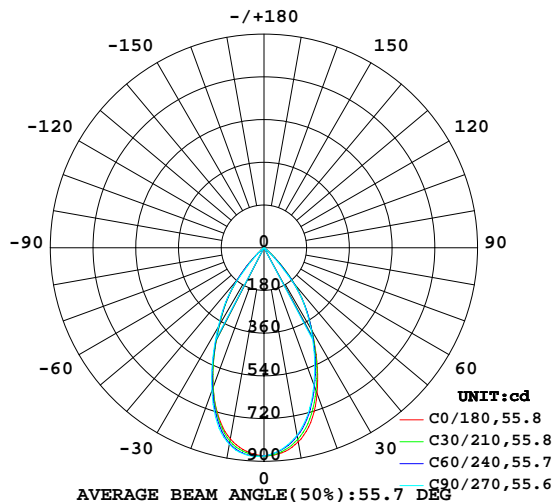


LUMINAIRE PHOTOMETRIC TEST REPORT

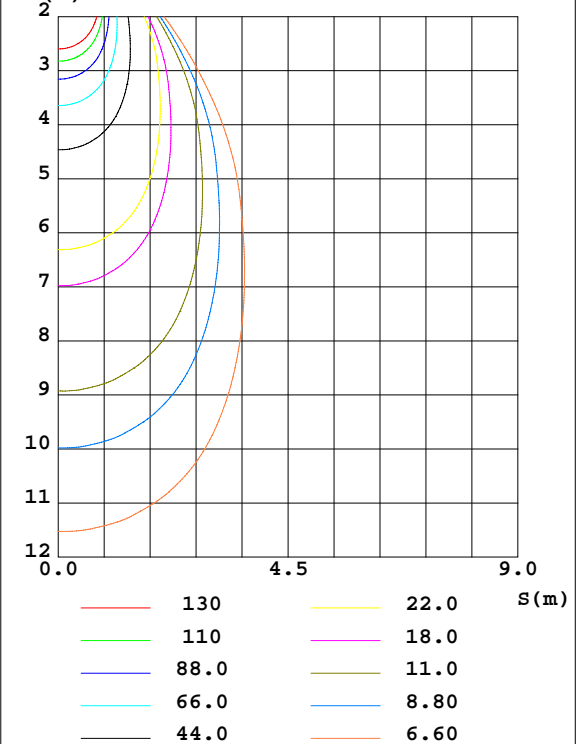
Test:U:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 111.77 lm/W			
MODEL		Imax(cd)	880.2	S/MH(C0/180)	0.84
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)	0.85
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	769.61	η UP,DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	769.61	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230.0	η down(%)	100.0	CIBSE SHR MAX	0.90

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:

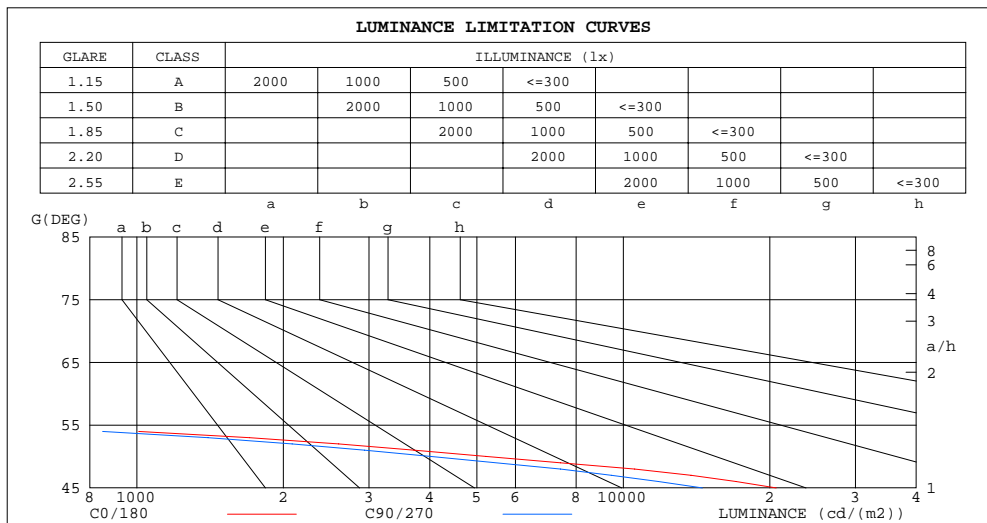
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	830.6	812.7	802.5	803.5	817.9	832.1	841.8	842.2	0- 10	81.19	81.19	10.6,10.6
20	654.4	631.7	615.0	612.3	626.4	630.8	642.6	650.8	10- 20	206.4	287.6	37.4,37.4
30	403.5	404.0	397.0	385.0	375.8	378.2	386.3	396.0	20- 30	232.4	520.0	67.6,67.6
40	199.1	199.5	186.9	178.9	172.7	171.1	155.7	192.0	30- 40	178.8	698.8	90.8,90.8
50	22.53	28.05	17.34	22.51	16.74	19.99	12.96	24.23	40- 50	65.33	764.1	99.3,99.3
60	0.2326	0.2198	0.1374	0.1730	0.1029	0.1421	0.1720	0.1641	50- 60	5.355	769.5	100,100
70	0.0602	0.0516	0.0172	0.0431	0.0258	0.0387	0.0775	0.0601	60- 70	0.0922	769.6	100,100
80	0.0172	0.0086	0.0172	0.0129	0.0258	0.0172	0.0430	0.0344	70- 80	0.0346	769.6	100,100
90	0	0.0043	0.0086	0.0129	0.0258	0.0172	0.0430	0.0344	80- 90	0.0212	769.6	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: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	15	29
80	15	15
75	20	10
70	26	7
65	46	18
60	69	41
55	527	469
50	5216	4013
45	20623	14538

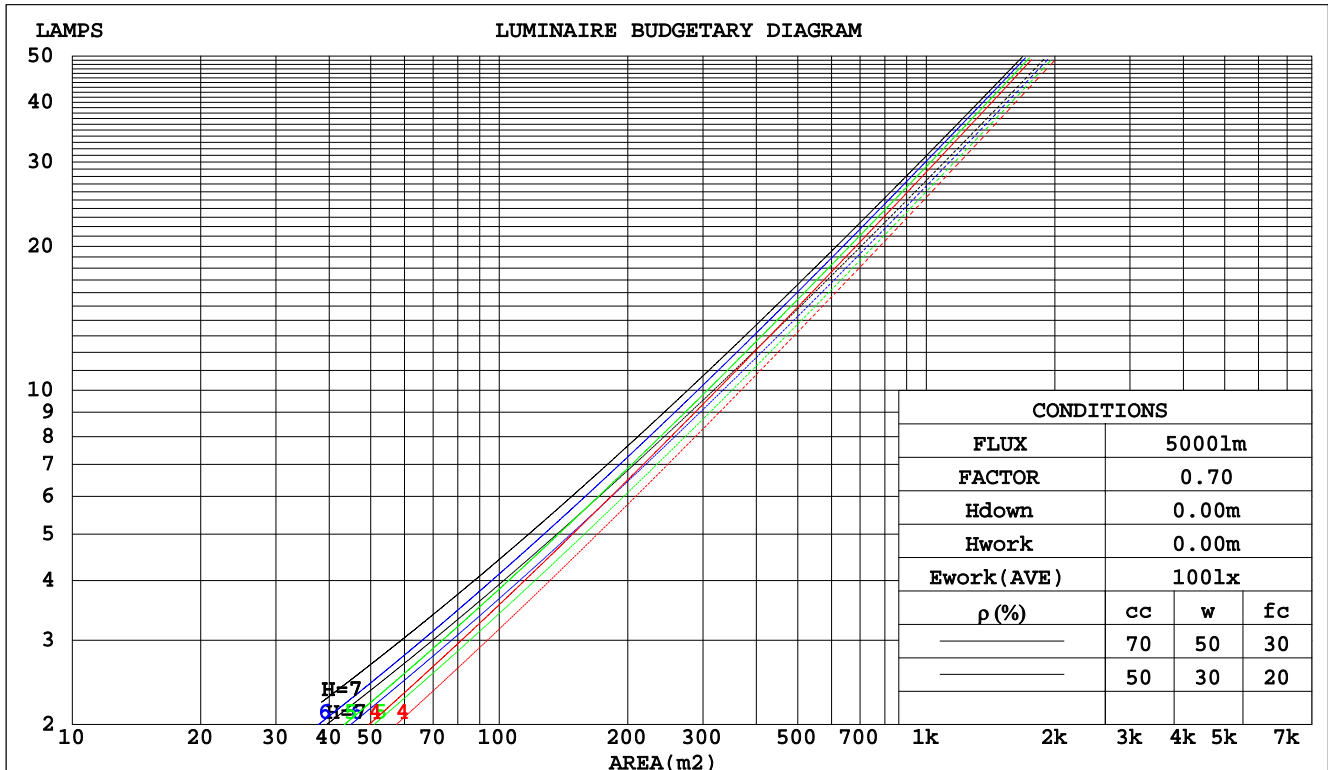
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	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	1.11	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.98	.94	.98	.95	.92	.95	.93	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.94	.90	.86	.92	.88	.85	.89	.86	.83	.87	.84	.82	.81
4.0	.89	.84	.80	.88	.83	.79	.86	.82	.78	.84	.80	.77	.82	.79	.76	.75
5.0	.84	.78	.73	.83	.77	.73	.81	.76	.72	.79	.75	.72	.78	.74	.71	.70
6.0	.78	.72	.68	.77	.72	.68	.76	.71	.67	.75	.70	.67	.73	.69	.66	.65
7.0	.73	.67	.63	.73	.67	.63	.71	.66	.63	.70	.66	.62	.69	.65	.62	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.62	.58	.65	.61	.58	.57
9.0	.65	.59	.55	.65	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.53
10.0	.61	.56	.52	.61	.55	.52	.60	.55	.51	.59	.55	.51	.59	.54	.51	.50



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm								
NAME:			TYPE:			WEIGHT:		
SPEC.:			DIM.: 182*65*42			SERIAL No.:		
MFR.: NLC-015B-04			SUR.:0.16*0.042			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	.179	.102	.032	.172	.098	.031	.159	.091	.029	.148	.085	.027	.137	.079	.026	
2.0	.172	.094	.029	.166	.092	.028	.156	.087	.027	.146	.082	.026	.137	.077	.024	
3.0	.164	.087	.026	.160	.085	.026	.151	.082	.025	.142	.078	.024	.134	.074	.023	
4.0	.157	.082	.024	.153	.080	.024	.145	.077	.023	.138	.074	.022	.131	.071	.022	
5.0	.150	.076	.022	.146	.075	.022	.140	.073	.021	.133	.070	.021	.127	.068	.020	
6.0	.143	.072	.021	.140	.071	.020	.134	.069	.020	.129	.067	.020	.123	.065	.019	
7.0	.137	.068	.019	.134	.067	.019	.129	.065	.019	.124	.064	.019	.119	.062	.018	
8.0	.131	.064	.018	.129	.063	.018	.124	.062	.018	.120	.061	.017	.115	.059	.017	
9.0	.126	.061	.017	.124	.060	.017	.119	.059	.017	.115	.058	.017	.112	.057	.016	
10.0	.121	.058	.016	.119	.057	.016	.115	.056	.016	.111	.055	.016	.108	.054	.016	

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	.171	.157	.145	.147	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.074	.053	.036	.043	.031	.022	.014	.010	.007	
6.0	.118	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 182*65*42			SERIAL No.:			
MFR.: NLC-015B-04					SUR.:0.16*0.042			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		18.8	19.7	19.0	19.9	20.1	18.5	19.4	18.7	19.6	19.8
	3H	18.6	19.5	18.9	19.7	19.9	18.3	19.2	18.5	19.4	19.6
	4H	18.5	19.4	18.8	19.6	19.8	18.2	19.0	18.5	19.2	19.5
	6H	18.4	19.2	18.7	19.5	19.7	18.1	18.9	18.4	19.1	19.4
	8H	18.4	19.1	18.7	19.4	19.7	18.1	18.8	18.4	19.1	19.3
	12H	18.3	19.1	18.7	19.3	19.6	18.0	18.7	18.3	19.0	19.3
4H	2H	18.5	19.4	18.8	19.6	19.8	18.2	19.0	18.5	19.3	19.5
	3H	18.3	19.1	18.7	19.3	19.6	18.0	18.7	18.3	19.0	19.3
	4H	18.2	18.9	18.6	19.2	19.5	17.9	18.6	18.3	18.9	19.2
	6H	18.1	18.7	18.5	19.0	19.4	17.8	18.4	18.2	18.7	19.1
	8H	18.1	18.6	18.5	19.0	19.3	17.8	18.3	18.2	18.7	19.0
	12H	18.0	18.5	18.5	18.9	19.3	17.7	18.2	18.1	18.6	19.0
8H	4H	18.1	18.6	18.5	19.0	19.3	17.8	18.3	18.2	18.7	19.0
	6H	18.0	18.4	18.4	18.8	19.2	17.7	18.1	18.1	18.5	18.9
	8H	17.9	18.3	18.4	18.7	19.2	17.6	18.0	18.1	18.4	18.9
	12H	17.9	18.2	18.4	18.7	19.1	17.6	17.9	18.0	18.3	18.8
12H	4H	18.0	18.5	18.5	18.9	19.3	17.7	18.2	18.1	18.6	19.0
	6H	17.9	18.3	18.4	18.7	19.2	17.6	18.0	18.1	18.4	18.9
	8H	17.9	18.2	18.4	18.7	19.1	17.6	17.9	18.0	18.3	18.8
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / -33.7					+ 2.7 / -33.0					
1.5H	+ 4.6 / -16.2					+ 5.0 / -16.5					
2.0H	+ 7.9 / -34.6					+ 7.1 / -30.8					

CIE Pub.117, 769.6 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.9$)

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:

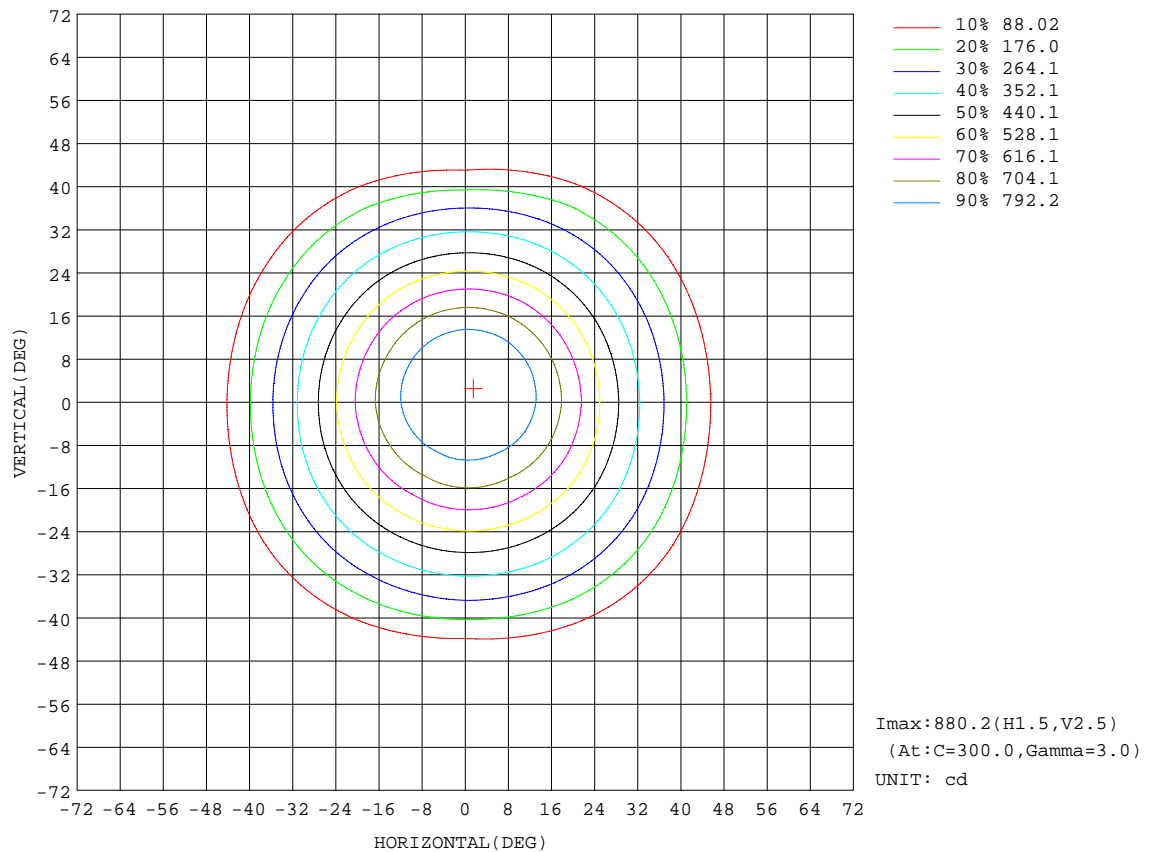
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	84	79	75	71
0.80	94	87	84	93	87	83	92	87	83	79
1.00	98	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	93	100	96	93	88
1.50	106	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:

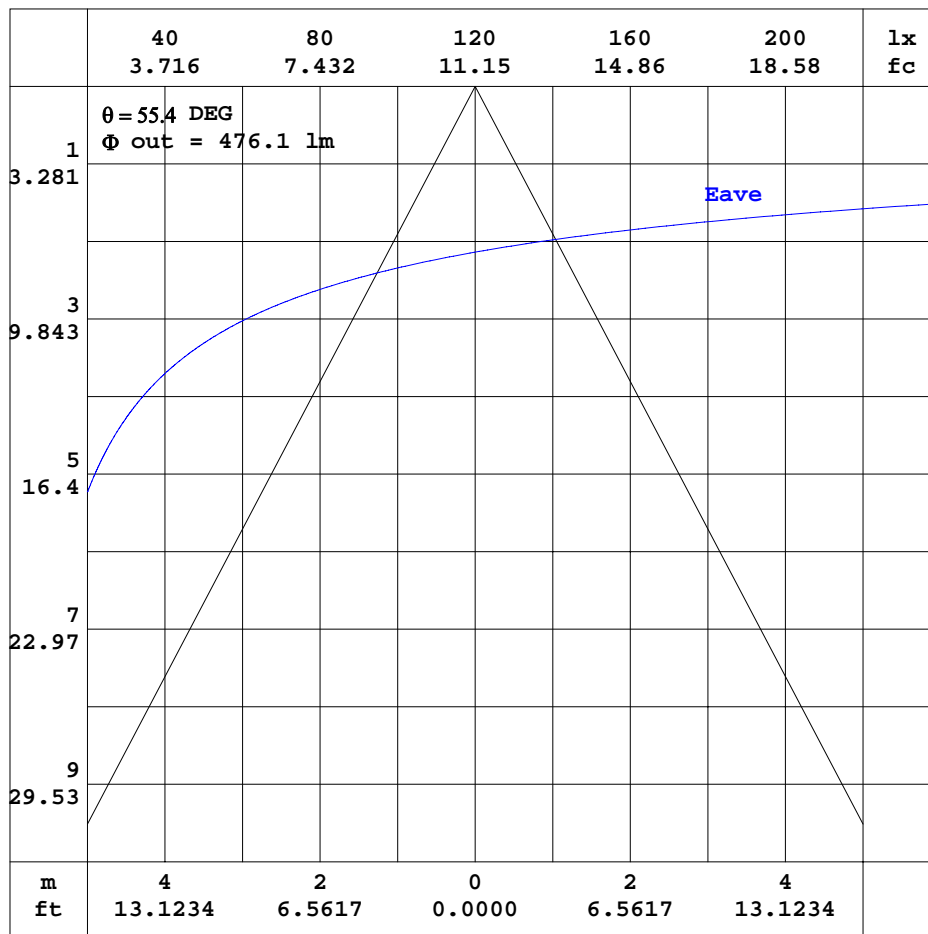


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:



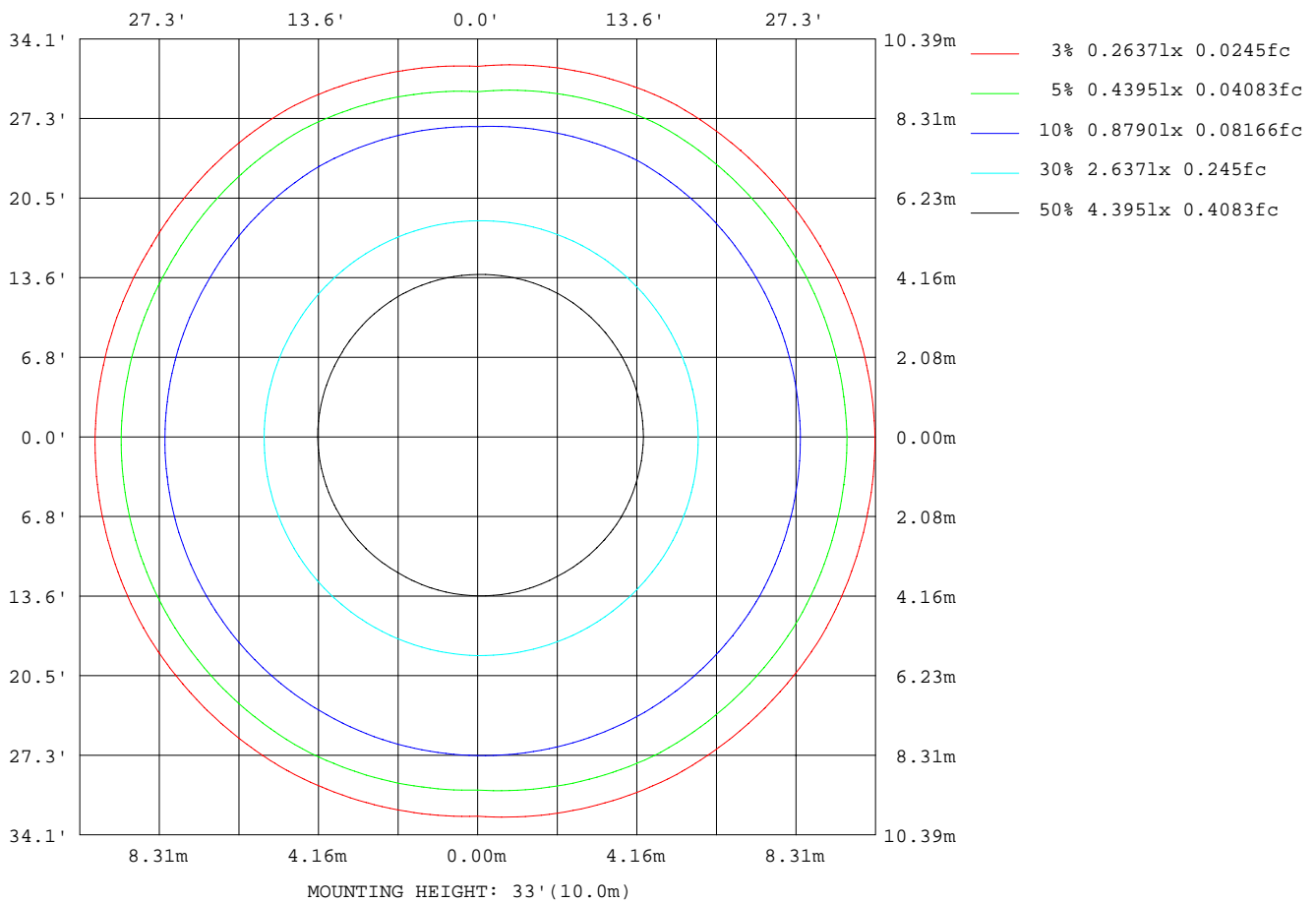
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-07-12

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:229.80V I:0.0314A P:6.8854W PF:0.9529 Freq:50.08Hz Lamp Flux:769.61x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 182*65*42	SERIAL No.:
MFR.: NLC-015B-04	SUR.:0.16*0.042	Shielding Angle:

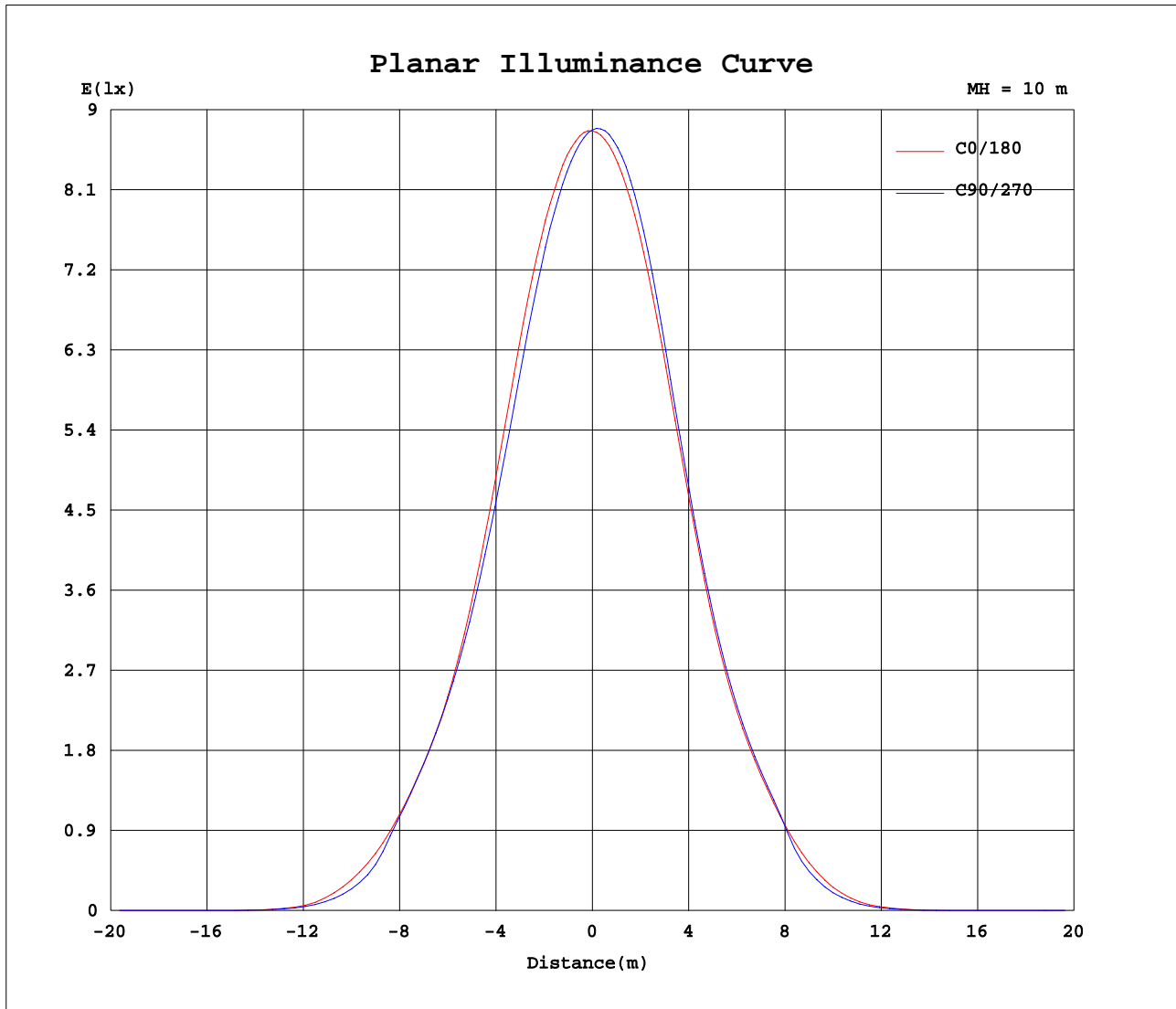
AvgL	cd/m2
L_0~180(65)av	27
L_0~180(75)av	17
L_0~180(85)av	29
L_90~270(65)av	30
L_90~270(75)av	20
L_90~270(85)av	51
L_45(65)av	31
L_45(75)av	18
L_45(85)av	28

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2023-07-12

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: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2023-07-12

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:

```