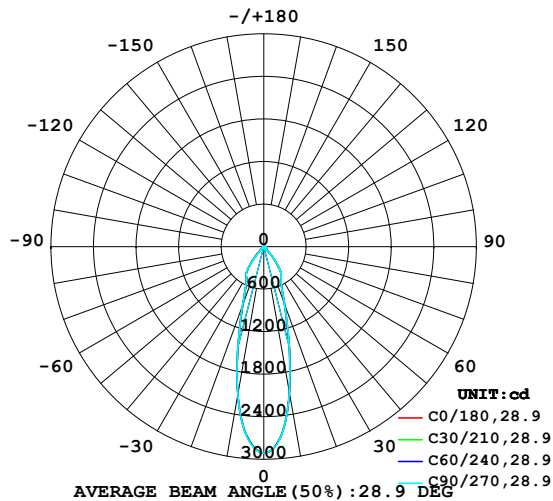


LUMINAIRE PHOTOMETRIC TEST REPORT

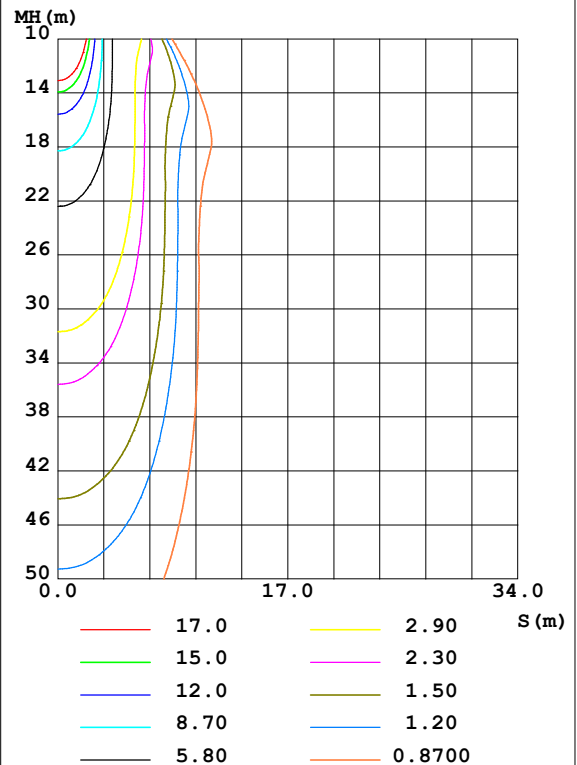
NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.76 lm/W			
MODEL		I _{max} (cd)	2910	S/MH (C0/180)	0.48
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH (C90/270)	0.49
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1255.1	η UP,DN (C0-180)	0.0,49.8
NOMINAL FLUX(lm)	1255.06	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	120	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: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [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	2096	2101	2082	2104	2111	2101	2116	2090	0- 10	238.4	238.4	19,19
20	859.0	855.8	853.1	860.6	862.2	866.2	873.4	864.0	10- 20	382.6	621.0	49.5,49.5
30	492.1	494.9	492.2	493.7	494.0	493.9	496.1	493.4	20- 30	283.5	904.5	72.1,72.1
40	200.1	209.2	204.4	213.0	217.0	216.0	217.9	200.4	30- 40	237.9	1142	91,91
50	31.13	31.64	31.41	31.02	30.66	30.65	31.19	31.04	40- 50	59.31	1202	95.7,95.7
60	21.55	21.78	21.64	21.48	21.19	21.03	21.30	21.39	50- 60	22.81	1225	97.6,97.6
70	15.76	15.95	15.83	15.69	15.35	15.08	15.33	15.55	60- 70	18.21	1243	99,99
80	4.103	4.184	3.862	3.716	3.581	3.492	3.801	3.978	70- 80	11.23	1254	99.9,99.9
90	0.1152	0.1066	0.1182	0.1184	0.1959	0.2045	0.2046	0.2050	80- 90	1.100	1255	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1186.3 lm

%lum = 94.5%

%lamp = 94.5%

Conical surface Flux(120deg): 1224.5 lm

%lum = 97.6%

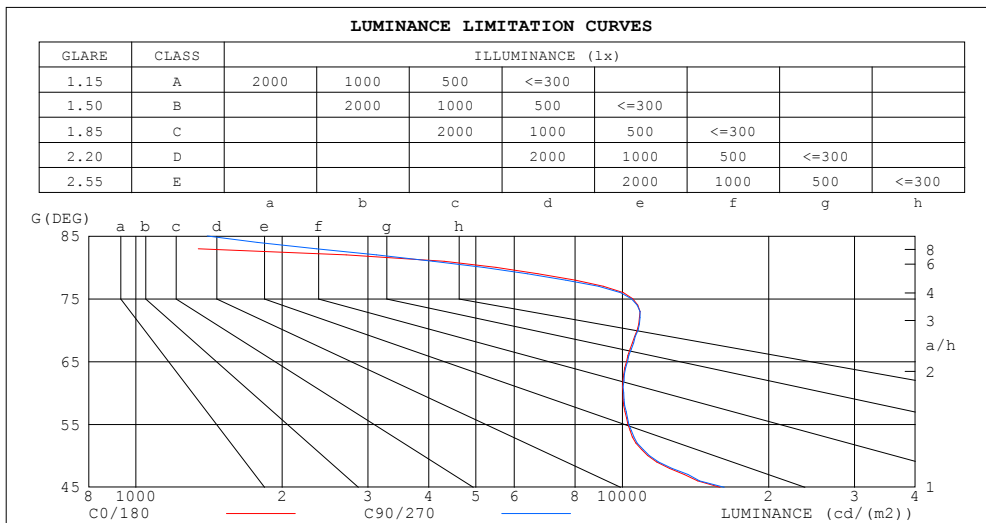
%lamp = 97.6%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:5.620m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	427	1402
80	5502	5177
75	10498	10442
70	10731	10772
65	10204	10246
60	10036	10075
55	10271	10312
50	11276	11373
45	15879	16210

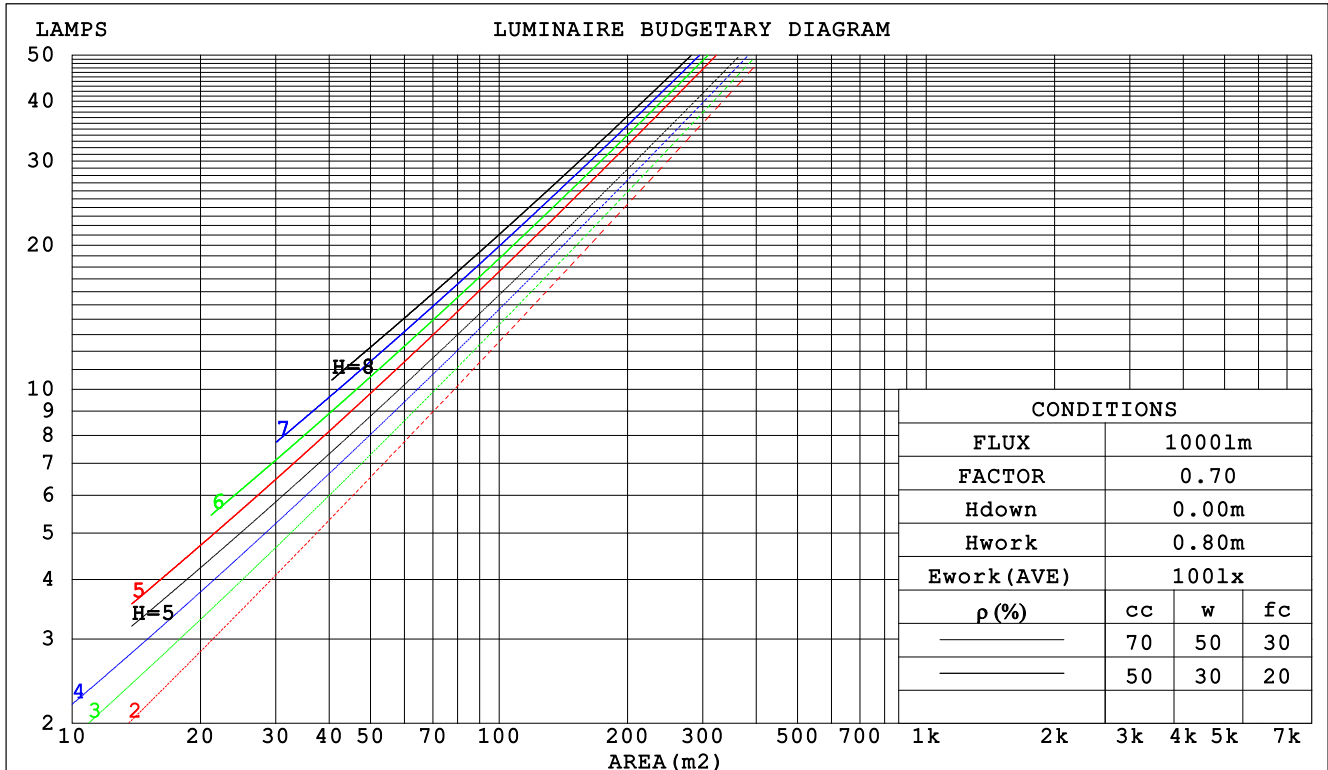
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding 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			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	1.11	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.00	.98	.97	.96	.95	.94
2.0	1.03	.99	.96	1.02	.98	.95	.98	.95	.93	.95	.93	.91	.93	.91	.89	.87
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.85	.88	.86	.83	.82
4.0	.91	.86	.82	.90	.85	.81	.88	.83	.80	.86	.82	.79	.84	.81	.78	.77
5.0	.86	.80	.76	.85	.80	.76	.83	.79	.75	.81	.77	.74	.80	.76	.74	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.71	.77	.73	.70	.76	.73	.70	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.65
8.0	.73	.67	.64	.72	.67	.63	.71	.67	.63	.70	.66	.63	.69	.66	.63	.61
9.0	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.67	.63	.60	.58
10.0	.66	.61	.57	.66	.61	.57	.65	.60	.57	.65	.60	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:#74MM	Shielding 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	.176	.100	.032	.170	.097	.031	.157	.090	.029	.145	.084	.027	.135	.078	.025		
2.0	.168	.092	.028	.162	.089	.027	.151	.084	.026	.142	.079	.025	.133	.075	.024		
3.0	.158	.084	.025	.154	.082	.025	.145	.078	.024	.136	.075	.023	.129	.071	.022		
4.0	.150	.078	.023	.146	.076	.023	.138	.073	.022	.131	.070	.021	.124	.067	.021		
5.0	.142	.072	.021	.138	.071	.021	.131	.068	.020	.125	.066	.020	.119	.064	.019		
6.0	.134	.067	.019	.131	.066	.019	.125	.064	.019	.120	.062	.018	.115	.060	.018		
7.0	.128	.063	.018	.125	.062	.018	.120	.061	.017	.115	.059	.017	.110	.057	.017		
8.0	.122	.060	.017	.119	.059	.017	.115	.057	.016	.110	.056	.016	.106	.055	.016		
9.0	.116	.056	.016	.114	.056	.016	.110	.054	.015	.106	.053	.015	.103	.052	.015		
10.0	.111	.053	.015	.109	.053	.015	.106	.052	.015	.102	.051	.014	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016		
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013		
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011		
4.0	.132	.099	.073	.114	.085	.064	.078	.059	.045	.045	.035	.026	.015	.011	.009		
5.0	.123	.087	.060	.106	.075	.053	.073	.053	.037	.042	.031	.022	.014	.010	.007		
6.0	.115	.078	.051	.099	.067	.044	.068	.047	.031	.040	.028	.019	.013	.009	.006		
7.0	.109	.070	.043	.093	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005		
8.0	.103	.064	.037	.088	.055	.032	.061	.039	.023	.036	.023	.014	.012	.007	.004		
9.0	.097	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004		
10.0	.093	.054	.028	.080	.047	.025	.055	.033	.017	.032	.019	.010	.010	.006	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: RAD35R-15-DTW-UNV-24C-WT					TYPE:DTW CRI90					WEIGHT:				
SPEC.:24C					DIM.:					SERIAL No.:1				
MFR.:					SUR.:Φ74MM					Shielding 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					19.0	19.9	19.3	20.1	20.3	19.1	20.0	19.3	20.2	20.3
3H					19.3	20.1	19.6	20.3	20.5	19.4	20.2	19.6	20.4	20.6
4H					19.5	20.3	19.8	20.5	20.7	19.5	20.3	19.8	20.6	20.8
6H					19.6	20.3	19.8	20.5	20.8	19.6	20.3	19.9	20.6	20.8
8H					19.5	20.2	19.8	20.5	20.8	19.6	20.3	19.9	20.5	20.8
12H					19.5	20.2	19.8	20.4	20.7	19.5	20.2	19.8	20.5	20.7
4H 2H					19.0	19.8	19.2	20.0	20.2	19.0	19.8	19.3	20.0	20.2
3H					19.4	20.1	19.7	20.4	20.6	19.5	20.1	19.8	20.4	20.7
4H					19.7	20.3	20.1	20.6	21.0	19.8	20.4	20.1	20.7	21.0
6H					19.8	20.4	20.2	20.7	21.1	19.9	20.4	20.2	20.7	21.1
8H					19.8	20.3	20.2	20.7	21.0	19.8	20.3	20.2	20.7	21.1
12H					19.7	20.2	20.2	20.6	21.0	19.8	20.2	20.2	20.6	21.0
8H 4H					19.8	20.3	20.2	20.6	21.0	19.8	20.3	20.2	20.7	21.0
6H					19.9	20.3	20.3	20.7	21.1	19.9	20.3	20.3	20.7	21.1
8H					19.9	20.2	20.3	20.7	21.1	19.9	20.3	20.3	20.7	21.1
12H					19.8	20.1	20.3	20.6	21.1	19.8	20.2	20.3	20.6	21.1
12H 4H					19.7	20.2	20.1	20.6	21.0	19.8	20.2	20.2	20.6	21.0
6H					19.9	20.2	20.3	20.7	21.1	19.9	20.3	20.3	20.7	21.1
8H					19.8	20.2	20.3	20.6	21.1	19.9	20.2	20.3	20.6	21.1
Variations with the observer position at spacings:														
S = 1.0H					+ 2.3 / - 2.9					+ 2.3 / - 2.9				
1.5H					+ 4.5 / - 2.8					+ 4.5 / - 2.9				
2.0H					+ 0.6 / - 0.4					+ 0.7 / - 0.4				

CIE Pub.117, 1255 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.8)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

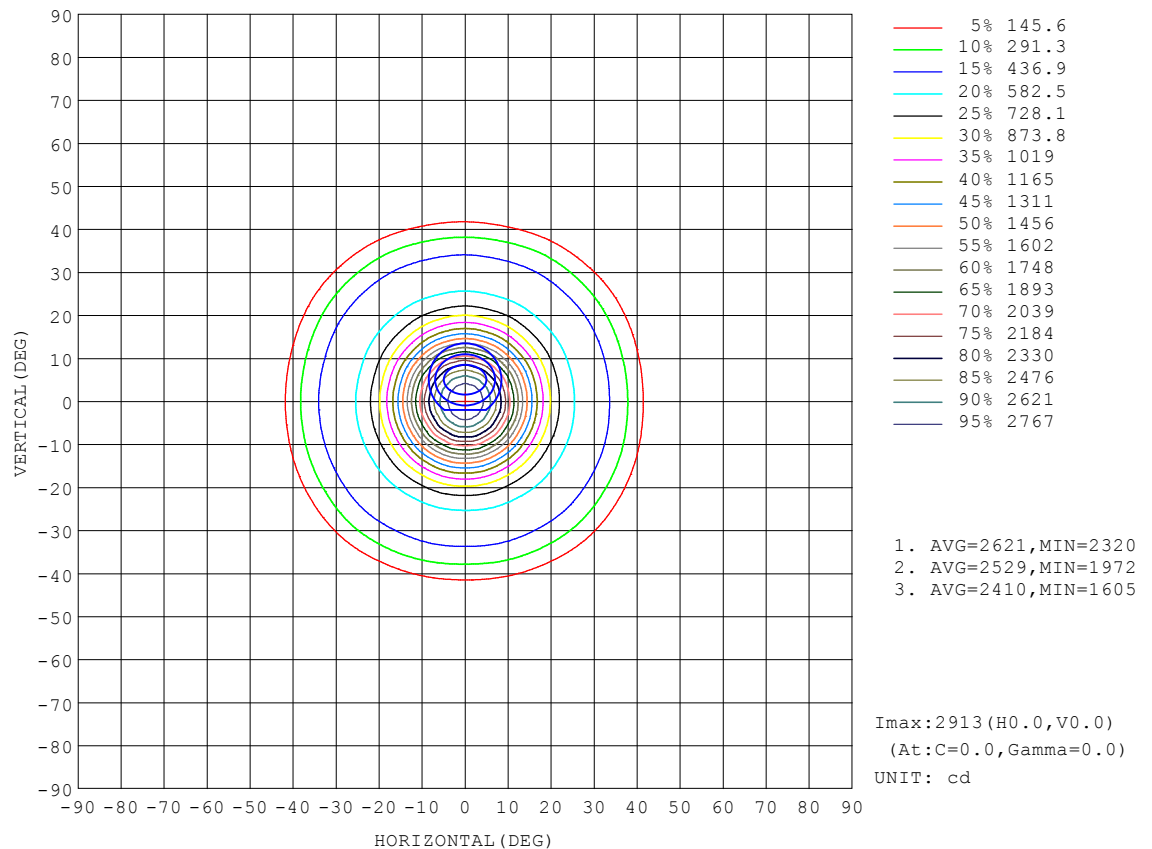
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	86	79	76	86	79	75	85	79	75	72
0.80	94	87	84	93	87	83	92	86	83	79
1.00	98	92	88	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	96	104	99	96	101	98	95	90
2.00	108	103	100	106	102	99	104	100	98	92
2.50	110	106	103	108	104	102	105	102	100	94
3.00	111	108	105	109	106	104	106	104	102	95
4.00	113	111	108	111	109	107	108	106	104	97
5.00	115	112	110	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2025-06-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 5.620m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

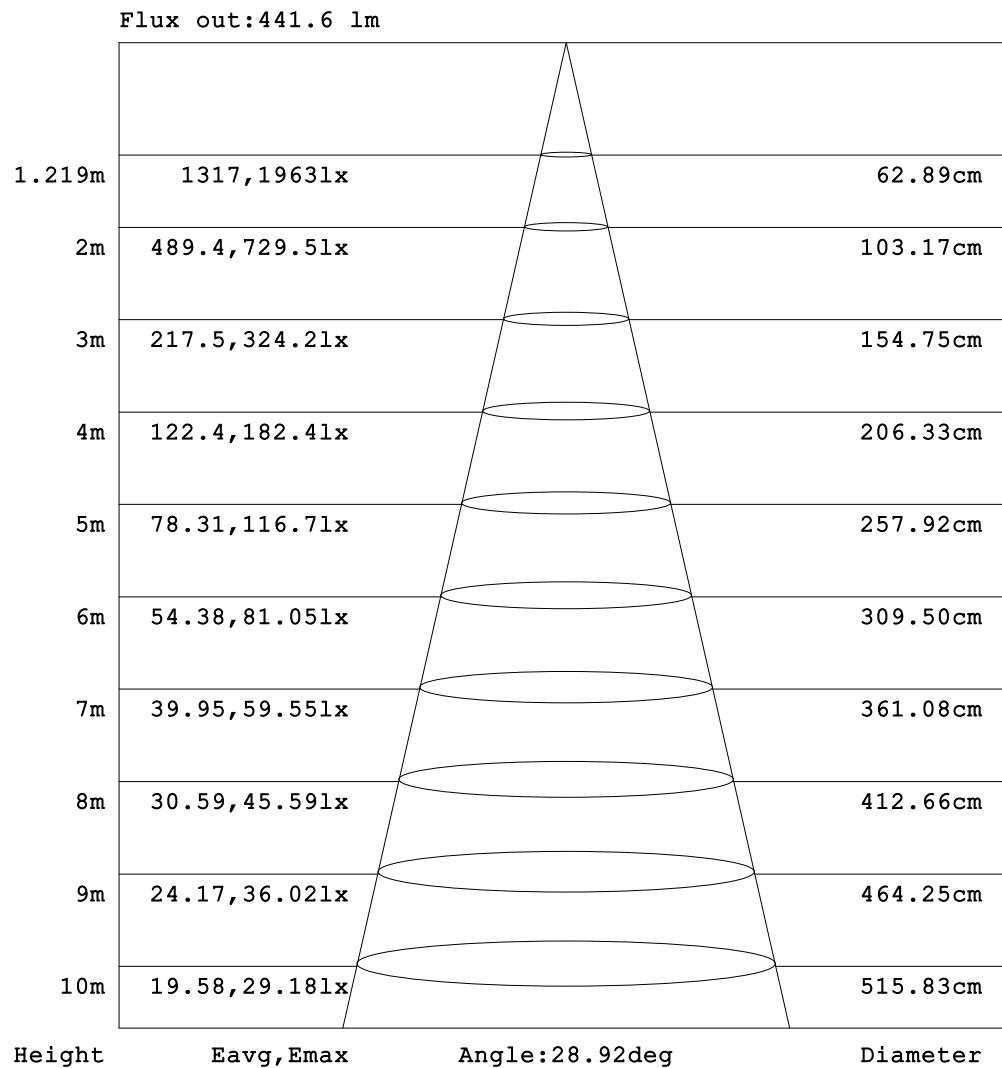


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

AAI Figure

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



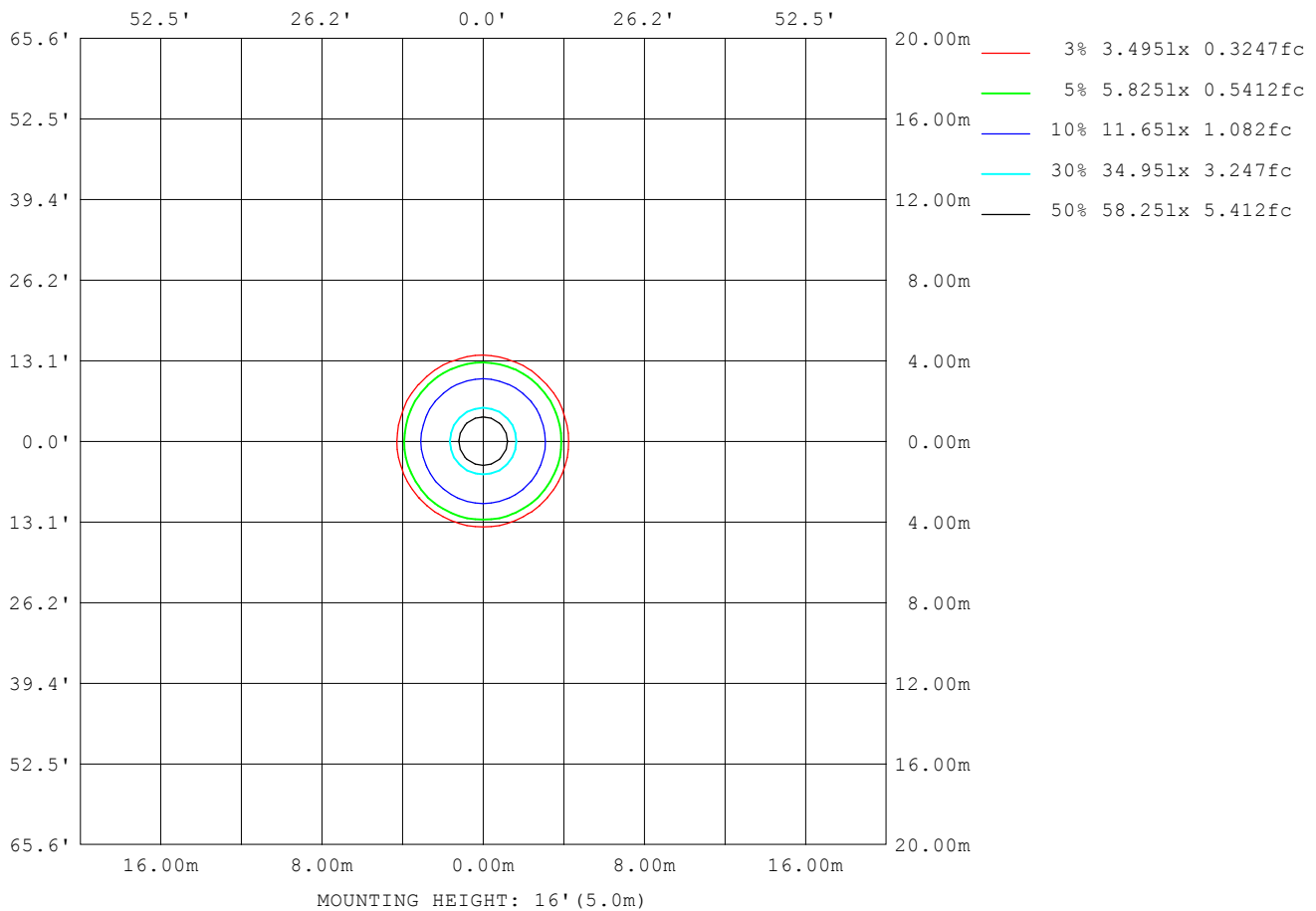
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: RAD35R-15-DTW-UNV-24C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:24C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

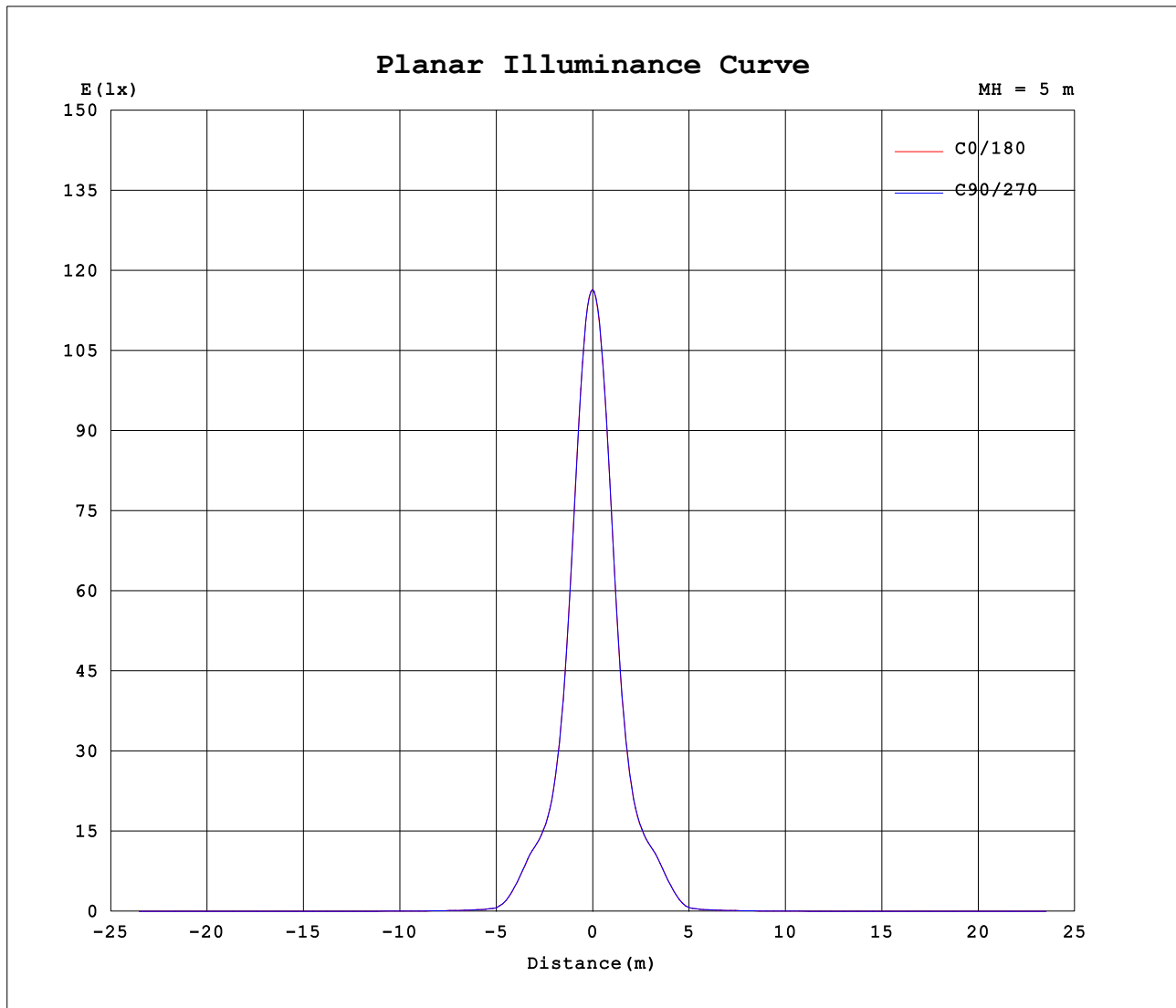
AvgL	cd/m2
L_0~180 (65) av	10095
L_0~180 (75) av	10237
L_0~180 (85) av	712
L_90~270 (65) av	10111
L_90~270 (75) av	10257
L_90~270 (85) av	1460
L_45 (65) av	10107
L_45 (75) av	10244
L_45 (85) av	1469

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-12

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2025-06-12

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 5.620m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:5.620m [K=1.0000]
Remarks:

```