

Light efficiency:



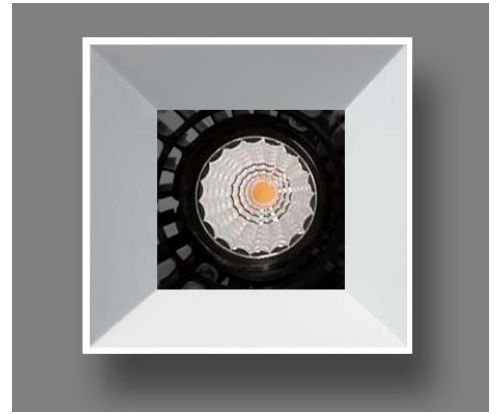
Output: 890 lm

Light quality:

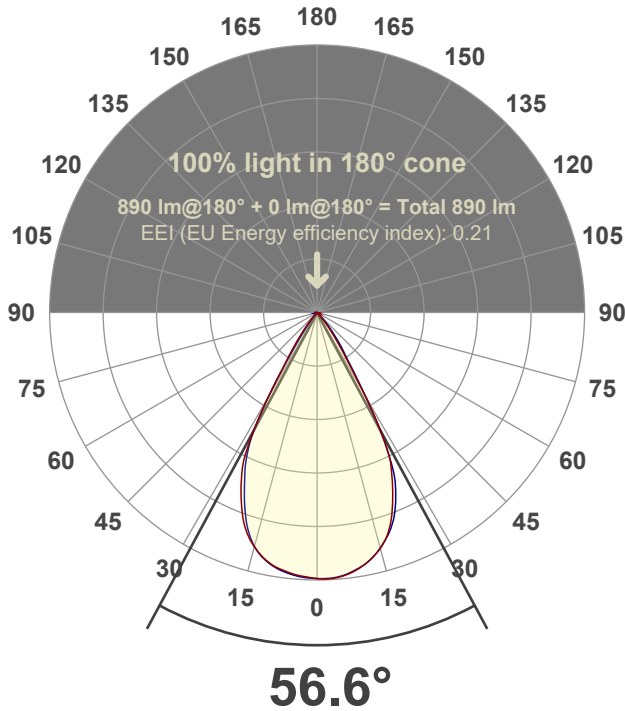


Peak: 1177 cd

Power: 14.7 W



Beam angle



Test number:

GR-O-F-A14-3019-WF-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-A14-3019 60° Optic

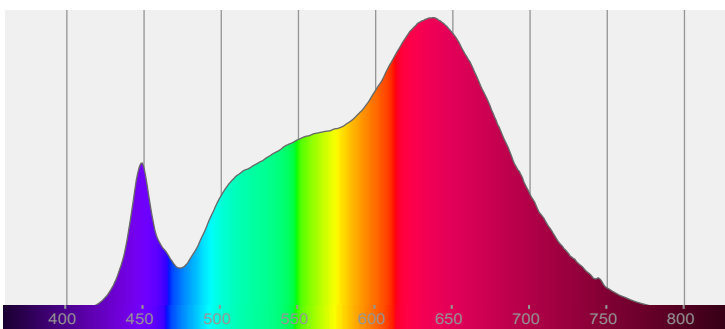
Date and time:

6/21/2022 9:22:55 PM

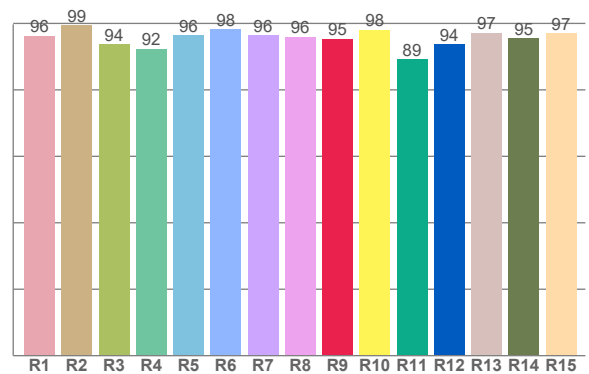
Delivered Lumens

890

Spectra



CRI: 96.1 (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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
	96.1	95.4	95.1	104.4	94.8	0.435	0.401	0.250	0.347	-0.0008

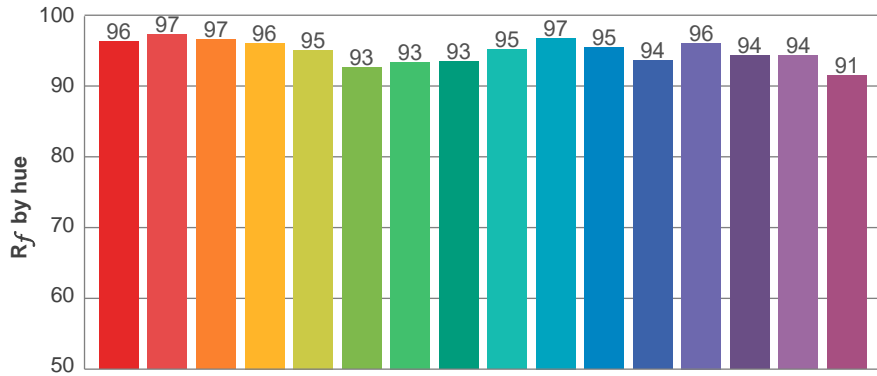
**$R_f$  95.1**  
Fidelity index  $R_f$

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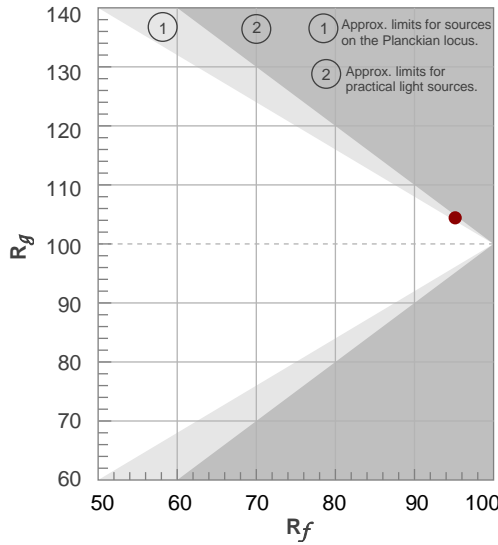
**$R_g$  104.4**  
Gammut index  $R_g$

TM30: 95.1

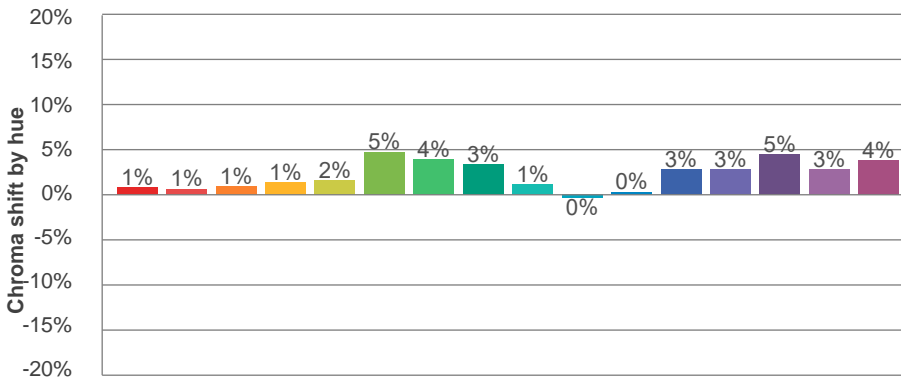
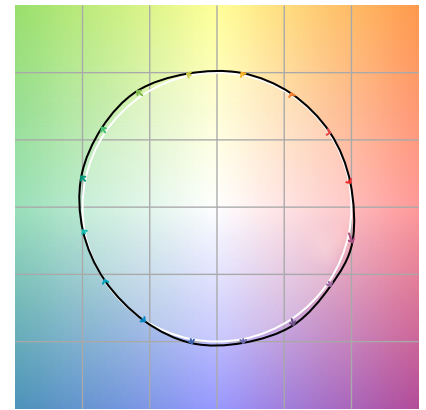
TM-30Color



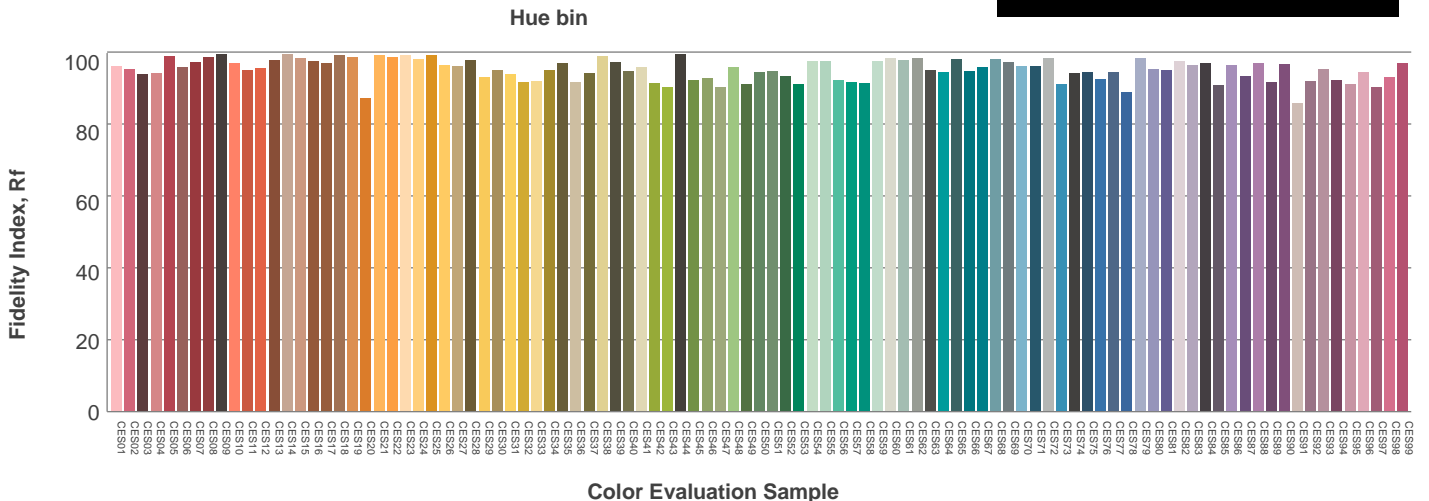
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	96	1%	-2%
2	97	1%	-1%
3	97	1%	1%
4	96	1%	2%
5	95	2%	2%
6	93	5%	1%
7	93	4%	-2%
8	93	3%	-3%
9	95	1%	-2%
10	97	0%	-1%
11	95	0%	2%
12	94	3%	1%
13	96	3%	-1%
14	94	5%	-1%
15	94	3%	-2%
16	91	4%	-6%



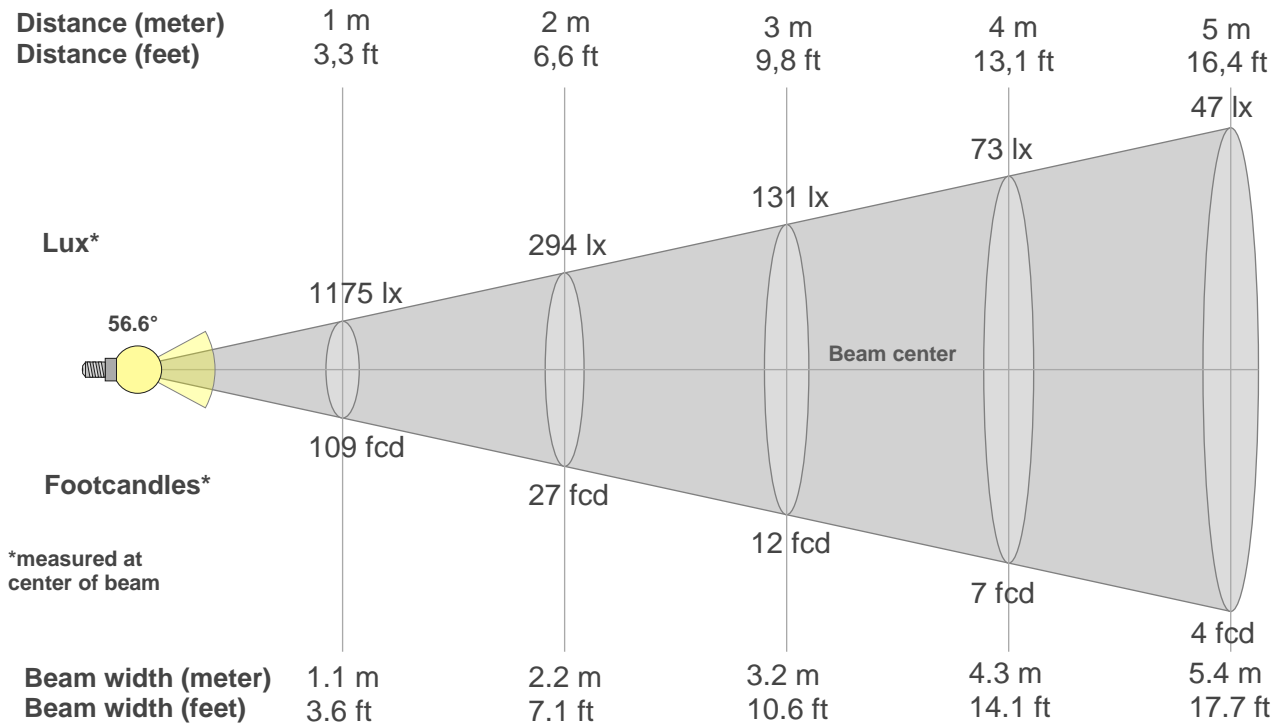
Color vector graphics



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
1175lx	294lx	131lx	73lx	47lx	33lx	24lx	18lx	15lx	12lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
109.1fcd	27.3fcd	12.1fcd	6.8fcd	4.4fcd	3fcd	2.2fcd	1.7fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.6fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd

#### 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°
1175	1177	1174	1167	1155	1139	1118	1093	1060	1018	962	893	818	736	614	447	274	190	131	88
100%	100%	100%	99%	98%	97%	95%	93%	90%	87%	82%	76%	70%	63%	52%	38%	23%	16%	11%	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°
1175	1175	1172	1165	1152	1137	1118	1092	1060	1025	980	922	851	759	611	442	309	222	171	123
100%	100%	100%	99%	98%	97%	95%	93%	90%	87%	83%	79%	72%	65%	52%	38%	26%	19%	15%	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°
1175	1169	1164	1155	1145	1132	1113	1086	1053	1012	960	896	826	743	613	448	286	198	139	95
100%	100%	99%	98%	97%	96%	95%	92%	90%	86%	82%	76%	70%	63%	52%	38%	24%	17%	12%	8%

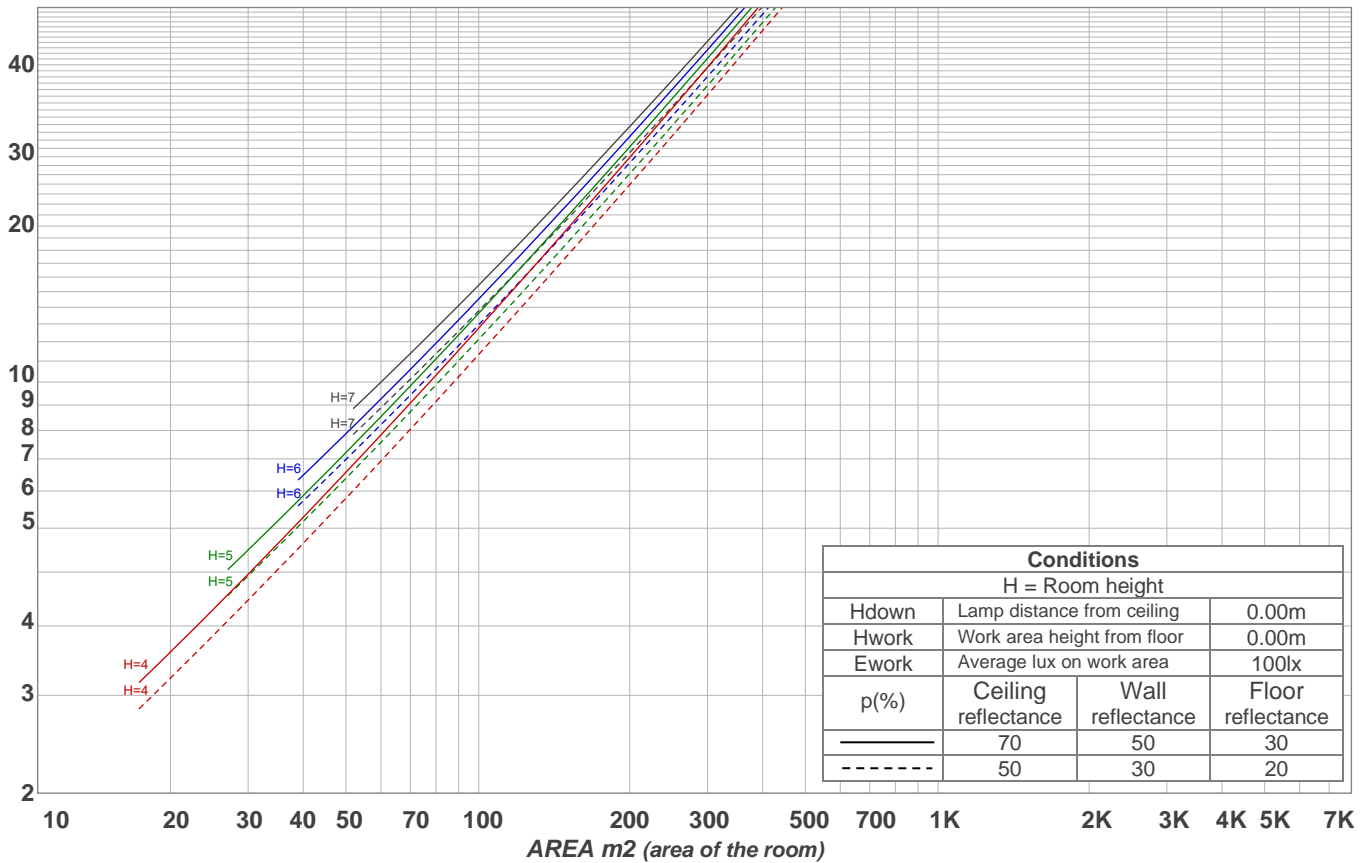
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1175	1172	1168	1160	1150	1134	1114	1086	1049	997	931	860	787	710	609	444	279	158	91	53
100%	100%	99%	99%	98%	97%	95%	92%	89%	85%	79%	73%	67%	60%	52%	38%	24%	13%	8%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
56.6°	73.4°	85.8°	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	78	74	71	70	70	70	
7	87	78	73	69	85	77	72	68	76	72	68	75	71	68	74	70	67	66	66	66	
8	83	74	69	65	82	74	68	65	72	68	64	71	67	64	71	67	64	63	63	63	
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	61	59	59	59	
10	76	67	62	58	75	67	61	58	66	61	58	65	61	58	64	60	58	56	56	56	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
110 lm	299 lm	343 lm	113 lm	16.8 lm	1.90 lm	2.20 lm	2.13 lm	1.72 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