

Light efficiency:



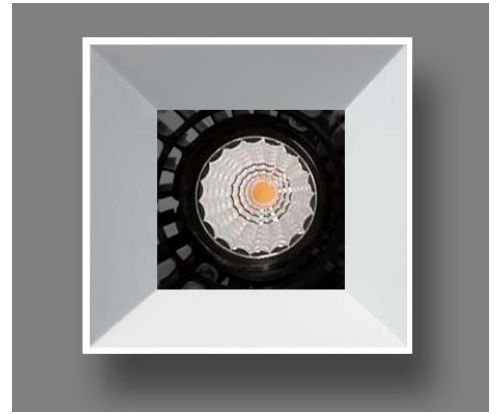
Output: 1443 lm

Light quality:

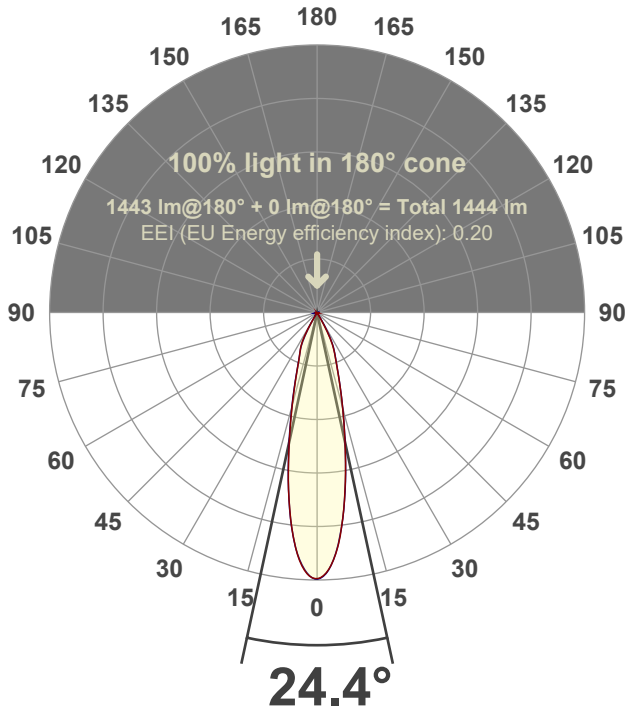


Peak: 5766 cd

Power: 21.3 W



Beam angle



Test number:

GR-O-F-A20-3019-NF-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-A20-3019 24° Optic

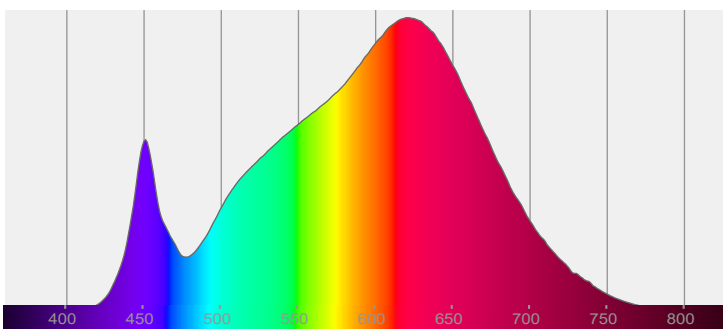
Date and time:

6/21/2022 8:30:06 PM

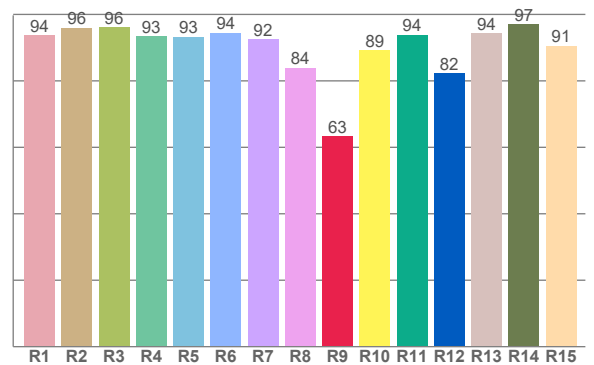
Delivered Lumens

1443

Spectra



CRI: 92.9 (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
	92.9	63.2	91.0	101.7	89.9	0.433	0.397	0.251	0.345	-0.0024

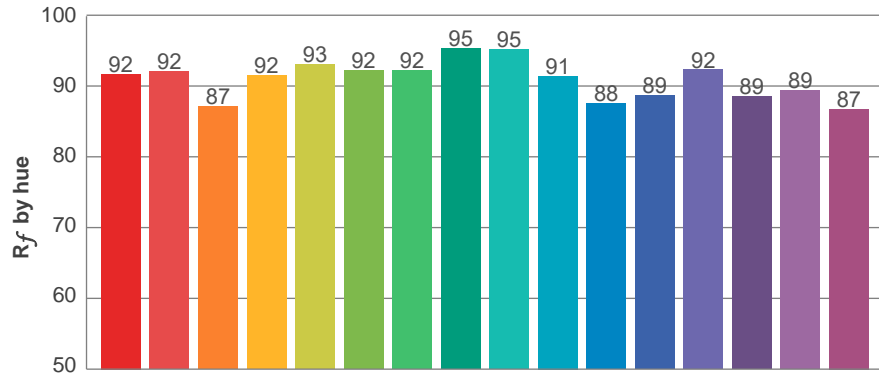
**$R_f$  91.0**  
Fidelity index  $R_f$

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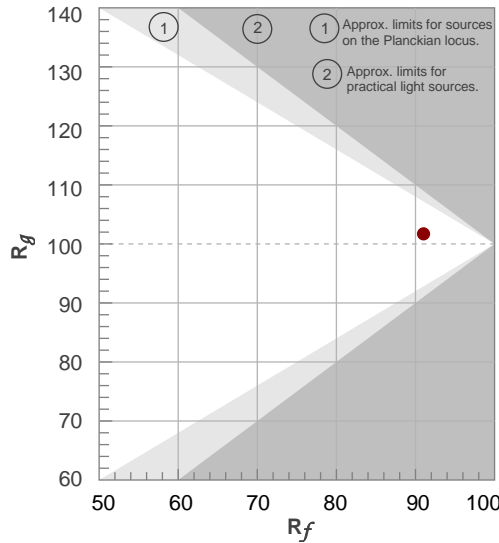
**$R_g$  101.7**  
Gammut index  $R_g$

TM30: 91.0

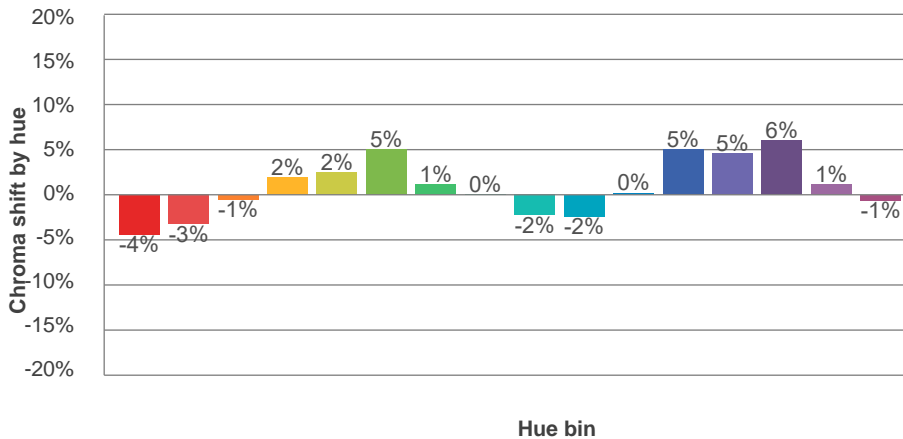
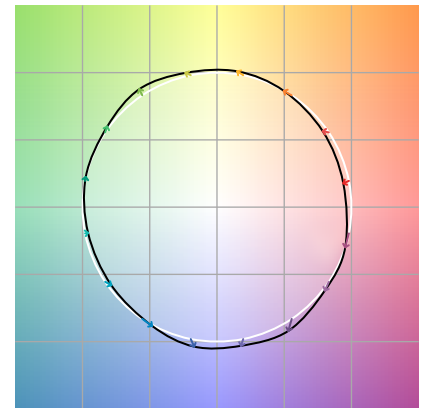
TM-30Color



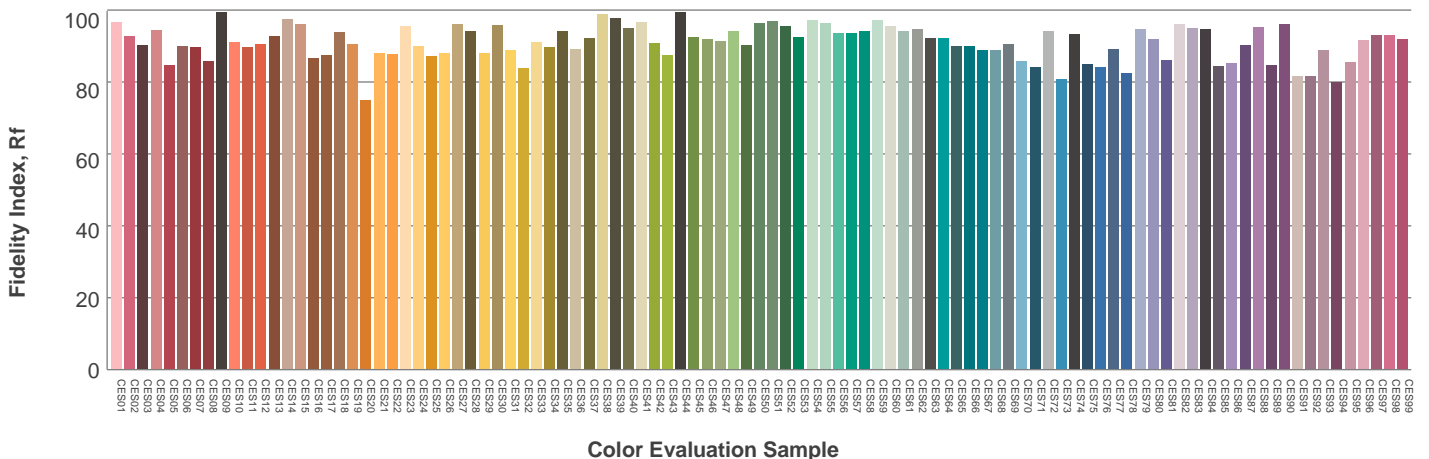
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	92	2%	5%
5	93	2%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



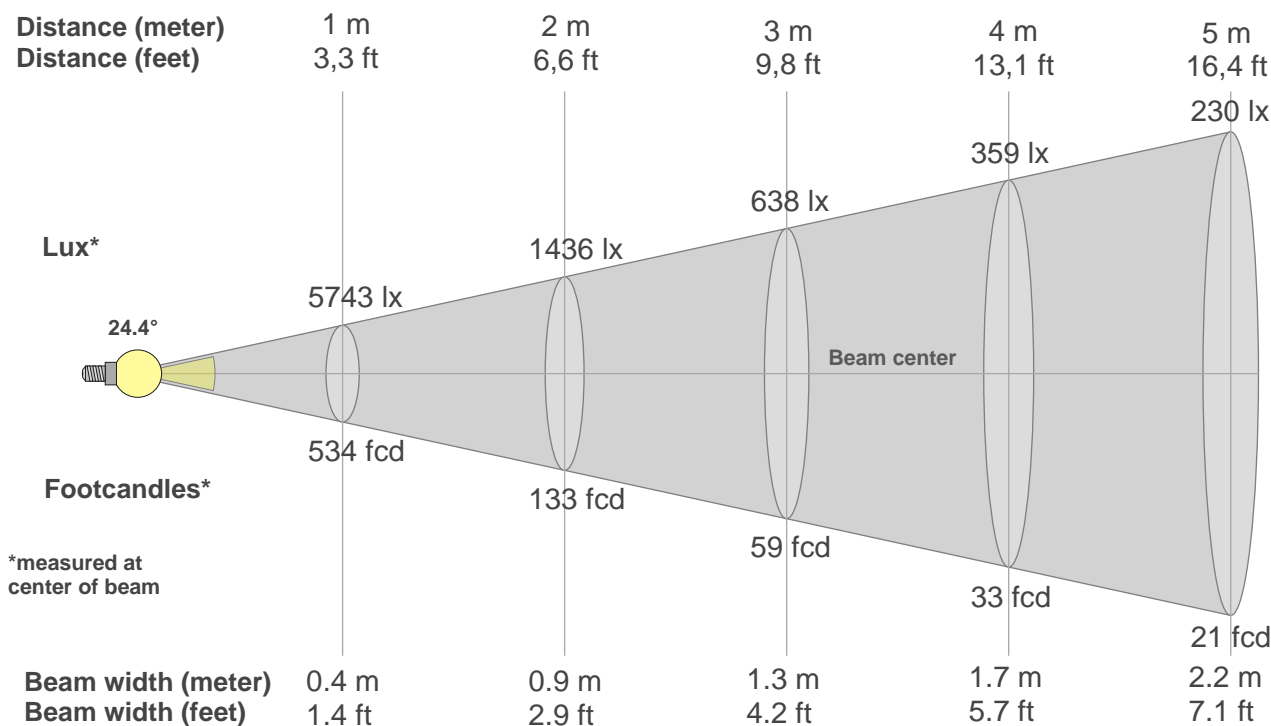
Color vector graphics



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
5743lx	1436lx	638lx	359lx	230lx	160lx	117lx	90lx	71lx	57lx	47lx	40lx	34lx	29lx	26lx	22lx	20lx	18lx	16lx	14lx
533.6fcd	133.4fcd	59.3fcd	33.3fcd	21.3fcd	14.8fcd	10.9fcd	8.3fcd	6.6fcd	5.3fcd	4.4fcd	3.7fcd	3.2fcd	2.7fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.5fcd	1.3fcd

#### 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°
5743	5602	5292	4816	4205	3548	2933	2399	1947	1576	1282	1073	909	729	498	247	58	23	14	12
100%	98%	92%	84%	73%	62%	51%	42%	34%	27%	22%	19%	16%	13%	9%	4%	1%	0%	0%	0%

#### 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°
5743	5631	5291	4799	4205	3564	2931	2390	1942	1577	1291	1079	922	764	542	308	121	22	15	11
100%	98%	92%	84%	73%	62%	51%	42%	34%	27%	22%	19%	16%	13%	9%	5%	2%	0%	0%	0%

#### 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°
5743	5670	5370	4879	4270	3600	2931	2342	1876	1510	1234	1038	904	793	609	364	151	32	15	12
100%	99%	94%	85%	74%	63%	51%	41%	33%	26%	21%	18%	16%	14%	11%	6%	3%	1%	0%	0%

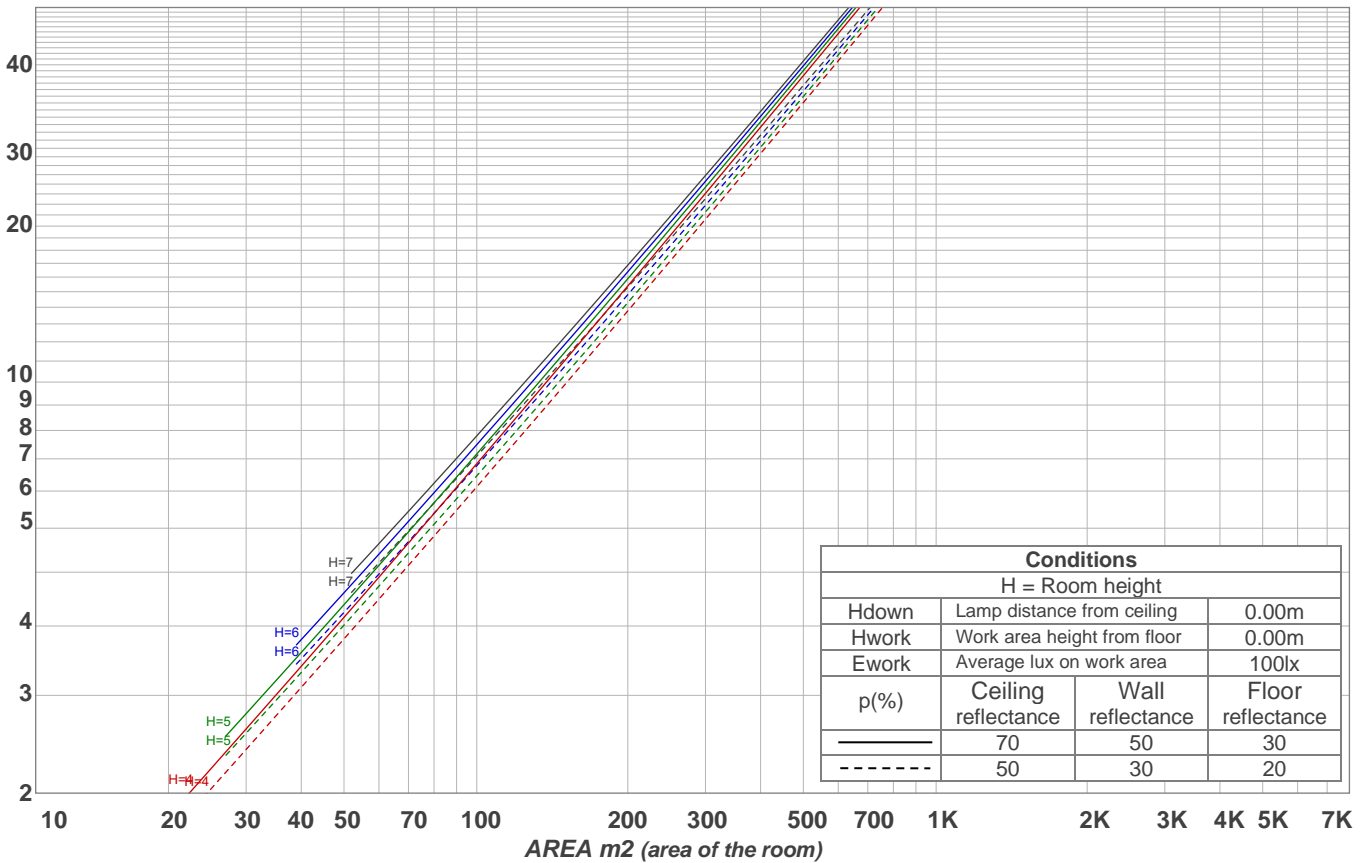
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5743	5637	5338	4877	4278	3604	2942	2378	1908	1527	1232	1028	897	746	536	302	109	21	16	14
100%	98%	93%	85%	74%	63%	51%	41%	33%	27%	21%	18%	16%	13%	9%	5%	2%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>24.4°</b>	<b>55.6°</b>	<b>63.1°</b>	<b>99.3%</b>	<b>99.1%</b>

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
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																				
	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	100
1	115	112	110	109	112	110	109	107	106	105	104	103	102	101	99	98	98	98	98	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	94	94	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	90	90	90	89
4	103	98	94	90	102	97	93	90	95	91	89	93	90	88	91	89	87	87	87	87	86
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	88	86	84	84	84	84	83
6	97	90	86	83	96	90	86	83	88	85	82	87	84	82	86	83	81	81	81	81	80
7	94	87	83	80	93	87	82	79	85	82	79	84	81	79	83	81	78	78	78	78	77
8	91	84	80	77	90	84	80	77	83	79	76	82	79	76	81	78	76	76	76	76	75
9	88	81	77	74	88	81	77	74	80	76	74	79	76	74	79	76	73	73	73	73	72
10	86	79	75	72	85	79	74	72	78	74	72	77	74	71	77	73	71	71	71	71	70

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
437 lm	596 lm	363 lm	32.2 lm	3.86 lm	2.21 lm	2.54 lm	3.35 lm	3.31 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