

# Photometric Report

VDO Atomic Bold – Beam

MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

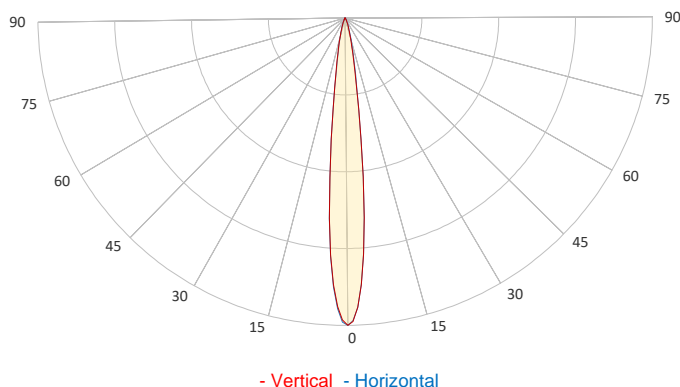
## GENERAL SPECIFICATIONS

Total Fixture Output:	8000 lm
Light Engine Output:	8700 lm
Efficacy:	38 lm/W
Lens Option:	N/A
Beam Angle (50%):	12°
Field Angle (10%):	26°
Cut-off Angle (3%):	42°
CRI:	83
CQS:	87
TM-30 Rf:	83
TM-30 Rg:	106
TLCI:	85
Color Temperature:	2,000-11,000 K



## SAMPLE MEASUREMENT

POLAR PLOT

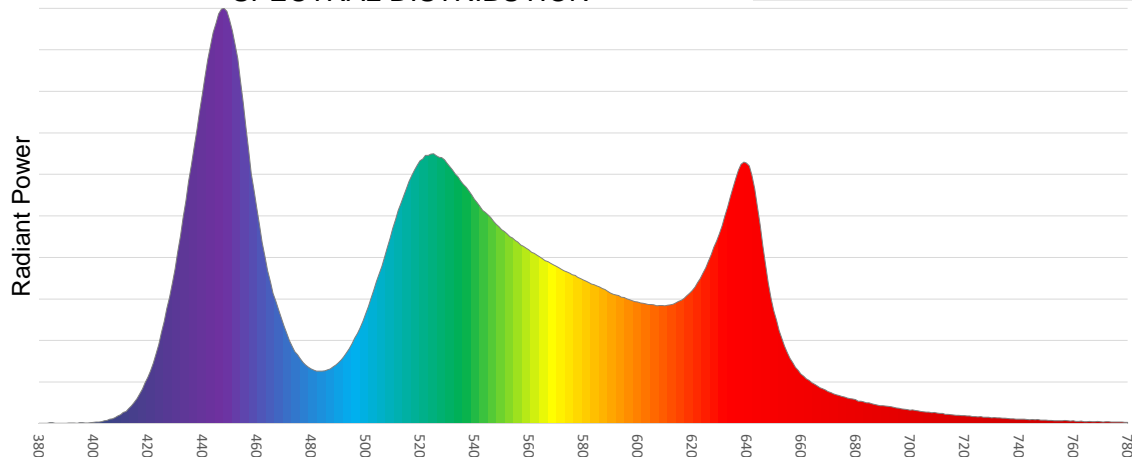


Catalog Number:	MAR-90357703
Measured Output:	7816 lm
Measured Peak:	103384 cd
Consumed Power:	208 W
Efficacy:	37.6 lm/W

