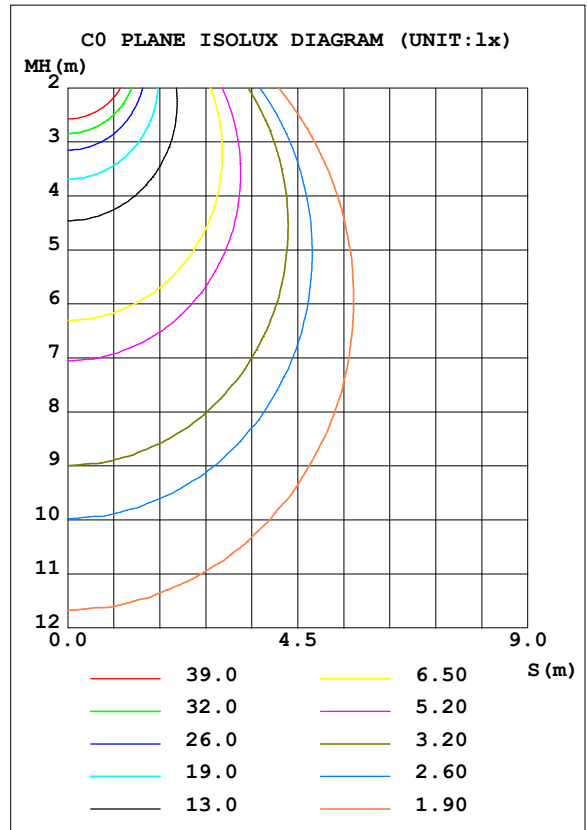
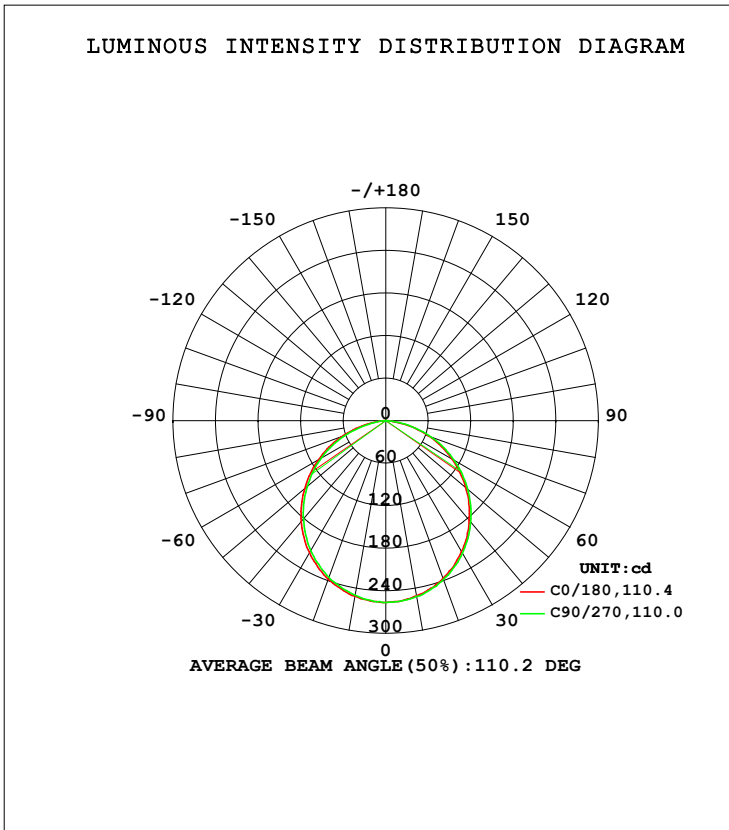


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.97V I:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.52 lm/W			
MODEL		Imax (cd)	256.8	S/MH (C0/180)	1.25
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	704.68	<input type="checkbox"/> UP, DN (C0-180)	0.0, 50.9
NOMINAL FLUX (lm)	704.683	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 49.1
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:

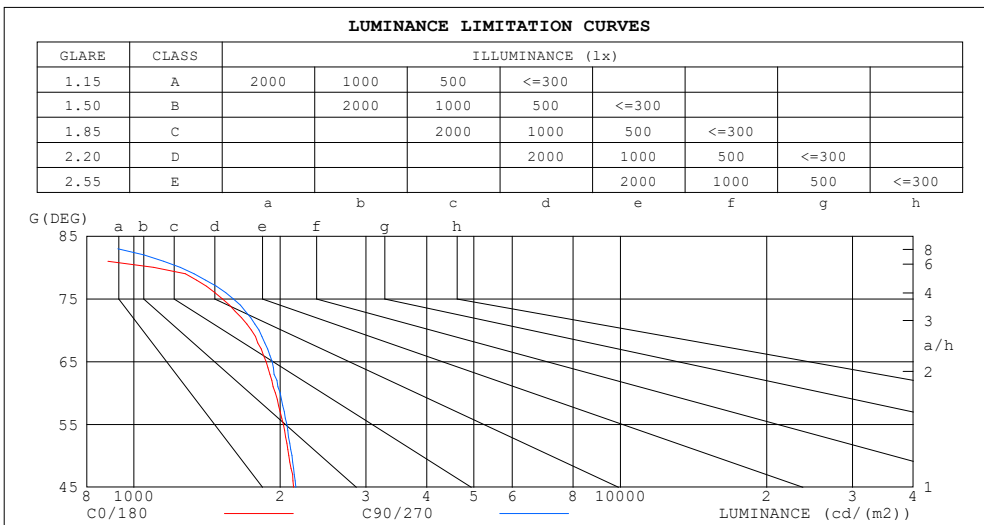
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	250.8	252.2	251.9	252.6	251.5	251.2	250.0	250.8	0- 10	24.23	24.23	3.44,3.44
20	236.5	238.4	238.6	239.0	237.7	236.5	235.2	235.5	10- 20	69.24	93.48	13.3,13.3
30	213.5	216.4	216.3	216.4	214.9	213.4	211.6	213.0	20- 30	104.5	197.9	28.1,28.1
40	183.1	185.9	186.4	186.3	185.7	182.5	181.0	182.2	30- 40	125.1	323.1	45.8,45.8
50	147.4	149.6	151.1	150.4	149.5	146.2	144.8	145.0	40- 50	128.5	451.6	64.1,64.1
60	107.5	109.4	111.1	110.4	109.3	105.7	104.3	104.8	50- 60	114.7	566.3	80.4,80.4
70	65.63	67.58	68.75	68.12	66.27	62.89	60.44	62.45	60- 70	85.80	652.1	92.5,92.5
80	21.00	25.65	24.06	25.23	21.56	20.26	16.62	19.78	70- 80	45.45	697.5	99,99
90	0.1154	0.1180	0.1035	0.1135	0.1928	0.2057	0.2047	0.2094	80- 90	7.178	704.7	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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



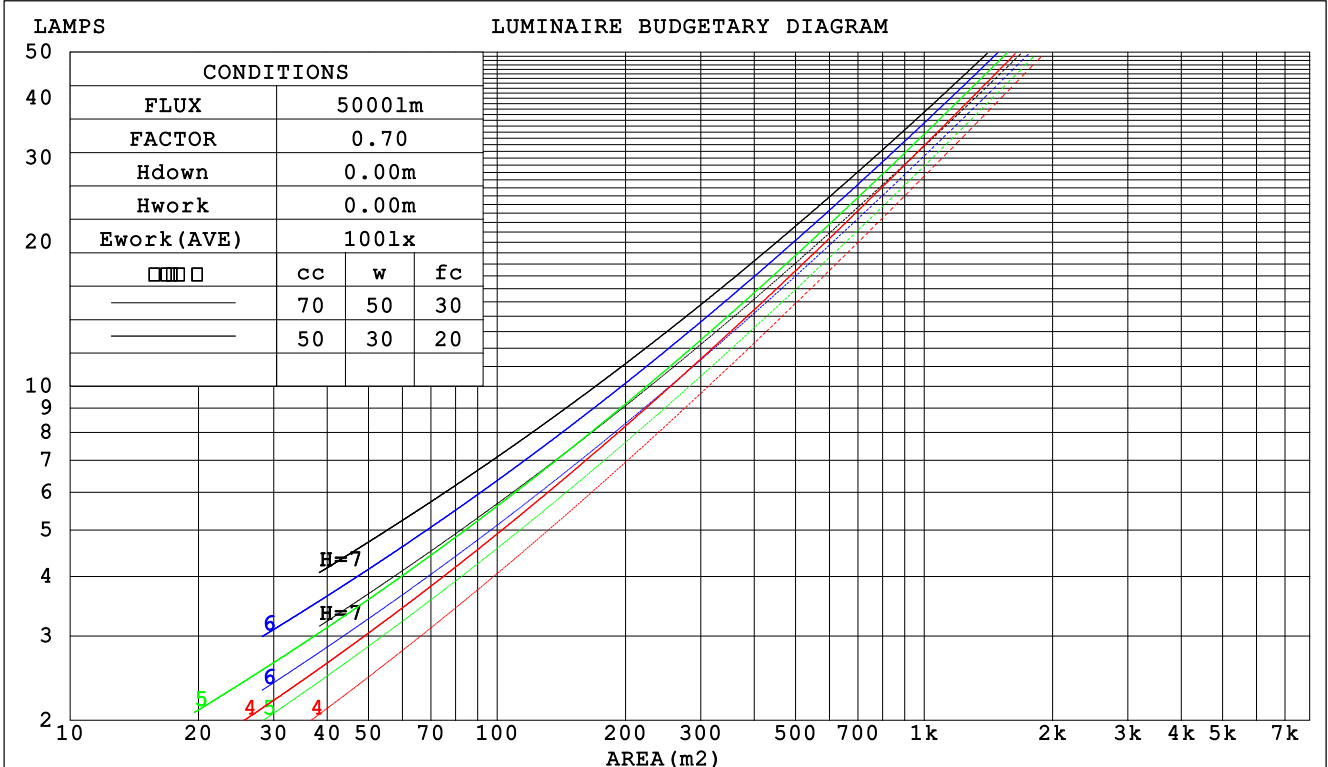
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.97V I:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	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	1.00	.97	1.02	.98	.95	.98	.95	.92	.94	.92	.89	.91	.89	.87	.85
2.0	.91	.85	.79	.89	.83	.78	.86	.81	.76	.83	.78	.74	.80	.76	.73	.71
3.0	.80	.72	.66	.79	.71	.65	.76	.69	.64	.73	.67	.63	.70	.66	.62	.60
4.0	.71	.62	.56	.70	.62	.55	.67	.60	.55	.65	.59	.54	.63	.57	.53	.51
5.0	.63	.55	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.54	.47	.41	.53	.46	.41	.51	.45	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.30	.43	.35	.30	.42	.34	.29	.41	.34	.29	.40	.34	.29	.27
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	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	.297 .169 .054	.290 .166 .053	.277 .159 .051	.265 .153 .049	.254 .147 .047	
2.0	.284 .156 .048	.278 .153 .047	.266 .148 .046	.256 .143 .045	.246 .139 .044	
3.0	.265 .141 .042	.259 .139 .042	.249 .135 .041	.239 .131 .040	.231 .128 .040	
4.0	.245 .128 .037	.241 .126 .037	.231 .123 .037	.223 .120 .036	.215 .117 .036	
5.0	.227 .116 .034	.223 .115 .033	.215 .112 .033	.208 .109 .033	.200 .107 .032	
6.0	.211 .106 .030	.208 .105 .030	.200 .103 .030	.194 .101 .030	.187 .099 .029	
7.0	.197 .097 .028	.194 .096 .027	.187 .095 .027	.181 .093 .027	.175 .091 .027	
8.0	.184 .090 .025	.181 .089 .025	.175 .088 .025	.170 .086 .025	.165 .085 .025	
9.0	.173 .084 .023	.170 .083 .023	.165 .082 .023	.160 .080 .023	.155 .079 .023	
10.0	.163 .078 .022	.160 .077 .022	.155 .076 .021	.151 .075 .021	.147 .074 .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 .135	.154 .134 .116	.105 .092 .081	.060 .053 .047	.019 .017 .015	
2.0	.171 .132 .099	.147 .114 .086	.100 .079 .060	.058 .046 .035	.019 .015 .011	
3.0	.163 .114 .075	.140 .099 .065	.096 .068 .046	.056 .040 .027	.018 .013 .009	
4.0	.156 .101 .059	.134 .087 .051	.092 .061 .036	.053 .036 .021	.017 .012 .007	
5.0	.149 .090 .048	.128 .078 .041	.088 .055 .029	.051 .032 .017	.016 .010 .006	
6.0	.141 .082 .039	.122 .071 .034	.084 .050 .024	.049 .029 .014	.016 .010 .005	
7.0	.135 .075 .033	.116 .065 .029	.080 .046 .021	.047 .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	.043 .023 .009	.014 .008 .003	
10.0	.117 .060 .023	.101 .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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm										
NAME: LED-S9W-5CCTWH-SQ					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	16.7	18.2	17.0	18.4	18.6
3H	18.1	19.5	18.4	19.7	20.0	18.2	19.6	18.5	19.8	20.1
4H	18.6	19.9	18.9	20.2	20.5	18.8	20.1	19.1	20.3	20.6
6H	18.9	20.2	19.3	20.4	20.7	19.1	20.3	19.4	20.6	20.9
8H	18.9	20.1	19.3	20.4	20.7	19.1	20.3	19.5	20.6	20.9
12H	18.9	20.1	19.3	20.4	20.7	19.1	20.3	19.5	20.6	20.9
4H 2H	17.2	18.6	17.6	18.8	19.1	17.3	18.6	17.6	18.9	19.1
3H	18.9	20.0	19.2	20.3	20.6	19.0	20.1	19.3	20.4	20.7
4H	19.5	20.6	19.9	20.9	21.2	19.7	20.7	20.0	21.0	21.4
6H	19.9	20.9	20.3	21.2	21.6	20.1	21.0	20.5	21.4	21.7
8H	20.0	20.8	20.4	21.2	21.6	20.2	21.0	20.6	21.4	21.8
12H	20.0	20.8	20.4	21.1	21.6	20.2	21.0	20.6	21.4	21.8
8H 4H	19.8	20.7	20.2	21.0	21.4	19.9	20.8	20.3	21.1	21.5
6H	20.3	21.0	20.7	21.4	21.9	20.4	21.2	20.9	21.6	22.0
8H	20.4	21.0	20.9	21.5	21.9	20.6	21.2	21.0	21.6	22.1
12H	20.4	21.0	20.9	21.4	21.9	20.6	21.2	21.1	21.6	22.1
12H 4H	19.8	20.6	20.2	21.0	21.4	19.9	20.7	20.3	21.1	21.5
6H	20.3	21.0	20.8	21.4	21.8	20.5	21.1	20.9	21.5	22.0
8H	20.5	21.0	20.9	21.4	21.9	20.6	21.2	21.1	21.6	22.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 704.7 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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

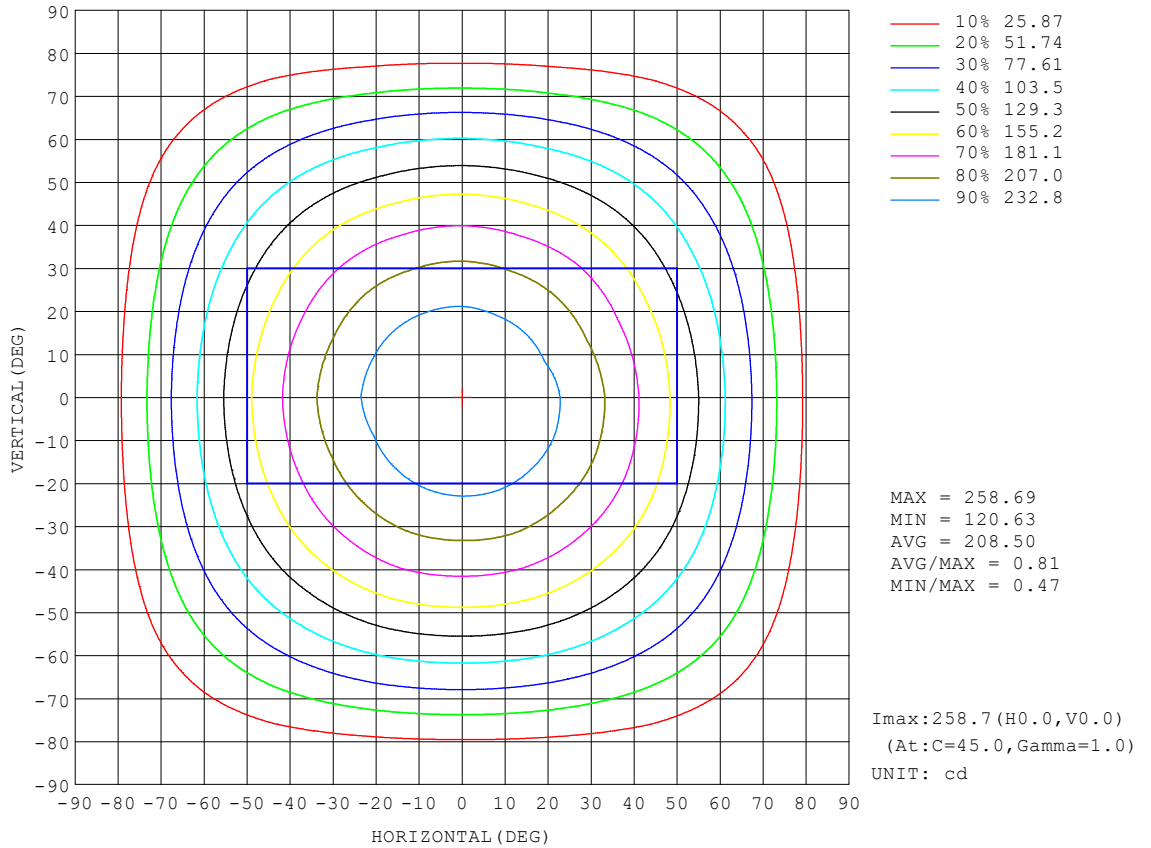
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	57	46	40	56	46	39	33
0.80	68	57	50	67	56	49	65	56	49	42
1.00	77	66	59	76	65	58	73	67	58	51
1.25	84	74	67	82	73	66	80	71	65	58
1.50	89	79	72	87	78	72	84	77	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	100	92	86	98	91	85	94	88	83	75
3.00	103	96	91	101	95	90	97	92	88	79
4.00	107	101	97	104	100	95	100	96	93	84
5.00	109	105	101	107	103	99	102	99	96	87
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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

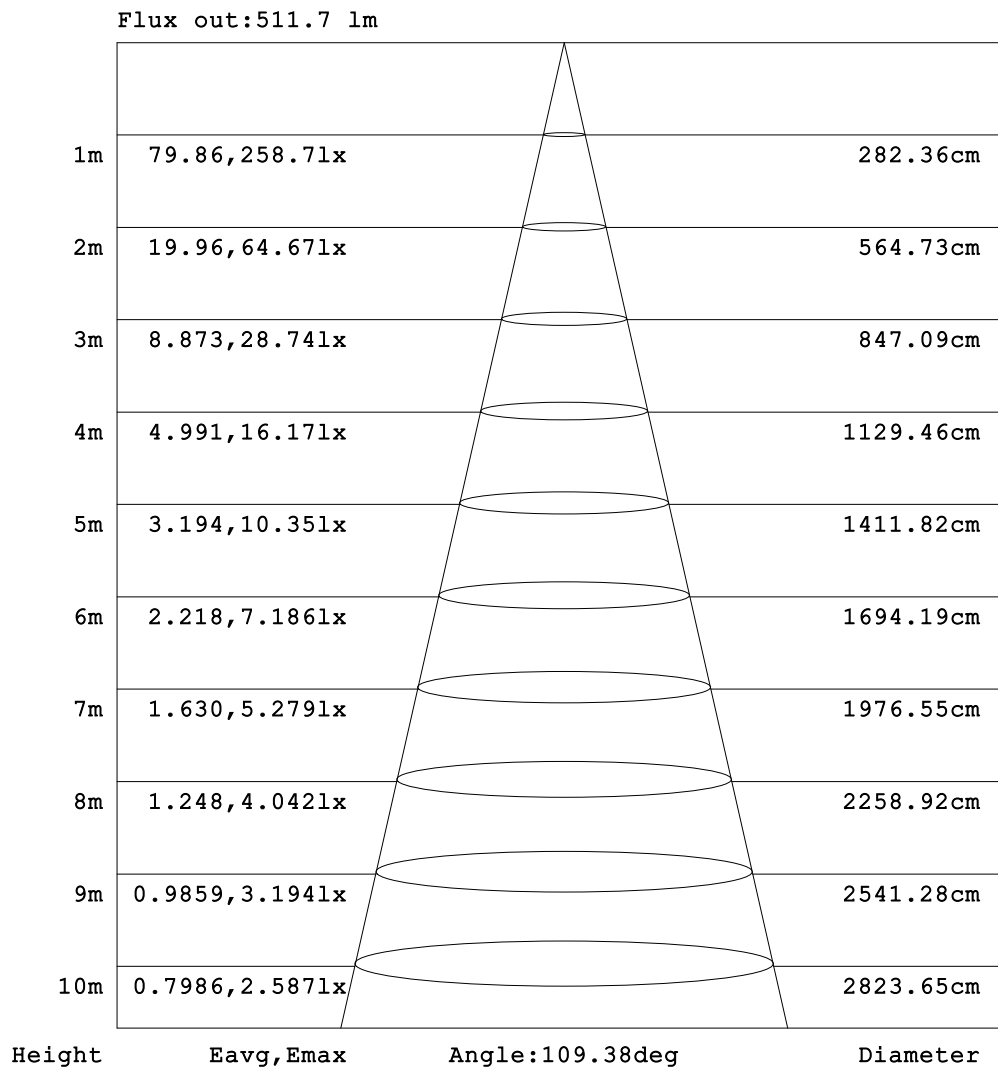


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-12-30

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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



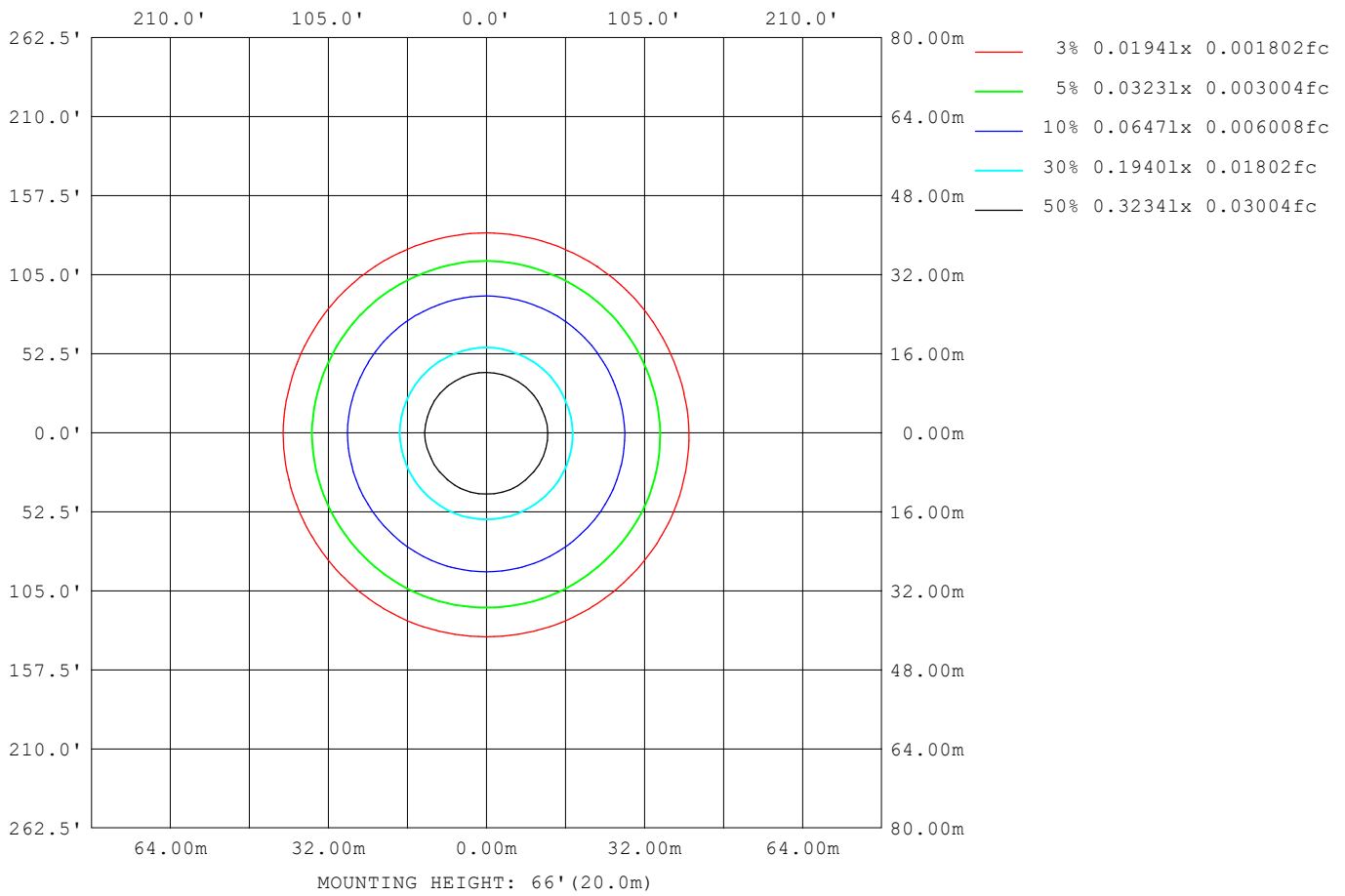
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	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:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 80	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

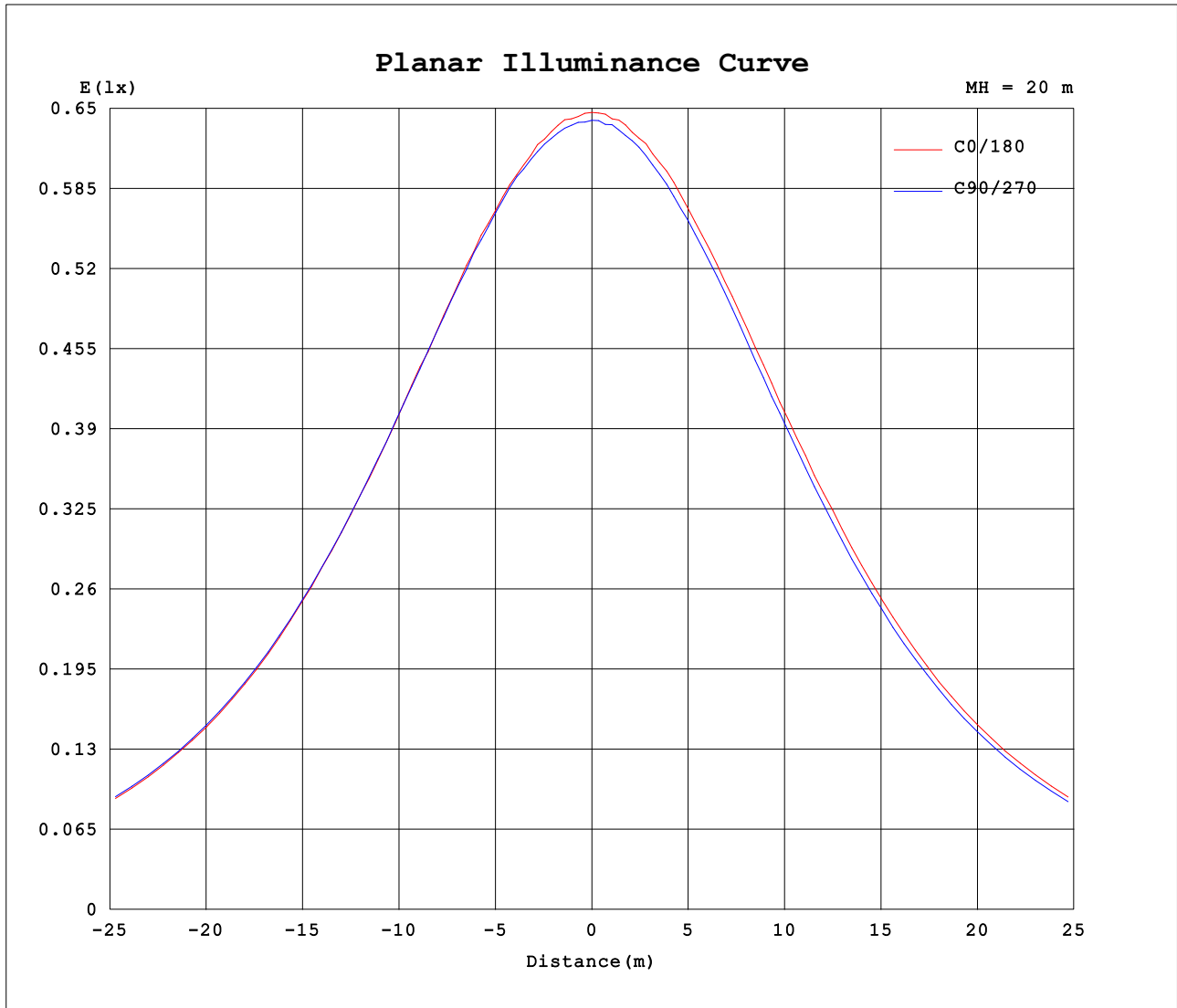
AvgL	cd/m2
L_0~180 (65) av	1867
L_0~180 (75) av	1508
L_0~180 (85) av	495
L_90~270 (65) av	1847
L_90~270 (75) av	1446
L_90~270 (85) av	311
L_45 (65) av	1845
L_45 (75) av	1524
L_45 (85) av	469

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

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.97V I:0.1166A P:8.7518W PF:0.8924 Freq:59.98Hz Lamp Flux:704.683x1 lm		
NAME: LED-S9W-5CCTWH-SQ	TYPE:	WEIGHT:
SPEC.:3000K 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	256	256	256	256	256	256	256	256	256	256	256	256	256	256	256	256			
5	255	255	256	255	255	256	256	256	255	255	255	254	254	255	255	255			
10	251	252	252	252	252	252	253	252	251	252	251	250	250	250	251	251			
15	245	246	246	246	246	247	247	247	245	245	245	244	243	244	244	245			
20	236	238	238	238	239	239	239	239	238	237	237	235	235	235	236	236			
25	227	228	228	228	228	229	228	229	227	226	226	224	224	225	225	225			
30	213	216	216	217	216	218	216	217	215	214	213	211	212	211	213	213			
35	200	201	202	203	202	203	202	203	201	199	199	197	197	197	198	199			
40	183	186	186	187	186	188	186	187	186	183	183	180	181	180	182	182			
45	166	169	168	169	169	170	169	170	168	166	165	163	163	163	164	165			
50	147	150	150	151	151	152	150	151	150	147	146	144	145	144	145	146			
55	128	130	130	131	132	132	131	131	130	127	126	124	125	124	125	126			
60	108	110	109	111	111	111	110	110	109	107	106	104	104	104	105	106			
65	87.0	88.4	88.8	89.9	90.4	90.3	89.6	89.3	88.3	85.9	84.5	82.8	83.1	82.8	83.6	84.9			
70	65.6	67.3	67.6	68.2	68.7	69.0	68.1	67.9	66.3	64.5	62.9	60.9	60.4	60.7	62.4	63.9			
75	43.3	45.1	46.4	46.4	46.0	46.4	46.7	45.1	43.4	41.7	41.2	37.9	37.2	37.8	41.0	41.6			
80	21.0	23.6	25.6	24.5	24.1	24.4	25.2	23.3	21.6	20.4	20.3	17.2	16.6	17.1	19.8	20.2			
85	4.87	6.37	6.66	5.99	5.73	5.73	6.30	6.06	4.71	4.55	2.65	0.42	0.29	0.39	2.55	4.67			
90	0.12	0.14	0.12	0.11	0.10	0.10	0.11	0.13	0.19	0.21	0.21	0.21	0.20	0.21	0.21	0.24			

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