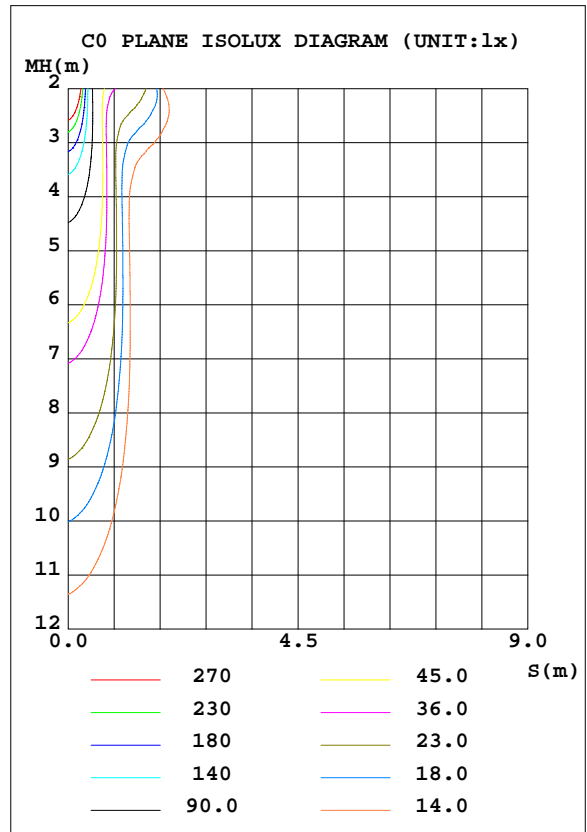
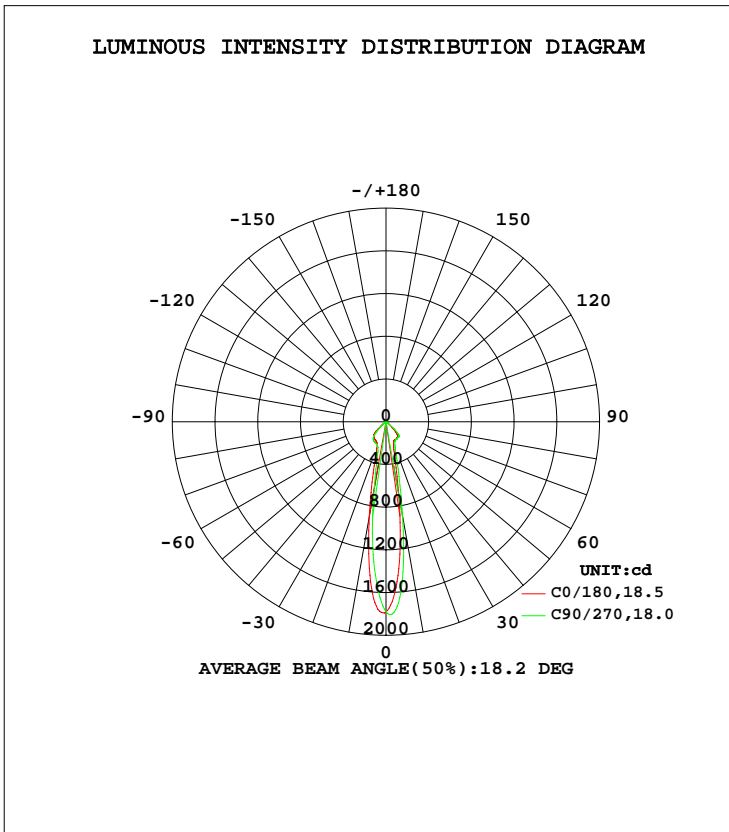


**LUMINAIRE PHOTOMETRIC TEST REPORT**

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	1025	I <sub>max</sub> (cd)	1818	S/MH(C0/180)	0.35
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.28
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	558.92	η UP, DN(C0-180)	0.0,51.3
NOMINAL FLUX(lm)	558.923	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,48.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

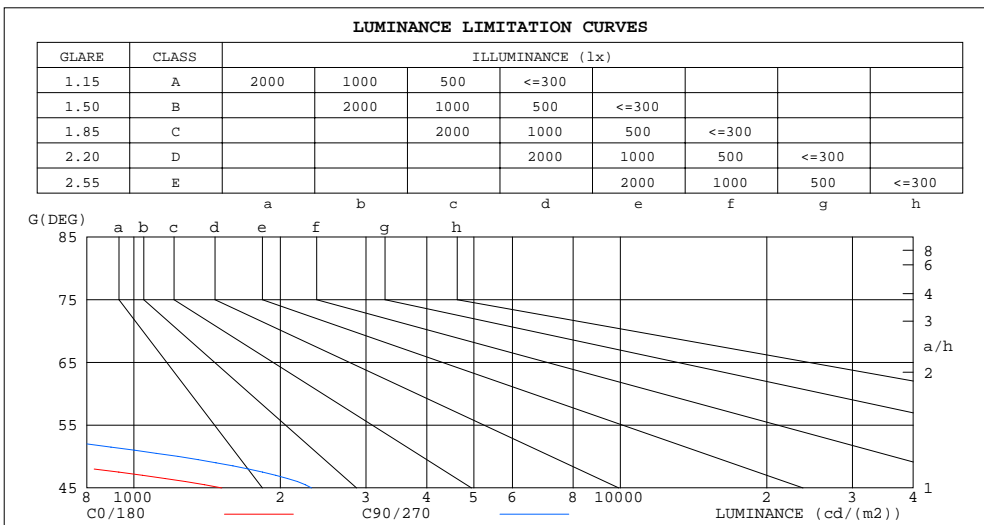
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	683.0	781.1	895.1	962.0	905.9	800.6	645.7	596.4	0- 10	116.6	116.6	20.9,20.9
20	207.5	232.5	248.9	253.9	247.5	238.1	237.5	219.4	10- 20	108.9	225.5	40.3,40.3
30	186.9	200.1	191.0	174.0	200.2	205.2	217.7	206.3	20- 30	96.12	321.6	57.5,57.5
40	170.6	183.3	185.4	159.5	179.7	174.7	178.9	170.3	30- 40	118.6	440.2	78.7,78.7
50	33.48	55.01	79.72	75.68	65.98	41.17	30.95	27.29	40- 50	91.73	531.9	95.2,95.2
60	8.778	10.73	11.60	11.95	10.17	9.211	8.161	7.721	50- 60	19.72	551.6	98.7,98.7
70	2.374	3.287	4.026	4.636	3.736	2.654	1.993	1.766	60- 70	6.385	558.0	99.8,99.8
80	0.0846	0.0800	0.1152	0.1019	0.1808	0.1149	0.1113	0.0811	70- 80	0.9078	558.9	100,100
90	0.0065	0.0007	0.0044	0.0007	0.0129	0.0007	0.0007	0.0007	80- 90	0.0385	558.9	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		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2	2
80	5	7
75	9	23
70	70	117
65	145	180
60	178	231
55	237	444
50	528	1234
45	1515	2318

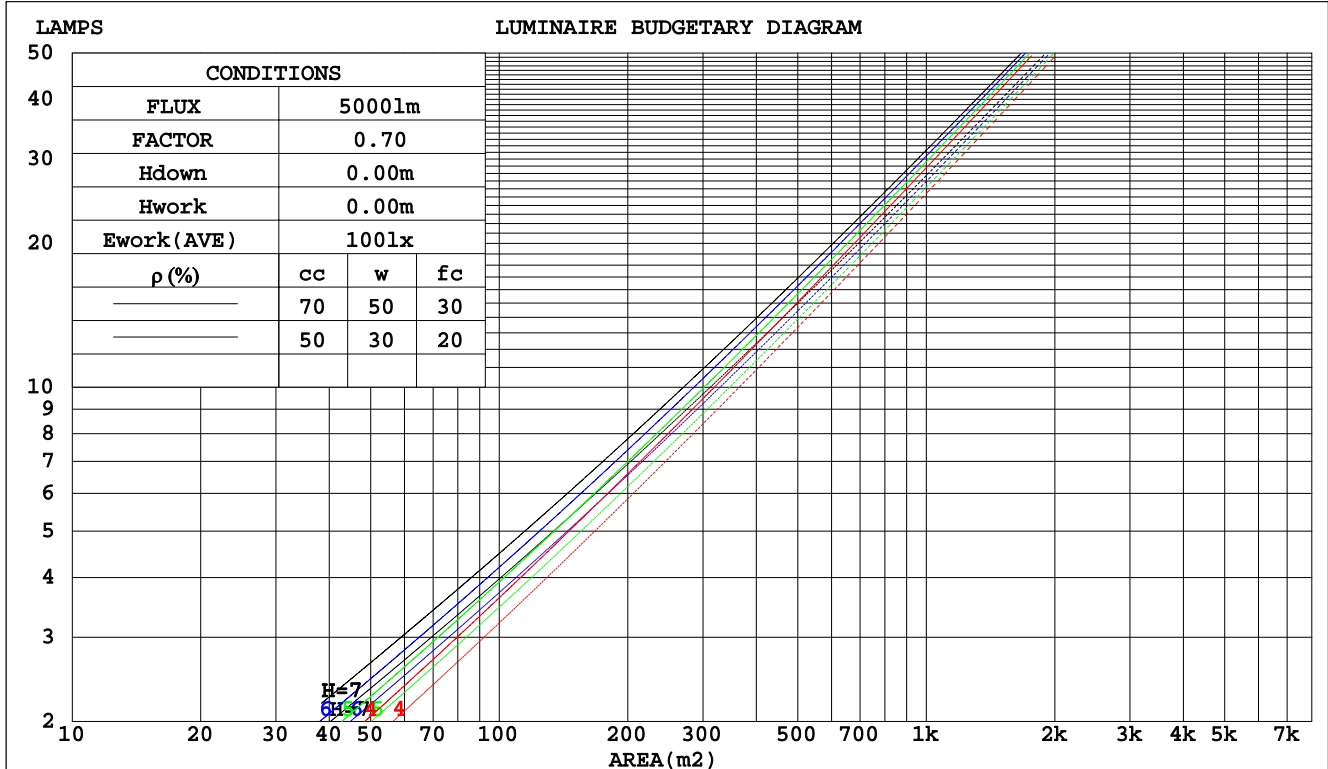
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: fu  
 Test Date: 09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity: 65.0%  
 Test Distance: 3.161m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	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	.00
1.0	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.02	.98	.94	1.00	.97	.93	.97	.94	.91	.94	.92	.89	.91	.89	.87	.86
3.0	.95	.89	.85	.93	.89	.85	.91	.87	.83	.88	.85	.82	.86	.83	.81	.79
4.0	.88	.82	.78	.87	.82	.77	.85	.80	.77	.83	.79	.76	.81	.78	.75	.73
5.0	.82	.76	.72	.81	.76	.71	.80	.75	.71	.78	.73	.70	.76	.72	.69	.68
6.0	.77	.71	.66	.76	.70	.66	.75	.70	.66	.73	.69	.65	.72	.68	.65	.63
7.0	.73	.66	.62	.72	.66	.62	.71	.65	.61	.69	.65	.61	.68	.64	.61	.59
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.65	.59	.55	.64	.59	.55	.63	.58	.54	.62	.58	.54	.62	.57	.54	.53
10.0	.62	.56	.52	.61	.56	.52	.60	.55	.52	.60	.55	.51	.59	.54	.51	.50



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.186	.106	.033	.179	.102	.032	.166	.095	.030	.155	.089	.029	.144	.083	.027	
2.0	.180	.098	.030	.174	.096	.030	.163	.091	.028	.153	.086	.027	.144	.082	.026	
3.0	.172	.091	.027	.167	.089	.027	.158	.085	.026	.149	.082	.025	.141	.078	.024	
4.0	.163	.085	.025	.159	.083	.025	.151	.080	.024	.144	.077	.023	.137	.074	.023	
5.0	.155	.079	.023	.151	.078	.023	.144	.075	.022	.138	.073	.022	.132	.070	.021	
6.0	.147	.074	.021	.144	.073	.021	.138	.071	.021	.132	.069	.020	.127	.067	.020	
7.0	.140	.069	.020	.137	.068	.019	.132	.067	.019	.127	.065	.019	.122	.063	.019	
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.017	
9.0	.127	.061	.017	.124	.061	.017	.120	.059	.017	.116	.058	.017	.112	.057	.016	
10.0	.121	.058	.016	.119	.057	.016	.115	.056	.016	.111	.055	.016	.108	.054	.016	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.136	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.127	.088	.058	.109	.076	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.120	.078	.049	.103	.068	.042	.071	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

NAME: AR70-7W-3000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: EVERFINE					SUR.:0.005					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	11.9	12.9	12.1	13.1	13.3	12.9	13.9	13.1	14.1	14.2				
3H	11.8	12.7	12.0	12.9	13.1	12.8	13.7	13.0	13.9	14.1				
4H	11.7	12.6	12.0	12.8	13.0	12.7	13.6	13.0	13.8	14.0				
6H	11.6	12.4	11.9	12.7	12.9	12.6	13.4	12.9	13.7	13.9				
8H	11.6	12.3	11.9	12.6	12.9	12.6	13.3	12.9	13.6	13.9				
12H	11.5	12.3	11.8	12.5	12.8	12.5	13.3	12.8	13.5	13.8				
4H 2H	11.7	12.6	12.0	12.8	13.0	12.7	13.6	13.0	13.8	14.0				
3H	11.6	12.3	11.9	12.6	12.9	12.6	13.3	12.9	13.6	13.9				
4H	11.5	12.2	11.8	12.5	12.8	12.5	13.2	12.8	13.5	13.8				
6H	11.4	12.0	11.8	12.3	12.7	12.4	13.0	12.8	13.3	13.7				
8H	11.4	11.9	11.7	12.3	12.6	12.3	12.9	12.7	13.2	13.6				
12H	11.3	11.8	11.7	12.2	12.6	12.3	12.8	12.7	13.2	13.5				
8H 4H	11.4	11.9	11.7	12.3	12.6	12.3	12.9	12.7	13.2	13.6				
6H	11.3	11.7	11.7	12.1	12.5	12.2	12.7	12.7	13.1	13.5				
8H	11.2	11.6	11.7	12.0	12.5	12.2	12.6	12.6	13.0	13.4				
12H	11.2	11.5	11.6	11.9	12.4	12.1	12.5	12.6	12.9	13.4				
12H 4H	11.3	11.8	11.7	12.2	12.6	12.3	12.8	12.7	13.2	13.5				
6H	11.2	11.6	11.7	12.0	12.5	12.2	12.6	12.6	13.0	13.4				
8H	11.2	11.5	11.6	11.9	12.4	12.1	12.5	12.6	12.9	13.4				
Variations with the observer position at spacings:														
S = 1.0H	+ 3.1 / - 9.3					+ 3.2 / - 7.5								
1.5H	+ 2.7 / - 7.7					+ 2.7 / - 7.6								
2.0H	+ 6.2 / - 6.9					+ 6.6 / - 8.3								

CIE Pub.117, 558.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.0)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

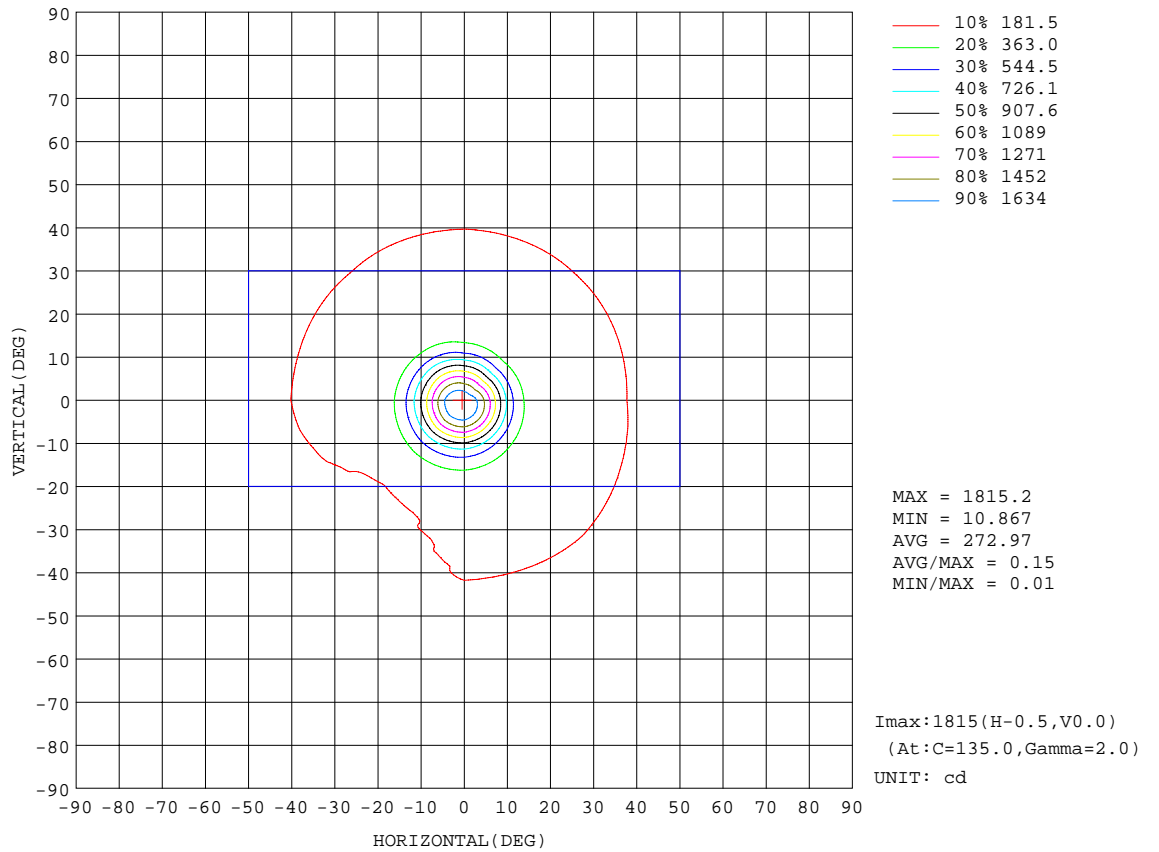
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	78	70	65	77	70	65	77	69	65	61
0.80	87	80	75	86	79	75	85	78	74	70
1.00	93	86	82	92	86	82	91	86	81	76
1.25	99	92	88	97	92	88	95	90	87	82
1.50	102	96	92	101	95	92	98	94	91	85
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	102	105	102	99	93
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



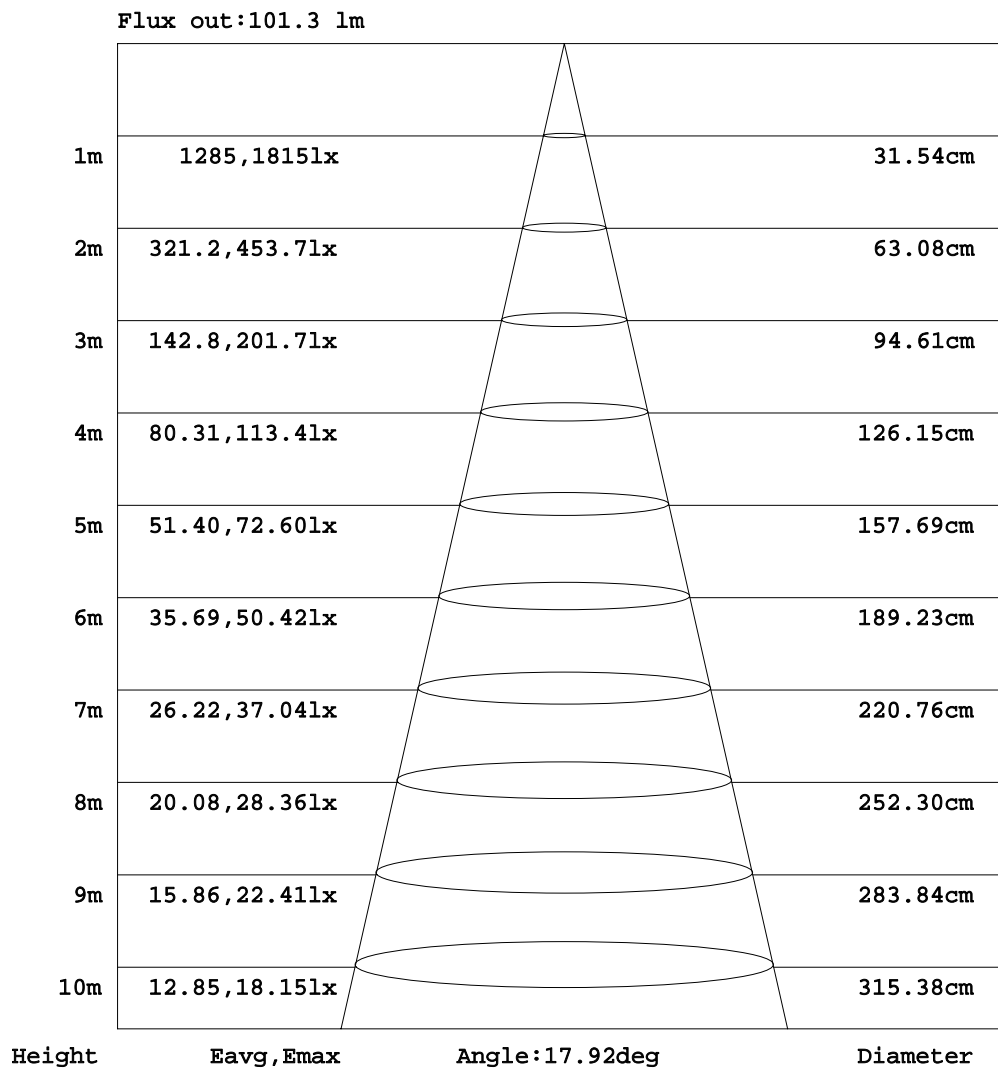
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:



**AAI Figure**

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



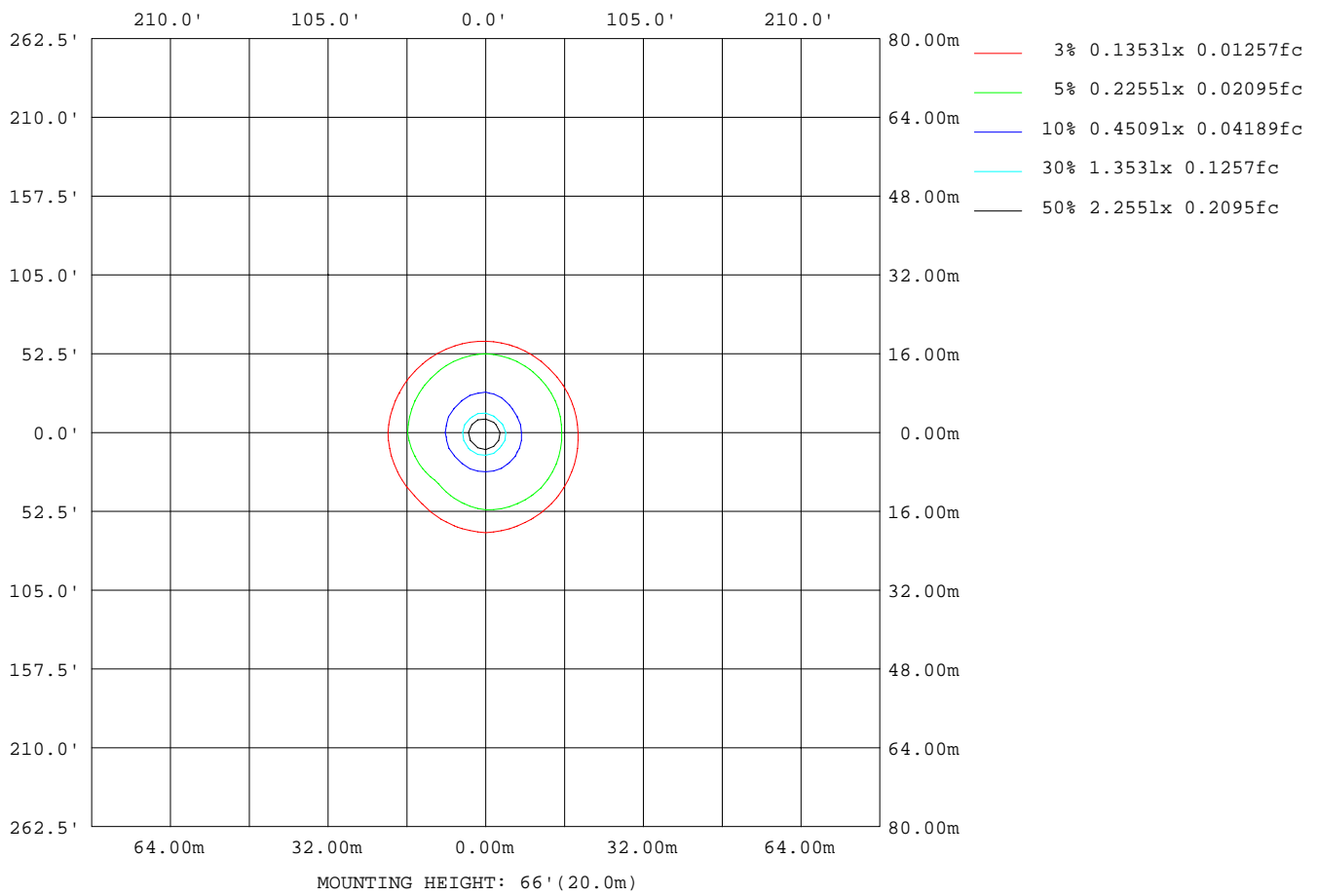
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

LED Avg.L Report

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

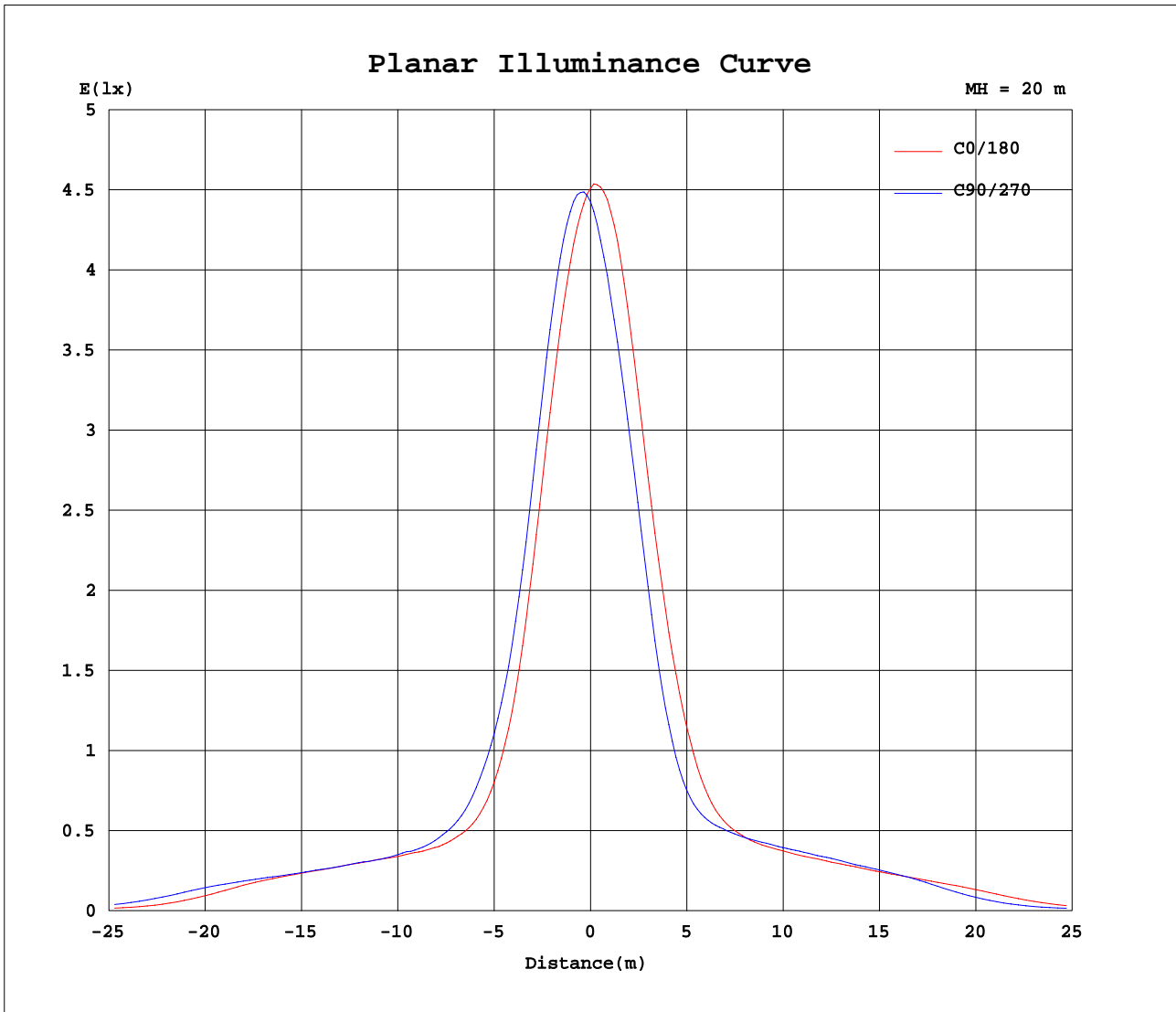
AvgL	cd/m2
L_0~180(65)av	151
L_0~180(75)av	18
L_0~180(85)av	4
L_90~270(65)av	154
L_90~270(75)av	16
L_90~270(85)av	2
L_45(65)av	156
L_45(75)av	16
L_45(85)av	2

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:fu  
 Test Date:09 August 2022

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:3.161m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators: fu  
 Test Date: 09 August 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Humidity: 65.0%  
 Test Distance: 3.161m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: AR70-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:0.005	Shielding Angle:

Table--1

UNIT: cd

C(DEG) \ γ (DEG)	0	45	90	135	180	225	270	315											
0	1779	1779	1779	1779	1779	1779	1779	1779											
5	1381	1498	1602	1645	1563	1437	1317	1276											
10	683	781	895	962	906	801	646	596											
15	303	361	428	461	429	354	297	274											
20	208	233	249	254	247	238	238	219											
25	190	203	201	192	210	214	224	210											
30	187	200	191	174	200	205	218	206											
35	183	192	189	167	192	193	206	197											
40	171	183	185	159	180	175	179	170											
45	106	140	165	141	148	117	95.8	88.1											
50	33.5	55.0	79.7	75.7	66.0	41.2	31.0	27.3											
55	13.4	19.4	25.6	25.6	22.0	17.0	13.7	11.8											
60	8.78	10.7	11.6	11.9	10.2	9.21	8.16	7.72											
65	6.04	7.25	7.64	7.40	6.72	6.15	5.39	5.59											
70	2.37	3.29	4.03	4.64	3.74	2.65	1.99	1.77											
75	0.22	0.23	0.60	0.99	0.70	0.24	0.21	0.20											
80	0.08	0.08	0.12	0.10	0.18	0.11	0.11	0.08											
85	0.02	0.01	0.02	0.03	0.05	0.02	0.02	0.02											
90	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00											

C Range: 0 - 360DEG      γ Range: 0 - 90DEG  
 C Interval: 45.0DEG     γ Interval: 0.5DEG  
 Test Speed: MEDIUM     Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.406.11  
 Temperature: 25.3DEG    Humidity: 65.0%  
 Operators: fu             Test Distance: 3.161m [K=1.0000]  
 Test Date: 09 August 2022    Remarks: