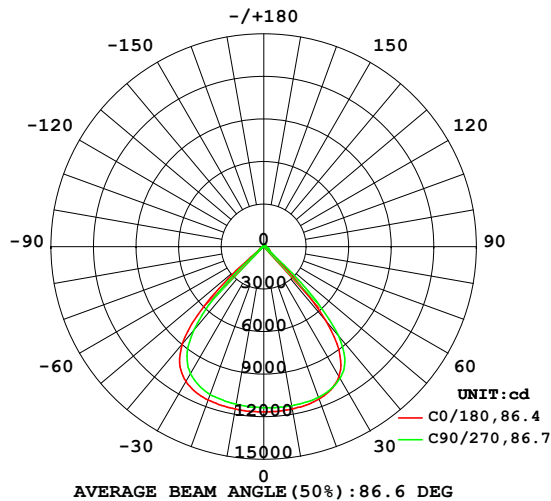


LUMINAIRE PHOTOMETRIC TEST REPORT

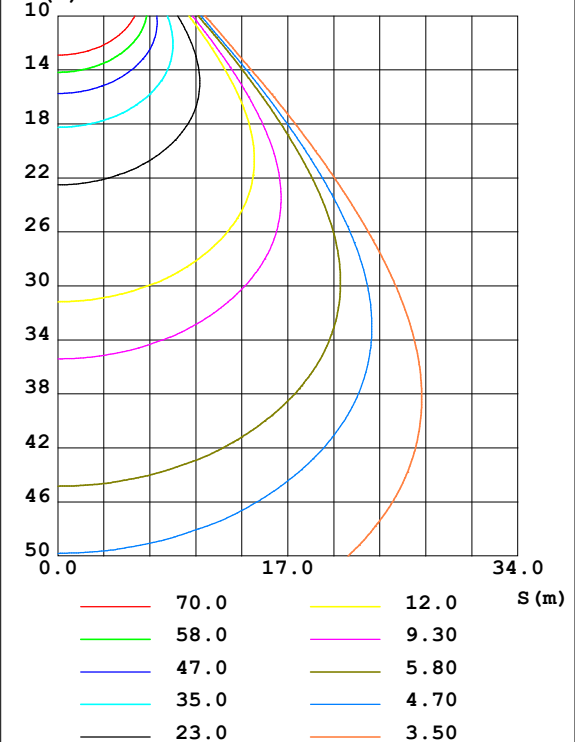
Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.93 lm/W			
MODEL		I _{max} (cd)	11662	S/MH (C0/180)	1.32
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	20154	η UP,DN(C0-180)	1.2,47.6
NOMINAL FLUX(lm)	20153.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,50.0
LAMPS INSIDE	1	η up (%)	2.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down (%)	97.7	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1163	1139	1163	1127					0- 10	1098	1098	5.45, 5.45
20	1143	1131	1150	1109					10- 20	3237	4334	21.5, 21.5
30	1060	1074	1099	1035					20- 30	5114	9448	46.9, 46.9
40	677.8	818.2	891.6	766.8					30- 40	6004	15452	76.7, 76.7
50	62.62	93.83	179.5	82.95					40- 50	3291	18743	93, 93
60	38.45	41.49	32.46	26.73					50- 60	453.3	19197	95.3, 95.3
70	22.75	24.82	19.25	15.06					60- 70	270.4	19467	96.6, 96.6
80	9.195	10.94	9.195	6.946					70- 80	152.4	19620	97.3, 97.3
90	4.881	5.141	3.575	3.290					80- 90	65.02	19685	97.7, 97.7
100	4.133	4.147	3.927	4.057					90-100	44.06	19729	97.9, 97.9
110	5.068	4.745	5.083	5.226					100-110	47.36	19776	98.1, 98.1
120	6.516	6.103	6.307	6.411					110-120	56.25	19832	98.4, 98.4
130	8.206	7.713	7.728	8.059					120-130	63.31	19896	98.7, 98.7
140	10.42	9.806	10.22	10.46					130-140	69.89	19965	99.1, 99.1
150	12.49	11.92	12.12	12.17					140-150	70.27	20036	99.4, 99.4
160	14.35	13.82	13.98	14.00					150-160	60.39	20096	99.7, 99.7
170	15.94	15.52	16.27	16.04					160-170	42.29	20138	99.9, 99.9
180	16.78	16.60	17.10	16.37					170-180	15.58	20154	100, 100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT: lm		

Conical surface Flux(90deg): 17744 lm

%lum = 88.0%

%lamp = 88.0%

Conical surface Flux(120deg): 19197 lm

%lum = 95.3%

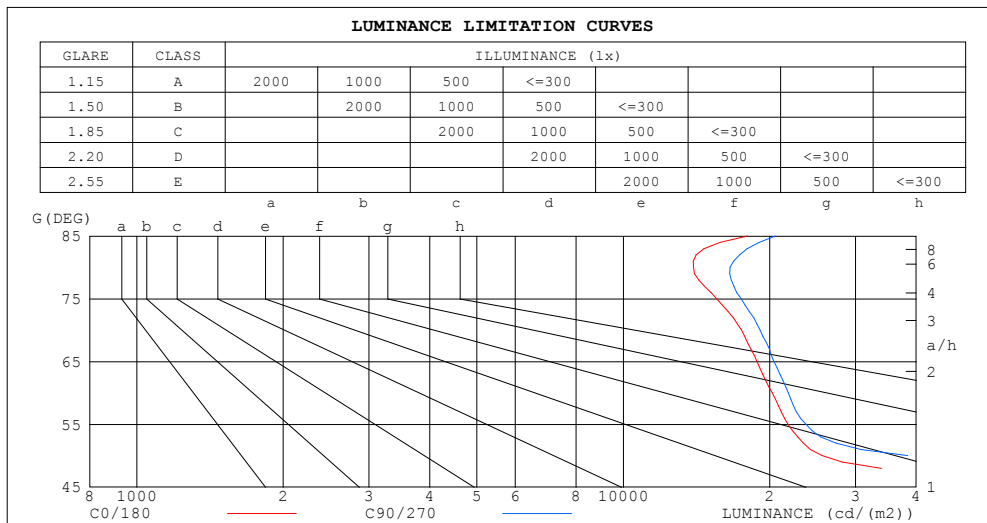
%lamp = 95.3%

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18026	20552
80	13935	16585
75	15561	17485
70	17507	19100
65	18825	20399
60	20239	21839
55	21811	23727
50	25636	38413
45	92778	166471

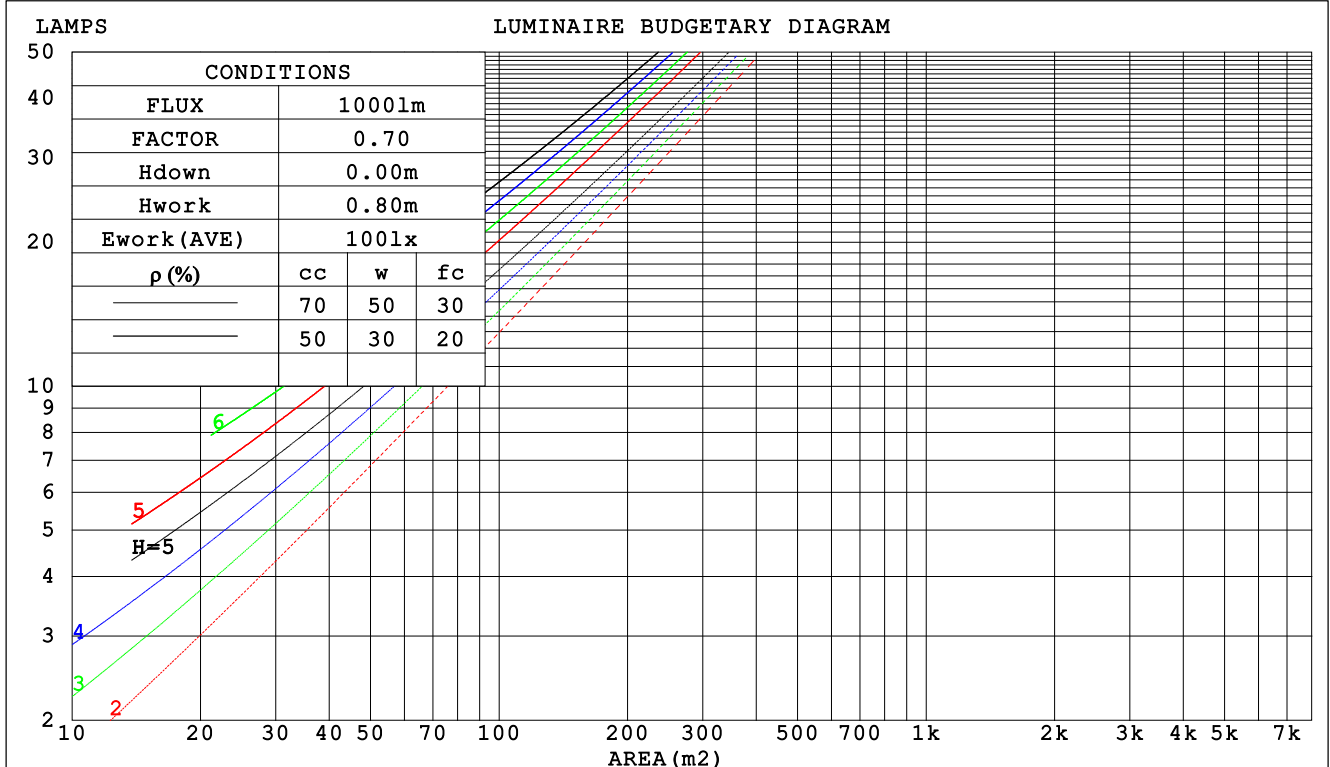
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.08	1.06	1.03	1.06	1.03	1.01	1.02	.99	.97	.97	.96	.94	.94	.92	.91	.89
2.0	.99	.94	.90	.97	.93	.89	.93	.90	.87	.90	.87	.85	.87	.84	.82	.80
3.0	.91	.85	.80	.89	.84	.79	.86	.81	.78	.83	.79	.76	.80	.77	.75	.73
4.0	.83	.76	.71	.82	.76	.71	.79	.74	.70	.77	.72	.69	.75	.71	.68	.66
5.0	.76	.69	.64	.75	.69	.64	.73	.67	.63	.71	.66	.62	.69	.65	.61	.60
6.0	.70	.63	.58	.69	.63	.58	.67	.62	.57	.66	.60	.57	.64	.60	.56	.54
7.0	.65	.58	.53	.64	.57	.53	.62	.56	.52	.61	.56	.52	.59	.55	.51	.49
8.0	.60	.53	.48	.59	.53	.48	.58	.52	.48	.57	.51	.47	.55	.50	.47	.45
9.0	.56	.49	.44	.55	.48	.44	.54	.48	.44	.53	.47	.43	.52	.47	.43	.42
10.0	.52	.45	.41	.51	.45	.40	.50	.44	.40	.49	.44	.40	.48	.43	.40	.38



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.:		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	.211	.120	.038	.203	.116	.037	.189	.109	.035	.176	.102	.033	.164	.095	.031		
2.0	.203	.111	.034	.197	.108	.033	.185	.103	.032	.174	.097	.030	.163	.092	.029		
3.0	.194	.103	.031	.189	.101	.030	.178	.096	.029	.168	.092	.028	.159	.088	.027		
4.0	.185	.096	.028	.180	.094	.028	.171	.091	.027	.162	.087	.026	.154	.084	.025		
5.0	.176	.090	.026	.172	.088	.026	.163	.085	.025	.156	.082	.024	.148	.079	.024		
6.0	.168	.084	.024	.164	.083	.024	.156	.080	.023	.149	.078	.023	.143	.075	.022		
7.0	.160	.079	.022	.156	.078	.022	.149	.076	.022	.143	.073	.021	.137	.071	.021		
8.0	.152	.074	.021	.149	.073	.021	.143	.071	.020	.137	.070	.020	.132	.068	.020		
9.0	.145	.070	.020	.142	.069	.019	.137	.068	.019	.132	.066	.019	.127	.064	.019		
10.0	.139	.067	.018	.136	.066	.018	.131	.064	.018	.126	.063	.018	.122	.061	.018		

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	.208	.208	.208	.178	.178	.178	.121	.121	.121	.070	.070	.070	.022	.022	.022	
1.0	.191	.175	.160	.164	.150	.138	.112	.103	.095	.064	.060	.055	.021	.019	.018	
2.0	.178	.150	.127	.153	.129	.110	.105	.090	.076	.060	.052	.045	.019	.017	.015	
3.0	.168	.132	.103	.144	.114	.089	.099	.079	.063	.057	.046	.037	.018	.015	.012	
4.0	.159	.118	.086	.137	.102	.075	.094	.071	.053	.054	.042	.031	.017	.014	.010	
5.0	.152	.107	.074	.130	.092	.064	.090	.064	.045	.052	.038	.027	.017	.012	.009	
6.0	.145	.098	.064	.125	.085	.056	.086	.059	.039	.050	.035	.023	.016	.011	.008	
7.0	.139	.091	.057	.120	.079	.050	.083	.055	.035	.048	.032	.021	.016	.011	.007	
8.0	.134	.085	.051	.115	.074	.045	.080	.052	.032	.046	.030	.019	.015	.010	.006	
9.0	.129	.080	.047	.111	.069	.041	.077	.049	.029	.045	.029	.017	.014	.009	.006	
10.0	.124	.076	.044	.107	.066	.038	.074	.046	.027	.043	.027	.016	.014	.009	.005	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 9.200m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm										
NAME:					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	15.2	16.3	15.5	16.5	16.8	15.9	17.0	16.2	17.3	17.5
3H	15.1	16.2	15.4	16.4	16.7	15.8	16.9	16.1	17.1	17.4
4H	15.1	16.1	15.4	16.3	16.6	15.8	16.8	16.1	17.0	17.3
6H	15.1	16.0	15.4	16.3	16.6	15.8	16.7	16.1	17.0	17.3
8H	15.0	15.9	15.4	16.2	16.5	15.7	16.6	16.1	16.9	17.2
12H	15.0	15.8	15.4	16.2	16.5	15.7	16.6	16.1	16.9	17.2
4H 2H	15.0	15.9	15.3	16.2	16.5	15.7	16.6	16.0	16.9	17.2
3H	15.0	15.8	15.3	16.1	16.4	15.6	16.5	16.0	16.8	17.1
4H	15.0	15.7	15.4	16.1	16.4	15.7	16.4	16.0	16.8	17.1
6H	15.0	15.6	15.4	16.0	16.4	15.7	16.3	16.1	16.7	17.1
8H	15.0	15.6	15.4	16.0	16.4	15.7	16.3	16.1	16.7	17.1
12H	15.0	15.5	15.4	15.9	16.4	15.7	16.2	16.1	16.6	17.1
8H 4H	14.9	15.5	15.3	15.9	16.3	15.6	16.2	16.0	16.6	17.0
6H	14.9	15.4	15.4	15.9	16.3	15.6	16.1	16.1	16.5	17.0
8H	15.0	15.4	15.4	15.9	16.3	15.6	16.1	16.1	16.5	17.0
12H	15.0	15.4	15.5	15.9	16.4	15.7	16.1	16.2	16.5	17.1
12H 4H	14.9	15.4	15.3	15.8	16.3	15.5	16.1	16.0	16.5	16.9
6H	14.9	15.3	15.4	15.8	16.3	15.6	16.0	16.1	16.5	17.0
8H	14.9	15.3	15.5	15.8	16.3	15.6	16.0	16.1	16.5	17.0
Variations with the observer position at spacings:										
S = 1.0H	+ 2.2 / - 5.9					+ 2.2 / - 5.9				
1.5H	+ 4.3 / - 5.9					+ 3.9 / - 6.2				
2.0H	+ 4.7 / - 1.5					+ 6.8 / - 2.8				

CIE Pub.117, 20154 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.4)
Area: 0.038 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

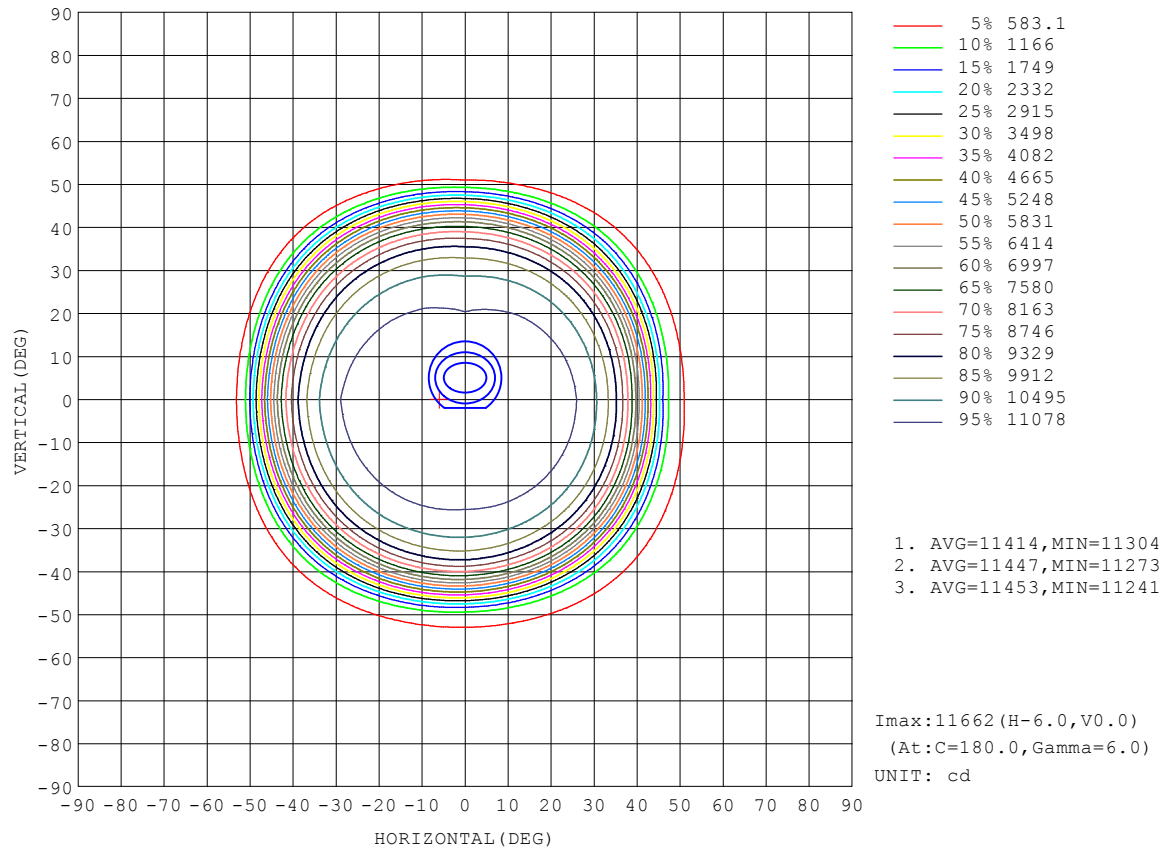
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	76	69	64	75	68	64	59
0.80	86	78	73	85	78	73	83	77	73	68
1.00	92	85	80	91	84	80	89	84	79	74
1.25	97	91	86	96	90	86	94	88	85	79
1.50	101	95	90	99	94	90	97	92	88	83
2.00	105	99	95	103	98	95	100	96	93	87
2.50	107	102	98	105	101	97	101	98	95	88
3.00	109	105	101	107	103	100	103	100	97	90
4.00	111	108	105	109	106	103	105	102	100	92
5.00	113	110	107	110	108	105	106	104	102	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

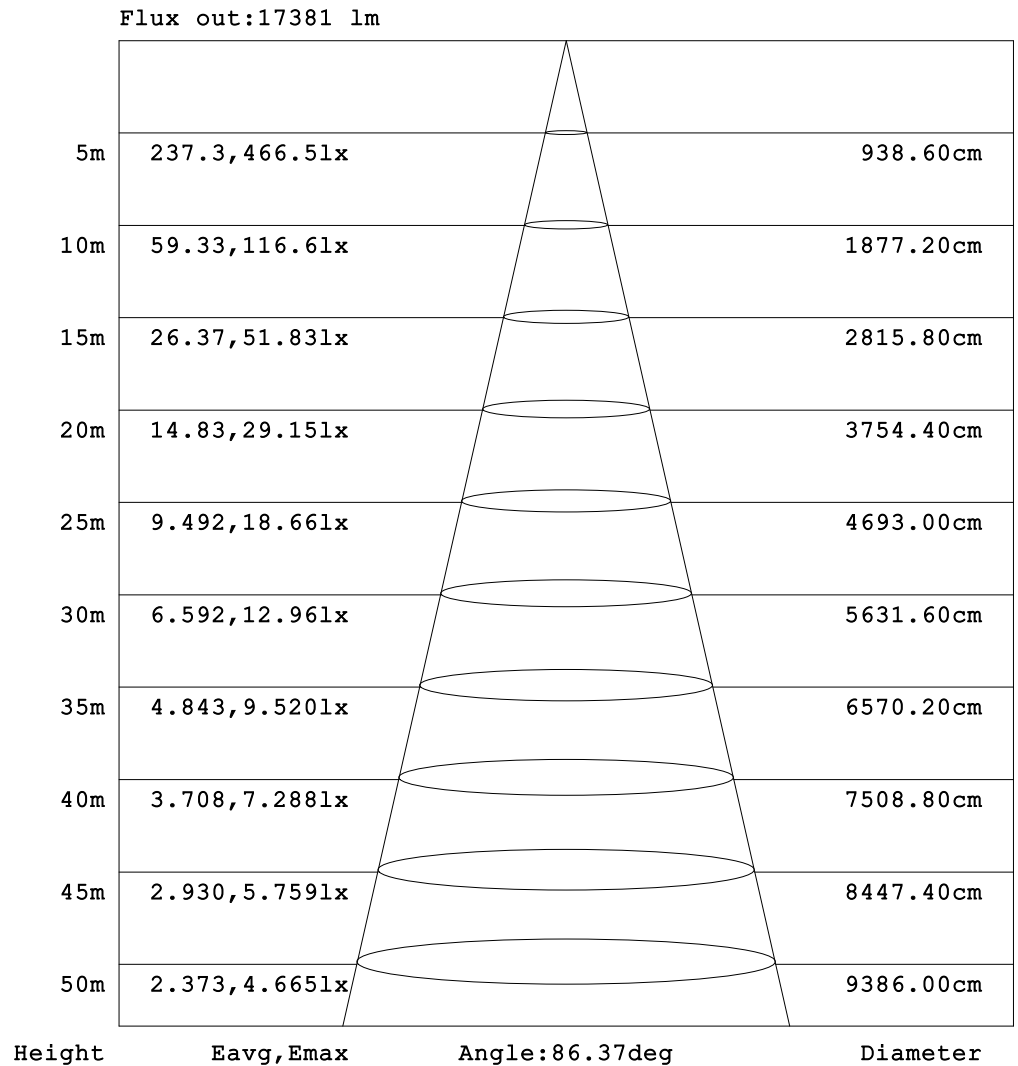


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

AAI Figure

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



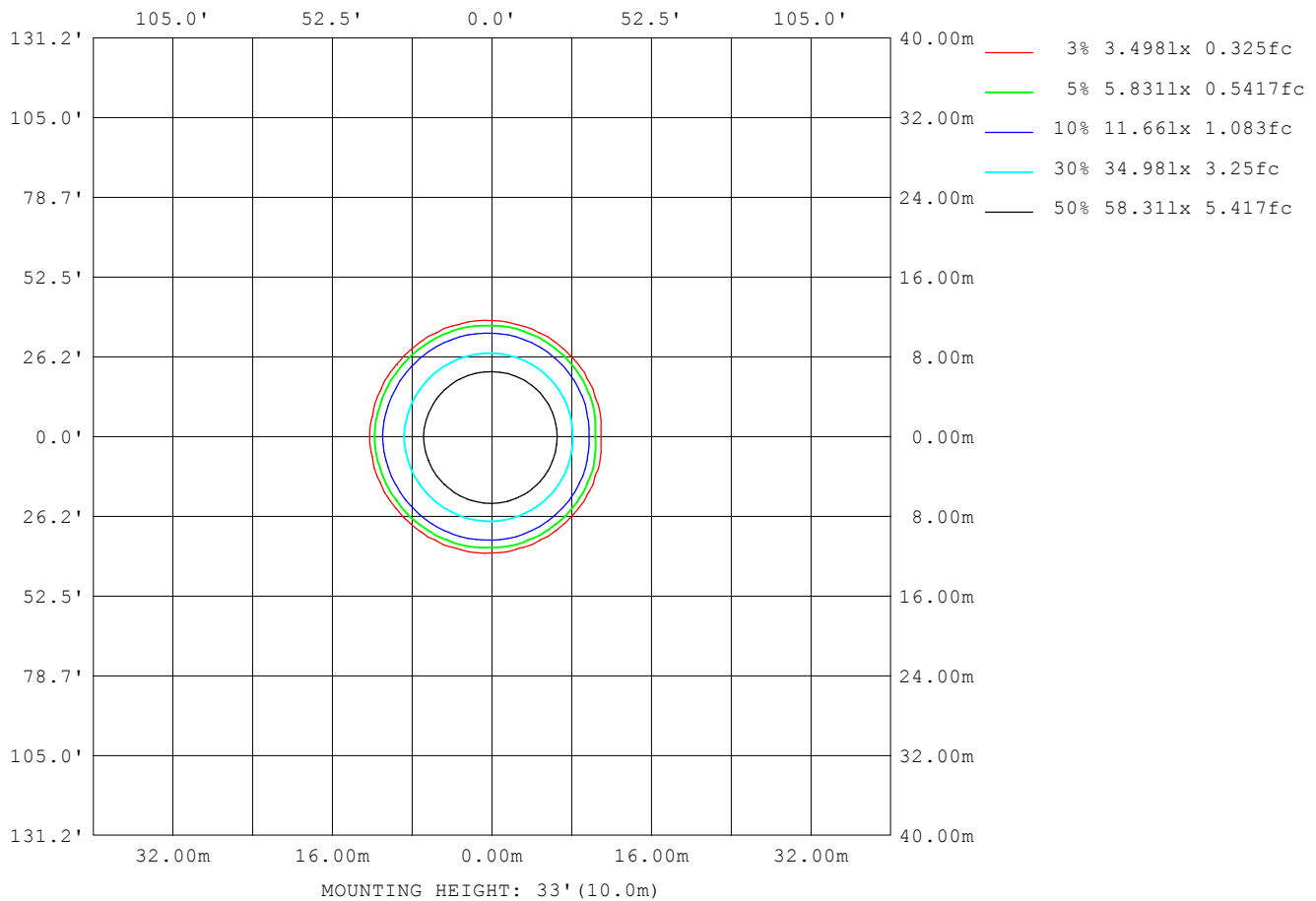
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

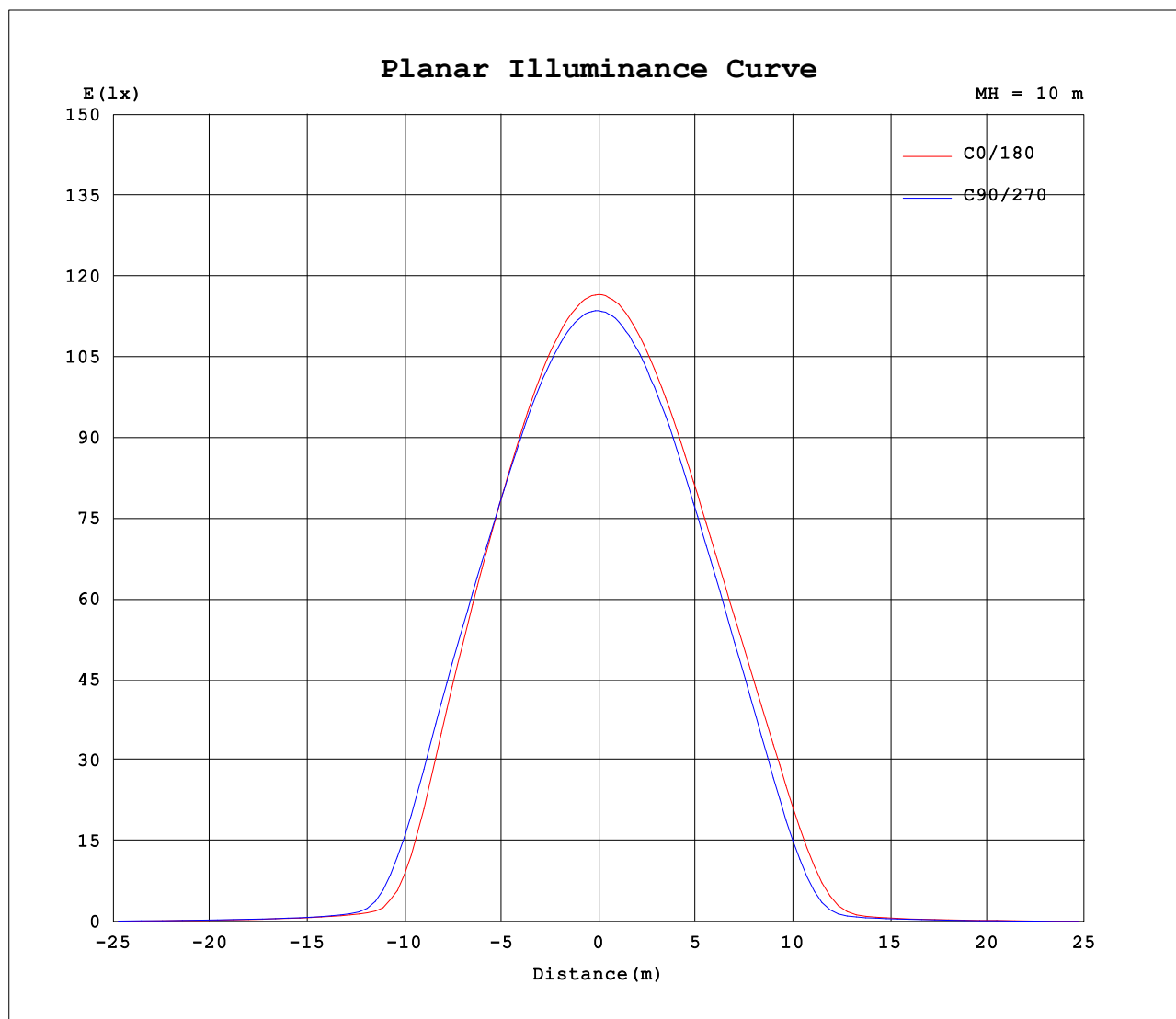
AvgL	cd/m2
L_0~180 (65) av	17309
L_0~180 (75) av	14966
L_0~180 (85) av	16945
L_90~270 (65) av	16537
L_90~270 (75) av	14102
L_90~270 (85) av	16862
L_45 (65) av	16732
L_45 (75) av	14389
L_45 (85) av	16826

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2024-11-23

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:234.84V I:0.8424A P:195.80W PF:0.9898 Freq:49.97Hz Lamp Flux:20153.9x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: ×10cd

C (DEG) γ (DEG)	0	90	180	270															
0	1166	1136	1166	1136															
5	1166	1138	1166	1135															
10	1163	1139	1163	1127															
15	1158	1137	1159	1120															
20	1143	1131	1150	1109															
25	1116	1111	1133	1082															
30	1060	1074	1099	1035															
35	939	998	1031	944															
40	678	818	892	767															
45	249	447	602	427															
50	62.6	93.8	180	83.0															
55	47.5	51.7	44.1	35.1															
60	38.5	41.5	32.5	26.7															
65	30.2	32.8	25.4	20.4															
70	22.8	24.8	19.2	15.1															
75	15.3	17.2	14.1	10.5															
80	9.20	10.9	9.20	6.95															
85	5.97	6.81	5.25	4.36															
90	4.88	5.14	3.57	3.29															
95	4.38	4.53	3.50	3.57															
100	4.13	4.15	3.93	4.06															
105	4.46	4.24	4.47	4.62															
110	5.07	4.74	5.08	5.23															
115	5.76	5.39	5.70	5.83															
120	6.52	6.10	6.31	6.41															
125	7.32	6.87	6.93	7.05															
130	8.21	7.71	7.73	8.06															
135	9.23	8.66	8.96	9.34															
140	10.4	9.81	10.2	10.5															
145	11.5	10.9	11.2	11.3															
150	12.5	11.9	12.1	12.2															
155	13.4	12.9	13.0	13.1															
160	14.3	13.8	14.0	14.0															
165	15.2	14.7	15.1	15.1															
170	15.9	15.5	16.3	16.0															
175	16.5	16.2	16.9	16.4															
180	16.8	16.6	17.1	16.4															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2024-11-23

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks: