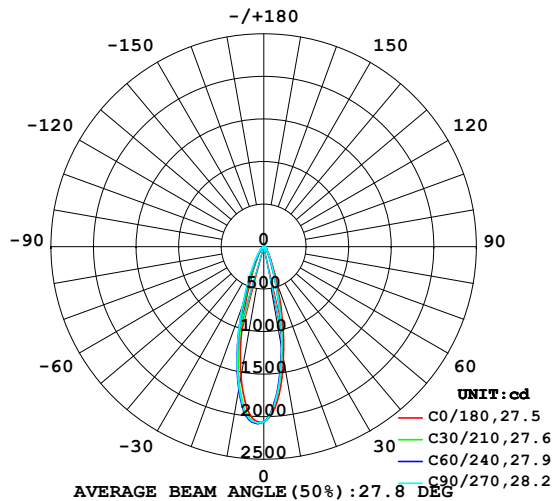


## LUMINAIRE PHOTOMETRIC TEST REPORT

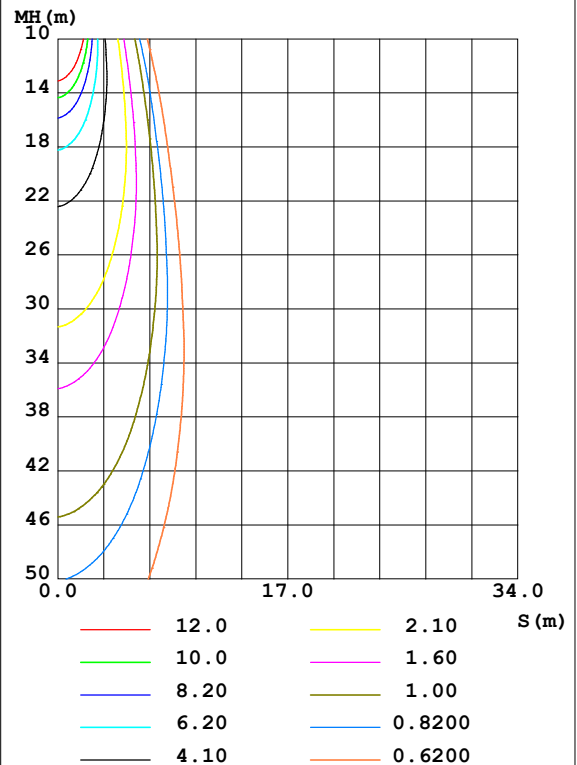
NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.98 lm/W			
MODEL		Imax(cd)	2082	S/MH(C0/180)	0.49
NOMINAL POWER(W)	9	LOR(%)	100.0	S/MH(C90/270)	0.55
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	680.48	η UP,DN(C0-180)	0.0,42.5
NOMINAL FLUX(lm)	680.476	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,57.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1336	1212	1213	1378	1555	1683	1685	1512	0- 10	166.0	166.0	24.4, 24.4
20	442.9	362.6	348.3	427.2	532.8	664.6	728.9	604.5	10- 20	254.4	420.4	61.8, 61.8
30	146.2	118.9	120.4	137.9	159.0	190.2	237.9	204.4	20- 30	133.7	554.0	81.4, 81.4
40	59.22	49.53	49.58	57.29	64.13	74.28	90.38	80.19	30- 40	65.91	619.9	91.1, 91.1
50	23.51	20.86	20.77	23.64	26.11	29.94	33.45	29.40	40- 50	32.65	652.6	95.9, 95.9
60	10.29	9.198	9.252	10.97	12.05	12.97	13.33	11.86	50- 60	15.56	668.2	98.2, 98.2
70	4.354	4.200	4.332	4.775	5.270	5.660	5.688	5.041	60- 70	7.454	675.6	99.3, 99.3
80	1.859	1.611	1.683	2.149	2.555	2.792	2.765	2.324	70- 80	3.742	679.4	99.8, 99.8
90	0.0518	0.0575	0.0577	0.0578	0.2043	0.3106	0.3926	0.1244	80- 90	1.123	680.5	100, 100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 639.33 lm

%lum = 94.0%

%lamp = 94.0%

Conical surface Flux(120deg): 668.16 lm

%lum = 98.2%

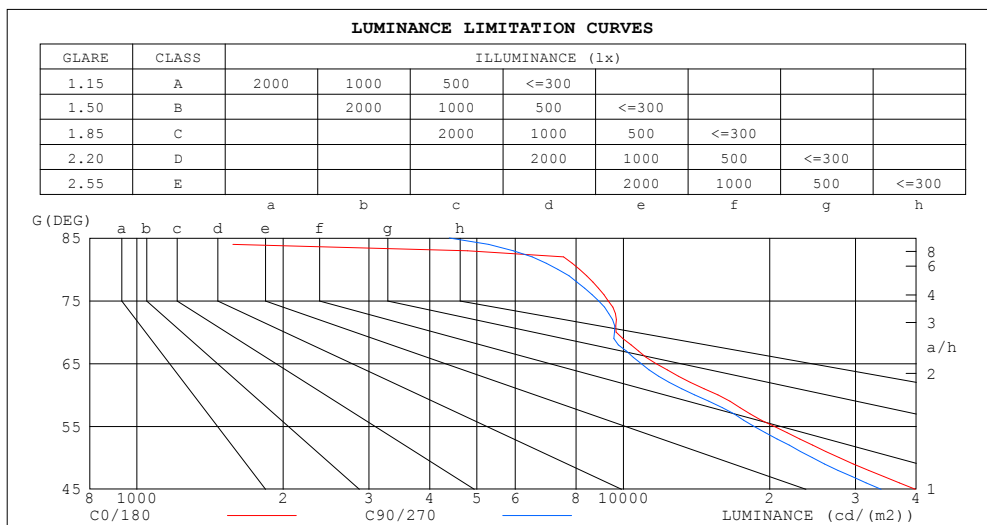
%lamp = 98.2%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025-06-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:5.620m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	518	4388
80	8131	7339
75	9309	8887
70	9672	9591
65	11661	10877
60	15639	14013
55	20402	18550
50	27792	24472
45	39875	33859

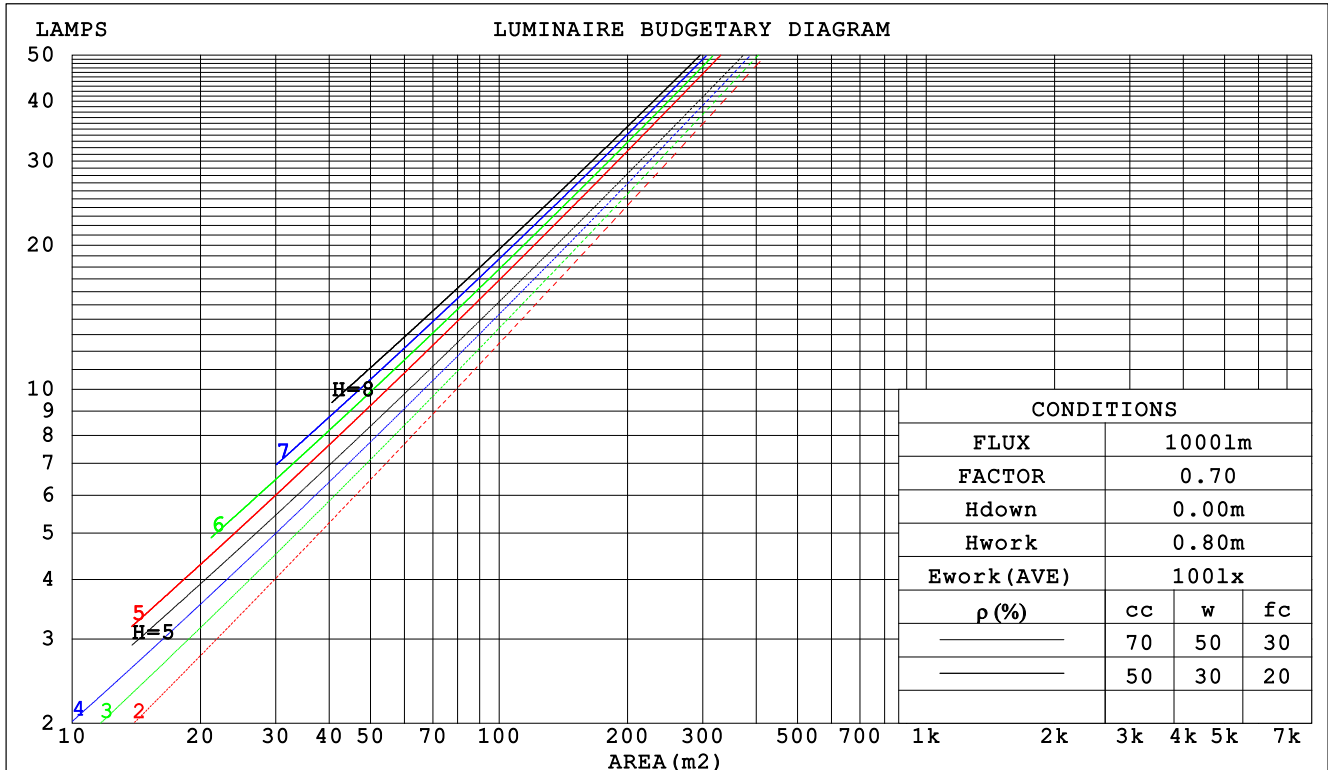
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:#41MM	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

### WEC AND CCEC

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:#41MM	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.164	.093	.030	.158	.090	.029	.145	.083	.027	.134	.077	.025	.123	.071	.023		
2.0	.155	.085	.026	.149	.082	.025	.139	.077	.024	.129	.072	.023	.120	.068	.021		
3.0	.145	.077	.023	.141	.075	.023	.132	.071	.022	.124	.068	.021	.116	.064	.020		
4.0	.137	.071	.021	.133	.070	.021	.125	.066	.020	.118	.064	.019	.112	.061	.019		
5.0	.129	.066	.019	.126	.065	.019	.119	.062	.018	.113	.060	.018	.108	.057	.017		
6.0	.122	.061	.018	.119	.060	.017	.114	.058	.017	.108	.056	.017	.103	.054	.016		
7.0	.116	.057	.016	.114	.057	.016	.109	.055	.016	.104	.053	.016	.100	.052	.015		
8.0	.111	.054	.015	.108	.053	.015	.104	.052	.015	.100	.051	.015	.096	.049	.014		
9.0	.106	.051	.014	.104	.050	.014	.100	.049	.014	.096	.048	.014	.092	.047	.014		
10.0	.101	.048	.013	.099	.048	.013	.096	.047	.013	.092	.046	.013	.089	.045	.013		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.111	.077	.052	.096	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.044	.090	.060	.039	.062	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.052	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

NAME: RAD25R-09-DTW-UNV-24-WT					TYPE:DTW CRI90					WEIGHT:				
SPEC.:24D					DIM.:					SERIAL No.:1				
MFR.:					SUR.:Φ41MM					Shielding Angle:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3				
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3				
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				
Room dimensions					Viewed crosswise					Viewed endwise				
x = 2H y = 2H					19.4	20.3	19.7	20.4	20.6	18.8	19.7	19.1	19.8	20.0
3H					19.7	20.4	19.9	20.6	20.8	19.1	19.9	19.4	20.1	20.3
4H					19.8	20.5	20.0	20.7	20.9	19.2	20.0	19.5	20.2	20.4
6H					19.9	20.5	20.1	20.8	21.0	19.3	20.0	19.6	20.2	20.5
8H					19.9	20.5	20.2	20.8	21.0	19.3	20.0	19.6	20.2	20.5
12H					19.8	20.5	20.1	20.7	21.0	19.3	19.9	19.6	20.2	20.5
4H 2H					19.4	20.2	19.7	20.4	20.6	18.9	19.6	19.2	19.8	20.1
3H					19.8	20.4	20.1	20.7	20.9	19.3	19.9	19.6	20.2	20.4
4H					20.0	20.5	20.3	20.8	21.1	19.5	20.1	19.8	20.4	20.7
6H					20.1	20.6	20.5	20.9	21.3	19.6	20.1	20.0	20.5	20.8
8H					20.1	20.6	20.5	21.0	21.3	19.7	20.1	20.0	20.5	20.8
12H					20.1	20.5	20.5	20.9	21.3	19.6	20.1	20.1	20.5	20.8
8H 4H					19.9	20.4	20.3	20.8	21.1	19.5	20.0	19.9	20.3	20.7
6H					20.1	20.5	20.6	20.9	21.3	19.7	20.1	20.1	20.5	20.9
8H					20.2	20.6	20.7	21.0	21.4	19.7	20.1	20.2	20.5	21.0
12H					20.2	20.5	20.7	20.9	21.4	19.8	20.1	20.2	20.5	21.0
12H 4H					19.9	20.3	20.3	20.7	21.1	19.5	19.9	19.9	20.3	20.7
6H					20.1	20.5	20.6	20.9	21.3	19.7	20.0	20.1	20.4	20.9
8H					20.2	20.5	20.7	20.9	21.4	19.7	20.0	20.2	20.5	20.9
Variations with the observer position at spacings:														
S = 1.0H					+ 1.6 / - 1.8					+ 1.2 / - 1.6				
1.5H					+ 2.6 / - 1.5					+ 2.0 / - 1.2				
2.0H					+ 2.7 / - 1.8					+ 2.1 / - 1.7				

CIE Pub.117, 680.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.3)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

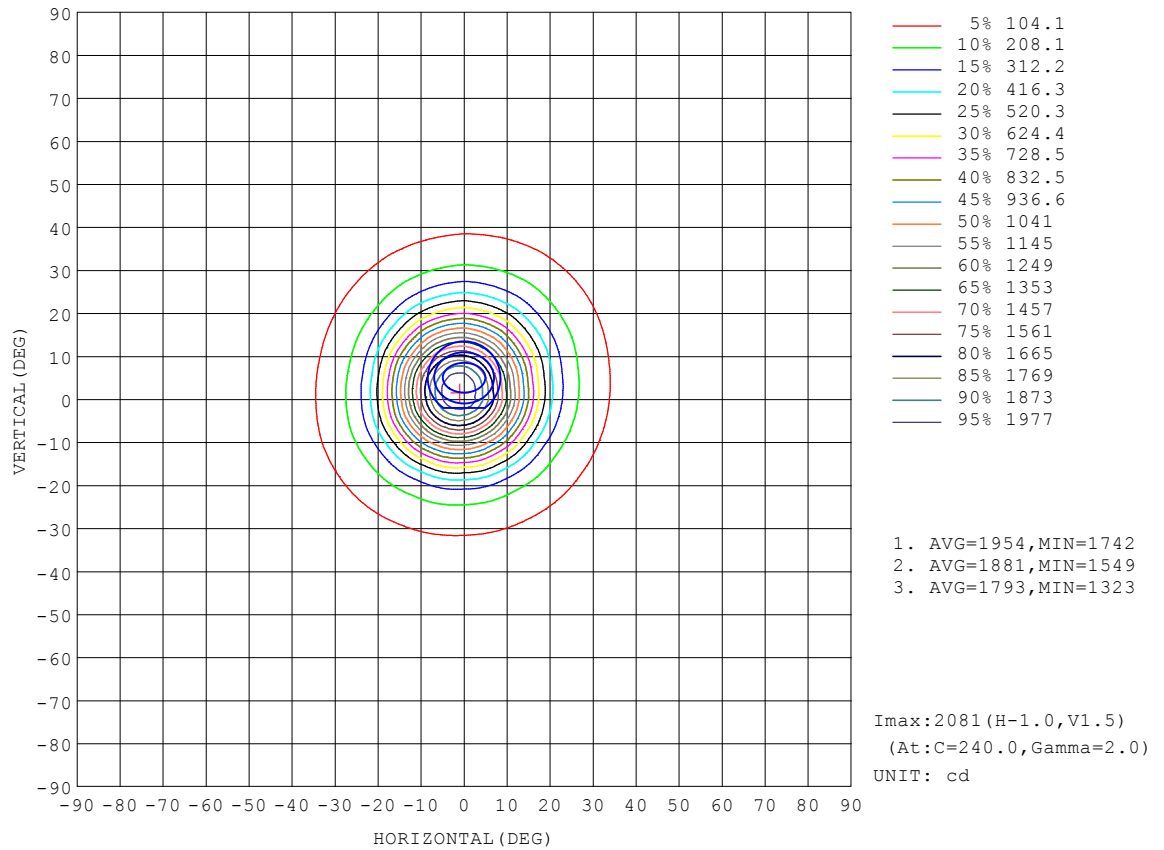
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```

## ISOCANDELA DIAGRAM

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

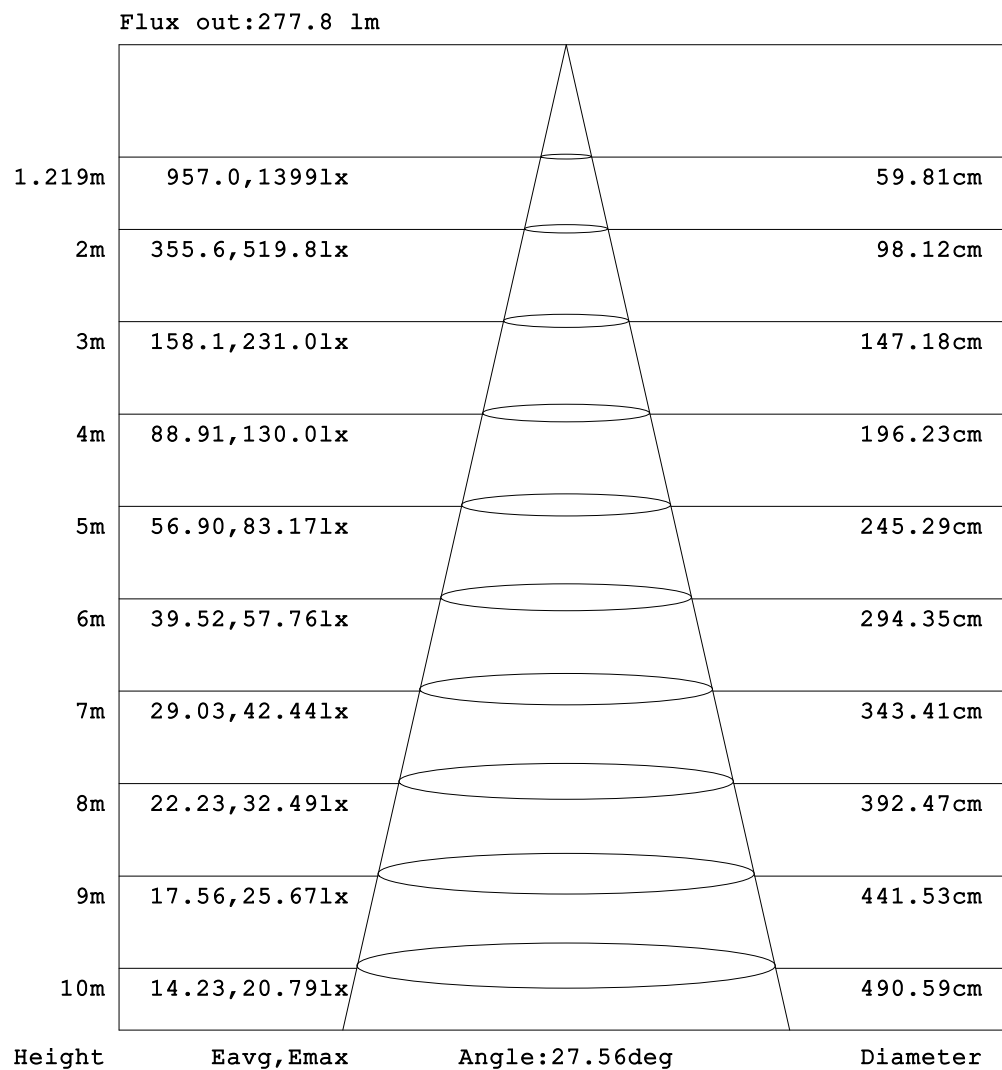


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

### AAI Figure

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



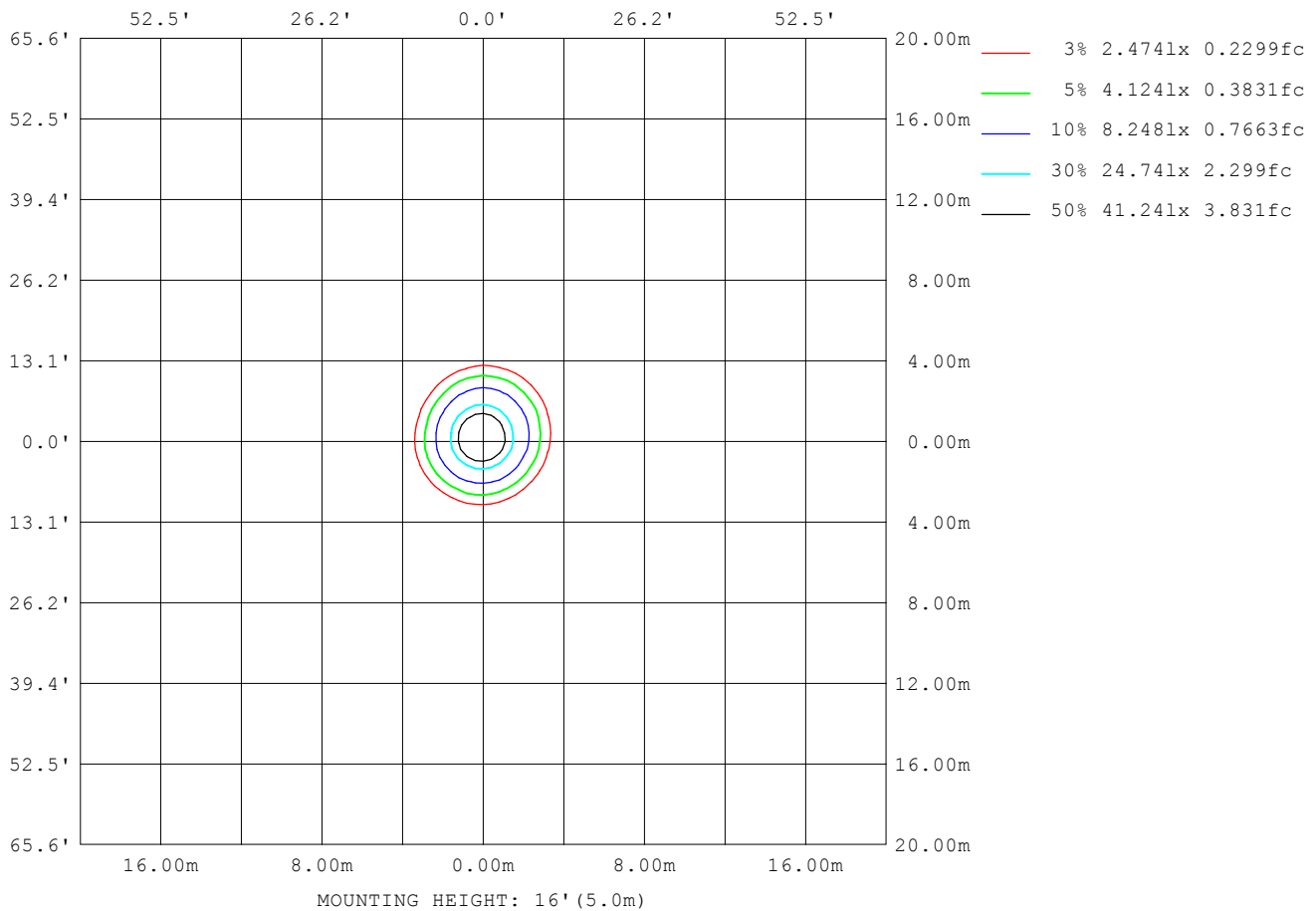
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:#41MM	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

## LED Avg.L Report

NAME: RAD25R-09-DTW-UNV-24-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

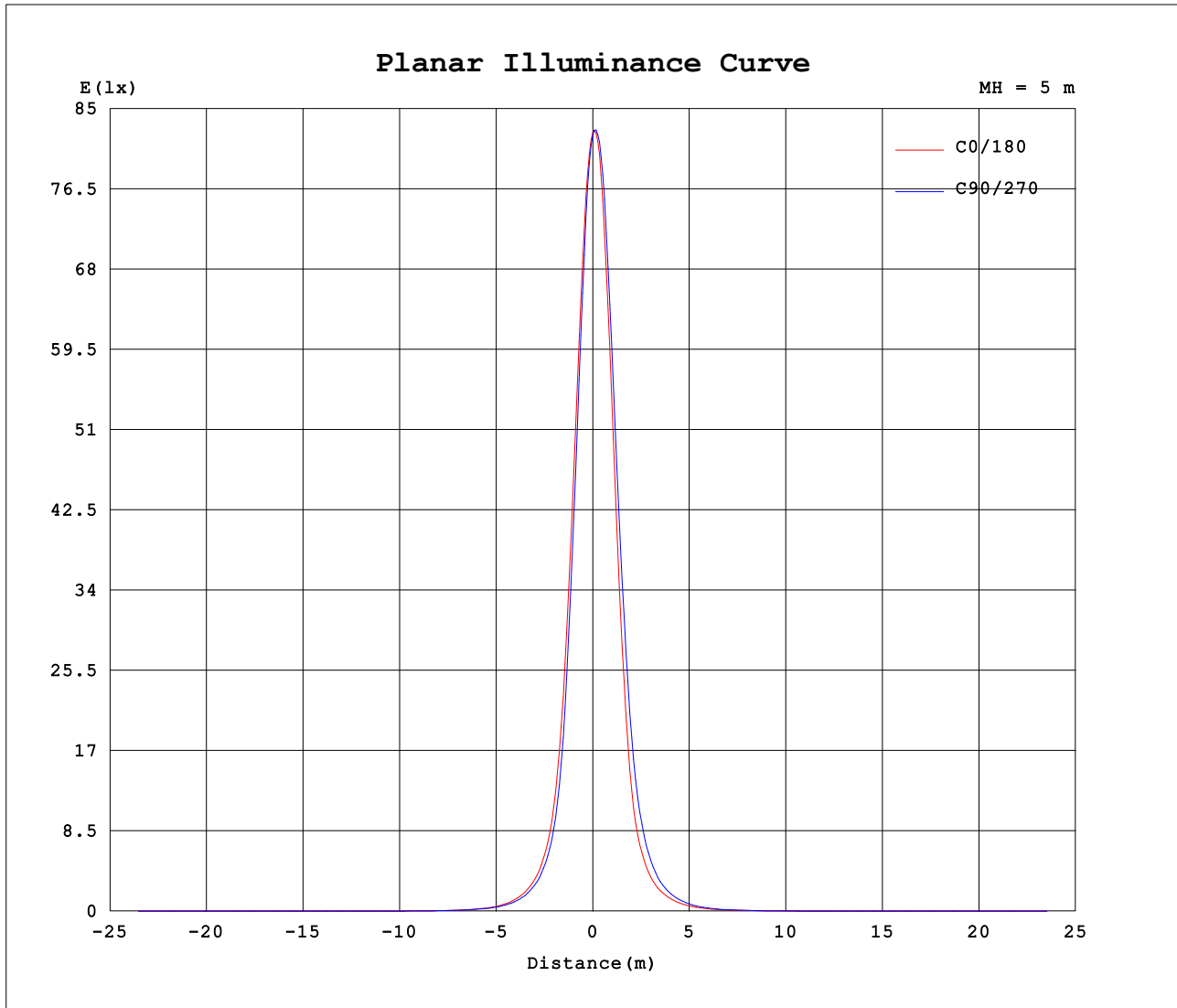
AvgL	cd/m2
L_0~180 (65) av	12693
L_0~180 (75) av	10381
L_0~180 (85) av	4058
L_90~270 (65) av	13252
L_90~270 (75) av	10406
L_90~270 (85) av	8662
L_45 (65) av	12989
L_45 (75) av	10414
L_45 (85) av	8642

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.620m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025-06-10

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 5.620m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```