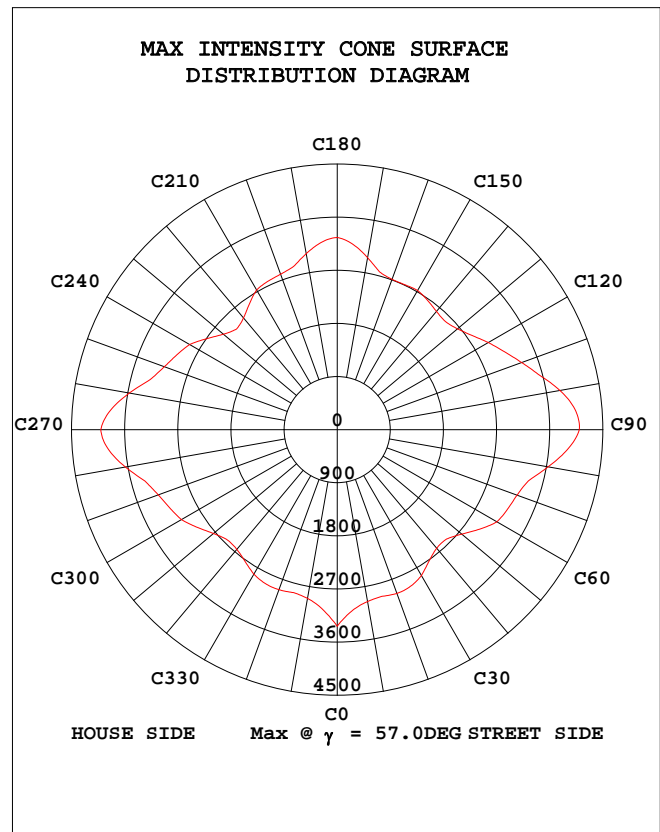
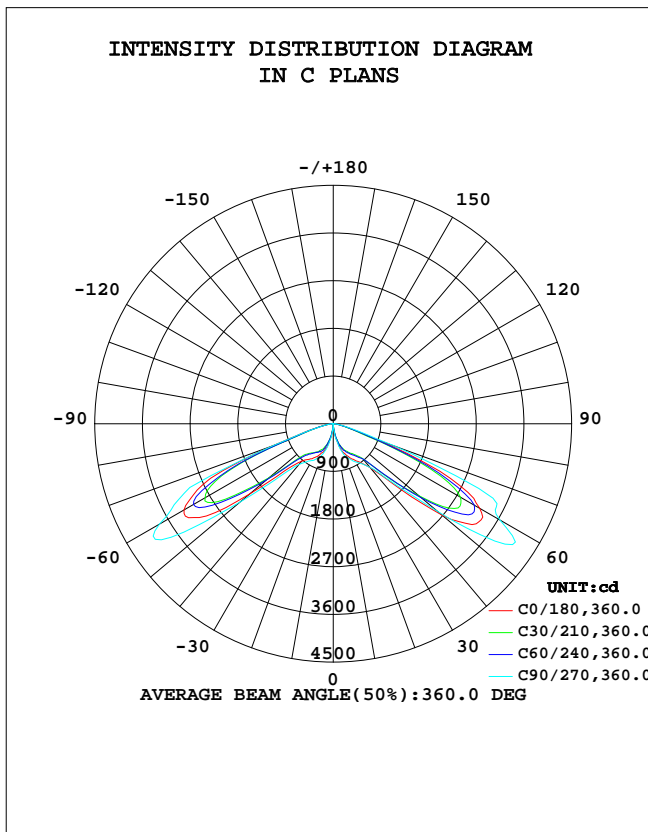


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 121.17 lm/W			
MODEL: 5050	40K RA70 TYPE V L	I _{max} (cd)	4101	η street_up(%)	0.4
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	50.2
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	7007	η house_up(%)	0.3
NOMINAL FLUX(lm)	7007.29	MAXIMUM @(C,γ)	90,57.0	η house_down(%)	49.0
LAMPS INSIDE	1	η up(%)	0.7	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	99.3	SLI	17.408



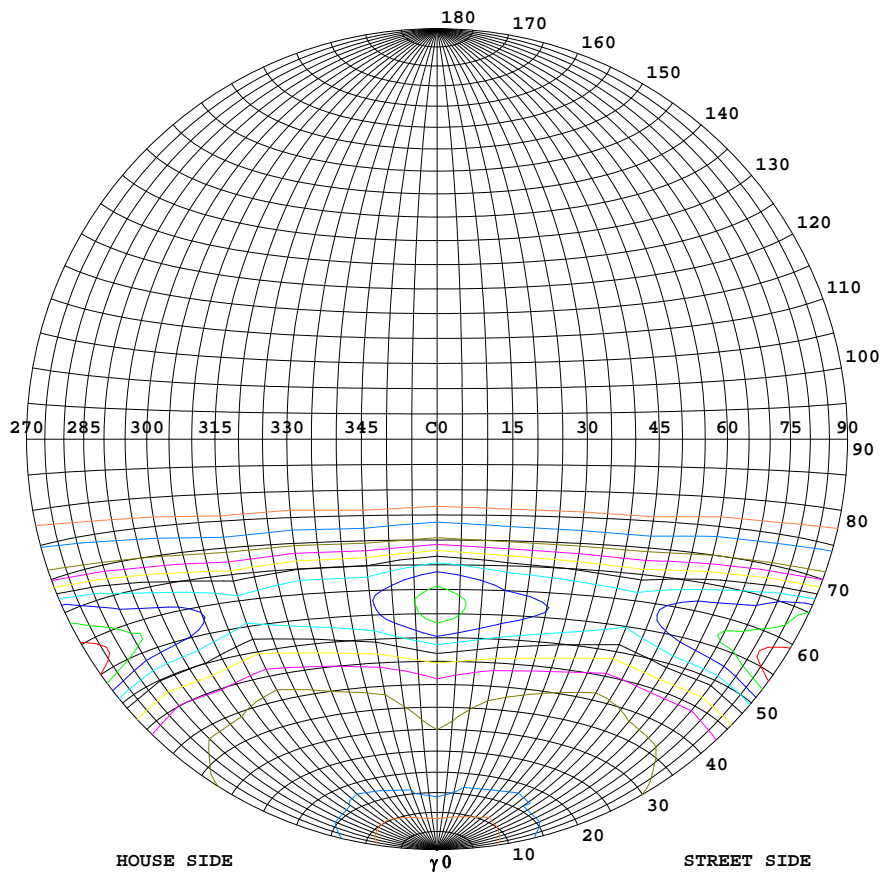
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:CS01
Test Date:2022-09-27

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 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



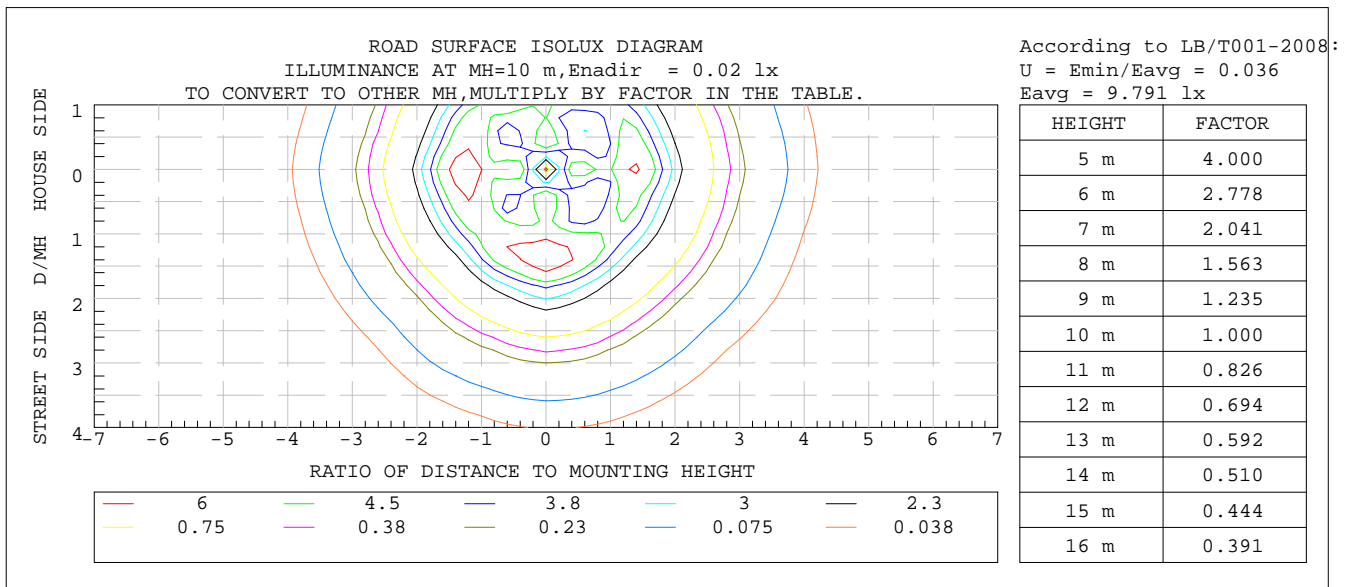
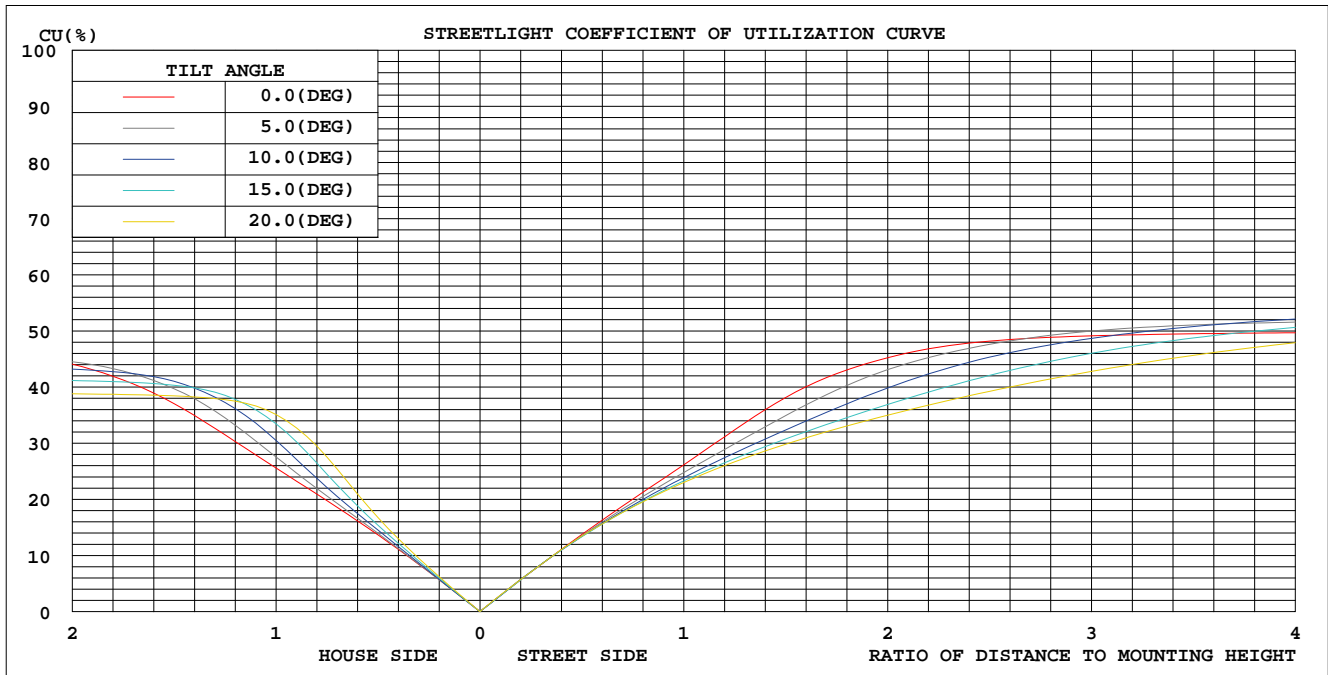
Classification:

IES:Type V - Very Short
 CIE:Broad - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:22.11cd/klm
 Max.At90:5.802cd/klm
 Max.80-90:22.11cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4101
90%	3691
80%	3281
70%	2870
60%	2460
50%	2050
40%	1640
30%	1230
20%	820
10%	410
5%	205

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 TYPE V)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

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 V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 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	256.7	183.5	286.0	170.2	268.1	189.9	281.4	202.2	0- 10	10.48	10.48	0.15,0.15
20	590.5	440.6	633.7	441.0	578.6	445.3	624.6	462.0	10- 20	111.4	121.9	1.74,1.74
30	782.9	574.3	832.1	559.8	744.5	547.3	803.8	575.3	20- 30	275.2	397.1	5.67,5.67
40	1081	747.9	1073	709.5	921.8	666.6	1007	755.6	30- 40	468.5	865.6	12.4,12.4
50	2685	1833	2586	1595	2064	1393	2310	1741	40- 50	999.0	1865	26.6,26.6
60	3193	2603	3631	2718	3253	2594	3785	2620	50- 60	2460	4324	61.7,61.7
70	871.2	642.7	1231	872.2	1180	864.5	1191	650.9	60- 70	2169	6493	92.7,92.7
80	97.79	87.05	118.4	119.4	142.5	131.0	135.6	98.32	70- 80	394.0	6887	98.3,98.3
90	26.28	27.95	20.49	31.26	28.56	28.85	18.46	31.10	80- 90	69.66	6957	99.3,99.3
100	4.285	5.945	6.327	5.839	3.783	5.260	4.983	5.623	90-100	16.45	6973	99.5,99.5
110	5.947	6.574	7.119	6.493	5.445	6.263	6.595	6.603	100-110	7.858	6981	99.6,99.6
120	7.005	7.889	8.572	8.120	6.301	7.153	7.233	6.875	110-120	7.793	6989	99.7,99.7
130	5.999	6.476	7.133	7.097	5.948	6.259	6.377	5.944	120-130	6.847	6996	99.8,99.8
140	4.838	5.261	5.414	5.675	4.535	4.838	4.714	4.965	130-140	4.583	7000	99.9,99.9
150	4.587	5.155	5.144	5.401	4.385	4.786	4.662	4.965	140-150	3.147	7003	99.9,99.9
160	4.587	5.155	5.144	5.401	4.385	4.785	4.660	4.910	150-160	2.278	7006	100,100
170	3.630	3.476	3.863	3.713	3.372	3.102	3.321	3.159	160-170	1.286	7007	100,100
180	2.066	2.157	2.304	2.182	2.117	2.157	2.251	2.238	170-180	0.2627	7007	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

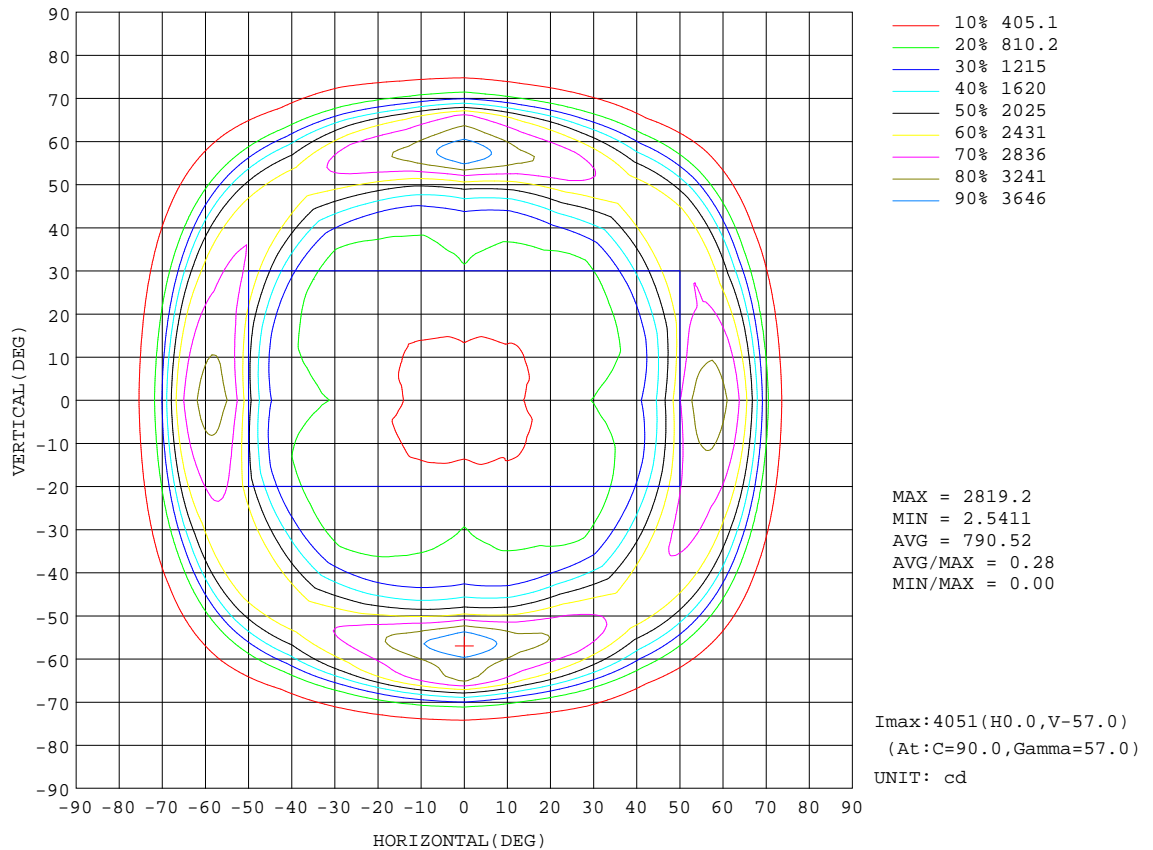
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:13.9DEG
 Operators:CS01
 Test Date:2022-09-27

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 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

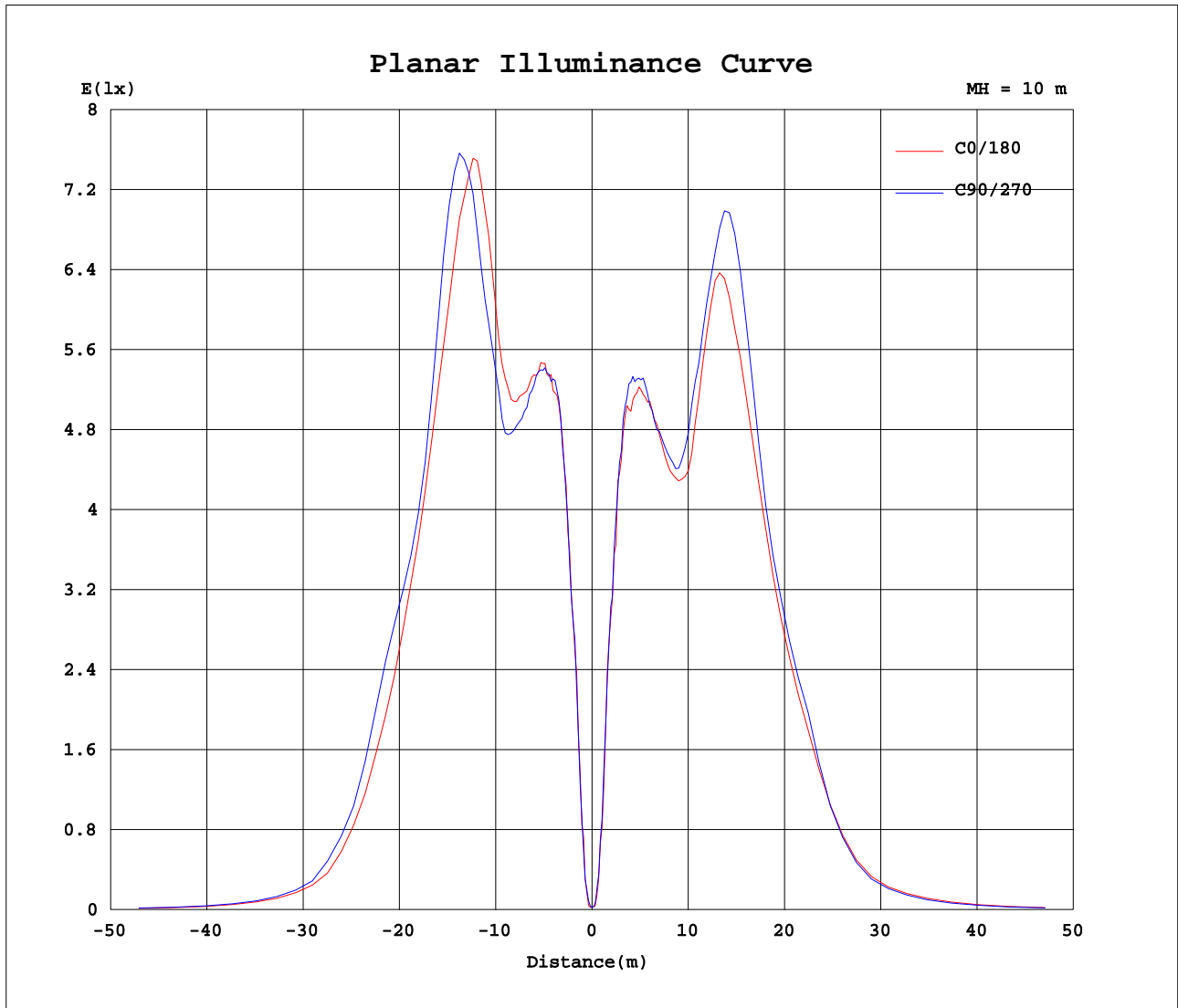
Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



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

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 V)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

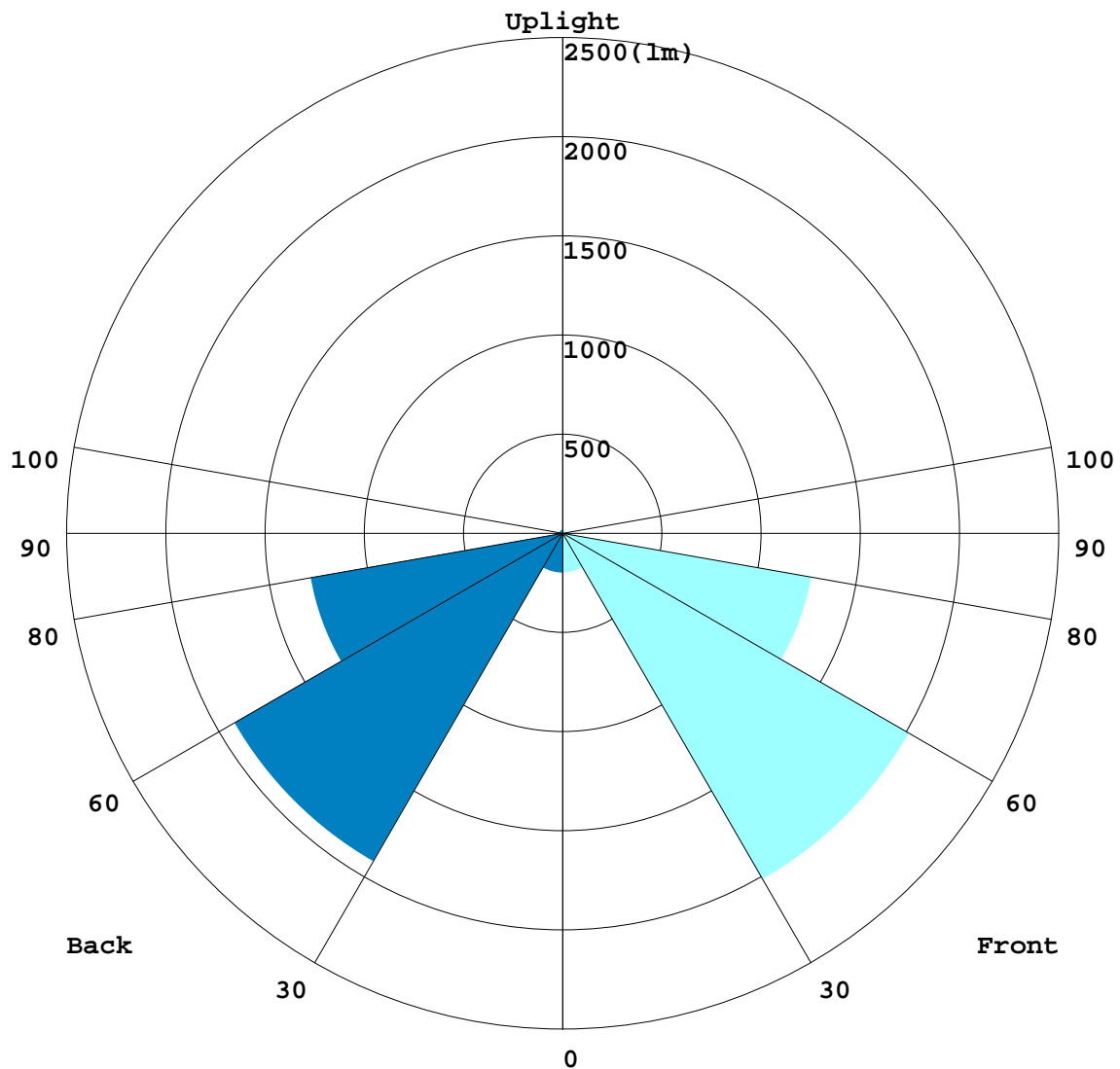
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 38.0%
Test Distance: 26.000m [K=1.0000]
Remarks: T-221LED60-24(5050 40K RA70 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 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

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 V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 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)	198.04	2.8
FM - Front-Medium(30-60)	2016.5	28.8
FH - Front-High(60-80)	1273.4	18.2
FVH - Front-Very High(80-90)	33.199	0.5
Total Forward Light	3547.4	50.6

BL - Back-Low(0-30)	199.07	2.8
BM - Back-Medium(30-60)	1910.8	27.3
BH - Back-High(60-80)	1289.3	18.4
BVH - Back-Very High(80-90)	36.457	0.5
Total Back Light	3459.8	49.4

UL - Uplight-Low(90-100)	16.448	0.2
UH - Uplight-High(100-180)	34.054	0.5
Total Up Light	50.502	0.7

BUG(Back,Up,Glare) Rating	B3-U2-G1
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	3435.7	24.164	3459.8
Street Side	3521.1	26.339	3547.4

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

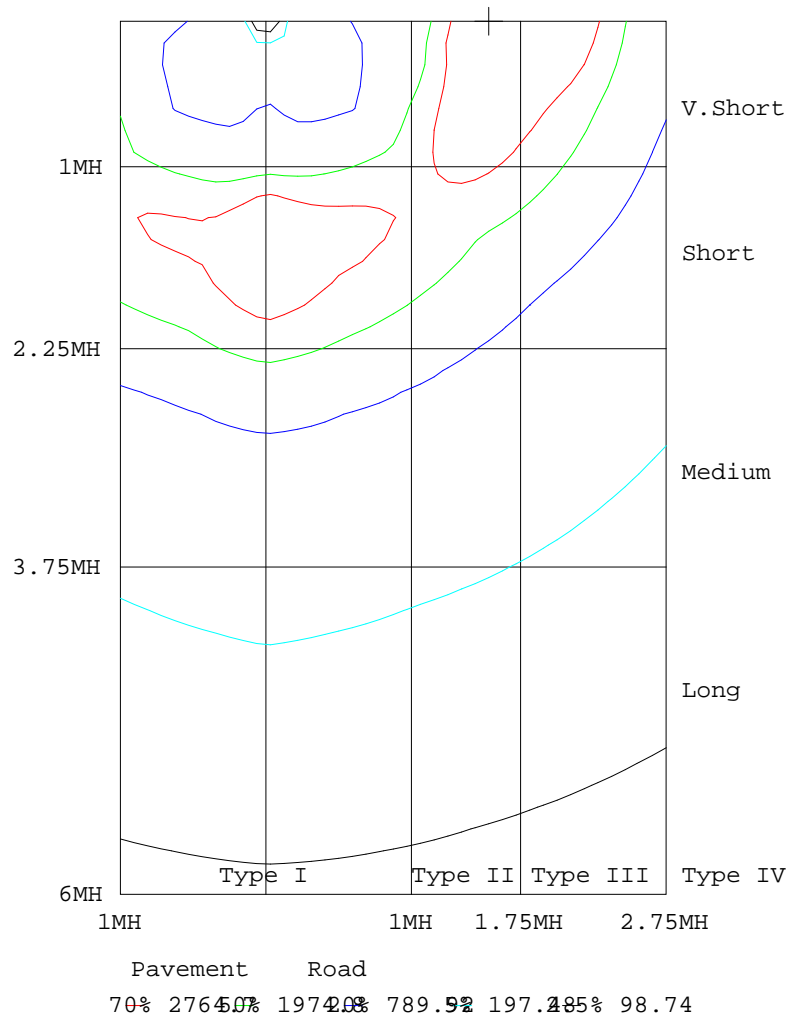
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity:38.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: T-221LED60-24(5050 40K RA70 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 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 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 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	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47
5	70.8	62.1	49.1	33.6	41.2	55.9	60.1	55.1	42.2	34.1	33.9	48.5	64.2	57.3	45.7	39.6	51.5	59.6	71.8
10	257	234	217	183	201	237	286	252	197	170	186	209	268	237	214	190	206	246	281
15	449	367	370	337	366	382	465	407	362	353	341	328	453	387	344	347	374	390	471
20	591	493	485	441	493	530	634	551	491	441	463	460	579	500	461	445	507	517	625
25	685	571	563	516	593	624	730	641	573	523	545	538	661	567	542	516	587	597	722
30	783	658	640	574	664	695	832	715	630	560	612	615	744	639	616	547	628	665	804
35	895	753	718	647	745	785	918	798	703	631	672	683	823	719	669	583	687	734	881
40	1081	909	850	748	864	913	1073	929	811	710	752	764	922	785	739	667	773	825	1007
45	1625	1456	1366	1152	1334	1349	1542	1297	1098	948	982	984	1182	989	906	820	972	1095	1364
50	2685	2320	2116	1833	2181	2251	2586	2174	1802	1595	1687	1727	2064	1728	1585	1393	1658	1869	2310
55	3295	2902	2790	2460	2972	3203	3960	3316	2731	2339	2470	2591	3088	2698	2481	2155	2588	3008	3738
60	3193	2796	2771	2603	3074	3150	3631	3262	2963	2718	2771	2839	3253	2853	2791	2594	3047	3185	3785
65	2445	2150	2044	1837	2198	2570	3327	2854	2367	2117	2287	2388	2707	2398	2322	2055	2396	2599	3104
70	871	737	681	643	801	897	1231	1123	918	872	990	1050	1180	1047	993	864	1008	1019	1191
75	281	258	257	237	289	298	347	337	321	309	349	364	418	380	375	332	387	367	388
80	97.8	97.4	101	87.0	104	108	118	127	127	119	141	140	142	143	155	131	151	139	136
85	53.4	59.4	60.8	47.4	51.7	51.0	44.1	55.4	54.5	50.5	63.5	60.5	56.3	63.1	71.4	56.9	67.5	64.0	48.9
90	26.3	34.7	36.0	27.9	32.2	30.2	20.5	29.7	32.8	31.3	39.5	36.6	28.6	35.4	40.7	28.9	34.4	30.9	18.5
95	10.3	14.3	13.4	8.39	14.1	16.1	12.0	16.9	15.2	8.93	14.2	16.0	10.8	15.0	13.8	7.81	14.2	15.3	8.97
100	4.28	8.50	9.07	5.94	9.27	9.14	6.33	9.72	9.34	5.84	9.13	8.80	3.78	7.68	8.21	5.26	8.05	8.03	4.98
105	4.68	8.30	8.75	5.94	8.84	8.86	6.05	9.17	8.86	5.84	8.59	8.43	4.39	7.68	8.10	5.52	7.89	8.03	5.47
110	5.95	8.30	8.75	6.57	8.79	8.86	7.12	9.11	8.80	6.49	8.59	8.43	5.45	7.83	8.11	6.26	7.95	8.03	6.59
115	6.40	8.30	8.75	7.05	8.79	8.92	7.72	9.11	8.80	7.31	8.59	8.48	6.30	7.93	8.16	6.95	7.95	8.03	7.29
120	7.01	8.55	8.91	7.89	8.79	9.49	8.57	9.44	8.86	8.12	8.91	8.85	6.30	7.78	8.16	7.15	8.00	8.03	7.23
125	6.96	7.89	8.37	7.58	8.47	8.77	8.37	8.91	8.70	8.08	8.70	8.75	6.30	7.26	7.51	6.89	7.31	7.45	7.07
130	6.00	6.70	7.09	6.48	7.16	7.35	7.13	7.61	7.57	7.10	7.64	7.63	5.95	6.54	7.02	6.26	6.68	6.66	6.38
135	5.24	5.72	6.17	5.68	6.16	6.25	6.06	6.49	6.60	6.22	6.68	6.61	5.19	5.61	5.90	5.47	5.73	5.61	5.46
140	4.84	5.10	5.63	5.26	5.47	5.51	5.41	5.63	5.85	5.67	5.87	5.66	4.54	4.84	5.20	4.84	5.20	4.82	4.71
145	4.59	4.90	5.37	5.21	5.32	5.19	5.25	5.36	5.48	5.40	5.45	5.23	4.39	4.53	4.72	4.79	4.79	4.56	4.66
150	4.59	4.79	5.37	5.15	5.26	5.14	5.14	5.20	5.37	5.40	5.34	5.07	4.39	4.53	4.72	4.79	4.74	4.56	4.66
155	4.59	4.79	5.26	5.15	5.26	5.09	5.14	5.20	5.37	5.40	5.28	5.01	4.39	4.53	4.72	4.79	4.74	4.56	4.66
160	4.59	4.79	5.31	5.15	5.26	5.14	5.14	5.25	5.37	5.40	5.28	5.01	4.39	4.53	4.62	4.79	4.79	4.56	4.66
165	4.59	4.59	4.83	4.79	4.79	4.67	4.93	4.88	4.89	5.07	4.91	4.69	4.33	4.32	4.45	4.52	4.63	4.56	4.50
170	3.63	3.66	3.65	3.48	3.53	3.68	3.86	3.87	3.76	3.71	3.69	3.79	3.37	3.40	3.32	3.10	3.05	3.15	3.32
175	2.48	2.53	2.53	2.32	2.42	2.57	2.63	2.63	2.52	2.51	2.57	2.62	2.12	2.22	2.25	2.16	2.11	2.10	2.25
180	2.07	2.11	2.15	2.16	2.16	2.10	2.30	2.25	2.15	2.18	2.19	2.19	2.12	2.16	2.20	2.16	2.21	2.21	2.25

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 TYPE V)L

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.08V I:0.2657A P:57.832W PF:0.9891 Freq:50.01Hz Lamp Flux:7007.29x1 lm		
NAME: T-221LED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	2.47	2.47	2.47	2.47	2.47														
5	60.4	43.6	43.4	63.8	72.6														
10	246	212	202	229	244														
15	400	391	366	367	406														
20	533	521	462	480	516														
25	614	587	536	551	591														
30	693	663	575	628	667														
35	764	736	657	711	753														
40	881	856	756	829	893														
45	1240	1277	1089	1199	1361														
50	2107	2072	1741	1937	2177														
55	3164	2888	2468	2691	2806														
60	3188	2977	2620	2756	2772														
65	2549	2141	1849	2055	2066														
70	927	768	651	699	691														
75	324	285	251	267	253														
80	121	111	98.3	108	99.0														
85	59.3	56.3	53.0	61.7	59.2														
90	29.2	31.7	31.1	37.1	32.0														
95	13.6	12.8	7.65	12.6	13.5														
100	8.20	8.26	5.62	8.01	7.78														
105	8.20	8.11	6.00	7.37	7.47														
110	8.31	8.11	6.60	7.37	7.47														
115	8.15	8.11	6.87	7.36	7.41														
120	8.10	8.05	6.87	7.31	7.31														
125	7.88	7.51	6.65	7.04	6.98														
130	6.81	6.65	5.94	6.35	6.24														
135	5.68	5.63	5.23	5.23	5.28														
140	5.35	4.94	4.96	4.96	4.75														
145	4.72	4.88	4.96	4.96	4.75														
150	4.72	4.88	4.96	4.96	4.75														
155	4.72	4.88	4.96	4.96	4.69														
160	4.72	4.67	4.91	5.01	4.69														
165	4.60	4.56	4.63	4.54	4.42														
170	3.38	3.16	3.16	3.04	3.14														
175	2.31	2.25	2.18	2.14	2.13														
180	2.25	2.20	2.24	2.14	2.13														

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 TYPE V)L