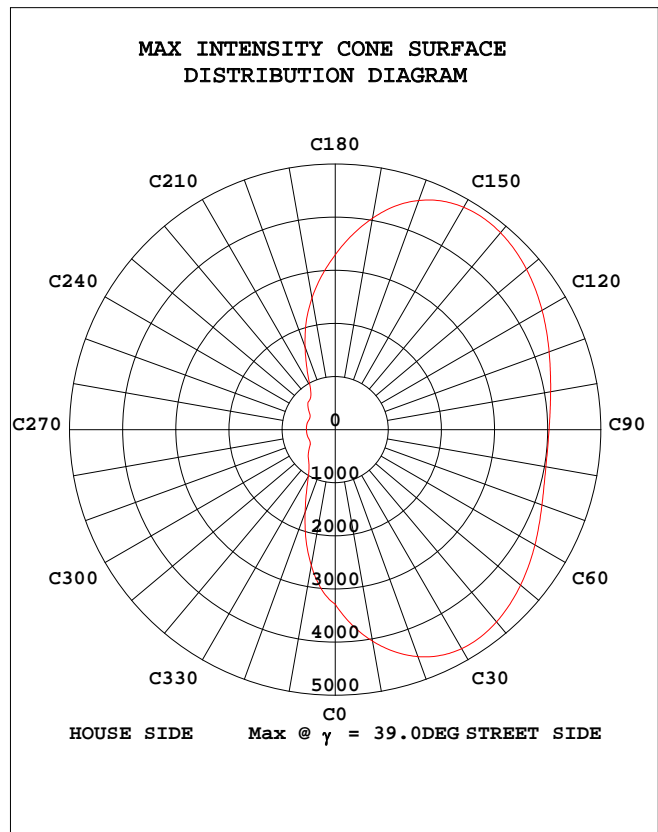
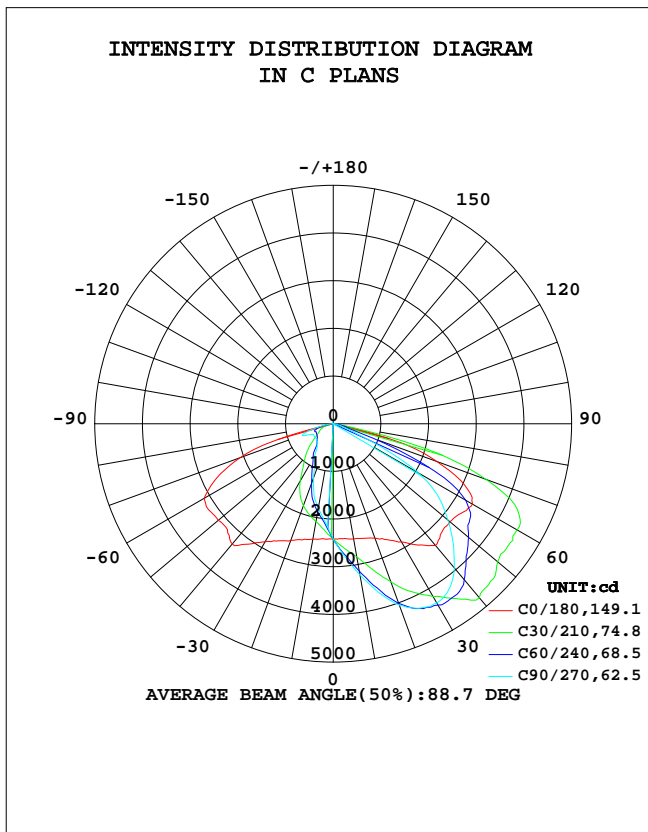


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 133.04 lm/W			
MODEL	5050 30K RA70 T3M	I _{max} (cd)	4835	η street_up(%)	0.1
NOMINAL POWER(W)	80	LOR(%)	100.0	η street_down(%)	76.7
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	10565	η house_up(%)	0.2
NOMINAL FLUX(lm)	10565	MAXIMUM @(C,γ)	150,39.0	η house_down(%)	23.0
LAMPS INSIDE	1	η up(%)	0.4	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	230.0	η down(%)	99.6	SLI	18.008



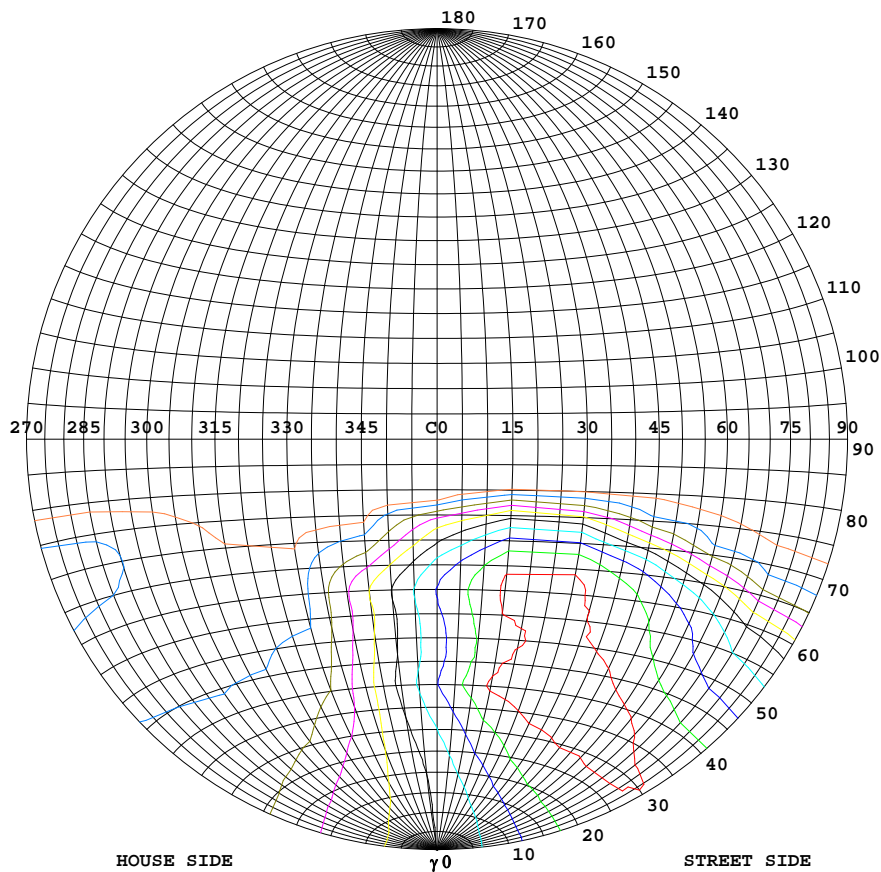
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:0.0DEG
Operators:CS01
Test Date:2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



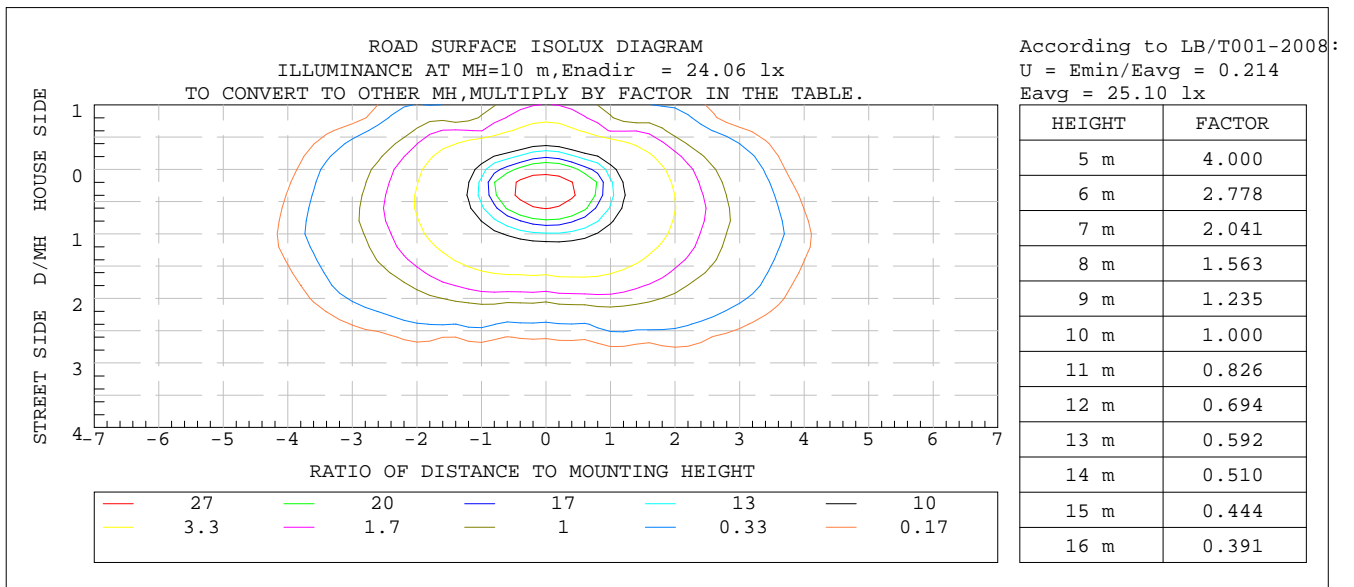
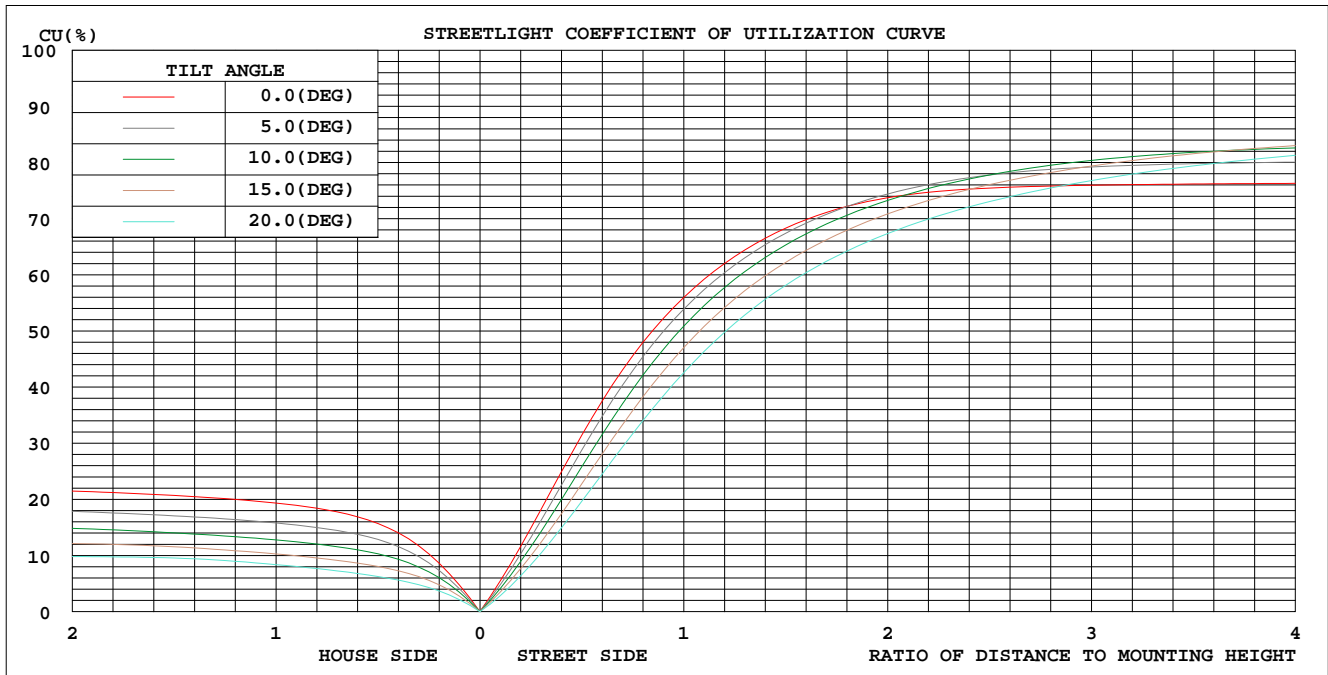
Classification:

IES:Type III - Very Short
 CIE:Average - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:26.07cd/klm
 Max.At90:0.2582cd/klm
 Max.80-90:26.07cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4835
90%	4352
80%	3868
70%	3385
60%	2901
50%	2418
40%	1934
30%	1451
20%	967
10%	484
5%	242

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:0.0DEG
 Operators:CS01
 Test Date:2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

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: 2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	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	2456	2999	3216	2990	2462	1967	1802	1948	0- 10	233.1	233.1	2.21,2.21
20	2554	3827	4045	3686	2606	1544	1213	1576	10- 20	728.4	961.5	9.1,9.1
30	2863	4370	4340	4287	2859	973.2	786.7	1010	20- 30	1238	2200	20.8,20.8
40	3334	4611	3951	4725	3291	701.3	532.0	700.8	30- 40	1709	3909	37,37
50	3198	4232	3138	4492	3153	440.4	476.5	435.8	40- 50	1981	5890	55.7,55.7
60	3374	3918	2062	4189	3130	340.4	474.0	331.5	50- 60	2094	7983	75.6,75.6
70	2316	2262	324.4	2532	2073	260.6	691.7	251.7	60- 70	1787	9770	92.5,92.5
80	104.3	199.7	66.86	231.2	102.6	119.1	189.5	93.10	70- 80	711.3	10481	99.2,99.2
90	1.107	0.7615	0.6631	0.7699	1.008	2.728	0.4579	0.9686	80- 90	46.70	10528	99.6,99.6
100	4.330	1.104	0.9080	1.121	5.096	3.500	1.068	3.681	90-100	1.594	10530	99.7,99.7
110	8.151	1.737	1.339	2.001	8.163	6.748	2.898	6.847	100-110	3.863	10533	99.7,99.7
120	9.868	2.227	1.951	2.758	10.32	8.921	6.354	9.193	110-120	5.559	10539	99.8,99.8
130	10.25	2.880	2.168	3.062	10.65	11.05	10.62	11.23	120-130	6.351	10545	99.8,99.8
140	9.770	4.198	3.504	4.441	10.16	12.42	12.65	12.05	130-140	6.274	10552	99.9,99.9
150	9.366	5.655	4.973	6.224	9.924	12.67	13.41	12.65	140-150	5.644	10557	99.9,99.9
160	9.324	5.166	6.796	5.411	9.962	10.15	12.61	11.29	150-160	4.201	10561	100,100
170	10.07	8.809	8.381	8.474	11.28	10.94	12.48	11.74	160-170	2.611	10564	100,100
180	11.59	11.15	10.97	11.02	11.63	10.89	11.32	11.08	170-180	1.001	10565	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

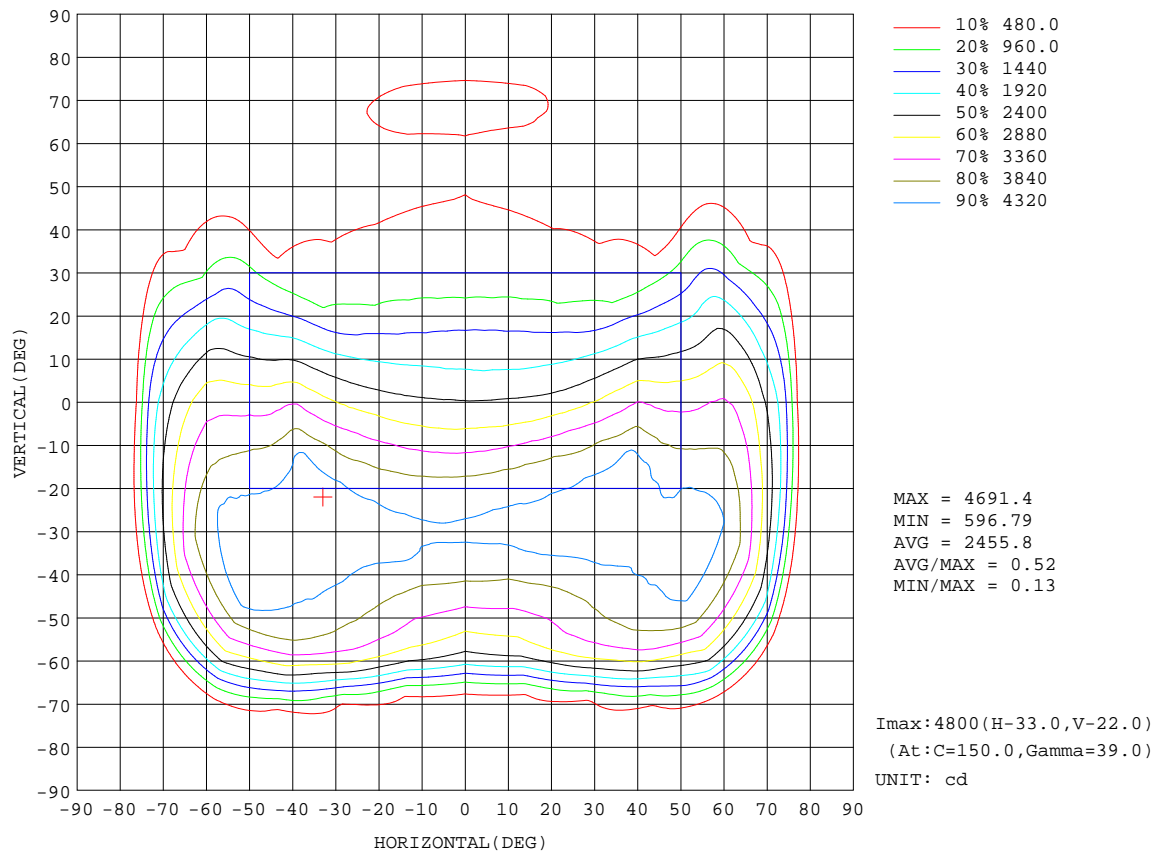
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:0.0DEG
 Operators:CS01
 Test Date:2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

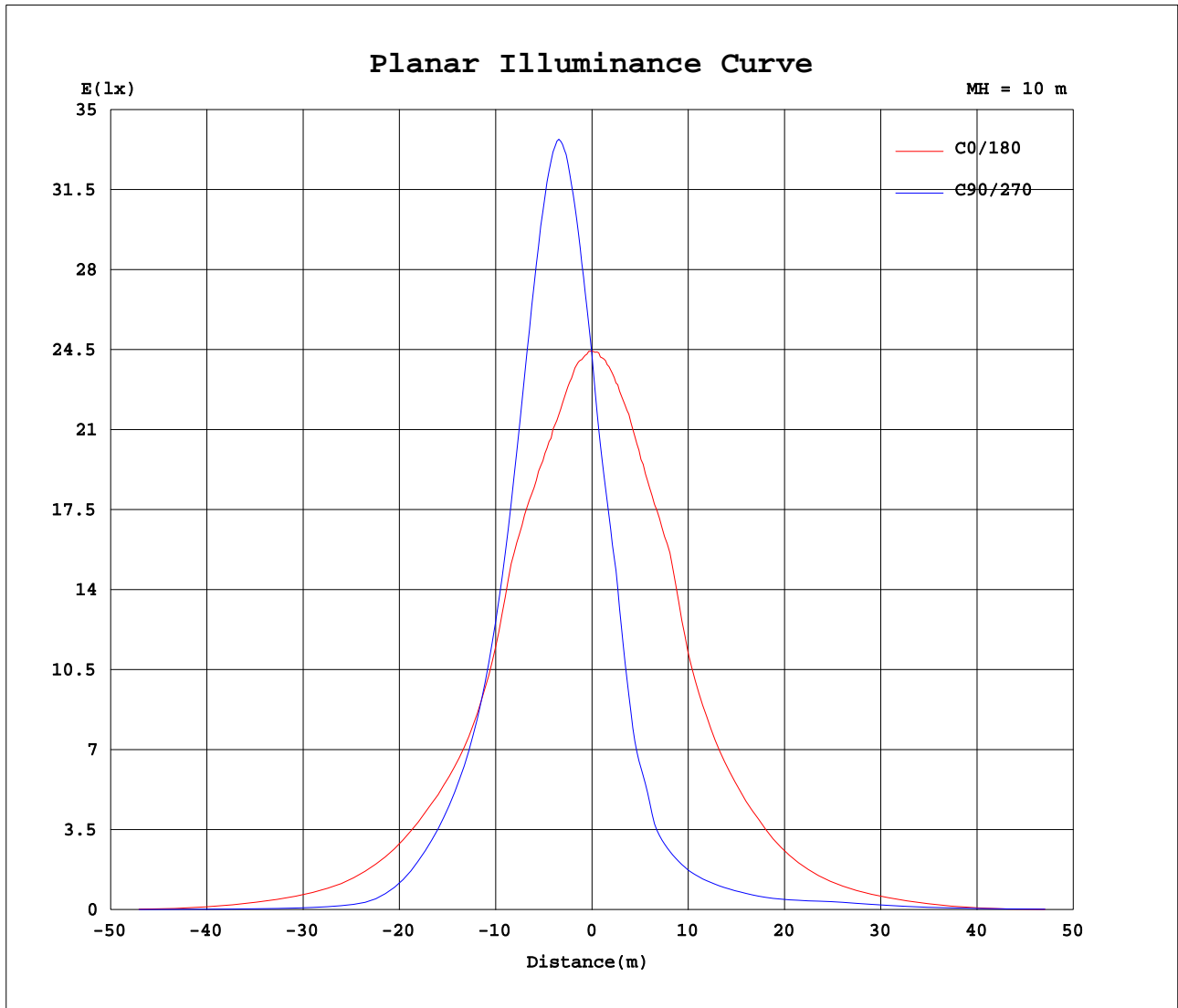
Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators: CS01
Test Date: 2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 0.0DEG
 Operators: CS01
 Test Date: 2021-07-17

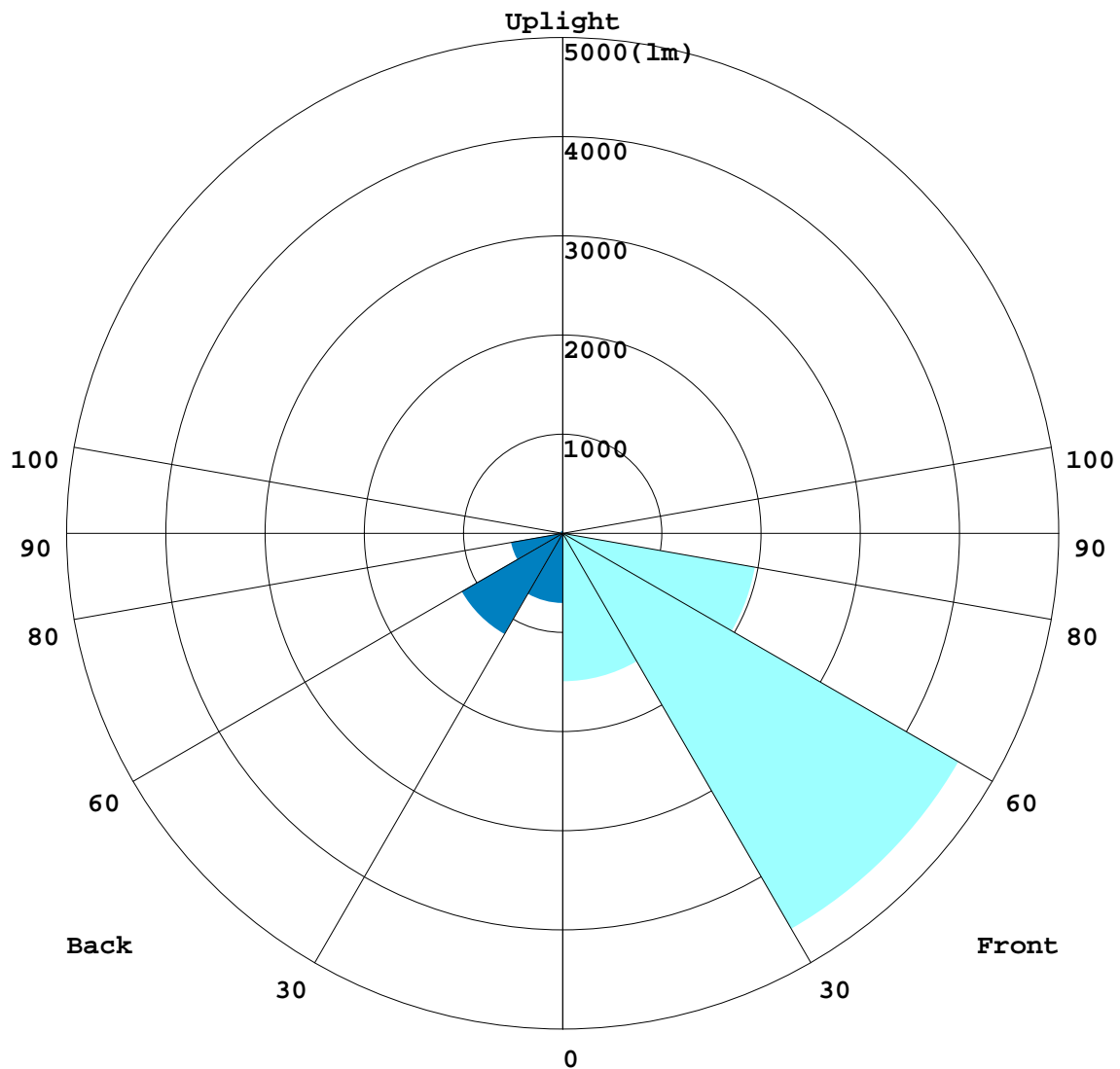
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance: 26.000m [K=1.0000]
 Remarks: D-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	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: 2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1494.9	14.1
FM - Front-Medium(30-60)	4608.5	43.6
FH - Front-High(60-80)	1969.8	18.6
FVH - Front-Very High(80-90)	24.996	0.2
Total Forward Light	8110.1	76.8

BL - Back-Low(0-30)	704.62	6.7
BM - Back-Medium(30-60)	1175.4	11.1
BH - Back-High(60-80)	528.07	5.0
BVH - Back-Very High(80-90)	21.701	0.2
Total Back Light	2455	23.2

UL - Uplight-Low(90-100)	1.5942	0.0
UH - Uplight-High(100-180)	35.504	0.3
Total Up Light	37.098	0.4

BUG(Back,Up,Glare) Rating	B2-U2-G2
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2429.7	25.215	2455
Street Side	8098.2	11.883	8110.1

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:0.0DEG
 Operators:CS01
 Test Date:2021-07-17

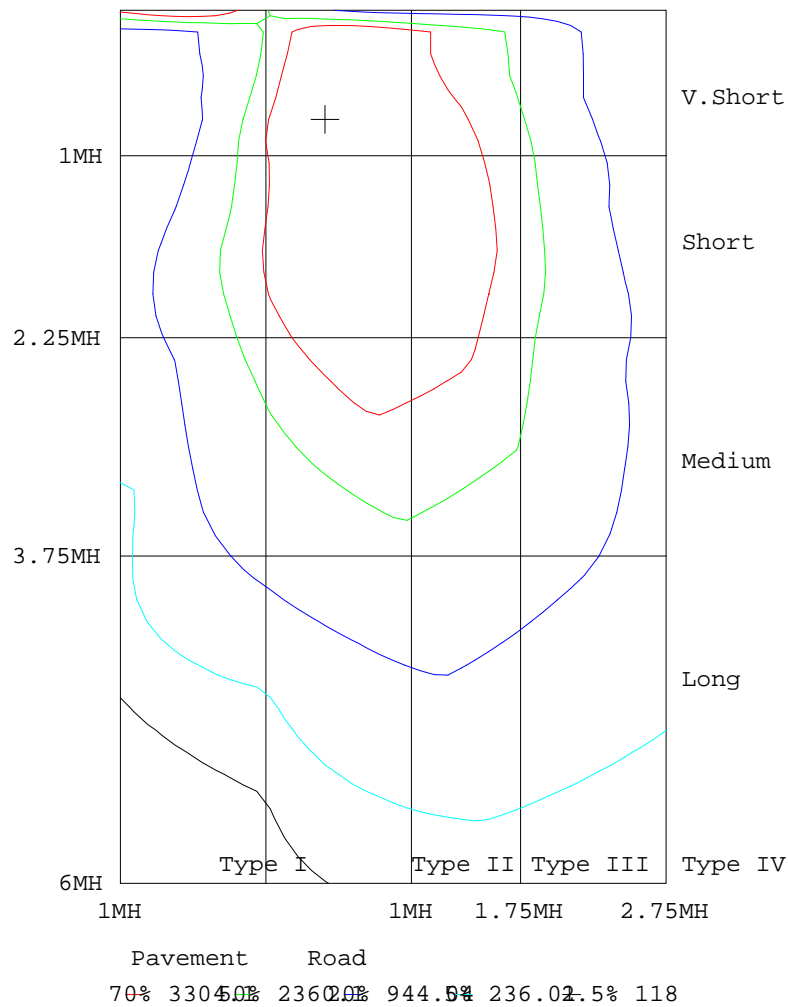
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity:0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	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: 2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm																			
NAME: D-20HLED80-32										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	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419	2419
5	2420	2513	2620	2689	2753	2783	2795	2781	2748	2690	2622	2530	2421	2325	2233	2157	2093	2064	2054
10	2456	2640	2828	2999	3135	3198	3216	3194	3120	2990	2838	2664	2462	2256	2084	1967	1876	1822	1802
15	2488	2807	3156	3401	3566	3646	3659	3623	3521	3332	3128	2828	2522	2205	1966	1780	1658	1593	1558
20	2554	3062	3526	3827	4007	4055	4045	4004	3891	3686	3441	3055	2606	2156	1830	1544	1331	1234	1213
25	2684	3370	3885	4124	4274	4303	4270	4248	4178	4010	3747	3321	2709	2131	1647	1234	1050	951	926
30	2863	3681	4188	4370	4394	4372	4340	4354	4370	4287	4063	3616	2859	2120	1387	973	849	811	787
35	3108	3998	4477	4555	4418	4277	4235	4305	4468	4584	4428	3972	3084	2109	1097	784	692	600	590
40	3334	4405	4766	4611	4274	3998	3951	4112	4429	4725	4792	4396	3291	2111	914	701	534	532	532
45	3222	4272	4667	4391	3940	3648	3562	3766	4180	4563	4689	4230	3140	1982	744	514	483	488	489
50	3198	4194	4503	4232	3702	3260	3138	3454	3995	4492	4611	4265	3153	1846	559	440	437	469	476
55	3276	4318	4472	4093	3495	2908	2707	3159	3809	4351	4588	4325	3173	1742	420	391	418	468	478
60	3374	4388	4452	3918	3205	2359	2062	2564	3489	4189	4597	4355	3130	1549	346	340	408	465	474
65	3037	4224	4264	3459	2343	1207	938	1353	2644	3690	4378	4091	2696	940	296	299	403	530	542
70	2316	3488	3410	2262	882	361	324	395	1110	2532	3484	3362	2073	466	237	261	414	584	692
75	1215	2236	1988	681	298	193	169	209	338	842	2025	2168	900	167	170	207	326	426	455
80	104	262	231	200	138	82.2	66.9	88.9	153	231	275	242	103	75.6	80.5	119	160	187	190
85	28.5	39.6	32.8	31.3	18.9	12.2	10.3	14.6	23.5	38.6	42.8	48.1	27.5	19.7	14.6	25.7	34.7	35.6	35.7
90	1.11	0.91	0.82	0.76	0.84	0.56	0.66	0.85	0.72	0.77	0.92	0.77	1.01	1.31	1.27	2.73	0.61	0.46	0.46
95	1.06	1.44	0.95	0.91	0.91	0.56	0.79	0.95	0.81	0.74	0.67	0.92	1.77	2.54	2.44	1.52	0.92	0.56	0.76
100	4.33	2.47	1.22	1.10	0.99	0.56	0.91	1.06	0.90	1.12	1.68	3.47	5.10	5.57	5.08	3.50	1.99	1.17	1.07
105	6.34	3.78	1.83	1.32	1.13	1.17	1.24	1.19	1.18	1.48	2.35	5.02	7.06	7.43	6.46	5.47	3.51	2.25	1.94
110	8.15	5.15	2.63	1.74	1.32	1.32	1.34	1.23	1.64	2.00	3.43	6.09	8.16	9.05	8.74	6.75	4.94	3.61	2.90
115	8.61	5.96	2.89	1.84	1.75	1.78	1.77	1.89	2.10	2.29	3.84	6.85	9.22	10.9	10.0	7.86	6.36	5.05	4.42
120	9.87	6.27	3.20	2.23	1.83	1.98	1.95	1.96	2.19	2.76	4.35	7.62	10.3	11.5	11.1	8.92	7.48	6.57	6.35
125	10.2	6.77	3.76	2.84	2.02	1.73	2.03	2.01	2.30	3.02	4.53	7.82	10.6	11.7	11.8	10.3	9.16	7.44	8.85
130	10.3	6.80	4.21	2.88	2.59	1.46	2.17	1.59	2.79	3.06	4.71	7.82	10.7	11.7	11.9	11.1	11.4	9.02	10.6
135	10.2	6.92	4.46	3.54	3.20	1.93	2.68	1.57	3.58	3.72	5.11	7.82	10.7	11.7	11.9	11.5	12.5	11.6	12.2
140	9.77	7.07	5.18	4.20	3.58	3.10	3.50	2.69	3.89	4.44	5.94	7.85	10.2	11.6	13.0	12.4	12.5	12.6	12.6
145	9.37	7.63	6.29	5.12	3.31	4.32	3.96	4.24	4.21	5.31	6.81	7.98	9.97	11.7	13.1	12.9	11.7	13.0	14.1
150	9.37	7.75	7.05	5.65	3.44	5.13	4.97	5.16	3.43	6.22	7.01	8.20	9.92	11.6	12.5	12.7	11.6	13.4	13.4
155	10.0	7.98	7.41	5.12	5.03	6.00	5.54	5.82	5.06	5.72	6.90	8.08	10.7	11.0	11.6	11.1	11.6	13.1	12.7
160	9.32	6.83	5.96	5.17	6.76	6.82	6.80	6.79	6.91	5.41	5.84	7.43	9.96	9.45	9.59	10.2	11.6	12.7	12.6
165	8.56	7.22	6.89	7.54	7.63	7.33	7.51	7.10	7.73	7.55	6.35	6.85	9.47	9.40	9.80	10.8	11.6	12.4	12.6
170	10.1	10.00	9.18	8.81	8.49	8.39	8.38	8.47	8.65	8.47	8.65	9.46	11.3	11.0	10.7	10.9	11.8	12.5	12.5
175	10.2	10.8	10.1	10.7	10.4	10.0	9.90	10.00	10.1	10.00	9.47	9.54	11.6	11.4	11.0	11.1	11.9	12.0	12.1
180	11.6	10.9	10.9	11.1	11.3	11.2	11.0	11.0	11.1	11.0	10.3	9.77	11.6	11.5	11.0	10.9	11.6	11.6	11.3

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:0.0DEG
Operators:CS01
Test Date:2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.20V I:0.3628A P:79.413W PF:0.9508 Freq:50.01Hz Lamp Flux:10565x1 lm		
NAME: D-20HLED80-32	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	2419	2419	2419	2419	2419														
5	2065	2088	2151	2227	2324														
10	1823	1863	1948	2054	2239														
15	1601	1667	1775	1934	2168														
20	1262	1371	1576	1818	2115														
25	959	1082	1278	1666	2102														
30	807	847	1010	1451	2116														
35	593	704	790	1181	2124														
40	525	529	701	980	2141														
45	485	476	519	768	2056														
50	465	433	436	594	1964														
55	460	407	382	438	1893														
60	457	395	332	348	1941														
65	485	370	289	293	1397														
70	547	371	252	229	625														
75	434	324	185	171	176														
80	186	160	93.1	83.4	76.6														
85	38.5	35.7	19.8	16.5	21.2														
90	0.56	0.67	0.97	1.38	1.53														
95	0.77	0.98	1.69	2.52	2.62														
100	1.23	2.26	3.68	5.03	5.59														
105	2.40	3.69	5.42	7.02	7.42														
110	3.53	4.97	6.85	8.91	9.46														
115	4.92	6.20	8.07	10.1	10.7														
120	6.49	7.33	9.19	11.3	11.8														
125	8.85	9.07	10.9	11.9	11.9														
130	9.36	11.2	11.2	12.1	12.0														
135	10.2	12.8	11.6	12.0	11.8														
140	11.5	13.4	12.0	12.4	11.4														
145	13.1	12.8	12.7	12.5	11.4														
150	13.3	12.2	12.7	12.5	11.4														
155	12.6	12.5	10.8	11.4	11.0														
160	12.3	12.5	11.3	9.58	9.00														
165	11.8	12.3	11.8	10.5	9.73														
170	11.7	11.8	11.7	11.1	10.2														
175	11.5	11.3	11.0	10.8	9.93														
180	11.0	11.1	11.1	11.0	10.02														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:0.0DEG
Operators:CS01
Test Date:2021-07-17

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-20HLED80-32(5050 30K RA70 T3M)