

**EINDHOVEN-75RW WW**  
Ordernr: A0135002

## **PHOTOMETRIC REPORT**



LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

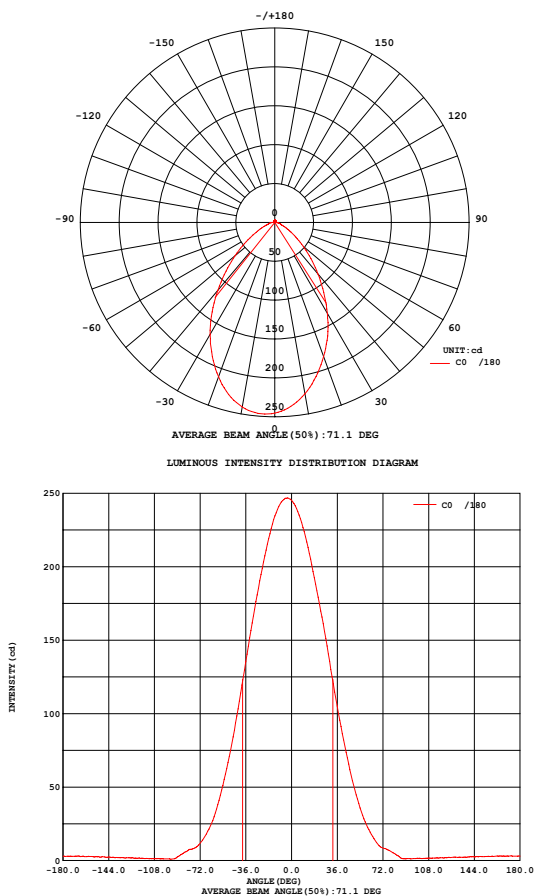


Fig. C0/C180

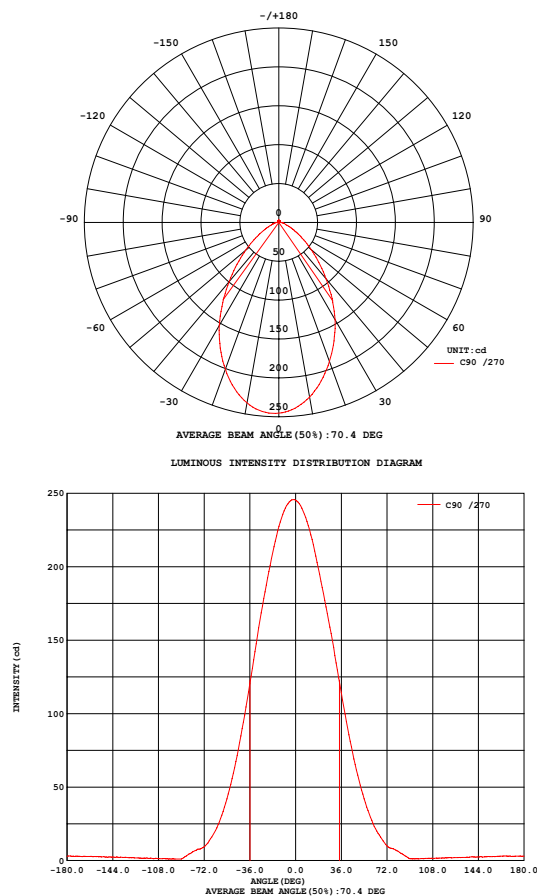


Fig. C90/C270

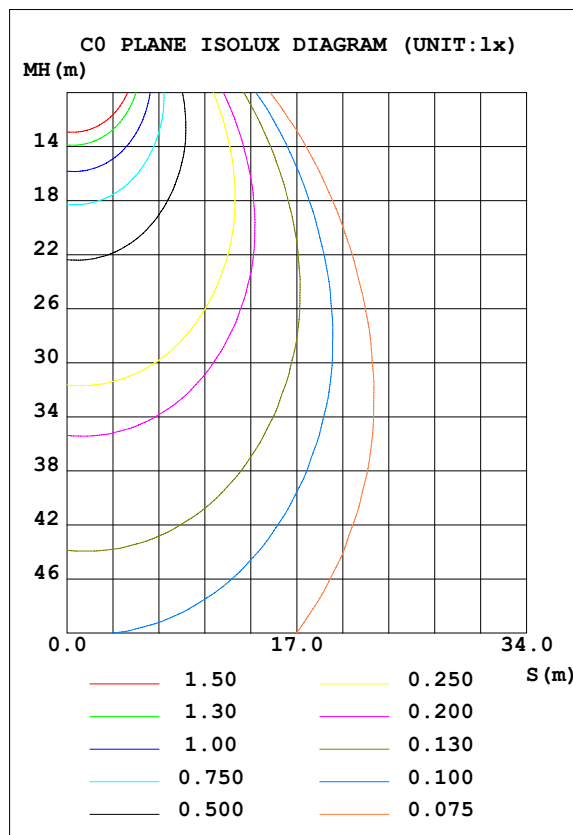
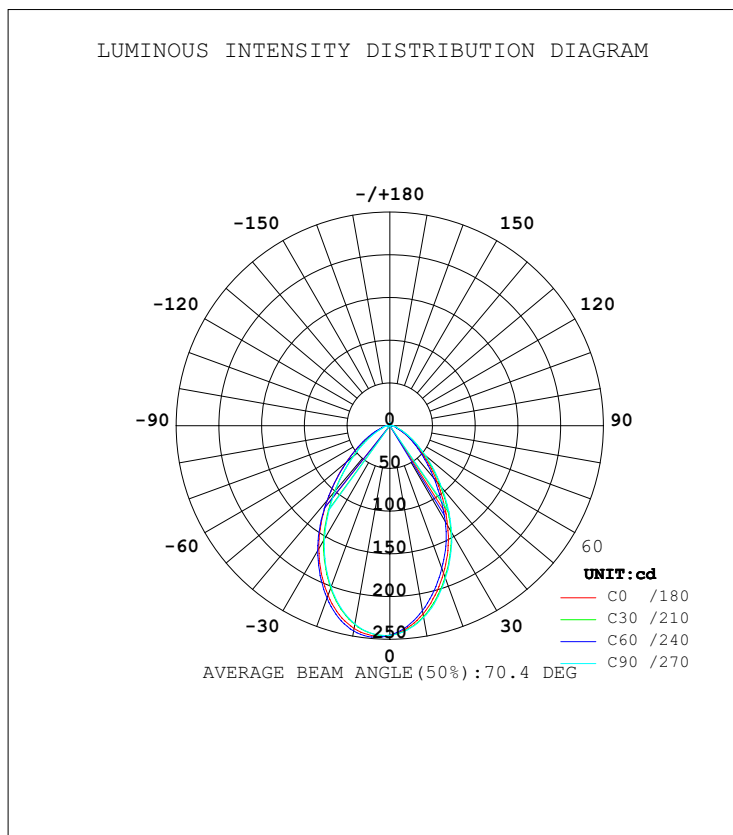
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: chen  
Test Date: 2011-09-26

Y Range: 0 - 180DEG  
Y Interval: 1.0DEG  
Test System: EVERFINE GO-2000B SYSTEM V1.0.139  
Humidity: 65.0%  
Test Distance: 7.000m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 230v AC	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER:	SURFACE:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	248.2	S/MH (C0/180)	1.06
NOMINAL POWER (W)	10	EFFICIENCY (%)	100.0	S/MH (C90/270)	1.00
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	382.34	$\eta$ UP (C0-180)	1.5
NOMINAL FLUX (lm)	382.3	CIE CLASS	DIRECT	$\eta$ DN (C0-180)	51.3
LAMPS INSIDE	1	$\eta$ up (%)	3.1	$\eta$ UP (C180-360)	1.6
TEST VOLTAGE (V)	230.3	$\eta$ down (%)	96.9	$\eta$ DN (C180-360)	45.6



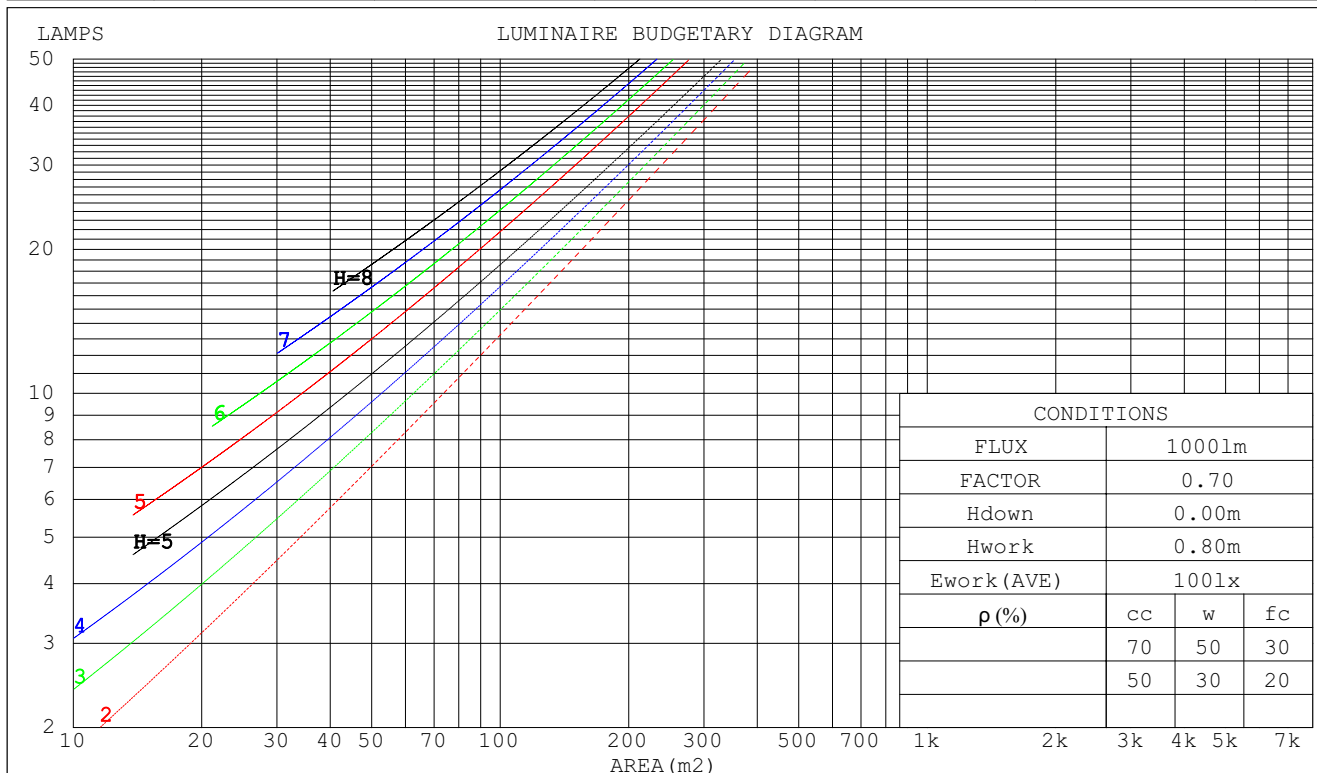
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: chen  
 Test Date: 2011-09-26

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity: 65.0%  
 Test Distance: 7.000m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

<b>NAME: 230v AC</b>	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>DIMENSION:</b>	<b>SPECIFICATION:</b>	<b>SERIAL No.:</b>
<b>MANUFACTURER:</b>	<b>SURFACE:</b>	<b>PROTECTION ANGLE:</b>

$\rho_{cc}$	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	1.07	1.03	1.00	1.04	1.01	.98	.99	.97	.95	.95	.93	.91	.91	.89	.88	.86
2.0	.96	.90	.86	.94	.89	.85	.90	.86	.82	.86	.83	.80	.83	.80	.78	.76
3.0	.87	.80	.75	.85	.79	.74	.82	.77	.72	.79	.74	.71	.76	.72	.69	.67
4.0	.79	.71	.66	.77	.71	.65	.75	.69	.64	.72	.67	.63	.70	.65	.62	.60
5.0	.72	.64	.59	.71	.64	.58	.68	.62	.57	.66	.61	.57	.64	.59	.56	.54
6.0	.66	.58	.53	.65	.58	.52	.63	.56	.52	.61	.55	.51	.59	.54	.51	.49
7.0	.61	.53	.48	.60	.53	.48	.58	.52	.47	.56	.51	.47	.55	.50	.46	.44
8.0	.56	.49	.44	.55	.48	.43	.54	.47	.43	.52	.47	.43	.51	.46	.42	.40
9.0	.52	.45	.40	.51	.45	.40	.50	.44	.39	.49	.43	.39	.48	.43	.39	.37
10.0	.49	.42	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.45	.40	.36	.34



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:chen  
 Test Date:2011-09-26

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total
10	241.0	239.9	235.6	231.1	223.8	223.3	227.9	226.4	0- 10	22.70	22.70
20	211.3	208.5	200.8	204.7	183.5	183.4	190.1	196.9	10- 20	60.57	83.28
30	166.5	162.1	153.2	162.1	135.5	136.5	144.8	155.6	20- 30	80.89	164.1
40	113.8	107.4	99.10	107.6	86.35	86.40	94.66	102.3	30- 40	78.63	242.8
50	66.80	61.06	55.68	61.48	47.89	48.88	54.74	55.00	40- 50	59.18	301.9
60	32.48	31.46	26.42	29.76	22.36	25.72	27.35	25.79	50- 60	36.39	338.3
70	13.87	13.14	11.10	11.85	9.268	10.62	12.14	10.79	60- 70	18.54	356.9
80	7.678	7.215	6.398	6.777	5.261	5.847	6.600	6.422	70- 80	9.118	366.0
90	2.475	2.034	1.053	1.885	1.147	1.250	1.260	1.831	80- 90	4.331	370.3
100	1.120	1.143	1.031	1.373	1.515	1.509	1.404	1.649	90-100	1.418	371.8
110	1.301	1.511	1.558	1.507	1.574	1.613	1.569	1.911	100-110	1.540	373.3
120	1.744	1.645	1.553	1.720	1.707	1.919	1.872	1.968	110-120	1.664	375.0
130	1.926	1.847	2.069	2.008	2.267	2.218	2.047	2.283	120-130	1.728	376.7
140	2.230	2.194	2.361	2.294	2.443	2.492	2.473	2.400	130-140	1.698	378.4
150	2.331	2.542	2.388	2.554	2.721	2.695	2.612	2.761	140-150	1.553	379.9
160	2.886	2.706	2.648	2.682	2.940	2.895	2.890	2.852	150-160	1.253	381.2
170	2.956	2.946	2.925	2.926	3.062	2.983	2.776	2.909	160-170	0.822	382.0
180	2.945	2.973	2.935	3.066	2.988	3.039	3.026	3.060	170-180	0.282	382.3
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:chen  
 Test Date:2011-09-26

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: 230v AC	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER:	SURFACE:	PROTECTION ANGLE:

$\rho_{cc}$	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	.244	.139	.044	.236	.135	.043	.222	.127	.041	.208	.120	.039	.196	.113	.037		
2.0	.232	.127	.039	.225	.124	.038	.212	.118	.037	.200	.112	.035	.190	.107	.034		
3.0	.218	.116	.035	.212	.114	.034	.201	.109	.033	.191	.104	.032	.181	.100	.031		
4.0	.205	.106	.031	.200	.104	.031	.190	.101	.030	.180	.097	.029	.172	.093	.028		
5.0	.192	.098	.028	.188	.096	.028	.179	.093	.027	.171	.090	.027	.163	.087	.026		
6.0	.181	.091	.026	.177	.089	.026	.169	.087	.025	.161	.084	.025	.154	.081	.024		
7.0	.171	.084	.024	.167	.083	.024	.160	.081	.023	.153	.078	.023	.147	.076	.022		
8.0	.161	.079	.022	.158	.078	.022	.151	.076	.022	.145	.074	.021	.139	.072	.021		
9.0	.152	.074	.021	.149	.073	.020	.144	.071	.020	.138	.069	.020	.133	.067	.019		
10.0	.145	.069	.019	.142	.069	.019	.137	.067	.019	.131	.065	.019	.127	.064	.018		

$\rho_{cc}$	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	.214	.214	.214	.183	.183	.183	.125	.125	.125	.072	.072	.072	.023	.023	.023		
1.0	.200	.181	.164	.171	.155	.141	.117	.107	.097	.067	.062	.057	.022	.020	.018		
2.0	.188	.156	.129	.161	.135	.112	.111	.093	.078	.064	.054	.046	.020	.018	.015		
3.0	.179	.138	.106	.153	.119	.092	.105	.083	.064	.061	.048	.038	.020	.016	.012		
4.0	.170	.124	.089	.146	.108	.078	.101	.075	.055	.058	.044	.032	.019	.014	.011		
5.0	.163	.114	.077	.140	.098	.067	.096	.069	.048	.056	.040	.028	.018	.013	.009		
6.0	.156	.105	.068	.134	.091	.060	.092	.064	.042	.054	.037	.025	.017	.012	.008		
7.0	.149	.098	.062	.129	.085	.054	.089	.059	.038	.052	.035	.023	.017	.011	.008		
8.0	.144	.092	.057	.124	.080	.049	.085	.056	.035	.050	.033	.021	.016	.011	.007		
9.0	.138	.087	.052	.119	.075	.046	.082	.053	.033	.048	.031	.019	.016	.010	.006		
10.0	.133	.083	.049	.115	.072	.043	.080	.051	.031	.046	.030	.018	.015	.010	.006		

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:chen  
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$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

NAME: 230v AC		TYPE:					WEIGHT:				
DIMENSION:		SPECIFICATION:					SERIAL No.:				
MANUFACTURER: MASON		SURFACE:					PROTECTION 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		11.1	12.3	11.4	12.5	12.8	11.1	12.3	11.4	12.6	12.8
	3H	11.5	12.6	11.8	12.9	13.2	11.5	12.6	11.8	12.9	13.2
	4H	11.7	12.7	12.0	13.0	13.3	11.6	12.7	12.0	13.0	13.3
	6H	11.9	12.9	12.3	13.2	13.5	11.8	12.8	12.2	13.1	13.4
	8H	12.0	13.0	12.4	13.3	13.7	11.9	12.9	12.3	13.2	13.5
	12H	12.2	13.1	12.6	13.5	13.8	12.0	12.9	12.4	13.2	13.6
4H	2H	11.3	12.3	11.6	12.6	12.9	11.3	12.4	11.6	12.7	13.0
	3H	11.8	12.7	12.2	13.0	13.4	11.8	12.8	12.2	13.1	13.5
	4H	12.0	12.9	12.4	13.2	13.6	12.1	12.9	12.5	13.3	13.7
	6H	12.4	13.1	12.8	13.5	14.0	12.4	13.1	12.8	13.5	14.0
	8H	12.6	13.3	13.1	13.7	14.2	12.6	13.3	13.0	13.7	14.1
	12H	12.9	13.5	13.3	13.9	14.4	12.7	13.4	13.2	13.8	14.3
8H	4H	12.1	12.8	12.6	13.2	13.6	12.1	12.8	12.6	13.2	13.7
	6H	12.6	13.2	13.1	13.6	14.1	12.6	13.2	13.1	13.7	14.1
	8H	12.9	13.4	13.5	13.9	14.4	12.9	13.4	13.4	13.9	14.4
	12H	13.3	13.7	13.8	14.2	14.8	13.3	13.7	13.8	14.2	14.7
12H	4H	12.1	12.7	12.6	13.2	13.6	12.1	12.8	12.6	13.2	13.7
	6H	12.7	13.2	13.2	13.7	14.2	12.7	13.2	13.2	13.7	14.2
	8H	13.1	13.5	13.6	14.0	14.5	13.1	13.5	13.6	14.0	14.5
Variations with the observer position at spacings:											
S = 1.0H		+ 0.6 / - 0.7					+ 0.7 / - 0.8				
1.5H		+ 0.5 / - 0.5					+ 0.4 / - 0.7				
2.0H		+ 1.4 / - 1.2					+ 1.1 / - 1.3				

CIE Pub.117 Corrected 382.3 lm Total Lamp Luminous Flux. (8log(F/F0) = -3.3)

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γ Range: 0 - 180DEG  
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 Test System: EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity: 65.0%  
 Test Distance: 7.000m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

NAME: 230v AC	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER: MASON	SURFACE:	PROTECTION 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	72	62	55	71	61	55	68	60	54	48
0.80	82	72	65	80	71	65	77	69	64	57
1.00	89	80	73	87	79	73	83	76	71	64
1.25	95	86	80	92	85	79	88	82	78	70
1.50	98	91	85	96	89	84	92	86	82	74
2.00	103	97	92	101	95	91	96	92	88	79
2.50	106	100	96	103	98	94	98	94	91	81
3.00	108	103	99	105	101	97	100	97	94	84
4.00	110	107	103	108	104	101	102	100	97	87
5.00	112	109	106	109	106	104	104	102	99	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Ceiling Mounted				SHRNOM = 1.25			

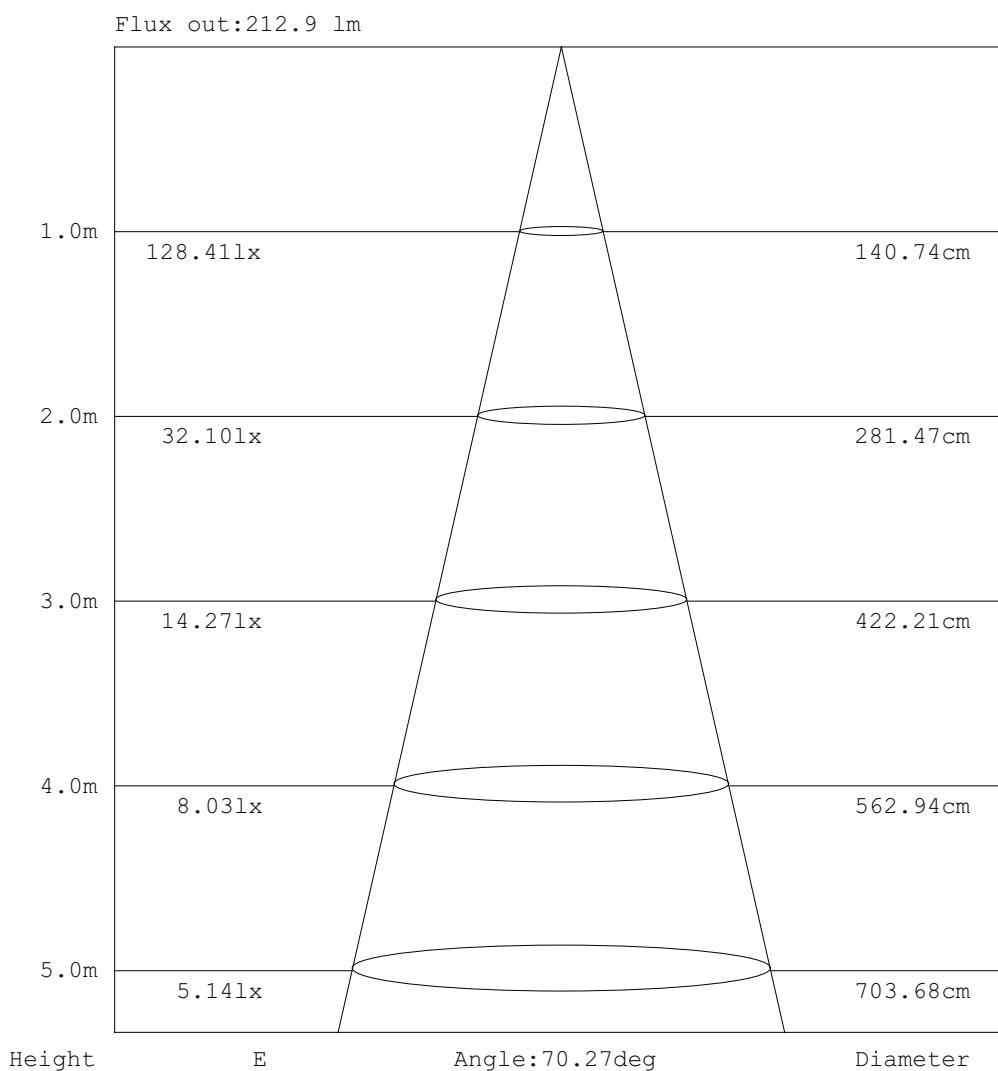
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AAI Figure

NAME: 230v AC	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER: MASON	SURFACE:	PROTECTION ANGLE:



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

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 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

<b>NAME:</b> 230v AC	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>DIMENSION:</b>	<b>SPECIFICATION:</b>	<b>SERIAL No.:</b>
<b>MANUFACTURER:</b> MASON	<b>SURFACE:</b>	<b>PROTECTION ANGLE:</b>

Table--1

UNIT: cd

C (DEG) \ Y (DEG)	0	30	60	90	120	150	180	210	240	270	300	330						
0	245	245	245	245	245	245	245	245	245	245	245	245						
5	247	244	248	244	246	237	237	239	236	240	238	238						
10	241	236	244	236	239	222	224	227	220	228	225	228						
15	229	222	233	221	227	206	205	210	200	211	207	220						
20	211	202	215	201	209	200	184	189	178	190	186	210						
25	190	179	193	178	187	185	161	167	155	168	163	195						
30	167	155	169	153	163	161	136	143	130	145	138	175						
35	140	128	142	126	136	133	110	117	104	119	112	150						
40	114	101	114	99.1	110	105	86.3	92.4	80.2	94.6	85.9	121						
45	88.6	76.8	87.9	76.0	85.8	80.0	65.7	70.6	60.8	72.8	60.7	93.4						
50	66.8	56.3	65.8	55.6	64.3	58.2	47.8	52.8	44.9	54.7	42.2	69.5						
55	47.8	41.1	48.2	39.0	45.9	41.0	33.2	38.6	32.8	39.3	27.2	49.6						
60	32.4	28.5	34.4	26.4	31.3	28.0	22.3	27.7	23.6	27.3	17.8	34.8						
65	21.3	18.6	23.7	17.5	20.2	16.5	14.8	18.8	14.9	18.5	12.2	22.7						
70	13.8	11.6	14.6	11.1	12.2	11.3	9.26	11.6	9.57	12.1	8.20	13.7						
75	9.18	8.21	9.60	7.89	8.44	8.70	7.66	8.54	7.87	8.43	6.49	9.91						
80	7.67	6.72	7.71	6.39	7.01	6.50	5.26	6.44	5.23	6.60	4.57	8.51						
85	5.03	3.90	5.48	3.76	4.53	3.46	2.56	3.63	2.35	3.95	2.65	5.38						
90	2.47	1.27	2.79	1.05	2.07	1.67	1.14	1.21	1.28	1.26	1.36	2.36						
95	0.98	1.02	0.992	1.01	1.19	1.72	1.24	1.23	1.24	1.20	1.16	1.56						
100	1.12	1.23	1.05	1.03	1.12	1.65	1.51	1.45	1.56	1.40	1.57	1.73						
105	1.33	1.33	1.22	1.28	1.19	1.90	1.50	1.71	1.53	1.60	1.55	1.56						
110	1.30	1.50	1.52	1.55	1.25	1.79	1.57	1.53	1.69	1.56	1.82	2.01						
115	1.38	1.62	1.65	1.51	1.48	1.97	1.79	1.87	1.80	1.70	1.71	1.84						
120	1.74	1.61	1.67	1.55	1.61	1.83	1.70	1.90	1.93	1.87	1.86	2.08						
125	1.86	1.79	1.55	1.84	1.70	2.04	2.04	1.86	2.05	2.04	2.05	2.31						
130	1.92	1.88	1.80	2.06	1.96	2.05	2.26	2.20	2.23	2.04	2.30	2.25						
135	1.93	2.07	2.05	2.10	2.01	2.18	2.21	2.25	2.45	2.31	2.22	2.39						
140	2.23	2.15	2.23	2.36	2.13	2.46	2.44	2.38	2.60	2.47	2.46	2.33						
145	2.19	2.40	2.15	2.31	2.29	2.46	2.53	2.69	2.67	2.42	2.64	2.56						
150	2.33	2.47	2.61	2.38	2.40	2.72	2.72	2.60	2.78	2.61	2.85	2.65						
155	2.49	2.56	2.49	2.53	2.49	2.81	2.84	2.79	2.89	2.67	2.87	3.00						
160	2.88	2.62	2.78	2.64	2.52	2.85	2.94	3.00	2.78	2.89	2.79	2.92						
165	2.85	2.79	3.07	2.76	2.63	2.90	3.05	2.96	2.86	3.08	3.03	2.94						
170	2.95	3.01	2.87	2.92	2.82	3.04	3.06	3.06	2.90	2.77	2.87	2.94						
175	2.85	2.93	2.90	3.01	2.90	3.08	3.04	2.90	3.13	3.01	2.91	3.19						
180	2.94	2.93	3.00	2.93	2.85	3.30	2.98	3.02	3.05	3.02	2.92	3.21						

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:chen  
 Test Date:2011-09-26

Y Range: 0 - 180DEG  
 Y Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B SYSTEM V1.0.139  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks: