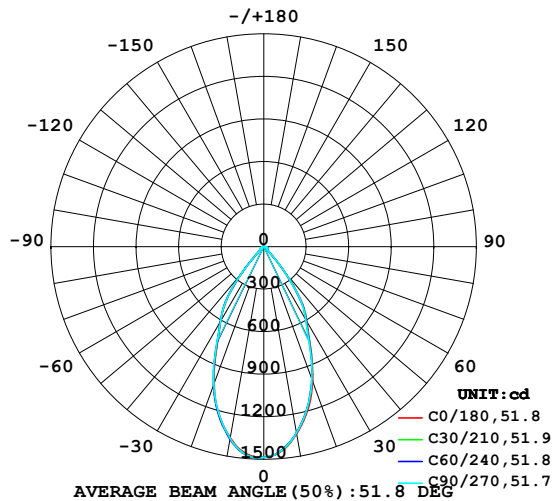


LUMINAIRE PHOTOMETRIC TEST REPORT

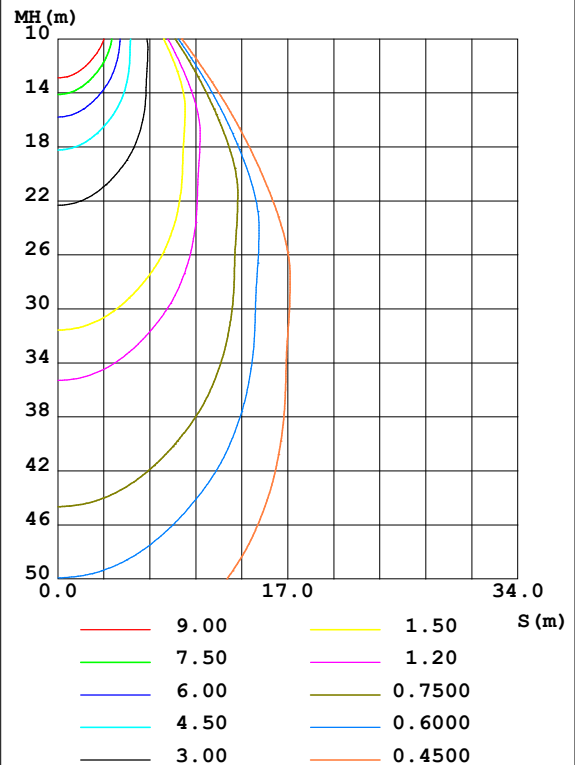
NAME: RAD35R-15-DTW-UNV-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 88.98 lm/W
MODEL		I _{max} (cd)	1489	S/MH (C0/180)	0.81	
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.82	
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1224.3	η UP, DN (C0-180)	0.0, 49.3	
NOMINAL FLUX (lm)	1224.34	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.90	

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: 2025-06-13

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	1340	1334	1333	1348	1367	1374	1373	1356	0- 10	135.8	135.8	11.1,11.1
20	1009	1000	993.6	1011	1029	1031	1034	1022	10- 20	334.7	470.4	38.4,38.4
30	606.6	603.2	594.9	600.0	609.7	610.3	613.5	611.1	20- 30	361.8	832.3	68,68
40	215.7	212.0	208.3	218.8	233.3	234.0	239.3	228.2	30- 40	269.5	1102	90,90
50	31.89	32.31	31.68	31.56	31.90	31.94	31.86	31.55	40- 50	62.26	1164	95.1,95.1
60	23.83	24.08	23.91	23.93	24.16	24.07	23.86	23.70	50- 60	24.46	1189	97.1,97.1
70	18.88	19.04	18.94	19.06	19.24	19.01	18.95	18.86	60- 70	21.45	1210	98.8,98.8
80	4.341	4.369	4.105	4.116	4.188	4.193	4.413	4.411	70- 80	13.14	1223	99.9,99.9
90	0.1232	0.1180	0.1212	0.1186	0.1920	0.1957	0.1934	0.1938	80- 90	1.239	1224	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): 1148.2 lm

%lum = 93.8%

%lamp = 93.8%

Conical surface Flux(120deg): 1188.5 lm

%lum = 97.1%

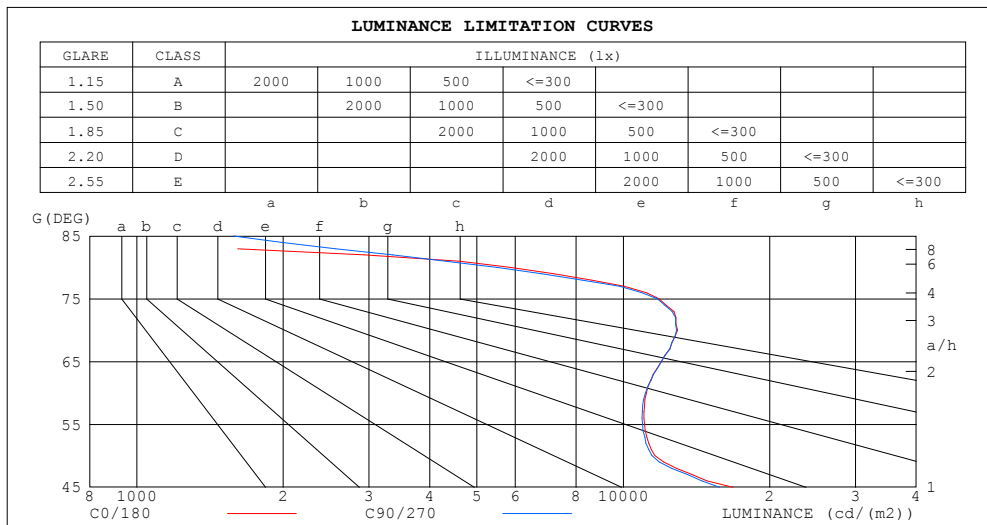
%lamp = 97.1%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	528	1580
80	5852	5495
75	11839	11743
70	12921	12870
65	11985	11965
60	11156	11115
55	11059	10962
50	11614	11458
45	16803	15771

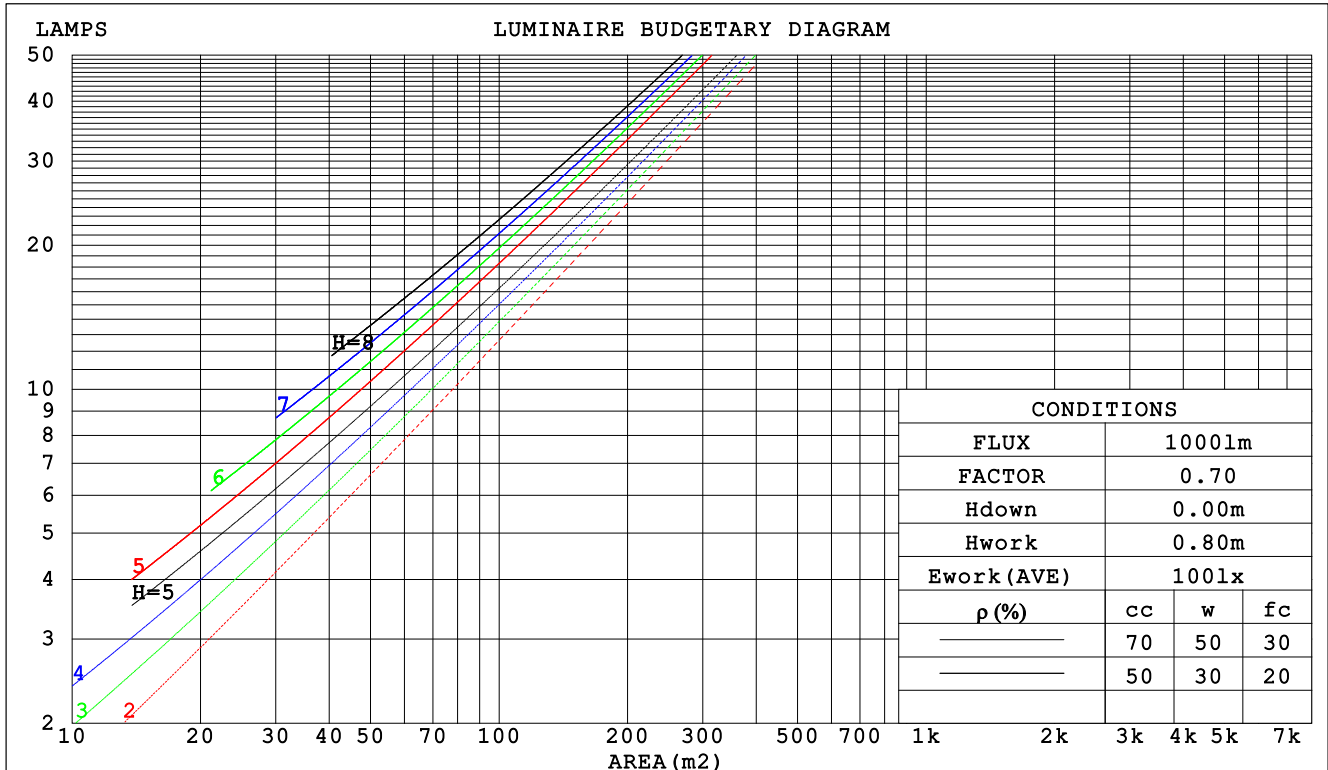
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	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	1.00
1.0	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	.99	.97	.97	.96	.95	.93
2.0	1.02	.98	.94	1.00	.97	.93	.97	.94	.91	.94	.92	.89	.91	.89	.87	.86
3.0	.95	.90	.86	.93	.89	.85	.91	.87	.83	.88	.85	.82	.86	.83	.81	.79
4.0	.88	.83	.78	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.71	.77	.73	.70	.68
6.0	.78	.71	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.72	.69	.65	.64
7.0	.73	.67	.62	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.64	.61	.60
8.0	.69	.63	.58	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.57	.56
9.0	.65	.59	.55	.64	.59	.55	.63	.58	.54	.62	.58	.54	.62	.57	.54	.53
10.0	.61	.55	.52	.61	.55	.51	.60	.55	.51	.59	.55	.51	.59	.54	.51	.50



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	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	.188	.107	.034	.181	.103	.033	.169	.097	.031	.157	.091	.029	.146	.085	.027		
2.0	.180	.099	.030	.174	.096	.030	.163	.091	.028	.154	.086	.027	.145	.082	.026		
3.0	.170	.091	.027	.166	.089	.027	.156	.085	.026	.148	.081	.025	.140	.078	.024		
4.0	.162	.084	.025	.157	.082	.024	.149	.079	.024	.142	.076	.023	.135	.073	.022		
5.0	.153	.078	.023	.150	.077	.022	.143	.074	.022	.136	.072	.021	.130	.070	.021		
6.0	.146	.073	.021	.143	.072	.021	.136	.070	.020	.131	.068	.020	.125	.066	.020		
7.0	.139	.069	.019	.136	.068	.019	.131	.066	.019	.126	.064	.019	.121	.063	.018		
8.0	.132	.065	.018	.130	.064	.018	.125	.063	.018	.121	.061	.018	.116	.060	.017		
9.0	.127	.061	.017	.124	.061	.017	.120	.059	.017	.116	.058	.017	.112	.057	.016		
10.0	.121	.058	.016	.119	.058	.016	.115	.056	.016	.112	.055	.016	.108	.054	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016		
2.0	.157	.132	.112	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013		
3.0	.145	.114	.088	.125	.098	.077	.086	.068	.054	.049	.040	.032	.016	.013	.010		
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008		
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007		
6.0	.119	.078	.049	.103	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006		
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005		
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004		
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004		
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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-50C-WT					TYPE:DTW CRI90					WEIGHT:				
SPEC.:50C					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					20.0	20.9	20.2	21.1	21.3	19.8	20.8	20.0	21.0	21.1
3H					20.3	21.2	20.5	21.4	21.6	20.1	21.1	20.4	21.3	21.5
4H					20.5	21.3	20.8	21.6	21.8	20.3	21.2	20.6	21.4	21.7
6H					20.5	21.3	20.8	21.6	21.8	20.4	21.2	20.7	21.4	21.7
8H					20.5	21.3	20.8	21.5	21.8	20.3	21.1	20.7	21.4	21.6
12H					20.4	21.2	20.8	21.4	21.7	20.3	21.0	20.6	21.3	21.6
4H 2H					19.9	20.7	20.2	21.0	21.2	19.7	20.6	20.0	20.8	21.1
3H					20.4	21.2	20.7	21.4	21.7	20.3	21.0	20.6	21.3	21.6
4H					20.7	21.4	21.1	21.7	22.0	20.6	21.3	21.0	21.6	21.9
6H					20.8	21.4	21.2	21.7	22.1	20.7	21.3	21.1	21.6	22.0
8H					20.8	21.3	21.2	21.7	22.0	20.7	21.2	21.1	21.6	21.9
12H					20.7	21.2	21.1	21.6	22.0	20.6	21.1	21.0	21.5	21.9
8H 4H					20.8	21.3	21.2	21.7	22.0	20.6	21.2	21.0	21.6	21.9
6H					20.9	21.3	21.3	21.7	22.1	20.8	21.2	21.2	21.6	22.0
8H					20.8	21.2	21.3	21.7	22.1	20.7	21.1	21.2	21.5	22.0
12H					20.8	21.1	21.3	21.6	22.0	20.7	21.0	21.2	21.5	21.9
12H 4H					20.7	21.2	21.1	21.6	22.0	20.6	21.1	21.0	21.5	21.9
6H					20.8	21.2	21.3	21.7	22.1	20.7	21.1	21.2	21.5	22.0
8H					20.8	21.1	21.3	21.6	22.1	20.7	21.0	21.2	21.5	21.9
Variations with the observer position at spacings:														
S = 1.0H					+ 2.4 / - 2.7					+ 2.3 / - 2.6				
1.5H					+ 4.6 / - 2.6					+ 4.5 / - 2.6				
2.0H					+ 0.6 / - 0.4					+ 0.5 / - 0.4				

CIE Pub.117, 1224 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.7)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

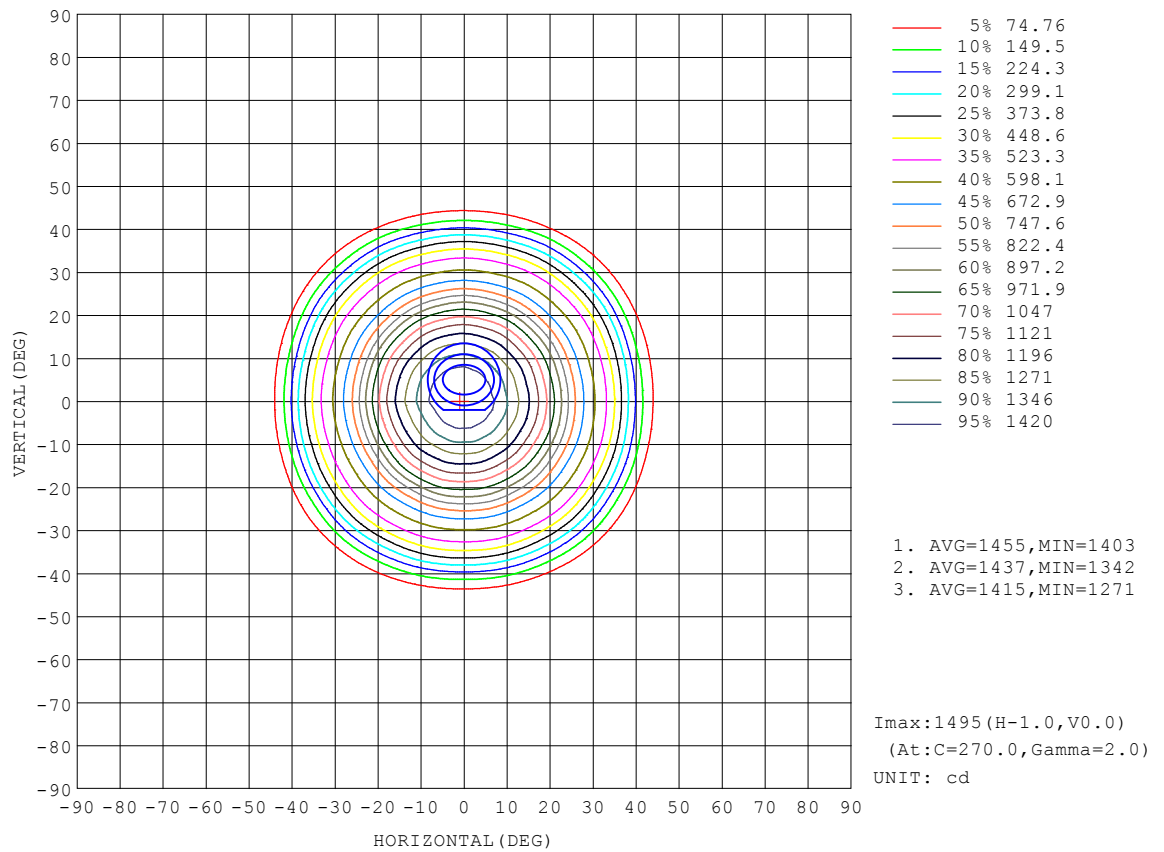
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	79	75	85	79	75	84	78	75	71
0.80	93	87	83	92	86	83	91	86	82	78
1.00	98	92	88	97	91	87	95	91	87	83
1.25	102	96	92	101	96	92	99	94	91	87
1.50	105	100	96	103	99	95	101	97	94	90
2.00	108	103	100	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	107	105	109	106	103	106	103	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	112	110	109	108	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: 2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

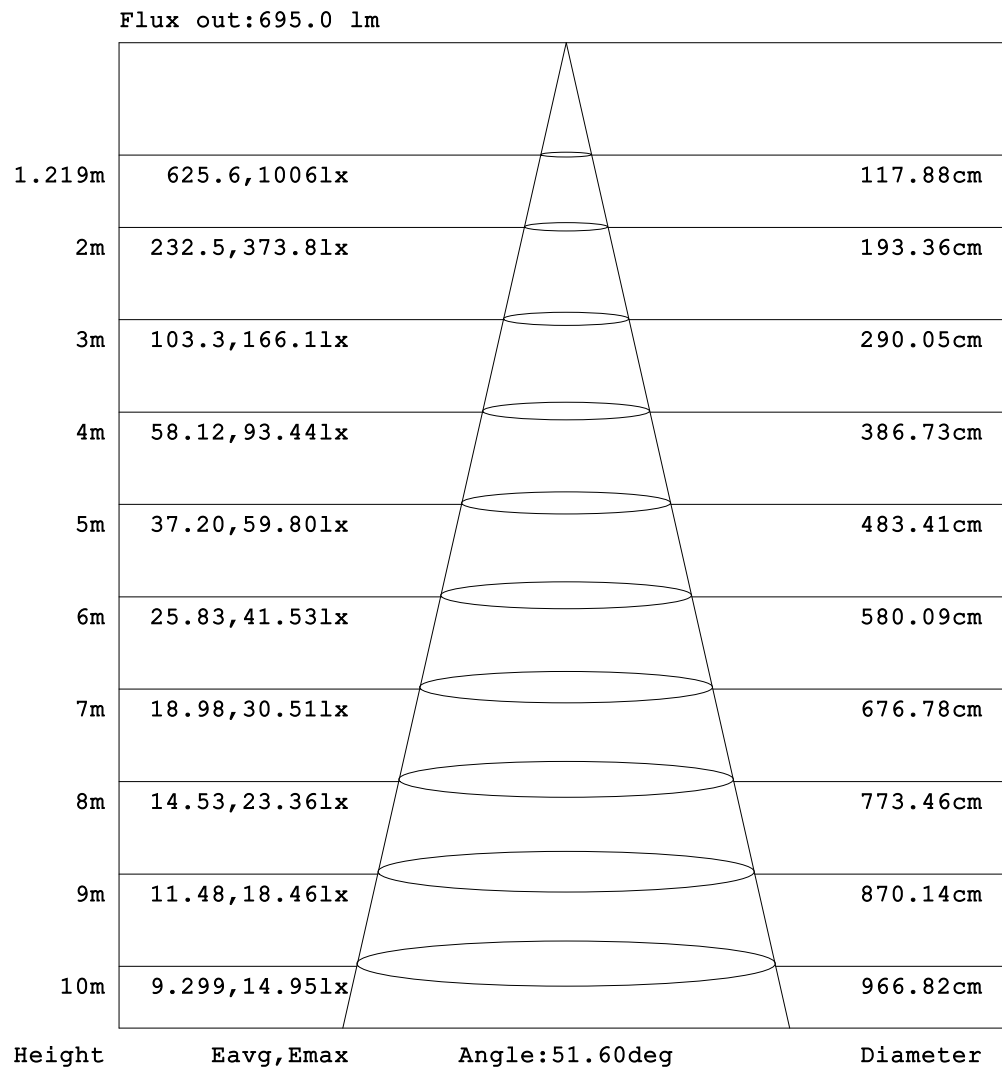


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:



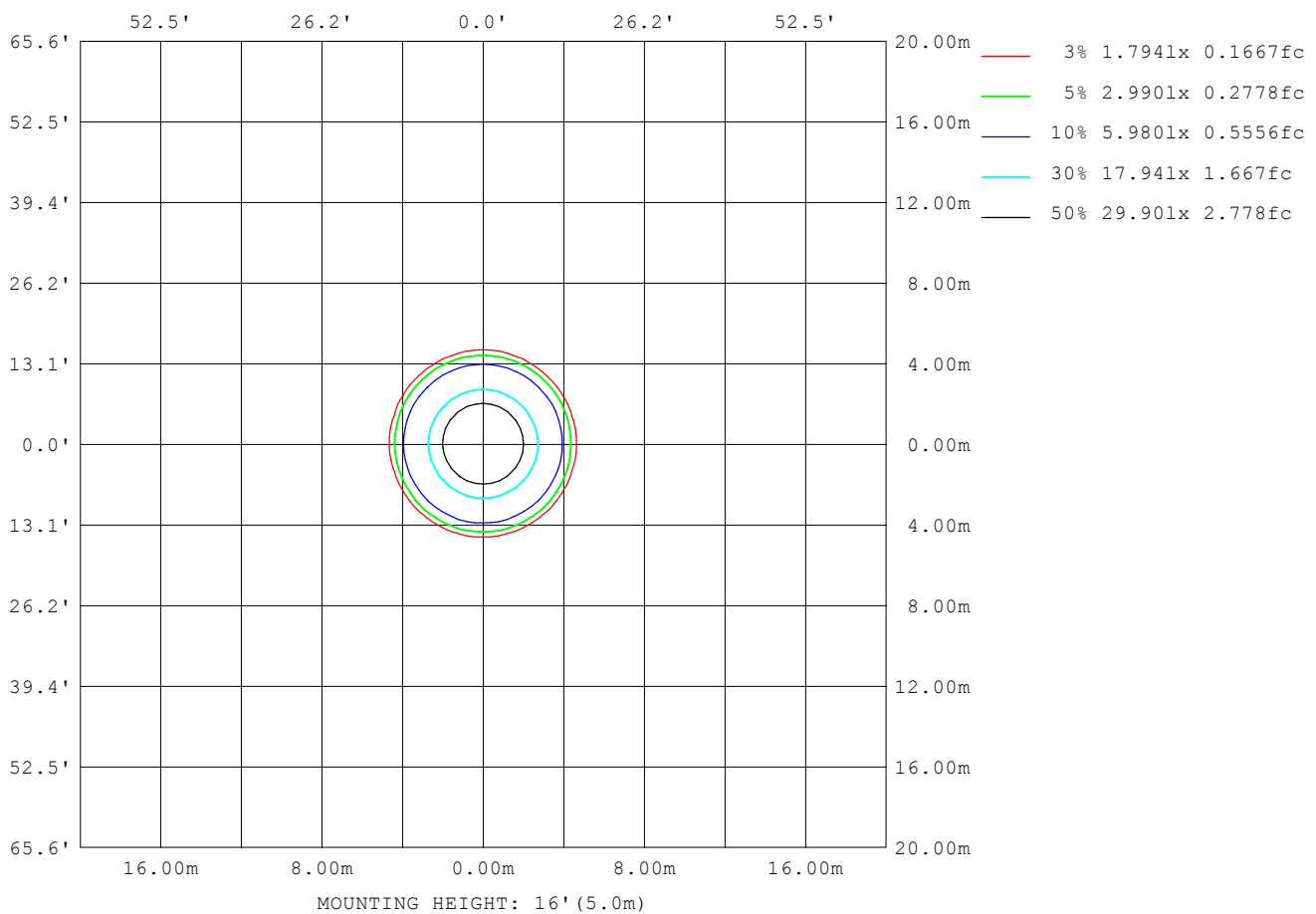
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	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:2025-06-13

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-50C-WT	TYPE:DTW CRI90	WEIGHT:
SPEC.:50C	DIM.:	SERIAL No.:1
MFR.:	SUR.:Φ74MM	Shielding Angle:

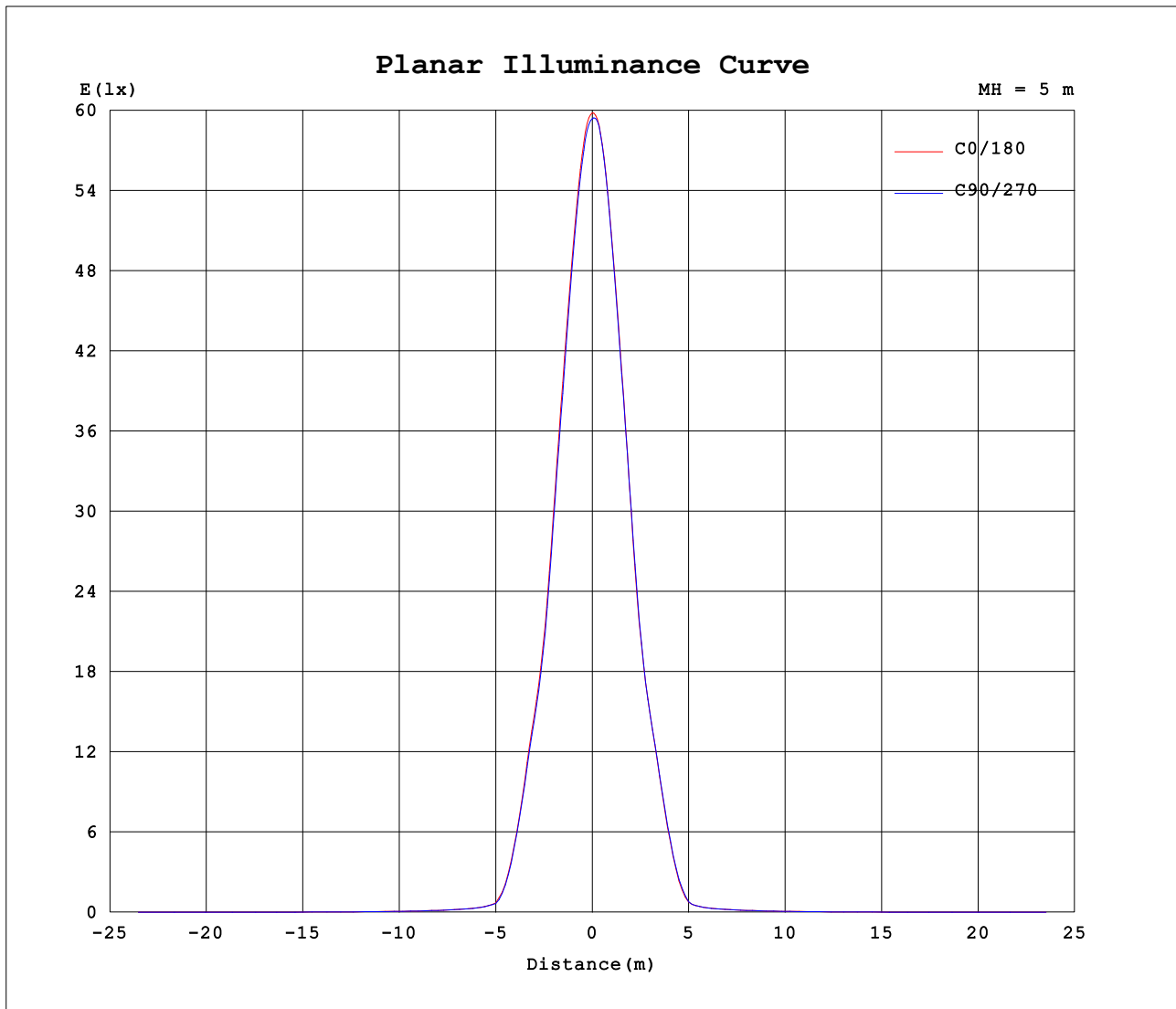
AvgL	cd/m2
L_0~180 (65) av	11986
L_0~180 (75) av	11879
L_0~180 (85) av	919
L_90~270 (65) av	11957
L_90~270 (75) av	11780
L_90~270 (85) av	1720
L_45 (65) av	11970
L_45 (75) av	11804
L_45 (85) av	1730

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2025-06-13

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: 2025-06-13

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:

```

```

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

```