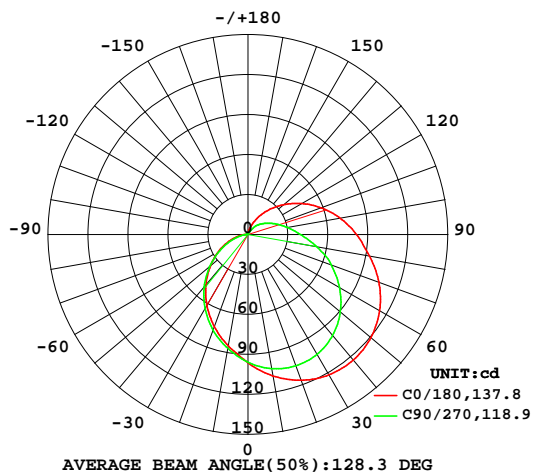


## LUMINAIRE PHOTOMETRIC TEST REPORT

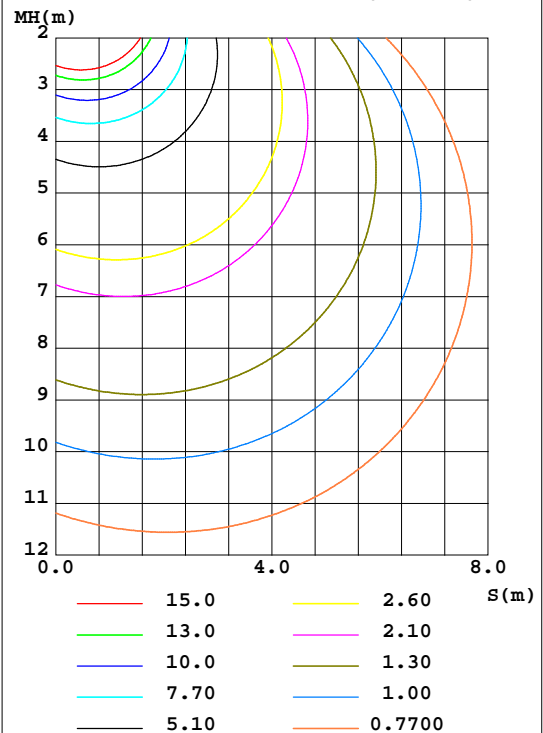
Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 55.68 lm/W			
MODEL	AS3535-04T90R	I <sub>max</sub> (cd)	123.0	S/MH(C0/180)	0.98
NOMINAL POWER(W)	8.3	LOR(%)	100.0	S/MH(C90/270)	1.03
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	462.18	h UP,DN(C0-180)	18.5,60.1
NOMINAL FLUX(lm)	462.185	CIE CLASS	SEMI-D.	h UP,DN(C180-360)	0.7,20.7
LAMPS INSIDE	1	h up(%)	19.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	80.9	CIBSE SHR MAX	1.35

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:JYH  
 Test Date:2020-04-17

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

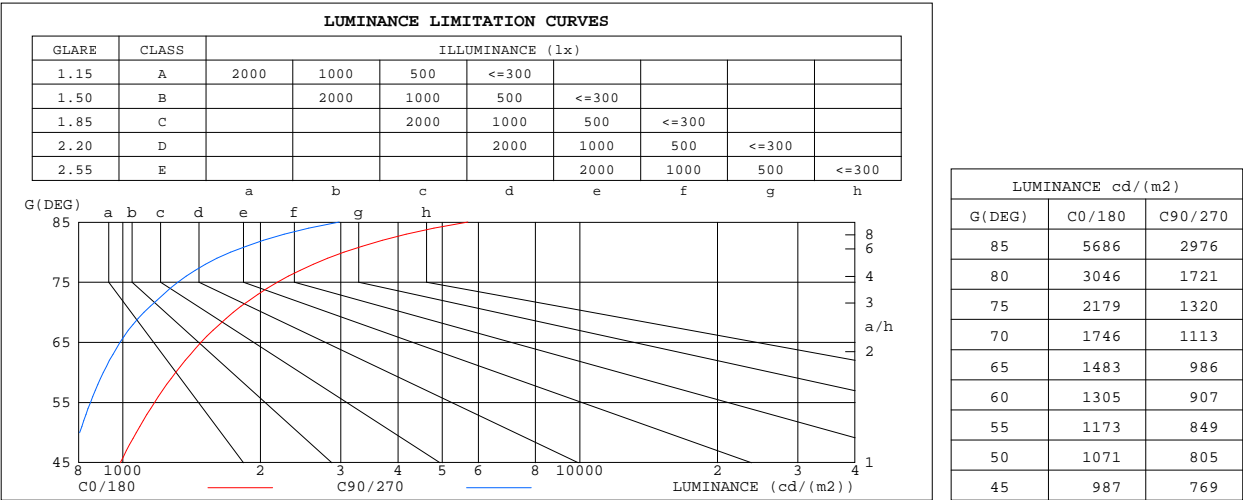
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	107.7	104.9	102.2	101.8	84.96	85.47	86.93	86.97	0- 10	9.118	9.118	1.97,1.97
20	116.4	110.6	104.9	104.2	73.76	74.27	76.53	76.57	10- 20	26.56	35.68	7.72,7.72
30	121.6	112.6	103.8	102.9	61.67	61.88	64.41	64.56	20- 30	41.41	77.09	16.7,16.7
40	123.0	110.6	98.88	97.73	49.17	48.76	51.17	51.30	30- 40	51.99	129.1	27.9,27.9
50	120.4	104.7	90.54	89.19	36.91	35.79	37.61	37.66	40- 50	57.29	186.4	40.3,40.3
60	114.2	95.63	79.33	77.83	25.58	23.79	24.63	24.61	50- 60	57.08	243.4	52.7,52.7
70	104.5	83.87	66.62	65.01	15.39	13.39	13.22	13.10	60- 70	52.05	295.5	63.9,63.9
80	92.55	70.68	52.30	50.65	7.225	5.600	4.899	4.719	70- 80	43.76	339.3	73.4,73.4
90	81.55	58.66	39.51	37.75	2.084	1.188	0.6524	0.6256	80- 90	34.45	373.7	80.9,80.9
100	70.48	48.70	30.45	28.72	1.056	0.7882	0.6346	0.5476	90-100	27.40	401.1	86.8,86.8
110	58.71	39.17	23.11	21.65	1.122	0.8348	0.7282	0.6277	100-110	21.62	422.7	91.5,91.5
120	46.65	30.30	17.13	16.02	1.196	0.9418	0.8558	0.7876	110-120	16.11	438.9	95,95
130	34.91	22.24	12.19	11.36	1.256	1.042	1.009	0.9351	120-130	11.15	450.0	97.4,97.4
140	24.09	15.08	7.524	6.839	1.282	1.115	1.075	1.062	130-140	6.983	457.0	98.9,98.9
150	14.40	5.608	2.060	1.889	1.242	1.162	1.075	1.069	140-150	3.398	460.4	99.6,99.6
160	6.713	1.477	1.389	1.449	1.296	1.156	1.075	1.056	150-160	1.217	461.6	99.9,99.9
170	1.469	1.496	1.469	1.469	1.323	1.122	1.002	0.9819	160-170	0.4616	462.1	100,100
180	1.490	1.496	1.476	1.469	1.490	1.476	1.476	1.443	170-180	0.1265	462.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:



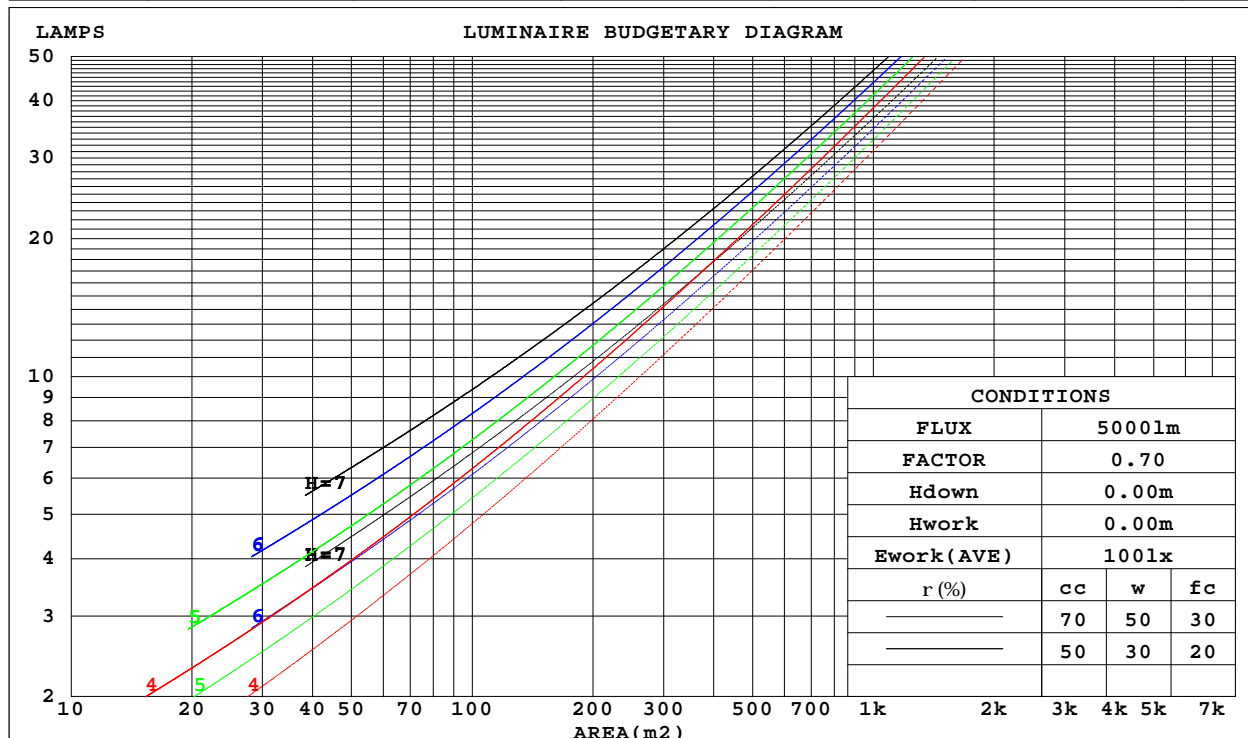
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-04-17

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.385	.219	.069	.372	.212	.067	.348	.199	.064	.325	.188	.060	.304	.176	.057	
2.0	.333	.183	.056	.322	.177	.055	.299	.167	.052	.279	.157	.049	.260	.147	.046	
3.0	.296	.158	.047	.285	.153	.046	.265	.144	.044	.247	.135	.041	.230	.127	.039	
4.0	.267	.138	.041	.257	.134	.040	.239	.127	.038	.222	.119	.036	.206	.112	.034	
5.0	.242	.123	.036	.234	.120	.035	.217	.113	.033	.202	.106	.032	.187	.100	.030	
6.0	.222	.111	.032	.214	.108	.031	.199	.102	.030	.185	.096	.028	.172	.090	.027	
7.0	.205	.101	.029	.197	.098	.028	.184	.093	.027	.171	.088	.025	.159	.082	.024	
8.0	.190	.093	.026	.183	.090	.025	.170	.085	.024	.159	.080	.023	.147	.076	.022	
9.0	.177	.086	.024	.171	.083	.023	.159	.079	.022	.148	.074	.021	.138	.070	.020	
10.0	.166	.079	.022	.160	.077	.022	.149	.073	.021	.139	.069	.020	.129	.065	.019	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.336	.336	.336	.287	.287	.287	.196	.196	.196	.113	.113	.113	.036	.036	.036	
1.0	.333	.303	.275	.285	.260	.237	.195	.179	.164	.112	.103	.095	.036	.033	.031	
2.0	.326	.280	.241	.279	.241	.208	.191	.167	.145	.110	.097	.085	.035	.031	.028	
3.0	.318	.263	.219	.273	.227	.190	.187	.158	.133	.108	.092	.079	.035	.030	.026	
4.0	.311	.251	.205	.267	.217	.178	.183	.151	.126	.106	.088	.074	.034	.029	.024	
5.0	.303	.241	.195	.260	.209	.170	.179	.146	.120	.104	.086	.071	.033	.028	.023	
6.0	.296	.233	.188	.254	.202	.164	.175	.141	.116	.102	.083	.069	.033	.027	.023	
7.0	.288	.227	.183	.248	.196	.160	.171	.138	.113	.100	.081	.067	.032	.027	.022	
8.0	.282	.221	.179	.243	.192	.156	.168	.135	.111	.098	.079	.066	.032	.026	.022	
9.0	.276	.216	.176	.237	.188	.154	.164	.132	.109	.096	.078	.065	.031	.026	.022	
10.0	.270	.212	.174	.232	.184	.152	.161	.130	.108	.094	.077	.064	.031	.025	.021	

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm											
NAME: AS3535-04T90R					TYPE:			WEIGHT:			
SPEC.:AS3535-04T90R					DIM.: 400*35*35			SERIAL No.:			
MFR.: COLORS					SUR.:400*35			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	16.8	18.2	17.3	18.7	19.3	15.4	16.8	15.9	17.3	17.9	
	3H	19.7	21.0	20.3	21.5	22.1	17.8	19.1	18.3	19.6	20.2
	4H	21.3	22.5	21.9	23.1	23.7	19.1	20.3	19.7	20.8	21.5
	6H	23.1	24.2	23.7	24.8	25.5	20.4	21.5	21.0	22.1	22.8
	8H	24.1	25.1	24.7	25.7	26.4	21.1	22.2	21.7	22.8	23.5
	12H	25.2	26.2	25.8	26.8	27.5	22.0	23.0	22.6	23.6	24.3
4H	2H	17.5	18.7	18.1	19.3	19.9	16.5	17.7	17.1	18.3	18.9
	3H	20.6	21.6	21.2	22.2	22.9	19.1	20.1	19.7	20.7	21.4
	4H	22.3	23.3	23.0	23.9	24.7	20.5	21.5	21.2	22.1	22.8
	6H	24.3	25.2	25.0	25.8	26.6	22.0	22.9	22.7	23.5	24.3
	8H	25.4	26.2	26.1	26.9	27.7	22.8	23.6	23.5	24.3	25.1
	12H	26.7	27.4	27.3	28.1	28.9	23.7	24.5	24.4	25.2	26.0
8H	4H	22.8	23.6	23.5	24.3	25.1	21.3	22.1	22.0	22.8	23.6
	6H	25.0	25.7	25.7	26.4	27.2	23.1	23.8	23.8	24.5	25.3
	8H	26.3	26.9	27.0	27.6	28.5	24.1	24.7	24.9	25.5	26.3
	12H	27.8	28.3	28.5	29.1	29.9	25.3	25.8	26.0	26.5	27.4
12H	4H	22.9	23.6	23.6	24.3	25.1	21.6	22.3	22.3	23.0	23.8
	6H	25.2	25.8	25.9	26.5	27.4	23.5	24.1	24.2	24.9	25.7
	8H	26.6	27.1	27.3	27.9	28.7	24.6	25.2	25.4	25.9	26.8
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 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.4					

CIE Pub.117, 462.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.7)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

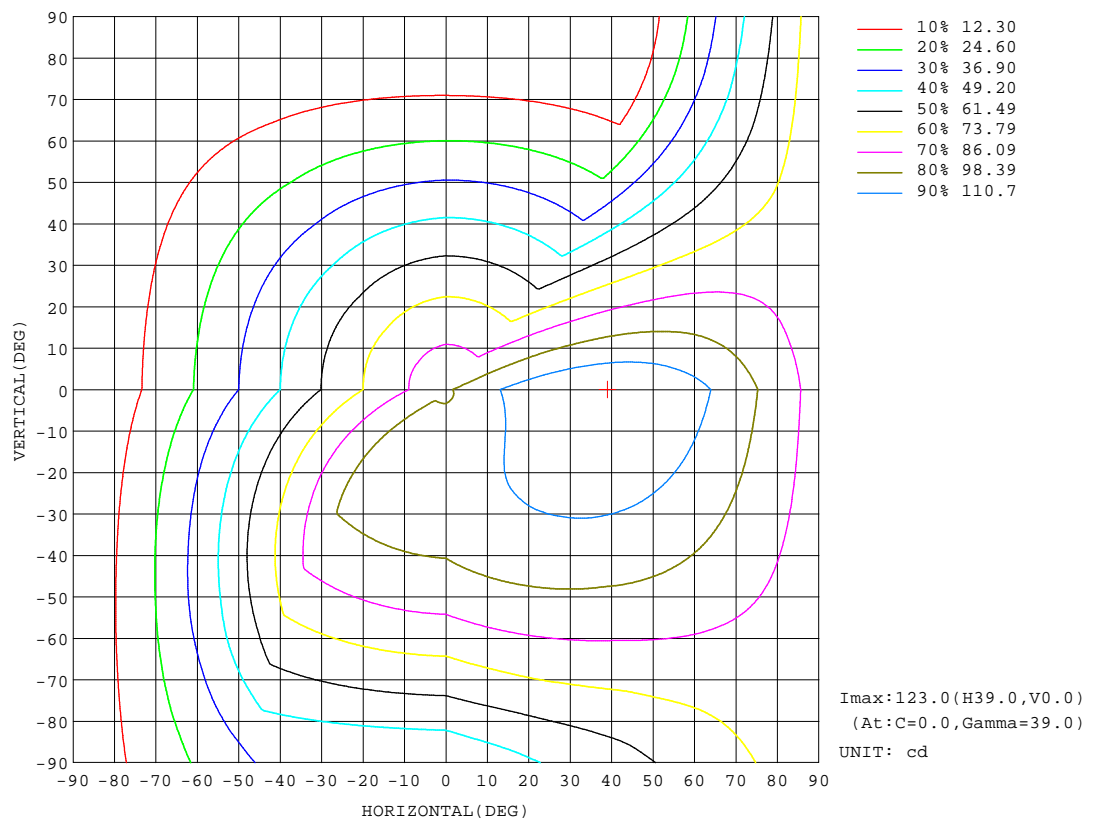
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	47	35	28	46	34	27	44	33	27	20
0.80	56	43	35	55	43	35	52	41	34	26
1.00	64	51	43	62	50	42	59	50	41	32
1.25	71	58	50	69	57	49	64	54	47	37
1.50	76	64	55	73	62	54	68	59	52	41
2.00	83	72	64	80	70	62	75	66	60	48
2.50	88	78	70	85	75	68	78	71	64	51
3.00	92	82	75	88	80	73	81	74	69	55
4.00	97	88	82	92	85	79	85	79	74	60
5.00	100	93	87	95	89	84	88	83	78	63
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

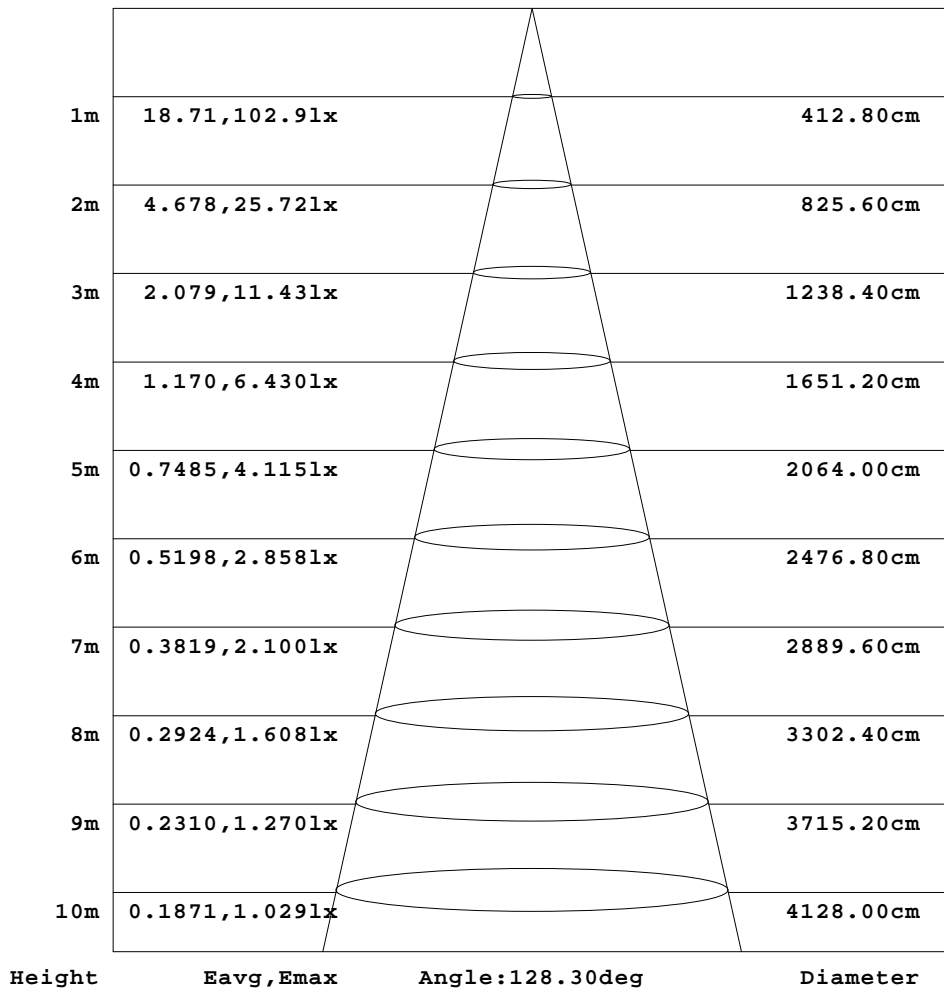
deg Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

Flux out:270.3 lm



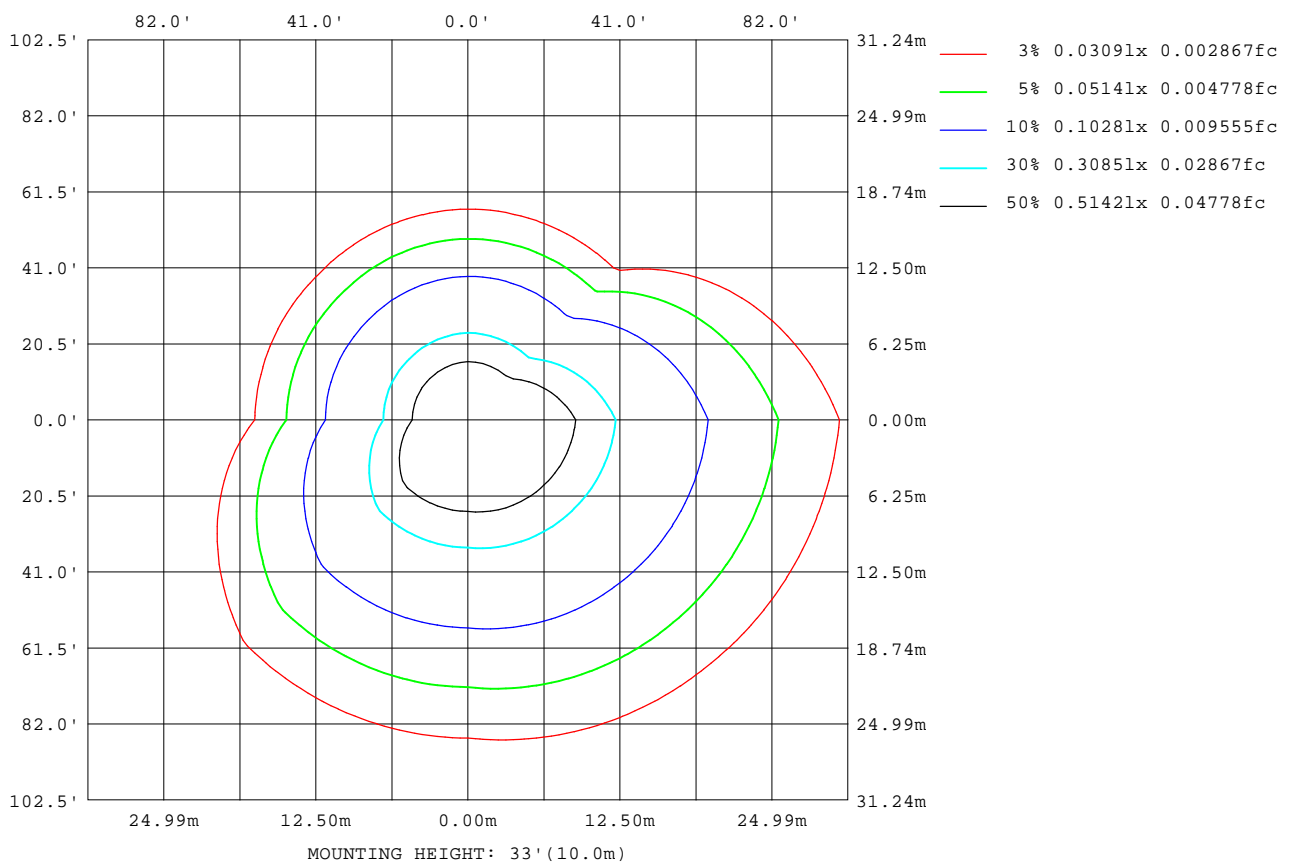
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

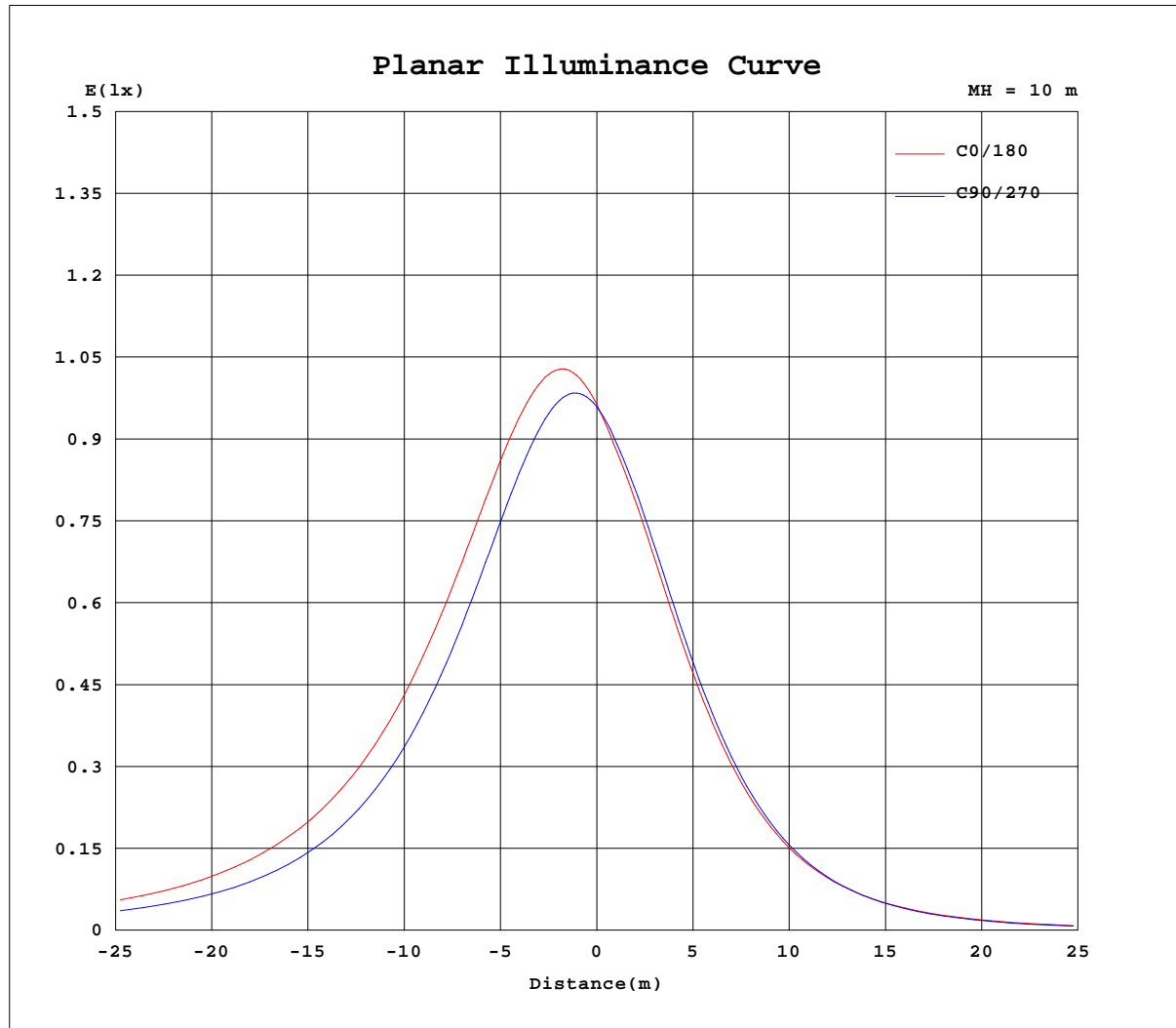
Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JYH  
Test Date: 2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.950m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JYH  
Test Date: 2020-04-17

deg Range: 0 - 180DEG  
deg Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.950m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.3470A P:8.300W PF:1.000 Freq:0Hz Lamp Flux:462.185x1 lm		
NAME: AS3535-04T90R	TYPE:	WEIGHT:
SPEC.:AS3535-04T90R	DIM.: 400*35*35	SERIAL No.:
MFR.: COLORS	SUR.:400*35	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	96.4	95.9	95.9	95.8	96.4	95.9	95.9	95.8										
5	102	101	99.5	99.2	90.3	90.5	91.6	91.6										
10	108	105	102	102	85.0	85.5	86.9	87.0										
15	112	108	104	103	79.5	80.1	82.0	82.0										
20	116	111	105	104	73.8	74.3	76.5	76.6										
25	120	112	105	104	67.8	68.2	70.7	70.8										
30	122	113	104	103	61.7	61.9	64.4	64.6										
35	123	112	102	101	55.4	55.3	57.9	58.0										
40	123	111	98.9	97.7	49.2	48.8	51.2	51.3										
45	122	108	95.2	93.8	43.0	42.2	44.4	44.5										
50	120	105	90.5	89.2	36.9	35.8	37.6	37.7										
55	118	101	85.3	83.8	31.1	29.6	31.0	31.0										
60	114	95.6	79.3	77.8	25.6	23.8	24.6	24.6										
65	110	90.0	72.9	71.4	20.3	18.3	18.7	18.6										
70	104	83.9	66.6	65.0	15.4	13.4	13.2	13.1										
75	98.7	77.4	59.8	58.1	10.9	9.09	8.53	8.43										
80	92.6	70.7	52.3	50.6	7.23	5.60	4.90	4.72										
85	86.7	64.0	45.4	43.7	4.28	2.95	2.23	2.10										
90	81.6	58.7	39.5	37.7	2.08	1.19	0.65	0.63										
95	76.1	53.6	34.8	33.0	1.03	0.79	0.59	0.54										
100	70.5	48.7	30.5	28.7	1.06	0.79	0.63	0.55										
105	64.6	43.9	26.6	24.9	1.10	0.83	0.67	0.61										
110	58.7	39.2	23.1	21.7	1.12	0.83	0.73	0.63										
115	52.7	34.6	20.0	18.7	1.15	0.87	0.79	0.71										
120	46.7	30.3	17.1	16.0	1.20	0.94	0.86	0.79										
125	40.7	26.2	14.6	13.6	1.23	0.98	0.94	0.84										
130	34.9	22.2	12.2	11.4	1.26	1.04	1.01	0.94										
135	29.4	18.6	10.1	9.37	1.28	1.07	1.06	1.03										
140	24.1	15.1	7.52	6.84	1.28	1.12	1.08	1.06										
145	19.1	11.5	3.82	3.49	1.28	1.14	1.08	1.06										
150	14.4	5.61	2.06	1.89	1.24	1.16	1.08	1.07										
155	10.1	2.54	1.37	1.38	1.27	1.16	1.07	1.08										
160	6.71	1.48	1.39	1.45	1.30	1.16	1.07	1.06										
165	4.09	1.50	1.41	1.47	1.32	1.16	0.98	1.00										
170	1.47	1.50	1.47	1.47	1.32	1.12	1.00	0.98										
175	1.47	1.50	1.48	1.47	1.35	1.18	1.17	1.09										
180	1.49	1.50	1.48	1.47	1.49	1.48	1.48	1.44										

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-04-17

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks: