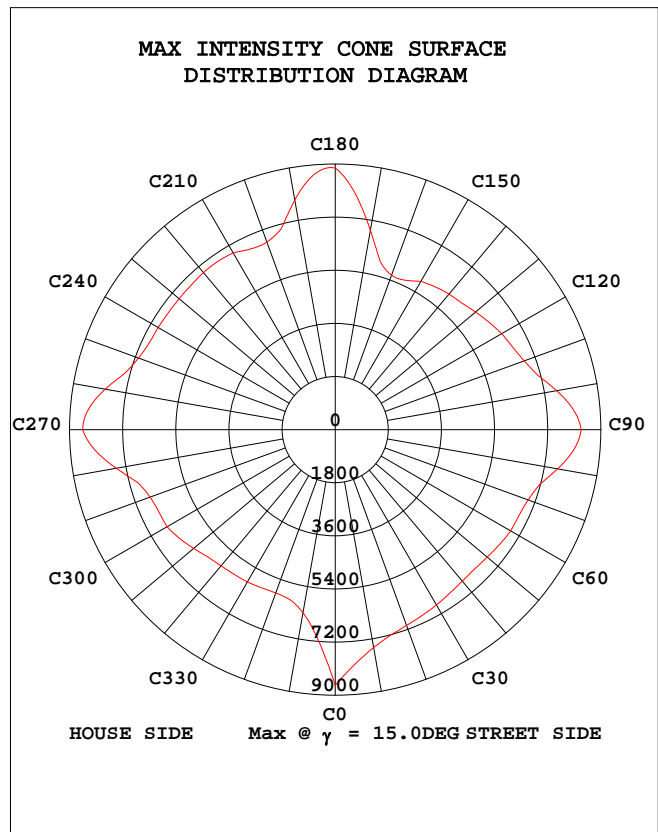
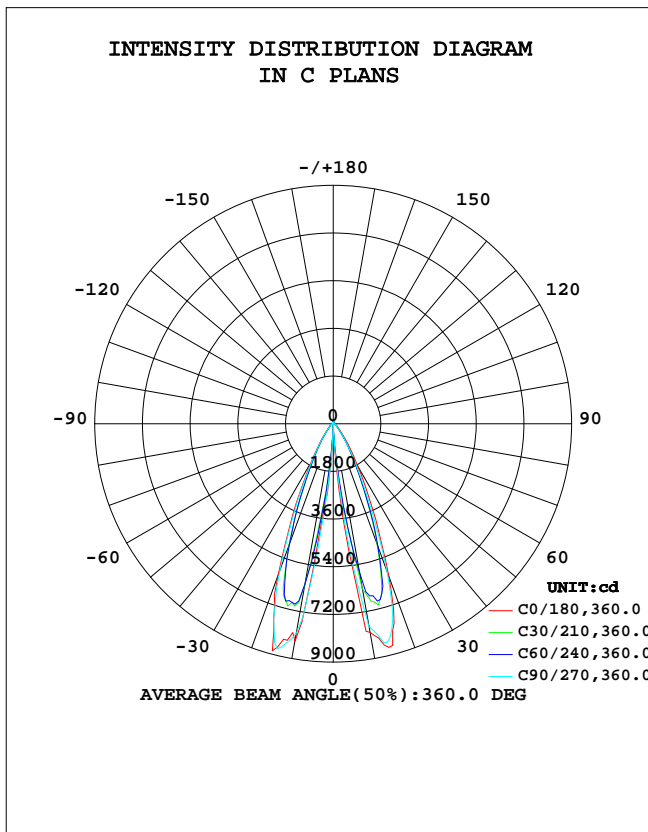


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.28 lm/W			
MODEL	5050 40K RA70 30°L	I <sub>max</sub> (cd)	8869	η street_up(%)	1.7
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	48.3
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	4631	η house_up(%)	1.8
NOMINAL FLUX(lm)	4630.67	MAXIMUM @(C,γ )	180,15.0	η house_down(%)	48.2
LAMPS INSIDE	1	η up(%)	3.5	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	96.5	SLI	16.364



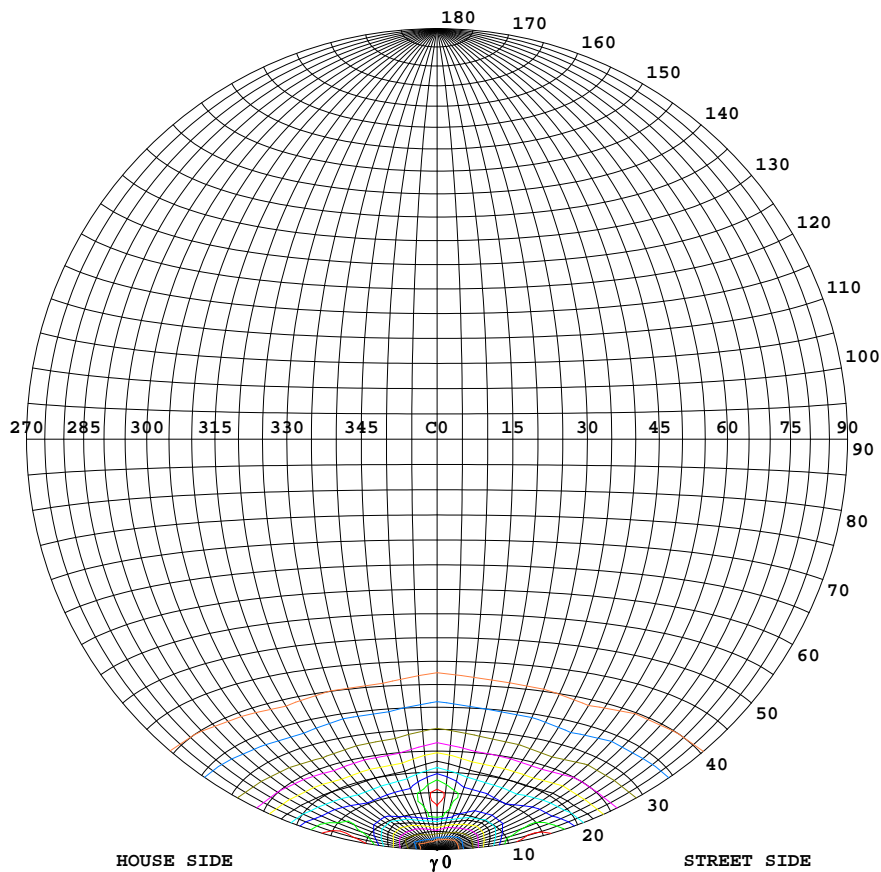
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity:38.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



### Classification:

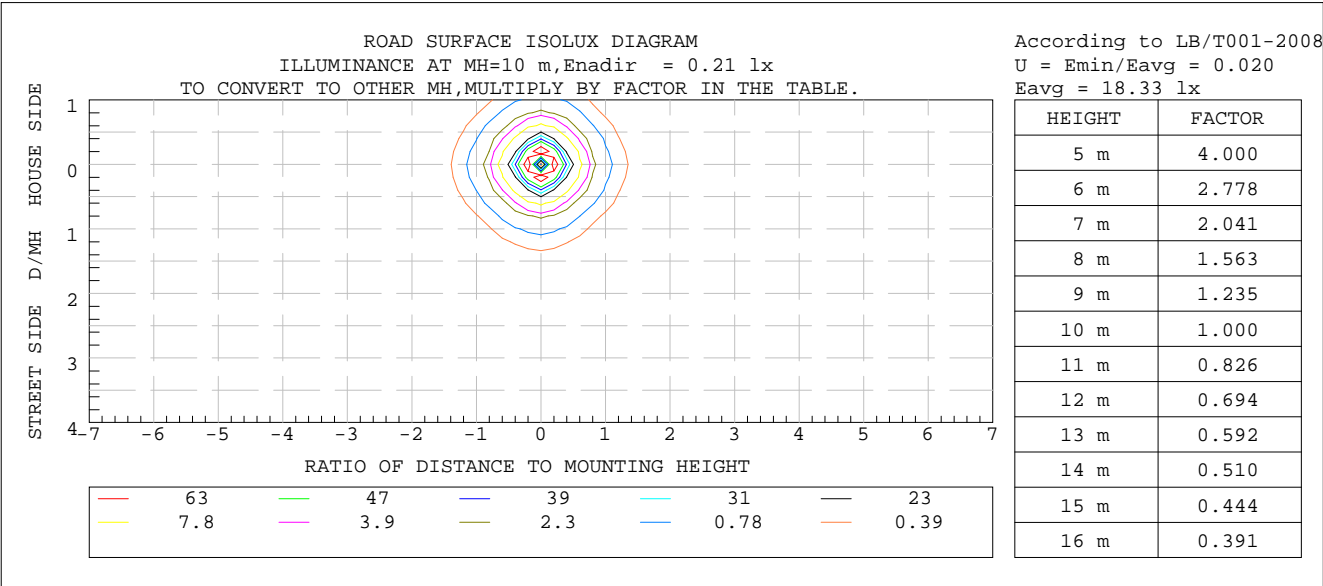
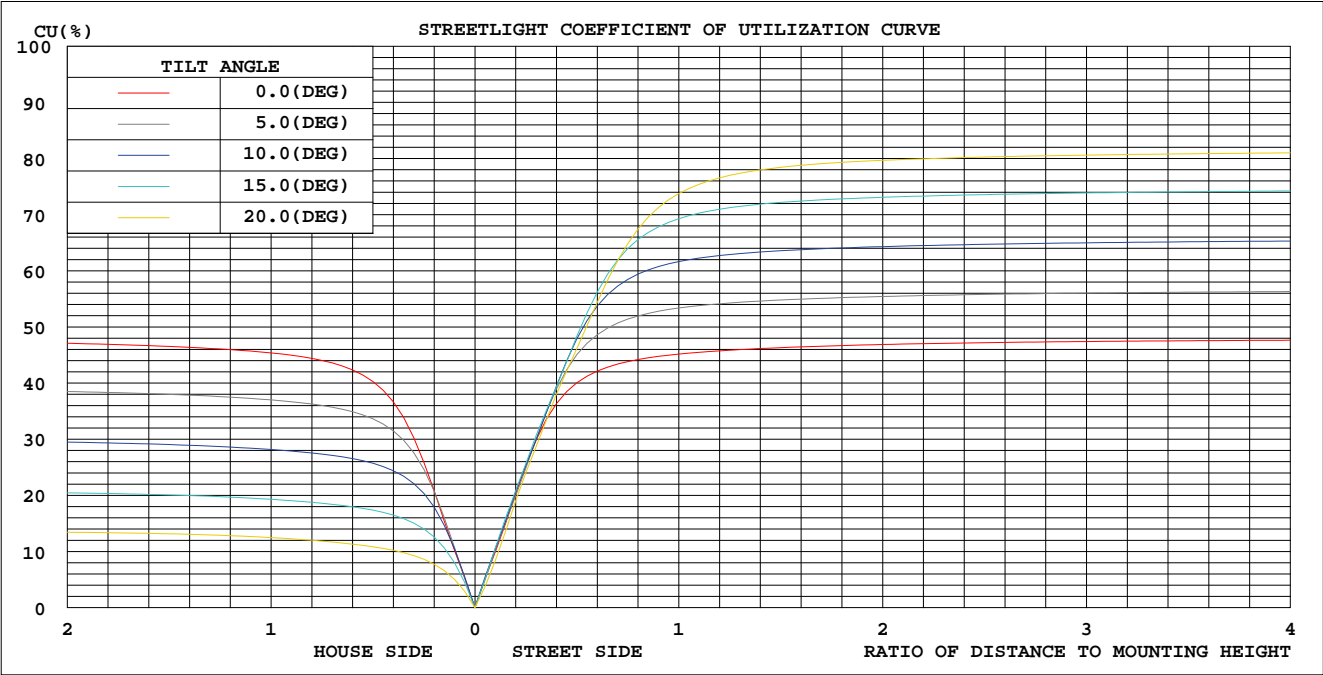
IES:Type V - Very Short  
 CIE:Narrow - Short  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:16.60cd/klm  
 Max.At90:7.983cd/klm  
 Max.80-90:17.18cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	8869
90%	7982
80%	7095
70%	6208
60%	5321
50%	4434
40%	3548
30%	2661
20%	1774
10%	887
5%	443

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity:38.0%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: T-221LED60-24(5050 40K RA70 30°)L

COEFFICIENT OF UTILIZATION CURVE  
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 13.9DEG  
Operators: CS01  
Test Date: 2022-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 38.0%  
Test Distance: 26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	7996	5596	7773	4511	8331	5632	8019	5425	0- 10	320.9	320.9	6.93,6.93
20	6158	4726	5968	4198	6075	4650	5884	4119	10- 20	1797	2118	45.7,45.7
30	1879	1334	1583	1161	1663	1278	1570	1167	20- 30	1257	3375	72.9,72.9
40	598.7	413.6	467.0	342.3	502.8	388.8	473.9	369.3	30- 40	498.5	3874	83.7,83.7
50	252.5	176.5	204.1	146.6	216.5	164.0	203.2	157.7	40- 50	213.3	4087	88.3,88.3
60	168.7	119.4	140.7	99.60	153.3	113.7	144.1	108.1	50- 60	135.7	4223	91.2,91.2
70	122.6	93.36	99.28	80.51	117.1	91.22	100.7	83.70	60- 70	111.5	4334	93.6,93.6
80	58.67	55.91	50.64	53.01	57.05	57.02	49.74	49.46	70- 80	82.89	4417	95.4,95.4
90	23.99	27.30	17.12	24.33	24.15	25.86	14.50	23.32	80- 90	50.79	4468	96.5,96.5
100	4.695	4.108	6.958	3.789	4.721	3.593	6.703	3.129	90-100	16.15	4484	96.8,96.8
110	2.573	3.202	2.036	2.826	3.114	3.770	2.665	3.537	100-110	5.527	4490	97,97
120	12.68	12.70	11.25	10.54	10.90	11.32	10.82	10.97	110-120	7.849	4498	97.1,97.1
130	26.81	25.72	25.23	22.69	26.48	25.64	25.72	23.40	120-130	17.63	4515	97.5,97.5
140	42.33	38.94	40.12	35.16	42.83	40.91	41.64	36.86	130-140	24.81	4540	98,98
150	65.99	65.91	63.51	57.19	66.52	64.83	65.14	57.52	140-150	30.98	4571	98.7,98.7
160	86.32	90.11	84.77	80.82	88.31	92.59	84.95	81.24	150-160	33.59	4605	99.4,99.4
170	60.09	55.96	60.03	53.45	65.66	61.71	61.21	51.36	160-170	22.05	4627	99.9,99.9
180	27.89	27.82	25.61	23.73	28.10	28.04	26.99	25.29	170-180	3.938	4631	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

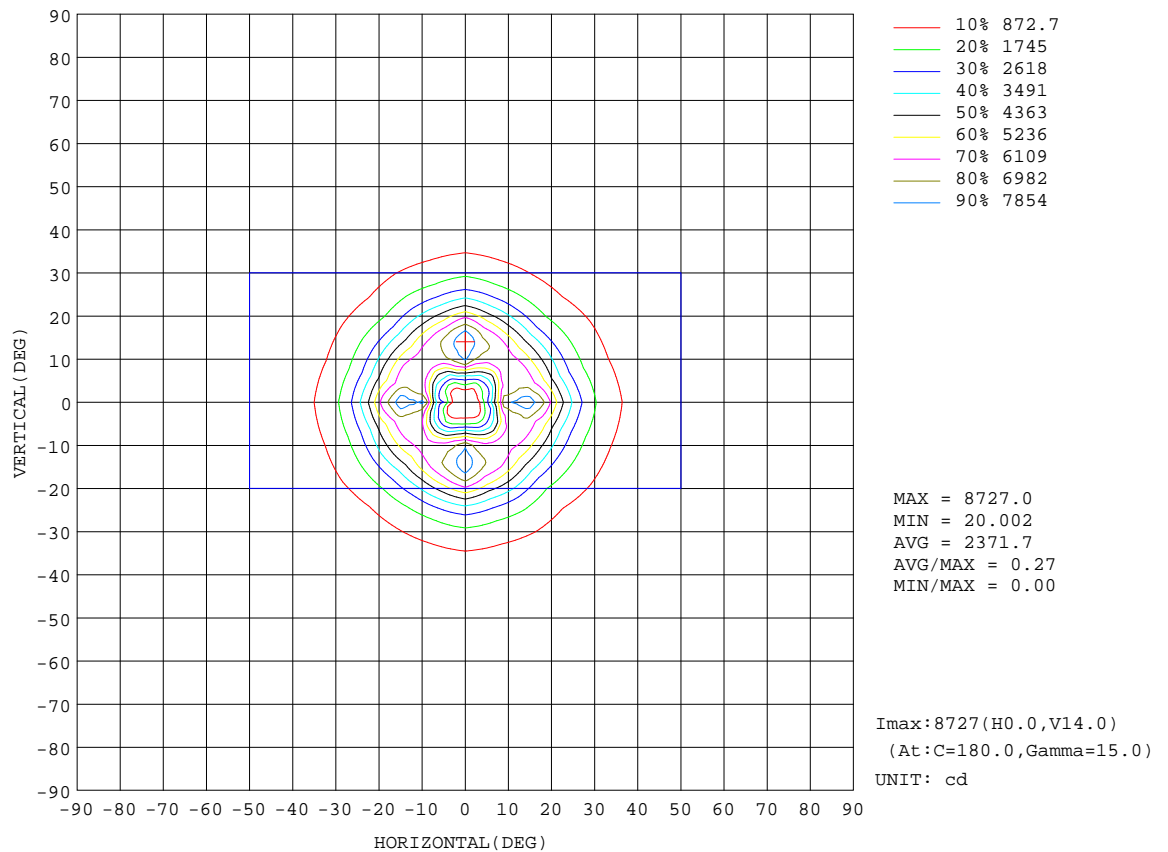
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity:38.0%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

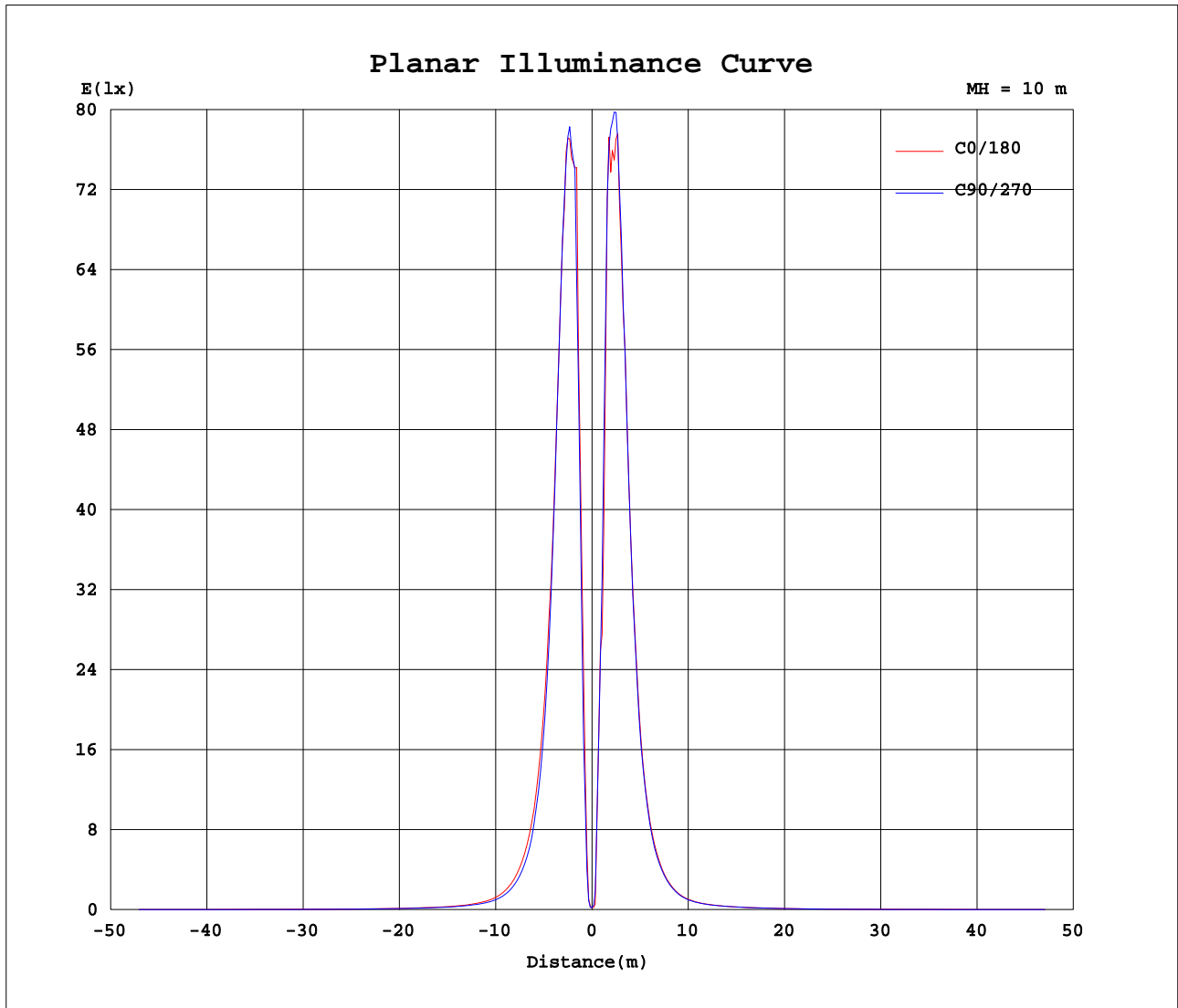
Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity:38.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 13.9DEG  
Operators: CS01  
Test Date: 2022-09-27

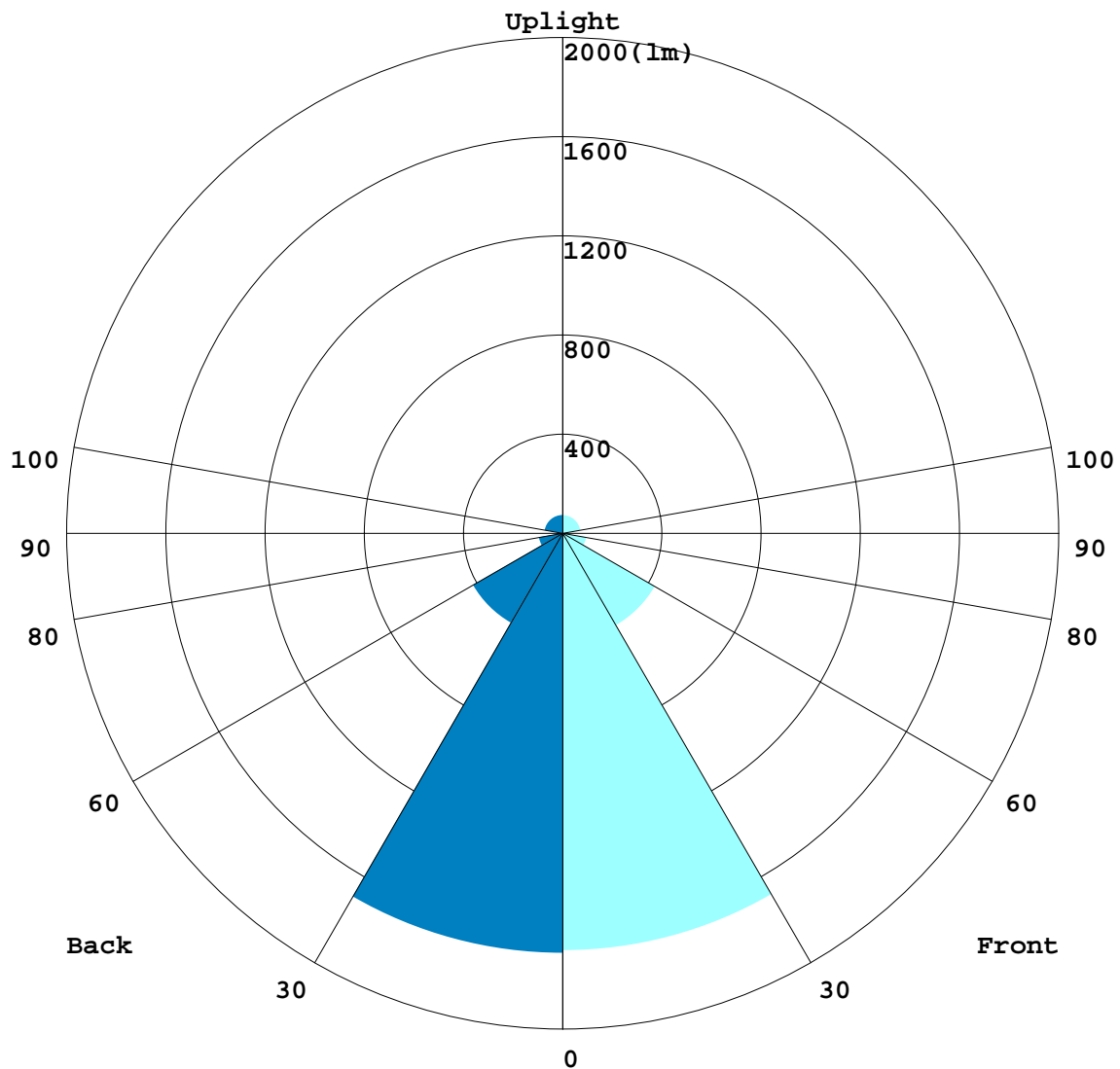
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 38.0%  
Test Distance: 26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LCS REPORT

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

## LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity:38.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## BUG REPORT

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

### IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1682.3	36.3
FM - Front-Medium(30-60)	429.73	9.3
FH - Front-High(60-80)	97.341	2.1
FVH - Front-Very High(80-90)	25.89	0.6
Total Forward Light	2316.2	50.0

BL - Back-Low(0-30)	1693.2	36.6
BM - Back-Medium(30-60)	417.72	9.0
BH - Back-High(60-80)	97.067	2.1
BVH - Back-Very High(80-90)	24.904	0.5
Total Back Light	2314.4	50.0

UL - Uplight-Low(90-100)	16.152	0.3
UH - Uplight-High(100-180)	146.38	3.2
Total Up Light	162.53	3.5

BUG(Back,Up,Glare) Rating	B3-U3-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2232.8	81.607	2314.4
Street Side	2235.3	80.924	2316.2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity:38.0%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: T-221LED60-24(5050 40K RA70 30°)L

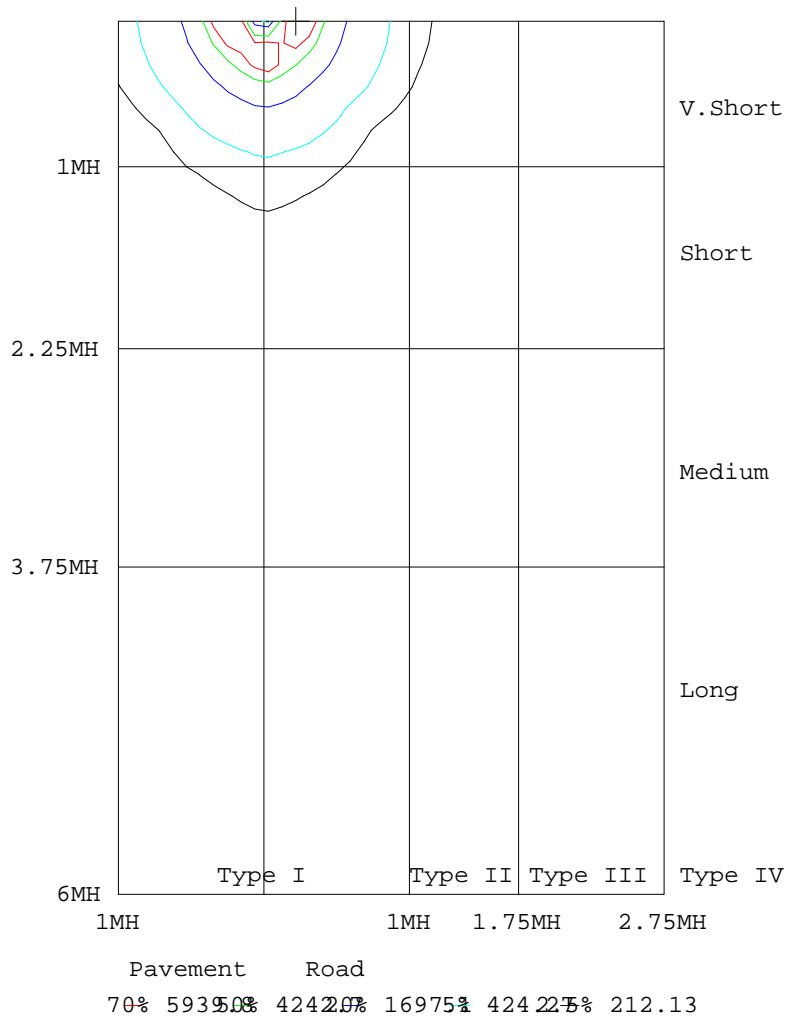


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ROAD ISOCANDELA REPORT

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

### ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-27

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity:38.0%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm																			
NAME: T-221LED60-24										TYPE:					WEIGHT:				
SPEC.:										DIM.:					SERIAL No.:				
MFR.: KLED										SUR.:					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	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
5	2455	2149	1674	1365	1367	1603	1730	1487	1226	939	808	1450	2695	2317	1597	1506	1630	2223	2532
10	7996	6662	6338	5596	5672	6581	7773	6601	5420	4511	4500	5532	8331	6851	6150	5632	6128	7128	8019
15	8663	7215	6861	6677	6864	7175	8331	7111	6513	6068	5804	5896	8869	7058	6919	6914	6932	7382	8554
20	6158	5079	4842	4726	4937	5139	5968	5009	4565	4198	4312	4318	6075	5000	4895	4650	4852	5097	5884
25	3452	2887	2744	2547	2764	2722	3070	2658	2449	2329	2420	2355	3302	2673	2657	2429	2669	2717	3132
30	1879	1639	1551	1334	1482	1434	1583	1354	1238	1161	1279	1245	1663	1400	1423	1278	1401	1396	1570
35	1045	925	866	738	796	772	827	723	670	614	686	671	902	768	763	702	770	765	839
40	599	533	500	414	454	441	467	416	382	342	389	381	503	437	425	389	437	438	474
45	359	327	300	250	275	269	282	253	229	206	233	233	303	269	258	230	262	265	281
50	253	230	211	177	194	194	204	184	168	147	165	168	217	195	186	164	186	191	203
55	195	178	165	139	153	154	163	145	133	115	130	132	173	158	149	131	147	152	164
60	169	153	141	119	131	132	141	124	114	99.6	112	114	153	139	130	114	126	132	144
65	146	133	125	105	115	114	121	107	101	88.9	100	101	135	123	117	101	112	113	123
70	123	112	107	93.4	98.7	94.8	99.3	89.3	88.8	80.5	88.6	87.1	117	106	103	91.2	96.4	93.6	101
75	92.2	87.7	86.9	79.4	85.0	73.8	75.1	69.7	80.7	72.8	73.6	69.6	89.6	85.2	85.9	81.0	85.3	72.1	74.5
80	58.7	70.3	76.5	55.9	72.4	60.4	50.6	58.6	71.6	53.0	62.7	59.3	57.0	73.0	76.9	57.0	75.1	60.4	49.7
85	44.4	53.2	56.0	34.2	53.3	60.5	37.3	56.2	49.2	31.1	50.8	48.0	50.7	58.2	60.3	33.6	46.1	50.6	32.3
90	24.0	33.3	37.0	27.3	29.3	27.1	17.1	25.6	27.8	24.3	32.0	29.6	24.2	33.6	36.7	25.9	25.3	22.0	14.5
95	12.4	16.2	15.3	10.15	14.6	16.1	13.5	15.9	14.7	9.79	13.8	14.3	13.1	16.8	15.9	10.66	14.2	14.7	12.7
100	4.69	9.00	7.25	4.11	8.40	9.16	6.96	9.04	8.21	3.79	6.47	7.75	4.72	8.77	7.06	3.59	7.89	8.58	6.70
105	2.31	6.17	6.34	3.15	6.16	6.55	3.47	6.46	5.99	2.73	5.53	5.14	2.47	6.01	6.39	3.20	6.05	5.91	2.86
110	2.57	6.23	6.34	3.20	6.16	5.76	2.04	5.43	5.83	2.83	5.52	5.14	3.11	6.67	6.79	3.77	6.49	5.93	2.67
115	5.73	9.00	9.14	6.05	8.92	8.52	4.75	7.51	7.79	4.83	7.50	7.14	5.42	8.81	8.93	5.98	8.79	8.24	5.17
120	12.7	15.4	15.6	12.7	15.3	14.8	11.3	13.3	13.5	10.5	13.0	12.4	10.9	14.1	14.2	11.3	14.0	13.5	10.8
125	20.3	22.7	22.5	19.9	22.1	21.5	18.8	20.2	20.2	17.3	19.3	18.5	18.5	21.3	21.6	18.9	21.0	20.4	18.2
130	26.8	28.5	28.1	25.7	27.3	27.1	25.2	26.0	25.6	22.7	24.1	23.7	26.5	28.6	28.4	25.6	27.7	27.2	25.7
135	33.5	34.5	34.1	31.4	32.9	32.7	31.6	31.4	30.8	28.0	29.1	28.5	33.8	35.2	34.7	32.3	33.8	33.7	32.8
140	42.3	42.4	41.7	38.9	40.6	40.2	40.1	38.6	37.6	35.2	35.6	34.9	42.8	43.2	42.9	40.9	41.4	41.5	41.6
145	53.4	52.4	51.4	50.7	50.8	49.8	51.2	48.0	47.0	44.7	44.3	43.4	54.5	53.5	53.0	51.5	51.5	51.3	52.8
150	66.0	64.5	65.4	65.9	63.1	61.4	63.5	59.2	59.4	57.2	55.2	53.5	66.5	65.3	65.3	64.8	64.3	63.0	65.1
155	78.4	76.9	79.9	79.6	75.5	73.2	75.9	70.6	72.3	70.9	66.5	63.8	78.5	77.3	79.2	80.2	78.1	74.8	76.8
160	86.3	85.1	87.2	90.1	85.2	81.7	84.8	78.9	79.7	80.8	76.4	72.1	88.3	87.7	89.8	92.6	89.1	83.6	84.9
165	82.5	82.0	83.2	83.8	81.5	78.2	81.9	77.1	78.1	77.7	74.8	71.2	86.5	86.6	87.2	89.1	86.4	80.8	81.9
170	60.1	60.4	58.1	56.0	55.0	56.3	60.0	57.8	55.8	53.5	53.0	53.0	65.7	66.5	64.2	61.7	59.3	58.8	61.2
175	33.5	33.6	32.7	31.7	31.6	32.6	33.7	32.1	31.4	30.1	30.2	30.9	37.4	38.6	37.4	35.1	33.0	33.1	35.0
180	27.9	27.8	27.8	27.8	27.7	26.8	25.6	24.4	24.6	23.7	23.1	21.4	28.1	28.5	28.8	28.0	27.1	26.7	27.0

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity:38.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.07V I:0.2650A P:57.683W PF:0.9892 Freq:50.01Hz Lamp Flux:4630.67x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345													
0	20.6	20.6	20.6	20.6	20.6													
5	2074	1588	1695	1835	2094													
10	6590	5723	5425	5916	5728													
15	6929	6579	6103	5960	5960													
20	4900	4490	4119	4130	4141													
25	2619	2421	2176	2287	2305													
30	1342	1256	1167	1281	1286													
35	735	695	650	727	729													
40	424	403	369	417	417													
45	257	245	223	251	257													
50	185	173	158	177	184													
55	148	140	125	140	144													
60	128	121	108	121	125													
65	111	107	94.9	107	109													
70	91.2	91.9	83.7	91.3	92.4													
75	70.5	78.9	70.3	74.2	72.8													
80	56.0	68.4	49.5	65.4	58.5													
85	49.5	44.6	29.7	47.9	43.5													
90	22.4	23.0	23.3	30.0	26.0													
95	14.6	13.0	8.93	12.9	12.8													
100	8.52	7.37	3.13	5.85	6.90													
105	6.03	5.68	2.93	5.48	5.18													
110	6.05	6.24	3.54	6.06	5.74													
115	8.34	8.54	5.77	8.30	7.87													
120	13.5	13.8	11.0	13.2	12.6													
125	20.2	20.4	17.6	19.3	18.5													
130	26.7	26.4	23.4	25.0	24.2													
135	32.6	32.2	29.2	30.1	29.6													
140	40.1	39.4	36.9	37.1	36.4													
145	49.5	48.4	46.4	46.1	44.8													
150	60.5	59.8	57.5	56.4	54.6													
155	71.9	72.4	70.7	67.4	64.0													
160	81.0	81.6	81.2	76.9	70.7													
165	79.5	78.1	76.6	72.8	67.6													
170	59.3	56.2	51.4	48.4	47.6													
175	34.3	33.0	29.9	27.8	27.5													
180	26.6	26.5	25.3	24.1	23.3													

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
γ Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity:38.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 30°)L