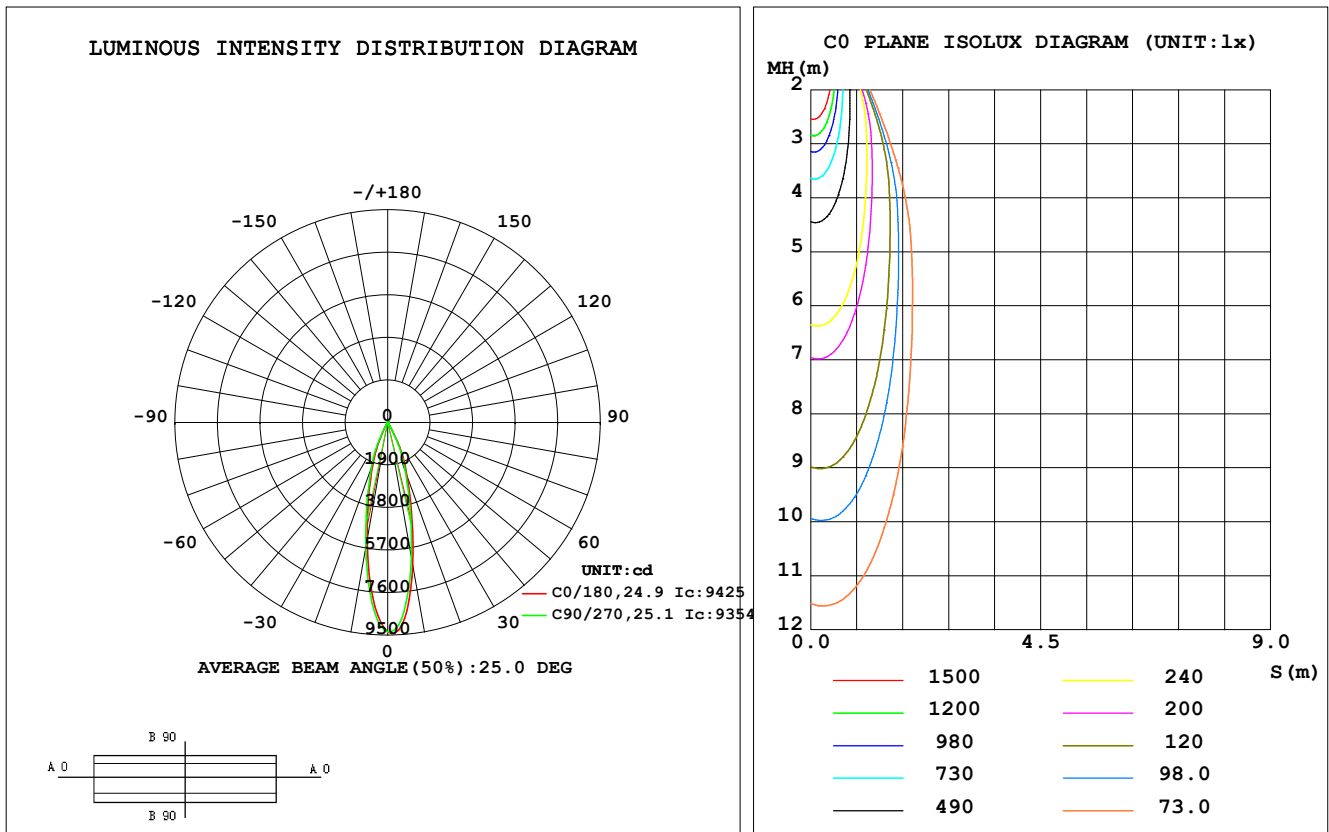


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm					
NAME: M20-T41006A-36G40-R24			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.: 652*21.6		Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 67.92 lm/W
MODEL	4000K CRI90	I _{max} (cd)	9454	S/MH(C0/180)	0.39	
NOMINAL POWER(W)	36	LOR(%)	100.0	S/MH(C90/270)	0.41	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	2456.2	η UP,DN(C0-180)	0.0,51.4	
NOMINAL FLUX(lm)	2456.22	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.6	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE(V)	225.1	η down(%)	100.0	CIBSE SHR MAX	1.00	



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	6483	6451	6110	5531	5338	5320	5665	6127	0- 10	711.0	711.0	28.9,28.9
20	2546	2491	2304	2001	1909	1942	2139	2406	10- 20	1020	1731	70.5,70.5
30	447.3	733.6	349.3	462.5	242.3	445.5	249.6	735.4	20- 30	561.6	2293	93.4,93.4
40	33.69	68.04	33.13	50.11	55.37	71.12	53.13	92.50	30- 40	105.9	2399	97.7,97.7
50	6.663	10.13	6.858	9.694	26.07	28.99	26.43	31.43	40- 50	23.64	2423	98.6,98.6
60	2.521	3.465	2.665	3.496	15.61	16.81	16.04	17.93	50- 60	11.78	2434	99.1,99.1
70	3.227	3.171	3.352	3.316	11.36	11.65	11.75	12.20	60- 70	8.329	2443	99.5,99.5
80	3.676	3.688	3.838	3.777	8.369	8.614	8.696	8.990	70- 80	7.221	2450	99.7,99.7
90	4.069	4.051	4.181	4.194	6.446	6.492	6.610	6.837	80- 90	6.284	2456	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		

Conical surface Flux(90deg): 2413.4 lm

%lum = 98.3%

%lamp = 98.3%

Conical surface Flux(120deg): 2434.4 lm

%lum = 99.1%

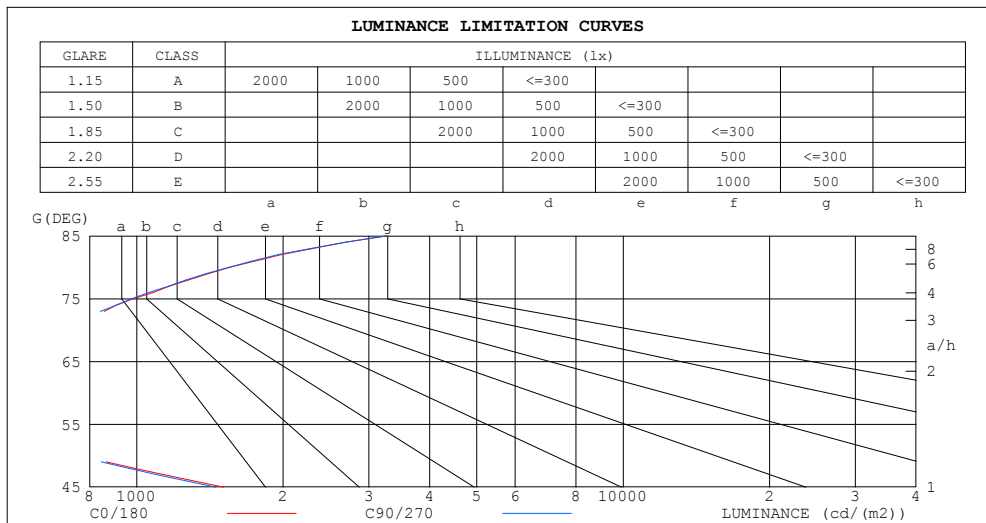
%lamp = 99.1%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZR
 Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
 Humidity:65.0%
 Test Distance:8.402m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:652*21.6	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3271	3254
80	1556	1549
75	986	977
70	693	687
65	493	504
60	370	373
55	461	465
50	762	748
45	1505	1454

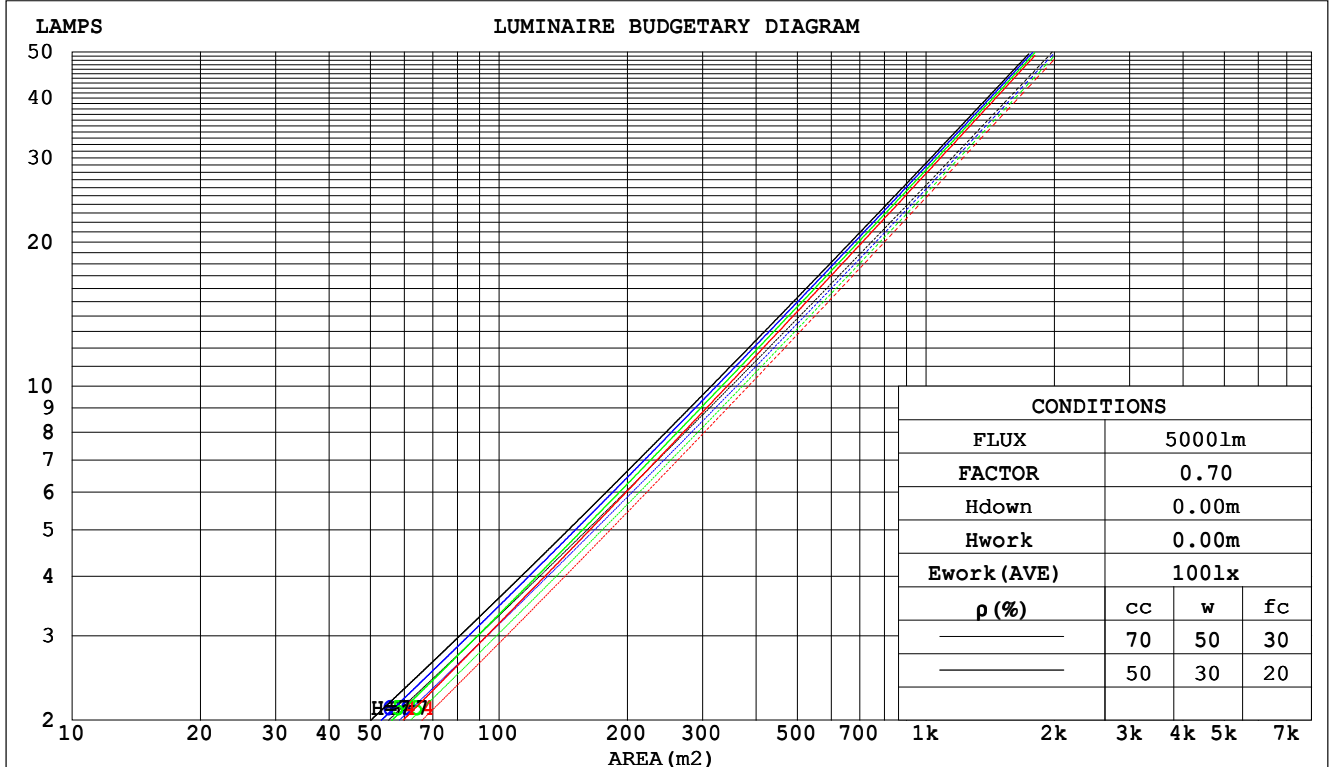
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 652*21.6	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	1.12	1.10	1.08	1.10	1.08	1.07	1.06	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96
2.0	1.06	1.03	1.01	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.95	.93	.92
3.0	1.01	.98	.94	1.00	.97	.94	.98	.95	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.93	.89	.96	.92	.89	.94	.91	.88	.92	.89	.87	.90	.88	.86	.85
5.0	.93	.89	.85	.92	.88	.85	.90	.87	.84	.89	.86	.83	.88	.85	.83	.82
6.0	.89	.85	.82	.89	.84	.81	.87	.84	.81	.86	.83	.80	.85	.82	.80	.79
7.0	.86	.82	.78	.85	.81	.78	.84	.81	.78	.83	.80	.77	.82	.79	.77	.76
8.0	.83	.78	.75	.82	.78	.75	.82	.78	.75	.81	.77	.75	.80	.77	.74	.73
9.0	.80	.76	.73	.80	.76	.73	.79	.75	.72	.78	.75	.72	.77	.74	.72	.71
10.0	.78	.73	.70	.77	.73	.70	.77	.73	.70	.76	.72	.70	.75	.72	.70	.69



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZR
 Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
 Humidity:65.0%
 Test Distance:8.402m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm					
NAME: M20-T41006A-36G40-R24			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:652*21.6		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	.149	.085	.027	.142	.081	.026	.130	.074	.024	.118	.068	.022	.108	.062	.020	
2.0	.138	.075	.023	.132	.073	.022	.122	.068	.021	.112	.063	.020	.104	.059	.018	
3.0	.128	.068	.020	.124	.066	.020	.115	.062	.019	.107	.059	.018	.100	.055	.017	
4.0	.121	.063	.018	.117	.061	.018	.109	.058	.017	.103	.055	.017	.096	.052	.016	
5.0	.114	.058	.017	.110	.057	.017	.104	.054	.016	.098	.052	.015	.093	.050	.015	
6.0	.108	.054	.015	.105	.053	.015	.099	.051	.015	.094	.049	.014	.090	.047	.014	
7.0	.102	.051	.014	.100	.050	.014	.095	.048	.014	.091	.047	.014	.087	.045	.013	
8.0	.098	.048	.013	.096	.047	.013	.091	.046	.013	.087	.044	.013	.084	.043	.013	
9.0	.094	.045	.013	.092	.045	.013	.088	.043	.012	.084	.042	.012	.081	.041	.012	
10.0	.090	.043	.012	.088	.042	.012	.085	.041	.012	.082	.040	.012	.079	.040	.011	

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	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.125	.098	.077	.107	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.115	.086	.065	.099	.074	.056	.068	.052	.040	.039	.031	.024	.013	.010	.008	
6.0	.106	.076	.054	.091	.066	.047	.063	.046	.034	.037	.027	.020	.012	.009	.007	
7.0	.099	.068	.046	.085	.059	.040	.059	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.093	.061	.040	.080	.053	.035	.055	.037	.025	.032	.022	.015	.010	.007	.005	
9.0	.087	.056	.035	.075	.048	.030	.052	.034	.021	.030	.020	.013	.010	.007	.004	
10.0	.082	.051	.030	.071	.044	.027	.049	.031	.019	.029	.018	.011	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm										
NAME: M20-T41006A-36G40-R24					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:652*21.6			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	4.4	5.2	4.7	5.3	5.5	3.2	3.9	3.4	4.1	4.2
3H	4.4	5.0	4.6	5.2	5.4	3.2	3.8	3.4	4.0	4.2
4H	4.4	5.1	4.7	5.3	5.5	3.3	3.9	3.5	4.1	4.3
6H	4.6	5.2	4.9	5.5	5.7	3.6	4.2	3.9	4.4	4.6
8H	4.8	5.4	5.1	5.7	5.9	3.9	4.4	4.2	4.7	4.9
12H	5.2	5.8	5.5	6.0	6.3	4.3	4.9	4.6	5.1	5.4
4H 2H	4.2	4.9	4.5	5.1	5.3	3.0	3.6	3.3	3.9	4.1
3H	4.2	4.8	4.5	5.0	5.3	3.0	3.6	3.4	3.9	4.1
4H	4.3	4.9	4.7	5.1	5.4	3.3	3.8	3.6	4.1	4.4
6H	4.7	5.2	5.1	5.5	5.9	3.8	4.2	4.2	4.6	4.9
8H	5.1	5.5	5.5	5.9	6.2	4.3	4.7	4.6	5.0	5.4
12H	5.7	6.1	6.1	6.4	6.8	5.0	5.4	5.4	5.7	6.1
8H 4H	4.3	4.8	4.7	5.1	5.5	3.3	3.7	3.7	4.1	4.4
6H	4.9	5.3	5.4	5.7	6.1	4.1	4.4	4.5	4.8	5.2
8H	5.5	5.8	5.9	6.2	6.7	4.8	5.1	5.2	5.5	5.9
12H	6.4	6.6	6.8	7.1	7.6	5.8	6.1	6.3	6.5	7.0
12H 4H	4.3	4.7	4.8	5.1	5.5	3.3	3.7	3.7	4.1	4.5
6H	5.0	5.3	5.5	5.7	6.2	4.2	4.5	4.6	4.9	5.4
8H	5.7	5.9	6.1	6.4	6.9	5.0	5.3	5.5	5.7	6.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 0.9					+ 0.8 / - 0.9				
1.5H	+ 1.8 / - 0.8					+ 1.7 / - 0.7				
2.0H	+ 0.5 / - 0.2					+ 0.4 / - 0.2				

CIE Pub.117, 2456 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.1$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:652*21.6	Shielding Angle:

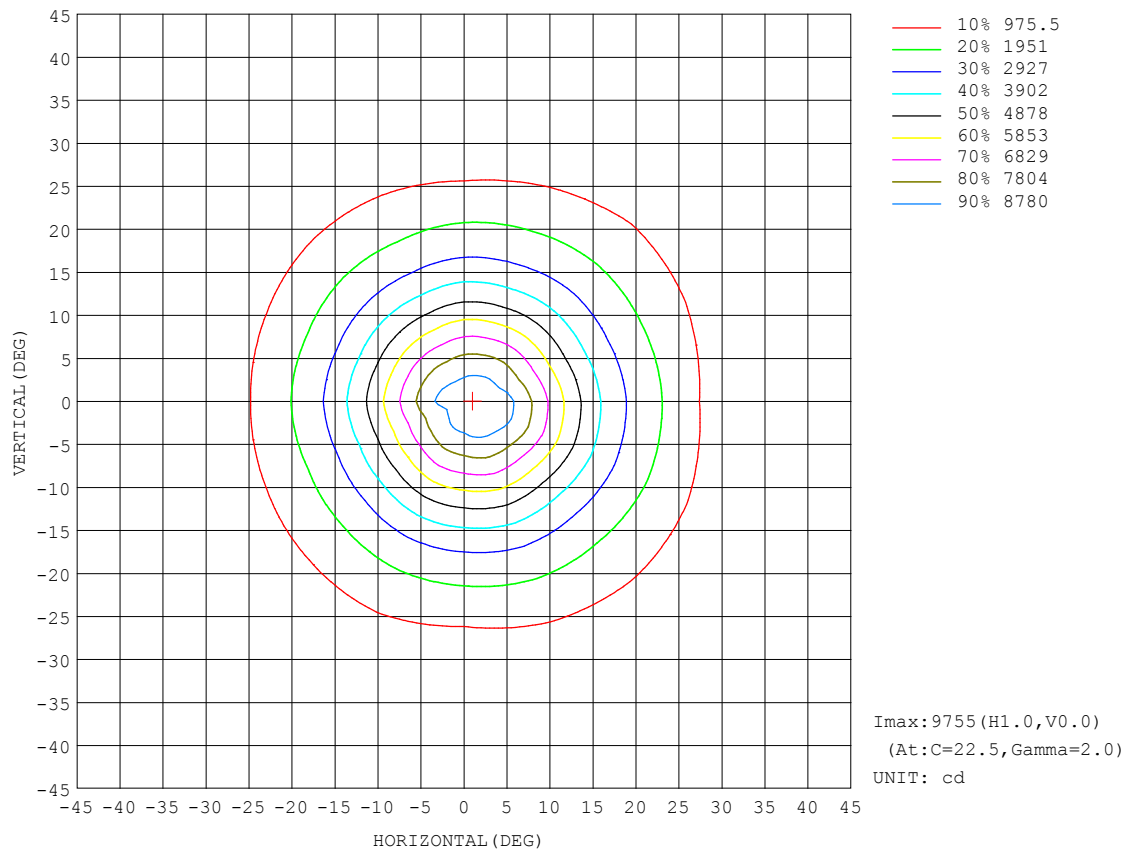
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	90	84	81	89	84	81	77
0.80	97	92	88	97	91	88	95	91	88	84
1.00	101	96	92	100	95	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	95	91
1.50	107	103	100	106	102	99	104	101	98	94
2.00	109	105	102	108	104	102	105	102	100	95
2.50	111	107	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	105	107	105	103	97
4.00	114	112	110	112	110	108	109	107	105	98
5.00	115	113	112	113	112	110	109	108	107	99
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:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:652*21.6	Shielding Angle:

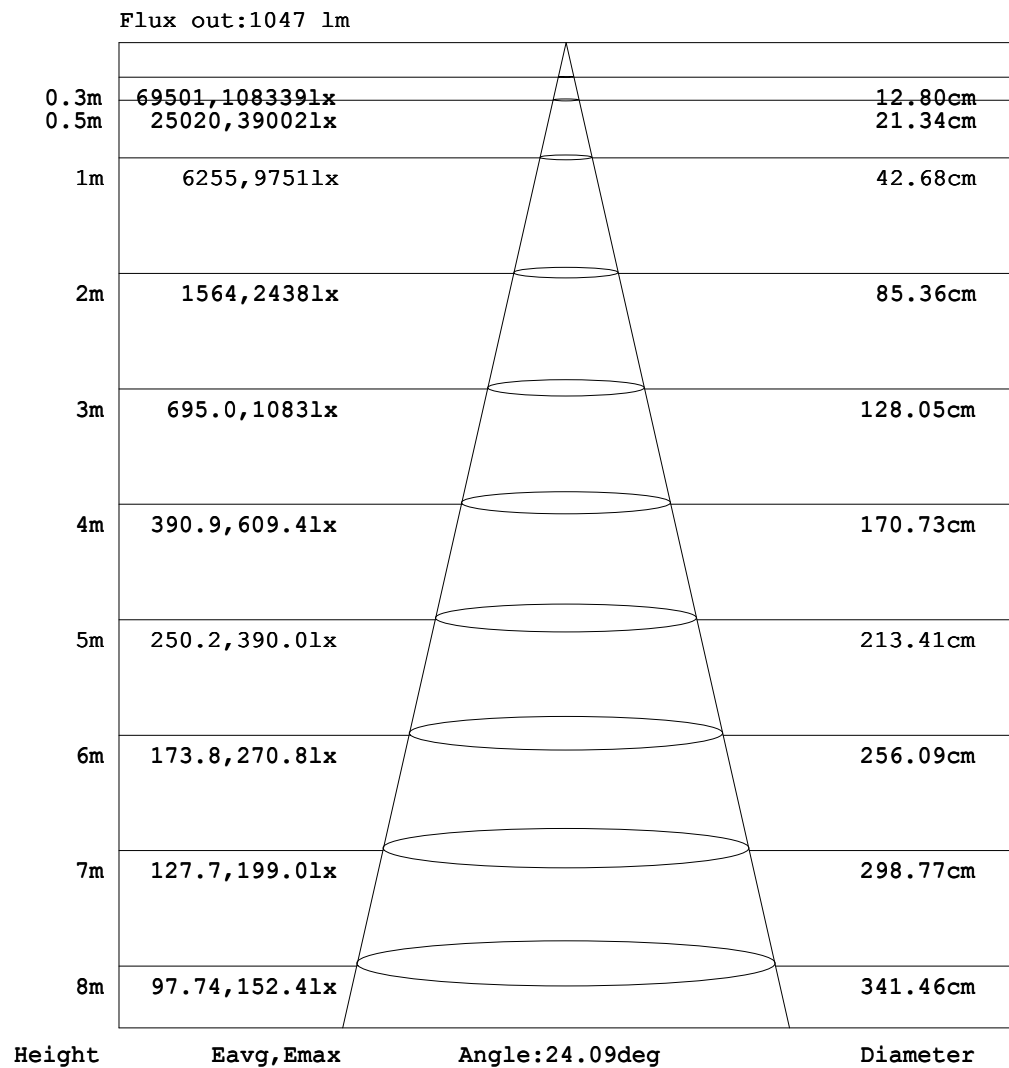


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

AAI Figure

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 652*21.6	Shielding Angle:



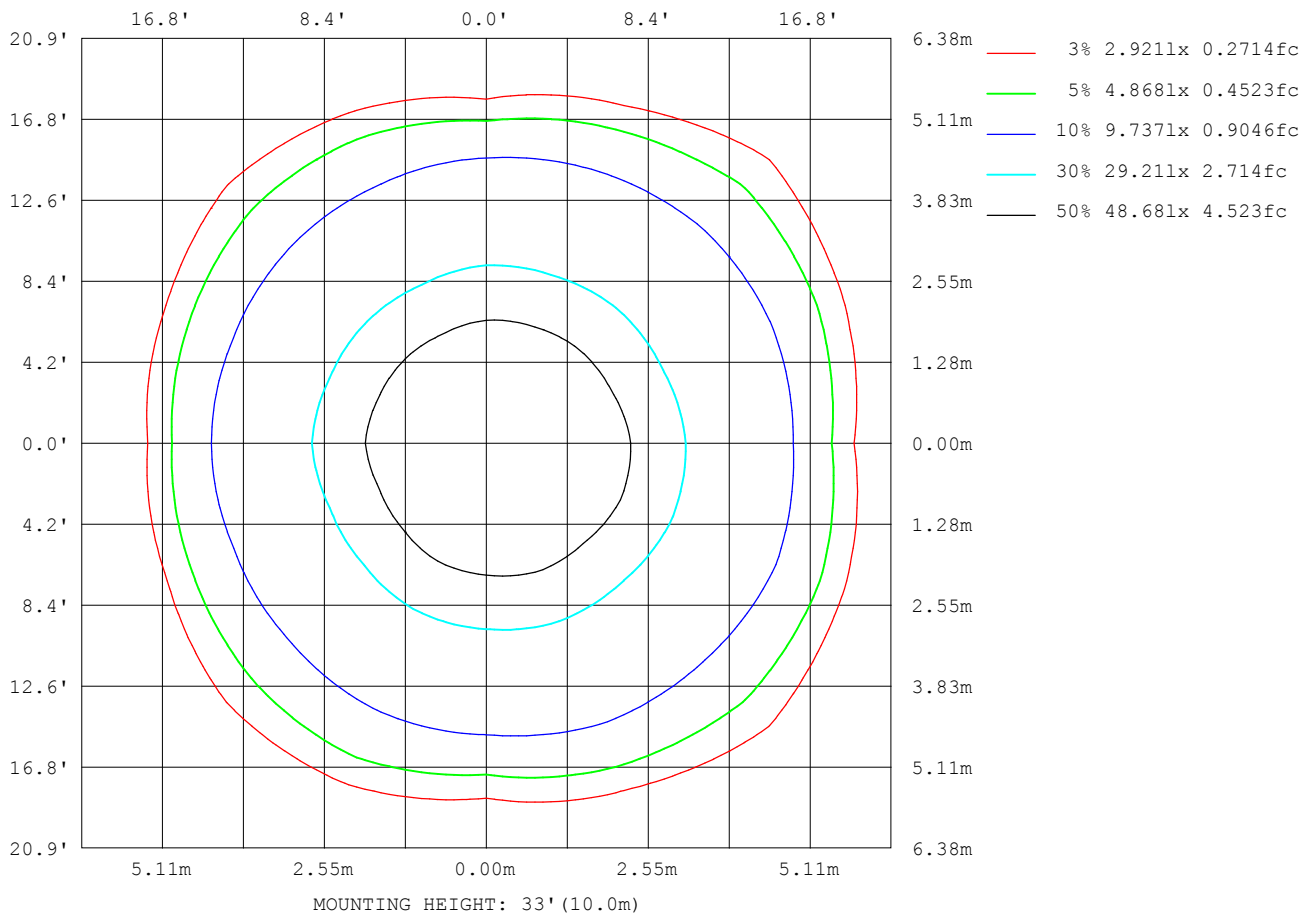
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-08-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:652*21.6	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZR
Test Date:2021-08-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:65.0%
Test Distance:8.402m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:48.00V I:0.7326A P:36.16W PF:1.000 Freq:50.00Hz Lamp Flux:2456.22x1 lm		
NAME: M20-T41006A-36G40-R24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:652*21.6	Shielding Angle:

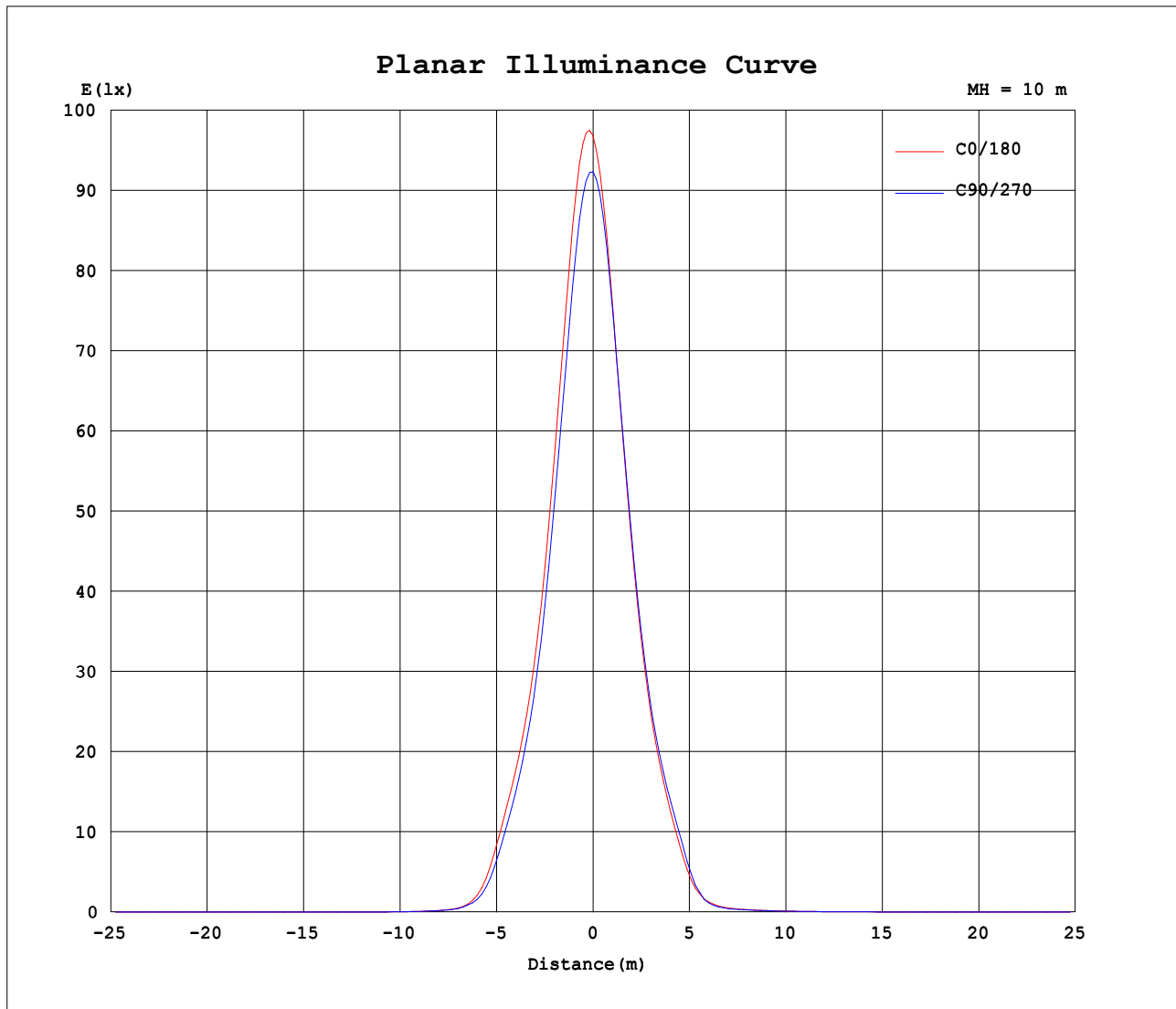
AvgL	cd/m2
L_0~180 (65) av	1353
L_0~180 (75) av	1811
L_0~180 (85) av	4550
L_90~270 (65) av	1399
L_90~270 (75) av	1878
L_90~270 (85) av	4730
L_45 (65) av	1422
L_45 (75) av	1884
L_45 (85) av	4703

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZR
 Test Date:2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
 Humidity:65.0%
 Test Distance:8.402m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZR
Test Date: 2021-08-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity: 65.0%
Test Distance: 8.402m [K=1.0000]
Remarks:

```

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