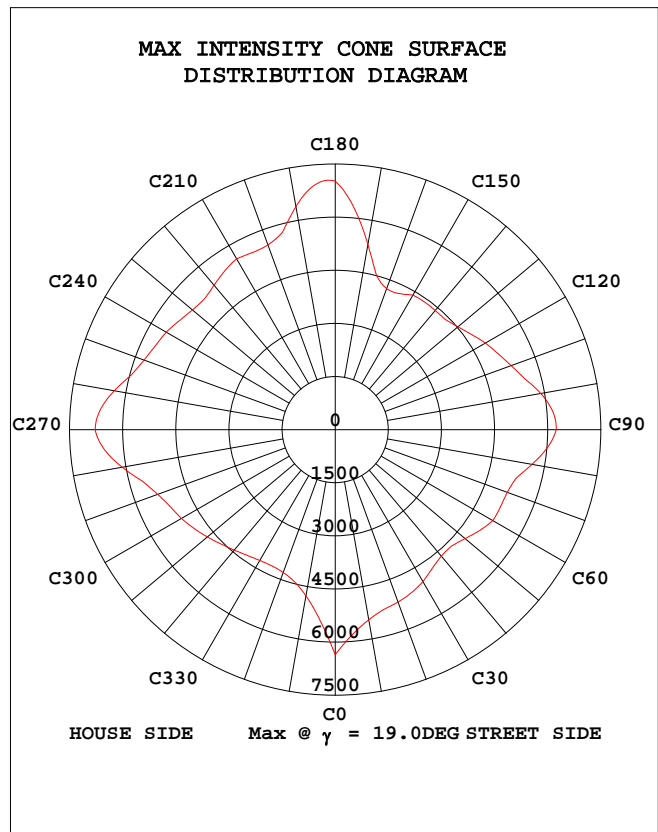
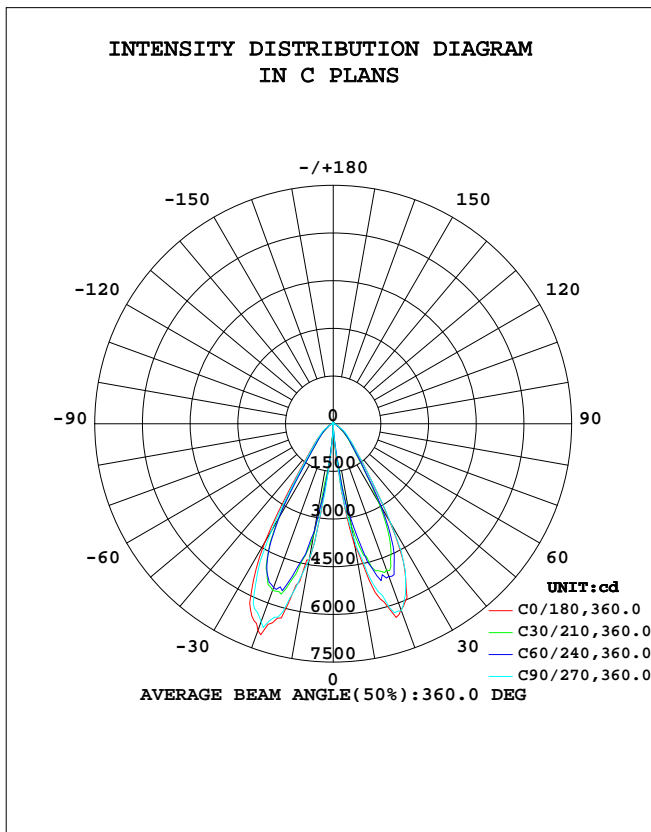


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 98.69 lm/W			
MODEL	5050 40K RA70 60°L	I <sub>max</sub> (cd)	7018	η street_up(%)	0.9
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	48.3
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	5696	η house_up(%)	0.9
NOMINAL FLUX(lm)	5695.54	MAXIMUM @(C,γ )	180,19.0	η house_down(%)	49.8
LAMPS INSIDE	1	η up(%)	1.9	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	98.1	SLI	16.410



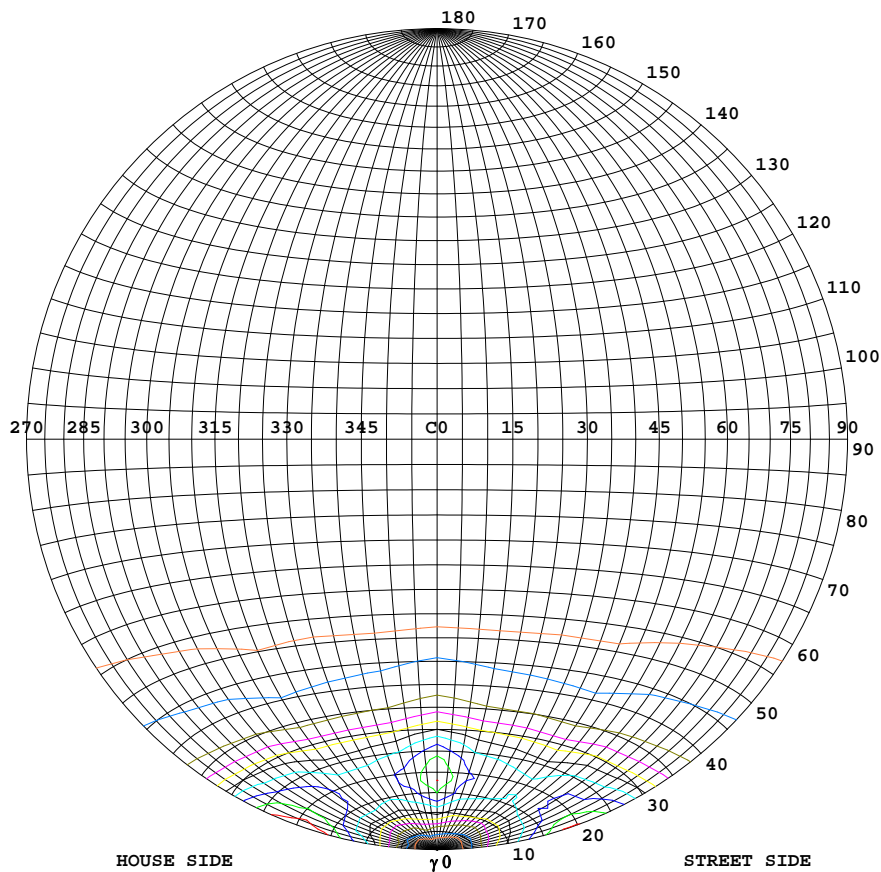
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-27

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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



### Classification:

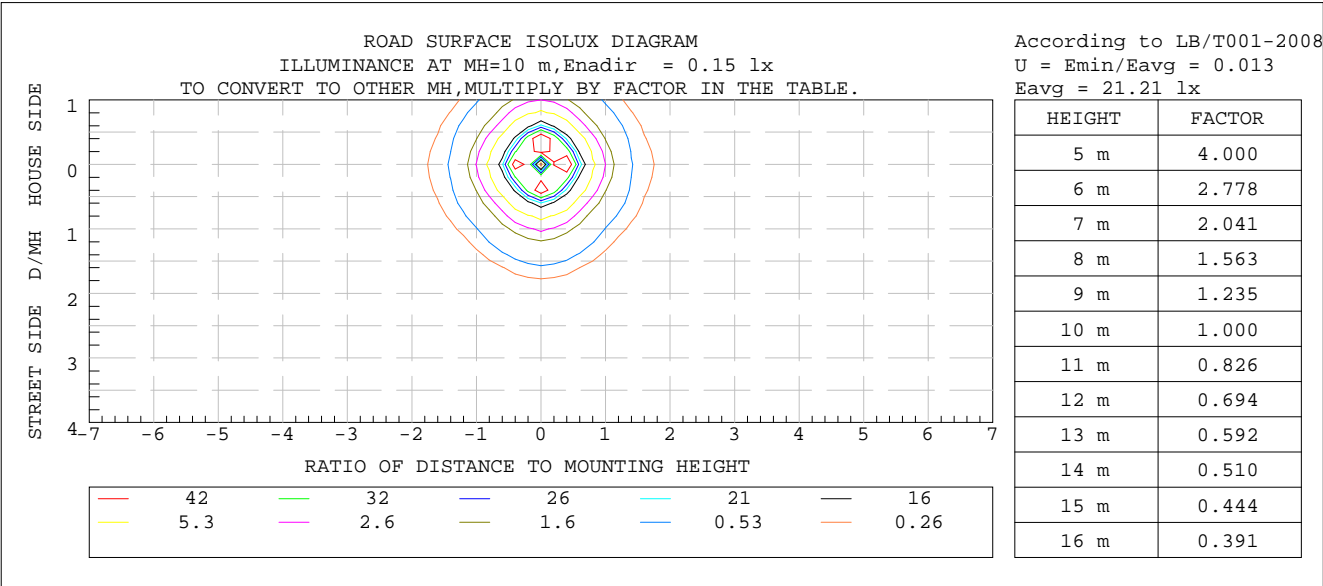
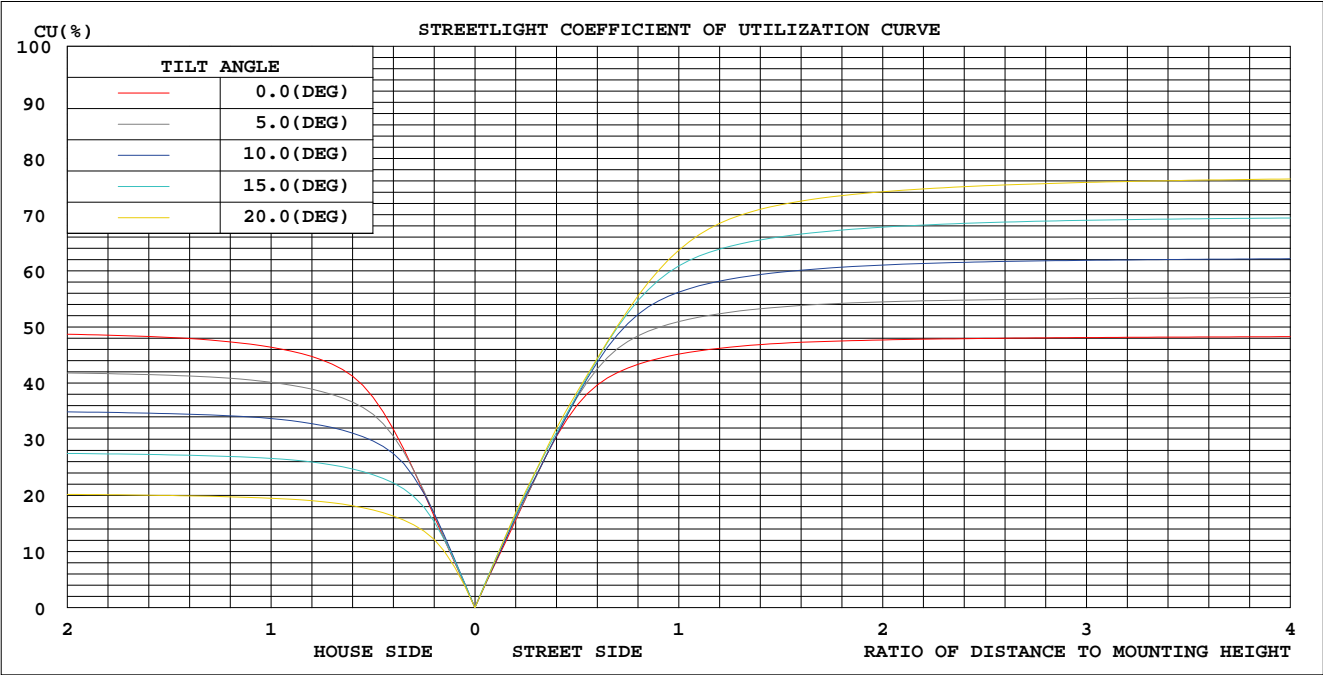
IES:Type V - Very Short  
 CIE:Narrow - Short  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:10.12cd/klm  
 Max.At90:3.283cd/klm  
 Max.80-90:10.12cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	7018
90%	6316
80%	5614
70%	4913
60%	4211
50%	3509
40%	2807
30%	2105
20%	1404
10%	702
5%	351

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 60°)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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum,lamp
10	3905	2829	3564	2253	4366	2942	4305	2875	0- 10	156.2	156.2	2.74,2.74
20	6238	4714	6261	4386	6929	5104	6628	4435	10- 20	1339	1495	26.2,26.2
30	3565	2660	3629	2745	4303	3053	3905	2406	20- 30	2042	3537	62.1,62.1
40	1141	830.7	1145	767.5	1113	794.1	1065	706.5	30- 40	1057	4594	80.7,80.7
50	442.5	416.6	572.1	371.3	439.7	362.7	515.1	346.1	40- 50	490.0	5084	89.3,89.3
60	215.9	164.8	223.6	151.1	212.0	159.7	206.5	137.8	50- 60	263.2	5347	93.9,93.9
70	111.8	84.81	109.1	80.85	124.4	90.27	105.2	73.98	60- 70	132.8	5480	96.2,96.2
80	50.66	44.35	42.71	41.21	52.11	46.27	41.81	40.34	70- 80	73.86	5554	97.5,97.5
90	13.05	12.85	10.32	11.85	13.73	12.92	9.613	11.40	80- 90	34.70	5588	98.1,98.1
100	2.359	3.357	1.981	2.884	2.359	3.299	1.873	3.038	90-100	9.025	5597	98.3,98.3
110	2.357	3.299	1.868	2.883	2.843	3.699	2.398	3.450	100-110	5.366	5603	98.4,98.4
120	8.143	8.529	7.172	7.143	7.453	8.153	7.402	7.898	110-120	6.603	5609	98.5,98.5
130	17.13	16.61	16.11	14.62	17.17	16.73	16.84	15.66	120-130	12.11	5621	98.7,98.7
140	27.76	25.80	26.37	22.89	27.87	26.65	27.59	24.80	130-140	16.53	5638	99,99
150	41.68	42.83	40.08	36.80	41.60	41.62	41.12	38.26	140-150	20.44	5658	99.3,99.3
160	51.57	55.73	50.26	49.57	51.94	56.31	50.31	50.82	150-160	21.15	5679	99.7,99.7
170	37.24	35.78	36.65	33.58	39.79	38.79	37.87	33.66	160-170	13.46	5693	100,100
180	19.09	19.62	18.59	17.61	19.19	19.68	18.57	17.81	170-180	2.602	5696	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

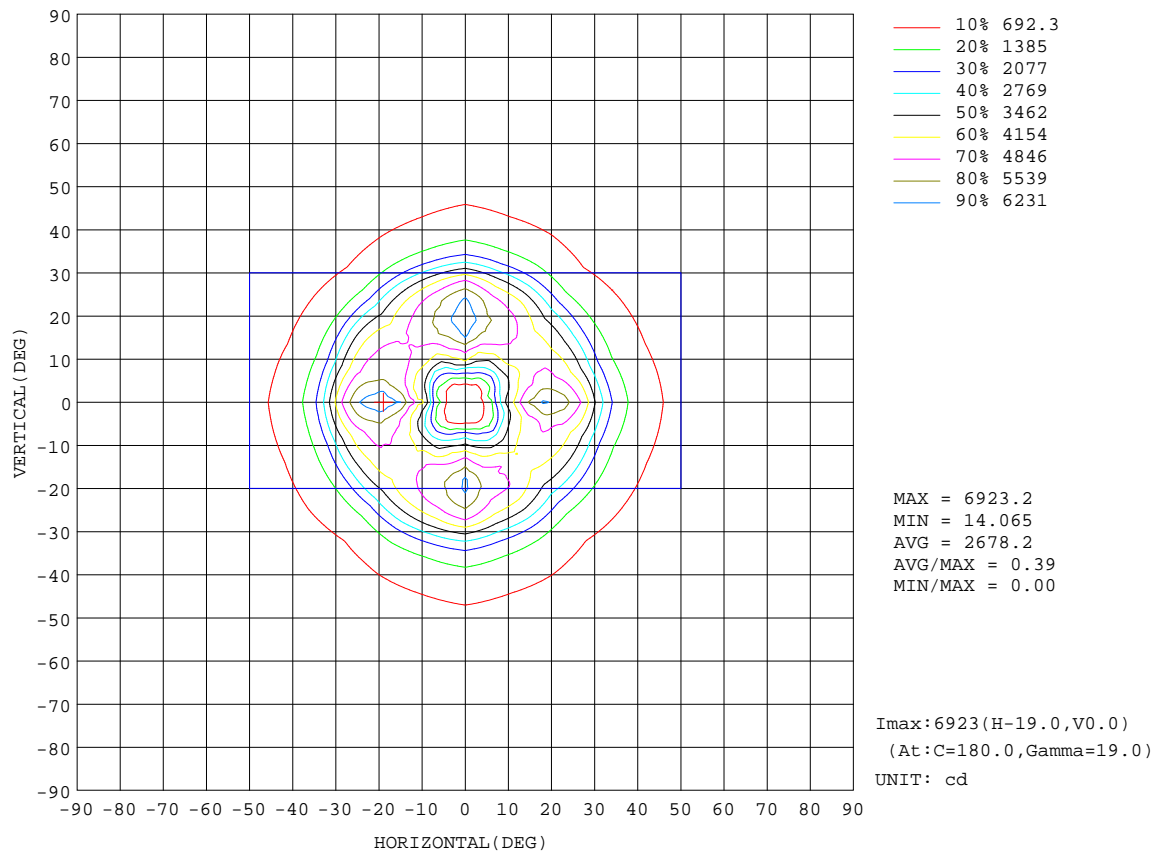
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-27

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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

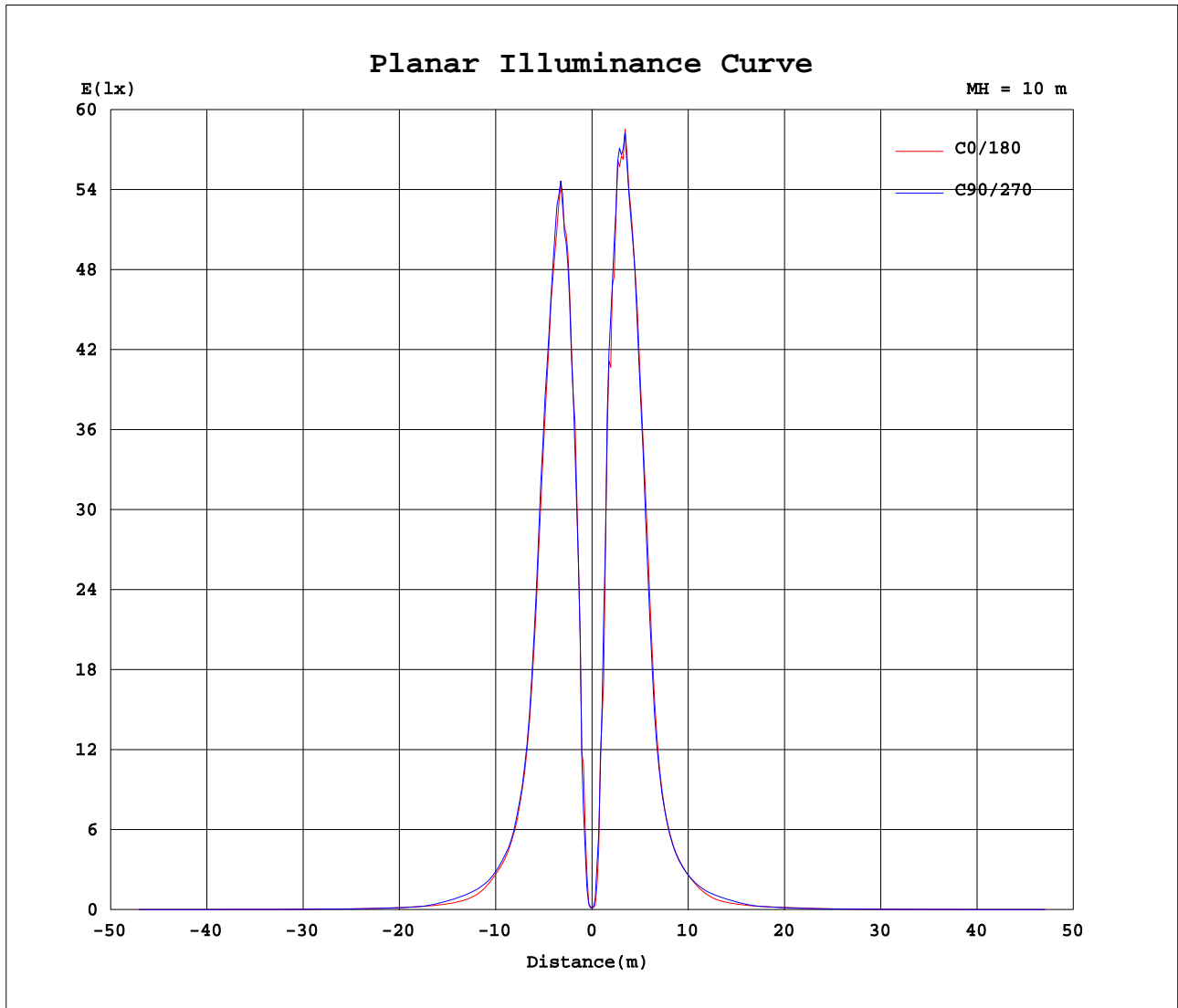
Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



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 60°)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

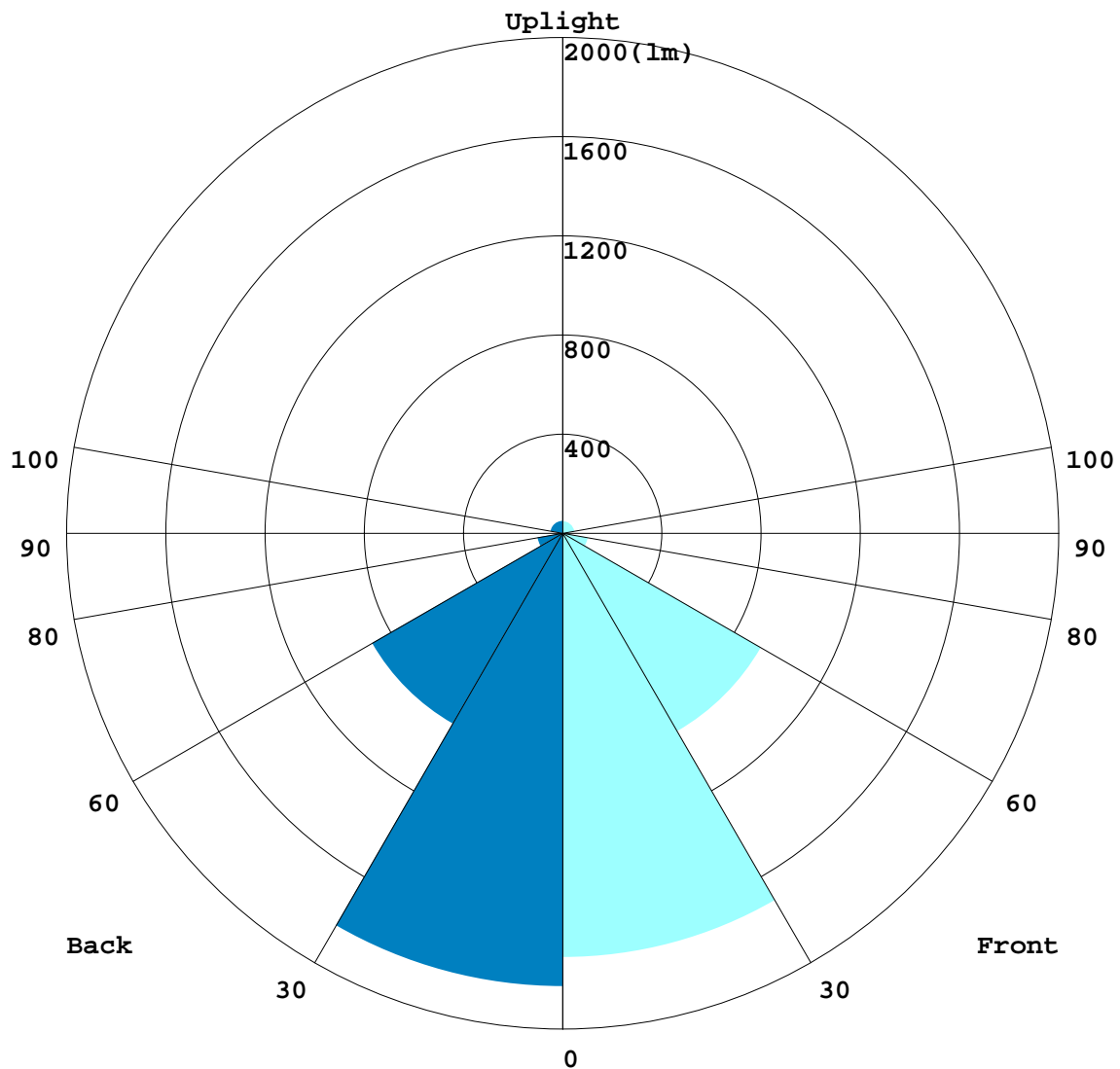
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 38.0%  
Test Distance: 26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LCS REPORT

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## BUG REPORT

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 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)	1709.7	30.0
FM - Front-Medium(30-60)	922.78	16.2
FH - Front-High(60-80)	103.72	1.8
FVH - Front-Very High(80-90)	17.328	0.3
Total Forward Light	2806.8	49.3

BL - Back-Low(0-30)	1827.3	32.1
BM - Back-Medium(30-60)	887.11	15.6
BH - Back-High(60-80)	102.98	1.8
BVH - Back-Very High(80-90)	17.372	0.3
Total Back Light	2888.7	50.7

UL - Uplight-Low(90-100)	9.0247	0.2
UH - Uplight-High(100-180)	98.257	1.7
Total Up Light	107.28	1.9

BUG(Back,Up,Glare) Rating	B3-U3-G1
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2834.7	54.014	2888.7
Street Side	2753.5	53.268	2806.8

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 60°)L

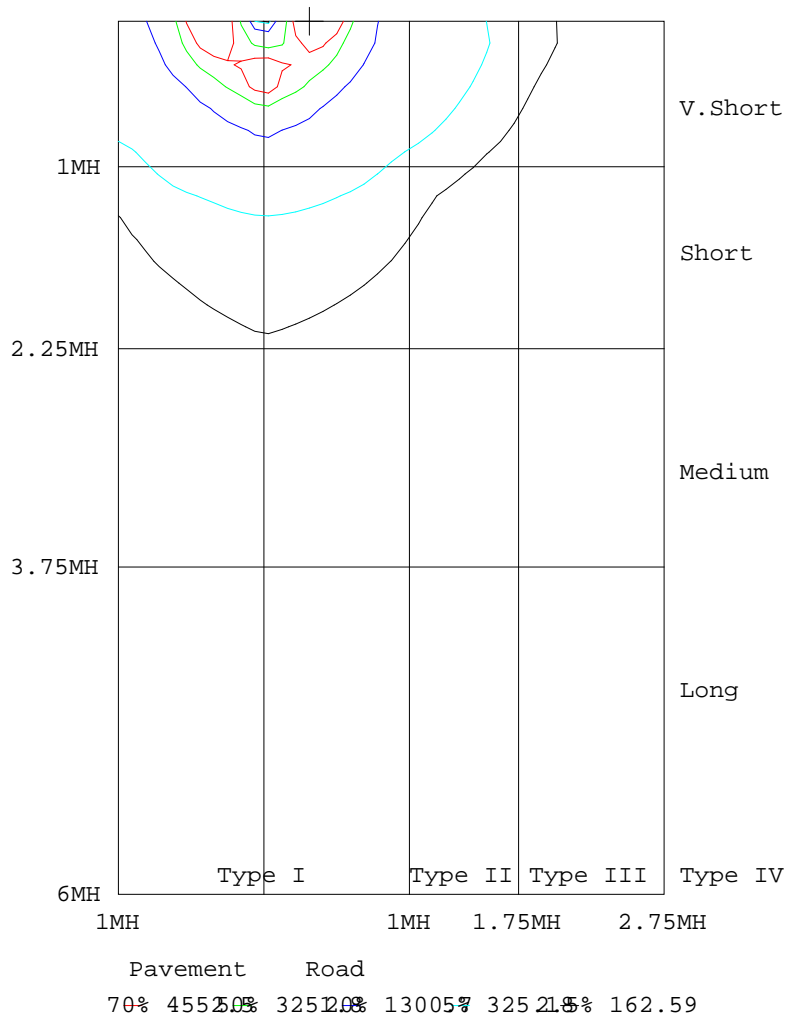


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ROAD ISOCANDELA REPORT

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 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

$\gamma$  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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 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	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
5	1107	962	786	594	565	693	732	630	507	450	371	704	1191	1057	693	730	720	1068	1058
10	3905	3208	3236	2829	2839	3135	3564	3265	2652	2253	2248	2731	4366	3774	3535	2942	3451	3880	4305
15	5704	4861	4667	4232	4681	4815	5463	4942	4375	3978	3847	4068	6328	5195	5104	4872	4955	5404	6130
20	6238	5188	4901	4714	5114	5292	6261	5507	4890	4386	4446	4738	6929	5775	5578	5104	5482	5994	6628
25	5405	4421	4276	4005	4549	4619	5385	4889	4424	3988	4008	4163	6221	5132	5013	4436	4948	5305	5895
30	3565	3000	2893	2660	3041	3120	3629	3364	3090	2745	2767	2928	4303	3524	3456	3053	3405	3571	3905
35	1882	1586	1533	1360	1598	1665	1908	1735	1604	1365	1395	1455	1970	1667	1586	1421	1582	1656	1853
40	1141	966	926	831	964	1014	1145	1025	910	768	812	822	1113	925	888	794	897	954	1065
45	766	668	637	583	683	715	797	714	625	522	548	553	742	623	596	526	603	643	723
50	443	429	438	417	489	519	572	519	452	371	387	366	440	409	409	363	432	466	515
55	287	280	285	274	334	374	427	387	316	251	250	236	274	261	259	240	287	335	379
60	216	203	191	165	182	197	224	203	170	151	161	165	212	194	181	160	173	185	206
65	165	153	141	122	132	134	152	132	118	109	122	131	180	163	151	126	134	129	143
70	112	104	97.7	84.8	93.5	95.9	109	97.7	88.4	80.8	87.8	91.6	124	115	109	90.3	95.2	95.5	105
75	75.7	74.7	72.4	61.2	69.0	72.0	72.1	72.7	65.4	58.1	64.0	64.1	80.1	79.9	77.5	64.3	71.2	74.2	73.9
80	50.7	55.2	53.8	44.3	53.7	56.8	42.7	56.2	50.0	41.2	47.4	46.8	52.1	57.6	56.6	46.3	54.8	56.9	41.8
85	28.8	38.6	34.8	27.4	33.3	36.6	25.1	36.8	30.8	25.3	30.9	33.2	30.9	40.3	36.8	28.3	33.2	37.0	24.5
90	13.0	18.2	18.5	12.9	16.3	16.3	10.3	16.5	15.2	11.8	16.5	15.6	13.7	18.2	18.7	12.9	15.4	15.3	9.61
95	5.50	9.88	9.36	4.88	9.62	10.1	5.18	9.92	8.75	4.52	7.98	8.06	5.07	8.85	8.53	4.42	8.58	8.92	4.63
100	2.36	7.21	7.39	3.36	7.12	6.70	1.98	6.38	6.49	2.88	6.13	5.67	2.36	6.32	6.59	3.30	6.45	5.78	1.87
105	2.31	6.98	7.28	3.30	6.96	6.37	1.72	6.05	6.23	2.83	5.94	5.48	2.41	6.32	6.59	3.36	6.39	5.73	1.98
110	2.36	6.82	7.10	3.30	6.84	6.37	1.87	6.00	6.18	2.88	5.84	5.39	2.84	6.54	6.76	3.70	6.62	6.00	2.40
115	4.11	7.81	8.07	4.83	7.90	7.43	3.43	6.95	6.84	3.81	6.52	6.17	4.24	7.65	7.85	5.02	7.80	7.29	4.07
120	8.14	11.4	11.6	8.53	11.5	11.1	7.17	10.2	9.91	7.14	9.47	9.05	7.45	10.6	10.8	8.15	10.8	10.3	7.40
125	12.9	15.6	15.7	12.9	15.5	15.1	11.8	14.3	13.7	11.2	13.0	12.5	12.1	14.8	15.1	12.6	14.9	14.4	12.0
130	17.1	19.1	19.0	16.6	18.6	18.5	16.1	17.9	17.0	14.6	16.0	15.6	17.2	19.1	19.0	16.7	18.9	18.6	16.8
135	21.7	23.1	22.9	20.4	22.3	22.2	20.5	21.5	20.2	18.1	19.0	18.7	21.9	23.2	23.0	21.0	22.8	22.7	21.6
140	27.8	28.4	28.0	25.8	27.4	27.3	26.4	26.6	24.6	22.9	23.1	22.8	27.9	28.5	28.3	26.6	27.9	28.0	27.6
145	34.7	34.7	34.4	33.4	34.2	33.6	33.3	32.5	30.6	29.1	28.7	28.0	35.0	35.1	34.9	33.6	34.5	34.3	34.5
150	41.7	41.9	43.0	42.8	41.9	40.3	40.1	39.2	37.9	36.8	35.2	33.8	41.6	41.7	42.2	41.6	42.2	41.0	41.1
155	47.9	48.2	51.0	50.5	48.9	46.5	46.3	45.3	44.9	44.6	41.4	39.4	47.5	48.0	49.9	50.1	49.9	47.2	47.0
160	51.6	51.8	54.4	55.7	53.6	50.3	50.3	49.2	48.4	49.6	46.3	43.5	51.9	52.7	54.5	56.3	55.1	50.8	50.3
165	49.2	50.0	51.7	51.5	50.8	48.0	48.4	48.2	46.9	47.3	45.0	42.5	50.6	51.6	52.5	53.4	52.9	49.2	48.4
170	37.2	38.1	37.4	35.8	35.9	36.0	36.6	36.9	34.5	33.6	32.9	33.2	39.8	41.2	40.4	38.8	38.1	37.4	37.9
175	23.1	23.4	23.1	22.3	22.7	22.9	22.8	22.7	21.3	20.8	20.6	20.9	24.6	25.7	25.4	23.9	22.9	22.6	23.3
180	19.1	19.5	19.6	19.6	19.5	18.8	18.6	18.5	17.9	17.6	16.9	16.0	19.2	20.0	20.2	19.7	19.4	18.7	18.6

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 60°)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.00V I:0.2652A P:57.709W PF:0.9893 Freq:50.01Hz Lamp Flux:5695.54x1 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	14.5	14.5	14.5	14.5	14.5													
5	1127	699	769	836	1074													
10	3545	3091	2875	2900	2951													
15	5194	4684	4335	4105	4146													
20	5663	5063	4435	4298	4455													
25	4973	4375	3700	3601	3738													
30	3305	2896	2406	2360	2413													
35	1609	1426	1193	1231	1266													
40	935	853	706	758	780													
45	646	588	486	524	537													
50	463	414	346	362	342													
55	333	279	226	228	225													
60	181	156	138	151	163													
65	118	110	99.4	111	120													
70	92.2	83.6	74.0	80.6	83.8													
75	72.1	64.3	55.3	61.5	62.4													
80	57.2	49.9	40.3	46.4	46.4													
85	36.9	30.9	24.9	30.2	33.1													
90	15.5	14.5	11.4	15.5	14.8													
95	9.29	7.94	3.89	7.44	7.61													
100	6.26	6.23	3.04	6.03	5.62													
105	6.21	6.18	3.14	6.03	5.62													
110	6.48	6.33	3.45	6.23	5.90													
115	7.76	7.58	4.84	7.37	6.88													
120	10.8	10.4	7.90	10.0	9.53													
125	14.9	14.3	12.0	13.6	13.1													
130	18.9	17.9	15.7	16.9	16.5													
135	22.9	21.6	19.6	20.3	20.2													
140	28.1	26.4	24.8	25.0	24.8													
145	34.2	32.2	31.2	31.0	30.3													
150	40.8	39.1	38.3	37.3	36.0													
155	46.8	45.9	45.7	43.3	40.9													
160	50.5	49.7	50.8	47.7	43.7													
165	49.3	47.2	47.4	45.0	41.8													
170	38.6	35.8	33.7	31.6	30.8													
175	24.1	22.7	21.1	19.6	19.2													
180	19.2	18.3	17.8	16.9	16.3													

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  
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 60°)L