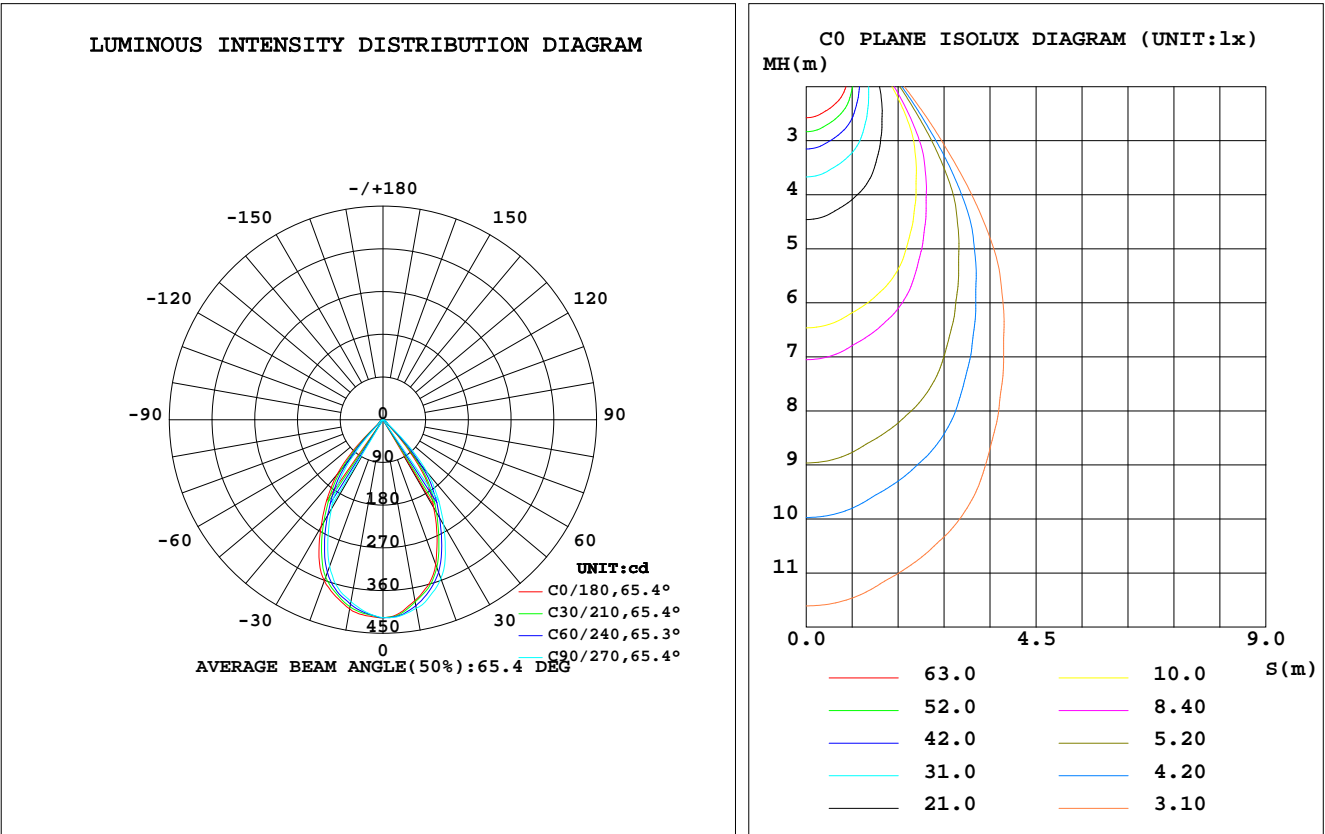


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 59.90 lm/W
MODEL	M011-8W-927-S-60	Imax(cd)	417.5	S/MH(C0/180)	0.91	
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	1.01	
RATED VOLTAGE(V)	226	TOTAL FLUX(lm)	459.45	η UP,DN(C0-180)	1.1,50.4	
NOMINAL FLUX(lm)	459.452	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,47.3	
LAMPS INSIDE	1	η up(%)	2.3	CIBSE SHR NOM	1.00	
TEST VOLTAGE(V)	226.5	η down(%)	97.7	CIBSE SHR MAX	1.05	



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	387.1	393.9	403.4	406.5	404.9	397.4	389.4	386.7	0- 10	38.76	38.76	8.44,8.44
20	324.9	337.0	356.2	363.6	361.4	347.8	328.9	323.1	10- 20	105.0	143.7	31.3,31.3
30	213.6	232.0	255.7	266.5	261.1	242.3	218.2	211.1	20- 30	133.9	277.6	60.4,60.4
40	89.40	116.5	146.2	156.0	150.9	127.0	94.90	86.25	30- 40	113.2	390.8	85.1,85.1
50	11.41	12.25	14.52	15.27	15.02	12.75	11.25	10.92	40- 50	40.31	431.1	93.8,93.8
60	6.559	7.167	7.816	8.138	7.964	7.368	6.650	6.401	50- 60	8.612	439.7	95.7,95.7
70	3.474	3.921	4.423	4.627	4.582	4.139	3.660	3.441	60- 70	5.510	445.2	96.9,96.9
80	0.9719	1.068	1.184	1.496	1.393	1.047	1.013	0.9770	70- 80	2.659	447.9	97.5,97.5
90	0.6605	0.6489	0.6305	0.6374	0.7174	0.7267	0.7312	0.7657	80- 90	0.8746	448.8	97.7,97.7
100	0.8347	0.8084	0.7734	0.7645	0.8749	0.9050	0.9286	0.9666	90-100	0.8320	449.6	97.9,97.9
110	1.124	1.080	1.019	0.9939	1.133	1.180	1.231	1.267	100-110	1.039	450.6	98.1,98.1
120	1.526	1.457	1.381	1.340	1.490	1.543	1.613	1.660	110-120	1.295	451.9	98.4,98.4
130	2.011	1.934	1.837	1.790	1.924	1.985	2.067	2.113	120-130	1.542	453.5	98.7,98.7
140	2.527	2.448	2.358	2.306	2.390	2.452	2.525	2.562	130-140	1.700	455.2	99.1,99.1
150	2.909	2.862	2.801	2.766	2.796	2.839	2.881	2.898	140-150	1.666	456.8	99.4,99.4
160	3.140	3.131	3.085	3.053	3.086	3.123	3.148	3.146	150-160	1.376	458.2	99.7,99.7
170	3.379	3.371	3.356	3.325	3.354	3.364	3.383	3.371	160-170	0.9144	459.1	99.9,99.9
180	3.536	3.536	3.534	3.529	3.543	3.534	3.528	3.530	170-180	0.3278	459.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

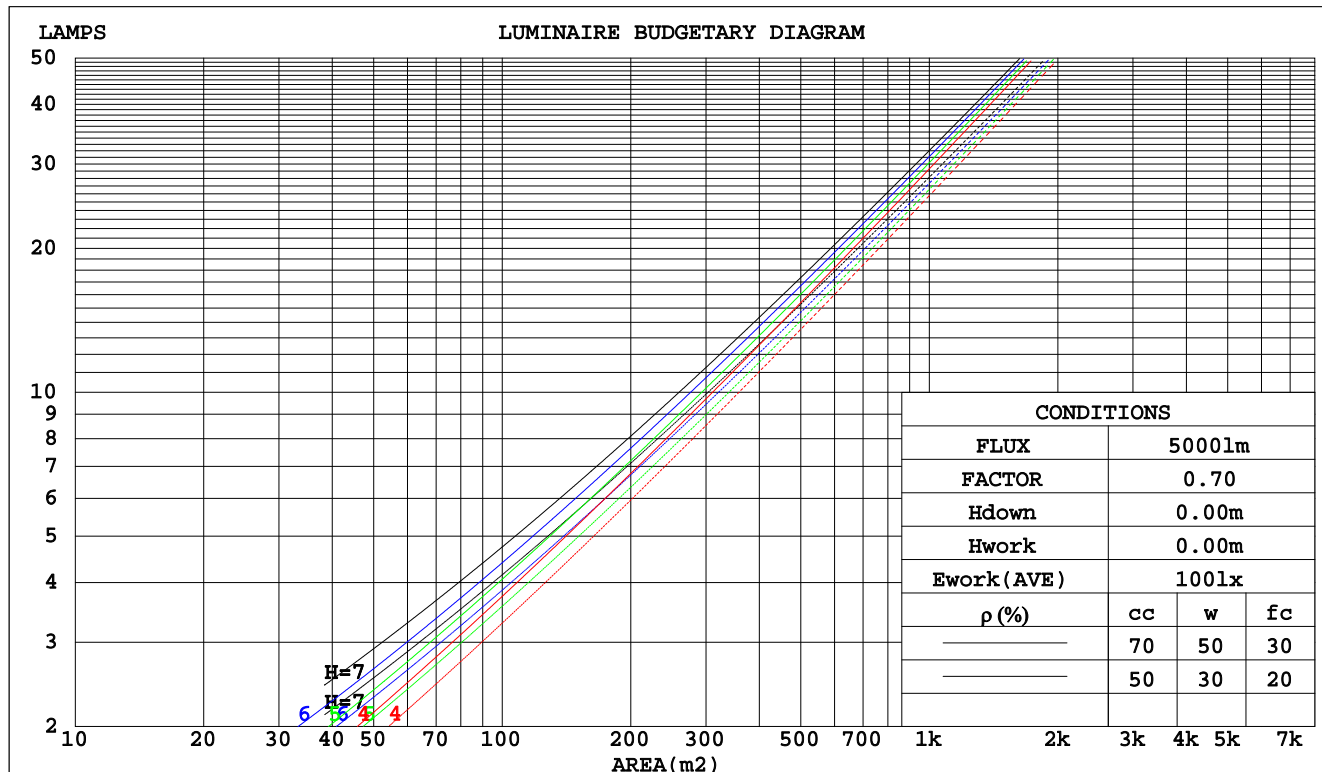
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:QiuMing
Test Date:2016-06-28

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	1.09	1.07	1.04	1.07	1.05	1.02	1.02	1.01	.99	.98	.97	.95	.94	.93	.92	.90
2.0	1.01	.96	.93	.99	.95	.92	.95	.92	.89	.92	.89	.87	.89	.87	.85	.83
3.0	.93	.88	.83	.92	.87	.83	.89	.84	.81	.86	.82	.79	.83	.80	.78	.76
4.0	.86	.80	.76	.85	.80	.75	.83	.78	.74	.80	.76	.73	.78	.75	.72	.70
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.75	.71	.67	.73	.69	.66	.65
6.0	.75	.68	.64	.74	.68	.63	.72	.67	.63	.70	.66	.62	.69	.65	.61	.60
7.0	.70	.63	.59	.69	.63	.59	.67	.62	.58	.66	.61	.58	.65	.60	.57	.56
8.0	.65	.59	.54	.65	.59	.54	.63	.58	.54	.62	.57	.54	.61	.56	.53	.52
9.0	.61	.55	.51	.61	.55	.51	.60	.54	.50	.58	.53	.50	.57	.53	.50	.48
10.0	.58	.51	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.54	.50	.46	.45



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	.195 .111 .035	.187 .107 .034	.173 .099 .032	.160 .092 .030	.148 .086 .028	
2.0	.187 .102 .031	.180 .099 .031	.168 .094 .029	.157 .088 .028	.147 .083 .026	
3.0	.178 .095 .028	.172 .092 .028	.162 .088 .027	.152 .083 .026	.143 .079 .025	
4.0	.169 .088 .026	.164 .086 .025	.155 .082 .025	.147 .079 .024	.139 .075 .023	
5.0	.161 .082 .024	.156 .080 .023	.148 .077 .023	.141 .074 .022	.134 .072 .021	
6.0	.153 .077 .022	.149 .075 .022	.142 .073 .021	.135 .070 .021	.129 .068 .020	
7.0	.146 .072 .020	.142 .071 .020	.136 .069 .020	.130 .067 .019	.124 .065 .019	
8.0	.139 .068 .019	.136 .067 .019	.130 .065 .019	.125 .063 .018	.120 .062 .018	
9.0	.133 .064 .018	.130 .064 .018	.125 .062 .018	.120 .060 .017	.116 .059 .017	
10.0	.127 .061 .017	.125 .060 .017	.120 .059 .017	.116 .057 .016	.111 .056 .016	

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 .161	.163 .150 .139	.111 .103 .096	.064 .060 .056	.021 .019 .018	
2.0	.176 .150 .129	.151 .129 .111	.103 .090 .078	.060 .052 .046	.019 .017 .015	
3.0	.165 .132 .105	.141 .114 .091	.097 .079 .064	.056 .046 .038	.018 .015 .012	
4.0	.155 .117 .088	.133 .101 .077	.092 .071 .054	.053 .041 .032	.017 .013 .011	
5.0	.147 .106 .076	.126 .092 .066	.087 .064 .047	.050 .038 .028	.016 .012 .009	
6.0	.140 .097 .066	.120 .084 .058	.083 .059 .041	.048 .035 .024	.016 .011 .008	
7.0	.134 .090 .059	.115 .078 .051	.079 .054 .036	.046 .032 .022	.015 .011 .007	
8.0	.128 .084 .053	.110 .073 .046	.076 .051 .033	.044 .030 .020	.014 .010 .006	
9.0	.123 .079 .048	.106 .068 .042	.073 .048 .030	.043 .028 .018	.014 .009 .006	
10.0	.119 .074 .045	.102 .064 .039	.071 .045 .028	.041 .027 .017	.013 .009 .005	

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	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	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	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise					Viewed endwise				
x = 2H y = 2H						21.2	22.2	21.4	22.4	22.6	22.6	23.6	22.8	23.8	24.0
3H						21.1	22.1	21.4	22.3	22.6	22.5	23.5	22.8	23.7	23.9
4H						21.1	22.0	21.4	22.2	22.5	22.5	23.4	22.8	23.6	23.9
6H						21.0	21.8	21.4	22.1	22.4	22.4	23.3	22.8	23.5	23.8
8H						21.0	21.8	21.3	22.1	22.4	22.4	23.2	22.7	23.5	23.8
12H						20.9	21.7	21.3	22.0	22.3	22.4	23.1	22.7	23.4	23.8
4H 2H						21.0	21.9	21.3	22.1	22.4	22.4	23.2	22.7	23.5	23.8
3H						21.0	21.7	21.3	22.1	22.4	22.3	23.1	22.7	23.4	23.7
4H						21.0	21.7	21.4	22.0	22.4	22.3	23.0	22.7	23.4	23.7
6H						20.9	21.5	21.3	21.9	22.3	22.3	22.9	22.7	23.3	23.7
8H						20.9	21.4	21.3	21.8	22.3	22.3	22.8	22.7	23.2	23.6
12H						20.9	21.4	21.3	21.8	22.2	22.2	22.7	22.7	23.2	23.6
8H 4H						20.9	21.4	21.3	21.8	22.2	22.2	22.8	22.7	23.2	23.6
6H						20.8	21.3	21.3	21.7	22.2	22.2	22.6	22.7	23.1	23.5
8H						20.8	21.2	21.3	21.7	22.2	22.2	22.6	22.7	23.0	23.5
12H						20.8	21.2	21.3	21.6	22.2	22.2	22.5	22.7	23.0	23.5
12H 4H						20.8	21.3	21.3	21.8	22.2	22.2	22.7	22.6	23.1	23.5
6H						20.8	21.2	21.3	21.7	22.1	22.1	22.5	22.6	23.0	23.5
8H						20.8	21.1	21.3	21.6	22.1	22.1	22.5	22.6	23.0	23.5
Variations with the observer position at spacings:															
S = 1.0H						+ 2.4 / - 6.0					+ 2.7 / - 6.5				
1.5H						+ 4.9 / - 5.6					+ 4.8 / - 6.3				
2.0H						+ 1.9 / - 0.9					+ 7.0 / - 2.5				

CIE Pub.117 Corrected 459.5 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:

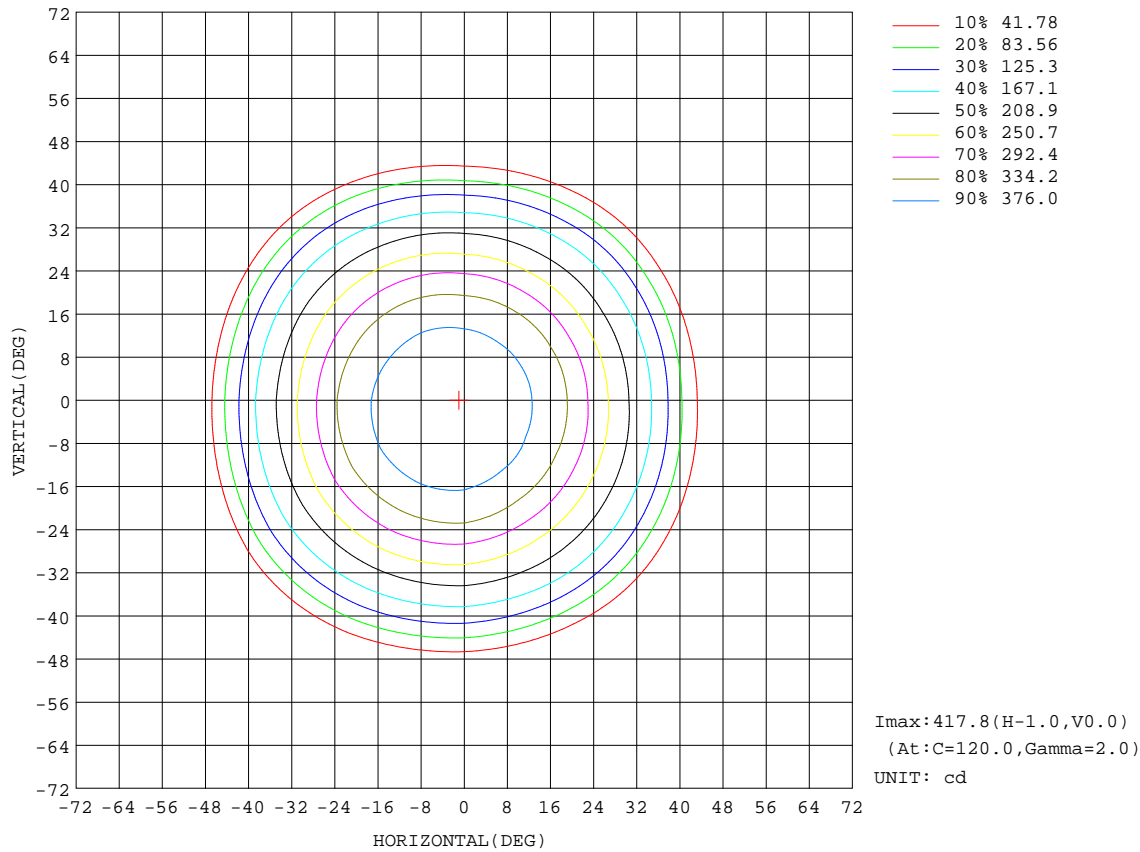
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	75	71	82	75	71	81	74	71	67
0.80	90	84	79	89	83	79	88	82	79	74
1.00	95	89	85	94	89	85	93	88	84	79
1.25	100	94	90	99	93	90	96	92	89	84
1.50	103	98	94	102	97	93	99	95	92	87
2.00	106	102	98	105	100	97	101	98	95	89
2.50	108	104	100	106	102	99	103	100	97	91
3.00	110	106	103	108	105	102	104	101	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:

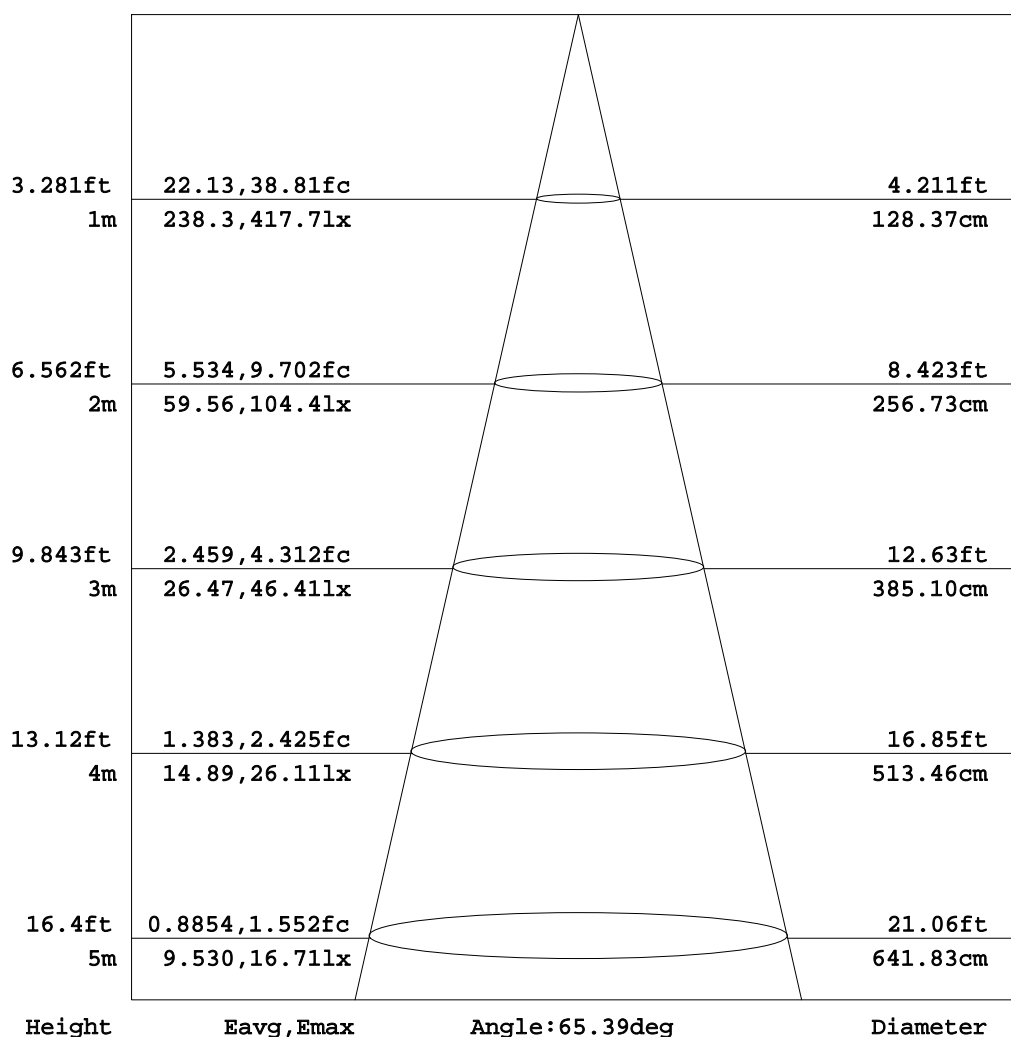


C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 30.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Temperature: 25.3DEG	Humidity: 65.0%
Operators: QiuMing	Test Distance: 6.250m [K=1.0000]
Test Date: 2016-06-28	Remarks:

AAI Figure

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

Flux out:315.7 lm



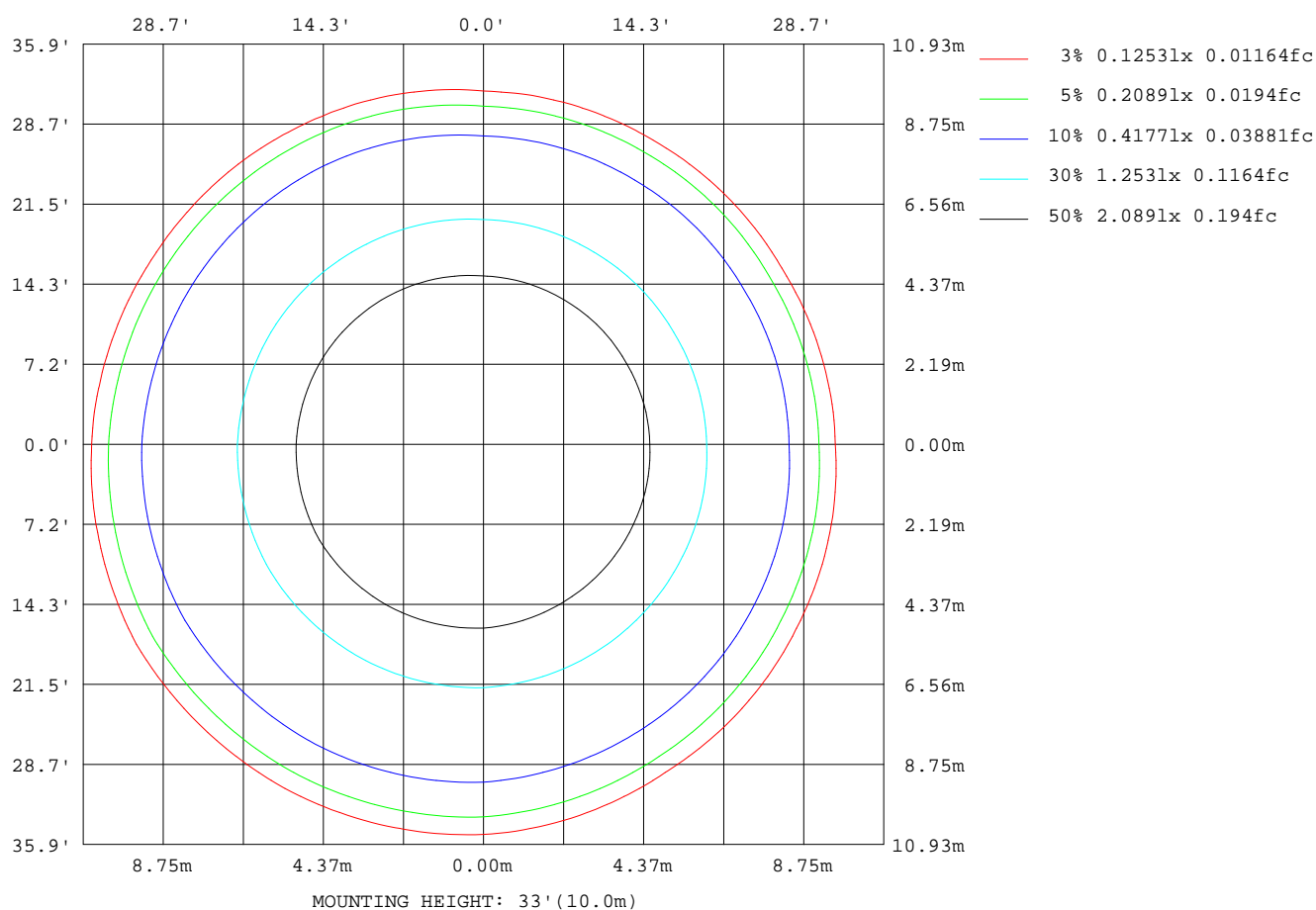
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

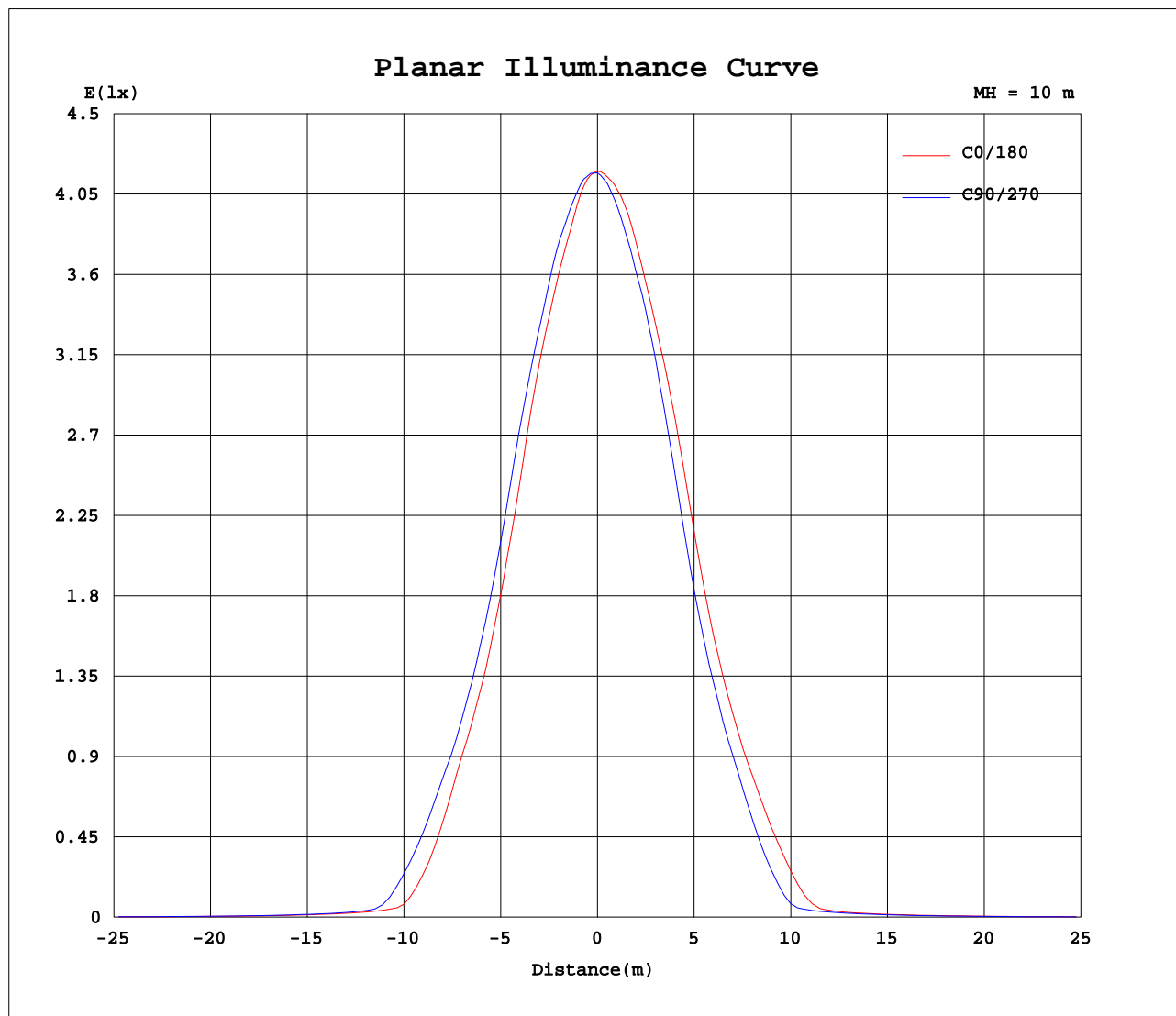
NAME:	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: Rayconn	SUR.:	PROTECTION ANGLE:



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	417	417	417	417	417	417	417	417	417	417	417	417							
5	409	411	414	415	416	416	414	411	409	407	407	407							
10	387	390	398	403	406	407	405	400	395	389	388	385							
15	363	368	374	384	390	389	385	379	375	367	363	362							
20	325	331	343	356	362	365	361	353	343	329	324	322							
25	270	279	293	311	320	326	319	307	291	275	268	265							
30	214	225	239	256	264	269	261	250	234	218	212	210							
35	164	173	187	202	208	212	207	195	179	165	161	159							
40	89.4	107	126	146	154	158	151	136	118	94.9	87.6	84.9							
45	20.5	31.5	46.9	68.9	79.4	83.6	73.2	54.7	36.4	21.4	17.5	16.9							
50	11.4	11.8	12.7	14.5	15.1	15.5	15.0	13.3	12.2	11.3	10.9	10.9							
55	8.72	9.13	9.60	10.2	10.4	10.7	10.3	9.82	9.34	8.73	8.47	8.33							
60	6.56	6.98	7.35	7.82	8.04	8.24	7.96	7.60	7.13	6.65	6.48	6.33							
65	4.94	5.28	5.57	5.95	6.09	6.24	6.10	5.77	5.51	5.11	5.00	4.82							
70	3.47	3.79	4.06	4.42	4.56	4.70	4.58	4.28	4.00	3.66	3.51	3.37							
75	1.94	2.35	2.62	2.95	3.03	3.16	3.08	2.76	2.53	2.15	1.98	1.81							
80	0.97	1.09	1.04	1.18	1.43	1.56	1.39	1.06	1.03	1.01	0.97	0.98							
85	0.65	0.66	0.72	0.77	0.82	0.82	0.84	0.82	0.76	0.73	0.72	0.73							
90	0.66	0.66	0.64	0.63	0.64	0.64	0.72	0.72	0.73	0.73	0.77	0.77							
95	0.73	0.73	0.70	0.69	0.66	0.68	0.78	0.79	0.81	0.83	0.85	0.84							
100	0.83	0.83	0.79	0.77	0.77	0.76	0.87	0.89	0.92	0.93	0.97	0.96							
105	0.96	0.95	0.90	0.88	0.85	0.87	0.99	1.00	1.05	1.07	1.11	1.10							
110	1.12	1.10	1.06	1.02	0.99	1.00	1.13	1.16	1.20	1.23	1.27	1.26							
115	1.31	1.28	1.22	1.19	1.16	1.16	1.30	1.32	1.38	1.41	1.46	1.45							
120	1.53	1.49	1.42	1.38	1.33	1.35	1.49	1.51	1.57	1.61	1.66	1.65							
125	1.77	1.72	1.64	1.60	1.55	1.55	1.70	1.73	1.79	1.83	1.89	1.88							
130	2.01	1.97	1.90	1.84	1.79	1.79	1.92	1.95	2.02	2.07	2.12	2.11							
135	2.27	2.23	2.15	2.10	2.04	2.04	2.16	2.18	2.26	2.30	2.35	2.34							
140	2.53	2.49	2.41	2.36	2.31	2.31	2.39	2.42	2.49	2.53	2.57	2.55							
145	2.74	2.72	2.65	2.60	2.55	2.55	2.61	2.64	2.70	2.73	2.77	2.74							
150	2.91	2.89	2.84	2.80	2.77	2.76	2.80	2.81	2.87	2.88	2.91	2.88							
155	3.02	3.02	2.98	2.95	2.92	2.91	2.95	2.98	3.01	3.01	3.04	3.01							
160	3.14	3.15	3.12	3.09	3.05	3.05	3.09	3.10	3.14	3.15	3.16	3.13							
165	3.26	3.26	3.23	3.22	3.19	3.19	3.22	3.22	3.27	3.27	3.28	3.26							
170	3.38	3.39	3.35	3.36	3.32	3.33	3.35	3.35	3.38	3.38	3.39	3.35							
175	3.48	3.49	3.48	3.47	3.45	3.45	3.47	3.45	3.48	3.47	3.48	3.46							
180	3.54	3.54	3.53	3.53	3.53	3.53	3.54	3.53	3.54	3.53	3.53	3.53							

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: