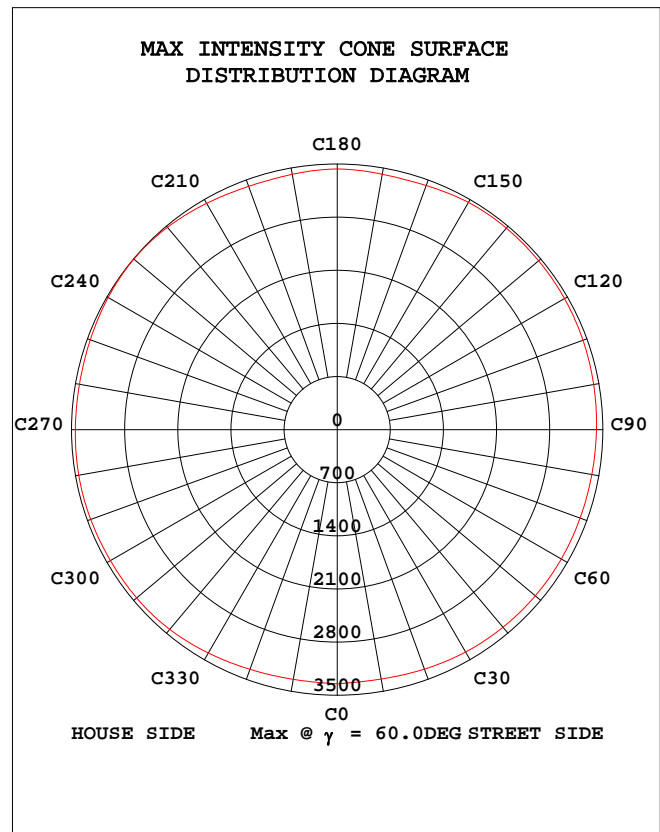
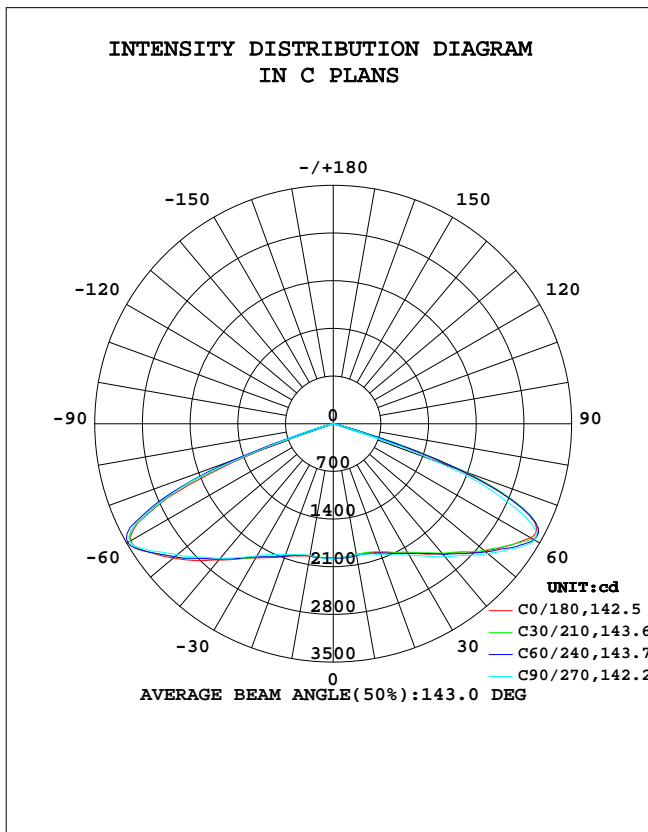


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 146.23 lm/W			
MODEL	LY5050 40K RA70 T1D	I <sub>max</sub> (cd)	3494	η street_up(%)	0.1
NOMINAL POWER(W)	80	LOR(%)	100.0	η street_down(%)	50.1
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	11627	η house_up(%)	0.1
NOMINAL FLUX(lm)	11627.4	MAXIMUM @(C,γ )	225,60.0	η house_down(%)	49.7
LAMPS INSIDE	1	η up(%)	0.2	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	99.8	SLI	17.358



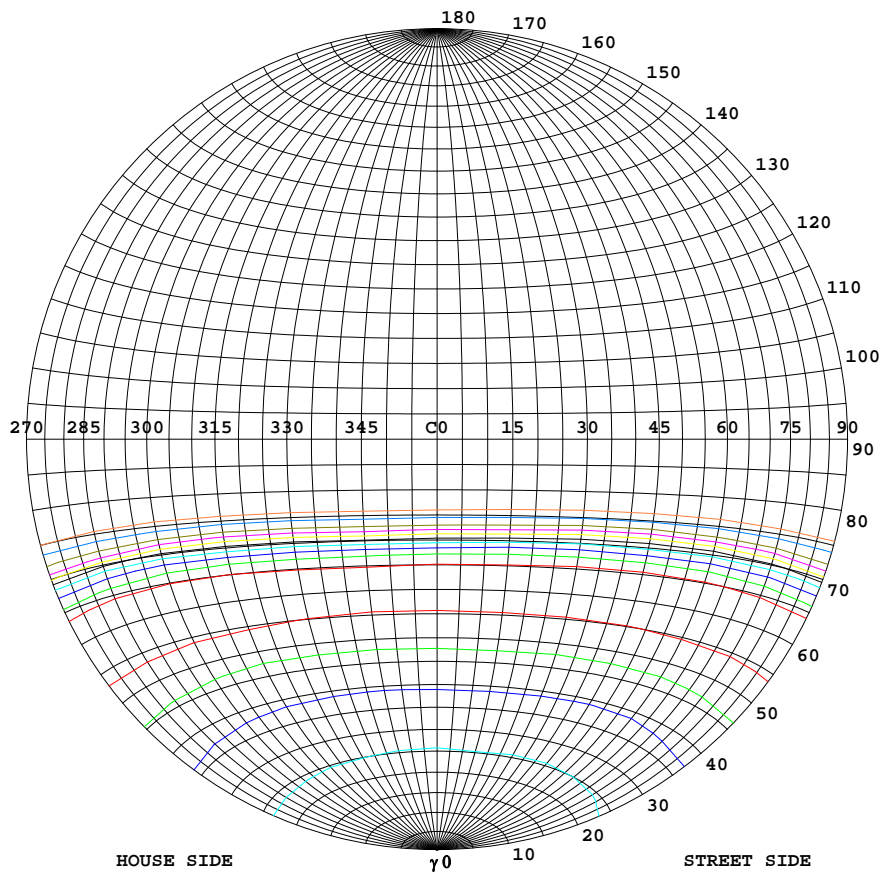
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



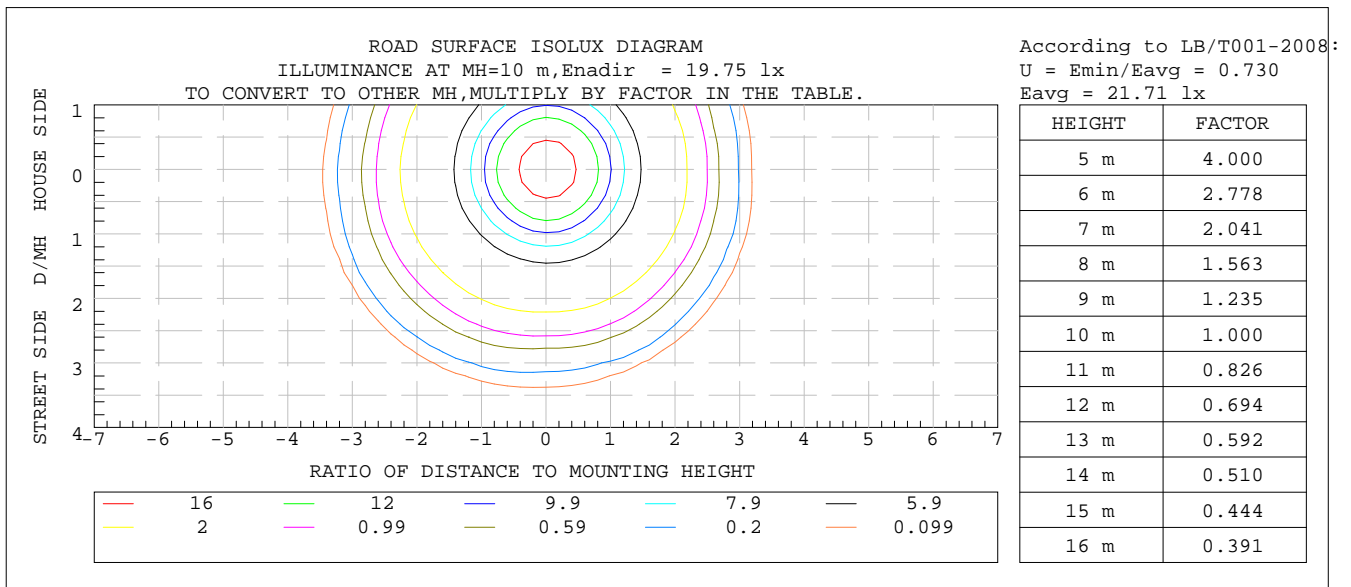
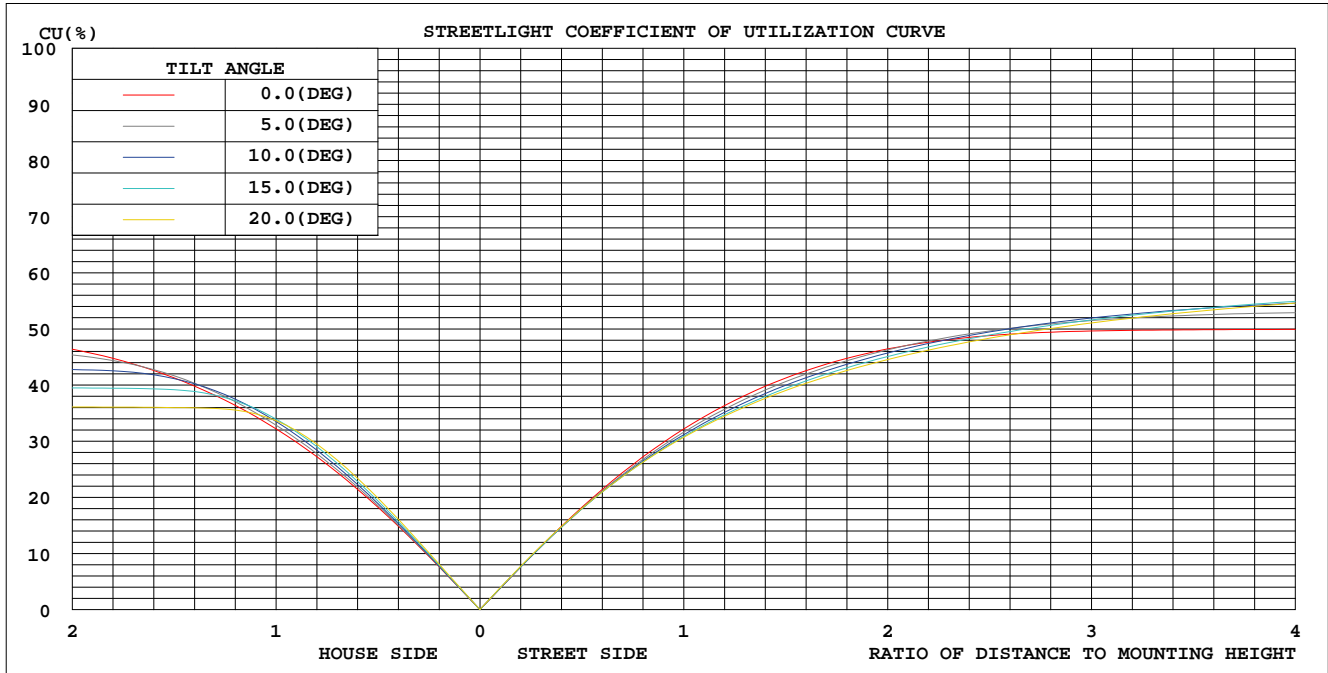
### Classification:

IES:Type V - Short  
 CIE:Broad - Intermediate  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:6.624cd/klm  
 Max.At90:0.0908cd/klm  
 Max.80-90:6.624cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	3494
90%	3145
80%	2795
70%	2446
60%	2096
50%	1747
40%	1398
30%	1048
20%	699
10%	349
5%	175

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 29.8DEG  
 Operators:CS01  
 Test Date:2021-06-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity: 37.1%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

COEFFICIENT OF UTILIZATION CURVE  
AND ISOLUX DIAGRAM

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	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	1954	1951	1957	1974	1977	1966	1967	1954	0- 10	187.8	187.8	1.61,1.61
20	2007	2009	2039	2053	2072	2063	2042	2017	10- 20	564.7	752.5	6.47,6.47
30	2193	2179	2228	2249	2275	2263	2240	2190	20- 30	986.8	1739	15,15
40	2495	2484	2551	2567	2610	2595	2577	2488	30- 40	1497	3236	27.8,27.8
50	2909	2908	2965	3007	3067	3038	2991	2905	40- 50	2134	5370	46.2,46.2
60	3348	3403	3415	3465	3435	3494	3451	3446	50- 60	2888	8258	71,71
70	1912	2023	1537	1594	1119	1513	1333	1846	60- 70	2852	11110	95.6,95.6
80	66.94	75.05	65.49	60.92	48.98	54.12	58.42	68.00	70- 80	465.7	11576	99.6,99.6
90	0.9105	0.9716	0.8524	0.9027	0.8582	1.055	1.001	1.003	80- 90	23.98	11600	99.8,99.8
100	1.863	2.001	1.948	2.347	2.820	2.911	2.706	2.659	90-100	1.559	11602	99.8,99.8
110	4.329	4.510	4.900	4.706	4.583	5.012	5.055	4.807	100-110	3.855	11606	99.8,99.8
120	5.888	5.109	6.054	5.208	6.244	5.162	5.956	5.208	110-120	5.132	11611	99.9,99.9
130	6.750	4.913	6.158	5.059	6.092	5.012	5.956	5.157	120-130	5.186	11616	99.9,99.9
140	6.445	4.761	5.505	4.807	5.489	5.012	5.356	4.607	130-140	4.212	11620	99.9,99.9
150	5.692	4.810	4.554	4.760	5.185	4.661	4.804	4.607	140-150	3.210	11623	100,100
160	4.784	4.410	4.504	4.307	4.784	4.761	4.804	4.657	150-160	2.183	11626	100,100
170	5.236	5.010	5.102	5.105	5.388	5.212	5.155	5.108	160-170	1.353	11627	100,100
180	5.287	5.312	5.155	5.158	5.388	5.212	5.055	4.857	170-180	0.4918	11627	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

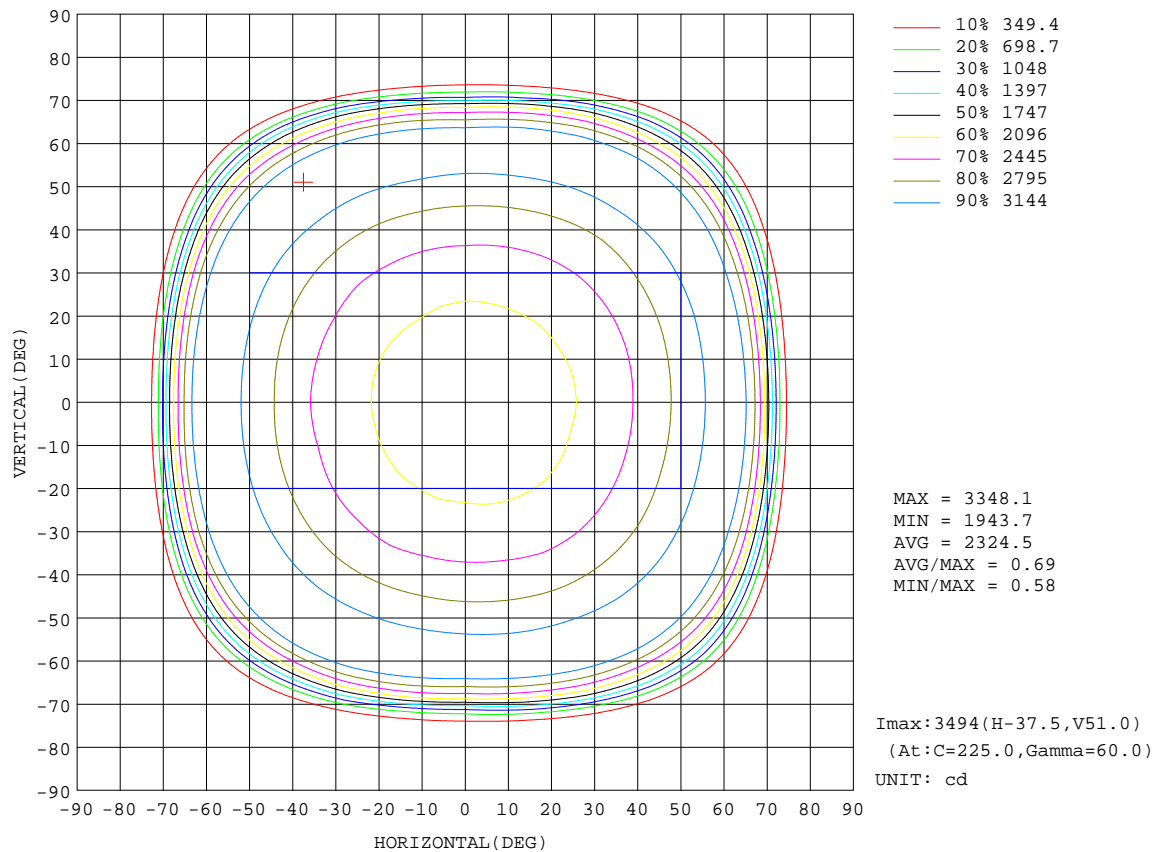
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 29.8DEG  
 Operators:CS01  
 Test Date:2021-06-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity: 37.1%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

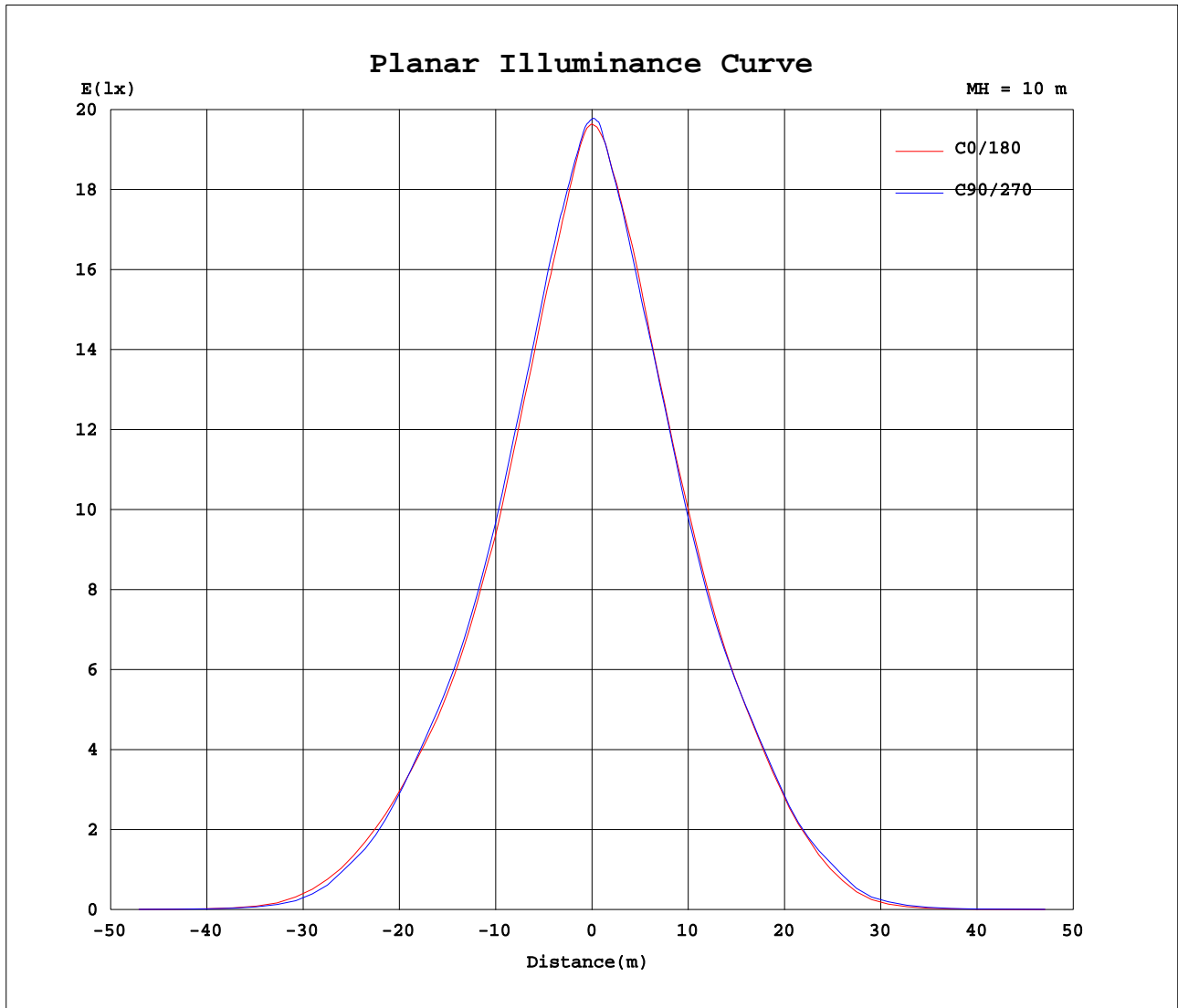
Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 29.8DEG  
 Operators: CS01  
 Test Date: 2021-06-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity: 37.1%  
 Test Distance: 26.000m [K=1.0000]  
 Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

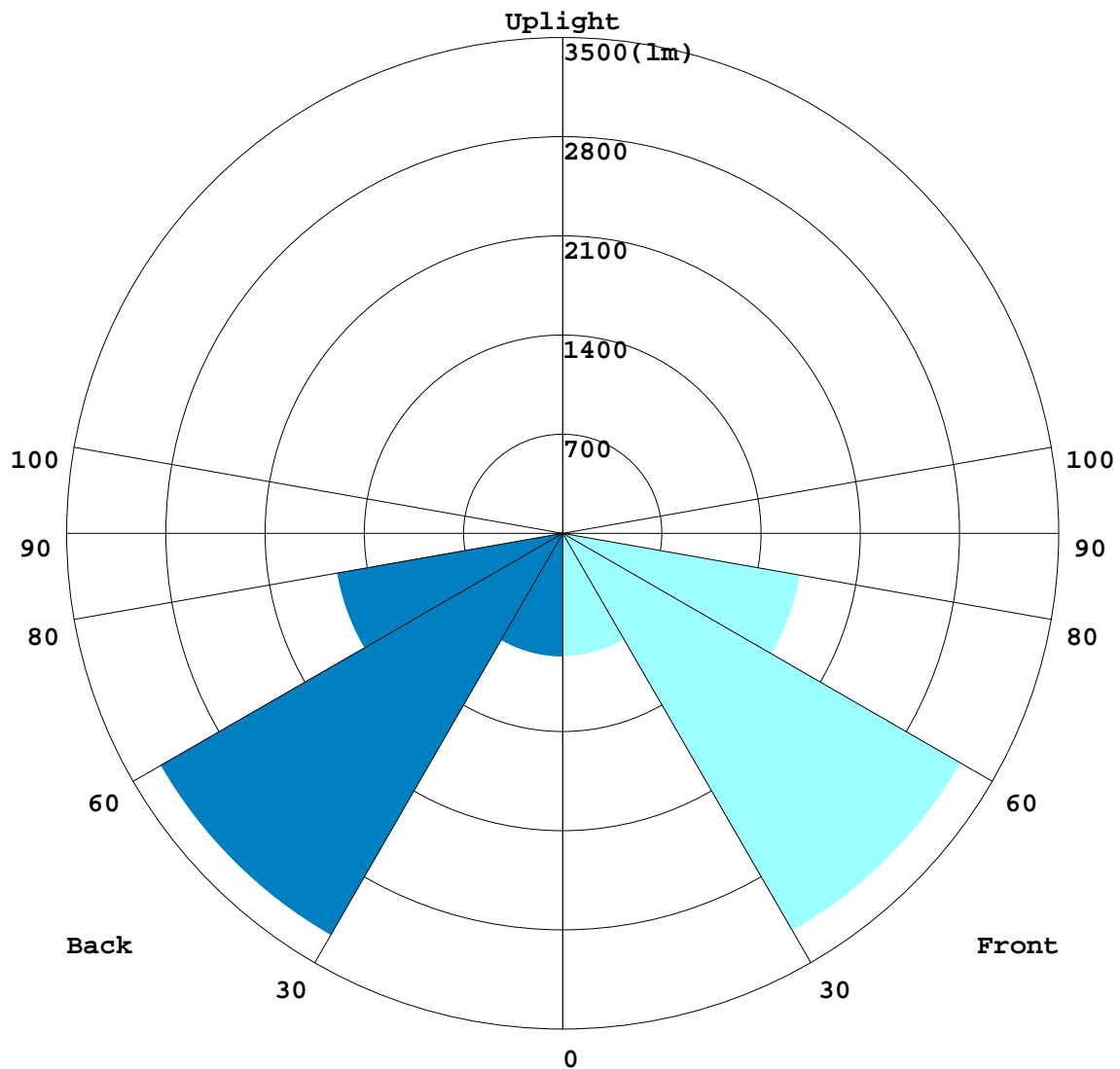
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LCS REPORT

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	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: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## BUG REPORT

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

### IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	867.48	7.5
FM - Front-Medium(30-60)	3243	27.9
FH - Front-High(60-80)	1702.1	14.6
FVH - Front-Very High(80-90)	12.861	0.1
Total Forward Light	5838.9	50.2

BL - Back-Low(0-30)	871.8	7.5
BM - Back-Medium(30-60)	3275.8	28.2
BH - Back-High(60-80)	1616	13.9
BVH - Back-Very High(80-90)	11.118	0.1
Total Back Light	5788.5	49.8

UL - Uplight-Low(90-100)	1.5595	0.0
UH - Uplight-High(100-180)	25.623	0.2
Total Up Light	27.183	0.2

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

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	5774.7	13.784	5788.5
Street Side	5825.5	13.398	5838.9

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 29.8DEG  
 Operators:CS01  
 Test Date:2021-06-18

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity: 37.1%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

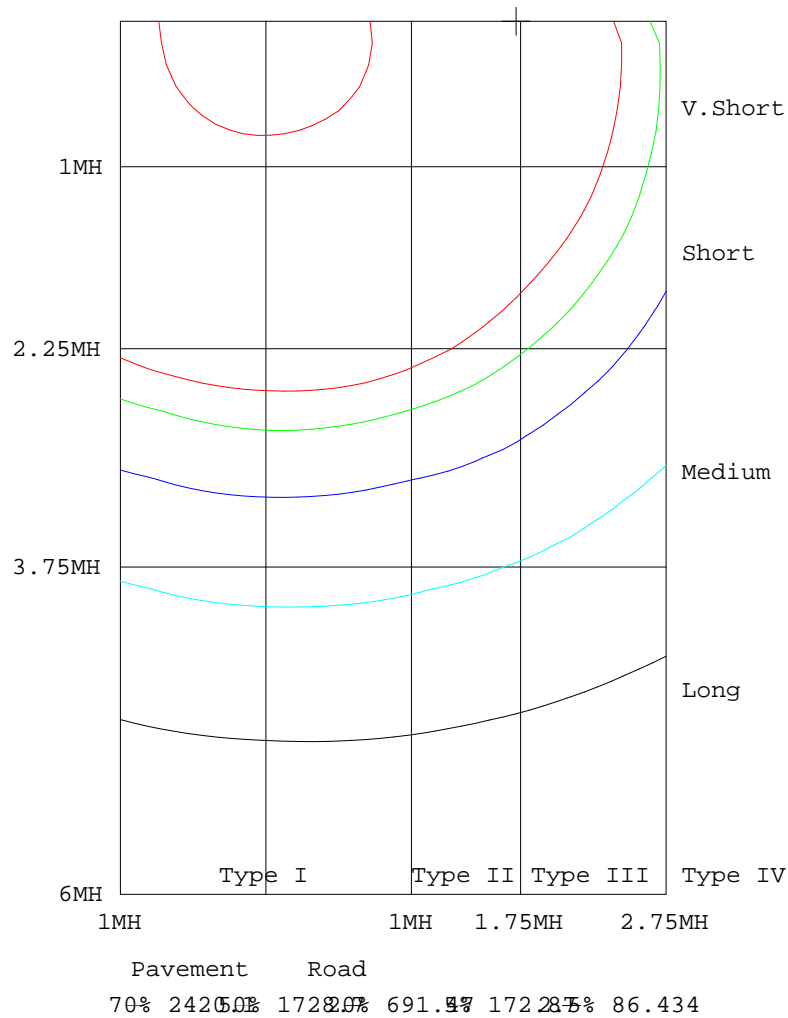


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ROAD ISOCANDELA REPORT

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	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: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm																			
NAME: D-191HLED80-36										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	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973
5	1965	1968	1966	1967	1977	1959	1965	1981	1967	1974	1981	1974	1973	1966	1967	1972	1976	1969	1978
10	1954	1955	1950	1951	1966	1953	1957	1972	1957	1974	1976	1970	1977	1963	1965	1966	1969	1962	1967
15	1962	1960	1954	1961	1976	1975	1980	1993	1976	1994	2002	2000	2012	1988	1993	1996	1998	1989	1989
20	2007	2005	1999	2009	2021	2021	2039	2045	2044	2053	2064	2068	2072	2060	2056	2063	2068	2045	2042
25	2091	2090	2082	2086	2101	2107	2125	2135	2133	2145	2161	2162	2168	2162	2155	2155	2155	2138	2119
30	2193	2194	2175	2179	2200	2213	2228	2244	2232	2249	2262	2274	2275	2274	2267	2263	2259	2251	2240
35	2337	2321	2312	2312	2325	2352	2372	2391	2370	2394	2412	2426	2422	2422	2420	2406	2414	2400	2394
40	2495	2485	2479	2484	2501	2528	2551	2571	2562	2567	2599	2614	2610	2602	2599	2595	2596	2578	2577
45	2664	2670	2666	2674	2701	2707	2733	2764	2761	2776	2803	2811	2843	2815	2804	2800	2795	2785	2766
50	2909	2897	2892	2908	2924	2937	2965	2992	2987	3007	3035	3044	3067	3045	3034	3038	3038	3021	2991
55	3127	3118	3119	3137	3174	3173	3202	3244	3250	3273	3294	3281	3291	3283	3288	3296	3289	3277	3254
60	3348	3345	3383	3403	3409	3404	3415	3438	3457	3465	3459	3414	3435	3409	3444	3494	3486	3454	3451
65	3175	3164	3207	3212	3179	3089	2982	3058	3090	3068	3020	2957	2841	2876	2911	2955	2987	2946	2878
70	1912	1978	2061	2023	1999	1816	1537	1645	1695	1594	1477	1338	1119	1177	1361	1513	1576	1444	1333
75	274	291	317	313	288	246	216	210	208	187	169	147	130	131	142	154	166	167	174
80	66.9	68.9	71.8	75.1	77.0	72.6	65.5	68.4	66.1	60.9	57.1	52.5	49.0	49.3	51.6	54.1	58.5	60.6	58.4
85	21.5	21.9	22.0	22.0	22.0	21.0	18.4	18.5	17.2	15.5	14.4	12.8	11.2	11.6	12.6	13.0	13.9	14.5	14.7
90	0.91	0.90	0.87	0.97	0.92	0.85	0.85	0.85	0.85	0.90	0.80	0.85	0.86	1.00	1.00	1.05	1.06	0.95	1.00
95	0.96	0.90	1.05	1.05	1.00	0.90	0.85	0.95	1.15	1.10	1.20	1.15	1.56	1.61	1.70	1.71	1.66	1.55	1.50
100	1.86	1.85	1.95	2.00	2.06	2.00	1.95	2.01	2.24	2.35	2.35	2.44	2.82	2.86	2.91	2.91	2.92	2.81	2.71
105	3.42	3.40	3.49	3.50	3.62	3.50	3.50	3.71	3.85	3.85	3.61	3.55	3.58	3.46	3.96	4.06	4.12	4.01	3.80
110	4.33	4.31	4.25	4.51	4.42	4.91	4.90	5.01	5.04	4.71	4.42	4.36	4.58	4.46	4.66	5.01	5.08	5.01	5.06
115	4.78	4.56	4.55	4.51	5.07	5.16	5.75	5.42	5.30	5.06	4.87	4.81	5.24	5.01	5.01	5.16	5.83	6.06	5.81
120	5.89	5.85	5.15	5.11	5.17	5.96	6.05	6.03	5.45	5.21	5.62	5.80	6.24	5.51	5.31	5.16	5.58	6.06	5.96
125	6.80	6.11	5.71	5.31	5.98	6.01	6.46	6.13	5.95	6.01	6.02	6.21	6.19	6.01	5.26	5.16	5.63	5.96	5.96
130	6.75	6.11	5.51	4.91	5.63	6.06	6.16	6.08	5.70	5.06	5.37	5.81	6.09	5.85	5.26	5.01	5.63	5.91	5.96
135	6.40	6.06	5.51	4.86	5.02	5.56	5.95	5.32	5.20	4.81	5.32	5.51	5.79	5.36	5.26	5.01	5.17	5.11	5.80
140	6.44	5.81	5.51	4.76	4.92	5.36	5.51	5.22	4.95	4.81	5.32	5.51	5.49	5.36	5.26	5.01	4.82	5.11	5.36
145	6.25	5.66	5.31	4.76	4.92	5.11	5.11	5.22	4.80	4.81	5.32	5.51	5.44	5.36	5.15	4.91	4.67	5.06	5.15
150	5.69	5.26	4.86	4.81	4.87	4.96	4.55	5.07	4.65	4.76	4.92	5.16	5.19	5.06	4.60	4.66	4.57	5.01	4.80
155	4.94	4.71	4.80	4.61	4.62	4.81	4.50	4.67	4.50	4.31	4.57	4.66	4.73	4.56	4.60	4.66	4.57	4.86	4.80
160	4.78	4.56	4.60	4.41	4.37	4.51	4.50	4.52	4.35	4.31	4.42	4.51	4.78	4.76	4.71	4.76	4.62	4.91	4.80
165	4.78	4.56	4.60	4.41	4.37	4.46	4.50	4.52	4.35	4.36	4.42	4.46	4.94	4.97	4.91	4.96	4.77	5.11	4.81
170	5.24	5.06	5.10	5.01	4.77	5.10	5.10	5.01	4.55	5.11	5.12	5.16	5.39	5.36	5.36	5.21	5.23	5.16	5.15
175	5.29	5.11	5.10	5.16	5.07	5.06	5.15	5.12	4.85	5.16	5.17	5.16	5.39	5.31	5.15	5.21	5.23	5.16	5.16
180	5.29	5.11	5.21	5.31	5.07	5.06	5.15	5.12	4.85	5.16	5.17	5.16	5.39	5.26	5.10	5.21	5.23	5.06	5.05

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.18V I:0.3880A P:79.516W PF:0.9308 Freq:50.01Hz Lamp Flux:11627.4x1 lm		
NAME: D-191HLED80-36	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	1973	1973	1973	1973	1973													
5	1979	1970	1968	1974	1962													
10	1970	1960	1954	1964	1956													
15	1983	1971	1965	1976	1962													
20	2043	2022	2017	2028	2003													
25	2127	2110	2100	2103	2085													
30	2232	2202	2190	2188	2179													
35	2373	2344	2326	2319	2312													
40	2558	2515	2488	2486	2473													
45	2754	2707	2675	2672	2660													
50	2984	2934	2905	2906	2884													
55	3237	3190	3178	3141	3109													
60	3459	3450	3446	3398	3348													
65	3032	3111	3144	3118	3096													
70	1642	1846	1846	1860	1796													
75	200	232	254	265	249													
80	66.4	68.5	68.0	67.4	65.5													
85	17.4	18.3	19.1	19.7	20.1													
90	1.00	1.05	1.00	1.01	0.90													
95	1.56	1.55	1.51	1.41	1.36													
100	2.71	2.80	2.66	2.62	2.41													
105	3.78	3.90	3.71	3.47	3.46													
110	4.87	4.50	4.81	4.52	4.51													
115	5.48	5.35	5.26	5.12	5.16													
120	5.57	5.35	5.21	5.47	5.86													
125	5.47	5.35	5.21	5.78	6.06													
130	5.47	5.15	5.16	5.92	6.06													
135	5.22	4.70	5.06	5.92	5.95													
140	5.17	4.70	4.61	5.27	5.46													
145	5.07	4.70	4.61	5.07	5.26													
150	4.87	4.70	4.61	4.82	5.06													
155	4.67	4.70	4.61	4.82	4.86													
160	4.67	4.80	4.66	4.82	4.86													
165	5.08	5.05	4.81	4.97	4.91													
170	5.27	5.10	5.11	5.17	5.21													
175	5.22	5.10	5.06	5.17	5.16													
180	5.17	5.10	4.86	5.17	5.16													

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 29.8DEG  
Operators:CS01  
Test Date:2021-06-18

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
γ Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 37.1%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED80-36(LY5050 40K RA70 T1D)