

Photometric Report

VDO Atomic Bold – Beam - 30 Deg Diffuser

MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

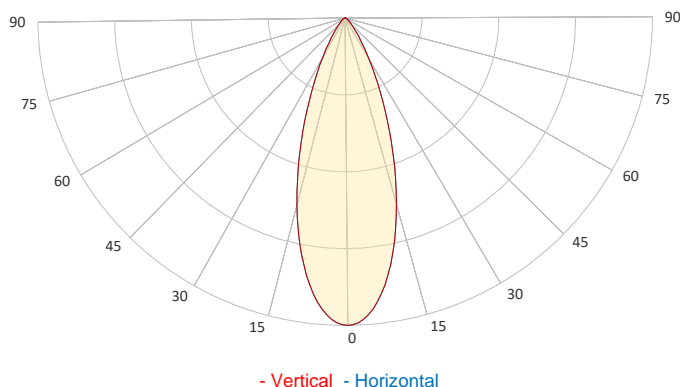
GENERAL SPECIFICATIONS

Total Fixture Output:	8000 lm
Light Engine Output:	8700 lm
Efficacy:	38 lm/W
Lens Option:	N/A
Beam Angle (50%):	36 °
Field Angle (10%):	67 °
Cut-off Angle (3%):	93 °
CRI:	83
CQS:	87
TM-30 Rf:	83
TM-30 Rg:	106
TLCl:	85
Color Temperature:	2,000-11,000 K



SAMPLE MEASUREMENT

POLAR PLOT

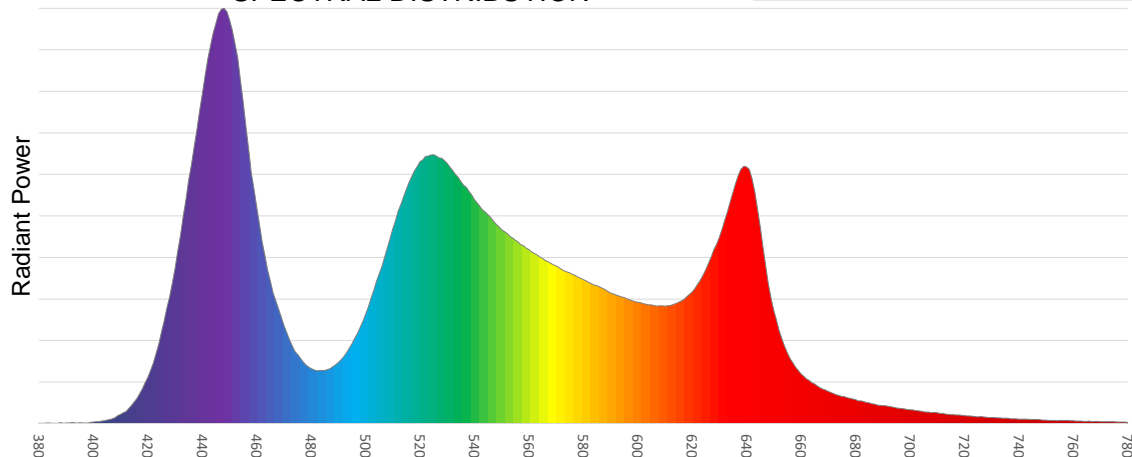


Catalog Number:	MAR-90357703
Measured Output:	7466 lm
Measured Peak:	15328 cd
Consumed Power:	208 W
Efficacy:	35.9 lm/W

Beam Angle (50%):	36.4 °
Field Angle (10%):	67 °
Cut-off Angle (3%):	93 °

Measurement Condition:	
Ambient Temperature:	25 ° +/- 5 ° C
AC Supply:	230V/50Hz
Fan Mode:	Regulated Fan Speed
Fixture Warm-up Time:	30 minutes

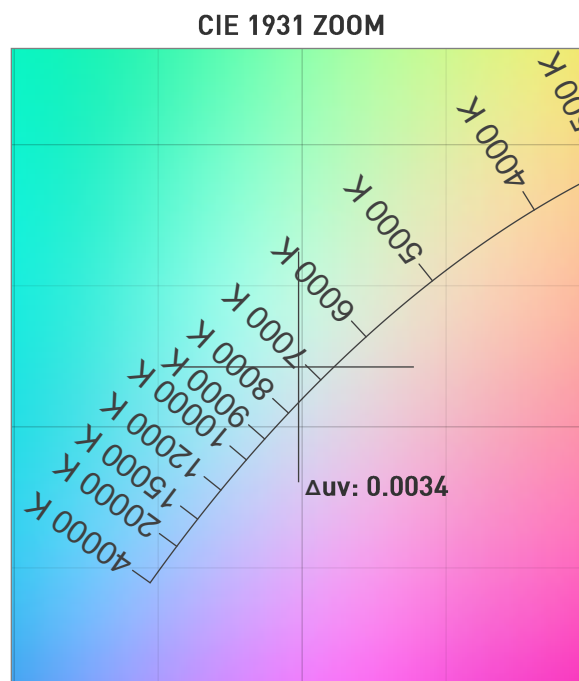
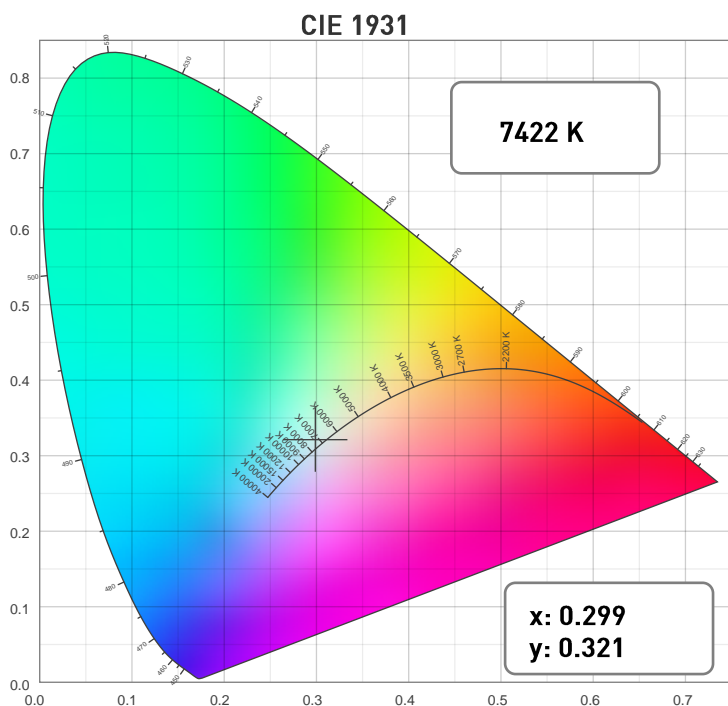
SPECTRAL DISTRIBUTION



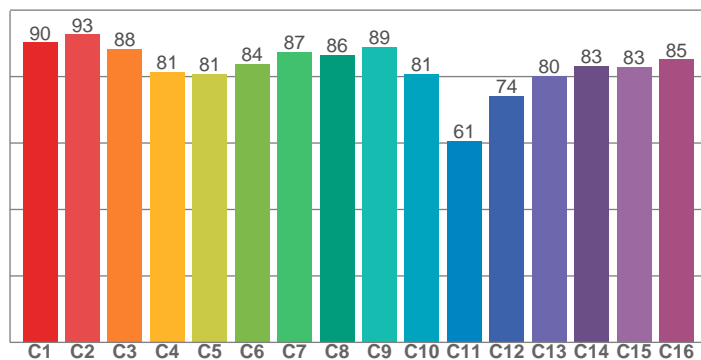
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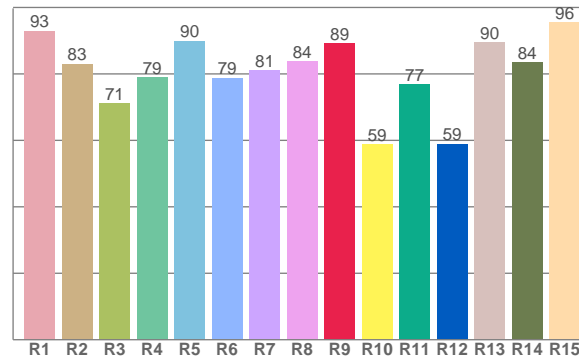
CHROMATICITY



TM30: 83.4



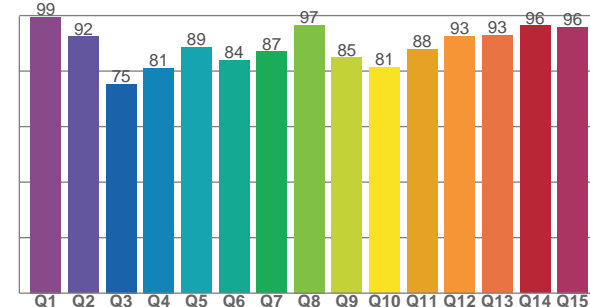
CRI: 82.5 (R1-R8)



COLOR PARAMETERS

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
7422 K	82.5	89.3	83.4	105.4

CQS: 87.2



Television Lighting Consistency Index	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964	Color Deviation from Black Body
TLCI	CQS	x	y	u	v	Δuv
85	87.2	0.299	0.321	0.191	0.308	0.0034

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TM30

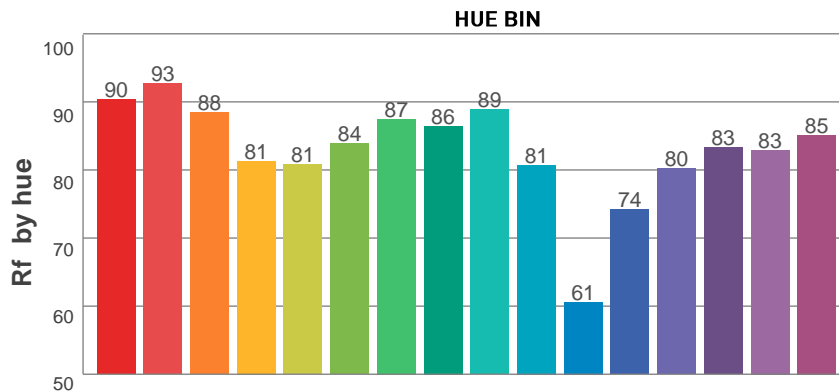
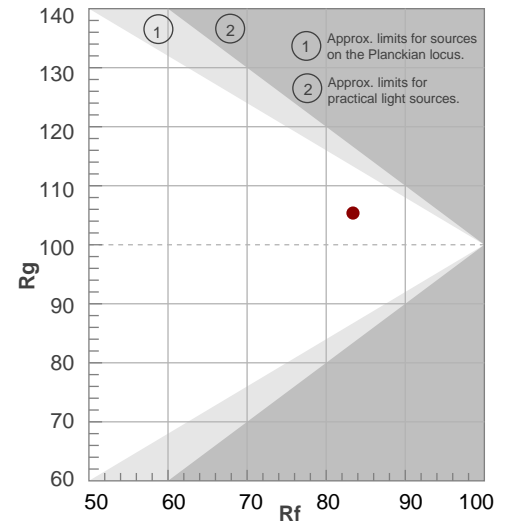
Rf 83.4

Fidelity index Rf

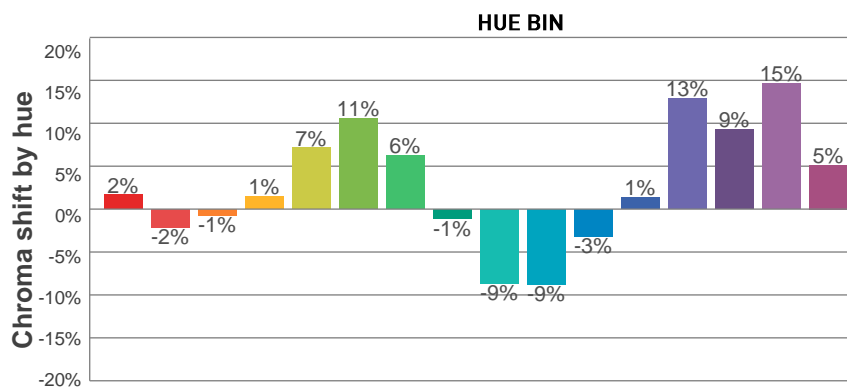
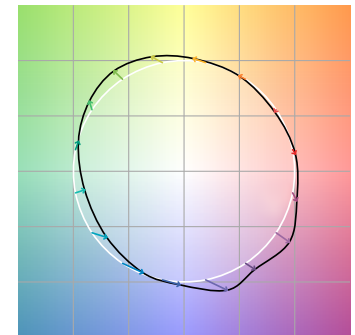
Rg 105.4

Gamut index Rg

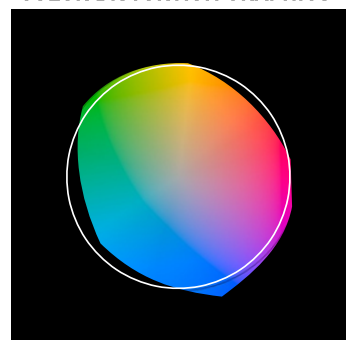
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	90	2%	-4%
2	93	-2%	-1%
3	88	-1%	7%
4	81	1%	11%
5	81	7%	9%
6	84	11%	2%
7	87	6%	-5%
8	86	-1%	-8%
9	89	-9%	-1%
10	81	-9%	11%
11	61	-3%	20%
12	74	1%	16%
13	80	13%	17%
14	83	9%	4%
15	83	15%	0%
16	85	5%	-6%



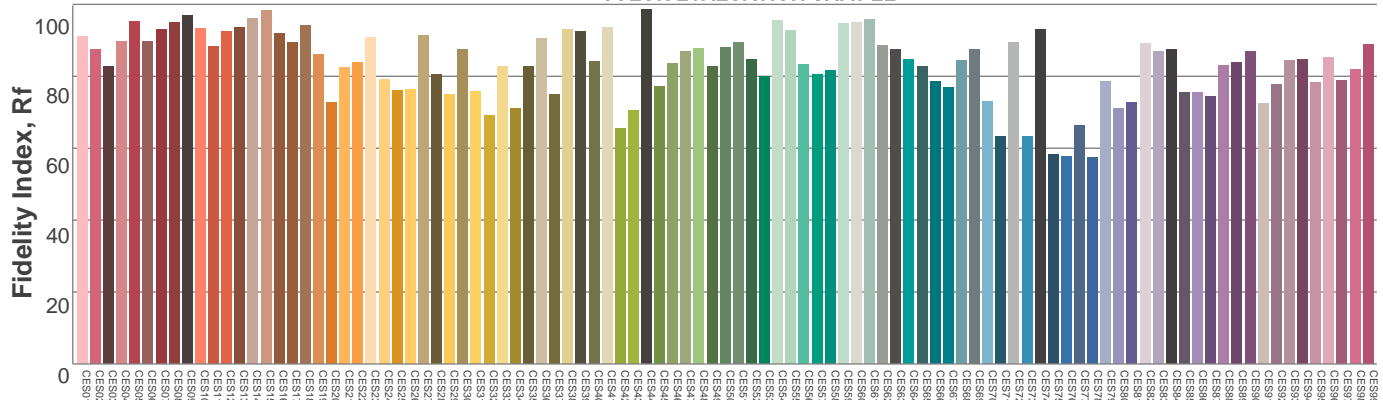
COLOR VECTOR GRAPHICS



COLOR DISTORTION GRAPHICS



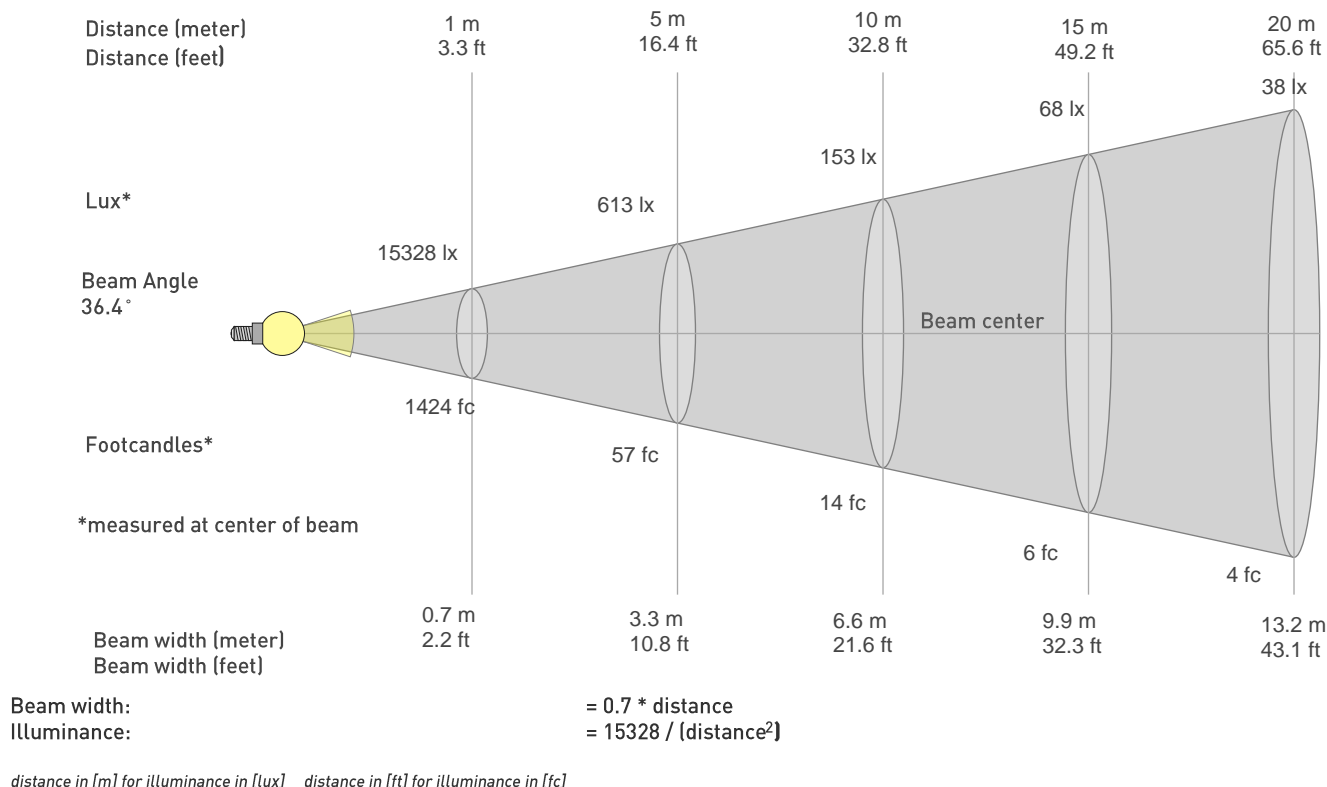
COLOR EVALUATION SAMPLE



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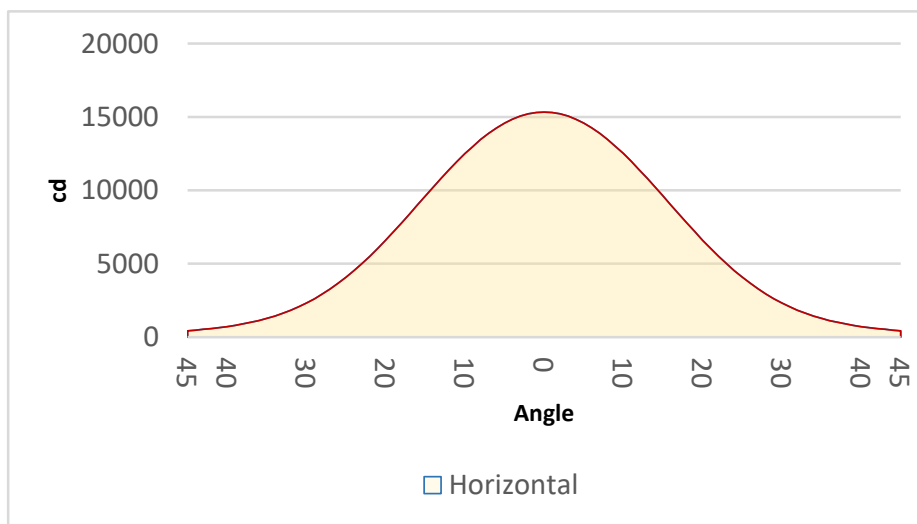
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BEAM DETAILS



BEAM ILLUMINANCE 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
15328lx	3832lx	1703lx	958lx	613lx	426lx	313lx	239lx	189lx	153lx	127lx	106lx	91lx	78lx	68lx	60lx	53lx	47lx	42lx	38lx
1424fc	356fc	158.2fc	89fc	57fc	39.6fc	29.1fc	22.3fc	17.6fc	14.2fc	11.8fc	9.9fc	8.4fc	7.3fc	6.3fc	5.6fc	4.9fc	4.4fc	3.9fc	3.6fc



BEAM ANGLE 50%	FIELD ANGLE 10%	CUTOFF ANGLE 3%
36.4°	67°	93°