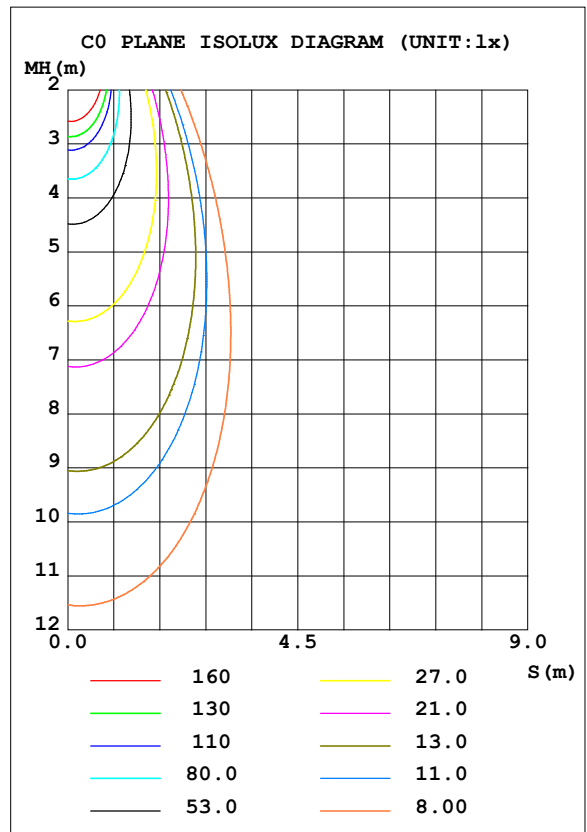
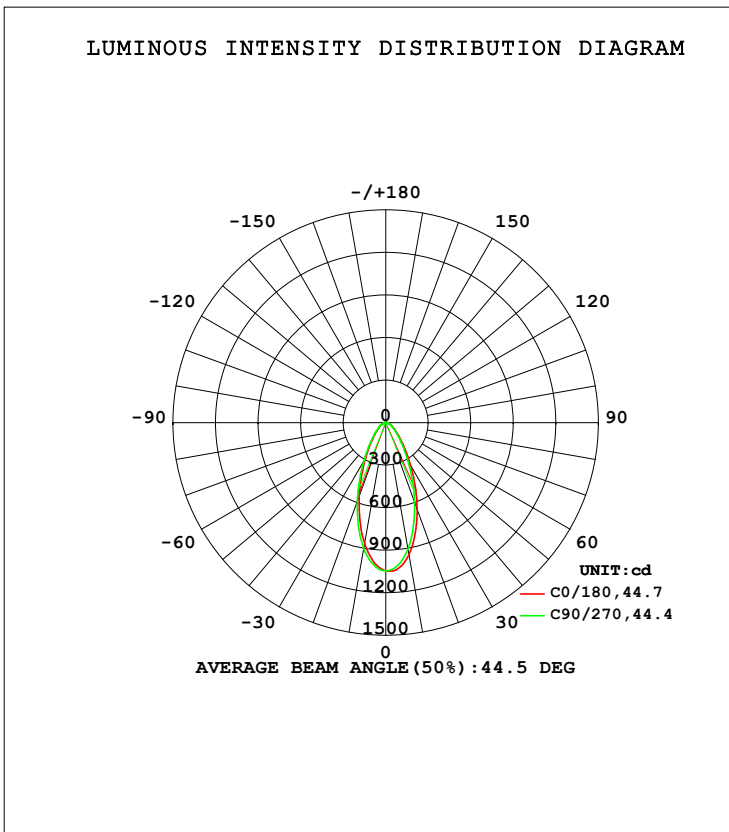


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME:2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.30 lm/W			
MODEL		I _{max} (cd)	1098	S/MH (C0/180)	0.65
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.69
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	859.09	<input type="checkbox"/> UP, DN (C0-180)	0.0, 48.4
NOMINAL FLUX (lm)	859.088	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 51.6
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	120	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	0.75



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2021-07-15

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:

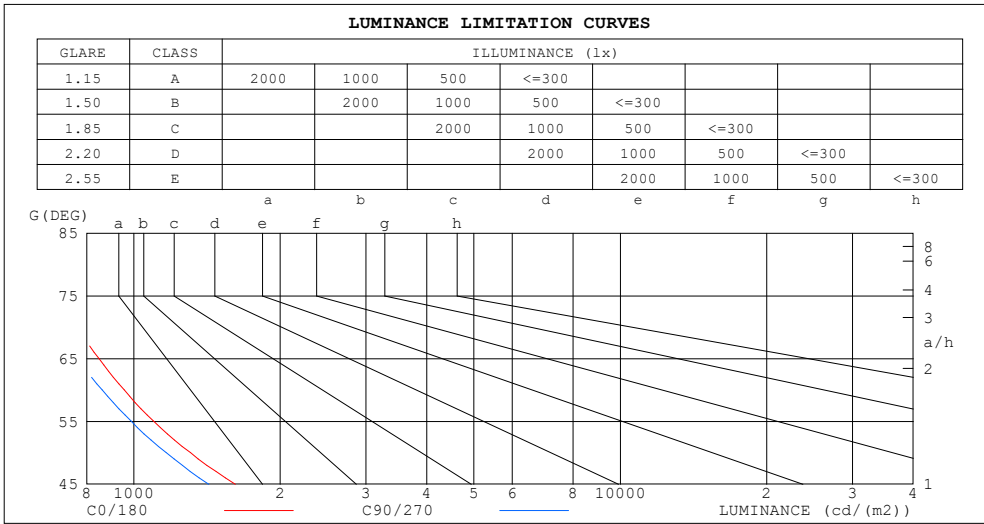
°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	945.7	932.7	904.9	825.5	865.0	873.5	900.4	990.9	0- 10	92.99	92.99	10.8,10.8
20	648.7	631.3	596.3	503.7	547.9	556.7	588.2	706.1	10- 20	210.3	303.3	35.3,35.3
30	356.1	343.1	316.5	254.6	283.5	289.5	310.4	395.7	20- 30	205.9	509.2	59.3,59.3
40	175.2	169.0	154.8	125.9	139.6	142.9	152.6	195.1	30- 40	143.2	652.3	75.9,75.9
50	91.70	89.07	82.66	69.53	75.62	77.63	82.11	100.7	40- 50	89.80	742.1	86.4,86.4
60	52.11	50.78	47.48	39.88	43.74	45.11	47.76	57.34	50- 60	57.88	800.0	93.1,93.1
70	28.31	27.43	25.36	19.66	22.86	23.88	25.78	31.90	60- 70	36.19	836.2	97.3,97.3
80	11.10	10.51	9.242	5.482	7.627	8.226	9.491	13.50	70- 80	18.24	854.5	99.5,99.5
90	0.1016	0.0468	0.0504	0.0691	0.1032	0.0879	0.0799	0.1470	80- 90	4.635	859.1	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:2021-07-15

□ 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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME: 2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	141	411
80	586	482
75	674	581
70	759	672
65	848	761
60	955	861
55	1098	988
50	1308	1165
45	1617	1426

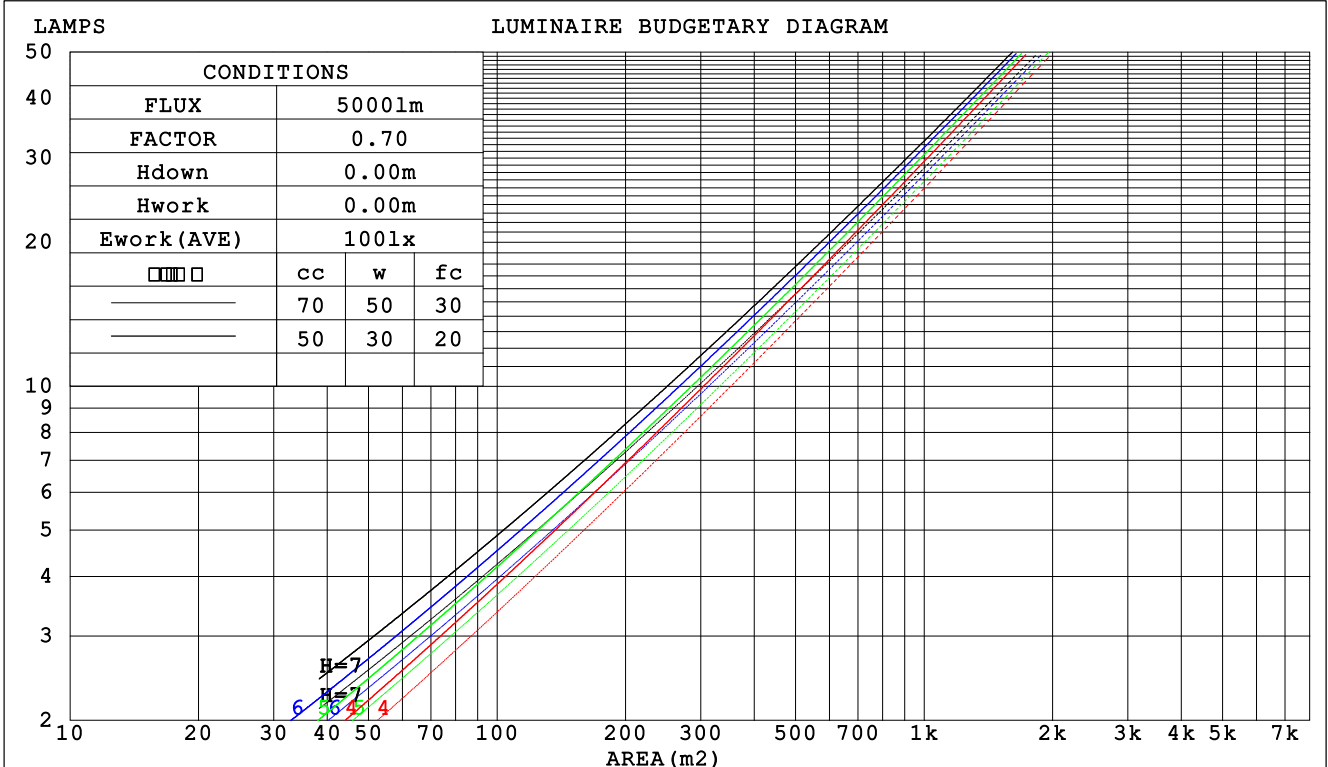
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME:2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 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	1.09	1.06	1.03	1.07	1.04	1.01	1.02	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.99	.95	.91	.98	.93	.90	.94	.91	.88	.91	.88	.86	.88	.86	.84	.82
3.0	.91	.85	.81	.90	.84	.80	.87	.83	.79	.85	.81	.78	.82	.79	.76	.75
4.0	.84	.78	.73	.83	.77	.73	.81	.76	.72	.79	.74	.71	.77	.73	.70	.68
5.0	.78	.72	.67	.77	.71	.66	.75	.70	.66	.74	.69	.65	.72	.68	.64	.63
6.0	.73	.66	.61	.72	.66	.61	.70	.65	.61	.69	.64	.60	.68	.63	.60	.58
7.0	.68	.61	.57	.67	.61	.57	.66	.60	.56	.65	.60	.56	.64	.59	.56	.54
8.0	.64	.57	.53	.63	.57	.53	.62	.56	.52	.61	.56	.52	.60	.55	.52	.50
9.0	.60	.54	.49	.60	.54	.49	.59	.53	.49	.58	.53	.49	.57	.52	.49	.47
10.0	.57	.51	.46	.56	.50	.46	.56	.50	.46	.55	.50	.46	.54	.49	.46	.44



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

□ 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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME:2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 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	.215 .123 .039	.209 .119 .038	.196 .112 .036	.184 .106 .034	.173 .100 .032	
2.0	.205 .112 .034	.199 .110 .034	.188 .105 .033	.178 .100 .031	.169 .096 .030	
3.0	.193 .103 .031	.188 .101 .030	.179 .097 .029	.170 .093 .029	.162 .090 .028	
4.0	.181 .094 .028	.177 .093 .027	.169 .090 .027	.161 .087 .026	.154 .084 .026	
5.0	.171 .087 .025	.167 .086 .025	.160 .083 .024	.153 .081 .024	.147 .078 .024	
6.0	.161 .081 .023	.158 .080 .023	.151 .077 .023	.145 .075 .022	.140 .074 .022	
7.0	.152 .075 .021	.149 .074 .021	.143 .072 .021	.138 .071 .021	.133 .069 .020	
8.0	.144 .070 .020	.141 .070 .020	.136 .068 .019	.132 .067 .019	.127 .065 .019	
9.0	.137 .066 .018	.134 .065 .018	.130 .064 .018	.125 .063 .018	.121 .062 .018	
10.0	.130 .062 .017	.128 .062 .017	.124 .061 .017	.120 .060 .017	.116 .058 .017	

<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	.174 .157 .142	.149 .135 .122	.102 .093 .084	.059 .054 .049	.019 .017 .016	
2.0	.161 .132 .108	.138 .114 .094	.094 .079 .065	.054 .046 .038	.017 .015 .012	
3.0	.150 .114 .085	.128 .098 .074	.088 .068 .052	.051 .040 .031	.016 .013 .010	
4.0	.140 .099 .068	.120 .086 .059	.083 .060 .042	.048 .035 .025	.015 .011 .008	
5.0	.132 .088 .056	.113 .076 .049	.078 .053 .034	.045 .031 .020	.015 .010 .007	
6.0	.124 .079 .047	.107 .069 .041	.074 .048 .029	.043 .028 .017	.014 .009 .006	
7.0	.118 .072 .040	.101 .062 .035	.070 .044 .024	.041 .026 .015	.013 .008 .005	
8.0	.112 .066 .034	.096 .057 .030	.067 .040 .021	.039 .024 .013	.013 .008 .004	
9.0	.106 .061 .030	.092 .053 .026	.063 .037 .018	.037 .022 .011	.012 .007 .004	
10.0	.101 .056 .026	.087 .049 .023	.061 .034 .016	.035 .020 .010	.011 .007 .003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm										
NAME:2RSTWH					TYPE:			WEIGHT:		
SPEC.:3000K 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	11.9	13.0	12.1	13.2	13.3	11.5	12.6	11.7	12.7	12.9
3H	12.7	13.7	12.9	13.9	14.1	12.2	13.2	12.5	13.4	13.6
4H	13.0	13.9	13.3	14.2	14.4	12.5	13.5	12.8	13.7	13.9
6H	13.2	14.1	13.5	14.4	14.6	12.7	13.6	13.0	13.8	14.1
8H	13.3	14.1	13.6	14.4	14.7	12.7	13.6	13.0	13.8	14.1
12H	13.2	14.1	13.5	14.3	14.6	12.7	13.6	13.0	13.8	14.1
4H 2H	12.1	13.1	12.4	13.3	13.6	11.8	12.8	12.1	13.0	13.2
3H	13.1	14.0	13.4	14.2	14.5	12.7	13.6	13.1	13.8	14.1
4H	13.5	14.3	13.9	14.6	14.9	13.1	13.9	13.5	14.2	14.5
6H	13.9	14.5	14.2	14.9	15.2	13.4	14.1	13.8	14.4	14.8
8H	14.0	14.6	14.4	14.9	15.3	13.5	14.1	13.9	14.5	14.8
12H	13.9	14.5	14.4	14.9	15.3	13.5	14.1	13.9	14.5	14.9
8H 4H	13.6	14.3	14.0	14.6	15.0	13.3	13.9	13.7	14.2	14.6
6H	14.1	14.6	14.5	15.0	15.4	13.6	14.2	14.1	14.6	15.0
8H	14.2	14.7	14.7	15.1	15.6	13.8	14.2	14.2	14.7	15.1
12H	14.3	14.7	14.7	15.1	15.6	13.9	14.3	14.3	14.7	15.2
12H 4H	13.6	14.2	14.0	14.6	15.0	13.3	13.8	13.7	14.2	14.6
6H	14.1	14.5	14.5	15.0	15.4	13.7	14.1	14.1	14.5	15.0
8H	14.3	14.7	14.7	15.1	15.6	13.8	14.2	14.3	14.7	15.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.6					+ 0.5 / - 0.7				
1.5H	+ 0.7 / - 0.4					+ 0.6 / - 0.6				
2.0H	+ 1.0 / - 0.6					+ 0.9 / - 0.7				

CIE Pub.117, 859.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.5)
 Area: 0.111111 m2

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME: 2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

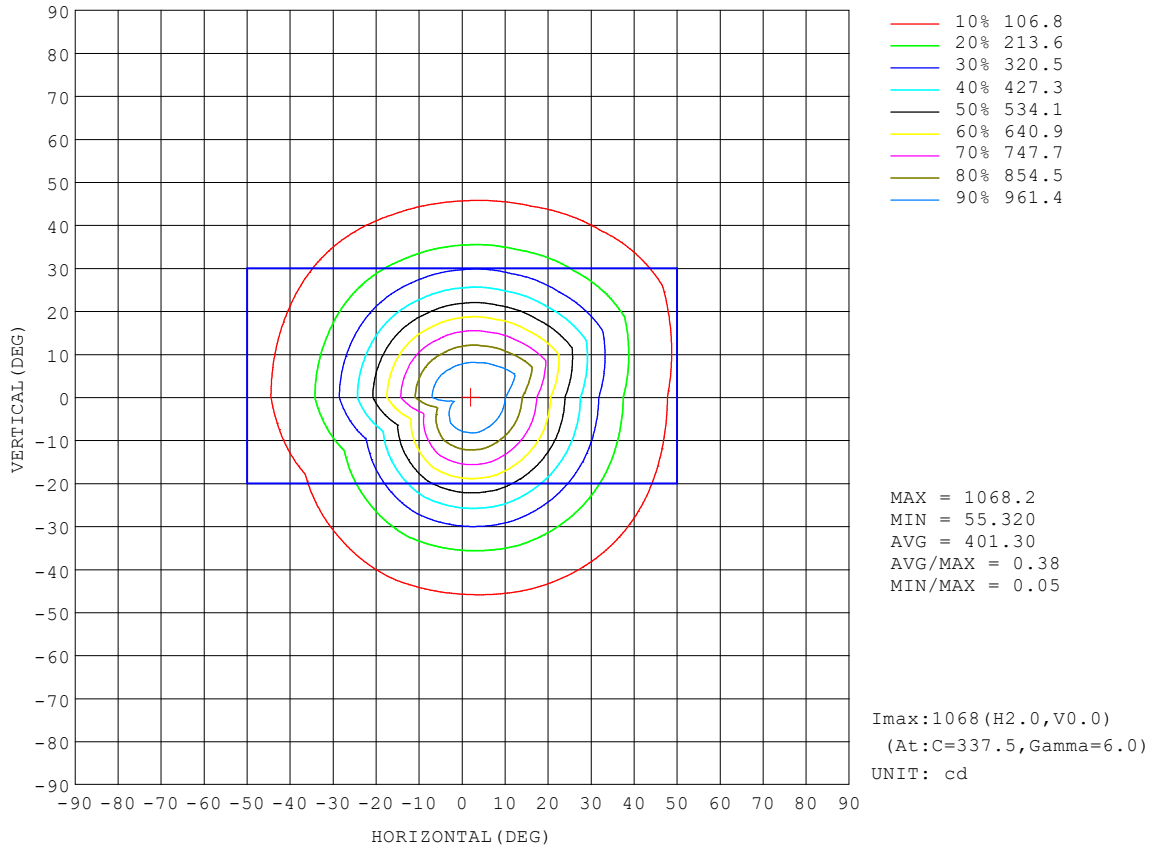
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	77	68	63	76	68	63	75	68	63	59
0.80	85	77	72	84	77	72	83	76	72	67
1.00	91	84	79	90	83	78	88	84	78	73
1.25	96	89	85	95	89	84	93	87	83	78
1.50	100	93	89	99	93	88	96	91	87	82
2.00	104	98	94	102	97	93	100	95	92	86
2.50	106	101	97	105	100	96	101	98	95	88
3.00	109	104	100	107	103	99	103	100	97	90
4.00	111	108	105	109	106	103	105	103	100	93
5.00	113	110	107	111	108	106	107	104	103	94
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:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME: 2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

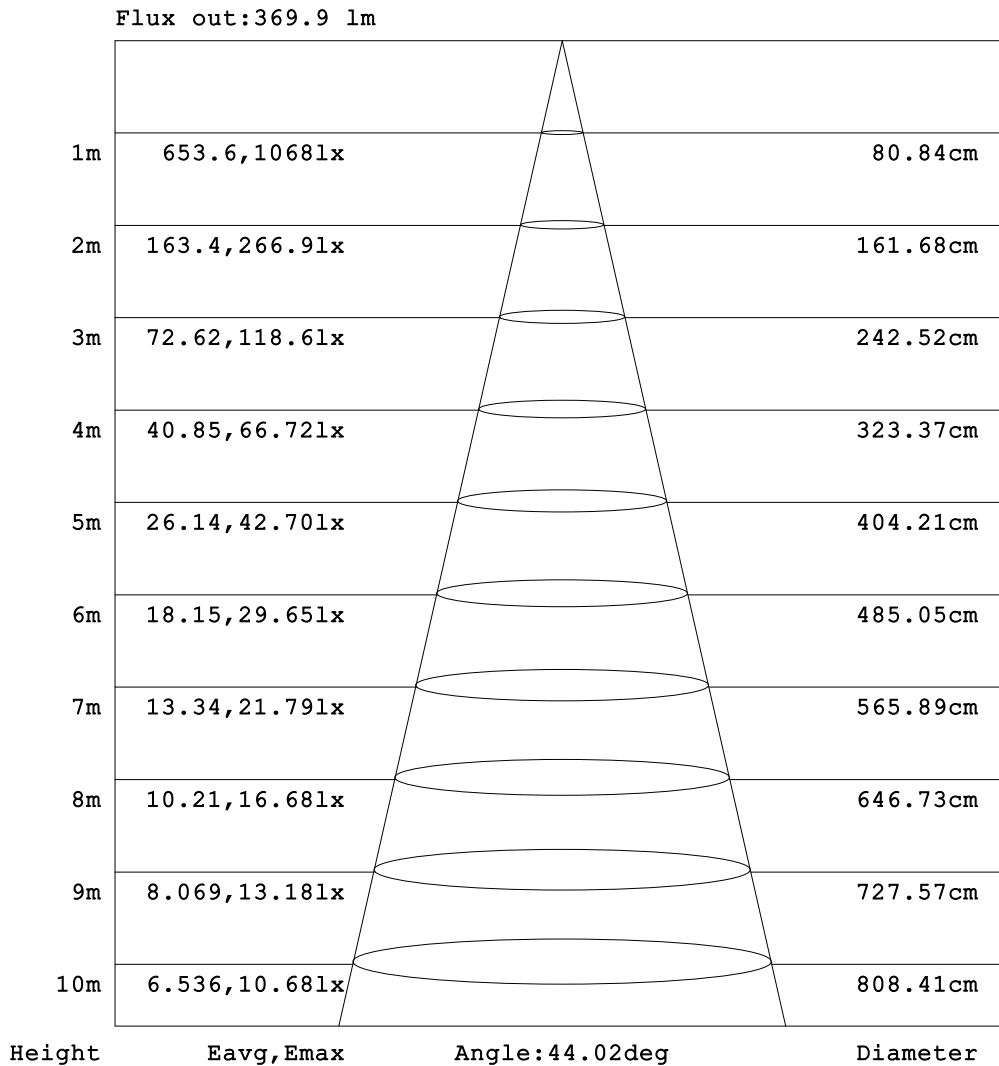


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME:2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



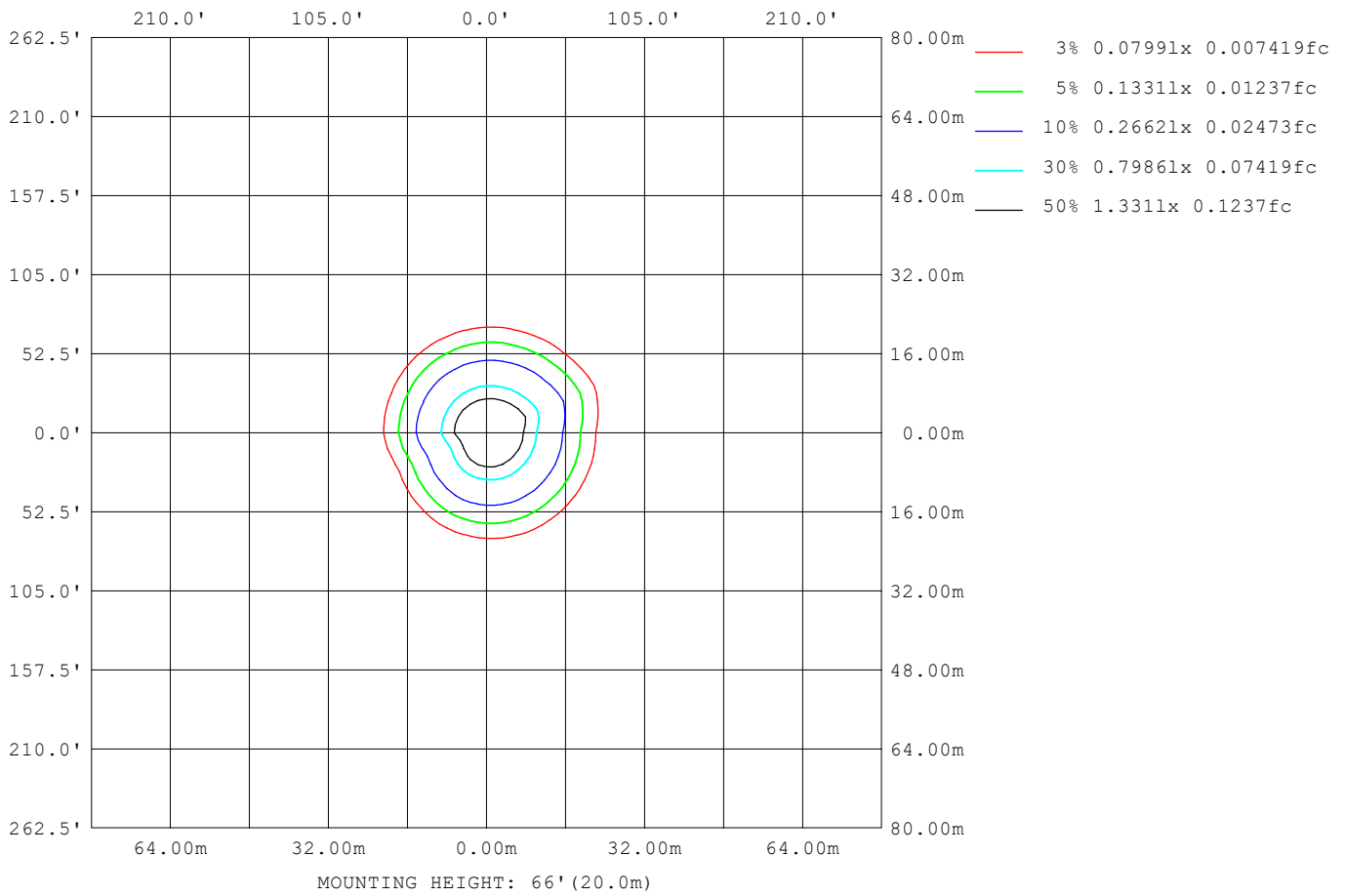
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME:2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 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:2021-07-15

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:120.05V I:0.1128A P:13.360W PF:0.9503 Freq:59.98Hz Lamp Flux:859.088x1 lm		
NAME: 2RSTWH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

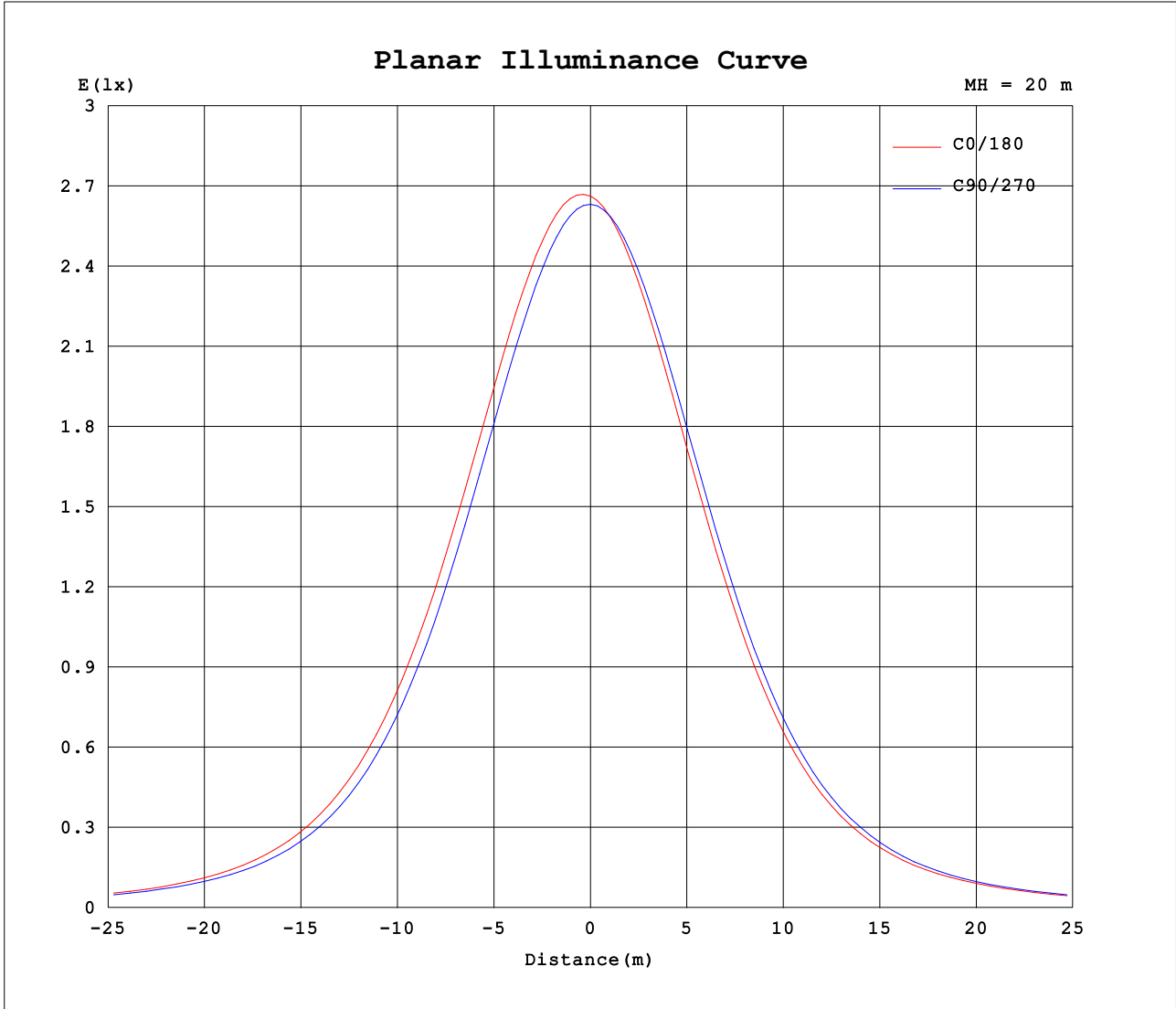
AvgL	cd/m2
L_0~180 (65) av	762
L_0~180 (75) av	583
L_0~180 (85) av	136
L_90~270 (65) av	760
L_90~270 (75) av	583
L_90~270 (85) av	415
L_45 (65) av	768
L_45 (75) av	585
L_45 (85) av	399

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-07-15

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:
 Test Date: 2021-07-15

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:

