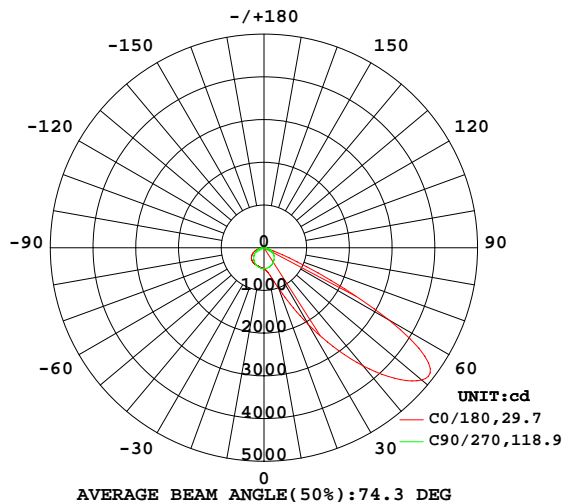


## LUMINAIRE PHOTOMETRIC TEST REPORT

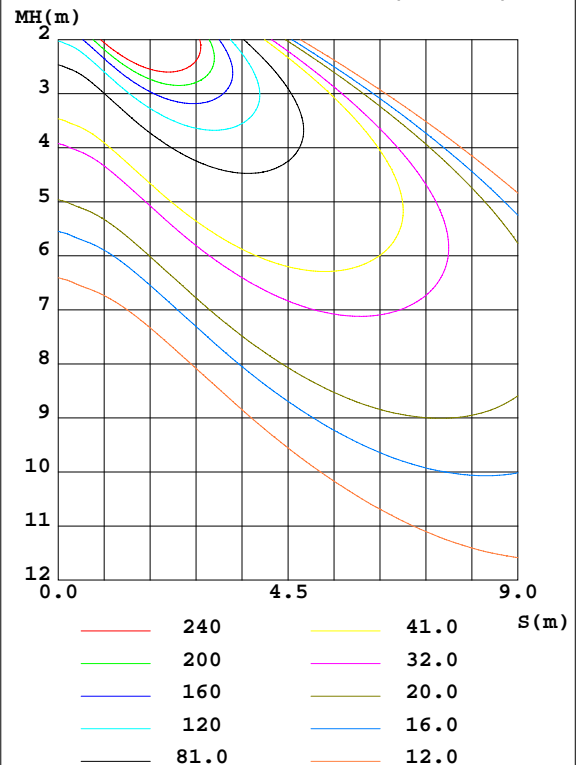
Test:U:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 19.36 lm/W			
MODEL		Imax(cd)	4885	S/MH(C0/180)	1.36
NOMINAL POWER(W)	190	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	3506.0	$\eta$ UP,DN(C0-180)	0.0,57.9
NOMINAL FLUX(lm)	3506.03	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,42.1
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.20

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:2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

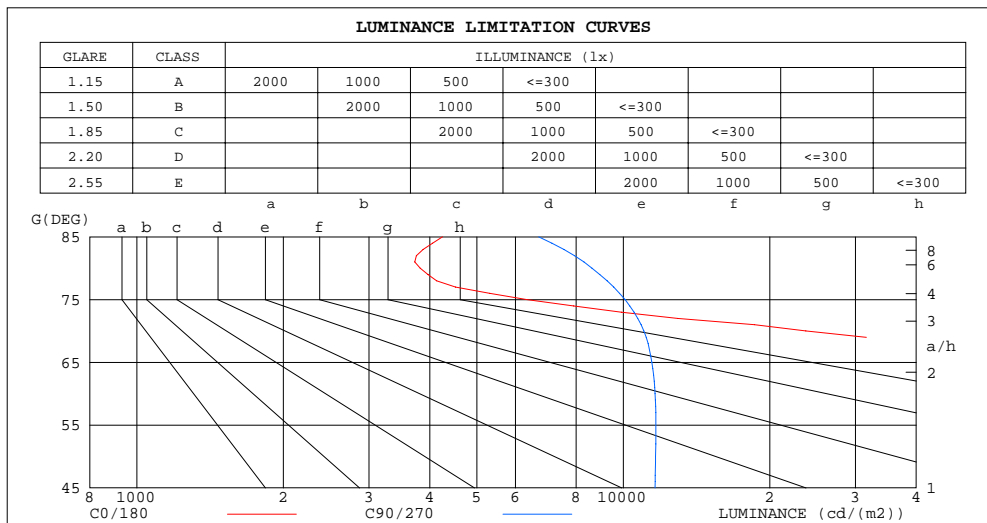
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	600.3	543.9	481.5	465.0	462.6	464.9	484.1	547.7	0- 10	47.62	47.62	1.36,1.36
20	1016	673.2	455.3	439.6	447.3	440.0	460.4	691.0	10- 20	152.8	200.4	5.72,5.72
30	2072	930.3	415.4	414.8	439.6	415.2	421.2	987.6	20- 30	308.1	508.5	14.5,14.5
40	3608	1256	366.1	386.9	420.6	386.7	371.4	1376	30- 40	563.0	1072	30.6,30.6
50	4817	1216	308.2	345.3	386.6	345.4	312.8	1366	40- 50	853.8	1925	54.9,54.9
60	3348	756.8	239.2	286.6	322.3	286.9	243.4	847.9	50- 60	924.3	2850	81.3,81.3
70	334.0	259.7	155.1	199.1	226.8	202.4	159.5	277.4	60- 70	475.8	3325	94.8,94.8
80	27.32	31.59	61.61	96.90	111.4	99.65	65.58	33.29	70- 80	140.3	3466	98.8,98.8
90	5.919	4.424	3.179	21.76	20.93	23.25	3.582	4.536	80- 90	40.39	3506	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:2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4249	6699
80	3822	8620
75	6327	10085
70	23723	11018
65	80302	11447
60	162682	11622
55	199189	11664
50	182082	11648
45	148457	11621

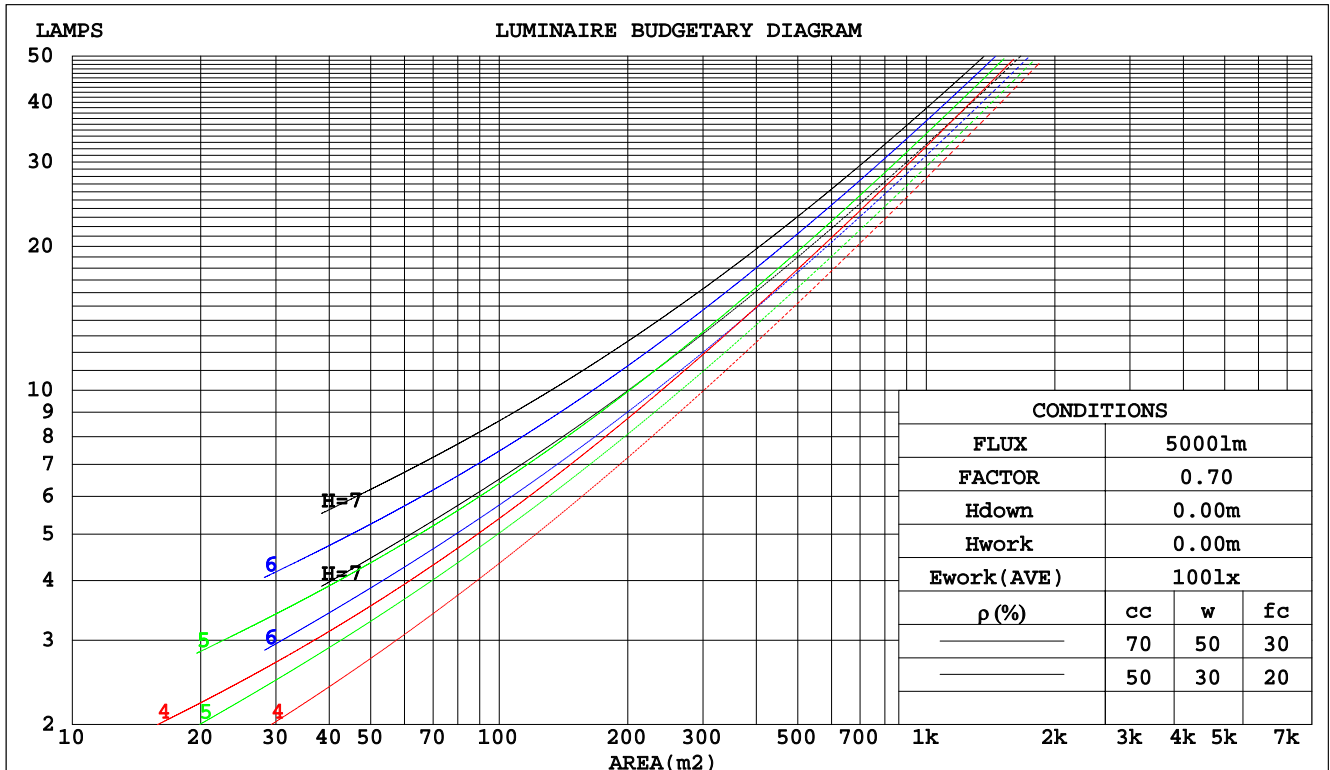
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	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	1.04	.99	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.83
2.0	.89	.82	.76	.87	.81	.75	.84	.78	.74	.81	.76	.72	.77	.74	.70	.68
3.0	.77	.68	.61	.75	.67	.61	.72	.65	.60	.70	.64	.59	.67	.62	.58	.55
4.0	.67	.57	.50	.65	.57	.50	.63	.55	.49	.60	.54	.48	.58	.52	.48	.45
5.0	.58	.49	.41	.57	.48	.41	.55	.47	.41	.53	.46	.40	.51	.45	.40	.37
6.0	.51	.42	.35	.50	.41	.35	.49	.40	.34	.47	.39	.34	.45	.39	.34	.31
7.0	.46	.36	.30	.45	.36	.29	.43	.35	.29	.42	.34	.29	.40	.34	.29	.26
8.0	.41	.32	.25	.40	.31	.25	.39	.31	.25	.37	.30	.25	.36	.30	.25	.23
9.0	.37	.28	.22	.36	.28	.22	.35	.27	.22	.34	.27	.22	.33	.26	.21	.19
10.0	.33	.25	.19	.33	.25	.19	.32	.24	.19	.31	.24	.19	.30	.23	.19	.17



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2026-04-23

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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	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	.312	.177	.056	.304	.174	.055	.291	.167	.053	.279	.161	.052	.268	.155	.050		
2.0	.302	.166	.051	.296	.163	.050	.284	.158	.049	.273	.153	.048	.263	.149	.047		
3.0	.285	.152	.045	.279	.150	.045	.269	.146	.044	.259	.142	.044	.250	.138	.043		
4.0	.266	.138	.041	.261	.137	.040	.251	.133	.040	.243	.130	.039	.235	.127	.039		
5.0	.247	.126	.036	.243	.125	.036	.234	.122	.036	.227	.120	.036	.219	.117	.035		
6.0	.230	.115	.033	.226	.114	.033	.218	.112	.033	.211	.110	.032	.205	.108	.032		
7.0	.214	.106	.030	.211	.105	.030	.204	.103	.030	.197	.101	.029	.192	.100	.029		
8.0	.200	.098	.027	.197	.097	.027	.191	.095	.027	.185	.094	.027	.180	.092	.027		
9.0	.187	.090	.025	.184	.090	.025	.179	.088	.025	.174	.087	.025	.169	.086	.025		
10.0	.175	.084	.023	.173	.084	.023	.168	.082	.023	.163	.081	.023	.159	.080	.023		

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	.180	.156	.134	.154	.134	.116	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.174	.132	.097	.149	.114	.084	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.072	.143	.099	.063	.099	.069	.044	.057	.040	.026	.018	.013	.008	
4.0	.161	.101	.056	.138	.088	.048	.095	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.154	.091	.045	.133	.079	.039	.091	.055	.027	.053	.032	.016	.017	.011	.005	
6.0	.148	.083	.037	.127	.072	.032	.088	.050	.023	.051	.030	.013	.016	.010	.004	
7.0	.141	.076	.031	.121	.066	.027	.084	.046	.019	.049	.027	.011	.016	.009	.004	
8.0	.135	.071	.027	.116	.061	.023	.080	.043	.017	.047	.025	.010	.015	.008	.003	
9.0	.129	.066	.024	.111	.057	.021	.077	.040	.015	.045	.024	.009	.014	.008	.003	
10.0	.123	.062	.021	.106	.054	.018	.073	.038	.013	.043	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-04-23

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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 1035*160*45			SERIAL No.:			
MFR.: NLD26-002-01					SUR.:0.98*0.042			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	3H	34.8	36.4	35.1	36.6	36.9	22.7	24.3	22.9	24.5	24.8
	4H	34.9	36.4	35.2	36.6	36.9	23.4	24.9	23.7	25.1	25.4
	6H	34.8	36.2	35.1	36.5	36.7	23.6	25.1	24.0	25.4	25.6
	8H	34.6	36.0	35.0	36.3	36.6	23.8	25.2	24.1	25.4	25.7
	12H	34.6	35.9	34.9	36.2	36.5	23.8	25.1	24.2	25.4	25.7
4H	2H	34.5	35.8	34.9	36.1	36.4	23.8	25.1	24.2	25.4	25.7
	3H	34.5	36.0	34.9	36.2	36.5	25.5	27.0	25.8	27.2	27.5
	4H	34.7	35.9	35.0	36.2	36.5	26.0	27.2	26.3	27.5	27.8
	6H	34.6	35.7	35.0	36.0	36.4	26.2	27.3	26.5	27.6	28.0
	8H	34.5	35.5	34.9	35.8	36.2	26.3	27.3	26.7	27.6	28.0
8H	12H	34.4	35.4	34.9	35.7	36.1	26.3	27.2	26.7	27.6	28.0
	4H	34.4	35.3	34.8	35.6	36.0	26.3	27.2	26.7	27.5	28.0
	6H	34.5	35.4	34.9	35.7	36.1	26.2	27.1	26.6	27.5	27.9
	8H	34.4	35.1	34.8	35.5	36.0	26.4	27.2	26.8	27.6	28.0
	12H	34.3	35.0	34.8	35.4	35.9	26.4	27.1	26.9	27.5	28.0
12H	4H	34.3	34.9	34.8	35.3	35.8	26.5	27.0	26.9	27.5	28.0
	6H	34.4	35.3	34.8	35.6	36.1	26.2	27.0	26.6	27.4	27.8
	8H	34.3	35.0	34.8	35.4	35.9	26.4	27.0	26.8	27.5	27.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.6					+ 1.1 / - 1.4					
1.5H	+ 3.1 / - 3.9					+ 1.1 / - 1.1					
2.0H	+ 3.3 / - 7.9					+ 2.4 / - 2.5					

CIE Pub.117, 3506 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 4.4$ )

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:

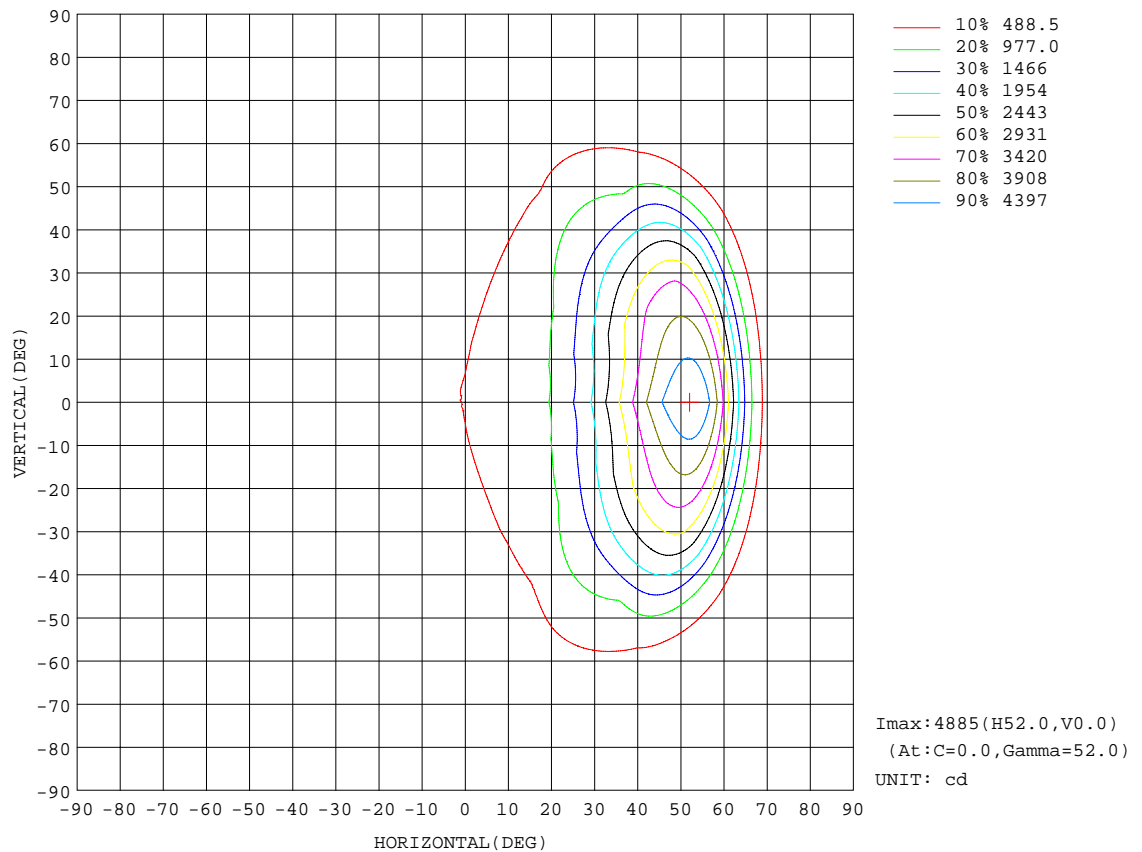
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	26	47	34	26	45	33	26	18
0.80	60	46	38	58	46	38	56	45	37	29
1.00	70	58	50	69	57	49	67	59	49	41
1.25	79	67	59	77	67	59	75	65	58	50
1.50	85	74	66	83	73	66	80	71	65	57
2.00	93	84	77	91	83	76	88	80	75	67
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	105	99	94	103	98	93	99	94	90	81
5.00	108	103	98	105	101	97	101	97	94	84
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:2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:

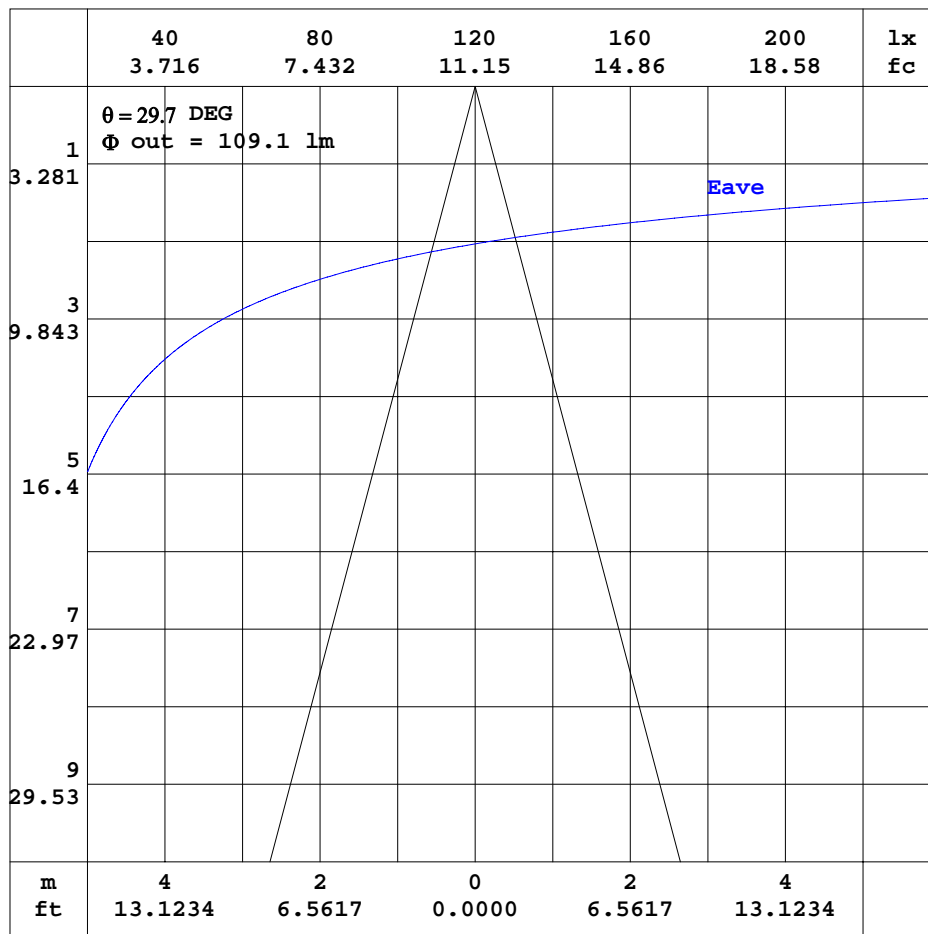


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:



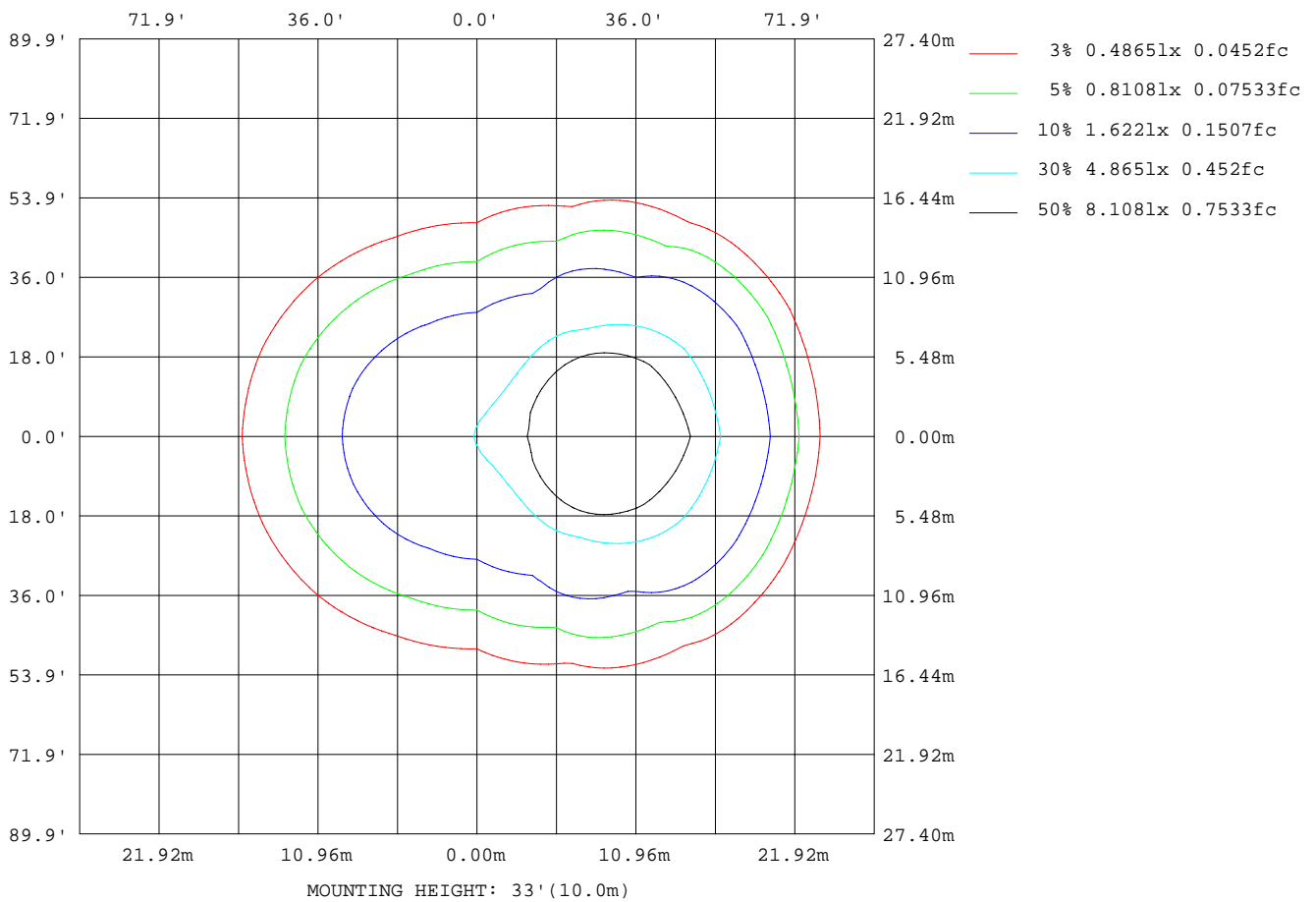
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-04-23

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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2026-04-23

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:229.51V I:0.7947A P:181.14W PF:0.9932 Freq:49.99Hz Lamp Flux:3506.03x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1035*160*45	SERIAL No.:
MFR.: NLD26-002-01	SUR.:0.98*0.042	Shielding Angle:

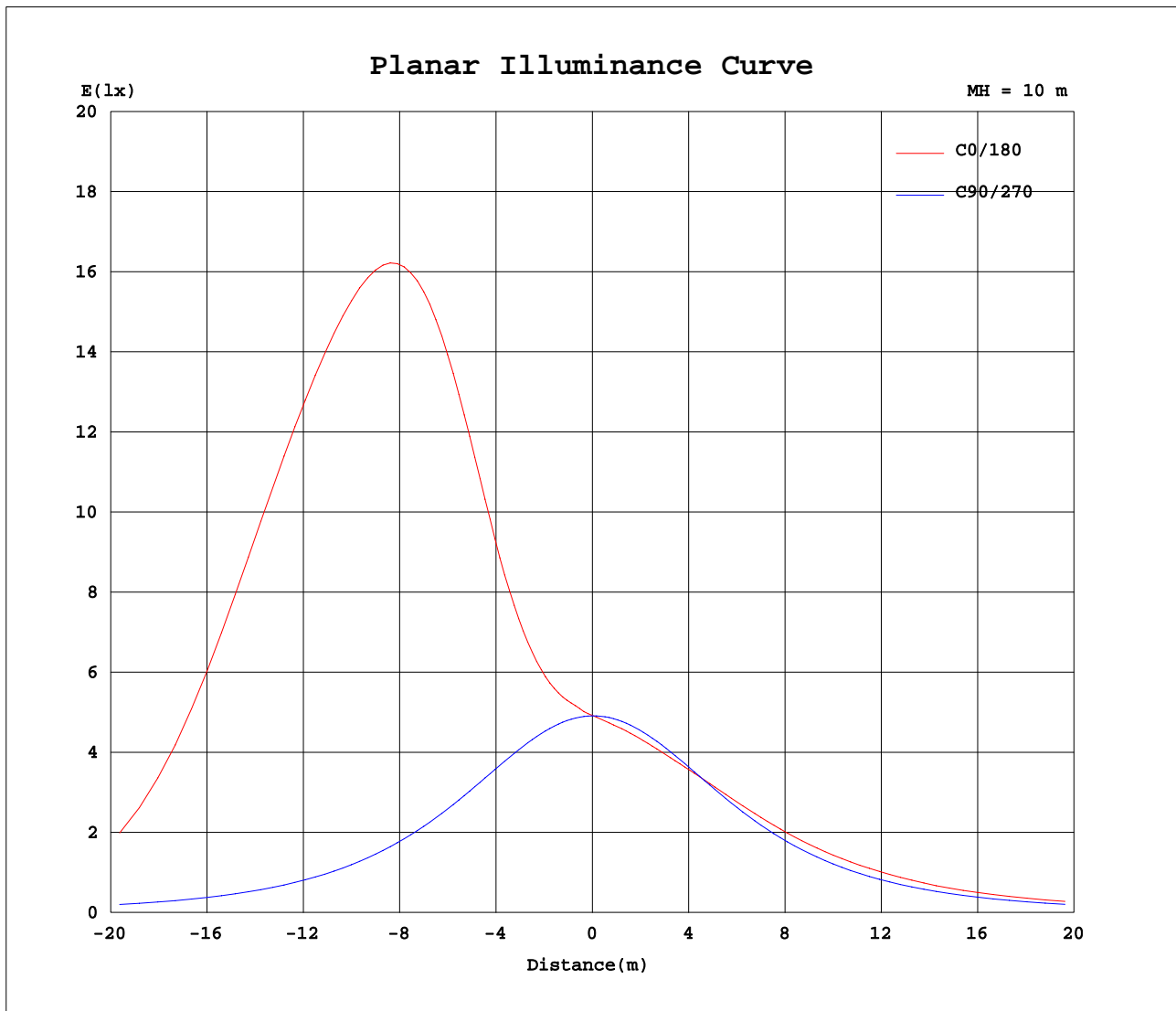
AvgL	cd/m2
L_0~180(65)av	48205
L_0~180(75)av	11075
L_0~180(85)av	12131
L_90~270(65)av	11574
L_90~270(75)av	10285
L_90~270(85)av	7136
L_45(65)av	22250
L_45(75)av	12281
L_45(85)av	9469

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2026-04-23

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: 2026-04-23

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

```