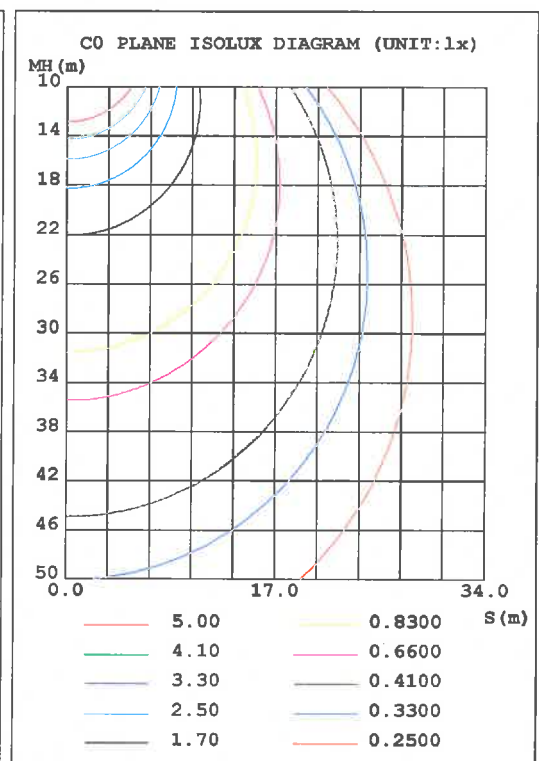
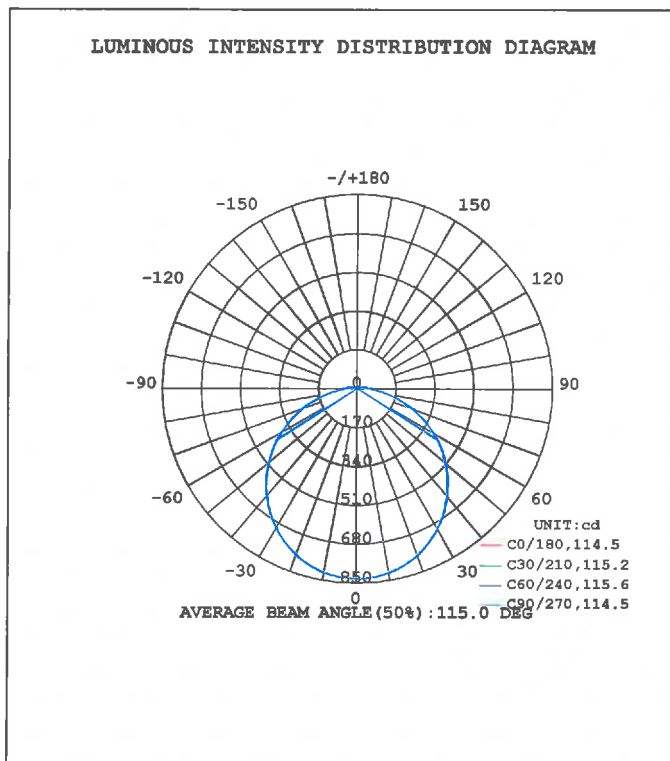


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.07V I:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 115.66 lm/W
MODEL	YYS24WCCT	I _{max} (cd)	828.0	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)	2563.2	η UP, DN (C0-180)	1.7, 48.3	
NOMINAL FLUX (lm)	2563.19	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.6, 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
 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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	⊙ zone	⊙ total	%lum, lamp
10	815.2	815.1	812.8	812.4	815.3	814.2	812.1	812.6	0- 10	78.29	78.29	3.05,3.05
20	772.1	774.2	771.3	770.9	771.1	772.6	769.7	771.9	10- 20	224.8	303.0	11.8,11.8
30	703.8	706.1	702.0	702.6	702.2	704.1	699.8	703.7	20- 30	341.4	644.5	25.1,25.1
40	610.7	615.2	611.3	612.6	610.9	613.9	609.6	614.0	30- 40	413.3	1058	41.3,41.3
50	502.4	507.4	502.1	504.5	501.3	505.4	500.3	506.0	40- 50	432.5	1490	58.1,58.1
60	379.1	385.8	379.2	382.9	378.2	383.4	377.6	384.5	50- 60	397.6	1888	73.6,73.6
70	246.2	253.7	247.0	251.1	245.6	251.4	245.5	252.9	60- 70	313.7	2201	85.9,85.9
80	116.7	125.0	118.8	123.3	116.7	123.7	118.0	125.3	70- 80	194.9	2396	93.5,93.5
90	35.73	42.88	36.32	42.77	35.56	43.22	37.36	43.59	80- 90	80.63	2477	96.6,96.6
100	33.32	37.41	34.09	36.48	33.30	35.35	34.91	35.02	90-100	42.84	2520	98.3,98.3
110	18.78	12.46	22.36	10.84	16.95	7.975	15.86	8.625	100-110	26.26	2546	99.3,99.3
120	2.530	2.516	3.147	2.561	2.584	2.541	2.538	2.507	110-120	5.513	2552	99.5,99.5
130	3.140	3.133	3.182	3.165	3.177	3.163	3.153	3.120	120-130	2.549	2554	99.6,99.6
140	3.719	3.708	3.738	3.733	3.747	3.735	3.724	3.697	130-140	2.659	2557	99.7,99.7
150	4.239	4.242	4.263	4.260	4.286	4.269	4.253	4.229	140-150	2.500	2559	99.8,99.8
160	4.733	4.708	4.715	4.713	4.752	4.729	4.733	4.690	150-160	2.073	2561	99.9,99.9
170	5.000	5.014	4.996	5.023	5.023	5.025	4.991	5.005	160-170	1.379	2563	100,100
180	5.149	5.161	5.131	5.158	5.158	5.156	5.122	5.156	170-180	0.4845	2563	100,100
DEG	LUMINOUS INTENSITY:cd								UMIT:lm			

Conical surface Flux(90deg): 1275.1 lm

%lum = 49.7%

%lamp = 49.7%

Conical surface Flux(120deg): 1887.8 lm

%lum = 73.6%

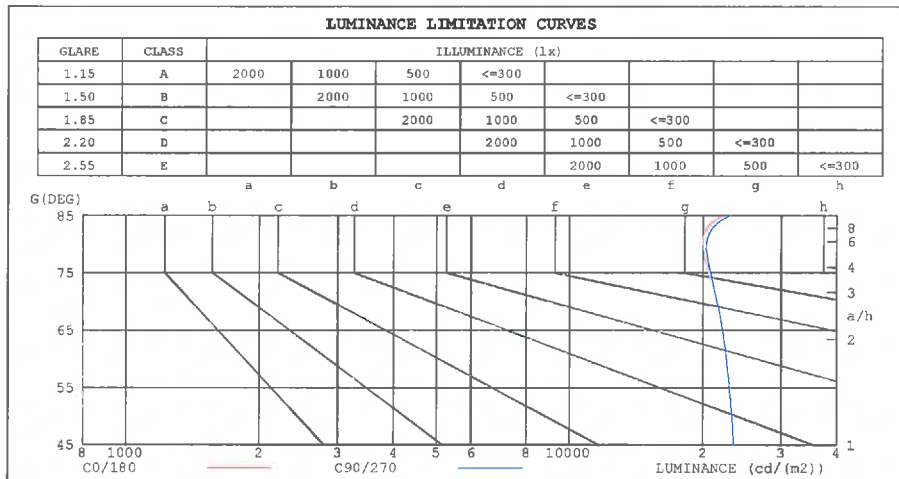
%lamp = 73.6%

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:

LUMINANCE LIMITATION CURVES

Test:U:230.07V I:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 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	22139	23006
80	20010	20363
75	20593	20804
70	21428	21489
65	22080	22141
60	22565	22571
55	22953	22908
50	23263	23247
45	23503	23469

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operator:
 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:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 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	.160	.052	
2.0	.302	.165	.051	.294	.162	.050	.281	.156	.048	.268	.150	.047	.257	.145	.046	
3.0	.276	.147	.044	.270	.145	.044	.258	.140	.042	.247	.135	.041	.236	.131	.040	
4.0	.254	.132	.039	.248	.130	.038	.237	.126	.038	.227	.122	.037	.218	.118	.036	
5.0	.233	.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	.098	.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	.207	.182	.159	.177	.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	.164	.121	.086	.113	.084	.061	.065	.049	.036	.021	.016	.012	
4.0	.184	.127	.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	.169	.109	.065	.146	.094	.057	.100	.066	.040	.058	.039	.024	.019	.013	.008	
7.0	.163	.102	.059	.140	.088	.052	.097	.062	.037	.056	.037	.022	.018	.012	.007	
8.0	.156	.096	.055	.134	.083	.048	.093	.059	.034	.054	.035	.020	.017	.011	.007	
9.0	.150	.091	.052	.129	.079	.045	.089	.056	.032	.052	.033	.019	.017	.011	.006	
10.0	.144	.087	.049	.124	.076	.043	.086	.053	.030	.050	.031	.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:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 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	22.0	23.3	22.3	23.6	23.9	22.0	23.3	22.3	23.6	24.0
4H	22.6	24.0	23.0	24.3	24.6	22.7	24.0	23.0	24.3	24.6
6H	23.2	24.4	23.6	24.8	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	23.6	24.7	24.0	25.1	25.5	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	24.0	23.2	24.3	24.7	22.8	24.0	23.2	24.3	24.7
4H	23.6	24.7	24.1	25.1	25.5	23.6	24.7	24.1	25.1	25.5
6H	24.3	25.2	24.8	25.7	26.1	24.3	25.3	24.8	25.7	26.1
8H	24.6	25.5	25.0	25.9	26.3	24.6	25.5	25.1	25.9	26.4
12H	24.8	25.6	25.3	26.1	26.6	24.9	25.7	25.4	26.1	26.6
8H 4H	23.9	24.8	24.4	25.3	25.7	24.0	24.8	24.4	25.3	25.7
6H	24.8	25.6	25.3	26.0	26.5	24.9	25.6	25.3	26.1	26.6
8H	25.2	25.9	25.7	26.4	26.9	25.3	25.9	25.8	26.4	26.9
12H	25.6	26.2	26.1	26.7	27.2	25.7	26.2	26.2	26.7	27.3
12H 4H	24.0	24.8	24.5	25.2	25.7	24.0	24.8	24.5	25.2	25.7
6H	24.9	25.6	25.4	26.1	26.6	24.9	25.6	25.5	26.1	26.6
8H	25.4	25.9	25.9	26.4	27.0	25.4	26.0	26.0	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, 2563 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.3$)

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:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

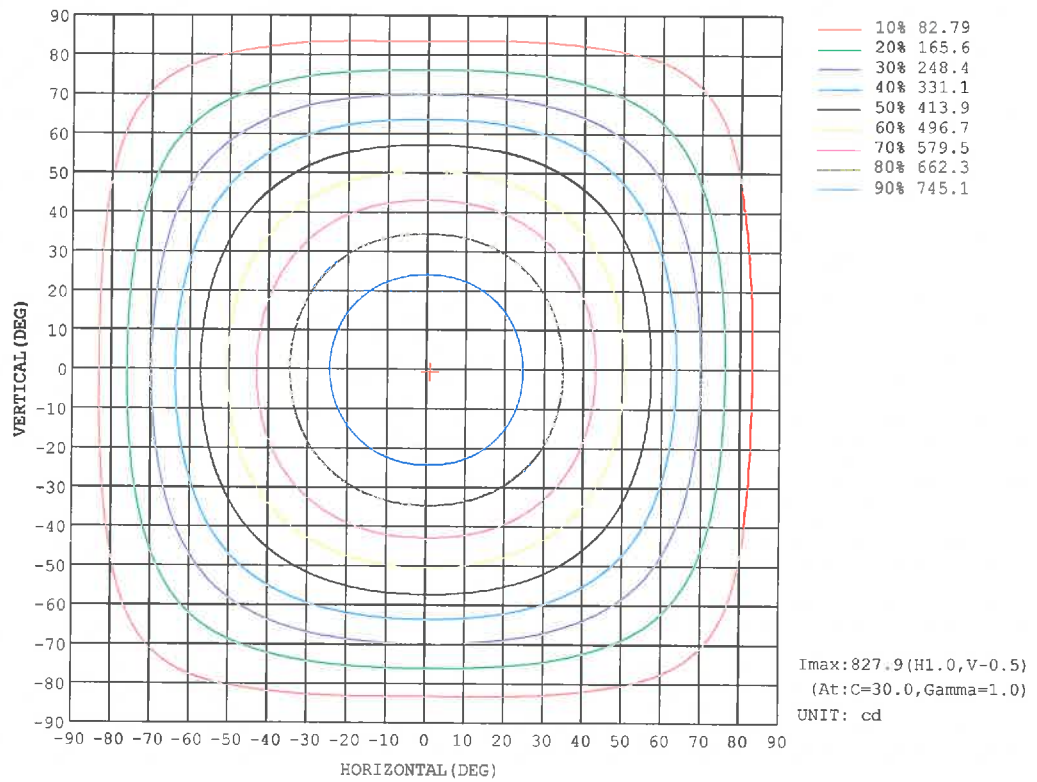
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	54	72	61	54	70	63	54	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	66
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	79
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:
 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:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



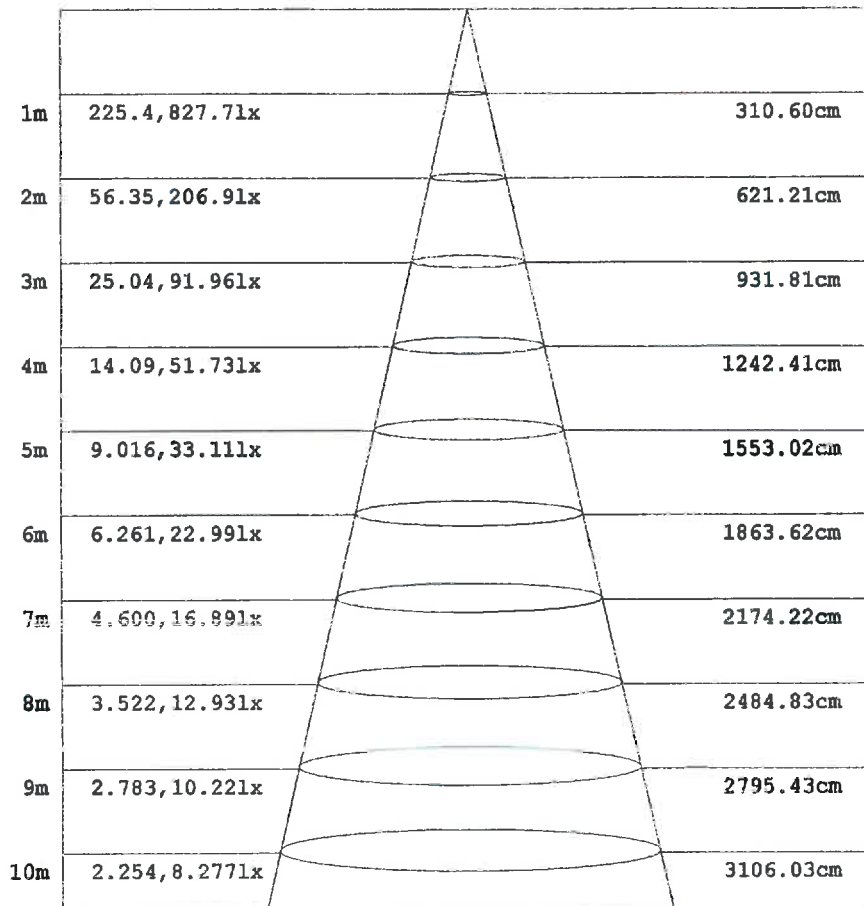
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:14 July 2021

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:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:1814 lm



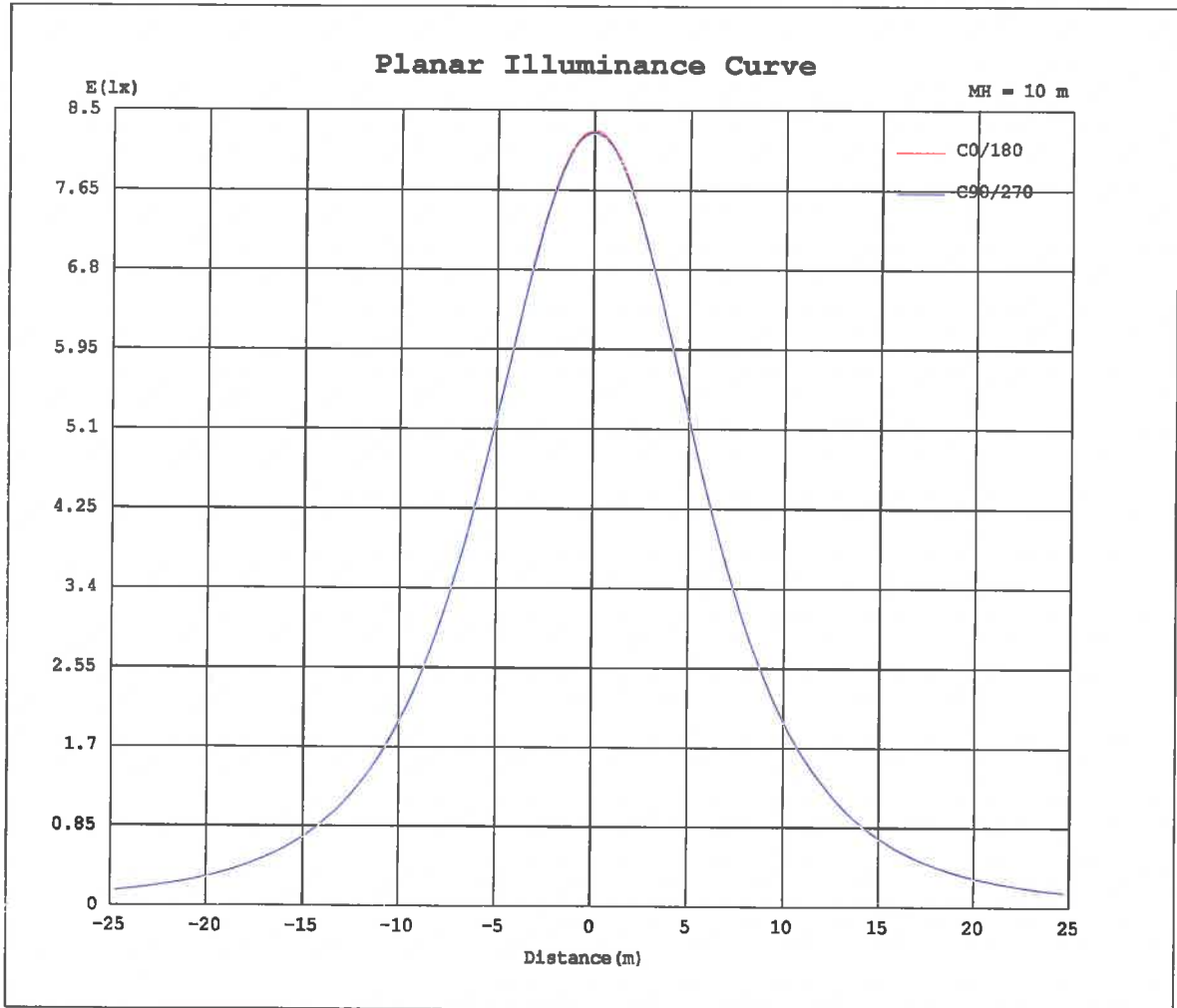
Height Eavg, Emax Angle:114.44deg Diameter

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: [Name]
 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: [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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.07V I:0.1001A P:22.161W PF:0.9627 Freq:49.99Hz Lamp Flux:2563.19x1 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	827	827	827	825	825	825	827	827	827	825	825	825						
5	825	825	824	823	822	821	824	825	824	822	823	822						
10	815	816	815	813	813	812	815	814	814	812	813	813						
15	797	799	797	796	796	795	796	797	797	795	796	795						
20	772	775	774	771	771	771	771	772	773	770	772	772						
25	741	743	743	739	740	740	741	741	742	738	741	741						
30	704	707	705	702	703	702	702	703	705	700	704	704						
35	660	664	662	660	660	660	660	660	663	657	661	662						
40	611	615	615	611	612	613	611	613	614	610	614	614						
45	558	564	564	558	560	561	558	561	563	557	562	563						
50	502	508	507	502	504	505	501	504	507	500	506	506						
55	442	448	448	441	445	446	441	445	447	441	447	447						
60	379	386	386	379	382	383	378	382	385	378	384	385						
65	314	321	321	314	317	318	313	317	320	312	319	320						
70	246	253	254	247	251	251	246	250	253	246	252	253						
75	179	187	188	181	185	185	179	183	187	179	186	187						
80	117	124	126	119	123	124	117	122	126	118	125	126						
85	64.8	72.6	74.0	67.4	71.8	72.8	65.3	70.6	74.6	66.8	73.9	74.1						
90	35.7	42.0	43.8	36.3	42.1	43.4	35.6	41.9	44.5	37.4	43.1	44.1						
95	34.6	41.0	42.7	35.4	41.1	42.3	34.6	40.9	43.4	36.4	42.0	43.0						
100	33.3	37.0	37.9	34.1	35.5	37.5	33.3	34.1	36.6	34.9	36.0	34.0						
105	30.3	24.3	25.6	32.4	25.7	21.5	29.3	20.8	20.4	29.3	21.2	19.1						
110	18.8	11.7	13.2	22.4	13.1	8.57	17.0	8.17	7.78	15.9	8.00	9.25						
115	7.38	3.00	3.92	10.2	3.77	2.43	5.65	2.40	2.24	4.82	2.27	2.62						
120	2.53	2.50	2.53	3.15	2.56	2.56	2.58	2.55	2.53	2.54	2.51	2.51						
125	2.92	2.91	2.94	2.87	2.87	2.96	2.97	2.96	2.95	2.95	2.82	2.80						
130	3.14	3.12	3.15	3.18	3.17	3.16	3.18	3.17	3.16	3.15	3.12	3.12						
135	3.44	3.41	3.44	3.47	3.45	3.45	3.48	3.47	3.45	3.45	3.42	3.41						
140	3.72	3.70	3.72	3.74	3.73	3.73	3.75	3.75	3.72	3.72	3.71	3.69						
145	3.99	3.97	3.99	4.00	3.99	4.01	4.01	4.03	3.99	3.99	3.97	3.95						
150	4.24	4.23	4.25	4.26	4.26	4.26	4.29	4.28	4.26	4.25	4.24	4.22						
155	4.48	4.48	4.51	4.49	4.49	4.51	4.52	4.53	4.50	4.50	4.48	4.47						
160	4.73	4.69	4.73	4.72	4.69	4.73	4.75	4.76	4.70	4.73	4.71	4.67						
165	4.88	4.86	4.91	4.87	4.85	4.91	4.90	4.92	4.87	4.88	4.90	4.85						
170	5.00	4.99	5.04	5.00	4.99	5.05	5.02	5.05	5.00	4.99	5.03	4.98						
175	5.10	5.10	5.12	5.08	5.10	5.14	5.11	5.14	5.10	5.08	5.13	5.09						
180	5.15	5.16	5.16	5.13	5.15	5.17	5.16	5.16	5.15	5.12	5.15	5.16						

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: