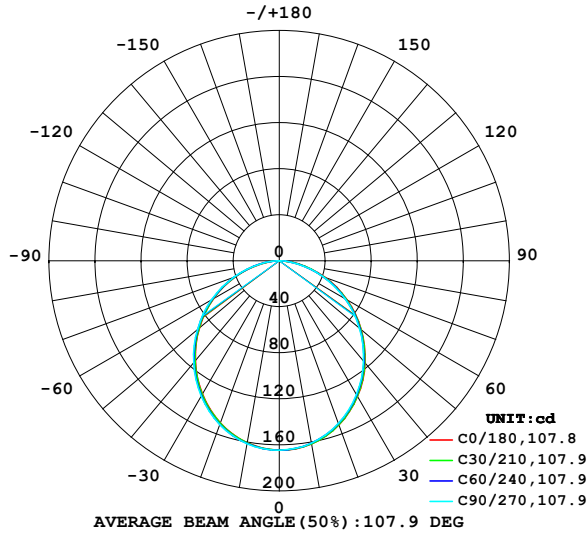


## LUMINAIRE PHOTOMETRIC TEST REPORT

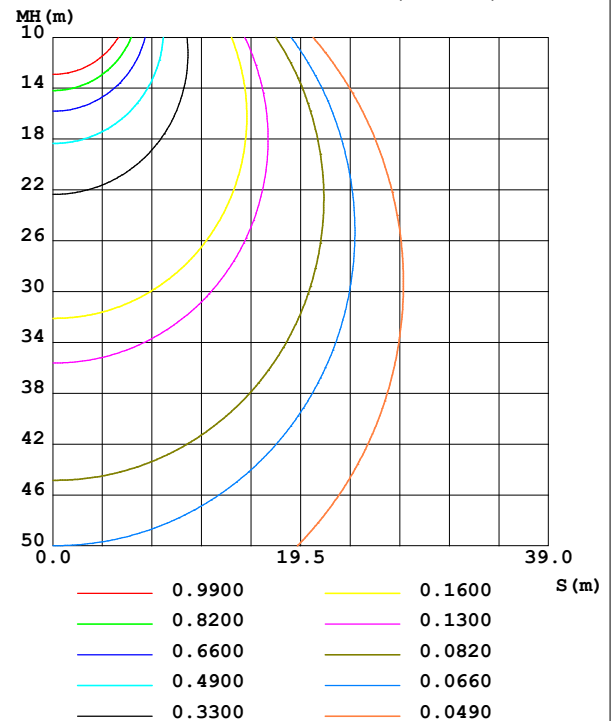
NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99LED960	Imax(cd)	164.6	S/MH(C0/180)	1.22
NOMINAL POWER(W)	6	LOR(%)	87.7	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	447.52	$\eta$ UP,DN(C0-180)	0.0,43.5
NOMINAL FLUX(lm)	510	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,44.2
LAMPS INSIDE	1	$\eta$ up (%)	0.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	$\eta$ down (%)	87.7	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	161.6	161.3	161.0	160.5	160.7	161.0	161.4	161.8	0- 10	15.54	15.54	3.47,3.05
20	151.8	151.2	150.5	149.7	150.0	150.7	151.5	152.1	10- 20	44.22	59.77	13.4,11.7
30	136.1	135.3	134.3	133.4	133.7	134.6	135.8	136.6	20- 30	66.13	125.9	28.1,24.7
40	116.1	115.1	114.0	113.1	113.5	114.5	115.7	116.7	30- 40	78.39	204.3	45.7,40.1
50	92.99	92.05	91.00	90.19	90.56	91.58	92.77	93.66	40- 50	79.93	284.2	63.5,55.7
60	68.15	67.16	66.13	65.56	65.90	66.96	68.09	68.77	50- 60	71.22	355.4	79.4,69.7
70	42.07	41.20	40.38	39.96	40.36	41.28	42.21	42.69	60- 70	53.64	409.1	91.4,80.2
80	17.43	16.79	16.19	15.88	16.27	17.02	17.66	17.88	70- 80	30.36	439.4	98.2,86.2
90	0.2350	0.2328	0.2344	0.2352	0.2094	0.2077	0.2087	0.2027	80- 90	7.747	447.2	99.9,87.7
100	0.3233	0.3291	0.3406	0.3365	0.3070	0.3033	0.2942	0.2902	90-100	0.2823	447.5	100,87.7
110	0	0	0	0	0	0	0	0	100-110	0.0424	447.5	100,87.7
120	0	0	0	0	0	0	0	0	110-120	0	447.5	100,87.7
130	0	0	0	0	0	0	0	0	120-130	0	447.5	100,87.7
140	0	0	0	0	0	0	0	0	130-140	0	447.5	100,87.7
150	0	0	0	0	0	0	0	0	140-150	0	447.5	100,87.7
160	0	0	0	0	0	0	0	0	150-160	0	447.5	100,87.7
170	0	0	0	0	0	0	0	0	160-170	0	447.5	100,87.7
180	0	0	0	0	0	0	0	0	170-180	0	447.5	100,87.7
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 244.74 lm

%lum = 54.7%  
%lamp = 48.0%

Conical surface Flux(130deg): 384.92 lm

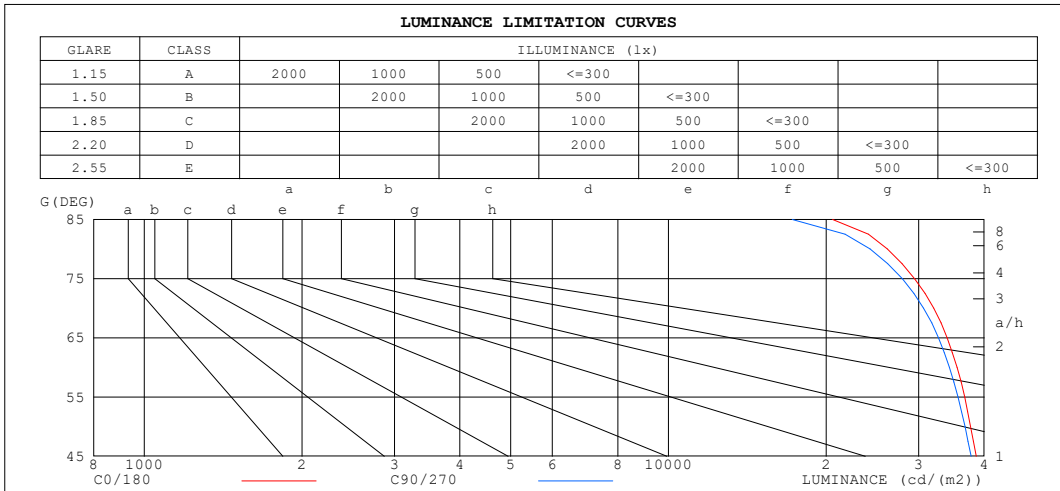
%lum = 86.0%  
%lamp = 75.5%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	20568	17230
80	26151	24217
75	29454	27915
70	32041	30665
65	34006	32744
60	35503	34351
55	36735	35663
50	37685	36771
45	38631	37761

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 10 August 2022

γ Range: 0 - 100DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 100DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

```

## WEC AND CCEC

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.268	.152	.048	.262	.149	.047	.250	.143	.046	.239	.138	.044	.230	.133	.043	
2.0	.253	.139	.043	.247	.136	.042	.237	.132	.041	.228	.128	.040	.219	.124	.039	
3.0	.234	.125	.037	.230	.123	.037	.220	.119	.036	.212	.116	.036	.204	.113	.035	
4.0	.217	.113	.033	.212	.111	.033	.204	.108	.032	.197	.106	.032	.190	.103	.031	
5.0	.200	.102	.030	.197	.101	.029	.189	.099	.029	.183	.096	.029	.177	.094	.028	
6.0	.186	.093	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.165	.087	.026	
7.0	.173	.086	.024	.170	.085	.024	.165	.083	.024	.159	.082	.024	.154	.080	.024	
8.0	.162	.079	.022	.159	.078	.022	.154	.077	.022	.149	.076	.022	.145	.074	.022	
9.0	.152	.073	.020	.149	.073	.020	.145	.072	.020	.140	.070	.020	.136	.069	.020	
10.0	.143	.068	.019	.141	.068	.019	.136	.067	.019	.133	.066	.019	.129	.065	.019	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.168	.168	.168	.143	.143	.143	.098	.098	.098	.056	.056	.056	.018	.018	.018	
1.0	.158	.138	.119	.136	.118	.102	.093	.081	.071	.053	.047	.041	.017	.015	.013	
2.0	.151	.116	.087	.130	.100	.075	.089	.069	.052	.051	.040	.031	.016	.013	.010	
3.0	.144	.101	.066	.124	.087	.057	.085	.060	.040	.049	.035	.024	.016	.011	.008	
4.0	.138	.089	.052	.118	.077	.045	.081	.054	.032	.047	.031	.019	.015	.010	.006	
5.0	.131	.080	.042	.113	.069	.037	.078	.048	.026	.045	.028	.015	.014	.009	.005	
6.0	.125	.073	.035	.107	.063	.031	.074	.044	.022	.043	.026	.013	.014	.008	.004	
7.0	.119	.066	.030	.102	.058	.026	.071	.040	.018	.041	.024	.011	.013	.008	.004	
8.0	.113	.061	.026	.097	.053	.023	.067	.037	.016	.039	.022	.010	.013	.007	.003	
9.0	.108	.057	.023	.093	.050	.020	.064	.035	.014	.038	.021	.008	.012	.007	.003	
10.0	.103	.053	.020	.089	.046	.018	.062	.033	.013	.036	.019	.008	.012	.006	.002	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

γ Range: 0 - 100DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

NAME: 99LED960					TYPE: 99LED960L			WEIGHT: 1			
SPEC.:					DIM.: F100			SERIAL No.: 0			
MFR.: Elmark Industries JSC					SUR.: circular			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H	y = 2H	27.7	29.2	28.0	29.4	29.6	27.6	29.1	27.8	29.3	29.5
	3H	29.2	30.6	29.5	30.8	31.1	29.0	30.4	29.3	30.6	30.9
	4H	29.8	31.1	30.1	31.3	31.6	29.6	30.9	29.9	31.1	31.4
	6H	30.2	31.4	30.5	31.7	32.0	29.9	31.2	30.3	31.5	31.7
	8H	30.3	31.5	30.6	31.8	32.1	30.0	31.3	30.4	31.5	31.8
	12H	30.4	31.5	30.7	31.8	32.1	30.1	31.2	30.4	31.5	31.8
4H	2H	28.3	29.6	28.6	29.9	30.1	28.2	29.5	28.5	29.8	30.0
	3H	30.0	31.1	30.3	31.4	31.7	29.8	31.0	30.2	31.3	31.6
	4H	30.7	31.7	31.0	32.0	32.4	30.5	31.5	30.9	31.9	32.2
	6H	31.2	32.1	31.6	32.5	32.8	31.0	31.9	31.4	32.3	32.6
	8H	31.4	32.2	31.8	32.6	33.0	31.1	32.0	31.5	32.4	32.8
	12H	31.5	32.3	31.9	32.6	33.1	31.2	32.0	31.6	32.4	32.8
8H	4H	30.9	31.8	31.3	32.1	32.5	30.7	31.6	31.1	32.0	32.4
	6H	31.6	32.3	32.0	32.7	33.1	31.4	32.1	31.8	32.5	32.9
	8H	31.8	32.5	32.3	32.9	33.3	31.6	32.2	32.1	32.7	33.1
	12H	32.0	32.5	32.4	33.0	33.5	31.7	32.3	32.2	32.7	33.2
12H	4H	30.9	31.7	31.3	32.1	32.5	30.7	31.5	31.2	31.9	32.3
	6H	31.6	32.3	32.1	32.7	33.1	31.4	32.1	31.9	32.5	32.9
	8H	31.9	32.4	32.4	32.9	33.4	31.7	32.2	32.2	32.7	33.2
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.3				

CIE Pub.117, 510.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.3)  
Area: 0.0038465 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

γ Range: 0 - 100DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

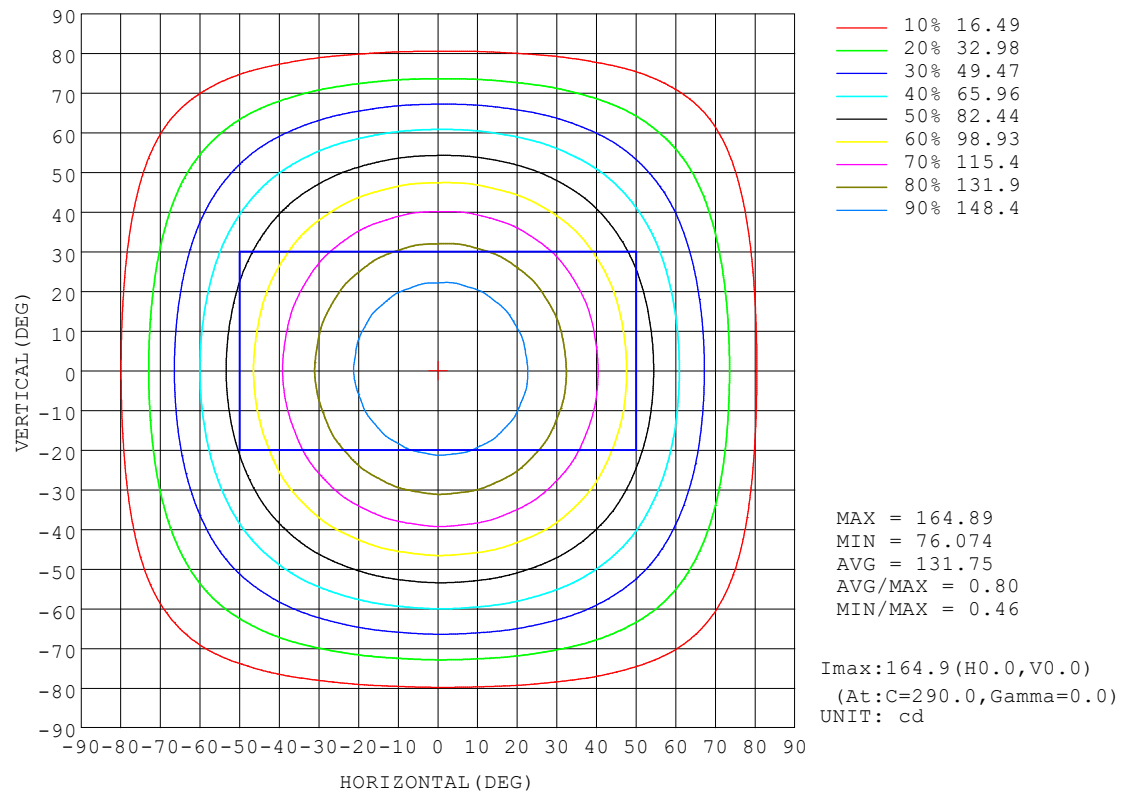
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	51	41	35	50	41	35	49	40	35	29
0.80	60	50	43	59	49	43	57	49	43	37
1.00	67	57	51	66	57	51	64	58	50	44
1.25	73	64	58	72	64	58	70	62	57	51
1.50	78	69	63	76	68	63	74	67	62	55
2.00	84	76	71	82	75	70	79	73	69	62
2.50	87	80	75	85	79	74	82	77	73	65
3.00	90	84	79	88	83	78	84	80	76	69
4.00	93	88	84	91	87	83	88	84	81	73
5.00	95	91	88	93	90	86	89	86	84	76
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 10 August 2022

γ Range: 0 - 100DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



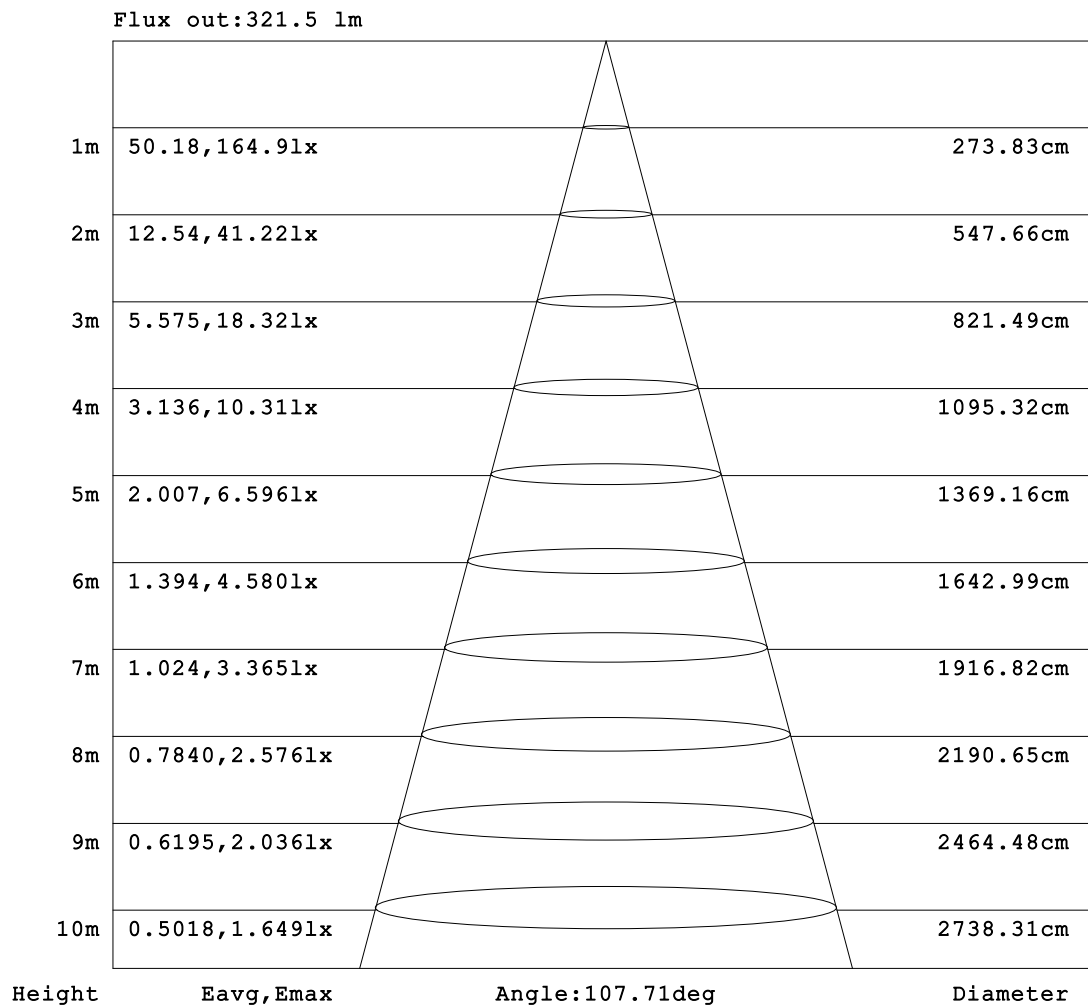
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

$\gamma$  Range: 0 - 100DEG  
 $\gamma$  Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:



**AAI Figure**

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



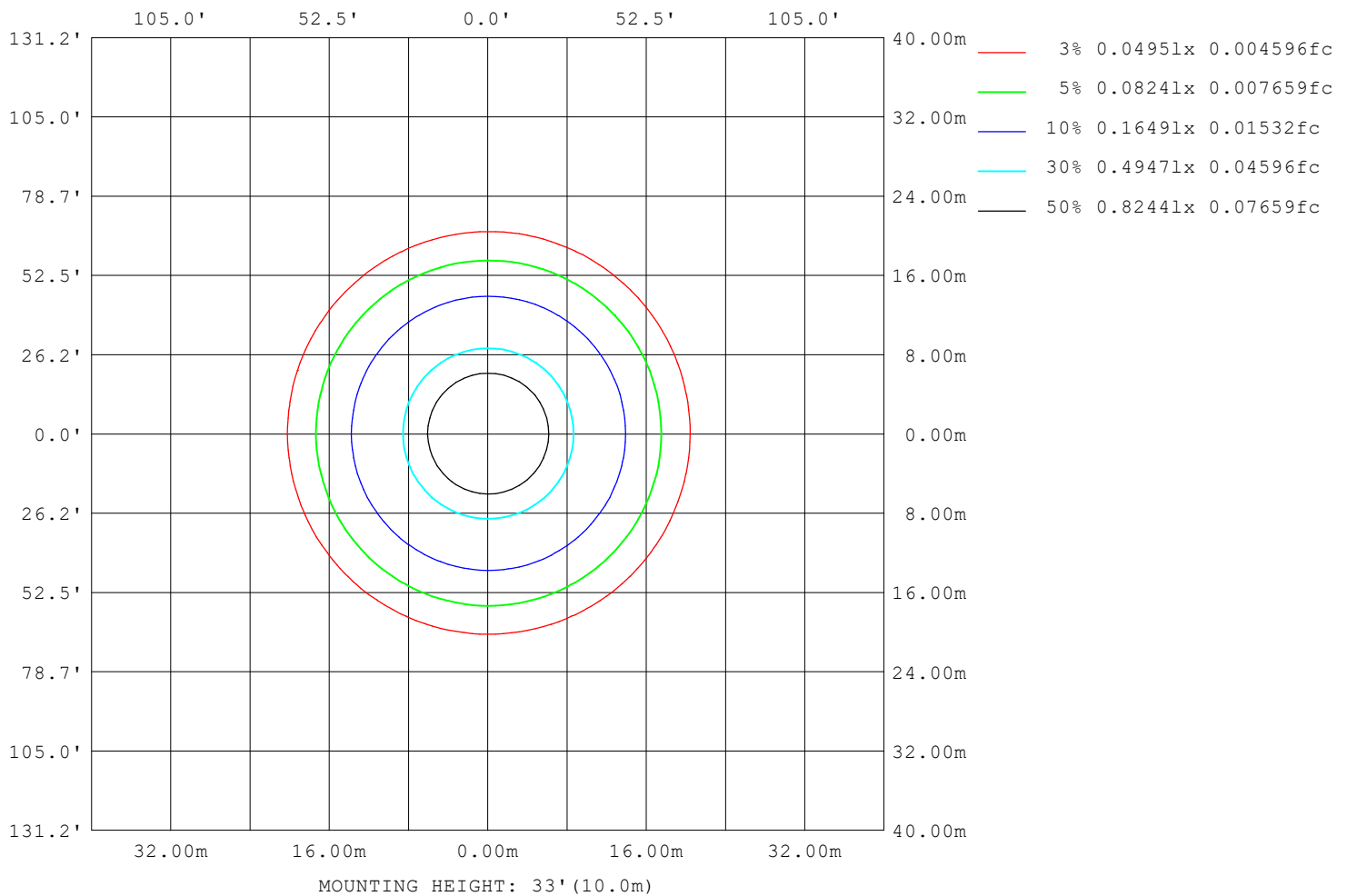
**Note:** The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 10 August 2022

γ Range: 0 - 100DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 10 August 2022

γ Range: 0 - 100DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

### LED Avg.L Report

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

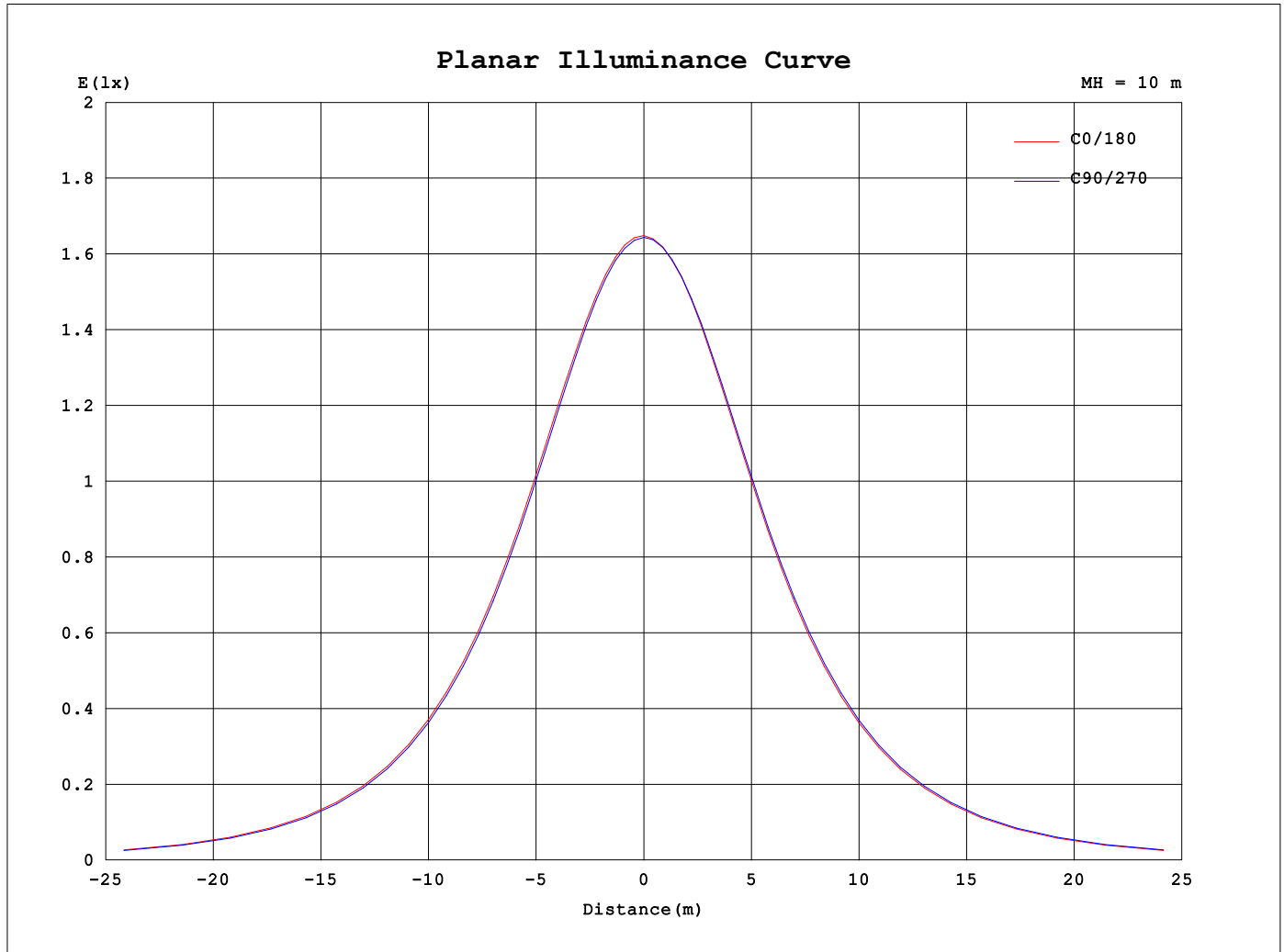
AvgL	cd/m2
L_0~180 (65) av	33316
L_0~180 (75) av	28694
L_0~180 (85) av	19228
L_90~270 (65) av	33365
L_90~270 (75) av	28773
L_90~270 (85) av	19211
L_45 (65) av	33367
L_45 (75) av	28755
L_45 (85) av	19211

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:10 August 2022

γ Range: 0 - 100DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

# Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 10 August 2022

γ Range: 0 - 100DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	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	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
5	164	164	164	164	164	164	164	164	164	164	163	164	163	164	163	163	163	163	163
10	162	162	161	162	161	161	161	161	161	161	161	161	160	161	160	161	160	161	161
15	157	158	157	157	157	157	157	157	156	157	156	156	156	156	156	156	156	156	156
20	152	152	151	152	151	151	151	151	150	150	150	150	150	150	150	150	149	150	150
25	145	145	144	144	144	144	143	143	143	143	142	143	142	142	142	142	142	142	142
30	136	136	136	136	135	135	135	135	134	134	134	134	133	134	133	134	133	134	134
35	127	127	126	126	126	126	125	125	124	125	124	124	124	124	123	124	123	124	124
40	116	116	116	116	115	115	115	115	114	114	113	114	113	113	113	113	113	113	113
45	105	105	104	104	104	104	103	103	103	103	102	102	102	102	102	102	102	102	102
50	93.0	93.1	92.5	92.6	92.0	92.1	91.4	91.5	90.9	91.0	90.4	90.6	90.1	90.4	90.0	90.3	90.0	90.4	90.6
55	80.9	80.8	80.4	80.3	79.9	79.8	79.4	79.2	78.8	78.8	78.4	78.4	78.1	78.2	78.0	78.1	78.0	78.3	78.4
60	68.1	68.1	67.7	67.6	67.2	67.1	66.7	66.6	66.2	66.1	65.8	65.8	65.6	65.7	65.5	65.6	65.5	65.8	65.9
65	55.2	55.1	54.7	54.6	54.3	54.2	53.8	53.7	53.3	53.3	53.0	53.0	52.8	52.9	52.7	52.8	52.8	53.0	53.1
70	42.1	42.0	41.7	41.6	41.2	41.2	40.8	40.7	40.4	40.4	40.1	40.1	39.9	40.0	39.9	40.0	40.0	40.2	40.4
75	29.3	29.2	28.9	28.9	28.5	28.5	28.1	28.1	27.8	27.8	27.5	27.6	27.4	27.5	27.4	27.6	27.5	27.7	27.9
80	17.4	17.4	17.1	17.1	16.8	16.8	16.5	16.5	16.2	16.2	16.0	16.0	15.8	15.9	15.8	16.0	15.9	16.2	16.3
85	6.88	6.88	6.59	6.58	6.30	6.28	6.01	6.00	5.77	5.78	5.59	5.65	5.49	5.61	5.51	5.68	5.65	5.88	6.01
90	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.24	0.24	0.23	0.23	0.23	0.23	0.24	0.23	0.23	0.23	0.23	0.21
95	0.25	0.27	0.25	0.28	0.26	0.28	0.26	0.28	0.26	0.28	0.26	0.29	0.26	0.29	0.26	0.29	0.26	0.29	0.26
100	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.33	0.34	0.31
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:10 August 2022

γ Range: 0 - 100DEG

γ Interval: 2.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 99LED960	TYPE: 99LED960L	WEIGHT: 1
SPEC.:	DIM.: F100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	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	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165		
5	163	164	163	164	164	164	164	164	164	164	164	164	164	164	164	164	164		
10	161	161	161	161	161	161	161	162	161	162	162	162	162	162	162	162	162		
15	156	156	156	157	157	157	157	157	157	158	157	158	158	158	158	158	158		
20	150	150	150	151	151	151	151	152	151	152	152	152	152	152	152	152	152		
25	142	143	143	143	143	144	144	144	144	145	145	145	145	145	145	145	145		
30	134	134	134	135	135	135	135	136	136	136	136	137	136	137	136	137	136		
35	124	124	124	125	125	126	126	126	126	127	127	127	127	127	127	127	127		
40	113	114	114	115	115	115	115	116	116	116	116	117	116	117	116	117	116		
45	102	103	103	103	103	104	104	105	105	105	105	106	105	106	105	105	105		
50	90.4	91.0	91.0	91.6	91.6	92.3	92.2	92.9	92.8	93.4	93.2	93.7	93.5	93.9	93.4	93.7	93.2		
55	78.5	78.8	79.0	79.4	79.6	80.0	80.2	80.6	80.7	81.1	81.1	81.5	81.4	81.5	81.3	81.4	81.1		
60	65.9	66.3	66.4	66.9	67.0	67.5	67.6	68.0	68.1	68.5	68.5	68.8	68.7	68.8	68.6	68.7	68.4		
65	53.2	53.6	53.7	54.1	54.2	54.6	54.7	55.1	55.2	55.5	55.5	55.8	55.7	55.9	55.6	55.7	55.4		
70	40.4	40.8	40.9	41.2	41.3	41.7	41.8	42.1	42.2	42.5	42.5	42.7	42.6	42.8	42.5	42.6	42.3		
75	27.9	28.3	28.3	28.7	28.7	29.1	29.1	29.5	29.5	29.7	29.7	29.9	29.8	29.9	29.7	29.7	29.4		
80	16.3	16.6	16.7	17.0	17.1	17.3	17.4	17.6	17.7	17.9	17.8	18.0	17.8	17.9	17.7	17.8	17.5		
85	6.02	6.31	6.33	6.61	6.62	6.88	6.88	7.13	7.10	7.32	7.22	7.39	7.25	7.36	7.16	7.22	6.99		
90	0.20	0.20	0.21	0.20	0.21	0.20	0.21	0.20	0.21	0.20	0.20	0.20	0.21	0.20	0.20	0.20	0.21		
95	0.23	0.26	0.23	0.25	0.23	0.25	0.22	0.25	0.22	0.25	0.22	0.24	0.22	0.25	0.22	0.25	0.22		
100	0.31	0.32	0.30	0.31	0.30	0.30	0.30	0.30	0.29	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:10 August 2022

γ Range: 0 - 100DEG

γ Interval: 2.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks: