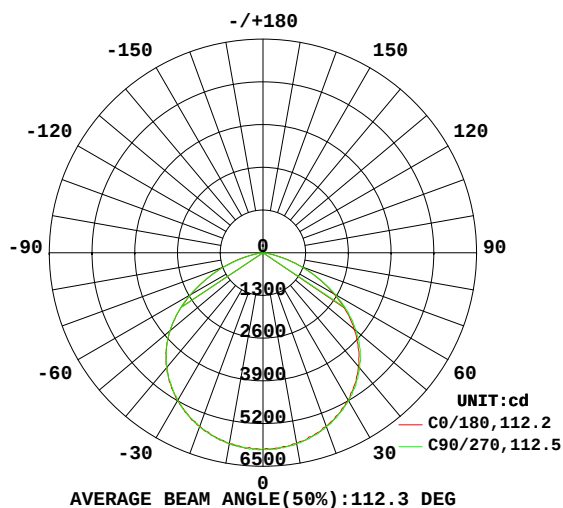


LUMINAIRE PHOTOMETRIC TEST REPORT

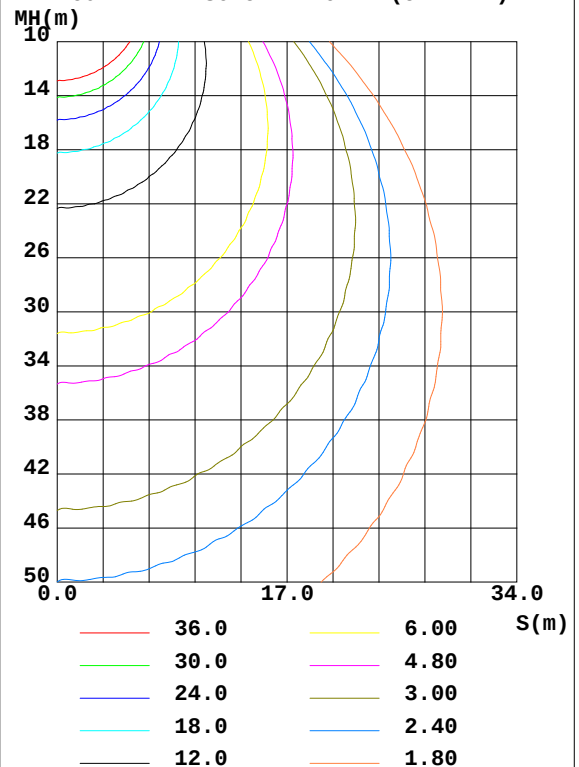
Test:U:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 175.86 lm/W			
MODEL	2835 4000K	I _{max} (cd)	6008	S/MH(C0/180)	1.29
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	16415	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	16415.3	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:

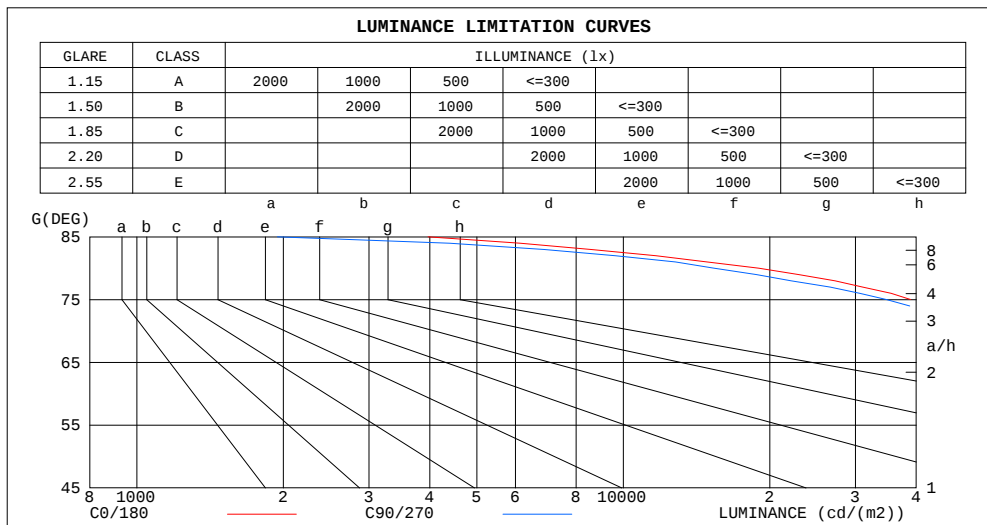
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5901	5885	5885	5886	5899	5875	5896	5910	0- 10	567.4	567.4	3.46, 3.46
20	5632	5634	5628	5622	5620	5628	5637	5647	10- 20	1635	2202	13.4, 13.4
30	5182	5208	5202	5188	5173	5191	5195	5206	20- 30	2506	4708	28.7, 28.7
40	4517	4574	4587	4573	4542	4564	4567	4566	30- 40	3065	7773	47.4, 47.4
50	3616	3678	3712	3716	3692	3711	3705	3670	40- 50	3200	10973	66.8, 66.8
60	2485	2495	2541	2531	2537	2554	2551	2508	50- 60	2794	13767	83.9, 83.9
70	1271	1253	1243	1259	1295	1268	1257	1272	60- 70	1865	15633	95.2, 95.2
80	225.3	191.4	182.4	197.4	240.6	211.4	202.1	211.7	70- 80	727.3	16360	99.7, 99.7
90	6.372	6.206	6.022	6.183	6.909	6.817	6.597	6.849	80- 90	55.42	16415	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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 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	3969	1945
80	18980	15368
75	38957	34754
70	54375	53157
65	64660	65606
60	72712	74366
55	78633	80538
50	82311	84489
45	84728	86700

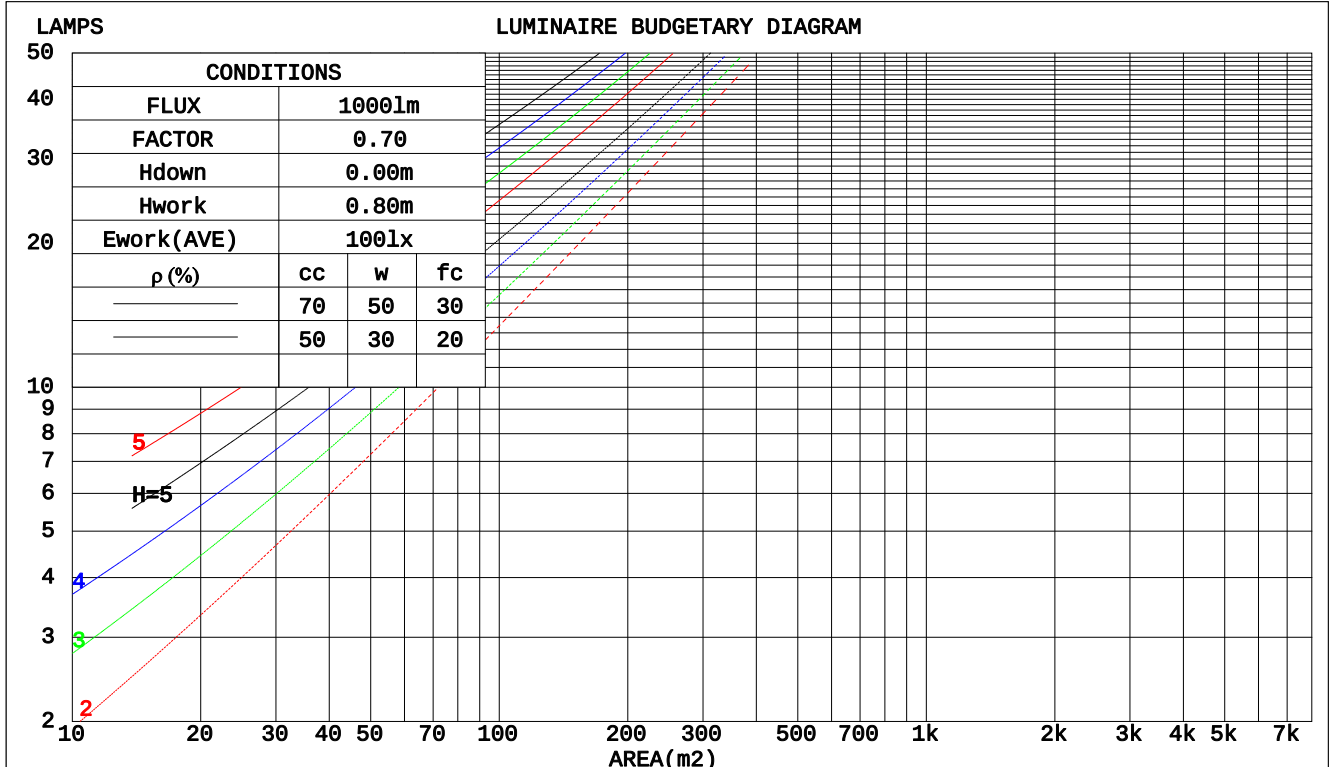
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-02-27

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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	1.05	1.02	.98	1.03	.99	.96	.99	.96	.93	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.72
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.67	.64	.61
4.0	.72	.64	.57	.71	.63	.57	.69	.62	.56	.66	.60	.55	.64	.59	.55	.53
5.0	.65	.56	.49	.64	.55	.49	.61	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.49	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.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:

WEC AND CCEC

Test:U:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 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	.279	.159	.050	.272	.155	.049	.259	.149	.047	.247	.143	.046	.236	.137	.044	
2.0	.271	.149	.046	.265	.146	.045	.254	.141	.044	.243	.136	.043	.233	.132	.042	
3.0	.256	.136	.041	.250	.134	.040	.240	.130	.040	.231	.126	.039	.222	.123	.038	
4.0	.239	.124	.037	.234	.123	.036	.225	.119	.036	.217	.116	.035	.209	.114	.035	
5.0	.223	.114	.033	.219	.112	.033	.211	.110	.032	.203	.107	.032	.196	.105	.031	
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029	
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.169	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.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	.170	.132	.100	.145	.114	.087	.100	.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	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005		
7.0	.134	.075	.034	.115	.065	.029	.079	.046	.021	.046	.027	.012	.015	.009	.004		
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.122	.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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 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		18.4	19.8	18.6	20.0	20.2	18.5	19.9	18.7	20.1	20.3
	3H	19.4	20.8	19.7	21.0	21.3	19.5	20.8	19.8	21.1	21.3
	4H	19.7	21.0	20.0	21.2	21.5	19.7	21.0	20.0	21.2	21.5
	6H	19.7	20.9	20.1	21.2	21.5	19.7	20.9	20.0	21.2	21.4
	8H	19.7	20.9	20.0	21.1	21.4	19.6	20.8	20.0	21.1	21.4
	12H	19.6	20.8	20.0	21.1	21.4	19.6	20.7	19.9	21.0	21.3
4H	2H	18.9	20.1	19.2	20.4	20.6	18.9	20.2	19.2	20.5	20.7
	3H	20.1	21.2	20.4	21.5	21.8	20.1	21.2	20.4	21.5	21.8
	4H	20.4	21.4	20.8	21.7	22.1	20.4	21.4	20.7	21.7	22.0
	6H	20.5	21.4	20.9	21.7	22.1	20.4	21.3	20.8	21.6	22.0
	8H	20.4	21.3	20.8	21.6	22.0	20.3	21.2	20.8	21.5	21.9
	12H	20.4	21.2	20.8	21.5	21.9	20.3	21.1	20.7	21.5	21.9
8H	4H	20.4	21.3	20.9	21.6	22.0	20.4	21.2	20.8	21.6	22.0
	6H	20.6	21.2	21.0	21.6	22.1	20.5	21.2	20.9	21.6	22.0
	8H	20.5	21.1	21.0	21.6	22.0	20.4	21.0	20.9	21.5	21.9
	12H	20.5	21.0	21.0	21.5	21.9	20.4	20.9	20.9	21.4	21.8
12H	4H	20.4	21.2	20.8	21.6	22.0	20.4	21.1	20.8	21.5	21.9
	6H	20.5	21.1	21.0	21.5	22.0	20.4	21.0	20.9	21.5	21.9
	8H	20.5	21.0	21.0	21.5	21.9	20.4	20.9	20.9	21.4	21.9
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.5					
2.0H	+ 0.5 / - 0.4					+ 0.5 / - 0.5					

CIE Pub.117, 16415 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.7)
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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

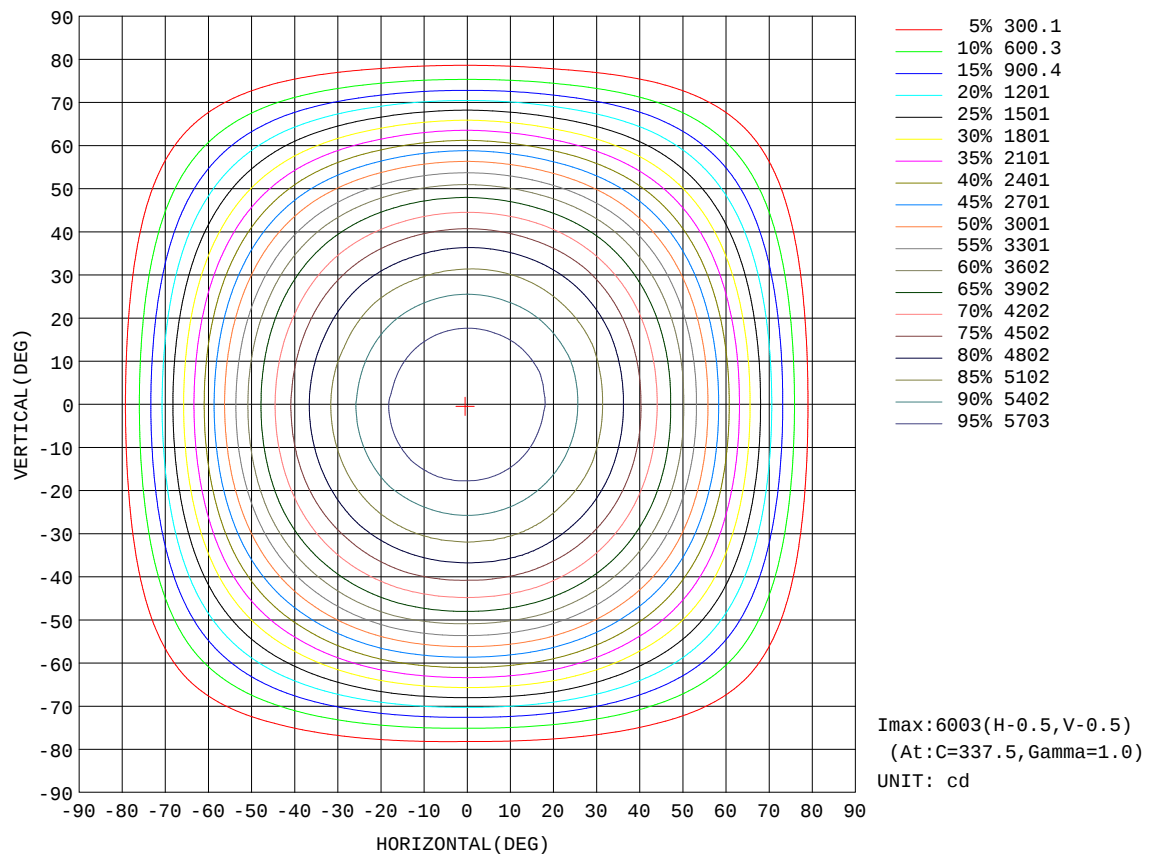
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	47	40	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	77	67	60	75	68	59	53
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	86	78	73	65
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	93	88	99	92	87	95	89	85	77
3.00	104	98	92	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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

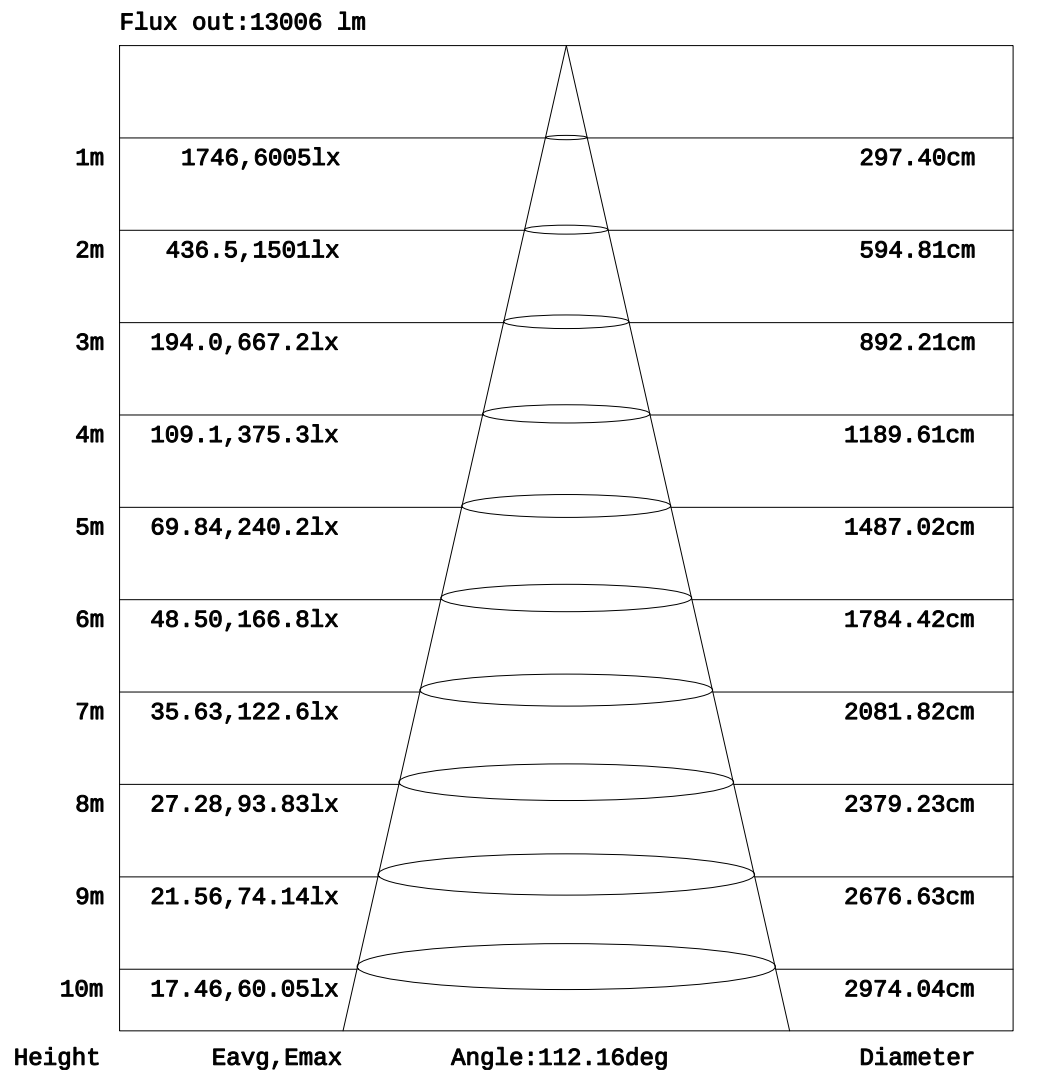


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-02-27

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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:



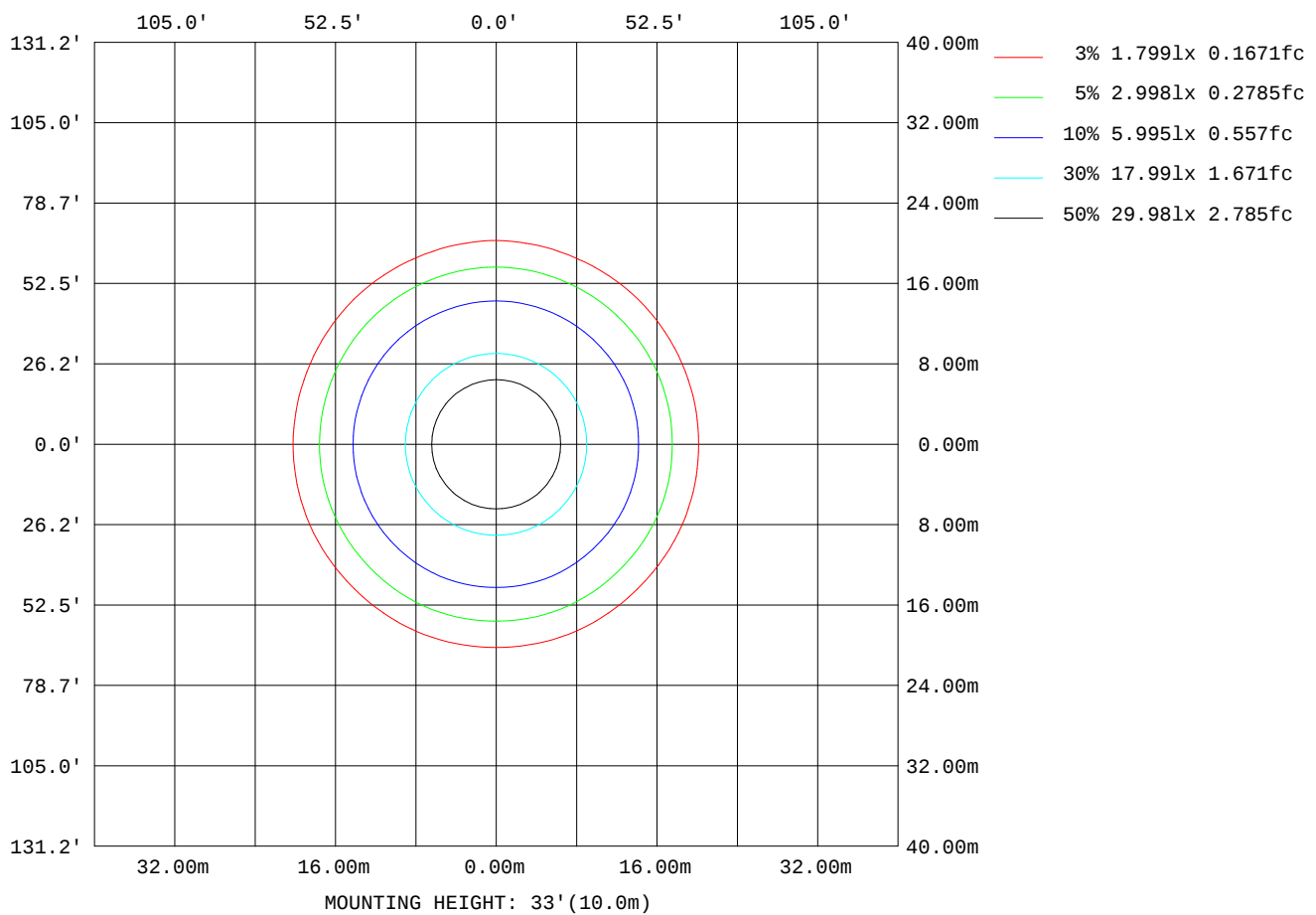
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 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:230.57V I:0.4274A P:93.341W PF:0.9472 Freq:49.99Hz Lamp Flux:16415.3x1 lm		
NAME: KD008-BKTCTP200-100	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 295mm	Shielding Angle:

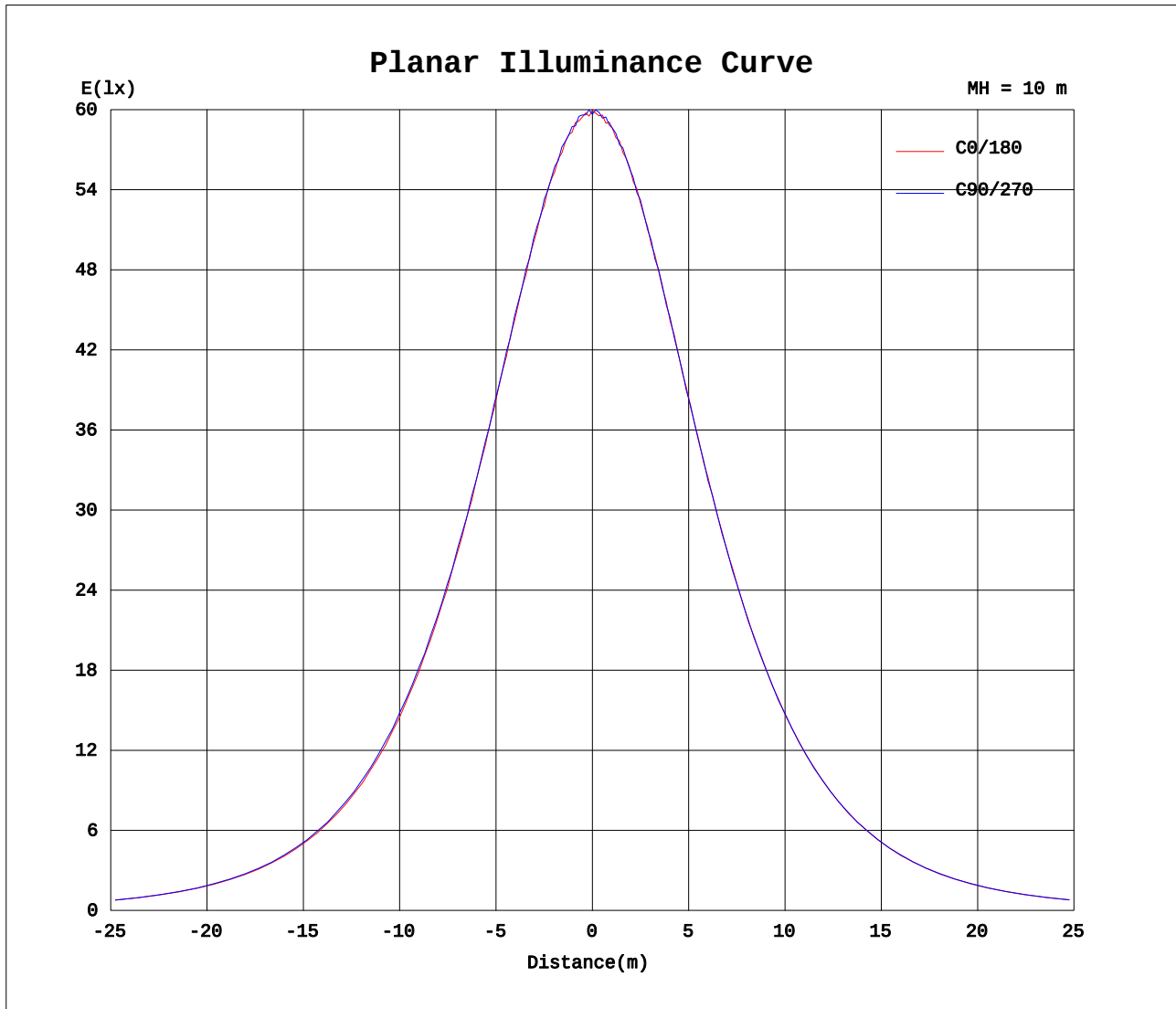
AvgL	cd/m2
L_0~180(65)av	65232
L_0~180(75)av	39575
L_0~180(85)av	4238
L_90~270(65)av	65839
L_90~270(75)av	35214
L_90~270(85)av	2505
L_45(65)av	64915
L_45(75)av	37860
L_45(85)av	3252

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:

```