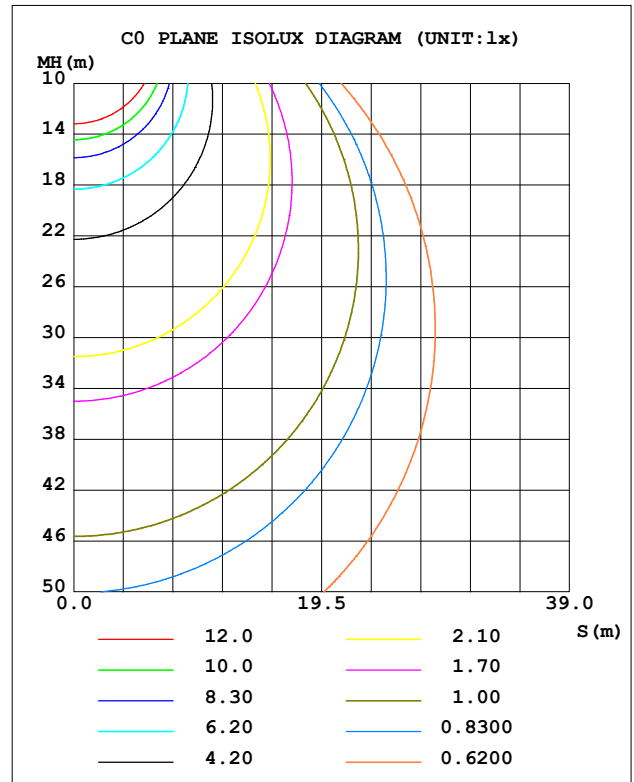
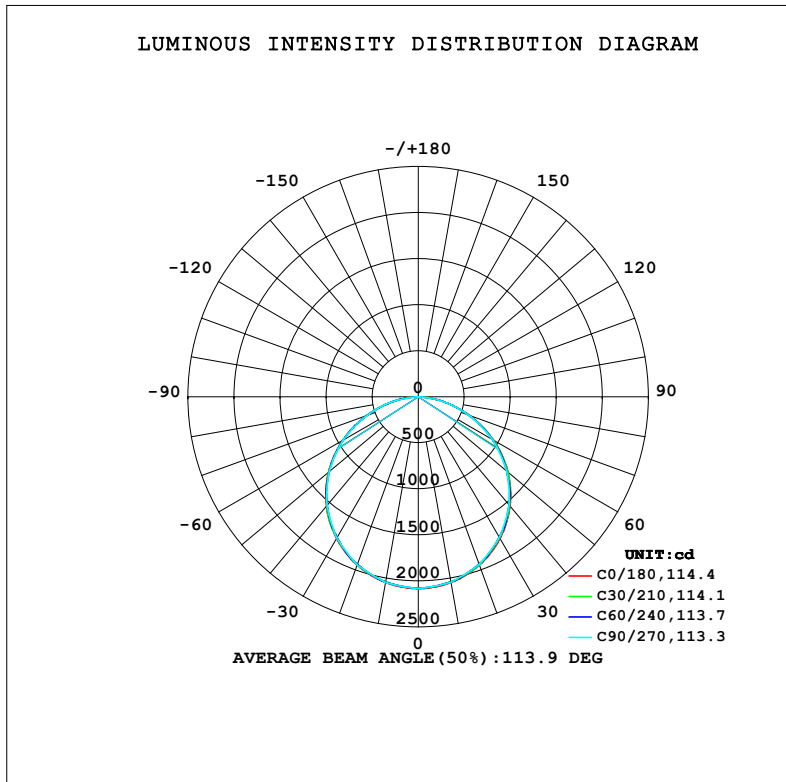


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92Panel031W	Imax(cd)	2083	S/MH(C0/180)	1.27
NOMINAL POWER(W)	60	LOR(%)	100.1	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	6005.8	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	6000	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down (%)	100.1	CIBSE SHR MAX	1.35



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [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	2048	2039	2046	2039	2047	2040	2048	2040	0- 10	196.5	196.5	3.27, 3.28
20	1945	1933	1938	1932	1944	1935	1941	1935	10- 20	563.7	760.3	12.7, 12.7
30	1777	1766	1764	1764	1776	1769	1770	1769	20- 30	857.0	1617	26.9, 27
40	1551	1543	1535	1537	1552	1544	1543	1547	30- 40	1039	2656	44.2, 44.3
50	1271	1263	1252	1261	1273	1270	1262	1268	40- 50	1085	3741	62.3, 62.3
60	943.8	937.2	927.7	934.9	946.8	946.3	939.6	943.5	50- 60	986.3	4727	78.7, 78.8
70	588.7	581.3	575.0	580.5	590.0	593.7	589.2	588.1	60- 70	755.0	5482	91.3, 91.4
80	239.4	239.8	233.3	240.4	241.8	254.5	250.5	248.7	70- 80	433.7	5916	98.5, 98.6
90	3.043	0	0	0	3.490	0	0	0	80- 90	89.75	6006	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		

Conical surface Flux(90deg): 3201.9 lm

%lum = 53.3%
%lamp = 53.4%

Conical surface Flux(130deg): 5140.9 lm

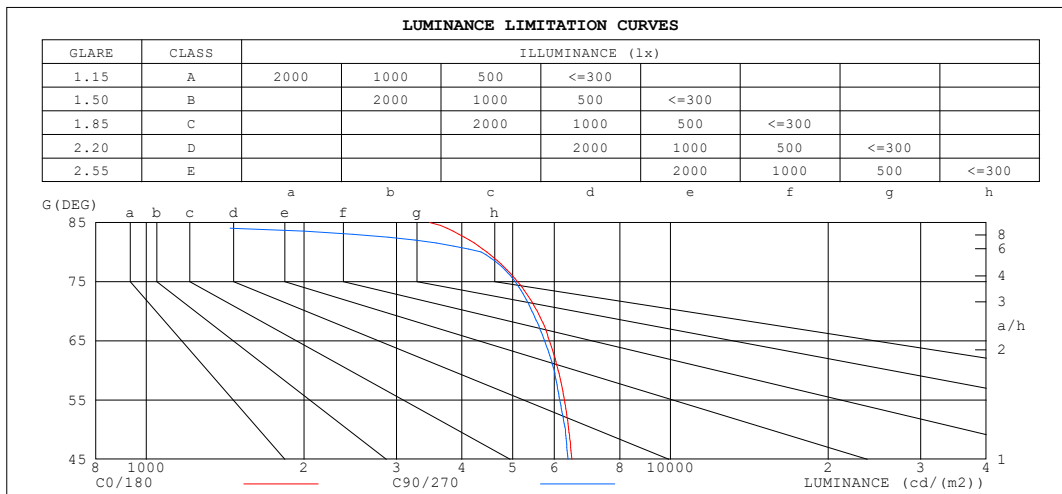
%lum = 85.6%
%lamp = 85.7%

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3467	0
80	4459	4347
75	5108	5052
70	5568	5439
65	5872	5751
60	6106	6002
55	6275	6147
50	6395	6302
45	6481	6376

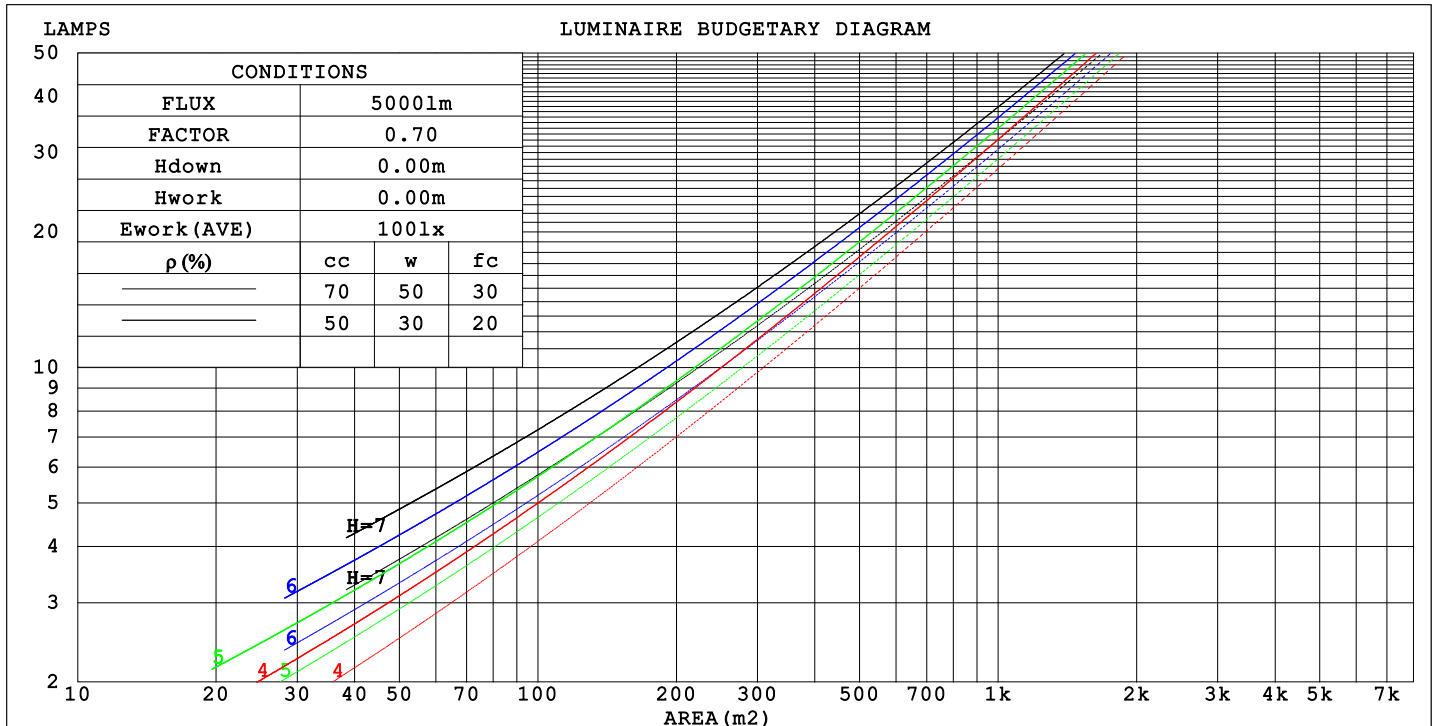
H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	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															



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	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	.308	.175	.056	.301	.172	.055	.288	.165	.053	.276	.159	.051	.264	.153	.049	
2.0	.292	.160	.049	.286	.157	.048	.274	.152	.047	.263	.148	.046	.253	.143	.045	
3.0	.271	.144	.043	.265	.142	.043	.255	.138	.042	.245	.134	.041	.236	.131	.040	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.219	.114	.034	.211	.111	.033	.204	.109	.033	
6.0	.214	.107	.031	.211	.106	.031	.203	.104	.030	.196	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.026	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.024	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.148	.075	.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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.135	.154	.134	.116	.106	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: 92Panel031W						TYPE: 92Panel031W			WEIGHT: 1		
SPEC.:						DIM.: 596 x 596			SERIAL No.: 0		
MFR.: Elmark Industries JSC						SUR.: square			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	13.1	14.6	13.3	14.8	15.0	13.0	14.5	13.3	14.7	14.9
	3H	14.6	16.0	14.9	16.2	16.5	14.5	15.9	14.8	16.1	16.4
	4H	15.2	16.5	15.5	16.8	17.1	15.1	16.4	15.4	16.7	17.0
	6H	15.6	16.9	15.9	17.1	17.4	15.5	16.8	15.8	17.1	17.3
	8H	15.7	16.9	16.1	17.2	17.5	15.6	16.8	15.9	17.1	17.4
	12H	15.7	16.9	16.1	17.2	17.5	15.6	16.7	15.9	17.0	17.3
4H	2H	13.7	15.0	14.0	15.3	15.5	13.6	15.0	13.9	15.2	15.5
	3H	15.4	16.6	15.7	16.9	17.2	15.3	16.5	15.7	16.8	17.1
	4H	16.1	17.2	16.5	17.5	17.8	16.0	17.1	16.4	17.4	17.8
	6H	16.6	17.6	17.0	17.9	18.3	16.6	17.5	17.0	17.9	18.2
	8H	16.8	17.7	17.2	18.0	18.4	16.7	17.6	17.1	17.9	18.3
	12H	16.8	17.7	17.3	18.0	18.4	16.7	17.5	17.1	17.9	18.3
8H	4H	16.4	17.3	16.8	17.6	18.0	16.3	17.2	16.7	17.6	17.9
	6H	17.0	17.8	17.5	18.2	18.6	17.0	17.7	17.4	18.1	18.5
	8H	17.3	17.9	17.7	18.3	18.8	17.1	17.8	17.6	18.2	18.7
	12H	17.4	17.9	17.9	18.4	18.9	17.1	17.7	17.6	18.1	18.6
12H	4H	16.4	17.2	16.8	17.6	18.0	16.3	17.1	16.7	17.5	17.9
	6H	17.1	17.7	17.5	18.2	18.6	17.0	17.7	17.5	18.1	18.6
	8H	17.3	17.9	17.8	18.4	18.8	17.2	17.8	17.7	18.2	18.7
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 6000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.2)
Area: 0.309136 m2

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:

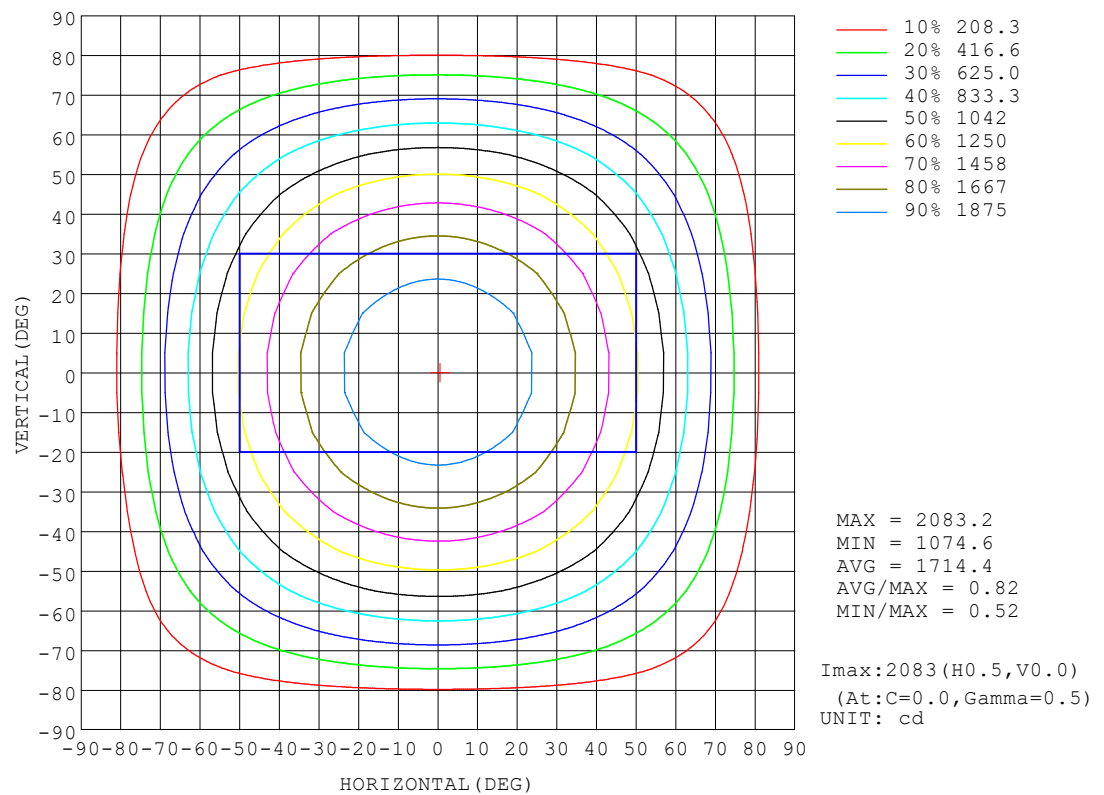
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	65	54	48	41
1.00	76	65	57	75	64	57	72	66	57	49
1.25	83	72	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	75	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:

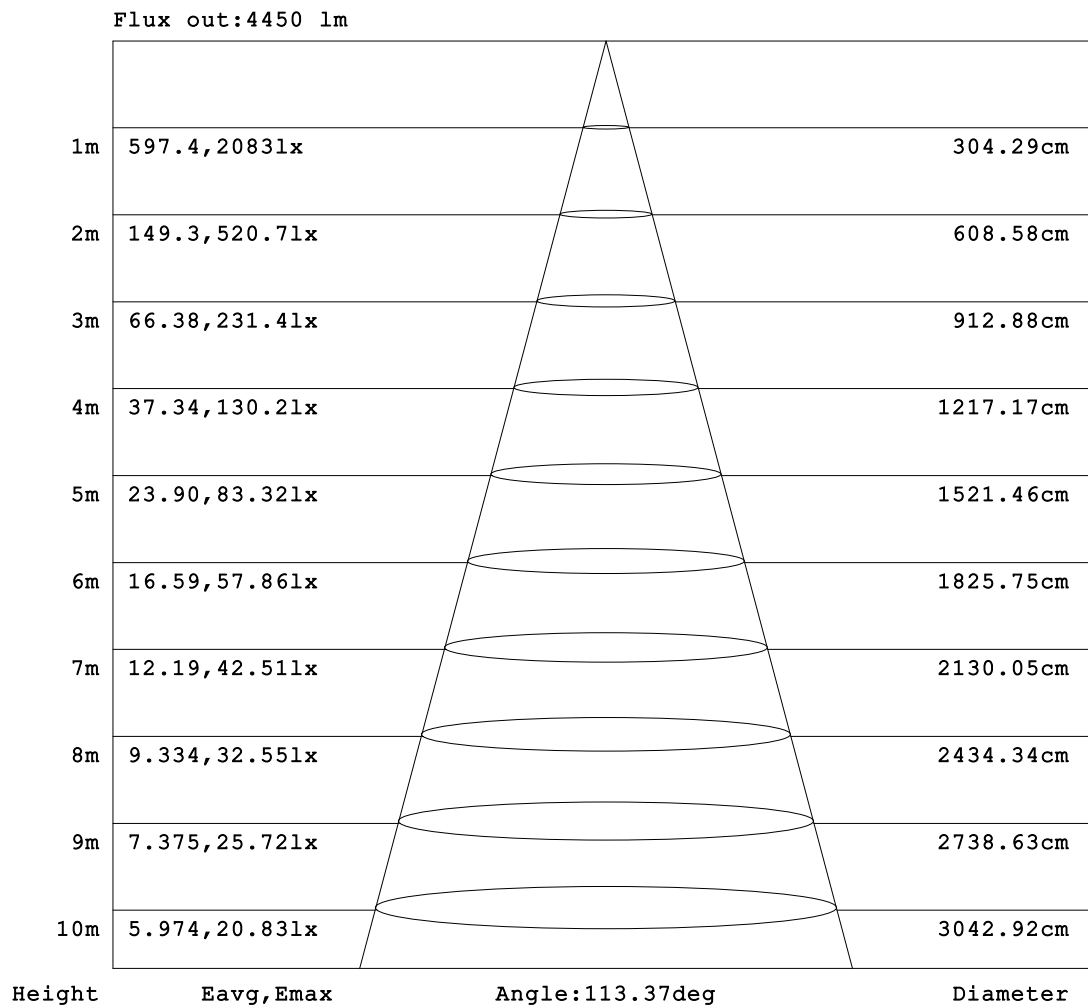


H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

AAI Figure

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:



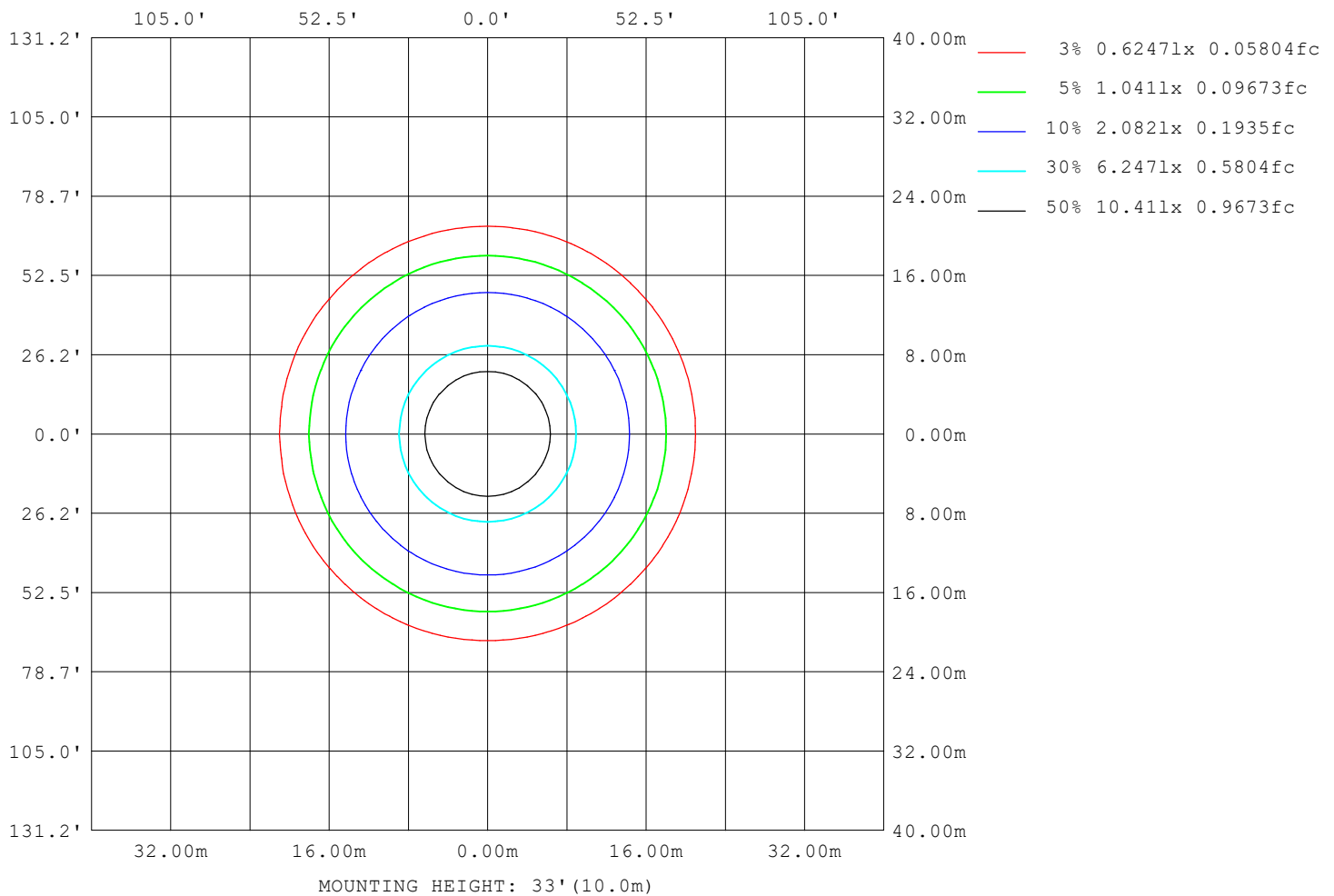
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
 H(β) Interval: 0.5DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:05 September 2022

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:6.265m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: 92Panel031W	TYPE: 92Panel031W	WEIGHT: 1
SPEC.:	DIM.: 596 x 596	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: square	Shielding Angle:

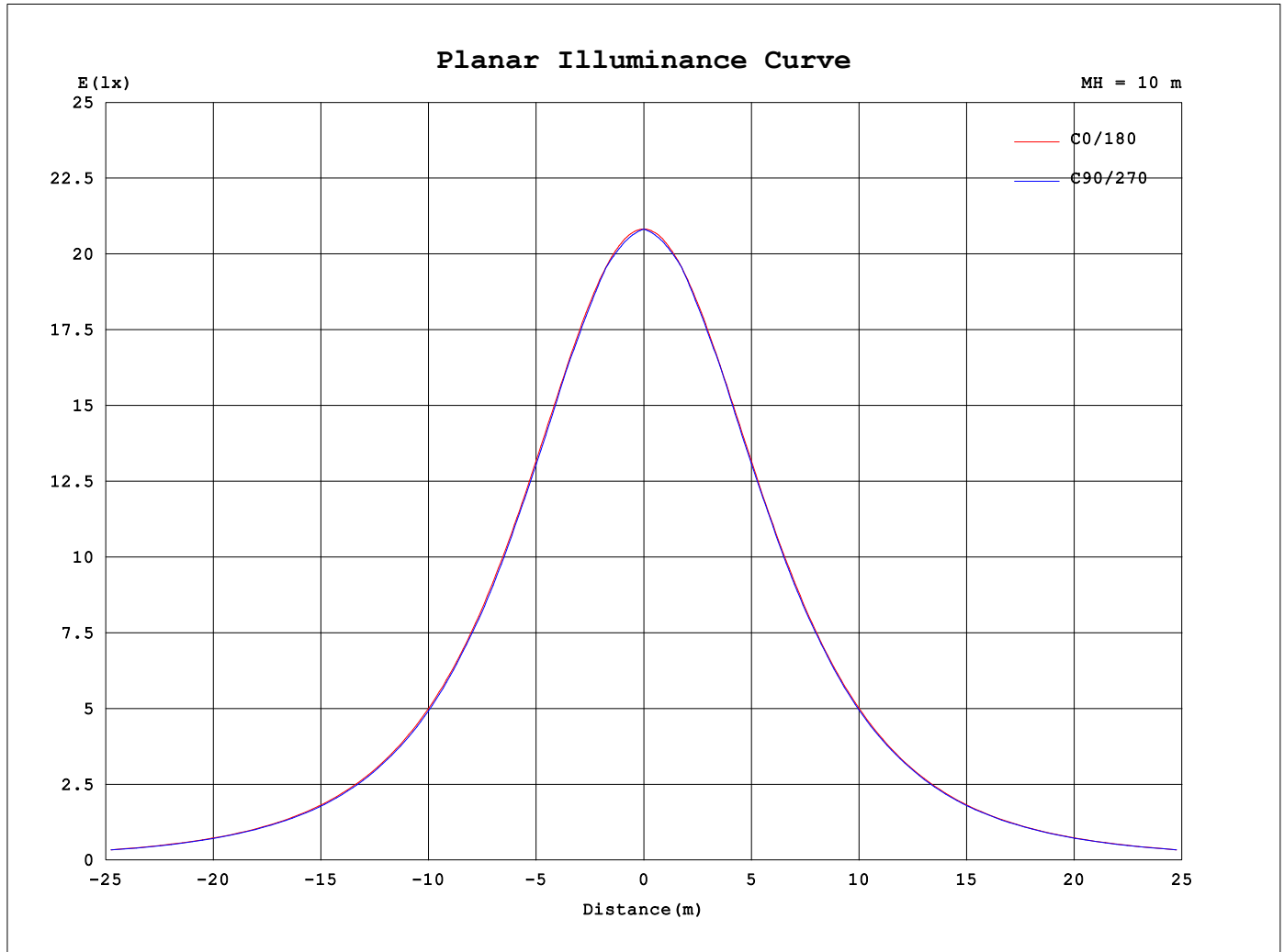
AvgL	cd/m2
L_0~180 (65) av	5886
L_0~180 (75) av	5119
L_0~180 (85) av	3482
L_90~270 (65) av	5801
L_90~270 (75) av	5150
L_90~270 (85) av	0
L_45 (65) av	5844
L_45 (75) av	5098
L_45 (85) av	2345

Standard: GB/T 29293-2012

H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

Planar Illuminance Curve



H(β) Range:-90 - 90DEG
H(β) Interval: 0.5DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:05 September 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks: