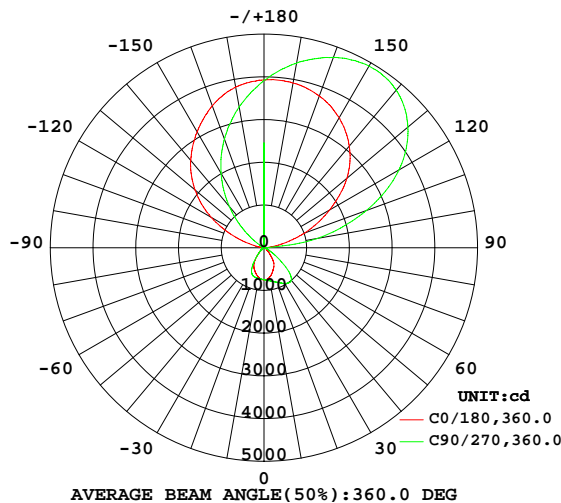


## LUMINAIRE PHOTOMETRIC TEST REPORT

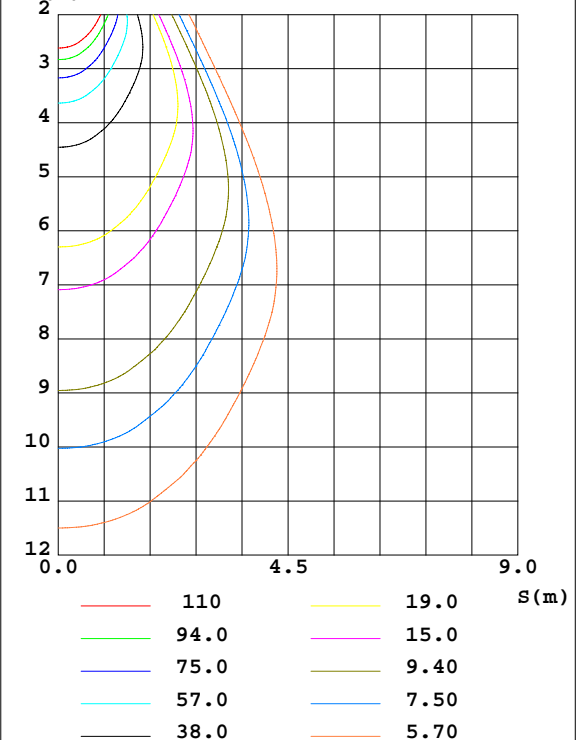
Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.34 lm/W			
MODEL		Imax(cd)	4929	S/MH(C0/180)	1.00
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	12640	$\eta$ UP,DN(C0-180)	64.2,7.0
NOMINAL FLUX(lm)	12640.3	CIE CLASS	SEMI-IND.	$\eta$ UP,DN(C180-360)	24.5,4.2
LAMPS INSIDE	1	$\eta$ up(%)	88.8	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	$\eta$ down(%)	11.2	CIBSE SHR MAX	1.10

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

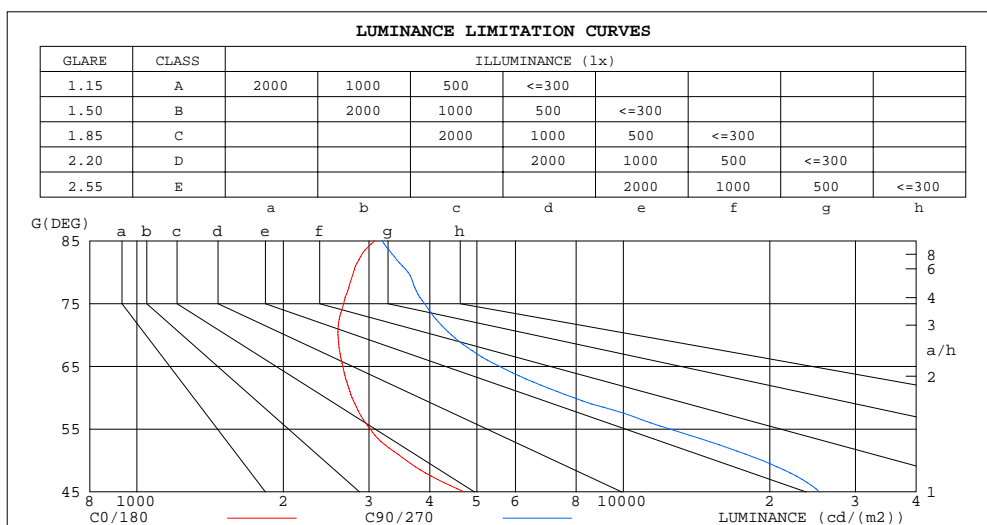
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	711.7	753.6	787.1	753.3	707.4	711.5	731.7	714.8	0- 10	70.88	70.88	0.56,0.56
20	593.5	723.0	858.0	743.7	603.0	634.3	713.6	623.7	10- 20	201.1	272.0	2.15,2.15
30	470.3	682.9	966.0	716.1	479.8	500.5	581.9	482.5	20- 30	300.6	572.6	4.53,4.53
40	254.5	629.7	995.2	665.7	258.0	261.9	262.4	254.2	30- 40	334.1	906.6	7.17,7.17
50	110.4	359.4	595.5	395.6	110.5	113.1	109.2	111.8	40- 50	259.6	1166	9.23,9.23
60	66.46	121.3	189.9	135.0	65.95	62.33	62.09	63.03	50- 60	135.4	1302	10.3,10.3
70	42.53	58.17	72.79	59.94	41.45	40.10	39.94	41.50	60- 70	68.71	1370	10.8,10.8
80	23.25	27.05	30.09	26.19	21.38	19.62	18.56	20.86	70- 80	38.23	1409	11.1,11.1
90	1.675	1.649	0.6443	0.5928	0.5928	0.7474	1.082	1.512	80- 90	12.91	1422	11.2,11.2
100	292.4	966.8	1267	736.6	131.8	33.96	26.76	39.95	90-100	174.1	1596	12.6,12.6
110	1007	2147	2547	1835	670.2	61.40	46.58	71.17	100-110	758.6	2354	18.6,18.6
120	1775	3221	3647	2786	1427	267.5	77.98	416.2	110-120	1340	3694	29.2,29.2
130	2533	3966	4398	3490	2108	853.9	523.9	1087	120-130	1812	5506	43.6,43.6
140	3106	4397	4814	3967	2670	1546	1260	1804	130-140	2059	7566	59.9,59.9
150	3520	4564	4913	4255	3133	2249	2012	2466	140-150	1991	9557	75.6,75.6
160	3780	4501	4743	4333	3538	2903	2712	3050	150-160	1640	11197	88.6,88.6
170	3915	4266	4389	4201	3820	3452	3351	3534	160-170	1072	12269	97.1,97.1
180	3932	3932	3932	3932	3932	3932	3932	3932	170-180	371.5	12640	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3086	3194
80	2790	3610
75	2661	3901
70	2591	4434
65	2652	5563
60	2769	7911
55	3018	12467
50	3578	19300
45	4711	25302

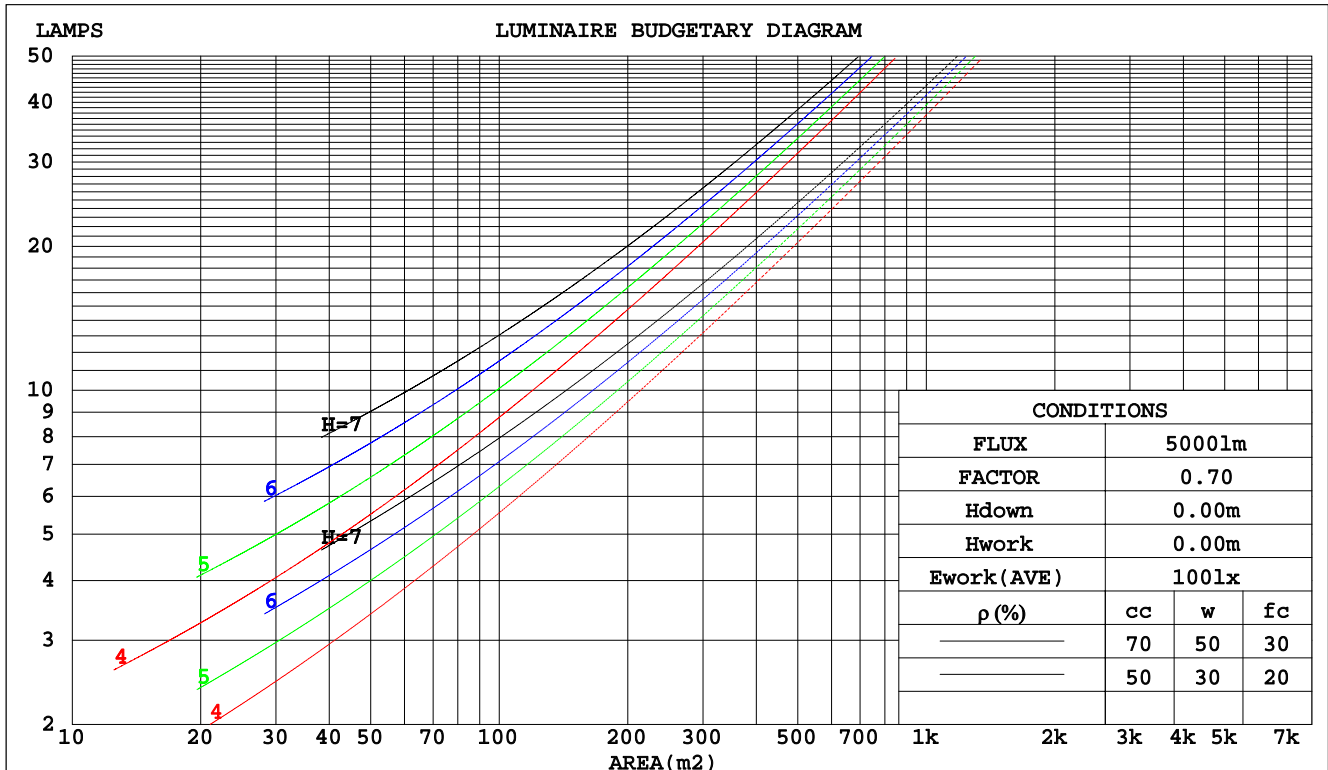
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	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	.98	.98	.98	.85	.85	.85	.62	.62	.62	.40	.40	.40	.21	.21	.21	.11
1.0	.85	.82	.79	.75	.72	.69	.54	.52	.51	.36	.35	.34	.18	.18	.18	.10
2.0	.75	.69	.65	.65	.61	.57	.48	.45	.42	.32	.30	.29	.17	.16	.15	.09
3.0	.66	.59	.54	.58	.52	.48	.42	.39	.36	.28	.26	.24	.15	.14	.13	.08
4.0	.58	.51	.45	.51	.45	.40	.38	.34	.31	.25	.23	.21	.13	.12	.12	.07
5.0	.52	.44	.39	.45	.39	.35	.34	.29	.26	.22	.20	.18	.12	.11	.10	.06
6.0	.46	.39	.34	.41	.34	.30	.30	.26	.23	.20	.18	.16	.11	.10	.09	.05
7.0	.42	.34	.29	.37	.30	.26	.27	.23	.20	.18	.16	.14	.10	.09	.08	.05
8.0	.38	.30	.26	.33	.27	.23	.25	.21	.18	.17	.14	.12	.09	.08	.07	.04
9.0	.34	.27	.23	.30	.24	.20	.22	.18	.16	.15	.13	.11	.09	.07	.07	.04
10.0	.31	.24	.20	.27	.22	.18	.21	.17	.14	.14	.12	.10	.08	.07	.06	.04



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## WEC AND CCEC

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 610*160*28			SERIAL No.:		
MFR.: NLD-24-2028			SUR.:0.4*0.12			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	.256	.146	.046	.222	.127	.040	.159	.091	.029	.101	.058	.019	.047	.028	.009	
2.0	.236	.130	.040	.206	.113	.035	.148	.082	.026	.094	.053	.017	.045	.025	.008	
3.0	.219	.116	.035	.190	.102	.031	.137	.074	.023	.088	.048	.015	.042	.024	.007	
4.0	.203	.105	.031	.177	.093	.027	.128	.068	.020	.082	.044	.013	.040	.022	.007	
5.0	.189	.096	.028	.165	.085	.025	.119	.062	.018	.077	.041	.012	.038	.020	.006	
6.0	.176	.088	.025	.154	.078	.022	.112	.057	.017	.072	.038	.011	.036	.019	.006	
7.0	.165	.082	.023	.144	.072	.020	.105	.053	.015	.068	.035	.010	.034	.017	.005	
8.0	.155	.076	.021	.136	.067	.019	.099	.049	.014	.064	.033	.009	.032	.016	.005	
9.0	.146	.070	.020	.128	.062	.017	.093	.046	.013	.061	.030	.009	.030	.015	.004	
10.0	.137	.066	.018	.120	.058	.016	.088	.043	.012	.058	.029	.008	.029	.014	.004	

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	.867	.867	.867	.741	.741	.741	.506	.506	.506	.290	.290	.290	.093	.093	.093	
1.0	.858	.838	.820	.734	.720	.706	.502	.495	.488	.289	.286	.284	.093	.092	.092	
2.0	.851	.819	.791	.729	.705	.684	.500	.487	.477	.288	.284	.280	.092	.092	.091	
3.0	.845	.804	.772	.724	.694	.669	.497	.482	.469	.287	.281	.277	.092	.091	.091	
4.0	.839	.793	.758	.720	.685	.659	.495	.478	.464	.286	.280	.274	.092	.091	.090	
5.0	.833	.785	.749	.715	.679	.652	.493	.474	.460	.285	.278	.273	.092	.091	.090	
6.0	.827	.778	.742	.711	.674	.646	.491	.471	.457	.285	.277	.272	.092	.091	.090	
7.0	.822	.772	.737	.707	.669	.642	.489	.469	.455	.284	.276	.271	.092	.091	.090	
8.0	.817	.767	.733	.703	.666	.639	.487	.467	.454	.283	.276	.270	.092	.090	.089	
9.0	.812	.763	.730	.700	.663	.637	.485	.466	.452	.282	.275	.270	.091	.090	.089	
10.0	.808	.760	.728	.696	.660	.635	.483	.464	.451	.282	.275	.269	.091	.090	.089	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-08-28

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=0.8547]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 610*160*28			SERIAL No.:				
MFR.: NLD-24-2028			SUR.:0.4*0.12			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	8.0	8.6	9.2	9.8	11.5	14.0	14.6	15.2	15.8	17.5
3H	8.2	8.8	9.4	9.9	11.6	13.9	14.5	15.2	15.7	17.4
4H	8.3	8.9	9.6	10.1	11.8	13.9	14.4	15.1	15.6	17.3
6H	8.5	9.0	9.7	10.2	11.9	13.8	14.3	15.1	15.5	17.2
8H	8.6	9.0	9.8	10.2	12.0	13.8	14.3	15.0	15.5	17.2
12H	8.6	9.1	9.8	10.3	12.0	13.7	14.2	15.0	15.4	17.1
4H 2H	8.3	8.8	9.5	10.0	11.7	13.5	14.1	14.7	15.3	17.0
3H	8.6	9.1	9.9	10.3	12.0	13.6	14.0	14.8	15.2	17.0
4H	8.9	9.3	10.1	10.5	12.2	13.6	14.0	14.8	15.2	16.9
6H	9.1	9.5	10.4	10.7	12.4	13.6	14.0	14.9	15.2	16.9
8H	9.2	9.5	10.5	10.8	12.5	13.6	13.9	14.8	15.1	16.9
12H	9.3	9.6	10.6	10.8	12.6	13.6	13.8	14.8	15.1	16.8
8H 4H	8.9	9.2	10.2	10.5	12.2	13.4	13.7	14.6	14.9	16.7
6H	9.3	9.6	10.6	10.8	12.6	13.5	13.7	14.7	14.9	16.7
8H	9.5	9.7	10.8	11.0	12.7	13.5	13.7	14.7	14.9	16.7
12H	9.7	9.9	11.0	11.1	12.9	13.5	13.7	14.7	14.9	16.7
12H 4H	8.9	9.2	10.1	10.4	12.1	13.3	13.6	14.5	14.8	16.5
6H	9.3	9.5	10.6	10.8	12.6	13.4	13.6	14.6	14.8	16.6
8H	9.6	9.8	10.8	11.0	12.8	13.4	13.6	14.7	14.9	16.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.3					+ 0.8 / - 1.2				
1.5H	+ 2.1 / - 1.4					+ 1.4 / - 1.6				
2.0H	+ 1.6 / - 0.9					+ 3.4 / - 2.9				

CIE Pub.117, 12640 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 8.8$ )

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-08-28

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=0.8547]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

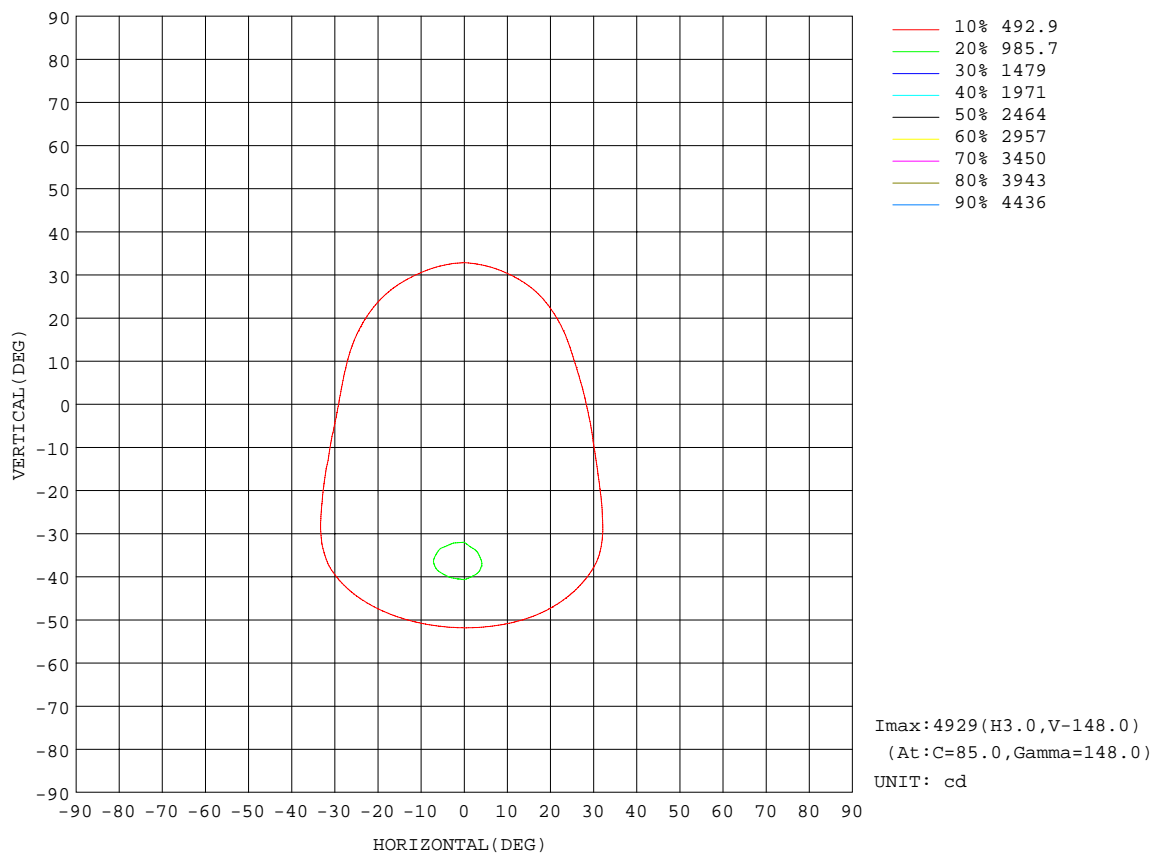
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	35	24	19	31	22	17	24	17	14	5
0.80	44	32	26	38	29	23	29	23	19	6
1.00	51	39	32	45	35	29	34	27	23	7
1.25	57	46	39	50	41	35	38	31	27	8
1.50	63	52	44	55	46	40	41	35	31	9
2.00	70	60	53	61	53	47	45	40	36	9
2.50	75	66	59	65	58	52	48	43	39	9
3.00	78	70	64	68	62	56	50	46	42	10
4.00	83	76	70	72	67	62	53	49	46	10
5.00	85	80	75	74	70	66	54	51	49	10
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
 Humidity:65.0%  
 Test Distance:11.700m [K=0.8547]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



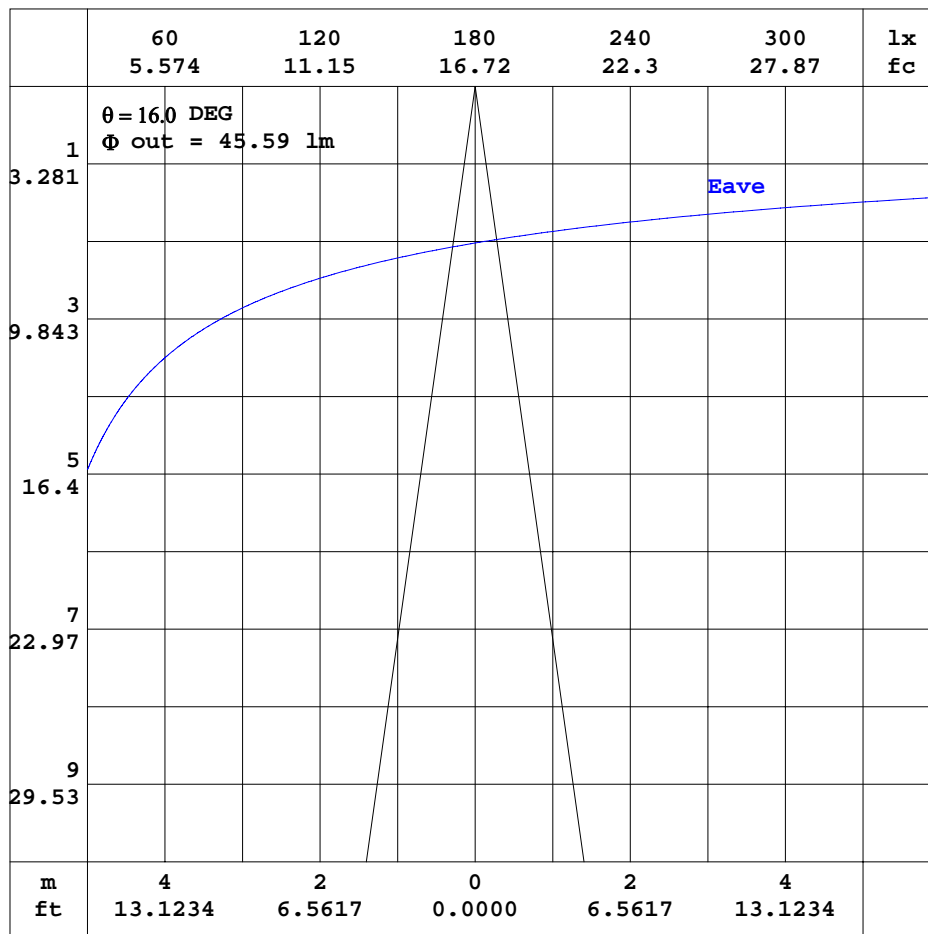
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:



## AAI CURVES

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



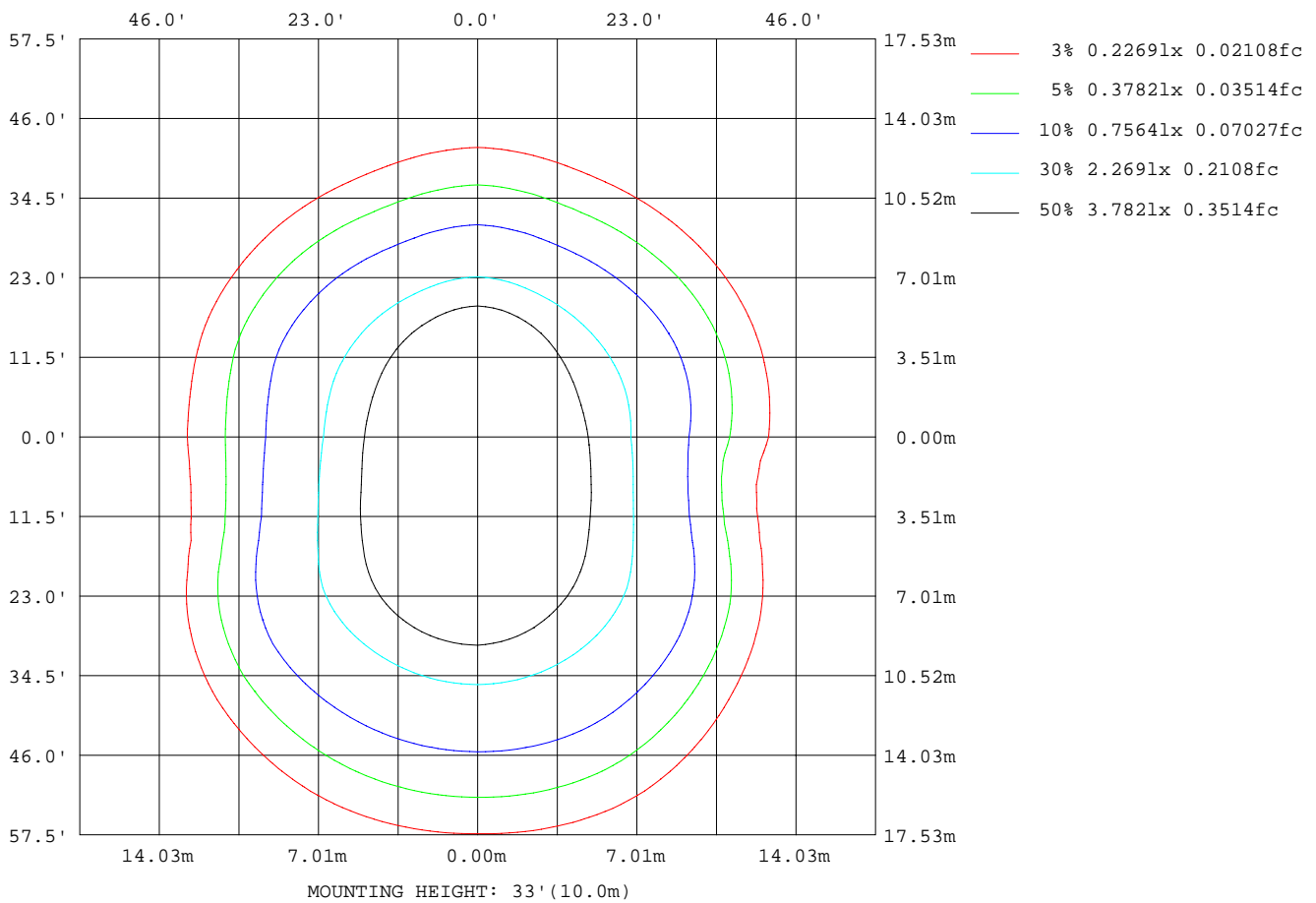
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## ISOLUX DIAGRAM

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=0.8547]  
Remarks:

## LED Avg.L Report

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

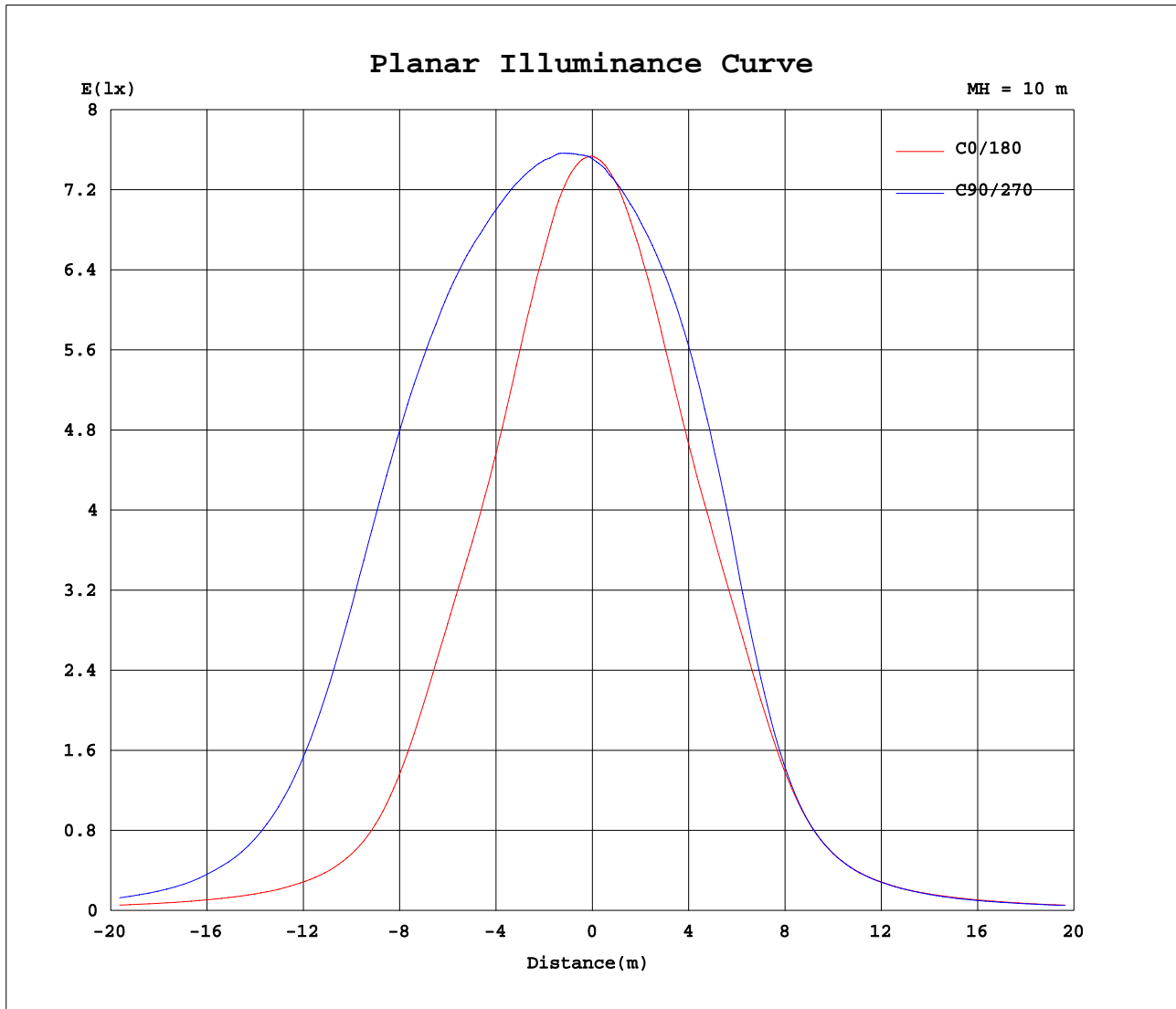
AvgL	cd/m2
L_0~180(65)av	2631
L_0~180(75)av	2602
L_0~180(85)av	2839
L_90~270(65)av	4031
L_90~270(75)av	3111
L_90~270(85)av	2620
L_45(65)av	3337
L_45(75)av	2889
L_45(85)av	2777

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-08-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity: 65.0%  
Test Distance: 11.700m [K=0.8547]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	754	753	753	753	752	752	752	752	752	752	752	752	752	752	752	752	751	751	751
5	746	747	748	749	751	752	754	756	758	759	761	762	763	764	764	765	765	765	765
10	712	715	718	722	726	731	736	742	748	754	760	765	771	776	780	783	785	787	787
15	660	664	670	676	684	693	704	716	728	741	754	766	778	789	799	807	812	816	818
20	594	600	608	618	630	645	663	682	702	723	745	767	788	808	824	837	847	854	858
25	532	539	550	563	579	598	620	645	672	700	733	766	798	828	854	874	890	902	908
30	470	480	492	509	529	553	581	613	647	683	723	764	805	843	878	909	935	954	966
35	377	388	404	425	452	487	528	572	619	668	715	762	807	850	892	931	965	990	1007
40	255	261	276	300	333	379	437	500	565	630	684	736	784	829	873	915	951	978	995
45	160	153	158	175	204	252	316	387	460	533	589	641	688	730	768	802	829	848	859
50	110	100	99.3	108	126	158	203	253	306	359	405	448	487	521	548	569	584	592	595
55	83.1	78.0	77.6	81.9	90.8	106	127	151	178	205	233	261	286	309	326	335	341	344	343
60	66.5	64.9	65.3	67.5	71.7	78.2	87.0	97.2	109	121	136	151	166	178	186	190	191	191	190
65	53.8	53.6	54.2	55.6	57.8	61.0	65.2	70.1	75.5	81.4	88.8	96.2	103	109	113	114	114	114	113
70	42.5	42.9	43.6	44.6	46.0	47.8	50.0	52.4	55.2	58.2	61.9	65.7	69.2	72.2	73.8	74.1	73.9	73.4	72.8
75	33.1	33.2	33.6	34.1	34.9	35.8	36.9	38.2	39.7	41.3	43.5	45.7	47.7	49.4	50.2	50.1	49.6	49.0	48.5
80	23.3	23.4	23.6	23.9	24.3	24.7	25.1	25.7	26.3	27.1	28.3	29.6	30.7	31.7	32.0	31.7	31.2	30.6	30.1
85	12.9	13.4	13.7	14.0	14.2	14.2	14.1	13.9	13.8	13.6	13.8	13.9	14.1	14.2	14.2	14.0	13.8	13.6	13.4
90	1.68	1.77	1.83	1.88	1.90	1.89	1.86	1.81	1.74	1.65	1.55	1.44	1.32	1.20	1.07	0.95	0.84	0.73	0.64
95	90.4	137	180	220	258	296	333	364	387	400	386	362	331	296	263	233	204	178	154
100	292	385	473	556	635	711	784	851	912	967	1006	1040	1070	1098	1137	1187	1228	1257	1267
105	613	743	868	988	1102	1214	1322	1423	1513	1591	1637	1673	1702	1726	1767	1821	1868	1899	1910
110	1007	1171	1326	1472	1608	1735	1854	1963	2060	2147	2213	2270	2318	2360	2412	2470	2516	2543	2547
115	1396	1570	1736	1896	2048	2196	2340	2474	2595	2703	2780	2843	2897	2942	2997	3059	3109	3138	3140
120	1775	1957	2134	2306	2472	2638	2803	2957	3097	3221	3305	3372	3425	3469	3521	3580	3624	3649	3647
125	2163	2357	2544	2723	2894	3062	3225	3377	3515	3638	3727	3800	3860	3909	3961	4014	4053	4072	4066
130	2533	2725	2908	3084	3251	3413	3569	3714	3847	3966	4063	4145	4213	4270	4322	4368	4398	4409	4398
135	2846	3026	3200	3366	3525	3680	3830	3970	4100	4218	4318	4405	4478	4539	4589	4629	4654	4660	4648
140	3106	3272	3433	3587	3736	3882	4024	4158	4283	4397	4497	4584	4659	4721	4769	4804	4824	4828	4814
145	3325	3475	3621	3761	3898	4032	4163	4288	4405	4513	4607	4689	4760	4818	4863	4894	4911	4913	4901
150	3520	3649	3775	3898	4018	4136	4253	4364	4468	4564	4648	4721	4785	4837	4877	4905	4920	4923	4913
155	3670	3779	3885	3988	4088	4187	4285	4378	4466	4547	4620	4684	4739	4785	4819	4842	4855	4858	4850
160	3780	3869	3956	4041	4123	4205	4285	4362	4434	4501	4559	4611	4655	4692	4719	4738	4747	4749	4743
165	3868	3933	3996	4058	4118	4178	4237	4294	4347	4397	4442	4483	4518	4546	4567	4580	4586	4587	4581
170	3915	3957	3999	4039	4079	4119	4159	4197	4233	4266	4297	4324	4348	4368	4381	4389	4393	4393	4389
175	3936	3955	3974	3992	4010	4029	4048	4066	4084	4100	4117	4132	4146	4157	4164	4166	4167	4166	4163
180	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	751	751	751	751	751	751	751	751	751	751	751	751	750	751	752	752	753	754	754
5	764	763	762	761	760	758	757	755	754	751	749	747	745	744	743	742	741	740	739
10	786	784	782	779	775	770	765	759	753	747	741	735	729	724	719	714	710	707	705
15	817	814	809	802	794	785	774	763	751	739	726	713	701	691	682	674	667	662	658
20	856	851	843	832	818	802	784	764	744	722	701	681	661	645	631	619	610	603	599
25	906	899	888	871	850	823	794	763	732	700	670	642	615	594	577	564	553	546	541
30	964	955	938	915	883	845	804	760	716	676	638	602	570	543	521	504	490	480	475
35	1004	990	968	938	900	854	805	752	699	649	601	554	512	475	444	418	397	382	378
40	990	974	948	915	874	829	779	724	666	599	533	468	408	359	323	294	272	258	256
45	853	839	816	787	754	717	675	627	572	497	420	345	276	226	197	177	166	161	161
50	591	582	567	548	526	500	470	435	396	339	281	224	173	138	122	113	110	111	111
55	342	337	331	321	308	293	275	254	231	201	170	140	113	95.5	87.2	82.9	81.6	82.4	82.0
60	190	190	188	185	179	170	159	148	135	121	107	93.3	81.3	73.2	69.2	66.9	66.0	66.0	65.3
65	114	114	114	113	110	105	99.8	93.5	86.9	80.2	73.6	67.4	61.9	58.0	55.8	54.3	53.4	52.9	52.2
70	73.4	73.9	74.1	73.9	72.5	69.9	66.8	63.5	59.9	56.6	53.4	50.3	47.6	45.5	44.0	42.9	42.1	41.5	40.8
75	49.0	49.6	50.0	50.1	49.4	47.8	45.8	43.7	41.5	39.7	37.9	36.4	34.9	33.8	33.1	32.5	32.0	31.6	31.1
80	30.5	30.9	31.3	31.5	31.1	30.1	28.8	27.5	26.2	25.3	24.6	23.9	23.4	22.9	22.4	22.1	21.7	21.4	21.0
85	13.4	13.5	13.5	13.5	13.4	13.1	12.7	12.3	12.0	11.8	11.6	11.5	11.4	11.3	11.2	11.1	11.0	10.8	10.6
90	0.59	0.56	0.54	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.60	0.60	0.59	0.59	0.59	0.59	0.59	0.59	0.60
95	136	122	114	111	122	144	168	189	206	197	181	160	135	112	89.4	68.4	49.6	33.8	28.0
100	1215	1146	1066	982	916	869	825	782	737	679	618	554	487	415	337	262	193	132	96.1
105	1849	1768	1674	1575	1497	1441	1386	1330	1269	1189	1101	1007	907	796	676	557	443	336	254
110	2472	2377	2268	2156	2070	2015	1960	1902	1835	1731	1616	1491	1359	1222	1082	942	804	670	541
115	3060	2955	2837	2713	2619	2555	2492	2425	2349	2236	2111	1974	1829	1677	1519	1359	1198	1040	885
120	3567	3464	3345	3219	3116	3037	2959	2876	2786	2669	2542	2405	2259	2103	1938	1769	1598	1427	1260
125	3992	3897	3785	3664	3557	3464	3370	3271	3166	3042	2909	2768	2620	2463	2297	2128	1956	1784	1613
130	4336	4254	4155	4045	3938	3834	3725	3611	3490	3360	3224	3081	2933	2776	2612	2446	2277	2108	1940
135	4598	4530	4446	4348	4243	4132	4013	3888	3756	3623	3486	3344	3198	3045	2887	2727	2566	2405	2243
140	4774	4717	4645	4559	4459	4349	4228	4101	3967	3834	3697	3557	3414	3268	3120	2970	2820	2670	2519
145	4869	4824	4763	4690	4601	4499	4387	4266	4139	4010	3877	3741	3602	3463	3324	3184	3045	2908	2770
150	4889	4852	4802	4741	4665	4575	4476	4369	4255	4136	4013	3886	3758	3631	3505	3379	3255	3133	3010
155	4833	4806	4768	4720	4659	4587	4505	4415	4318	4215	4108	3998	3886	3775	3665	3556	3449	3343	3237
160	4731	4710	4682	4645	4598	4542	4479	4409	4333	4251	4165	4075	3984	3894	3804	3715	3626	3538	3450
165	4572	4557	4537	4511	4478	4438	4393	4343	4288	4229	4167	4102	4035	3969	3902	3835	3768	3700	3631
170	4383	4375	4362	4346	4325	4299	4269	4236	4201	4164	4125	4085	4043	4000	3956	3912	3866	3820	3772
175	4162	4160	4157	4151	4141	4127	4111	4094	4075	4057	4038	4019	3999	3979	3958	3936	3914	3890	3864
180	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 610*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

Table--3

UNIT: cd

C(DEC) γ (DEC)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	753	753	752	752	752	752	752	752	752	752	752	752	752	752	751	751	751	751	751
5	738	737	736	736	735	735	736	736	736	737	737	738	738	738	739	739	739	739	739
10	704	703	703	703	705	707	709	712	714	717	720	723	726	728	730	731	732	731	731
15	656	655	655	657	661	666	671	678	684	691	698	704	710	716	721	724	726	724	721
20	597	597	598	603	608	616	625	634	645	657	668	679	689	698	706	711	714	710	704
25	538	538	541	545	551	559	569	579	591	604	616	629	641	653	662	670	673	669	662
30	472	473	475	479	483	488	494	500	508	517	526	536	547	559	569	577	582	576	567
35	378	381	386	389	389	390	390	391	390	389	389	390	395	403	411	417	422	415	407
40	260	266	274	277	274	271	267	262	257	252	249	246	246	251	255	259	262	258	253
45	165	170	176	179	178	175	171	167	163	158	154	151	150	153	156	159	161	158	155
50	112	115	118	119	119	117	115	113	110	108	105	104	103	105	106	108	109	108	106
55	82.4	83.3	84.2	84.3	83.4	82.2	80.9	79.5	78.1	76.8	75.7	74.9	75.1	76.1	77.3	78.4	79.3	78.5	77.5
60	65.1	65.0	65.0	64.8	64.2	63.6	63.0	62.3	61.8	61.3	60.9	60.7	60.7	61.0	61.4	61.8	62.1	61.9	61.6
65	51.6	51.2	51.0	50.8	50.7	50.7	50.7	50.7	50.6	50.4	50.3	50.2	50.2	50.3	50.4	50.6	50.7	50.7	50.7
70	40.3	39.9	39.6	39.5	39.6	39.7	39.9	40.1	40.2	40.2	40.2	40.2	40.2	40.1	40.0	40.0	39.9	40.0	40.2
75	30.6	30.2	29.9	29.7	29.6	29.6	29.6	29.7	29.8	29.9	29.9	30.0	29.8	29.5	29.3	29.0	28.8	29.1	29.4
80	20.6	20.3	20.0	19.8	19.7	19.6	19.6	19.6	19.7	19.7	19.7	19.7	19.6	19.3	19.0	18.7	18.6	18.8	19.1
85	10.4	10.2	9.96	9.84	9.81	9.80	9.80	9.79	9.73	9.65	9.55	9.43	9.25	9.02	8.81	8.64	8.56	8.74	9.00
90	0.61	0.63	0.64	0.66	0.67	0.69	0.71	0.75	0.82	0.89	0.97	1.04	1.07	1.07	1.07	1.07	1.08	1.17	1.27
95	25.4	25.2	26.5	27.1	26.7	26.4	26.1	25.9	25.3	24.6	23.8	23.0	22.1	21.1	20.2	19.5	19.2	20.1	21.3
100	70.0	52.3	41.2	34.5	30.9	30.3	31.6	34.0	33.0	32.0	31.0	30.1	29.1	28.2	27.4	26.9	26.8	27.7	28.9
105	184	126	81.0	52.9	40.6	36.9	39.1	44.6	42.5	41.0	39.8	39.0	38.2	37.2	36.5	36.2	36.3	37.2	38.6
110	421	313	219	152	111	84.4	68.8	61.4	52.9	48.6	47.4	48.2	48.2	47.1	46.4	46.2	46.6	47.6	49.2
115	737	598	471	363	274	200	141	96.5	74.1	62.9	60.2	63.0	64.0	61.8	60.7	60.6	61.4	59.9	59.9
120	1097	940	793	660	542	437	346	268	209	164	129	105	87.5	76.5	71.7	72.5	78.0	79.6	86.6
125	1446	1283	1128	985	855	736	628	533	455	390	336	294	262	240	228	226	232	244	264
130	1776	1616	1462	1319	1186	1064	953	854	772	702	645	598	562	536	521	517	524	542	571
135	2085	1931	1783	1645	1517	1398	1291	1196	1118	1052	998	955	920	895	880	876	883	902	933
140	2371	2227	2089	1960	1841	1732	1633	1546	1476	1417	1369	1331	1300	1275	1259	1254	1260	1280	1311
145	2636	2507	2383	2267	2161	2064	1976	1898	1837	1786	1744	1710	1681	1657	1642	1636	1640	1658	1687
150	2891	2777	2668	2567	2475	2392	2316	2249	2193	2146	2107	2075	2048	2027	2013	2008	2012	2028	2054
155	3135	3037	2943	2857	2778	2706	2641	2583	2534	2492	2457	2428	2404	2385	2372	2367	2370	2385	2408
160	3364	3281	3202	3130	3065	3006	2952	2903	2860	2822	2790	2763	2741	2724	2714	2709	2712	2725	2745
165	3562	3496	3432	3374	3321	3273	3230	3190	3155	3125	3099	3077	3059	3045	3036	3032	3034	3045	3061
170	3723	3676	3630	3588	3549	3513	3481	3452	3429	3410	3393	3380	3369	3360	3353	3351	3351	3357	3366
175	3838	3811	3786	3762	3741	3722	3705	3690	3678	3669	3661	3655	3649	3643	3639	3638	3638	3644	3652
180	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:229.64V I:0.4366A P:98.489W PF:0.9823 Freq:49.99Hz Lamp Flux:12640.3x1 lm																	
NAME:									TYPE:						WEIGHT:		
SPEC.:									DIM.: 610*160*28						SERIAL No.:		
MFR.: NLD-24-2028									SUR.:0.4*0.12						Shielding Angle:		

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	751	751	751	751	751	751	751	751	751	751	750	751	751	752	753				
5	739	739	739	739	739	739	739	739	739	739	739	740	741	742	744				
10	729	727	725	723	720	717	715	712	710	708	706	706	706	707	709				
15	716	711	704	697	690	683	676	669	663	657	653	651	651	652	655				
20	696	686	675	662	649	636	624	613	603	595	588	585	584	585	588				
25	651	639	624	609	593	577	562	550	539	530	524	520	519	521	525				
30	556	542	529	516	504	493	483	475	470	466	463	462	462	464	466				
35	397	387	381	378	377	378	379	382	385	387	390	390	389	386	382				
40	247	242	240	242	245	249	254	262	269	276	281	282	280	274	266				
45	152	149	148	151	154	159	163	169	174	179	182	183	180	175	169				
50	104	102	102	104	106	109	112	115	118	120	122	122	121	119	115				
55	76.4	75.5	75.3	76.1	77.1	78.4	79.8	81.5	83.2	84.7	85.9	86.4	86.3	85.7	84.6				
60	61.4	61.1	61.2	61.5	61.9	62.4	63.0	63.7	64.4	65.0	65.6	66.1	66.3	66.5	66.5				
65	50.6	50.7	50.8	51.0	51.3	51.6	51.8	51.8	51.8	51.8	51.9	52.1	52.4	52.8	53.2				
70	40.4	40.6	40.8	41.0	41.2	41.4	41.5	41.3	41.1	40.9	40.7	40.7	41.0	41.4	41.9				
75	29.8	30.2	30.5	30.7	30.9	31.0	31.1	31.0	30.9	30.8	30.8	30.9	31.3	31.7	32.3				
80	19.5	19.9	20.2	20.4	20.6	20.7	20.9	20.9	21.0	21.1	21.2	21.4	21.8	22.2	22.7				
85	9.31	9.66	9.98	10.3	10.5	10.8	11.1	11.2	11.4	11.5	11.7	11.9	12.1	12.3	12.6				
90	1.37	1.47	1.52	1.53	1.52	1.52	1.51	1.56	1.61	1.65	1.70	1.73	1.73	1.73	1.71				
95	22.7	24.2	25.6	26.8	28.0	29.0	30.1	29.1	28.7	29.4	31.8	37.5	46.8	58.7	73.3				
100	30.4	32.1	33.7	35.1	36.6	38.2	40.0	33.8	30.3	32.0	41.4	65.3	105	156	218				
105	40.2	42.1	42.5	41.9	42.7	45.8	52.3	55.5	66.2	87.3	122	179	260	359	477				
110	51.2	53.7	51.6	46.4	45.9	53.2	71.2	109	162	230	314	417	538	677	833				
115	62.4	68.2	74.2	82.4	99.8	130	175	254	351	463	590	728	876	1037	1210				
120	101	123	156	202	260	331	416	524	645	779	924	1077	1237	1407	1586				
125	295	337	392	459	539	631	736	859	994	1139	1293	1454	1620	1794	1975				
130	611	662	724	796	881	978	1087	1215	1355	1504	1662	1825	1992	2166	2346				
135	975	1027	1090	1162	1246	1341	1448	1572	1708	1852	2005	2162	2324	2491	2665				
140	1352	1404	1464	1534	1613	1703	1804	1920	2045	2180	2322	2468	2619	2775	2938				
145	1726	1775	1831	1896	1970	2053	2145	2251	2366	2489	2618	2750	2887	3028	3174				
150	2088	2132	2182	2241	2308	2383	2466	2560	2661	2769	2883	3002	3124	3251	3383				
155	2439	2478	2522	2573	2631	2695	2767	2848	2935	3028	3126	3228	3332	3441	3553				
160	2771	2804	2842	2886	2935	2990	3050	3117	3189	3265	3345	3427	3511	3598	3688				
165	3083	3109	3140	3174	3213	3256	3303	3356	3412	3472	3534	3598	3662	3729	3797				
170	3379	3396	3417	3442	3469	3500	3534	3571	3611	3652	3694	3737	3780	3824	3869				
175	3661	3672	3684	3696	3709	3723	3739	3759	3780	3803	3825	3848	3870	3892	3914				
180	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932	3932				

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.406.10  
Humidity:65.0%  
Test Distance:11.700m [K=0.8547]  
Remarks: