

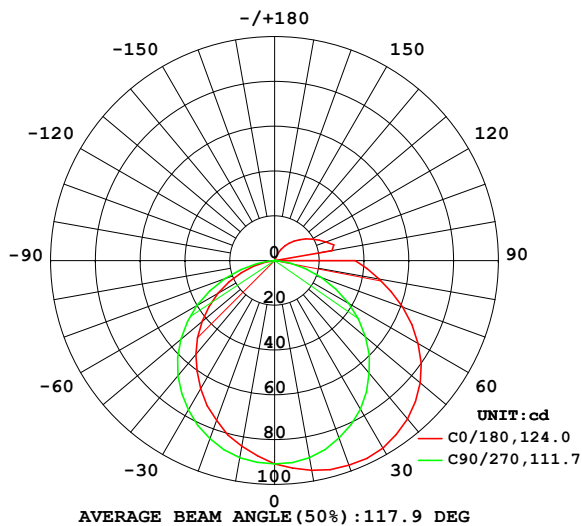
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

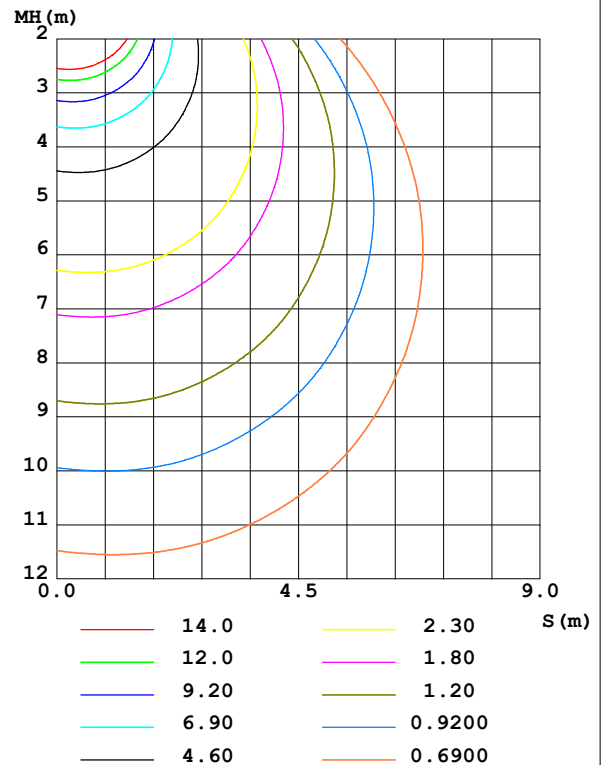
Test:U:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
MFR.: Royal Pacific Ltd.		

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 81.66 lm/W
MODEL		I _{max} (cd)	97.43	S/MH(C0/180)	1.10	
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.26	
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	320.07	η UP,DN(C0-180)	5.8,50.6	
NOMINAL FLUX(lm)	320.068	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.9,41.7	
LAMPS INSIDE	1	η up(%)	7.7	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	120	η down(%)	92.3	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	95.12	93.57	89.44	85.71	84.14	85.77	89.37	93.86	0- 10	8.611	8.611	2.69,2.69
20	97.27	93.57	84.33	78.11	75.93	78.51	84.66	93.32	10- 20	24.86	33.47	10.5,10.5
30	96.74	90.27	76.66	68.37	66.10	68.79	77.11	90.28	20- 30	38.22	71.69	22.4,22.4
40	92.37	83.70	65.76	57.14	54.75	57.20	67.16	84.44	30- 40	46.99	118.7	37.1,37.1
50	84.86	74.15	53.13	44.38	42.18	44.21	54.67	75.18	40- 50	50.13	168.8	52.7,52.7
60	74.06	61.84	38.14	30.55	29.35	30.37	40.14	63.48	50- 60	47.17	216.0	67.5,67.5
70	60.93	47.54	22.05	16.78	15.93	16.54	23.64	49.66	60- 70	38.47	254.4	79.5,79.5
80	47.43	33.25	7.221	5.165	4.268	4.680	8.328	35.36	70- 80	26.17	280.6	87.7,87.7
90	36.07	21.82	0	0	0	0	0.0004	23.72	80- 90	14.77	295.4	92.3,92.3
100	26.03	13.62	0	0	0	0	0	13.96	90-100	4.634	300.0	93.7,93.7
110	24.56	13.45	0	0	0	0	0	14.14	100-110	7.295	307.3	96,96
120	19.42	10.39	0	0	0	0	0	10.26	110-120	5.726	313.0	97.8,97.8
130	14.66	7.641	0	0	0	0	0	5.703	120-130	3.828	316.9	99,99
140	10.21	4.894	0	0	0	0	0	1.294	130-140	2.096	319.0	99.7,99.7
150	5.917	0.0022	0	0	0	0	0	0	140-150	0.9115	319.9	99.9,99.9
160	0.0255	0	0	0	0	0	0	0	150-160	0.1965	320.1	100,100
170	0	0	0	0	0	0	0	0	160-170	0.0003	320.1	100,100
180	0	0	0	0	0	0	0	0	170-180	0	320.1	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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz

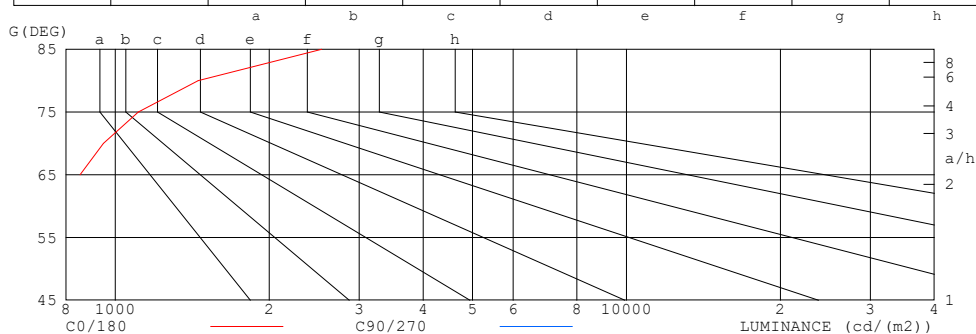
Lamp Flux:320.068x1 lm

NAME: 8973WH-5CCT_IES

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	2533	106
80	1453	221
75	1109	292
70	947	343
65	852	379
60	788	405
55	742	425
50	702	439
45	669	450

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

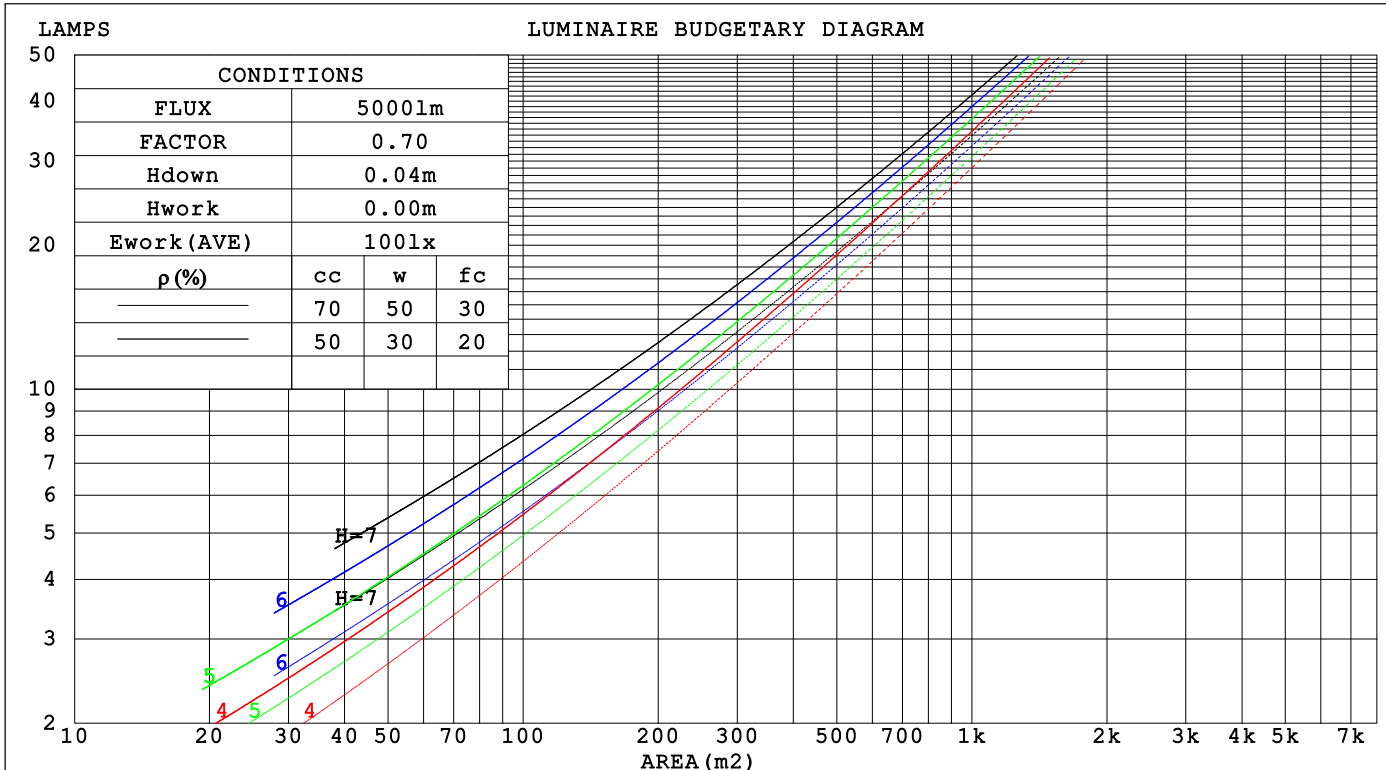
γ Range: 0 - 180DEG
γ Interval: 5.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.464
Humidity:65.0%
Test Distance:26.000m [K=1.2600]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
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															



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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz											
Lamp Flux:320.068x1 lm											
NAME: 8973WH-5CCT_IES											
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	.347	.197	.062	.337	.192	.061	.320	.183	.059	.303	.175	.056	.288	.167	.054	
2.0	.313	.171	.053	.304	.168	.052	.288	.160	.050	.273	.153	.048	.260	.147	.046	
3.0	.283	.151	.045	.276	.148	.044	.262	.142	.043	.248	.136	.042	.236	.131	.040	
4.0	.258	.134	.039	.252	.132	.039	.239	.127	.038	.227	.122	.037	.216	.117	.036	
5.0	.237	.121	.035	.231	.118	.035	.219	.114	.034	.208	.110	.033	.198	.106	.032	
6.0	.218	.109	.031	.213	.108	.031	.202	.104	.030	.193	.100	.029	.184	.097	.029	
7.0	.202	.100	.028	.197	.098	.028	.188	.095	.027	.179	.092	.027	.171	.089	.026	
8.0	.188	.092	.026	.184	.091	.026	.175	.088	.025	.167	.085	.024	.160	.082	.024	
9.0	.176	.085	.024	.172	.084	.024	.164	.081	.023	.157	.079	.022	.150	.076	.022	
10.0	.165	.079	.022	.161	.078	.022	.154	.076	.021	.147	.073	.021	.141	.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	.249	.249	.249	.213	.213	.213	.145	.145	.145	.084	.084	.084	.027	.027	.027	
1.0	.242	.215	.191	.207	.185	.164	.142	.127	.113	.082	.073	.066	.026	.024	.021	
2.0	.235	.191	.155	.201	.165	.134	.138	.114	.094	.079	.066	.055	.025	.021	.018	
3.0	.227	.174	.132	.195	.150	.115	.134	.104	.080	.077	.061	.047	.025	.020	.016	
4.0	.219	.161	.117	.188	.139	.102	.129	.097	.072	.075	.057	.042	.024	.019	.014	
5.0	.212	.151	.107	.182	.131	.093	.125	.091	.066	.073	.054	.039	.023	.018	.013	
6.0	.204	.143	.099	.176	.124	.086	.121	.087	.061	.070	.051	.036	.023	.017	.012	
7.0	.198	.136	.093	.170	.118	.081	.117	.083	.058	.068	.049	.034	.022	.016	.011	
8.0	.191	.131	.089	.164	.113	.078	.114	.080	.055	.066	.047	.033	.021	.015	.011	
9.0	.185	.126	.086	.159	.109	.075	.110	.077	.053	.064	.045	.032	.021	.015	.011	
10.0	.179	.122	.083	.154	.106	.073	.107	.074	.052	.062	.044	.031	.020	.014	.010	

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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
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) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	52	41	34	51	40	33	27
0.80	63	50	43	61	50	42	59	49	42	34
1.00	71	59	51	69	58	51	66	59	50	42
1.25	78	66	59	76	65	58	73	63	57	48
1.50	83	72	64	81	71	64	77	68	62	53
2.00	90	80	73	88	79	72	83	76	70	60
2.50	94	85	78	92	84	77	87	80	75	64
3.00	98	90	83	95	88	82	90	84	79	68
4.00	102	95	90	99	93	88	93	89	84	73
5.00	105	99	94	102	96	92	96	92	88	76
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

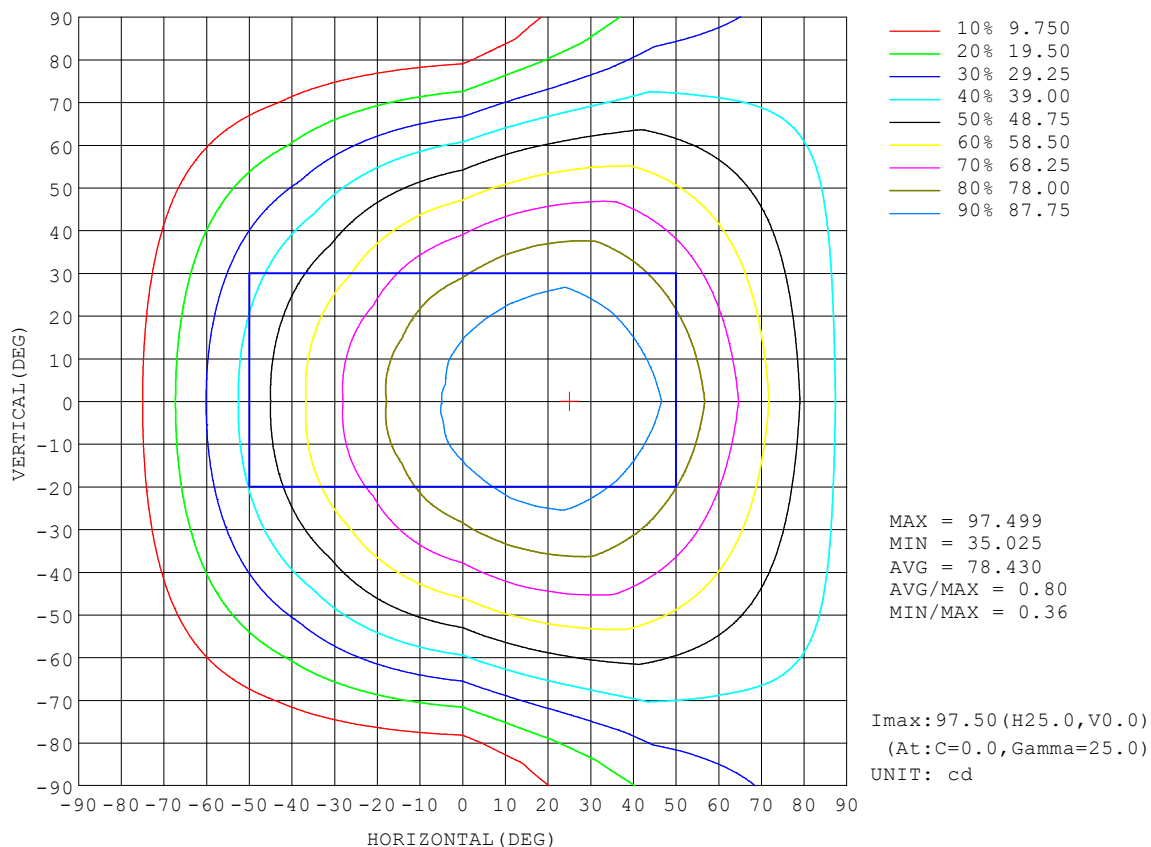
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3 °C
 Operators: DAMIN
 Test Date: 2025-07-29

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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
MFR.: Royal Pacific Ltd.		



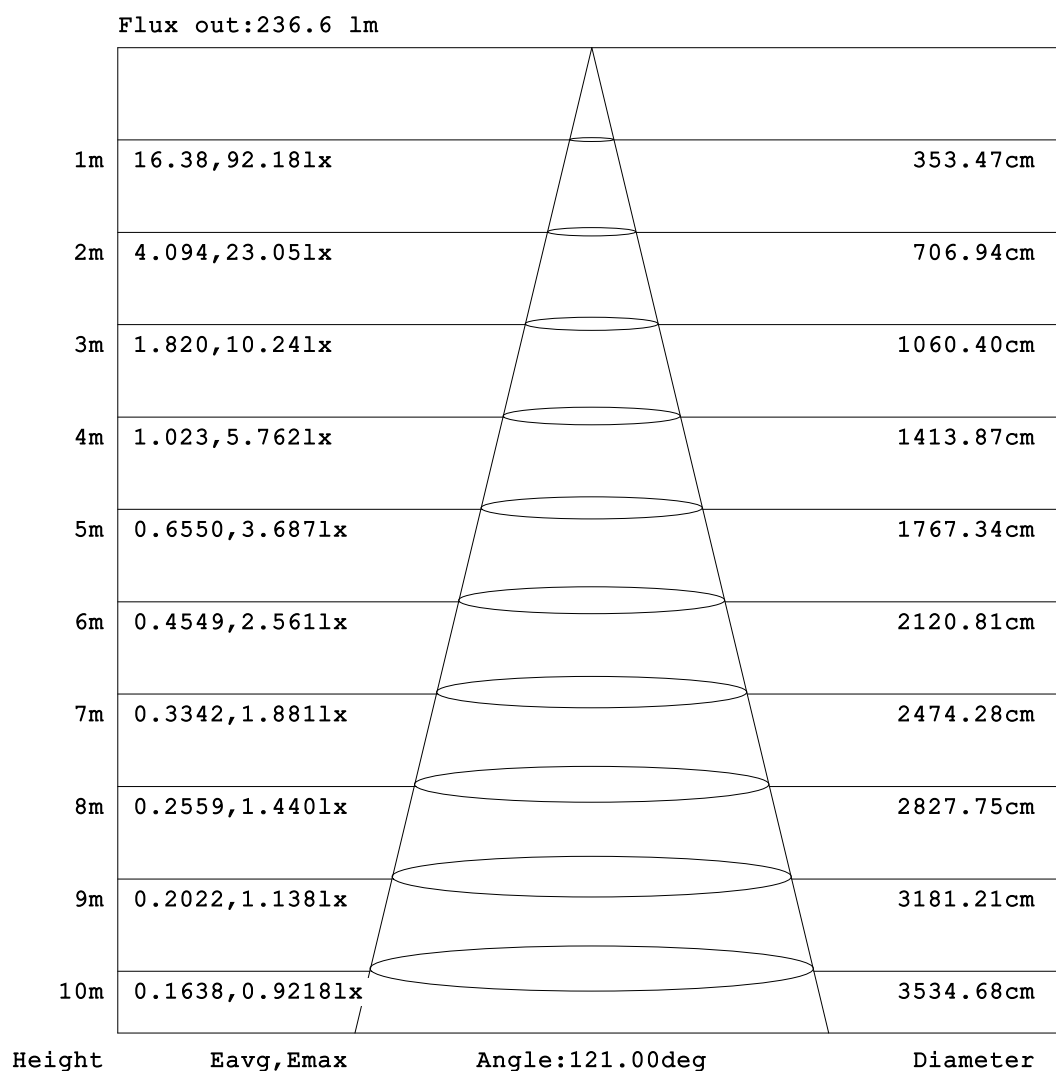
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-07-29

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

AAI Figure

Test:U:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
MFR.: Royal Pacific Ltd.		



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

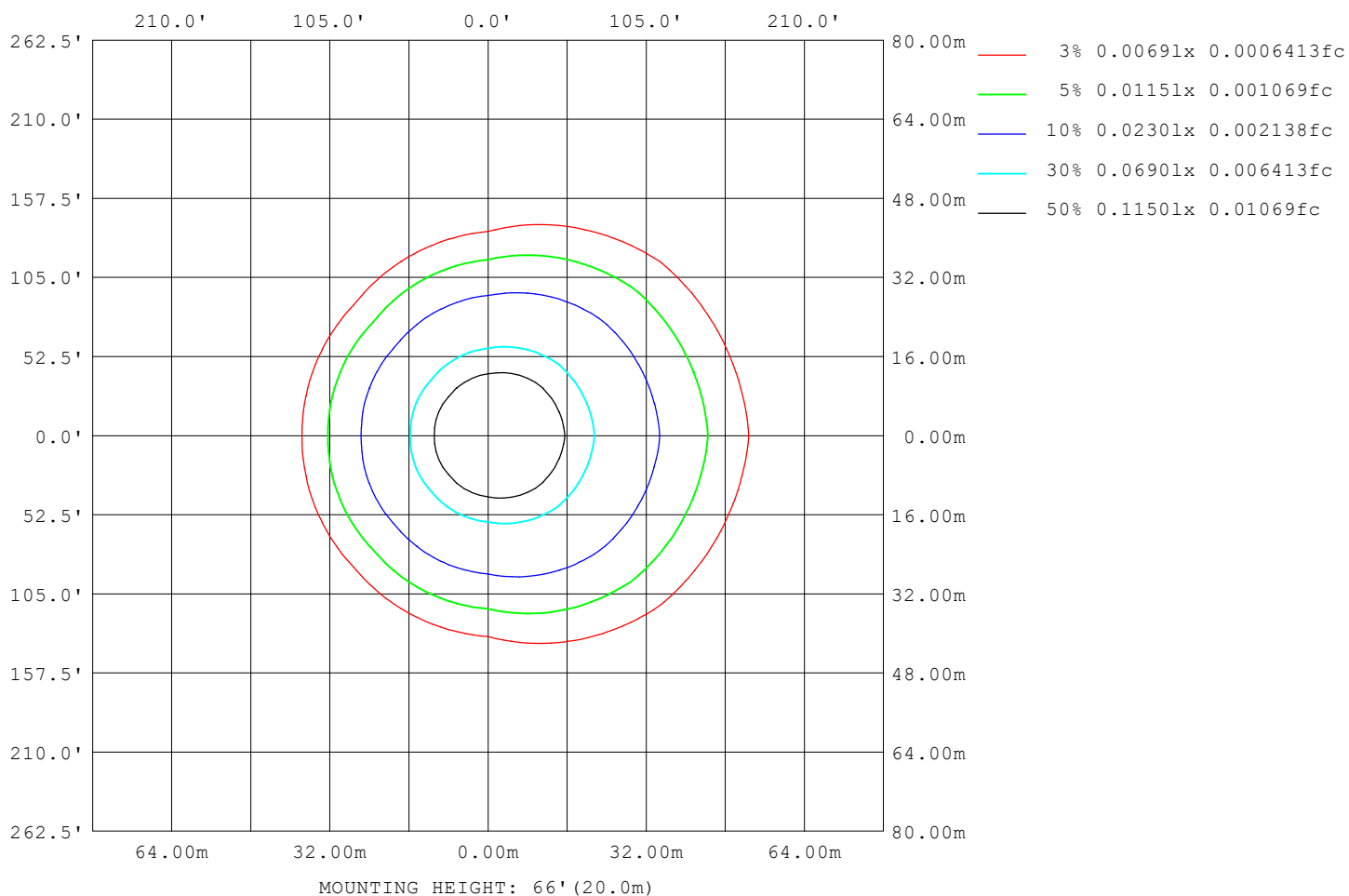
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:DAMIN
 Test Date:2025-07-29

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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
MFR.: Royal Pacific Ltd.		

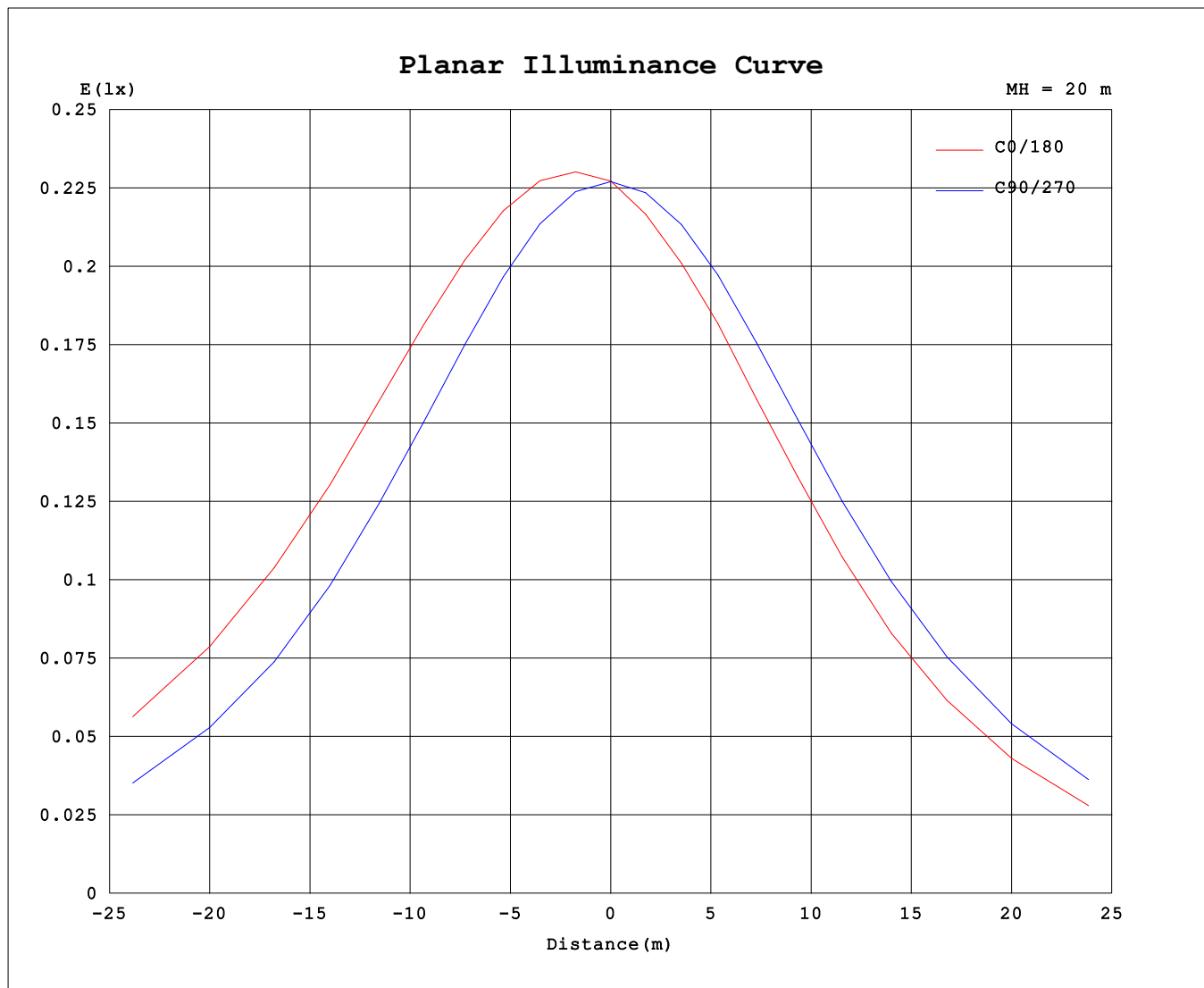
AvgL	cd/m2
L_0~180 (65) av	567
L_0~180 (75) av	654
L_0~180 (85) av	1266
L_90~270 (65) av	390
L_90~270 (75) av	306
L_90~270 (85) av	121
L_45 (65) av	498
L_45 (75) av	531
L_45 (85) av	878

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
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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:119.86V I:0.0375A P:3.9196W PF:0.8713 Freq:60.01Hz		
Lamp Flux:320.068x1 lm		
NAME: 8973WH-5CCT_IES		
MFR.: Royal Pacific Ltd.		

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315										
0	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8										
5	93.0	92.5	90.6	88.4	87.6	88.3	90.4	93.1										
10	95.1	93.6	89.4	85.7	84.1	85.8	89.4	93.9										
15	96.6	93.9	87.3	82.3	80.6	82.3	87.5	93.9										
20	97.3	93.6	84.3	78.1	75.9	78.5	84.7	93.3										
25	97.4	92.6	80.8	73.8	71.4	73.9	81.3	92.2										
30	96.7	90.3	76.7	68.4	66.1	68.8	77.1	90.3										
35	94.8	87.4	71.5	62.9	60.4	63.2	72.5	87.9										
40	92.4	83.7	65.8	57.1	54.7	57.2	67.2	84.4										
45	89.0	79.3	59.9	50.8	48.7	50.9	61.2	80.1										
50	84.9	74.2	53.1	44.4	42.2	44.2	54.7	75.2										
55	80.0	68.4	45.8	37.5	35.9	37.4	47.5	69.8										
60	74.1	61.8	38.1	30.5	29.4	30.4	40.1	63.5										
65	67.7	54.9	30.1	23.5	22.5	23.3	31.9	56.8										
70	60.9	47.5	22.1	16.8	15.9	16.5	23.6	49.7										
75	54.0	40.3	14.2	10.6	9.72	10.3	15.6	42.3										
80	47.4	33.3	7.22	5.16	4.27	4.68	8.33	35.4										
85	41.5	27.2	1.73	0.83	0.00	0.32	2.22	29.3										
90	36.1	21.8	0.00	0.00	0.00	0.00	0.00	23.7										
95	0.23	0.01	0.00	0.00	0.00	0.00	0.00	0.04										
100	26.0	13.6	0.00	0.00	0.00	0.00	0.00	14.0										
105	27.4	14.7	0.00	0.00	0.00	0.00	0.00	15.4										
110	24.6	13.5	0.00	0.00	0.00	0.00	0.00	14.1										
115	22.0	11.8	0.00	0.00	0.00	0.00	0.00	12.2										
120	19.4	10.4	0.00	0.00	0.00	0.00	0.00	10.3										
125	17.0	8.95	0.00	0.00	0.00	0.00	0.00	8.06										
130	14.7	7.64	0.00	0.00	0.00	0.00	0.00	5.70										
135	12.4	6.27	0.00	0.00	0.00	0.00	0.00	2.13										
140	10.2	4.89	0.00	0.00	0.00	0.00	0.00	1.29										
145	8.14	3.59	0.00	0.00	0.00	0.00	0.00	0.00										
150	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
155	3.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
160	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
165	0.00	0.00	0.00	0.00	0.00	0.00	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: