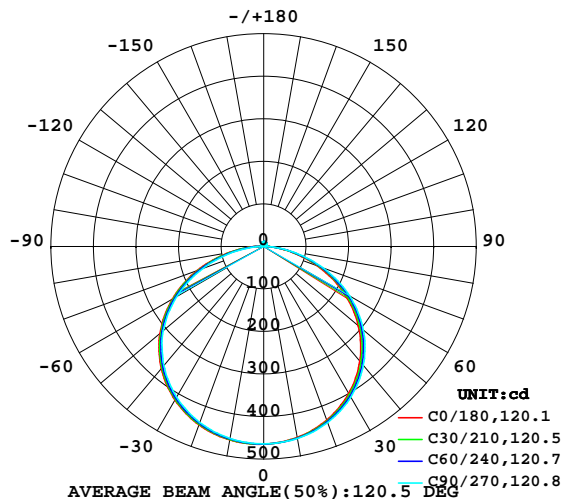


## LUMINAIRE PHOTOMETRIC TEST REPORT

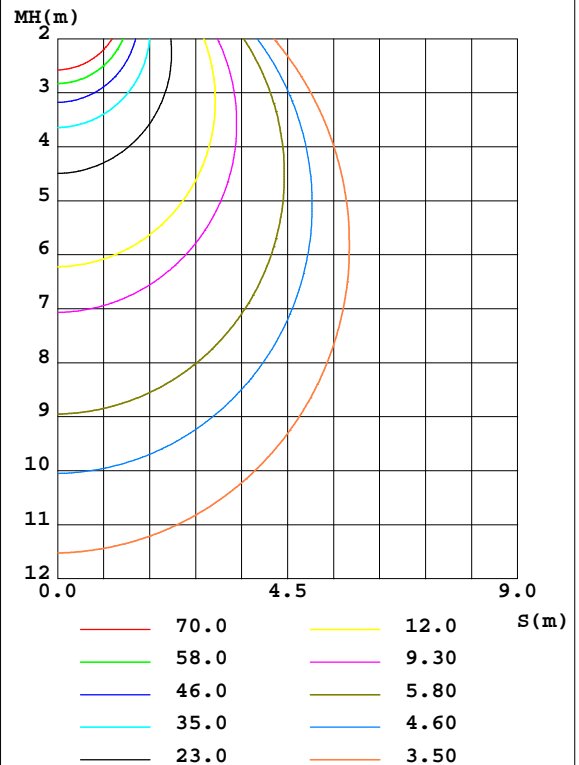
Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 98.08 lm/W
MODEL		I <sub>max</sub> (cd)	465.1	S/MH(C0/180)	1.33	
NOMINAL POWER(W)	15.3	LOR(%)	100.0	S/MH(C90/270)	1.31	
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	1500.7	η UP,DN(C0-180)	1.4,48.0	
NOMINAL FLUX(lm)	1500.68	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.5,49.0	
LAMPS INSIDE	1	η up(%)	3.0	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	12	η down(%)	97.0	CIBSE SHR MAX	1.50	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2023-10-11

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity:65.0%  
Test Distance:8.000m [K=0.7063]  
Remarks:

**ZONAL FLUX DIAGRAM**
**ZONAL FLUX DIAGRAM:**

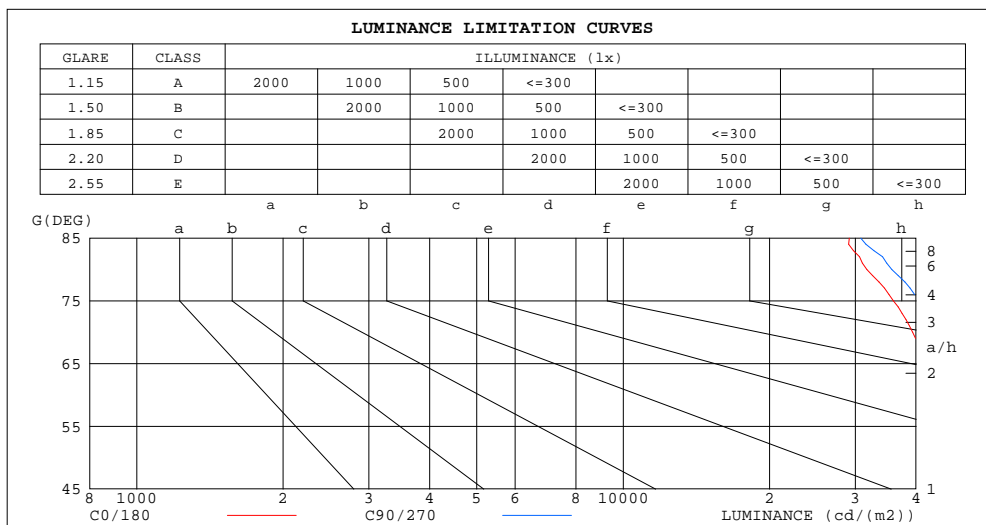
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	455.8	457.0	458.3	460.0	461.8	460.1	458.2	456.0	0- 10	44.04	44.04	2.93,2.93
20	434.3	437.2	440.3	443.4	446.1	443.6	440.1	436.2	10- 20	127.4	171.4	11.4,11.4
30	399.5	404.4	409.3	413.7	417.0	414.0	409.4	403.3	20- 30	196.5	367.9	24.5,24.5
40	351.7	358.3	364.7	370.4	374.7	370.8	365.4	357.3	30- 40	242.9	610.8	40.7,40.7
50	290.5	298.4	305.8	312.9	318.9	314.1	308.4	298.1	40- 50	259.6	870.5	58,58
60	217.3	225.4	233.8	241.5	248.1	243.3	236.2	225.8	50- 60	242.4	1113	74.2,74.2
70	134.6	142.2	149.3	158.8	166.4	161.3	152.7	143.3	60- 70	191.3	1304	86.9,86.9
80	55.02	59.02	61.99	72.55	81.68	75.15	66.46	60.55	70- 80	114.1	1418	94.5,94.5
90	8.507	7.448	4.933	12.99	19.91	15.09	6.817	8.840	80- 90	37.59	1456	97,97
100	4.306	4.105	3.965	4.383	5.848	5.075	4.476	4.559	90-100	6.584	1462	97.5,97.5
110	5.330	5.237	5.145	5.066	5.289	5.468	5.539	5.590	100-110	5.129	1468	97.8,97.8
120	6.540	6.396	6.301	6.278	6.400	6.604	6.618	6.688	110-120	5.855	1473	98.2,98.2
130	7.725	7.533	7.460	7.469	7.523	7.755	7.718	7.782	120-130	6.320	1480	98.6,98.6
140	8.749	8.604	8.546	8.622	8.547	8.815	8.772	8.808	130-140	6.313	1486	99,99
150	9.684	9.593	9.598	9.656	9.449	9.755	9.750	9.731	140-150	5.756	1492	99.4,99.4
160	10.59	10.54	10.57	10.58	10.29	10.56	10.60	10.58	150-160	4.667	1496	99.7,99.7
170	11.27	11.31	11.33	11.35	11.08	11.26	11.31	11.34	160-170	3.089	1500	99.9,99.9
180	11.56	11.68	11.69	11.74	11.57	11.67	11.69	11.76	170-180	1.094	1501	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

## LUMINANCE LIMITATION CURVES

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	29151	30821
80	31687	35701
75	35958	40490
70	39341	43654
65	41822	45634
60	43457	46766
55	44550	47354
50	45196	47580
45	45569	47604

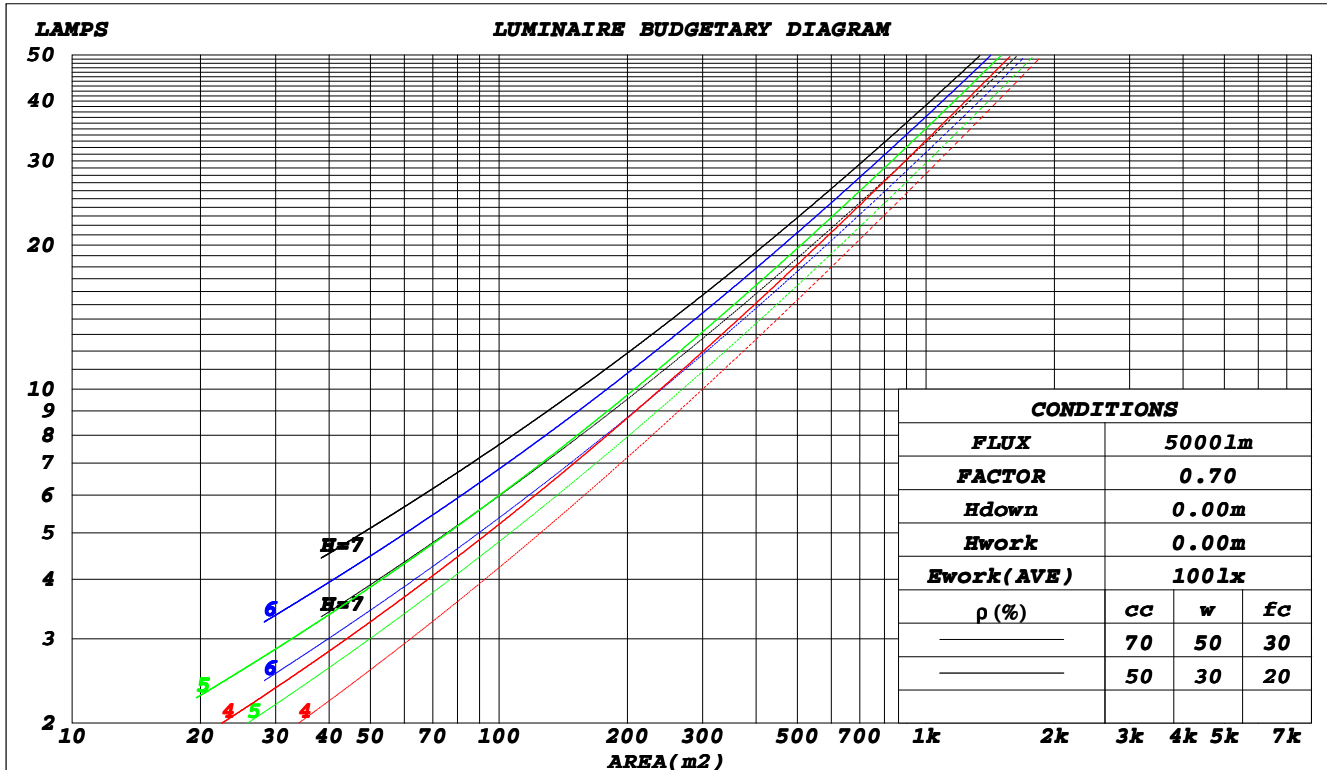
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2023-10-11

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity: 65.0%  
Test Distance: 8.000m [K=0.7063]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.89	.91	.88	.85	.87	.84	.82	.80
2.0	.89	.82	.76	.87	.80	.75	.83	.77	.72	.79	.74	.70	.75	.72	.68	.66
3.0	.78	.69	.62	.76	.68	.62	.72	.66	.60	.69	.64	.59	.66	.61	.57	.55
4.0	.68	.59	.53	.67	.59	.52	.64	.57	.51	.61	.55	.50	.59	.53	.49	.47
5.0	.61	.52	.45	.60	.51	.45	.57	.50	.44	.55	.48	.43	.53	.47	.42	.40
6.0	.55	.46	.39	.54	.45	.39	.51	.44	.38	.49	.43	.38	.48	.42	.37	.35
7.0	.49	.41	.34	.49	.40	.34	.47	.39	.34	.45	.38	.33	.43	.37	.33	.31
8.0	.45	.36	.30	.44	.36	.30	.43	.35	.30	.41	.34	.30	.40	.34	.29	.27
9.0	.41	.33	.27	.41	.33	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.24
10.0	.38	.30	.25	.37	.30	.25	.36	.29	.24	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2023-10-11

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
Humidity: 65.0%  
Test Distance: 8.000m [K=0.7063]  
Remarks:

**WEC AND CCEC**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

$\rho_{cc}$	80%			70%			50%			30%			10%			0	
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
$\rho_{fc}$	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.323	.184	.058	.315	.180	.057	.300	.172	.055	.286	.165	.053	.273	.158	.051		
2.0	.301	.165	.051	.294	.162	.050	.280	.156	.048	.268	.150	.047	.256	.145	.046		
3.0	.277	.147	.044	.270	.145	.044	.258	.140	.043	.247	.136	.042	.237	.131	.041		
4.0	.254	.132	.039	.249	.130	.038	.238	.126	.038	.228	.123	.037	.219	.119	.036		
5.0	.234	.119	.035	.229	.118	.034	.220	.114	.034	.211	.111	.033	.203	.108	.033		
6.0	.217	.109	.031	.212	.107	.031	.204	.104	.030	.196	.102	.030	.188	.099	.029		
7.0	.201	.100	.028	.197	.098	.028	.190	.096	.028	.183	.094	.027	.176	.091	.027		
8.0	.188	.092	.026	.184	.091	.026	.177	.089	.025	.171	.087	.025	.165	.085	.025		
9.0	.176	.085	.024	.173	.084	.024	.166	.082	.023	.160	.080	.023	.155	.079	.023		
10.0	.165	.079	.022	.162	.078	.022	.156	.077	.022	.151	.075	.021	.146	.073	.021		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.213	.213	.213	.182	.182	.182	.124	.124	.124	.071	.071	.071	.023	.023	.023	
1.0	.204	.179	.156	.175	.154	.134	.119	.106	.093	.069	.061	.054	.022	.020	.017	
2.0	.197	.155	.120	.168	.133	.104	.115	.092	.072	.067	.054	.042	.021	.017	.014	
3.0	.189	.138	.097	.162	.119	.084	.111	.082	.059	.064	.048	.035	.021	.016	.011	
4.0	.181	.124	.081	.156	.108	.070	.107	.075	.049	.062	.044	.029	.020	.014	.010	
5.0	.174	.114	.070	.149	.099	.061	.103	.069	.043	.060	.041	.025	.019	.013	.008	
6.0	.167	.106	.062	.143	.092	.054	.099	.064	.038	.057	.038	.023	.019	.012	.008	
7.0	.160	.099	.056	.138	.086	.049	.095	.060	.035	.055	.035	.021	.018	.012	.007	
8.0	.153	.093	.052	.132	.081	.045	.091	.057	.032	.053	.034	.019	.017	.011	.006	
9.0	.147	.088	.049	.127	.077	.042	.088	.054	.030	.051	.032	.018	.017	.010	.006	
10.0	.142	.084	.046	.122	.073	.040	.085	.051	.028	.049	.030	.017	.016	.010	.006	

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**UGR(Unified Glare Rating) Table**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

<b>ceiling/cavity</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>
<b>walls</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>
<b>working plane</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
<b>Room dimensions</b>	<b>Viewed crosswise</b>					<b>Viewed endwise</b>				
<b>x = 2H y = 2H</b>	<b>25.9</b>	<b>27.4</b>	<b>26.2</b>	<b>27.6</b>	<b>27.9</b>	<b>26.1</b>	<b>27.6</b>	<b>26.4</b>	<b>27.9</b>	<b>28.2</b>
<b>3H</b>	<b>27.4</b>	<b>28.8</b>	<b>27.7</b>	<b>29.1</b>	<b>29.4</b>	<b>27.7</b>	<b>29.1</b>	<b>28.1</b>	<b>29.4</b>	<b>29.7</b>
<b>4H</b>	<b>28.0</b>	<b>29.3</b>	<b>28.3</b>	<b>29.6</b>	<b>29.9</b>	<b>28.4</b>	<b>29.7</b>	<b>28.7</b>	<b>30.0</b>	<b>30.3</b>
<b>6H</b>	<b>28.4</b>	<b>29.6</b>	<b>28.7</b>	<b>29.9</b>	<b>30.3</b>	<b>28.8</b>	<b>30.1</b>	<b>29.2</b>	<b>30.4</b>	<b>30.7</b>
<b>8H</b>	<b>28.5</b>	<b>29.7</b>	<b>28.9</b>	<b>30.0</b>	<b>30.4</b>	<b>29.0</b>	<b>30.2</b>	<b>29.3</b>	<b>30.5</b>	<b>30.9</b>
<b>12H</b>	<b>28.6</b>	<b>29.7</b>	<b>28.9</b>	<b>30.1</b>	<b>30.4</b>	<b>29.0</b>	<b>30.2</b>	<b>29.4</b>	<b>30.5</b>	<b>30.9</b>
<b>4H 2H</b>	<b>26.5</b>	<b>27.8</b>	<b>26.9</b>	<b>28.1</b>	<b>28.5</b>	<b>26.7</b>	<b>28.0</b>	<b>27.1</b>	<b>28.3</b>	<b>28.7</b>
<b>3H</b>	<b>28.2</b>	<b>29.4</b>	<b>28.6</b>	<b>29.7</b>	<b>30.1</b>	<b>28.5</b>	<b>29.7</b>	<b>28.9</b>	<b>30.0</b>	<b>30.4</b>
<b>4H</b>	<b>28.9</b>	<b>30.0</b>	<b>29.3</b>	<b>30.3</b>	<b>30.7</b>	<b>29.3</b>	<b>30.3</b>	<b>29.7</b>	<b>30.7</b>	<b>31.1</b>
<b>6H</b>	<b>29.4</b>	<b>30.4</b>	<b>29.9</b>	<b>30.8</b>	<b>31.2</b>	<b>29.8</b>	<b>30.8</b>	<b>30.3</b>	<b>31.2</b>	<b>31.6</b>
<b>8H</b>	<b>29.6</b>	<b>30.5</b>	<b>30.1</b>	<b>30.9</b>	<b>31.3</b>	<b>30.0</b>	<b>30.9</b>	<b>30.5</b>	<b>31.3</b>	<b>31.8</b>
<b>12H</b>	<b>29.7</b>	<b>30.5</b>	<b>30.2</b>	<b>31.0</b>	<b>31.4</b>	<b>30.1</b>	<b>30.9</b>	<b>30.6</b>	<b>31.4</b>	<b>31.9</b>
<b>8H 4H</b>	<b>29.2</b>	<b>30.1</b>	<b>29.6</b>	<b>30.5</b>	<b>30.9</b>	<b>29.5</b>	<b>30.4</b>	<b>30.0</b>	<b>30.8</b>	<b>31.2</b>
<b>6H</b>	<b>29.8</b>	<b>30.6</b>	<b>30.3</b>	<b>31.0</b>	<b>31.5</b>	<b>30.2</b>	<b>30.9</b>	<b>30.7</b>	<b>31.4</b>	<b>31.9</b>
<b>8H</b>	<b>30.1</b>	<b>30.8</b>	<b>30.6</b>	<b>31.2</b>	<b>31.7</b>	<b>30.5</b>	<b>31.1</b>	<b>31.0</b>	<b>31.6</b>	<b>32.1</b>
<b>12H</b>	<b>30.3</b>	<b>30.9</b>	<b>30.8</b>	<b>31.4</b>	<b>31.9</b>	<b>30.7</b>	<b>31.2</b>	<b>31.2</b>	<b>31.7</b>	<b>32.3</b>
<b>12H 4H</b>	<b>29.2</b>	<b>30.0</b>	<b>29.7</b>	<b>30.4</b>	<b>30.9</b>	<b>29.5</b>	<b>30.3</b>	<b>30.0</b>	<b>30.7</b>	<b>31.2</b>
<b>6H</b>	<b>29.9</b>	<b>30.6</b>	<b>30.4</b>	<b>31.0</b>	<b>31.5</b>	<b>30.2</b>	<b>30.9</b>	<b>30.8</b>	<b>31.4</b>	<b>31.9</b>
<b>8H</b>	<b>30.2</b>	<b>30.8</b>	<b>30.7</b>	<b>31.3</b>	<b>31.8</b>	<b>30.6</b>	<b>31.1</b>	<b>31.1</b>	<b>31.6</b>	<b>32.2</b>
<b>Variations with the observer position at spacings(CIE Pub.117):</b>										
<b>S = 1.0H</b>	<b>+ 0.1 / - 0.2</b>					<b>+ 0.1 / - 0.2</b>				
<b>1.5H</b>	<b>+ 0.2 / - 0.3</b>					<b>+ 0.2 / - 0.3</b>				
<b>2.0H</b>	<b>+ 0.2 / - 0.4</b>					<b>+ 0.1 / - 0.3</b>				

CIE Pub.117, 1501 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 1.4$ )  
Area: 0.01 m2

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**UTILIZATION FACTORS TABLE**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

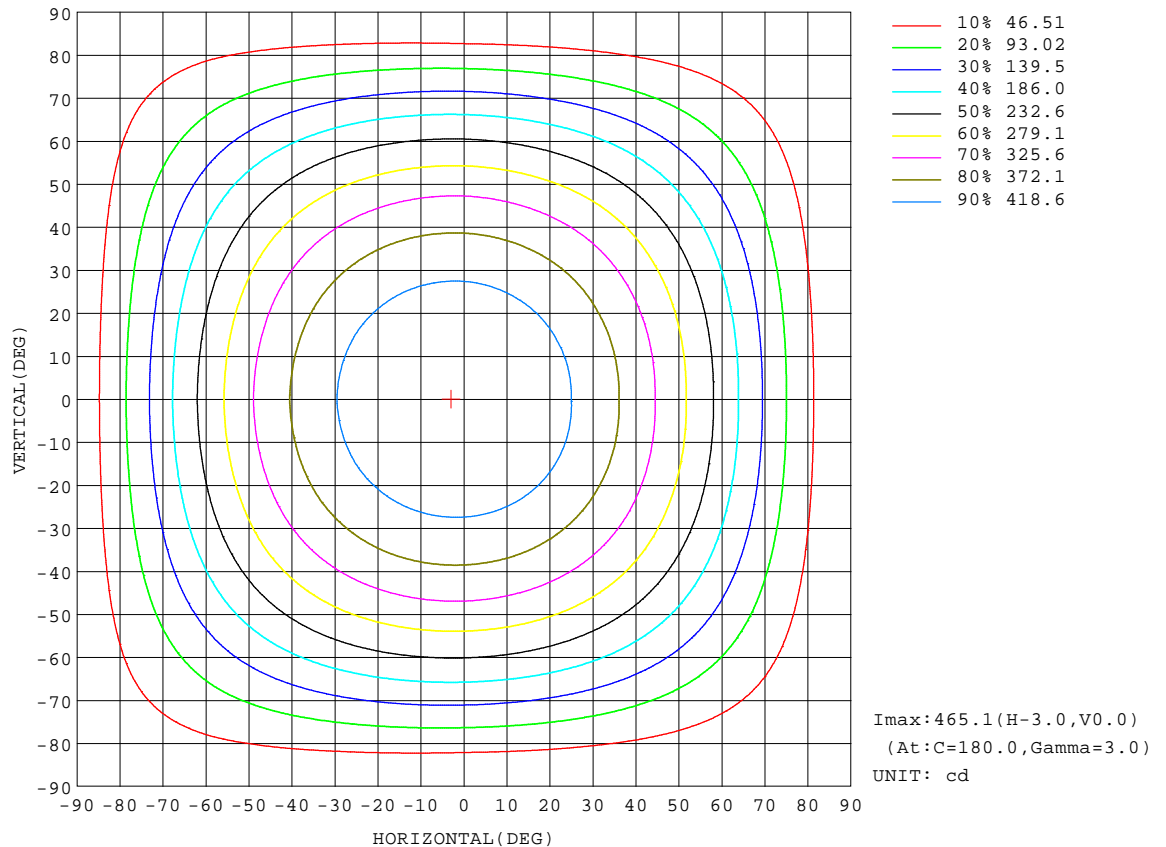
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	43	36	54	43	36	53	42	36	29
0.80	65	53	46	64	53	45	62	52	45	38
1.00	74	62	55	72	61	54	70	63	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	76	68	84	74	68	81	72	66	58
2.00	93	84	77	91	83	76	87	80	74	66
2.50	97	89	82	95	87	81	90	84	79	70
3.00	100	93	87	98	91	86	94	88	84	74
4.00	105	99	94	102	97	92	97	93	89	79
5.00	107	102	98	104	100	96	99	96	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**ISOCANDELA DIAGRAM**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz		
Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		



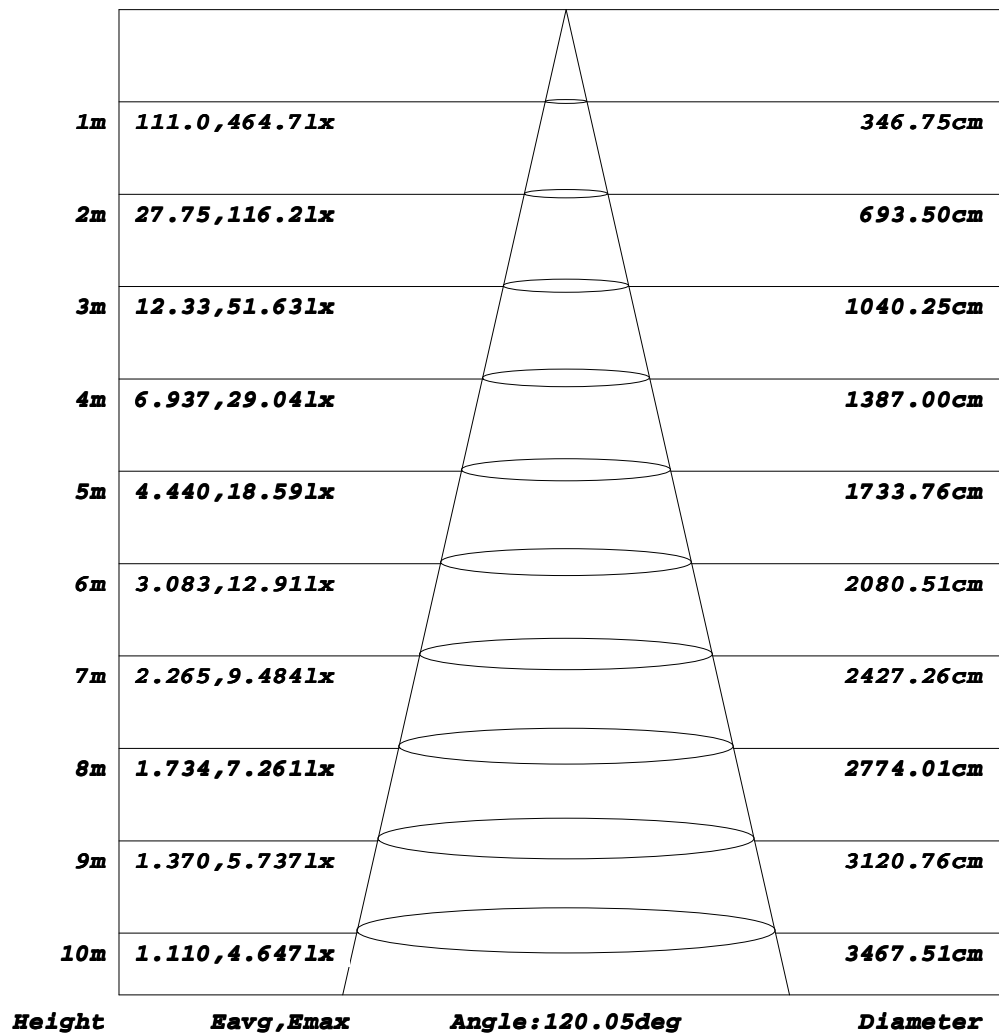
**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**



**AAI Figure**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		

**Flux out:1135 lm**


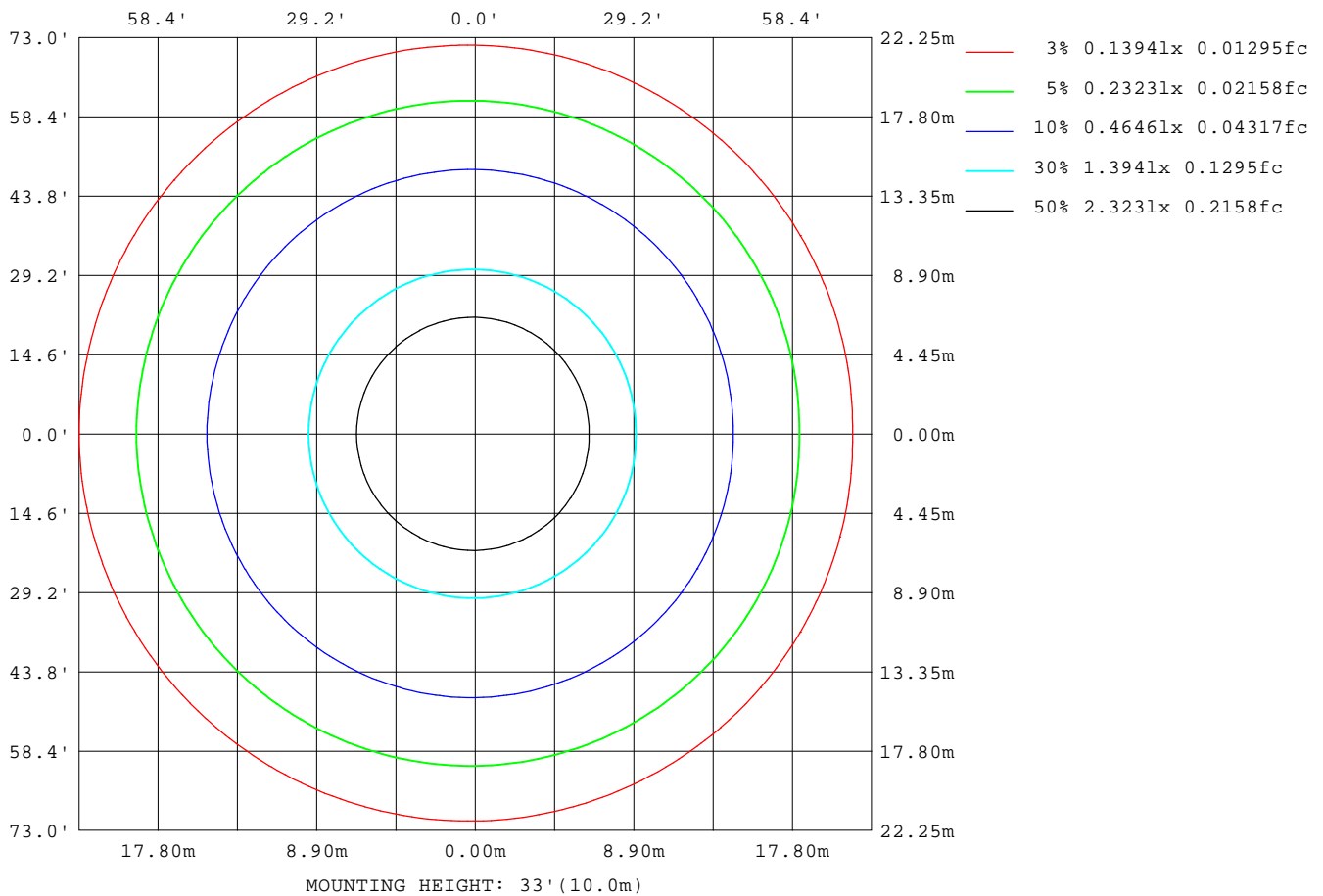
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**ISOLUX DIAGRAM**

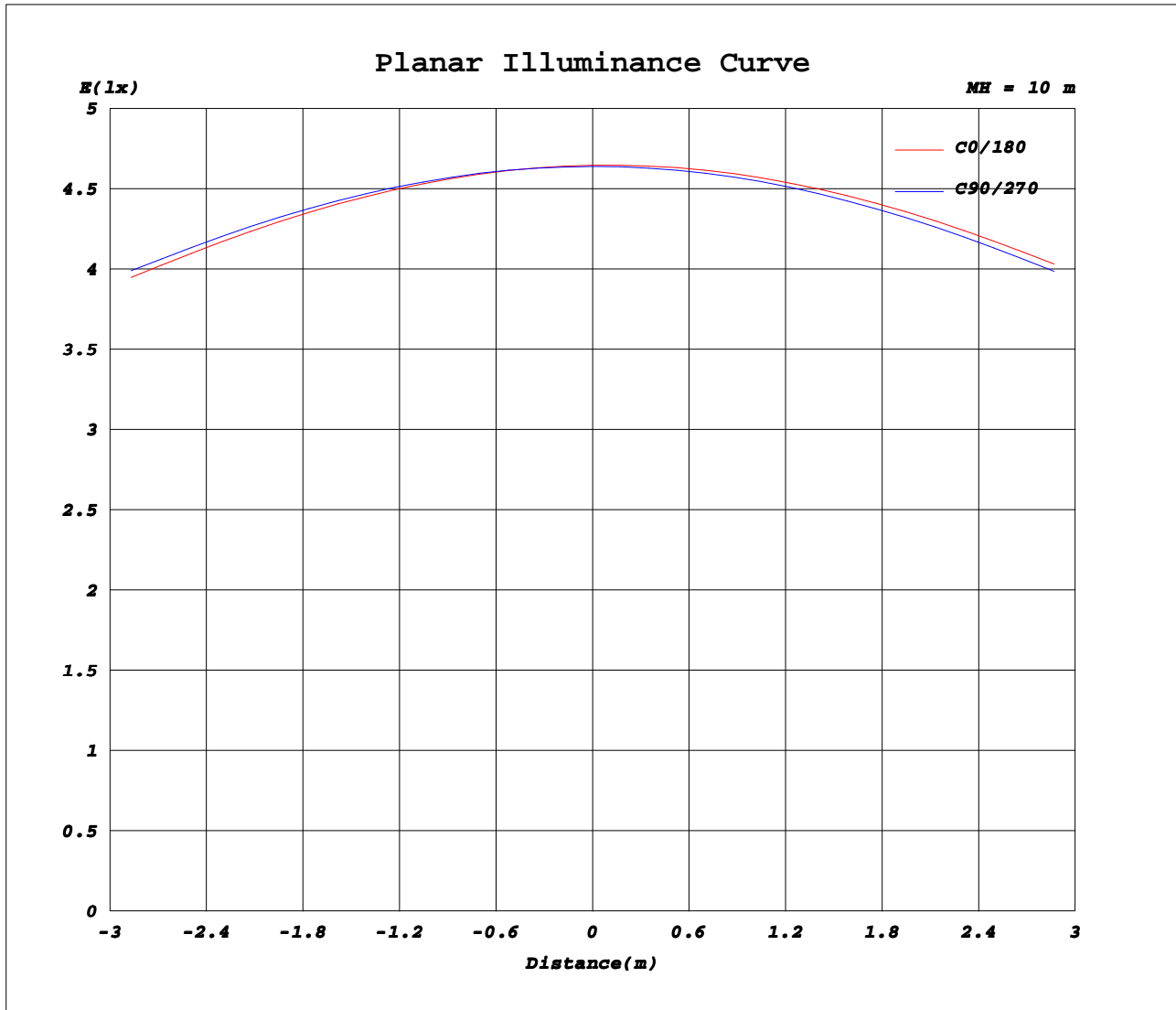
Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz Lamp Flux:1500.68x1 lm		
Name: 12V-400LM-80CRI-4000K	Type: LED	
MFR.:		



**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**Planar Illuminance Curve**



**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:12.000V I:1.2720A P:15.300W PF:1.0000 Freq:0Hz																	
Lamp Flux:1500.68x1 lm																	
Name: 12V-400LM-80CRI-4000K									Type: LED								
MFR.:																	

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	465	465	464	464	464	464	465	465	464	464	464	464						
5	462	462	462	463	463	464	465	464	463	463	462	461						
10	456	457	457	458	459	461	462	461	459	458	456	456						
15	447	448	449	451	452	454	456	454	453	451	449	447						
20	434	436	438	440	442	444	446	445	442	440	437	435						
25	419	421	424	427	429	431	433	432	429	426	423	420						
30	399	403	406	409	412	415	417	415	413	409	405	402						
35	377	381	385	389	392	396	398	396	393	389	384	380						
40	352	356	361	365	369	372	375	372	369	365	360	355						
45	322	328	332	337	341	345	348	346	342	338	332	326						
50	291	296	301	306	310	315	319	316	312	308	301	295						
55	256	261	266	272	276	281	285	282	278	274	267	260						
60	217	223	228	234	239	244	248	246	241	236	229	222						
65	177	182	187	193	198	204	209	206	201	196	189	182						
70	135	140	145	149	156	162	166	164	159	153	146	140						
75	93.1	97.2	101	105	111	118	124	120	115	109	103	97.9						
80	55.0	58.1	59.9	62.0	68.7	76.4	81.7	78.1	72.2	66.5	62.4	58.7						
85	25.4	26.5	26.4	26.9	32.8	40.1	45.1	42.0	35.8	30.0	28.9	27.8						
90	8.51	8.38	6.52	4.93	9.94	16.0	19.9	17.8	12.4	6.82	8.19	9.49						
95	4.55	4.15	3.61	3.41	5.02	7.58	9.67	8.20	5.85	4.01	4.00	4.33						
100	4.31	4.17	4.04	3.96	4.00	4.77	5.85	5.38	4.77	4.48	4.56	4.56						
105	4.75	4.67	4.61	4.56	4.44	4.61	4.98	4.98	4.96	5.01	5.07	5.01						
110	5.33	5.27	5.21	5.15	5.04	5.09	5.29	5.43	5.51	5.54	5.62	5.56						
115	5.93	5.85	5.78	5.72	5.65	5.68	5.83	5.99	6.07	6.07	6.15	6.12						
120	6.54	6.44	6.36	6.30	6.26	6.29	6.40	6.57	6.64	6.62	6.69	6.68						
125	7.13	7.01	6.92	6.87	6.87	6.90	6.97	7.15	7.22	7.17	7.24	7.25						
130	7.73	7.58	7.49	7.46	7.46	7.48	7.52	7.72	7.79	7.72	7.77	7.79						
135	8.25	8.12	8.04	8.01	8.07	8.07	8.05	8.26	8.33	8.25	8.30	8.32						
140	8.75	8.64	8.57	8.55	8.63	8.62	8.55	8.77	8.86	8.77	8.80	8.81						
145	9.23	9.13	9.08	9.07	9.16	9.12	9.01	9.25	9.35	9.26	9.27	9.27						
150	9.68	9.61	9.58	9.60	9.69	9.62	9.45	9.69	9.82	9.75	9.74	9.72						
155	10.1	10.1	10.1	10.1	10.2	10.1	9.86	10.1	10.2	10.2	10.2	10.2						
160	10.6	10.5	10.5	10.6	10.6	10.5	10.3	10.5	10.6	10.6	10.6	10.6						
165	11.0	11.0	11.0	11.0	11.1	10.9	10.7	10.9	11.0	11.0	11.0	11.0						
170	11.3	11.3	11.3	11.3	11.4	11.3	11.1	11.2	11.3	11.3	11.3	11.3						
175	11.5	11.6	11.6	11.6	11.7	11.6	11.4	11.5	11.5	11.5	11.6	11.6						
180	11.6	11.7	11.7	11.7	11.8	11.7	11.6	11.6	11.7	11.7	11.8	11.7						

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2023-10-11**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**