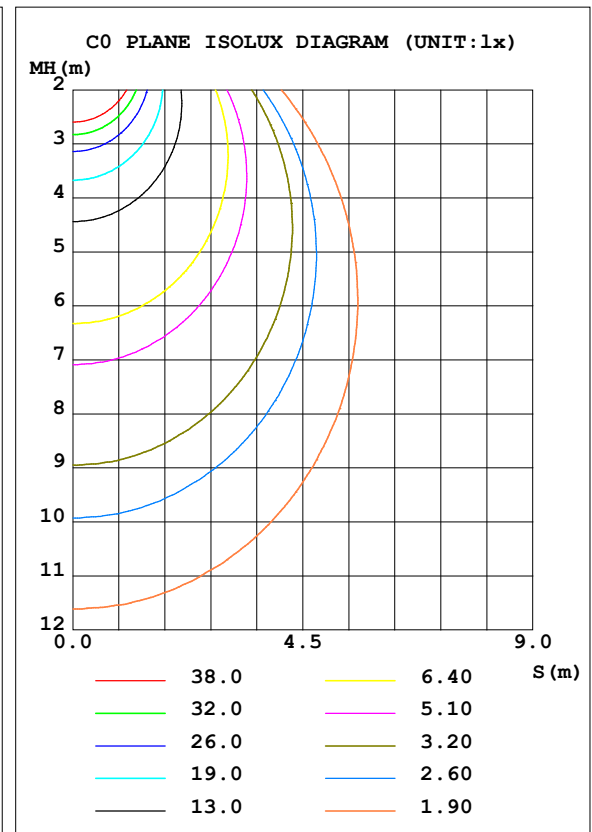
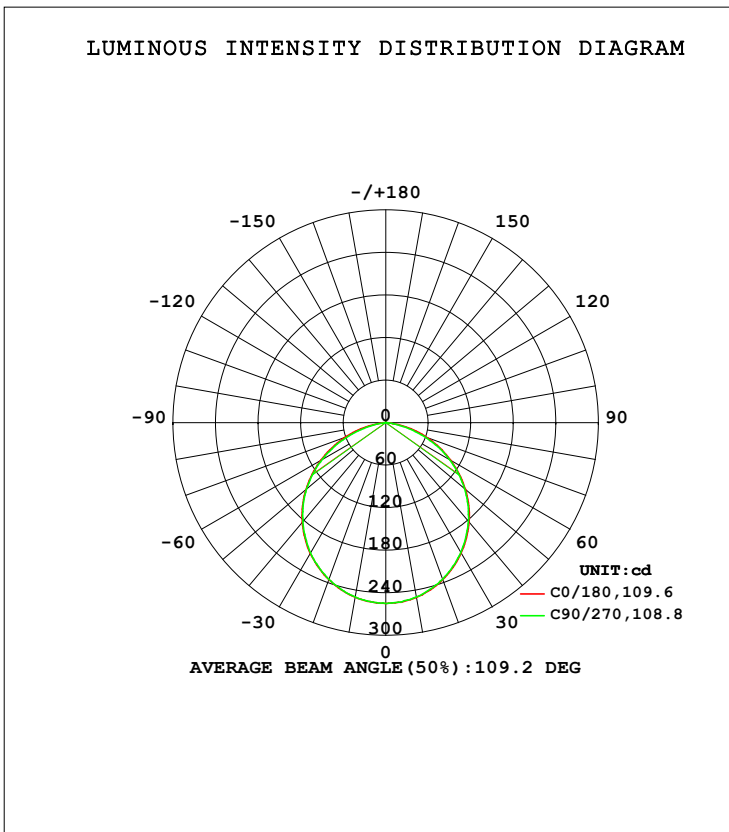


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.98V I:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	255.1	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)	684.61	<input type="checkbox"/> UP, DN (C0-180)	0.0, 50.1
NOMINAL FLUX (lm)	684.609	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:

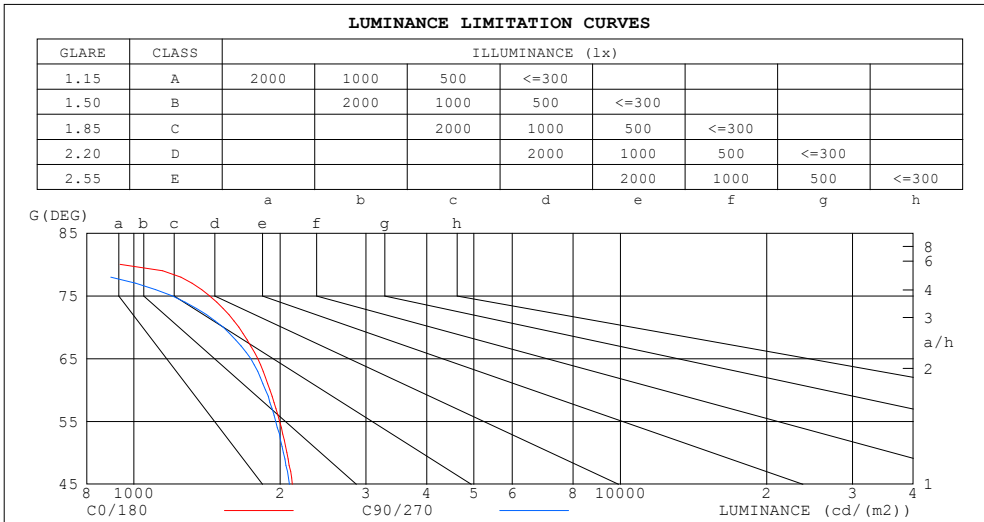
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	250.3	250.0	249.6	250.2	249.9	250.0	249.6	250.2	0- 10	24.09	24.09	3.52,3.52
20	235.6	235.7	234.8	235.6	235.6	235.3	235.1	235.8	10- 20	68.73	92.81	13.6,13.6
30	212.7	212.2	211.7	212.4	213.3	212.5	212.0	212.9	20- 30	103.5	196.4	28.7,28.7
40	182.9	182.3	181.4	182.1	183.2	182.8	182.3	183.3	30- 40	123.9	320.3	46.8,46.8
50	146.7	146.0	145.1	145.9	147.1	146.4	146.1	147.0	40- 50	127.3	447.6	65.4,65.4
60	105.3	104.6	103.7	104.3	105.4	105.0	103.4	105.1	50- 60	112.4	560.0	81.8,81.8
70	62.17	60.31	58.00	60.46	61.62	59.63	55.75	59.55	60- 70	81.46	641.4	93.7,93.7
80	17.99	15.89	12.17	15.35	18.75	14.74	10.10	14.88	70- 80	39.22	680.7	99.4,99.4
90	0.1016	0.0874	0.0775	0.0882	0.1754	0.1591	0.1476	0.1586	80- 90	3.937	684.6	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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	329	95
80	937	630
75	1430	1199
70	1644	1526
65	1797	1739
60	1905	1865
55	1993	1958
50	2063	2031
45	2116	2090

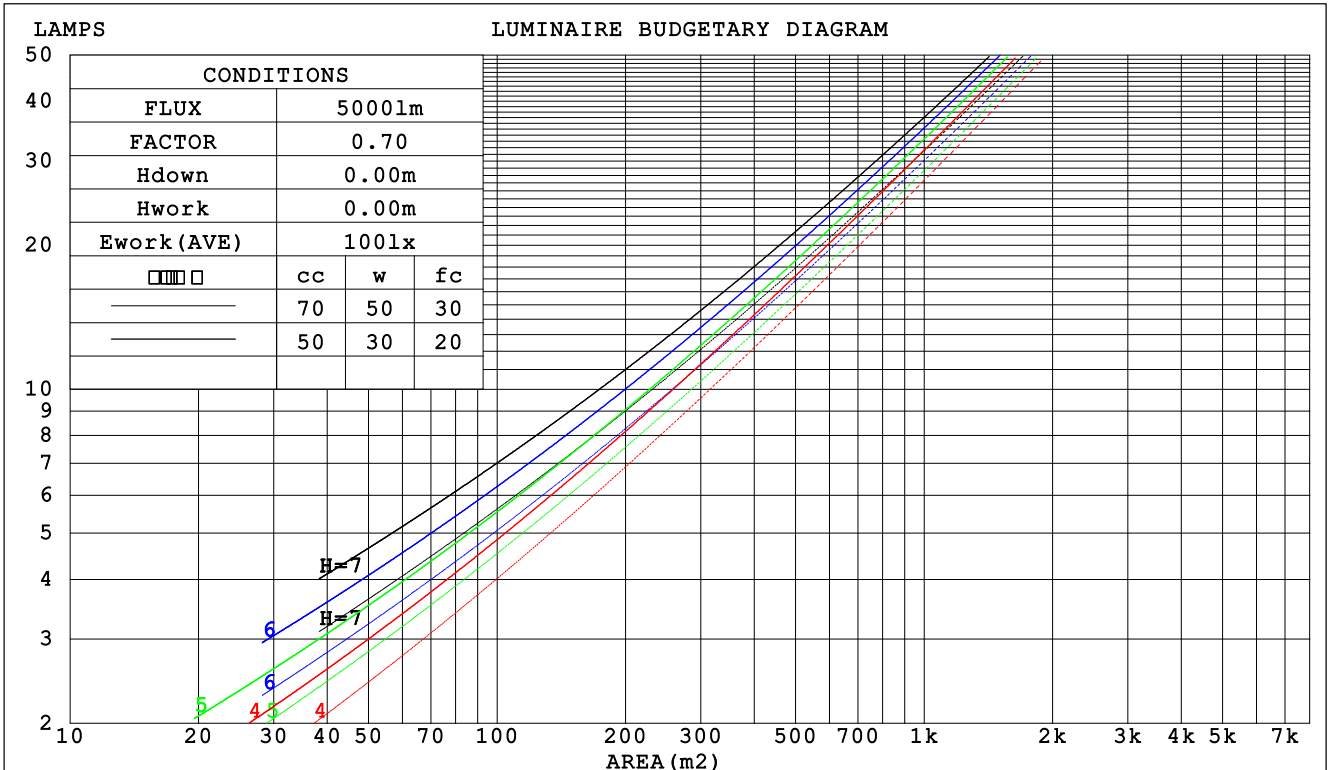
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 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:119.98V I:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 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	.226	.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:119.98V I:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm										
NAME: LED-S9W-5CCTWH-R-BF					TYPE:			WEIGHT:		
SPEC.:2700K 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	18.5
3H	18.0	19.4	18.3	19.6	19.9	17.8	19.2	18.1	19.4	19.7
4H	18.5	19.8	18.8	20.1	20.3	18.2	19.5	18.5	19.8	20.0
6H	18.8	20.0	19.1	20.3	20.5	18.3	19.6	18.7	19.8	20.1
8H	18.8	19.9	19.1	20.2	20.5	18.3	19.5	18.6	19.8	20.1
12H	18.7	19.9	19.1	20.2	20.5	18.3	19.4	18.6	19.7	20.0
4H 2H	17.2	18.5	17.5	18.8	19.0	17.1	18.4	17.4	18.7	18.9
3H	18.7	19.9	19.1	20.2	20.5	18.6	19.7	18.9	20.0	20.3
4H	19.3	20.4	19.7	20.7	21.0	19.1	20.1	19.4	20.4	20.7
6H	19.7	20.6	20.1	20.9	21.3	19.2	20.1	19.6	20.5	20.9
8H	19.7	20.5	20.1	20.9	21.3	19.2	20.1	19.6	20.4	20.8
12H	19.7	20.5	20.1	20.8	21.2	19.2	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	20.4	21.0	21.4	19.5	20.2	19.9	20.6	21.0
8H	20.0	20.6	20.4	21.0	21.4	19.5	20.1	19.9	20.5	20.9
12H	19.9	20.5	20.4	20.9	21.4	19.4	20.0	19.9	20.4	20.9
12H 4H	19.5	20.2	19.9	20.6	21.0	19.2	20.0	19.6	20.4	20.8
6H	19.9	20.5	20.4	20.9	21.4	19.5	20.1	19.9	20.5	21.0
8H	19.9	20.5	20.4	20.9	21.4	19.5	20.0	19.9	20.4	20.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 684.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.3)
 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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

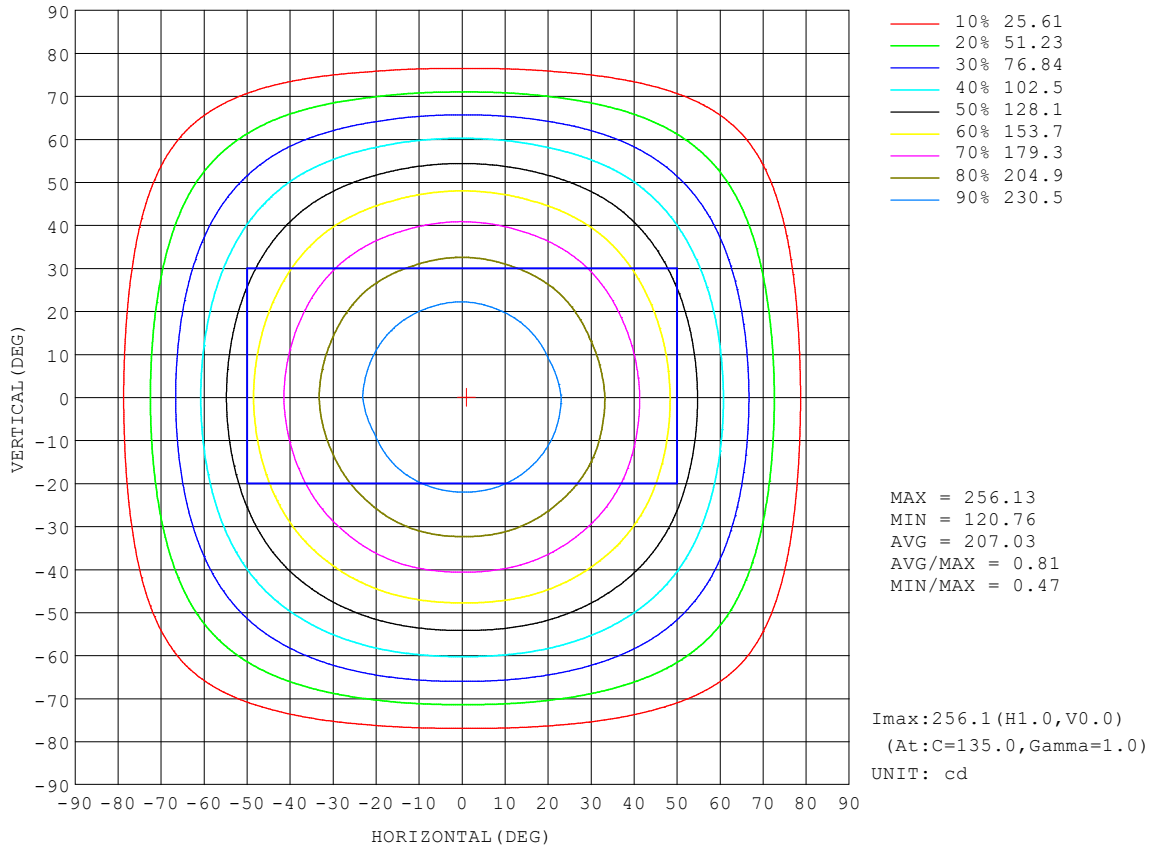
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	40	58	47	40	57	46	40	34
0.80	69	57	50	68	57	50	66	56	50	43
1.00	77	67	59	76	66	59	74	67	59	52
1.25	85	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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

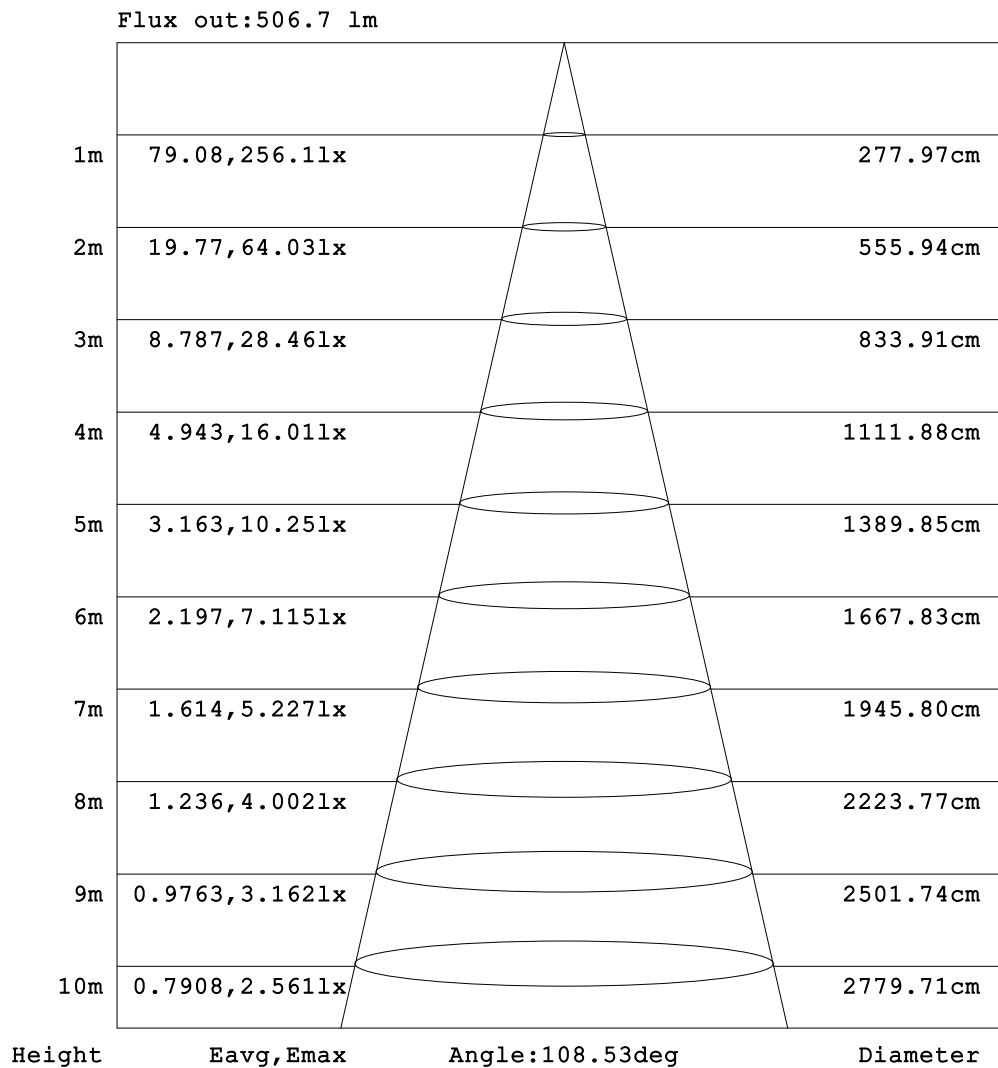


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



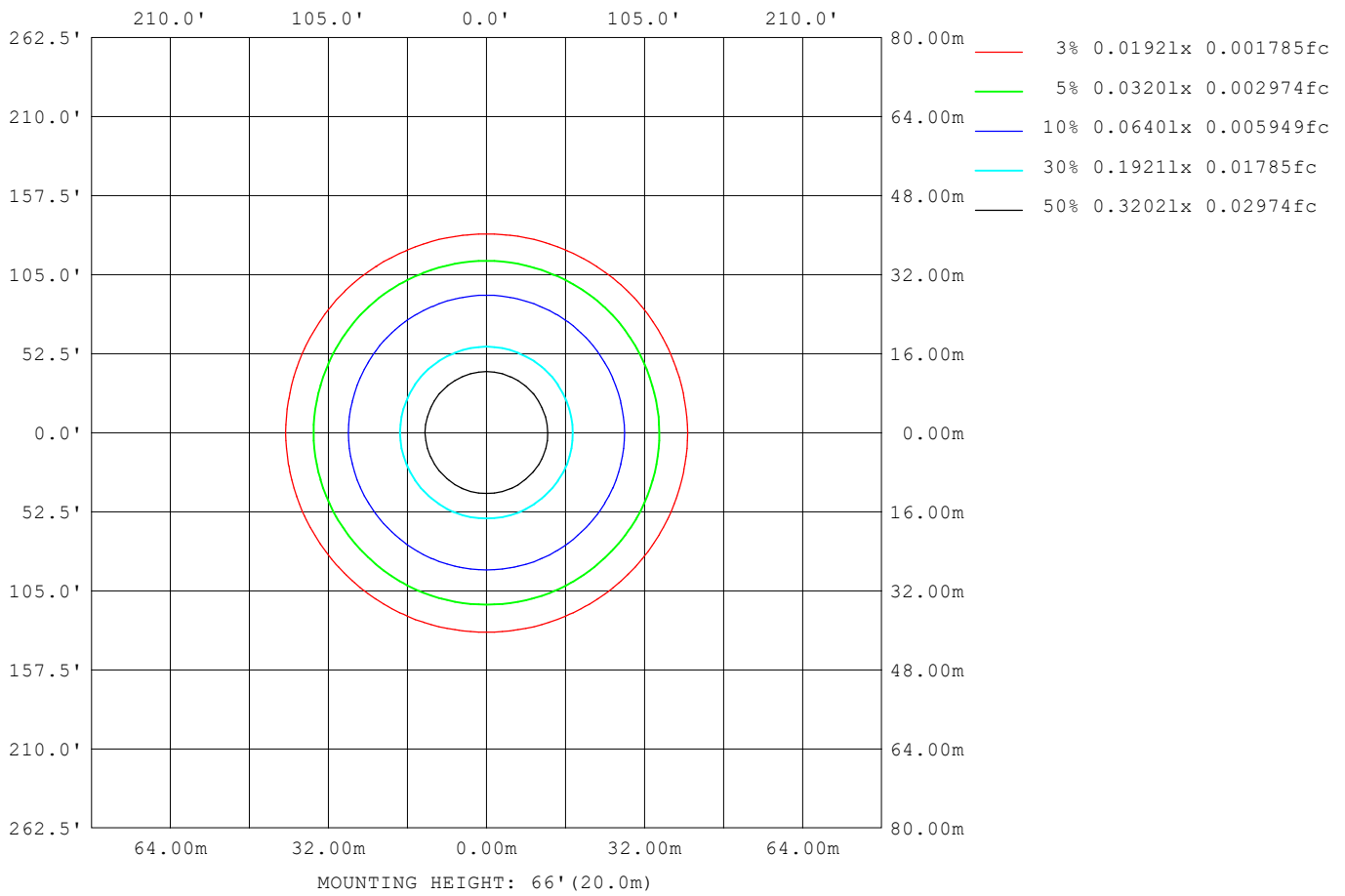
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 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:0.1060A P:8.8014W PF:0.9365 Freq:59.98Hz Lamp Flux:684.609x1 lm		
NAME: LED-S9W-5CCTWH-R-BF	TYPE:	WEIGHT:
SPEC.:2700K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

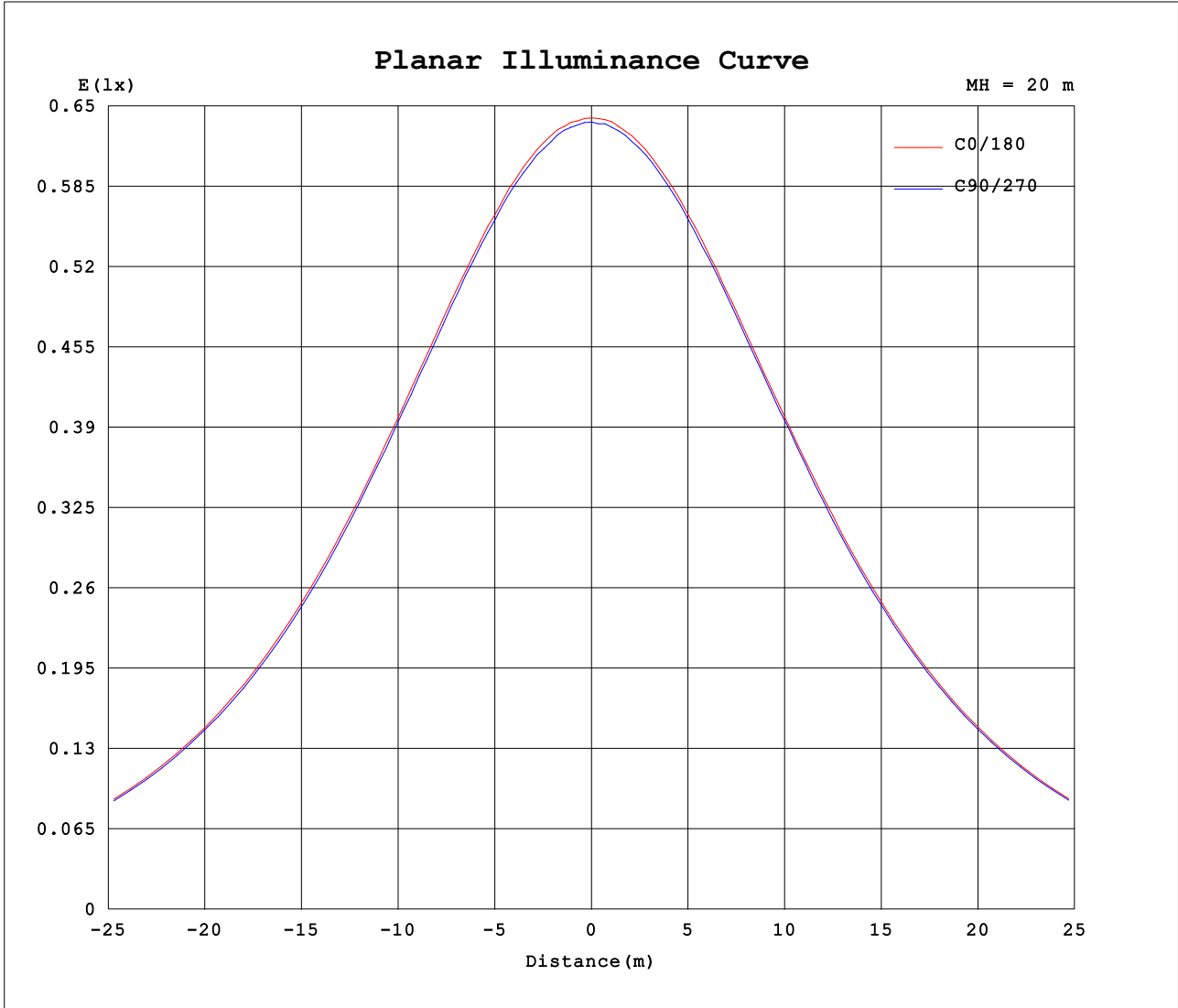
AvgL	cd/m2
L_0~180 (65) av	1784
L_0~180 (75) av	1415
L_0~180 (85) av	301
L_90~270 (65) av	1721
L_90~270 (75) av	1157
L_90~270 (85) av	82
L_45 (65) av	1764
L_45 (75) av	1290
L_45 (85) av	116

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

