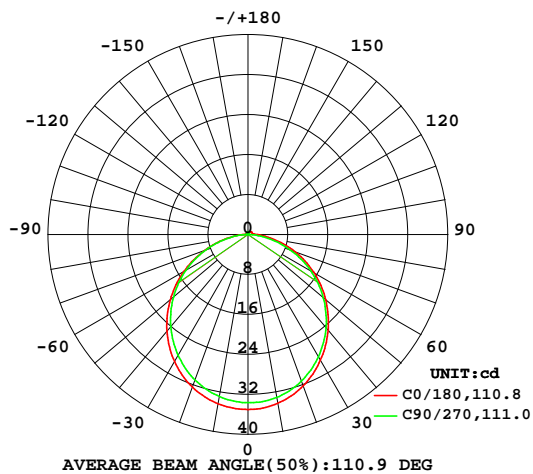


LUMINAIRE PHOTOMETRIC TEST REPORT

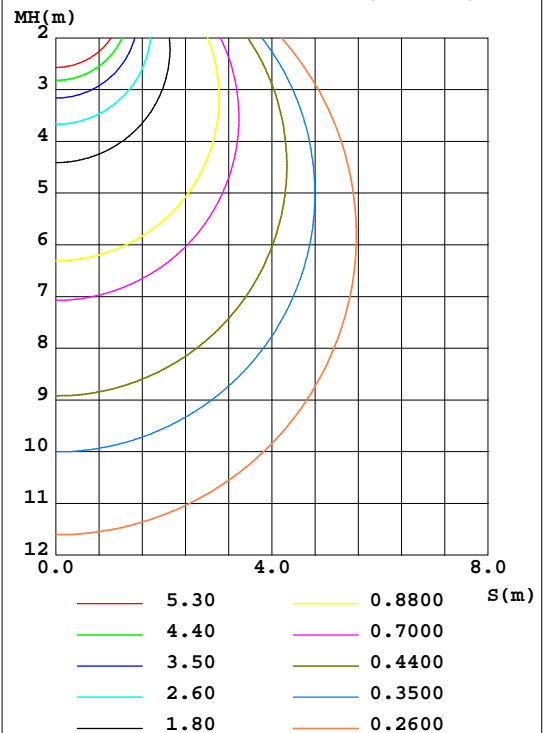
Test:U:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 14.41 lm/W			
MODEL	NMS0410	I _{max} (cd)	35.01	S/MH(C0/180)	1.25
NOMINAL POWER(W)	7.2	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	99.457	h UP,DN(C0-180)	1.7,49.1
NOMINAL FLUX(lm)	99.4569	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.2,48.0
LAMPS INSIDE	1	h up(%)	2.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	97.1	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:

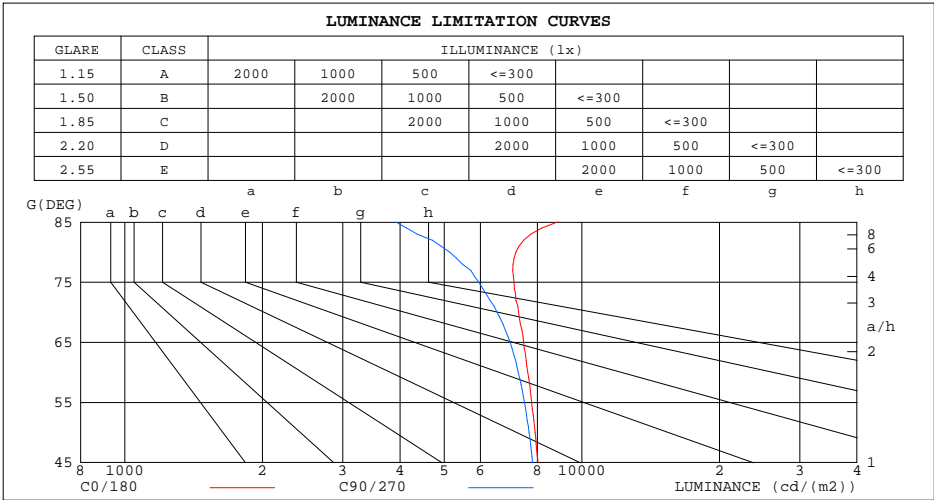
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	34.31	33.54	33.12	32.91	34.40	33.53	32.92	32.64	0~ 10	3.221	3.221	3.24,3.24
20	32.26	31.67	31.25	31.15	32.55	31.56	30.99	30.64	10~ 20	9.202	12.42	12.5,12.5
30	29.04	28.64	28.23	28.22	29.39	28.44	27.96	27.57	20~ 30	13.87	26.29	26.4,26.4
40	24.99	24.75	24.35	24.37	25.25	24.42	24.06	23.74	30~ 40	16.61	42.90	43.1,43.1
50	20.31	20.17	19.71	19.69	20.30	19.62	19.44	19.26	40~ 50	17.14	60.04	60.4,60.4
60	15.23	15.14	14.53	14.52	14.81	14.33	14.33	14.32	50~ 60	15.45	75.49	75.9,75.9
70	9.948	9.866	8.922	8.990	9.111	8.748	8.899	9.158	60~ 70	11.83	87.32	87.8,87.8
80	4.981	4.649	3.572	3.739	3.849	3.536	3.687	4.243	70~ 80	6.905	94.22	94.7,94.7
90	1.821	1.307	0.2952	0.6198	0.8376	0.6642	0.1870	1.226	80~ 90	2.352	96.57	97.1,97.1
100	1.049	0.7880	0.1203	0.2805	0.3139	0.3342	0.0802	0.7347	90~100	0.6395	97.21	97.7,97.7
110	0.9485	0.5811	0.1668	0.2939	0.3407	0.3273	0.1469	0.6412	100~110	0.4608	97.67	98.2,98.2
120	0.9216	0.5076	0.2137	0.3139	0.4009	0.3006	0.2140	0.4944	110~120	0.4256	98.10	98.6,98.6
130	0.8552	0.5010	0.2805	0.3206	0.4141	0.3006	0.2739	0.4677	120~130	0.3816	98.48	99,99
140	0.7953	0.4342	0.3540	0.3540	0.4008	0.3072	0.3071	0.4275	130~140	0.3315	98.81	99.4,99.4
150	0.6218	0.4409	0.4073	0.4208	0.4141	0.3874	0.3474	0.3206	140~150	0.2646	99.08	99.6,99.6
160	0.5344	0.4809	0.4275	0.4609	0.4542	0.4275	0.4410	0.3206	150~160	0.1978	99.28	99.8,99.8
170	0.5344	0.5276	0.5143	0.5076	0.4742	0.4408	0.5077	0.4208	160~170	0.1331	99.41	100,100
180	0.5143	0.6078	0.5678	0.5344	0.5210	0.5143	0.5410	0.5143	170~180	0.0485	99.46	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
 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:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	8839	3917
80	7171	5143
75	7103	5956
70	7271	6521
65	7460	6970
60	7613	7263
55	7768	7492
50	7900	7668
45	8025	7807

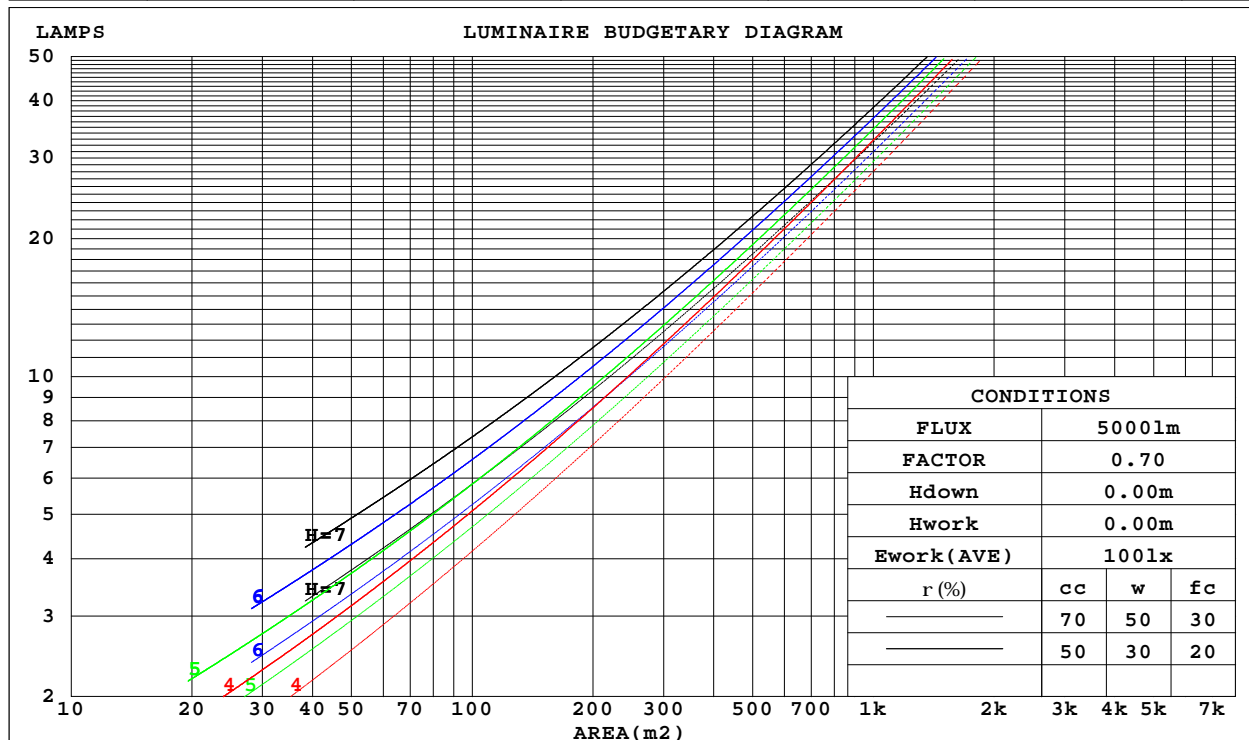
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	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	.314	.179	.057	.306	.175	.055	.291	.167	.053	.277	.160	.051	.265	.153	.049	
2.0	.293	.161	.049	.286	.158	.049	.273	.152	.047	.261	.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	.124	.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	.192	.100	.029	.185	.097	.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	.154	.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	.213	.213	.213	.182	.182	.182	.124	.124	.124	.071	.071	.071	.023	.023	.023	
1.0	.203	.178	.156	.174	.153	.135	.119	.105	.093	.068	.061	.054	.022	.020	.017	
2.0	.195	.154	.120	.167	.133	.104	.114	.092	.073	.066	.053	.043	.021	.017	.014	
3.0	.187	.137	.097	.160	.118	.084	.110	.082	.059	.064	.048	.035	.020	.016	.011	
4.0	.179	.124	.081	.154	.107	.070	.106	.074	.050	.061	.044	.029	.020	.014	.010	
5.0	.172	.113	.070	.148	.098	.061	.102	.068	.043	.059	.040	.025	.019	.013	.008	
6.0	.165	.105	.062	.142	.091	.054	.098	.064	.038	.057	.037	.023	.018	.012	.007	
7.0	.158	.098	.056	.136	.085	.049	.094	.060	.035	.055	.035	.021	.018	.012	.007	
8.0	.152	.092	.052	.130	.080	.045	.090	.056	.032	.053	.033	.019	.017	.011	.006	
9.0	.146	.087	.048	.125	.076	.042	.087	.053	.030	.051	.031	.018	.016	.010	.006	
10.0	.140	.083	.045	.121	.072	.040	.084	.051	.028	.049	.030	.017	.016	.010	.006	

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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm											
NAME: NMS0410					TYPE:			WEIGHT:			
SPEC.:NMS0410-0R24CSN050CC0100					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	27.9	29.4	28.2	29.7	29.9	27.8	29.2	28.1	29.5	29.8	
	3H	29.6	30.9	29.9	31.2	31.5	29.3	30.6	29.6	30.9	31.2
	4H	30.3	31.6	30.6	31.9	32.2	29.8	31.1	30.2	31.4	31.8
	6H	30.8	32.1	31.2	32.4	32.7	30.2	31.5	30.6	31.8	32.1
	8H	31.1	32.3	31.5	32.6	33.0	30.3	31.5	30.7	31.9	32.2
	12H	31.3	32.5	31.7	32.8	33.2	30.4	31.5	30.8	31.9	32.2
4H	2H	28.6	29.9	28.9	30.2	30.5	28.4	29.7	28.8	30.0	30.3
	3H	30.4	31.5	30.8	31.9	32.2	30.1	31.3	30.5	31.6	32.0
	4H	31.2	32.2	31.6	32.6	33.0	30.8	31.9	31.3	32.2	32.6
	6H	31.9	32.8	32.4	33.3	33.7	31.4	32.3	31.8	32.7	33.1
	8H	32.2	33.1	32.7	33.5	34.0	31.5	32.4	32.0	32.8	33.2
	12H	32.6	33.3	33.0	33.8	34.2	31.6	32.4	32.1	32.8	33.3
8H	4H	31.5	32.3	31.9	32.8	33.2	31.2	32.0	31.6	32.4	32.9
	6H	32.4	33.1	32.9	33.6	34.1	31.9	32.6	32.4	33.0	33.5
	8H	32.8	33.5	33.3	33.9	34.4	32.1	32.8	32.6	33.2	33.7
	12H	33.3	33.8	33.8	34.3	34.8	32.3	32.8	32.8	33.3	33.9
12H	4H	31.5	32.3	32.0	32.7	33.2	31.2	32.0	31.7	32.4	32.9
	6H	32.5	33.1	33.0	33.6	34.1	32.0	32.6	32.5	33.1	33.6
	8H	32.9	33.5	33.5	34.0	34.5	32.3	32.8	32.8	33.3	33.9
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 / - 0.3					

CIE Pub.117, 99.46 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.0)

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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

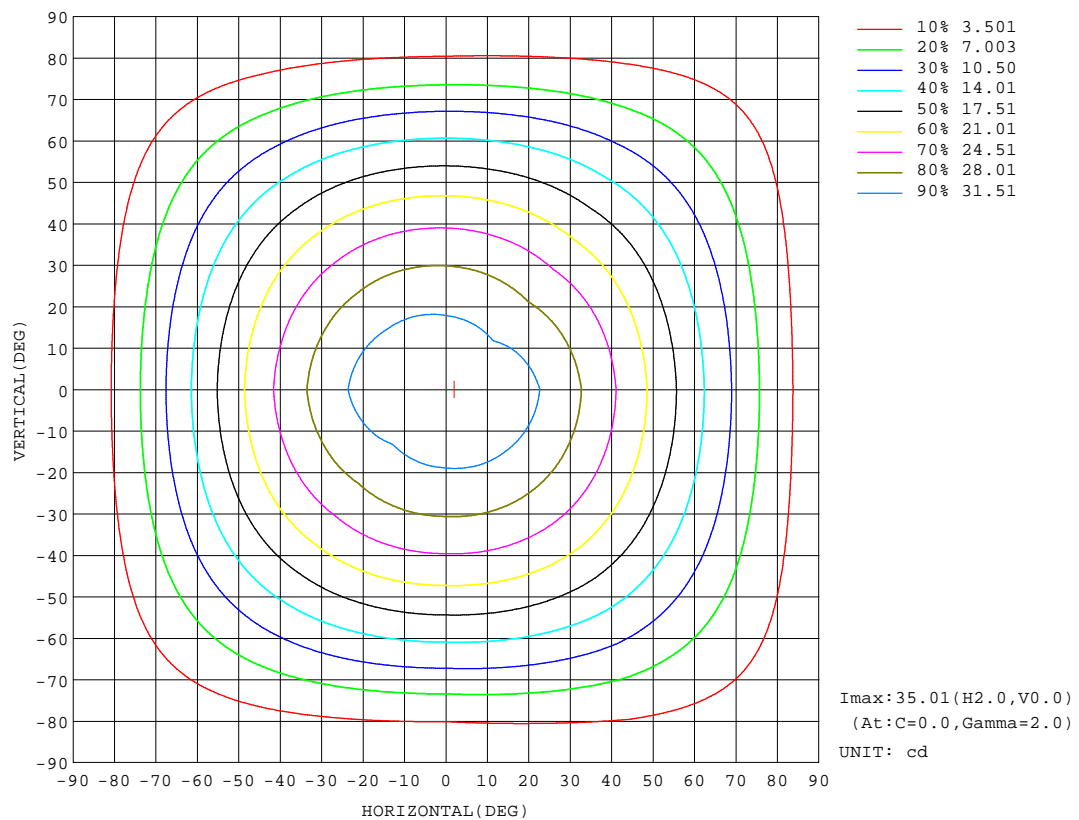
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	54	44	38	31
0.80	67	55	47	65	54	47	63	53	47	40
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	80	70	64	77	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	78	92	84	78	88	81	76	67
2.50	98	90	84	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	85	75
4.00	105	99	94	103	97	93	98	93	90	80
5.00	108	103	98	105	100	97	100	96	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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



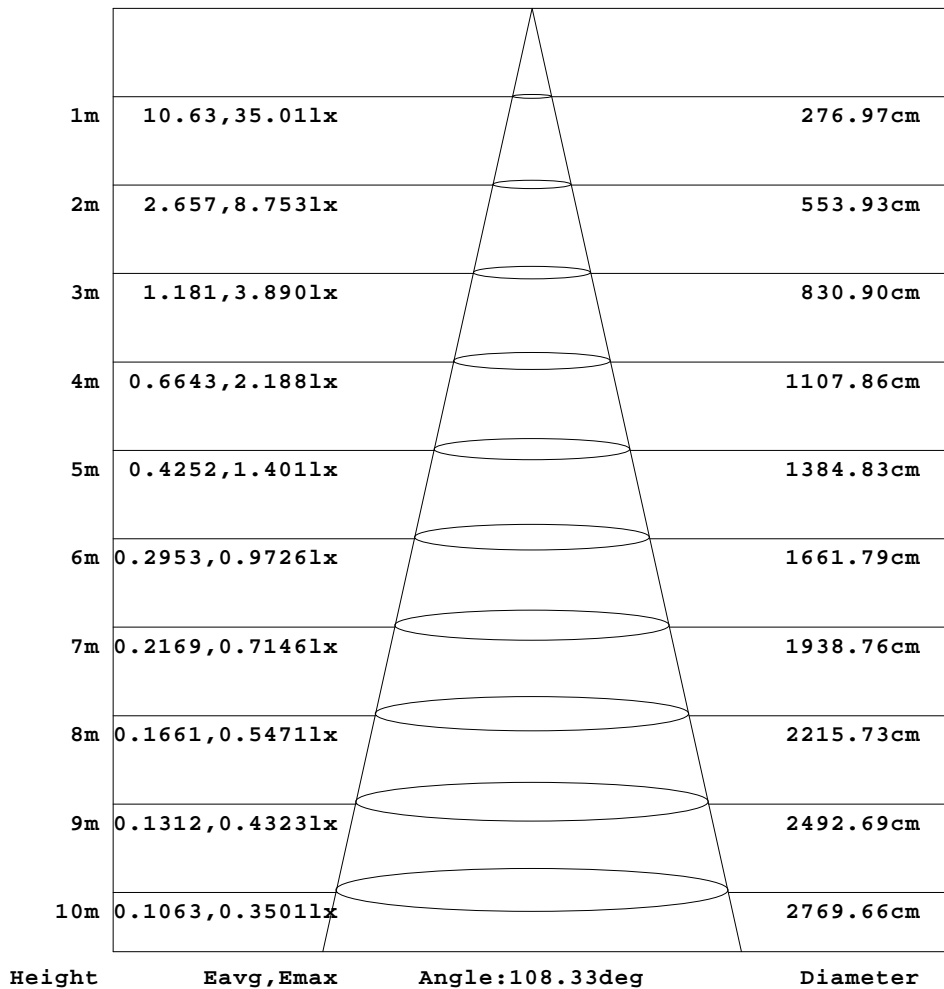
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-01

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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

Flux out:68.11 lm



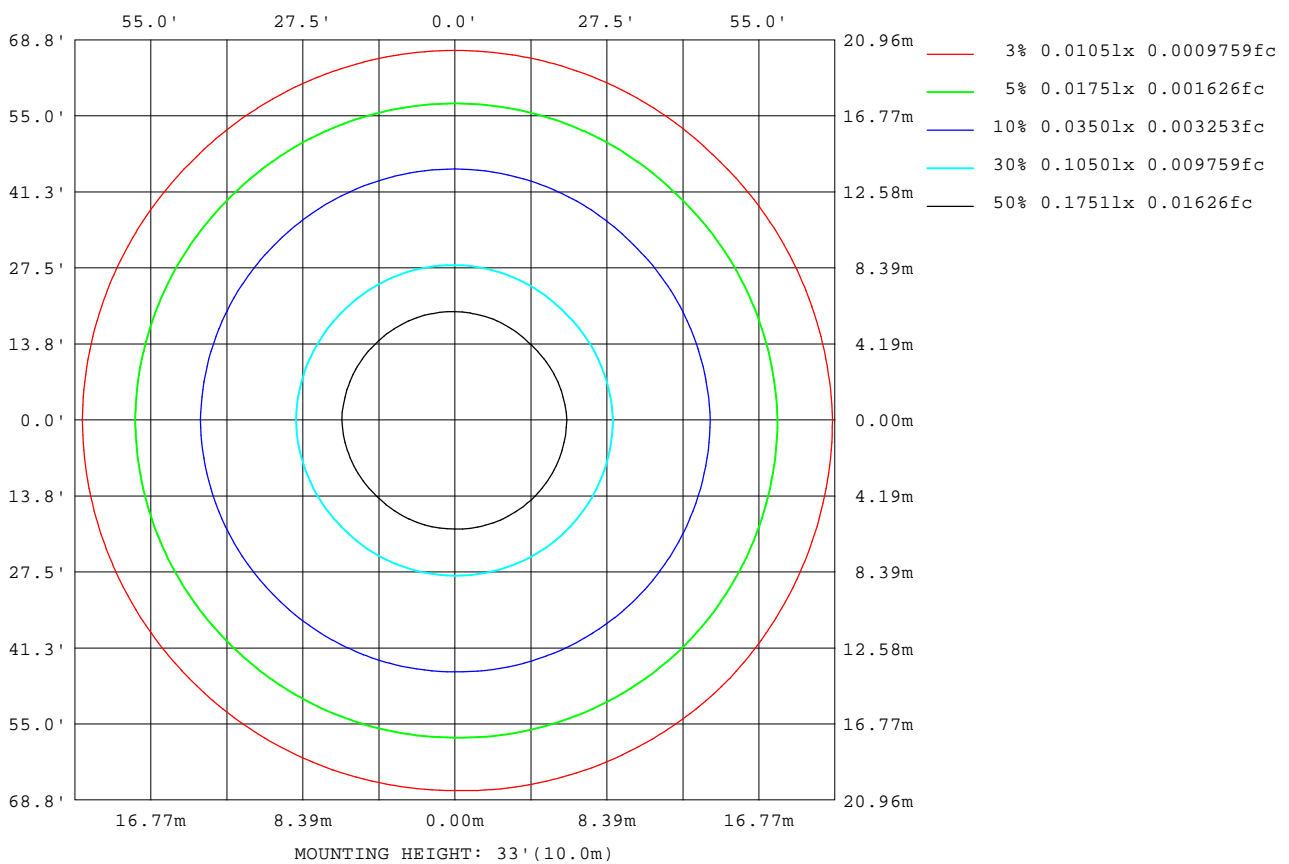
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

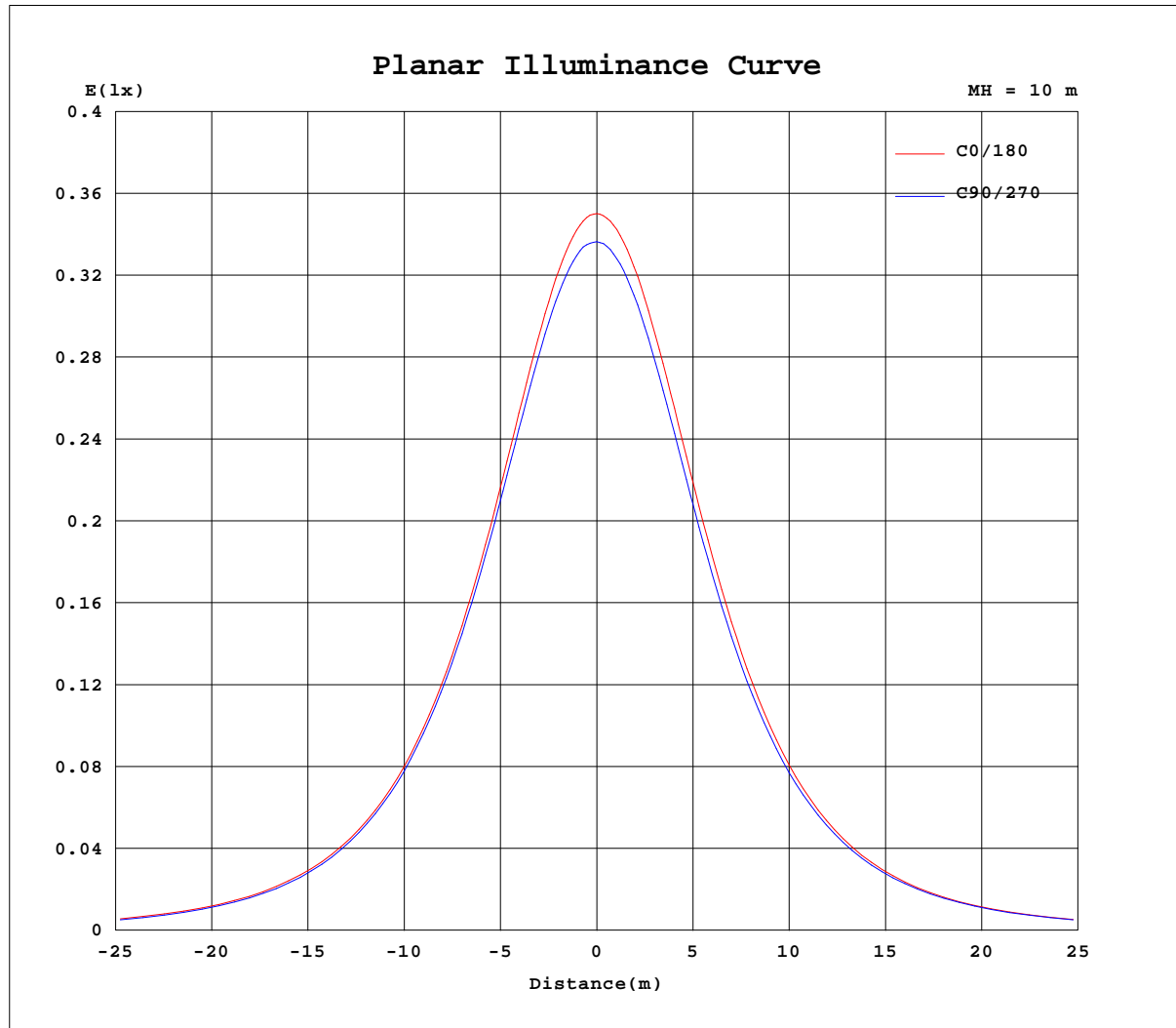
Test:U:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:



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:24.00V I:0.2880A P:6.900W PF:1.000 Freq:0Hz Lamp Flux:99.4569x1 lm		
NAME: NMS0410	TYPE:	WEIGHT:
SPEC.:NMS0410-0R24CSN050CC0100	DIM.: 1000*04*10	SERIAL No.:01
MFR.: COLORS	SUR.:1000*04	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	35.0	34.2	33.6	33.4	35.0	34.2	33.6	33.4										
5	34.8	34.0	33.6	33.3	34.8	34.0	33.4	33.2										
10	34.3	33.5	33.1	32.9	34.4	33.5	32.9	32.6										
15	33.4	32.8	32.3	32.2	33.6	32.7	32.1	31.8										
20	32.3	31.7	31.2	31.2	32.5	31.6	31.0	30.6										
25	30.8	30.3	29.9	29.8	31.1	30.1	29.6	29.2										
30	29.0	28.6	28.2	28.2	29.4	28.4	28.0	27.6										
35	27.1	26.8	26.4	26.4	27.4	26.5	26.1	25.8										
40	25.0	24.8	24.3	24.4	25.3	24.4	24.1	23.7										
45	22.7	22.5	22.1	22.1	22.9	22.1	21.8	21.5										
50	20.3	20.2	19.7	19.7	20.3	19.6	19.4	19.3										
55	17.8	17.7	17.2	17.2	17.6	17.0	17.0	16.8										
60	15.2	15.1	14.5	14.5	14.8	14.3	14.3	14.3										
65	12.6	12.6	11.8	11.8	12.0	11.6	11.6	11.8										
70	9.95	9.87	8.92	8.99	9.11	8.75	8.90	9.16										
75	7.35	7.16	6.17	6.25	6.34	6.03	6.20	6.57										
80	4.98	4.65	3.57	3.74	3.85	3.54	3.69	4.24										
85	3.08	2.58	1.37	1.72	1.93	1.61	1.40	2.37										
90	1.82	1.31	0.30	0.62	0.84	0.66	0.19	1.23										
95	1.21	0.85	0.29	0.28	0.39	0.40	0.16	0.79										
100	1.05	0.79	0.12	0.28	0.31	0.33	0.08	0.73										
105	0.98	0.64	0.11	0.29	0.33	0.33	0.11	0.64										
110	0.95	0.58	0.17	0.29	0.34	0.33	0.15	0.64										
115	0.94	0.55	0.20	0.31	0.37	0.30	0.19	0.57										
120	0.92	0.51	0.21	0.31	0.40	0.30	0.21	0.49										
125	0.90	0.50	0.25	0.32	0.41	0.30	0.25	0.48										
130	0.86	0.50	0.28	0.32	0.41	0.30	0.27	0.47										
135	0.83	0.50	0.30	0.33	0.41	0.30	0.30	0.45										
140	0.80	0.43	0.35	0.35	0.40	0.31	0.31	0.43										
145	0.76	0.43	0.39	0.38	0.38	0.36	0.31	0.33										
150	0.62	0.44	0.41	0.42	0.41	0.39	0.35	0.32										
155	0.53	0.46	0.41	0.45	0.43	0.41	0.41	0.32										
160	0.53	0.48	0.43	0.46	0.45	0.43	0.44	0.32										
165	0.53	0.50	0.49	0.48	0.47	0.43	0.49	0.40										
170	0.53	0.53	0.51	0.51	0.47	0.44	0.51	0.42										
175	0.51	0.54	0.52	0.53	0.48	0.52	0.53	0.51										
180	0.51	0.61	0.57	0.53	0.52	0.51	0.54	0.51										

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: