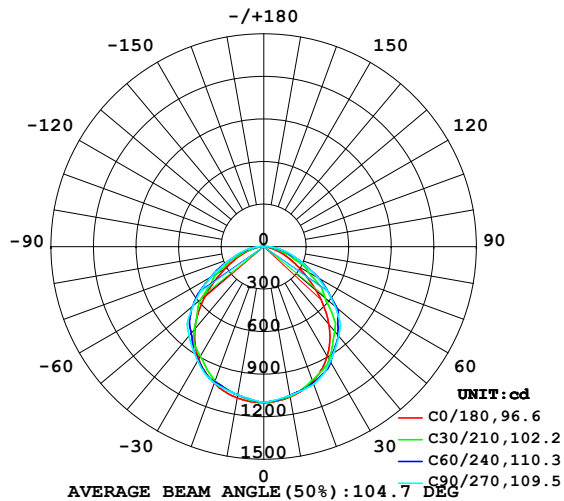


LUMINAIRE PHOTOMETRIC TEST REPORT

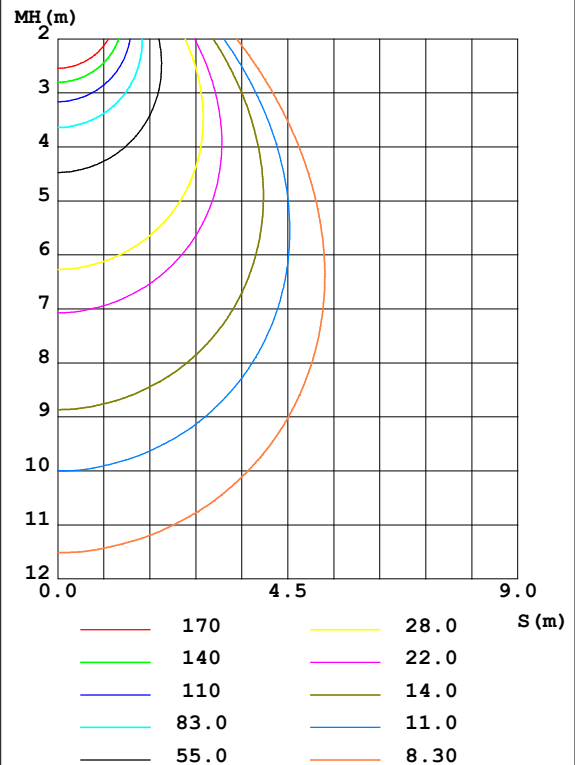
Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-RFKW-SL		
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.07 lm/W			
MODEL		I _{max} (cd)	1100	S/MH(C0/180)	1.24
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	2858.9	η UP,DN(C0-180)	0.0,50.2
NOMINAL FLUX(lm)	2858.88	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

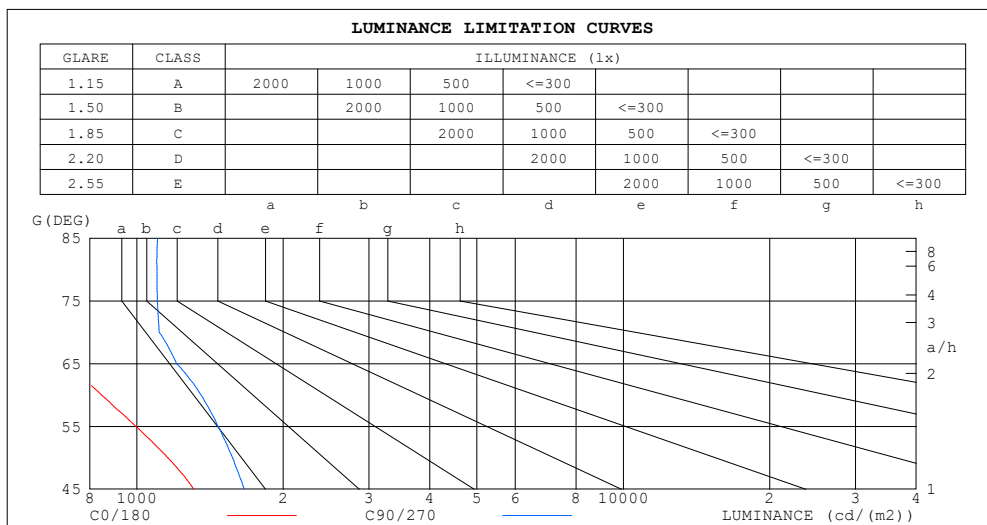
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1077	1067	1066	1064	1083	1062	1062	1064	0- 10	103.1	103.1	3.61,3.61
20	1012	1018	1032	1006	1024	1001	1024	1013	10- 20	294.6	397.7	13.9,13.9
30	894.6	934.4	937.6	926.9	918.4	921.8	931.6	925.2	20- 30	448.2	845.9	29.6,29.6
40	715.2	787.2	822.9	790.3	756.4	788.9	820.7	776.2	30- 40	534.0	1380	48.3,48.3
50	484.3	618.6	657.2	628.1	537.0	630.7	653.0	604.8	40- 50	537.9	1918	67.1,67.1
60	275.1	423.9	440.6	430.0	319.0	432.7	428.5	410.4	50- 60	444.3	2362	82.6,82.6
70	134.5	232.0	247.3	227.6	167.0	227.7	231.3	220.0	60- 70	293.5	2656	92.9,92.9
80	34.95	102.2	124.1	95.70	61.50	95.28	116.0	95.13	70- 80	154.9	2810	98.3,98.3
90	0.4064	0.8852	1.011	0.9984	0.8959	0.7476	0.7457	0.6806	80- 90	48.39	2859	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 2.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-08-09

$V(B)$ Range:-90 - 90DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:6.300m [K=0.9841]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	89	1104
80	310	1100
75	480	1103
70	605	1112
65	721	1208
60	846	1356
55	996	1470
50	1159	1573
45	1311	1663

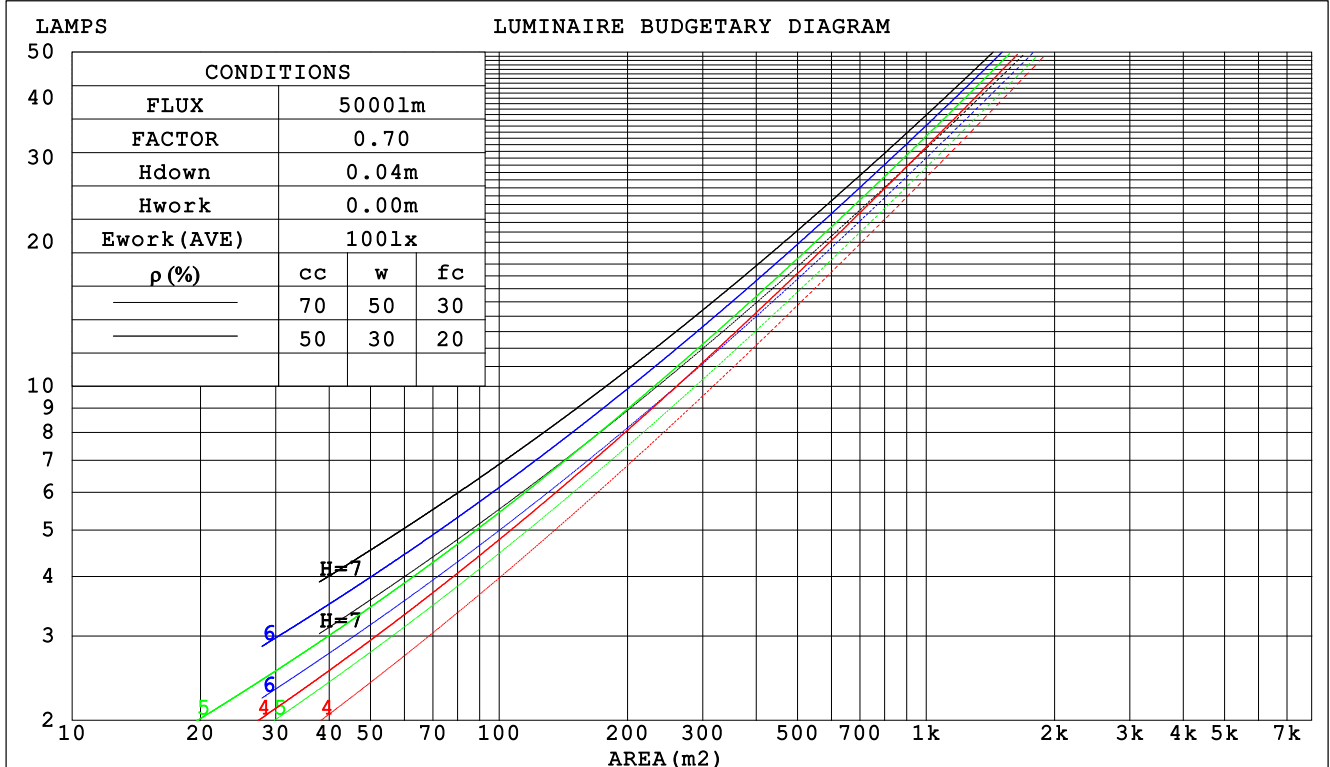
H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz		
Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.05	1.01	.97	1.02	.99	.95	.98	.95	.92	.94	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.87	.81	.77	.83	.79	.75	.80	.77	.74	.72
3.0	.81	.73	.67	.80	.72	.66	.77	.70	.65	.74	.69	.64	.71	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.61	.56	.66	.60	.55	.64	.59	.54	.52
5.0	.65	.56	.49	.64	.55	.49	.61	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.51	.43	.38	.49	.43	.38	.48	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.39	.34	.44	.38	.34	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.30	.29
10.0	.41	.33	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.26



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

WEC AND CCEC

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz											
Lamp Flux:2858.88x1 lm											
NAME: L7414-30W-AOK-REKW-SL											
MFR.: EVERFINE											

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	.293	.167	.053	.286	.163	.052	.273	.157	.050	.261	.151	.048	.250	.145	.047			
2.0	.278	.152	.047	.271	.149	.046	.260	.144	.045	.249	.140	.044	.239	.135	.043			
3.0	.258	.138	.041	.253	.136	.041	.243	.132	.040	.233	.128	.039	.225	.124	.038			
4.0	.240	.125	.037	.235	.123	.036	.226	.120	.036	.218	.117	.035	.210	.114	.035			
5.0	.223	.114	.033	.219	.112	.033	.211	.110	.032	.203	.107	.032	.196	.105	.031			
6.0	.207	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029			
7.0	.194	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.027	.172	.090	.026			
8.0	.181	.089	.025	.178	.088	.025	.173	.086	.025	.167	.085	.024	.162	.083	.024			
9.0	.170	.082	.023	.168	.082	.023	.163	.080	.023	.158	.079	.023	.153	.078	.022			
10.0	.161	.077	.021	.158	.076	.021	.154	.075	.021	.149	.074	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.011	
3.0	.162	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.060	.133	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz		
Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		

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	9.2	10.6	9.4	10.8	11.0	10.7	12.2	11.0	12.4	12.6
3H	9.9	11.3	10.2	11.5	11.8	11.9	13.3	12.2	13.5	13.7
4H	10.2	11.5	10.5	11.7	12.0	12.5	13.7	12.8	14.0	14.2
6H	10.3	11.5	10.6	11.8	12.0	12.9	14.1	13.3	14.4	14.7
8H	10.3	11.4	10.6	11.7	12.0	13.1	14.3	13.5	14.6	14.9
12H	10.2	11.4	10.6	11.7	12.0	13.3	14.4	13.6	14.7	15.0
4H 2H	10.0	11.3	10.3	11.5	11.8	11.2	12.4	11.5	12.7	12.9
3H	10.9	12.1	11.3	12.4	12.7	12.5	13.7	12.9	14.0	14.3
4H	11.3	12.3	11.7	12.6	13.0	13.2	14.3	13.6	14.6	14.9
6H	11.5	12.4	11.9	12.8	13.1	13.9	14.8	14.3	15.1	15.5
8H	11.5	12.4	11.9	12.7	13.1	14.1	15.0	14.5	15.3	15.7
12H	11.5	12.3	11.9	12.7	13.1	14.3	15.1	14.8	15.5	15.9
8H 4H	11.7	12.5	12.1	12.9	13.2	13.4	14.2	13.8	14.6	15.0
6H	12.0	12.7	12.5	13.1	13.5	14.2	14.9	14.6	15.3	15.7
8H	12.1	12.7	12.6	13.2	13.6	14.6	15.2	15.0	15.6	16.1
12H	12.2	12.7	12.6	13.1	13.6	14.9	15.4	15.4	15.9	16.3
12H 4H	11.7	12.5	12.1	12.9	13.3	13.4	14.1	13.8	14.5	14.9
6H	12.1	12.8	12.6	13.2	13.6	14.2	14.8	14.7	15.3	15.7
8H	12.3	12.8	12.8	13.3	13.8	14.6	15.2	15.1	15.6	16.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.4 / - 0.4					+ 0.2 / - 0.2				
1.5H	+ 0.3 / - 0.5					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 1.1					+ 0.3 / - 0.3				

CIE Pub.117, 2859 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.6$)
Area: 0.65 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz		
Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		

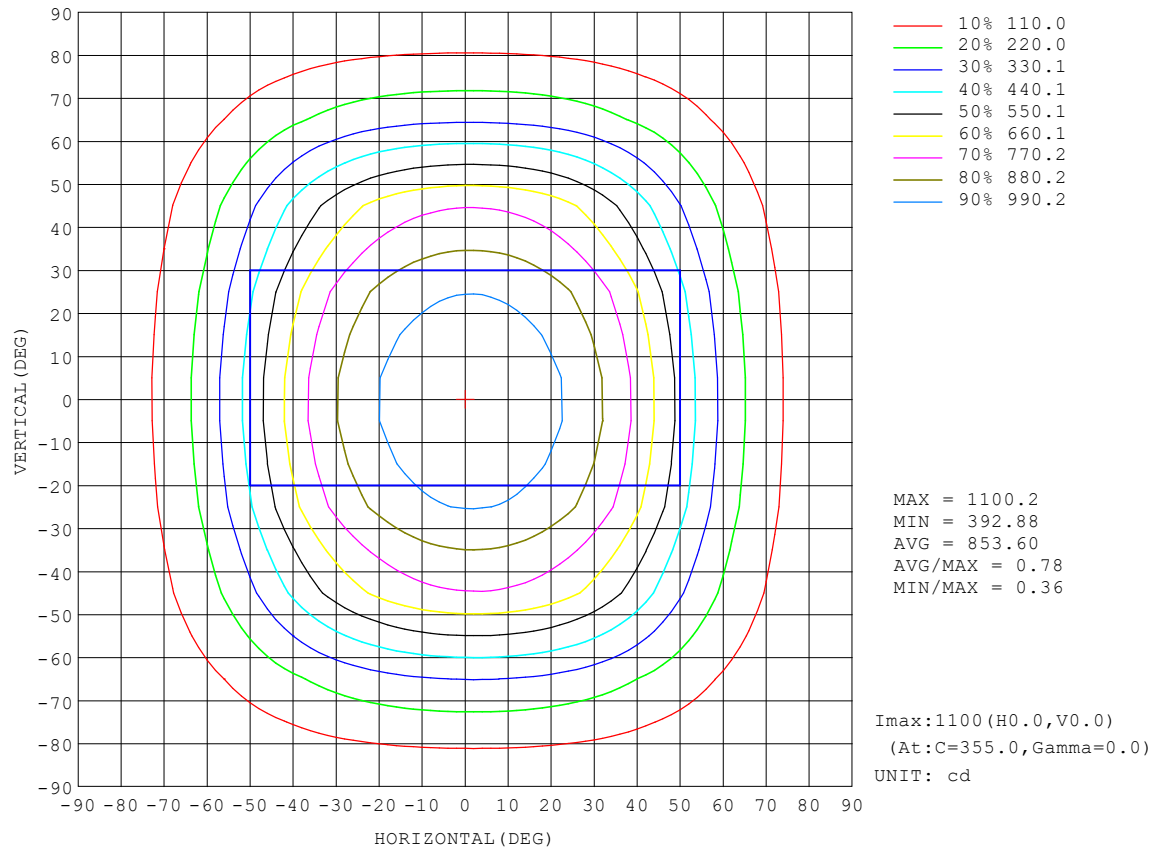
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	59	48	41	58	47	41	35
0.80	70	58	51	69	58	51	67	57	51	44
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	73	85	78	72	65
2.00	97	88	82	95	87	82	91	85	80	73
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	99	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 2.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-08-09

$V(B)$ Range:-90 - 90DEG
 $V(B)$ Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:6.300m [K=0.9841]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-RFKW-SL		
MFR.: EVERFINE		

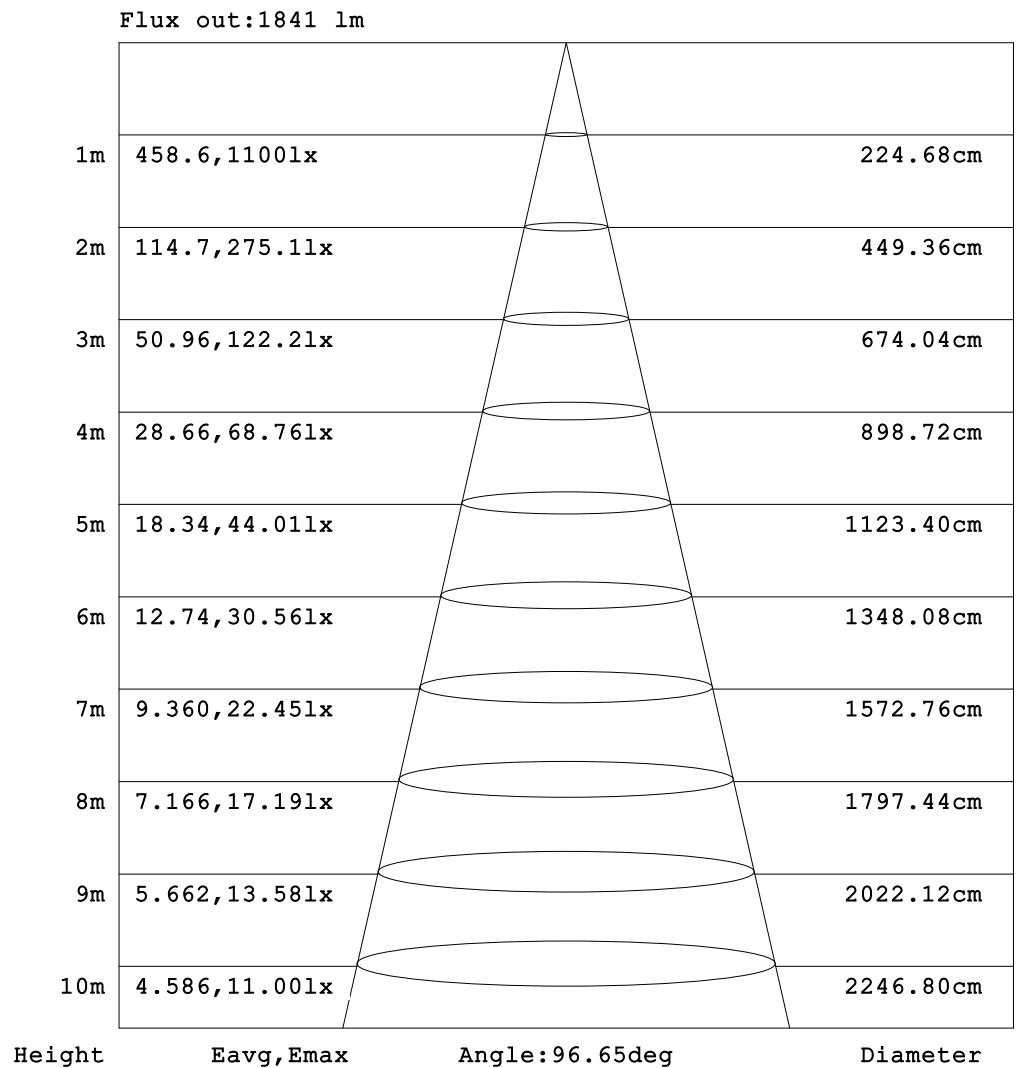


H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

AAI Figure

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		



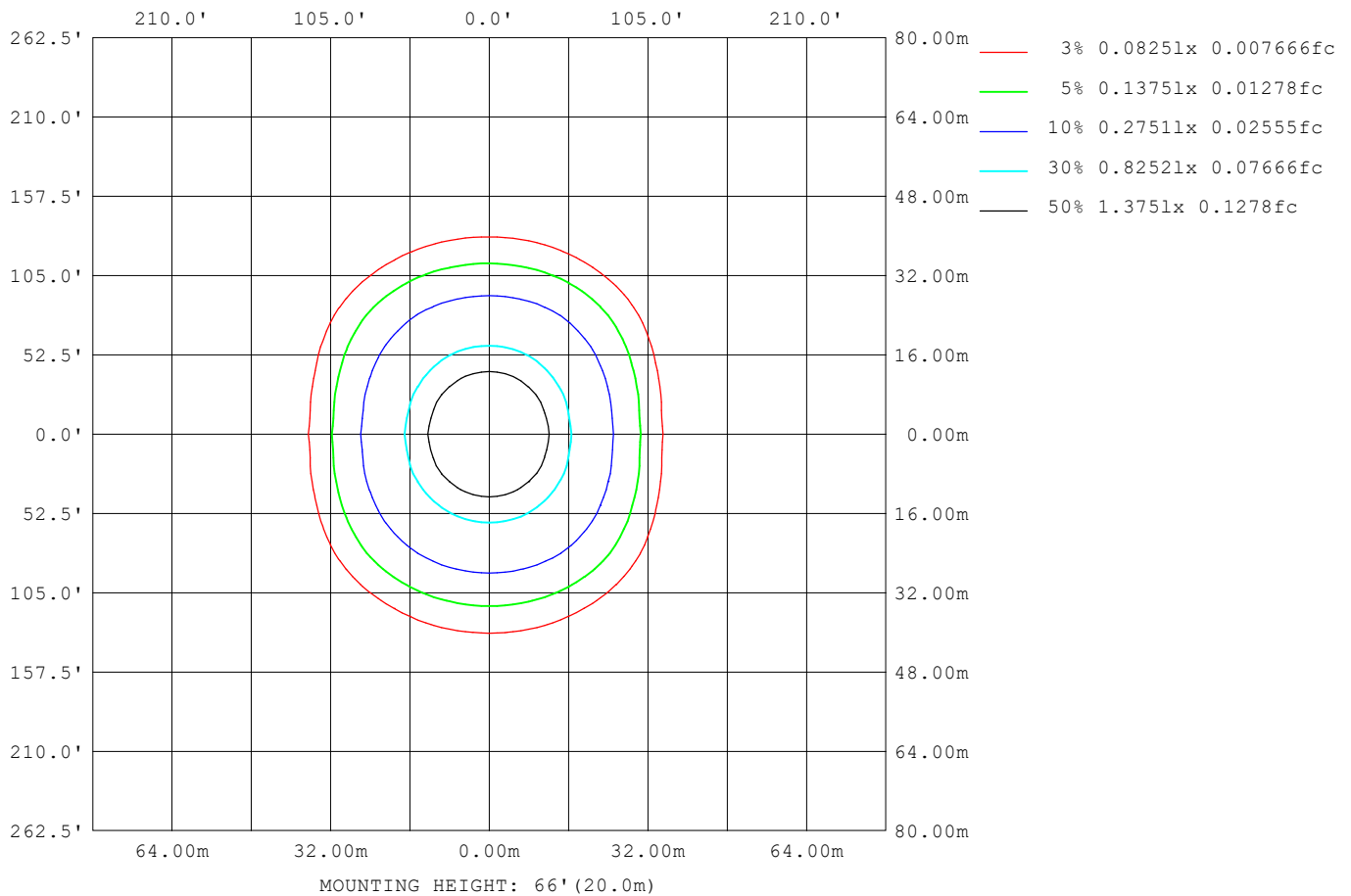
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90 DEG
H(β) Interval: 2.0 DEG
Test Speed: HIGH
Temperature: 25.3 DEG
Operators: DAMIN
Test Date: 2024-08-09

V(B) Range: -90 - 90 DEG
V(B) Interval: 5.0 DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 6.300m [K=0.9841]
Remarks:

ISOLUX DIAGRAM

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-RFKW-SL		
MFR.: EVERFINE		



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

LED Avg.L Report

Test:U:120.40V I:0.1643A P:19.707W PF:0.9960 Freq:59.98Hz		
Lamp Flux:2858.88x1 lm		
NAME: L7414-30W-AOK-REKW-SL		
MFR.: EVERFINE		

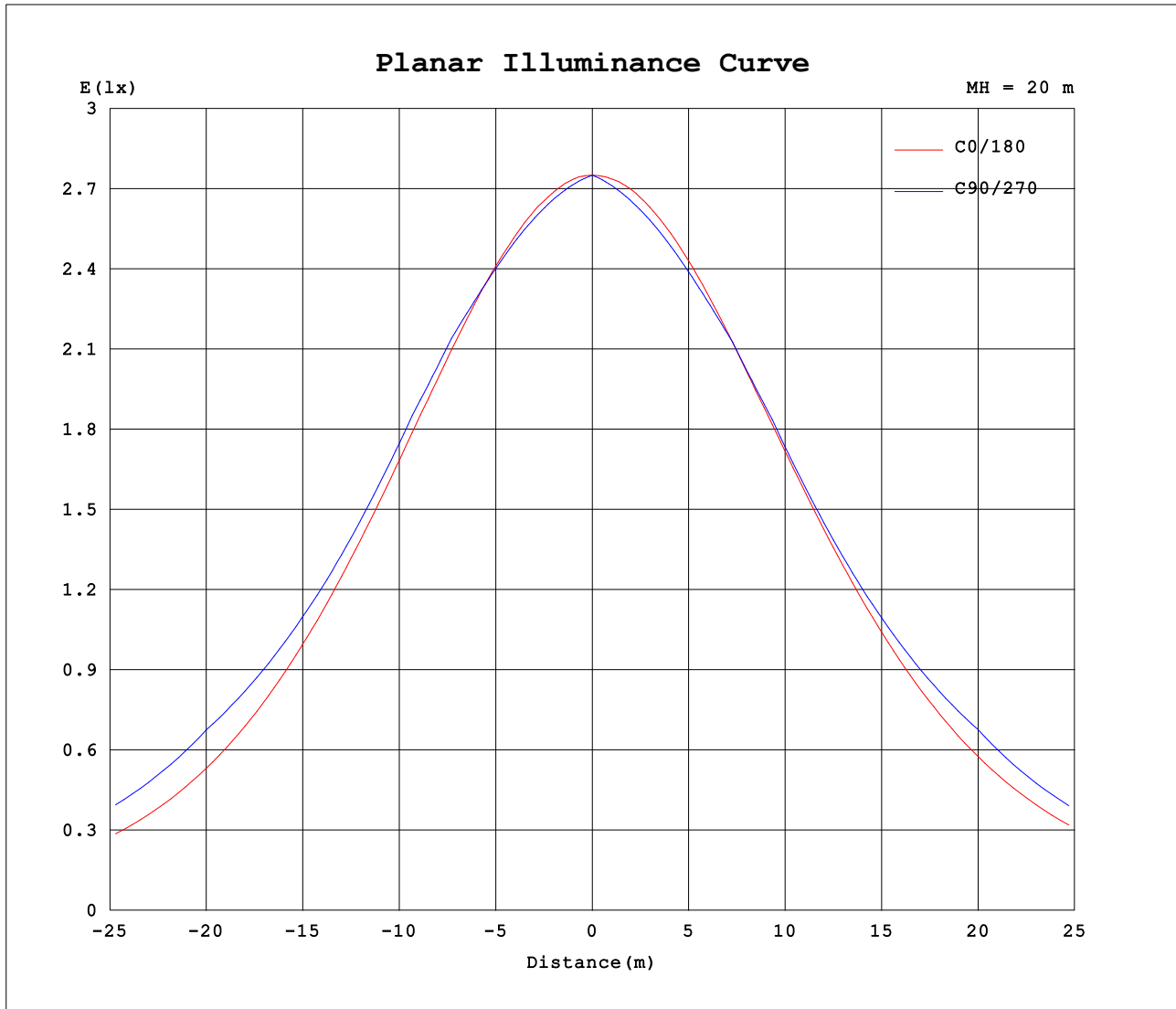
AvgL	cd/m2
L_0~180 (65) av	789
L_0~180 (75) av	568
L_0~180 (85) av	235
L_90~270 (65) av	1180
L_90~270 (75) av	1067
L_90~270 (85) av	1067
L_45 (65) av	1171
L_45 (75) av	891
L_45 (85) av	853

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-08-09

V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:

```
V(B) Range:-90 - 90DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:6.300m [K=0.9841]
Remarks:
```

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V(B) Range:-90 - 90DEG
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Remarks: