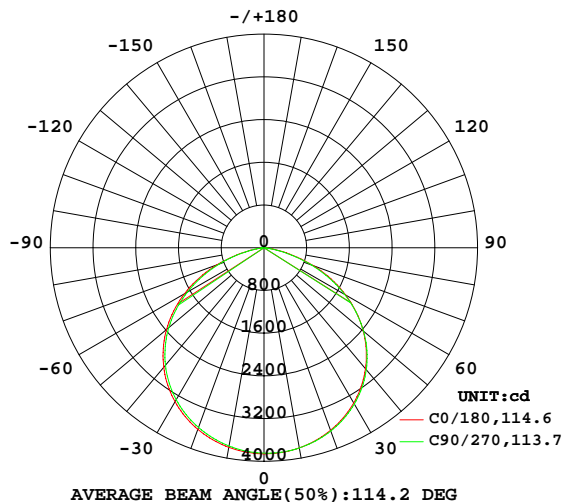


LUMINAIRE PHOTOMETRIC TEST REPORT

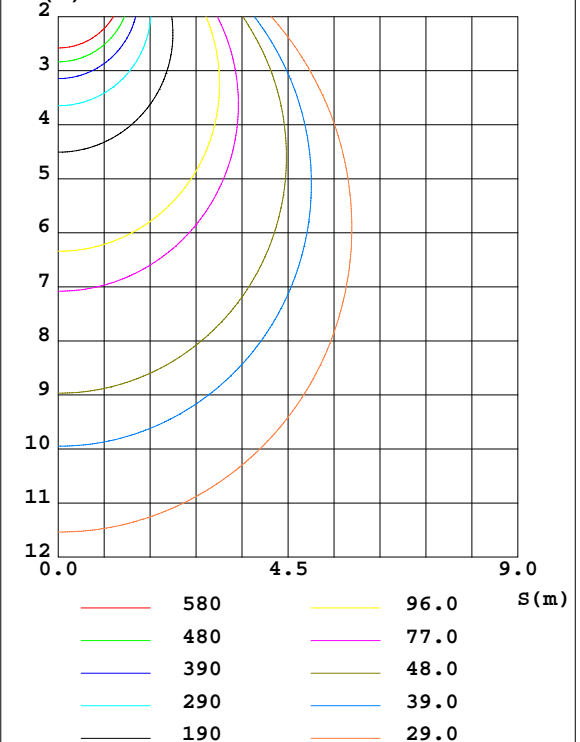
Test:U:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.74 lm/W			
MODEL		Imax(cd)	3859	S/MH(C0/180)	1.28
NOMINAL POWER(W)	120	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	10872	η UP,DN(C0-180)	0.0,50.7
NOMINAL FLUX(lm)	10872.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.3
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:2024-01-29

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:

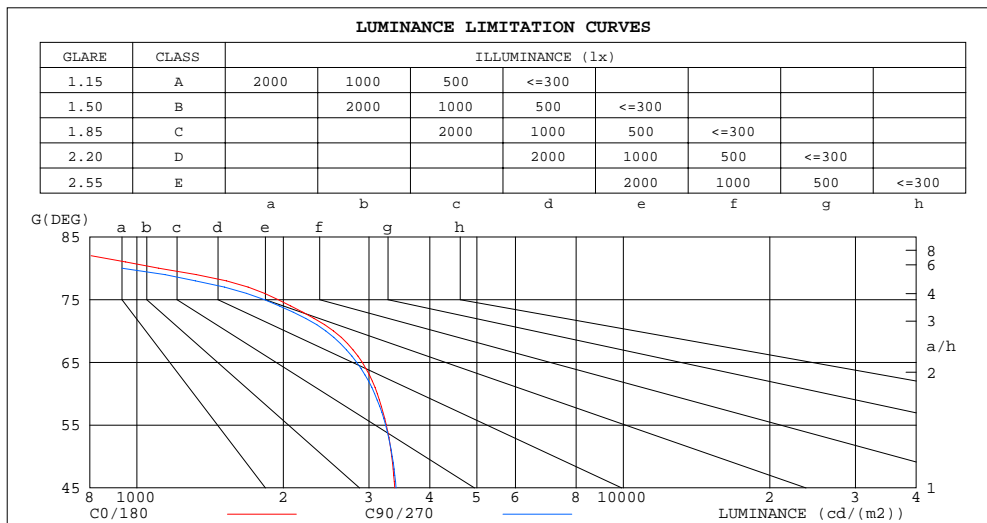
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	3806	3811	3807	3793	3796	3777	3770	3776	0- 10	364.6	364.6	3.35,3.35
20	3639	3655	3654	3630	3620	3592	3583	3598	10- 20	1050	1415	13,13
30	3360	3383	3381	3353	3331	3298	3287	3311	20- 30	1611	3025	27.8,27.8
40	2957	2986	2980	2949	2921	2886	2871	2908	30- 40	1970	4996	45.9,45.9
50	2427	2450	2434	2408	2383	2348	2328	2378	40- 50	2065	7060	64.9,64.9
60	1764	1769	1742	1729	1716	1682	1652	1716	50- 60	1849	8909	81.9,81.9
70	980.7	990.0	945.0	939.9	938.4	916.2	895.1	952.5	60- 70	1324	10233	94.1,94.1
80	217.6	211.3	182.7	183.6	190.5	181.8	186.4	208.6	70- 80	575.4	10808	99.4,99.4
90	9.596	10.95	8.093	6.692	10.69	12.11	12.12	11.66	80- 90	64.27	10872	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:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	428	298
80	1109	931
75	1950	1826
70	2537	2444
65	2905	2830
60	3121	3082
55	3257	3246
50	3340	3349
45	3389	3410

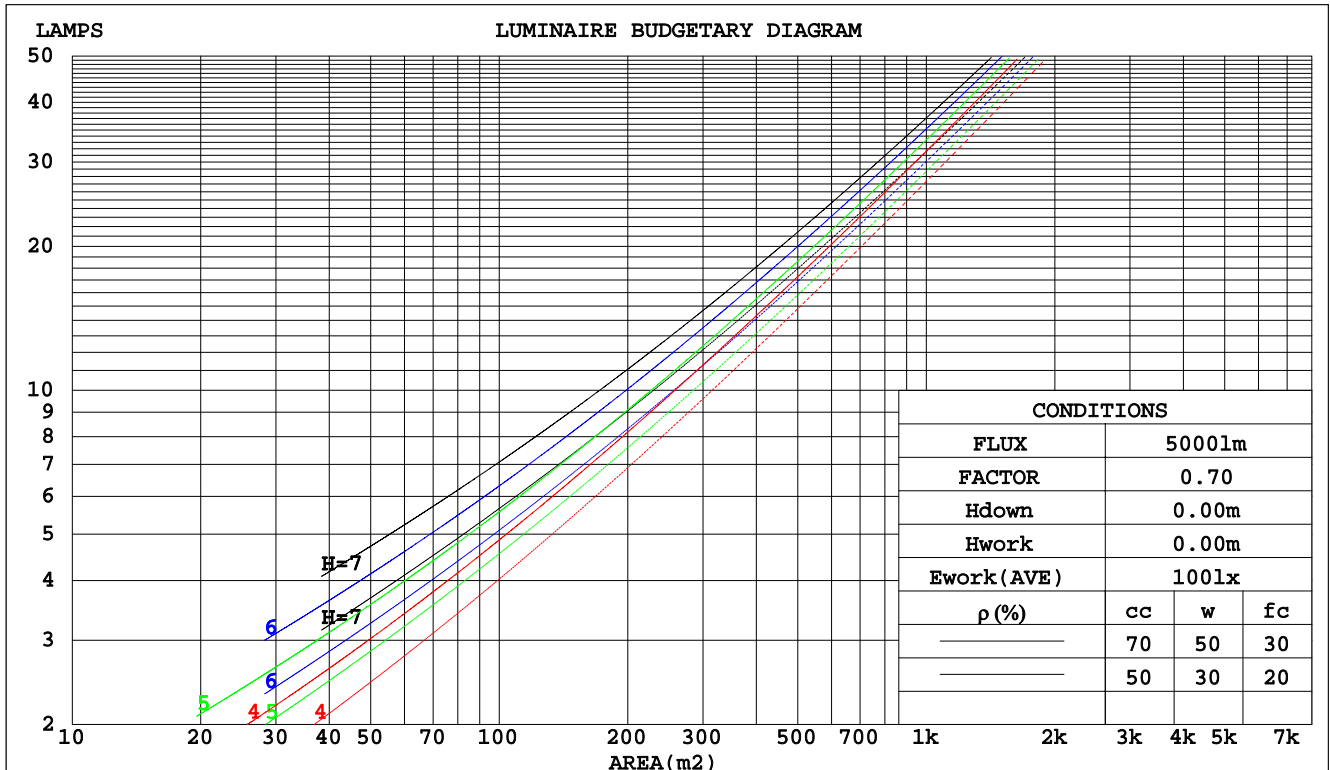
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	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	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.65	.73	.68	.64	.71	.66	.62	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.54	.63	.58	.54	.51
5.0	.64	.55	.48	.63	.54	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.44
6.0	.57	.49	.42	.56	.48	.42	.55	.47	.42	.53	.46	.41	.51	.46	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.42	.37	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.33	.43	.37	.32	.31
9.0	.43	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm					
NAME:		TYPE:		WEIGHT:	
SPEC.:		DIM.: 1200*40		SERIAL No.:	
MFR.: NLT23-0015-04		SUR.:3.14*0.6*0.6		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	.288	.164	.052	.281	.160	.051	.268	.154	.049	.256	.148	.047	.245	.142	.046		
2.0	.279	.153	.047	.272	.150	.046	.261	.145	.045	.250	.140	.044	.240	.136	.043		
3.0	.261	.139	.042	.256	.137	.041	.246	.133	.040	.236	.129	.040	.227	.126	.039		
4.0	.243	.126	.037	.238	.125	.037	.229	.122	.036	.221	.119	.036	.213	.116	.035		
5.0	.226	.115	.033	.222	.114	.033	.214	.111	.033	.206	.109	.032	.199	.106	.032		
6.0	.211	.106	.030	.207	.104	.030	.200	.102	.030	.193	.100	.029	.186	.098	.029		
7.0	.196	.097	.028	.193	.096	.027	.187	.094	.027	.181	.093	.027	.175	.091	.027		
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.170	.086	.025	.165	.085	.025		
9.0	.173	.084	.023	.170	.083	.023	.165	.081	.023	.160	.080	.023	.155	.079	.023		
10.0	.163	.078	.022	.160	.077	.022	.155	.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	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.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: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:					DIM.: 1200*40			SERIAL No.:			
MFR.: NLT23-0015-04					SUR.:3.14*0.6*0.6			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		17.2	18.7	17.4	18.9	19.1	17.2	18.7	17.5	18.9	19.1
3H		18.4	19.8	18.7	20.1	20.3	18.5	19.8	18.8	20.1	20.3
4H		18.8	20.1	19.1	20.4	20.6	18.8	20.1	19.1	20.3	20.6
6H		18.9	20.1	19.2	20.4	20.7	18.9	20.1	19.2	20.4	20.6
8H		18.9	20.1	19.2	20.4	20.7	18.8	20.0	19.2	20.3	20.6
12H		18.9	20.0	19.2	20.3	20.6	18.8	19.9	19.1	20.2	20.5
4H	2H	17.7	19.0	18.0	19.3	19.5	17.8	19.1	18.1	19.3	19.6
	3H	19.1	20.3	19.5	20.6	20.9	19.2	20.3	19.5	20.6	20.9
	4H	19.6	20.6	20.0	20.9	21.3	19.6	20.6	20.0	21.0	21.3
	6H	19.8	20.7	20.2	21.0	21.4	19.7	20.6	20.1	21.0	21.4
	8H	19.8	20.6	20.2	21.0	21.4	19.7	20.6	20.1	20.9	21.3
	12H	19.7	20.5	20.2	20.9	21.3	19.7	20.5	20.1	20.8	21.2
8H	4H	19.7	20.6	20.1	20.9	21.3	19.7	20.6	20.1	20.9	21.3
	6H	19.9	20.6	20.4	21.1	21.5	19.9	20.6	20.3	21.0	21.4
	8H	20.0	20.6	20.4	21.0	21.5	19.9	20.5	20.4	20.9	21.4
	12H	19.9	20.5	20.4	20.9	21.4	19.9	20.4	20.4	20.9	21.3
12H	4H	19.7	20.5	20.1	20.9	21.3	19.7	20.5	20.1	20.9	21.3
	6H	19.9	20.5	20.4	21.0	21.4	19.9	20.5	20.3	20.9	21.4
	8H	20.0	20.5	20.4	20.9	21.4	19.9	20.4	20.4	20.9	21.3
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 / - 0.5				
2.0H		+ 0.3 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 10872 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 8.3$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:

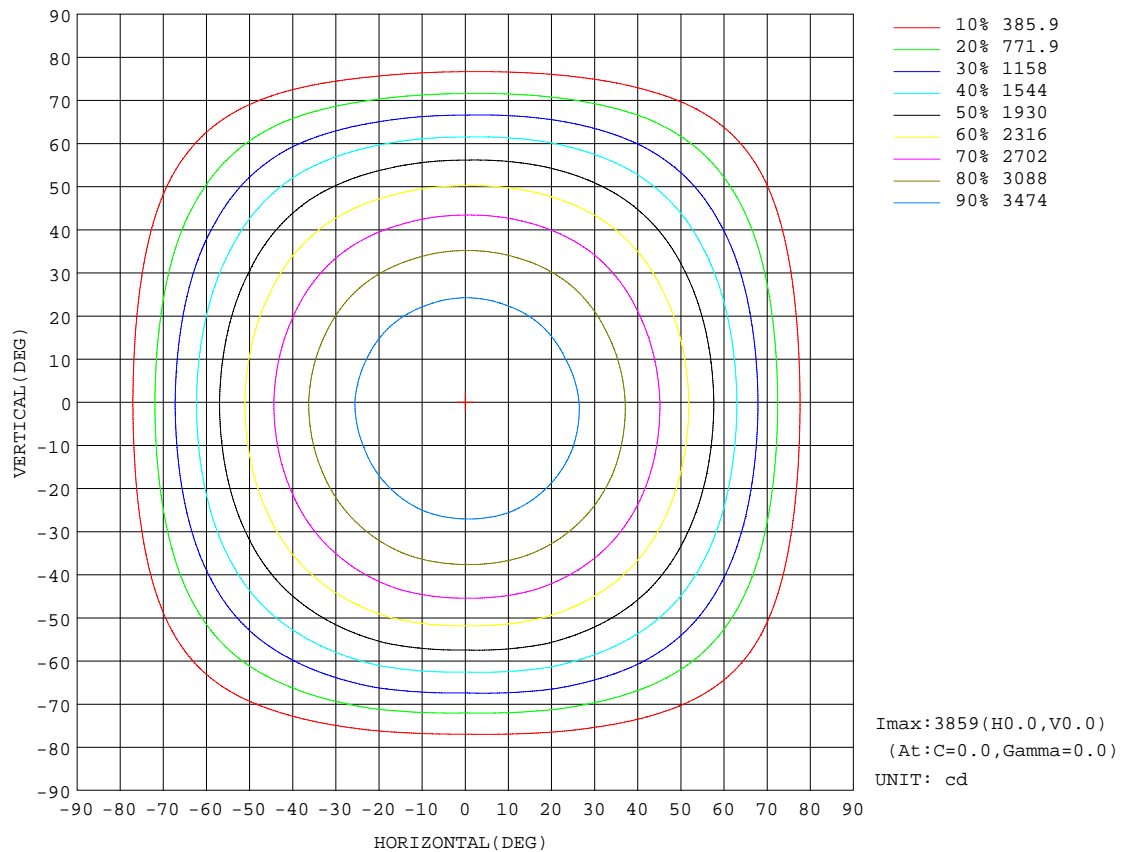
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	57	46	39	56	46	39	33
0.80	68	57	50	67	56	49	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	84	74	67	83	73	67	80	72	66	59
1.50	89	80	73	88	79	72	85	77	71	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	97	88
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:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:

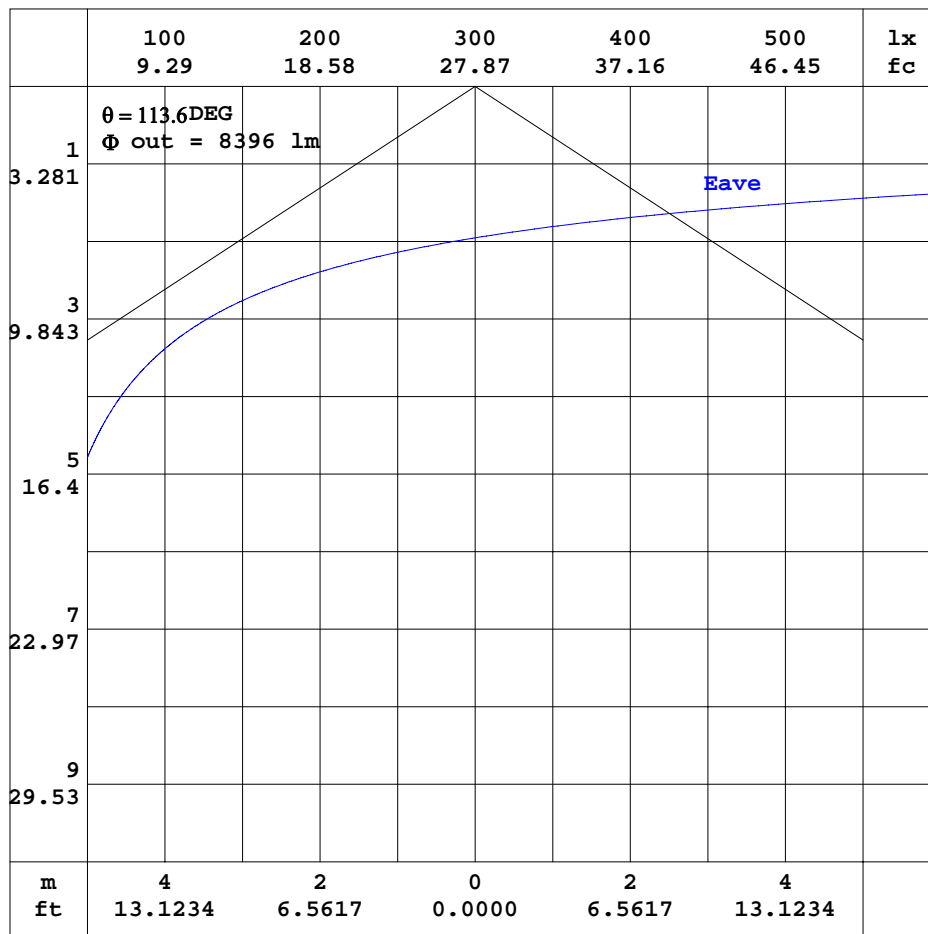


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:



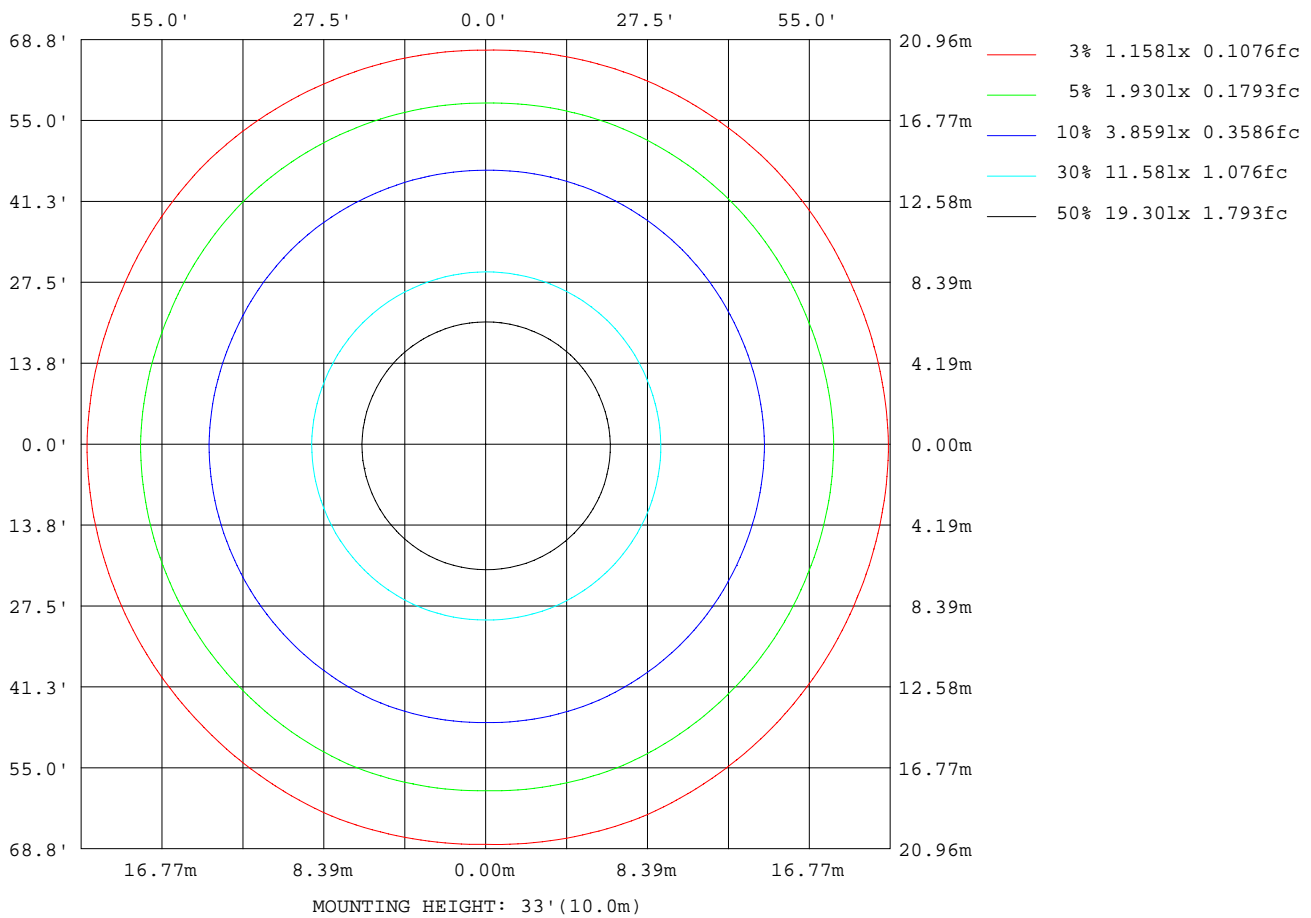
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-29

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:

ISOLUX DIAGRAM

Test:U:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2024-01-29

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:229.43V I:0.5170A P:117.23W PF:0.9883 Freq:49.99Hz Lamp Flux:10872.3x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*40	SERIAL No.:
MFR.: NLT23-0015-04	SUR.:3.14*0.6*0.6	Shielding Angle:

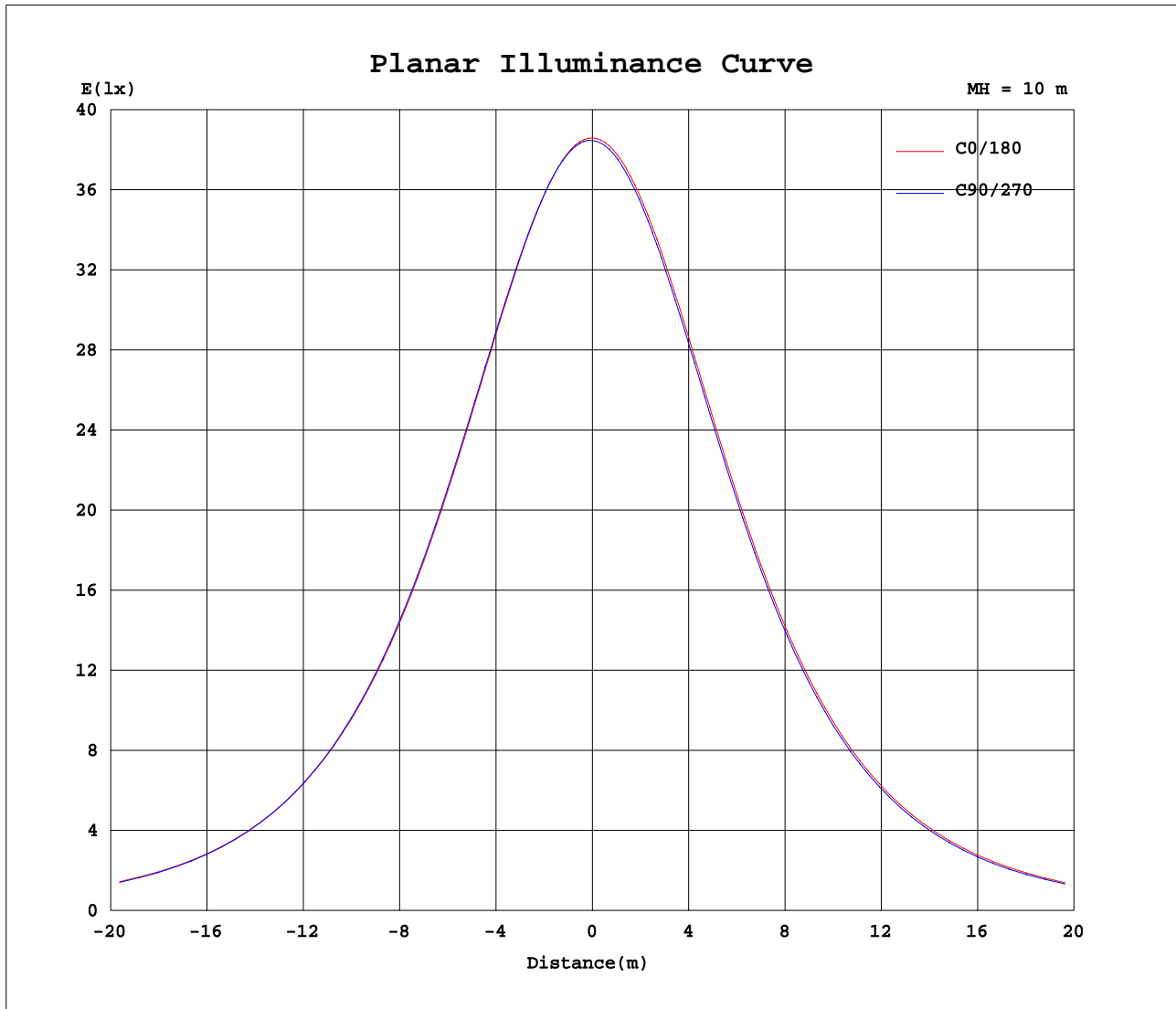
AvgL	cd/m2
L_0~180(65)av	2850
L_0~180(75)av	1881
L_0~180(85)av	391
L_90~270(65)av	2752
L_90~270(75)av	1777
L_90~270(85)av	337
L_45(65)av	2821
L_45(75)av	1838
L_45(85)av	374

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2024-01-29

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: 2024-01-29

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:

```