Beam Angle (50%):	12.3°
Field Angle (10%):	25.6°
Cut-off Angle (3%):	41.8°

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

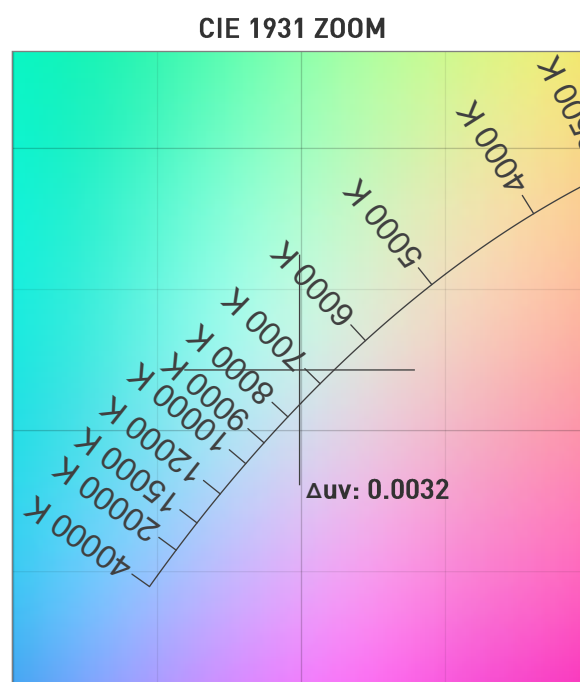
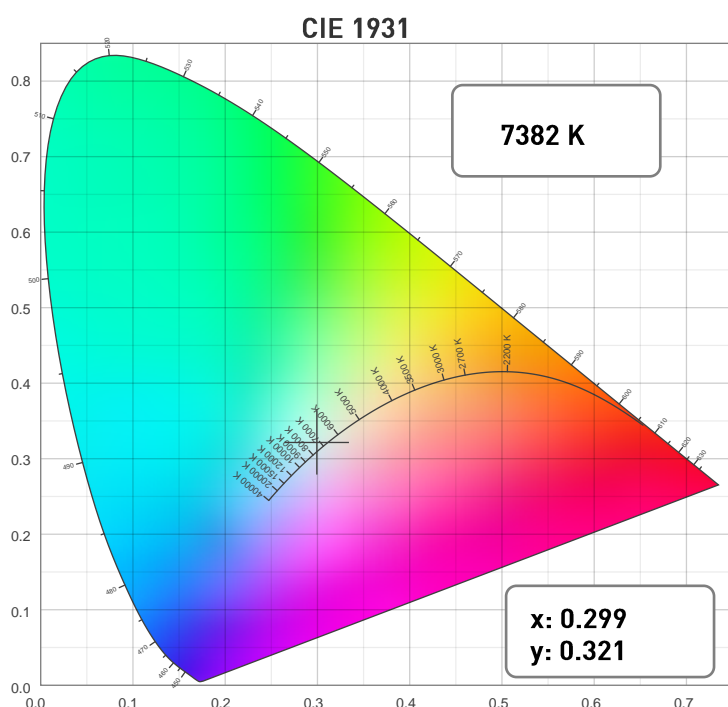
SPECTRAL DISTRIBUTION



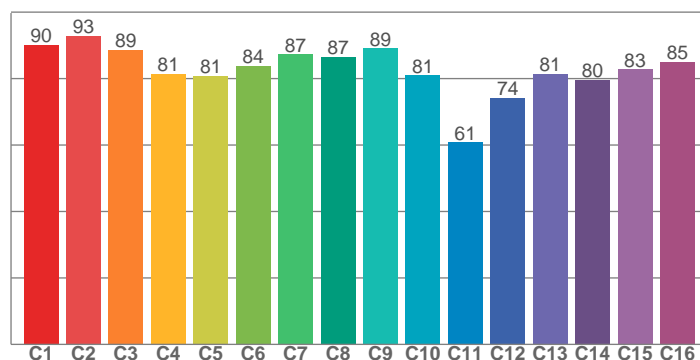
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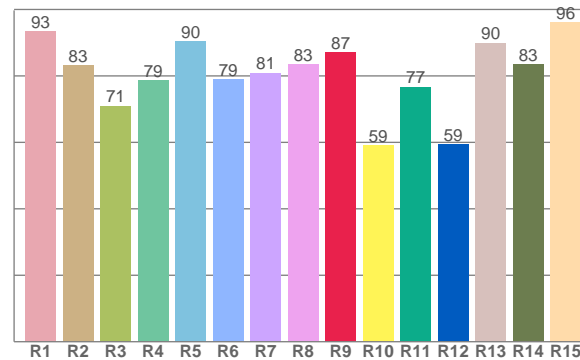
## CHROMATICITY



TM30: 83.4



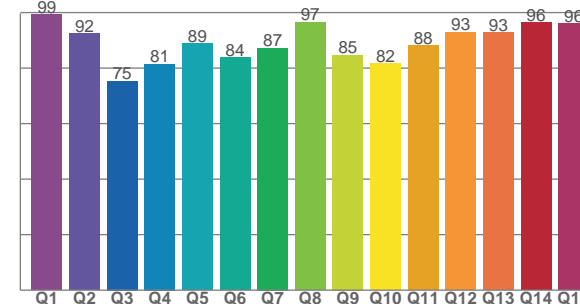
CRI: 82.5 (R1-R8)



## COLOR PARAMETERS

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
7382 K	82.5	87.2	83.4	105.9

CQS: 87.3



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	$\Delta uv$
85	87.3	0.299	0.321	0.191	0.308	0.0032

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TM30

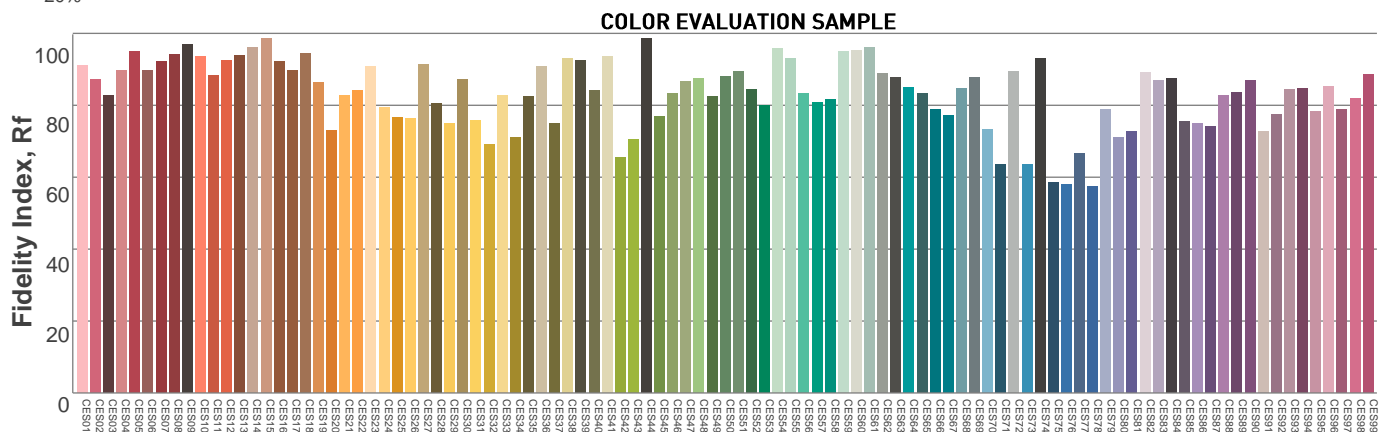
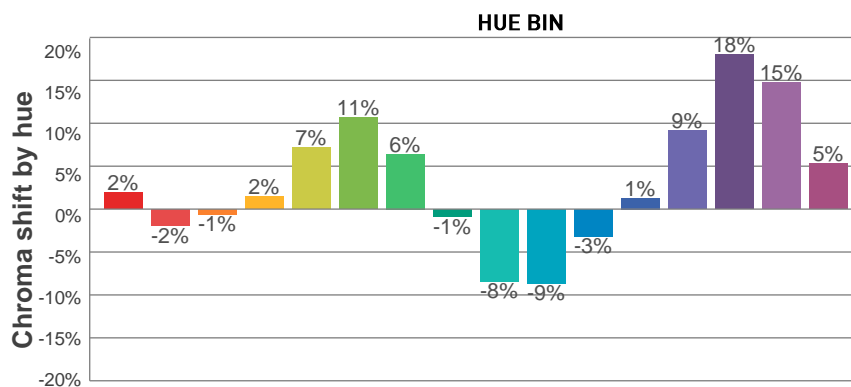
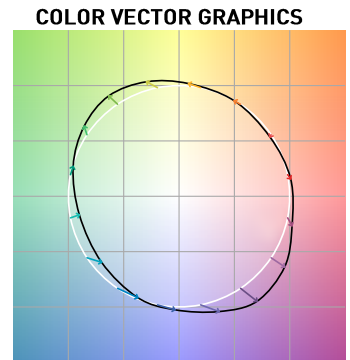
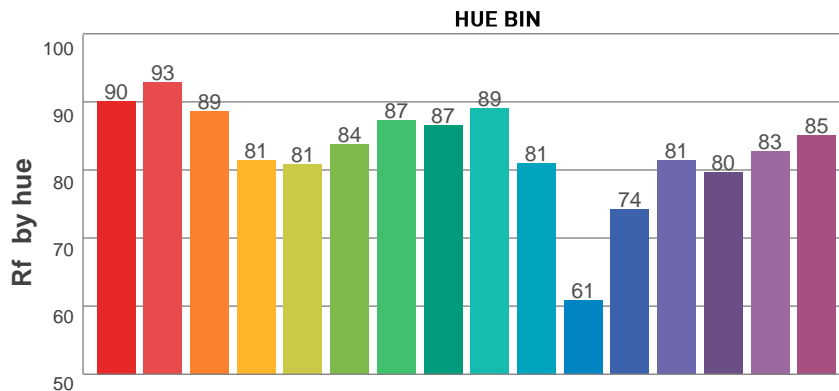
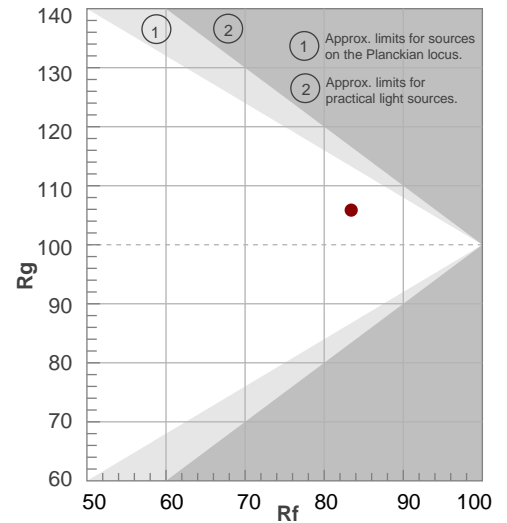
Rf 83.4

Fidelity index Rf

Rg 105.9

Gamut index Rg

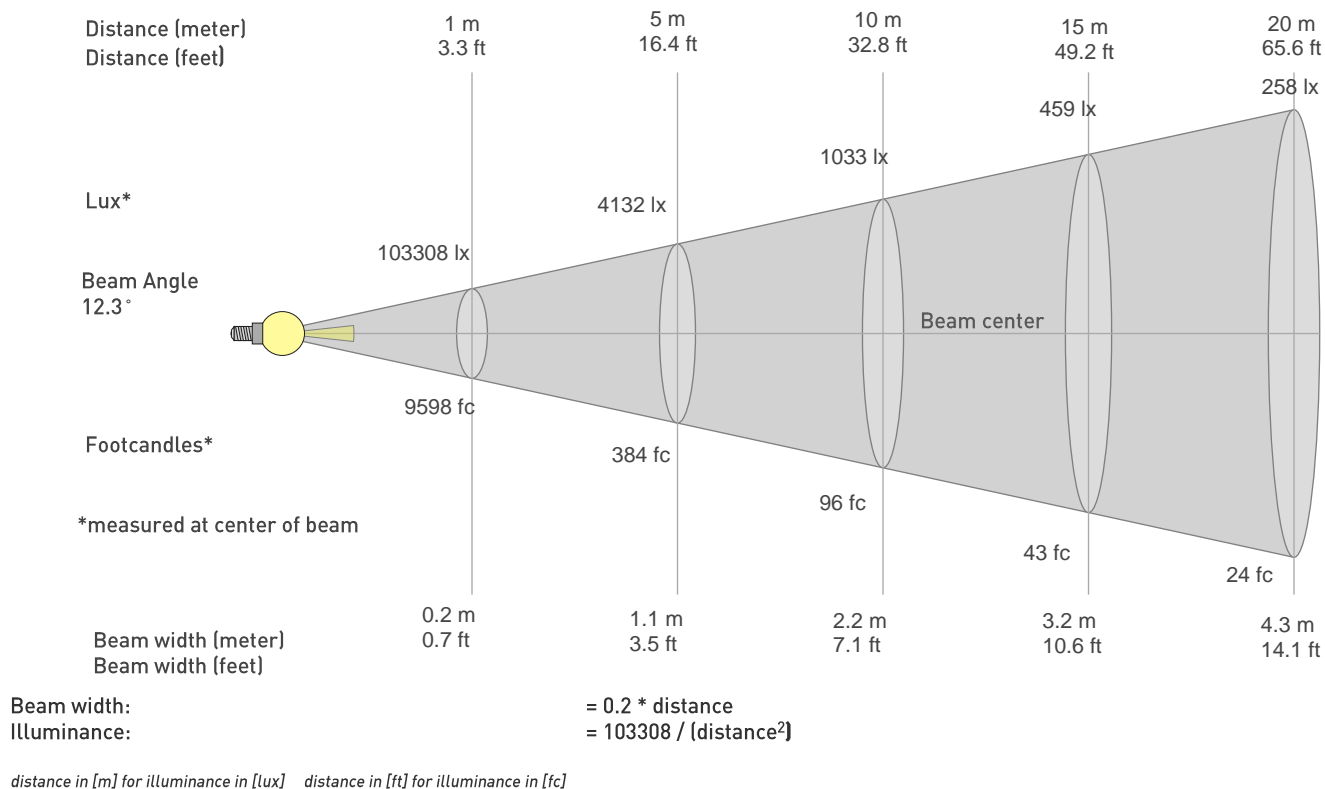
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	90	2%	-4%
2	93	-2%	-1%
3	89	-1%	7%
4	81	2%	11%
5	81	7%	9%
6	84	11%	2%
7	87	6%	-5%
8	87	-1%	-8%
9	89	-8%	-1%
10	81	-9%	11%
11	61	-3%	20%
12	74	1%	16%
13	81	9%	15%
14	80	18%	6%
15	83	15%	0%
16	85	5%	-6%



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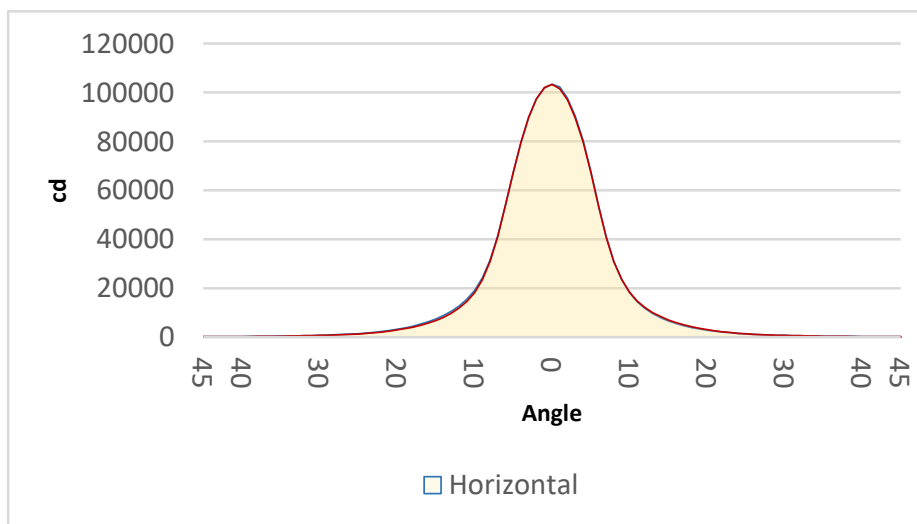
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## BEAM DETAILS



## 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
103308lx	25827lx	11479lx	6457lx	4132lx	2870lx	2108lx	1614lx	1275lx	1033lx	854lx	717lx	611lx	527lx	459lx	404lx	357lx	319lx	286lx	258lx
9597.7fc	2399.4fc	1066.4fc	599.9fc	383.9fc	266.6fc	195.9fc	150fc	118.5fc	96fc	79.3fc	66.7fc	56.8fc	49fc	42.7fc	37.5fc	33.2fc	29.6fc	26.6fc	24fc



BEAM ANGLE 50%	FIELD ANGLE 10%	CUTOFF ANGLE 3%
12.3°	25.6°	41.8°