

# LUMINAIRE PHOTOMETRIC TEST REPORT

## Luminaire Property

Manufacturer: 0  
Luminaire Type: 220V-2835-99L-5000K  
Lamp Type:  
Luminous Width: 0 mm  
Luminous Length: 0 mm  
Luminous Height: 0 mm

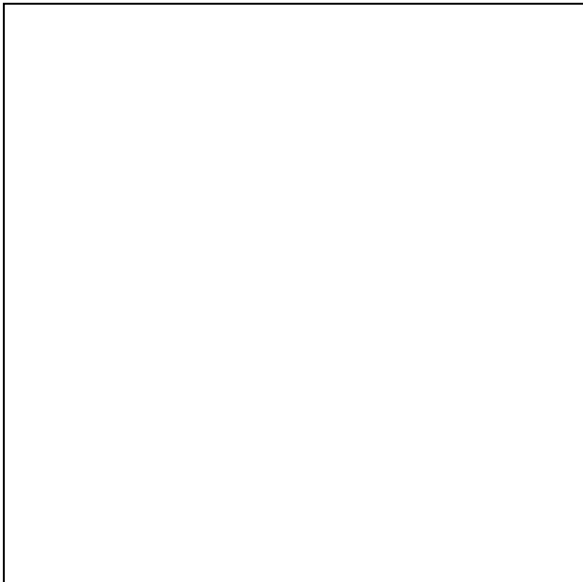
Voltage(V): 219.66 V  
Current(A): 0.0340 A  
Power(W): 7.06 W  
Power Factor: 0.9260  
Lamp Luminous Flux: 690.00

## Photometric Results

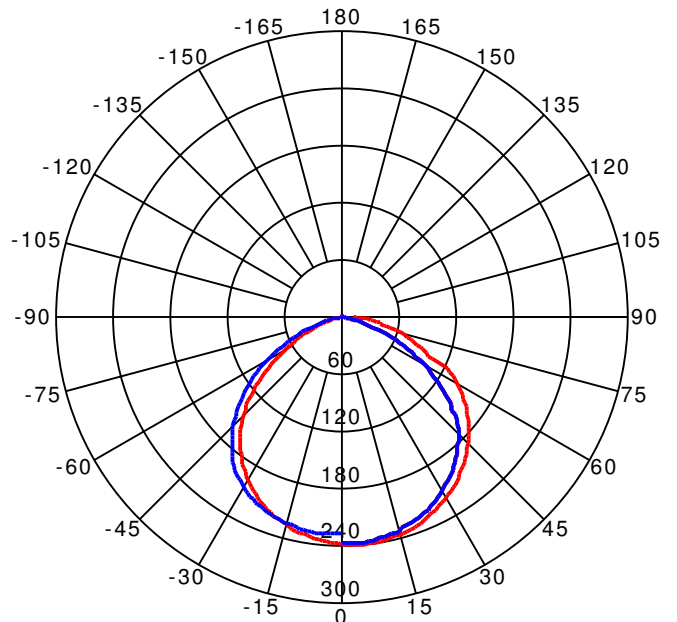
CIE Class: Direct  
Luminaire Luminous Flux: 690.0025  
Downward Ratio: 100.00%  
Luminaire Efficacy Rating(LER): 97.73 lm/W  
Beam Angle(50%) C0-180,C90-270: 114.3,110.3  
Field Angle(10%) C0-180,C90-270: 155.4,147.5

Max. Intensity: 239.96 cd  
Max.Intensity Angle: C=0 Gamma=6  
Upward Ratio: 0.00%  
Efficacy: 100.00%  
Center Intensity: 239.27 cd

Picture of Luminaire



Luminous Intensity Distribution Curve



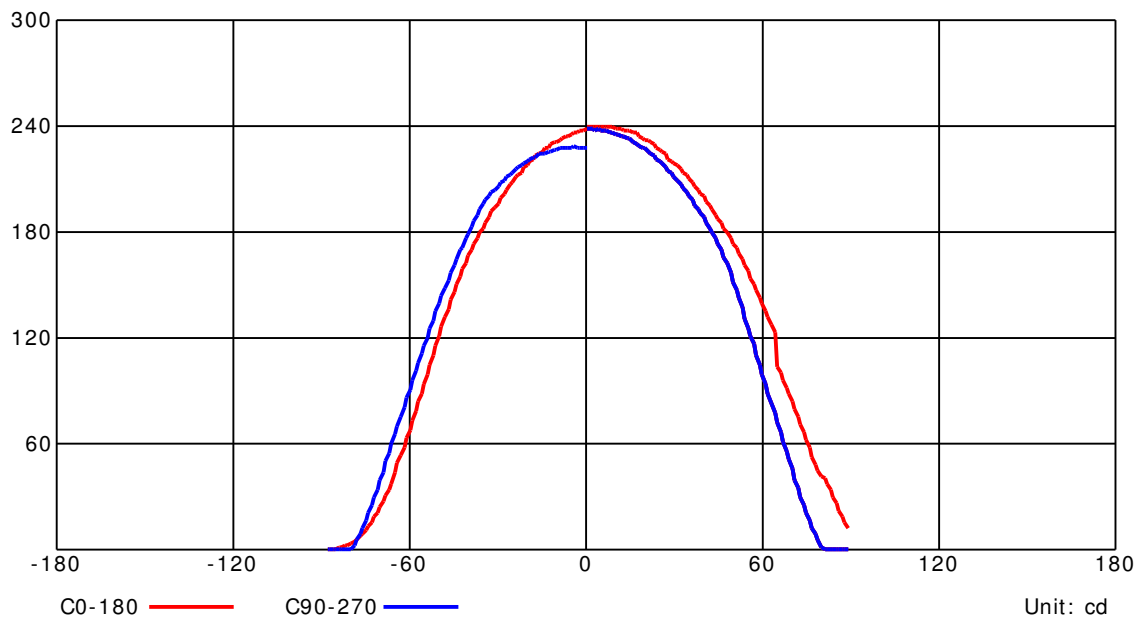
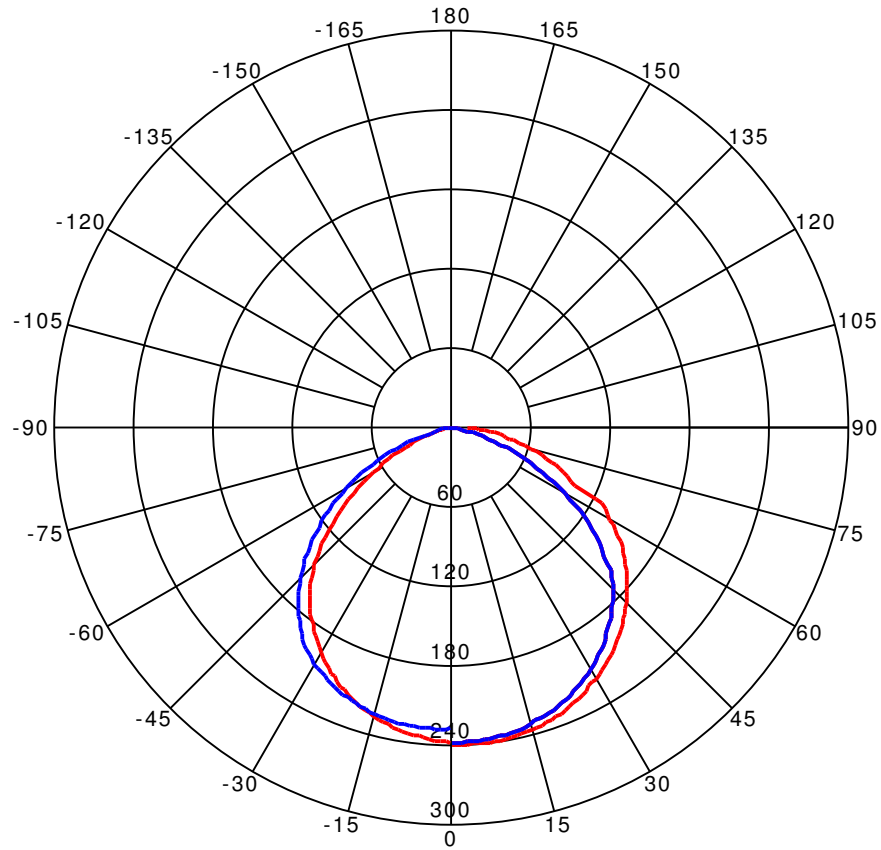
Beam Angle(50%) C0-180,C90-270: 110.3 deg

C0-180 ——— C90-270 ———

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

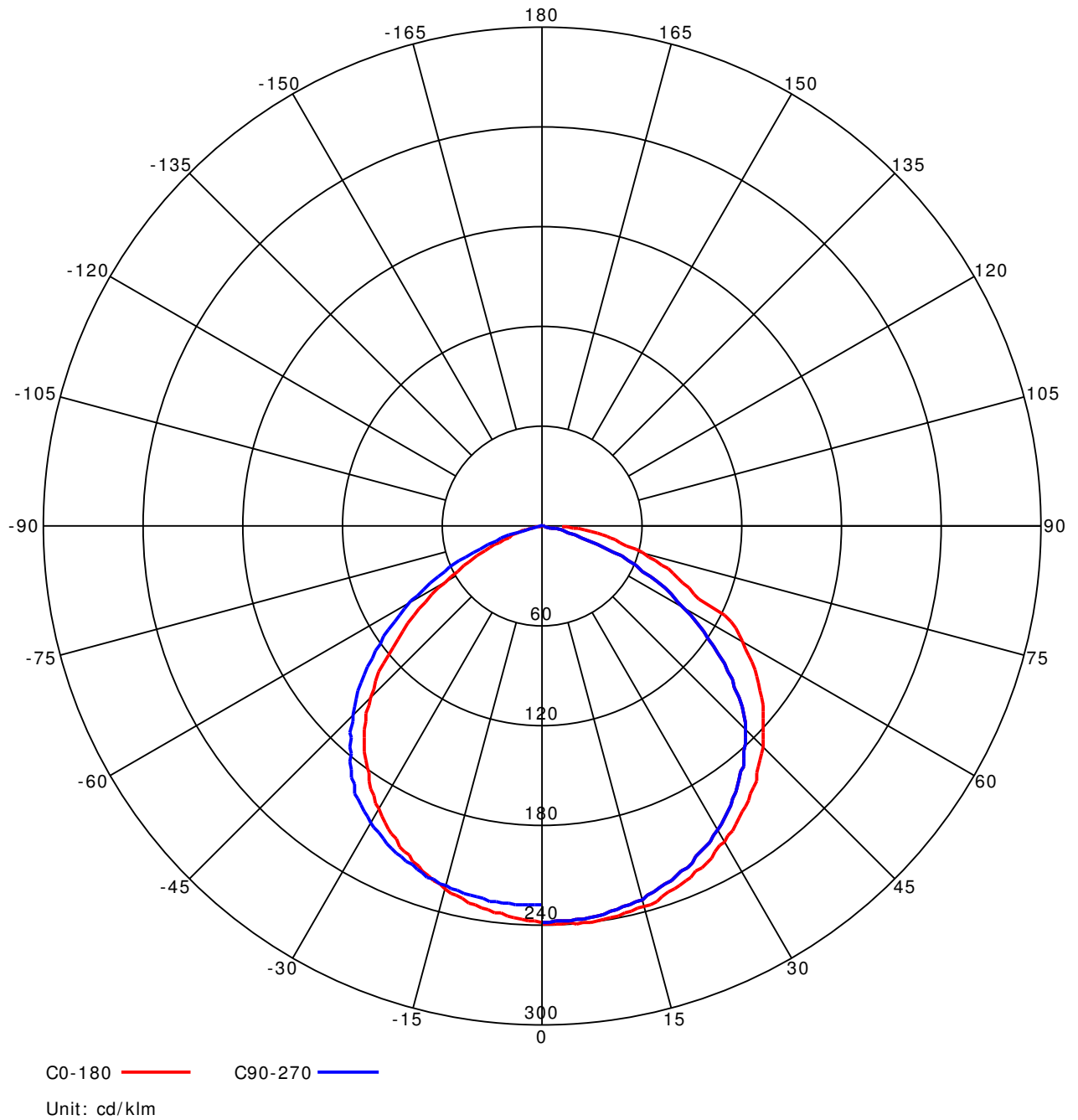
## Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

## Luminous Intensity Distribution Curve



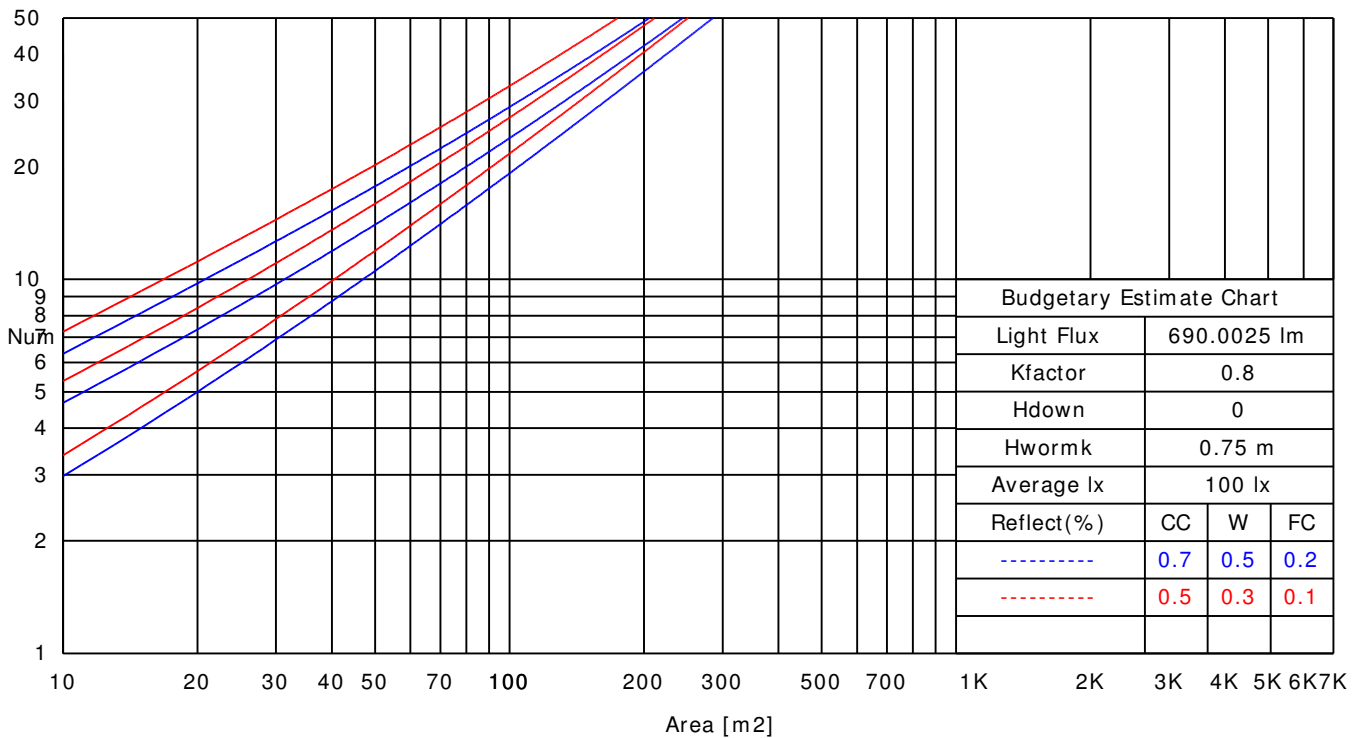
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

## UTILIZATION FACTORS TABLE

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
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	1.07	1.05	1.04	1.06	1.04	1.02	1.02	1.00	0.98	0.97	0.95	0.93	0.90	0.88	0.86	0.81
2	0.95	0.93	0.92	0.94	0.92	0.90	0.91	0.88	0.86	0.88	0.84	0.82	0.83	0.79	0.76	0.71
3	0.85	0.83	0.81	0.84	0.81	0.79	0.82	0.79	0.76	0.80	0.75	0.72	0.76	0.71	0.68	0.63
4	0.76	0.74	0.72	0.76	0.73	0.71	0.75	0.71	0.68	0.73	0.68	0.64	0.70	0.65	0.60	0.56
5	0.69	0.66	0.65	0.69	0.66	0.63	0.68	0.64	0.61	0.67	0.62	0.58	0.64	0.59	0.54	0.51
6	0.62	0.60	0.59	0.63	0.60	0.57	0.62	0.58	0.55	0.61	0.56	0.52	0.60	0.54	0.49	0.46
7	0.57	0.55	0.54	0.57	0.54	0.52	0.57	0.53	0.50	0.57	0.52	0.48	0.56	0.50	0.45	0.42
8	0.53	0.50	0.49	0.53	0.50	0.48	0.53	0.49	0.46	0.53	0.48	0.44	0.52	0.46	0.42	0.38
9	0.49	0.47	0.45	0.49	0.46	0.44	0.50	0.45	0.43	0.49	0.44	0.41	0.49	0.43	0.38	0.35
10	0.45	0.43	0.42	0.46	0.43	0.41	0.46	0.42	0.39	0.46	0.41	0.38	0.46	0.40	0.36	0.33

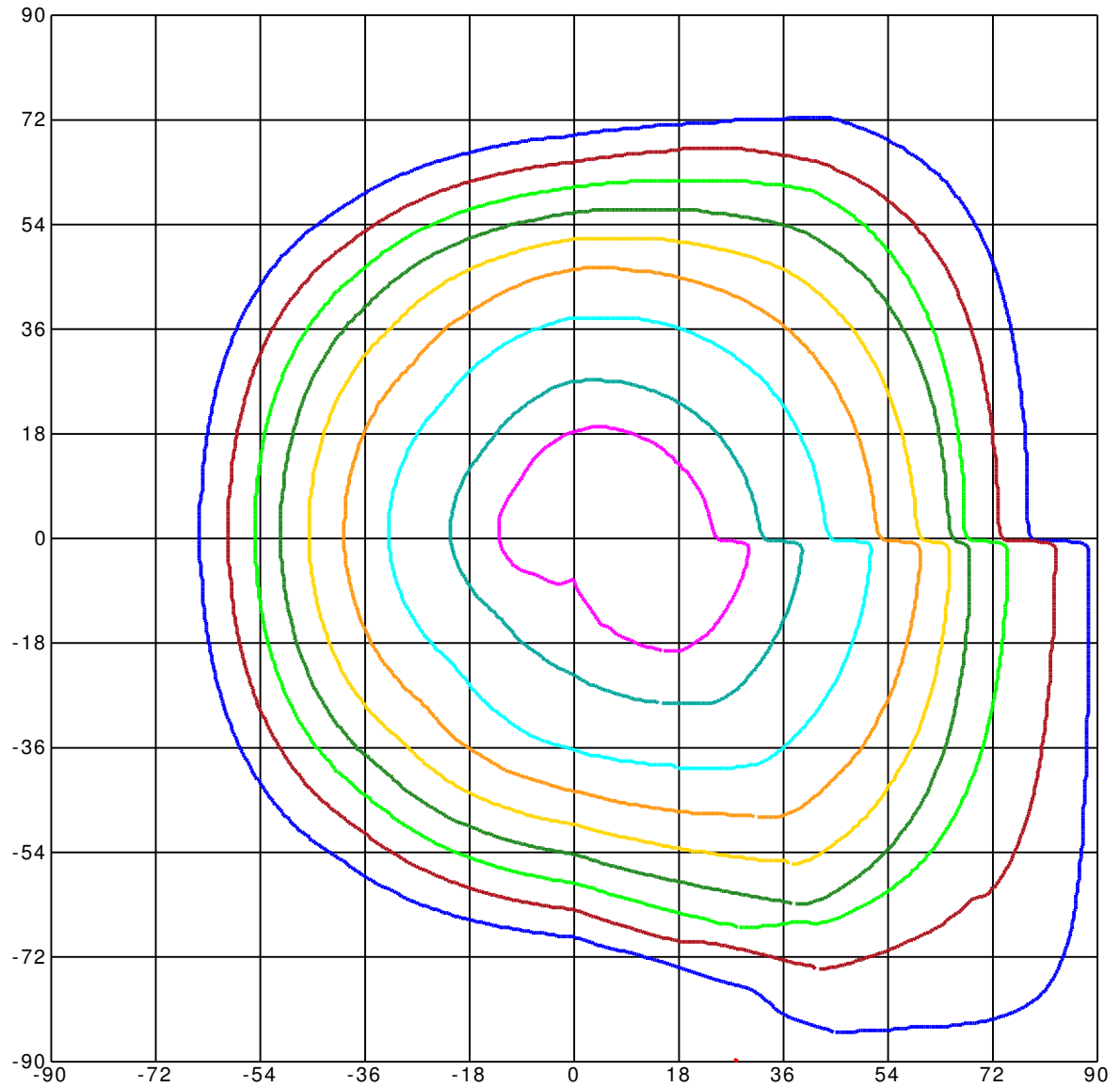
## LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd     $I_{max}(100\%)$ : 239.959 cd

— 227.961(95%  $I_{max}$ )

— 215.963(90%  $I_{max}$ )

— 191.967(80%  $I_{max}$ )

— 167.971(70%  $I_{max}$ )

— 143.976(60%  $I_{max}$ )

— 119.98(50%  $I_{max}$ )

— 95.984(40%  $I_{max}$ )

— 71.988(30%  $I_{max}$ )

— 47.992(20%  $I_{max}$ )

— 23.996(10%  $I_{max}$ )

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

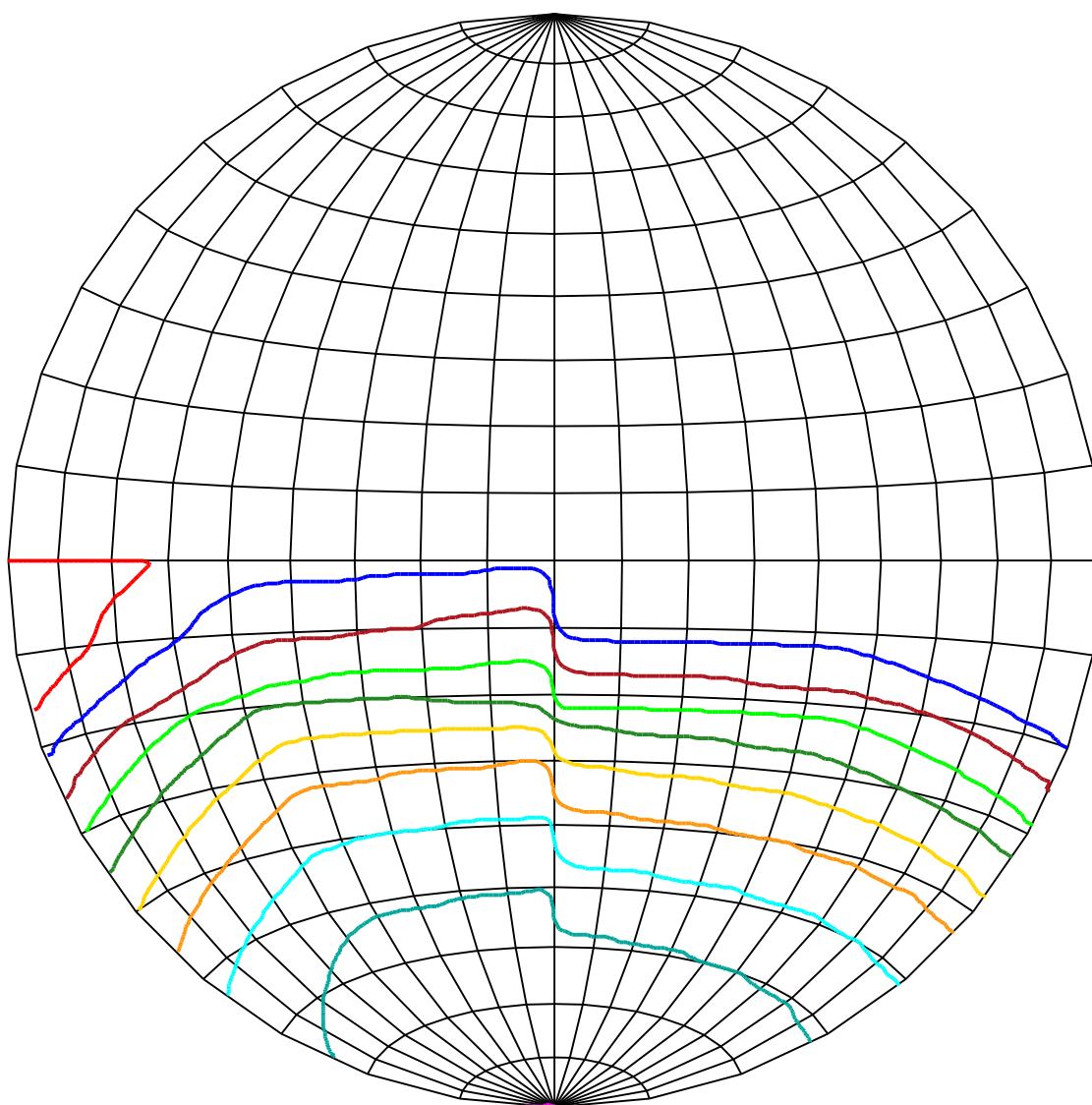
Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.35 m

Remarks:

## ISOCANDELA DIAGRAM ( SPHERE)



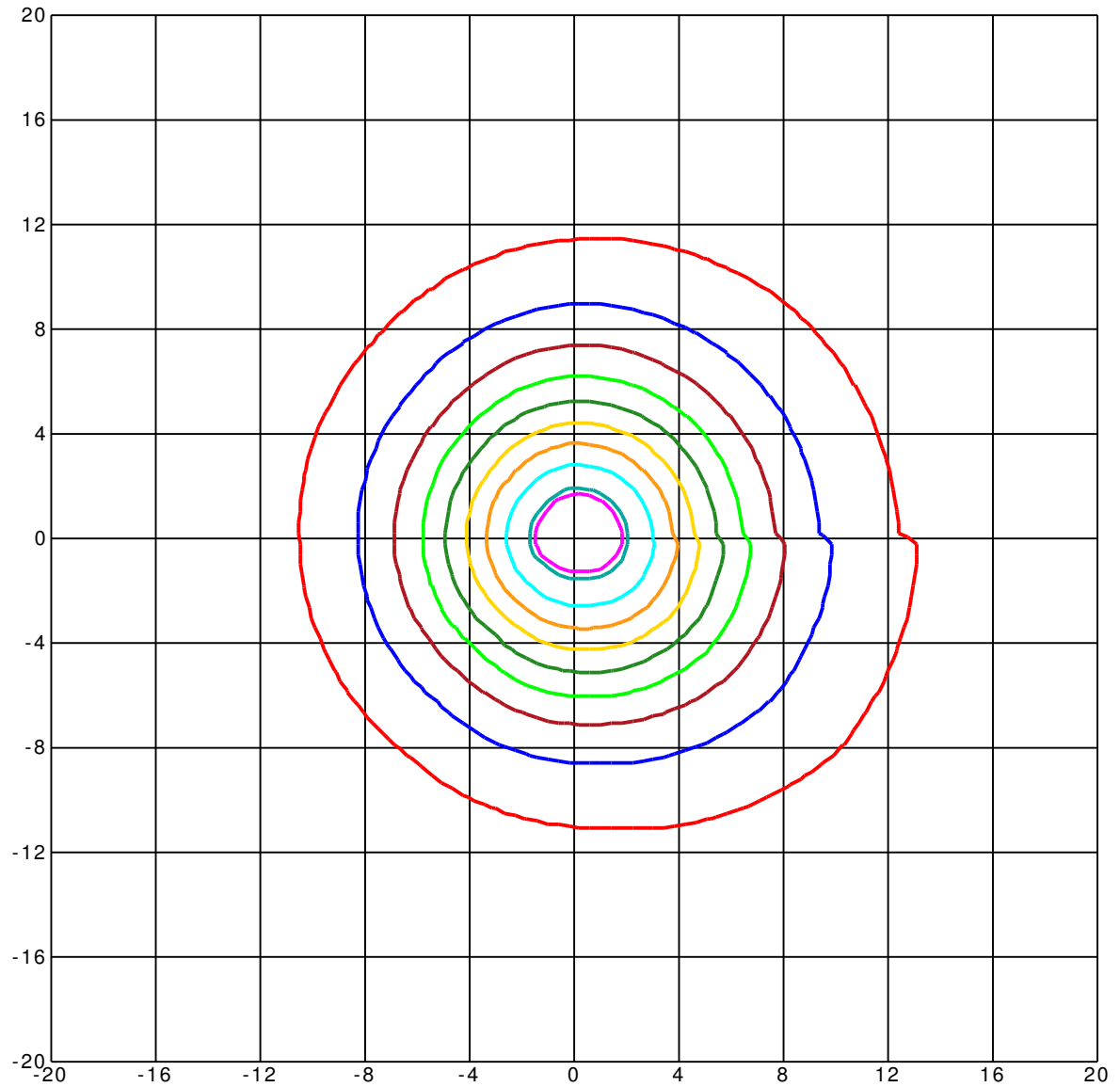
Unit of intensity:cd      Imax(100%): 239.959 cd

227.961(95%Imax)	119.98(50%Imax)
215.963(90%Imax)	95.984(40%Imax)
191.967(80%Imax)	71.988(30%Imax)
167.971(70%Imax)	47.992(20%Imax)
143.976(60%Imax)	23.996(10%Imax)

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

# ISOLX DIAGRAM



Unit of illumination:lx

Height of plane:8.0(m)/26.25(ft)

3.441(1% Emax)

3.366(1% Emax)

2.992(1% Emax)

2.618(1% Emax)

2.244(1% Emax)

1.87(1% Emax)

1.496(1% Emax)

1.122(0% Emax)

0.748(0% Emax)

0.374(0% Emax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

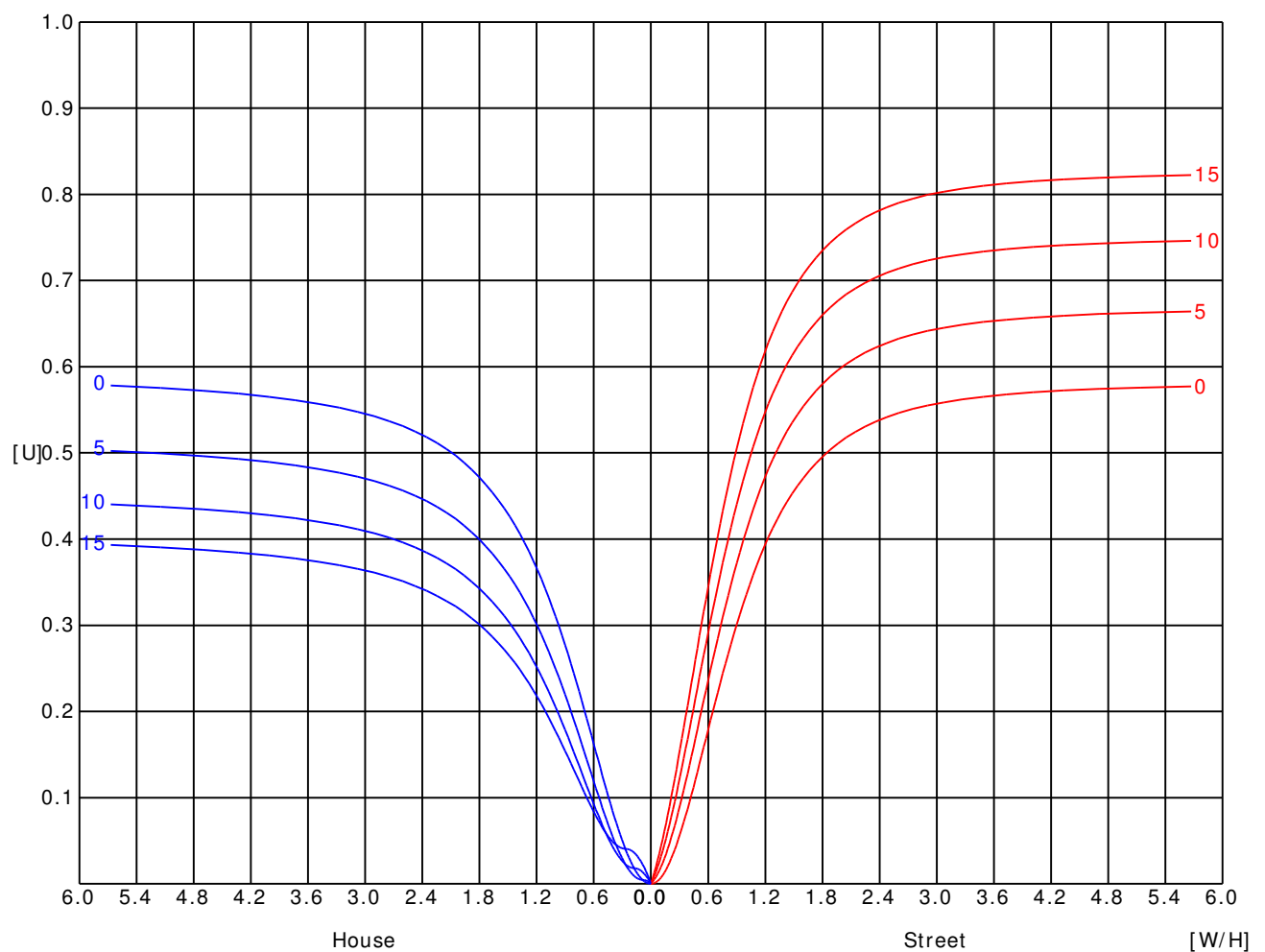
Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.35 m

Remarks:

## UTILIZATION FACTOR DIAGRAM (ROAD)

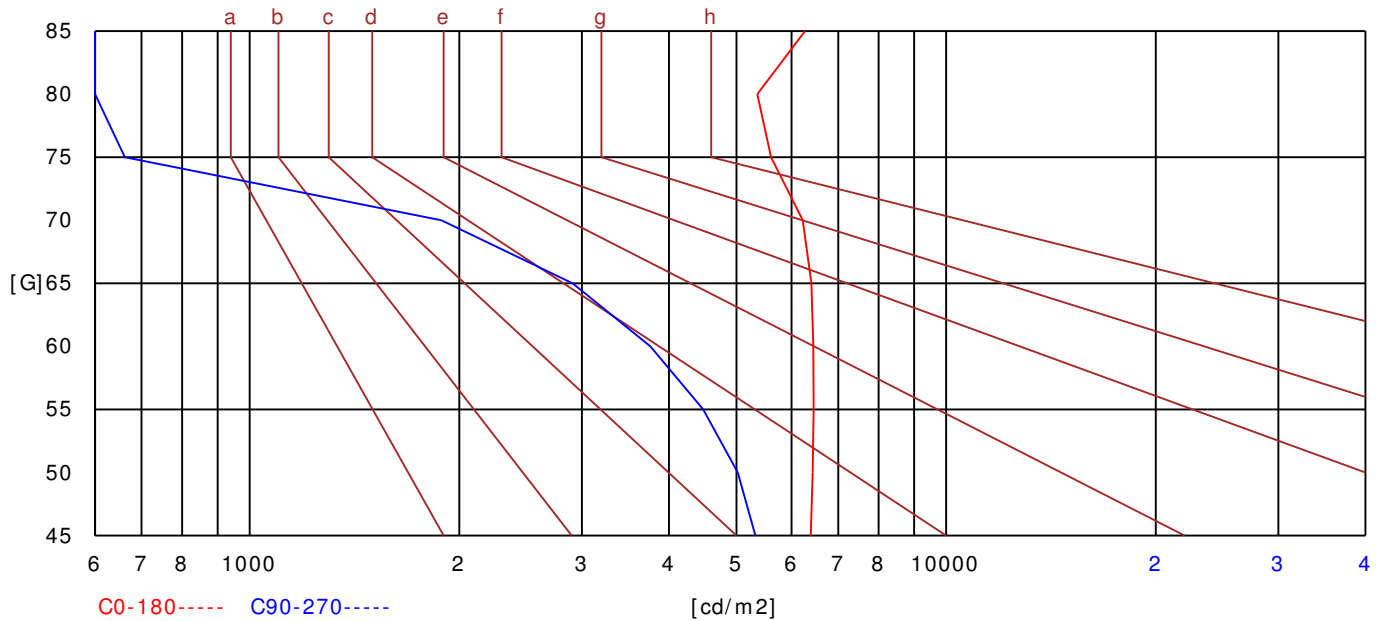


C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## B R I G H T L I M I T D I A G R A M

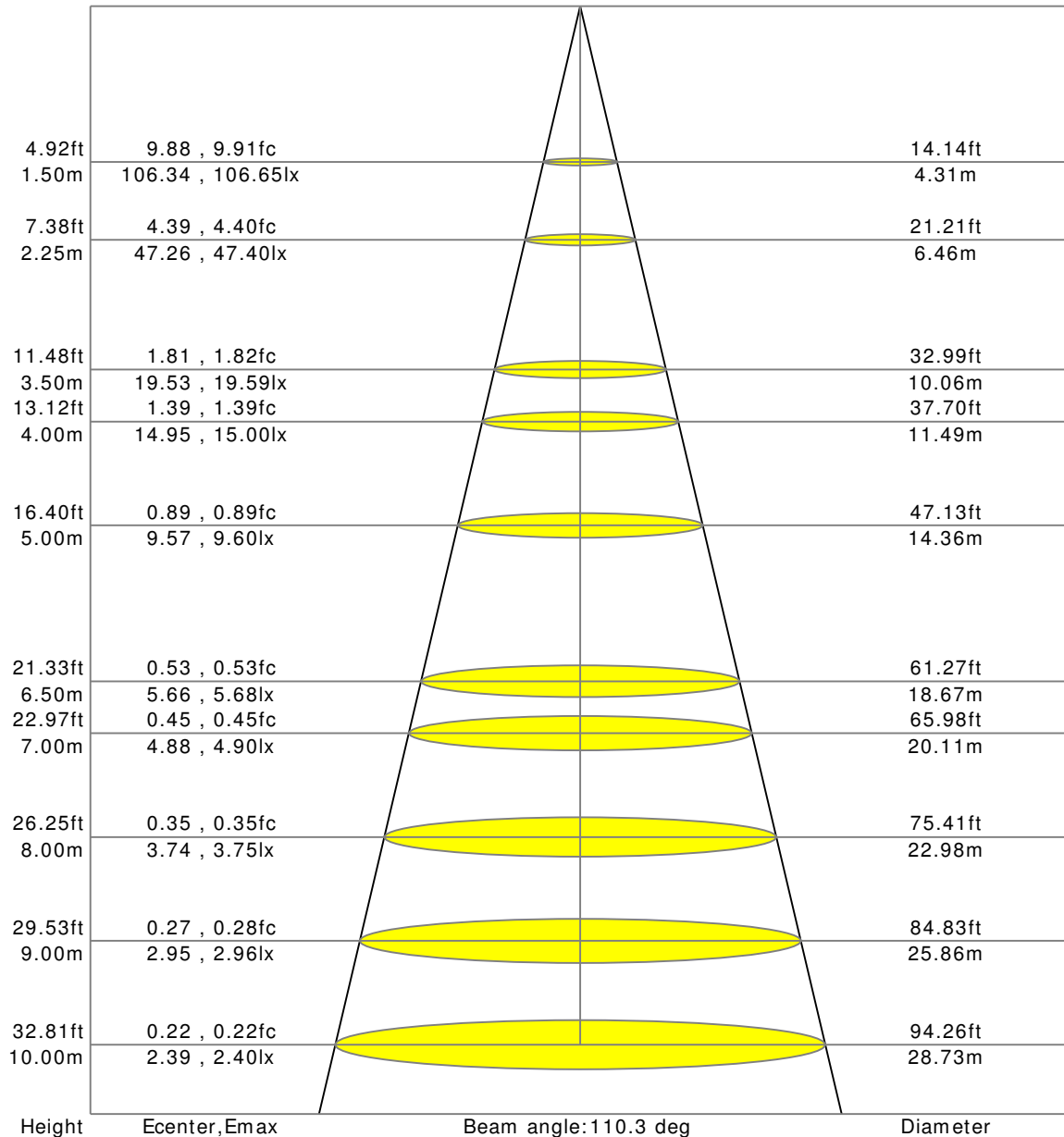
C/G	45	50	55	60	65	70	75	80	85
C0	6394	6436	6457	6444	6404	6228	5605	5358	6269
C90	5323	5022	4478	3764	2910	1886	662	17	0
Dazzle	Quality	Illuminance	---	---	---	---	---	---	---
1.15	A	2000	1000	500	<= 300				
1.5	B		2000	1000	500	<= 300			
1.85	C			2000	1000	500	<= 300		
2.2	D				2000	1000	500	<= 300	
2.55	E					2000	1000	500	<= 300
---	---	a	b	c	d	e	f	g	h



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## LX-DI STANCE DI AGRAM



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## UGR(Unified Glare Rating) TABLE

RHOCC	70	70	50	50	30	70	70	50	50	30
RHOW	70	70	50	50	30	70	70	50	50	30
RHOF	20	20	20	20	20	20	20	20	20	20
Room Size X Y	Viewed Endwise					Viewed Crosswise				
2H 2H	20.18	20.26	20.38	20.45	20.69	19.58	19.66	19.78	19.85	20.09
3H	20.29	20.37	20.50	20.56	20.81	19.77	19.84	19.98	20.04	20.29
4H	20.28	20.36	20.50	20.55	20.80	19.80	19.87	20.01	20.07	20.32
6H	20.26	20.33	20.48	20.53	20.78	19.79	19.86	20.00	20.06	20.31
8H	20.24	20.31	20.46	20.52	20.77	19.77	19.84	19.99	20.04	20.30
12H	20.23	20.30	20.45	20.50	20.76	19.75	19.82	19.98	20.03	20.28
4H 2H	22.92	22.99	23.13	23.19	23.44	21.42	21.49	21.63	21.69	21.94
3H	23.19	23.26	23.42	23.47	23.72	21.82	21.89	22.05	22.10	22.35
4H	23.25	23.31	23.48	23.53	23.78	21.95	22.01	22.18	22.23	22.49
6H	23.24	23.30	23.48	23.53	23.79	22.01	22.06	22.24	22.29	22.55
8H	23.23	23.29	23.47	23.51	23.78	22.01	22.07	22.25	22.29	22.56
12H	23.21	23.26	23.46	23.50	23.76	22.00	22.05	22.25	22.29	22.56
8H 4H	23.80	23.87	24.02	24.08	24.33	21.54	21.60	21.76	21.81	22.06
6H	24.52	24.57	24.77	24.81	25.08	22.47	22.52	22.72	22.76	23.03
8H	24.54	24.58	24.80	24.83	25.11	22.55	22.60	22.81	22.84	23.12
12H	24.53	24.57	24.80	24.83	25.11	22.59	22.63	22.86	22.89	23.17
12H 4H	24.77	24.82	25.02	25.05	25.32	22.29	22.34	22.54	22.57	22.84
6H	24.94	24.99	25.21	25.24	25.51	22.54	22.59	22.80	22.83	23.11

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

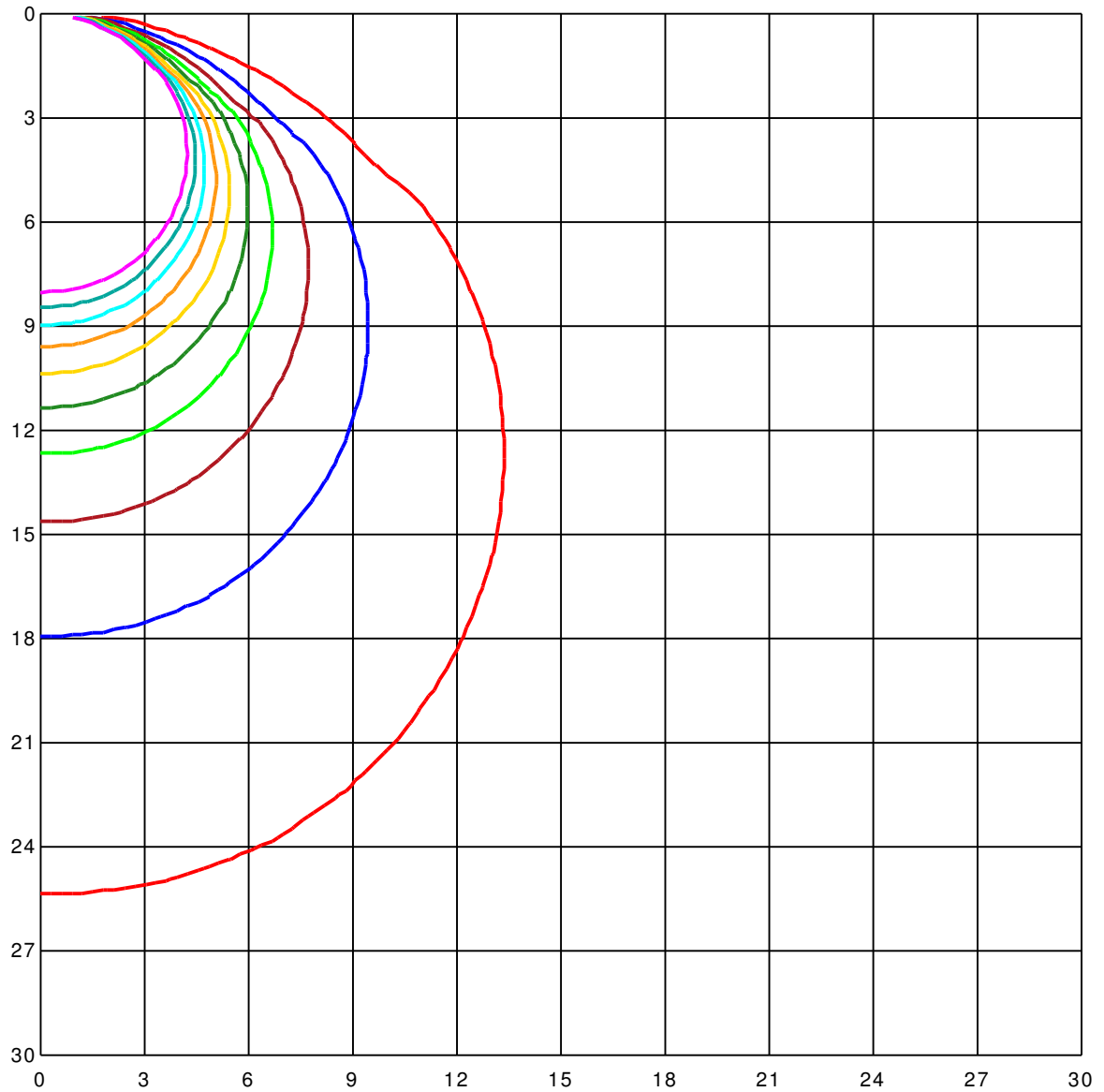
## ZONAL LUMINOUS FLUX TABLE

[illegible]

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

# SPACE ISOLX DIAGRAM



Unit of illumination:lx

3.723  
3.351  
2.979  
2.606  
2.234

1.862  
1.489  
1.117  
0.745  
0.372

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Gamma\ C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	239.27	238.63	238.02	237.66	238.1	233.87	227.42	228.43	232.14	
G1	239.48	238.67	238.1	237.42	237.7	233.43	227.74	229.15	232.9	
G2	239.6	238.75	238.02	236.85	237.34	233.02	227.82	229.84	233.63	
G3	239.88	238.59	237.54	236.29	236.73	232.58	228.06	230.36	234.44	
G4	239.23	238.59	237.94	236.57	236.25	231.94	228.1	231.17	235.04	
G5	239.92	238.51	237.78	235.2	235.56	231.49	228.02	231.61	235.6	
G6	239.96	238.39	237.54	235.52	234.23	230.69	228.02	232.06	236.09	
G7	239.8	238.14	237.14	233.87	233.99	230.0	227.78	232.5	236.41	
G8	239.64	237.86	236.73	233.06	233.19	229.07	227.62	233.23	236.73	
G9	239.23	237.62	236.09	232.26	232.3	227.18	227.18	233.27	236.89	
G10	238.91	237.18	235.52	231.29	231.29	227.18	226.85	233.35	237.02	
G11	238.51	236.77	234.8	230.44	231.21	226.05	226.37	232.86	237.26	
G12	238.06	236.21	234.19	229.27	229.19	224.96	225.89	232.9	237.38	
G13	237.5	234.68	233.91	228.27	227.94	223.71	225.24	233.95	237.38	
G14	236.85	235.04	233.19	227.14	227.74	222.34	224.6	233.87	238.23	
G15	236.94	233.27	232.5	225.24	225.52	221.05	223.99	233.79	237.26	
G16	236.49	233.55	230.69	224.76	224.19	219.6	223.95	233.63	237.1	
G17	235.81	232.7	229.76	223.35	222.82	218.19	222.18	232.42	237.02	
G18	234.03	231.77	228.75	221.01	221.33	216.49	222.38	233.06	236.81	
G19	233.14	230.81	227.62	220.44	219.92	214.68	220.48	232.7	236.53	
G20	232.26	229.72	227.34	218.19	217.74	212.94	219.56	232.18	236.65	
G21	231.89	228.63	225.4	217.06	216.45	211.13	218.47	231.73	235.77	
G22	230.32	227.3	224.15	215.16	213.83	209.15	217.66	231.17	235.52	
G23	229.19	226.17	222.82	213.23	212.74	207.26	216.33	230.64	234.96	
G24	227.5	224.64	221.37	211.21	210.81	205.0	215.16	229.8	234.44	
G25	226.69	223.27	219.44	209.03	207.66	203.71	213.87	229.11	233.63	
G26	225.44	221.77	218.39	207.7	206.45	201.09	212.1	228.35	232.94	
G27	223.99	220.24	216.65	204.64	204.15	198.27	210.85	227.46	232.22	
G28	221.49	218.67	214.8	202.3	201.73	195.69	208.59	226.53	231.13	
G29	219.96	216.85	212.98	199.92	199.27	193.23	207.78	225.64	229.39	
G30	219.27	215.16	211.01	197.42	196.49	190.6	206.05	224.64	228.27	
G31	217.46	213.47	209.07	195.48	194.23	188.06	203.27	223.63	227.5	
G32	215.69	211.53	206.94	192.3	191.17	185.36	202.3	222.46	226.53	
G33	213.75	209.64	204.68	189.6	188.31	182.54	200.28	221.33	225.24	
G34	211.98	207.62	202.5	186.77	185.32	179.6	198.23	220.04	224.15	
G35	210.0	205.56	200.04	184.03	181.69	176.53	196.01	218.67	222.42	
G36	208.06	203.47	198.1	181.01	179.35	173.55	192.3	217.3	220.97	

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma\ C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	205.89	200.32	195.24	177.98	176.41	170.36	189.92	215.73	220.36	
G38	203.87	198.06	192.74	174.8	172.9	166.57	185.69	214.07	217.82	
G39	201.73	196.49	190.12	170.93	169.39	163.83	182.9	212.38	216.33	
G40	200.32	194.03	188.31	168.35	166.09	160.4	178.63	210.69	214.56	
G41	197.22	191.57	185.52	165.12	162.34	156.73	175.97	208.79	212.94	
G42	194.76	189.03	182.02	161.61	158.67	153.51	171.45	206.89	211.53	
G43	192.42	186.17	179.19	157.54	154.64	149.35	169.39	204.88	209.31	
G44	189.96	183.59	176.17	154.27	150.32	145.36	163.95	202.78	207.5	
G45	187.46	180.85	173.47	150.56	145.77	141.29	161.21	200.64	205.48	
G46	184.84	177.9	170.0	146.49	141.09	137.58	156.57	198.23	203.63	
G47	182.22	175.0	165.93	142.42	136.29	132.74	152.3	195.97	200.77	
G48	179.6	171.77	162.06	137.98	131.45	128.14	148.55	193.55	199.35	
G49	176.49	168.71	156.98	133.43	126.41	123.39	143.59	191.09	197.1	
G50	173.63	165.48	151.09	129.11	121.09	118.55	139.92	188.43	194.56	
G51	170.64	162.26	147.22	123.75	115.64	113.55	135.24	185.73	192.06	
G52	167.46	158.91	142.26	119.03	110.24	108.51	129.52	183.19	189.44	
G53	164.44	155.4	137.06	113.43	104.88	103.27	125.12	180.16	186.81	
G54	161.05	151.73	131.25	107.94	99.64	97.82	120.36	177.26	184.03	
G55	157.74	148.14	125.77	102.74	94.15	92.3	115.89	174.44	181.21	
G56	154.07	144.44	121.13	97.18	88.67	87.18	111.41	171.69	178.35	
G57	150.48	140.56	116.25	91.81	83.47	81.98	106.01	168.55	175.4	
G58	146.81	136.69	110.52	86.13	78.27	76.21	101.29	165.32	172.38	
G59	142.94	132.82	104.88	81.01	72.98	71.53	96.05	162.34	169.27	
G60	139.03	128.87	99.23	75.28	67.98	66.53	90.89	159.03	166.29	
G61	135.56	124.88	93.95	69.48	62.9	61.61	85.93	155.73	163.1	
G62	131.53	120.77	88.06	64.52	57.9	56.98	80.69	152.1	159.8	
G63	127.14	116.57	83.02	59.4	53.02	52.5	75.48	148.63	156.49	
G64	122.58	112.5	77.22	54.19	48.63	48.1	69.92	144.96	153.43	
G65	103.99	108.27	71.73	49.19	43.19	44.11	65.08	141.21	131.98	
G66	100.04	104.03	66.61	44.31	37.3	40.04	60.44	137.26	127.66	
G67	95.81	99.56	61.25	39.8	33.75	36.25	54.27	133.47	122.94	
G68	91.77	95.36	56.17	35.36	30.4	32.74	49.68	129.72	119.27	
G69	87.82	90.85	50.93	30.85	27.1	29.44	44.15	125.52	116.21	
G70	83.75	85.2	45.48	25.81	23.99	26.01	39.68	117.94	112.74	
G71	79.84	76.21	39.76	16.69	20.93	22.54	34.15	104.64	109.27	
G72	75.65	70.2	34.92	13.43	18.31	18.19	29.35	98.47	105.64	
G73	71.37	66.09	29.92	11.01	15.81	15.56	25.48	94.72	101.45	

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
 G Interval: 1.0 Deg  
 Test System: Huipu CPM-1800B Goniophotometer  
 Humidity:  
 Test Distance: 6.35 m  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 8:53:26

G Range: 0 - 90 Deg  
G Interval: 1.0 Deg  
Test System: Huipu CPM-1800B Goniophotometer  
Humidity:  
Test Distance: 6.35 m  
Remarks: