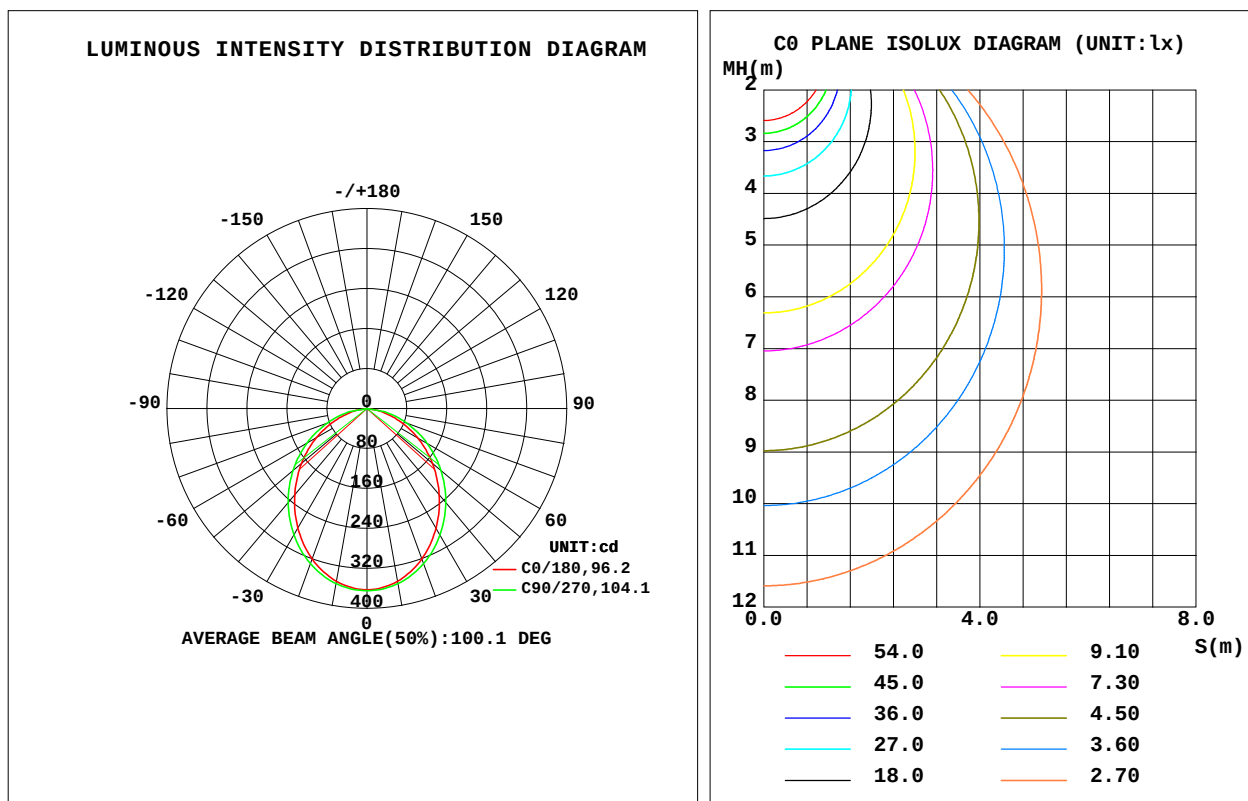


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 72.85 lm/W			
MODEL		I _{max} (cd)	364.6	S/MH(C0/180)	1.15
NOMINAL POWER(W)	12.1	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	881.47	h UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	881.471	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2022-11-23

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:

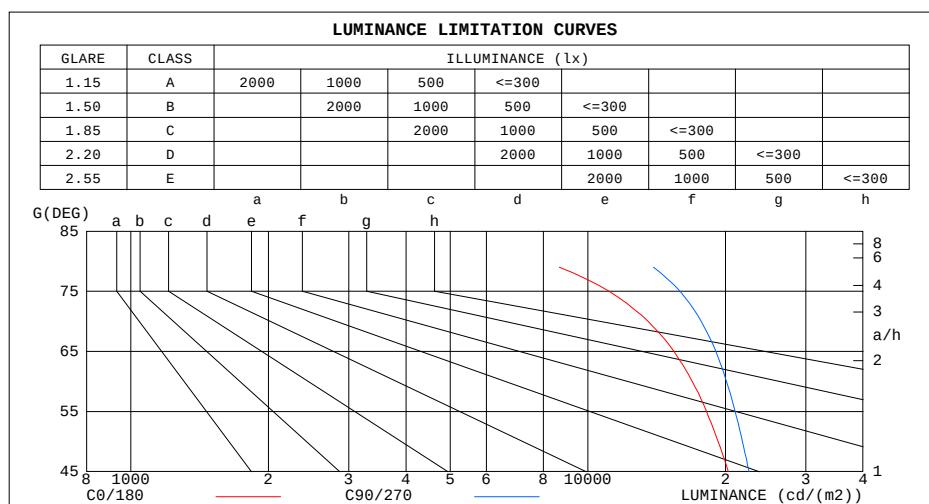
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
10	351.2	354.3	355.8	354.3	351.2	354.3	355.8	354.3	0- 10	34.26	34.26	3.89, 3.89
20	320.6	326.0	330.7	326.0	320.6	326.0	330.7	326.0	10- 20	96.29	130.5	14.8, 14.8
30	276.5	284.5	292.6	284.5	276.5	284.5	292.6	284.5	20- 30	141.1	271.6	30.8, 30.8
40	225.0	234.8	245.5	234.8	225.0	234.8	245.5	234.8	30- 40	162.8	434.5	49.3, 49.3
50	171.0	181.1	193.3	181.1	171.0	181.1	193.3	181.1	40- 50	160.9	595.4	67.5, 67.5
60	116.8	126.6	138.8	126.6	116.8	126.6	138.8	126.6	50- 60	138.1	733.5	83.2, 83.2
70	63.97	72.39	83.58	72.39	63.97	72.39	83.58	72.39	60- 70	98.92	832.4	94.4, 94.4
80	0	0	0	0	0	0	0	0	70- 80	49.08	881.5	100, 100
90	0	0	0	0	0	0	0	0	80- 90	0	881.5	100, 100
100	0	0	0	0	0	0	0	0	90-100	0	881.5	100, 100
110	0	0	0	0	0	0	0	0	100-110	0	881.5	100, 100
120	0	0	0	0	0	0	0	0	110-120	0	881.5	100, 100
130	0	0	0	0	0	0	0	0	120-130	0	881.5	100, 100
140	0	0	0	0	0	0	0	0	130-140	0	881.5	100, 100
150	0	0	0	0	0	0	0	0	140-150	0	881.5	100, 100
160	0	0	0	0	0	0	0	0	150-160	0	881.5	100, 100
170	0	0	0	0	0	0	0	0	160-170	0	881.5	100, 100
180	0	0	0	0	0	0	0	0	170-180	0	881.5	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	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	11133	15906
70	13552	17708
65	15423	19053
60	16933	20121
55	18184	21006
50	19277	21796
45	20301	22532

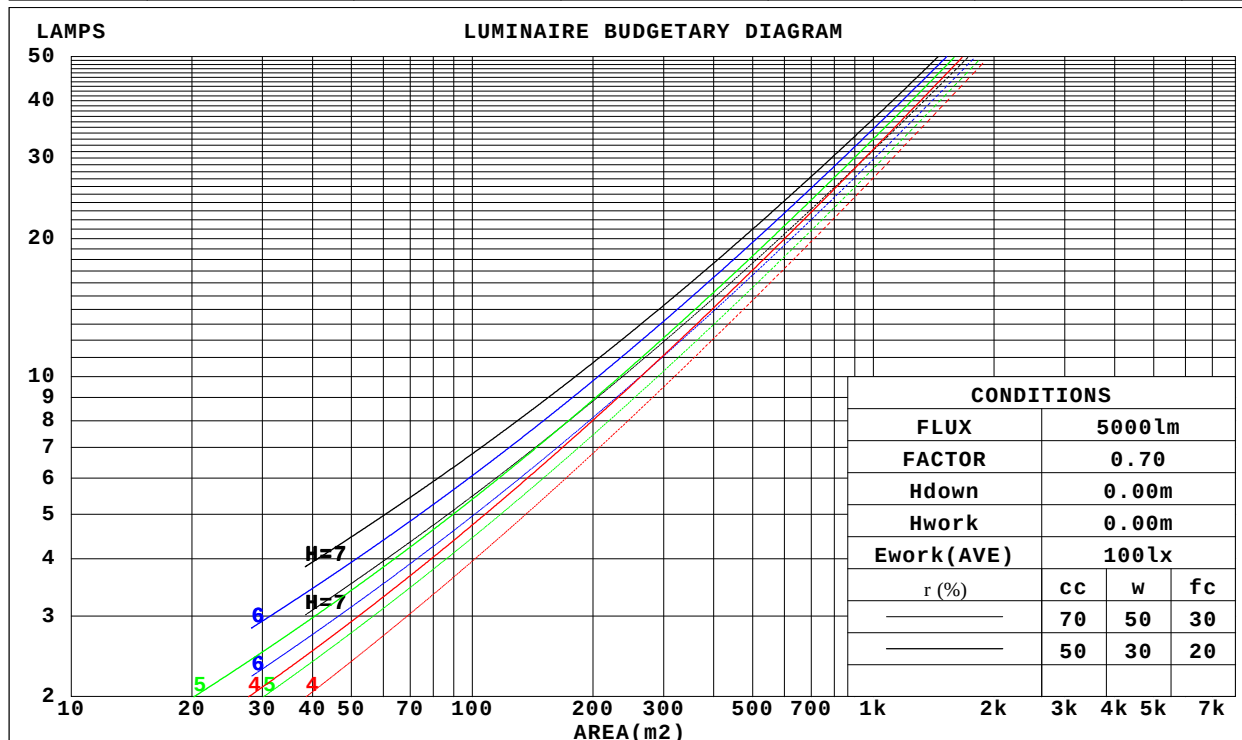
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	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	1.19	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	1.06	1.02	.98	1.03	.99	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.72	.64	.58	.69	.62	.57	.67	.61	.56	.65	.60	.55	.53
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.32
9.0	.45	.37	.32	.45	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.38	.33	.28	.27



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.278	.158	.050	.271	.154	.049	.258	.148	.047	.245	.142	.045	.234	.136	.044	
2.0	.270	.148	.045	.264	.145	.045	.252	.140	.044	.242	.136	.042	.232	.131	.041	
3.0	.254	.135	.040	.249	.133	.040	.238	.129	.039	.229	.126	.038	.220	.122	.038	
4.0	.237	.123	.036	.232	.121	.036	.223	.118	.035	.215	.115	.035	.207	.112	.034	
5.0	.220	.112	.033	.216	.111	.032	.208	.108	.032	.201	.106	.032	.194	.104	.031	
6.0	.206	.103	.029	.202	.102	.029	.195	.100	.029	.188	.098	.029	.182	.096	.028	
7.0	.192	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.171	.089	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.086	.024	.166	.084	.024	.161	.083	.024	
9.0	.169	.082	.023	.166	.081	.023	.161	.080	.023	.157	.078	.022	.152	.077	.022	
10.0	.159	.076	.021	.157	.076	.021	.152	.075	.021	.148	.074	.021	.144	.072	.021	

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			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.152	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.066	.095	.068	.047	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

g 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:

UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm											
NAME: VOM40FD600					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	23.2	24.7	23.5	24.9	25.1	23.8	25.3	24.1	25.5	25.7	
	3H	24.4	25.7	24.7	26.0	26.2	25.2	26.6	25.5	26.8	27.1
	4H	24.8	26.1	25.1	26.3	26.6	25.8	27.1	26.1	27.3	27.6
	6H	24.9	26.1	25.3	26.4	26.7	26.1	27.3	26.4	27.6	27.8
	8H	24.9	26.0	25.2	26.3	26.6	26.0	27.2	26.4	27.5	27.8
	12H	24.8	25.9	25.2	26.2	26.5	26.0	27.1	26.3	27.4	27.7
4H	2H	23.8	25.1	24.1	25.4	25.6	24.3	25.6	24.6	25.8	26.1
	3H	25.2	26.3	25.5	26.6	26.9	25.9	27.0	26.2	27.3	27.6
	4H	25.7	26.7	26.0	27.0	27.3	26.5	27.5	26.9	27.9	28.2
	6H	25.9	26.8	26.3	27.1	27.5	26.9	27.8	27.3	28.2	28.5
	8H	25.8	26.7	26.3	27.0	27.4	26.9	27.7	27.3	28.1	28.5
	12H	25.8	26.6	26.2	26.9	27.3	26.8	27.6	27.3	28.0	28.4
8H	4H	25.9	26.7	26.3	27.1	27.5	26.7	27.5	27.1	27.9	28.3
	6H	26.2	26.8	26.6	27.2	27.7	27.1	27.8	27.5	28.2	28.6
	8H	26.1	26.7	26.6	27.1	27.6	27.1	27.7	27.5	28.1	28.5
	12H	26.1	26.6	26.6	27.0	27.5	27.0	27.5	27.5	28.0	28.5
12H	4H	25.9	26.6	26.3	27.0	27.4	26.7	27.4	27.1	27.8	28.2
	6H	26.1	26.7	26.6	27.2	27.6	27.1	27.7	27.5	28.1	28.5
	8H	26.1	26.6	26.6	27.1	27.5	27.0	27.6	27.5	28.0	28.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
1.5H	+ 0.4 / - 0.3					+ 0.3 / - 0.3					
2.0H	+ 0.3 / - 0.5					+ 0.3 / - 0.3					

CIE Pub.117, 881.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.4)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

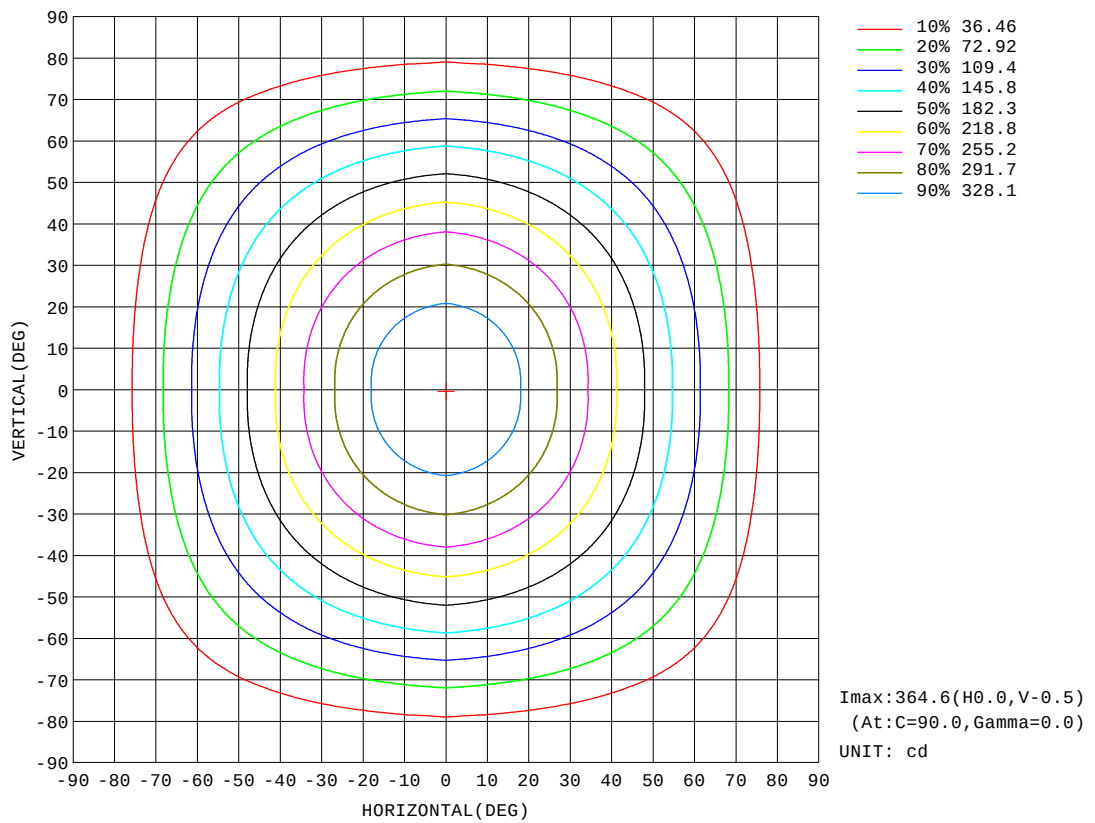
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	60	49	42	59	49	42	58	48	42	36
0.80	70	59	52	69	59	52	68	58	52	45
1.00	79	68	61	77	68	61	75	69	60	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	91	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	103	98	105	101	97	101	98	94	86
5.00	110	106	102	108	104	100	103	100	97	89
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:2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:



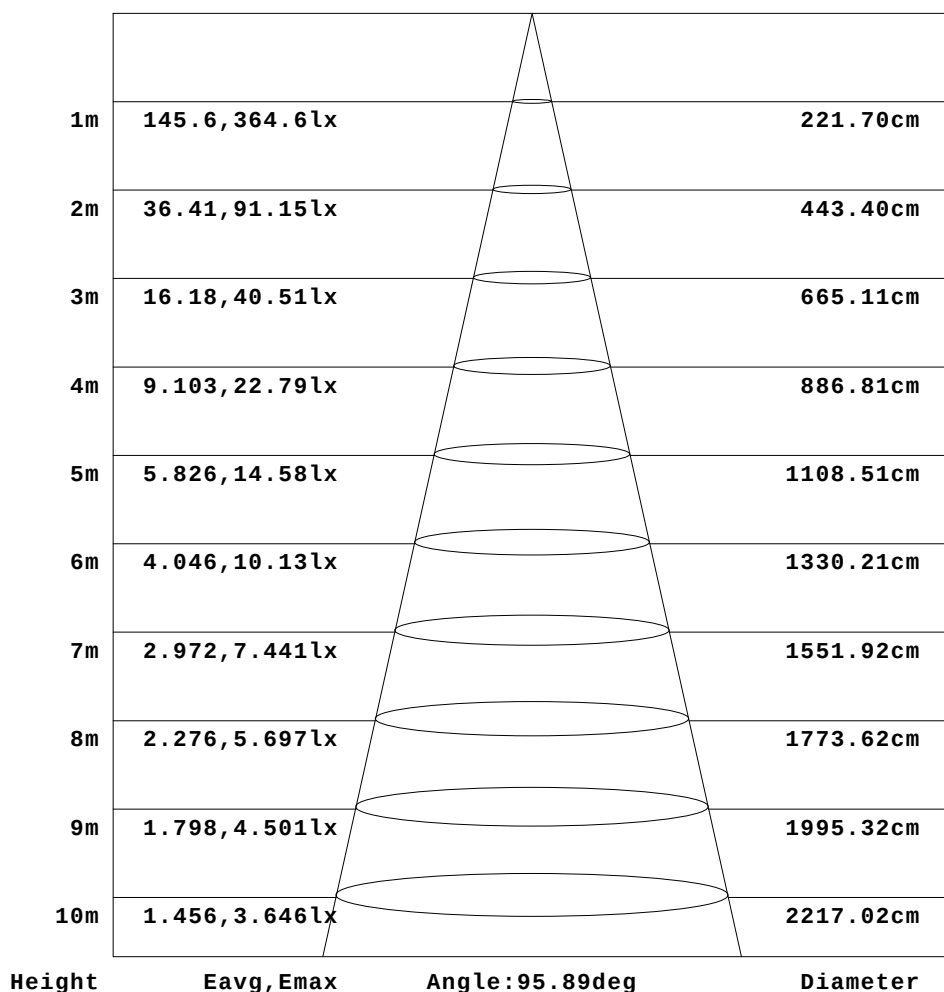
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Flux out:564.4 lm



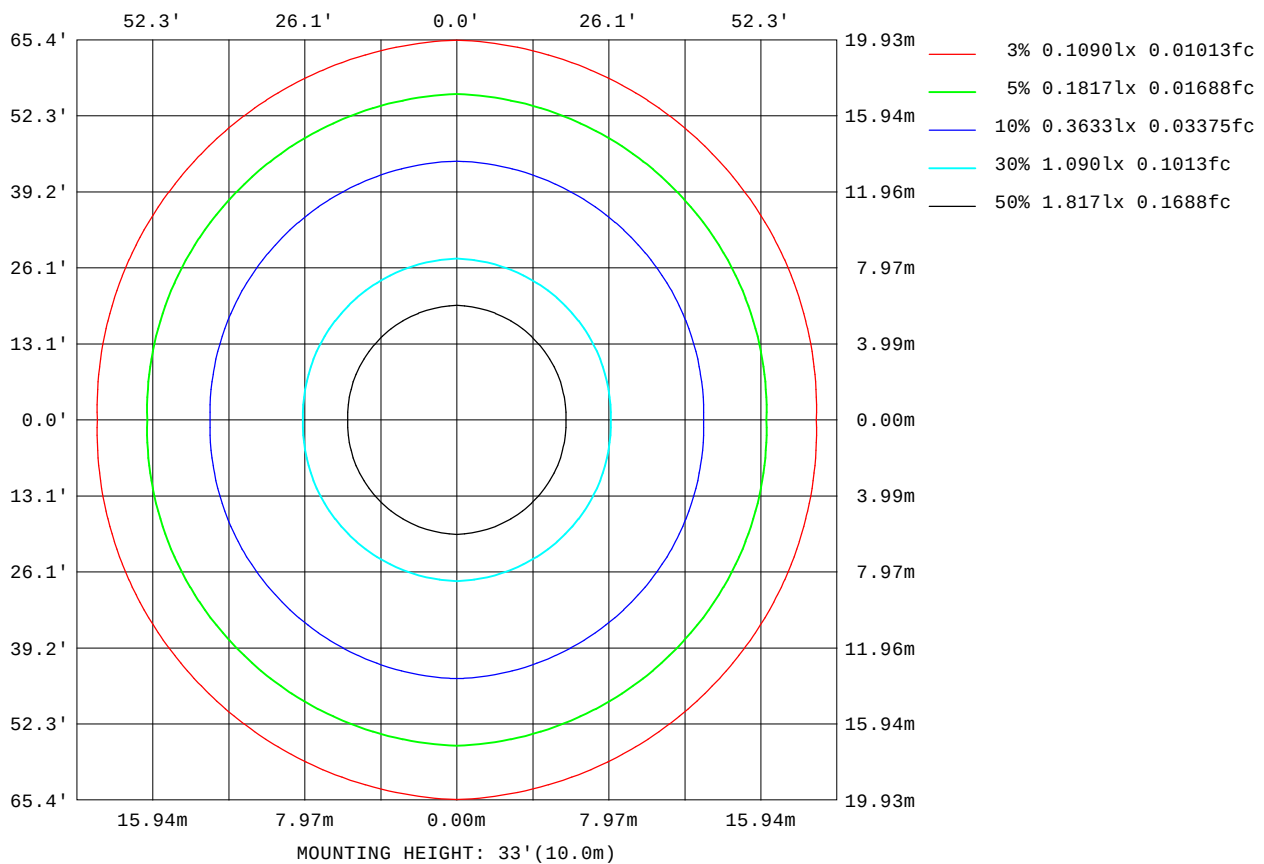
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	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: 2022-11-23

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:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

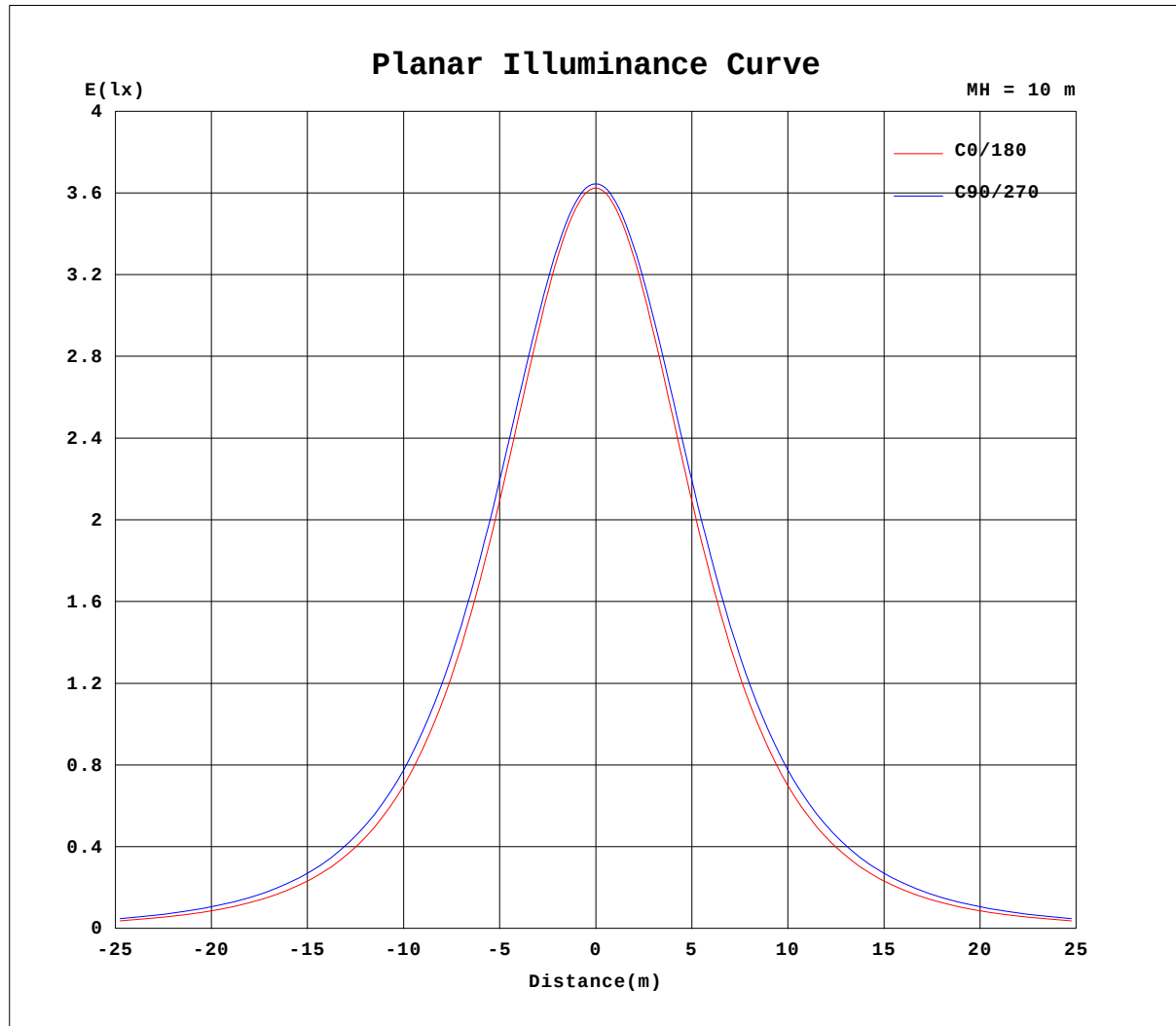
AvgL	cd/m2
L_0~180(65)av	15423
L_0~180(75)av	11133
L_0~180(85)av	0
L_90~270(65)av	19053
L_90~270(75)av	15906
L_90~270(85)av	0
L_45(65)av	17033
L_45(75)av	13011
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

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: 2022-11-23

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:



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:881.47lx1 lm		
NAME: VOM40FD600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	45	90	135	180	225	270	315									
0	363	365	365	365	363	365	365	365									
5	360	362	362	362	360	362	362	362									
10	351	354	356	354	351	354	356	354									
15	338	342	345	342	338	342	345	342									
20	321	326	331	326	321	326	331	326									
25	300	307	313	307	300	307	313	307									
30	277	284	293	284	277	284	293	284									
35	251	260	270	260	251	260	270	260									
40	225	235	246	235	225	235	246	235									
45	198	208	220	208	198	208	220	208									
50	171	181	193	181	171	181	193	181									
55	144	154	166	154	144	154	166	154									
60	117	127	139	127	117	127	139	127									
65	90.0	99.3	111	99.3	90.0	99.3	111	99.3									
70	64.0	72.4	83.6	72.4	64.0	72.4	83.6	72.4									
75	39.8	46.5	56.8	46.5	39.8	46.5	56.8	46.5									
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:2022-11-23

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: