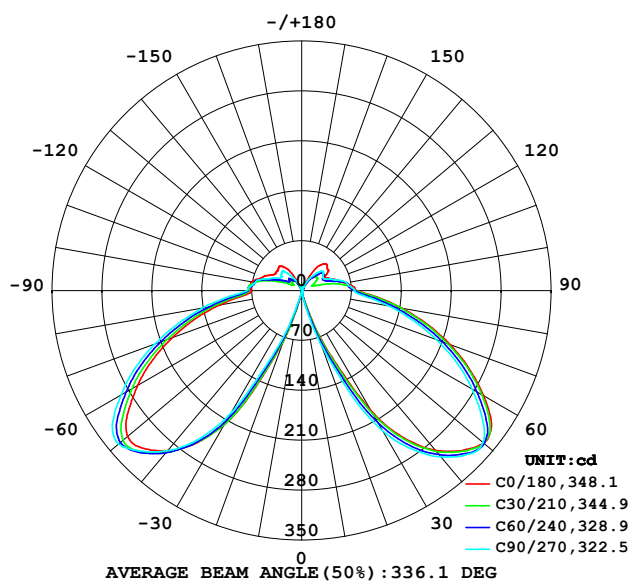
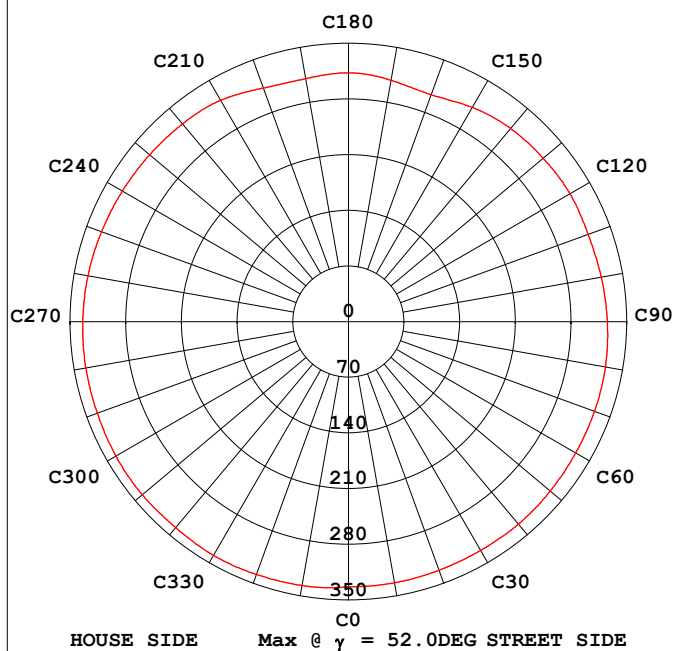


STREETLIGHT PHOTOMETRIC TEST REPORT

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 75.67 lm/W
MODEL	DLW-LED-029-20W	I _{max} (cd)	339.4	η street_up (%)	7.6	
NOMINAL POWER (W)	20	LOR (%)	100.0	η street_down (%)	42.1	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	1530	η house_up (%)	7.8	
NOMINAL FLUX (lm)	1529.55	MAXIMUM @ (C, γ)	330,52.0	η house_down (%)	42.6	
LAMPS INSIDE	1	η up (%)	15.3	76 FLASHAREA (m2)	0.00100	
TEST VOLTAGE (V)	220	η down (%)	84.7	SLI	17.698	

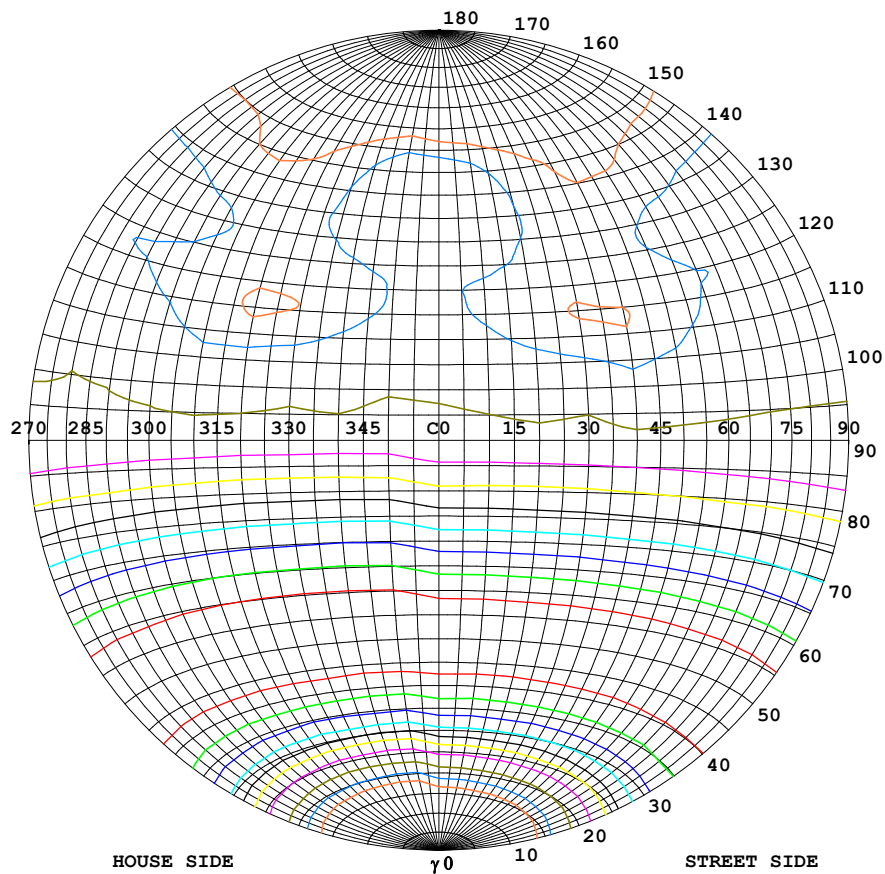
INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSMAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 9.780m [K=1.0000]
Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



Classification:

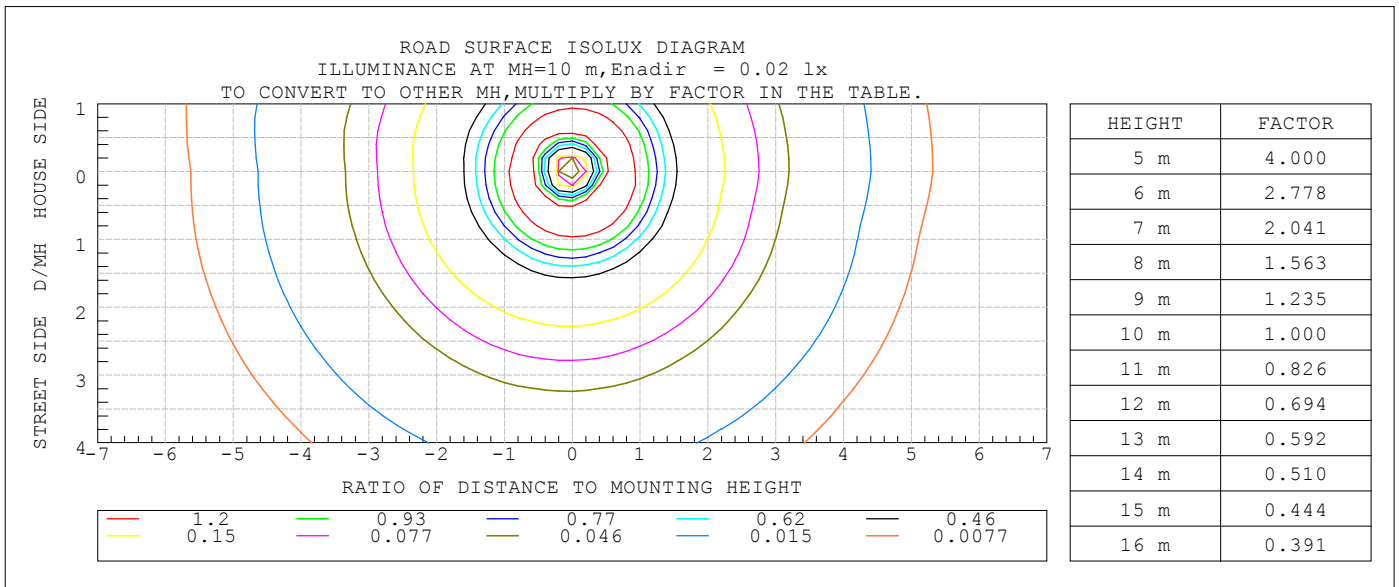
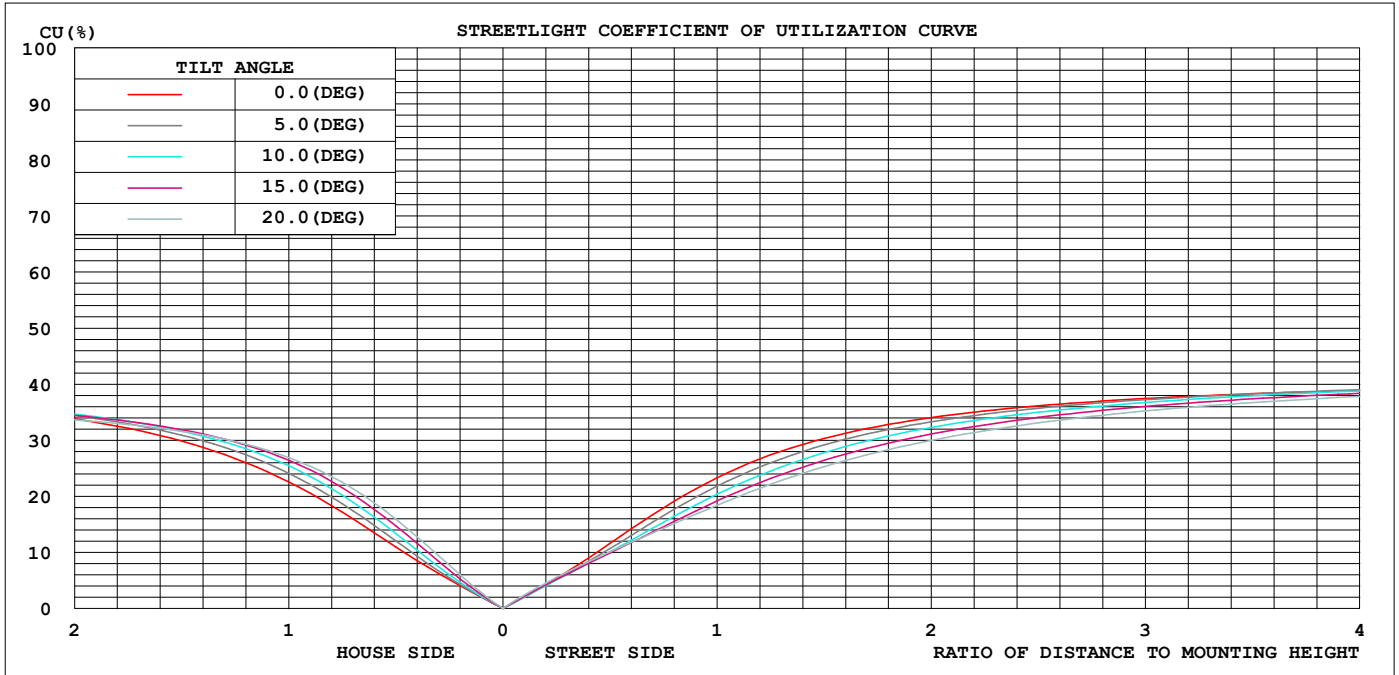
IES:Type V - Short
CIE:Broad - Short
IES:None cut-off
CIE:Non-cut-off
Max.At80:102.7cd/klm
Max.At90:55.27cd/klm
Max.80-90:102.7cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	339
90%	305
80%	272
70%	238
60%	204
50%	170
40%	136
30%	102
20%	68
10%	34
5%	17

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: DAMIN
Test Date: 2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 9.780m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

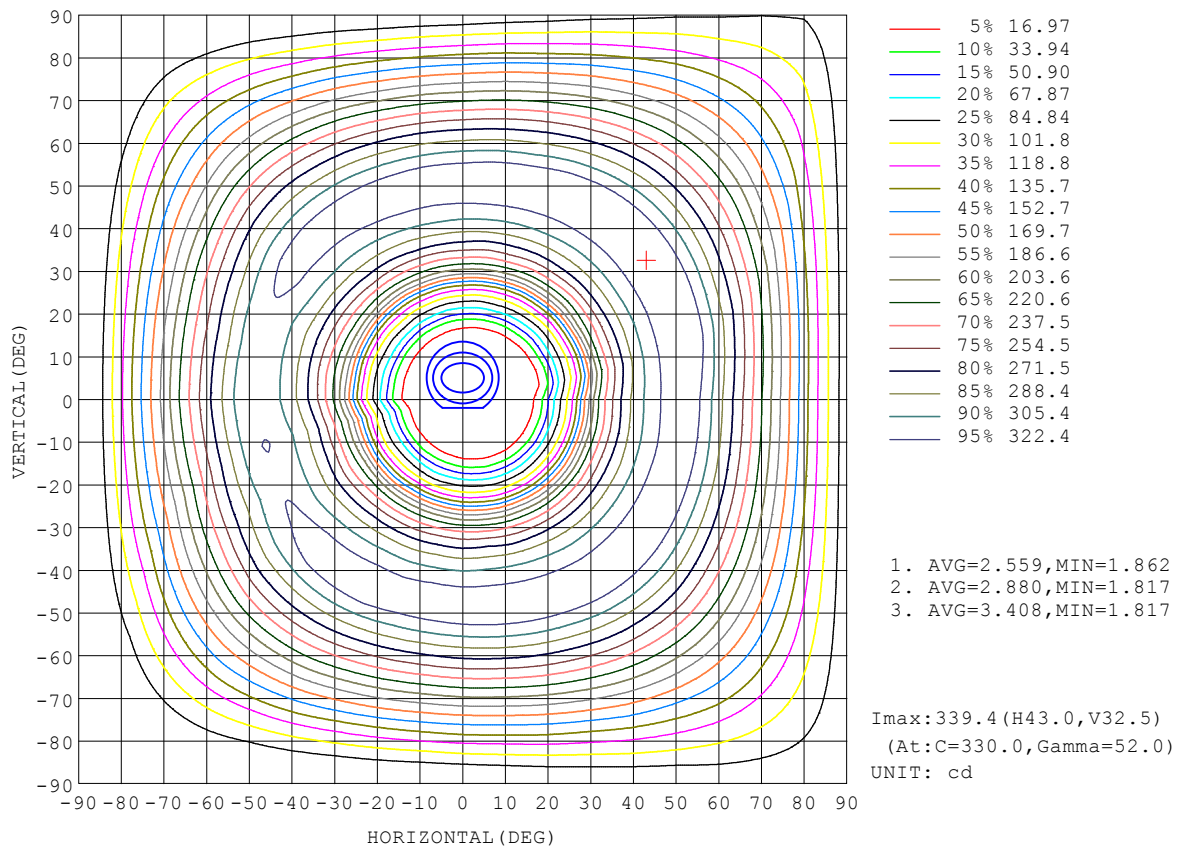
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4.058	4.385	5.869	8.209	6.171	5.237	4.053	3.438	0- 10	0.3330	0.3330	0.02,0.02
20	49.83	61.84	81.94	94.41	74.53	69.32	51.14	35.16	10- 20	7.850	8.183	0.53,0.53
30	193.3	205.3	226.9	236.8	216.8	213.6	197.3	177.0	20- 30	63.45	71.63	4.68,4.68
40	292.4	297.1	304.5	307.5	293.3	297.2	293.1	287.1	30- 40	163.4	235.0	15.4,15.4
50	332.8	334.6	332.0	327.1	318.5	330.0	335.1	334.5	40- 50	246.6	481.6	31.5,31.5
60	294.3	287.9	276.1	267.9	265.4	279.5	292.2	305.5	50- 60	279.5	761.1	49.8,49.8
70	221.3	214.3	201.4	191.6	192.8	205.5	219.0	233.8	60- 70	245.7	1007	65.8,65.8
80	142.8	136.3	123.2	112.1	116.6	127.8	141.3	154.4	70- 80	180.6	1187	77.6,77.6
90	78.10	75.15	74.12	74.74	71.47	75.13	76.82	82.96	80- 90	107.9	1295	84.7,84.7
100	62.33	49.33	64.00	56.99	71.47	61.48	66.40	54.39	90-100	75.87	1371	89.6,89.6
110	47.67	23.72	46.74	32.85	57.34	34.98	49.10	27.20	100-110	54.62	1426	93.2,93.2
120	37.58	25.84	35.33	24.56	45.57	12.58	35.77	21.59	110-120	32.92	1459	95.4,95.4
130	47.60	31.30	39.67	28.16	44.06	13.92	37.33	30.50	120-130	28.42	1487	97.2,97.2
140	49.11	18.76	31.00	16.89	44.98	17.08	32.84	25.22	130-140	25.24	1512	98.9,98.9
150	27.08	5.924	13.87	5.313	27.79	7.031	16.12	7.937	140-150	13.95	1526	99.8,99.8
160	1.574	1.040	1.260	0.8497	2.215	0.6875	4.362	0.8297	150-160	2.896	1529	100,100
170	3.255	1.337	0.4874	0.7248	1.786	0.9346	0.3453	1.666	160-170	0.2742	1529	100,100
180	0.2438	0.2201	0.2032	0.2032	0.2371	0.2167	0.1558	0.2032	170-180	0.0715	1530	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

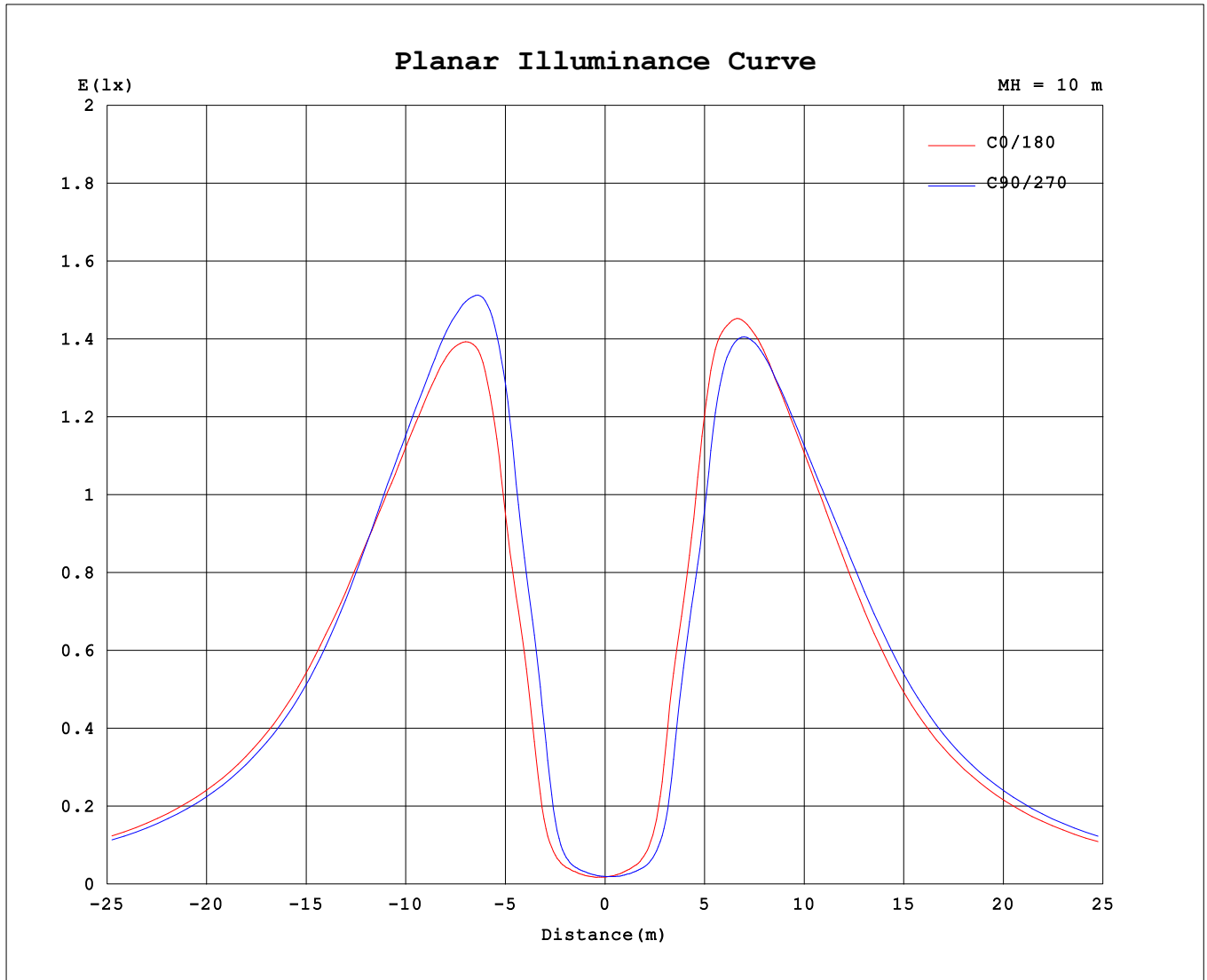
NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

Planar Illuminance Curve



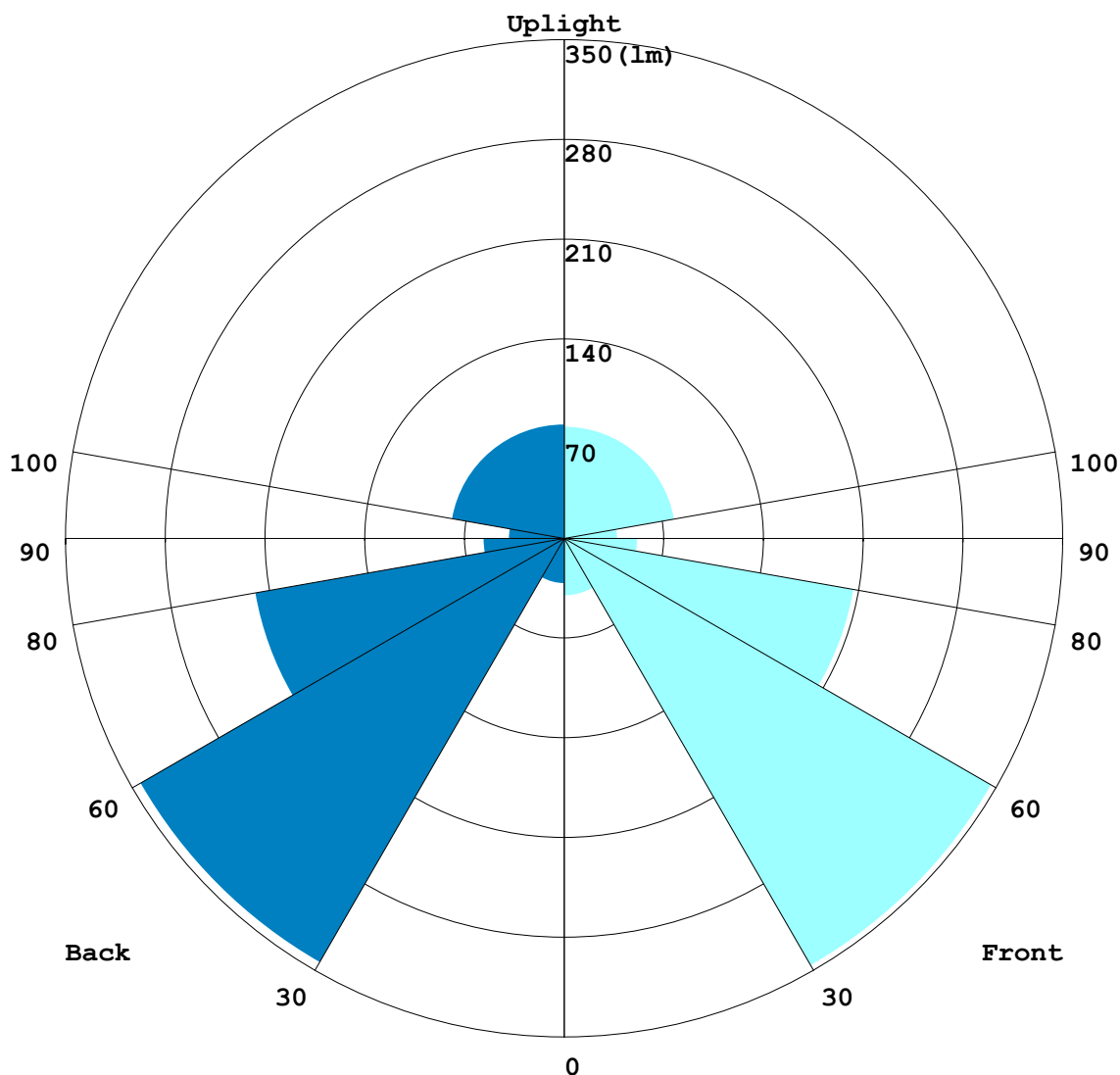
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: DAMIN
 Test Date: 2024-01-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.464
 Humidity: 65.0%
 Test Distance: 9.780m [K=1.0000]
 Remarks:

LCS REPORT

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

BUG REPORT

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	40.07	2.6
FM - Front-Medium(30-60)	346.1	22.6
FH - Front-High(60-80)	206.24	13.5
FVH - Front-Very High(80-90)	51.219	3.3
Total Forward Light	759.22	49.6

BL - Back-Low(0-30)	31.559	2.1
BM - Back-Medium(30-60)	343.41	22.5
BH - Back-High(60-80)	220.06	14.4
BVH - Back-Very High(80-90)	56.635	3.7
Total Back Light	770.33	50.4

UL - Uplight-Low(90-100)	75.868	5.0
UH - Uplight-High(100-180)	158.39	10.4
Total Up Light	234.26	15.3

BUG(Back,Up,Glare) Rating	B1-U3-G1
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	651.66	118.66	770.33
Street Side	643.63	115.6	759.22

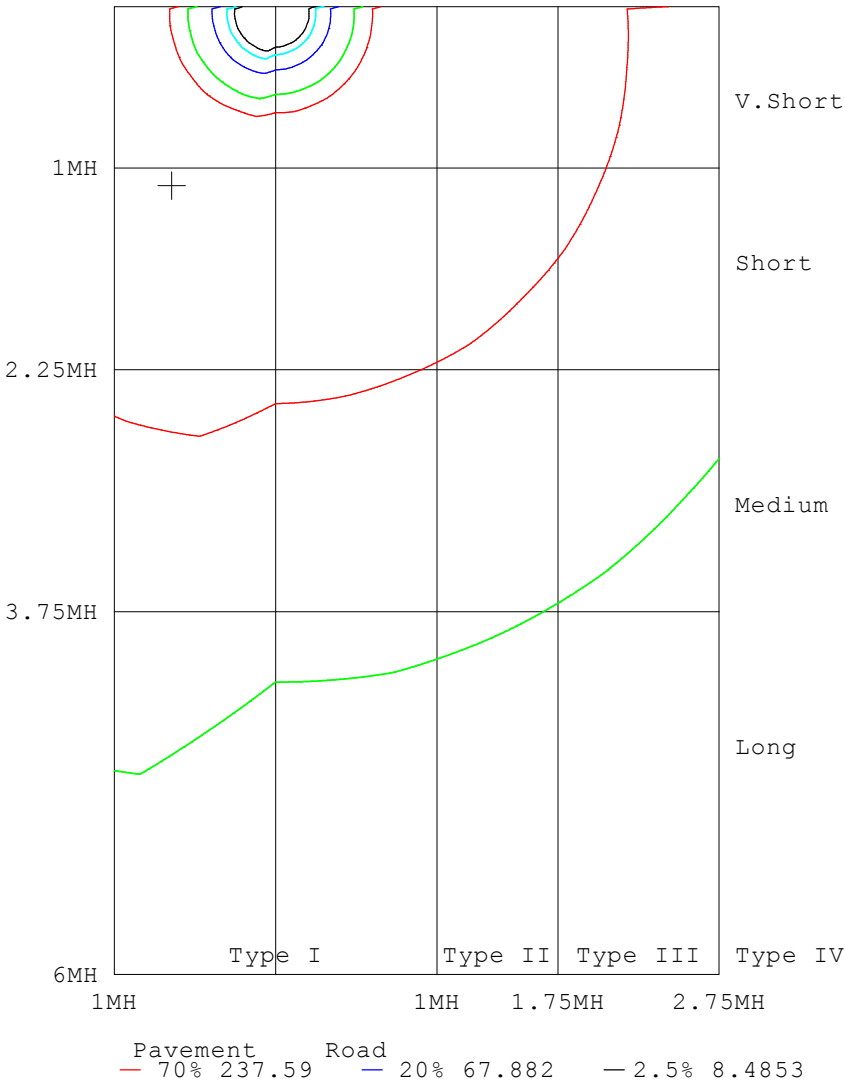
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:2024-01-09

γ Range: 0 - 180DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464

Humidity:65.0%

Test Distance:9.780m [K=1.0000]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	1.88	1.82	1.90	1.85	1.90	1.90	1.94	1.98	1.99	2.03	1.98	2.03	1.99	2.04	2.00	2.04	2.00	2.05	1.88
5	2.18	2.23	2.21	2.28	2.30	2.43	2.54	2.71	2.83	3.02	3.16	3.31	3.45	3.57	3.70	3.75	3.82	3.80	3.06
10	4.06	4.08	4.12	4.18	4.31	4.46	4.78	5.01	5.50	5.87	6.54	6.98	7.58	7.95	8.47	8.58	8.82	8.64	6.17
15	10.6	10.8	11.5	12.1	13.4	14.5	16.9	19.0	22.8	25.6	29.9	32.1	34.6	35.1	37.2	37.6	38.1	37.2	21.5
20	49.8	51.0	53.5	55.7	60.3	63.4	68.0	72.4	77.7	81.9	85.6	87.4	91.6	93.9	94.9	93.1	94.7	94.0	74.5
25	109	110	112	115	120	125	132	138	148	153	159	165	170	170	171	172	172	170	140
30	193	194	198	199	203	207	214	217	223	227	230	233	236	237	236	233	234	232	217
35	253	252	255	257	259	262	265	267	273	272	275	276	279	279	277	274	276	276	263
40	292	292	292	295	296	298	300	303	305	305	306	307	310	309	306	302	303	303	293
45	317	317	318	319	320	321	323	325	326	326	327	328	330	329	328	323	319	320	313
50	333	333	334	334	335	334	334	334	333	332	330	328	330	328	326	318	312	318	319
55	325	324	323	322	321	319	316	314	312	309	306	303	303	302	299	296	288	290	297
60	294	294	292	292	289	287	284	282	279	276	272	271	270	269	267	265	259	258	265
65	259	259	257	257	254	252	249	246	243	240	236	235	233	232	230	228	223	220	231
70	221	221	220	218	215	213	210	207	204	201	198	196	194	193	190	189	186	183	193
75	182	182	181	179	176	174	170	168	164	162	159	157	154	153	151	151	149	145	155
80	143	144	143	141	138	135	131	130	126	123	120	117	115	113	111	111	110	108	117
85	107	107	105	104	101	98.7	94.6	92.4	89.6	87.5	85.2	83.7	82.1	81.5	80.5	80.2	79.5	78.3	81.2
90	78.1	77.7	76.7	76.6	75.4	74.9	74.7	74.7	74.5	74.1	74.1	74.3	74.5	74.7	74.8	74.5	74.3	73.8	71.5
95	72.0	68.0	64.4	67.5	58.7	64.3	66.7	67.4	68.0	68.5	68.5	67.9	67.0	64.2	73.7	70.9	70.5	74.7	72.1
100	62.3	57.6	54.0	54.1	43.5	55.2	64.6	66.2	65.8	64.0	66.7	66.4	64.5	52.7	61.3	62.3	62.0	71.1	71.5
105	53.8	47.4	41.9	37.1	29.1	38.0	50.6	55.8	56.5	56.1	57.8	55.2	48.3	42.5	47.6	51.9	53.0	60.7	63.5
110	47.7	39.0	27.2	21.4	18.7	28.7	40.4	45.4	46.1	46.7	46.7	44.8	37.5	33.3	32.4	39.1	45.8	53.8	57.3
115	41.5	30.9	19.3	16.4	17.0	25.7	35.1	37.5	38.6	39.1	38.1	36.9	31.2	24.7	23.8	30.2	37.6	46.0	51.0
120	37.6	30.8	24.1	20.5	23.0	28.7	34.2	34.3	35.1	35.3	34.9	34.2	32.4	26.8	22.4	26.5	32.2	41.4	45.6
125	44.5	37.8	31.2	25.6	28.6	33.7	37.5	37.1	37.2	37.2	37.1	37.2	36.4	32.4	25.2	27.6	32.0	40.6	44.4
130	47.6	40.3	33.8	28.1	28.9	33.7	38.4	39.4	39.7	39.7	39.7	38.9	36.7	31.2	25.1	29.0	32.4	40.9	44.1
135	50.7	42.7	34.4	27.5	27.1	29.7	31.9	36.5	38.3	38.8	37.6	34.9	29.5	27.3	19.9	27.9	33.5	43.2	46.0
140	49.1	42.0	33.2	26.0	17.3	20.3	24.0	28.1	30.3	31.0	29.7	26.7	21.6	17.3	16.5	25.3	32.7	41.2	45.0
145	42.5	37.1	29.4	20.7	8.48	7.28	16.9	22.0	22.0	22.4	21.7	20.3	11.7	2.93	11.5	21.2	28.2	34.7	38.7
150	27.1	22.9	14.8	7.76	7.11	4.74	1.44	6.74	11.8	13.9	9.76	3.84	2.46	5.75	4.87	8.47	15.5	21.7	27.8
155	7.65	6.62	5.84	4.53	1.37	1.36	3.03	4.94	6.09	6.02	6.00	4.27	2.18	0.81	1.71	4.44	5.07	5.21	7.95
160	1.57	1.46	1.02	0.89	1.04	1.04	0.74	0.76	1.06	1.26	0.91	0.57	0.72	0.87	0.83	0.79	0.83	1.15	2.21
165	0.79	0.80	1.84	1.58	0.93	0.74	1.44	1.09	0.56	0.48	0.49	0.97	0.66	0.51	0.67	1.13	1.15	0.66	0.51
170	3.26	2.92	2.45	2.00	1.57	1.11	0.65	0.47	0.47	0.49	0.42	0.29	0.48	0.62	0.83	0.99	1.31	1.51	1.79
175	0.92	0.85	0.75	0.61	0.60	0.47	0.49	0.37	0.31	0.20	0.26	0.22	0.28	0.31	0.35	0.50	0.62	0.56	0.76
180	0.24	0.23	0.23	0.22	0.23	0.21	0.22	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.21	0.20	0.21	0.21	0.24

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-01-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:9.780m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: LED BOLLARD	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.: 1
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	1.82	1.90	1.85	1.90	1.90	1.94	1.98	1.99	2.03	1.98	2.03	1.99	2.04	2.00	2.04	2.00	2.05		
5	3.02	2.95	2.87	2.77	2.66	2.60	2.47	2.42	2.30	2.27	2.13	2.12	2.00	2.03	1.92	1.98	1.92		
10	6.18	5.89	5.74	5.36	5.11	4.76	4.53	4.25	4.05	3.86	3.71	3.57	3.47	3.40	3.32	3.31	3.32		
15	21.7	20.2	19.2	17.3	16.0	14.2	13.2	11.6	10.7	9.60	9.01	8.25	7.96	7.57	7.45	7.16	7.17		
20	74.5	72.9	73.1	70.5	68.1	63.3	59.8	54.4	51.1	47.1	43.9	39.0	37.5	32.9	32.2	29.4	30.9		
25	141	137	135	131	128	122	119	114	110	106	103	99.5	96.9	93.0	92.3	90.6	92.7		
30	215	215	217	215	212	209	206	201	197	192	188	182	180	174	173	167	168		
35	260	260	262	263	264	262	260	257	256	251	251	247	246	242	242	243	241		
40	292	292	296	298	297	297	296	295	293	292	290	288	287	287	286	285	285		
45	312	313	320	320	320	321	321	319	319	319	317	316	316	315	316	314	314		
50	316	319	327	329	331	332	333	335	335	335	334	336	334	335	336	334	333		
55	294	298	306	310	313	316	319	322	324	327	329	331	333	334	335	335	332		
60	263	267	274	279	281	284	287	290	292	296	298	302	305	306	307	308	307		
65	229	233	240	244	246	249	252	255	258	262	265	268	271	273	273	274	272		
70	192	194	201	204	207	210	213	216	219	223	227	230	233	235	235	237	235		
75	154	158	162	166	168	171	173	177	180	184	187	191	193	195	196	197	196		
80	116	121	126	127	129	132	135	138	141	145	147	151	153	155	156	157	156		
85	80.9	85.4	87.6	90.1	92.1	95.1	97.5	101	104	107	110	112	114	116	117	118	118		
90	70.8	73.7	74.7	75.1	75.2	75.2	75.6	76.2	76.8	78.3	79.6	81.4	82.3	83.6	83.8	84.5	84.1		
95	70.1	72.0	74.5	71.5	69.7	71.3	72.0	72.3	72.1	71.6	70.5	69.0	66.6	67.8	70.4	68.2	74.6		
100	66.2	62.4	66.7	60.2	62.8	67.3	68.0	67.5	66.4	68.0	67.3	65.5	55.1	53.7	60.1	57.9	64.8		
105	57.9	52.8	55.0	47.3	48.1	58.4	62.3	62.6	60.4	63.1	59.8	54.3	39.7	40.1	46.1	48.1	53.7		
110	49.8	43.5	38.8	33.8	36.2	45.3	49.3	49.3	49.1	49.8	47.0	40.0	28.5	26.0	27.7	37.0	46.4		
115	42.6	32.6	26.9	19.2	22.4	35.8	40.0	41.7	41.8	40.9	38.9	32.8	22.1	15.0	17.5	26.3	38.2		
120	36.6	27.9	16.1	10.5	14.7	28.2	34.3	35.5	35.8	35.3	34.3	29.9	24.4	18.7	21.2	25.0	35.4		
125	35.4	27.5	15.0	7.97	14.9	22.2	31.0	34.8	34.8	34.7	35.3	33.9	30.0	24.8	28.6	32.1	40.0		
130	35.8	29.1	18.7	10.8	17.1	23.7	31.6	36.9	37.3	37.6	37.3	36.5	33.1	27.9	32.3	36.2	44.1		
135	38.0	30.0	20.6	17.1	18.5	23.2	30.2	36.4	38.5	38.2	37.0	32.8	30.5	27.4	32.8	37.7	47.2		
140	37.9	29.6	21.3	17.6	16.5	18.4	24.6	29.6	32.8	32.6	31.0	24.3	25.2	25.2	30.8	37.5	46.7		
145	33.4	26.4	18.7	12.5	12.0	17.5	19.0	20.8	23.6	24.7	23.9	17.1	13.0	17.4	26.8	34.8	42.1		
150	24.3	17.9	8.02	5.93	8.14	12.9	14.8	15.3	16.1	16.9	16.0	11.1	8.44	7.44	14.6	25.3	31.5		
155	6.13	5.20	4.32	1.63	4.19	6.45	8.07	9.45	9.70	9.21	7.70	5.95	2.71	4.12	6.11	7.34	9.92		
160	1.99	1.39	0.66	0.68	0.69	0.93	2.92	4.19	4.36	3.98	1.86	0.62	0.86	0.80	1.29	2.68	3.13		
165	0.55	0.78	0.67	0.57	0.46	0.47	0.41	0.35	0.37	0.39	0.95	0.51	0.68	1.06	1.14	0.76	0.65		
170	1.61	1.19	0.93	0.93	0.94	0.58	0.28	0.36	0.35	0.35	0.66	1.36	1.58	1.75	2.13	2.73	3.22		
175	0.66	0.48	0.32	0.24	0.20	0.20	0.21	0.20	0.34	0.34	0.41	0.39	0.49	0.68	1.05	1.32	1.57		
180	0.24	0.22	0.23	0.22	0.22	0.22	0.16	0.16	0.16	0.16	0.19	0.19	0.20	0.20	0.21	0.20	0.22		

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:2024-01-09

γ Range: 0 - 180DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.464

Humidity:65.0%

Test Distance:9.780m [K=1.0000]

Remarks: