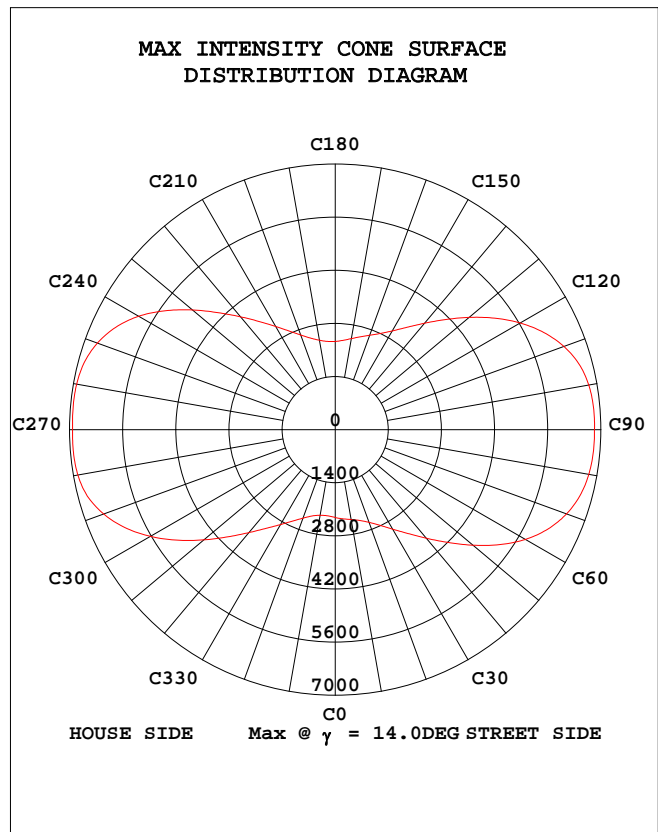
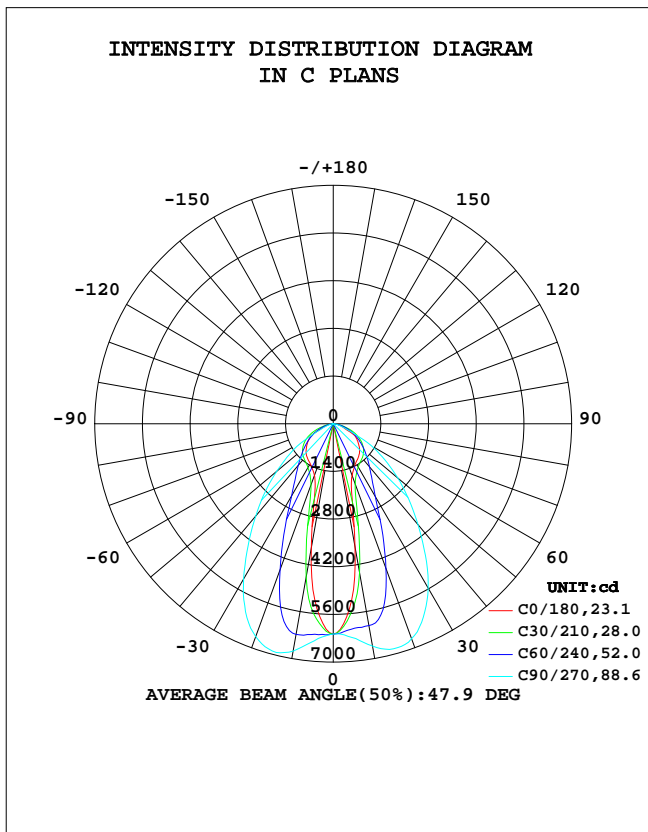


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.43 lm/W			
MODEL	LY5050 RA70 40K T1A	I _{max} (cd)	6920	η street_up(%)	0.1
NOMINAL POWER(W)	60	LOR(%)	100.0	η street_down(%)	50.9
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	7577	η house_up(%)	0.1
NOMINAL FLUX(lm)	7576.77	MAXIMUM @(C,γ)	270,14.0	η house_down(%)	48.8
LAMPS INSIDE	1	η up(%)	0.3	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	η down(%)	99.7	SLI	18.445



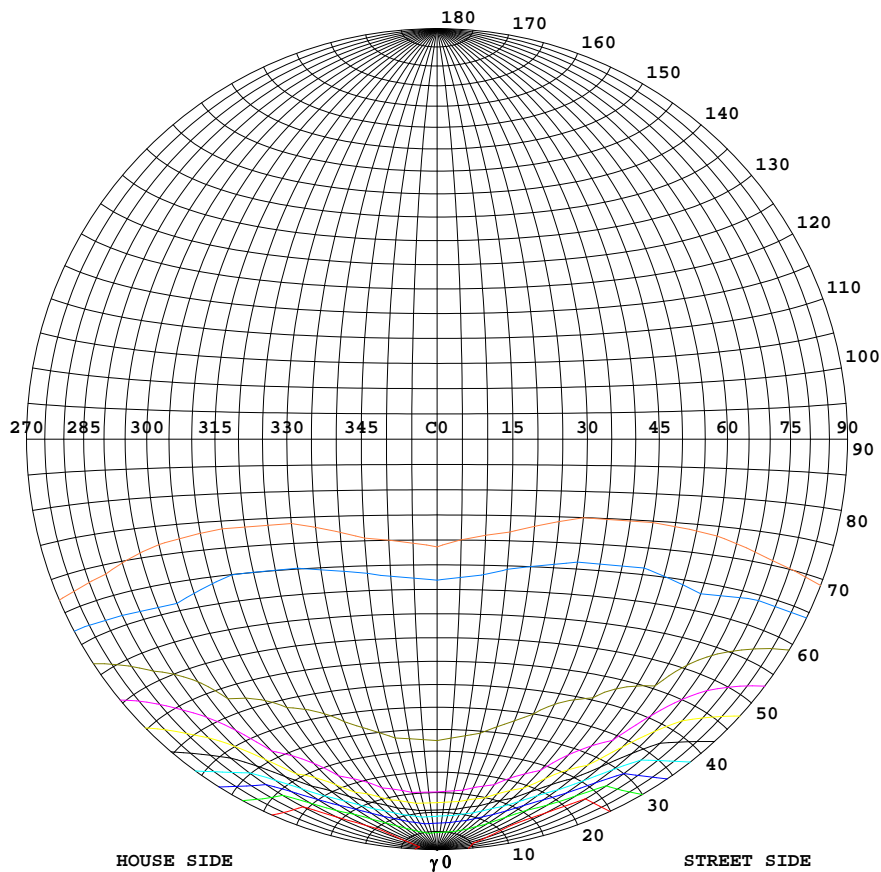
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-06-17

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



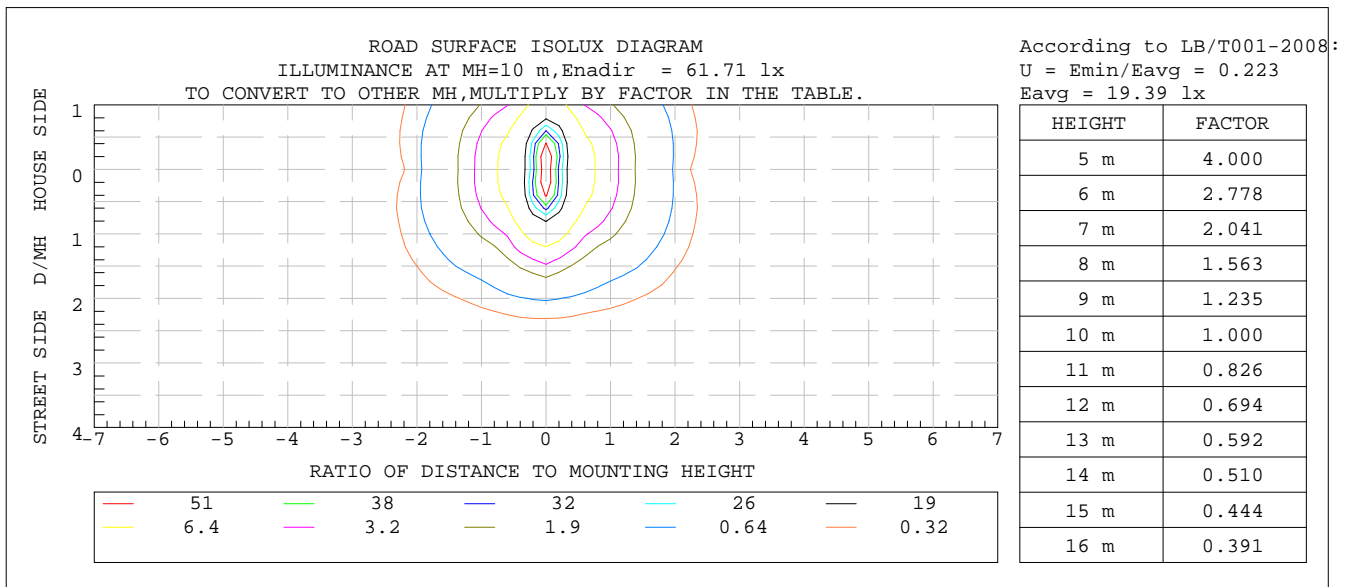
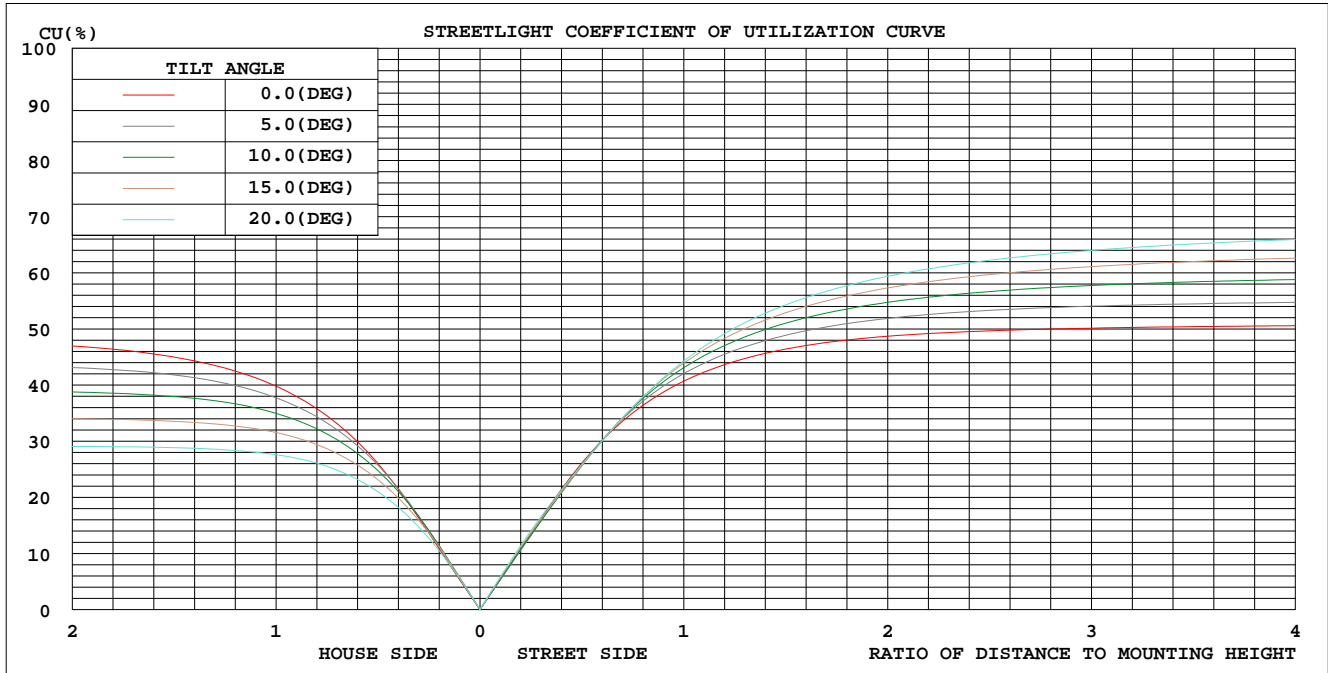
Classification:

IES:Type I - Very Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:25.56cd/klm
 Max.At90:1.207cd/klm
 Max.80-90:25.56cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	6920
90%	6228
80%	5536
70%	4844
60%	4152
50%	3460
40%	2768
30%	2076
20%	1384
10%	692
5%	346

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 0.0DEG
 Operators:CS01
 Test Date:2021-06-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators: CS01
Test Date: 2021-06-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance: 26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	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	3695	5213	6625	5179	3710	5454	6777	5206	0- 10	543.3	543.3	7.17,7.17
20	1627	2581	6719	2472	1620	2637	6652	2381	10- 20	1195	1738	22.9,22.9
30	1325	1683	5581	1669	1354	1683	5264	1624	20- 30	1355	3093	40.8,40.8
40	1184	1386	3878	1413	1221	1378	3541	1348	30- 40	1316	4409	58.2,58.2
50	986.9	1170	2476	1218	1024	1153	2159	1139	40- 50	1199	5608	74,74
60	749.8	895.2	1295	945.7	791.8	872.3	988.7	859.9	50- 60	981.8	6590	87,87
70	315.3	554.9	314.3	592.0	327.1	521.7	251.6	506.2	60- 70	634.5	7224	95.3,95.3
80	128.8	174.2	87.63	190.8	132.1	143.5	58.57	143.6	70- 80	280.8	7505	99.1,99.1
90	0.8153	1.772	0.7776	0.9459	0.7253	0.7635	1.706	0.8689	80- 90	52.07	7557	99.7,99.7
100	0.6423	1.113	0.9651	0.9273	0.9699	1.219	1.030	1.229	90-100	1.113	7558	99.8,99.8
110	1.222	1.221	1.441	1.126	1.632	1.649	2.113	1.792	100-110	1.267	7560	99.8,99.8
120	1.829	1.576	2.723	1.536	2.194	2.086	3.400	2.151	110-120	1.734	7561	99.8,99.8
130	2.090	2.063	4.781	2.018	2.754	2.697	5.820	2.818	120-130	2.327	7564	99.8,99.8
140	2.640	3.079	7.002	2.867	3.313	3.664	7.830	3.842	130-140	2.847	7567	99.9,99.9
150	3.108	5.336	8.784	6.034	3.875	6.718	9.167	6.202	140-150	3.335	7570	99.9,99.9
160	6.929	8.236	8.372	8.754	7.345	9.258	8.446	9.115	150-160	3.289	7573	100,100
170	10.80	10.12	10.96	10.05	10.82	10.17	11.34	10.37	160-170	2.612	7576	100,100
180	9.590	10.12	11.79	10.14	10.45	9.559	11.38	10.50	170-180	1.017	7577	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

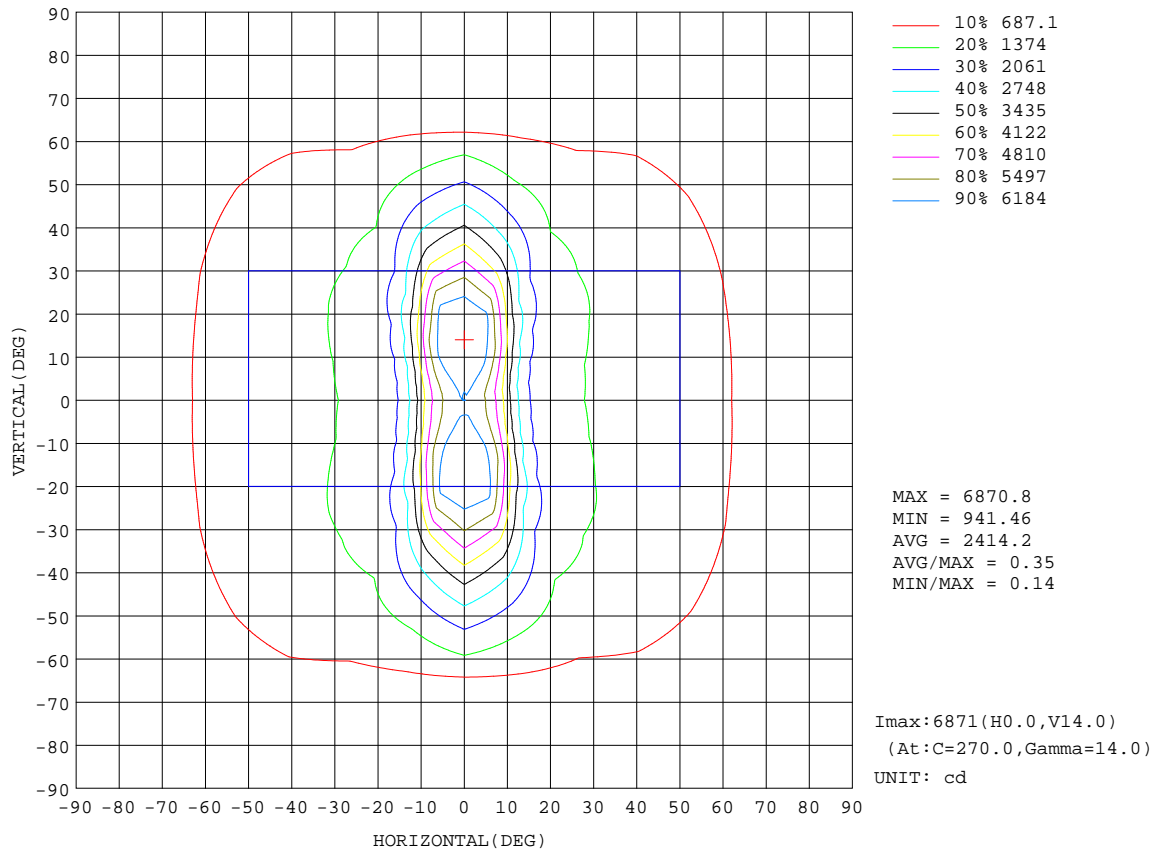
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 0.0DEG
 Operators:CS01
 Test Date:2021-06-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

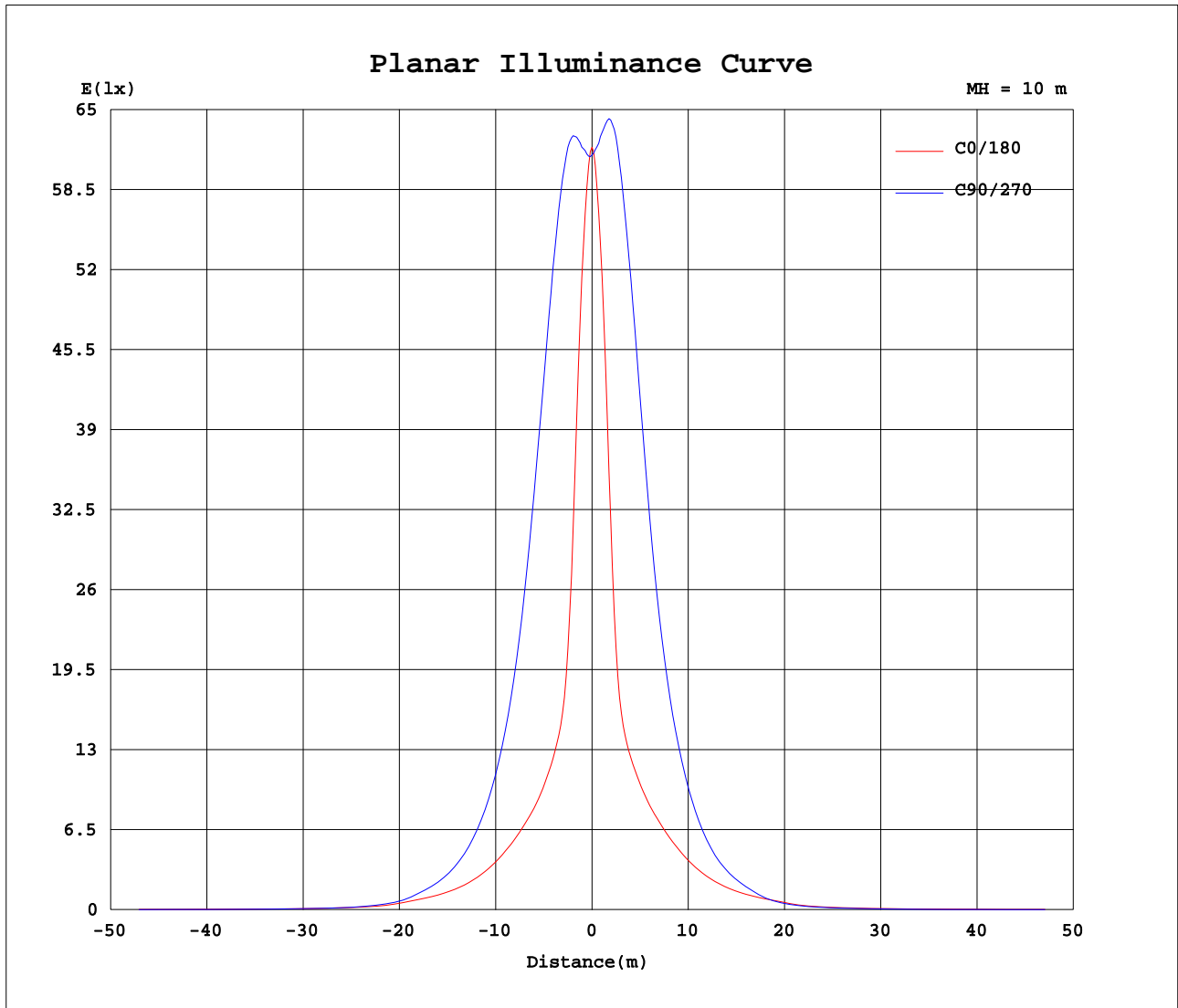
Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-06-17

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-06-17

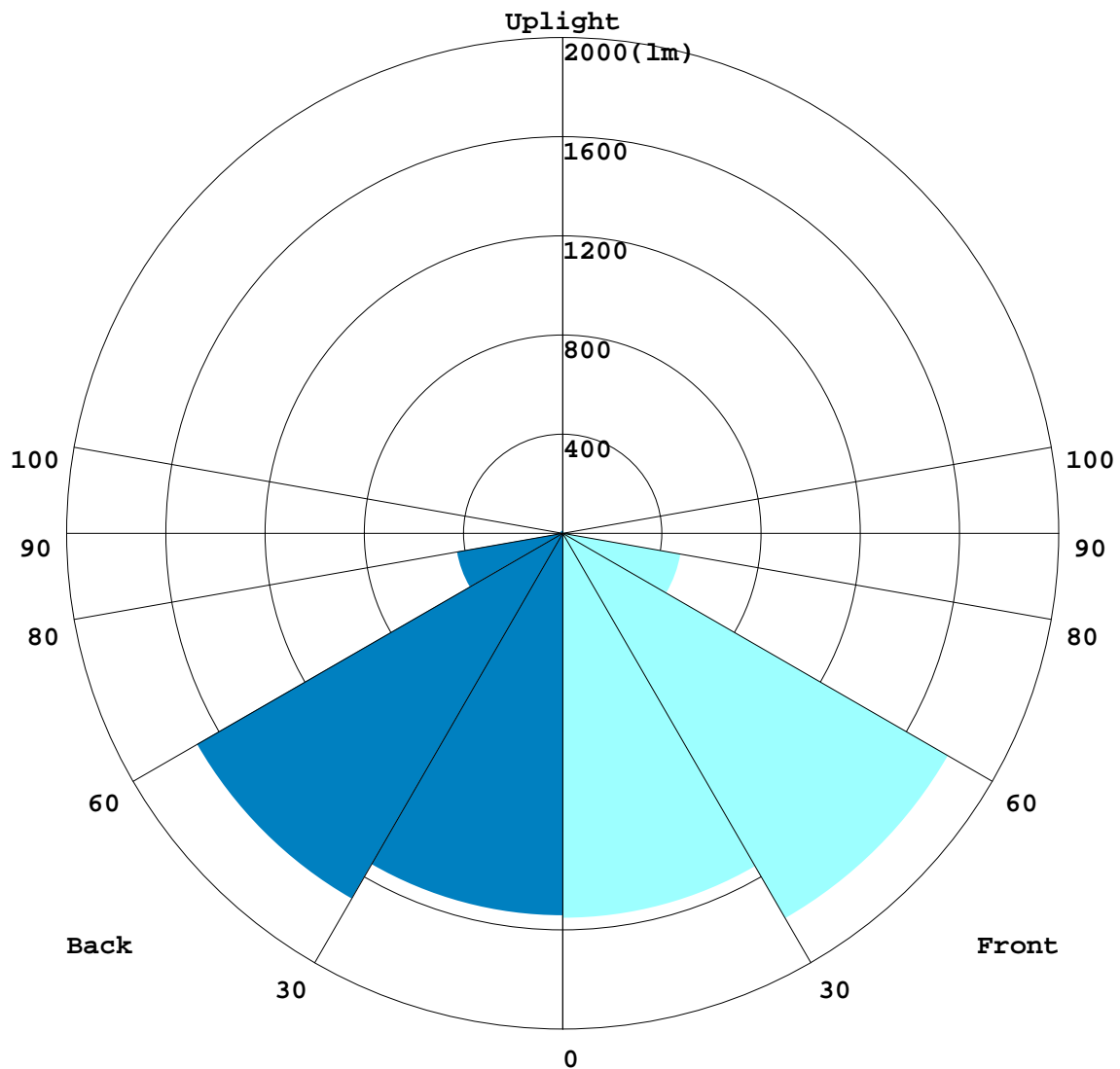
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	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: 0.0DEG
Operators:CS01
Test Date:2021-06-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1551.5	20.5
FM - Front-Medium(30-60)	1794.7	23.7
FH - Front-High(60-80)	482.83	6.4
FVH - Front-Very High(80-90)	30.064	0.4
Total Forward Light	3868.1	51.1

BL - Back-Low(0-30)	1541.5	20.3
BM - Back-Medium(30-60)	1702.1	22.5
BH - Back-High(60-80)	432.48	5.7
BVH - Back-Very High(80-90)	22.009	0.3
Total Back Light	3708.7	48.9

UL - Uplight-Low(90-100)	1.1135	0.0
UH - Uplight-High(100-180)	18.427	0.2
Total Up Light	19.54	0.3

BUG(Back,Up,Glare) Rating	B3-U2-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	3698.1	10.572	3708.7
Street Side	3859.1	8.9688	3868.1

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 0.0DEG
 Operators:CS01
 Test Date:2021-06-17

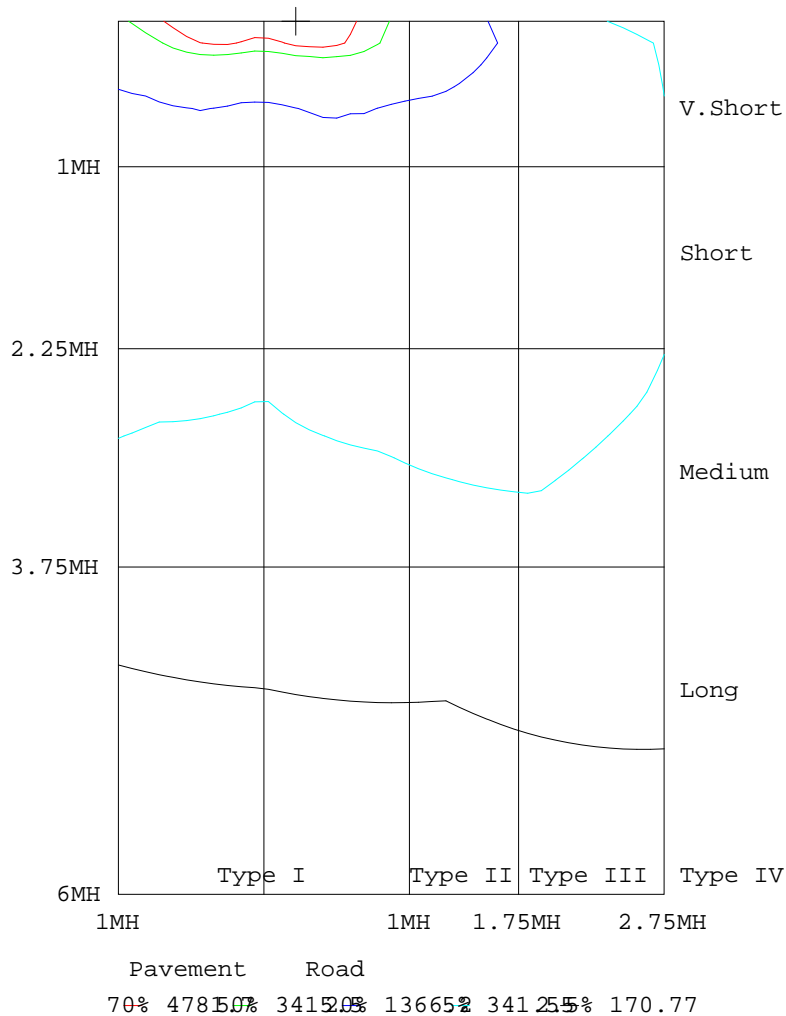
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	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: 0.0DEG
 Operators:CS01
 Test Date:2021-06-17

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm																			
NAME: D-191HLED60-24										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	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175	6175
5	5455	5496	5654	5829	6059	6220	6297	6219	6036	5869	5661	5568	5462	5534	5743	5963	6205	6347	6399
10	3695	3894	4457	5213	6018	6455	6625	6456	5956	5179	4454	3991	3710	3939	4582	5454	6280	6676	6777
15	2097	2235	2742	3907	5650	6715	6840	6694	5449	3790	2721	2287	2105	2256	2802	4033	5816	6848	6908
20	1627	1673	1891	2581	4527	6600	6719	6482	4280	2472	1862	1680	1620	1685	1922	2637	4563	6561	6652
25	1445	1485	1620	1967	3359	5903	6261	5666	3112	1911	1607	1495	1461	1503	1632	1985	3341	5747	6094
30	1325	1369	1470	1683	2478	4848	5581	4558	2319	1669	1475	1391	1354	1393	1489	1683	2452	4615	5264
35	1257	1296	1382	1510	1989	3837	4722	3559	1896	1520	1402	1327	1290	1325	1400	1508	1941	3613	4353
40	1184	1236	1322	1386	1660	3037	3878	2804	1612	1413	1349	1272	1221	1266	1337	1378	1602	2845	3541
45	1097	1156	1252	1283	1409	2407	3137	2220	1390	1321	1282	1192	1130	1193	1268	1262	1338	2210	2827
50	987	1055	1163	1170	1191	1876	2476	1718	1195	1218	1195	1095	1024	1092	1180	1153	1119	1686	2159
55	871	939	1049	1043	990	1413	1855	1296	1003	1097	1081	981	909	977	1063	1026	924	1253	1576
60	750	819	905	895	803	1026	1295	938	823	946	946	853	792	850	923	872	744	881	989
65	467	665	740	732	622	624	622	596	648	773	777	699	516	693	751	702	569	501	445
70	315	407	547	555	455	371	314	367	481	592	577	418	327	433	545	522	405	304	252
75	218	250	343	331	289	218	179	225	310	369	365	251	219	252	330	288	241	171	138
80	129	135	176	174	139	105	87.6	111	150	191	194	142	132	135	161	143	103	72.0	58.6
85	43.1	46.0	54.3	60.3	41.3	32.3	26.9	34.7	46.1	71.0	65.1	54.2	46.6	44.6	45.8	40.7	24.2	16.3	12.1
90	0.82	0.77	0.82	1.77	1.45	0.77	0.78	0.79	0.90	0.95	1.05	0.73	0.73	9.14	0.82	0.76	2.05	3.95	1.71
95	0.61	0.84	0.89	1.44	1.28	0.72	0.87	0.65	0.86	0.94	1.04	0.76	0.81	2.42	0.92	0.92	0.83	0.82	0.75
100	0.64	0.97	1.06	1.11	1.10	0.72	0.97	0.63	0.82	0.93	1.03	0.82	0.97	0.87	1.17	1.22	1.02	1.01	1.03
105	0.87	1.17	1.27	1.17	0.92	0.92	1.06	0.61	0.78	1.00	1.05	1.07	1.23	1.32	1.33	1.48	1.28	1.38	1.50
110	1.22	1.30	1.38	1.22	1.14	1.23	1.44	1.12	1.15	1.13	1.18	1.18	1.63	1.55	1.69	1.65	1.54	1.79	2.11
115	1.39	1.55	1.84	1.37	1.18	1.48	2.06	1.38	1.24	1.25	1.35	1.28	1.84	1.88	1.87	1.88	1.74	2.25	2.68
120	1.83	1.98	1.96	1.58	1.72	1.99	2.72	2.04	1.64	1.54	1.58	1.64	2.19	2.04	2.09	2.09	2.30	2.82	3.40
125	1.94	1.98	2.02	1.95	2.15	3.02	3.55	2.91	2.02	1.95	1.92	1.96	2.42	2.34	2.38	2.34	2.87	3.94	4.79
130	2.09	2.13	2.08	2.06	2.70	3.99	4.78	3.68	2.70	2.02	1.96	2.04	2.75	2.70	2.52	2.70	3.84	4.91	5.82
135	2.39	2.25	2.20	2.54	3.58	5.31	6.02	4.95	3.74	2.25	2.00	2.17	3.11	2.85	2.66	3.00	4.76	5.78	6.96
140	2.64	2.54	2.86	3.08	5.21	6.39	7.00	5.98	5.06	2.87	2.65	2.66	3.31	3.11	3.12	3.66	5.99	7.11	7.83
145	2.84	2.95	3.06	4.32	6.28	7.77	8.60	7.66	6.39	3.99	3.12	2.92	3.47	3.51	3.83	4.99	7.73	8.39	9.27
150	3.11	3.66	4.27	5.34	7.26	8.49	8.78	8.00	7.63	6.03	4.40	3.74	3.87	4.33	4.96	6.72	8.65	8.53	9.17
155	4.74	5.23	5.61	6.76	7.77	8.54	8.55	8.08	8.55	7.67	6.09	5.28	5.11	5.70	6.44	8.19	9.21	8.65	8.40
160	6.93	7.22	7.50	8.24	8.49	8.45	8.37	8.16	8.86	8.75	7.72	7.33	7.35	7.54	8.38	9.26	9.72	8.91	8.45
165	9.17	9.25	8.78	9.25	8.84	8.90	8.44	8.23	9.37	9.52	9.36	9.28	9.80	9.78	10.2	10.0	10.2	9.07	8.97
170	10.8	10.5	9.50	10.1	10.2	10.9	11.0	10.3	10.4	10.1	10.2	10.8	10.8	10.8	11.0	10.2	10.5	11.0	11.3
175	10.6	10.6	9.57	10.2	10.4	11.1	11.7	11.0	10.5	10.1	10.2	11.2	11.0	10.9	11.0	10.2	10.4	11.0	11.9
180	9.59	10.6	9.55	10.1	10.6	11.3	11.8	11.1	10.5	10.1	9.93	10.3	10.5	10.0	10.6	9.56	10.2	10.5	11.4

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-06-17

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.22V I:0.3058A P:60.406W PF:0.8970 Freq:50.01Hz Lamp Flux:7576.77x1 lm		
NAME: D-191HLED60-24	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	6175	6175	6175	6175	6175														
5	6330	6181	5919	5662	5474														
10	6639	6137	5206	4302	3736														
15	6755	5406	3673	2571	2137														
20	6339	4104	2381	1828	1646														
25	5340	2944	1871	1580	1468														
30	4192	2210	1624	1442	1358														
35	3271	1800	1468	1361	1291														
40	2555	1525	1348	1298	1230														
45	1993	1295	1248	1228	1148														
50	1523	1099	1139	1134	1041														
55	1135	913	1015	1016	926														
60	799	738	860	873	801														
65	479	570	691	698	632														
70	302	408	506	498	364														
75	173	241	290	304	226														
80	73.6	101	144	146	123														
85	16.4	22.3	35.2	39.2	37.6														
90	0.66	0.79	0.87	0.82	1.67														
95	0.77	0.87	0.97	0.97	0.82														
100	0.97	1.08	1.23	1.23	1.13														
105	1.23	1.28	1.44	1.54	1.44														
110	1.74	1.54	1.79	1.84	1.69														
115	2.15	1.79	1.95	2.07	2.05														
120	2.56	2.31	2.15	2.20	2.21														
125	4.04	2.77	2.51	2.46	2.36														
130	4.97	3.33	2.82	2.82	2.92														
135	6.20	4.20	3.23	3.02	3.00														
140	7.37	5.49	3.84	3.07	3.18														
145	8.59	7.23	4.97	3.79	3.64														
150	8.54	8.06	6.20	4.91	4.36														
155	8.29	8.18	7.74	6.40	5.70														
160	8.18	8.31	9.12	7.94	8.01														
165	8.71	8.61	9.38	9.27	9.90														
170	11.3	10.6	10.4	9.88	10.4														
175	11.8	11.0	10.5	10.1	10.3														
180	11.8	11.2	10.5	10.1	10.00														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-06-17

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-191HLED60-24(LY5050 RA70 40K T1A)