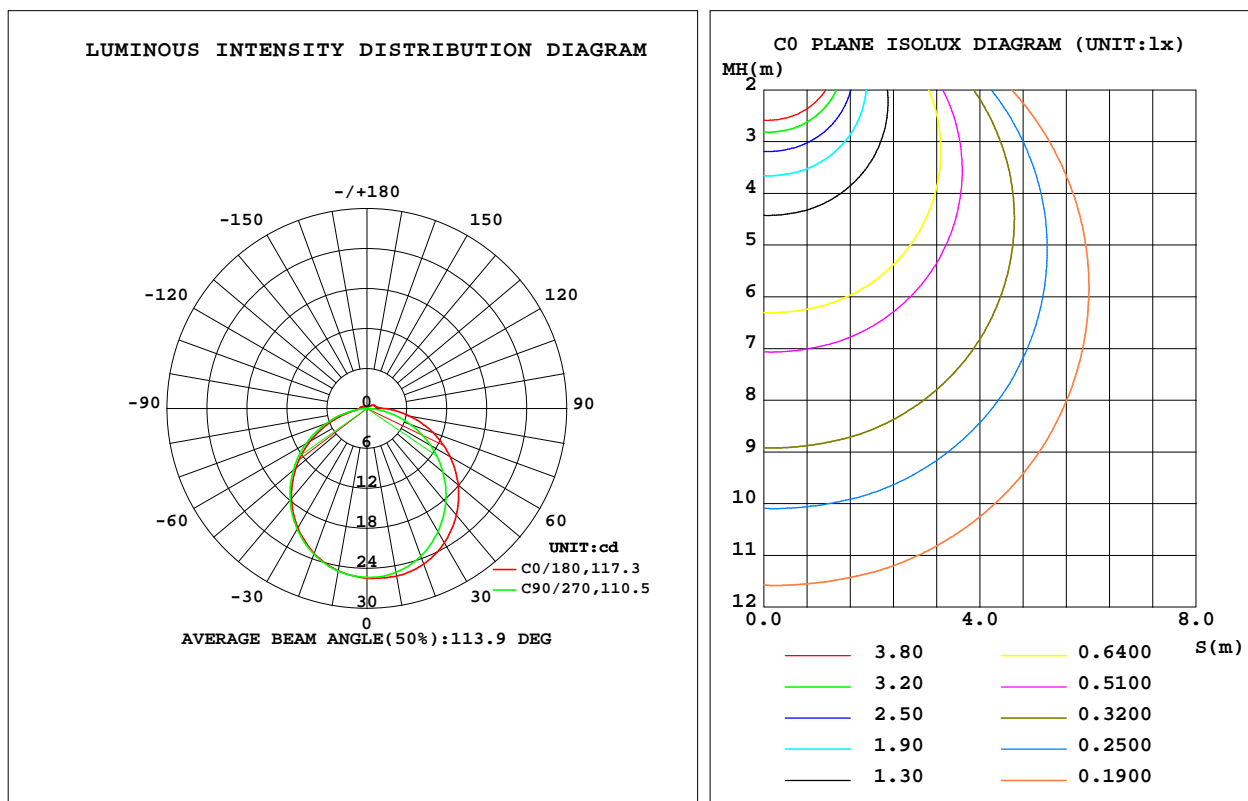


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 29.65 lm/W			
MODEL	NMS1217-Plus	I <sub>max</sub> (cd)	25.54	S/MH(C0/180)	1.22
NOMINAL POWER(W)	9.6	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	78.861	h UP,DN(C0-180)	2.4,50.1
NOMINAL FLUX(lm)	78.8612	CIE CLASS	DIRECT	h UP,DN(C180-360)	2.0,45.5
LAMPS INSIDE	1	h up(%)	4.4	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	95.6	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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:

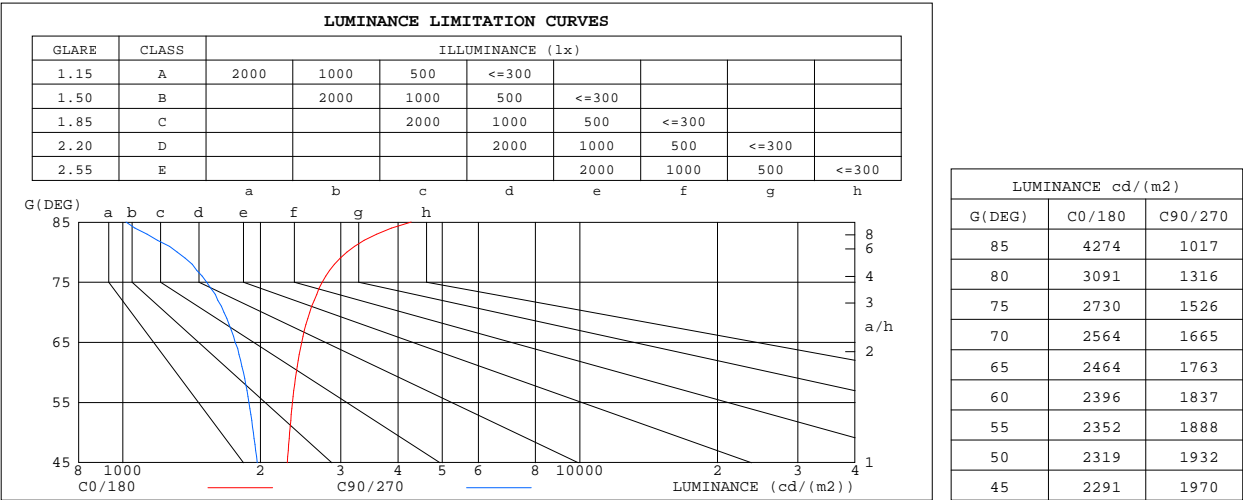
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	25.54	25.34	24.98	24.68	24.75	24.64	24.77	25.32	0- 10	2.406	2.406	3.05,3.05
20	24.86	24.54	23.60	23.11	23.16	22.93	23.27	24.40	10- 20	6.909	9.315	11.8,11.8
30	23.26	22.91	21.33	20.67	20.73	20.41	20.94	22.63	20- 30	10.49	19.81	25.1,25.1
40	20.86	20.48	18.40	17.55	17.63	17.25	17.96	20.14	30- 40	12.68	32.49	41.2,41.2
50	17.88	17.41	14.90	13.86	13.95	13.52	14.44	17.05	40- 50	13.22	45.71	58,58
60	14.38	13.86	11.02	9.815	9.886	9.470	10.58	13.47	50- 60	12.08	57.78	73.3,73.3
70	10.52	9.966	6.833	5.539	5.607	5.263	6.464	9.588	60- 70	9.426	67.21	85.2,85.2
80	6.440	5.832	2.742	1.800	1.979	1.667	2.497	5.590	70- 80	5.762	72.97	92.5,92.5
90	2.780	2.170	0.2477	0.8879	1.156	0.8620	0.1136	2.058	80- 90	2.442	75.41	95.6,95.6
100	1.471	1.081	0.1208	0.7282	1.048	0.7016	0.1201	0.9552	90-100	1.036	76.45	96.9,96.9
110	1.296	0.8215	0.1136	0.5076	0.8349	0.5413	0.1339	0.8686	100-110	0.7424	77.19	97.9,97.9
120	1.042	0.5263	0.1936	0.3139	0.6143	0.3407	0.1870	0.4826	110-120	0.5565	77.75	98.6,98.6
130	0.6891	0.3339	0.2070	0.2939	0.3941	0.2605	0.2338	0.3007	120-130	0.3497	78.10	99,99
140	0.5144	0.3274	0.2938	0.3273	0.3407	0.2871	0.2471	0.2739	130-140	0.2546	78.35	99.4,99.4
150	0.3941	0.3407	0.3139	0.3473	0.3407	0.3206	0.3007	0.2672	140-150	0.2068	78.56	99.6,99.6
160	0.4074	0.3540	0.3272	0.3810	0.3674	0.3206	0.3607	0.3204	150-160	0.1565	78.72	99.8,99.8
170	0.4275	0.3942	0.4141	0.4276	0.3674	0.4006	0.4409	0.3272	160-170	0.1055	78.82	100,100
180	0.4008	0.4275	0.4275	0.4408	0.3674	0.4208	0.4342	0.4141	170-180	0.0393	78.86	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:2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



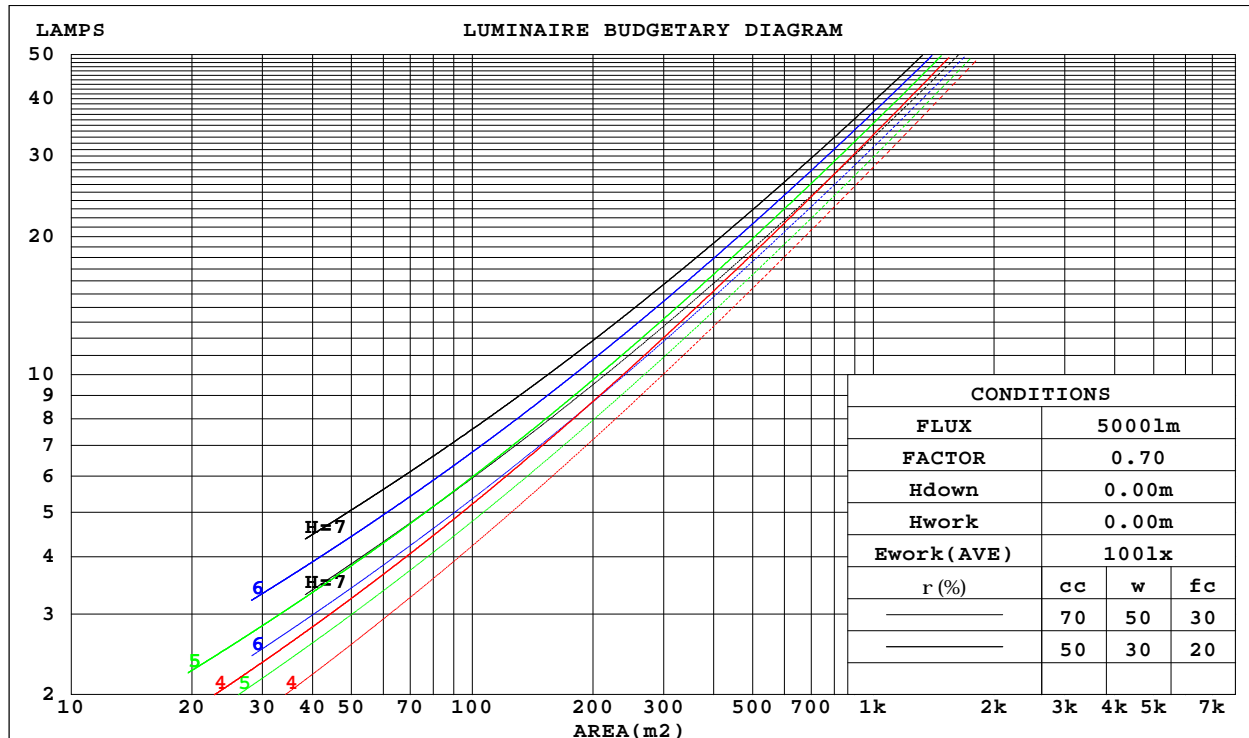
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	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:2020-06-15

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:

## WEC AND CCEC

Test:U:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	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	.325	.185	.058	.316	.180	.057	.300	.172	.055	.286	.165	.053	.272	.158	.051	
2.0	.299	.164	.050	.292	.161	.050	.278	.154	.048	.265	.149	.047	.253	.143	.045	
3.0	.275	.146	.044	.268	.143	.043	.255	.138	.042	.244	.134	.041	.233	.129	.040	
4.0	.252	.131	.039	.246	.129	.038	.235	.125	.037	.224	.121	.036	.215	.117	.036	
5.0	.232	.118	.034	.227	.116	.034	.217	.113	.033	.208	.109	.033	.199	.106	.032	
6.0	.215	.108	.031	.210	.106	.031	.201	.103	.030	.193	.100	.029	.185	.097	.029	
7.0	.200	.099	.028	.195	.097	.028	.187	.095	.027	.180	.092	.027	.172	.090	.026	
8.0	.186	.091	.026	.182	.090	.025	.175	.087	.025	.168	.085	.025	.162	.083	.024	
9.0	.174	.084	.024	.171	.083	.023	.164	.081	.023	.158	.079	.023	.152	.077	.022	
10.0	.164	.079	.022	.161	.078	.022	.154	.076	.021	.149	.074	.021	.143	.072	.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	.224	.224	.224	.191	.191	.191	.131	.131	.131	.075	.075	.075	.024	.024	.024	
1.0	.215	.190	.167	.184	.163	.144	.126	.112	.099	.072	.065	.058	.023	.021	.019	
2.0	.207	.166	.131	.177	.143	.113	.122	.099	.079	.070	.057	.046	.022	.019	.015	
3.0	.199	.148	.108	.171	.128	.093	.117	.089	.065	.068	.052	.039	.022	.017	.013	
4.0	.192	.135	.092	.164	.117	.080	.113	.081	.056	.065	.048	.033	.021	.016	.011	
5.0	.184	.125	.081	.158	.108	.071	.109	.076	.050	.063	.044	.030	.020	.014	.010	
6.0	.177	.117	.073	.152	.101	.064	.105	.071	.045	.061	.042	.027	.020	.014	.009	
7.0	.170	.110	.068	.146	.095	.059	.101	.067	.042	.059	.039	.025	.019	.013	.008	
8.0	.164	.104	.063	.141	.090	.055	.097	.063	.039	.057	.037	.023	.018	.012	.008	
9.0	.158	.099	.060	.136	.086	.052	.094	.061	.037	.055	.036	.022	.018	.012	.007	
10.0	.152	.095	.057	.131	.082	.050	.091	.058	.035	.053	.034	.021	.017	.011	.007	

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm											
NAME: NMS1217-Plus					TYPE:			WEIGHT:			
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus					DIM.: 1000*12*17			SERIAL No.:01			
MFR.: COLORS					SUR.:1000*12			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	25.0	26.5	25.3	26.8	27.1	24.1	25.6	24.4	25.9	26.1	
	3H	27.0	28.4	27.4	28.7	29.0	25.6	27.0	26.0	27.3	27.6
	4H	28.0	29.3	28.3	29.6	29.9	26.2	27.5	26.6	27.9	28.2
	6H	28.9	30.1	29.3	30.5	30.8	26.6	27.9	27.0	28.2	28.6
	8H	29.3	30.5	29.7	30.9	31.2	26.7	27.9	27.2	28.3	28.7
	12H	29.8	30.9	30.2	31.3	31.7	26.8	27.9	27.2	28.3	28.7
4H	2H	25.7	27.0	26.1	27.3	27.7	25.0	26.3	25.4	26.6	27.0
	3H	27.9	29.0	28.3	29.4	29.8	26.8	27.9	27.2	28.3	28.7
	4H	29.0	30.0	29.4	30.4	30.9	27.5	28.6	28.0	29.0	29.4
	6H	30.1	31.0	30.5	31.4	31.9	28.1	29.0	28.6	29.5	29.9
	8H	30.6	31.5	31.1	31.9	32.4	28.3	29.1	28.8	29.6	30.1
	12H	31.1	31.9	31.6	32.4	32.9	28.4	29.2	28.9	29.6	30.1
8H	4H	29.3	30.2	29.8	30.7	31.1	28.1	29.0	28.6	29.4	29.9
	6H	30.7	31.4	31.2	31.9	32.4	28.9	29.7	29.5	30.2	30.7
	8H	31.3	32.0	31.9	32.5	33.0	29.3	29.9	29.8	30.4	31.0
	12H	32.1	32.6	32.6	33.1	33.7	29.5	30.0	30.0	30.6	31.1
12H	4H	29.4	30.2	29.9	30.6	31.1	28.2	29.0	28.7	29.5	30.0
	6H	30.8	31.4	31.3	31.9	32.5	29.2	29.8	29.7	30.3	30.9
	8H	31.5	32.1	32.1	32.6	33.2	29.6	30.2	30.2	30.7	31.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5					

CIE Pub.117, 78.86 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.8)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

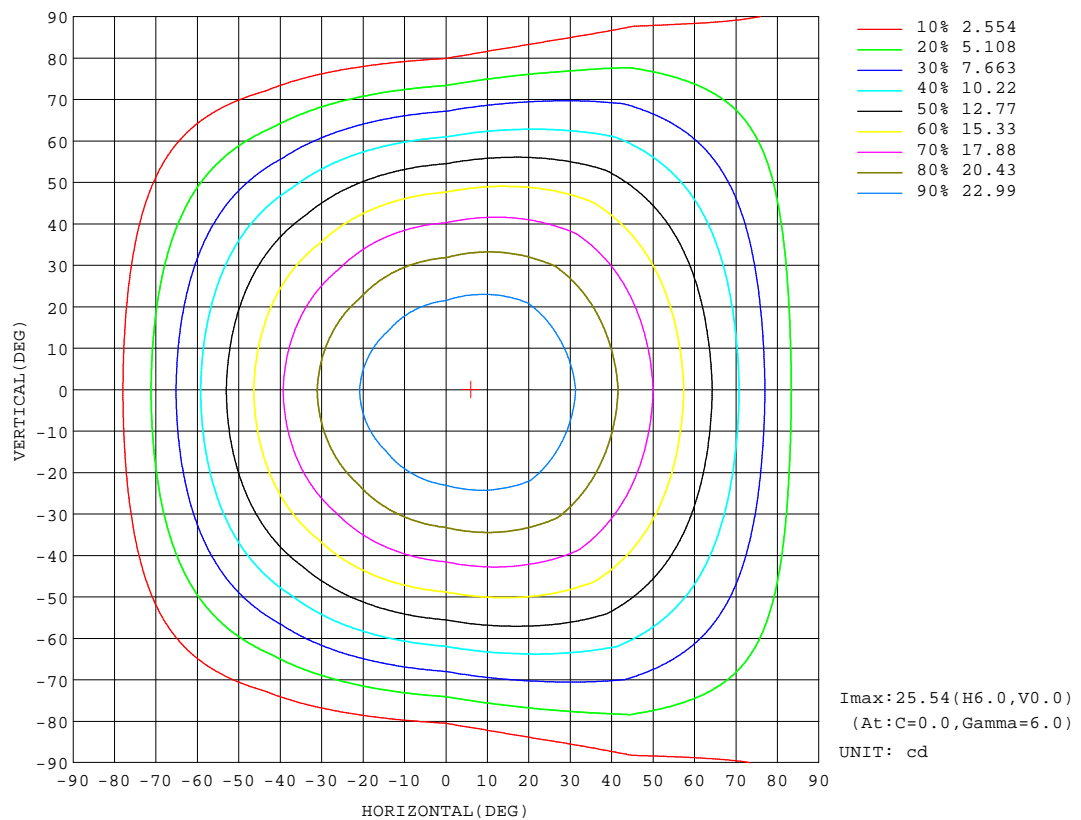
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	74	62	54	72	61	54	70	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	93	83	77	90	82	76	86	79	74	65
2.50	97	88	82	94	87	81	90	83	78	69
3.00	100	93	87	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	99	95	91	81
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:2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

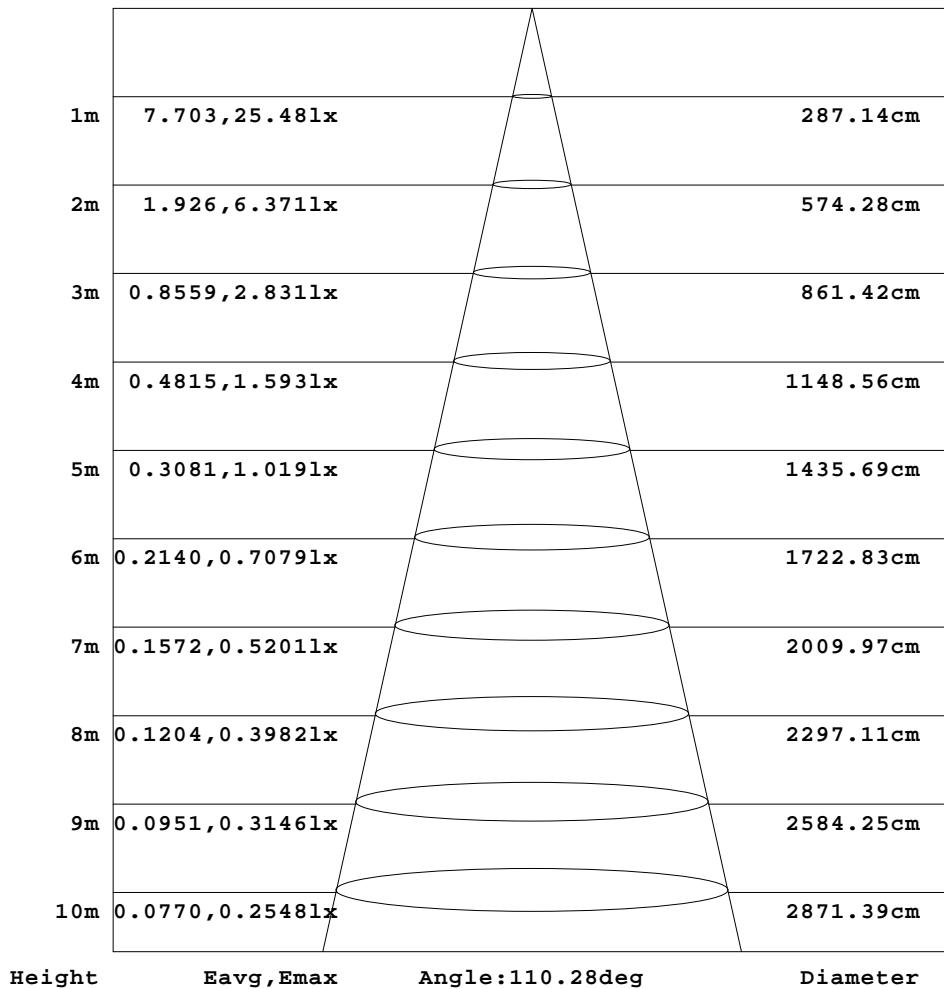
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

Flux out:53.19 lm



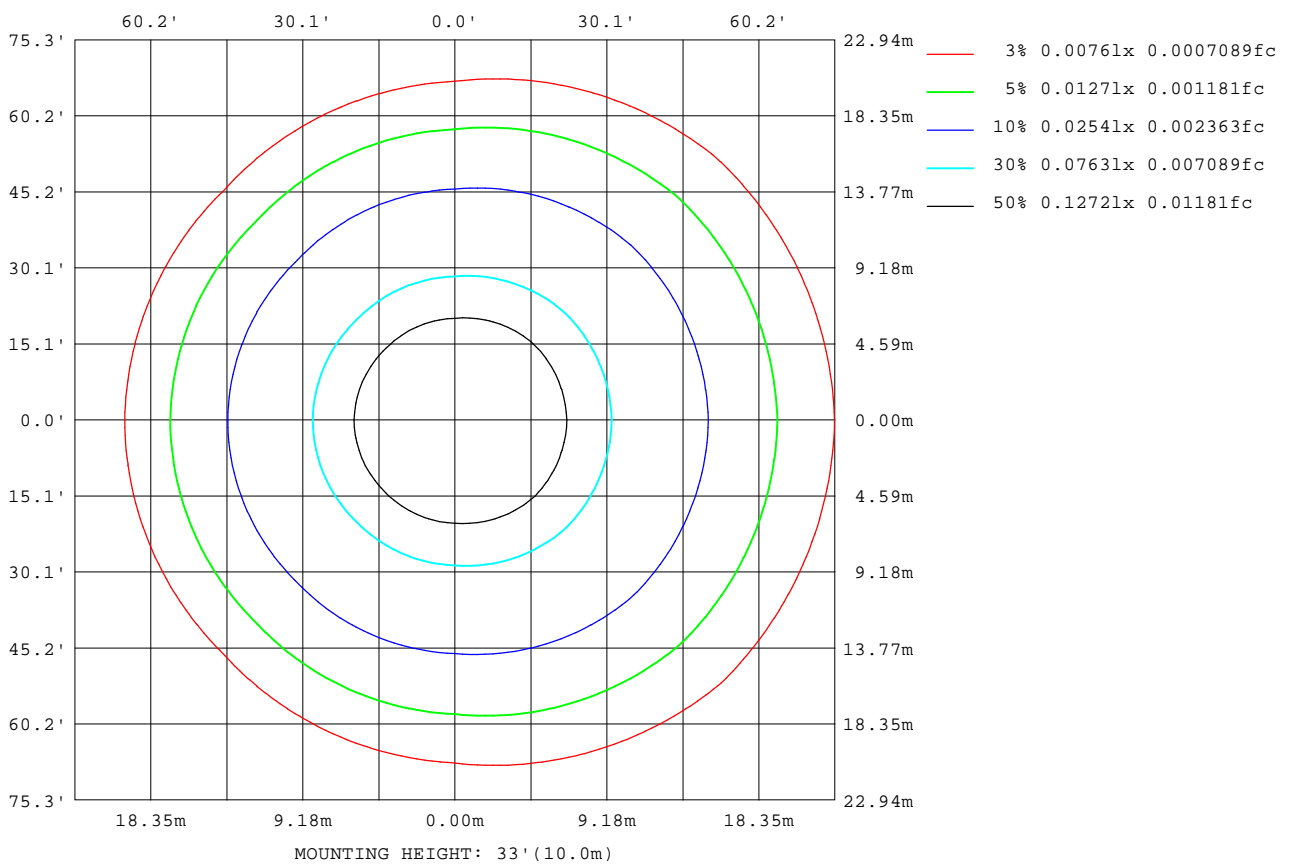
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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

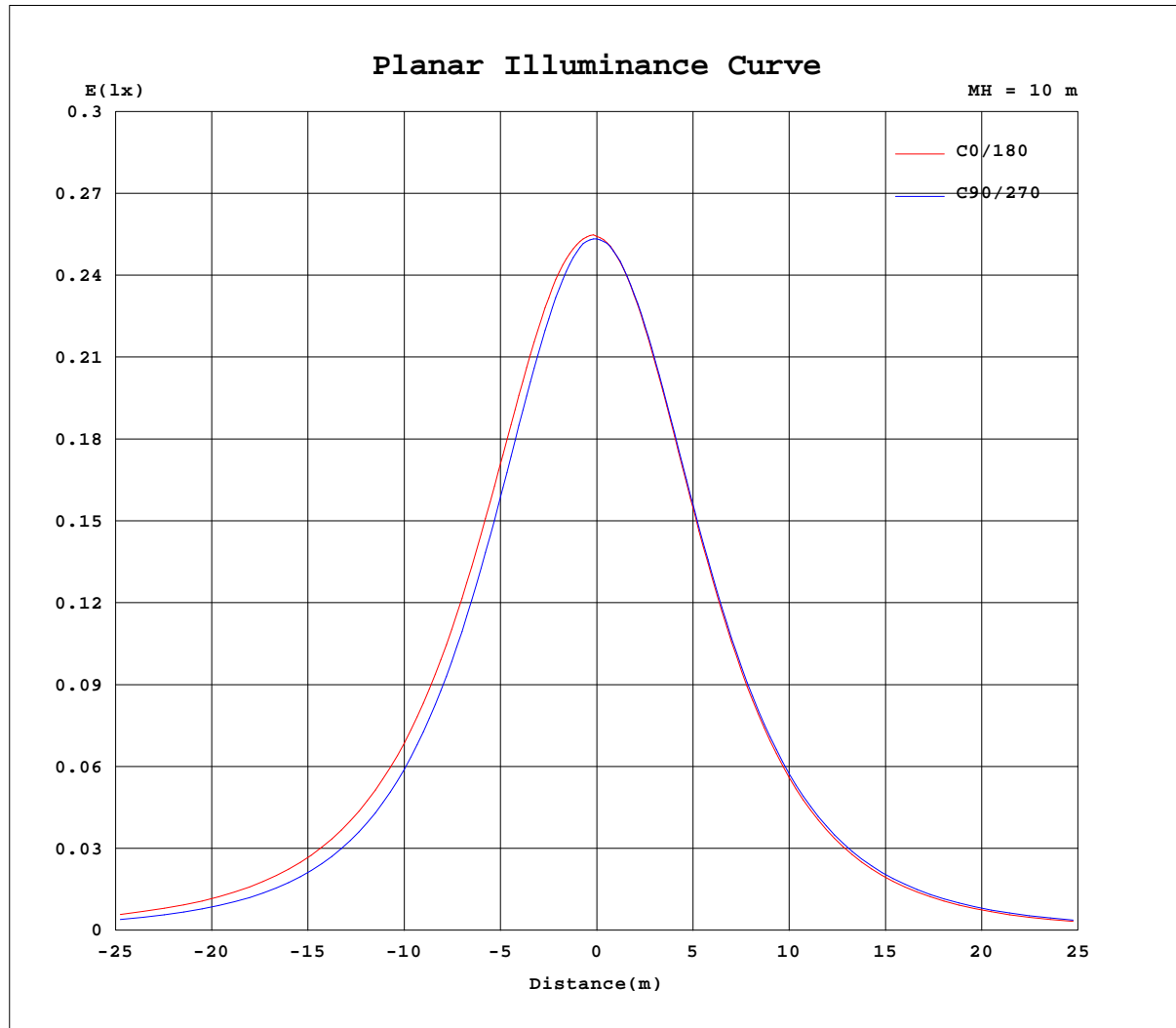
Test:U:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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: 2020-06-15

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:48.00V I:0.0556A P:2.660W PF:1.000 Freq:0Hz Lamp Flux:78.8612x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-0RGBLW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	25.4	25.4	25.3	25.4	25.4	25.4	25.3	25.4										
5	25.5	25.5	25.3	25.1	25.2	25.2	25.2	25.4										
10	25.5	25.3	25.0	24.7	24.7	24.6	24.8	25.3										
15	25.3	25.1	24.4	24.0	24.1	23.9	24.1	25.0										
20	24.9	24.5	23.6	23.1	23.2	22.9	23.3	24.4										
25	24.2	23.8	22.6	22.0	22.0	21.8	22.2	23.6										
30	23.3	22.9	21.3	20.7	20.7	20.4	20.9	22.6										
35	22.1	21.8	19.9	19.2	19.3	18.9	19.5	21.5										
40	20.9	20.5	18.4	17.6	17.6	17.2	18.0	20.1										
45	19.4	19.0	16.7	15.7	15.9	15.4	16.3	18.7										
50	17.9	17.4	14.9	13.9	13.9	13.5	14.4	17.0										
55	16.2	15.7	13.0	11.9	12.0	11.5	12.6	15.3										
60	14.4	13.9	11.0	9.81	9.89	9.47	10.6	13.5										
65	12.5	11.9	8.94	7.68	7.72	7.34	8.52	11.6										
70	10.5	9.97	6.83	5.54	5.61	5.26	6.46	9.59										
75	8.48	7.90	4.74	3.49	3.59	3.26	4.43	7.56										
80	6.44	5.83	2.74	1.80	1.98	1.67	2.50	5.59										
85	4.47	3.87	1.06	0.99	1.26	0.96	0.89	3.67										
90	2.78	2.17	0.25	0.89	1.16	0.86	0.11	2.06										
95	1.74	1.23	0.22	0.81	1.10	0.78	0.11	1.21										
100	1.47	1.08	0.12	0.73	1.05	0.70	0.12	0.96										
105	1.35	0.94	0.11	0.61	0.94	0.63	0.11	0.92										
110	1.30	0.82	0.11	0.51	0.83	0.54	0.13	0.87										
115	1.21	0.71	0.13	0.40	0.73	0.41	0.15	0.76										
120	1.04	0.53	0.19	0.31	0.61	0.34	0.19	0.48										
125	0.85	0.37	0.20	0.27	0.51	0.27	0.21	0.35										
130	0.69	0.33	0.21	0.29	0.39	0.26	0.23	0.30										
135	0.57	0.33	0.25	0.31	0.34	0.26	0.24	0.29										
140	0.51	0.33	0.29	0.33	0.34	0.29	0.25	0.27										
145	0.45	0.33	0.31	0.34	0.34	0.32	0.25	0.27										
150	0.39	0.34	0.31	0.35	0.34	0.32	0.30	0.27										
155	0.39	0.34	0.31	0.36	0.35	0.32	0.33	0.27										
160	0.41	0.35	0.33	0.38	0.37	0.32	0.36	0.32										
165	0.41	0.37	0.36	0.41	0.37	0.35	0.39	0.32										
170	0.43	0.39	0.41	0.43	0.37	0.40	0.44	0.33										
175	0.40	0.43	0.41	0.44	0.37	0.42	0.44	0.41										
180	0.40	0.43	0.43	0.44	0.37	0.42	0.43	0.41										

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-06-15

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: