

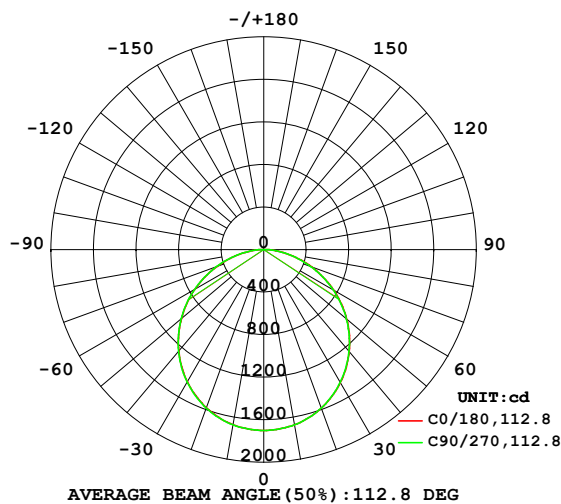
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.1V I:0.2049A P:47.60W PF:0.9676 Lamp Flux:4903.47x1 lm		
NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80		
MFR.: DARKON		

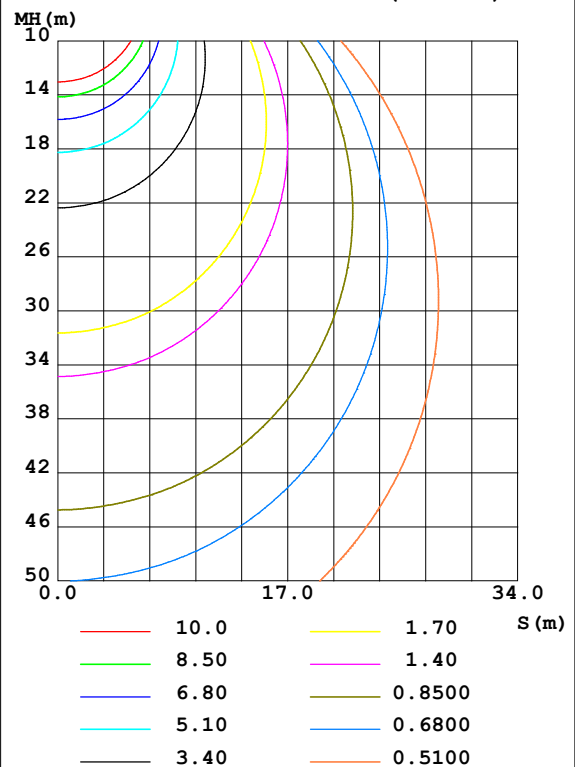
CLE Quadra

DATA OF LAMP		PHOTOMETRIC DATA Eff: 103.02 lm/W			
MODEL: 261mm 1200lm 830 ADV		Imax(cd)	1701	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)	4903.5	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	4903.47	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
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: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:03 July 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [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	1673	1674	1673	1672	1672	1671	1674	1673	0- 10	160.9	160.9	3.28,3.28
20	1586	1586	1585	1582	1582	1582	1584	1586	10- 20	461.7	622.7	12.7,12.7
30	1443	1443	1441	1438	1437	1438	1440	1443	20- 30	699.8	1322	27,27
40	1252	1251	1248	1245	1244	1245	1247	1251	30- 40	844.0	2166	44.2,44.2
50	1020	1019	1016	1012	1011	1012	1015	1019	40- 50	876.2	3043	62.1,62.1
60	758.8	757.6	754.0	750.0	748.7	749.7	752.5	757.4	50- 60	793.1	3836	78.2,78.2
70	480.4	479.1	475.5	471.1	469.7	471.0	473.9	478.8	60- 70	608.3	4444	90.6,90.6
80	211.5	210.3	207.0	202.9	201.8	202.9	205.8	210.5	70- 80	356.8	4801	97.9,97.9
90	3.674	2.974	1.706	1.376	1.441	1.411	1.406	2.469	80- 90	102.7	4903	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): 2607.9 lm

%lum = 53.2%

%lamp = 53.2%

Conical surface Flux(120deg): 3835.7 lm

%lum = 78.2%

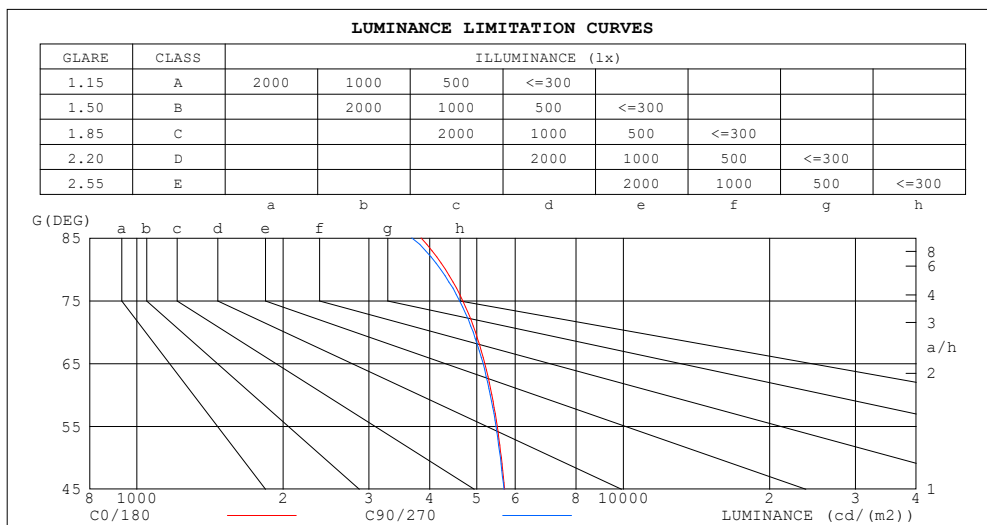
%lamp = 78.2%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:03 July 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.1V I:0.2049A P:47.60W PF:0.9676 Lamp Flux:4903.47x1 lm		
NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80		
MFR.: DARKON		



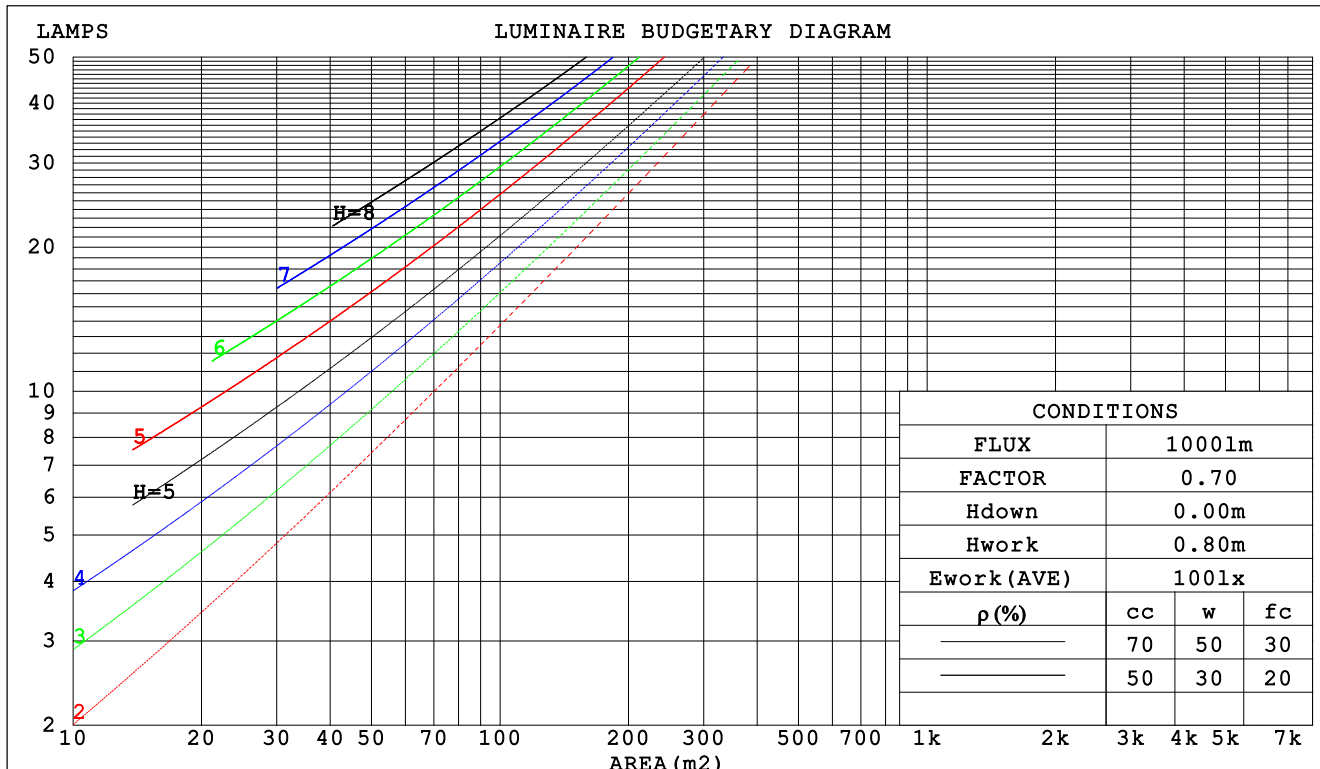
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 03 July 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.892m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.1V I:0.2049A P:47.60W PF:0.9676 Lamp Flux:4903.47x1 lm		
NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80		
MFR.: DARKON		

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	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
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	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.91	.88	.90	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.77	.70	.64	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.69	.60	.54	.66	.59	.53	.64	.57	.52	.62	.56	.52	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.52	.46	.57	.51	.45	.55	.50	.45	.43
6.0	.56	.47	.41	.55	.47	.40	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.35	.47	.40	.35	.46	.40	.35	.33
8.0	.46	.38	.32	.46	.38	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.36	.30	.26	.24



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WEC AND CCEC

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NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80											
MFR.: DARKON											

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	.314	.178	.057	.307	.175	.056	.293	.168	.054	.281	.162	.052	.270	.156	.050	
2.0	.294	.161	.049	.288	.159	.049	.276	.154	.048	.265	.149	.047	.255	.145	.046	
3.0	.272	.145	.043	.266	.143	.043	.256	.139	.042	.246	.135	.041	.237	.131	.041	
4.0	.251	.130	.038	.246	.129	.038	.236	.125	.037	.228	.122	.037	.220	.120	.036	
5.0	.231	.118	.034	.227	.117	.034	.219	.114	.034	.211	.112	.033	.204	.109	.033	
6.0	.214	.108	.031	.211	.106	.031	.203	.104	.030	.197	.102	.030	.190	.100	.030	
7.0	.200	.099	.028	.196	.098	.028	.190	.096	.028	.184	.094	.027	.178	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.175	.084	.024	.172	.084	.023	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.079	.022	.162	.078	.022	.157	.077	.022	.152	.076	.022	.148	.075	.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	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.003	
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
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Operators:JEFF
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.1V I:0.2049A P:47.60W PF:0.9676 Lamp Flux:4903.47x1 lm										
NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80										
MFR.: DARKON										
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	18.8	20.4	19.1	20.6	20.8	18.8	20.3	19.1	20.5	20.7
3H	20.4	21.8	20.7	22.0	22.3	20.4	21.8	20.6	22.0	22.2
4H	21.0	22.4	21.3	22.6	22.9	21.0	22.3	21.3	22.6	22.8
6H	21.5	22.8	21.8	23.0	23.3	21.4	22.7	21.8	23.0	23.3
8H	21.7	22.9	22.0	23.2	23.5	21.6	22.8	21.9	23.1	23.4
12H	21.8	22.9	22.1	23.2	23.5	21.7	22.9	22.0	23.2	23.5
4H 2H	19.4	20.8	19.8	21.0	21.3	19.4	20.8	19.7	21.0	21.3
3H	21.2	22.4	21.5	22.7	23.0	21.2	22.3	21.5	22.6	22.9
4H	22.0	23.0	22.3	23.4	23.7	21.9	23.0	22.3	23.3	23.7
6H	22.6	23.5	23.0	23.9	24.2	22.5	23.5	22.9	23.8	24.2
8H	22.8	23.7	23.2	24.0	24.4	22.7	23.6	23.1	24.0	24.4
12H	22.9	23.8	23.4	24.1	24.5	22.9	23.7	23.3	24.1	24.5
8H 4H	22.2	23.1	22.7	23.5	23.9	22.2	23.1	22.6	23.5	23.9
6H	23.0	23.8	23.5	24.2	24.6	23.0	23.7	23.4	24.1	24.5
8H	23.3	24.0	23.8	24.4	24.9	23.3	23.9	23.7	24.3	24.8
12H	23.6	24.1	24.0	24.6	25.0	23.5	24.1	24.0	24.5	25.0
12H 4H	22.3	23.1	22.7	23.5	23.9	22.2	23.0	22.7	23.4	23.8
6H	23.1	23.7	23.5	24.2	24.6	23.0	23.7	23.5	24.1	24.6
8H	23.4	24.0	23.9	24.4	24.9	23.4	23.9	23.8	24.4	24.9
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 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117 Corrected 4903 lm Total Lamp Luminous Flux. (8log(F/F0) = 5.5)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:03 July 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.892m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.1V I:0.2049A P:47.60W PF:0.9676 Lamp Flux:4903.47x1 lm		
NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80		
MFR.: DARKON		

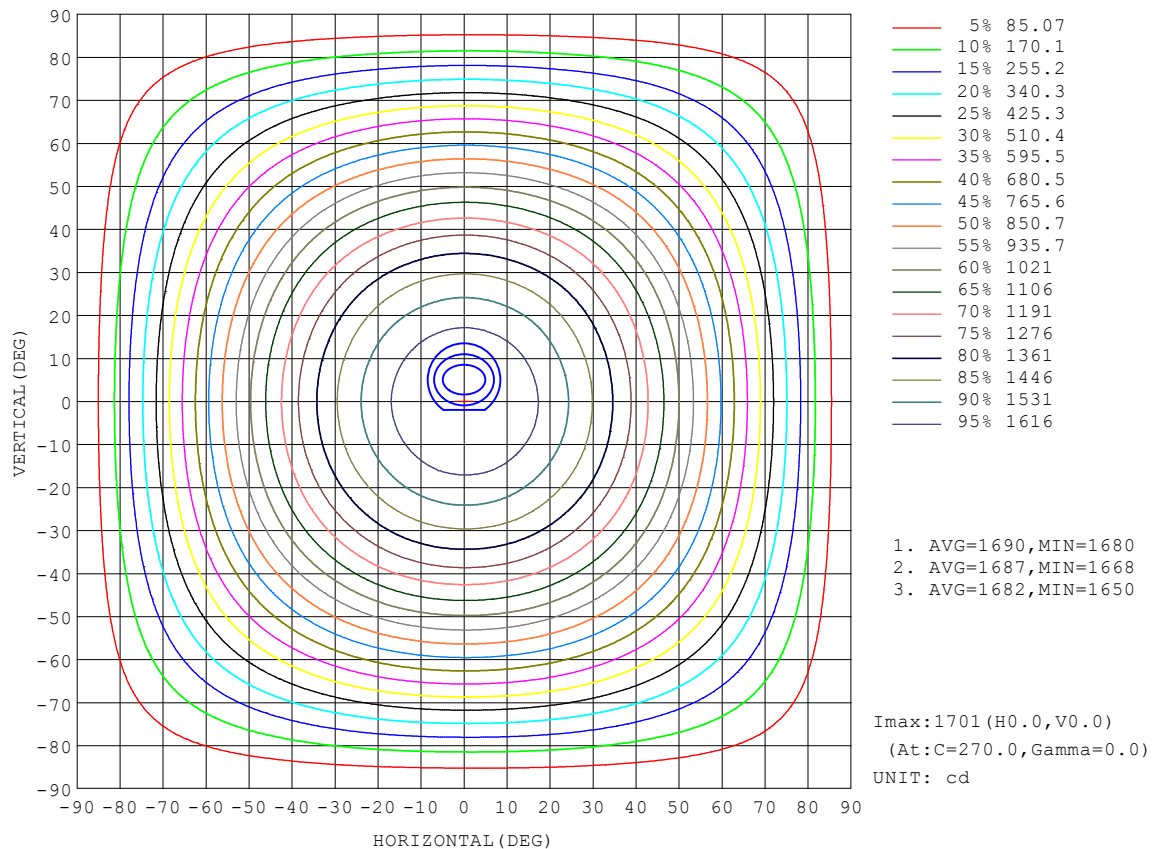
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	46	39	57	45	39	55	45	38	32
0.80	67	56	48	66	55	48	64	54	48	41
1.00	76	65	57	75	64	57	72	65	56	49
1.25	83	72	65	81	72	65	79	70	64	56
1.50	88	78	71	86	77	70	83	75	69	62
2.00	95	86	80	93	85	79	89	83	77	69
2.50	99	91	85	97	89	84	93	87	82	74
3.00	102	95	90	100	94	88	96	91	86	78
4.00	106	100	96	104	99	94	99	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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Remarks:

ISOCANDELA DIAGRAM

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MFR.: DARKON		

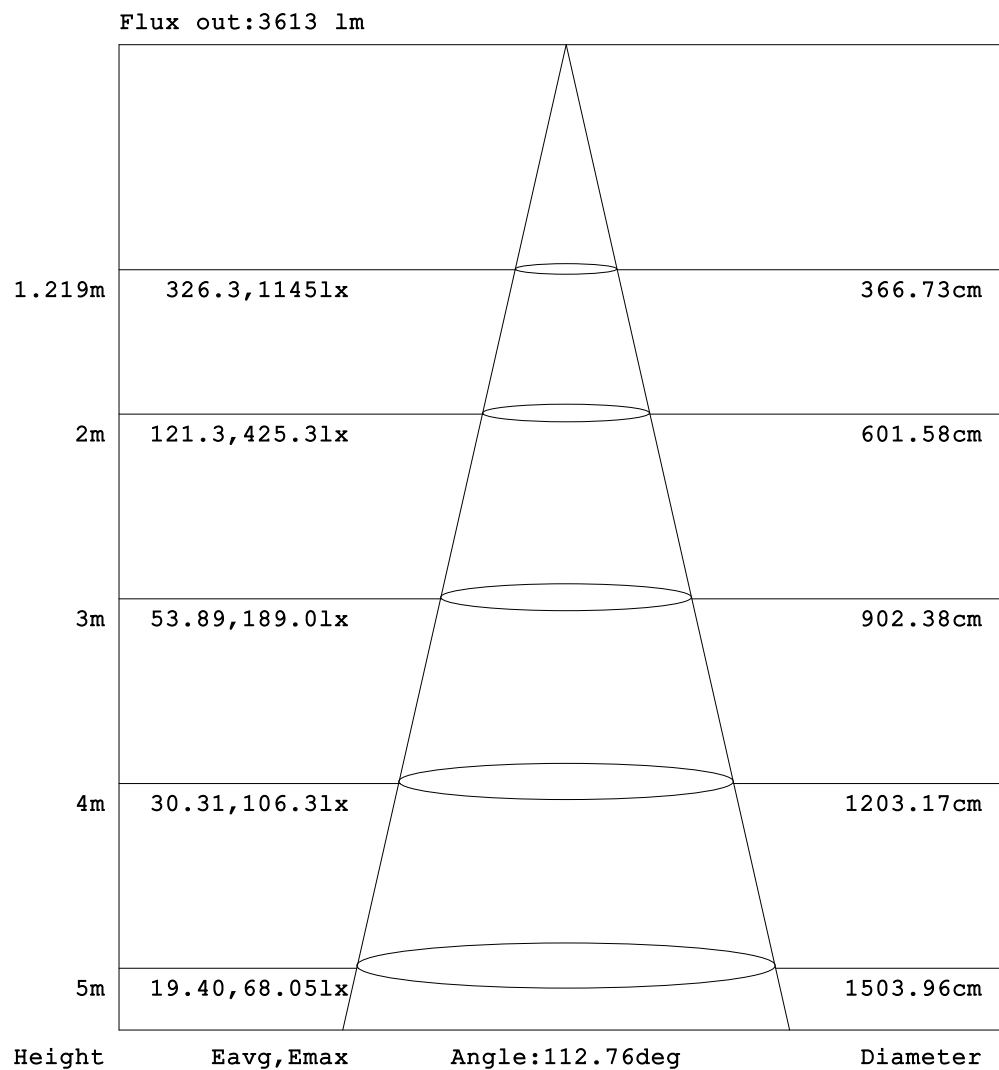


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AAI Figure

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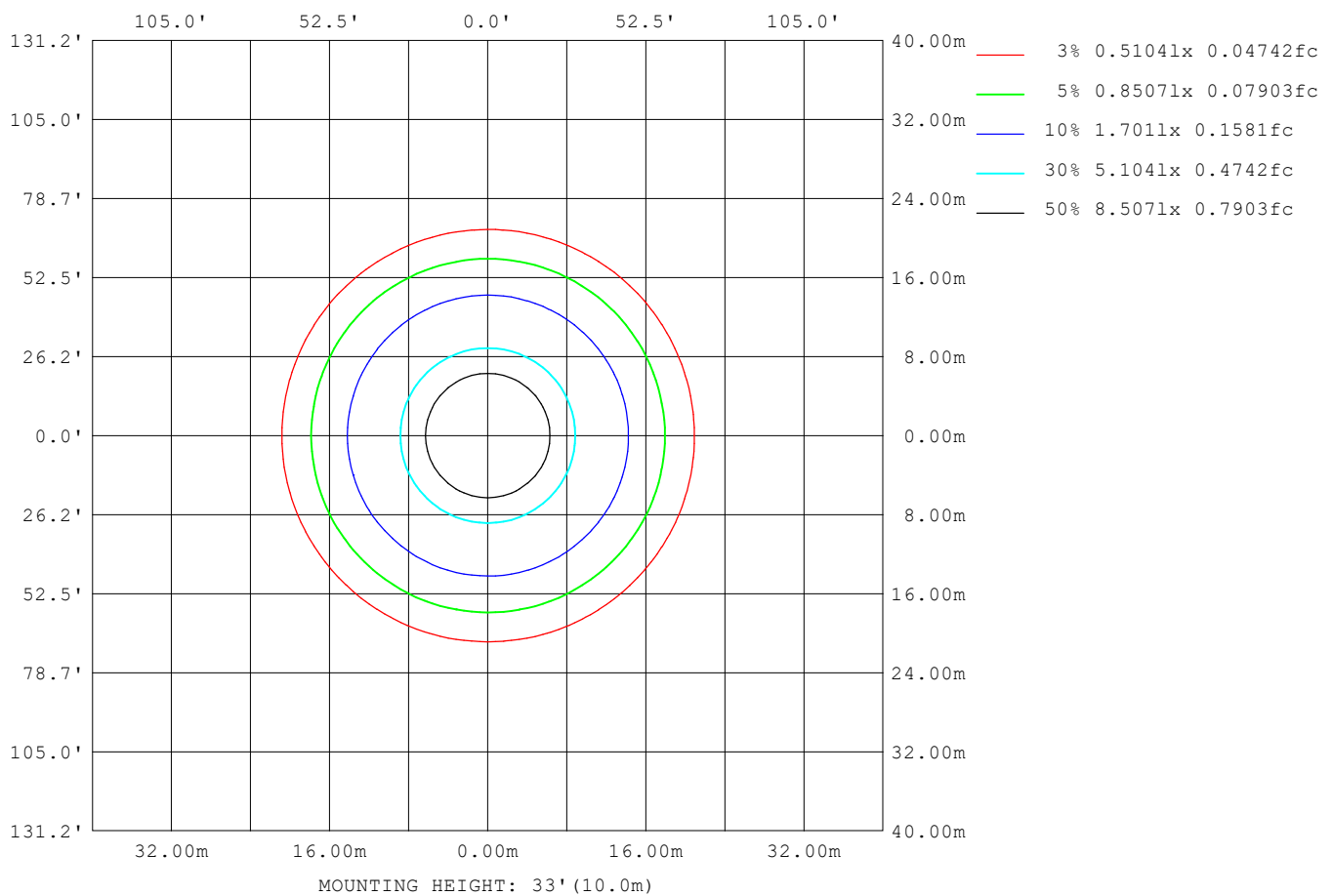
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Remarks:

ISOLUX DIAGRAM

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 Remarks:

LED Avg.L Report

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NAME: MRS SPIN 600_NA_WHT_350mA_3000K CRI80		
MFR.: DARKON		

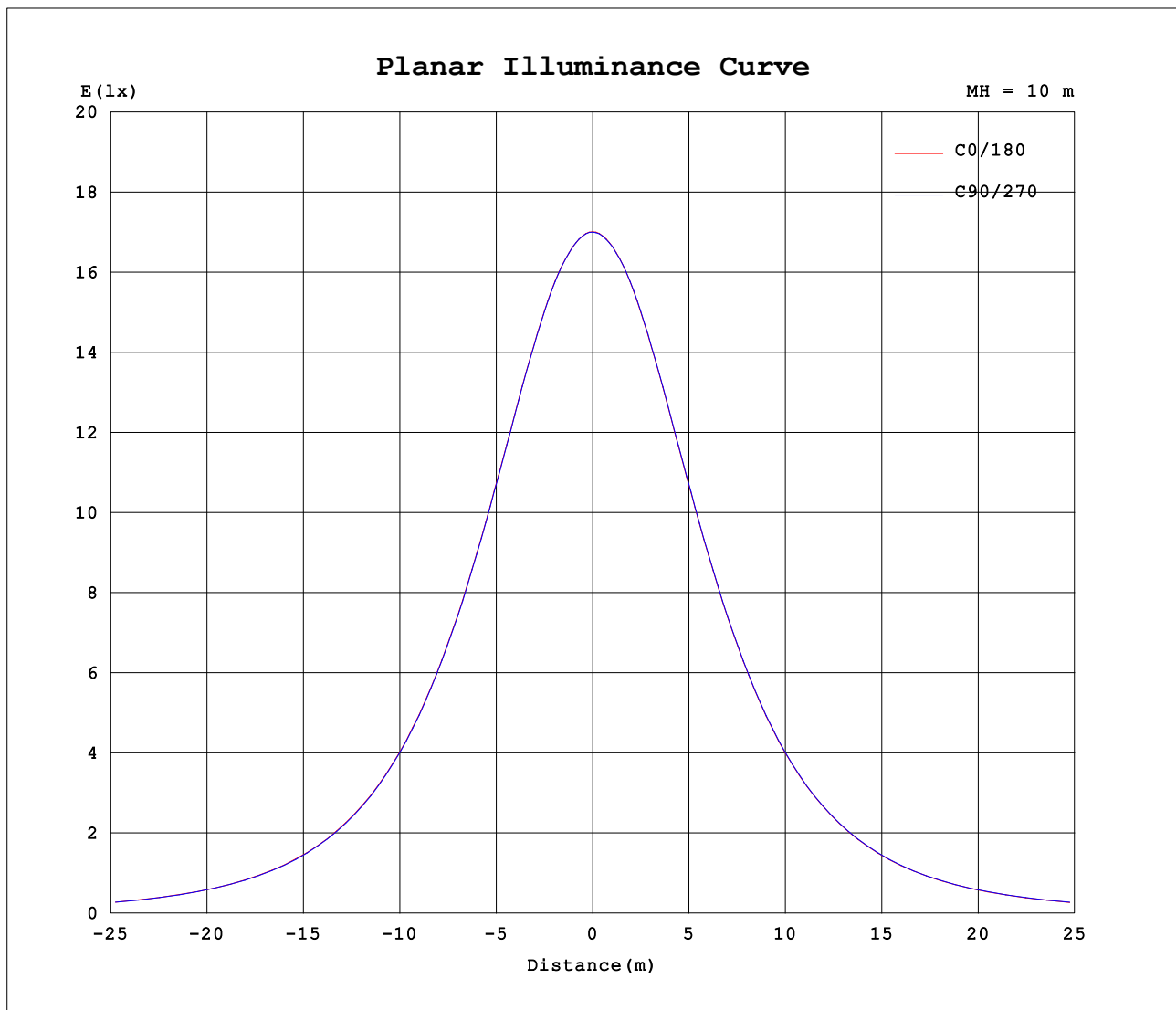
AvgL	cd/m2
L_0~180 (65) av	5147
L_0~180 (75) av	4606
L_0~180 (85) av	3662
L_90~270 (65) av	5144
L_90~270 (75) av	4600
L_90~270 (85) av	3651
L_45 (65) av	5146
L_45 (75) av	4603
L_45 (85) av	3657

Standard: GB/T 29293-2012

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Planar Illuminance Curve



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