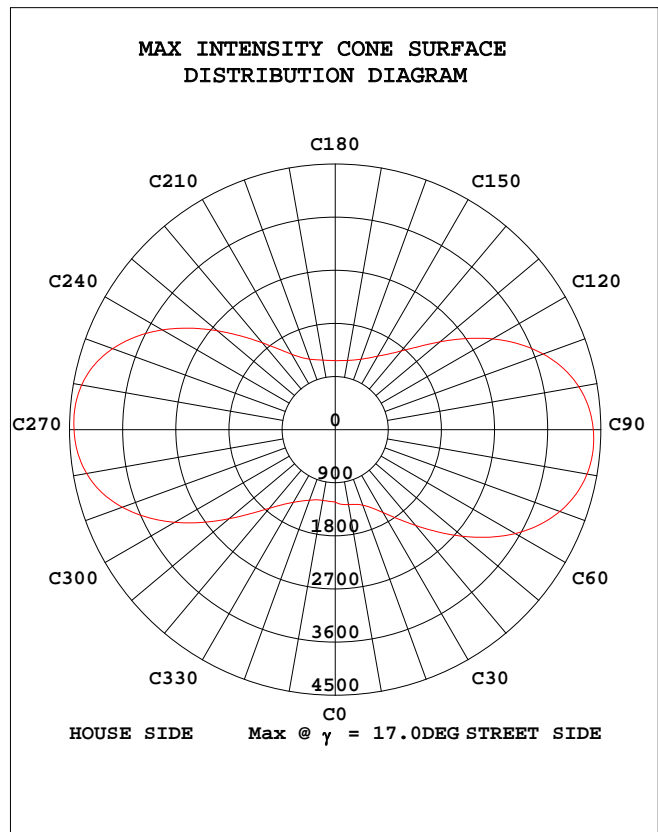
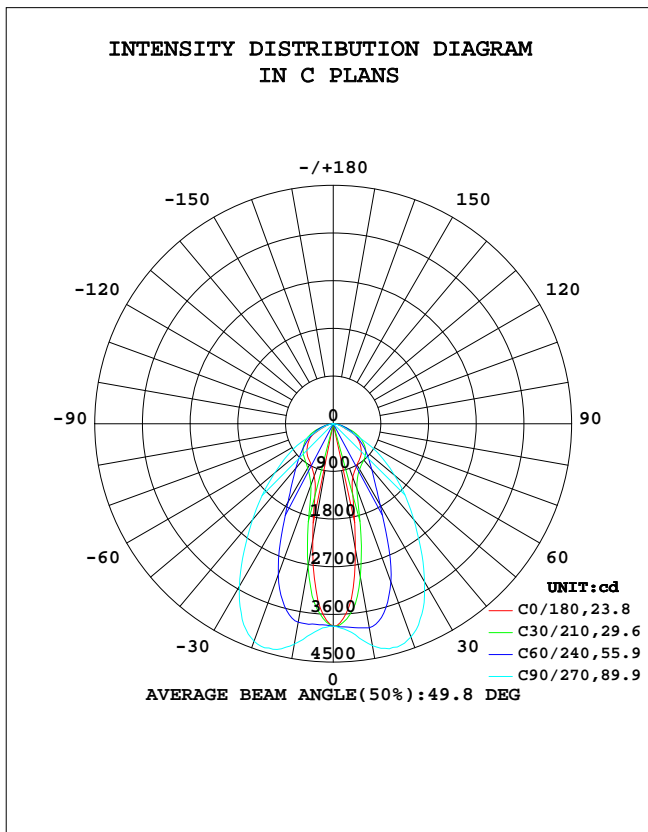


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 112.83 lm/W			
MODEL: PHILIPS 5050 40K M3A2 T1A		Imax(cd)	4424	$\eta$ street_up(%)	0.1
NOMINAL POWER(W)	40	LOR(%)	100.0	$\eta$ street_down(%)	50.3
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	4920	$\eta$ house_up(%)	0.1
NOMINAL FLUX(lm)	4920.47	MAXIMUM @(C, $\gamma$ )	270,17.0	$\eta$ house_down(%)	49.5
LAMPS INSIDE	1	$\eta$ up(%)	0.3	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	220.0	$\eta$ down(%)	99.7	SLI	17.660



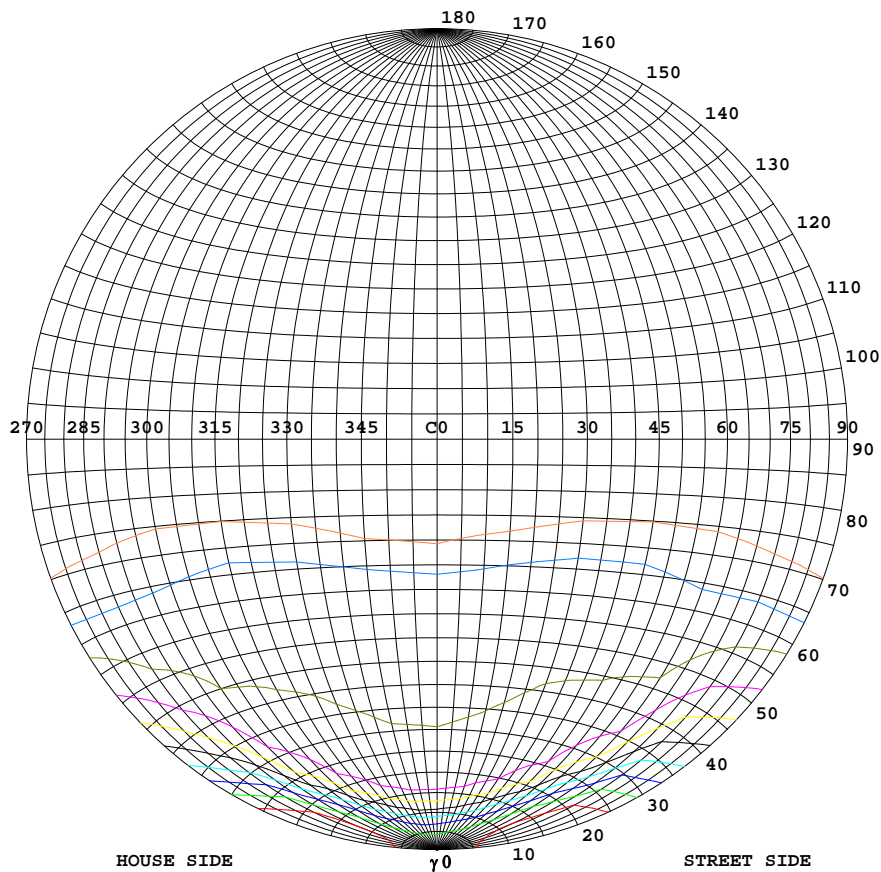
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 0.0DEG  
Operators: CS01  
Test Date: 2021-06-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



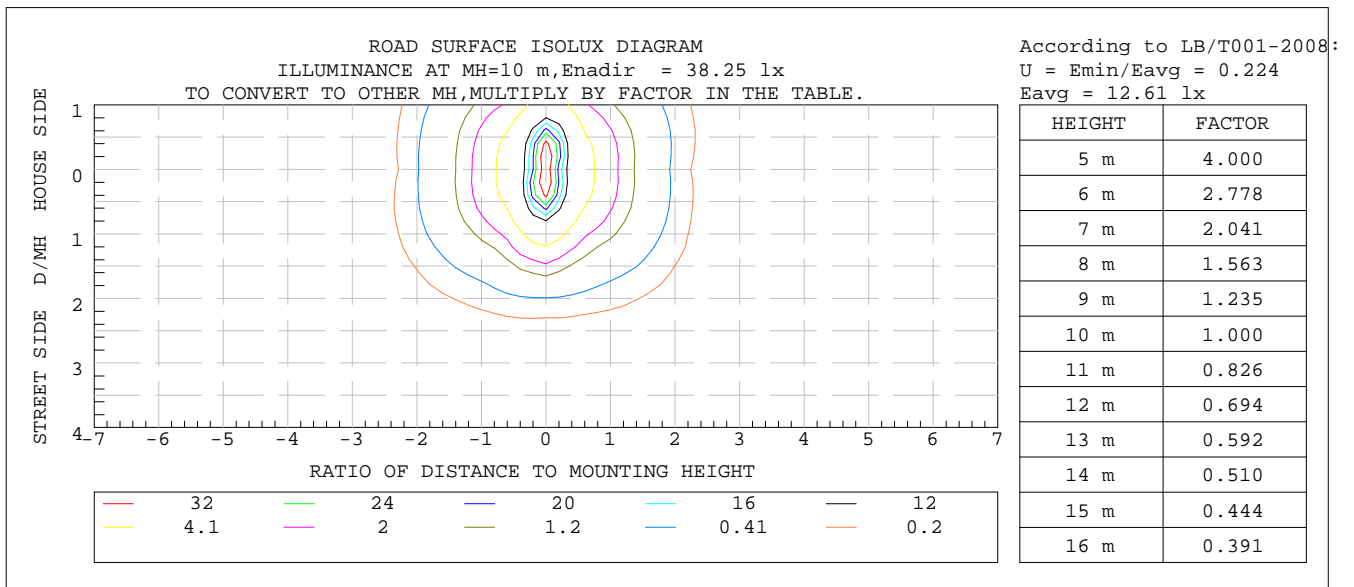
### Classification:

IES:Type I - Very Short  
 CIE:Narrow - Short  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:23.70cd/klm  
 Max.At90:0.1424cd/klm  
 Max.80-90:23.70cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4424
90%	3982
80%	3539
70%	3097
60%	2654
50%	2212
40%	1770
30%	1327
20%	885
10%	442
5%	221

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-191HLED40-16(PHILIPS5050 40K M3A2 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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ZONAL FLUX DIAGRAM

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	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	2409	3443	4251	3182	2231	3292	4221	3197	0- 10	338.4	338.4	6.88,6.88
20	1080	1902	4284	1560	1053	1739	4371	1564	10- 20	761.4	1100	22.4,22.4
30	898.2	1157	3454	1070	859.2	1132	3542	1079	20- 30	876.6	1976	40.2,40.2
40	804.5	942.3	2368	906.3	764.8	904.4	2376	907.7	30- 40	856.8	2833	57.6,57.6
50	679.9	794.1	1508	768.4	633.0	745.2	1432	791.2	40- 50	784.0	3617	73.5,73.5
60	519.3	603.8	749.2	585.5	484.4	566.0	693.7	617.4	50- 60	646.7	4264	86.7,86.7
70	208.9	362.9	224.1	354.3	196.9	346.5	224.5	366.8	60- 70	419.2	4683	95.2,95.2
80	85.66	115.5	69.98	111.3	83.68	103.6	66.47	116.6	70- 80	189.1	4872	99,99
90	0.6180	0.6934	0.5532	0.7007	0.5054	0.6014	0.5052	0.6512	80- 90	35.62	4908	99.7,99.7
100	0.5560	0.6515	0.5022	0.6508	0.7582	0.9021	0.7549	0.8023	90-100	0.6943	4908	99.8,99.8
110	0.5560	0.7997	1.105	1.152	1.112	1.254	1.507	1.201	100-110	0.8656	4909	99.8,99.8
120	1.111	1.203	1.859	1.302	1.567	1.505	2.412	1.502	110-120	1.255	4911	99.8,99.8
130	1.263	1.202	3.060	1.302	1.971	1.955	3.869	1.853	120-130	1.580	4912	99.8,99.8
140	1.870	1.854	4.469	2.001	2.275	2.707	5.230	2.453	130-140	1.874	4914	99.9,99.9
150	2.223	3.404	5.122	3.501	2.934	4.060	5.775	3.908	140-150	2.111	4916	99.9,99.9
160	4.092	4.659	5.273	5.046	4.453	5.666	5.975	5.407	150-160	2.034	4918	100,100
170	6.721	6.314	6.774	6.502	7.380	6.966	7.181	6.758	160-170	1.622	4920	100,100
180	7.076	6.766	7.966	6.708	7.329	6.714	7.482	6.758	170-180	0.6663	4920	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

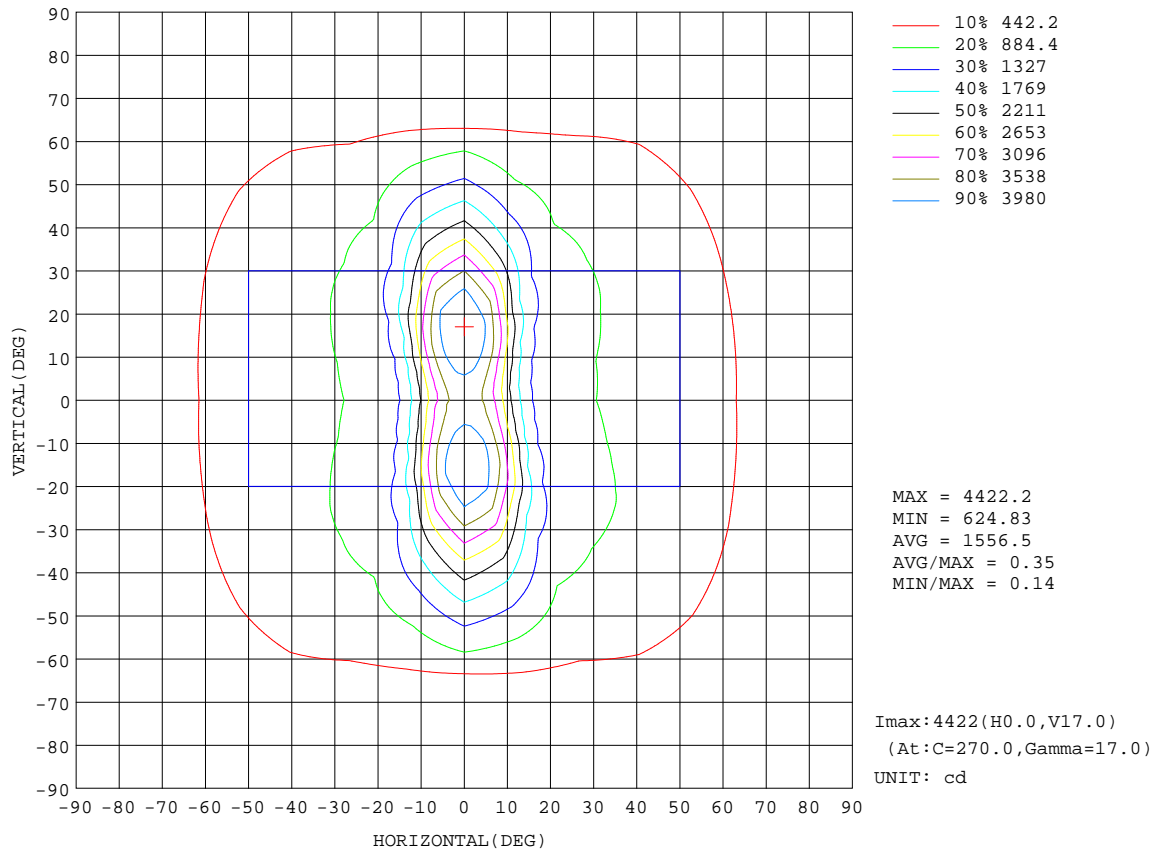
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 0.0DEG  
 Operators:CS01  
 Test Date:2021-06-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
 Humidity: 0.0%  
 Test Distance:26.000m [K=1.0000]  
 Remarks: D-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ISOCANDELA DIAGRAM

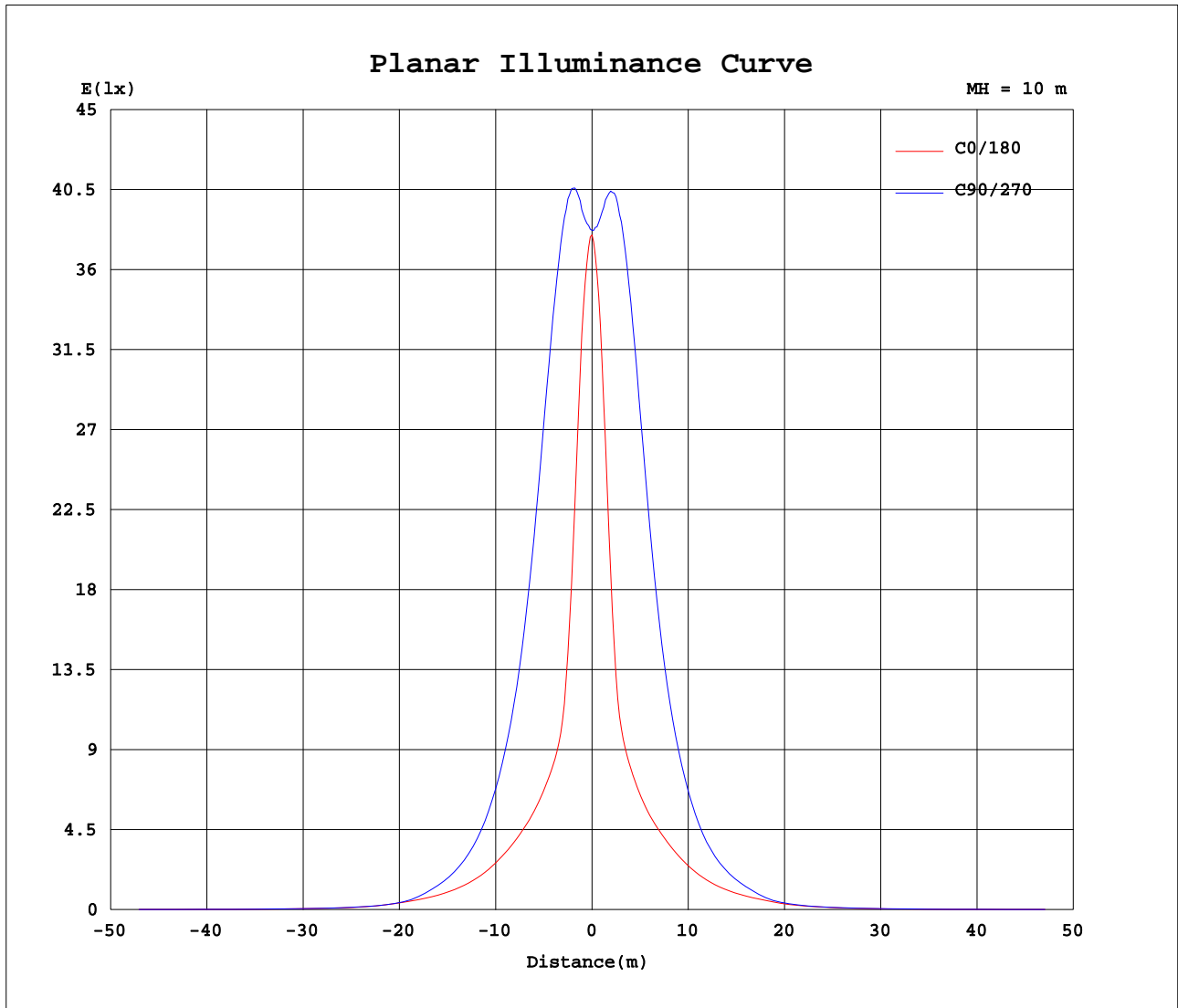
Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



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-191HLED40-16(PHILIPS5050 40K M3A2 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

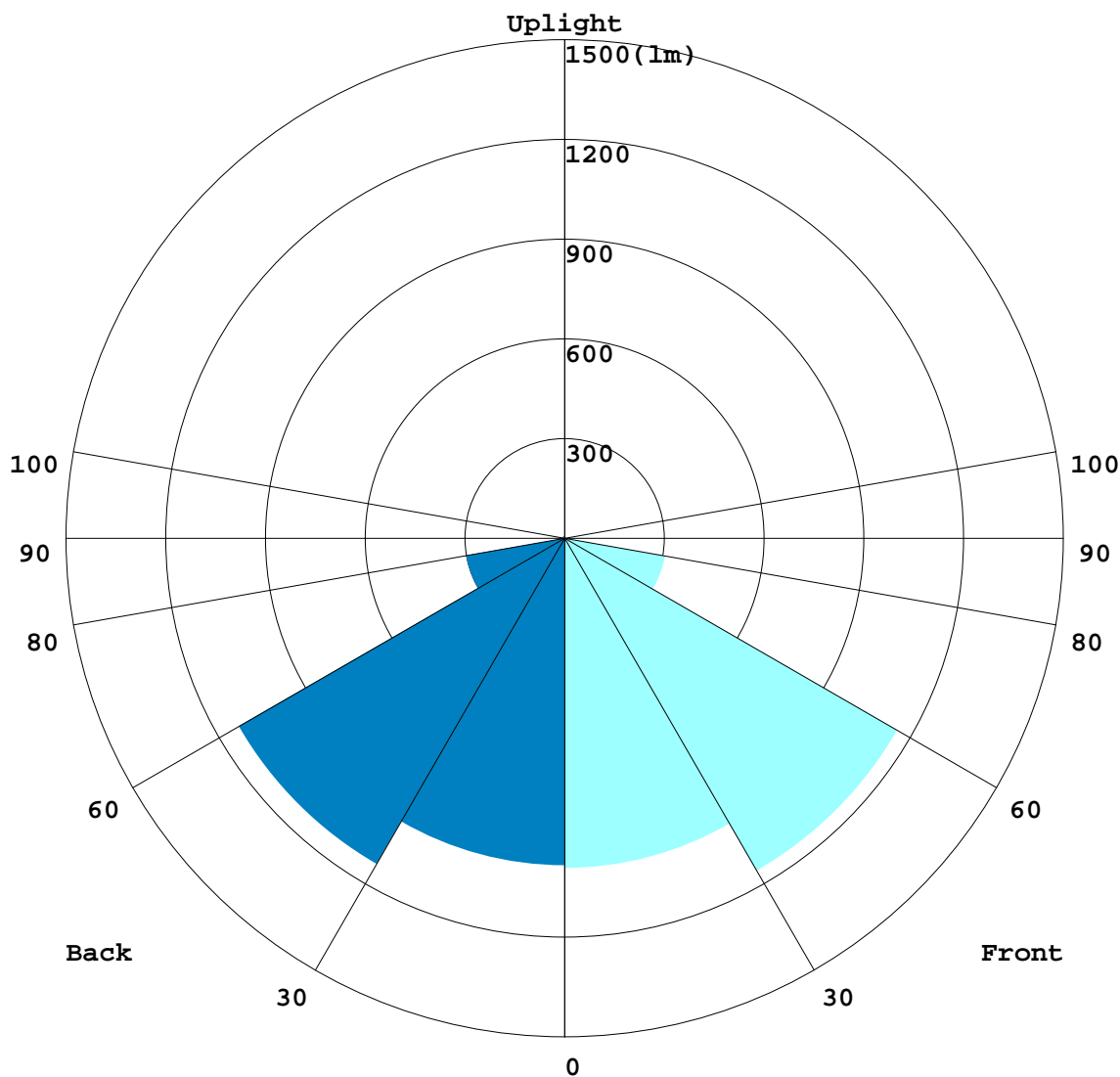
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.404.7  
Humidity: 0.0%  
Test Distance:26.000m [K=1.0000]  
Remarks: D-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LCS REPORT

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## BUG REPORT

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

### IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	992.17	20.2
FM - Front-Medium(30-60)	1155.9	23.5
FH - Front-High(60-80)	307.12	6.2
FVH - Front-Very High(80-90)	18.381	0.4
Total Forward Light	2479.3	50.4

BL - Back-Low(0-30)	984.14	20.0
BM - Back-Medium(30-60)	1131.6	23.0
BH - Back-High(60-80)	301.17	6.1
BVH - Back-Very High(80-90)	17.235	0.4
Total Back Light	2441.2	49.6

UL - Uplight-Low(90-100)	0.69425	0.0
UH - Uplight-High(100-180)	12.008	0.2
Total Up Light	12.702	0.3

BUG(Back,Up,Glare) Rating	B2-U2-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2434.2	7.0261	2441.2
Street Side	2473.6	5.6762	2479.3

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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

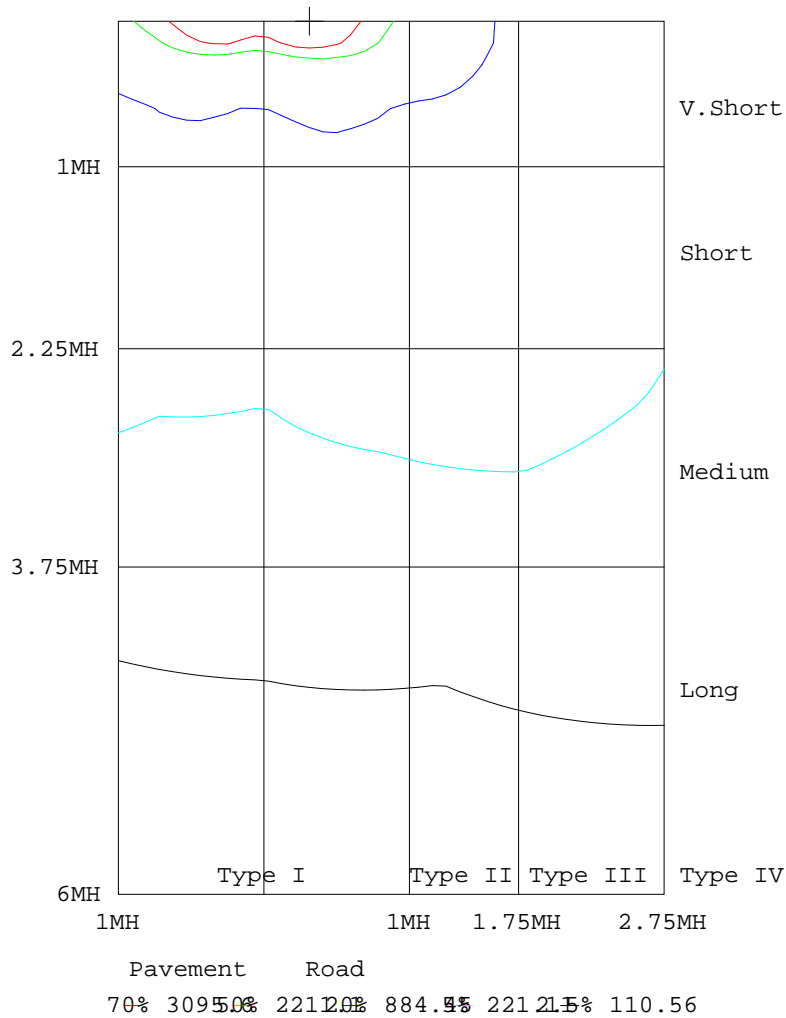


# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## ROAD ISOCANDELA REPORT

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm																			
NAME: D-191HLED40-16										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	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822	3822
5	3462	3523	3616	3742	3858	3941	3953	3903	3781	3645	3508	3434	3351	3385	3511	3651	3799	3919	3940
10	2409	2570	2943	3443	3911	4168	4251	4065	3686	3182	2697	2406	2231	2364	2747	3292	3804	4145	4221
15	1452	1567	1976	2789	3697	4264	4370	4082	3305	2367	1695	1438	1324	1414	1777	2581	3560	4259	4406
20	1080	1130	1307	1902	3183	4080	4284	3788	2647	1560	1193	1083	1053	1090	1241	1739	3034	4105	4371
25	971	999	1098	1382	2430	3642	3962	3250	1871	1219	1036	963	938	973	1066	1329	2314	3663	4073
30	898	926	997	1157	1771	3066	3454	2631	1435	1070	951	886	859	891	967	1132	1707	3047	3542
35	848	880	936	1026	1382	2480	2882	2088	1192	979	898	839	812	837	900	1002	1351	2452	2936
40	805	842	896	942	1134	1989	2368	1670	1024	906	857	798	765	795	850	904	1101	1966	2376
45	751	798	856	870	950	1602	1927	1335	888	842	807	743	704	744	799	822	914	1547	1888
50	680	733	801	794	799	1249	1508	1047	762	768	746	674	633	680	744	745	759	1188	1432
55	604	653	724	709	662	950	1135	801	638	687	670	598	564	610	674	662	628	901	1072
60	519	564	625	604	534	671	749	575	523	586	578	511	484	528	586	566	507	637	694
65	362	447	503	487	416	396	362	370	417	477	461	396	318	418	471	463	396	370	350
70	209	272	350	363	305	258	224	255	312	354	316	218	197	248	335	346	294	247	225
75	138	157	206	216	202	162	139	166	205	210	181	134	136	147	191	202	188	152	135
80	85.7	83.5	108	115	99.8	82.5	70.0	83.0	95.7	111	93.8	75.9	83.7	77.6	98.4	104	87.2	75.0	66.5
85	32.5	29.3	35.6	39.6	28.2	24.5	18.2	21.8	25.4	32.7	27.9	23.7	25.0	22.6	26.1	28.2	20.6	20.1	15.9
90	0.62	0.66	0.68	0.69	0.66	0.61	0.55	0.60	0.65	0.70	0.60	0.55	0.51	0.55	0.60	0.60	0.60	0.50	0.51
95	0.56	0.60	0.65	0.65	0.65	0.55	0.50	0.60	0.60	0.65	0.60	0.55	0.56	0.70	0.75	0.70	0.70	0.61	0.55
100	0.56	0.60	0.65	0.65	0.65	0.55	0.50	0.60	0.60	0.65	0.60	0.55	0.76	0.75	0.90	0.90	0.80	0.76	0.75
105	0.56	0.60	0.65	0.65	0.65	0.55	0.55	0.60	0.60	0.70	0.60	0.55	0.96	0.90	1.00	1.10	0.96	1.01	1.05
110	0.56	0.65	0.70	0.80	0.70	1.05	1.10	1.05	0.95	1.15	1.05	0.75	1.11	1.05	1.06	1.25	1.31	1.46	1.51
115	0.56	0.75	0.90	0.85	1.15	1.16	1.36	1.21	1.20	1.30	1.25	1.10	1.26	1.26	1.36	1.40	1.56	1.81	1.91
120	1.11	1.15	1.15	1.20	1.20	1.76	1.86	1.45	1.20	1.30	1.30	1.20	1.57	1.36	1.56	1.50	1.76	2.22	2.41
125	1.16	1.15	1.15	1.15	1.50	2.11	2.71	1.91	1.30	1.30	1.30	1.20	1.82	1.76	1.66	1.76	2.01	2.67	3.01
130	1.26	1.15	1.15	1.20	1.91	2.77	3.06	2.71	1.90	1.30	1.30	1.20	1.97	1.86	1.81	1.95	2.61	3.58	3.87
135	1.36	1.35	1.45	1.45	2.21	3.52	3.81	3.06	2.00	1.40	1.45	1.30	2.07	2.11	2.01	2.31	3.16	4.23	4.67
140	1.87	1.50	1.96	1.85	2.76	4.07	4.47	3.82	2.65	2.00	1.91	1.90	2.28	2.26	2.41	2.71	3.67	4.79	5.23
145	1.87	1.91	2.06	2.65	3.56	4.58	5.07	4.72	3.51	2.70	2.06	2.00	2.63	2.56	2.96	3.41	4.47	5.49	5.73
150	2.22	2.20	2.66	3.40	4.21	5.18	5.12	5.23	4.05	3.50	2.76	2.40	2.93	3.11	3.57	4.06	5.17	6.14	5.78
155	2.88	2.96	3.51	4.26	4.46	5.13	5.27	5.28	4.51	4.05	3.46	3.00	3.44	3.62	4.22	4.76	5.57	6.14	5.88
160	4.09	3.96	4.47	4.66	4.86	5.13	5.27	5.28	5.05	5.05	4.56	3.95	4.45	4.57	4.87	5.67	5.57	6.14	5.97
165	5.40	5.11	5.62	5.26	5.17	5.48	5.72	5.78	5.46	5.80	5.87	5.20	5.82	5.77	6.13	6.32	5.98	6.60	6.03
170	6.72	6.32	6.52	6.31	6.17	6.94	6.77	6.68	6.35	6.50	6.72	6.70	7.38	7.27	7.08	6.97	6.98	7.30	7.18
175	7.13	6.67	6.68	6.67	6.72	7.44	7.08	7.19	6.71	6.71	6.82	6.81	7.58	7.37	7.08	6.97	6.97	7.40	7.58
180	7.08	6.67	6.68	6.77	6.92	7.45	7.97	7.39	6.76	6.71	6.82	6.86	7.33	7.02	6.73	6.71	6.82	6.90	7.48

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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.26V I:0.2359A P:43.610W PF:0.8394 Freq:50.01Hz Lamp Flux:4920.47x1 lm		
NAME: D-191HLED40-16	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	3822	3822	3822	3822	3822													
5	3914	3794	3648	3523	3432													
10	4103	3734	3197	2699	2389													
15	4171	3378	2368	1715	1430													
20	3906	2713	1564	1206	1087													
25	3385	1910	1231	1045	976													
30	2699	1461	1079	961	901													
35	2088	1200	981	904	852													
40	1638	1021	908	864	814													
45	1271	882	850	823	763													
50	987	763	791	771	696													
55	752	652	714	697	624													
60	554	541	617	605	540													
65	373	433	497	481	420													
70	261	324	367	321	230													
75	166	210	218	191	141													
80	81.9	97.8	117	101	81.5													
85	21.3	26.3	36.6	33.8	29.7													
90	0.55	0.65	0.65	0.65	0.55													
95	0.60	0.70	0.75	0.65	0.60													
100	0.80	0.80	0.80	0.80	0.80													
105	0.91	0.90	1.00	0.91	0.90													
110	1.31	1.10	1.20	1.15	1.10													
115	1.61	1.40	1.30	1.21	1.25													
120	2.11	1.60	1.50	1.36	1.45													
125	2.51	1.86	1.60	1.66	1.55													
130	3.22	2.30	1.85	2.01	1.85													
135	3.82	2.61	2.15	2.21	1.95													
140	4.32	3.16	2.45	2.36	2.15													
145	5.03	3.96	3.11	2.76	2.40													
150	5.73	4.61	3.91	3.26	2.90													
155	5.78	5.16	4.66	4.12	3.56													
160	5.78	5.36	5.41	5.07	4.76													
165	6.03	6.06	5.76	5.97	5.76													
170	7.20	7.11	6.76	6.72	6.81													
175	7.59	7.36	6.76	6.72	6.81													
180	7.54	7.36	6.76	6.72	6.81													

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-191HLED40-16(PHILIPS5050 40K M3A2 T1A)