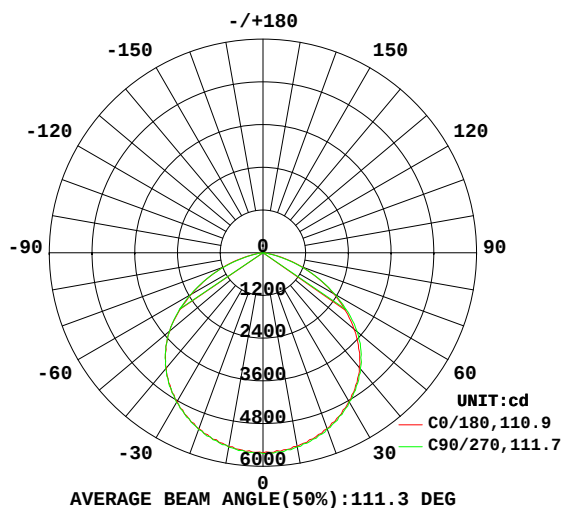


LUMINAIRE PHOTOMETRIC TEST REPORT

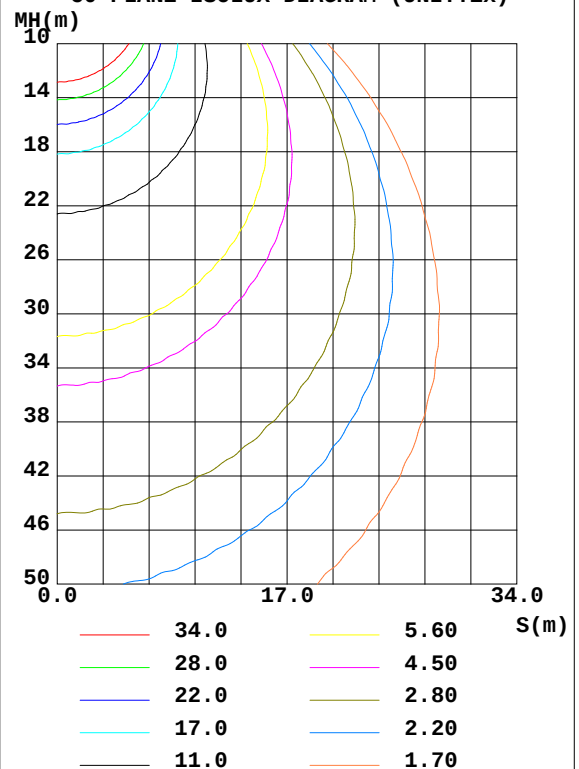
Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 159.53 lm/W			
MODEL	2835 3000K	I _{max} (cd)	5657	S/MH(C0/180)	1.28
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	15262	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	15261.6	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

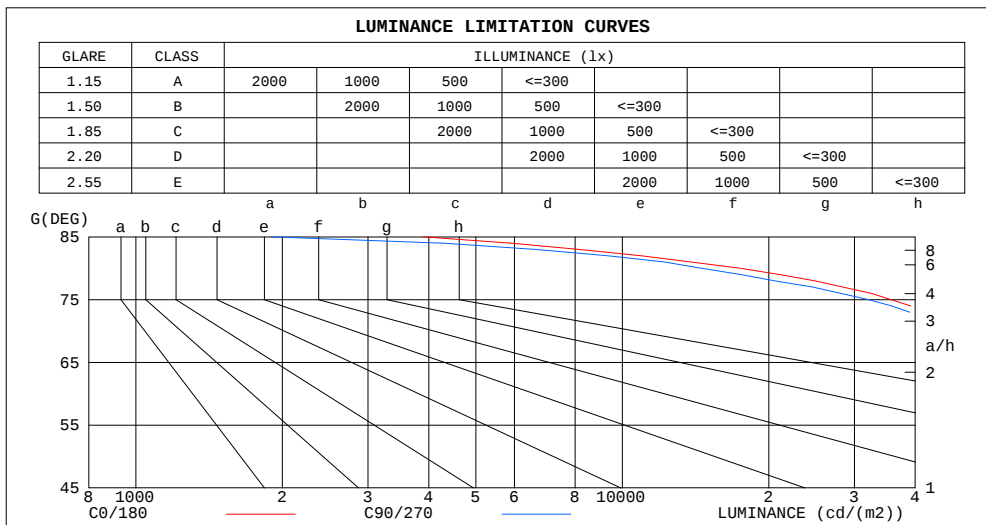
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5525	5512	5540	5545	5533	5536	5549	5527	0- 10	532.9	532.9	3.49, 3.49
20	5259	5255	5264	5298	5262	5277	5287	5281	10- 20	1532	2065	13.5, 13.5
30	4828	4841	4843	4875	4826	4847	4857	4865	20- 30	2343	4408	28.9, 28.9
40	4206	4255	4256	4273	4223	4250	4246	4264	30- 40	2860	7269	47.6, 47.6
50	3333	3412	3457	3451	3419	3430	3422	3411	40- 50	2978	10247	67.1, 67.1
60	2285	2300	2328	2336	2312	2350	2337	2326	50- 60	2580	12827	84, 84
70	1168	1153	1137	1163	1188	1158	1150	1173	60- 70	1715	14542	95.3, 95.3
80	207.1	176.2	172.3	183.7	220.0	195.0	189.3	193.8	70- 80	667.4	15209	99.7, 99.7
90	5.866	5.705	5.568	5.701	6.335	6.247	6.082	6.298	80- 90	52.13	15262	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2025-02-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.880m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3898	1900
80	17447	14517
75	35640	32016
70	49967	48632
65	59517	60387
60	66851	68108
55	72028	74457
50	75857	78675
45	78636	80497

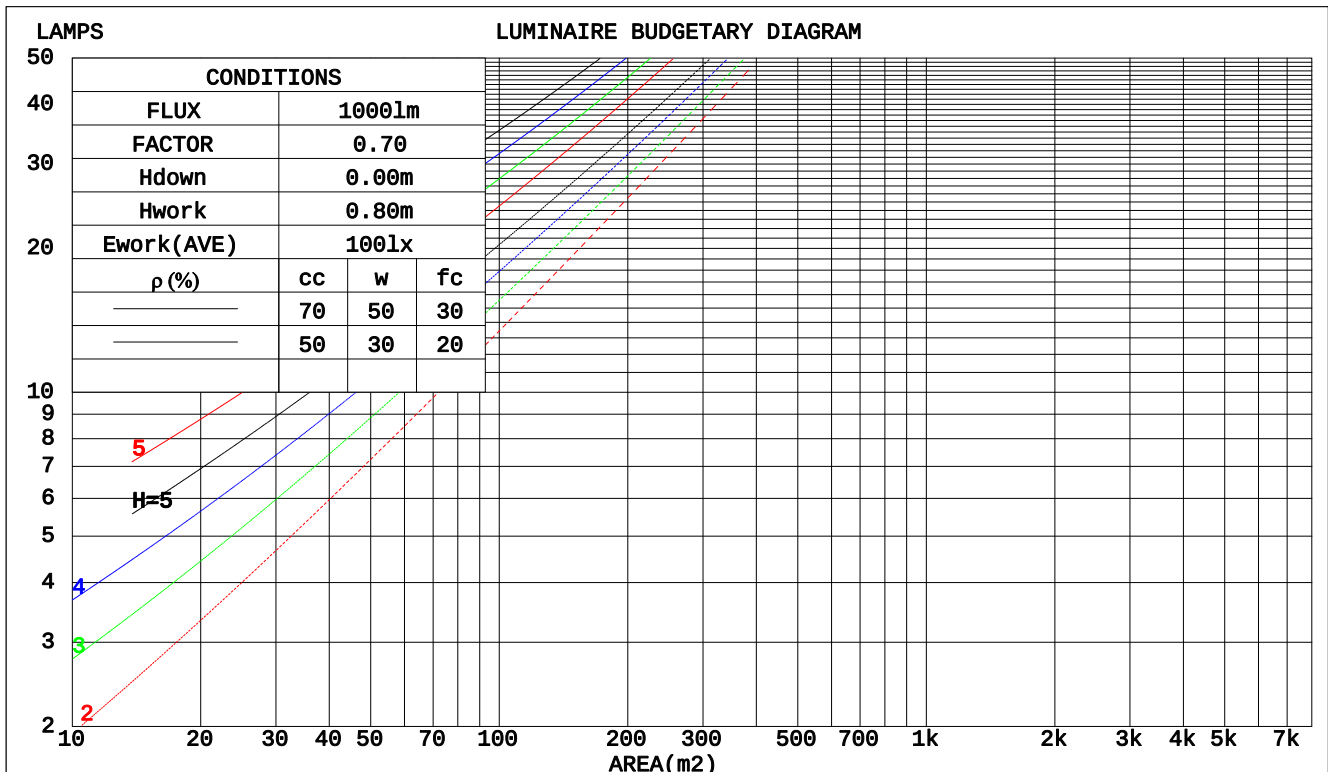
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	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	1.06	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	.74	.69	.65	.72	.67	.64	.62
4.0	.73	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.51	.43	.38	.49	.43	.38	.48	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.35	.30	.41	.35	.30	.40	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.38	.32	.27	.26



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm					
NAME: KD008-BKTCTP200-100			TYPE:		WEIGHT:
SPEC.: black RA80 3000K+6000K			DIM.:		SERIAL No.:
MFR.:			SUR.: 295mm		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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.278	.158	.050	.271	.155	.049	.258	.148	.047	.246	.142	.046	.235	.136	.044		
2.0	.271	.148	.046	.265	.146	.045	.253	.141	.044	.242	.136	.043	.233	.132	.041		
3.0	.255	.136	.041	.250	.134	.040	.240	.130	.039	.230	.126	.039	.221	.123	.038		
4.0	.238	.124	.036	.234	.122	.036	.225	.119	.036	.216	.116	.035	.208	.113	.034		
5.0	.222	.113	.033	.218	.112	.033	.210	.109	.032	.203	.107	.032	.196	.105	.031		
6.0	.207	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.194	.096	.027	.191	.095	.027	.184	.093	.027	.178	.091	.027	.173	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.086	.025	.168	.085	.025	.163	.084	.024		
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023		
10.0	.161	.077	.021	.159	.077	.021	.154	.075	.021	.150	.074	.021	.145	.073	.021		

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						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	.162	.114	.076	.139	.099	.066	.095	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.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	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm											
NAME: KD008-BKTCTP200-100					TYPE:			WEIGHT:			
SPEC.: black RA80 3000K+6000K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 295mm			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		18.3	19.8	18.6	20.0	20.2	18.4	19.9	18.7	20.1	20.3
	3H	19.4	20.7	19.7	21.0	21.2	19.4	20.8	19.7	21.0	21.2
	4H	19.6	20.9	19.9	21.2	21.4	19.6	20.9	19.9	21.2	21.4
	6H	19.7	20.9	20.0	21.1	21.4	19.6	20.8	20.0	21.1	21.4
	8H	19.6	20.8	20.0	21.1	21.3	19.6	20.7	19.9	21.0	21.3
	12H	19.6	20.7	19.9	21.0	21.3	19.5	20.6	19.9	20.9	21.2
4H	2H	18.8	20.1	19.1	20.3	20.6	18.9	20.2	19.2	20.4	20.7
	3H	20.0	21.1	20.3	21.4	21.7	20.0	21.1	20.4	21.4	21.7
	4H	20.3	21.3	20.7	21.6	22.0	20.3	21.3	20.7	21.6	21.9
	6H	20.4	21.3	20.8	21.6	22.0	20.3	21.2	20.7	21.6	21.9
	8H	20.4	21.2	20.8	21.5	21.9	20.3	21.1	20.7	21.5	21.9
	12H	20.3	21.1	20.7	21.5	21.9	20.2	21.0	20.7	21.4	21.8
8H	4H	20.4	21.2	20.8	21.6	21.9	20.3	21.2	20.7	21.5	21.9
	6H	20.5	21.2	20.9	21.6	22.0	20.4	21.1	20.8	21.5	21.9
	8H	20.5	21.1	20.9	21.5	21.9	20.4	21.0	20.8	21.4	21.8
	12H	20.4	20.9	20.9	21.4	21.9	20.3	20.9	20.8	21.3	21.8
12H	4H	20.3	21.1	20.7	21.5	21.9	20.3	21.1	20.7	21.4	21.8
	6H	20.4	21.0	20.9	21.5	21.9	20.4	21.0	20.8	21.4	21.8
	8H	20.4	20.9	20.9	21.4	21.9	20.4	20.9	20.8	21.3	21.8
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
1.5H	+ 0.2 / - 0.5					+ 0.3 / - 0.5					
2.0H	+ 0.5 / - 0.4					+ 0.5 / - 0.5					

CIE Pub.117, 15262 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.5)
Area: 0.06835 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

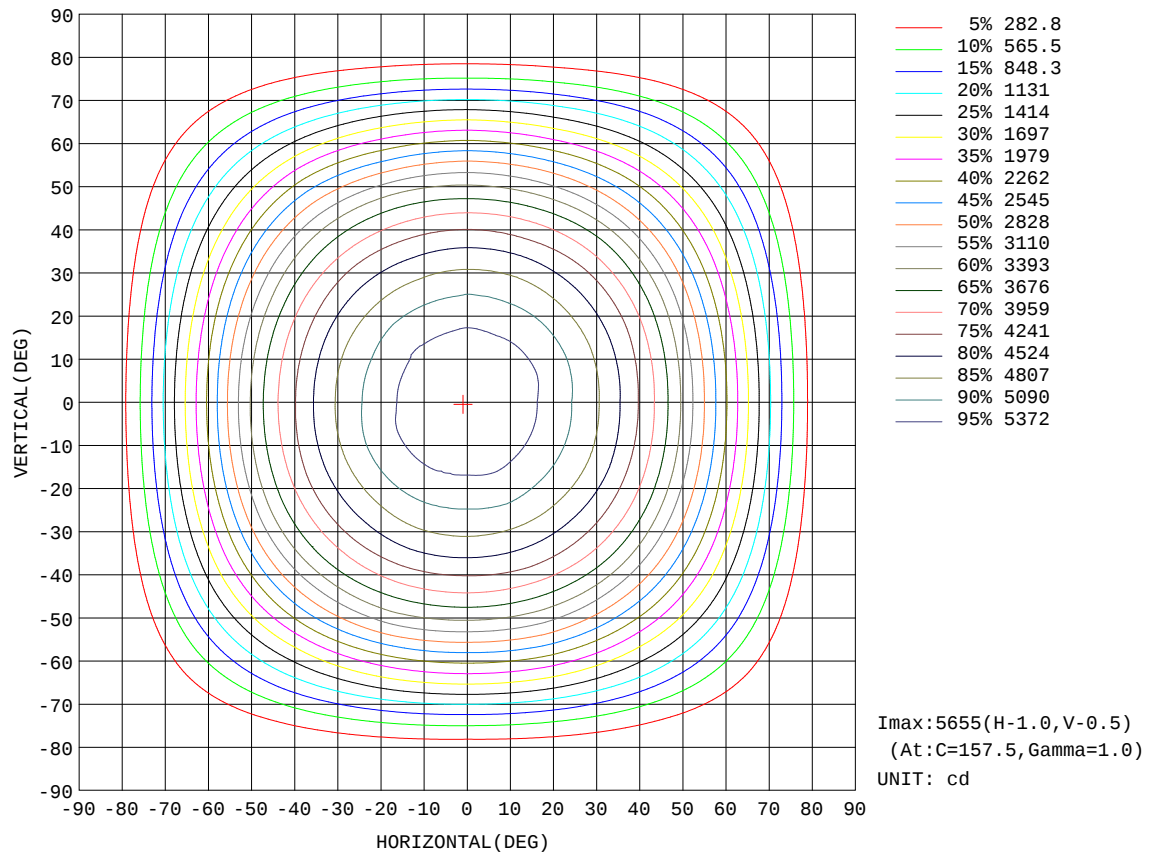
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	41	58	47	41	57	47	40	34
0.80	69	58	51	68	58	51	67	57	50	44
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	69	84	75	68	81	73	67	60
1.50	90	81	74	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	104	100	103	100	97	88
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:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

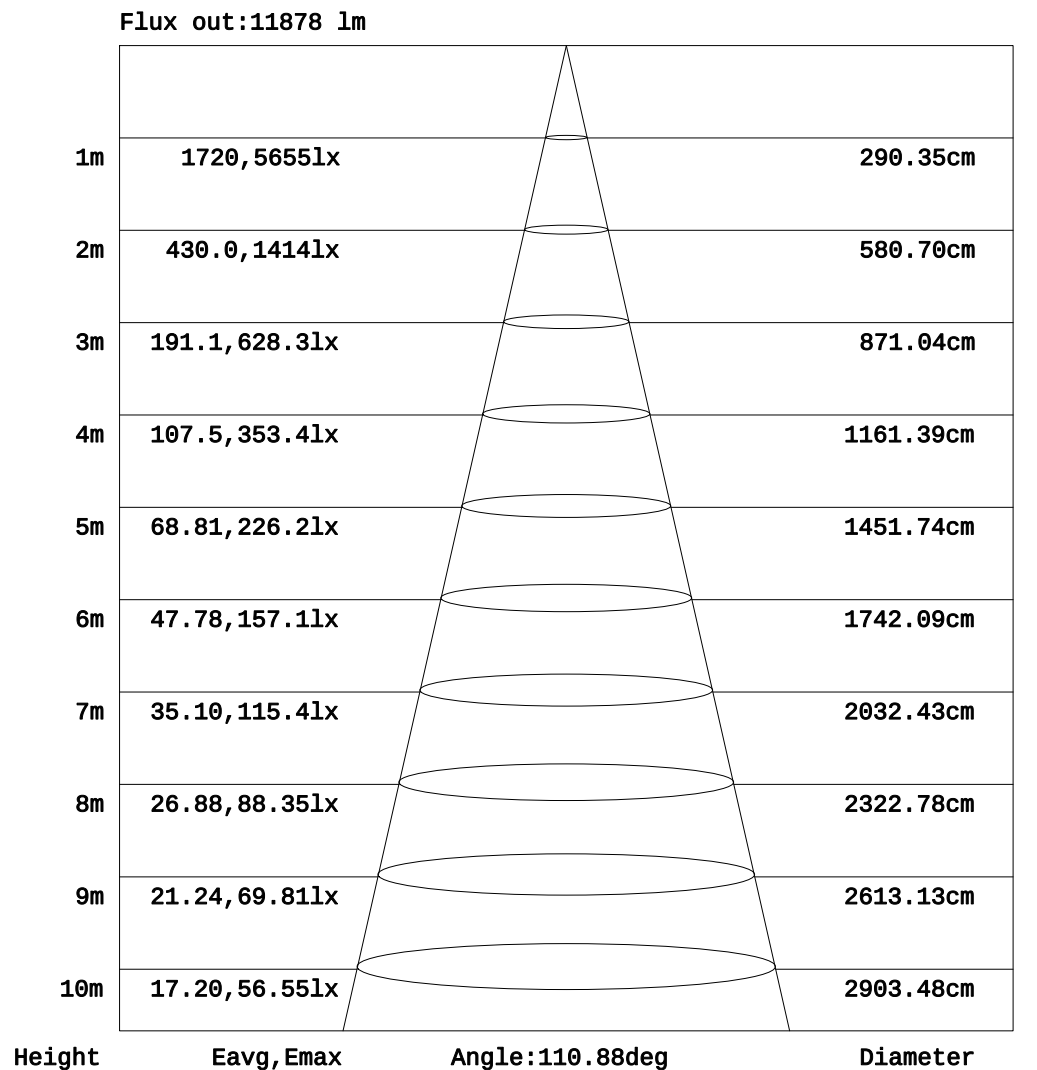


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:



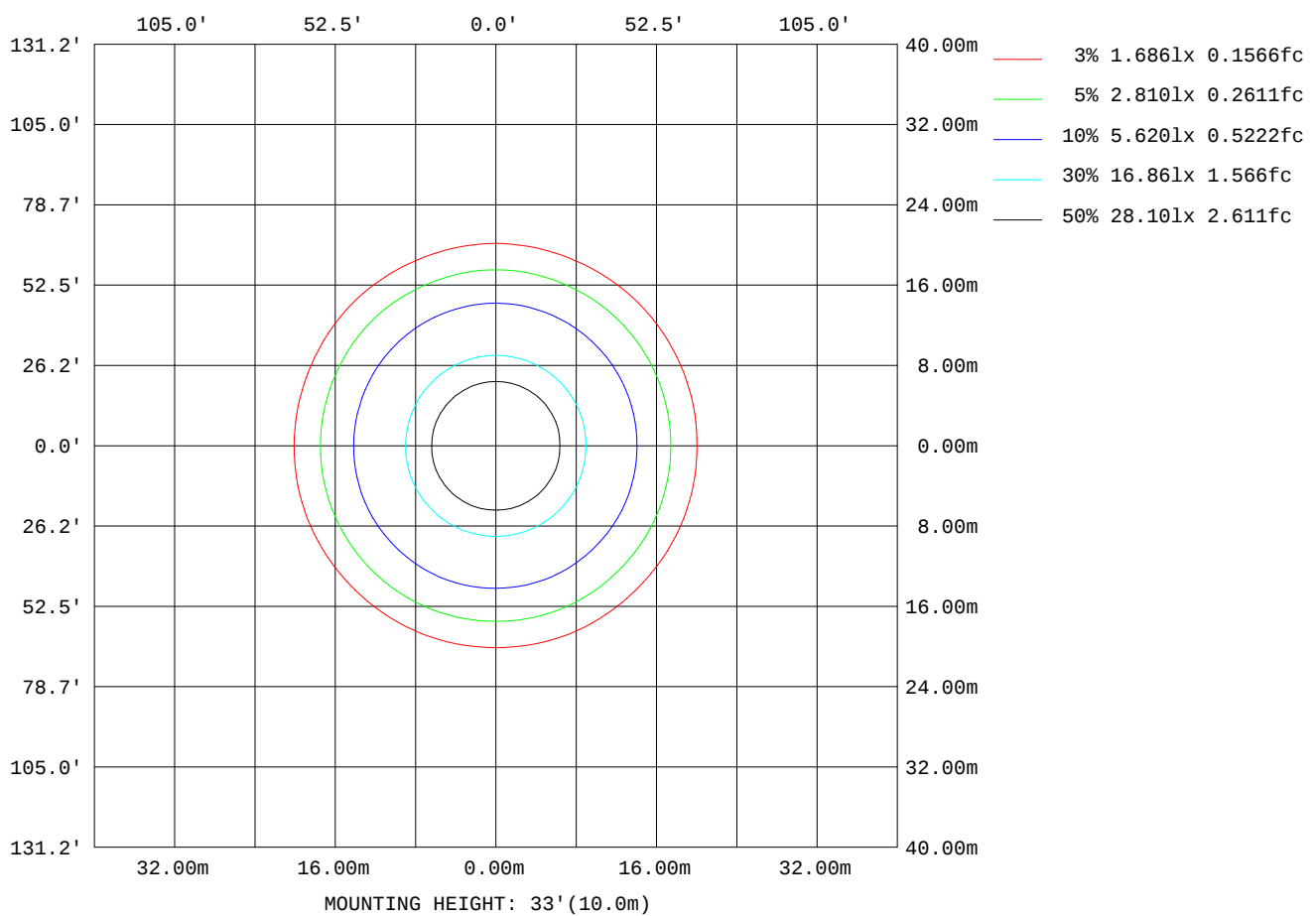
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.58V I:0.4368A P:95.663W PF:0.9497 Freq:49.99Hz Lamp Flux:15261.6x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

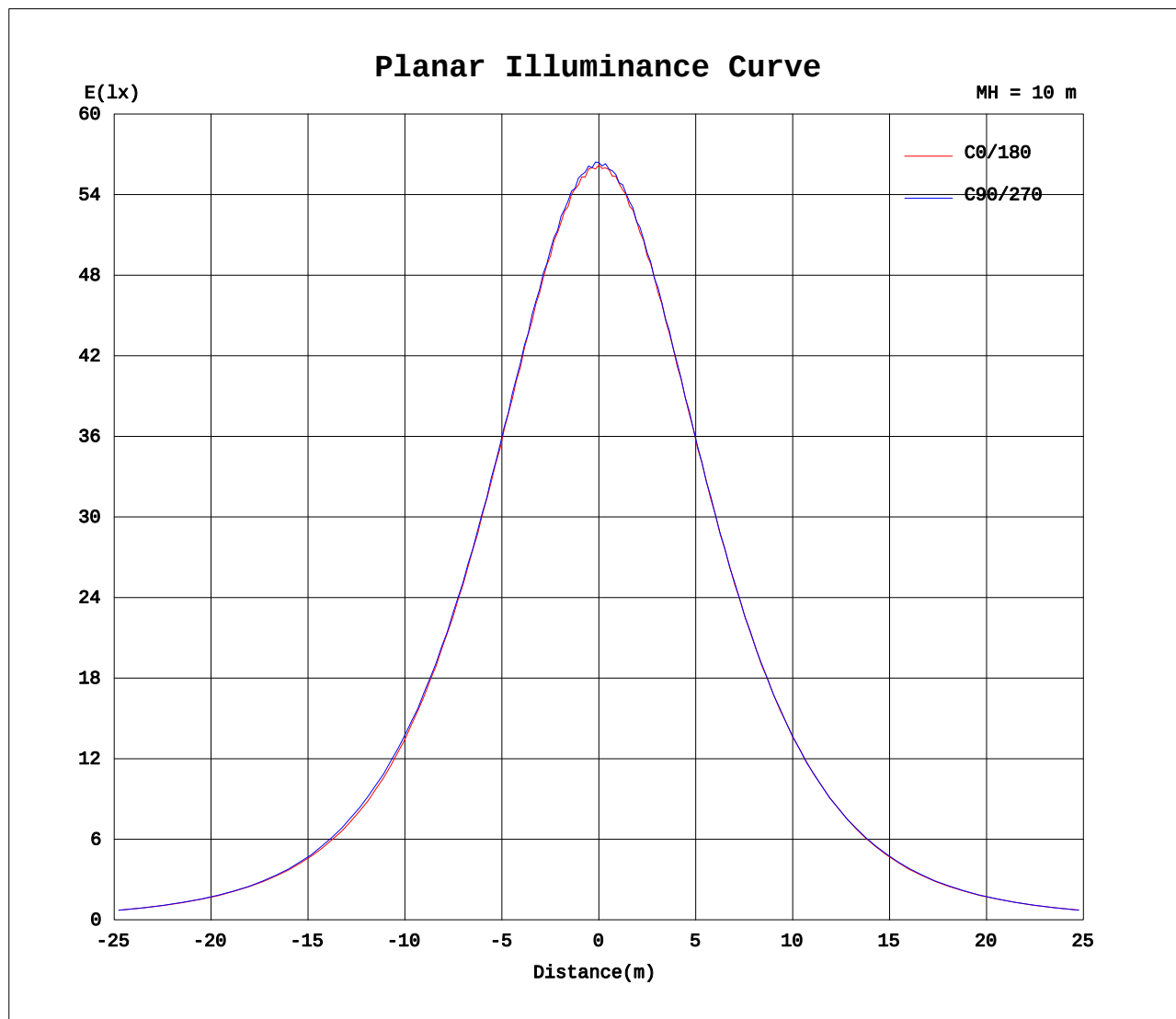
AvgL	cd/m2
L_0~180(65)av	59928
L_0~180(75)av	36080
L_0~180(85)av	4129
L_90~270(65)av	60470
L_90~270(75)av	32357
L_90~270(85)av	2429
L_45(65)av	59766
L_45(75)av	34625
L_45(85)av	3133

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-02-27

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

```