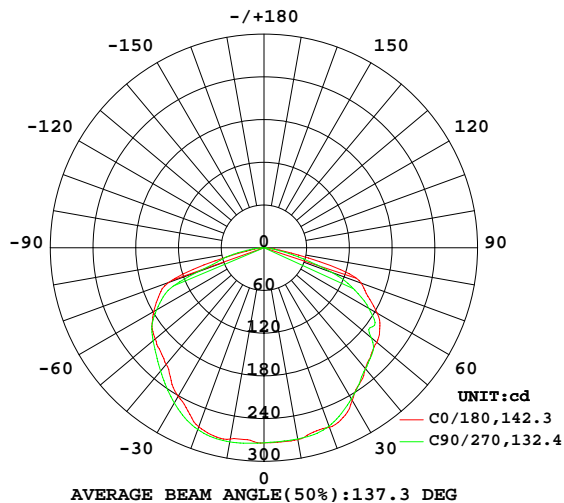


LUMINAIRE PHOTOMETRIC TEST REPORT

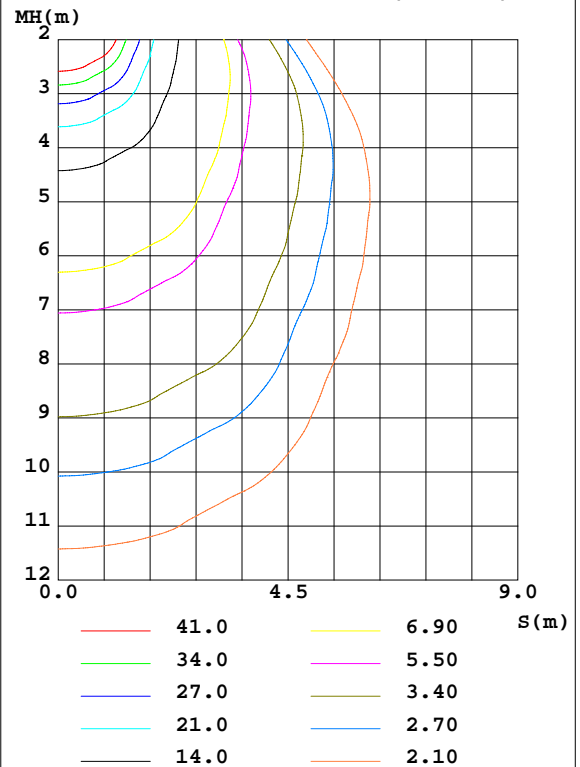
Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.73 lm/W			
MODEL		Imax(cd)	276.9	S/MH(C0/180)	1.32
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	949.98	η UP,DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	949.982	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

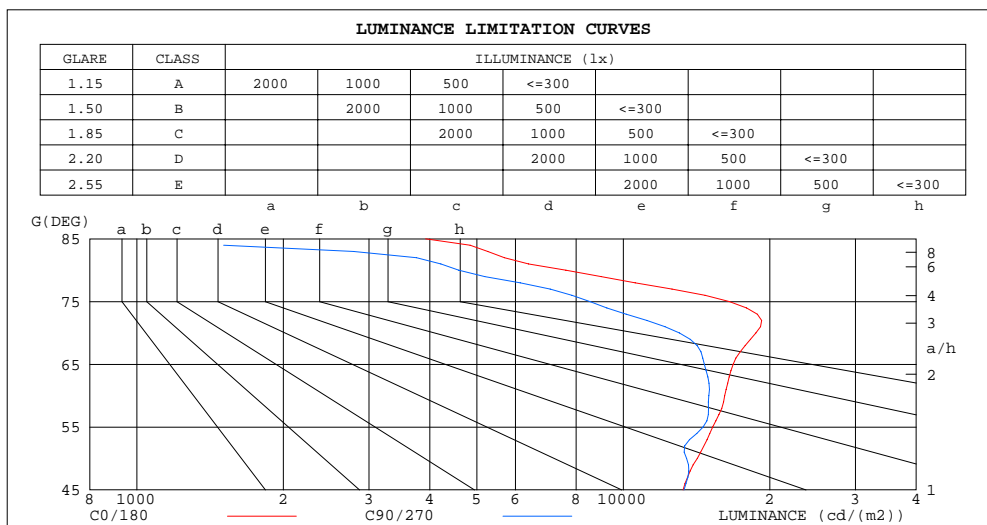
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	273.6	272.7	272.8	269.9	272.7	271.7	276.9	275.6	0- 10	26.07	26.07	2.74,2.74
20	268.5	266.2	266.7	266.5	267.7	269.8	271.8	265.3	10- 20	76.84	102.9	10.8,10.8
30	248.0	245.9	245.4	244.0	241.3	244.9	251.8	251.1	20- 30	119.2	222.1	23.4,23.4
40	221.6	225.5	222.1	219.5	213.7	221.0	226.0	225.9	30- 40	146.6	368.7	38.8,38.8
50	207.0	179.1	196.7	178.5	199.3	199.1	203.3	206.8	40- 50	162.6	531.3	55.9,55.9
60	183.3	181.7	170.0	172.8	178.6	175.5	174.0	181.8	50- 60	170.6	701.9	73.9,73.9
70	145.3	152.9	101.1	143.7	142.4	138.0	98.33	143.3	60- 70	156.0	857.9	90.3,90.3
80	30.02	20.22	18.08	15.97	19.87	22.36	30.54	35.12	70- 80	84.34	942.2	99.2,99.2
90	0.9966	0.8677	0.5670	0.8763	1.151	1.194	0.9622	1.280	80- 90	7.751	950.0	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3924	664
80	7621	4590
75	16512	8534
70	18733	13038
65	16812	14676
60	16161	14987
55	15265	14580
50	14197	13489
45	13269	13327

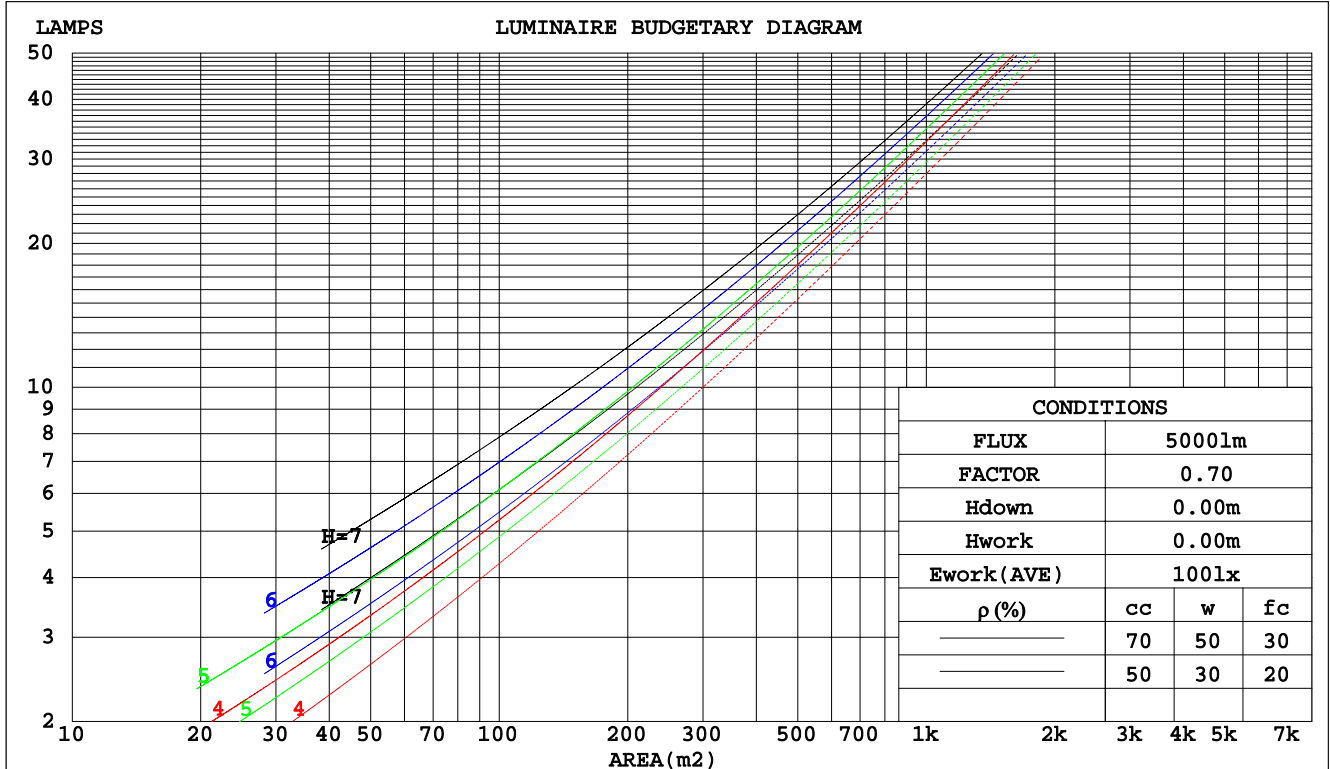
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	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			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	1.02	1.02	1.02	1.00
1.0	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.87	.89	.87	.85	.83
2.0	.89	.82	.75	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.77	.68	.61	.75	.67	.61	.72	.65	.60	.70	.64	.59	.67	.62	.58	.55
4.0	.68	.58	.51	.66	.58	.51	.64	.56	.50	.61	.55	.49	.59	.53	.49	.46
5.0	.60	.50	.43	.59	.50	.43	.57	.49	.43	.55	.48	.42	.53	.47	.42	.39
6.0	.54	.44	.37	.53	.44	.37	.51	.43	.37	.49	.42	.37	.47	.41	.36	.34
7.0	.48	.39	.33	.47	.39	.33	.46	.38	.32	.44	.37	.32	.43	.37	.32	.30
8.0	.44	.35	.29	.43	.35	.29	.42	.34	.29	.41	.34	.28	.39	.33	.28	.26
9.0	.40	.32	.26	.40	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.25	.23
10.0	.37	.29	.23	.36	.29	.23	.35	.28	.23	.34	.28	.23	.34	.27	.23	.21



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	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	.322	.183	.058	.314	.179	.057	.301	.173	.055	.289	.167	.053	.278	.161	.052	
2.0	.307	.168	.052	.301	.166	.051	.289	.161	.050	.278	.156	.049	.268	.152	.048	
3.0	.285	.152	.045	.279	.149	.045	.269	.146	.044	.259	.142	.044	.250	.138	.043	
4.0	.262	.136	.040	.257	.135	.040	.248	.131	.039	.239	.128	.039	.231	.125	.038	
5.0	.241	.123	.036	.237	.122	.035	.229	.119	.035	.221	.117	.035	.214	.114	.034	
6.0	.223	.112	.032	.219	.111	.032	.212	.108	.032	.205	.106	.031	.198	.104	.031	
7.0	.207	.102	.029	.203	.101	.029	.197	.099	.029	.190	.098	.028	.185	.096	.028	
8.0	.192	.094	.026	.189	.093	.026	.183	.092	.026	.178	.090	.026	.173	.089	.026	
9.0	.180	.087	.024	.177	.086	.024	.172	.085	.024	.167	.084	.024	.162	.082	.024	
10.0	.169	.081	.022	.166	.080	.022	.161	.079	.022	.157	.078	.022	.152	.077	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.133	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.072	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.008	
4.0	.160	.101	.056	.137	.088	.049	.094	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.153	.091	.046	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.005	
6.0	.145	.083	.038	.125	.072	.033	.086	.050	.023	.050	.030	.014	.016	.010	.005	
7.0	.138	.076	.032	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004	
8.0	.132	.070	.028	.113	.061	.024	.078	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.125	.065	.025	.108	.057	.021	.075	.040	.015	.044	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.103	.053	.019	.071	.037	.014	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 210*210*250			SERIAL No.:			
MFR.: A5022302A-11					SUR.:3.14*0.085*0.085			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	2H	22.9	24.5	23.2	24.7	24.9	22.5	24.1	22.8	24.4	24.6
	3H	25.3	26.8	25.6	27.0	27.3	24.4	25.9	24.7	26.2	26.4
	4H	26.2	27.7	26.6	27.9	28.2	24.8	26.2	25.1	26.4	26.7
	6H	26.4	27.8	26.8	28.0	28.3	24.8	26.1	25.2	26.4	26.7
	8H	26.4	27.7	26.8	28.0	28.3	24.8	26.1	25.1	26.4	26.7
	12H	26.4	27.6	26.7	27.9	28.2	24.7	26.0	25.1	26.3	26.6
4H	2H	23.8	25.2	24.1	25.5	25.7	23.5	24.9	23.9	25.2	25.5
	3H	26.4	27.7	26.8	28.0	28.3	25.6	26.8	26.0	27.1	27.5
	4H	27.4	28.5	27.8	28.9	29.2	26.0	27.1	26.4	27.5	27.8
	6H	27.6	28.6	28.0	29.0	29.4	26.1	27.1	26.5	27.4	27.8
	8H	27.6	28.6	28.0	28.9	29.3	26.0	27.0	26.5	27.3	27.7
	12H	27.6	28.5	28.0	28.9	29.3	26.0	26.9	26.4	27.3	27.7
8H	4H	27.6	28.6	28.0	28.9	29.3	26.4	27.3	26.8	27.7	28.1
	6H	27.9	28.6	28.3	29.0	29.5	26.5	27.2	26.9	27.6	28.1
	8H	27.9	28.6	28.4	29.0	29.5	26.5	27.1	26.9	27.6	28.0
	12H	27.9	28.5	28.4	28.9	29.4	26.4	27.0	26.9	27.5	28.0
12H	4H	27.6	28.4	28.0	28.8	29.2	26.4	27.2	26.8	27.6	28.0
	6H	27.8	28.5	28.3	29.0	29.4	26.5	27.1	26.9	27.6	28.0
	8H	27.9	28.5	28.4	28.9	29.4	26.5	27.0	26.9	27.5	28.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1					
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.4					+ 0.4 / - 0.6					

CIE Pub.117, 950.0 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -0.2)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:

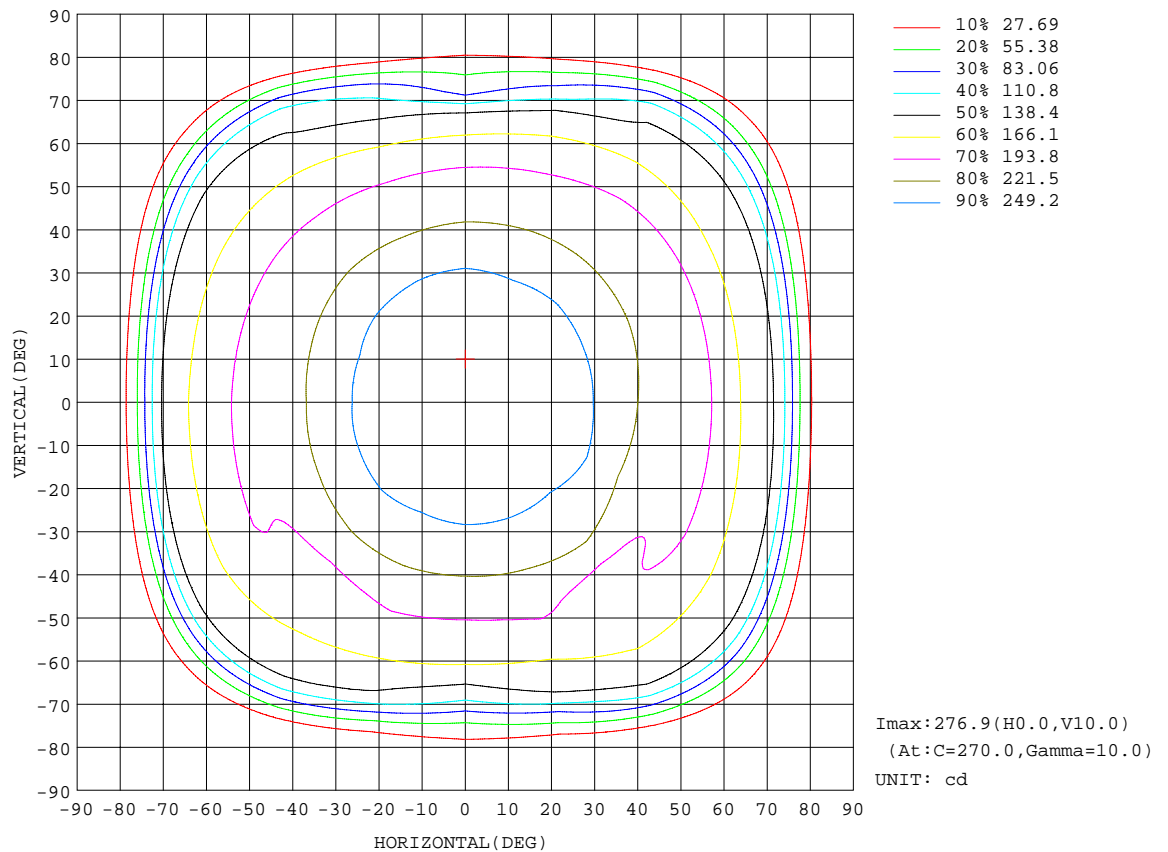
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	54	42	35	52	41	35	28
0.80	64	52	44	63	52	44	61	51	44	36
1.00	73	61	53	72	60	53	69	62	52	45
1.25	80	69	61	79	68	61	76	67	60	52
1.50	86	75	67	84	74	67	81	72	66	58
2.00	93	84	77	91	83	76	87	80	75	66
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	95	89	85	76
4.00	106	100	95	103	98	93	99	94	91	82
5.00	108	103	99	106	101	98	101	98	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:

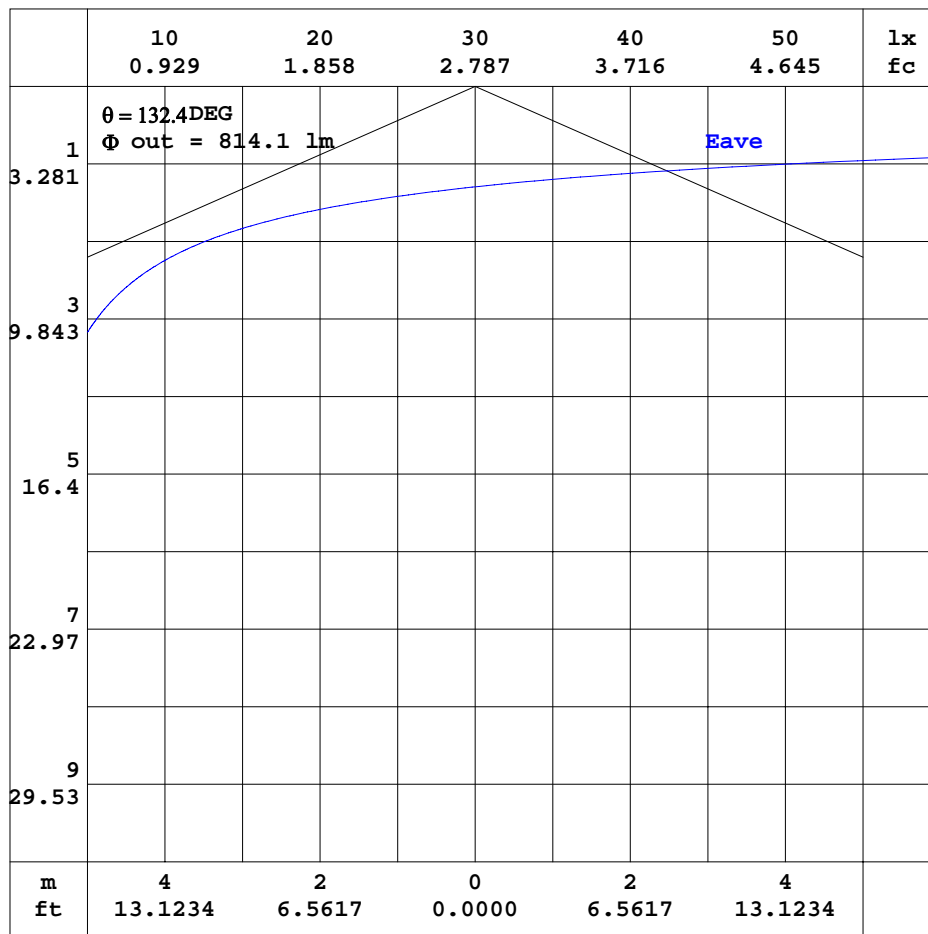


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI CURVES

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:



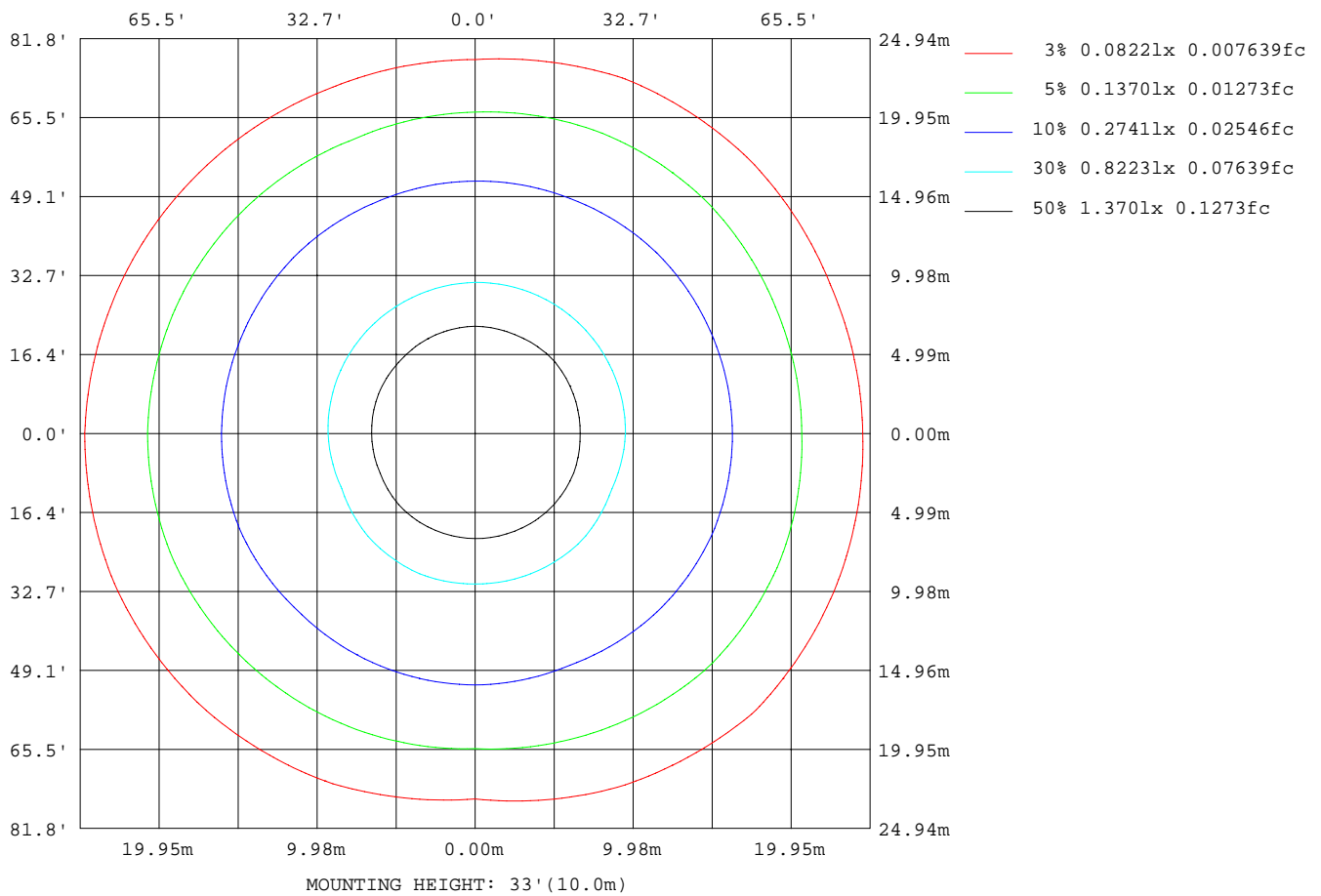
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity: 65.0%
 Test Distance: 11.700m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity: 65.0%
 Test Distance: 11.700m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:229.75V I:0.0456A P:9.7204W PF:0.9285 Freq:49.99Hz Lamp Flux:949.982x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 210*210*250	SERIAL No.:
MFR.: A5022302A-11	SUR.:3.14*0.085*0.085	Shielding Angle:

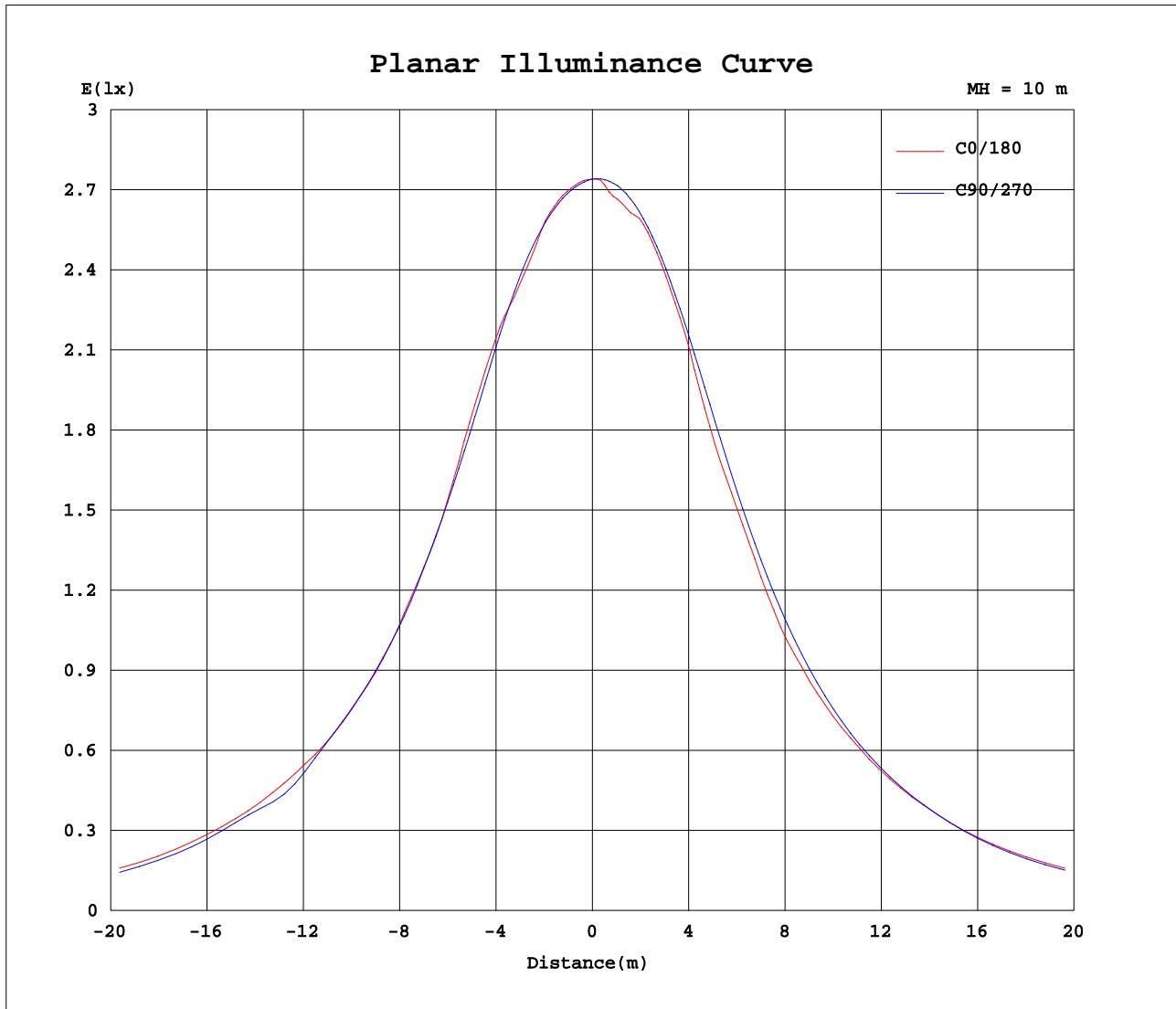
AvgL	cd/m2
L_0~180(65)av	16938
L_0~180(75)av	14334
L_0~180(85)av	2657
L_90~270(65)av	15328
L_90~270(75)av	9347
L_90~270(85)av	2619
L_45(65)av	16705
L_45(75)av	16220
L_45(85)av	2356

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-10-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-10-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```