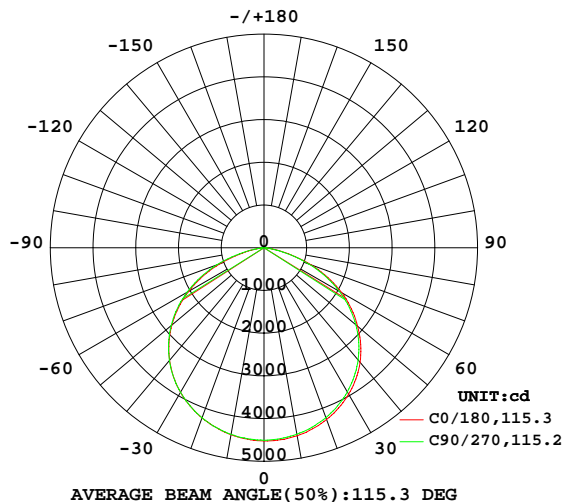


LUMINAIRE PHOTOMETRIC TEST REPORT

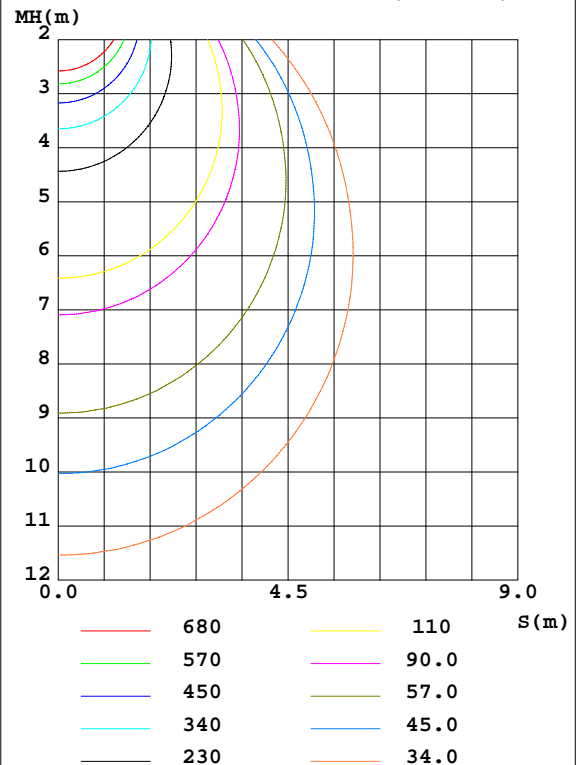
Test:U:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.75 lm/W			
MODEL		I _{max} (cd)	4525	S/MH(C0/180)	1.29
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	12887	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	12887.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
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: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:

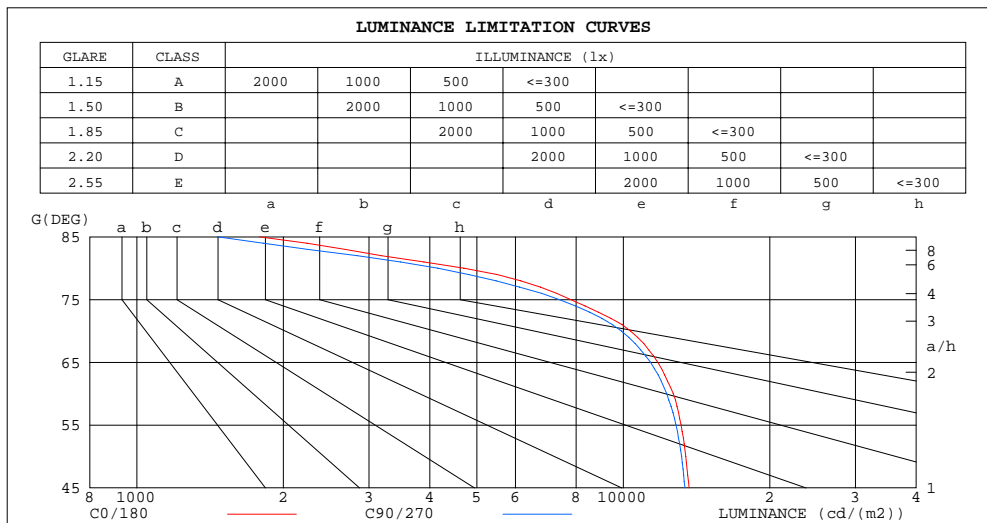
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	Φ lum, lamp
10	4470	4433	4444	4436					0- 10	427.5	427.5	3.32,3.32
20	4280	4234	4240	4238					10- 20	1232	1660	12.9,12.9
30	3961	3897	3907	3907					20- 30	1891	3550	27.5,27.5
40	3500	3426	3439	3445					30- 40	2317	5867	45.5,45.5
50	2864	2808	2818	2838					40- 50	2436	8303	64.4,64.4
60	2100	2036	2032	2079					50- 60	2199	10502	81.5,81.5
70	1172	1123	1103	1178					60- 70	1594	12096	93.9,93.9
80	270.8	239.3	237.4	283.8					70- 80	704.1	12800	99.3,99.3
90	14.63	10.21	14.05	15.13					80- 90	87.01	12887	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: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1785	1466
80	4703	4156
75	7788	7381
70	10337	9904
65	11770	11372
60	12669	12278
55	13146	12833
50	13439	13173
45	13658	13384

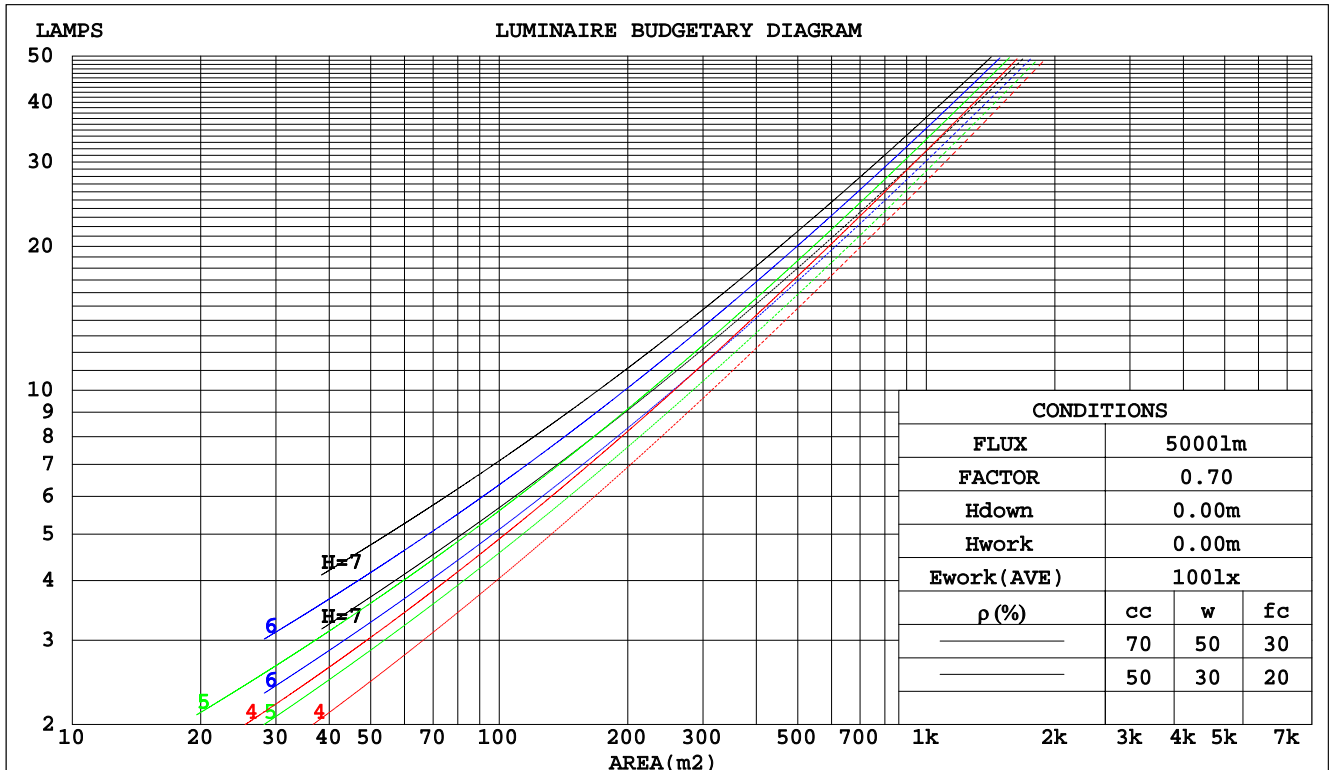
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	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	1.05	1.01	.97	1.03	.99	.96	.98	.95	.93	.94	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.79	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.76	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.64	.73	.68	.63	.71	.66	.62	.60
4.0	.71	.63	.56	.70	.62	.56	.67	.60	.55	.65	.59	.54	.63	.58	.53	.51
5.0	.64	.55	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.57	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.54	.47	.41	.53	.46	.41	.51	.45	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.38	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.30	.43	.35	.29	.42	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.37	.31	.26	.25



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 650*40			SERIAL No.:		
MFR.: NLC2-0003-01			SUR.:3.14*0.325*0.325			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	.291	.165	.052	.284	.162	.051	.271	.155	.050	.258	.149	.048	.247	.143	.046	
2.0	.280	.154	.047	.274	.151	.047	.263	.146	.045	.252	.141	.044	.242	.137	.043	
3.0	.263	.140	.042	.257	.138	.041	.247	.134	.041	.237	.130	.040	.229	.127	.039	
4.0	.244	.127	.037	.239	.125	.037	.230	.122	.036	.222	.119	.036	.214	.116	.035	
5.0	.227	.116	.034	.223	.114	.033	.215	.112	.033	.207	.109	.033	.200	.107	.032	
6.0	.211	.106	.030	.207	.105	.030	.200	.103	.030	.193	.101	.030	.187	.099	.029	
7.0	.197	.097	.028	.194	.097	.028	.187	.095	.027	.181	.093	.027	.176	.091	.027	
8.0	.184	.090	.025	.181	.089	.025	.176	.088	.025	.170	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.170	.083	.023	.165	.082	.023	.160	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.160	.077	.022	.156	.076	.021	.151	.075	.021	.147	.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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.099	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.111	.060	.025	.076	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.023	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 650*40			SERIAL No.:			
MFR.: NLC2-0003-01					SUR.:3.14*0.325*0.325			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	22.0	23.5	22.2	23.7	23.9	21.9	23.4	22.1	23.6	23.8
	3H	23.3	24.7	23.6	24.9	25.1	23.1	24.5	23.4	24.8	25.0
	4H	23.6	25.0	24.0	25.2	25.5	23.5	24.8	23.8	25.0	25.3
	6H	23.8	25.0	24.1	25.3	25.5	23.6	24.8	23.9	25.1	25.4
	8H	23.7	24.9	24.1	25.2	25.5	23.5	24.7	23.9	25.0	25.3
	12H	23.7	24.8	24.0	25.1	25.4	23.5	24.6	23.8	24.9	25.2
4H	2H	22.5	23.8	22.8	24.1	24.3	22.4	23.8	22.8	24.0	24.3
	3H	24.0	25.1	24.3	25.4	25.7	23.9	25.0	24.2	25.3	25.6
	4H	24.4	25.5	24.8	25.8	26.1	24.3	25.3	24.6	25.6	26.0
	6H	24.6	25.5	25.0	25.9	26.2	24.4	25.3	24.8	25.7	26.1
	8H	24.6	25.4	25.0	25.8	26.2	24.4	25.3	24.8	25.6	26.0
	12H	24.6	25.3	25.0	25.7	26.1	24.4	25.2	24.8	25.5	26.0
8H	4H	24.5	25.4	24.9	25.7	26.1	24.4	25.3	24.8	25.6	26.0
	6H	24.8	25.5	25.2	25.9	26.3	24.6	25.3	25.0	25.7	26.1
	8H	24.8	25.4	25.2	25.8	26.3	24.6	25.2	25.1	25.7	26.1
	12H	24.8	25.3	25.2	25.7	26.2	24.6	25.1	25.1	25.6	26.0
12H	4H	24.5	25.3	24.9	25.7	26.1	24.4	25.2	24.8	25.5	25.9
	6H	24.7	25.4	25.2	25.8	26.2	24.6	25.2	25.0	25.6	26.1
	8H	24.8	25.3	25.2	25.7	26.2	24.6	25.1	25.1	25.6	26.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.3					

CIE Pub.117, 12887 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 8.9$)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:

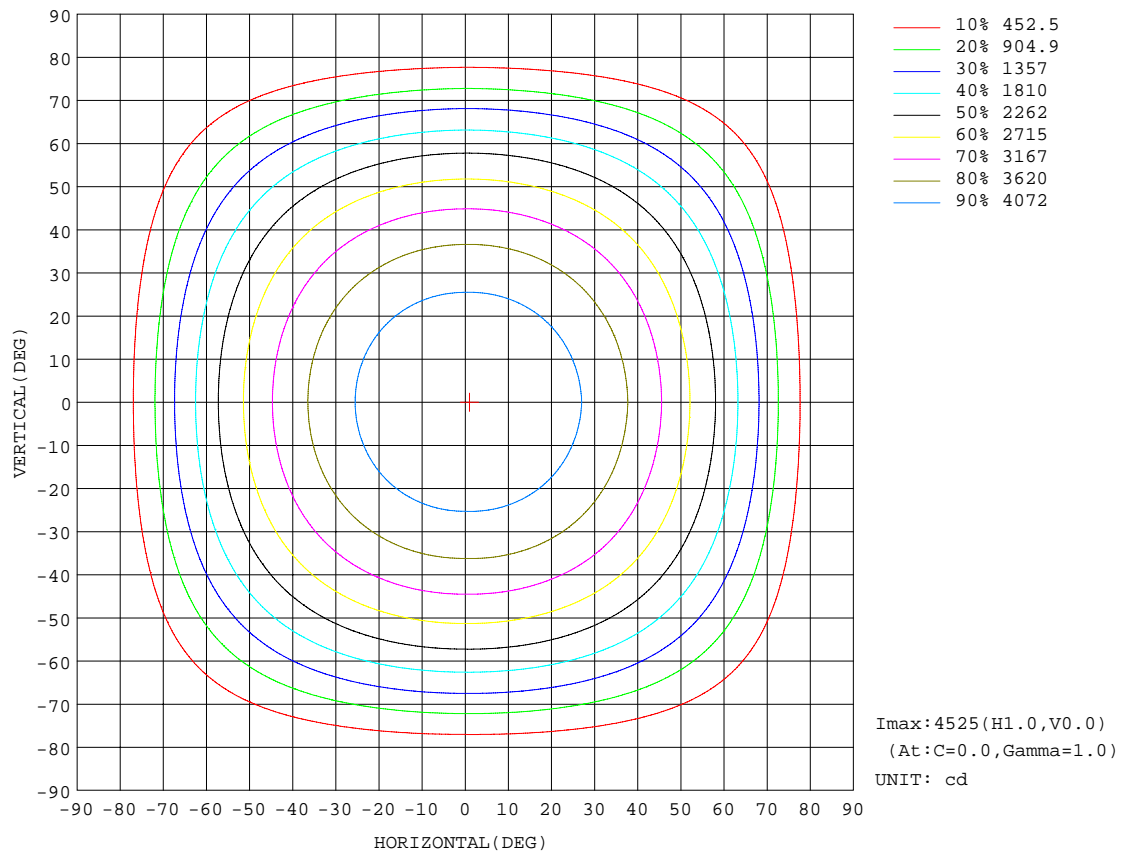
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	46	39	33
0.80	68	57	49	67	56	49	65	55	49	42
1.00	77	66	59	76	65	58	73	67	58	51
1.25	84	74	67	83	73	66	80	72	66	58
1.50	89	79	73	87	79	72	84	77	71	64
2.00	96	88	82	94	87	81	91	84	79	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	99	103	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ 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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:

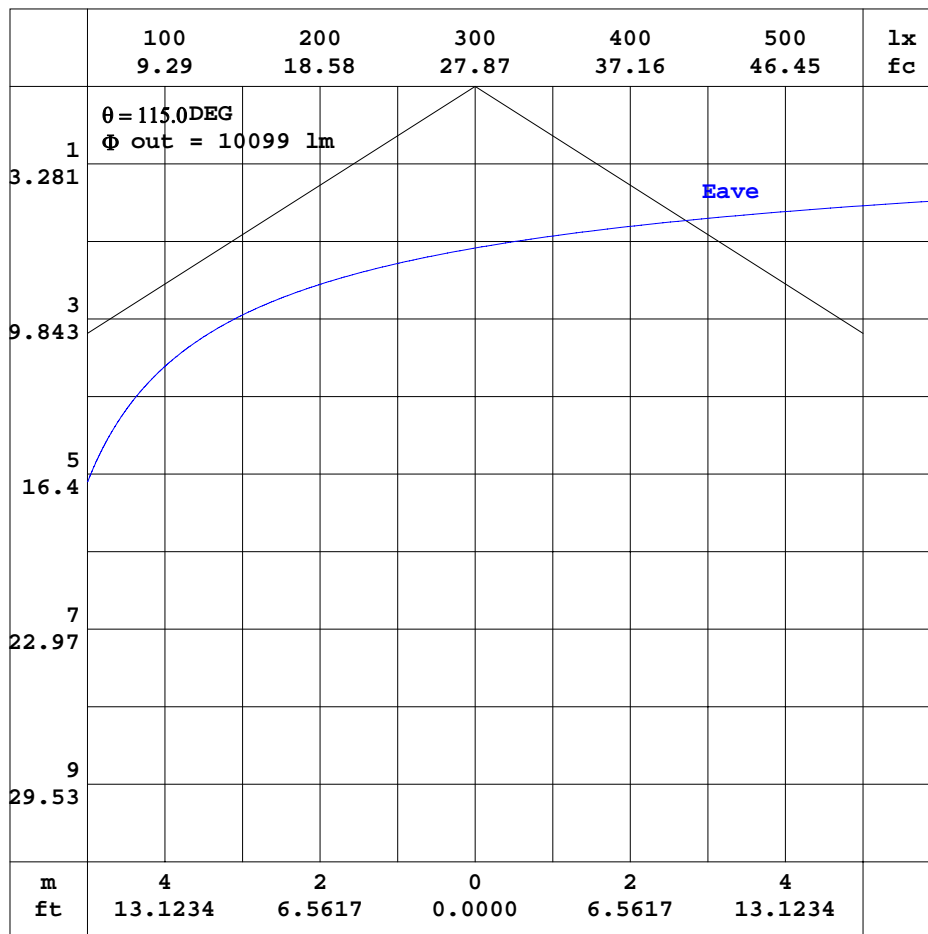


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-05-31

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 CURVES

Test:U:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:



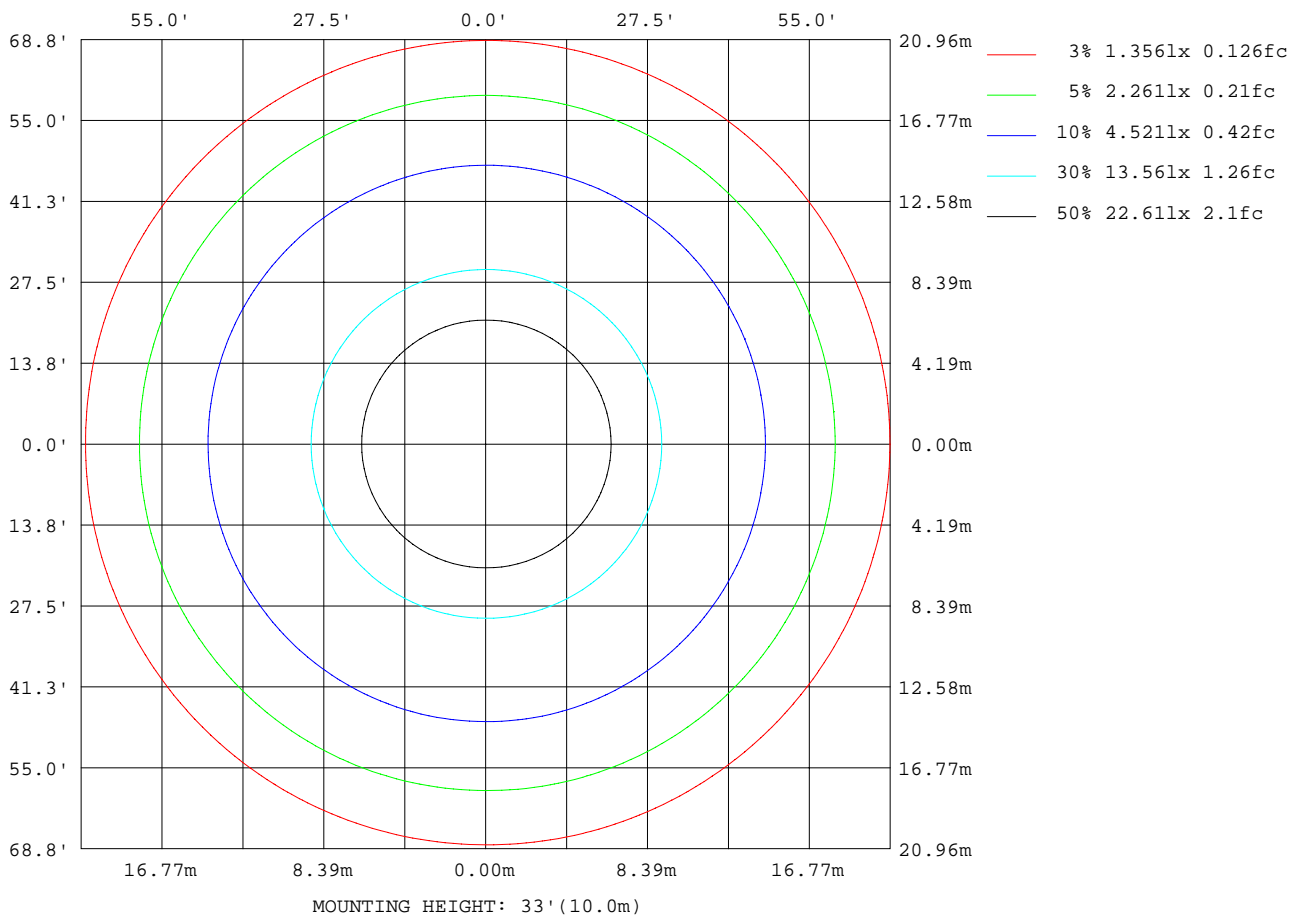
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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:229.66V I:0.4261A P:96.350W PF:0.9847 Freq:49.99Hz Lamp Flux:12887.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 650*40	SERIAL No.:
MFR.: NLC2-0003-01	SUR.:3.14*0.325*0.325	Shielding Angle:

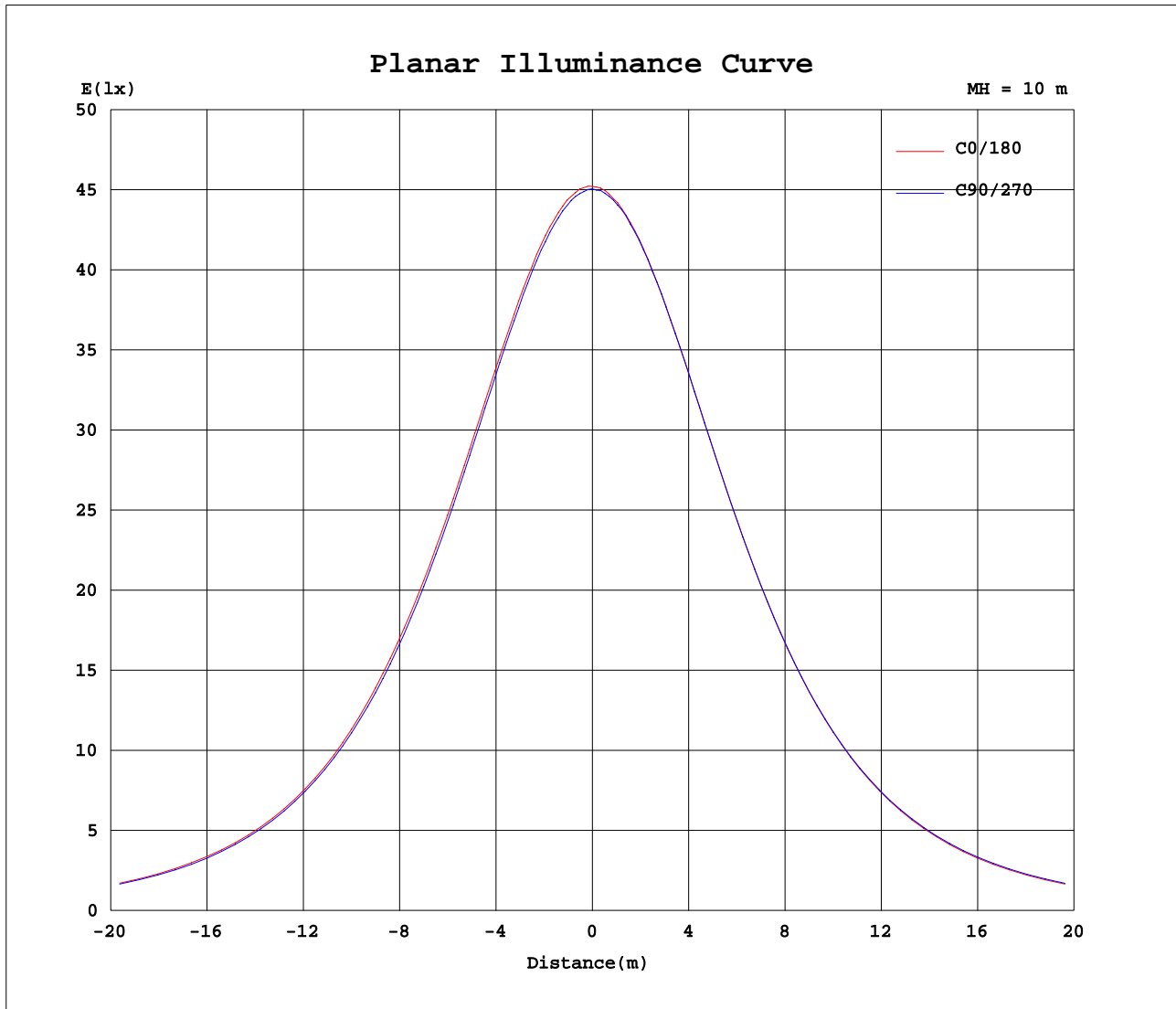
AvgL	cd/m2
L_0~180(65)av	11537
L_0~180(75)av	7443
L_0~180(85)av	1685
L_90~270(65)av	11544
L_90~270(75)av	7675
L_90~270(85)av	1774
L_45(65)av	11527
L_45(75)av	7566
L_45(85)av	1734

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-05-31

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: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-05-31

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:

```