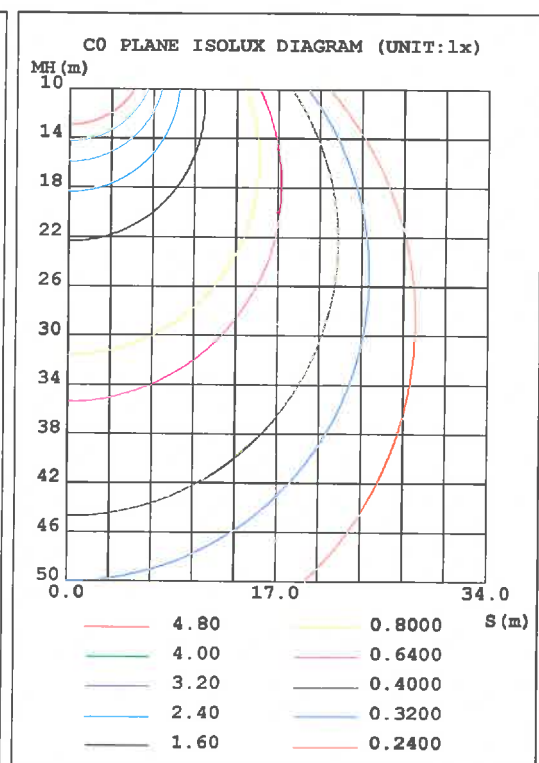
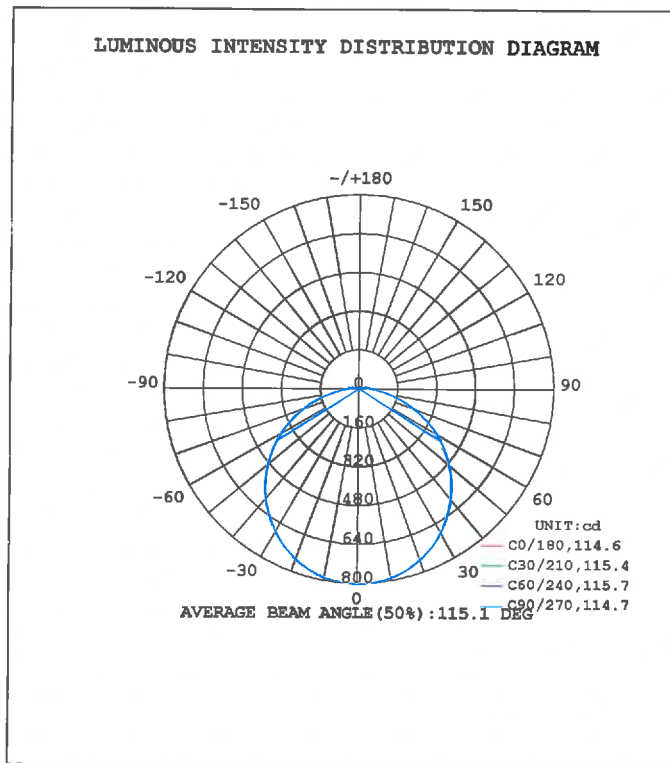


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.07V I:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.: 3308	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.80 lm/W			
MODEL	YYS24WCCT	I _{max} (cd)	799.6	S/MH(C0/180)	1.26
NOMINAL POWER (W)	24	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE (V)	230	TOTAL FLUX(lm)	2480.8	η UP, DN(C0-180)	1.7, 48.3
NOMINAL FLUX(lm)	2480.76	CIE CLASS	DIRECT	η UP, DN(C180-360)	1.7, 48.3
LAMPS INSIDE	1	η up (%)	3.4	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	96.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operator: 1
 Test Date: 14 July 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	787.6	787.1	785.3	785.1	786.6	786.1	785.2	784.6	0- 10	75.60	75.60	3.05,3.05
20	746.6	747.8	744.8	744.8	745.7	746.2	743.7	745.6	10- 20	217.1	292.7	11.8,11.8
30	679.7	682.5	678.6	679.6	678.8	680.2	677.8	680.8	20- 30	330.0	622.7	25.1,25.1
40	590.7	595.1	590.7	592.6	591.2	593.7	589.7	594.1	30- 40	398.7	1022	41.2,41.2
50	485.6	490.6	485.6	488.4	486.0	489.5	484.4	490.2	40- 50	418.4	1441	58.1,58.1
60	366.3	372.7	367.1	371.1	367.2	371.6	365.9	372.2	50- 60	384.8	1826	73.6,73.6
70	237.4	244.7	238.8	243.6	238.9	244.6	238.2	244.9	60- 70	303.8	2128	85.8,85.8
80	111.7	120.3	115.0	120.3	114.5	121.1	114.4	121.3	70- 80	189.0	2318	93.5,93.5
90	33.59	40.84	35.20	42.36	36.04	43.18	36.56	41.87	80- 90	78.41	2397	96.6,96.6
100	31.07	35.77	33.06	36.09	33.70	35.22	34.16	33.90	90-100	41.79	2438	98.3,98.3
110	17.89	12.05	21.77	10.66	16.98	7.873	15.45	8.319	100-110	25.61	2464	99.3,99.3
120	2.453	2.448	3.070	2.484	2.507	2.459	2.452	2.434	110-120	5.376	2469	99.5,99.5
130	3.049	3.043	3.078	3.077	3.073	3.061	3.054	3.027	120-130	2.474	2472	99.6,99.6
140	3.610	3.606	3.652	3.624	3.634	3.625	3.610	3.588	130-140	2.579	2475	99.7,99.7
150	4.108	4.113	4.132	4.127	4.150	4.138	4.117	4.098	140-150	2.426	2477	99.8,99.8
160	4.583	4.559	4.575	4.572	4.616	4.584	4.588	4.552	150-160	2.018	2479	99.9,99.9
170	4.855	4.858	4.846	4.873	4.878	4.876	4.851	4.858	160-170	1.337	2480	100,100
180	4.991	4.993	4.973	5.000	5.000	5.000	4.973	4.996	170-180	0.4699	2481	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1232.5 lm

%lum = 49.7%
%lamp = 49.7%

Conical surface Flux(120deg): 1825.6 lm

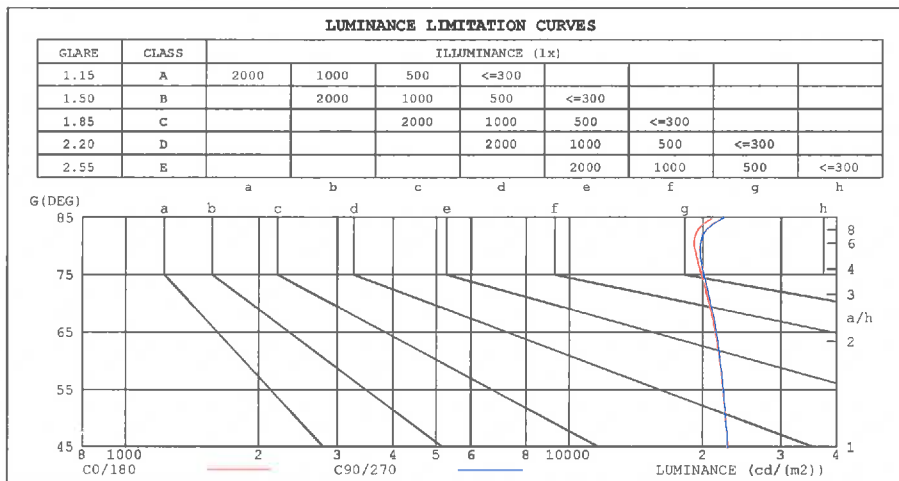
%lum = 73.6%
%lamp = 73.6%

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:14 July 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:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	21121	22280
80	19148	19717
75	19858	20125
70	20661	20784
65	21312	21421
60	21806	21849
55	22149	22198
50	22483	22483
45	22728	22728

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:14 July 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:230.07V I:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	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	.327	.186	.059	.319	.182	.058	.304	.174	.056	.290	.167	.054	.277	.161	.052	
2.0	.302	.165	.051	.295	.162	.050	.281	.156	.049	.268	.151	.047	.257	.145	.046	
3.0	.276	.147	.044	.270	.145	.044	.258	.140	.042	.247	.135	.041	.236	.131	.041	
4.0	.254	.132	.039	.248	.130	.038	.237	.126	.038	.227	.122	.037	.218	.118	.036	
5.0	.234	.119	.034	.228	.117	.034	.219	.114	.034	.210	.111	.033	.201	.108	.032	
6.0	.216	.108	.031	.211	.107	.031	.203	.104	.030	.195	.101	.030	.187	.099	.029	
7.0	.201	.099	.028	.196	.098	.028	.189	.095	.027	.181	.093	.027	.175	.091	.027	
8.0	.187	.091	.026	.183	.090	.026	.176	.088	.025	.170	.086	.025	.163	.084	.024	
9.0	.175	.085	.024	.172	.084	.023	.165	.082	.023	.159	.080	.023	.154	.078	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.021	.150	.075	.021	.145	.073	.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	.216	.216	.216	.185	.185	.185	.126	.126	.126	.072	.072	.072	.023	.023	.023	
1.0	.208	.182	.159	.178	.156	.137	.121	.107	.095	.070	.062	.055	.022	.020	.018	
2.0	.200	.158	.123	.171	.136	.106	.117	.094	.074	.068	.055	.043	.022	.018	.014	
3.0	.192	.141	.100	.165	.121	.086	.113	.084	.061	.065	.049	.036	.021	.016	.012	
4.0	.184	.128	.084	.158	.110	.073	.109	.077	.051	.063	.045	.030	.020	.015	.010	
5.0	.177	.117	.073	.152	.101	.064	.105	.071	.045	.061	.042	.027	.020	.014	.009	
6.0	.170	.109	.065	.146	.094	.057	.101	.066	.040	.058	.039	.024	.019	.013	.008	
7.0	.163	.102	.060	.140	.089	.052	.097	.062	.037	.056	.037	.022	.018	.012	.007	
8.0	.156	.096	.055	.135	.084	.048	.093	.059	.034	.054	.035	.020	.018	.011	.007	
9.0	.150	.091	.052	.129	.079	.045	.090	.056	.032	.052	.033	.019	.017	.011	.006	
10.0	.144	.087	.049	.124	.076	.043	.086	.053	.030	.050	.032	.018	.016	.010	.006	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:14 July 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:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm										
NAME: LED Ceiling light					TYPE:			WEIGHT:		
SPEC.:330S					DIM.: 330MM			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	20.3	21.8	20.6	22.1	22.4	20.3	21.8	20.6	22.1	22.4
3H	21.9	23.3	22.3	23.6	23.9	22.0	23.3	22.3	23.6	23.9
4H	22.6	23.9	23.0	24.3	24.6	22.6	24.0	23.0	24.3	24.6
6H	23.2	24.4	23.5	24.7	25.1	23.2	24.4	23.6	24.8	25.1
8H	23.4	24.6	23.8	24.9	25.3	23.4	24.6	23.8	25.0	25.3
12H	23.5	24.7	23.9	25.0	25.4	23.6	24.8	24.0	25.1	25.5
4H 2H	21.0	22.3	21.3	22.6	22.9	21.0	22.3	21.3	22.6	22.9
3H	22.8	23.9	23.2	24.3	24.7	22.8	24.0	23.2	24.3	24.7
4H	23.6	24.7	24.0	25.0	25.5	23.6	24.7	24.1	25.1	25.5
6H	24.3	25.2	24.7	25.6	26.1	24.3	25.3	24.8	25.7	26.1
8H	24.6	25.4	25.0	25.9	26.3	24.6	25.5	25.1	25.9	26.4
12H	24.8	25.6	25.3	26.0	26.5	24.9	25.7	25.4	26.1	26.6
8H 4H	23.9	24.8	24.4	25.2	25.7	23.9	24.8	24.4	25.3	25.7
6H	24.8	25.5	25.3	26.0	26.5	24.8	25.6	25.3	26.0	26.5
8H	25.2	25.8	25.7	26.3	26.8	25.2	25.9	25.8	26.4	26.9
12H	25.5	26.1	26.1	26.6	27.2	25.6	26.2	26.2	26.7	27.3
12H 4H	24.0	24.8	24.4	25.2	25.7	24.0	24.8	24.5	25.2	25.7
6H	24.9	25.5	25.4	26.0	26.6	24.9	25.6	25.4	26.1	26.6
8H	25.3	25.9	25.9	26.4	27.0	25.4	26.0	25.9	26.5	27.0
Variations with the observer position at spacings:										
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, 2481 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.2$)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:14 July 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:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

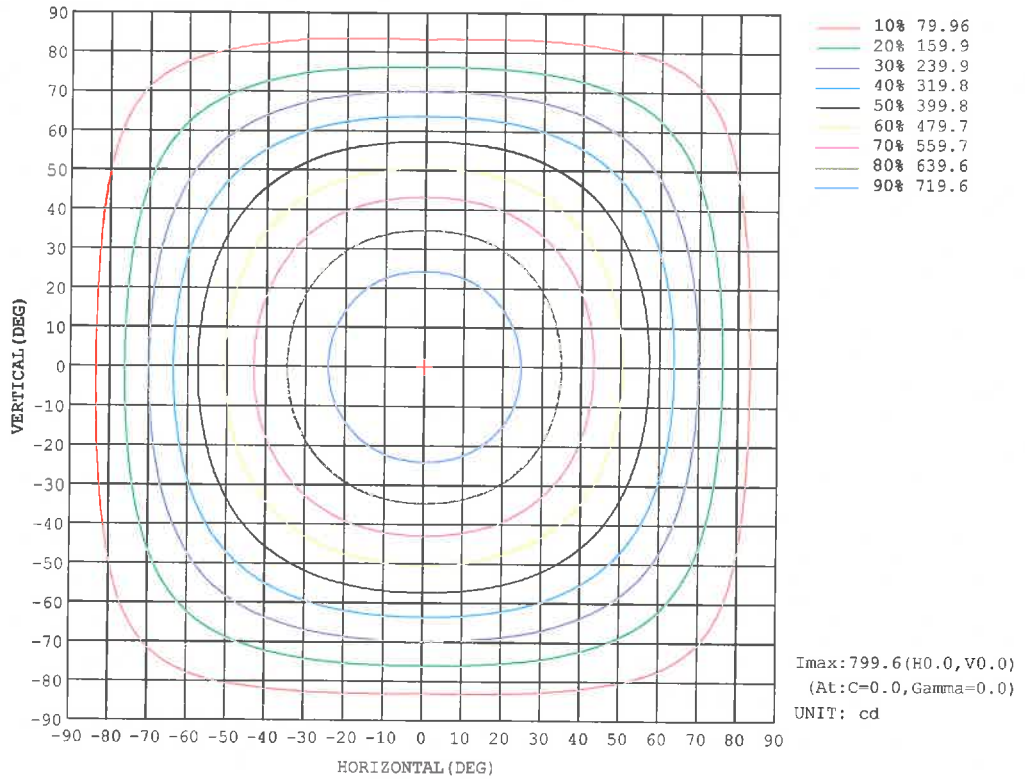
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	54	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	58
2.00	93	83	77	91	82	76	87	80	74	65
2.50	97	88	82	94	87	81	90	84	79	70
3.00	100	93	87	98	91	85	93	88	83	74
4.00	104	98	93	102	96	91	97	92	88	78
5.00	107	101	97	104	99	95	99	95	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			suspended				SHRNM = 1.25			

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: [unclear]
 Test Date: 14 July 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:230.07V I:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



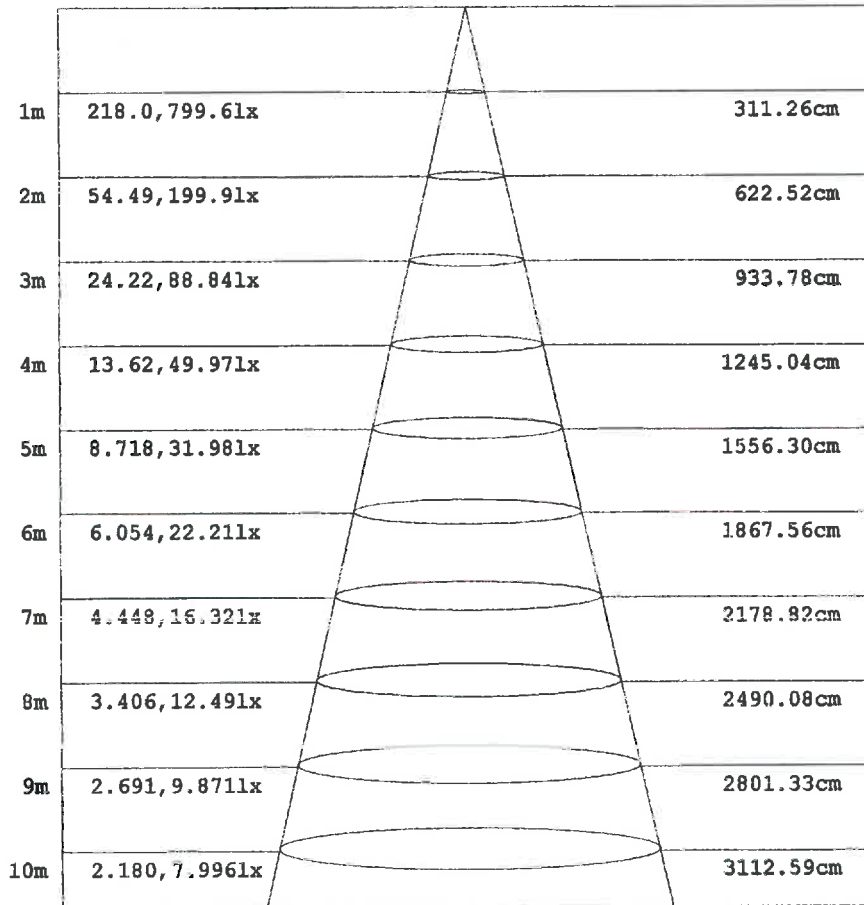
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: ...
 Test Date: 14 July 2021

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:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:1754 lm



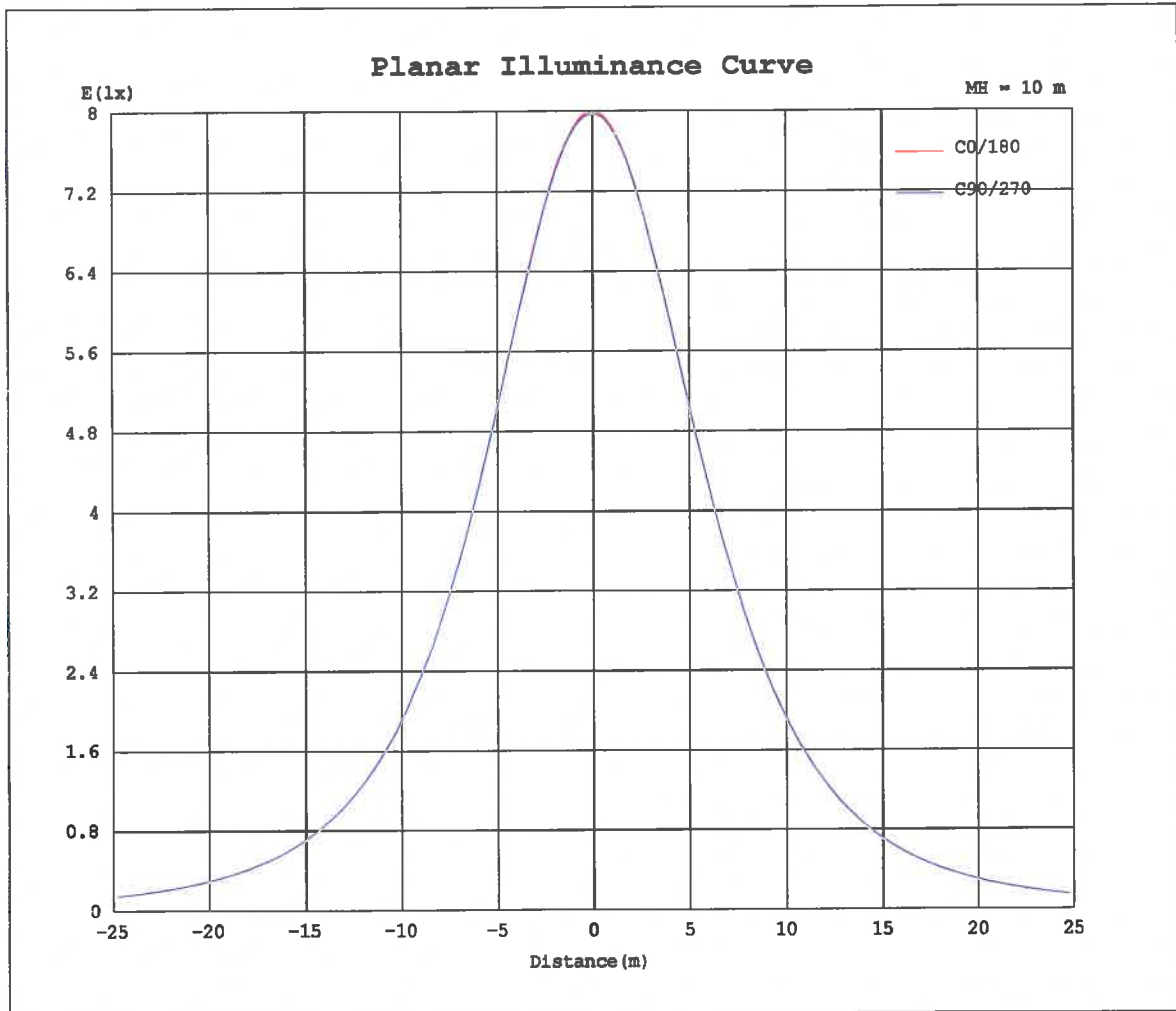
Height Eavg, Emax Angle:114.55deg Diameter

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:14 July 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: 14 July 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:230.07V I:0.1035A P:23.012W PF:0.9661 Freq:49.99Hz Lamp Flux:2480.76x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	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	800	799	798	797	797	796	800	799	798	797	797	796						
5	797	796	795	795	795	794	796	795	795	795	794	794						
10	788	788	786	785	785	785	787	786	786	785	785	785						
15	770	771	770	769	769	768	769	769	770	768	769	769						
20	747	748	747	745	745	744	746	746	746	744	746	745						
25	717	719	717	715	716	715	715	716	717	714	716	716						
30	680	683	682	679	680	680	679	680	681	678	681	681						
35	637	641	640	637	638	638	638	638	640	637	640	640						
40	591	595	595	591	593	593	591	593	595	590	594	594						
45	540	545	545	540	542	543	540	542	544	539	544	544						
50	486	491	490	486	488	489	486	489	491	484	490	490						
55	427	433	433	428	430	432	428	431	433	427	432	433						
60	366	373	373	367	370	372	367	370	373	366	372	372						
65	303	310	310	304	307	309	304	308	310	303	310	309						
70	237	244	245	239	243	244	239	243	246	238	245	245						
75	173	180	181	175	179	180	175	179	182	174	181	181						
80	112	120	121	115	120	121	115	119	123	114	121	121						
85	61.9	69.4	71.1	65.2	70.1	71.6	64.8	70.0	73.3	65.2	71.6	71.3						
90	33.6	39.8	41.9	35.2	41.4	43.3	36.0	42.2	44.1	36.6	41.7	42.1						
95	32.5	39.9	40.9	34.3	40.3	42.2	35.1	41.1	43.0	35.5	40.6	41.1						
100	31.1	35.1	36.5	33.1	34.7	37.5	33.7	34.4	36.1	34.2	35.1	32.7						
105	28.4	23.1	24.8	31.5	25.0	21.6	29.5	21.0	19.9	28.7	20.7	18.4						
110	17.9	11.3	12.8	21.8	12.8	8.53	17.0	8.17	7.57	15.5	7.80	8.84						
115	7.13	2.91	3.83	9.98	3.69	2.38	5.62	2.34	2.17	4.69	2.21	2.55						
120	2.45	2.43	2.46	3.07	2.49	2.48	2.51	2.47	2.45	2.45	2.44	2.43						
125	2.75	2.73	2.76	2.78	2.79	2.77	2.81	2.77	2.75	2.76	2.73	2.73						
130	3.05	3.03	3.05	3.08	3.08	3.07	3.07	3.07	3.06	3.05	3.03	3.03						
135	3.34	3.31	3.34	3.37	3.35	3.36	3.36	3.36	3.34	3.34	3.31	3.31						
140	3.61	3.59	3.62	3.65	3.62	3.63	3.63	3.63	3.62	3.61	3.59	3.58						
145	3.87	3.86	3.88	3.90	3.88	3.88	3.91	3.90	3.88	3.87	3.86	3.83						
150	4.11	4.10	4.12	4.13	4.12	4.13	4.15	4.15	4.13	4.12	4.10	4.09						
155	4.35	4.34	4.37	4.36	4.36	4.37	4.39	4.39	4.36	4.36	4.35	4.34						
160	4.58	4.53	4.58	4.58	4.56	4.58	4.62	4.61	4.56	4.59	4.57	4.54						
165	4.74	4.70	4.76	4.73	4.71	4.76	4.76	4.77	4.72	4.74	4.75	4.69						
170	4.86	4.83	4.88	4.85	4.85	4.90	4.88	4.90	4.85	4.85	4.88	4.84						
175	4.95	4.94	4.96	4.93	4.94	4.98	4.96	4.98	4.95	4.93	4.97	4.94						
180	4.99	5.00	4.99	4.97	5.00	5.00	5.00	5.00	5.00	4.97	5.00	4.99						

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:_
 Test Date:14 July 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: