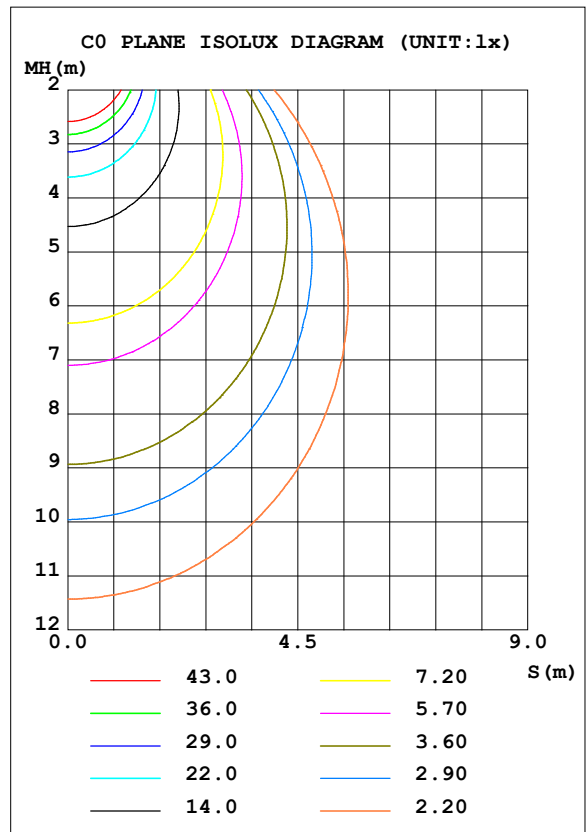
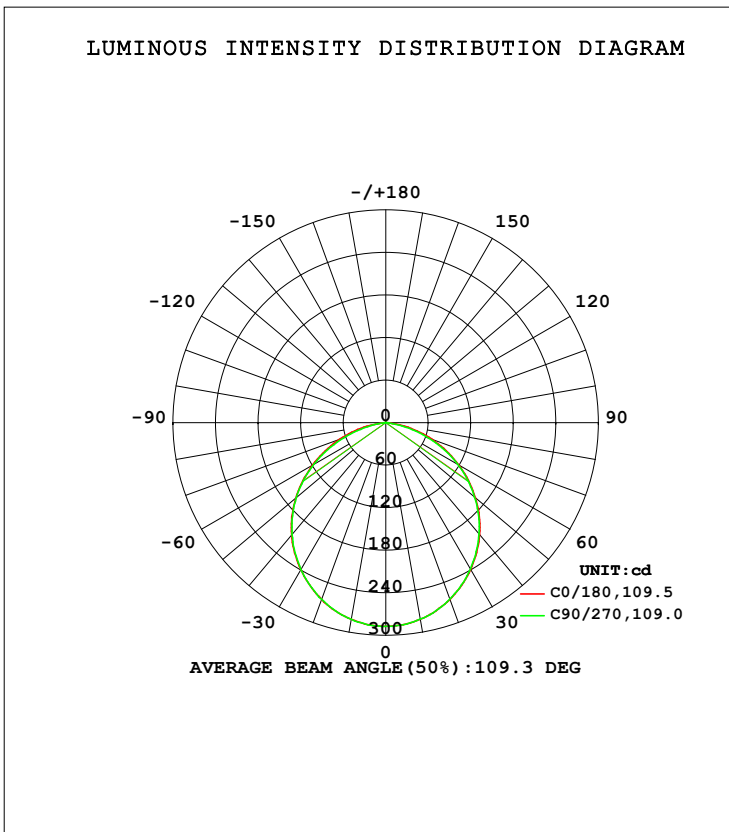


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 92.07 lm/W			
MODEL		I _{max} (cd)	287.7	S/MH (C0/180)	1.24
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	772.03	<input type="checkbox"/> UP, DN (C0-180)	0.0,50.0
NOMINAL FLUX (lm)	772.028	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0,50.0
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-12-30

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: PORTER

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

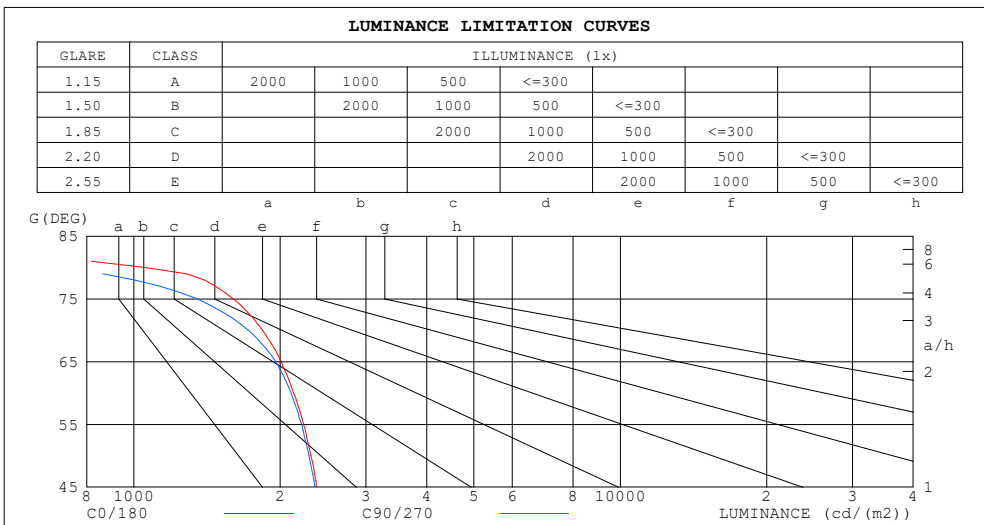
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	281.6	281.6	281.2	281.2	281.6	282.2	281.4	282.0	0- 10	27.16	27.16	3.52,3.52
20	265.1	265.1	264.6	265.0	265.1	265.4	265.0	265.2	10- 20	77.49	104.7	13.6,13.6
30	239.3	239.3	238.8	239.1	239.6	239.6	239.2	239.3	20- 30	116.7	221.3	28.7,28.7
40	206.0	205.6	204.4	205.4	206.6	206.6	205.9	206.3	30- 40	139.7	361.0	46.8,46.8
50	165.2	164.5	163.6	164.5	165.9	165.4	165.1	165.3	40- 50	143.6	504.6	65.4,65.4
60	118.4	117.7	116.9	117.7	118.9	118.7	117.0	118.5	50- 60	126.8	631.4	81.8,81.8
70	69.85	67.61	65.28	68.07	69.71	67.62	63.44	67.06	60- 70	91.86	723.3	93.7,93.7
80	20.26	17.54	13.59	17.31	21.21	16.95	11.96	16.81	70- 80	44.28	767.6	99.4,99.4
90	0.1158	0.0989	0.0895	0.0978	0.2009	0.1800	0.1666	0.1785	80- 90	4.447	772.0	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:2021-12-30

□ 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: PORTER

LUMINANCE LIMITATION CURVES

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	364	105
80	1050	704
75	1601	1348
70	1838	1717
65	2008	1958
60	2131	2103
55	2234	2213
50	2314	2291
45	2373	2355

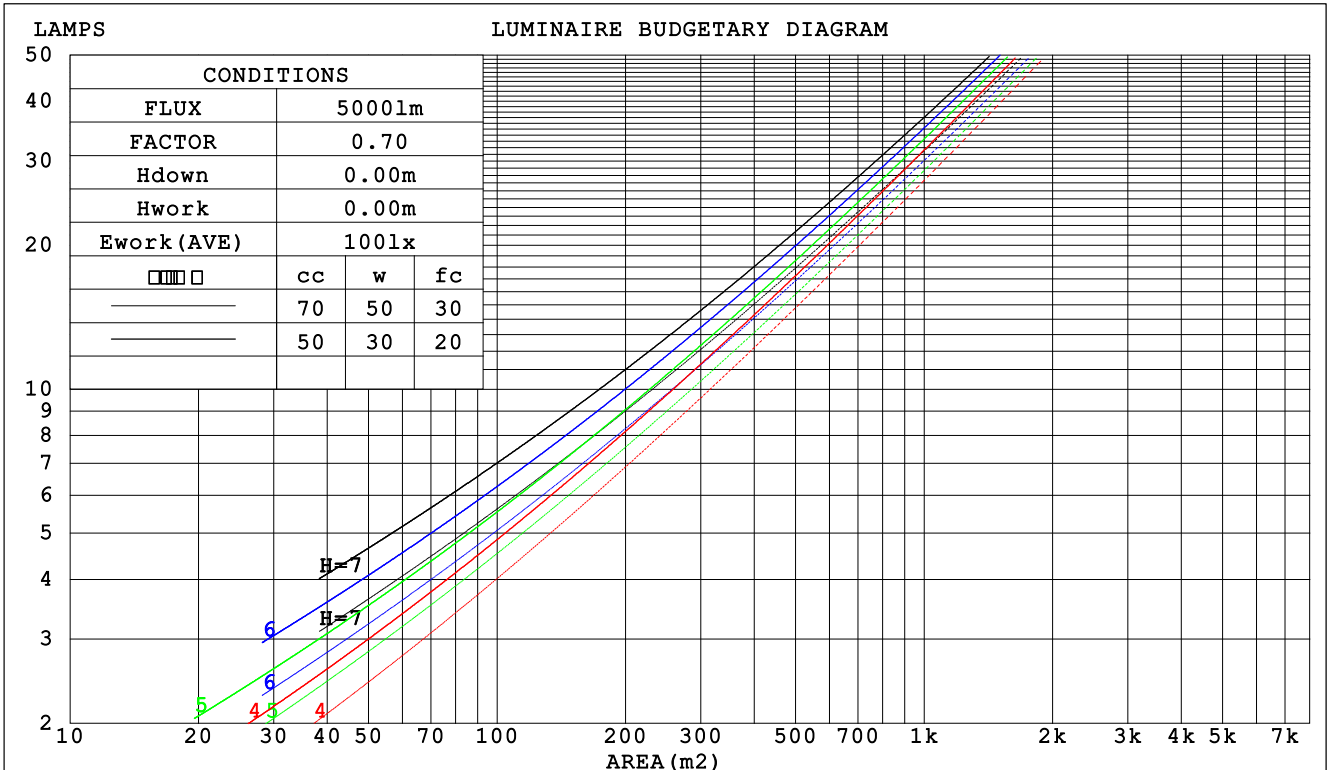
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	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	1.05	1.01	.97	1.03	.99	.96	.99	.96	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.71
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.66	.63	.60
4.0	.72	.63	.57	.70	.62	.56	.68	.61	.55	.66	.60	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.48	.61	.54	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.48	.42	.53	.47	.42	.52	.46	.41	.39
7.0	.52	.44	.38	.52	.43	.37	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.39	.34	.47	.39	.33	.46	.38	.33	.45	.38	.33	.43	.37	.33	.31
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.40	.33	.27	.40	.32	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

□ 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: PORTER

WEC AND CCEC

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	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	.288	.164	.052	.281	.161	.051	.268	.154	.049	.256	.148	.047	.245	.142	.046	
2.0	.278	.152	.047	.272	.150	.046	.260	.145	.045	.250	.140	.044	.240	.136	.043	
3.0	.260	.139	.042	.255	.137	.041	.245	.133	.040	.235	.129	.040	.227	.125	.039	
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.213	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.209	.105	.030	.206	.104	.030	.199	.102	.030	.192	.100	.029	.186	.098	.029	
7.0	.196	.097	.027	.192	.096	.027	.186	.094	.027	.180	.092	.027	.174	.090	.027	
8.0	.183	.089	.025	.180	.089	.025	.174	.087	.025	.169	.086	.025	.164	.084	.024	
9.0	.172	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.162	.078	.022	.159	.077	.021	.155	.076	.021	.150	.075	.021	.146	.073	.021	

<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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.084	.050	.024	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

UGR(Unified Glare Rating) Table

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm										
NAME: LED-S9W-5CCTWH-R-BF					TYPE:			WEIGHT:		
SPEC.:3500K 80					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	16.6	18.1	16.9	18.3	18.5	16.5	18.0	16.8	18.2	18.4
3H	18.0	19.4	18.3	19.6	19.8	17.8	19.2	18.1	19.4	19.7
4H	18.5	19.8	18.8	20.0	20.3	18.2	19.5	18.5	19.8	20.0
6H	18.7	19.9	19.0	20.2	20.5	18.3	19.5	18.6	19.8	20.1
8H	18.7	19.9	19.1	20.2	20.5	18.3	19.5	18.6	19.7	20.0
12H	18.7	19.8	19.0	20.1	20.4	18.2	19.4	18.6	19.7	20.0
4H 2H	17.2	18.5	17.5	18.7	19.0	17.1	18.4	17.4	18.7	18.9
3H	18.7	19.8	19.1	20.1	20.4	18.6	19.7	18.9	20.0	20.3
4H	19.3	20.3	19.7	20.6	21.0	19.0	20.1	19.4	20.4	20.7
6H	19.6	20.5	20.0	20.9	21.3	19.2	20.1	19.6	20.5	20.8
8H	19.6	20.5	20.1	20.9	21.2	19.2	20.0	19.6	20.4	20.8
12H	19.6	20.4	20.0	20.8	21.2	19.1	19.9	19.6	20.3	20.7
8H 4H	19.4	20.3	19.9	20.7	21.0	19.2	20.0	19.6	20.4	20.8
6H	19.9	20.6	20.3	21.0	21.4	19.4	20.1	19.9	20.5	21.0
8H	19.9	20.5	20.4	20.9	21.4	19.4	20.0	19.9	20.5	20.9
12H	19.9	20.4	20.4	20.9	21.3	19.4	19.9	19.9	20.4	20.8
12H 4H	19.4	20.2	19.8	20.6	21.0	19.2	20.0	19.6	20.3	20.7
6H	19.8	20.5	20.3	20.9	21.3	19.4	20.0	19.9	20.5	20.9
8H	19.9	20.4	20.4	20.9	21.3	19.4	19.9	19.9	20.4	20.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 772.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.9)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

UTILIZATION FACTORS TABLE

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

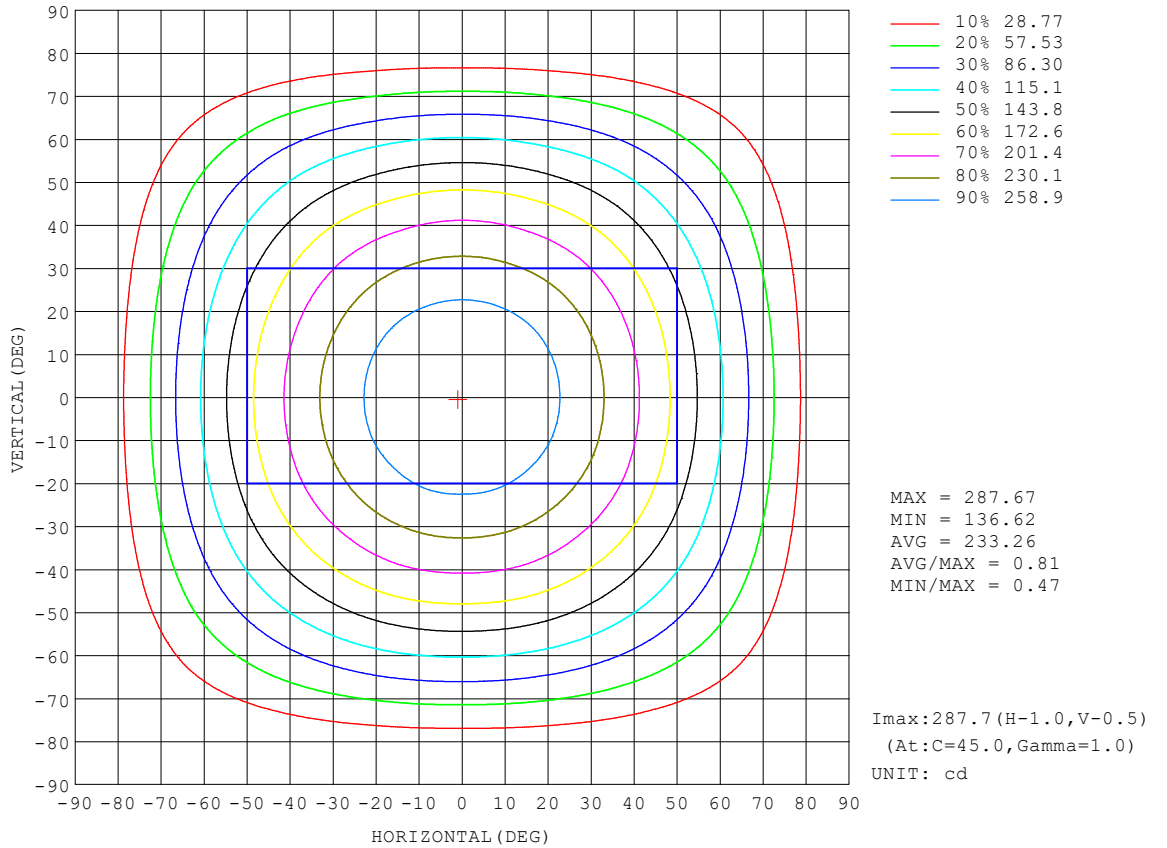
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	40	58	47	40	57	46	40	34
0.80	69	57	50	68	57	50	66	56	50	43
1.00	77	67	59	76	66	59	74	67	59	52
1.25	84	74	67	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	98	105	100	96	101	97	93	85
5.00	109	105	101	107	103	100	103	99	97	88
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:2021-12-30

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: PORTER

ISOCANDELA DIAGRAM

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

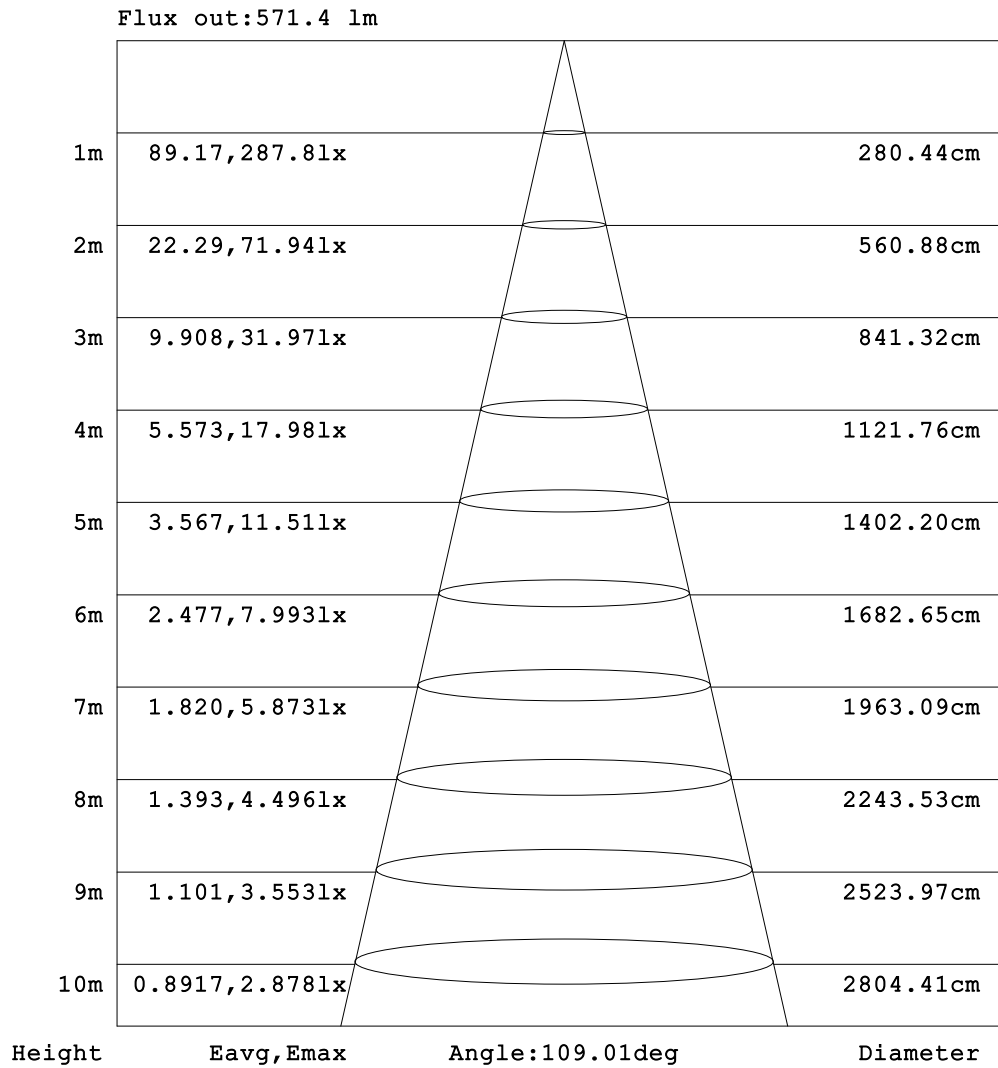


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

AAI Figure

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



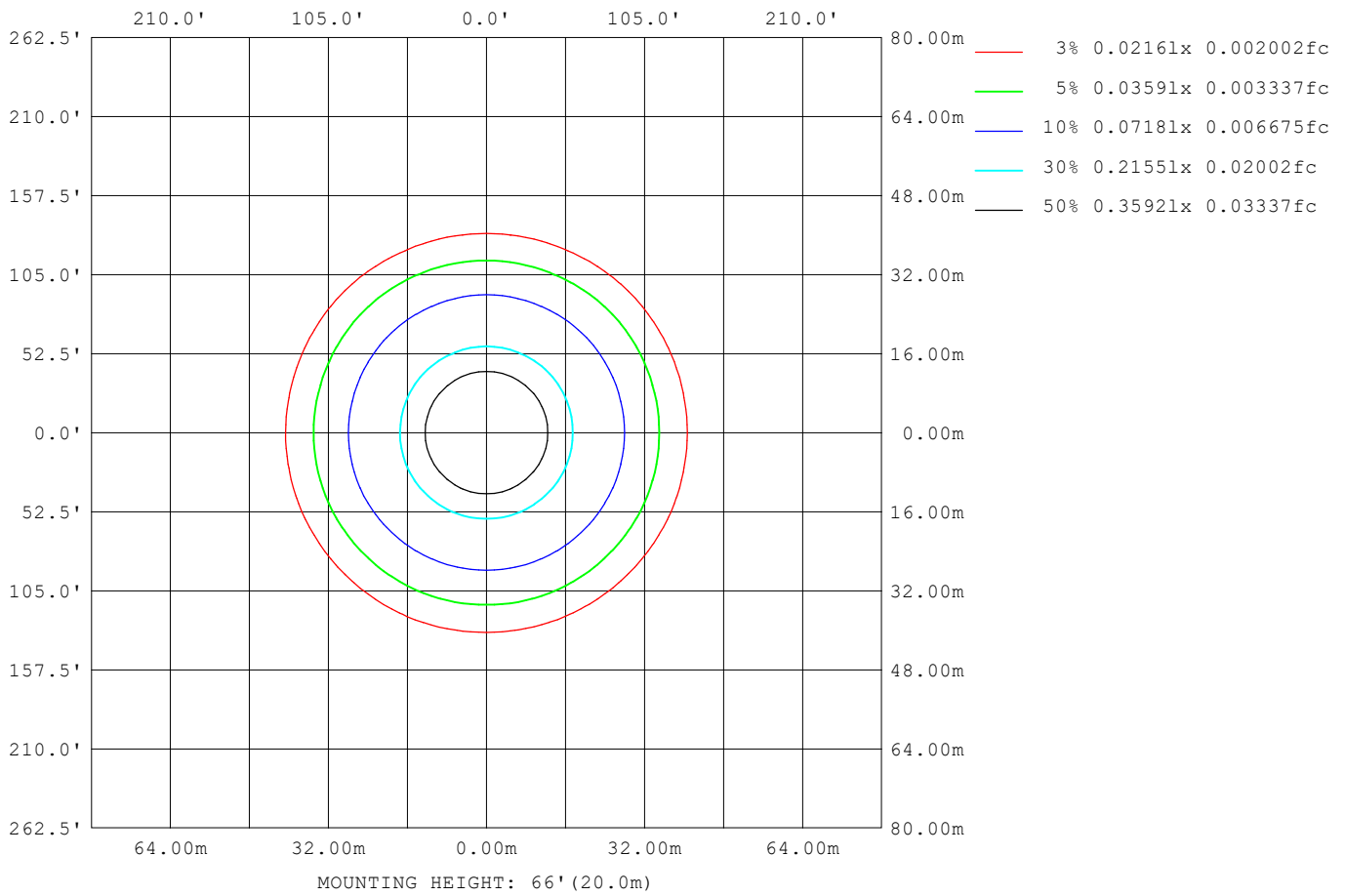
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

ISOLUX DIAGRAM

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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: PORTER

LED Avg.L Report

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

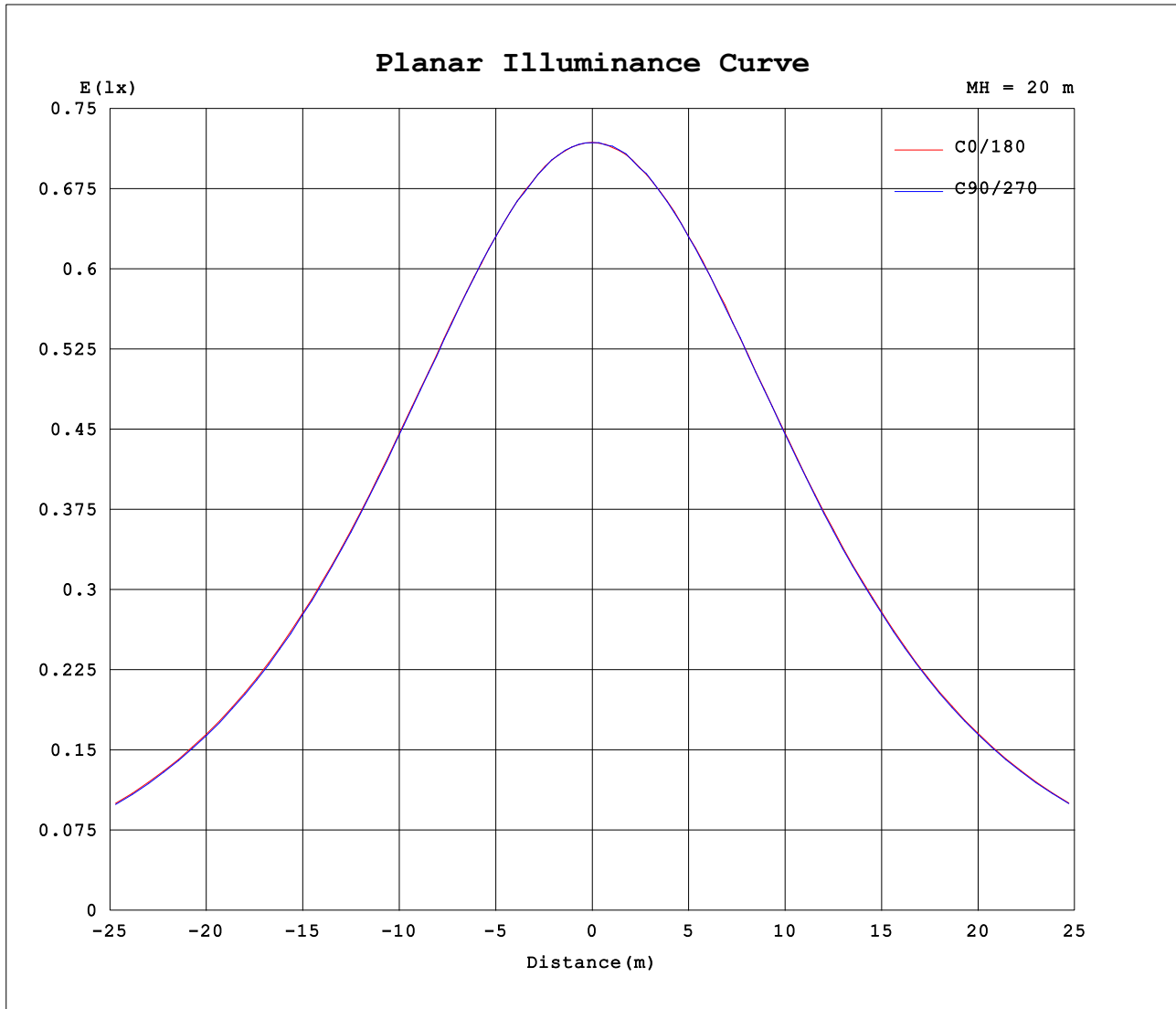
AvgL	cd/m2
L_0~180 (65) av	2009
L_0~180 (75) av	1595
L_0~180 (85) av	338
L_90~270 (65) av	1943
L_90~270 (75) av	1314
L_90~270 (85) av	95
L_45 (65) av	1988
L_45 (75) av	1453
L_45 (85) av	130

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: PORTER

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-12-30

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: PORTER

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.98V I:0.1014A P:8.3851W PF:0.9351 Freq:59.98Hz Lamp Flux:772.028x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3500K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287			
5	286	286	286	286	286	286	286	286	286	286	286	286	286	286	286	286			
10	282	282	282	282	281	282	281	281	282	282	282	281	281	282	282	281			
15	275	275	275	275	275	275	275	274	275	275	275	275	275	275	275	274			
20	265	266	265	265	265	265	265	265	265	265	265	265	265	265	265	265			
25	253	254	253	253	253	253	253	254	253	254	254	253	253	253	254	253			
30	239	240	239	239	239	239	239	239	240	239	240	239	239	239	239	239			
35	224	224	223	223	222	223	223	224	224	224	224	223	223	223	224	223			
40	206	207	206	206	204	206	205	206	207	206	207	205	206	205	206	206			
45	186	187	186	186	185	186	186	187	188	187	187	186	186	186	187	186			
50	165	166	165	165	164	165	164	166	166	165	165	164	165	164	165	165			
55	142	143	142	142	141	142	141	143	143	142	142	141	142	142	143	142			
60	118	119	118	118	117	118	118	119	119	118	119	117	117	117	119	118			
65	94.3	94.3	93.2	92.3	92.0	93.0	93.4	94.0	94.4	94.0	93.7	91.1	90.5	91.3	93.1	94.0			
70	69.8	69.8	67.6	66.2	65.3	66.5	68.1	69.7	69.7	69.5	67.6	64.4	63.4	64.6	67.1	69.2			
75	46.0	45.1	42.0	39.9	38.8	39.9	42.4	45.2	45.7	44.6	41.6	38.0	36.8	38.1	41.1	44.5			
80	20.3	21.0	17.5	15.0	13.6	14.8	17.3	21.5	21.2	20.4	16.9	13.3	12.0	13.1	16.8	21.1			
85	3.53	2.26	1.29	1.12	1.02	1.04	1.21	2.68	3.02	2.34	1.21	0.90	0.82	0.83	1.33	3.19			
90	0.12	0.12	0.10	0.09	0.09	0.09	0.10	0.11	0.20	0.19	0.18	0.17	0.17	0.17	0.18	0.19			

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