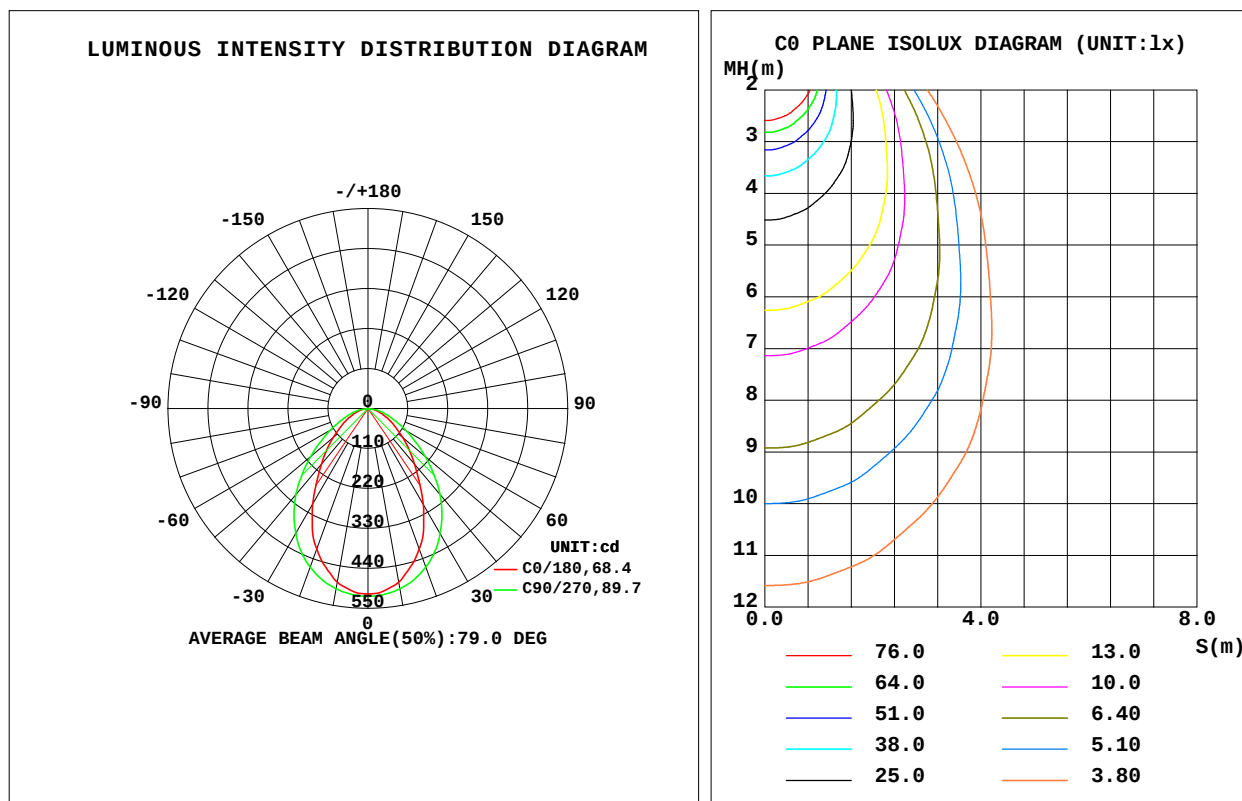


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.71 lm/W			
MODEL		I _{max} (cd)	516.6	S/MH(C0/180)	0.98
NOMINAL POWER(W)	12.1	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	928.18	h UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	928.178	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	48	h down(%)	100.0	CIBSE SHR MAX	1.15



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:

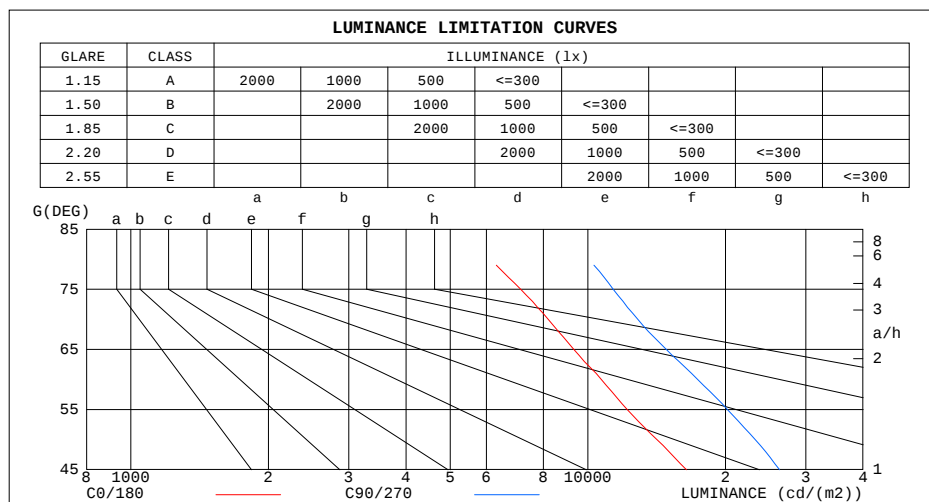
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
10	485.7	494.9	503.8	494.9	485.7	494.9	503.8	494.9	0- 10	48.18	48.18	5.19, 5.19
20	412.0	435.7	464.7	435.7	412.0	435.7	464.7	435.7	10- 20	132.0	180.2	19.4, 19.4
30	305.3	350.9	397.3	350.9	305.3	350.9	397.3	350.9	20- 30	182.4	362.5	39.1, 39.1
40	199.2	247.0	308.7	247.0	199.2	247.0	308.7	247.0	30- 40	187.7	550.2	59.3, 59.3
50	125.6	158.7	206.3	158.7	125.6	158.7	206.3	158.7	40- 50	157.5	707.7	76.3, 76.3
60	73.89	96.08	120.0	96.08	73.89	96.08	120.0	96.08	50- 60	113.9	821.6	88.5, 88.5
70	38.66	51.82	60.70	51.82	38.66	51.82	60.70	51.82	60- 70	71.18	892.8	96.2, 96.2
80	0	0	0	0	0	0	0	0	70- 80	35.36	928.2	100, 100
90	0	0	0	0	0	0	0	0	80- 90	0	928.2	100, 100
100	0	0	0	0	0	0	0	0	90-100	0	928.2	100, 100
110	0	0	0	0	0	0	0	0	100-110	0	928.2	100, 100
120	0	0	0	0	0	0	0	0	110-120	0	928.2	100, 100
130	0	0	0	0	0	0	0	0	120-130	0	928.2	100, 100
140	0	0	0	0	0	0	0	0	130-140	0	928.2	100, 100
150	0	0	0	0	0	0	0	0	140-150	0	928.2	100, 100
160	0	0	0	0	0	0	0	0	150-160	0	928.2	100, 100
170	0	0	0	0	0	0	0	0	160-170	0	928.2	100, 100
180	0	0	0	0	0	0	0	0	170-180	0	928.2	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:928.178x1 lm		
NAME: VOM40FP600	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	7131	11368
70	8190	12861
65	9318	14839
60	10709	17392
55	12198	20209
50	14161	23255
45	16439	26293

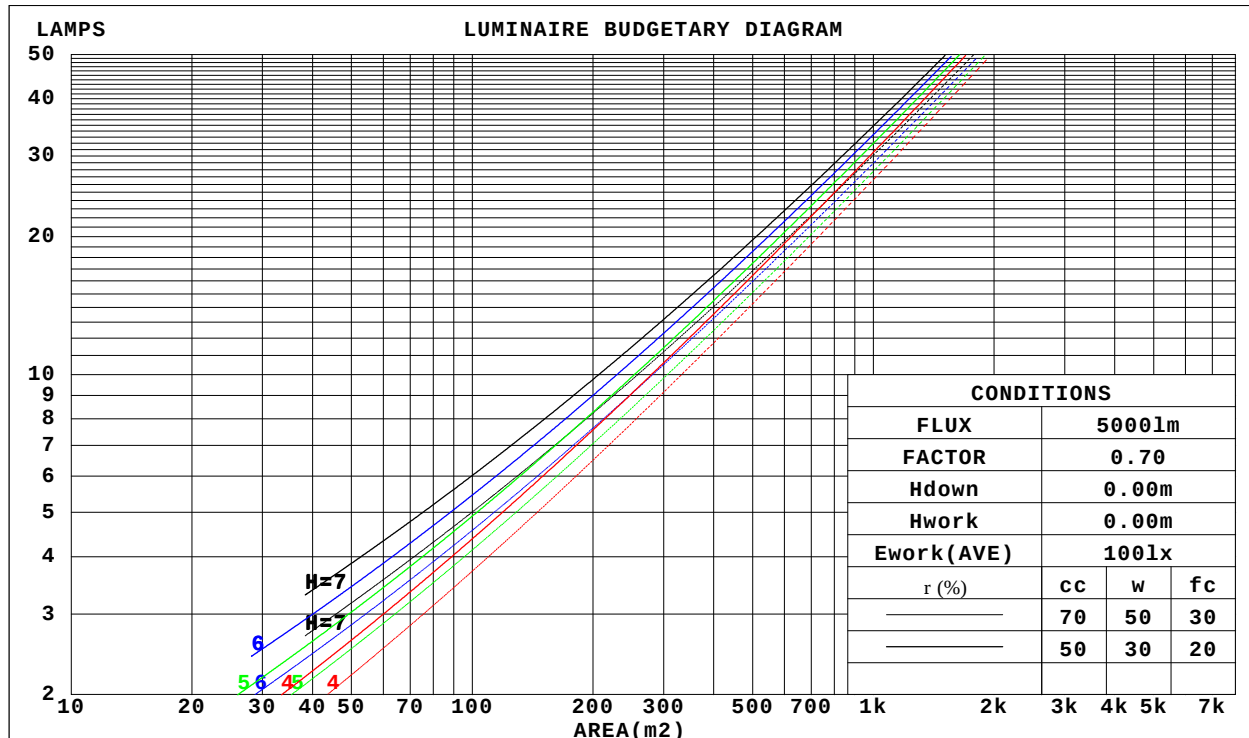
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2022-11-23

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:928.178x1 lm		
NAME: VOM40FP600	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	.00
1.0	1.07	1.03	1.00	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.95	.90	.85	.94	.88	.84	.90	.86	.82	.87	.83	.80	.84	.81	.78	.76
3.0	.85	.78	.73	.84	.77	.72	.81	.76	.71	.78	.74	.70	.76	.72	.69	.67
4.0	.77	.69	.63	.76	.69	.63	.73	.67	.62	.71	.66	.61	.69	.64	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.54	.49	.59	.53	.49	.58	.53	.48	.47
7.0	.58	.50	.45	.58	.50	.45	.56	.49	.44	.55	.49	.44	.53	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.40	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.38	.34	.32



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:



WEC AND CCEC

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:928.178x1 lm		
NAME: VOM40FP600	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	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.251	.143	.045	.244	.139	.044	.231	.133	.042	.219	.126	.041	.208	.121	.039		
2.0	.244	.134	.041	.238	.131	.040	.227	.126	.039	.217	.122	.038	.207	.117	.037		
3.0	.231	.123	.037	.226	.121	.036	.216	.117	.036	.207	.113	.035	.198	.110	.034		
4.0	.217	.113	.033	.212	.111	.033	.203	.108	.032	.195	.105	.032	.188	.102	.031		
5.0	.203	.103	.030	.199	.102	.030	.191	.100	.029	.184	.097	.029	.177	.095	.028		
6.0	.190	.095	.027	.187	.094	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026		
7.0	.179	.088	.025	.176	.088	.025	.170	.086	.025	.164	.084	.024	.159	.082	.024		
8.0	.169	.082	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	.150	.077	.022		
9.0	.159	.077	.021	.157	.076	.021	.152	.075	.021	.147	.074	.021	.143	.072	.021		
10.0	.151	.072	.020	.148	.072	.020	.144	.070	.020	.140	.069	.020	.136	.068	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.135	.098	.069	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.084	.054	.031	.048	.032	.019	.016	.010	.006	
6.0	.134	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.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
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:

UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.2520A P:12.10W PF:1.000 Freq:0Hz Lamp Flux:928.178x1 lm										
NAME: VOM40FP600					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	21.1	22.4	21.4	22.6	22.8	23.0	24.3	23.2	24.5	24.7
	3H	21.9	23.1	22.2	23.3	23.6	23.9	25.1	24.2	25.3
	4H	22.2	23.3	22.5	23.6	23.8	24.2	25.4	24.5	25.6
	6H	22.3	23.4	22.7	23.7	24.0	24.5	25.5	24.8	25.8
	8H	22.3	23.3	22.6	23.6	23.9	24.4	25.5	24.7	25.7
	12H	22.2	23.2	22.6	23.5	23.8	24.4	25.4	24.7	25.6
4H	2H	21.7	22.8	22.0	23.1	23.3	23.2	24.3	23.5	24.6
	3H	22.6	23.7	23.0	23.9	24.2	24.3	25.3	24.6	25.6
	4H	23.1	24.0	23.4	24.3	24.6	24.8	25.7	25.1	26.0
	6H	23.3	24.1	23.7	24.5	24.8	25.1	25.9	25.5	26.2
	8H	23.3	24.0	23.7	24.4	24.7	25.0	25.8	25.5	26.2
	12H	23.2	23.9	23.6	24.3	24.7	25.0	25.7	25.4	26.1
8H	4H	23.3	24.1	23.7	24.4	24.8	24.9	25.6	25.3	26.0
	6H	23.6	24.2	24.0	24.6	25.0	25.2	25.9	25.7	26.3
	8H	23.6	24.1	24.0	24.5	25.0	25.2	25.7	25.7	26.2
	12H	23.5	24.0	24.0	24.4	24.9	25.2	25.6	25.6	26.1
12H	4H	23.3	24.0	23.7	24.4	24.8	24.8	25.5	25.3	25.9
	6H	23.6	24.1	24.0	24.6	25.0	25.2	25.8	25.7	26.2
	8H	23.5	24.0	24.0	24.5	24.9	25.2	25.6	25.6	26.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.7					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.7					+ 0.3 / - 0.6				
2.0H	+ 0.6 / - 1.1					+ 1.1 / - 0.8				

CIE Pub.117, 928.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)

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:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

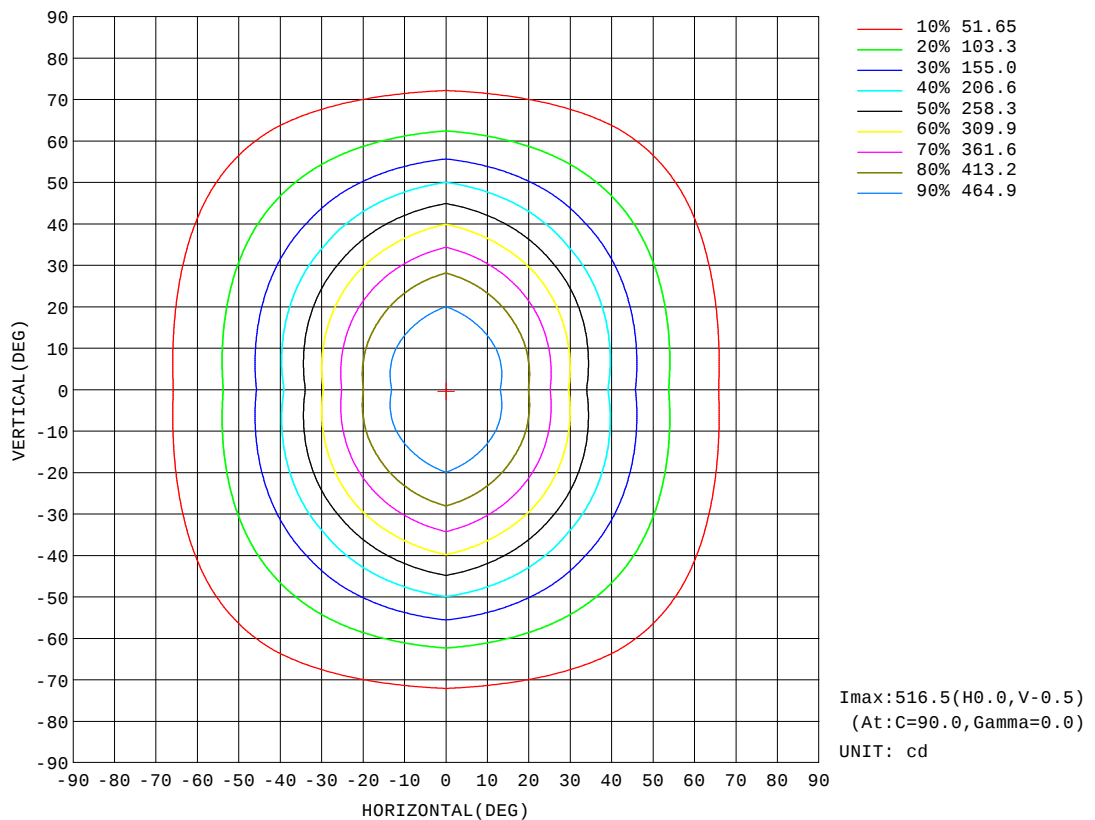
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	50	65	56	50	64	55	50	44
0.80	76	66	60	75	66	60	73	65	59	53
1.00	84	74	68	83	74	68	80	75	67	61
1.25	90	81	75	89	81	75	86	79	74	68
1.50	94	86	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	103	105	102	100	91
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:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:



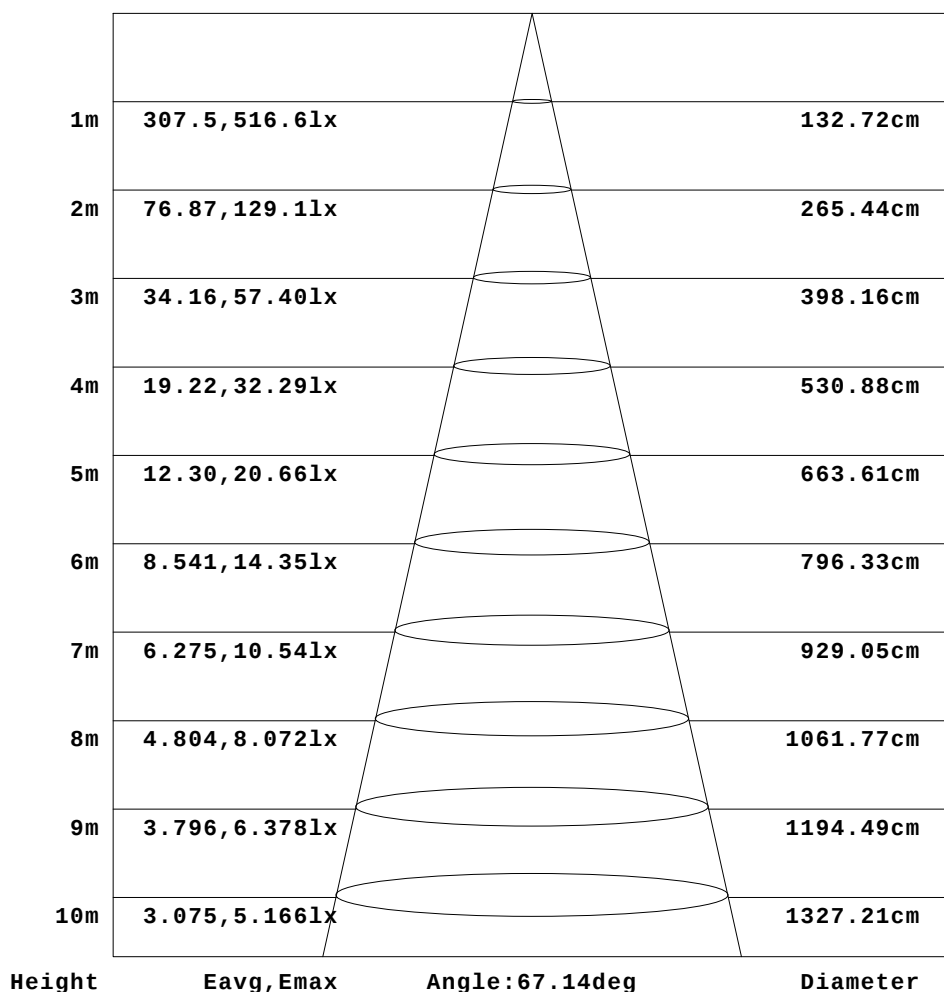
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2022-11-23

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:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Flux out:439.5 lm



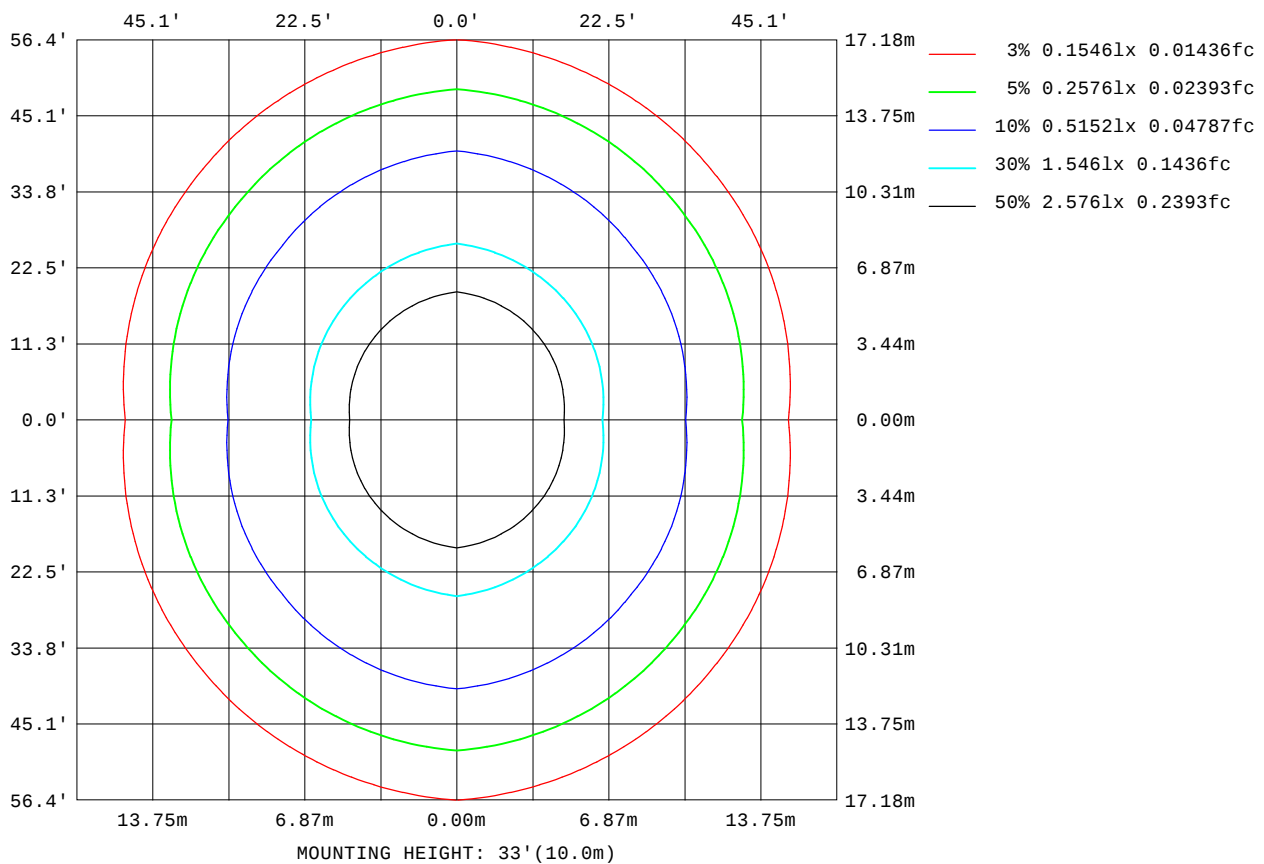
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:928.178x1 lm		
NAME: VOM40FP600	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:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

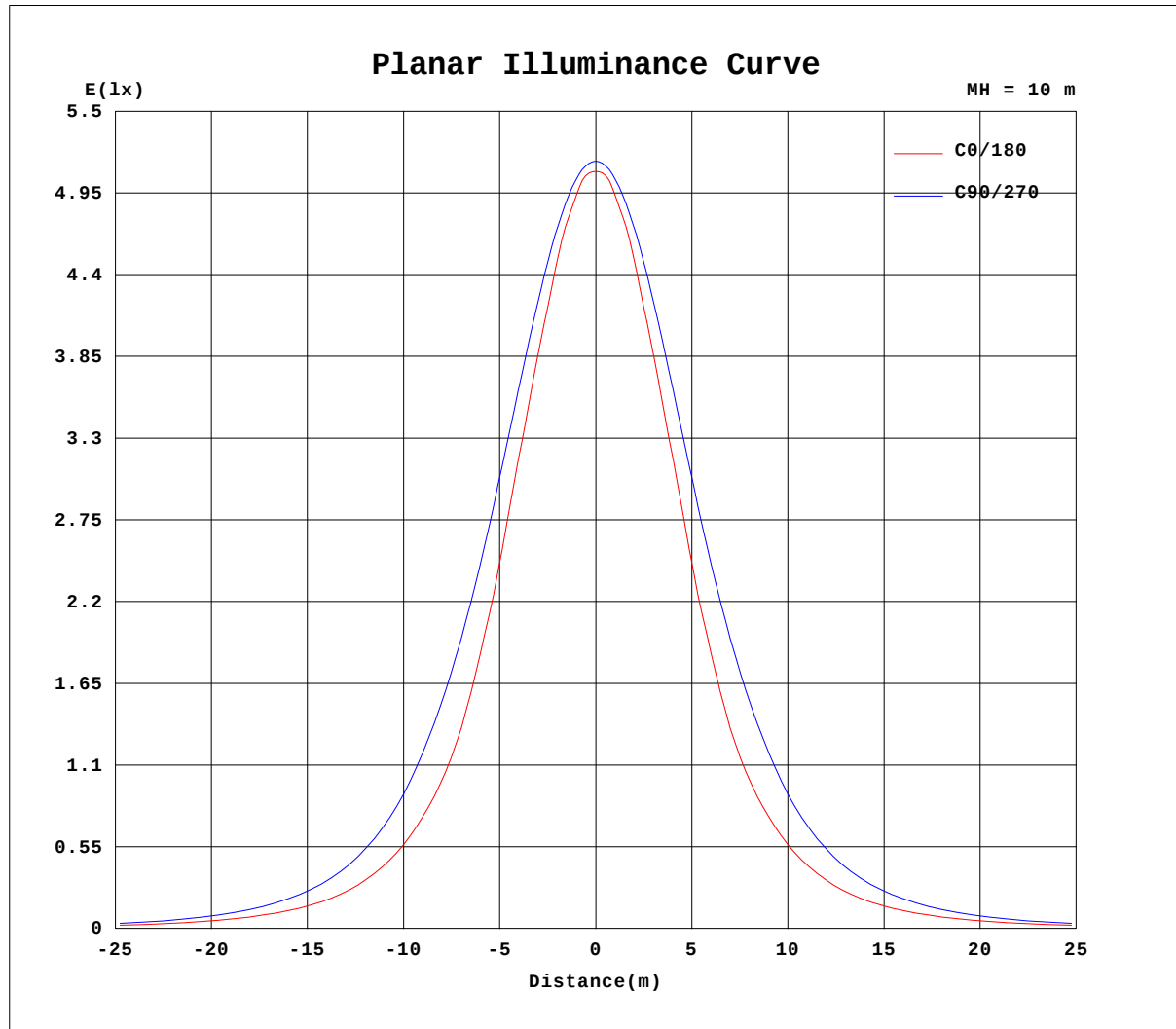
AvgL	cd/m2
L_0~180(65)av	9318
L_0~180(75)av	7131
L_0~180(85)av	0
L_90~270(65)av	14839
L_90~270(75)av	11368
L_90~270(85)av	0
L_45(65)av	12322
L_45(75)av	9864
L_45(85)av	0

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:928.178x1 lm		
NAME: VOM40FP600	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:23*600mm	Shielding Angle:

Table--1

UNIT: cd

C(°) g (°)	0	45	90	135	180	225	270	315									
0	510	515	517	515	510	515	517	515									
5	504	511	513	511	504	511	513	511									
10	486	495	504	495	486	495	504	495									
15	452	471	488	471	452	471	488	471									
20	412	436	465	436	412	436	465	436									
25	363	397	435	397	363	397	435	397									
30	305	351	397	351	305	351	397	351									
35	246	302	356	302	246	302	356	302									
40	199	247	309	247	199	247	309	247									
45	160	199	257	199	160	199	257	199									
50	126	159	206	159	126	159	206	159									
55	96.6	125	160	125	96.6	125	160	125									
60	73.9	96.1	120	96.1	73.9	96.1	120	96.1									
65	54.3	71.9	86.5	71.9	54.3	71.9	86.5	71.9									
70	38.7	51.8	60.7	51.8	38.7	51.8	60.7	51.8									
75	25.5	35.2	40.6	35.2	25.5	35.2	40.6	35.2									
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: