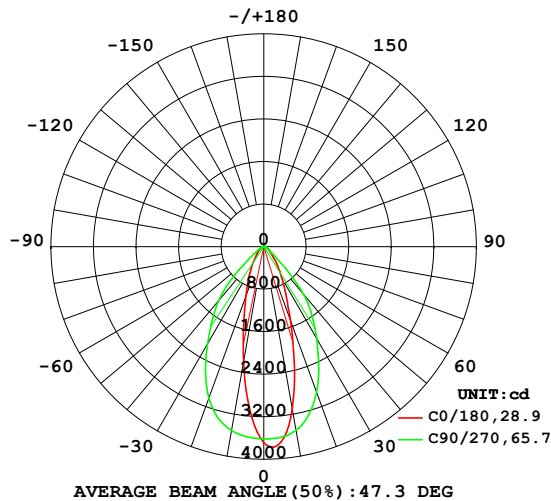


LUMINAIRE PHOTOMETRIC TEST REPORT

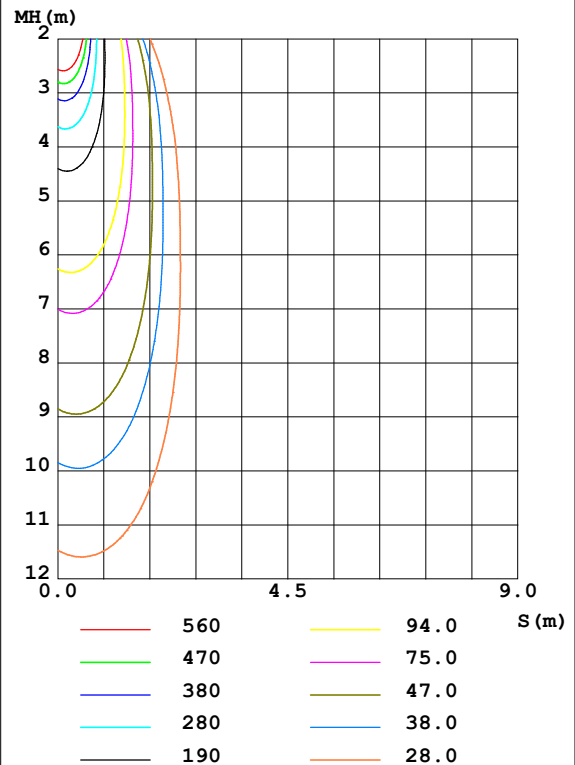
NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 137.71 lm/W			
MODEL		Imax(cd)	3771	S/MH(C0/180)	0.57
NOMINAL POWER(W)	20	LOR(%)	56.0	S/MH(C90/270)	0.98
RATED VOLTAGE(V)	120.0	TOTAL FLUX(lm)	2671.6	η UP,DN(C0-180)	0.0,28.0
NOMINAL FLUX(lm)	433.623	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,27.9
LAMPS INSIDE	11	η up(%)	0.1	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120.0	η down(%)	55.9	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

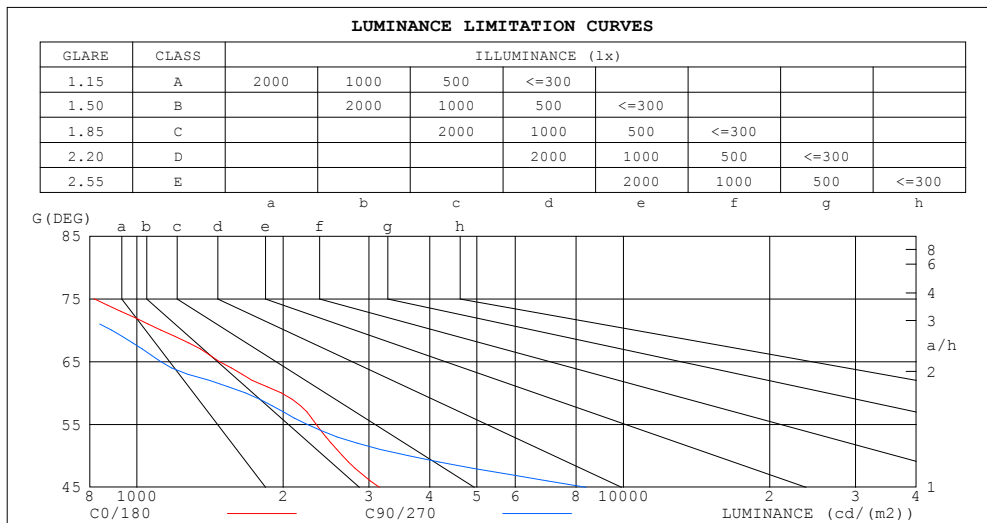
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3100	3496	3504	2664	2202	2520	3511	3500	0- 10	319.0	319.0	11.9,6.69
20	1461	2162	2907	1405	988.8	1329	3027	2272	10- 20	692.5	1012	37.9,21.2
30	688.8	962.1	1995	664.5	484.8	665.7	2123	1065	20- 30	672.1	1684	63,35.3
40	326.7	417.4	1158	313.6	229.7	329.1	1312	472.5	30- 40	499.3	2183	81.7,45.8
50	170.1	196.0	231.9	154.9	137.0	165.8	383.5	221.9	40- 50	283.2	2466	92.3,51.7
60	98.99	95.30	83.65	73.39	64.96	84.82	108.8	109.4	50- 60	122.8	2589	96.9,54.3
70	38.32	34.42	30.34	24.20	21.97	29.40	40.50	43.63	60- 70	57.01	2646	99,55.5
80	10.21	8.030	6.282	3.831	3.802	5.695	12.36	11.57	70- 80	19.58	2666	99.8,55.9
90	0.8222	0.1786	0.0097	0.0823	0.0170	0.0558	0.1224	0.8462	80- 90	3.065	2669	99.9,55.9
100	0.0219	0.0847	0.0363	0.0799	0.0193	0.0460	0.0001	0.0605	90-100	0.0679	2669	99.9,55.9
110	0.0532	0.0945	0.1378	0.1115	0.0436	0.0581	0.0461	0.0581	100-110	0.0573	2669	99.9,56
120	0.1089	0.1575	0.3750	0.2278	0.1018	0.1186	0.1916	0.0992	110-120	0.1152	2669	99.9,56
130	0.2226	0.3079	0.7502	0.5236	0.2158	0.3024	0.4509	0.2250	120-130	0.2338	2669	99.9,56
140	0.4646	0.6276	1.128	1.098	0.4728	0.7042	0.8045	0.4816	130-140	0.4126	2669	99.9,56
150	1.016	1.161	1.482	1.812	1.042	1.298	1.250	0.9053	140-150	0.5999	2670	99.9,56
160	1.980	1.778	1.964	2.325	1.868	1.850	1.686	1.399	150-160	0.7113	2671	100,56
170	2.620	2.228	2.259	2.436	2.378	2.213	2.158	1.874	160-170	0.5851	2671	100,56
180	2.511	2.400	2.335	2.276	2.509	2.398	2.347	2.269	170-180	0.2223	2672	100,56
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	431	125
80	588	362
75	816	653
70	1120	887
65	1476	1119
60	1980	1673
55	2337	2238
50	2647	3607
45	3156	8383

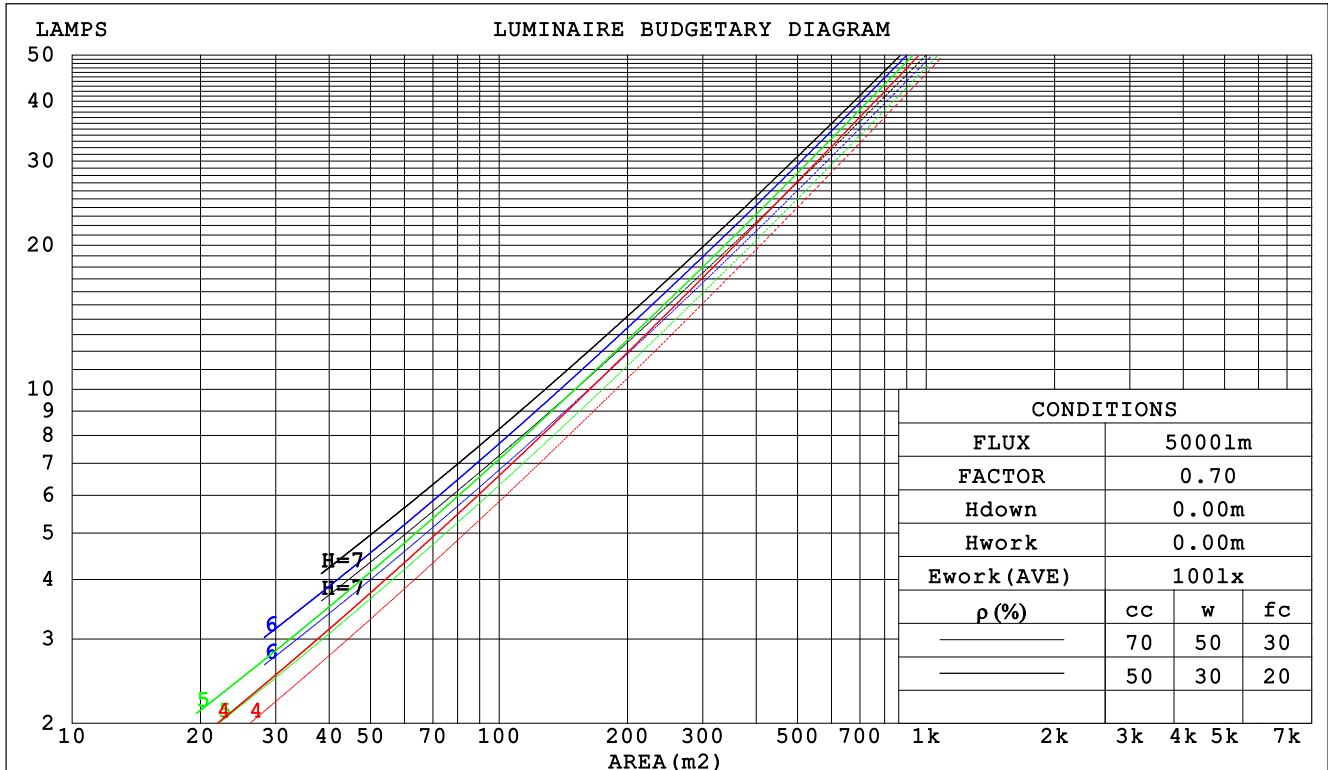
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.67	.67	.67	.65	.65	.65	.62	.62	.62	.60	.60	.60	.57	.57	.57	.56
1.0	.62	.60	.59	.60	.59	.58	.58	.57	.56	.56	.55	.54	.54	.53	.53	.52
2.0	.57	.54	.52	.56	.54	.52	.54	.52	.50	.52	.51	.49	.51	.49	.48	.47
3.0	.53	.49	.47	.52	.49	.47	.50	.48	.46	.49	.47	.45	.48	.46	.44	.44
4.0	.49	.45	.43	.48	.45	.43	.47	.44	.42	.46	.43	.42	.45	.43	.41	.40
5.0	.45	.42	.39	.45	.42	.39	.44	.41	.39	.43	.40	.38	.42	.40	.38	.37
6.0	.42	.39	.36	.42	.39	.36	.41	.38	.36	.40	.38	.36	.40	.37	.35	.35
7.0	.40	.36	.34	.39	.36	.34	.39	.36	.33	.38	.35	.33	.37	.35	.33	.32
8.0	.37	.34	.31	.37	.34	.31	.36	.33	.31	.36	.33	.31	.35	.33	.31	.30
9.0	.35	.32	.29	.35	.32	.29	.34	.31	.29	.34	.31	.29	.33	.31	.29	.28
10.0	.33	.30	.28	.33	.30	.28	.33	.30	.28	.32	.29	.27	.32	.29	.27	.27



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	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	.109	.062	.020	.105	.060	.019	.098	.056	.018	.091	.053	.017	.085	.049	.016		
2.0	.105	.057	.018	.101	.056	.017	.095	.053	.016	.090	.050	.016	.085	.048	.015		
3.0	.100	.053	.016	.097	.052	.016	.092	.050	.015	.087	.048	.015	.082	.046	.014		
4.0	.094	.049	.014	.092	.048	.014	.087	.046	.014	.083	.045	.013	.079	.043	.013		
5.0	.089	.046	.013	.087	.045	.013	.083	.043	.013	.080	.042	.013	.076	.041	.012		
6.0	.085	.043	.012	.083	.042	.012	.080	.041	.012	.076	.040	.012	.073	.039	.011		
7.0	.081	.040	.011	.079	.039	.011	.076	.038	.011	.073	.037	.011	.070	.037	.011		
8.0	.077	.037	.011	.075	.037	.010	.073	.036	.010	.070	.035	.010	.067	.035	.010		
9.0	.073	.035	.010	.072	.035	.010	.069	.034	.010	.067	.034	.010	.065	.033	.010		
10.0	.070	.033	.009	.069	.033	.009	.066	.033	.009	.064	.032	.009	.062	.031	.009		

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	.107	.107	.107	.092	.092	.092	.063	.063	.063	.036	.036	.036	.011	.011	.011	
1.0	.097	.089	.081	.083	.076	.070	.057	.052	.048	.033	.030	.028	.010	.010	.009	
2.0	.089	.075	.062	.076	.064	.054	.052	.044	.038	.030	.026	.022	.010	.008	.007	
3.0	.083	.064	.049	.071	.055	.043	.049	.038	.030	.028	.022	.018	.009	.007	.006	
4.0	.077	.056	.040	.066	.048	.035	.046	.034	.024	.026	.020	.014	.008	.006	.005	
5.0	.073	.050	.033	.062	.043	.029	.043	.030	.020	.025	.018	.012	.008	.006	.004	
6.0	.068	.045	.027	.059	.039	.024	.041	.027	.017	.024	.016	.010	.008	.005	.003	
7.0	.065	.040	.023	.056	.035	.020	.038	.025	.014	.022	.014	.009	.007	.005	.003	
8.0	.061	.037	.020	.053	.032	.017	.037	.022	.012	.021	.013	.007	.007	.004	.002	
9.0	.059	.034	.017	.050	.030	.015	.035	.021	.011	.020	.012	.006	.007	.004	.002	
10.0	.056	.032	.015	.048	.027	.013	.033	.019	.010	.019	.011	.006	.006	.004	.002	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: COVO light					TYPE:4000K					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: EVERFINE					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					12.5	13.6	12.8	13.7	13.9	15.7	16.8	16.0	16.9	17.1
3H					12.9	13.8	13.1	14.0	14.2	15.7	16.6	16.0	16.8	17.1
4H					12.9	13.8	13.2	14.1	14.3	15.6	16.5	15.9	16.8	17.0
6H					12.9	13.8	13.2	14.0	14.3	15.6	16.4	15.9	16.7	16.9
8H					12.9	13.7	13.2	14.0	14.3	15.5	16.3	15.8	16.6	16.9
12H					12.9	13.7	13.2	13.9	14.2	15.5	16.3	15.8	16.5	16.8
4H 2H					12.7	13.6	13.0	13.8	14.0	15.6	16.5	15.9	16.7	17.0
3H					13.1	13.9	13.4	14.2	14.4	15.6	16.4	16.0	16.7	17.0
4H					13.2	13.9	13.6	14.2	14.5	15.6	16.3	16.0	16.6	16.9
6H					13.2	13.9	13.6	14.2	14.5	15.5	16.2	15.9	16.5	16.9
8H					13.2	13.8	13.6	14.2	14.5	15.5	16.1	15.9	16.4	16.8
12H					13.2	13.7	13.6	14.1	14.5	15.5	16.0	15.9	16.4	16.8
8H 4H					13.2	13.7	13.6	14.1	14.5	15.5	16.1	15.9	16.4	16.8
6H					13.2	13.7	13.6	14.1	14.5	15.5	15.9	15.9	16.3	16.7
8H					13.2	13.6	13.7	14.0	14.5	15.4	15.8	15.9	16.3	16.7
12H					13.2	13.6	13.7	14.0	14.5	15.4	15.7	15.8	16.2	16.6
12H 4H					13.1	13.6	13.5	14.0	14.4	15.5	16.0	15.9	16.4	16.8
6H					13.2	13.6	13.6	14.0	14.5	15.4	15.8	15.9	16.2	16.7
8H					13.2	13.5	13.7	14.0	14.5	15.4	15.7	15.8	16.2	16.6
Variations with the observer position at spacings:														
S = 1.0H					+ 1.0 / - 1.3					+ 3.5 / - 4.8				
1.5H					+ 1.2 / - 0.9					+ 5.1 / - 4.1				
2.0H					+ 1.3 / - 1.4					+ 5.9 / - 3.1				

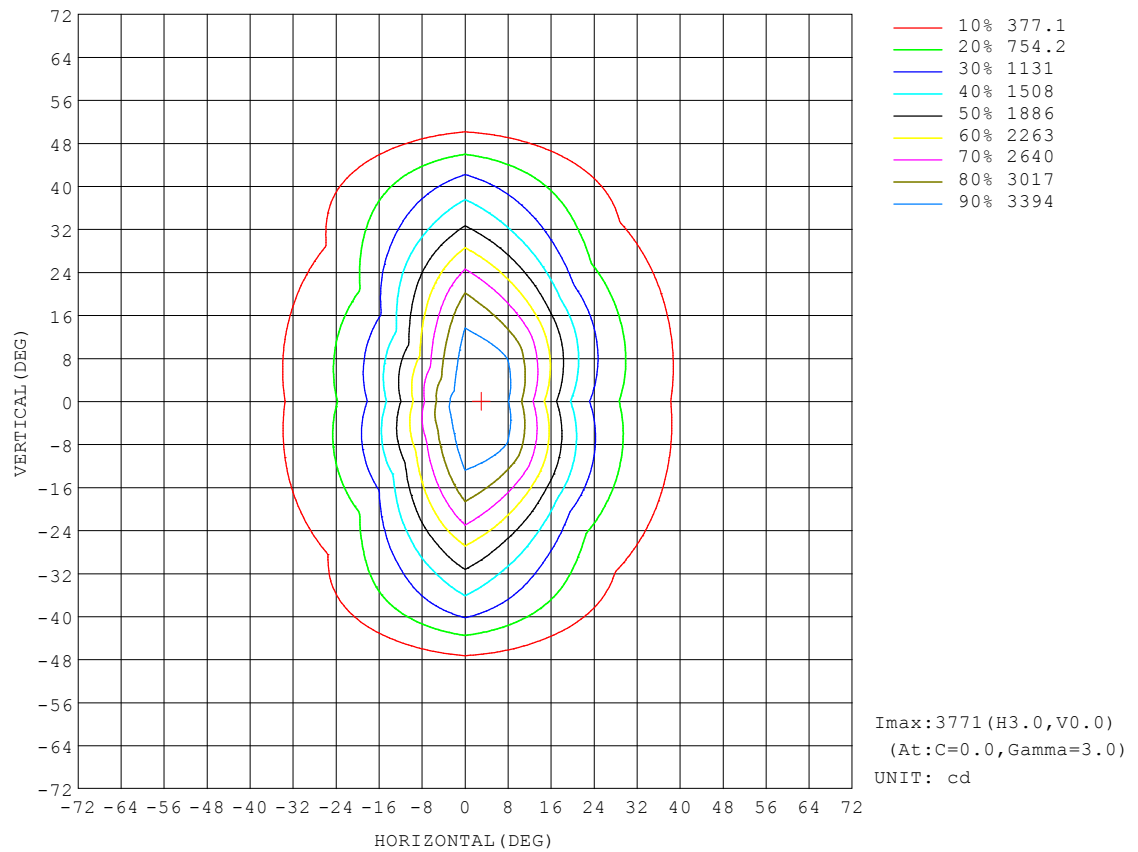
CIE Pub.117 Corrected 4770 lm Total Lamp Luminous Flux. (8log(F/F0) = 5.4)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
 Humidity:65.0%
 Test Distance:7.540m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

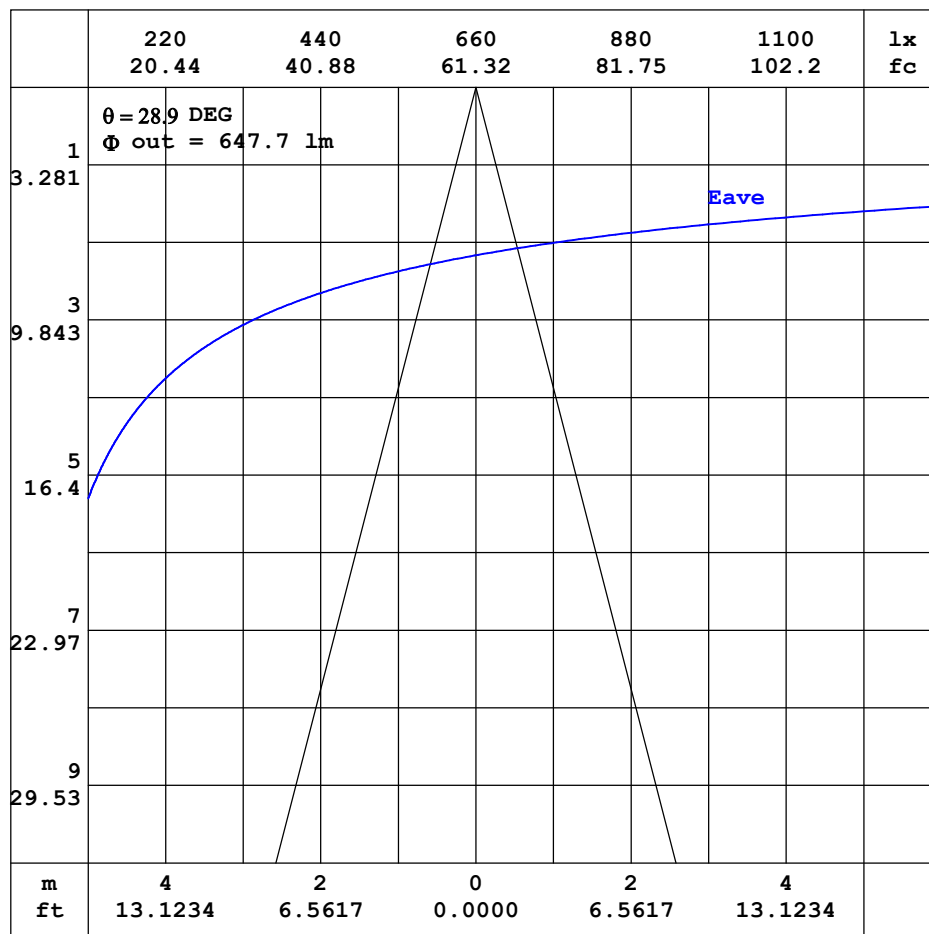


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

AAI CURVES

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



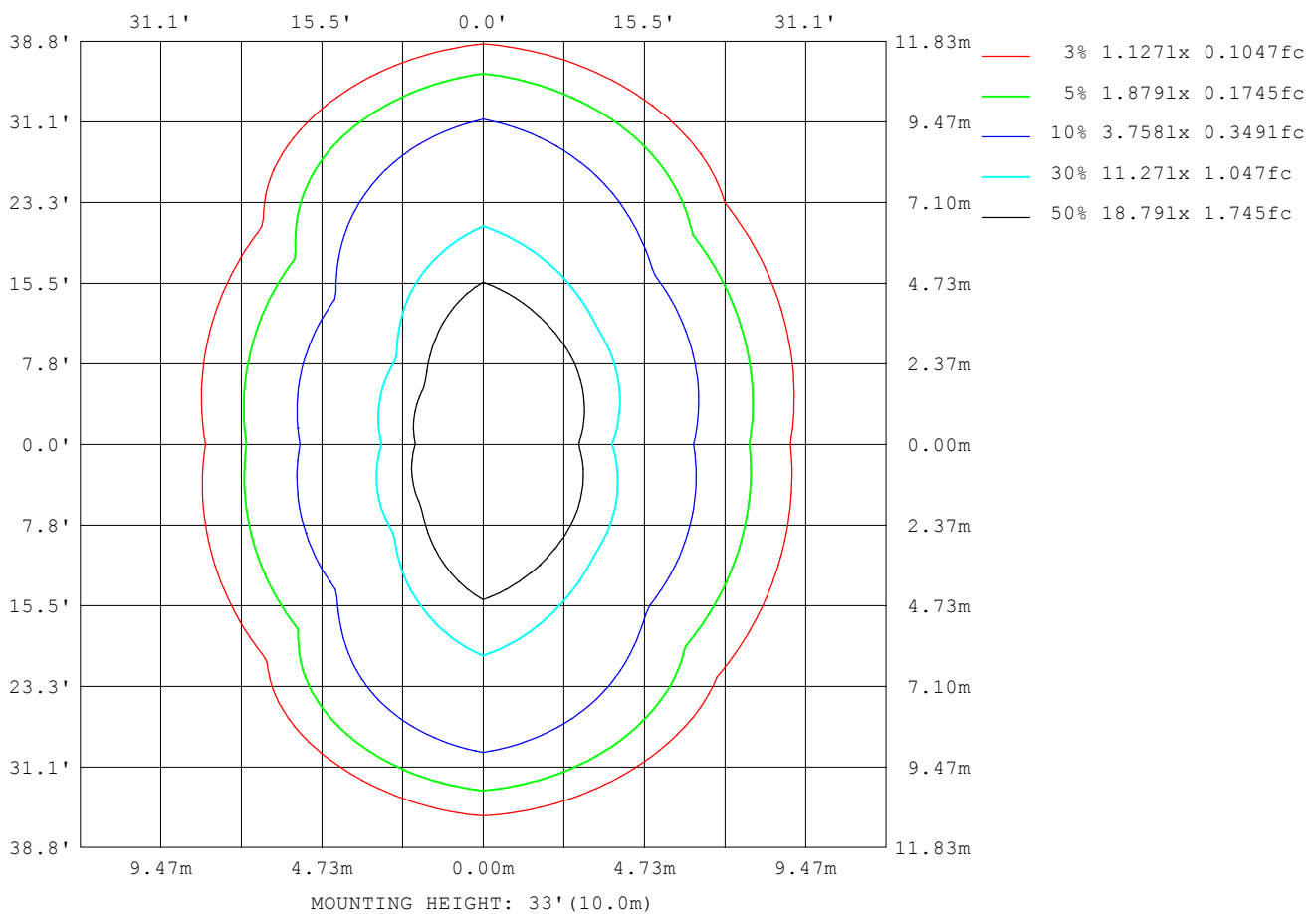
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity: 65.0%
Test Distance: 7.540m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

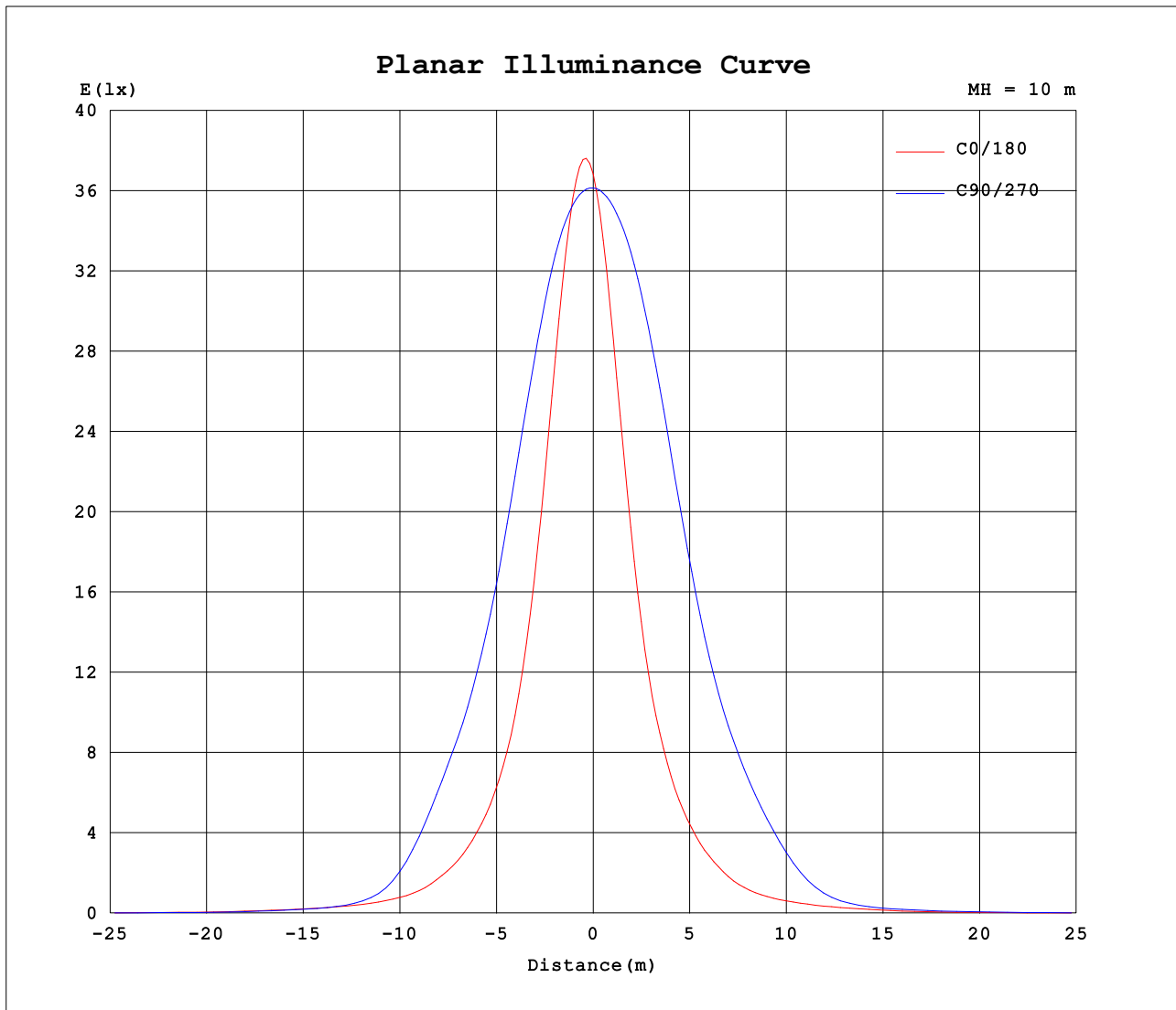
AvgL	cd/m2
L_0~180 (65) av	1213
L_0~180 (75) av	612
L_0~180 (85) av	264
L_90~270 (65) av	1339
L_90~270 (75) av	801
L_90~270 (85) av	256
L_45 (65) av	1361
L_45 (75) av	666
L_45 (85) av	251

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity: 65.0%
Test Distance: 7.540m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: COVO light	TYPE:4000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	3682	3619	3614	3660	3682	3619	3614	3660										
5	3695	3750	3599	3267	3068	3158	3589	3749										
10	3100	3496	3504	2664	2202	2520	3511	3500										
15	2218	2909	3273	1996	1458	1870	3332	2963										
20	1461	2162	2907	1405	989	1329	3027	2272										
25	983	1471	2447	966	691	942	2601	1596										
30	689	962	1995	664	485	666	2123	1065										
35	479	626	1593	455	333	468	1697	710										
40	327	417	1158	314	230	329	1312	472										
45	223	283	593	219	175	231	855	322										
50	170	196	232	155	137	166	384	222										
55	134	136	128	109	103	121	174	155										
60	99.0	95.3	83.6	73.4	65.0	84.8	109	109										
65	62.4	61.2	47.3	43.3	40.2	51.8	65.9	73.8										
70	38.3	34.4	30.3	24.2	22.0	29.4	40.5	43.6										
75	21.1	18.4	16.9	11.4	10.5	14.7	24.6	24.4										
80	10.2	8.03	6.28	3.83	3.80	5.69	12.4	11.6										
85	3.75	2.46	1.09	0.75	0.84	1.45	3.38	4.10										
90	0.82	0.18	0.01	0.08	0.02	0.06	0.12	0.85										
95	0.02	0.08	0.03	0.08	0.01	0.05	0.00	0.06										
100	0.02	0.08	0.04	0.08	0.02	0.05	0.00	0.06										
105	0.03	0.08	0.07	0.08	0.04	0.05	0.02	0.05										
110	0.05	0.09	0.14	0.11	0.04	0.06	0.05	0.06										
115	0.08	0.12	0.23	0.15	0.06	0.08	0.11	0.07										
120	0.11	0.16	0.38	0.23	0.10	0.12	0.19	0.10										
125	0.15	0.22	0.55	0.34	0.15	0.19	0.31	0.15										
130	0.22	0.31	0.75	0.52	0.22	0.30	0.45	0.23										
135	0.32	0.44	0.96	0.78	0.32	0.47	0.62	0.32										
140	0.46	0.63	1.13	1.10	0.47	0.70	0.80	0.48										
145	0.68	0.87	1.26	1.46	0.71	0.99	1.01	0.67										
150	1.02	1.16	1.48	1.81	1.04	1.30	1.25	0.91										
155	1.47	1.47	1.76	2.12	1.46	1.60	1.46	1.14										
160	1.98	1.78	1.96	2.33	1.87	1.85	1.69	1.40										
165	2.39	2.03	2.13	2.42	2.18	2.05	1.93	1.63										
170	2.62	2.23	2.26	2.44	2.38	2.21	2.16	1.87										
175	2.64	2.35	2.32	2.38	2.43	2.33	2.28	2.09										
180	2.51	2.40	2.33	2.28	2.51	2.40	2.35	2.27										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-13

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.353
Humidity:65.0%
Test Distance:7.540m [K=1.0000]
Remarks: