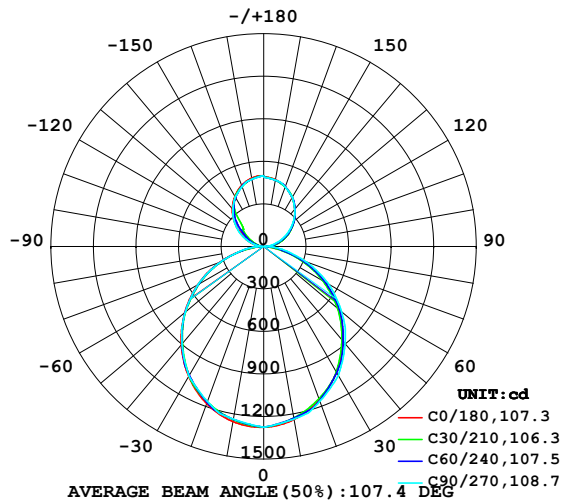


LUMINAIRE PHOTOMETRIC TEST REPORT

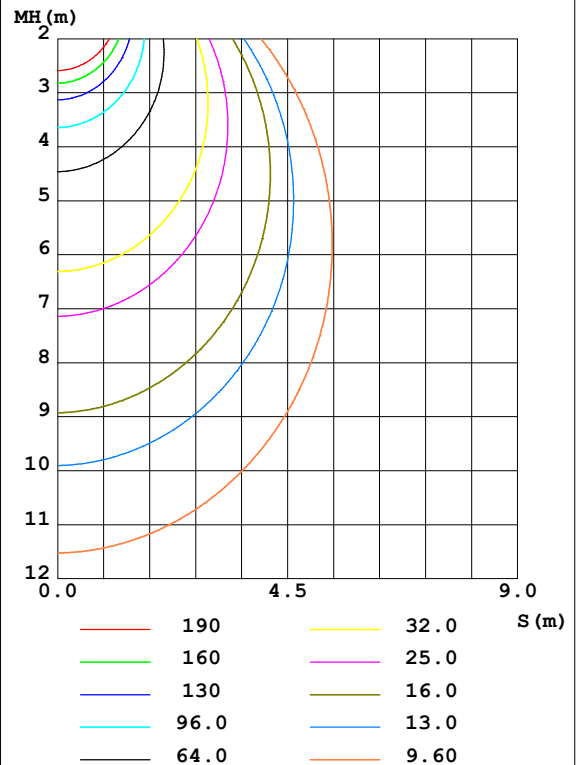
Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.24 lm/W			
MODEL	UP-DB77A-1200-45W	I _{max} (cd)	1275	S/MH (C0/180)	1.24
NOMINAL POWER (W)	45	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4708.3	η UP, DN (C0-180)	14.4, 35.2
NOMINAL FLUX (lm)	4708.29	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	13.5, 36.9
LAMPS INSIDE	1	η up (%)	27.9	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	72.1	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

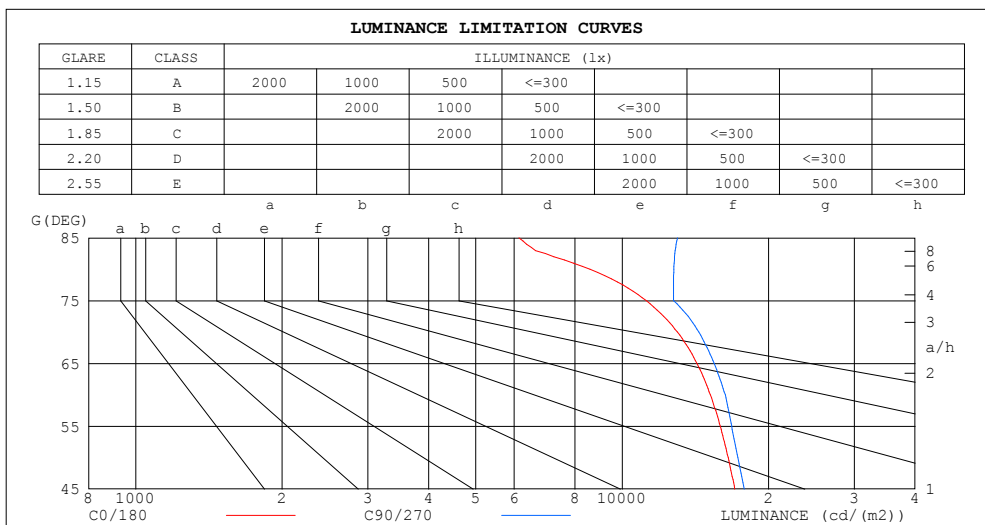
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1239	1227	1235	1239	1254	1238	1236	1229	0- 10	119.4	119.4	2.54,2.54
20	1152	1155	1161	1179	1179	1175	1163	1161	10- 20	340.1	459.5	9.76,9.76
30	1026	1020	1052	1048	1059	1046	1055	1031	20- 30	509.0	968.5	20.6,20.6
40	866.9	871.3	893.4	883.0	904.8	900.8	896.9	888.4	30- 40	604.6	1573	33.4,33.4
50	686.0	683.9	718.0	617.6	727.8	717.9	722.6	708.9	40- 50	611.3	2184	46.4,46.4
60	490.4	483.6	526.2	414.1	535.5	524.6	532.2	517.6	50- 60	533.1	2718	57.7,57.7
70	286.9	276.4	317.6	250.7	332.6	323.4	324.9	318.2	60- 70	392.3	3110	66.1,66.1
80	96.36	88.68	143.3	107.2	128.9	127.3	148.3	125.9	70- 80	215.3	3325	70.6,70.6
90	29.70	27.75	3.137	11.85	8.271	8.104	2.409	15.96	80- 90	68.53	3394	72.1,72.1
100	85.61	81.12	57.71	47.62	53.62	33.92	53.76	63.73	90-100	39.51	3433	72.9,72.9
110	144.8	146.9	123.5	112.9	118.7	77.46	118.2	128.7	100-110	91.28	3524	74.9,74.9
120	210.5	214.8	200.5	186.3	166.7	135.2	195.7	199.2	110-120	150.4	3675	78,78
130	277.7	281.4	273.7	259.3	269.9	211.3	269.9	269.5	120-130	199.5	3874	82.3,82.3
140	342.1	347.0	341.4	331.2	345.2	323.4	339.1	338.5	130-140	229.8	4104	87.2,87.2
150	400.4	401.5	403.7	391.3	408.2	395.9	403.4	396.9	140-150	230.6	4335	92.1,92.1
160	448.3	450.8	446.8	445.5	458.2	454.6	449.6	451.0	150-160	195.8	4530	96.2,96.2
170	479.5	475.1	475.7	473.2	490.3	482.6	482.0	480.7	160-170	131.5	4662	99,99
180	490.2	490.2	490.2	490.2	500.6	500.6	500.6	500.6	170-180	46.34	4708	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W		TYPE: 45W		WEIGHT: 1	
SPEC.: 3000K		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.: 0.0646		Shielding Angle:	



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6130	13001
80	8590	12771
75	11212	12758
70	12986	14375
65	14253	15454
60	15183	16291
55	15905	16789
50	16520	17291
45	17043	17817

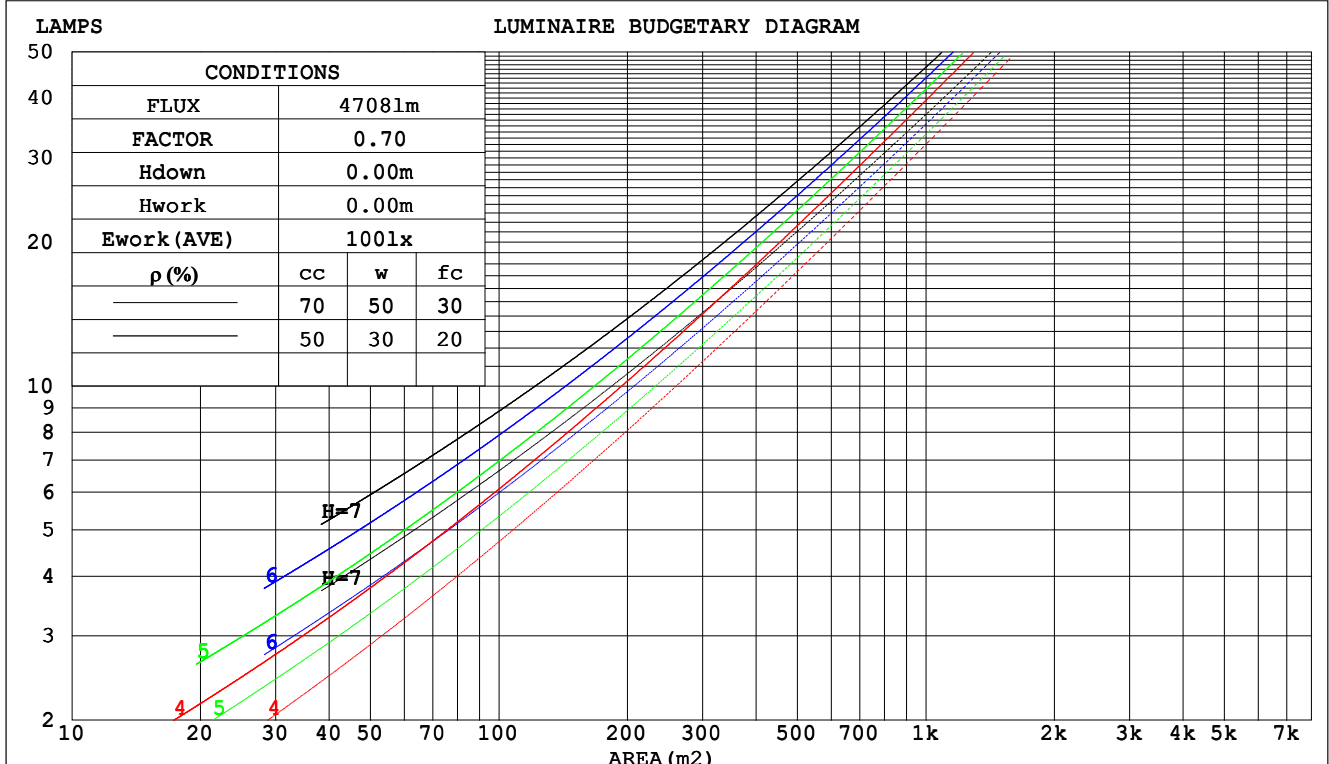
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	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						Coefficients of Utilization(CU)									
0.0	1.12	1.12	1.12	1.07	1.07	1.07	.96	.96	.96	.86	.86	.86	.76	.76	.76	.72
1.0	.98	.94	.90	.93	.90	.86	.84	.81	.79	.75	.73	.71	.67	.66	.64	.61
2.0	.86	.79	.74	.81	.76	.71	.73	.69	.65	.66	.63	.59	.59	.57	.54	.51
3.0	.75	.68	.62	.72	.65	.59	.65	.59	.55	.58	.54	.50	.53	.49	.46	.43
4.0	.67	.58	.52	.64	.56	.50	.58	.51	.47	.52	.47	.43	.47	.43	.40	.37
5.0	.60	.51	.45	.57	.49	.43	.52	.45	.40	.47	.42	.37	.42	.38	.35	.32
6.0	.54	.45	.39	.51	.43	.38	.47	.40	.35	.42	.37	.33	.38	.34	.30	.28
7.0	.48	.40	.34	.46	.39	.33	.42	.36	.31	.39	.33	.29	.35	.30	.27	.25
8.0	.44	.36	.30	.42	.35	.30	.39	.32	.28	.35	.30	.26	.32	.28	.24	.22
9.0	.40	.33	.27	.39	.31	.27	.36	.29	.25	.33	.27	.23	.30	.25	.22	.20
10.0	.37	.30	.25	.36	.29	.24	.33	.27	.23	.30	.25	.21	.28	.23	.20	.18



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W			TYPE: 45W		
SPEC.: 3000K			DIM.:		
MFR.: EVERFINE			SUR.: 0.0646		
			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	.292	.166	.053	.276	.157	.050	.247	.142	.045	.220	.127	.041	.196	.114	.037	
2.0	.273	.149	.046	.259	.142	.044	.232	.129	.040	.208	.117	.037	.186	.105	.033	
3.0	.252	.134	.040	.240	.128	.039	.216	.117	.036	.194	.106	.033	.173	.096	.030	
4.0	.233	.121	.036	.222	.116	.034	.200	.106	.032	.180	.097	.029	.161	.088	.027	
5.0	.216	.110	.032	.206	.106	.031	.186	.097	.028	.167	.088	.026	.150	.080	.024	
6.0	.201	.101	.029	.191	.097	.028	.173	.089	.026	.156	.081	.024	.140	.074	.022	
7.0	.187	.093	.026	.179	.089	.025	.162	.082	.024	.146	.075	.022	.131	.068	.020	
8.0	.175	.086	.024	.167	.082	.023	.152	.076	.022	.137	.069	.020	.123	.063	.018	
9.0	.164	.080	.022	.157	.076	.021	.143	.070	.020	.129	.065	.019	.116	.059	.017	
10.0	.155	.074	.021	.148	.071	.020	.134	.066	.019	.122	.060	.017	.110	.055	.016	

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	.403	.403	.403	.345	.345	.345	.235	.235	.235	.135	.135	.135	.043	.043	.043	
1.0	.394	.371	.350	.337	.318	.301	.230	.219	.209	.133	.127	.121	.042	.041	.039	
2.0	.386	.348	.316	.330	.300	.273	.226	.207	.191	.131	.121	.112	.042	.039	.036	
3.0	.378	.331	.294	.324	.286	.255	.223	.199	.179	.129	.116	.105	.041	.038	.035	
4.0	.371	.319	.279	.318	.275	.242	.219	.192	.171	.127	.112	.101	.041	.037	.033	
5.0	.364	.309	.268	.313	.267	.233	.215	.187	.165	.125	.110	.098	.040	.036	.032	
6.0	.357	.301	.260	.307	.261	.227	.212	.182	.160	.123	.107	.095	.040	.035	.031	
7.0	.351	.294	.255	.302	.255	.222	.209	.179	.157	.121	.105	.094	.039	.035	.031	
8.0	.345	.289	.250	.297	.251	.218	.206	.176	.155	.120	.104	.092	.039	.034	.031	
9.0	.339	.284	.247	.292	.247	.216	.203	.173	.153	.118	.102	.091	.038	.034	.030	
10.0	.334	.280	.245	.288	.243	.213	.200	.171	.152	.117	.101	.090	.038	.033	.030	

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0%						Lamp Flux:4708.29x1 lm					
NAME: UP-DB77A-1200-45W						TYPE: 45W			WEIGHT: 1		
SPEC.: 3000K						DIM.:			SERIAL No.:		
MFR.: EVERFINE						SUR.: 0.0646			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	2H	20.6	21.7	21.2	22.3	23.1	20.9	22.1	21.5	22.7	23.4
	3H	21.8	22.9	22.5	23.5	24.3	22.3	23.3	22.9	24.0	24.7
	4H	22.2	23.2	22.9	23.9	24.6	22.8	23.8	23.4	24.4	25.2
	6H	22.4	23.3	23.1	24.0	24.8	23.2	24.1	23.9	24.8	25.6
	8H	22.4	23.3	23.1	24.0	24.8	23.3	24.2	24.0	24.9	25.7
	12H	22.4	23.2	23.1	23.9	24.8	23.5	24.3	24.2	25.0	25.8
4H	2H	21.0	22.0	21.7	22.7	23.5	21.3	22.3	22.0	22.9	23.7
	3H	22.4	23.2	23.1	23.9	24.8	22.8	23.6	23.5	24.3	25.2
	4H	22.9	23.6	23.6	24.3	25.2	23.4	24.1	24.1	24.9	25.7
	6H	23.1	23.8	23.9	24.5	25.4	23.9	24.6	24.7	25.3	26.2
	8H	23.1	23.7	23.9	24.5	25.4	24.1	24.7	24.9	25.5	26.4
	12H	23.1	23.7	23.9	24.5	25.4	24.3	24.9	25.1	25.6	26.6
8H	4H	23.0	23.6	23.7	24.3	25.3	23.4	24.0	24.2	24.8	25.7
	6H	23.3	23.8	24.1	24.6	25.5	24.1	24.6	24.9	25.4	26.3
	8H	23.3	23.8	24.1	24.6	25.6	24.4	24.8	25.2	25.6	26.6
	12H	23.3	23.7	24.2	24.6	25.6	24.7	25.1	25.5	25.9	26.9
12H	4H	22.9	23.5	23.7	24.3	25.2	23.4	23.9	24.2	24.7	25.7
	6H	23.3	23.7	24.1	24.5	25.5	24.1	24.5	24.9	25.3	26.3
	8H	23.4	23.7	24.2	24.6	25.6	24.4	24.8	25.2	25.6	26.6
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	+ 0.3 / - 0.3					+ 0.3 / - 0.3					

CIE Pub.117, 4708 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.4$)
Area: 0.0646 m²

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0%			Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W		TYPE: 45W		WEIGHT: 1	
SPEC.: 3000K		DIM.:		SERIAL No.:	
MFR.: EVERFINE		SUR.: 0.0646		Shielding Angle:	

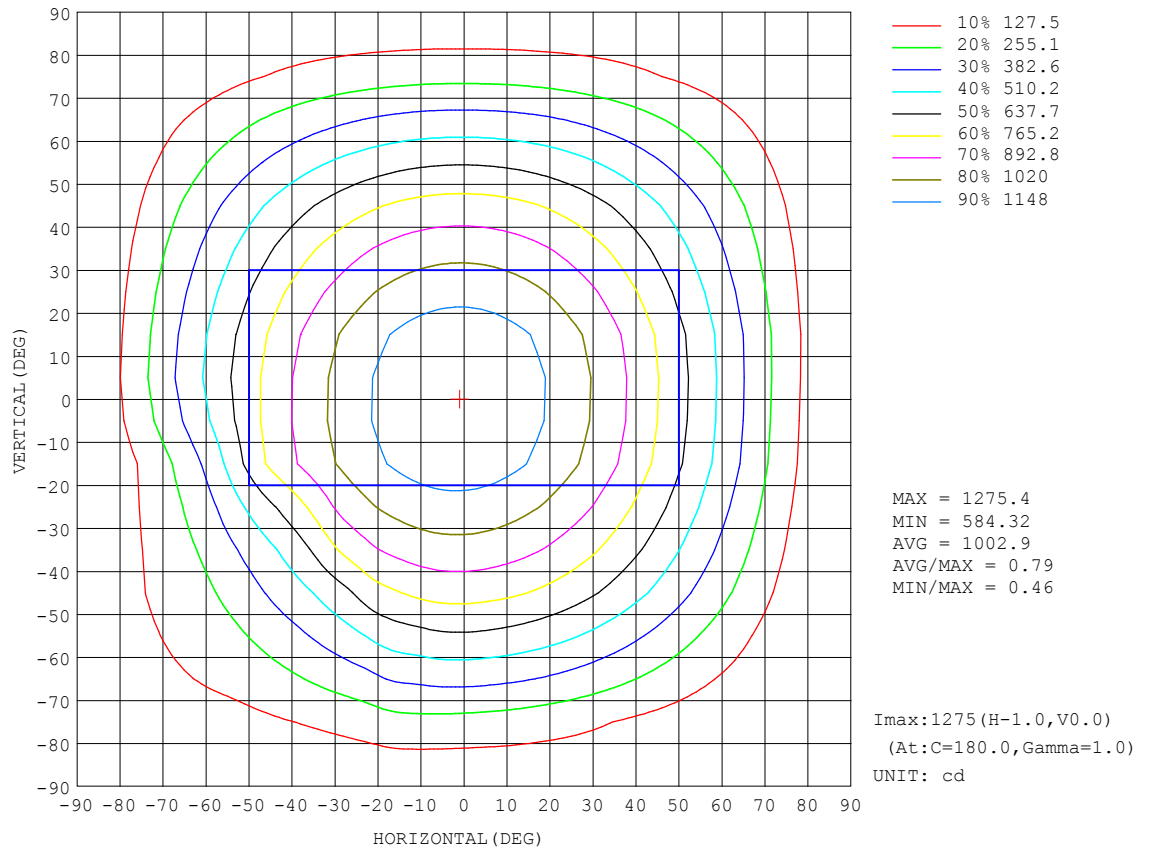
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	51	39	33	49	39	32	46	37	31	24
0.80	60	49	42	58	48	41	54	45	39	31
1.00	68	57	50	66	55	49	61	54	46	37
1.25	75	65	57	72	63	56	66	58	53	42
1.50	80	70	63	77	68	61	70	63	58	46
2.00	87	78	72	83	75	69	76	70	65	51
2.50	91	83	77	87	80	74	79	73	69	54
3.00	95	87	82	90	84	79	82	77	73	57
4.00	99	93	88	94	89	84	85	81	78	60
5.00	101	96	92	96	92	88	87	84	81	62
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-07-30

$V(B)$ Range:-180 - 180DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

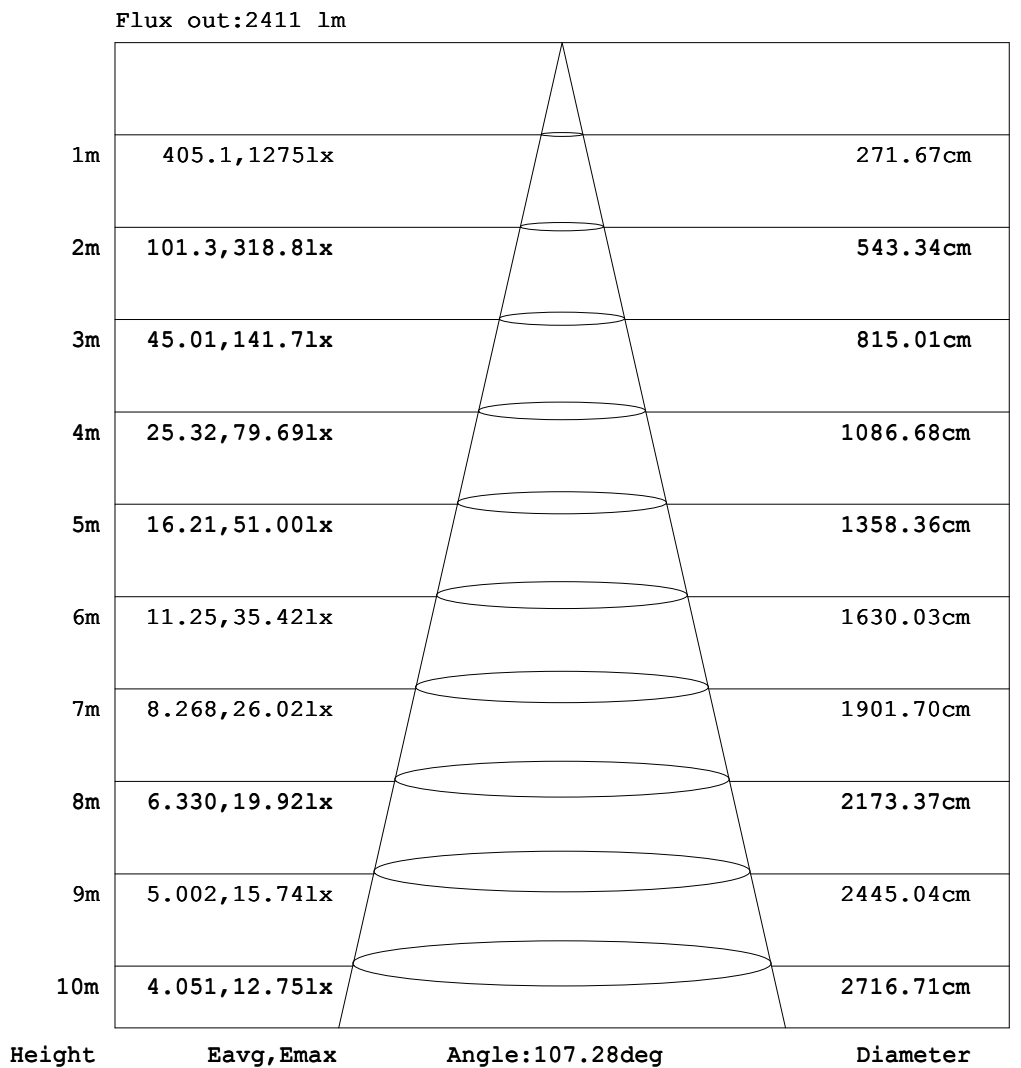


H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-07-30

V(B) Range:-180 - 180DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:



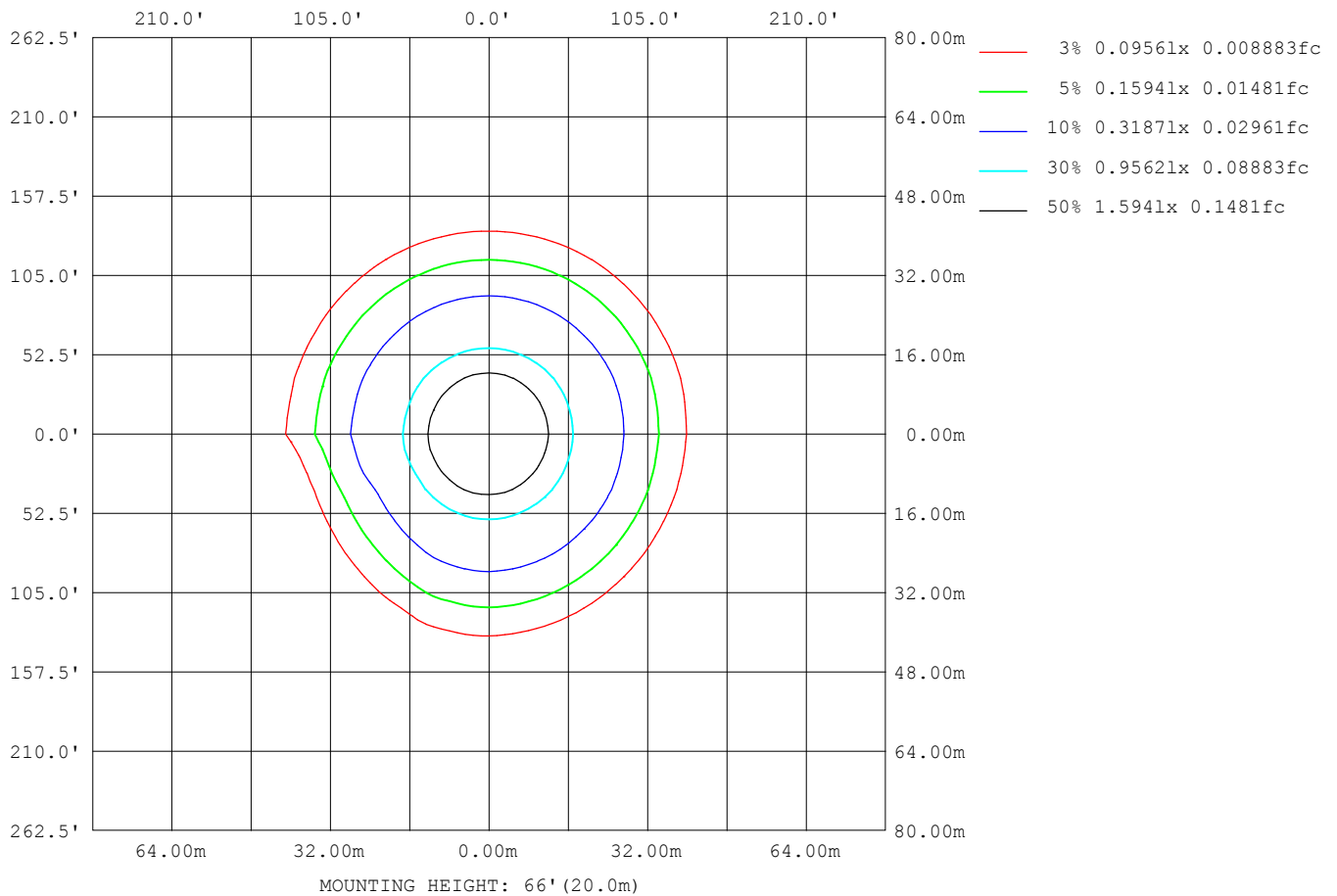
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-07-30

V(B) Range: -180 - 180DEG
 V(B) Interval: 5.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 8.690m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:



H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-07-30

V(B) Range:-180 - 180DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:8.690m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

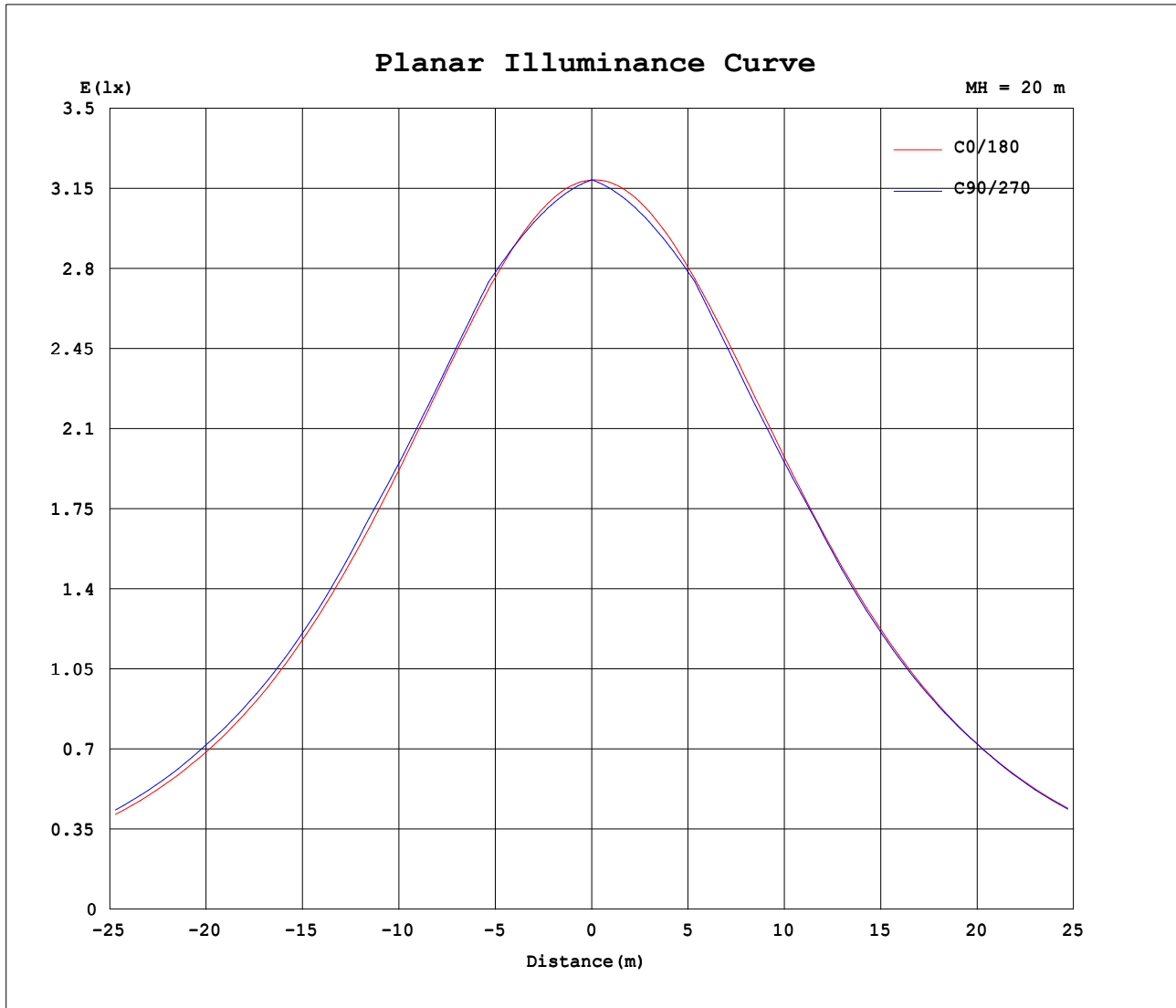
AvgL	cd/m2
L_0~180 (65) av	15093
L_0~180 (75) av	12510
L_0~180 (85) av	5704
L_90~270 (65) av	15576
L_90~270 (75) av	12994
L_90~270 (85) av	13191
L_45 (65) av	14212
L_45 (75) av	11824
L_45 (85) av	11263

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275
5	1264	1262	1261	1259	1258	1257	1256	1256	1255	1255	1254	1254	1254	1254	1254	1254	1255	1255	1255
10	1239	1236	1233	1231	1229	1228	1227	1227	1227	1227	1228	1229	1230	1231	1232	1233	1234	1235	1235
15	1202	1197	1193	1191	1189	1189	1189	1190	1192	1194	1196	1199	1202	1205	1208	1210	1213	1214	1216
20	1152	1146	1142	1140	1139	1140	1142	1146	1150	1155	1156	1155	1155	1155	1156	1157	1159	1160	1161
25	1093	1087	1082	1081	1081	1084	1088	1095	1092	1090	1090	1091	1093	1095	1097	1100	1103	1105	1107
30	1026	1018	1014	1014	1016	1022	1023	1020	1019	1020	1022	1025	1029	1034	1038	1043	1047	1050	1052
35	950	942	939	940	945	946	943	942	944	947	952	958	959	961	962	965	968	971	973
40	867	858	856	859	863	858	858	861	867	871	870	871	873	876	879	883	887	891	893
45	778	770	769	775	769	768	771	778	777	778	780	784	788	792	797	802	806	811	814
50	686	677	678	679	674	676	681	679	680	684	690	696	700	701	704	707	711	715	718
55	589	581	585	579	578	581	578	580	585	591	592	594	598	601	605	610	614	618	622
60	490	483	484	478	480	476	478	483	482	484	487	491	496	502	508	512	517	522	526
65	389	383	378	377	373	374	375	374	376	379	384	389	394	399	404	409	413	418	422
70	287	282	274	270	270	269	267	269	272	276	280	285	289	294	299	304	309	313	318
75	187	180	172	170	167	165	167	171	174	176	179	183	186	190	195	200	205	209	213
80	96.4	86.4	81.9	77.4	78.5	82.0	80.9	80.0	79.6	88.7	99.0	108	116	122	128	133	137	140	143
85	34.5	31.7	30.7	31.0	27.7	34.2	40.1	46.5	52.4	57.3	61.0	63.9	66.1	67.8	69.1	70.2	71.3	72.1	73.2
90	29.7	43.4	42.8	41.7	40.1	38.2	36.1	33.6	30.8	27.7	24.3	20.9	17.3	13.9	10.7	8.00	5.69	4.04	3.14
95	60.7	67.7	67.6	66.8	65.3	63.5	61.6	59.5	57.0	54.4	51.5	48.5	45.4	42.3	39.3	36.5	34.1	31.9	30.4
100	85.6	91.5	93.1	92.5	91.8	90.5	88.8	86.4	83.6	81.1	78.7	76.1	73.4	70.6	67.8	65.0	62.5	59.8	57.7
105	114	119	121	121	121	120	119	117	116	113	110	107	104	101	97.7	94.3	91.2	87.8	85.0
110	145	149	150	151	152	152	151	150	149	147	145	142	140	137	134	131	129	126	124
115	178	180	182	184	183	184	184	183	182	181	180	178	176	173	171	169	167	164	162
120	211	211	214	215	217	216	216	218	216	215	214	212	211	209	208	206	204	202	201
125	244	244	247	247	248	250	249	249	249	250	248	247	246	244	243	242	240	239	237
130	278	277	279	280	280	281	283	282	281	281	282	282	281	280	279	278	276	275	274
135	310	309	310	314	312	312	313	315	314	314	313	313	313	313	313	313	312	311	310
140	342	340	341	343	345	344	344	344	346	347	346	345	345	345	344	344	343	342	341
145	372	370	370	372	375	375	374	373	374	375	376	378	377	376	375	375	374	373	373
150	400	398	398	398	400	403	404	402	402	401	402	402	403	403	404	404	404	404	404
155	426	424	423	423	424	425	427	430	429	427	427	426	426	426	426	426	426	426	425
160	448	446	445	445	445	445	446	448	449	451	451	450	449	449	448	448	447	447	447
165	466	465	464	463	462	462	462	463	463	464	465	465	466	467	468	468	468	468	468
170	480	478	477	477	476	476	475	475	475	475	475	475	475	475	476	476	476	476	476
175	488	487	486	486	486	485	485	484	484	484	484	484	483	483	483	483	483	483	483
180	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275
5	1256	1256	1256	1257	1257	1258	1259	1259	1260	1261	1262	1263	1264	1266	1267	1268	1270	1272	1270
10	1236	1237	1237	1238	1238	1238	1238	1239	1239	1240	1240	1241	1242	1244	1246	1248	1251	1254	1251
15	1217	1217	1217	1217	1216	1215	1214	1213	1212	1211	1210	1210	1210	1211	1213	1215	1218	1223	1218
20	1163	1164	1166	1168	1170	1172	1175	1179	1179	1175	1172	1170	1168	1167	1168	1170	1174	1179	1173
25	1108	1110	1111	1112	1112	1113	1114	1116	1118	1122	1128	1122	1118	1115	1114	1115	1118	1124	1117
30	1054	1055	1055	1054	1053	1051	1050	1048	1048	1049	1053	1060	1060	1054	1050	1050	1053	1059	1051
35	975	976	977	977	978	980	981	975	971	969	968	971	982	987	980	978	979	985	977
40	895	895	892	889	886	884	881	879	883	871	857	855	870	901	904	899	899	905	896
45	815	813	807	798	792	786	769	758	749	734	716	717	740	779	824	815	813	819	809
50	719	716	709	702	695	678	646	631	618	601	588	581	605	648	696	710	712	728	719
55	623	617	609	605	590	565	539	521	503	495	487	481	479	509	545	574	593	633	624
60	526	518	511	507	483	462	445	429	414	406	398	389	387	387	406	426	469	535	527
65	423	419	416	408	382	368	358	344	331	321	312	305	300	296	298	313	354	435	427
70	321	321	321	311	290	279	270	260	251	242	235	229	226	221	221	219	240	333	326
75	219	223	226	216	201	192	186	181	175	170	166	167	170	170	170	152	149	231	223
80	147	150	150	142	130	123	117	112	107	103	106	110	114	118	116	112	90.1	129	122
85	75.1	76.6	77.2	73.1	68.2	65.0	62.8	61.2	59.0	56.8	58.4	59.8	60.4	60.4	61.1	60.1	54.9	29.7	42.7
90	3.46	3.61	4.16	5.27	6.62	8.06	9.50	10.9	11.9	12.7	14.6	15.8	16.8	18.0	19.3	20.2	21.1	8.27	14.8
95	29.7	28.8	28.3	28.1	28.3	28.5	28.8	29.3	29.6	29.6	29.2	28.3	26.6	24.1	23.9	24.7	25.1	17.2	27.3
100	55.9	54.1	52.4	51.1	50.1	49.1	48.3	47.8	47.6	47.6	48.1	48.7	49.1	49.6	49.1	49.9	50.3	53.6	32.9
105	82.3	80.0	78.1	76.9	76.3	76.3	76.7	77.5	78.4	78.8	78.7	78.4	78.6	79.1	79.9	80.6	76.2	85.6	49.7
110	121	119	117	115	114	114	114	113	113	112	112	112	112	112	111	110	106	119	80.8
115	160	158	156	154	153	152	151	150	149	148	148	148	147	146	146	142	141	140	115
120	198	196	194	192	191	189	188	187	186	186	186	184	182	183	179	179	178	167	152
125	235	233	231	230	228	227	226	225	225	223	220	219	219	217	215	215	214	229	202
130	272	270	269	267	266	265	264	262	259	258	257	256	254	252	252	251	250	270	245
135	309	307	305	303	301	300	298	296	295	294	294	290	288	288	288	286	286	310	300
140	340	339	337	336	335	334	333	332	331	329	326	324	323	324	322	320	321	345	340
145	372	370	370	369	368	368	367	365	362	360	358	358	359	357	355	354	355	378	374
150	403	402	400	399	397	395	394	392	391	391	390	391	390	387	385	385	386	408	405
155	425	424	423	422	421	421	420	420	420	420	421	418	416	414	414	414	415	435	432
160	446	446	446	445	445	445	445	446	446	443	442	440	439	439	439	439	441	458	456
165	468	467	467	466	465	464	463	462	461	460	459	459	458	459	459	460	461	477	475
170	475	475	475	475	474	474	474	473	473	473	473	473	474	474	475	476	477	490	489
175	483	483	483	483	483	483	483	483	483	483	484	484	484	485	485	486	486	498	497
180	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	490	501	501

H(β) Range:-90 - 90DEG

H(β) Interval: 1.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:

Test Date:2020-07-30

V(B) Range:-180 - 180DEG

V(B) Interval: 5.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426

Humidity:65.0%

Test Distance:8.690m [K=1.0000]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275
5	1268	1267	1265	1264	1263	1262	1261	1260	1259	1259	1258	1258	1257	1257	1256	1256	1256	1255	1255
10	1248	1245	1243	1242	1240	1239	1239	1238	1238	1238	1238	1237	1237	1237	1237	1237	1236	1236	1235
15	1214	1211	1209	1208	1208	1208	1208	1209	1211	1212	1214	1215	1216	1217	1217	1217	1217	1216	1215
20	1169	1166	1165	1165	1166	1168	1171	1175	1175	1172	1170	1168	1167	1166	1165	1164	1163	1162	1162
25	1112	1110	1110	1112	1116	1121	1117	1114	1112	1111	1110	1110	1110	1110	1110	1110	1109	1108	1107
30	1046	1045	1047	1052	1053	1049	1047	1046	1047	1048	1050	1051	1053	1054	1055	1055	1055	1054	1052
35	973	973	978	978	974	972	973	976	979	983	982	980	979	978	977	977	976	975	974
40	893	895	898	893	892	894	898	901	898	897	897	897	897	897	898	897	897	896	895
45	808	813	808	806	808	814	811	809	809	810	812	814	816	817	818	818	818	817	815
50	719	719	715	717	721	717	716	718	721	724	725	724	724	724	723	723	723	722	721
55	626	622	622	625	621	621	624	627	626	626	626	627	627	628	628	628	627	627	626
60	527	523	527	522	523	527	525	525	525	526	528	529	531	532	533	533	532	532	531
65	424	426	422	423	424	422	423	424	426	428	428	429	429	429	429	429	429	428	428
70	323	321	321	320	320	321	323	323	324	324	324	325	325	325	326	325	325	325	325
75	222	220	218	219	220	220	221	221	221	221	221	222	222	222	222	222	221	221	222
80	119	118	121	121	120	121	123	127	133	137	140	143	145	147	148	149	148	148	148
85	42.4	42.2	41.0	45.9	52.1	58.6	64.0	67.1	69.6	71.4	72.8	73.8	74.5	75.0	75.4	75.7	75.3	75.5	75.7
90	14.0	13.1	12.1	10.9	10.3	9.82	9.10	8.10	7.48	6.62	5.78	4.89	4.08	3.34	2.94	2.89	2.41	2.81	3.51
95	27.8	27.1	25.9	24.6	23.2	21.9	20.6	20.9	21.1	21.5	22.2	22.4	23.3	25.3	24.3	28.1	28.1	28.7	29.5
100	40.8	41.9	41.3	39.5	37.1	34.7	32.8	33.9	35.0	36.5	38.8	40.0	42.7	47.4	44.8	53.3	53.8	54.6	55.5
105	48.7	55.4	55.3	54.4	52.3	52.1	53.5	54.7	55.0	57.3	60.1	61.7	63.7	70.8	64.7	78.6	79.4	80.6	82.0
110	72.2	72.1	69.2	70.8	70.1	73.8	75.7	77.5	78.9	83.6	89.8	94.2	89.7	106	104	116	118	119	120
115	104	99.1	96.6	93.2	96.5	101	103	103	107	111	122	127	115	143	145	154	157	158	158
120	135	129	129	126	128	132	131	135	139	139	149	164	153	180	188	192	196	196	196
125	179	165	160	157	164	161	160	170	173	158	190	203	205	221	227	230	233	233	233
130	229	228	223	210	190	175	190	211	201	194	240	246	254	258	265	269	270	270	270
135	295	294	277	250	222	223	257	264	253	273	288	290	294	296	302	307	307	307	307
140	337	338	333	312	308	314	321	323	322	324	327	329	331	334	337	339	339	339	339
145	372	372	374	371	366	363	364	364	363	365	367	367	368	371	371	371	371	371	371
150	403	402	403	405	404	400	398	396	396	397	398	400	402	403	404	404	403	403	402
155	430	429	429	429	431	433	430	428	427	426	426	427	427	427	427	427	426	426	426
160	454	452	451	451	452	452	453	455	454	453	452	451	451	450	450	450	450	449	449
165	473	472	471	470	469	469	469	470	470	471	471	472	472	472	473	473	473	472	472
170	487	486	485	484	484	483	483	483	482	482	482	482	482	482	482	482	482	482	482
175	497	496	495	495	494	494	493	493	493	492	492	492	492	492	491	491	491	491	491
180	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.00V I:0.2042A P:46.970W PF:0.9954 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:4708.29x1 lm		
NAME: UP-DB77A-1200-45W	TYPE: 45W	WEIGHT: 1
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 0.0646	Shielding Angle:

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275	1275				
5	1255	1255	1255	1255	1255	1255	1255	1256	1256	1257	1258	1259	1260	1261	1262				
10	1234	1233	1233	1232	1231	1230	1229	1229	1229	1229	1230	1231	1232	1234	1236				
15	1213	1211	1208	1206	1203	1200	1198	1195	1194	1192	1192	1192	1193	1195	1198				
20	1161	1161	1160	1161	1161	1163	1161	1156	1151	1148	1145	1143	1143	1144	1147				
25	1105	1104	1102	1101	1099	1099	1099	1101	1103	1096	1091	1087	1085	1085	1088				
30	1049	1046	1043	1039	1036	1033	1031	1030	1031	1034	1031	1024	1020	1018	1020				
35	973	972	972	972	972	966	962	958	955	955	958	955	948	944	945				
40	893	891	890	888	887	887	888	884	878	874	873	876	869	863	862				
45	813	811	808	805	803	800	798	798	799	791	786	785	787	777	774				
50	721	720	720	720	719	714	709	705	703	704	697	693	693	688	682				
55	625	624	623	622	621	620	620	614	609	606	607	600	597	597	588				
60	530	529	527	524	522	519	518	517	517	510	507	507	500	500	491				
65	428	427	427	425	424	421	418	415	414	414	410	405	404	398	393				
70	324	324	323	322	321	319	318	317	314	311	310	309	303	299	296				
75	221	221	220	220	219	218	218	217	216	214	211	209	208	202	197				
80	147	145	143	140	136	132	126	121	121	121	121	119	116	114	107				
85	75.6	75.5	75.2	74.6	73.7	72.3	70.3	67.4	63.6	58.7	52.3	45.6	47.5	45.3	43.6				
90	4.62	6.07	7.80	9.72	11.8	13.9	16.0	17.9	19.7	21.3	22.7	24.0	25.0	25.7	26.1				
95	30.5	31.8	33.2	34.8	36.4	38.0	39.8	41.4	43.0	44.5	45.9	47.5	48.9	50.3	52.9				
100	56.5	57.5	58.6	59.8	61.0	62.3	63.7	65.4	67.9	70.0	71.7	73.1	74.7	77.2	78.6				
105	83.5	85.2	87.0	89.0	91.0	93.0	95.1	96.8	98.2	99.4	101	102	105	106	108				
110	121	122	124	125	126	127	129	130	131	132	133	135	136	137	140				
115	159	160	160	161	162	163	163	164	165	167	168	168	170	171	172				
120	197	197	197	197	198	198	199	200	202	201	202	204	204	206	205				
125	233	233	234	234	234	235	236	236	235	236	237	237	238	240	239				
130	270	270	270	271	271	270	269	269	270	272	271	271	273	273	273				
135	306	305	305	304	304	303	304	304	306	304	304	305	308	306	306				
140	338	338	337	337	337	338	338	338	336	336	337	340	339	338	339				
145	371	370	370	371	371	369	368	367	367	368	371	370	369	369	370				
150	402	401	400	399	398	397	397	397	398	400	400	398	397	398	400				
155	425	425	425	424	424	425	425	426	428	426	424	424	424	425	427				
160	449	449	449	450	450	451	451	450	448	447	447	447	447	449	450				
165	471	471	470	469	468	468	467	466	466	466	466	467	468	469	471				
170	481	481	481	481	481	481	481	481	481	481	482	483	484	485	486				
175	491	491	491	491	491	492	492	492	493	493	493	494	495	495	496				
180	501	501	501	501	501	501	501	501	501	501	501	501	501	501	501				

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-07-30

V(B) Range:-180 - 180DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:8.690m [K=1.0000]
Remarks: