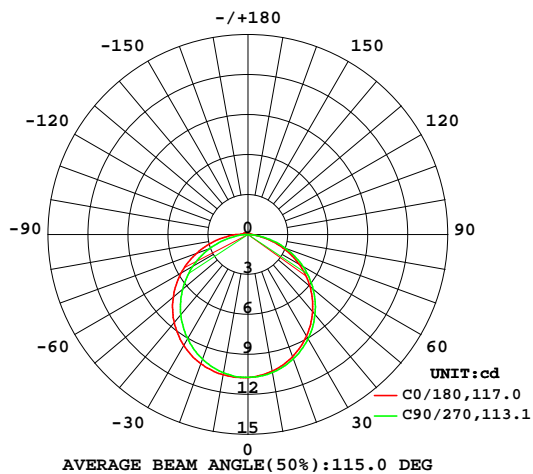


LUMINAIRE PHOTOMETRIC TEST REPORT

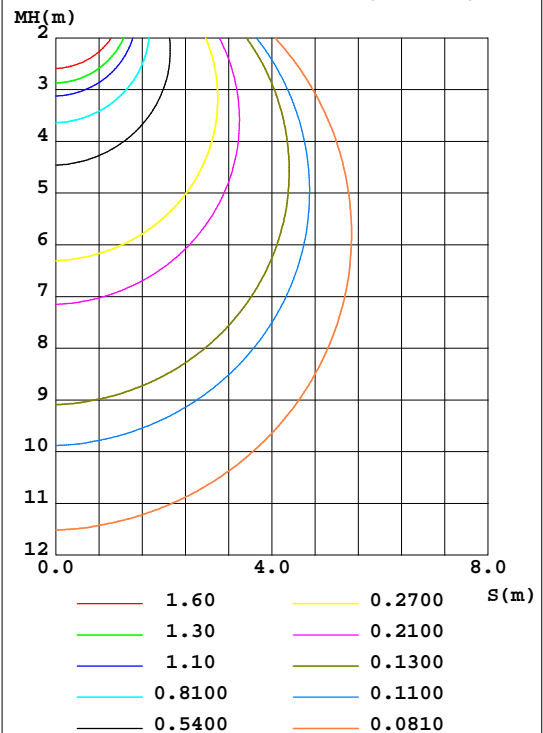
Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 8.14 lm/W
MODEL	NMT1312	I _{max} (cd)	10.75	S/MH(C0/180)	1.33	
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.26	
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	32.406	h UP,DN(C0-180)	0.7,46.2	
NOMINAL FLUX(lm)	32.4062	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.3,51.9	
LAMPS INSIDE	1	h up(%)	2.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	24	h down(%)	98.0	CIBSE SHR MAX	1.35	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

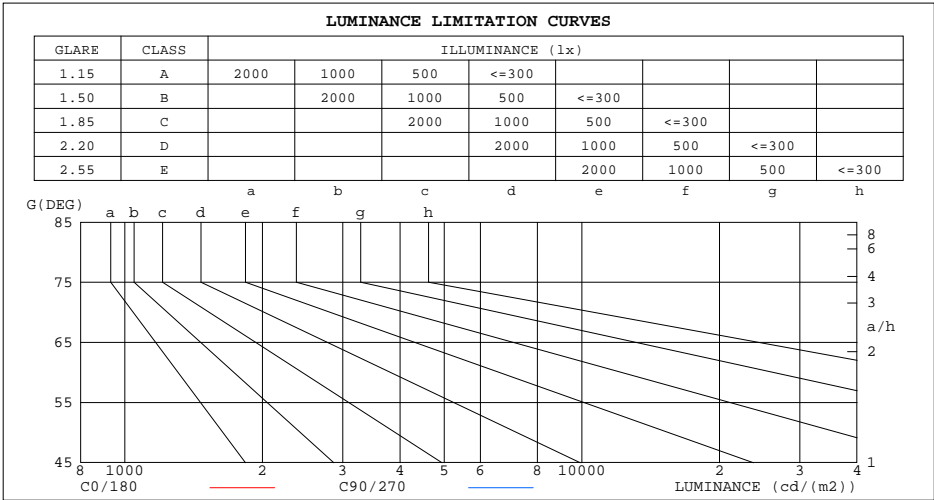
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	10.42	10.51	10.69	10.54					0~ 10	1.015	1.015	3.13,3.13
20	9.770	9.948	10.33	9.962					10~ 20	2.912	3.927	12.1,12.1
30	8.800	9.037	9.631	9.053					20~ 30	4.428	8.355	25.8,25.8
40	7.560	7.840	8.619	7.856					30~ 40	5.370	13.72	42.4,42.4
50	6.079	6.388	7.324	6.409					40~ 50	5.619	19.34	59.7,59.7
60	4.426	4.760	5.805	4.794					50~ 60	5.156	24.50	75.6,75.6
70	2.640	2.981	4.080	3.023					60~ 70	4.028	28.53	88,88
80	0.9988	1.147	2.300	1.258					70~ 80	2.418	30.95	95.5,95.5
90	0.2793	0	0.8259	0.0567					80~ 90	0.8207	31.77	98,98
100	0.2194	0	0.3853	0					90~100	0.2068	31.97	98.7,98.7
110	0.1943	0	0.3383	0					100~110	0.1470	32.12	99.1,99.1
120	0.1567	0	0.2671	0					110~120	0.1167	32.24	99.5,99.5
130	0.1222	0	0.1984	0					120~130	0.0860	32.32	99.7,99.7
140	0.0784	0	0.1441	0					130~140	0.0540	32.38	99.9,99.9
150	0.0031	0	0.0846	0					140~150	0.0248	32.40	100,100
160	0	0	0	0					150~160	0.0046	32.41	100,100
170	0	0	0	0					160~170	0	32.41	100,100
180	0	0	0	0					170~180	0	32.41	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:



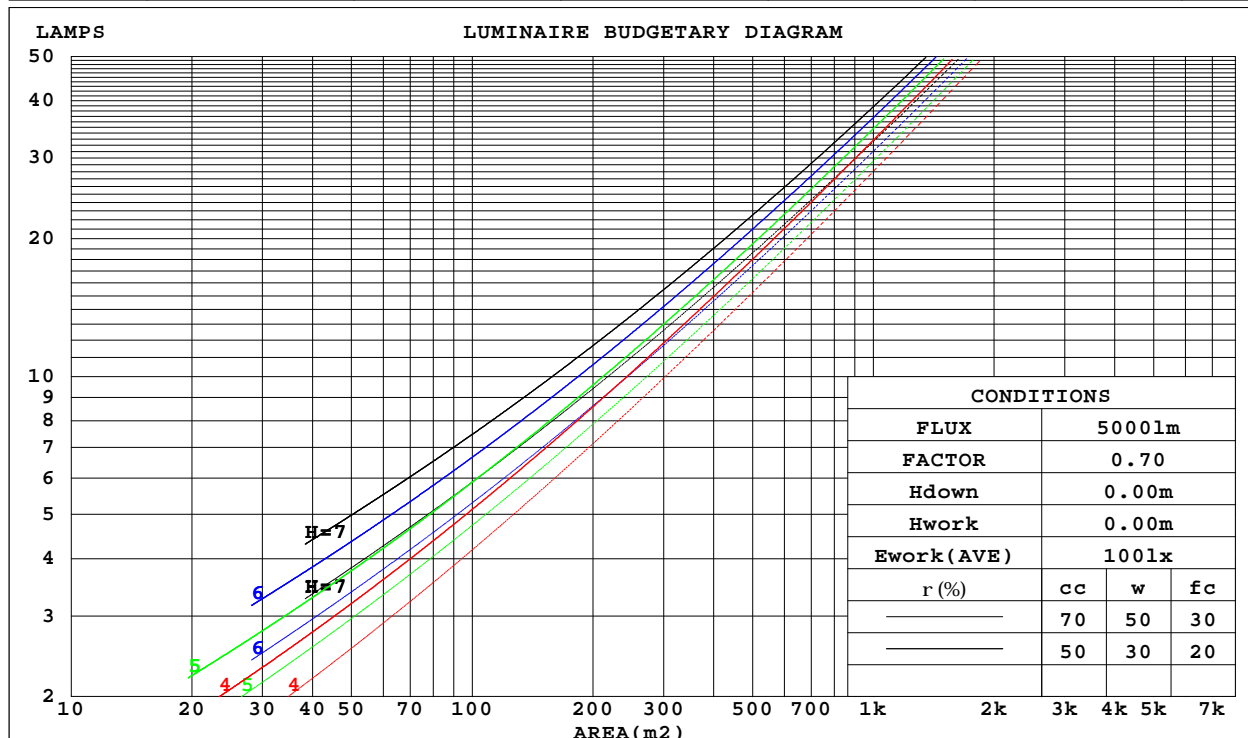
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	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: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-04-26

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-PLus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	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	.320	.182	.058	.312	.178	.057	.298	.171	.055	.285	.164	.053	.273	.158	.051	
2.0	.298	.163	.050	.291	.160	.049	.278	.155	.048	.267	.150	.047	.256	.145	.046	
3.0	.274	.146	.044	.268	.144	.043	.257	.139	.042	.246	.135	.041	.237	.131	.041	
4.0	.252	.131	.039	.247	.129	.038	.237	.126	.038	.227	.122	.037	.219	.119	.036	
5.0	.233	.119	.034	.228	.117	.034	.219	.114	.034	.210	.111	.033	.203	.108	.033	
6.0	.215	.108	.031	.211	.107	.031	.203	.104	.030	.196	.102	.030	.188	.099	.029	
7.0	.200	.099	.028	.196	.098	.028	.189	.096	.028	.182	.093	.027	.176	.091	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.164	.079	.022	.162	.078	.022	.156	.077	.022	.151	.075	.021	.146	.074	.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	.206	.206	.206	.176	.176	.176	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.196	.171	.149	.168	.147	.128	.115	.101	.089	.066	.058	.051	.021	.019	.017	
2.0	.188	.147	.113	.161	.127	.097	.111	.088	.068	.064	.051	.040	.020	.016	.013	
3.0	.181	.130	.089	.155	.112	.077	.106	.078	.054	.061	.045	.032	.020	.015	.010	
4.0	.173	.116	.073	.148	.101	.064	.102	.070	.045	.059	.041	.027	.019	.013	.009	
5.0	.166	.106	.062	.142	.092	.054	.098	.064	.038	.057	.038	.023	.018	.012	.007	
6.0	.158	.098	.054	.136	.085	.047	.094	.059	.034	.054	.035	.020	.018	.011	.007	
7.0	.152	.091	.049	.130	.079	.042	.090	.055	.030	.052	.033	.018	.017	.011	.006	
8.0	.145	.085	.044	.125	.074	.038	.086	.052	.027	.050	.031	.016	.016	.010	.005	
9.0	.139	.080	.041	.120	.070	.036	.083	.049	.025	.048	.029	.015	.016	.009	.005	
10.0	.133	.076	.038	.115	.066	.033	.080	.046	.024	.046	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm											
NAME: NMT1312					TYPE:			WEIGHT:			
SPEC.:NMT1312-0RGB24NSNO50CC0100-PLus-B					DIM.: 1000*13*12			SERIAL No.:			
MFR.: Colors					SUR.:100*13			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	23.2	24.8	23.5	25.0	25.2	23.5	25.0	23.8	25.3	25.5	
	3H	24.6	26.0	25.0	26.3	26.6	25.0	26.4	25.4	26.7	27.0
	4H	25.2	26.5	25.5	26.8	27.1	25.6	27.0	26.0	27.3	27.6
	6H	25.5	26.7	25.9	27.0	27.4	26.0	27.3	26.4	27.6	27.9
	8H	25.6	26.8	25.9	27.1	27.4	26.1	27.3	26.5	27.6	28.0
	12H	25.6	26.8	26.0	27.1	27.5	26.1	27.3	26.5	27.6	28.0
4H	2H	23.9	25.2	24.2	25.5	25.8	24.1	25.4	24.4	25.7	26.0
	3H	25.4	26.6	25.8	26.9	27.3	25.8	26.9	26.2	27.3	27.6
	4H	26.1	27.1	26.5	27.5	27.9	26.5	27.6	26.9	27.9	28.3
	6H	26.5	27.5	26.9	27.8	28.3	27.0	27.9	27.4	28.3	28.7
	8H	26.6	27.5	27.1	27.9	28.4	27.1	28.0	27.6	28.4	28.8
	12H	26.7	27.6	27.2	28.0	28.4	27.2	28.0	27.6	28.4	28.8
8H	4H	26.3	27.2	26.8	27.6	28.0	26.7	27.6	27.1	28.0	28.4
	6H	26.9	27.6	27.4	28.1	28.5	27.3	28.0	27.8	28.5	29.0
	8H	27.1	27.7	27.6	28.2	28.7	27.5	28.2	28.0	28.6	29.1
	12H	27.3	27.8	27.8	28.3	28.8	27.6	28.2	28.1	28.7	29.2
12H	4H	26.3	27.1	26.8	27.6	28.0	26.7	27.5	27.1	27.9	28.4
	6H	26.9	27.6	27.4	28.1	28.5	27.3	28.0	27.8	28.5	29.0
	8H	27.2	27.7	27.7	28.2	28.7	27.6	28.1	28.1	28.6	29.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					

CIE Pub.117, 32.41 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -11.9)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:

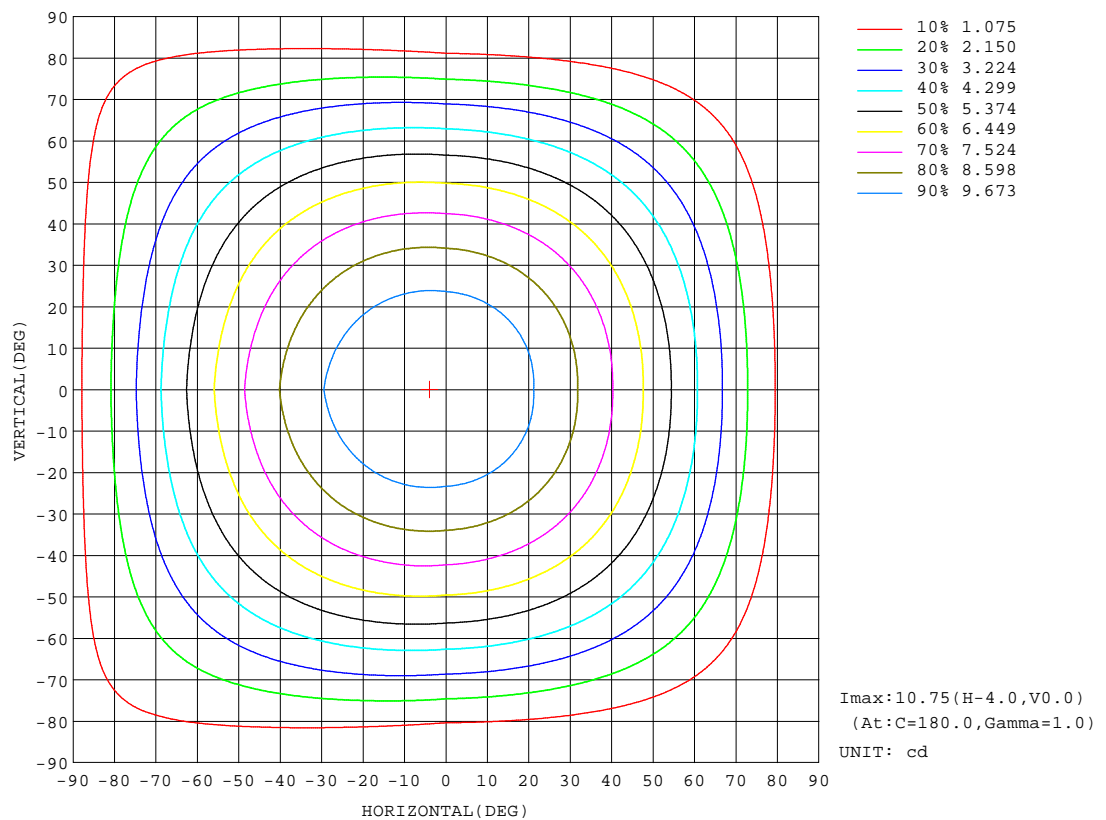
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	44	37	31
0.80	66	54	47	65	54	47	63	53	46	39
1.00	74	63	56	73	62	55	71	64	55	47
1.25	82	71	63	80	70	63	77	68	62	54
1.50	87	76	69	85	75	69	82	73	67	59
2.00	94	85	78	92	83	77	88	81	75	67
2.50	98	89	83	95	88	82	91	85	80	71
3.00	101	94	88	99	92	87	94	89	84	75
4.00	105	99	94	103	97	93	98	94	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: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:



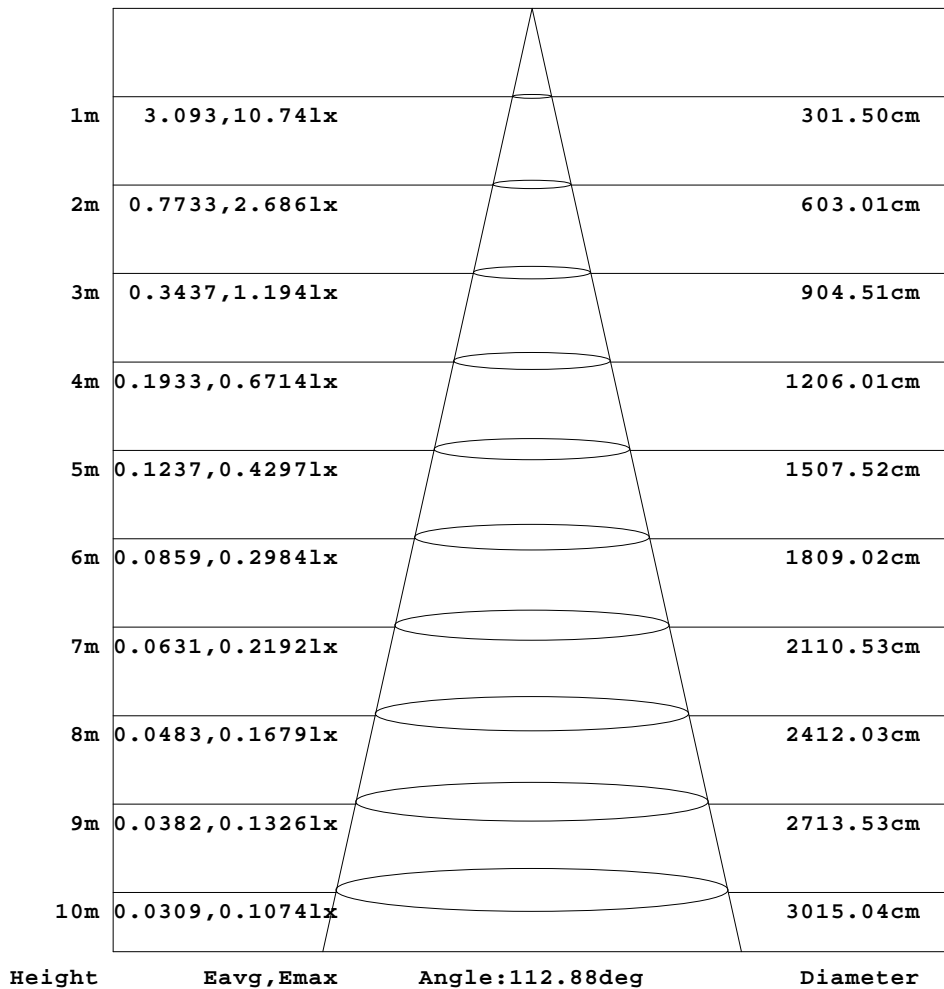
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:

Flux out:23.04 lm



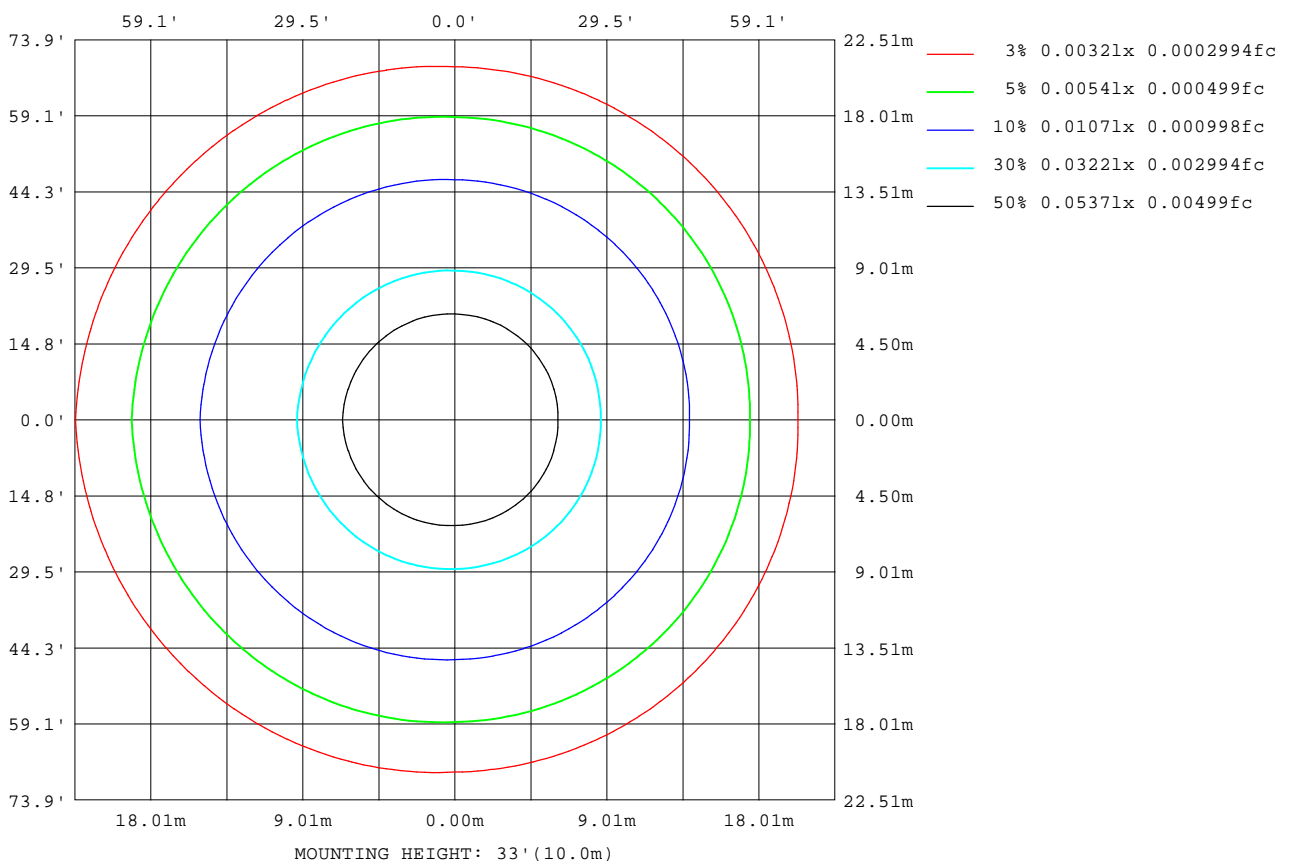
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: COLORS
 Test Date: 2019-04-26

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.500m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-PLus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:

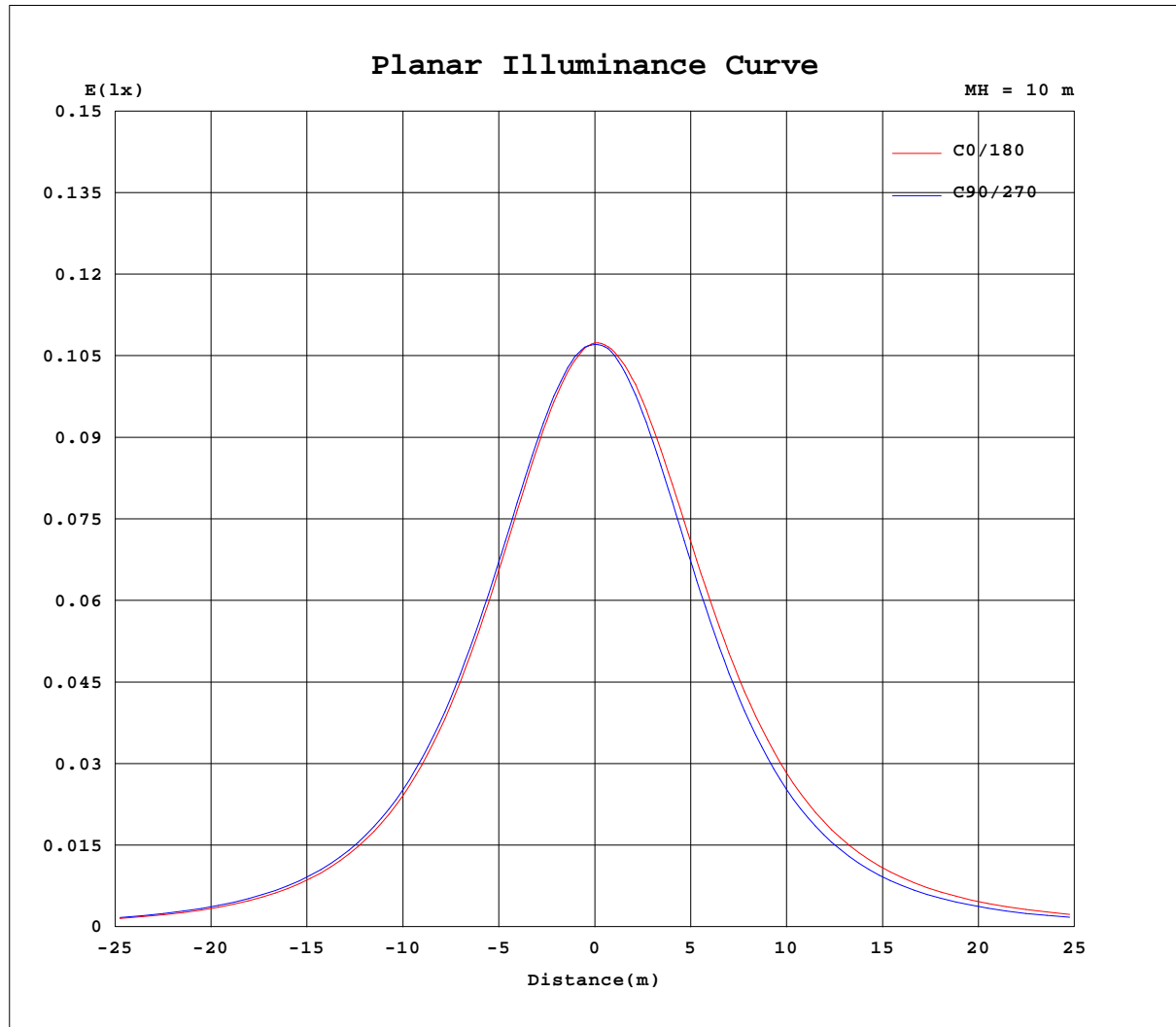
AvgL	cd/m2
L_0~180(65)av	773
L_0~180(75)av	736
L_0~180(85)av	865
L_90~270(65)av	709
L_90~270(75)av	625
L_90~270(85)av	373
L_45(65)av	741
L_45(75)av	680
L_45(85)av	585

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-04-26

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.500m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2019-04-26

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.500m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1660A P:3.980W PF:1.000 Freq:0Hz Lamp Flux:32.4062x1 lm		
NAME: NMT1312	TYPE:	WEIGHT:
SPEC.:NMT1312-0RGB24NSNO50CC0100-Plus-B	DIM.: 1000*13*12	SERIAL No.:
MFR.: Colors	SUR.:100*13	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270															
0	10.7	10.7	10.7	10.7															
5	10.6	10.7	10.7	10.7															
10	10.4	10.5	10.7	10.5															
15	10.1	10.3	10.6	10.3															
20	9.77	9.95	10.3	9.96															
25	9.32	9.53	10.0	9.55															
30	8.80	9.04	9.63	9.05															
35	8.21	8.47	9.16	8.48															
40	7.56	7.84	8.62	7.86															
45	6.84	7.13	8.01	7.15															
50	6.08	6.39	7.32	6.41															
55	5.27	5.60	6.59	5.62															
60	4.43	4.76	5.81	4.79															
65	3.53	3.88	4.97	3.91															
70	2.64	2.98	4.08	3.02															
75	1.77	2.08	3.18	2.12															
80	1.00	1.15	2.30	1.26															
85	0.48	0.35	1.48	0.49															
90	0.28	0.00	0.83	0.06															
95	0.23	0.00	0.46	0.00															
100	0.22	0.00	0.39	0.00															
105	0.21	0.00	0.35	0.00															
110	0.19	0.00	0.34	0.00															
115	0.18	0.00	0.29	0.00															
120	0.16	0.00	0.27	0.00															
125	0.14	0.00	0.25	0.00															
130	0.12	0.00	0.20	0.00															
135	0.10	0.00	0.18	0.00															
140	0.08	0.00	0.14	0.00															
145	0.03	0.00	0.12	0.00															
150	0.00	0.00	0.08	0.00															
155	0.00	0.00	0.03	0.00															
160	0.00	0.00	0.00	0.00															
165	0.00	0.00	0.00	0.00															
170	0.00	0.00	0.00	0.00															
175	0.00	0.00	0.00	0.00															
180	0.00	0.00	0.00	0.00															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-04-26

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: