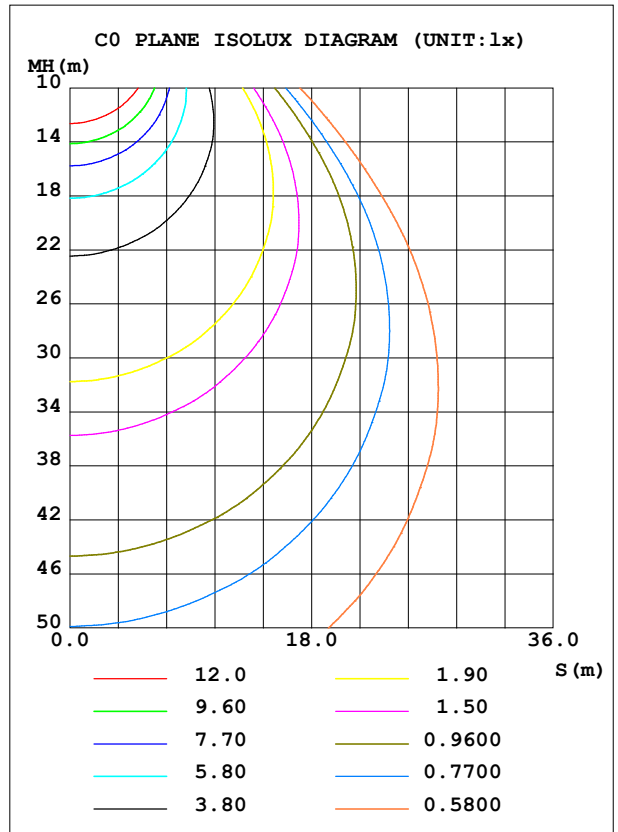
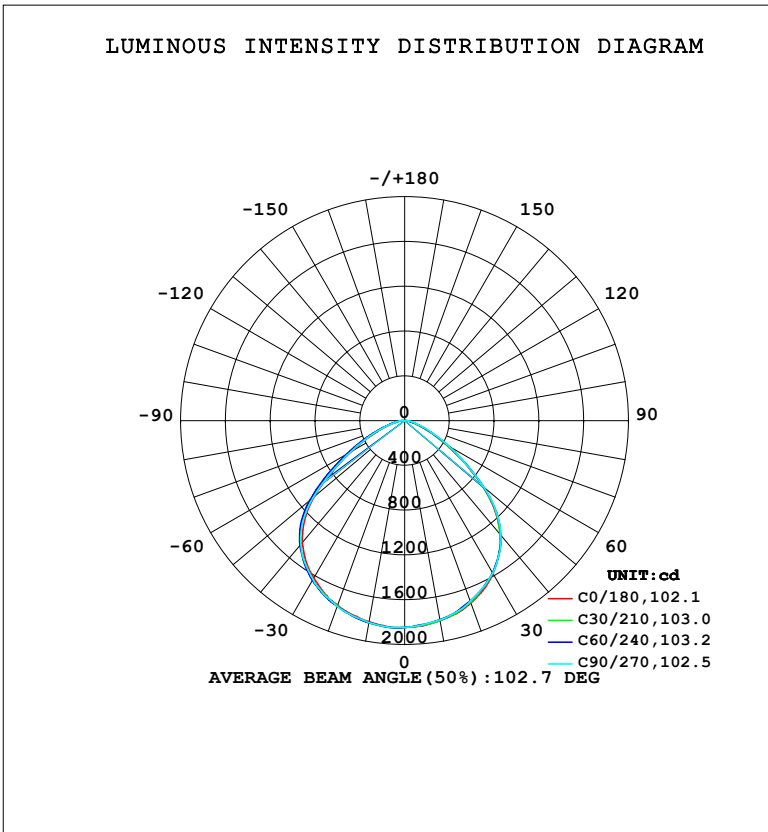


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	407	Imax (cd)	1853	S/MH (C0/180)	1.31
NOMINAL POWER (W)	45	LOR (%)	100.0	S/MH (C90/270)	1.32
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	4496.1	η UP, DN (C0-180)	0.0,48.4
NOMINAL FLUX (lm)	4496.09	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0,51.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	219.5	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2023-12-01

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity: 65.0%
Test Distance: 9.401m [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	1815	1809	1809	1820	1824	1834	1831	1820	0- 10	175.0	175.0	3.89,3.89
20	1732	1721	1716	1740	1754	1762	1764	1740	10- 20	505.0	680.0	15.1,15.1
30	1579	1572	1573	1600	1623	1647	1639	1602	20- 30	774.8	1455	32.4,32.4
40	1329	1337	1337	1398	1425	1454	1444	1379	30- 40	942.3	2397	53.3,53.3
50	908.4	926.1	918.9	1059	1054	1107	1066	999.5	40- 50	938.4	3336	74.2,74.2
60	426.4	449.3	452.6	551.5	543.7	604.8	560.7	500.0	50- 60	665.9	4001	89,89
70	152.4	166.0	178.9	220.4	219.3	252.8	233.6	186.3	60- 70	335.5	4337	96.5,96.5
80	40.81	50.30	61.59	69.36	69.23	86.32	80.22	53.77	70- 80	127.6	4465	99.3,99.3
90	2.286	1.933	1.742	2.012	3.138	3.339	2.090	2.196	80- 90	31.52	4496	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): 2882.5 lm

%lum = 64.1%

%lamp = 64.1%

Conical surface Flux(130deg): 4204 lm

%lum = 93.5%

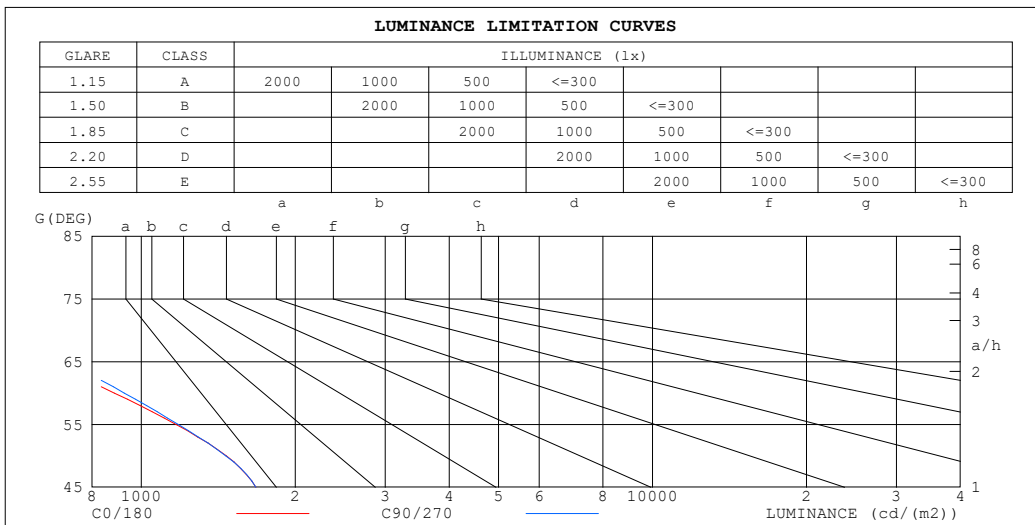
%lamp = 93.5%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	163	285
80	244	363
75	326	414
70	462	535
65	645	709
60	885	926
55	1170	1182
50	1467	1462
45	1675	1676

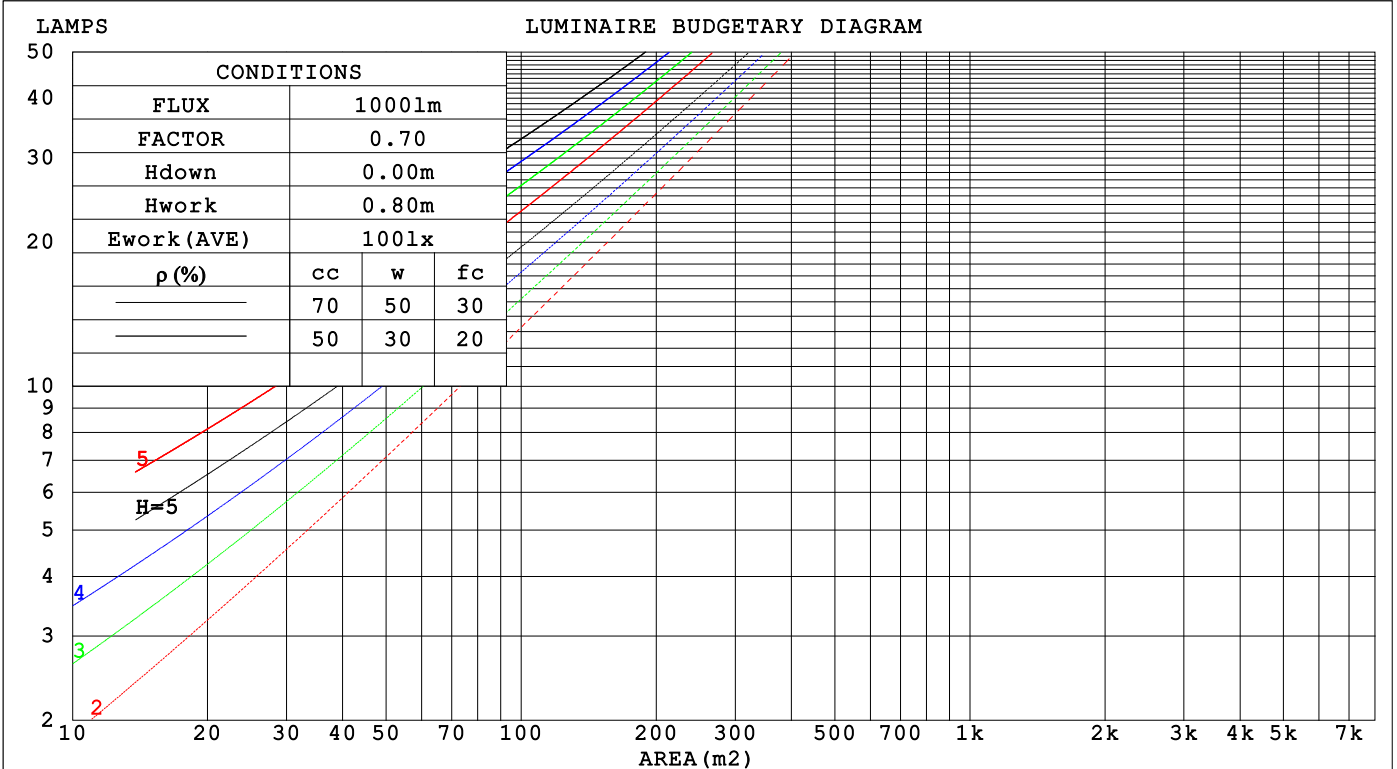
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	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 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	1.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.94	.88	.83	.93	.87	.82	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.84	.77	.71	.83	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.66	.61	.71	.65	.60	.69	.64	.59	.67	.62	.58	.56
5.0	.68	.59	.53	.67	.59	.53	.64	.58	.52	.63	.57	.52	.61	.56	.51	.49
6.0	.61	.53	.47	.60	.52	.47	.59	.51	.46	.57	.51	.46	.55	.50	.45	.44
7.0	.56	.47	.42	.55	.47	.41	.53	.46	.41	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.37	.50	.43	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.43	.37	.33	.31
10.0	.43	.36	.31	.43	.35	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz		
Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	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	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.262	.149	.047	.255	.145	.046	.242	.139	.044	.230	.133	.043	.219	.127	.041	
2.0	.254	.139	.043	.248	.136	.042	.236	.131	.041	.226	.127	.040	.216	.122	.039	
3.0	.240	.128	.038	.235	.126	.038	.225	.122	.037	.215	.118	.036	.207	.115	.035	
4.0	.225	.117	.034	.221	.116	.034	.212	.112	.034	.204	.109	.033	.196	.107	.032	
5.0	.211	.108	.031	.207	.106	.031	.200	.104	.031	.192	.101	.030	.185	.099	.030	
6.0	.198	.099	.028	.195	.098	.028	.188	.096	.028	.181	.094	.028	.175	.092	.027	
7.0	.186	.092	.026	.183	.091	.026	.177	.089	.026	.171	.088	.026	.166	.086	.025	
8.0	.176	.086	.024	.173	.085	.024	.167	.083	.024	.162	.082	.024	.157	.080	.023	
9.0	.166	.080	.022	.163	.079	.022	.158	.078	.022	.153	.077	.022	.149	.075	.022	
10.0	.157	.075	.021	.154	.074	.021	.150	.073	.021	.145	.072	.021	.141	.071	.020	

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	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	.177	.157	.138	.151	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.079	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.130	.087	.054	.089	.060	.038	.052	.035	.022	.017	.012	.007	
5.0	.144	.090	.050	.124	.078	.043	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.137	.081	.041	.118	.070	.036	.081	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.131	.074	.035	.112	.064	.030	.078	.045	.022	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.119	.064	.026	.103	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.114	.059	.023	.098	.052	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	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	7.7	9.1	7.9	9.3	9.5	7.8	9.2	8.0	9.4	9.6
3H	8.0	9.3	8.3	9.5	9.7	8.2	9.5	8.5	9.7	9.9
4H	8.0	9.2	8.3	9.5	9.7	8.3	9.5	8.6	9.7	10.0
6H	8.0	9.1	8.3	9.4	9.7	8.3	9.4	8.6	9.7	10.0
8H	8.0	9.1	8.3	9.3	9.6	8.3	9.4	8.6	9.7	10.0
12H	7.9	9.0	8.3	9.3	9.6	8.3	9.4	8.6	9.6	9.9
4H 2H	7.8	9.1	8.1	9.3	9.5	7.9	9.1	8.2	9.4	9.6
3H	8.2	9.3	8.6	9.6	9.9	8.4	9.5	8.8	9.8	10.1
4H	8.3	9.3	8.7	9.6	9.9	8.6	9.5	9.0	9.9	10.2
6H	8.4	9.2	8.8	9.5	9.9	8.7	9.6	9.1	9.9	10.3
8H	8.4	9.1	8.8	9.5	9.9	8.8	9.5	9.2	9.9	10.3
12H	8.3	9.0	8.8	9.4	9.8	8.8	9.5	9.2	9.9	10.3
8H 4H	8.3	9.1	8.7	9.5	9.8	8.6	9.4	9.0	9.7	10.1
6H	8.4	9.0	8.8	9.4	9.9	8.8	9.4	9.2	9.8	10.2
8H	8.4	9.0	8.9	9.4	9.9	8.8	9.4	9.3	9.8	10.3
12H	8.4	8.9	8.9	9.3	9.8	8.9	9.4	9.4	9.8	10.3
12H 4H	8.3	9.0	8.7	9.4	9.8	8.5	9.3	9.0	9.6	10.0
6H	8.4	9.0	8.8	9.4	9.8	8.7	9.3	9.2	9.7	10.2
8H	8.4	8.9	8.9	9.3	9.8	8.8	9.3	9.3	9.8	10.2

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.7 / - 0.8	+ 0.6 / - 0.8
1.5H	+ 0.4 / - 0.4	+ 0.4 / - 0.5
2.0H	+ 1.5 / - 1.8	+ 1.4 / - 1.5

CIE Pub.117, 4496 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.2)
Area: 1 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2023-12-01

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
Humidity:65.0%
Test Distance:9.401m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

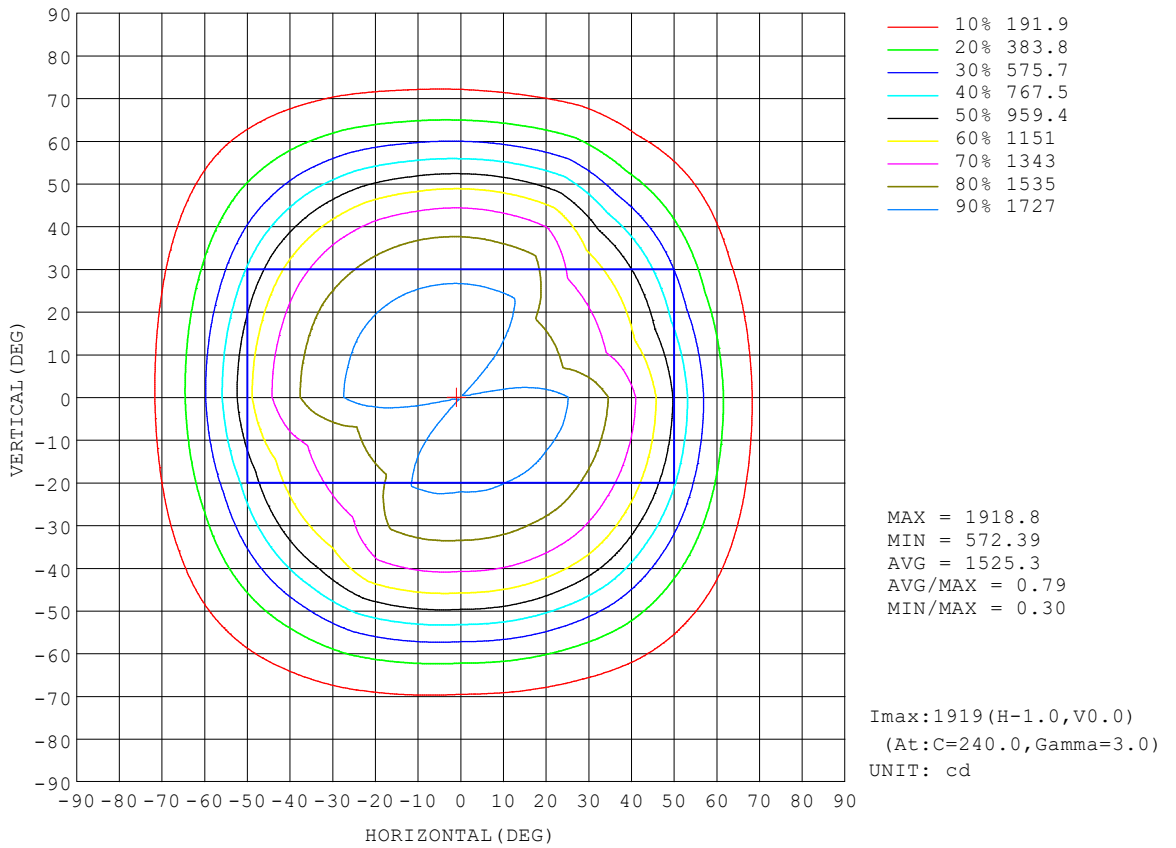
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	62	51	45	61	51	45	60	50	44	38
0.80	73	62	55	72	62	55	70	61	55	48
1.00	81	71	65	80	71	65	78	72	64	58
1.25	88	79	73	87	78	72	84	77	72	65
1.50	93	84	78	91	83	78	88	82	77	70
2.00	99	92	86	97	91	86	94	88	84	77
2.50	102	96	91	100	94	90	97	92	88	80
3.00	105	99	95	103	98	94	99	95	91	84
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	98	89
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:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

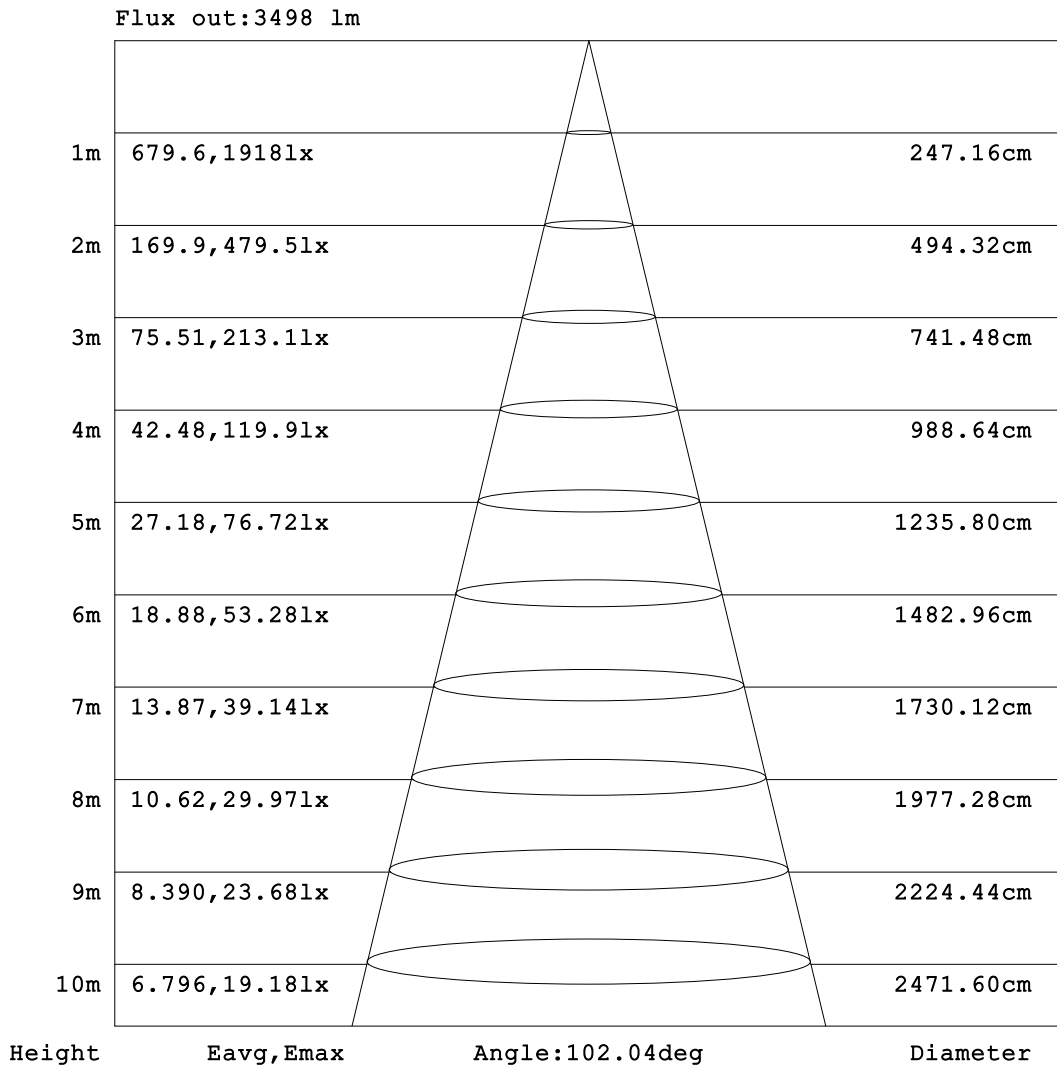


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



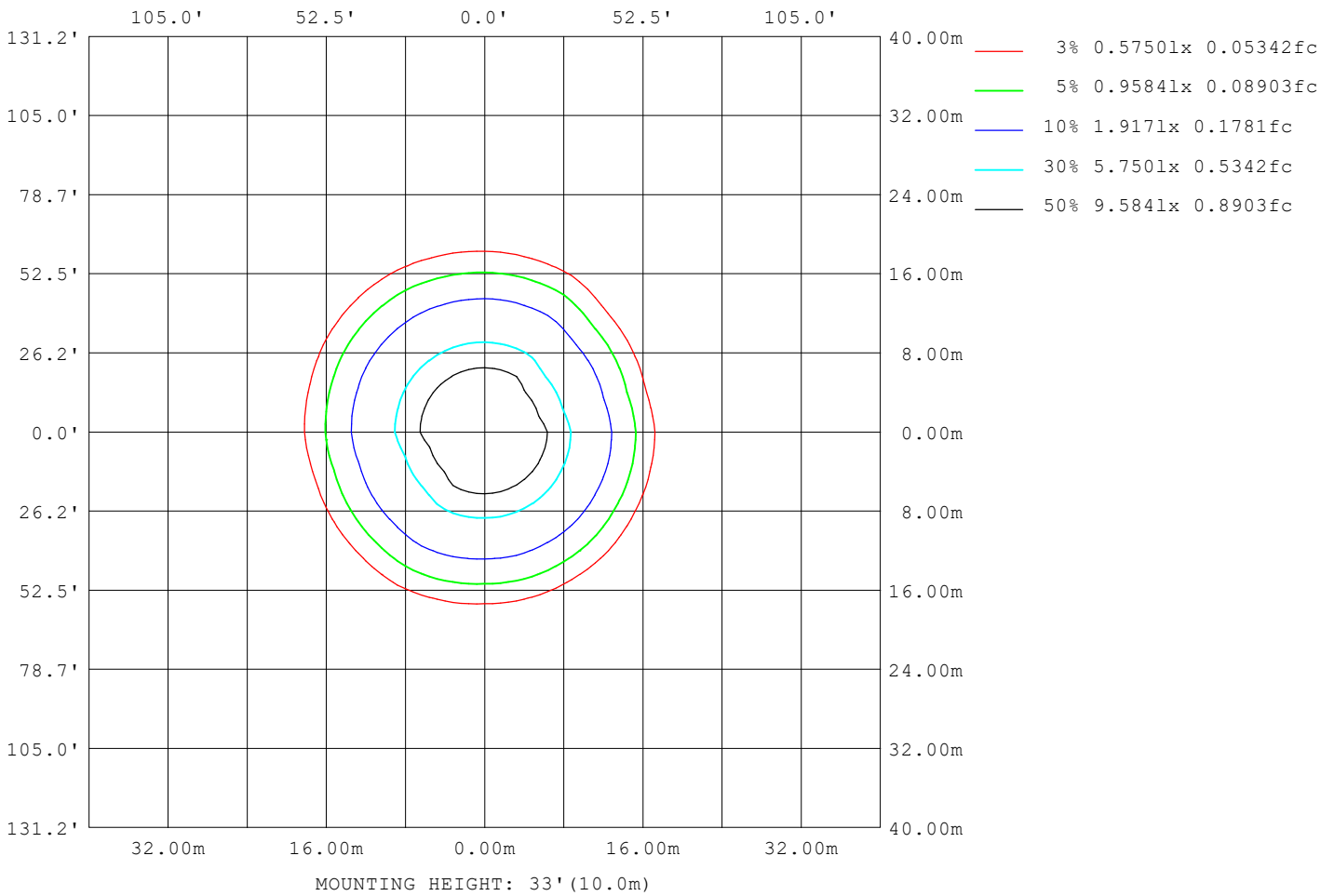
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.32V I:0.2189A P:44.491W PF:0.9223 Freq:50.00Hz Lamp Flux:4496.09x1 lm		
NAME:	TYPE: 投光灯	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

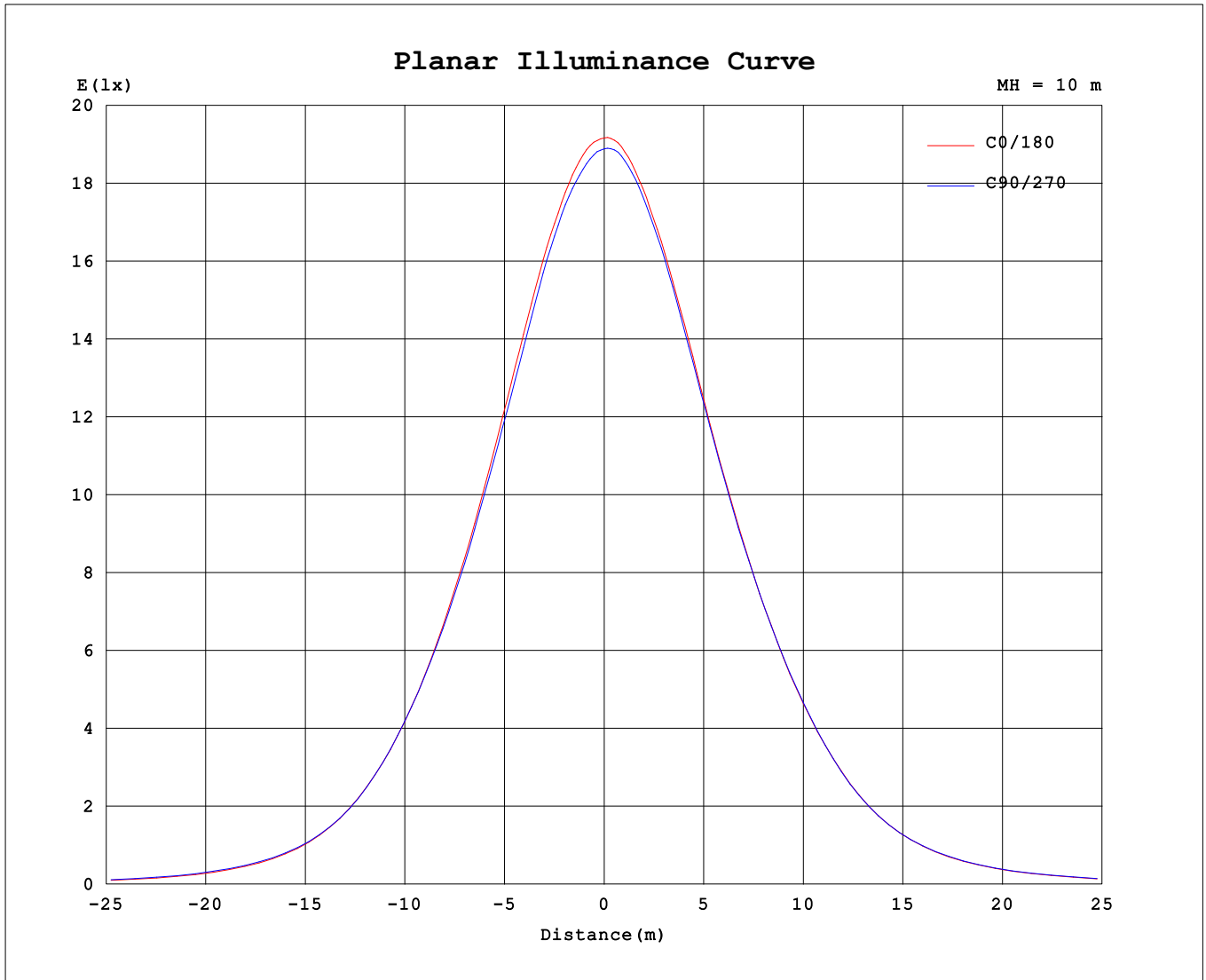
AvgL	cd/m2
L_0~180 (65) av	731
L_0~180 (75) av	403
L_0~180 (85) av	257
L_90~270 (65) av	787
L_90~270 (75) av	464
L_90~270 (85) av	363
L_45 (65) av	808
L_45 (75) av	452
L_45 (85) av	319

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity:65.0%
 Test Distance:9.401m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: DAMIN
 Test Date: 2023-12-01

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.473
 Humidity: 65.0%
 Test Distance: 9.401m [K=1.0000]
 Remarks:

