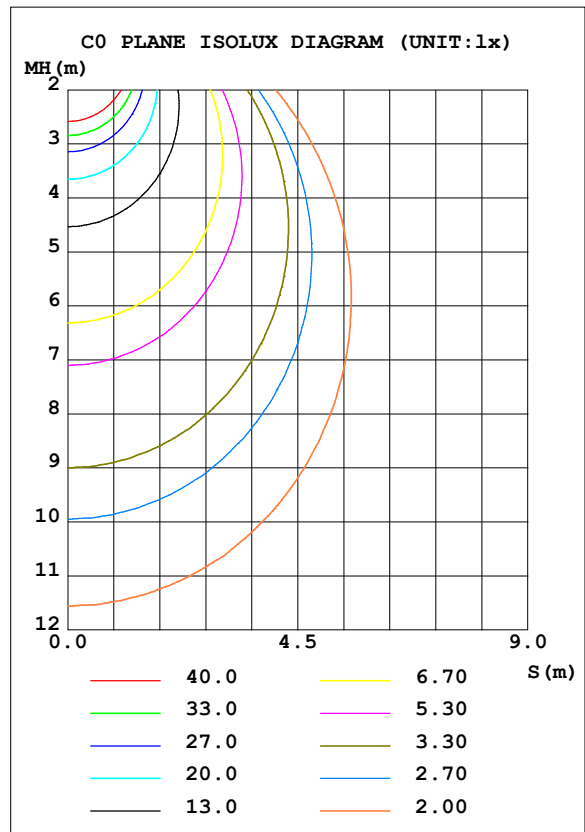
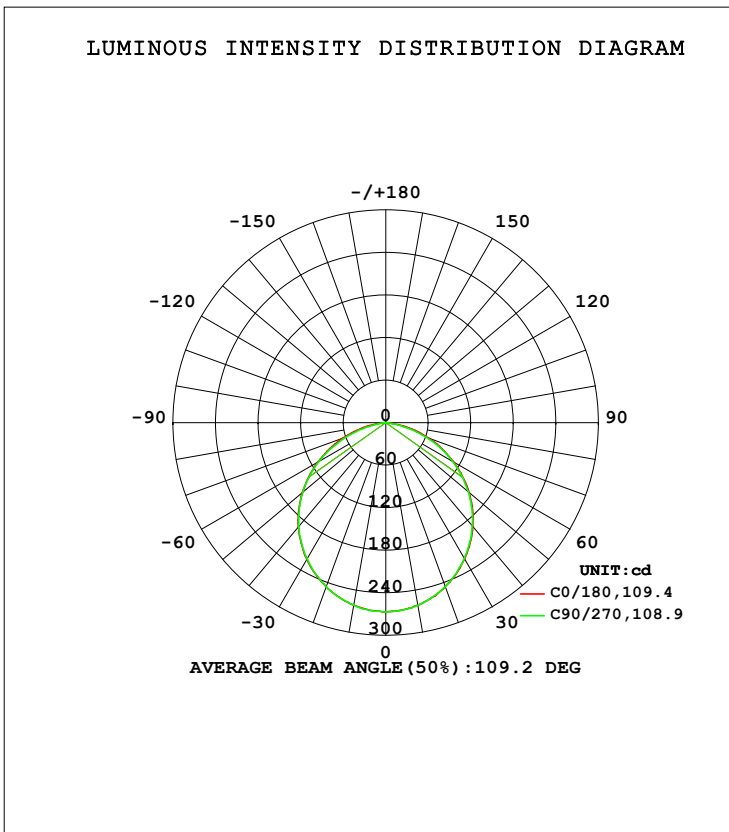


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.78 lm/W			
MODEL		I _{max} (cd)	267.4	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)	717.12	<input type="checkbox"/> UP, DN (C0-180)	0.0, 50.1
NOMINAL FLUX (lm)	717.117	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 49.9
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:

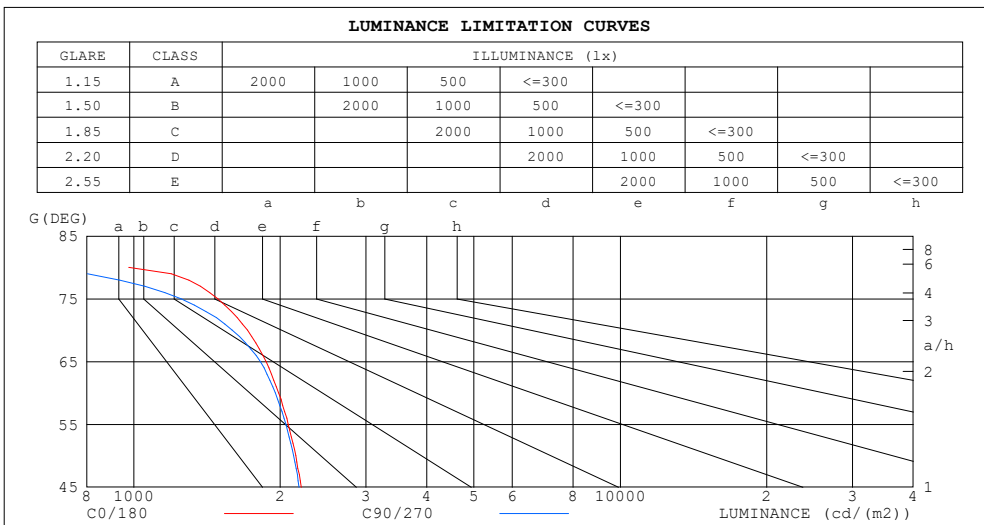
°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	261.3	261.8	261.6	261.7	261.4	261.8	261.5	261.6	0- 10	25.23	25.23	3.52,3.52
20	246.0	246.6	246.0	246.2	246.2	246.3	246.1	246.4	10- 20	72.00	97.23	13.6,13.6
30	222.5	222.2	221.3	222.0	222.6	222.3	221.9	222.7	20- 30	108.4	205.6	28.7,28.7
40	191.1	190.6	189.9	190.5	191.7	191.8	191.0	191.6	30- 40	129.8	335.5	46.8,46.8
50	153.6	152.8	152.1	152.8	153.8	153.5	153.1	153.5	40- 50	133.3	468.8	65.4,65.4
60	110.0	109.4	108.5	109.1	110.2	110.1	108.5	110.1	50- 60	117.8	586.6	81.8,81.8
70	64.94	62.93	60.55	63.20	64.55	62.76	58.90	62.19	60- 70	85.32	671.9	93.7,93.7
80	18.81	16.30	12.61	16.07	19.60	15.69	11.03	15.58	70- 80	41.10	713.0	99.4,99.4
90	0.1070	0.0918	0.0807	0.0918	0.1859	0.1633	0.1541	0.1665	80- 90	4.127	717.1	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:2021-12-30

□ 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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	341	98
80	977	654
75	1489	1250
70	1712	1594
65	1869	1819
60	1984	1954
55	2077	2054
50	2154	2130
45	2208	2186

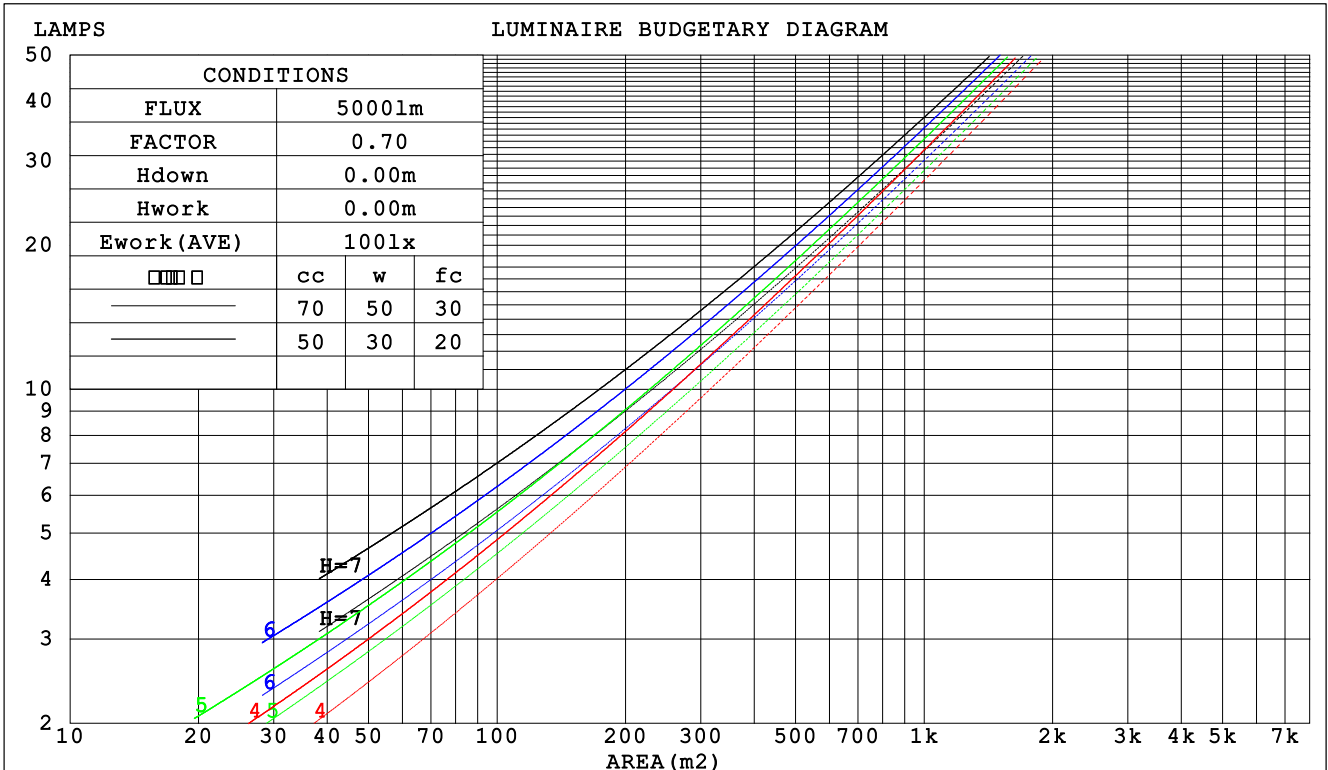
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 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	.67	.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	.38	.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	.41	.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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 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	.160	.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	.198	.102	.030	.192	.100	.029	.186	.098	.029	
7.0	.195	.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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm										
NAME: LED-S9W-5CCTWH-R-BF					TYPE:			WEIGHT:		
SPEC.:3000K 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	16.6	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	19.1	20.2	20.5	18.3	19.5	18.7	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	20.7	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	19.7	20.5	20.1	20.9	21.3	19.2	20.0	19.6	20.4	20.8
12H	19.6	20.4	20.1	20.8	21.2	19.1	19.9	19.6	20.3	20.7
8H 4H	19.5	20.3	19.9	20.7	21.1	19.2	20.1	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	21.0	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	19.9	20.6	21.0	19.2	20.0	19.6	20.3	20.8
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	21.4	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, 717.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.2)
 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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

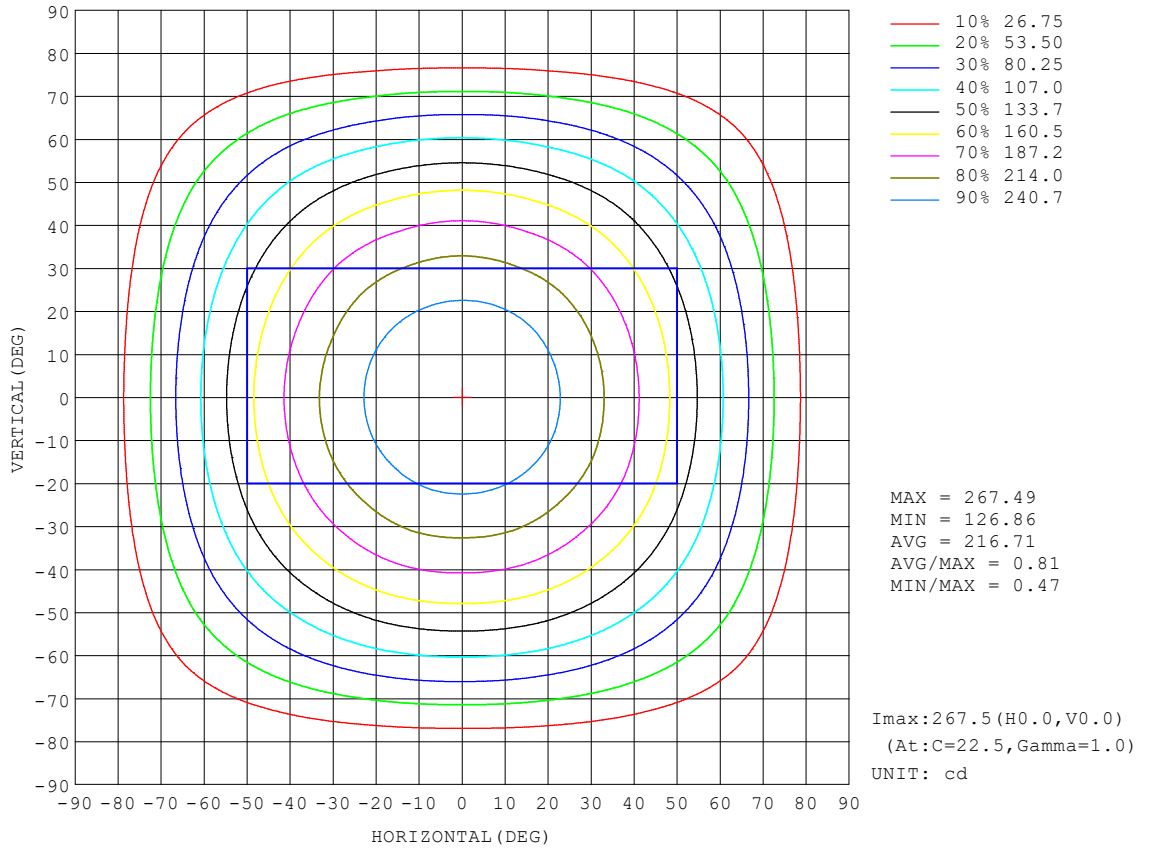
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	40	58	47	40	57	46	40	34
0.80	69	57	50	68	57	50	66	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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

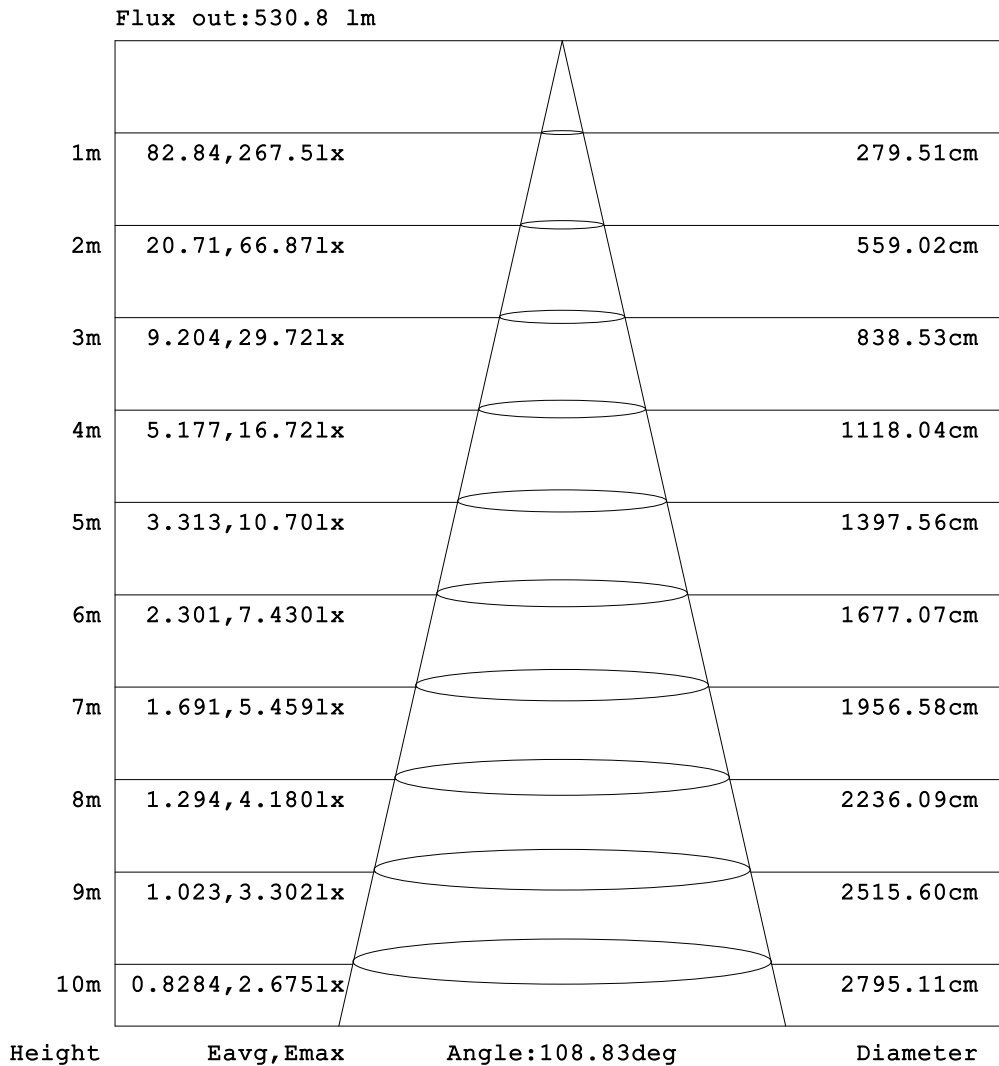


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



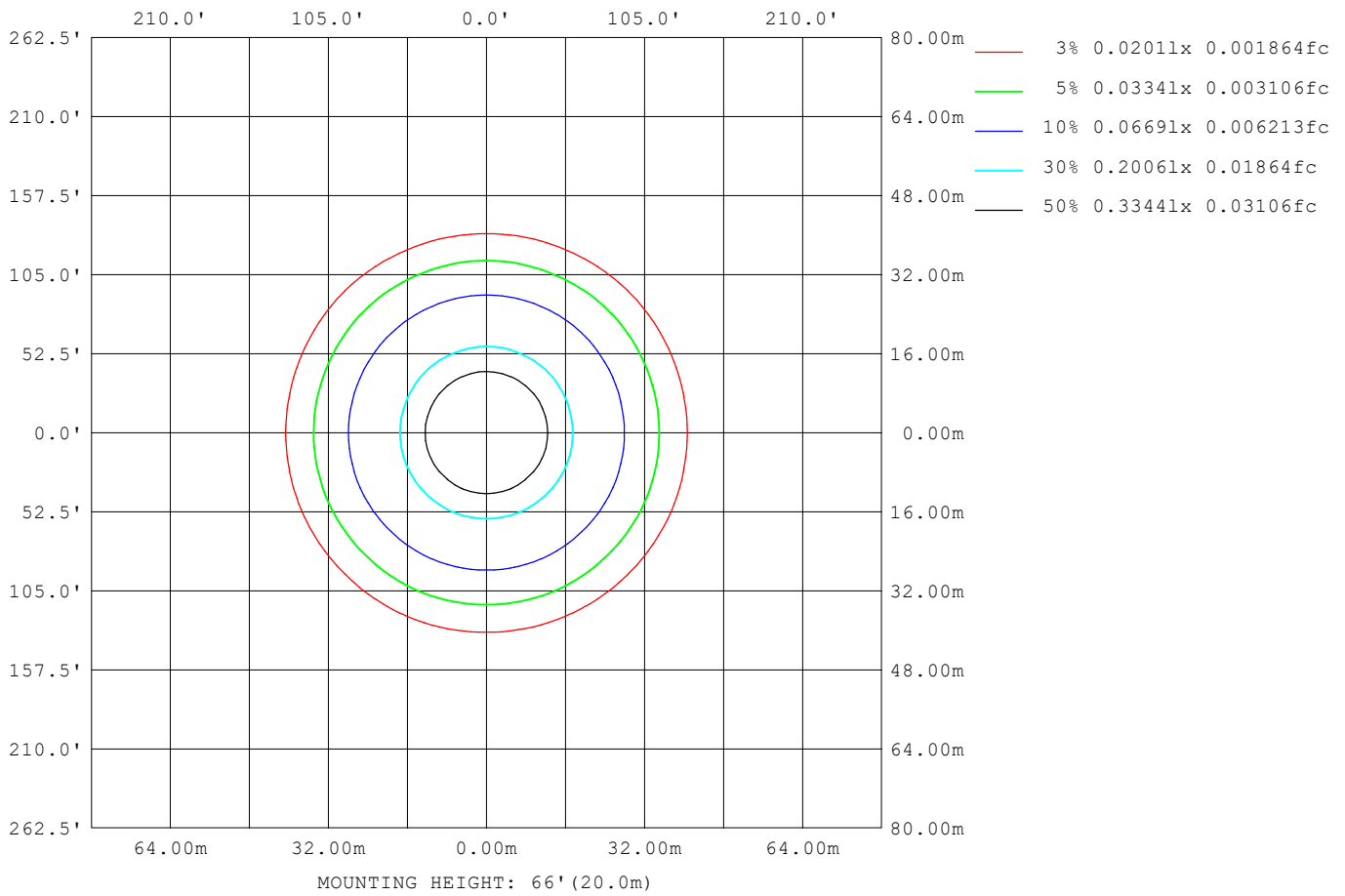
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 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:119.97V I:0.1031A P:8.5598W PF:0.9369 Freq:59.98Hz Lamp Flux:717.117x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

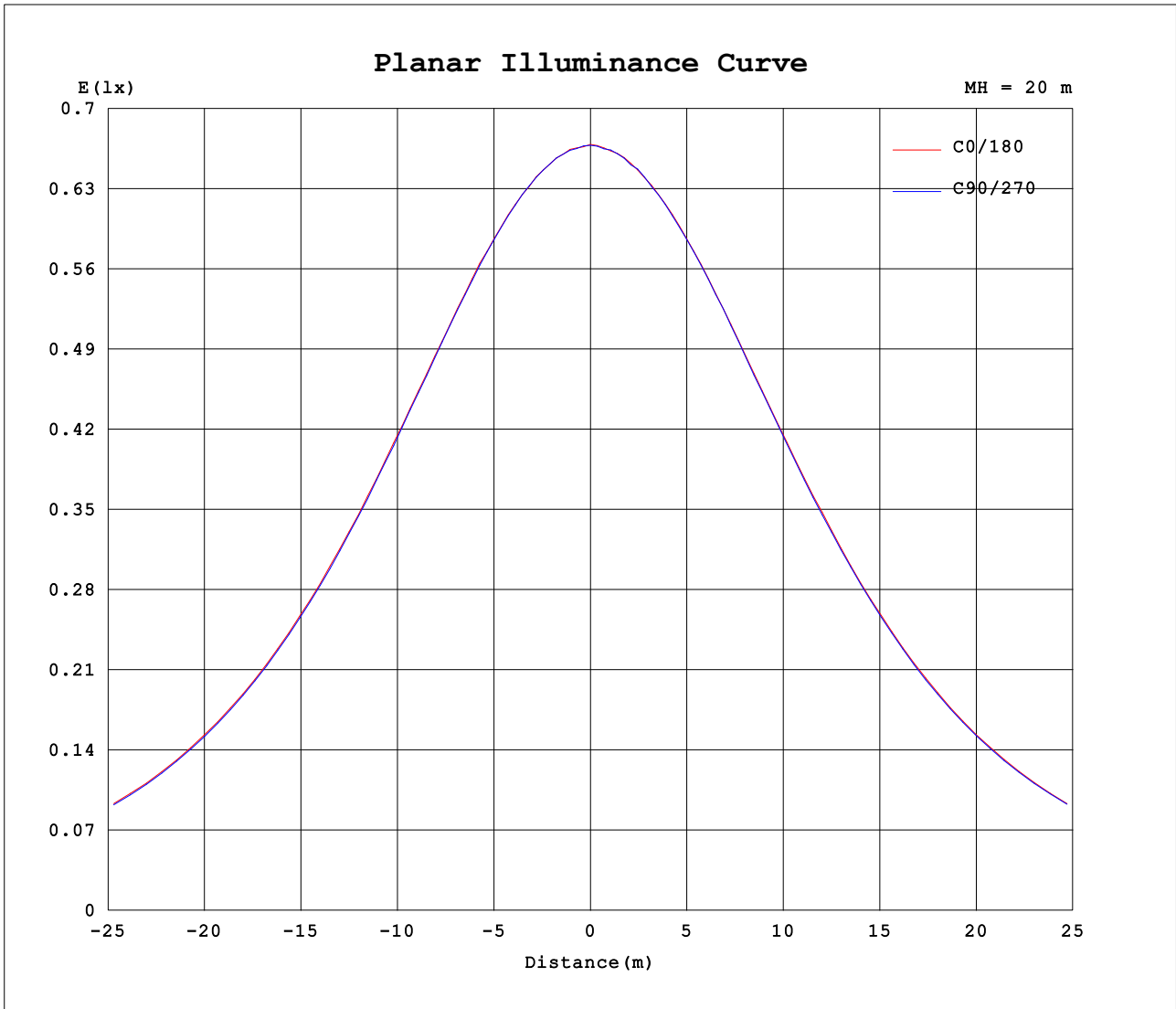
AvgL	cd/m2
L_0~180 (65) av	1863
L_0~180 (75) av	1479
L_0~180 (85) av	313
L_90~270 (65) av	1803
L_90~270 (75) av	1217
L_90~270 (85) av	88
L_45 (65) av	1847
L_45 (75) av	1349
L_45 (85) av	121

Standard: GB/T 29293-2012

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

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

