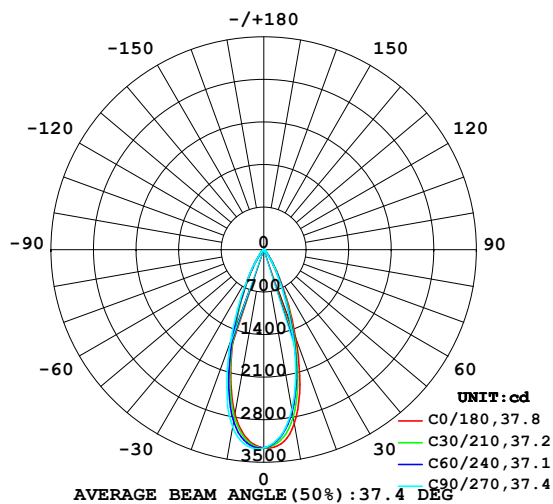


LUMINAIRE PHOTOMETRIC TEST REPORT

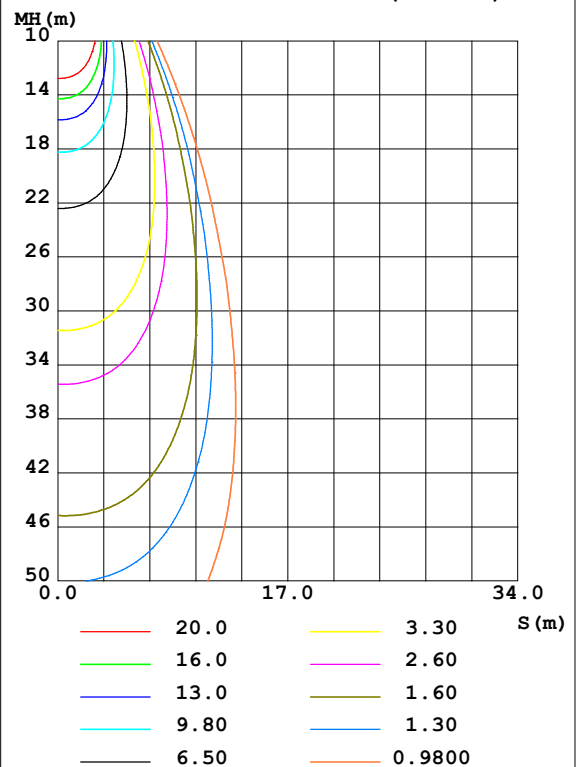
NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE: CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105.50 lm/W			
MODEL		I _{max} (cd)	3281	S/MH (C0/180)	0.60
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.62
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1489.2	η UP, DN (C0-180)	0.0, 47.8
NOMINAL FLUX (lm)	1489.17	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.60

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: CHEN
Test Date: 2026-06-25

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2905	2757	2671	2723	2744	2818	2962	3028	0- 10	291.6	291.6	19.6,19.6
20	1539	1400	1320	1345	1405	1446	1589	1660	10- 20	597.6	889.2	59.7,59.7
30	471.6	430.1	381.6	392.5	423.2	442.6	481.3	506.9	20- 30	393.1	1282	86.1,86.1
40	110.6	98.39	84.43	89.40	102.3	99.72	104.4	114.7	30- 40	140.4	1423	95.5,95.5
50	34.39	32.31	28.78	30.99	33.30	32.89	33.79	35.86	40- 50	44.34	1467	98.5,98.5
60	7.860	10.52	6.850	10.13	8.290	10.77	7.677	11.48	50- 60	17.16	1484	99.7,99.7
70	1.640	1.678	1.261	1.585	1.740	1.788	1.608	1.832	60- 70	4.423	1489	100,100
80	0.0803	0.0688	0.0764	0.0687	0.1643	0.1789	0.1453	0.1431	70- 80	0.4906	1489	100,100
90	0.0688	0.0688	0.0688	0.0725	0.1758	0.1834	0.1872	0.1794	80- 90	0.1280	1489	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): 1449.9 lm

%lum = 97.4%

%lamp = 97.4%

Conical surface Flux(120deg): 1484.1 lm

%lum = 99.7%

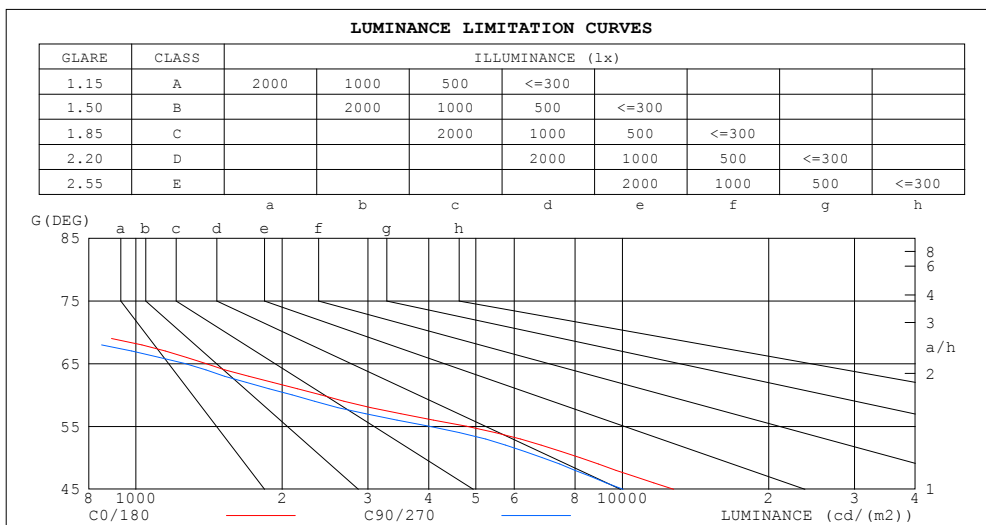
%lamp = 99.7%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:CHEN
 Test Date:2026-06-25

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:

LUMINANCE LIMITATION CURVES

NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE: CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	121	121
80	71	67
75	59	52
70	733	564
65	1393	1261
60	2403	2094
55	4784	4008
50	8178	6842
45	12749	10044

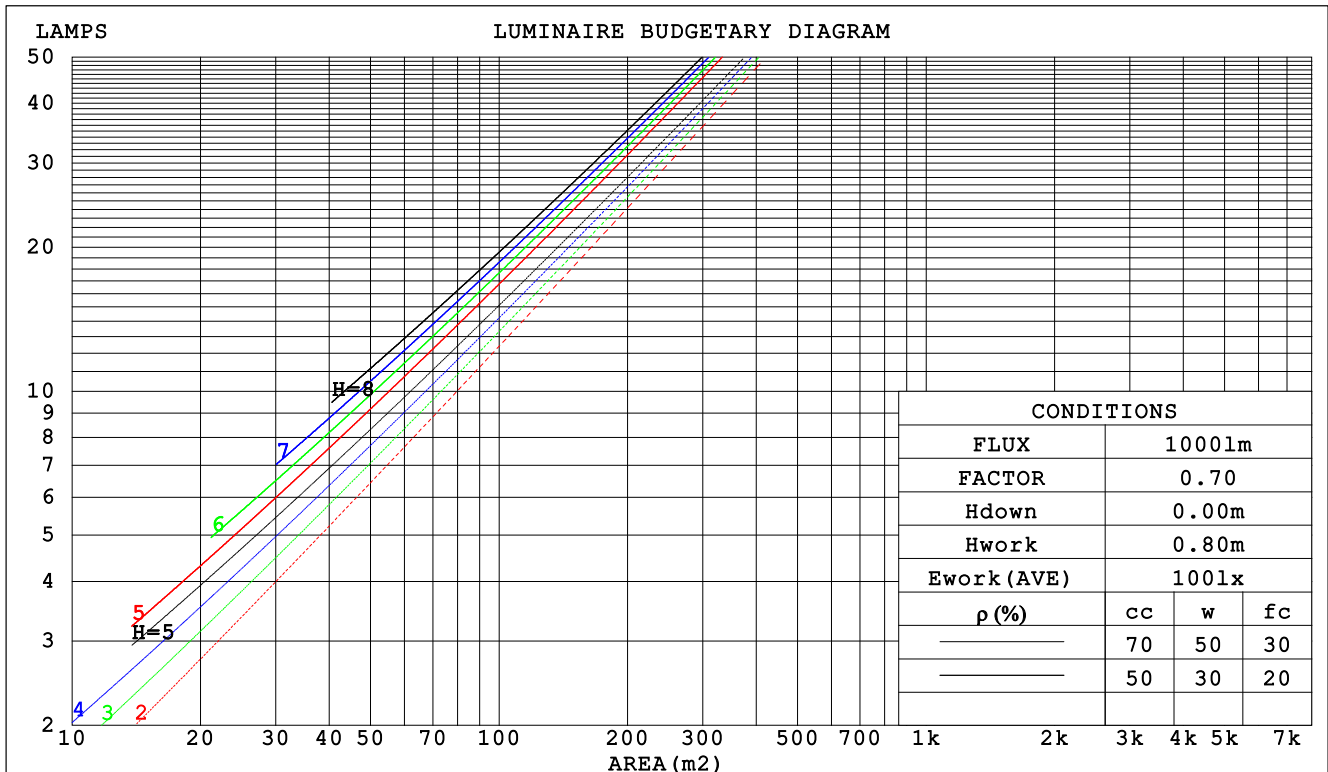
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: CHEN
Test Date: 2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.05	1.02	.99	1.04	1.00	.98	1.00	.98	.96	.98	.95	.94	.95	.93	.92	.90
3.0	.99	.95	.92	.98	.94	.91	.96	.92	.90	.93	.91	.88	.91	.89	.87	.85
4.0	.94	.90	.86	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.85	.83	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.85	.82	.79	.84	.81	.79	.77
6.0	.85	.80	.77	.85	.80	.76	.83	.79	.76	.82	.78	.75	.81	.77	.75	.74
7.0	.81	.76	.73	.81	.76	.73	.80	.75	.72	.78	.75	.72	.77	.74	.71	.70
8.0	.78	.73	.69	.77	.73	.69	.76	.72	.69	.75	.71	.69	.74	.71	.68	.67
9.0	.75	.70	.66	.74	.69	.66	.73	.69	.66	.72	.69	.66	.72	.68	.65	.64
10.0	.72	.67	.63	.71	.66	.63	.70	.66	.63	.70	.66	.63	.69	.65	.63	.62



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CHEN
Test Date:2026-06-25

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:

WEC AND CCEC

NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	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	.158	.090	.028	.151	.086	.027	.139	.080	.025	.127	.073	.024	.117	.068	.022		
2.0	.149	.082	.025	.144	.079	.024	.133	.074	.023	.124	.069	.022	.115	.065	.020		
3.0	.141	.075	.022	.136	.073	.022	.128	.069	.021	.119	.065	.020	.112	.062	.019		
4.0	.134	.069	.020	.130	.068	.020	.122	.065	.019	.115	.062	.019	.109	.059	.018		
5.0	.127	.065	.019	.123	.063	.018	.117	.061	.018	.111	.059	.017	.105	.056	.017		
6.0	.121	.061	.017	.118	.059	.017	.112	.057	.017	.107	.056	.016	.102	.054	.016		
7.0	.115	.057	.016	.113	.056	.016	.108	.054	.016	.103	.053	.015	.099	.051	.015		
8.0	.110	.054	.015	.108	.053	.015	.103	.052	.015	.099	.050	.015	.095	.049	.014		
9.0	.106	.051	.014	.104	.050	.014	.100	.049	.014	.096	.048	.014	.092	.047	.014		
10.0	.101	.049	.013	.100	.048	.013	.096	.047	.013	.093	.046	.013	.090	.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	.145	.135	.126	.099	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.115	.131	.114	.100	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.140	.113	.093	.120	.098	.080	.082	.068	.056	.047	.040	.033	.015	.013	.011	
4.0	.128	.098	.076	.110	.085	.066	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.086	.063	.102	.075	.054	.070	.052	.038	.041	.031	.023	.013	.010	.008	
6.0	.111	.077	.053	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.045	.089	.060	.039	.062	.042	.028	.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	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CHEN
Test Date:2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT					TYPE:CRI90 3000K					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:1				
MFR.:					SUR.:187*35MM					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					13.2	14.1	13.5	14.2	14.4	12.3	13.1	12.5	13.3	13.4
3H					13.1	13.9	13.4	14.0	14.2	12.2	12.9	12.4	13.1	13.3
4H					13.0	13.7	13.3	13.9	14.2	12.1	12.8	12.4	13.0	13.2
6H					12.9	13.6	13.2	13.8	14.1	12.0	12.7	12.3	12.9	13.1
8H					12.9	13.5	13.2	13.8	14.0	12.0	12.6	12.3	12.9	13.1
12H					12.8	13.5	13.2	13.7	14.0	11.9	12.5	12.2	12.8	13.1
4H 2H					13.1	13.8	13.3	14.0	14.2	12.1	12.9	12.4	13.1	13.3
3H					12.9	13.5	13.2	13.8	14.1	12.0	12.6	12.3	12.9	13.2
4H					12.8	13.4	13.2	13.7	14.0	11.9	12.5	12.3	12.8	13.1
6H					12.7	13.2	13.1	13.5	13.9	11.8	12.3	12.2	12.6	13.0
8H					12.7	13.1	13.1	13.5	13.8	11.8	12.2	12.1	12.6	12.9
12H					12.6	13.0	13.0	13.4	13.8	11.7	12.1	12.1	12.5	12.9
8H 4H					12.7	13.1	13.1	13.5	13.8	11.8	12.2	12.2	12.6	12.9
6H					12.6	12.9	13.0	13.3	13.7	11.7	12.0	12.1	12.4	12.8
8H					12.5	12.8	12.9	13.3	13.7	11.6	11.9	12.0	12.3	12.8
12H					12.4	12.7	12.9	13.2	13.6	11.5	11.8	12.0	12.3	12.7
12H 4H					12.6	13.0	13.0	13.4	13.8	11.7	12.1	12.1	12.5	12.9
6H					12.5	12.8	12.9	13.3	13.7	11.6	11.9	12.0	12.3	12.8
8H					12.4	12.7	12.9	13.2	13.6	11.5	11.8	12.0	12.3	12.7
Variations with the observer position at spacings:														
S = 1.0H					+ 3.2 / - 6.9					+ 2.7 / - 6.7				
1.5H					+ 4.6 / - 4.1					+ 3.9 / - 3.6				
2.0H					+ 4.7 / - 6.6					+ 4.0 / - 6.0				

CIE Pub.117, 1489 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.4$)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:CHEN
 Test Date:2026-06-25

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:

UTILIZATION FACTORS TABLE

NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

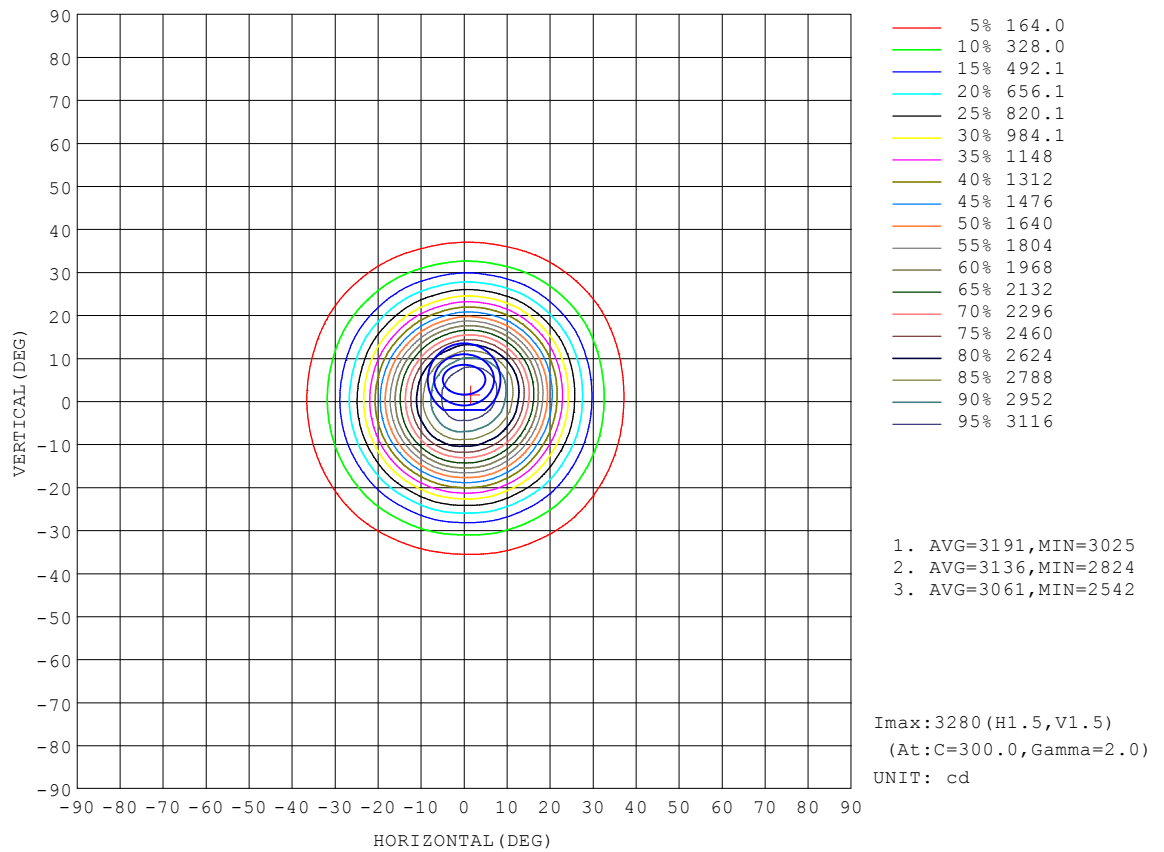
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	87	94	89	86	83
1.00	100	95	91	99	94	91	98	94	91	87
1.25	104	99	96	103	99	95	101	97	95	91
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	108	105	107	105	103	97
4.00	114	111	109	112	110	108	109	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: CHEN
 Test Date: 2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

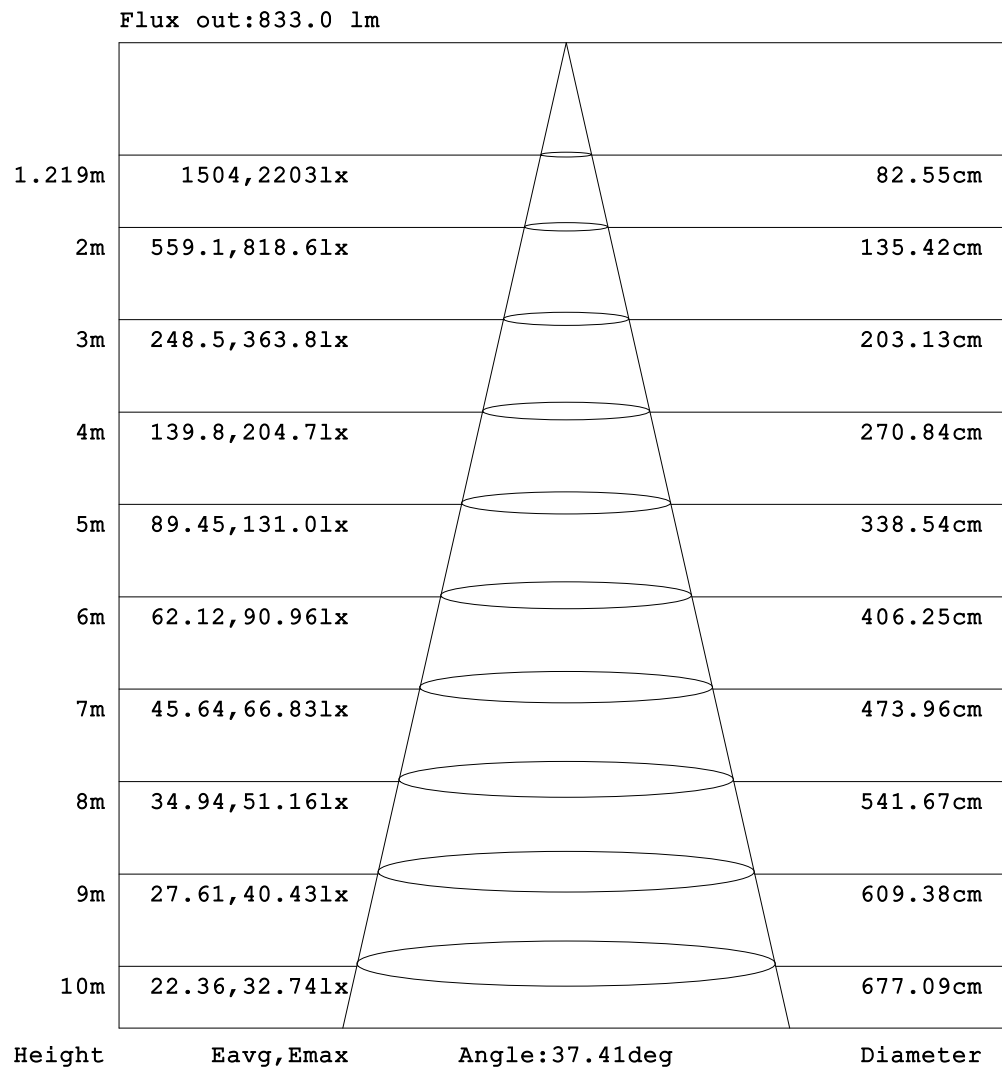


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CHEN
Test Date:2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:



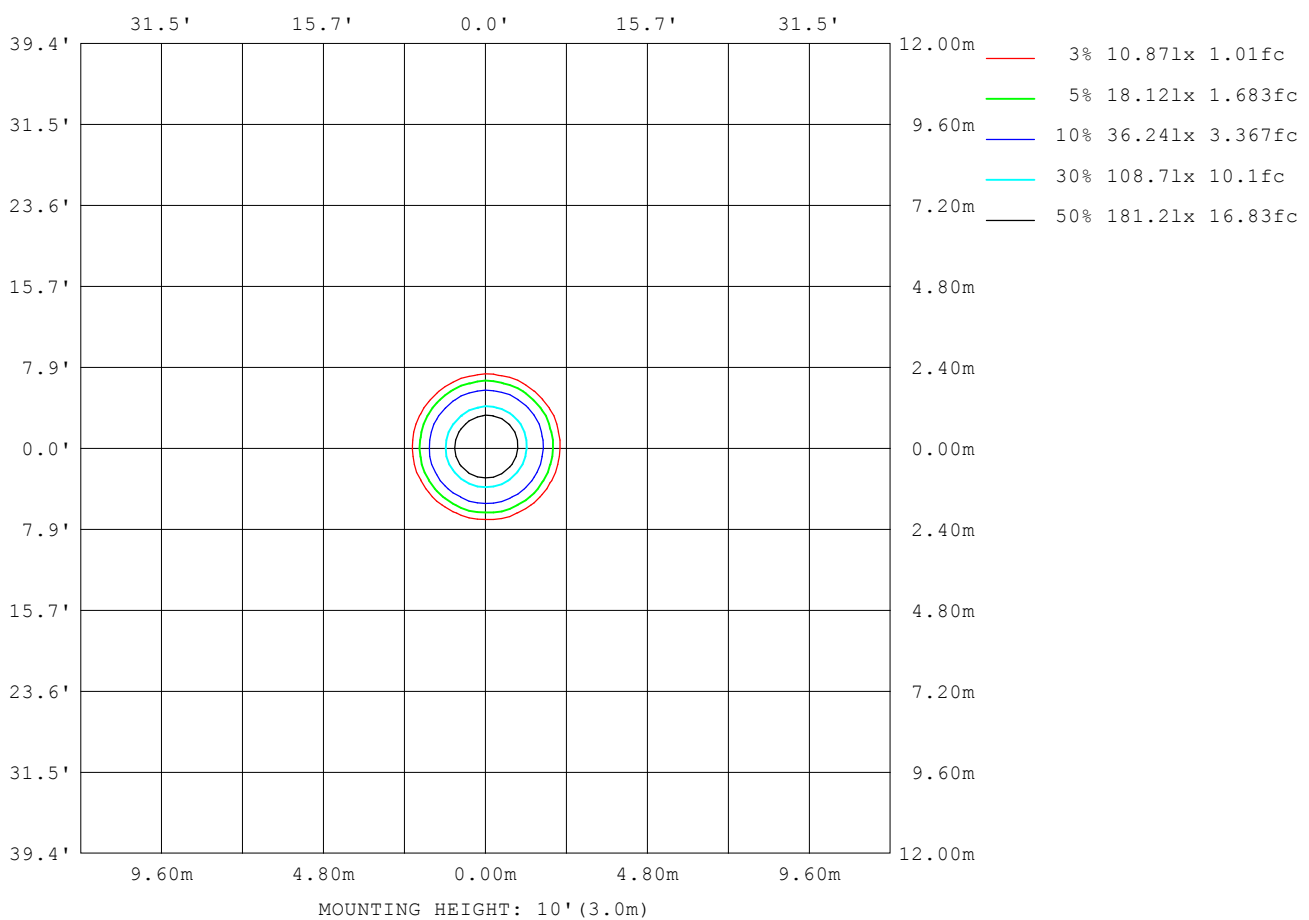
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: CHEN
 Test Date: 2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CHEN
Test Date:2026-06-25

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: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

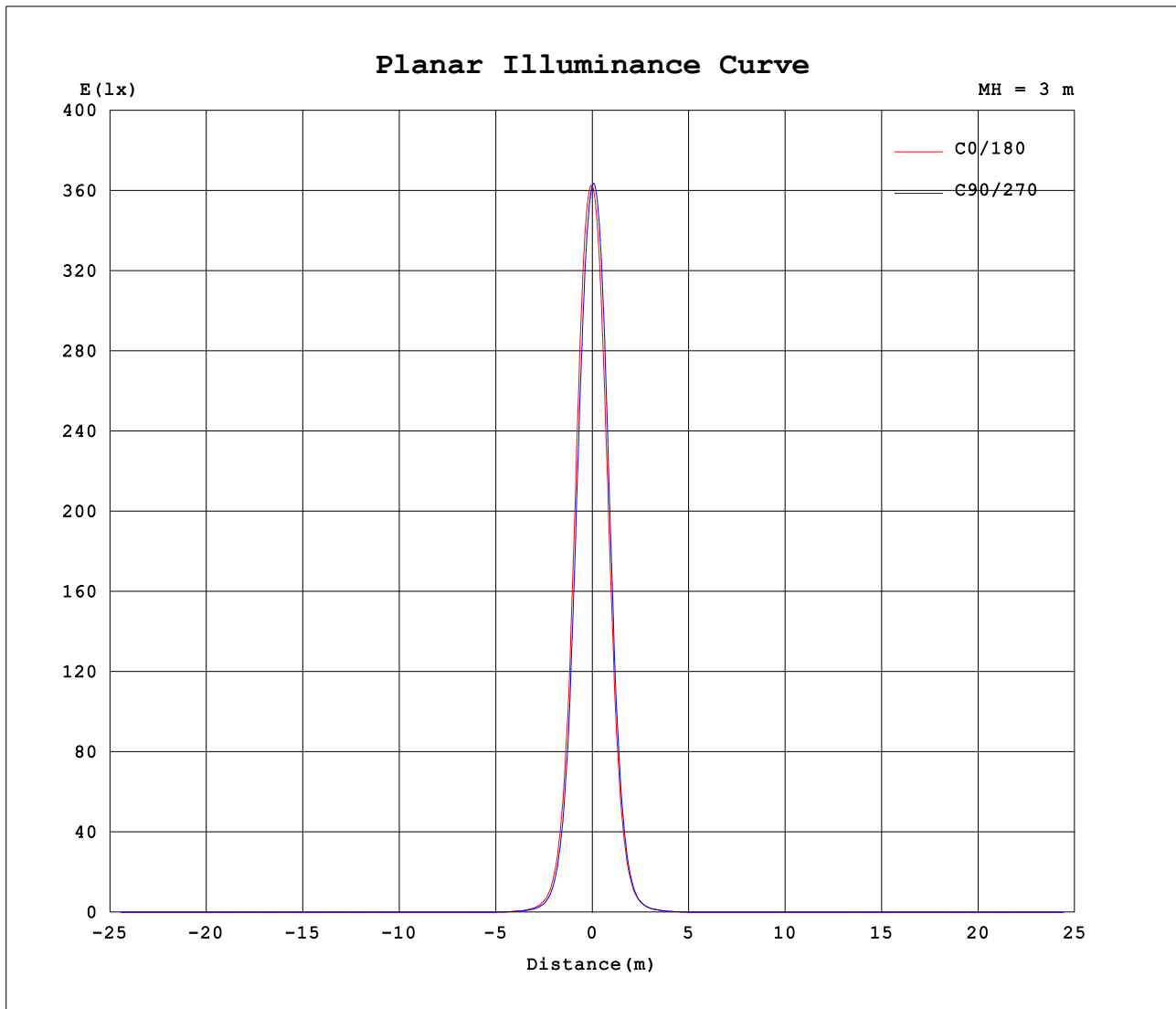
AvgL	cd/m2
L_0~180 (65) av	1428
L_0~180 (75) av	115
L_0~180 (85) av	218
L_90~270 (65) av	1360
L_90~270 (75) av	175
L_90~270 (85) av	205
L_45 (65) av	1587
L_45 (75) av	162
L_45 (85) av	190

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:CHEN
Test Date:2026-06-25

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: CHEN
Test Date: 2026-06-25

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

UNIT: cd

[illegible]

```

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:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: RAD-5-CCT-120-36-BK/BK-LT	TYPE:CRI90 3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:187*35MM	Shielding Angle:

UNIT: cd

[illegible]

```

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:

```