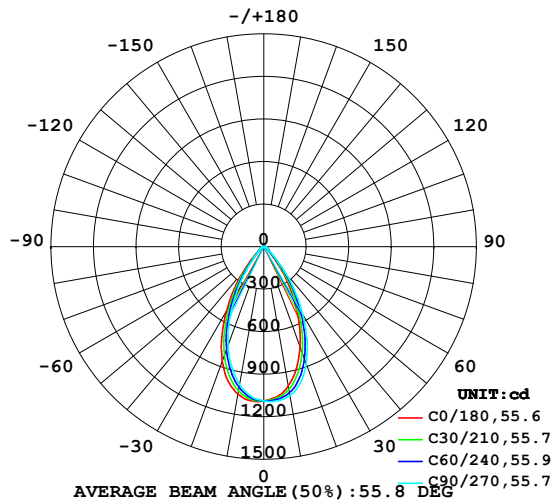


## LUMINAIRE PHOTOMETRIC TEST REPORT

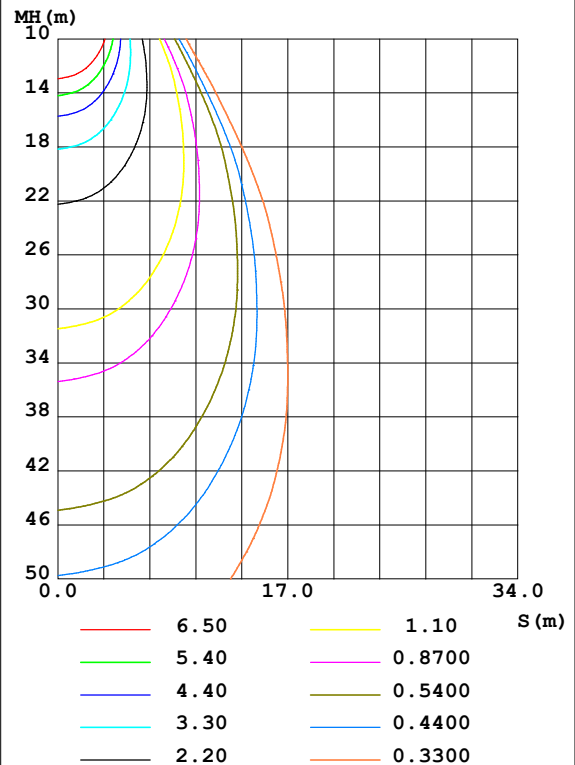
NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 78.00 lm/W
MODEL		Imax(cd)	1100	S/MH(C0/180)		0.89
NOMINAL POWER(W)	14	LOR(%)	100.0	S/MH(C90/270)		0.80
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	998.80	η UP,DN(C0-180)		0.0,53.7
NOMINAL FLUX(lm)	998.802	CIE CLASS	DIRECT	η UP,DN(C180-360)		0.0,46.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM		0.75
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX		0.90

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:2024-10-11

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	999.6	1036	1067	1077	1055	1018	987.6	980.7	0- 10	101.2	101.2	10.1,10.1
20	751.4	820.3	877.2	900.9	857.6	788.9	739.2	721.5	10- 20	260.2	361.4	36.2,36.2
30	420.4	491.9	549.5	572.0	529.6	454.6	402.3	385.0	20- 30	293.7	655.1	65.6,65.6
40	139.8	189.7	229.8	242.9	208.6	159.8	125.9	119.8	30- 40	197.8	853.0	85.4,85.4
50	47.71	55.76	62.22	64.37	56.74	48.90	44.82	44.27	40- 50	74.37	927.3	92.8,92.8
60	28.14	32.21	33.85	33.92	31.83	28.09	26.17	25.88	50- 60	35.49	962.8	96.4,96.4
70	13.52	15.47	16.74	16.70	15.40	13.49	12.83	12.91	60- 70	21.26	984.1	98.5,98.5
80	5.932	7.458	8.471	8.512	7.560	6.095	5.249	5.133	70- 80	11.32	995.4	99.7,99.7
90	0.0937	0.0909	0.8313	0.8527	0.2480	0.1570	0.1734	0.1711	80- 90	3.413	998.8	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): 899.93 lm

%lum = 90.1%

%lamp = 90.1%

Conical surface Flux(120deg): 962.81 lm

%lum = 96.4%

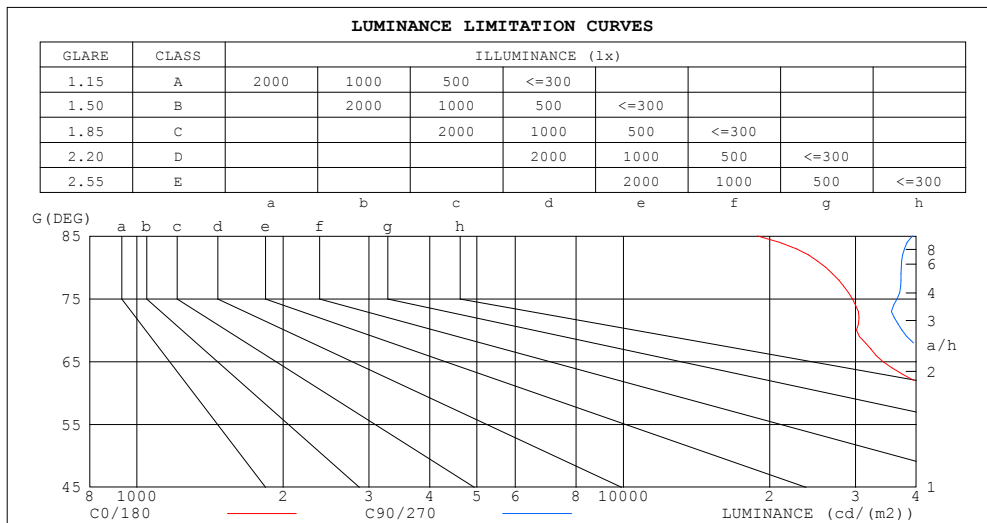
%lamp = 96.4%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

$\gamma$  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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18893	39282
80	26070	37259
75	29566	36552
70	30160	37379
65	34142	45228
60	42952	51709
55	48691	58142
50	56637	73937
45	78095	122460

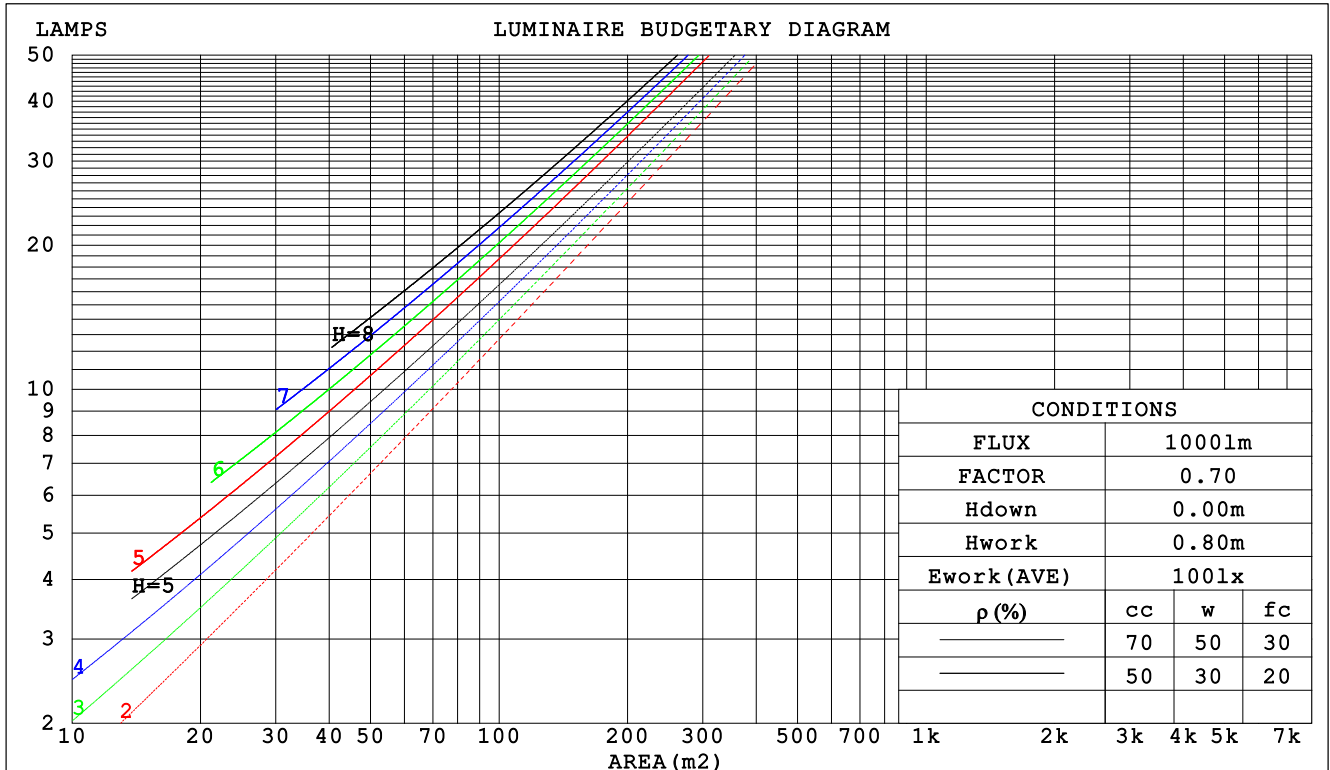
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	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	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.97	.93	.00	.96	.92	.96	.93	.90	.93	.91	.88	.90	.88	.86	.85
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.77	.86	.80	.76	.84	.79	.75	.82	.78	.74	.80	.76	.73	.72
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.77	.72	.69	.75	.71	.68	.67
6.0	.76	.70	.65	.75	.69	.65	.74	.68	.64	.72	.67	.64	.71	.67	.63	.62
7.0	.71	.65	.60	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.62	.59	.58
8.0	.67	.61	.56	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.55	.54
9.0	.63	.57	.53	.63	.57	.53	.62	.56	.52	.61	.56	.52	.60	.55	.52	.51
10.0	.60	.54	.49	.59	.53	.49	.58	.53	.49	.57	.53	.49	.57	.52	.49	.48



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

$\gamma$  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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	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	.197 .112 .035	.190 .108 .034	.177 .102 .032	.166 .095 .031	.155 .090 .029	
2.0	.188 .103 .032	.182 .100 .031	.171 .095 .030	.161 .090 .028	.152 .086 .027	
3.0	.178 .094 .028	.173 .092 .028	.163 .089 .027	.155 .085 .026	.147 .081 .025	
4.0	.168 .087 .026	.164 .086 .025	.156 .083 .025	.148 .080 .024	.141 .077 .023	
5.0	.159 .081 .023	.155 .080 .023	.148 .077 .023	.142 .075 .022	.136 .073 .022	
6.0	.151 .076 .022	.148 .075 .021	.142 .073 .021	.136 .071 .021	.130 .069 .020	
7.0	.144 .071 .020	.141 .070 .020	.135 .068 .020	.130 .067 .019	.125 .065 .019	
8.0	.137 .067 .019	.134 .066 .019	.129 .065 .018	.125 .063 .018	.120 .062 .018	
9.0	.130 .063 .018	.128 .062 .018	.124 .061 .017	.120 .060 .017	.116 .059 .017	
10.0	.125 .060 .017	.123 .059 .017	.119 .058 .016	.115 .057 .016	.111 .056 .016	

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	.172 .157 .143	.148 .135 .123	.101 .093 .085	.058 .054 .050	.019 .017 .016	
2.0	.158 .132 .111	.136 .114 .096	.093 .079 .067	.054 .046 .039	.017 .015 .013	
3.0	.147 .114 .087	.126 .098 .076	.086 .068 .053	.050 .040 .031	.016 .013 .010	
4.0	.137 .099 .070	.117 .086 .061	.081 .060 .043	.047 .035 .025	.015 .011 .008	
5.0	.128 .088 .058	.110 .076 .050	.076 .053 .035	.044 .031 .021	.014 .010 .007	
6.0	.121 .079 .048	.104 .068 .042	.072 .048 .030	.042 .028 .018	.013 .009 .006	
7.0	.115 .071 .041	.099 .062 .036	.068 .043 .025	.040 .025 .015	.013 .008 .005	
8.0	.109 .065 .035	.094 .056 .030	.065 .040 .022	.038 .023 .013	.012 .008 .004	
9.0	.104 .060 .030	.089 .052 .026	.062 .037 .019	.036 .022 .011	.012 .007 .004	
10.0	.099 .055 .027	.085 .048 .023	.059 .034 .017	.034 .020 .010	.011 .007 .003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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:					TYPE:CRI90 4000K			WEIGHT:			
SPEC.:RAD25R-14-CCT					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	2H	24.3	25.3	24.5	25.5	25.7	25.7	26.7	25.9	26.9	27.1
	3H	24.6	25.5	24.8	25.7	25.9	25.9	26.9	26.2	27.1	27.3
	4H	24.7	25.6	25.0	25.8	26.1	26.1	27.0	26.3	27.2	27.4
	6H	24.8	25.7	25.1	25.9	26.2	26.2	27.0	26.5	27.3	27.5
	8H	24.9	25.7	25.2	25.9	26.2	26.3	27.1	26.6	27.3	27.6
	12H	24.9	25.6	25.2	25.9	26.2	26.3	27.1	26.6	27.4	27.6
4H	2H	24.4	25.3	24.7	25.5	25.7	25.7	26.5	25.9	26.8	27.0
	3H	24.8	25.6	25.1	25.9	26.1	26.0	26.8	26.4	27.1	27.4
	4H	25.1	25.8	25.4	26.1	26.4	26.3	27.0	26.6	27.3	27.6
	6H	25.3	25.9	25.7	26.2	26.6	26.5	27.1	26.9	27.5	27.8
	8H	25.3	25.9	25.7	26.3	26.6	26.6	27.2	27.0	27.6	27.9
	12H	25.4	25.9	25.8	26.3	26.6	26.7	27.2	27.1	27.6	28.0
8H	4H	25.1	25.7	25.5	26.1	26.4	26.3	26.8	26.7	27.2	27.6
	6H	25.5	25.9	25.9	26.3	26.7	26.6	27.1	27.1	27.5	27.9
	8H	25.6	26.0	26.0	26.4	26.9	26.8	27.2	27.3	27.6	28.1
	12H	25.6	26.0	26.1	26.4	26.9	27.0	27.3	27.4	27.8	28.2
12H	4H	25.1	25.7	25.5	26.0	26.4	26.2	26.8	26.7	27.1	27.5
	6H	25.5	25.9	25.9	26.3	26.8	26.6	27.0	27.1	27.5	27.9
	8H	25.6	26.0	26.1	26.4	26.9	26.8	27.2	27.3	27.6	28.1
Variations with the observer position at spacings:											
S = 1.0H		+ 1.2 / - 1.6					+ 1.8 / - 2.0				
1.5H		+ 2.3 / - 1.4					+ 3.3 / - 1.7				
2.0H		+ 1.1 / - 0.8					+ 2.2 / - 0.8				

CIE Pub.117, 998.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.0)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

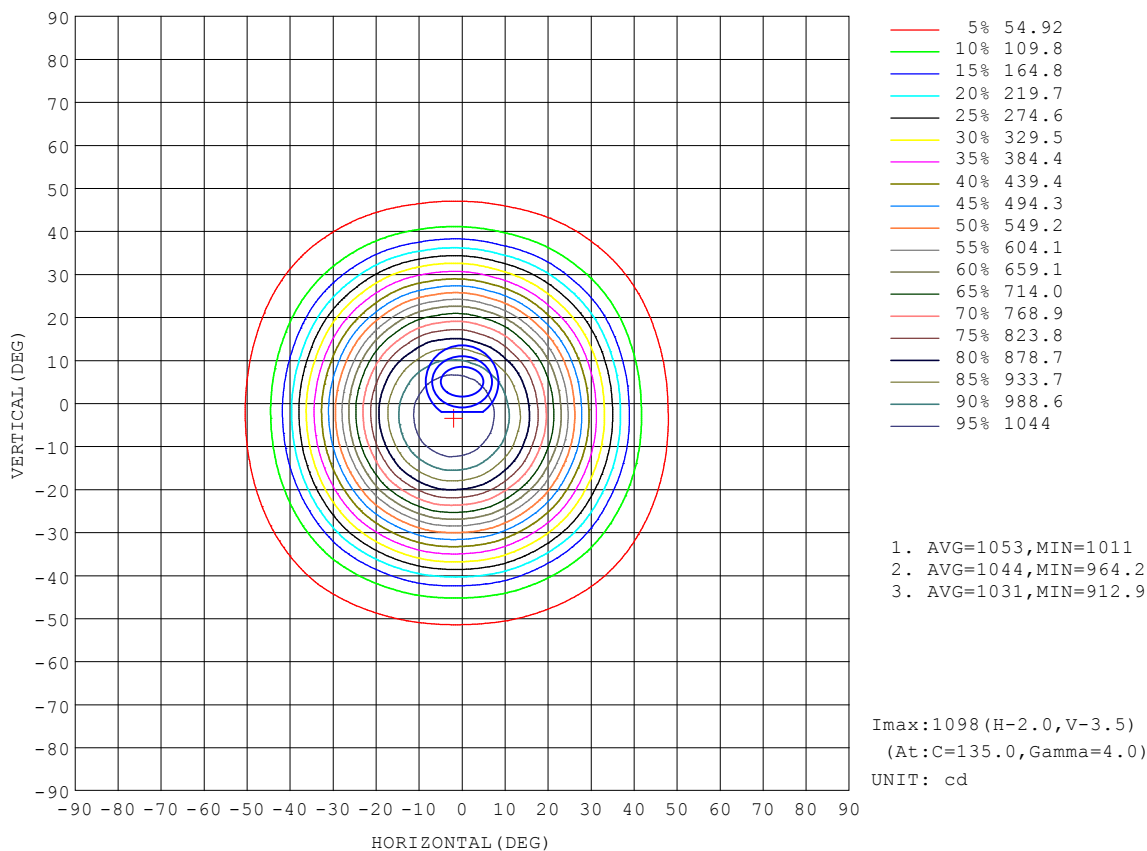
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	71	82	75	71	81	75	71	67
0.80	90	84	79	90	83	79	88	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	100	95	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	109	104	101	107	103	100	104	100	98	92
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	109	107	111	108	105	107	105	103	95
5.00	114	111	109	112	110	108	108	106	105	97
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:  
Test Date: 2024-10-11

$\gamma$  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:

## ISOCANDELA DIAGRAM

NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



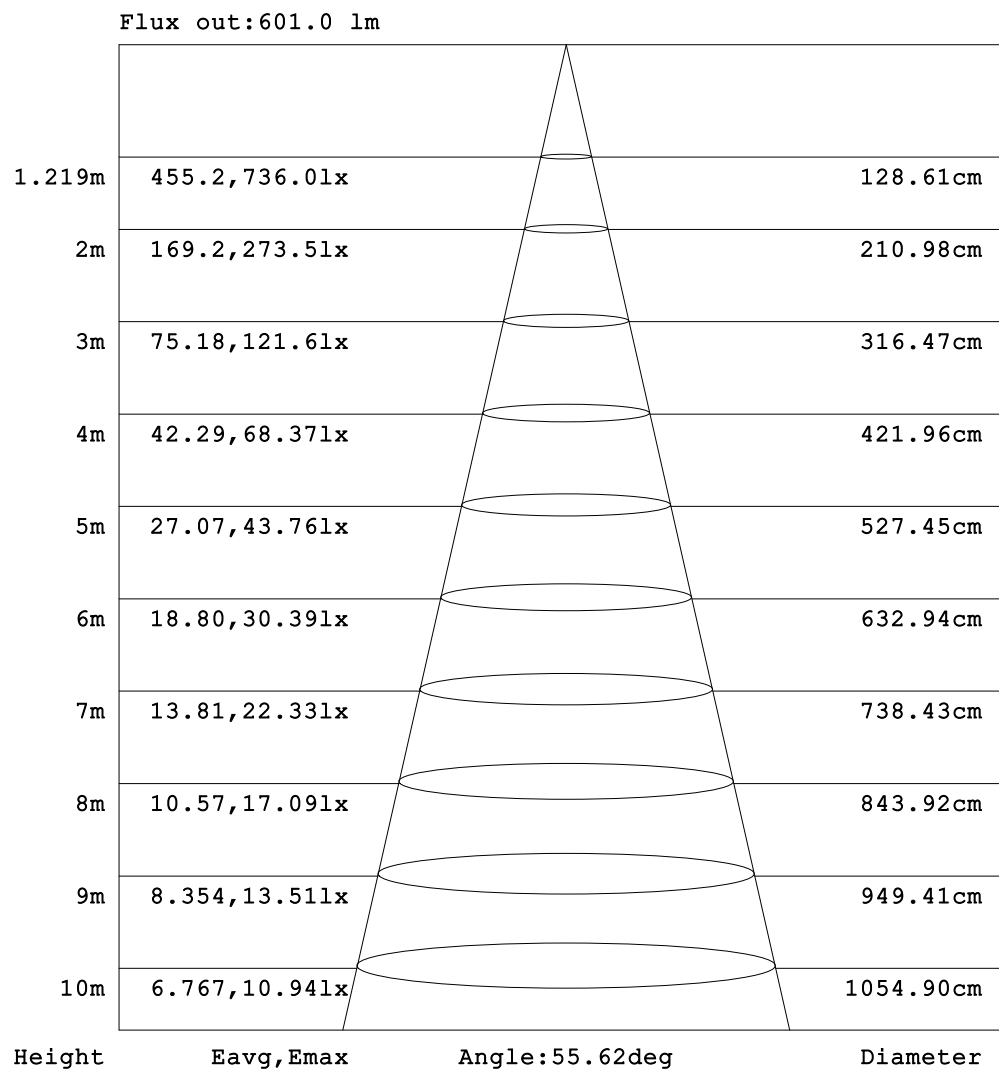
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



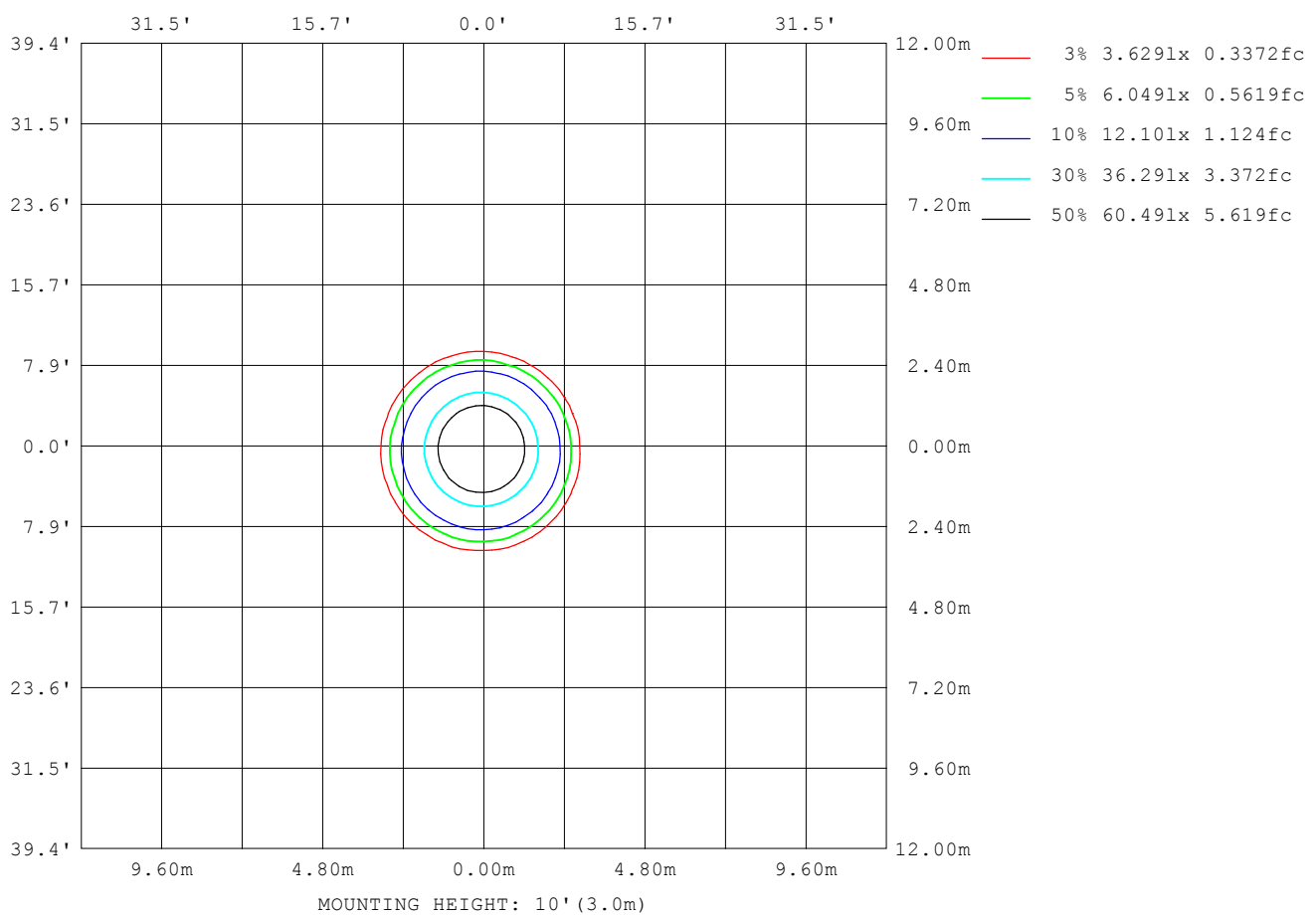
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	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:2024-10-11

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-14-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

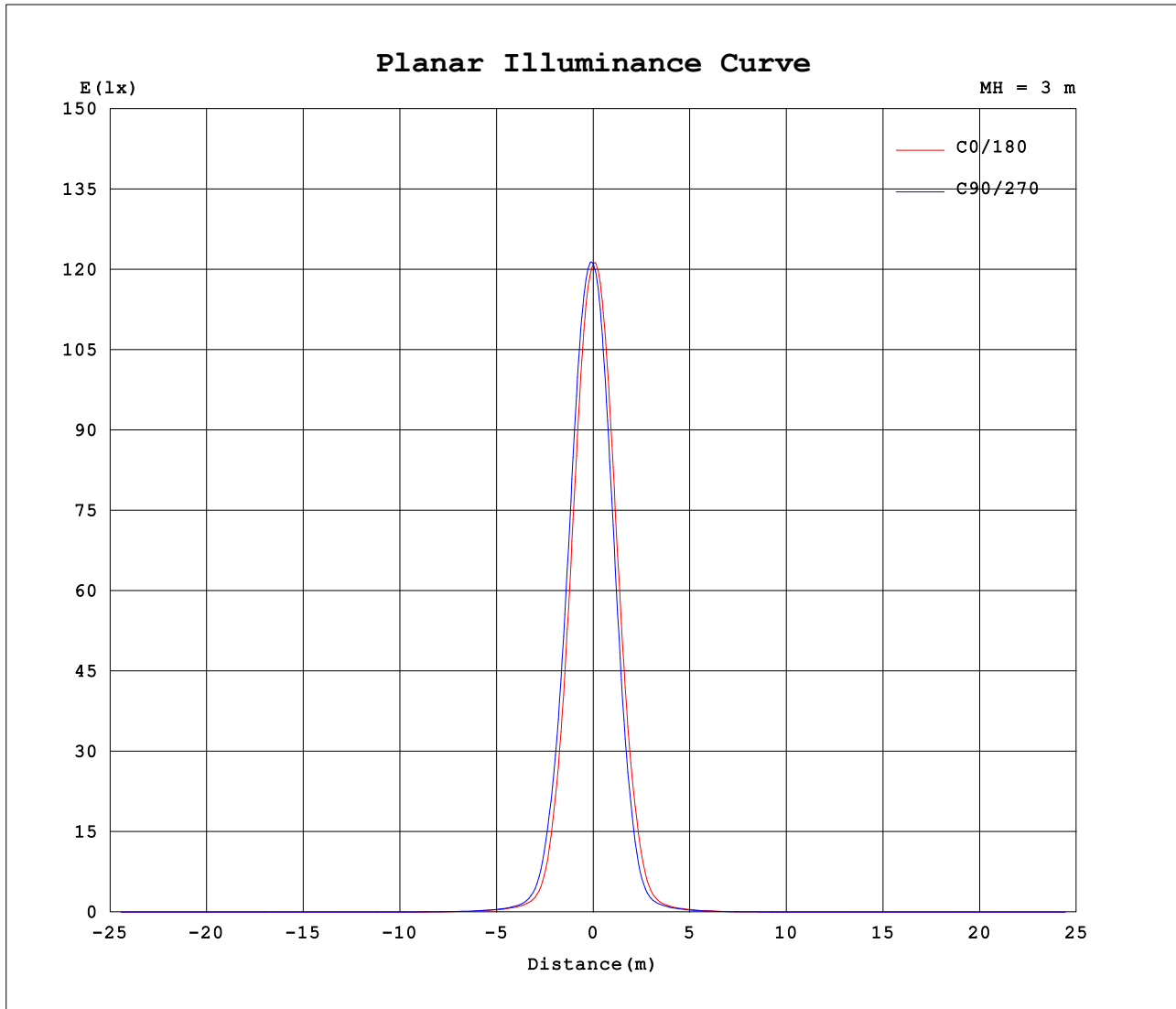
AvgL	cd/m2
L_0~180 (65) av	37642
L_0~180 (75) av	31813
L_0~180 (85) av	25530
L_90~270 (65) av	38311
L_90~270 (75) av	31885
L_90~270 (85) av	26461
L_45 (65) av	38077
L_45 (75) av	31840
L_45 (85) av	25930

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-11

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: 2024-10-11

$\gamma$  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:



