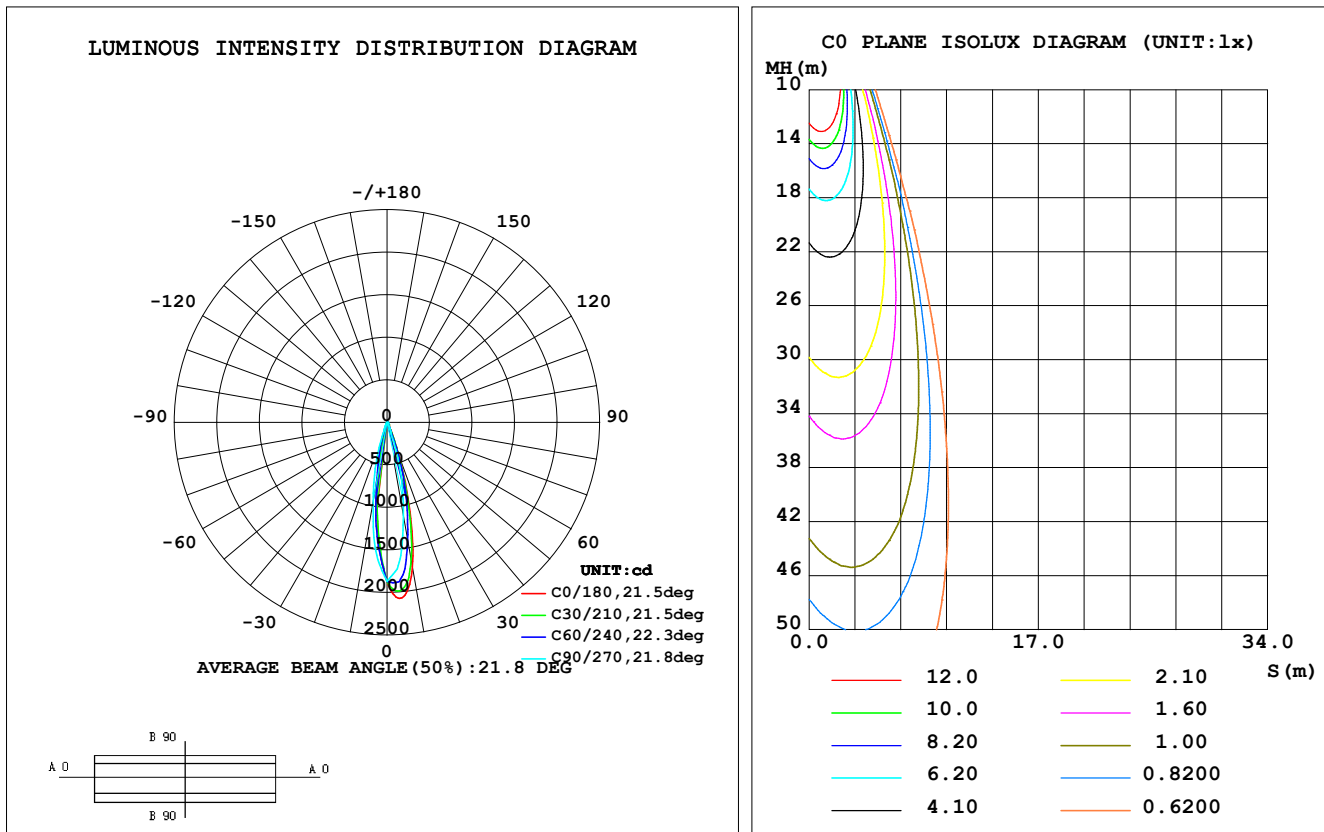


# LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	M8-B	Imax(cd)	2075	S/MH(C0/180)	0.26
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.34
RATED VOLTAGE(V)	6.45	TOTAL FLUX(lm)	352.15	$\eta$ UP,DN(C0-180)	0.0,53.3
NOMINAL FLUX(lm)	352.15	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,46.7
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	6.45	$\eta$ down(%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
5	2070	1927	1650	1357	1271	1282	1520	1820	0- 5	40.96	40.96	11.6,11.6
10	1725	1538	1108	723.0	591.1	647.6	932.8	1380	5- 10	94.75	135.7	38.5,38.5
15	1014	890.4	629.0	272.2	183.8	227.8	519.4	753.6	10- 15	93.86	229.6	65.2,65.2
20	392.2	405.0	150.2	91.35	53.86	76.41	106.1	339.7	15- 20	59.52	289.1	82.1,82.1
25	111.9	124.2	87.59	33.84	24.97	28.36	62.65	98.55	20- 25	24.55	313.6	89.1,89.1
30	43.20	43.68	24.96	17.82	13.78	15.10	19.19	33.95	25- 30	11.25	324.9	92.3,92.3
35	23.04	23.47	19.06	10.72	8.308	9.095	15.19	18.90	30- 35	5.998	330.9	94.94
40	13.09	12.68	13.17	7.293	6.331	6.242	11.18	10.40	35- 40	4.225	335.1	95.2,95.2
45	9.276	9.622	7.767	6.091	5.361	5.352	7.525	8.407	40- 45	3.249	338.4	96.1,96.1
50	7.415	7.595	6.324	5.218	4.646	4.664	6.636	7.055	45- 50	2.699	341.1	96.9,96.9
55	6.360	6.152	5.375	4.443	3.851	4.076	6.093	6.075	50- 55	2.461	343.5	97.5,97.5
60	5.214	5.054	4.426	3.497	3.137	3.341	5.550	5.337	55- 60	2.231	345.8	98.2,98.2
65	4.113	4.012	3.449	2.574	2.423	2.593	4.590	4.628	60- 65	1.931	347.7	98.7,98.7
70	3.128	2.963	2.471	1.773	1.895	1.983	3.631	3.773	65- 70	1.567	349.3	99.2,99.2
75	2.331	1.923	1.859	1.139	1.042	1.546	2.846	2.779	70- 75	1.195	350.4	99.5,99.5
80	1.548	1.289	1.247	0.7336	0.3747	1.133	2.061	2.053	75- 80	0.8609	351.3	99.8,99.8
85	0.7621	0.7055	0.6353	0.3590	0.0000	0.7602	1.276	1.375	80- 85	0.5570	351.9	99.9,99.9
90	0	0.1288	0.0234	0.0000	0	0.3982	0.4918	0.7143	85- 90	0.2868	352.1	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

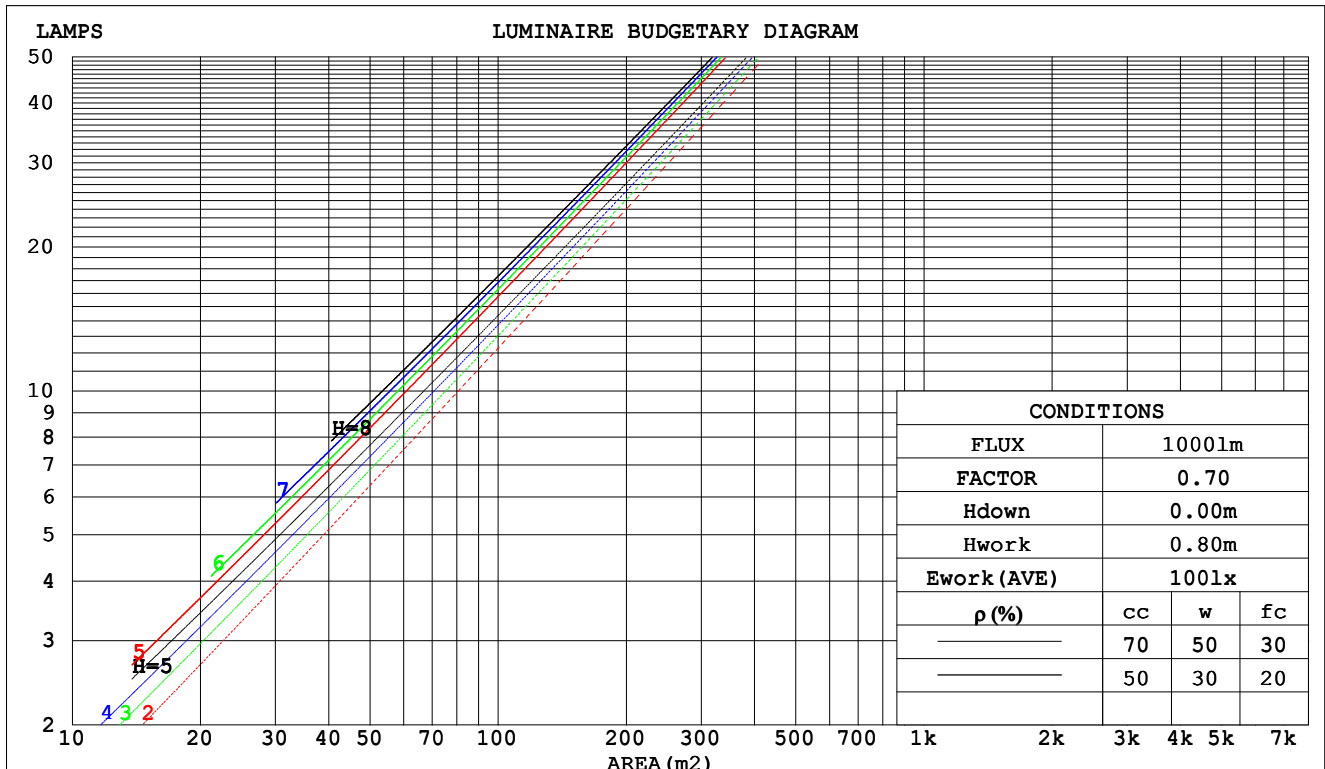
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.13	1.11	1.09	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.07	1.04	1.01	1.05	1.03	1.00	1.02	.99	.98	.99	.98	.96	.97	.95	.94	.93
3.0	1.02	.99	.96	1.01	.98	.95	.99	.96	.93	.96	.94	.92	.94	.92	.91	.89
4.0	.98	.94	.91	.97	.94	.91	.95	.92	.90	.93	.91	.89	.92	.90	.88	.87
5.0	.95	.91	.88	.94	.90	.87	.92	.89	.86	.91	.88	.86	.89	.87	.85	.84
6.0	.92	.87	.84	.91	.87	.84	.90	.86	.84	.88	.85	.83	.87	.85	.83	.82
7.0	.89	.85	.82	.88	.84	.82	.87	.84	.81	.86	.83	.81	.85	.82	.80	.79
8.0	.86	.82	.79	.86	.82	.79	.85	.81	.79	.84	.81	.79	.83	.80	.78	.77
9.0	.84	.80	.77	.84	.80	.77	.83	.79	.77	.82	.79	.77	.81	.78	.76	.75
10.0	.82	.78	.75	.81	.78	.75	.81	.77	.75	.80	.77	.75	.80	.77	.75	.74



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

## WEC AND CCEC

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm									
NAME: M8-B					TYPE:			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:2023111504	
MFR.: JEWOO					SUR.:0.05m			PROTECTION 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	.144	.082	.026	.137	.078	.025	.125	.072	.023	.113	.065	.021	.103	.060	.019	
2.0	.132	.073	.022	.127	.070	.022	.117	.065	.020	.107	.060	.019	.098	.056	.018	
3.0	.122	.065	.020	.118	.063	.019	.109	.059	.018	.101	.056	.017	.094	.052	.016	
4.0	.114	.059	.017	.110	.058	.017	.103	.055	.016	.096	.052	.016	.090	.049	.015	
5.0	.107	.054	.016	.103	.053	.015	.097	.051	.015	.091	.048	.014	.086	.046	.014	
6.0	.100	.050	.014	.097	.049	.014	.092	.047	.014	.087	.045	.013	.083	.043	.013	
7.0	.095	.047	.013	.092	.046	.013	.088	.044	.013	.083	.043	.012	.079	.041	.012	
8.0	.090	.044	.012	.088	.043	.012	.084	.042	.012	.080	.040	.012	.076	.039	.011	
9.0	.085	.041	.012	.084	.041	.011	.080	.040	.011	.077	.038	.011	.074	.037	.011	
10.0	.082	.039	.011	.080	.039	.011	.077	.038	.011	.074	.037	.010	.071	.036	.010	

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	.169	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.129	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.014	
3.0	.136	.113	.095	.117	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.106	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.113	.086	.066	.097	.074	.057	.067	.052	.040	.039	.030	.024	.012	.010	.008	
6.0	.104	.076	.055	.089	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.096	.067	.047	.083	.058	.041	.057	.041	.029	.033	.024	.017	.011	.008	.006	
8.0	.089	.061	.041	.077	.053	.036	.053	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.084	.055	.036	.072	.048	.031	.050	.034	.022	.029	.020	.013	.009	.007	.004	
10.0	.079	.050	.031	.068	.044	.027	.047	.031	.019	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

UGR(Unified Glare Rating) Table

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm											
NAME: M8-B					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:2023111504			
MFR.: JEWOO					SUR.:0.05m			PROTECTION 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	2H	11.8	12.5	12.0	12.6	12.8	11.1	11.8	11.3	11.9	12.1
	3H	12.9	13.5	13.2	13.7	13.9	12.1	12.7	12.3	12.9	13.1
	4H	13.4	14.0	13.7	14.2	14.4	12.5	13.1	12.8	13.3	13.6
	6H	13.8	14.4	14.1	14.6	14.9	12.9	13.5	13.2	13.7	14.0
	8H	14.0	14.5	14.3	14.8	15.0	13.1	13.7	13.4	13.9	14.1
	12H	14.1	14.6	14.4	14.9	15.2	13.2	13.8	13.5	14.0	14.3
4H	2H	12.2	12.8	12.5	13.0	13.2	11.7	12.3	11.9	12.5	12.7
	3H	13.5	14.1	13.8	14.3	14.6	12.8	13.4	13.1	13.6	13.9
	4H	14.1	14.6	14.5	14.9	15.2	13.4	13.9	13.7	14.2	14.5
	6H	14.7	15.1	15.0	15.4	15.8	13.9	14.4	14.3	14.7	15.0
	8H	14.9	15.3	15.3	15.7	16.0	14.2	14.6	14.5	14.9	15.3
	12H	15.1	15.4	15.5	15.8	16.2	14.3	14.7	14.7	15.1	15.4
8H	4H	14.3	14.7	14.7	15.0	15.4	13.6	14.0	14.0	14.4	14.7
	6H	14.9	15.3	15.4	15.7	16.1	14.3	14.6	14.7	15.0	15.4
	8H	15.2	15.5	15.7	16.0	16.4	14.6	14.9	15.1	15.3	15.8
	12H	15.5	15.8	16.0	16.2	16.7	14.9	15.1	15.4	15.6	16.0
12H	4H	14.3	14.7	14.7	15.0	15.4	13.6	14.0	14.0	14.4	14.8
	6H	15.0	15.3	15.4	15.7	16.1	14.4	14.7	14.8	15.1	15.5
	8H	15.3	15.6	15.8	16.0	16.5	14.7	15.0	15.2	15.4	15.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5					
1.5H	+ 0.5 / - 0.2					+ 0.7 / - 0.5					
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3					

CIE Pub.117 Corrected 352.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -3.6)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

## UTILIZATION FACTORS TABLE

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:

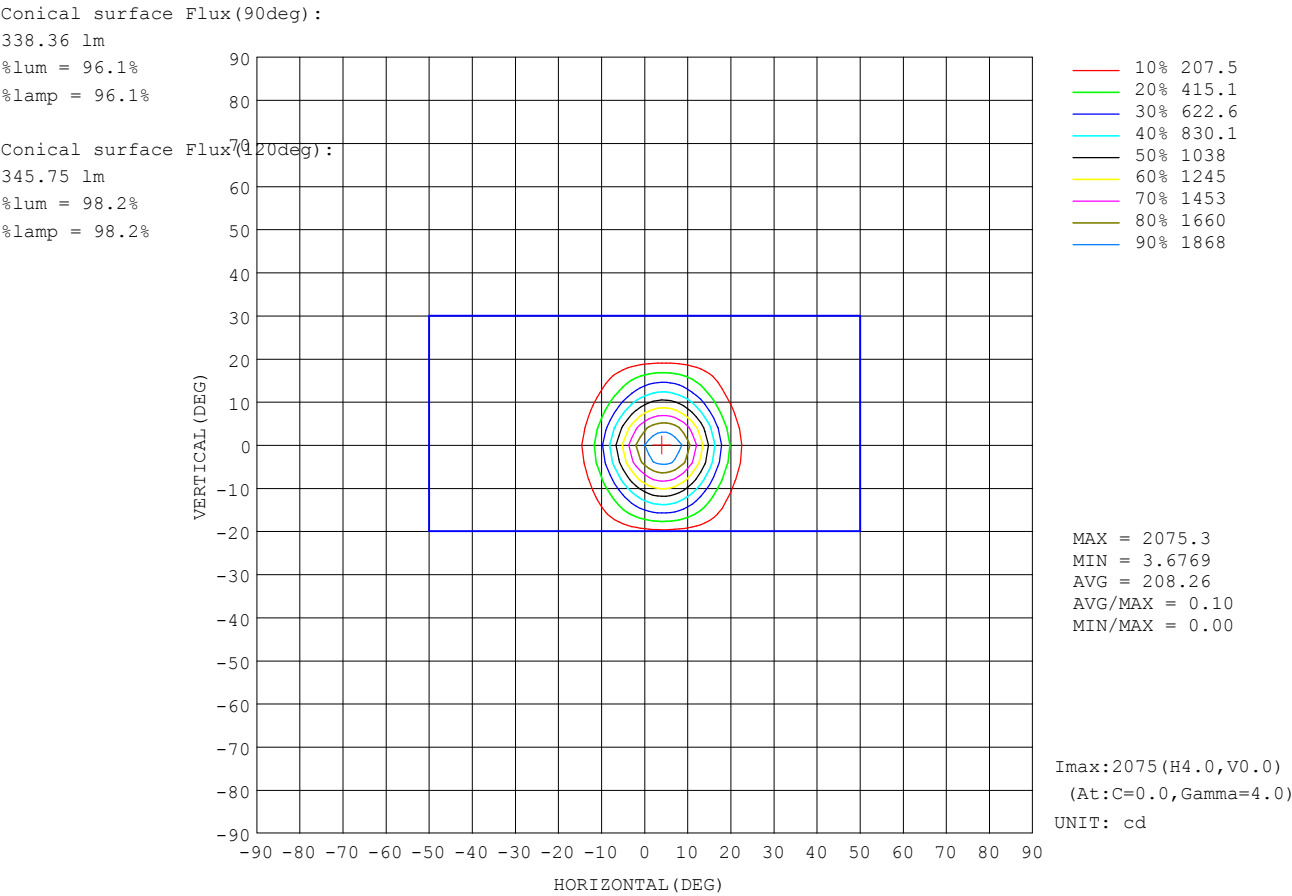
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	82	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	86	94	89	86	82
1.00	100	94	91	99	94	91	97	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	101	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V

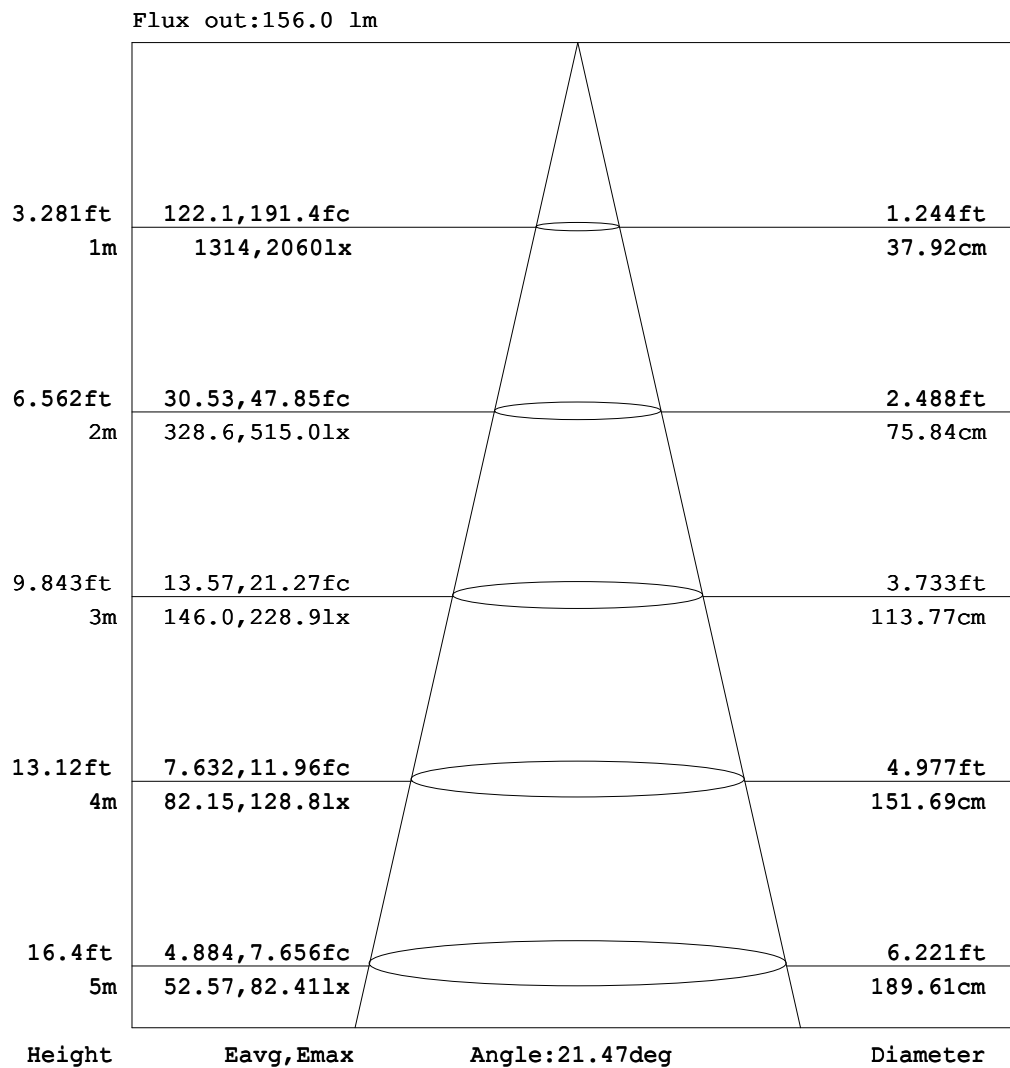
ISOCANDELA DIAGRAM

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:



## AAI Figure

Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:



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

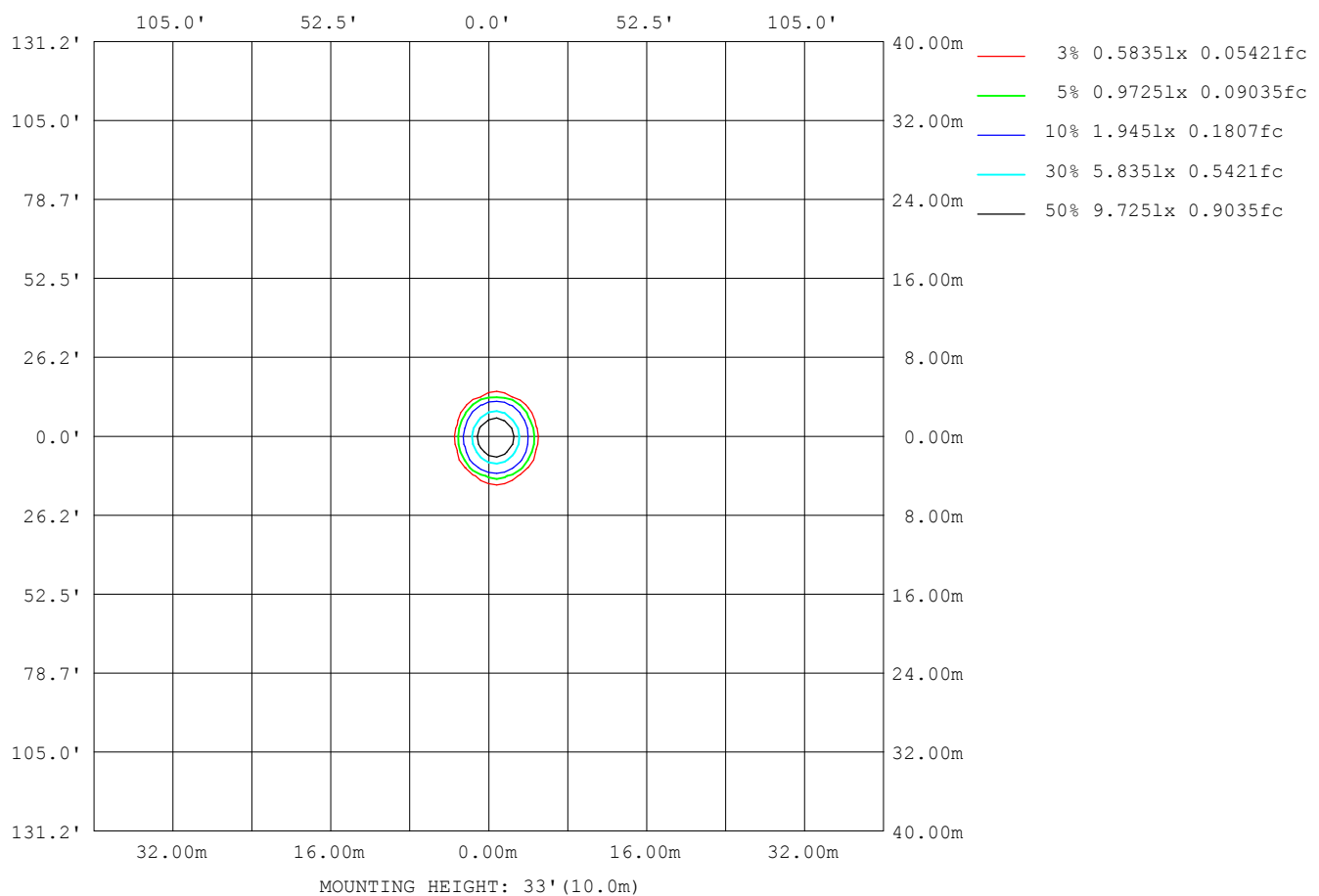
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:HJL  
 Test Date:2023-11-15

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:13.252m [K=1.0000]  
 Remarks: DC6.45V



## ISOLUX DIAGRAM

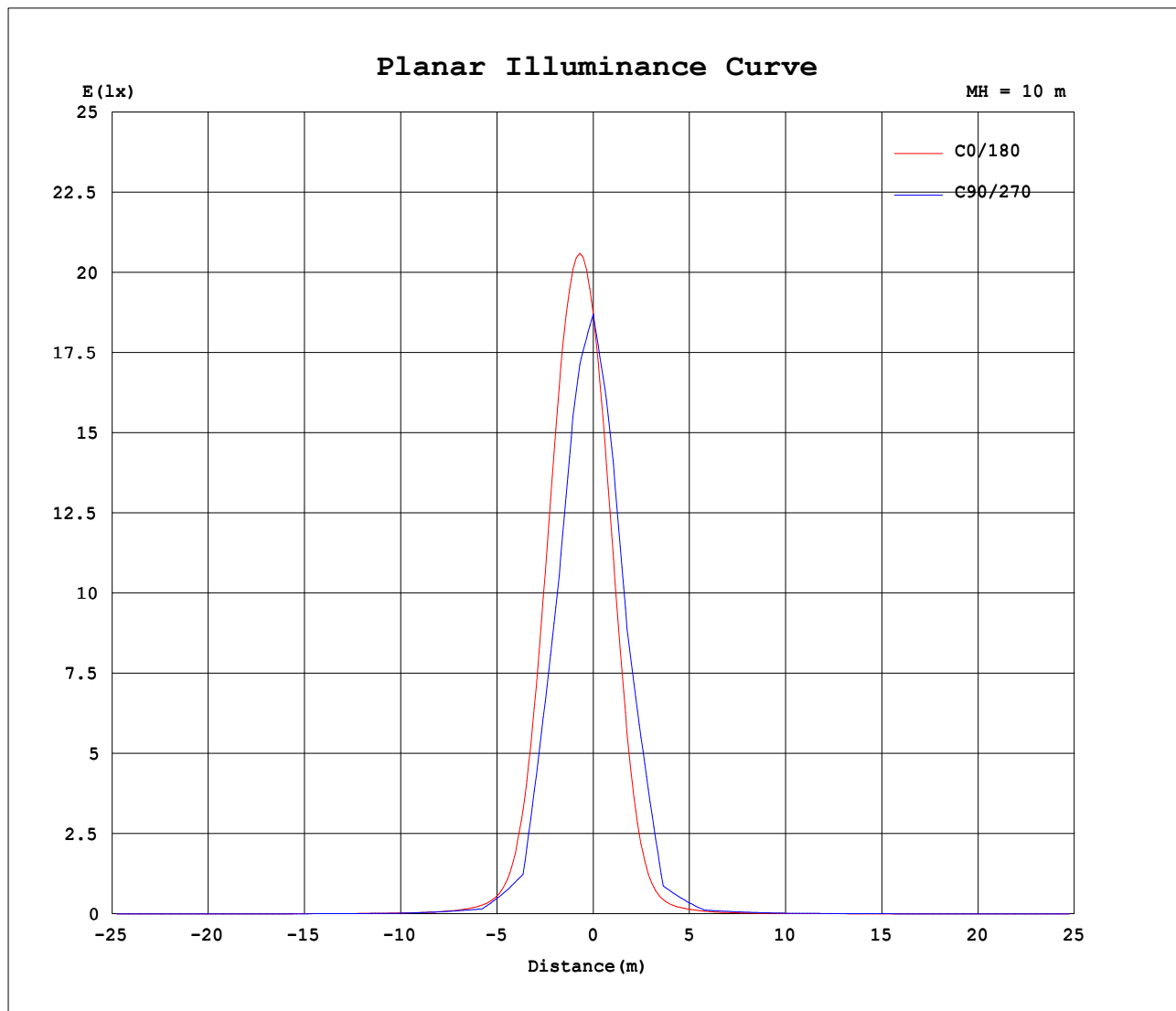
Test:U:0.1135V I:0A P:0W PF:0 Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.:0.05m	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HJL  
Test Date:2023-11-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:13.252m [K=1.0000]  
Remarks: DC6.45V

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: HJL  
Test Date: 2023-11-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000H\_V1 SYSTEM V2.0.287  
Humidity: 65.0%  
Test Distance: 13.252m [K=1.0000]  
Remarks: DC6.45V

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_v1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.252m [K=1.0000]
Remarks: DC6.45V

```

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.252m [K=1.0000]
Remarks: DC6.45V

```

Test:U:0.1135V I:0A P:0W PF:0    Lamp Flux:352.15x1 lm		
NAME: M8-B	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2023111504
MFR.: JEWOO	SUR.: 0.05m	PROTECTION ANGLE:

[illegible]

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Temperature: 25.3DEG	Humidity: 65.0%
Operators: HJL	Test Distance: 13.252m [K=1.0000]
Test Date: 2023-11-15	Remarks: DC6.45V

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Temperature: 25.3DEG	Humidity: 65.0%
Operators: HJL	Test Distance: 13.252m [K=1.0000]
Test Date: 2023-11-15	Remarks: DC6.45V

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.252m [K=1.0000]
Remarks: DC6.45V

```