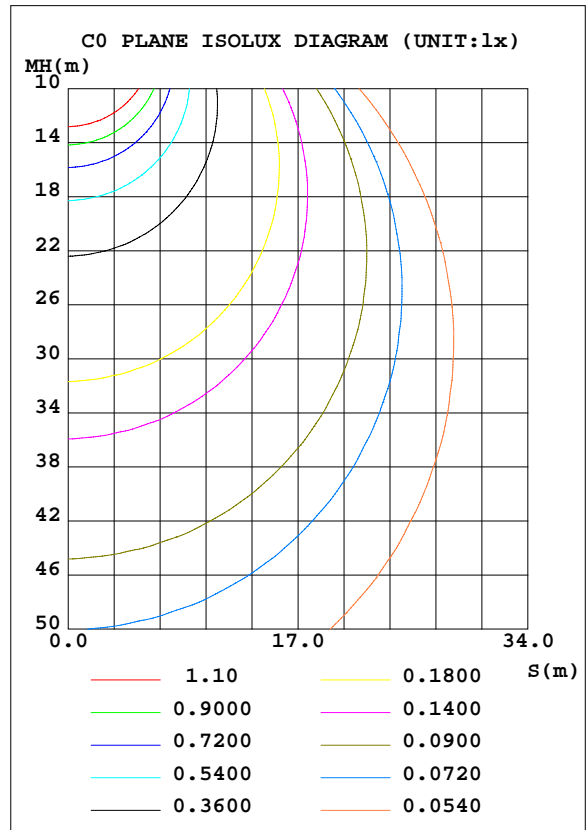
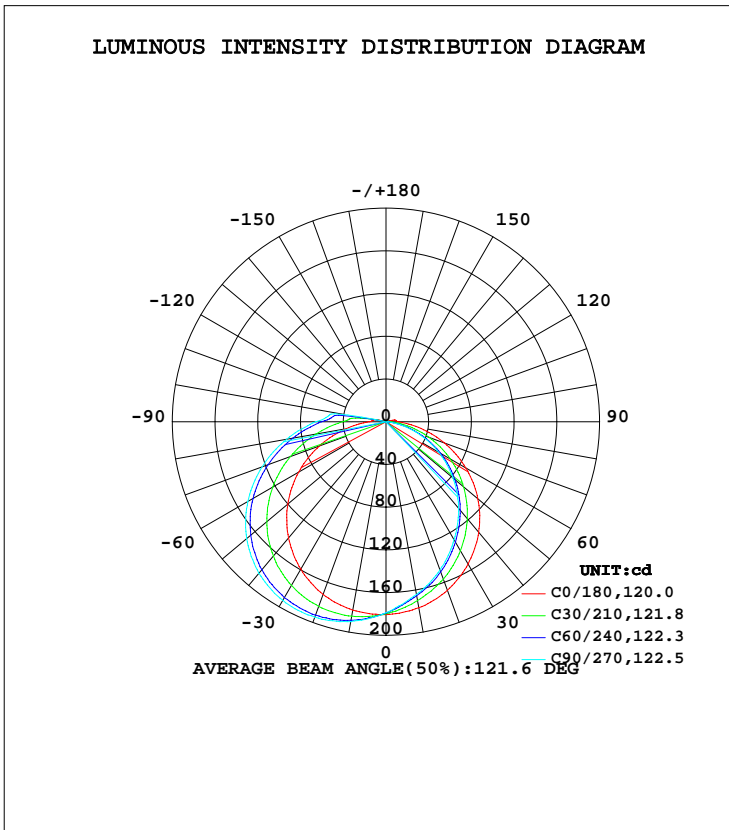


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	YBCCT-WH-EYELID-CW	Imax(cd)	195.1	S/MH(C0/180)	1.312
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.60
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	642.94	η UP, DN(C0-180)	0.7,35.5
NOMINAL FLUX(lm)	642.938	CIE CLASS	DIRECT	η UP, DN(C180-360)	3.4,60.4
LAMPS INSIDE	1	η up(%)	4.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	η down(%)	95.8	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [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	176.8	167.7	164.2	168.2	179.2	186.8	190.0	184.7	0- 10	17.00	17.00	2.64,2.64
20	167.9	153.4	147.8	154.6	172.0	188.4	194.7	184.7	10- 20	49.26	66.27	10.3,10.3
30	153.7	134.8	127.5	136.9	159.3	183.6	193.0	178.7	20- 30	76.12	142.4	22.1,22.1
40	135.1	113.3	105.8	115.8	142.1	172.4	185.2	166.7	30- 40	94.39	236.8	36.8,36.8
50	112.2	89.62	81.94	92.38	120.0	155.5	170.2	149.2	40- 50	102.1	338.8	52.7,52.7
60	86.29	64.21	56.97	67.06	94.39	133.0	149.4	126.0	50- 60	98.17	437.0	68,68
70	58.19	38.16	31.90	40.65	66.31	106.2	123.3	97.81	60- 70	83.25	520.3	80.9,80.9
80	31.01	14.47	9.532	16.41	38.07	77.43	94.40	68.40	70- 80	60.19	580.4	90.3,90.3
90	11.20	2.311	0.7149	3.219	15.49	50.76	65.64	41.99	80- 90	35.79	616.2	95.8,95.8
100	8.875	1.850	0.7557	2.604	11.21	17.42	36.33	10.03	90-100	20.95	637.2	99.1,99.1
110	0.4842	0.7353	0.8824	0.7082	0.4798	0.3168	0.2534	0.3349	100-110	2.582	639.8	99.5,99.5
120	0.5972	0.8438	0.9684	0.8190	0.5974	0.4411	0.3845	0.4638	110-120	0.5774	640.3	99.6,99.6
130	0.7057	0.9253	1.036	0.9141	0.7105	0.5498	0.4931	0.5860	120-130	0.6178	641.0	99.7,99.7
140	0.7963	0.9706	1.077	0.9729	0.8010	0.6652	0.6108	0.6968	130-140	0.6062	641.6	99.8,99.8
150	0.8913	1.025	1.104	1.036	0.8915	0.7738	0.7285	0.8100	140-150	0.5449	642.1	99.9,99.9
160	0.9683	1.059	1.118	1.070	0.9729	0.8846	0.8506	0.9073	150-160	0.4362	642.6	99.9,99.9
170	1.009	1.070	1.077	1.075	1.023	0.9775	0.9547	0.9955	160-170	0.2839	642.8	100,100
180	1.045	1.059	1.059	1.070	1.054	1.057	1.059	1.063	170-180	0.0989	642.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 287.56 lm

%lum = 44.7%  
 %lamp = 44.7%

Conical surface Flux(120deg): 437.01 lm

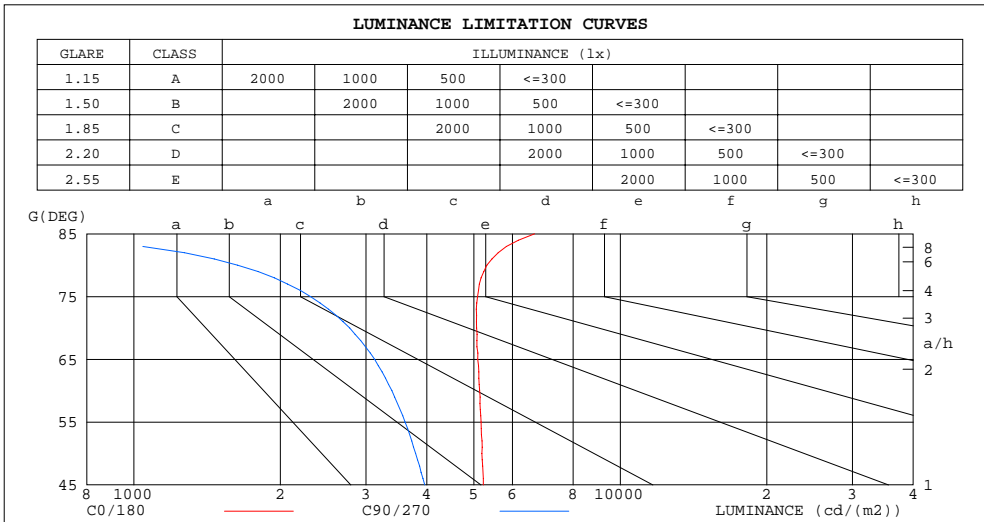
%lum = 68.0%  
 %lamp = 68.0%

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6664	489
80	5315	1634
75	5087	2307
70	5064	2776
65	5091	3125
60	5136	3391
55	5173	3609
50	5194	3794
45	5226	3963

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	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	.364	.207	.066	.356	.203	.064	.340	.195	.062	.325	.188	.060	.312	.181	.058	
2.0	.325	.178	.055	.317	.175	.054	.303	.169	.052	.290	.163	.051	.278	.157	.050	
3.0	.293	.156	.047	.286	.153	.046	.273	.148	.045	.262	.143	.044	.251	.139	.043	
4.0	.266	.138	.041	.260	.136	.040	.248	.132	.039	.238	.128	.039	.228	.124	.038	
5.0	.243	.124	.036	.237	.122	.035	.227	.118	.035	.218	.115	.034	.209	.112	.034	
6.0	.223	.112	.032	.218	.110	.032	.209	.107	.031	.201	.104	.031	.193	.102	.030	
7.0	.206	.102	.029	.202	.101	.029	.194	.098	.028	.186	.095	.028	.179	.093	.027	
8.0	.192	.094	.026	.188	.093	.026	.181	.090	.026	.174	.088	.025	.167	.086	.025	
9.0	.179	.087	.024	.175	.086	.024	.169	.083	.024	.162	.081	.023	.157	.080	.023	
10.0	.168	.080	.022	.165	.079	.022	.158	.078	.022	.153	.076	.022	.147	.074	.021	

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	.222	.222	.222	.190	.190	.190	.130	.130	.130	.074	.074	.074	.024	.024	.024	
1.0	.216	.188	.162	.185	.161	.139	.126	.111	.096	.073	.064	.056	.023	.021	.018	
2.0	.209	.164	.126	.179	.141	.109	.123	.098	.076	.071	.057	.045	.023	.018	.015	
3.0	.201	.147	.103	.172	.127	.090	.118	.088	.063	.068	.051	.037	.022	.017	.012	
4.0	.193	.134	.088	.166	.116	.077	.114	.081	.054	.066	.047	.032	.021	.015	.011	
5.0	.186	.124	.078	.159	.107	.068	.110	.075	.048	.064	.044	.028	.020	.014	.009	
6.0	.178	.115	.070	.153	.100	.061	.106	.070	.043	.061	.041	.026	.020	.013	.009	
7.0	.171	.109	.065	.147	.094	.057	.102	.066	.040	.059	.039	.024	.019	.013	.008	
8.0	.164	.103	.061	.141	.089	.053	.098	.063	.038	.057	.037	.022	.018	.012	.007	
9.0	.158	.098	.057	.136	.085	.050	.094	.060	.036	.055	.035	.021	.018	.012	.007	
10.0	.152	.094	.055	.131	.081	.048	.091	.057	.034	.053	.034	.020	.017	.011	.007	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm										
NAME: LED Ceiling light					TYPE:			WEIGHT:		
SPEC.:YBCCT-WH					DIM.: 230MM			SERIAL No.:		
MFR.:					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	18.8	20.3	19.1	20.6	20.9	17.1	18.7	17.5	19.0	19.3
3H	20.5	22.0	20.9	22.3	22.6	18.3	19.8	18.7	20.1	20.4
4H	21.3	22.7	21.7	23.0	23.4	18.7	20.1	19.1	20.4	20.8
6H	22.0	23.3	22.4	23.7	24.0	18.9	20.2	19.3	20.5	20.9
8H	22.3	23.6	22.8	24.0	24.3	18.9	20.1	19.3	20.5	20.9
12H	22.6	23.9	23.1	24.2	24.6	18.8	20.1	19.3	20.4	20.8
4H 2H	19.1	20.4	19.5	20.8	21.1	17.8	19.2	18.2	19.5	19.9
3H	21.0	22.2	21.4	22.6	23.0	19.1	20.3	19.5	20.7	21.1
4H	21.9	23.0	22.4	23.4	23.9	19.6	20.7	20.0	21.1	21.5
6H	22.8	23.8	23.2	24.2	24.7	19.8	20.8	20.3	21.3	21.7
8H	23.2	24.1	23.6	24.5	25.0	19.9	20.8	20.4	21.3	21.7
12H	23.6	24.4	24.1	24.9	25.4	19.8	20.7	20.3	21.2	21.7
8H 4H	22.0	22.9	22.5	23.4	23.8	19.9	20.8	20.4	21.3	21.7
6H	23.0	23.7	23.5	24.2	24.7	20.2	21.0	20.7	21.5	22.0
8H	23.5	24.2	24.0	24.7	25.2	20.3	21.0	20.8	21.5	22.0
12H	24.0	24.6	24.5	25.1	25.7	20.3	20.9	20.8	21.4	22.0
12H 4H	22.0	22.8	22.5	23.3	23.8	19.9	20.8	20.4	21.2	21.7
6H	23.0	23.7	23.5	24.2	24.7	20.3	21.0	20.8	21.5	22.1
8H	23.5	24.1	24.0	24.6	25.2	20.4	21.0	20.9	21.5	22.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 642.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.5)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

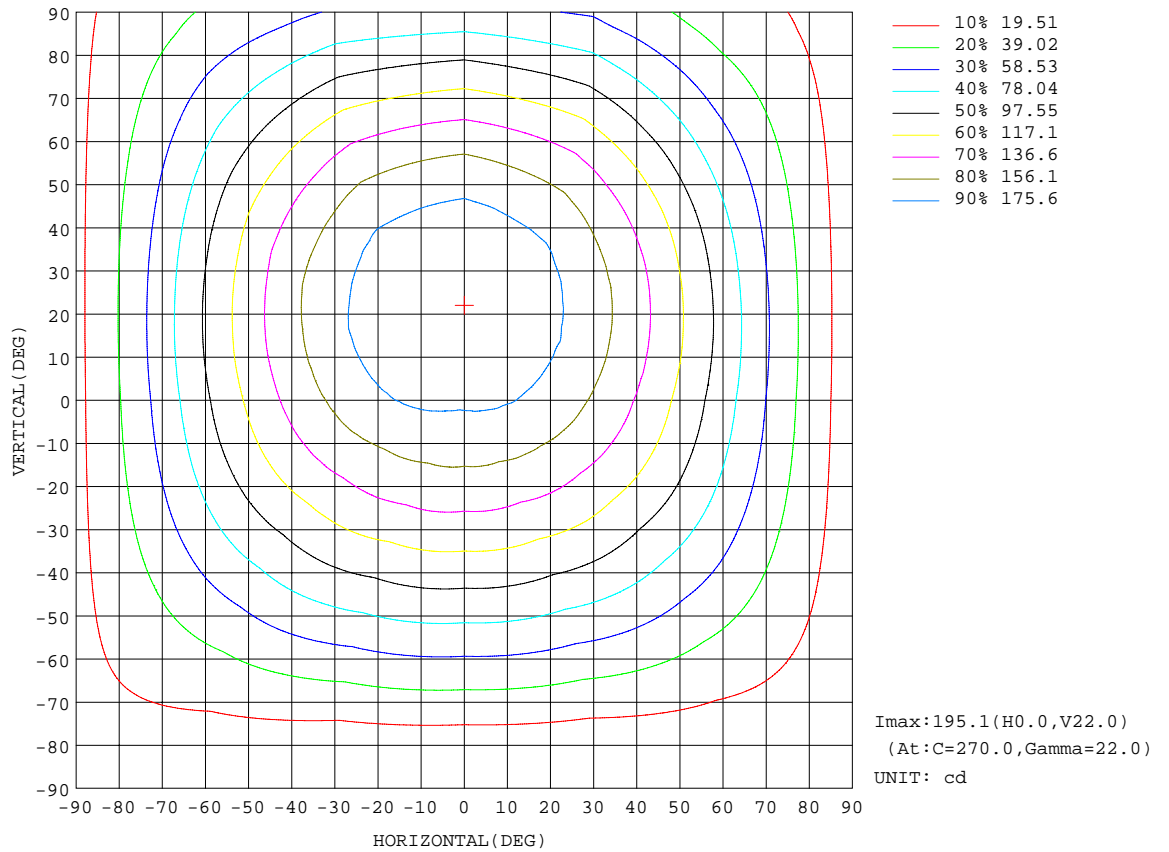
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	33	52	41	33	51	40	33	26
0.80	63	50	42	61	50	42	59	49	42	34
1.00	71	58	50	69	58	50	67	59	50	42
1.25	78	66	58	76	65	57	73	64	57	49
1.50	83	72	64	81	71	63	77	69	62	53
2.00	90	80	72	88	79	72	84	76	70	61
2.50	94	85	78	92	83	77	87	80	75	65
3.00	98	89	83	95	88	82	91	84	79	69
4.00	102	95	89	99	93	88	95	89	85	75
5.00	105	99	94	102	97	92	97	93	89	78
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:  
 Test Date:20 August 2021

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

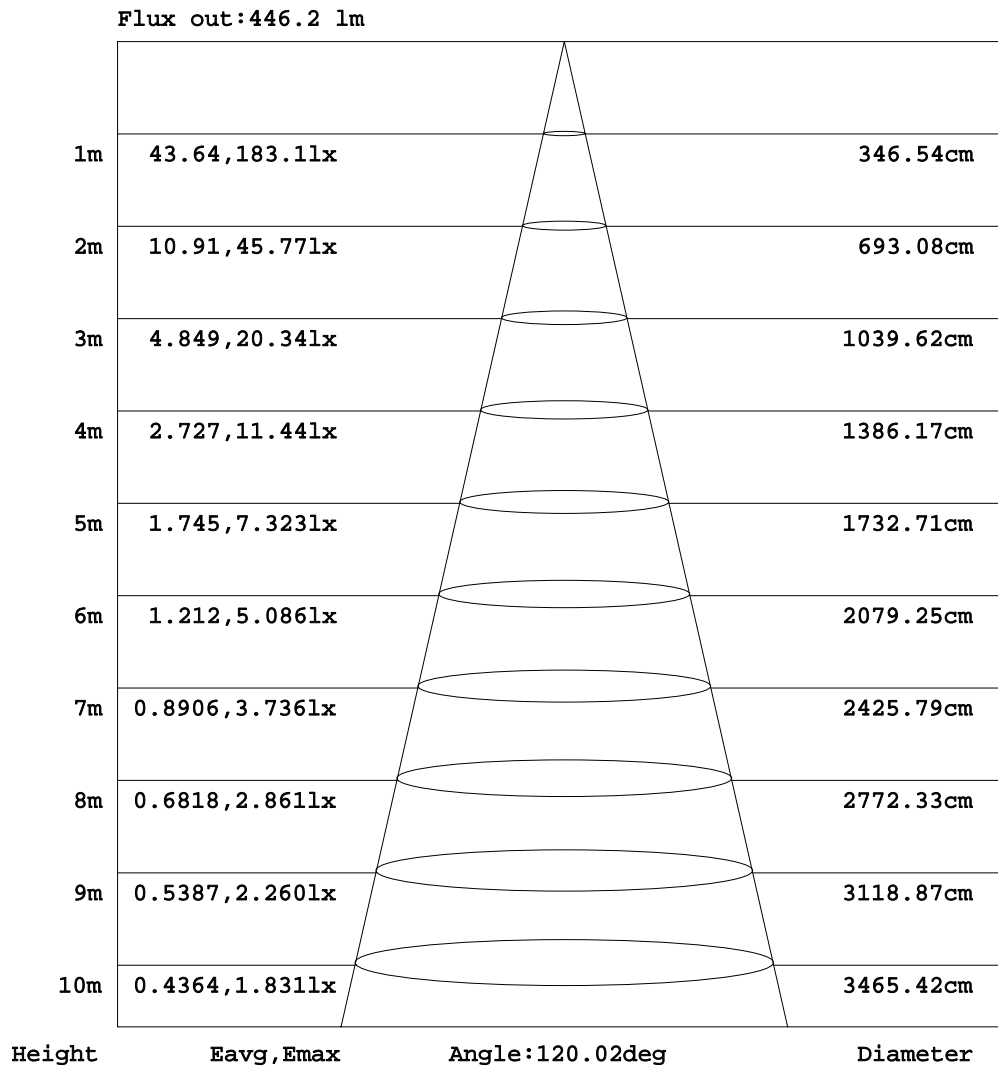


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 8.791m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



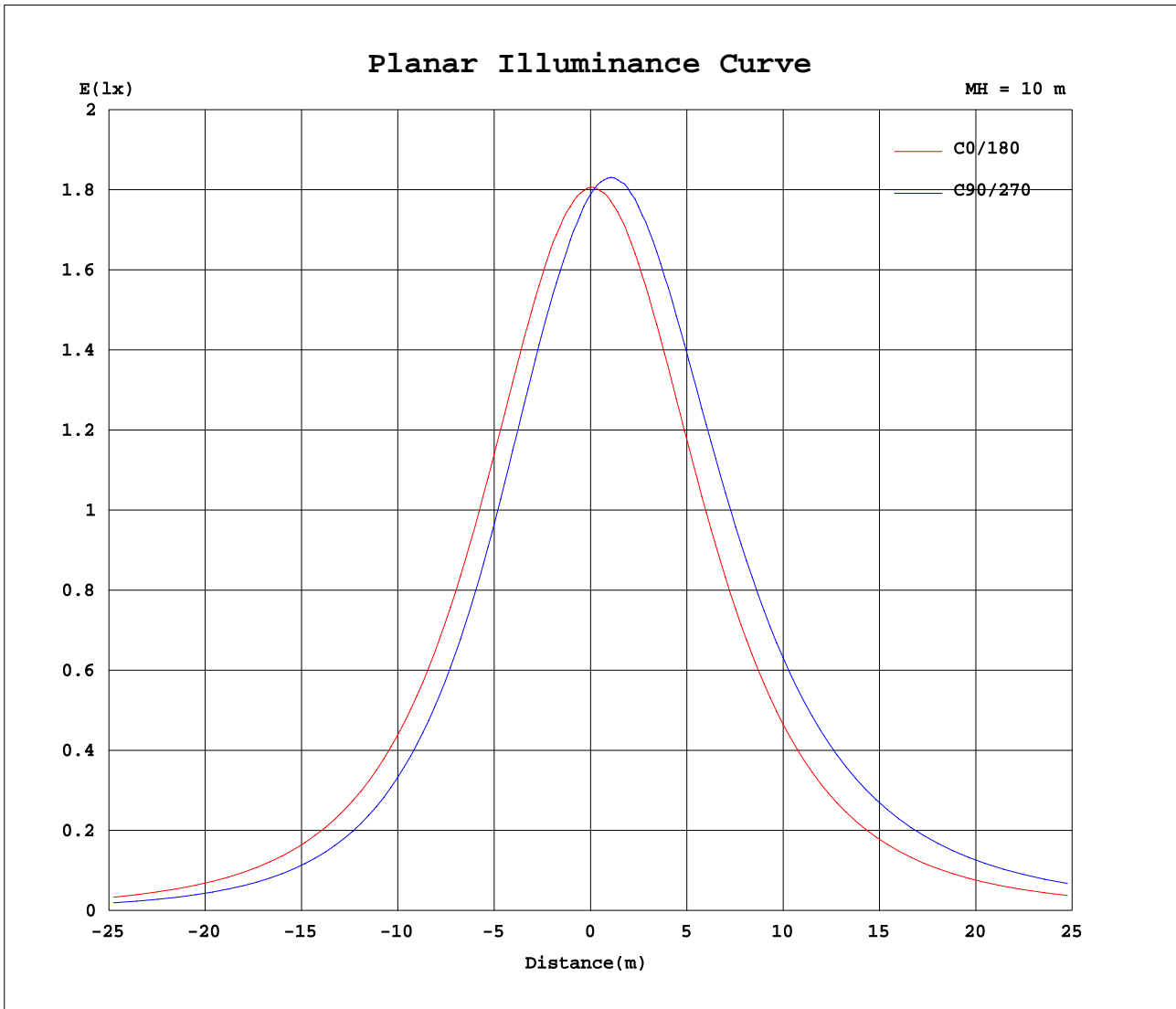
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks:



**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 20 August 2021

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 8.791m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.07V I:0.0564A P:12.040W PF:0.9284 Freq:49.99Hz Lamp Flux:642.938x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:YBCCT-WH	DIM.: 230MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C( DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	181	180	179	179	178	179	181	180	179	179	178	179							
5	179	175	172	172	172	176	180	183	184	185	184	181							
10	177	170	165	164	166	171	179	185	189	190	187	182							
15	173	164	158	157	159	165	176	185	192	193	189	182							
20	168	157	150	148	151	158	172	184	193	195	190	180							
25	161	149	140	138	142	151	166	181	192	195	189	176							
30	154	139	130	127	132	142	159	177	190	193	186	171							
35	145	129	119	117	121	133	151	171	186	190	182	165							
40	135	118	108	106	110	122	142	164	181	185	176	157							
45	124	107	96.5	94.2	98.2	111	131	156	174	179	169	148							
50	112	94.8	84.4	81.9	86.0	98.8	120	146	165	170	161	138							
55	99.7	82.4	71.8	69.5	73.5	86.2	108	135	155	160	150	126							
60	86.3	69.4	59.0	57.0	60.5	73.6	94.4	122	144	149	138	114							
65	72.3	56.2	46.1	44.4	47.6	60.2	80.6	109	131	137	126	99.0							
70	58.2	42.9	33.4	31.9	34.7	46.6	66.3	95.0	117	123	112	83.7							
75	44.2	30.1	21.4	20.1	22.4	33.5	51.9	80.7	103	109	97.8	68.4							
80	31.0	18.3	10.6	9.53	11.4	21.4	38.1	66.4	88.5	94.4	83.3	53.5							
85	19.5	8.53	2.21	1.43	2.59	11.1	25.6	52.9	74.1	79.6	69.3	39.7							
90	11.2	3.96	0.66	0.71	0.67	5.76	15.5	41.0	60.5	65.6	56.1	27.9							
95	9.79	3.36	0.62	0.69	0.68	5.02	12.7	33.9	50.5	55.1	45.7	21.8							
100	8.88	3.03	0.67	0.76	0.65	4.56	11.2	16.5	18.4	36.3	11.7	8.38							
105	3.69	0.71	0.71	0.81	0.70	1.23	5.09	0.69	0.23	0.22	0.25	0.39							
110	0.48	0.68	0.79	0.88	0.77	0.65	0.48	0.34	0.29	0.25	0.31	0.36							
115	0.54	0.73	0.84	0.93	0.82	0.71	0.54	0.40	0.36	0.34	0.38	0.43							
120	0.60	0.79	0.90	0.97	0.88	0.76	0.60	0.47	0.42	0.38	0.43	0.49							
125	0.65	0.83	0.91	1.00	0.91	0.81	0.65	0.51	0.48	0.43	0.50	0.55							
130	0.71	0.88	0.97	1.04	0.96	0.86	0.71	0.56	0.54	0.49	0.56	0.62							
135	0.76	0.91	0.98	1.05	0.98	0.91	0.76	0.62	0.60	0.56	0.62	0.67							
140	0.80	0.94	1.00	1.08	1.00	0.94	0.80	0.68	0.65	0.61	0.67	0.72							
145	0.84	0.98	1.04	1.09	1.05	0.98	0.85	0.72	0.71	0.68	0.73	0.77							
150	0.89	1.00	1.05	1.10	1.05	1.02	0.89	0.78	0.76	0.73	0.79	0.83							
155	0.92	1.03	1.07	1.12	1.07	1.04	0.93	0.83	0.82	0.78	0.85	0.88							
160	0.97	1.05	1.07	1.12	1.07	1.07	0.97	0.89	0.88	0.85	0.90	0.91							
165	0.98	1.05	1.08	1.10	1.08	1.07	1.00	0.94	0.93	0.90	0.95	0.97							
170	1.01	1.06	1.08	1.08	1.08	1.07	1.02	0.98	0.98	0.95	1.00	1.00							
175	1.02	1.05	1.08	1.06	1.08	1.07	1.04	1.00	1.02	0.99	1.05	1.05							
180	1.05	1.06	1.06	1.06	1.07	1.07	1.05	1.05	1.06	1.06	1.06	1.06							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:20 August 2021

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:8.791m [K=1.0000]  
 Remarks: