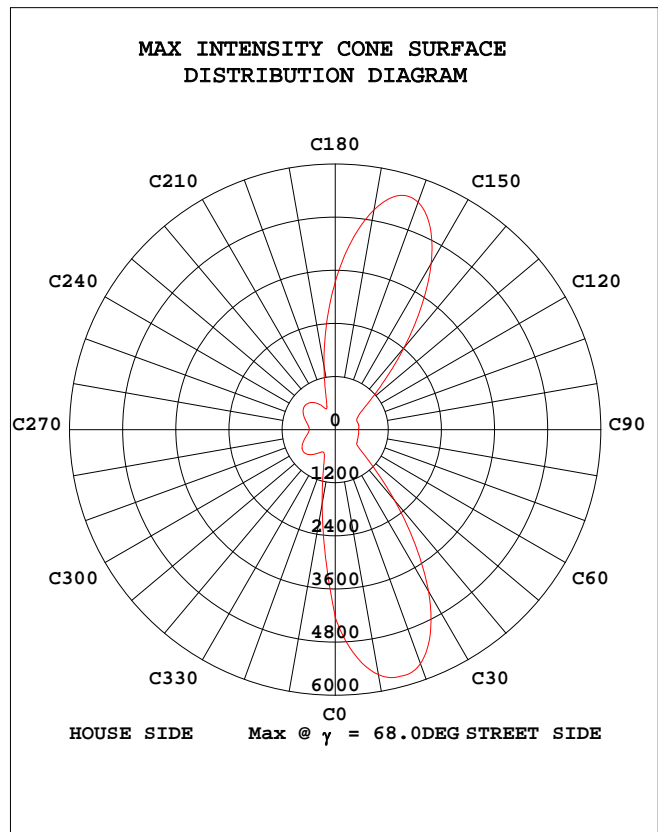
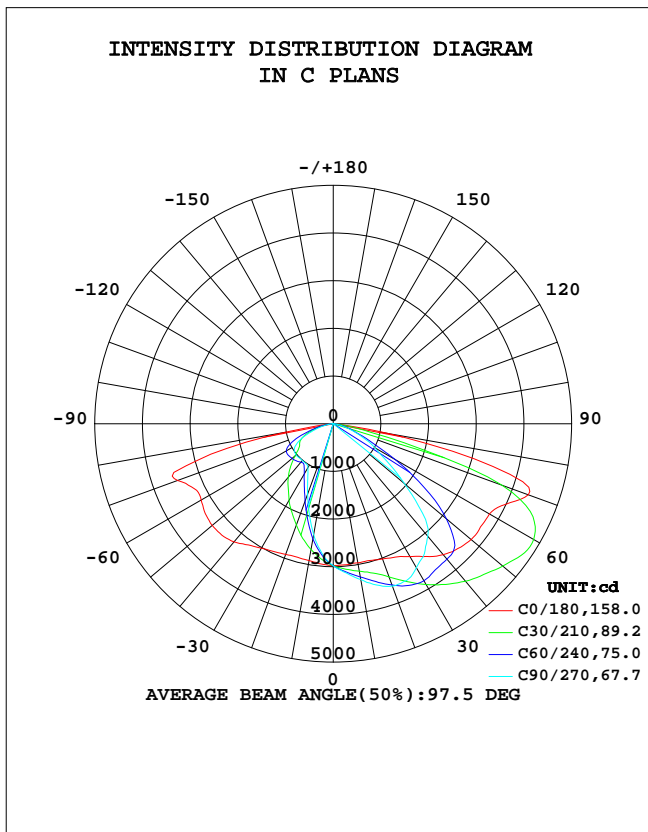


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 139.87 lm/W			
MODEL	LY5050 40K RA70 T2D	I _{max} (cd)	5760	η street_up(%)	0.1
NOMINAL POWER(W)	80	LOR(%)	100.0	η street_down(%)	68.7
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	11186	η house_up(%)	0.2
NOMINAL FLUX(lm)	11185.7	MAXIMUM @(C,γ)	15,68.0	η house_down(%)	31.1
LAMPS INSIDE	1	η up(%)	0.2	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	99.8	SLI	21.896



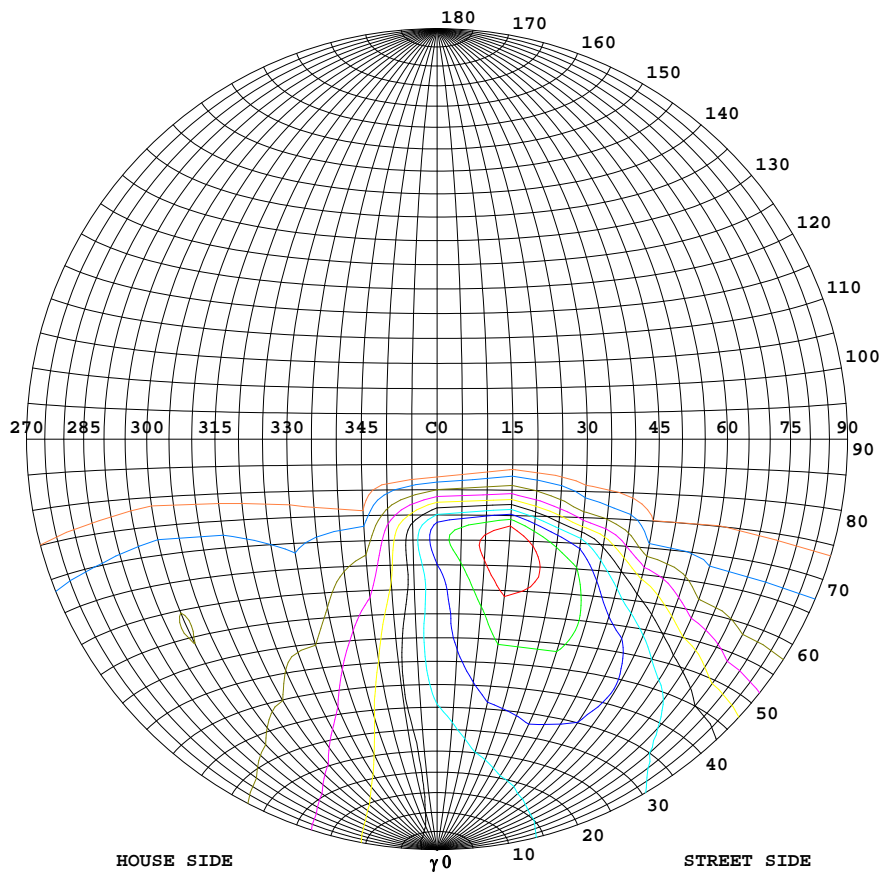
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 30.9DEG
Operators:CS01
Test Date:2021-06-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 42.6%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



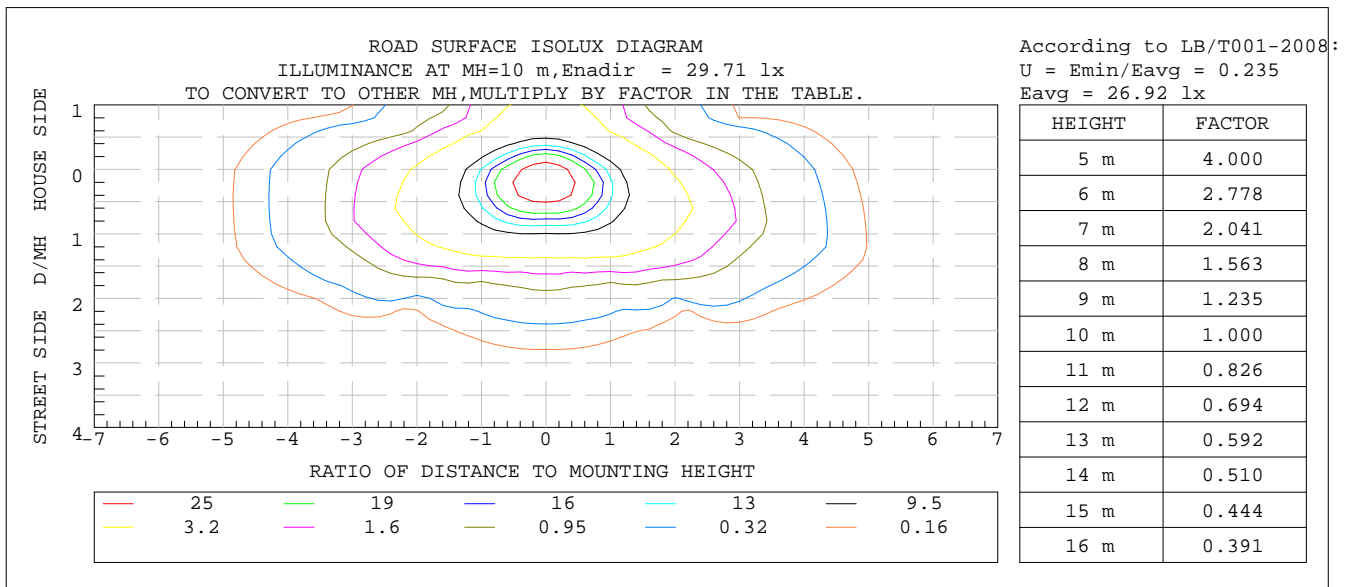
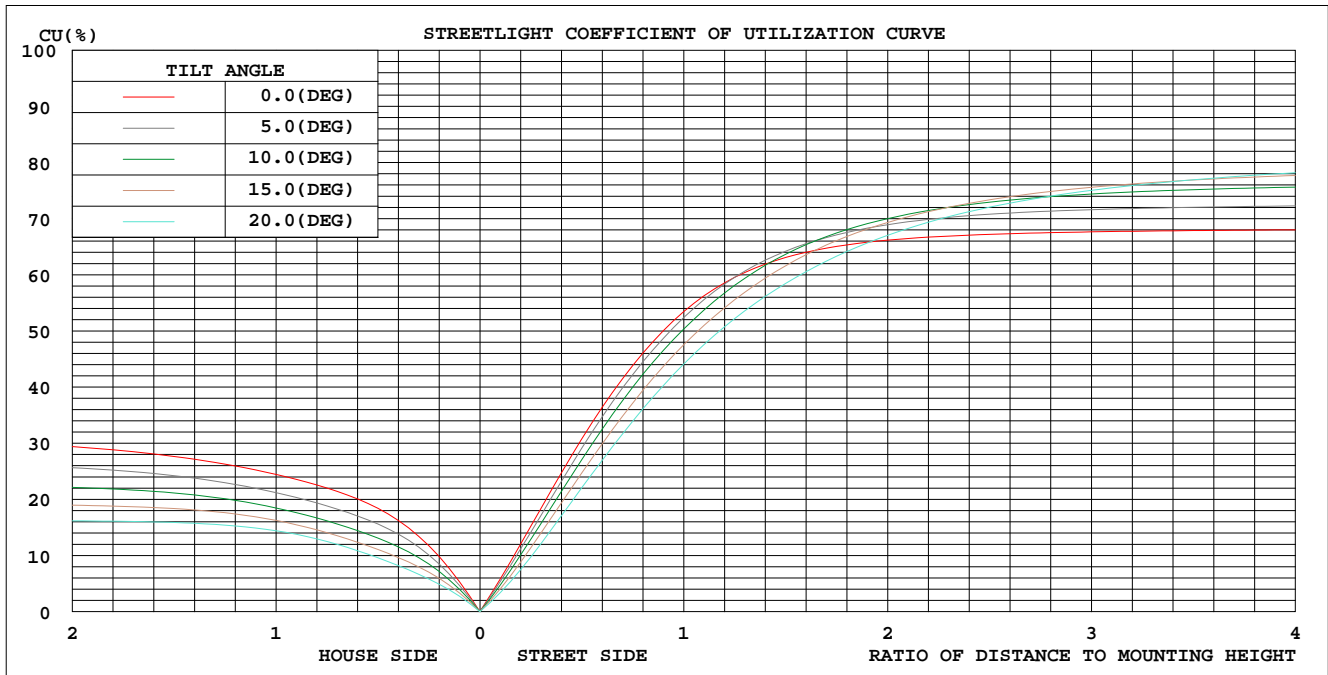
Classification:

IES:Type II - Medium
 CIE:Narrow - Intermediate
 IES:Semi cut-off
 CIE:Non-cut-off
 Max.At80:156.2cd/klm
 Max.At90:0.4040cd/klm
 Max.80-90:156.2cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	5760
90%	5184
80%	4608
70%	4032
60%	3456
50%	2880
40%	2304
30%	1728
20%	1152
10%	576
5%	288

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 30.9DEG
 Operators:CS01
 Test Date:2021-06-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 30.9DEG
Operators:CS01
Test Date:2021-06-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 42.6%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 lm		
NAME: D-191HLED80-36	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	2961	3210	3317	3187	2917	2563	2367	2580	0- 10	279.5	279.5	2.5,2.5
20	3018	3526	3623	3456	2917	1947	1576	2001	10- 20	797.1	1077	9.63,9.63
30	3219	3883	3489	3775	3014	1461	1064	1521	20- 30	1259	2336	20.9,20.9
40	3583	4124	3083	3992	3233	1109	1010	1148	30- 40	1676	4012	35.9,35.9
50	3777	4164	1941	4102	3315	1080	1019	1057	40- 50	2013	6025	53.9,53.9
60	3785	3080	1011	3235	3197	1080	912.8	1047	50- 60	2080	8105	72.5,72.5
70	4353	725.5	429.5	967.9	3475	741.1	492.7	700.4	60- 70	1872	9977	89.2,89.2
80	1145	135.6	96.73	142.9	1024	229.5	137.1	212.8	70- 80	1071	11048	98.8,98.8
90	2.622	1.047	0.7520	1.104	3.021	0.8469	0.6998	0.9004	80- 90	111.7	11160	99.8,99.8
100	4.838	1.193	0.7508	1.049	4.800	2.048	1.002	2.204	90-100	2.010	11162	99.8,99.8
110	6.826	1.639	1.300	1.448	6.680	5.476	1.853	4.644	100-110	3.081	11165	99.8,99.8
120	7.257	1.870	1.891	1.895	7.029	6.422	3.211	5.393	110-120	3.923	11169	99.8,99.8
130	6.828	1.982	2.027	2.030	7.381	7.112	5.959	6.843	120-130	4.204	11173	99.9,99.9
140	6.518	2.684	2.501	2.743	6.748	7.330	7.910	7.169	130-140	4.032	11177	99.9,99.9
150	5.779	3.584	3.000	3.595	6.136	7.467	8.457	7.281	140-150	3.523	11180	100,100
160	6.134	4.379	3.903	4.345	6.880	7.152	8.085	7.335	150-160	2.673	11183	100,100
170	7.260	6.169	6.204	6.136	7.483	7.590	9.007	8.197	160-170	1.835	11185	100,100
180	7.473	7.264	7.507	6.891	7.768	6.970	7.608	6.928	170-180	0.7028	11186	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

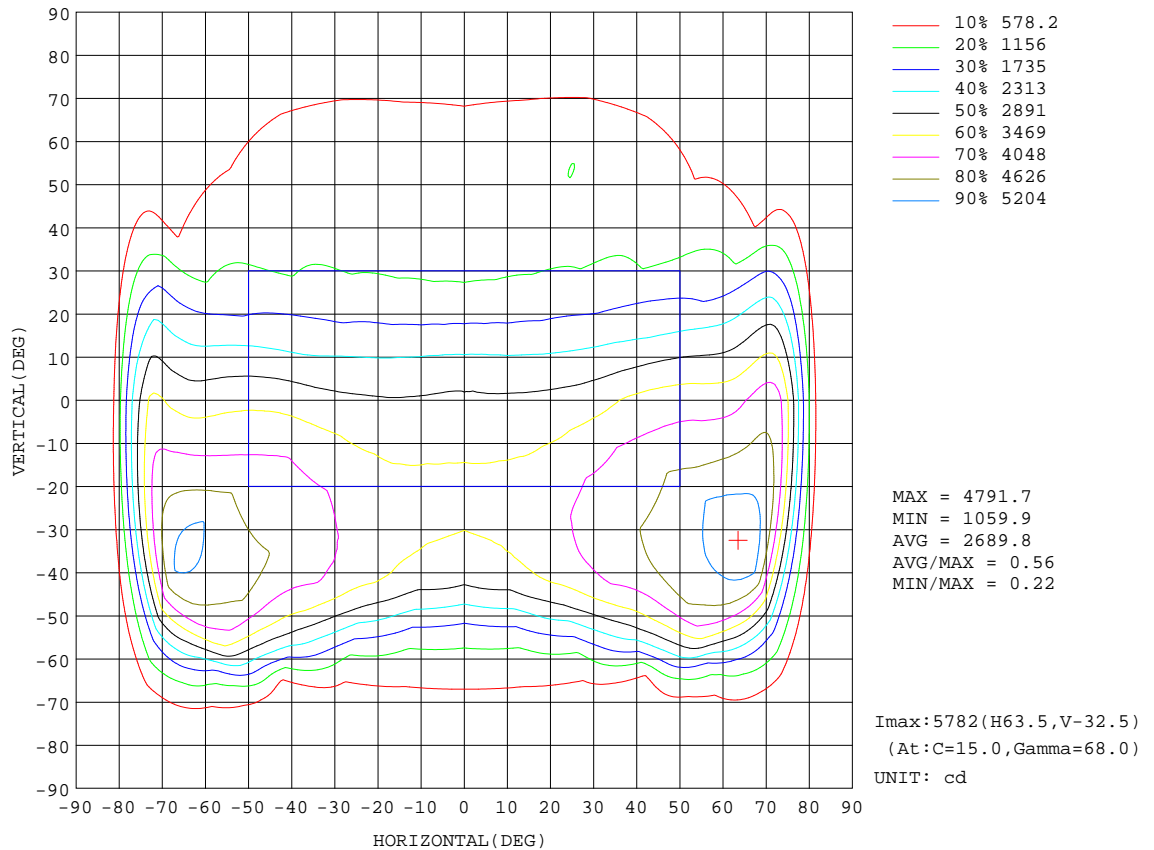
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 30.9DEG
 Operators:CS01
 Test Date:2021-06-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

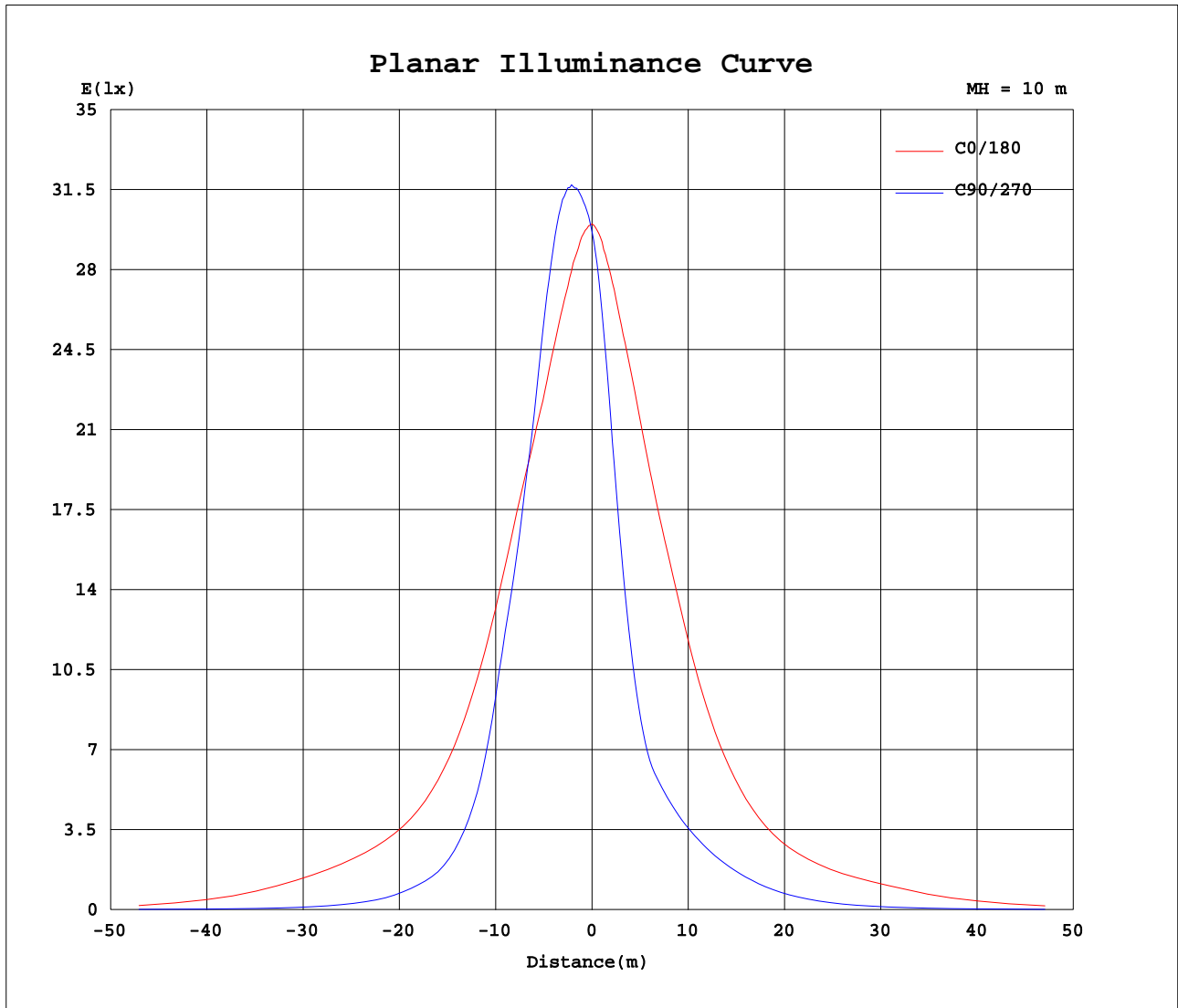
Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 lm		
NAME: D-191HLED80-36	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 30.9DEG
 Operators: CS01
 Test Date: 2021-06-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance: 26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 30.9DEG
 Operators: CS01
 Test Date: 2021-06-25

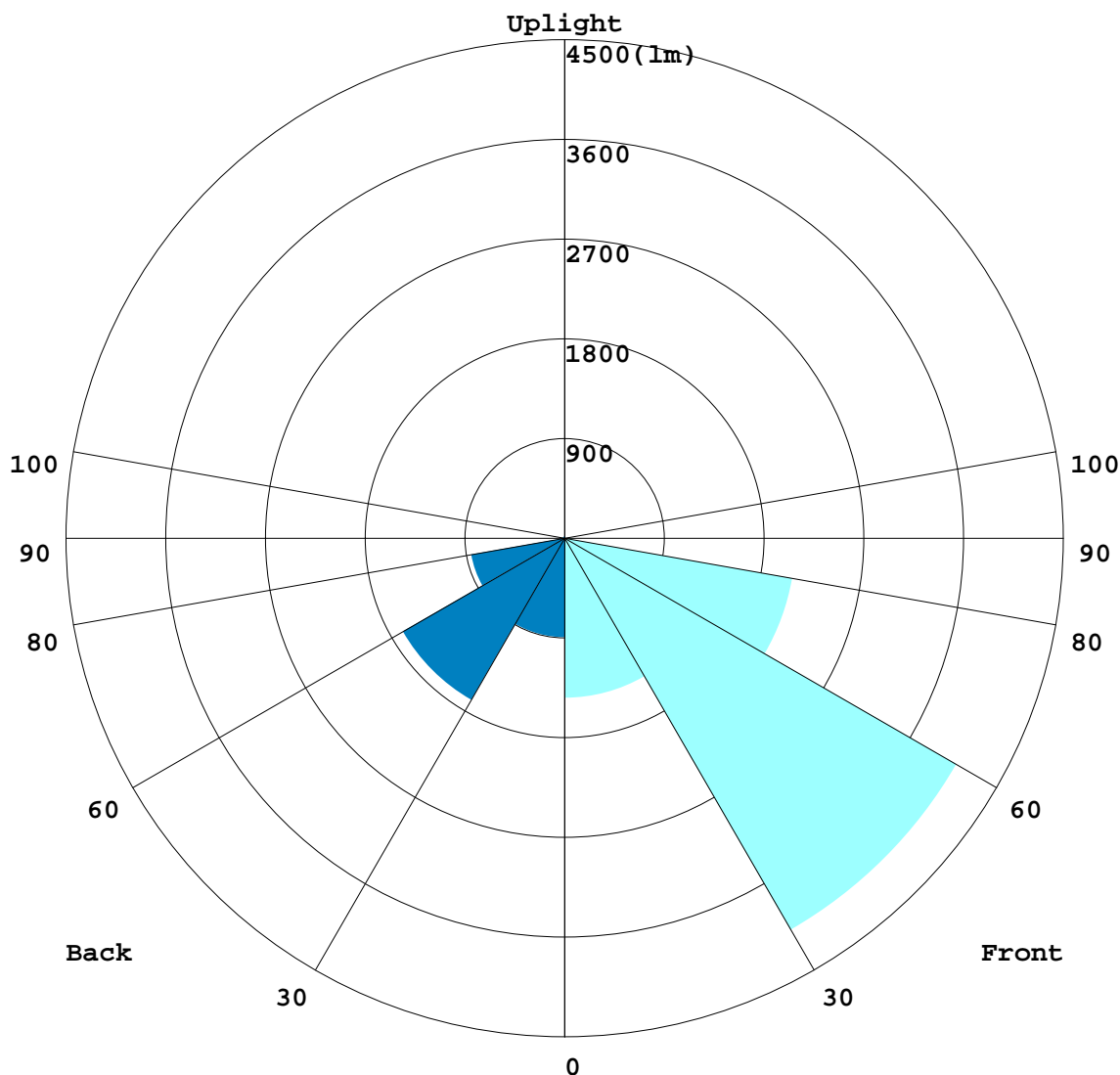
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance: 26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 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: 30.9DEG
 Operators:CS01
 Test Date:2021-06-25

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 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)	1441.8	12.9
FM - Front-Medium(30-60)	4083.7	36.5
FH - Front-High(60-80)	2087.1	18.7
FVH - Front-Very High(80-90)	70.829	0.6
Total Forward Light	7692.1	68.8

BL - Back-Low(0-30)	893.92	8.0
BM - Back-Medium(30-60)	1685.2	15.1
BH - Back-High(60-80)	856.31	7.7
BVH - Back-Very High(80-90)	40.839	0.4
Total Back Light	3493.5	31.2

UL - Uplight-Low(90-100)	2.0101	0.0
UH - Uplight-High(100-180)	23.974	0.2
Total Up Light	25.984	0.2

BUG(Back,Up,Glare) Rating	B2-U2-G2
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	3476.2	17.294	3493.5
Street Side	7683.4	8.6901	7692.1

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 30.9DEG
 Operators:CS01
 Test Date:2021-06-25

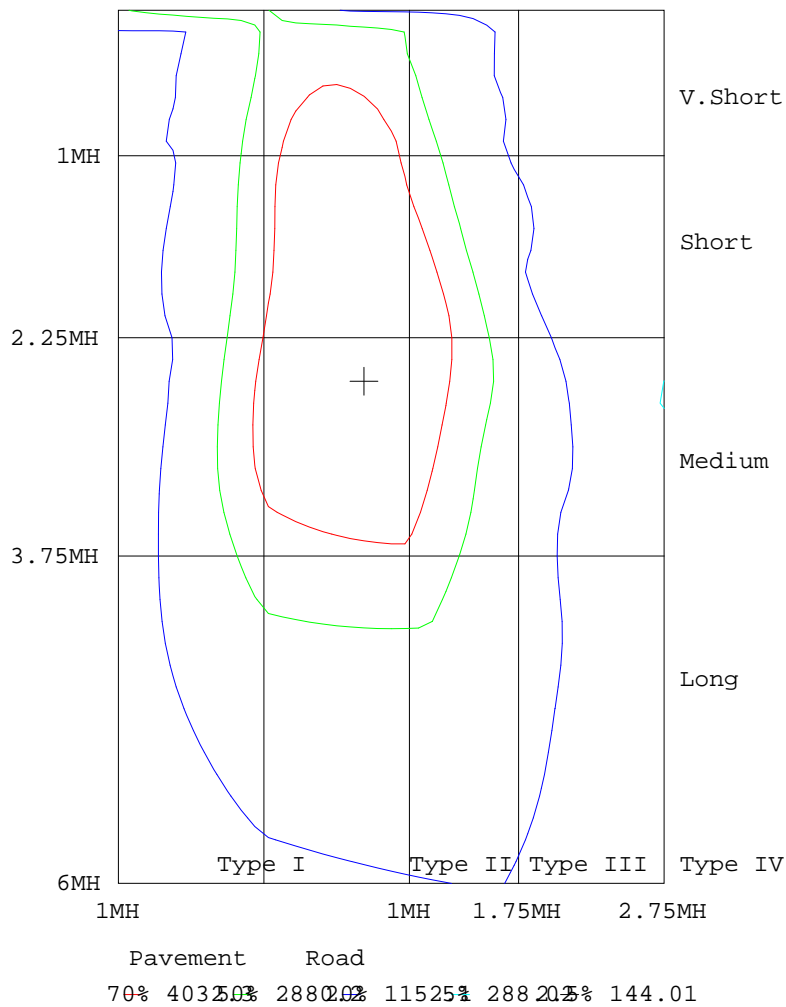
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 42.6%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 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: 30.9DEG
Operators:CS01
Test Date:2021-06-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 42.6%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 lm																			
NAME: D-191HLED80-36										TYPE:					WEIGHT:				
SPEC.:										DIM.:					SERIAL No.:				
MFR.: KLED										SUR.:					Shielding Angle:				

Table--1

UNIT: cd

C(DEC) γ (DEC)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977	2977
5	2968	3020	3062	3097	3122	3136	3143	3132	3122	3083	3049	3015	2953	2900	2853	2806	2764	2740	2730
10	2961	3050	3141	3210	3263	3300	3317	3304	3258	3187	3114	3025	2917	2806	2681	2563	2456	2391	2367
15	2970	3117	3242	3354	3425	3466	3499	3471	3413	3319	3189	3053	2899	2714	2488	2253	2075	1977	1951
20	3018	3246	3418	3526	3599	3603	3623	3599	3570	3456	3324	3143	2917	2622	2262	1947	1730	1606	1576
25	3085	3436	3652	3700	3742	3667	3632	3646	3702	3599	3526	3299	2956	2524	2054	1686	1440	1304	1268
30	3219	3684	3892	3883	3803	3594	3489	3590	3763	3775	3756	3504	3014	2424	1853	1461	1221	1097	1064
35	3399	3937	4115	4023	3737	3459	3331	3444	3709	3912	3974	3754	3104	2302	1647	1263	1069	1029	1014
40	3583	4185	4313	4124	3709	3293	3083	3257	3653	3992	4163	3983	3233	2176	1467	1109	1054	1037	1010
45	3701	4408	4469	4188	3607	2886	2647	2880	3580	4064	4321	4167	3304	2059	1264	1050	1100	1053	1013
50	3777	4642	4642	4164	3094	2196	1941	2234	3112	4102	4479	4339	3315	1898	1046	1080	1130	1072	1019
55	3773	4879	4813	3794	2331	1542	1381	1563	2410	3841	4651	4552	3279	1664	877	1094	1152	1069	998
60	3785	5270	4854	3080	1493	1005	1011	1012	1585	3235	4734	4877	3197	1368	814	1080	1135	1003	913
65	3995	5647	4621	2081	824	707	694	706	857	2364	4620	5295	3221	1039	730	976	990	832	735
70	4353	5696	3756	725	474	445	429	448	480	968	3992	5491	3475	685	566	741	716	566	493
75	3468	4166	1535	290	291	253	238	258	303	300	2024	4504	2931	347	382	451	430	335	291
80	1145	1476	421	136	122	104	96.7	108	131	143	617	1748	1024	166	221	230	216	160	137
85	48.0	151	40.6	25.0	21.5	18.4	16.8	20.3	24.7	29.2	67.2	261	52.7	47.8	55.5	58.3	55.7	42.9	36.5
90	2.62	1.64	1.34	1.05	0.91	0.81	0.75	0.80	1.37	1.10	1.40	1.82	3.02	3.03	1.64	0.85	0.80	0.75	0.70
95	3.41	1.53	1.28	1.05	0.98	0.85	0.75	0.83	1.14	1.08	1.20	1.60	4.06	4.98	3.03	1.15	0.80	0.80	0.76
100	4.84	1.74	1.39	1.19	1.05	0.89	0.75	0.85	1.05	1.05	1.16	1.75	4.80	6.41	4.97	2.05	1.15	1.00	1.00
105	5.84	2.63	1.50	1.24	1.20	1.10	1.17	1.25	1.20	1.25	1.20	2.96	5.50	7.20	6.26	3.64	1.80	1.35	1.40
110	6.83	3.48	1.81	1.64	1.45	1.40	1.30	1.45	1.50	1.45	1.83	3.71	6.68	7.75	7.43	5.48	2.95	2.05	1.85
115	7.14	3.73	1.90	1.80	1.79	1.60	1.55	1.65	1.90	1.65	1.99	4.41	6.73	8.05	7.58	6.08	3.99	2.65	2.36
120	7.26	4.17	2.00	1.87	1.99	1.80	1.89	1.86	1.94	1.89	2.20	4.56	7.03	8.08	7.69	6.42	5.04	3.70	3.21
125	7.23	4.25	2.62	1.93	2.01	2.00	2.01	1.96	1.98	2.01	2.61	4.61	7.15	8.10	7.66	6.87	5.69	4.89	4.66
130	6.83	4.36	2.71	1.98	2.03	2.02	2.03	2.03	2.02	2.03	2.83	4.76	7.38	8.13	7.63	7.11	7.28	6.29	5.96
135	6.75	4.46	2.68	2.03	2.14	2.04	2.05	2.09	2.10	2.10	2.95	5.06	7.12	7.79	7.60	7.23	7.77	6.89	6.91
140	6.52	4.56	3.22	2.68	2.76	2.34	2.50	2.29	2.60	2.74	3.40	5.16	6.75	7.49	7.58	7.33	7.75	7.64	7.91
145	6.23	5.06	3.62	2.94	2.89	2.87	2.75	2.77	2.68	3.04	3.80	5.18	6.48	7.46	7.55	7.49	7.73	8.21	8.28
150	5.78	5.13	4.10	3.58	3.24	2.99	3.00	2.87	3.10	3.60	4.31	5.20	6.14	7.40	7.36	7.47	7.62	8.08	8.46
155	5.94	5.21	4.24	3.73	3.49	3.39	3.40	3.34	3.55	3.99	4.48	5.25	6.63	6.65	7.31	7.13	7.57	7.70	8.14
160	6.13	5.28	4.51	4.38	4.36	4.03	3.90	3.79	4.21	4.35	4.60	5.30	6.88	6.61	7.25	7.15	7.55	7.72	8.08
165	6.43	5.86	5.07	5.27	5.18	4.59	4.75	4.75	5.05	5.09	5.06	5.96	7.28	7.35	7.41	7.22	7.58	7.74	8.22
170	7.26	6.90	6.01	6.17	6.33	6.24	6.20	6.18	6.05	6.14	5.96	6.97	7.48	7.90	7.90	7.59	8.32	8.43	9.01
175	7.45	7.41	6.71	6.77	6.78	6.81	7.05	6.83	6.70	6.74	6.36	7.00	7.69	7.72	7.65	7.52	7.83	8.20	8.36
180	7.47	7.45	7.05	7.26	7.33	7.58	7.51	7.73	7.16	6.89	6.81	7.02	7.77	7.55	7.45	6.97	7.28	7.33	7.61

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 30.9DEG
Operators:CS01
Test Date:2021-06-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 42.6%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.24V I:0.3982A P:79.971W PF:0.9121 Freq:50.01Hz Lamp Flux:11185.7x1 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	2977	2977	2977	2977	2977													
5	2736	2768	2814	2868	2919													
10	2393	2471	2580	2707	2842													
15	1985	2101	2287	2535	2786													
20	1619	1768	2001	2347	2720													
25	1318	1480	1746	2157	2658													
30	1114	1258	1521	1970	2589													
35	1033	1102	1316	1782	2526													
40	1049	1066	1148	1608	2438													
45	1073	1112	1052	1393	2329													
50	1093	1134	1057	1140	2165													
55	1089	1159	1065	891	1942													
60	1023	1152	1047	761	1644													
65	856	1015	928	669	1323													
70	590	742	700	518	879													
75	355	452	437	361	359													
80	170	224	213	202	145													
85	43.6	54.4	49.9	46.0	37.8													
90	4.52	1.33	0.90	2.06	3.62													
95	0.80	0.90	1.20	3.31	5.22													
100	1.10	1.25	2.20	4.67	6.27													
105	1.45	1.80	3.45	6.16	6.92													
110	2.00	2.81	4.64	7.31	7.89													
115	2.55	3.46	4.89	7.11	8.15													
120	3.30	4.65	5.39	7.18	8.38													
125	4.84	5.30	6.44	7.75	8.45													
130	5.94	6.11	6.84	7.81	8.42													
135	6.89	7.51	7.06	7.38	7.62													
140	7.93	8.36	7.17	6.96	7.46													
145	8.30	8.23	7.25	6.96	7.22													
150	8.12	7.70	7.28	6.96	7.03													
155	8.03	7.68	7.31	6.94	7.02													
160	8.08	7.66	7.34	6.92	7.02													
165	8.19	7.91	7.55	7.26	7.22													
170	9.08	8.96	8.20	7.79	7.52													
175	8.53	8.31	7.79	7.66	7.11													
180	7.53	7.61	6.93	6.90	6.72													

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 30.9DEG
Operators:CS01
Test Date:2021-06-25

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 42.6%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED80-36(LY5050 40K RA70 T2D)