

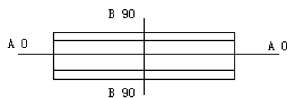
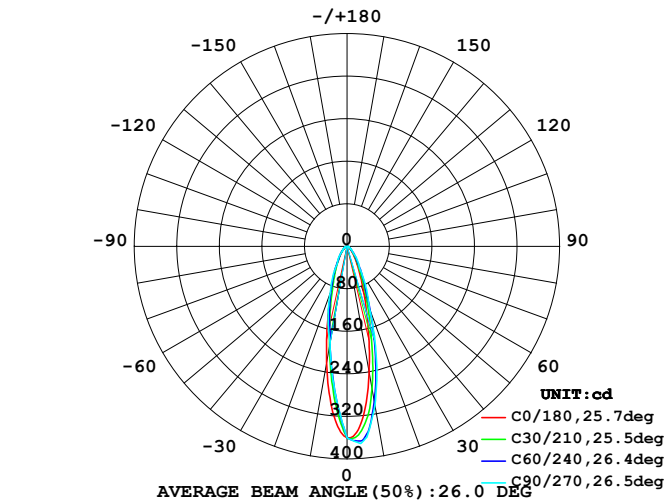


LUMINAIRE PHOTOMETRIC TEST REPORT

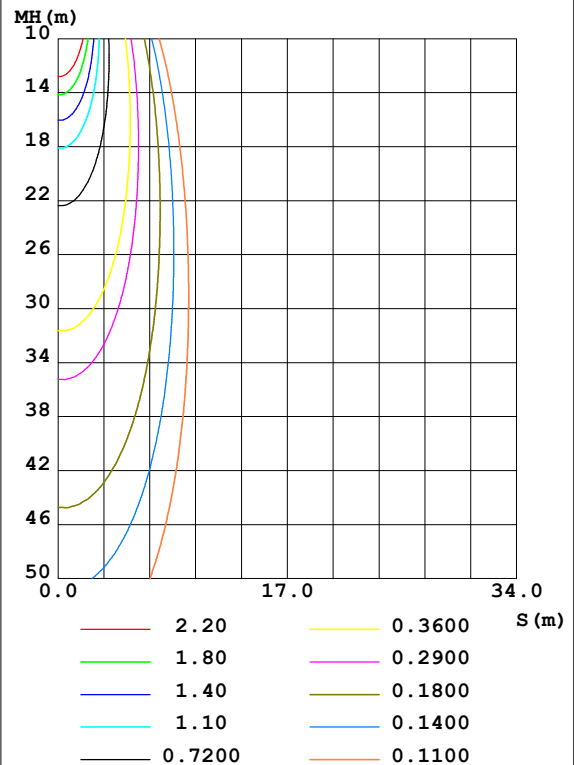
NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	RXEL39 single head	I _{max} (cd)	371.9	S/MH (C0/180)	0.42
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.35
RATED VOLTAGE (V)	4	TOTAL FLUX (lm)	145.24	η UP, DN (C0-180)	0.0, 55.5
NOMINAL FLUX (lm)	145.241	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 44.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	4	η down (%)	100.0	CIBSE SHR MAX	0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WLM
Test Date: 2021-08-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity: 65.0%
Test Distance: 13.693m [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
5	328.0	355.3	366.3	342.2	312.2	275.1	270.8	285.1	0- 5	7.984	7.984	5.5,5.5
10	240.2	285.0	303.8	265.4	222.1	187.6	185.5	198.5	5- 10	19.50	27.48	18.9,18.9
15	152.7	193.0	213.2	177.6	141.6	121.5	139.1	127.7	10- 15	22.85	50.33	34.7,34.7
20	93.14	119.0	122.6	110.0	88.84	82.67	92.76	85.71	15- 20	20.74	71.07	48.9,48.9
25	57.90	72.95	84.96	68.48	57.72	56.32	65.14	56.71	20- 25	16.76	87.82	60.5,60.5
30	37.21	46.83	47.32	45.05	38.63	39.17	37.52	38.08	25- 30	13.19	101.0	69.5,69.5
35	24.75	30.65	36.58	30.36	26.56	27.07	29.37	25.54	30- 35	10.06	111.1	76.5,76.5
40	16.98	20.44	25.83	20.65	18.60	18.80	21.22	17.27	35- 40	8.027	119.1	82,82
45	12.03	14.87	15.86	15.12	13.29	14.06	13.64	12.86	40- 45	6.253	125.3	86.3,86.3
50	8.835	10.71	12.11	10.90	9.668	10.31	10.66	9.488	45- 50	4.790	130.1	89.6,89.6
55	6.660	7.780	9.142	7.831	7.127	7.518	8.262	6.986	50- 55	3.862	134.0	92.3,92.3
60	5.090	6.117	6.170	6.039	5.347	5.850	5.859	5.531	55- 60	3.108	137.1	94.4,94.4
65	3.913	4.703	4.925	4.547	3.896	4.414	4.648	4.333	60- 65	2.459	139.6	96.1,96.1
70	2.874	3.549	3.679	3.384	2.755	3.282	3.437	3.295	65- 70	1.945	141.5	97.4,97.4
75	1.972	2.584	2.981	2.517	1.810	2.424	2.664	2.323	70- 75	1.489	143.0	98.5,98.5
80	1.178	1.901	2.284	1.824	1.014	1.697	1.891	1.628	75- 80	1.101	144.1	99.2,99.2
85	0.5546	1.279	1.586	1.175	0.3679	1.005	1.119	0.9840	80- 85	0.7387	144.8	99.7,99.7
90	0.0231	0.6805	0.8881	0.5421	0.0210	0.3228	0.3460	0.3575	85- 90	0.3994	145.2	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

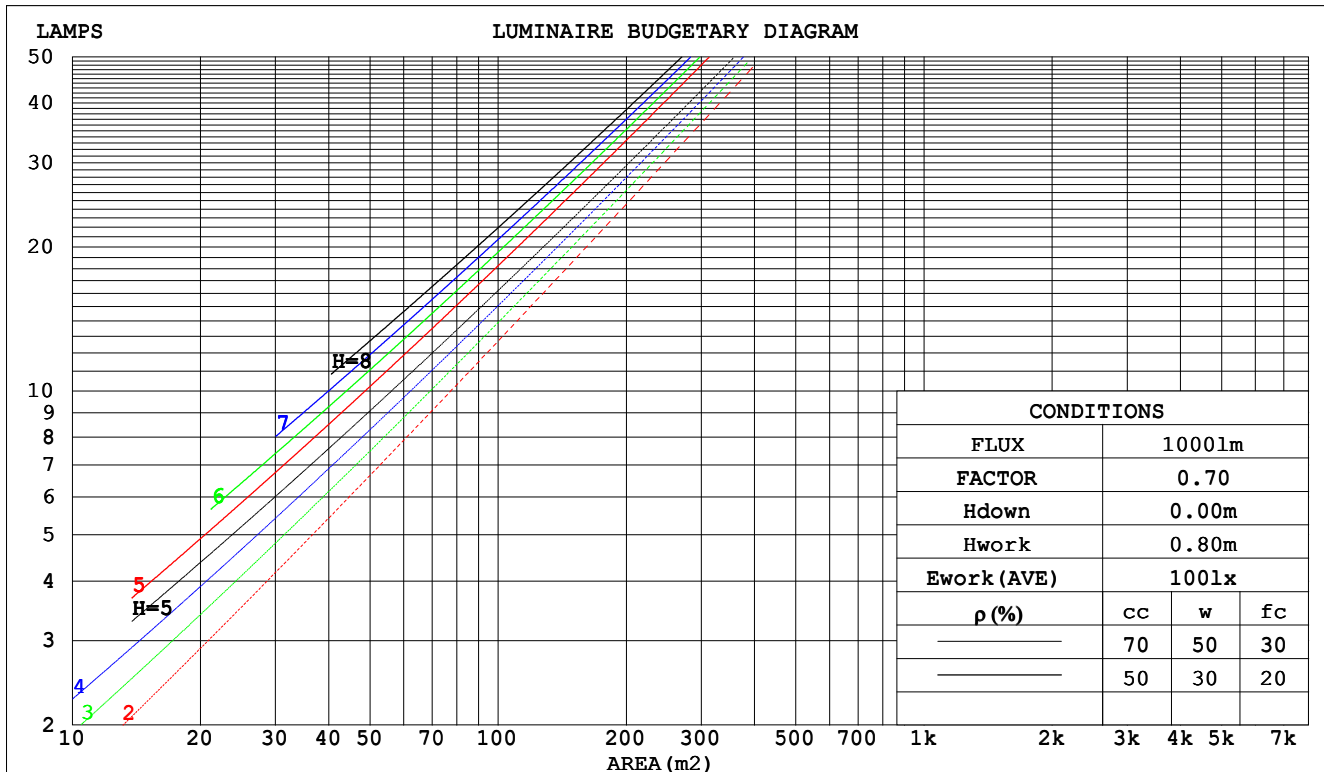
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.03	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.02	.97	.94	.00	.96	.93	.97	.93	.90	.94	.91	.89	.91	.89	.87	.85
3.0	.95	.89	.85	.93	.88	.84	.90	.86	.83	.88	.85	.82	.86	.83	.80	.79
4.0	.88	.83	.78	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.73	.82	.77	.72	.80	.76	.72	.79	.74	.71	.77	.73	.71	.69
6.0	.78	.72	.68	.78	.72	.68	.76	.71	.67	.75	.70	.67	.73	.70	.67	.65
7.0	.74	.68	.64	.74	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
8.0	.71	.65	.61	.70	.64	.61	.69	.64	.60	.68	.63	.60	.67	.63	.60	.58
9.0	.67	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.64	.60	.57	.56
10.0	.64	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.62	.57	.54	.53



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.197	.112	.036	.190	.109	.035	.178	.102	.033	.166	.096	.031	.155	.090	.029		
2.0	.185	.101	.031	.179	.099	.030	.168	.094	.029	.158	.089	.028	.149	.084	.027		
3.0	.173	.092	.028	.168	.090	.027	.159	.086	.026	.150	.082	.025	.142	.079	.024		
4.0	.162	.084	.025	.157	.082	.024	.149	.079	.024	.142	.076	.023	.135	.073	.022		
5.0	.152	.077	.022	.148	.076	.022	.141	.073	.022	.135	.071	.021	.129	.069	.021		
6.0	.143	.072	.020	.140	.071	.020	.134	.068	.020	.128	.066	.020	.123	.065	.019		
7.0	.135	.067	.019	.132	.066	.019	.127	.064	.018	.122	.062	.018	.117	.061	.018		
8.0	.128	.062	.018	.125	.062	.017	.121	.060	.017	.116	.059	.017	.112	.057	.017		
9.0	.121	.059	.016	.119	.058	.016	.115	.057	.016	.111	.056	.016	.107	.054	.016		
10.0	.115	.055	.015	.114	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.054	.050	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.118	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.111	.070	.042	.096	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
8.0	.105	.064	.036	.090	.056	.031	.063	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.100	.059	.031	.086	.051	.027	.059	.036	.019	.035	.021	.012	.011	.007	.004	
10.0	.095	.054	.028	.081	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME: RXEL39-1 single head						TYPE:		WEIGHT:			
SPEC.:						DIM.:		SERIAL No.:2021081001			
						SUR.:0.052		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		15.7	16.6	15.9	16.8	17.0	17.1	18.0	17.3	18.2	18.4
3H		16.4	17.3	16.7	17.5	17.7	17.9	18.7	18.1	18.9	19.2
4H		16.8	17.6	17.0	17.8	18.1	18.3	19.2	18.6	19.4	19.6
6H		17.0	17.8	17.3	18.1	18.3	18.8	19.6	19.1	19.9	20.1
8H		17.1	17.9	17.4	18.1	18.4	19.1	19.9	19.4	20.1	20.4
12H		17.1	17.9	17.4	18.1	18.4	19.4	20.1	19.7	20.4	20.7
4H 2H		16.1	17.0	16.4	17.2	17.4	17.3	18.1	17.6	18.4	18.6
3H		17.1	17.8	17.4	18.1	18.4	18.3	19.0	18.6	19.3	19.6
4H		17.6	18.2	17.9	18.5	18.9	18.9	19.6	19.2	19.9	20.2
6H		17.9	18.5	18.3	18.9	19.2	19.6	20.2	20.0	20.5	20.9
8H		18.1	18.6	18.5	19.0	19.4	20.0	20.5	20.4	20.9	21.3
12H		18.2	18.7	18.6	19.1	19.4	20.4	20.9	20.8	21.3	21.7
8H 4H		17.8	18.4	18.2	18.8	19.1	19.0	19.6	19.4	20.0	20.3
6H		18.4	18.9	18.8	19.3	19.7	19.9	20.4	20.4	20.8	21.2
8H		18.6	19.0	19.1	19.5	19.9	20.5	20.9	20.9	21.3	21.7
12H		18.8	19.1	19.3	19.6	20.1	21.1	21.4	21.5	21.9	22.3
12H 4H		17.9	18.4	18.3	18.8	19.2	19.0	19.6	19.5	19.9	20.3
6H		18.5	18.9	19.0	19.4	19.8	20.0	20.4	20.4	20.8	21.3
8H		18.8	19.2	19.3	19.6	20.1	20.6	20.9	21.1	21.4	21.9
Variations with the observer position at spacings:											
S = 1.0H		+ 0.5 / - 0.6					+ 0.4 / - 0.5				
1.5H		+ 0.5 / - 0.5					+ 0.8 / - 0.3				
2.0H		+ 0.6 / - 0.6					+ 0.6 / - 0.5				

CIE Pub.117 Corrected 145.2 lm Total Lamp Luminous Flux.(8log(F/F0) = -6.7)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	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) $k(RI) \times RCR = 5$									
$k = 0.60$	80	73	68	80	73	68	79	72	68	64
0.80	88	81	77	88	81	77	86	80	76	72
1.00	94	87	82	93	86	82	91	87	82	77
1.25	99	92	88	97	92	87	95	90	87	82
1.50	102	96	92	100	95	91	98	94	90	85
2.00	105	100	96	104	99	95	101	97	94	88
2.50	108	103	99	106	102	98	103	99	96	90
3.00	109	105	102	108	104	101	104	101	99	92
4.00	112	108	106	110	107	104	106	104	102	94
5.00	113	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:

Conical surface Flux(90deg):

125.35 lm

%lum = 86.3%

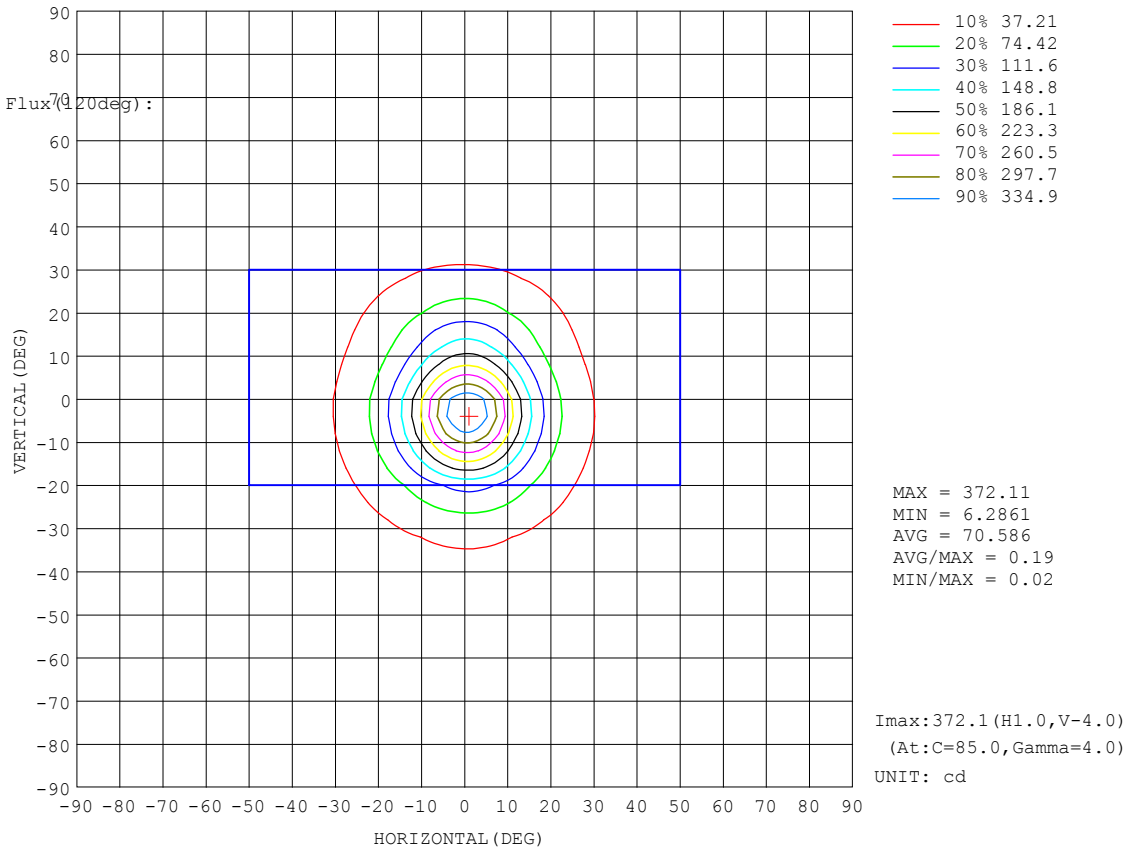
%lamp = 86.3%

Conical surface Flux(70deg):

137.11 lm

%lum = 94.4%

%lamp = 94.4%

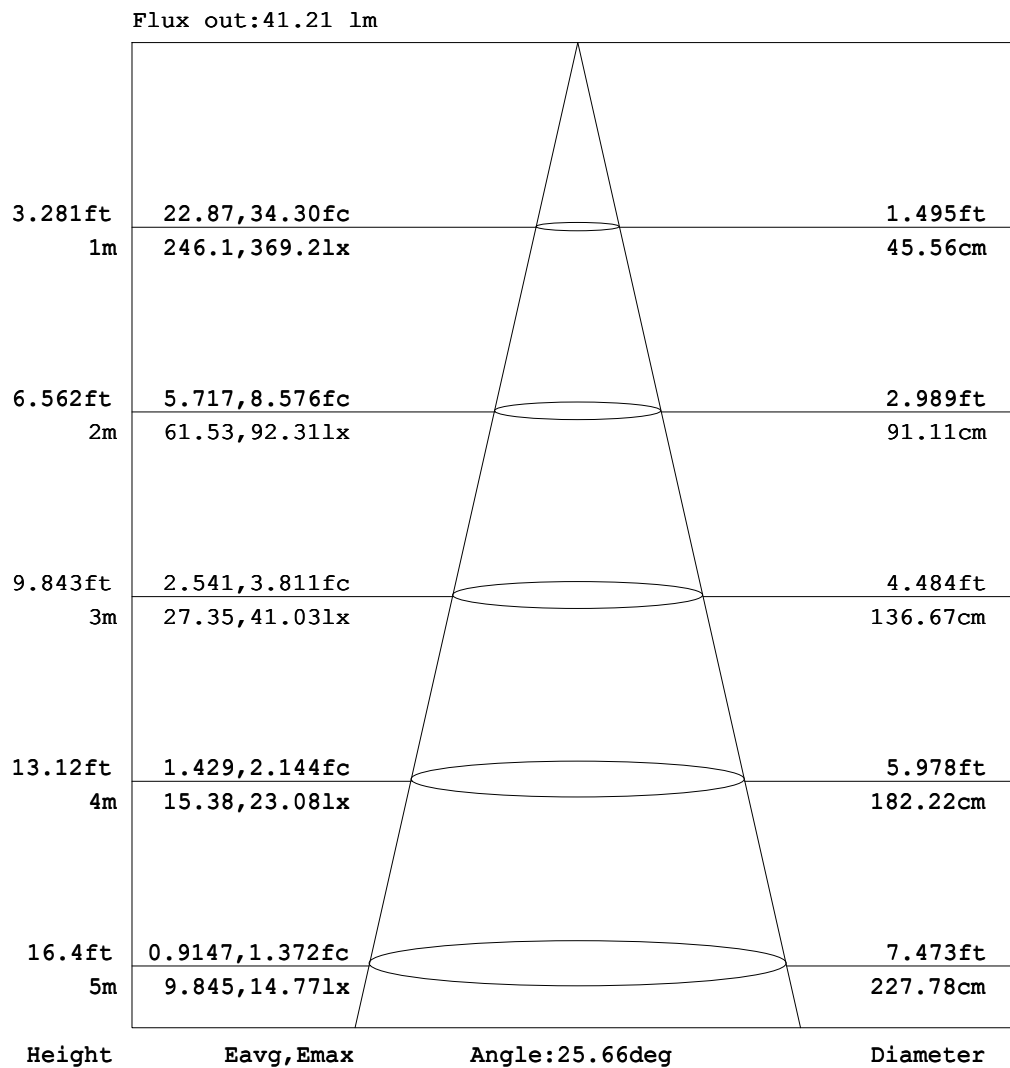


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: WLM
 Test Date: 2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 13.693m [K=1.0000]
 Remarks:

AAI Figure

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:



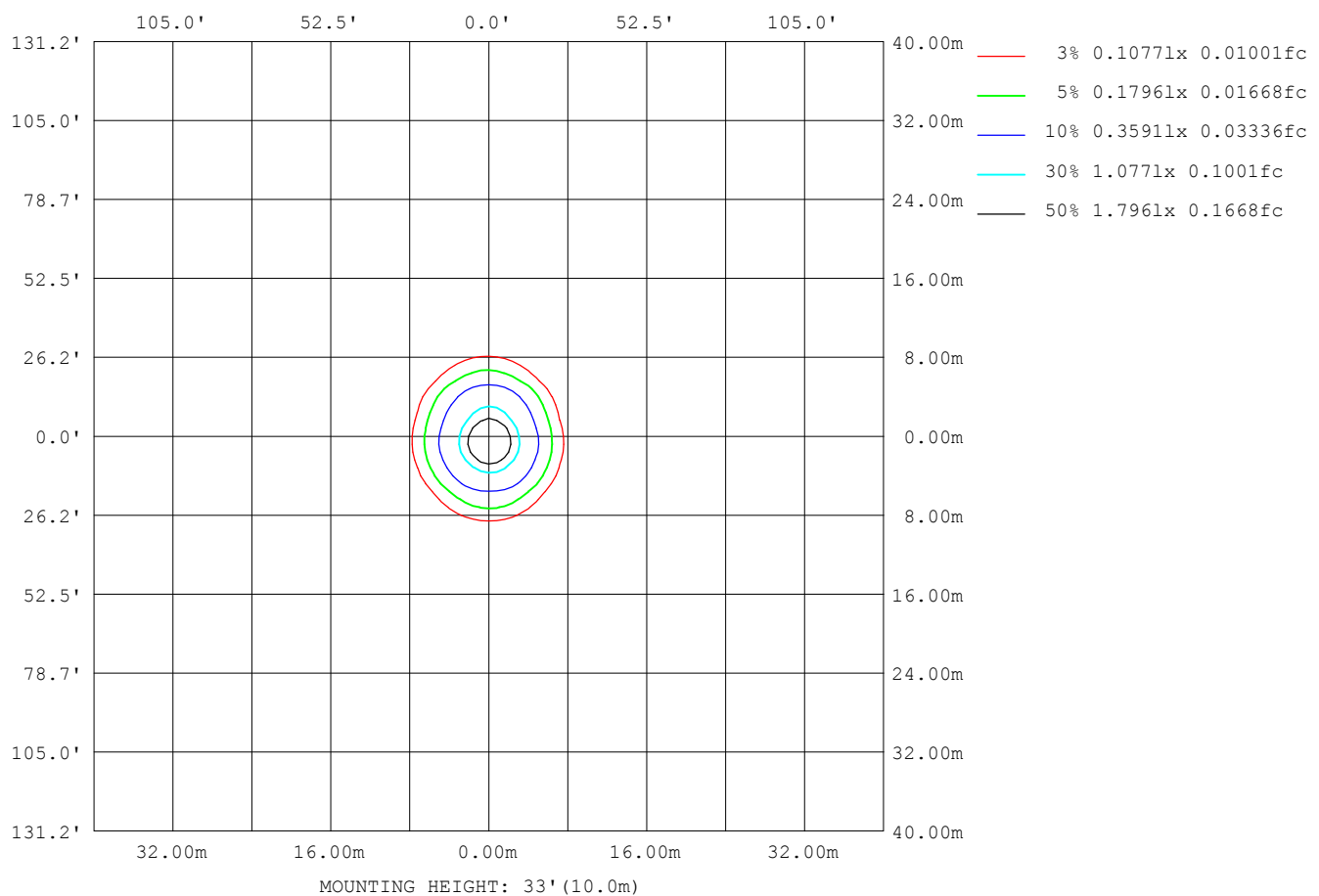
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WLM
Test Date: 2021-08-10

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity: 65.0%
Test Distance: 13.693m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

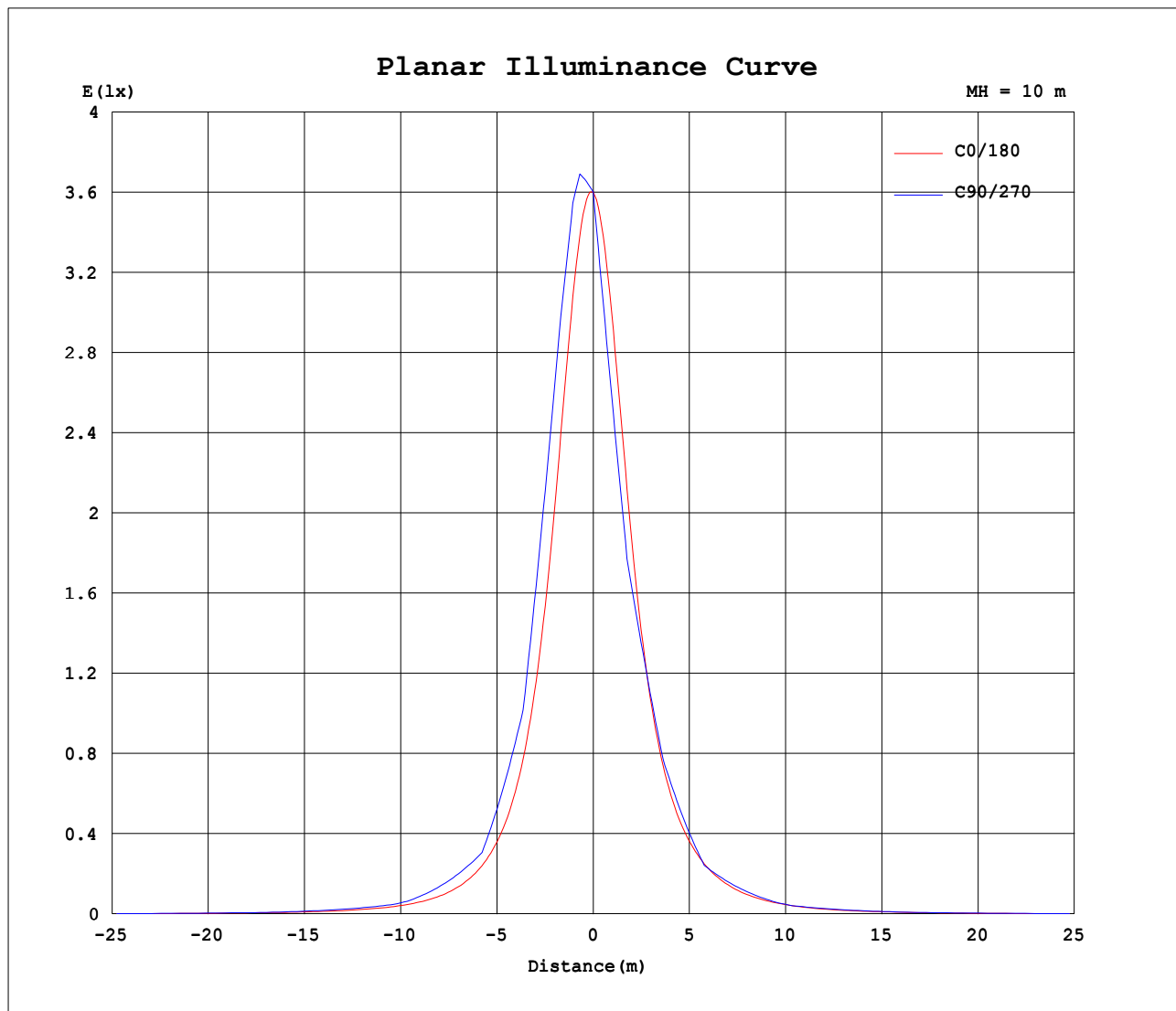
NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:WLM
 Test Date:2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:13.693m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WLM
Test Date: 2021-08-10

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity: 65.0%
Test Distance: 13.693m [K=1.0000]
Remarks:

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.693m [K=1.0000]
Remarks:

```

NAME: RXEL39-1 single head	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2021081001
	SUR.:0.052	PROTECTION ANGLE:

UNIT: cd

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Temperature: 25.3DEG	Humidity: 65.0%
Operators: WLM	Test Distance: 13.693m [K=1.0000]
Test Date: 2021-08-10	Remarks:

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.693m [K=1.0000]
Remarks:

```

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:13.693m [K=1.0000]
Remarks:

```