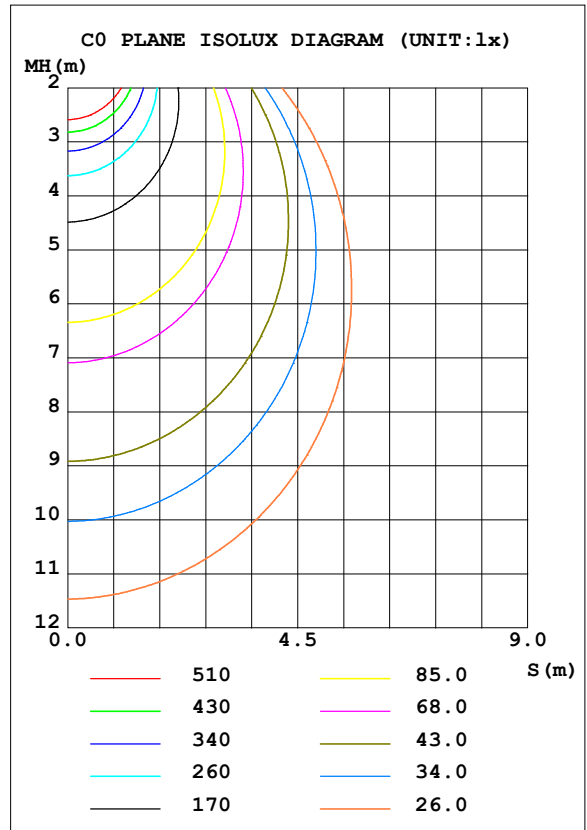
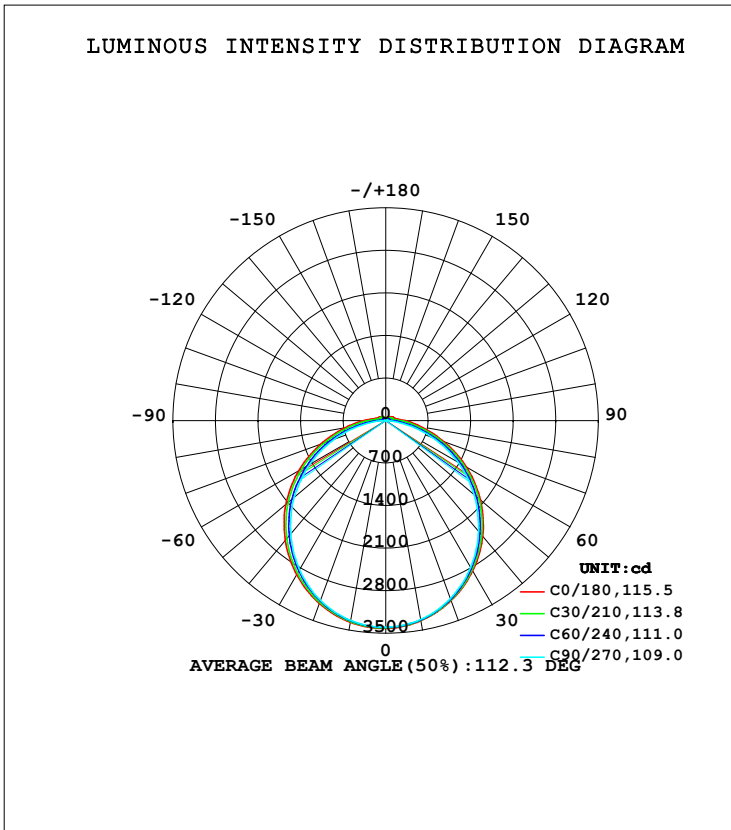


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 143.74 lm/W			
MODEL		I _{max} (cd)	3420	S/MH (C0/180)	1.27
NOMINAL POWER (W)	70	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	10421	η UP, DN (C0-180)	2.2, 46.9
NOMINAL FLUX (lm)	10421	CIE CLASS	DIRECT	η UP, DN (C180-360)	2.4, 48.5
LAMPS INSIDE	1	η up (%)	4.7	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	95.3	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-03-10

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=0.8062]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

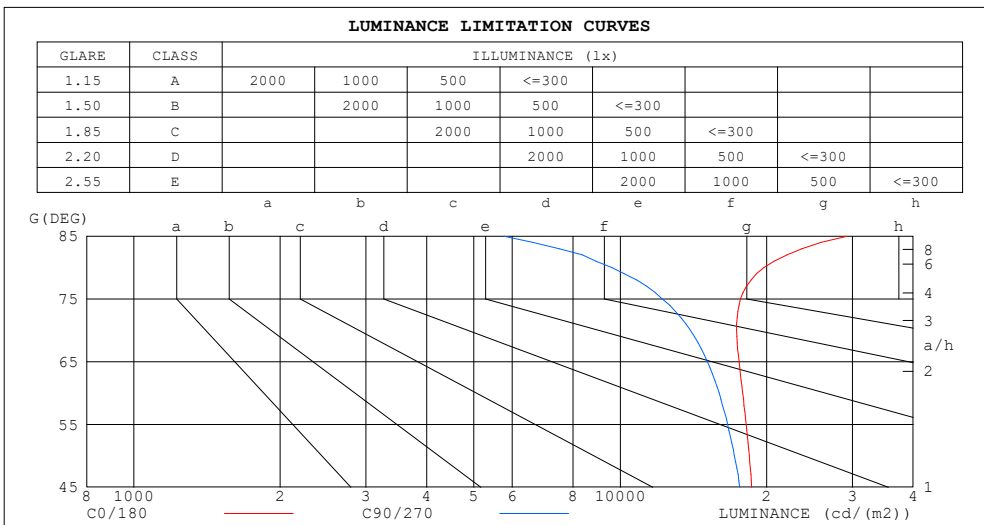
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	3344	3334	3324	3332	3368	3351	3340	3334	0- 10	321.9	321.9	3.09,3.09
20	3151	3135	3117	3140	3201	3170	3147	3147	10- 20	919.6	1242	11.9,11.9
30	2860	2829	2793	2841	2930	2881	2835	2849	20- 30	1388	2630	25.2,25.2
40	2484	2437	2378	2455	2573	2502	2431	2463	30- 40	1669	4299	41.3,41.3
50	2037	1974	1898	2001	2150	2056	1970	2009	40- 50	1731	6030	57.9,57.9
60	1536	1460	1374	1494	1654	1552	1446	1503	50- 60	1574	7604	73,73
70	1020	926.9	819.8	964.7	1143	1024	900.5	974.7	60- 70	1225	8829	84.7,84.7
80	589.2	451.9	287.2	479.0	676.4	532.4	366.8	492.7	70- 80	759.6	9589	92,92
90	322.3	184.3	8.503	190.7	366.6	218.7	28.46	198.1	80- 90	346.6	9935	95.3,95.3
100	181.0	97.93	9.370	94.08	197.7	106.8	16.48	99.54	90-100	149.5	10085	96.8,96.8
110	136.9	84.34	11.38	76.41	136.5	84.50	17.37	84.41	100-110	91.98	10177	97.7,97.7
120	121.3	71.47	13.82	70.14	120.0	78.15	19.70	71.80	110-120	75.42	10252	98.4,98.4
130	104.4	60.37	16.36	62.89	103.8	70.61	22.23	59.26	120-130	60.30	10312	99,99
140	86.41	50.05	19.42	54.69	86.44	61.71	24.87	48.76	130-140	45.33	10358	99.4,99.4
150	68.44	41.84	21.49	45.74	68.77	51.82	26.47	41.83	140-150	31.31	10389	99.7,99.7
160	51.71	35.33	23.60	37.08	51.79	41.58	27.21	35.85	150-160	19.46	10408	99.9,99.9
170	35.70	28.96	25.99	29.61	35.91	32.15	27.87	30.54	160-170	9.788	10418	100,100
180	27.11	27.24	28.17	27.23	27.30	27.27	28.10	27.08	170-180	2.762	10421	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	29271	5776
80	19726	9617
75	17667	12213
70	17342	13936
65	17557	15119
60	17862	15974
55	18154	16626
50	18427	17164
45	18618	17603

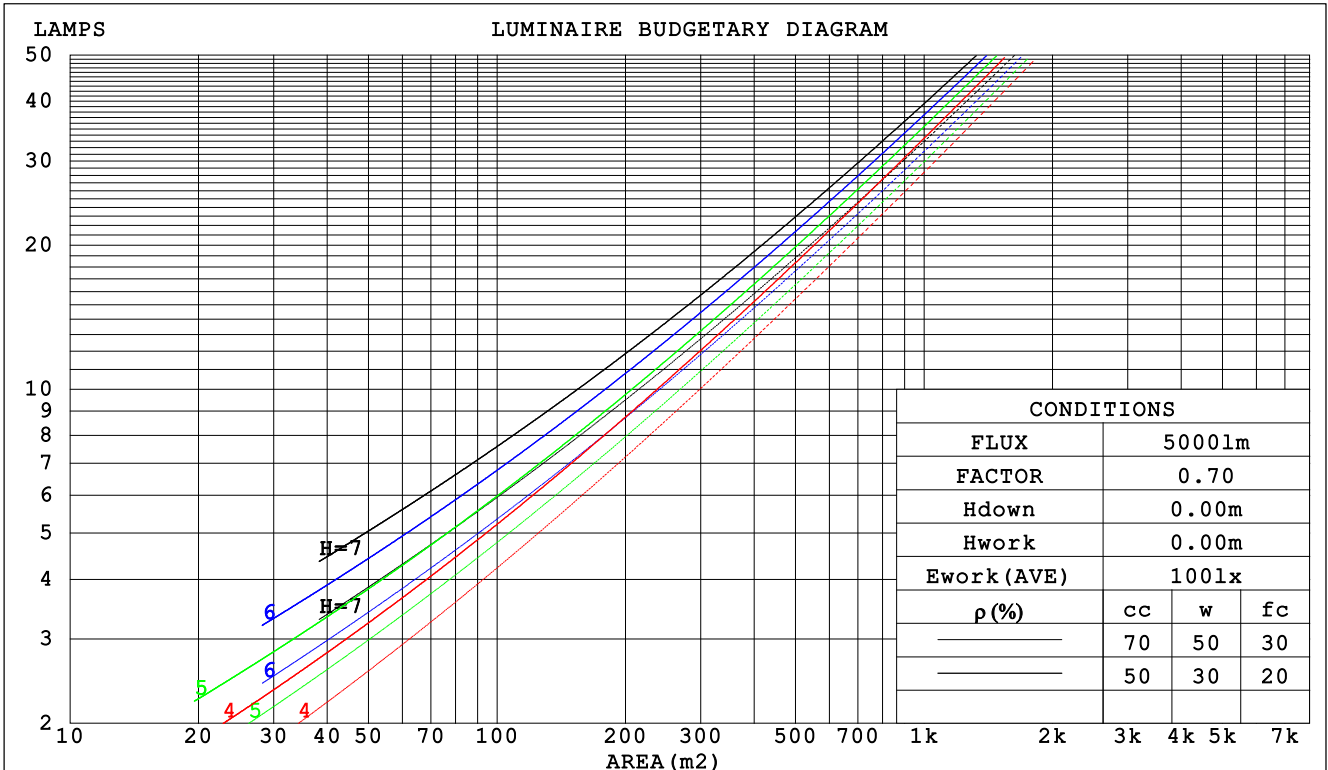
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.03	1.03	1.03	.98	.98	.98	.95
1.0	1.02	.97	.93	.99	.95	.91	.94	.91	.88	.89	.87	.84	.85	.83	.81	.78
2.0	.88	.81	.75	.86	.80	.74	.82	.76	.72	.78	.73	.69	.74	.70	.67	.65
3.0	.78	.69	.63	.76	.68	.62	.72	.65	.60	.69	.63	.58	.65	.61	.57	.54
4.0	.69	.60	.53	.67	.59	.52	.64	.57	.51	.61	.55	.50	.58	.53	.49	.46
5.0	.61	.52	.45	.60	.51	.45	.57	.50	.44	.55	.48	.43	.52	.47	.42	.40
6.0	.55	.46	.40	.54	.45	.39	.52	.44	.38	.49	.43	.38	.47	.42	.37	.35
7.0	.50	.41	.35	.49	.40	.35	.47	.39	.34	.45	.38	.33	.43	.37	.33	.31
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.30	.41	.35	.30	.40	.34	.29	.27
9.0	.42	.33	.28	.41	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.38	.31	.25	.38	.30	.25	.36	.30	.25	.35	.29	.24	.34	.28	.24	.22



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

WEC AND CCEC

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		

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						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.326	.186	.059	.318	.181	.058	.302	.173	.055	.287	.166	.053	.273	.158	.051	
2.0	.300	.164	.050	.292	.161	.050	.278	.155	.048	.265	.149	.046	.253	.143	.045	
3.0	.274	.146	.044	.268	.143	.043	.255	.138	.042	.243	.133	.041	.232	.129	.040	
4.0	.252	.131	.038	.246	.129	.038	.234	.124	.037	.224	.120	.036	.214	.116	.035	
5.0	.232	.118	.034	.227	.116	.034	.216	.113	.033	.207	.109	.032	.198	.106	.032	
6.0	.215	.108	.031	.210	.106	.030	.201	.103	.030	.192	.100	.029	.184	.097	.029	
7.0	.199	.099	.028	.195	.097	.028	.187	.094	.027	.179	.092	.027	.172	.089	.026	
8.0	.186	.091	.026	.182	.090	.025	.175	.087	.025	.167	.085	.024	.161	.083	.024	
9.0	.174	.084	.024	.170	.083	.023	.164	.081	.023	.157	.079	.023	.151	.077	.022	
10.0	.163	.078	.022	.160	.077	.022	.154	.075	.021	.148	.074	.021	.143	.072	.021	

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.226	.226	.226	.193	.193	.193	.132	.132	.132	.076	.076	.076	.024	.024	.024	
1.0	.217	.192	.169	.186	.165	.145	.127	.113	.101	.073	.066	.058	.023	.021	.019	
2.0	.209	.168	.133	.179	.145	.115	.123	.100	.080	.071	.058	.047	.023	.019	.015	
3.0	.202	.151	.110	.173	.130	.095	.119	.090	.067	.069	.053	.039	.022	.017	.013	
4.0	.194	.137	.094	.166	.119	.082	.114	.083	.058	.066	.048	.034	.021	.016	.011	
5.0	.186	.127	.083	.160	.110	.073	.110	.077	.051	.064	.045	.030	.021	.015	.010	
6.0	.179	.119	.076	.154	.103	.066	.106	.072	.047	.062	.042	.028	.020	.014	.009	
7.0	.172	.112	.070	.148	.097	.061	.102	.068	.043	.060	.040	.026	.019	.013	.008	
8.0	.166	.106	.065	.143	.092	.057	.099	.065	.041	.057	.038	.024	.019	.013	.008	
9.0	.160	.101	.062	.138	.088	.054	.095	.062	.038	.056	.037	.023	.018	.012	.008	
10.0	.154	.097	.059	.133	.084	.052	.092	.059	.037	.054	.035	.022	.017	.012	.007	

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	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	22.6	24.1	22.9	24.4	24.7	22.2	23.7	22.5	23.9	24.2
3H	24.3	25.6	24.6	25.9	26.3	23.6	25.0	24.0	25.3	25.6
4H	25.0	26.3	25.4	26.6	27.0	24.1	25.4	24.5	25.7	26.1
6H	25.7	27.0	26.1	27.3	27.7	24.4	25.6	24.8	26.0	26.4
8H	26.1	27.3	26.5	27.7	28.0	24.5	25.7	24.9	26.0	26.4
12H	26.5	27.7	27.0	28.0	28.4	24.5	25.6	24.9	26.0	26.4
4H 2H	23.2	24.4	23.5	24.8	25.1	22.8	24.1	23.2	24.5	24.8
3H	25.0	26.1	25.4	26.5	26.9	24.4	25.6	24.8	25.9	26.3
4H	25.9	26.9	26.3	27.3	27.8	25.1	26.1	25.5	26.5	26.9
6H	26.8	27.7	27.2	28.1	28.6	25.5	26.4	26.0	26.9	27.3
8H	27.2	28.1	27.7	28.6	29.0	25.6	26.5	26.1	26.9	27.4
12H	27.8	28.6	28.3	29.0	29.5	25.7	26.4	26.2	26.9	27.4
8H 4H	26.1	27.0	26.6	27.4	27.9	25.4	26.3	25.9	26.7	27.2
6H	27.2	27.9	27.7	28.4	29.0	26.0	26.7	26.5	27.2	27.7
8H	27.8	28.5	28.4	29.0	29.5	26.2	26.9	26.8	27.4	27.9
12H	28.6	29.1	29.1	29.6	30.2	26.3	26.9	26.9	27.4	28.0
12H 4H	26.1	26.9	26.6	27.4	27.9	25.5	26.2	25.9	26.7	27.2
6H	27.3	27.9	27.8	28.4	29.0	26.1	26.8	26.7	27.3	27.8
8H	28.0	28.5	28.5	29.0	29.6	26.4	27.0	27.0	27.5	28.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 10421 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 8.1)
 Area: 0.172 m2

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		

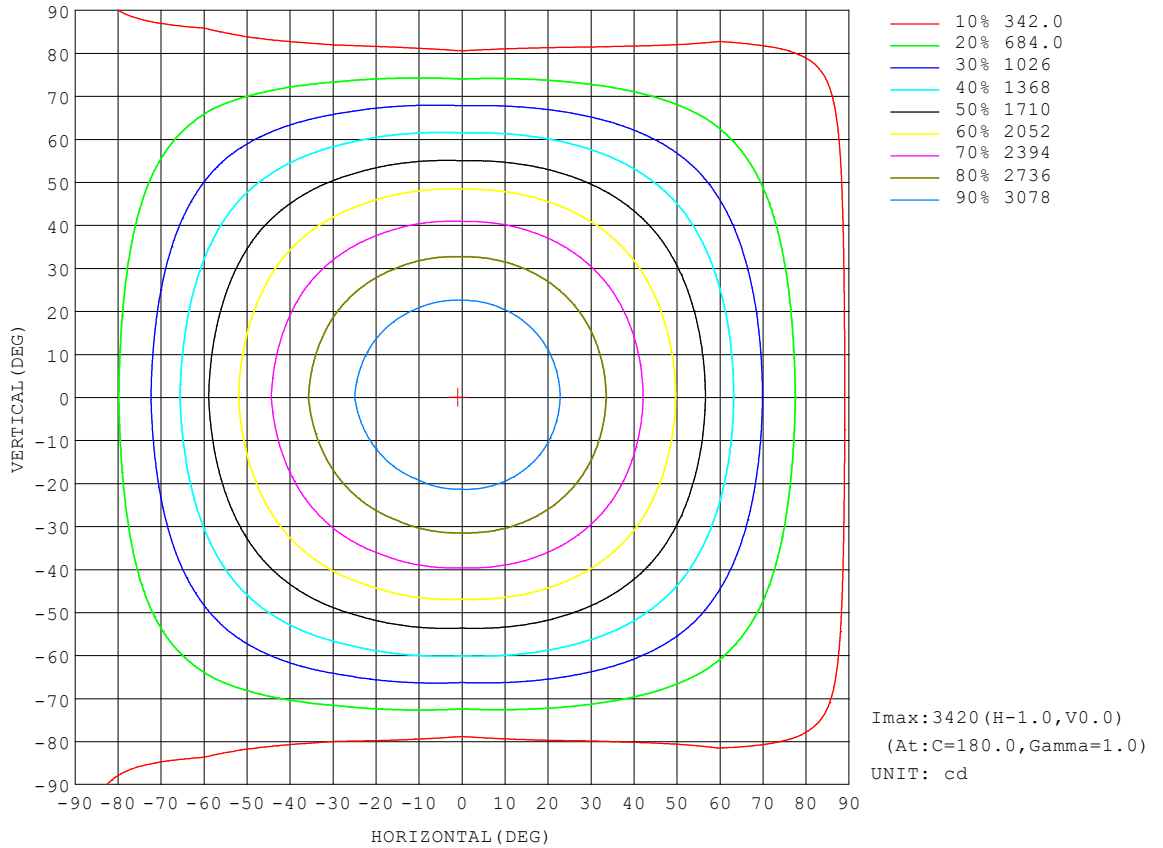
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	37	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	73	62	54	72	61	54	69	62	53	46
1.25	81	70	62	79	69	62	76	67	61	53
1.50	86	75	68	84	74	67	80	72	66	58
2.00	92	83	76	90	82	76	86	79	74	65
2.50	96	88	82	94	86	81	90	83	78	69
3.00	100	92	86	97	91	85	93	87	83	73
4.00	104	98	93	101	96	91	96	92	88	78
5.00	107	101	97	104	99	95	98	95	91	80
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		

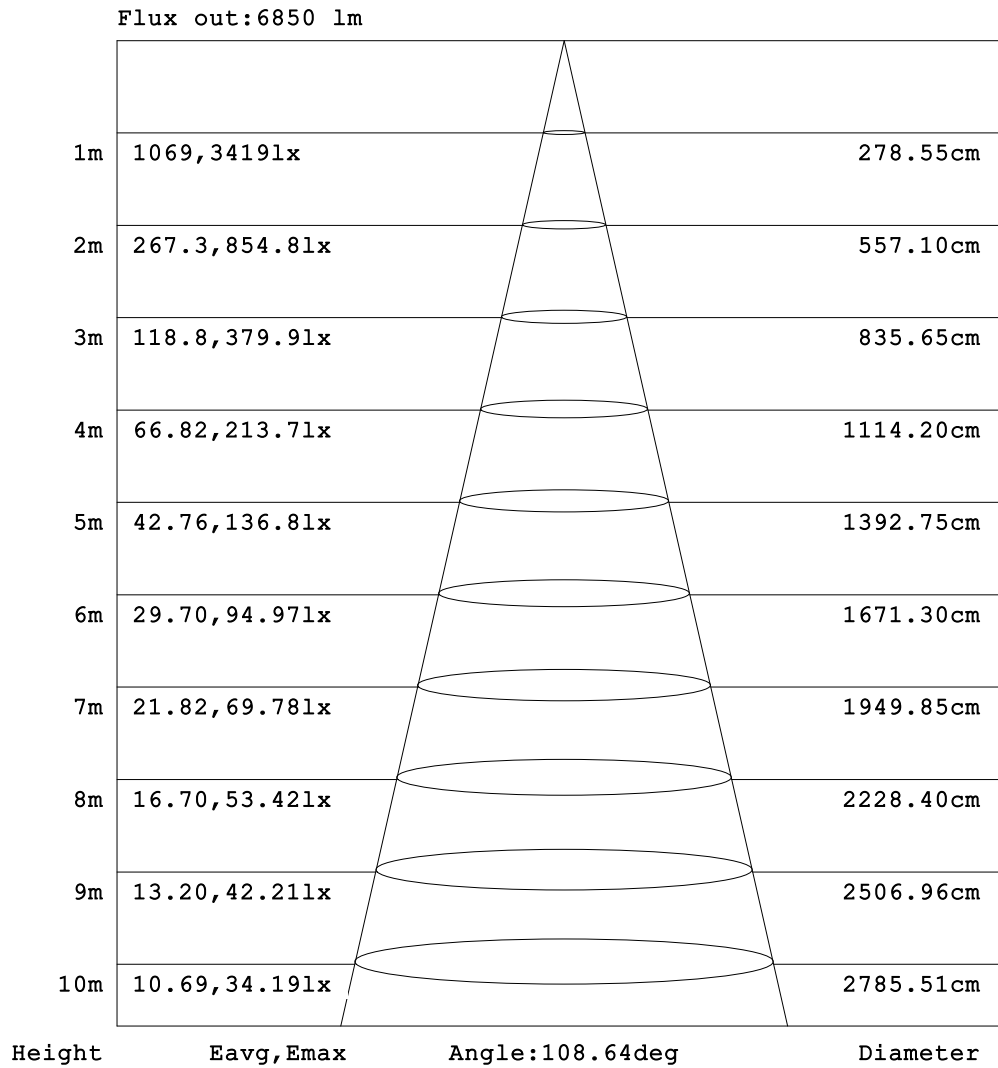


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-03-10

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=0.8062]
 Remarks:

AAI Figure

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		



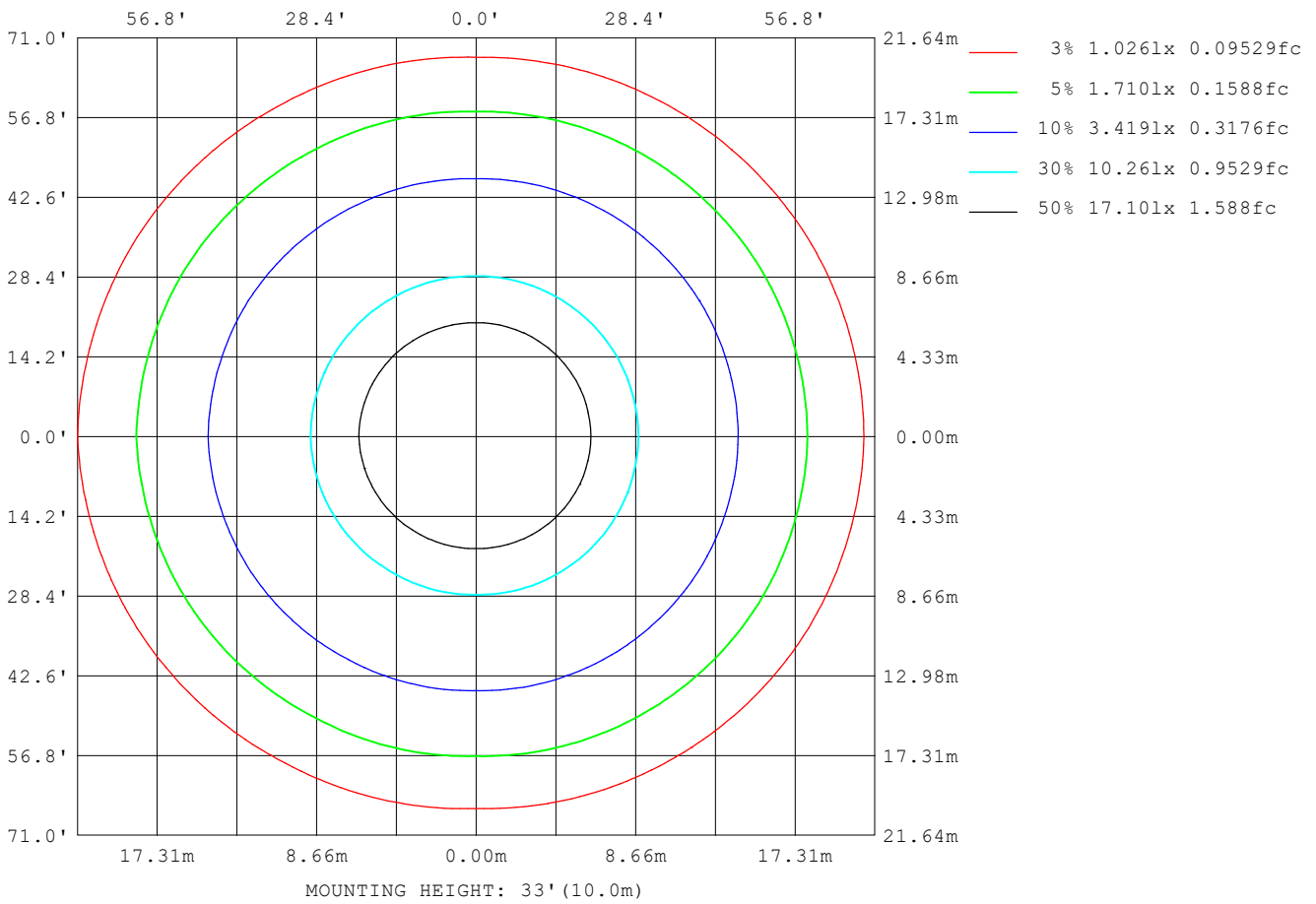
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

ISOLUX DIAGRAM

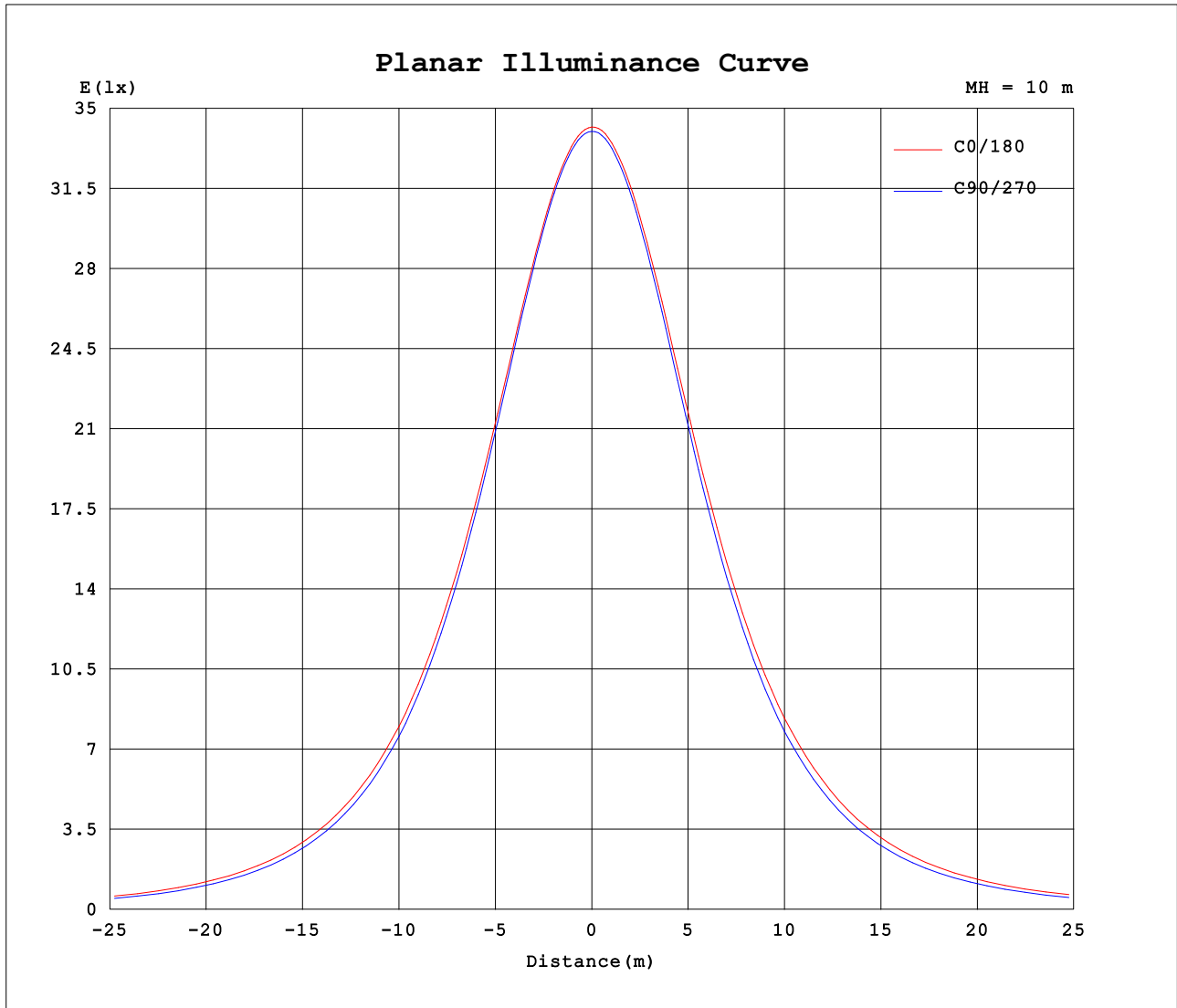
Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2024-03-10

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=0.8062]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.30V I:0.3230A P:72.500W PF:0.9850 Freq:50.00Hz		
Lamp Flux:10421x1 lm		
Name: NS55-70W	Type: LED	
MFR.:		

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	3419	3411	3404	3400	3396	3404	3419	3413	3404	3400	3396	3401							
5	3397	3390	3384	3379	3375	3388	3410	3401	3391	3387	3382	3384							
10	3344	3338	3331	3324	3323	3341	3368	3357	3345	3340	3333	3334							
15	3261	3253	3244	3236	3238	3263	3298	3283	3266	3259	3255	3255							
20	3151	3142	3128	3117	3122	3157	3201	3182	3158	3147	3146	3148							
25	3017	3004	2984	2968	2980	3025	3077	3053	3021	3004	3007	3012							
30	2860	2842	2815	2793	2813	2870	2930	2901	2860	2835	2844	2855							
35	2682	2660	2625	2595	2623	2692	2761	2727	2675	2643	2656	2674							
40	2484	2458	2415	2378	2414	2496	2573	2533	2471	2431	2451	2474							
45	2264	2237	2186	2141	2187	2281	2366	2320	2249	2203	2227	2255							
50	2037	2002	1946	1898	1948	2053	2150	2095	2016	1970	1994	2023							
55	1791	1753	1692	1640	1697	1807	1905	1851	1766	1709	1742	1779							
60	1536	1493	1427	1374	1435	1552	1654	1598	1506	1446	1483	1523							
65	1276	1229	1158	1099	1168	1293	1398	1339	1242	1176	1218	1263							
70	1020	967	886	820	897	1032	1143	1077	971	900	949	1001							
75	786	720	623	544	633	781	896	825	707	626	686	754							
80	589	513	391	287	397	561	676	600	465	367	447	539							
85	439	361	217	86.6	215	392	501	423	269	148	256	376							
90	322	248	121	8.50	114	267	367	292	145	28.5	138	258							
95	235	170	81.3	8.75	71.5	182	266	200	91.6	16.5	88.9	176							
100	181	131	64.6	9.37	53.5	135	198	146	67.3	16.5	67.4	132							
105	150	116	60.7	10.5	49.8	113	156	121	60.1	16.9	60.4	113							
110	137	110	59.0	11.4	49.3	104	137	111	58.5	17.4	60.3	108							
115	129	102	55.2	12.5	48.3	97.9	127	105	57.5	18.4	56.9	101							
120	121	92.8	50.2	13.8	47.3	92.9	120	99.9	56.4	19.7	51.7	91.9							
125	113	84.6	46.2	15.2	46.0	87.5	112	94.4	54.9	21.1	47.2	83.2							
130	104	77.5	43.2	16.4	44.2	81.5	104	88.2	53.1	22.2	43.4	75.1							
135	95.6	70.0	40.1	18.0	42.5	75.5	95.5	81.8	50.9	23.6	40.2	67.5							
140	86.4	62.8	37.3	19.4	40.5	68.9	86.4	74.9	48.6	24.9	37.3	60.3							
145	77.3	56.0	34.6	20.5	38.2	62.3	77.6	67.9	45.9	25.8	34.9	53.8							
150	68.4	50.7	33.0	21.5	35.8	55.7	68.8	60.9	42.8	26.5	34.1	49.6							
155	59.9	45.7	31.7	22.5	33.4	49.3	60.3	53.9	39.5	26.8	33.2	45.6							
160	51.7	40.5	30.1	23.6	31.2	43.0	51.8	46.9	36.3	27.2	31.4	40.3							
165	42.9	35.2	28.6	24.8	29.1	37.0	43.7	40.1	33.1	27.5	30.4	36.0							
170	35.7	30.6	27.3	26.0	27.5	31.7	35.9	33.9	30.4	27.9	29.1	32.0							
175	28.9	27.2	26.7	27.2	27.3	28.1	29.3	29.2	28.6	28.0	27.9	28.2							
180	27.1	27.0	27.5	28.2	27.4	27.0	27.3	27.1	27.4	28.1	27.3	26.8							

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-03-10

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=0.8062]
 Remarks: