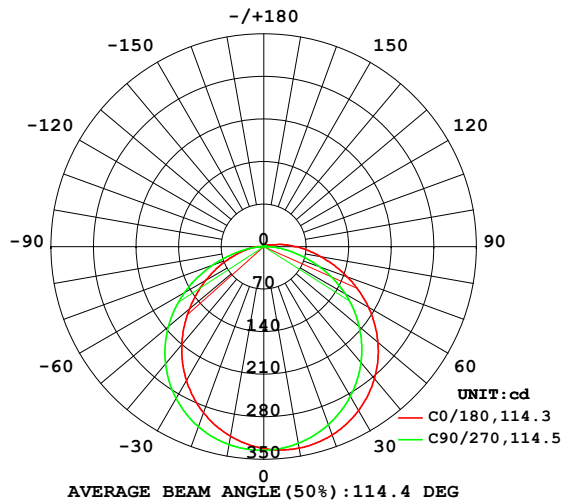


LUMINAIRE PHOTOMETRIC TEST REPORT

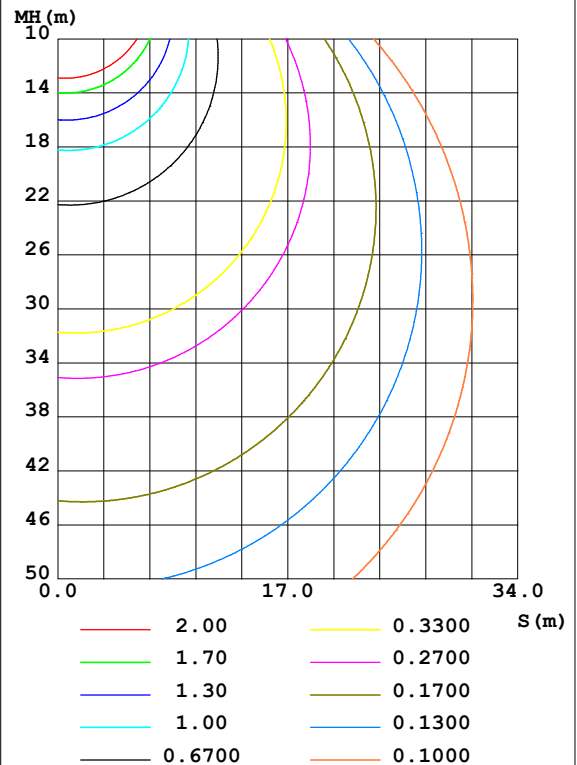
Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.56 lm/W			
MODEL		I _{max} (cd)	336.6	S/MH(C0/180)	1.15
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1026.8	η UP,DN(C0-180)	1.9,54.4
NOMINAL FLUX(lm)	1026.76	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.6,43.1
LAMPS INSIDE	1	η up(%)	2.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	97.5	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: yuan
Test Date: 2026-05-06

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	336.6	328.5	316.8	330.7					0- 10	31.59	31.59	3.08,3.08
20	329.6	311.5	290.7	315.1					10- 20	90.69	122.3	11.9,11.9
30	311.7	284.7	254.6	288.5					20- 30	138.1	260.4	25.4,25.4
40	283.4	248.9	210.0	251.7					30- 40	167.5	427.9	41.7,41.7
50	245.2	205.2	159.8	205.1					40- 50	175.1	603.0	58.7,58.7
60	198.8	154.5	109.4	150.2					50- 60	160.1	763.1	74.3,74.3
70	146.6	98.16	63.23	89.63					60- 70	125.1	888.2	86.5,86.5
80	95.15	43.71	28.79	33.47					70- 80	77.91	966.1	94.1,94.1
90	53.08	5.949	9.291	0.9897					80- 90	34.75	1001	97.5,97.5
100	20.48	1.245	1.642	1.023					90-100	11.92	1013	98.6,98.6
110	8.160	1.535	1.711	1.284					100-110	4.545	1017	99.1,99.1
120	1.558	1.870	1.888	1.580					110-120	2.372	1020	99.3,99.3
130	1.762	2.177	2.137	1.915					120-130	1.664	1021	99.5,99.5
140	2.023	2.444	2.376	2.160					130-140	1.643	1023	99.6,99.6
150	2.330	2.655	2.575	2.359					140-150	1.484	1024	99.8,99.8
160	2.569	2.830	2.882	2.722					150-160	1.212	1026	99.9,99.9
170	2.819	2.967	2.990	2.842					160-170	0.7990	1026	100,100
180	2.939	3.001	2.973	2.956					170-180	0.2802	1027	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 515.93 lm

%lum = 50.2%

%lamp = 50.2%

Conical surface Flux(120deg): 763.05 lm

%lum = 74.3%

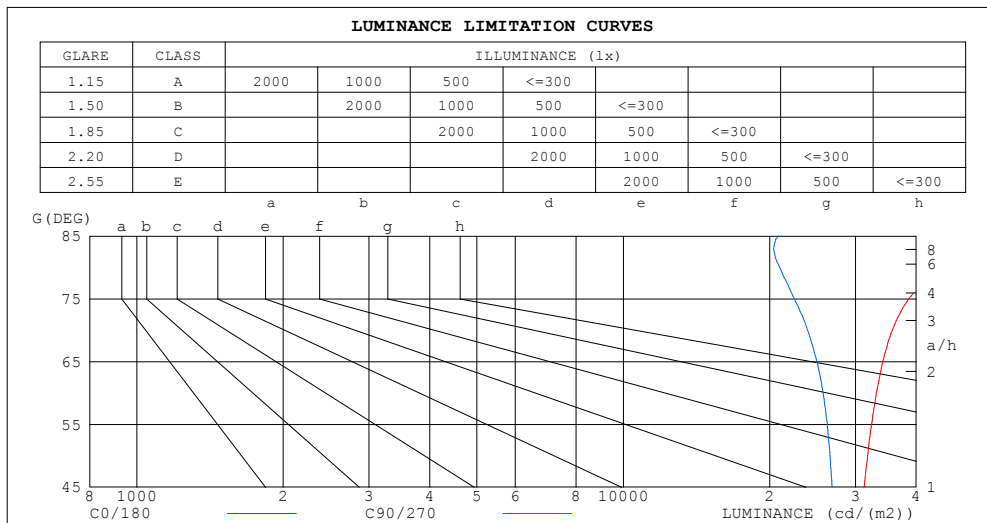
%lamp = 74.3%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:yuan
 Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	69802	20861
80	45664	20975
75	38626	22475
70	35721	23918
65	34156	25003
60	33134	25750
55	32383	26252
50	31784	26600
45	31293	26874

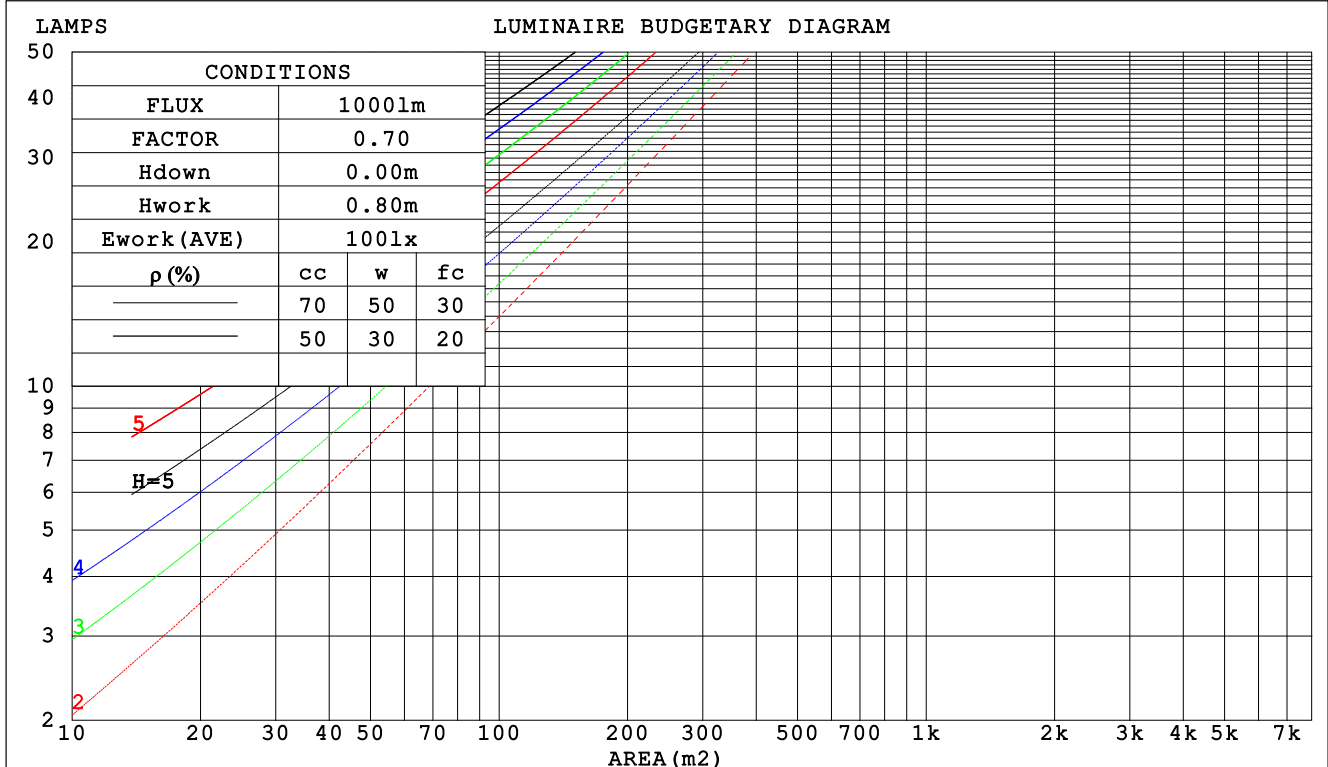
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.97
1.0	1.02	.98	.94	.00	.96	.92	.95	.92	.88	.91	.88	.85	.87	.84	.82	.80
2.0	.89	.82	.76	.87	.80	.74	.83	.77	.72	.79	.74	.70	.75	.72	.68	.66
3.0	.78	.69	.62	.76	.68	.62	.72	.66	.60	.69	.64	.59	.66	.62	.58	.55
4.0	.69	.60	.53	.67	.59	.52	.64	.57	.51	.62	.55	.50	.59	.54	.49	.47
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.55	.49	.43	.53	.47	.43	.40
6.0	.55	.46	.39	.54	.45	.39	.52	.44	.39	.50	.43	.38	.48	.42	.37	.35
7.0	.50	.41	.35	.49	.40	.34	.47	.40	.34	.45	.39	.34	.44	.38	.33	.31
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.30	.42	.35	.30	.40	.34	.30	.28
9.0	.42	.33	.28	.41	.33	.28	.40	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.34	.29	.24	.23



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

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	.329	.187	.059	.321	.183	.058	.306	.176	.056	.293	.169	.054	.280	.162	.052		
2.0	.303	.166	.051	.296	.163	.050	.282	.157	.049	.270	.152	.047	.259	.147	.046		
3.0	.277	.147	.044	.271	.145	.044	.259	.140	.043	.248	.136	.042	.238	.132	.041		
4.0	.254	.132	.039	.248	.130	.038	.238	.126	.038	.228	.123	.037	.219	.119	.036		
5.0	.234	.119	.035	.229	.118	.034	.220	.114	.034	.211	.111	.033	.203	.108	.033		
6.0	.216	.108	.031	.212	.107	.031	.204	.104	.030	.196	.102	.030	.188	.099	.029		
7.0	.201	.099	.028	.197	.098	.028	.189	.096	.028	.182	.094	.027	.176	.091	.027		
8.0	.187	.091	.026	.184	.090	.026	.177	.088	.025	.171	.086	.025	.165	.085	.025		
9.0	.175	.085	.024	.172	.084	.024	.166	.082	.023	.160	.080	.023	.155	.079	.023		
10.0	.165	.079	.022	.162	.078	.022	.156	.077	.022	.151	.075	.021	.146	.073	.021		

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	.210	.210	.210	.179	.179	.179	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.201	.175	.152	.172	.151	.131	.118	.104	.091	.068	.060	.053	.022	.019	.017	
2.0	.193	.151	.116	.165	.130	.100	.113	.090	.070	.065	.052	.041	.021	.017	.013	
3.0	.185	.134	.093	.159	.116	.081	.109	.080	.057	.063	.047	.033	.020	.015	.011	
4.0	.178	.121	.077	.153	.104	.067	.105	.073	.047	.061	.043	.028	.020	.014	.009	
5.0	.170	.111	.066	.146	.096	.058	.101	.067	.041	.058	.039	.024	.019	.013	.008	
6.0	.163	.102	.059	.140	.089	.051	.097	.062	.036	.056	.036	.021	.018	.012	.007	
7.0	.156	.095	.053	.134	.083	.046	.093	.058	.033	.054	.034	.019	.017	.011	.006	
8.0	.150	.090	.048	.129	.078	.042	.089	.055	.030	.052	.032	.018	.017	.011	.006	
9.0	.143	.085	.045	.124	.073	.039	.086	.052	.028	.050	.031	.017	.016	.010	.006	
10.0	.138	.080	.042	.119	.070	.037	.082	.049	.026	.048	.029	.016	.016	.010	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm										
NAME: 7416 2835 138LED. 2700K IRC97 24V					TYPE:					
SPEC.:										
MFR.: NORDECOR										
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	25.2	26.8	25.5	27.0	27.3	24.3	25.8	24.6	26.1	26.3
3H	27.3	28.7	27.6	29.0	29.3	25.9	27.3	26.3	27.6	27.9
4H	28.3	29.6	28.6	29.9	30.2	26.6	27.9	26.9	28.2	28.5
6H	29.3	30.5	29.7	30.9	31.2	27.1	28.3	27.4	28.6	29.0
8H	29.8	31.0	30.2	31.4	31.7	27.2	28.4	27.6	28.8	29.1
12H	30.4	31.6	30.8	31.9	32.3	27.4	28.5	27.7	28.9	29.2
4H 2H	25.8	27.2	26.2	27.5	27.8	25.1	26.5	25.5	26.8	27.1
3H	28.1	29.2	28.5	29.6	29.9	26.9	28.1	27.3	28.5	28.8
4H	29.2	30.3	29.6	30.7	31.0	27.7	28.8	28.2	29.2	29.6
6H	30.4	31.4	30.8	31.8	32.2	28.4	29.3	28.8	29.7	30.2
8H	31.0	31.9	31.5	32.3	32.8	28.6	29.5	29.1	29.9	30.4
12H	31.7	32.5	32.2	33.0	33.4	28.8	29.6	29.3	30.1	30.5
8H 4H	29.5	30.4	30.0	30.8	31.3	28.2	29.1	28.7	29.5	30.0
6H	30.9	31.7	31.4	32.1	32.6	29.1	29.9	29.6	30.3	30.8
8H	31.7	32.4	32.2	32.8	33.3	29.5	30.2	30.0	30.6	31.1
12H	32.6	33.2	33.1	33.7	34.2	29.8	30.4	30.3	30.9	31.4
12H 4H	29.5	30.4	30.0	30.8	31.2	28.3	29.2	28.8	29.6	30.1
6H	31.0	31.7	31.5	32.1	32.6	29.3	30.0	29.8	30.5	31.0
8H	31.9	32.4	32.4	32.9	33.5	29.8	30.4	30.3	30.9	31.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 1027 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.1$)
Area: 0.012 m²

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

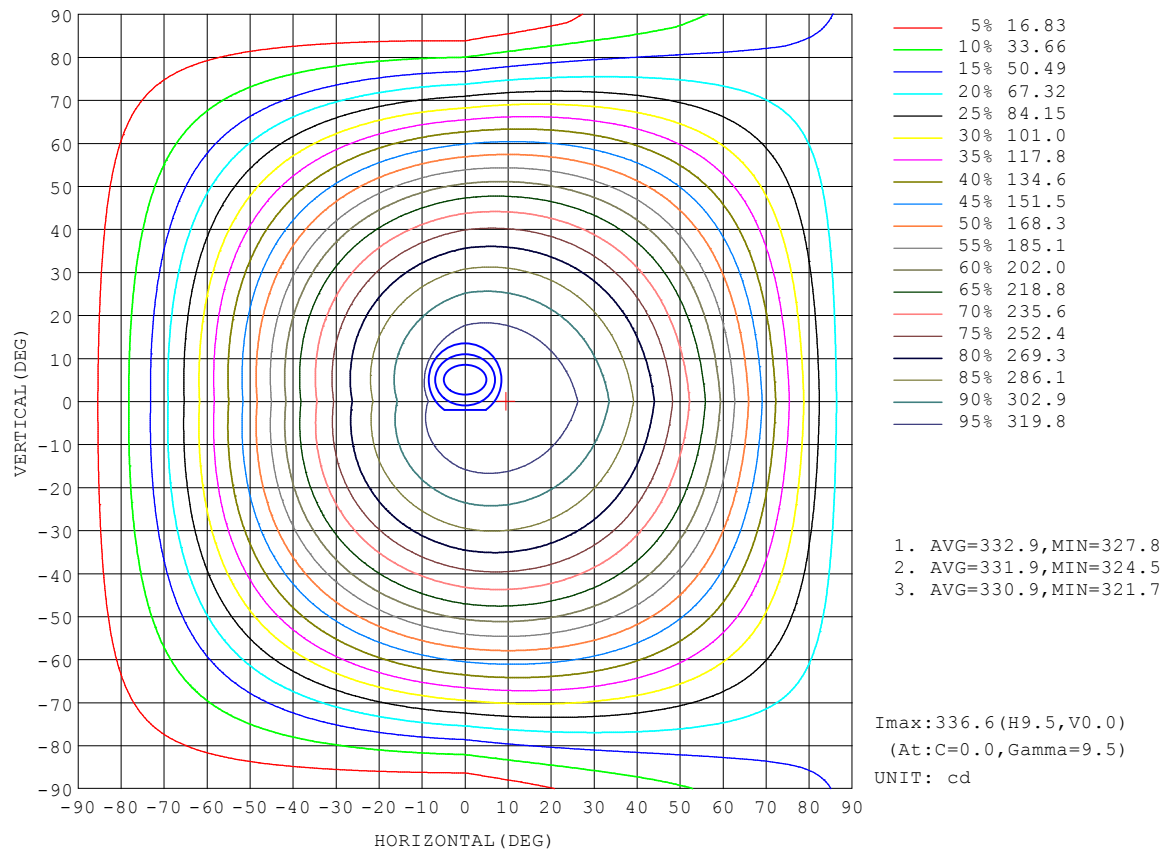
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	52	46	38
1.00	74	62	55	73	62	55	70	63	54	47
1.25	81	70	63	79	69	62	76	68	61	54
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	87	80	74	66
2.50	97	89	82	95	87	81	91	84	79	70
3.00	100	93	87	98	91	86	94	88	83	74
4.00	105	98	93	102	96	92	97	93	89	79
5.00	107	102	97	104	100	96	99	96	92	82
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: yuan
Test Date: 2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

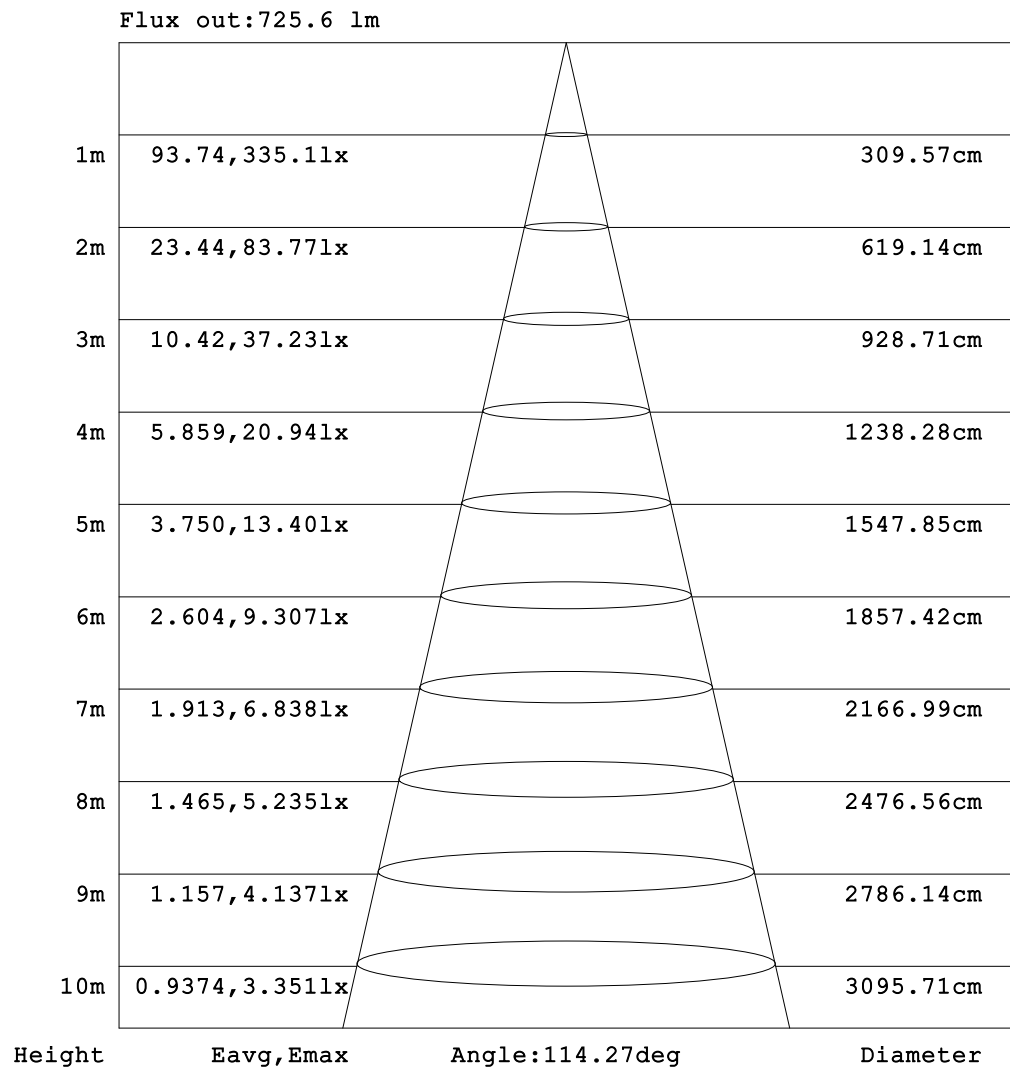


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		



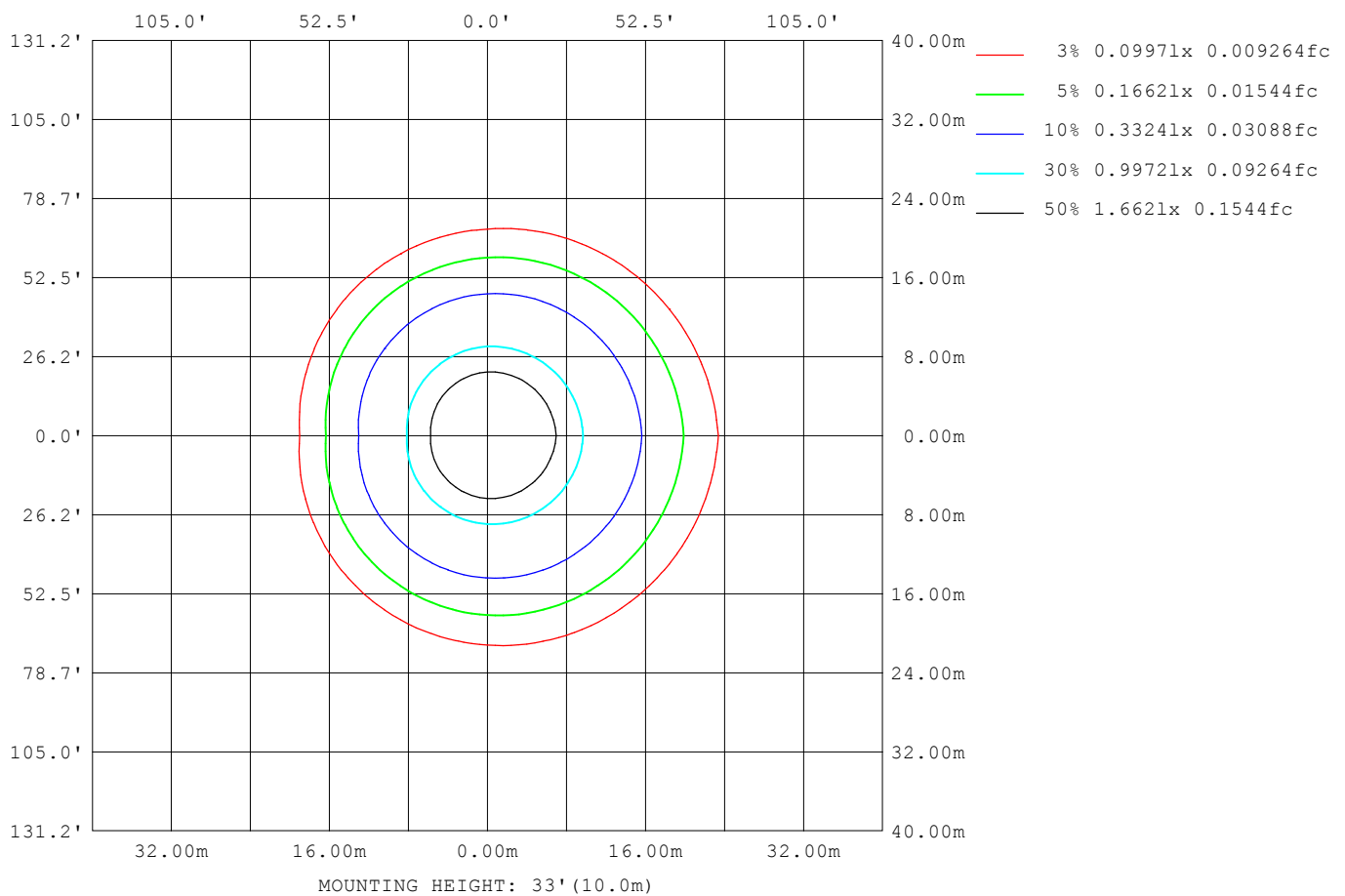
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:yuan
 Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: yuan
Test Date: 2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

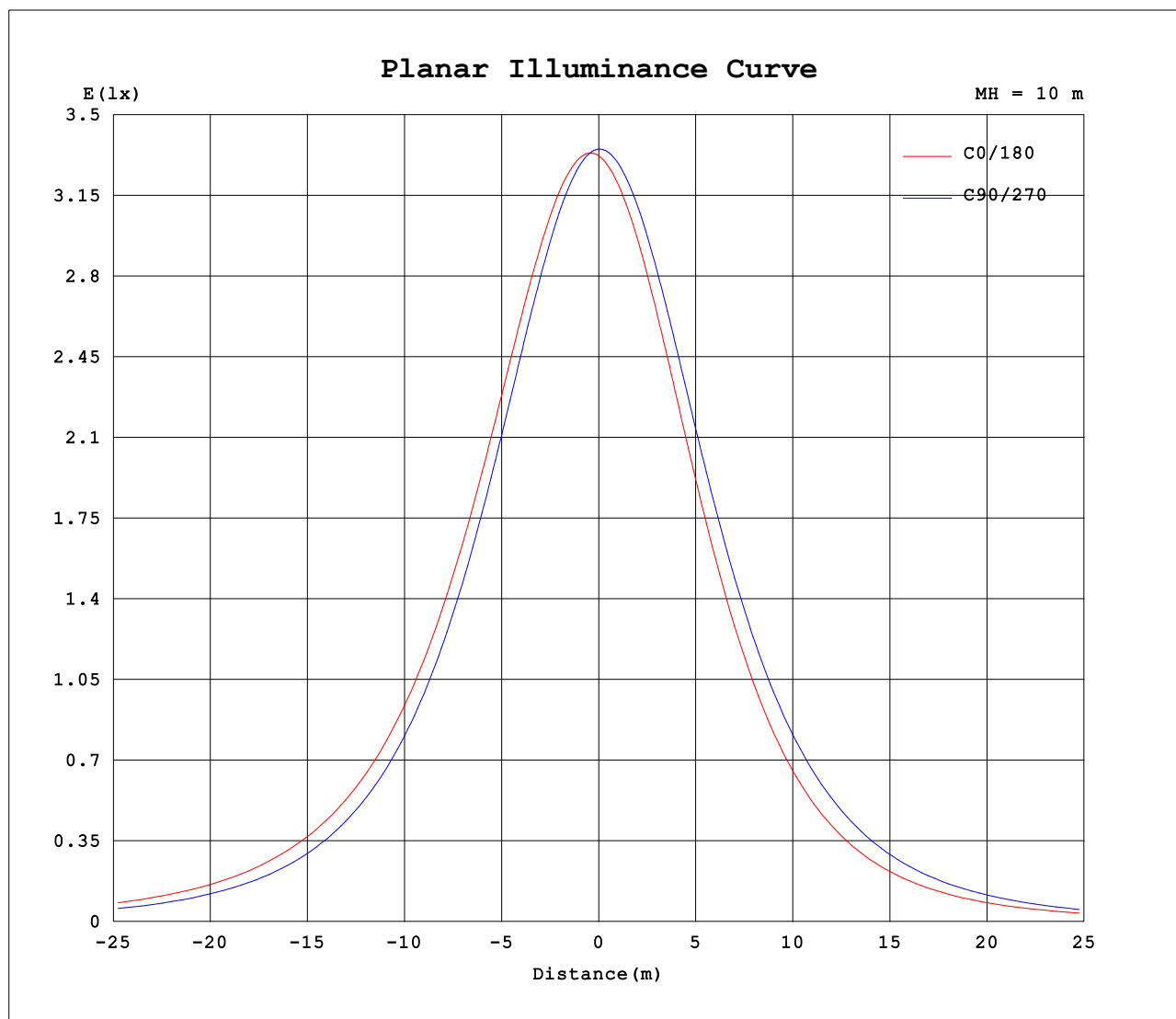
AvgL	cd/m2
L_0~180 (65) av	25520
L_0~180 (75) av	26336
L_0~180 (85) av	43312
L_90~270 (65) av	24367
L_90~270 (75) av	20856
L_90~270 (85) av	16157
L_45 (65) av	24259
L_45 (75) av	22143
L_45 (85) av	24684

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yuan
Test Date:2026-05-06

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.000m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: yuan
Test Date: 2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.000V I:0.5000A P:12.000W PF:1.0000 Freq:0Hz Lamp Flux:1026.76x1 lm		
NAME: 7416 2835 138LED. 2700K IRC97 24V	TYPE:	
SPEC.:		
MFR.: NORDECOR		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	332	335	332	335															
5	336	333	326	334															
10	337	329	317	331															
15	334	321	305	324															
20	330	311	291	315															
25	322	299	274	303															
30	312	285	255	289															
35	299	268	233	271															
40	283	249	210	252															
45	266	228	185	230															
50	245	205	160	205															
55	223	181	134	178															
60	199	154	109	150															
65	173	127	85.6	120															
70	147	98.2	63.2	89.6															
75	120	69.8	43.6	59.7															
80	95.2	43.7	28.8	33.5															
85	73.0	21.8	17.6	12.0															
90	53.1	5.95	9.29	0.99															
95	36.5	1.15	3.86	0.95															
100	20.5	1.24	1.64	1.02															
105	12.5	1.38	1.56	1.18															
110	8.16	1.53	1.71	1.28															
115	4.64	1.69	1.77	1.44															
120	1.56	1.87	1.89	1.58															
125	1.64	2.02	2.02	1.74															
130	1.76	2.18	2.14	1.92															
135	1.90	2.33	2.26	2.01															
140	2.02	2.44	2.38	2.16															
145	2.18	2.56	2.48	2.26															
150	2.33	2.66	2.57	2.36															
155	2.44	2.74	2.79	2.59															
160	2.57	2.83	2.88	2.72															
165	2.71	2.93	2.94	2.78															
170	2.82	2.97	2.99	2.84															
175	2.92	3.00	3.00	2.91															
180	2.94	3.00	2.97	2.96															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:yuan
 Test Date:2026-05-06

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.000m [K=1.0000]
 Remarks: