



Light Measurement Report

Print date: 10/3/2025

Measurement date and time: 9/26/2025 12:10:50 PM – Measurement no. VFR-250926-0151-MS

Operator: Shawn Blaszk

Tested Light Source

Product Name	Dram: DR-S-PC98_PC98-MTP-27-1_10V_UNV
Manufacturer	RBW
Product Description	Dram-Small-Glossy White_Glossy White-Matte PET-2700K-1% Dimming, 0-10V Control, 120V-277V "Universal Input" (Driver External), Input Current: 300mA, Driver Model: ERP ESS015W-0300-42



Light Quality

CRI: 91.5

Color Temperature

2667 K

Color Match

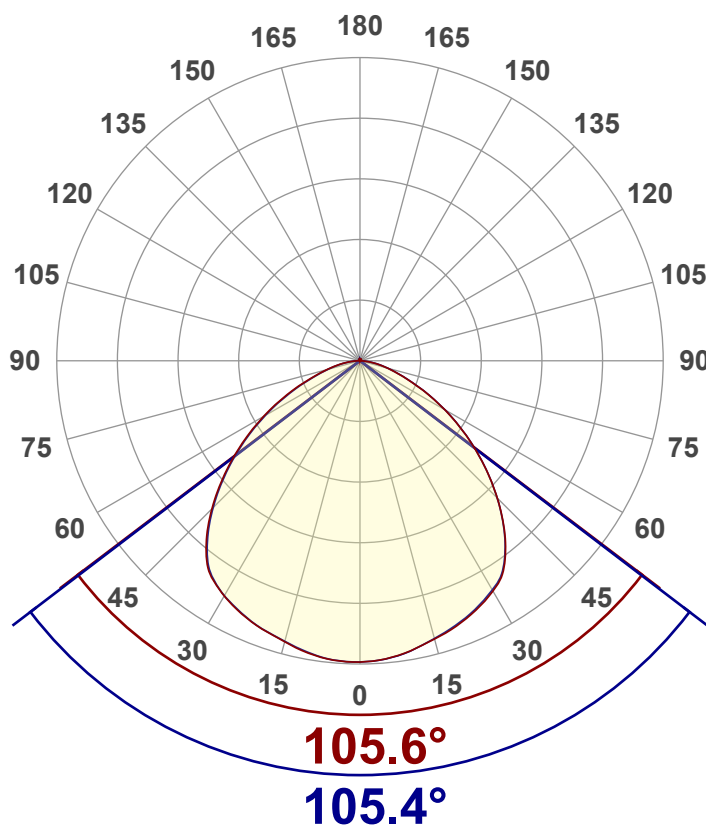
CIE1931
x: {CIEx#}
y: {CIEy#}

Summary of Results

Total Lumen Output	922 lm
Luminaire Efficacy	77 lm/W
Peak Intensity and Beam Angle	348 cd - 105.5°
Color Rendering TM13-18	R _r 91.0 – R _g 97.4
Color Shift, CIE duv	Duv 0.0011
MacAdams Steps	3
Flicker	SVM 0.48 – PstLM 0.02
Input Power, Power and Displ. Factors	11.9 W – PF 0.99 – DPF 1.0
Input RMS Voltage and Current	120 V – 0.100 A
Frequency of Input Power	60 Hz

Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	922 lm
Lumen Up% / Down%	0.9% / 99.1%
Peak Intensity	348 cd
Beam Angle (50%-FWHM)	105.48°

Cut-off Angle

Average 2,5%	169.9°
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Field Angle

Average 10%	150.9°
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Intensity Ratio

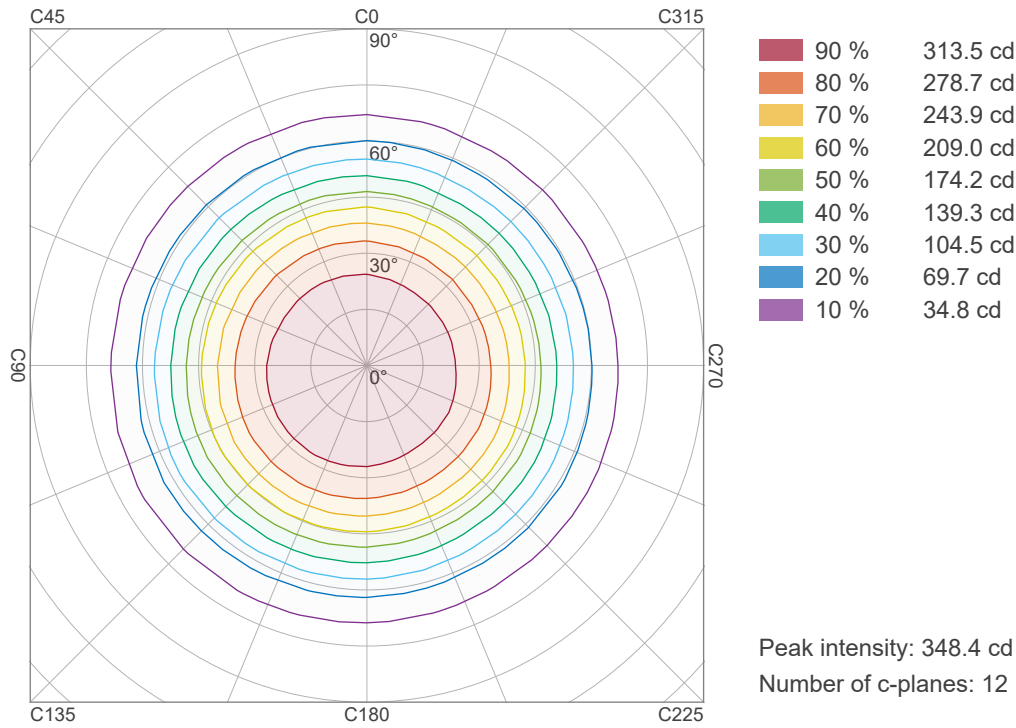
In 120° cone	84.4%
In 90° cone	59.8%

C000-C180

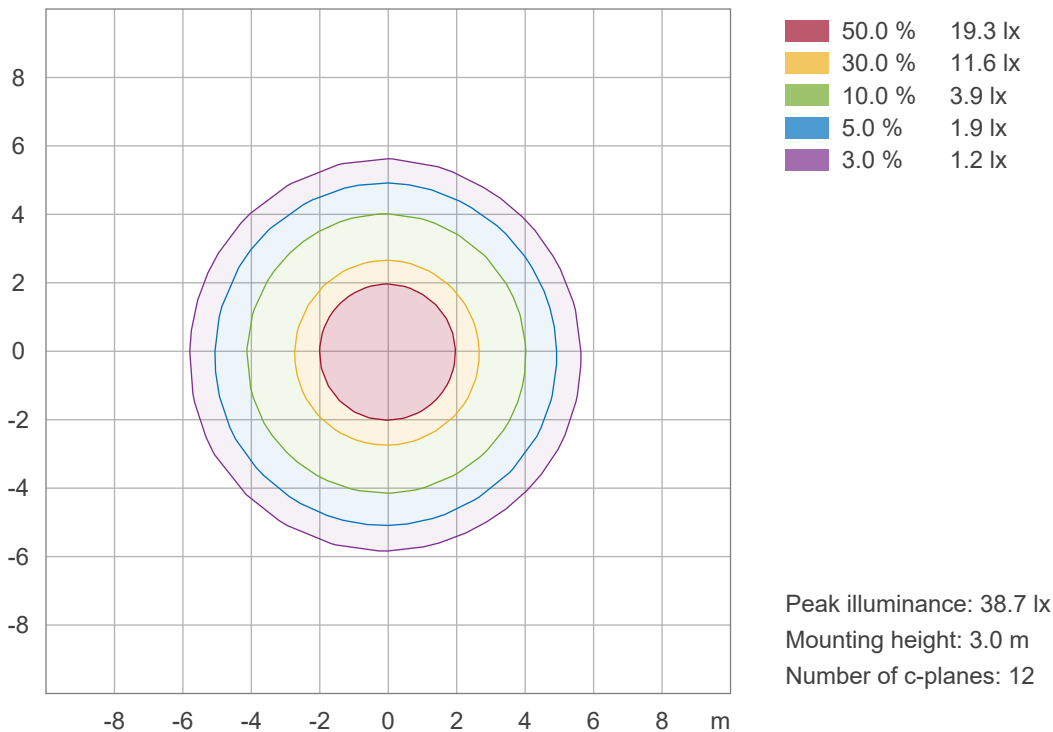
C090-C270



Iso-intensity Diagram (Iso-candela)



Iso-illuminance Diagram (Iso-lux)





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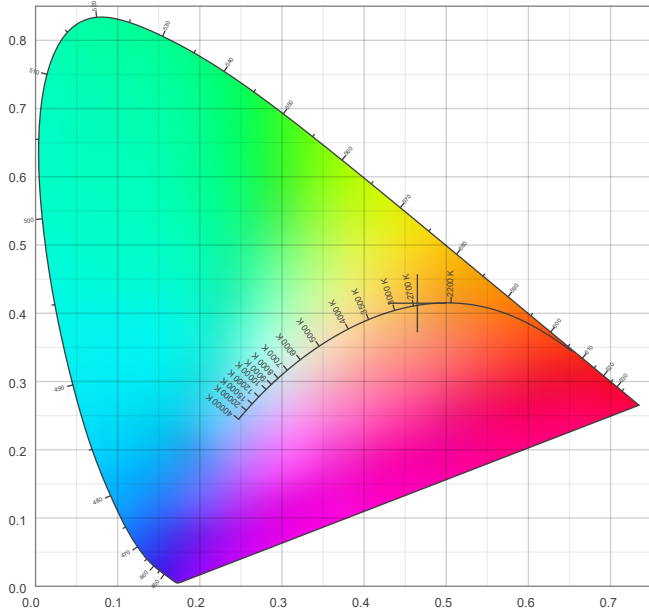
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Color details

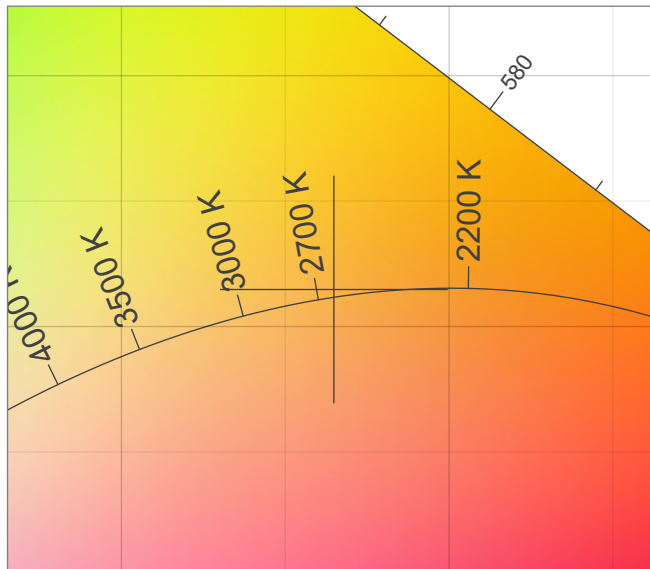
Correlated Color Temperature, Target CCT = 2667 K
Correlated Color Temperature, Measured CCT = 2667 K
Color Rendering Index CRI 91.5
Color Rendering Index, R9 (red component) R9 = 49.6
Color Rendering TM30-18 R_r 91.0 – R_g 97.4
Color Quality Scale CQS = 89.7

MacAdam Steps 3
Color coordinates CIE 1931 (x;y) = (0.465;0.415)
Color coordinate CIEs 1960 (u;v) = (0.264;0.353)
Color deviation from BBL Duv = 0.0011
Color coordinate CIEs 1976 (CIELUV)(u';v') = (0.264;0.530)

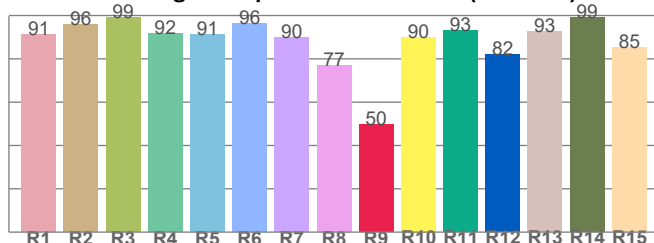
CIE 1931



CIE 1931 – zoomed on Planckian locus



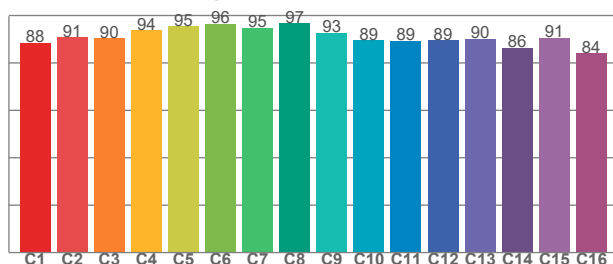
Color Rendering Index per reference color (CIE 1995)



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
91.3	96.0	99.2	91.6	91.1	96.2	90.0	76.9	49.6	90.1	93.1	82.1	92.6	99.1	85.4

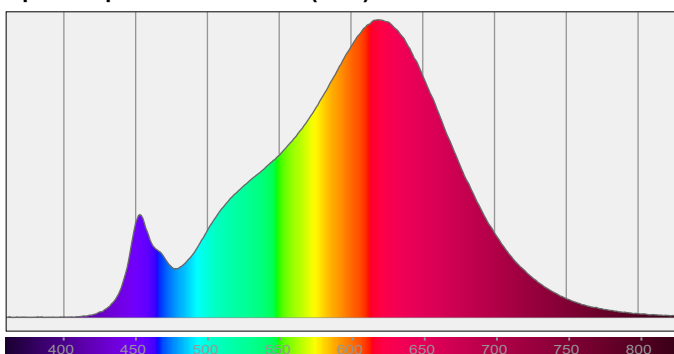
TM30-18 Rf-values per hue bin



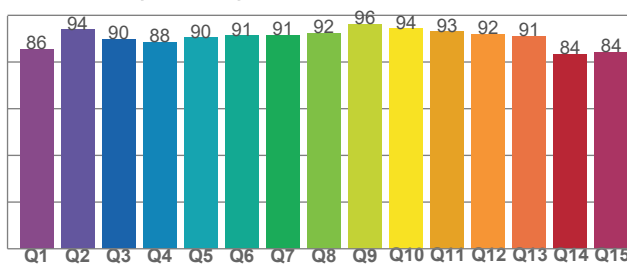
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.5	90.8	90.4	93.7	95.5	96.4	94.9	96.6	92.7	89.4	89.3	89.5	90.0	86.3	90.6	84.1

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
85.6	93.9	89.8	88.5	90.4	91.3	91.4	92.5	96.2	94.3	93.1	92.1	91.0	83.5	84.3



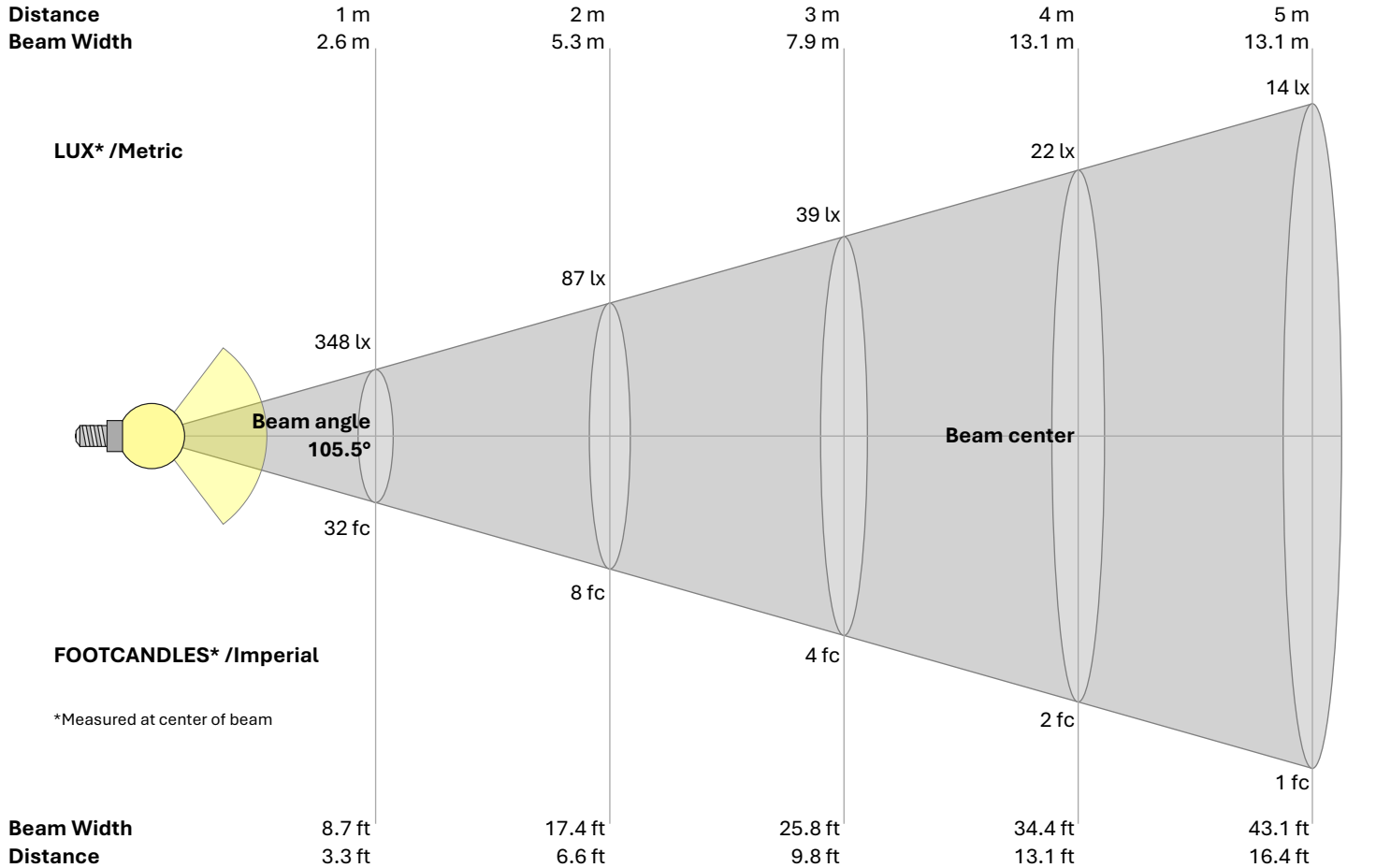
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Beam Details



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	m
3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6	ft
348	87	39	22	14	10	7	5	4	3	3	2	2	2	2	1	1	1	1	1	lux
32.3	8.1	3.6	2	1.3	0.9	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	fc

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
348	346	340	333	326	318	307	290	260	224	187	149	114	80	53	33	19	7	0	0	cd
100%	99%	98%	96%	94%	91%	88%	83%	75%	64%	54%	43%	33%	23%	15%	10%	5%	2%	0%	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
348	346	340	332	325	316	305	288	259	224	187	150	114	81	53	34	19	8	1	0	cd
100%	99%	98%	96%	93%	91%	88%	83%	75%	64%	54%	43%	33%	23%	15%	10%	5%	2%	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
348	347	343	336	330	323	314	301	276	242	204	166	129	94	63	40	24	11	2	0	cd
100%	100%	99%	97%	95%	93%	90%	86%	79%	69%	59%	48%	37%	27%	18%	12%	7%	3%	1%	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
348	347	342	336	330	322	313	299	274	240	202	164	127	91	61	39	23	10	2	0	cd
100%	100%	98%	97%	95%	93%	90%	86%	79%	69%	58%	47%	36%	26%	18%	11%	7%	3%	1%	0%	of 0°val