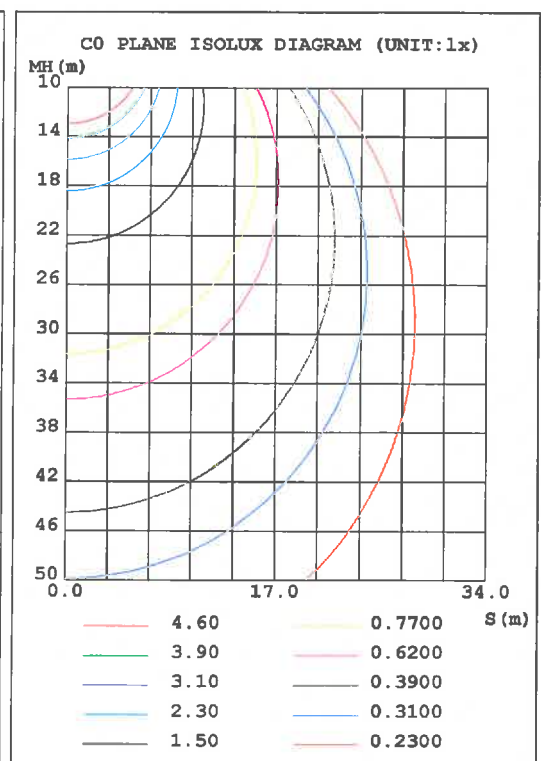
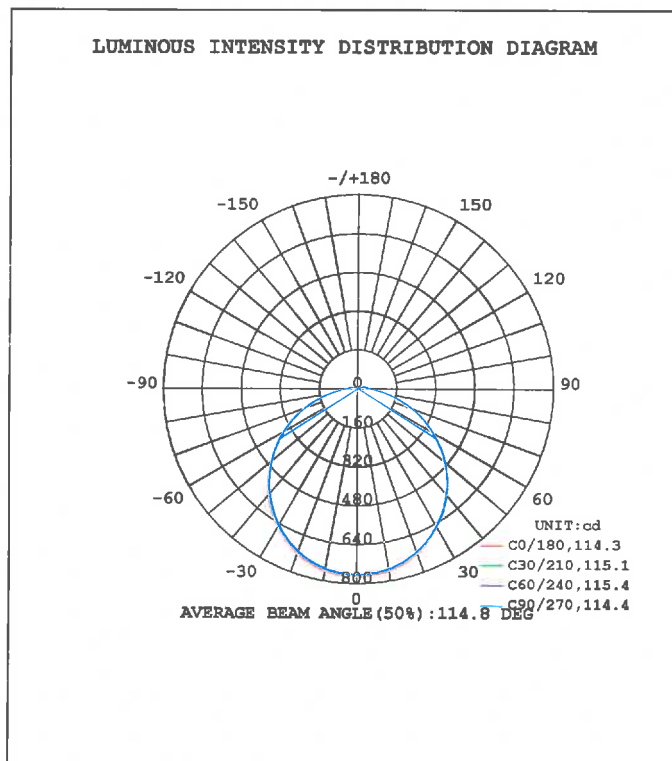


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.07V I:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.6lx1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 101.24 lm/W
MODEL	YYS24WCCT	I _{max} (cd)	772.1	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)	2360.6	η UP, DN (C0-180)	1.7, 48.3	
NOMINAL FLUX (lm)	2360.61	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.6, 48.4	
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	Φ zone	Φ total	%lum, lamp
10	758.0	753.3	747.5	744.0	760.4	753.3	748.5	744.5	0- 10	72.23	72.23	9.06, 9.06
20	719.2	714.2	709.9	706.7	721.0	715.0	707.9	706.7	10- 20	207.3	279.6	11.0, 11.0
30	653.0	651.7	646.2	643.4	656.7	652.1	643.6	644.3	20- 30	314.8	594.4	25.2, 25.2
40	567.0	567.7	561.6	560.6	571.1	567.6	559.7	561.0	30- 40	361.0	975.3	41.3, 41.3
50	465.0	467.7	461.0	461.2	469.0	467.4	459.3	463.1	40- 50	398.4	1374	50.2, 50.2
60	350.7	355.0	348.6	349.9	354.3	354.0	346.4	351.7	50- 60	366.0	1740	73.7, 73.7
70	227.2	232.7	226.9	229.2	230.6	232.0	225.0	231.3	60- 70	288.6	2028	85.9, 85.9
80	107.1	114.3	109.1	111.9	110.1	114.5	107.5	114.6	70- 80	179.2	2207	93.5, 93.5
90	34.44	40.29	33.31	30.21	32.09	30.91	34.01	40.30	80- 90	74.02	2282	96.6, 96.6
100	32.10	34.09	31.21	32.60	30.05	32.14	31.79	31.96	90-100	39.26	2321	98.3, 98.3
110	17.27	11.20	20.44	9.805	16.07	7.552	14.33	7.011	100-110	24.08	2345	99.3, 99.3
120	2.330	2.314	2.966	2.330	2.390	2.324	2.307	2.272	110-120	5.061	2350	99.5, 99.5
130	2.909	2.080	2.901	2.078	2.937	2.901	2.073	2.037	120-130	2.334	2352	99.6, 99.6
140	3.447	3.416	3.444	3.394	3.480	3.437	3.402	3.367	130-140	2.427	2355	99.7, 99.7
150	3.927	3.910	3.905	3.876	3.978	3.921	3.882	3.846	140-150	2.294	2357	99.8, 99.8
160	4.375	4.333	4.322	4.292	4.421	4.349	4.321	4.272	150-160	1.901	2359	99.9, 99.9
170	4.630	4.622	4.570	4.582	4.675	4.629	4.570	4.564	160-170	1.263	2360	100, 100
180	4.765	4.754	4.701	4.699	4.801	4.756	4.680	4.706	170-180	0.448	2361	100, 100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

Conical surface Flux(90deg): 1175.5 lm

%lum = 49.8%
%lamp = 49.8%

Conical surface Flux(120deg): 1739.7 lm

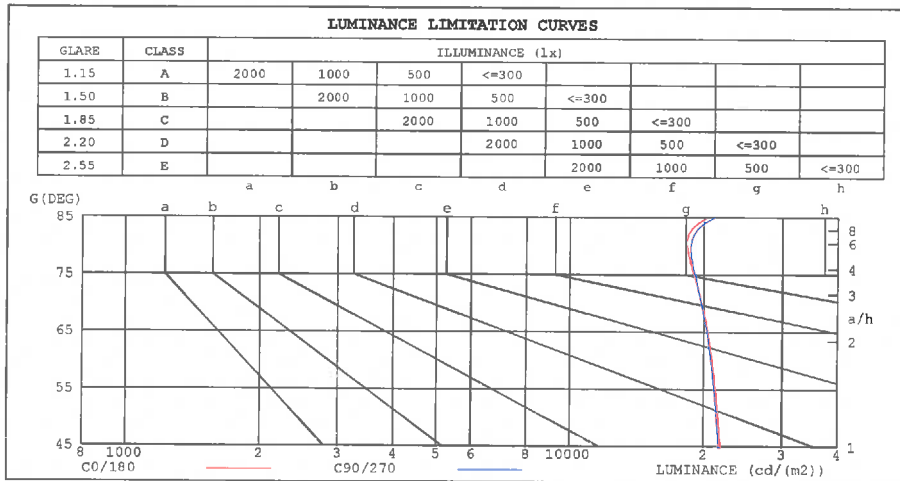
%lum = 73.7%
%lamp = 73.7%

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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.6lx1 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: [redacted]
 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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.61x1 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	.301	.165	.051	.294	.162	.050	.281	.156	.048	.268	.150	.047	.257	.145	.046	
3.0	.276	.147	.044	.270	.145	.043	.258	.140	.042	.247	.135	.041	.236	.131	.040	
4.0	.253	.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	.200	.099	.028	.196	.098	.028	.189	.095	.027	.181	.093	.027	.174	.091	.027	
8.0	.187	.091	.026	.183	.090	.025	.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	.094	.070	.062	.055	.022	.020	.018	
2.0	.199	.158	.123	.171	.136	.106	.117	.094	.074	.068	.055	.043	.022	.018	.014	
3.0	.192	.140	.099	.164	.121	.086	.113	.084	.060	.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	.063	.104	.071	.045	.061	.042	.027	.019	.014	.009	
6.0	.169	.109	.065	.146	.094	.057	.100	.066	.040	.058	.039	.024	.019	.013	.008	
7.0	.162	.102	.059	.140	.088	.052	.097	.062	.037	.056	.036	.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	.075	.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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.6lx1 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	20.4	21.8	20.7	22.1	22.4	20.3	21.8	20.6	22.1	22.4
3H	22.0	23.4	22.3	23.7	24.0	21.9	23.3	22.3	23.6	23.9
4H	22.7	24.0	23.0	24.3	24.6	22.6	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	24.9	25.3
12H	23.6	24.7	24.0	25.1	25.5	23.6	24.7	24.0	25.1	25.5
4H 2H	21.0	22.3	21.4	22.6	23.0	21.0	22.3	21.3	22.6	22.9
3H	22.8	24.0	23.2	24.3	24.7	22.8	23.9	23.2	24.3	24.7
4H	23.6	24.7	24.1	25.1	25.5	23.6	24.7	24.0	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	25.3	26.1	26.6
8H 4H	23.9	24.8	24.4	25.3	25.7	23.9	24.8	24.4	25.2	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	25.9	25.7	26.3	26.9	25.2	25.9	25.8	26.4	26.9
12H	25.6	26.1	26.1	26.7	27.2	25.6	26.2	26.2	26.7	27.2
12H 4H	24.0	24.8	24.5	25.2	25.7	24.0	24.8	24.4	25.2	25.7
6H	24.9	25.6	25.4	26.0	26.6	24.9	25.6	25.4	26.1	26.6
8H	25.4	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, 2361 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.0)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Y...
 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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.61x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

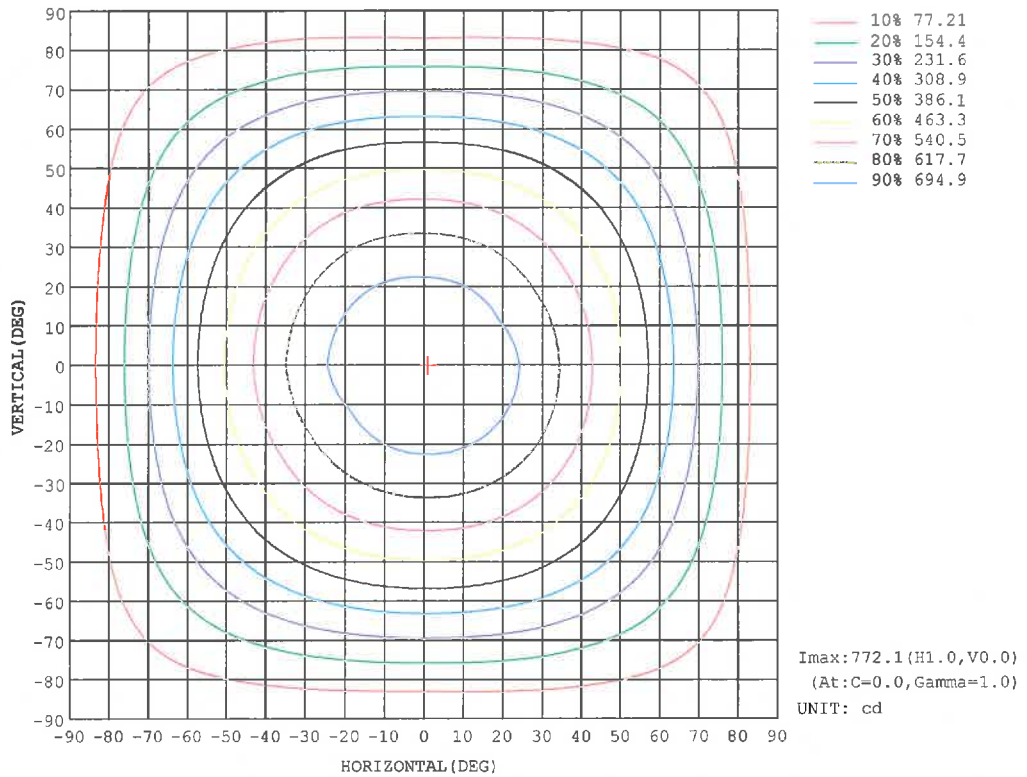
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	46	62	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	81	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	99	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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.6lx1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

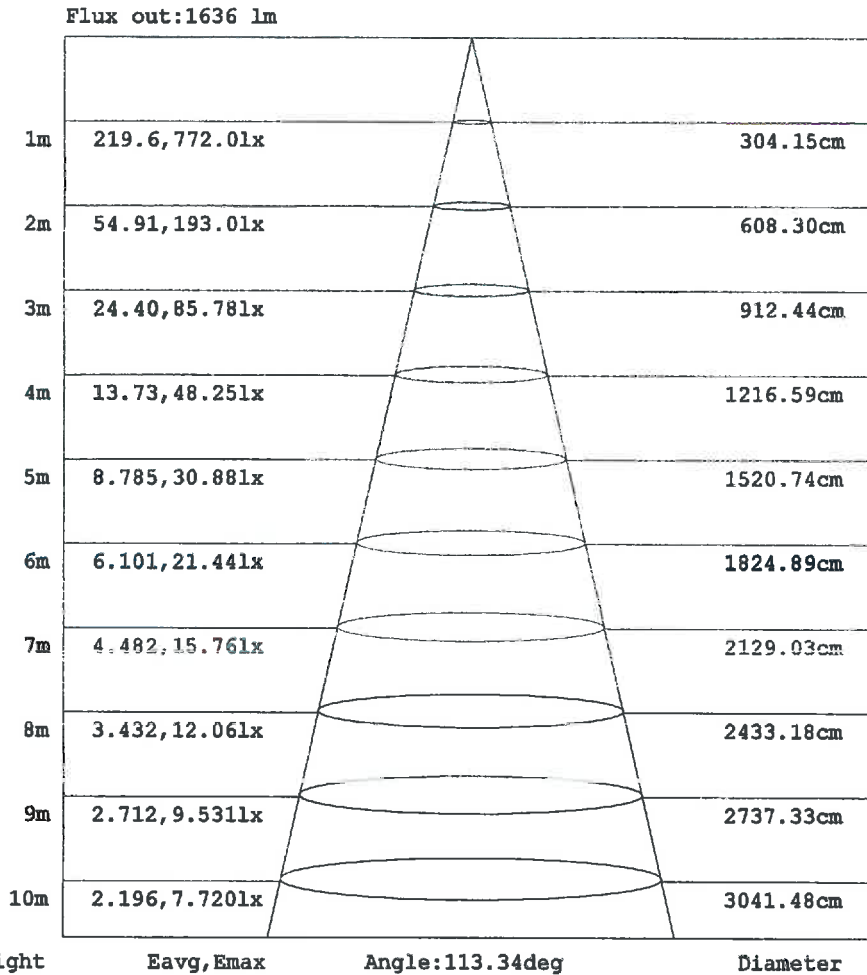


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:14 July 2021

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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.61x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

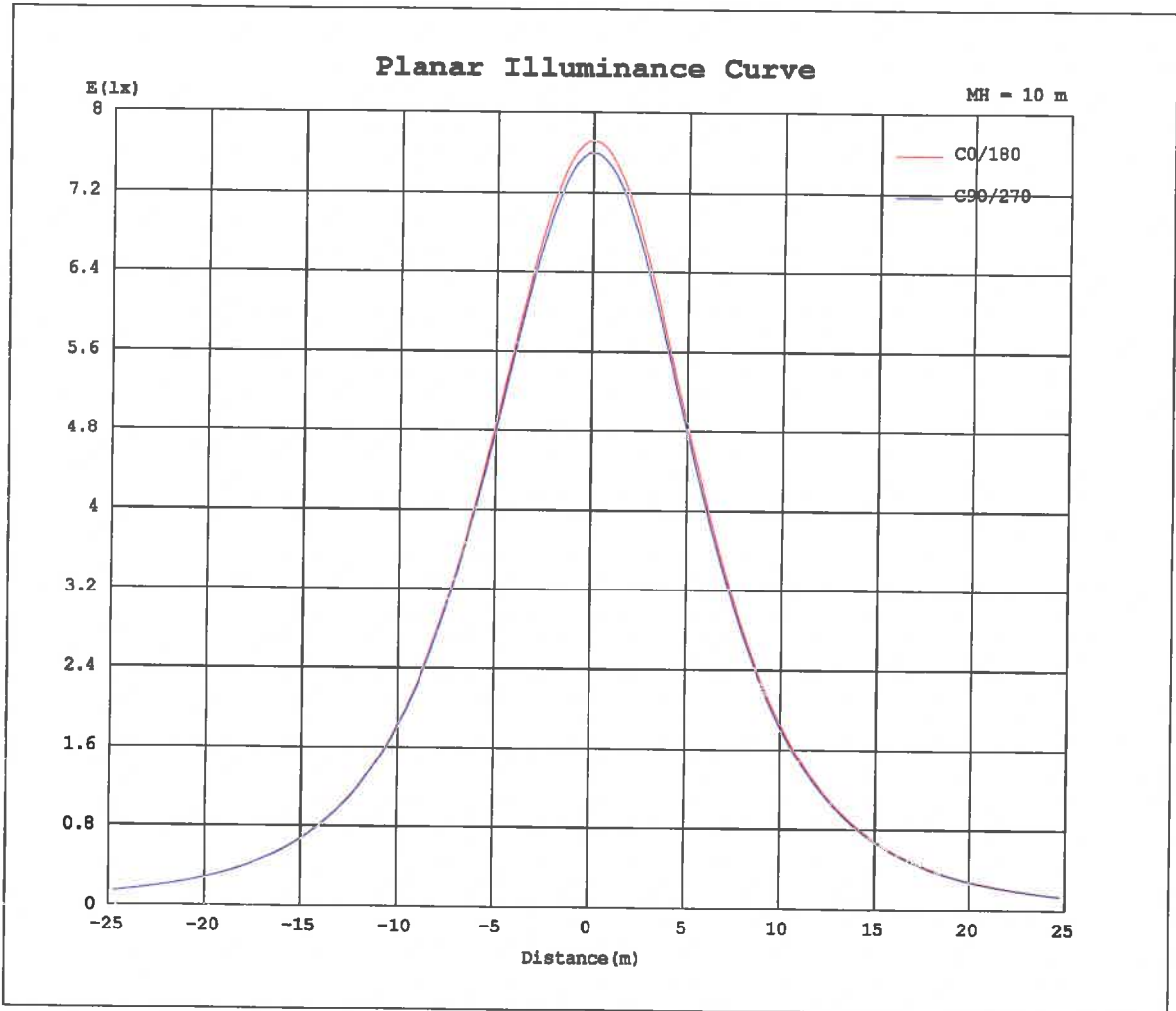


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: --
 Test Date: 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:0.1049A P:23.318W PF:0.9665 Freq:49.99Hz Lamp Flux:2360.61x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:330S	DIM.: 330MM	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	772	766	764	760	757	755	772	766	764	760	757	755						
5	769	764	761	757	755	752	769	764	761	756	755	752						
10	759	755	752	747	746	744	760	755	751	749	746	743						
15	743	739	736	733	731	727	743	739	736	731	730	727						
20	719	716	713	710	708	705	721	716	714	708	708	705						
25	689	688	685	681	679	677	692	687	685	679	679	677						
30	654	653	650	646	644	642	657	653	651	644	645	644						
35	613	614	610	606	605	604	616	612	611	604	607	604						
40	567	569	567	562	561	560	571	568	568	560	562	561						
45	519	521	519	513	513	512	522	519	520	511	514	514						
50	466	468	467	461	462	461	470	467	467	459	463	463						
55	410	413	412	406	407	406	413	412	413	404	409	409						
60	351	356	354	349	350	350	354	354	355	346	352	352						
65	290	295	294	289	290	291	294	294	295	286	292	292						
70	227	233	233	227	229	229	231	232	233	225	231	232						
75	165	171	172	166	169	168	168	171	173	164	171	172						
80	107	114	115	109	112	112	110	113	116	108	114	115						
85	59.9	66.5	67.8	61.9	65.2	65.4	61.4	65.6	68.7	61.0	67.5	68.2						
90	34.4	39.8	40.8	33.3	37.9	38.5	32.1	37.7	40.2	34.0	39.6	41.0						
95	33.4	38.8	39.7	32.5	36.9	37.6	31.3	36.7	39.2	33.1	38.6	40.0						
100	32.2	35.0	34.8	31.2	32.2	33.2	30.0	30.8	33.5	31.8	32.8	31.1						
105	28.9	22.8	23.2	29.6	23.4	19.1	26.8	19.3	18.8	26.6	19.2	17.5						
110	17.3	10.6	12.0	20.4	11.9	7.66	16.1	7.93	7.17	14.3	7.13	8.50						
115	6.40	2.65	3.62	9.39	3.52	2.23	5.66	2.31	2.07	4.34	2.06	2.40						
120	2.33	2.31	2.32	2.97	2.33	2.33	2.39	2.33	2.32	2.31	2.28	2.26						
125	2.61	2.59	2.60	2.62	2.61	2.61	2.66	2.62	2.61	2.59	2.56	2.54						
130	2.91	2.87	2.89	2.90	2.88	2.88	2.94	2.91	2.89	2.87	2.85	2.83						
135	3.18	3.15	3.16	3.19	3.14	3.14	3.21	3.18	3.16	3.15	3.11	3.09						
140	3.45	3.42	3.42	3.44	3.38	3.40	3.48	3.45	3.43	3.40	3.39	3.35						
145	3.69	3.68	3.67	3.67	3.63	3.64	3.73	3.70	3.67	3.65	3.63	3.59						
150	3.93	3.91	3.90	3.91	3.87	3.88	3.98	3.94	3.90	3.88	3.86	3.83						
155	4.15	4.13	4.13	4.12	4.10	4.10	4.20	4.16	4.13	4.11	4.09	4.05						
160	4.38	4.33	4.33	4.32	4.28	4.30	4.42	4.37	4.33	4.32	4.30	4.24						
165	4.52	4.48	4.50	4.46	4.43	4.47	4.57	4.53	4.48	4.46	4.47	4.41						
170	4.64	4.62	4.62	4.57	4.56	4.61	4.67	4.66	4.60	4.57	4.60	4.53						
175	4.71	4.71	4.70	4.66	4.65	4.69	4.76	4.72	4.70	4.65	4.69	4.63						
180	4.76	4.77	4.74	4.70	4.69	4.71	4.80	4.76	4.76	4.69	4.72	4.70						

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