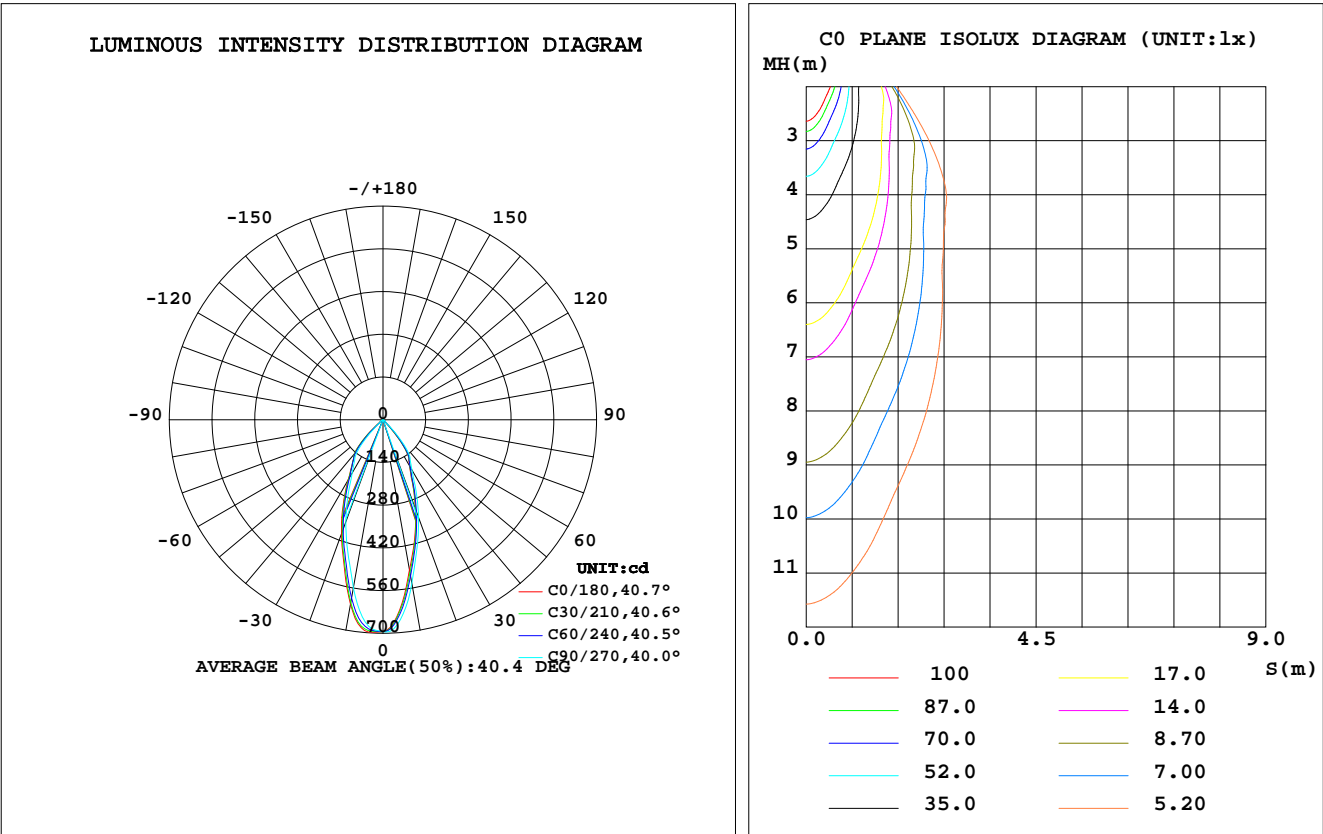


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 61.17 lm/W
MODEL	M011-8W-927-S-40	Imax(cd)	698.7	S/MH(C0/180)	0.56	
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.61	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	470.41	η UP,DN(C0-180)	1.2,46.5	
NOMINAL FLUX(lm)	470.406	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,51.2	
LAMPS INSIDE	1	η up(%)	2.3	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	226.5	η down(%)	97.7	CIBSE SHR MAX	0.65	



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.250m [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	500.4	515.1	544.4	583.8	614.3	601.4	559.1	519.2	0- 10	59.57	59.57	12.7,12.7
20	311.0	317.2	340.8	374.7	398.6	386.1	355.8	327.6	10- 20	123.8	183.3	39,39
30	174.2	177.0	190.8	210.0	230.0	222.6	202.5	182.6	20- 30	122.5	305.8	65,65
40	77.38	83.88	107.4	132.7	146.2	143.0	122.9	95.32	30- 40	98.15	403.9	85.9,85.9
50	10.01	10.22	11.39	14.24	18.62	15.59	12.69	11.11	40- 50	38.97	442.9	94.2,94.2
60	5.152	5.332	6.261	7.421	8.139	7.893	6.846	5.780	50- 60	8.341	451.3	95.9,95.9
70	2.889	2.916	3.246	3.778	4.035	3.905	3.524	3.138	60- 70	4.677	455.9	96.9,96.9
80	0.8846	0.9217	1.005	1.326	1.823	1.489	1.021	0.9521	70- 80	2.533	458.5	97.5,97.5
90	0.6976	0.6981	0.6836	0.6762	0.7731	0.7748	0.7719	0.7933	80- 90	0.9137	459.4	97.7,97.7
100	0.8358	0.8397	0.7994	0.7595	0.9052	0.9038	0.9252	0.9691	90-100	0.8609	460.2	97.8,97.8
110	1.112	1.104	1.052	0.9826	1.127	1.126	1.167	1.228	100-110	1.036	461.3	98.1,98.1
120	1.533	1.518	1.445	1.349	1.454	1.461	1.512	1.605	110-120	1.275	462.6	98.3,98.3
130	2.103	2.081	1.990	1.871	1.920	1.935	2.006	2.120	120-130	1.549	464.1	98.7,98.7
140	2.696	2.684	2.598	2.481	2.477	2.496	2.580	2.685	130-140	1.771	465.9	99,99
150	3.075	3.087	3.056	2.977	2.942	2.959	3.005	3.073	140-150	1.769	467.6	99.4,99.4
160	3.320	3.335	3.321	3.269	3.239	3.262	3.289	3.333	150-160	1.463	469.1	99.7,99.7
170	3.471	3.498	3.508	3.483	3.455	3.467	3.487	3.501	160-170	0.9601	470.1	99.9,99.9
180	3.597	3.620	3.628	3.627	3.612	3.622	3.626	3.628	170-180	0.3375	470.4	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

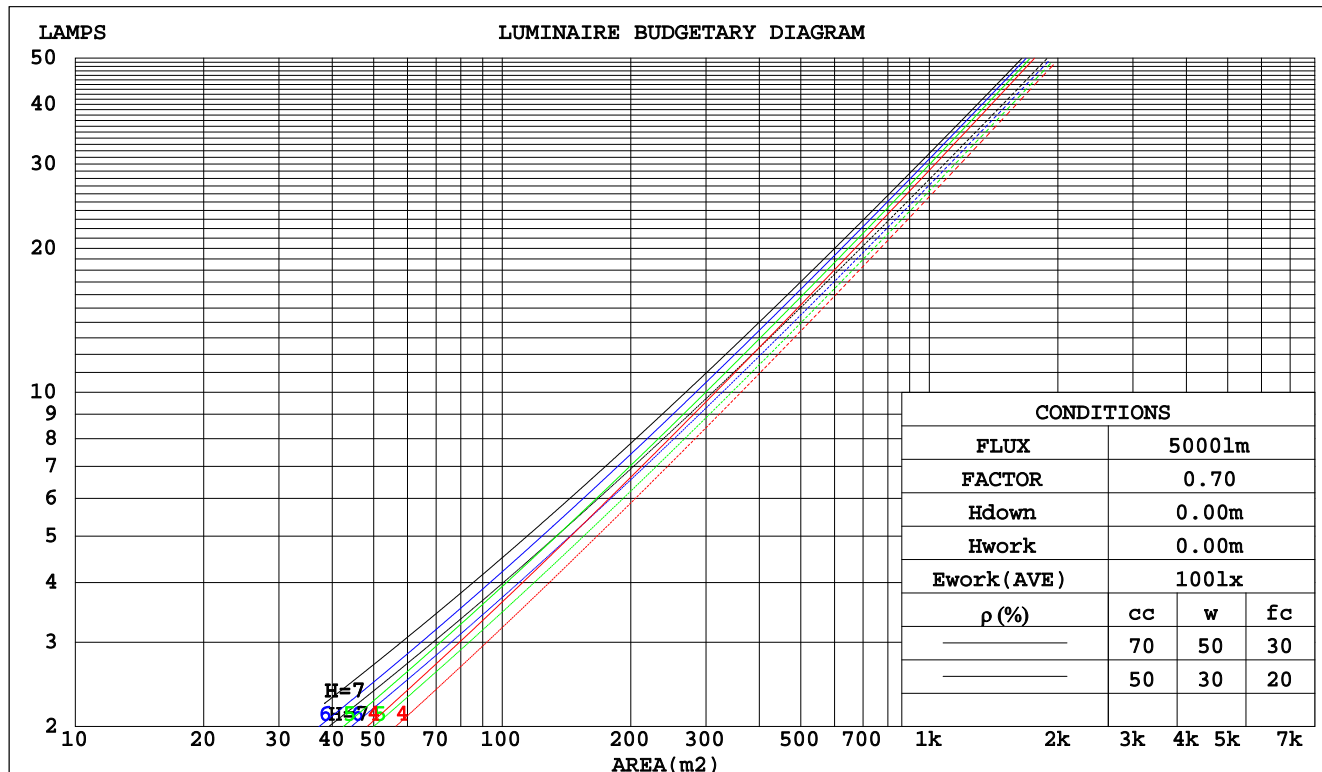
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.250m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION 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						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.10	1.07	1.05	1.07	1.05	1.03	1.03	1.01	.99	.99	.97	.96	.95	.94	.93	.91
2.0	1.02	.97	.94	.00	.96	.93	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.95	.89	.85	.93	.88	.84	.90	.86	.83	.87	.84	.81	.85	.82	.80	.78
4.0	.88	.82	.78	.87	.82	.77	.84	.80	.76	.82	.78	.75	.80	.77	.74	.72
5.0	.82	.76	.72	.81	.76	.71	.79	.74	.71	.77	.73	.70	.75	.72	.69	.67
6.0	.77	.71	.67	.76	.71	.66	.74	.69	.66	.73	.68	.65	.71	.67	.64	.63
7.0	.73	.66	.62	.72	.66	.62	.70	.65	.61	.69	.64	.61	.67	.63	.60	.59
8.0	.68	.62	.58	.68	.62	.58	.66	.61	.57	.65	.60	.57	.64	.60	.57	.55
9.0	.65	.59	.55	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.53	.52
10.0	.61	.55	.51	.61	.55	.51	.60	.54	.51	.59	.54	.51	.58	.54	.50	.49



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:

## WEC AND CCEC

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION 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	.187 .106 .034	.179 .102 .032	.165 .095 .030	.153 .088 .028	.141 .082 .026	
2.0	.178 .098 .030	.172 .095 .029	.160 .089 .028	.149 .084 .026	.139 .079 .025	
3.0	.169 .090 .027	.164 .088 .026	.154 .083 .025	.144 .079 .024	.135 .075 .023	
4.0	.161 .083 .025	.156 .082 .024	.147 .078 .023	.139 .074 .022	.131 .071 .022	
5.0	.153 .078 .023	.148 .076 .022	.141 .073 .022	.133 .070 .021	.126 .067 .020	
6.0	.145 .073 .021	.141 .071 .021	.134 .069 .020	.128 .066 .020	.122 .064 .019	
7.0	.138 .068 .019	.135 .067 .019	.129 .065 .019	.123 .063 .018	.117 .061 .018	
8.0	.132 .064 .018	.129 .063 .018	.123 .062 .018	.118 .060 .017	.113 .058 .017	
9.0	.126 .061 .017	.123 .060 .017	.118 .058 .017	.113 .057 .016	.109 .055 .016	
10.0	.121 .058 .016	.118 .057 .016	.114 .056 .016	.109 .054 .015	.105 .053 .015	

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	.208 .208 .208	.178 .178 .178	.122 .122 .122	.070 .070 .070	.022 .022 .022	
1.0	.190 .175 .162	.162 .150 .140	.111 .103 .096	.064 .060 .056	.020 .019 .018	
2.0	.175 .151 .130	.150 .130 .112	.103 .090 .078	.059 .052 .046	.019 .017 .015	
3.0	.163 .132 .107	.140 .114 .093	.096 .079 .065	.056 .046 .038	.018 .015 .013	
4.0	.153 .117 .090	.132 .101 .078	.090 .071 .055	.052 .041 .033	.017 .013 .011	
5.0	.145 .106 .077	.124 .092 .067	.086 .064 .047	.050 .038 .028	.016 .012 .009	
6.0	.137 .097 .067	.118 .084 .059	.082 .059 .042	.047 .034 .025	.015 .011 .008	
7.0	.131 .089 .060	.113 .077 .052	.078 .054 .037	.045 .032 .022	.015 .010 .007	
8.0	.125 .083 .054	.108 .072 .047	.075 .051 .033	.043 .030 .020	.014 .010 .007	
9.0	.120 .078 .049	.103 .068 .043	.072 .048 .031	.042 .028 .018	.014 .009 .006	
10.0	.115 .074 .046	.100 .064 .040	.069 .045 .028	.040 .027 .017	.013 .009 .006	

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.250m [K=1.0000]  
Remarks:

## Uncorrected UGR Table

NAME:					TYPE:					WEIGHT:				
DIM.:					SPEC.:					SERIAL No.:				
MFR.: Rayconn					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					19.4	20.3	19.6	20.5	20.7	20.2	21.1	20.4	21.3	21.5
3H					19.3	20.2	19.6	20.4	20.7	20.1	21.0	20.4	21.2	21.5
4H					19.3	20.1	19.6	20.4	20.6	20.1	20.9	20.4	21.2	21.5
6H					19.2	20.0	19.6	20.3	20.6	20.0	20.8	20.4	21.1	21.4
8H					19.2	19.9	19.5	20.2	20.5	20.0	20.8	20.4	21.1	21.4
12H					19.2	19.9	19.5	20.2	20.5	20.0	20.7	20.3	21.0	21.3
4H 2H					19.2	20.0	19.5	20.3	20.5	20.0	20.8	20.3	21.1	21.3
3H					19.2	19.9	19.5	20.2	20.5	19.9	20.7	20.3	21.0	21.3
4H					19.2	19.8	19.5	20.2	20.5	20.0	20.6	20.3	21.0	21.3
6H					19.1	19.7	19.5	20.1	20.5	19.9	20.5	20.3	20.9	21.3
8H					19.1	19.6	19.5	20.0	20.4	19.9	20.4	20.3	20.8	21.2
12H					19.1	19.6	19.5	20.0	20.4	19.9	20.4	20.3	20.8	21.2
8H 4H					19.1	19.6	19.5	20.0	20.4	19.8	20.4	20.3	20.8	21.2
6H					19.0	19.5	19.5	19.9	20.4	19.8	20.3	20.3	20.7	21.2
8H					19.0	19.4	19.5	19.9	20.4	19.8	20.2	20.3	20.7	21.1
12H					19.0	19.4	19.6	19.9	20.4	19.8	20.2	20.3	20.6	21.2
12H 4H					19.0	19.5	19.5	19.9	20.3	19.8	20.3	20.2	20.7	21.1
6H					19.0	19.4	19.5	19.8	20.3	19.8	20.2	20.3	20.6	21.1
8H					19.0	19.3	19.5	19.8	20.3	19.8	20.1	20.3	20.6	21.1
Variations with the observer position at spacings:														
S = 1.0H					+ 3.0 / - 6.0					+ 3.1 / - 6.2				
1.5H					+ 5.5 / - 5.2					+ 5.6 / - 5.7				
2.0H					+ 1.2 / - 1.2					+ 4.9 / - 1.5				

CIE Pub.117 Corrected 470.4 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.6)

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

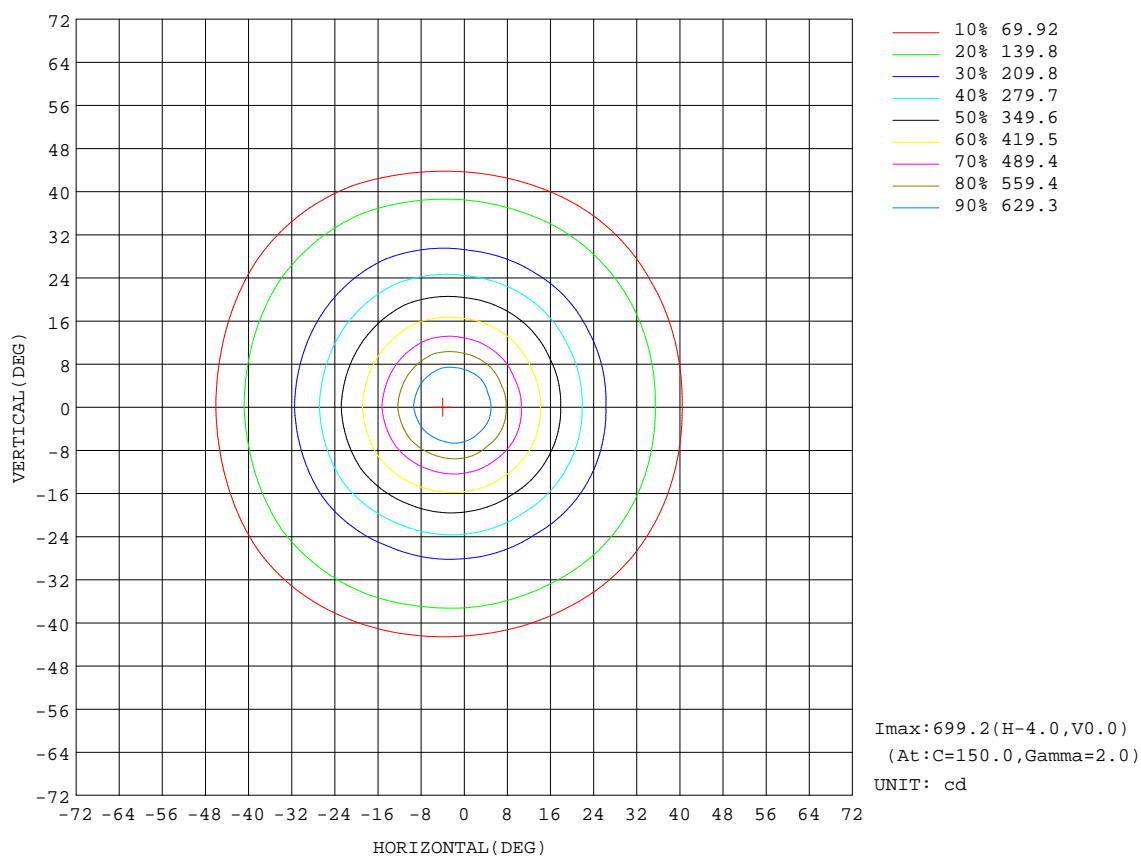
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	88	83	79	75
1.00	96	90	85	95	89	85	93	89	84	80
1.25	100	94	91	99	94	90	97	92	89	84
1.50	103	98	94	102	97	94	99	95	92	87
2.00	106	102	98	105	101	97	102	98	96	90
2.50	108	104	101	107	103	100	103	100	98	91
3.00	110	106	103	108	105	102	104	102	99	92
4.00	112	109	107	110	107	105	106	104	102	94
5.00	114	111	109	111	109	107	107	105	104	95
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



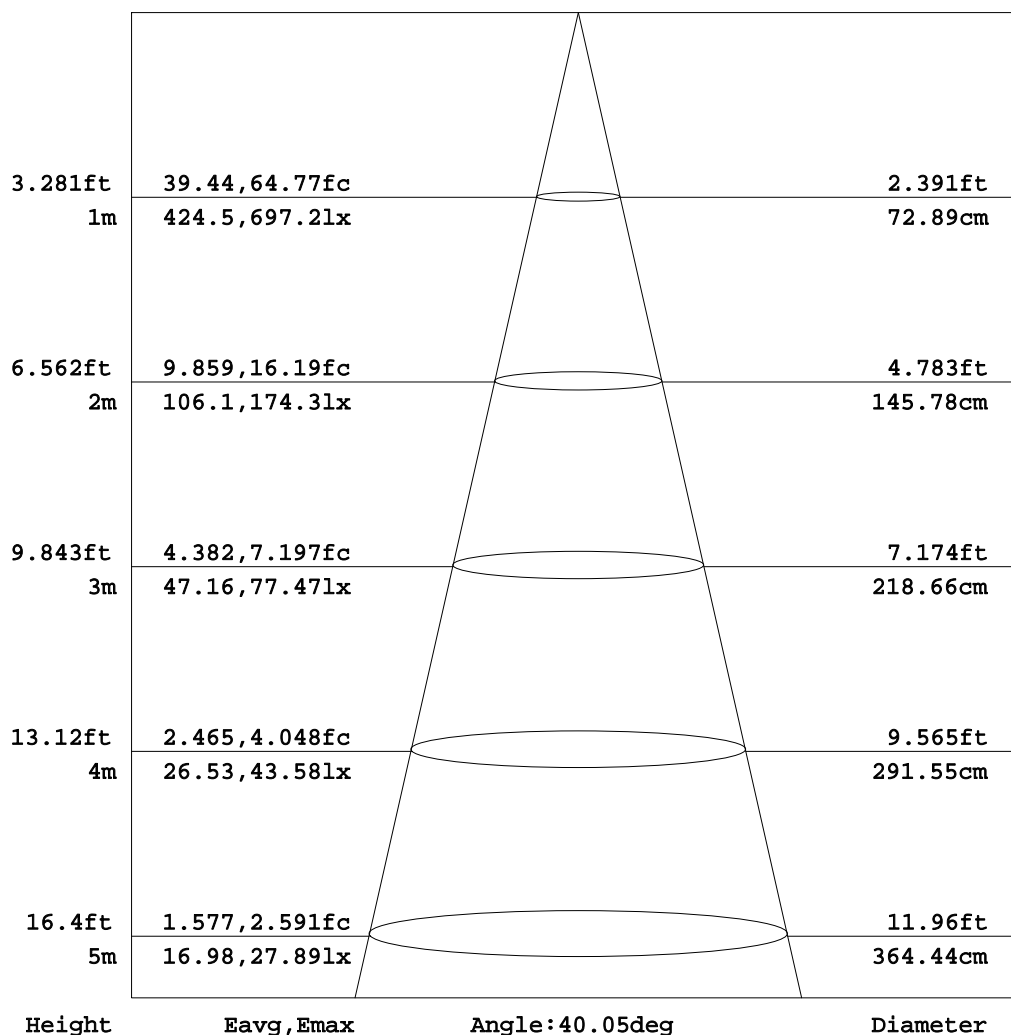
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: QiuMing  
 Test Date: 2016-06-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 6.250m [K=1.0000]  
 Remarks:

### AAI Figure

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

Flux out:196.5 lm



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

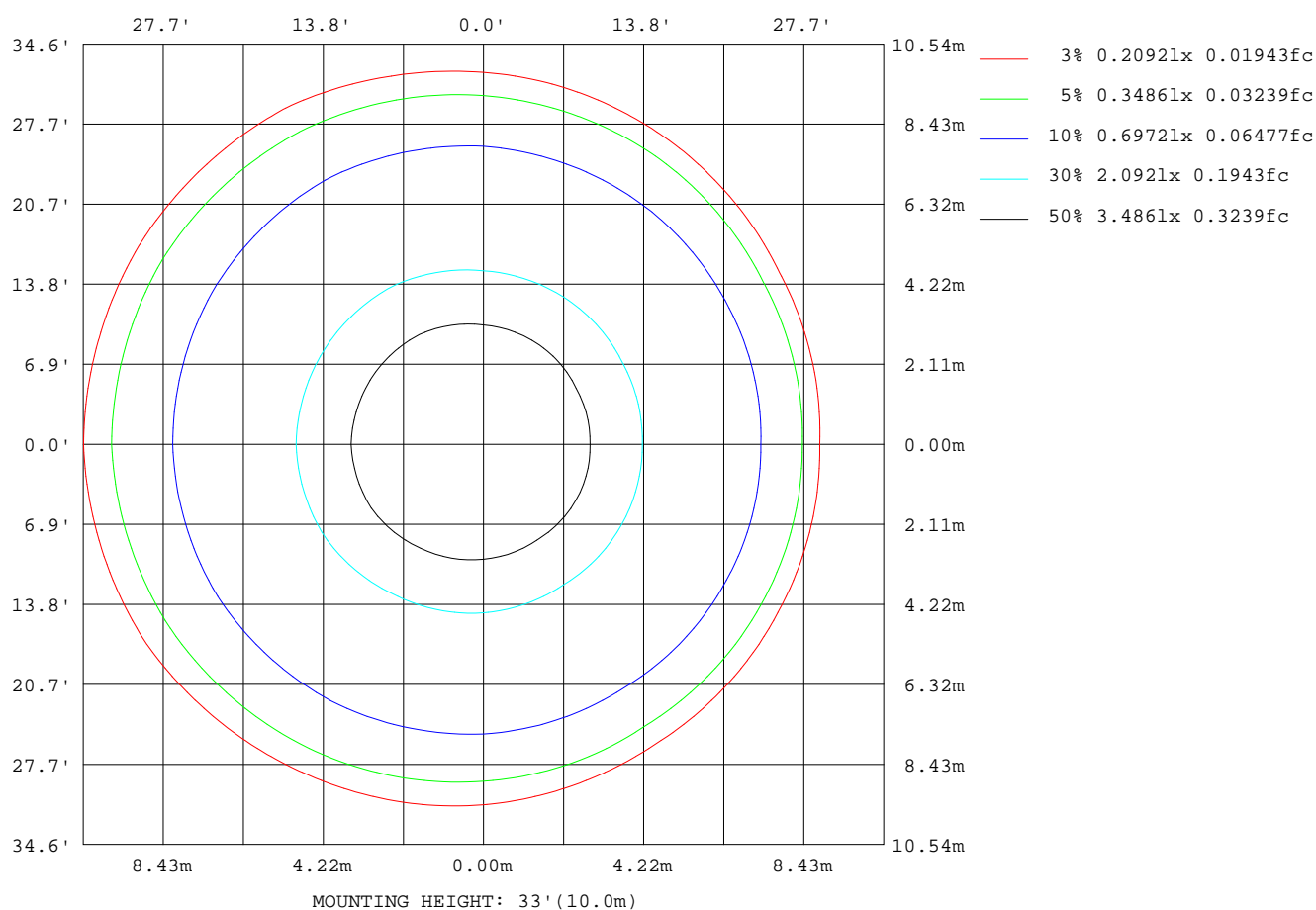
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:



## ISOLUX DIAGRAM

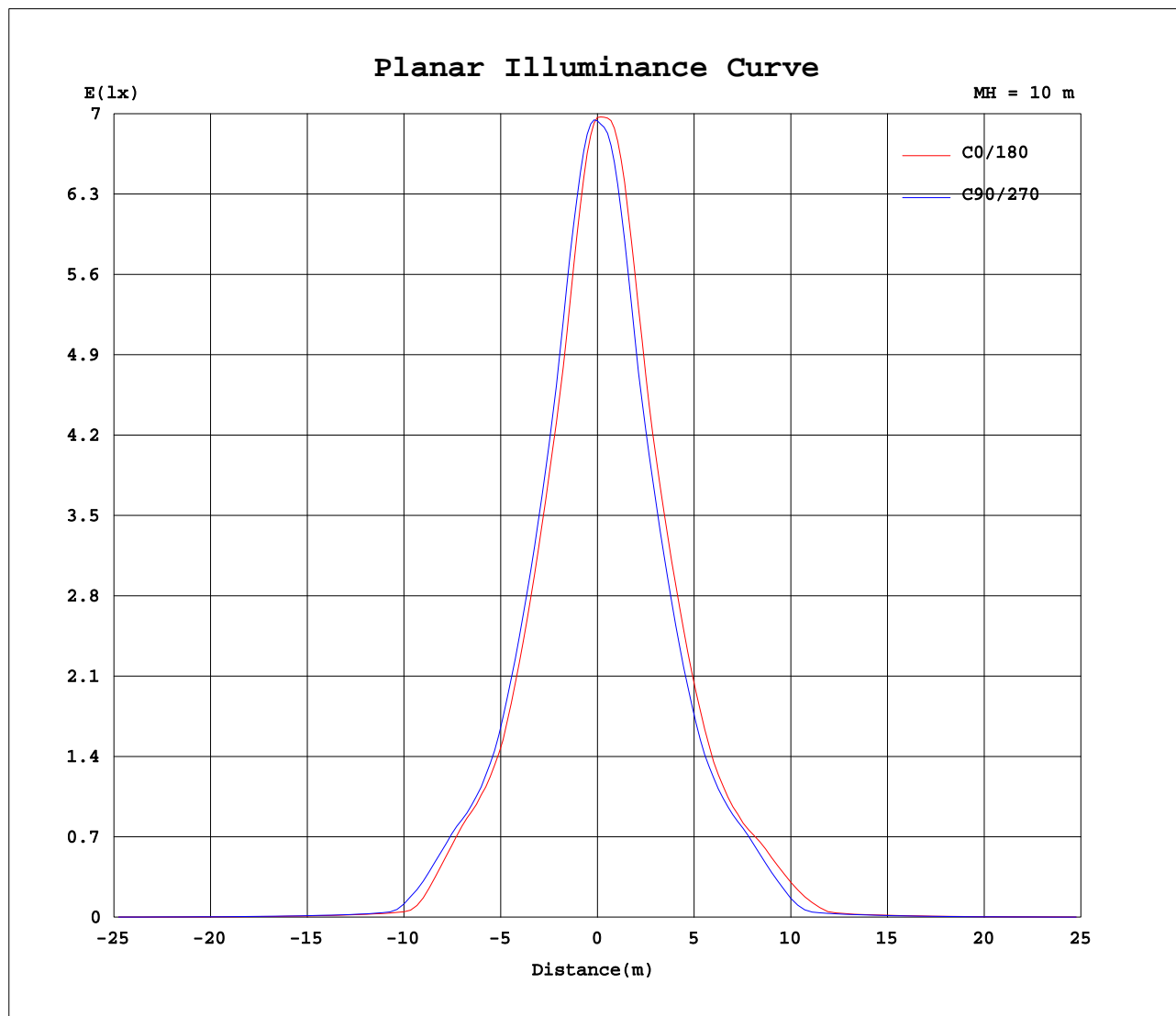
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: QiuMing  
Test Date: 2016-06-28

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 6.250m [K=1.0000]  
Remarks:

# LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	695	695	695	695	695	695	695	695	695	695	695	695							
5	626	631	639	657	672	686	693	688	679	666	651	632							
10	500	510	520	544	569	598	614	609	594	559	533	506							
15	402	408	414	433	453	481	494	486	474	447	428	408							
20	311	314	321	341	361	389	399	391	381	356	337	318							
25	228	232	236	257	274	301	310	304	296	271	253	237							
30	174	176	177	191	200	220	230	226	220	202	187	179							
35	144	146	148	155	160	171	175	175	175	163	152	148							
40	77.4	80.9	86.9	107	125	140	146	146	140	123	104	86.2							
45	13.6	14.0	16.7	32.7	53.4	74.8	86.0	83.8	72.6	46.4	26.9	14.7							
50	10.0	10.0	10.4	11.4	13.2	15.2	18.6	16.5	14.7	12.7	11.7	10.5							
55	7.61	7.66	8.00	8.82	9.71	10.5	10.9	10.8	10.4	9.61	8.76	7.93							
60	5.15	5.21	5.45	6.26	6.99	7.86	8.14	8.05	7.74	6.85	6.16	5.40							
65	3.72	3.73	3.83	4.27	4.79	5.38	5.59	5.49	5.26	4.69	4.27	3.86							
70	2.89	2.88	2.96	3.25	3.61	3.95	4.03	3.97	3.84	3.52	3.26	3.02							
75	1.73	1.82	2.01	2.40	2.78	3.09	3.13	3.06	2.99	2.71	2.38	1.98							
80	0.88	0.90	0.95	1.00	1.09	1.56	1.82	1.67	1.31	1.02	0.96	0.94							
85	0.70	0.70	0.70	0.71	0.79	0.87	0.95	0.94	0.86	0.82	0.77	0.78							
90	0.70	0.71	0.69	0.68	0.68	0.67	0.77	0.78	0.77	0.77	0.79	0.80							
95	0.76	0.76	0.73	0.72	0.70	0.70	0.82	0.80	0.83	0.83	0.87	0.89							
100	0.84	0.85	0.83	0.80	0.76	0.76	0.91	0.90	0.91	0.93	0.96	0.98							
105	0.96	0.97	0.93	0.91	0.86	0.85	1.01	0.99	1.02	1.03	1.08	1.10							
110	1.11	1.12	1.09	1.05	0.99	0.97	1.13	1.11	1.14	1.17	1.21	1.24							
115	1.30	1.31	1.27	1.23	1.16	1.13	1.28	1.26	1.29	1.32	1.38	1.42							
120	1.53	1.54	1.50	1.45	1.37	1.33	1.45	1.44	1.48	1.51	1.58	1.63							
125	1.81	1.81	1.76	1.70	1.62	1.57	1.67	1.66	1.70	1.74	1.82	1.88							
130	2.10	2.11	2.05	1.99	1.90	1.84	1.92	1.91	1.96	2.01	2.09	2.15							
135	2.40	2.41	2.36	2.30	2.20	2.15	2.20	2.19	2.24	2.30	2.38	2.44							
140	2.70	2.71	2.66	2.60	2.51	2.45	2.48	2.47	2.52	2.58	2.65	2.72							
145	2.92	2.94	2.91	2.87	2.79	2.74	2.74	2.73	2.78	2.82	2.88	2.92							
150	3.08	3.10	3.07	3.06	2.99	2.96	2.94	2.94	2.98	3.01	3.07	3.08							
155	3.21	3.24	3.21	3.20	3.15	3.12	3.10	3.11	3.14	3.15	3.20	3.22							
160	3.32	3.35	3.32	3.32	3.27	3.27	3.24	3.25	3.27	3.29	3.33	3.33							
165	3.40	3.43	3.42	3.42	3.39	3.38	3.36	3.35	3.39	3.39	3.43	3.42							
170	3.47	3.51	3.49	3.51	3.49	3.48	3.45	3.45	3.48	3.49	3.51	3.49							
175	3.53	3.57	3.56	3.59	3.56	3.57	3.54	3.54	3.57	3.55	3.57	3.56							
180	3.60	3.62	3.62	3.63	3.62	3.63	3.61	3.62	3.63	3.63	3.63	3.63							

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:QiuMing  
Test Date:2016-06-28

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:6.250m [K=1.0000]  
Remarks: