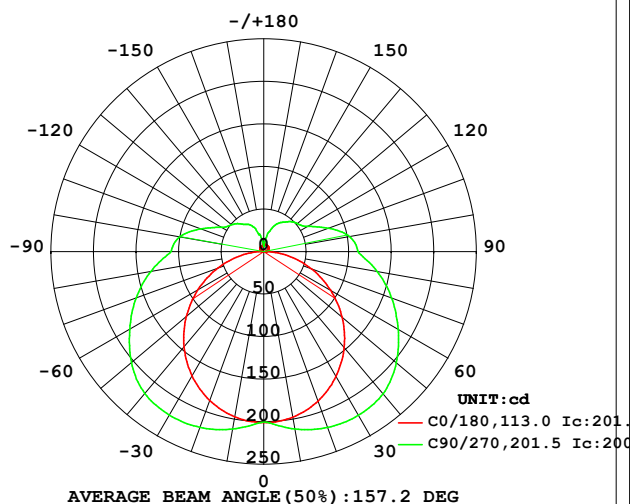


## LUMINAIRE PHOTOMETRIC TEST REPORT

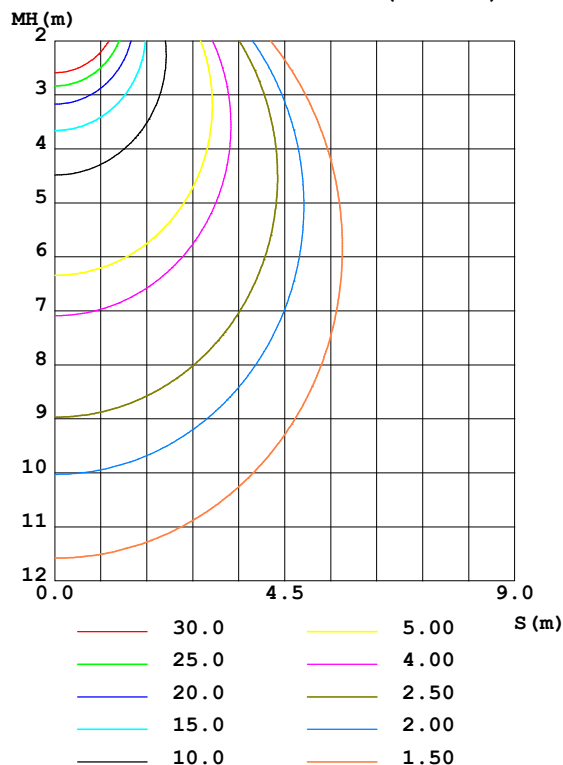
Test:U:120.07V I:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 69.37 lm/W
MODEL	--	I <sub>max</sub> (cd)	222.3	S/MH (C0/180)	1.25	
NOMINAL POWER (W)	--	LOR (%)	100.0	S/MH (C90/270)	1.65	
RATED VOLTAGE (V)	--	TOTAL FLUX (lm)	1153.7	η UP, DN (C0-180)	10.8, 39.5	
NOMINAL FLUX (lm)	1153.69	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	10.4, 39.3	
LAMPS INSIDE	1	η up (%)	21.2	CIBSE SHR NOM	1.50	
TEST VOLTAGE (V)	--	η down (%)	78.8	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: 2023-03-17

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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	197.6	207.2	211.7	205.8	197.1	206.7	211.8	206.2	0- 10	19.46	19.46	1.69,1.69
20	186.9	209.8	219.9	207.4	186.1	208.7	219.8	207.8	10- 20	58.54	78.01	6.76,6.76
30	169.7	206.0	222.2	202.7	168.6	204.5	221.9	203.1	20- 30	94.40	172.4	14.9,14.9
40	147.1	196.2	218.3	192.0	145.8	194.4	217.6	192.4	30- 40	122.8	295.2	25.6,25.6
50	120.4	180.3	203.4	175.5	118.8	178.5	202.8	176.1	40- 50	139.9	435.1	37.7,37.7
60	90.79	156.1	182.4	151.5	89.02	154.4	181.8	152.2	50- 60	142.9	577.9	50.1,50.1
70	59.84	128.7	160.0	123.5	57.91	126.9	159.6	124.2	60- 70	132.6	710.6	61.6,61.6
80	29.02	101.7	135.5	96.03	27.03	99.74	134.7	96.93	70- 80	112.6	823.1	71.3,71.3
90	2.608	76.37	110.9	70.88	1.763	73.87	109.2	70.55	80- 90	85.97	909.1	78.8,78.8
100	3.195	66.03	102.5	59.69	2.406	62.20	100.5	58.83	90-100	69.13	978.2	84.8,84.8
110	4.341	45.44	81.05	40.54	3.471	42.58	78.52	38.80	100-110	53.05	1031	89.4,89.4
120	6.126	36.93	59.90	34.30	5.114	35.47	57.80	32.73	110-120	37.54	1069	92.6,92.6
130	7.102	35.21	51.48	32.63	6.201	32.13	49.29	30.73	120-130	29.26	1098	95.2,95.2
140	7.702	32.50	46.18	31.06	6.668	28.62	42.83	29.54	130-140	23.29	1121	97.2,97.2
150	7.949	28.15	39.54	24.78	6.911	24.93	36.99	25.16	140-150	16.63	1138	98.6,98.6
160	8.427	22.48	30.33	16.18	7.198	16.07	28.51	20.49	150-160	10.17	1148	99.5,99.5
170	7.948	15.91	16.64	10.37	7.582	9.875	15.14	14.85	160-170	4.468	1153	99.9,99.9
180	9.984	9.793	6.228	9.663	10.01	9.841	6.228	9.677	170-180	1.040	1154	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 363.83 lm

%lum = 31.5%

%lamp = 31.5%

Conical surface Flux(120deg): 577.94 lm

%lum = 50.1%

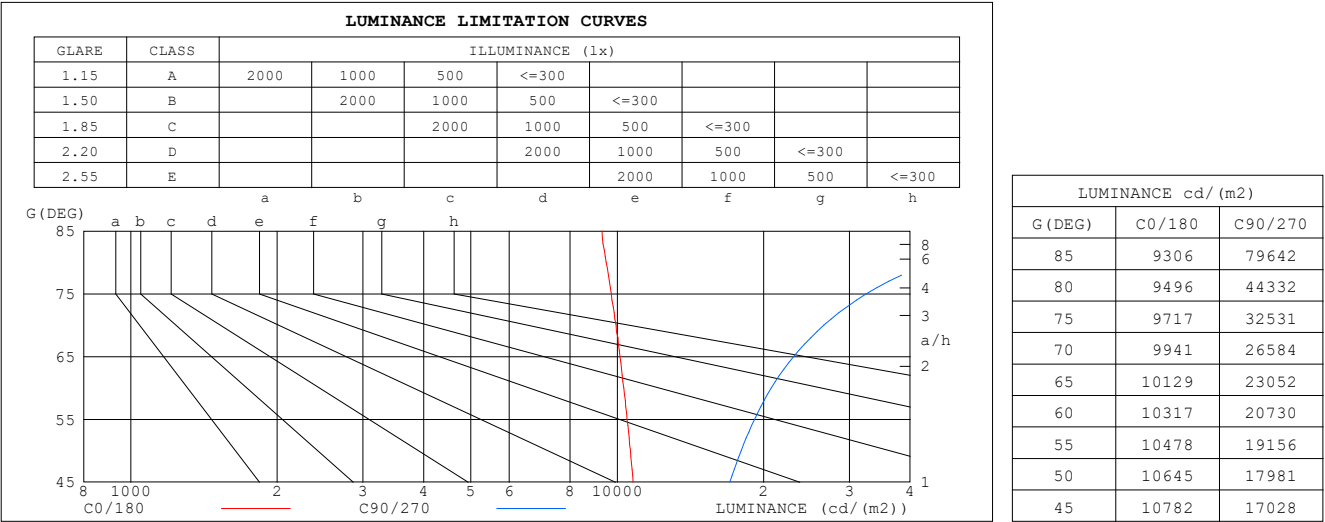
%lamp = 50.1%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason Huang  
 Test Date:2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	



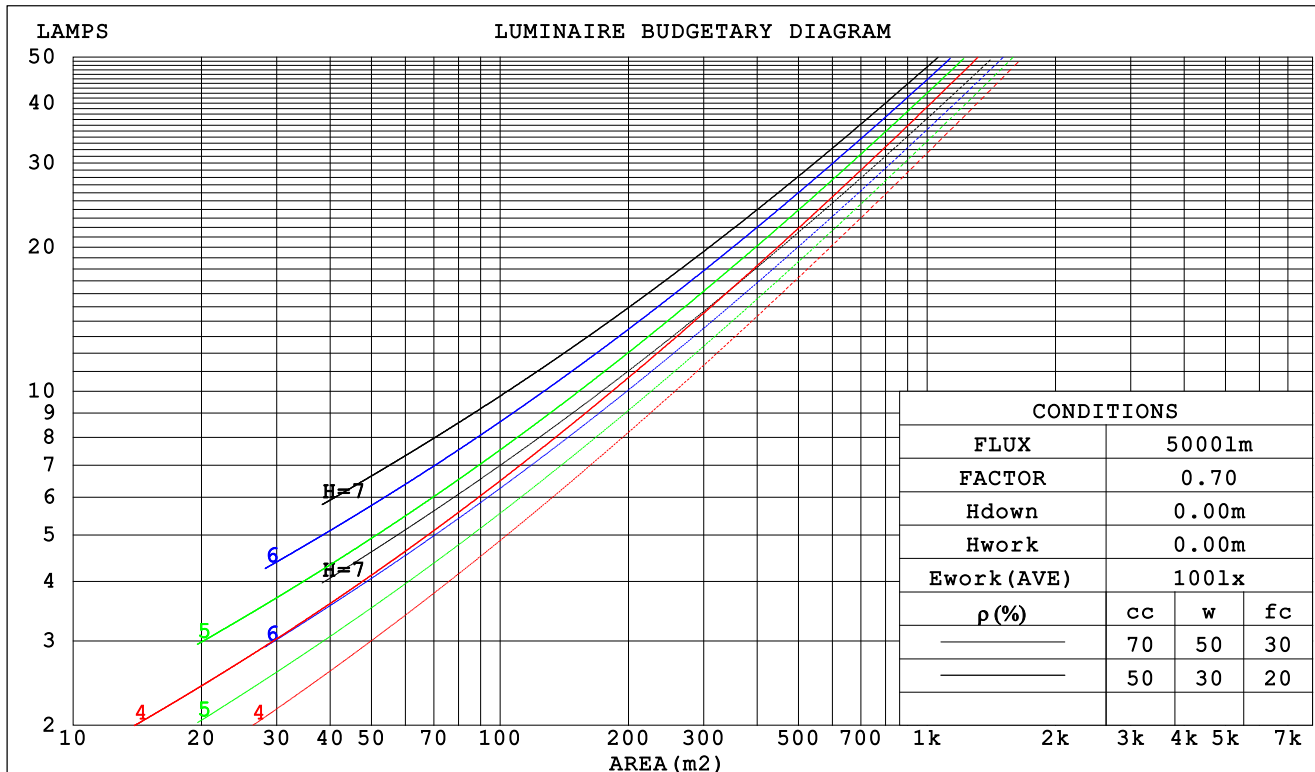
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Huang  
Test Date:2023-03-17

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: --

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.07V I:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.14	1.14	1.14	1.09	1.09	1.09	.99	.99	.99	.91	.91	.91	.83	.83	.83	.79
1.0	.95	.89	.84	.90	.85	.81	.82	.78	.75	.74	.71	.68	.67	.65	.63	.59
2.0	.81	.73	.66	.77	.70	.64	.70	.64	.59	.63	.59	.54	.57	.53	.50	.47
3.0	.70	.61	.53	.66	.58	.51	.60	.54	.48	.55	.49	.44	.50	.45	.41	.38
4.0	.61	.51	.44	.58	.49	.43	.53	.46	.40	.48	.42	.37	.44	.38	.34	.31
5.0	.54	.44	.37	.52	.43	.36	.47	.40	.34	.43	.36	.31	.39	.33	.29	.26
6.0	.48	.39	.32	.46	.37	.31	.42	.35	.29	.38	.32	.27	.35	.30	.25	.23
7.0	.43	.34	.28	.42	.33	.27	.38	.31	.25	.35	.28	.24	.32	.26	.22	.20
8.0	.39	.31	.24	.38	.29	.24	.35	.27	.22	.32	.26	.21	.29	.24	.20	.17
9.0	.36	.27	.22	.34	.27	.21	.32	.25	.20	.29	.23	.19	.27	.21	.18	.15
10.0	.33	.25	.19	.32	.24	.19	.29	.23	.18	.27	.21	.17	.25	.20	.16	.14



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Huang  
Test Date:2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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

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## WEC AND CCEC

Test:U:120.07V I:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm									
NAME: Pendent lamp					TYPE:--			SERIAL No.:FTS23031602L-06	
SPEC.:S03218					DIM.: --				
MFR.: YiZHI					SUR.:440mm				

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	.389	.221	.070	.375	.214	.068	.350	.201	.064	.326	.188	.060	.304	.176	.057		
2.0	.337	.185	.057	.324	.179	.055	.301	.167	.052	.280	.157	.049	.260	.147	.046		
3.0	.299	.159	.048	.288	.154	.046	.267	.144	.044	.247	.135	.042	.229	.127	.039		
4.0	.269	.140	.041	.259	.135	.040	.239	.127	.038	.222	.119	.036	.205	.111	.034		
5.0	.244	.124	.036	.235	.121	.035	.217	.113	.033	.201	.106	.032	.186	.099	.030		
6.0	.223	.112	.032	.215	.109	.031	.199	.102	.030	.184	.096	.028	.170	.090	.027		
7.0	.206	.102	.029	.198	.099	.028	.184	.093	.027	.170	.087	.025	.157	.082	.024		
8.0	.191	.093	.026	.184	.091	.026	.170	.085	.024	.158	.080	.023	.146	.075	.022		
9.0	.178	.086	.024	.171	.083	.023	.159	.079	.022	.147	.074	.021	.136	.069	.020		
10.0	.166	.080	.022	.160	.077	.022	.149	.073	.021	.138	.069	.019	.128	.064	.018		

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	.352	.352	.352	.301	.301	.301	.205	.205	.205	.118	.118	.118	.038	.038	.038	
1.0	.349	.318	.291	.298	.273	.250	.204	.188	.173	.117	.109	.101	.038	.035	.033	
2.0	.342	.296	.257	.293	.254	.222	.201	.176	.155	.116	.102	.091	.037	.033	.030	
3.0	.335	.279	.235	.287	.241	.204	.197	.167	.143	.114	.098	.084	.037	.032	.028	
4.0	.327	.267	.221	.281	.231	.192	.193	.161	.135	.112	.094	.080	.036	.031	.026	
5.0	.320	.257	.211	.274	.223	.184	.189	.156	.130	.110	.091	.077	.035	.030	.025	
6.0	.312	.249	.204	.268	.216	.178	.185	.151	.126	.107	.089	.075	.035	.029	.025	
7.0	.305	.243	.199	.262	.211	.174	.181	.148	.123	.105	.087	.073	.034	.028	.024	
8.0	.298	.237	.195	.257	.206	.170	.178	.145	.121	.103	.085	.072	.033	.028	.024	
9.0	.292	.233	.192	.252	.202	.168	.174	.142	.119	.102	.084	.071	.033	.028	.024	
10.0	.286	.229	.190	.247	.198	.166	.171	.140	.118	.100	.083	.070	.032	.027	.023	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Huang  
Test Date:2023-03-17

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

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## UGR(Unified Glare Rating) Table

Test:U:120.07V I:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm										
NAME: Pendent lamp					TYPE:--			SERIAL No.:FTS23031602L-06		
SPEC.:S03218					DIM.: --					
MFR.: YiZHI					SUR.:440mm					
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	20.0	21.4	20.5	21.9	22.5	22.5	23.8	23.0	24.4	25.0
3H	21.6	22.9	22.2	23.5	24.1	25.2	26.4	25.7	27.0	27.7
4H	22.3	23.5	22.9	24.1	24.8	26.6	27.8	27.2	28.4	29.1
6H	22.9	24.0	23.5	24.6	25.4	28.2	29.4	28.9	30.0	30.7
8H	23.1	24.2	23.7	24.8	25.5	29.1	30.2	29.7	30.8	31.6
12H	23.2	24.3	23.9	24.9	25.7	30.1	31.2	30.8	31.8	32.5
4H 2H	21.3	22.5	21.9	23.1	23.8	23.1	24.3	23.7	24.9	25.5
3H	23.3	24.3	23.9	25.0	25.7	26.0	27.0	26.6	27.7	28.4
4H	24.2	25.1	24.8	25.8	26.6	27.6	28.6	28.3	29.3	30.0
6H	25.0	25.8	25.6	26.5	27.3	29.5	30.3	30.2	31.0	31.8
8H	25.2	26.0	25.9	26.7	27.6	30.5	31.3	31.2	32.0	32.8
12H	25.5	26.2	26.2	26.9	27.8	31.6	32.4	32.3	33.1	33.9
8H 4H	25.3	26.1	26.0	26.8	27.6	28.0	28.8	28.7	29.5	30.3
6H	26.5	27.1	27.2	27.9	28.7	30.1	30.8	30.9	31.5	32.4
8H	27.0	27.6	27.7	28.3	29.2	31.4	32.0	32.1	32.7	33.6
12H	27.4	28.0	28.2	28.7	29.6	32.8	33.3	33.5	34.0	34.9
12H 4H	25.6	26.4	26.4	27.1	27.9	28.0	28.8	28.7	29.5	30.3
6H	27.0	27.6	27.8	28.4	29.3	30.3	30.9	31.0	31.6	32.5
8H	27.7	28.3	28.5	29.0	29.9	31.6	32.1	32.4	32.9	33.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				

CIE Pub.117, 1154 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:2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	

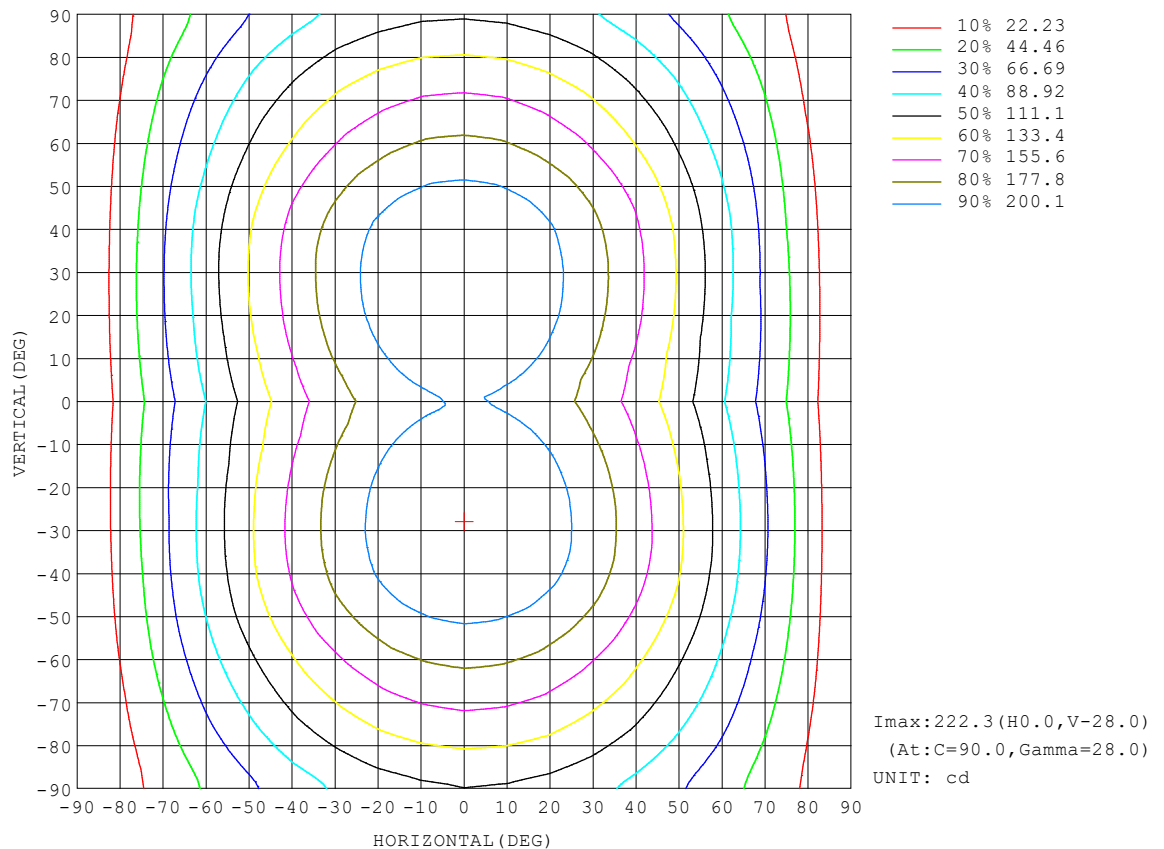
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	46	33	26	45	33	26	43	32	25	18
0.80	55	42	34	53	41	33	50	39	32	24
1.00	63	50	41	61	48	40	57	49	39	30
1.25	70	57	48	67	55	47	63	53	45	35
1.50	75	62	54	72	61	53	67	57	50	39
2.00	82	71	63	79	69	61	73	64	58	45
2.50	87	77	68	83	74	67	77	69	63	49
3.00	91	81	74	87	78	71	80	73	67	53
4.00	96	88	81	91	84	78	84	78	73	58
5.00	99	92	86	94	88	83	86	81	77	61
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:2023-03-17

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:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	



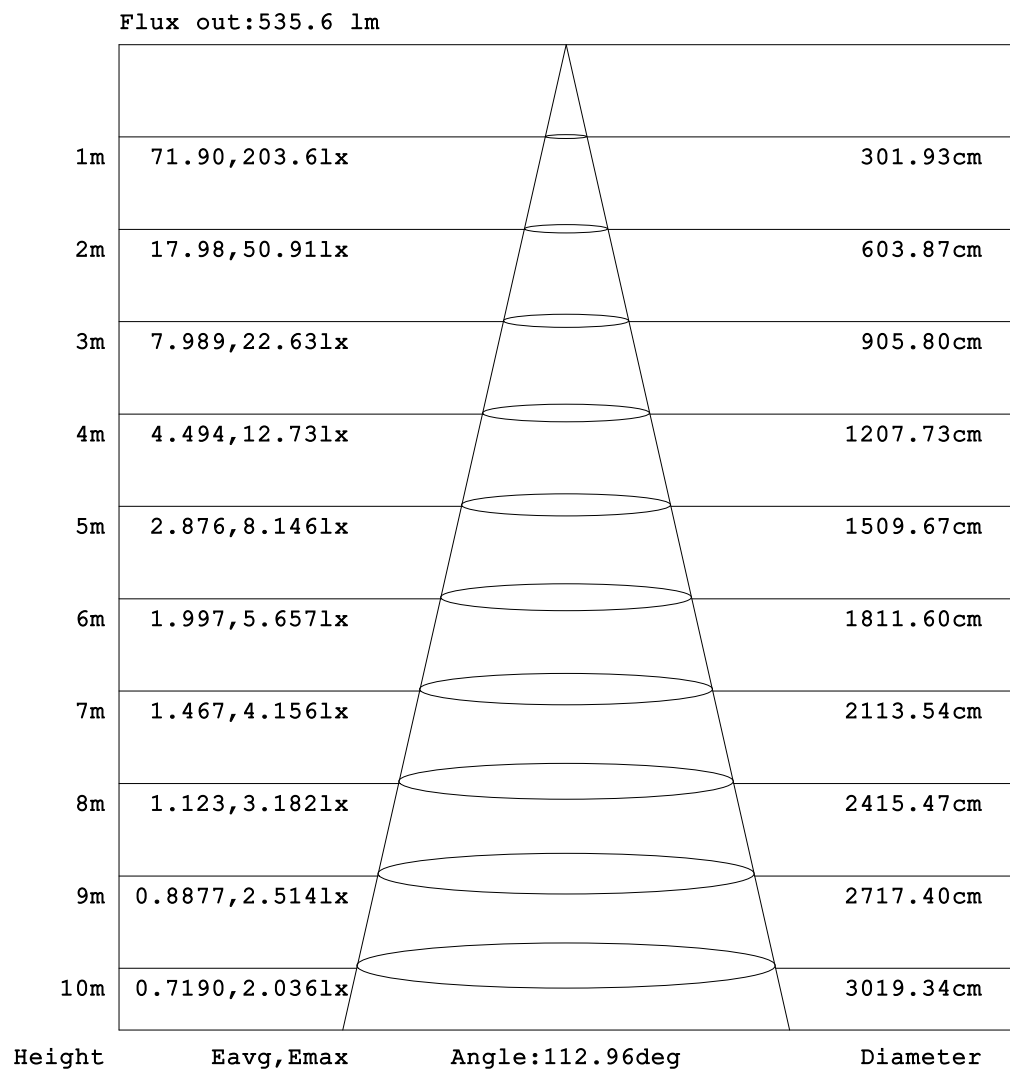
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Huang  
Test Date:2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	



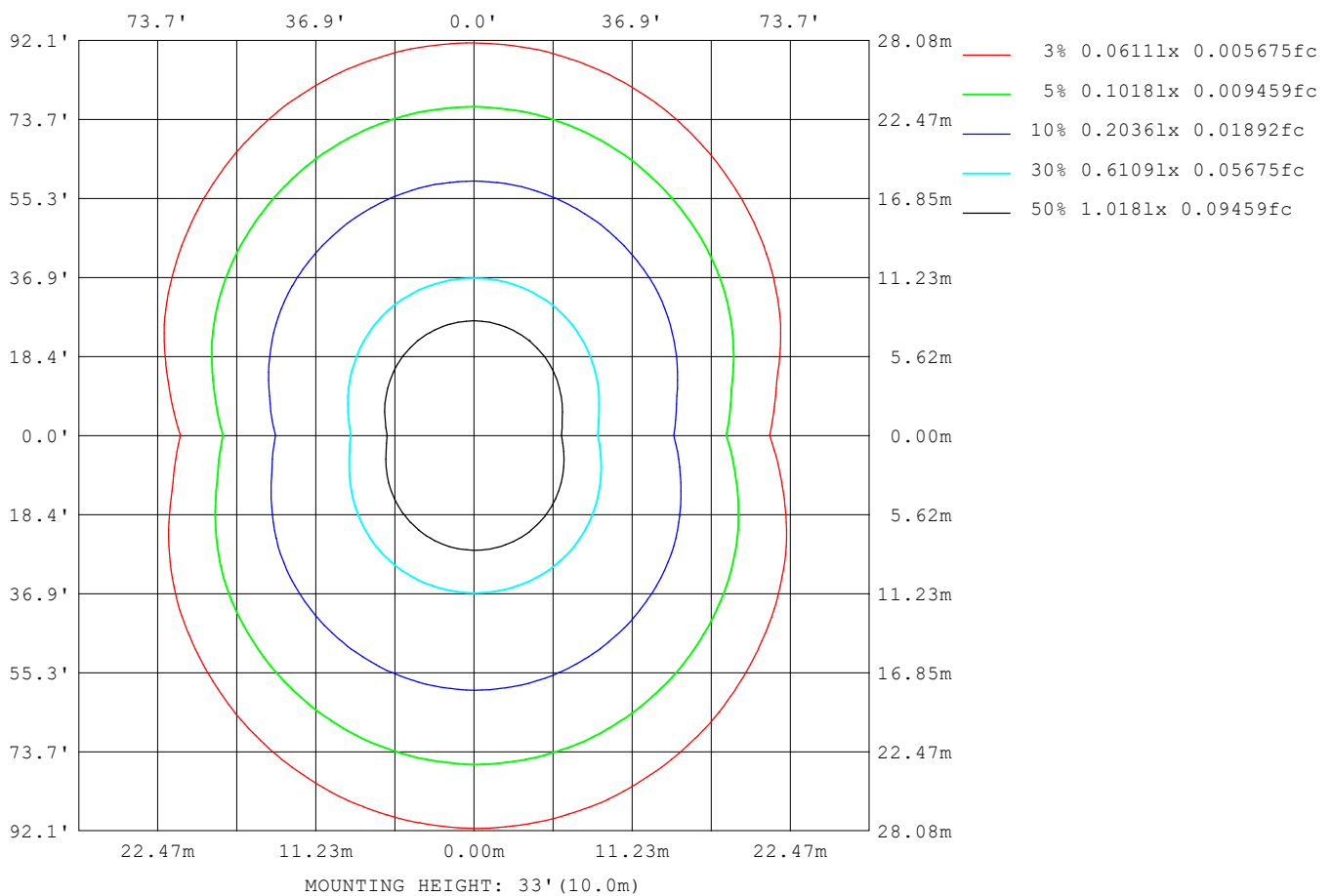
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason Huang  
 Test Date:2023-03-17

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

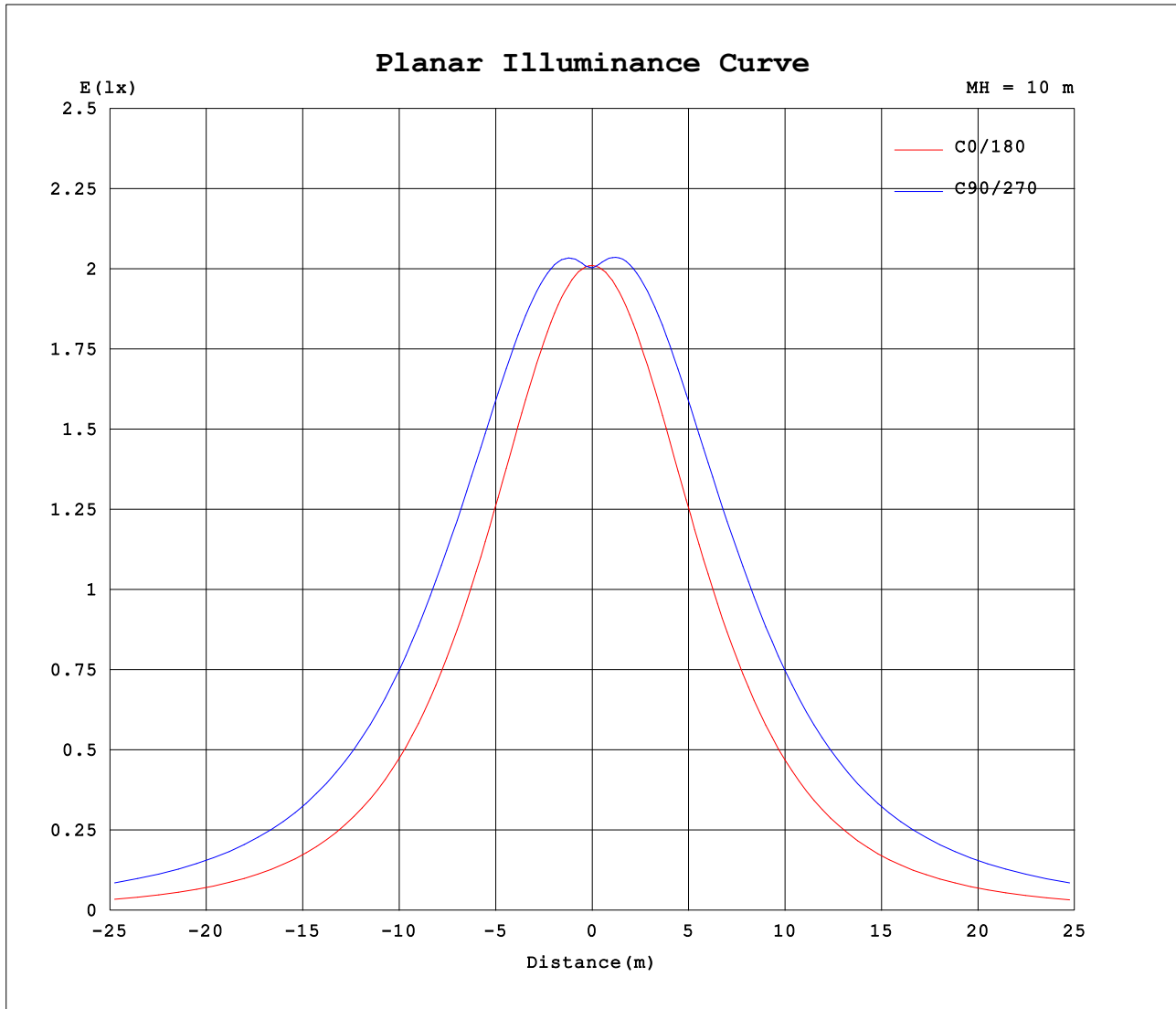
Test:U:120.07V I:0.152A P:16.63W PF:0.9136 Freq:60.00Hz Lamp Flux:1153.69x1 lm		
NAME: Pendent lamp	TYPE:--	SERIAL No.:FTS23031602L-06
SPEC.:S03218	DIM.: --	
MFR.: YiZHI	SUR.:440mm	



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason Huang  
Test Date:2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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: 2023-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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: --