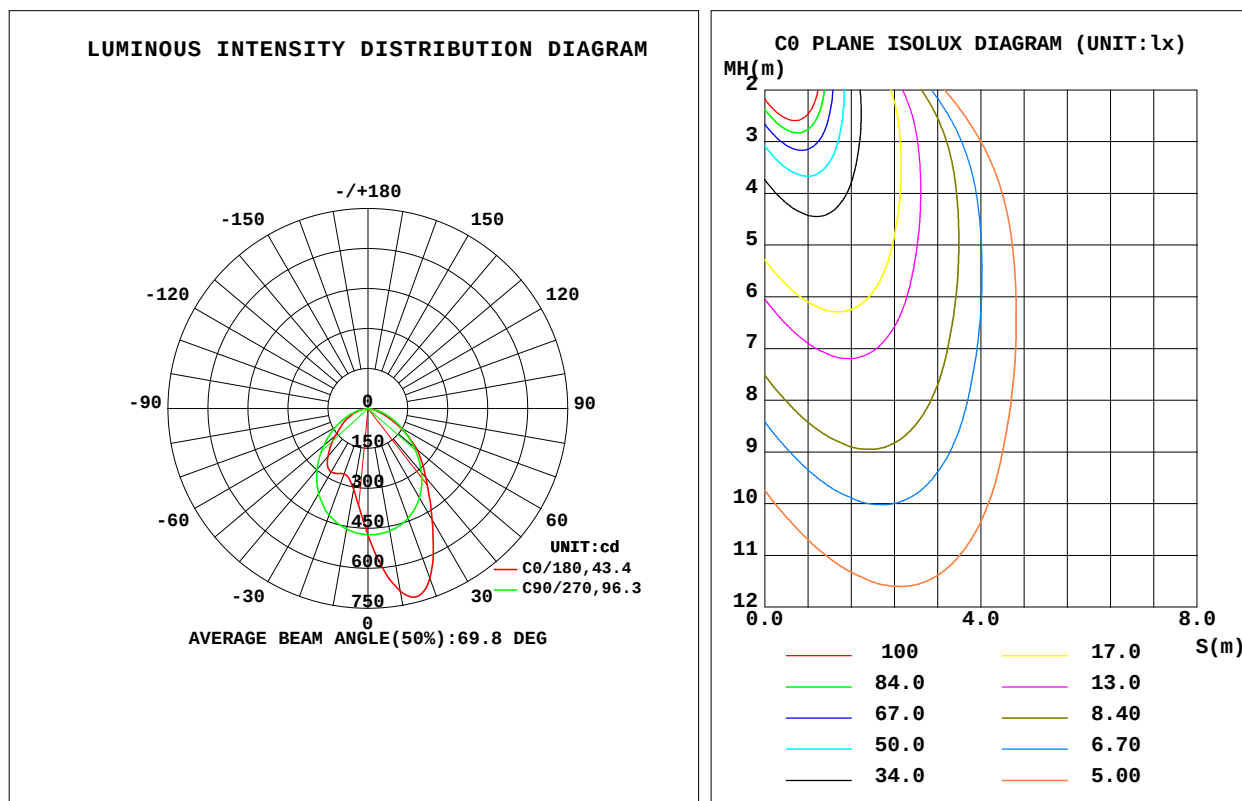


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 95.04 lm/W			
MODEL		I _{max} (cd)	729.2	S/MH(C0/180)	1.33
NOMINAL POWER(W)	12	LOR(%)	97.7	S/MH(C90/270)	1.17
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	1140.5	h UP, DN(C0-180)	0.0,51.5
NOMINAL FLUX(lm)	1167.85	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,46.1
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	48	h down(%)	97.7	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

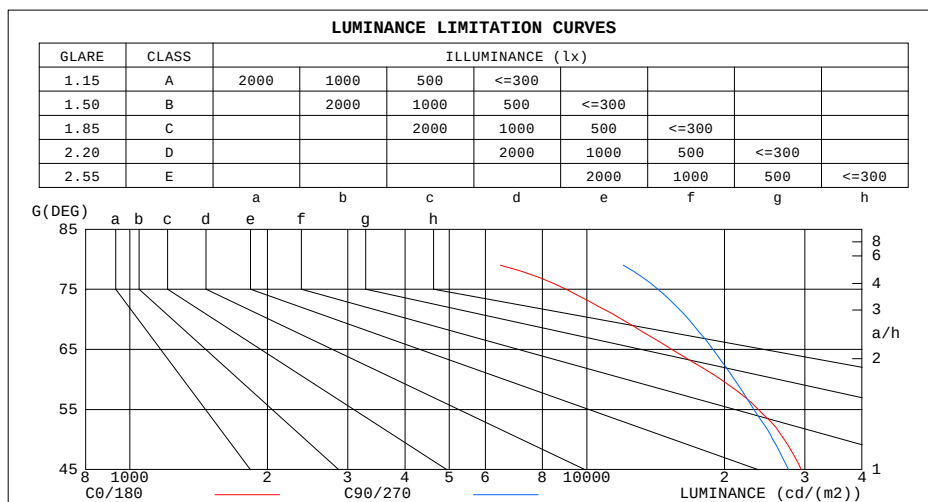
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
10	695.3	638.5	467.1	351.0	310.9	341.9	459.5	644.6	0- 10	46.14	46.14	4.05, 3.95
20	679.0	705.6	438.9	274.8	262.1	270.6	426.4	709.2	10- 20	137.2	183.3	16.1, 15.7
30	482.0	610.3	386.4	244.7	275.5	246.6	370.0	618.6	20- 30	202.6	385.9	33.8, 33
40	338.4	456.5	311.8	226.0	235.0	230.5	297.1	468.5	30- 40	227.3	613.2	53.8, 52.5
50	240.1	301.5	226.4	178.8	162.0	179.6	216.8	314.7	40- 50	211.2	824.5	72.3, 70.6
60	135.6	178.7	145.2	119.7	105.5	119.0	141.8	186.0	50- 60	163.6	988.0	86.6, 84.6
70	56.32	86.33	78.82	68.67	58.93	68.26	78.64	91.01	60- 70	104.6	1093	95.8, 93.6
80	0	0	0	0	0	0	0	0	70- 80	47.85	1140	100, 97.7
90	0	0	0	0	0	0	0	0	80- 90	0	1140	100, 97.7
100	0	0	0	0	0	0	0	0	90-100	0	1140	100, 97.7
110	0	0	0	0	0	0	0	0	100-110	0	1140	100, 97.7
120	0	0	0	0	0	0	0	0	110-120	0	1140	100, 97.7
130	0	0	0	0	0	0	0	0	120-130	0	1140	100, 97.7
140	0	0	0	0	0	0	0	0	130-140	0	1140	100, 97.7
150	0	0	0	0	0	0	0	0	140-150	0	1140	100, 97.7
160	0	0	0	0	0	0	0	0	150-160	0	1140	100, 97.7
170	0	0	0	0	0	0	0	0	160-170	0	1140	100, 97.7
180	0	0	0	0	0	0	0	0	170-180	0	1140	100, 97.7
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	0	0
80	0	0
75	9001	14316
70	11932	16699
65	15328	18880
60	19653	21041
55	23743	23214
50	27066	25528
45	29474	27641

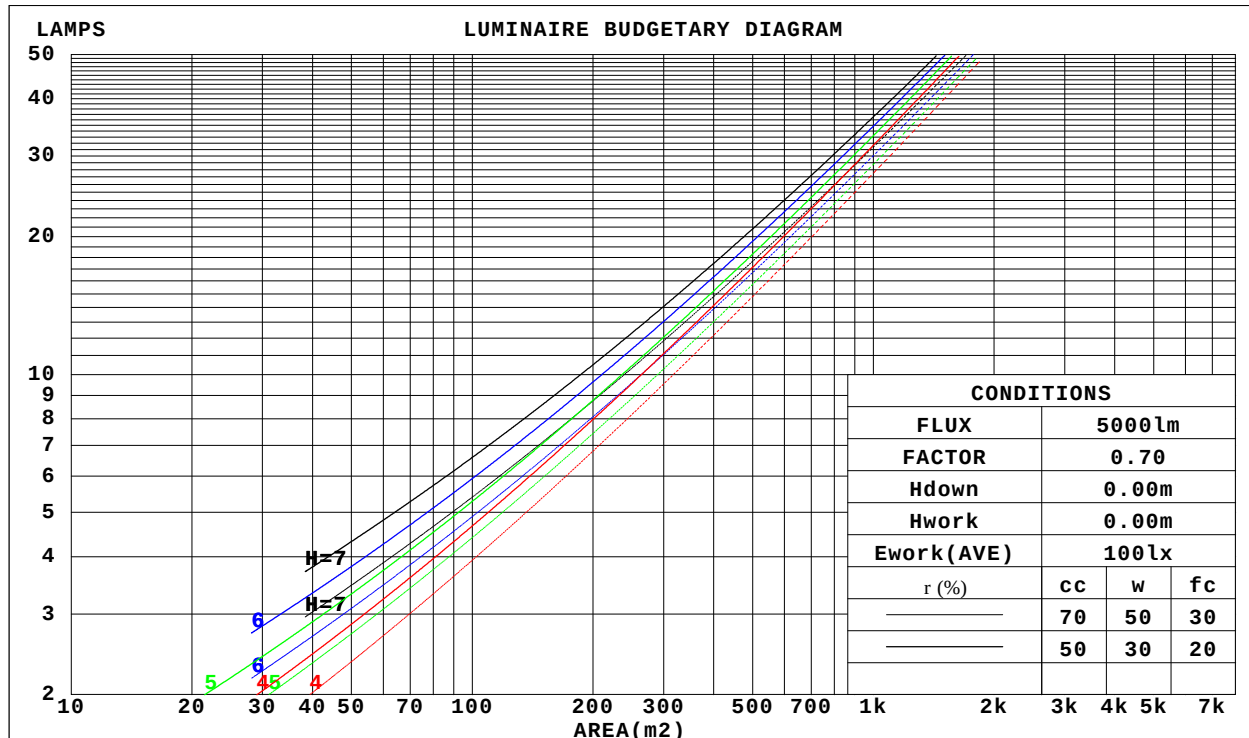
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

r CC	80%			70%			50%			30%			10%			0
r W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.16	1.16	1.16	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	.00	.00	.00	.98
1.0	1.04	1.00	.97	1.02	.98	.95	.98	.95	.92	.94	.92	.90	.90	.89	.87	.85
2.0	.92	.86	.81	.90	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.69	.80	.74	.68	.77	.72	.67	.75	.70	.66	.72	.68	.65	.63
4.0	.73	.65	.59	.72	.64	.59	.69	.63	.58	.67	.62	.57	.65	.60	.57	.55
5.0	.66	.58	.52	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.46	.59	.51	.45	.57	.50	.45	.55	.49	.45	.54	.48	.44	.42
7.0	.54	.46	.41	.54	.46	.40	.52	.45	.40	.51	.45	.40	.49	.44	.40	.38
8.0	.50	.42	.37	.49	.42	.36	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
9.0	.46	.38	.33	.45	.38	.33	.44	.38	.33	.43	.37	.33	.42	.37	.32	.31
10.0	.42	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.30	.39	.34	.30	.28



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2022-12-12

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:



WEC AND CCEC

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm					
NAME: VOM40LA600			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:23*600mm		Shielding Angle:

r c c	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r f c	20%			20%			20%			20%			20%			0
R C R	R C R:Room Cavity Ratio			Wall Exitance Coefficients(W E C)												
0.0																
1.0	.257	.146	.046	.250	.143	.045	.237	.136	.043	.226	.130	.042	.215	.125	.040	
2.0	.251	.137	.042	.245	.135	.042	.234	.130	.040	.223	.125	.039	.214	.121	.038	
3.0	.237	.126	.038	.232	.124	.037	.222	.120	.037	.213	.117	.036	.204	.113	.035	
4.0	.222	.115	.034	.217	.114	.034	.209	.111	.033	.201	.108	.032	.193	.105	.032	
5.0	.207	.106	.031	.203	.104	.030	.196	.102	.030	.189	.099	.030	.182	.097	.029	
6.0	.194	.097	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.182	.090	.026	.179	.089	.025	.173	.087	.025	.167	.086	.025	.162	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.161	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.152	.073	.020	.150	.072	.020	.146	.071	.020	.141	.070	.020	.137	.069	.020	

r c c	80%			70%			50%			30%			10%			0
r w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r f c	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.186	.186	.186	.159	.159	.159	.109	.109	.109	.062	.062	.062	.020	.020	.020	
1.0	.173	.153	.135	.148	.131	.116	.101	.090	.080	.058	.052	.047	.019	.017	.015	
2.0	.164	.129	.100	.140	.111	.086	.096	.077	.060	.055	.045	.035	.018	.014	.012	
3.0	.155	.111	.076	.133	.096	.066	.091	.067	.046	.053	.039	.027	.017	.013	.009	
4.0	.148	.098	.060	.127	.085	.052	.087	.059	.037	.050	.035	.022	.016	.011	.007	
5.0	.141	.088	.049	.121	.076	.042	.083	.053	.030	.048	.031	.018	.016	.010	.006	
6.0	.134	.079	.040	.115	.069	.035	.079	.048	.025	.046	.028	.015	.015	.009	.005	
7.0	.128	.073	.034	.110	.063	.030	.076	.044	.021	.044	.026	.013	.014	.009	.004	
8.0	.122	.067	.029	.105	.058	.026	.073	.041	.018	.042	.024	.011	.014	.008	.004	
9.0	.116	.062	.026	.100	.054	.022	.069	.038	.016	.040	.022	.009	.013	.007	.003	
10.0	.111	.058	.023	.096	.050	.020	.066	.035	.014	.039	.021	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-12-12

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm											
NAME: VOM40LA600						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:		
MFR.:						SUR.:23*600mm			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	23.8	25.2	24.1	25.4	25.6	23.8	25.2	24.1	25.4	25.6	
	3H	24.4	25.7	24.7	25.9	26.1	24.7	26.0	25.0	26.2	
	4H	24.5	25.7	24.8	26.0	26.2	25.0	26.2	25.3	26.5	
	6H	24.5	25.7	24.8	25.9	26.2	25.1	26.3	25.5	26.5	
	8H	24.5	25.6	24.8	25.8	26.1	25.1	26.2	25.4	26.5	
	12H	24.4	25.5	24.8	25.8	26.1	25.0	26.1	25.4	26.4	
4H	2H	24.3	25.5	24.6	25.8	26.0	24.3	25.5	24.6	25.8	
	3H	25.0	26.1	25.4	26.4	26.7	25.3	26.4	25.7	26.7	
	4H	25.2	26.2	25.6	26.5	26.8	25.7	26.7	26.1	27.0	
	6H	25.3	26.1	25.7	26.5	26.8	25.9	26.8	26.3	27.1	
	8H	25.2	26.0	25.7	26.4	26.8	25.9	26.7	26.3	27.0	
	12H	25.2	25.9	25.6	26.3	26.7	25.8	26.6	26.3	26.9	
8H	4H	25.4	26.2	25.8	26.5	26.9	25.8	26.6	26.2	27.0	
	6H	25.5	26.1	25.9	26.5	26.9	26.1	26.7	26.5	27.1	
	8H	25.4	26.0	25.9	26.4	26.9	26.0	26.6	26.5	27.0	
	12H	25.4	25.9	25.9	26.3	26.8	26.0	26.5	26.5	26.9	
12H	4H	25.3	26.1	25.8	26.4	26.8	25.8	26.5	26.2	26.9	
	6H	25.4	26.0	25.9	26.4	26.9	26.0	26.6	26.5	27.0	
	8H	25.4	25.9	25.9	26.3	26.8	26.0	26.5	26.5	26.9	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.7					+ 0.6 / - 0.7					
1.5H	+ 0.3 / - 0.7					+ 0.3 / - 0.7					
2.0H	+ 0.5 / - 1.3					+ 0.5 / - 1.0					

CIE Pub.117, 1168 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.5$)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

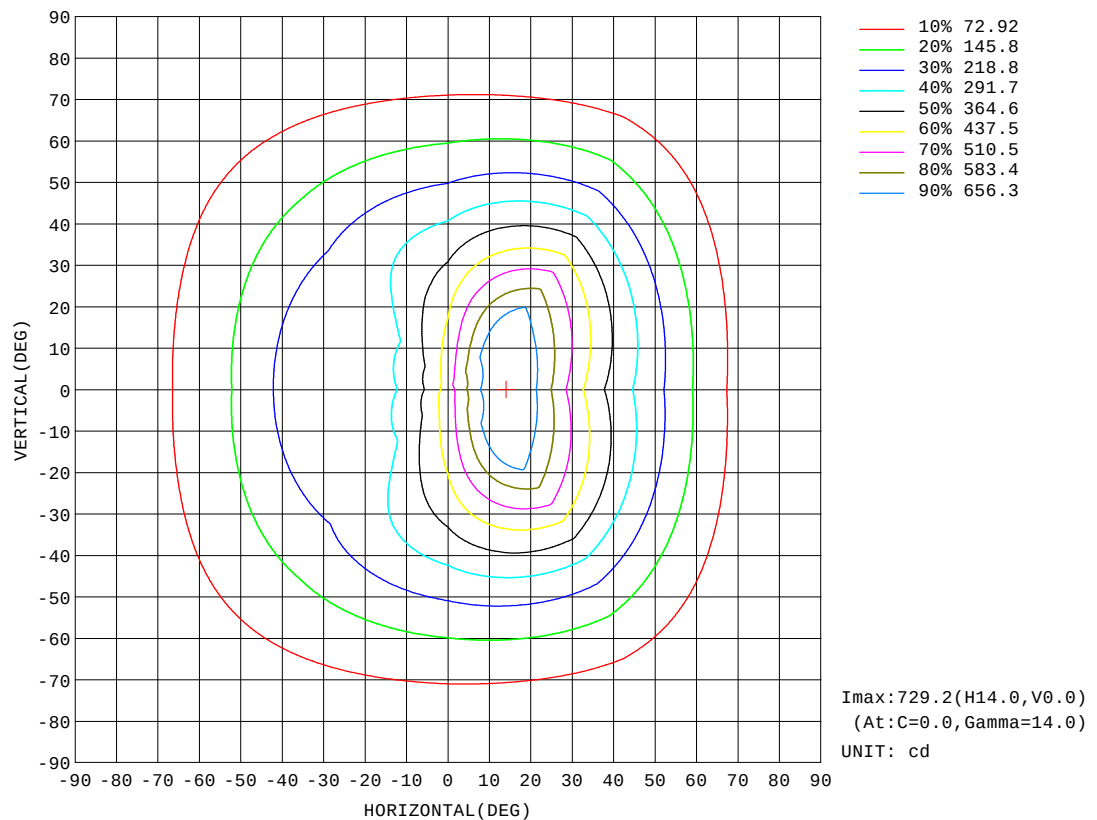
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	51	44	61	51	44	59	50	44	38
0.80	71	61	54	70	60	54	69	60	54	48
1.00	79	69	63	78	69	63	76	70	62	56
1.25	86	77	71	84	76	70	82	75	69	63
1.50	90	82	76	89	81	75	86	79	74	68
2.00	96	89	84	95	88	83	91	86	82	75
2.50	100	93	88	98	92	87	94	89	85	78
3.00	103	97	92	101	95	91	97	93	89	81
4.00	106	101	97	104	100	96	100	96	93	85
5.00	108	104	101	106	102	99	101	99	96	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:



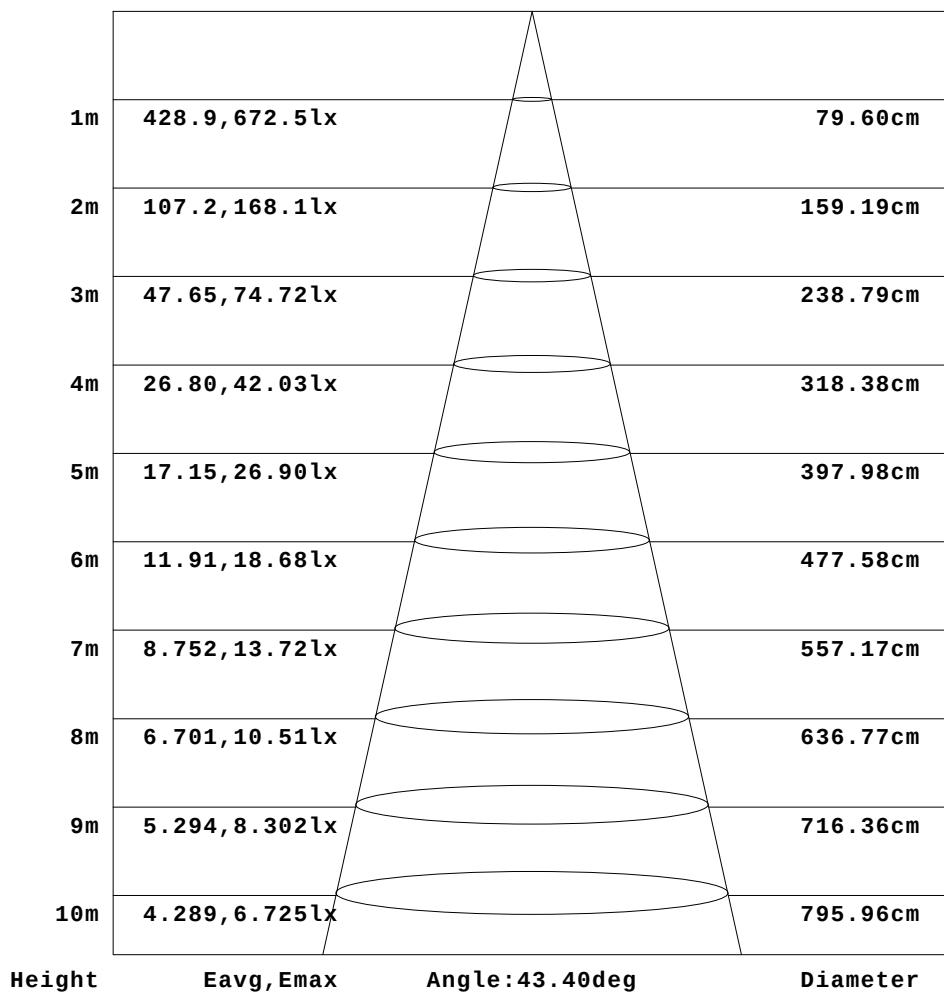
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

AAI Figure

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Flux out:219.9 lm



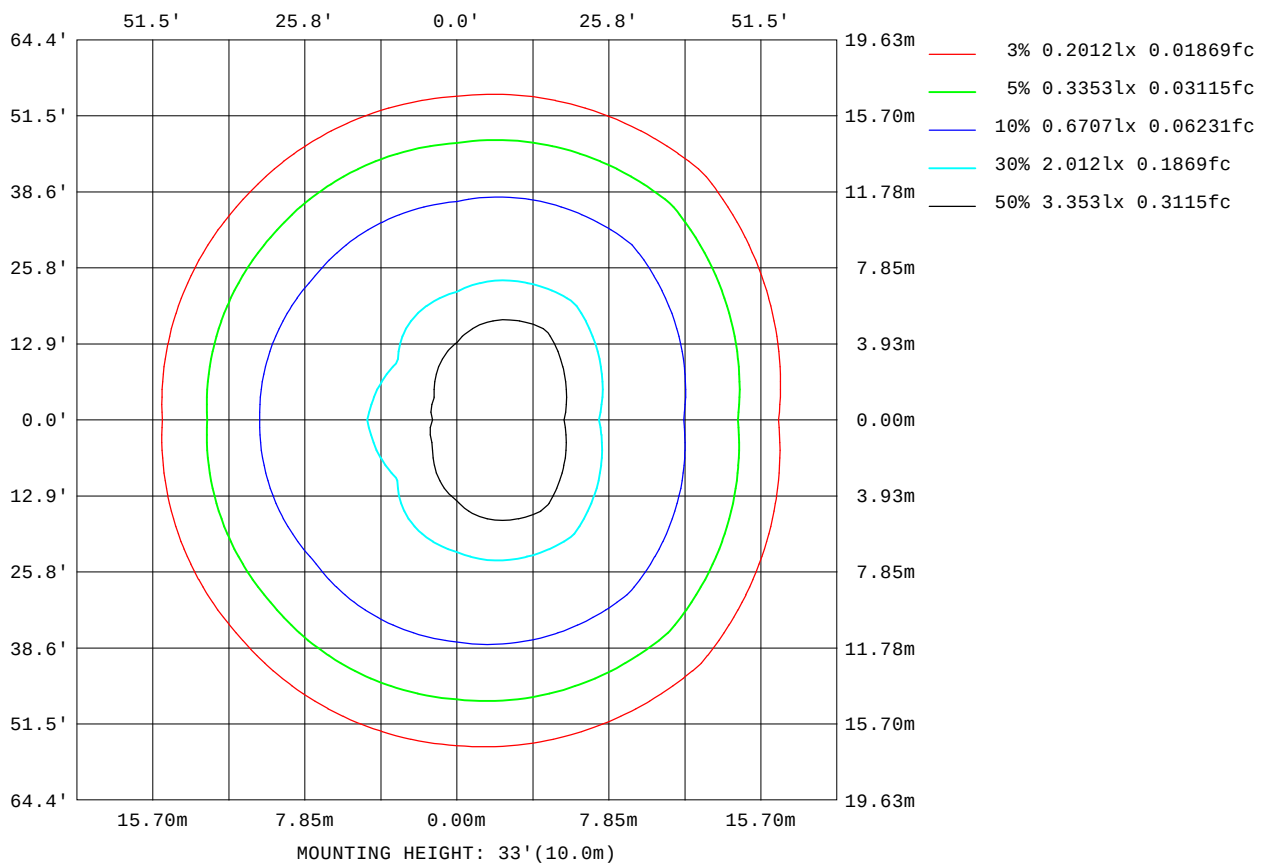
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2022-12-12

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

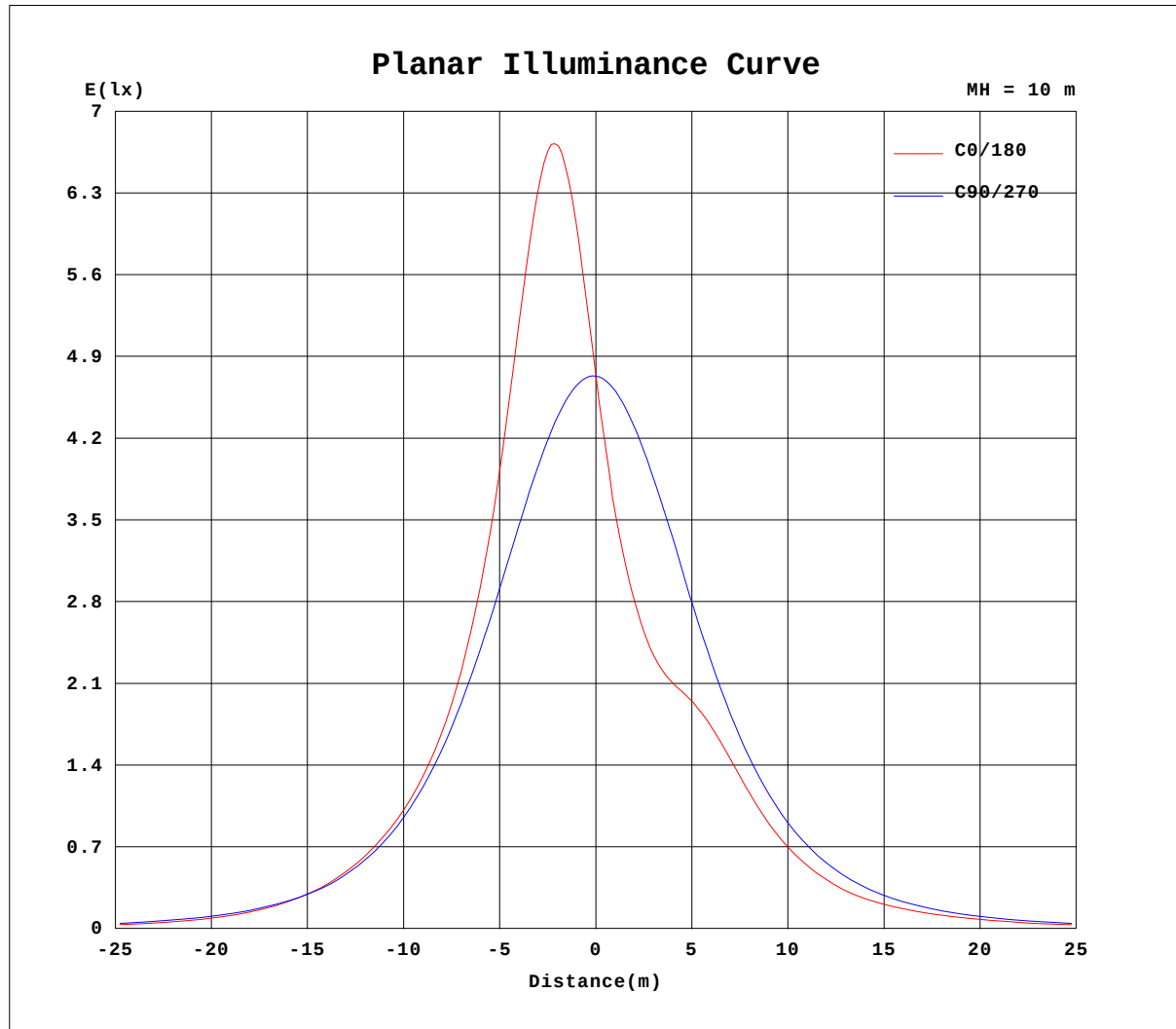
AvgL	cd/m2
L_0~180(65)av	14661
L_0~180(75)av	9779
L_0~180(85)av	0
L_90~270(65)av	18750
L_90~270(75)av	14422
L_90~270(85)av	0
L_45(65)av	19307
L_45(75)av	13563
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-12-12

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-12-12

Range: 0 - 180DEG
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Test System: EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:48.00V I:0.2500A P:12.00W PF:1.000 Freq:0Hz Lamp Flux:1167.85x1 lm		
NAME: VOM40LA600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315									
0	474	472	473	484	474	472	473	484									
5	594	557	473	411	374	398	469	567									
10	695	638	467	351	311	342	459	645									
15	729	694	456	307	274	300	445	697									
20	679	706	439	275	262	271	426	709									
25	581	673	416	255	270	254	400	678									
30	482	610	386	245	275	247	370	619									
35	401	536	352	238	265	241	335	546									
40	338	456	312	226	235	231	297	469									
45	288	375	270	206	198	208	257	390									
50	240	301	226	179	162	180	217	315									
55	188	236	184	149	130	148	178	247									
60	136	179	145	120	105	119	142	186									
65	89.4	129	110	93.3	81.6	92.7	109	135									
70	56.3	86.3	78.8	68.7	58.9	68.3	78.6	91.0									
75	32.2	50.7	51.1	44.6	37.7	44.5	51.9	53.9									
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00									

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-12-12

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks: