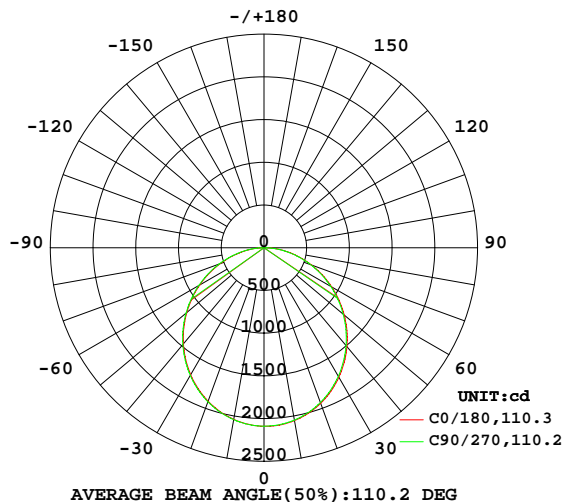


LUMINAIRE PHOTOMETRIC TEST REPORT

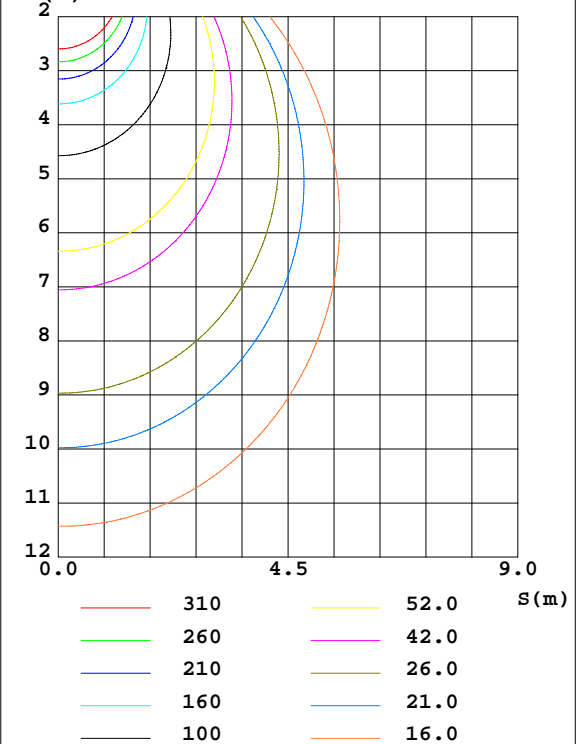
Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 154.79 lm/W			
MODEL		Imax(cd)	2090	S/MH(C0/180)	1.23
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	5892.8	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	5892.81	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

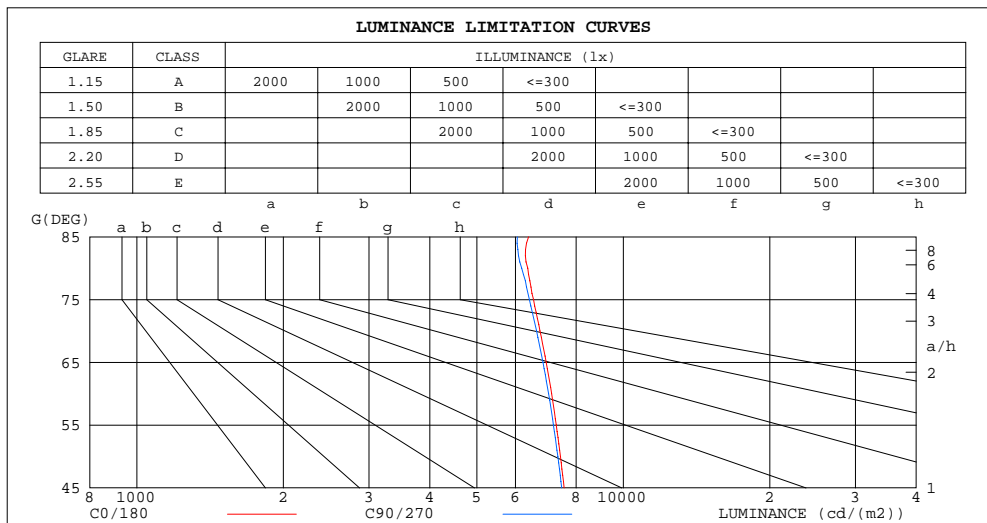
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	2054	2054	2048	2042	2040	2040	2044	2049	0- 10	197.3	197.3	3.35,3.35
20	1938	1938	1929	1916	1912	1912	1919	1931	10- 20	562.7	760.0	12.9,12.9
30	1752	1751	1739	1724	1716	1716	1726	1742	20- 30	846.0	1606	27.3,27.3
40	1510	1509	1495	1476	1468	1467	1479	1497	30- 40	1011	2617	44.4,44.4
50	1226	1225	1211	1190	1180	1179	1192	1212	40- 50	1040	3657	62.1,62.1
60	914.7	915.6	901.3	880.0	866.9	864.7	879.4	901.0	50- 60	937.0	4594	78,78
70	592.0	594.5	582.3	562.0	546.9	544.6	560.2	580.5	60- 70	722.7	5317	90.2,90.2
80	283.7	286.0	275.7	257.4	240.8	239.0	253.4	272.0	70- 80	436.7	5753	97.6,97.6
90	20.87	22.16	13.97	5.206	5.043	5.009	4.888	10.58	80- 90	139.5	5893	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6385	6056
80	6362	6183
75	6536	6411
70	6740	6630
65	6939	6835
60	7123	7020
55	7283	7183
50	7425	7334
45	7556	7472

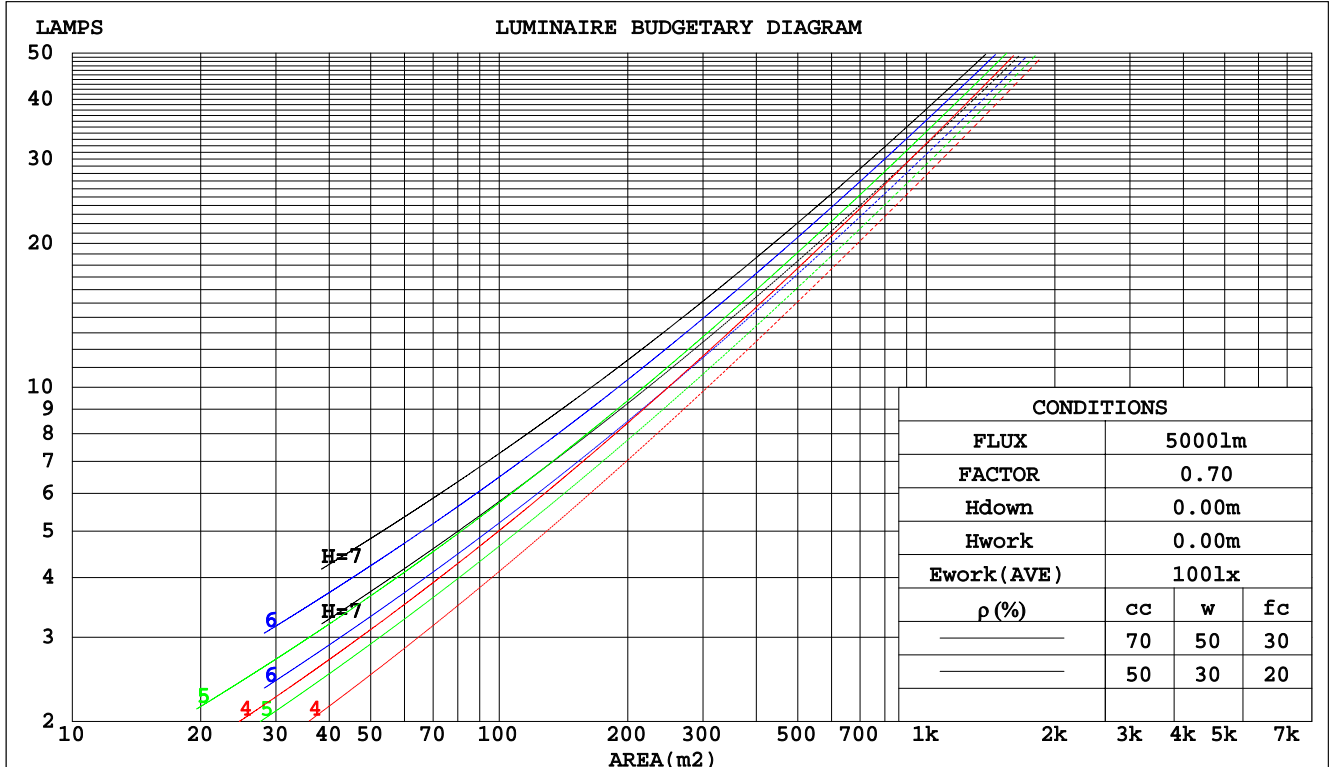
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.77	.70	.64	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.57	.52	.62	.56	.52	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.41	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.40	.35	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 600*82			SERIAL No.:		
MFR.: NLC24-0006-03			SUR.:3.14*0.286*0.286			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	.316	.180	.057	.309	.176	.056	.296	.170	.054	.284	.164	.052	.272	.158	.051	
2.0	.295	.162	.050	.289	.159	.049	.277	.154	.048	.266	.150	.047	.256	.145	.046	
3.0	.272	.145	.043	.267	.143	.043	.256	.139	.042	.247	.135	.041	.238	.132	.041	
4.0	.251	.130	.038	.246	.129	.038	.237	.125	.037	.228	.122	.037	.220	.120	.036	
5.0	.231	.118	.034	.227	.117	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.174	.084	.024	.172	.084	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 600*82			SERIAL No.:			
MFR.: NLC24-0006-03					SUR.:3.14*0.286*0.286			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	2H	19.8	21.4	20.1	21.6	21.8	19.8	21.3	20.0	21.5	21.7
	3H	21.4	22.9	21.7	23.1	23.3	21.4	22.8	21.7	23.0	23.3
	4H	22.1	23.5	22.4	23.7	24.0	22.1	23.4	22.4	23.7	23.9
	6H	22.7	24.0	23.0	24.2	24.5	22.6	23.9	22.9	24.1	24.4
	8H	22.9	24.1	23.2	24.4	24.7	22.8	24.0	23.1	24.3	24.6
	12H	23.0	24.2	23.4	24.5	24.8	22.9	24.1	23.3	24.4	24.7
4H	2H	20.5	21.8	20.8	22.1	22.3	20.4	21.8	20.7	22.0	22.3
	3H	22.3	23.5	22.6	23.8	24.1	22.2	23.4	22.6	23.7	24.0
	4H	23.1	24.2	23.5	24.5	24.8	23.0	24.1	23.4	24.4	24.8
	6H	23.8	24.8	24.2	25.1	25.5	23.7	24.7	24.1	25.0	25.4
	8H	24.1	25.0	24.5	25.3	25.7	24.0	24.9	24.4	25.2	25.6
	12H	24.3	25.1	24.7	25.5	25.9	24.2	25.0	24.6	25.4	25.8
8H	4H	23.4	24.3	23.8	24.7	25.1	23.4	24.3	23.8	24.6	25.0
	6H	24.3	25.0	24.7	25.4	25.9	24.2	25.0	24.7	25.4	25.8
	8H	24.7	25.3	25.1	25.8	26.2	24.6	25.3	25.1	25.7	26.1
	12H	25.0	25.6	25.5	26.0	26.5	24.9	25.5	25.4	25.9	26.4
12H	4H	23.4	24.3	23.9	24.7	25.1	23.4	24.2	23.8	24.6	25.0
	6H	24.4	25.0	24.8	25.5	25.9	24.3	25.0	24.8	25.4	25.9
	8H	24.8	25.4	25.3	25.8	26.3	24.7	25.3	25.2	25.8	26.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3					

CIE Pub.117, 5893 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 6.2$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:

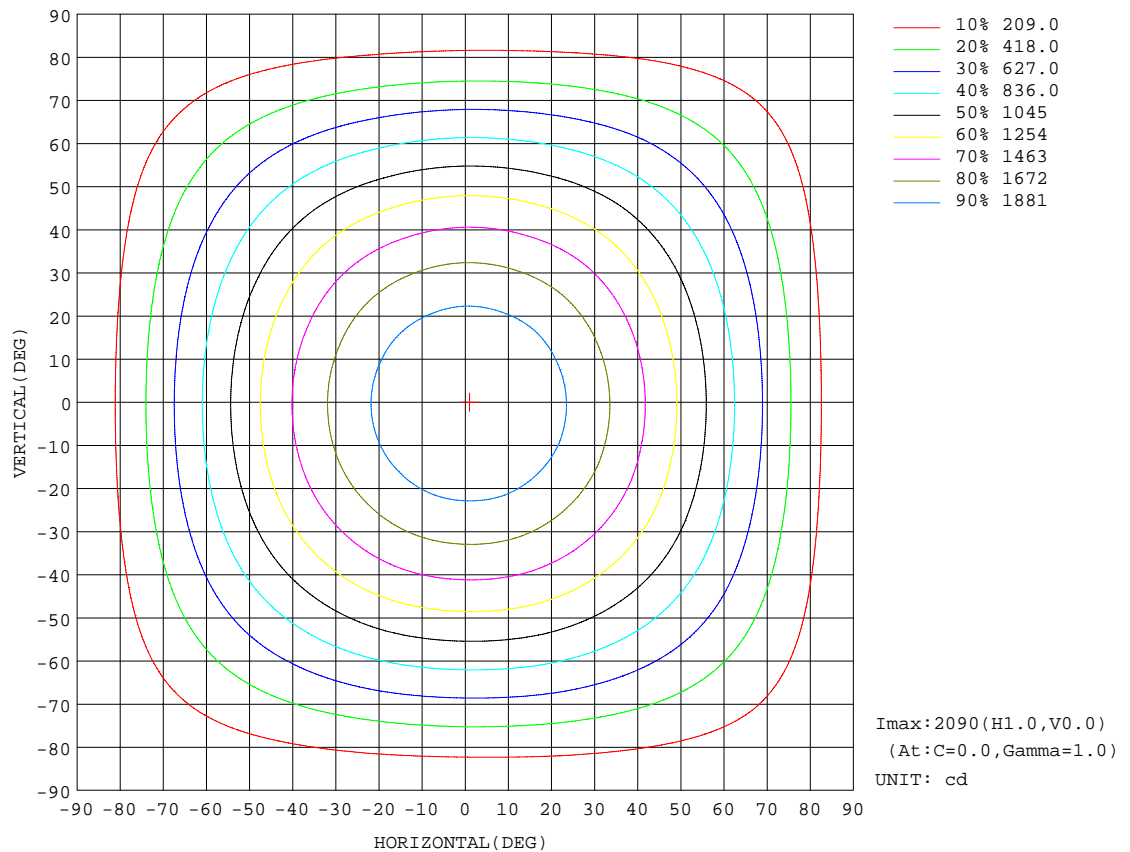
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	46	39	56	45	39	32
0.80	67	56	48	66	55	48	65	55	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	79	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	73
3.00	102	95	89	100	93	88	96	90	86	78
4.00	106	100	95	104	98	94	99	95	91	82
5.00	108	103	99	106	102	98	101	98	95	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
 Humidity:65.0%
 Test Distance:11.700m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:

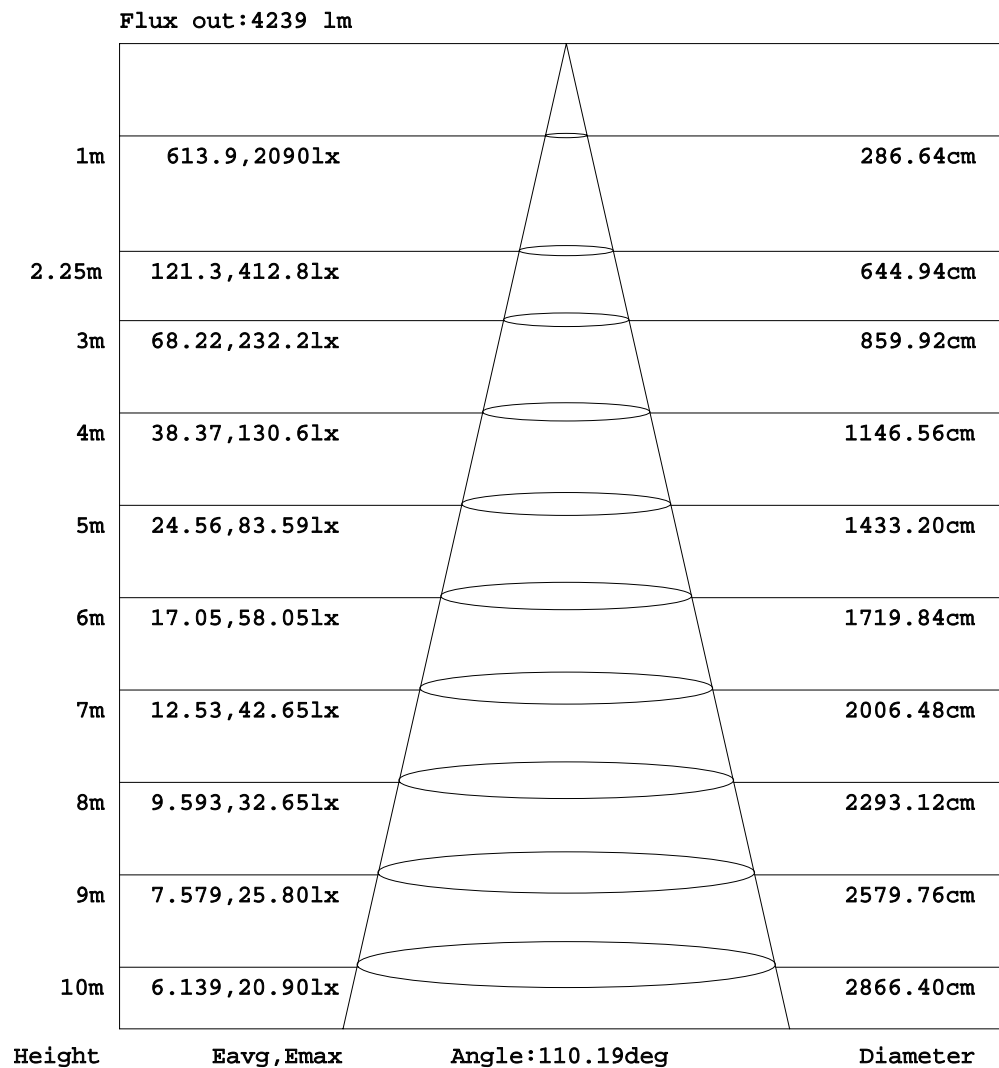


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:



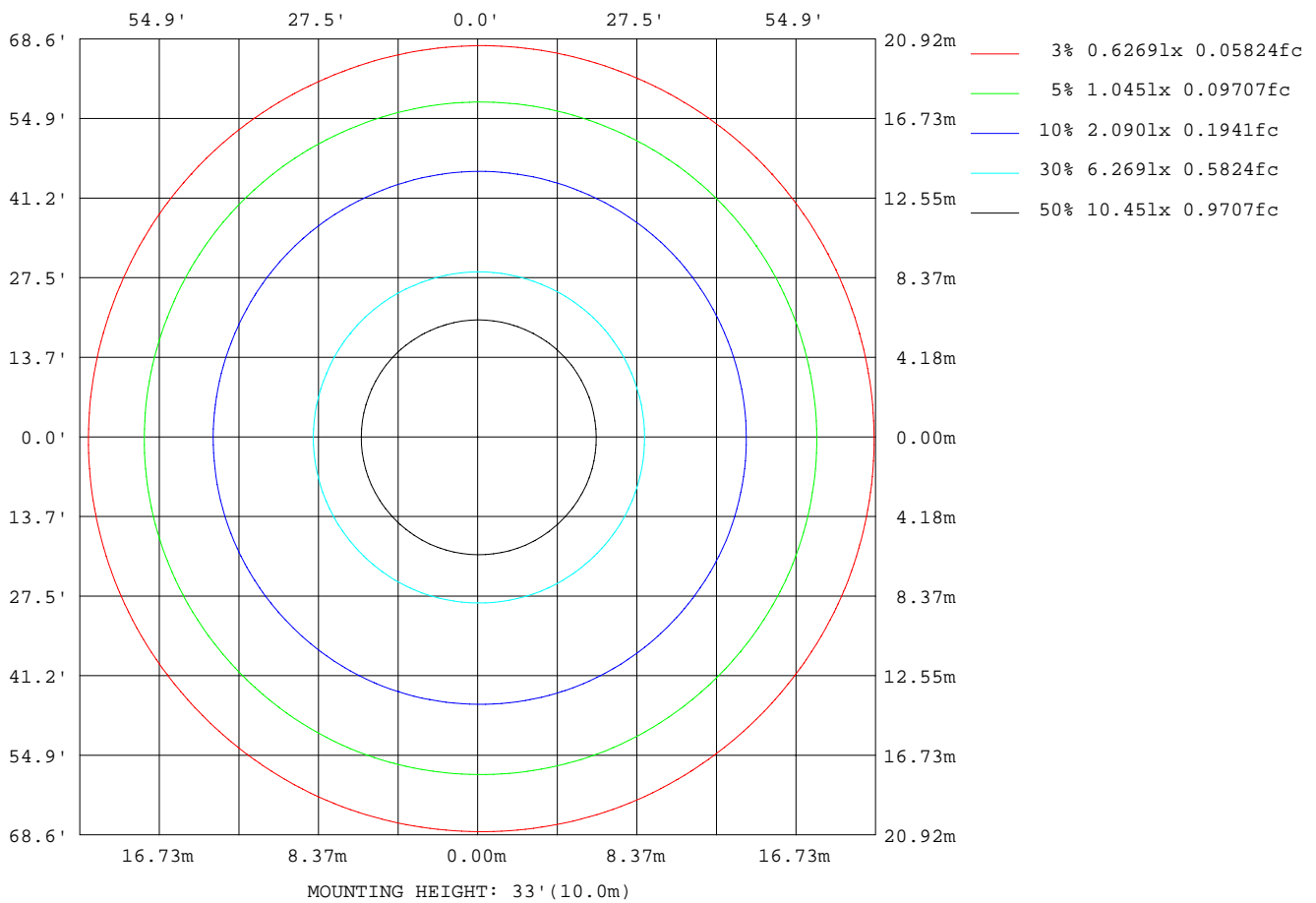
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:229.67V I:0.1721A P:38.070W PF:0.9630 Freq:49.99Hz Lamp Flux:5892.81x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 600*82	SERIAL No.:
MFR.: NLC24-0006-03	SUR.:3.14*0.286*0.286	Shielding Angle:

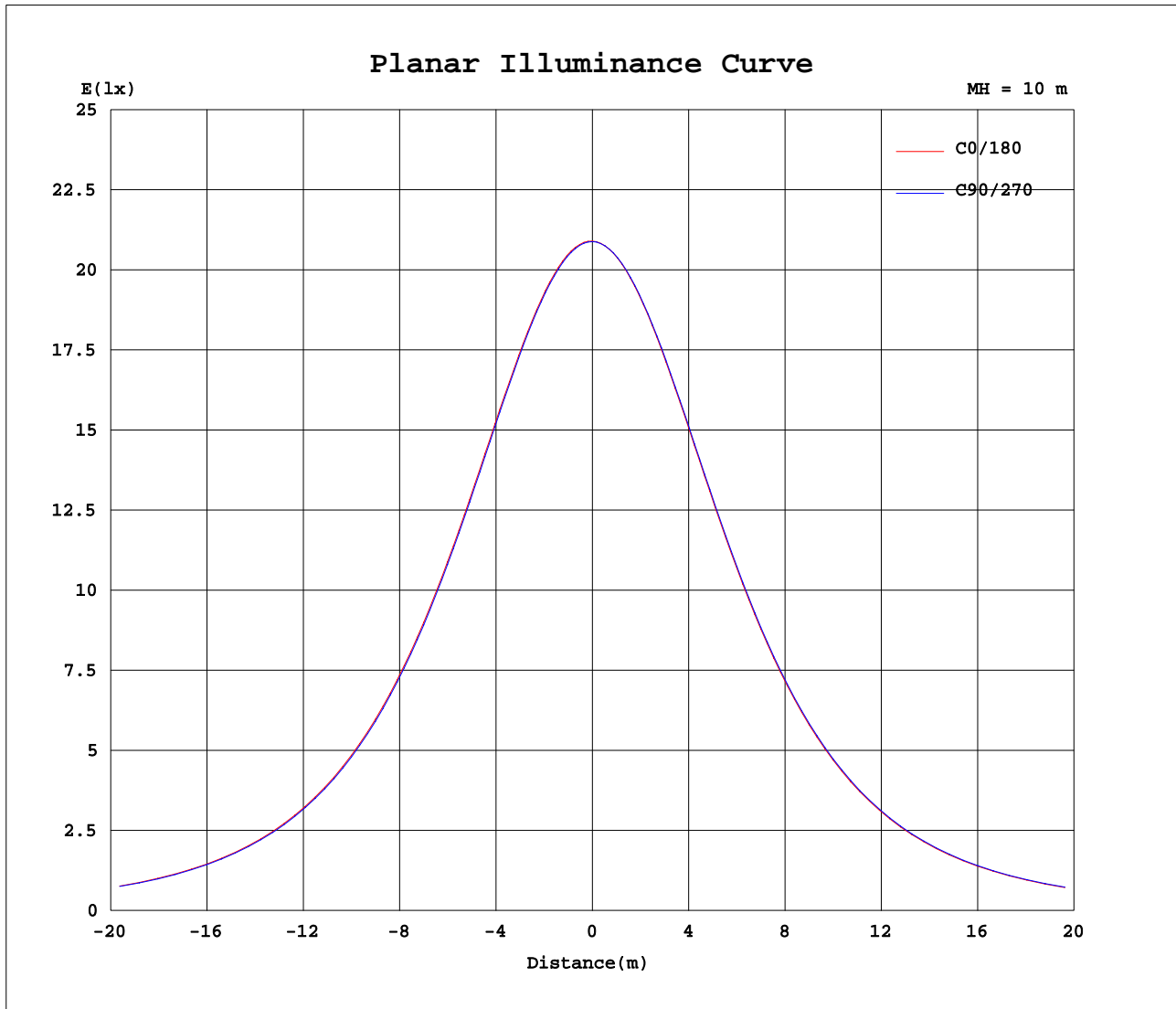
AvgL	cd/m2
L_0~180(65)av	6724
L_0~180(75)av	6187
L_0~180(85)av	5566
L_90~270(65)av	6733
L_90~270(75)av	6225
L_90~270(85)av	5605
L_45(65)av	6729
L_45(75)av	6208
L_45(85)av	5578

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-08-13

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-08-13

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity: 65.0%
Test Distance: 11.700m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.406.10
Humidity:65.0%
Test Distance:11.700m [K=1.0000]
Remarks:

```