

Report of Photometry & Chromaticity for Light Source

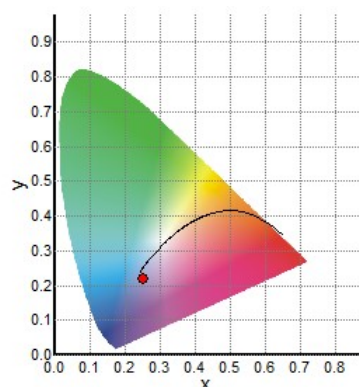


Product Description

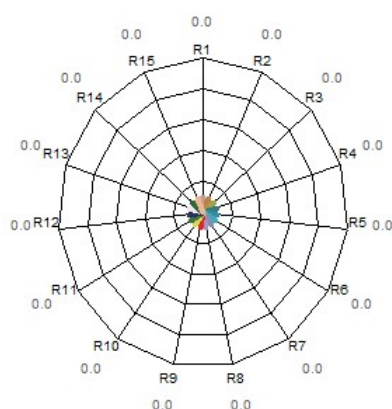
Product Name	Quad III RGBW Full On Min Zoom		
Measuring distance	5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:34:49		
Manufacturer Tester	FOS Technologies		
Temperature(°C)			
Reviewer	25	Re. Humidity(%)	34

Photometry and Chromaticity

CIE_x	0.2540	Duv	0.0000
CIE_y	0.2177	λ_d (nm)	465.9
CIE_u'	0.1991	Purity(%)	40
CIE_v'	0.3839	FWHM(nm)	28
CCT(K)	0	SP ratio	3.33
Illuminance(lx)	5677	PPFD 400-700nm($\mu\text{mol}/\text{m}^2/\text{s}$)	18.04
λ_p (nm)	449	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



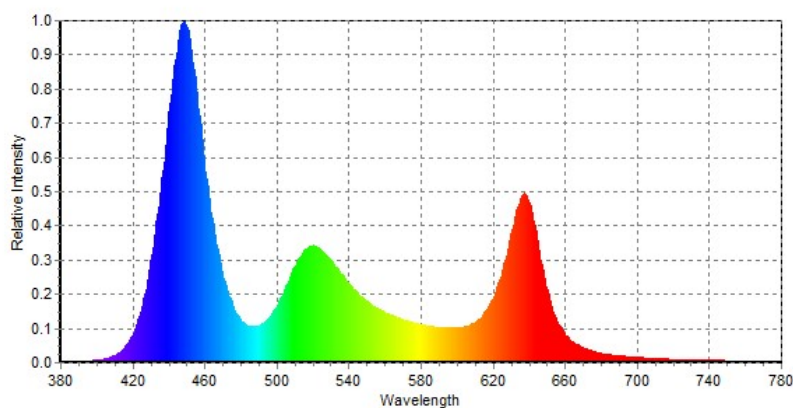
CIE1931 Chromaticity Diagram



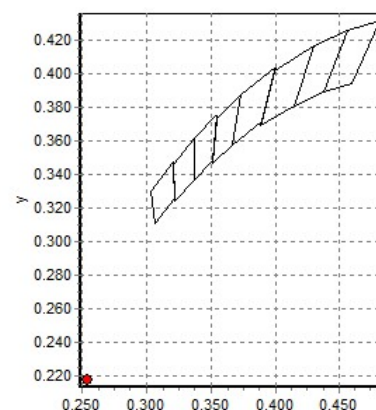
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	0
R1 0.0	R6 0.0	R11 0.0	
R2 0.0	R7 0.0	R12 0.0	
R3 0.0	R8 0.0	R13 0.0	
R4 0.0	R9 0.0	R14 0.0	
R5 0.0	R10 0.0	R15 0.0	

Flicker Frequency(Hz)	3	Flicker %	10
Flicker Index	0.02		



Spectral Distribution



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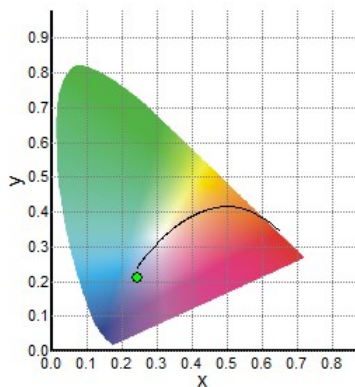


Product Description

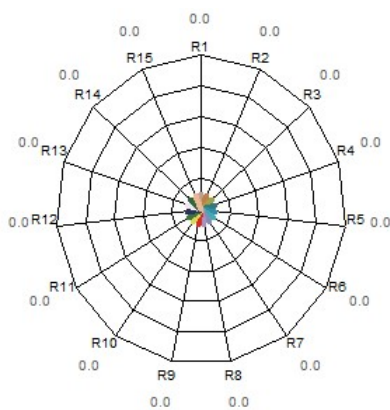
Product Name	Quad III RGBW Full On Max Zoom		
Measuring distance	All measurements at 5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:37:16		
Manufacturer Tester	FOS Technologies		
Temperature(°C)			
Reviewer	25	Re. Humidity(%)	34

Photometry and Chromaticity

CIE_x	0.2430	Duv	0.0000
CIE_y	0.2122	λ_d (nm)	469.4
CIE_u'	0.1921	Purity(%)	44
CIE_v'	0.3774	FWHM(nm)	28
CCT(K)	0	SP ratio	3.48
Illuminance(lx)	609	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	12.77
λ_p (nm)	450	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



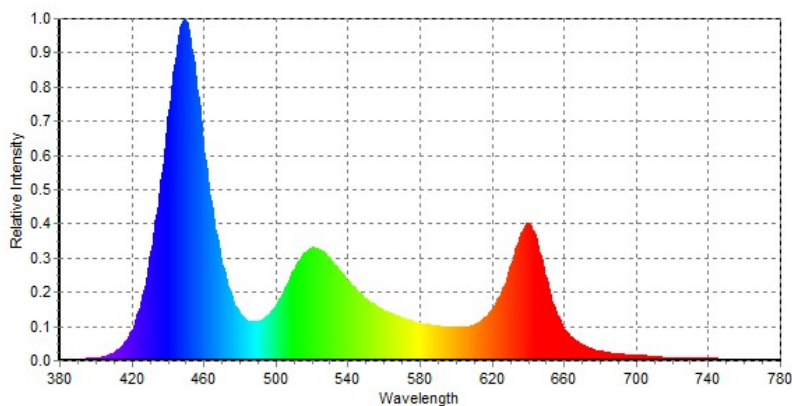
CIE1931 Chromaticity Diagram



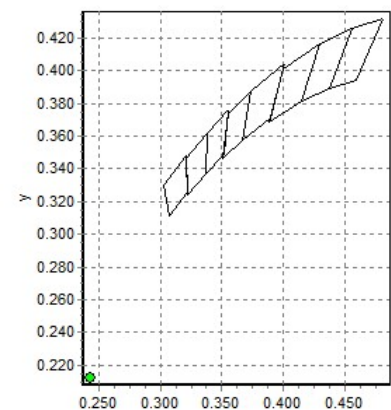
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	
R1	0.0	R6	0.0
R2	0.0	R7	0.0
R3	0.0	R8	0.0
R4	0.0	R9	0.0
R5	0.0	R10	0.0
		R11	0.0
		R12	0.0
		R13	0.0
		R14	0.0
		R15	0.0

Flicker Frequency(Hz)	85	Flicker %	4
Flicker Index	0.01		



Spectral Distribution



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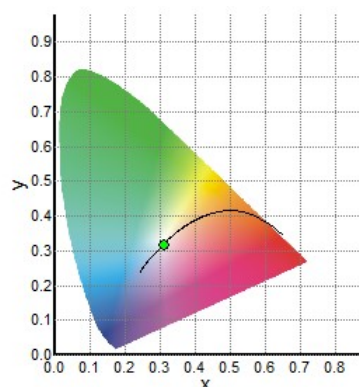


Product Description

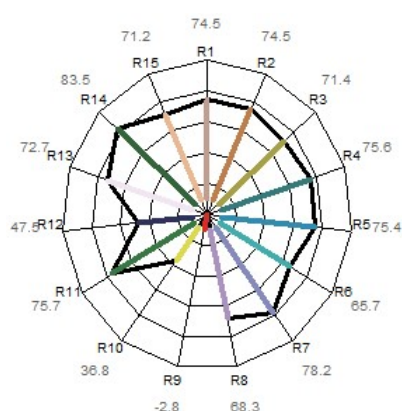
Product Name	Quad III White Min Zoom		
Measuring Distance	5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:38:56		
Manufacturer Tester	FOS Technologies		
Temperature(°C)			
Reviewer	25	Re. Humidity(%)	34

Photometry and Chromaticity

CIE_x	0.3109	Duv	-0.0027
CIE_y	0.3161	λ_d (nm)	481.0
CIE_u'	0.2015	Purity(%)	9
CIE_v'	0.4610	FWHM(nm)	29
CCT(K)	6726	SP ratio	2.02
Illuminance(lx)	2492	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	35.95
λ_p (nm)	444	CRI(Ra)	73
TLCI(Qa)	51.0	GAI	92.9
GAI BB8	94	GAI BB15	97
TM-30 Rf	68	TM-30 Rg	98



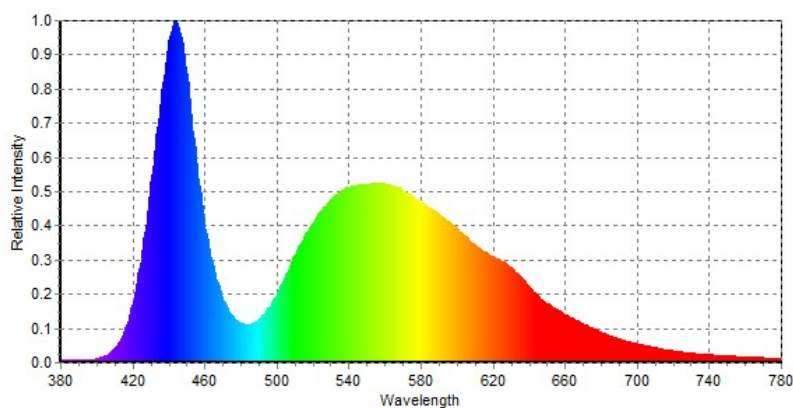
CIE1931 Chromaticity Diagram



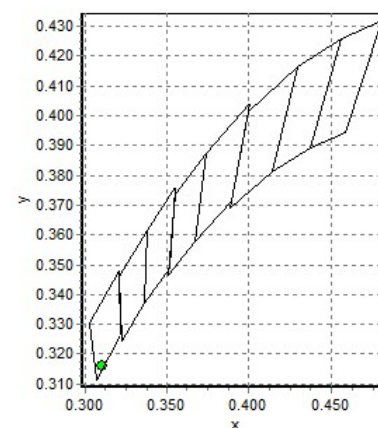
Radar Diagram of CRI

CQS-Qa		71	Re(thru R1~R15)		65
 R1	74.5	 R6	65.7	 R11	75.7
 R2	74.5	 R7	78.2	 R12	47.5
 R3	71.4	 R8	68.3	 R13	72.7
 R4	75.6	 R9	-2.8	 R14	83.5
 R5	75.4	 R10	36.8	 R15	71.2

Flicker Frequency(Hz)	85	Flicker %	5
Flicker Index	0.01		



Spectral Distribution



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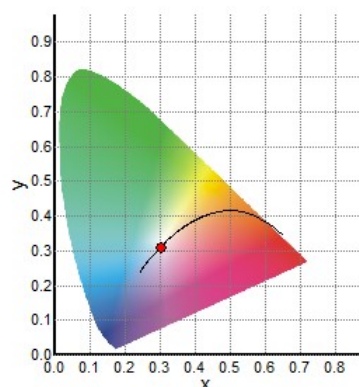


Product Description

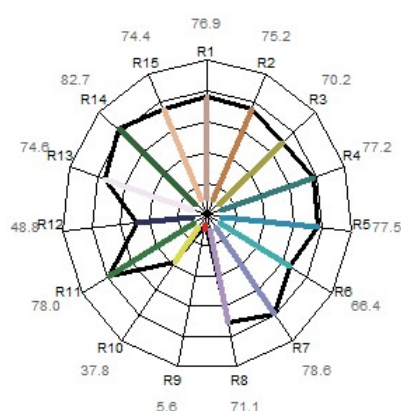
Product Name	Quad III White Max Zoom		
Measuring Distance	5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:38:12		
Manufacturer Tester	FOS Technologies		
Temperature(°C)			
Reviewer	25	Re. Humidity(%)	34

Photometry and Chromaticity

CIE_x	0.3052	Duv	-0.0048
CIE_y	0.3065	λ_d (nm)	477.8
CIE_u'	0.2012	Purity(%)	12
CIE_v'	0.4546	FWHM(nm)	29
CCT(K)	7223	SP ratio	2.08
Illuminance(lx)	286	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	4.21
λ_p (nm)	444	CRI(Ra)	74
TLCI(Qa)	52.2	GAI	95.7
GAI BB8	95	GAI BB15	98
TM-30 Rf	68	TM-30 Rg	98



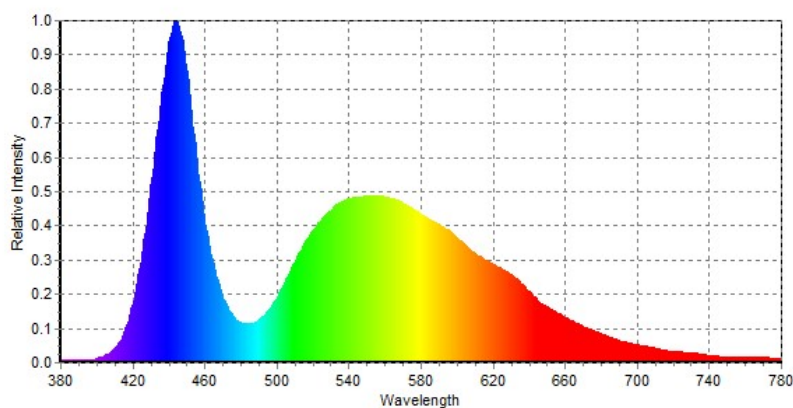
CIE1931 Chromaticity Diagram



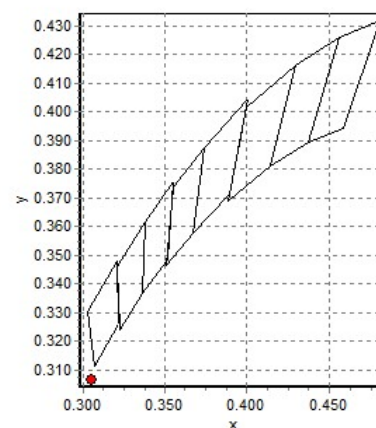
Radar Diagram of CRI

CQS-Qa		71	Re(thru R1~R15)		66
 R1	76.9	 R6	66.4	 R11	78.0
 R2	75.2	 R7	78.6	 R12	48.8
 R3	70.2	 R8	71.1	 R13	74.6
 R4	77.2	 R9	5.6	 R14	82.7
 R5	77.5	 R10	37.8	 R15	74.4

Flicker Frequency(Hz)	85	Flicker %	4
Flicker Index	0.01		



Spectral Distribution



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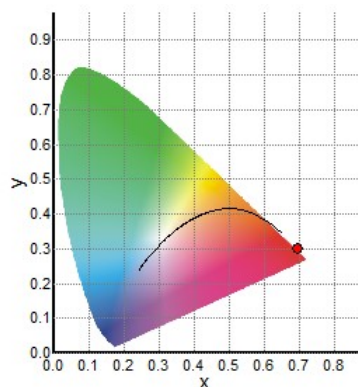


Product Description

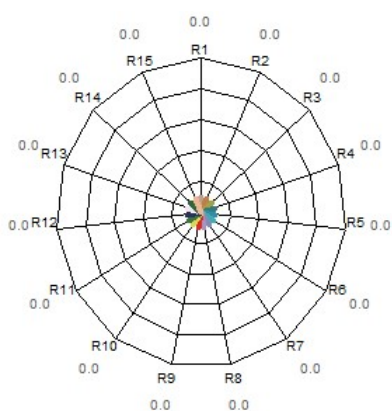
Product Name	Quad III RED Min Zoom		
Measuring Distance	5 Meters		
Date(YYYY/MM/DD)	2021/4/2 10:40:14		
Manufacturer Tester	FOS Technologies		
Temperature(°C)			
Reviewer	25	Re. Humidity(%)	34

Photometry and Chromaticity

CIE_x	0.6971	Duv	0.0000
CIE_y	0.3001	λ_d (nm)	624.7
CIE_u'	0.5355	Purity(%)	99
CIE_v'	0.5187	FWHM(nm)	22
CCT(K)	0	SP ratio	0.07
Illuminance(lx)	838	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{s}$)	27.53
λ_p (nm)	636	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



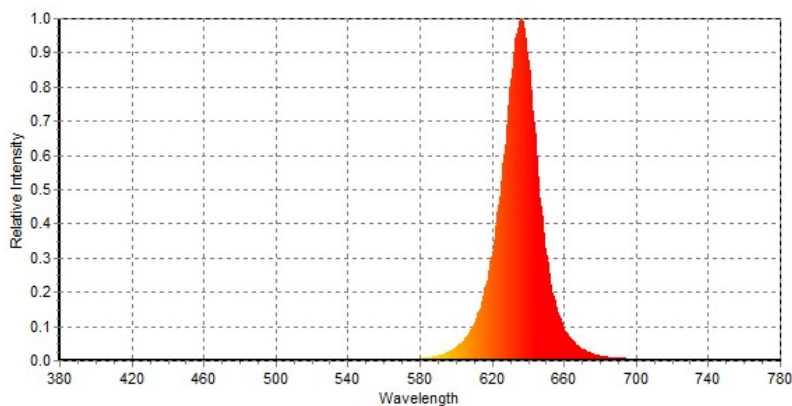
CIE1931 Chromaticity Diagram



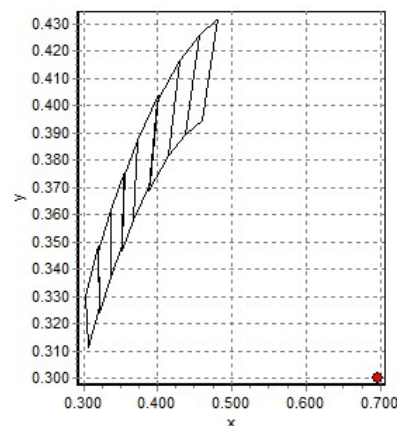
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	0
R1 0.0	R6 0.0	R11 0.0	
R2 0.0	R7 0.0	R12 0.0	
R3 0.0	R8 0.0	R13 0.0	
R4 0.0	R9 0.0	R14 0.0	
R5 0.0	R10 0.0	R15 0.0	

Flicker Frequency(Hz)	85	Flicker %	11
Flicker Index	0.03		



Spectral Distribution



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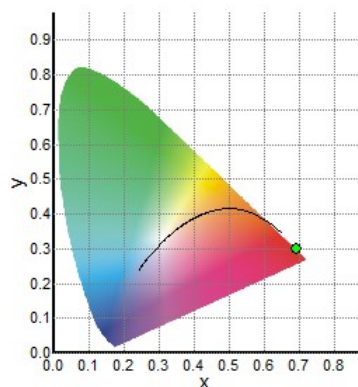


Product Description

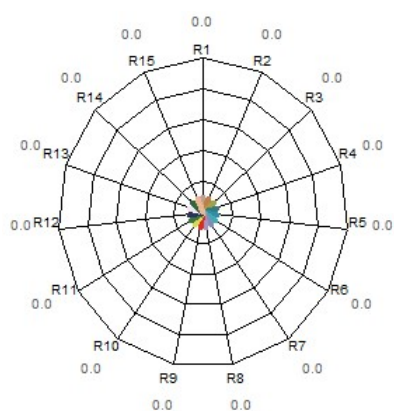
Product Name	Quad III Red Max Zoom		
Measuring Distance	5 Meters		
Date(YYYY/MM/DD)	2021/4/2 10:43:23		
Manufacturer Tester	FOS Technologies		
Temperature(°C)	25	Re. Humidity(%)	34
Reviewer			

Photometry and Chromaticity

CIE_x	0.6942	Duv	0.0000
CIE_y	0.3002	λ_d (nm)	624.8
CIE_u'	0.5325	Purity(%)	98
CIE_v'	0.5182	FWHM(nm)	22
CCT(K)	0	SP ratio	0.08
Illuminance(lx)	98	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	3.15
λ_p (nm)	635	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



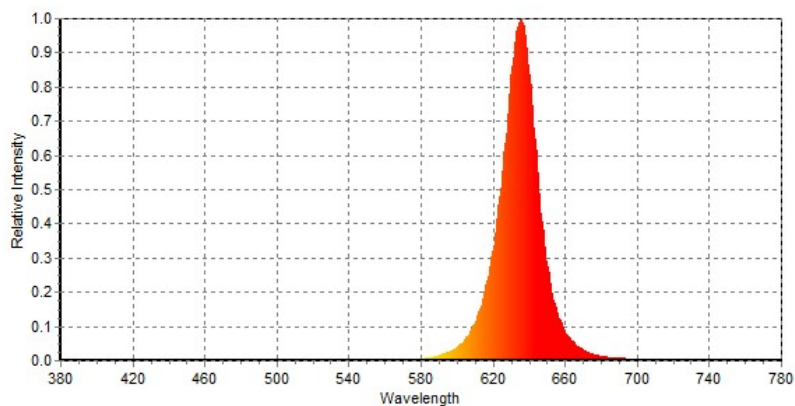
CIE1931 Chromaticity Diagram



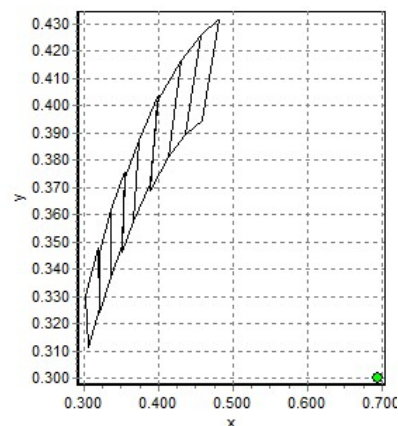
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	0
R1 0.0	R6 0.0	R11 0.0	
R2 0.0	R7 0.0	R12 0.0	
R3 0.0	R8 0.0	R13 0.0	
R4 0.0	R9 0.0	R14 0.0	
R5 0.0	R10 0.0	R15 0.0	

Flicker Frequency(Hz)	85	Flicker %	11
Flicker Index	0.03		



Spectral Distribution



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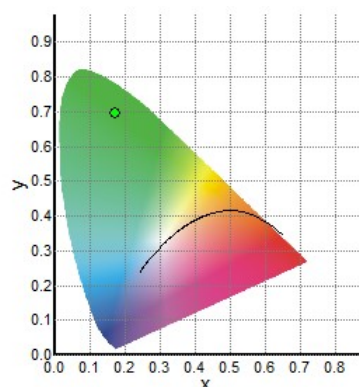


Product Description

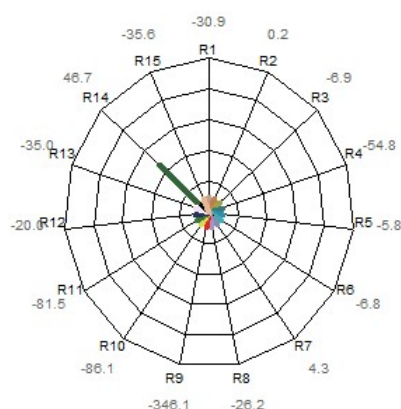
Product Name	Quad III Green Min Zoom		
Measuring Distance	5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:46:15		
Manufacturer Tester	FOS Technologies		
Temperature(°C)	25	Re. Humidity(%)	34
Reviewer			

Photometry and Chromaticity

CIE_x	0.1714	Duv	0.1537
CIE_y	0.6972	λ_d (nm)	525.0
CIE_u'	0.0622	Purity(%)	74
CIE_v'	0.5692	FWHM(nm)	38
CCT(K)	7946	SP ratio	2.94
Illuminance(lx)	2166	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	20.41
λ_p (nm)	518	CRI(Ra)	-16
TLCI(Qa)	4.2	GAI	1.4
GAI BB8	1	GAI BB15	2
TM-30 Rf	2	TM-30 Rg	13



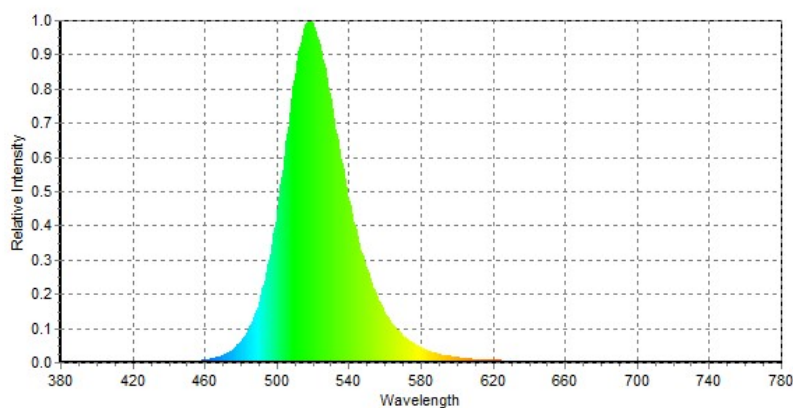
CIE1931 Chromaticity Diagram



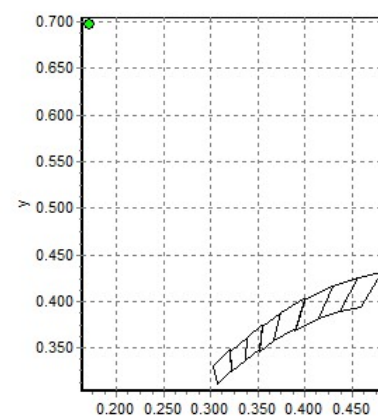
Radar Diagram of CRI

CQS-Qa		1	Re(thru R1~R15)		-46
 R1	-30.9	 R6	-6.8	 R11	-81.5
 R2	0.2	 R7	4.3	 R12	-20.0
 R3	-6.9	 R8	-26.2	 R13	-35.0
 R4	-54.8	 R9	-346.1	 R14	46.7
 R5	-5.8	 R10	-86.1	 R15	-35.6

Flicker Frequency(Hz)	85	Flicker %	5
Flicker Index	0.01		



Spectral Distribution



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Report of Photometry & Chromaticity for Light Source

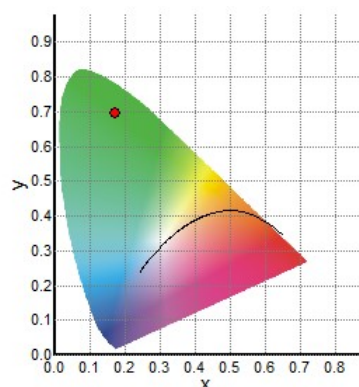


Product Description

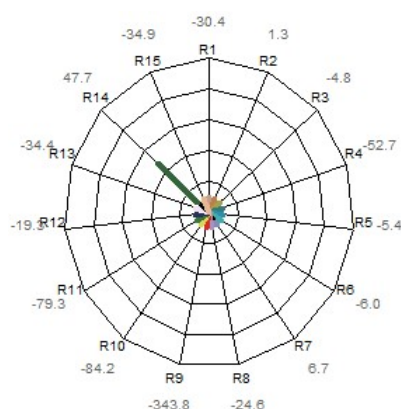
Product Name	Quad III Green Max Zoom		
Measuring Distance	5 meters		
Date(YYYY/MM/DD)	2021/4/2 10:45:15		
Manufacturer Tester	FOS Technologies		
Temperature(°C)	25	Re. Humidity(%)	34
Reviewer			

Photometry and Chromaticity

CIE_x	0.1711	Duv	0.1534
CIE_y	0.6942	λ_d (nm)	524.6
CIE_u'	0.0623	Purity(%)	73
CIE_v'	0.5686	FWHM(nm)	38
CCT(K)	7970	SP ratio	2.95
Illuminance(lx)	240	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	2.28
λ_p (nm)	518	CRI(Ra)	-14
TLCI(Qa)	4.5	GAI	1.6
GAI BB8	2	GAI BB15	2
TM-30 Rf	2	TM-30 Rg	14



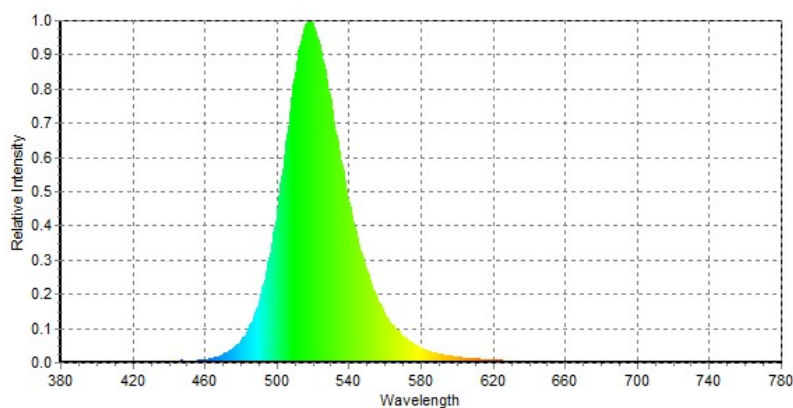
CIE1931 Chromaticity Diagram



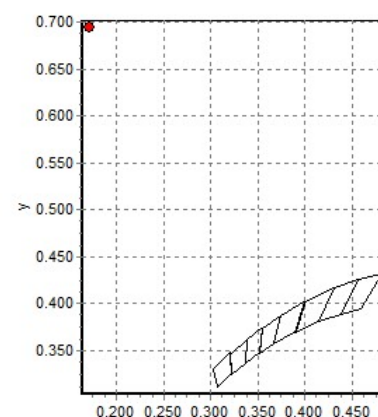
Radar Diagram of CRI

CQS-Qa		1	Re(thru R1~R15)		-44
 R1	-30.4	 R6	-6.0	 R11	-79.3
 R2	1.3	 R7	6.7	 R12	-19.3
 R3	-4.8	 R8	-24.6	 R13	-34.4
 R4	-52.7	 R9	-343.8	 R14	47.7
 R5	-5.4	 R10	-84.2	 R15	-34.9

Flicker Frequency(Hz)	85	Flicker %	4
Flicker Index	0.01		



Spectral Distribution



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Report of Photometry & Chromaticity for Light Source

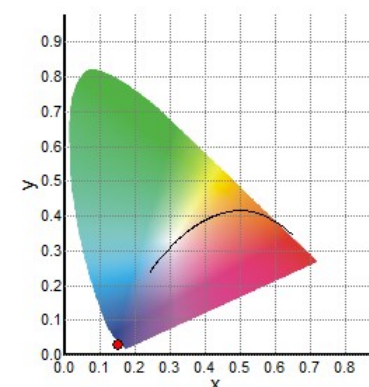


Product Description

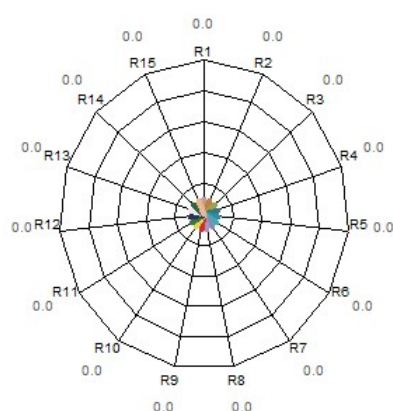
Product Name	Quad III Blue Min Zoom		
Measuring Distance	5 Meters		
Date(YYYY/MM/DD)	2021/4/2 10:47:18		
Manufacturer Tester	FOS Technologies		
Temperature(°C)	25	Re. Humidity(%)	34
Reviewer			

Photometry and Chromaticity

CIE_x	0.1541	Duv	0.0000
CIE_y	0.0296	λ_d (nm)	455.5
CIE_u'	0.2023	Purity(%)	98
CIE_v'	0.0875	FWHM(nm)	26
CCT(K)	0	SP ratio	20.11
Illuminance(lx)	390	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	38.00
λ_p (nm)	449	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



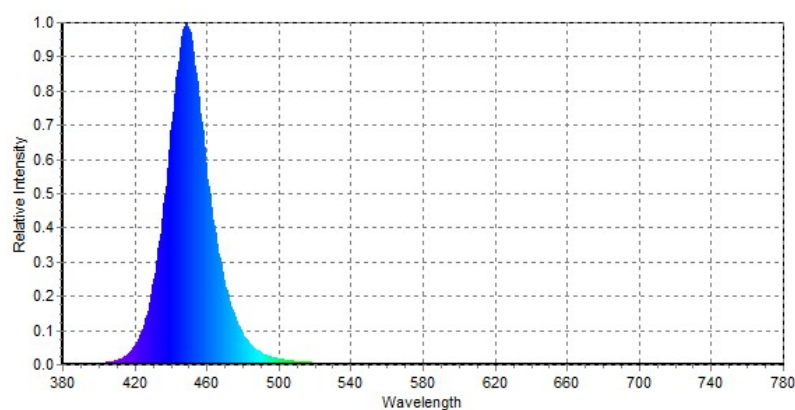
CIE1931 Chromaticity Diagram



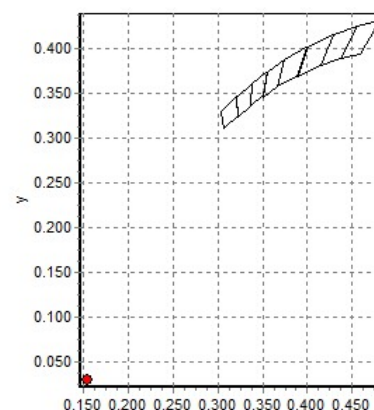
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	0
R1 0.0	R6 0.0	R11 0.0	
R2 0.0	R7 0.0	R12 0.0	
R3 0.0	R8 0.0	R13 0.0	
R4 0.0	R9 0.0	R14 0.0	
R5 0.0	R10 0.0	R15 0.0	

Flicker Frequency(Hz)	85	Flicker %	7
Flicker Index	0.01		



Spectral Distribution



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Report of Photometry & Chromaticity for Light Source

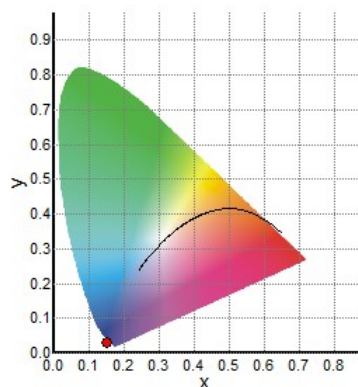


Product Description

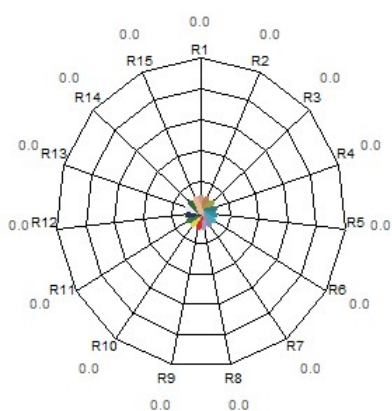
Product Name	Quad III Blue Max Zoom		
Measuring Distance	5 Meters		
Date(YYYY/MM/DD)	2021/4/2 10:48:38		
Manufacturer Tester	FOS Technologies		
Temperature(°C)	25	Re. Humidity(%)	34
Reviewer			

Photometry and Chromaticity

CIE_x	0.1542	Duv	0.0000
CIE_y	0.0296	λ_d (nm)	455.4
CIE_u'	0.2025	Purity(%)	98
CIE_v'	0.0874	FWHM(nm)	26
CCT(K)	0	SP ratio	20.10
Illuminance(lx)	46	PPFD 400-700nm($\mu\text{mol}/\text{m}^2 \text{ s}$)	4.50
λ_p (nm)	449	CRI(Ra)	0
TLCI(Qa)	0.0	GAI	0.0
GAI BB8	0	GAI BB15	0
TM-30 Rf	0	TM-30 Rg	0



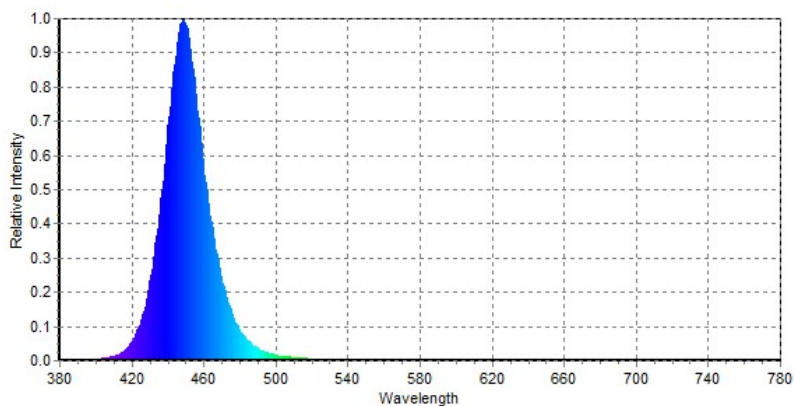
CIE1931 Chromaticity Diagram



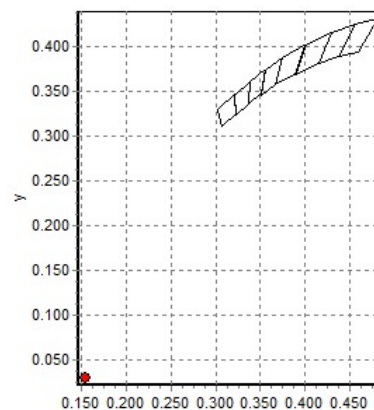
Radar Diagram of CRI

CQS-Qa	0	Re(thru R1~R15)	0
R1 0.0	R6 0.0	R11 0.0	
R2 0.0	R7 0.0	R12 0.0	
R3 0.0	R8 0.0	R13 0.0	
R4 0.0	R9 0.0	R14 0.0	
R5 0.0	R10 0.0	R15 0.0	

Flicker Frequency(Hz)	85	Flicker %	6
Flicker Index	0.01		



Spectral Distribution



C78.377-2008