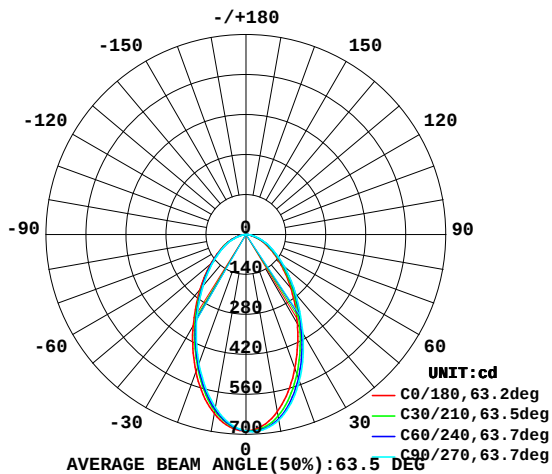


LUMINAIRE PHOTOMETRIC TEST REPORT

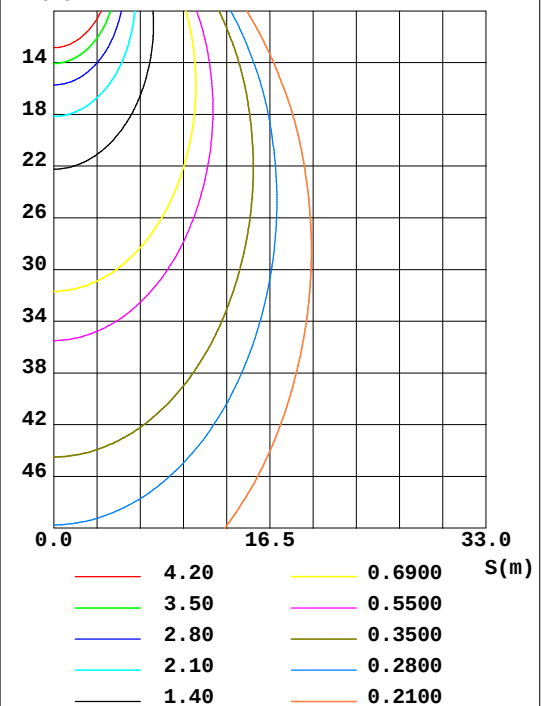
Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.50 lm/W			
MODEL	5RS049-3000K	I _{max} (cd)	690.7	S/MH(C0/180)	0.88
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	0.95
RATED VOLTAGE(V)	232	TOTAL FLUX(lm)	1002.0	h UP, DN(C0-180)	0.0, 52.3
NOMINAL FLUX(lm)	1001.98	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 47.7
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	231.2	h down(%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2018-04-03

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
 Humidity: 65.0%
 Test Distance: 8.989m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum, lamp
10	630.8	651.2	660.6	651.0	637.6	625.0	615.6	617.4	0- 10	63.18	63.18	6.31, 6.31
20	500.3	530.2	546.4	531.6	512.5	492.1	482.1	483.6	10- 20	161.5	224.7	22.4, 22.4
30	360.8	384.5	399.2	385.8	370.6	352.6	345.5	344.7	20- 30	200.7	425.4	42.5, 42.5
40	244.5	262.8	270.5	261.0	249.8	240.1	234.2	233.2	30- 40	190.5	616.0	61.5, 61.5
50	156.7	170.0	175.9	169.9	161.7	155.2	150.4	149.4	40- 50	156.4	772.3	77.1, 77.1
60	94.29	104.0	108.9	105.2	100.0	96.00	91.97	90.25	50- 60	114.1	886.4	88.5, 88.5
70	47.89	55.95	61.13	59.38	55.46	51.14	46.41	44.87	60- 70	74.48	960.9	95.9, 95.9
80	12.10	17.53	22.18	21.58	18.03	13.80	11.37	10.76	70- 80	34.87	995.8	99.4, 99.4
90	0.0429	0.0492	0.2903	0.3471	0.0552	0.0492	0.0494	0.0496	80- 90	6.187	1002	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		

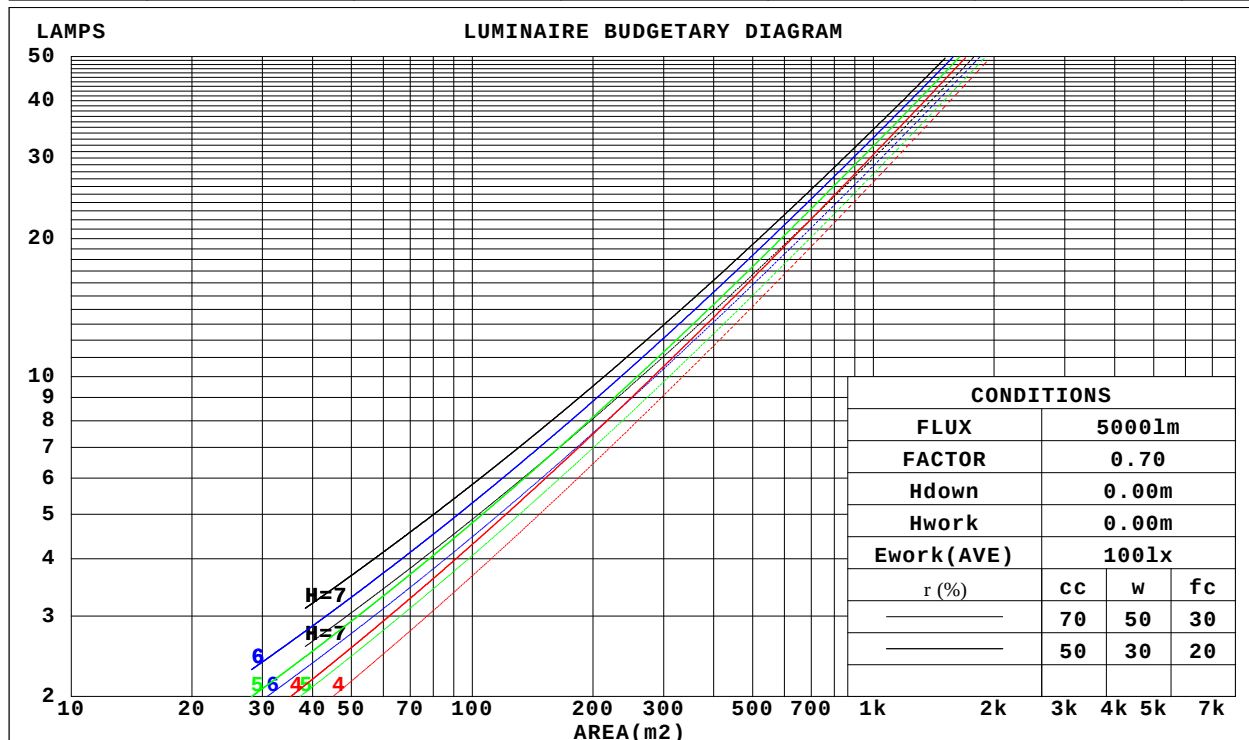
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2018-04-03

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
 Humidity: 65.0%
 Test Distance: 8.989m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION 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 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	1.07	1.03	1.00	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.96	.90	.85	.94	.89	.84	.90	.86	.82	.87	.84	.81	.84	.81	.79	.77
3.0	.86	.79	.74	.85	.78	.73	.82	.76	.72	.79	.75	.71	.77	.73	.69	.68
4.0	.78	.70	.65	.77	.70	.64	.74	.68	.63	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.57	.70	.63	.57	.68	.61	.57	.66	.60	.56	.64	.59	.55	.54
6.0	.65	.57	.52	.64	.57	.51	.62	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.47	.59	.52	.47	.58	.51	.46	.56	.50	.46	.55	.50	.46	.44
8.0	.55	.48	.43	.55	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.40
9.0	.51	.44	.39	.51	.44	.39	.50	.43	.39	.49	.43	.39	.48	.42	.38	.37
10.0	.48	.41	.36	.47	.41	.36	.47	.40	.36	.46	.40	.36	.45	.39	.36	.34



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2018-04-03

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity: 65.0%
 Test Distance: 8.989m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm														
NAME: 5RS049-3000K					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:001				
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd					SUR.:					PROTECTION ANGLE:				

RC	80%			70%			50%			30%			10%			0
W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
f	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.251	.143	.045	.244	.139	.044	.231	.133	.042	.219	.126	.041	.208	.121	.039	
2.0	.241	.132	.040	.235	.129	.040	.224	.124	.039	.213	.120	.037	.204	.115	.036	
3.0	.227	.121	.036	.221	.119	.036	.212	.115	.035	.202	.111	.034	.194	.107	.033	
4.0	.212	.110	.032	.208	.109	.032	.199	.105	.032	.191	.103	.031	.183	.100	.030	
5.0	.199	.101	.029	.195	.100	.029	.187	.097	.029	.180	.095	.028	.173	.093	.028	
6.0	.186	.093	.027	.183	.092	.027	.176	.090	.026	.169	.088	.026	.164	.086	.026	
7.0	.175	.086	.025	.172	.086	.024	.166	.084	.024	.160	.082	.024	.155	.080	.024	
8.0	.165	.080	.023	.162	.080	.023	.156	.078	.022	.151	.077	.022	.147	.075	.022	
9.0	.156	.075	.021	.153	.075	.021	.148	.073	.021	.144	.072	.021	.139	.071	.020	
10.0	.147	.071	.020	.145	.070	.020	.141	.069	.019	.136	.068	.019	.132	.067	.019	

RC	80%			70%			50%			30%			10%			0
W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
f	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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.080	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.050	.035	.023	.016	.012	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.038	.079	.049	.027	.046	.029	.016	.015	.009	.005	
7.0	.126	.074	.036	.109	.064	.032	.075	.045	.023	.044	.026	.013	.014	.009	.004	
8.0	.120	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.013	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.068	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.109	.058	.024	.094	.051	.021	.065	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:01
 Test Date:2018-04-03

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.989m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm										
NAME: 5RS049-3000K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:001		
MFR.: Suzhou Radiant Lighting Technology Co., Ltd					SUR.:			PROTECTION 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	27.2	28.5	27.4	28.7	28.9	27.7	29.0	27.9	29.2	29.3
3H	28.0	29.2	28.3	29.5	29.7	28.7	29.9	29.0	30.1	30.4
4H	28.3	29.4	28.6	29.7	29.9	29.1	30.2	29.4	30.5	30.7
6H	28.4	29.4	28.7	29.7	30.0	29.3	30.4	29.6	30.6	30.9
8H	28.4	29.4	28.7	29.7	29.9	29.4	30.4	29.7	30.7	31.0
12H	28.3	29.3	28.7	29.6	29.9	29.4	30.4	29.7	30.7	31.0
4H 2H	27.6	28.8	27.9	29.0	29.3	28.0	29.2	28.3	29.4	29.7
3H	28.7	29.7	29.0	29.9	30.2	29.3	30.2	29.6	30.5	30.8
4H	29.0	29.9	29.4	30.2	30.6	29.7	30.6	30.1	31.0	31.3
6H	29.2	30.0	29.6	30.3	30.7	30.1	30.9	30.5	31.2	31.6
8H	29.2	29.9	29.6	30.3	30.6	30.2	30.9	30.6	31.3	31.6
12H	29.1	29.8	29.6	30.2	30.6	30.2	30.9	30.7	31.3	31.7
8H 4H	29.2	29.9	29.6	30.3	30.7	29.8	30.6	30.3	30.9	31.3
6H	29.4	30.0	29.8	30.4	30.8	30.3	30.9	30.7	31.3	31.7
8H	29.4	29.9	29.9	30.4	30.8	30.4	31.0	30.9	31.4	31.8
12H	29.4	29.9	29.9	30.3	30.8	30.5	31.0	31.0	31.4	31.9
12H 4H	29.2	29.8	29.6	30.2	30.6	29.8	30.5	30.2	30.9	31.3
6H	29.4	29.9	29.9	30.4	30.8	30.3	30.8	30.7	31.2	31.7
8H	29.4	29.9	29.9	30.3	30.8	30.4	30.9	30.9	31.3	31.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				
1.5H	+ 0.1 / - 0.4					+ 0.1 / - 0.2				
2.0H	+ 0.6 / - 0.7					+ 0.5 / - 0.4				

CIE Pub.117 Corrected 1002 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.0)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:01
 Test Date:2018-04-03

g Range: 0 - 90DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.989m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

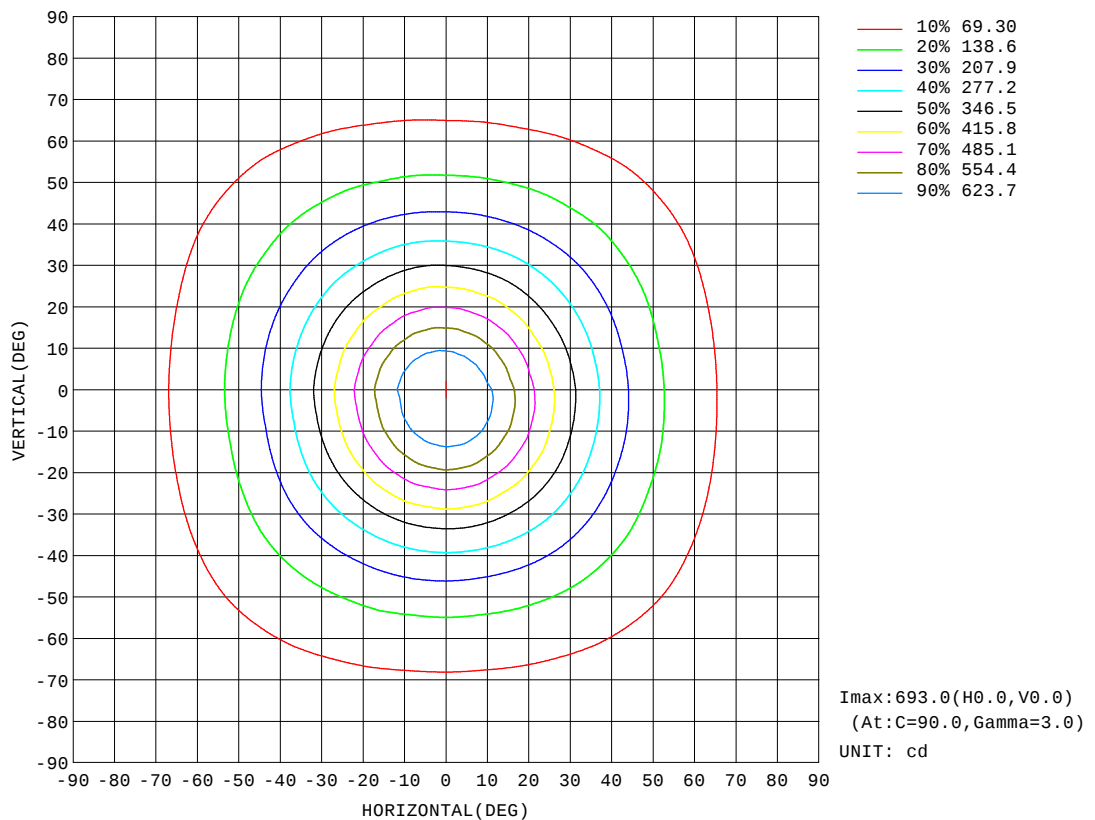
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	52	67	57	52	66	57	52	46
0.80	77	67	61	76	67	61	75	66	61	55
1.00	84	75	69	83	75	69	81	76	69	63
1.25	91	82	76	89	82	76	87	80	75	69
1.50	95	87	81	93	86	81	91	85	80	74
2.00	100	94	88	99	92	88	96	90	86	79
2.50	103	97	92	102	96	92	98	93	90	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:01
 Test Date:2018-04-03

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.279
 Humidity:65.0%
 Test Distance:8.989m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:



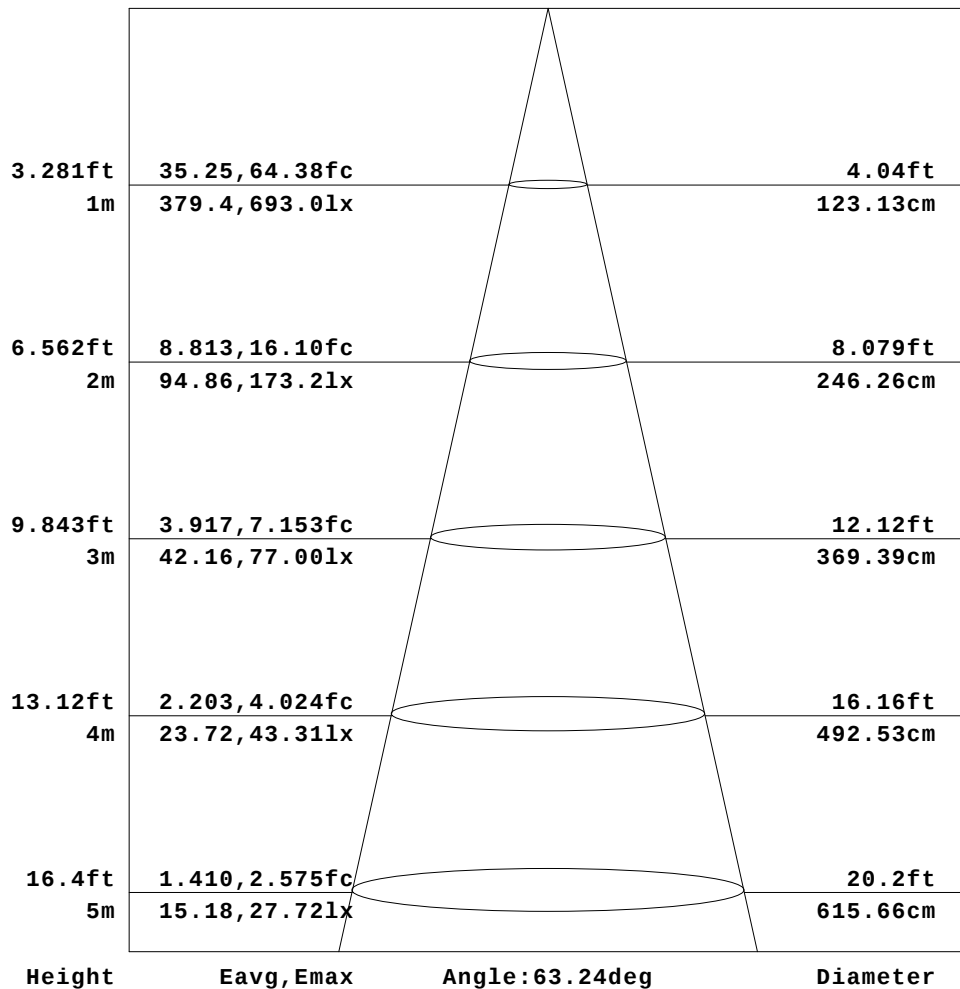
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 01
Test Date: 2018-04-03

Range: 0 - 90DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
Humidity: 65.0%
Test Distance: 8.989m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

Flux out:465.5 lm



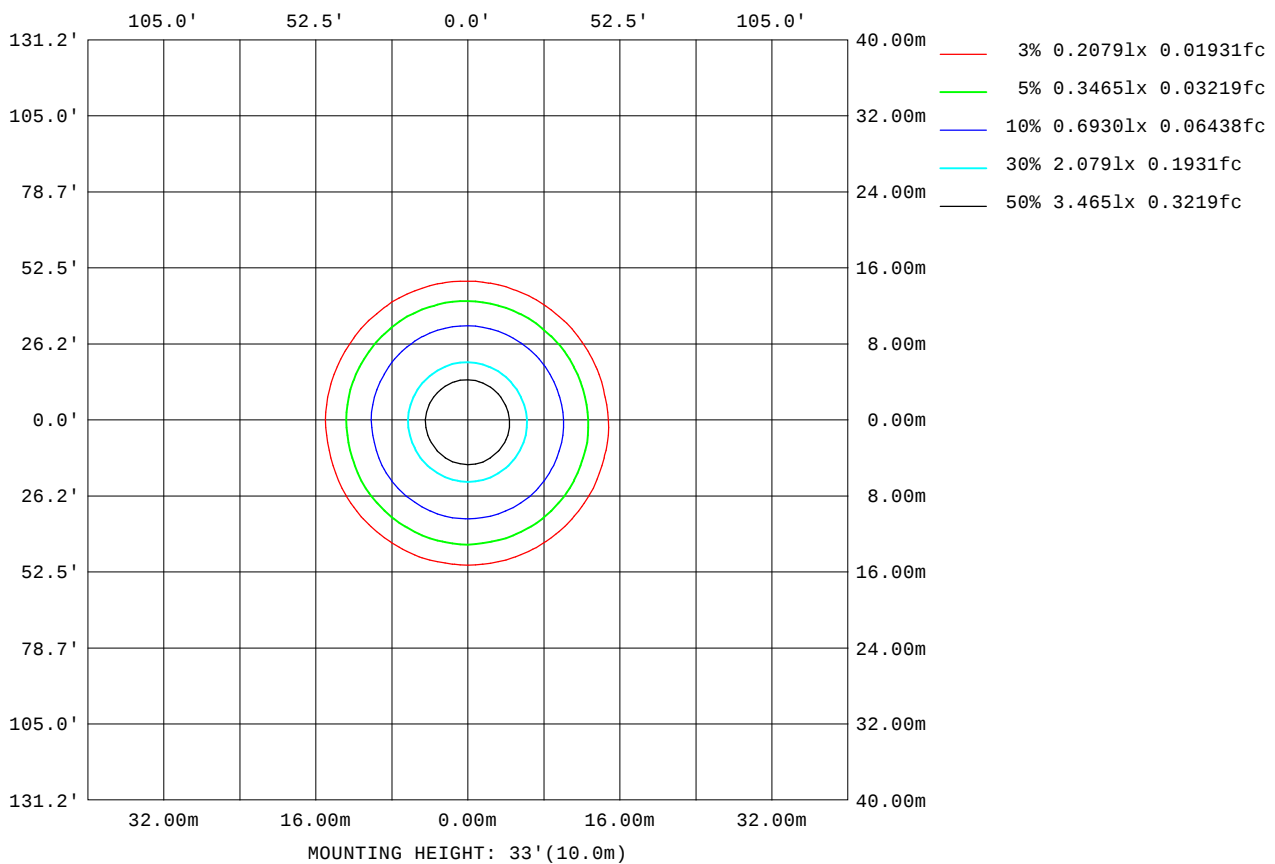
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 01
Test Date: 2018-04-03

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
Humidity: 65.0%
Test Distance: 8.989m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

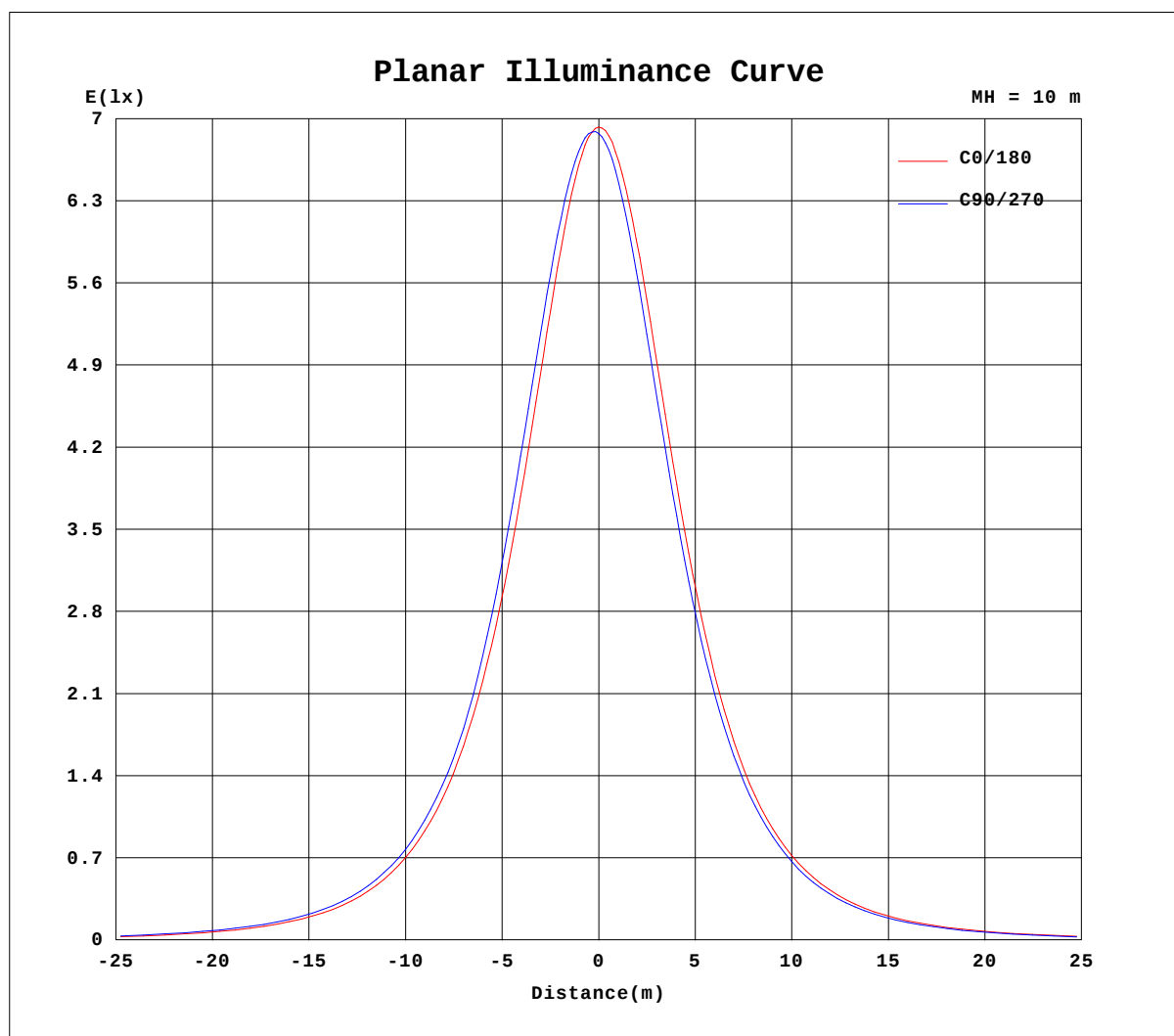
Test:U:231.2V I:0.0580A P:12.29W PF:0.9161 Lamp Flux:1001.98x1 lm		
NAME: 5RS049-3000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 01
Test Date: 2018-04-03

g Range: 0 - 90DEG
g Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
Humidity: 65.0%
Test Distance: 8.989m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 01
Test Date: 2018-04-03

Range: 0 - 90DEG
Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.279
Humidity: 65.0%
Test Distance: 8.989m [K=1.0000]
Remarks:

