



## Light Measurement Report

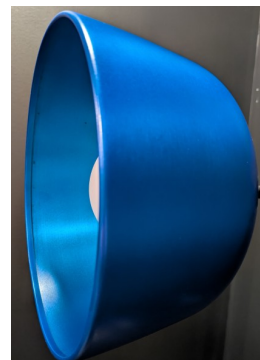
Print date: 10/3/2025

Measurement date and time: 9/25/2025 3:04:52 PM – Measurement no. VFR-250925-0148-MS

Operator: Shawn Blaszak

### Tested Light Source

Product Name: Dram: DR-S-PC52\_PC52-MTP-27-1\_10V\_UNV  
Manufacturer: RBW  
Product Description: Dram-Small-Blue "Anodized" \_Blue "Anodized"-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: 95.8

### Color Temperature

3004 K

### Color Match

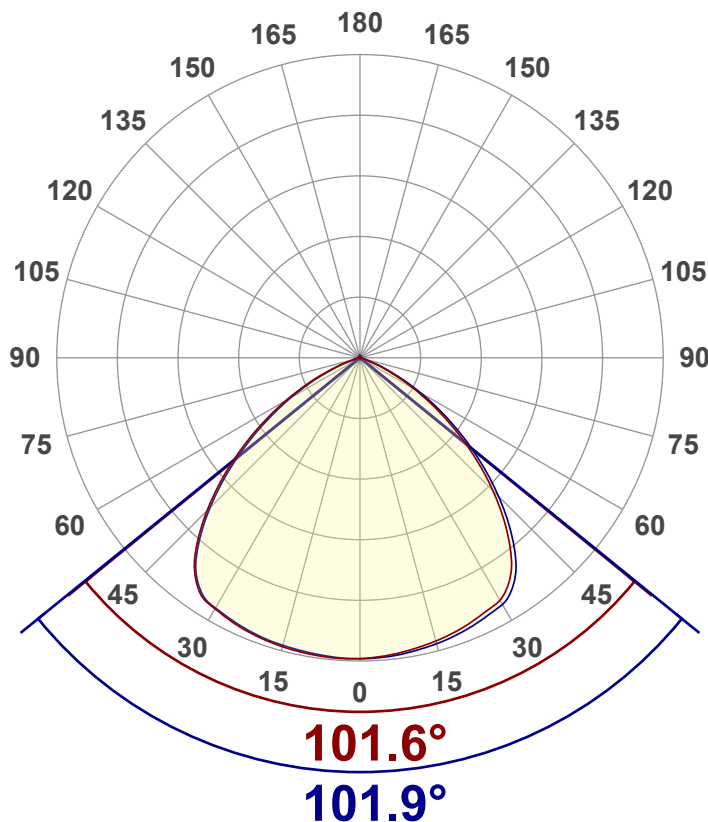
CIE1931  
x: {CIEx#}  
y: {CIEy#}

### Summary of Results

Total Lumen Output: 431 lm  
Luminaire Efficacy: 36 lm/W  
Peak Intensity and Beam Angle: 178 cd - 101.8°  
Color Rendering TM13-18: R<sub>r</sub> 93.3 – R<sub>g</sub> 99.4  
Color Shift, CIE duv: Duv -0.0015  
MacAdams Steps: 3  
Flicker: SVM n/a – PstLM n/a  
Input Power, Power and Displ. Factors: 11.9 W – PF 0.99 – DPF 1.0  
Input RMS Voltage and Current: 120 V – 0.101 A  
Frequency of Input Power: 60 Hz

### Luminous Intensity diagram

Unit: 0-100% of peak intensity



### Main Values

Output (total Lumen): 431 lm  
Lumen Up% / Down%: 0.69% / 99.31%  
Peak Intensity: 178 cd  
Beam Angle (50%-FWHM): 101.84°

### Cut-off Angle

Average 2,5%: 145.4°

### Field Angle

Average 10%: 133.7°

### Intensity Ratio

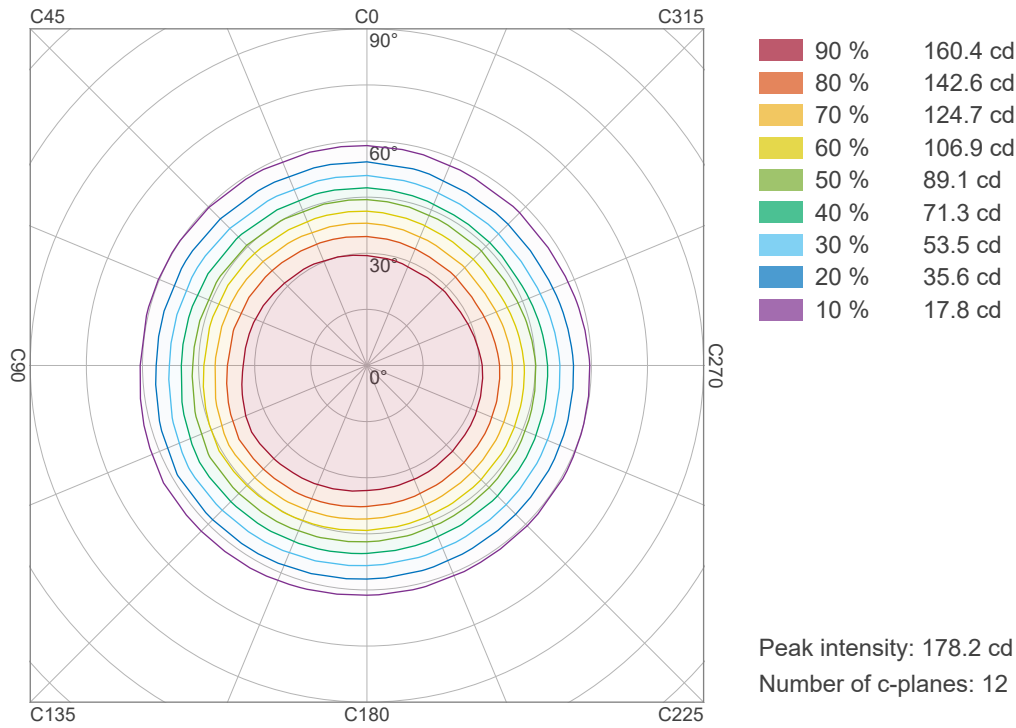
In 120° cone: 92.6%  
In 90° cone: 68.4%

C000-C180

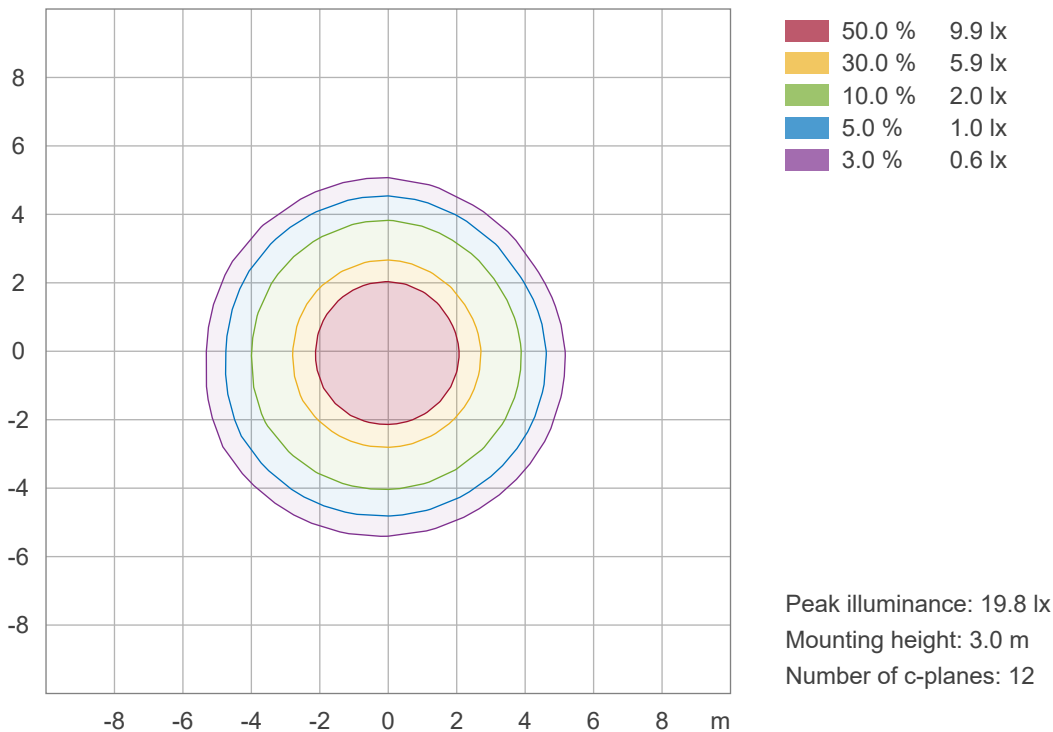
C090-C270



### Iso-intensity Diagram (Iso-candela)



### Iso-illuminance Diagram (Iso-lux)





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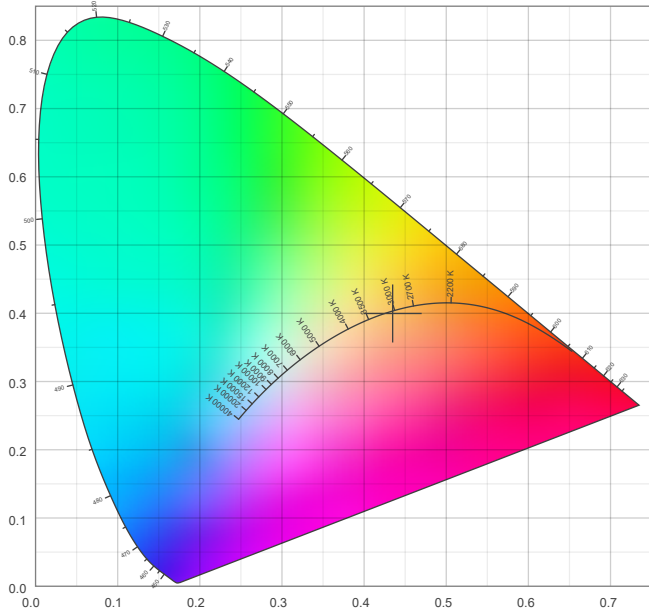
Operator: Shawn Blaszk

### Color details

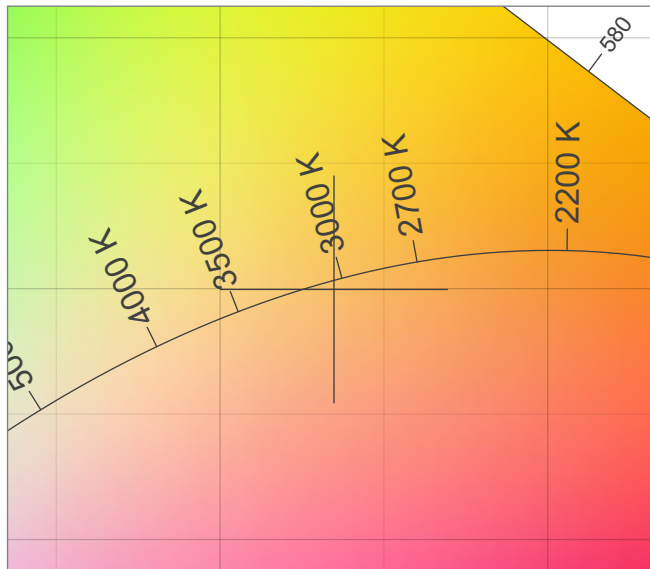
Correlated Color Temperature, Target CCT = 3004 K  
Correlated Color Temperature, Measured CCT = 3004 K  
Color Rendering Index CRI 95.8  
Color Rendering Index, R9 (red component) R9 = 74.9  
Color Rendering TM30-18 R<sub>r</sub> 93.3 – R<sub>g</sub> 99.4  
Color Quality Scale CQS = 94.5

MacAdam Steps 3  
Color coordinates CIE 1931 (x;y) = (0.435;0.400)  
Color coordinate CIEs 1960 (u;v) = (0.251;0.346)  
Color deviation from BBL Duv = -0.0015  
Color coordinate CIEs 1976 (CIELUV)(u';v') = (0.251;0.519)

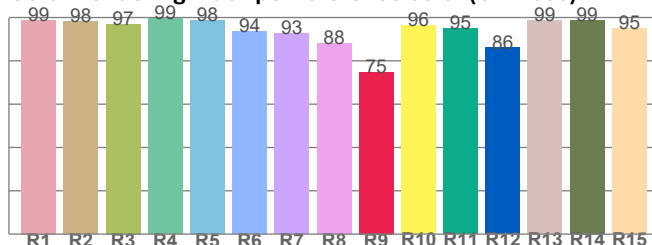
#### CIE 1931



#### CIE 1931 – zoomed on Planckian locus



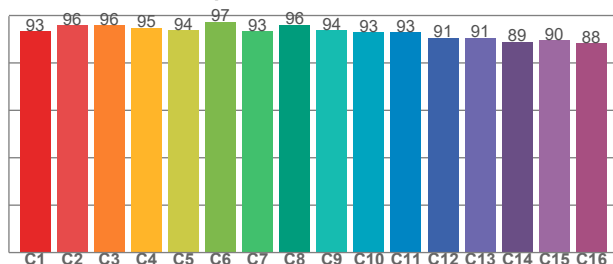
#### Color Rendering Index per reference color (CIE 1995)



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
98.8	98.3	97.0	99.4	98.5	93.7	92.7	87.9	74.9	96.4	94.9	86.0	98.7	98.9	94.9

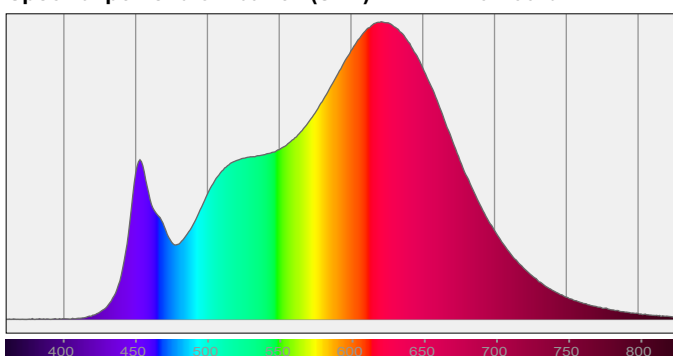
#### TM30-18 Rf-values per hue bin



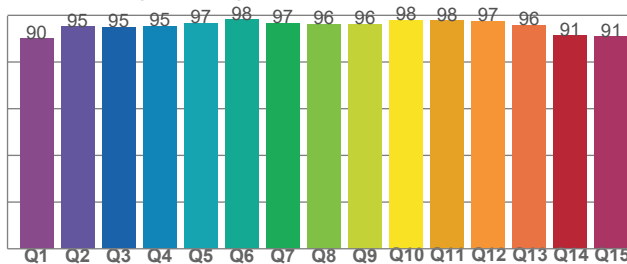
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.3	95.9	95.9	94.8	93.7	97.2	93.3	96.0	93.8	92.8	92.8	90.6	90.7	88.8	89.5	88.3

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

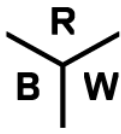


#### Color Quality Scale by reference color



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.0	95.1	94.9	95.4	96.7	98.2	96.8	96.3	96.3	98.0	97.8	97.4	95.7	91.3	90.8



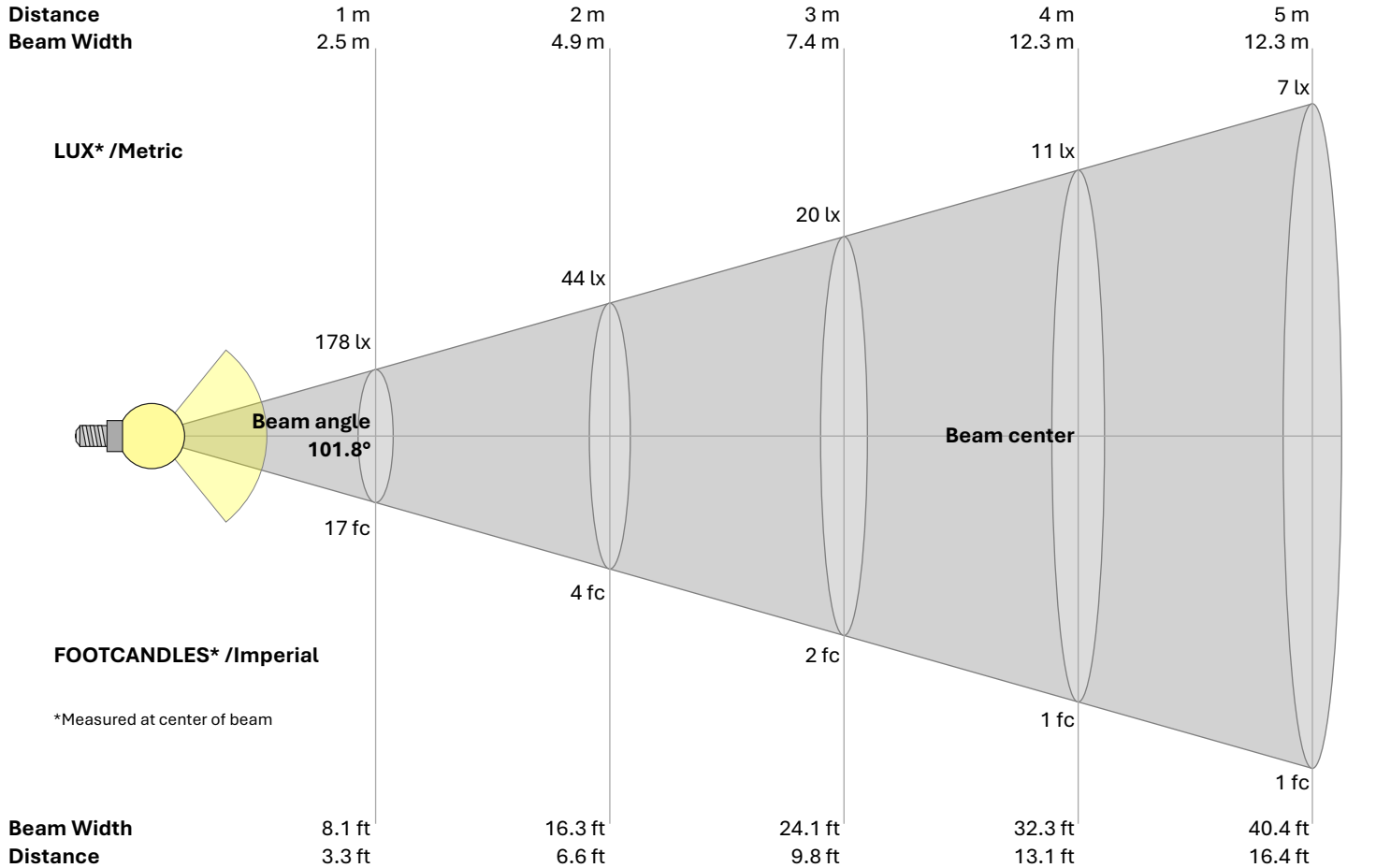
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### Beam Details



Beam Width				8.1 ft				16.3 ft				24.1 ft				32.3 ft				40.4 ft			
Distance				3.3 ft				6.6 ft				9.8 ft				13.1 ft				16.4 ft			
Beam intensities from 1 – 20 m																							
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			
178	44	20	11	7	5	4	3	2	2	1	1	1	1	1	1	1	1	0	0	lux			
16.5	4.1	1.8	1	0.7	0.5	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	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
178	177	175	173	171	168	165	155	135	111	85	60	38	19	6	2	1	0	0	0	cd
100%	99%	98%	97%	96%	95%	93%	87%	76%	62%	48%	34%	21%	11%	3%	1%	0%	0%	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
178	177	176	175	173	171	168	159	140	116	90	65	42	22	8	3	1	0	0	0	cd
100%	100%	99%	98%	97%	96%	94%	89%	79%	65%	51%	36%	23%	12%	5%	1%	1%	0%	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
178	178	178	177	176	174	171	166	151	128	102	75	51	29	13	3	1	1	0	0	cd
100%	100%	100%	99%	99%	98%	96%	93%	85%	72%	57%	42%	29%	17%	7%	2%	1%	0%	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
178	178	177	176	175	173	171	165	149	125	98	72	47	26	11	3	1	0	0	0	cd
100%	100%	99%	99%	98%	97%	96%	93%	84%	70%	55%	40%	27%	15%	6%	2%	1%	0%	0%	0%	of 0°val