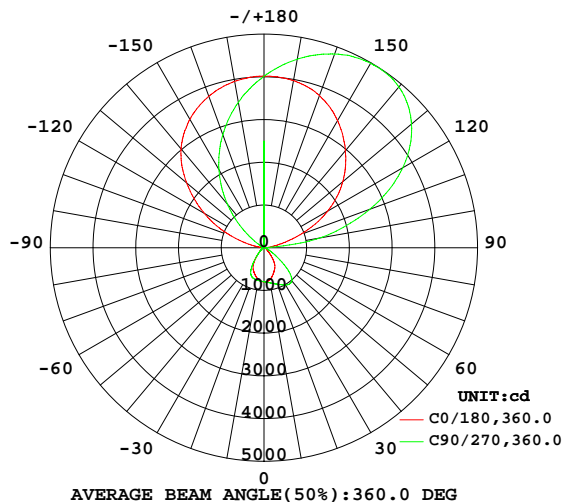


## LUMINAIRE PHOTOMETRIC TEST REPORT

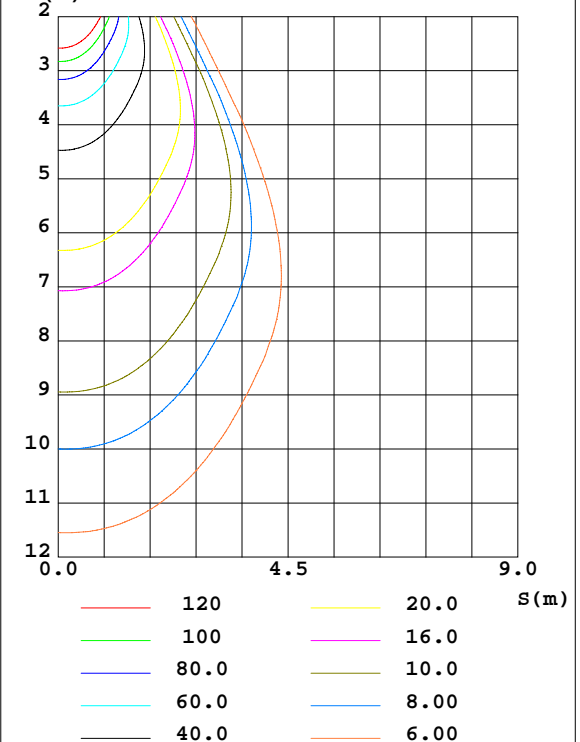
Test:U:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.69 lm/W			
MODEL		I <sub>max</sub> (cd)	4996	S/MH(C0/180)	1.01
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.06
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	13130	η UP,DN(C0-180)	63.6,7.2
NOMINAL FLUX(lm)	13129.8	CIE CLASS	SEMI-IND.	η UP,DN(C180-360)	24.8,4.4
LAMPS INSIDE	1	η up(%)	88.4	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230.0	η down(%)	11.6	CIBSE SHR MAX	1.15

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

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:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

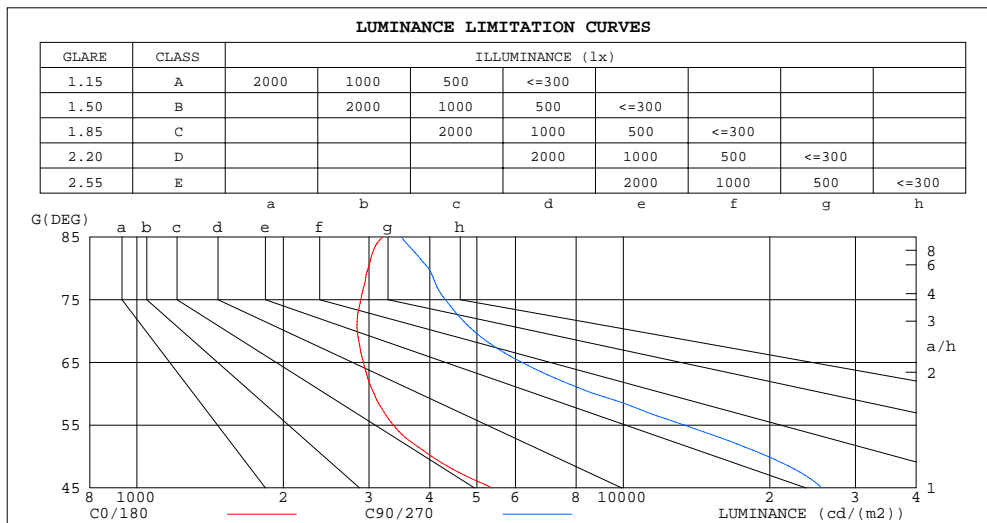
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	764.5	805.1	837.2	800.8	754.7	757.8	778.4	764.2	0- 10	75.40	75.40	0.57,0.57
20	643.4	779.9	908.2	793.2	649.0	673.2	755.8	674.8	10- 20	214.9	290.3	2.21,2.21
30	514.1	739.0	1008	763.4	513.1	537.2	619.5	527.5	20- 30	322.0	612.3	4.66,4.66
40	288.8	673.8	1014	699.9	276.6	280.5	283.5	280.0	30- 40	355.8	968.1	7.37,7.37
50	124.6	392.5	612.2	409.4	120.6	123.2	119.8	123.1	40- 50	274.7	1243	9.47,9.47
60	73.77	136.3	208.9	142.7	71.72	68.07	68.40	68.81	50- 60	146.8	1390	10.6,10.6
70	46.60	64.03	80.93	64.19	45.04	43.59	43.90	44.91	60- 70	75.56	1465	11.2,11.2
80	24.92	29.34	33.18	28.25	23.32	21.33	20.41	22.47	70- 80	41.71	1507	11.5,11.5
90	1.435	1.555	0.6959	0.3436	0.5241	0.8247	1.151	1.521	80- 90	13.90	1521	11.6,11.6
100	226.7	963.2	1321	829.0	183.9	41.02	28.17	37.96	90-100	180.2	1701	13,13
110	897.3	2169	2635	2010	820.3	72.62	49.04	69.31	100-110	785.7	2487	18.9,18.9
120	1727	3106	3751	3028	1613	336.8	83.67	374.0	110-120	1392	3879	29.5,29.5
130	2405	3809	4507	3871	2364	1020	559.5	1035	120-130	1874	5752	43.8,43.8
140	2965	4307	4911	4346	3023	1773	1334	1778	130-140	2133	7886	60.1,60.1
150	3444	4543	4990	4540	3472	2469	2111	2494	140-150	2065	9951	75.8,75.8
160	3791	4531	4825	4513	3778	3086	2822	3110	150-160	1695	11646	88.7,88.7
170	3976	4338	4482	4321	3957	3597	3460	3613	160-170	1103	12749	97.1,97.1
180	4020	4020	4020	4020	4020	4020	4020	4020	170-180	381.3	13130	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  
 $\gamma$  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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*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	3201	3496
80	2989	3981
75	2885	4306
70	2838	4929
65	2923	6184
60	3074	8706
55	3367	13345
50	4038	19841
45	5383	25601

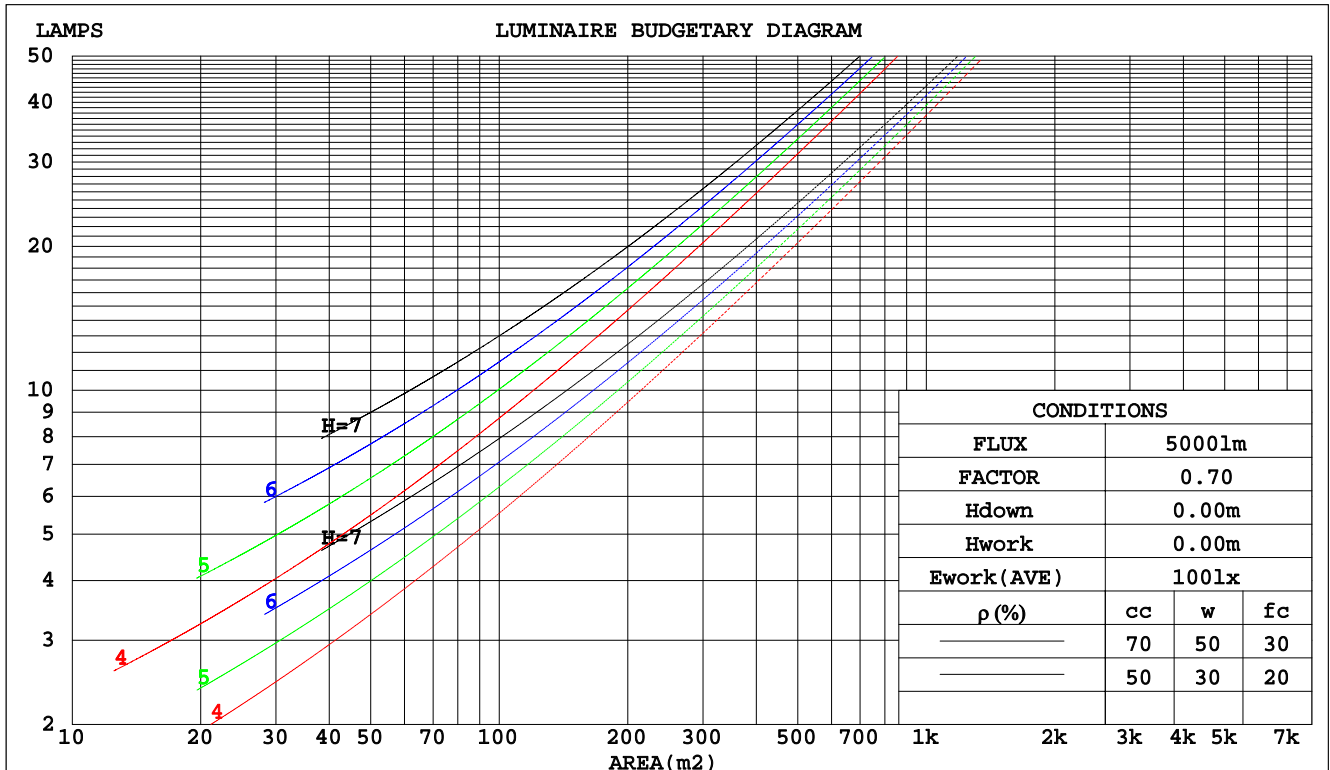
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*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	.41	.41	.41	.21	.21	.21	.12
1.0	.85	.82	.79	.75	.72	.69	.54	.53	.51	.36	.35	.34	.19	.18	.18	.10
2.0	.75	.69	.65	.65	.61	.57	.48	.45	.43	.32	.30	.29	.17	.16	.16	.09
3.0	.66	.59	.54	.58	.52	.48	.42	.39	.36	.28	.26	.24	.15	.14	.13	.08
4.0	.58	.51	.46	.51	.45	.41	.38	.34	.31	.25	.23	.21	.14	.13	.12	.07
5.0	.52	.44	.39	.46	.39	.35	.34	.30	.26	.23	.20	.18	.12	.11	.10	.06
6.0	.46	.39	.34	.41	.35	.30	.30	.26	.23	.20	.18	.16	.11	.10	.09	.06
7.0	.42	.34	.29	.37	.31	.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	.05
9.0	.34	.27	.23	.30	.24	.20	.23	.18	.16	.15	.13	.11	.09	.07	.07	.04
10.0	.31	.24	.20	.28	.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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 620*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	.059	.019	.048	.028	.009	
2.0	.236	.130	.040	.206	.113	.035	.148	.082	.026	.095	.053	.017	.046	.026	.008	
3.0	.219	.116	.035	.191	.102	.031	.138	.075	.023	.089	.049	.015	.043	.024	.007	
4.0	.203	.106	.031	.177	.093	.027	.128	.068	.020	.083	.044	.013	.041	.022	.007	
5.0	.189	.096	.028	.165	.085	.025	.120	.062	.018	.078	.041	.012	.038	.020	.006	
6.0	.176	.088	.025	.154	.078	.022	.112	.057	.017	.073	.038	.011	.036	.019	.006	
7.0	.165	.082	.023	.144	.072	.021	.105	.053	.015	.069	.035	.010	.034	.018	.005	
8.0	.155	.076	.021	.136	.067	.019	.099	.049	.014	.065	.033	.009	.032	.017	.005	
9.0	.146	.070	.020	.128	.062	.017	.093	.046	.013	.061	.031	.009	.031	.016	.004	
10.0	.137	.066	.018	.121	.058	.016	.088	.043	.012	.058	.029	.008	.029	.015	.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	.864	.864	.864	.739	.739	.739	.504	.504	.504	.290	.290	.290	.093	.093	.093	
1.0	.856	.836	.818	.732	.717	.704	.501	.494	.487	.288	.286	.283	.092	.092	.092	
2.0	.849	.816	.788	.727	.702	.682	.498	.486	.475	.287	.283	.279	.092	.091	.091	
3.0	.842	.801	.769	.722	.691	.667	.496	.480	.468	.286	.280	.276	.092	.091	.090	
4.0	.836	.790	.756	.717	.683	.656	.493	.476	.462	.285	.279	.273	.092	.091	.090	
5.0	.830	.782	.746	.713	.676	.649	.491	.473	.458	.284	.277	.272	.092	.091	.090	
6.0	.825	.775	.739	.709	.671	.644	.489	.470	.456	.284	.276	.271	.092	.090	.089	
7.0	.819	.769	.734	.705	.667	.640	.487	.468	.454	.283	.275	.270	.091	.090	.089	
8.0	.814	.765	.731	.701	.663	.637	.485	.466	.452	.282	.275	.269	.091	.090	.089	
9.0	.810	.761	.728	.697	.660	.635	.483	.464	.451	.281	.274	.269	.091	.090	.089	
10.0	.805	.757	.725	.694	.658	.633	.481	.463	.450	.281	.274	.268	.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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 620*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	8.5	9.2	9.7	10.3	12.0	14.3	14.9	15.5	16.1	17.8
3H	8.7	9.3	9.9	10.5	12.2	14.3	14.9	15.5	16.0	17.7
4H	8.9	9.4	10.1	10.6	12.3	14.3	14.8	15.5	16.0	17.7
6H	9.0	9.5	10.2	10.7	12.4	14.2	14.7	15.4	15.9	17.6
8H	9.1	9.6	10.3	10.7	12.5	14.2	14.6	15.4	15.8	17.5
12H	9.1	9.6	10.3	10.8	12.5	14.1	14.5	15.3	15.7	17.5
4H 2H	8.8	9.4	10.1	10.6	12.3	13.8	14.4	15.1	15.6	17.3
3H	9.2	9.6	10.4	10.8	12.5	13.9	14.4	15.2	15.6	17.3
4H	9.4	9.8	10.6	11.0	12.7	14.0	14.4	15.2	15.6	17.3
6H	9.6	10.0	10.9	11.2	12.9	14.0	14.4	15.3	15.6	17.3
8H	9.7	10.1	11.0	11.3	13.0	14.0	14.3	15.2	15.5	17.3
12H	9.8	10.1	11.1	11.3	13.1	14.0	14.2	15.2	15.5	17.2
8H 4H	9.5	9.8	10.7	11.0	12.7	13.8	14.1	15.0	15.3	17.0
6H	9.8	10.1	11.1	11.3	13.1	13.8	14.1	15.1	15.3	17.1
8H	10.0	10.2	11.3	11.5	13.2	13.9	14.1	15.1	15.3	17.1
12H	10.2	10.3	11.4	11.6	13.4	13.9	14.1	15.2	15.3	17.1
12H 4H	9.4	9.7	10.7	10.9	12.7	13.7	13.9	14.9	15.2	16.9
6H	9.8	10.0	11.1	11.3	13.1	13.8	14.0	15.0	15.2	17.0
8H	10.0	10.2	11.3	11.5	13.3	13.8	14.0	15.1	15.3	17.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.3					+ 0.8 / - 1.1				
1.5H	+ 2.0 / - 1.4					+ 1.2 / - 1.3				
2.0H	+ 1.7 / - 1.0					+ 3.0 / - 2.6				

CIE Pub.117, 13130 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 8.9$ )

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

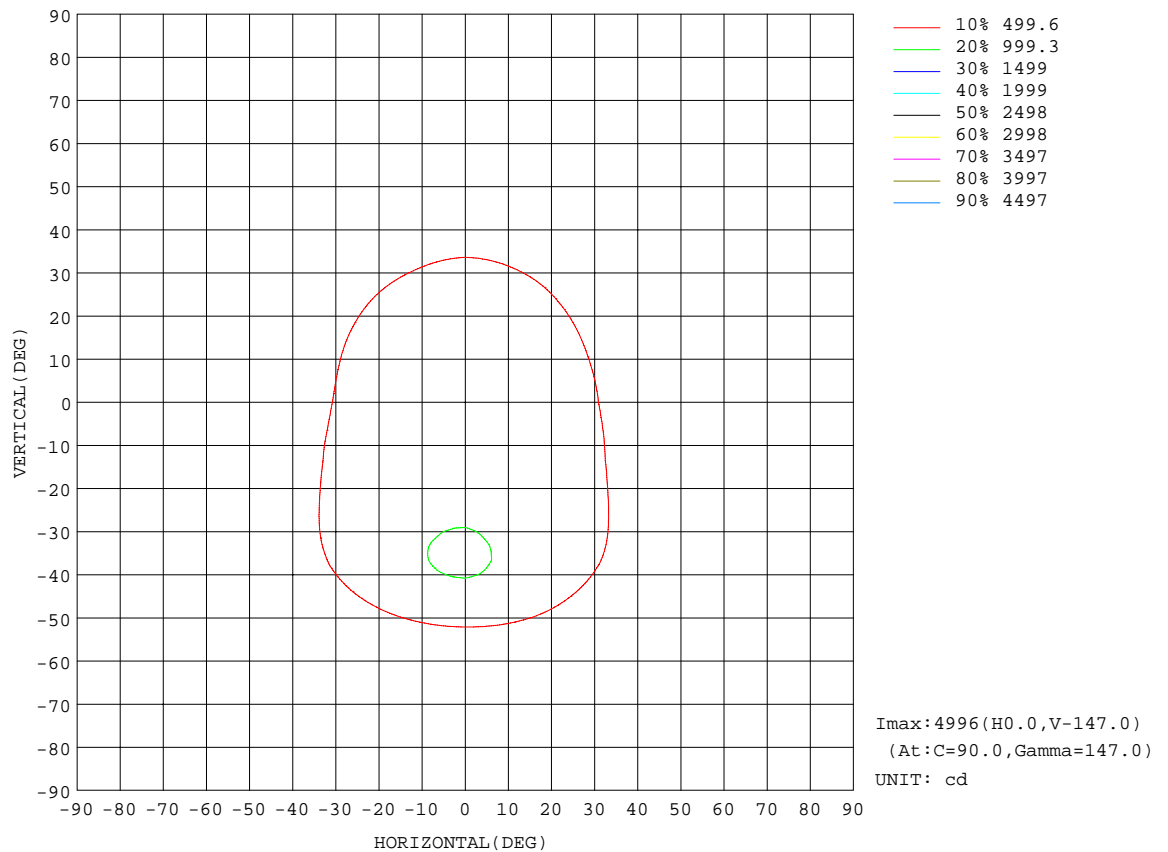
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	35	24	19	31	22	17	24	18	14	6
0.80	44	32	26	39	29	23	29	23	19	7
1.00	51	39	32	45	35	29	34	27	23	8
1.25	58	46	39	51	41	35	38	32	27	8
1.50	63	52	45	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	40	10
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	75	70	66	54	52	49	11
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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



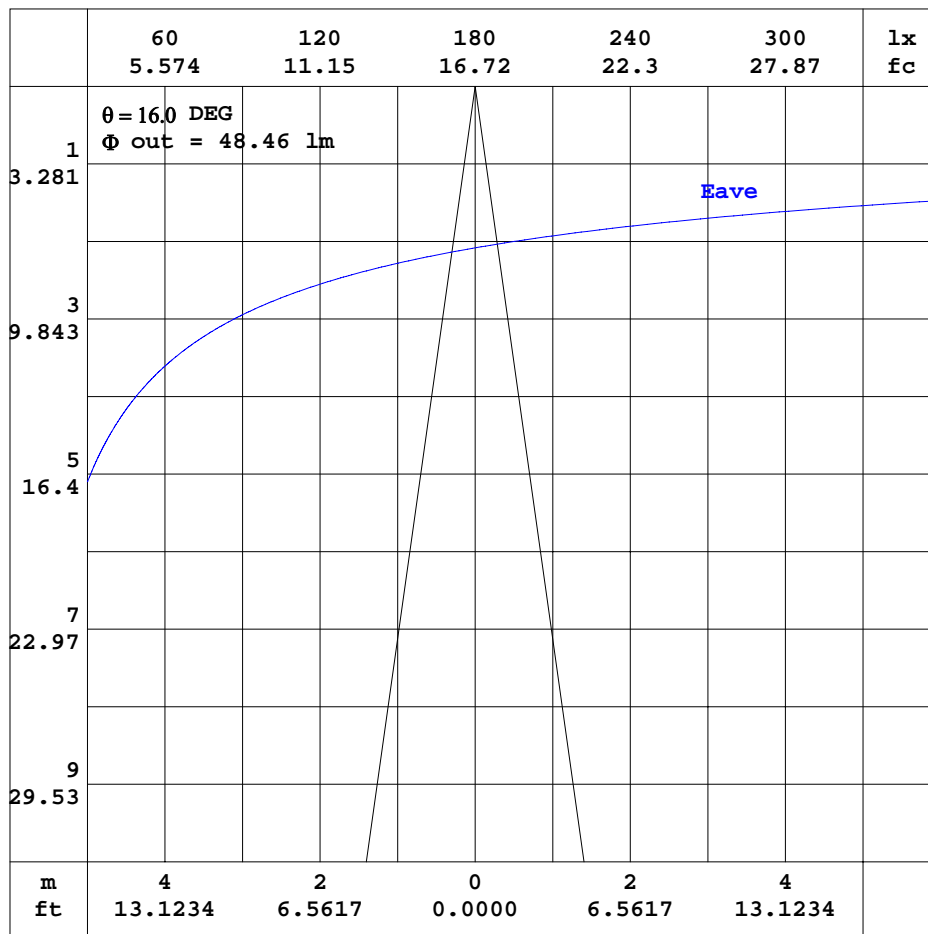
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-08-28

$\gamma$  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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:



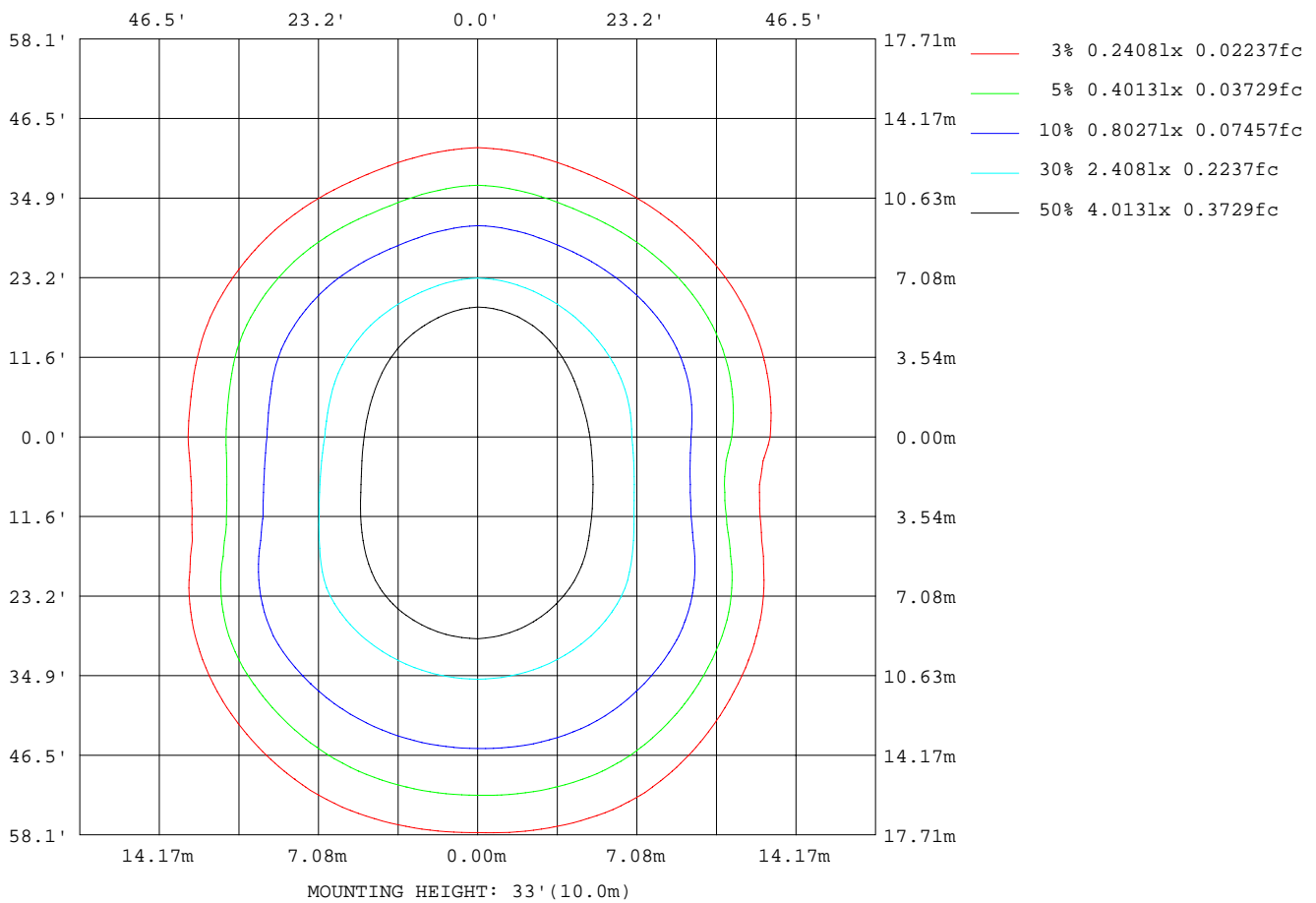
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

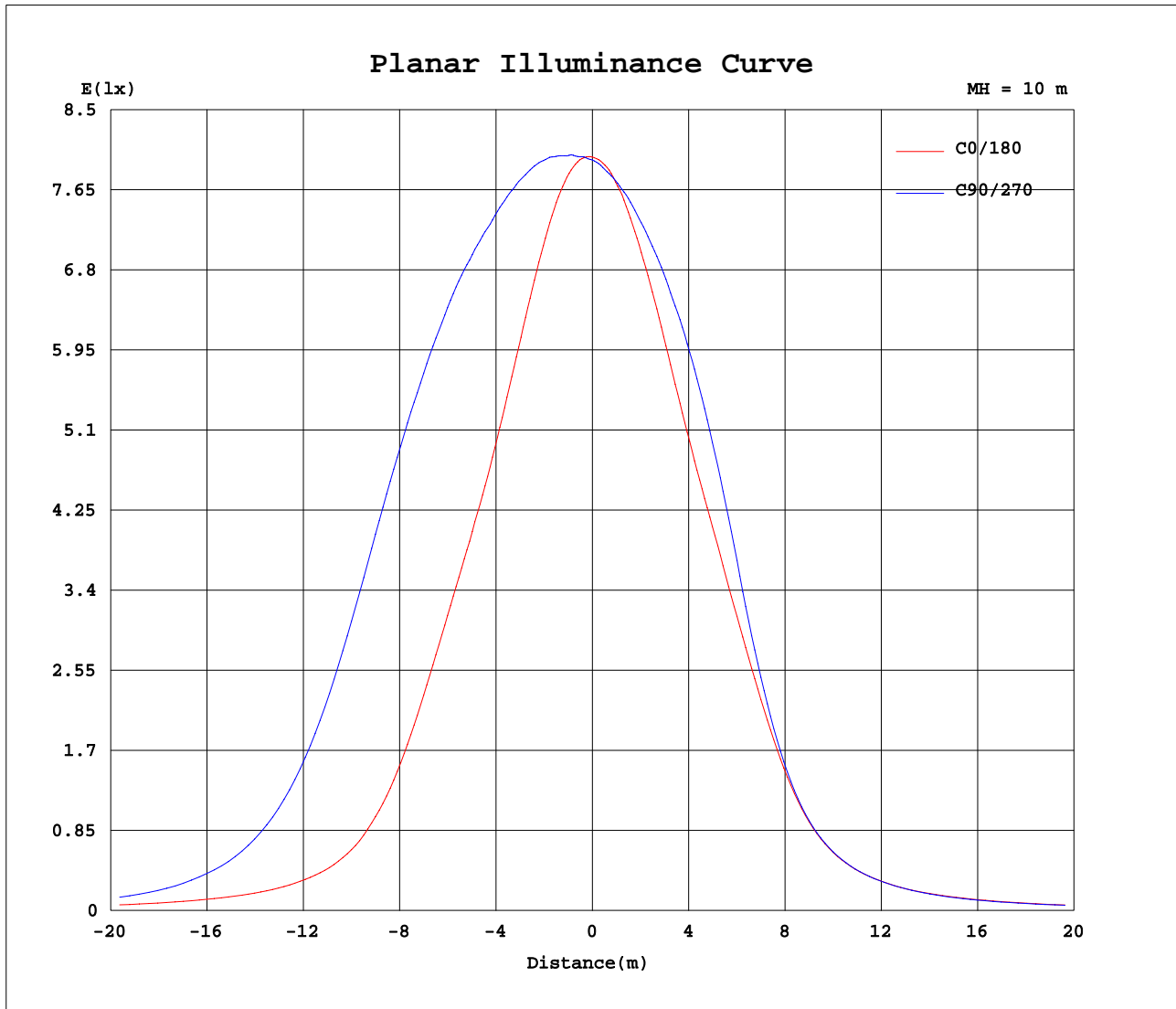
AvgL	cd/m2
L_0~180(65)av	2879
L_0~180(75)av	2822
L_0~180(85)av	3010
L_90~270(65)av	4463
L_90~270(75)av	3429
L_90~270(85)av	2879
L_45(65)av	3628
L_45(75)av	3130
L_45(85)av	2976

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*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	800	800	800	800	800	800	800	799	799	799	799	799	799	799	798	798	798	797	797
5	795	796	798	799	800	802	803	804	806	807	808	809	810	811	811	812	812	812	811
10	765	767	770	774	778	783	788	793	799	805	812	818	824	829	833	836	837	838	837
15	710	715	721	729	737	748	759	772	784	797	811	824	836	847	855	862	866	869	870
20	643	650	659	669	682	698	717	737	758	780	803	825	846	865	880	892	900	906	908
25	579	587	598	612	629	649	673	699	727	757	790	824	856	885	910	928	942	951	955
30	514	525	539	556	578	603	633	666	702	739	780	821	861	898	932	960	982	999	1008
35	417	428	446	468	496	532	574	620	669	718	765	812	856	898	937	973	1002	1024	1038
40	289	297	315	340	374	422	480	544	609	674	727	777	823	865	906	944	975	999	1014
45	183	178	186	205	236	286	351	423	497	569	623	673	717	755	790	820	844	860	869
50	125	115	115	125	145	179	227	280	337	393	439	481	519	551	576	594	605	611	612
55	92.7	87.2	86.9	91.7	102	119	142	169	199	229	260	290	317	341	357	365	369	370	367
60	73.8	71.8	72.1	74.6	79.3	86.7	96.7	109	122	136	154	171	188	202	211	213	213	212	209
65	59.3	58.9	59.5	61.1	63.6	67.2	71.9	77.4	83.6	90.5	99.4	108	117	124	128	129	128	127	125
70	46.6	46.9	47.6	48.7	50.2	52.2	54.6	57.4	60.6	64.0	68.6	73.1	77.4	81.1	83.0	83.2	82.7	81.9	80.9
75	35.8	36.0	36.4	37.0	37.8	38.8	40.1	41.6	43.3	45.2	47.8	50.4	52.9	54.9	55.8	55.6	55.0	54.3	53.5
80	24.9	25.1	25.3	25.6	26.0	26.5	27.0	27.7	28.4	29.3	30.8	32.4	33.8	35.0	35.4	35.0	34.4	33.8	33.2
85	13.4	13.6	13.8	14.0	14.1	14.2	14.2	14.3	14.3	14.4	14.7	15.1	15.4	15.6	15.7	15.4	15.2	14.9	14.6
90	1.43	1.51	1.57	1.62	1.65	1.66	1.66	1.64	1.60	1.55	1.49	1.41	1.33	1.24	1.13	1.01	0.90	0.79	0.70
95	69.2	112	153	192	230	271	314	351	380	398	383	357	324	288	257	232	210	190	172
100	227	322	415	503	589	672	754	830	900	963	1008	1047	1083	1116	1161	1217	1266	1303	1321
105	516	662	800	931	1054	1172	1284	1386	1477	1555	1599	1634	1663	1692	1746	1823	1894	1951	1985
110	897	1065	1227	1382	1529	1676	1820	1952	2069	2169	2214	2244	2268	2290	2346	2434	2518	2588	2635
115	1328	1517	1697	1867	2026	2178	2321	2452	2569	2670	2732	2782	2826	2868	2936	3029	3115	3187	3236
120	1727	1919	2102	2275	2438	2592	2737	2872	2995	3106	3194	3273	3344	3409	3487	3575	3652	3713	3751
125	2083	2273	2455	2628	2792	2948	3095	3232	3361	3481	3592	3693	3786	3871	3954	4032	4097	4145	4171
130	2405	2590	2767	2937	3100	3256	3405	3547	3682	3809	3934	4049	4155	4249	4332	4401	4455	4490	4507
135	2697	2870	3039	3203	3363	3519	3673	3820	3961	4094	4220	4336	4440	4532	4609	4669	4714	4742	4752
140	2965	3125	3283	3437	3589	3741	3891	4036	4175	4307	4428	4539	4638	4724	4793	4846	4883	4905	4911
145	3217	3363	3507	3650	3790	3931	4073	4210	4340	4463	4573	4673	4760	4835	4894	4937	4967	4983	4986
150	3444	3575	3704	3831	3956	4080	4204	4324	4437	4543	4638	4723	4798	4861	4912	4948	4974	4987	4990
155	3640	3753	3863	3971	4076	4181	4284	4382	4476	4563	4641	4711	4772	4824	4866	4898	4919	4932	4935
160	3791	3883	3973	4060	4145	4228	4310	4388	4462	4531	4593	4648	4697	4739	4772	4797	4814	4823	4825
165	3904	3973	4039	4103	4166	4228	4288	4346	4401	4451	4497	4538	4574	4605	4630	4649	4662	4669	4671
170	3976	4021	4065	4108	4150	4190	4230	4268	4304	4338	4368	4396	4420	4441	4457	4469	4477	4481	4482
175	4011	4034	4056	4077	4098	4117	4136	4154	4172	4188	4206	4222	4236	4248	4256	4260	4262	4262	4260
180	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*160*28	SERIAL No.:
MFR.: NLD-24-2028	SUR.:0.4*0.12	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	797	797	797	796	796	796	795	795	795	794	794	794	794	795	796	797	799	800	800
5	811	810	809	807	806	804	802	801	799	796	794	792	790	788	788	788	787	787	786
10	836	834	831	828	823	818	813	807	801	794	787	780	773	768	764	760	757	755	752
15	868	865	860	854	845	836	825	813	801	787	772	759	745	735	726	719	713	709	704
20	907	902	895	885	871	854	835	815	793	770	748	726	706	689	675	664	656	649	644
25	954	947	936	920	899	872	843	812	780	749	718	689	662	640	622	608	596	588	583
30	1006	996	980	957	926	889	849	807	763	723	684	647	613	584	560	540	525	513	508
35	1034	1021	1000	971	935	892	845	795	744	693	642	593	548	508	475	447	424	407	402
40	1009	994	970	938	900	858	810	757	700	633	565	498	436	385	346	316	292	277	274
45	864	851	831	804	773	737	695	646	592	517	439	364	294	243	213	192	180	174	174
50	609	601	588	570	548	520	488	451	409	352	293	236	184	149	132	123	120	121	120
55	366	362	355	346	332	315	294	271	246	213	181	150	122	103	94.6	90.3	89.1	90.0	89.5
60	210	210	208	205	197	186	172	158	143	127	113	98.9	86.9	78.8	74.8	72.6	71.7	71.7	71.1
65	126	127	127	126	123	116	109	101	92.5	85.1	78.1	71.8	66.2	62.3	60.1	58.7	57.9	57.5	56.8
70	81.6	82.2	82.4	82.1	80.3	76.8	72.9	68.6	64.2	60.5	57.0	53.7	50.9	48.8	47.4	46.3	45.6	45.0	44.4
75	54.1	54.7	55.2	55.3	54.3	52.2	49.8	47.2	44.5	42.5	40.6	38.9	37.4	36.3	35.6	35.0	34.6	34.3	33.8
80	33.6	34.1	34.5	34.7	34.2	32.9	31.4	29.8	28.2	27.2	26.4	25.6	25.0	24.5	24.2	23.8	23.6	23.3	22.9
85	14.7	14.8	14.8	14.9	14.7	14.3	13.9	13.4	13.0	12.7	12.5	12.4	12.2	12.1	12.1	12.0	11.9	11.8	11.5
90	0.65	0.63	0.60	0.59	0.55	0.49	0.44	0.39	0.34	0.32	0.31	0.31	0.33	0.35	0.39	0.43	0.48	0.52	0.55
95	156	144	136	133	144	166	189	212	229	223	210	192	169	144	118	91.9	67.9	47.1	39.1
100	1279	1220	1149	1073	1012	966	922	877	829	768	702	633	561	484	403	324	250	184	139
105	1934	1860	1773	1679	1609	1564	1520	1474	1420	1337	1245	1144	1037	923	805	686	569	458	356
110	2595	2531	2450	2358	2281	2220	2156	2087	2010	1909	1799	1680	1552	1414	1267	1118	968	820	675
115	3209	3156	3083	2995	2907	2823	2731	2634	2529	2419	2301	2176	2042	1894	1733	1567	1398	1228	1058
120	3727	3678	3609	3525	3437	3348	3250	3144	3028	2902	2767	2624	2473	2312	2142	1967	1790	1613	1434
125	4149	4106	4046	3970	3890	3808	3715	3610	3493	3354	3204	3044	2877	2704	2528	2350	2170	1990	1811
130	4487	4449	4395	4327	4253	4176	4086	3985	3871	3732	3582	3422	3254	3080	2903	2724	2543	2364	2187
135	4736	4703	4656	4595	4525	4448	4359	4259	4147	4019	3880	3731	3575	3411	3242	3069	2894	2720	2549
140	4899	4871	4831	4777	4712	4637	4551	4454	4346	4225	4096	3957	3812	3661	3505	3346	3185	3023	2862
145	4977	4956	4922	4877	4818	4747	4666	4574	4473	4363	4244	4119	3988	3850	3708	3562	3416	3268	3122
150	4983	4966	4937	4898	4847	4784	4712	4630	4540	4441	4336	4224	4107	3985	3859	3731	3601	3472	3344
155	4928	4913	4888	4854	4811	4758	4696	4627	4550	4464	4373	4276	4175	4071	3964	3857	3748	3639	3530
160	4821	4809	4790	4763	4728	4684	4633	4576	4513	4444	4370	4292	4210	4127	4041	3954	3866	3778	3691
165	4667	4657	4642	4621	4594	4562	4524	4482	4436	4385	4331	4274	4213	4149	4083	4015	3946	3878	3811
170	4479	4473	4464	4450	4432	4409	4383	4353	4321	4288	4253	4215	4176	4135	4092	4047	4002	3957	3912
175	4259	4257	4253	4247	4239	4228	4215	4201	4185	4168	4150	4131	4111	4091	4069	4048	4026	4003	3981
180	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 620*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	800	800	800	800	800	799	799	799	799	799	799	799	798	798	798	797	797	797	797
5	785	784	783	782	781	781	781	781	781	782	783	783	784	785	786	786	786	786	786
10	751	750	749	749	751	753	755	758	760	763	766	769	771	774	776	777	778	779	779
15	702	700	699	701	704	709	714	720	726	733	740	746	752	758	764	768	770	770	769
20	641	640	640	643	649	656	664	673	684	695	706	717	728	737	746	752	756	755	751
25	580	580	582	586	592	600	609	619	630	641	653	665	678	690	701	710	716	713	707
30	506	506	509	513	518	524	530	537	544	552	561	569	580	593	604	613	620	616	609
35	401	403	408	411	413	415	416	417	417	416	416	417	422	430	438	445	451	447	441
40	276	281	289	292	290	288	284	280	276	272	268	265	266	270	275	280	284	281	277
45	177	182	188	191	190	188	184	181	176	171	167	164	163	166	170	173	176	174	171
50	122	124	127	129	128	127	125	123	120	118	115	113	113	115	116	118	120	118	117
55	89.8	90.5	91.3	91.3	90.4	89.3	88.1	86.8	85.3	84.0	83.0	82.2	82.5	83.7	85.0	86.3	87.3	86.5	85.4
60	70.8	70.7	70.7	70.4	69.9	69.3	68.7	68.1	67.5	67.1	66.7	66.5	66.6	67.0	67.5	68.0	68.4	68.1	67.8
65	56.2	55.8	55.5	55.4	55.3	55.2	55.2	55.2	55.1	55.0	54.9	54.9	54.9	55.1	55.3	55.5	55.6	55.6	55.5
70	43.8	43.4	43.1	43.0	43.1	43.2	43.4	43.6	43.7	43.7	43.8	43.8	43.8	43.8	43.8	43.9	43.9	44.0	44.1
75	33.3	32.8	32.5	32.2	32.2	32.2	32.2	32.3	32.4	32.5	32.6	32.6	32.5	32.3	32.0	31.8	31.7	31.9	32.2
80	22.4	22.0	21.7	21.4	21.3	21.3	21.3	21.3	21.4	21.4	21.4	21.4	21.3	21.0	20.8	20.5	20.4	20.6	20.9
85	11.3	11.0	10.8	10.7	10.7	10.7	10.7	10.7	10.6	10.5	10.4	10.2	10.1	9.86	9.67	9.53	9.46	9.64	9.90
90	0.57	0.59	0.61	0.64	0.68	0.72	0.77	0.82	0.90	0.99	1.06	1.13	1.16	1.16	1.15	1.14	1.15	1.24	1.33
95	35.0	33.8	34.4	34.5	33.5	32.8	32.2	31.6	30.5	29.3	28.1	26.8	25.3	23.6	22.1	20.9	20.1	20.6	21.4
100	103	75.0	55.0	42.9	37.4	36.3	37.9	41.0	39.5	37.9	36.4	34.9	33.3	31.6	30.1	28.9	28.2	28.6	29.5
105	263	183	115	73.0	54.4	47.2	48.1	53.7	50.3	47.9	46.2	45.0	43.5	41.7	40.2	39.0	38.3	38.7	39.5
110	537	411	299	215	158	118	89.9	72.6	60.4	54.5	53.2	54.8	54.9	52.6	50.8	49.6	49.0	49.4	50.3
115	894	737	591	463	356	264	189	130	98.5	81.0	73.7	73.6	72.4	68.5	66.3	65.7	66.1	64.5	64.3
120	1260	1091	930	784	652	533	428	337	267	210	166	132	108	92.0	83.3	80.9	83.7	82.9	87.5
125	1635	1465	1302	1149	1009	879	760	653	561	480	412	356	313	282	263	253	254	259	273
130	2015	1847	1686	1533	1390	1257	1133	1020	921	833	757	693	642	603	576	562	560	570	592
135	2382	2219	2061	1911	1769	1636	1512	1399	1301	1214	1138	1075	1023	984	957	942	939	951	974
140	2703	2548	2397	2255	2121	1995	1879	1773	1680	1598	1527	1467	1418	1379	1352	1337	1334	1347	1371
145	2978	2837	2701	2571	2448	2332	2225	2128	2044	1970	1907	1853	1808	1773	1748	1733	1730	1743	1766
150	3218	3095	2976	2861	2753	2650	2555	2469	2394	2329	2272	2225	2184	2152	2129	2115	2111	2122	2143
155	3423	3318	3216	3119	3027	2941	2861	2788	2725	2669	2621	2579	2543	2513	2490	2477	2472	2481	2500
160	3604	3520	3438	3359	3284	3213	3147	3086	3032	2984	2942	2906	2876	2852	2834	2824	2822	2830	2845
165	3746	3682	3620	3560	3503	3450	3400	3354	3314	3278	3246	3219	3196	3177	3163	3155	3152	3157	3169
170	3868	3824	3781	3740	3701	3664	3629	3597	3569	3545	3523	3504	3488	3476	3467	3461	3460	3463	3471
175	3958	3936	3914	3893	3874	3856	3838	3822	3807	3793	3781	3770	3762	3755	3750	3748	3747	3751	3756
180	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020

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:229.65V I:0.4353A P:98.211W PF:0.9824 Freq:49.99Hz Lamp Flux:13129.8x1 lm																	
NAME:									TYPE:						WEIGHT:		
SPEC.:									DIM.: 620*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	797	796	796	796	795	795	795	794	794	794	794	795	796	797	798				
5	786	786	786	786	786	786	786	786	786	786	786	787	788	790	793				
10	778	777	775	773	770	767	764	761	758	756	754	754	755	757	760				
15	766	761	756	749	742	734	726	719	712	707	702	700	700	701	705				
20	745	737	726	714	701	688	675	664	653	645	638	634	633	634	638				
25	698	687	673	658	643	627	612	599	588	578	571	567	566	568	572				
30	600	588	576	563	551	539	527	519	513	507	504	502	503	505	509				
35	434	426	420	417	415	414	413	415	417	420	422	423	423	421	419				
40	273	269	268	269	272	275	280	287	295	302	307	310	308	304	298				
45	168	165	165	168	171	175	180	186	192	197	201	202	200	196	191				
50	115	113	113	115	117	120	123	127	130	133	135	135	134	132	129				
55	84.3	83.3	83.1	83.8	84.9	86.3	87.8	89.7	91.5	93.2	94.6	95.4	95.4	95.0	94.1				
60	67.4	67.1	67.0	67.3	67.7	68.2	68.8	69.6	70.4	71.2	72.0	72.6	73.1	73.4	73.6				
65	55.4	55.3	55.4	55.5	55.7	56.0	56.2	56.3	56.3	56.4	56.6	56.9	57.4	57.9	58.5				
70	44.2	44.3	44.4	44.6	44.7	44.8	44.9	44.8	44.6	44.4	44.4	44.5	44.8	45.3	45.9				
75	32.5	32.9	33.1	33.3	33.4	33.5	33.5	33.4	33.3	33.3	33.3	33.5	33.9	34.4	35.1				
80	21.3	21.6	21.9	22.1	22.2	22.4	22.5	22.5	22.6	22.7	22.8	23.1	23.4	23.8	24.3				
85	10.2	10.5	10.8	11.1	11.3	11.5	11.7	11.9	12.0	12.1	12.3	12.5	12.7	12.9	13.1				
90	1.43	1.52	1.56	1.56	1.55	1.54	1.52	1.54	1.57	1.59	1.61	1.61	1.59	1.55	1.50				
95	22.5	23.8	24.9	25.8	26.7	27.5	28.2	27.5	27.1	27.5	29.0	32.9	39.3	47.5	57.4				
100	30.6	32.0	33.2	34.3	35.5	36.7	38.0	33.3	30.6	31.9	38.8	56.7	86.2	124	171				
105	40.7	42.2	42.7	42.5	43.3	45.6	50.0	48.6	53.1	66.6	92.3	139	208	293	396				
110	51.8	53.8	52.3	48.6	48.7	54.8	69.3	96.0	135	188	257	346	456	585	732				
115	66.1	70.4	73.3	76.7	88.5	112	151	222	311	415	536	668	812	971	1142				
120	98.6	118	145	183	233	296	374	477	596	728	872	1024	1185	1355	1536				
125	298	333	378	435	505	587	683	800	930	1072	1223	1381	1545	1716	1896				
130	625	669	721	782	854	938	1035	1153	1282	1423	1572	1727	1886	2052	2225				
135	1009	1054	1106	1165	1234	1314	1406	1517	1638	1770	1910	2055	2206	2363	2527				
140	1405	1449	1499	1555	1619	1694	1778	1879	1990	2110	2238	2372	2510	2655	2807				
145	1798	1840	1887	1939	1999	2068	2146	2236	2336	2443	2558	2678	2803	2935	3073				
150	2172	2210	2253	2302	2359	2423	2494	2576	2666	2762	2864	2970	3081	3197	3318				
155	2527	2561	2601	2645	2695	2752	2816	2888	2966	3050	3139	3232	3328	3428	3532				
160	2868	2896	2929	2966	3008	3056	3110	3172	3239	3311	3386	3463	3541	3622	3705				
165	3185	3207	3232	3261	3295	3332	3375	3423	3476	3531	3590	3649	3710	3773	3838				
170	3483	3497	3515	3535	3558	3584	3613	3647	3683	3722	3763	3804	3845	3888	3931				
175	3763	3772	3781	3789	3799	3811	3824	3842	3860	3881	3902	3923	3944	3966	3988				
180	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020				

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: