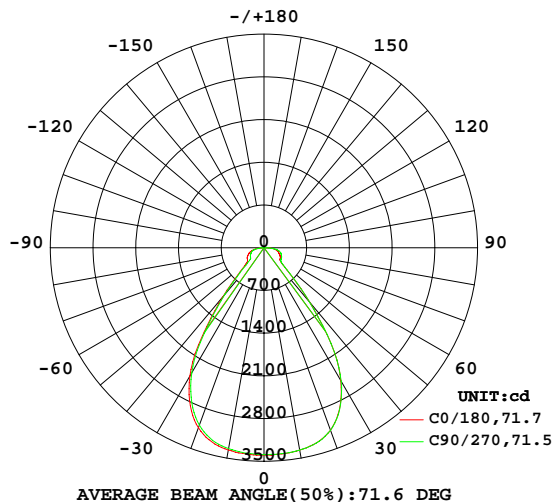


## LUMINAIRE PHOTOMETRIC TEST REPORT

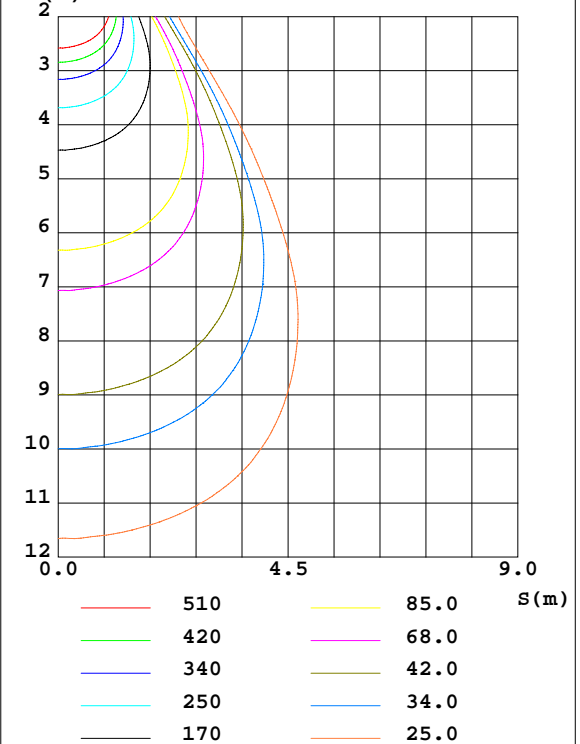
Test:U:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 67.23 lm/W			
MODEL		Imax(cd)	3402	S/MH(C0/180)	1.03
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	1.02
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	4999.6	$\eta$ UP,DN(C0-180)	0.0,52.0
NOMINAL FLUX(lm)	4999.63	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,48.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.10

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:2025-08-14

$\gamma$  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:

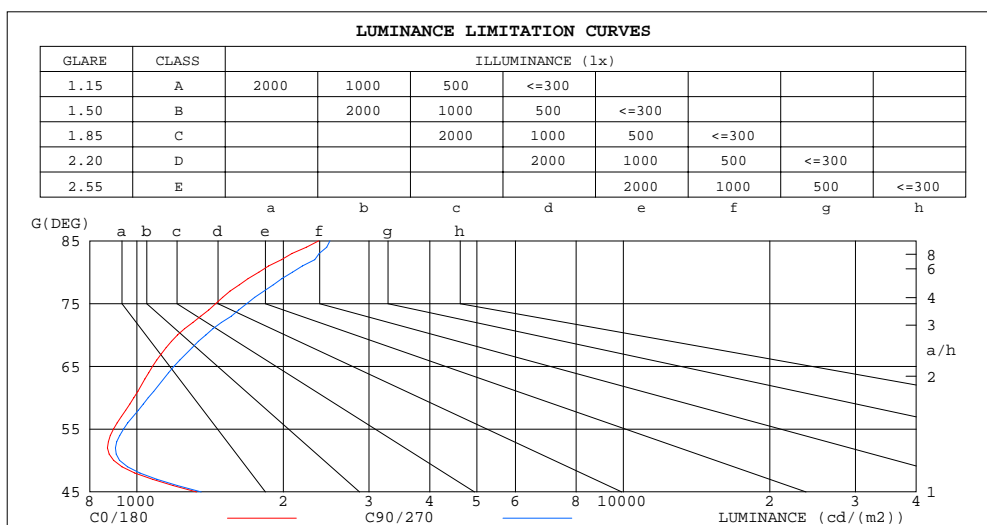
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	3367	3369	3365	3355	3365	3351	3341	3340	0- 10	321.9	321.9	6.44,6.44
20	3184	3196	3185	3150	3141	3100	3095	3118	10- 20	925.7	1248	25,25
30	2520	2559	2529	2475	2429	2375	2369	2422	20- 30	1308	2556	51.1,51.1
40	1163	1203	1165	1090	1048	998.5	995.7	1052	30- 40	1114	3669	73.4,73.4
50	363.0	386.8	373.4	337.0	359.2	327.0	296.9	284.4	40- 50	462.3	4132	82.6,82.6
60	310.6	326.4	332.5	290.2	318.8	297.5	259.4	236.2	50- 60	275.2	4407	88.1,88.1
70	261.3	284.4	298.8	247.7	259.9	250.9	221.6	195.1	60- 70	268.1	4675	93.5,93.5
80	195.0	218.7	228.5	166.3	156.5	159.1	141.3	127.0	70- 80	228.2	4903	98.1,98.1
90	22.00	22.56	21.26	17.07	13.99	12.23	15.60	19.21	80- 90	96.34	5000	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:2025-08-14

$\gamma$  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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2366	2494
80	1782	2088
75	1453	1683
70	1212	1386
65	1077	1192
60	986	1055
55	895	939
50	896	922
45	1326	1356

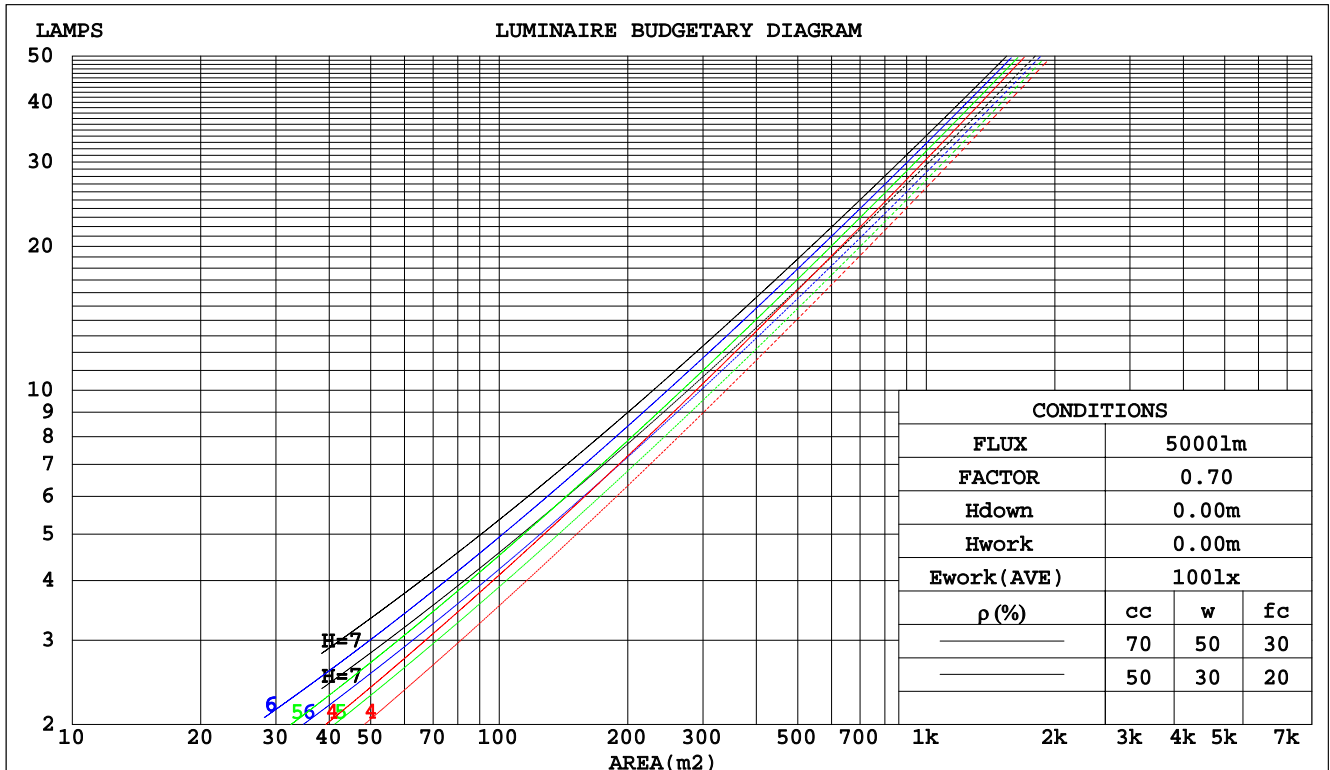
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

$\gamma$  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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	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															



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 900*31			SERIAL No.:		
MFR.: NLD25-0017			SUR.:3.14*0.448*0.448			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	.252	.143	.045	.245	.140	.044	.232	.133	.043	.220	.127	.041	.209	.121	.039	
2.0	.233	.128	.039	.227	.125	.039	.216	.120	.037	.206	.115	.036	.196	.111	.035	
3.0	.216	.115	.034	.211	.113	.034	.201	.109	.033	.192	.105	.032	.184	.102	.031	
4.0	.200	.104	.031	.196	.102	.030	.187	.099	.030	.179	.096	.029	.172	.094	.028	
5.0	.187	.095	.028	.183	.094	.027	.176	.091	.027	.169	.089	.026	.162	.087	.026	
6.0	.175	.088	.025	.172	.087	.025	.165	.085	.025	.159	.083	.024	.153	.081	.024	
7.0	.165	.082	.023	.162	.081	.023	.156	.079	.023	.150	.077	.022	.145	.076	.022	
8.0	.156	.076	.021	.153	.075	.021	.148	.074	.021	.143	.072	.021	.138	.071	.021	
9.0	.147	.071	.020	.145	.071	.020	.140	.069	.020	.136	.068	.019	.132	.067	.019	
10.0	.140	.067	.019	.138	.067	.019	.134	.065	.018	.130	.064	.018	.126	.063	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.091	.068	.050	.052	.040	.029	.017	.013	.010	
4.0	.145	.100	.066	.124	.086	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
5.0	.137	.089	.054	.117	.077	.047	.081	.054	.033	.047	.032	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.077	.049	.028	.044	.029	.016	.014	.009	.005	
7.0	.123	.073	.038	.105	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.117	.067	.033	.100	.058	.028	.069	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.111	.062	.028	.096	.054	.025	.066	.038	.018	.039	.022	.010	.013	.007	.003	
10.0	.106	.057	.025	.091	.050	.022	.063	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 900*31			SERIAL No.:			
MFR.: NLD25-0017					SUR.:3.14*0.448*0.448			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	11.6	12.8	11.8	13.0	13.2	11.7	12.9	11.9	13.1	13.3	
	3H	13.2	14.3	13.5	14.6	14.8	13.5	14.6	13.7	14.8	15.0
	4H	14.3	15.4	14.6	15.6	15.8	14.7	15.7	15.0	16.0	16.2
	6H	15.4	16.4	15.7	16.7	16.9	15.9	16.9	16.2	17.2	17.4
	8H	16.0	16.9	16.3	17.2	17.5	16.5	17.5	16.9	17.8	18.0
	12H	16.5	17.4	16.8	17.7	18.0	17.0	18.0	17.4	18.3	18.6
4H	2H	12.1	13.2	12.4	13.4	13.6	12.2	13.2	12.5	13.5	13.7
	3H	14.1	15.1	14.5	15.4	15.6	14.3	15.3	14.7	15.5	15.8
	4H	15.5	16.3	15.8	16.6	16.9	15.7	16.6	16.1	16.9	17.2
	6H	16.8	17.6	17.2	17.9	18.3	17.2	18.0	17.6	18.3	18.7
	8H	17.5	18.2	17.9	18.5	18.9	17.9	18.6	18.3	19.0	19.4
	12H	18.1	18.7	18.5	19.1	19.5	18.5	19.2	19.0	19.6	20.0
8H	4H	16.1	16.8	16.5	17.1	17.5	16.3	17.0	16.7	17.3	17.7
	6H	17.7	18.3	18.1	18.7	19.1	18.0	18.6	18.4	19.0	19.4
	8H	18.5	19.0	19.0	19.5	19.9	18.9	19.4	19.3	19.8	20.3
	12H	19.3	19.8	19.8	20.2	20.7	19.6	20.1	20.1	20.5	21.0
12H	4H	16.2	16.8	16.6	17.2	17.6	16.4	17.0	16.8	17.4	17.8
	6H	17.9	18.4	18.4	18.9	19.3	18.2	18.7	18.7	19.1	19.6
	8H	18.8	19.3	19.3	19.7	20.2	19.2	19.6	19.6	20.1	20.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					
1.5H	+ 0.4 / - 0.2					+ 0.3 / - 0.2					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					

CIE Pub.117, 5000 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 5.6$ )

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025-08-14

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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:

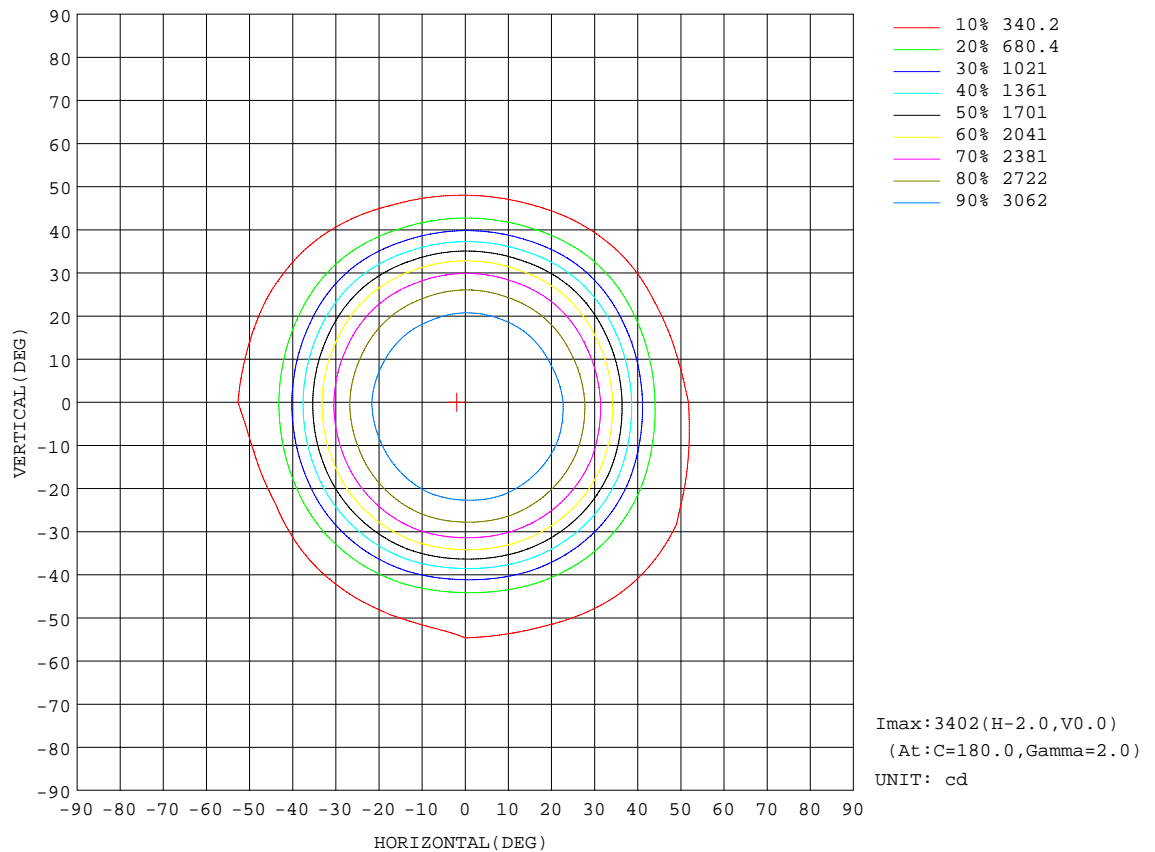
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	67	62	75	67	62	74	66	62	57
0.80	84	75	70	83	75	70	81	74	70	65
1.00	89	81	76	88	81	76	86	81	75	70
1.25	94	87	82	93	86	81	91	85	81	75
1.50	98	91	86	97	90	85	94	89	84	79
2.00	102	96	91	101	95	91	98	93	89	83
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	110	106	104	105	103	101	92
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:2025-08-14

$\gamma$  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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:



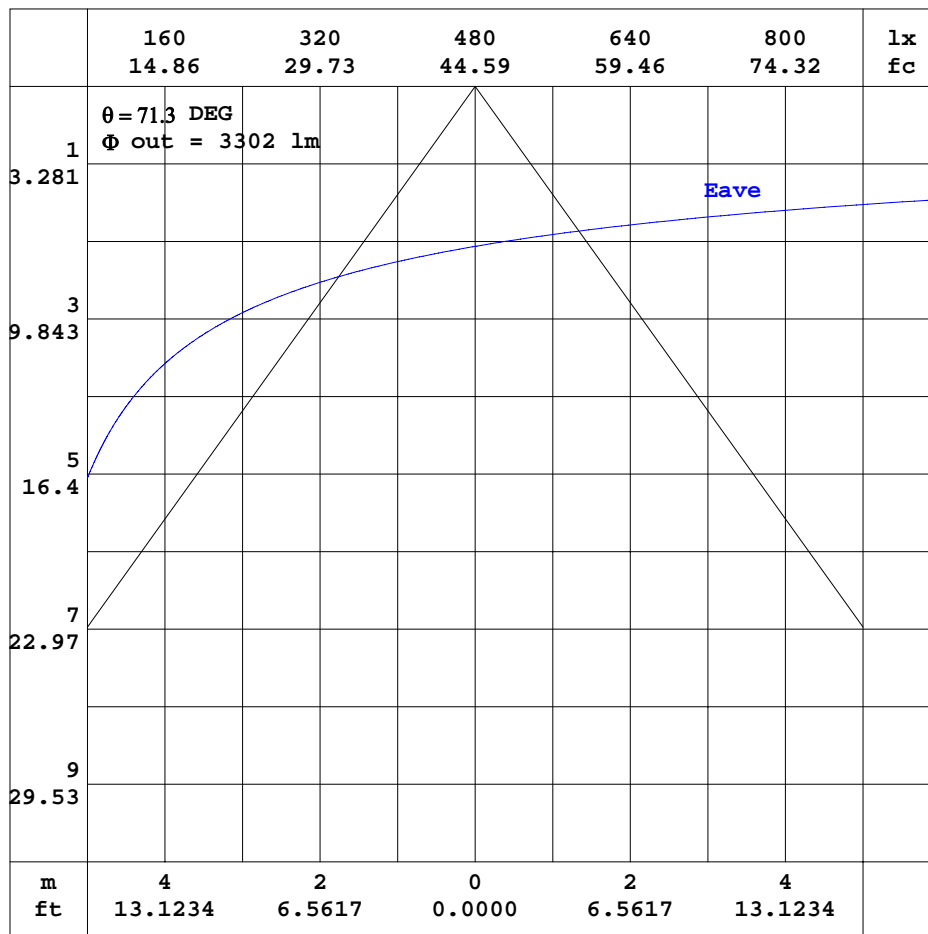
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

$\gamma$  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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:



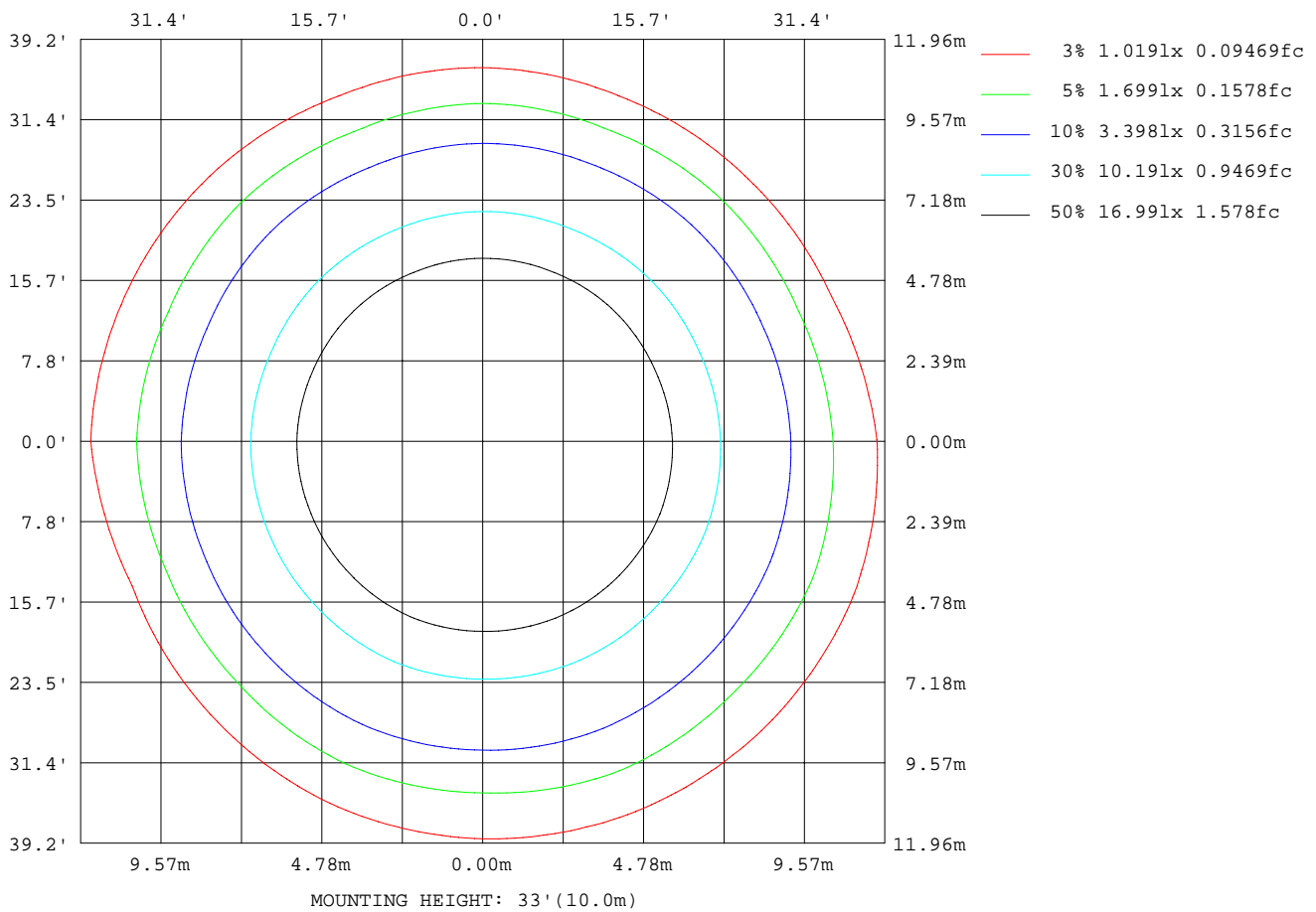
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

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:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

$\gamma$  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:

## LED Avg.L Report

Test:U:229.70V I:0.3327A P:74.362W PF:0.9731 Freq:49.99Hz Lamp Flux:4999.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 900*31	SERIAL No.:
MFR.: NLD25-0017	SUR.:3.14*0.448*0.448	Shielding Angle:

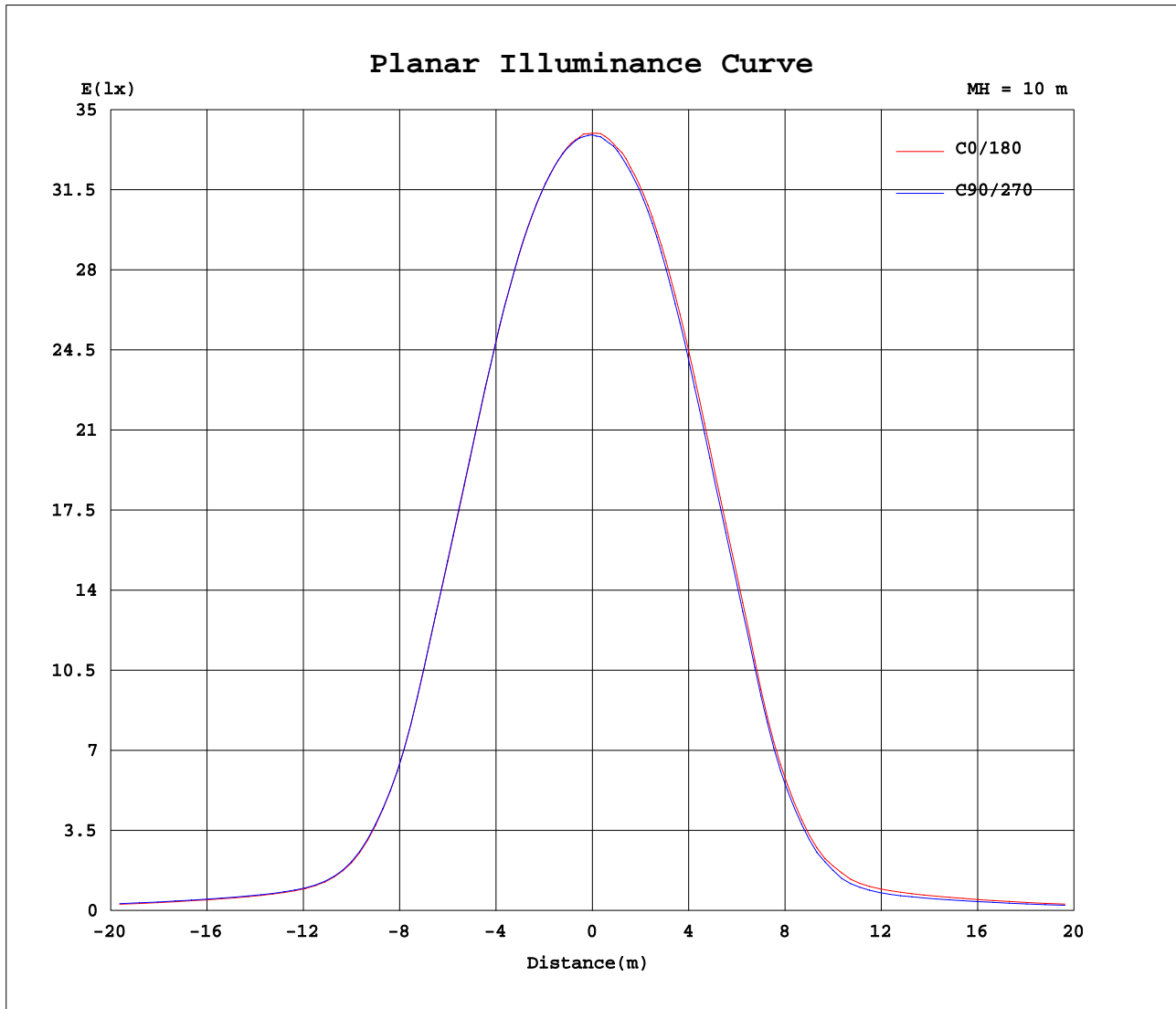
AvgL	cd/m2
L_0~180(65)av	1086
L_0~180(75)av	1391
L_0~180(85)av	1691
L_90~270(65)av	1046
L_90~270(75)av	1435
L_90~270(85)av	1730
L_45(65)av	1000
L_45(75)av	1339
L_45(85)av	1584

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-08-14

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: 2025-08-14

$\gamma$  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:

```