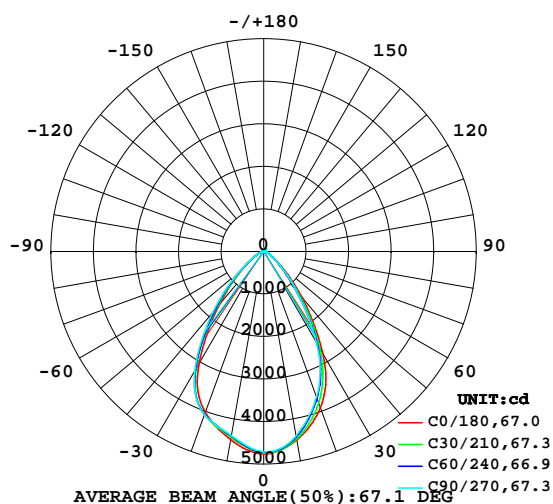


## LUMINAIRE PHOTOMETRIC TEST REPORT

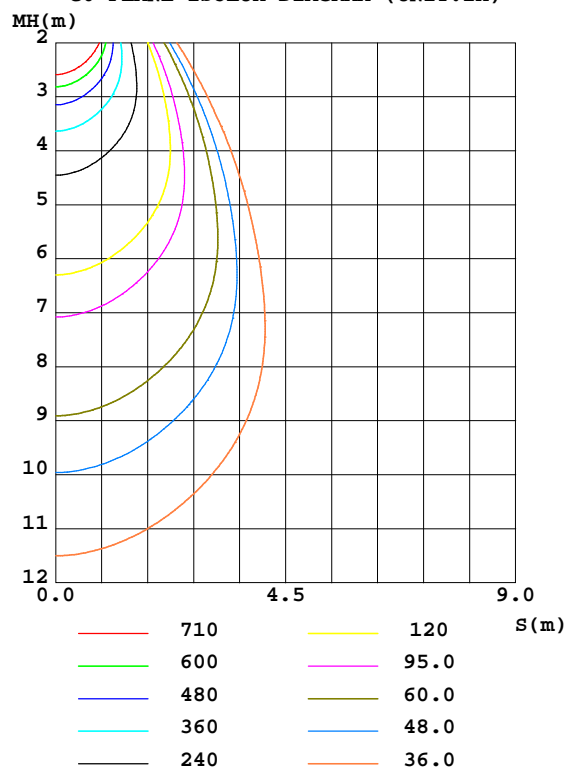
Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.74 lm/W			
MODEL		Imax(cd)	4761	S/MH(C0/180)	0.97
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	0.93
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	6073.4	$\eta$ UP,DN(C0-180)	1.6,44.4
NOMINAL FLUX(lm)	6073.37	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	1.6,52.4
LAMPS INSIDE	1	$\eta$ up(%)	3.3	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220	$\eta$ down(%)	96.7	CIBSE SHR MAX	1.00

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:2018-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
 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	4499	4451	4401	4405	4493	4425	4400	4439	0- 10	436.0	436.0	7.18,7.18
20	3907	3729	3632	3759	4024	4077	4083	4068	10- 20	1179	1615	26.6,26.6
30	2786	2586	2494	2730	3049	3198	3244	3117	20- 30	1593	3208	52.8,52.8
40	1385	1190	1174	1293	1604	1743	1867	1603	30- 40	1343	4551	74.9,74.9
50	530.7	457.9	451.4	492.5	663.8	739.7	770.6	653.1	40- 50	751.3	5302	87.3,87.3
60	197.8	188.5	170.1	191.9	235.6	261.6	259.0	229.3	50- 60	329.5	5632	92.7,92.7
70	92.03	92.56	85.65	91.38	105.7	107.0	106.0	97.00	60- 70	145.4	5777	95.1,95.1
80	38.37	39.65	47.29	39.55	49.17	45.54	45.26	41.48	70- 80	71.07	5848	96.3,96.3
90	9.524	8.989	8.773	8.332	15.77	14.30	13.24	13.52	80- 90	27.14	5875	96.7,96.7
100	13.56	13.19	12.78	12.06	18.54	17.10	16.15	16.51	90-100	14.11	5889	97,97
110	19.55	19.58	19.38	18.35	23.39	21.57	20.54	21.08	100-110	18.46	5908	97.3,97.3
120	27.88	27.96	27.64	26.59	29.69	27.67	26.47	27.26	110-120	23.58	5931	97.7,97.7
130	38.12	37.91	37.37	36.42	37.80	35.46	33.99	35.11	120-130	28.52	5960	98.1,98.1
140	48.24	47.72	47.32	46.30	46.44	44.14	42.67	43.61	130-140	31.70	5992	98.7,98.7
150	56.12	55.56	55.63	54.63	54.03	51.88	50.91	51.31	140-150	31.18	6023	99.2,99.2
160	62.34	62.02	62.38	61.33	59.89	58.36	57.85	57.75	150-160	26.26	6049	99.6,99.6
170	68.72	67.22	67.44	66.93	66.68	64.42	64.17	64.02	160-170	17.82	6067	99.9,99.9
180	70.67	69.06	69.08	69.04	70.96	69.05	68.95	69.07	170-180	6.437	6073	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

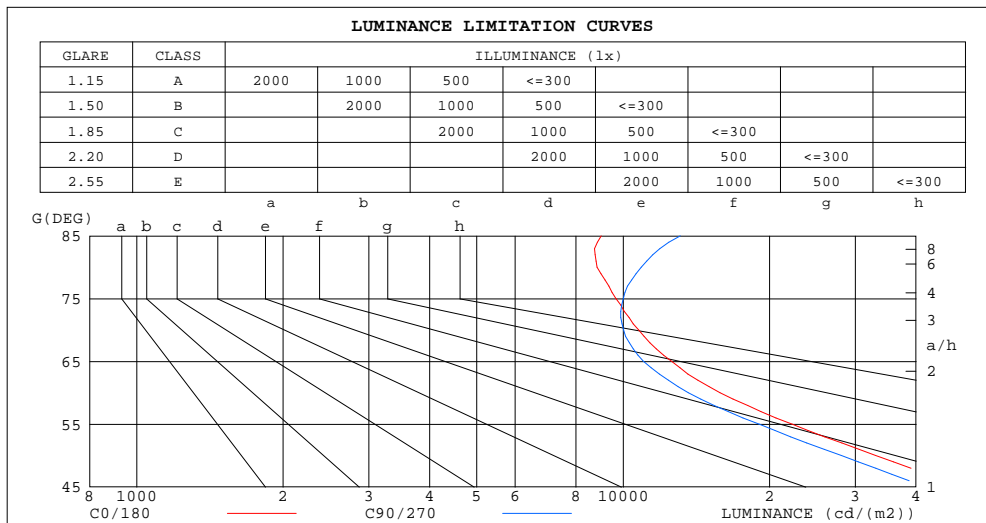
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
 Humidity:65.0%  
 Test Distance:8.000m [K=0.7063]  
 Remarks:



## LUMINANCE LIMITATION CURVES

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2018-12-22

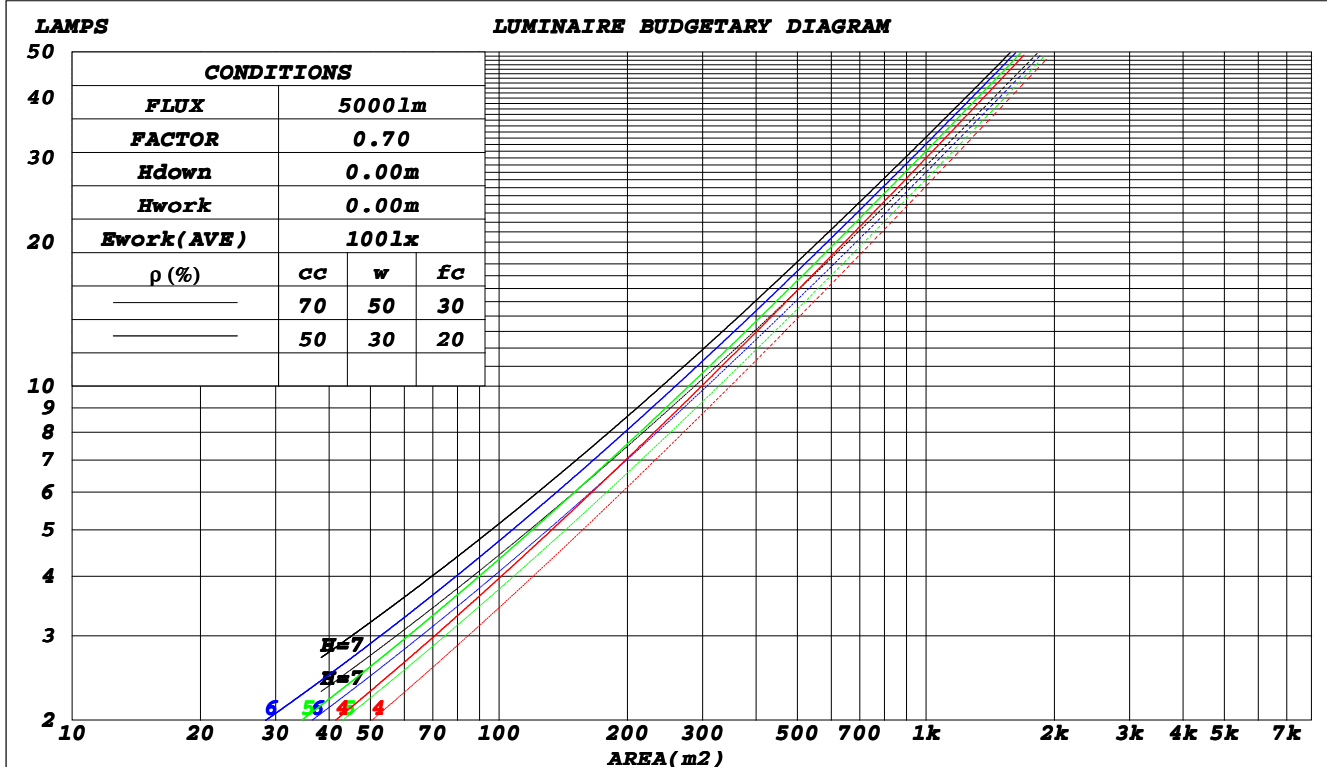
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity: 65.0%  
Test Distance: 8.000m [K=0.7063]  
Remarks:



## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

$\rho_{cc}$	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	1.08	1.05	1.02	1.06	1.03	1.01	1.01	.99	.97	.97	.95	.93	.93	.91	.90	.88
2.0	.99	.94	.90	.97	.92	.89	.93	.89	.86	.89	.86	.84	.86	.84	.82	.80
3.0	.90	.84	.80	.89	.83	.79	.86	.81	.77	.83	.79	.76	.80	.77	.74	.72
4.0	.83	.76	.72	.82	.76	.71	.79	.74	.70	.76	.72	.68	.74	.70	.67	.66
5.0	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.62	.69	.65	.62	.60
6.0	.71	.64	.59	.70	.63	.59	.68	.62	.58	.66	.61	.57	.64	.60	.56	.55
7.0	.66	.59	.54	.65	.58	.54	.63	.57	.53	.62	.56	.53	.60	.56	.52	.50
8.0	.61	.54	.50	.60	.54	.49	.59	.53	.49	.58	.52	.49	.56	.52	.48	.47
9.0	.57	.50	.46	.56	.50	.46	.55	.49	.45	.54	.49	.45	.53	.48	.45	.43
10.0	.53	.47	.43	.53	.47	.42	.52	.46	.42	.51	.46	.42	.50	.45	.42	.40



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2018-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity: 65.0%  
Test Distance: 8.000m [K=0.7063]  
Remarks:



**WEC AND CCEC**

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

$\rho_{cc}$	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	.214	.122	.038	.206	.117	.037	.191	.110	.035	.178	.103	.033	.165	.096	.031		
2.0	.205	.112	.034	.198	.109	.034	.185	.103	.032	.174	.097	.031	.163	.092	.029		
3.0	.194	.103	.031	.188	.101	.030	.177	.096	.029	.167	.092	.028	.158	.087	.027		
4.0	.184	.096	.028	.179	.094	.028	.169	.090	.027	.160	.086	.026	.152	.082	.025		
5.0	.174	.089	.026	.169	.087	.025	.161	.084	.025	.153	.081	.024	.145	.078	.023		
6.0	.165	.083	.024	.161	.081	.023	.153	.078	.023	.146	.076	.022	.139	.073	.022		
7.0	.156	.077	.022	.153	.076	.022	.146	.074	.021	.139	.071	.021	.133	.069	.020		
8.0	.149	.073	.020	.145	.072	.020	.139	.070	.020	.133	.068	.019	.128	.066	.019		
9.0	.142	.068	.019	.139	.068	.019	.133	.066	.019	.128	.064	.018	.122	.062	.018		
10.0	.135	.065	.018	.132	.064	.018	.127	.062	.018	.122	.061	.017	.118	.059	.017		

$\rho_{cc}$	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	.215	.215	.215	.184	.184	.184	.126	.126	.126	.072	.072	.072	.023	.023	.023		
1.0	.199	.182	.167	.170	.156	.144	.116	.107	.099	.067	.062	.058	.021	.020	.019		
2.0	.186	.158	.134	.159	.136	.116	.109	.094	.081	.063	.055	.047	.020	.018	.015		
3.0	.175	.139	.110	.150	.120	.096	.103	.083	.067	.060	.049	.040	.019	.016	.013		
4.0	.166	.125	.094	.143	.108	.081	.098	.075	.057	.057	.044	.034	.018	.014	.011		
5.0	.158	.114	.081	.136	.099	.071	.094	.069	.050	.054	.040	.030	.017	.013	.010		
6.0	.151	.105	.072	.130	.091	.063	.090	.064	.044	.052	.037	.026	.017	.012	.009		
7.0	.145	.098	.065	.125	.085	.056	.086	.059	.040	.050	.035	.024	.016	.011	.008		
8.0	.139	.092	.059	.120	.080	.052	.083	.056	.037	.048	.033	.022	.016	.011	.007		
9.0	.134	.087	.055	.116	.075	.048	.080	.053	.034	.047	.031	.020	.015	.010	.007		
10.0	.129	.083	.051	.112	.072	.045	.077	.050	.032	.045	.030	.019	.015	.010	.006		

**C Range:** 0 - 360DEG  
**C Interval:** 30.0DEG  
**Test Speed:** HIGH  
**Temperature:** 25.3DEG  
**Operators:** DAMIN  
**Test Date:** 2018-12-22

**$\gamma$  Range:** 0 - 180DEG  
 **$\gamma$  Interval:** 1.0DEG  
**Test System:** EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
**Humidity:** 65.0%  
**Test Distance:** 8.000m [K=0.7063]  
**Remarks:**



**UGR(Unified Glare Rating) Table**

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm										
NAME: LC-LL1603-50W-Standard 90°					TYPE:LED					
MFR.: LOW-CARBON					DIM.: 930*40*95mm					
<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>21.7</b>	<b>22.8</b>	<b>22.0</b>	<b>23.1</b>	<b>23.3</b>	<b>21.1</b>	<b>22.2</b>	<b>21.4</b>	<b>22.4</b>	<b>22.6</b>
<b>3H</b>	<b>21.9</b>	<b>22.9</b>	<b>22.2</b>	<b>23.2</b>	<b>23.4</b>	<b>21.2</b>	<b>22.3</b>	<b>21.6</b>	<b>22.5</b>	<b>22.8</b>
<b>4H</b>	<b>21.9</b>	<b>22.9</b>	<b>22.3</b>	<b>23.2</b>	<b>23.5</b>	<b>21.3</b>	<b>22.3</b>	<b>21.7</b>	<b>22.6</b>	<b>22.9</b>
<b>6H</b>	<b>22.0</b>	<b>22.9</b>	<b>22.3</b>	<b>23.2</b>	<b>23.5</b>	<b>21.5</b>	<b>22.3</b>	<b>21.8</b>	<b>22.7</b>	<b>23.0</b>
<b>8H</b>	<b>22.0</b>	<b>22.9</b>	<b>22.4</b>	<b>23.2</b>	<b>23.5</b>	<b>21.5</b>	<b>22.4</b>	<b>21.9</b>	<b>22.7</b>	<b>23.0</b>
<b>12H</b>	<b>22.0</b>	<b>22.8</b>	<b>22.4</b>	<b>23.1</b>	<b>23.5</b>	<b>21.6</b>	<b>22.4</b>	<b>22.0</b>	<b>22.7</b>	<b>23.1</b>
<b>4H 2H</b>	<b>21.7</b>	<b>22.6</b>	<b>22.0</b>	<b>22.9</b>	<b>23.2</b>	<b>21.1</b>	<b>22.0</b>	<b>21.4</b>	<b>22.3</b>	<b>22.6</b>
<b>3H</b>	<b>21.9</b>	<b>22.7</b>	<b>22.3</b>	<b>23.1</b>	<b>23.4</b>	<b>21.3</b>	<b>22.2</b>	<b>21.7</b>	<b>22.5</b>	<b>22.9</b>
<b>4H</b>	<b>22.1</b>	<b>22.8</b>	<b>22.5</b>	<b>23.2</b>	<b>23.5</b>	<b>21.5</b>	<b>22.3</b>	<b>21.9</b>	<b>22.6</b>	<b>23.0</b>
<b>6H</b>	<b>22.2</b>	<b>22.8</b>	<b>22.6</b>	<b>23.2</b>	<b>23.6</b>	<b>21.8</b>	<b>22.4</b>	<b>22.2</b>	<b>22.8</b>	<b>23.2</b>
<b>8H</b>	<b>22.2</b>	<b>22.8</b>	<b>22.7</b>	<b>23.2</b>	<b>23.7</b>	<b>21.9</b>	<b>22.5</b>	<b>22.3</b>	<b>22.9</b>	<b>23.3</b>
<b>12H</b>	<b>22.3</b>	<b>22.8</b>	<b>22.7</b>	<b>23.2</b>	<b>23.7</b>	<b>22.0</b>	<b>22.5</b>	<b>22.5</b>	<b>23.0</b>	<b>23.4</b>
<b>8H 4H</b>	<b>22.0</b>	<b>22.6</b>	<b>22.5</b>	<b>23.1</b>	<b>23.5</b>	<b>21.5</b>	<b>22.1</b>	<b>22.0</b>	<b>22.6</b>	<b>23.0</b>
<b>6H</b>	<b>22.2</b>	<b>22.7</b>	<b>22.7</b>	<b>23.2</b>	<b>23.7</b>	<b>21.8</b>	<b>22.3</b>	<b>22.3</b>	<b>22.8</b>	<b>23.3</b>
<b>8H</b>	<b>22.3</b>	<b>22.8</b>	<b>22.8</b>	<b>23.2</b>	<b>23.7</b>	<b>22.0</b>	<b>22.5</b>	<b>22.5</b>	<b>22.9</b>	<b>23.4</b>
<b>12H</b>	<b>22.4</b>	<b>22.8</b>	<b>22.9</b>	<b>23.3</b>	<b>23.8</b>	<b>22.2</b>	<b>22.6</b>	<b>22.7</b>	<b>23.1</b>	<b>23.6</b>
<b>12H 4H</b>	<b>22.0</b>	<b>22.6</b>	<b>22.5</b>	<b>23.0</b>	<b>23.5</b>	<b>21.5</b>	<b>22.1</b>	<b>22.0</b>	<b>22.5</b>	<b>23.0</b>
<b>6H</b>	<b>22.2</b>	<b>22.7</b>	<b>22.7</b>	<b>23.1</b>	<b>23.7</b>	<b>21.8</b>	<b>22.3</b>	<b>22.3</b>	<b>22.8</b>	<b>23.3</b>
<b>8H</b>	<b>22.3</b>	<b>22.7</b>	<b>22.9</b>	<b>23.2</b>	<b>23.8</b>	<b>22.0</b>	<b>22.4</b>	<b>22.6</b>	<b>22.9</b>	<b>23.5</b>
<b>Variations with the observer position at spacings:</b>										
<b>S = 1.0H</b>	<b>+ 1.6 / - 2.0</b>					<b>+ 1.2 / - 1.8</b>				
<b>1.5H</b>	<b>+ 2.5 / - 1.9</b>					<b>+ 2.1 / - 1.6</b>				
<b>2.0H</b>	<b>+ 3.2 / - 1.8</b>					<b>+ 2.5 / - 1.5</b>				

CIE Pub.117, 6073 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 6.3$ )

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2018-12-22**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**



**UTILIZATION FACTORS TABLE**

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

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) $k(RI) \times RCR = 5$									
$k = 0.60$	76	68	63	75	67	62	74	67	62	58
0.80	85	77	72	84	76	72	82	75	71	66
1.00	91	83	79	90	83	78	88	83	77	72
1.25	96	89	85	95	88	84	92	87	83	77
1.50	100	93	89	98	92	88	95	90	87	81
2.00	104	98	94	102	97	93	98	94	91	85
2.50	106	101	97	104	99	96	100	97	94	86
3.00	108	104	100	106	102	99	102	99	96	88
4.00	111	107	104	108	105	102	104	101	99	91
5.00	112	109	106	110	107	105	105	103	101	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

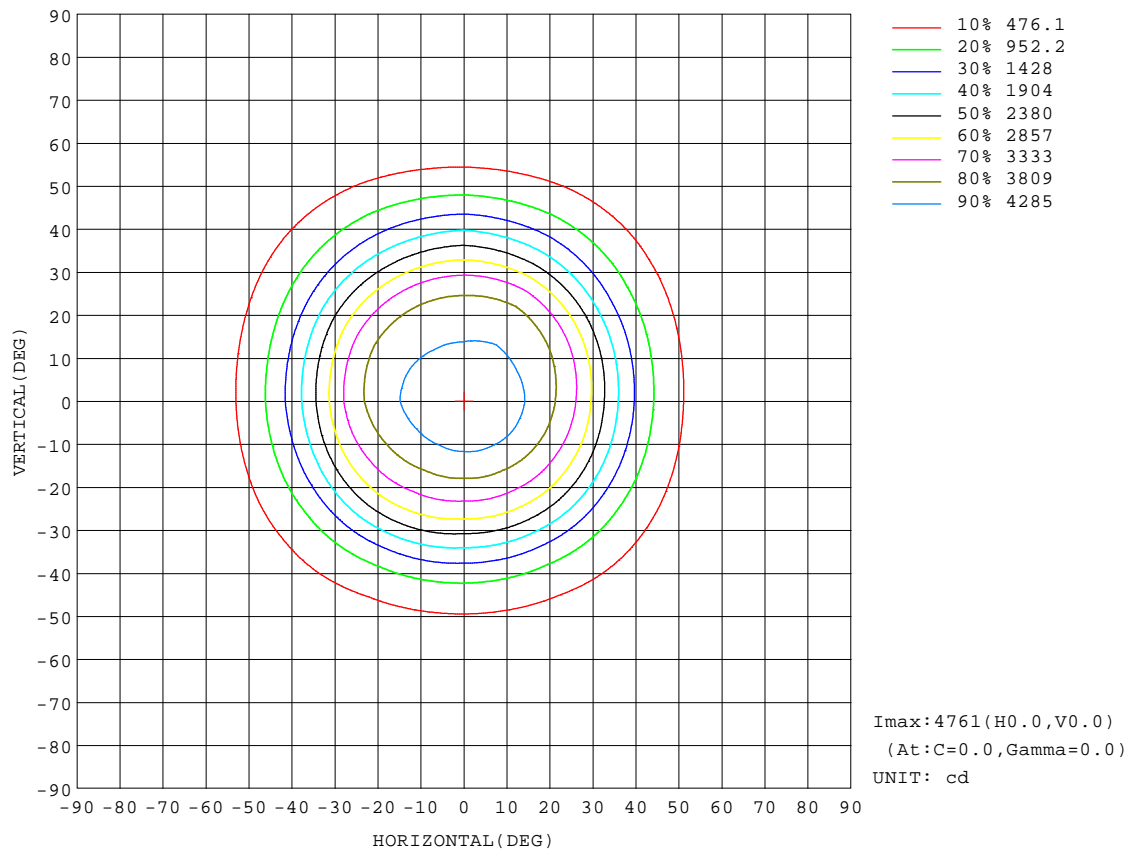
**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2018-12-22**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**



## ISOCANDELA DIAGRAM

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2018-12-22

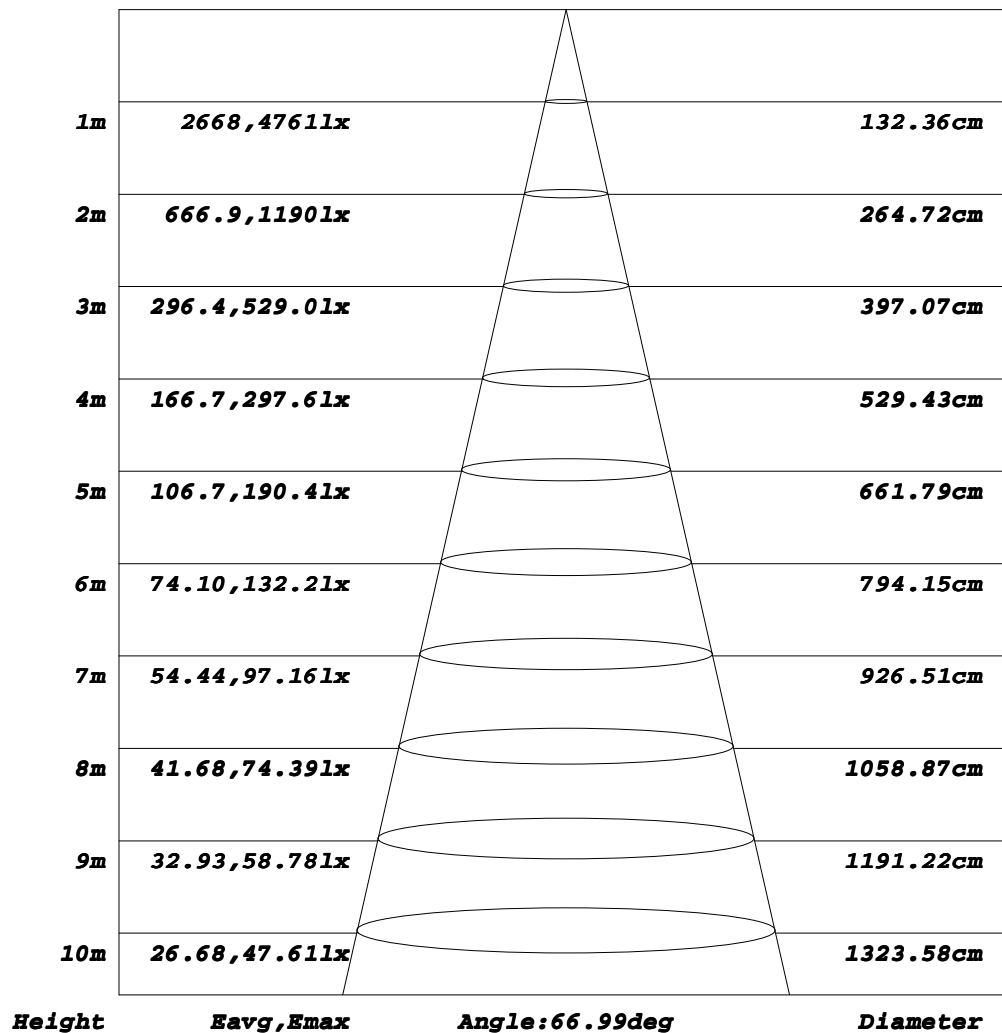
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity:65.0%  
Test Distance:8.000m [K=0.7063]  
Remarks:



**AAI Figure**

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

**Flux out:3813 lm**



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

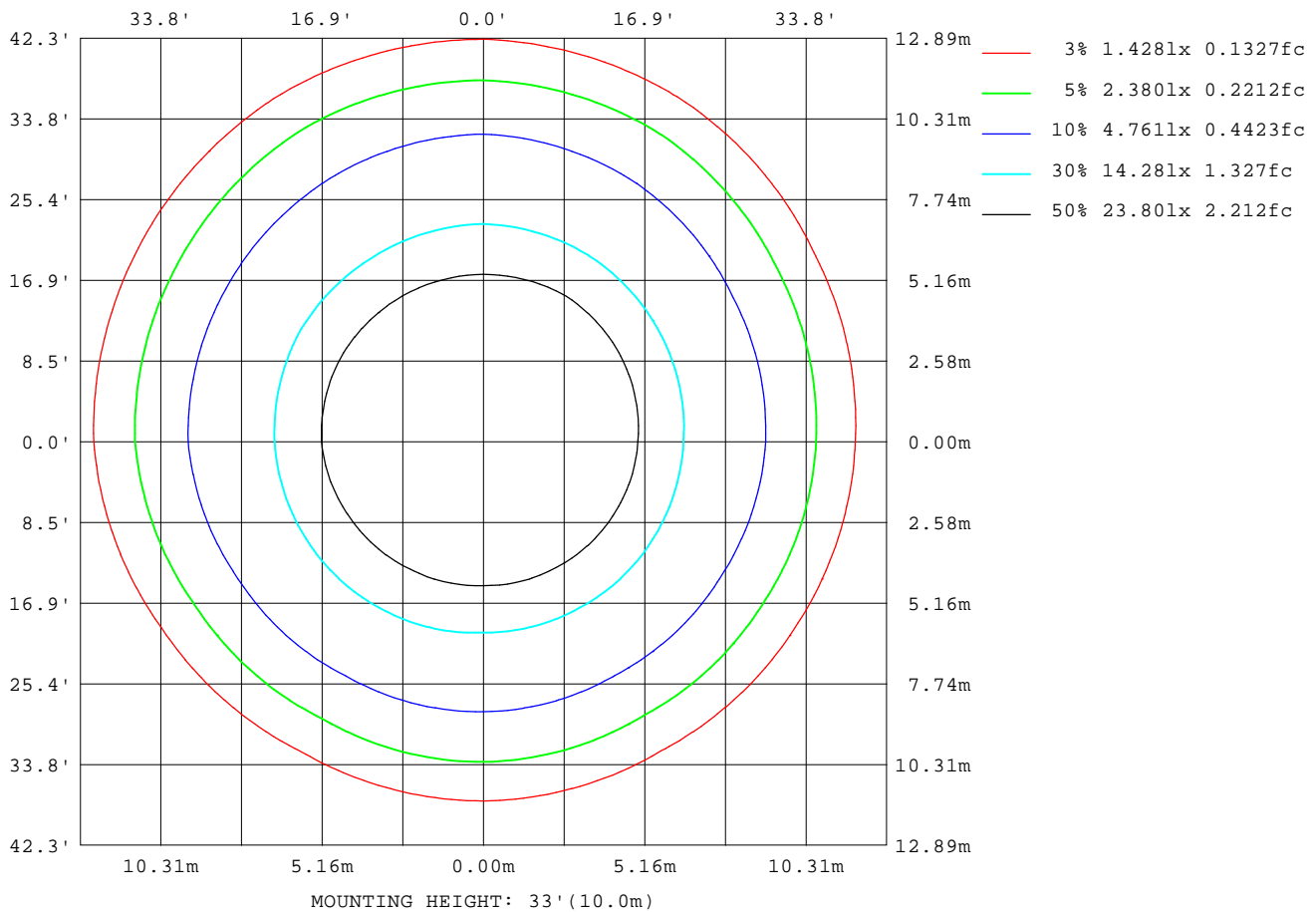
**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2018-12-22**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**



## ISOLUX DIAGRAM

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

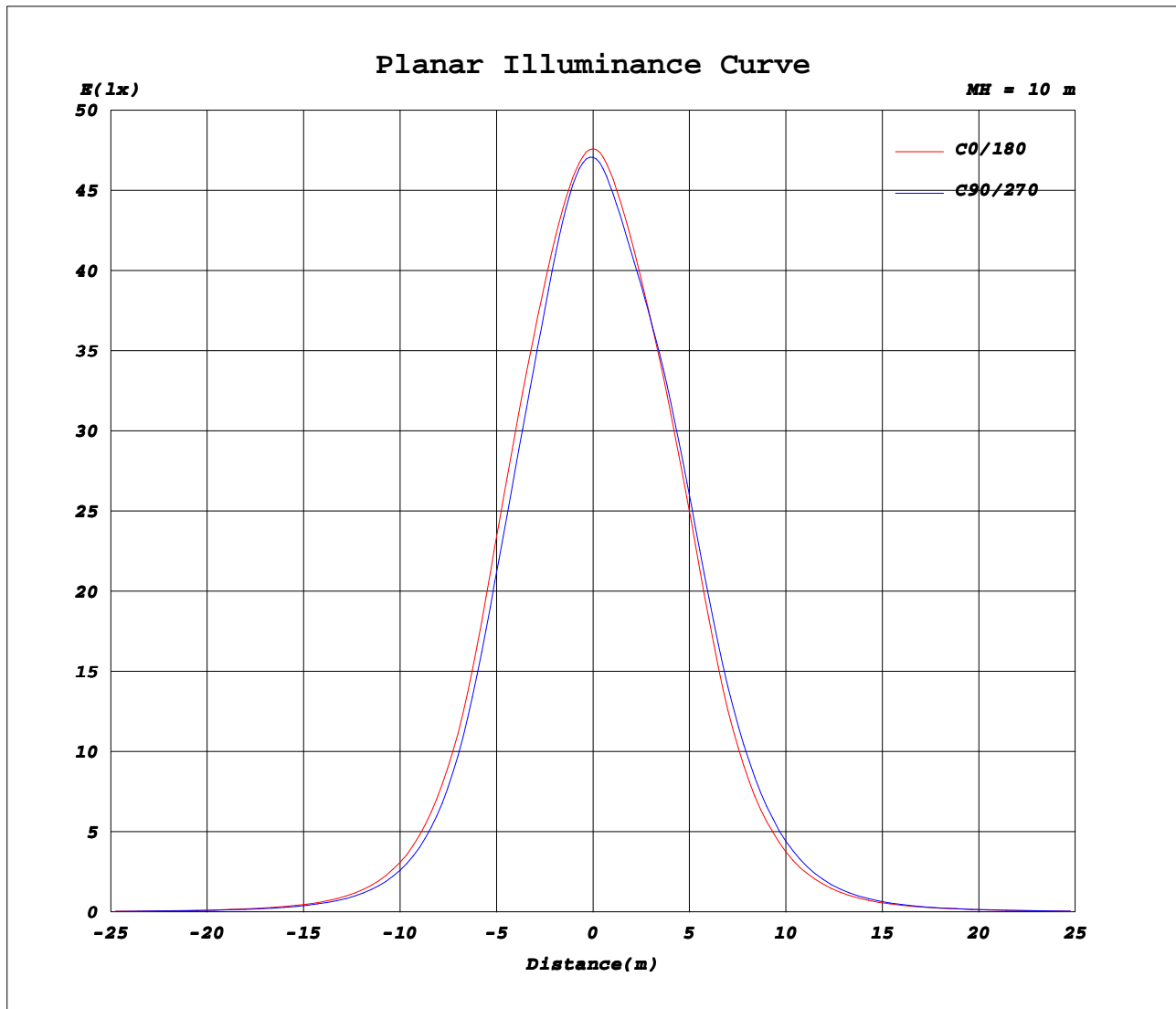


**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2018-12-22**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11**  
**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: 2018-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11  
Humidity: 65.0%  
Test Distance: 8.000m [K=0.7063]  
Remarks:



**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:220.40V I:0.2230A P:48.300W PF:0.9820 Freq:50.00Hz Lamp Flux:6073.37x1 lm		
NAME: LC-LL1603-50W-Standard 90°	TYPE:LED	
MFR.: LOW-CARBON	DIM.: 930*40*95mm	

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	4761	4737	4720	4707	4700	4694	4761	4737	4720	4707	4700	4694						
5	4685	4679	4660	4644	4621	4616	4676	4624	4605	4586	4607	4610						
10	4499	4474	4427	4401	4390	4420	4493	4439	4412	4400	4437	4442						
15	4237	4170	4081	4039	4062	4163	4279	4273	4247	4251	4287	4251						
20	3907	3785	3673	3632	3684	3835	4024	4080	4074	4083	4119	4016						
25	3451	3289	3182	3139	3231	3405	3649	3757	3766	3775	3804	3649						
30	2786	2639	2532	2494	2633	2826	3049	3186	3210	3244	3214	3020						
35	2027	1889	1780	1775	1885	2084	2289	2446	2476	2554	2431	2217						
40	1385	1232	1148	1174	1210	1375	1604	1716	1769	1867	1706	1500						
45	880	771	711	741	743	863	1067	1130	1212	1252	1141	967						
50	531	476	440	451	453	532	664	707	773	771	713	593						
55	319	299	276	273	279	325	388	424	453	446	413	352						
60	198	195	182	170	180	204	236	255	268	259	245	213						
65	133	134	128	116	124	136	154	161	166	162	154	138						
70	92.0	93.2	91.9	85.7	88.3	94.5	106	106	109	106	102	92.4						
75	62.5	62.9	63.6	64.7	61.3	63.6	73.8	69.9	71.6	70.2	67.5	61.8						
80	38.4	39.0	40.3	47.3	39.1	40.0	49.2	45.1	46.0	45.3	43.4	39.5						
85	19.6	20.3	21.7	28.5	21.3	21.0	29.3	26.5	26.9	26.2	24.9	22.7						
90	9.52	9.22	8.76	8.77	8.36	8.31	15.8	14.8	13.8	13.2	13.3	13.7						
95	11.3	11.0	10.6	10.3	9.95	9.50	16.7	15.9	14.9	14.5	14.5	15.1						
100	13.6	13.3	13.0	12.8	12.4	11.7	18.5	17.6	16.6	16.2	16.1	16.9						
105	16.3	16.2	16.0	15.8	15.4	14.5	20.8	19.7	18.6	18.2	18.2	19.1						
110	19.5	19.6	19.5	19.4	18.8	17.9	23.4	22.2	21.0	20.5	20.6	21.6						
115	23.4	23.6	23.5	23.3	22.8	21.7	26.3	25.1	23.7	23.3	23.4	24.5						
120	27.9	27.9	28.0	27.6	27.2	26.0	29.7	28.4	26.9	26.5	26.5	28.0						
125	32.8	32.8	32.8	32.4	31.9	30.8	33.6	32.2	30.5	30.0	30.2	31.8						
130	38.1	38.0	37.8	37.4	37.0	35.9	37.8	36.4	34.5	34.0	34.2	36.1						
135	43.3	43.2	42.7	42.4	41.9	41.0	42.1	40.8	38.6	38.3	38.2	40.4						
140	48.2	48.1	47.3	47.3	46.6	46.0	46.4	45.2	43.1	42.7	42.5	44.7						
145	52.5	52.4	51.4	51.7	51.0	50.5	50.4	49.0	47.3	47.0	46.6	48.7						
150	56.1	56.0	55.1	55.6	55.0	54.2	54.0	52.4	51.4	50.9	50.5	52.1						
155	59.3	59.3	58.5	59.2	58.7	57.7	57.0	55.6	55.0	54.5	54.0	55.2						
160	62.3	62.4	61.7	62.4	61.9	60.8	59.9	58.4	58.3	57.9	57.2	58.3						
165	65.7	65.3	64.5	65.2	64.8	63.8	63.2	61.6	61.5	61.2	60.6	61.5						
170	68.7	67.5	66.9	67.4	67.3	66.6	66.7	64.4	64.5	64.2	63.8	64.2						
175	70.1	68.8	68.3	68.8	68.8	68.5	69.4	67.2	67.1	66.9	66.9	66.8						
180	70.7	69.3	68.8	69.1	69.0	69.0	71.0	69.1	69.0	68.9	69.2	68.9						

**C Range: 0 - 360DEG**  
**C Interval: 30.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2018-12-22**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.406.11**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**