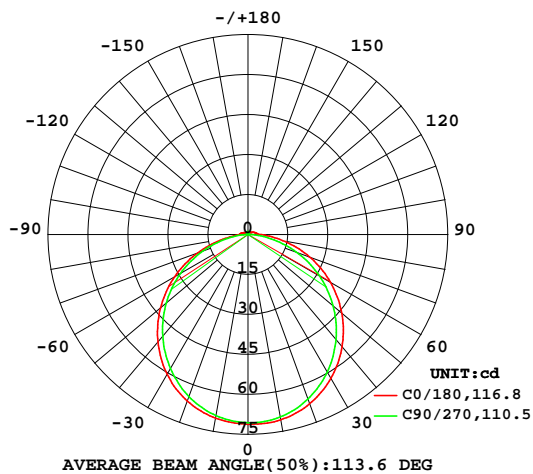


LUMINAIRE PHOTOMETRIC TEST REPORT

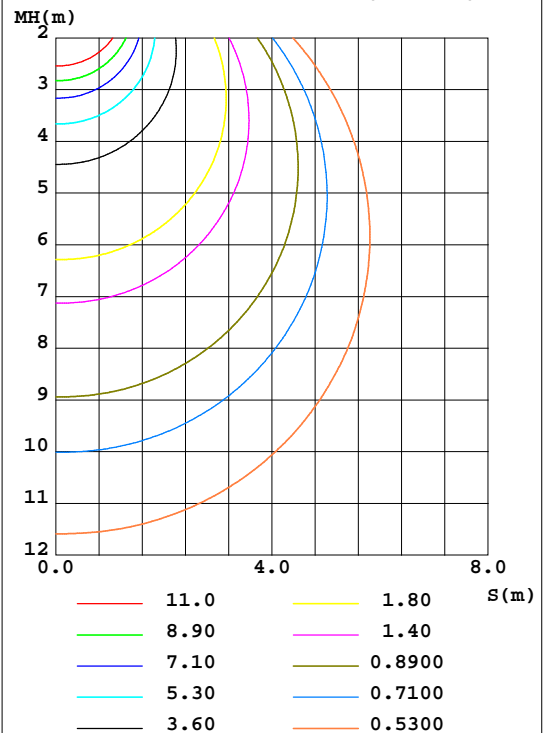
Test:U:48.00V I:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 41.86 lm/W			
MODEL	NMS1217-Plus	I _{max} (cd)	71.18	S/MH(C0/180)	1.27
NOMINAL POWER(W)	5.3	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	216.85	h UP,DN(C0-180)	1.9,49.3
NOMINAL FLUX(lm)	216.85	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.7,47.0
LAMPS INSIDE	1	h up(%)	3.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	96.4	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:2020-06-15

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:

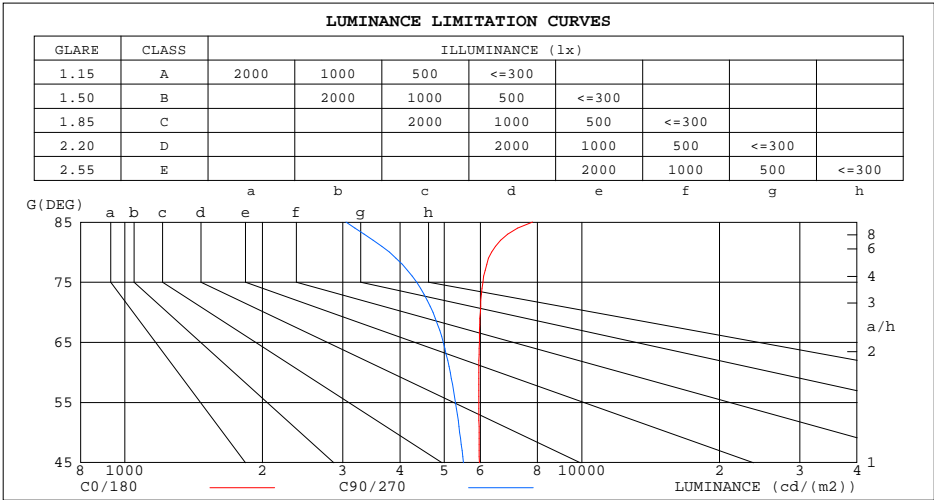
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	70.59	70.36	69.55	69.25	69.96	69.18	68.99	69.76	0- 10	6.708	6.708	3.09,3.09
20	67.62	67.56	65.73	65.48	66.54	65.04	64.75	66.59	10- 20	19.26	25.97	12,12
30	62.27	62.31	59.58	59.25	60.60	58.68	58.16	61.16	20- 30	29.25	55.22	25.5,25.5
40	54.97	54.99	51.42	51.09	52.62	50.29	49.80	53.71	30- 40	35.36	90.58	41.8,41.8
50	45.95	46.00	41.70	41.21	42.82	40.26	40.06	44.68	40- 50	36.84	127.4	58.8,58.8
60	35.70	35.74	30.91	30.21	31.82	29.13	29.24	34.45	50- 60	33.62	161.0	74.3,74.3
70	24.61	24.59	19.38	18.46	20.04	17.46	17.84	23.42	60- 70	26.21	187.3	86.4,86.4
80	13.23	13.03	7.905	7.266	8.686	6.680	6.784	12.24	70- 80	15.82	203.1	93.6,93.6
90	4.618	3.937	0.5573	2.483	3.366	2.406	0.4342	3.594	80- 90	5.876	208.9	96.4,96.4
100	3.246	2.229	0.2496	1.802	2.744	1.805	0.2004	2.011	90-100	2.344	211.3	97.4,97.4
110	2.486	1.346	0.3206	1.176	2.075	1.243	0.3409	1.630	100-110	1.648	212.9	98.2,98.2
120	1.710	0.7547	0.5209	0.8015	1.455	0.8285	0.4609	0.9367	110-120	1.117	214.1	98.7,98.7
130	1.263	0.6880	0.6277	0.8482	1.042	0.7615	0.5745	0.7481	120-130	0.7696	214.8	99.1,99.1
140	1.229	0.7951	0.7480	0.8750	0.9751	0.8348	0.6548	0.7876	130-140	0.6539	215.5	99.4,99.4
150	1.202	0.8751	0.8283	0.9219	0.9418	0.8349	0.7684	0.8283	140-150	0.5529	216.0	99.6,99.6
160	1.176	0.9284	0.9485	1.009	0.9620	0.9551	0.9421	0.8216	150-160	0.4302	216.5	99.8,99.8
170	1.122	1.035	1.108	1.096	0.9886	1.055	1.116	0.9484	160-170	0.2848	216.7	100,100
180	1.049	1.189	1.242	1.189	1.055	1.176	1.256	1.176	170-180	0.1046	216.9	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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7800	3047
80	6348	3794
75	6076	4352
70	5997	4722
65	5968	4977
60	5950	5152
55	5950	5293
50	5958	5407
45	5969	5508

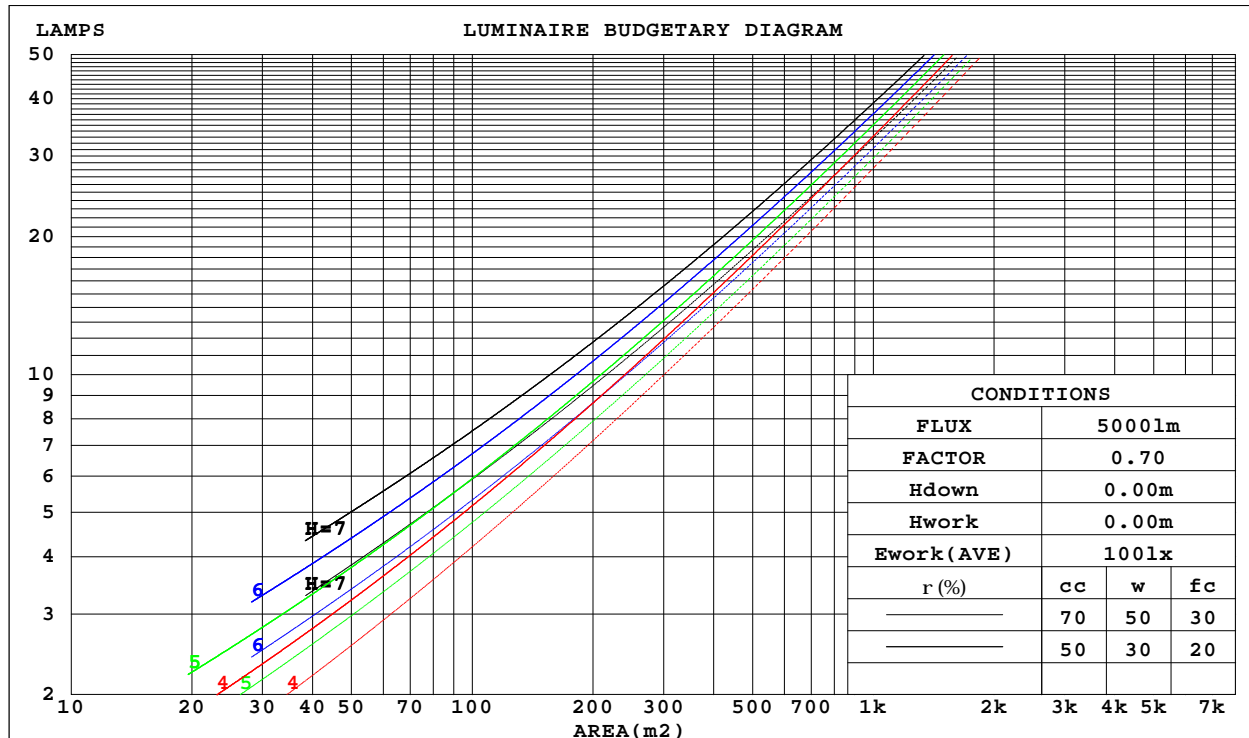
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-15

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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	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 Coefficients of Utilization(CU)															
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.96
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.88	.90	.88	.85	.86	.84	.82	.80
2.0	.89	.82	.76	.87	.80	.75	.83	.77	.73	.79	.74	.70	.75	.72	.68	.66
3.0	.78	.70	.63	.76	.68	.62	.73	.66	.61	.69	.64	.59	.66	.62	.58	.55
4.0	.69	.60	.53	.67	.59	.53	.64	.57	.51	.62	.55	.50	.59	.54	.49	.47
5.0	.61	.52	.46	.60	.52	.45	.58	.50	.44	.55	.49	.44	.53	.47	.43	.41
6.0	.55	.46	.40	.54	.46	.39	.52	.44	.39	.50	.43	.38	.48	.42	.38	.35
7.0	.50	.41	.35	.49	.41	.35	.47	.40	.34	.45	.39	.34	.44	.38	.33	.31
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.42	.35	.30	.40	.34	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.27	.38	.32	.27	.37	.31	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.35	.29	.25	.34	.29	.24	.23



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:

WEC AND CCEC

Test:U:48.00V I:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-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															

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	.218	.218	.218	.187	.187	.187	.127	.127	.127	.073	.073	.073	.023	.023	.023		
1.0	.209	.184	.162	.179	.158	.139	.122	.109	.096	.070	.063	.056	.023	.020	.018		
2.0	.201	.160	.126	.172	.138	.108	.118	.095	.076	.068	.055	.044	.022	.018	.014		
3.0	.194	.143	.102	.166	.123	.089	.114	.085	.062	.066	.050	.037	.021	.016	.012		
4.0	.186	.130	.086	.159	.112	.075	.110	.078	.053	.063	.046	.031	.020	.015	.010		
5.0	.178	.119	.076	.153	.103	.066	.106	.072	.046	.061	.042	.028	.020	.014	.009		
6.0	.171	.111	.068	.147	.096	.059	.102	.067	.042	.059	.040	.025	.019	.013	.008		
7.0	.164	.104	.062	.141	.090	.054	.098	.063	.038	.057	.037	.023	.018	.012	.008		
8.0	.158	.098	.057	.136	.085	.050	.094	.060	.036	.055	.035	.021	.018	.012	.007		
9.0	.152	.093	.054	.131	.081	.047	.091	.057	.033	.053	.034	.020	.017	.011	.007		
10.0	.146	.089	.051	.126	.077	.045	.087	.054	.032	.051	.032	.019	.017	.011	.006		

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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm											
NAME: NMS1217-Plus					TYPE:			WEIGHT:			
SPEC.:NMS1217-9WW48CSN050CC0100-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	24.5	26.0	24.8	26.3	26.5	24.0	25.5	24.3	25.8	26.0	
	3H	26.3	27.7	26.7	28.0	28.3	25.6	26.9	25.9	27.2	27.5
	4H	27.1	28.4	27.5	28.7	29.1	26.2	27.5	26.5	27.8	28.1
	6H	27.8	29.0	28.2	29.4	29.7	26.6	27.8	27.0	28.1	28.5
	8H	28.1	29.3	28.5	29.7	30.0	26.7	27.9	27.1	28.2	28.6
	12H	28.4	29.5	28.8	29.9	30.3	26.8	27.9	27.2	28.3	28.6
4H	2H	25.2	26.5	25.5	26.8	27.1	24.8	26.1	25.2	26.4	26.8
	3H	27.2	28.3	27.6	28.7	29.1	26.6	27.7	27.0	28.1	28.4
	4H	28.1	29.2	28.6	29.6	30.0	27.3	28.4	27.7	28.7	29.2
	6H	29.0	29.9	29.4	30.3	30.8	27.9	28.8	28.3	29.2	29.7
	8H	29.4	30.2	29.8	30.7	31.1	28.1	28.9	28.5	29.3	29.8
	12H	29.7	30.5	30.2	31.0	31.5	28.2	29.0	28.6	29.4	29.9
8H	4H	28.5	29.3	28.9	29.8	30.2	27.8	28.6	28.2	29.1	29.5
	6H	29.5	30.3	30.0	30.7	31.2	28.5	29.3	29.0	29.7	30.2
	8H	30.0	30.7	30.6	31.2	31.7	28.8	29.5	29.4	30.0	30.5
	12H	30.5	31.1	31.1	31.6	32.2	29.1	29.6	29.6	30.1	30.7
12H	4H	28.5	29.3	29.0	29.7	30.2	27.8	28.6	28.3	29.1	29.6
	6H	29.6	30.3	30.1	30.8	31.3	28.7	29.3	29.2	29.8	30.4
	8H	30.2	30.8	30.7	31.3	31.8	29.1	29.6	29.6	30.1	30.7
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, 216.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -5.3)

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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

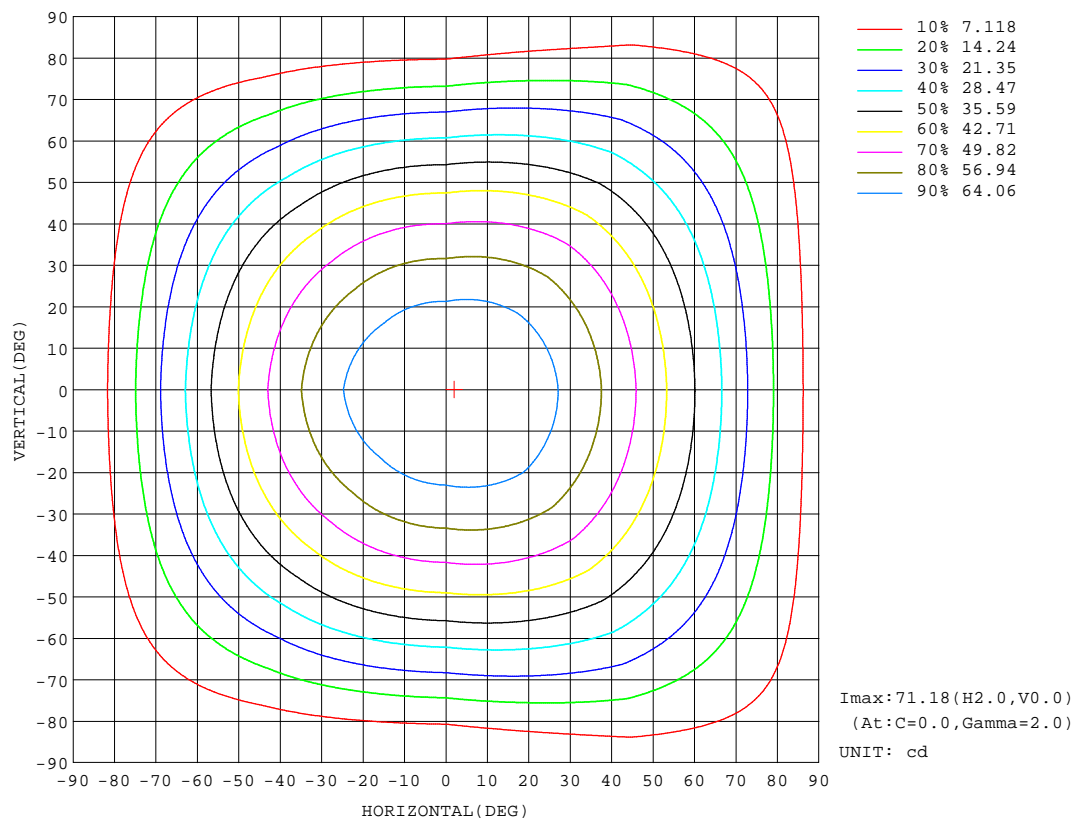
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	52	46	38
1.00	74	63	55	73	62	55	70	63	54	47
1.25	81	70	63	79	69	62	76	68	61	54
1.50	86	76	68	84	75	68	81	73	67	58
2.00	93	84	77	91	83	76	87	80	75	66
2.50	97	89	82	95	87	81	90	84	79	70
3.00	100	93	87	98	91	86	93	88	83	74
4.00	105	98	94	102	96	92	97	93	89	79
5.00	107	102	98	104	100	96	99	95	92	82
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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



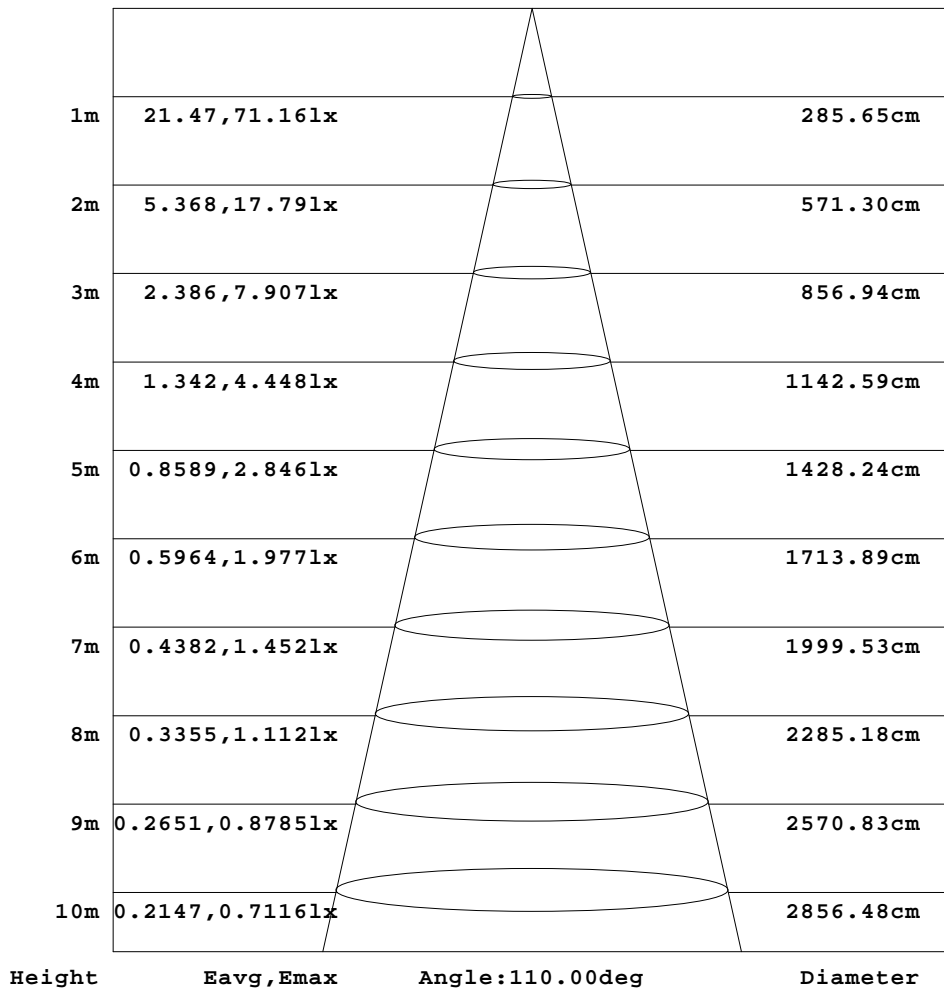
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-15

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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

Flux out:148.3 lm



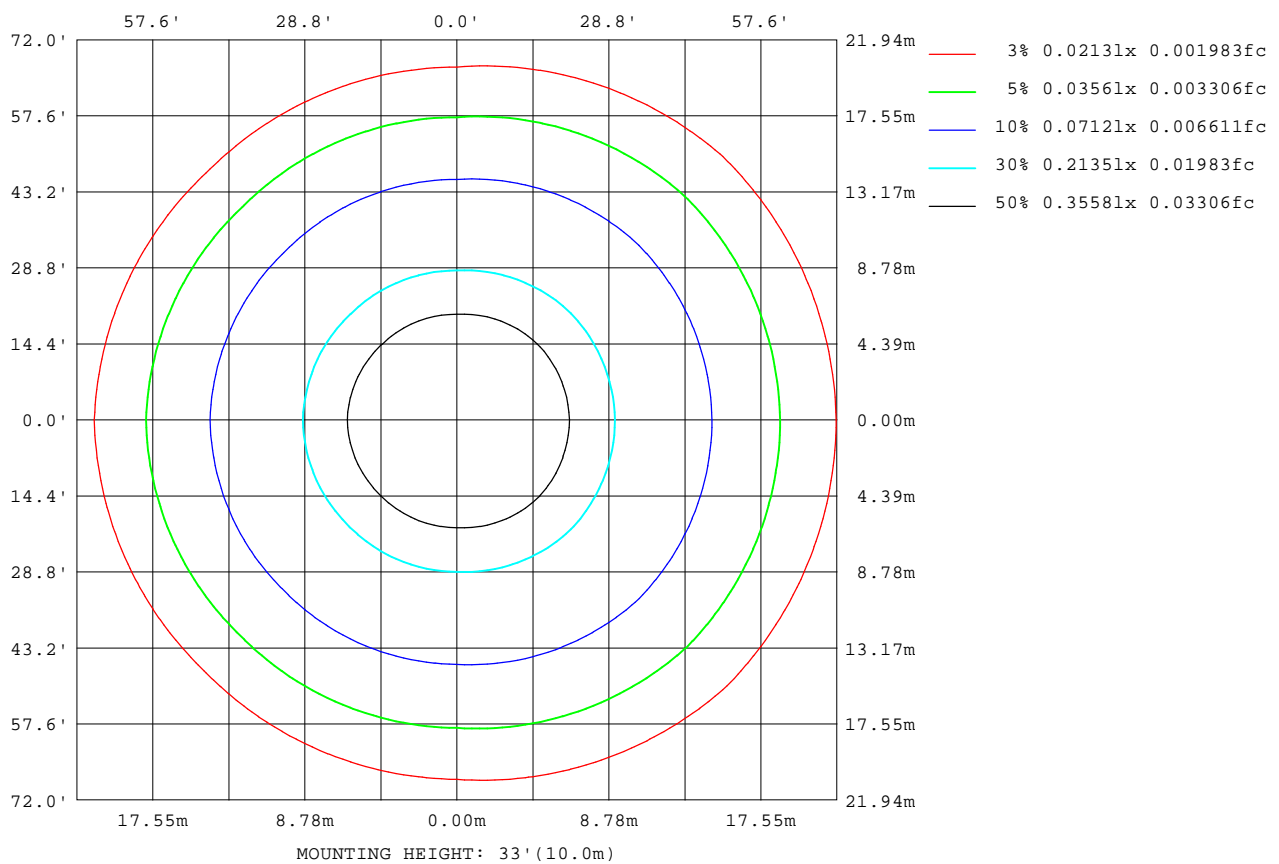
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

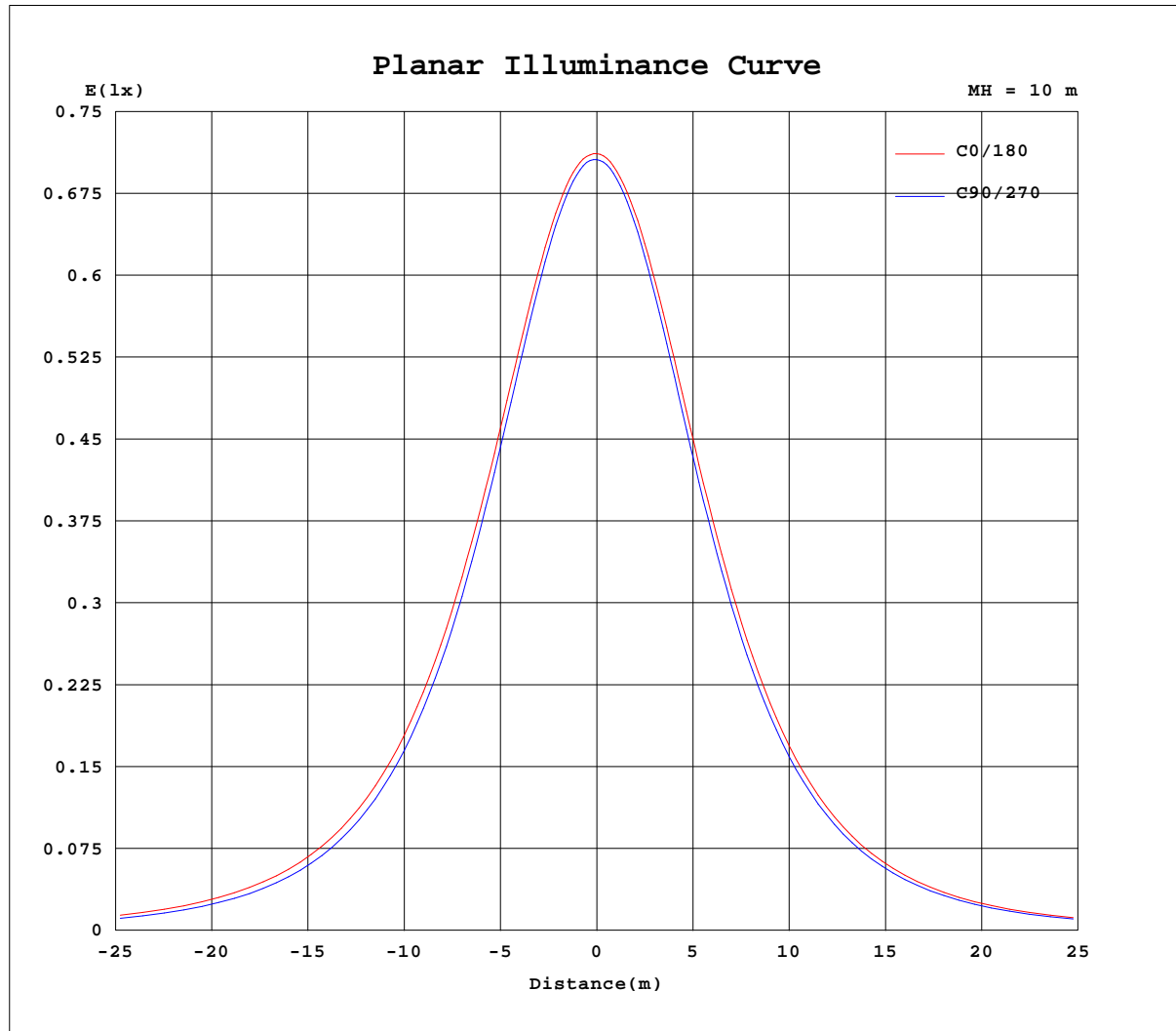
Test:U:48.00V I:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



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

deg 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:0.1080A P:5.180W PF:1.000 Freq:0Hz Lamp Flux:216.85x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9WW48CSN050CC0100-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	71.2	70.9	70.6	70.6	71.2	70.9	70.6	70.6										
5	71.2	70.9	70.5	70.2	70.8	70.3	70.1	70.5										
10	70.6	70.4	69.6	69.2	70.0	69.2	69.0	69.8										
15	69.4	69.3	68.0	67.7	68.6	67.4	67.2	68.5										
20	67.6	67.6	65.7	65.5	66.5	65.0	64.8	66.6										
25	65.2	65.2	62.9	62.6	63.9	62.1	61.7	64.1										
30	62.3	62.3	59.6	59.3	60.6	58.7	58.2	61.2										
35	58.9	58.9	55.7	55.4	56.8	54.7	54.2	57.7										
40	55.0	55.0	51.4	51.1	52.6	50.3	49.8	53.7										
45	50.6	50.7	46.7	46.3	47.9	45.4	45.1	49.4										
50	46.0	46.0	41.7	41.2	42.8	40.3	40.1	44.7										
55	41.0	41.0	36.4	35.8	37.4	34.8	34.8	39.7										
60	35.7	35.7	30.9	30.2	31.8	29.1	29.2	34.4										
65	30.3	30.2	25.2	24.4	26.0	23.3	23.6	29.0										
70	24.6	24.6	19.4	18.5	20.0	17.5	17.8	23.4										
75	18.9	18.8	13.5	12.6	14.1	11.7	12.2	17.8										
80	13.2	13.0	7.90	7.27	8.69	6.68	6.78	12.2										
85	8.16	7.76	3.19	3.56	4.77	3.27	2.37	7.23										
90	4.62	3.94	0.56	2.48	3.37	2.41	0.43	3.59										
95	3.59	2.57	0.49	2.20	3.05	2.10	0.43	2.59										
100	3.25	2.23	0.25	1.80	2.74	1.81	0.20	2.01										
105	2.88	1.82	0.24	1.46	2.42	1.50	0.27	1.87										
110	2.49	1.35	0.32	1.18	2.08	1.24	0.34	1.63										
115	2.07	1.04	0.41	0.97	1.72	1.01	0.41	1.34										
120	1.71	0.75	0.52	0.80	1.45	0.83	0.46	0.94										
125	1.43	0.67	0.59	0.82	1.24	0.78	0.51	0.76										
130	1.26	0.69	0.63	0.85	1.04	0.76	0.57	0.75										
135	1.25	0.75	0.74	0.88	1.03	0.77	0.61	0.75										
140	1.23	0.80	0.75	0.88	0.98	0.83	0.65	0.79										
145	1.22	0.84	0.81	0.88	0.94	0.83	0.69	0.82										
150	1.20	0.88	0.83	0.92	0.94	0.83	0.77	0.83										
155	1.19	0.91	0.86	0.96	0.94	0.87	0.86	0.84										
160	1.18	0.93	0.95	1.01	0.96	0.96	0.94	0.82										
165	1.17	0.97	1.05	1.04	0.99	0.96	1.03	0.83										
170	1.12	1.04	1.11	1.10	0.99	1.06	1.12	0.95										
175	1.05	1.12	1.18	1.17	0.99	1.06	1.20	1.06										
180	1.05	1.19	1.24	1.19	1.06	1.18	1.26	1.18										

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: