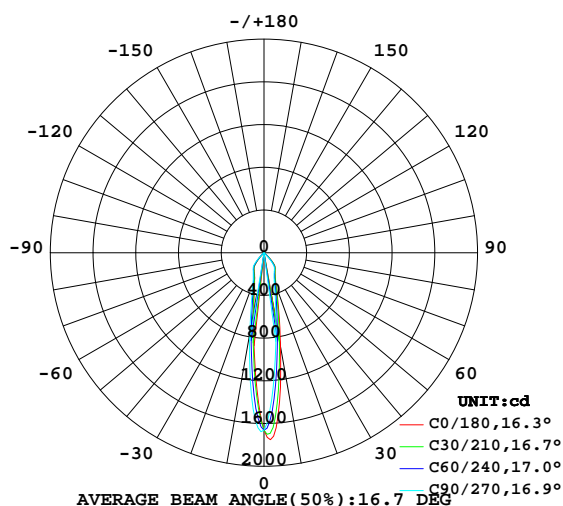


LUMINAIRE PHOTOMETRIC TEST REPORT

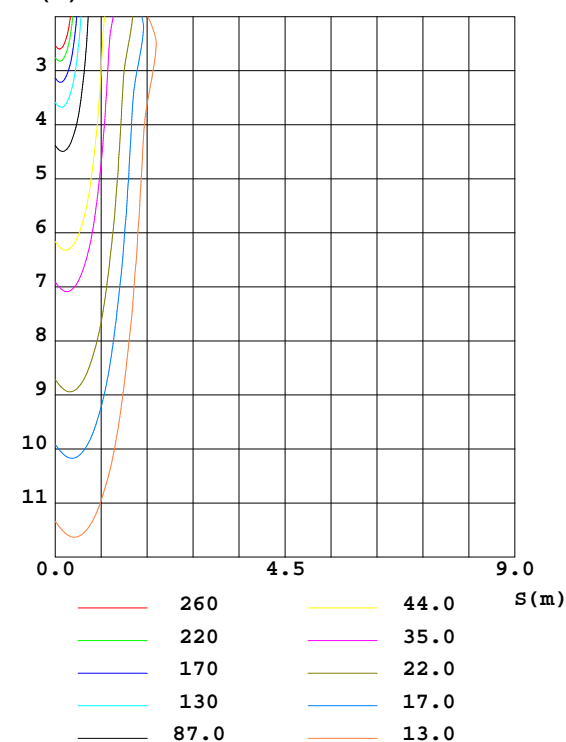
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 66.70 lm/W			
MODEL	M011-8W-827-S-16	Imax(cd)	1776	S/MH(C0/180)	0.36
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.27
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	509.56	η UP,DN(C0-180)	1.1,48.5
NOMINAL FLUX(lm)	509.563	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,49.2
LAMPS INSIDE	1	η up(%)	2.3	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	226.5	η down(%)	97.7	CIBSE SHR MAX	1.00

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:2016-06-29

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	893.1	776.8	649.2	566.4	558.5	638.5	764.2	902.1	0- 10	101.9	101.9	20,20
20	341.3	317.6	282.9	260.9	257.6	275.5	305.3	337.0	10- 20	123.7	225.5	44.3,44.3
30	209.0	203.9	195.1	188.0	186.4	192.2	202.9	210.2	20- 30	108.5	334.1	65.6,65.6
40	154.9	141.5	118.1	96.52	91.30	106.3	134.1	152.1	30- 40	105.2	439.3	86.2,86.2
50	19.23	15.57	11.54	9.982	9.807	11.58	15.14	18.90	40- 50	42.62	481.9	94.6,94.6
60	6.288	5.857	5.233	4.894	4.838	5.184	5.727	6.228	50- 60	7.579	489.5	96.1,96.1
70	4.023	3.826	3.508	3.328	3.213	3.334	3.632	3.908	60- 70	4.404	493.9	96.9,96.9
80	1.662	1.242	1.040	0.9907	0.9920	1.077	1.160	1.579	70- 80	2.697	496.6	97.5,97.5
90	0.7877	0.7714	0.7635	0.7715	0.9214	0.9018	0.8767	0.8716	80- 90	1.022	497.6	97.7,97.7
100	0.7646	0.7892	0.8266	0.8537	1.114	1.089	1.032	1.015	90-100	0.9498	498.5	97.8,97.8
110	1.025	1.067	1.129	1.183	1.371	1.334	1.273	1.249	100-110	1.123	499.7	98.1,98.1
120	1.364	1.419	1.494	1.561	1.724	1.674	1.594	1.549	110-120	1.354	501.0	98.3,98.3
130	1.890	1.986	2.117	2.238	2.351	2.265	2.128	2.046	120-130	1.618	502.6	98.6,98.6
140	2.704	2.799	2.903	3.006	3.044	2.971	2.858	2.796	130-140	1.943	504.6	99,99
150	3.229	3.282	3.329	3.384	3.401	3.362	3.280	3.272	140-150	1.962	506.5	99.4,99.4
160	3.539	3.583	3.627	3.673	3.681	3.642	3.576	3.562	150-160	1.599	508.1	99.7,99.7
170	3.791	3.805	3.786	3.806	3.798	3.797	3.784	3.805	160-170	1.053	509.2	99.9,99.9
180	3.808	3.781	3.761	3.819	3.800	3.784	3.769	3.822	170-180	0.3620	509.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

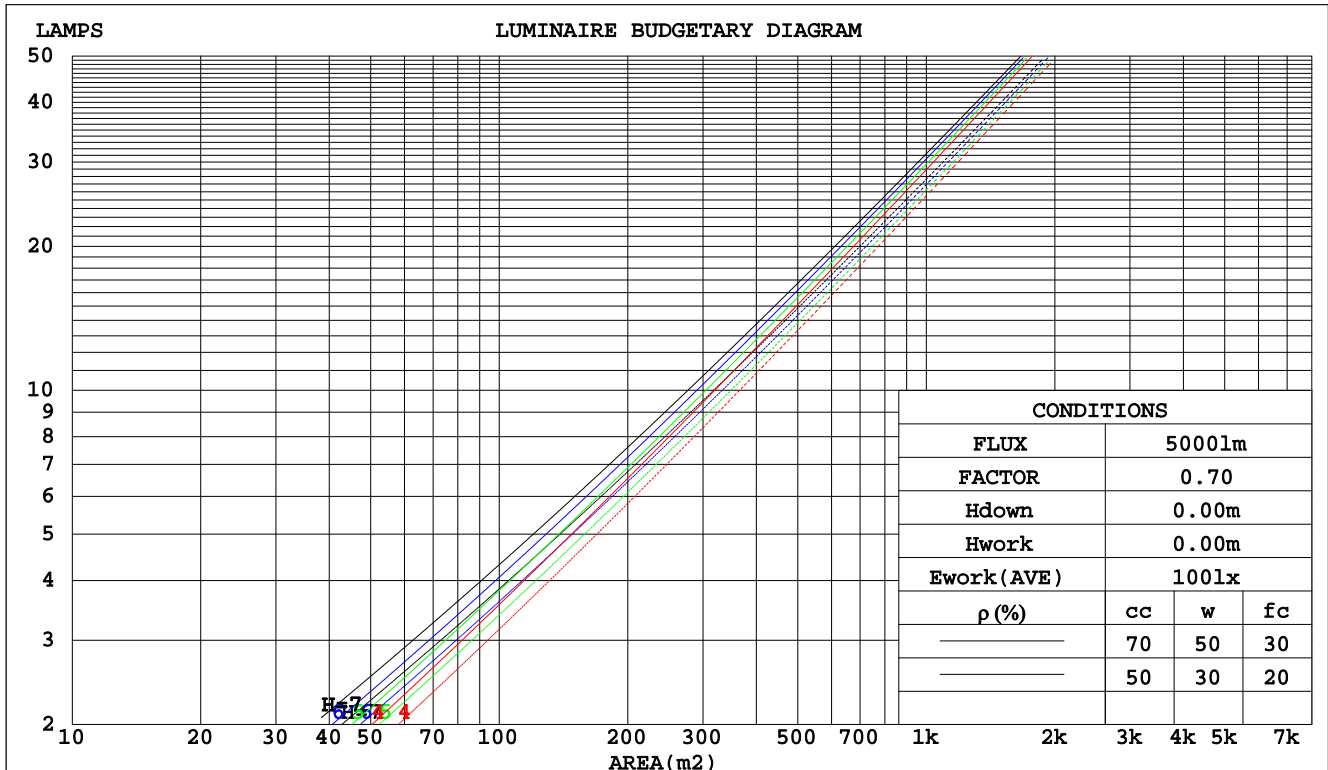
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-29

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	1.08	1.05	1.08	1.05	1.03	1.03	1.01	.00	.99	.98	.96	.95	.94	.93	.91
2.0	1.02	.98	.95	1.00	.97	.94	.97	.94	.91	.94	.91	.89	.90	.89	.87	.85
3.0	.96	.91	.87	.94	.89	.86	.91	.87	.84	.88	.85	.83	.86	.83	.81	.79
4.0	.90	.84	.80	.88	.83	.79	.86	.81	.78	.84	.80	.77	.81	.78	.76	.74
5.0	.84	.78	.74	.83	.78	.74	.81	.76	.73	.79	.75	.72	.77	.74	.71	.70
6.0	.79	.73	.69	.78	.73	.69	.77	.72	.68	.75	.71	.68	.73	.70	.67	.66
7.0	.75	.69	.65	.74	.69	.65	.73	.68	.64	.71	.67	.64	.70	.66	.63	.62
8.0	.71	.65	.61	.70	.65	.61	.69	.64	.61	.68	.63	.60	.67	.63	.60	.59
9.0	.67	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.64	.60	.57	.56
10.0	.64	.59	.55	.64	.58	.55	.63	.58	.55	.62	.57	.54	.61	.57	.54	.53



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-29

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	.180 .102 .032	.173 .099 .031	.159 .091 .029	.146 .084 .027	.134 .078 .025	
2.0	.171 .094 .029	.165 .091 .028	.153 .085 .026	.142 .080 .025	.132 .075 .024	
3.0	.162 .086 .026	.157 .084 .025	.147 .080 .024	.137 .075 .023	.129 .071 .022	
4.0	.154 .080 .023	.149 .078 .023	.140 .074 .022	.132 .071 .021	.124 .068 .021	
5.0	.146 .074 .022	.142 .073 .021	.134 .070 .021	.127 .067 .020	.120 .064 .019	
6.0	.138 .069 .020	.135 .068 .020	.128 .066 .019	.121 .063 .019	.115 .061 .018	
7.0	.132 .065 .018	.128 .064 .018	.122 .062 .018	.117 .060 .017	.111 .058 .017	
8.0	.125 .061 .017	.123 .060 .017	.117 .058 .017	.112 .057 .016	.107 .055 .016	
9.0	.120 .058 .016	.117 .057 .016	.112 .055 .016	.107 .054 .015	.103 .052 .015	
10.0	.114 .055 .015	.112 .054 .015	.108 .053 .015	.103 .051 .015	.099 .050 .014	

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	.189 .175 .163	.162 .150 .140	.111 .104 .097	.064 .060 .056	.020 .019 .018	
2.0	.174 .151 .131	.149 .130 .113	.102 .090 .079	.059 .052 .046	.019 .017 .015	
3.0	.162 .132 .108	.139 .114 .093	.095 .079 .066	.055 .046 .039	.018 .015 .013	
4.0	.152 .117 .091	.130 .101 .079	.089 .071 .056	.052 .041 .033	.017 .013 .011	
5.0	.143 .106 .078	.123 .091 .068	.085 .064 .048	.049 .037 .028	.016 .012 .009	
6.0	.135 .096 .068	.116 .083 .060	.080 .058 .042	.047 .034 .025	.015 .011 .008	
7.0	.129 .089 .061	.111 .077 .053	.076 .054 .038	.044 .032 .022	.014 .010 .007	
8.0	.123 .083 .055	.106 .072 .048	.073 .050 .034	.043 .030 .020	.014 .010 .007	
9.0	.117 .077 .050	.101 .067 .044	.070 .047 .031	.041 .028 .019	.013 .009 .006	
10.0	.113 .073 .046	.097 .063 .040	.067 .044 .029	.039 .026 .017	.013 .009 .006	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-29

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					22.8	23.7	23.0	23.9	24.1	21.7	22.6	22.0	22.8	23.0
3H					22.7	23.5	23.0	23.8	24.0	21.6	22.5	21.9	22.7	22.9
4H					22.6	23.4	23.0	23.7	24.0	21.6	22.4	21.9	22.6	22.9
6H					22.6	23.4	23.0	23.6	23.9	21.5	22.3	21.9	22.6	22.8
8H					22.6	23.3	22.9	23.6	23.9	21.5	22.2	21.8	22.5	22.8
12H					22.6	23.2	22.9	23.6	23.9	21.5	22.1	21.8	22.5	22.8
4H 2H					22.5	23.3	22.8	23.6	23.9	21.5	22.3	21.8	22.5	22.8
3H					22.5	23.2	22.8	23.5	23.8	21.4	22.1	21.8	22.4	22.8
4H					22.5	23.1	22.9	23.4	23.8	21.4	22.1	21.8	22.4	22.8
6H					22.5	23.0	22.9	23.4	23.8	21.4	21.9	21.8	22.3	22.7
8H					22.5	23.0	22.9	23.4	23.8	21.4	21.9	21.8	22.3	22.7
12H					22.4	22.9	22.9	23.3	23.8	21.3	21.8	21.8	22.2	22.7
8H 4H					22.4	22.9	22.8	23.3	23.7	21.4	21.9	21.8	22.3	22.7
6H					22.4	22.8	22.9	23.2	23.7	21.3	21.7	21.8	22.2	22.6
8H					22.4	22.7	22.9	23.2	23.7	21.3	21.7	21.8	22.1	22.6
12H					22.4	22.7	22.9	23.2	23.7	21.3	21.6	21.8	22.1	22.6
12H 4H					22.3	22.8	22.8	23.2	23.6	21.3	21.8	21.8	22.2	22.6
6H					22.3	22.7	22.8	23.2	23.7	21.3	21.6	21.8	22.1	22.6
8H					22.3	22.7	22.8	23.1	23.7	21.3	21.6	21.8	22.1	22.6
Variations with the observer position at spacings:														
S = 1.0H					+ 2.3 / - 6.7					+ 2.3 / - 7.1				
1.5H					+ 3.9 / - 6.9					+ 4.5 / - 6.7				
2.0H					+ 7.0 / - 3.8					+ 4.0 / - 1.6				

CIE Pub.117 Corrected 509.6 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.3)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-29

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:

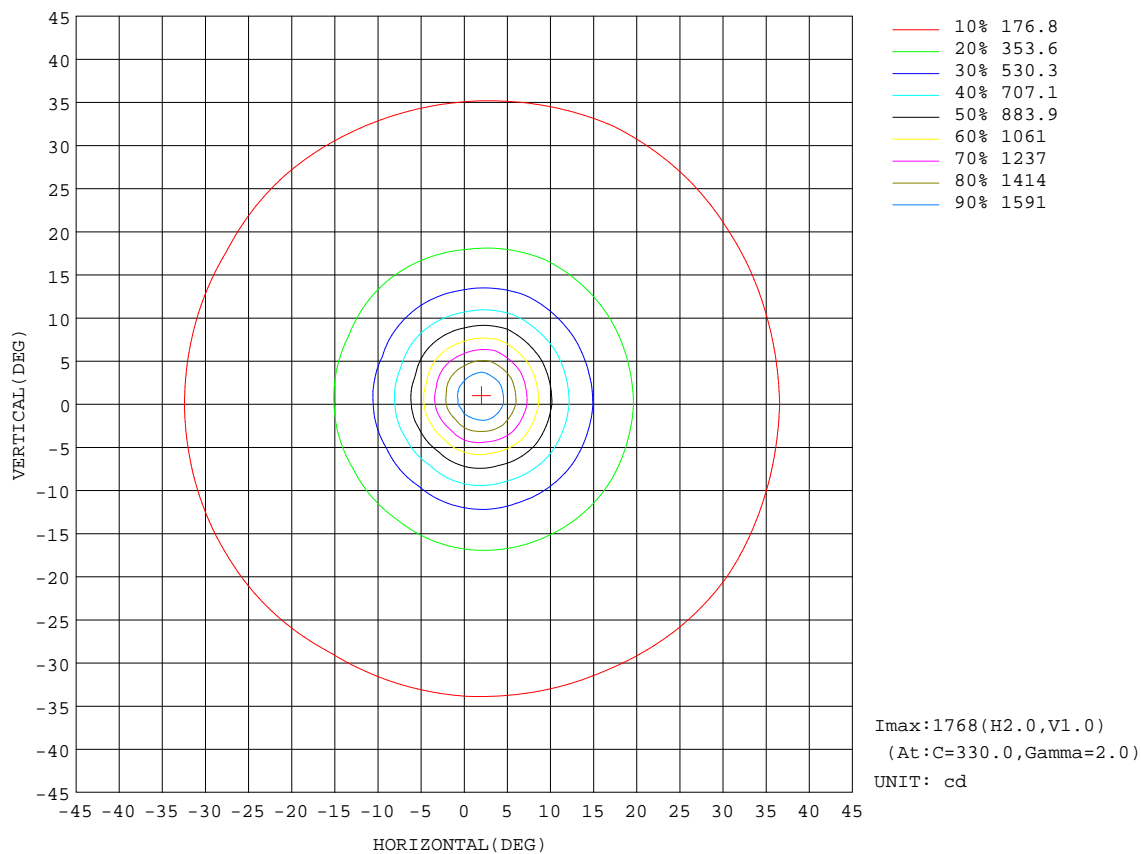
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	82	76	72	81	75	71	68
0.80	91	84	80	90	84	80	89	83	80	75
1.00	96	90	86	95	89	85	93	89	85	80
1.25	100	95	91	99	94	90	97	92	89	85
1.50	103	98	94	102	97	94	99	95	92	87
2.00	107	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	100	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: 2016-06-29

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:



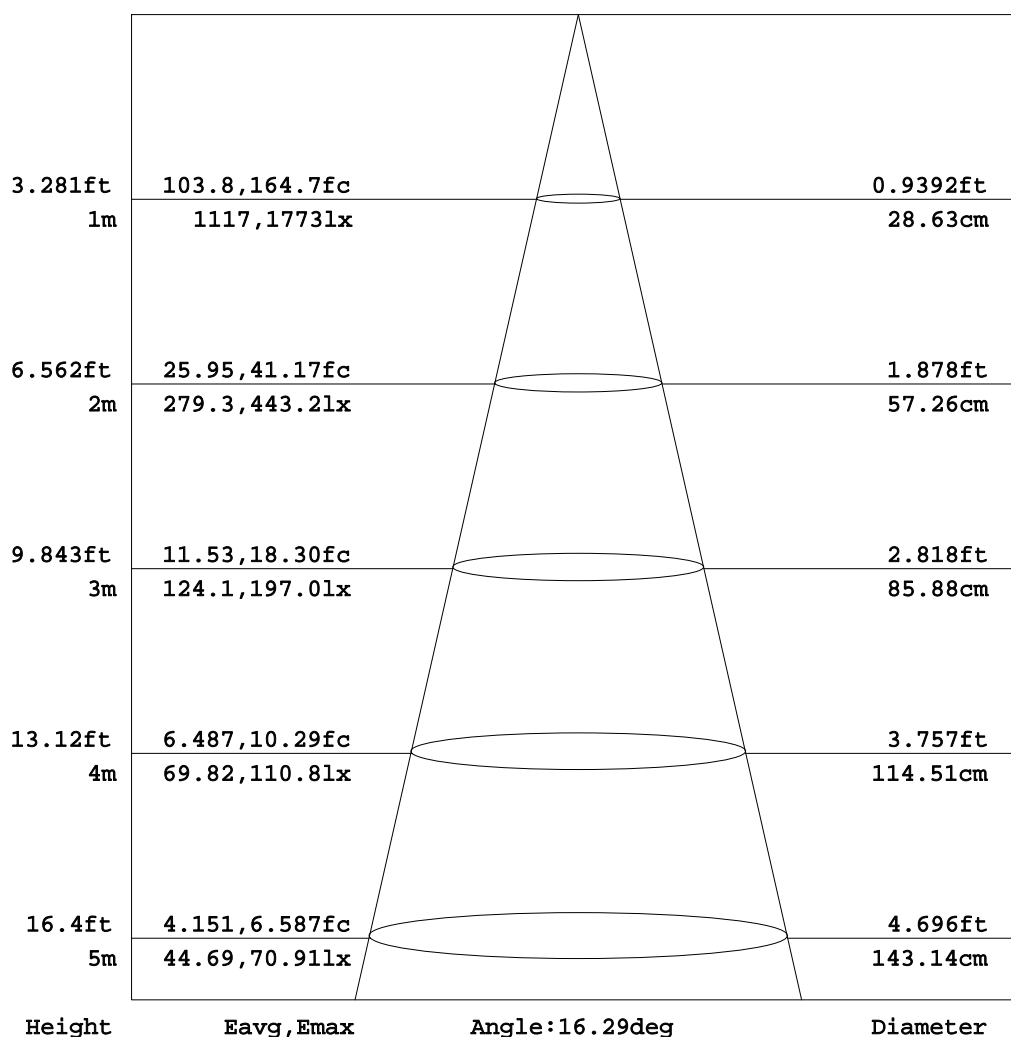
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-29

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:88.04 lm



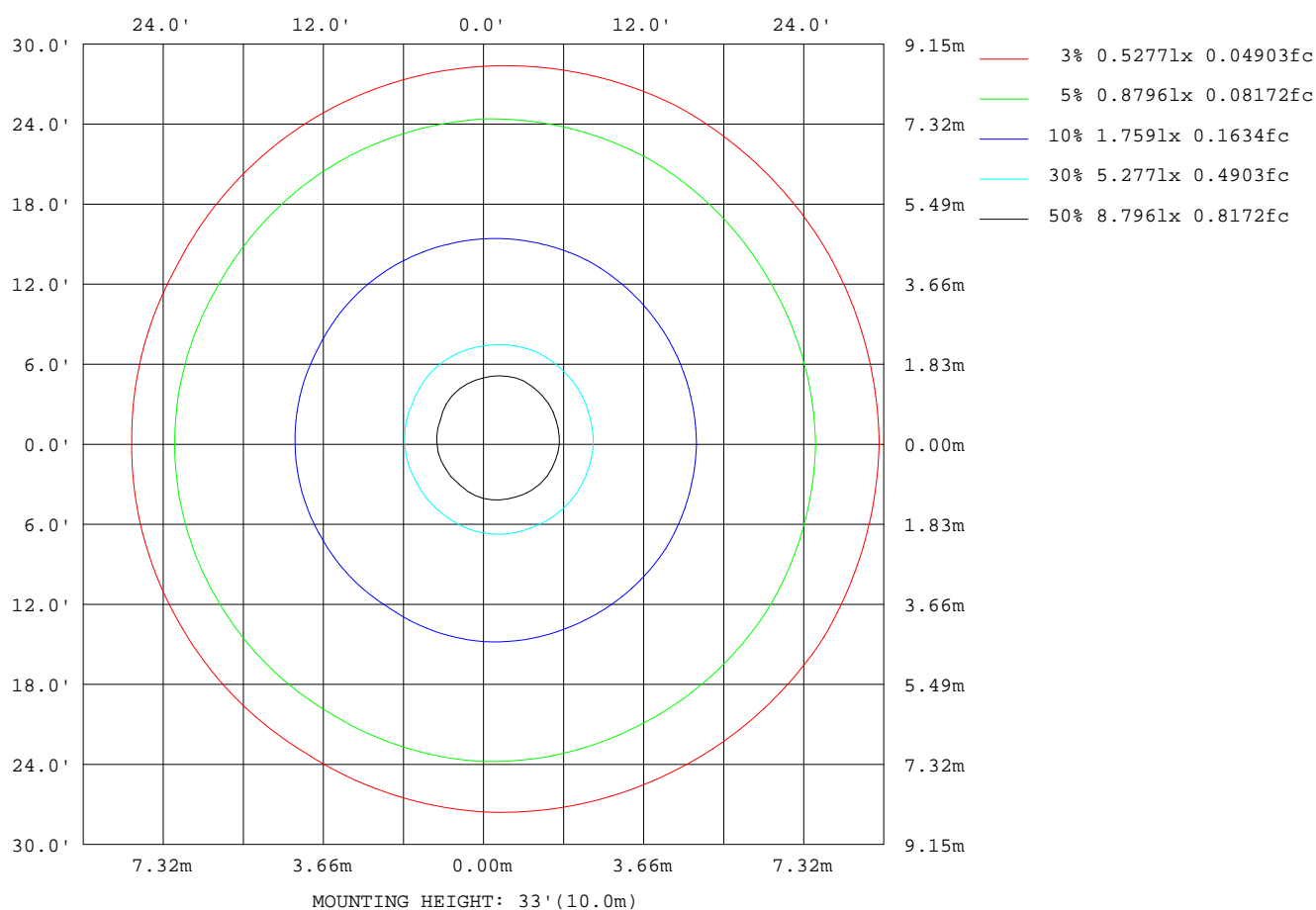
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-29

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

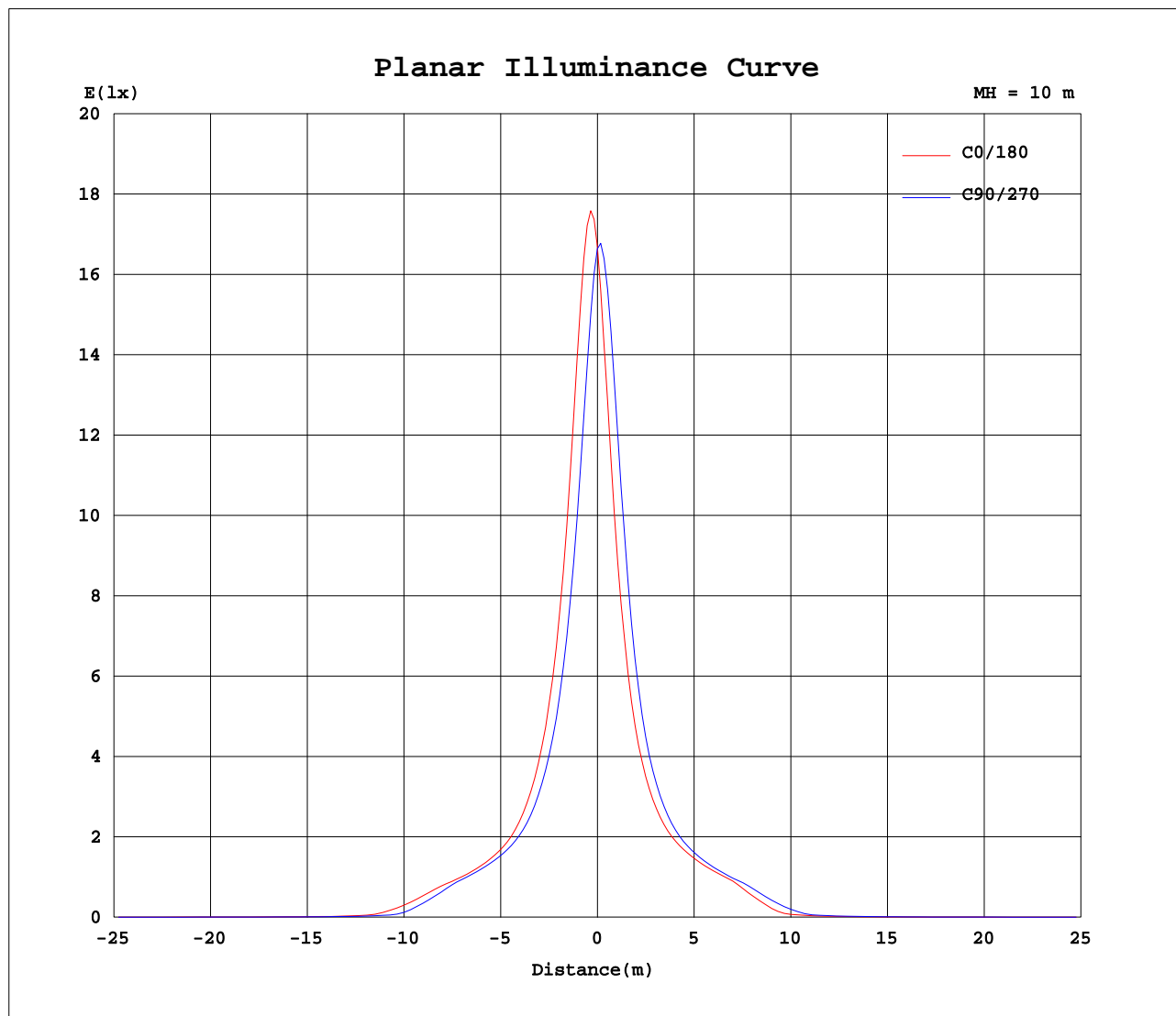
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-29

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: 2016-06-29

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	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661							
5	1529	1419	1243	1127	1026	990	1010	1066	1216	1345	1528	1569							
10	893	832	722	649	584	549	559	597	680	764	891	914							
15	522	494	445	406	367	350	354	368	411	448	506	521							
20	341	330	305	283	265	257	258	265	286	305	334	341							
25	250	247	234	226	216	213	213	218	228	238	250	251							
30	209	208	200	195	189	187	186	189	196	203	210	210							
35	183	182	174	171	165	163	163	164	169	177	183	182							
40	155	150	133	118	100	92.9	91.3	96.3	116	134	150	154							
45	84.5	80.1	55.2	34.0	20.9	19.7	19.8	22.4	37.5	56.3	76.1	82.7							
50	19.2	17.5	13.6	11.5	10.4	9.58	9.81	10.6	12.6	15.1	18.1	19.7							
55	9.66	9.01	8.18	7.23	6.54	6.50	6.42	6.78	7.57	8.49	9.34	9.45							
60	6.29	6.17	5.55	5.23	4.95	4.84	4.84	4.99	5.38	5.73	6.17	6.28							
65	4.90	4.78	4.47	4.27	4.07	4.00	3.96	4.05	4.20	4.48	4.75	4.81							
70	4.02	3.97	3.68	3.51	3.36	3.30	3.21	3.27	3.40	3.63	3.88	3.94							
75	3.25	3.21	2.87	2.67	2.34	2.19	2.14	2.30	2.55	2.80	3.07	3.15							
80	1.66	1.36	1.12	1.04	1.01	0.97	0.99	1.05	1.10	1.16	1.48	1.68							
85	1.00	0.95	0.88	0.82	0.82	0.79	0.88	0.89	0.90	0.95	1.00	1.03							
90	0.79	0.77	0.78	0.76	0.78	0.77	0.92	0.90	0.90	0.88	0.88	0.87							
95	0.76	0.76	0.76	0.77	0.77	0.78	1.01	0.99	0.98	0.93	0.94	0.90							
100	0.76	0.79	0.79	0.83	0.84	0.87	1.11	1.10	1.08	1.03	1.04	0.99							
105	0.86	0.89	0.92	0.96	0.99	1.02	1.23	1.21	1.20	1.17	1.14	1.11							
110	1.03	1.05	1.08	1.13	1.17	1.19	1.37	1.34	1.32	1.27	1.27	1.23							
115	1.19	1.22	1.24	1.30	1.34	1.37	1.53	1.50	1.47	1.42	1.41	1.37							
120	1.36	1.40	1.43	1.49	1.54	1.58	1.72	1.70	1.65	1.59	1.57	1.53							
125	1.59	1.63	1.68	1.75	1.83	1.86	2.00	1.96	1.90	1.82	1.78	1.73							
130	1.89	1.95	2.02	2.12	2.22	2.26	2.35	2.31	2.22	2.13	2.08	2.01							
135	2.29	2.36	2.44	2.54	2.65	2.68	2.74	2.70	2.60	2.50	2.45	2.38							
140	2.70	2.77	2.83	2.90	2.99	3.02	3.04	3.00	2.94	2.86	2.82	2.77							
145	3.03	3.08	3.11	3.16	3.23	3.25	3.26	3.22	3.18	3.11	3.11	3.05							
150	3.23	3.28	3.28	3.33	3.37	3.39	3.40	3.38	3.34	3.28	3.30	3.25							
155	3.38	3.43	3.42	3.47	3.52	3.53	3.54	3.52	3.48	3.42	3.43	3.39							
160	3.54	3.58	3.58	3.63	3.67	3.68	3.68	3.66	3.62	3.58	3.59	3.54							
165	3.69	3.73	3.71	3.75	3.78	3.78	3.78	3.76	3.75	3.69	3.73	3.69							
170	3.79	3.82	3.79	3.79	3.82	3.80	3.80	3.80	3.79	3.78	3.82	3.79							
175	3.83	3.80	3.77	3.73	3.77	3.76	3.77	3.78	3.76	3.78	3.82	3.82							
180	3.81	3.80	3.76	3.76	3.82	3.82	3.80	3.80	3.77	3.77	3.82	3.83							

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: QiuMing
Test Date: 2016-06-29

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: