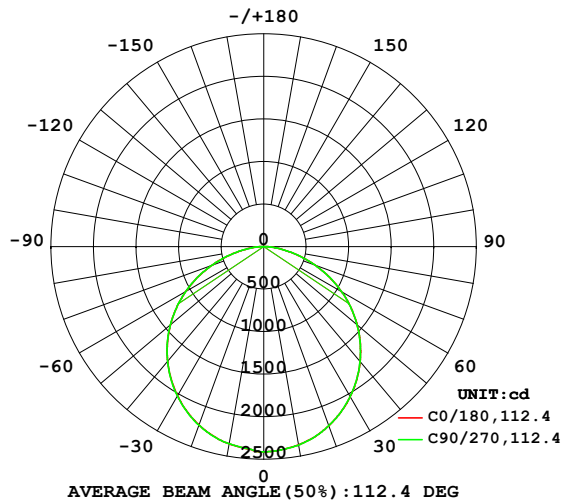


LUMINAIRE PHOTOMETRIC TEST REPORT

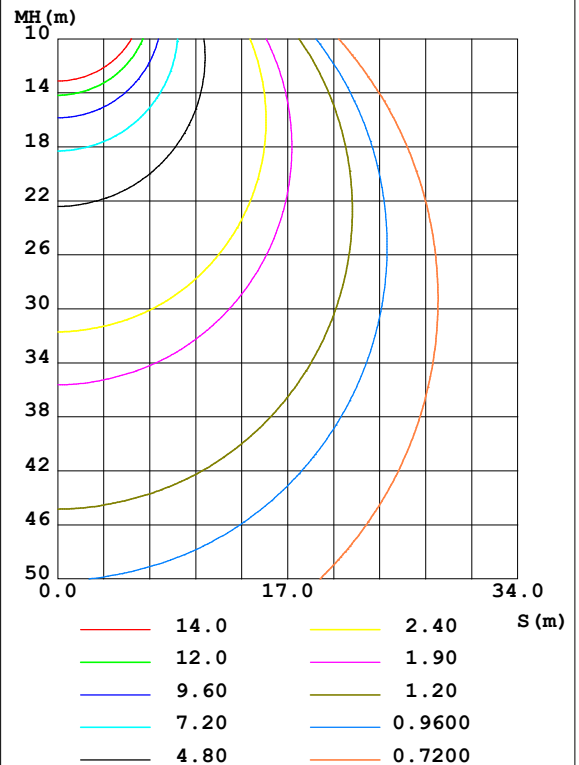
Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.91 lm/W			
CLE SHALIMONDE32 522mm 1750lm 940 EXC		Imax(cd)	2412	S/MH(C0/180)	1.25
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	6848.3	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	6848.3	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:03 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	2397	2397	2397	2394	2383	2382	2381	2383	0- 5	57.35	57.35	0.84,0.84
10	2366	2365	2367	2366	2354	2355	2352	2356	5- 10	169.8	227.2	3.32,3.32
15	2316	2314	2315	2317	2303	2305	2305	2305	10- 15	277.1	504.3	7.36,7.36
20	2241	2239	2240	2241	2229	2232	2232	2231	15- 20	374.6	878.8	12.8,12.8
25	2147	2144	2145	2146	2137	2139	2140	2139	20- 25	459.2	1338	19.5,19.5
30	2036	2033	2033	2036	2026	2028	2029	2028	25- 30	528.2	1866	27.3,27.3
35	1907	1904	1906	1908	1900	1902	1903	1900	30- 35	579.4	2446	35.7,35.7
40	1764	1761	1761	1764	1759	1760	1760	1758	35- 40	611.4	3057	44.6,44.6
45	1606	1604	1604	1607	1602	1604	1604	1601	40- 45	623.0	3680	53.7,53.7
50	1436	1433	1433	1436	1433	1435	1436	1432	45- 50	613.8	4294	62.7,62.7
55	1253	1251	1251	1254	1251	1253	1253	1250	50- 55	584.1	4878	71.2,71.2
60	1054	1051	1051	1054	1060	1062	1062	1058	55- 60	534.2	5412	79,79
65	852.4	849.6	850.8	854.0	859.2	861.8	860.8	857.4	60- 65	464.8	5877	85.8,85.8
70	646.6	643.6	644.9	648.0	652.7	655.4	654.4	651.3	65- 70	381.0	6258	91.4,91.4
75	441.2	438.9	440.3	442.4	447.3	450.5	449.6	445.3	70- 75	285.4	6543	95.5,95.5
80	250.6	250.4	251.4	251.3	254.9	259.4	259.3	254.4	75- 80	185.6	6729	98.3,98.3
85	98.72	98.98	98.93	97.84	99.32	104.0	104.2	101.0	80- 85	93.95	6823	99.6,99.6
90	1.996	1.985	1.978	1.972	1.780	1.872	1.945	1.842	85- 90	25.41	6848	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): 3680 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 5412.1 lm

%lum = 79.0%

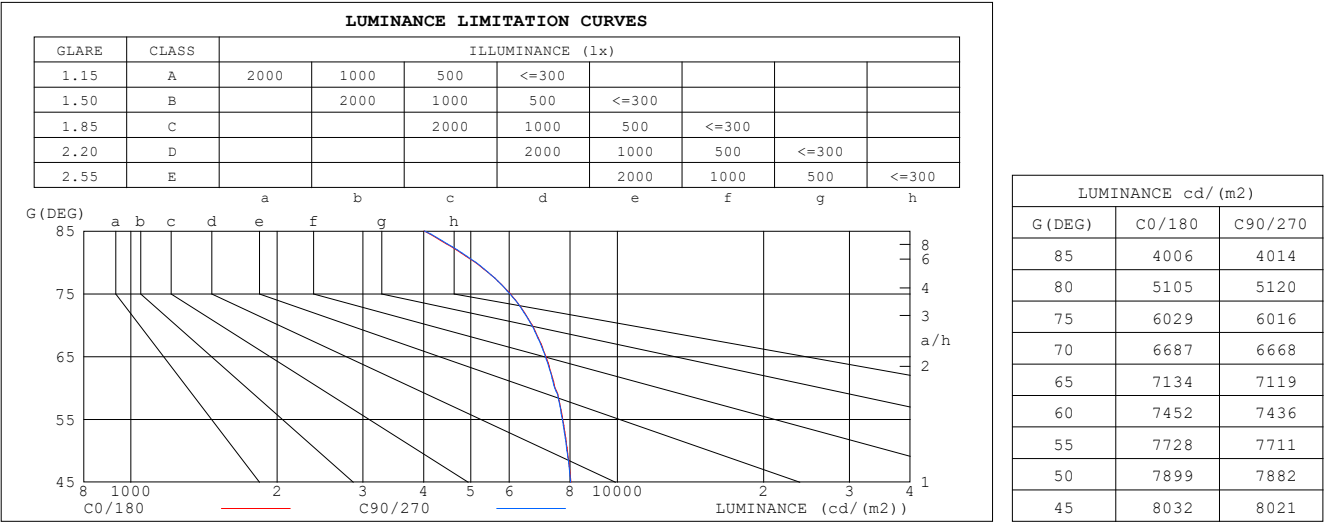
%lamp = 79.0%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



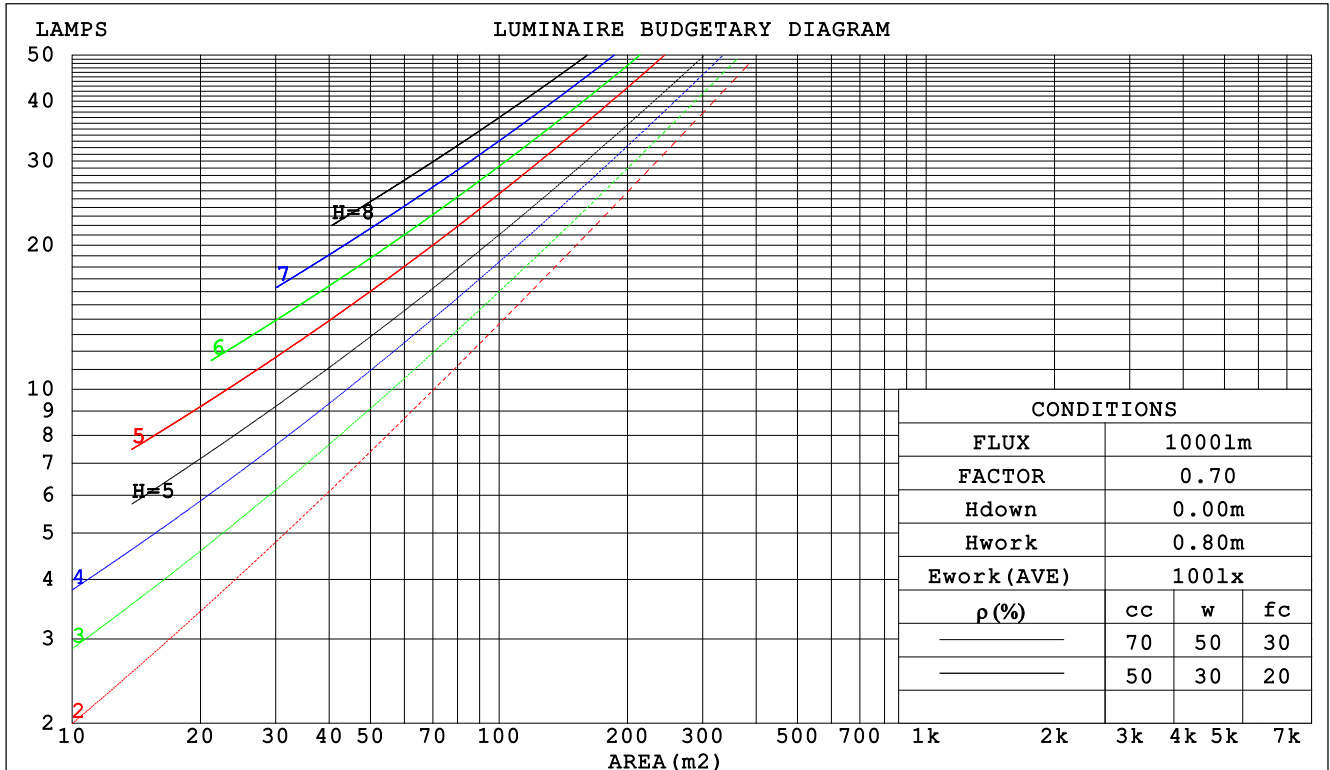
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 June 2025

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K 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	.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	.57	.48	.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
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:

WEC AND CCEC

Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K 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	.055	.301	.172	.055	.288	.165	.053	.275	.159	.051	.264	.153	.049		
2.0	.291	.159	.049	.284	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045		
3.0	.269	.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	.108	.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	.095	.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	.075	.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	.135	.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:03 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:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm										
NAME: MRS SPIN 600_NA_WHT_500mA_4000K 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	20.0	21.5	20.2	21.7	21.9	20.0	21.5	20.2	21.7	21.9
3H	21.5	22.9	21.8	23.1	23.3	21.4	22.9	21.7	23.1	23.3
4H	22.0	23.4	22.3	23.6	23.9	22.0	23.3	22.3	23.6	23.9
6H	22.4	23.6	22.7	23.9	24.2	22.4	23.6	22.7	23.9	24.2
8H	22.5	23.7	22.8	24.0	24.3	22.5	23.7	22.8	24.0	24.3
12H	22.5	23.7	22.9	24.0	24.3	22.5	23.7	22.9	24.0	24.3
4H 2H	20.6	21.9	20.9	22.2	22.4	20.6	21.9	20.9	22.2	22.4
3H	22.2	23.4	22.6	23.7	24.0	22.2	23.4	22.6	23.7	24.0
4H	22.9	24.0	23.3	24.3	24.6	22.9	24.0	23.3	24.3	24.6
6H	23.4	24.3	23.8	24.7	25.1	23.4	24.3	23.8	24.7	25.1
8H	23.5	24.4	24.0	24.8	25.2	23.5	24.4	24.0	24.8	25.2
12H	23.6	24.4	24.1	24.8	25.2	23.6	24.4	24.1	24.8	25.2
8H 4H	23.2	24.0	23.6	24.4	24.8	23.1	24.0	23.6	24.4	24.8
6H	23.8	24.5	24.2	24.9	25.3	23.8	24.5	24.2	24.9	25.3
8H	24.0	24.6	24.4	25.1	25.5	24.0	24.6	24.4	25.1	25.5
12H	24.1	24.7	24.6	25.1	25.6	24.1	24.7	24.6	25.1	25.6
12H 4H	23.2	24.0	23.6	24.4	24.8	23.2	24.0	23.6	24.3	24.8
6H	23.8	24.5	24.3	24.9	25.3	23.8	24.5	24.3	24.9	25.3
8H	24.1	24.6	24.5	25.1	25.5	24.1	24.6	24.5	25.1	25.5
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 6848 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.7)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

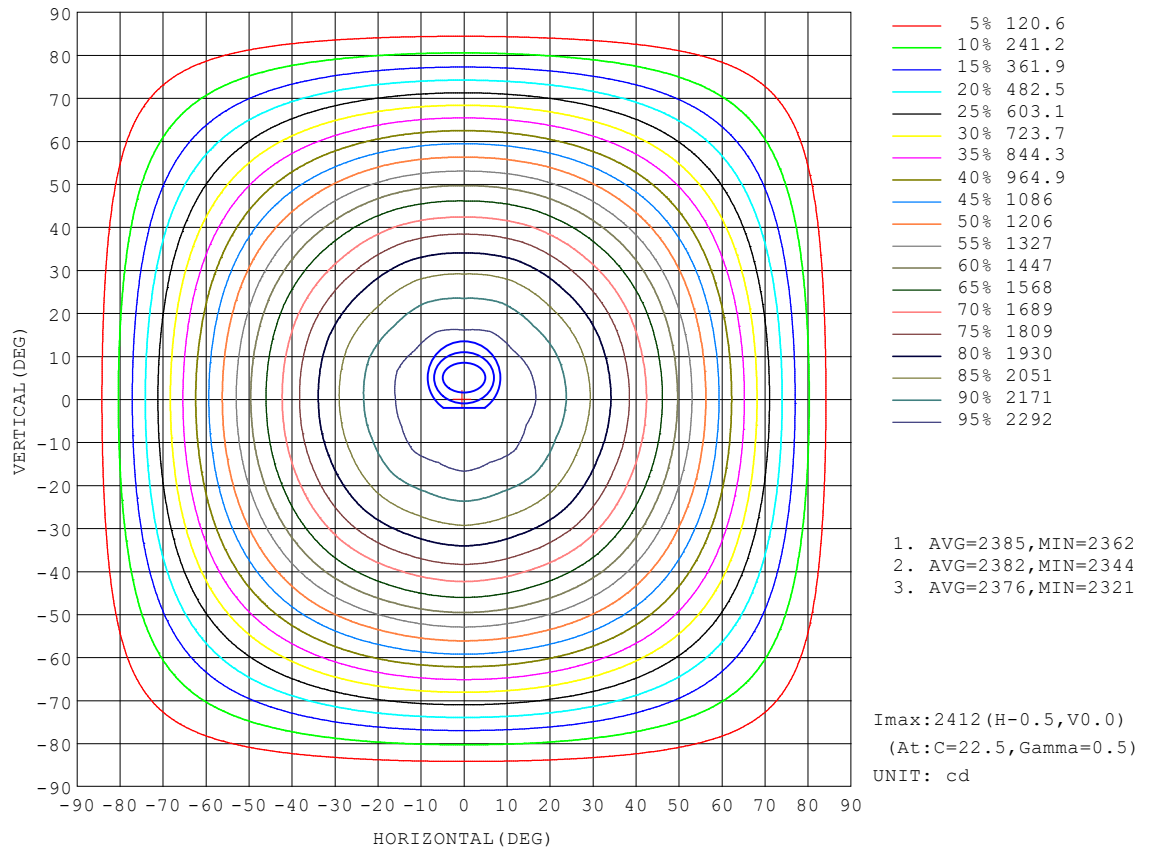
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	66	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	87	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	96	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		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:

ISOCANDELA DIAGRAM

Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

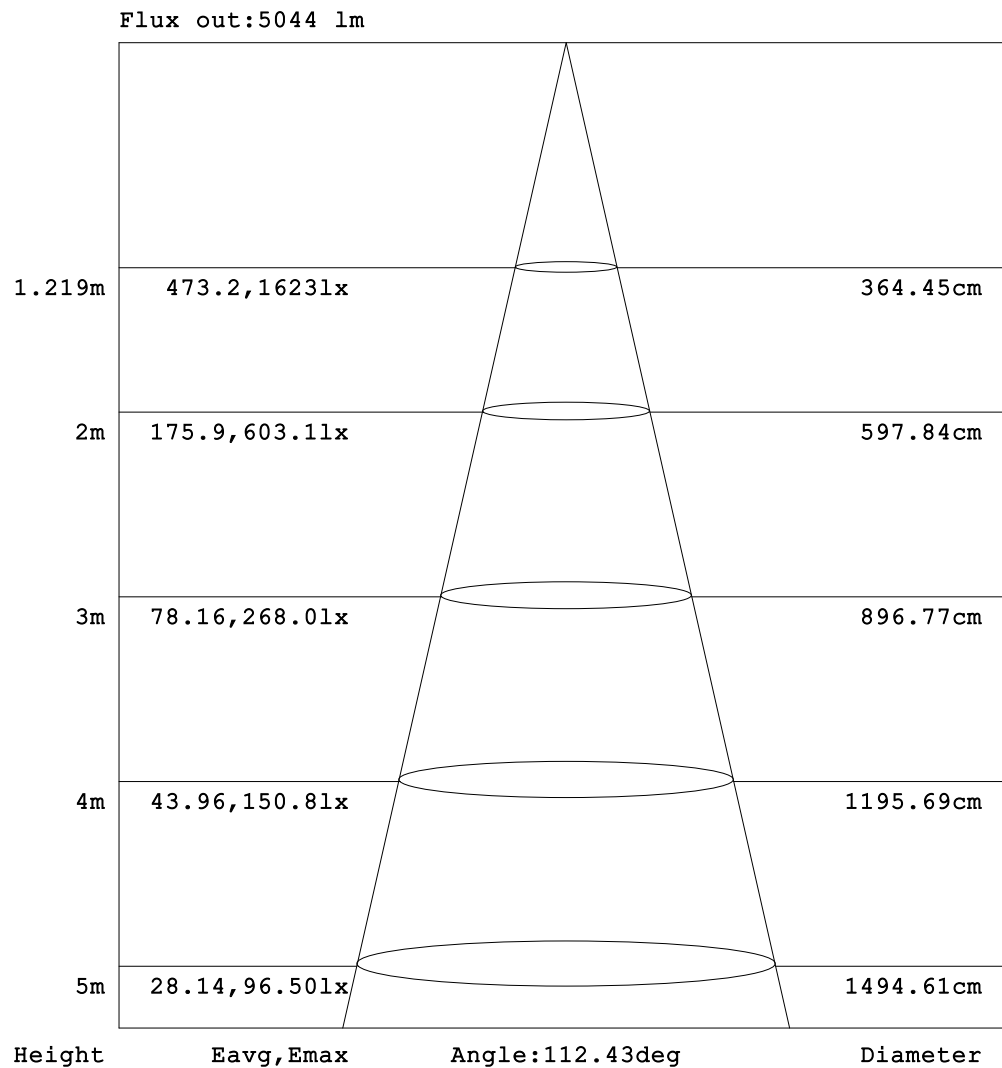


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 June 2025

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:

AAI Figure

Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



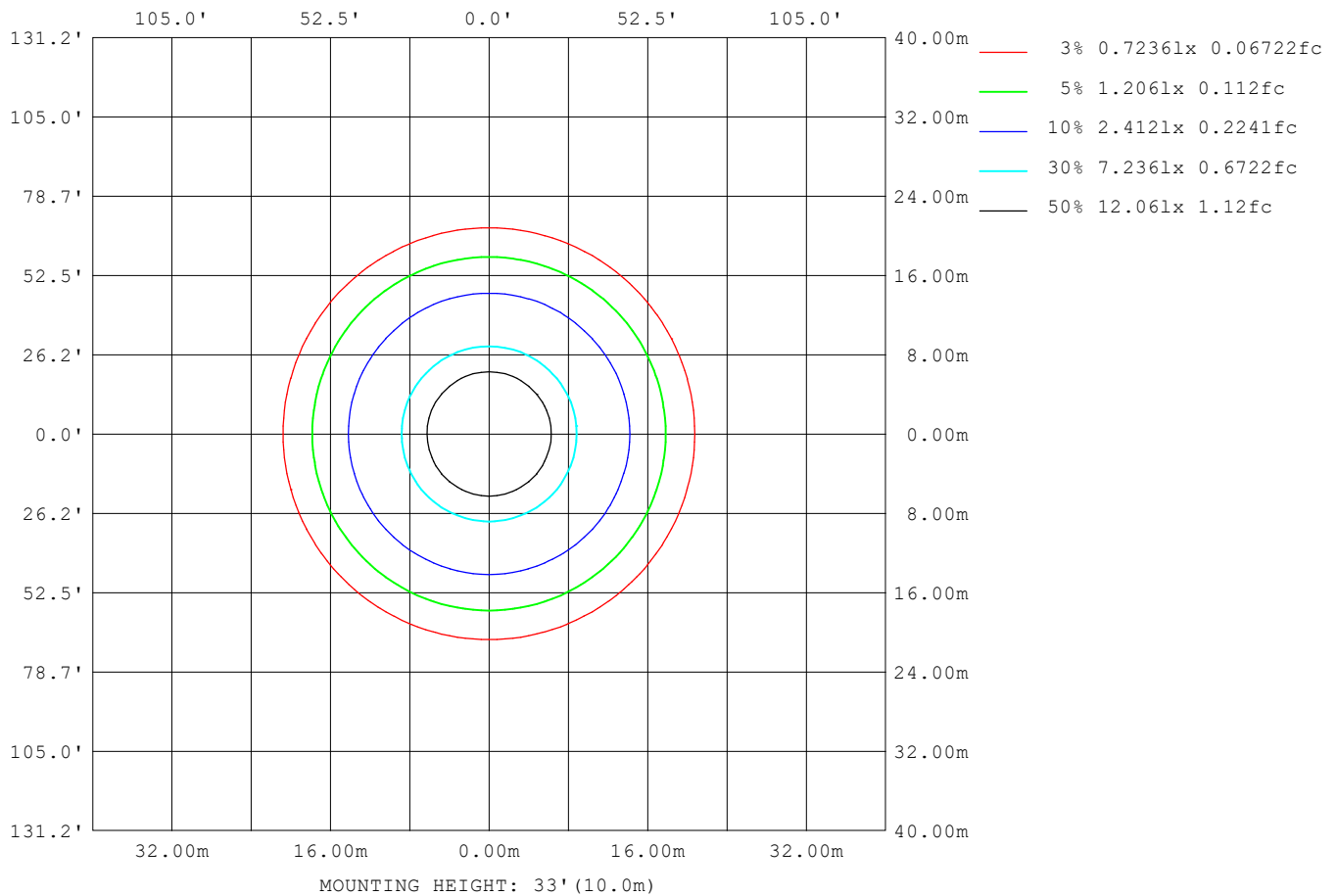
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:

ISOLUX DIAGRAM

Test:U:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K 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
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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:240.0V I:0.3145A P:73.71W PF:0.9766 Lamp Flux:6848.3x1 lm		
NAME: MRS SPIN 600_NA_WHT_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

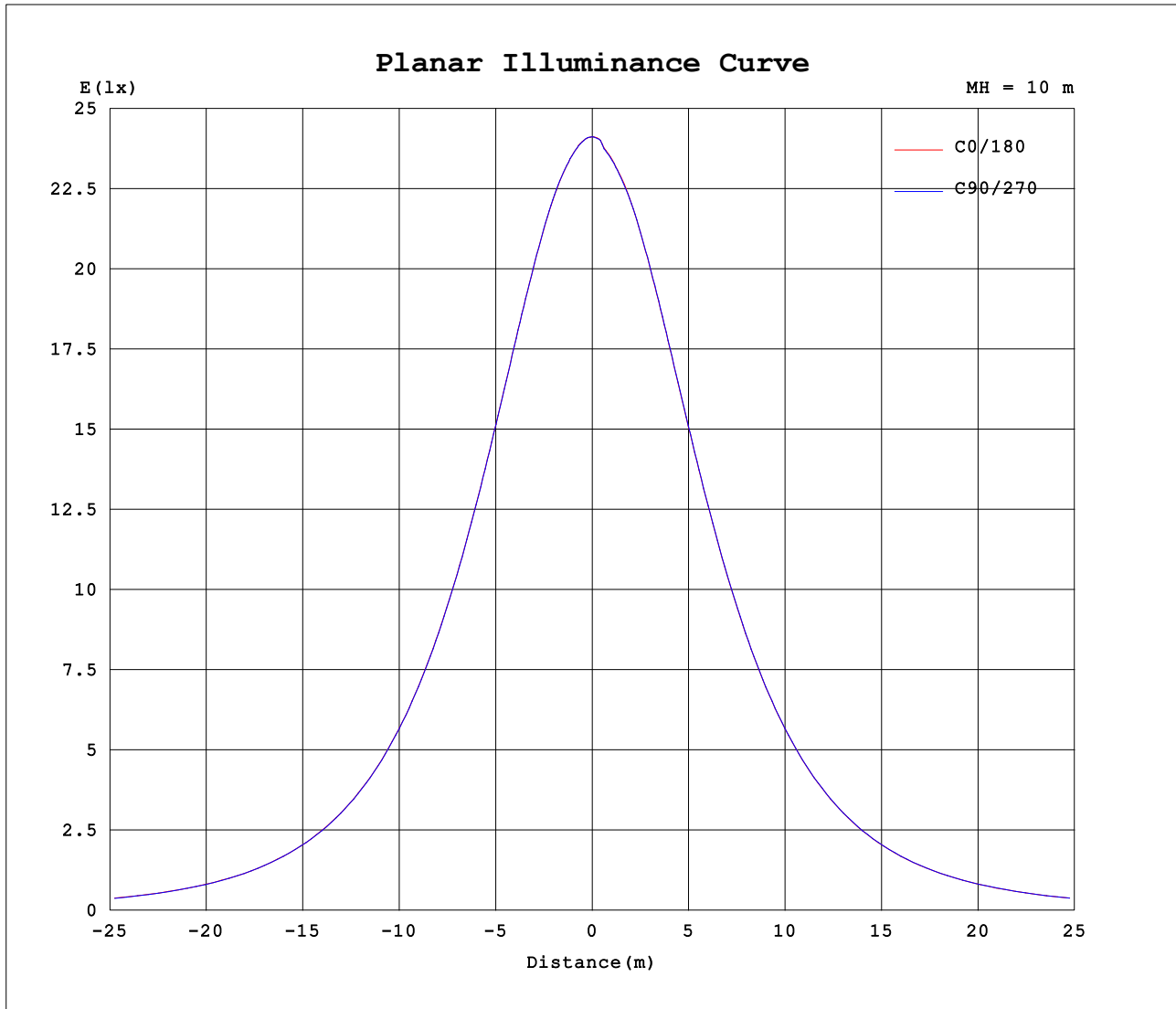
AvgL	cd/m2
L_0~180 (65) av	7161
L_0~180 (75) av	6069
L_0~180 (85) av	4017
L_90~270 (65) av	7160
L_90~270 (75) av	6079
L_90~270 (85) av	4120
L_45 (65) av	7160
L_45 (75) av	6070
L_45 (85) av	4076

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:03 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: 03 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:

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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:

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