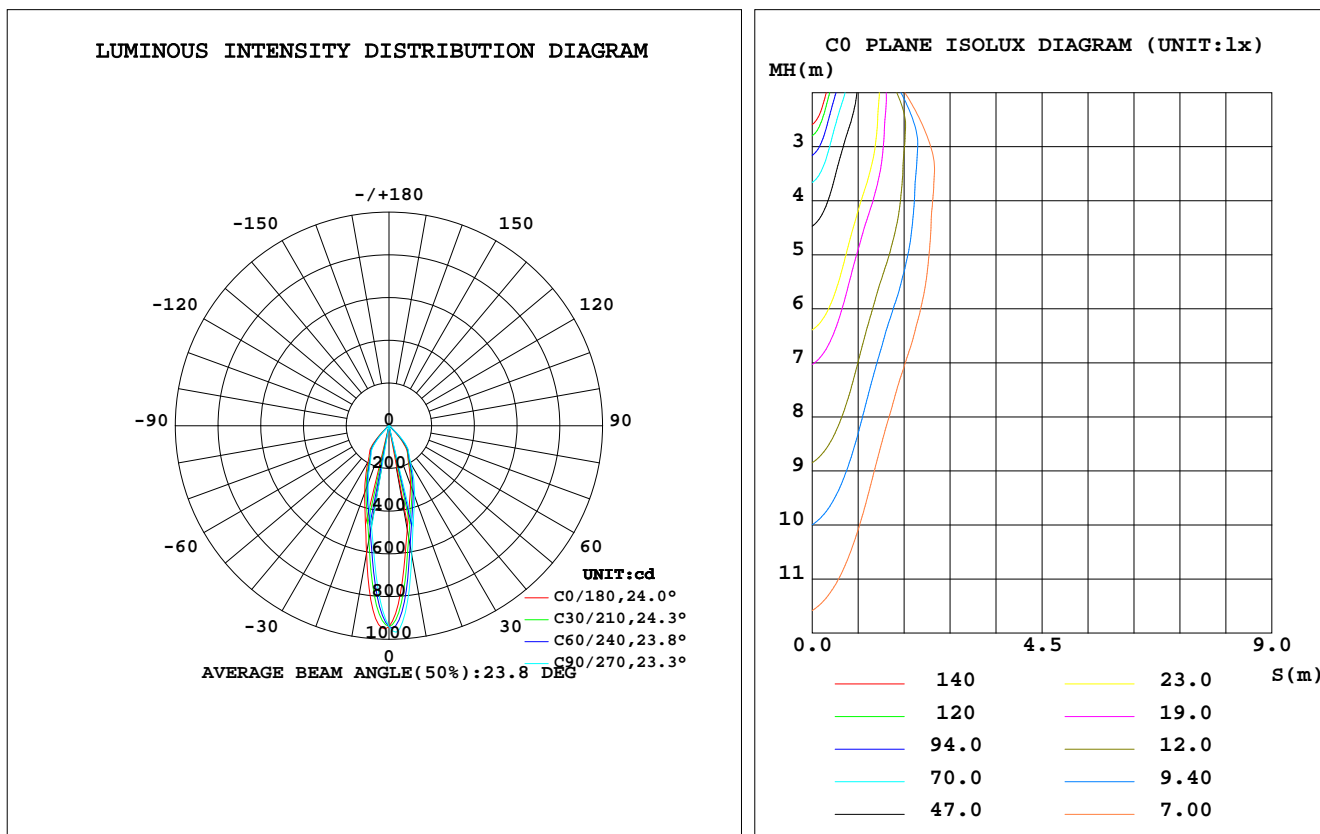


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 59.05 lm/W			
MODEL	M011-8W-927-S-28	Imax(cd)	975.0	S/MH(C0/180)	0.36
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.45
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	457.08	η UP,DN(C0-180)	1.1,52.0
NOMINAL FLUX(lm)	457.076	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,45.7
LAMPS INSIDE	1	η up(%)	2.3	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	226.5	η down(%)	97.7	CIBSE SHR MAX	0.55



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	492.5	551.1	614.1	626.6	606.2	525.3	476.2	477.2	0- 10	67.22	67.22	14.7,14.7
20	293.7	322.7	350.9	347.9	334.3	306.6	285.5	284.9	10- 20	113.7	180.9	39.6,39.6
30	179.1	189.8	206.7	202.4	196.9	178.8	171.5	171.8	20- 30	112.1	292.9	64.1,64.1
40	100.5	121.4	136.2	135.9	127.9	108.6	89.20	89.07	30- 40	94.78	387.7	84.8,84.8
50	12.71	15.18	18.15	18.43	16.31	13.81	12.26	11.81	40- 50	40.06	427.8	93.6,93.6
60	6.670	7.500	8.163	8.383	7.956	7.018	6.357	6.213	50- 60	9.218	437.0	95.6,95.6
70	3.934	4.451	4.735	4.744	4.468	4.027	3.649	3.646	60- 70	5.480	442.5	96.8,96.8
80	0.9804	1.107	1.843	1.910	1.261	1.071	0.9713	0.9385	70- 80	3.023	445.5	97.5,97.5
90	0.6791	0.6662	0.6613	0.6824	0.7508	0.7712	0.7750	0.7854	80- 90	0.9388	446.4	97.7,97.7
100	0.7695	0.7407	0.7267	0.7152	0.9065	0.9268	0.9643	0.9699	90-100	0.8415	447.3	97.9,97.9
110	1.034	0.9865	0.9522	0.9353	1.129	1.171	1.202	1.211	100-110	1.004	448.3	98.1,98.1
120	1.402	1.334	1.283	1.269	1.447	1.504	1.560	1.562	110-120	1.228	449.5	98.3,98.3
130	1.944	1.844	1.766	1.742	1.908	1.991	2.070	2.071	120-130	1.477	451.0	98.7,98.7
140	2.550	2.461	2.393	2.362	2.482	2.555	2.618	2.611	130-140	1.708	452.7	99.99
150	2.950	2.902	2.873	2.842	2.911	2.944	2.988	2.956	140-150	1.710	454.4	99.4,99.4
160	3.207	3.174	3.157	3.123	3.182	3.203	3.218	3.199	150-160	1.410	455.8	99.7,99.7
170	3.389	3.374	3.374	3.337	3.390	3.393	3.399	3.339	160-170	0.9272	456.8	99.9,99.9
180	3.491	3.487	3.484	3.441	3.491	3.486	3.467	3.435	170-180	0.3250	457.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

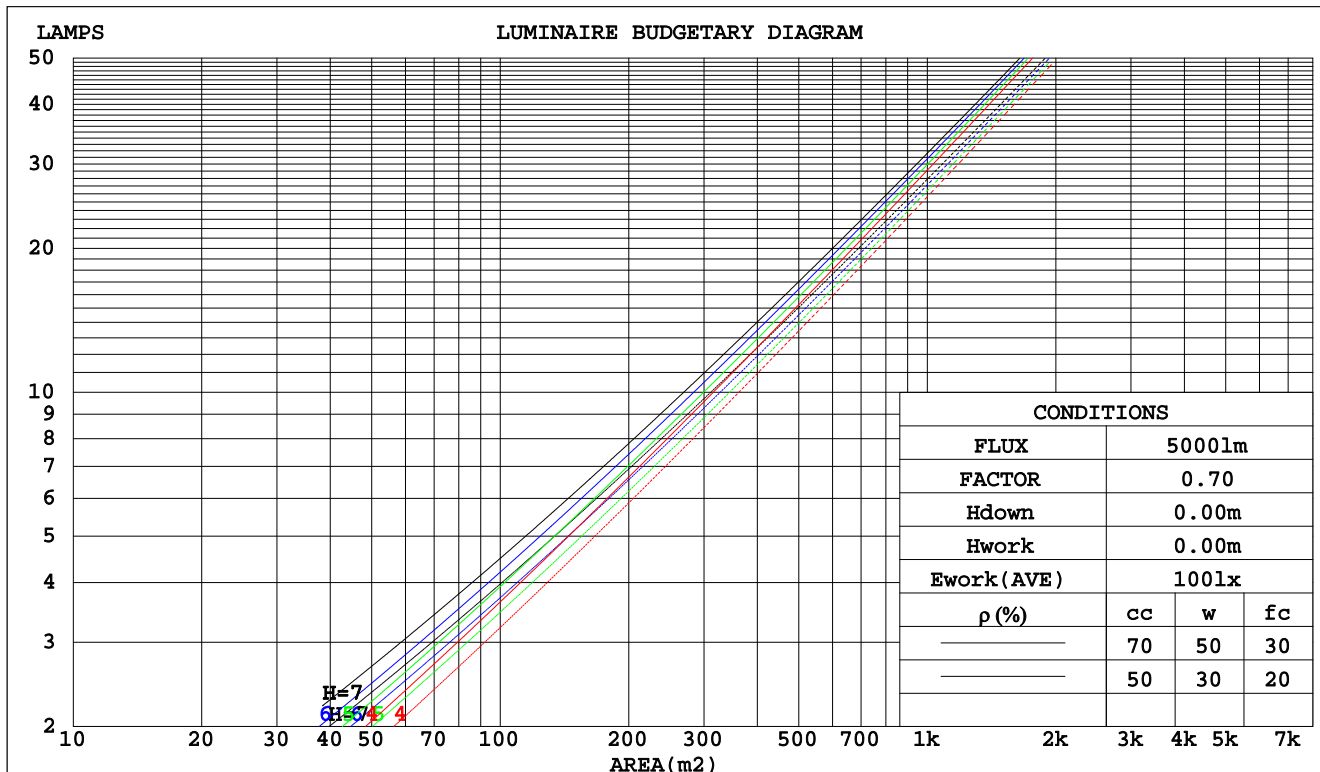
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ 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	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	.90	.96	.93	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.94	.89	.85	.93	.88	.84	.90	.86	.83	.87	.84	.81	.85	.82	.80	.78
4.0	.88	.82	.78	.87	.81	.77	.84	.80	.76	.82	.78	.75	.80	.77	.74	.72
5.0	.82	.76	.72	.81	.76	.72	.79	.74	.71	.77	.73	.70	.75	.72	.69	.67
6.0	.77	.71	.67	.76	.71	.66	.75	.70	.66	.73	.69	.65	.71	.68	.65	.63
7.0	.73	.67	.62	.72	.66	.62	.70	.65	.62	.69	.64	.61	.68	.64	.61	.59
8.0	.69	.62	.58	.68	.62	.58	.67	.61	.58	.65	.61	.57	.64	.60	.57	.56
9.0	.65	.59	.55	.64	.59	.55	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.56	.52	.61	.55	.52	.60	.55	.51	.59	.54	.51	.58	.54	.51	.50



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 .107 .034	.180 .103 .033	.166 .095 .030	.153 .088 .028	.141 .082 .026	
2.0	.179 .098 .030	.173 .095 .029	.161 .089 .028	.150 .084 .026	.140 .079 .025	
3.0	.170 .090 .027	.164 .088 .026	.154 .083 .025	.144 .079 .024	.136 .075 .023	
4.0	.161 .084 .025	.156 .082 .024	.147 .078 .023	.139 .074 .022	.131 .071 .022	
5.0	.153 .078 .023	.148 .076 .022	.140 .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	.128 .065 .019	.122 .063 .018	.117 .061 .018	
8.0	.131 .064 .018	.128 .063 .018	.123 .061 .018	.118 .060 .017	.113 .058 .017	
9.0	.125 .061 .017	.123 .060 .017	.118 .058 .016	.113 .057 .016	.108 .055 .016	
10.0	.120 .058 .016	.118 .057 .016	.113 .055 .016	.109 .054 .015	.104 .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	.121 .121 .121	.070 .070 .070	.022 .022 .022	
1.0	.190 .175 .162	.162 .150 .139	.111 .103 .096	.064 .060 .056	.020 .019 .018	
2.0	.175 .150 .130	.150 .130 .112	.103 .090 .078	.059 .052 .046	.019 .017 .015	
3.0	.163 .132 .107	.140 .114 .092	.096 .079 .065	.055 .046 .038	.018 .015 .013	
4.0	.153 .117 .090	.131 .101 .078	.090 .071 .055	.052 .041 .032	.017 .013 .011	
5.0	.145 .106 .077	.124 .091 .067	.086 .064 .047	.050 .038 .028	.016 .012 .009	
6.0	.137 .097 .067	.118 .084 .059	.081 .059 .041	.047 .034 .025	.015 .011 .008	
7.0	.131 .089 .060	.112 .077 .052	.078 .054 .037	.045 .032 .022	.015 .010 .007	
8.0	.125 .083 .054	.108 .072 .047	.074 .050 .033	.043 .030 .020	.014 .010 .007	
9.0	.120 .078 .049	.103 .067 .043	.071 .047 .031	.042 .028 .018	.013 .009 .006	
10.0	.115 .073 .046	.099 .064 .040	.069 .045 .028	.040 .026 .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	21.2	22.2	21.5	22.4	22.6	22.3	23.2	22.5	23.4	23.6				
3H	21.2	22.1	21.5	22.3	22.6	22.2	23.1	22.5	23.4	23.6				
4H	21.2	22.0	21.5	22.3	22.6	22.2	23.1	22.6	23.3	23.6				
6H	21.1	21.9	21.5	22.2	22.5	22.2	23.0	22.6	23.3	23.6				
8H	21.1	21.9	21.5	22.2	22.5	22.2	23.0	22.6	23.3	23.6				
12H	21.1	21.8	21.4	22.1	22.4	22.2	22.9	22.5	23.2	23.5				
4H 2H	21.0	21.9	21.4	22.1	22.4	22.1	22.9	22.4	23.1	23.4				
3H	21.1	21.8	21.5	22.1	22.5	22.1	22.8	22.4	23.1	23.4				
4H	21.2	21.8	21.5	22.1	22.5	22.2	22.8	22.5	23.1	23.5				
6H	21.1	21.7	21.5	22.1	22.5	22.2	22.8	22.6	23.1	23.5				
8H	21.1	21.6	21.5	22.0	22.4	22.2	22.7	22.6	23.1	23.5				
12H	21.1	21.5	21.5	22.0	22.4	22.1	22.6	22.6	23.0	23.5				
8H 4H	21.1	21.6	21.5	22.0	22.4	22.1	22.6	22.5	23.0	23.4				
6H	21.1	21.5	21.5	21.9	22.4	22.1	22.6	22.6	23.0	23.5				
8H	21.0	21.4	21.5	21.9	22.4	22.1	22.5	22.6	23.0	23.4				
12H	21.0	21.4	21.5	21.9	22.4	22.1	22.4	22.6	22.9	23.4				
12H 4H	21.1	21.5	21.5	22.0	22.4	22.0	22.5	22.5	22.9	23.4				
6H	21.0	21.4	21.5	21.9	22.4	22.1	22.5	22.6	22.9	23.4				
8H	21.0	21.3	21.5	21.8	22.3	22.1	22.4	22.6	22.9	23.4				
Variations with the observer position at spacings:														
S = 1.0H	+ 2.2 / - 5.6					+ 2.1 / - 5.2								
1.5H	+ 4.3 / - 5.2					+ 3.8 / - 5.3								
2.0H	+ 2.8 / - 1.2					+ 6.4 / - 2.7								

CIE Pub.117 Corrected 457.1 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.7)

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:

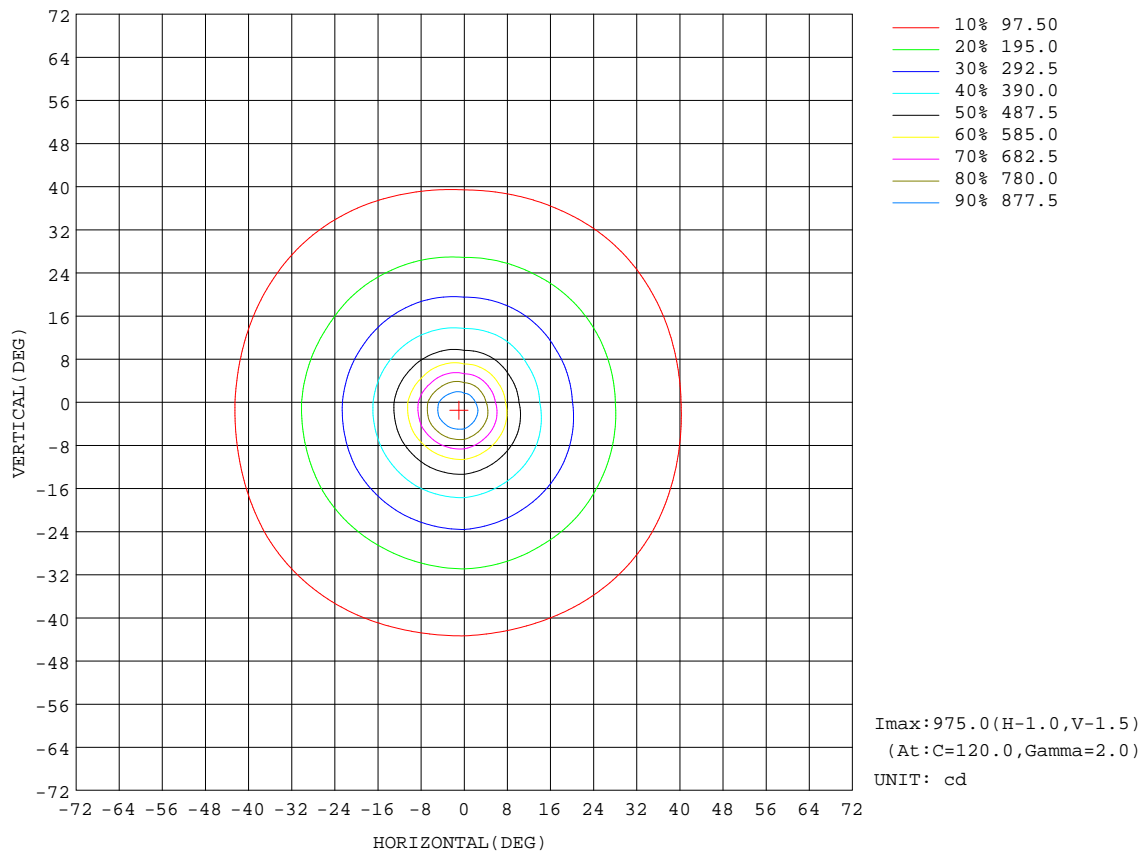
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	71	81	75	71	80	74	70	66
0.80	90	83	79	89	83	79	88	82	78	74
1.00	95	89	85	94	88	84	92	88	84	79
1.25	100	94	90	99	93	89	96	92	89	84
1.50	103	97	94	101	97	93	99	95	92	87
2.00	106	101	98	105	100	97	101	98	95	89
2.50	108	104	100	106	102	99	103	100	97	90
3.00	110	106	103	108	104	102	104	101	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	114	111	109	111	109	107	107	105	103	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

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ 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:



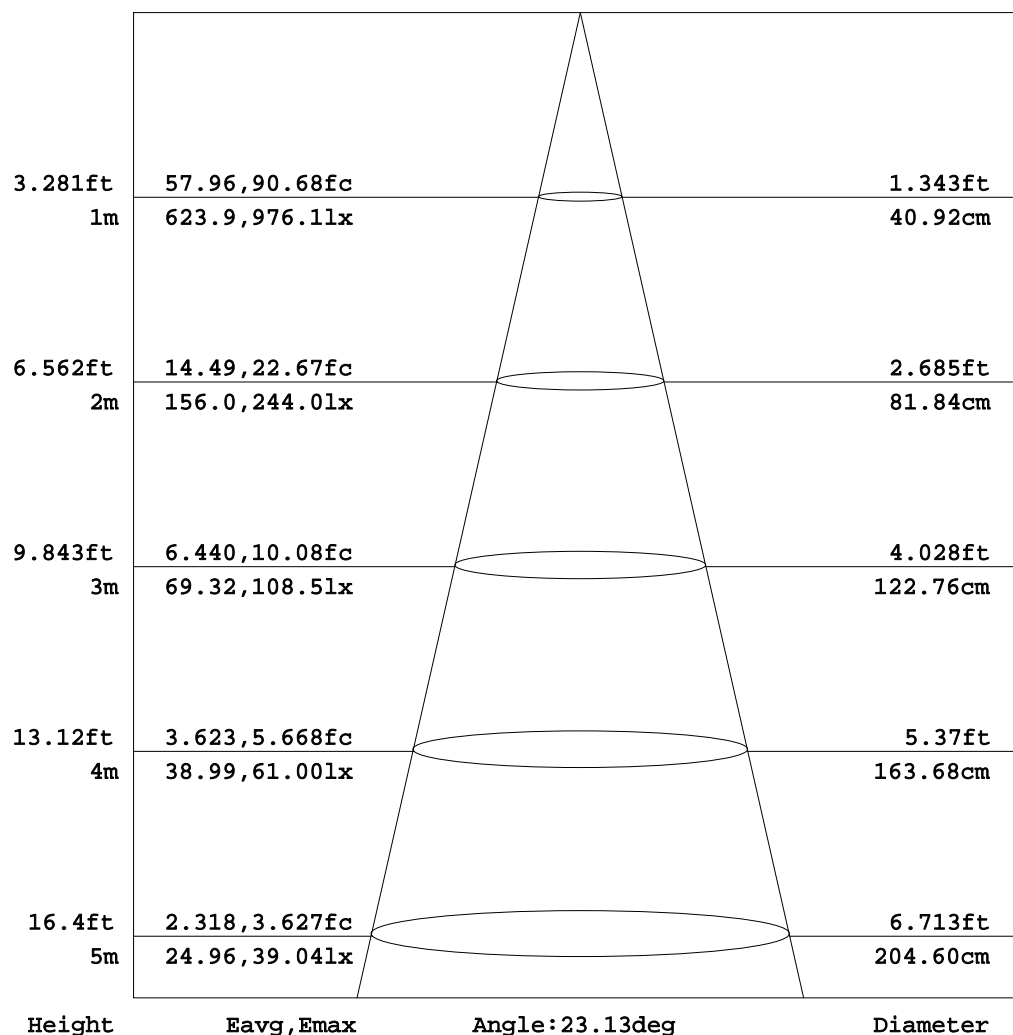
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-28

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ 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:88.56 lm



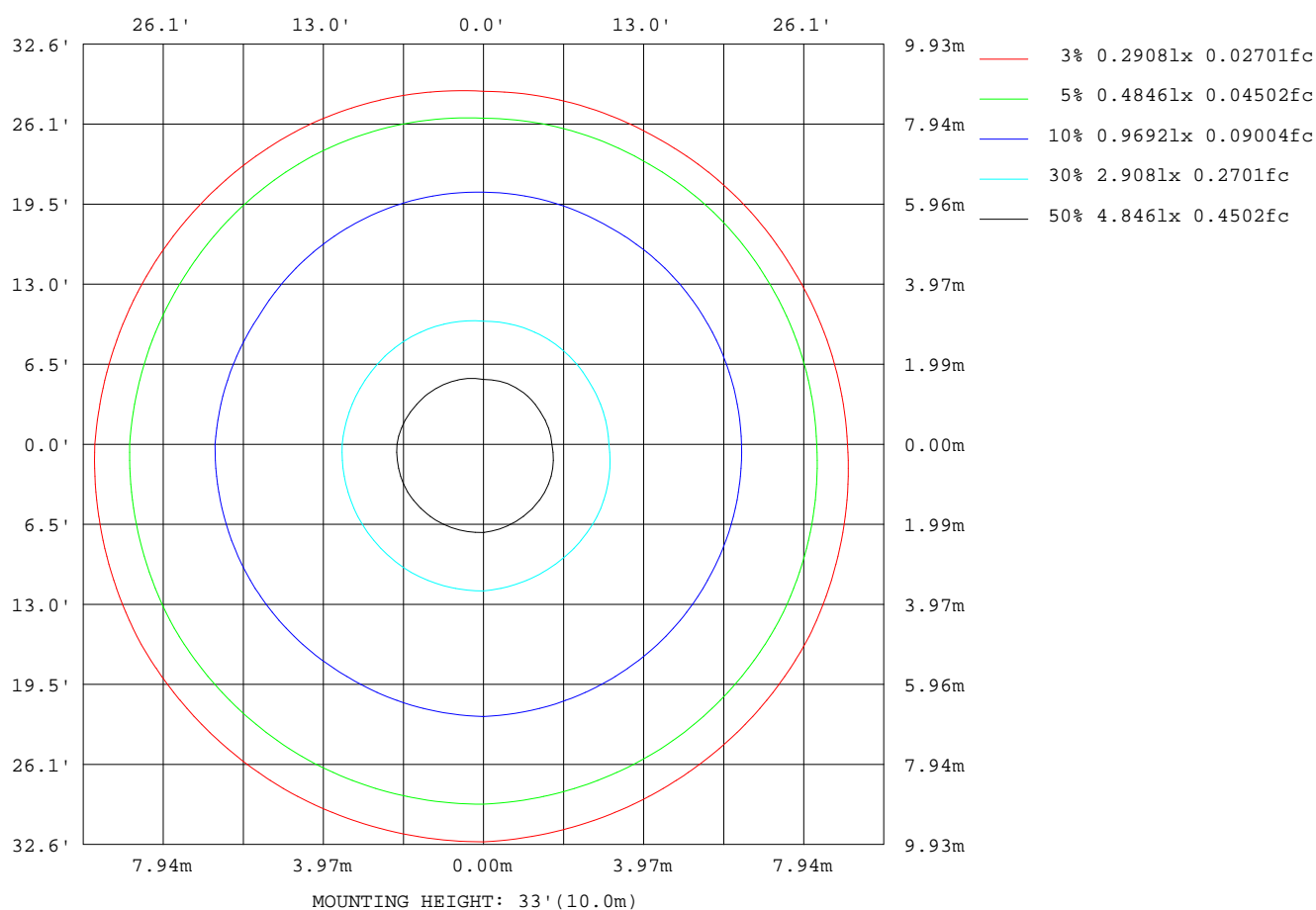
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

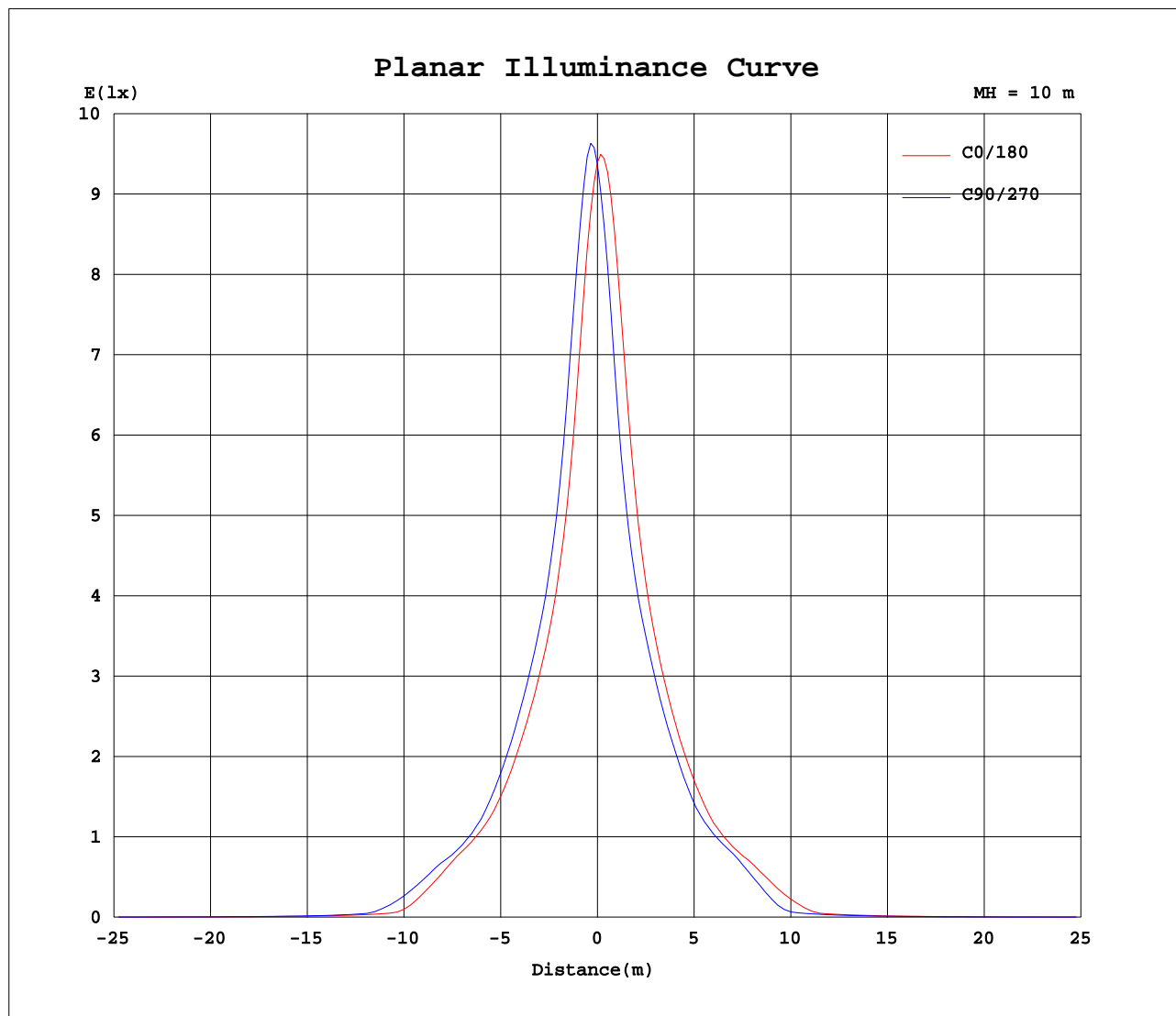
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



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

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:

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	940	940	940	940	940	940	940	940	940	940	940	940							
5	727	781	828	878	893	897	866	795	744	700	696	702							
10	492	532	570	614	624	629	606	545	506	476	477	477							
15	371	400	421	445	449	445	433	404	384	367	367	364							
20	294	314	331	351	351	345	334	313	300	286	284	285							
25	228	244	257	274	271	269	259	241	228	218	216	220							
30	179	186	194	207	202	202	197	182	176	171	169	174							
35	149	153	159	163	161	162	160	150	149	145	144	146							
40	100	116	127	136	136	135	128	114	103	89.2	86.6	91.5							
45	27.9	48.4	62.5	75.2	75.6	73.4	63.7	42.0	27.3	18.8	17.9	19.2							
50	12.7	14.2	16.2	18.1	19.4	17.5	16.3	14.3	13.3	12.3	11.8	11.8							
55	8.88	9.83	10.7	11.6	11.9	11.7	11.0	9.95	9.28	8.64	8.30	8.35							
60	6.67	7.25	7.75	8.16	8.35	8.42	7.96	7.23	6.80	6.36	6.16	6.26							
65	5.00	5.44	5.80	6.14	6.18	6.25	5.86	5.32	5.03	4.72	4.63	4.72							
70	3.93	4.32	4.58	4.73	4.74	4.74	4.47	4.15	3.91	3.65	3.59	3.70							
75	2.69	3.17	3.47	3.67	3.66	3.63	3.35	3.01	2.69	2.30	2.24	2.39							
80	0.98	1.05	1.16	1.84	1.94	1.88	1.26	1.12	1.02	0.97	0.92	0.95							
85	0.71	0.73	0.82	0.91	0.97	0.92	0.89	0.81	0.76	0.77	0.76	0.77							
90	0.68	0.66	0.67	0.66	0.67	0.69	0.75	0.76	0.78	0.78	0.80	0.77							
95	0.70	0.69	0.67	0.68	0.69	0.68	0.82	0.83	0.86	0.86	0.88	0.86							
100	0.77	0.76	0.72	0.73	0.70	0.73	0.91	0.91	0.95	0.96	0.98	0.96							
105	0.90	0.87	0.83	0.82	0.80	0.82	1.01	1.03	1.06	1.07	1.09	1.07							
110	1.03	1.01	0.96	0.95	0.92	0.95	1.13	1.15	1.19	1.20	1.22	1.20							
115	1.20	1.18	1.12	1.11	1.09	1.10	1.27	1.30	1.35	1.37	1.38	1.36							
120	1.40	1.36	1.30	1.28	1.26	1.28	1.45	1.47	1.53	1.56	1.57	1.56							
125	1.65	1.59	1.53	1.50	1.47	1.49	1.65	1.70	1.76	1.80	1.81	1.78							
130	1.94	1.88	1.80	1.77	1.73	1.76	1.91	1.95	2.03	2.07	2.09	2.06							
135	2.26	2.20	2.12	2.08	2.04	2.07	2.20	2.25	2.32	2.36	2.37	2.35							
140	2.55	2.50	2.42	2.39	2.35	2.38	2.48	2.52	2.59	2.62	2.62	2.60							
145	2.79	2.75	2.69	2.66	2.63	2.65	2.73	2.75	2.81	2.82	2.82	2.81							
150	2.95	2.93	2.87	2.87	2.84	2.85	2.91	2.92	2.97	2.99	2.97	2.94							
155	3.08	3.06	3.02	3.02	2.97	2.99	3.05	3.06	3.10	3.11	3.10	3.07							
160	3.21	3.20	3.15	3.16	3.11	3.13	3.18	3.19	3.22	3.22	3.21	3.19							
165	3.30	3.30	3.26	3.28	3.24	3.25	3.30	3.29	3.32	3.33	3.29	3.26							
170	3.39	3.39	3.36	3.37	3.33	3.34	3.39	3.39	3.40	3.40	3.36	3.32							
175	3.42	3.44	3.42	3.45	3.39	3.40	3.45	3.42	3.44	3.41	3.39	3.38							
180	3.49	3.49	3.48	3.48	3.45	3.44	3.49	3.49	3.48	3.47	3.45	3.42							

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: