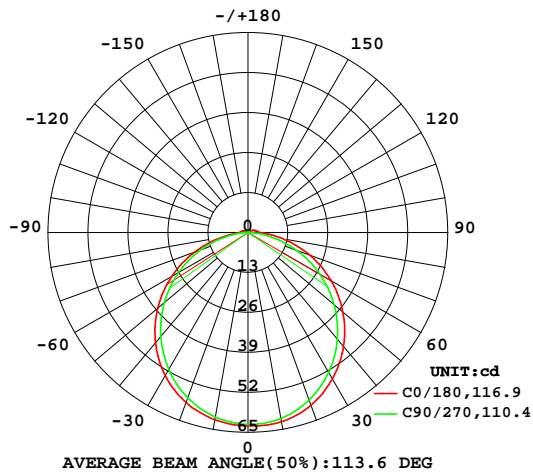


LUMINAIRE PHOTOMETRIC TEST REPORT

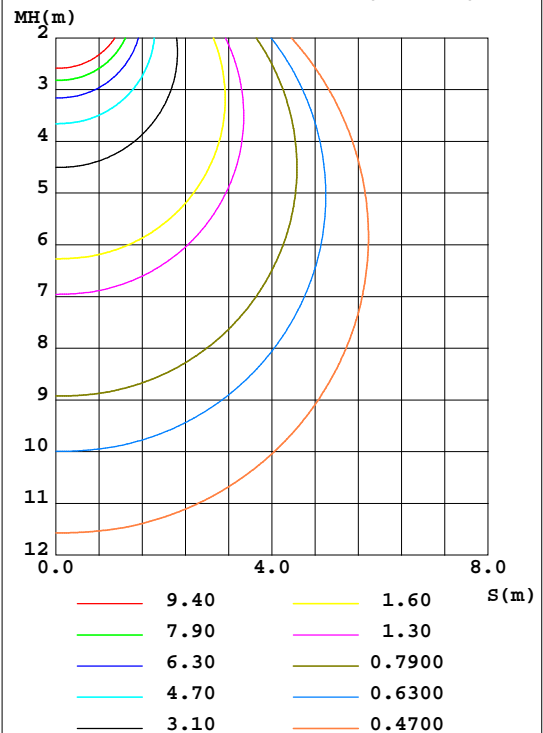
Test:U:48.00V I:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 37.52 lm/W			
MODEL	NMS1217-Plus	I _{max} (cd)	62.95	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)	191.35	h UP,DN(C0-180)	1.8,49.0
NOMINAL FLUX(lm)	191.35	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.6,47.5
LAMPS INSIDE	1	h up(%)	3.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	96.5	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:

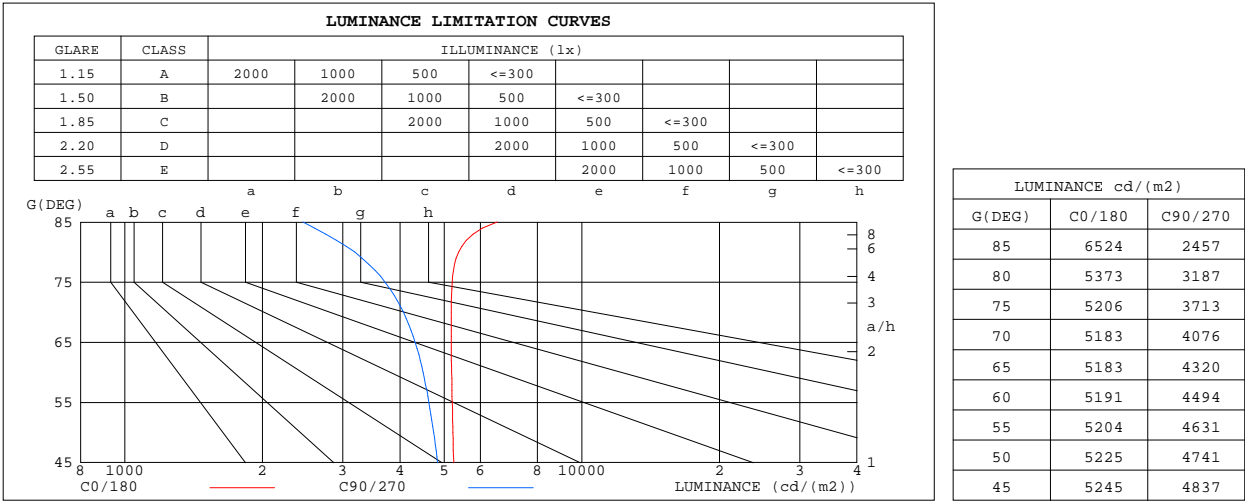
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	62.51	62.24	61.41	61.14	61.81	61.13	60.94	61.75	0~ 10	5.929	5.929	3.1,3.1
20	59.80	59.70	58.02	57.85	58.83	57.56	57.25	59.04	10~ 20	17.03	22.96	12,12
30	54.92	54.96	52.49	52.43	53.79	52.10	51.48	54.19	20~ 30	25.87	48.83	25.5,25.5
40	48.37	48.30	45.24	45.20	46.81	44.89	44.11	47.61	30~ 40	31.28	80.11	41.9,41.9
50	40.30	40.25	36.57	36.49	38.32	36.18	35.50	39.54	40~ 50	32.60	112.7	58.9,58.9
60	31.15	31.09	26.96	26.80	28.67	26.52	26.07	30.42	50~ 60	29.75	142.4	74.4,74.4
70	21.27	21.13	16.73	16.47	18.33	16.24	16.10	20.55	60~ 70	23.20	165.6	86.6,86.6
80	11.20	10.93	6.642	6.467	8.116	6.537	6.354	10.65	70~ 80	13.99	179.6	93.9,93.9
90	3.935	3.211	0.5643	1.889	2.750	1.997	0.4141	3.171	80~ 90	5.099	184.7	96.5,96.5
100	2.880	2.008	0.2360	1.282	2.183	1.457	0.1536	1.733	90~100	1.989	186.7	97.6,97.6
110	2.139	1.227	0.3253	0.8213	1.580	0.9961	0.2873	1.249	100~110	1.349	188.1	98.3,98.3
120	1.437	0.7650	0.4096	0.6516	1.068	0.6947	0.3944	0.7223	110~120	0.9080	189.0	98.8,98.8
130	1.069	0.7015	0.5567	0.6815	0.8573	0.6582	0.5010	0.5550	120~130	0.6401	189.6	99.1,99.1
140	0.9819	0.7548	0.6380	0.7214	0.8089	0.7481	0.5746	0.6278	130~140	0.5483	190.2	99.4,99.4
150	0.9638	0.7815	0.7225	0.7883	0.7874	0.7768	0.6679	0.6428	140~150	0.4685	190.6	99.6,99.6
160	0.9592	0.8350	0.8347	0.8686	0.8149	0.8296	0.8085	0.7547	150~160	0.3688	191.0	99.8,99.8
170	0.9408	0.9352	0.9337	0.9419	0.8352	0.8949	0.9687	0.8496	160~170	0.2454	191.3	100,100
180	0.9084	1.062	1.069	1.069	0.8550	1.055	1.075	1.062	170~180	0.0905	191.4	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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



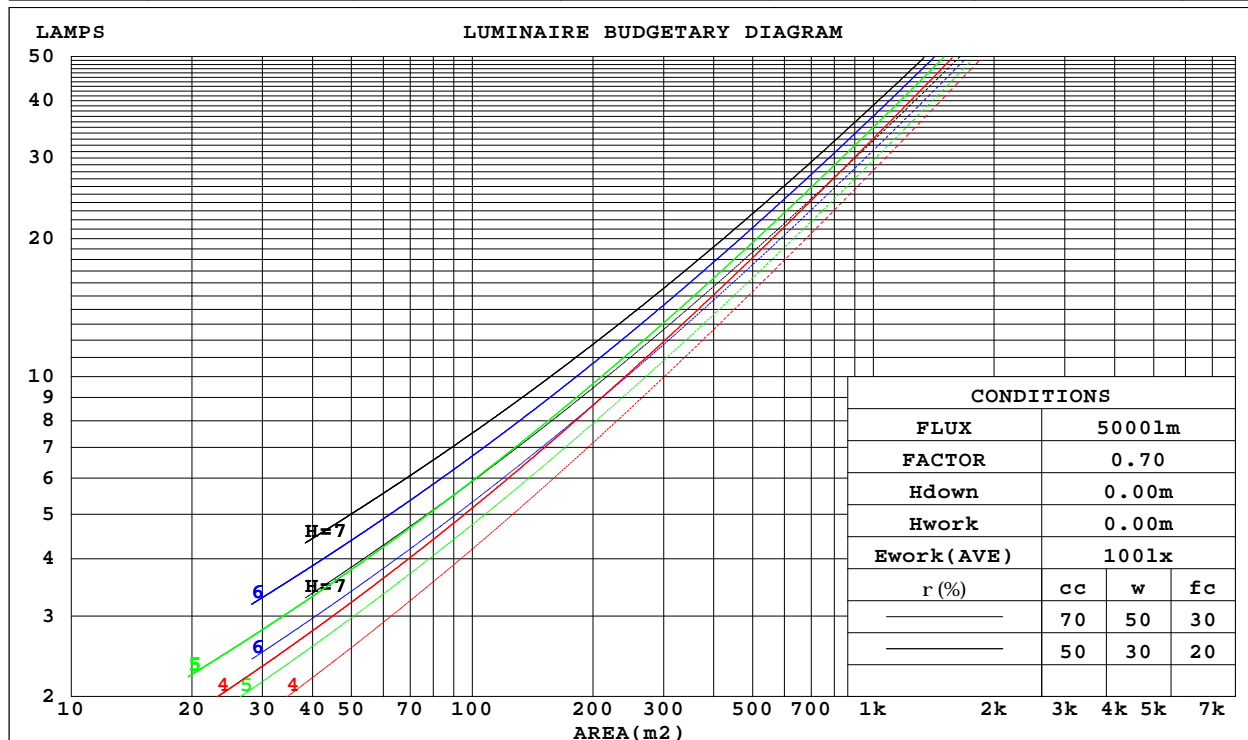
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-06-15

g Range: 0 - 180DEG
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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-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	.97
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.89	.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	.52	.62	.55	.50	.59	.54	.49	.47
5.0	.62	.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	.28	.38	.32	.27	.37	.31	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-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	.217	.217	.217	.185	.185	.185	.126	.126	.126	.073	.073	.073	.023	.023	.023		
1.0	.208	.183	.160	.178	.157	.138	.121	.108	.095	.070	.062	.055	.022	.020	.018		
2.0	.200	.159	.124	.171	.137	.107	.117	.094	.075	.068	.055	.044	.022	.018	.014		
3.0	.192	.141	.101	.165	.122	.087	.113	.085	.061	.065	.049	.036	.021	.016	.012		
4.0	.184	.128	.085	.158	.111	.074	.109	.077	.052	.063	.045	.031	.020	.015	.010		
5.0	.177	.118	.074	.152	.102	.064	.105	.071	.045	.061	.042	.027	.020	.014	.009		
6.0	.170	.109	.066	.146	.095	.058	.101	.066	.041	.058	.039	.024	.019	.013	.008		
7.0	.163	.103	.060	.140	.089	.053	.097	.062	.037	.056	.037	.022	.018	.012	.007		
8.0	.156	.097	.056	.135	.084	.049	.093	.059	.035	.054	.035	.021	.018	.011	.007		
9.0	.150	.092	.052	.129	.080	.046	.090	.056	.032	.052	.033	.019	.017	.011	.006		
10.0	.145	.088	.050	.125	.076	.043	.086	.054	.031	.050	.032	.018	.016	.010	.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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm										
NAME: NMS1217-Plus					TYPE:			WEIGHT:		
SPEC.:NMS1217-9LW48CSN050CC0100-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	24.4	25.9	24.8	26.2	26.5	23.9	25.4	24.3	25.7	26.0
3H	26.2	27.6	26.6	27.9	28.2	25.5	26.8	25.8	27.1	27.4
4H	27.0	28.3	27.4	28.6	28.9	26.0	27.3	26.4	27.7	28.0
6H	27.7	28.9	28.1	29.2	29.6	26.4	27.7	26.8	28.0	28.4
8H	28.0	29.1	28.4	29.5	29.9	26.5	27.7	26.9	28.1	28.4
12H	28.2	29.4	28.6	29.7	30.1	26.6	27.7	27.0	28.1	28.5
4H 2H	25.1	26.4	25.5	26.7	27.0	24.7	26.0	25.1	26.3	26.7
3H	27.1	28.2	27.5	28.6	28.9	26.4	27.6	26.8	27.9	28.3
4H	28.0	29.0	28.4	29.4	29.8	27.2	28.2	27.6	28.6	29.0
6H	28.8	29.7	29.3	30.2	30.6	27.7	28.6	28.2	29.1	29.5
8H	29.2	30.0	29.6	30.5	30.9	27.9	28.7	28.3	29.2	29.6
12H	29.5	30.3	30.0	30.8	31.2	28.0	28.8	28.4	29.2	29.7
8H 4H	28.3	29.2	28.8	29.6	30.1	27.6	28.5	28.1	28.9	29.4
6H	29.3	30.1	29.8	30.5	31.0	28.4	29.1	28.9	29.5	30.0
8H	29.8	30.5	30.3	31.0	31.5	28.6	29.3	29.1	29.8	30.3
12H	30.3	30.9	30.8	31.4	31.9	28.8	29.4	29.4	29.9	30.4
12H 4H	28.3	29.1	28.8	29.6	30.1	27.7	28.5	28.2	28.9	29.4
6H	29.4	30.1	29.9	30.6	31.1	28.5	29.1	29.0	29.6	30.2
8H	30.0	30.5	30.5	31.0	31.6	28.9	29.4	29.4	29.9	30.5
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 / - 0.4				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 191.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -5.7)

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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

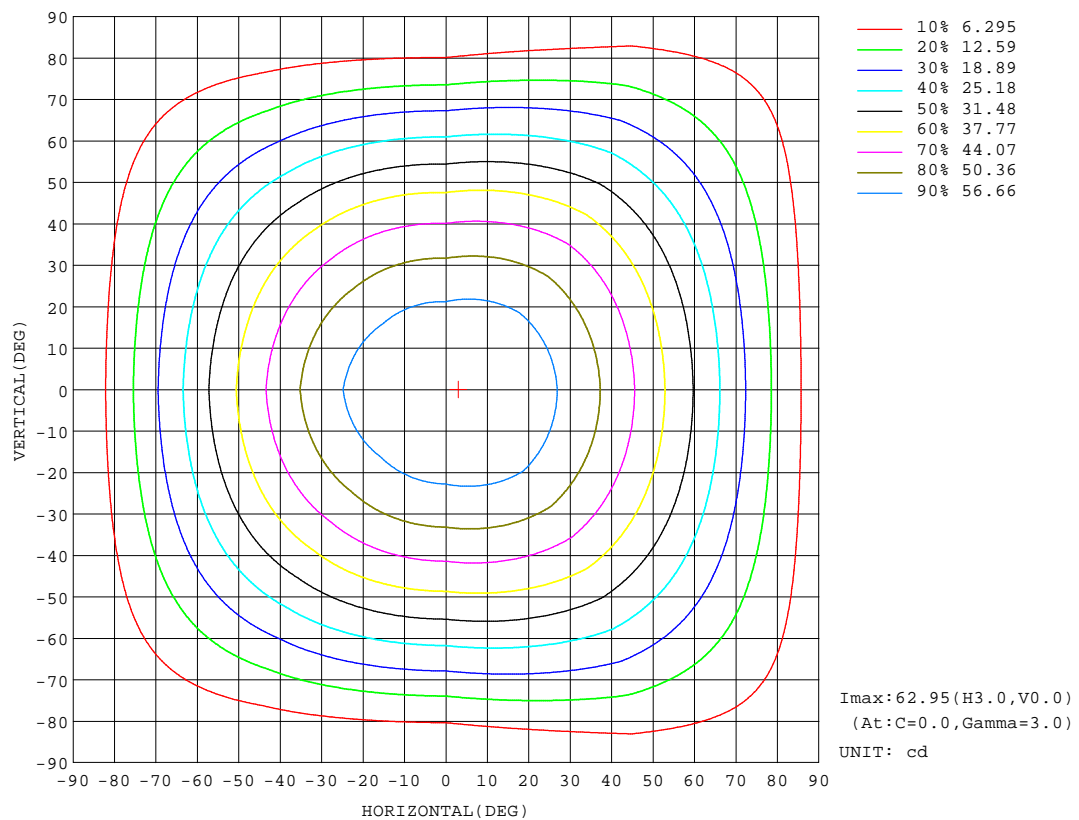
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	46	65	53	46	63	52	46	39
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	69	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	87	80	75	66
2.50	97	89	83	95	87	81	90	84	79	70
3.00	100	93	87	98	91	86	94	88	84	74
4.00	105	99	94	102	97	92	97	93	89	79
5.00	107	102	98	104	100	96	99	96	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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



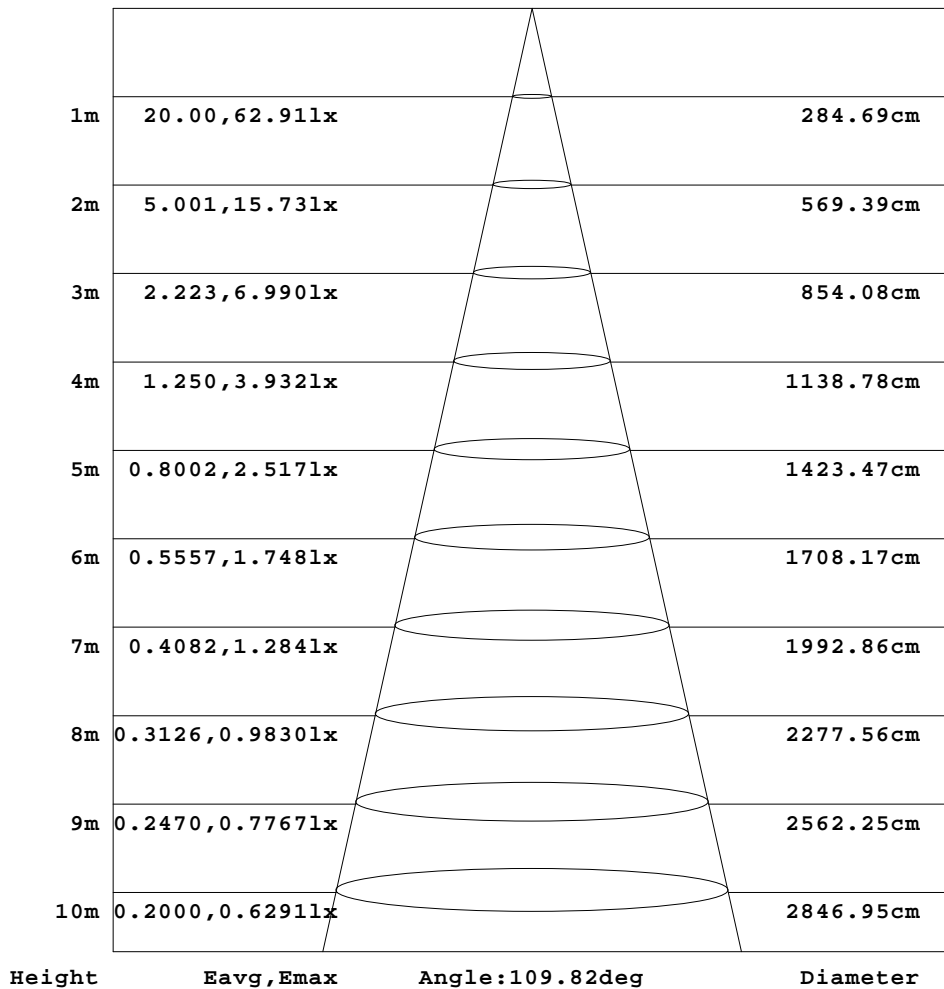
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2020-06-15

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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:

Flux out:128.2 lm



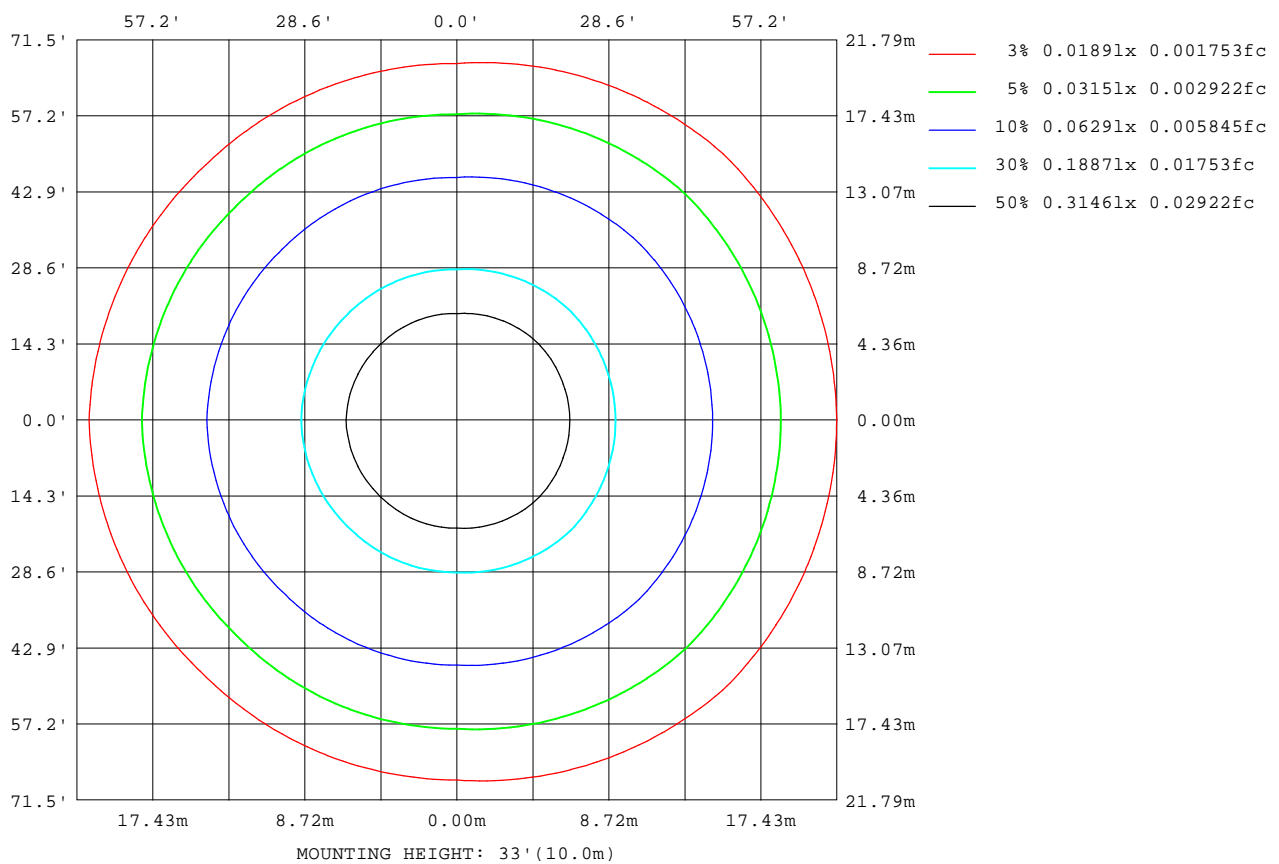
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

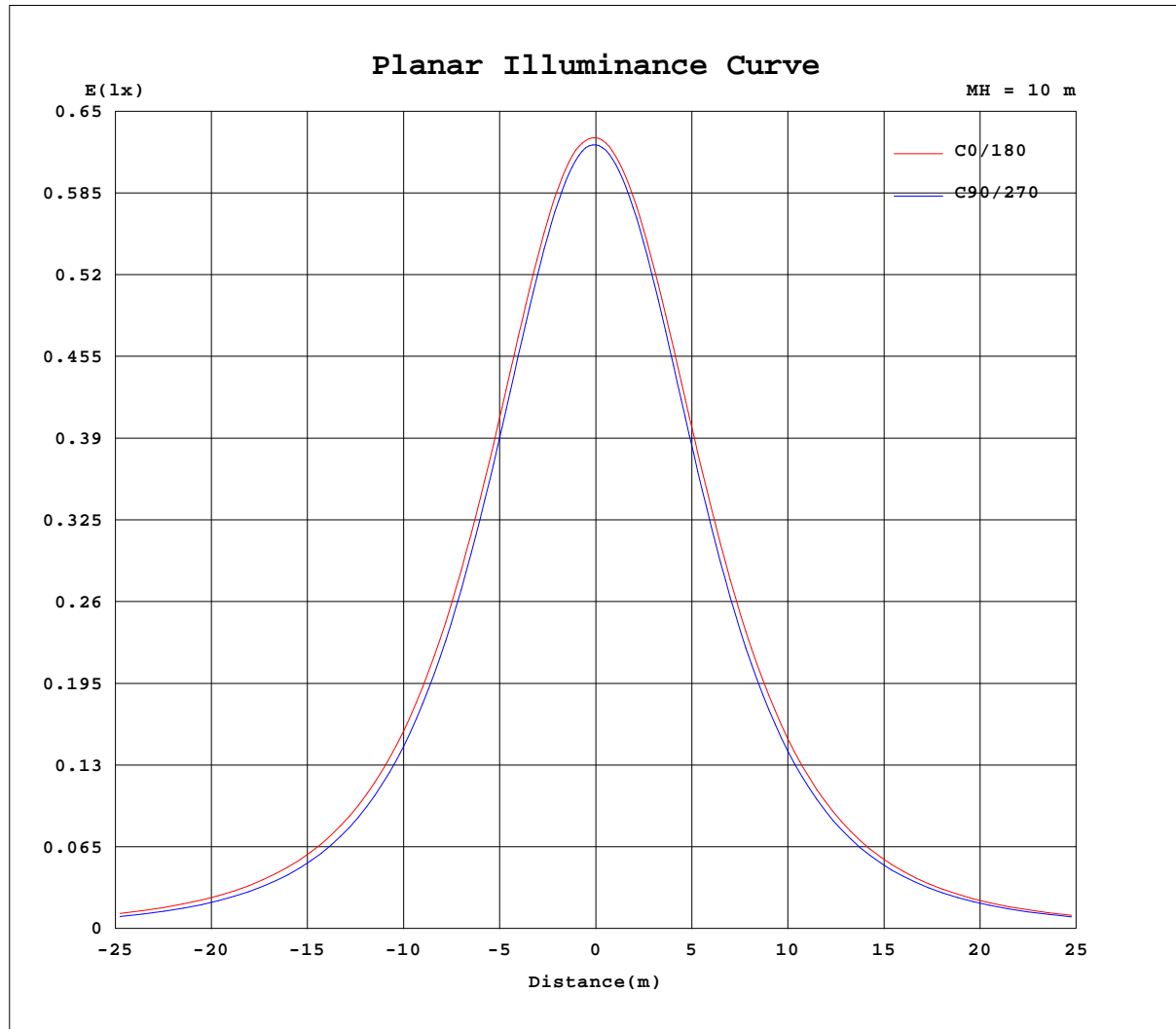
Test:U:48.00V I:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-Plus	DIM.: 1000*12*17	SERIAL No.:01
MFR.: COLORS	SUR.:1000*12	Shielding Angle:



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

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:0.1070A P:5.100W PF:1.000 Freq:0Hz Lamp Flux:191.35x1 lm		
NAME: NMS1217-Plus	TYPE:	WEIGHT:
SPEC.:NMS1217-9LW48CSN050CC0100-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	62.9	62.7	62.3	62.4	62.9	62.7	62.3	62.4										
5	62.9	62.7	62.2	62.0	62.6	62.2	61.9	62.3										
10	62.5	62.2	61.4	61.1	61.8	61.1	60.9	61.7										
15	61.4	61.3	60.0	59.8	60.6	59.6	59.4	60.7										
20	59.8	59.7	58.0	57.8	58.8	57.6	57.3	59.0										
25	57.6	57.6	55.5	55.4	56.6	55.0	54.6	56.8										
30	54.9	55.0	52.5	52.4	53.8	52.1	51.5	54.2										
35	51.9	51.9	49.1	49.0	50.5	48.7	48.0	51.1										
40	48.4	48.3	45.2	45.2	46.8	44.9	44.1	47.6										
45	44.5	44.5	41.0	41.0	42.7	40.7	40.0	43.7										
50	40.3	40.2	36.6	36.5	38.3	36.2	35.5	39.5										
55	35.8	35.8	31.9	31.7	33.6	31.5	30.9	35.1										
60	31.1	31.1	27.0	26.8	28.7	26.5	26.1	30.4										
65	26.3	26.2	21.9	21.7	23.6	21.4	21.1	25.5										
70	21.3	21.1	16.7	16.5	18.3	16.2	16.1	20.6										
75	16.2	16.0	11.5	11.3	13.1	11.1	11.1	15.5										
80	11.2	10.9	6.64	6.47	8.12	6.54	6.35	10.6										
85	6.82	6.36	2.57	3.01	4.37	3.09	2.38	6.25										
90	3.94	3.21	0.56	1.89	2.75	2.00	0.41	3.17										
95	3.23	2.32	0.52	1.60	2.43	1.73	0.39	2.34										
100	2.88	2.01	0.24	1.28	2.18	1.46	0.15	1.73										
105	2.52	1.64	0.21	1.01	1.88	1.20	0.23	1.58										
110	2.14	1.23	0.33	0.82	1.58	1.00	0.29	1.25										
115	1.74	0.94	0.38	0.74	1.29	0.78	0.35	0.96										
120	1.44	0.76	0.41	0.65	1.07	0.69	0.39	0.72										
125	1.24	0.63	0.51	0.65	0.93	0.66	0.45	0.55										
130	1.07	0.70	0.56	0.68	0.86	0.66	0.50	0.56										
135	1.00	0.74	0.61	0.71	0.83	0.66	0.54	0.58										
140	0.98	0.75	0.64	0.72	0.81	0.75	0.57	0.63										
145	0.97	0.77	0.67	0.76	0.80	0.76	0.60	0.63										
150	0.96	0.78	0.72	0.79	0.79	0.78	0.67	0.64										
155	0.97	0.81	0.76	0.82	0.79	0.80	0.75	0.69										
160	0.96	0.83	0.83	0.87	0.81	0.83	0.81	0.75										
165	0.95	0.87	0.85	0.90	0.84	0.84	0.88	0.79										
170	0.94	0.94	0.93	0.94	0.84	0.89	0.97	0.85										
175	0.92	1.01	0.97	1.00	0.84	0.95	1.03	0.94										
180	0.91	1.06	1.07	1.07	0.85	1.06	1.08	1.06										

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: