

# LUMINAIRE PHOTOMETRIC TEST REPORT

## Luminaire Property

Manufacturer: 0  
Luminaire Type: 220V-2835-99L-3000K  
Lamp Type:  
Luminous Width: 0 mm  
Luminous Length: 0 mm  
Luminous Height: 0 mm

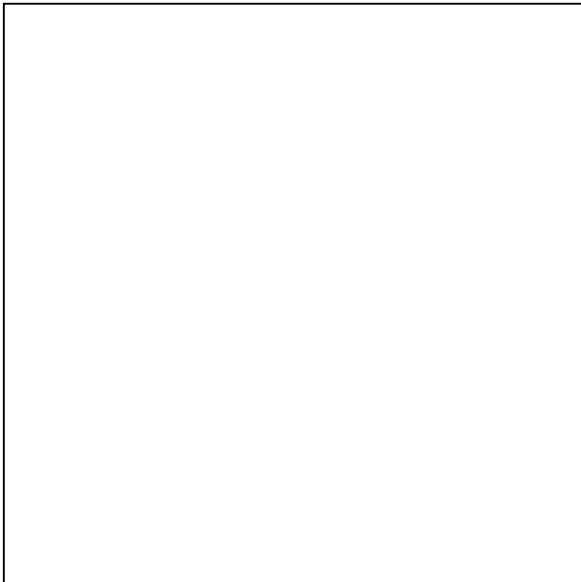
Voltage(V): 219.67 V  
Current(A): 0.0340 A  
Power(W): 7.02 W  
Power Factor: 0.9270  
Lamp Luminous Flux: 654.43

## Photometric Results

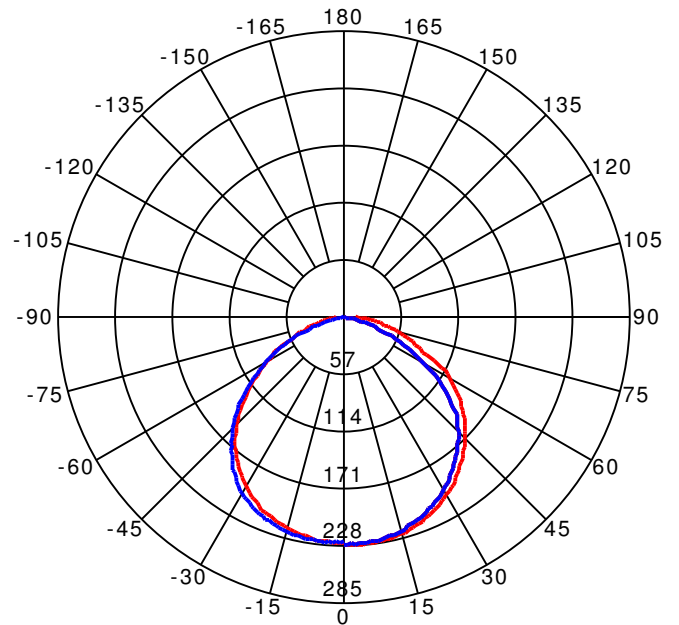
CIE Class: Direct  
Luminaire Luminous Flux: 654.4259  
Downward Ratio: 100.00%  
Luminaire Efficacy Rating(LER): 93.22 lm/W  
Beam Angle(50%) C0-180,C90-270: 115.9,110.9  
Field Angle(10%) C0-180,C90-270: 164.4,147.9

Max. Intensity: 227.74 cd  
Max.Intensity Angle: C=0 Gamma=4  
Upward Ratio: 0.00%  
Efficacy: 100.00%  
Center Intensity: 227.14 cd

Picture of Luminaire



Luminous Intensity Distribution Curve



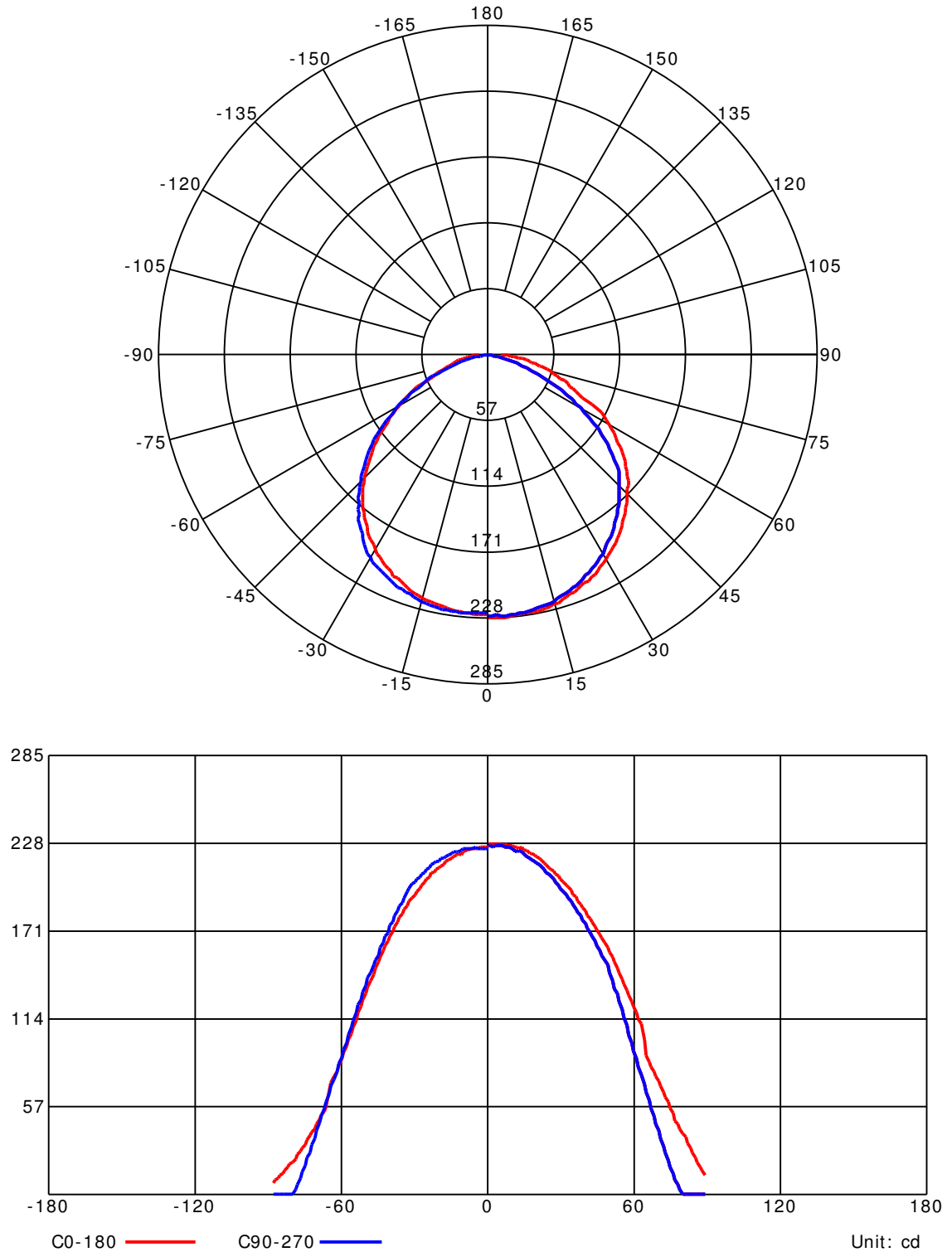
Beam Angle(50%) C0-180,C90-270: 110.9 deg

C0-180 ——— C90-270 ———

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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

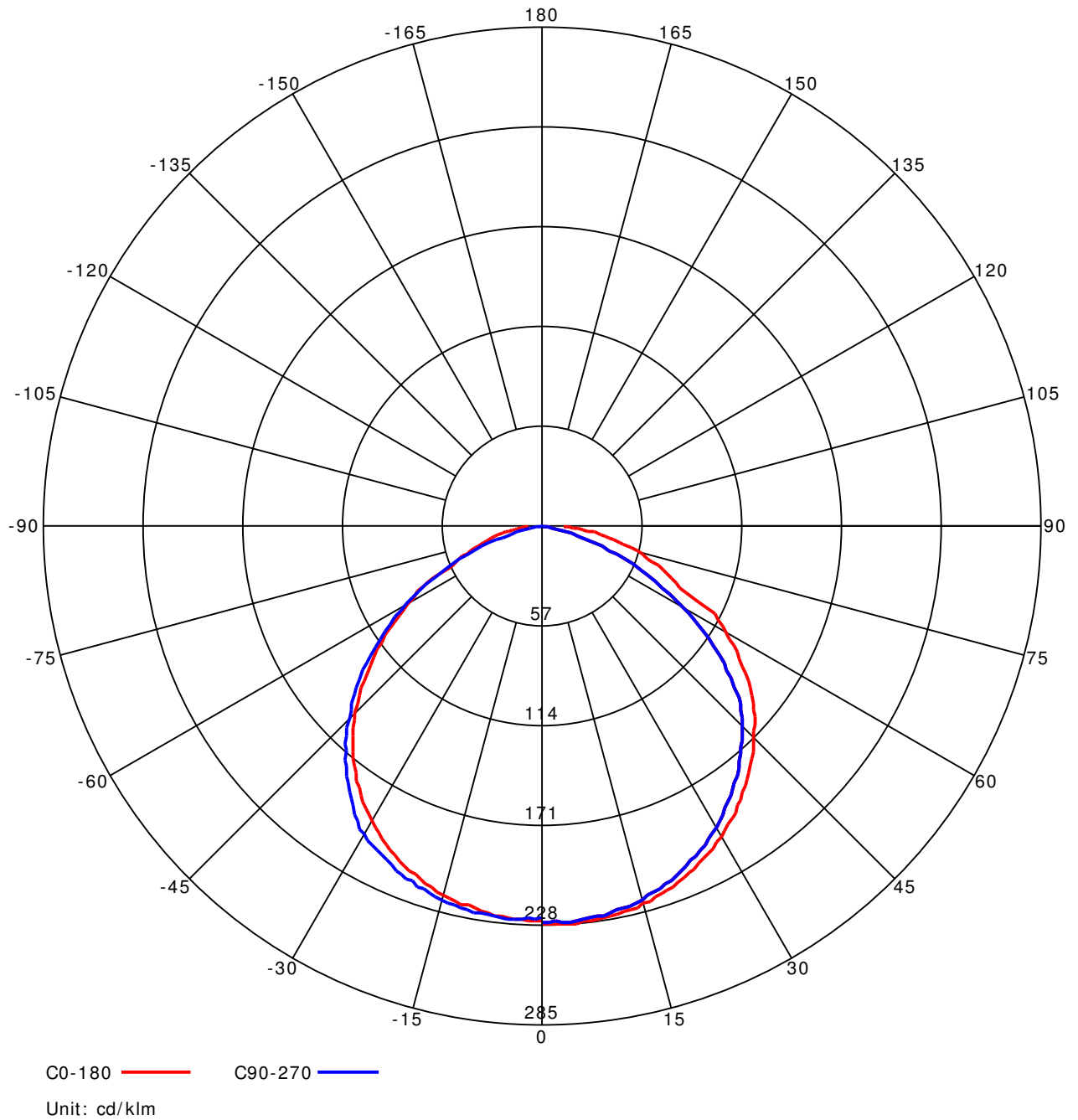
## Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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



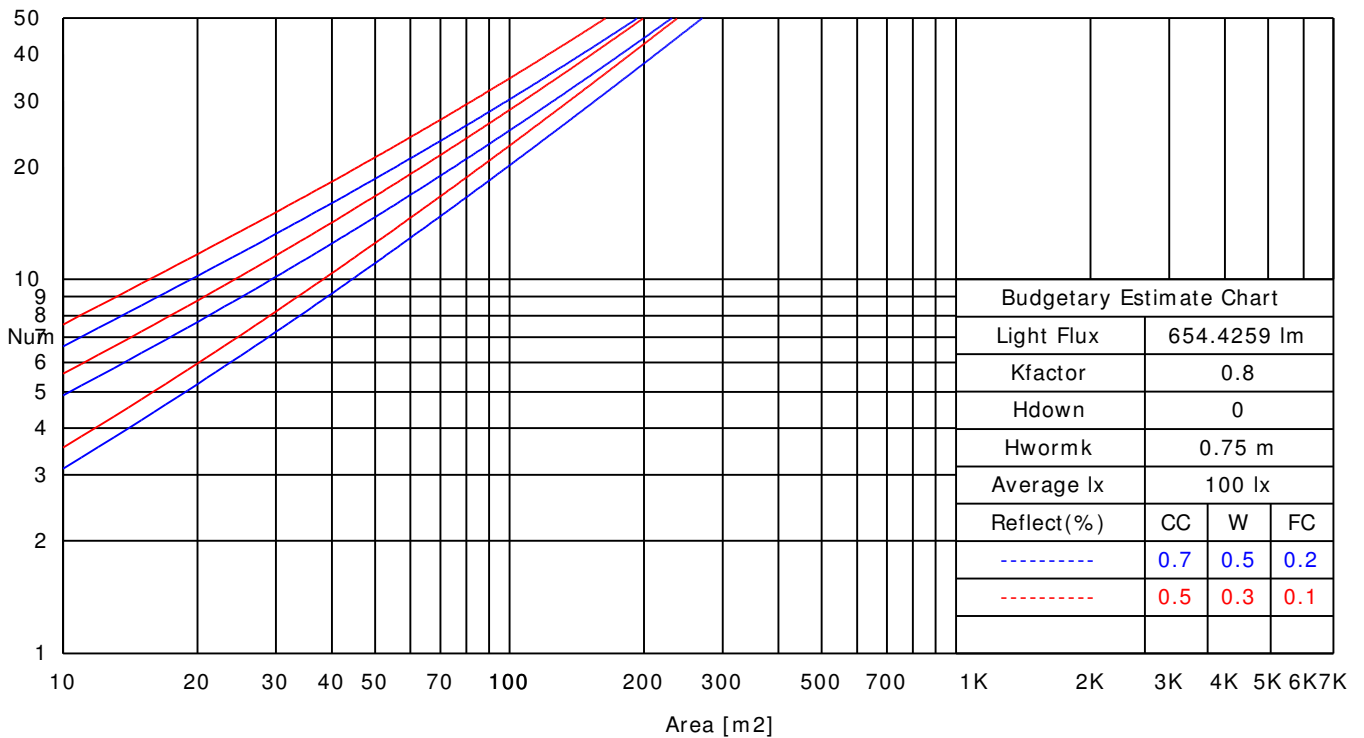
C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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	1.06	1.04	1.06	1.04	1.03	1.02	1.00	0.98	0.97	0.95	0.93	0.90	0.88	0.86	0.81
2	0.96	0.94	0.92	0.95	0.92	0.90	0.92	0.89	0.86	0.88	0.85	0.82	0.83	0.79	0.76	0.72
3	0.85	0.83	0.81	0.85	0.82	0.80	0.83	0.79	0.76	0.80	0.76	0.73	0.76	0.72	0.68	0.64
4	0.77	0.74	0.73	0.76	0.73	0.71	0.75	0.71	0.68	0.73	0.68	0.65	0.70	0.65	0.61	0.57
5	0.69	0.67	0.65	0.69	0.66	0.64	0.68	0.64	0.61	0.67	0.62	0.58	0.65	0.59	0.55	0.51
6	0.63	0.61	0.59	0.63	0.60	0.58	0.63	0.58	0.55	0.62	0.57	0.53	0.60	0.54	0.50	0.46
7	0.58	0.55	0.54	0.58	0.55	0.53	0.58	0.53	0.50	0.57	0.52	0.48	0.56	0.50	0.46	0.42
8	0.53	0.51	0.50	0.53	0.50	0.48	0.54	0.49	0.46	0.53	0.48	0.44	0.52	0.46	0.42	0.39
9	0.49	0.47	0.46	0.49	0.47	0.45	0.50	0.46	0.43	0.50	0.45	0.41	0.49	0.43	0.39	0.36
10	0.46	0.44	0.42	0.46	0.43	0.42	0.47	0.42	0.40	0.47	0.42	0.38	0.46	0.40	0.36	0.33

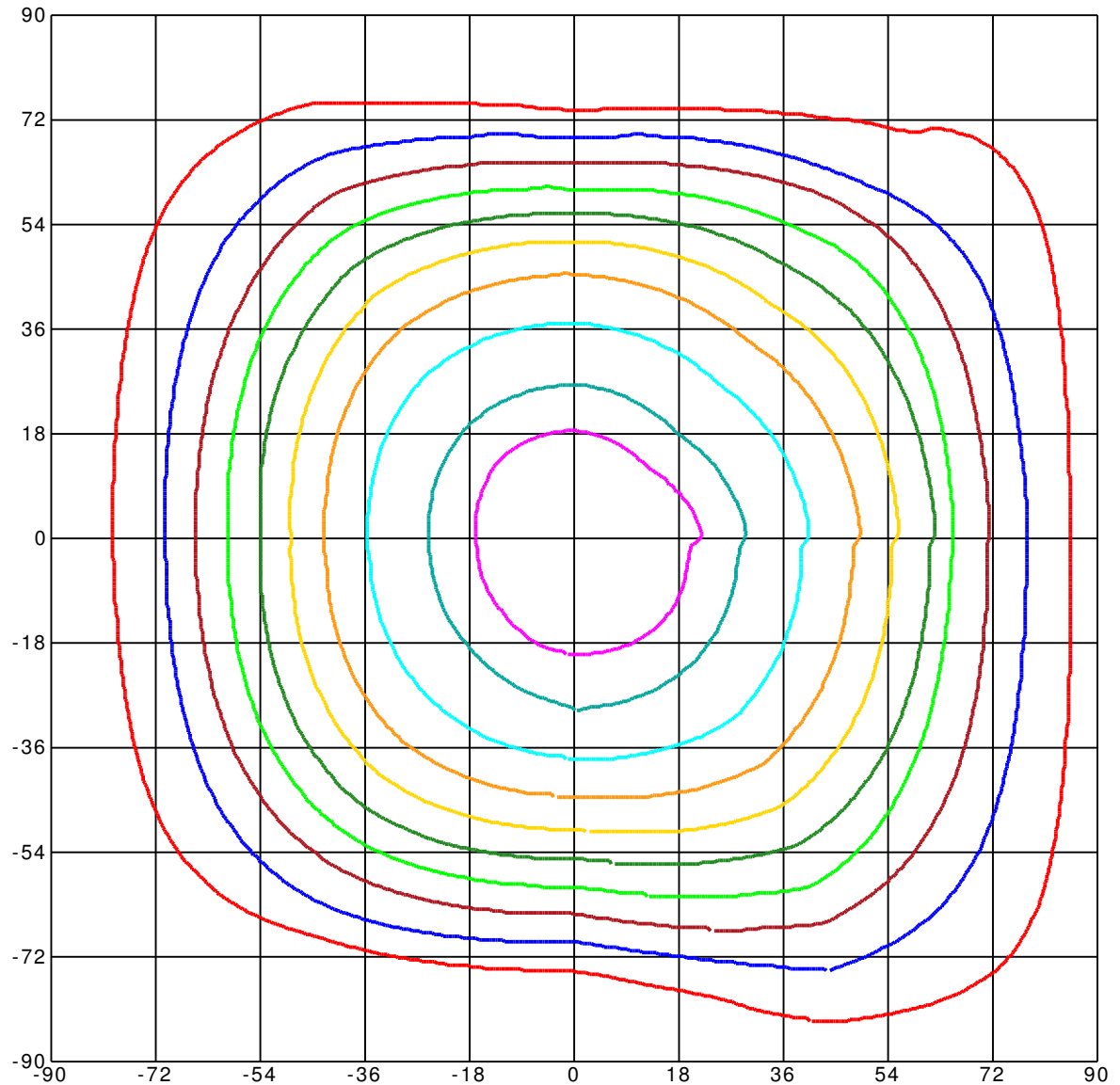
## LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 9:07:29

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    Imax(100%): 227.742 cd

216.354(95%Imax)

204.967(90%Imax)

182.193(80%Imax)

159.419(70%Imax)

136.645(60%Imax)

113.871(50%Imax)

91.097(40%Imax)

68.322(30%Imax)

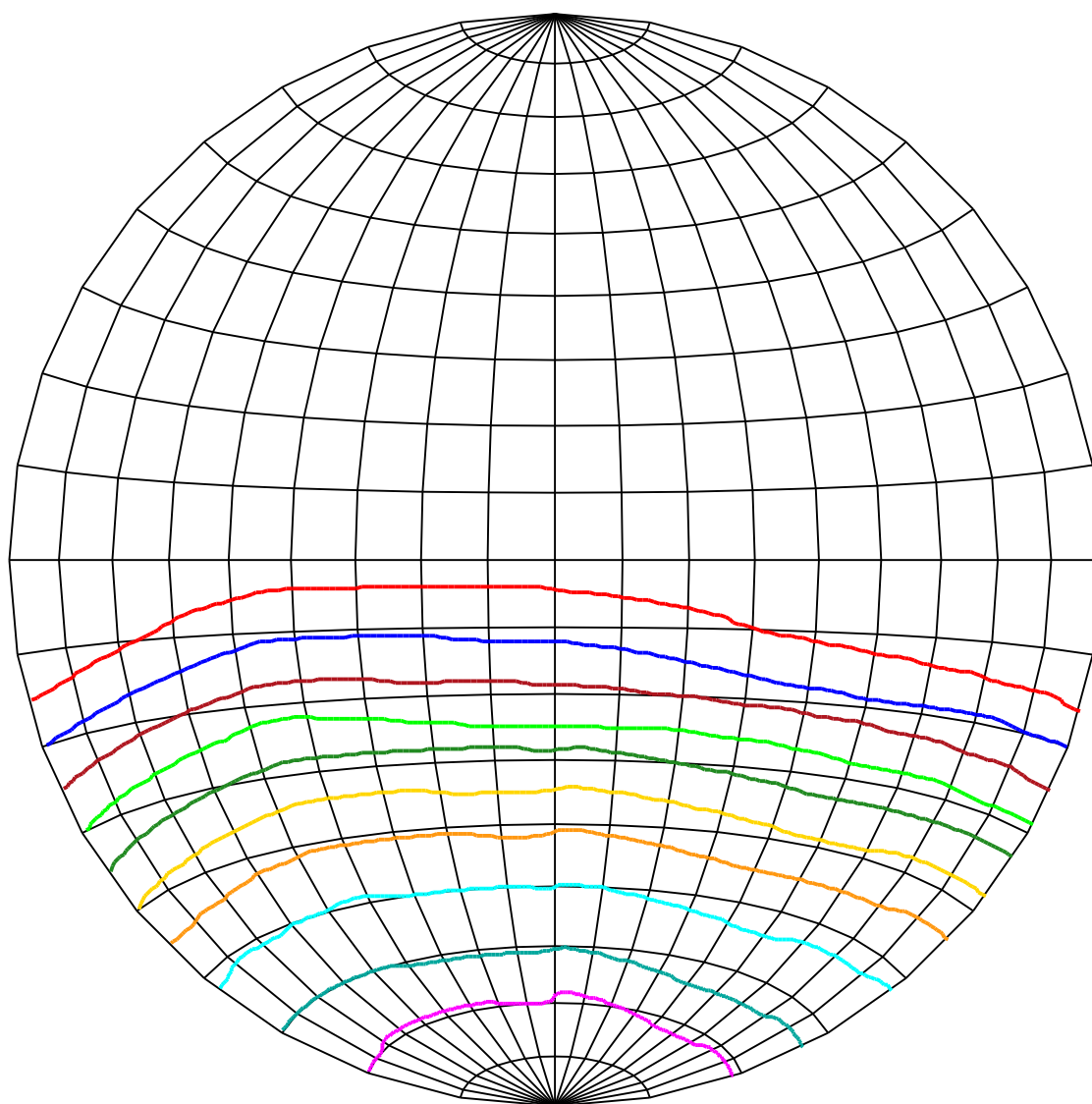
45.548(20%Imax)

22.774(10%Imax)

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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%): 227.742 cd

216.354(95%Imax)

204.967(90%Imax)

182.193(80%Imax)

159.419(70%Imax)

136.645(60%Imax)

113.871(50%Imax)

91.097(40%Imax)

68.322(30%Imax)

45.548(20%Imax)

22.774(10%Imax)

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2020/3/14 9:07:29

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

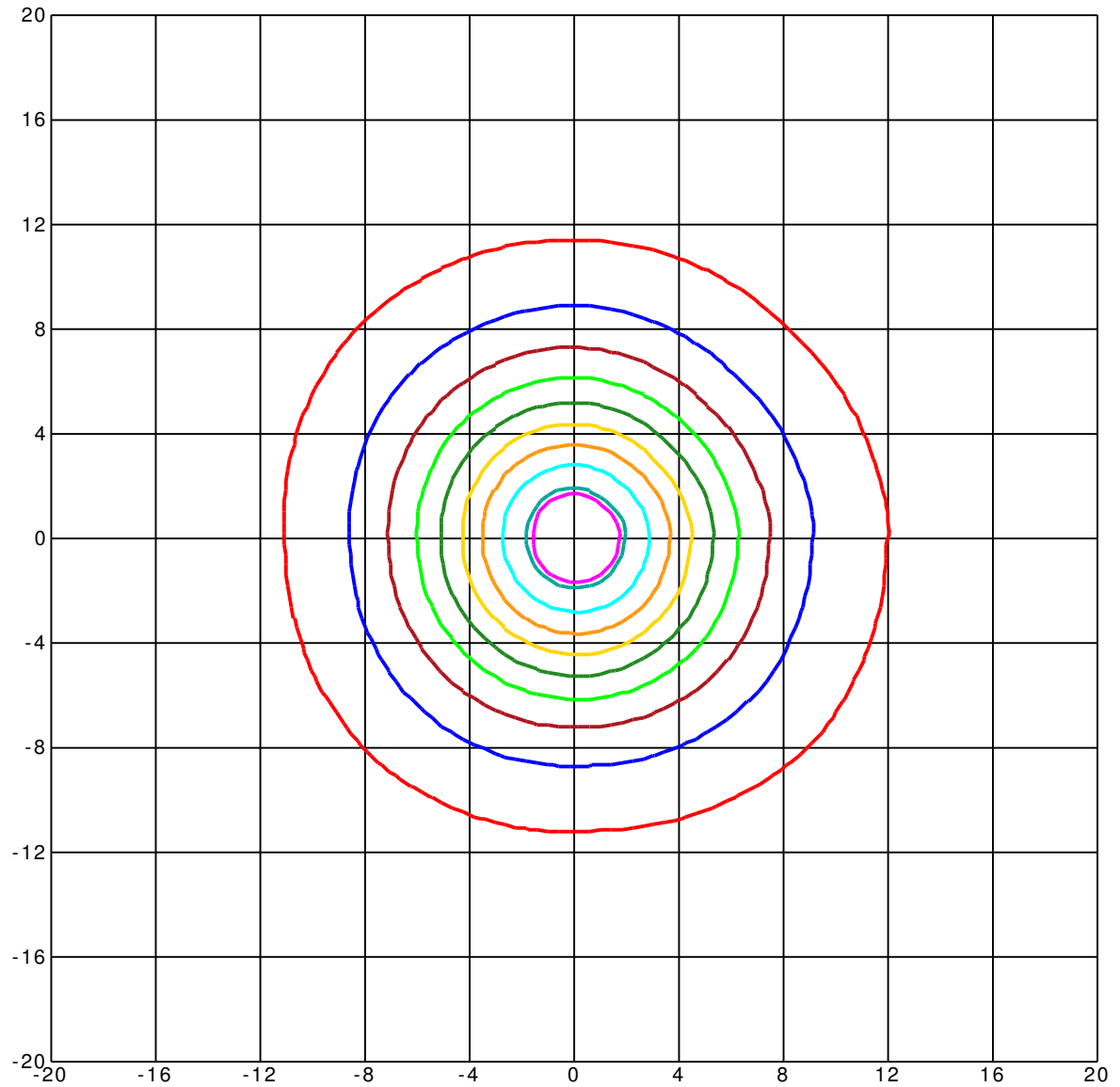
Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 6.35 m

Remarks:

# ISOLX DIAGRAM



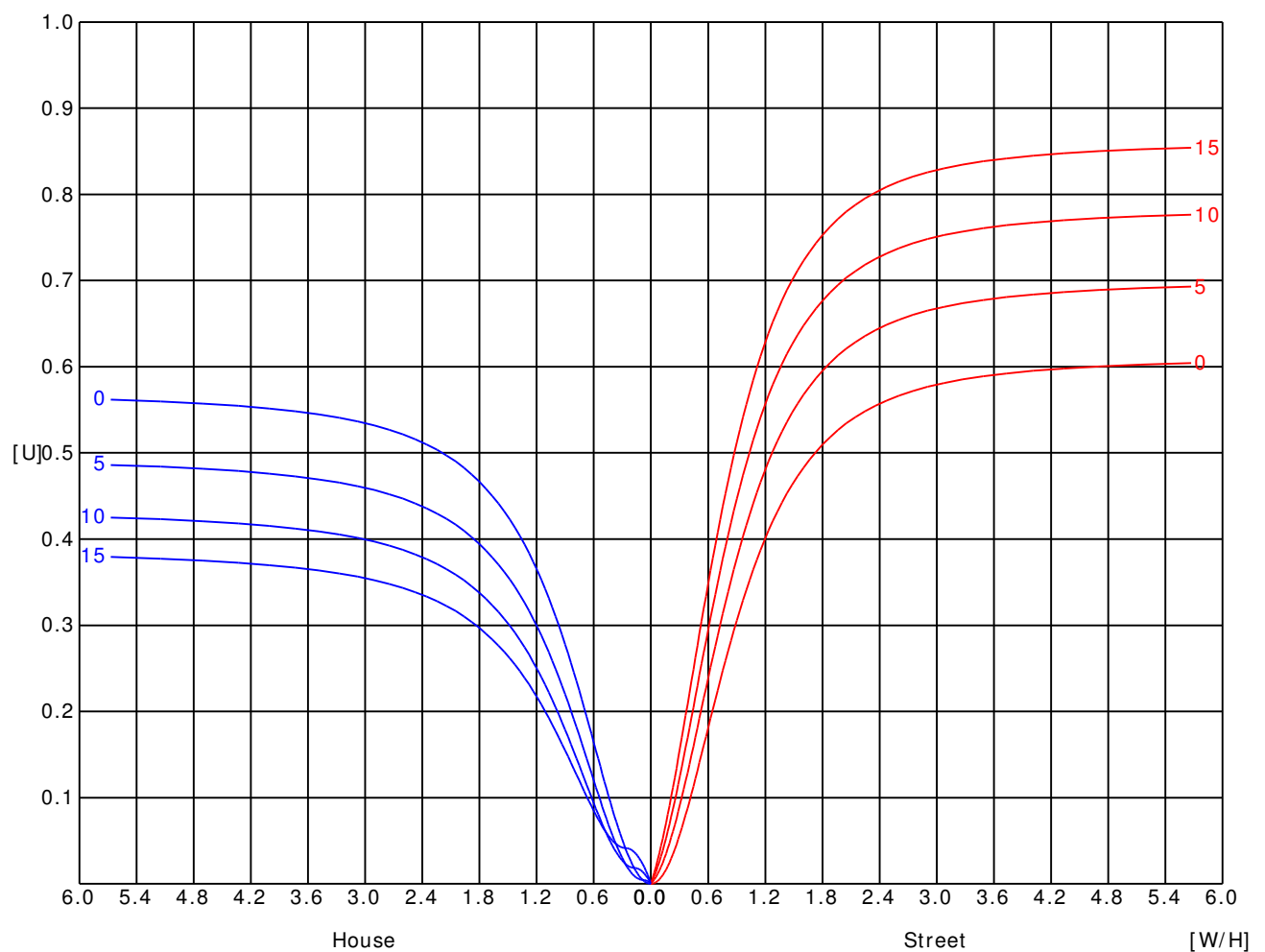
Unit of illumination:lx      Height of plane:8.0(m)/26.25(ft)

3.267(1% Emax)	1.776(1% Emax)
3.196(1% Emax)	1.421(1% Emax)
2.841(1% Emax)	1.065(0% Emax)
2.486(1% Emax)	0.71(0% Emax)
2.131(1% Emax)	0.355(0% Emax)

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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)



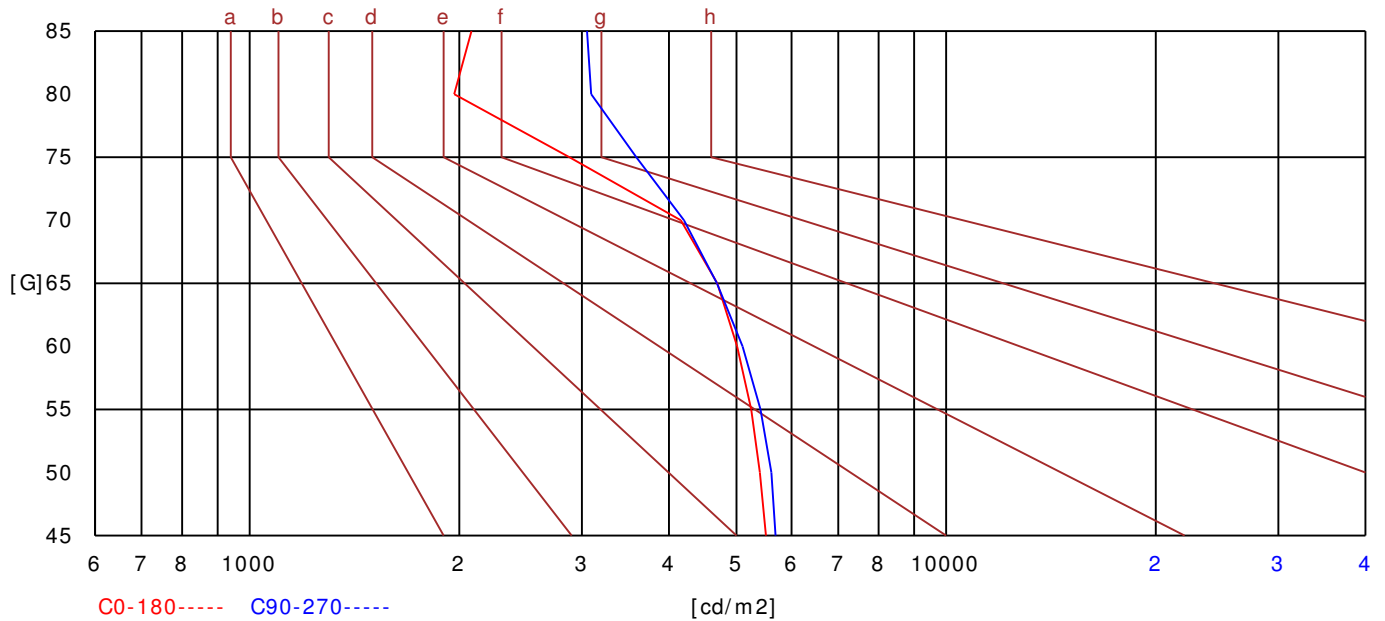
C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 9:07:29

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



## BRIGHT LIMIT DIAGRAM

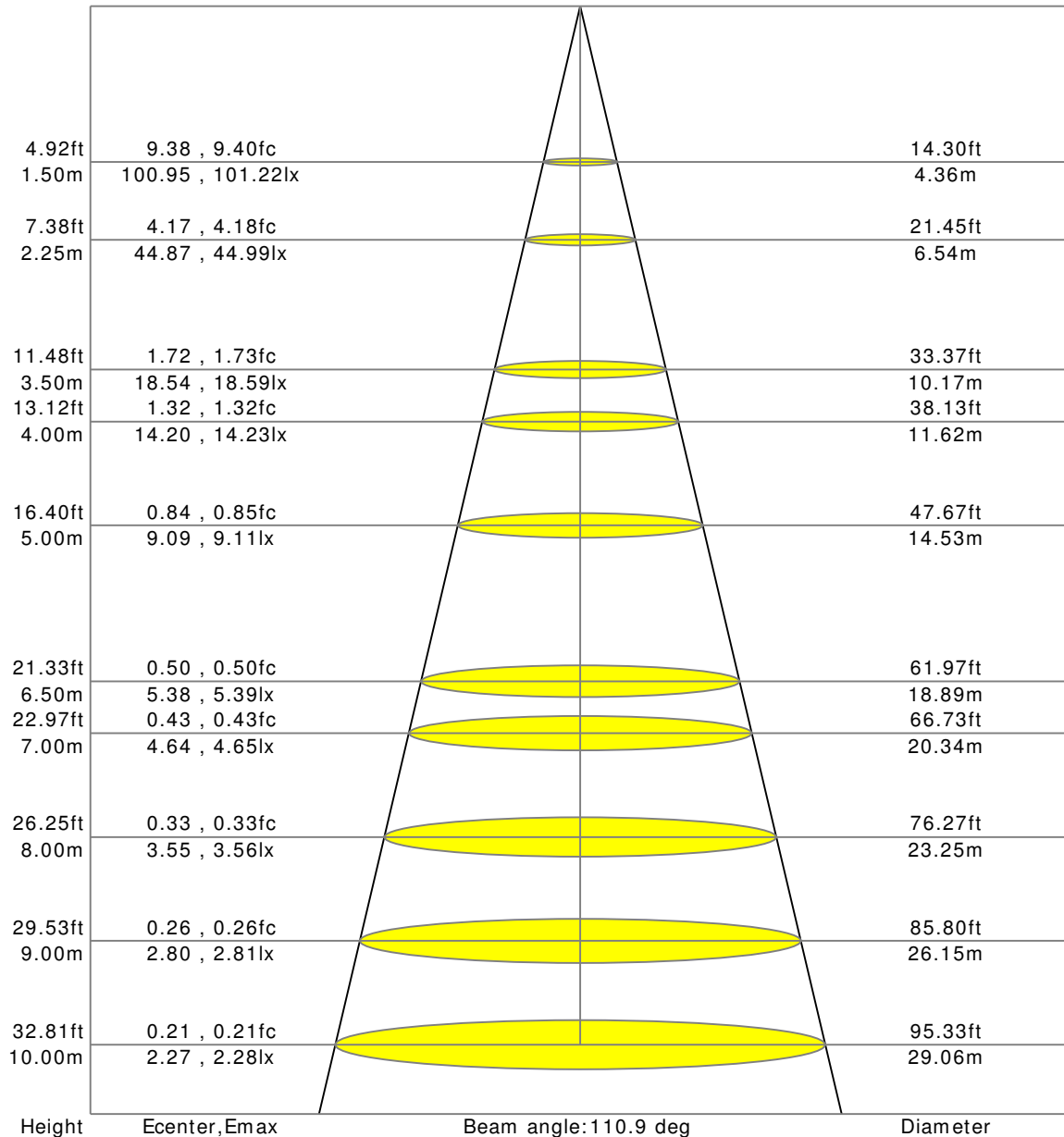
C/G	45	50	55	60	65	70	75	80	85
C0	5510	5404	5250	5014	4694	4162	2878	1968	2082
C90	5690	5611	5413	5101	4687	4206	3591	3094	3053
Dazzle	Quality	Illuminance	---	---	---	---	---	---	---
1.15	A	2000	1000	500	<= 300				
1.5	B		2000	1000	500	<= 300			
1.85	C			2000	1000	500	<= 300		
2.2	D				2000	1000	500	<= 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 9:07:29

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 9:07:29

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	19.27	19.35	19.47	19.53	19.78	18.76	18.84	18.96	19.03	19.27
3H	19.33	19.41	19.54	19.60	19.85	18.89	18.96	19.09	19.16	19.40
4H	19.31	19.39	19.53	19.58	19.83	18.90	18.97	19.11	19.17	19.42
6H	19.29	19.36	19.50	19.56	19.81	18.88	18.95	19.10	19.15	19.41
8H	19.27	19.34	19.49	19.54	19.80	18.87	18.94	19.09	19.14	19.39
12H	19.25	19.32	19.48	19.53	19.78	18.85	18.92	19.07	19.12	19.38
4H 2H	21.77	21.84	21.98	22.04	22.29	20.29	20.37	20.50	20.56	20.81
3H	21.91	21.97	22.13	22.18	22.44	20.50	20.57	20.72	20.77	21.03
4H	21.91	21.97	22.14	22.19	22.44	20.55	20.61	20.78	20.82	21.08
6H	21.88	21.94	22.12	22.16	22.42	20.56	20.62	20.80	20.84	21.10
8H	21.86	21.92	22.11	22.14	22.41	20.56	20.61	20.80	20.84	21.11
12H	21.84	21.89	22.09	22.13	22.40	20.54	20.60	20.79	20.83	21.10
8H 4H	22.68	22.75	22.90	22.96	23.21	20.32	20.39	20.54	20.59	20.84
6H	23.02	23.07	23.28	23.31	23.58	20.67	20.72	20.93	20.96	21.23
8H	23.01	23.06	23.27	23.30	23.58	20.70	20.74	20.96	20.99	21.26
12H	22.99	23.03	23.26	23.28	23.57	20.71	20.75	20.98	21.00	21.28
12H 4H	23.38	23.43	23.62	23.66	23.93	20.61	20.66	20.86	20.89	21.16
6H	23.43	23.48	23.70	23.72	24.00	20.67	20.72	20.93	20.96	21.24

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 9:07:29

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

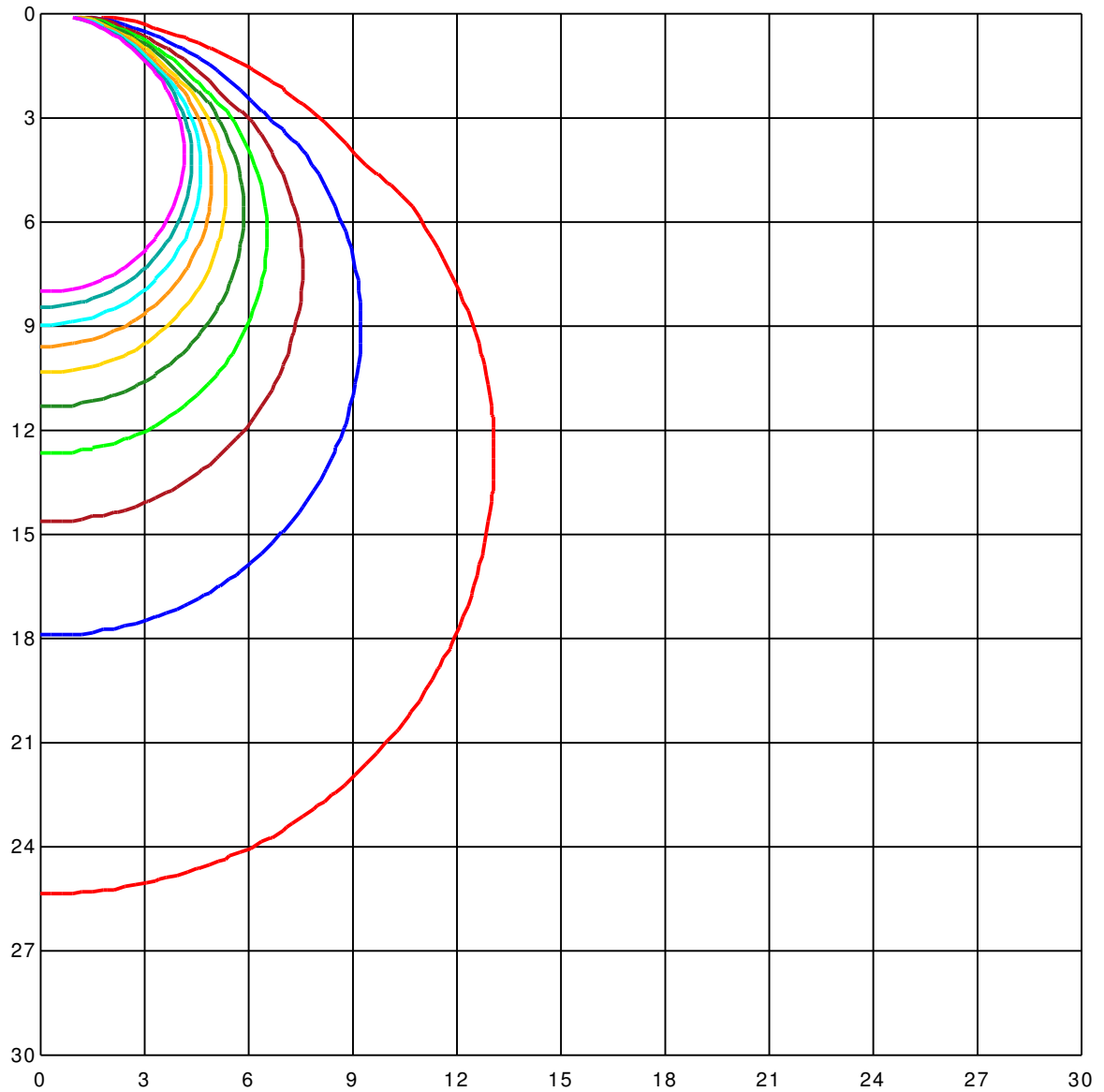
## ZONAL LUMINOUS FLUX TABLE

[illegible]

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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

3.541  
3.187  
2.833  
2.479  
2.125

1.77  
1.416  
1.062  
0.708  
0.354

C Range: 0 - 360 Deg  
C Interval: 45.0 Deg  
Test Speed: High  
Temperature:  
Operators:  
Test Date: 2020/3/14 9:07:29

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	227.14	227.3	226.65	225.97	225.16	225.64	223.95	224.48	225.85	
G1	227.34	227.3	226.73	225.85	225.08	225.69	224.23	224.68	225.28	
G2	227.58	227.06	225.77	225.93	225.04	225.6	223.79	225.2	225.36	
G3	227.66	226.94	226.73	226.57	224.84	225.73	224.48	225.12	225.52	
G4	227.74	226.65	226.49	225.6	224.56	225.4	224.56	225.28	225.69	
G5	227.62	226.45	226.29	225.93	224.52	225.04	225.04	225.32	225.6	
G6	226.57	226.05	225.93	225.24	224.07	225.08	224.44	225.32	225.32	
G7	227.22	225.64	225.48	224.96	223.87	224.19	224.23	225.16	225.2	
G8	226.41	225.04	225.08	224.64	223.39	223.75	224.11	224.96	224.03	
G9	226.61	224.6	225.0	224.23	222.86	223.27	223.79	224.68	224.52	
G10	226.21	223.79	224.03	223.06	221.69	222.58	224.39	223.51	224.07	
G11	225.73	223.1	223.31	222.26	220.56	222.06	223.14	223.83	223.47	
G12	225.2	222.22	222.54	222.5	220.81	222.1	222.62	223.47	222.98	
G13	224.64	220.85	222.78	221.69	219.92	220.6	222.3	222.82	222.18	
G14	224.8	220.32	221.98	220.97	218.95	220.12	221.85	222.26	221.49	
G15	223.19	219.27	220.85	220.08	218.1	218.79	220.89	221.73	220.73	
G16	223.39	218.1	219.31	219.11	216.85	217.94	220.36	221.49	219.88	
G17	221.53	217.1	218.27	218.1	215.85	216.77	219.52	219.92	218.87	
G18	220.69	215.64	217.26	216.89	214.35	215.93	217.9	219.07	217.78	
G19	219.68	214.39	216.13	215.77	213.27	214.68	217.78	218.02	216.89	
G20	218.99	212.94	214.96	214.39	211.89	212.58	215.85	217.1	215.85	
G21	217.7	211.57	213.71	213.87	210.56	211.25	215.77	215.97	215.6	
G22	216.57	209.96	212.42	212.66	209.03	210.85	214.56	215.28	213.63	
G23	214.96	208.43	211.01	210.4	208.31	209.39	213.47	213.71	212.22	
G24	214.11	206.73	208.59	208.87	205.89	207.78	211.94	212.46	211.01	
G25	211.89	205.0	207.94	207.98	204.19	206.13	210.64	211.05	209.56	
G26	211.21	203.19	206.21	205.56	202.42	204.27	209.19	209.76	208.23	
G27	209.76	201.29	204.44	203.87	200.44	202.54	207.7	208.31	206.69	
G28	207.98	199.03	202.5	202.02	198.55	200.69	206.01	206.73	205.0	
G29	206.33	197.34	200.52	200.16	196.73	198.59	205.08	205.2	203.43	
G30	204.64	195.2	198.63	198.23	194.52	196.57	202.7	203.47	201.57	
G31	202.78	193.1	196.49	196.33	192.06	194.44	201.77	200.89	199.6	
G32	200.77	190.89	194.39	194.31	189.72	193.1	198.43	199.88	197.74	
G33	199.19	187.74	192.14	192.18	187.46	189.96	196.09	197.9	195.64	
G34	197.1	186.25	189.88	190.0	184.96	187.66	192.26	196.01	193.55	
G35	194.68	183.75	187.58	187.7	182.34	185.24	189.48	193.91	191.25	
G36	193.23	181.29	185.24	185.36	179.72	182.86	187.26	191.89	189.11	

C Range: 0 - 360 Deg  
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 Test Date: 2020/3/14 9:07:29

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	190.36	178.59	182.82	182.9	176.77	180.48	183.75	190.12	186.77	
G38	188.06	175.97	181.01	179.84	173.95	177.74	181.21	187.46	184.48	
G39	185.81	173.59	178.06	177.7	170.77	174.76	177.06	185.2	182.06	
G40	183.55	170.48	175.2	175.12	167.82	172.34	174.68	182.9	179.68	
G41	181.17	167.62	172.58	172.42	164.68	168.99	169.56	180.44	177.22	
G42	178.79	164.76	169.84	169.6	161.21	166.77	167.7	178.06	175.48	
G43	176.45	161.85	167.18	167.26	157.66	163.75	163.23	175.52	172.14	
G44	173.91	159.52	164.27	163.87	153.99	160.77	159.96	172.98	169.56	
G45	171.29	155.85	161.37	160.93	150.89	157.62	155.36	170.77	166.89	
G46	167.98	153.1	158.35	157.82	146.53	154.19	151.45	167.62	164.19	
G47	165.97	149.44	154.56	155.36	142.46	150.81	148.63	164.96	161.29	
G48	163.14	146.05	151.98	151.25	138.51	147.1	143.87	161.65	158.43	
G49	160.24	142.66	148.55	147.86	134.48	143.35	140.08	158.99	155.4	
G50	157.14	138.95	143.23	144.27	130.44	139.19	135.81	155.89	152.18	
G51	153.87	135.48	138.55	140.44	126.09	135.2	131.13	152.06	148.71	
G52	150.48	131.85	133.71	136.69	121.61	131.09	126.01	149.48	145.4	
G53	147.14	128.14	129.96	132.62	117.38	126.77	122.66	146.01	141.94	
G54	143.63	124.27	125.08	128.43	113.06	122.94	117.82	142.38	137.7	
G55	139.84	120.44	119.72	124.19	108.75	118.39	112.82	138.83	134.92	
G56	136.09	116.57	114.64	119.39	104.35	113.39	108.06	135.16	131.37	
G57	132.54	112.58	109.11	115.52	100.32	108.55	103.47	131.49	127.94	
G58	128.83	108.51	103.19	111.01	96.17	103.75	98.63	127.62	124.39	
G59	125.16	104.44	97.94	106.21	92.1	98.87	93.91	124.19	120.77	
G60	121.49	100.28	93.19	102.02	88.19	93.95	89.35	120.24	117.38	
G61	117.78	96.09	88.06	97.5	83.87	89.07	84.56	116.41	113.71	
G62	114.07	91.81	82.86	92.86	80.08	84.03	79.52	112.58	110.36	
G63	110.56	87.94	77.22	88.27	76.17	79.27	74.64	108.87	106.45	
G64	99.92	83.79	71.77	83.75	72.38	74.68	70.08	105.12	97.86	
G65	90.48	79.35	66.57	79.23	67.46	69.68	65.2	101.29	86.94	
G66	86.17	75.08	61.57	74.84	57.02	65.36	60.2	97.5	83.63	
G67	82.98	70.97	56.17	70.6	54.07	60.93	55.6	93.67	80.6	
G68	79.76	67.18	51.09	66.37	51.29	56.57	50.85	89.76	77.5	
G69	76.61	62.7	45.89	62.18	48.43	52.14	46.25	85.73	74.4	
G70	73.27	56.94	41.01	57.54	45.65	47.82	41.25	81.17	71.05	
G71	69.92	46.17	36.25	51.98	42.86	43.63	36.33	75.4	67.82	
G72	66.53	40.04	31.37	48.19	40.28	30.73	31.9	70.97	64.68	
G73	63.15	36.33	26.65	44.4	37.86	27.5	27.3	67.42	61.41	

C Range: 0 - 360 Deg  
 C Interval: 45.0 Deg  
 Test Speed: High  
 Temperature:  
 Operators:  
 Test Date: 2020/3/14 9:07:29

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 9:07:29

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