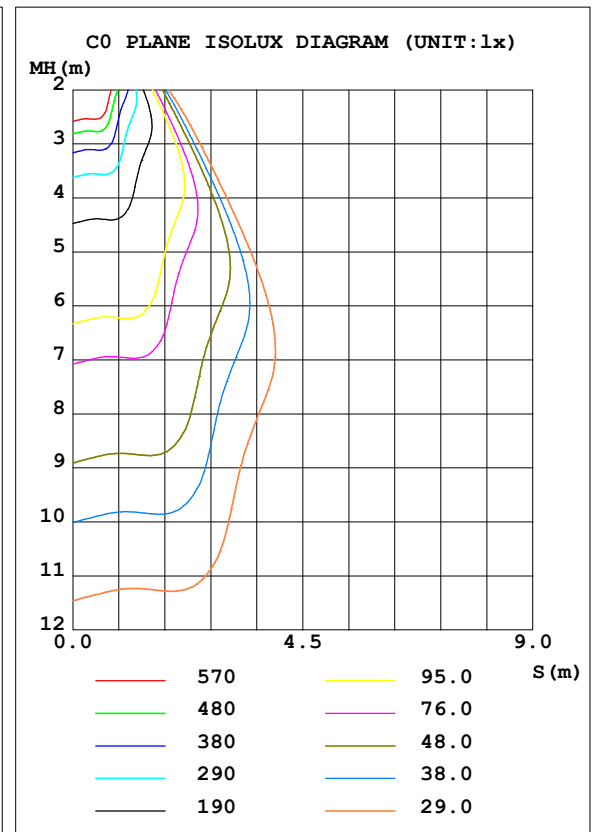
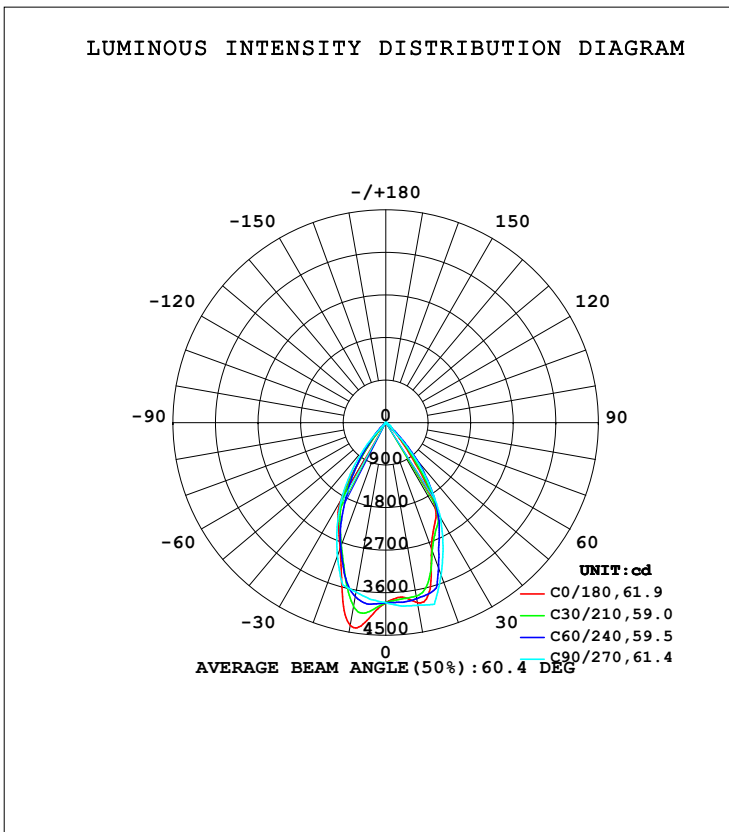


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 106.51 lm/W			
MODEL GLM-FLS66(Down Light)		I <sub>max</sub> (cd)	4391	S/MH(C0/180)	0.88
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.90
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	3390.0	η UP, DN(C0-180)	0.0,53.4
NOMINAL FLUX(lm)	3389.98	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,46.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220.0	η down(%)	100.0	CIBSE SHR MAX	0.85



H(β) Range:-90 - 90DEG  
 H(β) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0667]  
 Remarks: TÜV RHEINLAND

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

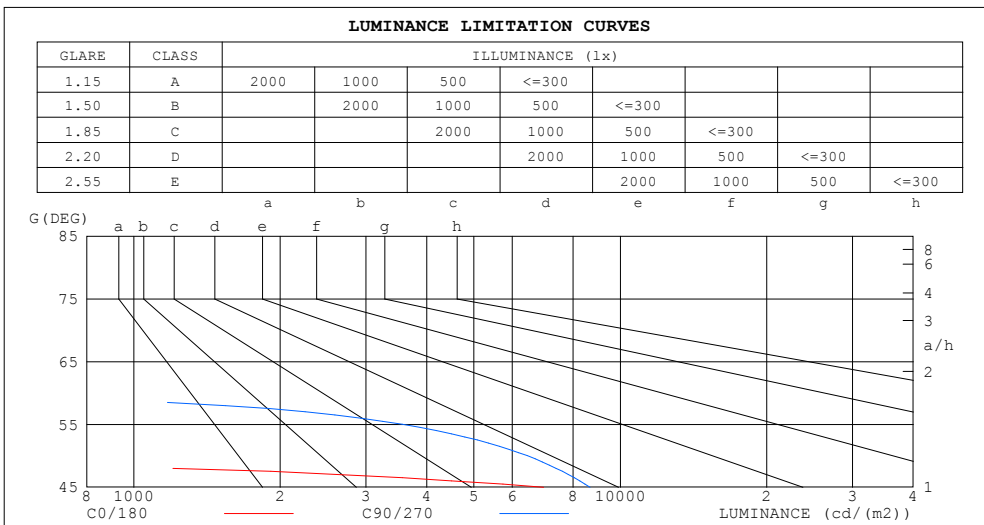
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	3866	3722	3921	4031	4354	3839	3639	3519	0- 10	368.4	368.4	10.9,10.9
20	2833	3109	3424	2956	2831	2747	2997	2811	10- 20	970.5	1339	39.5,39.5
30	2106	1997	2316	1815	1915	1534	1883	1702	20- 30	1116	2455	72.4,72.4
40	544.4	701.4	912.9	475.9	272.6	264.0	656.5	479.2	30- 40	757.4	3212	94.8,94.8
50	0	112.8	140.8	50.52	0	16.39	28.64	73.21	40- 50	168.0	3380	99.7,99.7
60	0	0	0.0001	0	0	0	0.0000	0	50- 60	9.702	3390	100,100
70	0	0	0	0	0	0	0	0	60- 70	0.0541	3390	100,100
80	0	0	0	0	0	0	0	0	70- 80	0	3390	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	3390	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		

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

**LUMINANCE LIMITATION CURVES**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	0	0
75	0	0
70	0	0
65	0	0
60	0	0
55	0	3563
50	0	6443
45	6957	8671

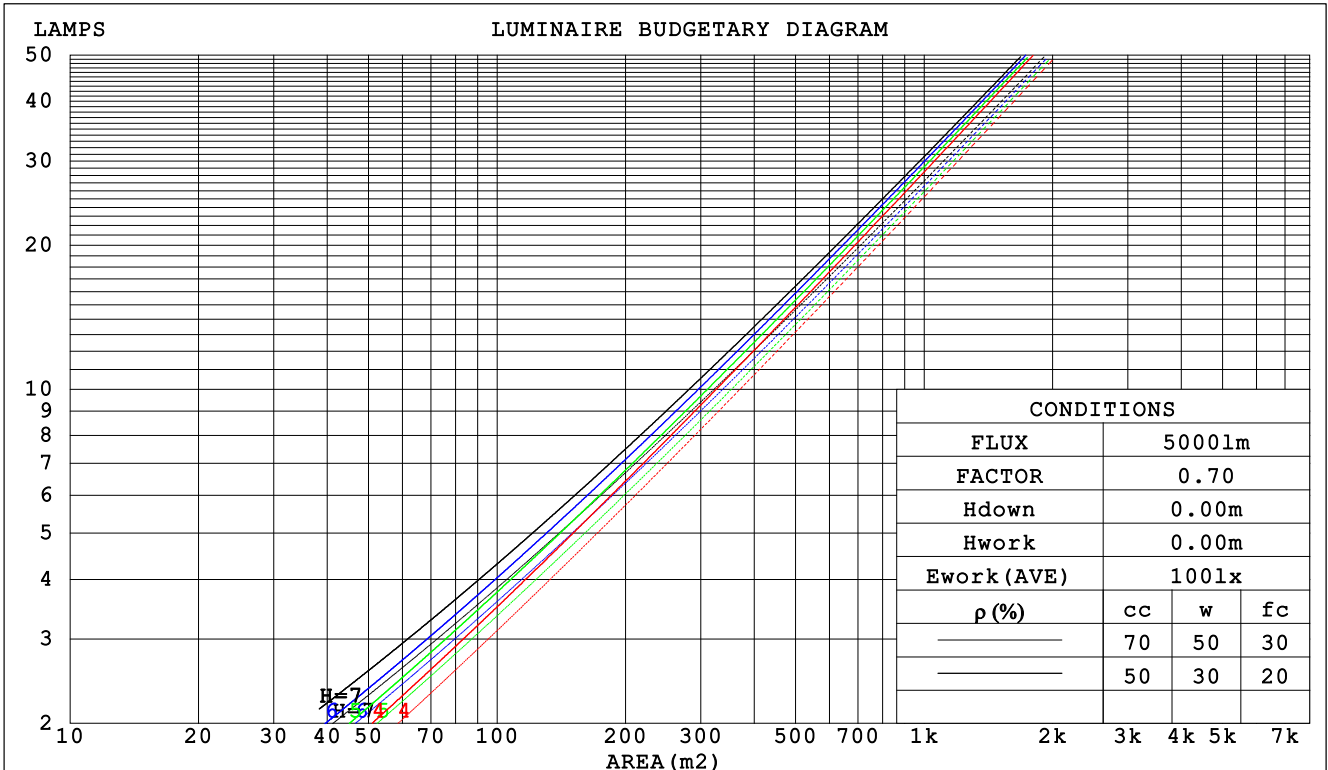
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm																

