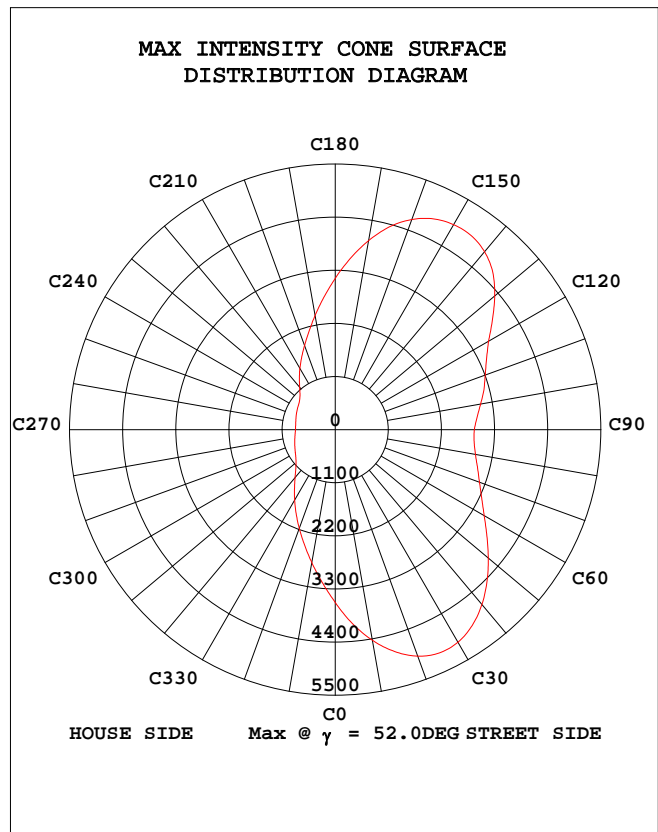
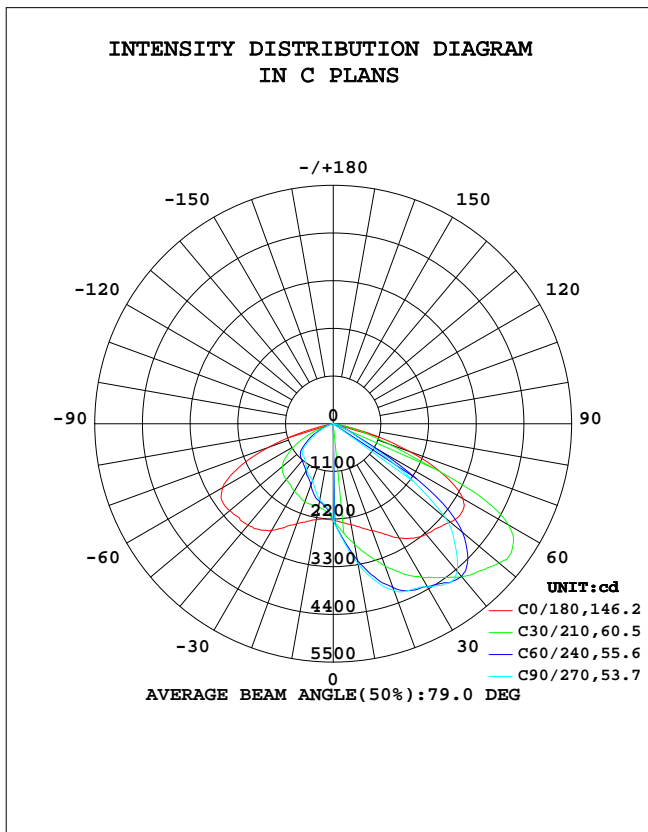


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.29 lm/W			
MODEL	5050 30K RA70 T4	I _{max} (cd)	5081	η street_up(%)	0.1
NOMINAL POWER(W)	80	LOR(%)	100.0	η street_down(%)	70.5
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	10254	η house_up(%)	0.2
NOMINAL FLUX(lm)	10253.9	MAXIMUM @(C,γ)	30,52.0	η house_down(%)	29.1
LAMPS INSIDE	1	η up(%)	0.3	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	230.0	η down(%)	99.7	SLI	18.307



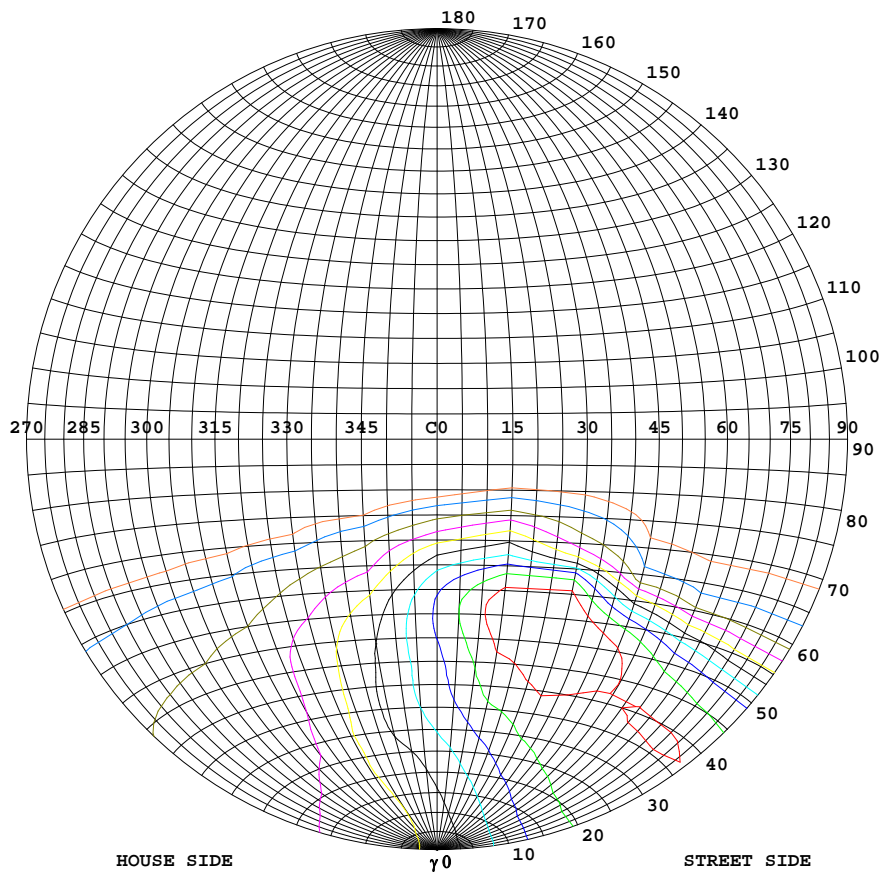
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 0.0DEG
Operators:CS01
Test Date:2021-07-17

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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



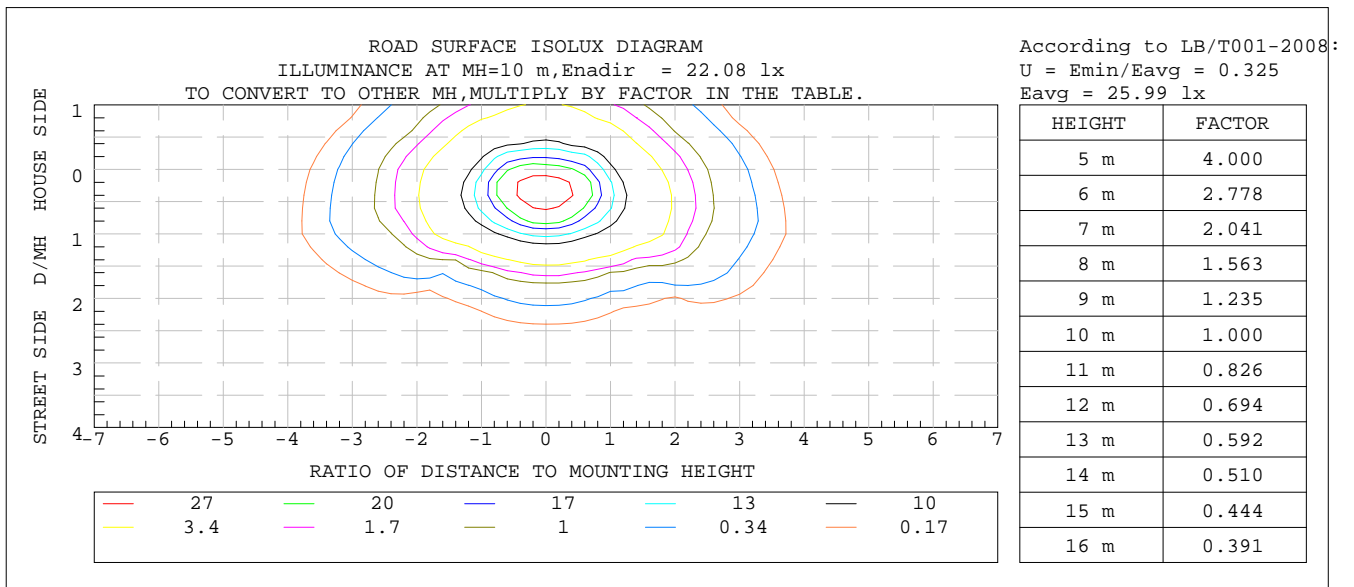
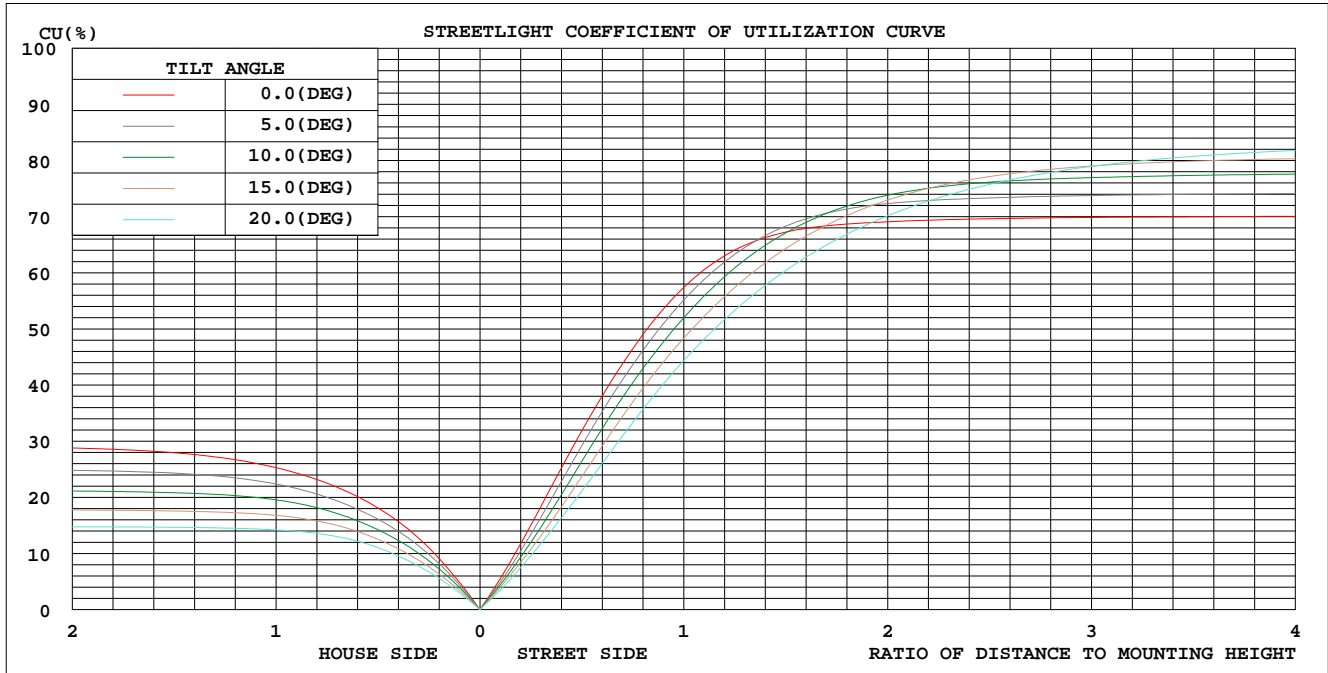
Classification:

IES:Type II - Short
 CIE:Narrow - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:29.16cd/klm
 Max.At90:0.1263cd/klm
 Max.80-90:29.16cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	5081
90%	4573
80%	4065
70%	3557
60%	3049
50%	2541
40%	2033
30%	1524
20%	1016
10%	508
5%	254

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 T4)

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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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	lum,lamp
10	2365	3027	3274	2924	2251	1877	1786	1902	0- 10	222.5	222.5	2.17,2.17
20	2627	3795	4093	3669	2451	1677	1401	1764	10- 20	732.7	955.3	9.32,9.32
30	3045	4275	4346	4196	2836	1366	1226	1480	20- 30	1294	2249	21.9,21.9
40	3336	4507	4452	4448	3061	1206	1037	1306	30- 40	1852	4101	40,40
50	3533	4603	3382	4648	3116	1086	905.0	1222	40- 50	2276	6377	62.2,62.2
60	3453	2344	834.6	2902	2945	675.7	469.2	722.0	50- 60	2186	8563	83.5,83.5
70	1866	318.9	217.5	437.1	1580	207.6	159.9	214.9	60- 70	1249	9812	95.7,95.7
80	123.0	76.09	48.72	98.04	94.45	55.10	35.48	56.77	70- 80	377.8	10190	99.4,99.4
90	0.8993	0.5079	0.5457	0.5609	0.8521	0.8513	0.8764	0.5588	80- 90	29.47	10219	99.7,99.7
100	3.599	0.6524	0.4843	1.169	4.654	1.311	0.6557	1.627	90-100	1.173	10220	99.7,99.7
110	7.053	1.864	0.5553	2.133	7.509	4.543	1.970	4.885	100-110	3.041	10223	99.7,99.7
120	9.051	2.721	1.821	3.403	10.01	7.914	4.794	7.475	110-120	4.820	10228	99.7,99.7
130	10.03	3.527	2.853	4.013	10.93	10.48	9.944	10.18	120-130	6.156	10234	99.8,99.8
140	9.409	4.985	4.336	5.185	10.66	12.19	12.91	11.65	130-140	6.431	10241	99.9,99.9
150	9.107	6.013	5.275	6.401	9.356	12.03	13.36	11.76	140-150	5.710	10246	99.9,99.9
160	9.258	5.766	6.303	5.947	9.462	10.15	12.05	10.43	150-160	4.102	10250	100,100
170	9.401	8.460	8.118	8.231	10.55	10.66	12.05	11.03	160-170	2.512	10253	100,100
180	10.55	10.78	10.38	9.964	10.76	10.01	10.74	10.47	170-180	0.9506	10254	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

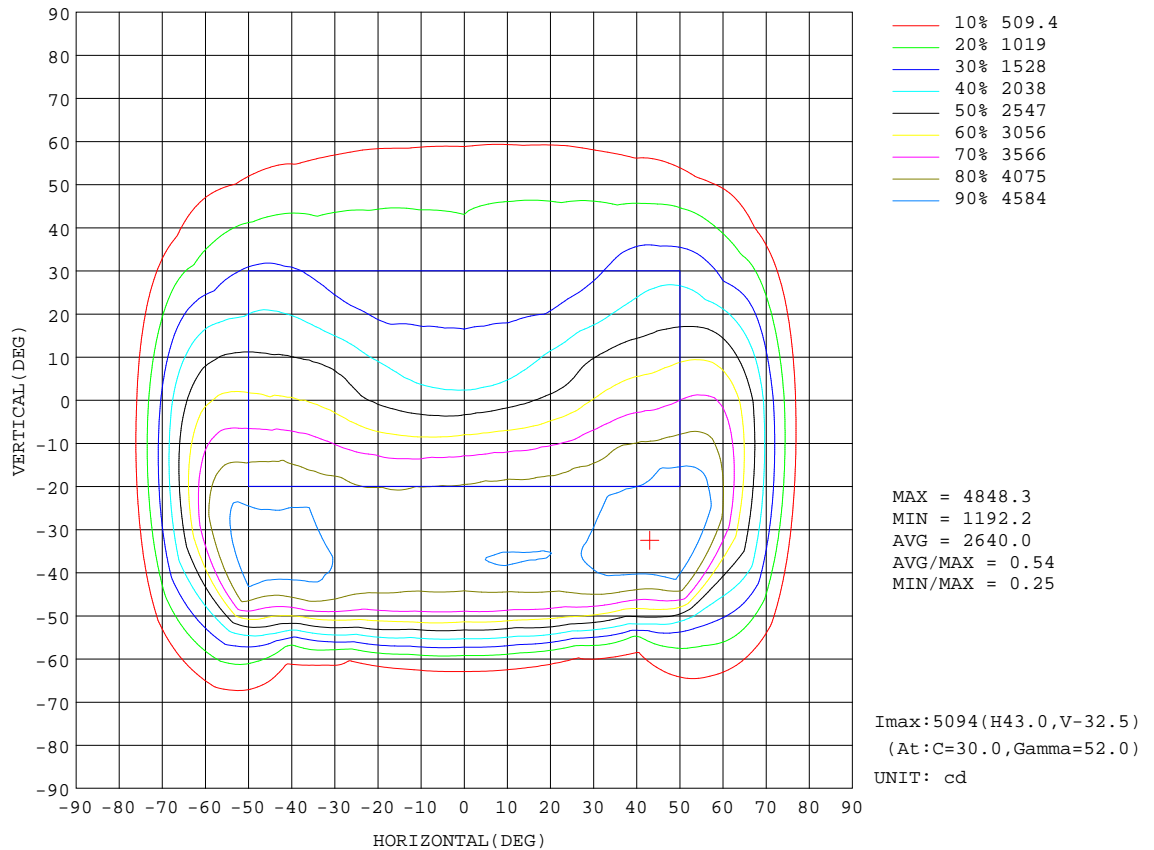
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 0.0DEG
 Operators:CS01
 Test Date:2021-07-17

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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

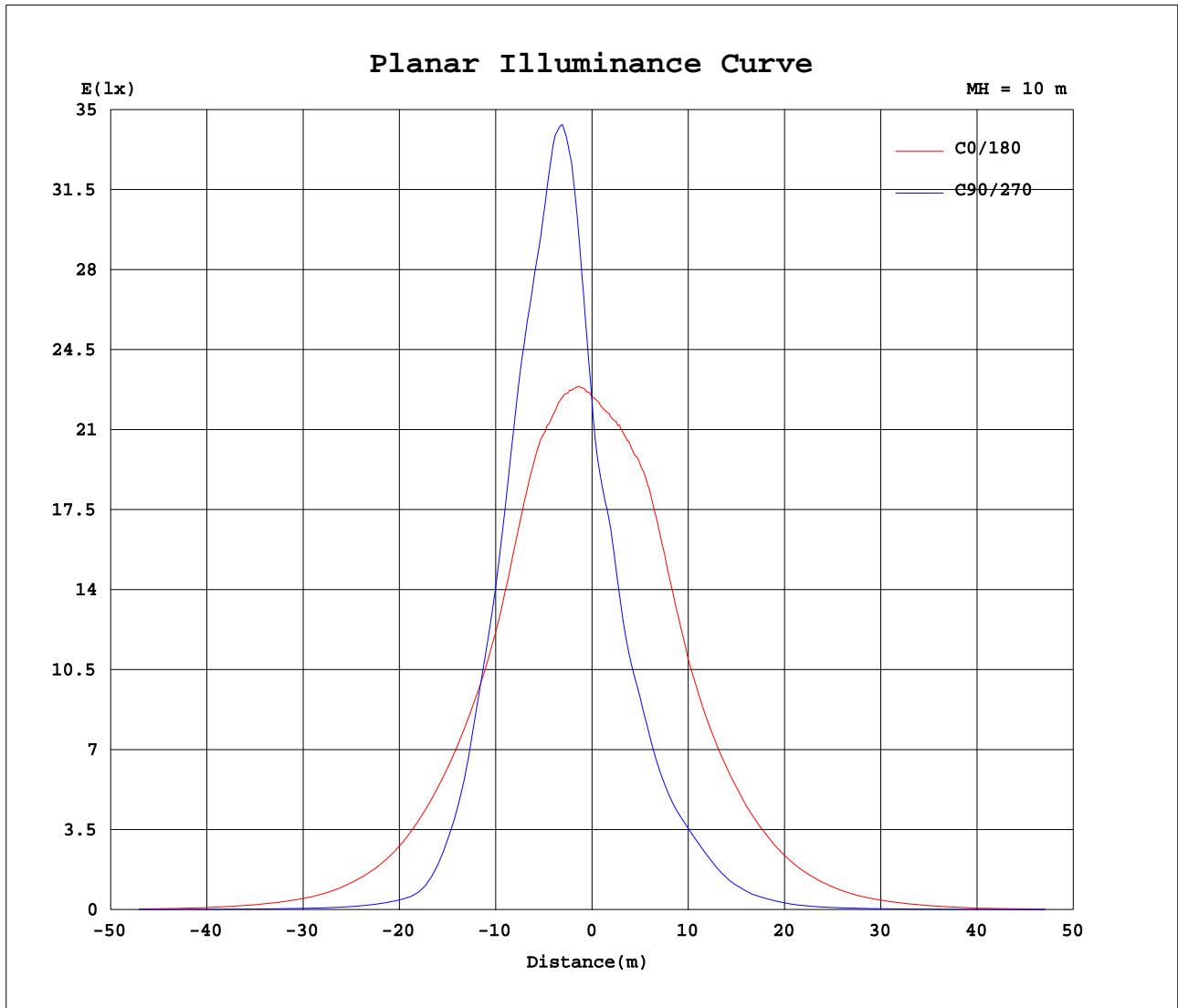
Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 lm		
NAME: D-20HLED80-32	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: KLED	SUR.:	Shielding Angle:



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 T4)

Planar Illuminance Curve



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

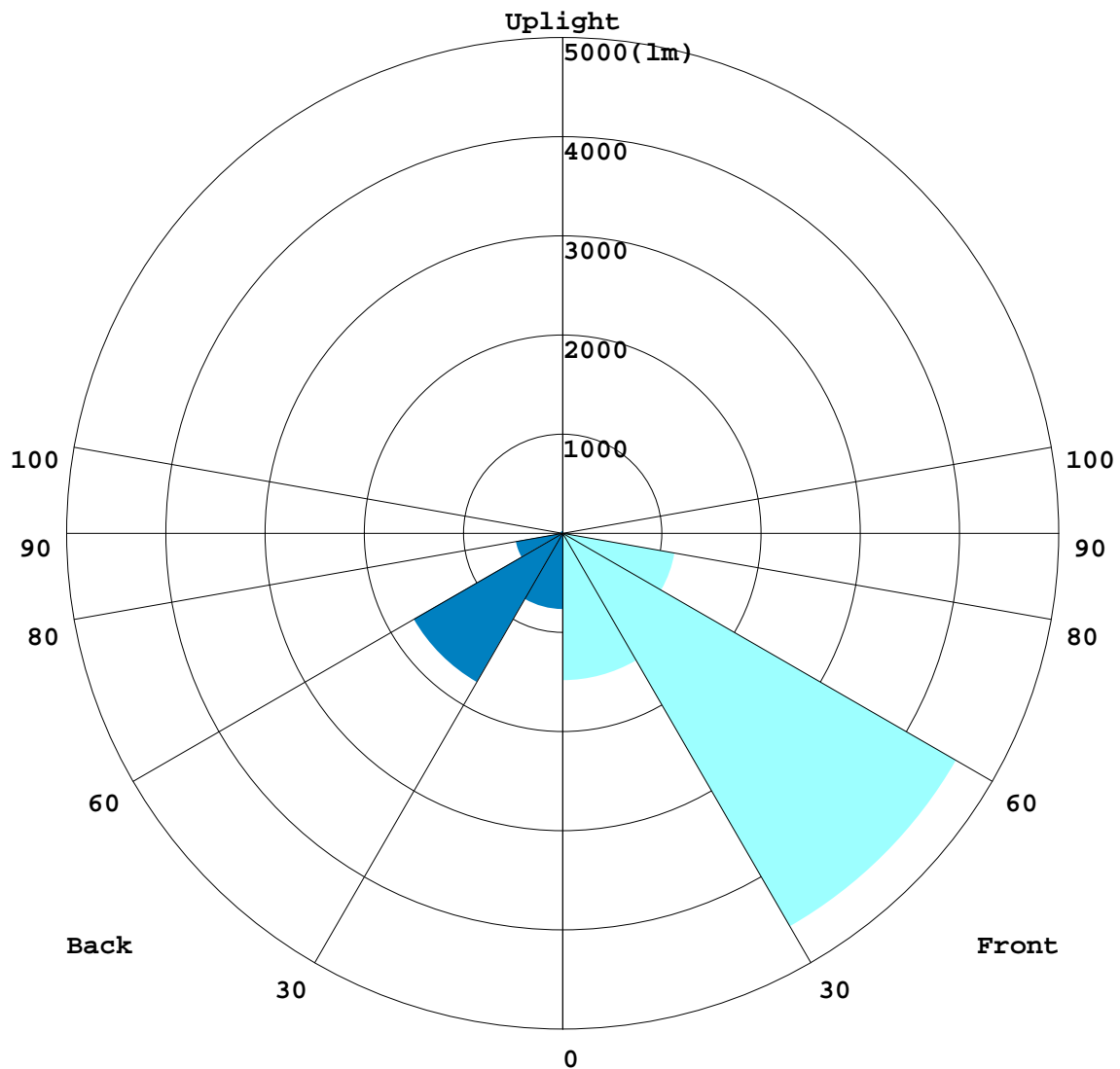
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity: 0.0%
Test Distance:26.000m [K=1.0000]
Remarks: D-20HLED80-32(5050 30K RA70 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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)	1483.2	14.5
FM - Front-Medium(30-60)	4580.1	44.7
FH - Front-High(60-80)	1148.1	11.2
FVH - Front-Very High(80-90)	19.263	0.2
Total Forward Light	7243	70.6

BL - Back-Low(0-30)	765.8	7.5
BM - Back-Medium(30-60)	1733.5	16.9
BH - Back-High(60-80)	478.8	4.7
BVH - Back-Very High(80-90)	10.209	0.1
Total Back Light	3010.9	29.4

UL - Uplight-Low(90-100)	1.1732	0.0
UH - Uplight-High(100-180)	33.723	0.3
Total Up Light	34.896	0.3

BUG(Back,Up,Glare) Rating	B2-U2-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2988.3	22.593	3010.9
Street Side	7230.7	12.302	7243

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

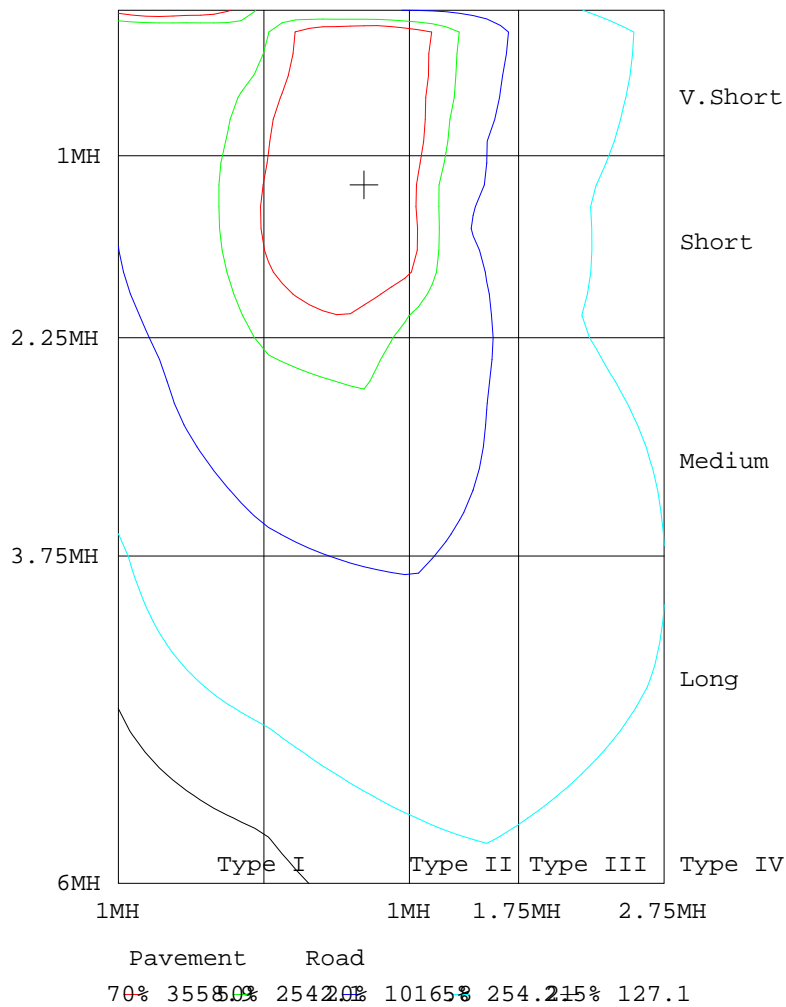
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
 Humidity: 0.0%
 Test Distance:26.000m [K=1.0000]
 Remarks: D-20HLED80-32(5050 30K RA70 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221	2221
5	2285	2403	2506	2607	2676	2718	2719	2695	2643	2550	2442	2329	2210	2109	2025	1974	1939	1920	1915
10	2365	2602	2820	3027	3191	3262	3274	3224	3101	2924	2708	2492	2251	2065	1952	1877	1821	1792	1786
15	2480	2821	3148	3442	3653	3759	3748	3725	3573	3304	2994	2679	2328	2081	1931	1818	1699	1619	1586
20	2627	3068	3490	3795	4016	4116	4093	4069	3946	3669	3303	2884	2451	2148	1921	1677	1510	1430	1401
25	2816	3328	3823	4090	4243	4303	4231	4253	4176	3976	3620	3144	2634	2272	1850	1489	1368	1330	1316
30	3045	3632	4090	4275	4339	4401	4346	4355	4263	4196	3904	3427	2836	2418	1802	1366	1259	1237	1226
35	3224	3930	4327	4421	4476	4550	4510	4509	4397	4352	4193	3691	2979	2443	1724	1265	1178	1129	1112
40	3336	4206	4609	4507	4603	4553	4452	4553	4556	4448	4476	3923	3061	2393	1685	1206	1117	1054	1037
45	3399	4411	4794	4644	4392	4118	3982	4124	4394	4578	4681	4114	3065	2316	1634	1168	1068	1021	1004
50	3533	4656	4992	4603	3885	3490	3382	3570	3953	4648	4829	4294	3116	2192	1532	1086	976	925	905
55	3602	4871	5041	3938	2832	2192	2103	2288	3028	4346	4947	4506	3124	1952	1333	913	770	702	678
60	3453	4628	4666	2344	1199	881	835	963	1447	2902	4816	4456	2945	1622	1043	676	565	480	469
65	2847	3636	3141	614	417	414	405	423	438	1062	4039	3635	2422	1192	677	441	339	289	269
70	1866	2462	1357	319	222	219	217	224	239	437	1975	2316	1580	718	327	208	172	165	160
75	849	1285	640	176	137	126	123	130	145	234	898	1178	672	195	136	118	107	103	97.9
80	123	299	212	76.1	57.1	51.1	48.7	54.6	60.9	98.0	272	255	94.4	74.3	67.8	55.1	51.4	45.8	35.5
85	24.5	34.4	30.2	14.8	10.5	8.85	8.42	10.1	12.5	19.7	42.2	36.5	23.1	17.4	13.1	9.84	9.25	7.57	6.02
90	0.90	0.81	0.66	0.51	0.46	0.46	0.55	0.41	0.51	0.56	0.71	0.86	0.85	1.00	0.71	0.85	1.29	0.46	0.88
95	1.11	0.76	0.91	0.58	0.51	0.47	0.49	0.36	0.55	0.68	0.66	2.23	1.51	1.82	1.31	0.61	0.51	0.52	0.45
100	3.60	2.25	1.31	0.65	0.57	0.49	0.48	0.40	0.59	1.17	1.92	3.65	4.65	4.47	3.23	1.31	0.86	0.71	0.66
105	5.34	3.51	2.11	1.26	0.96	0.50	0.52	0.56	1.02	1.62	2.93	6.09	6.85	6.53	5.04	2.63	1.57	1.22	1.21
110	7.05	4.91	2.87	1.86	1.26	0.96	0.56	1.12	1.37	2.13	3.99	6.14	7.51	7.94	7.56	4.54	2.69	2.12	1.97
115	7.70	5.72	3.51	2.07	1.53	1.31	1.21	1.37	1.88	2.80	4.47	7.00	8.56	9.64	8.82	6.45	4.20	3.20	3.13
120	9.05	6.62	3.77	2.72	1.97	1.92	1.82	1.93	2.23	3.40	5.11	7.76	10.0	10.6	9.72	7.91	5.87	4.41	4.79
125	9.89	7.04	4.53	3.07	2.88	2.06	2.42	2.79	2.80	3.91	5.41	8.29	10.7	11.5	10.7	9.32	8.62	6.49	7.77
130	10.0	7.11	4.91	3.53	3.49	2.25	2.85	2.59	3.56	4.01	5.96	8.37	10.9	11.6	11.3	10.5	11.1	9.16	9.94
135	9.95	7.17	5.22	4.38	4.40	2.88	3.42	2.61	4.32	4.57	6.04	8.43	10.9	11.5	11.6	11.0	12.2	11.9	12.0
140	9.41	7.53	5.89	4.99	4.57	4.09	4.34	3.50	4.88	5.19	6.73	8.48	10.7	11.4	12.2	12.2	12.2	12.8	12.9
145	9.06	7.63	6.65	5.89	4.41	5.05	4.79	5.02	4.93	6.05	6.93	8.53	9.95	11.4	12.3	12.4	11.6	13.1	14.0
150	9.11	7.68	6.88	6.01	4.33	5.26	5.27	5.58	4.48	6.40	7.23	8.48	9.36	11.1	11.6	12.0	11.2	13.3	13.4
155	9.29	7.57	6.55	5.60	5.05	5.95	5.65	5.94	5.24	5.90	7.24	8.40	9.69	10.6	11.1	10.3	11.2	12.5	12.2
160	9.26	7.04	5.90	5.77	6.47	6.32	6.30	6.25	6.81	5.95	5.92	7.21	9.46	8.73	9.49	10.2	11.1	12.3	12.1
165	8.35	6.82	6.48	7.14	7.58	7.11	7.01	6.75	7.37	7.32	6.68	6.95	9.31	9.19	9.77	10.5	11.2	12.0	12.1
170	9.40	9.24	8.65	8.46	8.39	8.09	8.12	7.86	8.44	8.23	8.39	9.29	10.6	10.4	10.2	10.7	11.6	11.9	12.1
175	9.48	9.84	9.36	9.97	9.96	9.55	9.33	9.49	9.71	9.35	8.91	9.31	10.8	10.8	10.2	10.7	11.6	11.7	11.5
180	10.6	9.89	10.0	10.8	11.0	10.9	10.4	10.3	10.4	9.96	9.26	9.49	10.8	10.5	10.1	10.0	10.9	10.8	10.7

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 T4)

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.18V I:0.3628A P:79.309W PF:0.9498 Freq:50.01Hz Lamp Flux:10253.9x1 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	2221	2221	2221	2221	2221														
5	1931	1956	2002	2070	2168														
10	1802	1848	1902	1993	2147														
15	1643	1741	1868	1992	2181														
20	1448	1555	1764	2008	2258														
25	1348	1405	1599	2001	2389														
30	1257	1306	1480	1993	2584														
35	1162	1230	1386	1902	2658														
40	1091	1161	1306	1860	2662														
45	1053	1121	1280	1826	2605														
50	949	1023	1222	1742	2529														
55	733	826	1024	1542	2332														
60	510	600	722	1221	1951														
65	294	354	491	857	1393														
70	166	173	215	367	898														
75	104	113	125	145	260														
80	48.5	53.5	56.8	70.7	70.8														
85	8.50	9.61	10.6	15.2	18.8														
90	0.47	0.43	0.56	0.76	1.12														
95	0.51	0.46	0.66	1.57	1.88														
100	0.76	0.97	1.63	3.64	4.52														
105	1.32	1.73	3.01	5.58	6.35														
110	2.19	2.95	4.89	7.35	8.18														
115	3.40	4.42	6.51	8.50	9.19														
120	4.88	5.90	7.48	9.62	10.6														
125	7.78	7.79	9.11	10.7	11.4														
130	9.14	10.1	10.2	11.0	11.3														
135	10.1	12.1	11.2	11.2	11.1														
140	11.4	13.3	11.6	11.6	11.0														
145	13.0	13.5	11.8	11.7	11.0														
150	13.2	12.3	11.8	11.6	10.8														
155	12.5	12.0	10.3	10.9	10.3														
160	11.7	11.8	10.4	8.96	8.83														
165	11.2	11.8	11.0	9.97	8.82														
170	11.1	11.4	11.0	10.5	9.19														
175	10.8	11.1	10.2	10.0	9.30														
180	10.3	10.4	10.5	9.97	9.29														

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 T4)