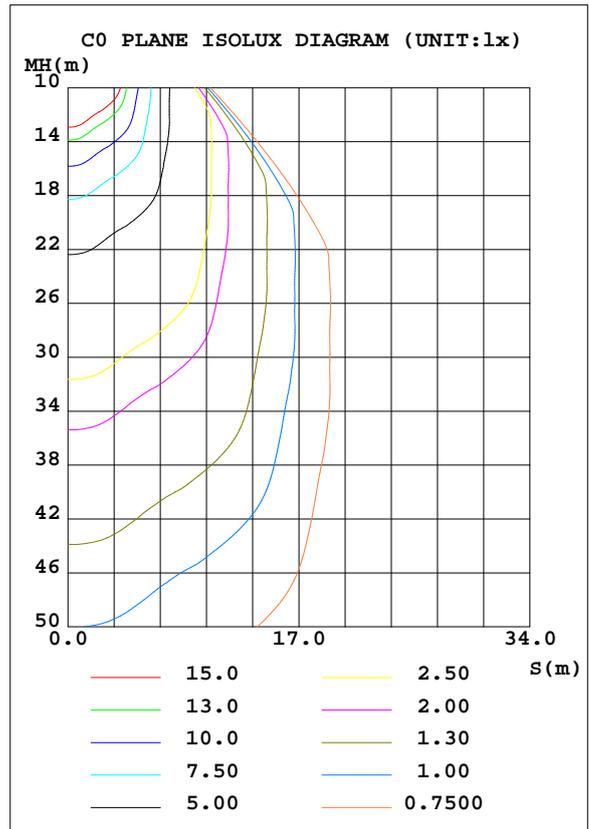
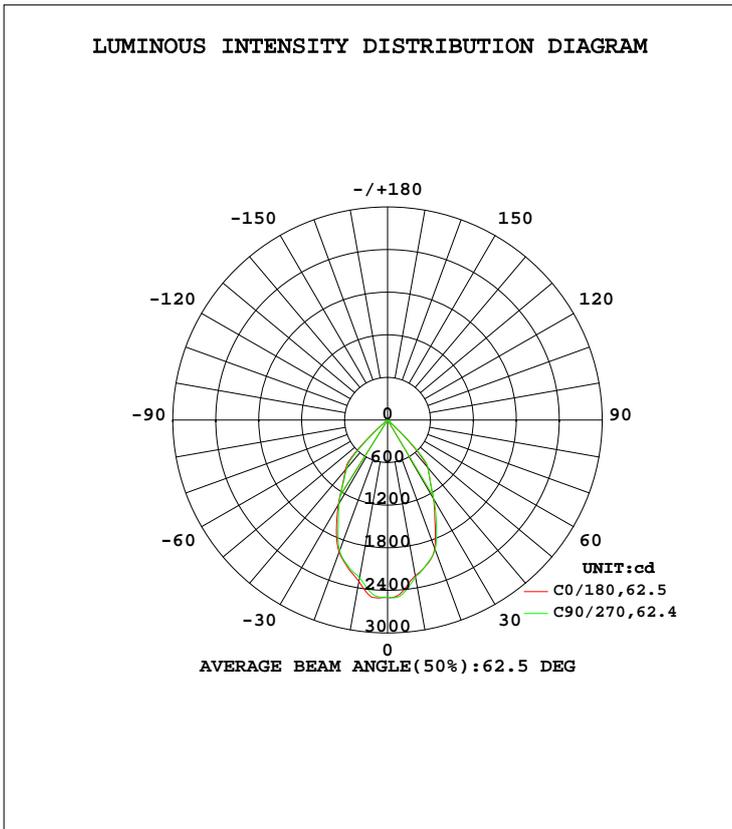


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 91.24 lm/W
MODEL	TB25141209 4000K	I _{max} (cd)	2509	S/MH(C0/180)		0.94
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)		0.92
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	2674.1	η UP, DN(C0-180)		0.0,49.4
NOMINAL FLUX(lm)	2674.13	CIE CLASS	DIRECT	η UP, DN(C180-360)		0.0,50.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM		1.00
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX		1.05



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

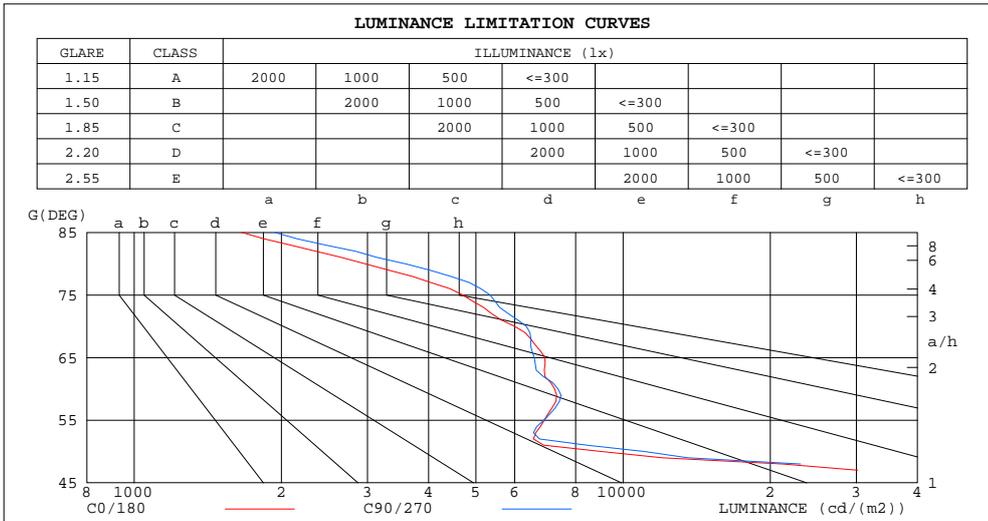
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	2226	2237	2248	2277	2309	2287	2258	2233	0- 10	227.5	227.5	8.51,8.51
20	1928	1939	1944	1956	1981	1979	1959	1948	10- 20	596.2	823.6	30.8,30.8
30	1285	1284	1294	1328	1379	1378	1354	1322	20- 30	748.4	1572	58.8,58.8
40	872.8	875.2	877.7	894.3	913.9	911.1	884.8	891.7	30- 40	672.7	2245	83.9,83.9
50	45.34	47.89	55.56	62.95	69.42	64.91	63.08	51.77	40- 50	363.3	2608	97.5,97.5
60	28.42	28.33	28.87	29.12	29.65	29.43	30.21	28.87	50- 60	30.06	2638	98.7,98.7
70	16.10	16.77	17.02	16.92	17.95	18.89	18.21	16.94	60- 70	22.58	2661	99.5,99.5
80	4.036	4.152	4.880	5.531	6.205	5.656	5.101	4.495	70- 80	11.51	2672	99.9,99.9
90	0.4748	0.4517	0.4246	0.4015	0.0965	0.0888	0.0926	0.0965	80- 90	1.973	2674	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:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1660	1938
80	2961	3580
75	4694	5343
70	5998	6339
65	6921	6580
60	7242	7355
55	6899	6894
50	8985	11010
45	71211	85311

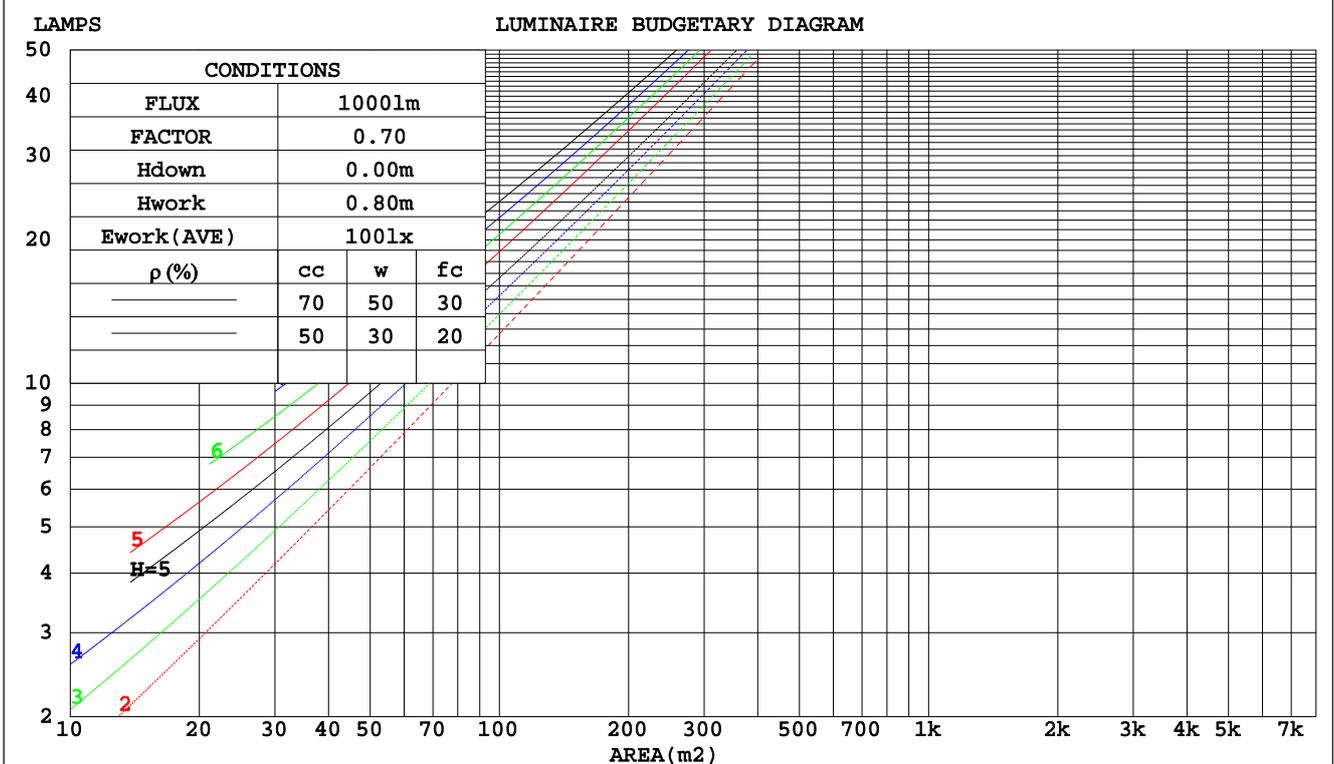
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	1.00	.99	.98	.97	.97	.95	.94	.92
2.0	1.01	.97	.93	.90	.96	.92	.96	.93	.90	.93	.91	.88	.91	.88	.86	.85
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.76	.86	.80	.76	.83	.79	.75	.81	.77	.74	.79	.76	.73	.71
5.0	.80	.74	.69	.80	.74	.69	.78	.72	.68	.76	.71	.68	.74	.70	.67	.66
6.0	.75	.68	.64	.74	.68	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
7.0	.70	.63	.59	.69	.63	.58	.68	.62	.58	.66	.62	.58	.65	.61	.57	.56
8.0	.65	.59	.54	.65	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.53	.52
9.0	.61	.55	.50	.61	.54	.50	.60	.54	.50	.59	.54	.50	.58	.53	.50	.48
10.0	.57	.51	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.54	.50	.46	.45



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.193	.110	.035	.186	.106	.034	.173	.099	.032	.162	.093	.030	.151	.088	.028	
2.0	.186	.102	.031	.180	.099	.031	.170	.094	.029	.160	.090	.028	.151	.085	.027	
3.0	.178	.095	.028	.173	.093	.028	.164	.089	.027	.155	.085	.026	.147	.082	.025	
4.0	.170	.088	.026	.166	.087	.026	.158	.084	.025	.150	.081	.024	.143	.078	.024	
5.0	.162	.083	.024	.158	.081	.024	.151	.079	.023	.145	.076	.023	.138	.074	.022	
6.0	.154	.077	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	.134	.070	.021	
7.0	.147	.073	.021	.145	.072	.021	.139	.070	.020	.134	.069	.020	.129	.067	.020	
8.0	.141	.069	.019	.138	.068	.019	.133	.067	.019	.129	.065	.019	.124	.064	.019	
9.0	.135	.065	.018	.132	.065	.018	.128	.063	.018	.124	.062	.018	.120	.061	.018	
10.0	.129	.062	.017	.127	.061	.017	.123	.060	.017	.119	.059	.017	.115	.058	.017	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.172	.157	.144	.147	.135	.124	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.057	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.071	.040	.100	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.034	.095	.057	.030	.066	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.091	.052	.026	.063	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.101	.056	.026	.087	.049	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	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	20.1	21.1	20.3	21.3	21.5	20.2	21.3	20.5	21.5	21.6
3H	19.9	20.9	20.2	21.1	21.3	20.1	21.1	20.4	21.3	21.5
4H	19.9	20.8	20.1	21.0	21.2	20.0	21.0	20.3	21.2	21.4
6H	19.8	20.6	20.1	20.9	21.1	20.0	20.8	20.3	21.1	21.3
8H	19.7	20.6	20.0	20.8	21.1	19.9	20.7	20.2	21.0	21.3
12H	19.7	20.5	20.0	20.7	21.0	19.9	20.7	20.2	20.9	21.2
4H 2H	19.8	20.7	20.1	20.9	21.2	20.0	20.9	20.3	21.1	21.4
3H	19.7	20.5	20.0	20.8	21.0	19.9	20.7	20.2	20.9	21.2
4H	19.6	20.3	20.0	20.6	21.0	19.8	20.5	20.2	20.8	21.1
6H	19.6	20.2	19.9	20.5	20.9	19.7	20.4	20.1	20.7	21.1
8H	19.5	20.1	19.9	20.4	20.8	19.7	20.3	20.1	20.6	21.0
12H	19.5	20.0	19.9	20.4	20.8	19.7	20.2	20.1	20.6	20.9
8H 4H	19.5	20.1	19.9	20.4	20.8	19.7	20.3	20.1	20.6	21.0
6H	19.4	19.9	19.9	20.3	20.7	19.6	20.1	20.1	20.5	20.9
8H	19.4	19.8	19.8	20.2	20.7	19.6	20.0	20.0	20.4	20.9
12H	19.3	19.7	19.8	20.1	20.6	19.5	19.9	20.0	20.3	20.8
12H 4H	19.5	20.0	19.9	20.4	20.8	19.6	20.2	20.1	20.5	20.9
6H	19.4	19.8	19.8	20.2	20.7	19.6	20.0	20.0	20.4	20.8
8H	19.3	19.7	19.8	20.1	20.6	19.5	19.9	20.0	20.3	20.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 3.0 / - 9.9					+ 3.2 / - 9.8				
1.5H	+ 4.2 / -10.6					+ 4.0 / -10.4				
2.0H	+ 8.0 / - 4.8					+ 8.3 / - 5.5				

CIE Pub.117, 2674 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.4)
 Area: 0.00785 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

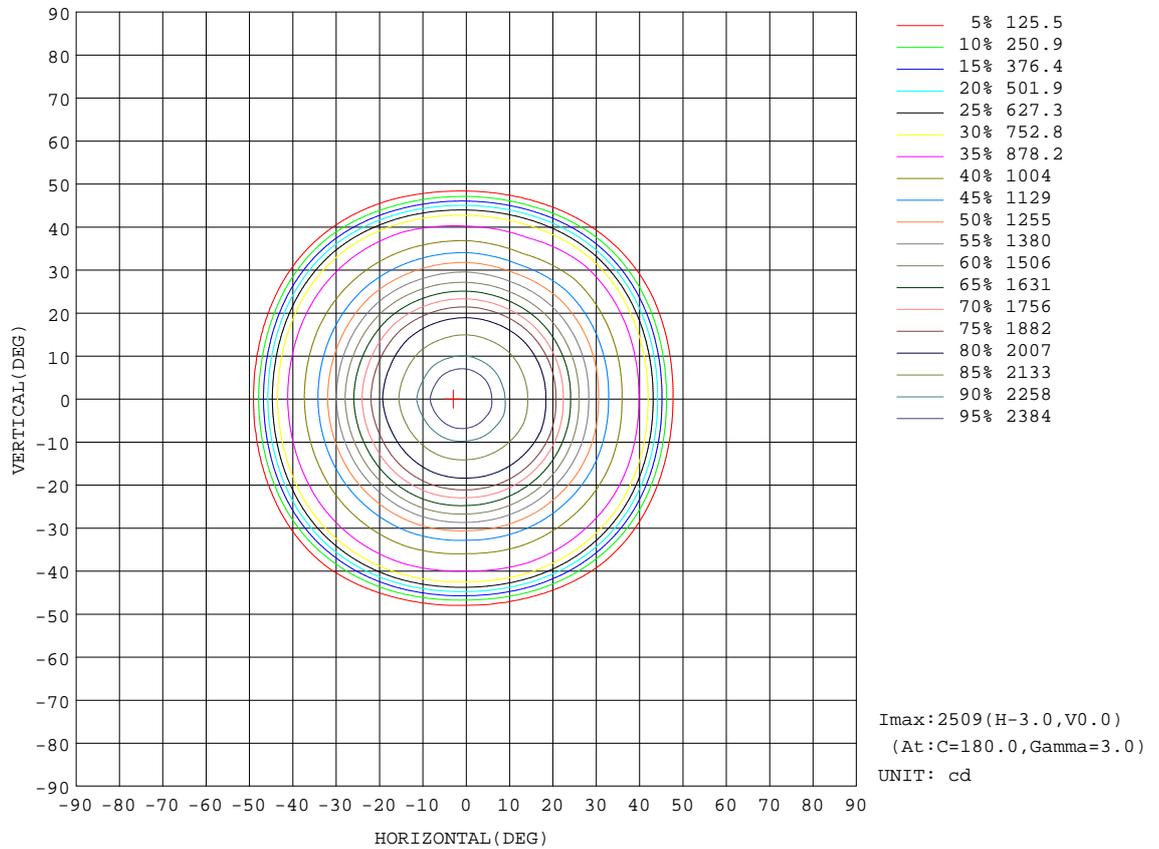
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	82	74	70	81	74	70	80	74	70	65
0.80	90	83	79	89	83	79	88	82	78	74
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	93	89	85
1.50	103	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	104	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	110	108	108	106	105	97
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:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

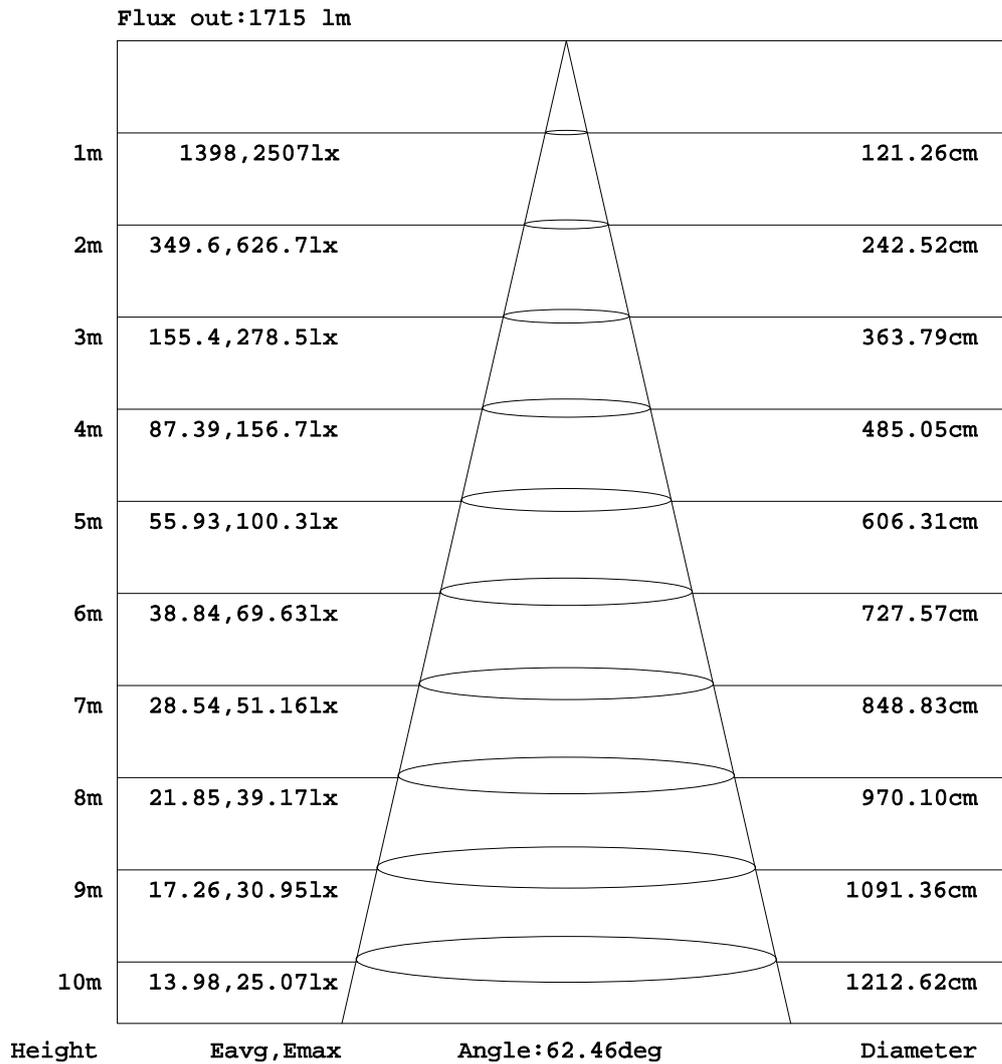


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 2700K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



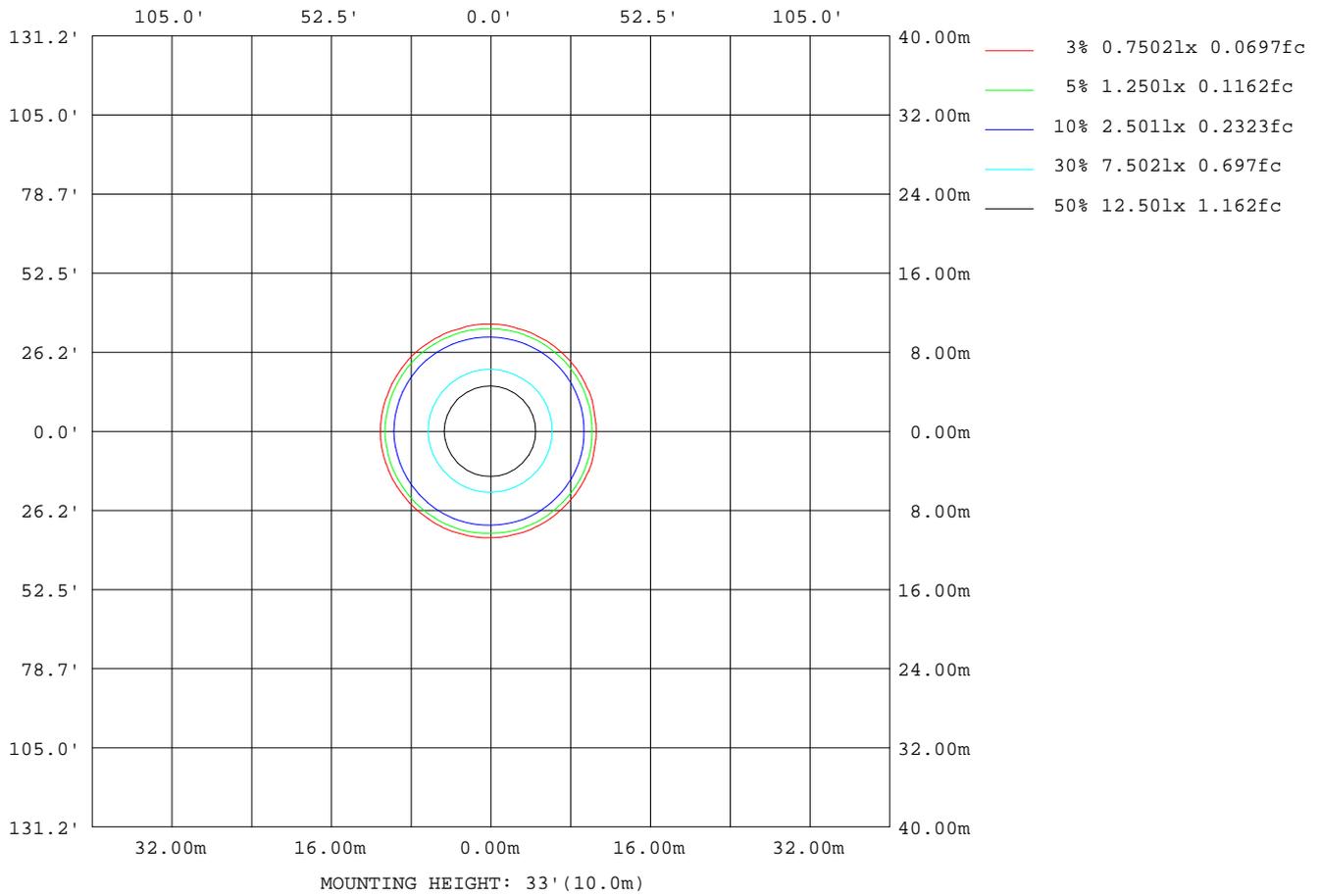
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.44V I:0.1350A P:29.309W PF:0.9849 Freq:50.01Hz Lamp Flux:2674.13x1 lm		
NAME: DL3082-BKTC30C01P	TYPE:	WEIGHT:
SPEC.: black RA90 3000K+5700K	DIM.:	SERIAL No.:
MFR.:	SUR.: 100mm	Shielding Angle:

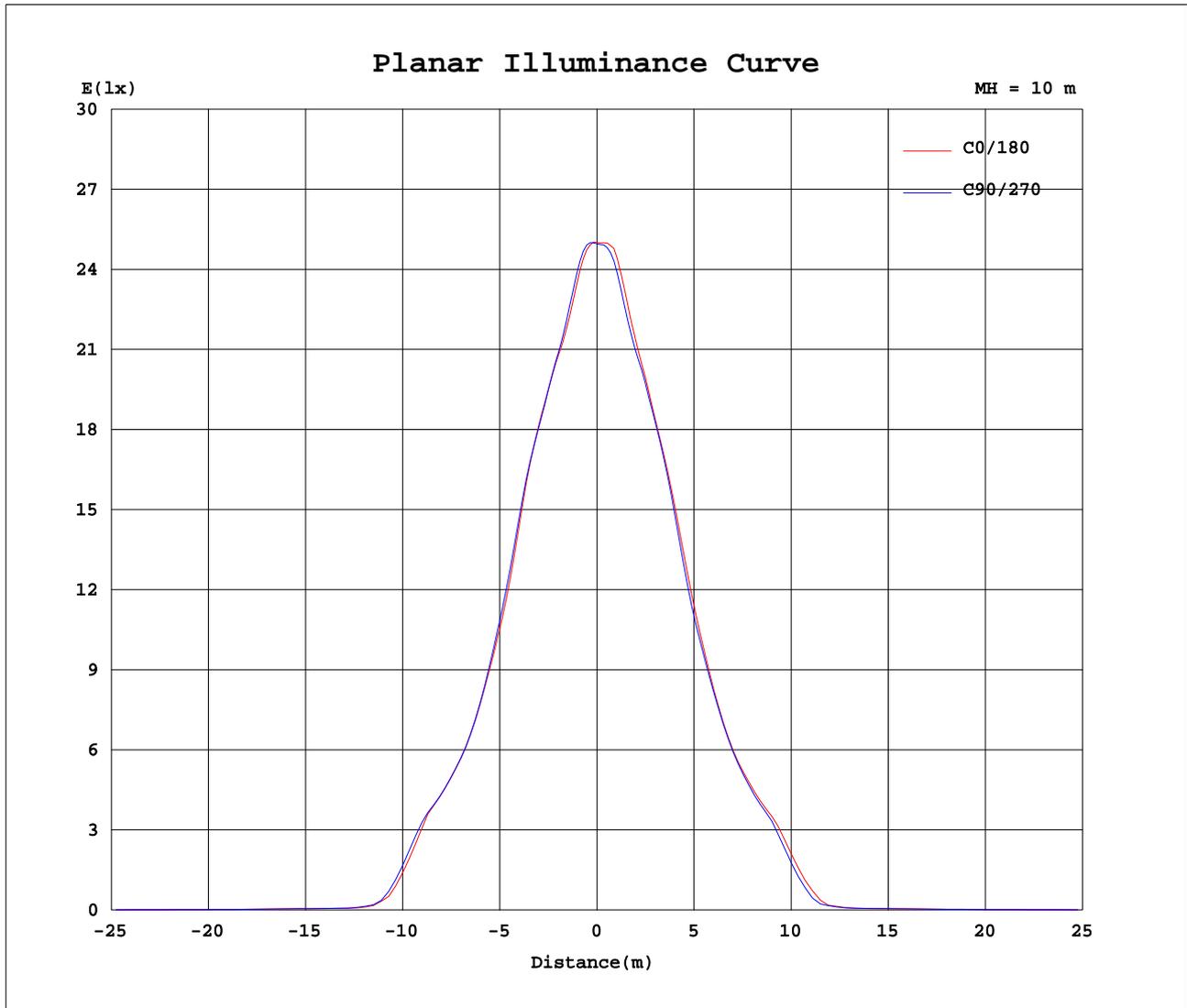
AvgL	cd/m2
L_0~180(65)av	6840
L_0~180(75)av	5366
L_0~180(85)av	2081
L_90~270(65)av	6895
L_90~270(75)av	5357
L_90~270(85)av	1984
L_45(65)av	6757
L_45(75)av	5352
L_45(85)av	1992

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.450m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2023-12-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.428
 Humidity: 65.0%
 Test Distance: 7.450m [K=1.0000]
 Remarks:

