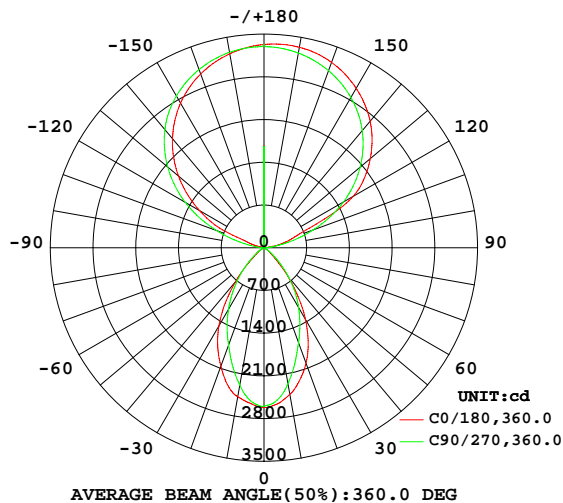


## LUMINAIRE PHOTOMETRIC TEST REPORT

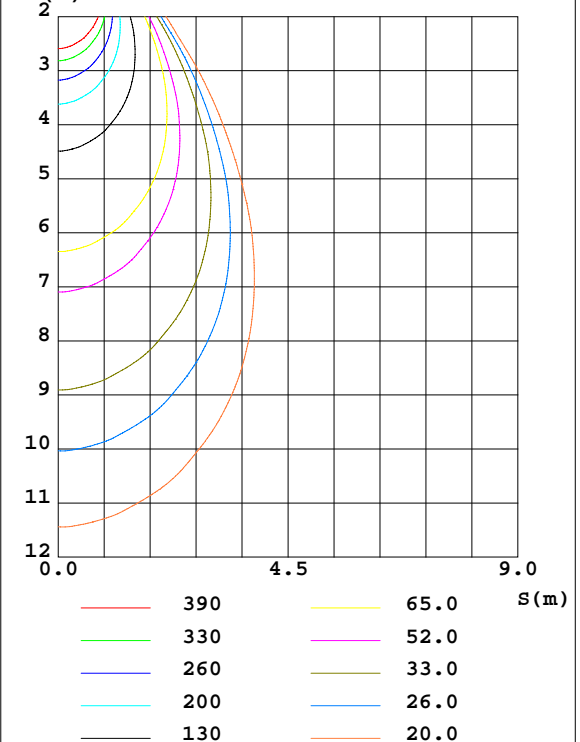
Test:U:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.75 lm/W			
MODEL		I <sub>max</sub> (cd)	3347	S/MH(C0/180)	0.95
NOMINAL POWER(W)	80	LOR(%)	100.0	S/MH(C90/270)	0.79
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	11584	η UP,DN(C0-180)	39.5,10.5
NOMINAL FLUX(lm)	11583.7	CIE CLASS	SEMI-IND.	η UP,DN(C180-360)	39.4,10.7
LAMPS INSIDE	1	η up(%)	78.8	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.0	η down(%)	21.2	CIBSE SHR MAX	0.85

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:2024-01-17

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:

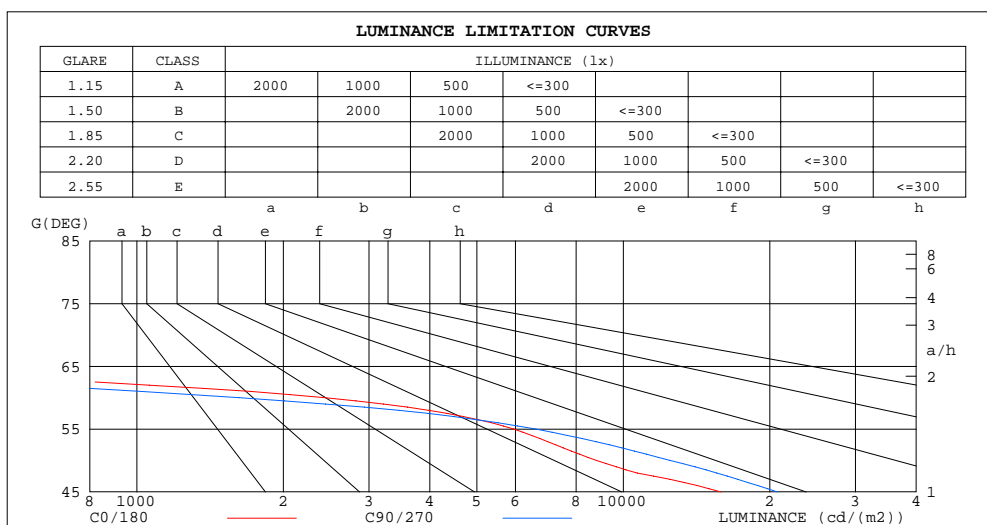
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	2441	2352	2263	2335	2479	2389	2285	2339	0- 10	236.0	236.0	2.04,2.04
20	2014	1688	1656	1714	2066	1809	1698	1698	10- 20	583.7	819.8	7.08,7.08
30	1361	1042	1136	1115	1478	1162	1164	1073	20- 30	679.2	1499	12.9,12.9
40	605.8	519.1	632.9	585.9	725.6	605.5	651.9	533.4	30- 40	549.8	2049	17.7,17.7
50	152.9	178.6	216.5	210.6	188.3	220.5	238.3	189.3	40- 50	288.5	2337	20.2,20.2
60	32.83	35.30	21.93	47.72	60.55	53.18	33.88	41.19	50- 60	96.45	2434	21,21
70	0.9008	2.405	1.933	4.696	3.832	5.033	0.5583	2.328	60- 70	12.81	2447	21.1,21.1
80	0.9795	1.564	1.778	4.003	6.145	2.397	0.4276	0.8601	70- 80	2.247	2449	21.1,21.1
90	2.268	1.486	1.469	5.730	9.012	0.9364	4.309	1.392	80- 90	2.824	2452	21.2,21.2
100	169.0	181.6	252.7	76.05	42.72	69.80	219.3	169.6	90-100	52.79	2504	21.6,21.6
110	555.4	898.6	858.5	643.5	331.9	624.9	825.0	848.3	100-110	396.4	2901	25,25
120	1687	1607	1506	1278	1221	1264	1489	1618	110-120	1069	3970	34.3,34.3
130	2274	2169	2058	1869	1829	1866	2058	2198	120-130	1572	5542	47.8,47.8
140	2707	2607	2505	2366	2334	2367	2526	2646	130-140	1761	7304	63.1,63.1
150	3020	2934	2846	2754	2735	2752	2872	2973	140-150	1686	8989	77.6,77.6
160	3234	3154	3089	3036	3033	3027	3109	3192	150-160	1380	10370	89.5,89.5
170	3336	3271	3241	3220	3229	3203	3252	3303	160-170	901.2	11271	97.3,97.3
180	3331	3331	3331	3331	3331	3331	3331	3331	170-180	312.8	11584	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:2024-01-17

$\gamma$  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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	638	737
80	209	379
75	135	263
70	98	209
65	214	255
60	2432	1625
55	5951	6608
50	8807	12473
45	15876	20736

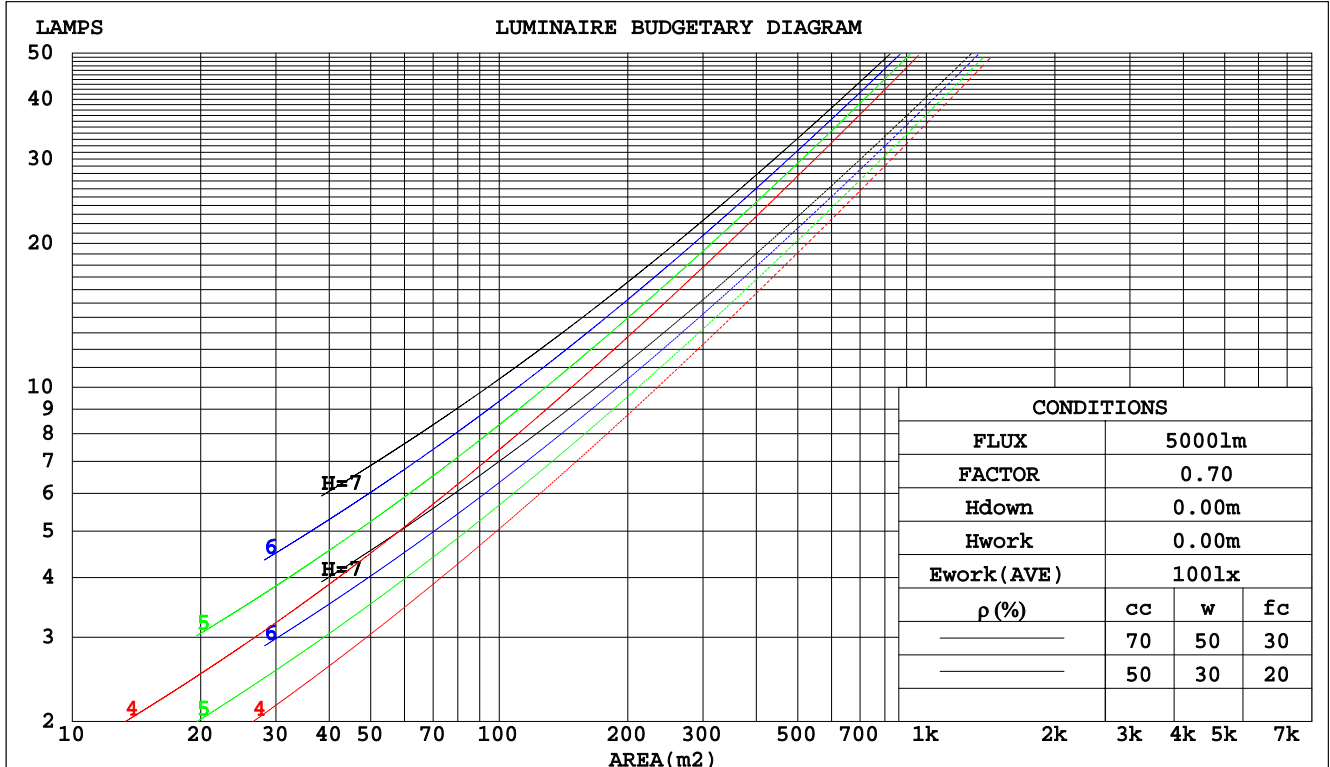
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

$\gamma$  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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	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	1.00	1.00	1.00	.89	.89	.89	.67	.67	.67	.48	.48	.48	.30	.30	.30	.21
1.0	.88	.85	.82	.79	.76	.73	.60	.58	.57	.43	.42	.41	.27	.27	.27	.20
2.0	.78	.73	.69	.70	.65	.62	.54	.51	.49	.39	.37	.36	.25	.25	.24	.18
3.0	.70	.63	.58	.62	.57	.53	.48	.45	.42	.35	.33	.32	.23	.22	.22	.17
4.0	.62	.55	.50	.56	.50	.46	.44	.40	.37	.32	.30	.28	.22	.21	.20	.15
5.0	.56	.49	.44	.50	.44	.40	.39	.35	.32	.29	.27	.25	.20	.19	.18	.14
6.0	.51	.43	.38	.45	.39	.35	.36	.32	.29	.27	.24	.22	.19	.17	.16	.13
7.0	.46	.39	.34	.41	.35	.31	.33	.29	.26	.25	.22	.20	.17	.16	.15	.12
8.0	.42	.35	.30	.38	.32	.28	.30	.26	.23	.23	.20	.18	.16	.15	.14	.11
9.0	.38	.32	.27	.35	.29	.25	.28	.24	.21	.21	.19	.17	.15	.14	.13	.10
10.0	.35	.29	.24	.32	.26	.23	.26	.22	.19	.20	.17	.15	.14	.13	.12	.10



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 1045*41*38		SERIAL No.:	
MFR.: NLD23-0014-02		SUR.:0.795*0.034		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	.243	.138	.044	.212	.121	.038	.155	.089	.028	.102	.059	.019	.053	.031	.010	
2.0	.225	.124	.038	.197	.109	.033	.145	.081	.025	.096	.054	.017	.052	.029	.009	
3.0	.209	.111	.033	.184	.098	.030	.136	.073	.022	.091	.050	.015	.050	.027	.009	
4.0	.195	.101	.030	.171	.090	.027	.127	.067	.020	.086	.046	.014	.047	.026	.008	
5.0	.182	.093	.027	.160	.082	.024	.119	.062	.018	.081	.043	.013	.045	.024	.007	
6.0	.170	.085	.024	.150	.076	.022	.112	.058	.017	.077	.040	.012	.043	.023	.007	
7.0	.160	.079	.022	.141	.070	.020	.106	.053	.015	.073	.037	.011	.041	.021	.006	
8.0	.150	.074	.021	.133	.066	.019	.100	.050	.014	.069	.035	.010	.040	.020	.006	
9.0	.142	.069	.019	.126	.061	.017	.095	.047	.013	.065	.033	.009	.038	.019	.006	
10.0	.134	.064	.018	.119	.057	.016	.090	.044	.012	.062	.031	.009	.036	.018	.005	

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	.791	.791	.791	.676	.676	.676	.461	.461	.461	.265	.265	.265	.085	.085	.085	
1.0	.781	.762	.745	.669	.654	.641	.457	.450	.444	.263	.260	.258	.084	.084	.083	
2.0	.773	.742	.716	.662	.639	.619	.454	.442	.432	.262	.257	.253	.084	.083	.082	
3.0	.766	.727	.696	.656	.627	.603	.451	.436	.423	.260	.254	.249	.084	.083	.082	
4.0	.759	.715	.682	.651	.618	.592	.448	.431	.417	.259	.252	.247	.083	.082	.081	
5.0	.753	.707	.672	.647	.611	.585	.445	.427	.413	.258	.251	.245	.083	.082	.081	
6.0	.747	.699	.665	.642	.606	.579	.443	.424	.410	.257	.249	.244	.083	.082	.080	
7.0	.742	.694	.660	.638	.601	.575	.441	.422	.407	.256	.248	.242	.083	.081	.080	
8.0	.737	.689	.656	.634	.597	.572	.439	.419	.406	.255	.247	.242	.083	.081	.080	
9.0	.732	.685	.652	.631	.594	.569	.437	.418	.404	.255	.247	.241	.082	.081	.080	
10.0	.728	.681	.650	.627	.591	.567	.435	.416	.403	.254	.246	.240	.082	.081	.080	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm										
NAME:			TYPE:			WEIGHT:				
SPEC.:			DIM.: 1045*41*38			SERIAL No.:				
MFR.: NLD23-0014-02			SUR.:0.795*0.034			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	11.4	12.0	12.5	13.1	14.6	11.6	12.3	12.8	13.4	14.9
3H	11.0	11.6	12.1	12.7	14.2	11.3	11.9	12.4	13.0	14.5
4H	10.8	11.4	11.9	12.5	14.0	11.1	11.6	12.2	12.7	14.3
6H	10.6	11.1	11.8	12.2	13.8	10.9	11.4	12.0	12.5	14.1
8H	10.5	11.0	11.7	12.1	13.7	10.8	11.3	11.9	12.4	14.0
12H	10.4	10.9	11.6	12.0	13.6	10.7	11.1	11.8	12.3	13.9
4H 2H	10.8	11.4	12.0	12.5	14.1	11.1	11.7	12.3	12.8	14.3
3H	10.4	10.9	11.6	12.0	13.6	10.7	11.2	11.9	12.3	13.9
4H	10.2	10.6	11.4	11.8	13.4	10.5	10.9	11.7	12.1	13.7
6H	10.0	10.4	11.2	11.5	13.2	10.3	10.7	11.5	11.8	13.4
8H	9.9	10.2	11.1	11.4	13.0	10.2	10.5	11.4	11.7	13.3
12H	9.8	10.1	11.0	11.3	12.9	10.1	10.4	11.3	11.6	13.2
8H 4H	9.9	10.2	11.1	11.4	13.0	10.2	10.5	11.4	11.7	13.3
6H	9.7	10.0	10.9	11.1	12.8	10.0	10.2	11.2	11.4	13.1
8H	9.6	9.8	10.8	11.0	12.7	9.9	10.1	11.1	11.3	12.9
12H	9.5	9.7	10.7	10.9	12.5	9.8	10.0	11.0	11.1	12.8
12H 4H	9.8	10.1	11.0	11.3	12.9	10.1	10.4	11.3	11.5	13.2
6H	9.6	9.8	10.8	11.0	12.7	9.9	10.1	11.1	11.3	12.9
8H	9.5	9.7	10.7	10.9	12.5	9.8	9.9	11.0	11.1	12.8
Variations with the observer position at spacings:										
S = 1.0H	+ 3.0 / - 7.2					+ 2.6 / - 8.2				
1.5H	+ 4.4 / - 4.8					+ 3.4 / - 5.6				
2.0H	+ 5.1 / -10.4					+ 5.7 / -13.3				

CIE Pub.117, 11584 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 8.5$ )

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:

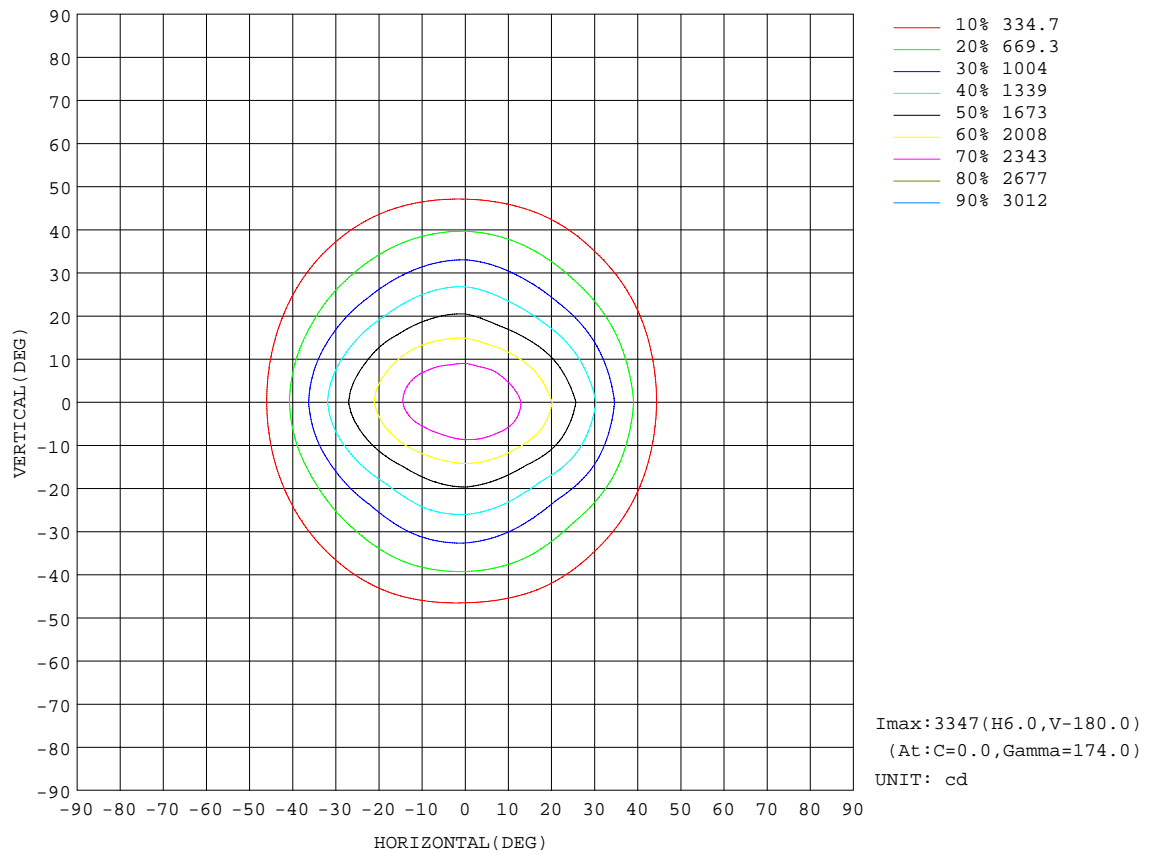
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	41	31	26	38	29	25	31	25	22	14
0.80	50	40	33	45	37	31	37	31	27	16
1.00	57	46	40	51	42	37	41	35	31	17
1.25	63	53	46	57	48	43	45	39	35	18
1.50	68	58	52	61	53	47	48	43	39	19
2.00	75	66	59	67	59	54	52	47	44	19
2.50	79	71	65	70	64	59	55	50	47	19
3.00	82	75	69	73	67	62	56	53	50	20
4.00	86	80	75	77	72	68	59	56	53	20
5.00	89	84	79	79	75	71	60	58	56	20
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:2024-01-17

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:

## ISOCANDELA DIAGRAM

Test:U:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:



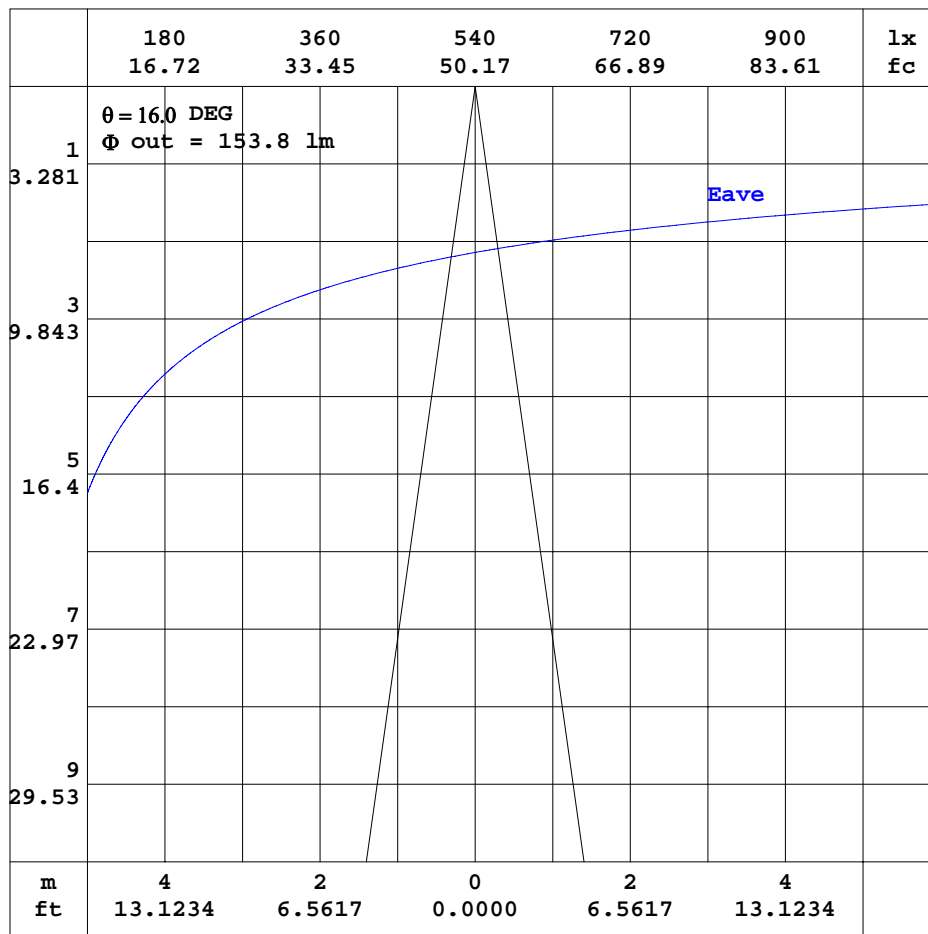
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

$\gamma$  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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:



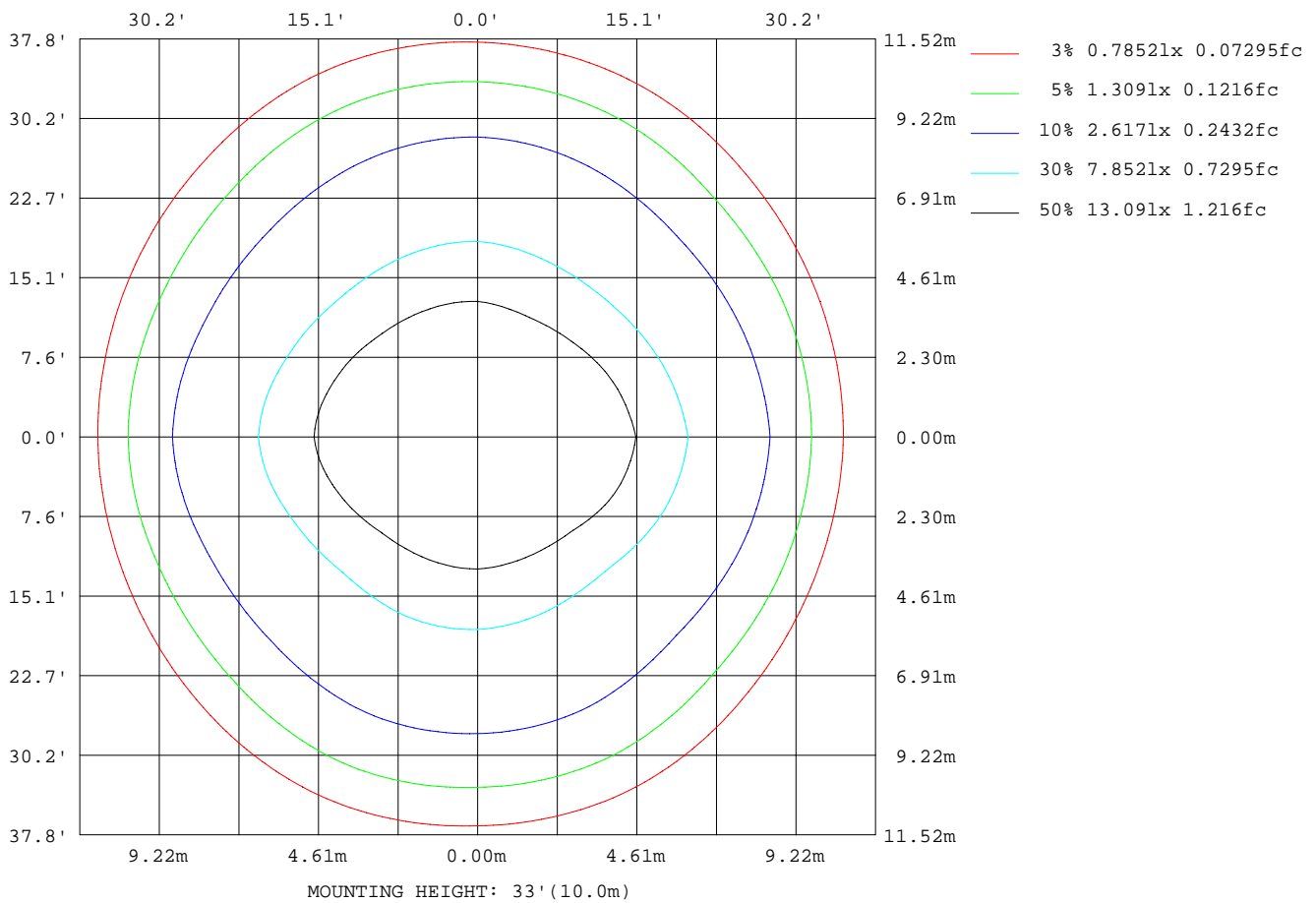
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-01-17

$\gamma$  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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024-01-17

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:

## LED Avg.L Report

Test:U:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	Shielding Angle:

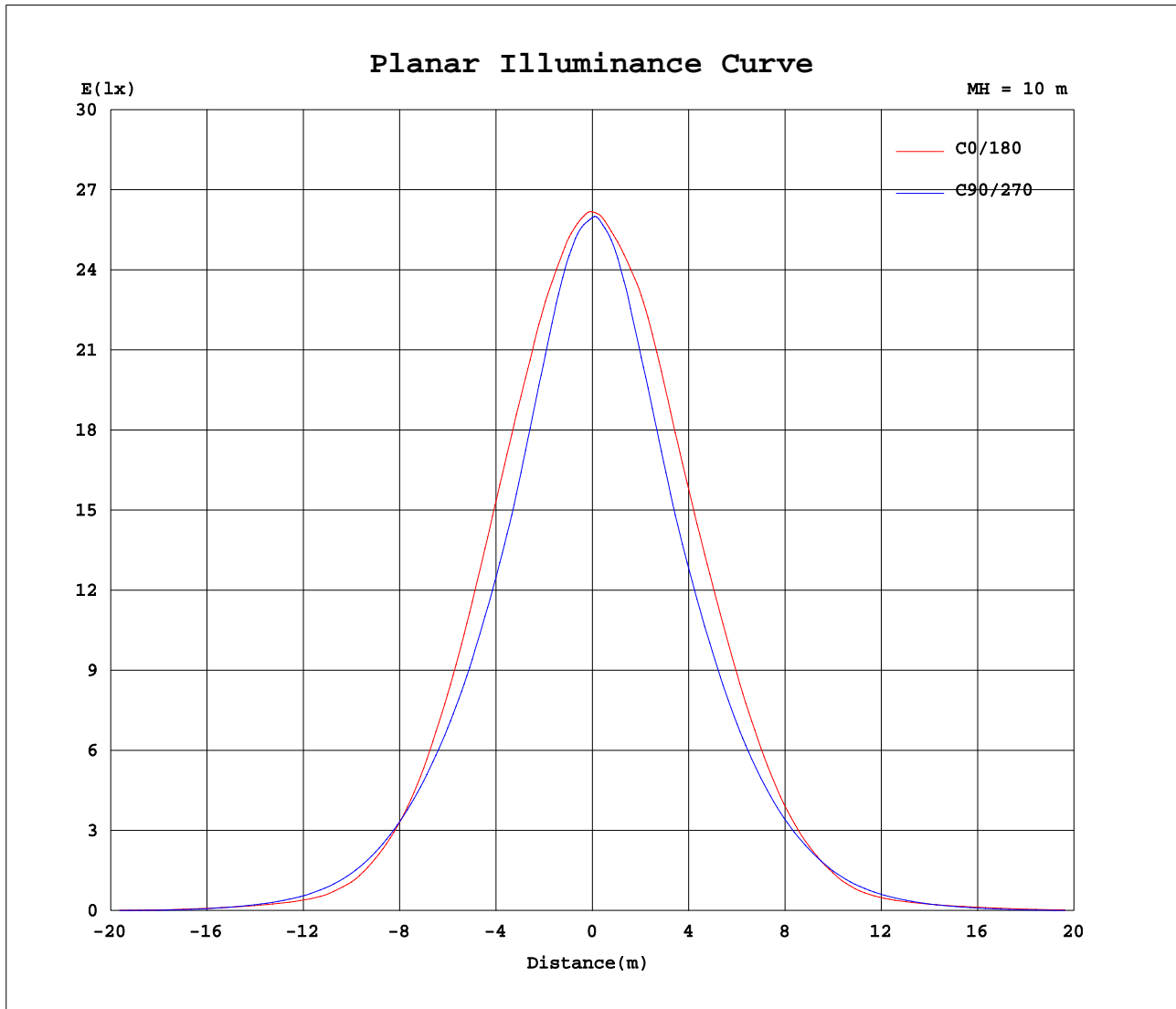
AvgL	cd/m2
L_0~180(65)av	536
L_0~180(75)av	440
L_0~180(85)av	1872
L_90~270(65)av	261
L_90~270(75)av	163
L_90~270(85)av	466
L_45(65)av	1312
L_45(75)av	271
L_45(85)av	944

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

$\gamma$  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:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators:  
Test Date: 2024-01-17

$\gamma$  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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	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	2617	2616	2615	2614	2612	2611	2609	2608	2606	2605	2604	2603	2602	2602	2601	2600	2598	2597	2596
5	2566	2563	2560	2557	2554	2551	2549	2547	2544	2541	2537	2533	2529	2525	2520	2516	2511	2507	2504
10	2441	2444	2443	2440	2433	2421	2406	2389	2371	2352	2337	2323	2310	2298	2287	2279	2272	2267	2263
15	2251	2243	2232	2217	2198	2174	2145	2114	2083	2053	2030	2009	1992	1977	1967	1961	1958	1957	1958
20	2014	1999	1979	1953	1922	1881	1831	1781	1732	1688	1665	1648	1638	1633	1632	1636	1642	1649	1656
25	1717	1689	1658	1624	1586	1541	1488	1437	1390	1350	1337	1333	1335	1343	1353	1363	1374	1385	1395
30	1361	1331	1300	1267	1233	1194	1149	1108	1071	1042	1038	1042	1052	1067	1082	1097	1111	1125	1136
35	972	947	923	900	876	850	822	797	777	763	769	781	797	816	834	849	863	875	885
40	606	591	578	566	555	544	533	524	519	519	532	549	568	588	603	613	622	628	633
45	303	301	300	300	300	301	303	306	311	318	330	343	356	369	378	385	389	393	396
50	153	152	153	154	156	159	163	168	173	179	185	191	198	203	208	210	213	215	216
55	92.2	91.6	91.2	90.7	90.3	89.7	89.2	88.7	88.4	88.4	88.7	89.4	90.3	91.5	93.2	95.5	97.8	100	102
60	32.8	35.2	37.0	38.3	39.1	39.3	39.0	38.2	36.9	35.3	32.8	30.1	27.5	25.0	23.2	22.1	21.5	21.5	21.9
65	2.44	3.42	4.38	5.34	6.28	7.41	8.67	9.74	10.5	10.9	9.76	8.29	6.65	5.01	3.86	3.28	2.94	2.83	2.91
70	0.90	0.90	0.94	1.02	1.14	1.36	1.66	1.95	2.21	2.40	2.31	2.15	1.96	1.78	1.69	1.71	1.77	1.84	1.93
75	0.94	1.03	1.11	1.19	1.26	1.33	1.40	1.46	1.51	1.55	1.58	1.60	1.61	1.63	1.66	1.69	1.73	1.78	1.84
80	0.98	1.08	1.17	1.26	1.33	1.40	1.45	1.50	1.54	1.56	1.58	1.58	1.59	1.59	1.61	1.63	1.67	1.72	1.78
85	1.50	1.57	1.63	1.67	1.70	1.71	1.70	1.69	1.66	1.63	1.60	1.57	1.55	1.54	1.54	1.55	1.58	1.64	1.74
90	2.27	2.12	1.98	1.87	1.76	1.68	1.61	1.56	1.52	1.49	1.46	1.43	1.42	1.41	1.38	1.33	1.32	1.36	1.47
95	16.8	16.0	15.9	16.5	17.9	20.2	23.5	27.2	31.3	35.5	39.2	42.9	46.6	50.5	55.6	61.6	66.8	70.4	71.8
100	169	172	175	177	179	179	178	178	179	182	194	208	222	236	247	253	257	257	253
105	369	366	364	362	360	355	347	342	344	353	396	445	494	539	565	569	565	553	534
110	555	527	516	521	542	593	669	750	829	899	916	920	915	902	893	890	883	873	858
115	1019	1060	1098	1134	1167	1200	1232	1258	1280	1294	1289	1278	1262	1244	1231	1224	1216	1205	1190
120	1687	1686	1683	1679	1672	1662	1650	1636	1622	1607	1595	1583	1571	1560	1550	1542	1533	1521	1506
125	2016	2002	1988	1975	1962	1950	1938	1926	1915	1903	1891	1878	1866	1853	1842	1833	1822	1810	1794
130	2274	2259	2244	2231	2219	2208	2198	2188	2179	2169	2158	2146	2134	2121	2109	2098	2087	2073	2058
135	2505	2490	2475	2462	2450	2439	2430	2421	2412	2403	2393	2383	2372	2361	2349	2337	2324	2310	2294
140	2707	2691	2676	2662	2650	2639	2630	2622	2614	2607	2598	2589	2580	2570	2559	2547	2534	2520	2505
145	2876	2859	2844	2830	2819	2809	2802	2796	2791	2785	2777	2768	2759	2749	2738	2727	2715	2702	2689
150	3020	3003	2988	2974	2963	2955	2949	2944	2939	2934	2926	2917	2908	2898	2888	2878	2868	2858	2846
155	3139	3123	3108	3095	3083	3075	3070	3066	3062	3057	3049	3041	3032	3022	3013	3005	2997	2988	2980
160	3234	3217	3203	3190	3179	3171	3166	3162	3158	3154	3147	3139	3131	3123	3116	3109	3102	3096	3089
165	3301	3284	3269	3256	3246	3238	3233	3230	3227	3224	3219	3213	3207	3202	3196	3191	3186	3181	3176
170	3336	3319	3305	3293	3283	3277	3274	3272	3271	3271	3267	3264	3260	3257	3253	3250	3247	3244	3241
175	3346	3330	3317	3306	3297	3292	3289	3289	3289	3290	3289	3288	3287	3286	3284	3283	3282	3281	3280
180	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1045*41*38	SERIAL No.:
MFR.: NLD23-0014-02	SUR.:0.795*0.034	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	2596	2596	2596	2596	2595	2594	2593	2592	2591	2589	2588	2588	2588	2592	2598	2605	2612	2617	2618
5	2503	2503	2503	2503	2503	2501	2499	2498	2498	2500	2503	2508	2513	2521	2532	2543	2553	2560	2560
10	2262	2263	2266	2271	2279	2291	2304	2318	2335	2353	2371	2390	2408	2426	2444	2459	2471	2479	2478
15	1957	1958	1961	1968	1979	1995	2015	2038	2065	2098	2132	2167	2202	2234	2263	2288	2308	2320	2318
20	1656	1655	1656	1657	1661	1667	1677	1693	1714	1753	1797	1844	1892	1938	1981	2018	2047	2066	2058
25	1398	1399	1399	1398	1395	1390	1389	1393	1404	1436	1474	1518	1565	1619	1675	1725	1767	1794	1777
30	1141	1143	1143	1141	1134	1124	1116	1112	1115	1137	1166	1202	1242	1293	1351	1404	1448	1478	1458
35	889	890	889	885	877	866	855	847	844	855	872	894	922	959	1005	1047	1083	1108	1090
40	637	639	639	637	630	618	606	595	586	585	588	595	606	627	655	684	708	726	714
45	401	405	408	409	405	396	387	377	368	363	361	360	361	366	375	384	393	399	396
50	220	223	226	228	227	224	220	216	211	206	202	198	195	192	190	189	188	188	188
55	104	105	106	107	108	109	110	111	112	112	111	111	111	112	113	114	116	117	116
60	23.1	24.7	26.9	29.4	32.6	36.3	40.2	44.0	47.7	50.6	53.1	55.2	57.0	58.4	59.4	60.0	60.4	60.6	60.7
65	2.98	3.29	3.88	4.82	6.56	9.03	11.6	14.1	16.3	17.2	17.7	17.7	17.3	16.1	14.3	12.5	10.9	9.79	10.7
70	1.92	1.93	1.99	2.12	2.49	3.08	3.69	4.24	4.70	4.63	4.44	4.17	3.89	3.74	3.75	3.78	3.82	3.83	3.64
75	1.90	1.97	2.05	2.16	2.28	2.42	2.59	2.80	3.06	3.47	3.91	4.33	4.73	5.01	5.16	5.24	5.26	5.21	5.12
80	1.84	1.92	2.04	2.20	2.44	2.76	3.13	3.55	4.00	4.61	5.21	5.77	6.25	6.51	6.53	6.46	6.32	6.15	6.14
85	1.87	2.05	2.28	2.58	2.98	3.48	4.03	4.60	5.18	5.77	6.32	6.82	7.24	7.51	7.63	7.64	7.53	7.31	6.94
90	1.77	2.15	2.60	3.08	3.60	4.13	4.67	5.21	5.73	6.18	6.60	7.00	7.38	7.85	8.39	8.81	9.04	9.01	8.14
95	64.8	56.0	46.4	37.1	31.4	29.8	29.4	30.0	31.0	31.3	31.6	32.0	32.3	32.4	32.3	32.1	31.8	31.4	30.9
100	241	225	207	186	164	140	117	95.5	76.0	64.3	55.4	49.1	44.9	42.5	41.4	41.3	41.9	42.7	41.1
105	514	489	461	430	395	357	320	284	251	227	208	192	179	170	162	157	155	155	155
110	829	796	762	729	706	692	679	664	644	598	548	497	448	407	376	352	337	332	346
115	1159	1125	1090	1055	1027	1006	988	973	960	946	933	922	912	904	896	891	887	885	888
120	1477	1446	1413	1380	1352	1330	1311	1293	1278	1264	1252	1242	1233	1227	1224	1222	1221	1221	1221
125	1769	1741	1712	1684	1658	1637	1617	1599	1584	1571	1559	1550	1543	1538	1536	1535	1535	1536	1535
130	2035	2011	1986	1961	1938	1918	1900	1884	1869	1857	1846	1837	1831	1827	1826	1826	1827	1829	1827
135	2274	2252	2230	2208	2189	2172	2157	2143	2130	2119	2109	2100	2094	2090	2090	2091	2093	2095	2092
140	2486	2467	2448	2429	2413	2400	2387	2376	2366	2355	2346	2338	2332	2329	2329	2331	2333	2334	2331
145	2673	2657	2640	2625	2612	2601	2591	2582	2574	2565	2557	2550	2544	2542	2542	2544	2546	2547	2543
150	2833	2820	2807	2794	2784	2775	2767	2761	2754	2747	2741	2735	2730	2729	2730	2732	2734	2735	2730
155	2969	2959	2948	2939	2930	2924	2918	2912	2908	2902	2897	2893	2890	2889	2891	2894	2896	2897	2891
160	3081	3074	3066	3059	3053	3048	3043	3040	3036	3032	3028	3025	3023	3024	3027	3029	3032	3033	3026
165	3170	3165	3160	3155	3150	3147	3144	3141	3139	3137	3134	3133	3132	3133	3136	3139	3142	3142	3134
170	3237	3234	3230	3227	3225	3223	3222	3220	3220	3218	3217	3217	3217	3219	3223	3226	3229	3229	3220
175	3279	3278	3277	3276	3276	3275	3275	3276	3276	3277	3277	3278	3279	3282	3286	3290	3292	3292	3283
180	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm																		
NAME:									TYPE:					WEIGHT:				
SPEC.:									DIM.: 1045*41*38					SERIAL No.:				
MFR.: NLD23-0014-02									SUR.:0.795*0.034					Shielding Angle:				

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	2617	2615	2613	2611	2609	2608	2606	2605	2604	2603	2602	2602	2601	2600	2598	2597	2596	2596	2596
5	2557	2552	2547	2542	2540	2537	2534	2532	2530	2528	2526	2525	2523	2523	2522	2521	2521	2519	2518
10	2472	2464	2453	2442	2431	2418	2404	2389	2370	2351	2332	2315	2303	2295	2290	2287	2285	2281	2278
15	2308	2293	2274	2251	2225	2198	2170	2142	2115	2090	2066	2045	2029	2018	2010	2004	1998	1988	1979
20	2040	2014	1982	1947	1912	1876	1841	1809	1784	1763	1745	1730	1719	1713	1708	1703	1698	1681	1664
25	1747	1707	1660	1615	1575	1537	1502	1473	1458	1449	1444	1442	1441	1440	1439	1436	1432	1416	1399
30	1423	1379	1329	1284	1248	1214	1185	1162	1153	1149	1150	1153	1157	1161	1164	1166	1164	1150	1133
35	1061	1024	983	949	923	900	881	867	865	866	871	878	886	893	899	903	903	892	877
40	694	671	646	628	618	611	606	605	611	618	627	636	644	649	652	654	652	644	633
45	390	384	377	374	374	376	379	384	393	402	411	419	424	426	425	423	420	415	408
50	189	191	193	197	202	208	214	220	227	233	238	243	245	245	244	241	238	234	230
55	114	113	112	112	113	115	116	118	118	118	118	118	118	118	117	117	116	113	110
60	60.6	60.3	59.7	59.0	58.0	56.7	55.1	53.2	50.1	46.9	43.6	40.5	38.2	36.8	35.6	34.7	33.9	32.2	30.7
65	12.2	13.9	15.8	17.4	18.8	19.7	20.1	19.8	17.3	14.2	10.9	7.60	5.35	4.22	3.51	3.14	3.05	2.80	2.80
70	3.44	3.29	3.20	3.42	3.93	4.43	4.83	5.03	4.34	3.47	2.51	1.56	0.95	0.71	0.58	0.54	0.56	0.46	0.40
75	4.98	4.77	4.50	4.12	3.64	3.14	2.63	2.15	1.81	1.52	1.27	1.06	0.88	0.72	0.60	0.51	0.44	0.40	0.37
80	6.10	5.99	5.79	5.34	4.66	3.91	3.14	2.40	1.87	1.43	1.05	0.76	0.56	0.46	0.42	0.41	0.43	0.39	0.37
85	6.47	5.89	5.23	4.41	3.46	2.51	1.63	0.88	0.59	0.45	0.41	0.45	0.47	0.45	0.45	0.45	0.46	0.41	0.38
90	7.04	5.81	4.54	3.47	2.67	1.97	1.40	0.94	0.69	0.54	0.47	0.46	0.46	0.44	0.43	0.44	4.31	0.46	0.46
95	30.3	29.7	29.0	28.2	27.3	26.4	25.7	25.1	24.3	23.9	24.1	25.1	28.3	33.7	39.3	44.6	49.0	49.5	48.8
100	39.8	39.1	39.4	41.3	44.9	50.7	58.9	69.8	88.3	109	130	152	171	187	201	212	219	218	214
105	157	162	170	181	197	215	237	261	290	321	352	383	411	436	458	479	497	519	536
110	368	398	433	471	511	551	589	625	646	664	680	696	718	745	773	800	825	843	857
115	892	897	904	910	915	922	931	942	959	979	1001	1026	1053	1082	1111	1139	1165	1182	1196
120	1222	1224	1228	1231	1236	1242	1251	1264	1283	1305	1330	1356	1383	1411	1439	1465	1489	1506	1521
125	1535	1536	1538	1541	1546	1553	1563	1575	1595	1618	1643	1669	1694	1719	1743	1766	1787	1805	1822
130	1825	1825	1826	1828	1834	1842	1852	1866	1885	1906	1929	1953	1976	1997	2018	2038	2058	2077	2095
135	2089	2087	2087	2090	2097	2107	2118	2132	2150	2169	2189	2210	2230	2249	2268	2287	2306	2326	2345
140	2327	2324	2323	2325	2332	2342	2354	2367	2384	2401	2420	2439	2457	2474	2491	2508	2526	2545	2564
145	2539	2535	2533	2535	2541	2550	2561	2574	2588	2603	2619	2636	2652	2668	2684	2700	2716	2734	2750
150	2725	2720	2717	2718	2723	2731	2741	2752	2764	2776	2790	2804	2818	2831	2845	2858	2872	2887	2902
155	2884	2878	2873	2873	2877	2884	2892	2901	2912	2923	2934	2946	2958	2969	2980	2991	3002	3015	3027
160	3018	3010	3003	3002	3005	3011	3018	3027	3035	3045	3054	3064	3073	3082	3091	3100	3109	3119	3130
165	3126	3117	3109	3106	3109	3114	3120	3127	3134	3141	3148	3156	3163	3171	3178	3185	3193	3201	3210
170	3210	3200	3191	3187	3188	3192	3197	3203	3208	3213	3219	3225	3230	3236	3241	3247	3252	3259	3265
175	3272	3261	3251	3246	3246	3248	3252	3256	3259	3262	3266	3269	3273	3276	3279	3283	3286	3290	3294
180	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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:229.80V I:0.3413A P:76.839W PF:0.9798 Freq:49.99Hz Lamp Flux:11583.7x1 lm																	
NAME:									TYPE:						WEIGHT:		
SPEC.:									DIM.: 1045*41*38						SERIAL No.:		
MFR.: NLD23-0014-02									SUR.:0.795*0.034						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	2596	2596	2595	2594	2593	2592	2591	2589	2588	2588	2588	2591	2595	2601	2608				
5	2517	2516	2517	2519	2521	2523	2526	2526	2526	2527	2529	2533	2539	2546	2556				
10	2278	2280	2287	2298	2311	2325	2339	2349	2359	2369	2379	2390	2402	2415	2428				
15	1973	1970	1974	1985	2001	2020	2042	2066	2092	2119	2145	2170	2192	2213	2232				
20	1648	1637	1634	1641	1654	1673	1698	1731	1767	1806	1846	1884	1918	1951	1983				
25	1382	1367	1357	1353	1354	1361	1374	1401	1433	1470	1510	1550	1590	1631	1673				
30	1115	1097	1083	1074	1068	1068	1073	1091	1114	1142	1173	1207	1242	1279	1319				
35	861	844	827	812	799	790	786	793	805	821	841	863	886	912	941				
40	621	606	591	574	558	544	533	531	532	536	543	552	562	574	589				
45	401	392	380	367	353	340	328	321	317	314	311	309	307	305	304				
50	225	219	214	208	202	196	189	182	176	169	164	159	156	154	153				
55	107	105	103	101	101	99.8	98.9	96.8	94.6	92.6	90.8	89.8	89.6	89.9	90.8				
60	29.6	29.0	30.1	32.7	35.7	38.6	41.2	41.7	41.5	40.9	40.0	38.9	37.7	36.3	34.7				
65	3.07	3.67	5.11	7.28	9.46	11.4	12.9	12.3	11.1	9.62	7.91	6.45	5.36	4.32	3.35				
70	0.40	0.46	0.73	1.17	1.62	2.02	2.33	2.15	1.86	1.51	1.16	0.92	0.82	0.79	0.81				
75	0.37	0.39	0.45	0.53	0.63	0.73	0.82	0.90	0.97	1.02	1.06	1.08	1.07	1.05	1.00				
80	0.37	0.38	0.43	0.52	0.62	0.74	0.86	1.00	1.14	1.26	1.34	1.37	1.34	1.27	1.15				
85	0.36	0.38	0.47	0.63	0.82	1.01	1.20	1.32	1.43	1.50	1.56	1.59	1.61	1.59	1.56				
90	0.49	0.54	0.65	0.82	1.00	1.20	1.39	1.54	1.68	1.81	1.92	2.02	2.11	2.17	2.23				
95	47.0	44.2	40.5	36.0	31.4	26.8	22.6	20.2	18.5	17.3	16.5	16.0	15.7	15.8	16.1				
100	208	200	193	186	179	174	170	170	171	173	176	176	176	174	172				
105	546	547	523	477	426	376	332	327	330	340	353	362	365	367	368				
110	867	874	880	884	882	870	848	788	721	653	590	547	528	524	533				
115	1208	1220	1237	1257	1276	1289	1296	1283	1263	1236	1204	1171	1137	1101	1061				
120	1535	1547	1560	1574	1588	1602	1618	1640	1661	1681	1698	1708	1710	1708	1700				
125	1837	1852	1866	1879	1893	1906	1920	1939	1959	1977	1993	2005	2012	2017	2018				
130	2113	2130	2145	2159	2172	2185	2198	2214	2229	2243	2256	2265	2271	2275	2275				
135	2364	2381	2395	2407	2418	2428	2438	2452	2466	2479	2491	2499	2504	2507	2507				
140	2582	2599	2613	2622	2630	2638	2646	2658	2669	2681	2691	2699	2703	2706	2708				
145	2766	2781	2793	2802	2810	2817	2824	2834	2844	2853	2862	2868	2873	2875	2877				
150	2916	2930	2941	2950	2958	2966	2973	2982	2991	3000	3007	3013	3017	3019	3020				
155	3040	3052	3063	3072	3080	3089	3096	3105	3113	3120	3126	3131	3135	3138	3139				
160	3140	3151	3160	3169	3177	3184	3192	3200	3207	3214	3220	3225	3229	3232	3234				
165	3218	3226	3234	3241	3247	3254	3260	3267	3274	3280	3286	3290	3294	3297	3299				
170	3271	3277	3283	3288	3293	3298	3303	3308	3313	3318	3322	3326	3329	3332	3334				
175	3297	3301	3305	3309	3312	3316	3319	3323	3326	3330	3333	3336	3339	3341	3344				
180	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331	3331				

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:2024-01-17

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: