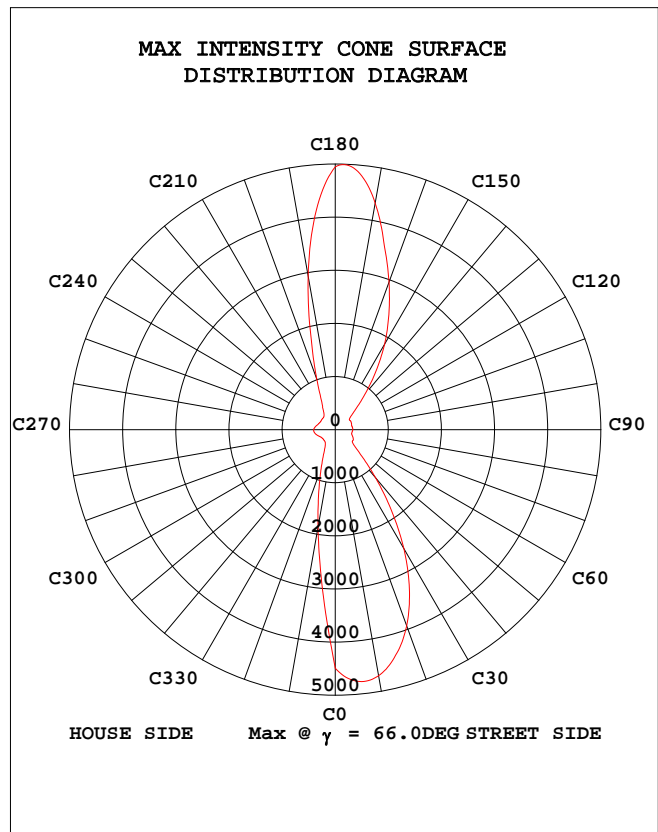
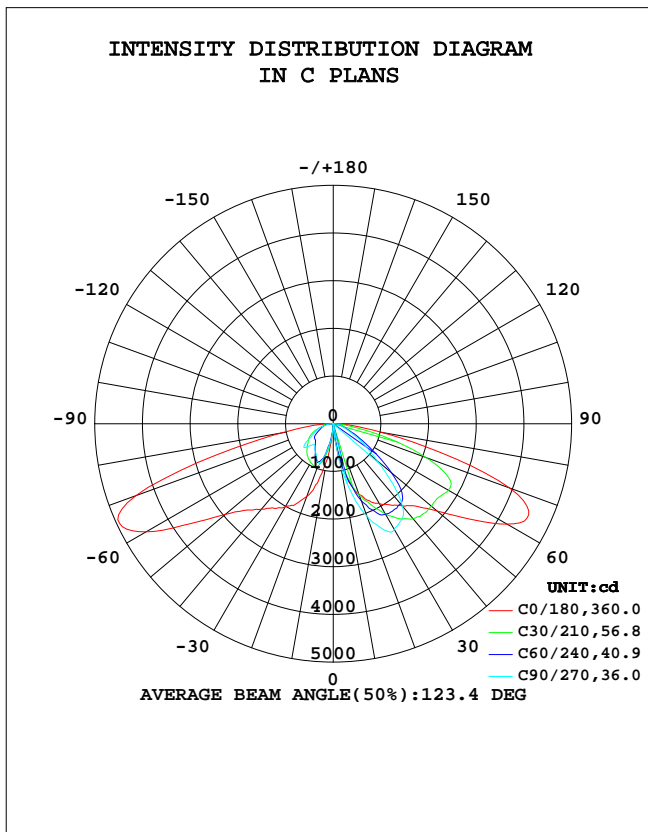


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 113.52 lm/W			
MODEL: 5050	40K RA70 TYPE II L	I <sub>max</sub> (cd)	4947	η street_up(%)	0.5
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	66.5
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	6551	η house_up(%)	0.6
NOMINAL FLUX(lm)	6550.71	MAXIMUM @ (C, γ )	180, 66.0	η house_down(%)	32.5
LAMPS INSIDE	1	η up(%)	1.1	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	98.9	SLI	20.873



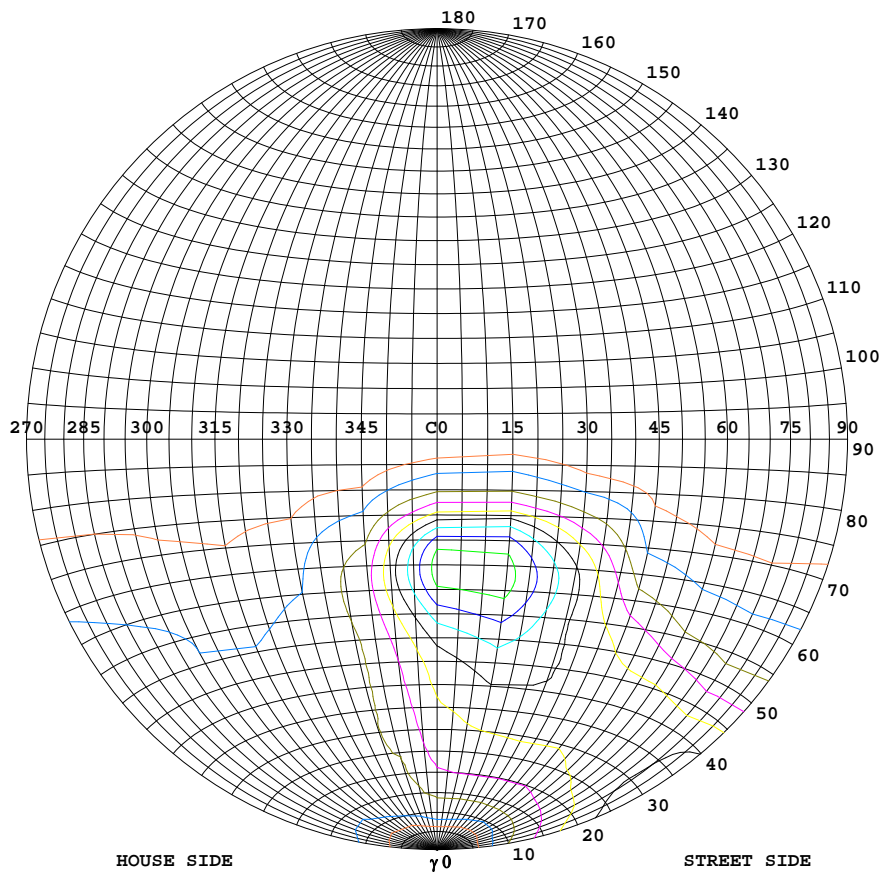
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 13.9DEG  
Operators: CS01  
Test Date: 2022-09-26

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 TYPE II)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



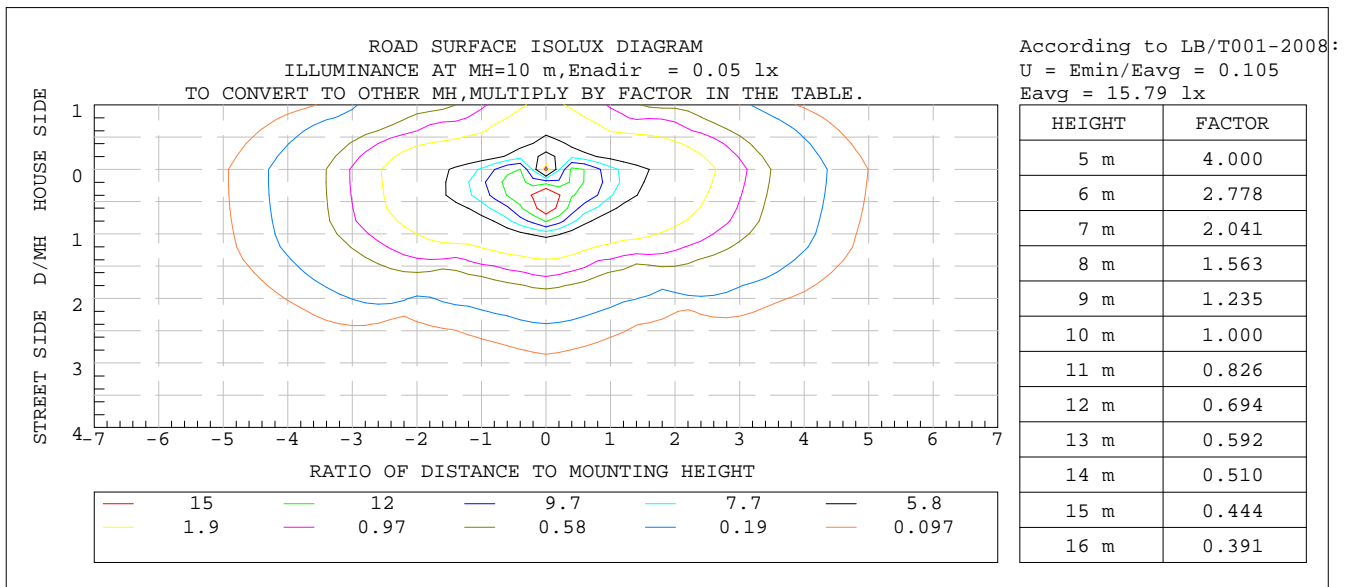
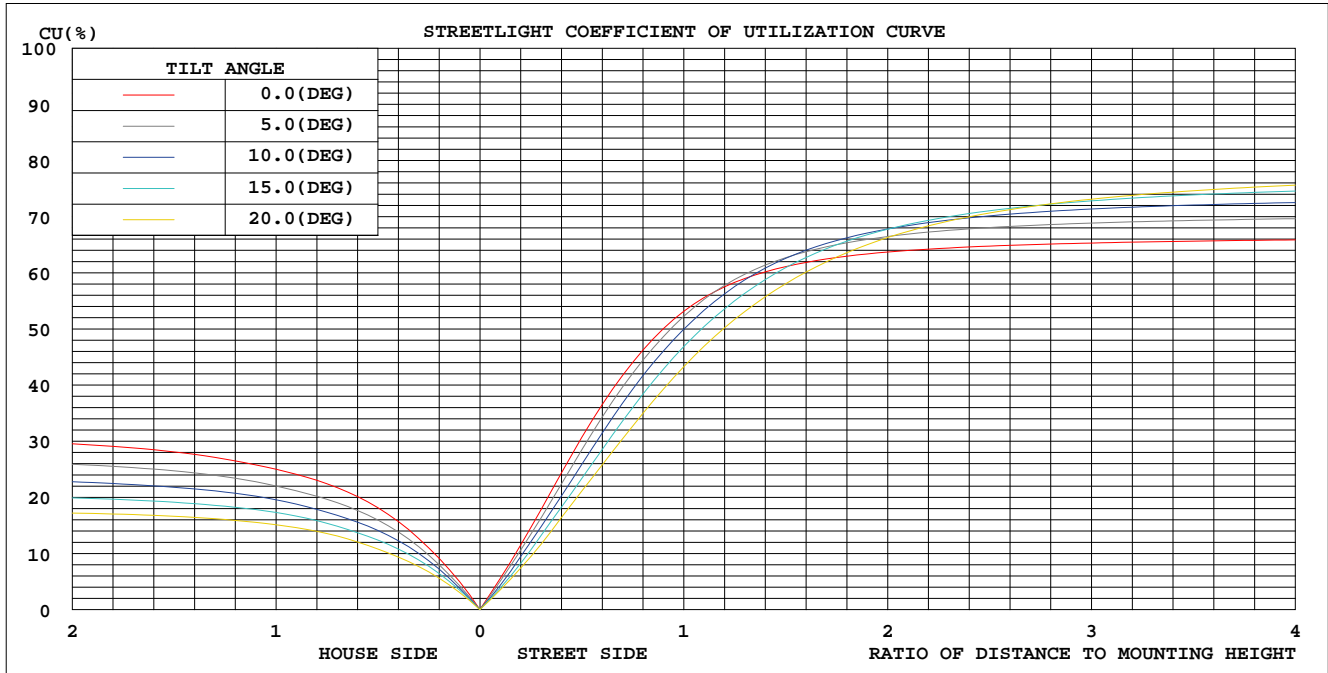
### Classification:

IES:Type V - Short  
 CIE:Narrow - Intermediate  
 IES:Semi cut-off  
 CIE:Non-cut-off  
 Max.At80:166.0cd/klm  
 Max.At90:16.16cd/klm  
 Max.80-90:166.0cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4947
90%	4452
80%	3957
70%	3463
60%	2968
50%	2473
40%	1979
30%	1484
20%	989
10%	495
5%	247

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-26

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 TYPE II)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: 2022-09-26

$\gamma$  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 TYPE II)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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	784.2	565.4	903.2	525.6	777.1	411.3	426.8	407.8	0- 10	26.65	26.65	0.41,0.41
20	1585	1574	2063	1390	1624	891.8	881.4	840.4	10- 20	283.8	310.4	4.74,4.74
30	1932	2112	2563	1839	2004	818.3	727.1	763.3	20- 30	661.3	971.7	14.8,14.8
40	2250	2200	2263	1915	2339	648.8	600.4	601.7	30- 40	963.1	1935	29.5,29.5
50	2852	2061	1207	1727	2965	540.2	780.8	504.3	40- 50	1149	3084	47.1,47.1
60	4211	1257	576.5	959.0	4531	392.5	534.4	362.9	50- 60	1260	4344	66.3,66.3
70	3935	471.1	258.2	363.9	4396	270.9	343.6	248.2	60- 70	1244	5588	85.3,85.3
80	995.1	221.8	150.1	183.8	1087	180.0	146.8	167.0	70- 80	708.2	6296	96.1,96.1
90	79.19	60.34	32.55	57.88	90.11	52.51	35.80	45.38	80- 90	185.1	6481	98.9,98.9
100	10.03	4.266	4.982	4.244	7.451	4.932	6.909	4.295	90-100	28.57	6510	99.4,99.4
110	10.20	3.824	2.384	3.616	7.853	5.541	2.725	4.664	100-110	6.812	6517	99.5,99.5
120	10.72	3.989	2.871	3.772	8.316	7.048	4.382	6.079	110-120	6.253	6523	99.6,99.6
130	10.37	5.591	4.379	5.180	9.630	9.312	7.454	8.439	120-130	6.485	6529	99.7,99.7
140	10.54	6.870	5.790	6.442	10.66	11.14	10.37	10.33	130-140	6.490	6536	99.8,99.8
150	11.23	9.191	7.635	8.633	12.04	12.69	11.58	12.26	140-150	6.140	6542	99.9,99.9
160	12.04	11.08	9.099	10.32	12.32	13.07	11.39	12.36	150-160	5.075	6547	99.9,99.9
170	9.126	7.536	7.305	7.447	9.507	8.749	8.061	7.844	160-170	2.967	6550	100,100
180	4.826	4.544	4.140	4.244	4.929	4.709	4.136	4.244	170-180	0.5917	6551	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

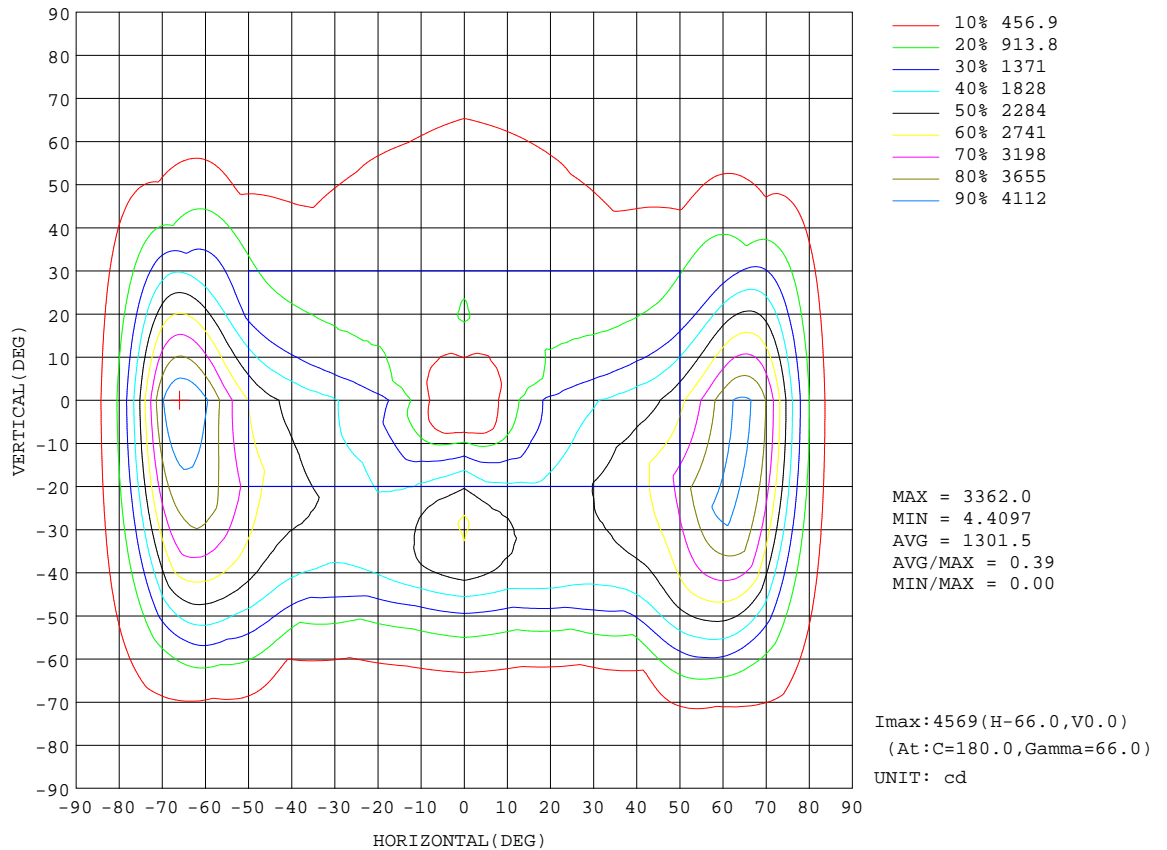
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-26

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 TYPE II)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

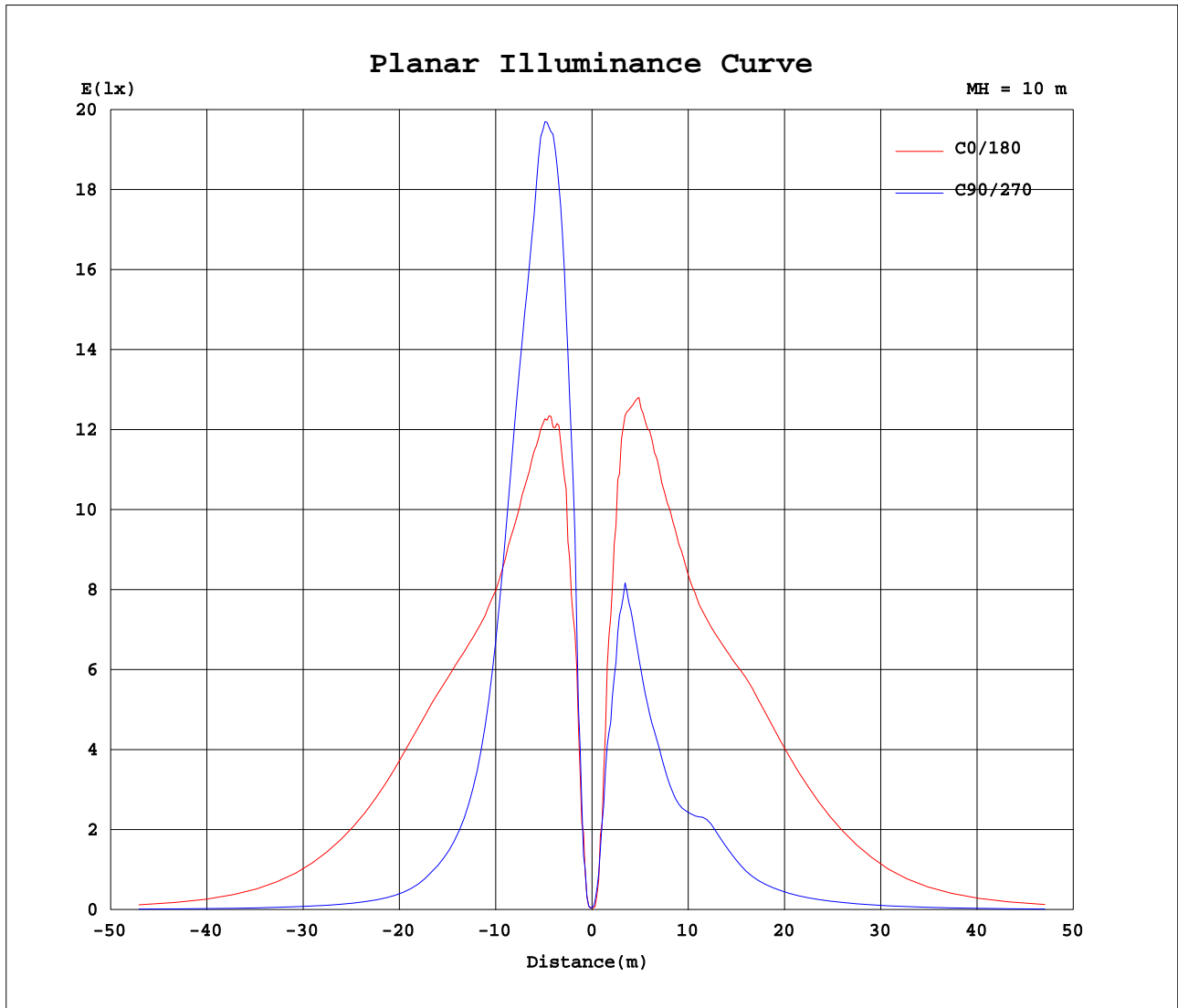
Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 13.9DEG  
Operators: CS01  
Test Date: 2022-09-26

$\gamma$  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 TYPE II)L

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 13.9DEG  
Operators: CS01  
Test Date: 2022-09-26

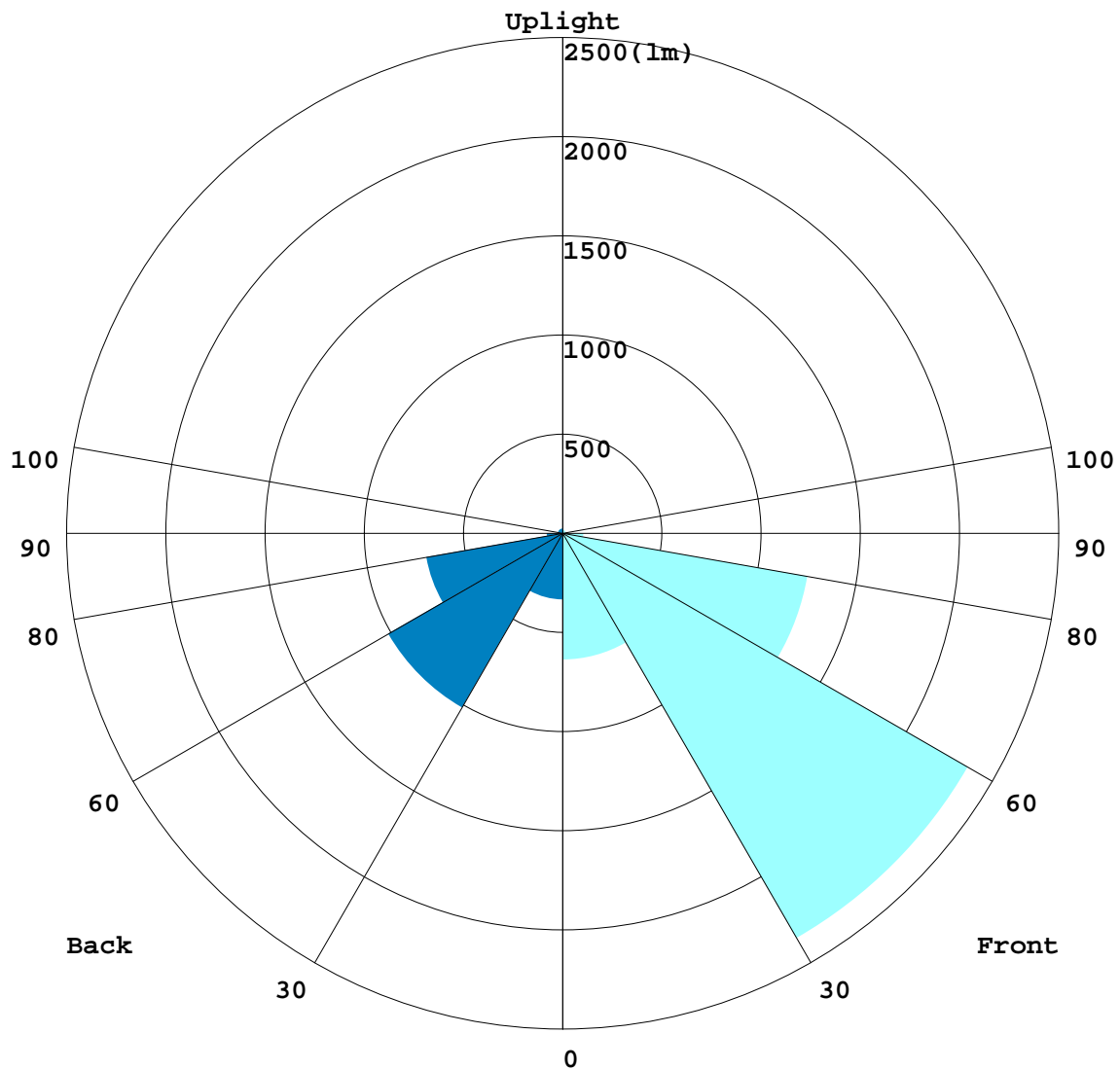
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 38.0%  
Test Distance: 26.000m [K=1.0000]  
Remarks: T-221LED60-24(5050 40K RA70 TYPE II)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LCS REPORT

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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:2022-09-26

$\gamma$  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 TYPE II )L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## BUG REPORT

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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)	637.26	9.7
FM - Front-Medium(30-60)	2357.8	36.0
FH - Front-High(60-80)	1253.7	19.1
FVH - Front-Very High(80-90)	105.14	1.6
Total Forward Light	4385.3	66.9

BL - Back-Low(0-30)	334.43	5.1
BM - Back-Medium(30-60)	1014.8	15.5
BH - Back-High(60-80)	698.19	10.7
BVH - Back-Very High(80-90)	79.976	1.2
Total Back Light	2165.4	33.1

UL - Uplight-Low(90-100)	28.568	0.4
UH - Uplight-High(100-180)	40.814	0.6
Total Up Light	69.382	1.1

BUG(Back,Up,Glare) Rating	B2-U2-G2
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2127.4	38.024	2165.4
Street Side	4353.9	31.358	4385.3

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:13.9DEG  
 Operators:CS01  
 Test Date:2022-09-26

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 TYPE II)L

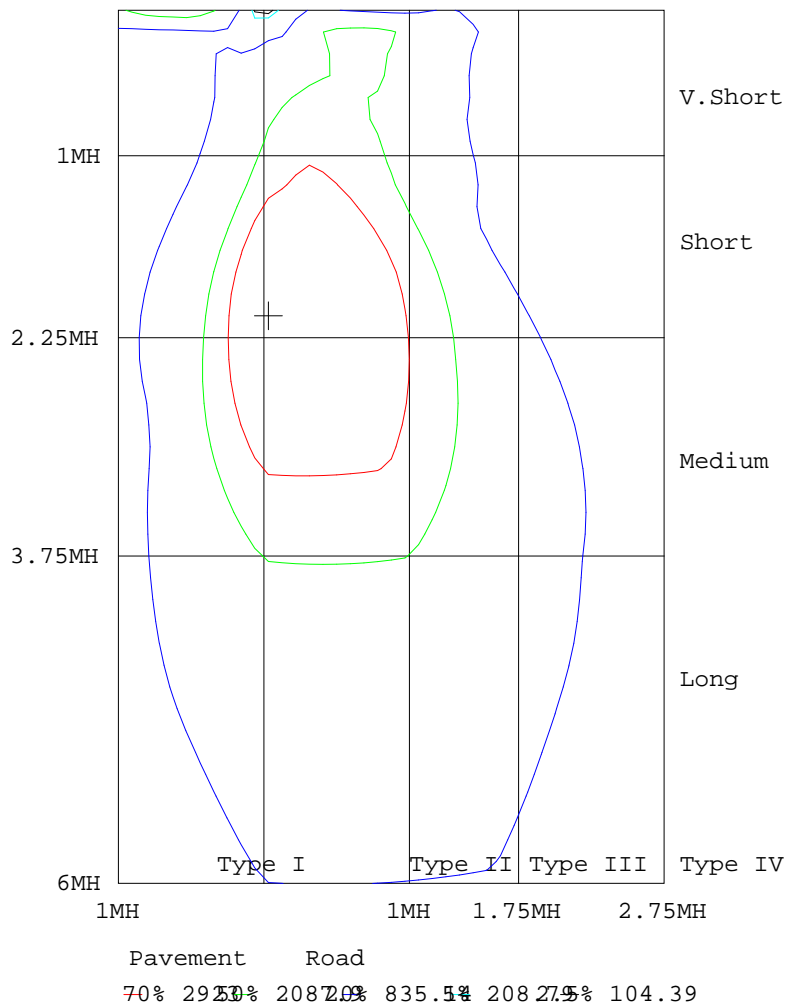


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ROAD ISOCANDELA REPORT

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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:2022-09-26

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 TYPE II )L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77	4.77
5	211	192	158	98.7	115	116	125	117	106	92.5	69.6	127	204	169	118	86.3	107	138	140
10	784	767	645	565	629	766	903	817	611	526	511	623	777	584	507	411	407	411	427
15	1263	1235	1164	1197	1224	1335	1519	1404	1183	1074	959	990	1292	905	779	703	683	619	706
20	1585	1624	1594	1574	1712	1791	2063	1897	1619	1390	1425	1365	1624	1105	937	892	847	785	881
25	1780	1885	1873	1855	2018	2166	2431	2237	1873	1625	1660	1589	1857	1160	967	880	840	749	814
30	1932	2132	2184	2112	2189	2277	2563	2349	2006	1839	1910	1818	2004	1217	943	818	766	666	727
35	2079	2378	2435	2192	2211	2243	2485	2310	1979	1952	2106	2019	2165	1251	906	726	666	610	673
40	2250	2655	2606	2200	2194	2126	2263	2154	1937	1915	2243	2241	2339	1282	854	649	585	543	600
45	2443	2974	2672	2157	2040	1723	1743	1695	1705	1867	2287	2503	2562	1321	780	593	530	525	633
50	2852	3383	2692	2061	1593	1213	1207	1179	1275	1727	2260	2789	2965	1393	706	540	502	605	781
55	3484	3932	2696	1744	1090	823	842	808	858	1390	2251	3190	3655	1562	644	468	483	583	712
60	4211	4415	2788	1257	702	576	577	564	575	959	2206	3560	4531	1792	582	392	408	451	534
65	4521	4455	2673	790	440	348	360	347	367	597	1947	3610	4944	1793	496	331	329	364	427
70	3935	3909	2067	471	282	242	258	245	247	364	1458	3181	4396	1371	387	271	271	304	344
75	2327	2468	1233	311	206	182	192	185	186	248	858	2106	2559	774	275	226	232	233	243
80	995	1027	508	222	149	145	150	146	134	184	390	870	1087	349	186	180	175	152	147
85	363	416	206	128	99.5	81.7	75.4	79.7	91.0	112	169	340	422	151	194	113	109	88.5	78.8
90	79.2	106	72.7	60.3	46.2	39.3	32.6	38.0	42.9	57.9	65.6	90.2	90.1	65.0	92.9	52.5	51.3	45.5	35.8
95	30.7	32.3	23.8	17.7	16.5	19.0	16.1	19.1	16.7	18.3	27.3	30.3	29.3	27.8	35.9	19.4	21.7	24.4	16.2
100	10.03	9.64	7.57	4.27	5.21	5.67	4.98	6.71	4.94	4.24	6.96	8.59	7.45	12.3	10.26	4.93	10.4	12.4	6.91
105	9.69	9.28	7.05	3.93	4.63	4.07	2.39	3.85	4.34	3.83	6.22	8.01	7.62	11.5	10.09	5.10	6.64	5.90	2.48
110	10.20	9.22	6.71	3.82	4.31	3.87	2.38	3.74	4.03	3.62	5.86	7.96	7.85	11.5	10.09	5.54	6.64	5.60	2.73
115	10.43	8.99	6.43	3.82	4.20	3.82	2.43	3.69	3.93	3.56	5.75	7.85	8.08	11.5	10.09	6.15	6.86	5.86	3.26
120	10.72	8.99	6.59	3.99	4.25	3.87	2.87	3.74	3.93	3.77	5.75	7.91	8.32	11.4	10.32	7.05	7.34	6.52	4.38
125	10.66	8.99	6.76	4.82	4.84	4.53	3.70	4.50	4.54	4.56	6.12	7.91	9.17	11.7	10.7	8.21	8.24	7.54	5.89
130	10.37	8.93	6.93	5.59	5.47	5.24	4.38	5.11	5.16	5.18	6.32	7.96	9.63	11.6	11.0	9.31	9.15	8.65	7.45
135	10.03	8.88	7.55	5.98	5.79	5.55	4.96	5.66	5.61	5.71	7.00	7.96	9.98	11.7	11.3	10.25	10.1	9.72	8.91
140	10.54	9.05	8.33	6.87	6.54	6.16	5.79	6.17	6.28	6.44	7.36	8.11	10.66	11.9	11.7	11.1	11.1	10.8	10.4
145	10.60	9.68	8.90	7.86	7.44	7.02	6.71	7.08	7.19	7.43	8.03	8.74	11.4	12.2	12.1	12.0	12.0	11.7	11.3
150	11.2	10.42	9.92	9.19	8.34	7.94	7.64	7.94	8.21	8.63	8.91	9.51	12.0	12.5	12.7	12.7	12.7	12.0	11.6
155	11.6	10.71	10.54	10.14	9.41	8.90	8.66	9.00	9.24	9.69	9.79	9.83	12.4	12.5	13.2	13.1	13.1	12.0	11.6
160	12.0	11.3	10.8	11.1	9.94	9.31	9.10	9.46	9.60	10.3	10.3	10.2	12.3	12.4	13.0	13.1	13.0	11.9	11.4
165	11.9	11.1	10.7	10.5	9.94	9.31	9.10	9.46	9.60	10.2	10.1	10.0	11.8	12.0	12.0	12.0	11.6	11.0	10.6
170	9.13	8.61	7.85	7.54	7.35	7.39	7.30	7.45	7.36	7.45	7.47	7.81	9.51	9.37	9.23	8.75	8.33	8.18	8.06
175	6.02	5.74	5.30	5.05	4.95	4.99	4.88	5.01	4.81	4.83	4.87	5.20	5.90	6.00	5.80	5.53	5.31	5.37	5.10
180	4.83	4.87	4.74	4.54	4.47	4.33	4.14	4.20	4.19	4.24	4.15	4.11	4.93	5.10	4.90	4.71	4.41	4.28	4.14

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-26

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 TYPE II)L

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.12V I:0.2650A P:57.707W PF:0.9893 Freq:50.01Hz Lamp Flux:6550.71x1 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	4.77	4.77	4.77	4.77	4.77														
5	138	108	96.5	138	170														
10	402	407	408	480	533														
15	624	636	670	704	804														
20	748	768	840	852	929														
25	706	740	831	886	990														
30	635	667	763	856	1020														
35	581	592	680	801	1032														
40	529	538	602	738	1044														
45	535	495	552	673	1062														
50	640	480	504	611	1095														
55	606	460	430	558	1199														
60	472	381	363	490	1306														
65	382	310	304	408	1246														
70	315	259	248	324	915														
75	236	218	212	239	538														
80	147	159	167	199	266														
85	83.7	97.1	103	166	127														
90	40.2	43.3	45.4	74.7	53.6														
95	20.5	17.1	17.4	31.7	31.4														
100	10.1	9.05	4.29	9.43	11.0														
105	5.77	6.08	4.40	8.55	10.2														
110	5.62	6.08	4.66	8.39	10.0														
115	5.72	6.23	5.24	8.45	10.0														
120	6.43	6.79	6.08	8.76	10.0														
125	7.34	7.61	7.29	9.33	10.4														
130	8.45	8.58	8.44	9.79	10.4														
135	9.62	9.60	9.43	10.2	10.5														
140	10.7	10.5	10.3	10.6	10.7														
145	11.5	11.3	11.3	11.2	11.0														
150	11.9	12.1	12.3	11.7	11.4														
155	11.9	12.2	12.6	12.1	11.4														
160	11.7	11.9	12.4	12.1	11.3														
165	11.1	10.9	11.2	11.0	10.7														
170	8.44	8.11	7.84	7.69	7.74														
175	5.41	5.16	4.97	4.61	4.68														
180	4.40	4.29	4.24	4.15	4.21														

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:13.9DEG  
Operators:CS01  
Test Date:2022-09-26

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 TYPE II)L