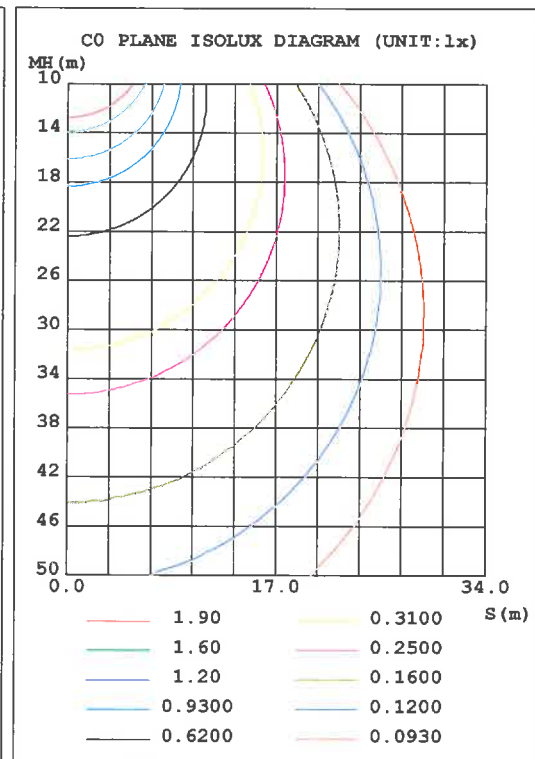
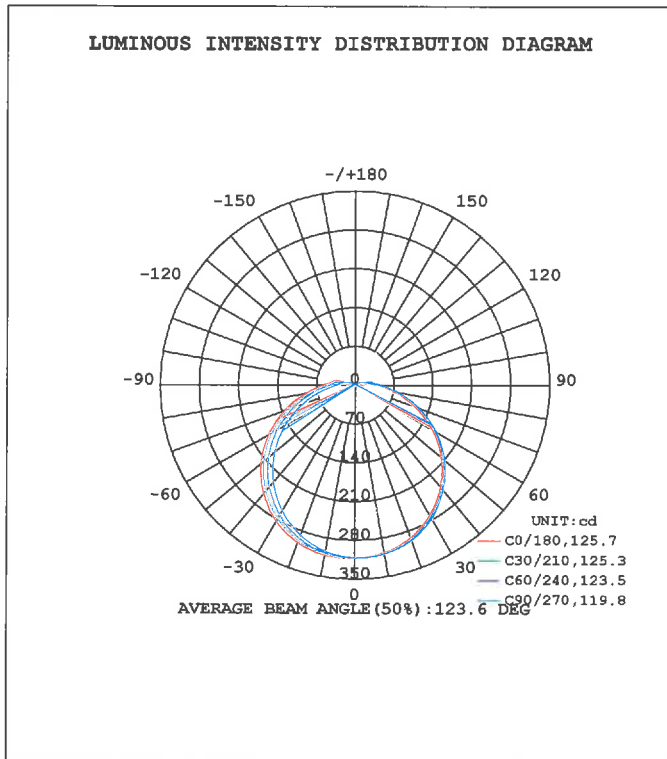


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.:230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.85 lm/W
MODEL	YBHPIR-WH-CW	I _{max} (cd)	312.1	S/MH(C0/180)	1.35	
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.25	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1059.3	η UP, DN(C0-180)	1.6, 49.2	
NOMINAL FLUX(lm)	1059.27	CIE CLASS	DIRECT	η UP, DN(C180-360)	2.0, 47.2	
LAMPS INSIDE	1	η up (%)	3.6	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	230	η down (%)	96.4	CIBSE SHR MAX	1.50	



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 02 September 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	⊙ zone	⊙ total	⊙lum, lamp
10	306.1	307.6	308.8	308.8	311.3	307.7	303.3	303.9	0- 10	29.50	29.50	2.78,2.78
20	291.6	296.4	298.0	296.5	302.1	295.3	287.0	286.6	10- 20	85.24	114.7	10.8,10.8
30	269.4	275.5	278.0	275.1	283.6	273.1	261.3	259.2	20- 30	130.9	245.7	23.2,23.2
40	239.1	245.7	247.4	244.5	255.8	243.3	227.6	224.7	30- 40	160.8	406.5	38.4,38.4
50	201.4	208.9	210.1	206.8	220.9	207.3	187.7	183.5	40- 50	171.6	578.1	54.6,54.6
60	158.2	166.0	167.4	163.1	179.4	164.9	143.5	137.4	50- 60	162.4	740.4	69.9,69.9
70	110.9	118.8	120.1	115.1	134.0	119.0	96.36	89.75	60- 70	134.6	875.0	82.6,82.6
80	66.42	72.09	71.93	66.70	87.49	74.51	53.16	45.82	70- 80	93.95	969.0	91.5,91.5
90	37.50	37.19	30.67	24.84	51.04	43.52	28.60	21.07	80- 90	52.16	1021	96.4,96.4
100	16.41	15.11	15.68	5.494	35.00	8.187	17.34	13.32	90-100	28.26	1049	99.1,99.1
110	0.9229	0.8304	0.7695	0.7262	0.8057	0.8529	0.8278	2.620	100-110	4.383	1054	99.5,99.5
120	1.140	1.048	0.9866	0.9547	1.027	1.073	1.050	1.018	110-120	0.9635	1055	99.6,99.6
130	1.353	1.262	1.204	1.194	1.249	1.294	1.276	1.244	120-130	1.027	1056	99.7,99.7
140	1.543	1.459	1.412	1.391	1.444	1.495	1.479	1.444	130-140	1.048	1057	99.8,99.8
150	1.697	1.651	1.602	1.588	1.625	1.658	1.652	1.631	140-150	0.9686	1058	99.9,99.9
160	1.846	1.803	1.783	1.780	1.806	1.815	1.814	1.794	150-160	0.7946	1059	99.9,99.9
170	1.928	1.930	1.901	1.894	1.914	1.930	1.901	1.905	160-170	0.5264	1059	100,100
180	1.964	1.971	1.959	1.941	1.950	1.971	1.937	1.939	170-180	0.1843	1059	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 492.19 lm

%lum = 46.5%

%lamp = 46.5%

Conical surface Flux(120deg): 740.44 lm

%lum = 69.9%

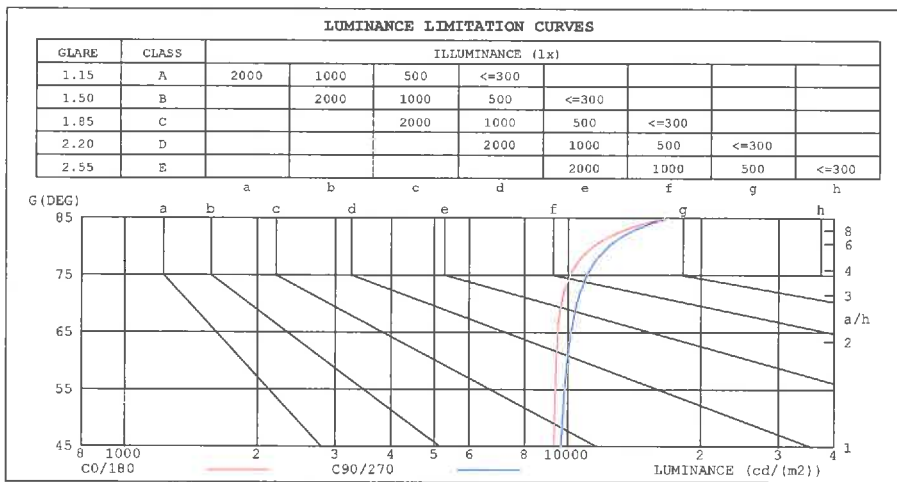
%lamp = 69.9%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 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:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.: 230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 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:

WEC AND CCEC

Test:U:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.: 230X105X61	SERIAL No.:
MFR.:	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	.354	.201	.064	.346	.197	.063	.330	.189	.060	.316	.182	.058	.303	.175	.057	
2.0	.318	.174	.054	.311	.171	.053	.297	.165	.051	.284	.159	.050	.272	.154	.049	
3.0	.288	.153	.046	.281	.151	.045	.269	.146	.044	.258	.141	.043	.247	.137	.042	
4.0	.262	.136	.040	.256	.134	.040	.245	.130	.039	.235	.126	.038	.226	.123	.037	
5.0	.240	.122	.035	.235	.121	.035	.225	.117	.034	.216	.114	.034	.207	.111	.033	
6.0	.221	.111	.032	.216	.109	.031	.208	.106	.031	.199	.104	.030	.192	.101	.030	
7.0	.205	.101	.029	.200	.100	.028	.193	.097	.028	.185	.095	.028	.178	.093	.027	
8.0	.190	.093	.026	.187	.092	.026	.179	.090	.026	.173	.087	.025	.166	.085	.025	
9.0	.178	.086	.024	.174	.085	.024	.168	.083	.024	.162	.081	.023	.156	.079	.023	
10.0	.167	.080	.022	.164	.079	.022	.158	.077	.022	.152	.076	.021	.147	.074	.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	.218	.218	.218	.186	.186	.186	.127	.127	.127	.073	.073	.073	.023	.023	.023	
1.0	.211	.183	.159	.181	.157	.136	.124	.108	.094	.071	.063	.055	.023	.020	.018	
2.0	.204	.160	.123	.174	.137	.106	.120	.095	.074	.069	.055	.043	.022	.018	.014	
3.0	.196	.142	.100	.168	.123	.086	.115	.085	.061	.067	.050	.036	.021	.016	.012	
4.0	.188	.129	.085	.161	.112	.073	.111	.078	.052	.064	.046	.031	.021	.015	.010	
5.0	.180	.119	.074	.155	.103	.064	.107	.072	.045	.062	.042	.027	.020	.014	.009	
6.0	.173	.111	.066	.149	.096	.058	.103	.067	.041	.060	.040	.024	.019	.013	.008	
7.0	.166	.104	.061	.143	.090	.053	.099	.063	.038	.057	.037	.022	.019	.012	.007	
8.0	.159	.098	.057	.137	.085	.049	.095	.060	.035	.055	.035	.021	.018	.012	.007	
9.0	.153	.093	.053	.132	.081	.046	.091	.057	.033	.053	.034	.020	.017	.011	.007	
10.0	.147	.089	.051	.127	.077	.044	.088	.054	.031	.051	.032	.019	.017	.011	.006	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 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:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm										
NAME: LED Ceiling light					TYPE:			WEIGHT:		
SPEC.:230					DIM.: 230X105X61			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	20.4	21.9	20.7	22.2	22.4	20.6	22.1	20.9	22.4	22.7
3H	22.2	23.6	22.6	23.9	24.2	22.5	23.9	22.9	24.2	24.5
4H	23.1	24.4	23.4	24.8	25.1	23.4	24.8	23.8	25.1	25.4
6H	23.9	25.2	24.3	25.5	25.9	24.3	25.6	24.7	25.9	26.3
8H	24.3	25.5	24.7	25.9	26.3	24.7	25.9	25.1	26.3	26.7
12H	24.7	25.9	25.1	26.3	26.7	25.1	26.3	25.5	26.7	27.1
4H 2H	21.1	22.5	21.5	22.8	23.1	21.3	22.6	21.6	22.9	23.3
3H	23.2	24.4	23.6	24.7	25.1	23.4	24.6	23.8	25.0	25.4
4H	24.2	25.3	24.6	25.7	26.1	24.5	25.6	24.9	26.0	26.4
6H	25.2	26.2	25.6	26.6	27.0	25.5	26.5	26.0	26.9	27.4
8H	25.7	26.6	26.2	27.0	27.5	26.0	26.9	26.5	27.4	27.8
12H	26.2	27.1	26.7	27.5	28.0	26.5	27.4	27.0	27.8	28.3
8H 4H	24.7	25.6	25.1	26.0	26.5	24.9	25.8	25.4	26.2	26.7
6H	25.9	26.7	26.4	27.1	27.6	26.2	26.9	26.7	27.4	27.9
8H	26.6	27.2	27.1	27.7	28.3	26.8	27.5	27.3	28.0	28.5
12H	27.3	27.9	27.8	28.4	28.9	27.5	28.1	28.1	28.6	29.2
12H 4H	24.7	25.6	25.2	26.0	26.5	25.0	25.8	25.4	26.3	26.7
6H	26.1	26.8	26.6	27.2	27.8	26.3	27.0	26.8	27.5	28.0
8H	26.8	27.4	27.3	27.9	28.5	27.1	27.7	27.6	28.2	28.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117, 1059 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.2$)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 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:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.: 230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

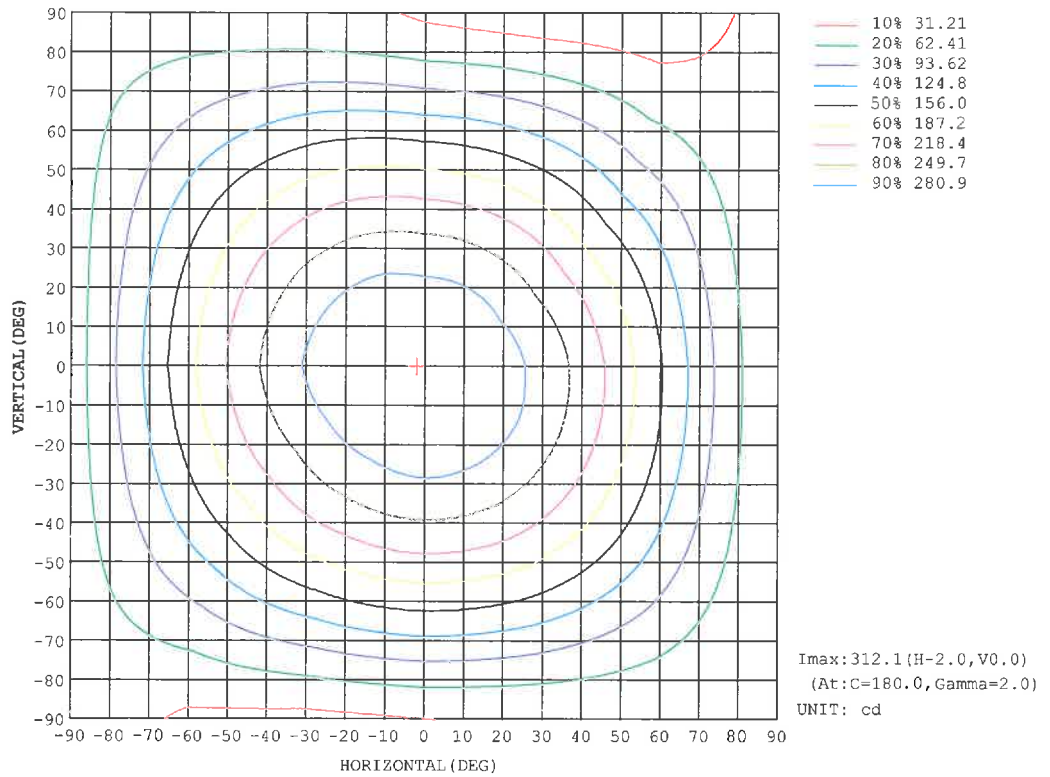
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	35	53	42	34	52	41	34	28
0.80	64	51	43	62	51	43	60	50	43	36
1.00	72	60	52	70	59	52	68	60	51	43
1.25	79	67	59	77	66	59	74	65	58	50
1.50	84	73	65	82	72	64	79	70	63	55
2.00	91	81	74	89	80	73	85	77	71	63
2.50	95	86	79	93	85	78	88	82	76	67
3.00	99	91	84	96	89	83	92	86	80	71
4.00	103	96	91	100	94	89	95	90	86	76
5.00	106	100	95	103	98	93	98	93	90	79
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:02 September 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:

ISOCANDELA DIAGRAM

Test:U:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.:230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



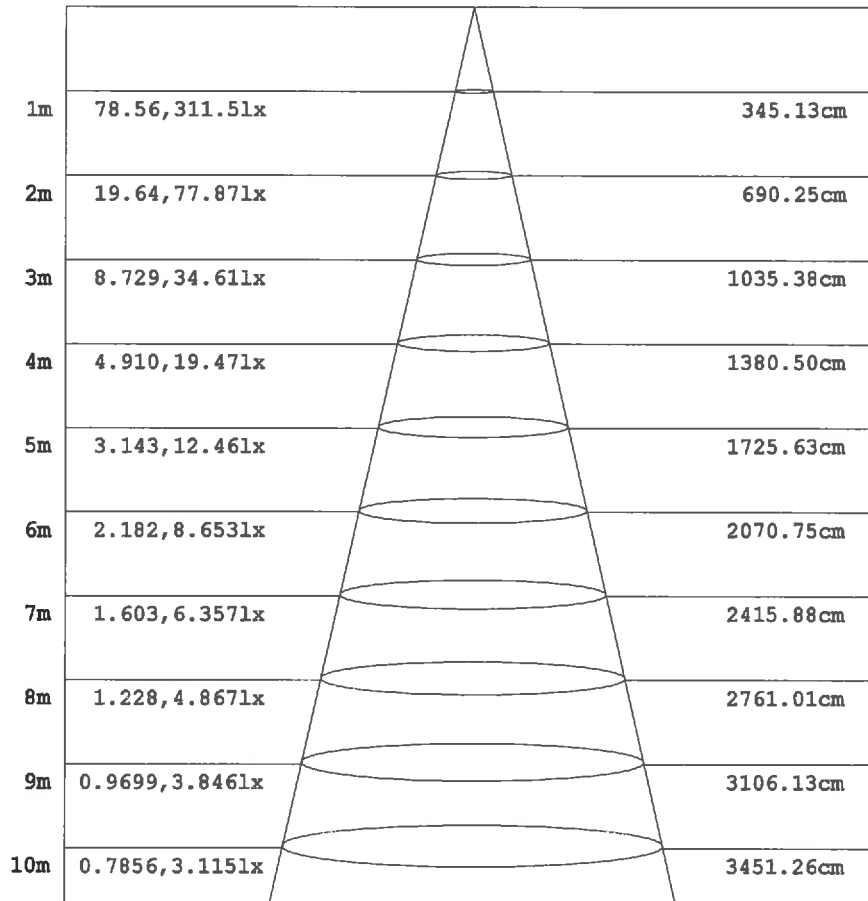
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 2021

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:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.: 230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:740.4 lm



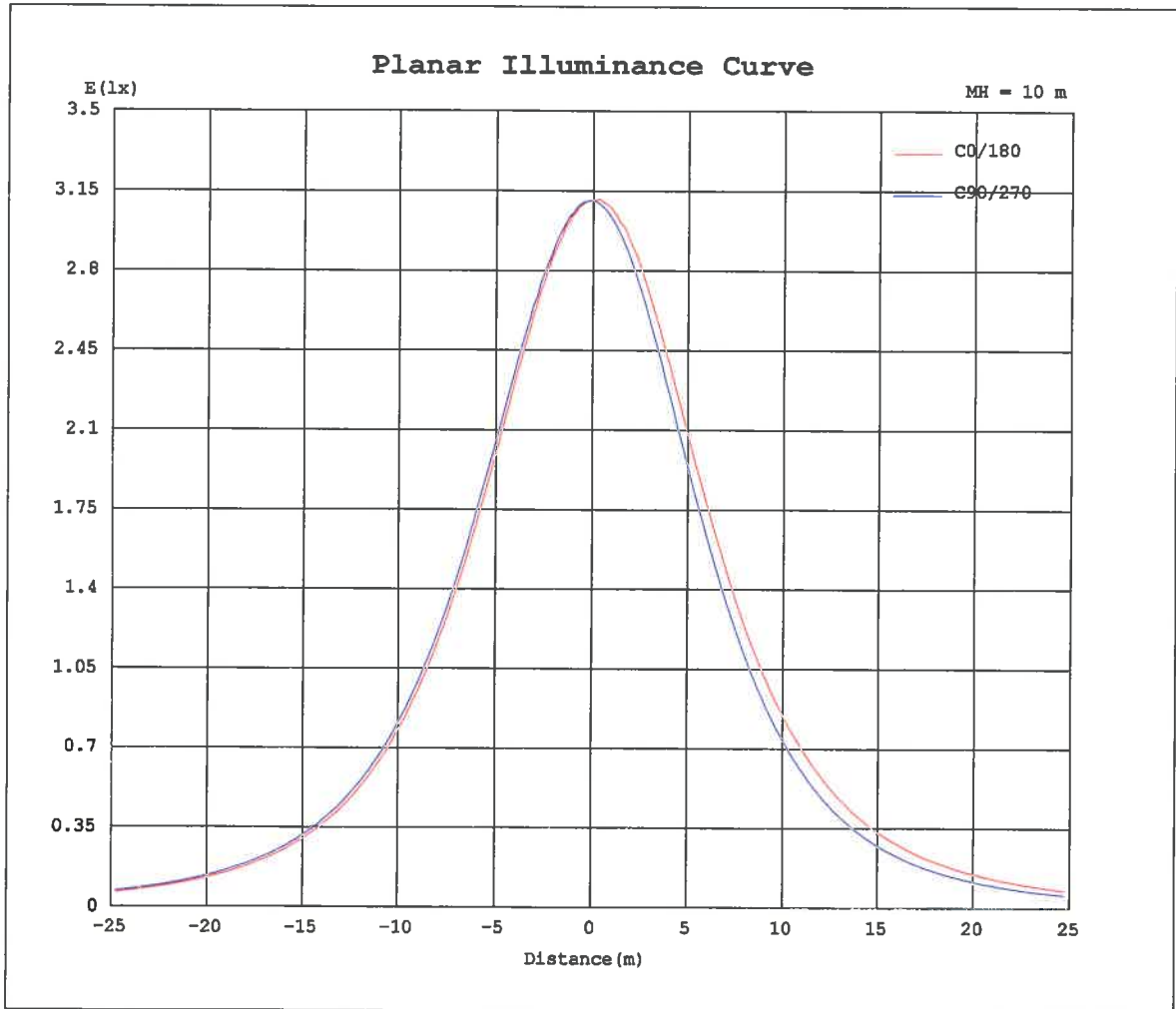
Height Eavg, Emax Angle:119.82deg Diameter

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:02 September 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: 02 September 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.14V I:0.0684A P:12.339W PF:0.7843 Freq:49.99Hz Lamp Flux:1059.27x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:230	DIM.: 230X105X61	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ y (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	311	311	311	311	311	311	311	311	311	311	311	311							
5	309	310	311	311	311	311	312	311	310	308	308	309							
10	306	307	308	309	308	309	311	309	307	303	304	304							
15	301	303	304	305	304	304	308	305	301	297	297	296							
20	292	296	297	298	296	297	302	298	293	287	287	286							
25	282	286	288	289	287	288	294	288	283	275	275	274							
30	269	274	277	278	274	276	284	277	269	261	259	259							
35	255	259	263	263	260	261	271	264	255	245	243	243							
40	239	244	247	247	244	245	256	248	239	228	225	224							
45	221	227	230	230	226	227	239	231	221	208	205	204							
50	201	207	211	210	206	207	221	213	202	188	184	183							
55	181	186	190	189	185	186	201	192	181	166	162	160							
60	158	164	168	167	162	164	179	171	159	143	139	136							
65	135	141	145	144	138	141	157	148	137	120	115	112							
70	111	118	120	120	114	117	134	124	114	96.4	91.2	88.3							
75	87.8	93.9	96.3	95.8	89.2	92.4	110	101	90.9	73.8	68.3	65.3							
80	66.4	71.3	72.9	71.9	65.2	68.2	87.5	79.5	69.5	53.2	47.2	44.4							
85	48.5	51.8	51.8	49.4	42.6	45.6	66.4	60.1	51.3	36.3	29.2	26.8							
90	37.5	38.3	36.1	30.7	23.6	26.1	51.0	46.9	40.1	28.6	21.9	20.3							
95	32.3	31.7	27.7	20.6	15.1	16.9	42.2	40.0	35.0	25.1	18.8	17.6							
100	16.4	16.6	13.6	15.7	10.5	0.53	35.0	0.85	15.5	17.3	11.7	14.9							
105	0.81	0.76	0.76	3.54	0.86	0.64	0.70	0.70	0.89	5.13	0.70	11.2							
110	0.92	0.88	0.78	0.77	0.70	0.75	0.81	0.83	0.87	0.83	0.81	4.43							
115	1.05	0.99	0.90	0.87	0.83	0.86	0.92	0.94	0.99	0.94	0.93	0.90							
120	1.14	1.10	1.00	0.99	0.93	0.98	1.03	1.05	1.10	1.05	1.04	1.00							
125	1.26	1.21	1.13	1.10	1.05	1.10	1.14	1.16	1.21	1.17	1.16	1.11							
130	1.35	1.31	1.22	1.20	1.18	1.21	1.25	1.27	1.32	1.28	1.27	1.22							
135	1.44	1.41	1.33	1.31	1.26	1.31	1.34	1.36	1.42	1.38	1.38	1.32							
140	1.54	1.50	1.42	1.41	1.37	1.42	1.44	1.48	1.51	1.48	1.47	1.42							
145	1.64	1.58	1.51	1.51	1.47	1.52	1.54	1.55	1.60	1.56	1.57	1.51							
150	1.70	1.68	1.62	1.60	1.56	1.62	1.62	1.63	1.68	1.65	1.66	1.61							
155	1.77	1.76	1.70	1.69	1.66	1.71	1.72	1.72	1.77	1.74	1.75	1.69							
160	1.85	1.83	1.77	1.78	1.76	1.80	1.81	1.80	1.83	1.81	1.82	1.76							
165	1.92	1.88	1.85	1.85	1.81	1.87	1.87	1.86	1.90	1.86	1.89	1.83							
170	1.93	1.94	1.92	1.90	1.86	1.92	1.91	1.93	1.93	1.90	1.94	1.87							
175	1.93	1.97	1.93	1.94	1.91	1.95	1.95	1.94	1.96	1.92	1.94	1.91							
180	1.96	1.99	1.95	1.96	1.94	1.95	1.95	1.97	1.97	1.94	1.94	1.94							

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:02 September 2021

y Range: 0 - 180DEG
 y Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:8.791m [K=1.0000]
 Remarks: