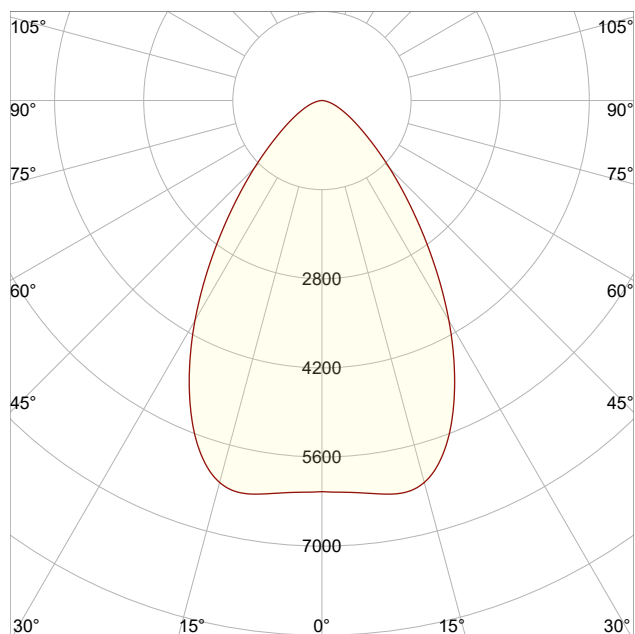
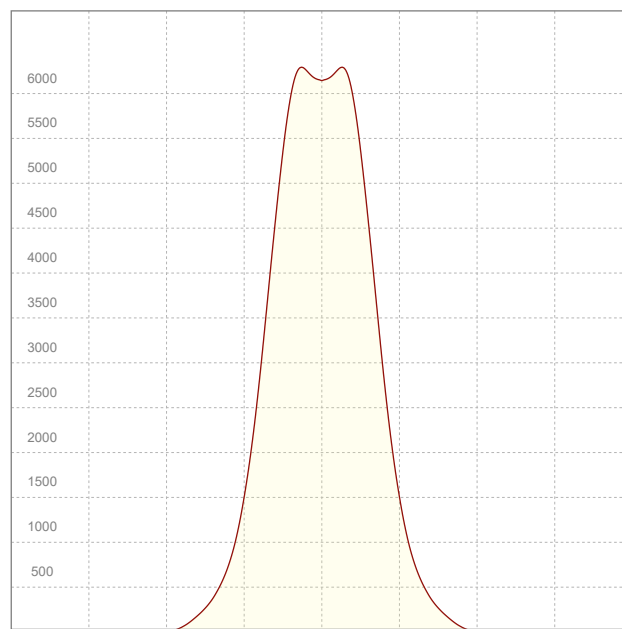


General Discription

Item number	Q-BXX-4080-F
Date and time	5-1-2024 14:01:41
CCT (Kelvin)	4037 K
Beam angle	68,6°
Luminous flux	8780 lm
Efficiency	113 lm/watt
Weighted energy	77,6 kWh/1000h
Power factor	0,55
CRI (RA)	87,2
Fidelity index Rf	Rf 87,3
Gammut index Rg	Rg 99,3
Peak	6292 cd



Polar curve

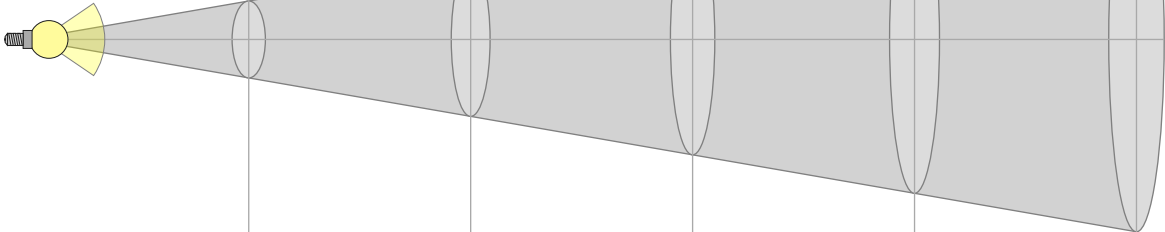


Linear distribution diagram

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Beam details				1m			2m			3m			4m			5m			
Lux*				6146 lx			1536 lx			683 lx			384 lx			246 lx			
68,6° 																			
*measured at center of beam																			
Footcandles*				570,9 fcd			142,7 fcd			63,4 fcd			35,7 fcd			22,8 fcd			
Beam width (meter)				1,4 m			2,7 m			4,1 m			5,5 m			6,8 m			
Beam width (Feet)				4,5 ft			9 ft			13,4 ft			17,9 ft			22,4 ft			
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
6146lx	1536lx	683lx	384lx	246lx	171lx	125lx	96lx	76lx	61lx	51lx	43lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	19,7ft	23ft	26,2ft	29,5ft	32,8ft	36,1ft	39,4ft	42,7ft	45,9ft	49,2ft	52,5ft	55,8ft	59,1ft	62,3ft	65,6ft
570,9fcd	142,7fcd	63,4fcd	35,7fcd	22,8fcd	15,9fcd	11,7fcd	8,9fcd	7fcd	5,7fcd	4,7fcd	4fcd	3,4fcd	2,9fcd	2,5fcd	2,2fcd	2fcd	1,8fcd	1,6fcd	1,4fcd
Intensities in 0° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
6146	6183	6277	6208	5729	4931	3986	3014	2163	1504	1016	693	478	325	218	134	66	24	4	4
100%	101%	102%	101%	93%	80%	65%	49%	35%	24%	17%	11%	8%	5%	4%	2%	1%	0%	0%	0%
Intensities in 90° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
6146	6183	6277	6208	5729	4931	3986	3014	2163	1504	1016	693	478	325	218	134	66	24	4	4
100%	101%	102%	101%	93%	80%	65%	49%	35%	24%	17%	11%	8%	5%	4%	2%	1%	0%	0%	0%
Intensities in 180° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
6146	6183	6277	6208	5729	4931	3986	3014	2163	1504	1016	693	478	325	218	134	66	24	4	4
100%	101%	102%	101%	93%	80%	65%	49%	35%	24%	17%	11%	8%	5%	4%	2%	1%	0%	0%	0%
Intensities in 270° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
6146	6183	6277	6208	5729	4931	3986	3014	2163	1504	1016	693	478	325	218	134	66	24	4	4
100%	101%	102%	101%	93%	80%	65%	49%	35%	24%	17%	11%	8%	5%	4%	2%	1%	0%	0%	0%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
68,6°				112,6°				147°				94,1%				81,2%			



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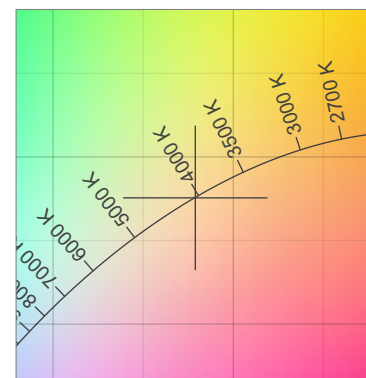
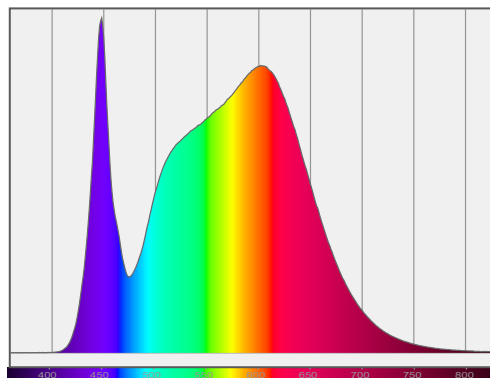
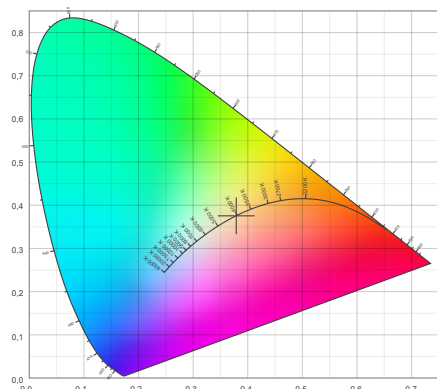
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Color details



CIE 1931

x: 0,379

4037 K

y: 0,376

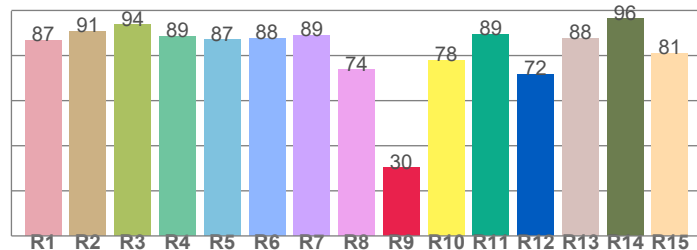
Spectra

CIE 1931 ZOOM

Δuv : -0,0002

CRI: 87,2 (R1-R8)

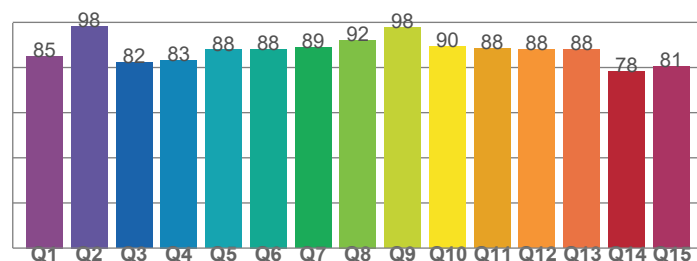
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
86,9	90,6	93,6	88,6	87,0	87,7	89,1	73,7
R9	R10	R11	R12	R13	R14	R15	
30,2	77,9	89,4	71,7	87,7	96,3	81,0	

CQS: 86,7

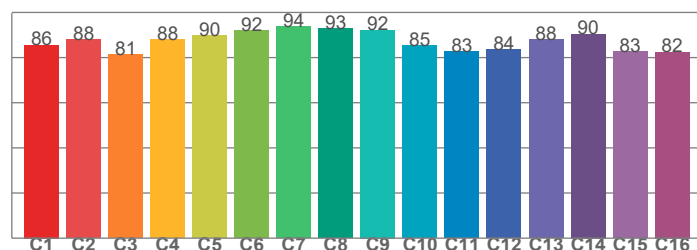
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
85,1	98,4	82,3	83,3	87,9	88,2	88,8	92,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,7	89,6	88,4	88,0	88,0	78,4	80,7	

TM30: 87,3

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



C1	C2	C3	C4	C5	C6	C7	C8
85,6	87,9	81,3	88,0	89,9	92,1	93,9	92,8
C9	C10	C11	C12	C13	C14	C15	
92,3	85,5	82,7	83,6	87,9	90,4	82,8	

Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4037 K	87,2	30,2	87,3	99,3	86,7	0,379	0,376	0,225	0,334	-0,0002



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TM30 details

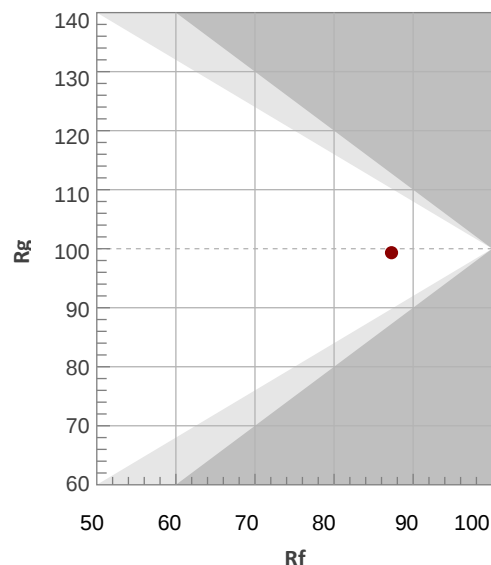
Rf 87,3

Fidelity index Rf

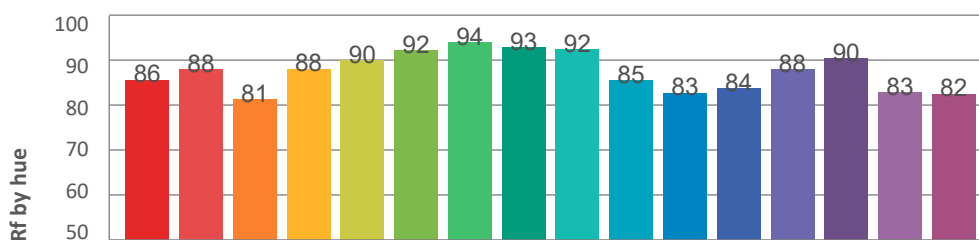
Rg 99,3

Gamut index Rg

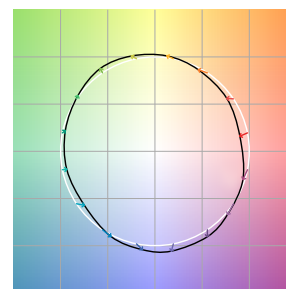
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	86	-9%	-2%
2	88	-6%	4%
3	81	-3%	10%
4	88	2%	7%
5	90	4%	5%
6	92	5%	-1%
7	94	1%	-4%
8	93	-3%	-3%
9	92	-5%	1%
10	85	-6%	6%
11	83	1%	11%
12	84	5%	7%
13	88	7%	-4%
14	90	6%	-4%
15	83	1%	-13%
16	82	-3%	-11%



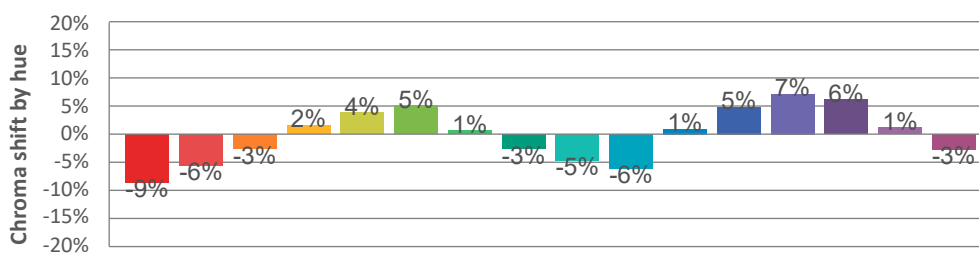
Hue binH



Color vector graphics



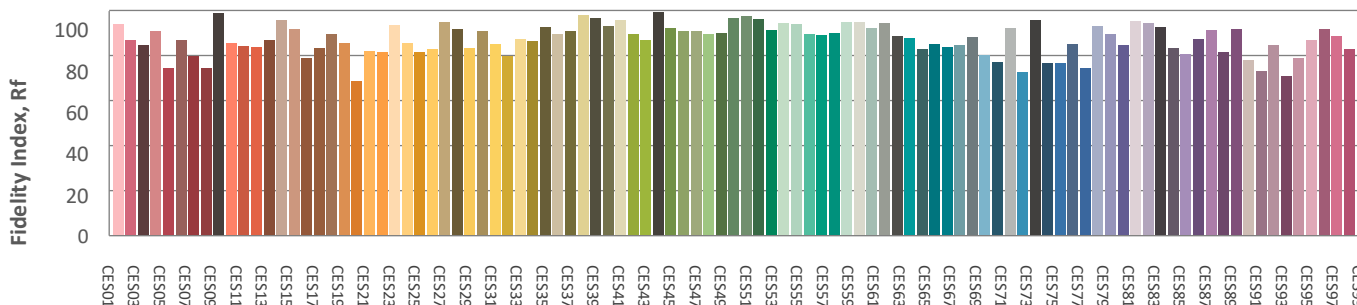
Hue bin



Color distortion graphics



Color Evaluation Sample



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Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	22,1	23,0	22,3	23,3	23,5	22,1	23,0	22,3	23,3	23,5
	3H	22,3	23,2	22,7	23,5	23,7	22,3	23,2	22,7	23,5	23,7
	4H	22,4	23,3	22,8	23,5	23,8	22,4	23,3	22,8	23,5	23,8
	6H	22,4	23,2	22,7	23,5	23,9	22,4	23,2	22,7	23,5	23,9
	8H	22,4	23,1	22,7	23,5	23,9	22,4	23,1	22,7	23,5	23,9
	12H	22,4	23,1	22,7	23,4	23,9	22,4	23,1	22,7	23,4	23,9
4H	2H	22,1	23,0	22,5	23,2	23,5	22,1	23,0	22,5	23,2	23,5
	3H	22,5	23,2	22,9	23,6	24,0	22,5	23,2	22,9	23,6	24,0
	4H	22,6	23,2	23,0	23,7	24,2	22,6	23,2	23,0	23,7	24,2
	6H	22,6	23,3	23,1	23,6	24,0	22,6	23,3	23,1	23,6	24,0
	8H	22,6	23,2	23,1	23,5	23,9	22,6	23,2	23,1	23,5	23,9
	12H	22,5	23,0	23,0	23,4	23,9	22,5	23,0	23,0	23,4	23,9
8H	4H	22,5	23,1	23,0	23,5	23,9	22,5	23,1	23,0	23,5	23,9
	6H	22,6	23,1	23,1	23,5	24,1	22,6	23,1	23,1	23,5	24,1
	8H	22,7	23,0	23,2	23,5	24,2	22,7	23,0	23,2	23,5	24,2
	12H	22,6	22,9	23,2	23,4	24,0	22,6	22,9	23,2	23,4	24,0
12H	4H	22,5	23,0	23,0	23,4	23,9	22,5	23,0	23,0	23,4	23,9
	6H	22,6	23,0	23,1	23,5	24,1	22,6	23,0	23,1	23,5	24,1
	8H	22,6	22,9	23,2	23,4	24,0	22,6	22,9	23,2	23,4	24,0
Variation of the observer position for the luminaire distance S											
S = 1.0H		1,3 / -1,4					1,3 / -1,4				
S = 1.5H		2,9 / -2,6					2,9 / -2,6				
S = 2.0H		4,4 / -3,7					4,4 / -3,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 8780lm total luminous flux											



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