



Example 5: Odd shape



Example 6: Lighting fixture



EU DIRECTIVE



In accordance with EU machinery directive, EMC directive, and low voltage directive, machines and electronic devices not marked with the CE logo are subject to distribution restrictions within the EU. All LAK LED illumination products excluding power supply conform to corresponding EN regulations. These products will maintain the EU mandate compatibility of our customers' machinery and electronic devices.

RoHS DIRECTIVE

All products listed in this catalog comply with the RoHS Directive.

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1. CCS WILL REPAIR OR REPLACE THE PRODUCT FREE OF CHARGE IF IT SHOULD FAIL TO FUNCTION UNDER USE ON OUR SPECIFIED CONDITION IN ACCORDANCE WITH THE INSTRUCTION GUIDE AND OTHER WRITTEN CAUTIONS DURING THE INDICATED WARRANTY PERIOD OF TWO YEARS.
2. CCS WILL REPAIR OR REPLACE THE PRODUCT FREE OF CHARGE IF ITS RADIANT QUANTITY SHOULD DROP TO 50% OR LESS OF ITS INITIAL RADIANT QUANTITY UNDER USE ON OUR SPECIFIED CONDITION IN ACCORDANCE WITH THE INSTRUCTION GUIDE AND OTHER WRITTEN CAUTIONS DURING THE INDICATED WARRANTY PERIOD OF ONE YEAR.
3. CCS WILL CHARGE A REPAIR FEE UNDER THE FOLLOWING CONDITIONS:
 - 1) IF THE PRODUCT HAS BEEN SUBJECTED TO MISUSE, UNAUTHORIZED REPAIRS, OR MODIFICATION FROM ITS ORIGINAL DESIGN.
 - 2) IF THE PRODUCT HAS BEEN DAMAGED FROM IMPACTS DUE TO INAPPROPRIATE HANDLING.
 - 3) IF DAMAGE TO THE PRODUCT RESULTS FROM EXTERNAL CAUSES INCLUDING ACCIDENTS, FIRE, POLLUTION, RIOTS, COMMUNICATION FAILURES, EARTHQUAKES, THUNDERSTORMS, WIND AND FLOOD DAMAGE, OR ANY OTHER ACT OF PROVIDENCE, OR FROM ANY EXTRAORDINARY CONDITIONS SUCH AS ELECTRICAL SURGES, WATER LEAKAGE, CONDENSATION, OR THE USE OF CHEMICALS.
 - 4) IF THE DAMAGE RESULTS FROM CONNECTION TO ANY POWER SUPPLY OR TO ANY EQUIPMENT WHICH CCS DOES NOT MANUFACTURE OR DOES NOT SPECIFY FOR USE.
4. CCS ASSUMES NO LIABILITY FOR ANY PURCHASER'S SECONDARY DAMAGE (DAMAGE OF EQUIPMENT, LOSS OF OPPORTUNITIES, LOSS OF PROFITS, ETC.) OR ANY OTHER DAMAGE RESULTING FROM A FAILURE OF OUR PRODUCT.

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NOTE: THE RADIANT QUANTITY REFERS TO THE WATTAGE OF PHYSICAL ENERGY RADIATED FROM AN LED. IT REFERS TO THE RADIATION LUMINOSITY OF THE LED MEASURED UNDER CONDITIONS SPECIFIED BY CCS OR THE RADIATION ILLUMINATION OF THE LED UNDER SPECIFIED IRRADIATION CONDITIONS. CCS SPECIFIES THE RADIANT QUANTITY FOR EACH LED LIGHT BECAUSE THE MEASUREMENT AND IRRADIATION CONDITIONS VARY FROM THE FORM, THE APPLICATION AND THE IRRADIATION WAVELENGTH.

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