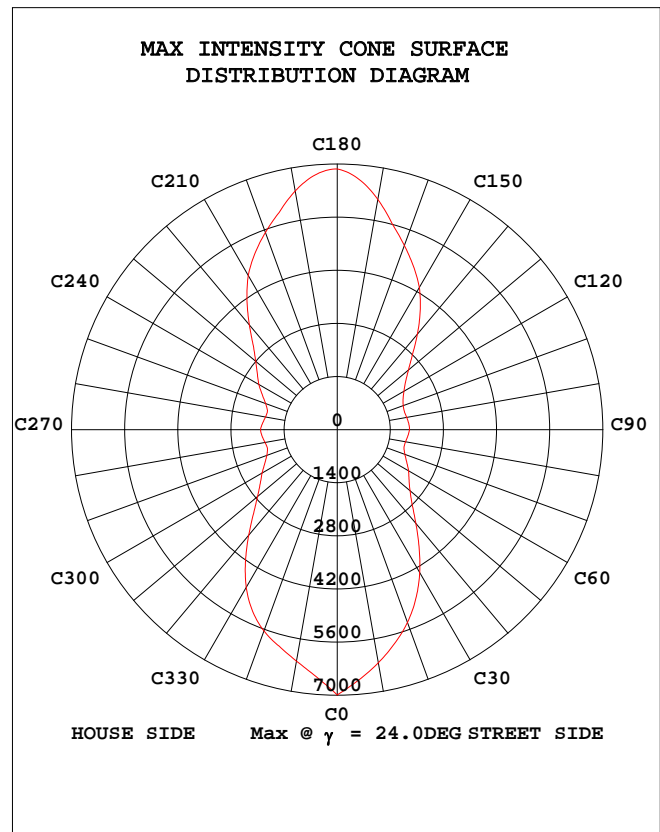
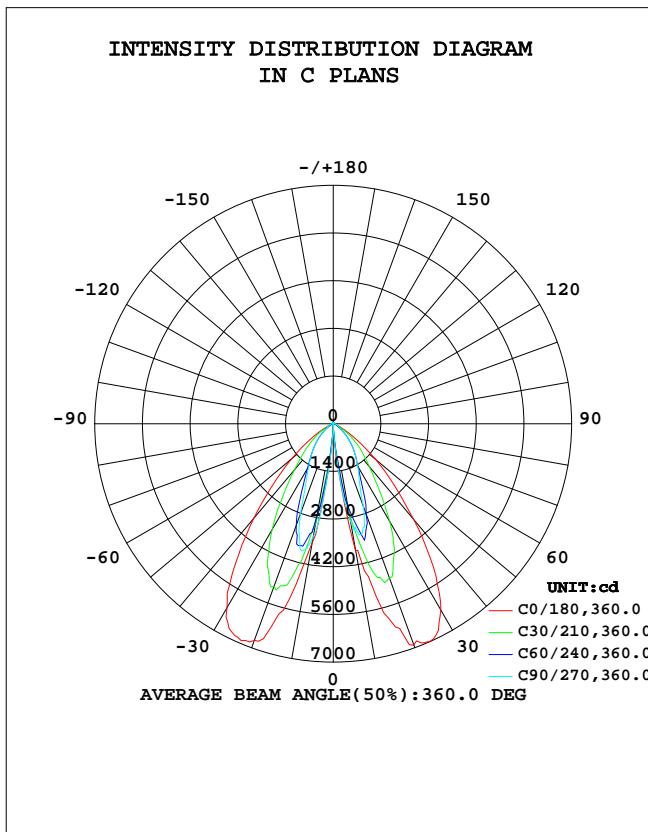


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.49 lm/W			
MODEL: 5050	40K RA70 TYPE I L	Imax(cd)	6991	η street_up(%)	0.9
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	48.2
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	5774	η house_up(%)	0.9
NOMINAL FLUX(lm)	5773.65	MAXIMUM @(C, γ)	0,24.0	η house_down(%)	50.1
LAMPS INSIDE	1	η up(%)	1.7	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	98.3	SLI	16.451



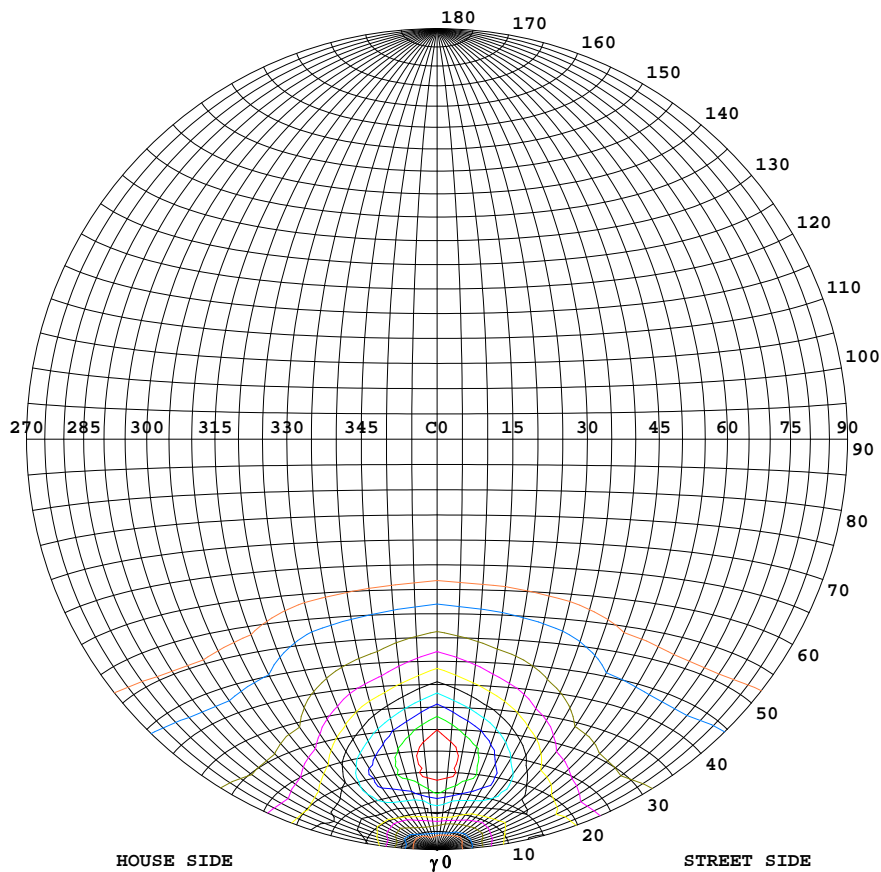
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:CS01
Test Date:2022-09-26

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 I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



Classification:

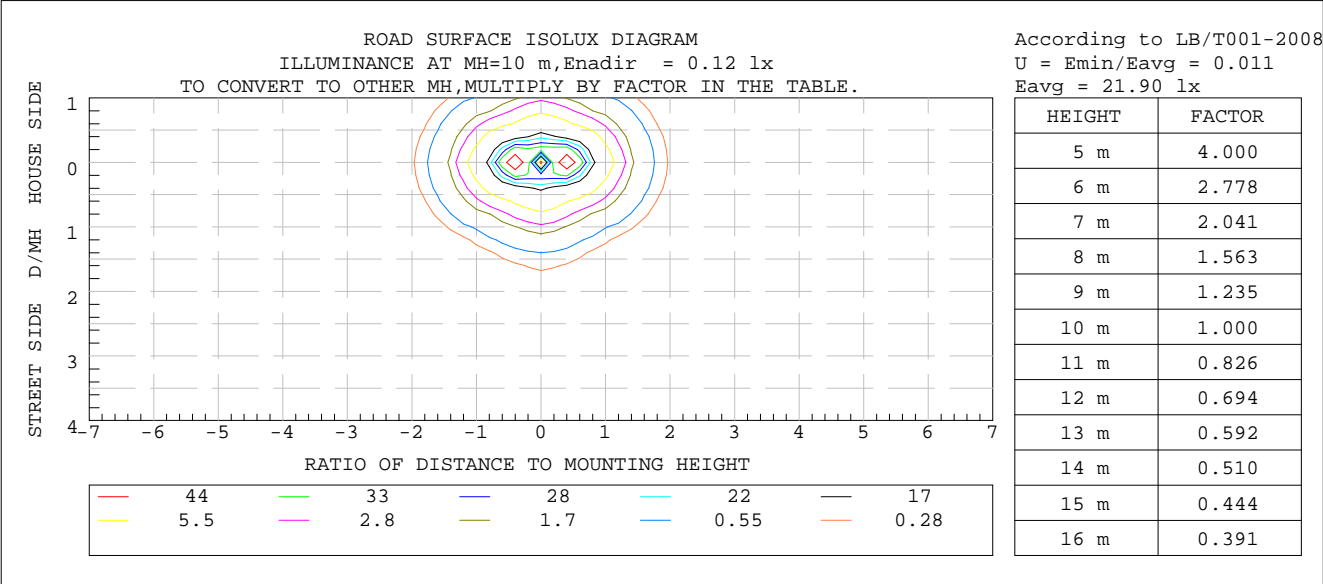
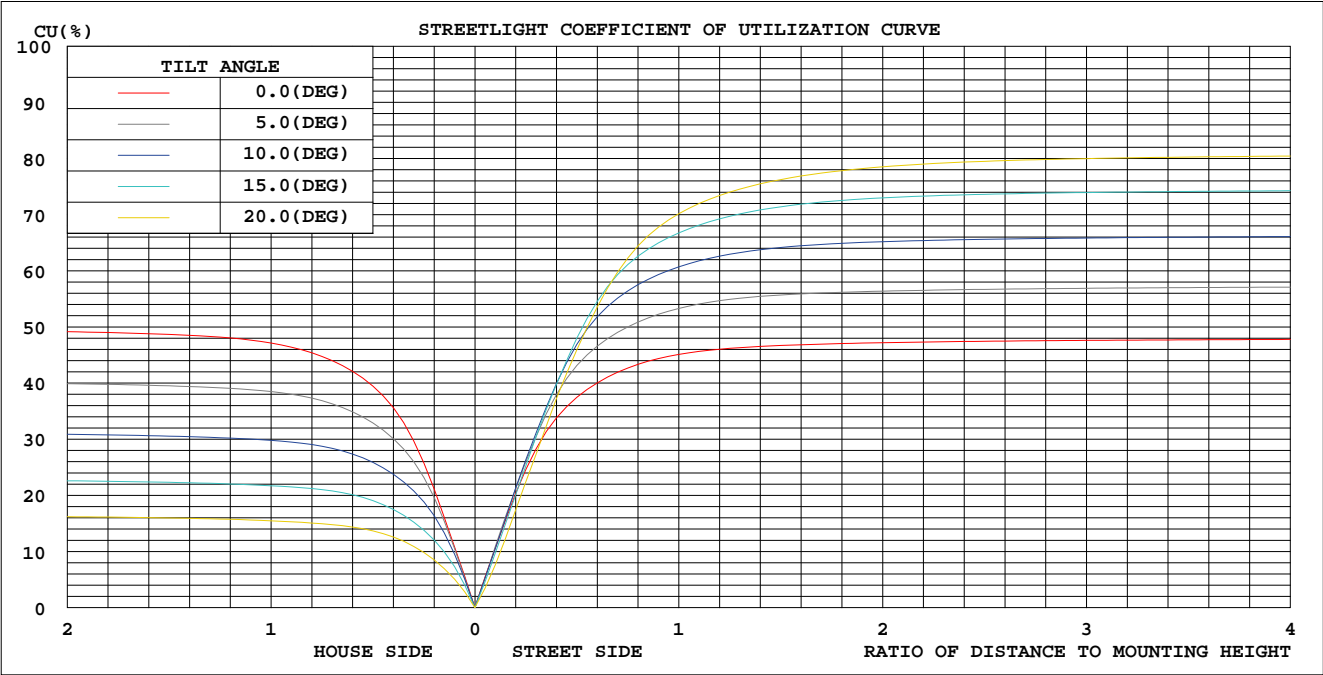
IES:Type V - Very Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:14.74cd/klm
 Max.At90:5.824cd/klm
 Max.80-90:14.74cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	6991
90%	6291
80%	5592
70%	4893
60%	4194
50%	3495
40%	2796
30%	2097
20%	1398
10%	699
5%	350

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 I)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

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 I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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	Φ lum,lamp
10	3784	2443	2857	2326	3529	2663	3360	2747	0- 10	140.4	140.4	2.43,2.43
20	6917	3530	2593	3512	6767	3907	2809	3769	10- 20	1114	1255	21.7,21.7
30	6315	1879	1427	1821	6248	2053	1440	2010	20- 30	1593	2848	49.3,49.3
40	3690	1004	887.1	981.3	3635	1024	861.5	1002	30- 40	1322	4170	72.2,72.2
50	1608	508.1	403.8	500.7	1569	518.0	391.8	503.8	40- 50	835.5	5005	86.7,86.7
60	460.9	164.3	183.7	162.8	464.7	166.6	178.3	157.4	50- 60	400.8	5406	93.6,93.6
70	117.9	71.06	116.2	72.21	119.9	71.50	118.3	70.35	60- 70	147.5	5554	96.2,96.2
80	50.99	38.17	85.08	39.26	52.61	38.73	82.54	37.32	70- 80	77.17	5631	97.5,97.5
90	12.63	13.73	20.70	14.75	13.42	13.79	17.75	12.55	80- 90	42.00	5673	98.3,98.3
100	2.741	3.217	4.303	3.369	2.791	3.111	3.411	3.043	90-100	11.83	5685	98.5,98.5
110	2.897	3.164	1.974	3.260	3.532	3.484	1.977	3.424	100-110	5.422	5690	98.6,98.6
120	8.989	7.435	6.072	7.744	8.856	7.230	5.748	7.411	110-120	6.445	5696	98.7,98.7
130	18.75	14.50	12.89	14.98	18.99	14.62	12.85	14.85	120-130	11.41	5708	98.9,98.9
140	28.93	22.50	19.99	22.87	29.81	22.05	20.02	22.93	130-140	15.34	5723	99.1,99.1
150	39.67	34.81	30.60	34.85	40.65	35.08	30.01	35.16	140-150	18.30	5742	99.4,99.4
160	45.58	45.86	40.60	45.96	46.36	45.03	39.37	44.98	150-160	18.38	5760	99.8,99.8
170	31.18	29.05	30.81	30.39	33.92	30.17	29.75	29.93	160-170	11.55	5771	100,100
180	16.55	15.40	14.87	16.14	16.65	15.77	14.92	16.19	170-180	2.194	5774	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

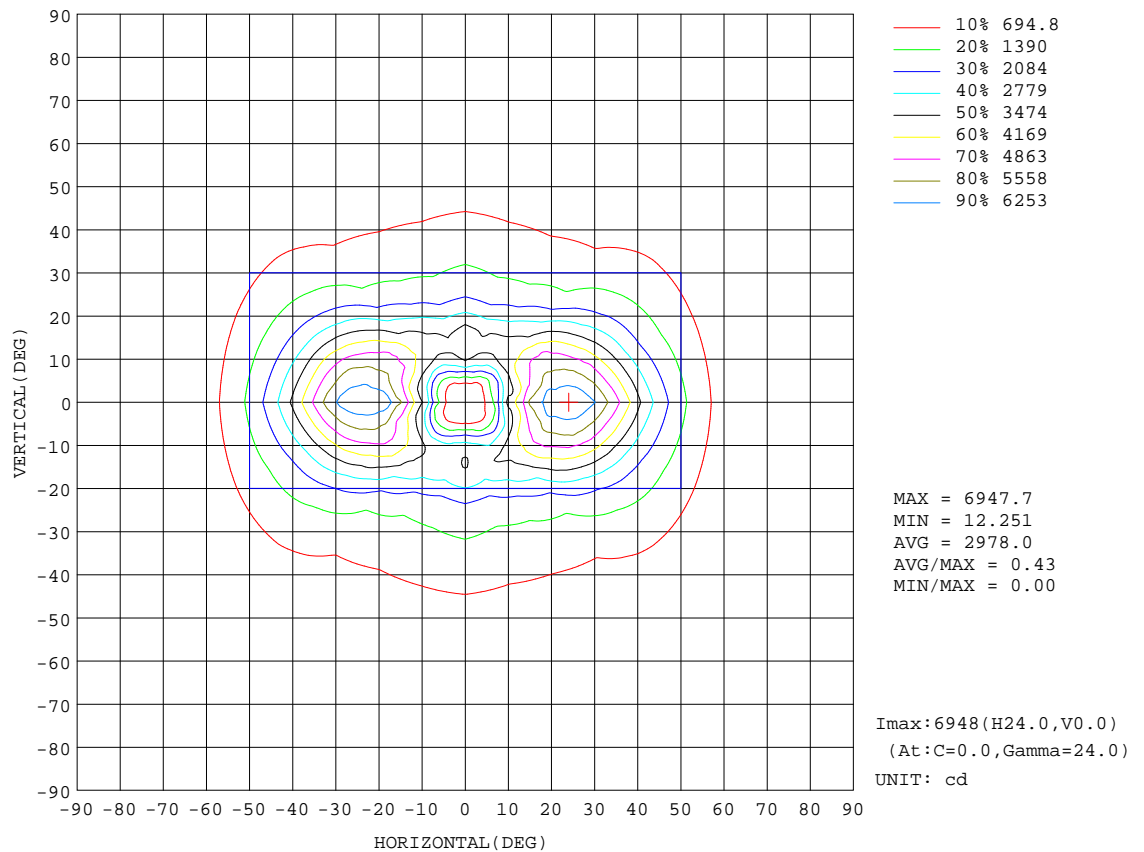
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:13.9DEG
 Operators:CS01
 Test Date:2022-09-26

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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 TYPE I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

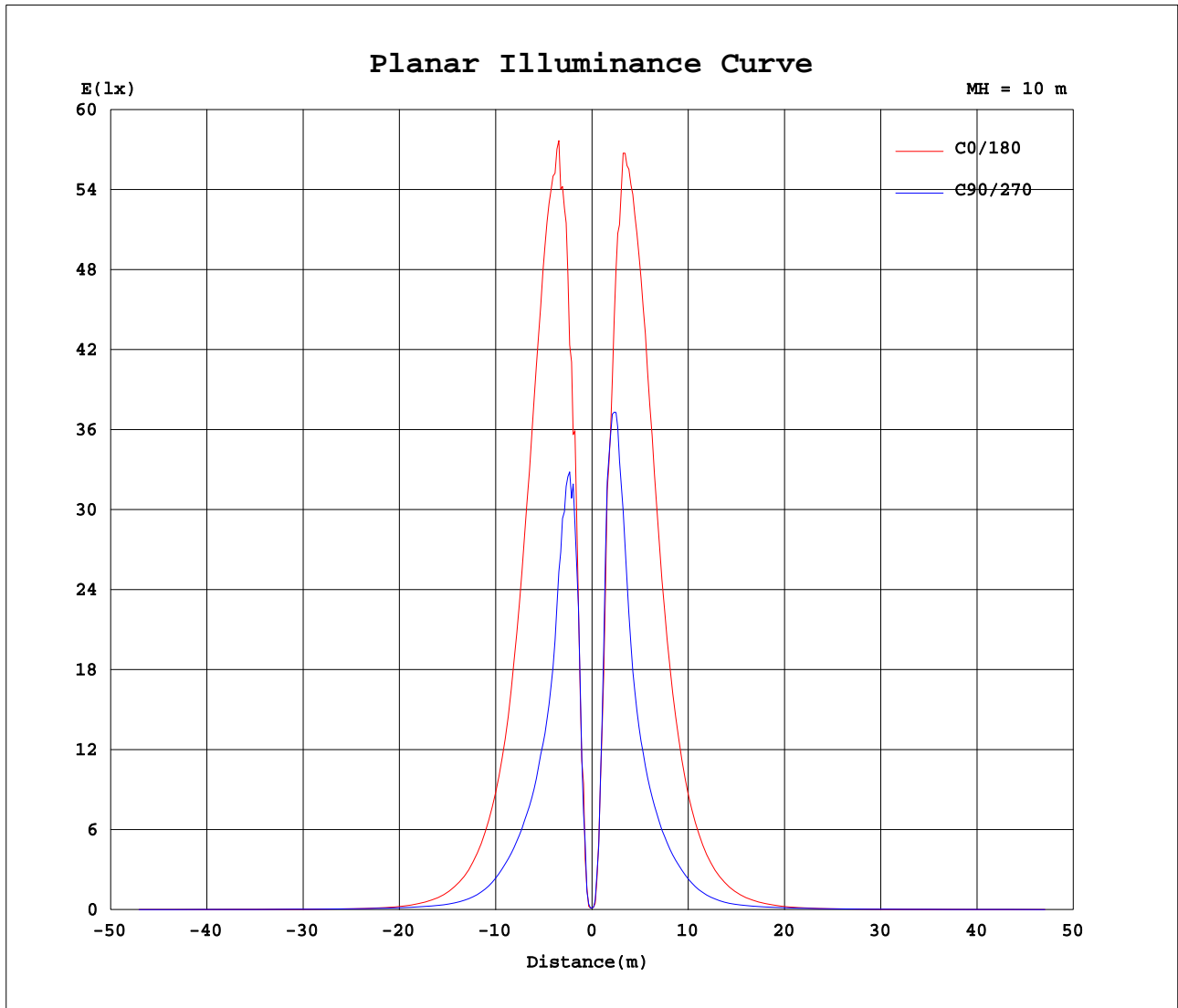
Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



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

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 I)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

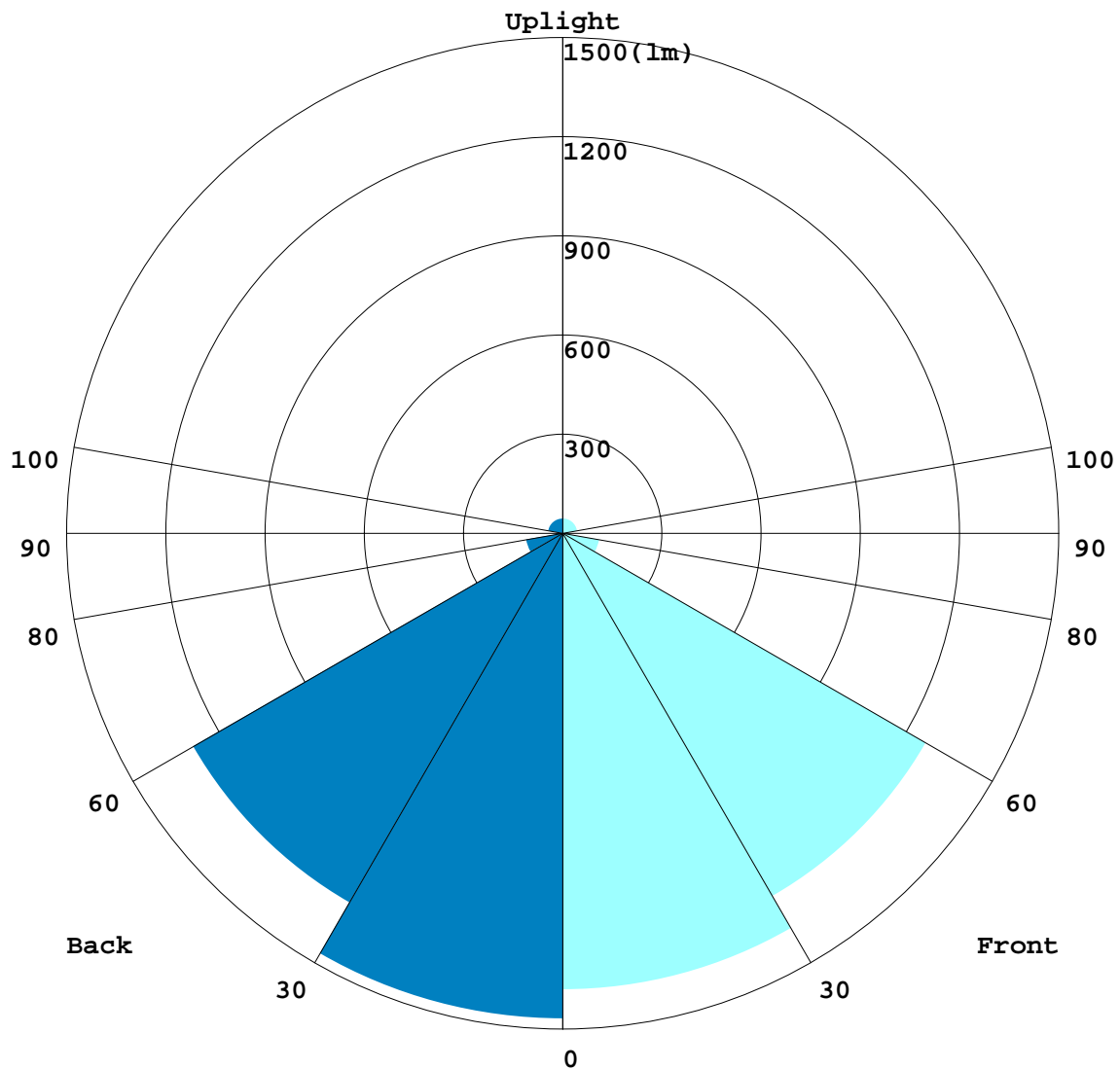
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 38.0%
Test Distance: 26.000m [K=1.0000]
Remarks: T-221LED60-24(5050 40K RA70 TYPE I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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

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 I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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)	1379.7	23.9
FM - Front-Medium(30-60)	1268.4	22.0
FH - Front-High(60-80)	112.65	2.0
FVH - Front-Very High(80-90)	21.259	0.4
Total Forward Light	2832.7	49.1

BL - Back-Low(0-30)	1468	25.4
BM - Back-Medium(30-60)	1290	22.3
BH - Back-High(60-80)	112.06	1.9
BVH - Back-Very High(80-90)	20.742	0.4
Total Back Light	2941	50.9

UL - Uplight-Low(90-100)	11.832	0.2
UH - Uplight-High(100-180)	89.043	1.5
Total Up Light	100.88	1.7

BUG(Back,Up,Glare) Rating	B3-U3-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2890.7	50.249	2941
Street Side	2782.1	50.627	2832.7

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

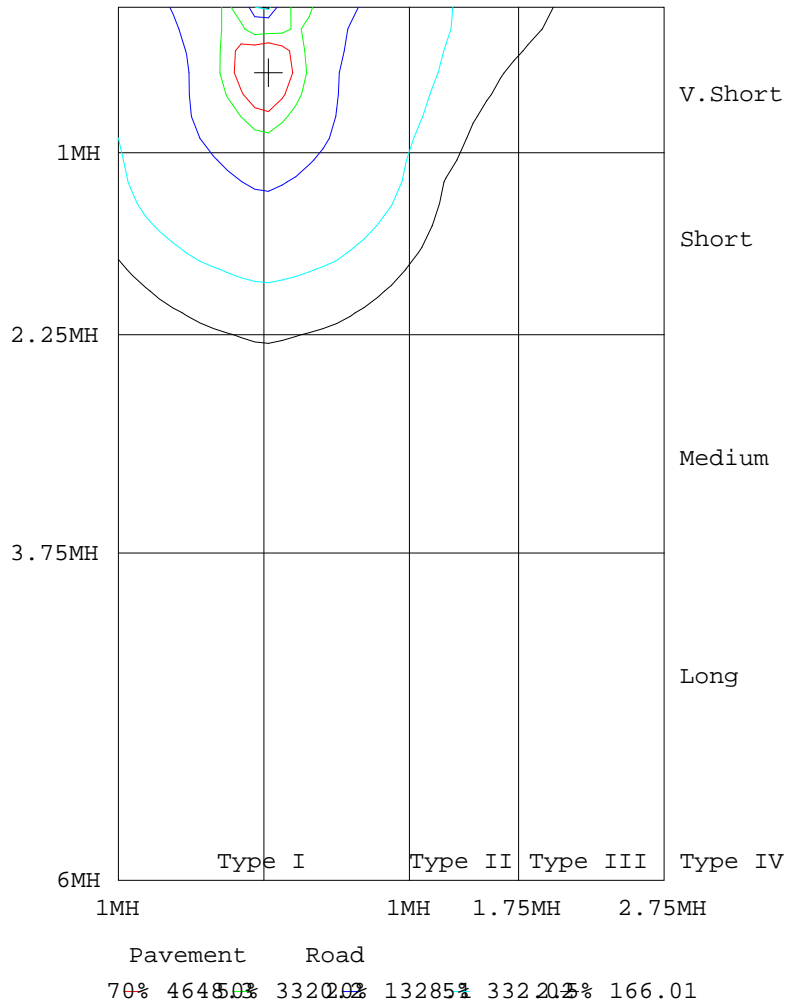
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity:38.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: T-221LED60-24(5050 40K RA70 TYPE I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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 I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
5	963	892	604	421	586	617	689	610	559	462	461	736	951	778	668	561	615	955	912
10	3784	3108	2607	2443	2430	2712	2857	2780	2436	2326	2651	3006	3529	2968	2976	2663	2710	3152	3360
15	5749	4908	4494	3556	3545	3045	3324	3115	3197	3790	4214	4739	5662	4868	4650	3956	3702	3400	3785
20	6917	5915	4817	3530	2818	2480	2593	2509	2759	3512	4808	5676	6767	5835	5083	3907	3177	2687	2809
25	6970	5737	4235	2655	2020	1720	1810	1722	1881	2681	4090	5581	6856	5801	4587	2953	2210	1805	1893
30	6315	4946	3317	1879	1458	1314	1427	1350	1357	1821	3205	4789	6248	5168	3594	2053	1515	1345	1440
35	5125	3715	2334	1329	1140	1051	1146	1078	1056	1304	2288	3600	5013	3935	2571	1404	1138	1048	1125
40	3690	2561	1666	1004	878	812	887	838	827	981	1627	2509	3635	2696	1779	1024	859	801	862
45	2507	1767	1227	741	634	591	633	607	599	728	1210	1728	2459	1809	1266	755	620	575	616
50	1608	1181	880	508	414	381	404	388	388	501	870	1177	1569	1196	893	518	406	371	392
55	917	743	558	307	242	231	253	238	227	299	550	743	905	746	568	313	234	226	240
60	461	394	289	164	144	158	184	167	141	163	289	403	465	401	302	167	137	156	178
65	211	183	142	97.8	105	125	147	133	106	99.2	144	190	212	186	149	98.4	102	126	145
70	118	105	86.0	71.1	79.7	100	116	106	81.1	72.2	88.2	106	120	107	88.9	71.5	79.5	103	118
75	80.8	76.1	63.8	53.5	61.6	80.9	96.2	86.0	62.9	54.2	65.7	77.4	82.0	78.4	66.3	54.0	61.5	84.3	97.3
80	51.0	55.5	46.2	38.2	48.8	70.4	85.1	75.3	50.8	39.3	48.0	56.7	52.6	56.6	48.1	38.7	49.2	74.3	82.5
85	28.4	37.0	30.9	25.0	34.8	54.2	64.8	59.5	37.1	26.5	33.2	38.2	29.8	38.3	32.6	25.5	35.1	55.4	56.8
90	12.6	19.2	17.9	13.7	21.1	30.5	20.7	33.6	22.6	14.8	19.6	20.8	13.4	20.4	19.1	13.8	21.0	29.0	17.8
95	5.65	9.83	8.99	5.31	10.2	13.8	13.7	14.9	11.0	6.60	10.20	10.8	5.90	10.3	9.34	5.36	9.84	13.9	17.5
100	2.74	7.15	6.86	3.22	6.22	6.70	4.30	7.23	6.42	3.37	7.44	7.47	2.79	7.14	6.81	3.11	5.96	6.35	3.41
105	2.74	6.83	6.59	3.16	6.01	5.39	1.88	5.60	5.93	3.26	7.22	7.25	2.95	7.09	6.81	3.17	5.86	5.44	1.63
110	2.90	6.83	6.49	3.16	5.86	5.28	1.97	5.55	5.77	3.26	7.06	7.20	3.53	7.25	6.91	3.48	5.96	5.54	1.98
115	4.84	7.77	7.23	4.21	6.42	5.94	3.01	6.05	6.50	4.55	7.81	8.10	5.27	8.37	7.93	4.65	6.90	6.51	3.16
120	8.99	11.1	10.4	7.43	9.32	8.83	6.07	8.81	9.33	7.74	11.0	11.6	8.86	11.2	10.5	7.23	9.23	8.85	5.75
125	14.1	15.4	14.3	11.2	12.6	12.0	9.72	12.2	12.8	11.6	14.9	15.8	13.8	15.2	14.1	11.0	12.4	11.9	9.30
130	18.7	19.2	17.6	14.5	15.2	14.8	12.9	14.9	15.4	15.0	18.0	19.4	19.0	19.3	17.7	14.6	15.4	15.1	12.8
135	23.4	23.3	21.3	17.9	17.8	17.4	16.0	17.7	18.2	18.4	21.3	23.4	24.1	23.5	21.4	18.0	18.3	18.0	16.2
140	28.9	28.1	26.1	22.5	21.5	21.0	20.0	21.3	22.0	22.9	25.9	28.1	29.8	28.5	25.9	22.0	22.1	21.5	20.0
145	34.7	33.4	31.7	28.2	26.6	25.6	25.0	25.7	26.8	28.6	31.7	33.5	35.9	33.6	31.0	28.1	26.9	25.9	24.9
150	39.7	38.4	37.3	34.8	32.9	31.3	30.6	31.3	32.8	34.9	37.4	38.5	40.6	38.6	37.3	35.1	32.4	30.8	30.0
155	43.7	42.4	42.8	41.5	39.4	37.1	36.5	36.6	38.9	41.4	42.4	42.7	44.7	42.8	43.0	41.1	38.1	36.0	35.3
160	45.6	44.2	45.3	45.9	43.4	41.2	40.6	40.7	42.6	46.0	45.8	45.0	46.4	44.9	45.0	45.0	42.9	40.4	39.4
165	42.9	42.1	42.3	42.1	41.6	40.4	40.1	40.2	41.3	43.2	42.9	42.5	44.1	43.3	42.6	42.3	41.4	39.3	38.4
170	31.2	30.8	29.6	29.1	29.7	30.5	30.8	31.0	30.5	30.4	30.8	32.4	33.9	33.8	32.2	30.2	29.1	29.2	29.8
175	19.1	18.8	18.3	17.7	18.2	19.0	18.9	19.0	18.7	18.9	19.6	20.6	20.8	21.0	20.1	18.7	17.5	17.5	17.9
180	16.5	15.8	15.8	15.4	15.2	15.3	14.9	15.2	15.4	16.1	16.5	16.1	16.7	16.6	16.3	15.8	15.3	15.1	14.9

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 I)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.16V I:0.2639A P:57.457W PF:0.9891 Freq:50.00Hz Lamp Flux:5773.65x1 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	12.3	12.3	12.3	12.3	12.3													
5	945	548	515	877	882													
10	3180	2770	2747	3114	3352													
15	3496	3696	3880	4863	4898													
20	2674	3016	3769	5165	5965													
25	1792	2101	2952	4619	5797													
30	1340	1459	2010	3450	5067													
35	1049	1100	1350	2449	3765													
40	798	818	1002	1738	2564													
45	570	586	740	1250	1729													
50	362	376	504	888	1165													
55	217	216	299	557	727													
60	156	133	157	285	383													
65	129	102	95.1	138	178													
70	104	79.9	70.3	86.4	103													
75	86.0	61.6	52.8	65.0	76.4													
80	74.4	49.6	37.3	46.5	54.8													
85	55.3	35.2	24.3	31.1	36.3													
90	28.2	20.6	12.5	17.6	18.3													
95	13.4	9.43	4.59	8.30	9.02													
100	5.84	5.72	3.04	6.68	6.77													
105	5.14	5.72	3.10	6.68	6.77													
110	5.25	5.82	3.42	6.90	6.93													
115	6.22	6.67	4.62	7.88	8.22													
120	8.51	9.03	7.41	10.5	11.1													
125	11.7	12.3	11.3	14.3	15.3													
130	14.8	15.2	14.8	18.0	19.6													
135	17.6	18.1	18.5	21.7	24.0													
140	21.1	21.7	22.9	26.4	29.1													
145	25.4	26.4	28.6	32.0	34.5													
150	30.5	32.2	35.2	37.7	39.5													
155	35.6	38.1	41.6	42.6	43.7													
160	40.2	41.6	45.0	46.3	45.3													
165	39.7	40.1	42.3	42.8	43.1													
170	30.9	30.4	29.9	29.4	30.3													
175	19.0	18.9	18.4	18.0	18.5													
180	15.6	15.8	16.2	16.2	16.5													

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 I)L