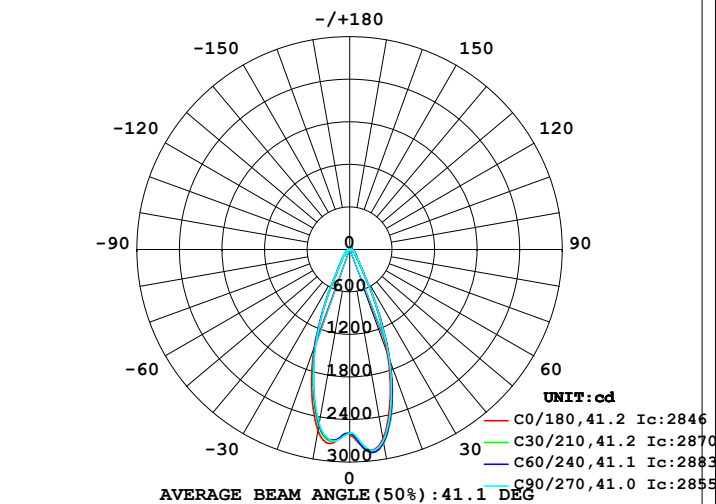


## LUMINAIRE PHOTOMETRIC TEST REPORT

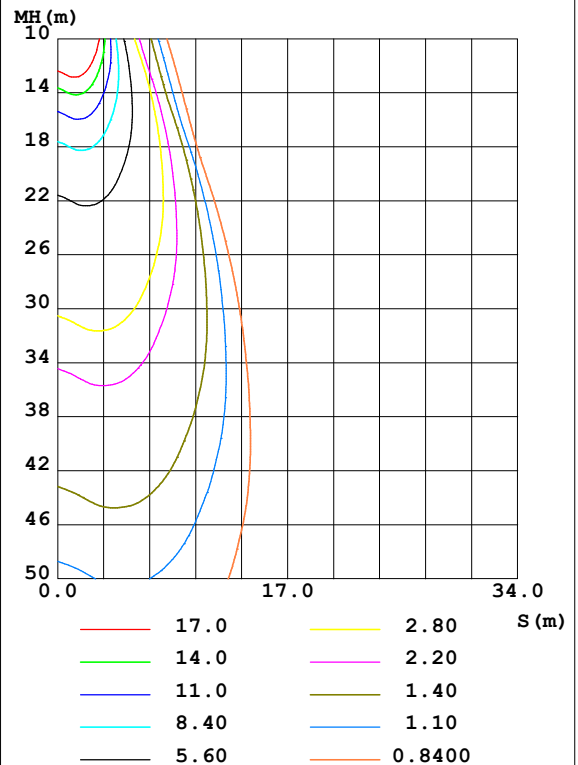
Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.63 lm/W			
MODEL	2700K CRI90	I <sub>max</sub> (cd)	2883	S/MH(C0/180)	0.65
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1660.9	η UP,DN(C0-180)	2.2,49.6
NOMINAL FLUX(lm)	1660.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.9,46.3
LAMPS INSIDE	1	η up(%)	4.1	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	225	η down(%)	95.9	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-03-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:7.028m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	2709	2771	2736	2646	2591	2514	2490	2587	0- 10	260.0	260.0	15.7,15.7
20	1551	1660	1624	1512	1460	1394	1381	1461	10- 20	580.5	840.5	50.6,50.6
30	403.3	425.1	414.8	377.3	367.6	355.9	355.2	377.4	20- 30	389.7	1230	74.1,74.1
40	164.3	168.1	164.2	155.0	155.1	154.8	155.7	159.0	30- 40	151.5	1382	83.2,83.2
50	89.74	91.08	89.85	87.11	87.75	87.50	87.40	88.47	40- 50	90.97	1473	88.7,88.7
60	56.37	57.55	57.42	57.13	57.65	56.92	55.84	55.84	50- 60	63.62	1536	92.5,92.5
70	27.42	28.26	28.35	27.54	27.99	27.29	26.94	27.39	60- 70	41.64	1578	95,95
80	3.309	3.456	3.646	3.586	3.101	2.852	2.743	2.837	70- 80	13.18	1591	95.8,95.8
90	1.758	1.753	1.774	1.788	1.040	1.032	1.024	1.005	80- 90	1.618	1593	95.9,95.9
100	2.708	2.689	2.700	2.735	1.675	1.687	1.647	1.602	90-100	1.891	1595	96,96
110	4.624	4.560	4.559	4.656	3.391	3.473	3.441	3.298	100-110	3.143	1598	96.2,96.2
120	7.749	7.607	7.590	7.777	6.367	6.500	6.449	6.236	110-120	5.368	1603	96.5,96.5
130	11.81	11.63	11.63	11.85	10.08	10.23	10.18	9.909	120-130	7.965	1611	97,97
140	16.79	16.58	16.57	16.84	14.53	14.72	14.62	14.27	130-140	10.13	1621	97.6,97.6
150	24.91	24.53	24.49	25.02	21.42	21.81	21.62	20.95	140-150	11.82	1633	98.3,98.3
160	36.58	35.89	35.79	36.61	31.27	31.72	31.30	30.45	150-160	13.00	1646	99.1,99.1
170	44.91	44.48	44.37	44.69	39.53	39.69	39.18	38.45	160-170	10.62	1657	99.7,99.7
180	48.34	48.26	47.97	47.63	48.35	48.27	47.96	47.63	170-180	4.225	1661	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1431.9 lm

%lum = 86.2%

%lamp = 86.2%

Conical surface Flux(120deg): 1536.3 lm

%lum = 92.5%

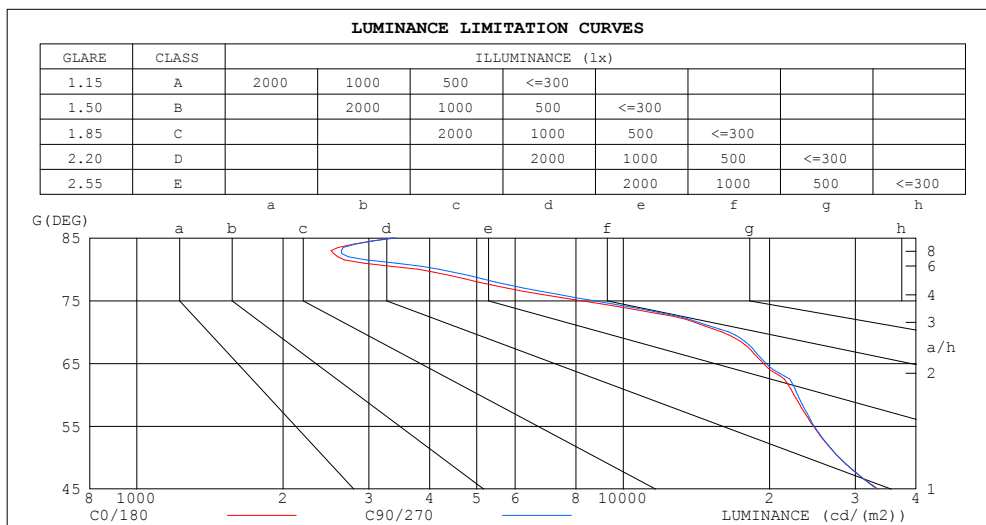
%lamp = 92.5%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
 Test Distance:7.028m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3367	3411
80	3793	4179
75	8162	8674
70	15958	16498
65	19426	19661
60	22439	22857
55	24614	24702
50	27790	27823
45	33406	33256

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

### WEC AND CCEC

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm					
NAME: TL45-20G27-38-M			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:80		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	.183	.104	.033	.175	.100	.032	.160	.092	.029	.146	.084	.027	.134	.078	.025		
2.0	.174	.095	.029	.167	.092	.028	.154	.086	.027	.142	.080	.025	.131	.074	.023		
3.0	.164	.087	.026	.158	.084	.025	.147	.080	.024	.136	.075	.023	.127	.070	.022		
4.0	.154	.080	.024	.149	.078	.023	.139	.074	.022	.130	.070	.021	.122	.066	.020		
5.0	.145	.074	.021	.141	.072	.021	.132	.069	.020	.124	.066	.020	.117	.062	.019		
6.0	.137	.069	.020	.133	.067	.019	.126	.064	.019	.119	.062	.018	.112	.059	.018		
7.0	.130	.064	.018	.127	.063	.018	.120	.061	.017	.113	.058	.017	.108	.056	.016		
8.0	.124	.060	.017	.121	.059	.017	.114	.057	.016	.109	.055	.016	.103	.053	.015		
9.0	.118	.057	.016	.115	.056	.016	.109	.054	.015	.104	.052	.015	.099	.050	.015		
10.0	.112	.054	.015	.110	.053	.015	.105	.051	.014	.100	.050	.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	.222	.222	.222	.190	.190	.190	.129	.129	.129	.074	.074	.074	.024	.024	.024	
1.0	.203	.189	.176	.174	.162	.151	.119	.111	.105	.068	.065	.061	.022	.021	.020	
2.0	.188	.164	.144	.161	.141	.125	.110	.098	.087	.064	.057	.051	.020	.018	.017	
3.0	.176	.145	.121	.151	.126	.105	.104	.087	.074	.060	.051	.043	.019	.017	.014	
4.0	.165	.131	.105	.142	.113	.091	.098	.079	.064	.056	.046	.038	.018	.015	.012	
5.0	.156	.119	.092	.134	.103	.080	.093	.072	.057	.054	.042	.034	.017	.014	.011	
6.0	.149	.110	.082	.128	.095	.072	.088	.067	.051	.051	.039	.030	.017	.013	.010	
7.0	.142	.102	.075	.122	.089	.065	.084	.062	.046	.049	.037	.028	.016	.012	.009	
8.0	.136	.096	.069	.117	.083	.060	.081	.059	.043	.047	.035	.025	.015	.011	.008	
9.0	.130	.091	.064	.112	.079	.056	.078	.055	.040	.045	.033	.024	.015	.011	.008	
10.0	.126	.086	.060	.108	.075	.053	.075	.053	.037	.044	.031	.022	.014	.010	.007	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm											
NAME: TL45-20G27-38-M					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:80			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		18.1	19.0	18.4	19.3	19.5	18.2	19.1	18.5	19.3	19.5
	3H	18.9	19.7	19.2	20.0	20.3	18.9	19.8	19.3	20.0	20.3
	4H	19.0	19.8	19.3	20.1	20.4	19.0	19.8	19.4	20.1	20.4
	6H	18.9	19.7	19.3	20.0	20.3	19.0	19.7	19.3	20.0	20.4
	8H	18.9	19.6	19.3	19.9	20.3	18.9	19.6	19.3	20.0	20.3
	12H	18.8	19.5	19.2	19.9	20.2	18.9	19.6	19.3	19.9	20.3
4H	2H	18.5	19.3	18.8	19.6	19.8	18.5	19.3	18.9	19.6	19.9
	3H	19.3	20.0	19.7	20.4	20.7	19.4	20.1	19.8	20.4	20.8
	4H	19.5	20.1	19.9	20.5	20.8	19.5	20.1	19.9	20.5	20.9
	6H	19.4	20.0	19.9	20.4	20.8	19.5	20.0	19.9	20.4	20.8
	8H	19.4	19.9	19.8	20.3	20.8	19.4	19.9	19.9	20.4	20.8
	12H	19.3	19.8	19.8	20.2	20.7	19.4	19.8	19.9	20.3	20.8
8H	4H	19.4	19.9	19.9	20.4	20.8	19.5	20.0	19.9	20.4	20.8
	6H	19.4	19.8	19.9	20.3	20.8	19.4	19.9	19.9	20.3	20.8
	8H	19.3	19.7	19.9	20.2	20.7	19.4	19.8	19.9	20.2	20.8
	12H	19.3	19.6	19.8	20.1	20.7	19.3	19.7	19.9	20.2	20.7
12H	4H	19.4	19.8	19.8	20.3	20.8	19.4	19.9	19.9	20.3	20.8
	6H	19.3	19.7	19.8	20.2	20.7	19.4	19.7	19.9	20.2	20.8
	8H	19.3	19.6	19.8	20.1	20.7	19.3	19.7	19.9	20.2	20.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.8					+ 0.6 / - 0.8					
1.5H	+ 0.7 / - 0.5					+ 0.7 / - 0.6					
2.0H	+ 0.9 / - 0.6					+ 0.9 / - 0.7					

CIE Pub.117, 1661 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.8$ )

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:

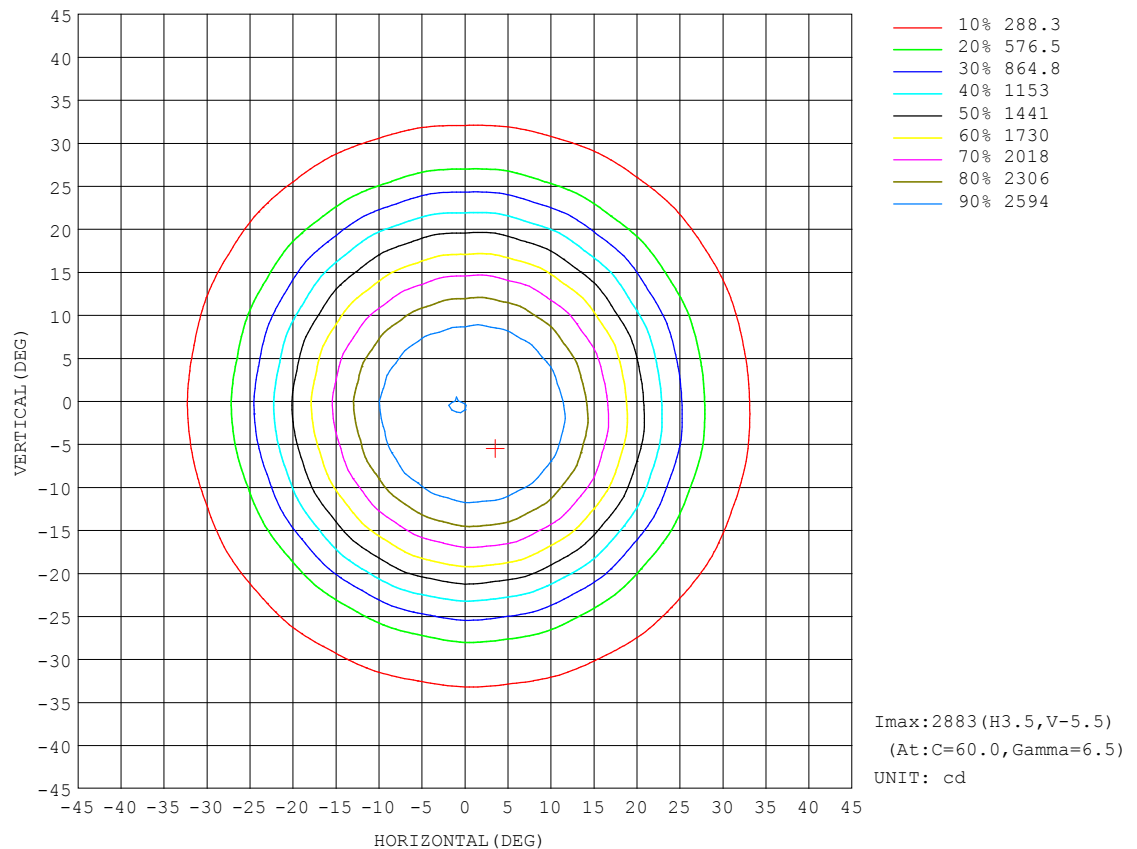
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	74	70	80	74	69	79	73	69	65
0.80	89	82	78	88	82	78	86	81	77	73
1.00	94	88	83	93	87	83	91	87	82	77
1.25	99	92	88	97	92	88	95	90	87	81
1.50	102	96	92	100	95	91	97	93	90	84
2.00	105	100	96	103	99	95	100	96	93	87
2.50	107	103	99	105	101	98	101	98	96	88
3.00	109	105	102	107	103	101	103	100	98	90
4.00	112	108	106	109	106	104	105	102	101	92
5.00	113	110	108	110	108	106	106	104	102	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:

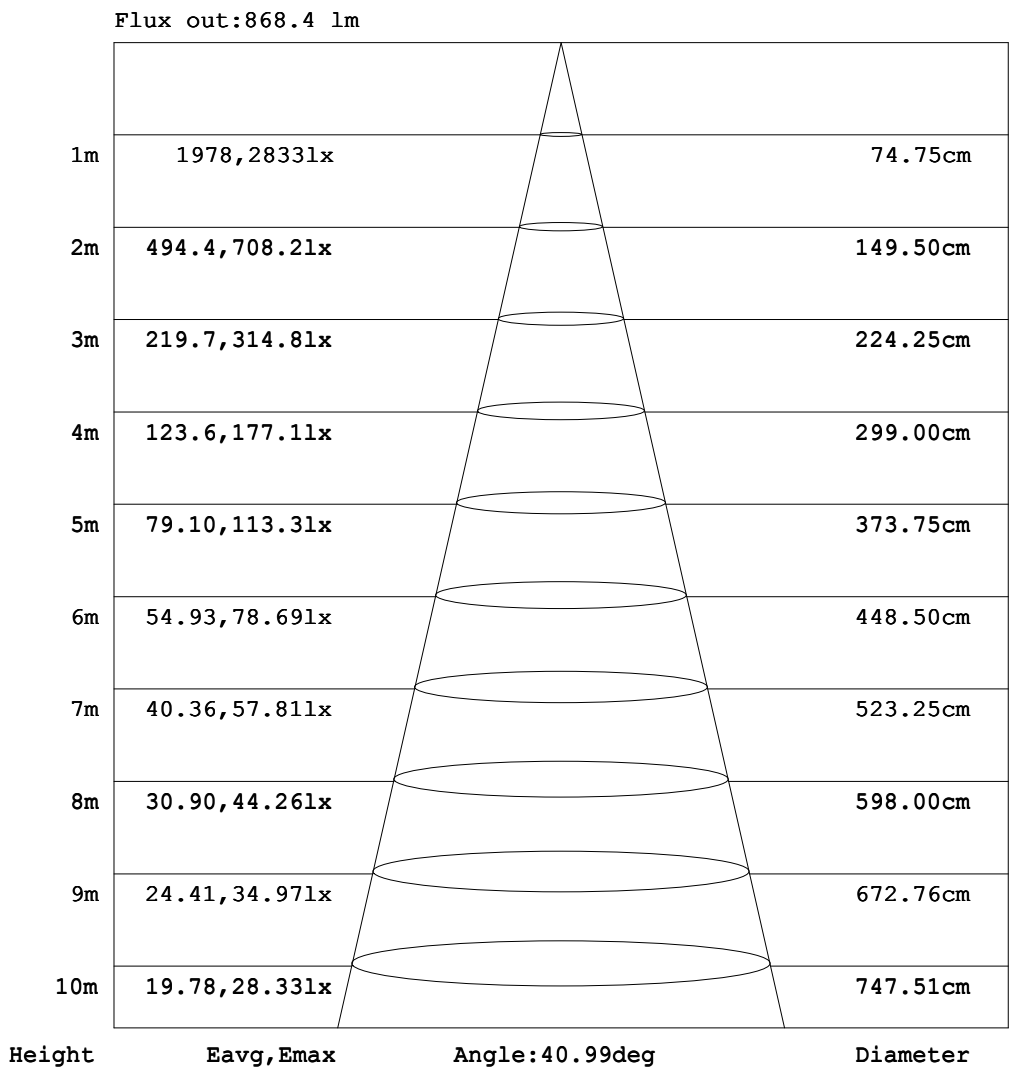


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

### AAI Figure

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:



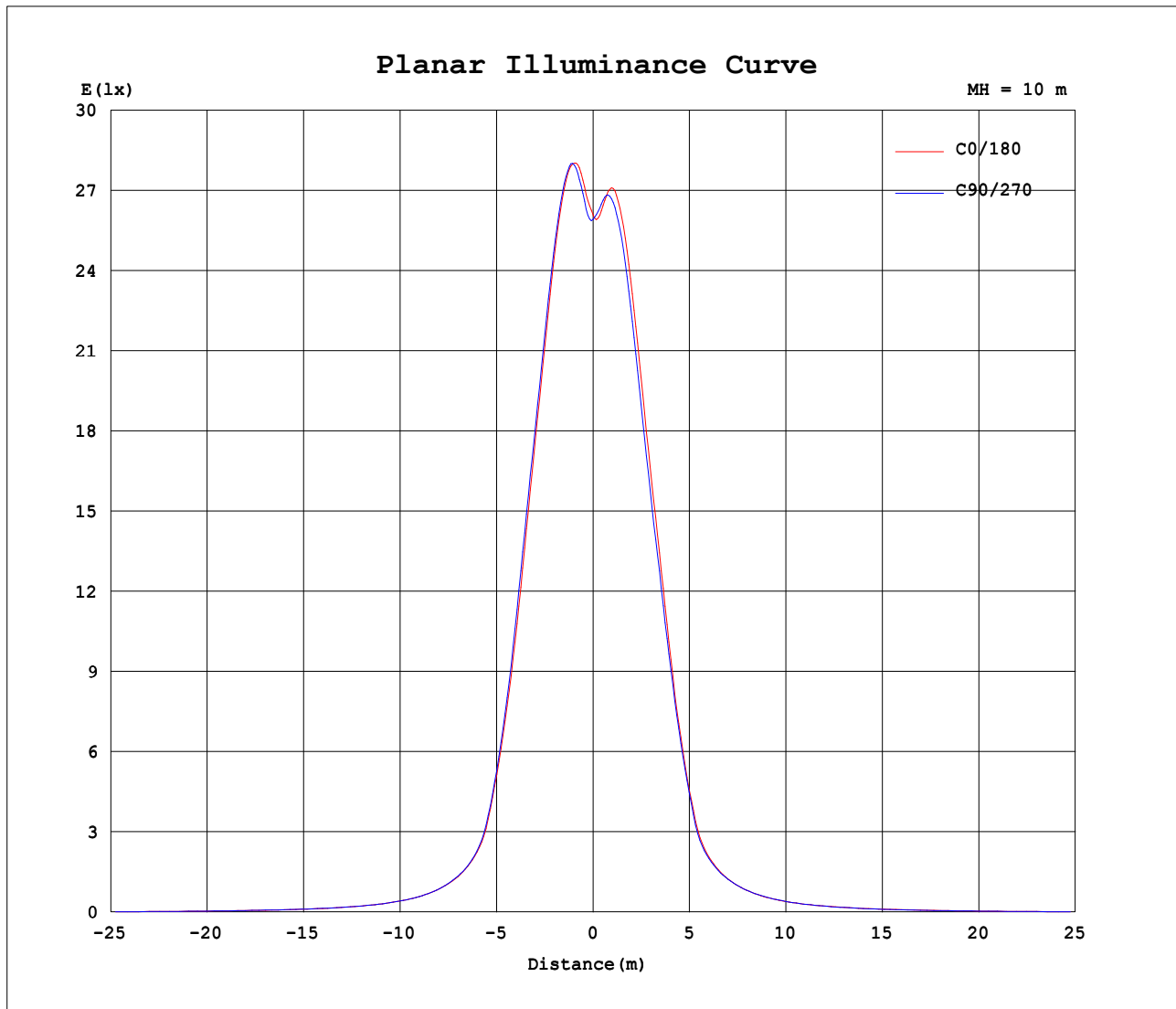
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZR  
 Test Date: 2021-03-15

γ Range: 0 - 180DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity: 65.0%  
 Test Distance: 7.028m [K=1.0000]  
 Remarks:



## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZR  
Test Date: 2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity: 65.0%  
Test Distance: 7.028m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm		
NAME: TL45-20G27-38-M	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:80	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	2609	2601	2603	2596	2598	2595	2594	2592	2590	2592	2588	2591	2588	2590	2586	2592	2587	2591	2609
5	2835	2837	2842	2844	2852	2850	2854	2842	2835	2814	2802	2781	2771	2752	2742	2732	2729	2721	2735
10	2709	2738	2746	2767	2766	2776	2761	2758	2742	2736	2706	2696	2668	2662	2631	2618	2590	2590	2591
15	2206	2252	2261	2304	2297	2318	2293	2298	2264	2258	2216	2210	2166	2158	2114	2106	2069	2071	2072
20	1551	1604	1609	1655	1647	1673	1648	1663	1625	1624	1582	1582	1537	1534	1490	1490	1455	1458	1460
25	890	925	911	937	924	953	936	952	921	924	887	890	853	855	820	828	800	813	811
30	403	416	413	427	421	430	417	430	413	415	398	399	382	384	371	374	363	367	368
35	243	249	247	252	249	253	249	252	246	246	239	238	232	232	227	228	223	226	227
40	164	166	166	168	167	169	168	168	166	164	161	159	157	156	154	154	153	154	155
45	119	119	119	120	120	121	121	121	119	118	116	115	113	113	112	113	112	113	114
50	89.7	90.5	90.0	91.0	90.6	91.6	91.0	91.7	90.3	89.9	88.0	87.9	86.8	87.4	86.8	87.5	86.9	87.3	87.8
55	70.9	71.3	71.1	71.8	71.7	72.2	72.0	72.3	71.5	71.2	70.2	70.2	69.9	70.3	70.1	70.5	70.2	70.4	70.7
60	56.4	56.8	56.7	57.3	57.2	57.9	57.7	58.0	57.4	57.4	56.7	57.0	56.8	57.3	57.0	57.4	57.1	57.4	57.6
65	41.2	41.7	41.4	42.0	41.7	42.3	41.9	42.2	41.6	41.7	41.0	41.3	40.9	41.4	41.1	41.5	41.1	41.5	41.6
70	27.4	28.0	27.5	28.2	27.9	28.6	28.1	28.6	27.9	28.3	27.5	28.0	27.4	27.9	27.2	27.8	27.2	27.8	28.0
75	10.6	11.1	10.7	11.3	10.9	11.4	11.0	11.4	11.0	11.3	10.8	11.1	10.6	11.0	10.4	10.8	10.4	10.8	10.7
80	3.31	3.43	3.38	3.49	3.39	3.52	3.46	3.59	3.53	3.65	3.57	3.67	3.58	3.66	3.51	3.58	3.46	3.53	3.10
85	1.47	1.50	1.50	1.49	1.47	1.49	1.47	1.49	1.52	1.49	1.48	1.50	1.50	1.51	1.51	1.52	1.51	1.53	0.91
90	1.76	1.77	1.75	1.77	1.74	1.76	1.75	1.77	1.75	1.77	1.76	1.78	1.77	1.79	1.79	1.80	1.80	1.81	1.04
95	2.16	2.17	2.16	2.16	2.15	2.16	2.14	2.15	2.16	2.16	2.16	2.17	2.16	2.18	2.17	2.20	2.19	2.21	1.27
100	2.71	2.71	2.70	2.70	2.69	2.69	2.69	2.70	2.70	2.70	2.70	2.71	2.72	2.73	2.74	2.76	2.76	2.78	1.67
105	3.51	3.49	3.49	3.47	3.47	3.46	3.47	3.47	3.48	3.48	3.50	3.50	3.52	3.52	3.56	3.56	3.59	3.60	2.35
110	4.62	4.58	4.59	4.56	4.57	4.55	4.57	4.54	4.57	4.56	4.60	4.58	4.63	4.63	4.69	4.68	4.74	4.74	3.39
115	6.04	5.98	6.00	5.93	5.97	5.91	5.95	5.91	5.96	5.93	6.00	5.97	6.05	6.03	6.11	6.11	6.19	6.18	4.75
120	7.75	7.65	7.68	7.60	7.64	7.57	7.63	7.57	7.63	7.59	7.67	7.64	7.74	7.72	7.83	7.82	7.93	7.92	6.37
125	9.69	9.58	9.61	9.52	9.56	9.49	9.54	9.49	9.56	9.52	9.61	9.58	9.68	9.67	9.79	9.78	9.90	9.89	8.14
130	11.8	11.7	11.7	11.6	11.7	11.6	11.6	11.6	11.7	11.6	11.7	11.7	11.8	11.8	11.9	11.9	12.0	12.0	10.1
135	14.1	14.0	14.0	13.9	14.0	13.9	14.0	13.9	14.0	13.9	14.0	14.0	14.1	14.1	14.2	14.2	14.4	14.3	12.2
140	16.8	16.7	16.7	16.6	16.6	16.5	16.6	16.5	16.6	16.6	16.7	16.7	16.8	16.8	16.9	16.9	17.1	17.1	14.5
145	20.2	20.0	20.1	19.9	20.0	19.9	20.0	19.9	20.0	19.9	20.1	20.0	20.2	20.2	20.4	20.4	20.6	20.6	17.5
150	24.9	24.7	24.7	24.5	24.6	24.4	24.6	24.4	24.6	24.5	24.7	24.7	24.9	24.9	25.2	25.2	25.5	25.5	21.4
155	30.8	30.5	30.6	30.3	30.4	30.1	30.3	30.1	30.3	30.2	30.5	30.4	30.8	30.7	31.1	31.1	31.5	31.6	26.3
160	36.6	36.3	36.3	36.0	36.0	35.8	35.9	35.7	35.9	35.8	36.1	36.1	36.4	36.4	36.8	36.9	37.3	37.3	31.3
165	41.2	40.9	40.9	40.7	40.7	40.5	40.5	40.4	40.5	40.5	40.7	40.7	40.9	41.0	41.3	41.4	41.7	41.8	35.5
170	44.9	44.7	44.7	44.6	44.5	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.5	44.6	44.8	44.9	45.0	45.1	39.5
175	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.0	47.0	47.0	47.0	46.9	46.9	47.0	47.0	47.0	47.1	47.1	44.2
180	48.3	48.4	48.3	48.3	48.3	48.2	48.2	48.1	48.0	48.0	47.9	47.8	47.7	47.7	47.6	47.5	47.5	47.4	48.3

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZR  
Test Date:2021-03-15

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:65.0%  
Test Distance:7.028m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:225.0V I:0.0910A P:20.10W PF:0.9780 Freq:50.00Hz Lamp Flux:1660.9x1 lm																	
NAME: TL45-20G27-38-M									TYPE:						WEIGHT:		
SPEC.:									DIM.:						SERIAL No.:		
MFR.:									SUR.:80						Shielding Angle:		

Table--2

UNIT: cd

$\gamma$ (DEG) \ C (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	2601	2603	2596	2598	2595	2594	2592	2590	2592	2588	2591	2588	2590	2586	2592	2587	2591		
5	2733	2721	2718	2710	2705	2701	2701	2704	2709	2717	2731	2741	2752	2766	2780	2789	2805		
10	2558	2559	2526	2527	2500	2503	2479	2497	2490	2522	2527	2562	2568	2606	2619	2660	2673		
15	2037	2040	2002	2005	1969	1976	1952	1974	1966	2000	2004	2052	2058	2105	2114	2163	2172		
20	1423	1431	1393	1410	1378	1399	1373	1397	1381	1419	1408	1448	1439	1483	1474	1527	1524		
25	780	800	776	799	773	794	772	799	782	809	793	824	811	847	835	872	871		
30	360	363	354	358	354	361	355	361	355	365	364	375	372	383	383	402	402		
35	223	226	222	225	222	225	223	226	224	228	226	230	229	234	234	240	240		
40	154	155	154	155	154	156	155	156	156	157	156	158	158	160	160	162	162		
45	113	114	113	114	113	114	114	114	114	115	114	115	115	116	117	118	118		
50	87.0	87.6	87.2	87.8	87.2	87.7	87.2	87.9	87.4	87.9	87.4	88.2	88.0	89.0	88.8	89.6	89.2		
55	70.1	70.4	70.0	70.3	69.8	70.1	69.5	69.9	69.4	69.8	69.3	69.8	69.7	70.4	70.2	70.8	70.5		
60	57.0	57.3	56.9	57.2	56.7	56.9	56.2	56.4	55.8	56.1	55.5	55.9	55.6	56.1	55.8	56.4	56.0		
65	41.0	41.4	40.8	41.2	40.7	41.1	40.5	40.9	40.6	41.0	40.6	41.1	40.7	41.2	40.8	41.3	40.9		
70	27.4	27.8	27.2	27.6	27.0	27.4	26.8	27.3	26.9	27.5	27.1	27.6	27.1	27.6	27.2	27.7	27.2		
75	10.3	10.7	10.1	10.4	9.96	10.2	9.82	10.2	9.92	10.4	10.1	10.5	10.2	10.6	10.2	10.7	10.3		
80	2.96	3.01	2.86	2.91	2.79	2.86	2.73	2.83	2.74	2.85	2.75	2.85	2.78	2.89	2.82	2.94	2.86		
85	0.91	0.91	0.91	0.90	0.89	0.91	0.91	0.91	0.91	0.90	0.91	0.90	0.90	0.89	0.90	0.90	0.92		
90	1.04	1.04	1.02	1.04	1.02	1.04	1.05	1.03	1.02	1.03	1.00	1.02	0.99	1.02	0.98	1.01	0.99		
95	1.25	1.28	1.26	1.28	1.26	1.28	1.25	1.26	1.23	1.25	1.22	1.24	1.22	1.23	1.21	1.22	1.22		
100	1.68	1.68	1.69	1.69	1.68	1.69	1.68	1.67	1.65	1.65	1.63	1.63	1.60	1.60	1.59	1.59	1.57		
105	2.39	2.38	2.40	2.39	2.41	2.39	2.40	2.37	2.37	2.34	2.33	2.30	2.29	2.26	2.26	2.23	2.23		
110	3.45	3.43	3.48	3.46	3.49	3.45	3.48	3.43	3.44	3.38	3.39	3.32	3.33	3.27	3.28	3.22	3.23		
115	4.83	4.81	4.88	4.85	4.90	4.86	4.89	4.82	4.83	4.75	4.76	4.69	4.69	4.61	4.62	4.54	4.55		
120	6.44	6.43	6.51	6.47	6.53	6.47	6.52	6.44	6.45	6.37	6.37	6.28	6.28	6.19	6.19	6.10	6.11		
125	8.24	8.23	8.31	8.28	8.34	8.28	8.31	8.24	8.26	8.15	8.16	8.05	8.05	7.94	7.95	7.84	7.85		
130	10.2	10.2	10.2	10.2	10.3	10.2	10.2	10.2	10.2	10.1	10.1	9.96	9.96	9.86	9.86	9.75	9.75		
135	12.3	12.2	12.3	12.3	12.4	12.3	12.3	12.2	12.3	12.1	12.1	12.0	12.0	11.9	11.9	11.8	11.8		
140	14.7	14.6	14.7	14.7	14.8	14.7	14.7	14.6	14.6	14.5	14.5	14.3	14.3	14.2	14.2	14.1	14.1		
145	17.7	17.6	17.8	17.7	17.8	17.7	17.8	17.6	17.6	17.4	17.4	17.2	17.2	17.0	17.1	16.9	17.0		
150	21.7	21.6	21.8	21.7	21.9	21.7	21.8	21.6	21.6	21.3	21.3	21.0	21.1	20.8	20.9	20.6	20.7		
155	26.7	26.6	26.9	26.8	27.0	26.7	26.8	26.5	26.6	26.2	26.2	25.9	25.9	25.6	25.6	25.3	25.4		
160	31.6	31.5	31.8	31.7	31.8	31.6	31.6	31.3	31.3	31.0	31.0	30.6	30.6	30.3	30.3	30.0	30.0		
165	35.7	35.7	35.8	35.7	35.8	35.6	35.5	35.3	35.2	35.0	34.9	34.6	34.6	34.3	34.3	34.1	34.0		
170	39.7	39.7	39.8	39.7	39.7	39.5	39.5	39.3	39.2	39.0	38.9	38.6	38.6	38.3	38.3	38.1	38.0		
175	44.3	44.3	44.4	44.3	44.3	44.2	44.1	44.0	43.9	43.7	43.6	43.4	43.4	43.2	43.2	43.0	43.0		
180	48.3	48.3	48.3	48.3	48.2	48.2	48.1	48.1	48.0	47.9	47.8	47.7	47.7	47.6	47.5	47.5	47.4		

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZR  
 Test Date:2021-03-15

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:65.0%  
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 Remarks: