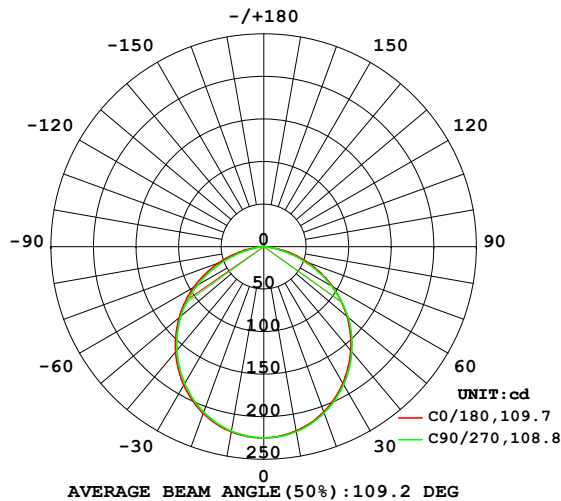


LUMINAIRE PHOTOMETRIC TEST REPORT

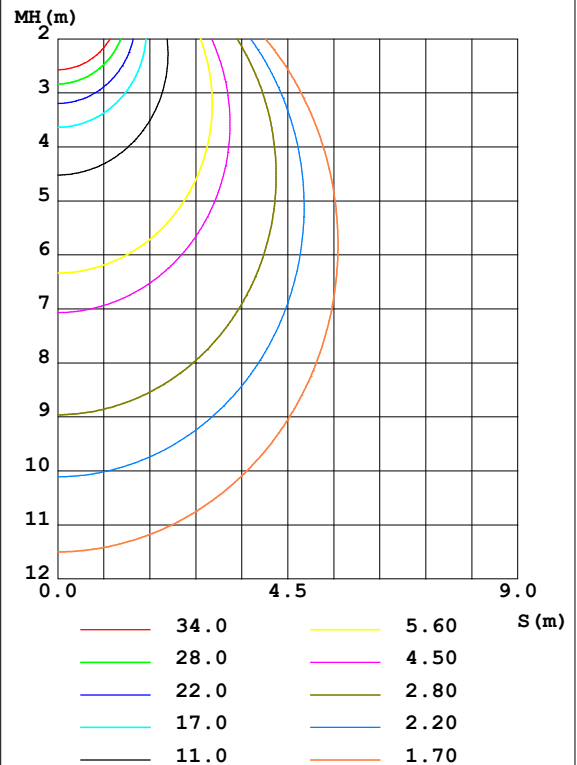
Test:U:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 69.33 lm/W			
MODEL		I _{max} (cd)	224.8	S/MH (C0/180)	1.24
NOMINAL POWER (W)	9	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	604.11	□ UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	604.108	CIE CLASS	DIRECT	□ UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	□ up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	□ down (%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2021-10-18

□ 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:

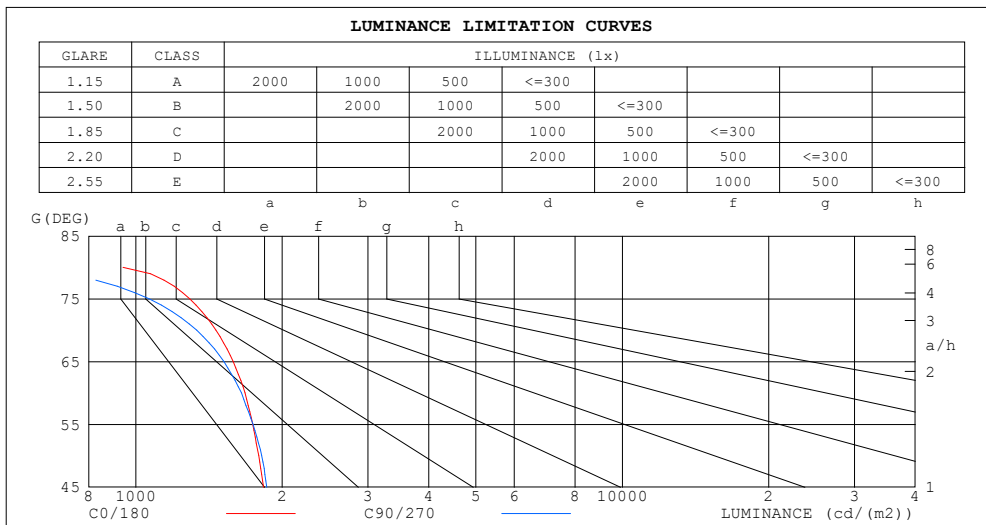
°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	219.8	220.2	220.7	220.8	220.8	220.4	220.1	219.9	0- 10	21.24	21.24	3.52,3.52
20	206.5	207.1	207.9	208.3	208.5	207.5	206.8	206.7	10- 20	60.65	81.89	13.6,13.6
30	185.7	186.5	187.6	188.2	188.1	186.7	185.8	185.8	20- 30	91.21	173.1	28.7,28.7
40	159.0	159.8	161.1	161.8	161.4	159.6	158.8	159.0	30- 40	108.9	282.0	46.7,46.7
50	127.8	128.6	129.6	130.6	130.0	128.1	127.2	127.5	40- 50	111.7	393.7	65.2,65.2
60	93.15	92.68	91.55	94.59	94.74	91.92	89.42	91.61	50- 60	99.22	492.9	81.6,81.6
70	55.51	52.80	50.67	54.41	56.64	52.12	48.68	52.18	60- 70	72.01	565.0	93.5,93.5
80	18.17	14.92	11.99	15.54	18.37	14.12	10.39	14.25	70- 80	35.30	600.3	99.4,99.4
90	0.0851	0.0684	0.0564	0.0651	0.1438	0.1271	0.1165	0.1342	80- 90	3.852	604.1	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:2021-10-18

□ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	222	51
80	942	621
75	1291	1065
70	1461	1333
65	1585	1516
60	1677	1648
55	1738	1742
50	1789	1815
45	1832	1859

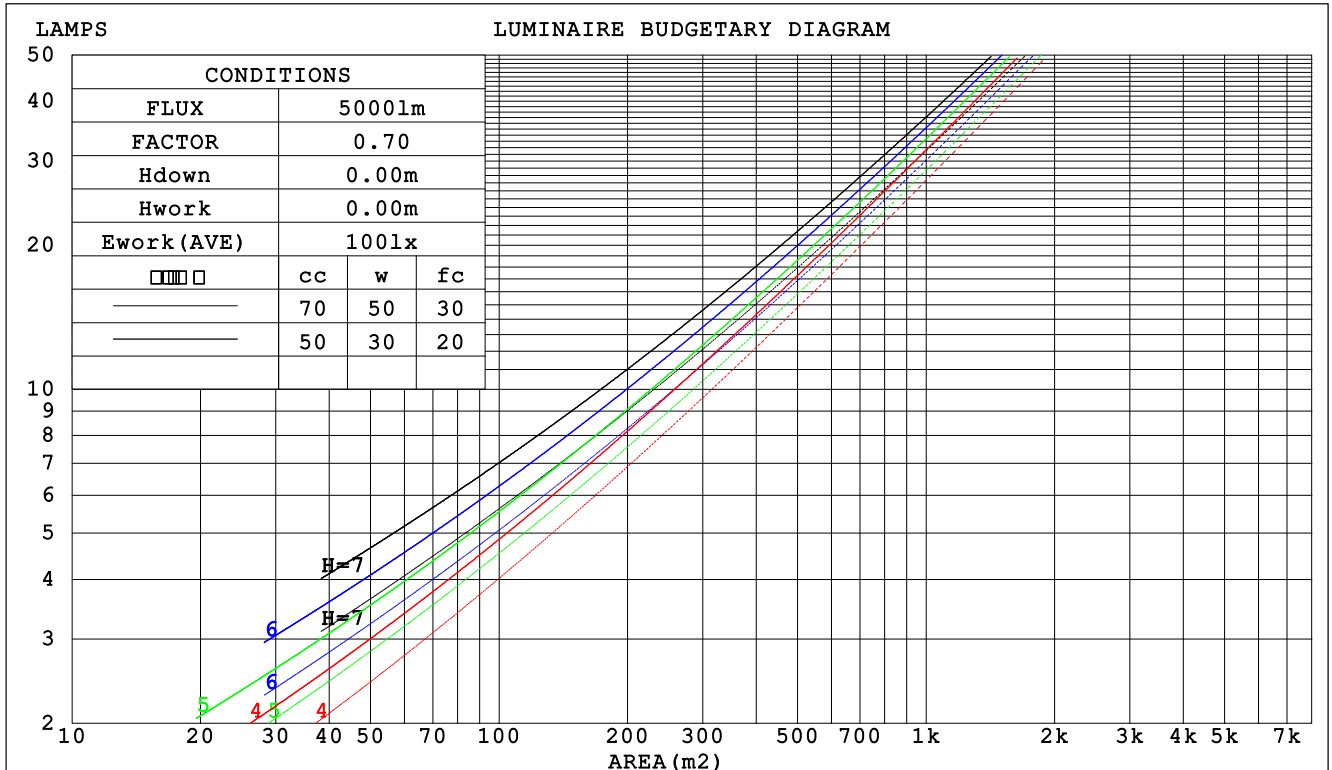
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	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	Coefficients of Utilization(CU)															
	RCR:Room Cavity Ratio															
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	.98	.95	.93	.95	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.73	.71
3.0	.81	.73	.66	.79	.72	.66	.76	.70	.65	.73	.68	.64	.71	.66	.63	.60
4.0	.72	.63	.56	.70	.62	.56	.68	.61	.55	.65	.59	.55	.63	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.48	.61	.53	.48	.59	.52	.47	.57	.51	.47	.45
6.0	.58	.49	.43	.57	.48	.42	.55	.47	.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	.34	.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:2021-10-18

□ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	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	.290 .165 .052	.283 .161 .051	.269 .155 .049	.257 .148 .048	.246 .143 .046	
2.0	.279 .153 .047	.273 .150 .046	.261 .145 .045	.250 .140 .044	.241 .136 .043	
3.0	.261 .139 .042	.256 .137 .041	.245 .133 .040	.236 .129 .040	.227 .126 .039	
4.0	.243 .126 .037	.238 .124 .037	.229 .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	.210 .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 .091 .027	
8.0	.183 .089 .025	.180 .089 .025	.174 .087 .025	.169 .086 .025	.164 .084 .025	
9.0	.172 .083 .023	.169 .082 .023	.164 .081 .023	.159 .080 .023	.155 .078 .023	
10.0	.162 .078 .022	.159 .077 .021	.155 .076 .021	.150 .075 .021	.146 .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 .136	.153 .134 .117	.105 .092 .081	.060 .053 .047	.019 .017 .015	
2.0	.171 .132 .100	.146 .114 .086	.100 .079 .060	.058 .046 .035	.019 .015 .011	
3.0	.163 .114 .076	.140 .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	.088 .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:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm										
NAME: RSD-4-TUN-WH					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	16.6	18.1	16.9	18.3	18.5	16.6	18.1	16.8	18.3	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	20.6	18.3	19.6	18.7	19.8	20.1
8H	18.8	20.0	19.1	20.3	20.6	18.3	19.5	18.6	19.8	20.1
12H	18.8	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	18.7	19.0	17.1	18.4	17.4	18.7	18.9
3H	18.7	19.9	19.1	20.2	20.5	18.5	19.7	18.9	20.0	20.3
4H	19.3	20.4	19.7	20.7	21.0	19.0	20.1	19.4	20.4	20.7
6H	19.7	20.6	20.1	21.0	21.3	19.2	20.1	19.6	20.5	20.9
8H	19.7	20.6	20.1	21.0	21.3	19.2	20.1	19.6	20.4	20.8
12H	19.7	20.5	20.1	20.9	21.3	19.2	19.9	19.6	20.3	20.7
8H 4H	19.5	20.3	19.9	20.7	21.1	19.2	20.0	19.6	20.4	20.8
6H	19.9	20.7	20.4	21.1	21.5	19.5	20.2	19.9	20.6	21.0
8H	20.0	20.6	20.5	21.1	21.5	19.5	20.1	19.9	20.5	21.0
12H	20.0	20.5	20.5	21.0	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	20.3	20.7
6H	19.9	20.6	20.4	21.0	21.4	19.5	20.1	19.9	20.5	21.0
8H	20.0	20.5	20.5	21.0	21.5	19.5	20.0	20.0	20.5	20.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 604.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.8)
Area: 0.111111 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

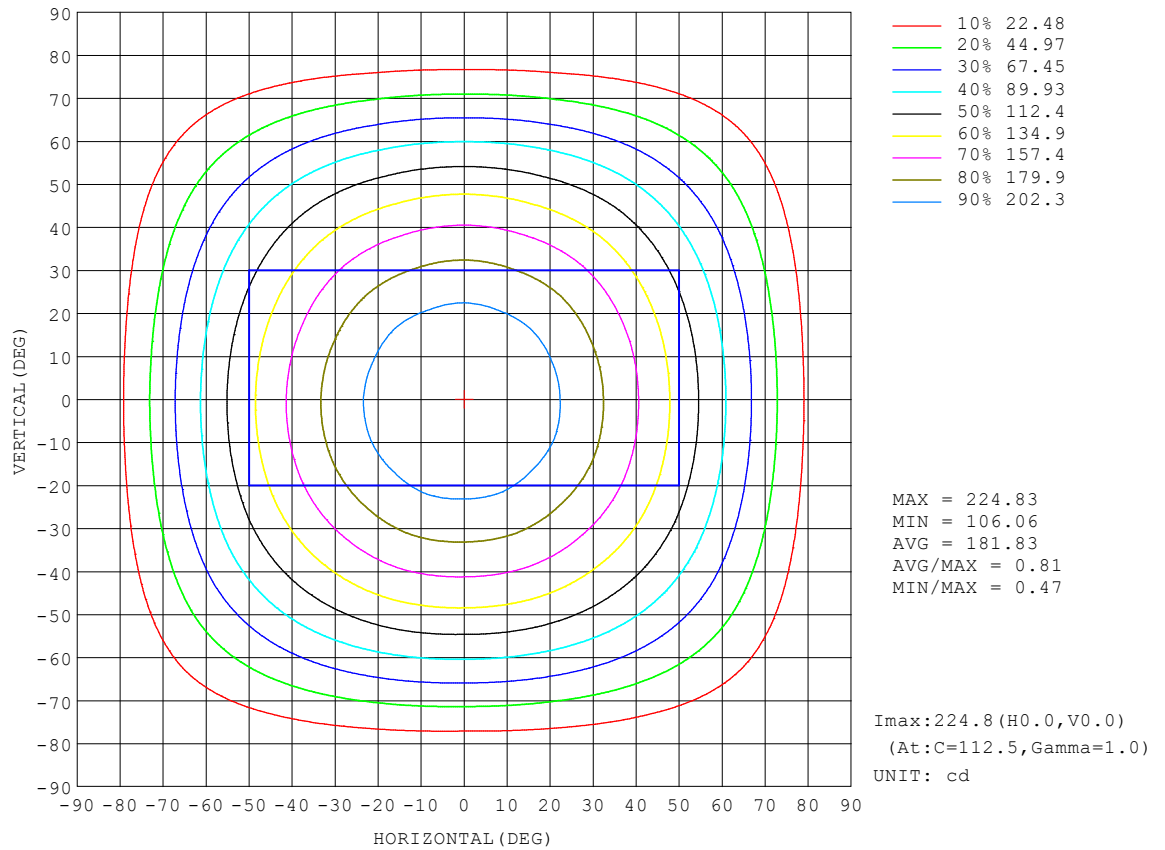
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	46	40	34
0.80	69	57	50	68	57	50	66	56	50	43
1.00	77	66	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	90	97	92	88	80
4.00	107	102	97	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:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

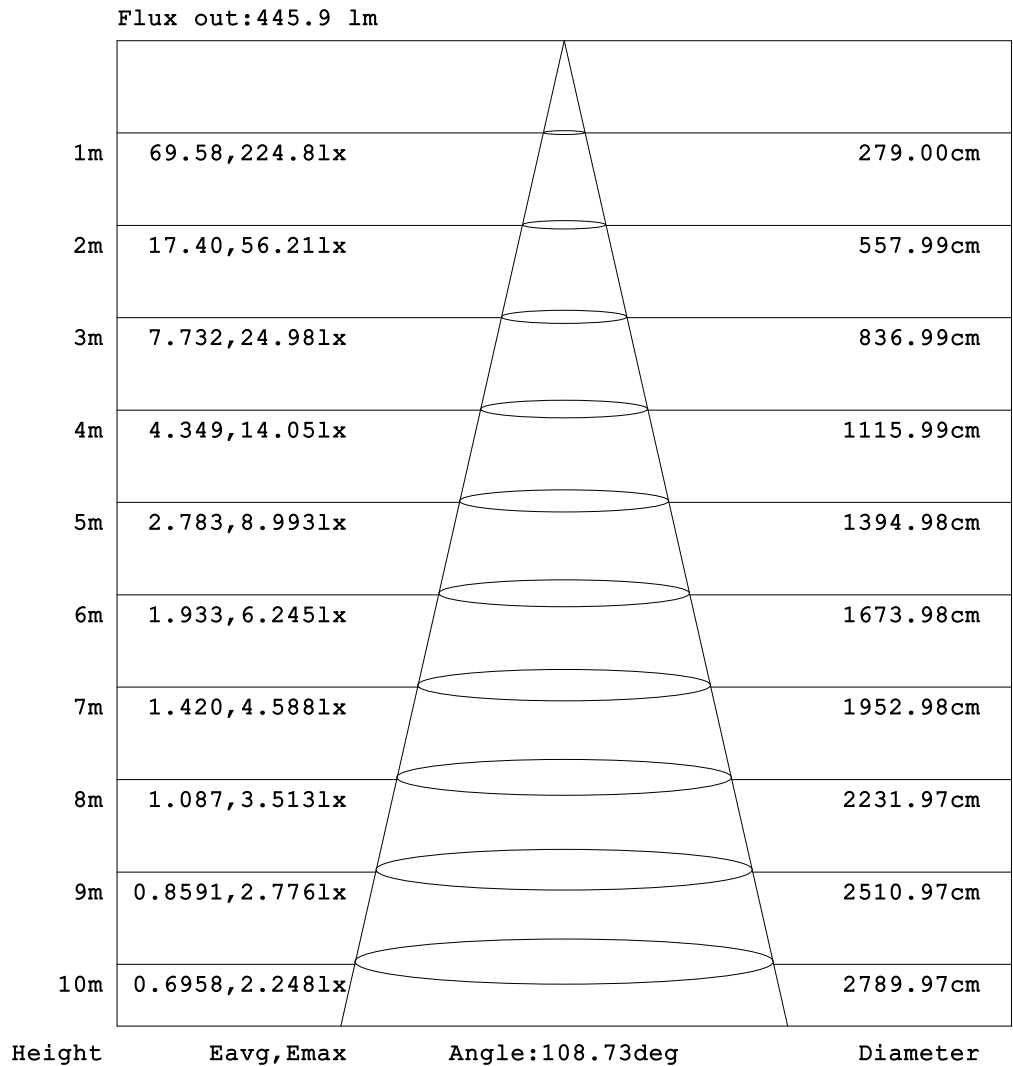


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



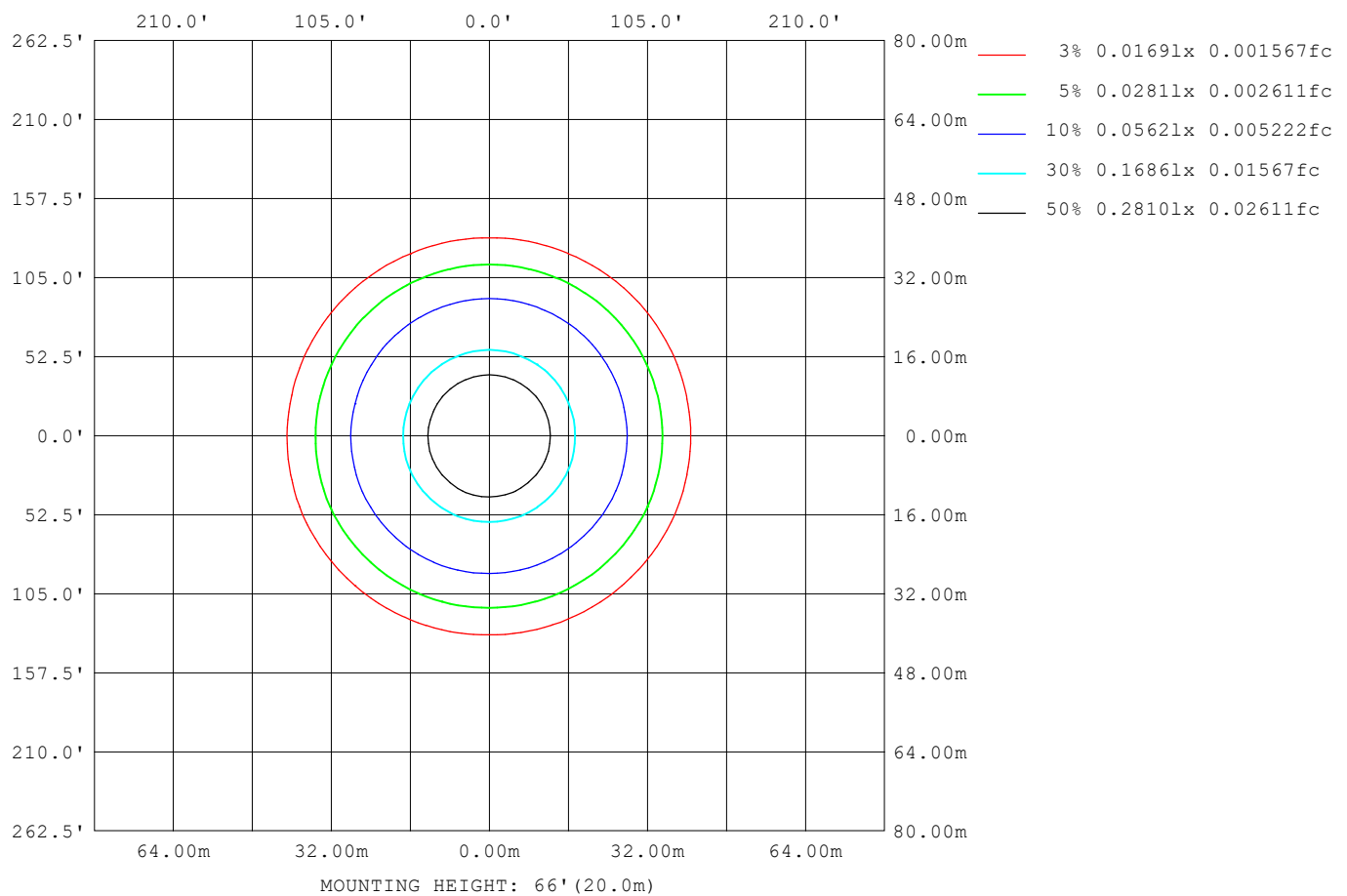
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	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:2021-10-18

☐ 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:119.96V I:0.0988A P:8.7137W PF:0.8908 Freq:59.98Hz Lamp Flux:604.108x1 lm		
NAME: RSD-4-TUN-WH	TYPE:	WEIGHT:
SPEC.:3000K 90	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

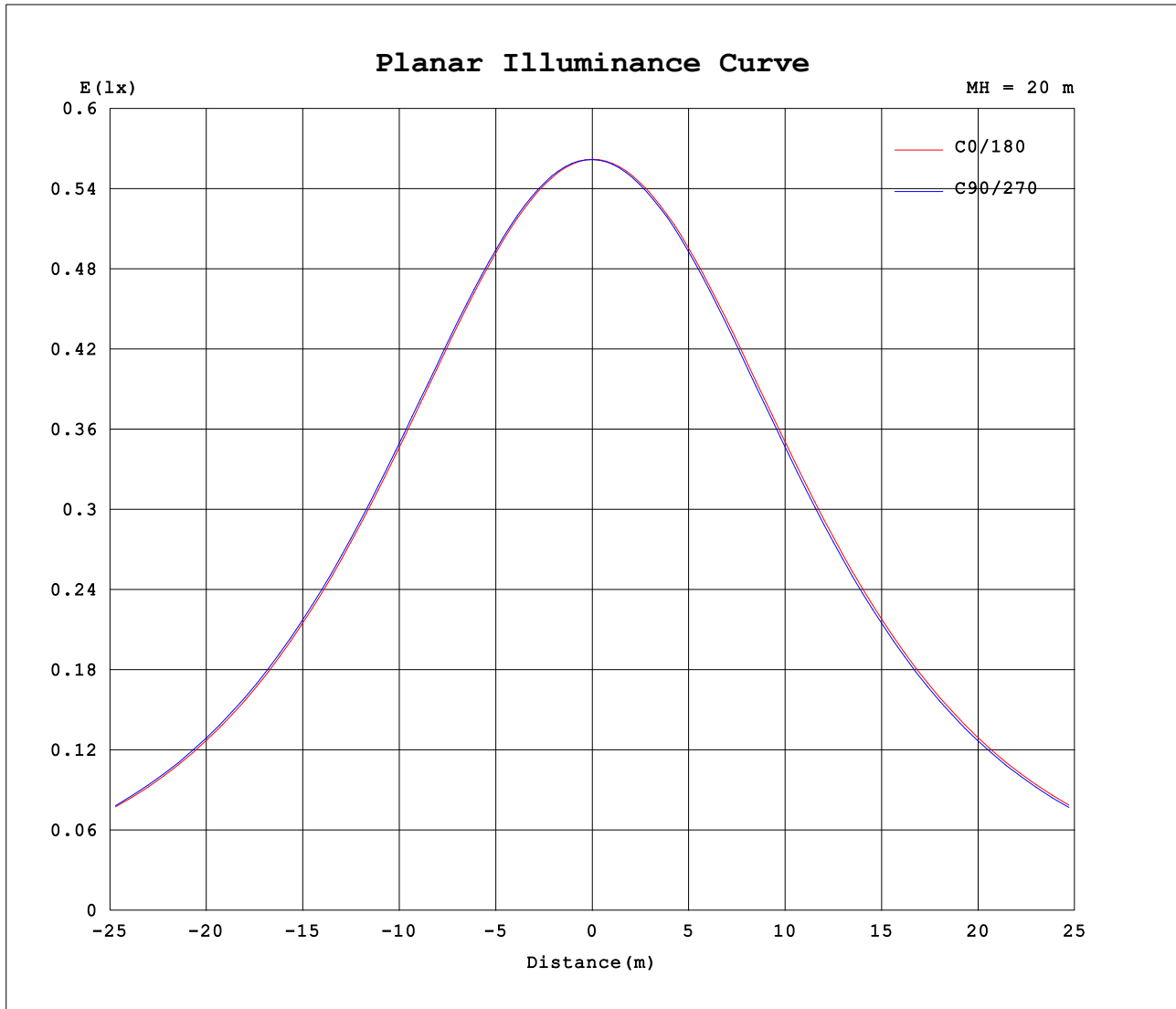
AvgL	cd/m2
L_0~180 (65) av	1599
L_0~180 (75) av	1306
L_0~180 (85) av	207
L_90~270 (65) av	1495
L_90~270 (75) av	1030
L_90~270 (85) av	48
L_45 (65) av	1554
L_45 (75) av	1152
L_45 (85) av	77

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-10-18

☐ 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: 2021-10-18

☐ Range: 0 - 90DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
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☐ Range: 0 - 90DEG
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 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.421
 Humidity:65.0%
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 Remarks: