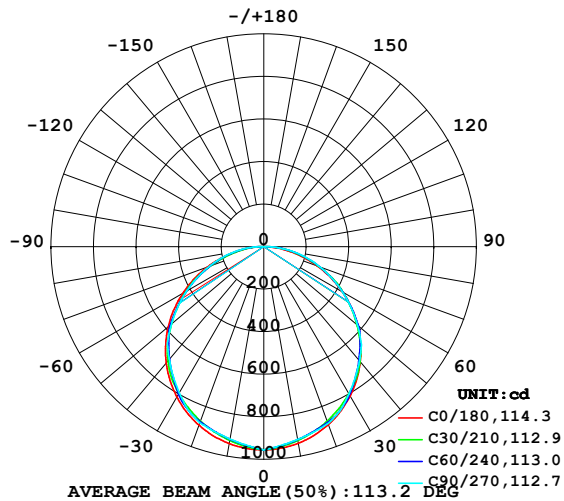


LUMINAIRE PHOTOMETRIC TEST REPORT

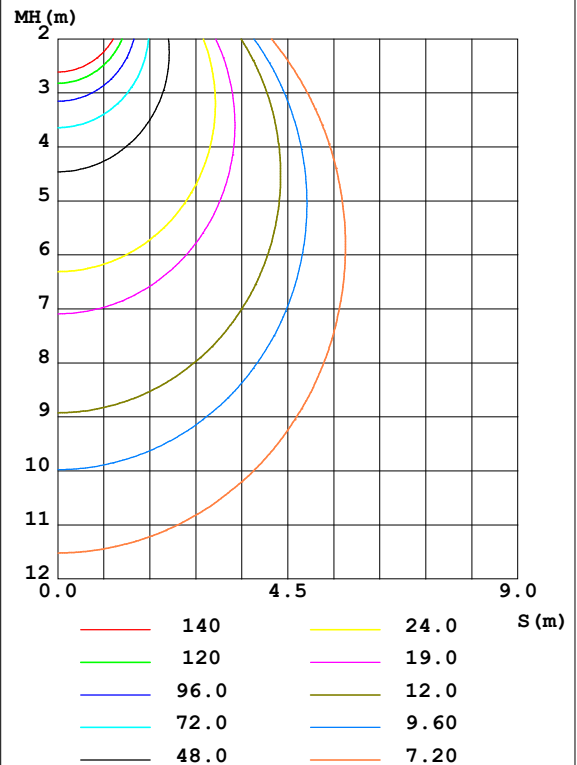
Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 139.65 lm/W			
MODEL		I _{max} (cd)	955.6	S/MH (C0/180)	1.27
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2771.4	η UP,DN (C0-180)	0.0,50.5
NOMINAL FLUX(lm)	2771.36	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down (%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

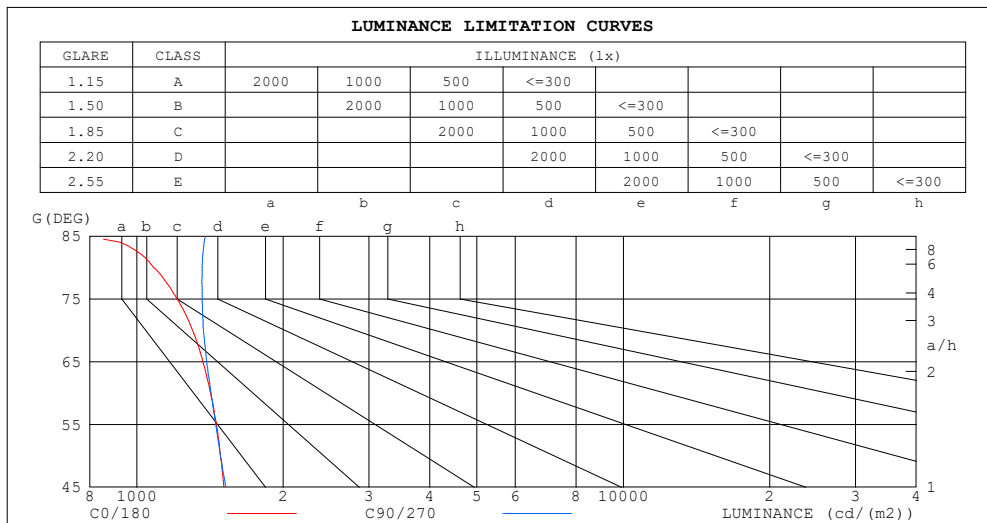
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	938.7	921.8	920.2	923.0	940.0	921.3	918.1	920.2	0- 10	89.34	89.34	3.22,3.22
20	890.2	874.6	884.9	876.2	892.5	872.7	880.6	870.4	10- 20	255.1	344.4	12.4,12.4
30	812.3	807.3	800.7	809.6	816.7	803.8	794.4	801.2	20- 30	389.1	733.5	26.5,26.5
40	706.4	697.5	700.3	700.3	713.9	692.1	692.1	688.7	30- 40	470.2	1204	43.4,43.4
50	576.3	574.6	576.2	578.3	586.0	567.3	566.9	562.7	40- 50	492.1	1696	61.2,61.2
60	427.5	432.8	428.5	435.9	440.5	422.5	418.7	418.2	50- 60	447.6	2143	77.3,77.3
70	268.5	279.3	282.8	280.9	283.5	265.3	273.5	262.8	60- 70	346.2	2490	89.8,89.8
80	113.5	137.7	142.7	137.9	128.6	126.9	137.1	125.8	70- 80	212.1	2702	97.5,97.5
90	0.6204	3.496	2.658	2.720	0.8031	0.7173	0.6951	0.6938	80- 90	69.62	2771	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		

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		



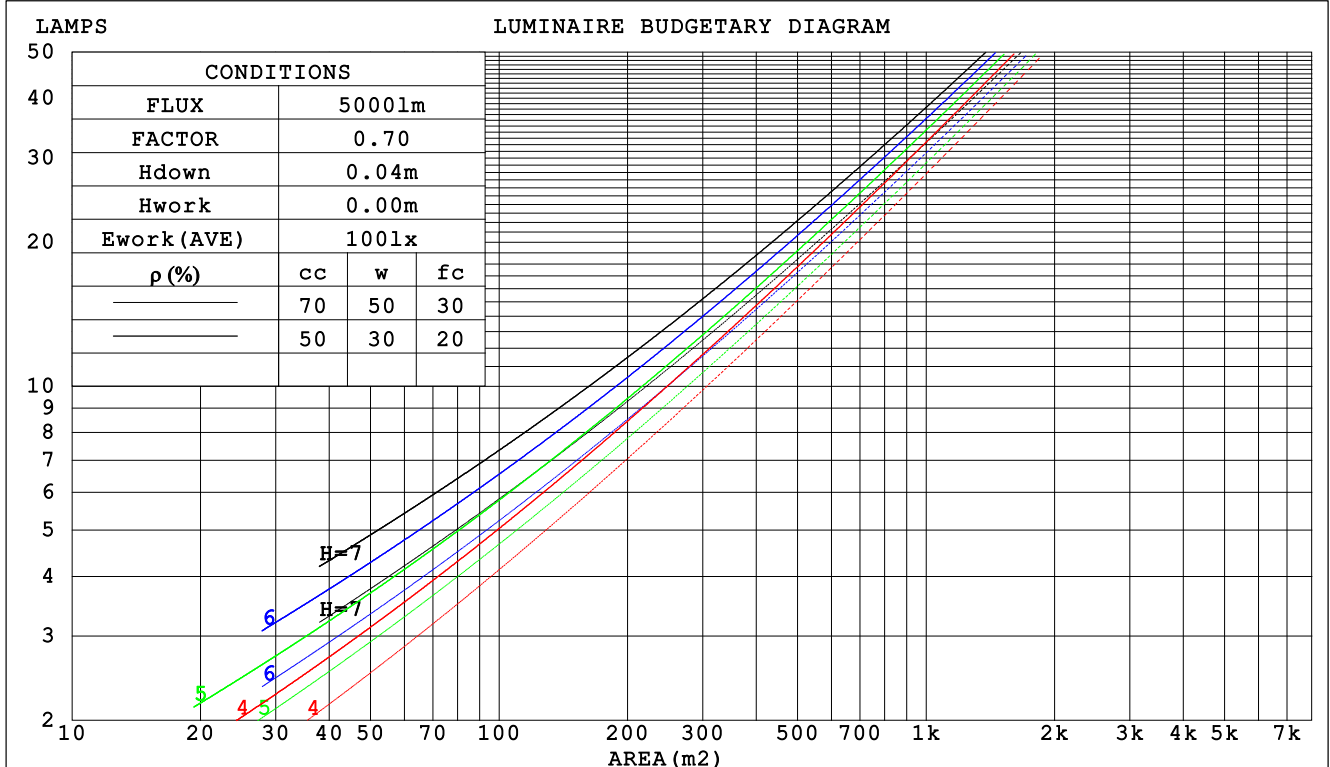
H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz		
Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		

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	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.57
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.50	.44	.39	.37
7.0	.51	.42	.35	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.37	.30	.25	.36	.30	.25	.23



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz											
Lamp Flux:2771.36x1 lm											
NAME: FPB-22-3500L-AOK-L-G2											
MFR.: EVERFINE											

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	.320	.182	.058	.313	.179	.057	.300	.172	.055	.288	.166	.053	.276	.160	.052	
2.0	.299	.164	.050	.292	.161	.050	.280	.156	.048	.270	.151	.047	.260	.147	.046	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.137	.042	.240	.133	.041	
4.0	.253	.131	.039	.248	.130	.038	.239	.127	.038	.230	.124	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.117	.034	.221	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.216	.108	.031	.212	.107	.031	.205	.105	.031	.198	.103	.030	.192	.101	.030	
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.185	.095	.028	.179	.093	.027	
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.088	.025	.168	.086	.025	
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.021	

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	.181	.156	.134	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.112	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz										
Lamp Flux:2771.36x1 lm										
NAME: FPB-22-3500L-AOK-L-G2										
MFR.: EVERFINE										
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	10.6	12.2	10.9	12.4	12.6	10.7	12.2	10.9	12.4	12.6
3H	12.2	13.6	12.5	13.9	14.1	12.3	13.7	12.6	14.0	14.2
4H	12.9	14.2	13.2	14.5	14.7	13.0	14.4	13.4	14.6	14.9
6H	13.3	14.6	13.7	14.9	15.2	13.7	14.9	14.0	15.2	15.5
8H	13.5	14.7	13.8	15.0	15.3	13.9	15.1	14.2	15.4	15.7
12H	13.5	14.7	13.9	15.0	15.3	14.1	15.3	14.4	15.6	15.9
4H 2H	11.3	12.6	11.6	12.9	13.2	11.3	12.7	11.6	12.9	13.2
3H	13.1	14.3	13.4	14.6	14.9	13.1	14.3	13.5	14.6	14.9
4H	13.9	14.9	14.2	15.3	15.6	14.0	15.1	14.4	15.4	15.8
6H	14.5	15.4	14.9	15.8	16.2	14.8	15.8	15.2	16.1	16.5
8H	14.7	15.6	15.1	15.9	16.3	15.1	16.0	15.5	16.4	16.7
12H	14.8	15.6	15.2	16.0	16.4	15.3	16.2	15.8	16.6	17.0
8H 4H	14.2	15.1	14.6	15.5	15.8	14.3	15.2	14.7	15.6	16.0
6H	15.0	15.8	15.4	16.2	16.6	15.3	16.0	15.7	16.4	16.9
8H	15.3	16.0	15.8	16.4	16.9	15.7	16.4	16.2	16.8	17.3
12H	15.5	16.1	16.0	16.6	17.0	16.1	16.6	16.5	17.1	17.6
12H 4H	14.2	15.1	14.7	15.4	15.9	14.4	15.2	14.8	15.6	16.0
6H	15.1	15.8	15.6	16.2	16.7	15.4	16.0	15.8	16.5	16.9
8H	15.5	16.1	16.0	16.5	17.0	15.8	16.4	16.3	16.9	17.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 2771 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.5)
Area: 0.603098 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz		
Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		

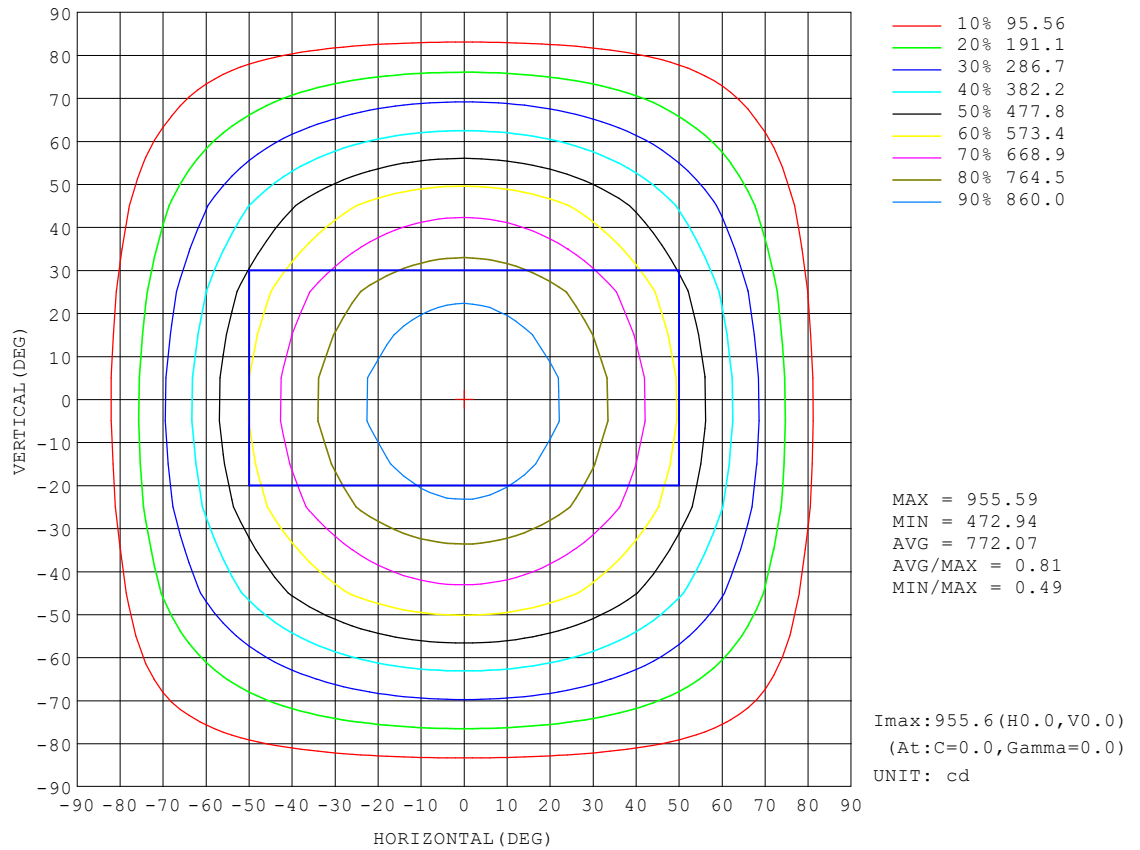
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	57	74	63	56	72	65	56	48
1.25	82	72	64	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	99	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	98	94	85
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 2.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-12-13

$V(B)$ Range:-90 - 90DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:6.300m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		

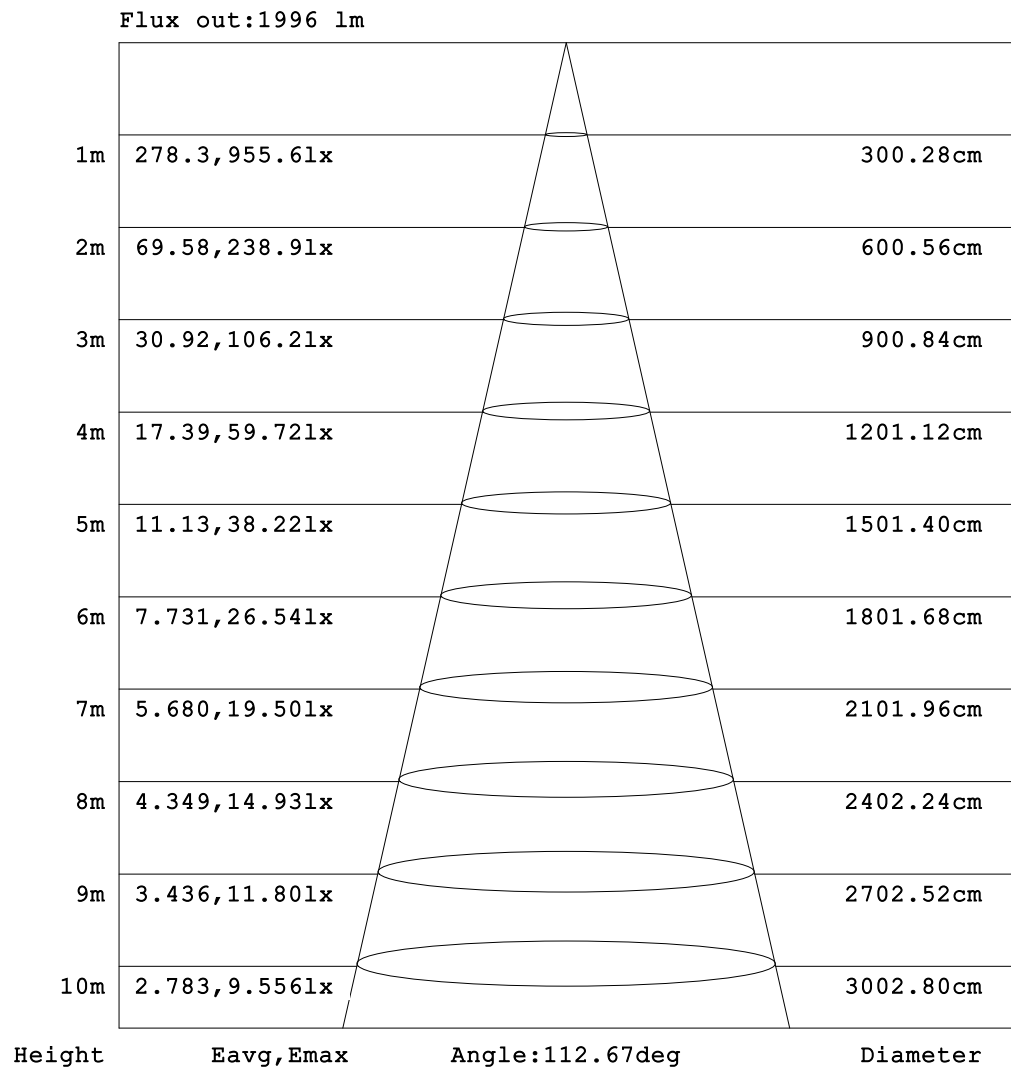


H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		



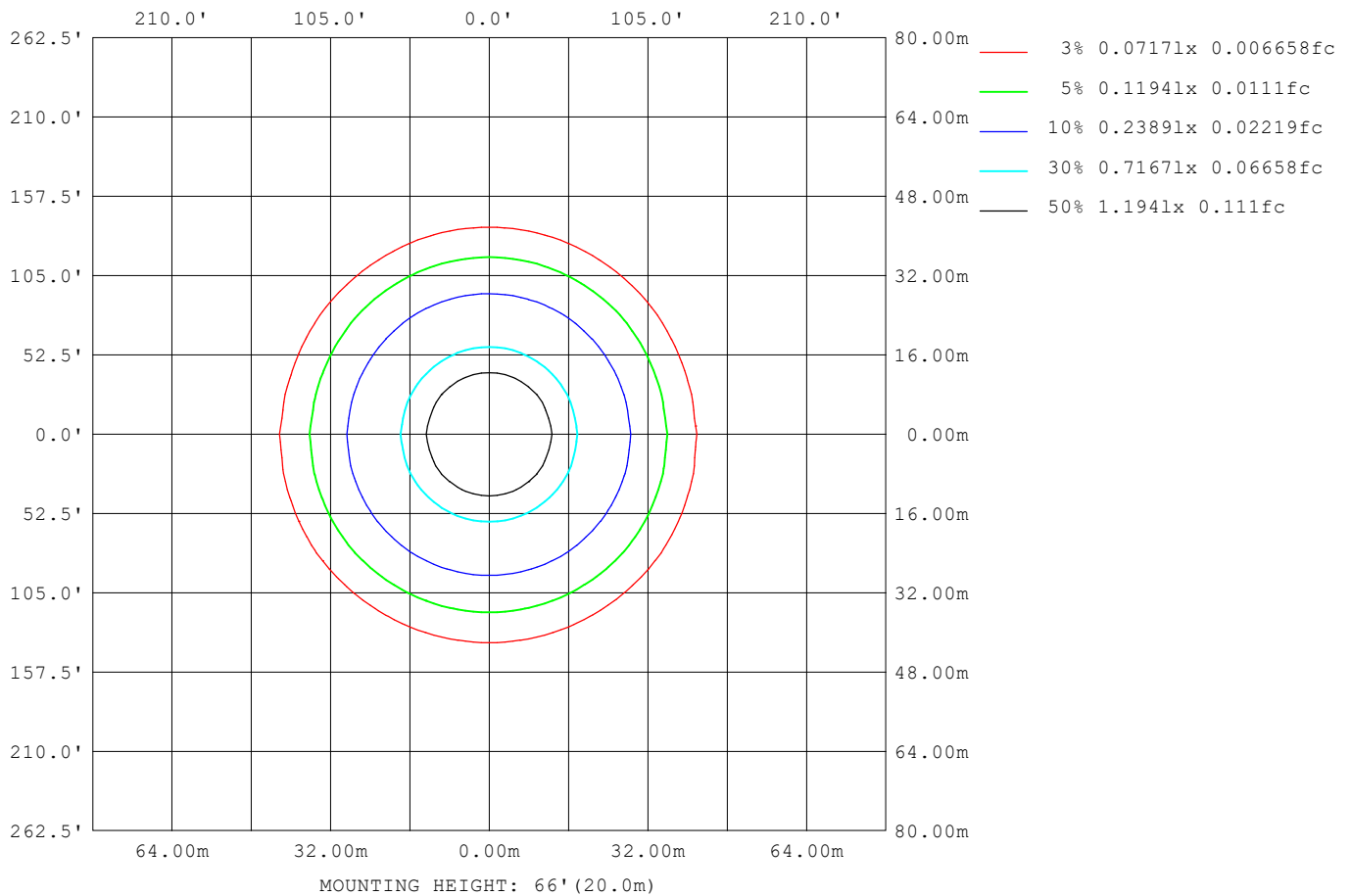
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:120.36V I:0.1657A P:19.845W PF:0.9951 Freq:59.98Hz Lamp Flux:2771.36x1 lm		
NAME: FPB-22-3500L-AOK-L-G2		
MFR.: EVERFINE		

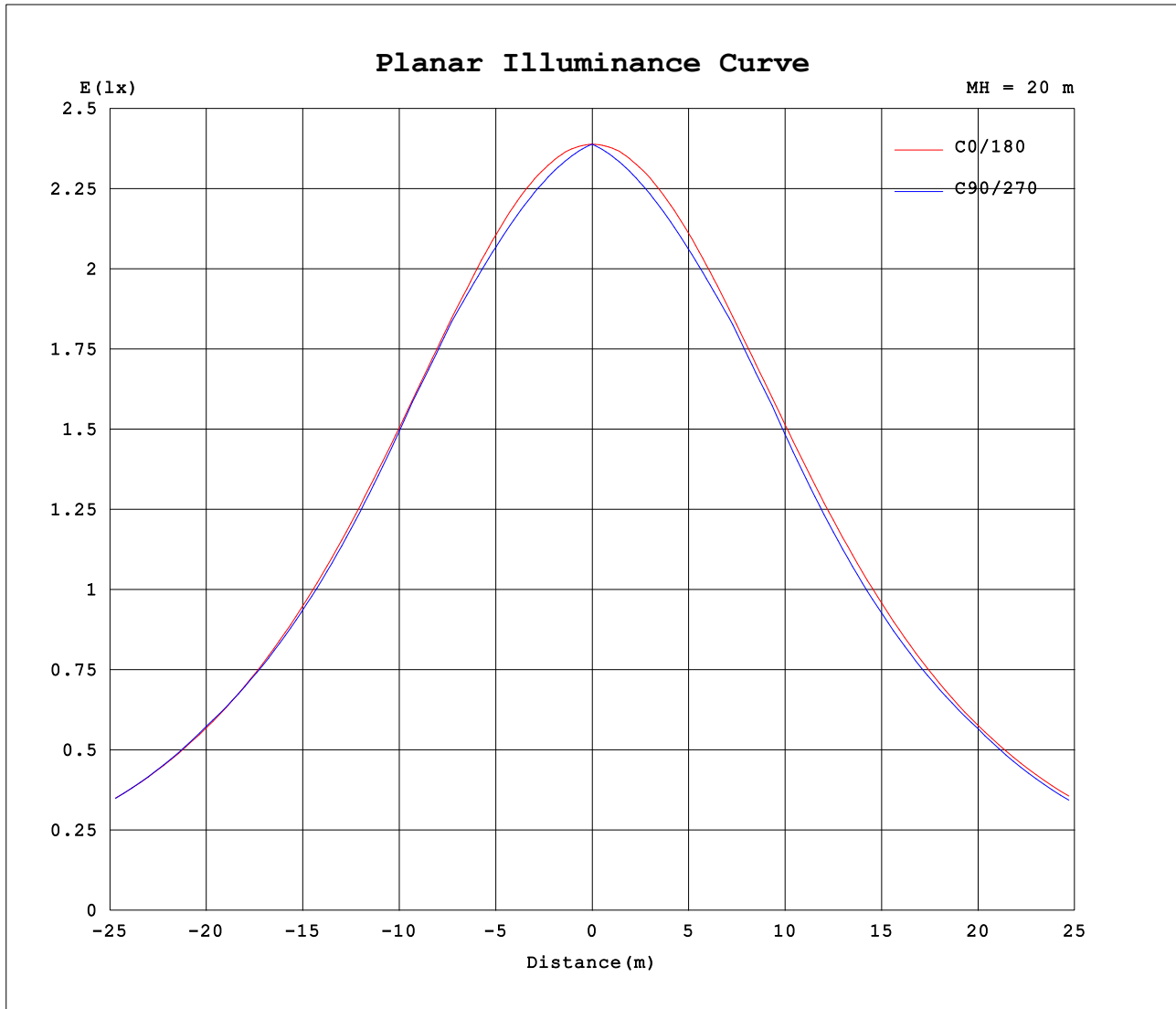
AvgL	cd/m2
L_0~180 (65) av	1395
L_0~180 (75) av	1261
L_0~180 (85) av	921
L_90~270 (65) av	1372
L_90~270 (75) av	1339
L_90~270 (85) av	1347
L_45 (65) av	1368
L_45 (75) av	1277
L_45 (85) av	1267

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-13

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

```
V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:
```

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:

```
V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:
```

```
V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=1.0000]
Remarks:
```