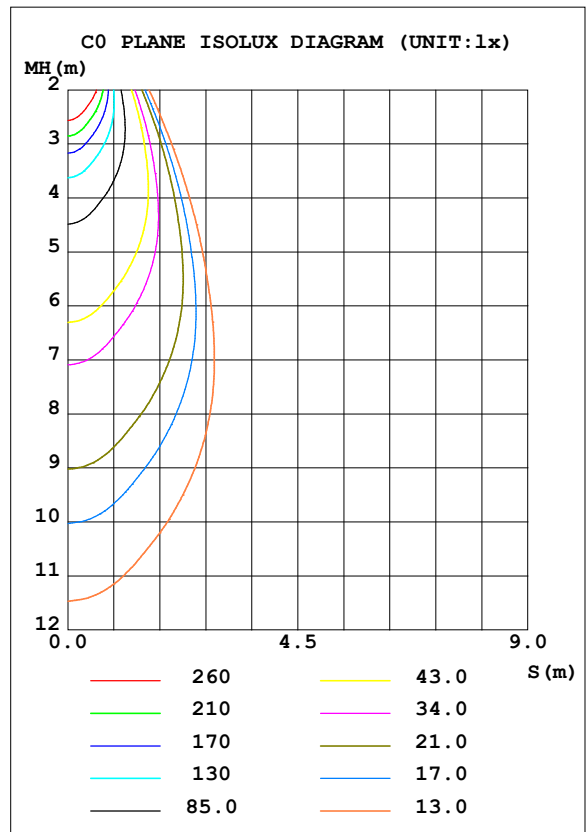
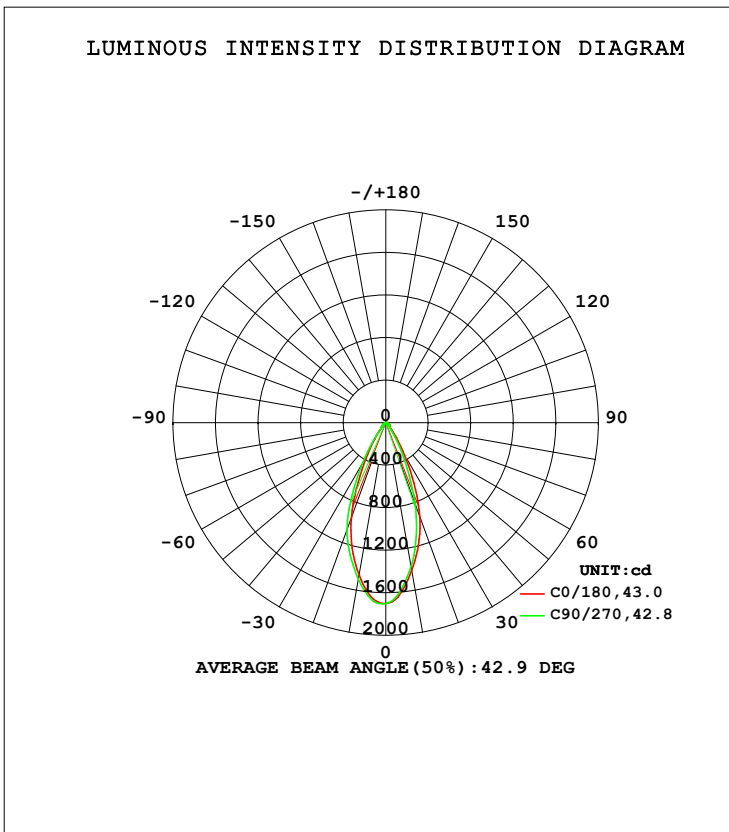


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.80 lm/W			
MODEL		I _{max} (cd)	1705	S/MH (C0/180)	0.68
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.73
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	961.12	<input type="checkbox"/> UP, DN (C0-180)	0.0, 47.1
NOMINAL FLUX (lm)	961.123	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 52.9
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	0.70



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

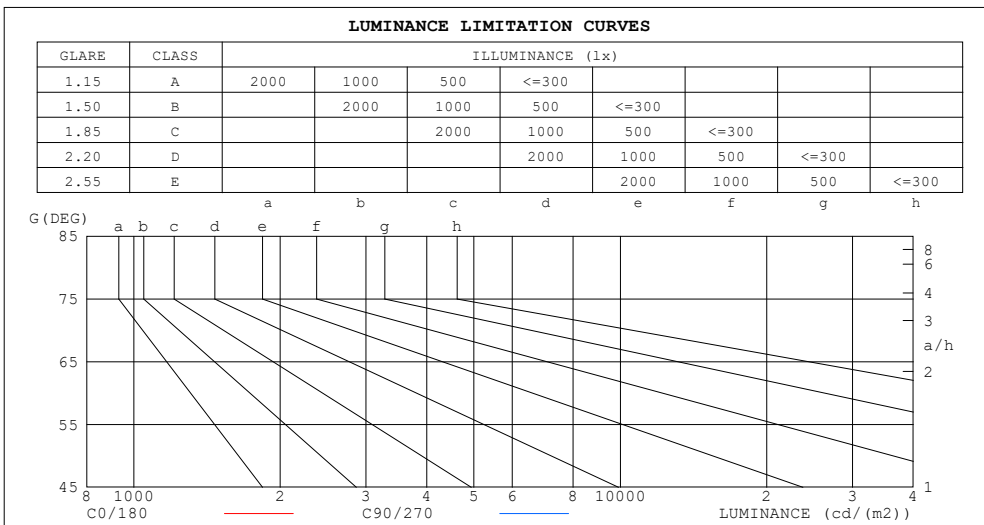
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1410	1390	1373	1400	1454	1481	1493	1443	0- 10	148.6	148.6	15.5,15.5
20	936.2	891.5	805.6	856.0	947.2	957.8	1067	947.9	10- 20	330.5	479.1	49.9,49.9
30	359.7	312.7	260.6	290.7	342.8	365.4	426.7	361.8	20- 30	276.3	755.4	78.6,78.6
40	88.16	75.06	64.36	71.19	78.92	87.00	83.92	99.32	30- 40	109.6	865.1	90,90
50	45.84	41.97	36.92	40.55	44.37	44.24	44.21	46.14	40- 50	43.78	908.9	94.6,94.6
60	27.07	22.86	19.06	22.24	25.73	25.25	24.21	26.34	50- 60	29.29	938.1	97.6,97.6
70	10.82	8.726	7.666	8.447	10.08	9.514	9.239	9.970	60- 70	15.58	953.7	99.2,99.2
80	4.085	2.442	1.599	2.343	3.905	3.284	2.860	3.411	70- 80	6.413	960.1	99.9,99.9
90	0.0419	0.0273	0.0267	0.0234	0.0492	0.0357	0.0307	0.0630	80- 90	0.9921	961.1	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	92	11
80	213	83
75	264	150
70	286	202
65	404	236
60	489	343
55	560	437
50	645	517
45	731	607

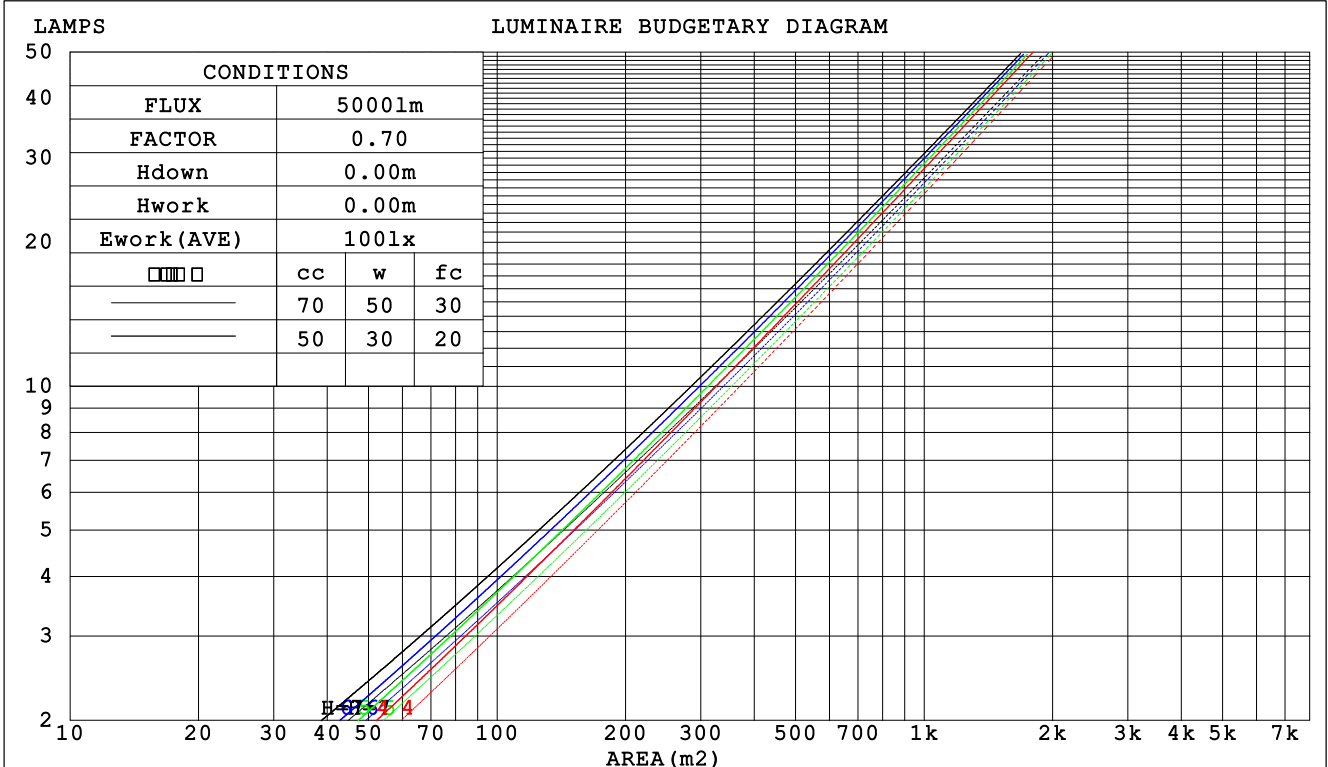
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□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	1.11	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	.66	.63	.60	.58
10.0	.66	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	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	.128	.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	.111	.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	.110	.053	.015	.106	.052	.015	.102	.051	.014	.099	.050	.014	

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> 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	.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	.024	.055	.033	.017	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	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	6.8	7.7	7.0	7.9	8.0	5.2	6.1	5.5	6.3	6.5
3H	7.2	8.0	7.5	8.2	8.4	5.5	6.3	5.8	6.5	6.7
4H	7.3	8.1	7.6	8.3	8.6	5.6	6.4	5.9	6.6	6.8
6H	7.4	8.2	7.7	8.4	8.7	5.6	6.3	5.9	6.5	6.8
8H	7.4	8.1	7.7	8.4	8.6	5.5	6.2	5.8	6.5	6.8
12H	7.4	8.1	7.7	8.3	8.6	5.5	6.2	5.8	6.4	6.7
4H 2H	6.9	7.7	7.1	7.9	8.1	5.5	6.3	5.7	6.5	6.7
3H	7.3	8.0	7.7	8.3	8.6	5.8	6.5	6.2	6.8	7.1
4H	7.6	8.2	7.9	8.5	8.8	6.0	6.6	6.3	6.9	7.2
6H	7.7	8.3	8.1	8.6	8.9	6.0	6.5	6.3	6.8	7.2
8H	7.7	8.2	8.1	8.6	8.9	5.9	6.4	6.3	6.8	7.2
12H	7.7	8.1	8.1	8.5	8.9	5.9	6.3	6.3	6.7	7.1
8H 4H	7.5	8.0	7.9	8.4	8.7	6.0	6.5	6.4	6.8	7.2
6H	7.7	8.1	8.1	8.5	8.9	6.0	6.4	6.4	6.8	7.2
8H	7.7	8.1	8.2	8.5	9.0	6.0	6.3	6.4	6.8	7.2
12H	7.7	8.0	8.2	8.5	8.9	5.9	6.2	6.4	6.7	7.1
12H 4H	7.5	7.9	7.9	8.3	8.7	5.9	6.4	6.3	6.8	7.2
6H	7.7	8.0	8.1	8.5	8.9	6.0	6.4	6.4	6.8	7.2
8H	7.7	8.0	8.2	8.5	8.9	5.9	6.3	6.4	6.7	7.2
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 1.0					+ 0.8 / - 1.0				
1.5H	+ 2.1 / - 0.9					+ 0.8 / - 0.6				
2.0H	+ 0.9 / - 1.0					+ 1.2 / - 1.7				

CIE Pub.117, 961.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

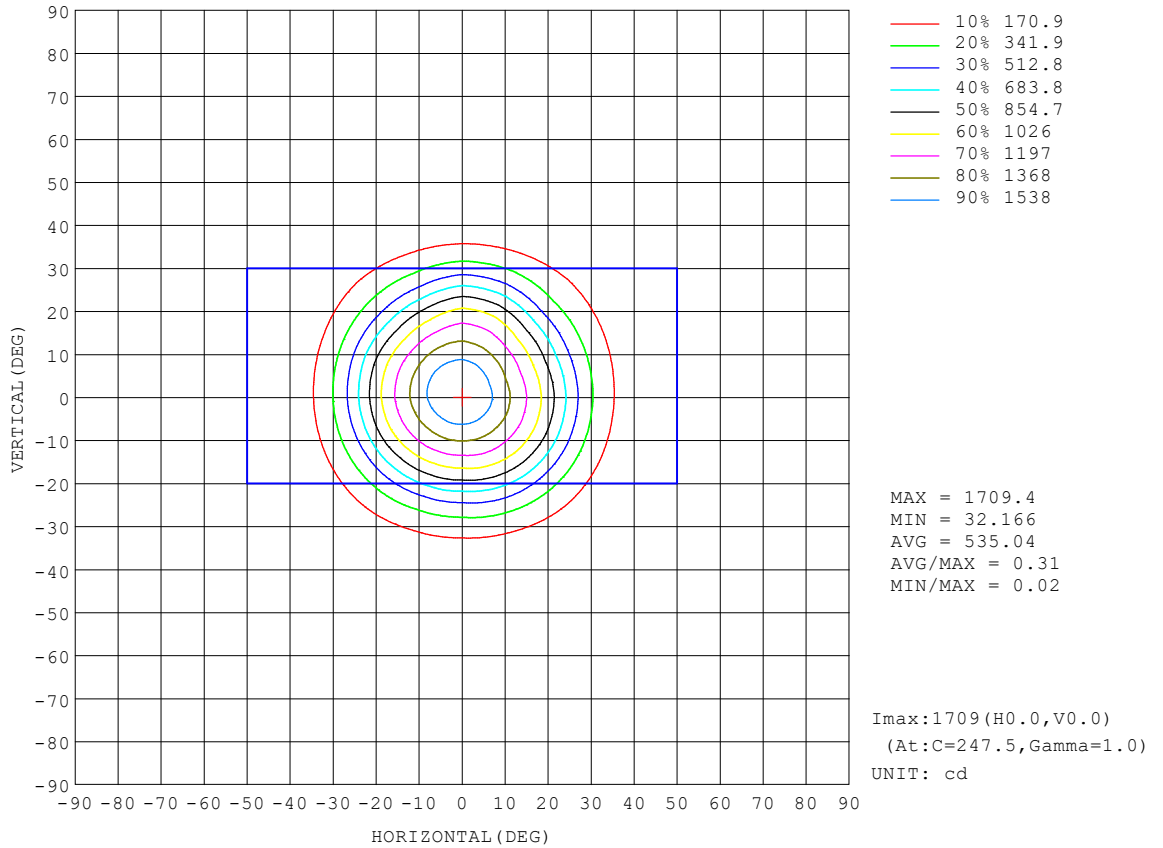
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	85	79	75	85	78	74	84	78	74	71
0.80	93	87	83	92	86	83	91	86	82	78
1.00	98	92	88	97	91	88	95	91	87	83
1.25	102	96	93	101	96	92	99	95	91	87
1.50	105	100	96	103	99	96	101	97	94	90
2.00	108	103	100	106	102	99	103	100	98	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	108	105	109	106	104	106	103	101	95
4.00	113	110	108	111	109	107	108	106	104	97
5.00	115	112	110	113	110	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: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

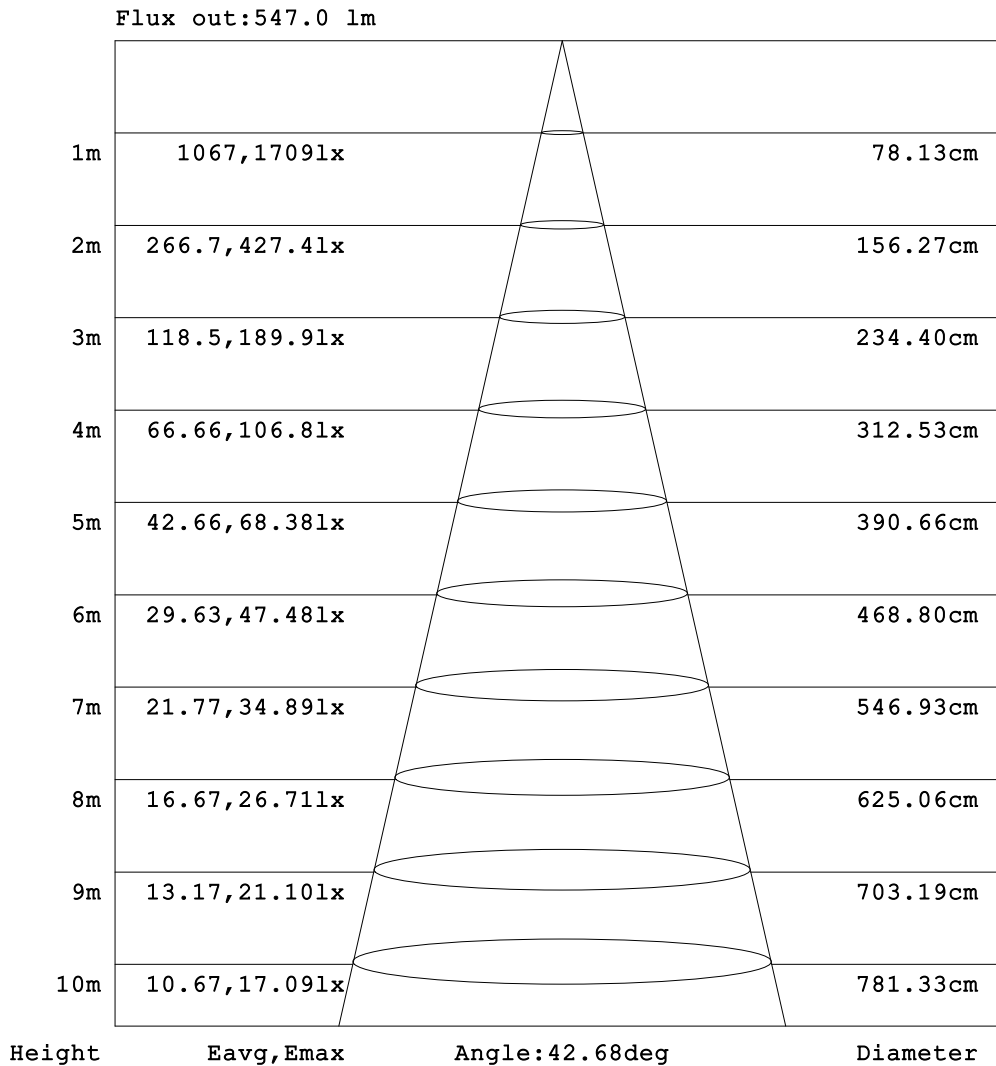


C Range: 0 - 360DEG
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 Test Speed: HIGH
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 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

AAI Figure

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	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: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
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 Operators:
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Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.98V I:0.1103A P:13.024W PF:0.9452 Freq:59.98Hz Lamp Flux:961.123x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

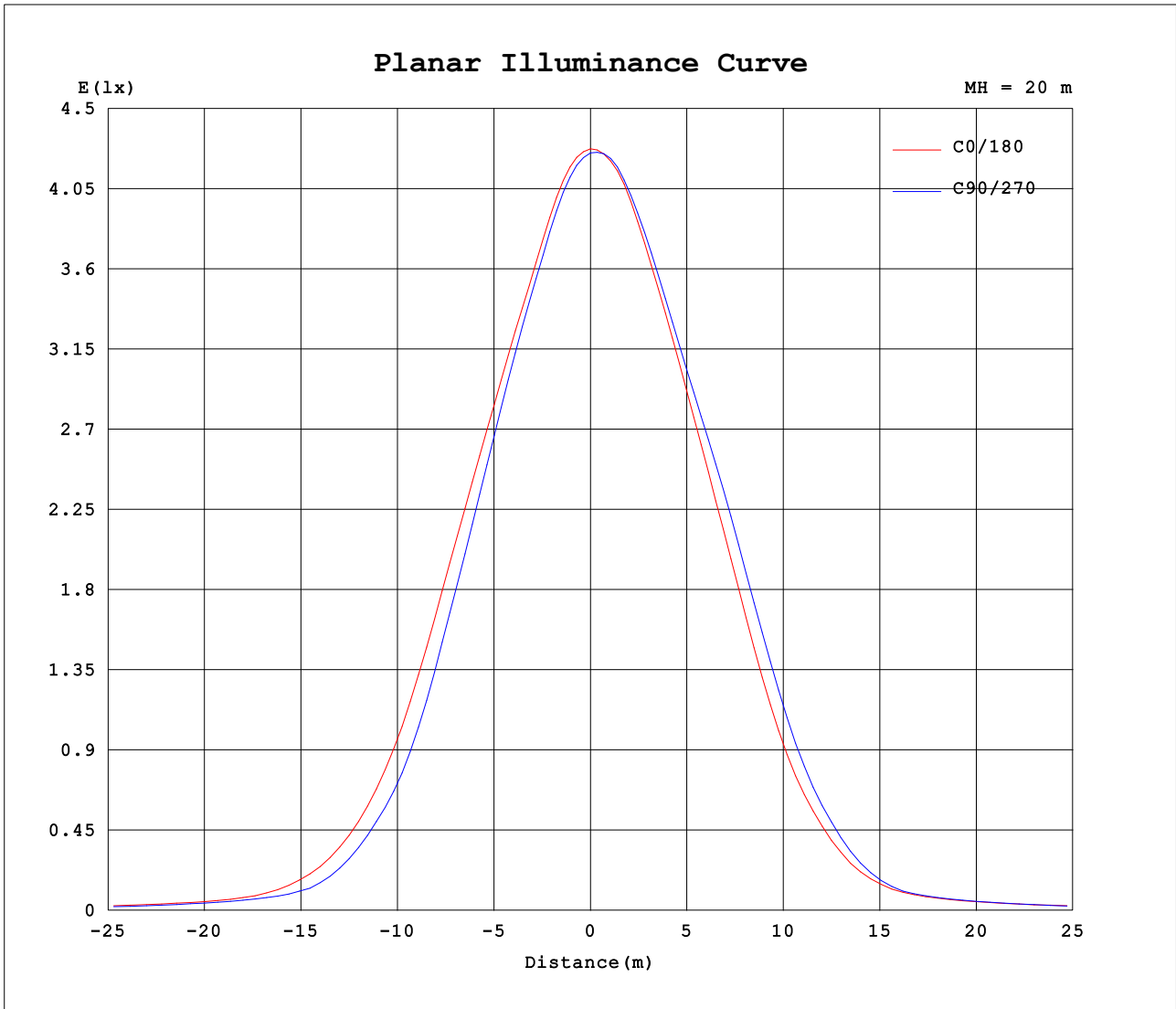
AvgL	cd/m2
L_0~180 (65) av	384
L_0~180 (75) av	256
L_0~180 (85) av	87
L_90~270 (65) av	268
L_90~270 (75) av	178
L_90~270 (85) av	30
L_45 (65) av	328
L_45 (75) av	207
L_45 (85) av	44

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
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Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-09-29

Range: 0 - 90DEG
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