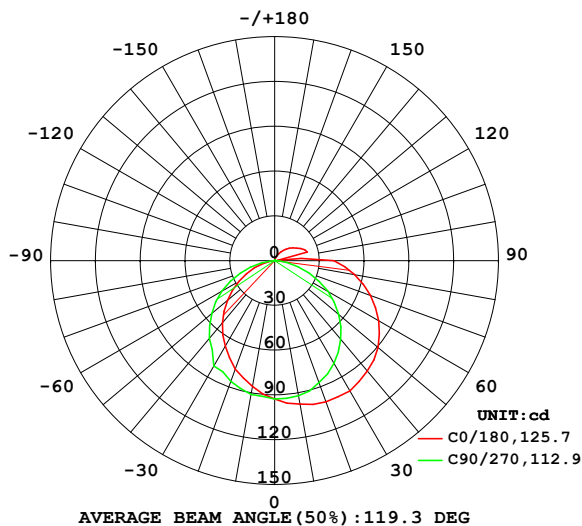


LUMINAIRE PHOTOMETRIC TEST REPORT

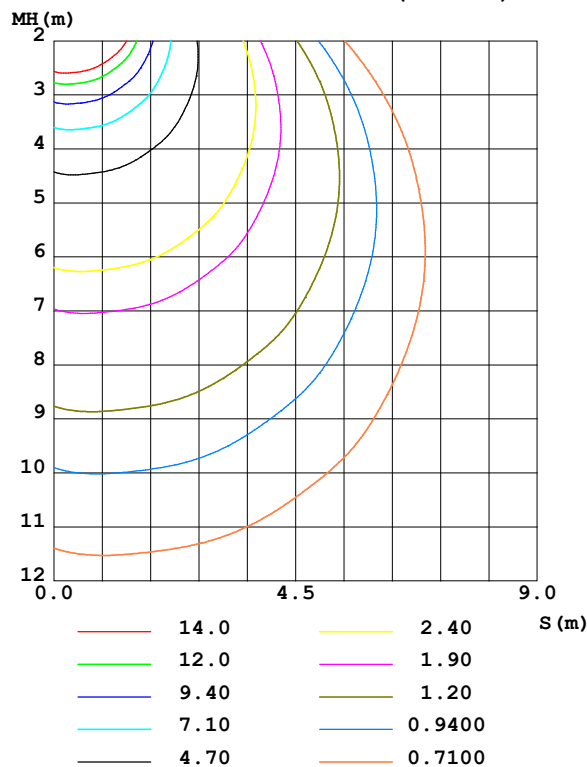
Test:U:119.97V I:0.0385A P:4.0531W PF:0.8785 Freq:60.01Hz Lamp Flux:327.881x1 lm		
NAME:	ASD-UBN-9WH 5000k	
MFR.: EVERFINE		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 80.90 lm/W
MODEL		I _{max} (cd)	100.8	S/MH(C0/180)	1.08	
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.28	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	327.88	η UP,DN(C0-180)	5.0,52.4	
NOMINAL FLUX(lm)	327.881	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,41.4	
LAMPS INSIDE	1	η up (%)	6.2	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	120	η down (%)	93.8	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℃
Operators: DAMIN
Test Date: 2024-02-02

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

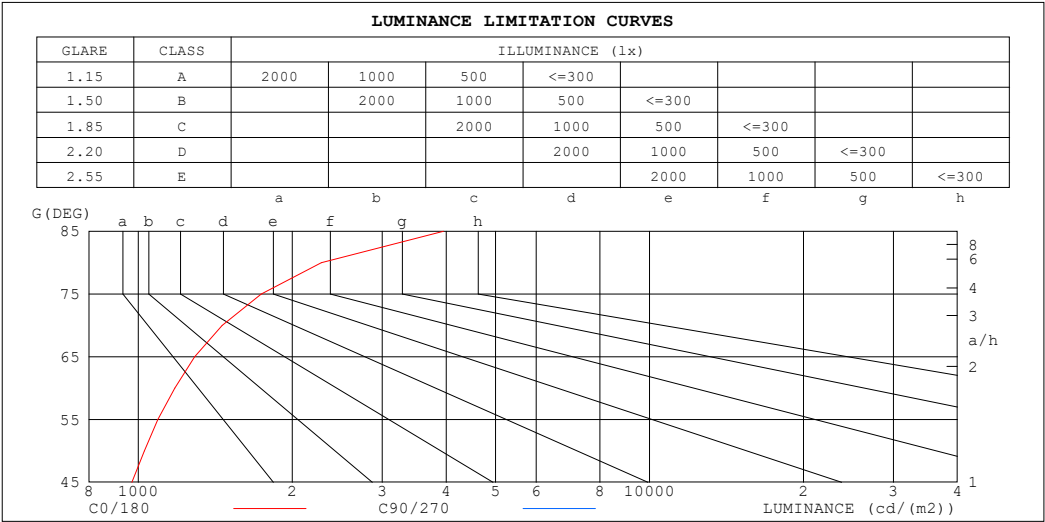
ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	97.66	96.18	91.91	87.36	85.66	87.48	91.05	94.99	0- 10	8.789	8.789	2.68,2.68
20	100.6	96.77	87.06	79.64	77.47	79.58	86.03	95.24	10- 20	25.41	34.20	10.4,10.4
30	100.8	93.41	79.65	69.66	66.25	68.93	81.43	92.09	20- 30	39.10	73.30	22.4,22.4
40	96.59	87.71	68.95	57.13	54.52	58.95	68.12	89.35	30- 40	48.33	121.6	37.1,37.1
50	90.43	78.58	56.12	44.09	41.35	44.18	55.07	77.74	40- 50	51.69	173.3	52.9,52.9
60	80.65	67.42	41.33	30.31	27.92	30.22	40.67	66.46	50- 60	48.88	222.2	67.8,67.8
70	68.23	54.32	24.73	16.09	14.40	16.26	24.56	52.55	60- 70	40.66	262.8	80.2,80.2
80	54.23	39.16	8.506	4.152	2.437	4.217	9.044	37.89	70- 80	28.25	291.1	88.8,88.8
90	39.71	25.57	0	0	0	0	0.0006	24.35	80- 90	16.39	307.5	93.8,93.8
100	2.102	8.223	0	0	0	0	0	8.363	90-100	4.934	312.4	95.3,95.3
110	21.61	10.06	0	0	0	0	0	8.138	100-110	4.630	317.0	96.7,96.7
120	17.14	9.221	0	0	0	0	0	6.977	110-120	4.581	321.6	98.1,98.1
130	13.01	7.041	0	0	0	0	0	3.824	120-130	3.220	324.8	99.1,99.1
140	9.035	4.859	0	0	0	0	0	0.7515	130-140	1.867	326.7	99.6,99.6
150	5.413	2.685	0	0	0	0	0	0	140-150	0.8800	327.6	99.9,99.9
160	2.203	0	0	0	0	0	0	0	150-160	0.2634	327.9	100,100
170	0	0	0	0	0	0	0	0	160-170	0.0226	327.9	100,100
180	0	0	0	0	0	0	0	0	170-180	0	327.9	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:2024-02-02

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



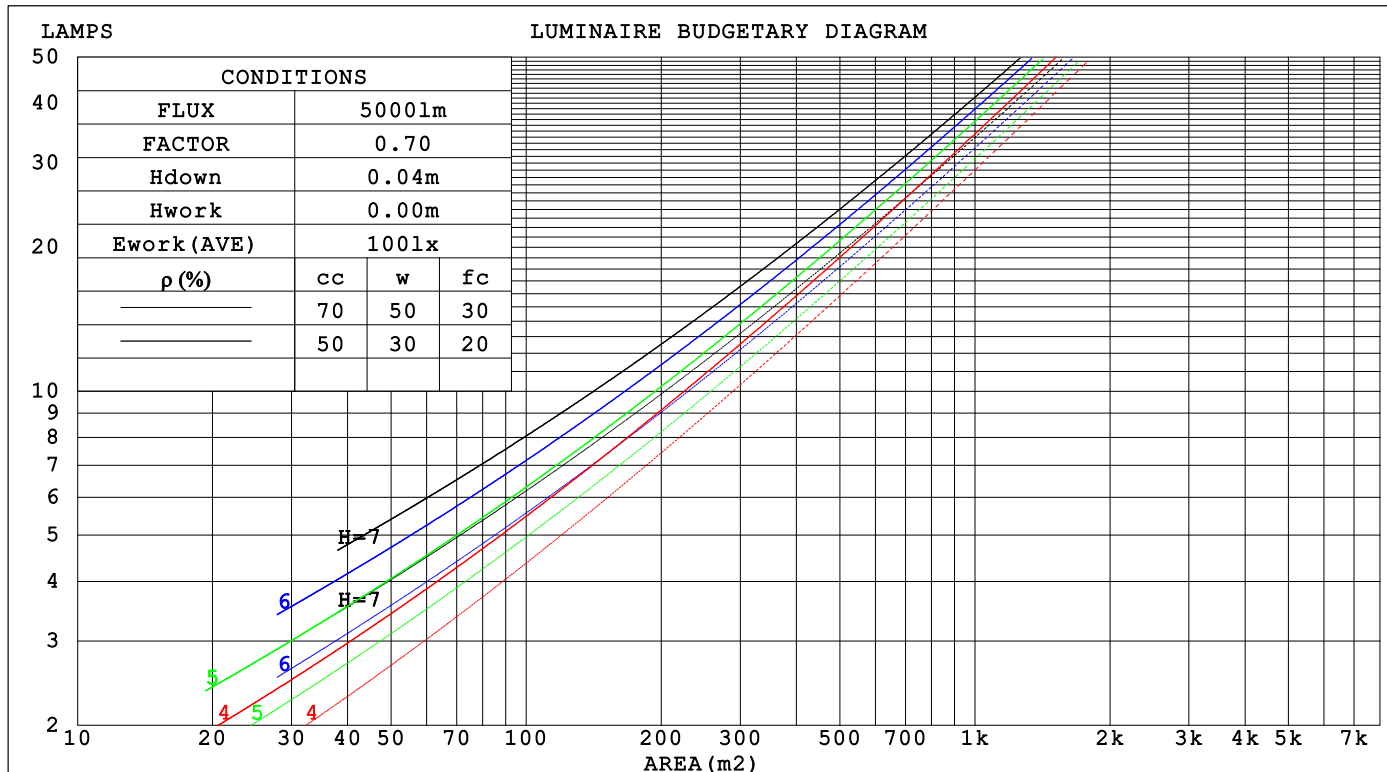
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3950	200
80	2282	360
75	1738	466
70	1458	532
65	1289	575
60	1178	608
55	1091	626
50	1028	642
45	972	654

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

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

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.96	.96	.96	.94
1.0	1.00	.95	.91	.97	.93	.89	.92	.88	.85	.87	.84	.81	.82	.80	.77	.75
2.0	.86	.79	.73	.84	.77	.71	.79	.73	.69	.75	.70	.66	.71	.67	.64	.61
3.0	.75	.66	.59	.73	.65	.59	.69	.62	.57	.66	.60	.55	.62	.57	.53	.51
4.0	.66	.57	.50	.64	.56	.49	.61	.54	.48	.58	.52	.46	.55	.50	.45	.43
5.0	.59	.50	.43	.57	.49	.42	.55	.47	.41	.52	.45	.40	.49	.44	.39	.37
6.0	.53	.44	.37	.52	.43	.37	.49	.41	.36	.47	.40	.35	.45	.39	.34	.32
7.0	.48	.39	.32	.47	.38	.32	.45	.37	.31	.43	.36	.31	.41	.35	.30	.28
8.0	.44	.35	.29	.43	.34	.29	.41	.33	.28	.39	.32	.27	.37	.31	.27	.25
9.0	.40	.31	.26	.39	.31	.26	.37	.30	.25	.36	.29	.25	.34	.28	.24	.22
10.0	.37	.29	.23	.36	.28	.23	.35	.28	.23	.33	.27	.22	.32	.26	.22	.20



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

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

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	.354	.201	.064	.345	.197	.062	.328	.188	.060	.312	.180	.058	.298	.172	.056		
2.0	.317	.174	.053	.309	.170	.052	.294	.163	.051	.280	.157	.049	.267	.151	.048		
3.0	.287	.153	.046	.280	.150	.045	.266	.144	.044	.254	.139	.043	.242	.134	.041		
4.0	.261	.136	.040	.255	.133	.039	.243	.129	.038	.231	.124	.037	.221	.120	.037		
5.0	.239	.122	.035	.233	.120	.035	.222	.116	.034	.212	.112	.033	.203	.108	.033		
6.0	.220	.110	.032	.215	.109	.031	.205	.105	.031	.196	.102	.030	.187	.099	.029		
7.0	.204	.101	.029	.199	.099	.028	.190	.096	.028	.182	.093	.027	.174	.090	.027		
8.0	.190	.093	.026	.185	.091	.026	.177	.089	.025	.170	.086	.025	.163	.083	.024		
9.0	.177	.086	.024	.173	.084	.024	.166	.082	.023	.159	.080	.023	.152	.077	.022		
10.0	.166	.080	.022	.163	.079	.022	.156	.076	.022	.150	.074	.021	.144	.072	.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	.238	.238	.238	.203	.203	.203	.139	.139	.139	.080	.080	.080	.025	.025	.025	
1.0	.231	.204	.179	.198	.175	.154	.135	.120	.106	.078	.070	.062	.025	.022	.020	
2.0	.224	.180	.143	.192	.155	.124	.131	.107	.086	.076	.062	.051	.024	.020	.016	
3.0	.216	.163	.120	.185	.140	.104	.127	.098	.073	.073	.057	.043	.024	.018	.014	
4.0	.208	.150	.105	.179	.129	.091	.123	.090	.064	.071	.053	.038	.023	.017	.013	
5.0	.201	.140	.095	.172	.121	.082	.119	.084	.058	.069	.050	.034	.022	.016	.011	
6.0	.193	.131	.087	.166	.114	.076	.115	.080	.054	.067	.047	.032	.021	.015	.011	
7.0	.186	.125	.082	.160	.108	.071	.111	.076	.050	.064	.045	.030	.021	.015	.010	
8.0	.180	.119	.077	.155	.103	.067	.107	.072	.048	.062	.043	.028	.020	.014	.009	
9.0	.173	.114	.074	.149	.099	.065	.104	.070	.046	.060	.041	.027	.020	.013	.009	
10.0	.168	.110	.071	.145	.095	.062	.100	.067	.044	.058	.040	.026	.019	.013	.009	

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

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:

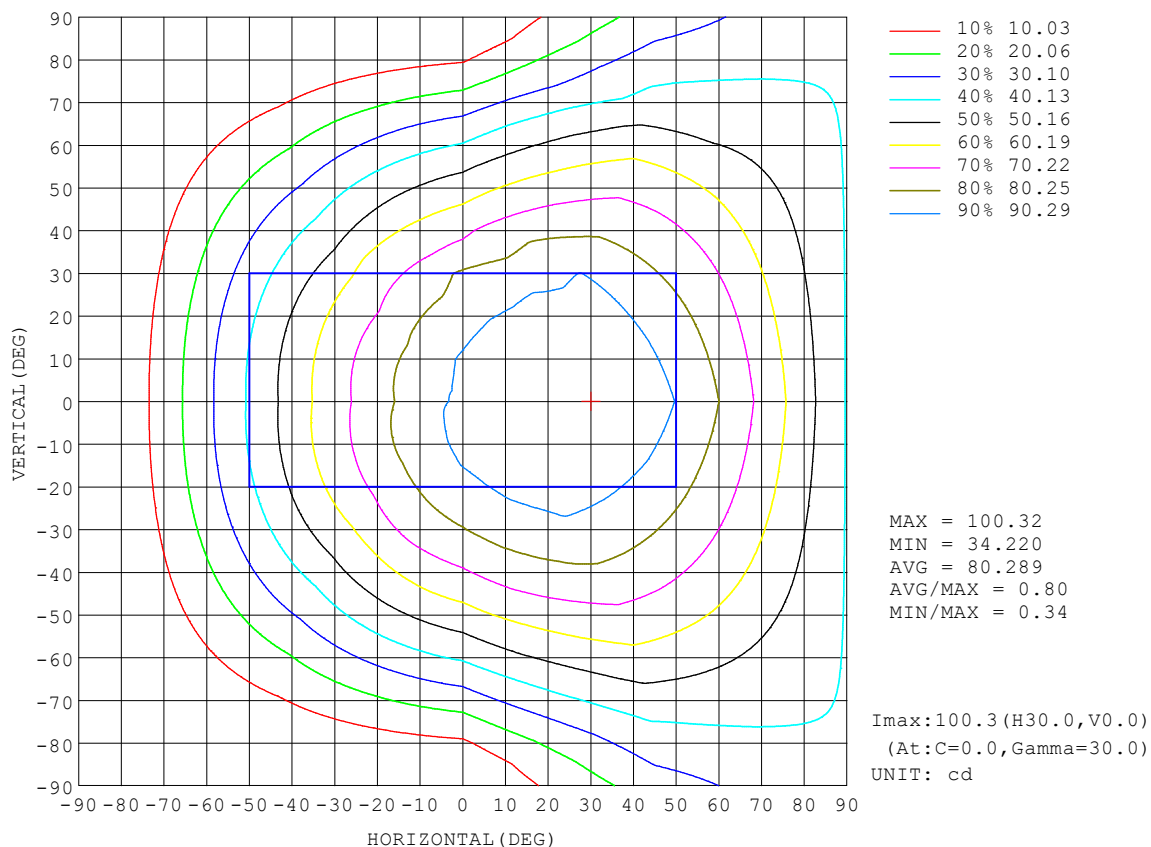
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	52	41	34	51	40	33	27
0.80	63	50	43	61	50	42	59	49	42	34
1.00	71	59	51	69	58	51	67	59	50	42
1.25	78	66	59	76	65	58	73	64	57	49
1.50	83	72	64	81	71	64	77	69	62	53
2.00	90	80	73	88	79	72	83	76	70	61
2.50	94	85	78	92	84	77	87	80	75	65
3.00	98	90	83	95	88	82	90	84	79	69
4.00	102	96	90	99	93	88	94	89	85	74
5.00	105	99	94	102	97	92	96	92	88	77
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: 2024-02-02

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:

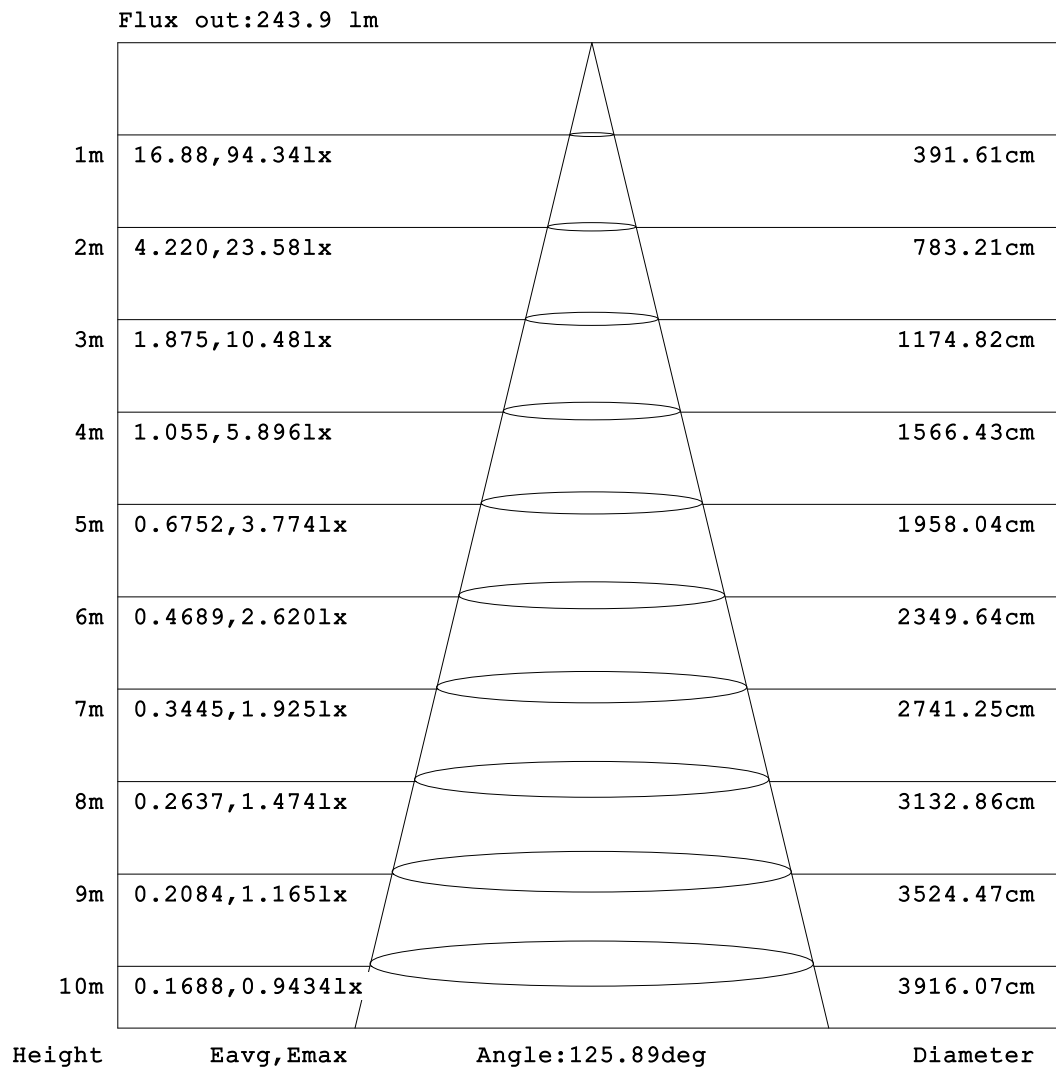
ISOCANDELA DIAGRAM



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

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

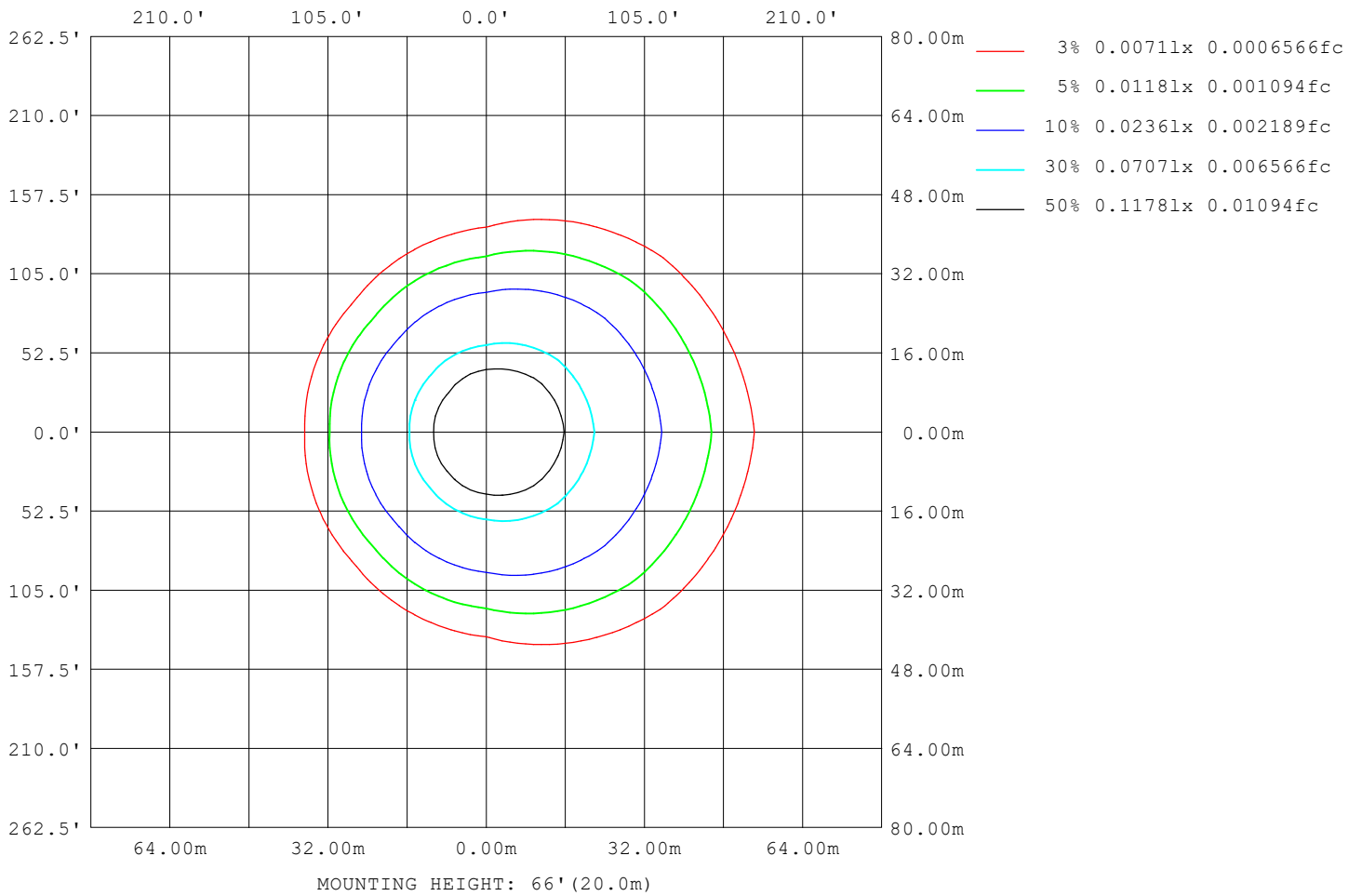


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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



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

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

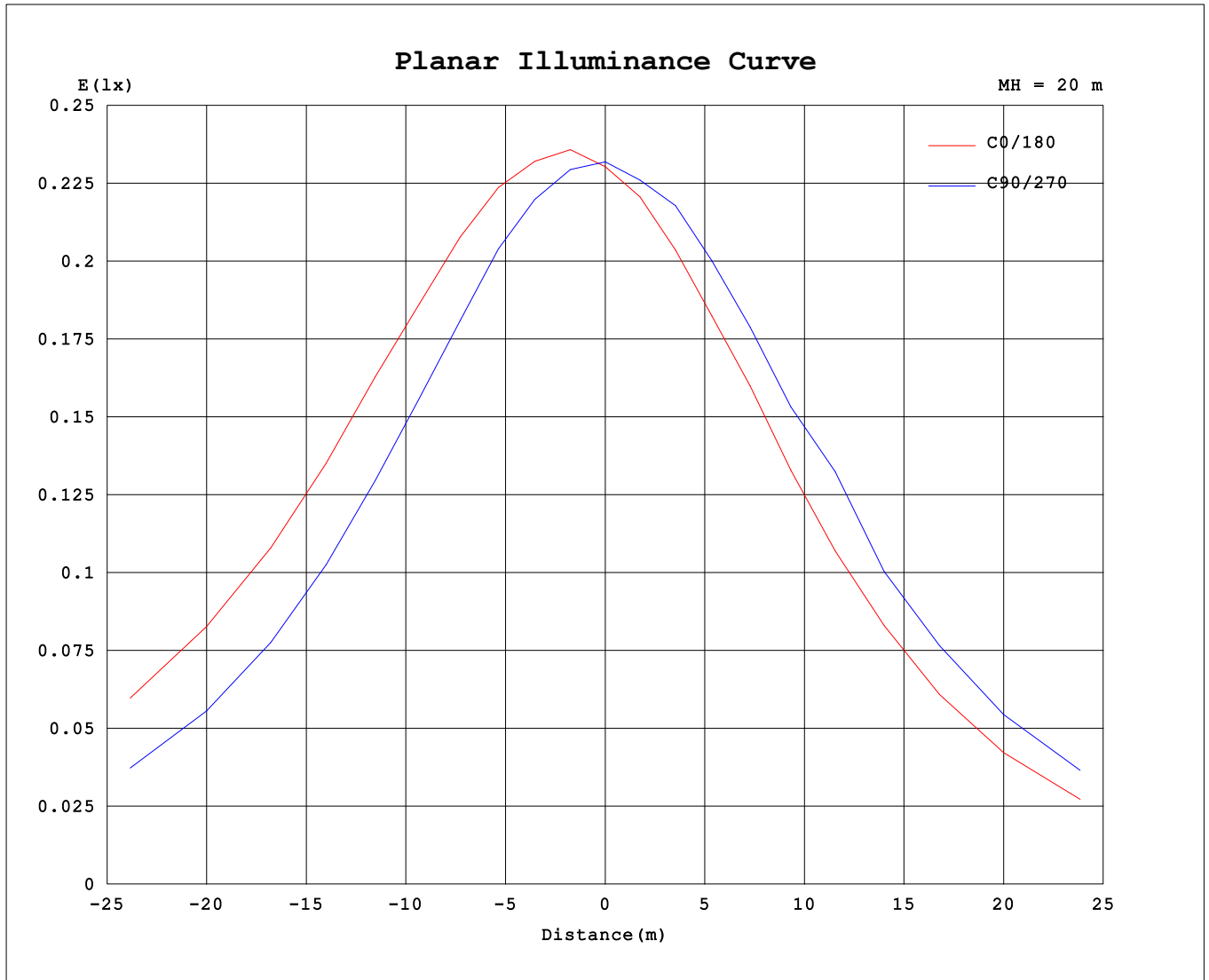
AvgL	cd/m2
L_0~180 (65) av	830
L_0~180 (75) av	989
L_0~180 (85) av	1984
L_90~270 (65) av	575
L_90~270 (75) av	469
L_90~270 (85) av	212
L_45 (65) av	725
L_45 (75) av	779
L_45 (85) av	1347

Standard: GB/T 29293-2012

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

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: 2024-02-02

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

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6										
5	95.9	94.8	92.7	90.1	89.7	90.1	91.3	94.1										
10	97.7	96.2	91.9	87.4	85.7	87.5	91.1	95.0										
15	99.8	96.8	90.4	83.9	81.4	83.3	88.7	95.2										
20	101	96.8	87.1	79.6	77.5	79.6	86.0	95.2										
25	101	95.7	83.7	74.5	71.7	74.5	82.2	93.8										
30	101	93.4	79.7	69.7	66.2	68.9	81.4	92.1										
35	98.9	91.3	74.6	64.7	60.8	63.5	73.0	89.8										
40	96.6	87.7	69.0	57.1	54.5	58.9	68.1	89.3										
45	94.1	83.7	62.9	51.2	48.1	50.8	61.6	83.3										
50	90.4	78.6	56.1	44.1	41.4	44.2	55.1	77.7										
55	85.6	73.1	48.8	37.2	34.8	37.3	48.2	72.1										
60	80.6	67.4	41.3	30.3	27.9	30.2	40.7	66.5										
65	74.6	61.1	33.0	22.8	21.0	23.1	33.1	60.0										
70	68.2	54.3	24.7	16.1	14.4	16.3	24.6	52.6										
75	61.6	46.9	16.4	9.88	8.19	9.89	16.7	43.3										
80	54.2	39.2	8.51	4.15	2.44	4.22	9.04	37.9										
85	47.1	32.5	2.37	0.25	0.00	0.01	2.65	31.2										
90	39.7	25.6	0.00	0.00	0.00	0.00	0.00	24.4										
95	17.9	0.11	0.00	0.00	0.00	0.00	0.00	0.15										
100	2.10	8.22	0.00	0.00	0.00	0.00	0.00	8.36										
105	22.7	9.90	0.00	0.00	0.00	0.00	0.00	8.39										
110	21.6	10.1	0.00	0.00	0.00	0.00	0.00	8.14										
115	19.3	10.1	0.00	0.00	0.00	0.00	0.00	7.89										
120	17.1	9.22	0.00	0.00	0.00	0.00	0.00	6.98										
125	15.0	8.22	0.00	0.00	0.00	0.00	0.00	5.57										
130	13.0	7.04	0.00	0.00	0.00	0.00	0.00	3.82										
135	11.0	6.03	0.00	0.00	0.00	0.00	0.00	2.24										
140	9.04	4.86	0.00	0.00	0.00	0.00	0.00	0.75										
145	7.18	3.77	0.00	0.00	0.00	0.00	0.00	0.00										
150	5.41	2.68	0.00	0.00	0.00	0.00	0.00	0.00										
155	3.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
160	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										

C Range: 0 - 360DEG

C Interval: 45.0DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:DAMIN

Test Date:2024-02-02

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: