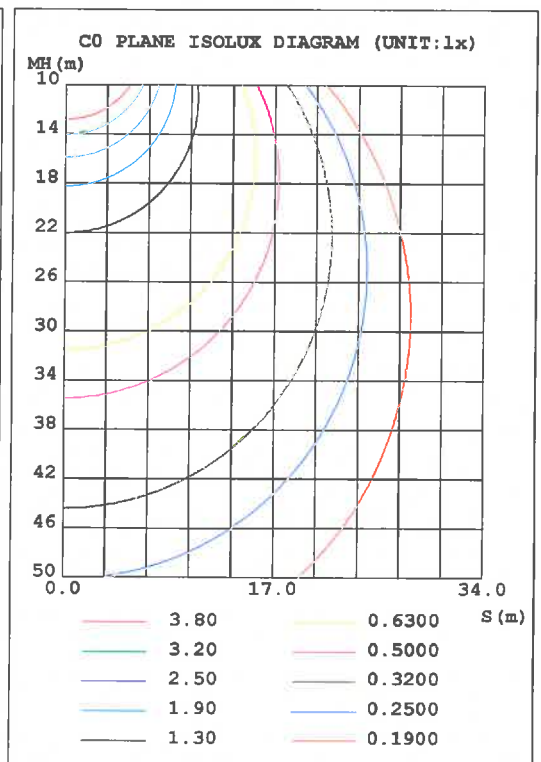
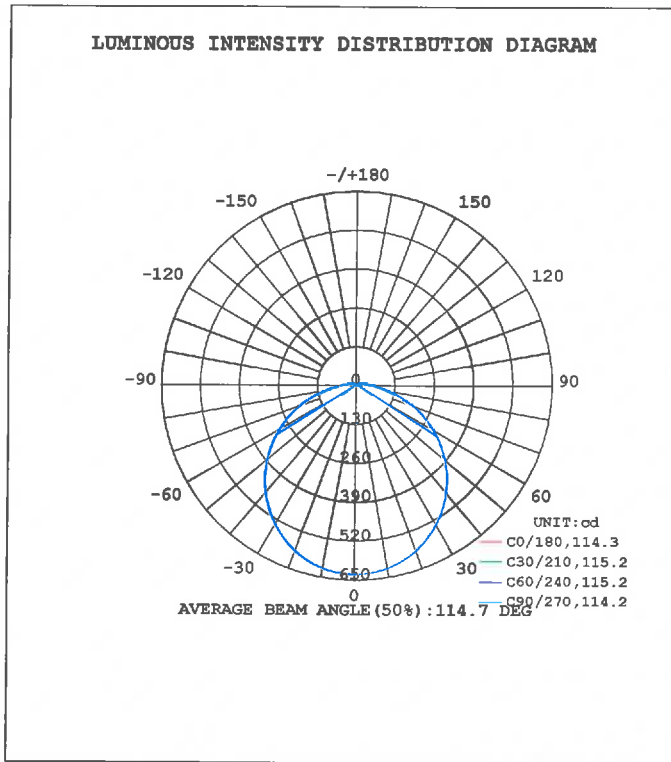


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	YYS18WCCT	I <sub>max</sub> (cd)	630.9	S/MH(C0/180)	1.27
NOMINAL POWER(W)	18	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1937.2	η UP,DN(C0-180)	1.5,48.3
NOMINAL FLUX(lm)	1937.23	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.4,48.8
LAMPS INSIDE	1	η up(%)	2.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	97.1	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	620.1	619.8	619.2	620.3	622.1	621.5	620.0	619.7	0- 10	59.70	59.70	3.08, 3.08
20	586.7	587.3	586.3	588.4	590.2	591.0	587.6	588.1	10- 20	171.3	231.0	11.9, 11.9
30	532.8	534.6	532.9	536.5	537.9	539.5	535.3	536.5	20- 30	260.2	491.2	25.4, 25.4
40	462.3	465.1	462.3	467.1	467.9	470.7	465.5	467.6	30- 40	314.8	806.0	41.6, 41.6
50	379.0	382.5	379.0	384.5	384.4	388.0	382.5	385.1	40- 50	329.1	1135	58.6, 58.6
60	285.1	289.3	285.3	291.1	290.3	294.9	288.8	292.5	50- 60	302.2	1437	74.2, 74.2
70	184.2	188.5	183.4	189.7	188.0	193.9	187.7	192.0	60- 70	237.7	1675	86.5, 86.5
80	86.84	91.35	85.34	91.60	89.59	95.52	88.89	94.56	70- 80	146.9	1822	94, 94
90	27.36	32.43	26.15	31.32	25.31	31.35	26.08	32.38	80- 90	59.33	1882	97.1, 97.1
100	25.44	24.05	24.99	24.59	24.20	22.61	24.87	20.54	90-100	30.93	1913	98.7, 98.7
110	2.013	1.823	8.403	2.414	8.956	2.150	3.092	1.446	100-110	13.58	1926	99.4, 99.4
120	2.080	1.946	1.942	1.921	1.901	2.038	1.896	1.912	110-120	1.941	1928	99.5, 99.5
130	2.457	2.421	2.421	2.382	2.372	2.367	2.375	2.389	120-130	1.949	1930	99.6, 99.6
140	2.864	2.867	2.874	2.826	2.815	2.828	2.819	2.835	130-140	2.025	1932	99.7, 99.7
150	3.267	3.272	3.263	3.235	3.222	3.256	3.231	3.240	140-150	1.910	1934	99.8, 99.8
160	3.633	3.620	3.625	3.591	3.598	3.618	3.606	3.597	150-160	1.586	1935	99.9, 99.9
170	3.833	3.848	3.819	3.830	3.819	3.846	3.814	3.837	160-170	1.055	1937	100, 100
180	3.937	3.944	3.928	3.941	3.937	3.937	3.923	3.941	170-180	8.3705	1937	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 971.38 lm

%lum = 50.1%  
%lamp = 50.1%

Conical surface Flux(120deg): 1437.4 lm

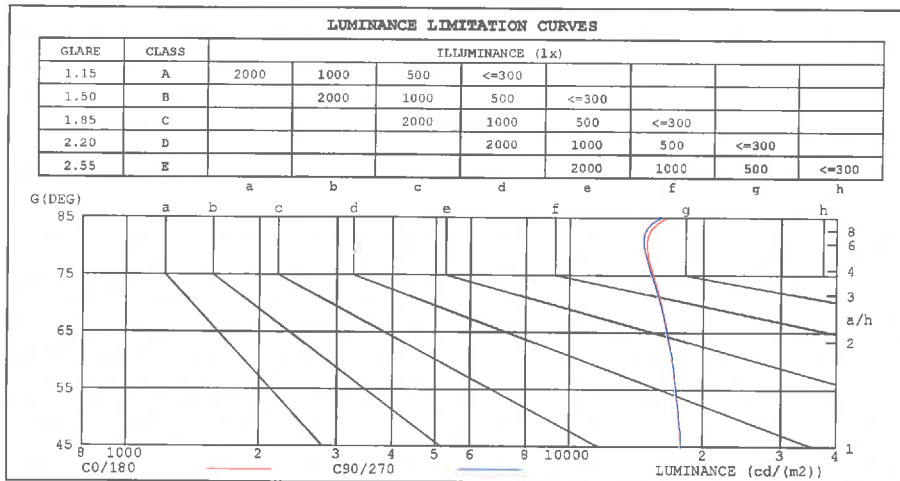
%lum = 74.2%  
%lamp = 74.2%

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: [Signature]  
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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16565	15991
80	14883	14627
75	15387	15260
70	16032	15959
65	16561	16514
60	16973	16979
55	17285	17288
50	17547	17547
45	17772	17765

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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	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	.326	.186	.059	.318	.182	.058	.303	.174	.056	.290	.167	.054	.277	.161	.052	
2.0	.301	.165	.051	.294	.162	.050	.281	.156	.048	.269	.151	.047	.257	.146	.046	
3.0	.276	.147	.044	.270	.145	.044	.258	.140	.043	.247	.135	.042	.237	.131	.041	
4.0	.253	.132	.039	.248	.130	.038	.237	.126	.038	.228	.122	.037	.218	.119	.036	
5.0	.233	.119	.034	.228	.117	.034	.219	.114	.034	.210	.111	.033	.202	.108	.032	
6.0	.216	.108	.031	.211	.107	.031	.203	.104	.030	.195	.101	.030	.188	.099	.029	
7.0	.201	.099	.028	.197	.098	.028	.189	.096	.028	.182	.093	.027	.175	.091	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.088	.025	.170	.086	.025	.164	.084	.025	
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.160	.080	.023	.154	.078	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.021	.151	.075	.021	.146	.073	.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	.212	.212	.212	.191	.191	.191	.124	.124	.124	.071	.071	.071	.023	.023	.023	
1.0	.203	.178	.155	.174	.153	.133	.119	.105	.092	.069	.061	.054	.022	.020	.017	
2.0	.196	.154	.119	.168	.133	.103	.115	.092	.072	.066	.053	.042	.021	.017	.014	
3.0	.188	.137	.096	.161	.118	.083	.111	.082	.058	.064	.048	.034	.021	.016	.011	
4.0	.180	.123	.080	.155	.107	.069	.106	.074	.049	.062	.044	.029	.020	.014	.010	
5.0	.173	.113	.069	.148	.098	.060	.102	.068	.042	.059	.040	.025	.019	.013	.008	
6.0	.165	.105	.061	.142	.091	.053	.098	.064	.038	.057	.037	.022	.018	.012	.007	
7.0	.159	.098	.055	.136	.085	.048	.094	.060	.034	.055	.035	.020	.018	.011	.007	
8.0	.152	.092	.051	.131	.080	.045	.091	.056	.032	.053	.033	.019	.017	.011	.006	
9.0	.146	.087	.048	.126	.076	.042	.087	.053	.030	.051	.031	.018	.016	.010	.006	
10.0	.140	.083	.045	.121	.072	.039	.084	.051	.028	.049	.030	.017	.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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm										
NAME: LED Ceiling light					TYPE:			WEIGHT:		
SPEC.:280S					DIM.: 280MM			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	22.3	20.3	21.8	20.6	22.1	22.3
3H	21.9	23.3	22.3	23.6	23.9	21.9	23.3	22.2	23.6	23.9
4H	22.6	23.9	23.0	24.2	24.5	22.6	23.9	22.9	24.2	24.5
6H	23.1	24.4	23.5	24.7	25.0	23.1	24.3	23.5	24.7	25.0
8H	23.3	24.5	23.7	24.9	25.2	23.3	24.5	23.7	24.8	25.2
12H	23.5	24.7	23.9	25.0	25.4	23.4	24.6	23.8	25.0	25.3
4H 2H	21.0	22.3	21.3	22.6	22.9	20.9	22.3	21.3	22.6	22.9
3H	22.8	23.9	23.2	24.3	24.6	22.7	23.9	23.1	24.2	24.6
4H	23.6	24.6	24.0	25.0	25.4	23.5	24.6	24.0	25.0	25.4
6H	24.2	25.2	24.7	25.6	26.0	24.2	25.2	24.6	25.6	26.0
8H	24.5	25.4	25.0	25.8	26.3	24.5	25.4	24.9	25.8	26.2
12H	24.8	25.6	25.2	26.0	26.5	24.7	25.5	25.2	26.0	26.4
8H 4H	23.9	24.8	24.3	25.2	25.6	23.9	24.7	24.3	25.2	25.6
6H	24.7	25.5	25.2	25.9	26.4	24.7	25.4	25.2	25.9	26.4
8H	25.1	25.8	25.6	26.3	26.8	25.1	25.7	25.6	26.2	26.7
12H	25.5	26.1	26.0	26.6	27.1	25.4	26.0	26.0	26.5	27.0
12H 4H	23.9	24.7	24.4	25.2	25.6	23.9	24.7	24.4	25.1	25.6
6H	24.8	25.5	25.3	26.0	26.5	24.8	25.5	25.3	25.9	26.4
8H	25.3	25.9	25.8	26.4	26.9	25.2	25.8	25.8	26.3	26.8
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, 1937 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.3)

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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

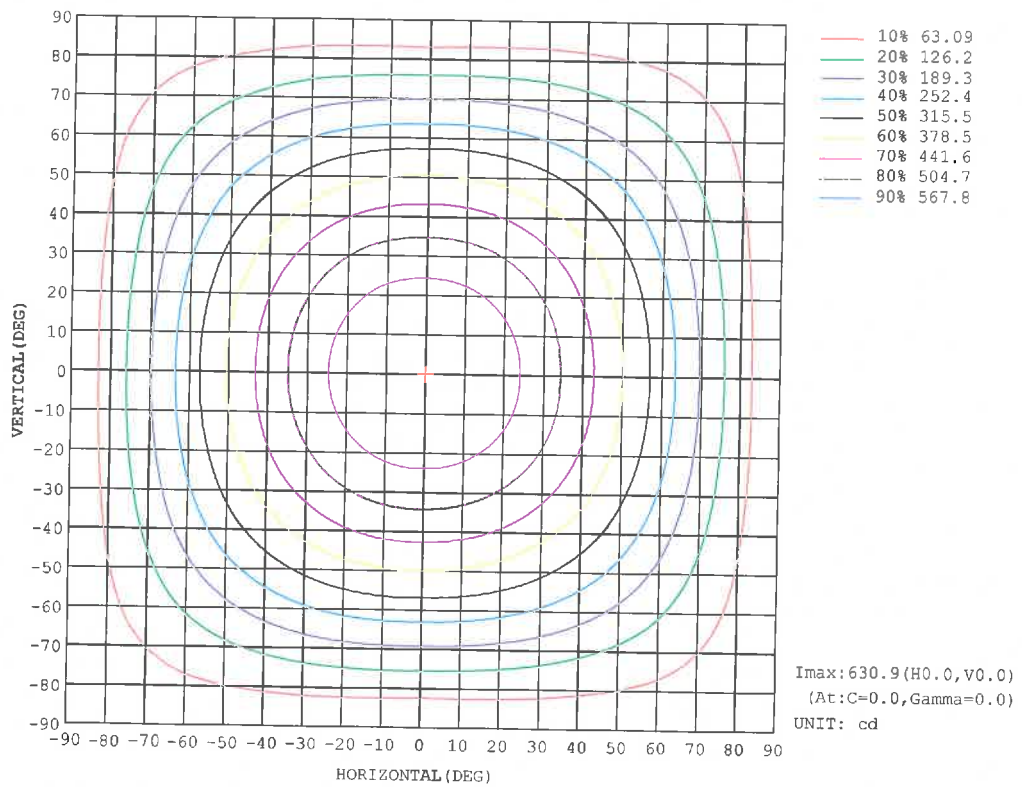
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR - 5$									
k = 0.60	56	44	37	55	44	37	54	43	36	30
0.80	66	54	46	64	53	46	63	52	45	38
1.00	74	62	55	73	62	54	70	63	54	46
1.25	81	70	62	79	69	62	76	68	61	53
1.50	86	75	68	84	75	68	81	73	66	58
2.00	93	84	77	91	82	76	87	80	74	66
2.50	97	89	82	95	87	81	90	84	79	70
3.00	100	93	87	98	91	86	94	88	83	74
4.00	104	98	93	102	96	92	97	93	89	79
5.00	107	102	97	104	100	95	99	96	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

$\gamma$  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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	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

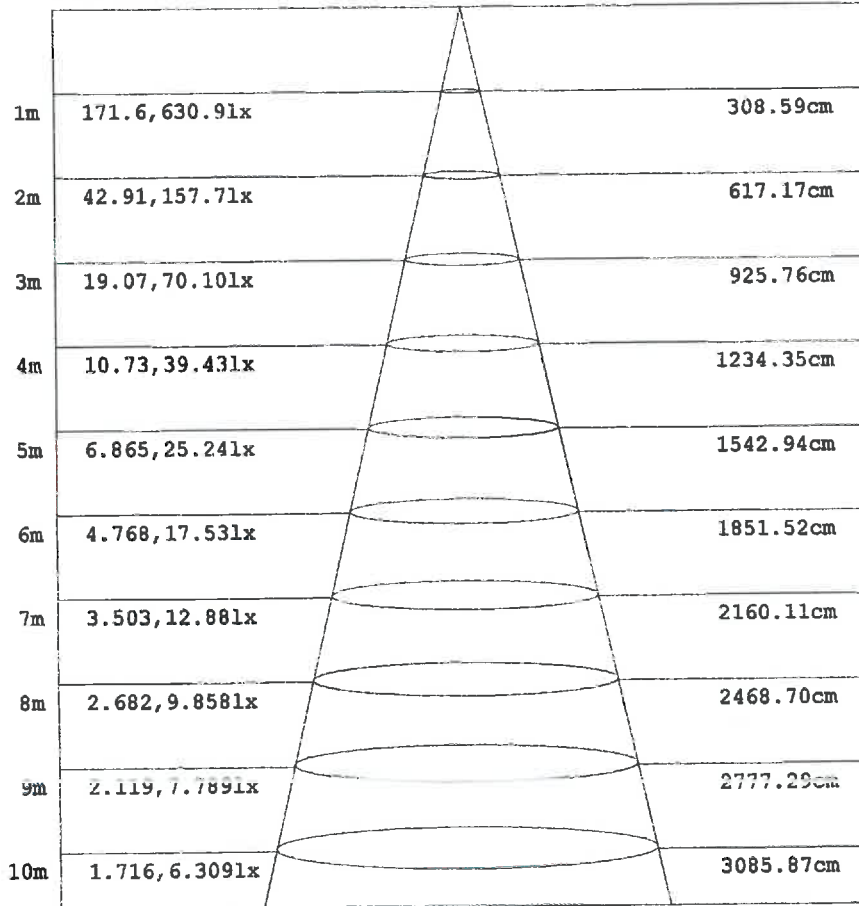
γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 8.791m [K=1.0000]  
 Remarks:



AAI Figure

Test:U:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:1381 lm



Height                      Eavg, Emax                      Angle:114.10deg                      Diameter

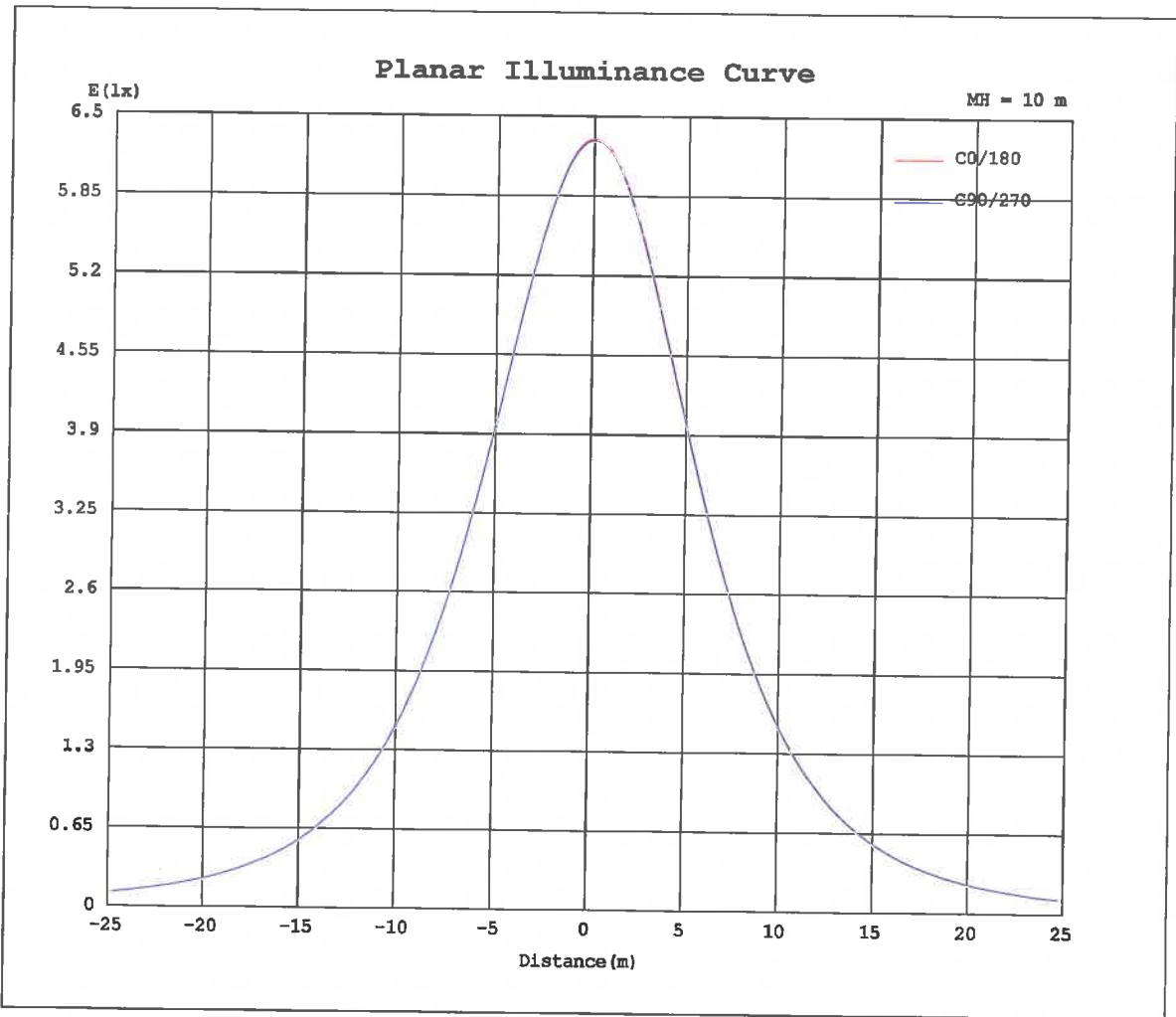
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 1...  
 Test Date: 14 July 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:230.08V I:0.0826A P:18.193W PF:0.9569 Freq:49.99Hz Lamp Flux:1937.23x1 lm		
NAME: LED Ceiling light	TYPE:	WEIGHT:
SPEC.:280S	DIM.: 280MM	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	631	631	630	630	630	630	631	631	630	630	630	630						
5	628	628	628	627	627	628	629	629	628	628	628	627						
10	620	620	620	619	620	621	622	622	621	620	621	619						
15	606	607	606	605	607	607	609	609	609	607	607	606						
20	587	588	587	586	588	589	590	591	591	588	589	588						
25	562	564	563	562	564	565	566	567	568	564	565	564						
30	533	535	534	533	536	537	538	539	540	535	537	536						
35	499	502	501	500	503	504	505	506	507	502	505	503						
40	462	465	465	462	466	468	468	470	471	466	469	467						
45	422	426	425	422	426	428	428	430	431	426	429	427						
50	379	383	382	379	383	386	384	387	389	383	386	384						
55	333	338	336	333	338	340	339	342	344	337	341	339						
60	285	290	289	285	290	292	290	294	296	289	294	292						
65	235	240	239	234	240	241	239	244	245	239	243	242						
70	184	189	188	183	189	191	188	193	195	188	193	191						
75	134	139	138	133	138	140	137	142	144	137	142	141						
80	86.8	92.2	90.5	85.3	90.6	92.8	89.6	94.7	96.3	88.9	95.1	94.1						
85	48.5	53.9	52.5	46.8	52.1	53.9	49.9	55.1	56.4	49.4	55.7	55.4						
90	27.4	32.5	32.3	26.1	31.3	31.3	25.3	31.0	31.7	26.1	32.0	32.8						
95	26.8	31.8	31.6	25.6	30.6	30.6	24.8	30.3	30.8	25.5	30.8	32.0						
100	25.4	24.7	23.4	25.0	24.9	24.3	24.2	22.2	23.0	24.9	21.1	20.0						
105	14.0	8.39	13.1	20.2	12.5	12.9	19.3	12.5	8.14	14.9	8.43	6.20						
110	2.01	1.47	2.18	8.40	1.84	2.99	8.96	2.89	1.41	3.09	1.43	1.46						
115	1.70	1.70	1.71	1.70	1.70	1.67	1.67	1.99	1.64	1.66	1.67	1.69						
120	2.08	1.93	1.96	1.94	1.93	1.91	1.90	2.20	1.88	1.90	1.90	1.92						
125	2.28	2.18	2.19	2.19	2.17	2.14	2.15	2.17	2.12	2.14	2.14	2.16						
130	2.46	2.41	2.43	2.42	2.39	2.37	2.37	2.38	2.36	2.38	2.39	2.39						
135	2.67	2.64	2.66	2.65	2.62	2.60	2.60	2.62	2.58	2.60	2.61	2.62						
140	2.86	2.86	2.88	2.87	2.84	2.81	2.82	2.85	2.81	2.82	2.83	2.84						
145	3.08	3.06	3.09	3.07	3.04	3.03	3.02	3.08	3.01	3.03	3.04	3.04						
150	3.27	3.26	3.28	3.26	3.24	3.23	3.22	3.29	3.22	3.23	3.24	3.24						
155	3.46	3.44	3.47	3.44	3.43	3.43	3.41	3.50	3.41	3.43	3.43	3.43						
160	3.63	3.60	3.64	3.62	3.58	3.60	3.60	3.67	3.57	3.61	3.61	3.59						
165	3.75	3.73	3.76	3.73	3.72	3.74	3.72	3.80	3.71	3.73	3.75	3.72						
170	3.83	3.83	3.86	3.82	3.82	3.84	3.82	3.88	3.81	3.81	3.86	3.82						
175	3.90	3.91	3.92	3.89	3.90	3.92	3.90	3.92	3.90	3.90	3.92	3.89						
180	3.94	3.95	3.94	3.93	3.94	3.94	3.94	3.93	3.94	3.92	3.94	3.94						

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: