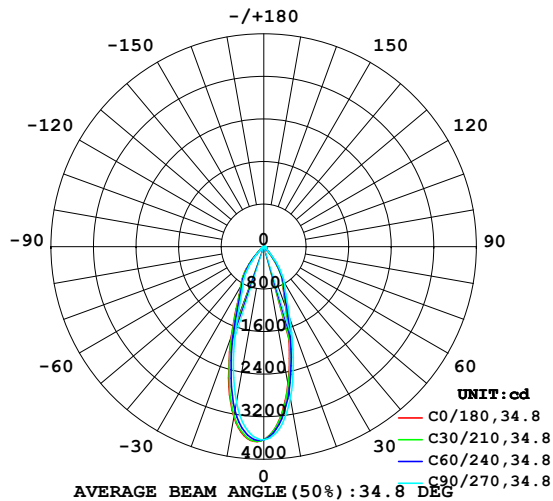


## LUMINAIRE PHOTOMETRIC TEST REPORT

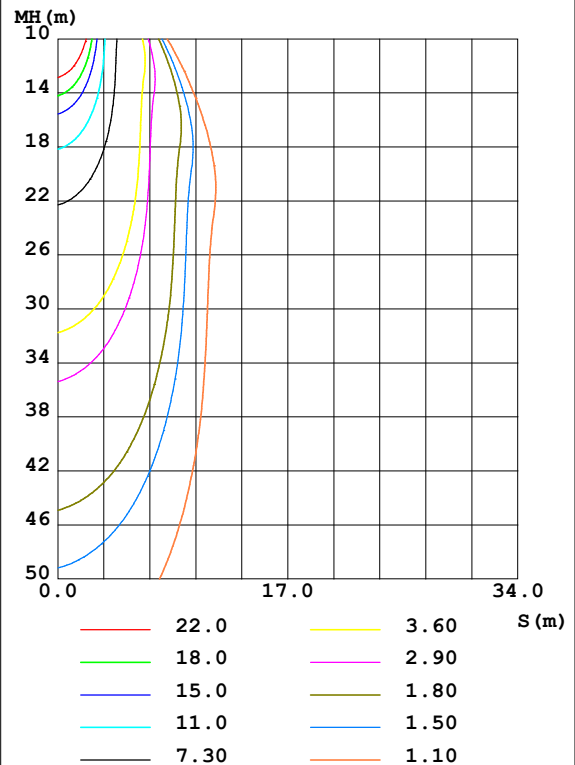
NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 104.26 lm/W			
MODEL		I <sub>max</sub> (cd)	3668	S/MH (C0/180)	0.65
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH (C90/270)	0.58
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1930.6	η UP,DN (C0-180)	0.0,48.9
NOMINAL FLUX(lm)	1930.64	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,51.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.55

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:2024-10-12

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	2630	2715	2895	3144	3252	3168	2969	2726	0- 10	313.2	313.2	16.2,16.2
20	1222	1279	1442	1676	1784	1685	1479	1288	10- 20	600.8	914.0	47.3,47.3
30	688.9	705.4	769.4	834.1	862.5	837.8	787.4	716.0	20- 30	477.7	1392	72.1,72.1
40	183.9	217.7	298.6	387.1	433.5	398.7	323.8	222.4	30- 40	341.0	1733	89.7,89.7
50	47.78	48.44	50.84	66.06	68.61	68.93	60.34	49.51	40- 50	105.4	1838	95.2,95.2
60	33.80	34.19	35.79	38.75	40.76	40.70	38.39	35.15	50- 60	40.13	1878	97.3,97.3
70	22.82	23.53	25.63	28.22	30.05	29.92	27.85	24.53	60- 70	31.47	1910	98.9,98.9
80	2.660	3.190	5.339	9.412	12.34	10.79	6.942	3.751	70- 80	18.93	1929	99.9,99.9
90	0.1515	0.1459	0.1460	0.2122	0.4187	0.3248	0.2672	0.2673	80- 90	2.122	1931	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): 1806.7 lm

%lum = 93.6%

%lamp = 93.6%

Conical surface Flux(120deg): 1878.1 lm

%lum = 97.3%

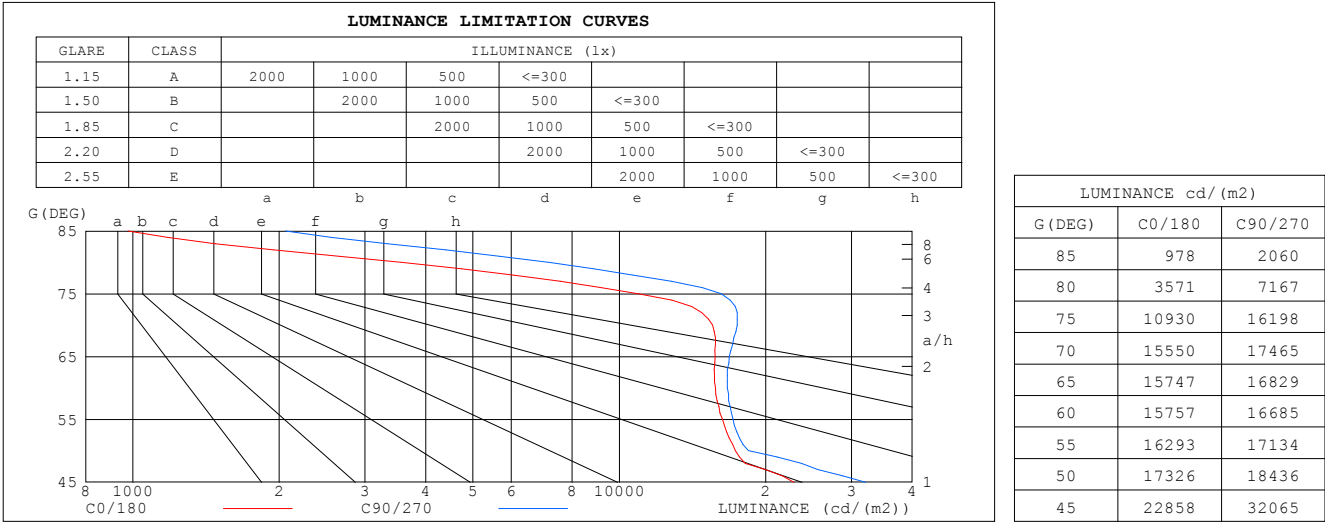
%lamp = 97.3%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

$\gamma$  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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



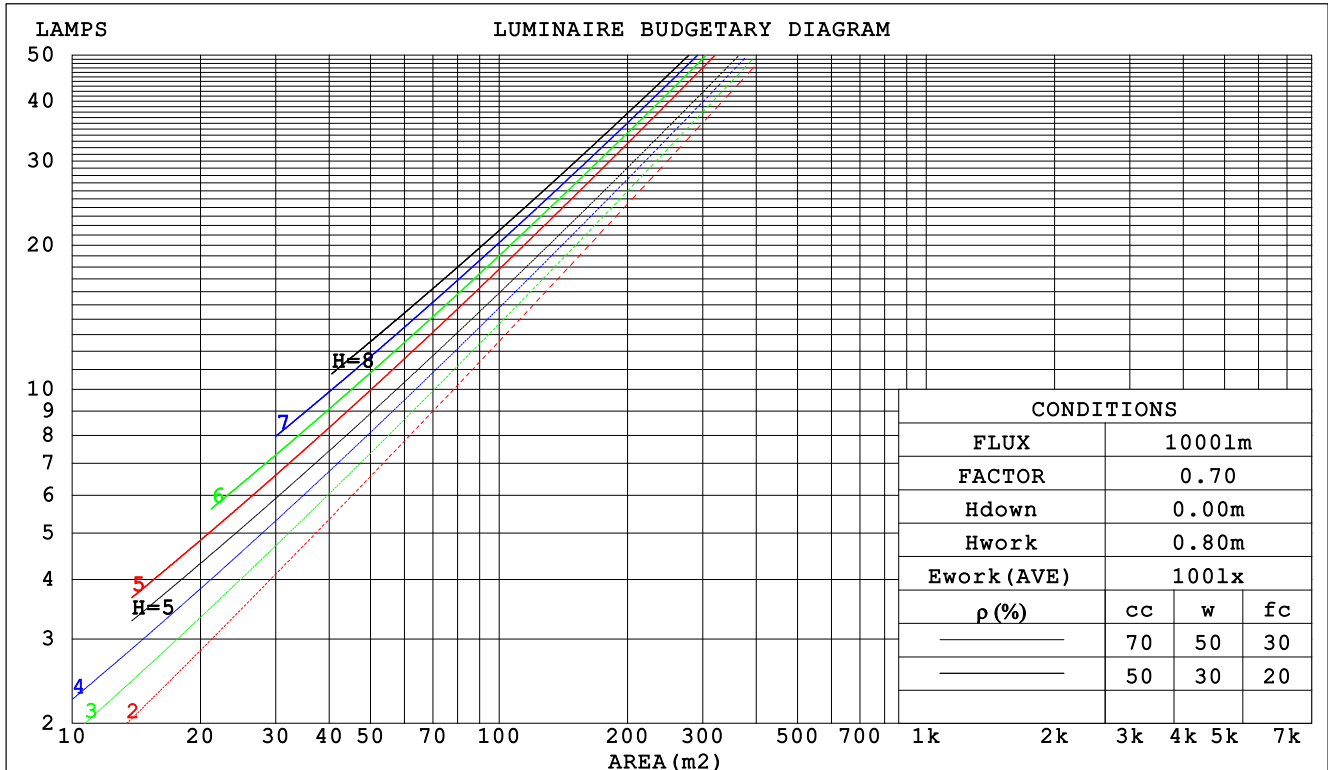
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	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	1.08	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	.94	.98	.95	.92	.95	.93	.90	.92	.90	.89	.87
3.0	.96	.91	.87	.95	.90	.87	.92	.88	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.78	.74	.80	.76	.73	.79	.75	.73	.71
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.76	.70	.66	.75	.70	.66	.74	.69	.65	.73	.68	.65	.72	.68	.65	.63
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.64	.61	.60
9.0	.68	.63	.59	.68	.62	.59	.67	.62	.59	.66	.62	.58	.65	.61	.58	.57
10.0	.65	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.55	.62	.58	.55	.54



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

$\gamma$  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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	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	.180	.103	.032	.174	.099	.031	.161	.092	.029	.149	.086	.028	.139	.080	.026	
2.0	.171	.094	.029	.166	.091	.028	.155	.086	.027	.145	.082	.026	.136	.077	.024	
3.0	.162	.086	.026	.157	.084	.025	.148	.080	.024	.140	.077	.024	.132	.073	.023	
4.0	.153	.080	.023	.149	.078	.023	.141	.075	.022	.134	.072	.022	.127	.069	.021	
5.0	.145	.074	.021	.141	.073	.021	.135	.070	.021	.128	.068	.020	.122	.065	.020	
6.0	.138	.069	.020	.134	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.131	.065	.018	.128	.064	.018	.123	.062	.018	.118	.060	.018	.113	.059	.017	
8.0	.125	.061	.017	.122	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016	
9.0	.119	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.105	.053	.015	
10.0	.114	.055	.015	.112	.054	.015	.108	.053	.015	.105	.052	.015	.101	.051	.015	

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	.124	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013		
3.0	.144	.114	.090	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.011		
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009		
5.0	.124	.087	.060	.107	.075	.052	.073	.053	.037	.043	.031	.022	.014	.010	.007		
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006		
7.0	.110	.070	.042	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005		
8.0	.104	.064	.036	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004		
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004		
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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.:RAD35R-20-CCT					DIM.:			SERIAL No.:1			
MFR.:					SUR.:Φ74MM			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	17.3	18.2	17.5	18.4	18.6	18.2	19.2	18.5	19.3	19.5
	3H	17.8	18.6	18.0	18.8	19.0	18.7	19.5	18.9	19.7	19.9
	4H	18.0	18.8	18.2	19.0	19.2	18.9	19.7	19.2	19.9	20.1
	6H	17.9	18.7	18.2	18.9	19.2	18.9	19.7	19.2	19.9	20.2
	8H	17.9	18.6	18.2	18.9	19.1	18.9	19.6	19.2	19.9	20.1
	12H	17.8	18.5	18.2	18.8	19.1	18.8	19.5	19.1	19.8	20.1
4H	2H	17.4	18.2	17.6	18.4	18.6	18.2	19.0	18.5	19.2	19.5
	3H	18.0	18.8	18.4	19.0	19.3	18.8	19.5	19.1	19.8	20.1
	4H	18.3	18.9	18.6	19.2	19.5	19.1	19.8	19.5	20.1	20.4
	6H	18.3	18.8	18.6	19.2	19.5	19.2	19.8	19.6	20.1	20.4
	8H	18.2	18.7	18.6	19.1	19.5	19.2	19.7	19.5	20.0	20.4
	12H	18.2	18.6	18.6	19.0	19.4	19.1	19.6	19.5	20.0	20.3
8H	4H	18.3	18.8	18.7	19.2	19.5	19.1	19.6	19.5	20.0	20.4
	6H	18.3	18.7	18.7	19.1	19.5	19.2	19.6	19.6	20.0	20.4
	8H	18.2	18.6	18.7	19.0	19.5	19.1	19.5	19.6	19.9	20.4
	12H	18.2	18.5	18.6	18.9	19.4	19.1	19.4	19.6	19.9	20.3
12H	4H	18.3	18.7	18.7	19.1	19.5	19.1	19.6	19.5	19.9	20.3
	6H	18.2	18.6	18.7	19.0	19.5	19.1	19.5	19.6	19.9	20.4
	8H	18.2	18.5	18.7	19.0	19.4	19.1	19.4	19.6	19.9	20.3
Variations with the observer position at spacings:											
S = 1.0H		+ 2.1 / - 2.0					+ 2.4 / - 2.5				
1.5H		+ 3.9 / - 1.8					+ 4.5 / - 2.4				
2.0H		+ 0.9 / - 0.6					+ 1.7 / - 0.5				

CIE Pub.117, 1931 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 2.3$ )

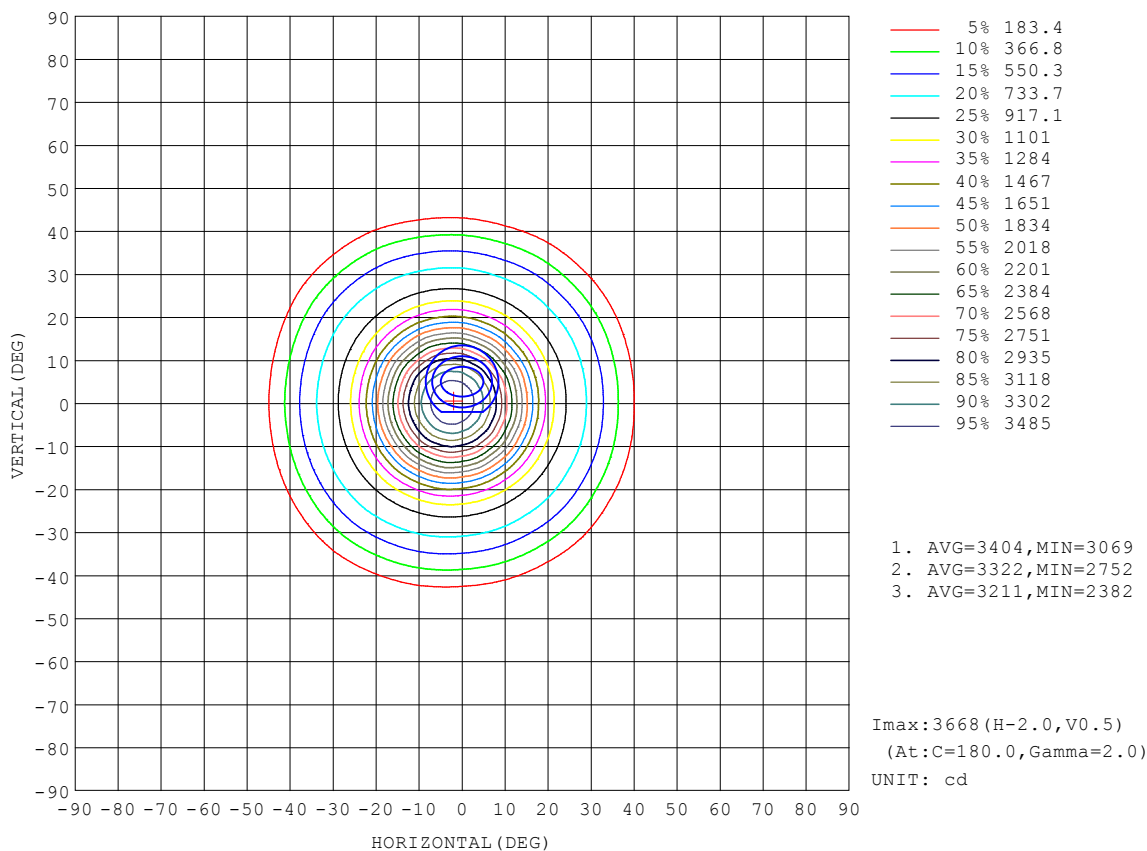
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-10-12

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:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



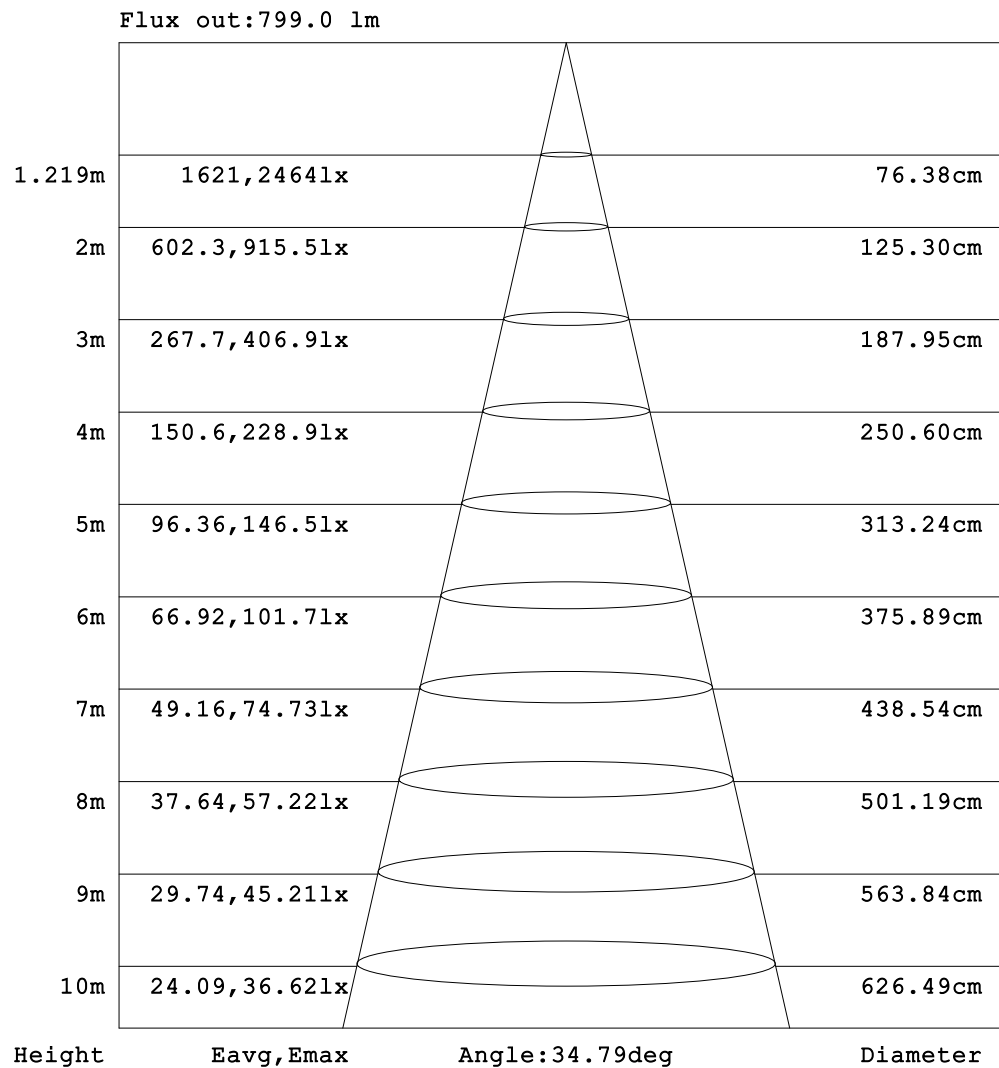
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



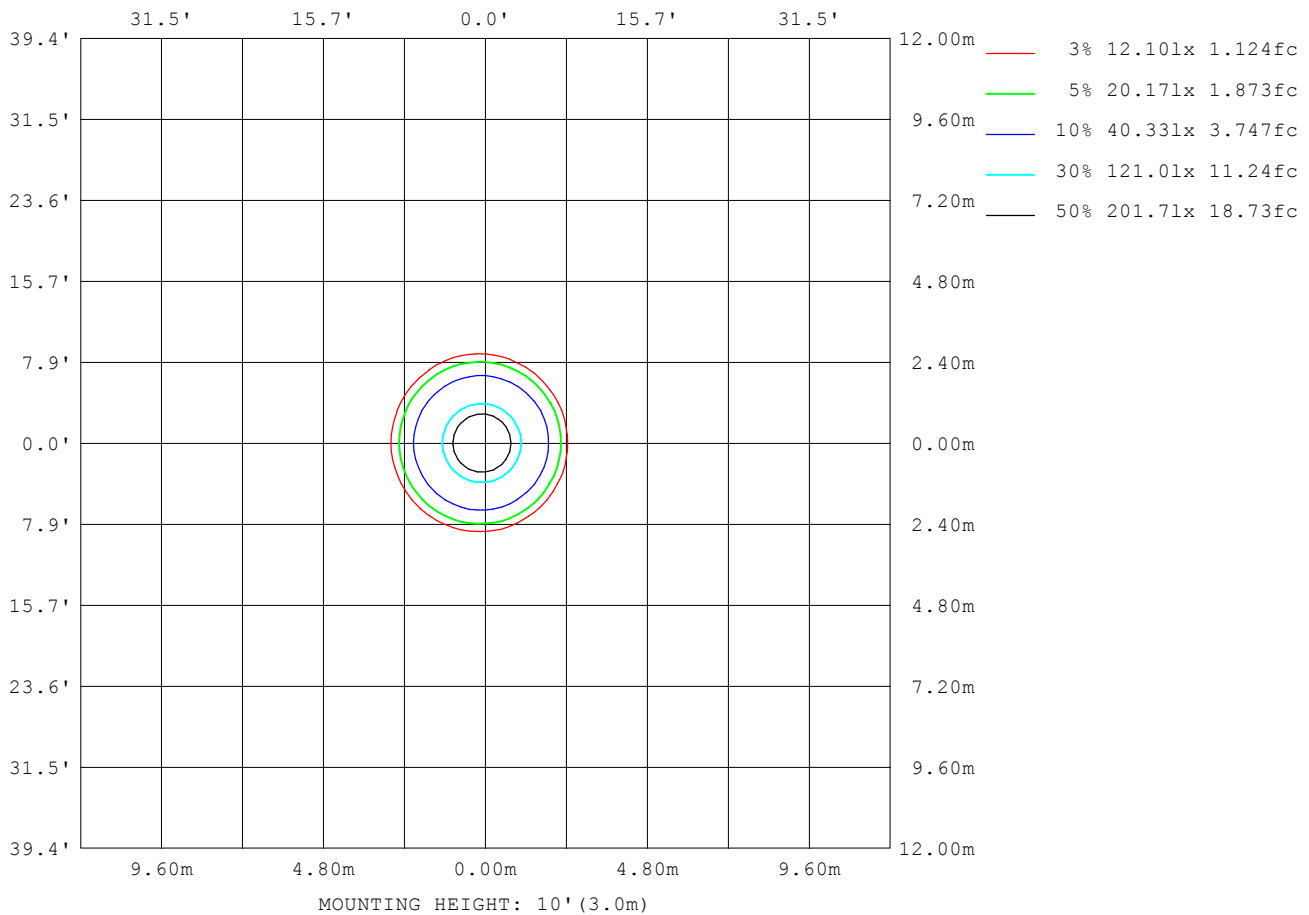
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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.:RAD35R-20-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

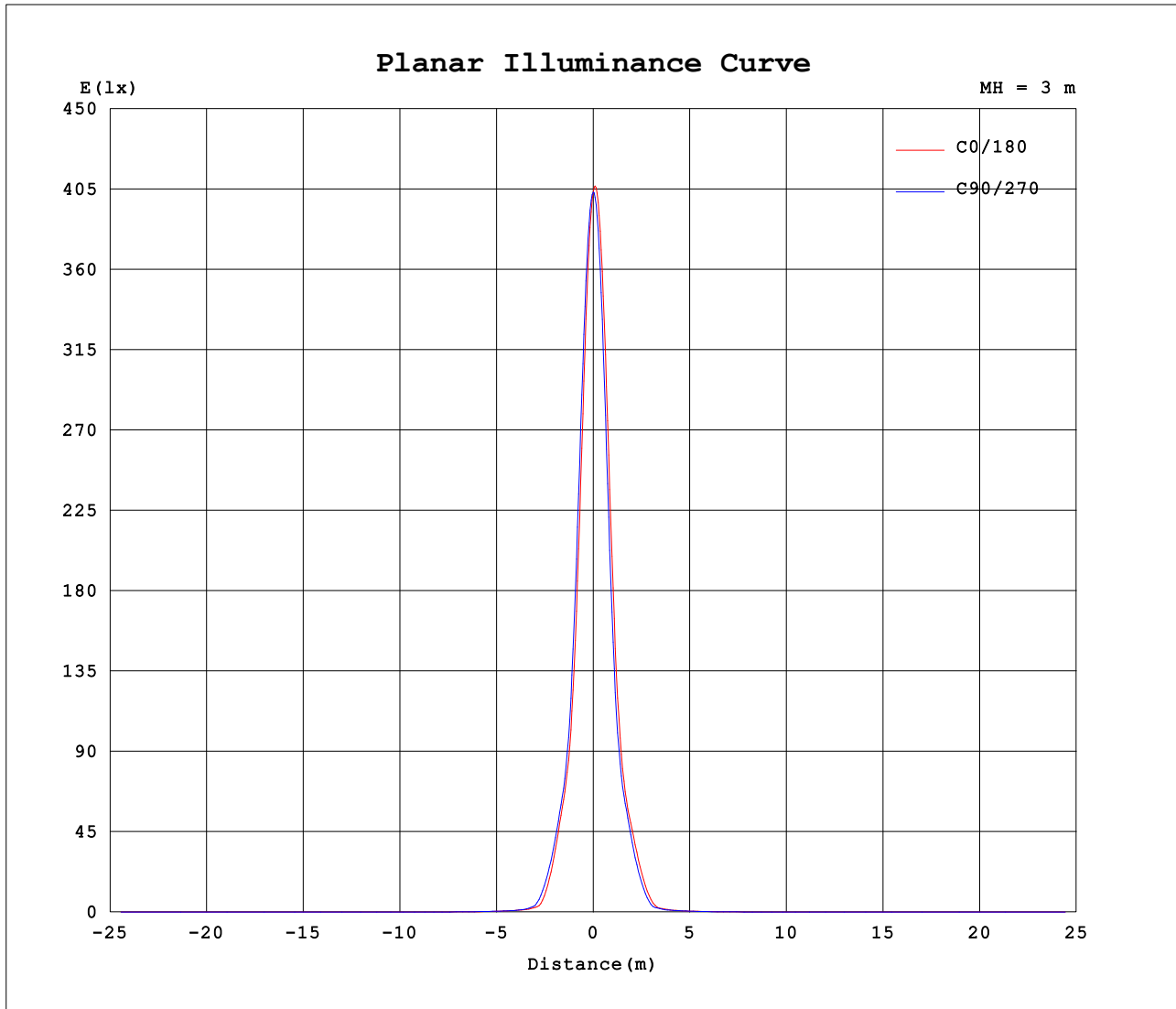
AvgL	cd/m2
L_0~180 (65) av	17515
L_0~180 (75) av	16468
L_0~180 (85) av	3798
L_90~270 (65) av	17480
L_90~270 (75) av	17461
L_90~270 (85) av	2538
L_45 (65) av	17485
L_45 (75) av	16931
L_45 (85) av	3139

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2024-10-12

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: 2024-10-12

$\gamma$  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:



