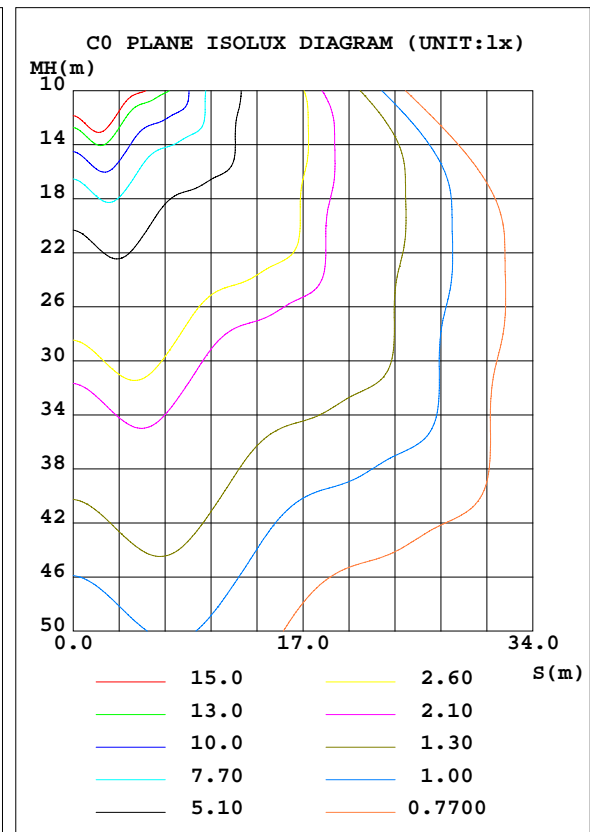
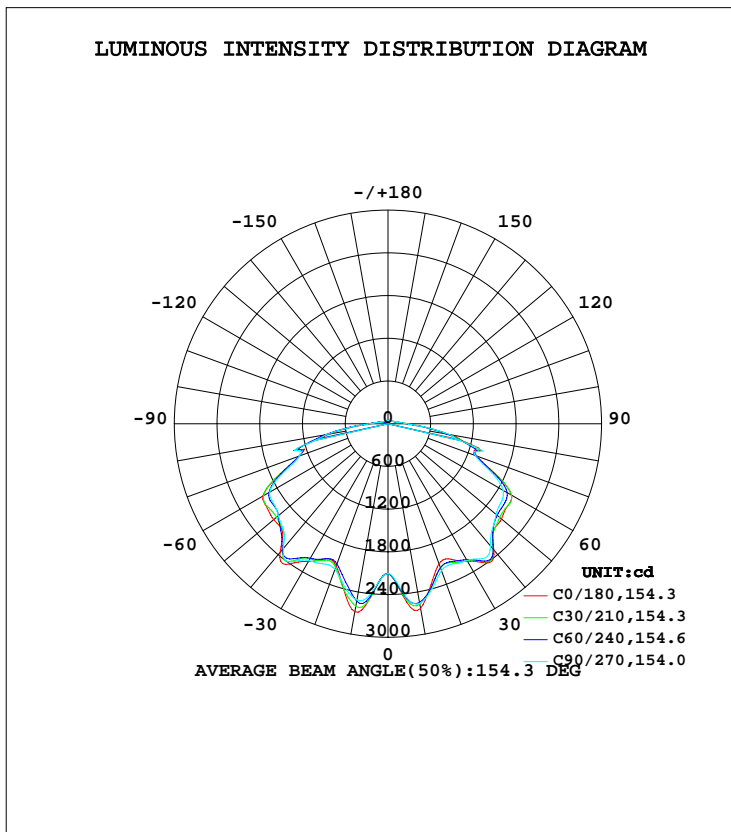


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 131.61 lm/W			
MODEL TS-GCP1312-120W-G-TCP		Imax(cd)	2682	S/MH(C0/180)	1.69
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.66
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	10788	η UP, DN(C0-180)	2.7,47.3
NOMINAL FLUX(lm)	10788.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	2.5,47.6
LAMPS INSIDE	1	η up(%)	5.2	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down(%)	94.8	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

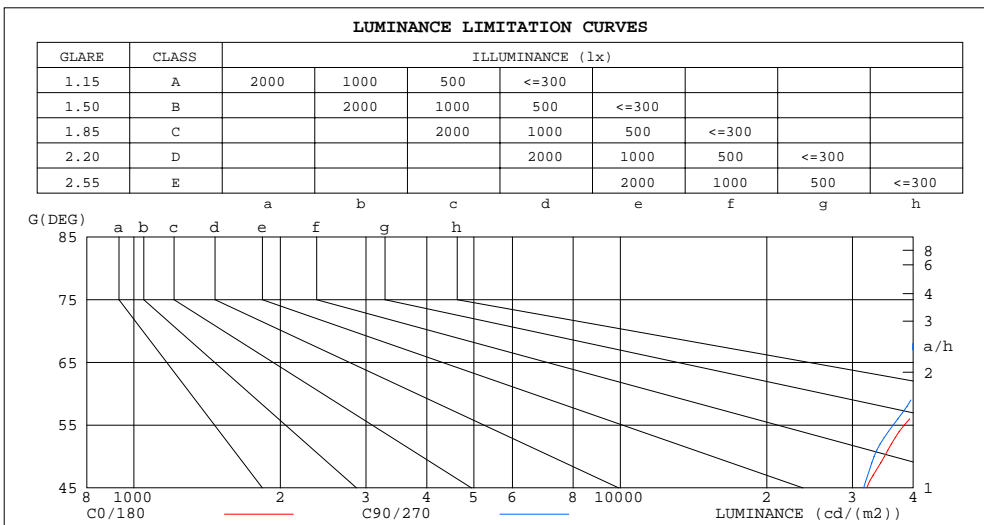
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	2634	2560	2561	2655	2682	2568	2514	2623	0- 10	236.2	236.2	2.19,2.19
20	2096	2153	2197	2146	2128	2123	2178	2157	10- 20	666.5	902.7	8.37,8.37
30	2231	2212	2216	2244	2234	2186	2219	2207	20- 30	995.0	1898	17.6,17.6
40	2313	2298	2240	2269	2357	2305	2287	2293	30- 40	1462	3360	31.1,31.1
50	2080	2025	1983	2064	2097	2027	2011	2059	40- 50	1641	5001	46.4,46.4
60	2001	1966	1866	1915	2027	1971	1917	1967	50- 60	1801	6802	63,63
70	1329	1317	1306	1319	1320	1327	1324	1342	60- 70	1624	8426	78.1,78.1
80	880.1	847.3	877.7	841.6	834.2	878.9	881.0	861.9	70- 80	1238	9664	89.6,89.6
90	262.7	268.1	263.5	278.0	242.1	273.6	259.8	264.4	80- 90	567.0	10231	94.8,94.8
100	138.7	136.7	140.2	141.3	130.2	131.5	132.1	129.6	90-100	208.5	10439	96.8,96.8
110	91.12	91.66	92.99	94.50	84.14	83.42	84.12	82.68	100-110	113.8	10553	97.8,97.8
120	73.19	70.62	72.03	68.46	64.40	57.92	64.90	63.03	110-120	76.55	10630	98.5,98.5
130	57.60	55.45	56.13	52.50	48.54	46.74	50.77	49.13	120-130	52.30	10682	99,99
140	49.88	49.34	49.85	48.16	44.72	43.33	46.11	44.37	130-140	37.96	10720	99.4,99.4
150	48.14	48.45	48.19	47.68	43.73	44.06	45.11	44.42	140-150	28.99	10749	99.6,99.6
160	47.85	49.08	47.77	48.65	46.76	45.56	45.07	45.52	150-160	21.50	10770	99.8,99.8
170	47.88	49.17	48.58	48.72	47.19	47.17	47.76	47.01	160-170	13.49	10784	100,100
180	47.80	47.88	47.53	47.78	47.76	47.86	47.48	47.73	170-180	4.564	10788	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	62592	61470
80	54669	54463
75	54505	52853
70	41902	41133
65	42303	40566
60	43158	40211
55	38343	36362
50	34910	33241
45	32087	31638

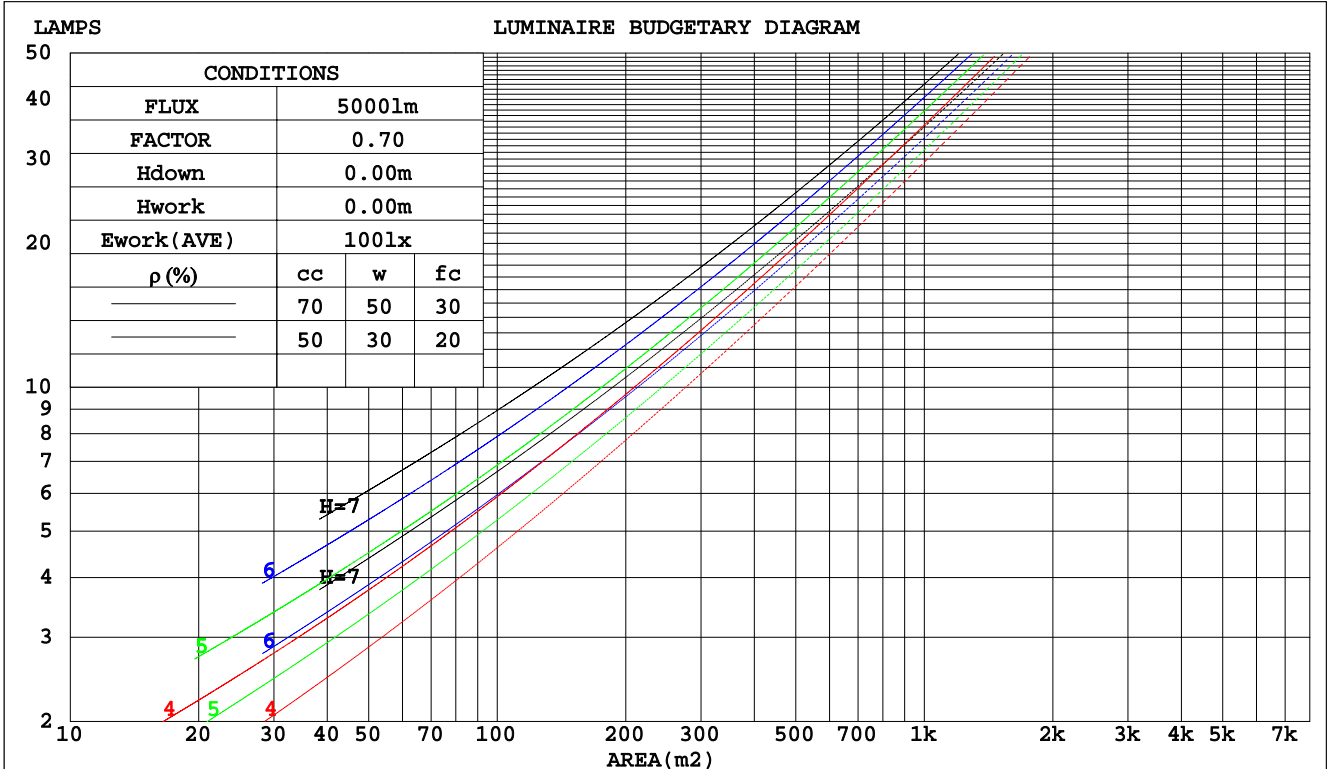
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 12.550m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.03	1.03	1.03	.97	.97	.97	.95
1.0	.99	.94	.89	.96	.91	.87	.91	.87	.83	.86	.83	.80	.81	.79	.76	.74
2.0	.84	.76	.69	.82	.74	.68	.77	.71	.66	.73	.68	.63	.69	.65	.61	.58
3.0	.72	.63	.56	.70	.62	.55	.66	.59	.53	.63	.57	.51	.60	.54	.50	.47
4.0	.63	.53	.46	.61	.52	.45	.58	.50	.44	.55	.48	.43	.52	.46	.42	.39
5.0	.56	.46	.39	.54	.45	.38	.51	.43	.37	.49	.42	.36	.46	.40	.35	.33
6.0	.50	.40	.33	.48	.39	.33	.46	.38	.32	.44	.37	.31	.42	.35	.30	.28
7.0	.45	.35	.29	.44	.35	.28	.42	.34	.28	.40	.32	.27	.38	.31	.27	.24
8.0	.41	.31	.25	.40	.31	.25	.38	.30	.24	.36	.29	.24	.34	.28	.23	.21
9.0	.37	.28	.22	.36	.28	.22	.35	.27	.22	.33	.26	.21	.32	.25	.21	.19
10.0	.34	.26	.20	.33	.25	.20	.32	.25	.20	.31	.24	.19	.29	.23	.19	.17



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 12.550m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0%			Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP		TYPE:		WEIGHT:	
SPEC.:		DIM.:		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	.381	.217	.069	.372	.212	.067	.355	.204	.065	.340	.196	.063	.326	.189	.061	
2.0	.341	.187	.057	.333	.184	.057	.318	.177	.055	.305	.171	.053	.292	.165	.052	
3.0	.307	.163	.049	.300	.160	.048	.286	.155	.047	.274	.150	.046	.263	.145	.045	
4.0	.277	.144	.042	.271	.142	.042	.259	.137	.041	.248	.133	.040	.238	.129	.039	
5.0	.252	.129	.037	.247	.127	.037	.236	.123	.036	.226	.119	.035	.217	.116	.035	
6.0	.231	.116	.033	.226	.114	.033	.217	.111	.032	.208	.108	.032	.199	.105	.031	
7.0	.213	.105	.030	.209	.104	.030	.200	.101	.029	.192	.098	.029	.184	.096	.028	
8.0	.198	.097	.027	.193	.095	.027	.186	.093	.026	.178	.090	.026	.171	.088	.026	
9.0	.184	.089	.025	.180	.088	.025	.173	.086	.024	.166	.083	.024	.160	.081	.023	
10.0	.172	.082	.023	.169	.081	.023	.162	.079	.022	.156	.077	.022	.150	.076	.022	

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	.230	.230	.230	.196	.196	.196	.134	.134	.134	.077	.077	.077	.025	.025	.025	
1.0	.225	.195	.168	.192	.168	.145	.132	.115	.100	.076	.067	.058	.024	.021	.019	
2.0	.219	.172	.132	.187	.148	.114	.128	.102	.080	.074	.059	.047	.024	.019	.015	
3.0	.212	.155	.109	.182	.133	.095	.125	.093	.066	.072	.054	.039	.023	.018	.013	
4.0	.204	.142	.094	.175	.123	.082	.120	.085	.058	.070	.050	.034	.022	.016	.011	
5.0	.196	.132	.084	.169	.114	.073	.116	.080	.052	.067	.047	.031	.022	.015	.010	
6.0	.189	.124	.077	.162	.107	.067	.112	.075	.048	.065	.044	.028	.021	.014	.009	
7.0	.182	.117	.072	.156	.102	.063	.108	.071	.044	.063	.042	.026	.020	.014	.009	
8.0	.175	.111	.068	.150	.097	.059	.104	.068	.042	.061	.040	.025	.020	.013	.008	
9.0	.168	.107	.065	.145	.092	.057	.100	.065	.040	.058	.038	.024	.019	.013	.008	
10.0	.162	.102	.062	.140	.089	.054	.097	.062	.039	.057	.037	.023	.018	.012	.008	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0%						Lamp Flux:10788.4x1 lm				
NAME: TS-GCP1312-120W-G-TCP			TYPE:			WEIGHT:				
SPEC.:			DIM.:			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	25.2	26.9	25.7	27.3	27.8	24.8	26.5	25.3	26.9	27.3
3H	27.3	28.8	27.8	29.3	29.7	27.0	28.5	27.5	29.0	29.4
4H	28.7	30.1	29.2	30.6	31.1	28.5	29.9	29.0	30.4	30.9
6H	29.7	31.1	30.2	31.5	32.0	29.5	30.8	30.0	31.3	31.8
8H	30.1	31.4	30.6	31.9	32.4	29.9	31.2	30.4	31.7	32.2
12H	30.5	31.7	31.0	32.2	32.7	30.3	31.5	30.8	32.0	32.5
4H 2H	26.0	27.4	26.5	27.9	28.4	25.6	27.1	26.1	27.5	28.0
3H	28.3	29.6	28.8	30.0	30.6	28.1	29.3	28.6	29.8	30.3
4H	29.9	31.0	30.4	31.5	32.1	29.7	30.8	30.2	31.3	31.9
6H	31.1	32.1	31.6	32.6	33.2	30.8	31.8	31.4	32.4	32.9
8H	31.5	32.5	32.1	33.0	33.6	31.3	32.3	31.9	32.8	33.4
12H	32.0	32.8	32.5	33.4	34.0	31.8	32.6	32.3	33.2	33.8
8H 4H	30.4	31.3	30.9	31.9	32.5	30.2	31.1	30.7	31.7	32.3
6H	31.8	32.6	32.3	33.1	33.7	31.5	32.3	32.1	32.9	33.5
8H	32.4	33.1	32.9	33.7	34.3	32.2	32.9	32.7	33.5	34.1
12H	32.9	33.6	33.5	34.2	34.8	32.7	33.4	33.3	34.0	34.6
12H 4H	30.5	31.4	31.0	31.9	32.5	30.3	31.2	30.8	31.7	32.3
6H	31.9	32.7	32.5	33.2	33.8	31.7	32.4	32.3	33.0	33.6
8H	32.6	33.2	33.2	33.8	34.5	32.4	33.0	33.0	33.6	34.3
CIE190: 2010										

CIE190: 2010
 Area: 0.0928 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0%			Lamp Flux:10788.4x1 lm
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:	
MFR.:	SUR.:	Shielding Angle:	

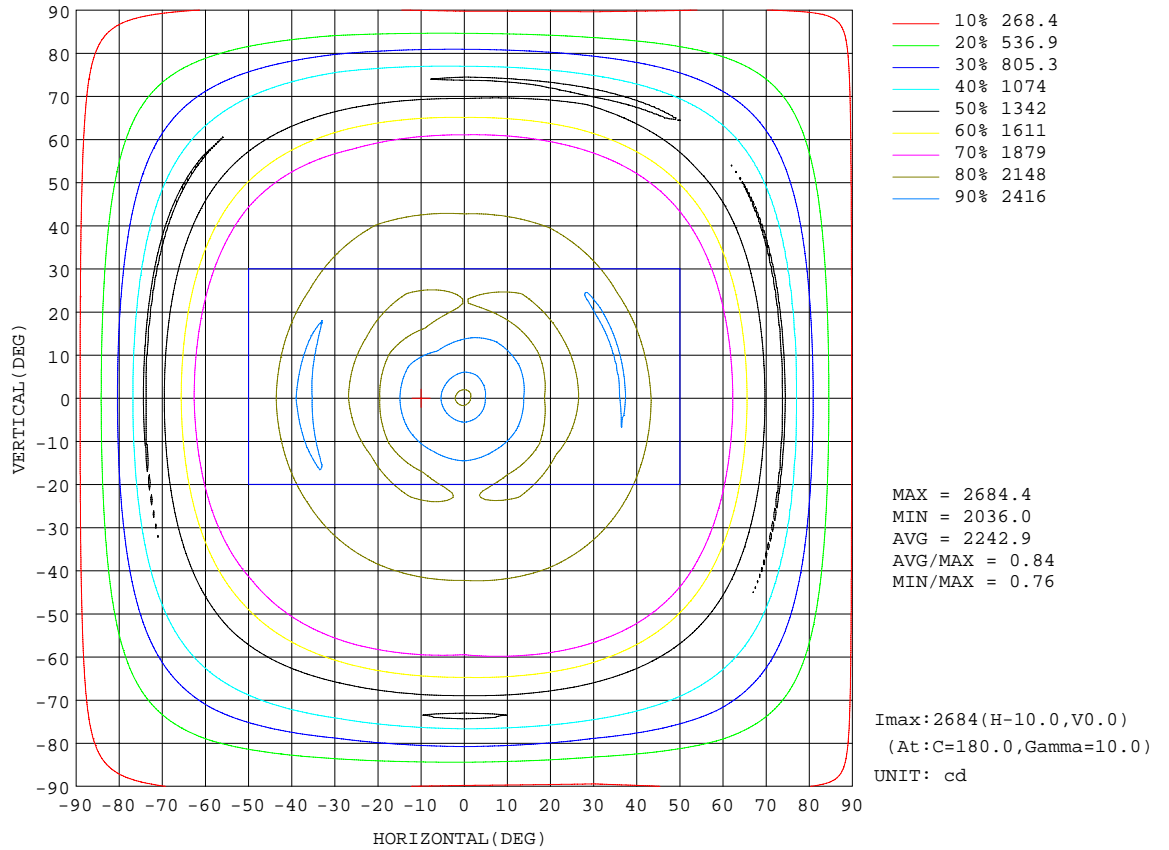
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	50	37	29	49	37	29	47	36	29	22
0.80	59	46	38	58	46	38	56	45	37	29
1.00	68	55	46	66	54	46	63	56	45	37
1.25	75	63	54	73	62	54	70	60	53	44
1.50	80	68	60	78	67	59	74	65	58	49
2.00	88	77	69	86	76	68	81	73	67	57
2.50	93	83	75	90	81	74	85	78	72	62
3.00	96	88	81	94	86	79	89	82	77	66
4.00	101	94	88	98	92	86	93	88	83	72
5.00	104	98	93	101	96	91	96	91	87	76
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:DAMIN
Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:12.550m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



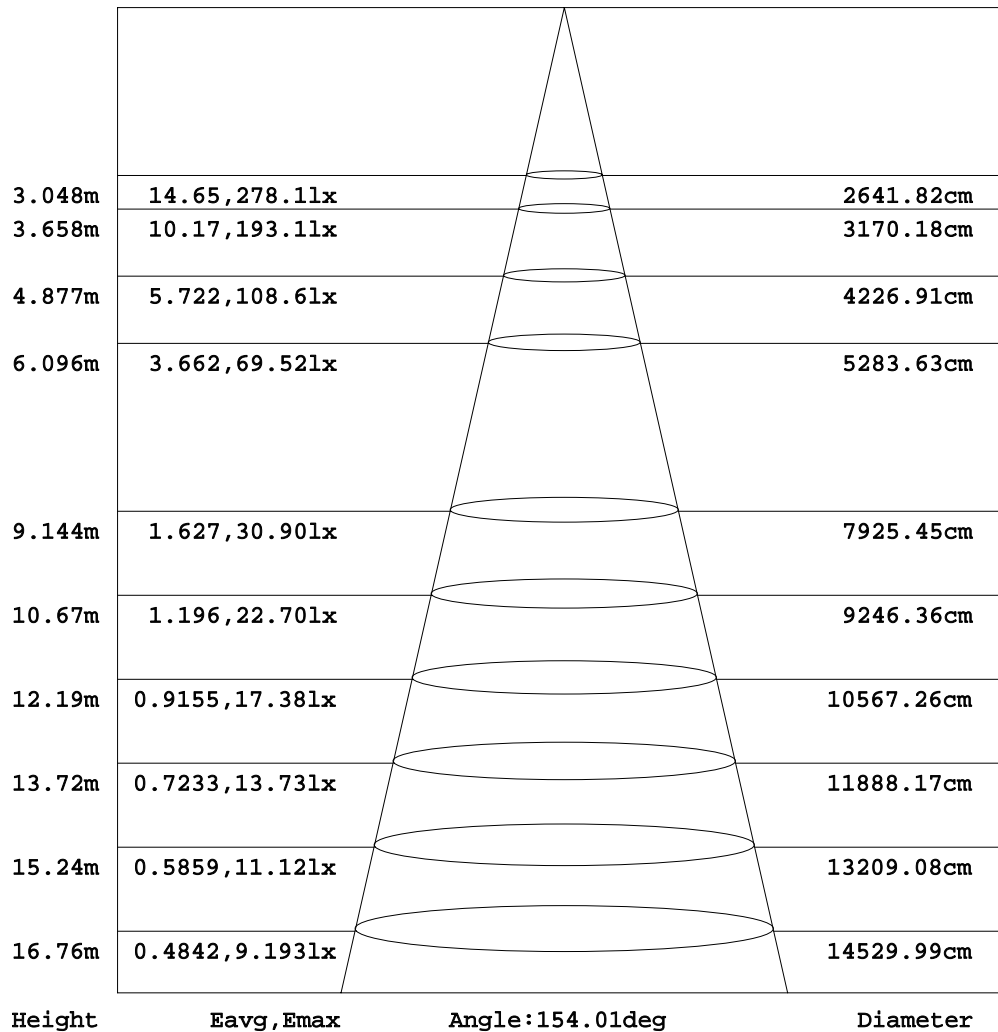
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:9462 lm



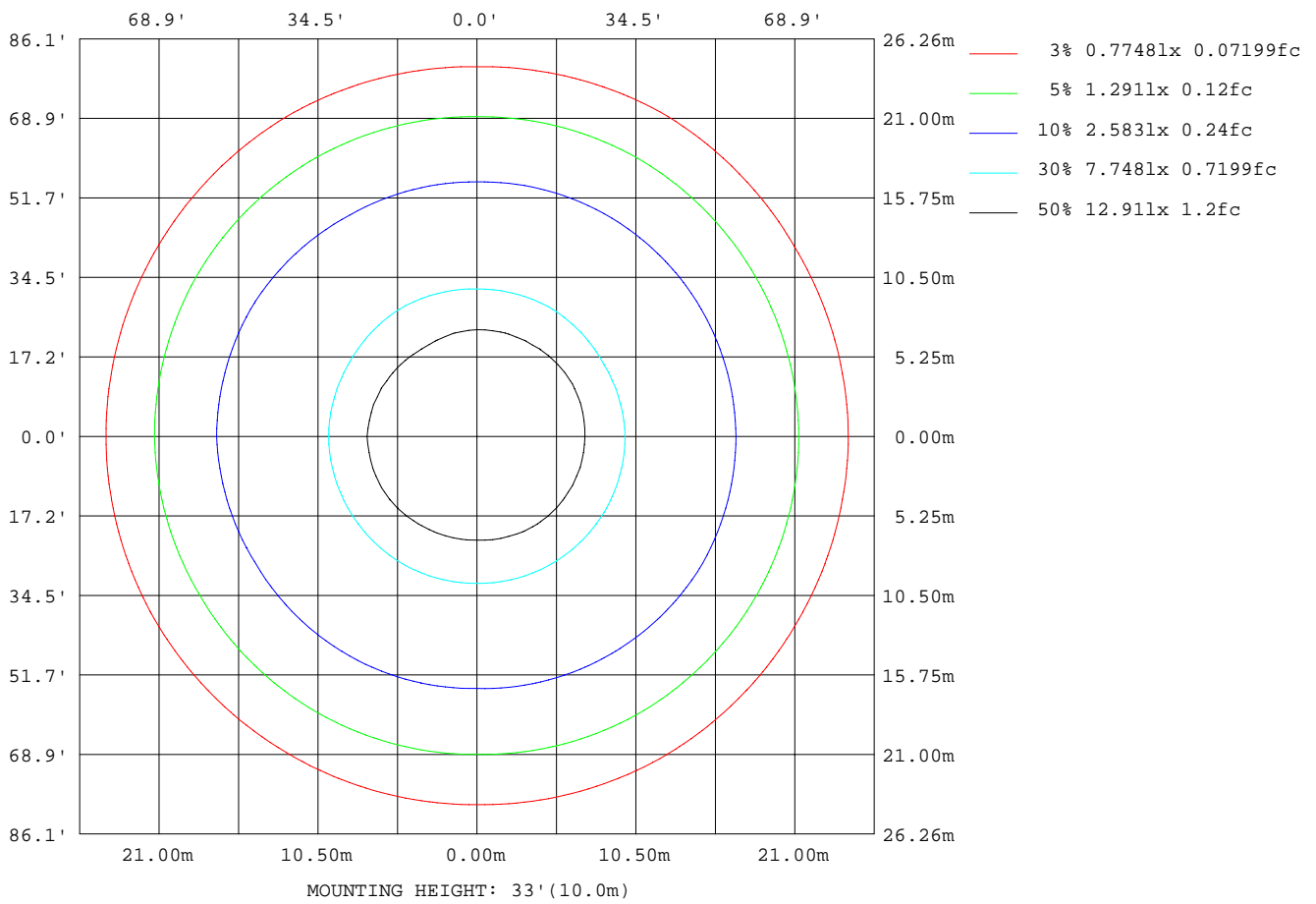
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:12.550m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 12.550m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.66V I:0.6825A P:81.974W PF:0.9955 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:10788.4x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

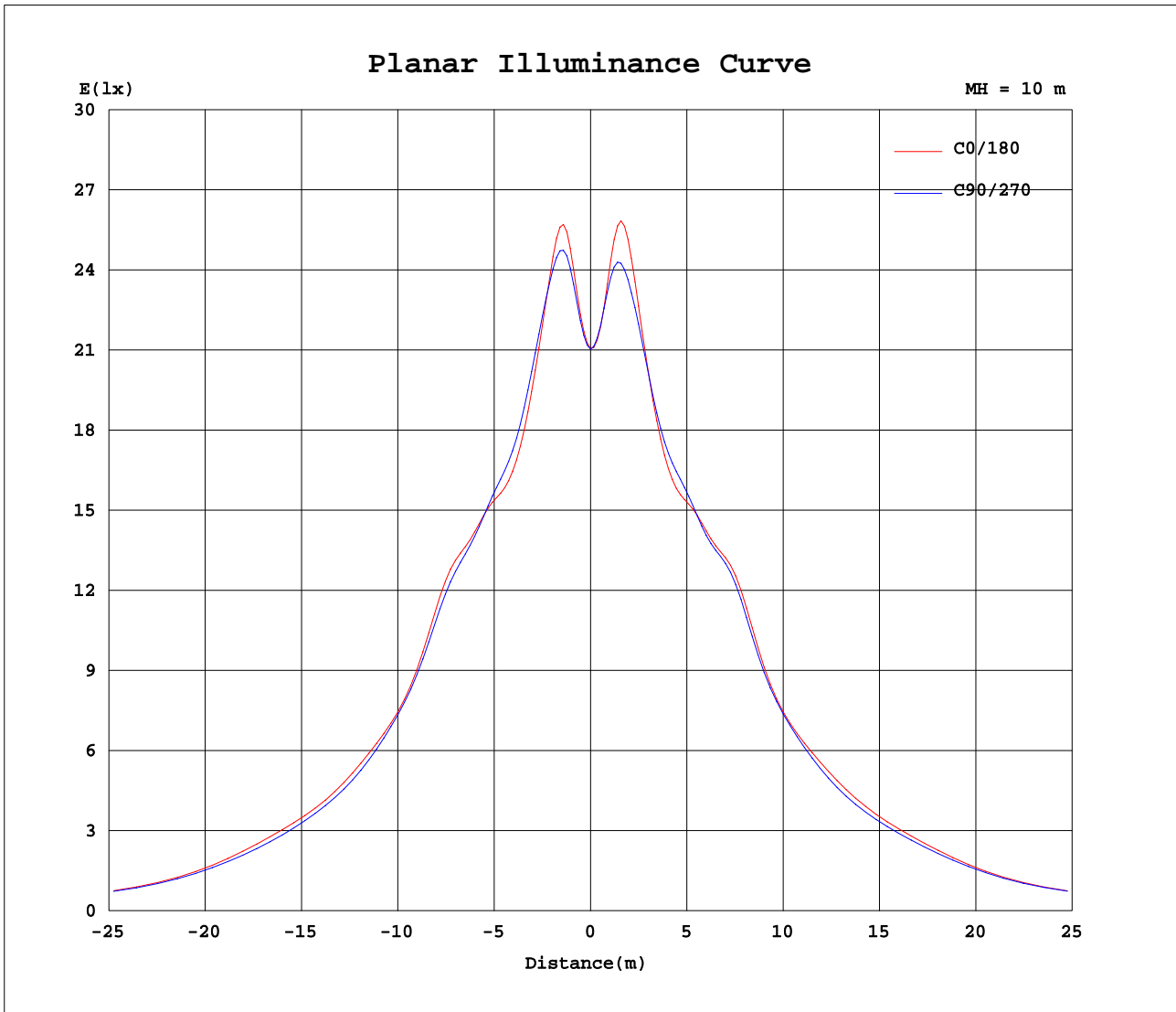
AvgL	cd/m2
L_0~180(65)av	42364
L_0~180(75)av	54061
L_0~180(85)av	61017
L_90~270(65)av	40912
L_90~270(75)av	53917
L_90~270(85)av	62277
L_45(65)av	41949
L_45(75)av	51613
L_45(85)av	62730

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:12.550m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 12.550m [K=1.0000]
 Remarks: