

```

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

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ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	198.0	197.3	196.3	195.5	196.5	196.4	196.8	197.4	0- 10	18.96	18.96	3.24,3.24
20	187.4	186.6	185.1	183.6	184.7	184.9	186.0	187.4	10- 20	54.20	73.16	12.5,12.5
30	170.2	169.4	167.5	165.5	166.5	167.1	168.8	170.6	20- 30	81.87	155.0	26.5,26.5
40	147.6	146.9	144.8	142.4	143.4	144.1	146.2	148.3	30- 40	98.46	253.5	43.3,43.3
50	120.9	120.2	118.1	115.5	116.4	116.9	119.4	121.8	40- 50	102.2	355.7	60.8,60.8
60	91.14	90.44	88.15	85.51	86.29	86.87	89.20	91.92	50- 60	92.96	448.6	76.7,76.7
70	59.05	58.32	55.89	53.45	54.36	54.46	56.35	59.39	60- 70	71.94	520.6	89,89
80	27.76	26.55	23.55	22.43	23.90	22.90	23.30	26.95	70- 80	42.43	563.0	96.3,96.3
90	6.790	5.127	1.835	4.030	5.865	4.495	1.974	4.544	80- 90	14.05	577.1	98.7,98.7
100	1.423	1.493	0.2253	1.568	2.105	2.092	0.7569	2.067	90-100	2.571	579.6	99.1,99.1
110	1.101	1.085	0.2278	1.263	1.816	1.739	0.7310	1.677	100-110	1.504	581.1	99.4,99.4
120	0.9964	0.7489	0.2562	1.011	1.635	1.472	0.7402	1.376	110-120	1.167	582.3	99.6,99.6
130	0.9230	0.6012	0.3005	0.8274	1.453	1.253	0.7535	1.153	120-130	0.8937	583.2	99.7,99.7
140	0.8180	0.5078	0.3480	0.6943	1.253	1.080	0.7660	0.9830	130-140	0.6704	583.9	99.8,99.8
150	0.7010	0.4904	0.4072	0.5720	1.017	0.8991	0.7619	0.8616	140-150	0.4749	584.3	99.9,99.9
160	0.5480	0.5037	0.4791	0.5269	0.8430	0.7540	0.7427	0.7677	150-160	0.3161	584.6	100,100
170	0.5532	0.5599	0.5675	0.5812	0.6649	0.6763	0.7052	0.6926	160-170	0.1794	584.8	100,100
180	0.5983	0.6154	0.6117	0.6158	0.5983	0.6121	0.6492	0.6246	170-180	0.0591	584.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 304.94 lm

%lum = 52.1%

%lamp = 52.1%

Conical surface Flux(120deg): 448.62 lm

%lum = 76.7%

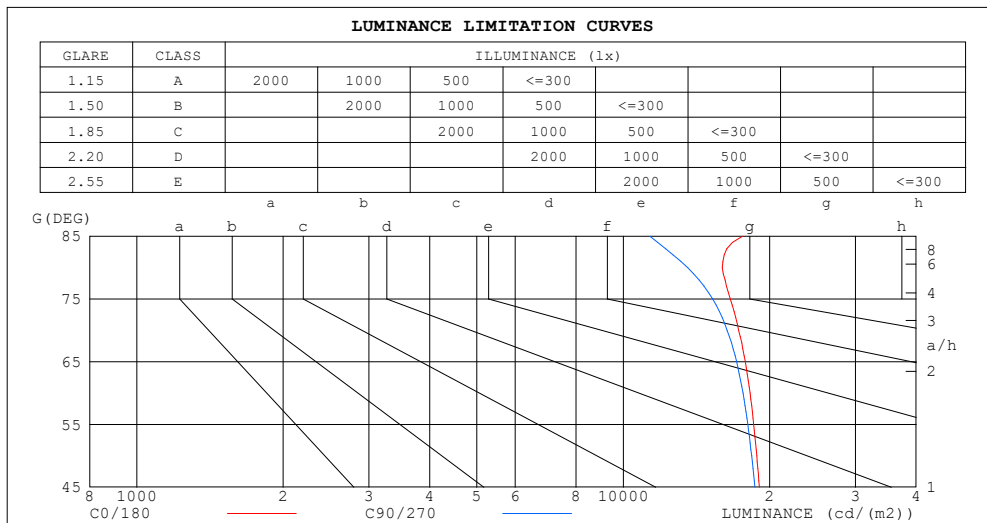
%lamp = 76.7%

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity:65.0%
 Test Distance:8.000m [K=0.7125]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17584	11342
80	15985	13563
75	16600	15266
70	17264	16340
65	17815	17100
60	18227	17630
55	18547	18032
50	18811	18366
45	19052	18644

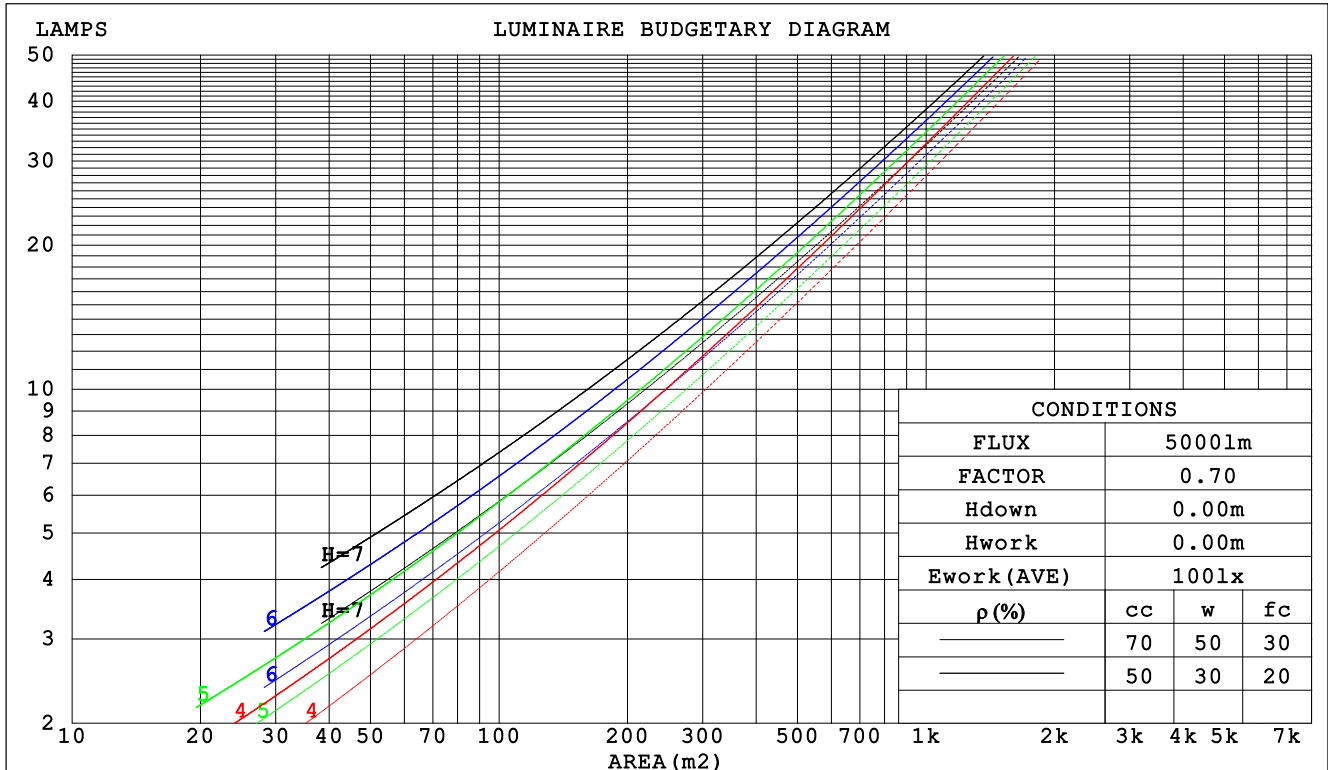
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		

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	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.99
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.82
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.80	.76	.72	.77	.73	.70	.68
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.65	.61	.68	.63	.59	.57
4.0	.70	.61	.54	.68	.60	.53	.65	.58	.53	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.56	.50	.45	.54	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.44	.39	.49	.43	.39	.37
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.45	.37	.32	.44	.37	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.29	.42	.34	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

WEC AND CCEC

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		

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	.317	.180	.057	.309	.176	.056	.295	.169	.054	.282	.163	.052	.270	.157	.051		
2.0	.296	.162	.050	.289	.159	.049	.277	.154	.048	.265	.149	.047	.254	.144	.045		
3.0	.273	.145	.043	.267	.143	.043	.256	.139	.042	.245	.134	.041	.236	.131	.040		
4.0	.251	.130	.038	.246	.129	.038	.236	.125	.037	.227	.122	.037	.218	.119	.036		
5.0	.232	.118	.034	.227	.116	.034	.218	.114	.033	.210	.111	.033	.202	.108	.033		
6.0	.214	.108	.031	.210	.106	.031	.203	.104	.030	.195	.101	.030	.188	.099	.029		
7.0	.199	.099	.028	.196	.098	.028	.189	.095	.027	.182	.093	.027	.176	.091	.027		
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025		
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023		
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.147	.074	.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	.201	.201	.201	.172	.172	.172	.117	.117	.117	.067	.067	.067	.022	.022	.022		
1.0	.191	.166	.144	.163	.143	.124	.112	.098	.086	.064	.057	.050	.021	.018	.016		
2.0	.183	.142	.108	.157	.122	.093	.107	.085	.065	.062	.049	.038	.020	.016	.012		
3.0	.175	.125	.084	.150	.108	.073	.103	.075	.051	.060	.044	.030	.019	.014	.010		
4.0	.168	.111	.069	.144	.096	.060	.099	.067	.042	.057	.039	.025	.018	.013	.008		
5.0	.160	.101	.057	.138	.087	.050	.095	.061	.035	.055	.036	.021	.018	.012	.007		
6.0	.153	.093	.050	.132	.080	.043	.091	.056	.031	.053	.033	.018	.017	.011	.006		
7.0	.146	.086	.044	.126	.074	.038	.087	.052	.027	.050	.031	.016	.016	.010	.005		
8.0	.140	.080	.039	.120	.070	.034	.083	.049	.024	.048	.029	.014	.016	.009	.005		
9.0	.134	.075	.036	.115	.065	.031	.080	.046	.022	.046	.027	.013	.015	.009	.004		
10.0	.128	.071	.033	.110	.062	.029	.076	.043	.020	.045	.026	.012	.014	.008	.004		

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz Lamp Flux:584.886x1 lm										
Name: NSL96W-WW-IP67					Type: LED					
MFR.:										
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	23.0	24.5	23.3	24.8	25.0	22.9	24.4	23.2	24.6	24.9
3H	24.7	26.1	25.0	26.3	26.6	24.5	25.9	24.8	26.1	26.4
4H	25.3	26.7	25.7	26.9	27.2	25.1	26.4	25.4	26.7	27.0
6H	25.9	27.1	26.2	27.4	27.7	25.5	26.8	25.9	27.1	27.4
8H	26.1	27.3	26.4	27.6	27.9	25.7	26.9	26.0	27.2	27.5
12H	26.2	27.4	26.6	27.7	28.1	25.7	26.9	26.1	27.2	27.6
4H 2H	23.6	25.0	24.0	25.3	25.5	23.5	24.9	23.9	25.2	25.4
3H	25.5	26.6	25.8	27.0	27.3	25.3	26.5	25.7	26.8	27.1
4H	26.3	27.4	26.7	27.7	28.1	26.1	27.1	26.5	27.5	27.8
6H	27.0	27.9	27.4	28.3	28.7	26.6	27.6	27.0	28.0	28.3
8H	27.2	28.1	27.7	28.5	28.9	26.8	27.7	27.3	28.1	28.5
12H	27.5	28.3	27.9	28.7	29.1	26.9	27.8	27.4	28.2	28.6
8H 4H	26.6	27.5	27.0	27.9	28.3	26.4	27.3	26.8	27.6	28.1
6H	27.4	28.2	27.9	28.6	29.0	27.1	27.8	27.6	28.3	28.7
8H	27.8	28.5	28.3	28.9	29.4	27.4	28.0	27.9	28.5	29.0
12H	28.2	28.7	28.6	29.2	29.7	27.6	28.2	28.1	28.6	29.1
12H 4H	26.6	27.4	27.0	27.8	28.2	26.4	27.2	26.8	27.6	28.1
6H	27.5	28.1	28.0	28.6	29.1	27.2	27.8	27.7	28.3	28.8
8H	27.9	28.5	28.4	29.0	29.5	27.5	28.1	28.0	28.5	29.1
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	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 584.9 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -1.9$)
Area: 0.01 m2

C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		

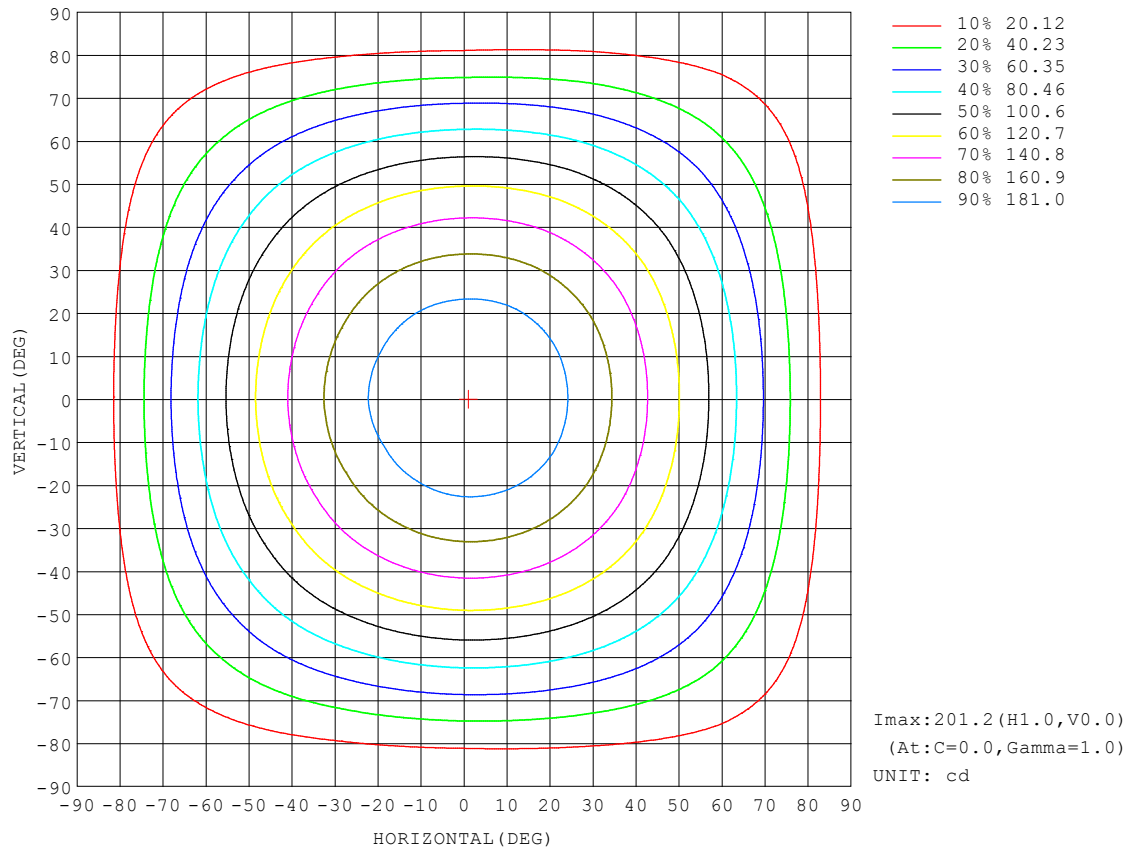
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	56	74	63	56	71	65	55	48
1.25	82	71	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	95	90	85	76
4.00	105	100	95	103	98	93	99	94	90	81
5.00	108	103	99	105	101	97	101	97	94	84
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		

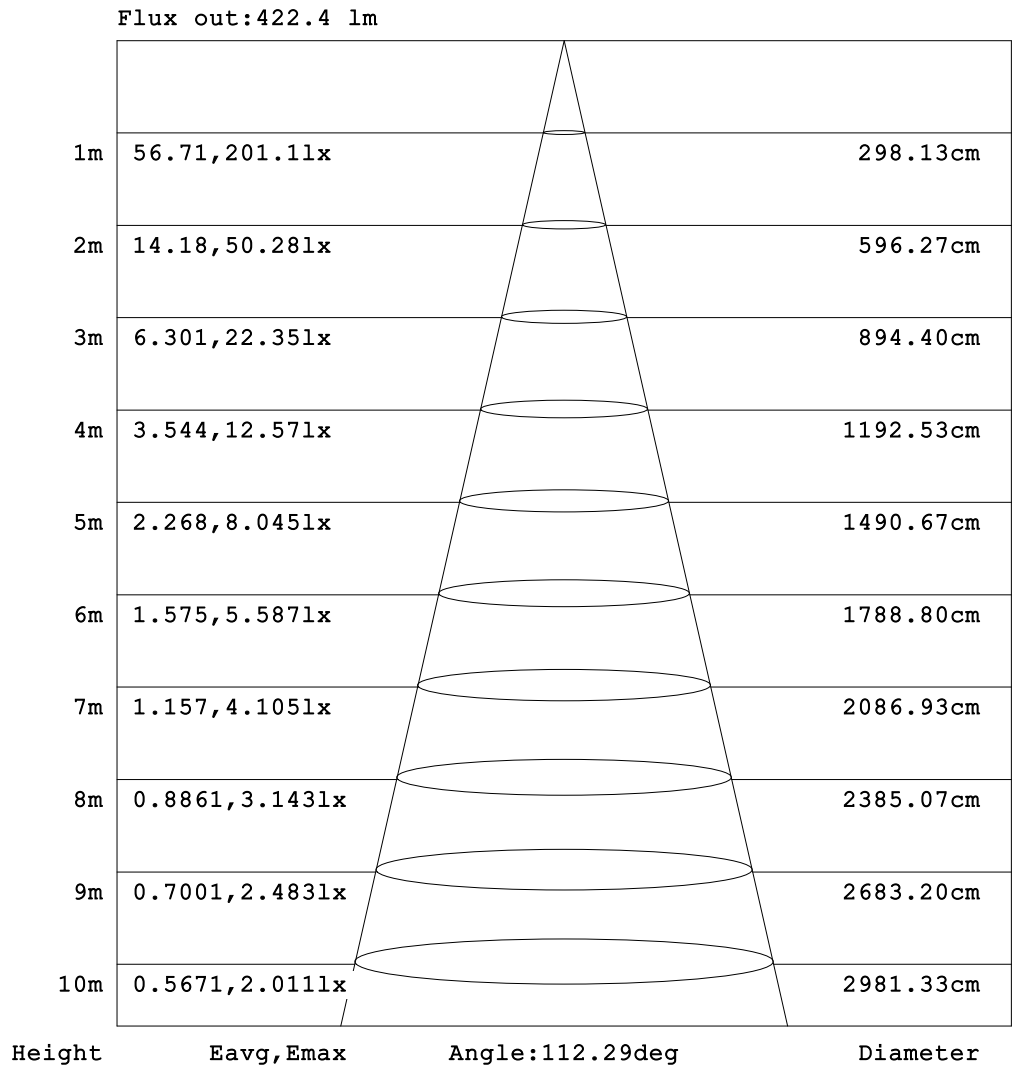


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

AAI Figure

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		



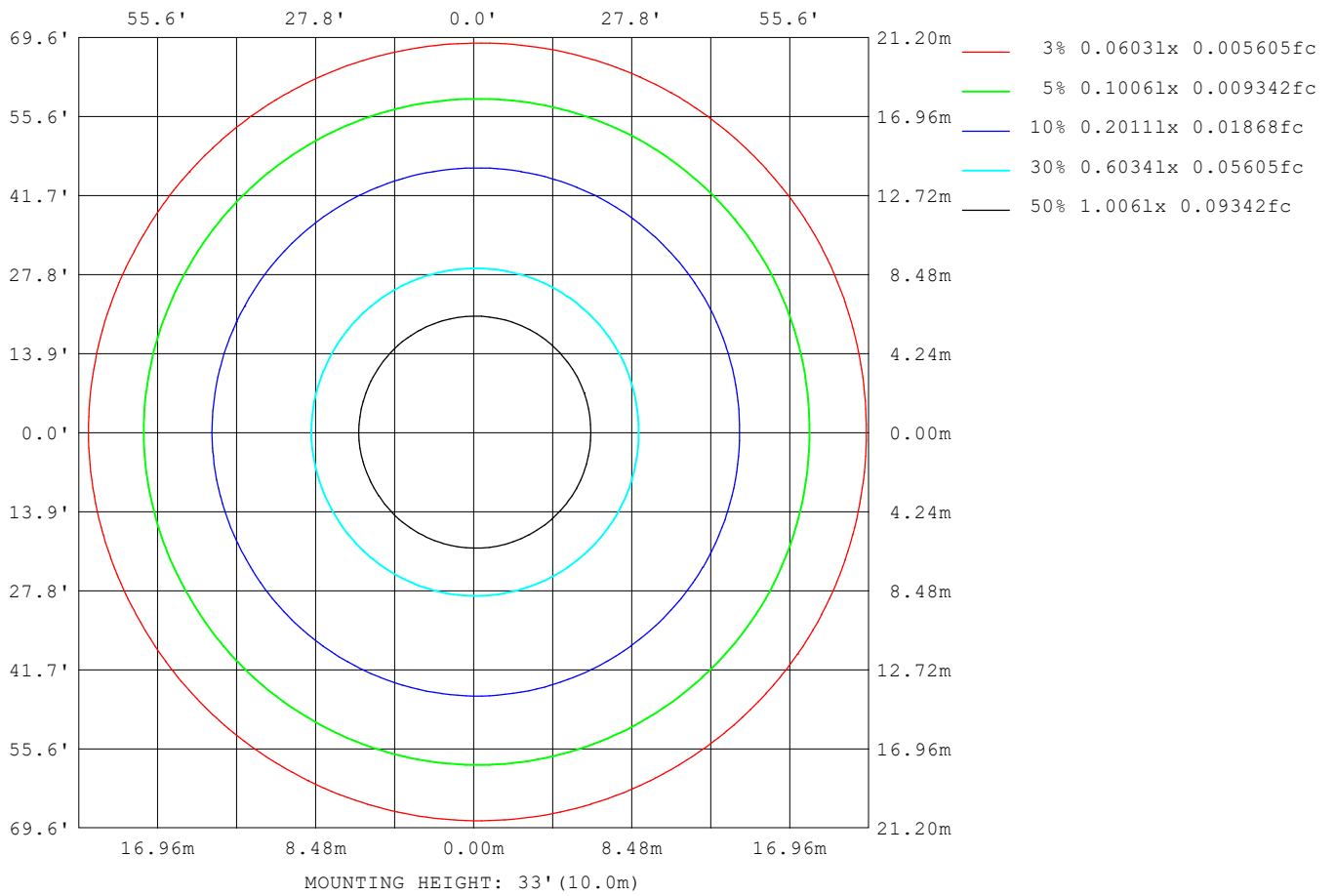
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
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Test Date:2024-12-05

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks:

ISOLUX DIAGRAM

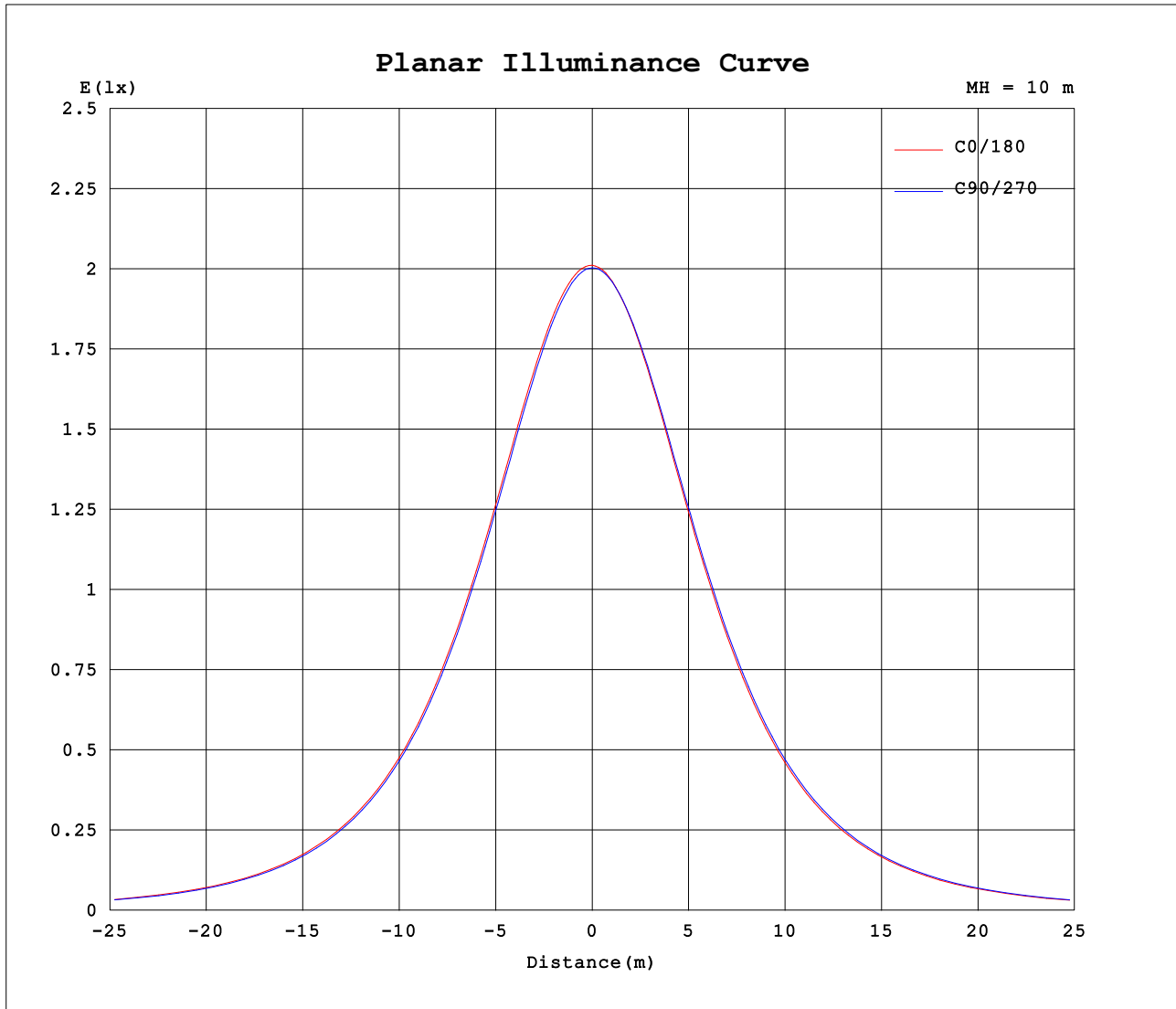
Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
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 Humidity:65.0%
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 Remarks:

Planar Illuminance Curve



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 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-12-05

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.443
 Humidity: 65.0%
 Test Distance: 8.000m [K=0.7125]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.4330A P:10.400W PF:1.000 Freq:0Hz		
Lamp Flux:584.886x1 lm		
Name: NSL96W-WW-IP67	Type: LED	
MFR.:		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	201	201	201	200	200	200	201	201	201	200	200	200							
5	201	200	200	199	199	199	200	199	200	200	200	200							
10	198	198	197	196	196	195	197	196	197	197	197	198							
15	194	193	192	192	191	190	191	191	192	192	193	193							
20	187	187	186	185	184	183	185	185	185	186	187	188							
25	180	179	178	177	176	175	176	176	177	178	179	180							
30	170	170	169	168	166	165	166	166	168	169	170	171							
35	159	159	158	157	155	154	155	155	157	158	160	160							
40	148	148	146	145	143	142	143	143	145	146	148	149							
45	135	135	133	132	130	129	130	130	131	133	135	136							
50	121	121	120	118	116	115	116	116	118	119	121	122							
55	106	106	105	103	101	100	102	102	103	105	107	108							
60	91.1	91.1	89.7	88.2	86.0	85.0	86.3	86.2	87.6	89.2	91.5	92.4							
65	75.3	75.4	73.8	72.3	70.1	69.2	70.5	70.2	71.6	73.0	75.5	76.3							
70	59.0	59.2	57.5	55.9	53.8	53.1	54.4	53.9	55.0	56.3	59.0	59.8							
75	43.0	43.1	41.1	39.5	37.6	37.2	38.4	37.7	38.5	39.5	42.4	43.1							
80	27.8	27.7	25.4	23.6	22.3	22.5	23.9	23.0	22.8	23.3	26.3	27.6							
85	15.3	14.8	12.0	9.89	9.88	11.3	12.8	11.7	10.2	9.61	11.7	14.9							
90	6.79	6.24	4.01	1.84	3.33	4.73	5.87	5.20	3.79	1.97	3.29	5.79							
95	2.57	2.41	1.77	0.23	1.75	2.14	2.83	2.70	2.32	0.77	2.37	2.53							
100	1.42	1.55	1.44	0.23	1.49	1.65	2.10	2.20	1.99	0.76	1.99	2.14							
105	1.21	1.36	1.20	0.22	1.34	1.48	1.93	2.00	1.79	0.74	1.78	1.94							
110	1.10	1.24	0.93	0.23	1.16	1.36	1.82	1.86	1.61	0.73	1.53	1.82							
115	1.04	1.09	0.74	0.23	0.99	1.27	1.72	1.74	1.44	0.73	1.41	1.71							
120	1.00	0.87	0.63	0.26	0.85	1.18	1.63	1.64	1.30	0.74	1.28	1.48							
125	0.96	0.77	0.55	0.27	0.74	1.09	1.55	1.52	1.19	0.74	1.16	1.37							
130	0.92	0.71	0.49	0.30	0.67	0.99	1.45	1.41	1.09	0.75	1.05	1.26							
135	0.87	0.64	0.45	0.32	0.60	0.90	1.35	1.30	1.02	0.76	0.97	1.15							
140	0.82	0.59	0.43	0.35	0.56	0.83	1.25	1.20	0.96	0.77	0.91	1.05							
145	0.75	0.54	0.44	0.37	0.51	0.75	1.02	1.09	0.89	0.76	0.86	0.98							
150	0.70	0.52	0.46	0.41	0.47	0.68	1.02	0.99	0.81	0.76	0.81	0.91							
155	0.67	0.51	0.47	0.44	0.48	0.63	0.95	0.90	0.77	0.75	0.78	0.85							
160	0.55	0.52	0.49	0.48	0.50	0.55	0.84	0.77	0.74	0.74	0.75	0.79							
165	0.53	0.55	0.51	0.52	0.54	0.55	0.73	0.70	0.72	0.73	0.72	0.74							
170	0.55	0.57	0.55	0.57	0.58	0.59	0.66	0.67	0.69	0.71	0.69	0.69							
175	0.58	0.58	0.59	0.60	0.60	0.60	0.61	0.62	0.65	0.67	0.66	0.64							
180	0.60	0.62	0.61	0.61	0.62	0.61	0.60	0.61	0.61	0.65	0.63	0.62							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-12-05

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.443
Humidity:65.0%
Test Distance:8.000m [K=0.7125]
Remarks: