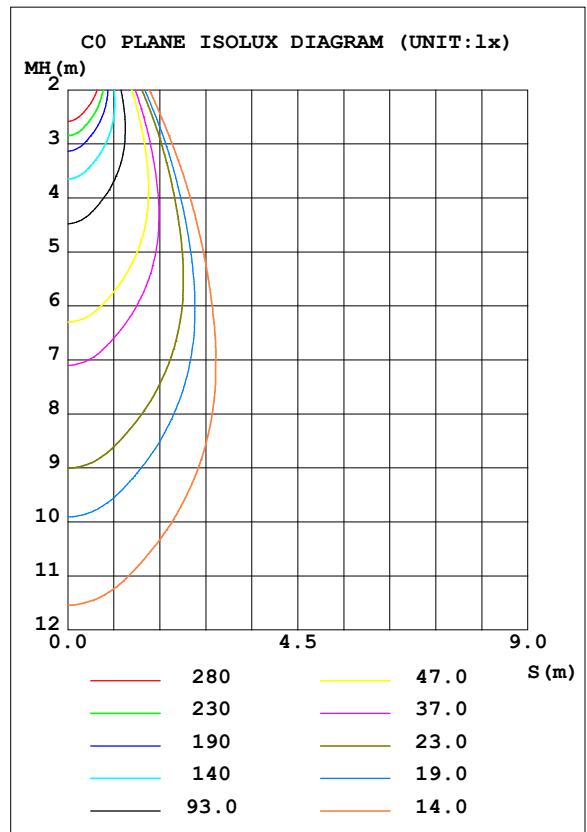
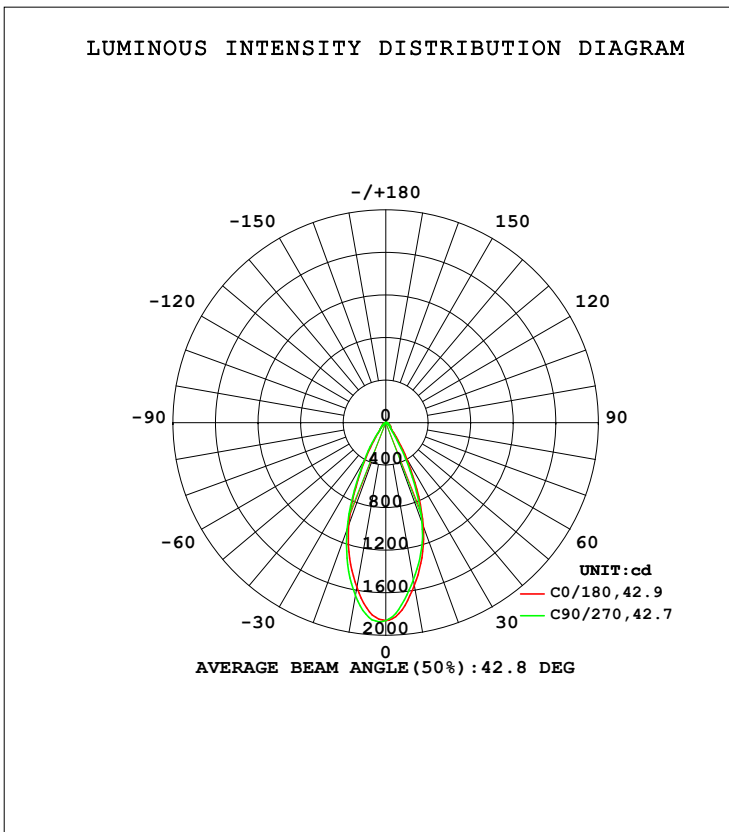


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.59 lm/W			
MODEL		Imax (cd)	1874	S/MH (C0/180)	0.68
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.69
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1052.4	<input type="checkbox"/> UP, DN (C0-180)	0.0, 47.6
NOMINAL FLUX (lm)	1052.36	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 52.4
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:

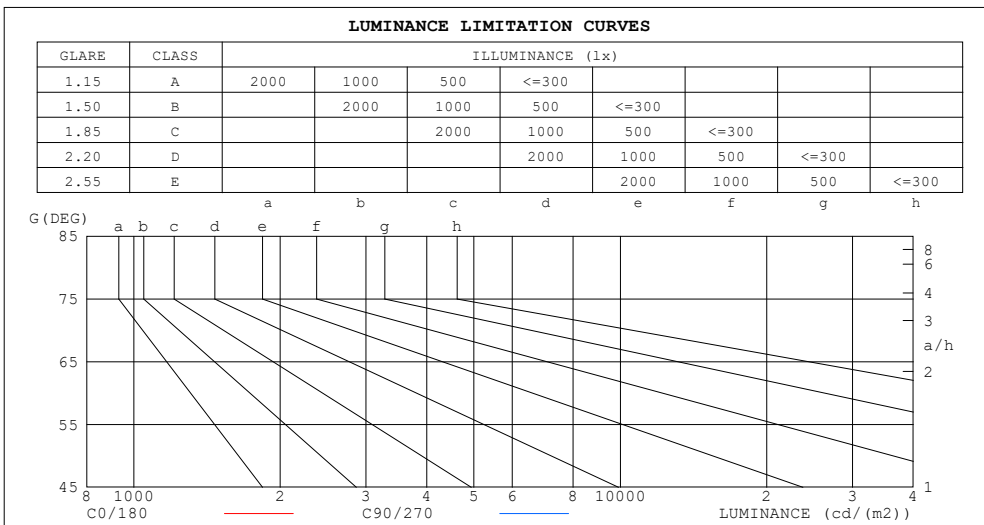
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1553	1501	1501	1505	1572	1646	1648	1612	0- 10	162.8	162.8	15.5,15.5
20	1032	932.8	998.9	934.2	1021	1090	1066	1059	10- 20	362.6	525.4	49.9,49.9
30	397.0	331.5	331.3	317.5	372.1	409.4	393.6	408.9	20- 30	302.8	828.1	78.7,78.7
40	93.46	82.54	74.54	78.99	85.56	94.23	86.33	107.1	30- 40	119.4	947.5	90,90
50	50.22	45.84	41.76	44.78	48.21	48.21	46.44	49.99	40- 50	47.74	995.3	94.6,94.6
60	29.64	25.32	21.32	24.68	28.05	27.38	25.85	28.32	50- 60	31.98	1027	97.6,97.6
70	11.79	9.527	8.372	9.250	10.97	10.38	10.08	10.86	60- 70	17.00	1044	99.2,99.2
80	4.448	2.658	1.737	2.552	4.255	3.594	3.133	3.732	70- 80	7.001	1051	99.9,99.9
90	0.0526	0.0314	0.0307	0.0257	0.0593	0.0411	0.0377	0.0718	80- 90	1.086	1052	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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	100	12
80	231	90
75	287	164
70	311	220
65	443	258
60	535	383
55	611	490
50	705	584
45	799	696

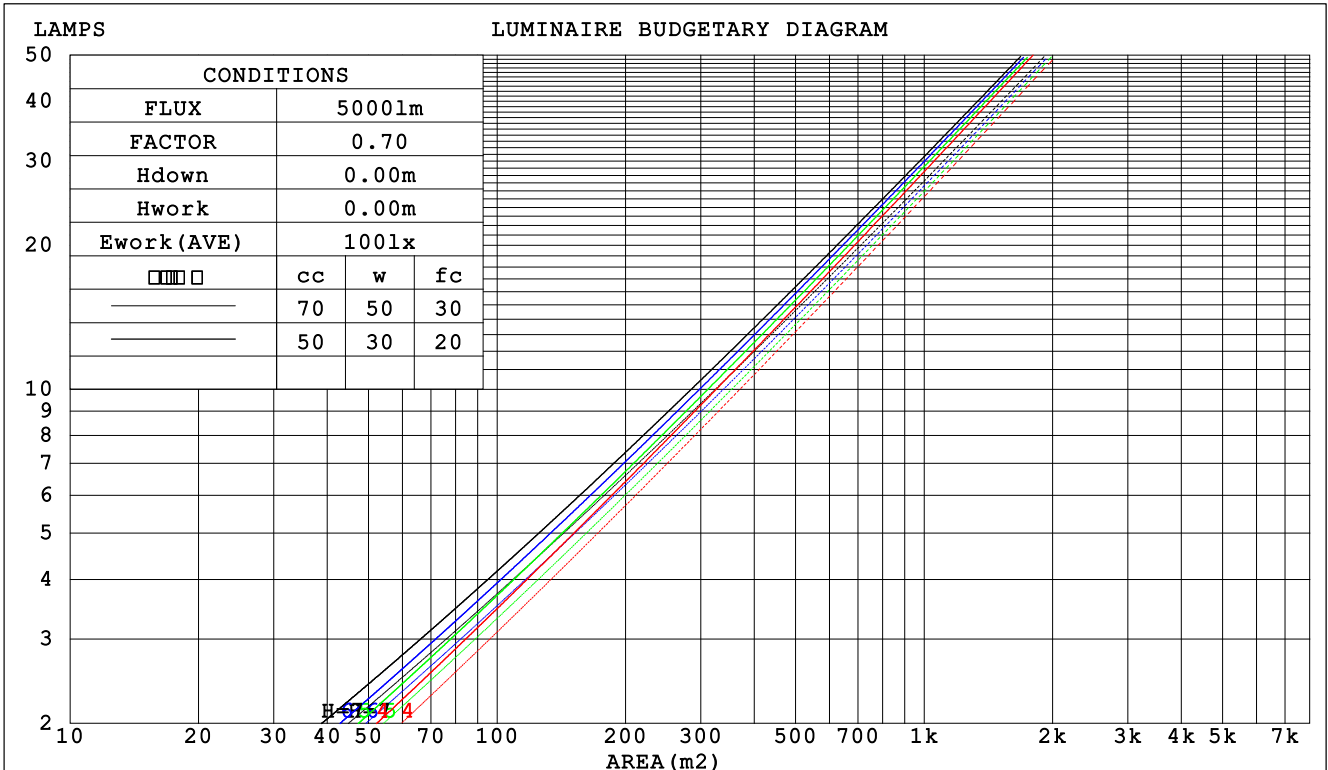
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 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	.98	.96	.95	.94
2.0	1.03	.99	.96	1.02	.98	.95	.98	.96	.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	.78	.74	.80	.77	.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	.73	.67	.63	.71	.67	.63	.70	.66	.63	.70	.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	.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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 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	.167	.092	.028	.162	.089	.027	.151	.084	.026	.142	.079	.025	.132	.075	.024	
3.0	.158	.084	.025	.153	.082	.025	.144	.078	.024	.136	.075	.023	.128	.071	.022	
4.0	.150	.078	.023	.145	.076	.022	.138	.073	.022	.130	.070	.021	.124	.067	.020	
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	

<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	.037	.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: 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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 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	5.4	6.3	5.6	6.5	6.6
3H	7.2	8.0	7.4	8.2	8.4	5.6	6.5	5.9	6.7	6.9
4H	7.3	8.1	7.6	8.3	8.6	5.7	6.5	6.0	6.7	6.9
6H	7.4	8.2	7.7	8.4	8.6	5.7	6.4	6.0	6.7	6.9
8H	7.4	8.1	7.7	8.4	8.6	5.6	6.4	6.0	6.6	6.9
12H	7.4	8.0	7.7	8.3	8.6	5.6	6.3	5.9	6.6	6.8
4H 2H	6.9	7.6	7.1	7.9	8.1	5.6	6.4	5.9	6.6	6.8
3H	7.3	8.0	7.7	8.3	8.6	6.0	6.6	6.3	6.9	7.2
4H	7.5	8.2	7.9	8.5	8.8	6.1	6.7	6.4	7.0	7.3
6H	7.7	8.3	8.1	8.6	8.9	6.1	6.6	6.4	7.0	7.3
8H	7.7	8.2	8.1	8.6	8.9	6.0	6.5	6.4	6.9	7.3
12H	7.7	8.1	8.1	8.5	8.9	6.0	6.4	6.4	6.8	7.2
8H 4H	7.5	8.0	7.9	8.4	8.7	6.1	6.6	6.5	6.9	7.3
6H	7.7	8.1	8.1	8.5	8.9	6.1	6.5	6.5	6.9	7.3
8H	7.7	8.1	8.2	8.5	8.9	6.1	6.4	6.5	6.9	7.3
12H	7.7	8.0	8.2	8.5	8.9	6.0	6.3	6.5	6.8	7.2
12H 4H	7.5	7.9	7.9	8.3	8.7	6.0	6.5	6.5	6.9	7.3
6H	7.7	8.0	8.1	8.4	8.9	6.1	6.5	6.5	6.9	7.3
8H	7.7	8.0	8.1	8.4	8.9	6.0	6.4	6.5	6.8	7.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.2 / - 1.0					+ 0.8 / - 1.0				
1.5H	+ 2.2 / - 0.9					+ 0.9 / - 0.6				
2.0H	+ 0.9 / - 0.9					+ 1.2 / - 1.7				

CIE Pub.117, 1052 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.2)
 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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

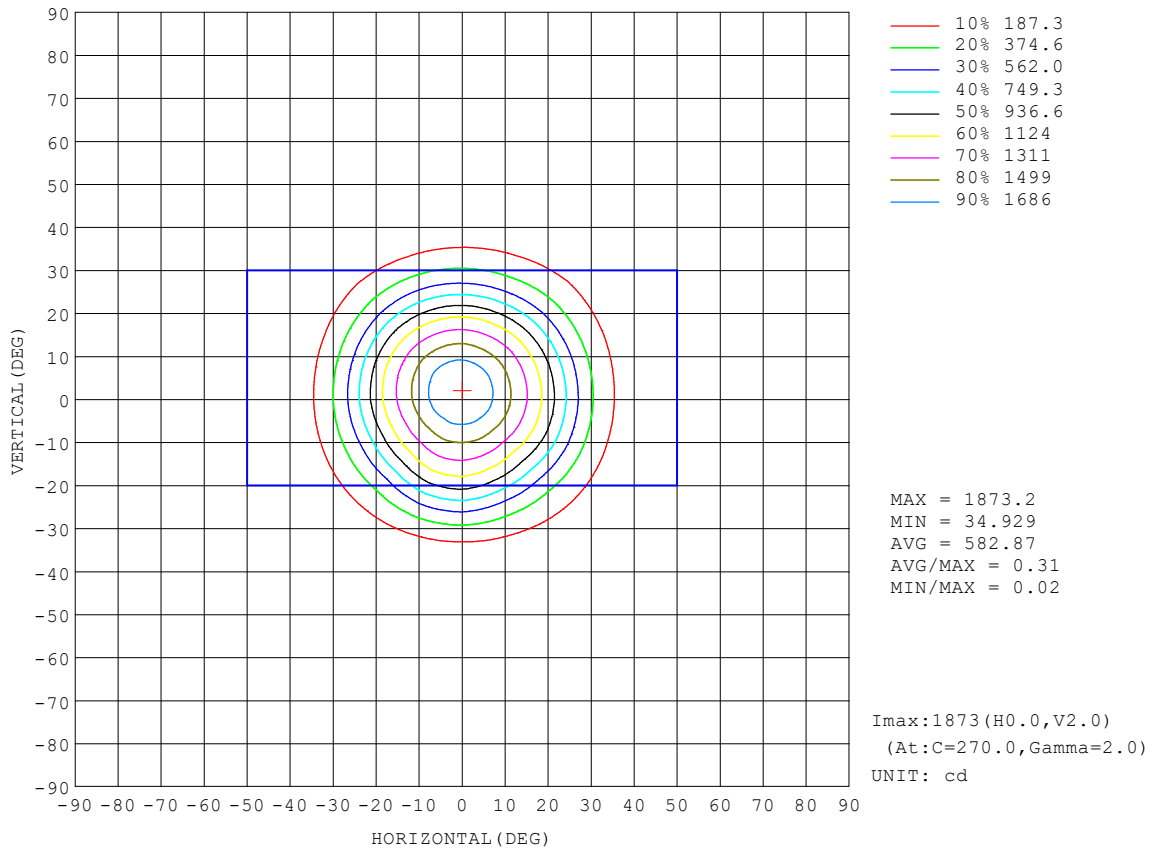
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	85	79	75	85	78	74	84	78	74	71
0.80	93	87	83	92	86	83	91	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:
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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:

ISOCANDELA DIAGRAM

Test:U:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

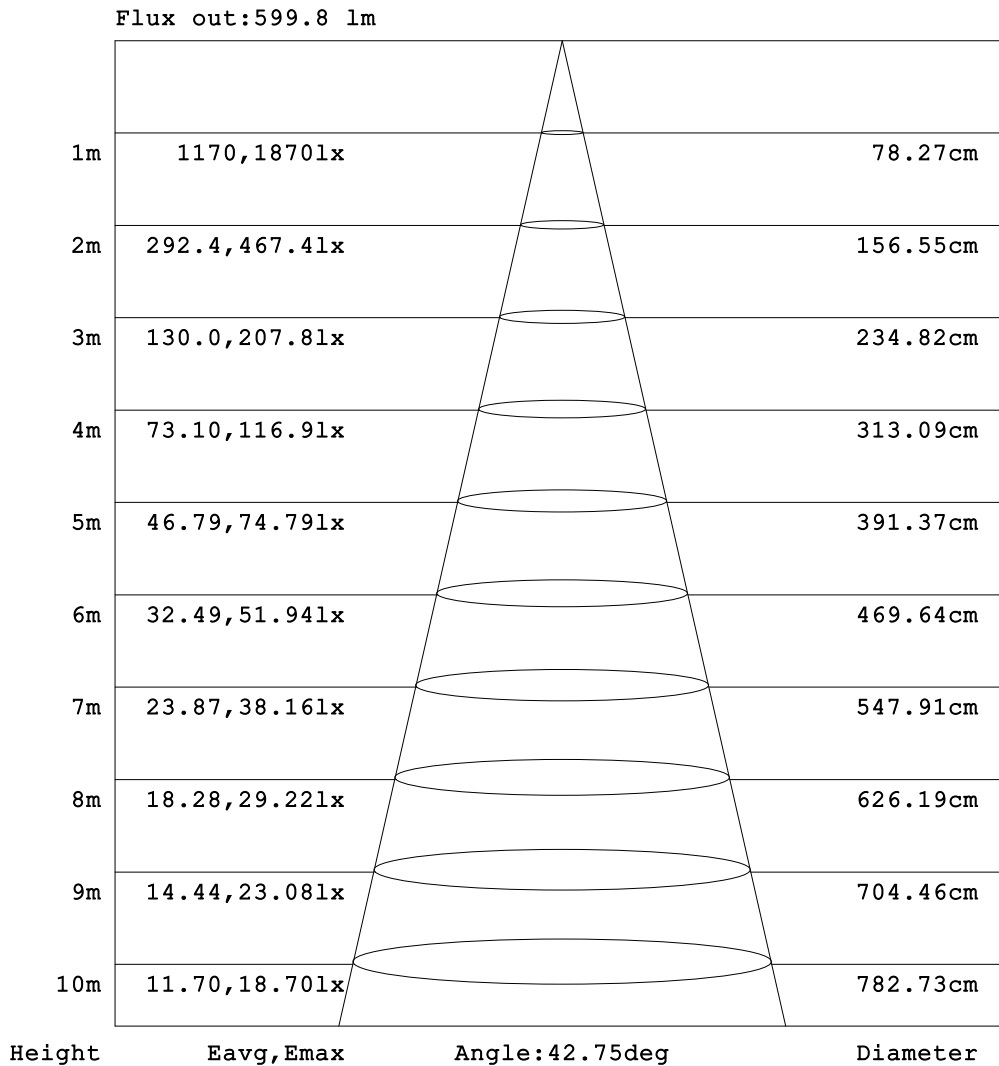


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-09-29

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:

AAI Figure

Test:U:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



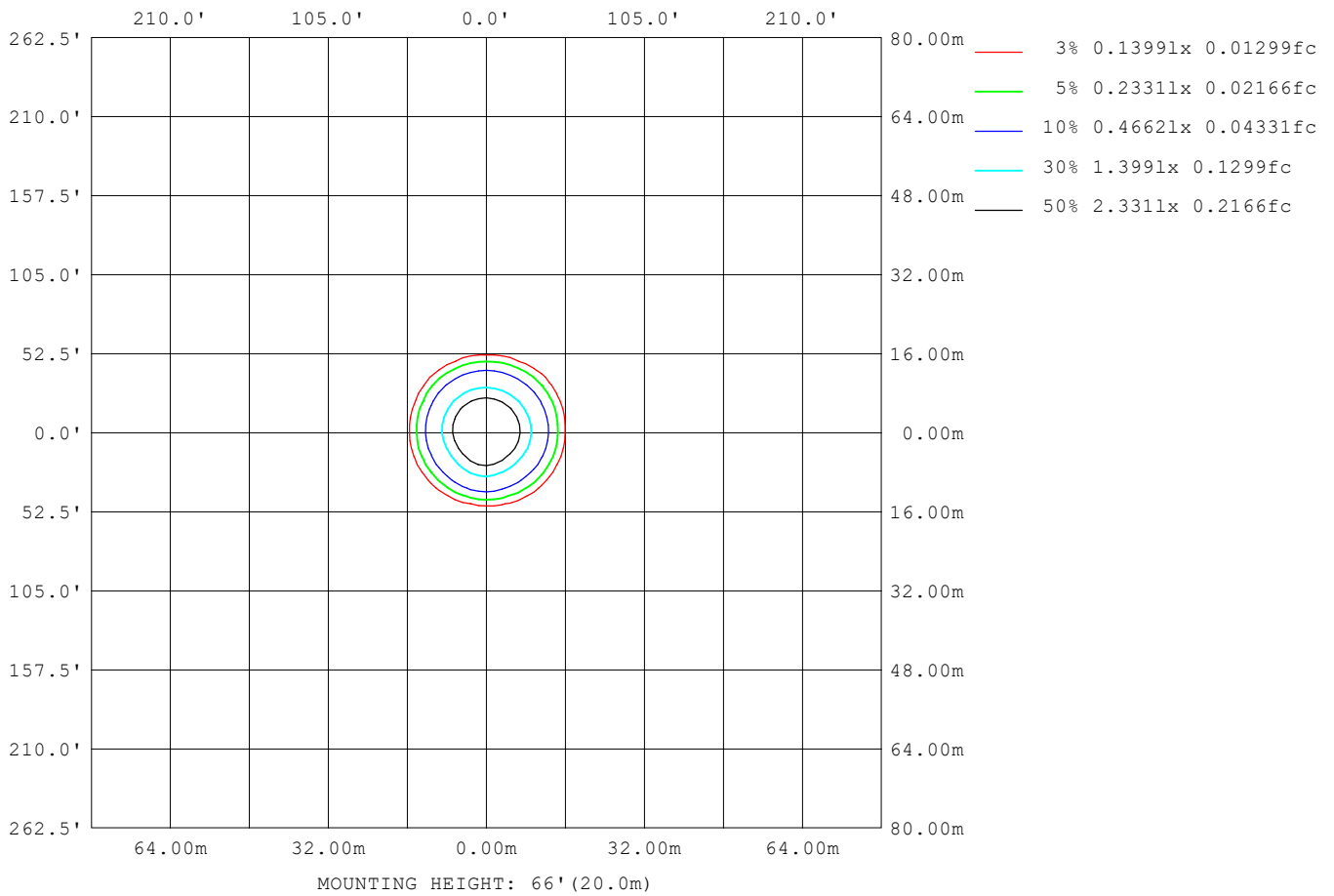
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



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:

LED Avg.L Report

Test:U:119.97V I:0.1093A P:12.898W PF:0.9453 Freq:59.98Hz Lamp Flux:1052.36x1 lm		
NAME: AD-LED-4-S15W-5CCTWH	TYPE:	WEIGHT:
SPEC.:4000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

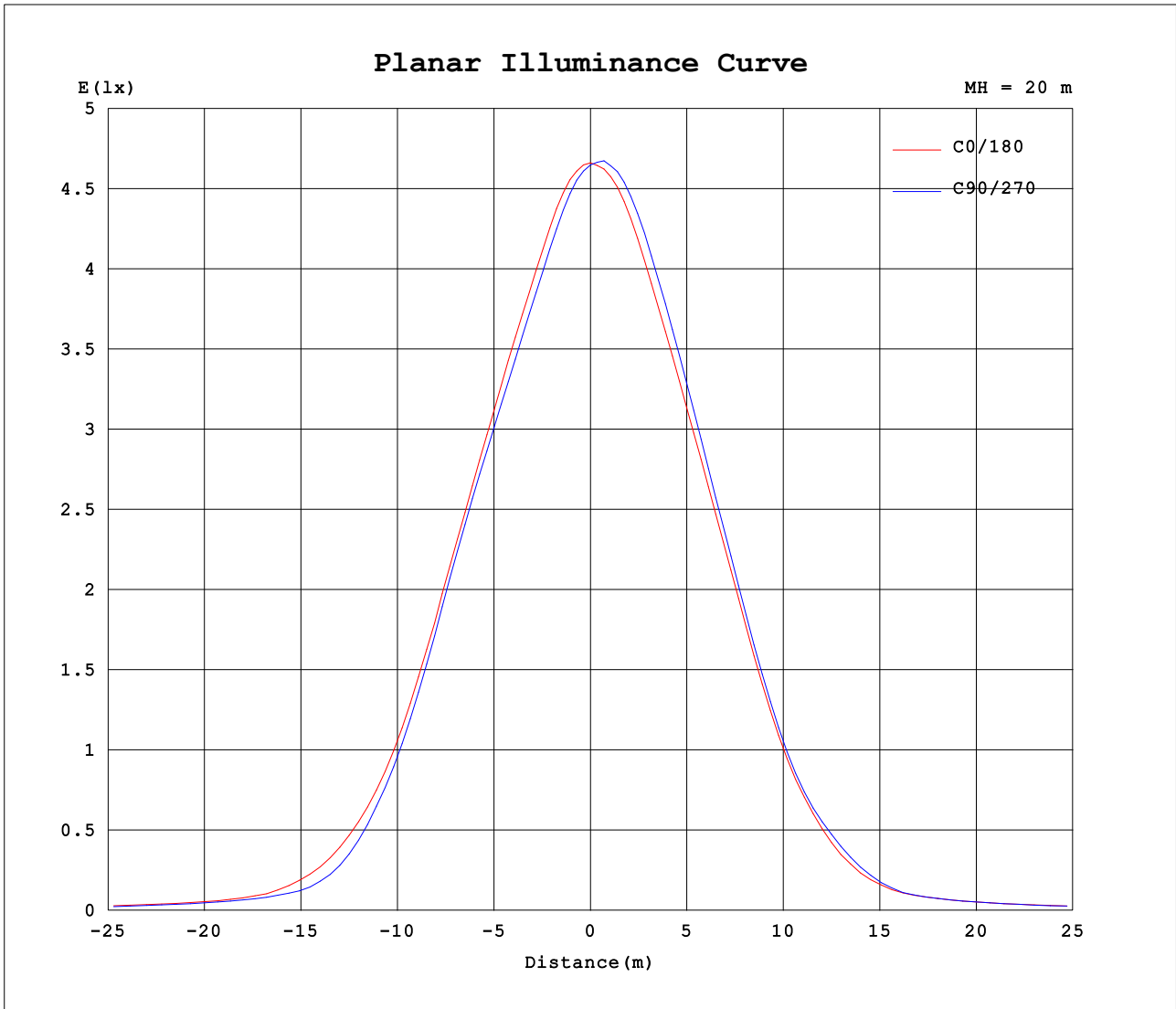
AvgL	cd/m2
L_0~180 (65) av	420
L_0~180 (75) av	278
L_0~180 (85) av	95
L_90~270 (65) av	292
L_90~270 (75) av	194
L_90~270 (85) av	33
L_45 (65) av	358
L_45 (75) av	227
L_45 (85) av	49

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
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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:
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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:

