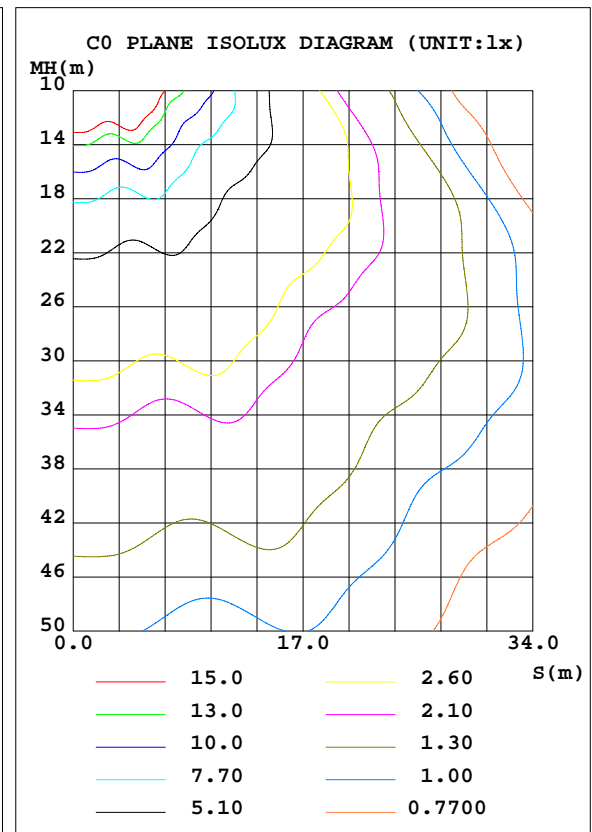
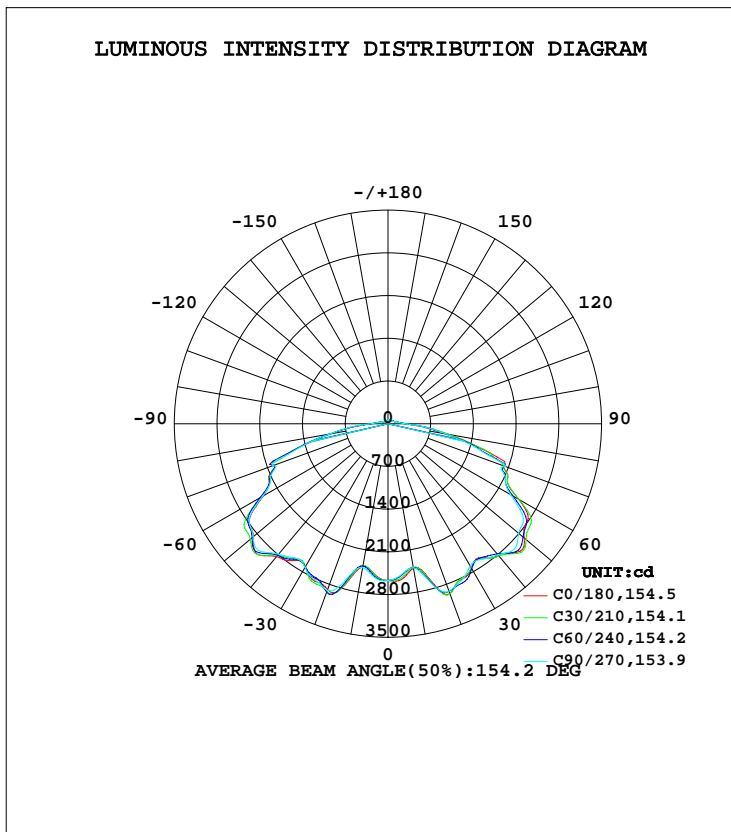


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 136.71 lm/W			
MODEL TS-GCP1312-120W-G-TCP		Imax(cd)	3042	S/MH(C0/180)	1.67
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.64
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	13747	η UP, DN(C0-180)	2.5,47.6
NOMINAL FLUX(lm)	13746.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	2.3,47.7
LAMPS INSIDE	1	η up(%)	4.7	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	120	η down(%)	95.3	CIBSE SHR MAX	1.75



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:

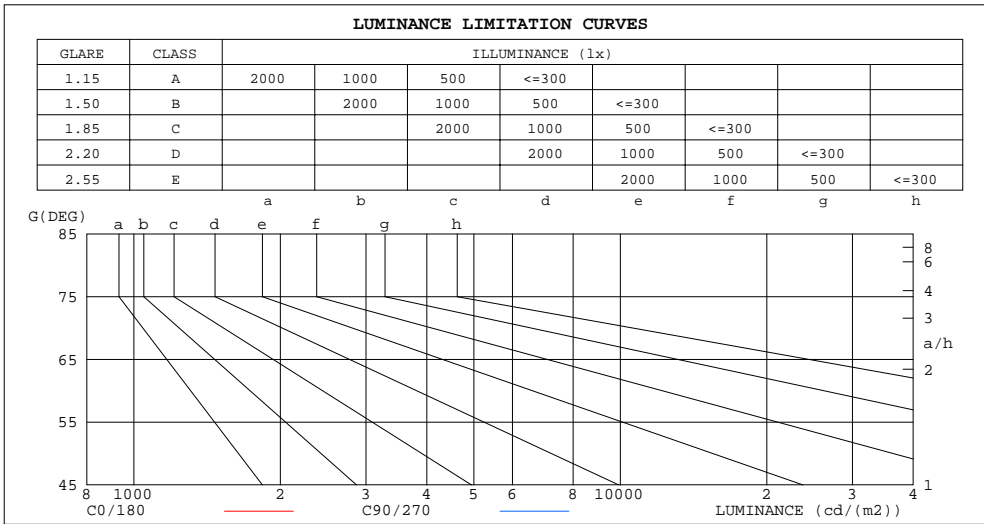
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	2403	2389	2396	2420	2377	2364	2393	2407	0- 10	235.0	235.0	1.71,1.71
20	2965	2947	2921	2952	2892	2934	2907	2862	10- 20	768.1	1003	7.3,7.3
30	2734	2737	2694	2678	2702	2708	2718	2792	20- 30	1308	2312	16.8,16.8
40	2825	2807	2805	2833	2842	2813	2789	2758	30- 40	1712	4023	29.3,29.3
50	2913	2923	2795	2855	2879	2926	2887	2897	40- 50	2262	6285	45.7,45.7
60	2467	2417	2317	2345	2355	2398	2370	2391	50- 60	2441	8726	63.5,63.5
70	2021	2026	2043	1961	1992	2002	2003	2020	60- 70	2119	10845	78.9,78.9
80	1007	971.4	962.0	956.3	956.6	961.5	968.9	993.2	70- 80	1609	12454	90.6,90.6
90	300.6	285.2	280.9	294.6	273.7	274.9	283.9	281.4	80- 90	640.2	13095	95.3,95.3
100	159.7	157.9	158.7	160.4	144.4	146.1	148.7	148.0	90-100	228.8	13323	96.9,96.9
110	111.4	111.2	109.9	110.9	98.63	97.26	99.10	100.2	100-110	132.3	13456	97.9,97.9
120	91.39	88.21	86.67	81.86	75.84	69.59	77.44	78.46	110-120	91.87	13548	98.6,98.6
130	73.67	70.59	69.38	65.42	58.59	57.69	61.43	62.62	120-130	63.94	13611	99,99
140	64.96	63.72	63.00	59.60	55.04	54.33	57.62	57.66	130-140	47.89	13659	99.4,99.4
150	62.29	62.07	61.30	60.36	55.16	56.21	57.32	57.29	140-150	36.92	13696	99.6,99.6
160	61.83	62.95	60.94	61.77	58.15	57.40	56.76	57.50	150-160	27.38	13724	99.8,99.8
170	60.38	61.98	61.57	61.31	59.62	59.68	60.21	59.41	160-170	17.06	13741	100,100
180	61.02	61.35	60.69	61.01	61.05	61.26	60.61	60.97	170-180	5.789	13747	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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0%			Lamp Flux:13746.5x1 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	75573	72443
80	62502	59724
75	66328	61593
70	63665	64386
65	55024	54214
60	53174	49953
55	52361	50911
50	48831	46884
45	45382	44451

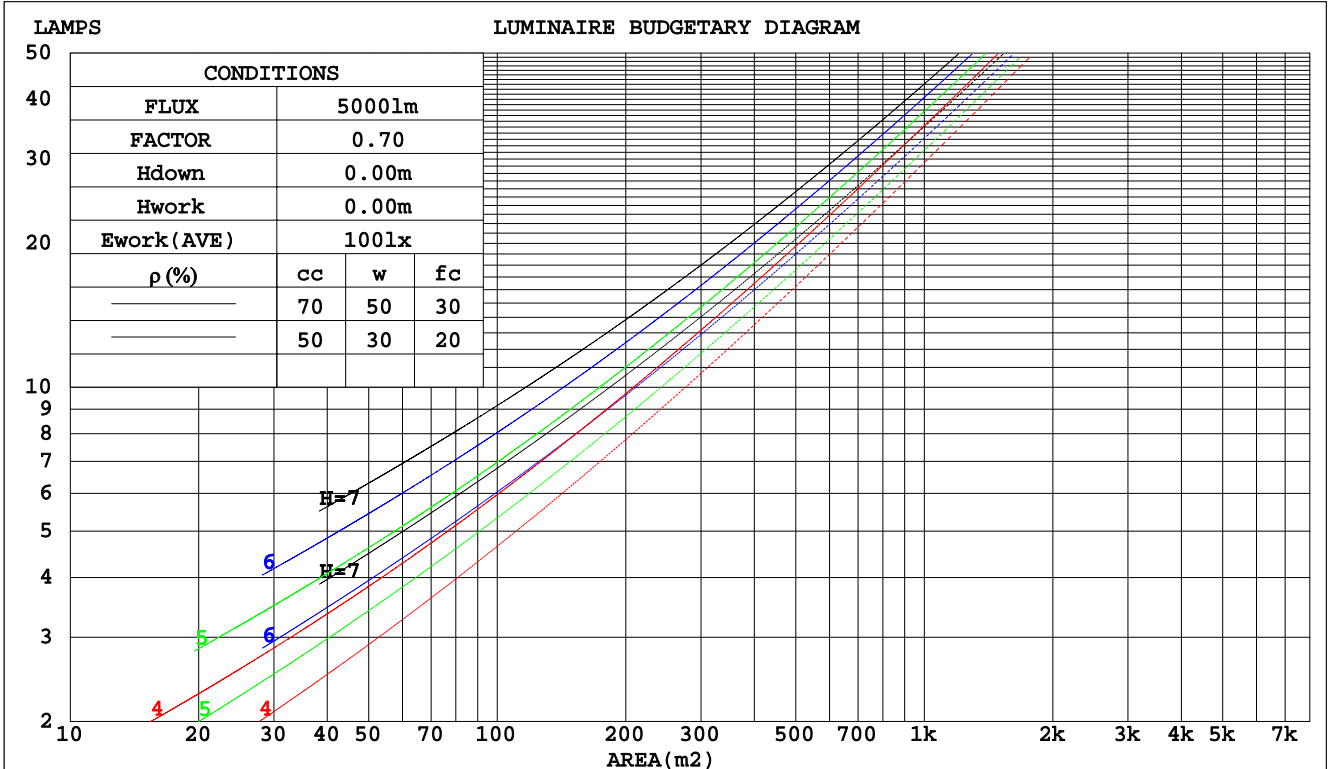
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 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	1.15	1.15	1.15	1.08	1.08	1.08	1.03	1.03	1.03	.98	.98	.98	.95
1.0	.99	.94	.89	.96	.92	.87	.91	.87	.84	.86	.83	.80	.82	.79	.77	.74
2.0	.84	.76	.69	.82	.74	.68	.77	.71	.66	.73	.68	.63	.69	.65	.61	.59
3.0	.72	.63	.55	.70	.61	.54	.66	.59	.53	.63	.56	.51	.60	.54	.50	.47
4.0	.63	.53	.45	.61	.52	.45	.58	.50	.43	.55	.48	.42	.52	.46	.41	.39
5.0	.55	.45	.38	.54	.44	.37	.51	.43	.36	.48	.41	.36	.46	.40	.35	.32
6.0	.49	.39	.32	.48	.39	.32	.45	.37	.31	.43	.36	.30	.41	.35	.30	.27
7.0	.44	.34	.28	.43	.34	.28	.41	.33	.27	.39	.32	.26	.37	.31	.26	.24
8.0	.40	.31	.24	.39	.30	.24	.37	.29	.24	.35	.28	.23	.34	.27	.23	.21
9.0	.36	.27	.21	.35	.27	.21	.34	.26	.21	.32	.25	.21	.31	.25	.20	.18
10.0	.33	.25	.19	.32	.24	.19	.31	.24	.19	.30	.23	.18	.29	.22	.18	.16



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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 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	.379	.216	.068	.370	.211	.067	.354	.203	.065	.339	.196	.063	.325	.189	.061	
2.0	.342	.188	.058	.335	.184	.057	.320	.178	.055	.306	.172	.054	.294	.166	.052	
3.0	.309	.164	.049	.302	.162	.049	.289	.156	.048	.277	.152	.046	.265	.147	.045	
4.0	.280	.145	.043	.274	.143	.042	.262	.139	.041	.251	.135	.041	.241	.131	.040	
5.0	.255	.130	.038	.249	.128	.037	.239	.124	.037	.229	.121	.036	.220	.117	.035	
6.0	.234	.117	.034	.229	.115	.033	.219	.112	.033	.210	.109	.032	.202	.106	.032	
7.0	.215	.106	.030	.211	.105	.030	.202	.102	.029	.194	.100	.029	.187	.097	.029	
8.0	.200	.098	.027	.195	.096	.027	.188	.094	.027	.180	.091	.026	.174	.089	.026	
9.0	.186	.090	.025	.182	.089	.025	.175	.087	.025	.168	.084	.024	.162	.082	.024	
10.0	.174	.083	.023	.170	.082	.023	.164	.080	.023	.158	.078	.022	.152	.077	.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	.227	.227	.227	.194	.194	.194	.132	.132	.132	.076	.076	.076	.024	.024	.024	
1.0	.222	.192	.165	.190	.165	.142	.130	.113	.098	.075	.066	.057	.024	.021	.019	
2.0	.216	.168	.129	.185	.145	.111	.127	.100	.078	.073	.058	.045	.023	.019	.015	
3.0	.209	.151	.106	.179	.131	.092	.123	.091	.064	.071	.053	.038	.023	.017	.012	
4.0	.201	.139	.091	.173	.120	.079	.119	.084	.056	.069	.049	.033	.022	.016	.011	
5.0	.194	.129	.081	.166	.111	.070	.115	.078	.050	.066	.046	.029	.021	.015	.010	
6.0	.186	.121	.074	.160	.104	.064	.110	.073	.045	.064	.043	.027	.021	.014	.009	
7.0	.179	.114	.068	.154	.099	.060	.106	.069	.042	.062	.041	.025	.020	.013	.008	
8.0	.172	.108	.064	.148	.094	.056	.103	.066	.040	.060	.039	.024	.019	.013	.008	
9.0	.166	.103	.061	.143	.090	.053	.099	.063	.038	.058	.037	.023	.019	.012	.008	
10.0	.159	.099	.059	.137	.086	.051	.095	.061	.037	.056	.036	.022	.018	.012	.007	

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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0%						Lamp Flux:13746.5x1 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	26.4	28.1	26.8	28.5	28.9	25.9	27.6	26.3	28.0	28.4
3H	28.8	30.4	29.3	30.8	31.3	28.4	30.0	28.9	30.4	30.9
4H	30.0	31.5	30.5	31.9	32.4	29.5	31.0	30.0	31.4	31.9
6H	30.8	32.2	31.3	32.6	33.1	30.3	31.7	30.8	32.1	32.6
8H	31.1	32.4	31.6	32.9	33.4	30.6	32.0	31.1	32.4	32.9
12H	31.4	32.7	31.9	33.1	33.7	30.9	32.2	31.4	32.7	33.2
4H 2H	27.1	28.6	27.5	29.0	29.5	26.6	28.1	27.1	28.6	29.0
3H	29.9	31.1	30.4	31.6	32.1	29.5	30.8	30.0	31.3	31.8
4H	31.2	32.4	31.7	32.9	33.4	30.7	31.9	31.2	32.4	32.9
6H	32.1	33.2	32.6	33.7	34.2	31.7	32.7	32.2	33.2	33.8
8H	32.5	33.5	33.0	34.0	34.6	32.1	33.0	32.6	33.6	34.1
12H	32.9	33.7	33.4	34.3	34.9	32.5	33.3	33.0	33.9	34.5
8H 4H	31.7	32.6	32.2	33.1	33.7	31.2	32.2	31.7	32.7	33.3
6H	32.7	33.6	33.3	34.1	34.7	32.3	33.1	32.9	33.7	34.3
8H	33.2	34.0	33.8	34.5	35.1	32.8	33.6	33.4	34.1	34.7
12H	33.7	34.4	34.3	34.9	35.6	33.3	34.0	33.9	34.6	35.2
12H 4H	31.7	32.6	32.3	33.1	33.7	31.3	32.2	31.8	32.7	33.3
6H	32.9	33.6	33.4	34.1	34.8	32.4	33.2	33.0	33.7	34.4
8H	33.4	34.1	34.0	34.6	35.3	33.0	33.7	33.6	34.2	34.9
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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0%			Lamp Flux:13746.5x1 lm
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:	
MFR.:	SUR.:	Shielding Angle:	

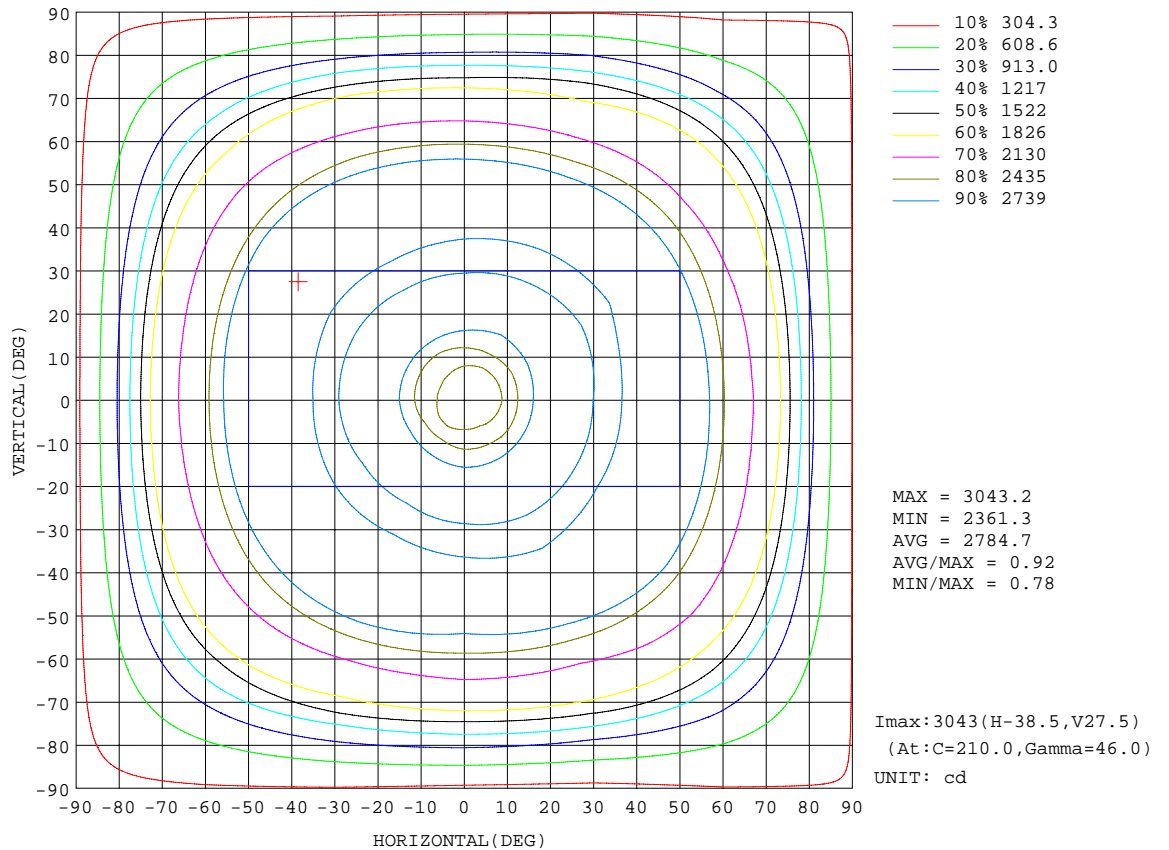
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	49	36	28	48	35	28	46	35	27	20
0.80	58	45	37	57	45	36	55	44	36	28
1.00	67	54	45	65	53	45	63	55	44	36
1.25	74	62	53	73	61	53	69	59	52	43
1.50	80	68	59	78	67	59	74	65	57	48
2.00	88	77	69	85	76	68	81	73	66	57
2.50	92	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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



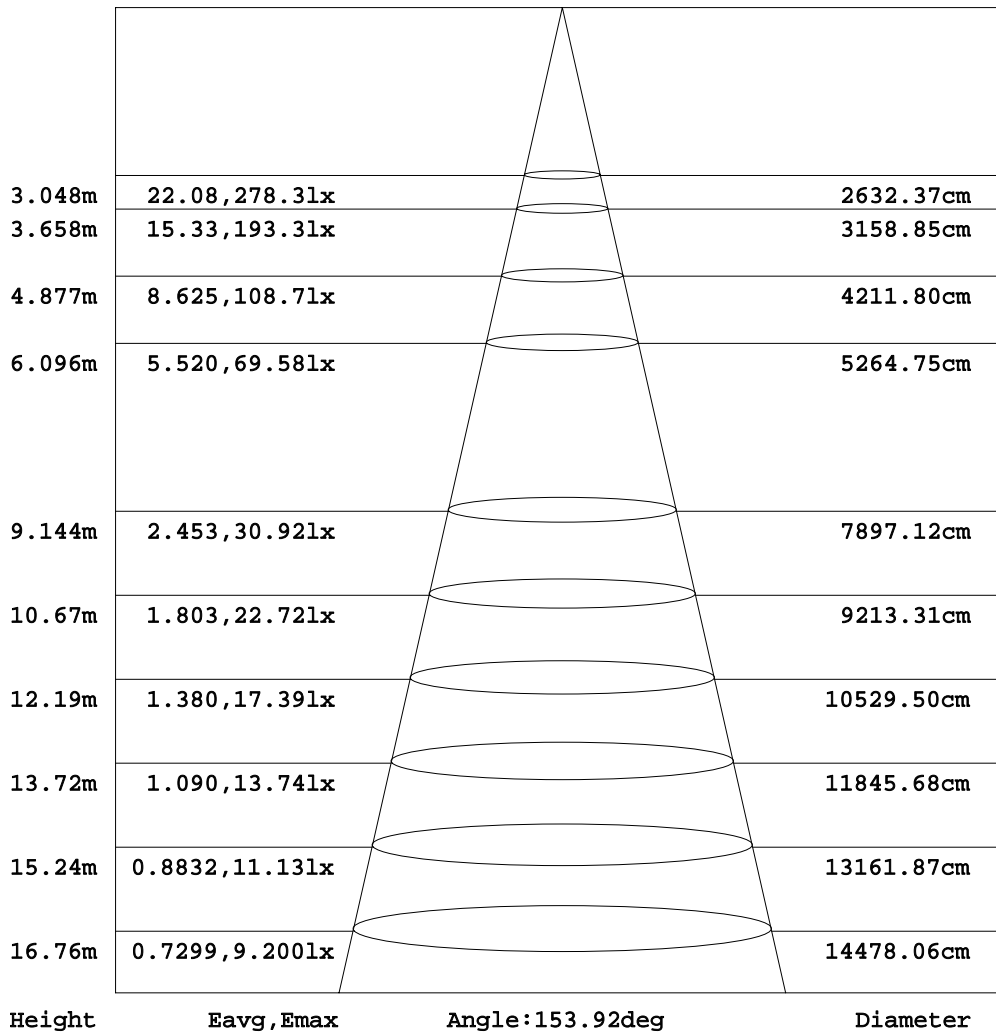
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 15 April 2024

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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:12091 lm



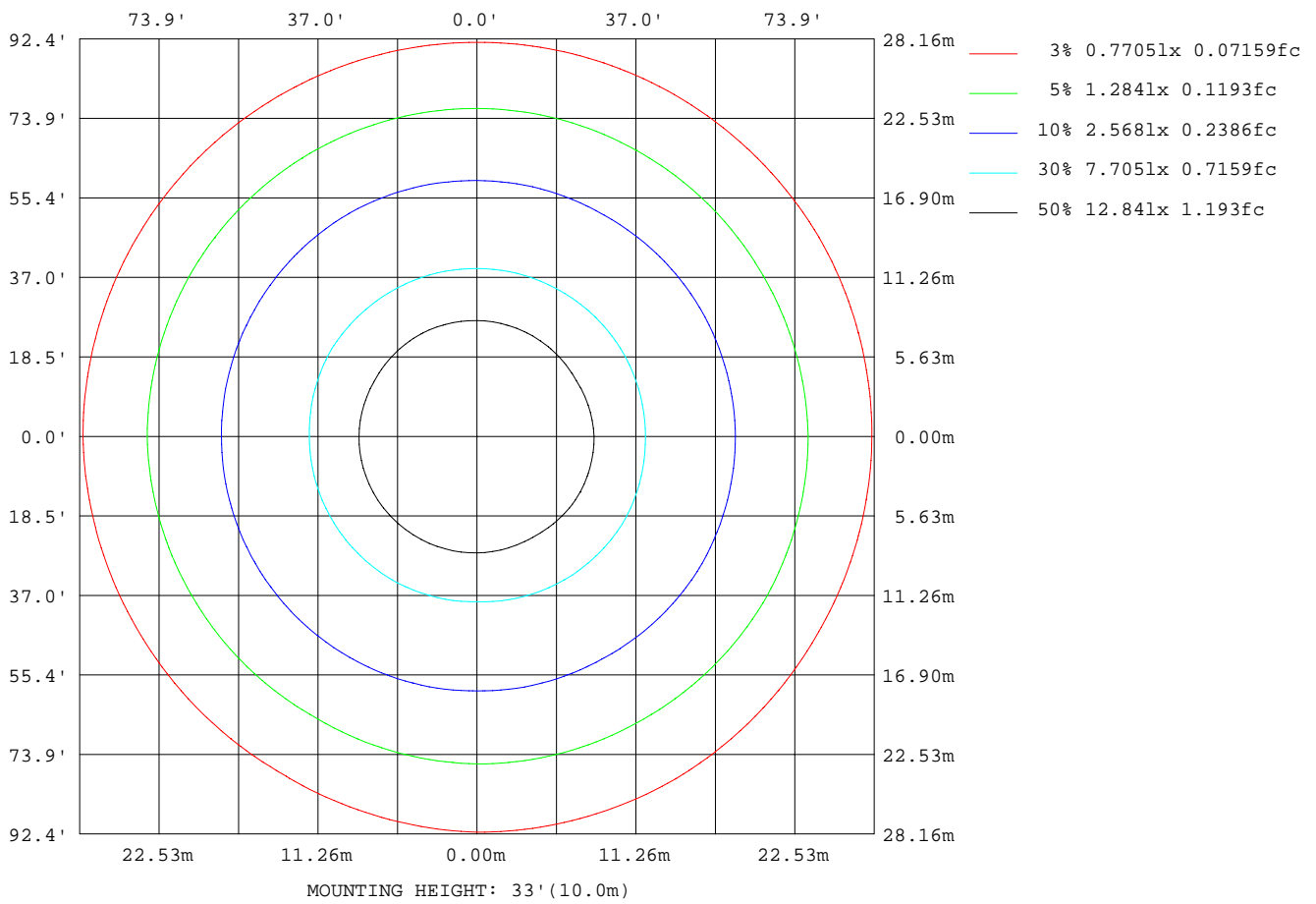
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 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:120.62V I:0.8361A P:100.55W PF:0.9969 Freq:59.98Hz UTHDi:0% ITHDi:0% Lamp Flux:13746.5x1 lm		
NAME: TS-GCP1312-120W-G-TCP	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

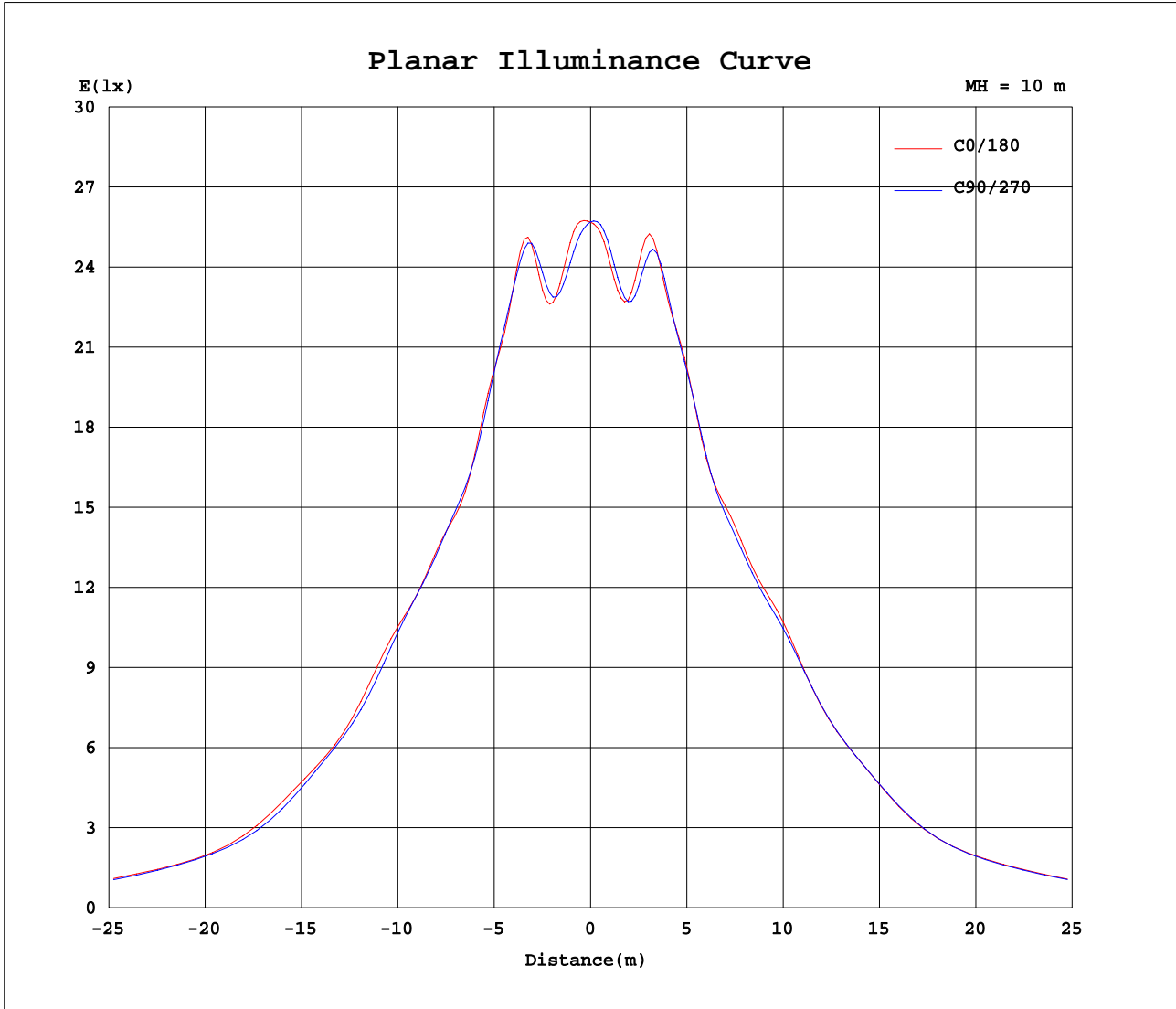
AvgL	cd/m2
L_0~180(65)av	54996
L_0~180(75)av	64884
L_0~180(85)av	73267
L_90~270(65)av	54180
L_90~270(75)av	61957
L_90~270(85)av	73066
L_45(65)av	54122
L_45(75)av	64273
L_45(85)av	71611

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: