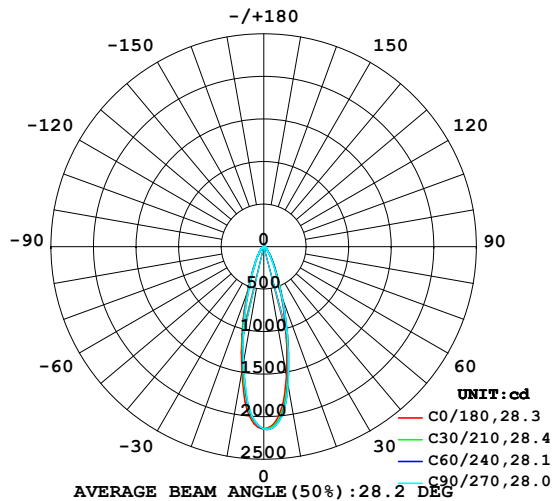


LUMINAIRE PHOTOMETRIC TEST REPORT

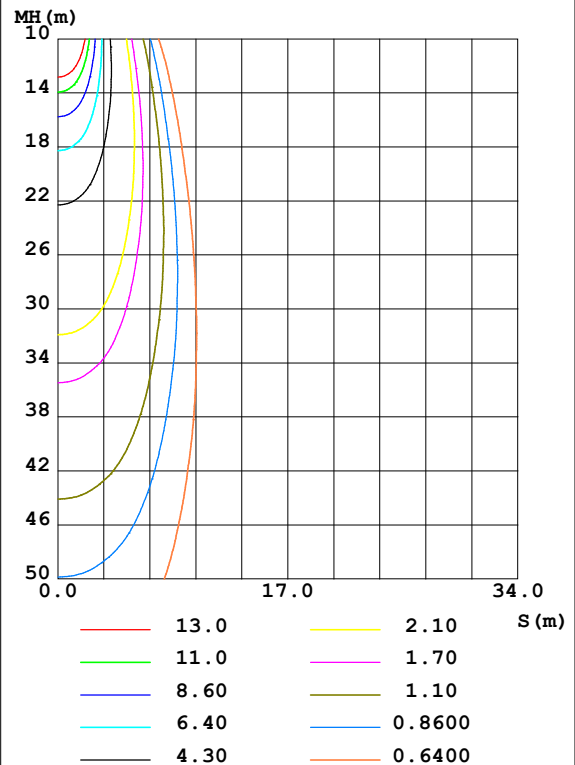
NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 89.11 lm/W
MODEL		Imax(cd)	2151	S/MH(C0/180)	0.47	
NOMINAL POWER(W)	9	LOR(%)	100.0	S/MH(C90/270)	0.44	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	757.82	η UP,DN(C0-180)	0.0,52.7	
NOMINAL FLUX(lm)	757.817	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.3	
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: 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1545	1631	1648	1584	1491	1399	1390	1441	0- 10	174.7	174.7	23.1,23.1
20	600.9	642.8	624.4	591.1	550.0	509.1	503.4	537.9	10- 20	269.9	444.6	58.7,58.7
30	222.1	226.0	208.2	190.3	183.8	179.7	181.0	199.4	20- 30	154.9	599.6	79.1,79.1
40	90.78	93.40	86.70	79.47	77.73	75.54	75.21	81.88	30- 40	81.57	681.1	89.9,89.9
50	33.48	36.16	35.57	34.13	32.77	30.57	29.23	30.26	40- 50	41.24	722.4	95.3,95.3
60	13.94	15.07	15.82	15.75	15.04	13.77	12.93	13.13	50- 60	19.60	742.0	97.9,97.9
70	5.998	6.575	6.841	6.888	6.522	5.967	5.720	5.681	60- 70	9.581	751.6	99.2,99.2
80	2.732	3.049	3.222	3.202	3.008	2.683	2.543	2.533	70- 80	4.833	756.4	99.8,99.8
90	0.0496	0.0468	0.0853	0.0469	0.1075	0.1073	0.1184	0.1075	80- 90	1.427	757.8	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): 705.59 lm

%lum = 93.1%

%lamp = 93.1%

Conical surface Flux(120deg): 741.97 lm

%lum = 97.9%

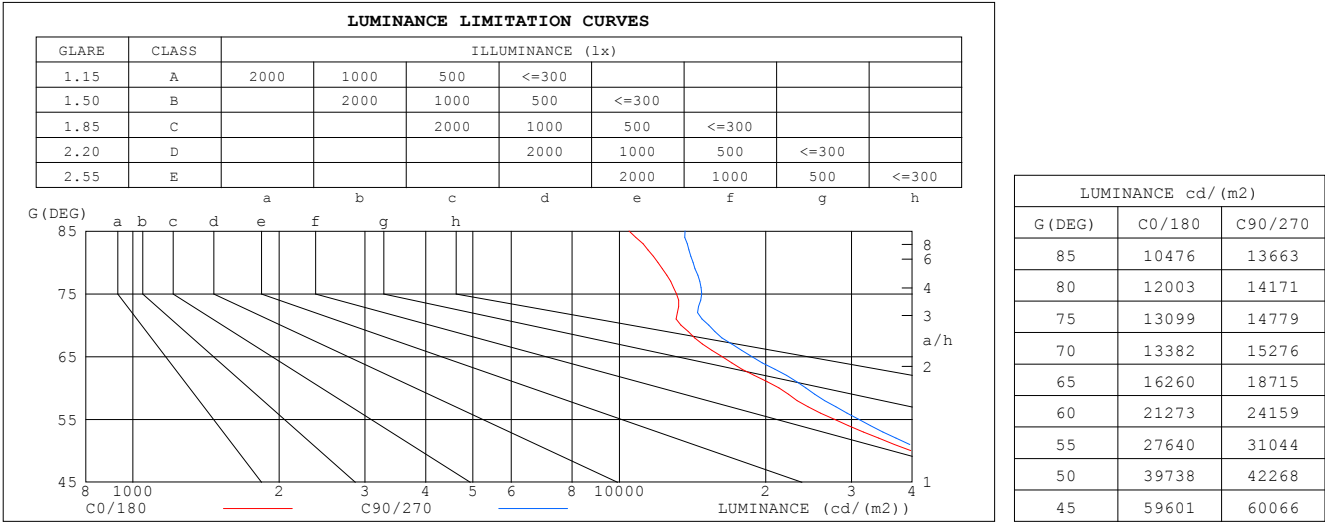
%lamp = 97.9%

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:

LUMINANCE LIMITATION CURVES

NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



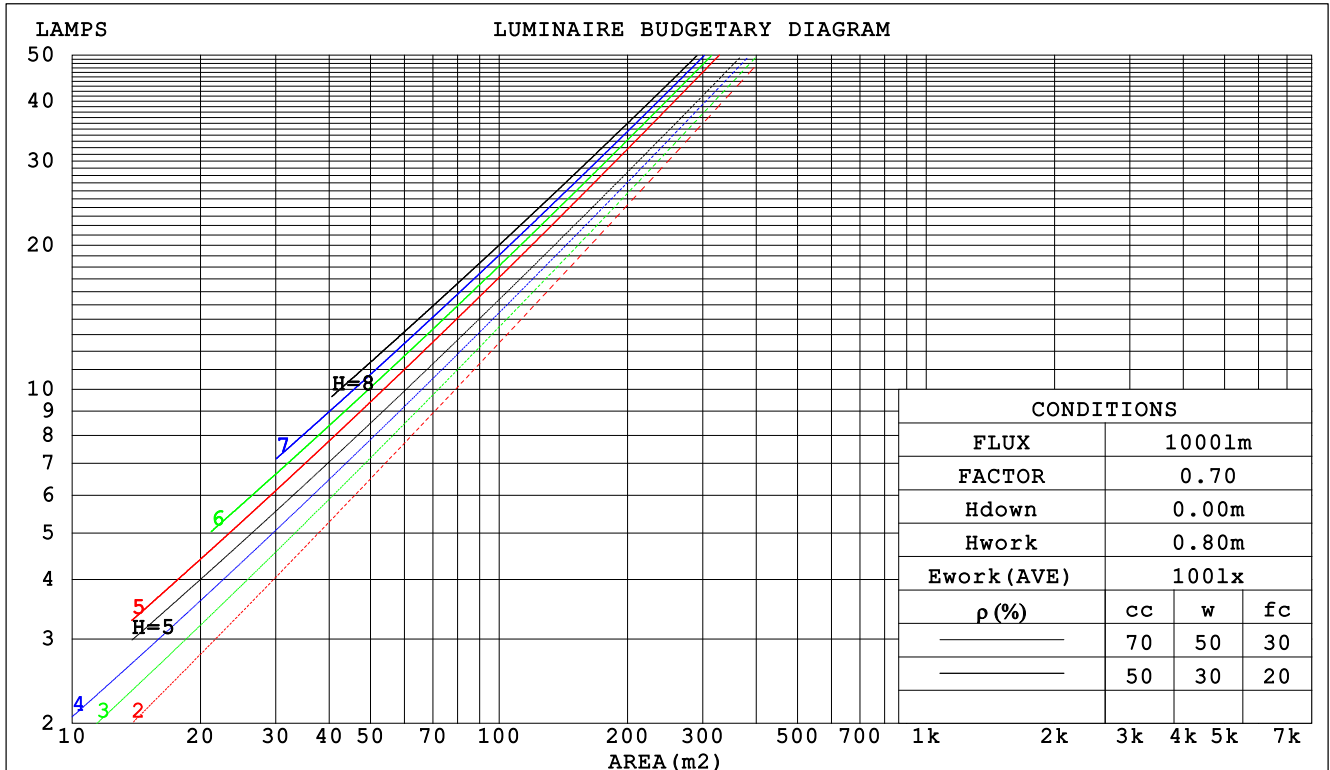
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	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	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.97	1.03	.99	.96	.99	.97	.94	.96	.94	.92	.94	.92	.90	.89
3.0	.98	.94	.90	.97	.93	.89	.94	.91	.88	.92	.89	.86	.90	.87	.85	.84
4.0	.93	.88	.84	.92	.87	.83	.90	.86	.82	.88	.84	.81	.86	.83	.81	.79
5.0	.88	.83	.79	.87	.82	.78	.85	.81	.78	.84	.80	.77	.82	.79	.76	.75
6.0	.84	.78	.75	.83	.78	.74	.81	.77	.74	.80	.76	.73	.79	.75	.73	.72
7.0	.80	.74	.71	.79	.74	.71	.78	.73	.70	.77	.73	.70	.76	.72	.70	.68
8.0	.76	.71	.67	.76	.71	.67	.75	.70	.67	.74	.70	.67	.73	.69	.67	.65
9.0	.73	.68	.65	.73	.68	.64	.72	.67	.64	.71	.67	.64	.70	.67	.64	.63
10.0	.70	.65	.62	.70	.65	.62	.69	.65	.62	.68	.64	.61	.68	.64	.61	.60



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:

WEC AND CCEC

NAME:	TYPE:CRI90 4000K	WEIGHT:
SPEC.:RAD25R-09-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	.169 .096 .030	.162 .092 .029	.149 .086 .027	.138 .080 .026	.127 .074 .024	
2.0	.159 .087 .027	.154 .085 .026	.143 .080 .025	.133 .075 .023	.124 .070 .022	
3.0	.150 .080 .024	.145 .078 .023	.136 .074 .022	.128 .070 .021	.120 .067 .021	
4.0	.141 .073 .022	.137 .072 .021	.129 .069 .020	.122 .066 .020	.116 .063 .019	
5.0	.133 .068 .020	.130 .067 .019	.123 .064 .019	.117 .062 .018	.111 .059 .018	
6.0	.126 .063 .018	.123 .062 .018	.117 .060 .017	.112 .058 .017	.107 .056 .017	
7.0	.120 .059 .017	.117 .058 .017	.112 .057 .016	.107 .055 .016	.103 .053 .016	
8.0	.114 .056 .016	.112 .055 .016	.107 .054 .015	.103 .052 .015	.099 .051 .015	
9.0	.109 .053 .015	.107 .052 .015	.103 .051 .014	.099 .050 .014	.095 .048 .014	
10.0	.104 .050 .014	.102 .049 .014	.098 .048 .014	.095 .047 .013	.092 .046 .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	.171 .157 .146	.146 .135 .125	.100 .093 .087	.057 .054 .050	.018 .017 .016	
2.0	.155 .133 .114	.132 .114 .099	.091 .079 .069	.052 .046 .040	.017 .015 .013	
3.0	.141 .113 .091	.121 .098 .079	.083 .068 .056	.048 .040 .033	.015 .013 .011	
4.0	.130 .099 .074	.112 .085 .065	.077 .059 .046	.044 .035 .027	.014 .011 .009	
5.0	.121 .087 .062	.104 .075 .054	.071 .052 .038	.041 .031 .022	.013 .010 .007	
6.0	.113 .077 .052	.097 .067 .045	.067 .047 .032	.039 .028 .019	.013 .009 .006	
7.0	.106 .069 .044	.091 .060 .038	.063 .042 .027	.036 .025 .016	.012 .008 .005	
8.0	.099 .063 .038	.086 .055 .033	.059 .038 .023	.034 .023 .014	.011 .007 .005	
9.0	.094 .057 .033	.081 .050 .029	.056 .035 .020	.033 .021 .012	.011 .007 .004	
10.0	.089 .053 .029	.077 .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:
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-09-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	22.1	23.0	22.4	23.2	23.3	22.1	22.9	22.3	23.1	23.3
3H	22.3	23.1	22.5	23.3	23.5	22.3	23.1	22.6	23.3	23.5
4H	22.4	23.1	22.6	23.3	23.5	22.4	23.1	22.7	23.4	23.6
6H	22.4	23.1	22.7	23.3	23.6	22.5	23.2	22.8	23.4	23.7
8H	22.4	23.1	22.7	23.3	23.6	22.5	23.2	22.8	23.5	23.7
12H	22.4	23.1	22.7	23.3	23.6	22.5	23.2	22.9	23.5	23.7
4H 2H	22.1	22.9	22.4	23.1	23.3	22.1	22.8	22.4	23.1	23.3
3H	22.4	23.0	22.7	23.3	23.6	22.4	23.0	22.7	23.3	23.6
4H	22.5	23.1	22.9	23.4	23.7	22.6	23.2	22.9	23.5	23.8
6H	22.6	23.2	23.0	23.5	23.8	22.7	23.3	23.1	23.6	23.9
8H	22.7	23.2	23.1	23.5	23.9	22.8	23.3	23.2	23.7	24.0
12H	22.7	23.1	23.1	23.5	23.9	22.9	23.3	23.3	23.7	24.1
8H 4H	22.5	23.0	22.9	23.3	23.7	22.6	23.1	23.0	23.4	23.8
6H	22.7	23.1	23.1	23.5	23.9	22.8	23.2	23.2	23.6	24.0
8H	22.8	23.1	23.2	23.6	24.0	22.9	23.3	23.4	23.7	24.2
12H	22.8	23.1	23.3	23.6	24.1	23.0	23.3	23.5	23.8	24.3
12H 4H	22.5	22.9	22.9	23.3	23.7	22.5	23.0	22.9	23.3	23.7
6H	22.7	23.1	23.1	23.5	23.9	22.8	23.2	23.3	23.6	24.0
8H	22.8	23.1	23.3	23.5	24.0	23.0	23.3	23.4	23.7	24.2
Variations with the observer position at spacings:										
S = 1.0H	+ 1.4 / - 2.2					+ 1.2 / - 1.8				
1.5H	+ 2.2 / - 1.8					+ 1.8 / - 1.5				
2.0H	+ 2.6 / - 1.7					+ 2.3 / - 1.5				

CIE Pub.117, 757.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.0)

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-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

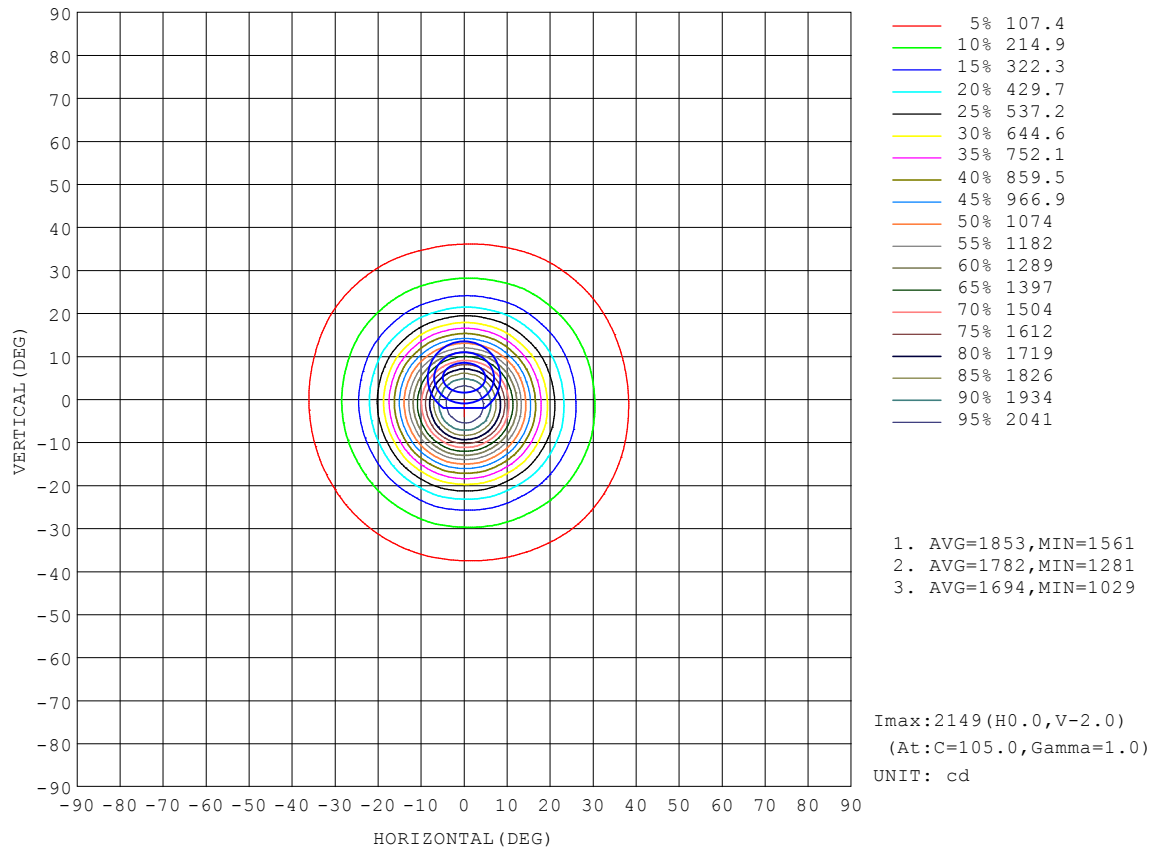
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	85	78	74	84	78	74	70
0.80	93	87	83	92	86	83	91	86	82	78
1.00	98	92	88	97	91	88	95	91	87	83
1.25	102	96	93	101	96	92	99	95	91	87
1.50	105	100	96	103	99	96	101	97	95	90
2.00	108	103	100	106	102	99	103	100	98	92
2.50	110	105	102	108	104	101	105	102	99	93
3.00	111	108	105	109	106	104	106	103	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	107	106	98
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

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.:RAD25R-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

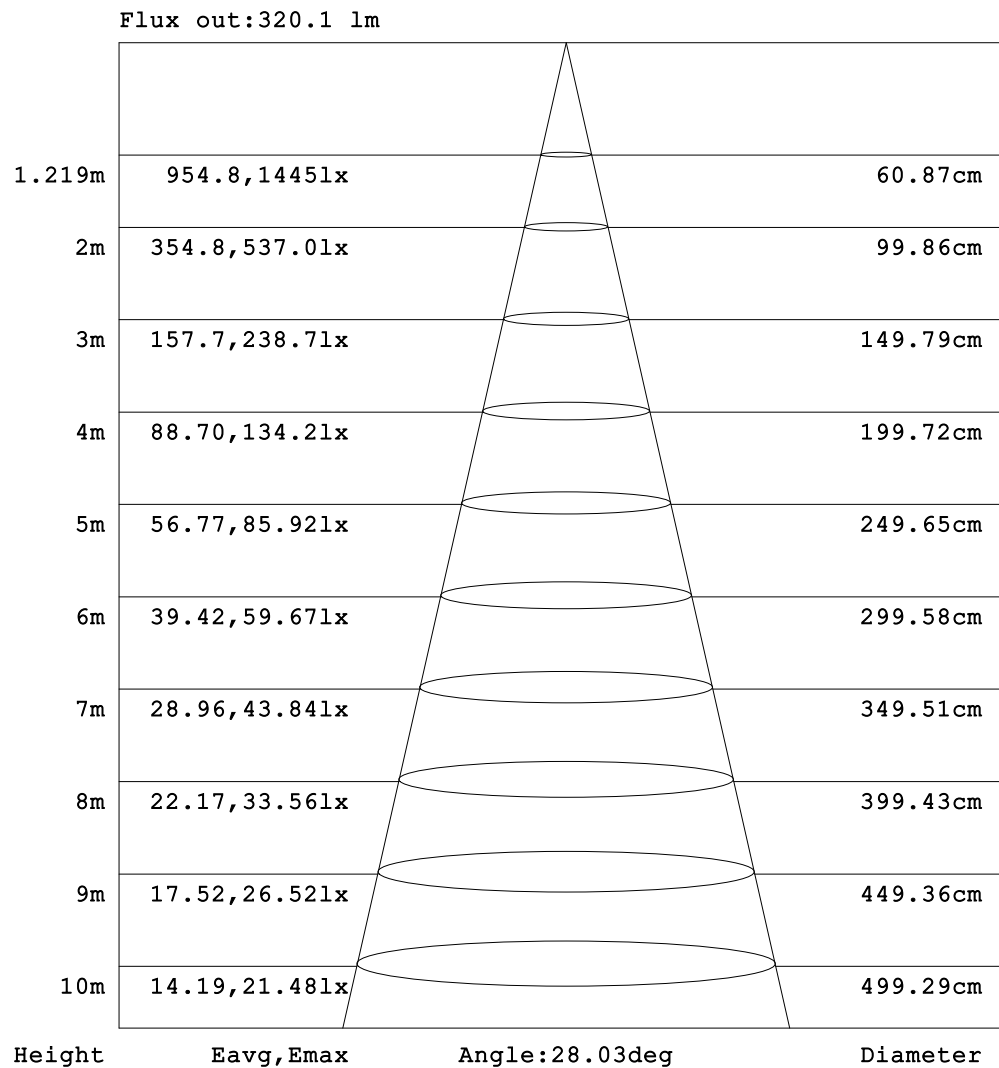


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-10-11

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-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:



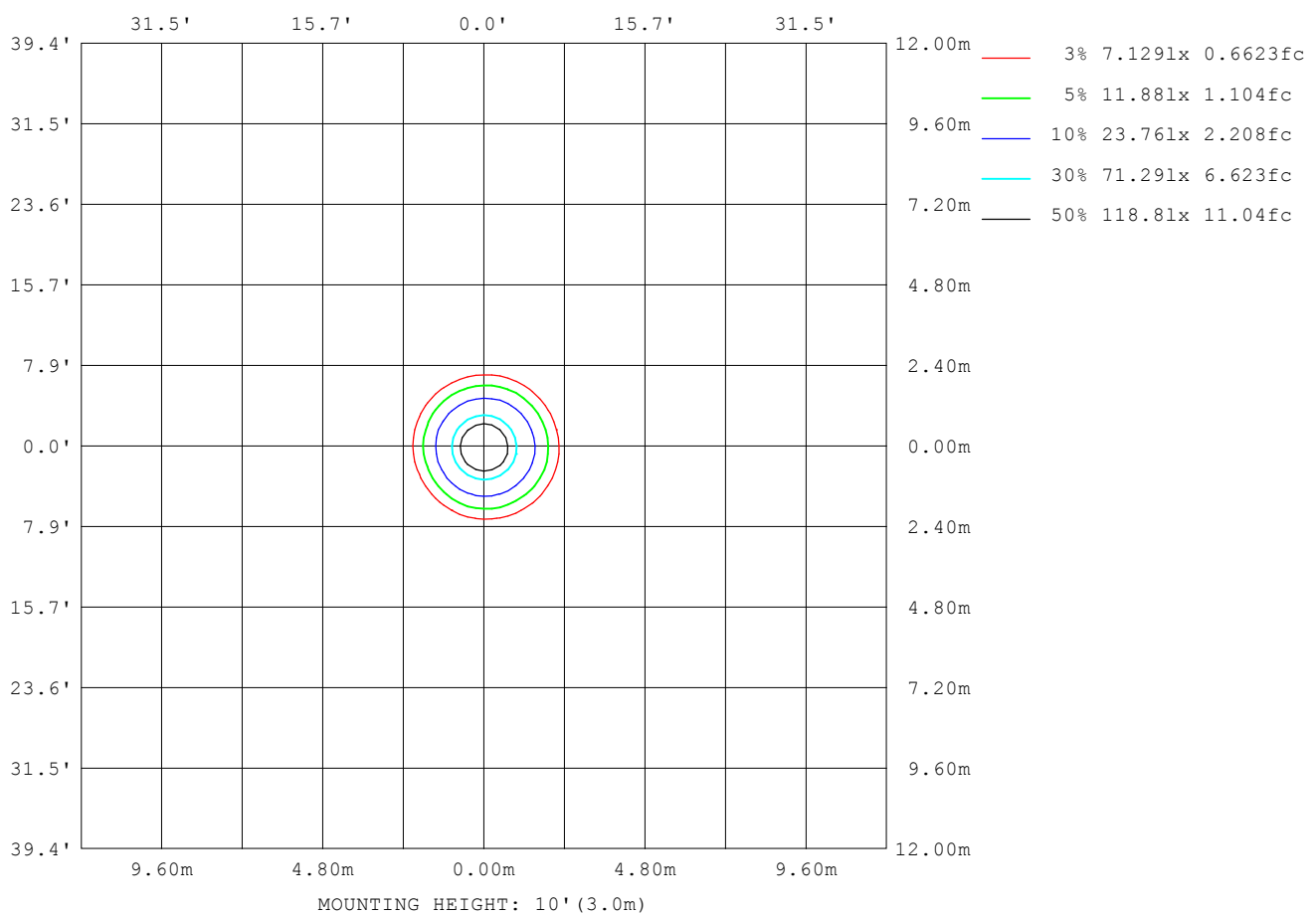
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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-09-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-09-CCT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ41MM	Shielding Angle:

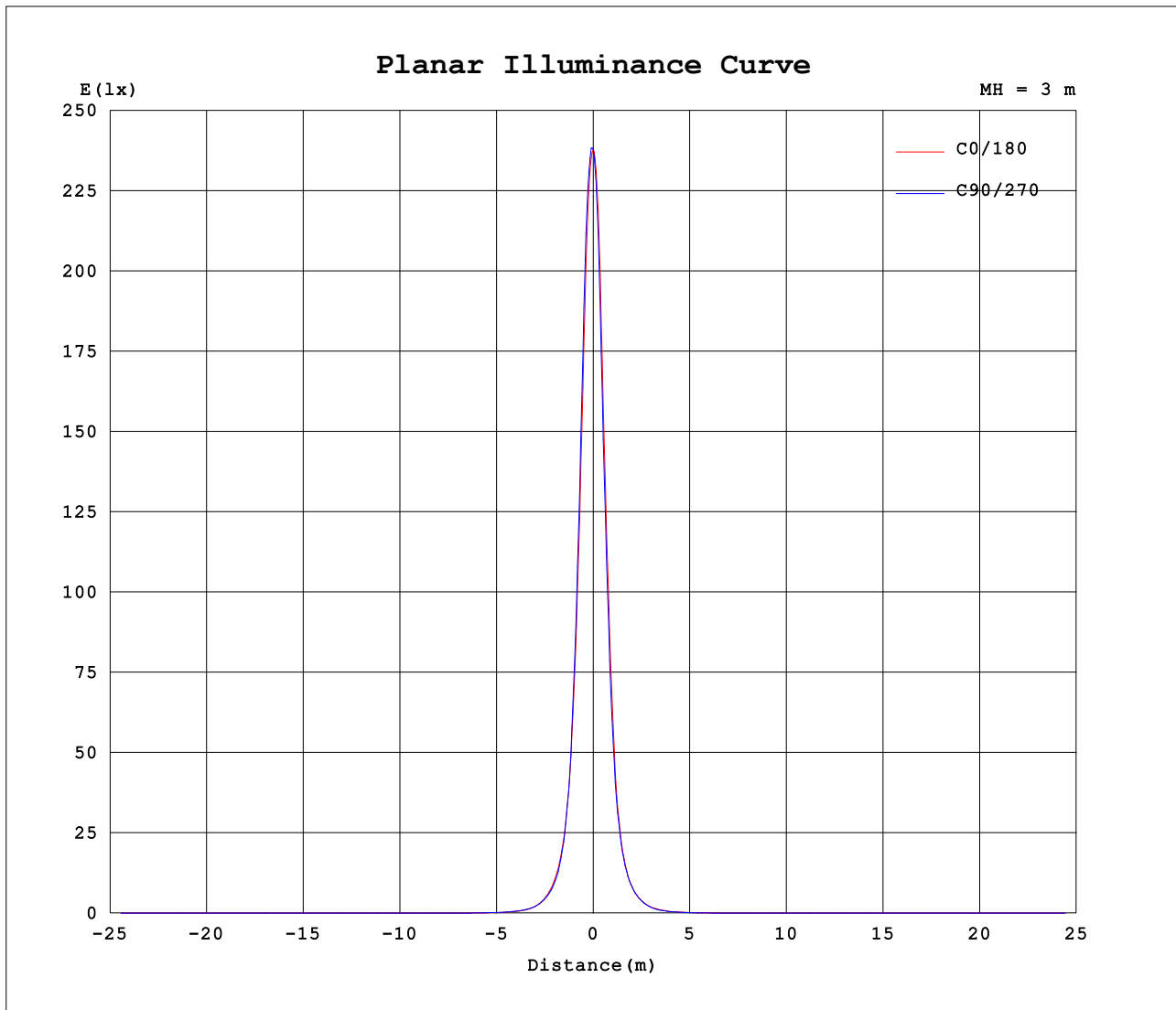
AvgL	cd/m2
L_0~180 (65) av	16993
L_0~180 (75) av	13686
L_0~180 (85) av	11015
L_90~270 (65) av	16831
L_90~270 (75) av	13649
L_90~270 (85) av	11212
L_45 (65) av	16840
L_45 (75) av	13655
L_45 (85) av	11094

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

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:

