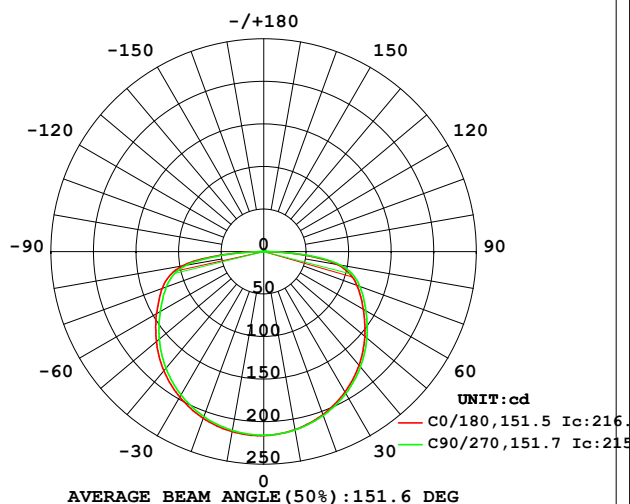


LUMINAIRE PHOTOMETRIC TEST REPORT

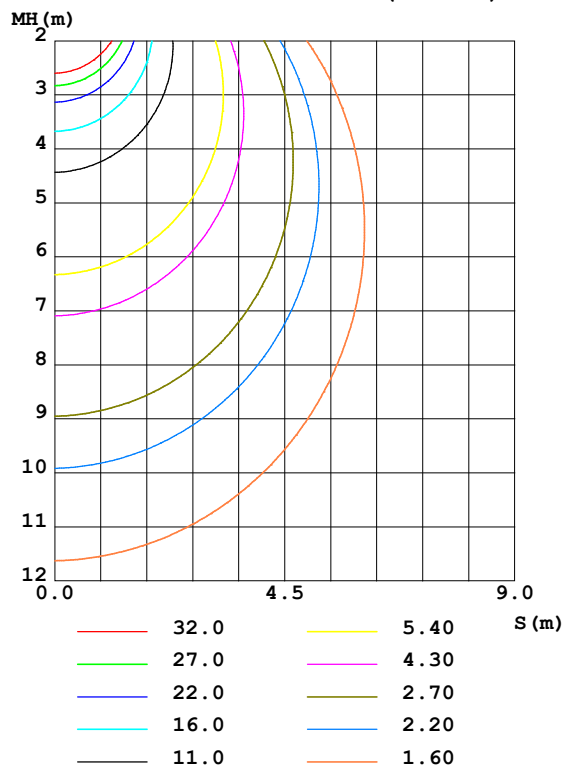
Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 42.87 lm/W			
MODEL	--	I _{max} (cd)	216.4	S/MH(C0/180)	1.36
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	858.35	η UP,DN(C0-180)	0.5,49.4
NOMINAL FLUX(lm)	858.346	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.4,49.7
LAMPS INSIDE	1	η up(%)	0.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	--	η down(%)	99.1	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [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	212.4	212.2	212.7	213.6	214.8	214.4	213.4	212.4	0- 10	20.48	20.48	2.39,2.39
20	203.8	203.8	204.8	206.7	208.4	207.9	206.2	204.3	10- 20	59.35	79.83	9.3,9.3
30	190.8	191.1	192.8	195.4	197.4	197.1	194.5	191.7	20- 30	92.43	172.3	20.1,20.1
40	174.4	174.8	177.0	180.1	182.8	182.1	178.9	175.4	30- 40	116.8	289.1	33.7,33.7
50	155.1	155.8	158.4	161.9	164.7	164.2	160.3	156.3	40- 50	130.7	419.7	48.9,48.9
60	135.0	136.0	138.6	142.4	145.4	144.7	140.5	136.1	50- 60	134.1	553.8	64.5,64.5
70	116.7	117.8	120.3	124.1	127.1	126.3	122.0	117.5	60- 70	129.5	683.2	79.6,79.6
80	87.65	88.95	91.41	94.40	96.80	96.43	92.15	87.65	70- 80	115.4	798.6	93,93
90	0.9868	0.9613	0.9145	0.9578	0.6002	0.6224	0.6372	0.6430	80- 90	51.64	850.3	99.1,99.1
100	0.9823	0.9494	0.9160	0.8948	0.6836	0.7034	0.7098	0.7307	90-100	0.8136	851.1	99.2,99.2
110	1.229	1.215	1.175	1.154	0.9160	0.9219	0.9557	0.9561	100-110	0.9926	852.1	99.3,99.3
120	1.448	1.427	1.393	1.366	1.107	1.120	1.133	1.161	110-120	1.158	853.2	99.4,99.4
130	1.625	1.612	1.584	1.557	1.312	1.311	1.352	1.359	120-130	1.223	854.5	99.5,99.5
140	1.748	1.748	1.707	1.694	1.543	1.523	1.557	1.578	130-140	1.203	855.7	99.7,99.7
150	1.844	1.864	1.844	1.830	1.708	1.694	1.707	1.735	140-150	1.074	856.7	99.8,99.8
160	1.953	1.967	1.940	1.946	1.830	1.851	1.857	1.885	150-160	0.8511	857.6	99.9,99.9
170	2.010	2.030	2.008	2.023	1.953	1.948	1.967	1.989	160-170	0.5532	858.2	100,100
180	2.021	2.035	2.021	2.035	2.035	2.035	2.035	2.028	170-180	0.1922	858.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 353.32 lm

%lum = 41.2%

%lamp = 41.2%

Conical surface Flux(120deg): 553.77 lm

%lum = 64.5%

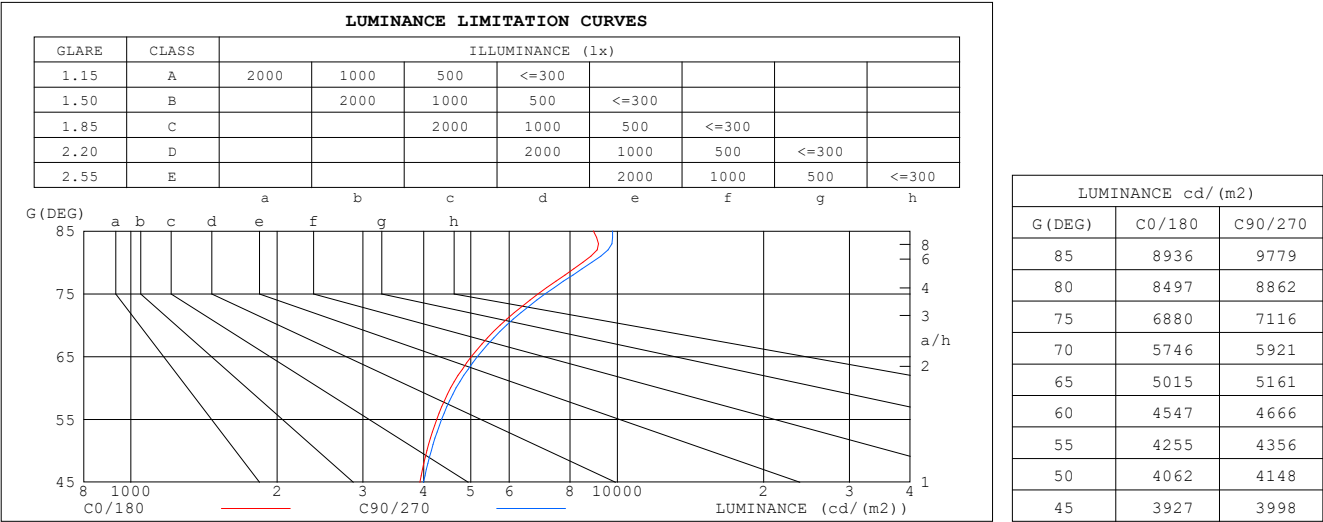
%lamp = 64.5%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [K=1.0000]
Remarks: ---

LUMINANCE LIMITATION CURVES

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [K=1.0000]
Remarks: ---

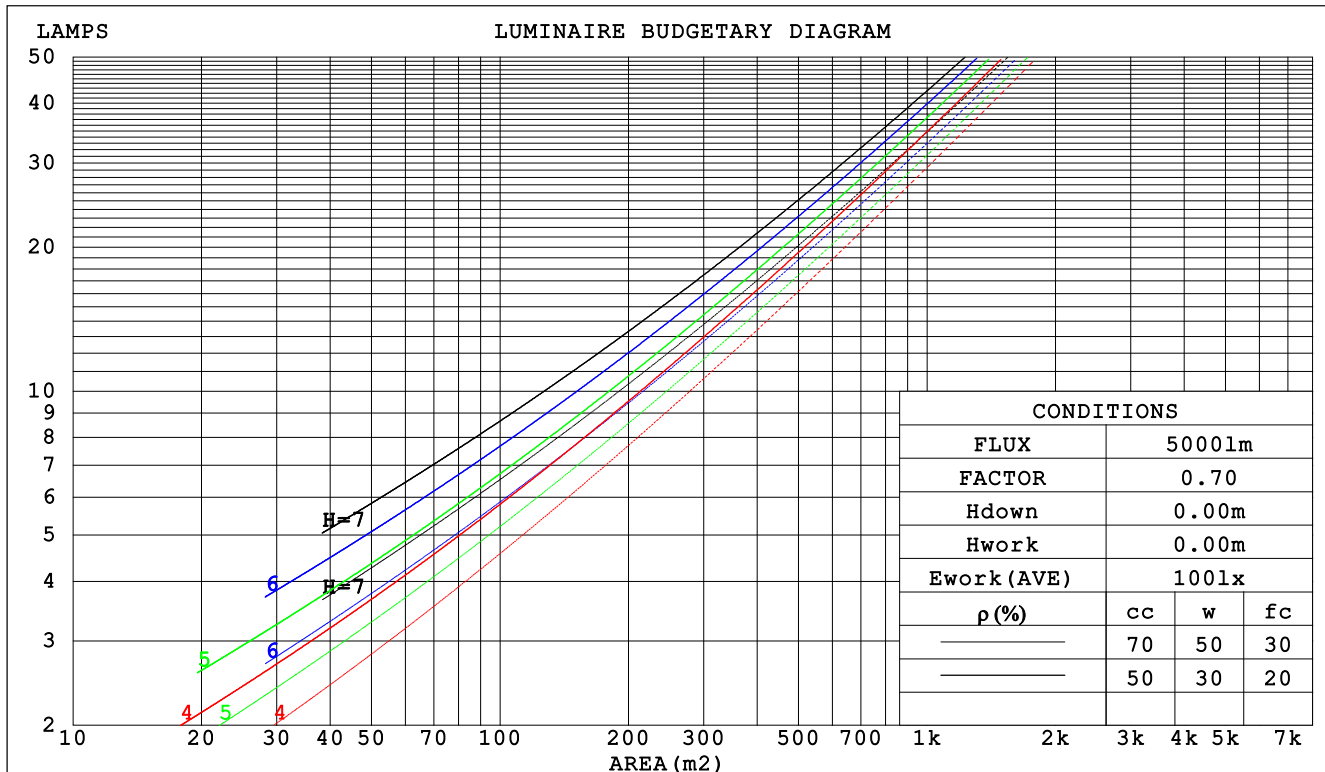
GONIOPHOTOMETERS SYSTEM TEST REPORT

Page 4 Of 11

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	

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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	.99	.94	.89	.97	.92	.87	.92	.88	.84	.88	.85	.81	.84	.81	.79	.76
2.0	.84	.76	.69	.82	.75	.68	.78	.72	.66	.75	.69	.65	.71	.67	.63	.60
3.0	.73	.63	.55	.71	.62	.55	.68	.60	.54	.65	.58	.53	.62	.56	.51	.49
4.0	.63	.53	.46	.62	.53	.45	.59	.51	.45	.57	.50	.44	.54	.48	.43	.41
5.0	.56	.46	.39	.55	.46	.39	.53	.44	.38	.50	.43	.37	.48	.42	.37	.34
6.0	.50	.40	.33	.49	.40	.33	.47	.39	.33	.45	.38	.32	.44	.37	.32	.30
7.0	.45	.36	.29	.44	.35	.29	.43	.35	.29	.41	.34	.28	.40	.33	.28	.26
8.0	.41	.32	.26	.40	.32	.26	.39	.31	.25	.38	.30	.25	.36	.30	.25	.23
9.0	.38	.29	.23	.37	.29	.23	.36	.28	.23	.35	.28	.23	.33	.27	.22	.20
10.0	.35	.26	.21	.34	.26	.21	.33	.26	.21	.32	.25	.20	.31	.25	.20	.18



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason Huang
 Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:13.486m [K=1.0000]
 Remarks: ---

GONIOPHOTOMETERS SYSTEM TEST REPORT

Page 5 Of 11

WEC AND CCEC

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm									
NAME: Wall Sconce					TYPE:--			SERIAL No.:FTS23050402L-02	
SPEC.:W32712					DIM.: --				
MFR.: MATTEO					SUR.:275mm				

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	.395	.224	.071	.387	.221	.070	.373	.214	.068	.360	.207	.067	.348	.202	.065	
2.0	.350	.192	.059	.343	.189	.058	.330	.184	.057	.318	.179	.056	.308	.174	.055	
3.0	.312	.166	.050	.306	.164	.049	.295	.160	.049	.284	.156	.048	.275	.152	.047	
4.0	.281	.146	.043	.275	.144	.043	.265	.141	.042	.256	.138	.041	.247	.134	.041	
5.0	.255	.130	.038	.250	.128	.037	.241	.126	.037	.233	.123	.037	.225	.120	.036	
6.0	.233	.117	.033	.229	.116	.033	.221	.113	.033	.213	.111	.033	.206	.109	.032	
7.0	.214	.106	.030	.211	.105	.030	.204	.103	.030	.197	.101	.029	.191	.099	.029	
8.0	.198	.097	.027	.195	.096	.027	.189	.094	.027	.183	.093	.027	.177	.091	.026	
9.0	.185	.089	.025	.182	.089	.025	.176	.087	.025	.171	.085	.024	.165	.084	.024	
10.0	.173	.083	.023	.170	.082	.023	.165	.081	.023	.160	.079	.023	.155	.078	.022	

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	.198	.198	.198	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.193	.163	.135	.165	.140	.116	.113	.096	.080	.065	.056	.047	.021	.018	.015	
2.0	.187	.139	.098	.160	.120	.085	.110	.083	.059	.063	.048	.035	.020	.016	.011	
3.0	.180	.122	.076	.154	.105	.066	.106	.073	.046	.061	.043	.027	.020	.014	.009	
4.0	.172	.109	.061	.148	.094	.053	.101	.066	.037	.059	.038	.022	.019	.013	.007	
5.0	.164	.099	.051	.141	.086	.044	.097	.060	.031	.056	.035	.019	.018	.011	.006	
6.0	.156	.091	.044	.134	.079	.038	.093	.055	.027	.054	.032	.016	.017	.011	.005	
7.0	.149	.084	.038	.128	.073	.034	.088	.051	.024	.051	.030	.014	.017	.010	.005	
8.0	.142	.078	.034	.122	.068	.030	.084	.048	.021	.049	.028	.013	.016	.009	.004	
9.0	.135	.073	.031	.116	.063	.027	.081	.045	.019	.047	.026	.012	.015	.009	.004	
10.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.004	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [K=1.0000]
Remarks: ---

GONIOPHOTOMETERS SYSTEM TEST REPORT

Page 6 Of 11

UGR(Unified Glare Rating) Table

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm										
NAME: Wall Sconce					TYPE:--			SERIAL No.:FTS23050402L-02		
SPEC.:W32712					DIM.: --					
MFR.: MATTEO					SUR.:275mm					
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	17.9	19.5	18.2	19.8	20.0	18.0	19.6	18.3	19.9	20.1
3H	20.4	22.0	20.8	22.3	22.5	20.6	22.1	20.9	22.4	22.7
4H	21.8	23.3	22.2	23.6	23.9	22.0	23.5	22.3	23.7	24.0
6H	23.2	24.7	23.6	25.0	25.3	23.4	24.8	23.8	25.1	25.4
8H	23.8	25.2	24.2	25.5	25.9	24.0	25.4	24.4	25.7	26.0
12H	24.3	25.6	24.7	25.9	26.3	24.5	25.8	24.9	26.1	26.5
4H 2H	18.8	20.3	19.1	20.5	20.8	18.8	20.3	19.2	20.6	20.9
3H	21.6	22.9	21.9	23.2	23.5	21.7	23.0	22.0	23.3	23.6
4H	23.1	24.3	23.5	24.7	25.1	23.2	24.5	23.6	24.8	25.2
6H	24.7	25.8	25.1	26.2	26.6	24.8	25.9	25.3	26.3	26.7
8H	25.4	26.4	25.8	26.8	27.2	25.5	26.6	26.0	27.0	27.4
12H	25.9	26.8	26.3	27.3	27.7	26.1	27.0	26.5	27.4	27.9
8H 4H	23.8	24.8	24.2	25.2	25.6	23.8	24.9	24.3	25.3	25.7
6H	25.6	26.4	26.0	26.9	27.3	25.7	26.6	26.2	27.0	27.4
8H	26.4	27.2	26.9	27.6	28.1	26.5	27.3	27.0	27.8	28.3
12H	27.0	27.7	27.5	28.2	28.7	27.2	27.9	27.7	28.4	28.9
12H 4H	23.9	24.9	24.3	25.3	25.7	24.0	24.9	24.4	25.3	25.8
6H	25.8	26.6	26.3	27.0	27.5	25.9	26.7	26.4	27.1	27.6
8H	26.7	27.4	27.2	27.9	28.4	26.8	27.5	27.3	28.0	28.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 858.3 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.5$)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason Huang
 Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:13.486m [K=1.0000]
 Remarks: ---

UTILIZATION FACTORS TABLE

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	

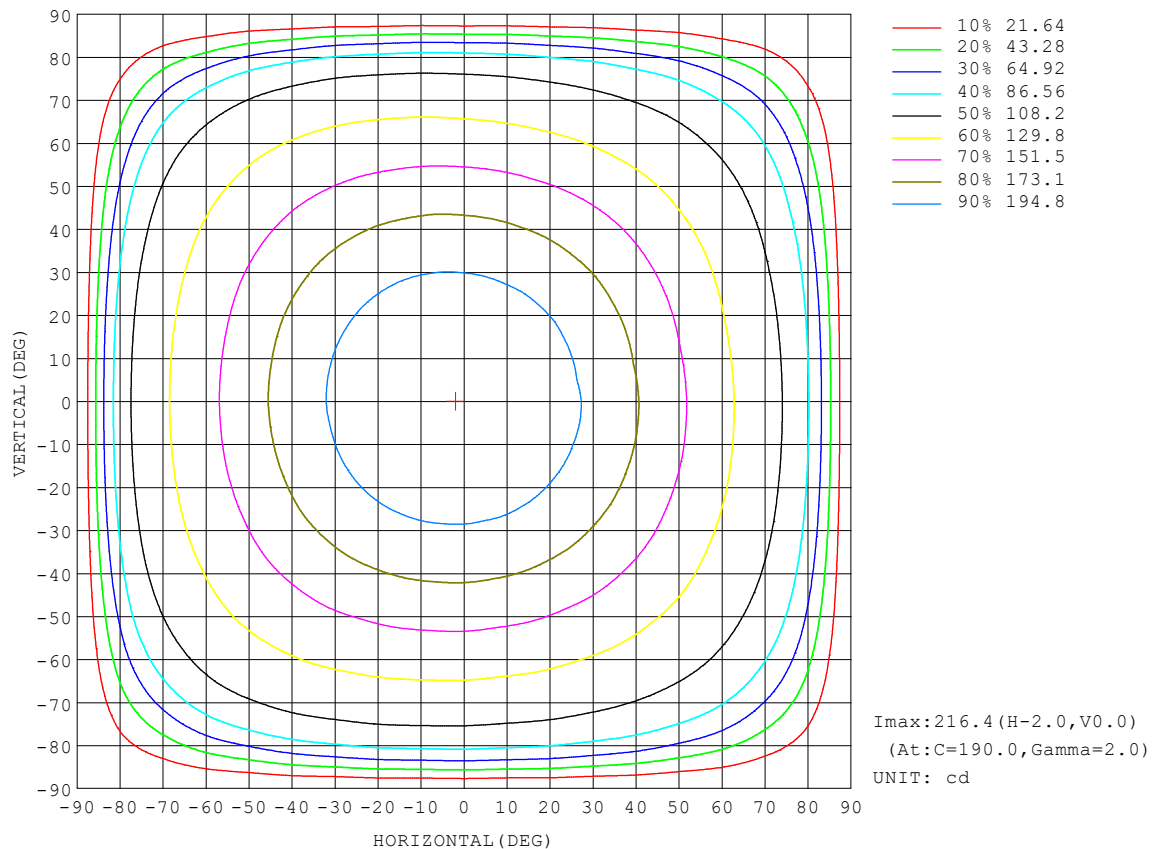
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	39	32	51	39	32	50	38	31	24
0.80	61	48	40	60	48	40	58	47	39	32
1.00	69	56	48	68	56	48	65	58	47	39
1.25	76	64	56	75	63	55	72	62	54	46
1.50	81	70	61	80	69	61	76	67	60	51
2.00	89	78	71	87	77	70	83	75	68	59
2.50	94	84	76	91	82	76	87	80	74	64
3.00	97	89	82	95	87	81	90	84	78	69
4.00	102	95	89	99	93	87	95	89	85	75
5.00	105	99	94	102	97	92	97	93	89	79
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason Huang
 Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:13.486m [K=1.0000]
 Remarks: ---

ISOCANDELA DIAGRAM

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	

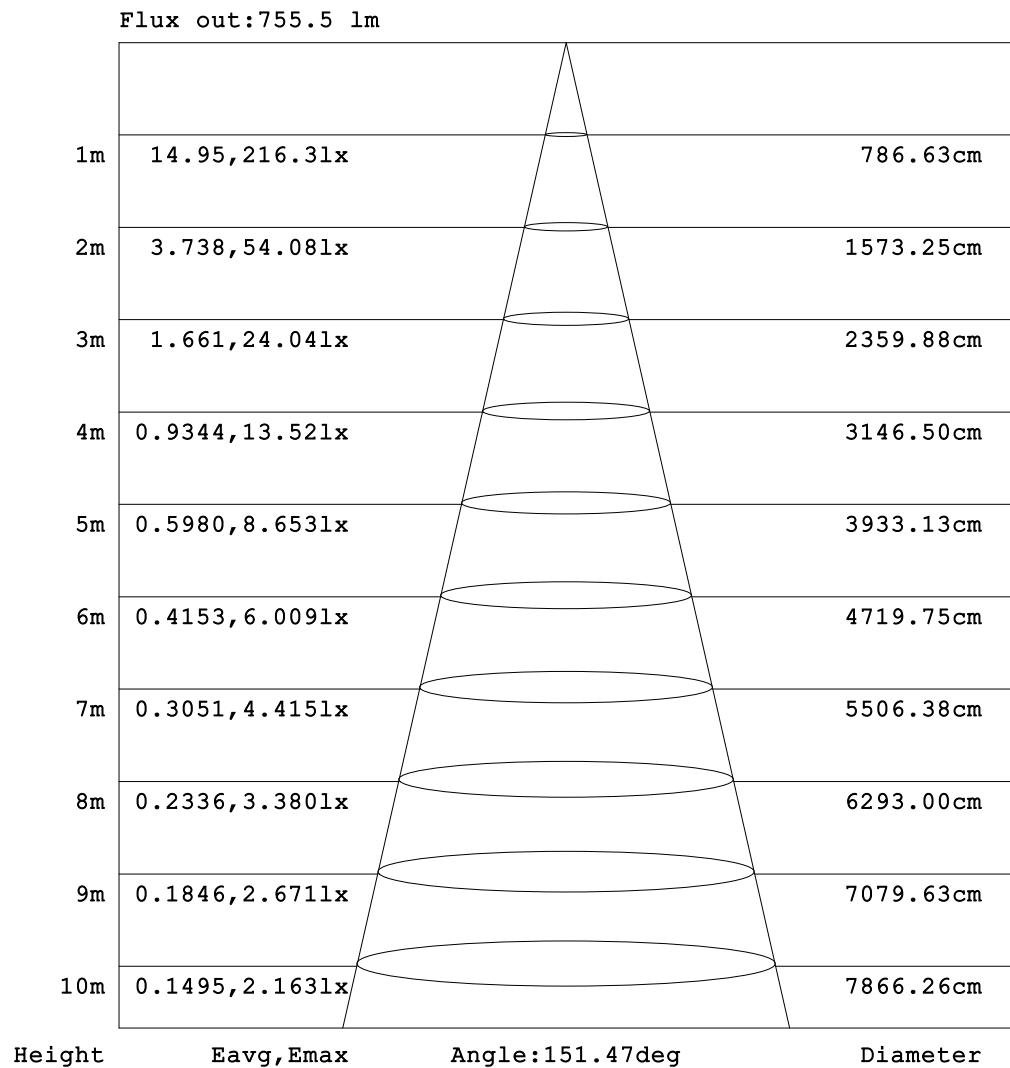


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [K=1.0000]
Remarks: ---

AAI Figure

Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	



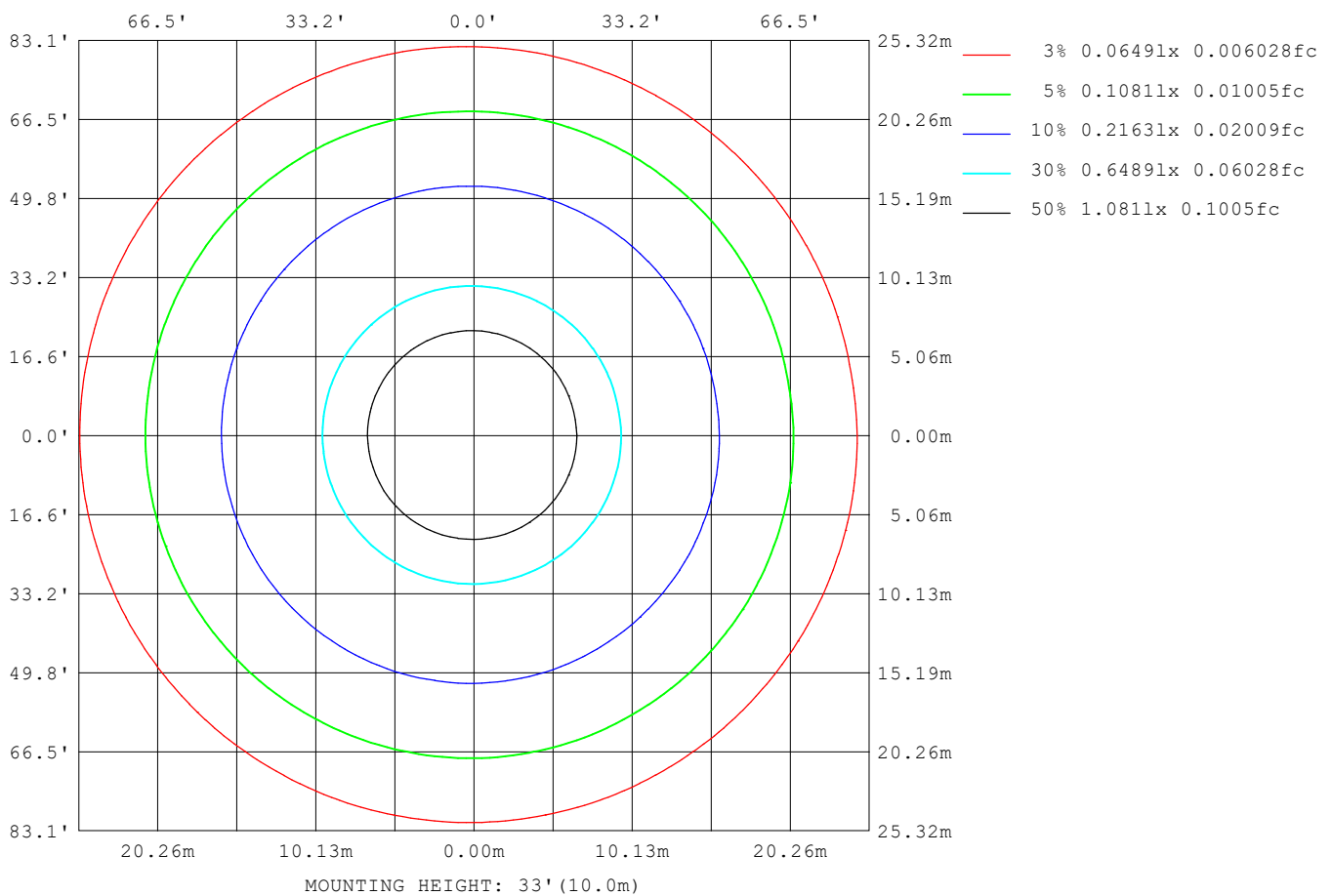
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason Huang
 Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:13.486m [K=1.0000]
 Remarks: ---

ISOLUX DIAGRAM

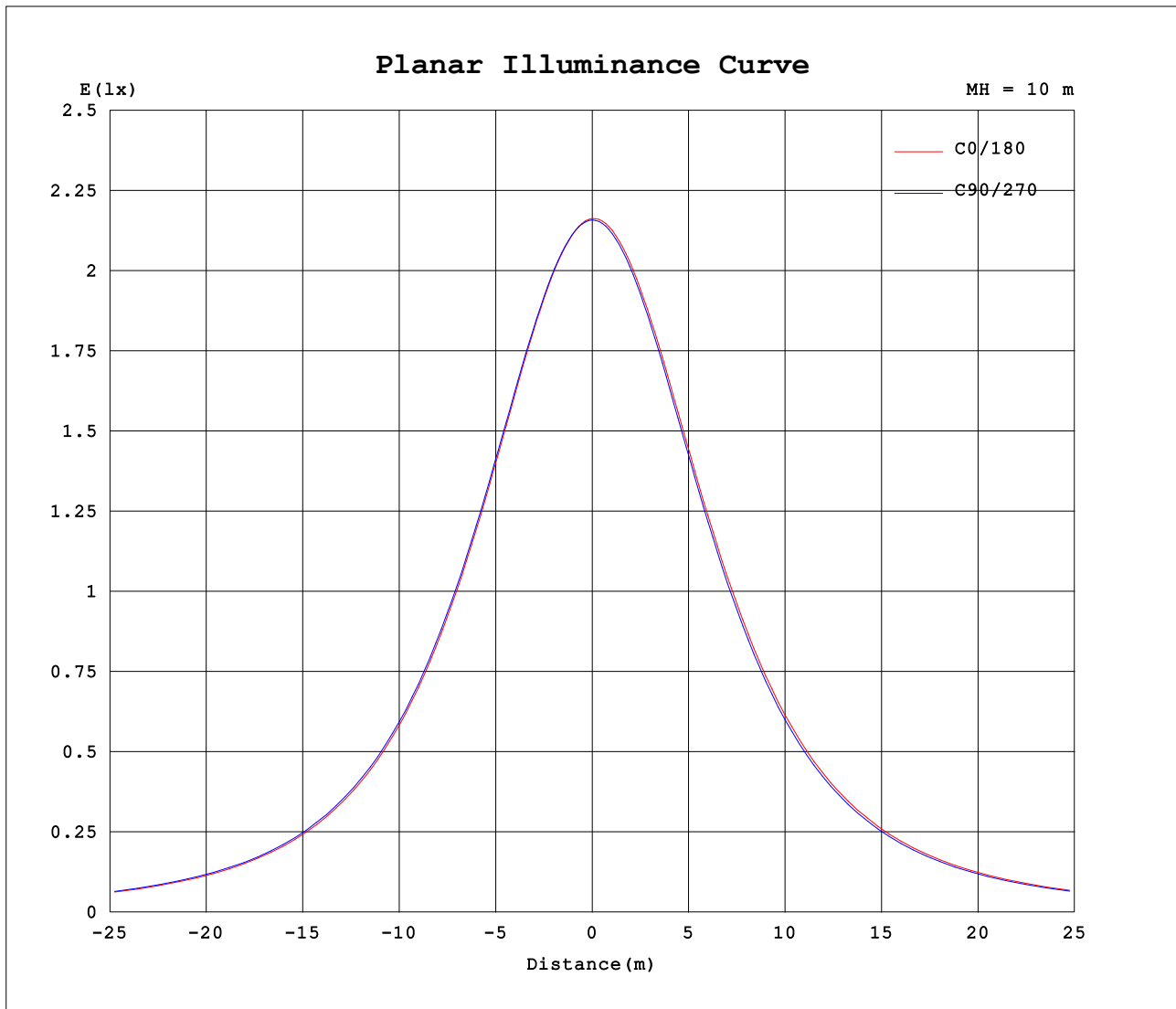
Test:U:120.07V I:0.1697A P:20.02W PF:0.9825 Freq:60.00Hz Lamp Flux:858.346x1 lm		
NAME: Wall Sconce	TYPE:--	SERIAL No.:FTS23050402L-02
SPEC.:W32712	DIM.: --	
MFR.: MATTEO	SUR.:275mm	



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason Huang
Test Date:2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity:65.0%
Test Distance:13.486m [K=1.0000]
Remarks: ---

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason Huang
Test Date: 2023-05-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
Humidity: 65.0%
Test Distance: 13.486m [K=1.0000]
Remarks: ---