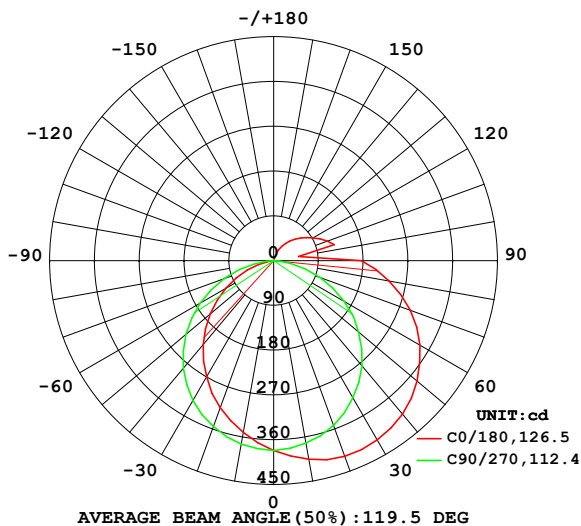


LUMINAIRE PHOTOMETRIC TEST REPORT

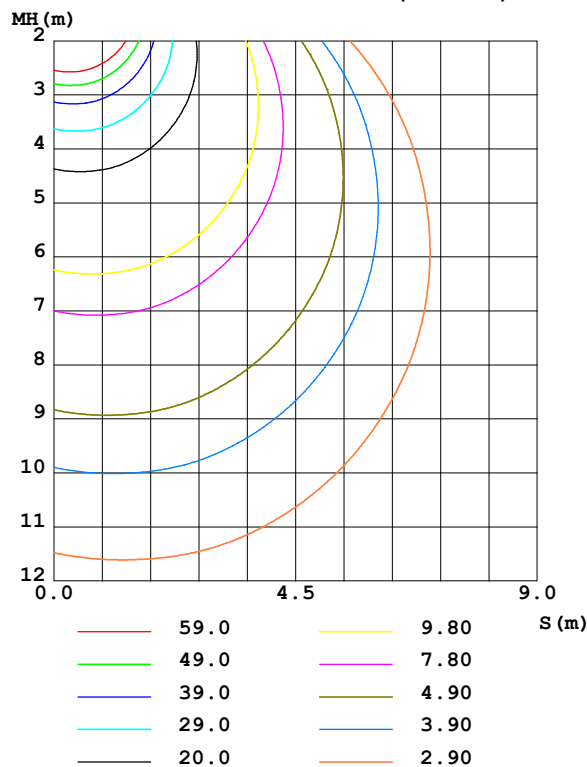
Test:U:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.63 lm/W
MODEL		I _{max} (cd)	418.7	S/MH (C0/180)		1.07
NOMINAL POWER(W)	16	LOR (%)	100.0	S/MH (C90/270)		1.26
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1400.5	η UP,DN (C0-180)		6.6,50.7
NOMINAL FLUX(lm)	1400.49	CIE CLASS	DIRECT	η UP,DN (C180-360)		2.1,40.5
LAMPS INSIDE	1	η up (%)	8.8	CIBSE SHR NOM		1.50
TEST VOLTAGE(V)	120	η down (%)	91.2	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:

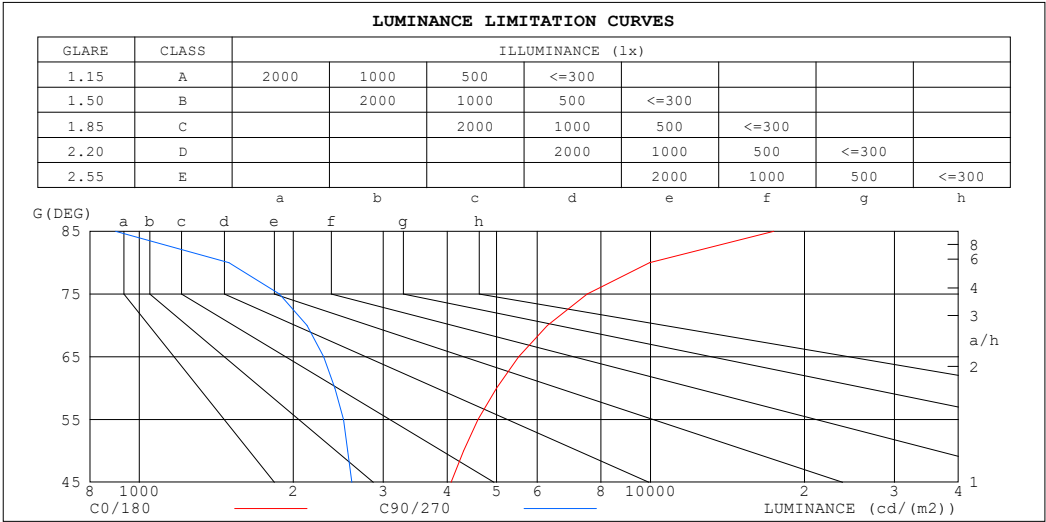
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	405.3	394.7	372.7	356.5	350.9	358.5	374.4	396.2	0- 10	36.15	36.15	2.58,2.58
20	418.1	395.3	352.6	322.6	314.3	325.6	354.8	399.0	10- 20	104.4	140.6	10,10
30	416.1	382.9	318.5	281.4	269.5	284.9	324.5	390.3	20- 30	160.7	301.3	21.5,21.5
40	402.9	359.4	276.5	231.5	220.9	233.9	283.0	368.0	30- 40	198.1	499.3	35.7,35.7
50	376.3	324.8	223.1	177.0	166.4	178.5	230.4	334.3	40- 50	212.3	711.6	50.8,50.8
60	339.5	279.4	163.9	119.6	110.7	121.9	170.2	290.8	50- 60	202.2	913.8	65.2,65.2
70	292.2	227.3	98.88	62.41	56.36	65.54	104.9	235.6	60- 70	170.0	1084	77.4,77.4
80	235.1	167.8	35.32	14.40	9.687	17.02	41.02	174.3	70- 80	121.0	1205	86,86
90	176.5	111.2	0.6717	0	0.0809	0	0.3212	118.3	80- 90	72.88	1278	91.2,91.2
100	50.93	66.92	0	0	0.0809	0	0	70.31	90-100	26.24	1304	93.1,93.1
110	115.0	62.16	0	0	0.0809	0	0	62.54	100-110	31.50	1335	95.4,95.4
120	92.02	51.11	0	0	0	0	0	49.00	110-120	26.83	1362	97.3,97.3
130	71.62	40.59	0	0	0	0	0.2425	32.09	120-130	18.90	1381	98.6,98.6
140	52.37	29.31	0	0	0	0	0.3226	14.12	130-140	11.69	1393	99.5,99.5
150	33.51	17.52	0	0	0	0	0.3226	1.053	140-150	5.729	1399	99.9,99.9
160	3.450	4.871	0	0	0	0	0.3226	0	150-160	1.688	1400	100,100
170	0.8446	0.8815	0	0	0	0.4007	0.4033	0	160-170	0.2507	1400	100,100
180	0.4046	0.4007	0	0	0	0.4007	0.4033	0	170-180	0.0252	1400	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
 γ 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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17412	899
80	9960	1497
75	7514	1880
70	6286	2127
65	5523	2295
60	4996	2412
55	4599	2507
50	4308	2554
45	4069	2605

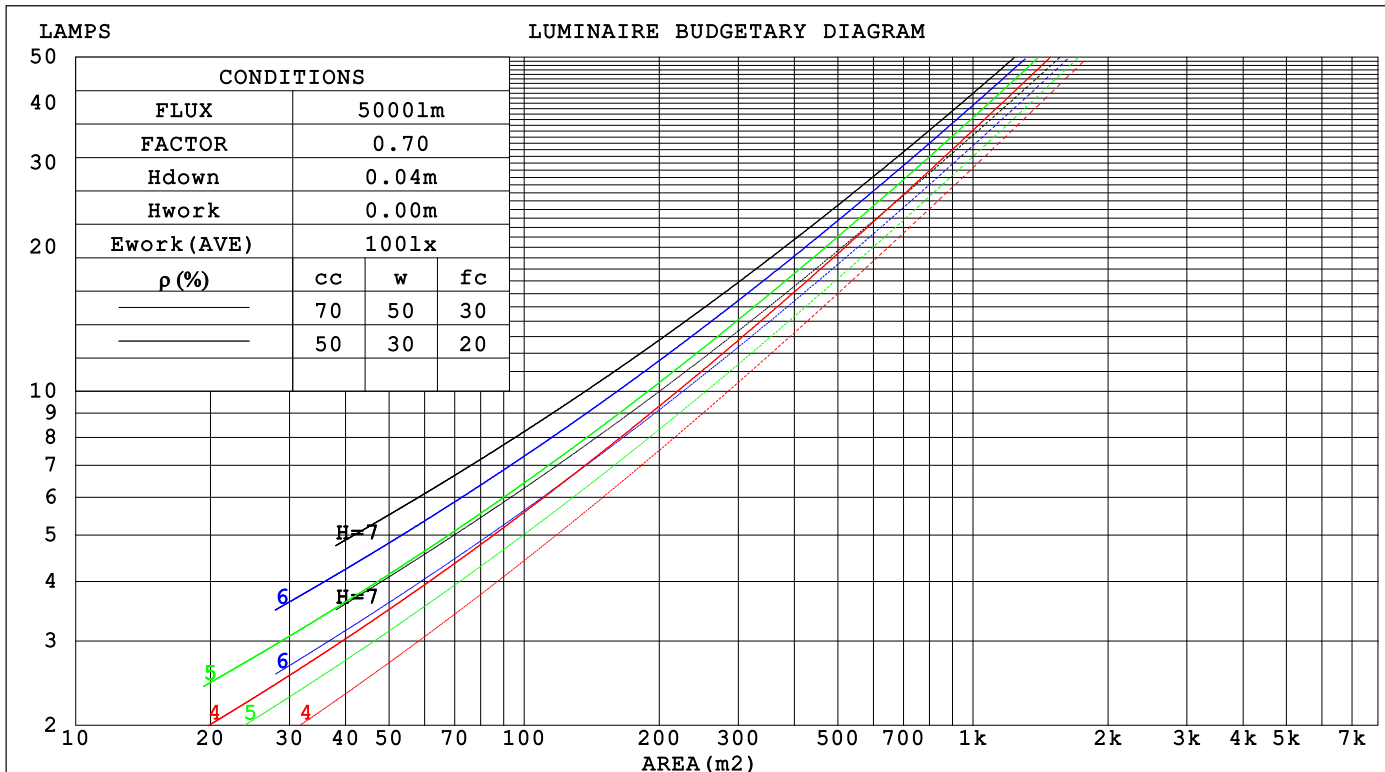
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
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															Coefficients of Utilization(CU)														
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.00	.00	.00	.94	.94	.94	.91														
1.0	.99	.94	.90	.96	.92	.88	.90	.87	.83	.85	.82	.79	.80	.77	.75	.72														
2.0	.86	.78	.72	.83	.76	.70	.78	.72	.67	.73	.68	.64	.69	.65	.62	.59														
3.0	.75	.66	.59	.72	.64	.58	.68	.61	.56	.64	.58	.53	.60	.56	.51	.49														
4.0	.66	.56	.49	.64	.55	.48	.60	.53	.47	.57	.50	.45	.53	.48	.44	.41														
5.0	.58	.49	.42	.57	.48	.41	.54	.46	.40	.51	.44	.39	.48	.42	.38	.35														
6.0	.52	.43	.36	.51	.42	.36	.48	.41	.35	.46	.39	.34	.43	.37	.33	.31														
7.0	.47	.38	.32	.46	.38	.32	.44	.36	.31	.42	.35	.30	.39	.34	.29	.27														
8.0	.43	.34	.28	.42	.34	.28	.40	.33	.27	.38	.31	.27	.36	.30	.26	.24														
9.0	.39	.31	.25	.38	.31	.25	.37	.30	.24	.35	.29	.24	.33	.28	.23	.21														
10.0	.36	.28	.23	.35	.28	.23	.34	.27	.22	.32	.26	.22	.31	.25	.21	.19														



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:

WEC AND CCEC

Test:U:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
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	.356	.202	.064	.346	.197	.063	.328	.188	.060	.311	.179	.058	.295	.171	.055		
2.0	.318	.174	.053	.309	.170	.052	.293	.163	.051	.278	.156	.049	.263	.149	.047		
3.0	.287	.153	.046	.279	.150	.045	.264	.143	.044	.251	.137	.042	.238	.132	.041		
4.0	.261	.136	.040	.254	.133	.039	.241	.128	.038	.228	.123	.037	.217	.118	.036		
5.0	.239	.122	.035	.232	.119	.035	.220	.115	.034	.209	.110	.033	.199	.106	.032		
6.0	.220	.110	.032	.214	.108	.031	.203	.104	.030	.193	.100	.029	.184	.097	.029		
7.0	.203	.101	.029	.198	.099	.028	.188	.095	.027	.179	.092	.027	.171	.089	.026		
8.0	.189	.092	.026	.185	.091	.026	.176	.088	.025	.167	.085	.024	.159	.082	.024		
9.0	.177	.085	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.149	.076	.022		
10.0	.166	.079	.022	.162	.078	.022	.154	.076	.021	.147	.073	.021	.140	.071	.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	.257	.257	.257	.220	.220	.220	.150	.150	.150	.086	.086	.086	.028	.028	.028		
1.0	.251	.223	.198	.215	.191	.170	.147	.132	.118	.085	.076	.069	.027	.025	.022		
2.0	.244	.200	.163	.209	.172	.141	.143	.119	.098	.082	.069	.057	.026	.022	.019		
3.0	.236	.183	.140	.202	.158	.121	.139	.109	.085	.080	.064	.050	.026	.021	.016		
4.0	.228	.170	.125	.196	.147	.109	.135	.102	.076	.078	.060	.045	.025	.019	.015		
5.0	.221	.160	.115	.190	.138	.100	.131	.097	.070	.076	.057	.042	.024	.018	.014		
6.0	.213	.152	.107	.183	.131	.093	.126	.092	.066	.073	.054	.039	.024	.018	.013		
7.0	.206	.145	.102	.177	.125	.089	.123	.088	.063	.071	.052	.037	.023	.017	.012		
8.0	.200	.139	.097	.172	.121	.085	.119	.085	.060	.069	.050	.036	.022	.016	.012		
9.0	.193	.134	.094	.167	.117	.082	.115	.082	.058	.067	.048	.035	.022	.016	.012		
10.0	.188	.130	.092	.162	.113	.080	.112	.079	.057	.065	.047	.034	.021	.015	.011		

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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		

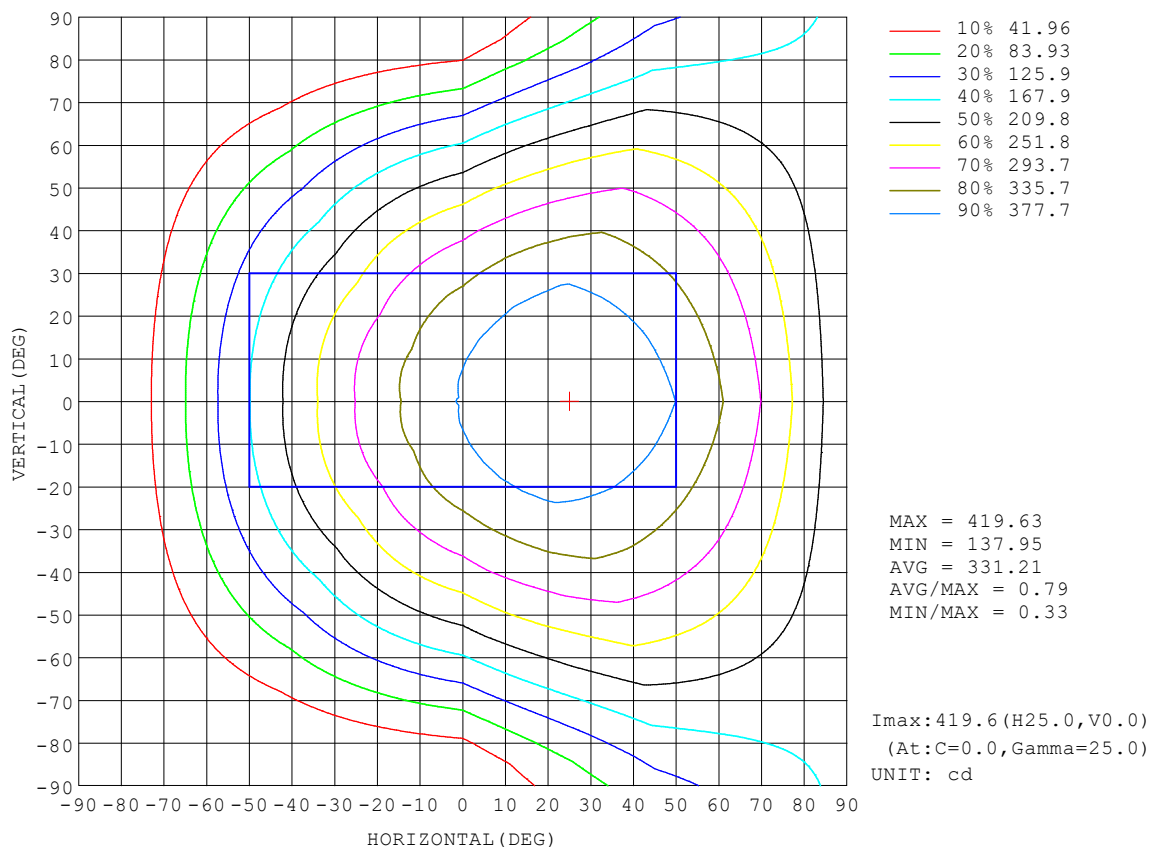
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	33	51	40	33	50	39	32	26
0.80	62	49	42	60	49	41	58	48	41	33
1.00	70	58	50	68	57	49	65	58	48	40
1.25	77	65	57	75	64	57	71	62	55	47
1.50	82	71	63	80	69	62	76	67	60	51
2.00	89	79	72	87	77	71	82	74	68	58
2.50	93	84	77	91	82	76	85	79	73	62
3.00	97	89	82	94	87	81	89	83	78	66
4.00	101	94	89	98	92	87	92	87	83	71
5.00	104	98	93	101	95	91	95	90	87	74
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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		

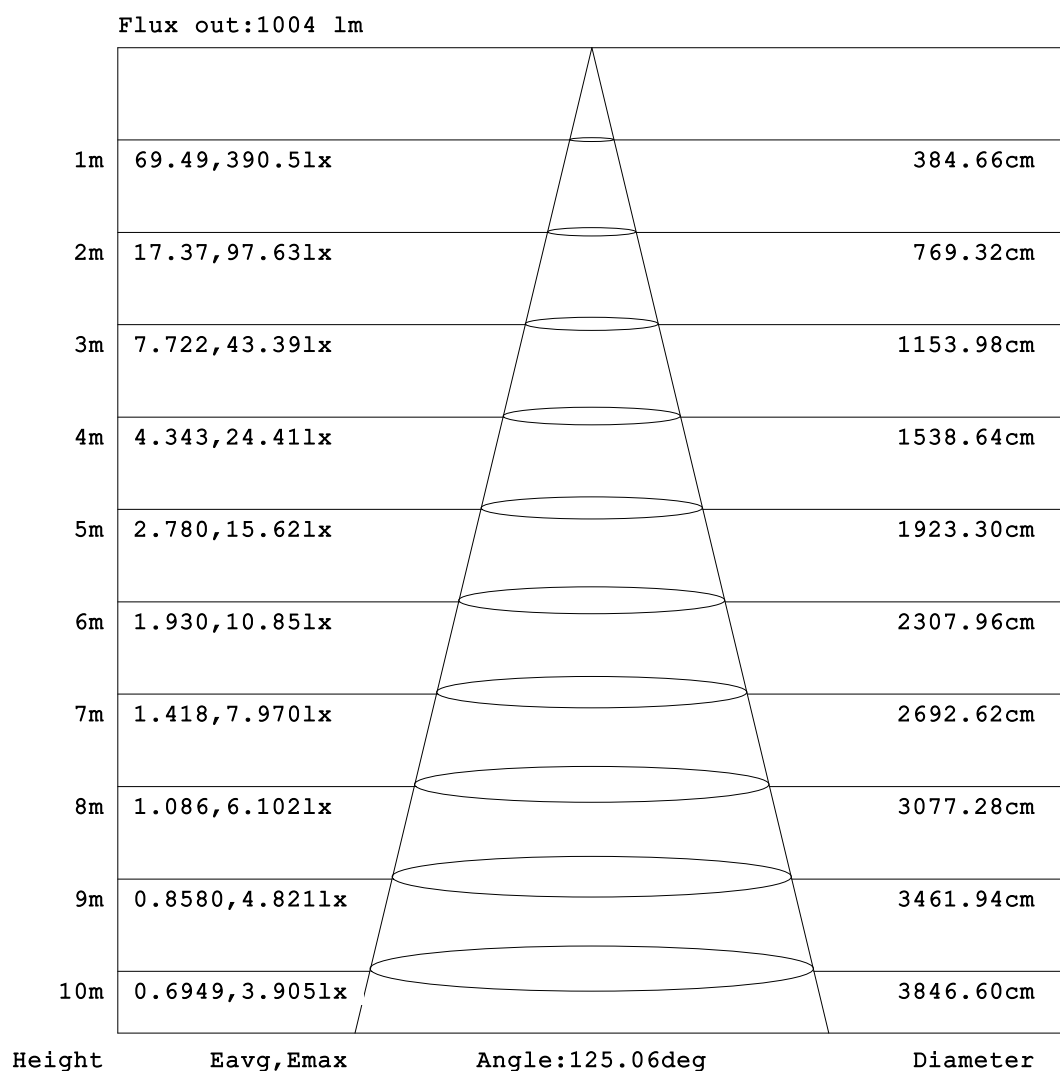


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2024-02-04

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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		



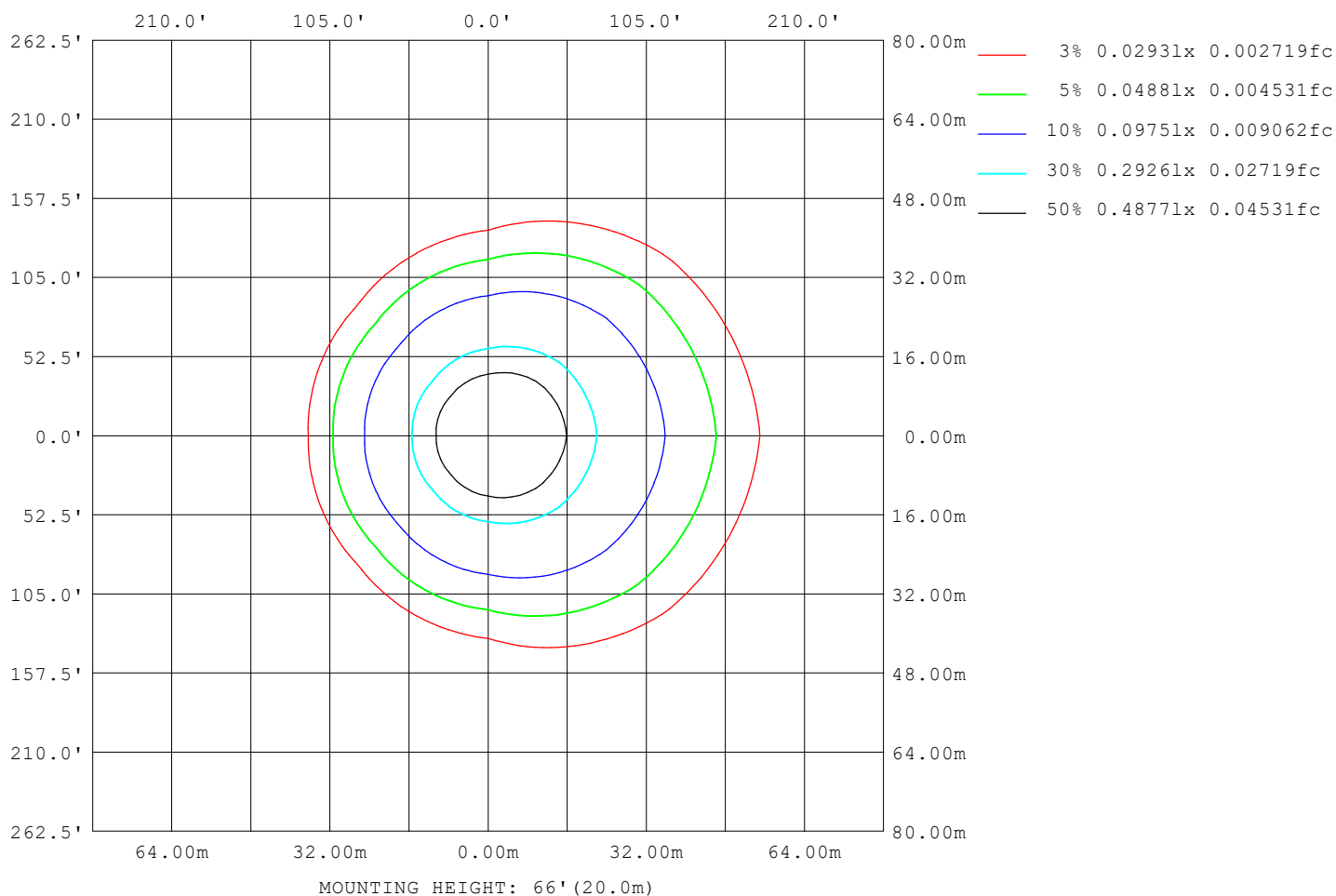
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		

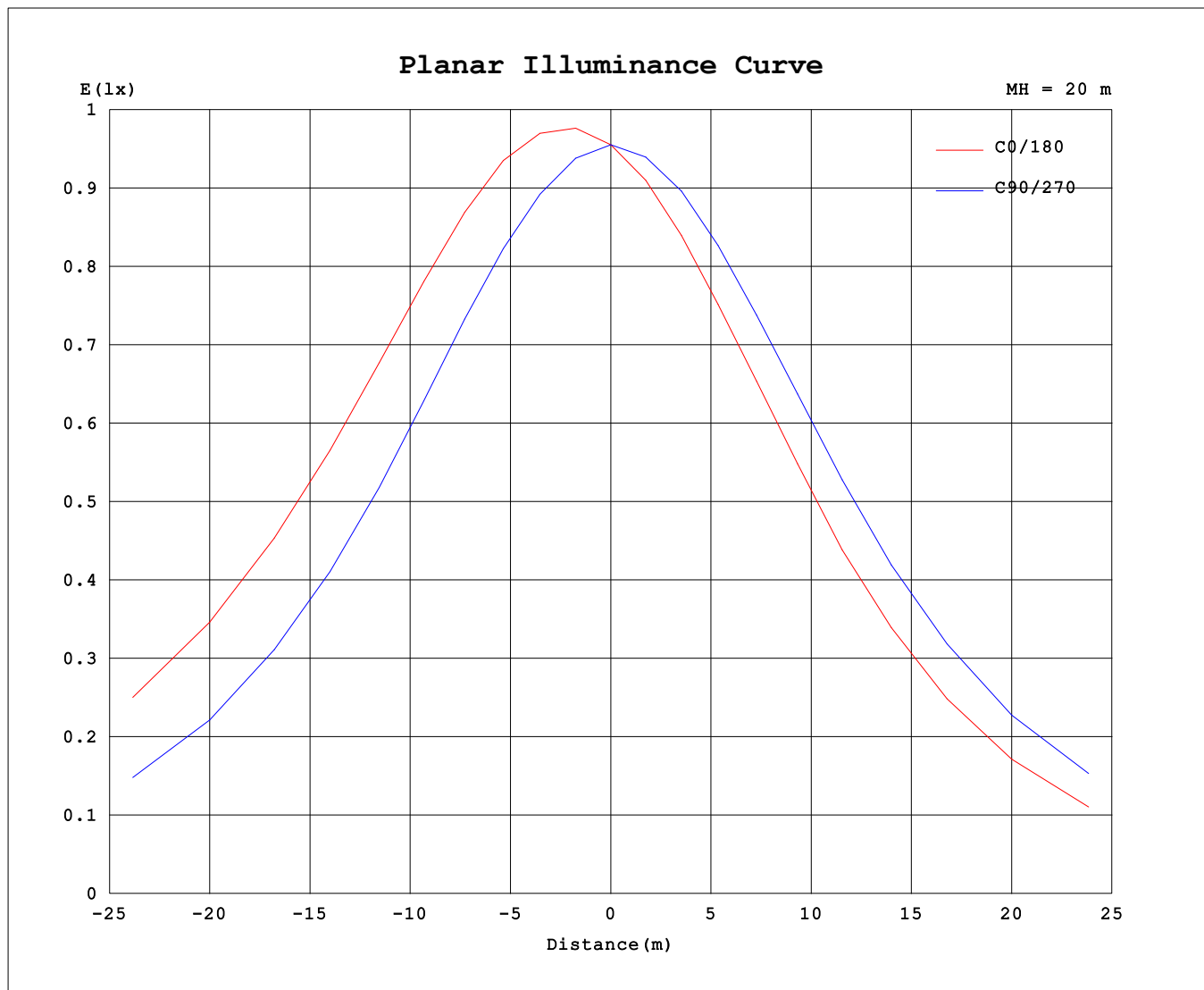
AvgL	cd/m2
L_0~180 (65) av	3479
L_0~180 (75) av	4197
L_0~180 (85) av	8711
L_90~270 (65) av	2347
L_90~270 (75) av	1959
L_90~270 (85) av	1075
L_45 (65) av	3057
L_45 (75) av	3406
L_45 (85) av	6029

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:120.06V I:0.1412A P:16.354W PF:0.9648 Freq:60.01Hz		
Lamp Flux:1400.49x1 lm		
NAME: ASD-UBN-32WH5000K		
MFR.: EVERFINE		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	381	381	381	381	381	381	381	381										
5	394	389	379	370	367	371	379	390										
10	405	395	373	357	351	358	374	396										
15	414	396	364	341	333	344	366	400										
20	418	395	353	323	314	326	355	399										
25	419	391	337	304	294	307	342	397										
30	416	383	318	281	269	285	325	390										
35	411	372	298	257	246	260	305	382										
40	403	359	277	231	221	234	283	368										
45	391	343	250	206	194	207	257	353										
50	376	325	223	177	166	178	230	334										
55	359	302	195	149	139	150	201	314										
60	340	279	164	120	111	122	170	291										
65	317	255	132	90.7	83.3	93.7	138	264										
70	292	227	98.9	62.4	56.4	65.5	105	236										
75	264	198	66.1	36.8	31.6	39.7	72.0	206										
80	235	168	35.3	14.4	9.69	17.0	41.0	174										
85	206	138	10.6	1.12	0.57	1.10	14.9	146										
90	176	111	0.67	0.00	0.08	0.00	0.32	118										
95	80.0	3.38	0.08	0.00	0.08	0.00	0.00	3.16										
100	50.9	66.9	0.00	0.00	0.08	0.00	0.00	70.3										
105	126	67.9	0.00	0.00	0.08	0.00	0.00	68.7										
110	115	62.2	0.00	0.00	0.08	0.00	0.00	62.5										
115	104	56.5	0.00	0.00	0.08	0.00	0.00	56.0										
120	92.0	51.1	0.00	0.00	0.00	0.00	0.00	49.0										
125	81.7	45.7	0.00	0.00	0.00	0.00	0.00	40.7										
130	71.6	40.6	0.00	0.00	0.00	0.00	0.24	32.1										
135	61.8	35.0	0.00	0.00	0.00	0.00	0.32	23.1										
140	52.4	29.3	0.00	0.00	0.00	0.00	0.32	14.1										
145	42.8	23.4	0.00	0.00	0.00	0.00	0.32	3.69										
150	33.5	17.5	0.00	0.00	0.00	0.00	0.32	1.05										
155	24.3	1.12	0.00	0.00	0.00	0.00	0.32	0.00										
160	3.45	4.87	0.00	0.00	0.00	0.00	0.32	0.00										
165	5.66	1.75	0.00	0.00	0.00	0.24	0.40	0.00										
170	0.84	0.88	0.00	0.00	0.00	0.40	0.40	0.00										
175	0.40	0.72	0.00	0.00	0.00	0.40	0.40	0.00										
180	0.40	0.40	0.00	0.00	0.00	0.40	0.40	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: