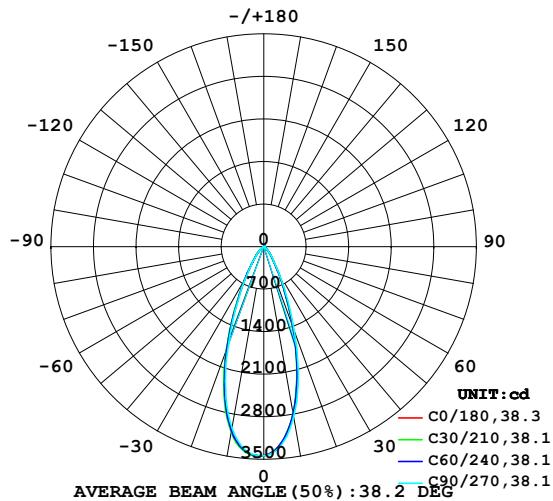


LUMINAIRE PHOTOMETRIC TEST REPORT

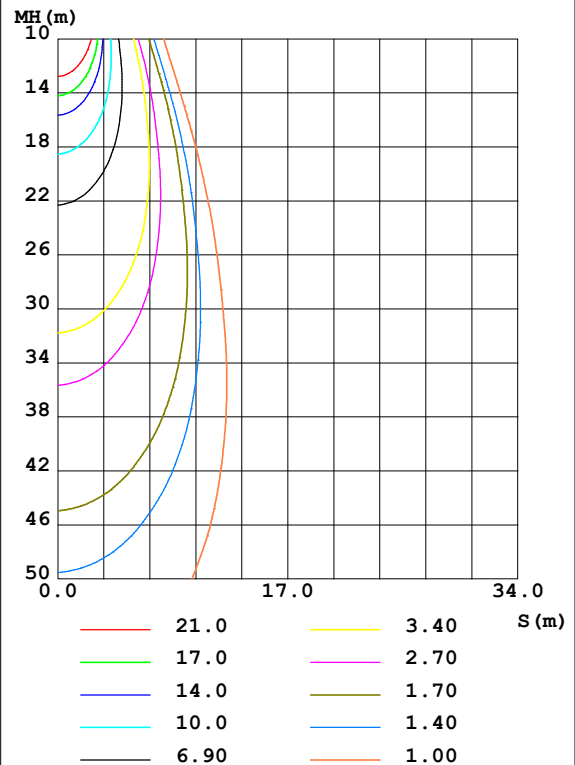
NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 94.27 lm/W
MODEL		Imax(cd)	3456	S/MH(C0/180)	0.65	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.64	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1738.9	η UP,DN(C0-180)	0.0,47.4	
NOMINAL FLUX(lm)	1738.89	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,52.6	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	0.65	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [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	2793	2790	2845	2959	3067	3077	3028	2917	0- 10	304.8	304.8	17.5,17.5
20	1416	1391	1474	1630	1793	1778	1703	1582	10- 20	631.8	936.6	53.9,53.9
30	464.4	463.0	487.4	562.5	635.7	637.3	607.6	547.3	20- 30	449.0	1386	79.7,79.7
40	173.2	168.2	181.1	196.3	217.7	213.0	212.8	193.9	30- 40	202.9	1589	91.4,91.4
50	53.87	51.97	57.49	65.97	77.21	75.98	73.32	62.96	40- 50	93.60	1682	96.7,96.7
60	15.54	15.36	15.64	16.82	18.54	18.50	17.55	16.48	50- 60	30.75	1713	98.5,98.5
70	10.63	10.68	10.62	11.24	11.59	11.48	11.27	11.15	60- 70	13.26	1726	99.3,99.3
80	6.007	5.981	6.449	7.438	8.056	7.900	7.712	7.096	70- 80	9.909	1736	99.8,99.8
90	0.1154	0.1125	0.1153	0.1123	0.4471	0.4731	0.2623	0.2419	80- 90	2.875	1739	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): 1645.9 lm

%lum = 94.7%

%lamp = 94.7%

Conical surface Flux(120deg): 1712.9 lm

%lum = 98.5%

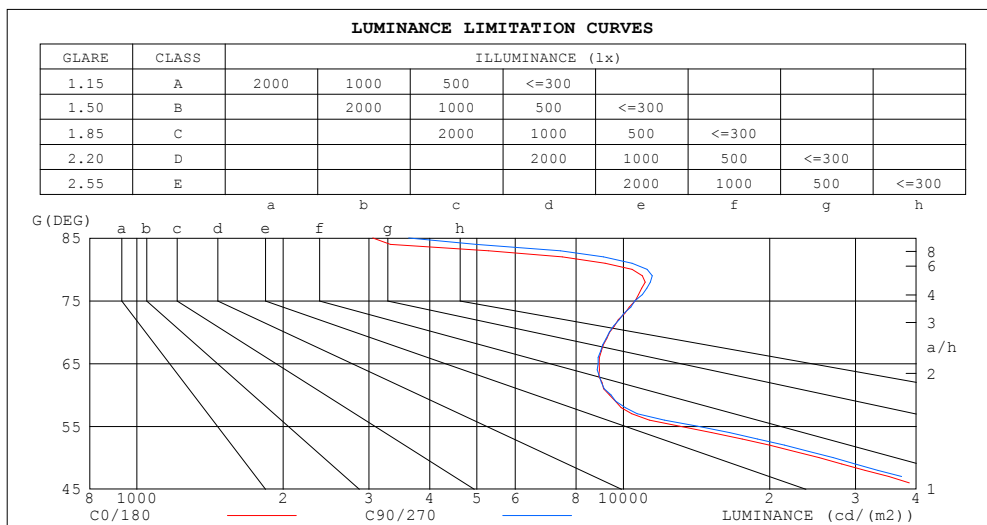
%lamp = 98.5%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-07-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:5.620m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3054	3620
80	10427	11201
75	10577	10571
70	9369	9366
65	8917	8877
60	9368	9432
55	13062	14214
50	25263	26977
45	42925	45532

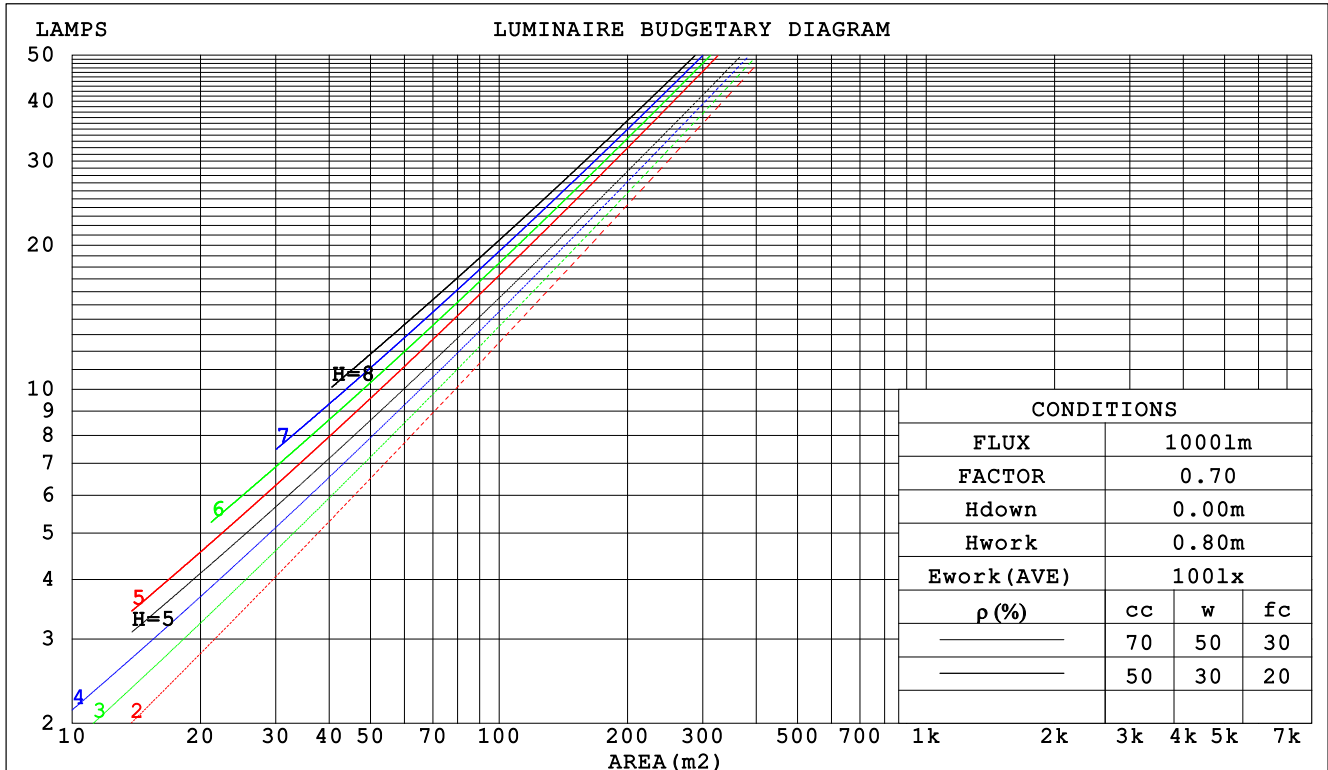
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:#65MM	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.89	.96	.92	.89	.94	.90	.87	.91	.88	.86	.89	.87	.85	.83
4.0	.92	.87	.83	.91	.86	.83	.89	.85	.82	.87	.84	.81	.85	.82	.80	.78
5.0	.87	.82	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.75	.74
6.0	.83	.77	.73	.82	.77	.73	.80	.76	.72	.79	.75	.72	.78	.74	.72	.70
7.0	.78	.73	.69	.78	.73	.69	.77	.72	.69	.75	.71	.68	.74	.71	.68	.67
8.0	.75	.69	.66	.74	.69	.65	.73	.69	.65	.72	.68	.65	.71	.67	.65	.63
9.0	.71	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.62	.68	.65	.62	.60
10.0	.68	.63	.60	.68	.63	.59	.67	.62	.59	.66	.62	.59	.66	.62	.59	.58



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

WEC AND CCEC

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:#65MM	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	.171	.097	.031	.164	.093	.030	.151	.087	.028	.140	.081	.026	.129	.075	.024		
2.0	.161	.088	.027	.156	.086	.026	.145	.081	.025	.135	.076	.024	.126	.072	.023		
3.0	.152	.081	.024	.147	.079	.024	.139	.075	.023	.130	.071	.022	.123	.068	.021		
4.0	.144	.075	.022	.140	.073	.022	.132	.070	.021	.125	.067	.020	.118	.064	.020		
5.0	.136	.069	.020	.133	.068	.020	.126	.066	.019	.120	.063	.019	.114	.061	.018		
6.0	.130	.065	.019	.126	.064	.018	.121	.062	.018	.115	.060	.018	.110	.058	.017		
7.0	.123	.061	.017	.121	.060	.017	.116	.058	.017	.111	.057	.017	.106	.055	.016		
8.0	.118	.058	.016	.115	.057	.016	.111	.055	.016	.107	.054	.016	.103	.053	.015		
9.0	.113	.054	.015	.110	.054	.015	.106	.053	.015	.103	.051	.015	.099	.050	.015		
10.0	.108	.052	.014	.106	.051	.014	.102	.050	.014	.099	.049	.014	.096	.048	.014		

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	.171	.157	.145	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.104	.075	.053	.072	.052	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.107	.070	.044	.092	.060	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.101	.063	.037	.087	.055	.033	.060	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.096	.058	.032	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.091	.053	.028	.078	.046	.025	.054	.033	.018	.032	.019	.011	.010	.006	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME:					TYPE:CRI90 3500K			WEIGHT:			
SPEC.:CYL-20-CCT-WT					DIM.:			SERIAL No.:1			
MFR.:					SUR.:Φ65MM			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	2H	16.6	17.5	16.8	17.6	17.8	16.8	17.7	17.0	17.8	18.0
	3H	16.7	17.5	17.0	17.7	17.9	16.9	17.7	17.1	17.9	18.1
	4H	16.8	17.6	17.1	17.8	18.0	17.0	17.8	17.3	18.0	18.2
	6H	17.0	17.7	17.3	18.0	18.2	17.2	17.9	17.5	18.1	18.4
	8H	17.0	17.7	17.3	18.0	18.2	17.2	17.9	17.5	18.1	18.4
	12H	17.0	17.6	17.3	17.9	18.2	17.2	17.8	17.5	18.1	18.4
4H	2H	16.5	17.2	16.7	17.5	17.7	16.7	17.4	16.9	17.6	17.9
	3H	16.7	17.4	17.0	17.6	17.9	16.9	17.5	17.2	17.8	18.1
	4H	16.9	17.5	17.3	17.8	18.2	17.1	17.7	17.4	18.0	18.3
	6H	17.2	17.8	17.6	18.1	18.4	17.4	17.9	17.8	18.3	18.6
	8H	17.3	17.8	17.7	18.1	18.5	17.5	17.9	17.8	18.3	18.7
	12H	17.2	17.7	17.6	18.0	18.4	17.4	17.9	17.8	18.2	18.6
8H	4H	17.0	17.5	17.4	17.8	18.2	17.1	17.6	17.5	18.0	18.3
	6H	17.4	17.8	17.8	18.2	18.6	17.5	17.9	18.0	18.3	18.7
	8H	17.4	17.8	17.9	18.2	18.6	17.6	18.0	18.1	18.4	18.8
	12H	17.4	17.7	17.9	18.1	18.6	17.6	17.9	18.1	18.3	18.8
12H	4H	17.0	17.4	17.4	17.8	18.2	17.1	17.6	17.5	17.9	18.3
	6H	17.4	17.7	17.8	18.1	18.6	17.5	17.9	18.0	18.3	18.7
	8H	17.4	17.7	17.9	18.2	18.6	17.6	17.9	18.1	18.4	18.8
Variations with the observer position at spacings:											
S = 1.0H		+ 1.6 / - 2.6					+ 1.7 / - 2.6				
1.5H		+ 2.8 / - 2.9					+ 2.8 / - 2.9				
2.0H		+ 3.5 / - 1.8					+ 3.7 / - 1.8				

CIE Pub.117, 1739 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.9)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:

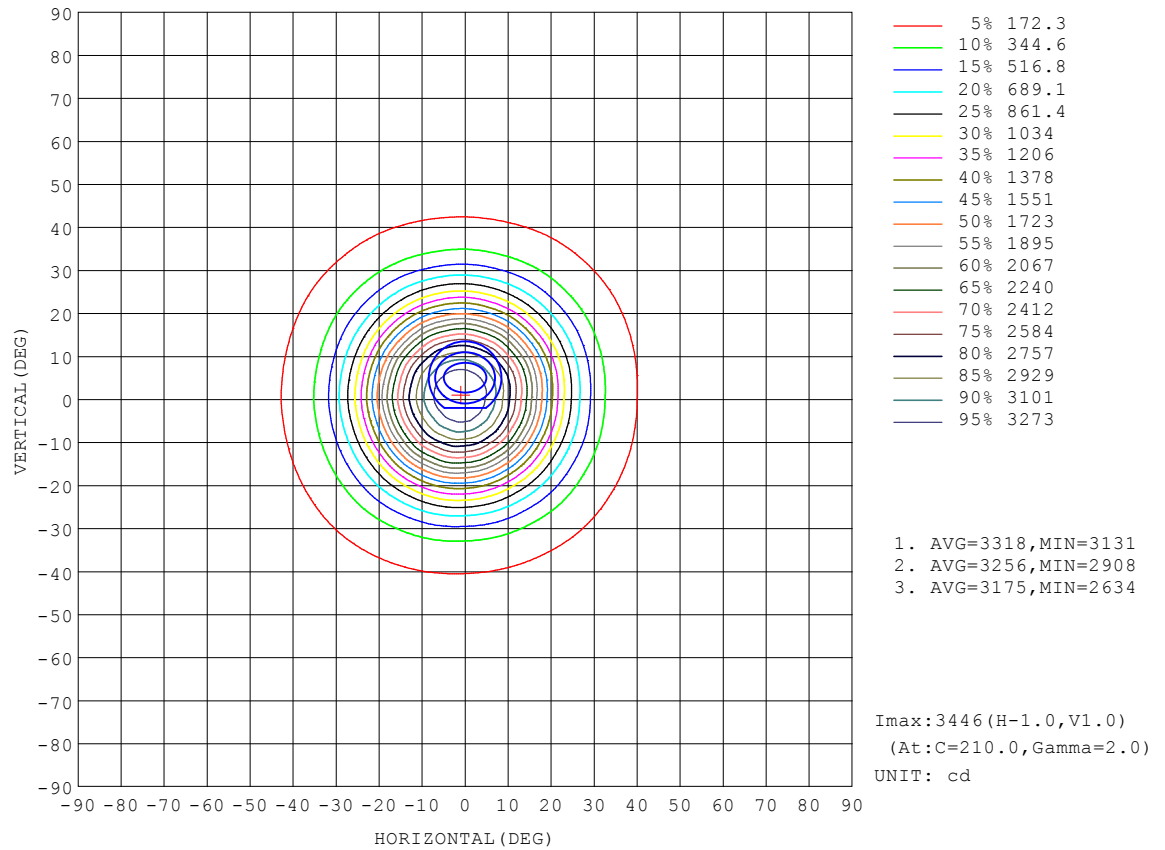
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	79	76	85	79	75	72
0.80	94	88	84	93	87	84	92	87	83	79
1.00	98	93	89	98	92	89	96	92	88	84
1.25	102	97	94	101	97	93	99	95	92	88
1.50	105	100	97	104	100	96	102	98	95	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	106	104	106	104	102	95
4.00	114	111	108	111	109	107	108	106	104	97
5.00	115	112	110	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2025-07-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 5.620m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:

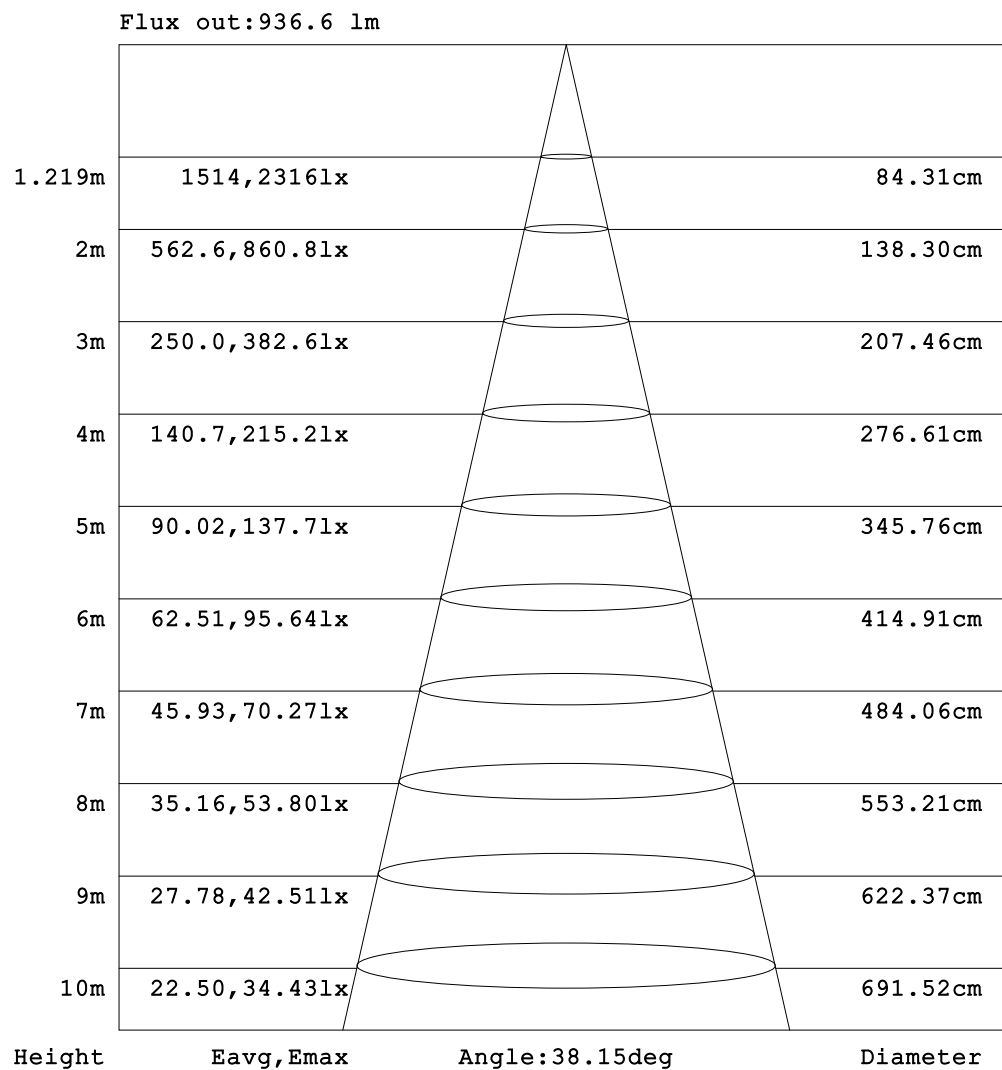


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

AAI Figure

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:



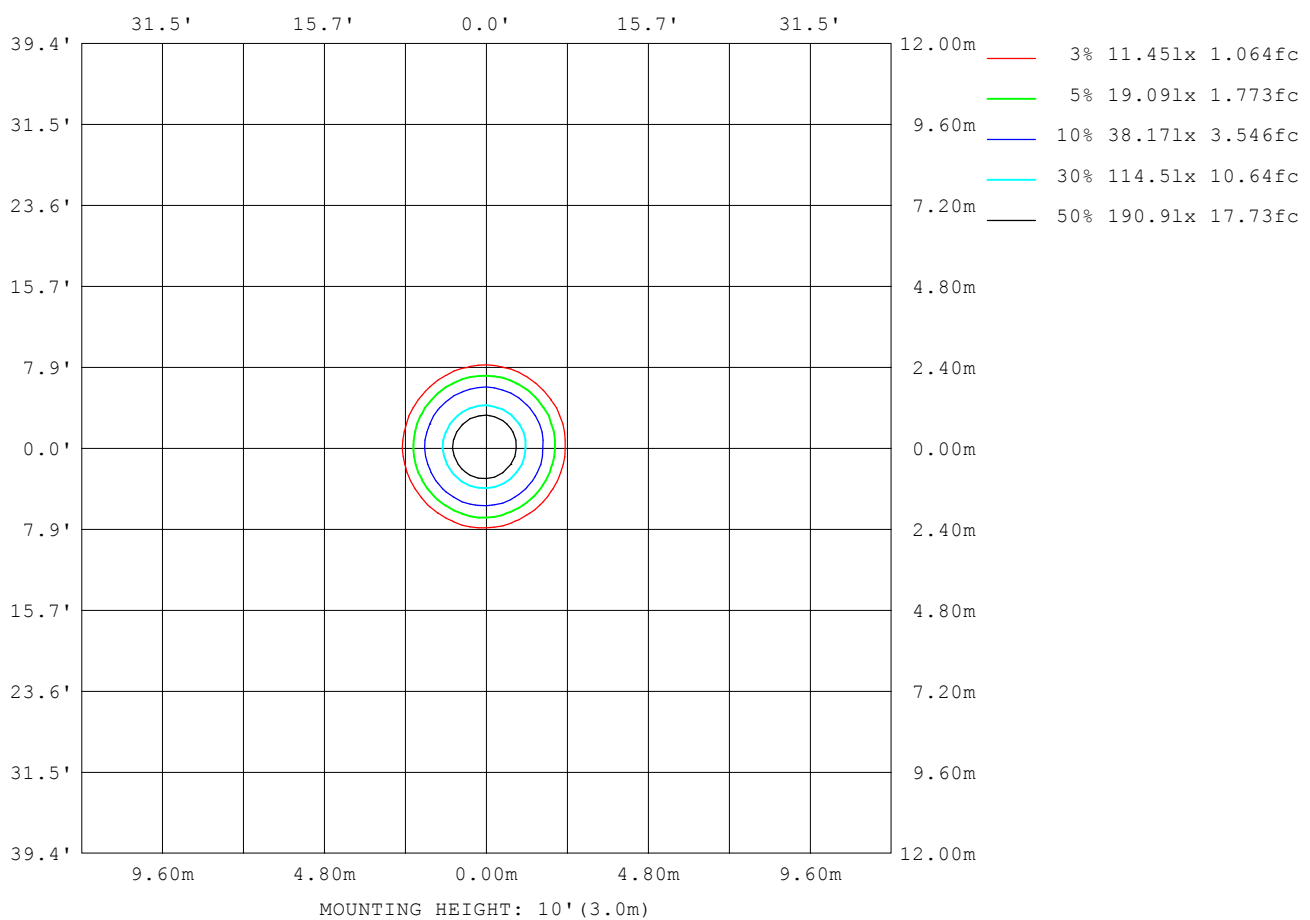
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-07-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:5.620m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

LED Avg.L Report

NAME:	TYPE:CRI90 3500K	WEIGHT:
SPEC.:CYL-20-CCT-WT	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ65MM	Shielding Angle:

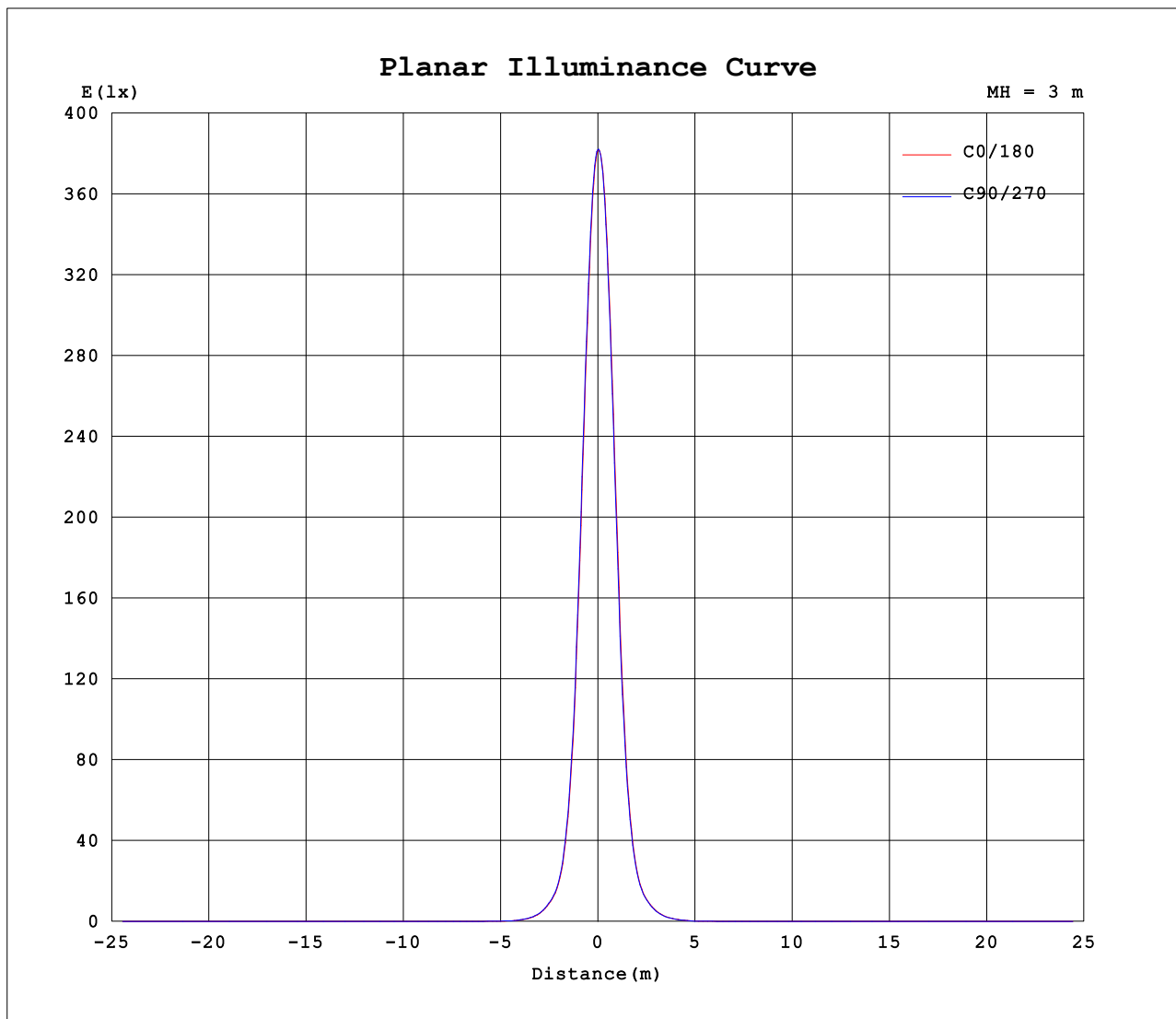
AvgL	cd/m2
L_0~180 (65) av	9441
L_0~180 (75) av	11101
L_0~180 (85) av	7180
L_90~270 (65) av	9241
L_90~270 (75) av	10942
L_90~270 (85) av	6100
L_45 (65) av	9382
L_45 (75) av	11116
L_45 (85) av	6308

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-07-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-07-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 5.620m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```