



Light Measurement Report

Print date: 10/22/2025

Measurement date and time: 10/22/2025 3:54:39 PM – Measurement no. VFR-251022-0281-MS

Operator: Shawn Blaszak

Tested Light Source

Product Name	Dram: DR-L-PC37_PC78-MTP-27-1_10V_UNV
Manufacturer	RBW
Product Description	Dram-Large-Army Green_Heritage Cream-Matte FEP-2700K-1% Dimming, 0-10V Control, 120V to 277V "Universal Input" (External Driver), Input Current: 400mA, Driver Model: ESS020-0400-42



Light Quality

CRI: 91.0

Color Temperature

2606 K

Color Match

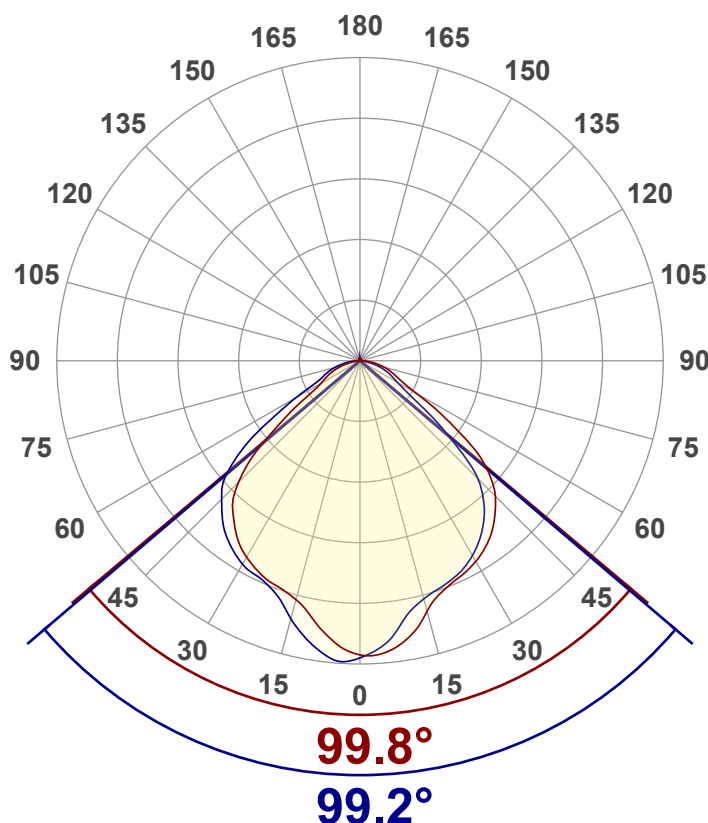
CIE1931
x: {CIEx#}
y: {CIEy#}

Summary of Results

Total Lumen Output	1185 lm
Luminaire Efficacy	71 lm/W
Peak Intensity and Beam Angle	553 cd - 99.6°
Color Rendering TM13-18	R _r 90.8 - R _g 97.5
Color Shift, CIE duv	Duv 0.0009
MacAdams Steps	3
Flicker	SVM 0.41 - PstLM 0.01
Input Power, Power and Displ. Factors	16.8 W - PF 0.99 - DPF 1.0
Input RMS Voltage and Current	120 V - 0.141 A
Frequency of Input Power	60 Hz

Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	1185 lm
Lumen Up% / Down%	1.28% / 98.72%
Peak Intensity	553 cd
Beam Angle (50%-FWHM)	99.62°

Cut-off Angle

Average 2,5%	167.8°
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Field Angle

Average 10%	140.8°
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Intensity Ratio

In 120° cone	87.9%
In 90° cone	64.3%

C000-C180

C090-C270



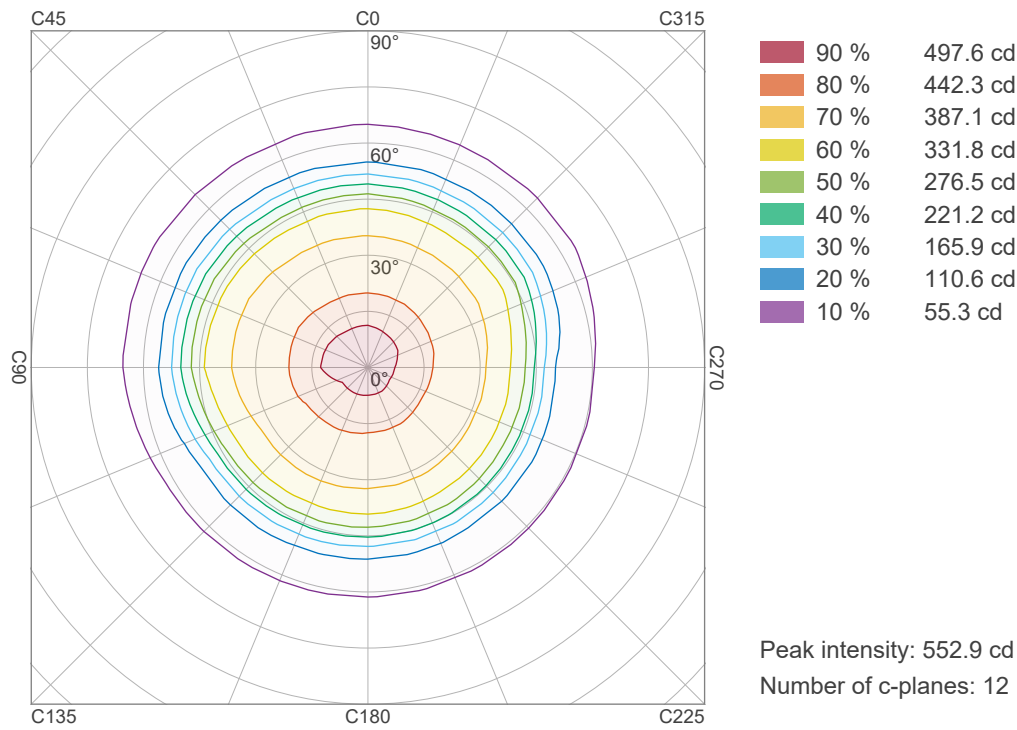
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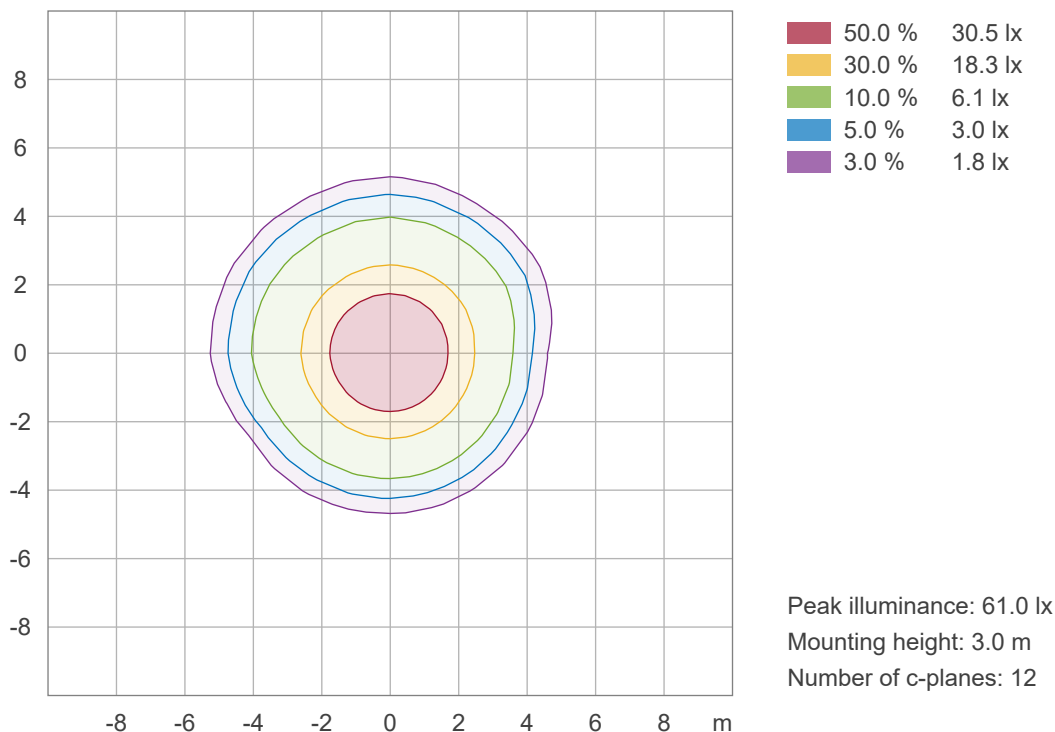
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Iso-intensity Diagram (Iso-candela)



Iso-illuminance Diagram (Iso-lux)





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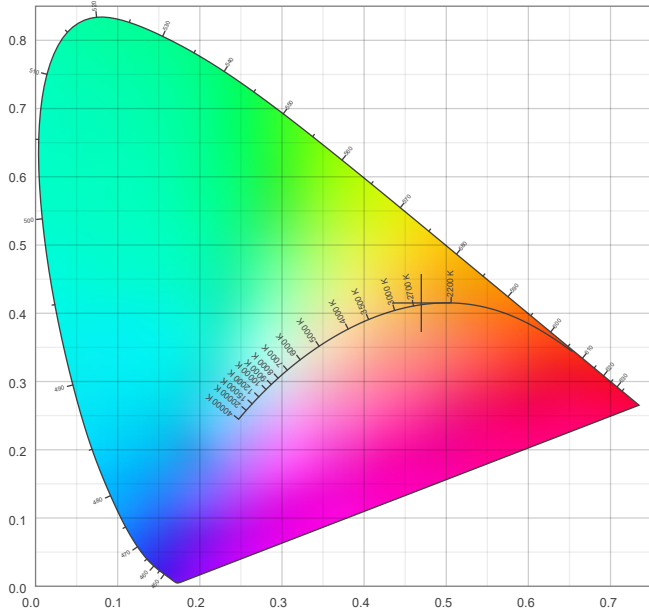
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Color details

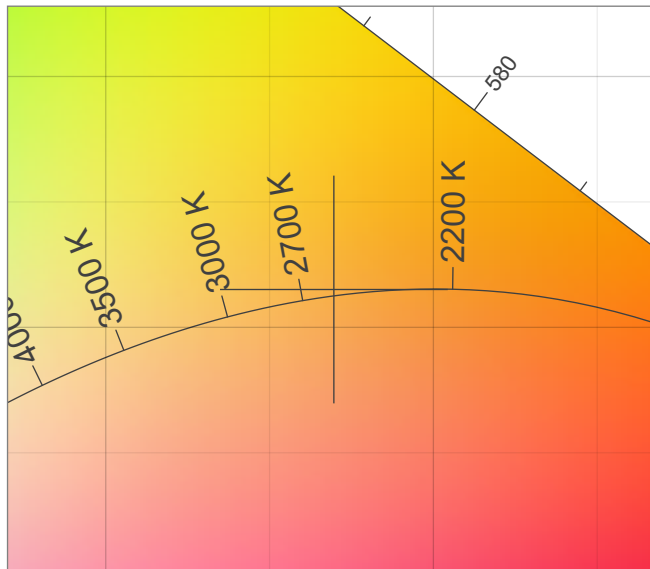
Correlated Color Temperature, Target CCT = 2606 K
Correlated Color Temperature, Measured CCT = 2606 K
Color Rendering Index CRI 91.0
Color Rendering Index, R9 (red component) R9 = 47.0
Color Rendering TM30-18 R_f 90.8 – R_g 97.5
Color Quality Scale CQS = 88.9

MacAdam Steps 3
Color coordinates CIE 1931 (x;y) = (0.470;0.415)
Color coordinate CIEs 1960 (u;v) = (0.267;0.354)
Color deviation from BBL Duv = 0.0009
Color coordinate CIEs 1976 (CIELUV)(u';v') = (0.267;0.531)

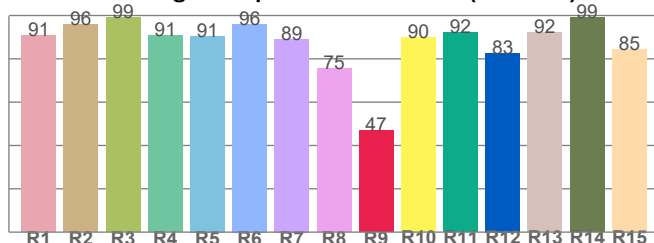
CIE 1931



CIE 1931 – zoomed on Planckian locus



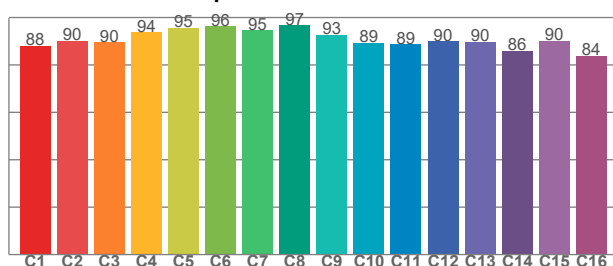
Color Rendering Index per reference color (CIE 1995)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
90.7	95.8	99.0	90.8	90.6	96.1	89.2	75.4	47.0	89.7	92.2	82.7	92.1	99.3	84.6

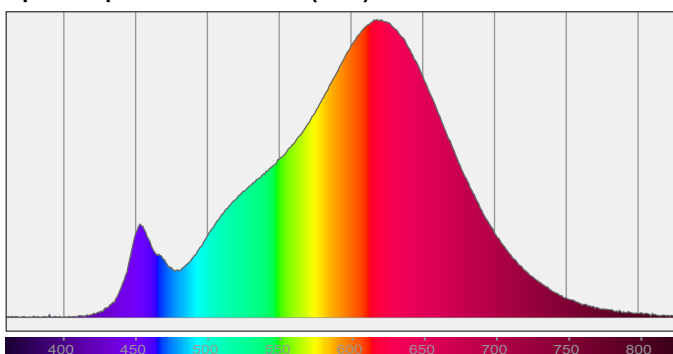
TM30-18 R_f-values per hue bin



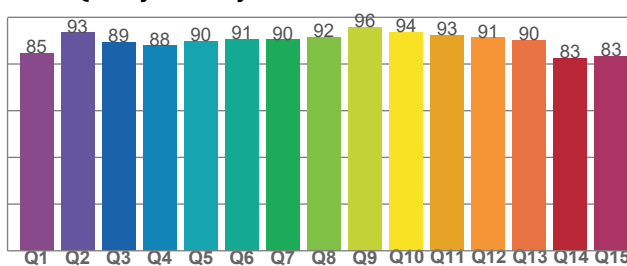
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87.9	90.1	89.6	93.8	95.5	96.2	94.6	96.6	92.6	89.4	88.7	89.9	89.6	85.9	90.2	83.8

Spectral power distribution (SPD) / W/nm – 0-100%



Color Quality Scale by reference color



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84.8	93.5	89.4	87.9	89.8	90.5	90.4	91.5	95.7	93.7	92.5	91.3	90.2	82.5	83.3



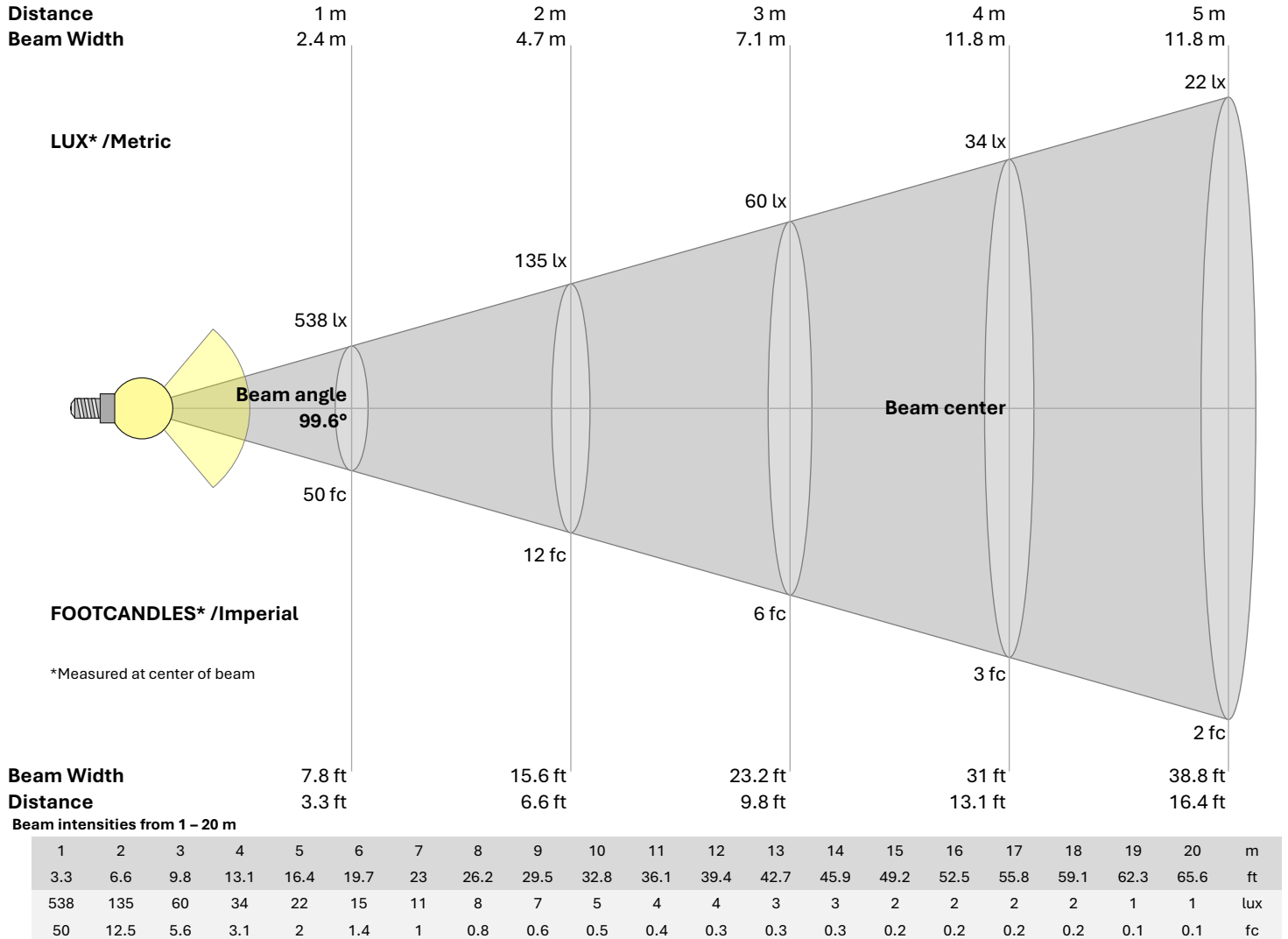
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Beam Details



Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
538	535	514	477	450	437	424	407	382	349	297	212	127	82	62	46	31	17	5	1	cd
100%	99%	95%	89%	84%	81%	79%	76%	71%	65%	55%	39%	24%	15%	12%	9%	6%	3%	1%	0%	of 0°val

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
538	521	480	454	441	430	412	387	354	302	209	123	81	62	46	30	17	5	2	2	cd
100%	97%	89%	84%	82%	80%	77%	72%	66%	56%	39%	23%	15%	12%	9%	6%	3%	1%	0%	0%	of 0°val

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
538	518	485	455	441	431	415	393	361	312	229	138	85	65	49	33	18	7	2	2	cd
100%	96%	90%	85%	82%	80%	77%	73%	67%	58%	43%	26%	16%	12%	9%	6%	3%	1%	0%	0%	of 0°val

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
538	549	525	490	455	439	430	414	390	358	314	233	139	83	64	48	32	17	6	0	cd
100%	102%	98%	91%	85%	82%	80%	77%	73%	67%	58%	43%	26%	15%	12%	9%	6%	3%	1%	0%	of 0°val