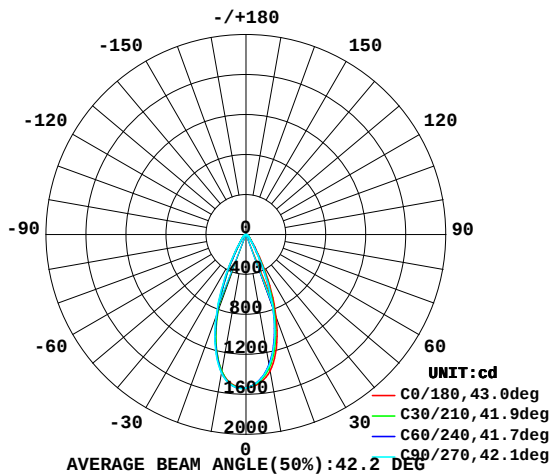


LUMINAIRE PHOTOMETRIC TEST REPORT

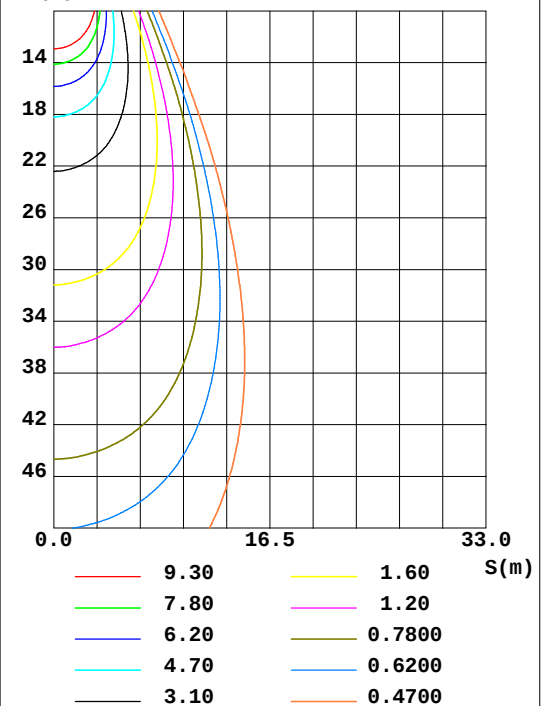
Test:U:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.15 lm/W			
MODEL	5RS019-3000k	I _{max} (cd)	1541	S/MH(C0/180)	0.68
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	889.42	h UP, DN(C0-180)	0.0, 48.5
NOMINAL FLUX(lm)	889.417	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 51.5
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230.3	h down(%)	100.0	CIBSE SHR MAX	0.70

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: 2017-04-26

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	1388	1338	1335	1367	1393	1400	1409	1424	0- 10	139.5	139.5	15.7, 15.7
20	883.9	815.6	801.4	846.0	850.0	842.8	879.0	941.9	10- 20	316.9	456.4	51.3, 51.3
30	305.8	251.1	239.6	249.1	267.6	245.4	277.8	327.4	20- 30	241.4	697.8	78.5, 78.5
40	86.42	75.80	73.15	68.28	74.87	71.71	80.47	86.09	30- 40	89.81	787.6	88.5, 88.5
50	42.35	39.76	38.43	36.73	39.10	37.83	39.99	41.99	40- 50	41.65	829.2	93.2, 93.2
60	26.66	24.32	23.36	22.42	24.41	23.15	23.79	25.23	50- 60	27.93	857.2	96.4, 96.4
70	15.27	13.64	12.98	12.38	13.57	13.12	13.32	14.34	60- 70	18.28	875.4	98.4, 98.4
80	6.789	6.914	6.456	5.452	6.283	6.337	6.504	7.123	70- 80	10.45	885.9	99.6, 99.6
90	0.1887	0.0584	0.0371	0.0404	0.0365	0.0338	0.0371	0.2018	80- 90	3.532	889.4	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		

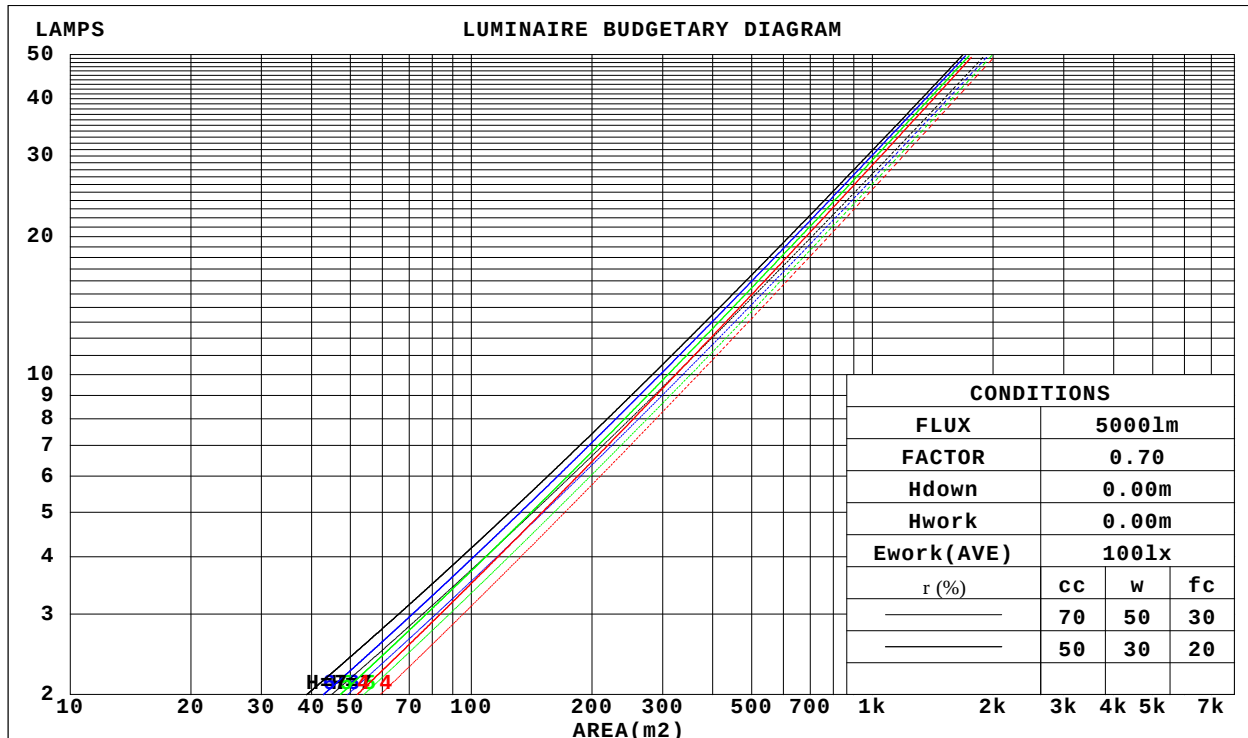
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2017-04-26

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	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	.00
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.98	.94	.98	.95	.92	.95	.93	.90	.92	.90	.88	.87
3.0	.96	.91	.88	.95	.90	.87	.92	.89	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.91	.85	.81	.89	.84	.81	.87	.83	.80	.85	.82	.79	.83	.80	.78	.76
5.0	.85	.80	.76	.84	.79	.75	.83	.78	.75	.81	.77	.74	.79	.76	.73	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.66	.74	.69	.66	.72	.69	.66	.64
8.0	.73	.67	.63	.72	.67	.63	.71	.66	.63	.70	.66	.63	.69	.65	.62	.61
9.0	.69	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.66	.62	.60	.58
10.0	.66	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:01
 Test Date:2017-04-26

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:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm														
NAME: 5RS019-3000k							TYPE:				WEIGHT:			
SPEC.:							DIM.:				SERIAL No.:001			
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd							SUR.:				PROTECTION ANGLE:			

r c c	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 f c	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.183	.104	.033	.176	.100	.032	.163	.094	.030	.152	.087	.028	.141	.082	.026	
2.0	.172	.094	.029	.166	.091	.028	.155	.086	.027	.146	.082	.026	.137	.077	.024	
3.0	.161	.086	.026	.156	.084	.025	.147	.080	.024	.139	.076	.023	.131	.073	.022	
4.0	.152	.079	.023	.148	.077	.023	.140	.074	.022	.133	.071	.021	.126	.068	.021	
5.0	.143	.073	.021	.139	.072	.021	.133	.069	.020	.126	.067	.020	.121	.064	.019	
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.121	.063	.018	.116	.061	.018	
7.0	.128	.064	.018	.126	.063	.018	.120	.061	.018	.116	.059	.017	.111	.058	.017	
8.0	.122	.060	.017	.120	.059	.017	.115	.058	.016	.111	.056	.016	.107	.055	.016	
9.0	.117	.056	.016	.114	.056	.016	.110	.055	.015	.106	.053	.015	.103	.052	.015	
10.0	.111	.053	.015	.110	.053	.015	.106	.052	.015	.102	.051	.014	.099	.050	.014	

r c c	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 f c	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	.172	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.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	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.109	.070	.043	.094	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.088	.055	.032	.061	.039	.023	.036	.023	.014	.012	.007	.004	
9.0	.097	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.054	.028	.080	.047	.024	.055	.033	.017	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:01
 Test Date:2017-04-26

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:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm											
NAME: 5RS019-3000k					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	2H	22.0	23.0	22.3	23.1	23.3	21.3	22.2	21.6	22.4	22.6
	3H	22.9	23.8	23.2	24.0	24.2	22.1	23.0	22.4	23.2	23.4
	4H	23.3	24.1	23.6	24.4	24.6	22.5	23.3	22.8	23.5	23.7
	6H	23.7	24.4	24.0	24.7	24.9	22.8	23.6	23.1	23.8	24.1
	8H	23.8	24.5	24.1	24.8	25.1	23.0	23.7	23.3	24.0	24.2
	12H	23.9	24.6	24.3	24.9	25.2	23.1	23.8	23.4	24.1	24.4
4H	2H	22.3	23.1	22.6	23.3	23.5	21.7	22.5	22.0	22.7	22.9
	3H	23.4	24.1	23.7	24.3	24.6	22.7	23.4	23.0	23.6	23.9
	4H	23.9	24.5	24.2	24.8	25.1	23.2	23.8	23.5	24.1	24.4
	6H	24.4	25.0	24.8	25.3	25.7	23.7	24.2	24.0	24.6	24.9
	8H	24.6	25.2	25.0	25.5	25.9	23.9	24.4	24.3	24.7	25.1
	12H	24.8	25.3	25.2	25.7	26.1	24.0	24.5	24.4	24.9	25.3
8H	4H	24.0	24.6	24.4	24.9	25.3	23.4	23.9	23.8	24.3	24.6
	6H	24.7	25.2	25.1	25.5	26.0	24.0	24.5	24.5	24.9	25.3
	8H	25.0	25.4	25.5	25.8	26.3	24.3	24.7	24.8	25.1	25.6
	12H	25.3	25.7	25.8	26.1	26.6	24.6	24.9	25.1	25.4	25.8
12H	4H	24.0	24.5	24.5	24.9	25.3	23.4	23.9	23.8	24.3	24.6
	6H	24.8	25.1	25.2	25.6	26.0	24.1	24.5	24.5	24.9	25.3
	8H	25.1	25.5	25.6	25.9	26.4	24.4	24.8	24.9	25.2	25.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 0.4 / - 0.5					
1.5H	+ 1.0 / - 0.4					+ 0.6 / - 0.4					
2.0H	+ 0.5 / - 0.4					+ 0.5 / - 0.5					

CIE Pub.117 Corrected 889.4 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.4)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2017-04-26

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:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

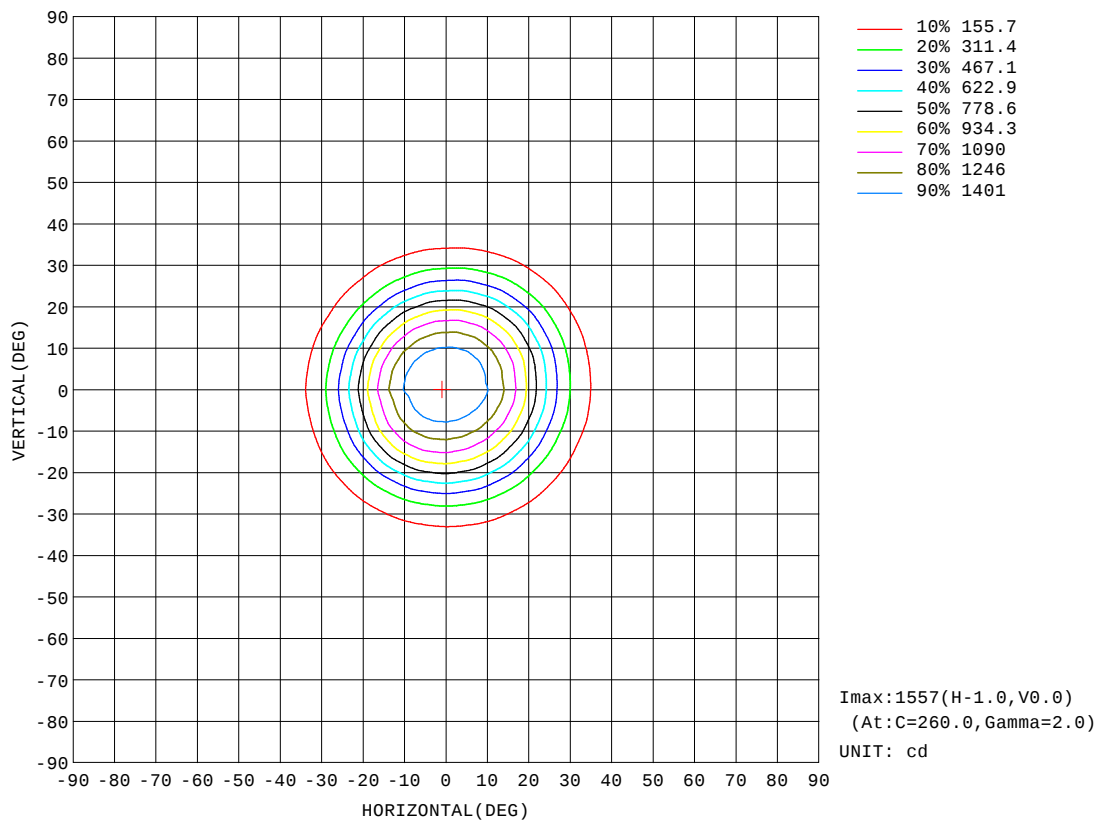
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	84	78	74	84	77	73	83	77	73	69
0.80	92	86	82	91	85	81	90	85	81	77
1.00	97	91	87	96	90	86	94	90	86	82
1.25	101	95	92	100	95	91	98	94	90	86
1.50	104	99	95	103	98	95	100	96	93	89
2.00	107	102	99	106	101	98	103	99	97	91
2.50	109	105	101	107	103	101	104	101	99	92
3.00	111	107	104	109	105	103	105	103	101	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	105	97
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: 2017-04-26

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:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:



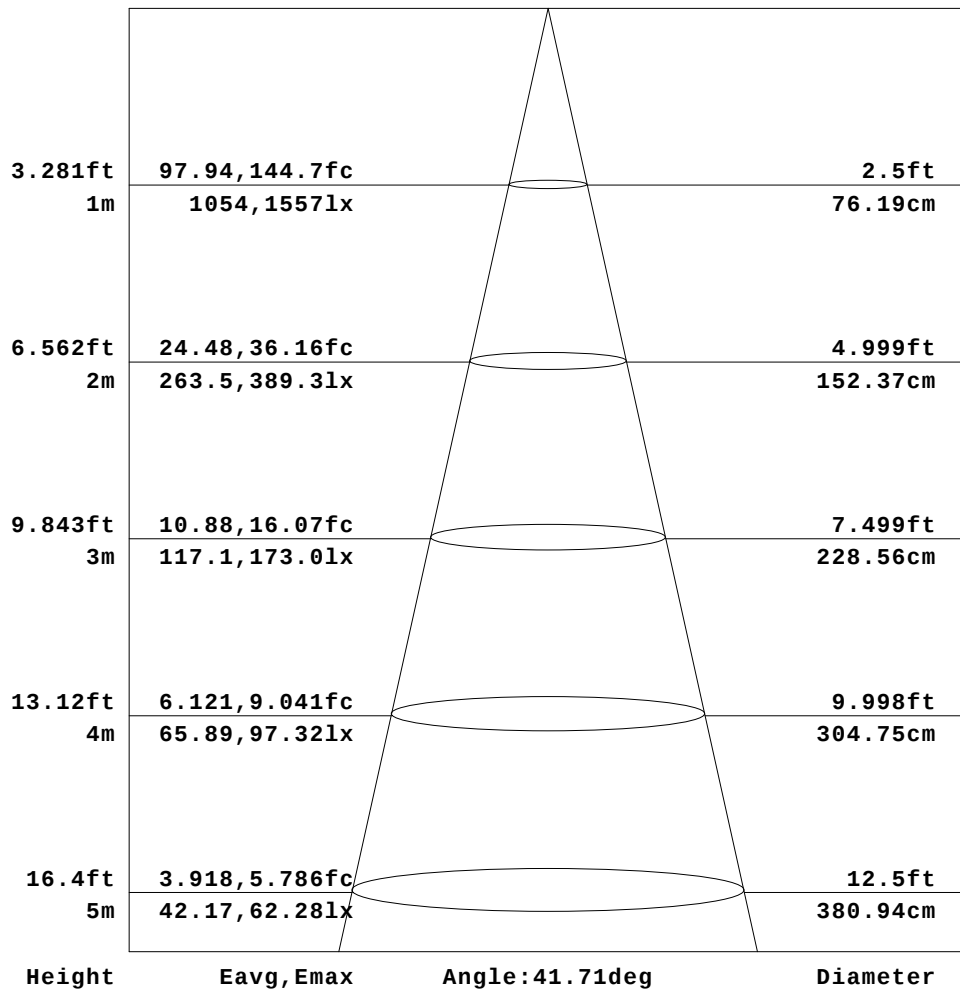
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:01
Test Date:2017-04-26

g 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:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co.,Ltd	SUR.:	PROTECTION ANGLE:

Flux out:488.0 lm



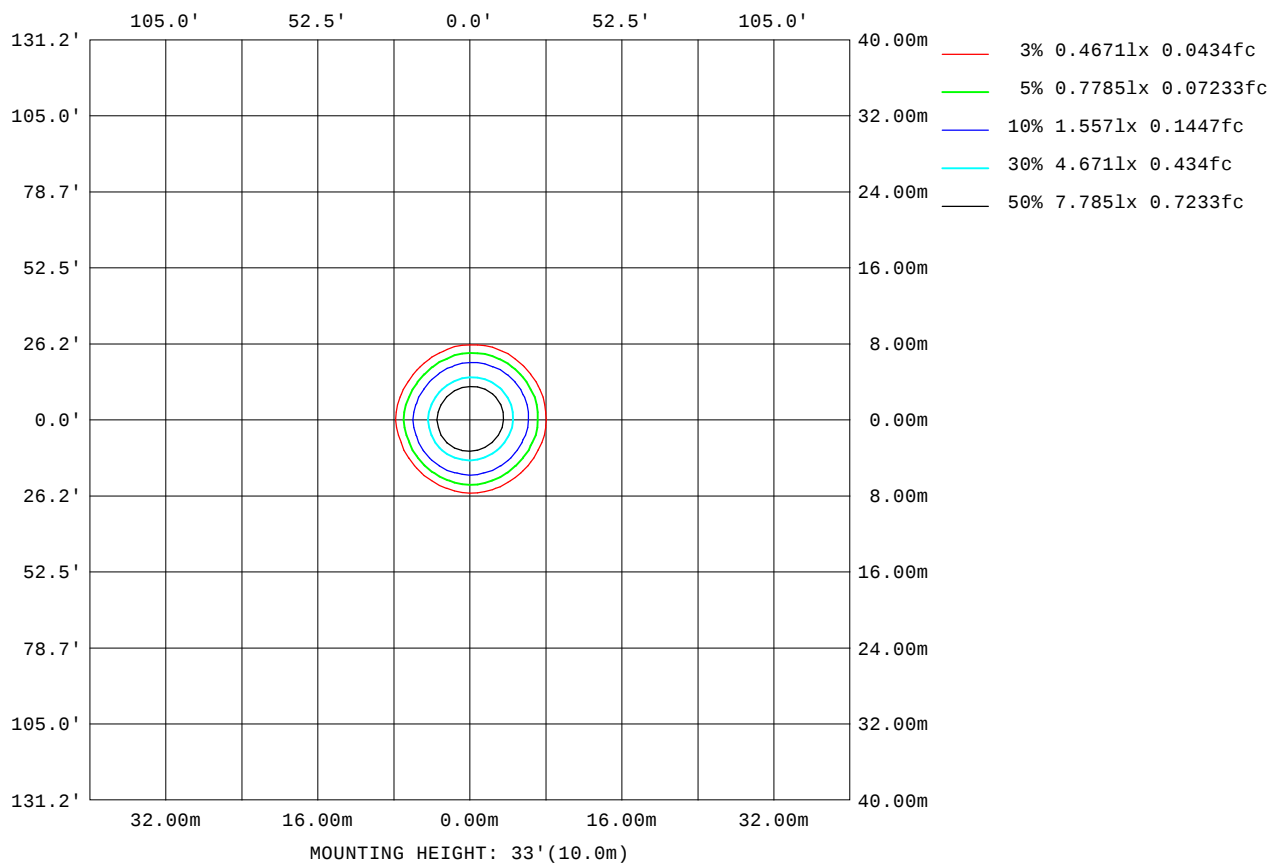
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 01
Test Date: 2017-04-26

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

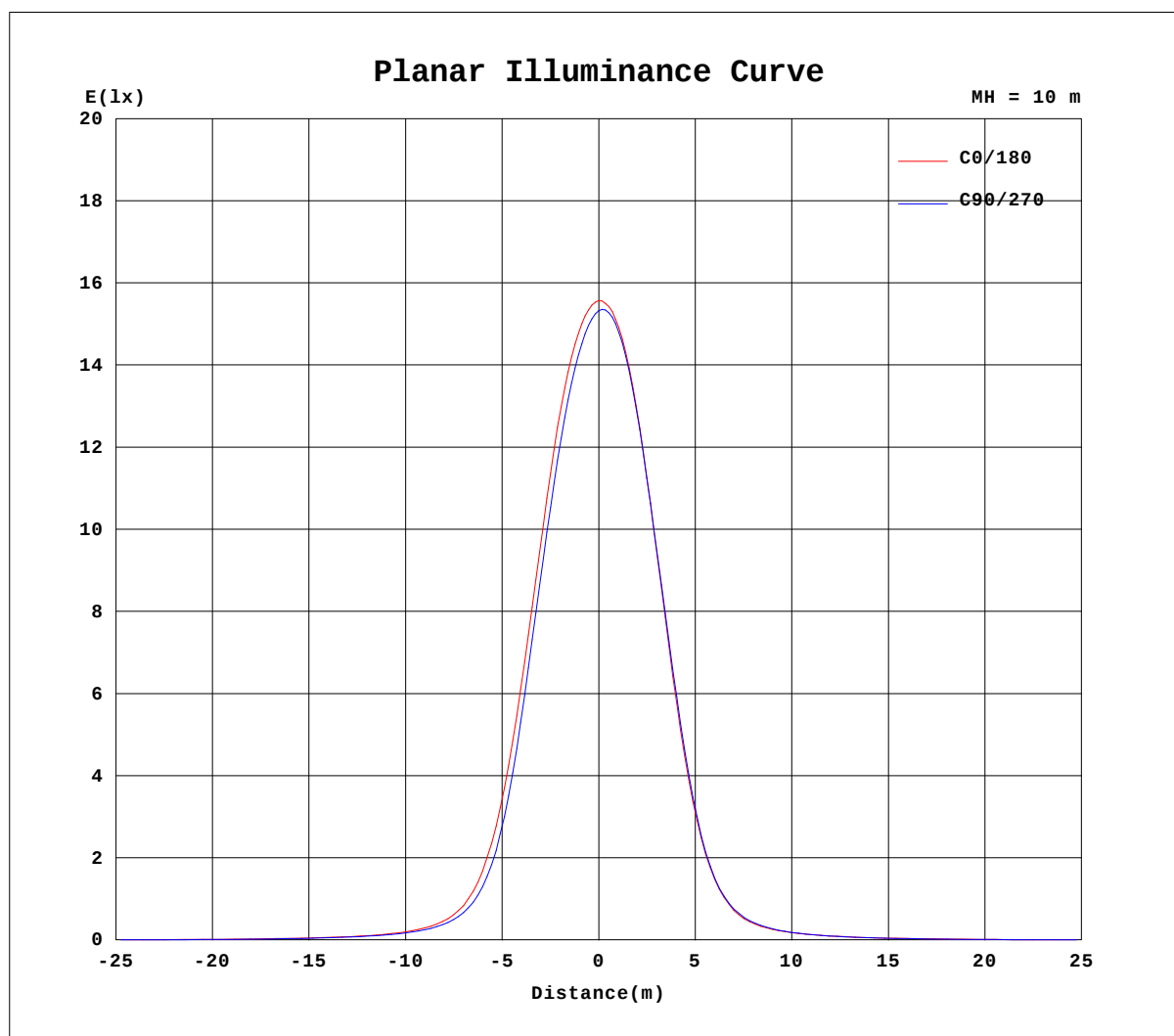
Test:U:230.3V I:0.0471A P:9.977W PF:0.9188 Lamp Flux:889.417x1 lm		
NAME: 5RS019-3000k	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:001
MFR.: Suzhou Radiant Lighting Technology Co., Ltd	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 01
 Test Date: 2017-04-26

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: 2017-04-26

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:

