

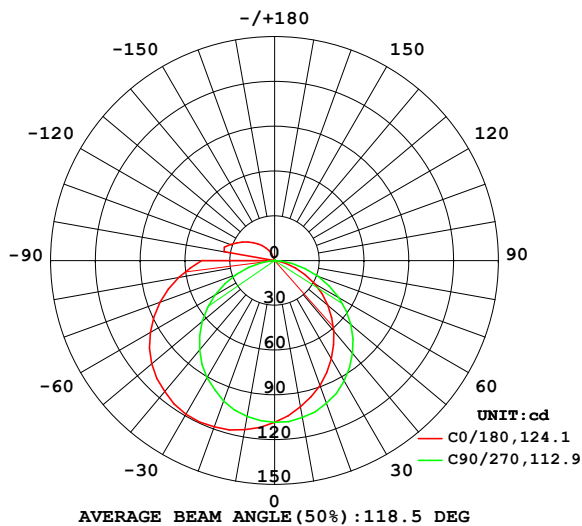
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

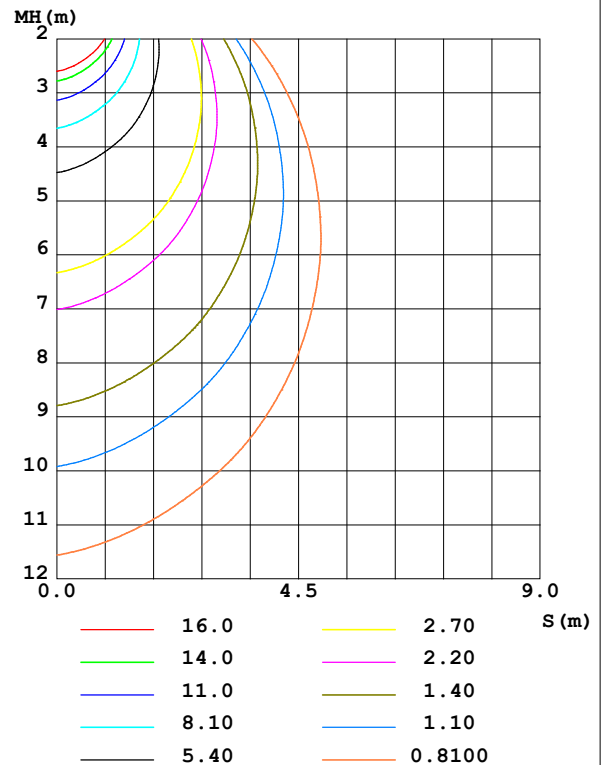
Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.22 lm/W			
MODEL		I _{max} (cd)	119.4	S/MH(C0/180)	1.62
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	397.03	η UP,DN(C0-180)	2.4,40.7
NOMINAL FLUX(lm)	397.069	CIE CLASS	DIRECT	η UP,DN(C180-360)	6.4,50.4
LAMPS INSIDE	1	η up (%)	8.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	120	η down (%)	91.1	CIBSE SHR MAX	1.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	99.62	102.1	106.8	112.6	114.9	112.4	106.0	100.7	0- 10	10.28	10.28	2.59,2.59
20	89.09	92.59	101.6	113.9	118.5	112.9	100.2	91.23	10- 20	29.70	39.98	10.1,10.1
30	76.10	80.37	93.23	111.7	118.8	109.5	90.78	78.74	20- 30	45.68	85.66	21.6,21.6
40	61.92	66.48	81.21	105.1	114.7	102.9	78.12	64.83	30- 40	56.33	142.0	35.8,35.8
50	46.62	50.98	66.63	95.80	107.5	92.78	63.23	49.39	40- 50	60.41	202.4	51,51
60	30.94	34.47	49.82	82.80	96.22	79.77	46.26	33.09	50- 60	57.53	259.9	65.5,65.5
70	15.01	18.08	31.06	67.16	81.75	64.13	27.72	16.44	60- 70	48.03	308.0	77.6,77.6
80	2.224	4.179	12.06	50.03	65.21	46.60	9.355	3.007	70- 80	33.81	341.8	86.1,86.1
90	0	0	0	32.37	48.94	30.38	0	0	80- 90	20.10	361.9	91.1,91.1
100	0	0	0	17.73	34.58	17.10	0	0	90-100	6.209	368.1	92.7,92.7
110	0	0	0	19.28	31.73	17.43	0	0	100-110	9.415	377.5	95.1,95.1
120	0	0	0	16.06	25.19	14.00	0	0	110-120	7.672	385.2	97,97
130	0	0	0	12.01	18.87	12.10	0	0	120-130	5.497	390.7	98.4,98.4
140	0	0	0	8.334	13.32	10.35	0	0	130-140	3.639	394.3	99.3,99.3
150	0	0	0	4.899	8.063	7.154	0	0	140-150	2.062	396.4	99.8,99.8
160	0	0	0	0.6887	0	0.0170	0	0	150-160	0.6348	397.0	100,100
170	0	0	0	0	0	0	0	0	160-170	0.0261	397.0	100,100
180	0	0	0	0	0	0	0	0	170-180	0	397.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2025-07-29

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
 Humidity:65.0%
 Test Distance:26.000m [K=1.2600]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.

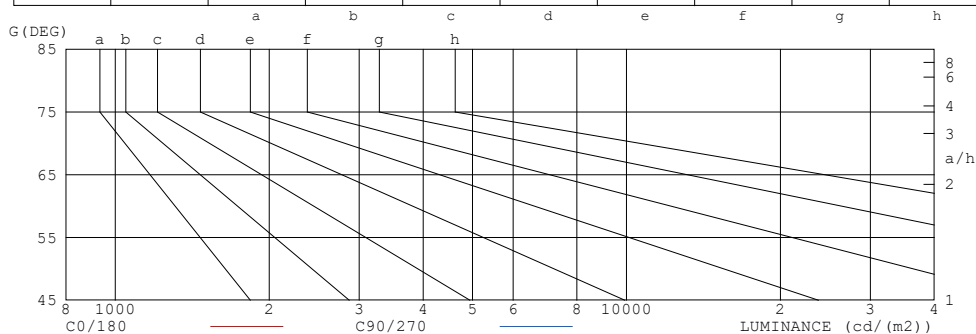
01Hz Lamp Flux:397.069x1 lm

NAME: 8974WH-5CCT

MFR.: Royal Pacific Ltd.

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	260
80	68	370
75	167	435
70	233	483
65	283	511
60	328	530
55	359	543
50	385	552
45	407	560

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

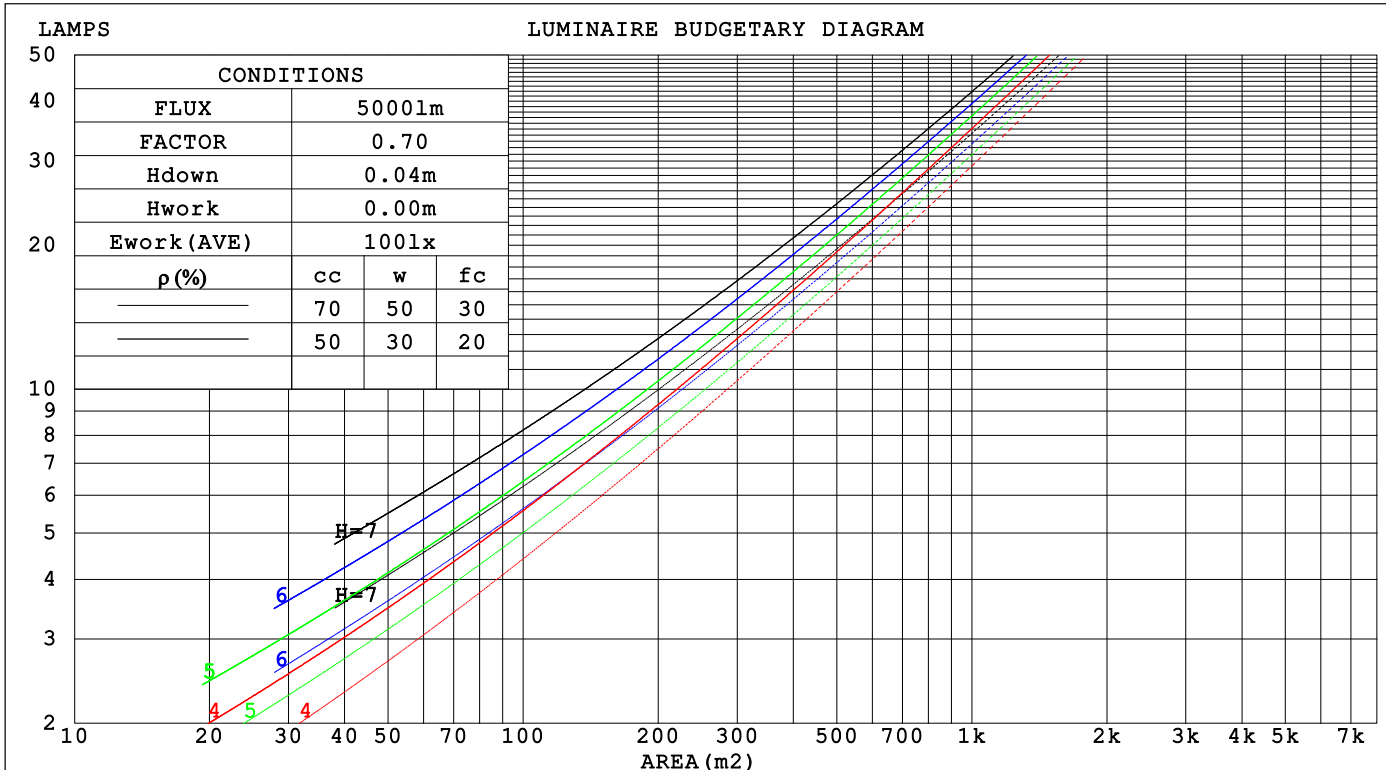
γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		

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															
	Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	.00	.00	.00	.94	.94	.94	.91
1.0	.99	.95	.90	.96	.92	.88	.90	.87	.83	.85	.82	.79	.80	.77	.75	.73
2.0	.86	.78	.72	.83	.76	.70	.78	.72	.67	.73	.69	.64	.69	.65	.62	.59
3.0	.75	.66	.59	.72	.64	.58	.68	.61	.56	.64	.58	.54	.60	.56	.52	.49
4.0	.66	.57	.49	.64	.55	.49	.60	.53	.47	.57	.50	.45	.54	.48	.44	.41
5.0	.58	.49	.42	.57	.48	.42	.54	.46	.40	.51	.44	.39	.48	.42	.38	.35
6.0	.52	.43	.37	.51	.42	.36	.48	.41	.35	.46	.39	.34	.43	.38	.33	.31
7.0	.47	.38	.32	.46	.38	.32	.44	.36	.31	.42	.35	.30	.39	.34	.29	.27
8.0	.43	.34	.28	.42	.34	.28	.40	.33	.27	.38	.31	.27	.36	.30	.26	.24
9.0	.39	.31	.25	.39	.31	.25	.37	.30	.25	.35	.29	.24	.33	.28	.23	.21
10.0	.36	.28	.23	.36	.28	.23	.34	.27	.22	.32	.26	.22	.31	.25	.21	.19



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz											
Lamp Flux:397.069x1 lm											
NAME: 8974WH-5CCT											
MFR.: Royal Pacific Ltd.											

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	.354	.201	.064	.344	.196	.062	.326	.187	.060	.309	.178	.057	.293	.170	.055	
2.0	.317	.174	.053	.308	.170	.052	.291	.162	.050	.276	.155	.048	.262	.148	.047	
3.0	.286	.152	.046	.278	.149	.045	.264	.143	.043	.250	.137	.042	.237	.131	.041	
4.0	.260	.135	.040	.253	.133	.039	.240	.127	.038	.228	.122	.037	.216	.117	.036	
5.0	.238	.121	.035	.232	.119	.035	.220	.115	.034	.209	.110	.033	.198	.106	.032	
6.0	.219	.110	.031	.214	.108	.031	.203	.104	.030	.193	.100	.029	.183	.096	.029	
7.0	.203	.100	.028	.198	.099	.028	.188	.095	.027	.179	.092	.027	.170	.088	.026	
8.0	.189	.092	.026	.184	.091	.026	.175	.088	.025	.167	.084	.024	.159	.082	.024	
9.0	.177	.085	.024	.172	.084	.024	.164	.081	.023	.156	.078	.022	.149	.076	.022	
10.0	.165	.079	.022	.162	.078	.022	.154	.075	.021	.147	.073	.021	.140	.071	.020	

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	.258	.258	.258	.220	.220	.220	.150	.150	.150	.086	.086	.086	.028	.028	.028	
1.0	.251	.224	.199	.215	.192	.171	.147	.132	.118	.085	.076	.069	.027	.025	.022	
2.0	.244	.200	.163	.209	.172	.141	.143	.119	.099	.083	.069	.058	.027	.022	.019	
3.0	.236	.183	.141	.203	.158	.122	.139	.110	.086	.080	.064	.050	.026	.021	.017	
4.0	.229	.170	.126	.196	.147	.109	.135	.103	.077	.078	.060	.046	.025	.020	.015	
5.0	.221	.160	.115	.190	.139	.100	.131	.097	.071	.076	.057	.042	.024	.019	.014	
6.0	.214	.152	.108	.184	.132	.094	.127	.092	.066	.074	.054	.040	.024	.018	.013	
7.0	.207	.145	.102	.178	.126	.089	.123	.088	.063	.071	.052	.038	.023	.017	.012	
8.0	.200	.140	.098	.172	.121	.086	.119	.085	.061	.069	.050	.036	.022	.016	.012	
9.0	.194	.135	.095	.167	.117	.083	.116	.082	.059	.067	.049	.035	.022	.016	.012	
10.0	.188	.131	.092	.162	.113	.081	.113	.080	.057	.066	.047	.034	.021	.016	.011	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		

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) $k(RI) \times RCR = 5$									
$k = 0.60$	52	40	33	51	40	33	50	39	32	26
0.80	62	49	42	60	49	41	58	48	41	33
1.00	70	58	50	68	57	49	65	58	49	40
1.25	77	65	57	75	64	57	71	62	55	47
1.50	82	71	63	80	70	62	76	67	61	51
2.00	89	79	72	87	78	71	82	74	69	59
2.50	93	84	77	91	82	76	86	79	73	63
3.00	97	89	82	94	87	81	89	83	78	67
4.00	101	95	89	98	92	87	92	87	83	71
5.00	104	98	93	101	96	91	95	91	87	75
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

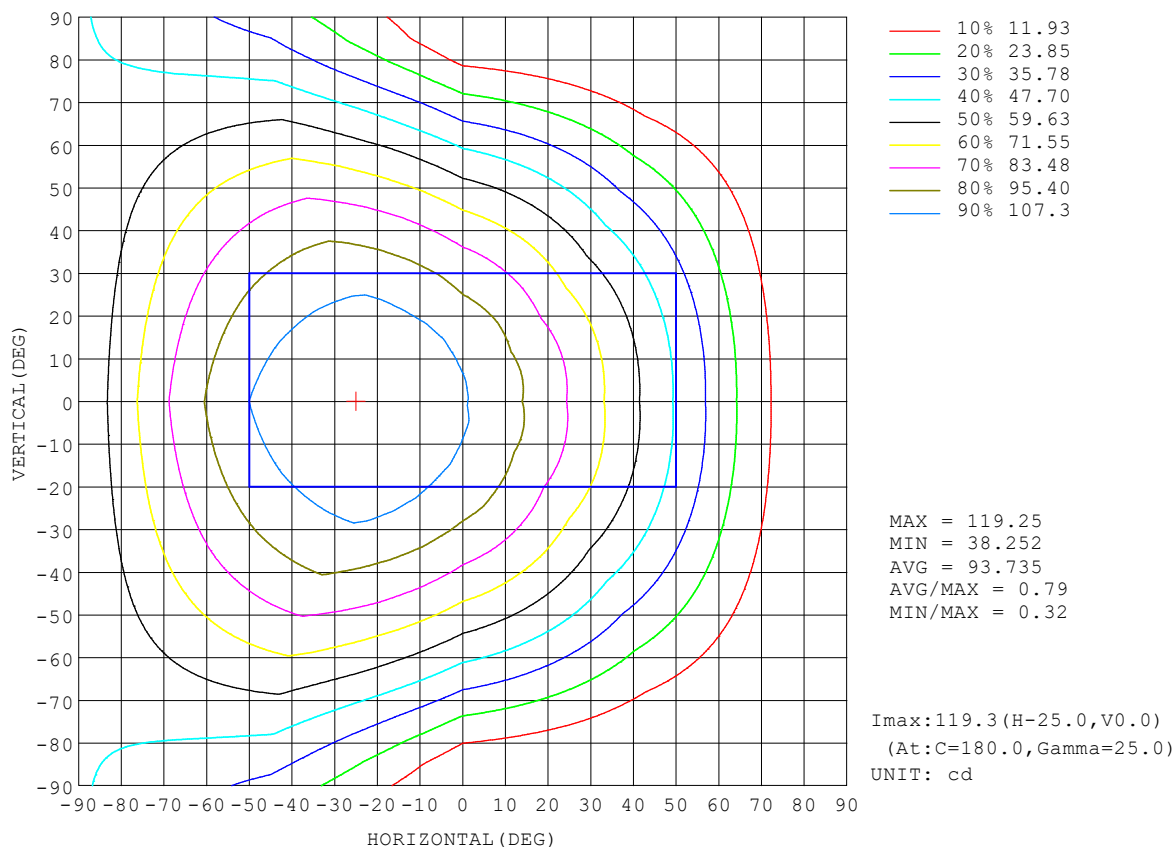
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: DAMIN
 Test Date: 2025-07-29

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
 Humidity: 65.0%
 Test Distance: 26.000m [K=1.2600]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		



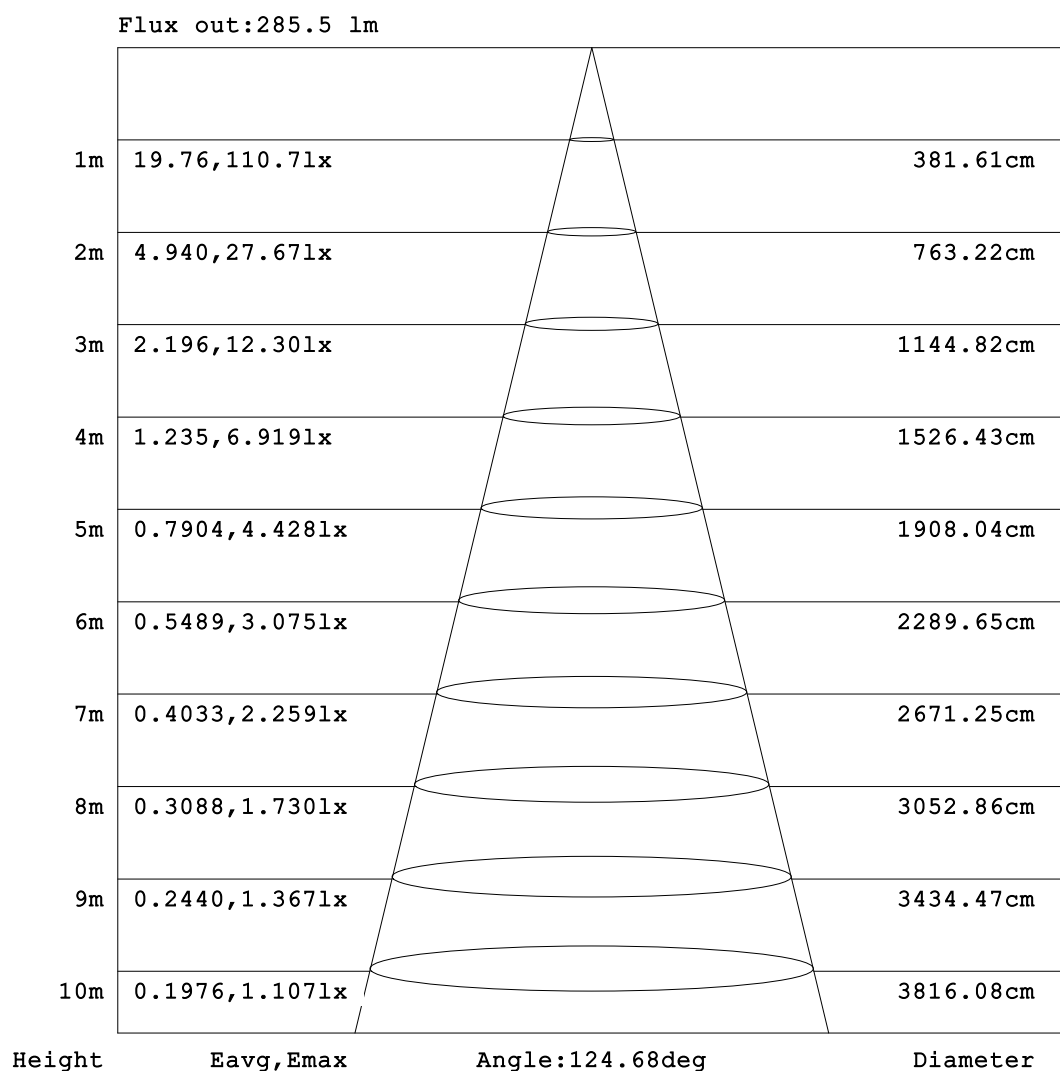
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		



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

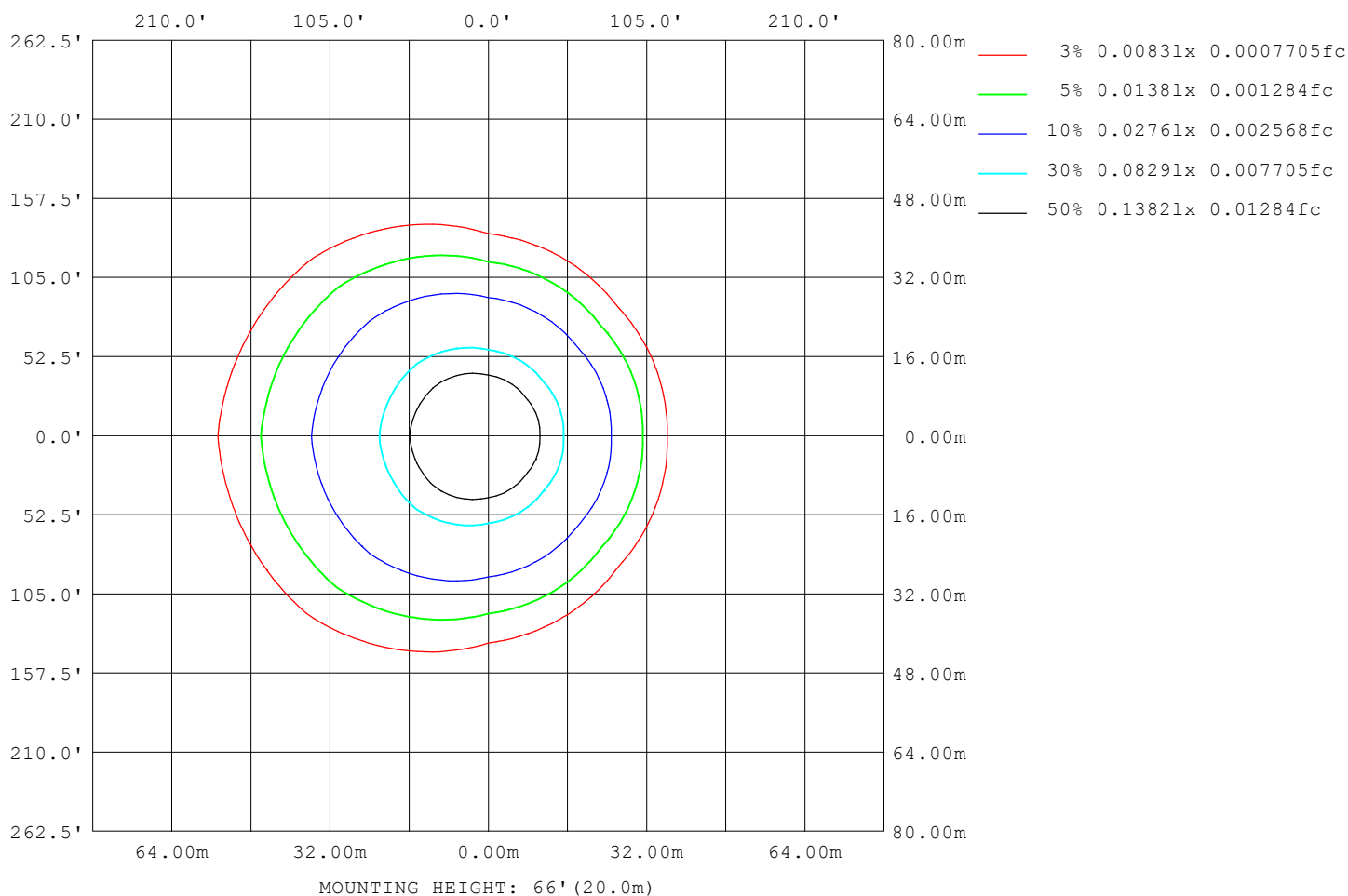
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2025-07-29

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
 Humidity:65.0%
 Test Distance:26.000m [K=1.2600]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:DAMIN
 Test Date:2025-07-29

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
 Humidity:65.0%
 Test Distance:26.000m [K=1.2600]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		

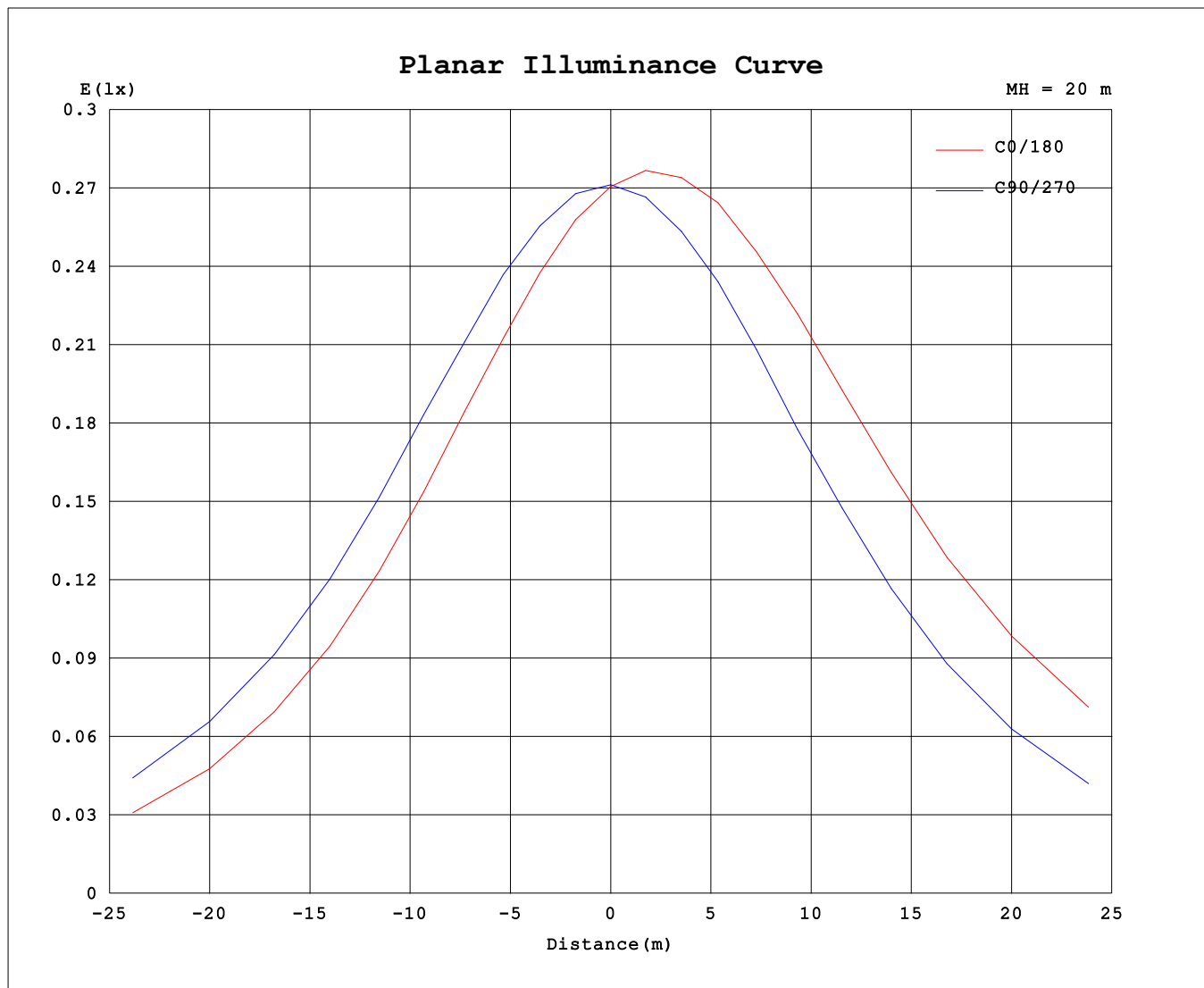
AvgL	cd/m2
L_0~180 (65) av	703
L_0~180 (75) av	841
L_0~180 (85) av	1731
L_90~270 (65) av	487
L_90~270 (75) av	404
L_90~270 (85) av	196
L_45 (65) av	625
L_45 (75) av	688
L_45 (85) av	1216

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: DAMIN
 Test Date: 2025-07-29

γ Range: 0 - 180DEG
 γ Interval: 5.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.464
 Humidity: 65.0%
 Test Distance: 26.000m [K=1.2600]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.99V I:0.0453A P:4.9492W PF:0.9104 Freq:60.01Hz		
Lamp Flux:397.069x1 lm		
NAME: 8974WH-5CCT		
MFR.: Royal Pacific Ltd.		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	108	108	108	108	108	108	108	108										
5	104	106	108	111	112	111	108	105										
10	99.6	102	107	113	115	112	106	101										
15	94.4	97.7	105	114	117	113	104	96.4										
20	89.1	92.6	102	114	118	113	100	91.2										
25	82.7	86.8	98.4	113	119	112	95.3	85.2										
30	76.1	80.4	93.2	112	119	109	90.8	78.7										
35	69.0	73.9	87.5	109	117	107	84.8	71.9										
40	61.9	66.5	81.2	105	115	103	78.1	64.8										
45	54.1	58.9	74.3	101	112	98.2	71.1	57.3										
50	46.6	51.0	66.6	95.8	108	92.8	63.2	49.4										
55	38.8	42.8	58.5	89.5	102	86.5	54.8	41.5										
60	30.9	34.5	49.8	82.8	96.2	79.8	46.3	33.1										
65	22.5	26.2	40.6	75.6	89.4	72.2	36.8	25.0										
70	15.0	18.1	31.1	67.2	81.8	64.1	27.7	16.4										
75	8.16	10.6	21.2	58.7	73.8	55.5	18.2	9.25										
80	2.22	4.18	12.1	50.0	65.2	46.6	9.35	3.01										
85	0.00	0.00	4.26	41.5	56.8	38.2	2.16	0.00										
90	0.00	0.00	0.00	32.4	48.9	30.4	0.00	0.00										
95	0.00	0.00	0.00	0.03	0.01	0.43	0.00	0.00										
100	0.00	0.00	0.00	17.7	34.6	17.1	0.00	0.00										
105	0.00	0.00	0.00	19.3	34.9	19.4	0.00	0.00										
110	0.00	0.00	0.00	19.3	31.7	17.4	0.00	0.00										
115	0.00	0.00	0.00	18.0	28.3	15.5	0.00	0.00										
120	0.00	0.00	0.00	16.1	25.2	14.0	0.00	0.00										
125	0.00	0.00	0.00	14.0	21.9	12.9	0.00	0.00										
130	0.00	0.00	0.00	12.0	18.9	12.1	0.00	0.00										
135	0.00	0.00	0.00	10.2	16.1	11.3	0.00	0.00										
140	0.00	0.00	0.00	8.33	13.3	10.4	0.00	0.00										
145	0.00	0.00	0.00	6.57	10.6	8.91	0.00	0.00										
150	0.00	0.00	0.00	4.90	8.06	7.15	0.00	0.00										
155	0.00	0.00	0.00	0.00	5.55	5.10	0.00	0.00										
160	0.00	0.00	0.00	0.69	0.00	0.02	0.00	0.00										
165	0.00	0.00	0.00	0.30	0.38	0.38	0.00	0.00										
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-07-29

γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks: