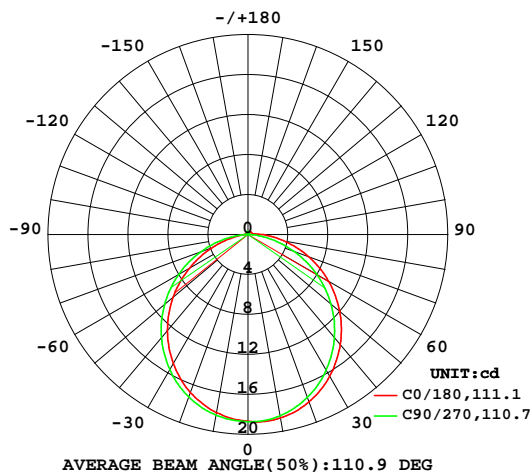


LUMINAIRE PHOTOMETRIC TEST REPORT

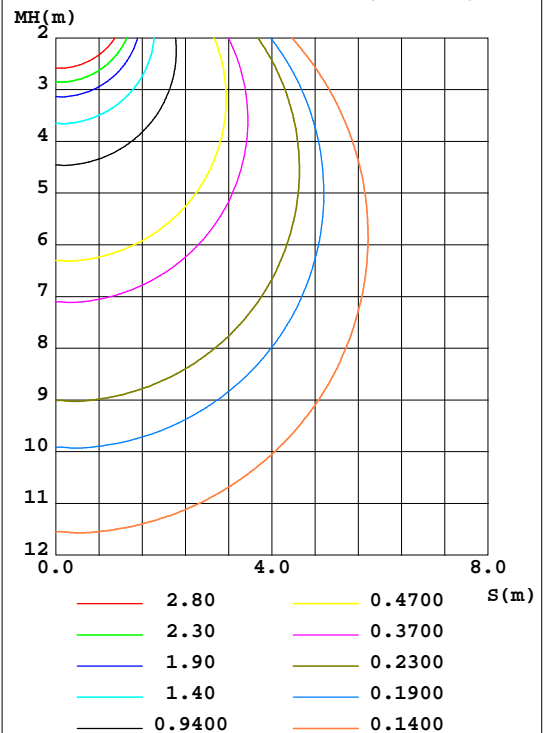
Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 7.72 lm/W
MODEL	NMS0410	I _{max} (cd)	18.80	S/MH(C0/180)	1.20	
NOMINAL POWER(W)	7.2	LOR(%)	100.0	S/MH(C90/270)	1.24	
RATED VOLTAGE(V)	12	TOTAL FLUX(lm)	54.440	h UP,DN(C0-180)	1.5,50.2	
NOMINAL FLUX(lm)	54.4402	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.1,47.2	
LAMPS INSIDE	1	h up(%)	2.6	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	12	h down(%)	97.4	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2020-06-01

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

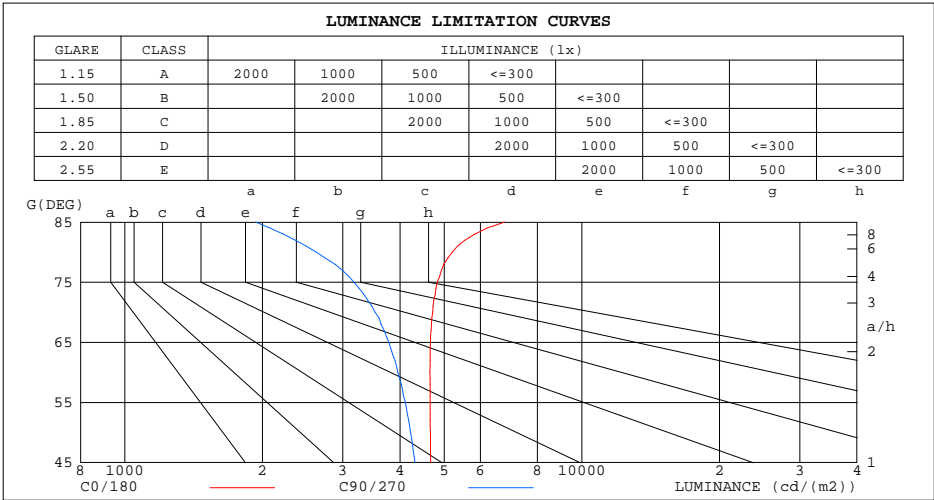
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	18.64	18.48	18.42	18.25	18.10	18.25	18.36	18.54	0~ 10	1.771	1.771	3.25,3.25
20	17.83	17.60	17.36	17.10	16.84	17.04	17.31	17.60	10~ 20	5.062	6.834	12.6,12.6
30	16.38	16.09	15.65	15.31	14.93	15.23	15.63	16.06	20~ 30	7.636	14.47	26.6,26.6
40	14.38	14.03	13.47	13.02	12.56	12.93	13.47	13.96	30~ 40	9.143	23.61	43.4,43.4
50	12.00	11.56	10.85	10.32	9.798	10.23	10.89	11.51	40~ 50	9.432	33.04	60.7,60.7
60	9.307	8.809	7.919	7.337	6.784	7.255	8.007	8.752	50~ 60	8.480	41.52	76.3,76.3
70	6.460	5.870	4.832	4.238	3.752	4.175	4.960	5.815	60~ 70	6.453	47.98	88.1,88.1
80	3.616	2.941	1.821	1.451	1.224	1.435	1.977	2.940	70~ 80	3.749	51.73	95,95
90	1.379	0.7741	0.1014	0.1736	0.1868	0.1943	0.0868	0.8498	80~ 90	1.277	53.00	97.4,97.4
100	0.4829	0.2669	0.0802	0.1269	0.1469	0.1069	0.0802	0.3407	90~100	0.3170	53.32	97.9,97.9
110	0.4141	0.2338	0.0935	0.1404	0.1803	0.1069	0.1069	0.2805	100~110	0.2049	53.52	98.3,98.3
120	0.4074	0.2338	0.1132	0.1671	0.2137	0.1069	0.1403	0.2273	110~120	0.1967	53.72	98.7,98.7
130	0.3874	0.2338	0.1669	0.2070	0.2204	0.1536	0.1807	0.2071	120~130	0.1893	53.91	99,99
140	0.3407	0.2338	0.1937	0.2271	0.2271	0.1805	0.2073	0.2071	130~140	0.1738	54.08	99.3,99.3
150	0.3007	0.2405	0.2070	0.2605	0.2271	0.2004	0.2407	0.1937	140~150	0.1455	54.23	99.6,99.6
160	0.2939	0.2538	0.2204	0.2807	0.2271	0.2136	0.2939	0.2071	150~160	0.1108	54.34	99.8,99.8
170	0.2939	0.2872	0.2872	0.2939	0.2271	0.2402	0.3139	0.2205	160~170	0.0725	54.41	100,100
180	0.2872	0.3073	0.3006	0.3073	0.2271	0.3006	0.3073	0.2939	170~180	0.0267	54.44	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2020-06-01

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	6780	1936
80	5207	2622
75	4829	3174
70	4722	3532
65	4667	3781
60	4654	3960
55	4661	4114
50	4669	4219
45	4675	4320

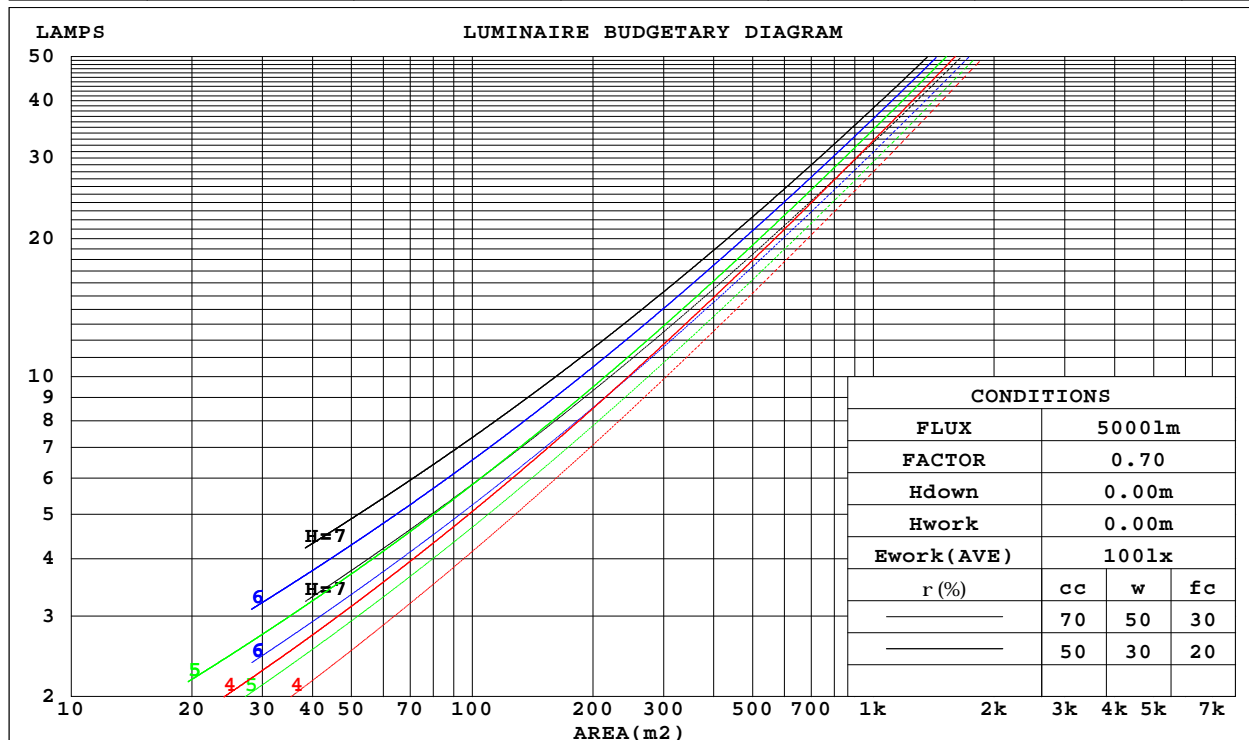
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.313	.178	.056	.306	.174	.055	.291	.167	.053	.277	.160	.051	.265	.153	.049	
2.0	.293	.160	.049	.286	.157	.048	.273	.152	.047	.260	.146	.046	.249	.141	.044	
3.0	.270	.144	.043	.264	.141	.043	.252	.137	.042	.241	.132	.041	.231	.128	.040	
4.0	.249	.129	.038	.243	.127	.038	.233	.123	.037	.223	.120	.036	.214	.116	.035	
5.0	.230	.117	.034	.225	.115	.034	.216	.112	.033	.207	.109	.032	.199	.106	.032	
6.0	.213	.107	.031	.209	.105	.030	.200	.103	.030	.193	.100	.029	.185	.098	.029	
7.0	.198	.098	.028	.194	.097	.028	.187	.094	.027	.180	.092	.027	.173	.090	.026	
8.0	.185	.090	.025	.181	.089	.025	.175	.087	.025	.168	.085	.025	.162	.083	.024	
9.0	.173	.084	.023	.170	.083	.023	.164	.081	.023	.158	.079	.023	.153	.078	.022	
10.0	.163	.078	.022	.160	.077	.022	.155	.076	.021	.149	.074	.021	.144	.073	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.211	.211	.211	.180	.180	.180	.123	.123	.123	.071	.071	.071	.023	.023	.023	
1.0	.201	.176	.154	.172	.151	.133	.118	.104	.092	.068	.060	.053	.022	.019	.017	
2.0	.193	.152	.118	.165	.131	.102	.113	.091	.071	.065	.053	.042	.021	.017	.014	
3.0	.185	.135	.095	.159	.116	.082	.109	.081	.058	.063	.047	.034	.020	.015	.011	
4.0	.177	.122	.079	.152	.105	.069	.105	.073	.048	.061	.043	.029	.019	.014	.009	
5.0	.170	.111	.068	.146	.096	.059	.101	.067	.042	.058	.039	.025	.019	.013	.008	
6.0	.163	.103	.060	.140	.089	.052	.097	.062	.037	.056	.037	.022	.018	.012	.007	
7.0	.156	.096	.054	.134	.083	.047	.093	.058	.033	.054	.034	.020	.017	.011	.007	
8.0	.150	.090	.050	.129	.078	.043	.089	.055	.031	.052	.032	.018	.017	.011	.006	
9.0	.143	.085	.046	.124	.074	.040	.086	.052	.029	.050	.031	.017	.016	.010	.006	
10.0	.138	.081	.043	.119	.070	.038	.082	.050	.027	.048	.029	.016	.016	.010	.005	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm										
NAME: NMS0410					TYPE:			WEIGHT:		
SPEC.:NMS0410-0B12CSN050CC0100					DIM.: 1000*04*10			SERIAL No.:01		
MFR.: COLORS					SUR.:1000*04			Shielding Angle:		
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	28.5	30.0	28.8	30.2	30.5	27.9	29.4	28.2	29.7	29.9
3H	30.3	31.7	30.6	31.9	32.2	29.4	30.8	29.7	31.1	31.3
4H	31.1	32.4	31.5	32.7	33.0	30.0	31.3	30.3	31.6	31.9
6H	31.9	33.1	32.2	33.4	33.8	30.3	31.6	30.7	31.9	32.2
8H	32.2	33.4	32.6	33.7	34.1	30.4	31.6	30.8	31.9	32.3
12H	32.6	33.7	32.9	34.0	34.4	30.5	31.6	30.8	31.9	32.3
4H 2H	29.1	30.4	29.4	30.7	31.0	28.7	30.0	29.0	30.3	30.6
3H	31.1	32.2	31.5	32.6	32.9	30.3	31.5	30.7	31.8	32.2
4H	32.1	33.1	32.5	33.5	33.9	31.1	32.1	31.5	32.5	32.9
6H	33.0	33.9	33.4	34.3	34.7	31.5	32.5	32.0	32.9	33.3
8H	33.4	34.2	33.8	34.7	35.1	31.7	32.6	32.1	33.0	33.4
12H	33.8	34.6	34.3	35.0	35.5	31.8	32.6	32.2	33.0	33.5
8H 4H	32.3	33.2	32.8	33.6	34.1	31.5	32.3	31.9	32.7	33.2
6H	33.4	34.1	33.9	34.6	35.1	32.2	32.9	32.6	33.3	33.8
8H	34.0	34.6	34.5	35.1	35.6	32.4	33.0	32.9	33.5	34.0
12H	34.6	35.1	35.1	35.6	36.1	32.6	33.1	33.1	33.6	34.1
12H 4H	32.3	33.1	32.8	33.6	34.0	31.5	32.3	32.0	32.7	33.2
6H	33.5	34.1	34.0	34.6	35.1	32.3	32.9	32.8	33.4	33.9
8H	34.1	34.7	34.6	35.1	35.7	32.6	33.1	33.1	33.6	34.2
Variations with the observer position at spacings:										
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					+ 0.2 / - 0.4				

CIE Pub.117, 54.44 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -10.1)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

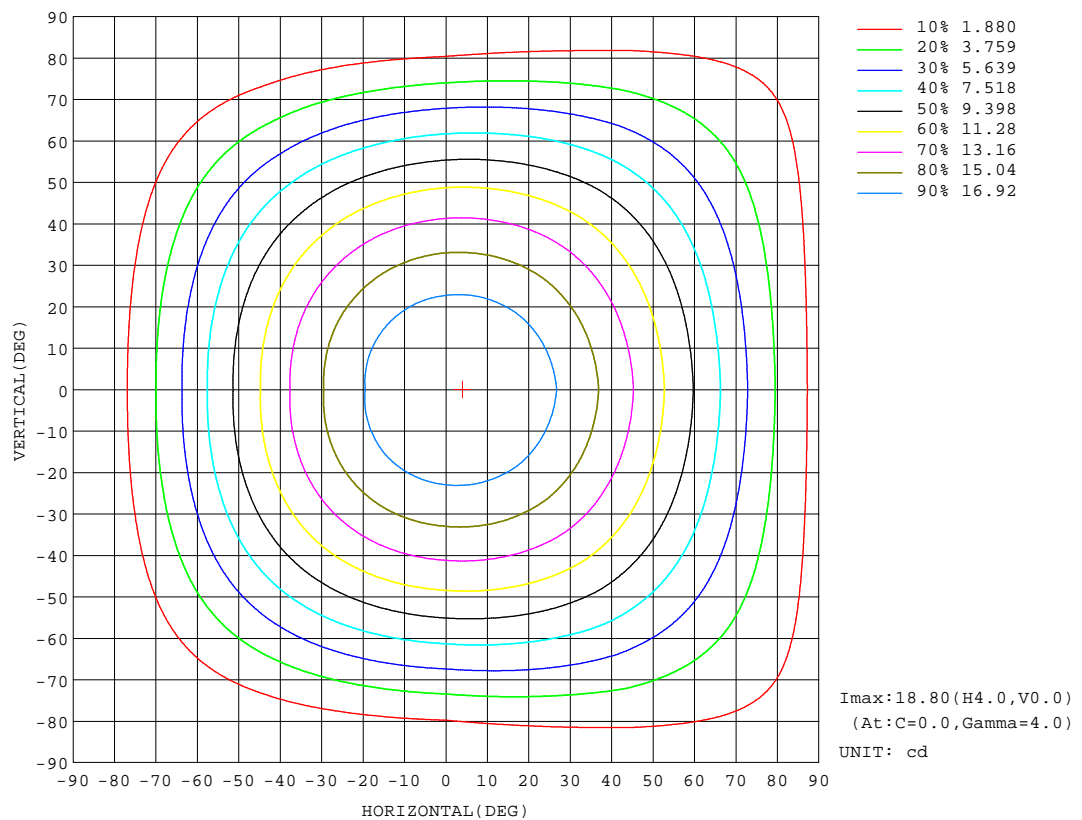
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	80	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	81	76	68
2.50	98	90	84	96	88	83	91	85	81	72
3.00	101	94	89	99	92	87	94	89	85	76
4.00	105	99	95	103	97	93	98	94	90	80
5.00	108	103	99	105	101	97	100	97	93	83
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:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



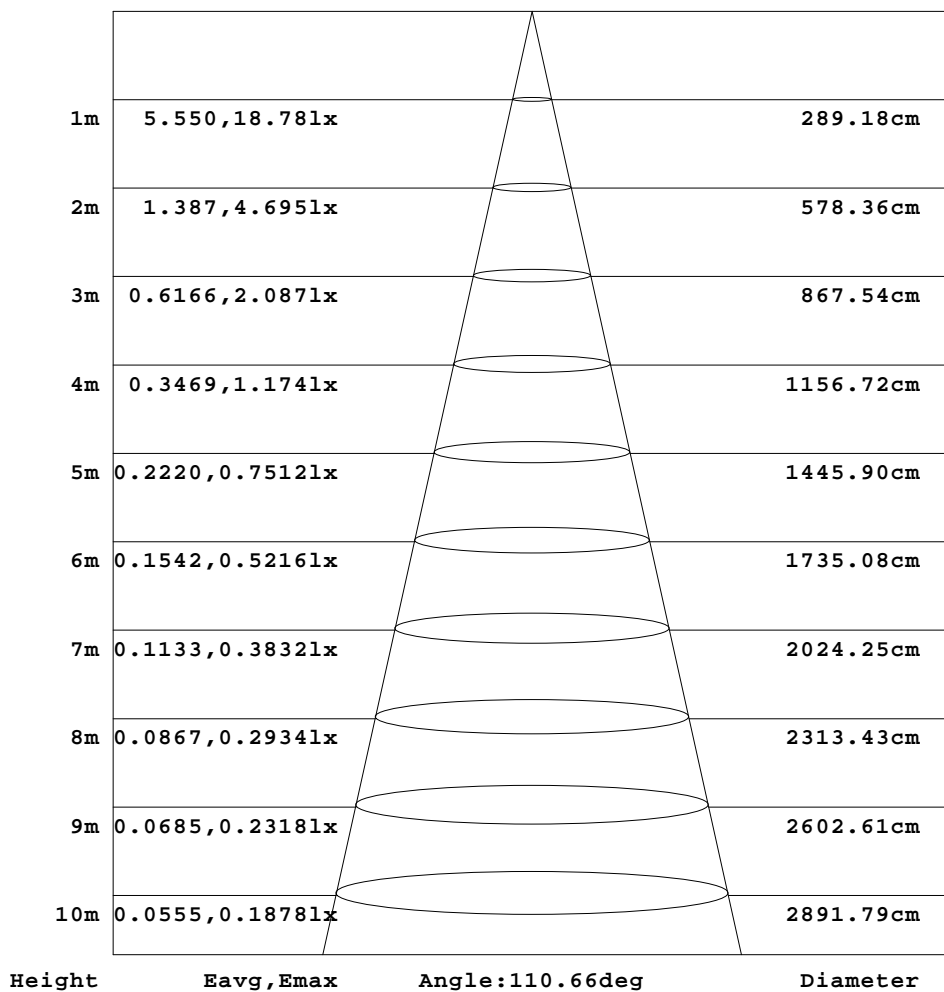
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

AAI Figure

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

Flux out:38.32 lm



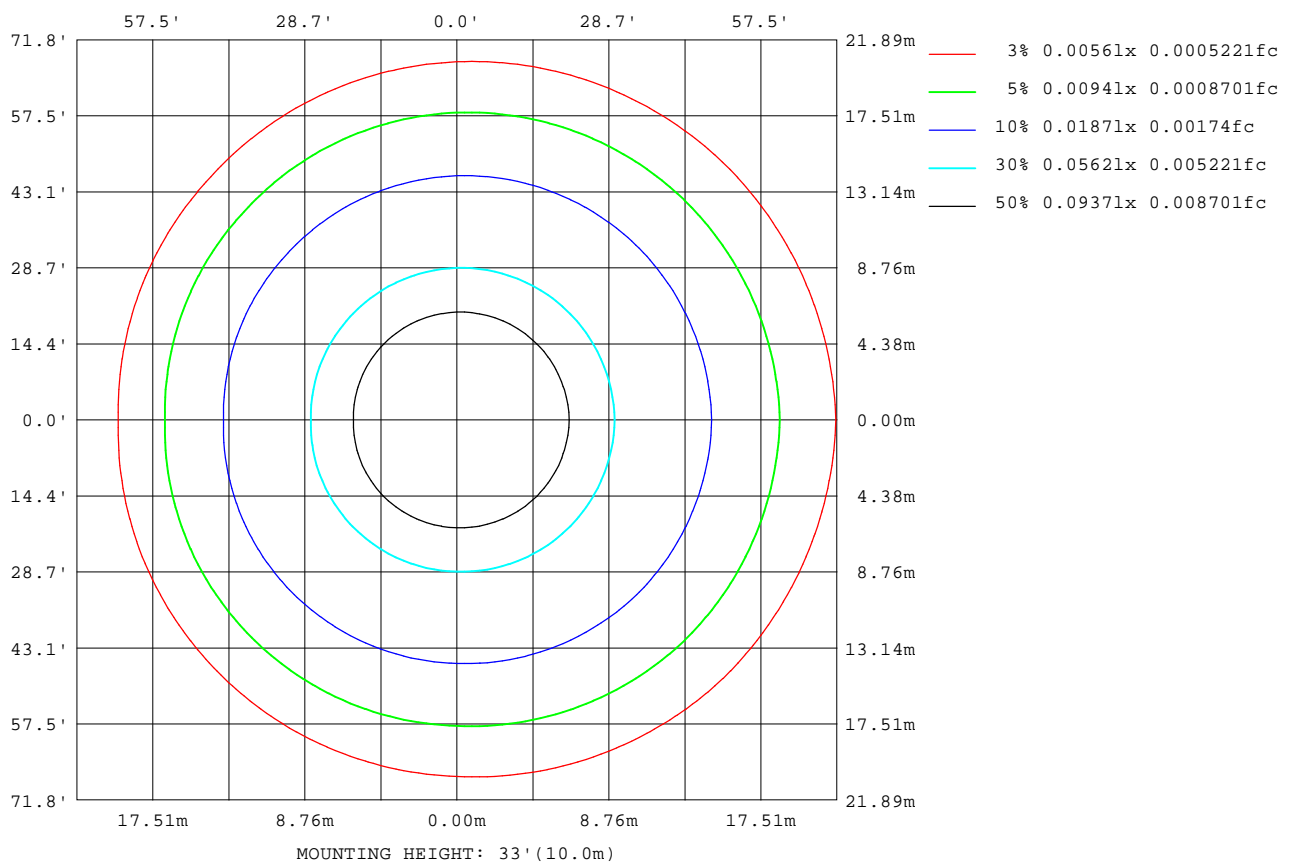
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

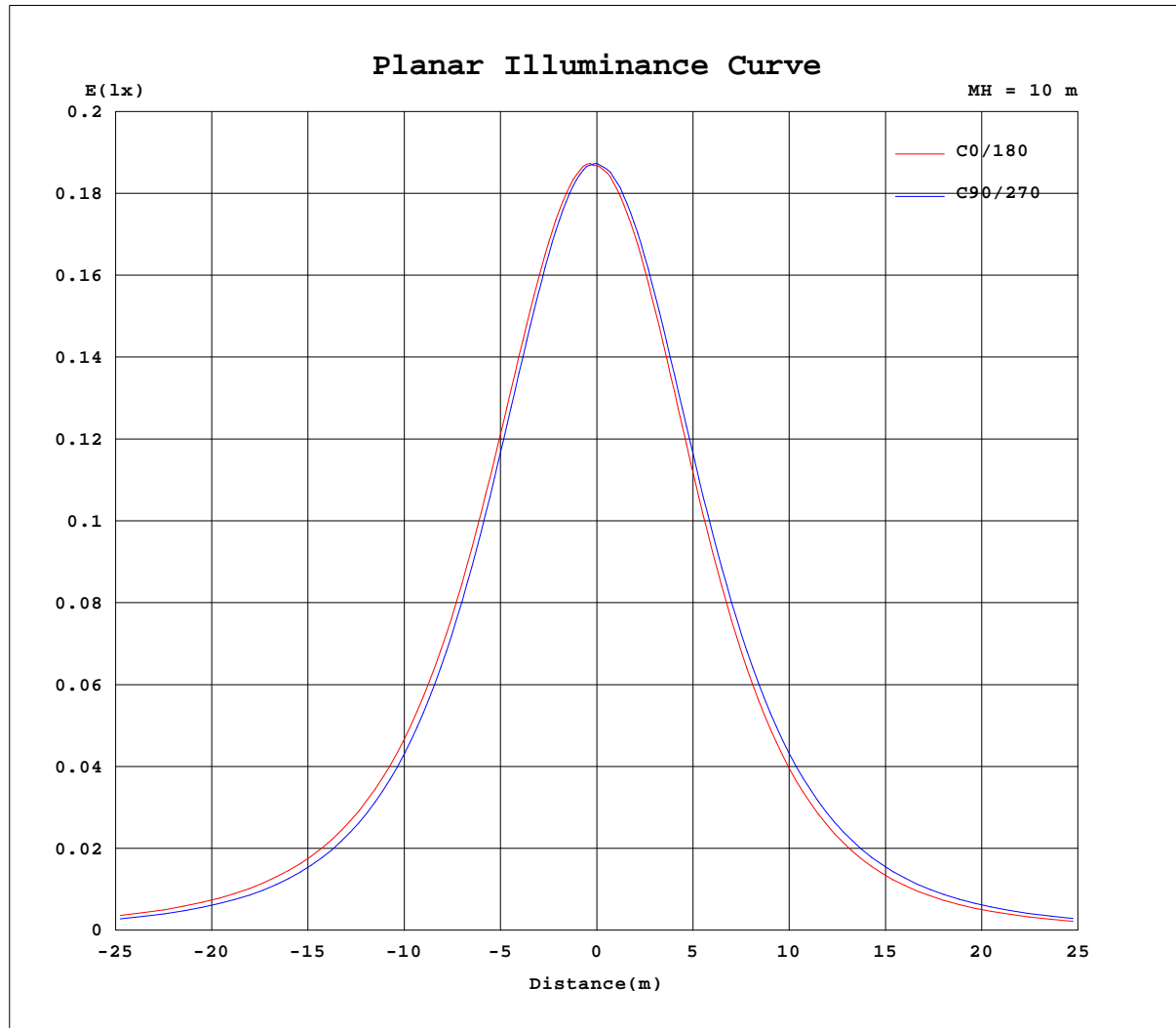
Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2020-06-01

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.950m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2020-06-01

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:12.00V I:0.5880A P:7.050W PF:1.000 Freq:0Hz Lamp Flux:54.4402x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0B12CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	45	90	135	180	225	270	315										
0	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7										
5	18.8	18.7	18.7	18.6	18.5	18.6	18.6	18.8										
10	18.6	18.5	18.4	18.2	18.1	18.3	18.4	18.5										
15	18.3	18.1	18.0	17.8	17.5	17.7	17.9	18.2										
20	17.8	17.6	17.4	17.1	16.8	17.0	17.3	17.6										
25	17.2	16.9	16.6	16.3	16.0	16.2	16.5	16.9										
30	16.4	16.1	15.7	15.3	14.9	15.2	15.6	16.1										
35	15.4	15.1	14.6	14.2	13.8	14.1	14.6	15.1										
40	14.4	14.0	13.5	13.0	12.6	12.9	13.5	14.0										
45	13.2	12.8	12.2	11.7	11.2	11.6	12.2	12.8										
50	12.0	11.6	10.8	10.3	9.80	10.2	10.9	11.5										
55	10.7	10.2	9.44	8.84	8.30	8.76	9.49	10.2										
60	9.31	8.81	7.92	7.34	6.78	7.26	8.01	8.75										
65	7.89	7.35	6.39	5.79	5.26	5.72	6.50	7.29										
70	6.46	5.87	4.83	4.24	3.75	4.17	4.96	5.82										
75	5.00	4.36	3.29	2.75	2.36	2.71	3.46	4.34										
80	3.62	2.94	1.82	1.45	1.22	1.43	1.98	2.94										
85	2.36	1.66	0.67	0.55	0.51	0.56	0.76	1.69										
90	1.38	0.77	0.10	0.17	0.19	0.19	0.09	0.85										
95	0.78	0.37	0.08	0.12	0.13	0.11	0.08	0.45										
100	0.48	0.27	0.08	0.13	0.15	0.11	0.08	0.34										
105	0.41	0.23	0.09	0.15	0.16	0.11	0.09	0.29										
110	0.41	0.23	0.09	0.14	0.18	0.11	0.11	0.28										
115	0.41	0.23	0.09	0.16	0.19	0.11	0.12	0.27										
120	0.41	0.23	0.11	0.17	0.21	0.11	0.14	0.23										
125	0.39	0.23	0.15	0.19	0.21	0.13	0.18	0.21										
130	0.39	0.23	0.17	0.21	0.22	0.15	0.18	0.21										
135	0.35	0.23	0.19	0.21	0.23	0.17	0.20	0.21										
140	0.34	0.23	0.19	0.23	0.23	0.18	0.21	0.21										
145	0.33	0.23	0.20	0.24	0.23	0.20	0.23	0.19										
150	0.30	0.24	0.21	0.26	0.23	0.20	0.24	0.19										
155	0.29	0.24	0.21	0.27	0.23	0.20	0.27	0.21										
160	0.29	0.25	0.22	0.28	0.23	0.21	0.29	0.21										
165	0.29	0.26	0.25	0.29	0.23	0.22	0.30	0.21										
170	0.29	0.29	0.29	0.29	0.23	0.24	0.31	0.22										
175	0.29	0.30	0.29	0.31	0.23	0.28	0.32	0.27										
180	0.29	0.31	0.30	0.31	0.23	0.30	0.31	0.29										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks: