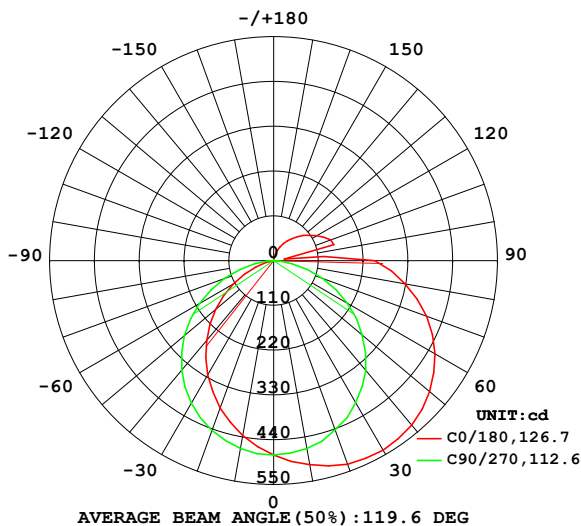


LUMINAIRE PHOTOMETRIC TEST REPORT

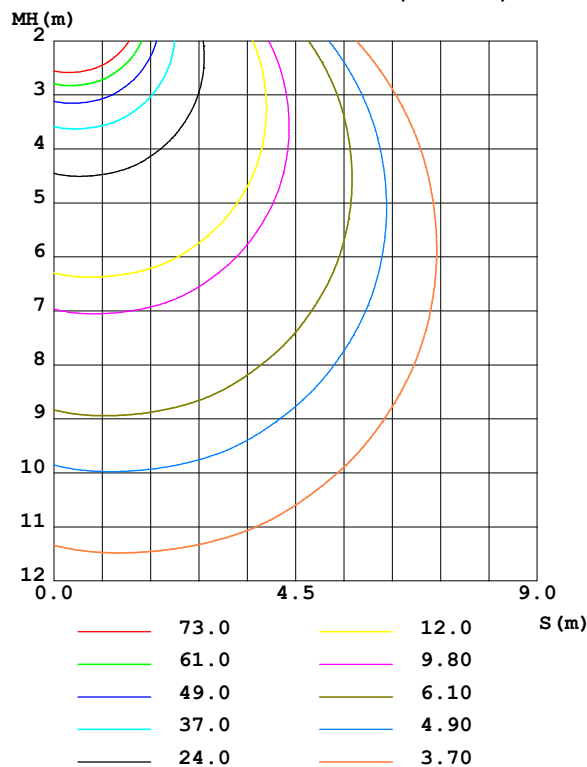
Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz		
Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 88.70 lm/W
MODEL		I _{max} (cd)	537.5	S/MH (C0/180)		1.04
NOMINAL POWER(W)	20	LOR (%)	100.0	S/MH (C90/270)		1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1789.2	η UP,DN (C0-180)		7.1,51.5
NOMINAL FLUX(lm)	1789.19	CIE CLASS	DIRECT	η UP,DN (C180-360)		2.4,39.0
LAMPS INSIDE	1	η up (%)	9.5	CIBSE SHR NOM		1.50
TEST VOLTAGE(V)	120	η down (%)	90.5	CIBSE SHR MAX		1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 26.000m [K=1.2950]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

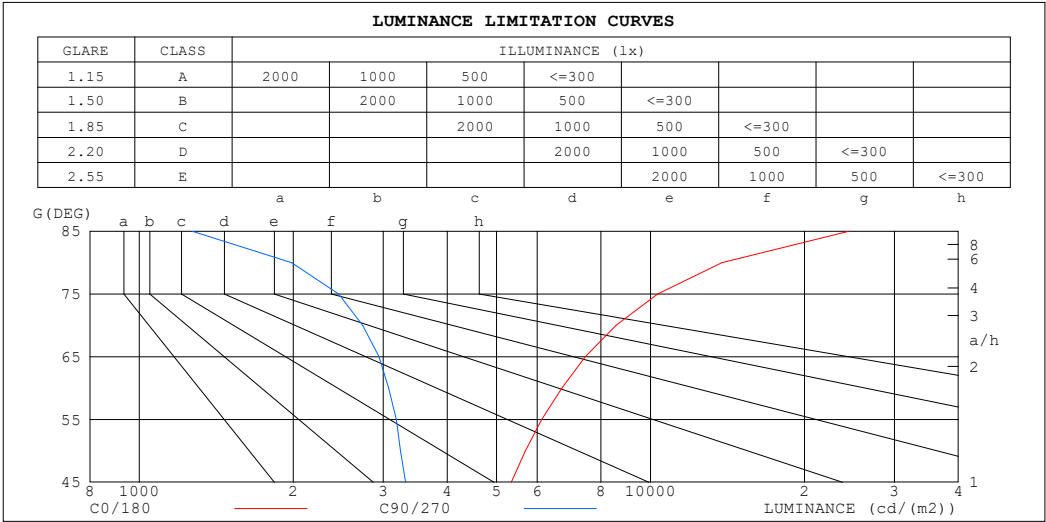
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	508.3	496.9	468.4	444.0	436.8	445.5	468.6	495.4	0- 10	45.22	45.22	2.53,2.53
20	532.0	503.9	442.3	398.1	385.8	397.6	443.4	501.9	10- 20	130.5	175.8	9.82,9.82
30	537.5	495.5	402.9	342.9	324.6	340.4	404.5	494.4	20- 30	201.1	376.8	21.1,21.1
40	528.0	471.0	352.5	278.9	256.7	279.3	351.6	471.2	30- 40	248.6	625.4	35,35
50	500.1	428.2	284.0	208.2	186.1	208.3	286.3	433.6	40- 50	267.3	892.7	49.9,49.9
60	458.1	376.4	209.3	134.7	114.9	134.2	210.7	381.4	50- 60	255.2	1148	64.2,64.2
70	399.8	311.0	127.4	64.34	47.15	63.33	128.2	314.3	60- 70	215.2	1363	76.2,76.2
80	327.5	237.0	46.98	9.157	0.4856	8.711	48.19	239.4	70- 80	156.0	1519	84.9,84.9
90	249.1	162.1	0.4021	0.0802	0.0008	0	0.0319	163.9	80- 90	100.4	1619	90.5,90.5
100	26.82	85.56	0	0	0.7295	0	0	85.35	90-100	36.15	1656	92.5,92.5
110	149.5	90.01	0	0	0.6477	0	0.0805	90.72	100-110	40.55	1696	94.8,94.8
120	122.7	73.01	0	0	0.3240	0	0.1609	71.60	110-120	37.17	1733	96.9,96.9
130	96.57	57.96	0	0	0	0	0.3218	47.09	120-130	26.35	1760	98.4,98.4
140	71.77	42.89	0	0	0	0	0.4827	23.00	130-140	16.48	1776	99.3,99.3
150	48.39	28.83	0	0	0	0	0.4827	0.9645	140-150	8.636	1785	99.8,99.8
160	26.41	15.06	0	0	0	0	0.4827	0	150-160	3.534	1788	100,100
170	1.135	2.640	0	0	0	0.8051	0.7241	0	160-170	0.8023	1789	100,100
180	0.7315	0.5581	0	0	0	0.8053	0.7241	0	170-180	0.0497	1789	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz		
Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		



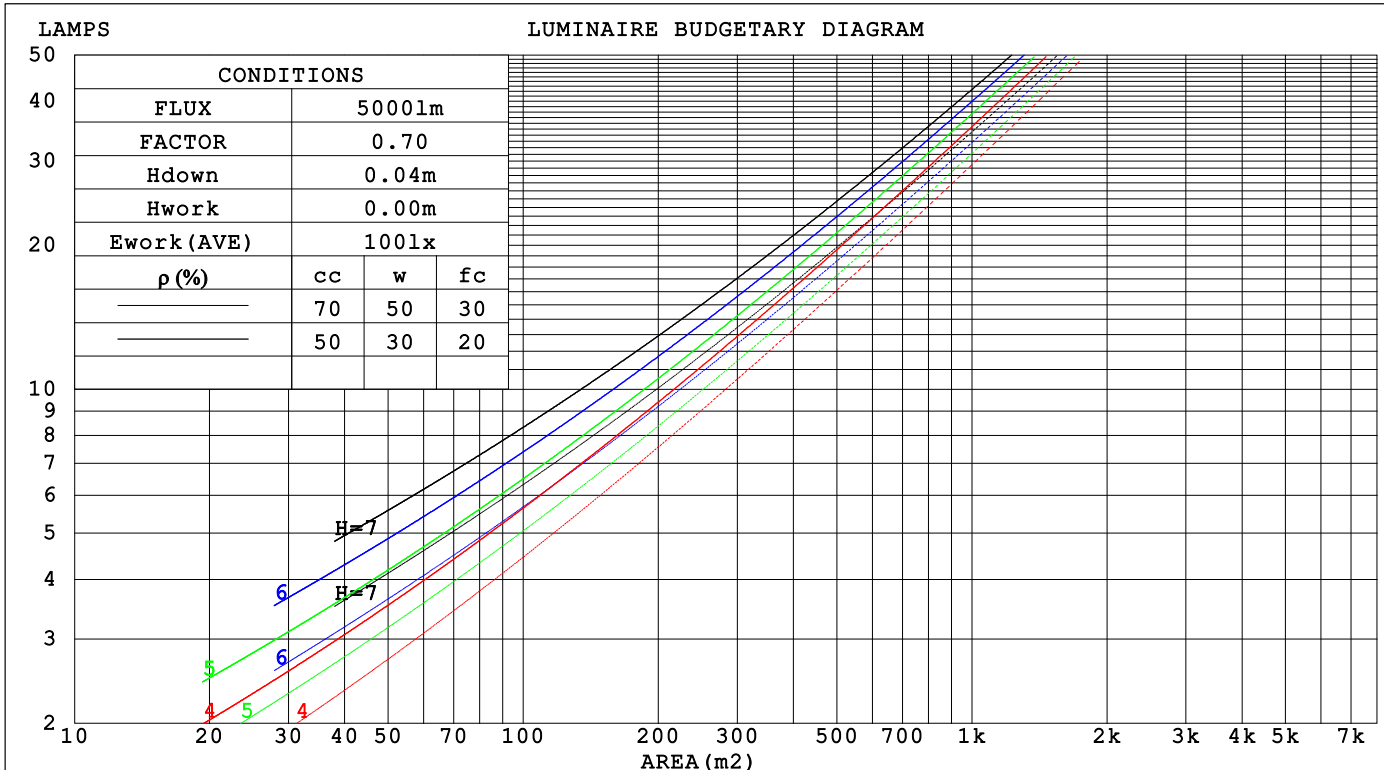
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	24410	1269
80	13796	1987
75	10318	2456
70	8552	2736
65	7448	2945
60	6703	3074
55	6126	3182
50	5692	3244
45	5340	3317

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

ρcc	80%			70%			50%			30%			10%			0														
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
ρfc	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Coefficients of Utilization(CU)														
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.99	.99	.99	.93	.93	.93	.91														
1.0	.99	.94	.89	.96	.91	.87	.90	.86	.83	.84	.81	.78	.79	.77	.74	.71														
2.0	.85	.78	.71	.82	.75	.70	.77	.72	.67	.72	.68	.64	.68	.64	.61	.58														
3.0	.74	.65	.58	.72	.64	.57	.67	.61	.55	.63	.58	.53	.60	.55	.51	.48														
4.0	.65	.56	.49	.63	.55	.48	.60	.52	.46	.56	.50	.45	.53	.47	.43	.40														
5.0	.58	.49	.42	.56	.48	.41	.53	.46	.40	.50	.44	.38	.47	.42	.37	.35														
6.0	.52	.43	.36	.51	.42	.36	.48	.40	.34	.45	.39	.33	.43	.37	.32	.30														
7.0	.47	.38	.32	.46	.37	.31	.43	.36	.30	.41	.34	.29	.39	.33	.29	.26														
8.0	.43	.34	.28	.42	.33	.28	.40	.32	.27	.38	.31	.26	.36	.30	.26	.23														
9.0	.39	.31	.25	.38	.30	.25	.36	.29	.24	.35	.28	.24	.33	.27	.23	.21														
10.0	.36	.28	.23	.35	.28	.22	.34	.27	.22	.32	.26	.21	.31	.25	.21	.19														



```

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

```

WEC AND CCEC

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz											
Lamp Flux:1789.19x1 lm											
NAME: ASD-UBN-40WH5000K											
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	.361	.205	.065	.351	.200	.064	.332	.190	.061	.314	.181	.058	.298	.173	.056		
2.0	.321	.176	.054	.312	.172	.053	.295	.164	.051	.279	.157	.049	.265	.150	.047		
3.0	.289	.154	.046	.281	.150	.045	.265	.144	.044	.251	.138	.042	.238	.132	.041		
4.0	.262	.136	.040	.255	.133	.039	.241	.128	.038	.228	.123	.037	.217	.118	.036		
5.0	.240	.122	.035	.233	.120	.035	.221	.115	.034	.209	.110	.033	.198	.106	.032		
6.0	.220	.110	.032	.214	.108	.031	.203	.104	.030	.193	.100	.029	.183	.096	.029		
7.0	.204	.101	.029	.198	.099	.028	.188	.095	.027	.179	.092	.027	.170	.088	.026		
8.0	.189	.093	.026	.185	.091	.026	.175	.088	.025	.167	.084	.024	.159	.081	.024		
9.0	.177	.086	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.149	.075	.022		
10.0	.166	.079	.022	.162	.078	.022	.154	.075	.021	.147	.073	.021	.140	.070	.020		

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	.263	.263	.263	.225	.225	.225	.153	.153	.153	.088	.088	.088	.028	.028	.028	
1.0	.257	.229	.203	.220	.196	.175	.150	.135	.121	.086	.078	.070	.028	.025	.023	
2.0	.249	.205	.168	.214	.177	.145	.146	.122	.101	.084	.071	.059	.027	.023	.019	
3.0	.242	.188	.145	.207	.162	.126	.142	.113	.088	.082	.066	.052	.026	.021	.017	
4.0	.234	.175	.130	.201	.152	.113	.138	.106	.080	.080	.062	.047	.026	.020	.016	
5.0	.226	.165	.120	.194	.143	.105	.134	.100	.074	.078	.059	.044	.025	.019	.014	
6.0	.219	.157	.113	.188	.136	.098	.130	.095	.069	.075	.056	.041	.024	.018	.014	
7.0	.212	.150	.107	.182	.130	.093	.126	.091	.066	.073	.054	.039	.024	.018	.013	
8.0	.205	.145	.103	.177	.126	.090	.122	.088	.064	.071	.052	.038	.023	.017	.013	
9.0	.199	.140	.100	.172	.121	.087	.119	.085	.062	.069	.050	.037	.022	.017	.012	
10.0	.193	.136	.097	.167	.118	.085	.116	.083	.060	.067	.049	.036	.022	.016	.012	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz		
Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

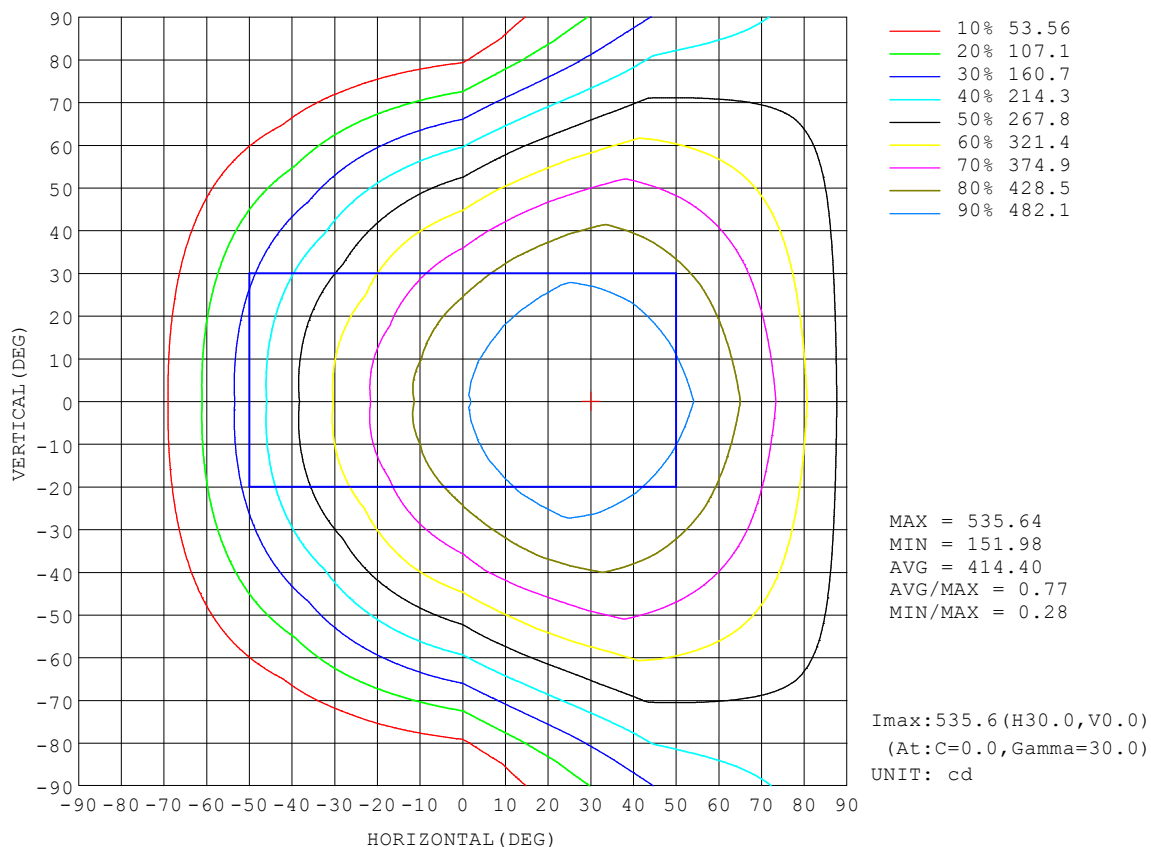
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	32	51	39	32	49	38	32	25
0.80	61	49	41	60	48	41	58	47	40	32
1.00	69	57	49	68	56	49	65	57	48	40
1.25	76	65	57	74	64	56	71	61	55	46
1.50	81	70	62	79	69	61	75	66	60	50
2.00	89	79	71	86	77	70	81	74	68	57
2.50	93	84	77	90	82	75	85	78	72	62
3.00	96	88	82	93	86	80	88	82	77	65
4.00	101	94	88	98	91	86	92	87	82	70
5.00	104	98	93	100	95	90	94	90	86	73
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: 25.3°C
Operators: DAMIN
Test Date: 2024-02-04

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 26.000m [K=1.2950]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

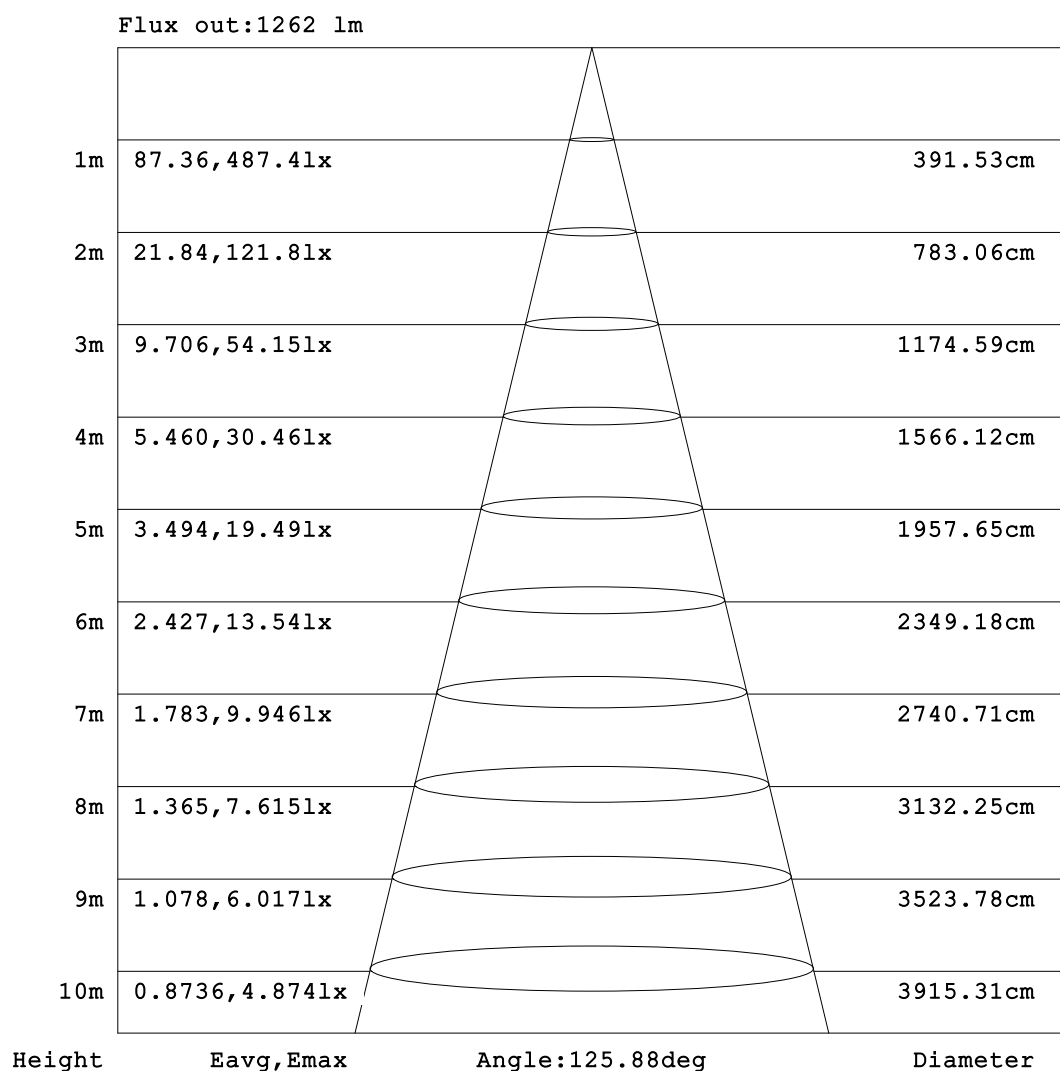


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

AAI Figure

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		



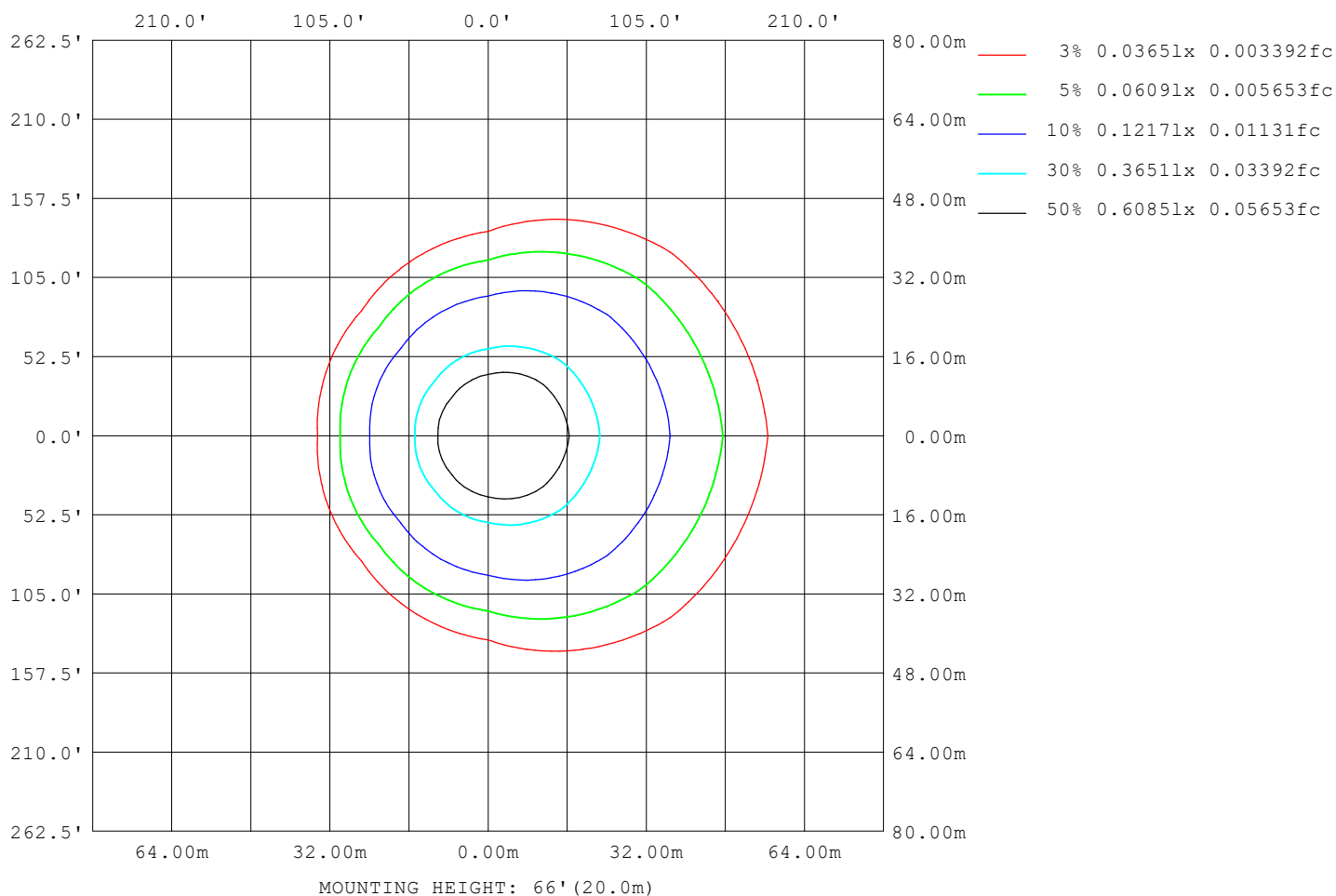
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 26.000m [K=1.2950]
Remarks:

ISOLUX DIAGRAM

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz		
Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

LED Avg.L Report

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

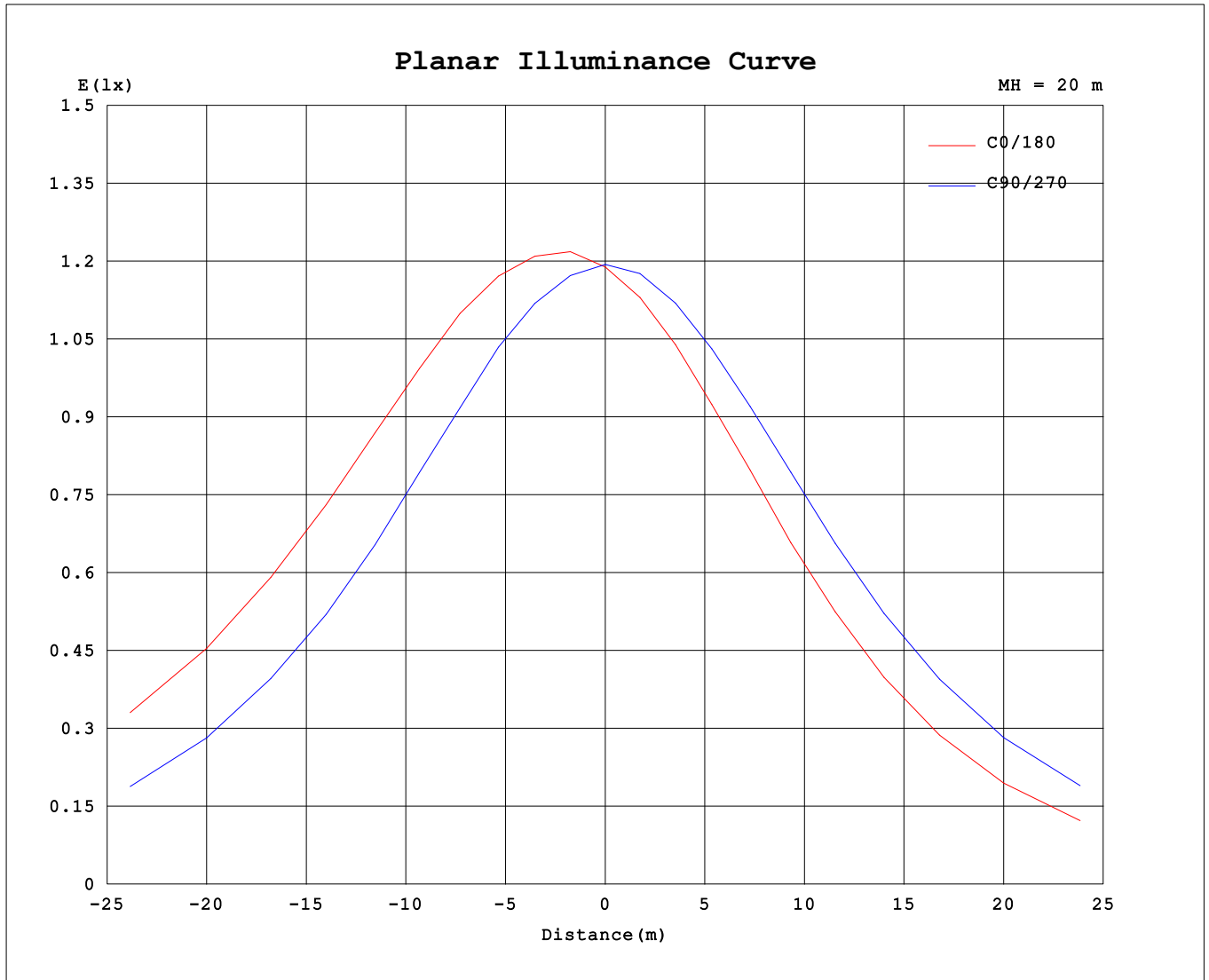
AvgL	cd/m2
L_0~180 (65) av	4433
L_0~180 (75) av	5466
L_0~180 (85) av	12254
L_90~270 (65) av	2944
L_90~270 (75) av	2459
L_90~270 (85) av	1316
L_45 (65) av	3855
L_45 (75) av	4376
L_45 (85) av	8513

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity: 65.0%
Test Distance: 26.000m [K=1.2950]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.01V I:0.1728A P:20.172W PF:0.9729 Freq:60.01Hz		
Lamp Flux:1789.19x1 lm		
NAME: ASD-UBN-40WH5000K		
MFR.: EVERFINE		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	477	477	477	477	477	477	477	477										
5	495	489	474	460	459	463	476	487										
10	508	497	468	444	437	446	469	495										
15	522	502	459	424	411	423	458	500										
20	532	504	442	398	386	398	443	502										
25	536	502	426	373	355	372	426	500										
30	537	495	403	343	325	340	404	494										
35	534	486	378	312	291	311	380	486										
40	528	471	353	279	257	279	352	471										
45	516	451	319	244	221	244	319	455										
50	500	428	284	208	186	208	286	434										
55	480	404	248	171	150	171	248	409										
60	458	376	209	135	115	134	211	381										
65	430	343	169	98.6	80.2	97.7	169	349										
70	400	311	127	64.3	47.1	63.3	128	314										
75	365	275	86.6	32.8	20.4	32.8	86.8	277										
80	327	237	47.0	9.16	0.49	8.71	48.2	239										
85	291	200	15.1	0.48	0.16	0.00	16.2	204										
90	249	162	0.40	0.08	0.00	0.00	0.03	164										
95	125	7.27	0.08	0.00	0.73	0.00	0.00	10.2										
100	26.8	85.6	0.00	0.00	0.73	0.00	0.00	85.4										
105	153	96.5	0.00	0.00	0.81	0.00	0.00	99.3										
110	150	90.0	0.00	0.00	0.65	0.00	0.08	90.7										
115	136	81.1	0.00	0.00	0.49	0.00	0.16	81.6										
120	123	73.0	0.00	0.00	0.32	0.00	0.16	71.6										
125	109	65.4	0.00	0.00	0.16	0.00	0.24	59.5										
130	96.6	58.0	0.00	0.00	0.00	0.00	0.32	47.1										
135	84.2	50.3	0.00	0.00	0.00	0.00	0.40	34.6										
140	71.8	42.9	0.00	0.00	0.00	0.00	0.48	23.0										
145	59.9	35.9	0.00	0.00	0.00	0.00	0.48	13.8										
150	48.4	28.8	0.00	0.00	0.00	0.00	0.48	0.96										
155	37.0	21.8	0.00	0.00	0.00	0.00	0.48	1.05										
160	26.4	15.1	0.00	0.00	0.00	0.00	0.48	0.00										
165	16.6	1.22	0.00	0.00	0.00	0.24	0.72	0.00										
170	1.13	2.64	0.00	0.00	0.00	0.81	0.72	0.00										
175	1.08	1.05	0.00	0.00	0.00	0.81	0.72	0.00										
180	0.73	0.56	0.00	0.00	0.00	0.81	0.72	0.00										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2950]
Remarks: