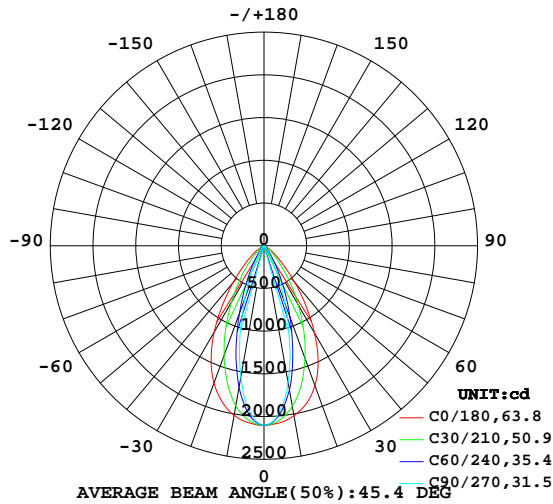


## LUMINAIRE PHOTOMETRIC TEST REPORT

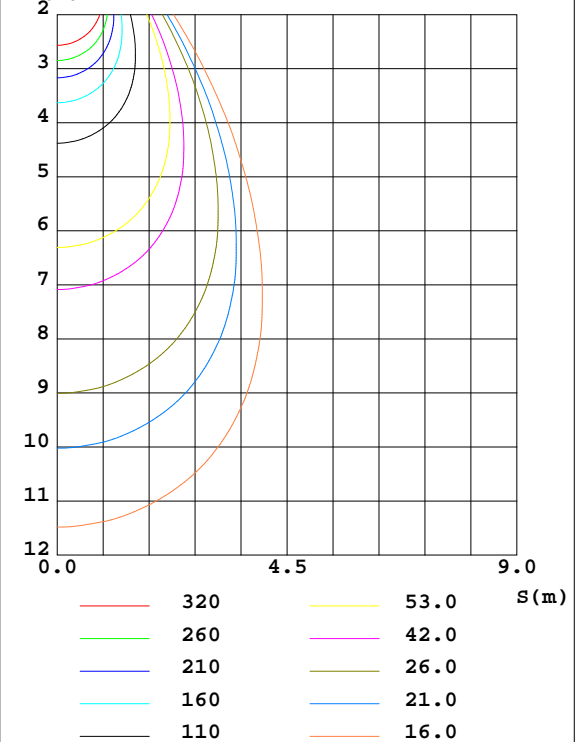
NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.68 lm/W			
MODEL		I <sub>max</sub> (cd)	2103	S/MH(C0/180)	0.95
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.51
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1439.3	η UP,DN(C0-180)	1.2,50.7
NOMINAL FLUX(lm)	1439.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,47.0
LAMPS INSIDE	1	η up(%)	2.4	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	η down(%)	97.6	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

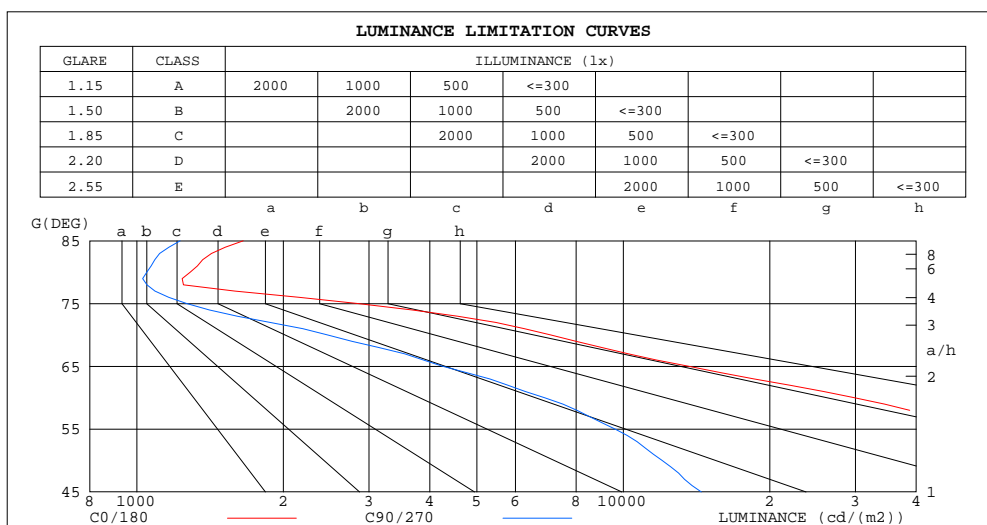
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	2020	1822	1627	1852	2016	1780	1567	1745	0- 10	185.9	185.9	12.9,12.9
20	1743	1141	708.9	1173	1710	1059	659.1	1023	10- 20	411.4	597.3	41.5,41.5
30	1187	523.3	183.7	540.7	1167	462.1	158.9	441.6	20- 30	386.2	983.6	68.3,68.3
40	561.7	180.9	52.01	189.7	566.0	151.8	46.14	143.7	30- 40	240.7	1224	85.1,85.1
50	193.8	65.75	27.95	67.73	209.9	53.89	27.28	51.39	40- 50	114.3	1339	93,93
60	53.80	23.58	12.46	24.91	59.37	21.38	12.92	20.38	50- 60	48.74	1387	96.4,96.4
70	8.748	6.062	3.052	6.894	9.512	6.178	3.398	5.689	60- 70	14.55	1402	97.4,97.4
80	0.8062	0.7032	0.6589	0.7325	0.7435	0.6556	0.5628	0.6203	70- 80	2.610	1404	97.6,97.6
90	0.4971	0.3796	0.3204	0.3522	0.4341	0.3027	0.2652	0.3098	80- 90	0.4824	1405	97.6,97.6
100	1.115	0.6534	0.4175	0.5827	0.9762	0.5512	0.3824	0.6195	90-100	0.5294	1405	97.7,97.7
110	2.532	1.395	0.6380	1.219	2.309	1.254	0.6168	1.429	100-110	1.043	1407	97.7,97.7
120	4.913	3.132	1.474	2.794	4.694	2.906	1.446	3.248	110-120	2.130	1409	97.9,97.9
130	7.937	6.260	3.909	5.734	7.800	5.882	3.941	6.411	120-130	3.942	1413	98.1,98.1
140	11.01	10.36	8.606	9.760	10.98	9.875	8.554	10.50	130-140	6.082	1419	98.6,98.6
150	13.30	14.30	14.03	13.70	13.44	13.72	13.91	14.33	140-150	7.460	1426	99.1,99.1
160	14.64	16.59	17.36	15.70	14.80	15.51	17.23	16.40	150-160	6.965	1433	99.6,99.6
170	15.91	17.01	17.00	16.11	16.27	15.93	16.62	16.67	160-170	4.619	1438	99.9,99.9
180	17.16	17.05	16.13	16.87	17.18	17.04	16.13	16.86	170-180	1.576	1439	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:LXJ  
 Test Date:2024-09-26

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
 Humidity:65.0%  
 Test Distance:5.190m [K=1.0000]  
 Remarks:

# LUMINANCE LIMITATION CURVES

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1654	1227
80	1287	1048
75	2849	1267
70	7089	2465
65	13633	4254
60	29828	6884
55	54262	9613
50	83566	12011
45	131449	14459

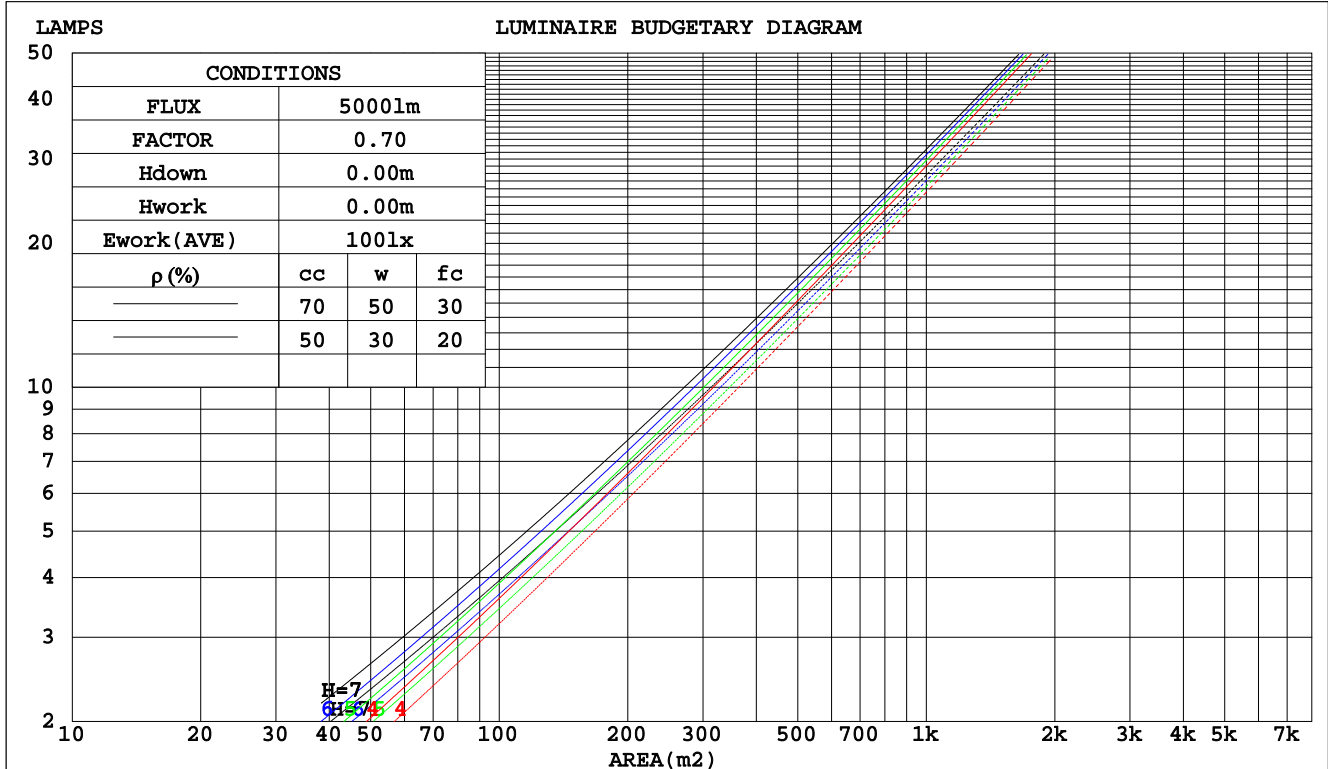
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.03	1.01	.00	.99	.98	.96	.95	.94	.93	.91
2.0	1.02	.98	.94	1.00	.96	.93	.96	.93	.91	.93	.91	.88	.90	.88	.86	.84
3.0	.95	.90	.86	.93	.89	.85	.90	.86	.83	.88	.84	.82	.85	.82	.80	.78
4.0	.89	.83	.79	.87	.82	.78	.85	.80	.77	.82	.79	.76	.80	.77	.75	.73
5.0	.83	.77	.73	.82	.76	.72	.80	.75	.71	.78	.74	.70	.76	.72	.70	.68
6.0	.78	.72	.67	.77	.71	.67	.75	.70	.66	.73	.69	.66	.72	.68	.65	.64
7.0	.73	.67	.63	.72	.67	.63	.71	.66	.62	.70	.65	.62	.68	.64	.61	.60
8.0	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.65	.61	.58	.56
9.0	.65	.59	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.57	.54	.53
10.0	.62	.56	.52	.61	.56	.52	.60	.55	.52	.60	.55	.52	.59	.55	.51	.50



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

TLO020-21 36V500mA CXM-14-30-90-36-AC30 45D 3000K CRI90 NA 20240926(Rec

### WEC AND CCEC

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	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	.161	.092	.030	.148	.086	.027	.137	.079	.026	
2.0	.175	.096	.029	.169	.093	.029	.157	.087	.027	.146	.082	.026	.136	.077	.024	
3.0	.167	.089	.027	.161	.086	.026	.151	.082	.025	.142	.078	.024	.133	.073	.023	
4.0	.158	.082	.024	.154	.080	.024	.145	.077	.023	.136	.073	.022	.129	.070	.021	
5.0	.151	.077	.022	.146	.075	.022	.138	.072	.021	.131	.069	.021	.124	.066	.020	
6.0	.143	.072	.021	.139	.070	.020	.132	.068	.020	.126	.065	.019	.120	.063	.019	
7.0	.136	.067	.019	.133	.066	.019	.127	.064	.018	.121	.062	.018	.115	.060	.018	
8.0	.130	.064	.018	.127	.063	.018	.121	.061	.017	.116	.059	.017	.111	.057	.017	
9.0	.124	.060	.017	.122	.059	.017	.116	.058	.016	.112	.056	.016	.107	.054	.016	
10.0	.119	.057	.016	.116	.056	.016	.112	.055	.015	.107	.053	.015	.103	.052	.015	

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	.209	.209	.209	.178	.178	.178	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.190	.176	.163	.162	.151	.140	.111	.104	.097	.064	.060	.056	.020	.019	.018	
2.0	.175	.151	.131	.150	.130	.113	.103	.090	.079	.059	.052	.046	.019	.017	.015	
3.0	.163	.132	.107	.140	.114	.093	.096	.079	.065	.055	.046	.039	.018	.015	.013	
4.0	.153	.118	.090	.131	.102	.079	.090	.071	.055	.052	.041	.033	.017	.014	.011	
5.0	.145	.106	.078	.124	.092	.068	.086	.064	.048	.050	.038	.028	.016	.012	.009	
6.0	.137	.097	.068	.118	.084	.059	.081	.059	.042	.047	.035	.025	.015	.011	.008	
7.0	.131	.089	.061	.112	.078	.053	.078	.054	.037	.045	.032	.022	.015	.010	.007	
8.0	.125	.083	.055	.107	.072	.048	.074	.051	.034	.043	.030	.020	.014	.010	.007	
9.0	.120	.078	.050	.103	.068	.044	.071	.048	.031	.042	.028	.018	.013	.009	.006	
10.0	.115	.074	.046	.099	.064	.040	.069	.045	.029	.040	.027	.017	.013	.009	.006	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

TLO020-21 36V500mA CXM-14-30-90-36-AC30 45D 3000K CRI90 NA 20240926(Rec

UGR(Unified Glare Rating) Table

NAME: TLO020-21					TYPE:45D			WEIGHT:1			
SPEC.:3000K CRI90					DIM.:			SERIAL No.:			
MFR.:					SUR.:68			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		24.4	25.4	24.7	25.6	25.8	14.6	15.5	14.8	15.7	15.9
3H		24.3	25.2	24.6	25.4	25.6	14.5	15.4	14.8	15.6	15.9
4H		24.2	25.0	24.5	25.3	25.5	14.4	15.3	14.7	15.5	15.8
6H		24.1	24.9	24.4	25.1	25.4	14.3	15.1	14.7	15.4	15.7
8H		24.0	24.8	24.4	25.1	25.4	14.3	15.0	14.6	15.3	15.6
12H		24.0	24.7	24.4	25.0	25.3	14.3	15.0	14.6	15.3	15.6
4H 2H		24.2	25.0	24.5	25.3	25.5	14.9	15.8	15.3	16.0	16.3
3H		24.0	24.7	24.4	25.0	25.4	14.9	15.6	15.3	15.9	16.3
4H		23.9	24.6	24.3	24.9	25.3	14.8	15.5	15.2	15.8	16.2
6H		23.8	24.4	24.2	24.8	25.2	14.7	15.3	15.2	15.7	16.1
8H		23.8	24.3	24.2	24.7	25.1	14.7	15.2	15.1	15.6	16.0
12H		23.7	24.2	24.2	24.6	25.1	14.6	15.1	15.1	15.5	16.0
8H 4H		23.8	24.3	24.2	24.7	25.1	14.7	15.2	15.1	15.6	16.0
6H		23.7	24.1	24.1	24.5	25.0	14.6	15.0	15.1	15.5	15.9
8H		23.6	24.0	24.1	24.4	24.9	14.6	14.9	15.1	15.4	15.9
12H		23.6	23.9	24.1	24.4	24.9	14.5	14.8	15.0	15.3	15.8
12H 4H		23.7	24.2	24.2	24.6	25.1	14.7	15.1	15.1	15.5	16.0
6H		23.6	24.0	24.1	24.4	24.9	14.6	14.9	15.1	15.4	15.9
8H		23.6	23.9	24.1	24.4	24.9	14.5	14.8	15.0	15.3	15.8
Variations with the observer position at spacings:											
S = 1.0H		+ 3.5 / - 4.8					+ 2.0 / - 3.3				
1.5H		+ 4.7 / - 7.1					+ 2.5 / - 2.6				
2.0H		+ 5.7 / - 8.6					+ 2.4 / - 3.3				

CIE Pub.117, 1439 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.3$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

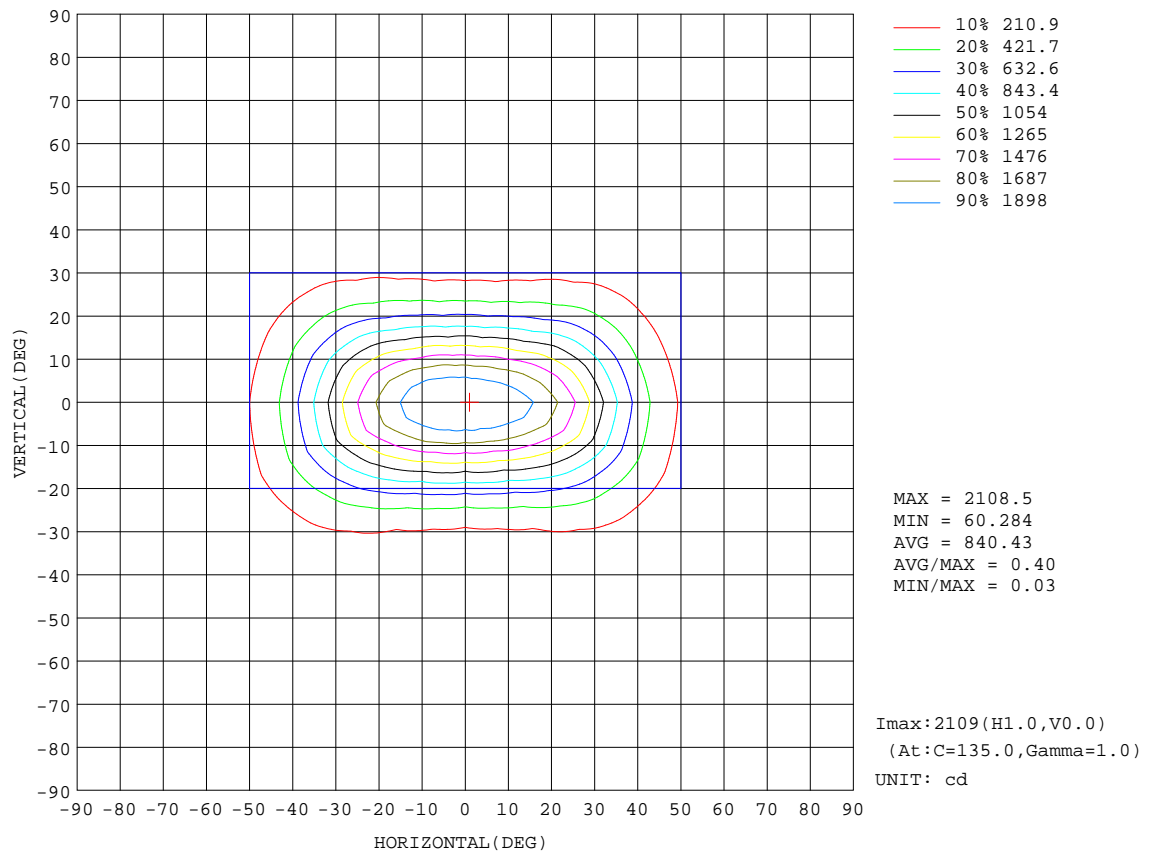
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	82	75	71	81	75	71	80	74	70	66
0.80	90	83	79	89	83	79	88	82	79	74
1.00	95	89	85	94	89	85	93	88	84	79
1.25	100	94	90	99	94	90	96	92	89	84
1.50	103	98	94	102	97	93	99	95	92	87
2.00	106	102	98	105	101	97	102	98	96	90
2.50	108	104	101	106	103	100	103	100	98	91
3.00	110	106	103	108	105	102	104	102	100	92
4.00	112	109	107	110	107	105	106	104	102	94
5.00	114	111	109	111	109	107	107	105	104	95
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:28DEG  
 Operators:LXJ  
 Test Date:2024-09-26

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
 Humidity:65.0%  
 Test Distance:5.190m [K=1.0000]  
 Remarks:

# ISOCANDELA DIAGRAM

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

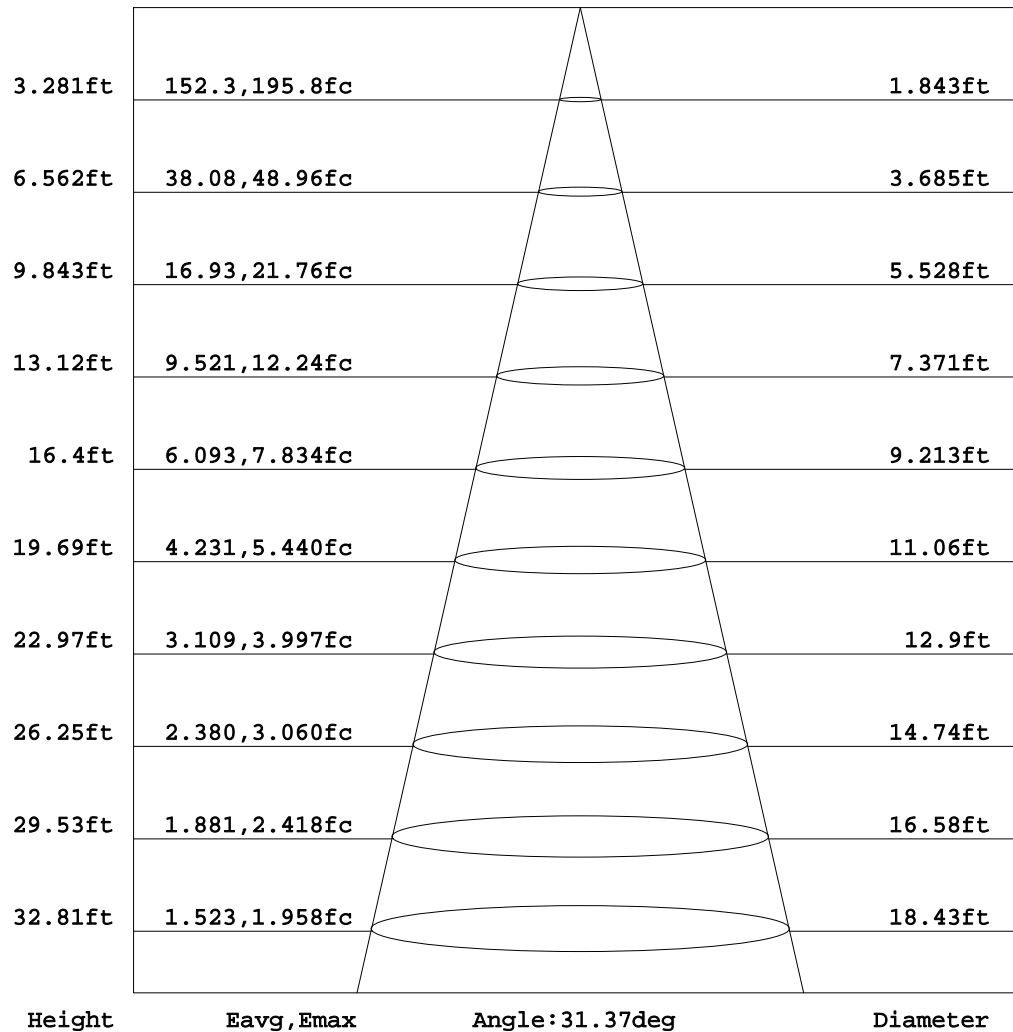
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:



### AAI Figure

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

Flux out:423.5 lm



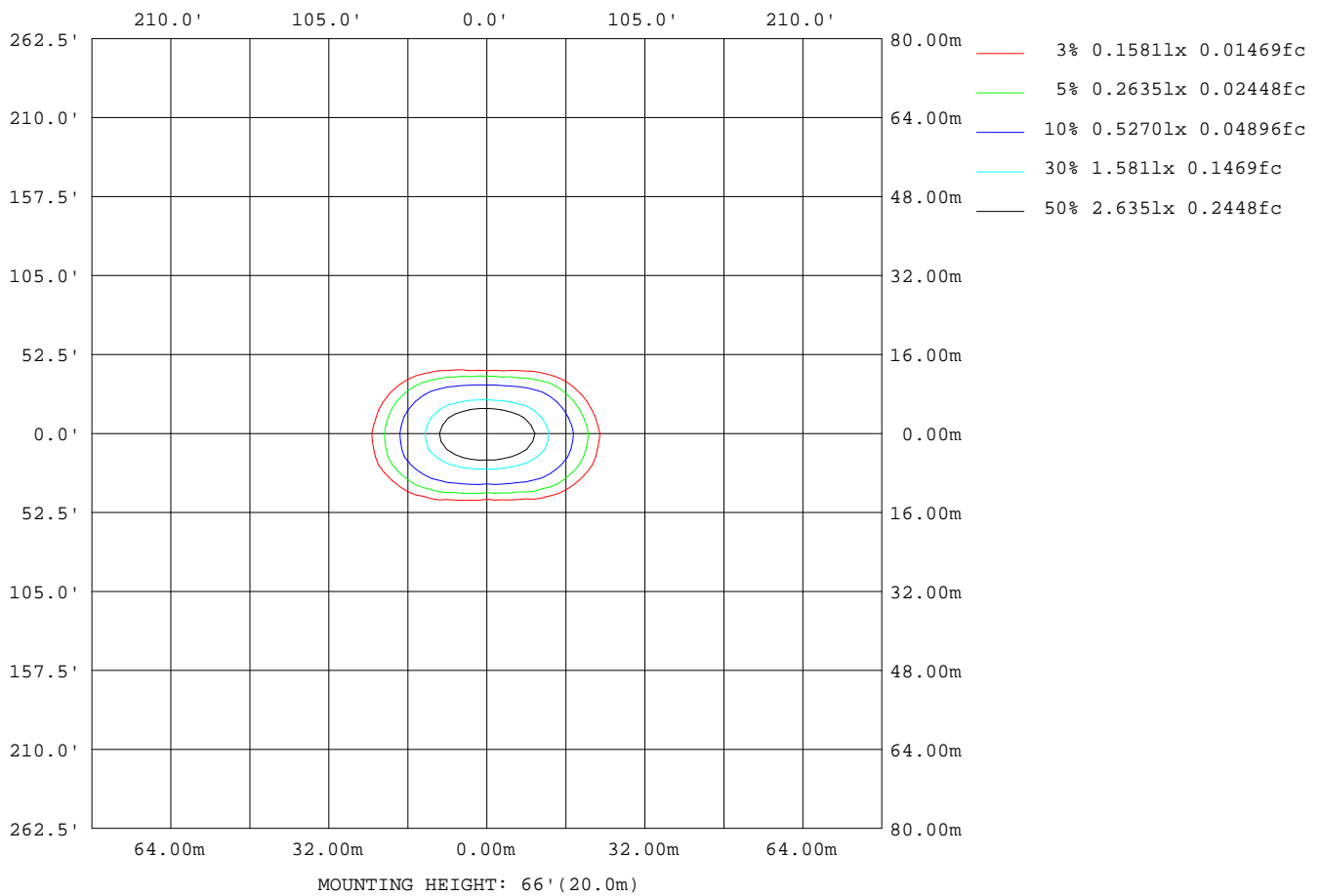
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## LED Avg.L Report

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

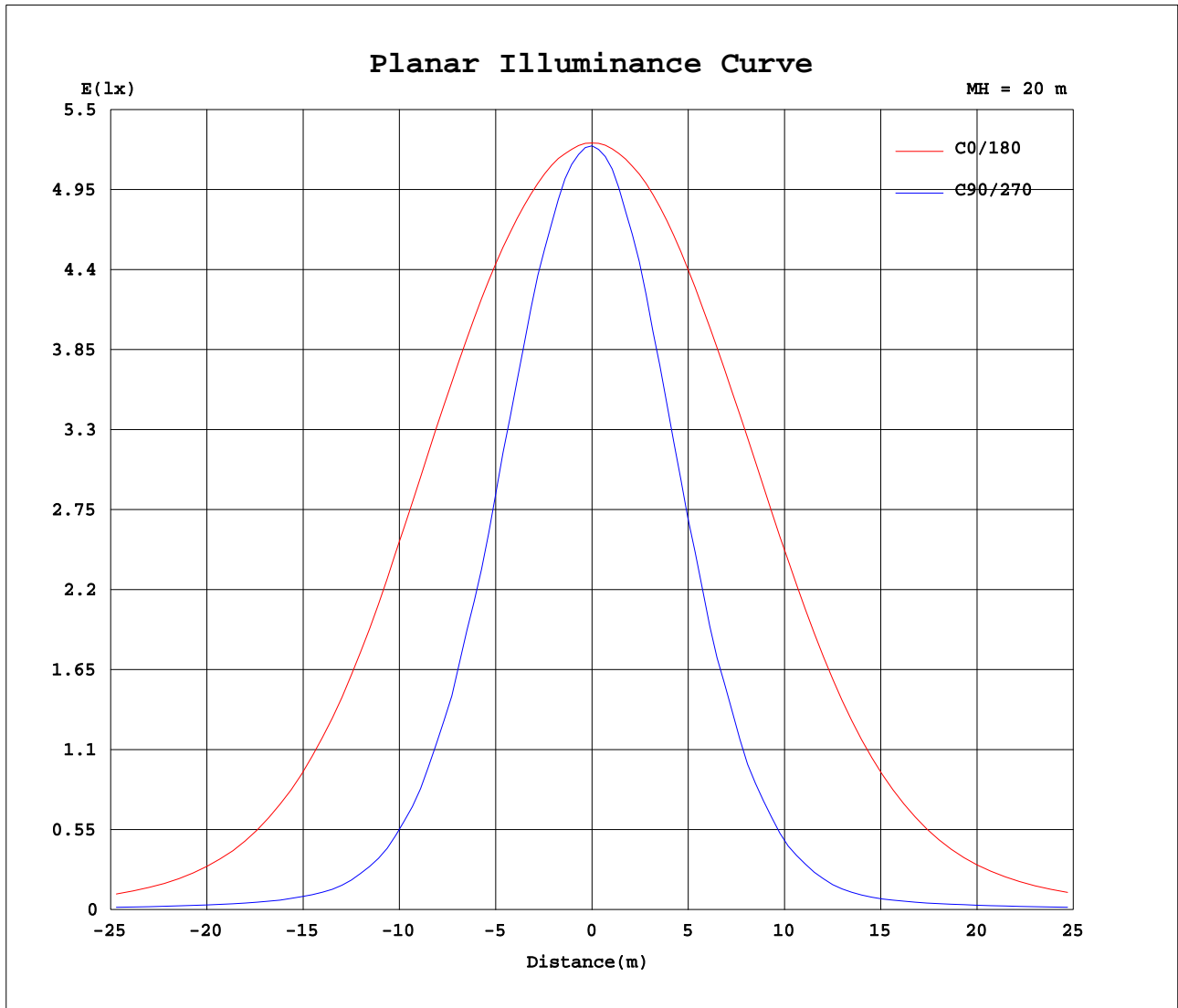
AvgL	cd/m2
L_0~180(65)av	14406
L_0~180(75)av	2941
L_0~180(85)av	1517
L_90~270(65)av	4426
L_90~270(75)av	1337
L_90~270(85)av	1120
L_45(65)av	8263
L_45(75)av	2191
L_45(85)av	1250

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 28DEG  
 Operators: LXJ  
 Test Date: 2024-09-26

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
 Humidity: 65.0%  
 Test Distance: 5.190m [K=1.0000]  
 Remarks:

TLO020-21 36V500mA CXM-14-30-90-36-AC30 45D 3000K CRI90 NA 20240926(Rec

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101	2101
5	2082	2075	2051	2028	1997	1990	1975	1999	2013	2046	2067	2086	2081	2071	2050	2012	1987	1948	1942
10	2020	1993	1909	1822	1717	1665	1627	1683	1743	1852	1939	2015	2016	1982	1904	1780	1684	1586	1567
15	1914	1859	1688	1507	1307	1213	1151	1229	1339	1536	1713	1872	1893	1822	1660	1432	1269	1109	1092
20	1743	1659	1403	1141	897	781	709	791	919	1173	1432	1669	1710	1602	1368	1059	843	685	659
25	1499	1403	1103	802	553	435	381	443	571	829	1129	1416	1466	1332	1057	724	505	371	342
30	1187	1095	801	523	302	215	184	219	313	541	829	1115	1167	1025	757	462	274	180	159
35	858	780	542	315	158	104	87.4	106	167	327	568	810	848	724	503	271	143	83.4	73.5
40	562	507	340	181	88.1	59.1	52.0	59.5	91.3	190	360	538	566	472	310	152	74.3	50.2	46.1
45	335	300	198	105	54.8	40.4	37.0	40.6	55.0	111	217	333	347	286	182	87.1	48.0	36.9	34.9
50	194	175	115	65.7	37.3	30.3	28.0	30.7	37.9	67.7	128	202	210	170	106	53.9	34.7	29.1	27.3
55	112	100	68.3	41.3	26.5	22.2	20.0	22.6	27.1	42.3	76.5	119	124	97.6	62.0	34.8	25.9	21.7	20.1
60	53.8	49.1	33.7	23.6	17.7	14.5	12.5	14.9	18.3	24.9	39.2	59.5	59.4	47.4	32.8	21.4	18.0	14.4	12.9
65	20.8	19.1	14.5	12.7	10.3	7.91	6.51	8.23	11.0	13.8	16.8	23.8	23.3	19.2	15.4	12.4	11.0	8.03	7.03
70	8.75	8.25	6.73	6.06	4.78	3.73	3.05	3.92	5.37	6.89	7.62	9.64	9.51	8.20	7.22	6.18	5.39	3.91	3.40
75	2.66	2.59	2.08	1.98	1.62	1.36	1.19	1.44	1.92	2.44	2.61	3.26	2.85	2.47	2.35	2.08	1.92	1.42	1.32
80	0.81	0.77	0.74	0.70	0.68	0.66	0.66	0.67	0.70	0.73	0.79	0.81	0.74	0.74	0.69	0.66	0.61	0.58	0.56
85	0.52	0.48	0.45	0.41	0.40	0.39	0.39	0.39	0.41	0.46	0.49	0.52	0.44	0.43	0.39	0.38	0.34	0.33	0.32
90	0.50	0.48	0.41	0.38	0.34	0.34	0.32	0.33	0.32	0.35	0.38	0.44	0.43	0.39	0.36	0.30	0.28	0.26	0.27
95	0.73	0.69	0.58	0.48	0.41	0.39	0.36	0.38	0.38	0.44	0.51	0.62	0.64	0.59	0.50	0.39	0.35	0.30	0.32
100	1.12	1.03	0.84	0.65	0.51	0.46	0.42	0.44	0.46	0.58	0.75	0.92	0.98	0.91	0.74	0.55	0.44	0.38	0.38
105	1.70	1.56	1.28	0.93	0.68	0.56	0.50	0.53	0.61	0.82	1.13	1.40	1.52	1.43	1.13	0.81	0.60	0.48	0.47
110	2.53	2.32	1.93	1.40	0.98	0.74	0.64	0.68	0.86	1.22	1.73	2.12	2.31	2.19	1.73	1.25	0.87	0.66	0.62
115	3.61	3.35	2.85	2.11	1.50	1.07	0.92	0.99	1.32	1.85	2.58	3.12	3.37	3.21	2.58	1.92	1.33	1.00	0.90
120	4.91	4.64	4.07	3.13	2.34	1.69	1.47	1.56	2.07	2.79	3.73	4.39	4.69	4.48	3.74	2.91	2.08	1.62	1.45
125	6.37	6.12	5.52	4.53	3.57	2.74	2.44	2.54	3.23	4.10	5.14	5.85	6.19	5.96	5.18	4.21	3.24	2.66	2.42
130	7.94	7.71	7.21	6.26	5.27	4.31	3.91	4.04	4.79	5.73	6.78	7.48	7.80	7.57	6.84	5.88	4.82	4.18	3.94
135	9.51	9.35	9.02	8.24	7.38	6.40	6.01	6.06	6.78	7.66	8.57	9.17	9.44	9.23	8.64	7.81	6.82	6.21	6.01
140	11.0	10.9	10.9	10.4	9.71	8.91	8.61	8.54	9.09	9.76	10.5	10.8	11.0	10.9	10.5	9.87	9.12	8.68	8.55
145	12.3	12.3	12.5	12.4	12.1	11.6	11.4	11.2	11.5	11.9	12.2	12.3	12.3	12.3	12.1	11.9	11.5	11.3	11.3
150	13.3	13.5	14.0	14.3	14.4	14.2	14.0	13.8	13.8	13.7	13.6	13.5	13.4	13.4	13.5	13.7	13.7	13.8	13.9
155	14.1	14.4	15.1	15.7	16.2	16.2	16.2	15.8	15.5	15.0	14.6	14.3	14.2	14.2	14.5	14.9	15.4	15.8	16.0
160	14.6	15.1	15.9	16.6	17.2	17.4	17.4	17.0	16.3	15.7	15.2	14.9	14.8	14.7	15.0	15.5	16.2	16.8	17.2
165	15.3	15.7	16.3	17.0	17.4	17.7	17.5	17.1	16.5	16.0	15.5	15.4	15.5	15.4	15.4	15.7	16.2	16.9	17.3
170	15.9	16.2	16.6	17.0	17.3	17.3	17.0	16.6	16.2	16.1	16.1	16.1	16.3	16.2	16.1	15.9	15.9	16.2	16.6
175	16.6	16.7	16.9	17.0	16.8	16.5	16.2	16.1	16.2	16.5	16.7	16.7	16.9	16.9	16.9	16.6	16.2	16.0	16.1
180	17.2	17.2	17.2	17.1	16.6	16.3	16.1	16.2	16.5	16.9	16.9	17.0	17.2	17.2	17.2	17.0	16.7	16.3	16.1

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: TLO020-21	TYPE:45D	WEIGHT:1
SPEC.:3000K CRI90	DIM.:	SERIAL No.:
MFR.:	SUR.:68	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	2101	2101	2101	2101	2101														
5	1941	1968	1991	2031	2059														
10	1568	1656	1745	1868	1959														
15	1098	1240	1402	1636	1805														
20	676	820	1023	1337	1585														
25	364	486	696	1030	1314														
30	175	261	442	732	998														
35	82.4	135	258	479	694														
40	49.5	71.3	144	289	436														
45	36.6	46.4	82.5	164	254														
50	28.6	34.0	51.4	94.2	147														
55	21.2	25.2	33.4	55.9	84.2														
60	14.0	17.4	20.4	29.5	40.0														
65	7.72	10.5	11.7	14.1	16.2														
70	3.67	5.00	5.69	6.63	7.10														
75	1.31	1.64	1.71	1.96	1.95														
80	0.56	0.57	0.62	0.66	0.71														
85	0.31	0.32	0.33	0.37	0.39														
90	0.25	0.29	0.31	0.39	0.44														
95	0.31	0.37	0.44	0.56	0.65														
100	0.39	0.48	0.62	0.83	1.02														
105	0.51	0.66	0.93	1.25	1.58														
110	0.71	0.97	1.43	1.91	2.37														
115	1.08	1.49	2.18	2.83	3.43														
120	1.74	2.32	3.25	4.06	4.71														
125	2.83	3.58	4.66	5.54	6.20														
130	4.42	5.27	6.41	7.24	7.80														
135	6.56	7.37	8.38	9.04	9.40														
140	9.10	9.74	10.5	10.8	11.0														
145	11.8	12.2	12.5	12.5	12.3														
150	14.3	14.4	14.3	13.8	13.4														
155	16.2	16.1	15.6	14.9	14.3														
160	17.3	17.0	16.4	15.6	15.0														
165	17.5	17.2	16.6	16.0	15.5														
170	16.9	16.9	16.7	16.4	16.0														
175	16.3	16.6	16.7	16.6	16.5														
180	16.2	16.5	16.9	16.9	17.0														

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:28DEG  
Operators:LXJ  
Test Date:2024-09-26

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:5.190m [K=1.0000]  
Remarks: