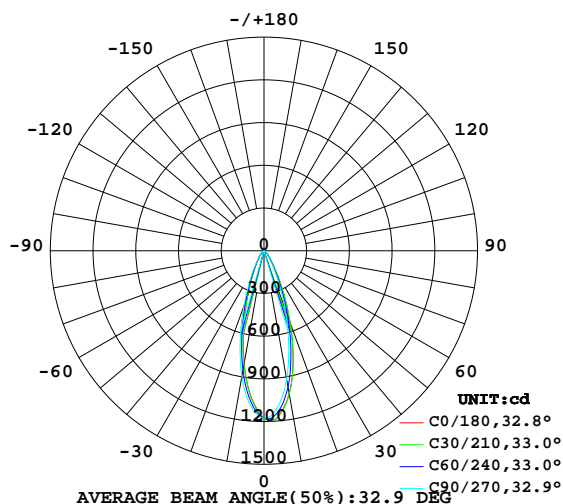


LUMINAIRE PHOTOMETRIC TEST REPORT

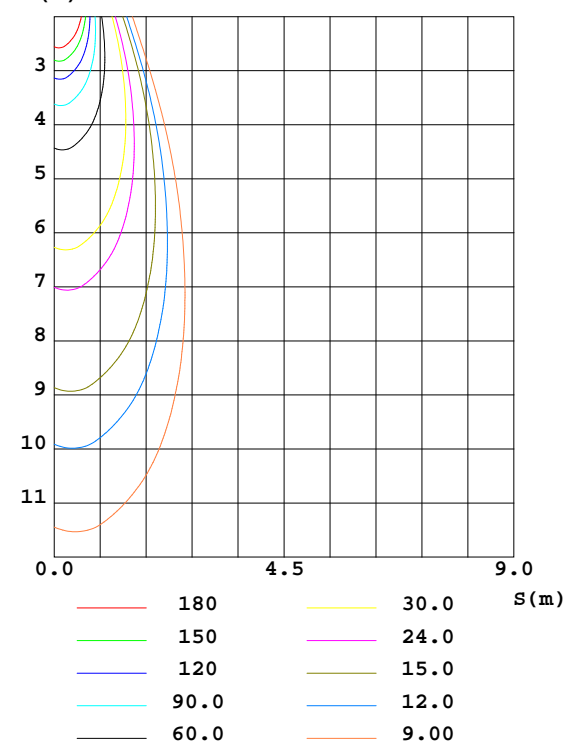
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.88 lm/W			
MODEL	M012-8W-927-S-38	Imax(cd)	1196	S/MH(C0/180)	0.61
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.55
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	502.19	η UP,DN(C0-180)	1.3,50.2
NOMINAL FLUX(lm)	502.194	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.4,47.1
LAMPS INSIDE	1	η up(%)	2.7	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	226.5	η down(%)	97.3	CIBSE SHR MAX	0.55

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	1021	996.3	916.1	834.0	804.9	832.0	896.6	975.2	0- 10	98.77	98.77	19.7,19.7
20	535.4	512.2	430.2	357.6	335.3	358.9	415.0	487.7	10- 20	181.6	280.3	55.8,55.8
30	170.4	158.1	132.9	110.0	108.2	116.6	134.7	156.9	20- 30	116.2	396.5	79,79
40	56.34	52.66	46.29	40.85	41.80	44.57	48.09	54.13	30- 40	50.60	447.1	89,89
50	21.20	19.15	17.47	16.09	16.12	16.58	17.53	19.97	40- 50	23.82	470.9	93.8,93.8
60	8.008	7.999	6.805	6.252	5.934	6.552	6.639	7.203	50- 60	10.38	481.3	95.8,95.8
70	2.436	2.497	2.265	2.190	2.019	2.188	2.204	2.363	60- 70	4.106	485.4	96.7,96.7
80	2.959	1.427	1.338	1.233	1.281	1.293	1.312	1.440	70- 80	1.886	487.3	97,97
90	1.633	1.019	0.9904	0.8486	1.475	1.206	1.368	1.051	80- 90	1.334	488.6	97.3,97.3
100	1.515	0.9991	1.230	0.8506	1.543	1.317	1.543	1.152	90-100	1.292	489.9	97.6,97.6
110	1.755	1.128	1.343	1.059	1.888	1.516	1.778	1.285	100-110	1.373	491.3	97.8,97.8
120	1.839	1.500	1.642	1.551	2.104	1.867	1.814	1.589	110-120	1.511	492.8	98.1,98.1
130	2.166	2.176	2.281	2.305	2.597	2.520	2.345	2.198	120-130	1.773	494.6	98.5,98.5
140	3.025	3.016	3.190	3.127	3.800	3.354	3.223	2.990	130-140	2.109	496.7	98.9,98.9
150	3.973	3.678	3.868	3.687	4.055	3.848	3.792	3.635	140-150	2.224	498.9	99.3,99.3
160	4.150	3.971	4.103	3.901	4.407	4.023	3.987	3.903	150-160	1.810	500.7	99.7,99.7
170	3.866	3.845	3.796	3.788	3.798	3.780	3.779	3.812	160-170	1.114	501.8	99.9,99.9
180	3.879	3.872	3.855	3.847	3.881	3.867	3.853	3.854	170-180	0.3631	502.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

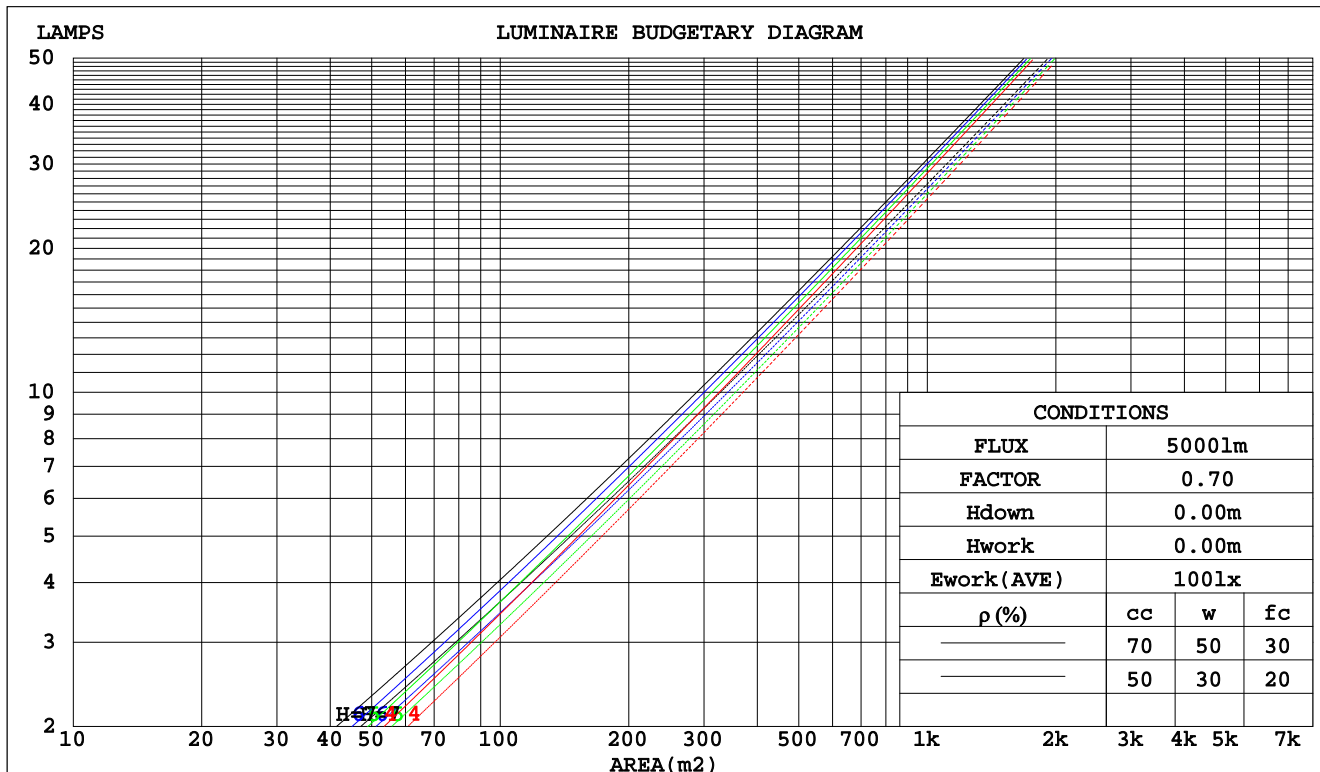
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-28

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															



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	.170 .097 .031	.163 .093 .029	.149 .085 .027	.136 .078 .025	.124 .072 .023	
2.0	.160 .088 .027	.154 .085 .026	.142 .079 .024	.131 .073 .023	.121 .068 .022	
3.0	.151 .080 .024	.145 .078 .023	.135 .073 .022	.126 .069 .021	.117 .065 .020	
4.0	.142 .074 .022	.137 .072 .021	.129 .068 .020	.120 .065 .019	.113 .061 .019	
5.0	.134 .068 .020	.130 .067 .019	.123 .064 .019	.115 .061 .018	.109 .058 .017	
6.0	.127 .064 .018	.124 .063 .018	.117 .060 .017	.111 .057 .017	.105 .055 .016	
7.0	.121 .060 .017	.118 .059 .017	.112 .057 .016	.106 .054 .016	.101 .052 .015	
8.0	.115 .056 .016	.113 .055 .016	.107 .054 .015	.102 .052 .015	.097 .050 .015	
9.0	.110 .053 .015	.108 .052 .015	.103 .051 .014	.098 .049 .014	.094 .048 .014	
10.0	.106 .051 .014	.103 .050 .014	.099 .048 .014	.095 .047 .013	.091 .046 .013	

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	.211 .211 .211	.180 .180 .180	.123 .123 .123	.071 .071 .071	.023 .023 .023	
1.0	.191 .178 .166	.164 .153 .143	.112 .105 .099	.064 .061 .058	.021 .020 .019	
2.0	.176 .153 .135	.150 .132 .117	.103 .091 .081	.059 .053 .048	.019 .017 .016	
3.0	.163 .135 .112	.139 .116 .097	.096 .081 .068	.055 .047 .040	.018 .015 .013	
4.0	.152 .120 .095	.130 .103 .083	.089 .072 .058	.052 .042 .035	.017 .014 .011	
5.0	.142 .108 .083	.122 .093 .072	.084 .065 .051	.049 .038 .030	.016 .013 .010	
6.0	.134 .098 .073	.115 .085 .063	.080 .060 .045	.046 .035 .027	.015 .011 .009	
7.0	.127 .091 .065	.110 .079 .057	.076 .055 .040	.044 .032 .024	.014 .011 .008	
8.0	.121 .084 .059	.104 .073 .051	.072 .051 .036	.042 .030 .022	.014 .010 .007	
9.0	.116 .079 .054	.100 .069 .047	.069 .048 .033	.040 .028 .020	.013 .009 .007	
10.0	.111 .075 .050	.096 .065 .044	.067 .046 .031	.039 .027 .019	.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	18.7	19.5	19.0	19.7	20.0	17.9	18.7	18.1	18.9	19.1					
3H	18.7	19.5	19.0	19.7	20.0	17.9	18.6	18.2	18.9	19.1					
4H	18.7	19.4	19.0	19.7	19.9	17.9	18.6	18.2	18.9	19.1					
6H	18.8	19.4	19.1	19.7	20.0	17.9	18.6	18.2	18.8	19.1					
8H	19.0	19.6	19.3	19.9	20.2	17.9	18.6	18.2	18.9	19.2					
12H	19.2	19.8	19.5	20.1	20.4	17.9	18.5	18.3	18.9	19.2					
4H 2H	18.6	19.3	18.9	19.6	19.9	17.8	18.5	18.1	18.8	19.1					
3H	18.6	19.3	19.0	19.6	19.9	17.9	18.5	18.2	18.8	19.1					
4H	18.7	19.2	19.1	19.6	19.9	17.9	18.5	18.3	18.8	19.2					
6H	18.8	19.3	19.2	19.7	20.1	18.0	18.5	18.4	18.8	19.2					
8H	19.1	19.6	19.6	20.0	20.4	18.0	18.5	18.5	18.9	19.3					
12H	19.4	19.9	19.9	20.3	20.7	18.1	18.5	18.5	18.9	19.4					
8H 4H	18.6	19.0	19.0	19.4	19.9	17.8	18.3	18.3	18.7	19.1					
6H	18.8	19.2	19.3	19.6	20.1	18.0	18.4	18.4	18.8	19.3					
8H	19.2	19.5	19.7	20.0	20.5	18.1	18.4	18.6	18.9	19.4					
12H	19.6	19.9	20.1	20.4	20.9	18.2	18.5	18.7	19.0	19.5					
12H 4H	18.5	19.0	19.0	19.4	19.8	17.8	18.2	18.2	18.6	19.1					
6H	18.8	19.1	19.3	19.6	20.1	18.0	18.3	18.4	18.8	19.3					
8H	19.2	19.5	19.7	20.0	20.5	18.1	18.4	18.6	18.9	19.4					
Variations with the observer position at spacings:															
S = 1.0H	+ 1.5 / - 2.3					+ 1.5 / - 2.5									
1.5H	+ 2.6 / - 2.0					+ 2.1 / - 1.8									
2.0H	+ 2.7 / - 1.5					+ 2.8 / - 2.0									

CIE Pub.117 Corrected 502.2 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:

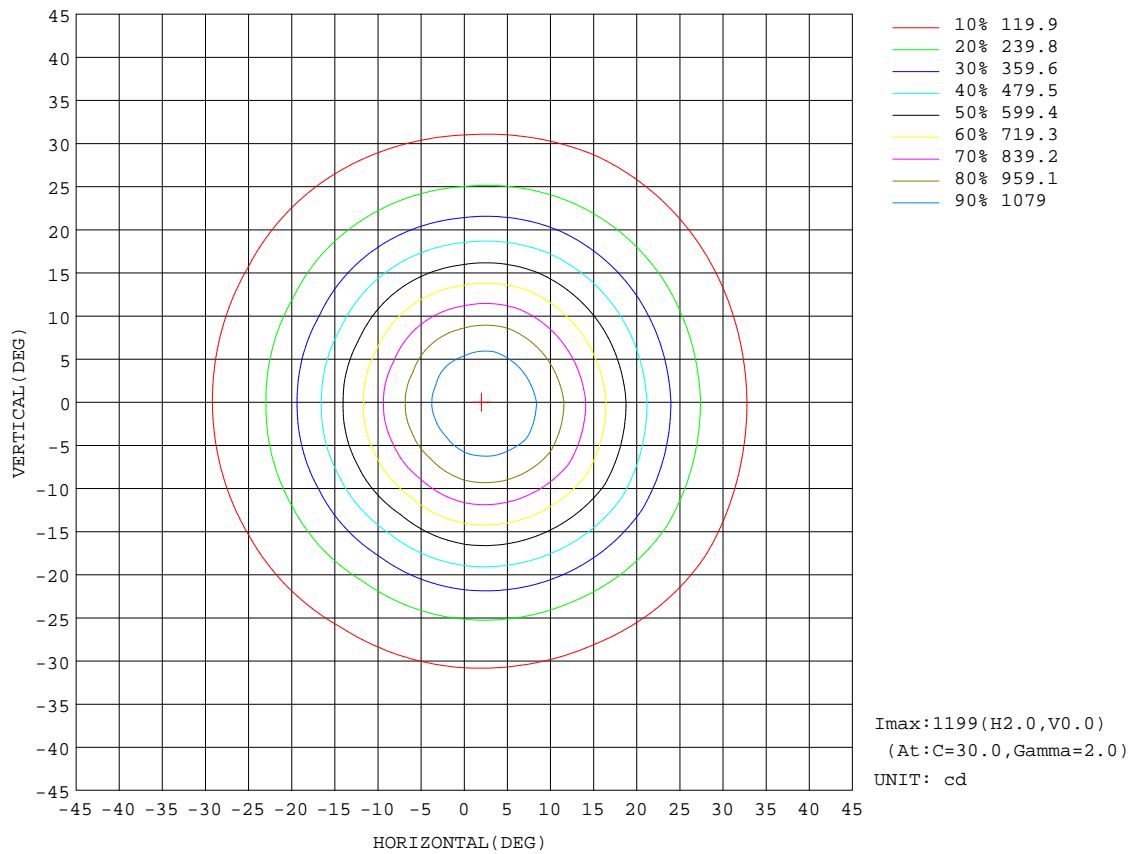
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	83	77	74	70
0.80	92	86	82	91	86	82	90	85	81	77
1.00	97	91	87	96	90	87	94	90	86	82
1.25	101	96	92	100	95	91	98	93	90	86
1.50	104	99	95	103	98	95	100	96	93	88
2.00	107	102	99	105	101	98	102	99	96	90
2.50	109	105	101	107	103	100	103	100	98	91
3.00	110	107	104	108	105	103	105	102	100	93
4.00	113	110	107	110	108	106	106	104	102	94
5.00	114	111	109	111	109	108	107	105	104	96
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:



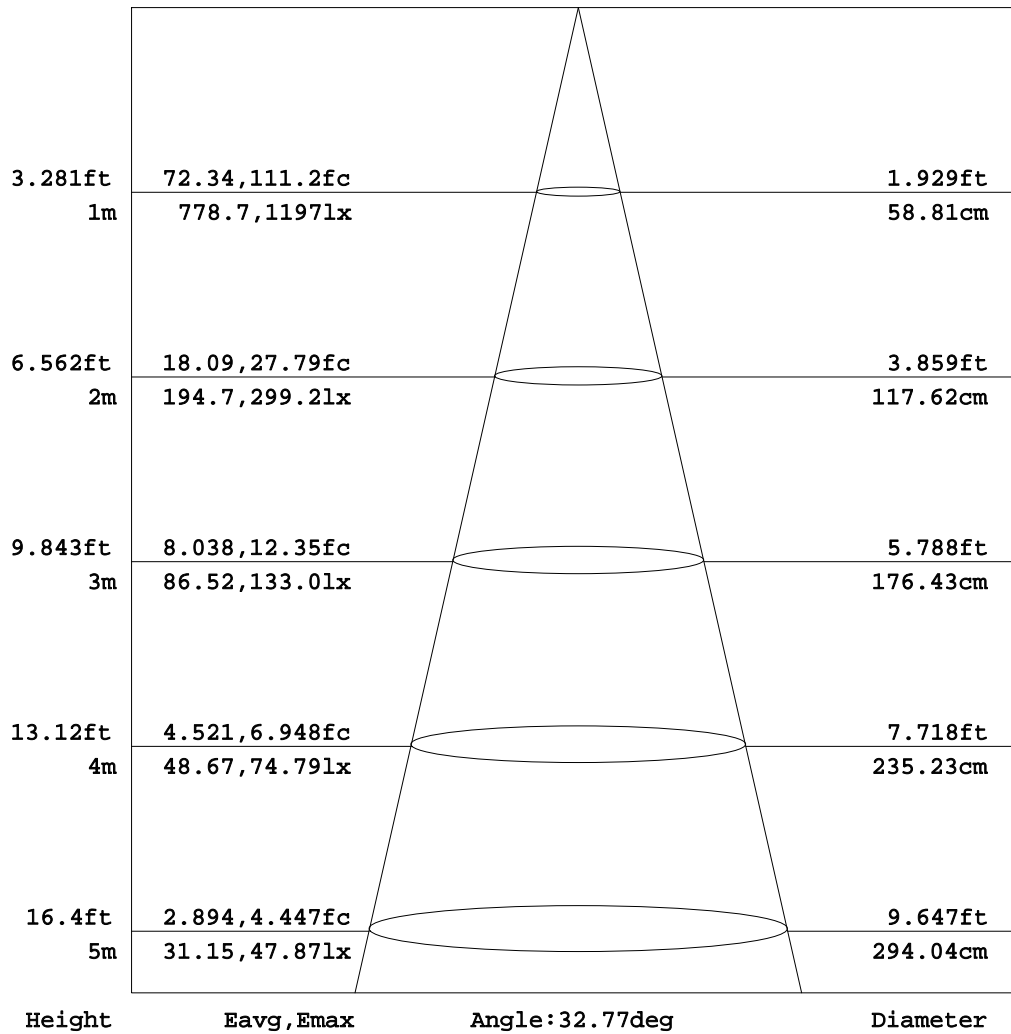
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-28

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:228.7 lm



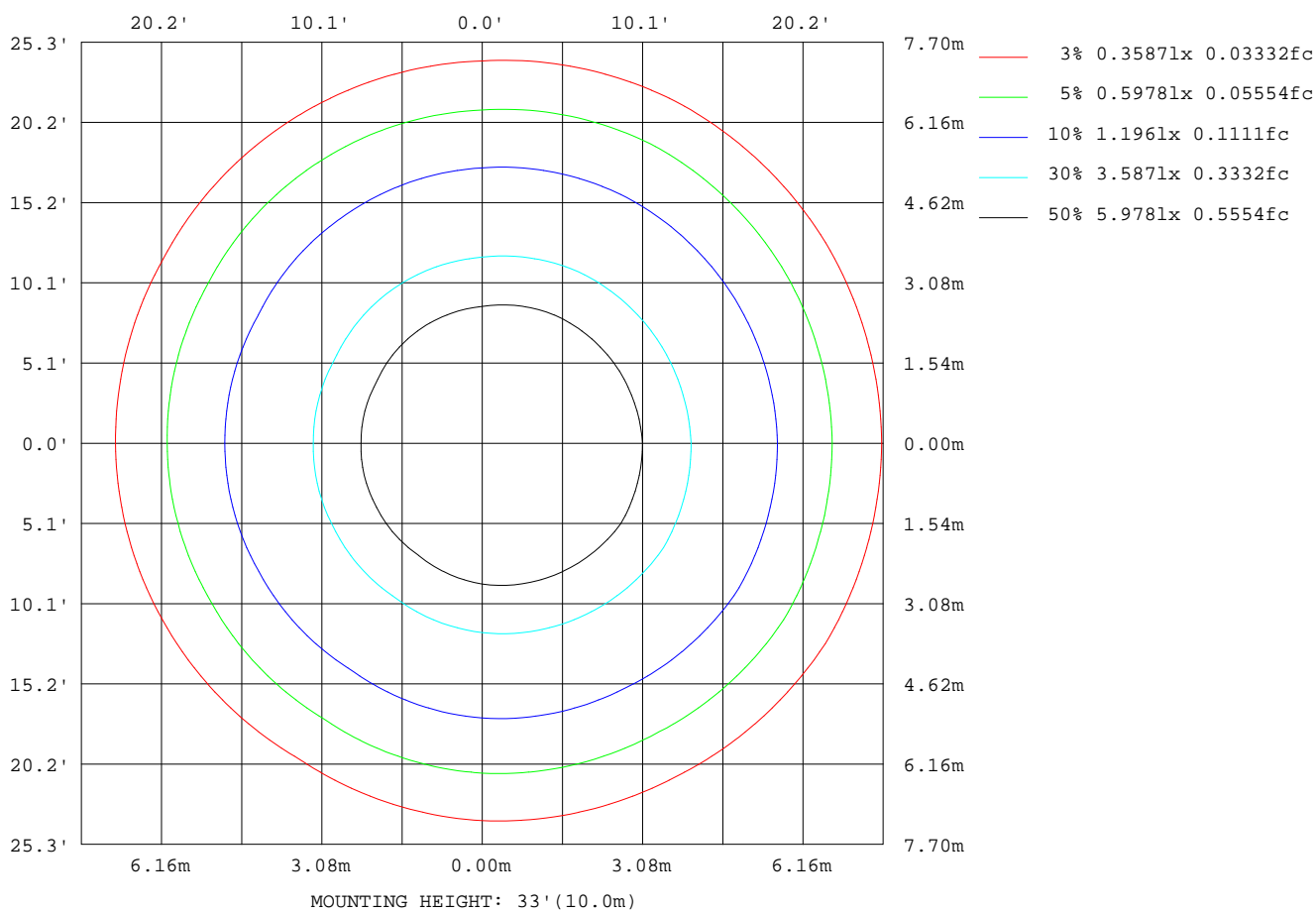
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

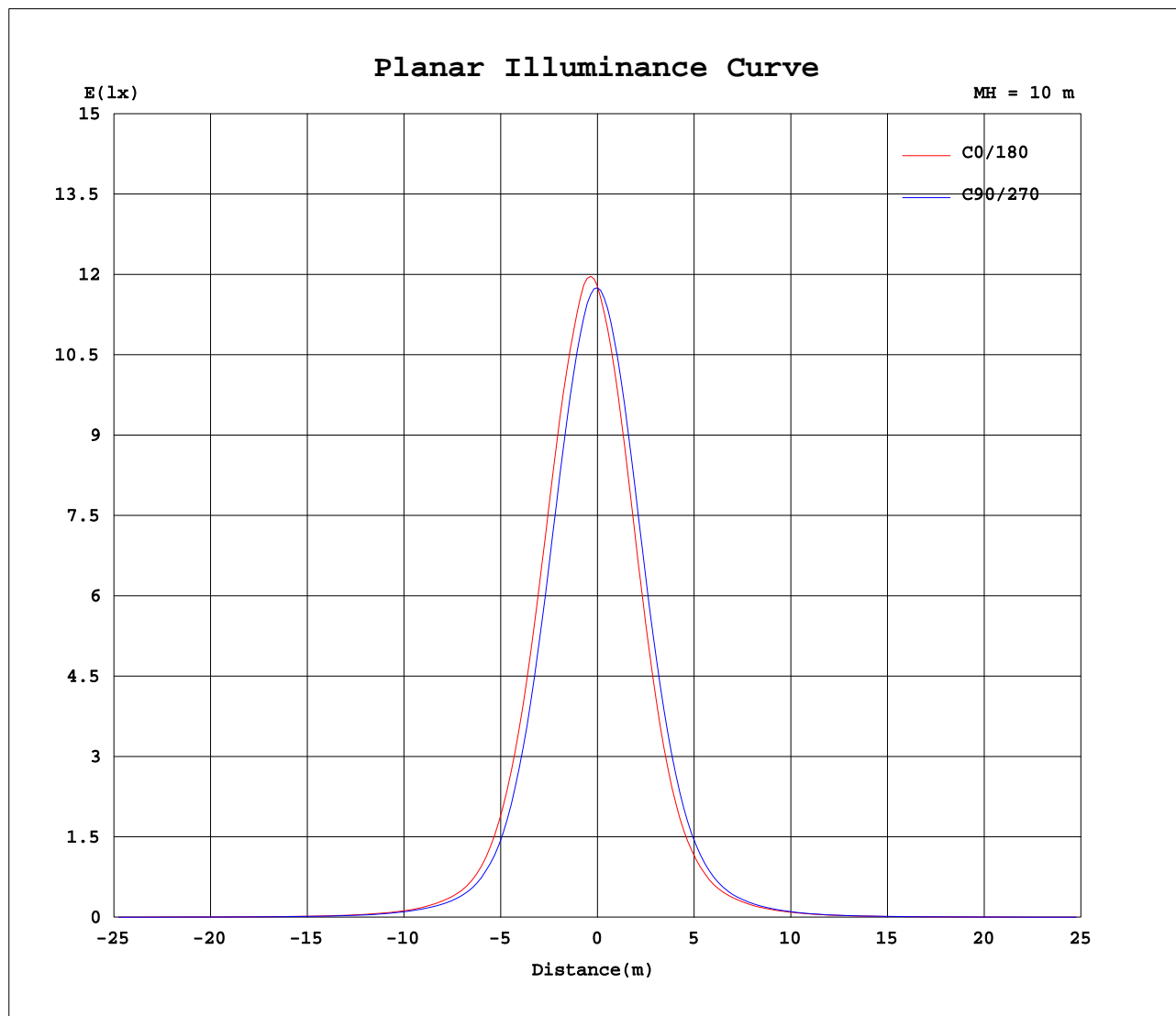
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



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	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176						
5	1167	1167	1136	1103	1062	1042	1032	1038	1064	1090	1130	1152						
10	1021	1021	972	916	851	817	805	811	853	897	957	993						
15	791	793	732	671	596	567	552	558	603	647	714	757						
20	535	540	484	430	372	344	335	340	377	415	470	506						
25	319	320	279	245	205	194	191	193	215	240	275	301						
30	170	170	146	133	113	107	108	111	122	135	152	162						
35	91.9	91.5	80.5	74.3	65.6	65.7	66.3	67.6	72.2	77.3	86.6	91.0						
40	56.3	55.8	49.6	46.3	41.1	40.6	41.8	42.9	46.3	48.1	53.7	54.6						
45	34.0	35.3	32.1	29.2	26.4	26.0	26.5	27.1	29.3	29.6	34.8	33.8						
50	21.2	19.7	18.6	17.5	15.9	16.3	16.1	16.0	17.2	17.5	20.1	19.9						
55	12.4	12.1	11.8	11.0	10.4	10.7	10.3	10.7	10.7	11.1	11.8	12.3						
60	8.01	8.13	7.87	6.80	6.19	6.31	5.93	6.37	6.73	6.64	7.07	7.33						
65	4.69	4.89	4.59	4.19	3.47	3.25	3.13	3.33	3.66	3.75	4.38	4.44						
70	2.44	2.61	2.39	2.26	2.25	2.14	2.02	2.17	2.21	2.20	2.36	2.37						
75	1.86	1.98	1.86	1.78	1.74	1.66	1.61	1.63	1.65	1.70	1.80	1.81						
80	2.96	1.45	1.41	1.34	1.27	1.19	1.28	1.23	1.36	1.31	1.34	1.54						
85	1.82	1.13	1.09	0.94	0.89	0.93	1.24	0.99	1.23	1.28	1.04	1.17						
90	1.63	0.94	1.10	0.99	0.81	0.89	1.48	1.03	1.38	1.37	0.98	1.12						
95	1.66	0.95	1.06	1.17	0.81	0.88	1.49	1.10	1.44	1.56	1.04	1.17						
100	1.52	0.96	1.04	1.23	0.82	0.88	1.54	1.18	1.45	1.54	1.10	1.21						
105	1.56	1.00	1.06	1.29	0.89	0.96	1.93	1.26	1.53	1.67	1.16	1.24						
110	1.76	1.07	1.18	1.34	1.01	1.11	1.89	1.38	1.66	1.78	1.23	1.34						
115	1.73	1.22	1.30	1.47	1.22	1.31	1.99	1.54	1.75	1.80	1.38	1.45						
120	1.84	1.45	1.55	1.64	1.50	1.60	2.10	1.80	1.93	1.81	1.57	1.60						
125	1.99	1.75	1.86	1.92	1.85	1.96	2.24	2.13	2.15	2.02	1.85	1.87						
130	2.17	2.12	2.23	2.28	2.25	2.36	2.60	2.50	2.54	2.34	2.19	2.20						
135	2.56	2.53	2.65	2.71	2.67	2.79	3.03	2.91	2.96	2.78	2.59	2.59						
140	3.02	2.95	3.08	3.19	3.07	3.19	3.80	3.27	3.44	3.22	2.98	3.00						
145	3.90	3.33	3.68	3.75	3.40	3.51	3.89	3.56	3.82	3.70	3.32	3.45						
150	3.97	3.61	3.74	3.87	3.65	3.73	4.06	3.76	3.94	3.79	3.58	3.69						
155	4.05	3.82	3.88	4.04	3.80	3.88	4.21	3.89	4.06	3.91	3.76	3.85						
160	4.15	3.95	3.99	4.10	3.87	3.93	4.41	3.92	4.13	3.99	3.85	3.96						
165	4.06	3.90	3.89	3.86	3.85	3.82	3.84	3.85	3.91	3.96	3.83	3.89						
170	3.87	3.85	3.84	3.80	3.79	3.78	3.80	3.79	3.77	3.78	3.80	3.83						
175	3.85	3.84	3.81	3.80	3.79	3.78	3.81	3.80	3.78	3.76	3.78	3.80						
180	3.88	3.89	3.86	3.85	3.83	3.86	3.88	3.87	3.86	3.85	3.85	3.86						

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: