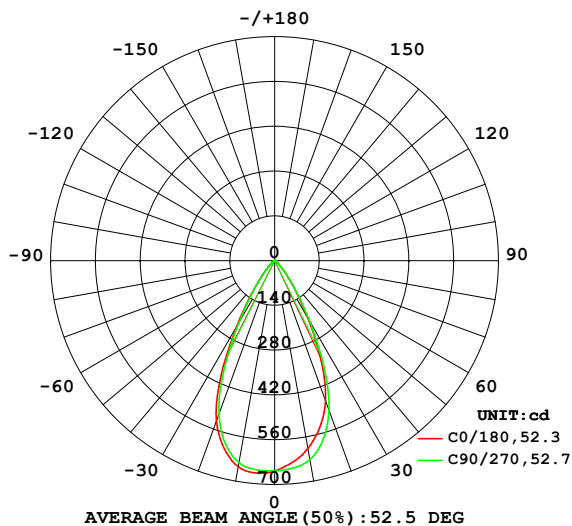


LUMINAIRE PHOTOMETRIC TEST REPORT

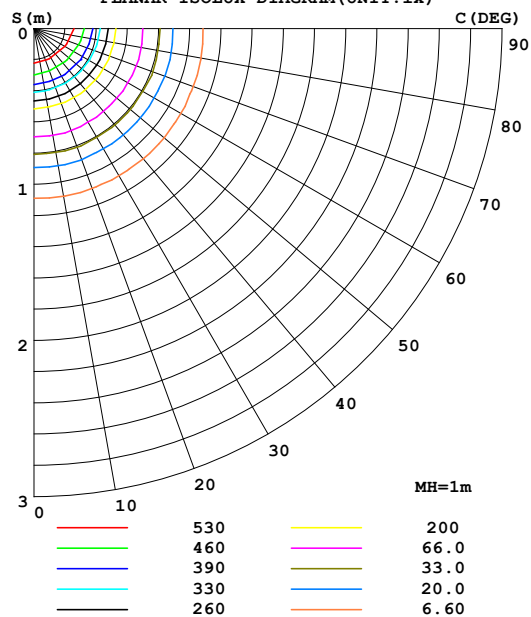
Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 90.27 lm/W
MODEL		I _{max} (cd)	666.0	S/MH(C0/180)	0.80	
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)	0.79	
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	502.13	η UP,DN(C0-180)	0.0,49.1	
NOMINAL FLUX(lm)	502.134	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	240.27	η down (%)	100.0	CIBSE SHR MAX	0.80	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	597.0	596.9	632.0	654.4	654.8	643.8	641.5	613.6	0- 10	61.54	61.54	12.3,12.3
20	465.9	460.7	497.1	522.1	532.6	513.0	509.8	476.6	10- 20	160.6	222.1	44.2,44.2
30	208.8	210.2	220.5	233.0	237.8	229.5	225.9	213.4	20- 30	164.9	387.1	77.1,77.1
40	59.65	59.57	60.10	63.02	63.39	62.69	61.40	60.12	30- 40	77.86	464.9	92.6,92.6
50	14.49	14.51	13.86	14.36	14.81	15.12	14.76	14.24	40- 50	24.75	489.7	97.5,97.5
60	5.110	5.086	5.177	5.252	5.299	5.315	5.237	5.080	50- 60	7.856	497.5	99.1,99.1
70	1.918	1.932	2.005	2.040	2.027	1.990	1.991	1.918	60- 70	3.307	500.8	99.7,99.7
80	0.4252	0.4236	0.3991	0.4565	0.4600	0.4112	0.3718	0.4087	70- 80	1.187	502.0	100,100
90	0.0122	0.0093	0.0145	0.0113	0.0096	0.0074	0.0113	0.0100	80- 90	0.1076	502.1	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 481.08 lm

%lum = 95.8%

%lamp = 95.8%

Conical surface Flux(120deg): 497.53 lm

%lum = 99.1%

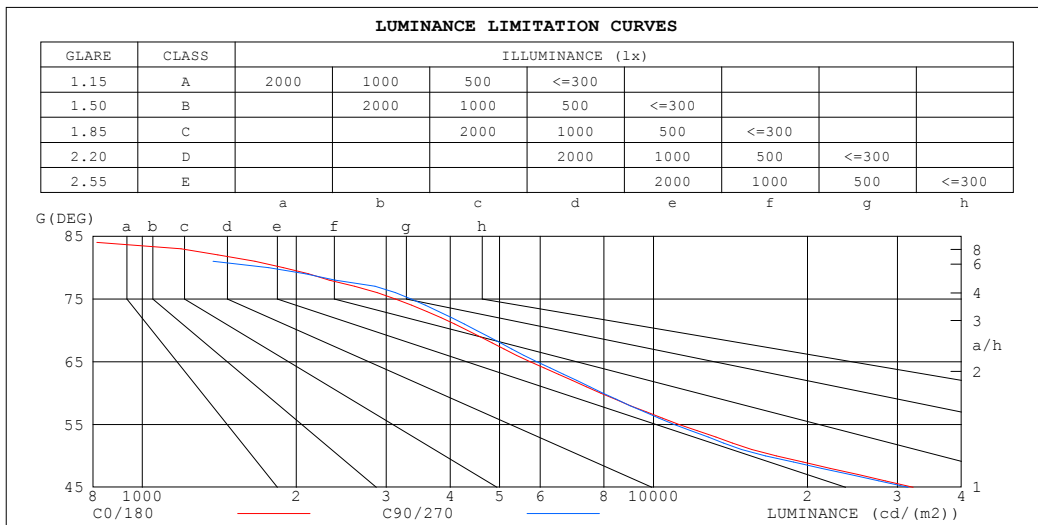
%lamp = 99.1%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2023-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	440	113
80	1888	1766
75	3129	3358
70	4325	4506
65	5735	5913
60	7880	7957
55	11225	10978
50	17385	16569
45	32192	31458

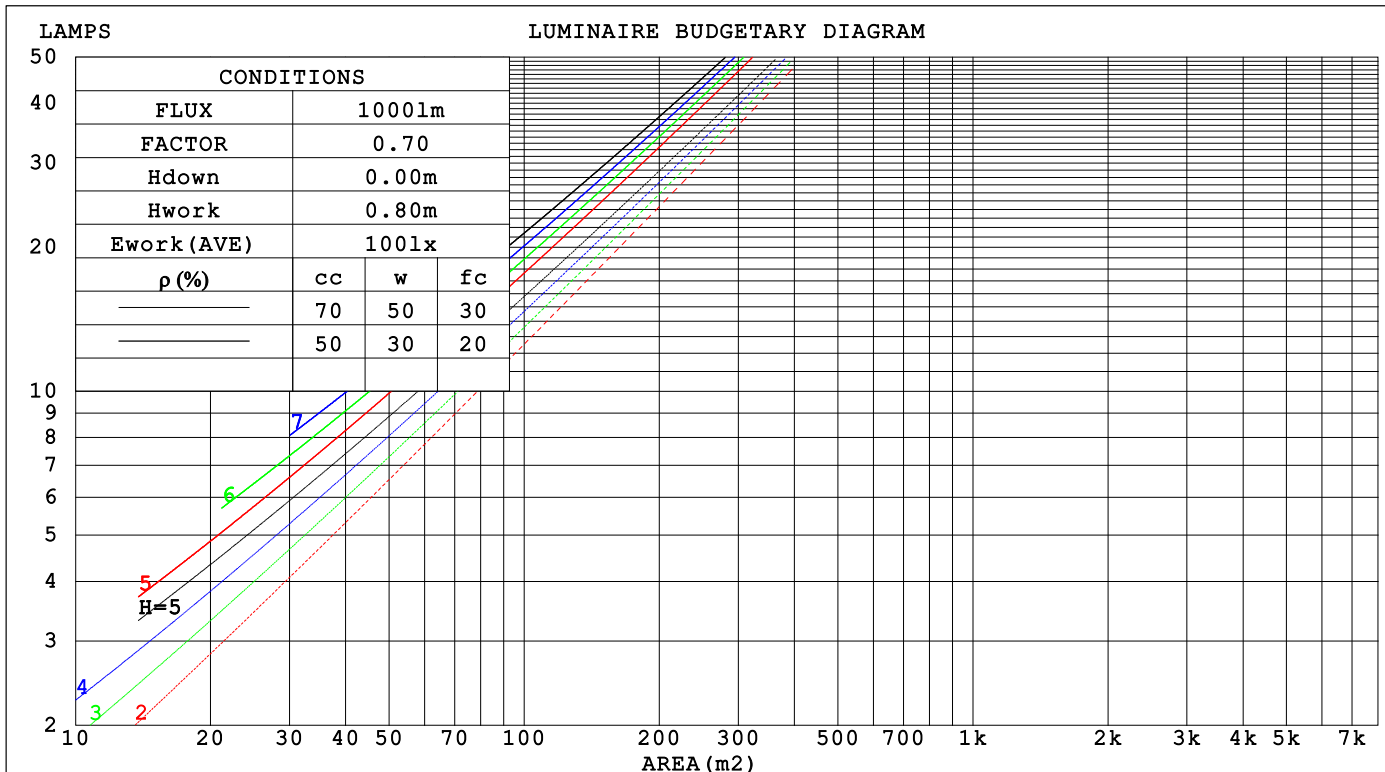
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945		Lamp Flux:502.134x1 lm
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{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:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz			UTHDi:0.18% ITHDi:24.66% KDisp:0.8945			Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D			TYPE:			WEIGHT:		
SPEC.:			DIM.:			SERIAL No.:		
MFR.: Norming Lighting			SUR.: 41mm			Shielding Angle:		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.174	.099	.031	.167	.095	.030	.155	.089	.028	.143	.083	.026	.133	.077	.025		
2.0	.166	.091	.028	.161	.088	.027	.150	.083	.026	.140	.079	.025	.131	.074	.023		
3.0	.158	.084	.025	.153	.082	.025	.144	.078	.024	.136	.074	.023	.128	.071	.022		
4.0	.150	.078	.023	.146	.076	.023	.138	.073	.022	.131	.070	.021	.124	.068	.021		
5.0	.143	.073	.021	.139	.072	.021	.133	.069	.020	.126	.067	.020	.121	.064	.019		
6.0	.136	.068	.020	.133	.067	.019	.127	.065	.019	.122	.063	.019	.117	.061	.018		
7.0	.130	.064	.018	.127	.064	.018	.122	.062	.018	.117	.060	.018	.113	.059	.017		
8.0	.125	.061	.017	.122	.060	.017	.117	.059	.017	.113	.057	.017	.109	.056	.016		
9.0	.119	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.105	.054	.015		
10.0	.115	.055	.015	.113	.054	.015	.109	.053	.015	.105	.052	.015	.102	.051	.015		

pcc	80%			70%			50%			30%			10%			0	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013		
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011		
4.0	.132	.099	.073	.114	.085	.063	.078	.059	.045	.045	.035	.026	.015	.011	.009		
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007		
6.0	.116	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006		
7.0	.110	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005		
8.0	.104	.064	.036	.089	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004		
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004		
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm										
NAME: MD10-06-XX-04 3000K RA90 50D					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: Norming Lighting					SUR.: 41mm			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					19.3	20.2	19.6	20.4	20.6	19.4
3H					19.2	20.1	19.5	20.3	20.5	19.3
4H					19.2	20.0	19.5	20.2	20.4	19.3
6H					19.1	19.9	19.4	20.1	20.3	19.2
8H					19.1	19.8	19.4	20.0	20.3	19.2
12H					19.0	19.7	19.3	20.0	20.3	19.1
4H 2H					19.1	19.9	19.4	20.2	20.4	19.2
3H					19.1	19.8	19.4	20.0	20.3	19.2
4H					19.0	19.7	19.4	19.9	20.3	19.1
6H					18.9	19.5	19.3	19.8	20.2	19.0
8H					18.9	19.4	19.3	19.8	20.1	19.0
12H					18.9	19.3	19.3	19.7	20.1	18.9
8H 4H					18.9	19.4	19.3	19.8	20.1	19.0
6H					18.8	19.2	19.3	19.6	20.1	18.9
8H					18.8	19.1	19.2	19.6	20.0	18.9
12H					18.7	19.0	19.2	19.5	19.9	18.8
12H 4H					18.9	19.3	19.3	19.7	20.1	18.9
6H					18.8	19.1	19.2	19.6	20.0	18.9
8H					18.7	19.0	19.2	19.5	20.0	18.8
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H					+ 2.8 / - 5.9			+ 2.9 / - 6.0		
1.5H					+ 4.6 / - 4.8			+ 4.7 / - 4.9		
2.0H					+ 4.6 / - 3.6			+ 4.6 / - 3.4		

CIE Pub.117, 502.1 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -2.4)
Area: 0.0013 m2

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:

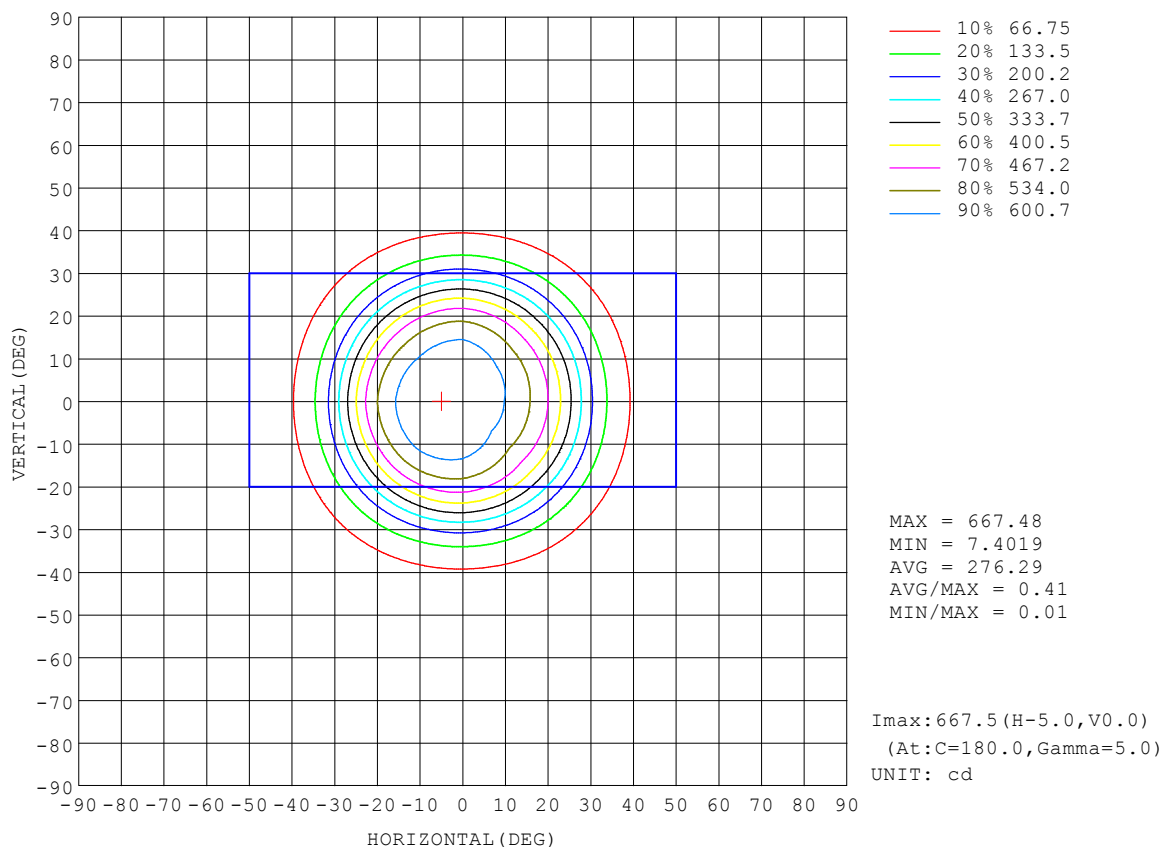
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	80	77	86	80	77	86	80	76	73
0.80	94	88	85	94	88	85	93	88	84	80
1.00	99	93	90	98	93	89	97	93	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	107	106	99
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:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:

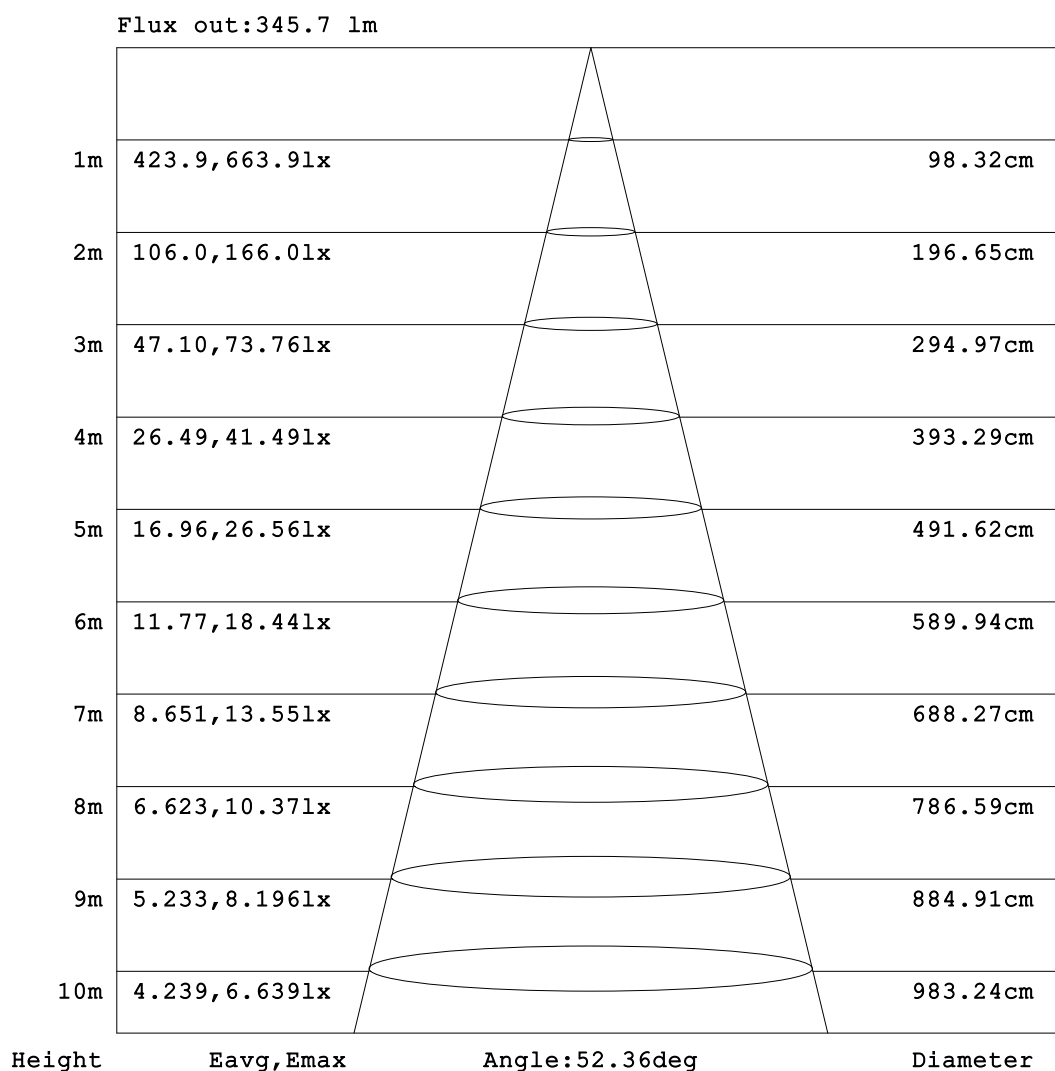


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:



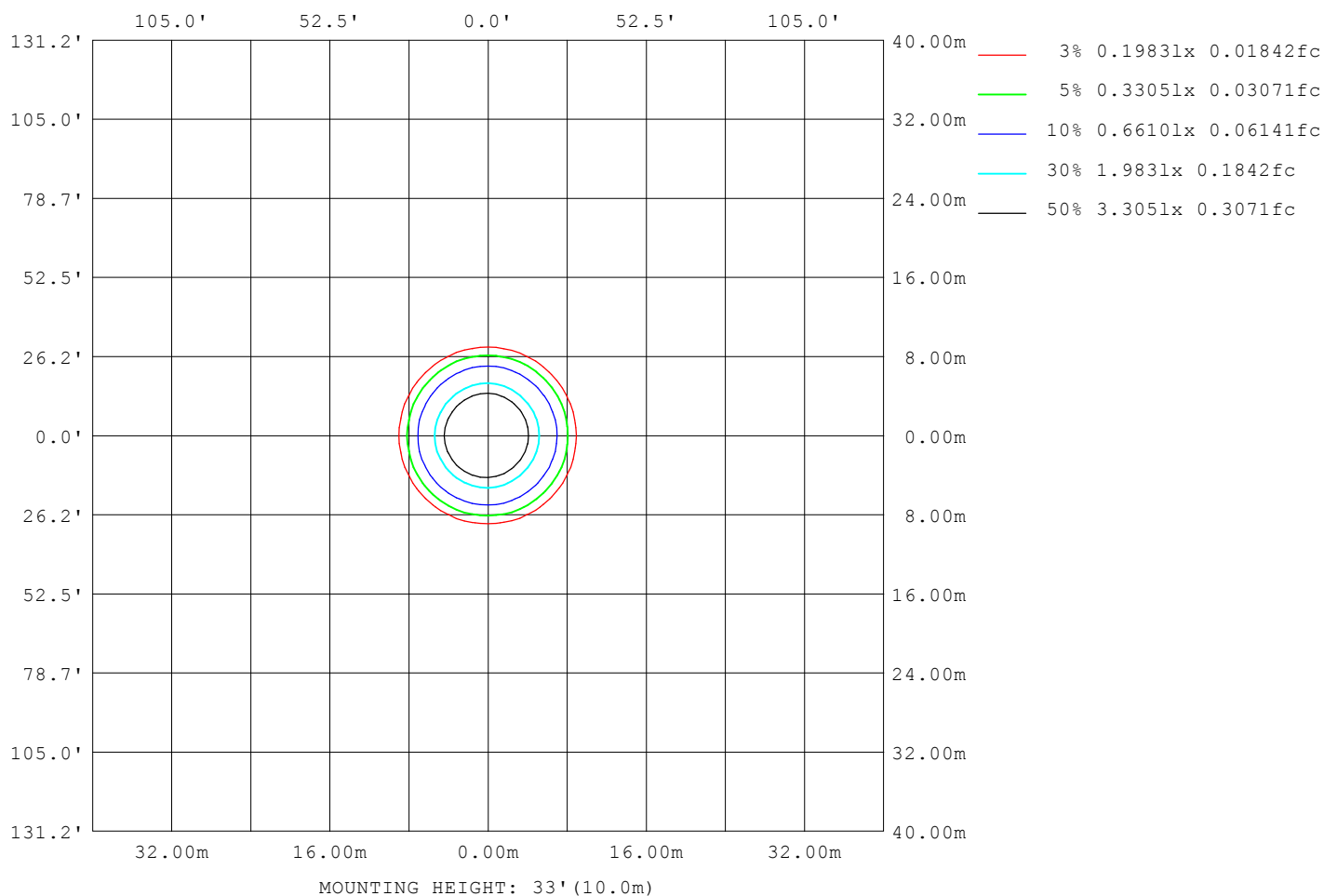
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:240.3V I:0.0267A P:5.6W PF:0.8681 Freq:49.99Hz		
UTHDi:0.18% ITHDi:24.66% KDisp:0.8945 Lamp Flux:502.134x1 lm		
NAME: MD10-06-XX-04 3000K RA90 50D	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Norming Lighting	SUR.: 41mm	Shielding Angle:

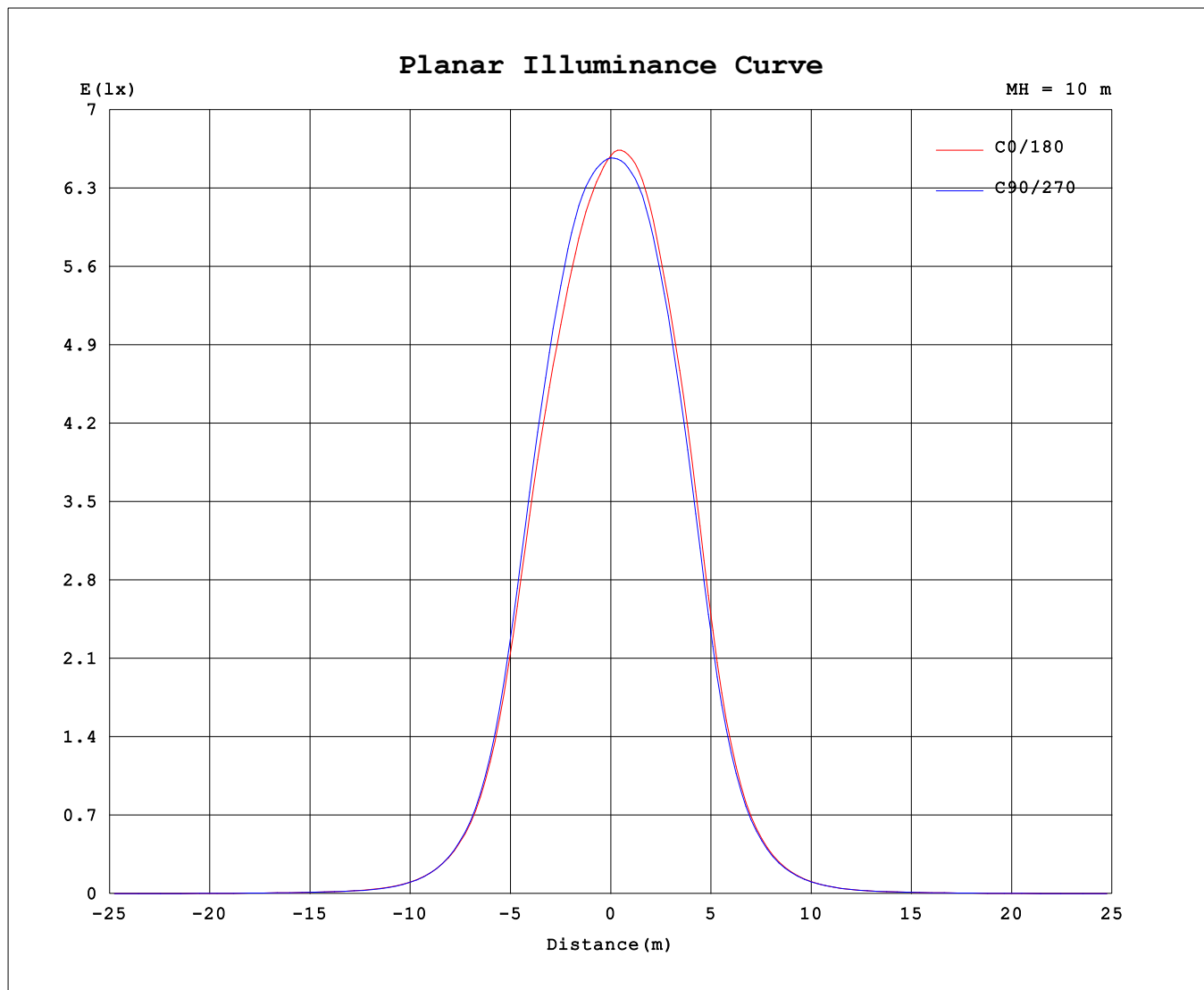
AvgL	cd/m2
L_0~180 (65) av	5881
L_0~180 (75) av	3247
L_0~180 (85) av	537
L_90~270 (65) av	5922
L_90~270 (75) av	3325
L_90~270 (85) av	109
L_45 (65) av	5853
L_45 (75) av	3250
L_45 (85) av	88

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2023-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
 Humidity:65.0%
 Test Distance:3.090m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2023-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity: 65.0%
Test Distance: 3.090m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks:

```

Photometric Data Table [cd]

G/C	0.0	45.0	90.0	135.0	180.0	225.0	270.0	315.0
0.0	657.6	657.6	657.6	657.6	657.6	657.6	657.6	657.6
3.0	643.7	645.9	654.5	663.2	665.1	663.5	657.8	649.3
6.0	627.7	630.1	649.0	664.9	665.8	661.5	654.8	638.9
9.0	605.9	606.5	638.1	658.7	659.5	650.3	647.1	621.3
12.0	577.1	576.1	615.8	640.4	640.5	627.3	626.6	595.2
15.0	542.5	539.5	582.4	607.7	608.8	594.3	594.9	559.4
18.0	500.8	495.7	536.0	561.7	567.7	550.0	548.8	513.4
21.0	445.7	440.7	474.7	498.9	511.0	491.3	487.3	455.3
24.0	371.6	369.5	395.6	416.7	429.5	412.7	405.6	378.7
27.0	287.6	287.6	306.0	322.8	331.9	319.3	312.2	293.0
30.0	208.8	210.2	220.5	233.0	237.8	229.5	225.9	213.4
33.0	146.3	146.6	152.5	161.4	163.6	158.3	156.2	149.6
36.0	100.5	100.7	103.5	109.2	110.0	106.7	106.0	102.5
39.0	68.29	68.11	69.27	72.52	72.99	71.87	70.74	69.10
42.0	45.13	45.39	45.04	46.90	47.60	47.70	46.34	45.10
45.0	29.53	29.88	28.95	29.80	30.75	31.27	30.20	29.03
48.0	19.22	19.64	18.55	19.41	20.06	20.25	19.86	18.89
51.0	12.70	12.69	12.18	12.59	12.94	13.18	12.86	12.49
54.0	9.274	9.185	9.046	9.301	9.465	9.595	9.366	9.199
57.0	6.832	6.770	6.795	6.948	7.035	7.090	6.962	6.791
60.0	5.110	5.086	5.177	5.252	5.299	5.315	5.237	5.080
63.0	3.834	3.822	3.938	3.984	4.012	3.994	3.948	3.815
66.0	2.847	2.850	2.953	2.994	3.007	2.977	2.950	2.841
69.0	2.125	2.137	2.217	2.256	2.247	2.213	2.205	2.126
72.0	1.539	1.552	1.619	1.649	1.634	1.597	1.596	1.539
75.0	1.050	1.062	1.131	1.155	1.134	1.095	1.107	1.061
78.0	0.6256	0.6343	0.6454	0.7275	0.7016	0.6489	0.6133	0.6390
81.0	0.3370	0.3212	0.2798	0.3486	0.3691	0.3143	0.2565	0.3028
84.0	0.1104	0.0324	0.0176	0.0518	0.1527	0.0378	0.0129	0.0389
87.0	0.0138	0.0083	0.0113	0.0084	0.0138	0.0061	0.0125	0.0068
90.0	0.0122	0.0093	0.0145	0.0113	0.0096	0.0074	0.0113	0.0100

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2023-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.453
Humidity:65.0%
Test Distance:3.090m [K=1.0000]
Remarks: