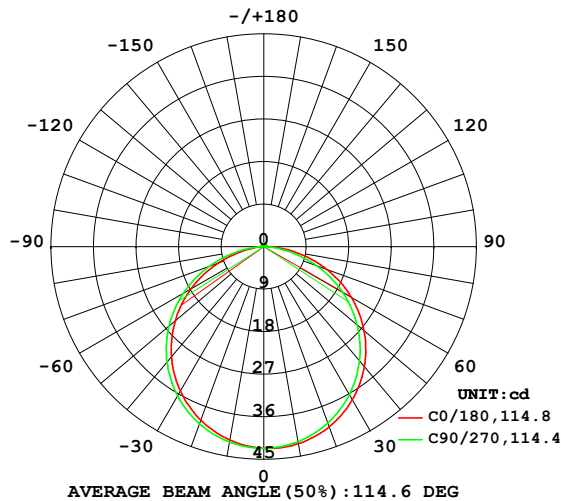


LUMINAIRE PHOTOMETRIC TEST REPORT

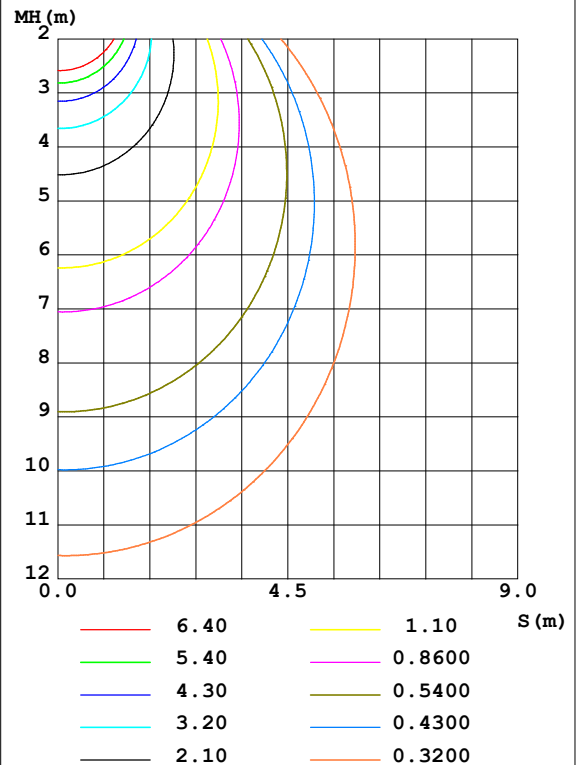
Test:U:12.207V I:0.2849A P:2.2545W PF:0.6482 Freq:59.98Hz Lamp Flux:127.541x1 lm		
NAME: 2701PS 4inch	TYPE:	WEIGHT:
SPEC.:2W 3000K	DIM.:	SERIAL No.:
MFR.: modian	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 56.57 lm/W			
MODEL		I _{max} (cd)	42.72	S/MH (C0/180)	1.24
NOMINAL POWER(W)		LOR(%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	127.54	η UP,DN (C0-180)	1.0,49.5
NOMINAL FLUX(lm)	127.541	CIE CLASS	DIRECT	η UP,DN (C180-360)	1.4,48.1
LAMPS INSIDE	1	η up (%)	2.4	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)		η down (%)	97.6	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

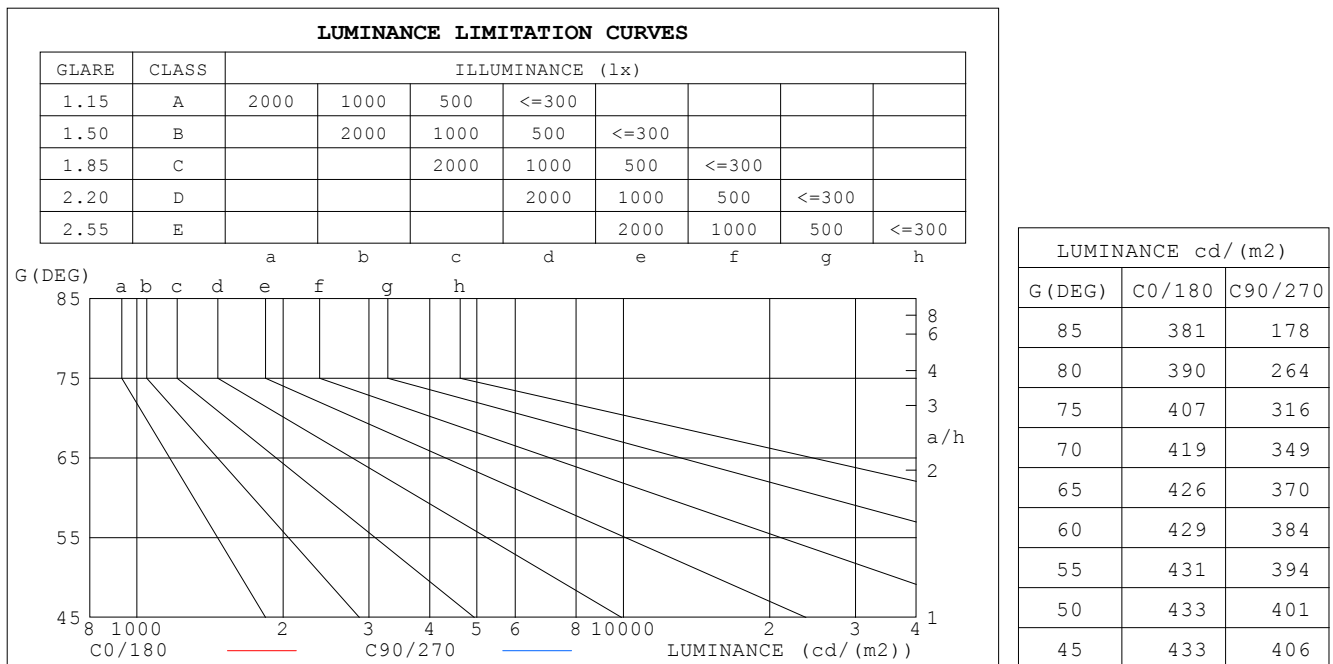
ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	42.32	42.23	41.89	41.60	41.53	41.67	41.96	42.29	0- 10	4.037	4.037	3.17,3.17
20	40.55	40.37	39.69	39.11	39.05	39.26	39.88	40.47	10- 20	11.58	15.62	12.2,12.2
30	37.43	37.18	36.20	35.39	35.27	35.59	36.44	37.30	20- 30	17.62	33.24	26.1,26.1
40	33.10	32.75	31.50	30.53	30.38	30.74	31.87	32.93	30- 40	21.38	54.62	42.8,42.8
50	27.71	27.27	25.80	24.65	24.47	24.89	26.20	27.48	40- 50	22.38	77.00	60.4,60.4
60	21.39	20.84	19.23	17.93	17.69	18.18	19.62	21.07	50- 60	20.44	97.44	76.4,76.4
70	14.27	13.64	11.94	10.55	10.26	10.81	12.33	13.88	60- 70	15.73	113.2	88.7,88.7
80	6.740	6.154	4.589	3.416	3.214	3.655	4.942	6.360	70- 80	8.950	122.1	95.8,95.8
90	0.7681	0.3730	0.2264	0.2408	0.5595	0.5613	0.5550	0.6434	80- 90	2.367	124.5	97.6,97.6
100	0.2287	0.2754	0.2863	0.3011	0.5208	0.5366	0.5161	0.5455	90-100	0.4407	124.9	98,98
110	0.3095	0.3354	0.3323	0.3648	0.5173	0.5259	0.5126	0.5242	100-110	0.4376	125.4	98.3,98.3
120	0.3976	0.4025	0.4030	0.4286	0.5244	0.5154	0.5197	0.5135	110-120	0.4387	125.8	98.6,98.6
130	0.4540	0.4695	0.4630	0.4923	0.5456	0.5154	0.5373	0.5135	120-130	0.4304	126.2	99,99
140	0.5032	0.5260	0.5126	0.5525	0.5877	0.5542	0.5658	0.5560	130-140	0.4039	126.6	99.3,99.3
150	0.5630	0.5860	0.5691	0.6127	0.6369	0.6248	0.6152	0.5948	140-150	0.3580	127.0	99.6,99.6
160	0.6229	0.6425	0.6257	0.6518	0.6688	0.6530	0.6576	0.6233	150-160	0.2894	127.3	99.8,99.8
170	0.6757	0.6883	0.6682	0.6977	0.7004	0.6742	0.6929	0.6729	160-170	0.1889	127.5	99.9,99.9
180	0.7214	0.7130	0.7106	0.7154	0.7179	0.7095	0.7141	0.7119	170-180	0.0659	127.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC01
Test Date:2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

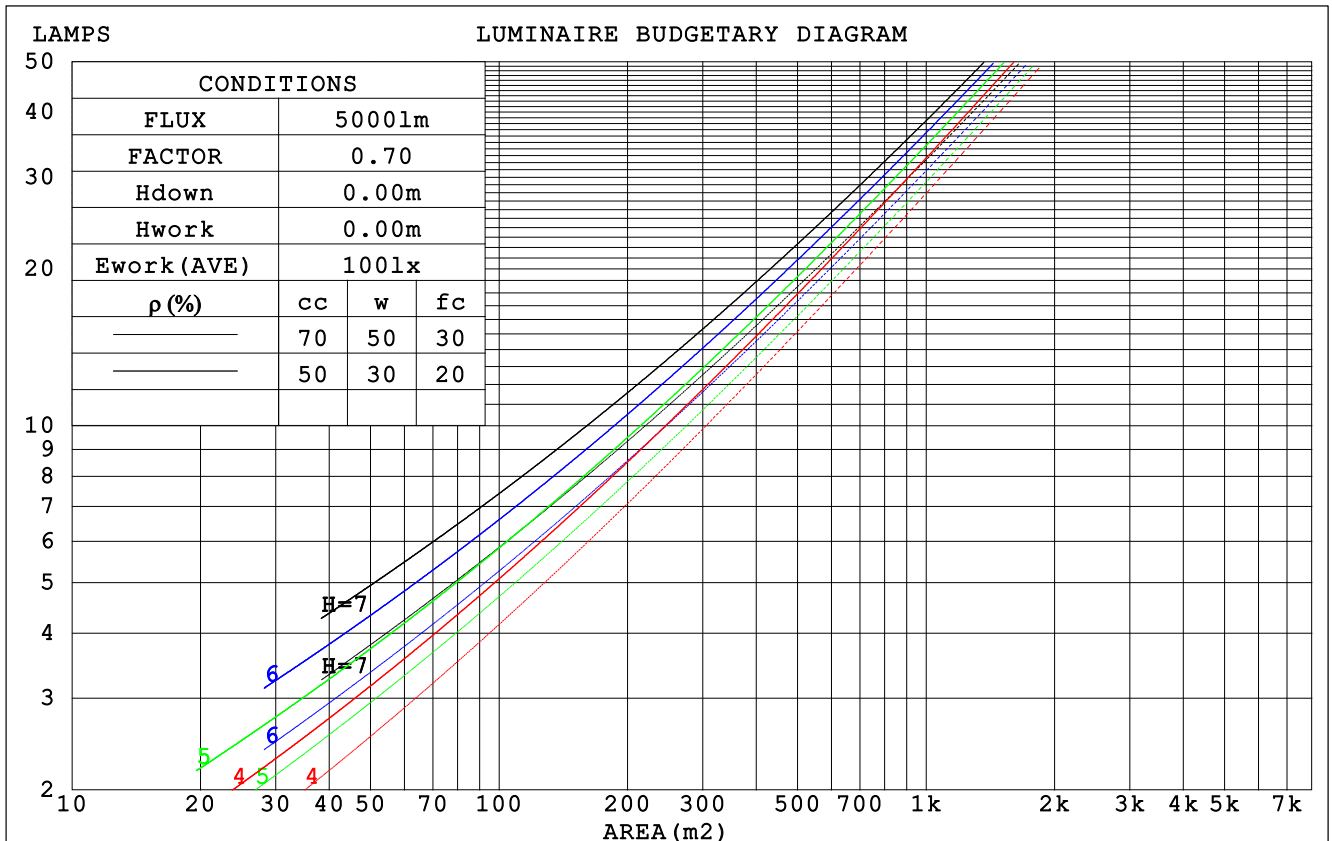


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.81
2.0	.90	.83	.77	.88	.81	.76	.84	.78	.74	.80	.76	.72	.77	.73	.70	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.70	.65	.60	.68	.63	.59	.57
4.0	.70	.61	.54	.68	.60	.53	.65	.58	.52	.63	.56	.51	.60	.55	.50	.48
5.0	.62	.53	.46	.61	.52	.46	.58	.51	.45	.56	.50	.44	.54	.48	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.38	.36
7.0	.51	.42	.36	.50	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8.0	.46	.38	.32	.45	.37	.31	.44	.36	.31	.42	.36	.31	.41	.35	.30	.28
9.0	.42	.34	.28	.42	.34	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.26
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

WEC AND CCEC

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	.311	.177	.056	.303	.173	.055	.288	.165	.053	.275	.159	.051	.263	.152	.049	
2.0	.293	.160	.049	.286	.157	.048	.273	.152	.047	.261	.146	.046	.250	.141	.045	
3.0	.271	.144	.043	.265	.142	.043	.253	.137	.042	.242	.133	.041	.232	.129	.040	
4.0	.250	.130	.038	.244	.128	.038	.234	.124	.037	.224	.121	.036	.216	.117	.036	
5.0	.231	.118	.034	.226	.116	.034	.217	.113	.033	.208	.110	.033	.200	.107	.032	
6.0	.214	.107	.031	.210	.106	.030	.201	.103	.030	.194	.101	.030	.186	.098	.029	
7.0	.199	.098	.028	.195	.097	.028	.188	.095	.027	.181	.093	.027	.174	.091	.027	
8.0	.186	.091	.026	.182	.090	.025	.176	.088	.025	.169	.086	.025	.164	.084	.024	
9.0	.174	.084	.024	.171	.083	.023	.165	.082	.023	.159	.080	.023	.154	.078	.023	
10.0	.164	.078	.022	.161	.078	.022	.155	.076	.021	.150	.075	.021	.145	.073	.021	

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	.209	.209	.209	.178	.178	.178	.122	.122	.122	.070	.070	.070	.022	.022	.022		
1.0	.199	.175	.153	.170	.150	.131	.116	.103	.091	.067	.060	.053	.021	.019	.017		
2.0	.191	.150	.116	.163	.129	.101	.112	.090	.070	.065	.052	.041	.021	.017	.013		
3.0	.183	.133	.093	.157	.115	.080	.108	.080	.056	.062	.047	.033	.020	.015	.011		
4.0	.176	.120	.077	.151	.103	.067	.104	.072	.047	.060	.042	.028	.019	.014	.009		
5.0	.168	.109	.066	.145	.095	.057	.100	.066	.040	.058	.039	.024	.019	.013	.008		
6.0	.161	.101	.058	.139	.088	.050	.096	.061	.036	.055	.036	.021	.018	.012	.007		
7.0	.154	.094	.052	.133	.082	.045	.092	.057	.032	.053	.034	.019	.017	.011	.006		
8.0	.148	.088	.048	.127	.077	.041	.088	.054	.029	.051	.032	.018	.017	.010	.006		
9.0	.142	.084	.044	.122	.072	.038	.085	.051	.027	.049	.030	.016	.016	.010	.005		
10.0	.136	.079	.041	.117	.069	.036	.081	.048	.026	.047	.029	.015	.015	.009	.005		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC01
Test Date:2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	17.3	18.8	17.6	19.0	19.3	16.9	18.4	17.2	18.6	18.9
3H	19.0	20.4	19.3	20.6	20.9	18.4	19.8	18.7	20.0	20.3
4H	19.7	21.0	20.1	21.3	21.6	19.0	20.3	19.3	20.6	20.9
6H	20.3	21.5	20.6	21.8	22.2	19.3	20.6	19.7	20.9	21.2
8H	20.5	21.7	20.9	22.0	22.3	19.4	20.6	19.8	21.0	21.3
12H	20.6	21.8	21.0	22.1	22.5	19.5	20.6	19.9	21.0	21.3
4H 2H	17.9	19.2	18.2	19.5	19.8	17.6	18.9	17.9	19.2	19.5
3H	19.8	20.9	20.2	21.3	21.6	19.3	20.4	19.7	20.8	21.1
4H	20.6	21.7	21.1	22.1	22.4	20.0	21.1	20.4	21.4	21.8
6H	21.3	22.3	21.8	22.7	23.1	20.5	21.4	20.9	21.8	22.2
8H	21.6	22.5	22.1	22.9	23.3	20.6	21.5	21.1	21.9	22.4
12H	21.8	22.6	22.3	23.0	23.5	20.7	21.5	21.2	21.9	22.4
8H 4H	20.9	21.8	21.4	22.2	22.6	20.4	21.2	20.8	21.6	22.1
6H	21.8	22.5	22.3	23.0	23.4	21.0	21.7	21.5	22.2	22.7
8H	22.1	22.8	22.6	23.3	23.8	21.2	21.9	21.7	22.4	22.9
12H	22.4	23.0	23.0	23.5	24.0	21.4	21.9	21.9	22.4	22.9
12H 4H	20.9	21.7	21.4	22.1	22.6	20.4	21.2	20.9	21.6	22.1
6H	21.8	22.5	22.3	22.9	23.4	21.1	21.8	21.6	22.2	22.7
8H	22.2	22.8	22.8	23.3	23.8	21.4	21.9	21.9	22.4	23.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 127.5 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -7.2)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC01
Test Date:2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

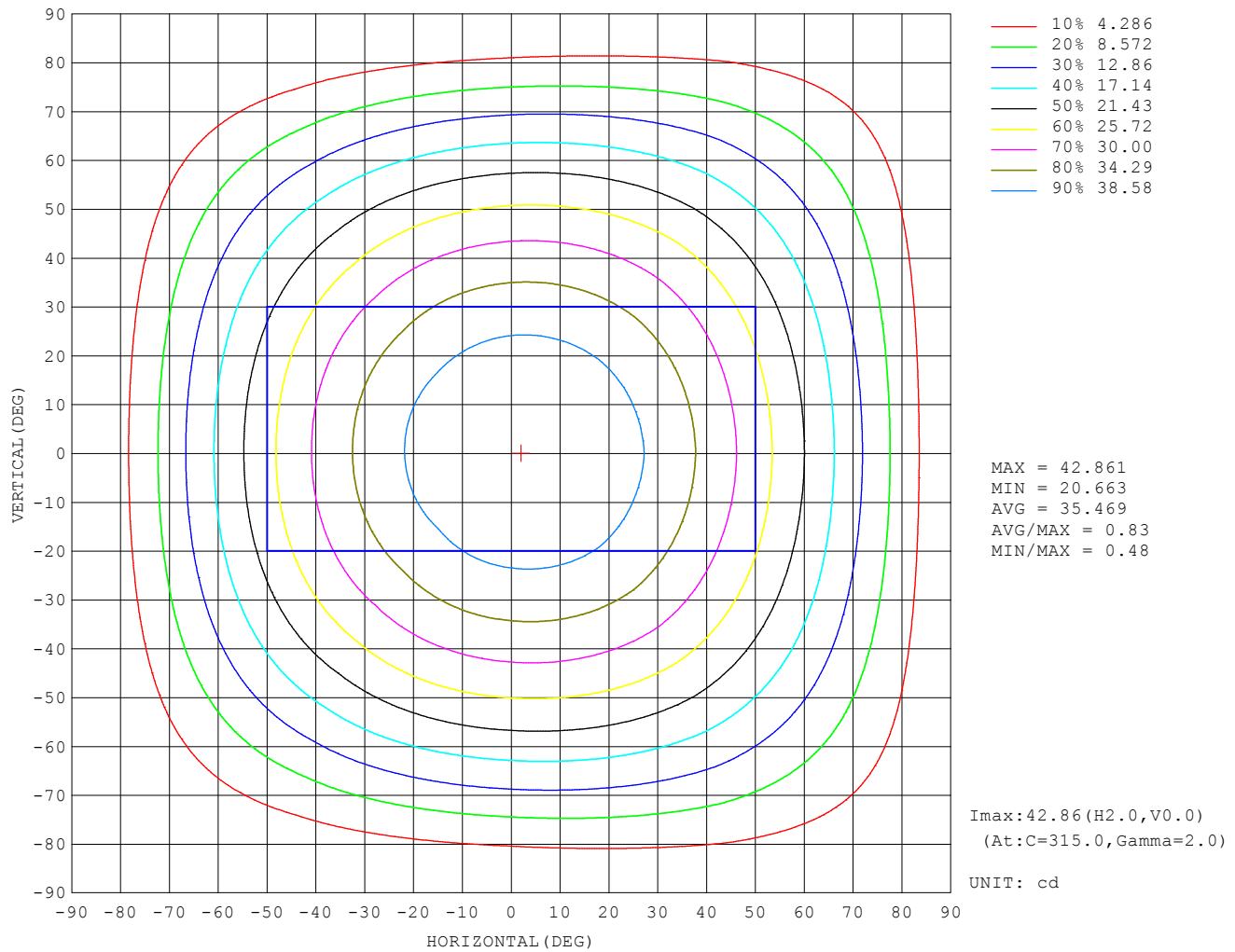
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	56	45	38	56	44	38	54	44	37	31
0.80	66	55	47	65	54	47	63	53	47	39
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	80	70	64	77	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	81	76	68
2.50	98	90	84	96	88	83	92	86	81	72
3.00	101	94	89	99	93	87	95	89	85	76
4.00	105	100	95	103	98	93	98	94	90	81
5.00	108	103	99	105	101	97	100	97	94	84
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC01
 Test Date: 2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 8.600m [K=1.0000]
 Remarks:

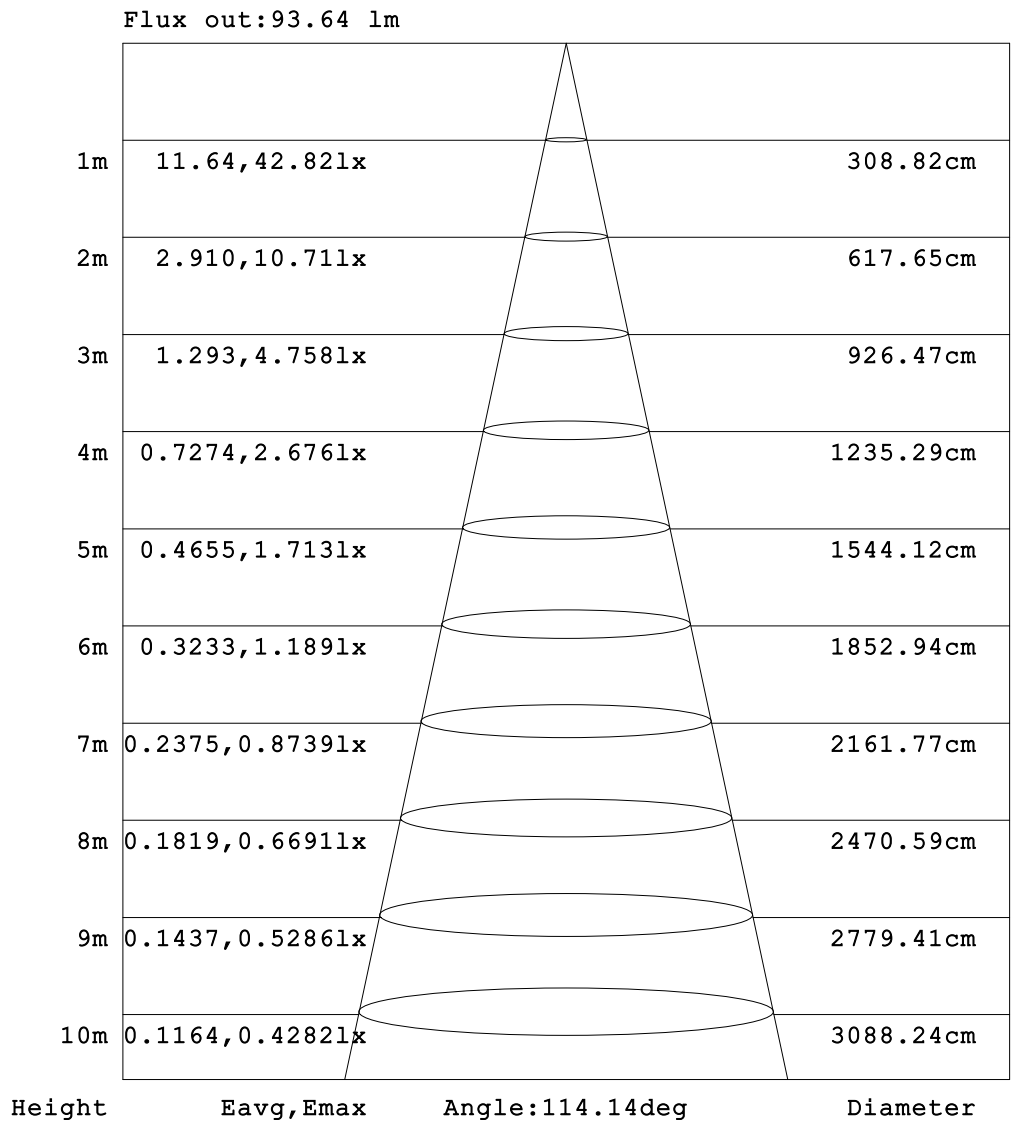
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC01
Test Date:2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

AAI Figure

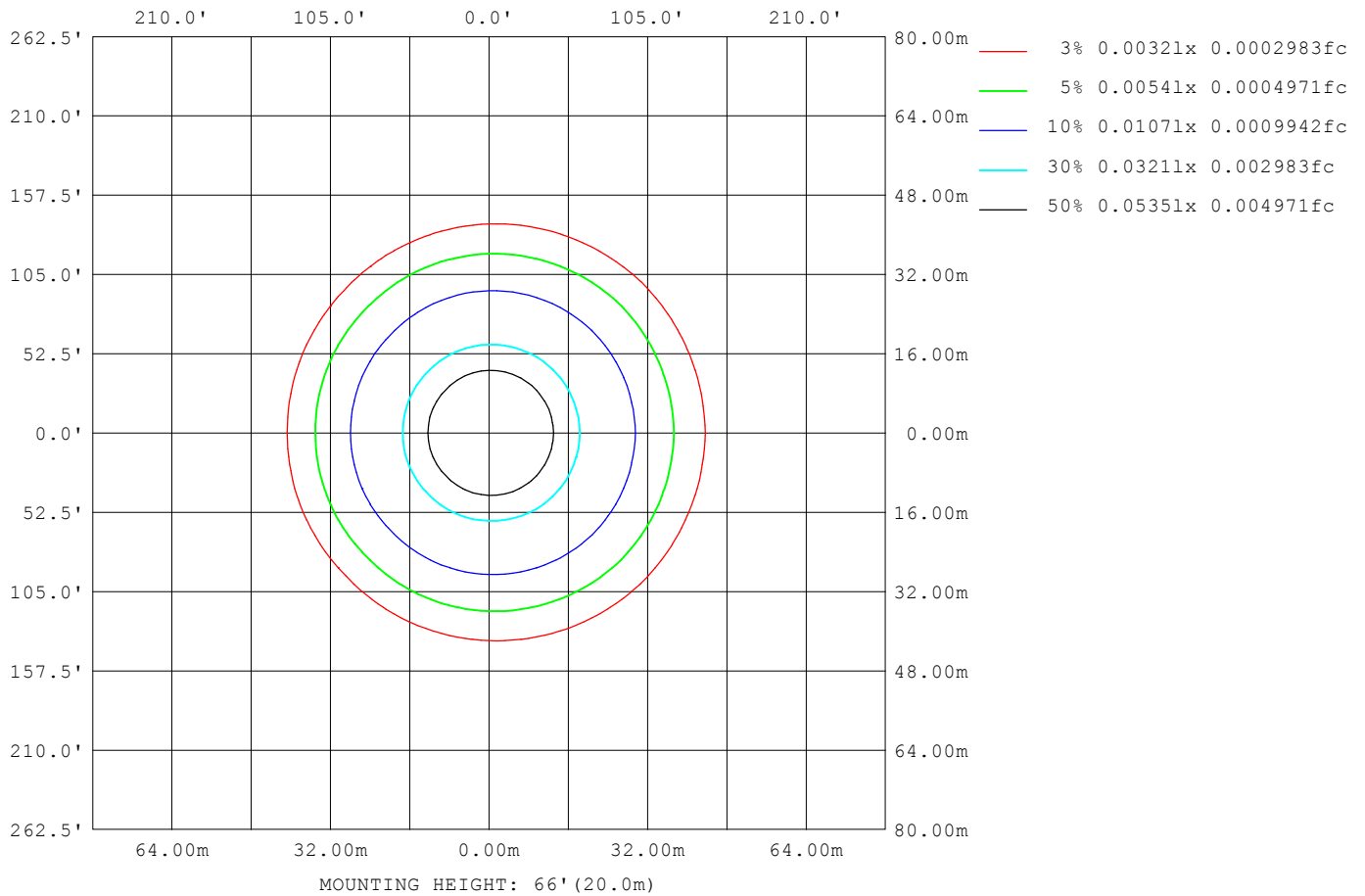


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:12.207V I:0.2849A P:2.2545W PF:0.6482 Freq:59.98Hz Lamp Flux:127.541x1 lm		
NAME: 2701PS 4inch	TYPE:	WEIGHT:
SPEC.:2W 3000K	DIM.:	SERIAL No.:
MFR.: modian	SUR.:	Shielding Angle:

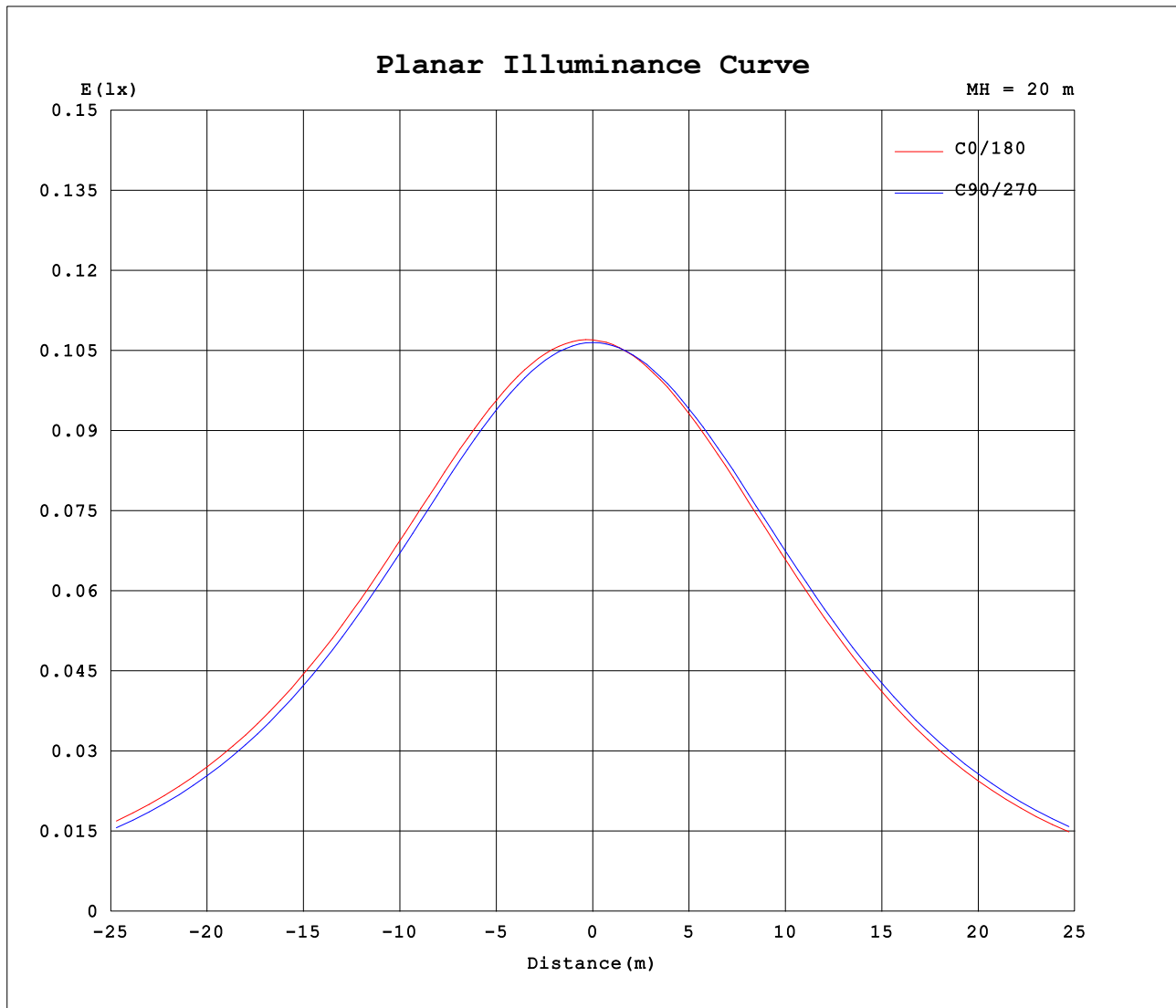
AvgL	cd/m2
L_0~180 (65) av	378
L_0~180 (75) av	329
L_0~180 (85) av	241
L_90~270 (65) av	376
L_90~270 (75) av	324
L_90~270 (85) av	189
L_45 (65) av	377
L_45 (75) av	327
L_45 (85) av	221

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QC01
Test Date:2025-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.600m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QC01
Test Date: 2025-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.600m [K=1.0000]
Remarks: