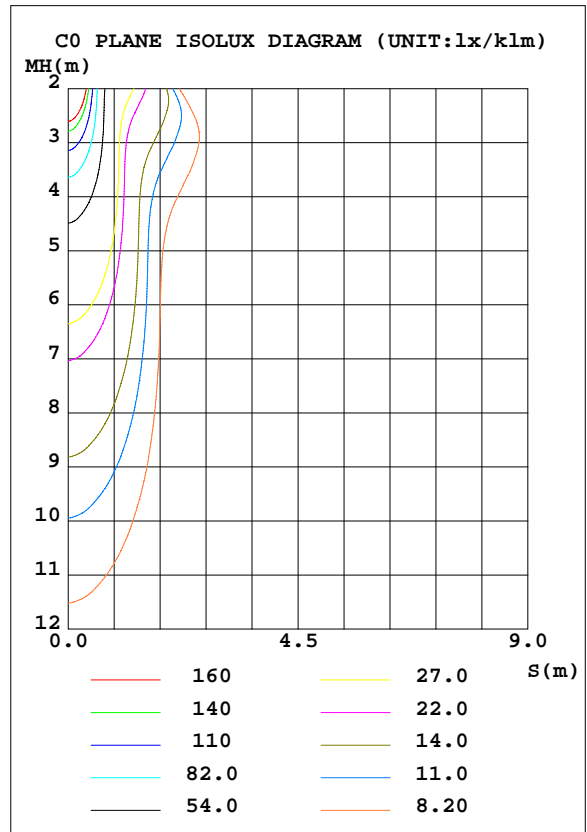
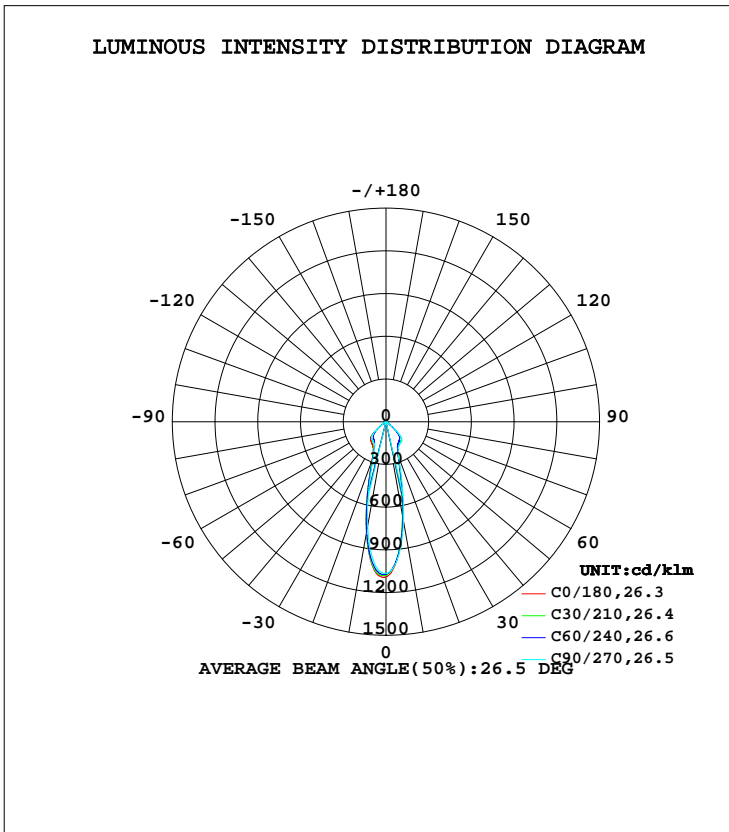


**LUMINAIRE PHOTOMETRIC TEST REPORT**

NAME: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		I <sub>max</sub> (cd/klm)	1093	S/MH(C0/180)	0.48
NOMINAL POWER(W)	7	LOR(%)	54.2	S/MH(C90/270)	0.45
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm/klm)	541.65	η UP, DN(C0-180)	0.0,27.0
NOMINAL FLUX(lm)	1000	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,27.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230.0	η down(%)	54.2	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-12-10

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:

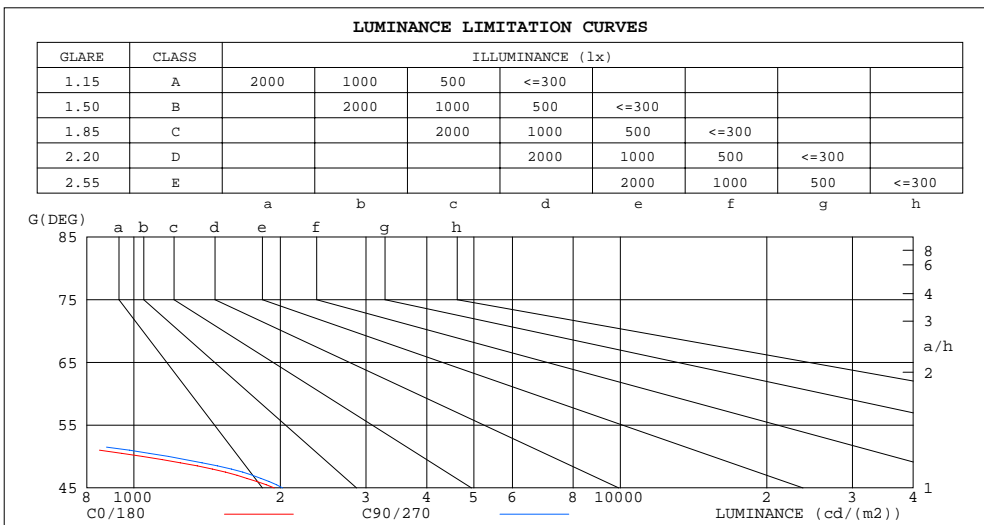
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	676.6	679.0	708.0	743.7	791.1	788.4	743.7	683.4	0- 10	84.96	84.96	15.7,8.5
20	254.8	249.5	262.5	276.9	293.1	278.2	262.3	245.8	10- 20	123.3	208.2	38.4,20.8
30	187.1	175.8	187.5	188.1	189.6	168.7	172.7	177.9	20- 30	94.82	303.0	55.9,30.3
40	169.1	158.8	173.4	164.1	165.7	146.5	155.8	157.8	30- 40	106.3	409.3	75.6,40.9
50	66.89	63.07	75.70	83.03	89.84	77.02	77.92	68.70	40- 50	98.87	508.2	93.8,50.8
60	9.205	8.300	9.293	10.82	11.71	10.19	9.993	9.795	50- 60	26.34	534.5	98.7,53.5
70	2.299	2.162	2.833	3.736	4.074	3.500	3.617	2.947	60- 70	6.019	540.5	99.8,54.1
80	0.1357	0.0981	0.1056	0.1439	0.1202	0.1122	0.1947	0.1335	70- 80	1.068	541.6	100,54.2
90	0.0117	0.0117	0.0080	0.0058	0.0088	0.0033	0.0139	0.0106	80- 90	0.0493	541.6	100,54.2
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/klm									UNIT:lm/klm		

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-12-10

$\gamma$  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: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5	2
80	8	6
75	12	15
70	67	83
65	139	140
60	184	186
55	339	374
50	1041	1178
45	1944	2021

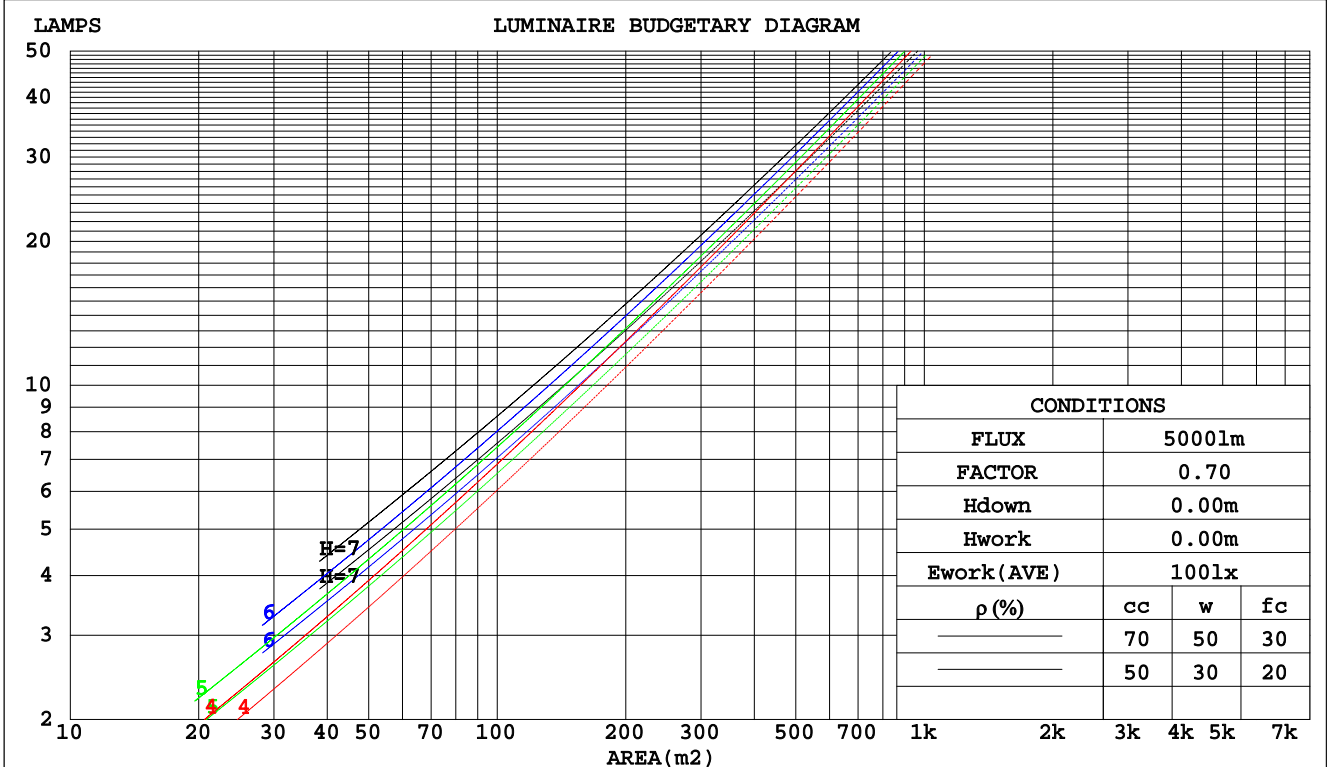
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

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:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

NAME: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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																0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.64	.64	.64	.63	.63	.63	.60	.60	.60	.58	.58	.58	.55	.55	.55	.54
1.0	.60	.58	.57	.58	.57	.56	.56	.55	.54	.54	.53	.53	.52	.52	.51	.50
2.0	.55	.53	.51	.54	.52	.50	.52	.50	.49	.51	.49	.48	.49	.48	.47	.46
3.0	.51	.48	.45	.50	.47	.45	.49	.46	.44	.47	.45	.44	.46	.44	.43	.42
4.0	.47	.44	.41	.46	.43	.41	.45	.43	.40	.44	.42	.40	.43	.41	.40	.39
5.0	.44	.40	.38	.43	.40	.38	.42	.39	.37	.41	.39	.37	.40	.38	.37	.36
6.0	.41	.37	.35	.40	.37	.35	.39	.37	.34	.39	.36	.34	.38	.36	.34	.33
7.0	.38	.35	.32	.38	.34	.32	.37	.34	.32	.36	.34	.32	.36	.33	.32	.31
8.0	.36	.32	.30	.36	.32	.30	.35	.32	.30	.34	.32	.30	.34	.31	.30	.29
9.0	.34	.30	.28	.34	.30	.28	.33	.30	.28	.33	.30	.28	.32	.30	.28	.27
10.0	.32	.29	.26	.32	.29	.26	.31	.28	.26	.31	.28	.26	.30	.28	.26	.25



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

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: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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	.104	.059	.019	.100	.057	.018	.093	.054	.017	.087	.050	.016	.081	.047	.015	
2.0	.101	.055	.017	.098	.054	.017	.092	.051	.016	.087	.049	.015	.082	.046	.015	
3.0	.097	.051	.015	.094	.050	.015	.089	.048	.015	.084	.046	.014	.080	.044	.014	
4.0	.092	.048	.014	.090	.047	.014	.085	.045	.014	.081	.044	.013	.077	.042	.013	
5.0	.087	.045	.013	.085	.044	.013	.082	.042	.012	.078	.041	.012	.075	.040	.012	
6.0	.083	.042	.012	.081	.041	.012	.078	.040	.012	.075	.039	.011	.072	.038	.011	
7.0	.079	.039	.011	.077	.038	.011	.074	.038	.011	.071	.037	.011	.069	.036	.011	
8.0	.075	.037	.010	.074	.036	.010	.071	.035	.010	.068	.035	.010	.066	.034	.010	
9.0	.071	.035	.010	.070	.034	.010	.068	.034	.009	.066	.033	.009	.063	.032	.009	
10.0	.068	.033	.009	.067	.032	.009	.065	.032	.009	.063	.031	.009	.061	.031	.009	

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	.103	.103	.103	.088	.088	.088	.060	.060	.060	.035	.035	.035	.011	.011	.011	
1.0	.093	.085	.078	.080	.073	.067	.055	.050	.046	.031	.029	.027	.010	.009	.009	
2.0	.086	.072	.060	.073	.062	.052	.050	.043	.036	.029	.025	.021	.009	.008	.007	
3.0	.080	.062	.047	.068	.053	.041	.047	.037	.029	.027	.022	.017	.009	.007	.006	
4.0	.074	.054	.038	.064	.046	.033	.044	.032	.023	.025	.019	.014	.008	.006	.005	
5.0	.070	.048	.031	.060	.041	.027	.041	.029	.019	.024	.017	.011	.008	.006	.004	
6.0	.066	.043	.026	.057	.037	.023	.039	.026	.016	.023	.015	.009	.007	.005	.003	
7.0	.062	.039	.022	.054	.033	.019	.037	.023	.014	.022	.014	.008	.007	.005	.003	
8.0	.059	.035	.019	.051	.031	.016	.035	.021	.012	.021	.013	.007	.007	.004	.002	
9.0	.056	.033	.016	.049	.028	.014	.034	.020	.010	.020	.012	.006	.006	.004	.002	
10.0	.054	.030	.014	.046	.026	.013	.032	.018	.009	.019	.011	.005	.006	.004	.002	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-12-10

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: AR70F-7W-3000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: EVERFINE					SUR.:					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	10.3	11.4	10.6	11.5	11.7	10.2	11.2	10.4	11.4	11.6				
3H	10.2	11.1	10.4	11.3	11.5	10.0	11.0	10.3	11.2	11.4				
4H	10.1	11.0	10.4	11.2	11.4	9.9	10.9	10.2	11.1	11.3				
6H	10.0	10.8	10.3	11.1	11.3	9.9	10.7	10.2	11.0	11.2				
8H	9.9	10.8	10.3	11.0	11.3	9.8	10.6	10.1	10.9	11.2				
12H	9.9	10.7	10.2	11.0	11.2	9.8	10.5	10.1	10.8	11.1				
4H 2H	10.1	11.0	10.4	11.2	11.5	10.0	10.9	10.2	11.1	11.3				
3H	10.0	10.7	10.3	11.0	11.3	9.8	10.6	10.1	10.9	11.1				
4H	9.9	10.6	10.2	10.9	11.2	9.7	10.4	10.1	10.7	11.0				
6H	9.8	10.4	10.1	10.7	11.1	9.6	10.2	10.0	10.6	10.9				
8H	9.7	10.3	10.1	10.6	11.0	9.6	10.1	10.0	10.5	10.9				
12H	9.7	10.2	10.1	10.6	11.0	9.5	10.0	9.9	10.4	10.8				
8H 4H	9.7	10.3	10.1	10.6	11.0	9.6	10.2	10.0	10.5	10.9				
6H	9.6	10.1	10.1	10.5	10.9	9.5	9.9	9.9	10.3	10.8				
8H	9.6	10.0	10.0	10.4	10.8	9.4	9.8	9.9	10.3	10.7				
12H	9.5	9.9	10.0	10.3	10.8	9.4	9.7	9.8	10.2	10.6				
12H 4H	9.7	10.2	10.1	10.6	11.0	9.5	10.1	9.9	10.4	10.8				
6H	9.6	10.0	10.0	10.4	10.8	9.4	9.8	9.9	10.3	10.7				
8H	9.5	9.9	10.0	10.3	10.8	9.4	9.7	9.8	10.2	10.6				
Variations with the observer position at spacings:														
S = 1.0H	+ 3.1 / - 8.7					+ 2.7 / - 8.2								
1.5H	+ 2.2 / - 8.5					+ 2.6 / - 8.2								
2.0H	+ 6.2 / - 9.7					+ 6.5 / -10.5								

CIE Pub.117, 1000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-12-10

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: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

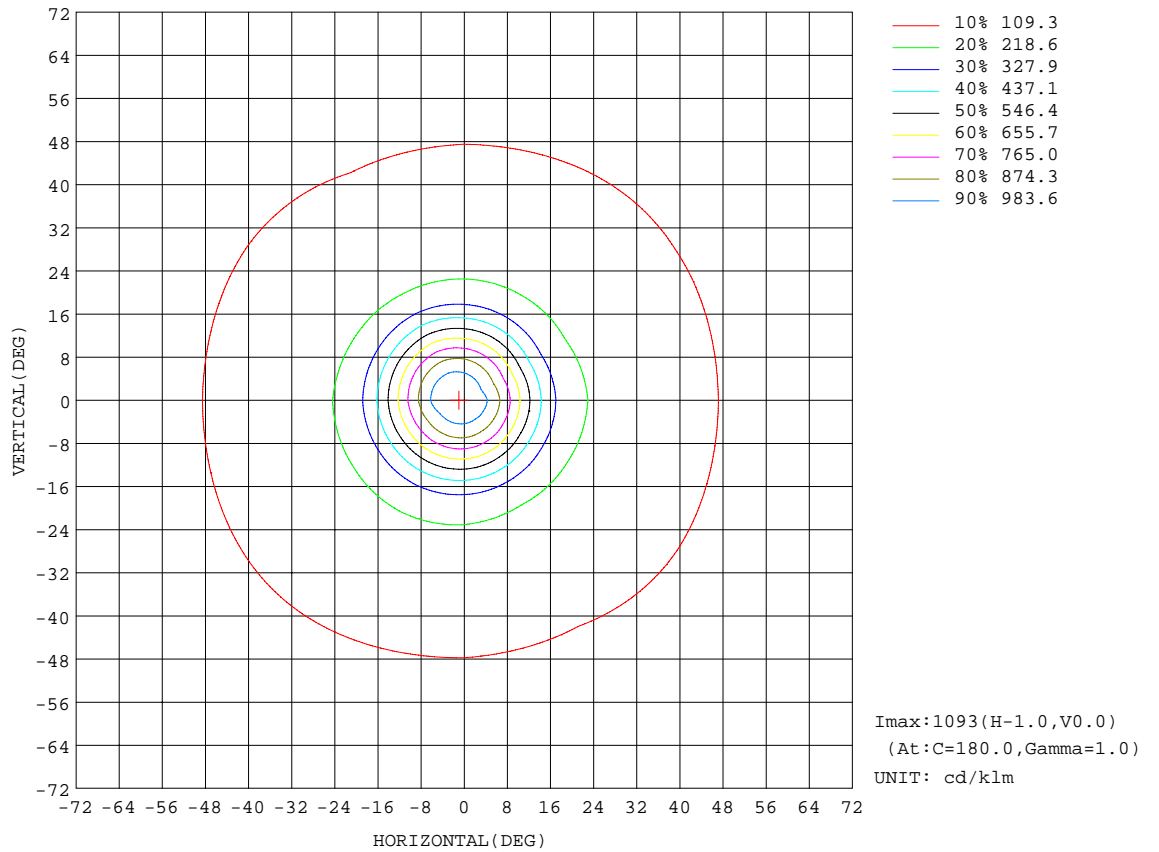
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	41	37	34	41	36	34	40	36	34	31
0.80	46	42	39	46	42	39	45	41	39	36
1.00	50	46	43	49	46	43	48	46	43	40
1.25	53	49	47	52	49	47	51	48	46	43
1.50	55	51	49	54	51	49	53	50	48	45
2.00	57	54	52	56	54	52	55	53	51	48
2.50	58	56	54	57	55	53	56	54	52	49
3.00	59	57	55	58	56	55	56	55	53	50
4.00	61	59	57	59	58	56	57	56	55	51
5.00	61	60	58	60	59	58	58	57	56	52
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

$\gamma$  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: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



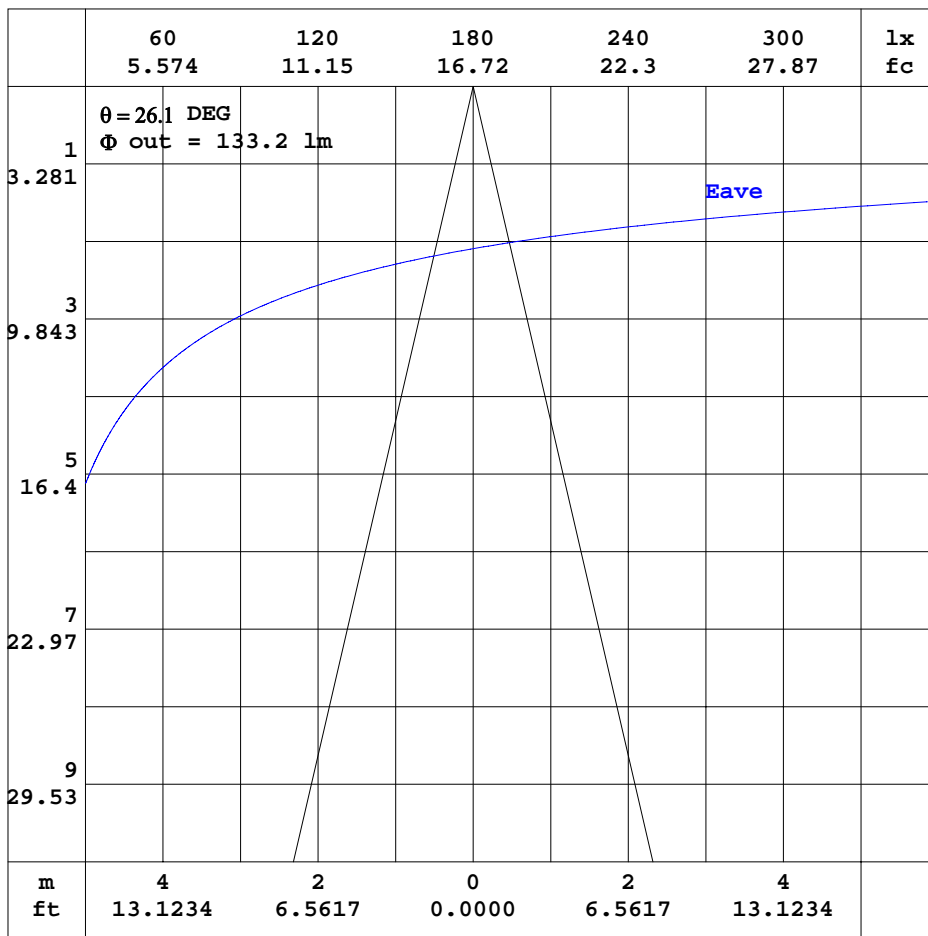
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

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 CURVES**

NAME: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



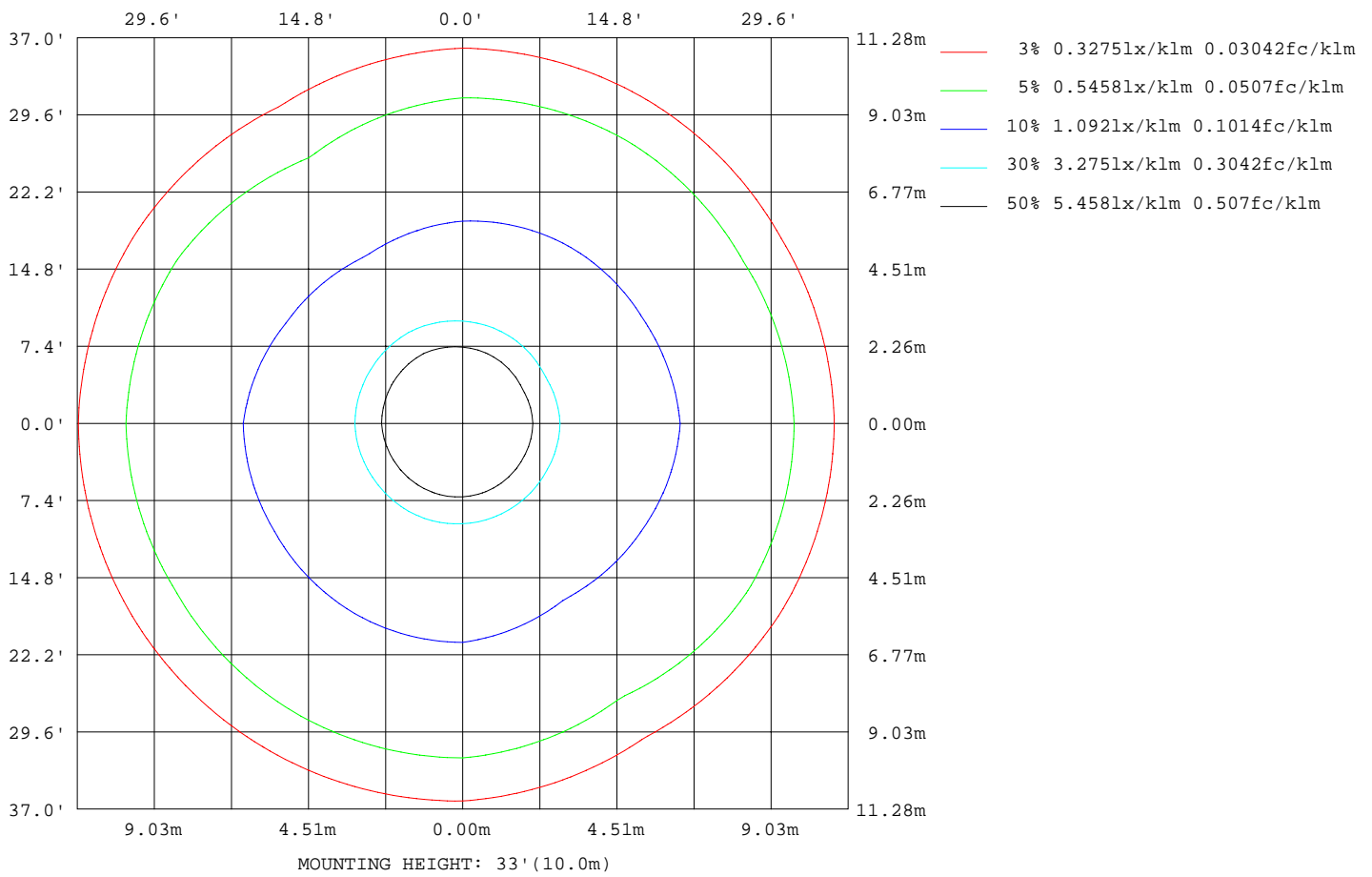
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

$\gamma$  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:

**ISOLUX DIAGRAM**

NAME: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

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: AR70F-7W-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

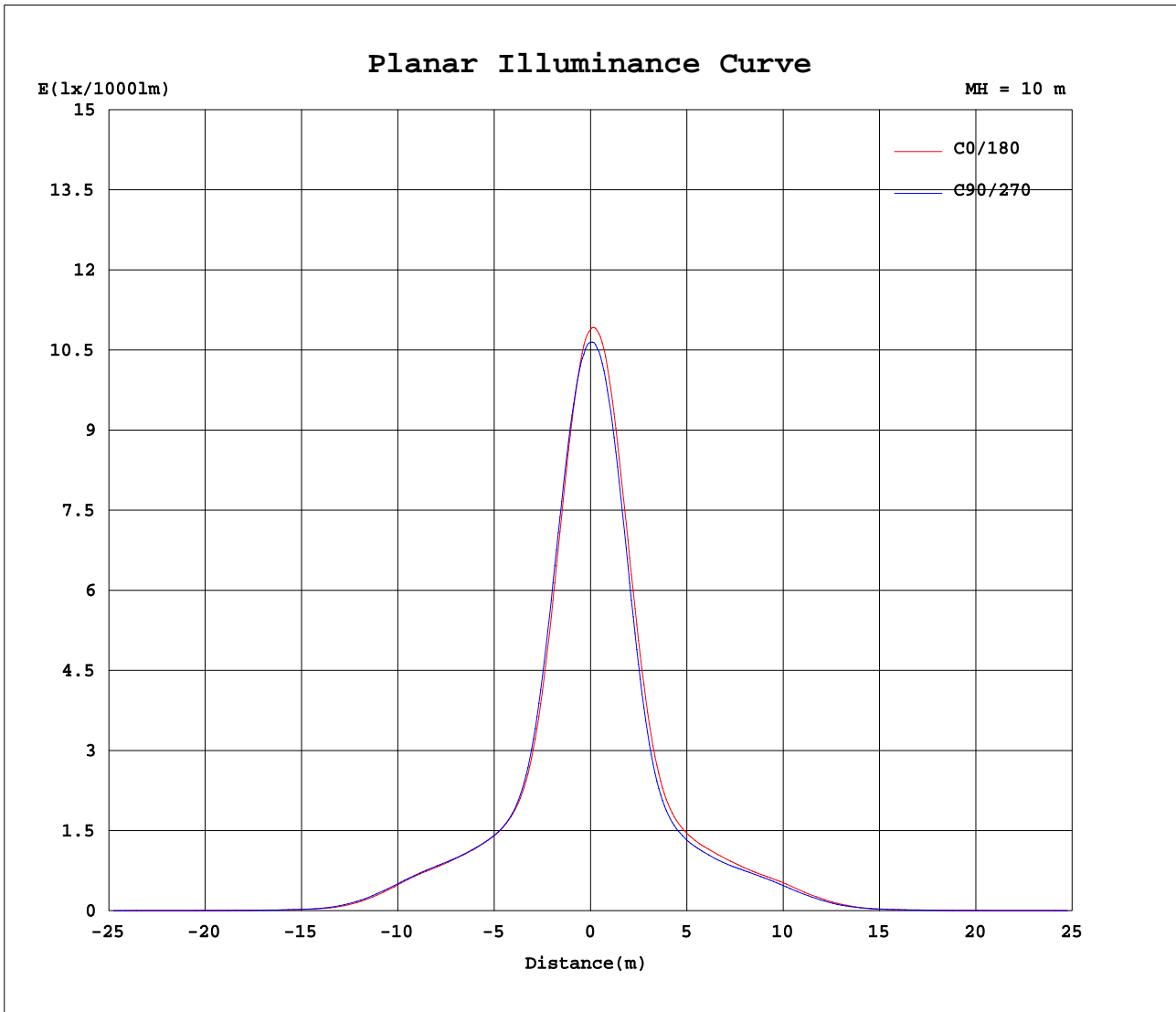
AvgL	cd/m2
L_0~180(65)av	147
L_0~180(75)av	26
L_0~180(85)av	5
L_90~270(65)av	138
L_90~270(75)av	27
L_90~270(85)av	4
L_45(65)av	136
L_45(75)av	27
L_45(85)av	3

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2021-12-10

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: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2021-12-10

$\gamma$  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:

