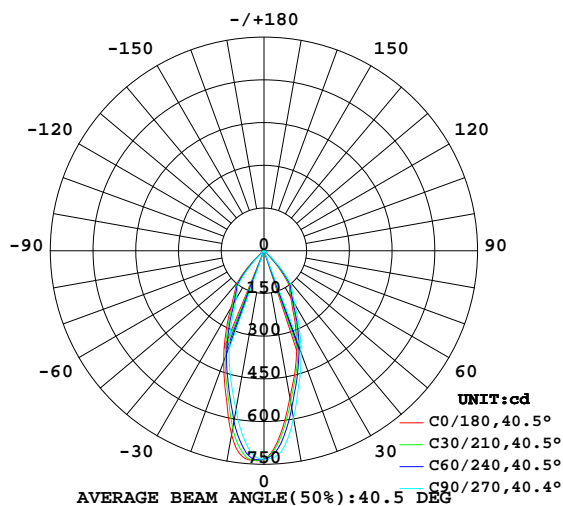


LUMINAIRE PHOTOMETRIC TEST REPORT

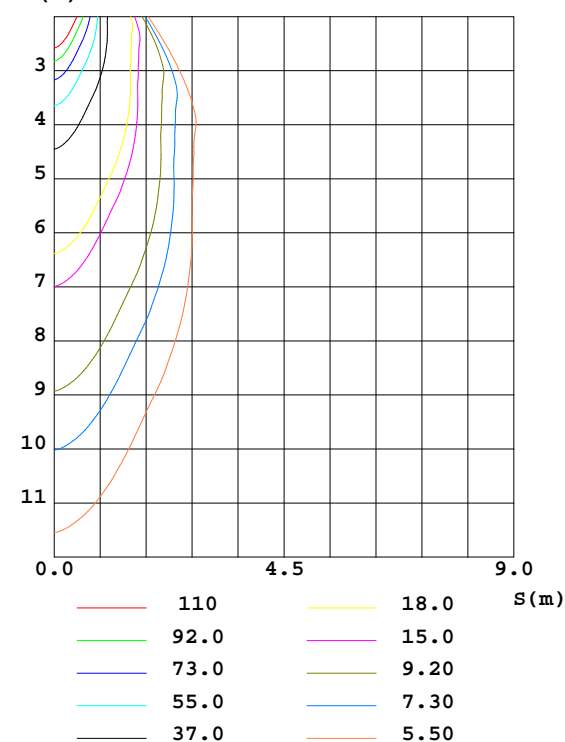
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.88 lm/W			
MODEL	M011-8W-827-S-40	Imax(cd)	737.8	S/MH(C0/180)	0.57
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	496.95	η UP,DN(C0-180)	1.1,49.2
NOMINAL FLUX(lm)	496.953	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,48.4
LAMPS INSIDE	1	η up(%)	2.4	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	226.5	η down(%)	97.6	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



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	524.8	549.6	598.1	639.5	656.5	621.0	567.8	533.3	0- 10	62.72	62.72	12.6,12.6
20	335.8	354.7	380.4	402.7	414.9	391.7	357.2	338.7	10- 20	130.9	193.6	39,39
30	187.9	199.4	216.2	227.7	232.6	215.1	196.4	188.6	20- 30	128.9	322.5	64.9,64.9
40	95.84	115.7	135.2	145.3	145.4	129.7	108.4	95.85	30- 40	104.1	426.6	85.8,85.8
50	12.80	13.40	14.82	15.35	14.87	13.51	12.64	12.46	40- 50	39.79	466.3	93.8,93.8
60	6.798	7.501	8.236	8.704	8.570	7.738	6.942	6.529	50- 60	9.378	475.7	95.7,95.7
70	3.994	4.359	4.492	4.556	4.380	3.983	3.757	3.669	60- 70	5.504	481.2	96.8,96.8
80	1.031	1.040	1.055	1.554	1.789	1.261	1.148	1.094	70- 80	3.066	484.3	97.5,97.5
90	0.7300	0.7303	0.7230	0.7303	0.8391	0.8416	0.8344	0.8576	80- 90	0.9739	485.3	97.6,97.6
100	0.8661	0.8521	0.8345	0.8114	0.9882	0.9968	1.032	1.044	90-100	0.9236	486.2	97.8,97.8
110	1.157	1.123	1.078	1.042	1.230	1.247	1.290	1.320	100-110	1.106	487.3	98.1,98.1
120	1.592	1.543	1.474	1.422	1.576	1.616	1.662	1.722	110-120	1.354	488.6	98.3,98.3
130	2.187	2.128	2.031	1.958	2.073	2.122	2.198	2.269	120-130	1.642	490.3	98.7,98.7
140	2.821	2.762	2.678	2.602	2.671	2.722	2.786	2.849	130-140	1.874	492.2	99,99
150	3.245	3.226	3.180	3.133	3.157	3.186	3.218	3.255	140-150	1.871	494.0	99.4,99.4
160	3.505	3.495	3.479	3.453	3.472	3.489	3.512	3.513	150-160	1.546	495.6	99.7,99.7
170	3.675	3.687	3.699	3.673	3.692	3.694	3.689	3.684	160-170	1.015	496.6	99.9,99.9
180	3.820	3.843	3.844	3.824	3.839	3.842	3.832	3.823	170-180	0.3569	497.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

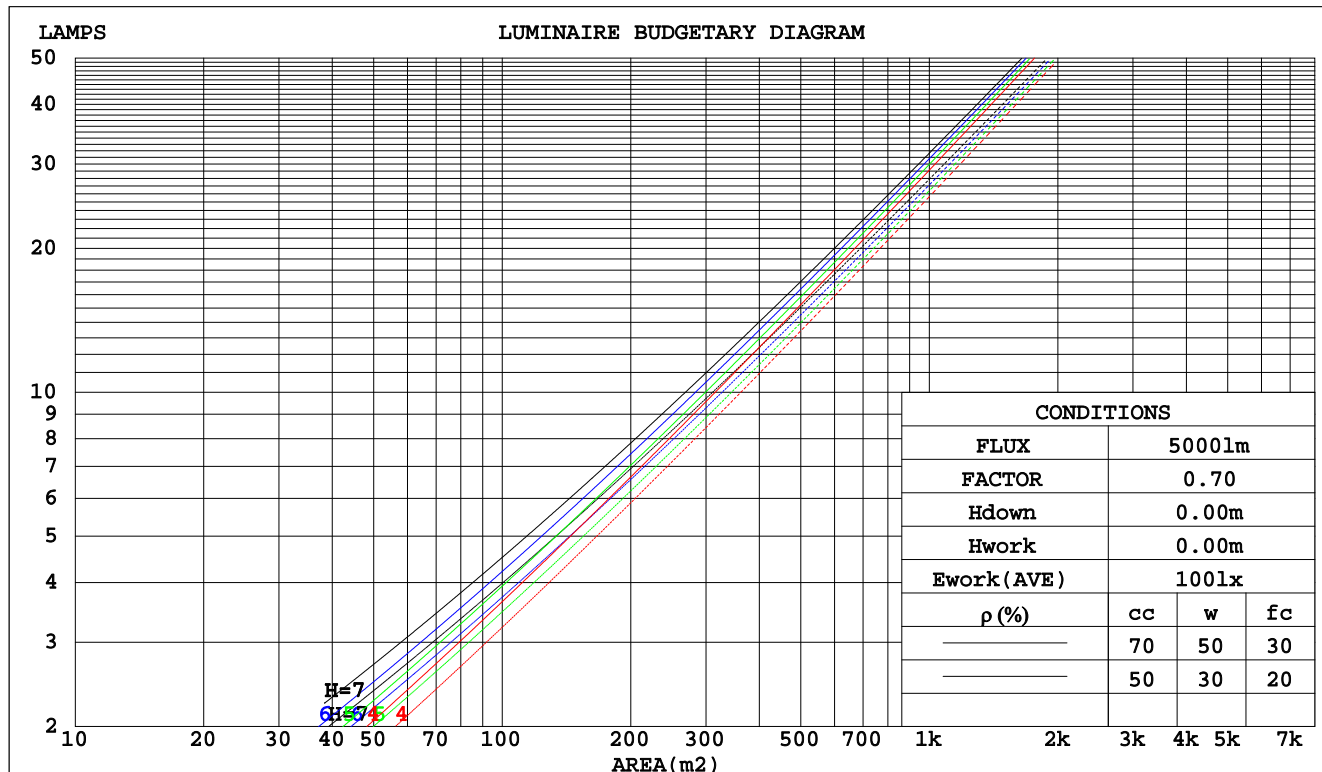
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-28

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	.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	.71	.79	.74	.70	.77	.73	.70	.75	.72	.69	.67
6.0	.77	.71	.67	.76	.70	.66	.74	.69	.66	.73	.68	.65	.71	.67	.64	.63
7.0	.72	.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	.64	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.56	.53	.52
10.0	.61	.55	.51	.60	.55	.51	.60	.54	.51	.59	.54	.51	.58	.53	.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	.188 .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	.145 .079 .024	.136 .075 .023	
4.0	.161 .084 .025	.156 .082 .024	.147 .078 .023	.139 .075 .023	.131 .071 .022	
5.0	.153 .078 .023	.149 .076 .022	.141 .073 .022	.133 .070 .021	.127 .068 .020	
6.0	.145 .073 .021	.142 .072 .021	.135 .069 .020	.128 .067 .020	.122 .064 .019	
7.0	.139 .068 .019	.135 .067 .019	.129 .065 .019	.123 .063 .018	.118 .061 .018	
8.0	.132 .065 .018	.129 .064 .018	.124 .062 .018	.118 .060 .017	.113 .058 .017	
9.0	.126 .061 .017	.124 .060 .017	.118 .059 .017	.114 .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	.163 .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	.154 .117 .090	.132 .101 .078	.091 .071 .055	.052 .041 .033	.017 .013 .011	
5.0	.145 .106 .077	.125 .092 .067	.086 .064 .047	.050 .038 .028	.016 .012 .009	
6.0	.138 .097 .067	.118 .084 .059	.082 .059 .042	.047 .035 .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	.104 .068 .043	.072 .048 .031	.042 .028 .018	.014 .009 .006	
10.0	.116 .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					20.7	21.7	21.0	21.9	22.1	21.7	22.7	22.0	22.9	23.1
3H					20.7	21.6	21.0	21.8	22.1	21.7	22.6	22.0	22.8	23.0
4H					20.7	21.5	21.0	21.8	22.1	21.7	22.5	22.0	22.8	23.1
6H					20.6	21.4	21.0	21.7	22.0	21.6	22.4	22.0	22.7	23.0
8H					20.6	21.4	21.0	21.7	22.0	21.6	22.4	22.0	22.7	23.0
12H					20.6	21.3	20.9	21.6	21.9	21.6	22.3	21.9	22.6	22.9
4H 2H					20.5	21.4	20.9	21.6	21.9	21.5	22.3	21.8	22.6	22.9
3H					20.6	21.3	21.0	21.6	22.0	21.5	22.3	21.9	22.6	22.9
4H					20.7	21.3	21.0	21.7	22.0	21.6	22.3	22.0	22.6	23.0
6H					20.6	21.2	21.0	21.6	21.9	21.6	22.2	22.0	22.5	22.9
8H					20.6	21.1	21.0	21.5	21.9	21.5	22.1	22.0	22.5	22.9
12H					20.6	21.0	21.0	21.5	21.9	21.5	22.0	22.0	22.4	22.9
8H 4H					20.6	21.1	21.0	21.5	21.9	21.5	22.0	21.9	22.4	22.9
6H					20.5	21.0	21.0	21.4	21.9	21.5	21.9	22.0	22.4	22.8
8H					20.5	20.9	21.0	21.4	21.9	21.5	21.9	22.0	22.3	22.8
12H					20.5	20.9	21.0	21.3	21.9	21.5	21.8	22.0	22.3	22.8
12H 4H					20.5	21.0	21.0	21.4	21.9	21.5	21.9	21.9	22.4	22.8
6H					20.5	20.9	21.0	21.3	21.8	21.4	21.8	21.9	22.3	22.8
8H					20.5	20.8	21.0	21.3	21.8	21.4	21.8	21.9	22.2	22.8
Variations with the observer position at spacings:														
S = 1.0H					+ 2.3 / - 5.4					+ 2.3 / - 5.6				
1.5H					+ 4.7 / - 5.0					+ 4.5 / - 5.3				
2.0H					+ 2.1 / - 1.4					+ 6.0 / - 1.7				

CIE Pub.117 Corrected 497.0 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.4)

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:

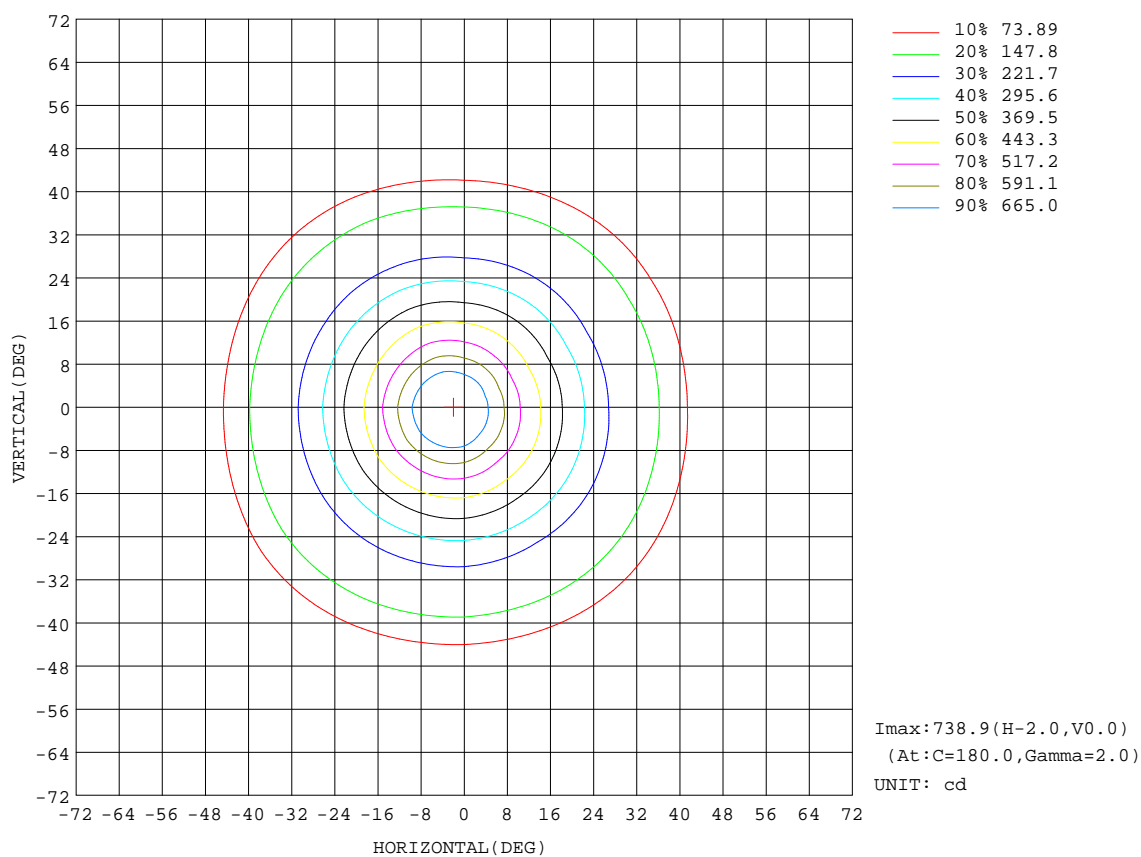
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	83	76	72	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	88	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	99	95	92	87
2.00	106	102	98	105	100	97	102	98	95	90
2.50	108	104	101	106	103	100	103	100	97	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

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:



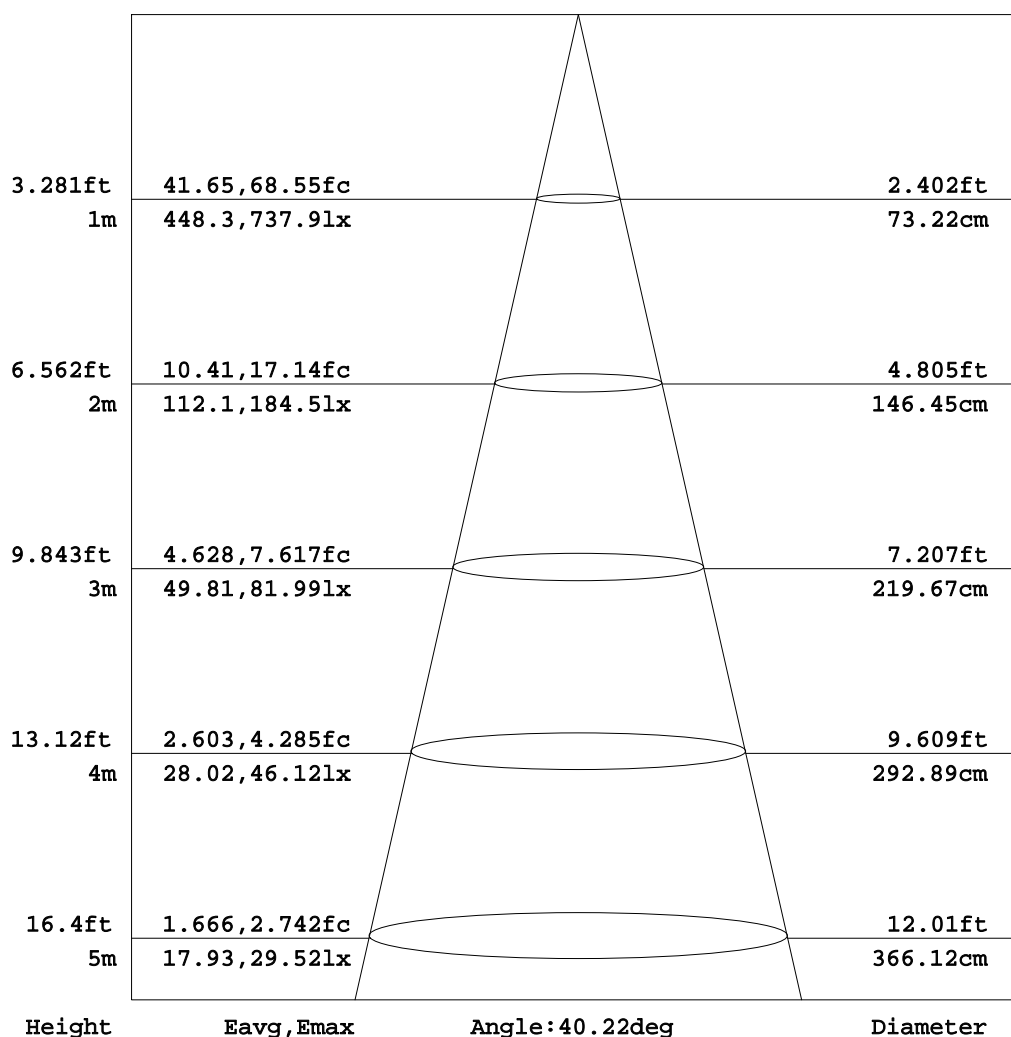
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-28

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



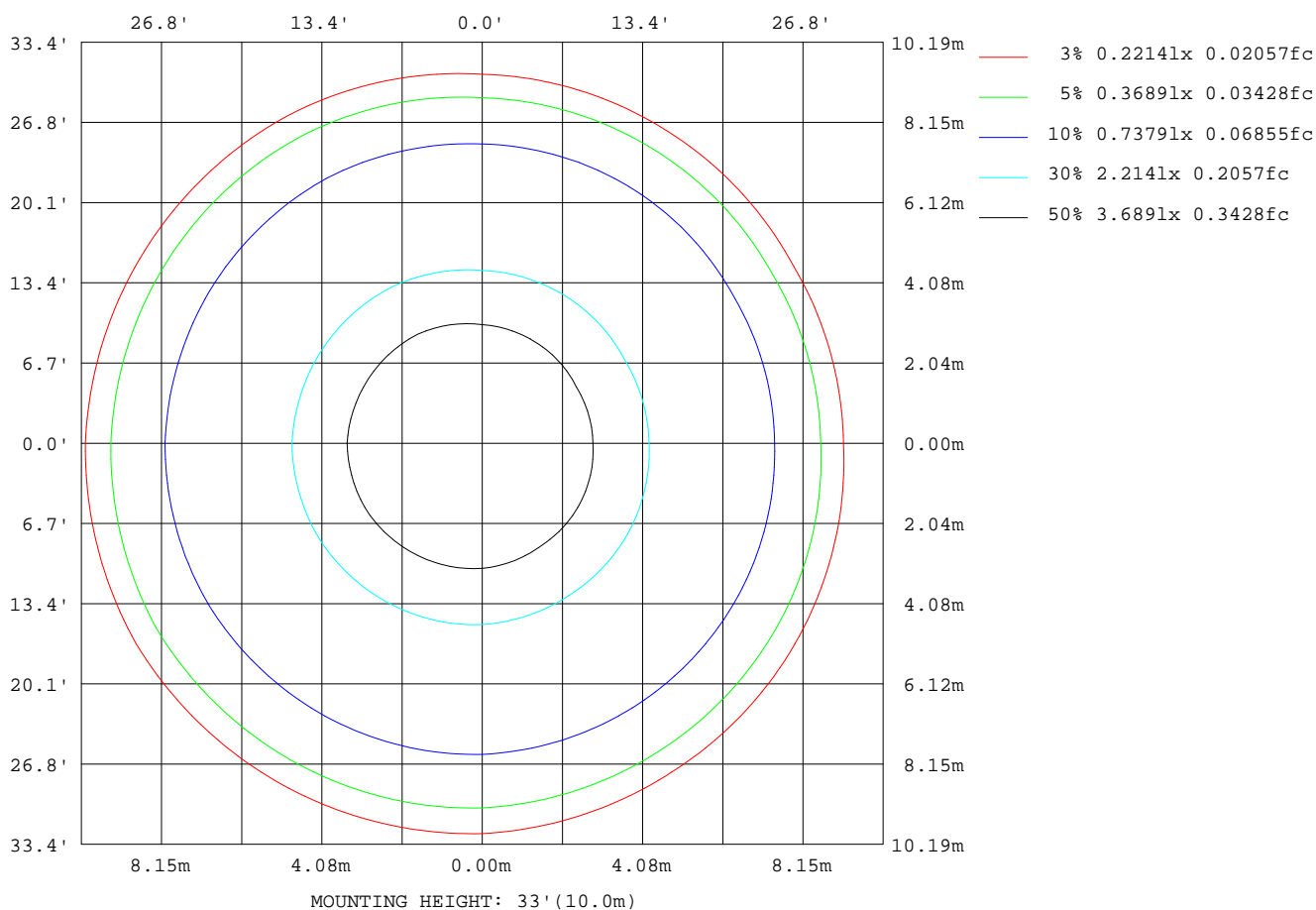
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

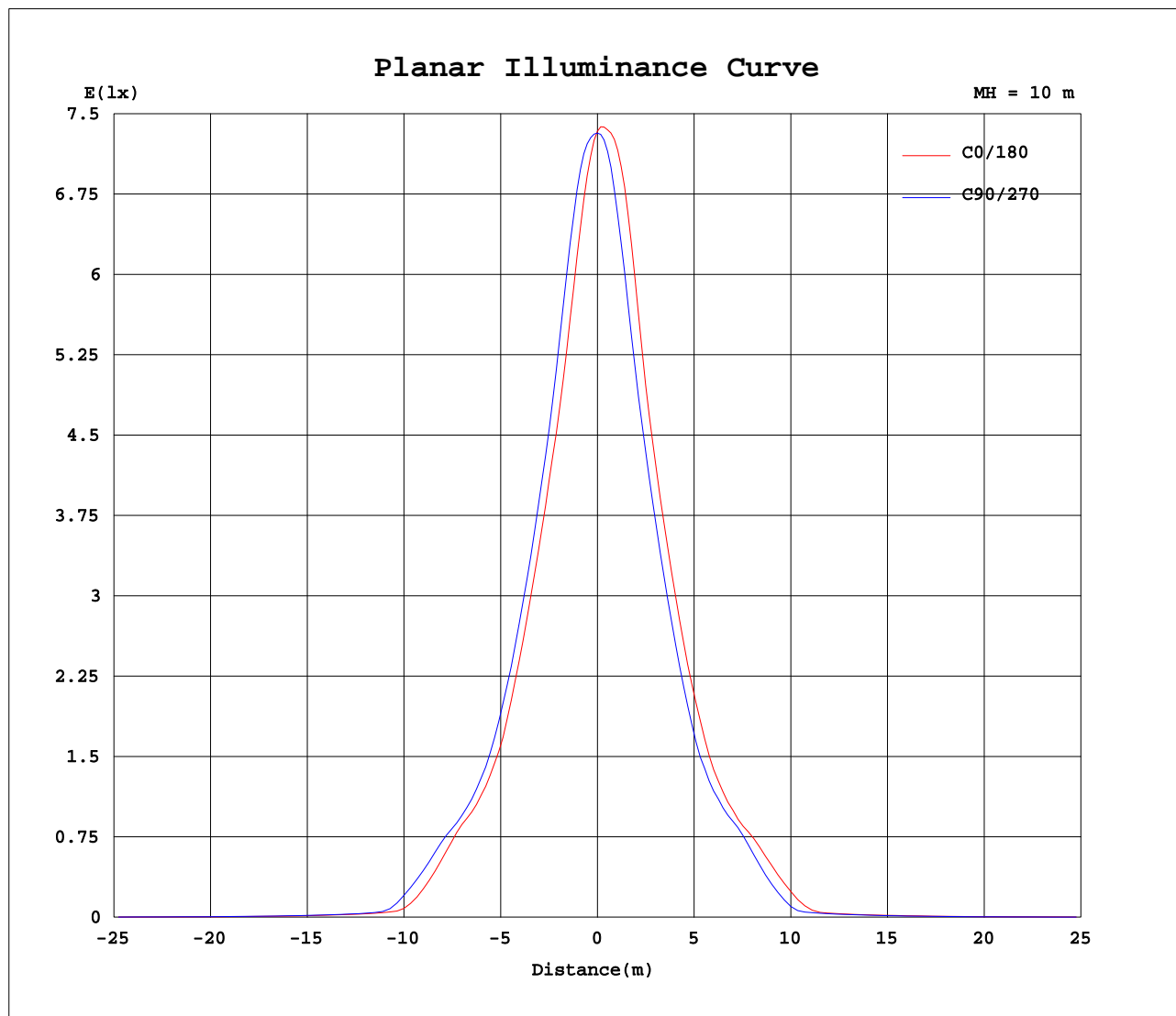
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



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

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	732	732	732	732	732	732	732	732	732	732	732	732							
5	650	660	680	706	719	731	733	727	713	687	670	653							
10	525	539	560	598	628	651	657	634	608	568	542	524							
15	426	439	454	479	496	516	520	501	485	456	439	424							
20	336	348	361	380	395	410	415	398	385	357	345	332							
25	248	261	273	291	302	315	317	303	288	266	255	244							
30	188	196	203	216	224	231	233	219	211	196	192	185							
35	157	161	165	173	179	181	182	175	169	163	162	158							
40	95.8	110	122	135	143	148	145	135	124	108	99.7	92.0							
45	23.5	32.3	42.7	58.1	66.3	74.1	68.1	55.1	42.8	28.6	23.7	20.5							
50	12.8	13.3	13.5	14.8	15.2	15.5	14.9	13.9	13.1	12.6	12.5	12.4							
55	9.63	10.1	10.6	11.2	11.4	11.6	11.3	10.7	10.5	9.80	9.54	9.36							
60	6.80	7.28	7.72	8.24	8.58	8.83	8.57	7.92	7.56	6.94	6.60	6.46							
65	5.02	5.37	5.57	5.87	6.00	6.16	5.91	5.43	5.20	4.83	4.68	4.70							
70	3.99	4.31	4.41	4.49	4.52	4.59	4.38	4.04	3.92	3.76	3.64	3.70							
75	2.61	3.25	3.45	3.56	3.59	3.64	3.48	3.20	3.06	2.84	2.59	2.37							
80	1.03	1.03	1.05	1.05	1.27	1.84	1.79	1.36	1.16	1.15	1.10	1.09							
85	0.74	0.73	0.77	0.80	0.86	0.90	0.96	0.96	0.91	0.87	0.83	0.84							
90	0.73	0.74	0.72	0.72	0.73	0.73	0.84	0.84	0.84	0.83	0.86	0.85							
95	0.78	0.79	0.76	0.76	0.74	0.76	0.90	0.89	0.92	0.92	0.94	0.94							
100	0.87	0.87	0.84	0.83	0.80	0.82	0.99	0.98	1.01	1.03	1.05	1.04							
105	0.99	0.99	0.96	0.94	0.90	0.91	1.10	1.09	1.13	1.14	1.17	1.17							
110	1.16	1.14	1.10	1.08	1.04	1.04	1.23	1.23	1.27	1.29	1.32	1.32							
115	1.35	1.34	1.29	1.26	1.22	1.21	1.39	1.39	1.44	1.45	1.50	1.50							
120	1.59	1.57	1.52	1.47	1.43	1.42	1.58	1.59	1.64	1.66	1.71	1.73							
125	1.87	1.85	1.79	1.73	1.67	1.66	1.81	1.82	1.88	1.91	1.97	1.99							
130	2.19	2.16	2.10	2.03	1.97	1.95	2.07	2.09	2.15	2.20	2.26	2.28							
135	2.51	2.48	2.41	2.35	2.29	2.27	2.37	2.38	2.45	2.51	2.56	2.58							
140	2.82	2.79	2.73	2.68	2.61	2.60	2.67	2.70	2.75	2.79	2.84	2.85							
145	3.07	3.06	3.00	2.96	2.91	2.89	2.94	2.95	3.00	3.04	3.08	3.08							
150	3.24	3.24	3.21	3.18	3.13	3.13	3.16	3.17	3.20	3.22	3.25	3.26							
155	3.38	3.38	3.35	3.34	3.31	3.30	3.32	3.32	3.36	3.38	3.40	3.39							
160	3.51	3.51	3.48	3.48	3.45	3.45	3.47	3.47	3.51	3.51	3.52	3.50							
165	3.58	3.60	3.58	3.59	3.56	3.57	3.59	3.58	3.62	3.60	3.62	3.59							
170	3.67	3.69	3.68	3.70	3.67	3.68	3.69	3.68	3.71	3.69	3.70	3.67							
175	3.75	3.76	3.76	3.78	3.76	3.77	3.77	3.76	3.78	3.76	3.77	3.73							
180	3.82	3.84	3.84	3.84	3.82	3.83	3.84	3.84	3.85	3.83	3.83	3.81							

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: