

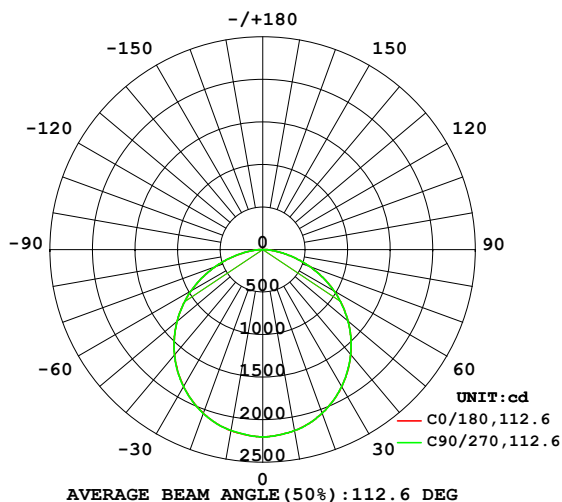
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

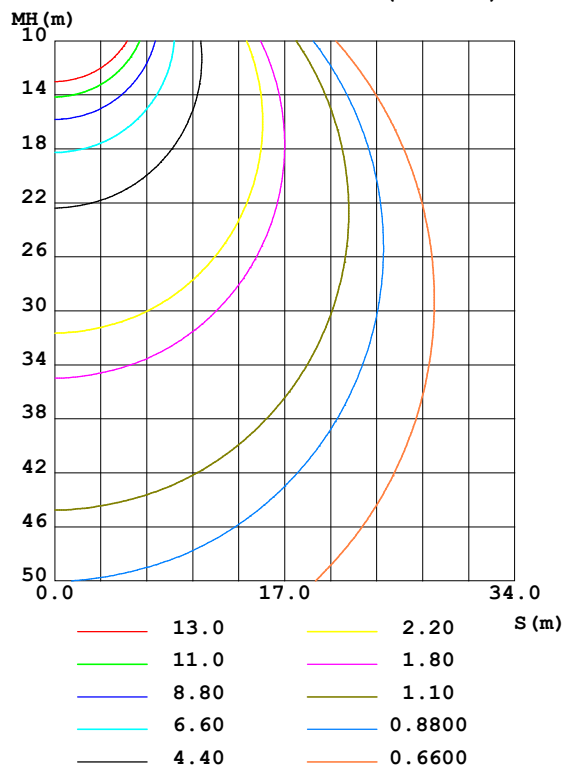
CLE SHALIMONDE

DATA OF LAMP		PHOTOMETRIC DATA Eff: 84.71 lm/W			
MODEL: 522mm 1750lm 930 EXC		Imax(cd)	2203	S/MH(C0/180)	1.26
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	6273.4	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	6273.43	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [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
5	2187	2189	2188	2186	2186	2188	2186	2187	0- 5	52.46	52.46	0.84,0.84
10	2160	2159	2160	2159	2160	2164	2159	2162	5- 10	155.5	208.0	3.31,3.31
15	2113	2112	2114	2114	2113	2116	2114	2116	10- 15	253.7	461.6	7.36,7.36
20	2045	2044	2046	2045	2047	2048	2049	2049	15- 20	343.0	804.6	12.8,12.8
25	1960	1957	1959	1960	1961	1963	1963	1963	20- 25	420.4	1225	19.5,19.5
30	1859	1857	1858	1858	1861	1862	1862	1861	25- 30	483.6	1709	27.2,27.2
35	1742	1739	1739	1741	1745	1745	1746	1745	30- 35	530.5	2239	35.7,35.7
40	1609	1608	1608	1610	1614	1615	1615	1613	35- 40	559.7	2799	44.6,44.6
45	1466	1465	1464	1466	1470	1472	1471	1471	40- 45	570.3	3369	53.7,53.7
50	1309	1308	1308	1310	1315	1317	1317	1314	45- 50	561.9	3931	62.7,62.7
55	1143	1141	1142	1144	1149	1150	1150	1147	50- 55	534.6	4466	71.2,71.2
60	966.7	965.4	965.1	969.1	973.6	975.6	974.6	971.3	55- 60	489.1	4955	79,79
65	782.1	780.7	781.4	783.7	788.9	791.4	789.9	786.6	60- 65	426.8	5381	85.8,85.8
70	593.3	591.0	592.0	595.4	599.4	602.1	601.0	597.0	65- 70	349.8	5731	91.4,91.4
75	404.0	403.0	404.5	406.7	410.6	413.6	412.7	408.6	70- 75	262.1	5993	95.5,95.5
80	229.5	229.4	231.2	231.6	234.4	238.2	238.3	234.2	75- 80	170.5	6164	98.3,98.3
85	90.21	90.33	91.04	90.26	91.21	95.37	96.09	93.48	80- 85	86.30	6250	99.6,99.6
90	1.845	1.835	1.835	1.825	1.655	1.699	1.824	1.704	85- 90	23.34	6273	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3369 lm

%lum = 53.7%
%lamp = 53.7%

Conical surface Flux(120deg): 4954.7 lm

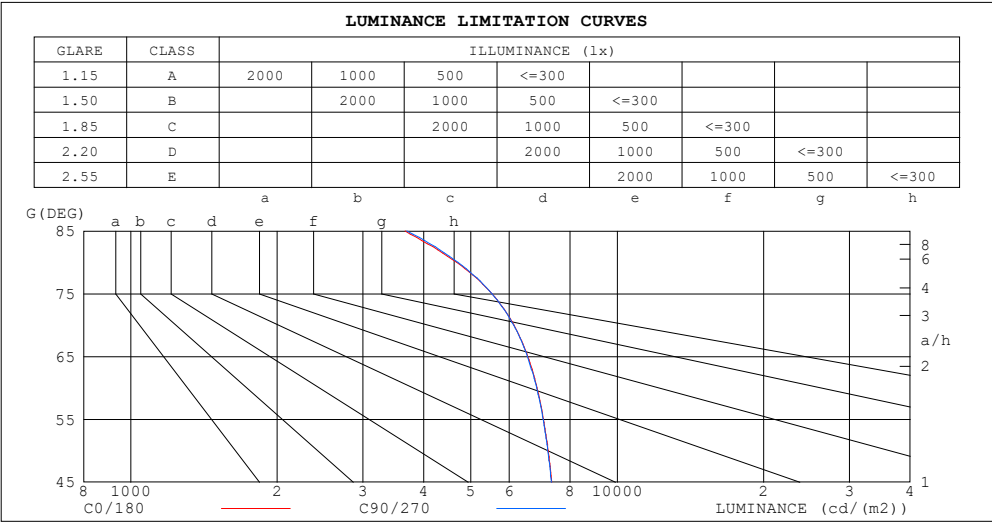
%lum = 79.0%
%lamp = 79.0%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3663	3694
80	4678	4709
75	5525	5528
70	6139	6121
65	6550	6539
60	6842	6826
55	7054	7040
50	7209	7197
45	7337	7323

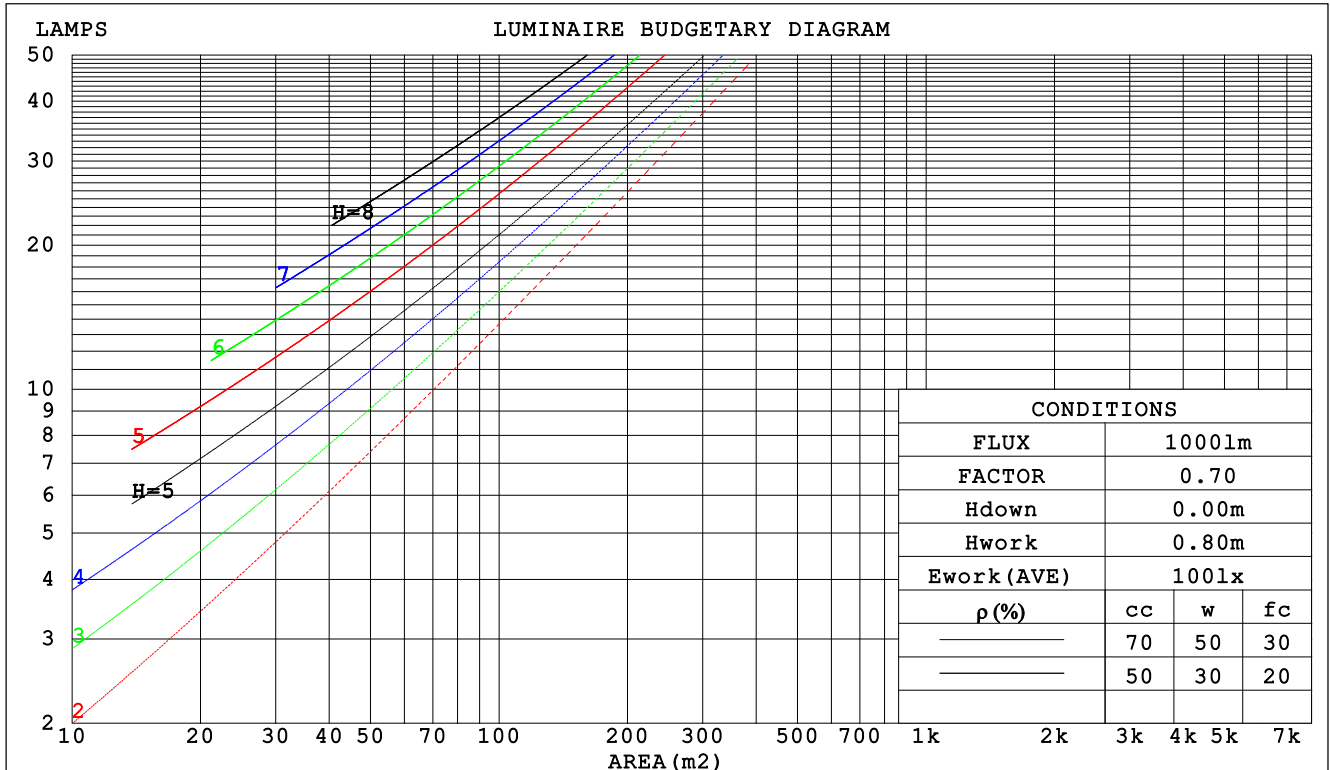
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Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.94	.91	.88	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.56	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
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Test Speed: MEDIUM
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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

WEC AND CCEC

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NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	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	.308	.175	.056	.301	.172	.055	.288	.165	.053	.276	.159	.051	.264	.153	.049		
2.0	.291	.159	.049	.285	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045		
3.0	.270	.143	.043	.264	.141	.043	.254	.137	.042	.244	.134	.041	.235	.130	.040		
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.226	.122	.037	.218	.119	.036		
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.109	.033		
6.0	.214	.107	.031	.210	.106	.030	.202	.104	.030	.196	.102	.030	.189	.100	.030		
7.0	.199	.098	.028	.195	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027		
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025		
9.0	.174	.084	.024	.171	.083	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023		
10.0	.164	.078	.022	.161	.078	.022	.156	.077	.022	.152	.076	.021	.148	.074	.021		

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	.180	.156	.134	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015		
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011		
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009		
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007		
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006		
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005		
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004		
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004		
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003		
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm										
NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: DARKON					SUR.:			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	19.7	21.2	19.9	21.4	21.6	19.7	21.2	19.9	21.4	21.6
3H	21.2	22.6	21.5	22.8	23.0	21.1	22.6	21.4	22.8	23.0
4H	21.7	23.1	22.0	23.3	23.6	21.7	23.1	22.0	23.3	23.6
6H	22.1	23.3	22.4	23.6	23.9	22.1	23.3	22.4	23.6	23.9
8H	22.2	23.4	22.5	23.7	24.0	22.2	23.4	22.5	23.7	24.0
12H	22.2	23.4	22.6	23.7	24.0	22.2	23.4	22.6	23.7	24.0
4H 2H	20.3	21.6	20.6	21.9	22.1	20.3	21.6	20.6	21.9	22.1
3H	21.9	23.1	22.3	23.4	23.7	21.9	23.1	22.3	23.4	23.7
4H	22.6	23.7	23.0	24.0	24.3	22.6	23.7	23.0	24.0	24.3
6H	23.1	24.0	23.5	24.4	24.8	23.1	24.0	23.5	24.4	24.8
8H	23.2	24.1	23.7	24.5	24.9	23.2	24.1	23.7	24.5	24.9
12H	23.3	24.1	23.8	24.5	24.9	23.3	24.1	23.8	24.5	24.9
8H 4H	22.9	23.7	23.3	24.1	24.5	22.9	23.7	23.3	24.1	24.5
6H	23.5	24.2	23.9	24.6	25.0	23.5	24.2	23.9	24.6	25.0
8H	23.7	24.3	24.1	24.8	25.2	23.7	24.3	24.2	24.8	25.2
12H	23.8	24.4	24.3	24.8	25.3	23.8	24.4	24.3	24.9	25.3
12H 4H	22.9	23.7	23.3	24.1	24.5	22.9	23.7	23.3	24.1	24.5
6H	23.5	24.2	24.0	24.6	25.0	23.5	24.2	24.0	24.6	25.0
8H	23.8	24.3	24.2	24.8	25.2	23.8	24.3	24.2	24.8	25.3
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 Corrected 6273 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.4)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm		
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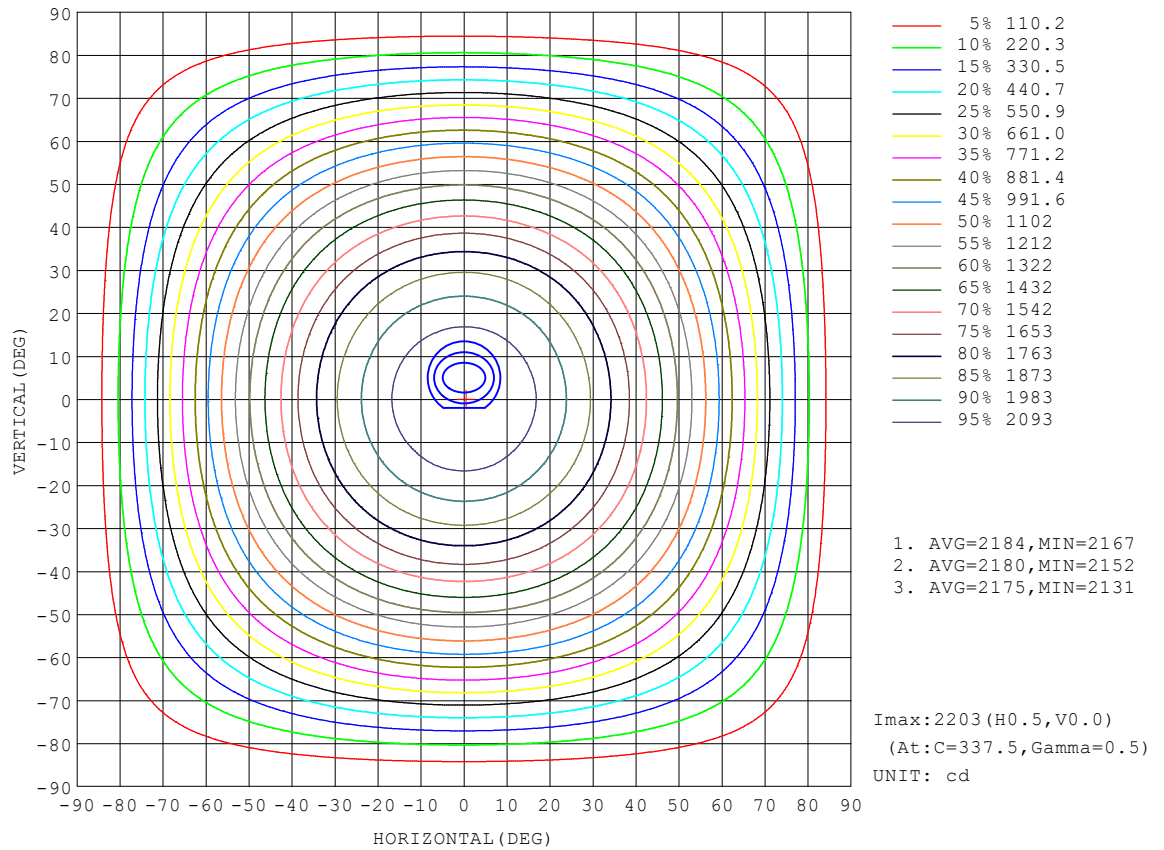
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	55	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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ISOCANDELA DIAGRAM

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MFR.: DARKON	SUR.:	Shielding Angle:

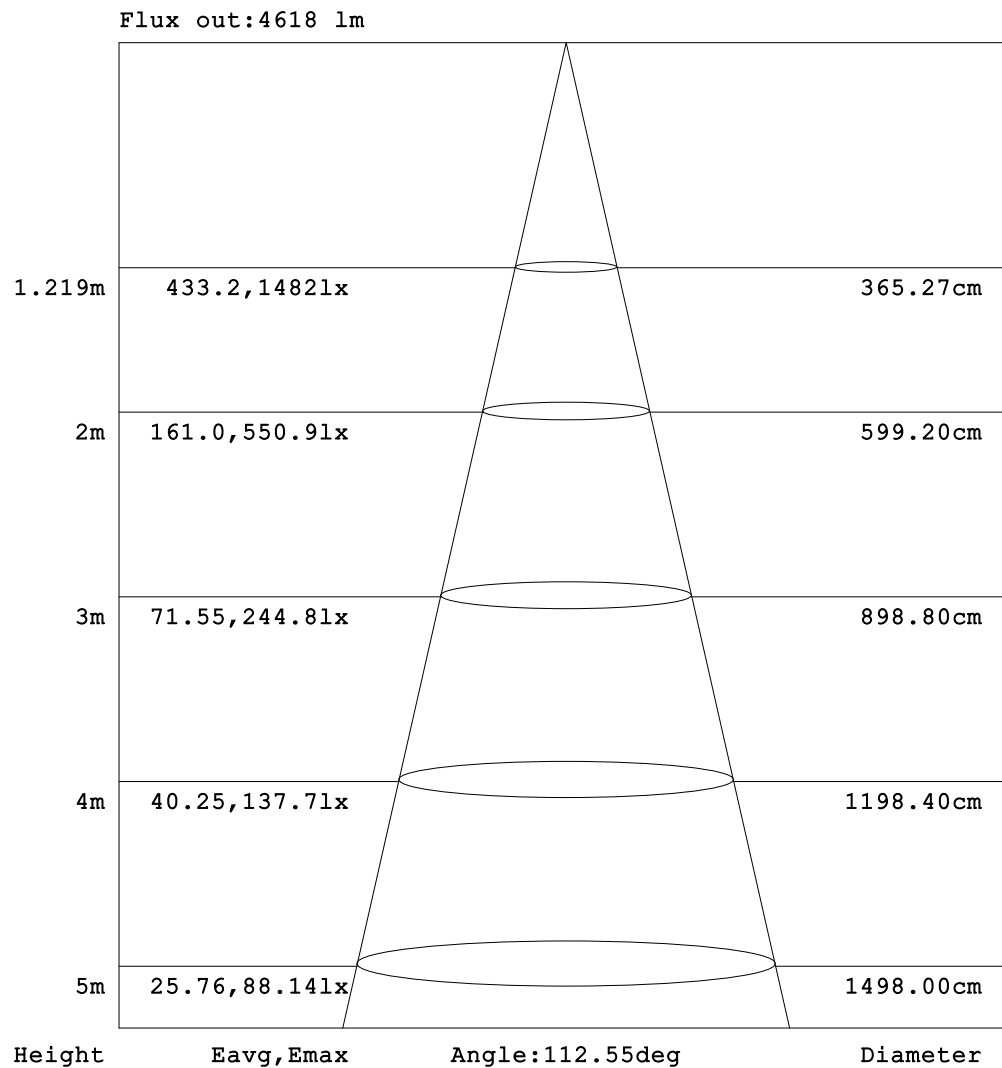


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Remarks:

AAI Figure

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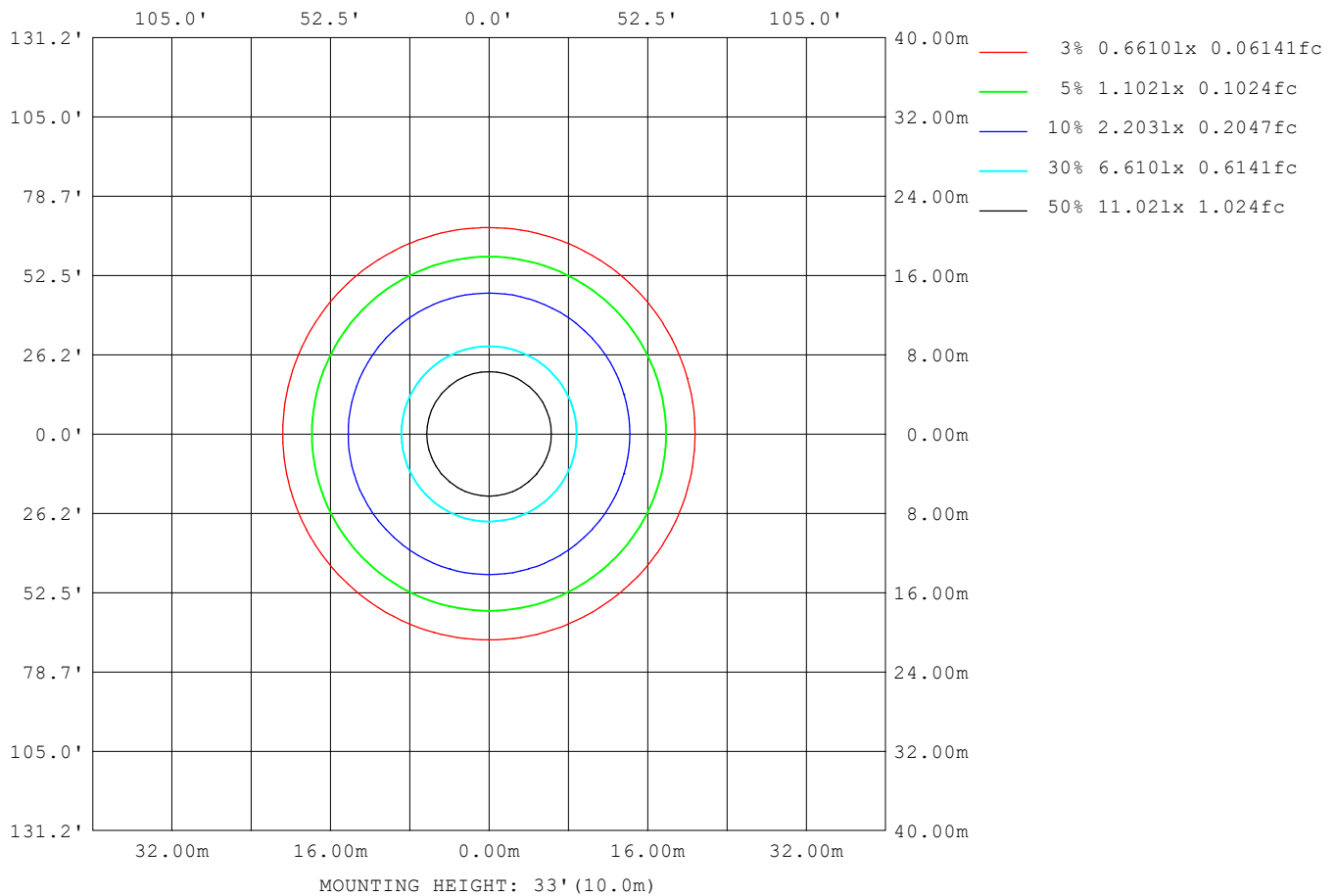
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Remarks:

ISOLUX DIAGRAM

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NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
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Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:239.8V I:0.3161A P:74.06W PF:0.9770 Lamp Flux:6273.43x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

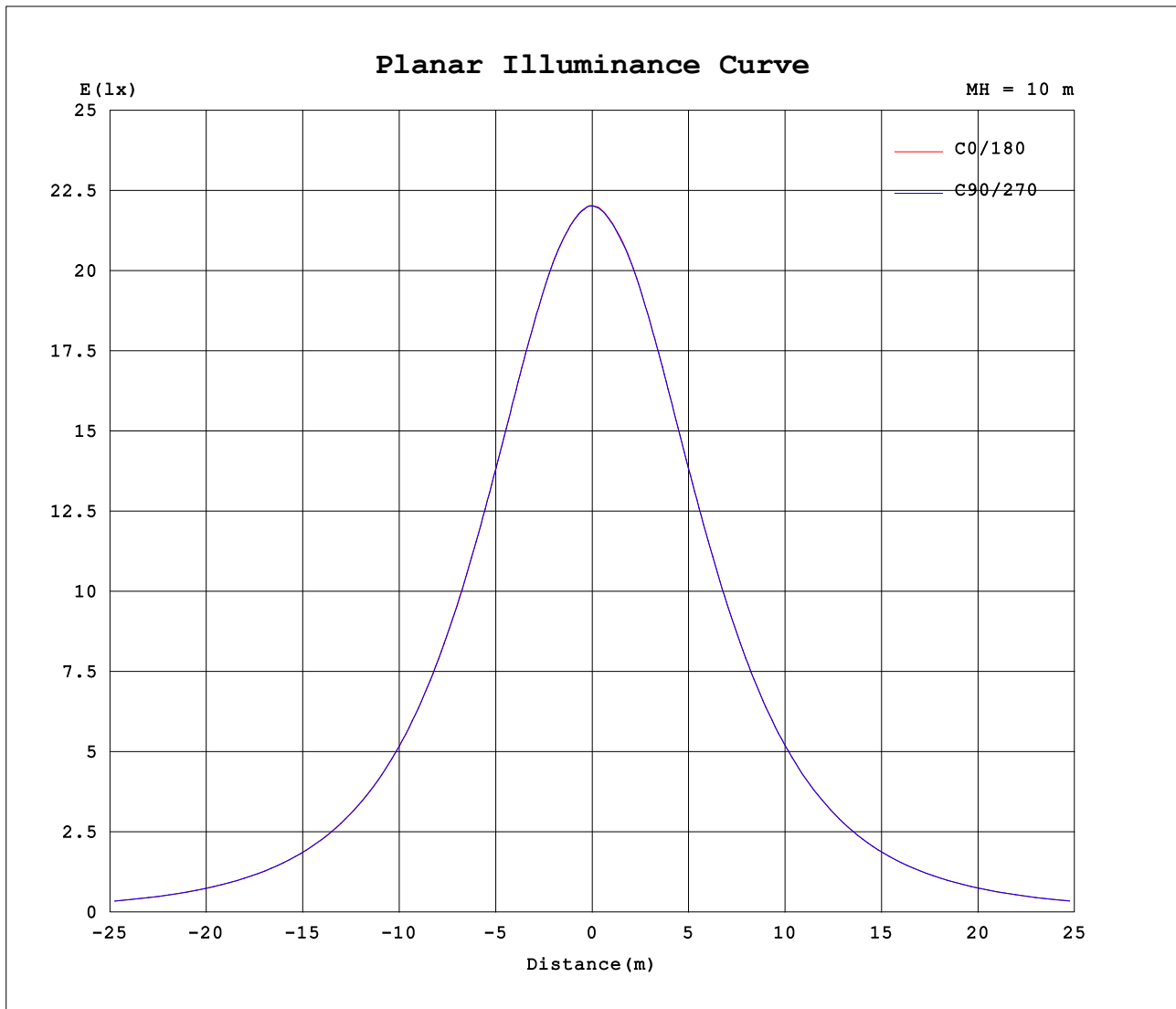
AvgL	cd/m2
L_0~180 (65) av	6573
L_0~180 (75) av	5565
L_0~180 (85) av	3680
L_90~270 (65) av	6574
L_90~270 (75) av	5583
L_90~270 (85) av	3796
L_45 (65) av	6573
L_45 (75) av	5574
L_45 (85) av	3747

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:11 June 2025

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: JEFF
Test Date: 11 June 2025

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.888m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.888m [K=1.0000]
Remarks:

```