ρcc	80%			70%			50%			30%			10%			0
	ρw	50%	30%	10%	ρw	50%	30%	10%	ρw	50%	30%	10%	ρw	50%	30%	10%
ρfc	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	.00
1.0	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.03	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.85	.88	.85	.83	.82
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.80	.85	.82	.79	.83	.80	.78	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.77	.74	.80	.76	.73	.79	.75	.73	.71
6.0	.80	.74	.70	.79	.73	.69	.77	.73	.69	.76	.72	.68	.75	.71	.68	.67
7.0	.75	.69	.65	.74	.69	.65	.73	.68	.64	.72	.67	.64	.71	.67	.64	.62
8.0	.71	.65	.61	.70	.65	.61	.69	.64	.60	.68	.63	.60	.67	.63	.60	.59
9.0	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.64	.59	.56	.55
10.0	.63	.58	.54	.63	.57	.54	.62	.57	.53	.61	.57	.53	.60	.56	.53	.52



H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

WEC AND CCEC

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm															

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.174	.099	.031	.167	.095	.030	.155	.089	.028	.143	.083	.026	.132	.077	.025	
2.0	.167	.091	.028	.161	.089	.027	.151	.084	.026	.141	.079	.025	.132	.075	.023	
3.0	.159	.085	.025	.154	.083	.025	.145	.079	.024	.137	.075	.023	.129	.072	.022	
4.0	.152	.079	.023	.148	.077	.023	.140	.074	.022	.133	.071	.022	.126	.069	.021	
5.0	.145	.074	.021	.142	.073	.021	.135	.070	.021	.128	.068	.020	.123	.066	.020	
6.0	.139	.070	.020	.136	.069	.020	.130	.067	.019	.124	.065	.019	.119	.063	.019	
7.0	.133	.066	.019	.130	.065	.018	.125	.063	.018	.120	.062	.018	.115	.060	.018	
8.0	.128	.062	.018	.125	.062	.017	.120	.060	.017	.116	.059	.017	.112	.057	.017	
9.0	.122	.059	.017	.120	.059	.016	.116	.057	.016	.112	.056	.016	.108	.055	.016	
10.0	.118	.056	.016	.116	.056	.016	.112	.055	.015	.108	.054	.015	.105	.053	.015	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0																
1.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.101	.067	.043	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.105	.064	.036	.090	.056	.031	.063	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.060	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.096	.055	.027	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

**UGR(Unified Glare Rating) Table**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm										
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	17.6	18.5	17.8	18.7	18.8	19.2	20.1	19.4	20.3	20.4
3H	17.4	18.3	17.7	18.5	18.7	19.0	19.9	19.3	20.1	20.3
4H	17.3	18.1	17.6	18.3	18.6	18.9	19.7	19.2	19.9	20.2
6H	17.2	18.0	17.5	18.2	18.5	18.8	19.6	19.1	19.8	20.1
8H	17.2	17.9	17.5	18.2	18.4	18.8	19.5	19.1	19.8	20.0
12H	17.1	17.8	17.5	18.1	18.4	18.7	19.4	19.0	19.7	20.0
4H 2H	17.3	18.1	17.6	18.3	18.6	18.9	19.7	19.2	19.9	20.2
3H	17.1	17.8	17.5	18.1	18.4	18.7	19.4	19.0	19.7	20.0
4H	17.0	17.7	17.4	18.0	18.3	18.6	19.3	19.0	19.6	19.9
6H	16.9	17.5	17.3	17.8	18.2	18.5	19.1	18.9	19.4	19.8
8H	16.9	17.4	17.3	17.8	18.1	18.5	19.0	18.9	19.3	19.7
12H	16.8	17.3	17.3	17.7	18.1	18.4	18.9	18.8	19.3	19.7
8H 4H	16.9	17.4	17.3	17.8	18.1	18.5	19.0	18.9	19.3	19.7
6H	16.8	17.2	17.2	17.6	18.0	18.4	18.8	18.8	19.2	19.6
8H	16.7	17.1	17.2	17.5	18.0	18.3	18.7	18.8	19.1	19.6
12H	16.7	17.0	17.2	17.4	17.9	18.3	18.6	18.7	19.0	19.5
12H 4H	16.8	17.3	17.3	17.7	18.1	18.4	18.9	18.8	19.3	19.7
6H	16.7	17.1	17.2	17.5	18.0	18.3	18.7	18.8	19.1	19.6
8H	16.7	17.0	17.2	17.4	17.9	18.3	18.6	18.7	19.0	19.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / - 1.5					+ 2.7 / -15.2				
1.5H	+ 5.1 / -113.1					+ 5.3 / -21.6				
2.0H	+ 7.7 / - 1.5					+ 6.0 / - 1.5				

CIE Pub.117, 3390 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.2)

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

**UTILIZATION FACTORS TABLE**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm										

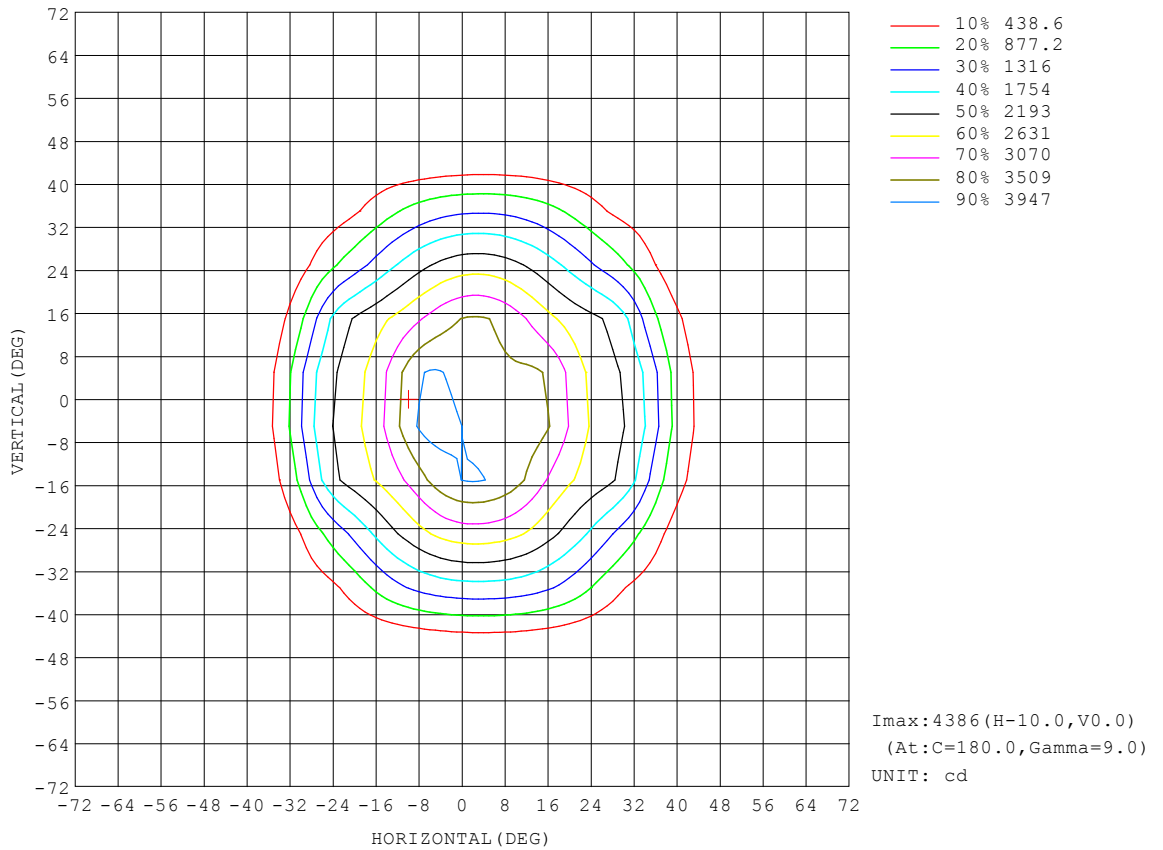
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	88	82	78	88	82	78	87	82	78	75
0.80	96	90	86	95	90	86	94	89	86	82
1.00	100	95	91	99	94	91	98	94	90	87
1.25	104	99	96	103	98	95	101	97	94	90
1.50	107	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	96
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

**ISOCANDELA DIAGRAM**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		



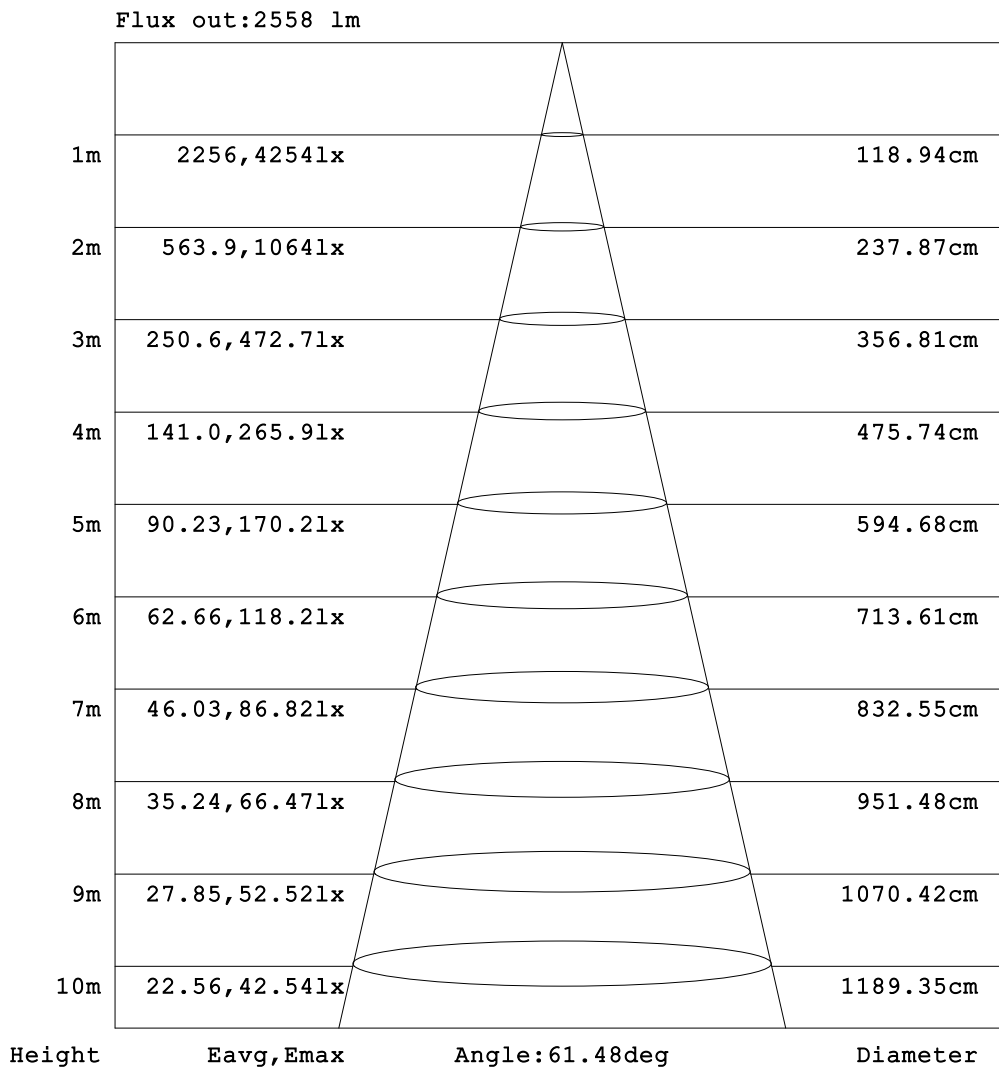
H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0667]  
 Remarks: TÜV RHEINLAND



**AAI Figure**

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		



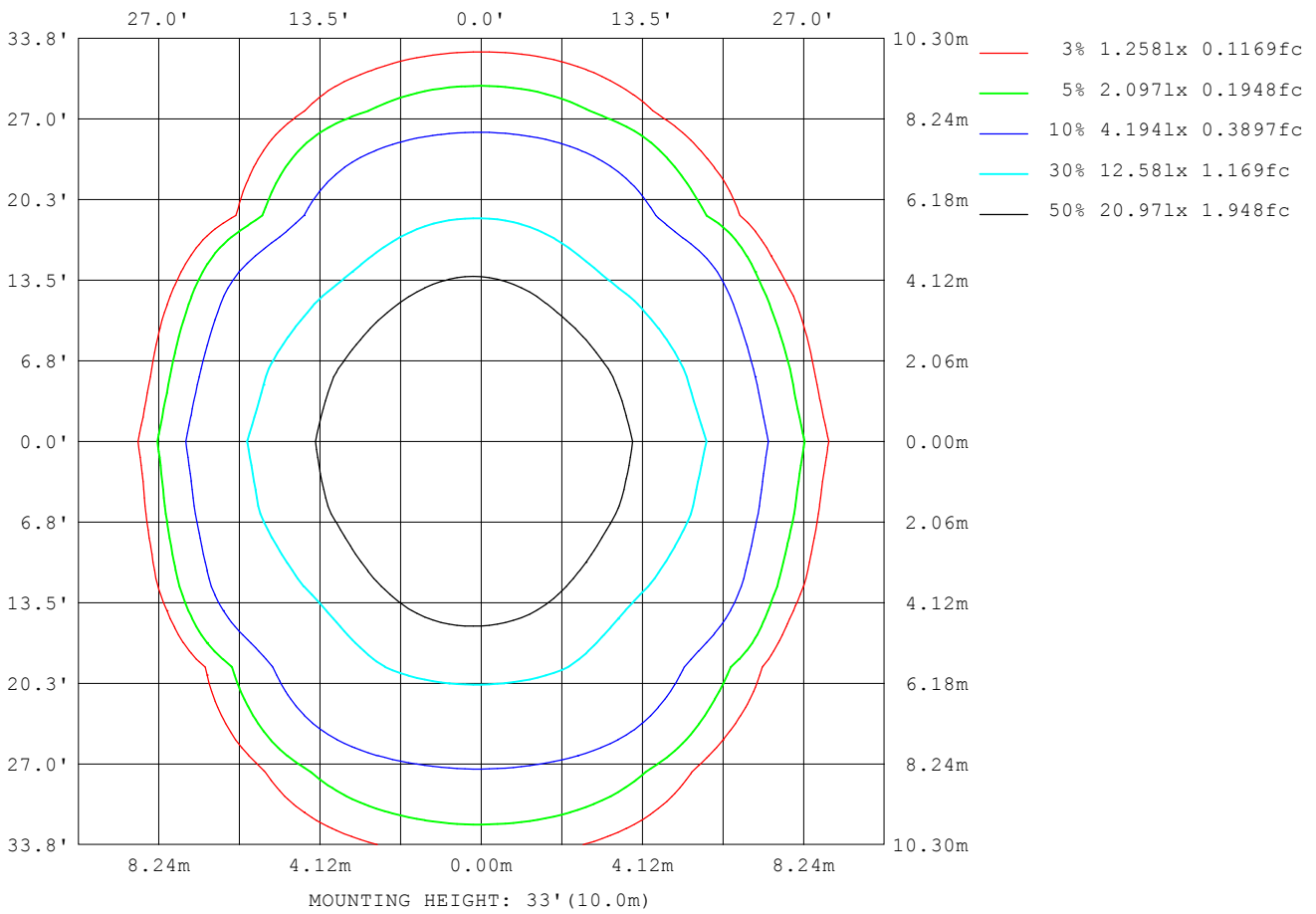
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90DEG  
 H(β) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 09 Aug 2023

V(B) Range: -75 - 75DEG  
 V(B) Interval: 5.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 7.500m [K=1.0667]  
 Remarks: TÜV RHEINLAND

**ISOLUX DIAGRAM**

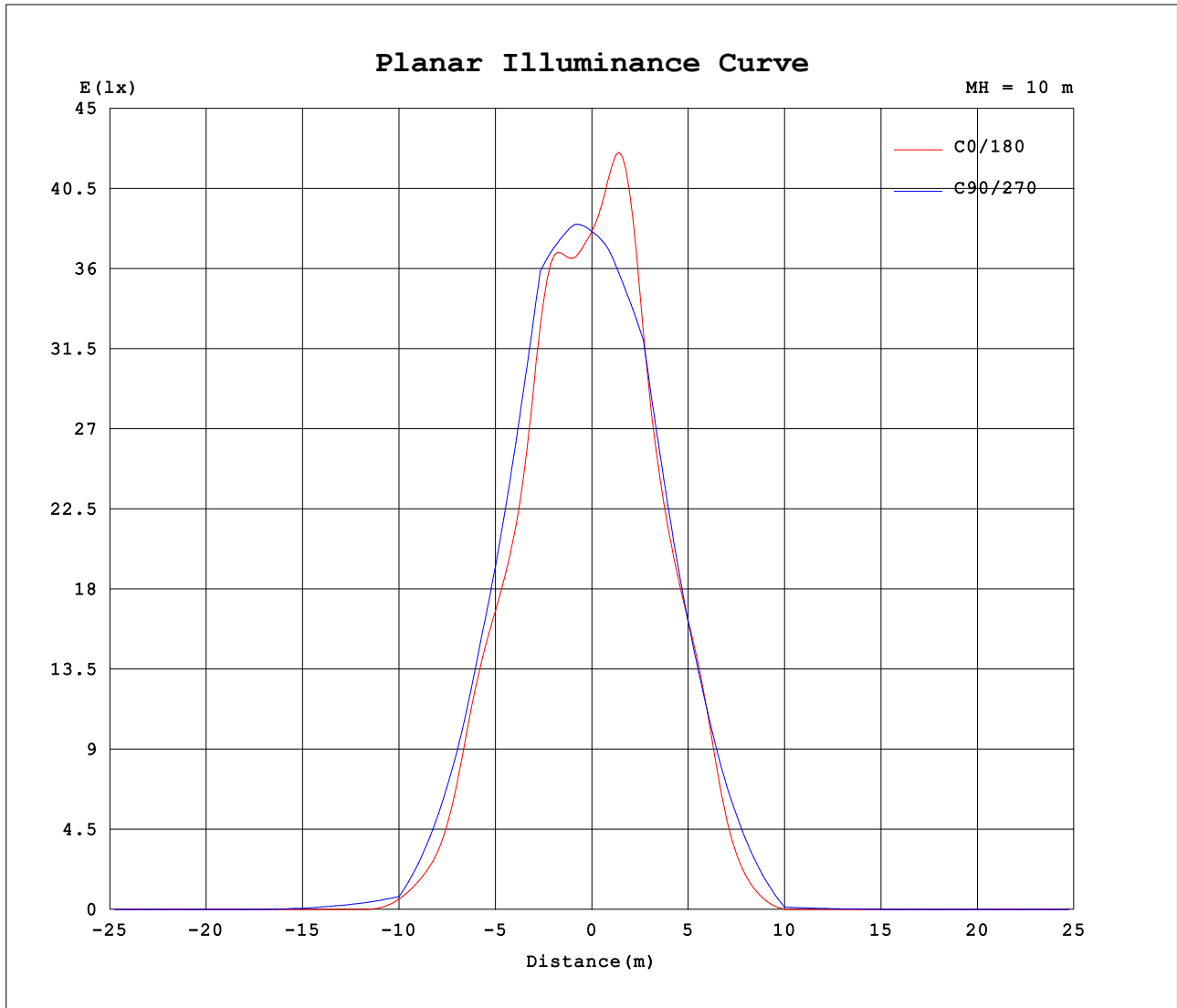
Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

**Planar Illuminance Curve**



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809
5	3706	3711	3717	3723	3730	3737	3745	3755	3765	3777	3789	3802	3815	3828	3841	3854	3868	3881	3894
10	3866	3840	3813	3786	3762	3741	3726	3717	3716	3722	3736	3757	3781	3808	3835	3861	3884	3905	3921
15	3636	3604	3583	3572	3560	3516	3488	3474	3478	3521	3579	3645	3717	3790	3857	3910	3950	3973	3977
20	2833	2847	2881	2915	2894	2880	2885	2952	3025	3109	3176	3222	3270	3312	3349	3379	3399	3413	3424
25	2429	2437	2458	2445	2436	2461	2513	2574	2522	2507	2522	2591	2681	2763	2822	2857	2872	2874	2867
30	2106	2106	2100	2050	2089	2192	2167	2040	1972	1997	2062	2143	2205	2264	2304	2320	2323	2320	2316
35	1280	1345	1314	1240	1431	1507	1420	1410	1417	1413	1452	1548	1637	1679	1686	1672	1649	1627	1611
40	544	593	551	583	664	621	709	774	710	701	846	977	1028	1027	1005	975	945	924	913
45	167	212	154	233	216	234	251	221	304	371	400	416	419	399	356	306	261	227	208
50	0.00	6.84	2.37	13.4	25.6	38.6	13.5	69.4	110	113	94.1	52.5	41.9	69.7	96.9	119	134	141	141
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.14	11.6	0.00	0.00	1.38	14.2	31.7	49.6	62.9	70.0	71.8	69.5
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	4.77	9.37	11.0	8.96	4.88	1.33	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809
5	3908	3921	3935	3950	3965	3981	3997	4014	4031	4048	4064	4081	4097	4113	4128	4140	4151	4158	4138
10	3933	3943	3952	3963	3974	3989	4002	4015	4031	4039	4048	4055	4083	4117	4163	4219	4284	4354	4265
15	3958	3919	3866	3804	3742	3688	3647	3620	3603	3582	3527	3467	3407	3356	3383	3438	3510	3601	3492
20	3422	3407	3373	3312	3232	3144	3062	2996	2956	2931	2904	2880	2818	2760	2713	2730	2773	2831	2753
25	2850	2821	2775	2714	2647	2580	2528	2487	2445	2444	2478	2449	2427	2391	2330	2290	2329	2386	2295
30	2310	2299	2269	2211	2122	2009	1885	1819	1815	1868	1918	1953	1922	1889	1815	1688	1749	1915	1704
35	1600	1593	1584	1567	1529	1459	1339	1177	1091	1092	1164	1156	989	900	916	773	762	922	736
40	910	913	916	907	867	778	663	572	476	439	389	387	375	278	265	237	194	273	182
45	202	215	245	285	320	327	291	229	161	111	56.3	56.0	66.4	40.0	3.17	9.06	0.76	4.83	0.76
50	130	109	82.1	50.9	22.5	3.00	26.9	58.4	50.5	10.4	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	62.1	51.8	38.4	23.5	9.57	0.46	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	1.14	3.47	4.89	3.96	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm		

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809
5	4115	4090	4064	4036	4008	3981	3954	3927	3901	3877	3854	3832	3813	3796	3779	3765	3751	3739	3728
10	4183	4107	4042	3988	3938	3906	3872	3839	3801	3767	3736	3709	3688	3672	3660	3650	3639	3626	3610
15	3402	3328	3281	3307	3340	3370	3391	3377	3359	3348	3349	3367	3400	3442	3487	3525	3549	3552	3538
20	2690	2653	2681	2720	2759	2758	2756	2747	2743	2760	2792	2835	2885	2931	2967	2989	2997	2991	2974
25	2224	2241	2284	2302	2304	2313	2243	2202	2190	2184	2198	2231	2276	2325	2371	2409	2435	2446	2443
30	1595	1668	1696	1690	1720	1697	1631	1534	1483	1490	1564	1651	1733	1798	1844	1870	1883	1888	1885
35	712	809	751	790	931	937	862	815	815	879	992	1085	1148	1191	1223	1246	1266	1282	1295
40	205	213	209	281	280	259	267	264	333	403	495	575	622	640	648	652	656	667	684
45	9.06	2.49	19.1	42.9	40.1	5.62	31.3	70.7	125	171	199	193	157	104	63.0	42.3	40.9	58.6	93.3
50	0.00	0.00	0.00	0.00	0.00	0.00	0.04	16.4	29.1	15.3	0.00	0.00	0.00	0.00	9.54	21.4	28.6	30.5	26.6
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61	9.13	13.6	15.5	14.0
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.16	0.00	0.29	0.96
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:09 Aug 2023

V(B) Range:-75 - 75DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:7.500m [K=1.0667]  
Remarks: TÜV RHEINLAND

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.11V I:0.1620A P:31.829W PF:0.8966 Freq:49.99Hz Lamp Flux:3389.98x1 lm																	

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809	3809				
5	3718	3709	3701	3694	3688	3682	3678	3675	3674	3675	3678	3682	3686	3692	3699				
10	3592	3572	3552	3535	3522	3517	3519	3532	3553	3583	3621	3665	3713	3764	3816				
15	3505	3457	3400	3344	3296	3263	3245	3245	3277	3325	3382	3453	3493	3532	3579				
20	2949	2916	2883	2854	2833	2824	2811	2789	2767	2743	2767	2806	2849	2837	2825				
25	2422	2383	2333	2278	2231	2209	2240	2303	2400	2373	2348	2346	2377	2412	2414				
30	1872	1847	1810	1770	1741	1708	1702	1737	1851	2003	2036	1946	1933	2021	2066				
35	1300	1291	1258	1192	1098	1070	1105	1174	1207	1222	1297	1244	1121	1239	1306				
40	703	720	726	715	664	566	479	538	613	562	508	566	524	519	576				
45	138	186	231	261	269	269	260	201	121	171	180	177	190	135	202				
50	17.1	4.38	0.00	0.00	25.3	65.7	73.2	59.5	22.1	0.04	30.0	13.5	4.20	1.66	6.72				
55	8.49	0.83	0.00	0.00	0.00	0.00	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
60	1.13	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

H(β) Range:-90 - 90DEG	V(B) Range:-75 - 75DEG
H(β) Interval: 1.0DEG	V(B) Interval: 5.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Temperature:25.3DEG	Humidity:65.0%
Operators:	Test Distance:7.500m [K=1.0667]
Test Date:09 Aug 2023	Remarks: TÜV RHEINLAND