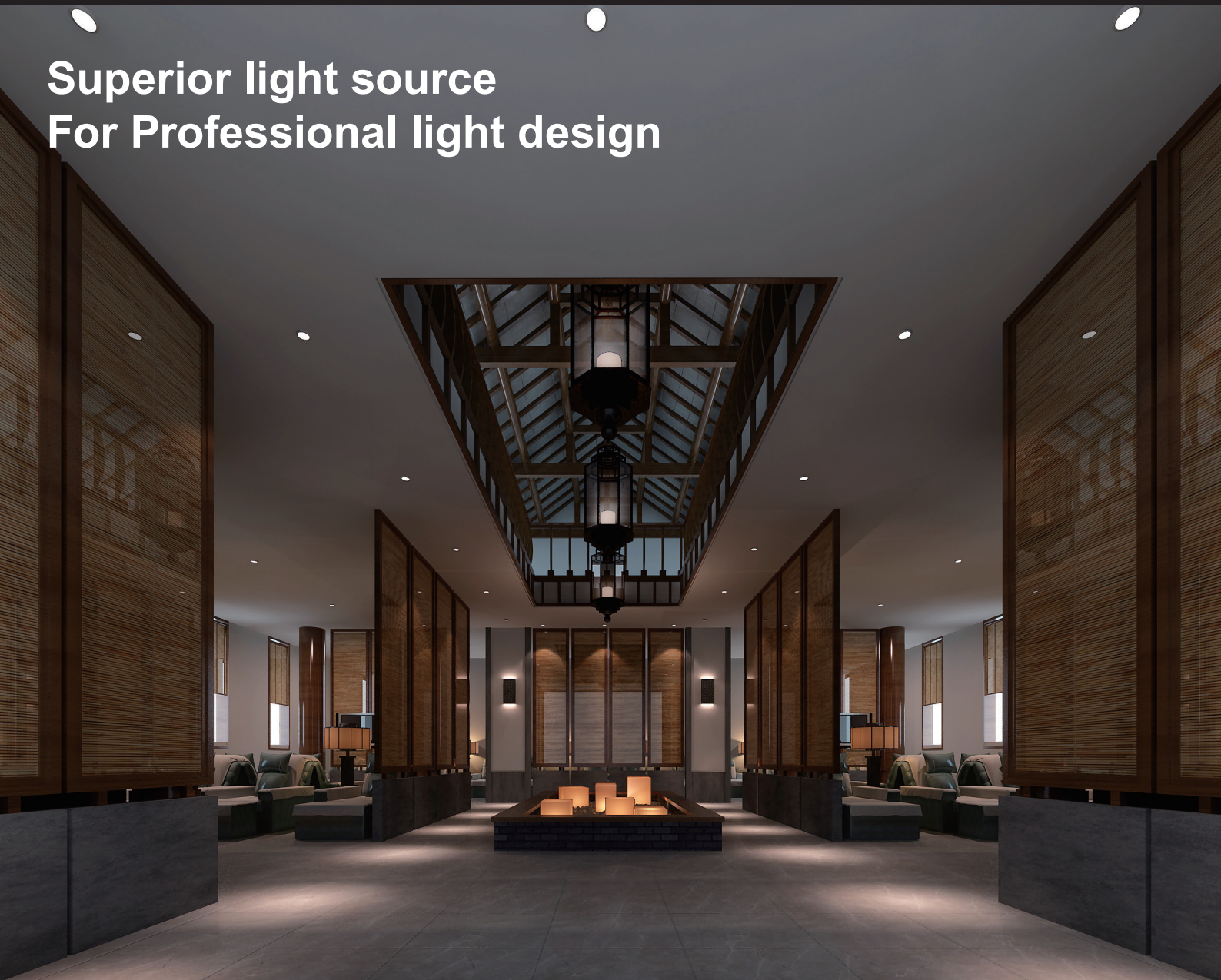


# CITILED

## High Intensity COB Series Ver.4

**CITILED**  
The Light Engine

Superior light source  
For Professional light design



### The world's smallest LES COB, $\Phi 2.4\text{mm}$ (\*1)

Added the industry's smallest class lineup (LES $\Phi 2.4\text{mm}$ )

\*1 : According to our investigation as of September 2021.

### Super High CRI with Narrower LES

High Intensity Series Ver.4 has realized the production of Super High CRI (CRI97) through the use of our advanced phosphor and packaging technology.



CLU7L3(\*2)



CLU7S3(\*2)



CLU7R3



CLU7A3



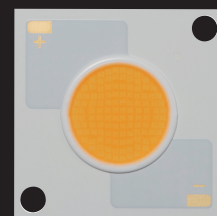
CLU703



CLU713



CLU723



CLU733

\*2 : Please contact our sales team as these products are under development as of November 2021.

\* The pictures will be full-scale when it is printed in A4 size.

**CITIZEN ELECTRONICS CO., LTD.**

# CITILED High Intensity COB Series Ver.4

## Color Variation

Package	Die Configuration	80 CRI Min.					90 CRI Min.					Below B.B.L. 90 CRI Min.			Super High CRI 97 CRI Typ.				
		27	30	35	40	50	24	27	30	35	40	50	27	30	35	27	30	35	40
CLU7L3	0104	★	★	★	★	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU7S3	0403	★	★	★	★	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU7R3	0403	★	★	★	★	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU7A3	0403	✓	✓	✓	✓	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU7A3	1201	✓	✓	✓	✓	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU703	1202	✓	✓	✓	✓	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU713	1204	✓	✓	✓	✓	★	✓	✓	✓	✓	✓	★	★	✓	★	✓	✓	✓	✓
CLU723	1206	✓	✓	✓	✓	★	★	✓	✓	✓	✓	★	★	★	★	★	★	★	★
CLU733	1210	✓	✓	✓	✓	✓	★	✓	✓	✓	✓	★	★	★	★	★	★	★	★

Note : "★" indicate that optional color line up. Please contact our sales team if you are considering ordering the color which is except for standard line up.

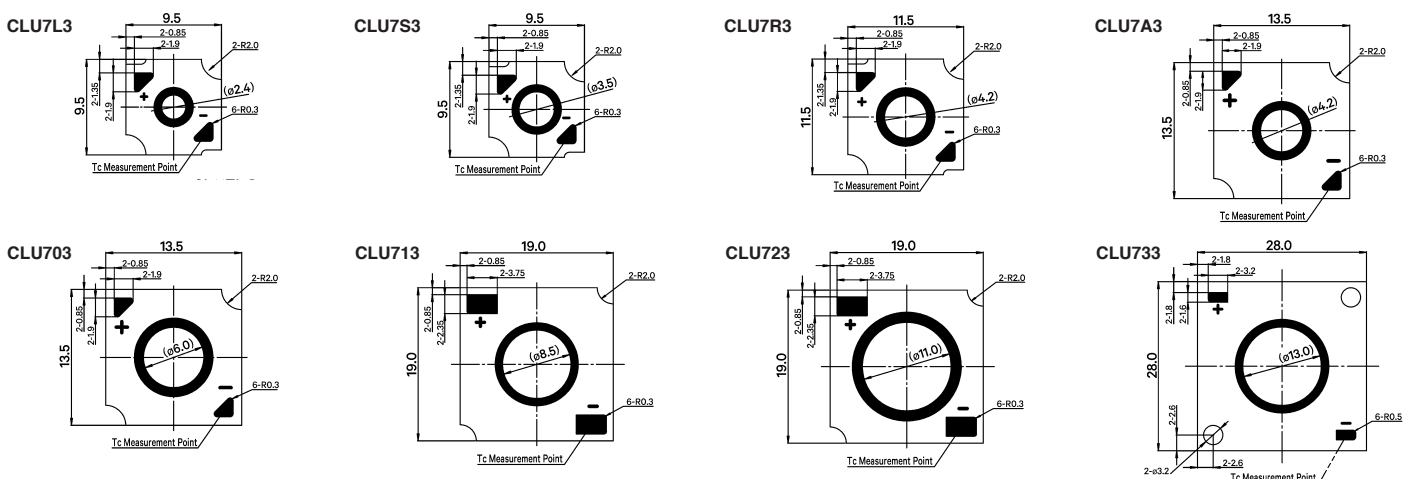
## Representative specifications

(Tj=85°C)

Product code	Electro-optical Characteristics								Absolute Maximum Rating
	CRI	CCT	Forward current (mA)	Voltage Typ. (V)	Input power Typ. (W)	Luminous flux Typ. (lm)	Efficacy Typ. (lm/W)	Thermal resistance Rj-c (°C/W)	
CLU7L3-0104C4-303H5X3	90min	3,000K	700	3.1	2.2	210	97	9.9	1,000
CLU7S3-0403C4-303H5X3	90min	3,000K	525	12.2	6.4	624	97	3.9	750
CLU7R3-0403E1-303H5X3	90min	3,000K	525	12.2	6.4	711	111	4.0	900
CLU7A3-0403E1-303H5X3	90min	3,000K	525	12.2	6.4	711	111	3.4	900
CLU7A3-1201E1-303H5X3	90min	3,000K	175	36.5	6.4	711	111	3.4	300
CLU703-1202E1-303H5X3	90min	3,000K	350	36.5	12.8	1,432	112	1.7	600
CLU713-1204E1-303H5X3	90min	3,000K	700	36.5	25.6	2,900	113	0.95	1,200
CLU723-1206E1-303H5X3	90min	3,000K	1,050	36.5	38.3	4,411	115	0.62	1,380
CLU733-1210E1-303H5X3	90min	3,000K	1,750	36.5	63.9	7,164	112	0.35	2,300

Note : Please check the details of the release data and the latest specification of each product on our WEB site ( <https://ce.citizen.co.jp/e/> ).

## Outline Drawing



Note : Product codes and specifications in this catalogue are subject to change without notice for improvement, and products may be discontinued. We will not be held liable for any damages or costs caused by such change or discontinuation. Please ask our sales team for details of the release date and the latest specifications of each product.





## Contact

Website <https://ce.citizen.co.jp/e/>  
 Sales Network [https://ce.citizen.co.jp/productse/sales\\_network](https://ce.citizen.co.jp/productse/sales_network)  
 Requests / Inquiries E-mail : [cej-inquiry@ml.citizen.co.jp](mailto:cej-inquiry@ml.citizen.co.jp)

CITIZEN ELECTRONICS CO., LTD. shall not be liable for any disadvantages or damages resulting from the use of downloaded data or the impossibility of download and use, responsibility for the cause of lawsuit or any other damages or losses. This data shall be provided as is to users and CITIZEN ELECTRONICS CO., LTD. does not guarantee the absence of error or other defects in this data, conformance of this data to specific purpose, this data or its use will not infringe the right of users or third parties or any other matters. CITIZEN ELECTRONICS CO., LTD. reserves the right to make changes to data without notification.

# Product List




(Tj=85°C)

Package	Product code	Electro-optical Characteristics								Absolute Maximum Rating
		CRI	CCT	Forward current (mA)	Voltage Typ. (V)	Input power Typ. (W)	Luminous flux Typ. (lm)	Efficacy Typ. (lm/W)	Thermal resistance Rj-c (°C/W)	Forward current (mA)
 CLU7L3	CLU7L3-0104C4-243H5X3	90min	2,400K	700	3.1	2.2	184	85	9.9	1,000
	CLU7L3-0104C4-273H5X3	90min	2,700K				199	92		
	CLU7L3-0104C4-303H5X3	90min	3,000K				210	97		
	CLU7L3-0104C4-353H5X3	90min	3,500K				225	104		
	CLU7L3-0104C4-403H5X3	90min	4,000K				227	105		
	CLU7L3-0104C4-303H6X3	90min below	3,000K				204	94		
	CLU7L3-0104C4-273H7X5	97typ	2,700K				178	82		
	CLU7L3-0104C4-303H7X5	97typ	3,000K				189	87		
	CLU7L3-0104C4-353H7X5	97typ	3,500K				199	92		
	CLU7L3-0104C4-403H7X5	97typ	4,000K				206	95		
 CLU7S3	CLU7S3-0403C4-243H5X3	90min	2,400K	525	12.2	6.4	560	87	3.9	750
	CLU7S3-0403C4-273H5X3	90min	2,700K				583	91		
	CLU7S3-0403C4-303H5X3	90min	3,000K				624	97		
	CLU7S3-0403C4-353H5X3	90min	3,500K				678	106		
	CLU7S3-0403C4-403H5X3	90min	4,000K				683	107		
	CLU7S3-0403C4-303H6X3	90min below	3,000K				605	95		
	CLU7S3-0403C4-273H7X5	97typ	2,700K				531	83		
	CLU7S3-0403C4-303H7X5	97typ	3,000K				573	89		
	CLU7S3-0403C4-353H7X5	97typ	3,500K				595	93		
	CLU7S3-0403C4-403H7X5	97typ	4,000K				615	96		
 CLU7R3	CLU7R3-0403E1-243H5X3	90min	2,400K	525	12.2	6.4	628	98	4.0	900
	CLU7R3-0403E1-273H5X3	90min	2,700K				681	106		
	CLU7R3-0403E1-303H5X3	90min	3,000K				711	111		
	CLU7R3-0403E1-353H5X3	90min	3,500K				746	116		
	CLU7R3-0403E1-403H5X3	90min	4,000K				761	119		
	CLU7R3-0403E1-303H6X3	90min below	3,000K				697	109		
	CLU7R3-0403E1-273H7X5	97typ	2,700K				598	93		
	CLU7R3-0403E1-303H7X5	97typ	3,000K				637	99		
	CLU7R3-0403E1-353H7X5	97typ	3,500K				677	106		
	CLU7R3-0403E1-403H7X5	97typ	4,000K				697	109		
 CLU7A3	CLU7A3-0403E1-273M2X2	80min	2,700K	525	12.2	6.4	800	125	3.4	900
	CLU7A3-0403E1-303M2X2	80min	3,000K				811	127		
	CLU7A3-0403E1-353M2X2	80min	3,500K				851	133		
	CLU7A3-0403E1-403M2X2	80min	4,000K				868	136		
	CLU7A3-0403E1-243H5X3	90min	2,400K				628	98		
	CLU7A3-0403E1-273H5X3	90min	2,700K				681	106		
	CLU7A3-0403E1-303H5X3	90min	3,000K				711	111		
	CLU7A3-0403E1-353H5X3	90min	3,500K				746	116		
	CLU7A3-0403E1-403H5X3	90min	4,000K				761	119		
	CLU7A3-0403E1-303H6X3	90min below	3,000K				697	109		
	CLU7A3-0403E1-273H7X5	97typ	2,700K				598	93		
	CLU7A3-0403E1-303H7X5	97typ	3,000K				637	99		
	CLU7A3-0403E1-353H7X5	97typ	3,500K				677	106		
	CLU7A3-0403E1-403H7X5	97typ	4,000K				697	109		

Note : Product codes and specifications in this catalogue are subject to change without notice for improvement, and products may be discontinued. We will not be held liable for any damages or costs caused by such change or discontinuation. Please ask our sales team for details of the release date and the latest specifications of each product.

# Product List


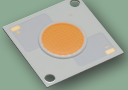
(T<sub>j</sub>=85°C)

Package	Product code	Electro-optical Characteristics								Absolute Maximum Rating	
		CRI	CCT	Forward current (mA)	Voltage Typ. (V)	Input power Typ. (W)	Luminous flux Typ. (lm)	Efficacy Typ. (lm/W)	Thermal resistance R <sub>j-c</sub> (°C/W)	Forward current (mA)	
 <b>CLU7A3</b>	CLU7A3-1201E1-273M2X2	80min	2,700K	175	36.5	6.4	800	125	3.4	300	
	CLU7A3-1201E1-303M2X2	80min	3,000K				811	127			
	CLU7A3-1201E1-353M2X2	80min	3,500K				851	133			
	CLU7A3-1201E1-403M2X2	80min	4,000K				868	136			
	CLU7A3-1201E1-243H5X3	90min	2,400K				628	98			
	CLU7A3-1201E1-273H5X3	90min	2,700K				681	107			
	CLU7A3-1201E1-303H5X3	90min	3,000K				711	111			
	CLU7A3-1201E1-353H5X3	90min	3,500K				746	117			
	CLU7A3-1201E1-403H5X3	90min	4,000K				761	119			
	CLU7A3-1201E1-303H6X3	90min below	3,000K				697	109			
	CLU7A3-1201E1-273H7X5	97typ	2,700K				598	94			
	CLU7A3-1201E1-303H7X5	97typ	3,000K				637	100			
	CLU7A3-1201E1-353H7X5	97typ	3,500K				677	106			
	CLU7A3-1201E1-403H7X5	97typ	4,000K				697	109			
 <b>CLU703</b>	CLU703-1202E1-273M2X2	80min	2,700K	350	36.5	12.8	1,574	123	1.7	600	
	CLU703-1202E1-303M2X2	80min	3,000K				1,636	128			
	CLU703-1202E1-353M2X2	80min	3,500K				1,708	134			
	CLU703-1202E1-403M2X2	80min	4,000K				1,733	136			
	CLU703-1202E1-243H5X3	90min	2,400K				1,242	97			
	CLU703-1202E1-273H5X3	90min	2,700K				1,356	106			
	CLU703-1202E1-303H5X3	90min	3,000K				1,432	112			
	CLU703-1202E1-353H5X3	90min	3,500K				1,498	117			
	CLU703-1202E1-403H5X3	90min	4,000K				1,529	120			
	CLU703-1202E1-303H6X3	90min below	3,000K				1,403	110			
	CLU703-1202E1-273H7X5	97typ	2,700K				1,196	94			
	CLU703-1202E1-303H7X5	97typ	3,000K				1,280	100			
	CLU703-1202E1-353H7X5	97typ	3,500K				1,340	105			
	CLU703-1202E1-403H7X5	97typ	4,000K				1,391	109			
 <b>CLU713</b>	CLU713-1204E1-273M2X2	80min	2,700K	700	36.5	25.6	3,192	125	0.95	1,200	
	CLU713-1204E1-303M2X2	80min	3,000K				3,339	131			
	CLU713-1204E1-353M2X2	80min	3,500K				3,415	134			
	CLU713-1204E1-403M2X2	80min	4,000K				3,498	137			
	CLU713-1204E1-243H5X3	90min	2,400K				2,558	100			
	CLU713-1204E1-273H5X3	90min	2,700K				2,709	106			
	CLU713-1204E1-303H5X3	90min	3,000K				2,900	113			
	CLU713-1204E1-353H5X3	90min	3,500K				2,985	117			
	CLU713-1204E1-403H5X3	90min	4,000K				3,120	122			
	CLU713-1204E1-303H6X3	90min below	3,000K				2,842	111			
	CLU713-1204E1-273H7X5	97typ	2,700K				2,429	95			
	CLU713-1204E1-303H7X5	97typ	3,000K				2,600	102			
	CLU713-1204E1-353H7X5	97typ	3,500K				2,701	106			
	CLU713-1204E1-403H7X5	97typ	4,000K				2,811	110			

Note : Product codes and specifications in this catalogue are subject to change without notice for improvement, and products may be discontinued. We will not be held liable for any damages or costs caused by such change or discontinuation. Please ask our sales team for details of the release date and the latest specifications of each product.

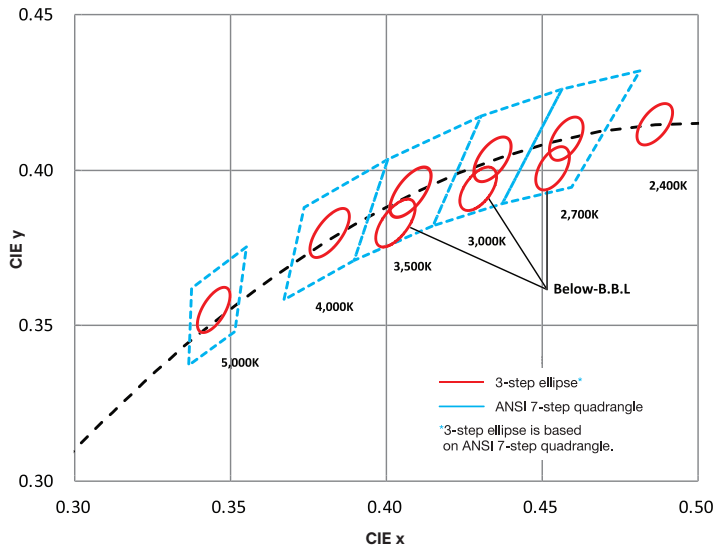
# Product List

(T<sub>j</sub>=85°C)

Package	Product code	Electro-optical Characteristics								Absolute Maximum Rating
		CRI	CCT	Forward current (mA)	Voltage Typ. (V)	Input power Typ. (W)	Luminous flux Typ. (lm)	Efficacy Typ. (lm/W)	Thermal resistance R <sub>j-c</sub> (°C/W)	Forward current (mA)
 CLU723	CLU723-1206E1-273M2X2	80min	2,700K	1,050	36.5	38.3	4,801	125	0.62	1,380
	CLU723-1206E1-303M2X2	80min	3,000K				5,013	131		
	CLU723-1206E1-353M2X2	80min	3,500K				5,178	135		
	CLU723-1206E1-403M2X2	80min	4,000K				5,305	138		
	CLU723-1206E1-273H5X3	90min	2,700K				4,170	109		
	CLU723-1206E1-303H5X3	90min	3,000K				4,411	115		
	CLU723-1206E1-353H5X3	90min	3,500K				4,625	121		
	CLU723-1206E1-403H5X3	90min	4,000K				4,603	120		
 CLU733	CLU733-1210E1-273M2X2	80min	2,700K	1,750	36.5	63.9	7,809	122	0.35	2,300
	CLU733-1210E1-303M2X2	80min	3,000K				8,141	127		
	CLU733-1210E1-353M2X2	80min	3,500K				8,486	133		
	CLU733-1210E1-403M2X2	80min	4,000K				8,598	135		
	CLU733-1210E1-503M2X2	80min	5,000K				8,705	136		
	CLU733-1210E1-273H5X3	90min	2,700K				6,855	107		
	CLU733-1210E1-303H5X3	90min	3,000K				7,164	112		
	CLU733-1210E1-353H5X3	90min	3,500K				7,692	120		
	CLU733-1210E1-403H5X3	90min	4,000K				7,856	123		

Note : Product codes and specifications in this catalogue are subject to change without notice for improvement, and products may be discontinued. We will not be held liable for any damages or costs caused by such change or discontinuation. Please ask our sales team for details of the release date and the latest specifications of each product.

## Chromaticity Range



Note : The measurement temperature is specified at T<sub>j</sub>=85°C .



## Contact

Website <https://ce.citizen.co.jp/e/>  
 Sales Network [https://ce.citizen.co.jp/productse/sales\\_network](https://ce.citizen.co.jp/productse/sales_network)  
 Requests / Inquiries E-mail : [cej-inquiry@ml.citizen.co.jp](mailto:cej-inquiry@ml.citizen.co.jp)

CITIZEN ELECTRONICS CO., LTD. shall not be liable for any disadvantages or damages resulting from the use of downloaded data or the impossibility of download and use, responsibility for the cause of lawsuit or any other damages or losses. This data shall be provided as is to users and CITIZEN ELECTRONICS CO., LTD. does not guarantee the absence of error or other defects in this data, conformance of this data to specific purpose, this data or its use will not infringe the right of users or third parties or any other matters. CITIZEN ELECTRONICS CO., LTD. reserves the right to make changes to data without notification.

CITILED is registered trademark of CITIZEN WATCH CO.,LTD or its affiliates.

# CITIZEN ELECTRONICS CO., LTD.