

Light efficiency:



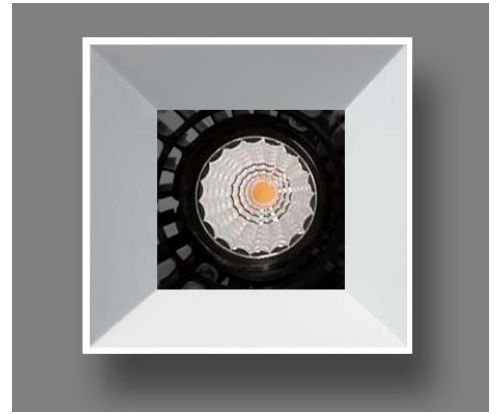
Output: 1925 lm

Light quality:

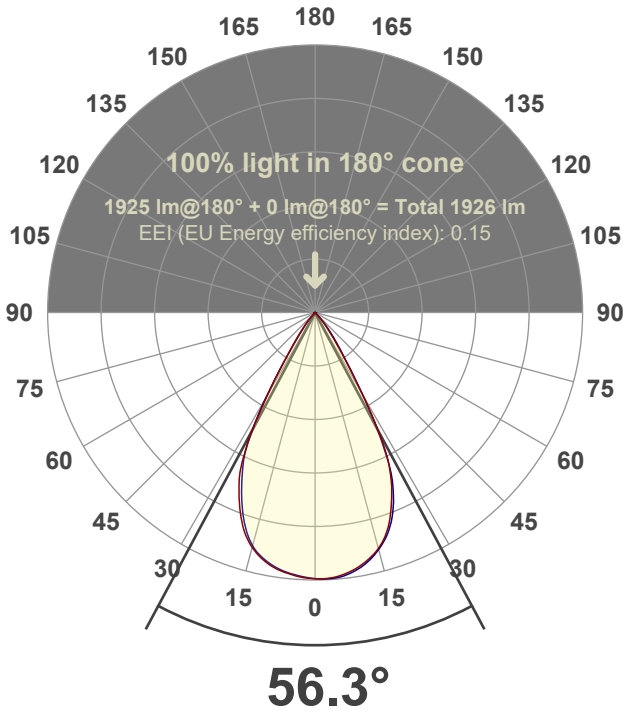


Peak: 2538 cd

Power: 20.8 W



Beam angle



Test number:

GR-O-F-CZ20-30k-WF-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-CZ20 30k 60° Optic

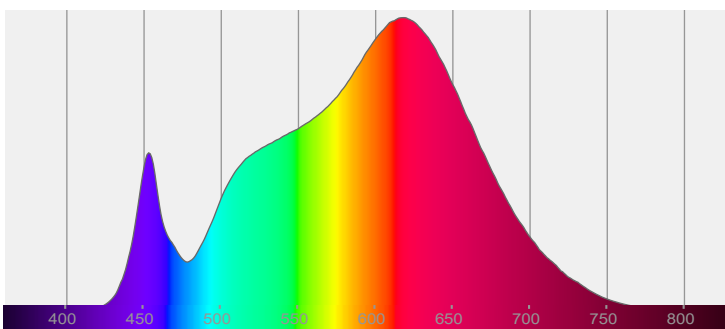
Date and time:

6/30/2022 7:51:47 PM

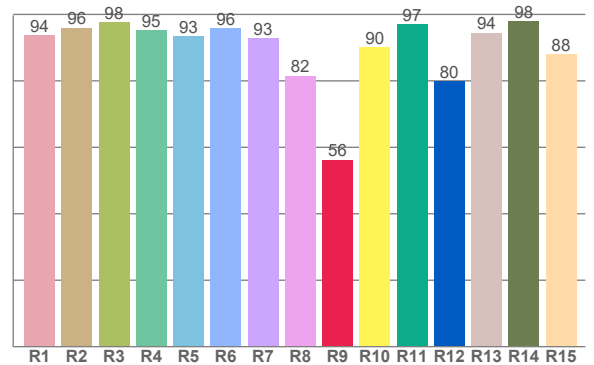
Delivered Lumens

1925

Spectra



CRI: 93.2 (R1-R8)



Color parameters

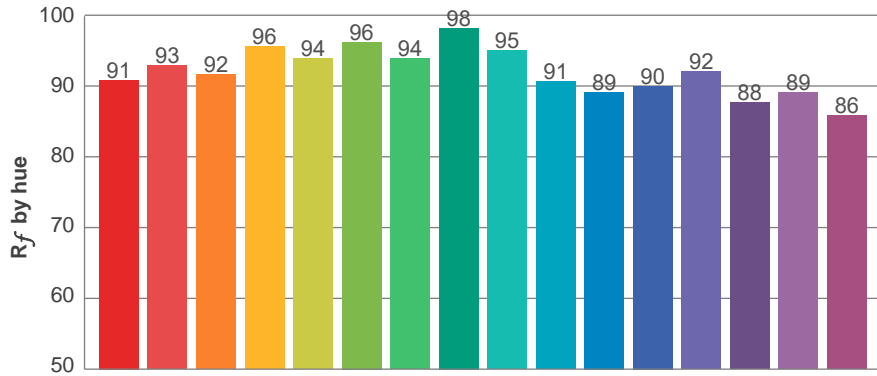
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.2	56.2	92.2	99.2	91.7	0.436	0.408	0.249	0.348	0.0015

R_f 92.2
Fidelity index R_f

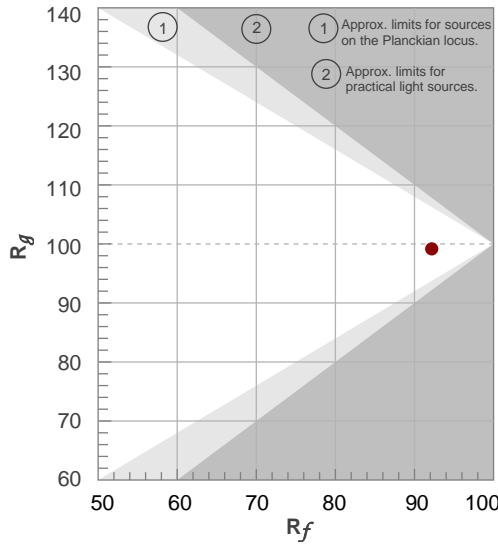
R_g 99.2
Gammut index R_g

TM30: 92.2

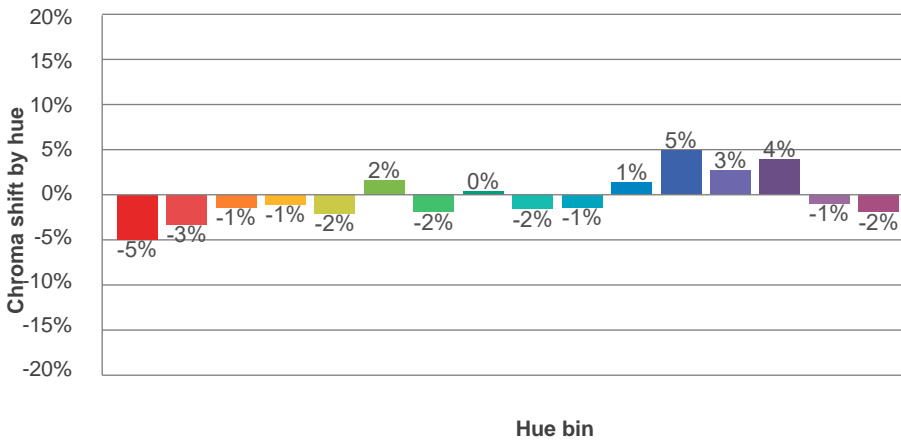
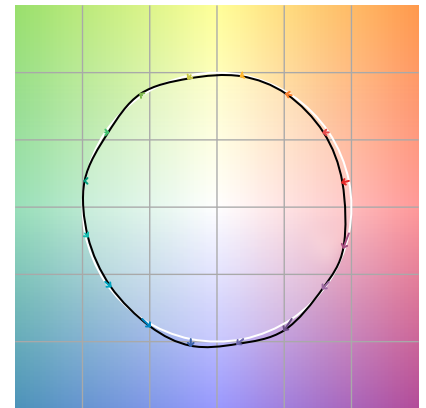
TM-30Color



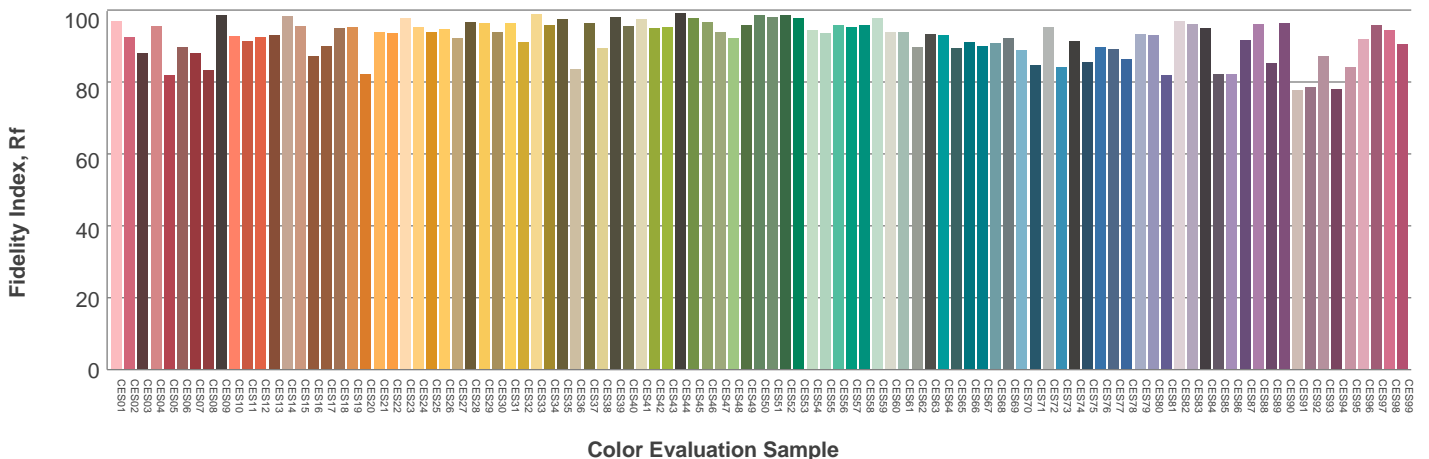
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



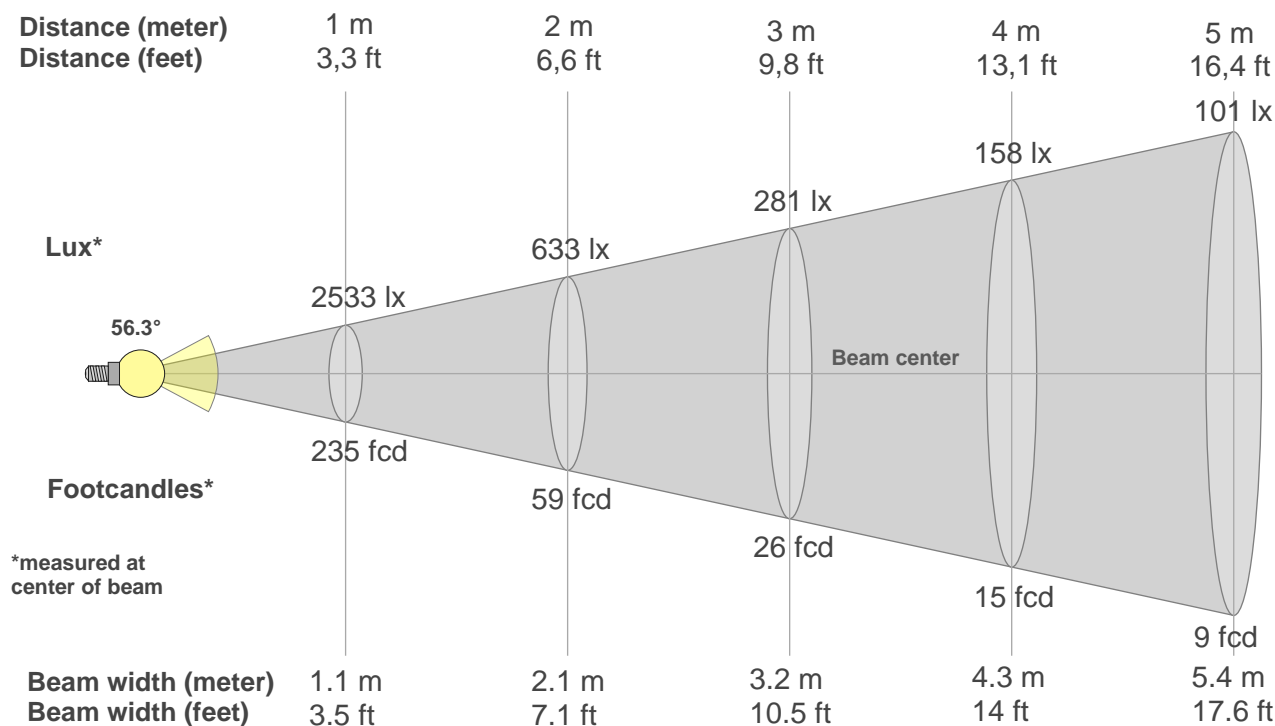
Color vector graphics



Color distortion



Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
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
2533lx	633lx	281lx	158lx	101lx	70lx	52lx	40lx	31lx	25lx	21lx	18lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx	6lx
235.4fcd	58.8fcd	26.2fcd	14.7fcd	9.4fcd	6.5fcd	4.8fcd	3.7fcd	2.9fcd	2.4fcd	1.9fcd	1.6fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.7fcd	0.6fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2533	2536	2527	2509	2484	2451	2409	2357	2289	2199	2085	1946	1791	1591	1303	954	616	422	297	206
100%	100%	100%	99%	98%	97%	95%	93%	90%	87%	82%	77%	71%	63%	51%	38%	24%	17%	12%	8%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2533	2537	2535	2524	2501	2467	2423	2368	2302	2224	2118	1986	1820	1604	1288	940	661	465	339	245
100%	100%	100%	100%	99%	97%	96%	93%	91%	88%	84%	78%	72%	63%	51%	37%	26%	18%	13%	10%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2533	2528	2515	2497	2477	2444	2402	2346	2277	2188	2067	1930	1776	1584	1304	937	633	421	292	198
100%	100%	99%	99%	98%	96%	95%	93%	90%	86%	82%	76%	70%	63%	51%	37%	25%	17%	12%	8%

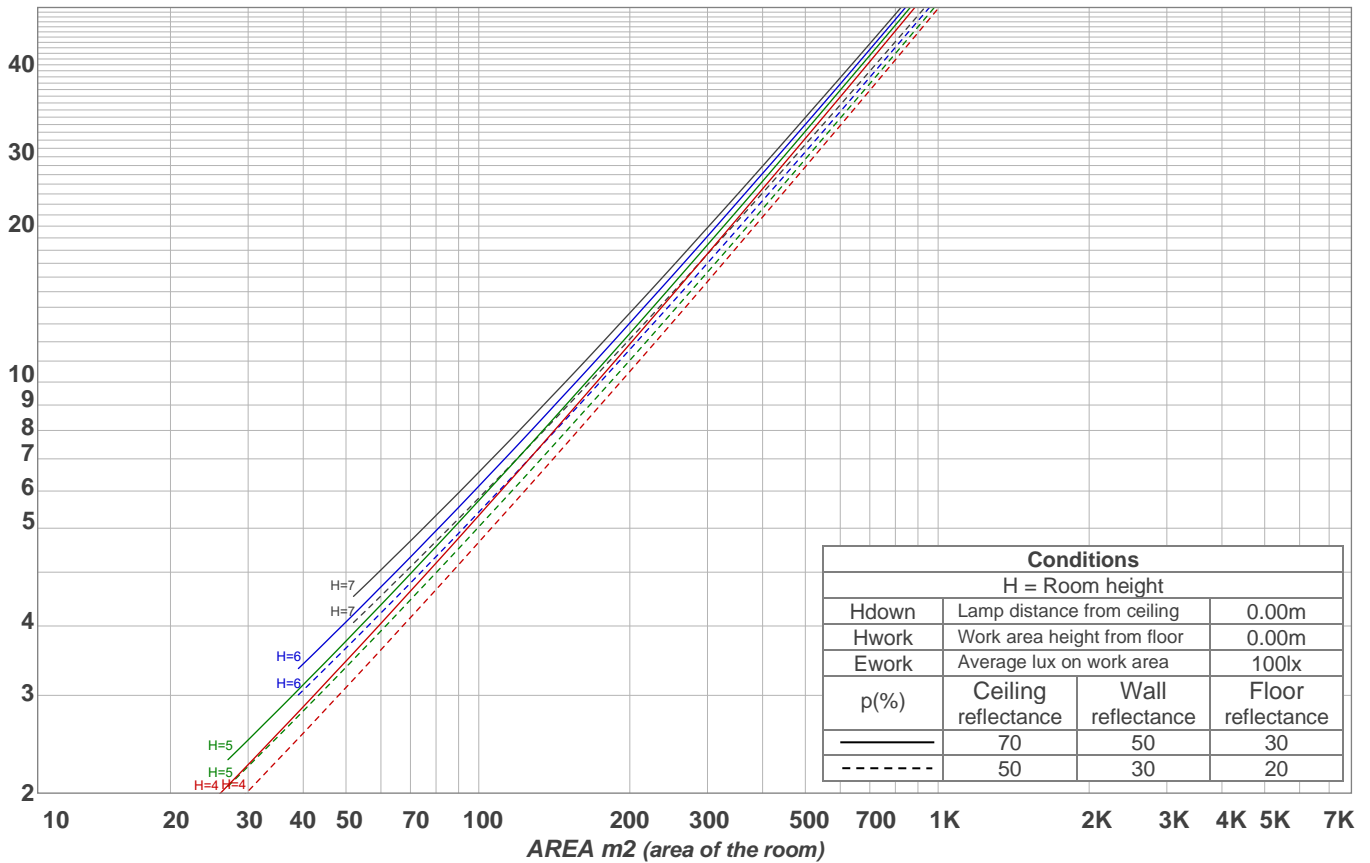
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2533	2522	2507	2489	2465	2432	2390	2335	2253	2146	2018	1872	1714	1541	1287	969	634	382	251	166
100%	100%	99%	98%	97%	96%	94%	92%	89%	85%	80%	74%	68%	61%	51%	38%	25%	15%	10%	7%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
56.3°	73.7°	86.8°	99.3%	98.7%

LAMPS (number of lamps)
50

Light planning Luminaire budgetary diagram



Luminaire budgetary diagram AREA m2 (area of the room) Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)																				
	Room Values are expressed as percentage of Lumens delivered to the task surface																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	
2	109	104	100	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89	89	89	
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83	83	83	
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	79	79	79	
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74	74	74	
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	77	74	71	70	70	70	
7	87	78	72	69	85	77	72	68	76	71	68	75	71	68	74	70	67	66	66	66	
8	83	74	68	65	82	73	68	65	72	68	64	71	67	64	70	67	64	63	63	63	
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	60	59	59	59	
10	76	67	62	58	75	67	61	58	66	61	58	65	61	58	64	60	57	56	56	56	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
238 lm	646 lm	737 lm	249 lm	38.3 lm	4.40 lm	4.01 lm	4.60 lm	4.14 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm