

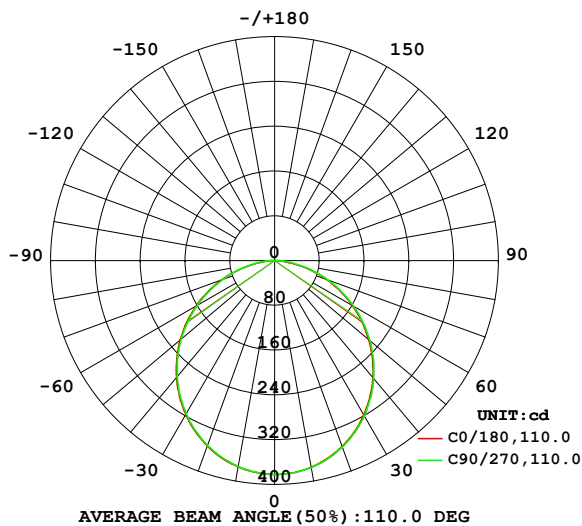


LUMINAIRE PHOTOMETRIC TEST REPORT

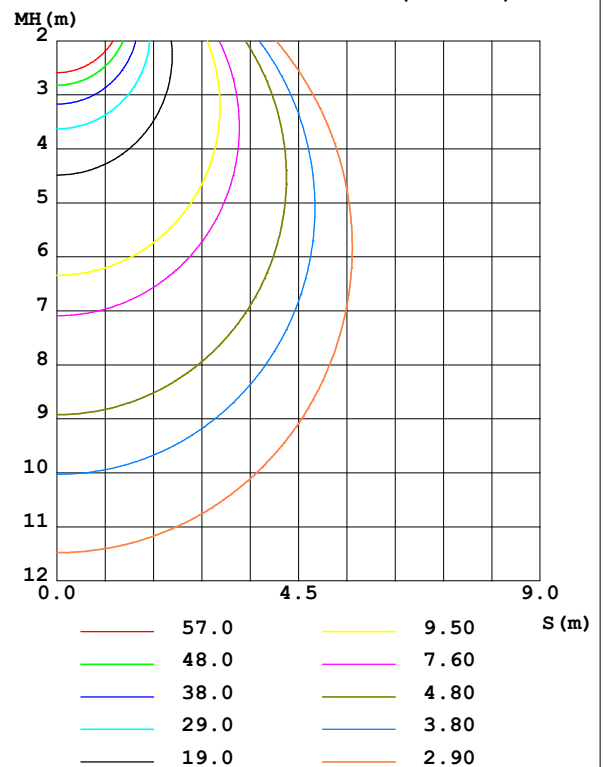
Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1060.18x1 lm		
NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: RP LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.76 lm/W			
MODEL	8544WH-90-5CCT 4000K	I _{max} (cd)	382.3	S/MH (C0/180)	1.24
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	120.0	TOTAL FLUX (lm)	1060.2	η UP, DN (C0-180)	0.0, 50.4
NOMINAL FLUX (lm)	1060.18	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120	η 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: 25.3 °C
Operators:
Test Date: 2023-06-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.080m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

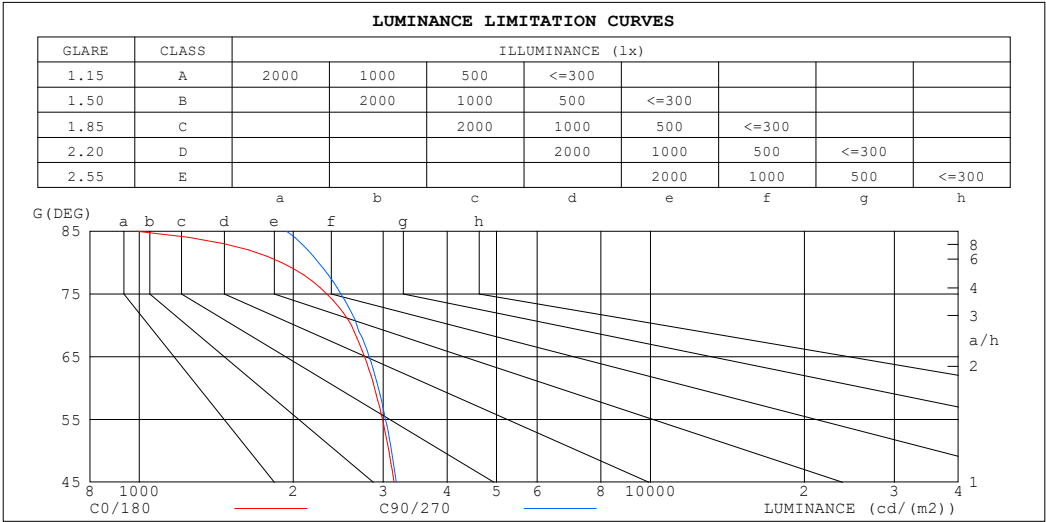
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	374.9	375.3	375.5	375.1	374.3	373.2	373.6	374.6	0- 10	36.11	36.11	3.41,3.41
20	353.4	354.3	354.3	353.5	352.3	350.4	351.0	352.6	10- 20	103.1	139.2	13.1,13.1
30	318.7	320.0	320.2	319.3	317.5	315.3	315.8	317.6	20- 30	155.2	294.4	27.8,27.8
40	273.3	275.2	275.5	274.4	272.7	270.0	270.4	272.4	30- 40	185.6	479.9	45.3,45.3
50	219.7	221.7	222.4	221.5	220.1	217.4	217.6	219.3	40- 50	190.7	670.7	63.3,63.3
60	160.4	162.2	163.1	162.8	161.6	158.8	159.0	160.3	50- 60	170.7	841.4	79.4,79.4
70	98.78	100.5	101.3	101.3	100.5	97.95	97.91	98.84	60- 70	129.0	970.3	91.5,91.5
80	36.67	40.45	43.26	41.26	38.26	38.80	40.75	39.16	70- 80	73.07	1043	98.4,98.4
90	0.3830	0.3892	0.4233	0.4041	0.2359	0.2536	0.2755	0.2525	80- 90	16.77	1060	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:25.3℃
 Operators:
 Test Date:2023-06-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:1060.18x1 lm		
NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: RP LIGHTING	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	989	1941
80	1900	2242
75	2328	2481
70	2599	2665
65	2757	2817
60	2887	2935
55	2990	3032
50	3076	3113
45	3150	3180

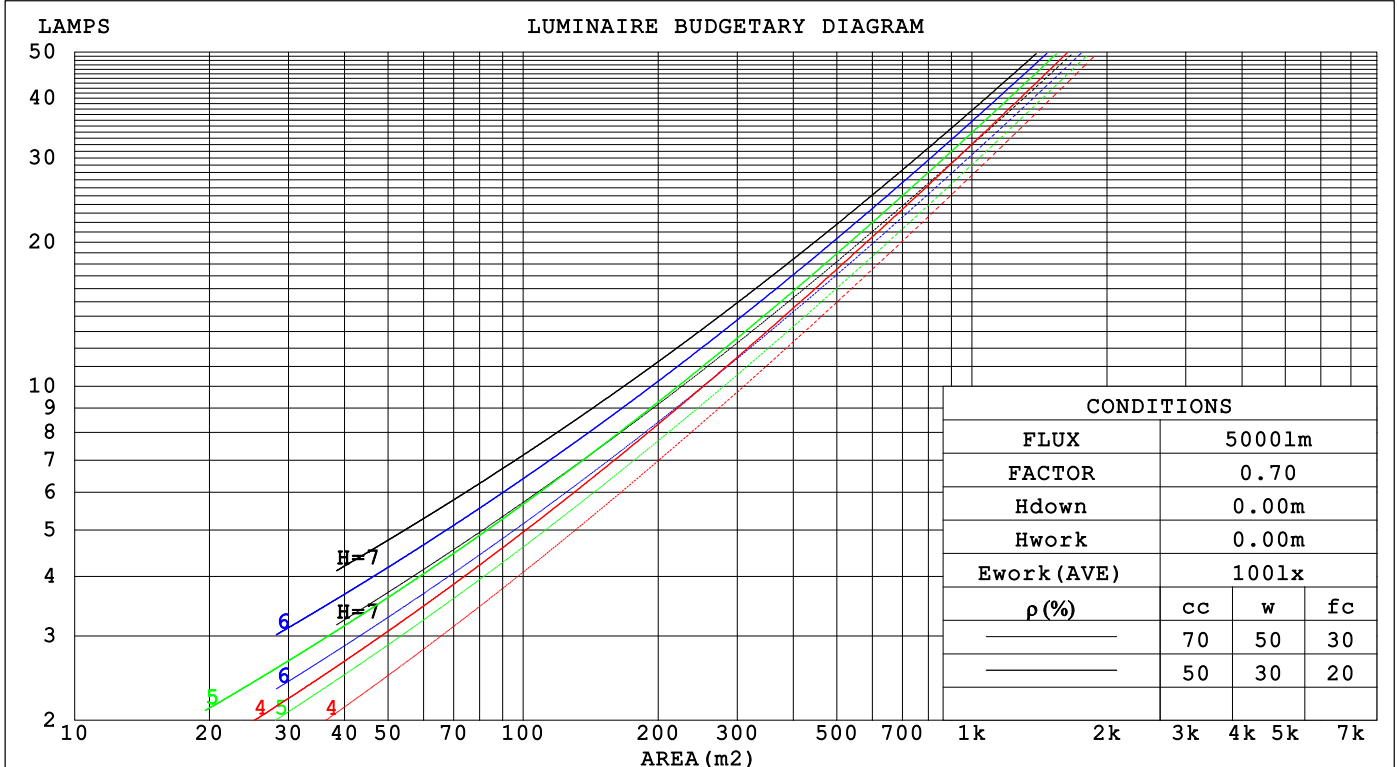
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
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γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.080m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0			Lamp Flux:1060.18x1 lm		
NAME: 8544WH-90-5CCT 4000K		TYPE:		WEIGHT:	
SPEC.: 4000K 90		DIM.:		SERIAL No.:	
MFR.: RP LIGHTING		SUR.:		Shielding Angle:	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 2023-06-30

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γ Interval: 1.0DEG
Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity: 65.0%
Test Distance: 3.080m [K=1.0000]
Remarks:

WEC AND CCEC

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UTHDi:0.00% ITHDi:0.00% KDisp:0		Lamp Flux:1060.18x1 lm
NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: RP LIGHTING	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.305	.174	.055	.298	.170	.054	.285	.163	.052	.273	.157	.050	.262	.152	.049	
2.0	.289	.158	.049	.283	.156	.048	.271	.151	.047	.260	.146	.046	.250	.142	.045	
3.0	.268	.143	.043	.262	.141	.042	.252	.137	.042	.242	.133	.041	.234	.129	.040	
4.0	.248	.129	.038	.243	.127	.038	.234	.124	.037	.225	.121	.036	.217	.118	.036	
5.0	.229	.117	.034	.225	.115	.034	.217	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.213	.107	.031	.209	.105	.030	.201	.103	.030	.195	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027	
8.0	.185	.090	.025	.182	.090	.025	.176	.088	.025	.171	.086	.025	.166	.085	.025	
9.0	.173	.084	.023	.171	.083	.023	.165	.082	.023	.161	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.152	.075	.021	.147	.074	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.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	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.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	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.064	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:
Test Date:2023-06-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.080m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1060.18x1 lm											
NAME: 8544WH-90-5CCT 4000K						TYPE:		WEIGHT:			
SPEC.: 4000K 90						DIM.:		SERIAL No.:			
MFR.: RP LIGHTING						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		16.5	18.0	16.8	18.2	18.4	16.6	18.1	16.8	18.3	18.5
	3H	18.0	19.4	18.3	19.6	19.8	18.1	19.5	18.4	19.7	19.9
	4H	18.5	19.9	18.8	20.1	20.4	18.7	20.0	19.0	20.2	20.5
	6H	18.9	20.1	19.2	20.4	20.7	19.1	20.3	19.4	20.6	20.9
	8H	19.0	20.2	19.3	20.4	20.7	19.2	20.4	19.6	20.7	21.0
	12H	19.0	20.1	19.3	20.4	20.7	19.3	20.5	19.7	20.8	21.1
4H	2H	17.1	18.4	17.4	18.7	18.9	17.2	18.5	17.5	18.7	19.0
	3H	18.8	19.9	19.1	20.2	20.5	18.8	20.0	19.2	20.3	20.6
	4H	19.4	20.5	19.8	20.8	21.2	19.6	20.6	19.9	21.0	21.3
	6H	19.9	20.9	20.3	21.2	21.6	20.1	21.1	20.5	21.4	21.8
	8H	20.0	20.9	20.4	21.3	21.7	20.3	21.2	20.7	21.6	22.0
	12H	20.1	20.9	20.5	21.3	21.7	20.5	21.3	20.9	21.6	22.0
8H	4H	19.7	20.6	20.1	21.0	21.3	19.8	20.7	20.2	21.1	21.5
	6H	20.3	21.0	20.7	21.4	21.9	20.5	21.3	21.0	21.7	22.1
	8H	20.5	21.1	20.9	21.6	22.0	20.8	21.4	21.3	21.9	22.3
	12H	20.6	21.1	21.0	21.6	22.0	21.0	21.6	21.5	22.0	22.5
12H	4H	19.7	20.5	20.1	20.9	21.3	19.8	20.6	20.3	21.0	21.4
	6H	20.4	21.0	20.8	21.4	21.9	20.6	21.2	21.0	21.6	22.1
	8H	20.6	21.1	21.0	21.6	22.0	20.9	21.4	21.4	21.9	22.4
Variations with the observer position at spacings(CIE Pub.117):											
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, 1060 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.2$)
 Area: 0.111111 m²

C Range: 0 - 360DEG
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity:65.0%
 Test Distance:3.080m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1060.18x1 lm		
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SPEC.: 4000K 90	DIM.:	SERIAL No.:
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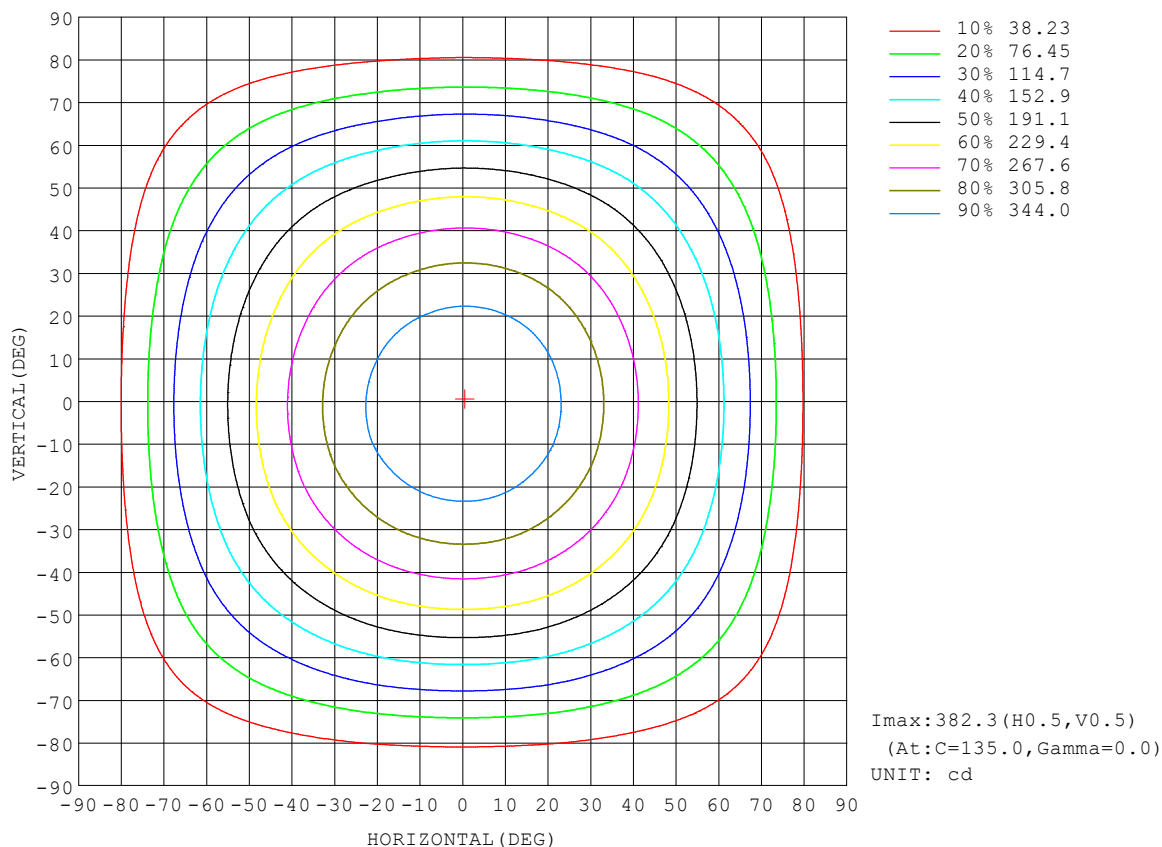
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	55	48	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	83	73	66	82	72	66	79	71	65	57
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	91	85	97	90	85	93	87	83	74
3.00	102	96	90	100	94	89	96	91	87	79
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	95	86
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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 C Interval: 22.5DEG
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
 Humidity: 65.0%
 Test Distance: 3.080m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:1060.18x1 lm		
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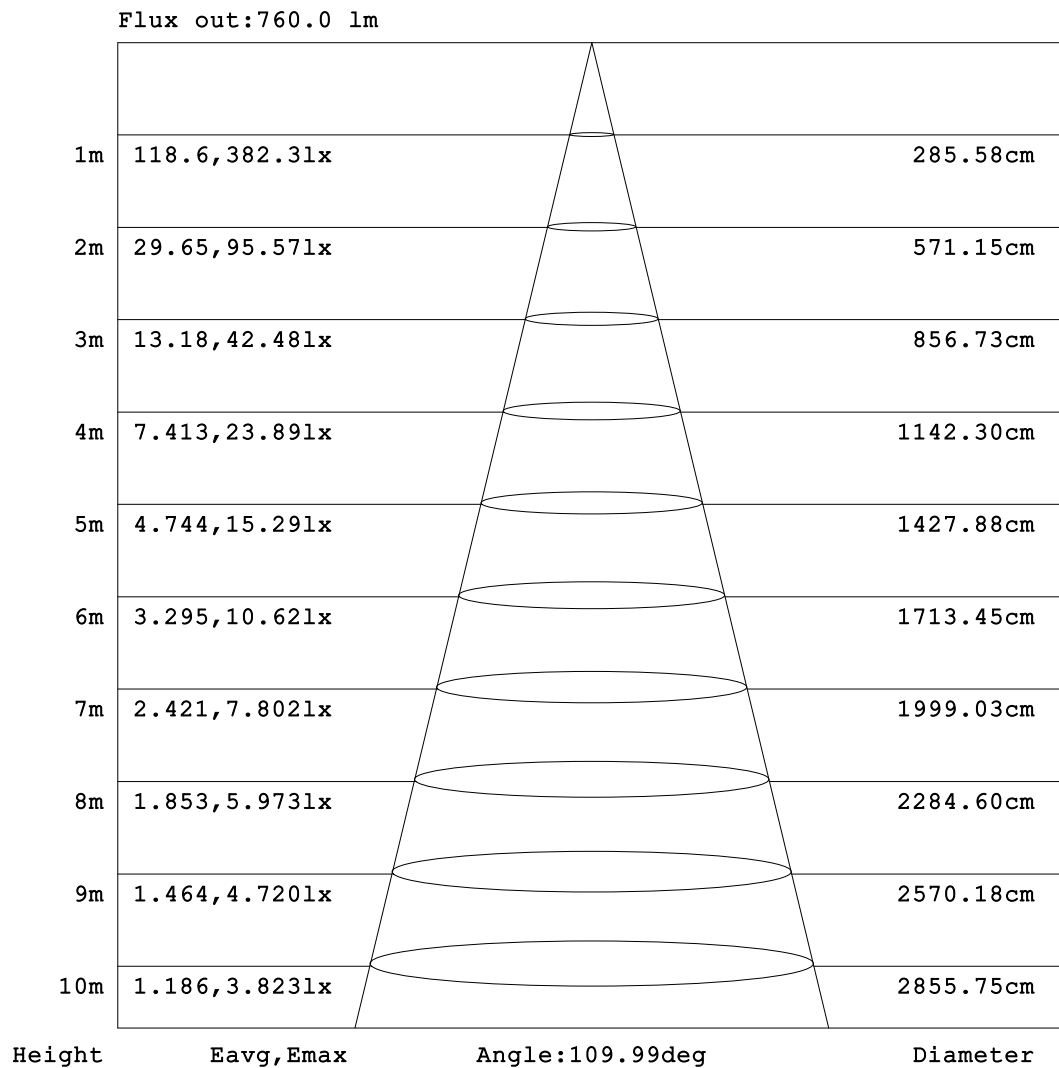


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Test Speed: HIGH
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γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
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Remarks:

AAI Figure

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NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
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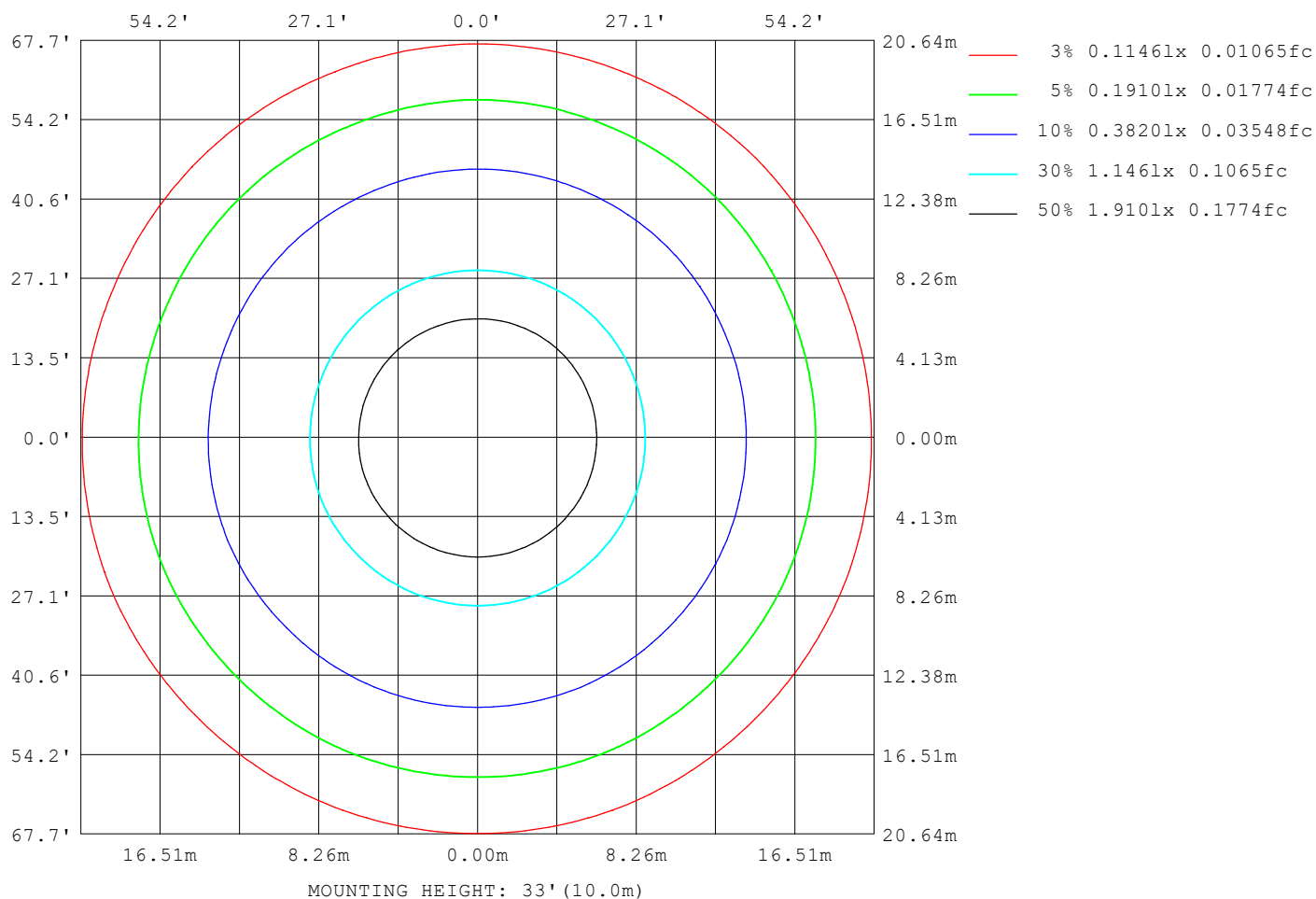
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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C Interval: 22.5DEG
Test Speed: HIGH
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Remarks:

ISOLUX DIAGRAM

Test:U:119.80V I:0.1128A P:13.293W PF:0.9841 Freq:59.98Hz UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:1060.18x1 lm		
NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
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C Range: 0 - 360DEG
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γ Interval: 1.0DEG
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Humidity: 65.0%
Test Distance: 3.080m [K=1.0000]
Remarks:

LED Avg.L Report

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NAME: 8544WH-90-5CCT 4000K	TYPE:	WEIGHT:
SPEC.: 4000K 90	DIM.:	SERIAL No.:
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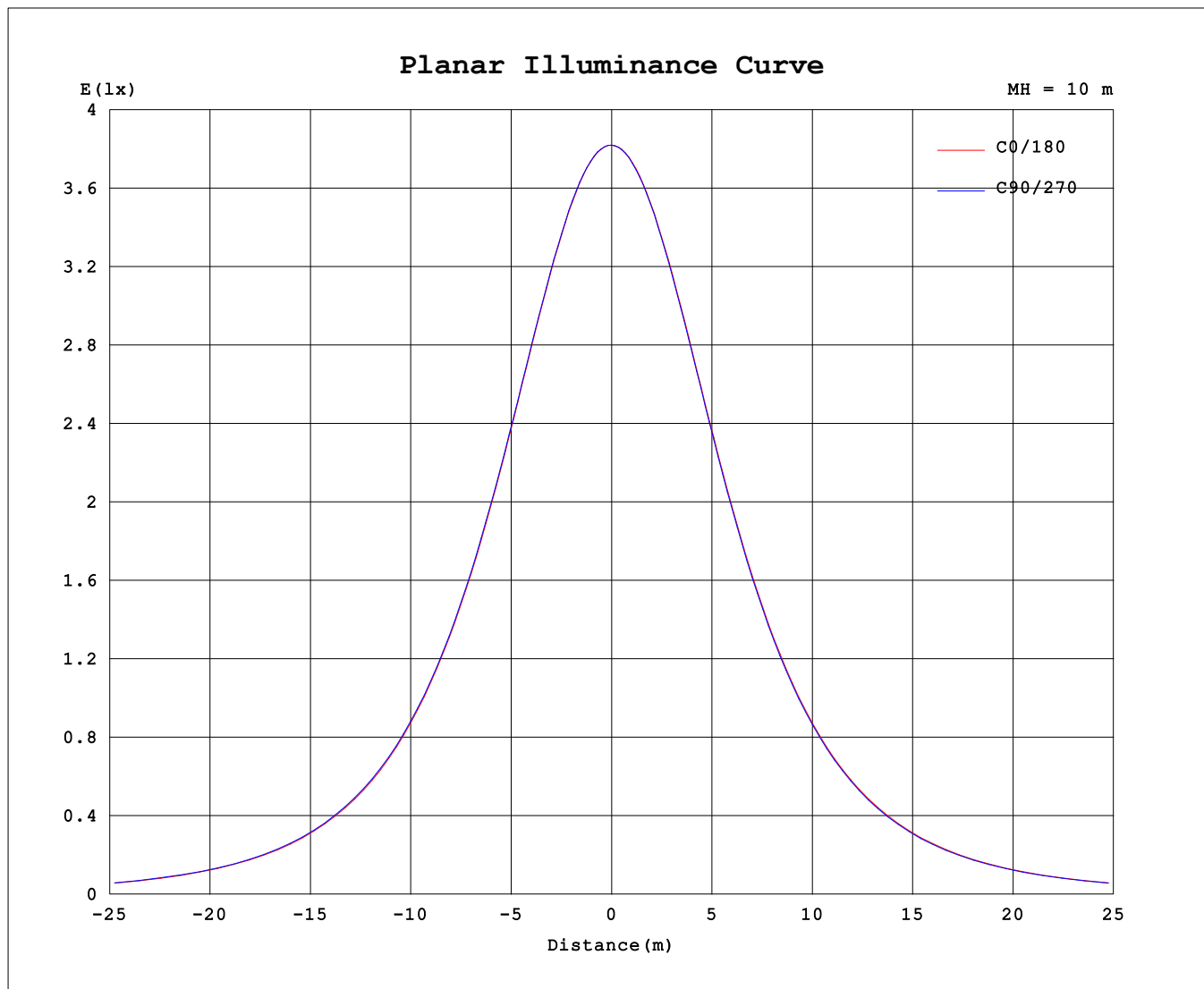
AvgL	cd/m2
L_0~180 (65) av	2775
L_0~180 (75) av	2360
L_0~180 (85) av	1064
L_90~270 (65) av	2776
L_90~270 (75) av	2425
L_90~270 (85) av	1844
L_45 (65) av	2776
L_45 (75) av	2408
L_45 (85) av	1367

Standard: GB/T 29293-2012

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γ Interval: 1.0DEG
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Humidity:65.0%
Test Distance:3.080m [K=1.0000]
Remarks:

Planar Illuminance Curve



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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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SPEC.: 4000K 90	DIM.:	SERIAL No.:
MFR.: RP LIGHTING	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
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```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-SPEX500_V1 SYSTEM V2.00.460
Humidity:65.0%
Test Distance:3.080m [K=1.0000]
Remarks:

```