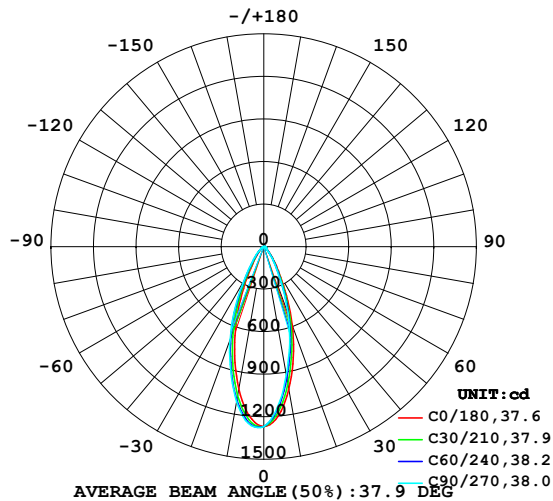


## LUMINAIRE PHOTOMETRIC TEST REPORT

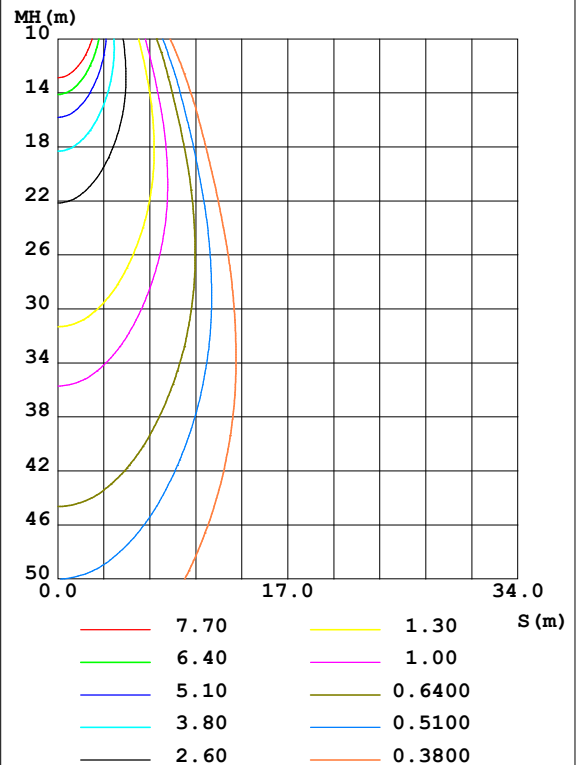
NAME: RAD25R-09-DTW-UNV-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.40 lm/W			
MODEL		Imax(cd)	1276	S/MH(C0/180)	0.60
NOMINAL POWER(W)	9	LOR(%)	100.0	S/MH(C90/270)	0.68
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	666.25	η UP,DN(C0-180)	0.0,45.4
NOMINAL FLUX(lm)	666.246	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,54.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	0.65

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	1021	963.5	921.9	964.3	1019	1080	1109	1082	0- 10	108.4	108.4	16.3,16.3
20	590.6	538.6	501.3	530.4	570.5	654.6	698.0	658.7	10- 20	222.3	330.7	49.6,49.6
30	224.3	203.2	183.2	186.5	203.2	257.5	293.0	263.1	20- 30	177.2	507.9	76.2,76.2
40	79.71	69.58	63.51	66.56	74.23	89.72	104.4	95.98	30- 40	86.35	594.2	89.2,89.2
50	25.63	23.84	22.95	24.59	27.18	30.93	33.73	29.88	40- 50	36.92	631.1	94.7,94.7
60	13.56	12.85	12.14	13.55	15.28	16.42	16.91	15.42	50- 60	17.89	649.0	97.4,97.4
70	6.395	6.014	6.061	6.695	7.401	8.097	8.169	7.362	60- 70	10.17	659.2	98.9,98.9
80	2.934	2.559	2.462	3.076	3.516	3.943	3.988	3.512	70- 80	5.402	664.6	99.8,99.8
90	0.1032	0.1035	0.1038	0.2486	0.1577	0.3883	0.2337	0.2284	80- 90	1.657	666.2	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): 616.96 lm

%lum = 92.6%

%lamp = 92.6%

Conical surface Flux(120deg): 649.02 lm

%lum = 97.4%

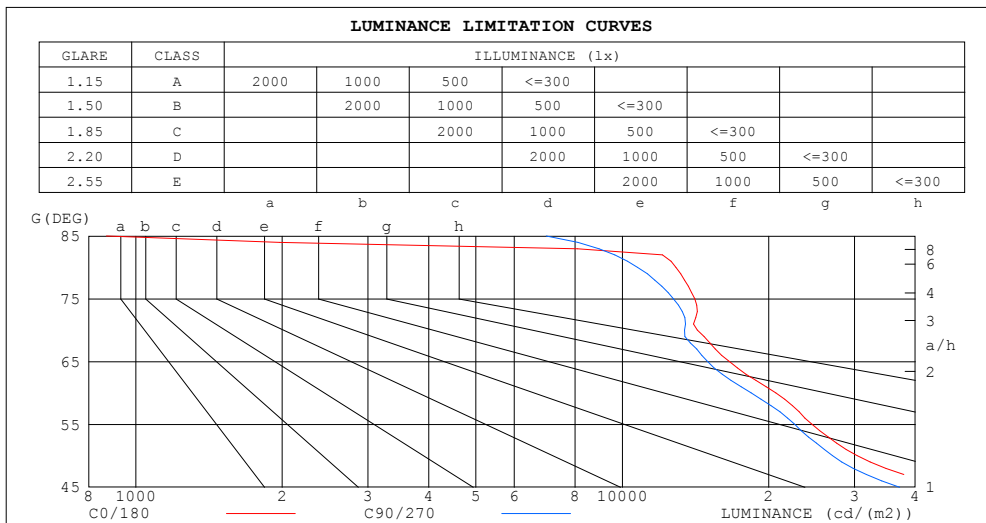
%lamp = 97.4%

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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	870	6981
80	12883	10743
75	14083	12742
70	14258	13428
65	16592	14971
60	20686	18394
55	24523	22606
50	30404	27051
45	46278	37148

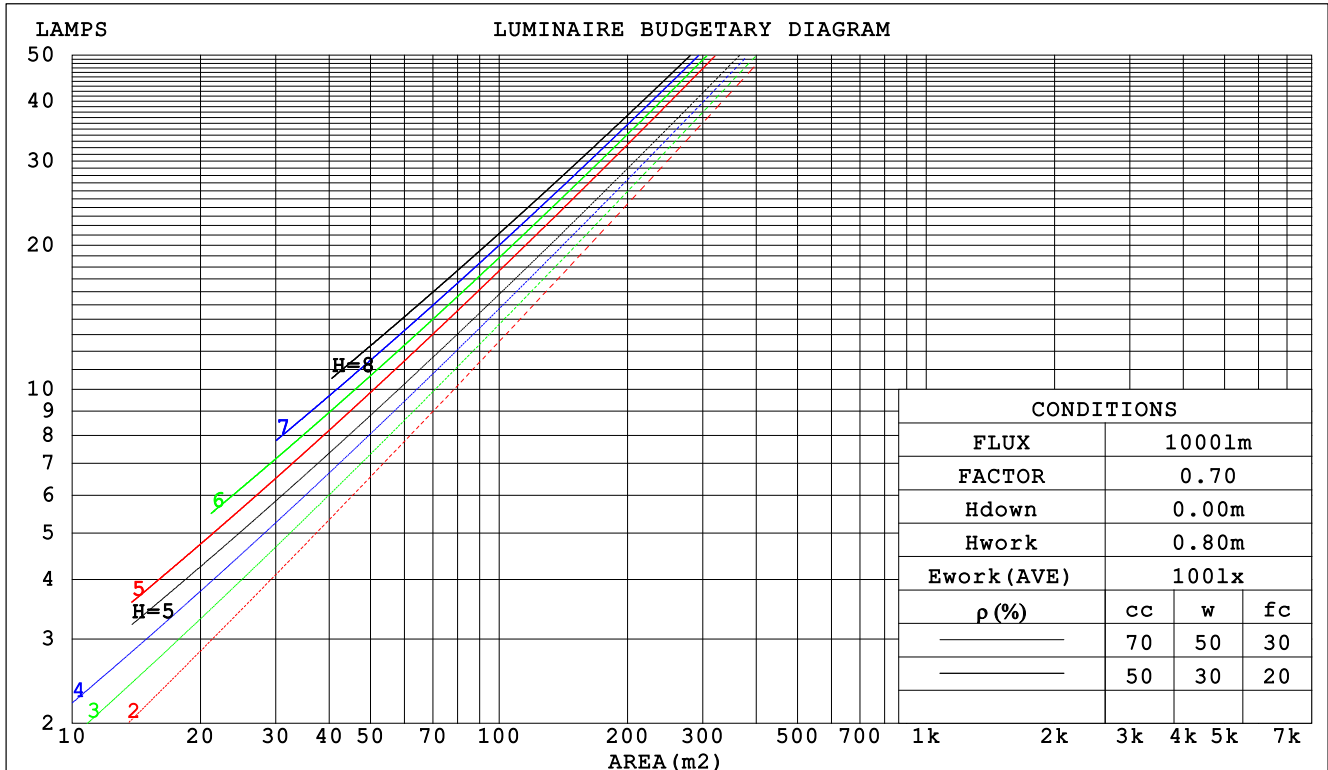
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.11	1.08	1.06	1.09	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.93	.91	.89	.87
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.84	.88	.85	.83	.82
4.0	.91	.85	.81	.90	.85	.81	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
5.0	.85	.80	.76	.85	.79	.75	.83	.78	.75	.81	.77	.74	.80	.76	.73	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.66	.73	.69	.66	.72	.69	.66	.64
8.0	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.66	.63	.69	.65	.62	.61
9.0	.69	.64	.60	.69	.63	.60	.68	.63	.60	.67	.63	.59	.66	.62	.59	.58
10.0	.66	.61	.57	.66	.60	.57	.65	.60	.57	.64	.60	.57	.63	.59	.57	.55



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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	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	.179	.102	.032	.172	.098	.031	.160	.092	.029	.148	.085	.027	.137	.080	.026		
2.0	.169	.093	.028	.164	.090	.028	.153	.085	.026	.143	.080	.025	.134	.076	.024		
3.0	.160	.085	.025	.155	.083	.025	.146	.079	.024	.138	.075	.023	.130	.072	.022		
4.0	.151	.078	.023	.147	.077	.023	.139	.074	.022	.132	.071	.021	.125	.068	.021		
5.0	.143	.073	.021	.139	.071	.021	.132	.069	.020	.126	.067	.020	.120	.064	.019		
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.121	.063	.018	.116	.061	.018		
7.0	.129	.064	.018	.126	.063	.018	.121	.061	.018	.116	.059	.017	.111	.058	.017		
8.0	.123	.060	.017	.120	.059	.017	.116	.058	.016	.111	.056	.016	.107	.055	.016		
9.0	.117	.057	.016	.115	.056	.016	.111	.055	.016	.107	.054	.015	.103	.052	.015		
10.0	.112	.054	.015	.110	.053	.015	.106	.052	.015	.103	.051	.015	.099	.050	.014		

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	.171	.157	.145	.147	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.134	.114	.098	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.089	.055	.032	.061	.039	.023	.036	.023	.014	.012	.008	.004	
9.0	.098	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.054	.028	.080	.047	.024	.056	.033	.017	.032	.019	.010	.011	.006	.003	

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-38-WT					TYPE:DTW CRI90					WEIGHT:				
SPEC.:38D					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					21.7	22.6	21.9	22.8	22.9	21.0	21.9	21.2	22.1	22.2
3H					22.0	22.8	22.2	23.0	23.2	21.3	22.1	21.6	22.3	22.5
4H					22.1	22.9	22.4	23.1	23.4	21.5	22.3	21.7	22.5	22.7
6H					22.2	23.0	22.5	23.2	23.5	21.6	22.3	21.9	22.6	22.8
8H					22.3	23.0	22.6	23.3	23.5	21.6	22.3	21.9	22.6	22.8
12H					22.2	22.9	22.6	23.2	23.5	21.6	22.3	21.9	22.5	22.8
4H 2H					21.7	22.5	22.0	22.7	22.9	21.1	21.9	21.3	22.1	22.3
3H					22.1	22.8	22.4	23.1	23.3	21.5	22.2	21.8	22.5	22.7
4H					22.3	23.0	22.7	23.3	23.6	21.7	22.4	22.1	22.7	23.0
6H					22.5	23.1	22.9	23.4	23.8	21.9	22.5	22.3	22.8	23.2
8H					22.6	23.1	23.0	23.5	23.9	22.0	22.5	22.4	22.9	23.2
12H					22.6	23.1	23.0	23.4	23.8	22.0	22.5	22.4	22.8	23.2
8H 4H					22.4	22.9	22.7	23.2	23.6	21.8	22.3	22.2	22.7	23.0
6H					22.6	23.1	23.1	23.5	23.9	22.1	22.5	22.5	22.9	23.3
8H					22.8	23.1	23.2	23.5	24.0	22.1	22.5	22.6	22.9	23.4
12H					22.8	23.1	23.2	23.5	24.0	22.2	22.5	22.6	22.9	23.4
12H 4H					22.3	22.8	22.7	23.2	23.6	21.8	22.2	22.2	22.6	23.0
6H					22.6	23.0	23.1	23.4	23.9	22.1	22.4	22.5	22.8	23.3
8H					22.8	23.1	23.2	23.5	24.0	22.2	22.5	22.6	22.9	23.4
Variations with the observer position at spacings:														
S = 1.0H					+ 1.6 / - 1.7					+ 1.2 / - 1.6				
1.5H					+ 3.0 / - 1.4					+ 2.3 / - 1.2				
2.0H					+ 2.1 / - 1.1					+ 1.4 / - 1.0				

CIE Pub.117, 666.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.4)

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:

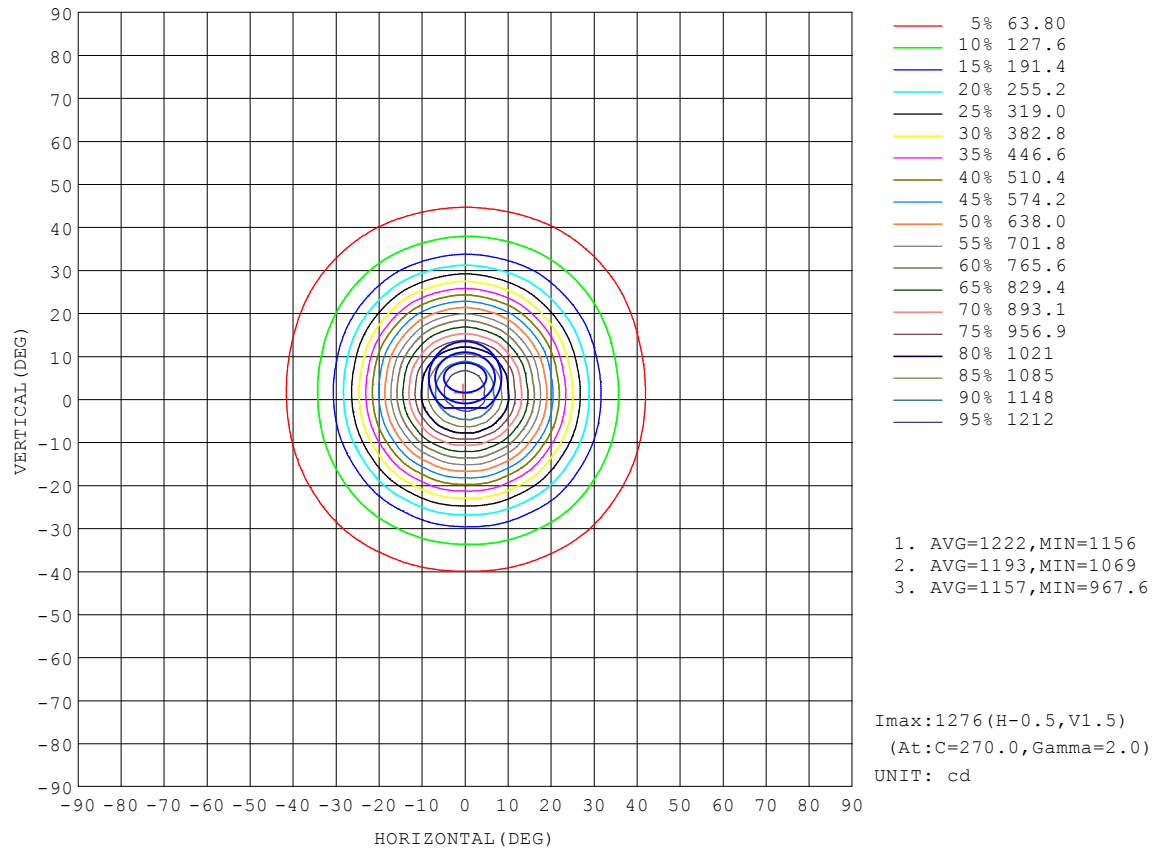
```

Range: 0 - 90DEG
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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

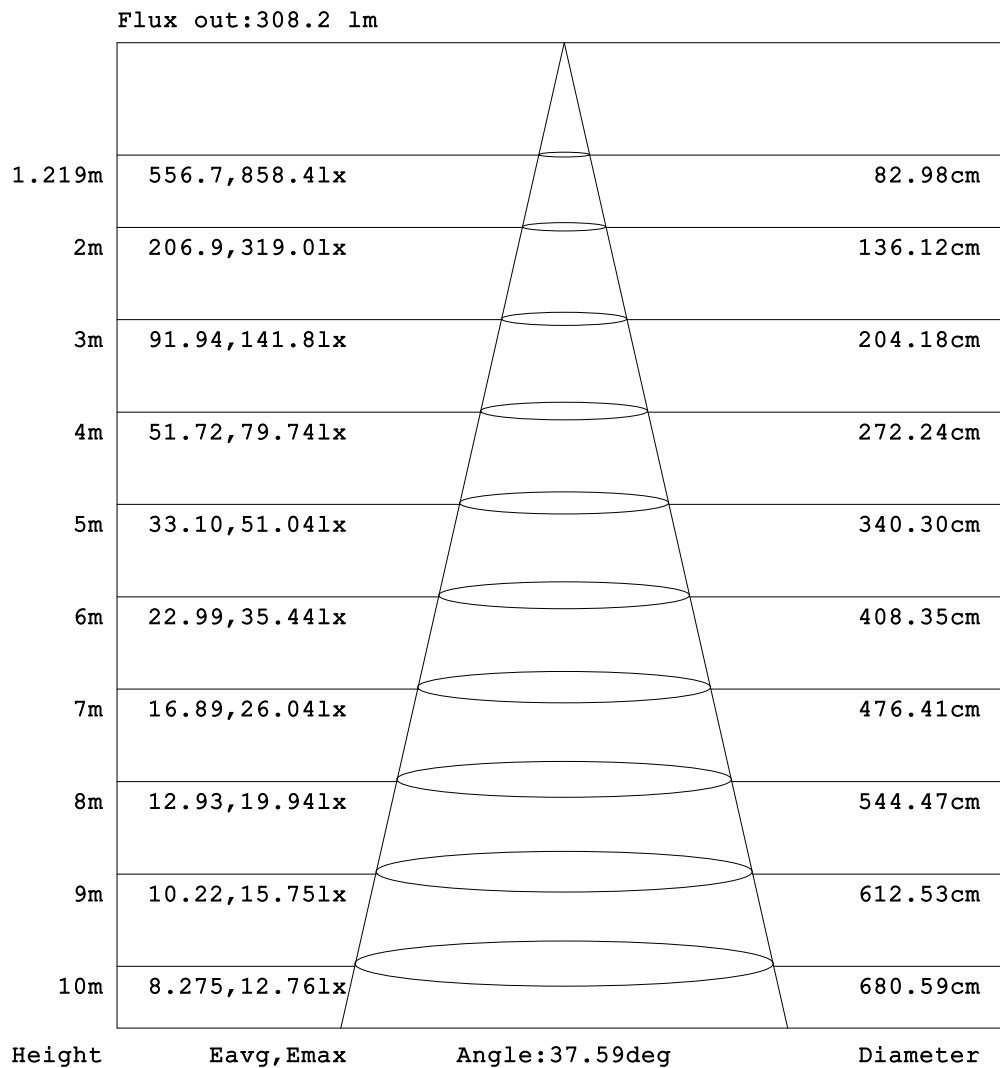


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-06-10

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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



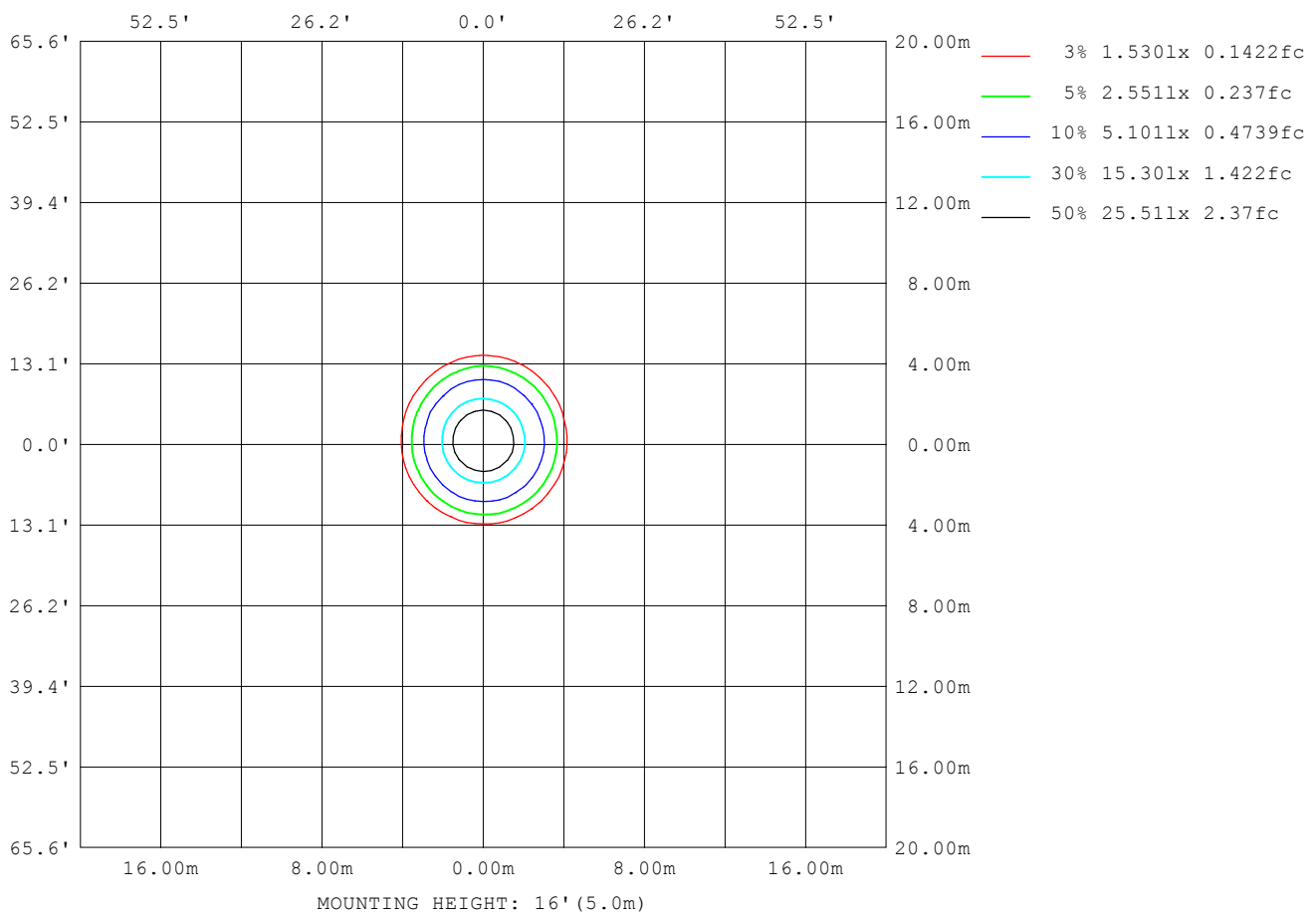
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	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:

## LED Avg.L Report

NAME: RAD25R-09-DTW-UNV-38-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:38D	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

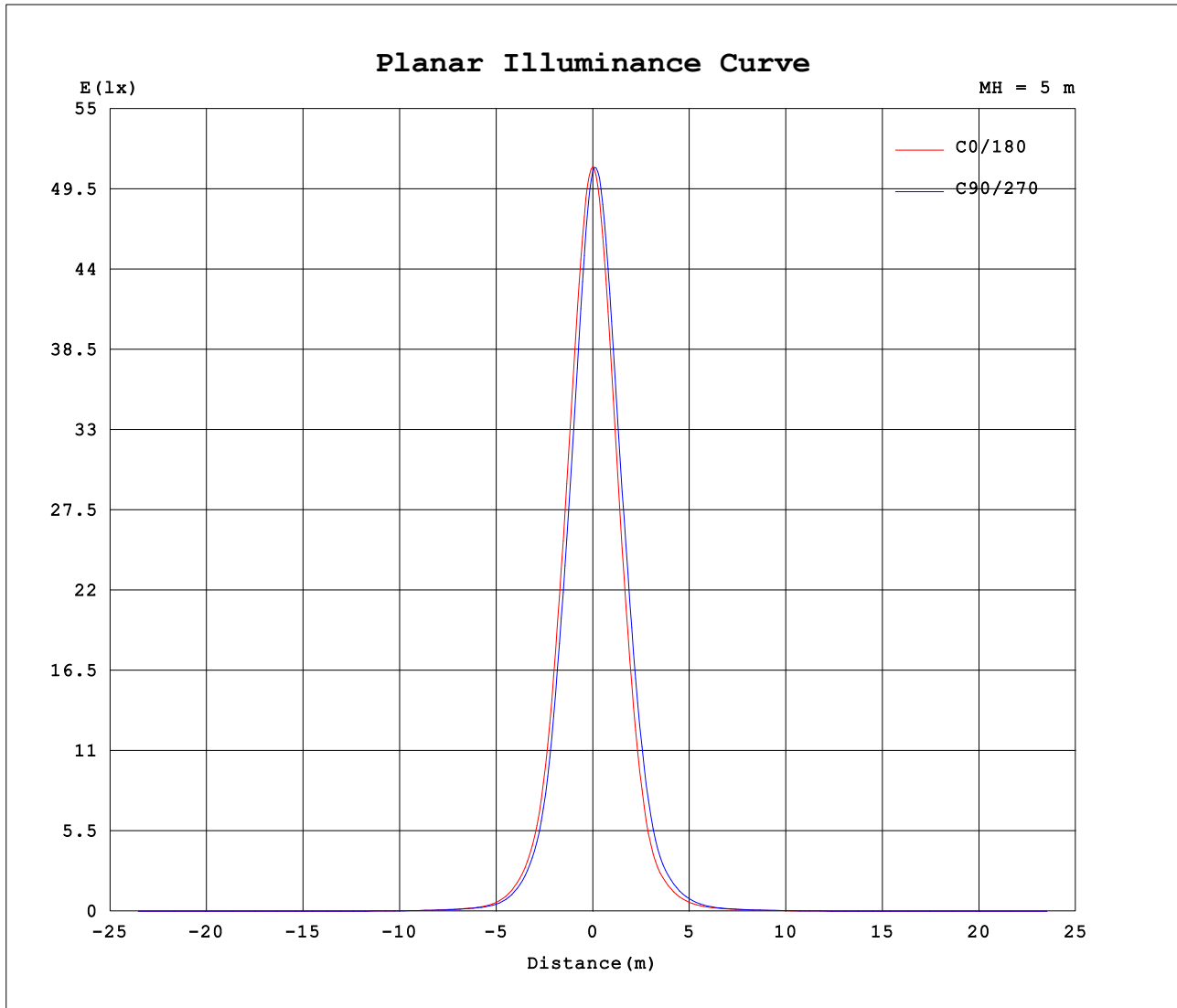
AvgL	cd/m2
L_0~180 (65) av	17700
L_0~180 (75) av	15043
L_0~180 (85) av	4608
L_90~270 (65) av	18211
L_90~270 (75) av	14967
L_90~270 (85) av	12820
L_45 (65) av	17983
L_45 (75) av	15119
L_45 (85) av	13138

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:

```