

Report No.:

Test Time: 2019/11/29 8:52:11

LUMINAIRE PHOTOMETRIC TEST REPORT

Luminaire Property

Manufacturer:
Luminaire Type: 12V-2835-420-2700K
Lamp Type:
Luminous Width: 0 mm
Luminous Length: 0 mm
Luminous Height: 0 mm

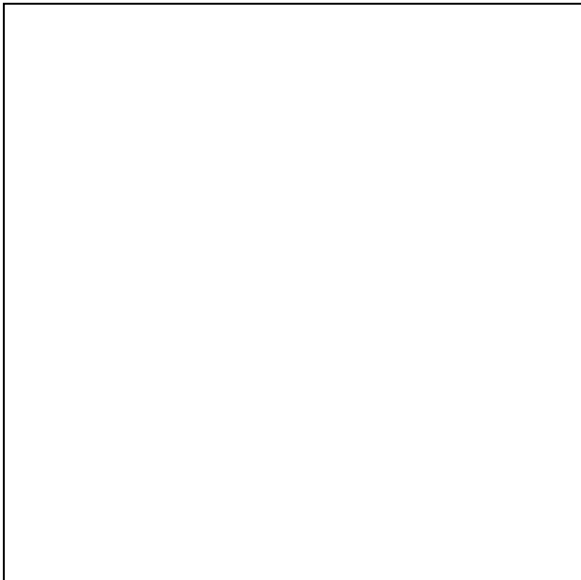
Voltage(V): 12.00 V
Current(A): 2.6900 A
Power(W): 32.28 W
Power Factor: 1.0000
Lamp Luminous Flux: 3234.68

Photometric Results

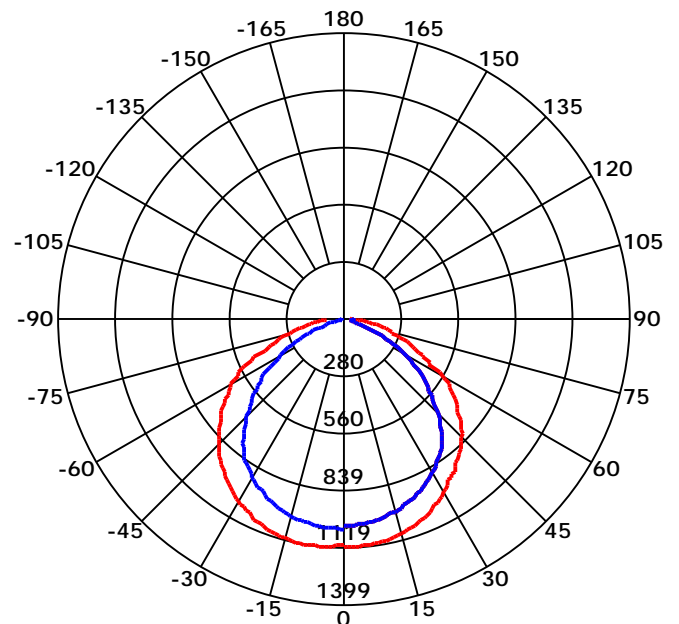
CIE Class: Direct
Luminaire Luminous Flux: 3234.676
Downward Ratio: 0.00%
Luminaire Efficacy Rating(LER): 100.21 lm/W
Beam Angle(50%Imax): L=-71.31 R=55.73
Field Angle(10%Imax): L=-94.44 R=78.02

Max. Intensity: 1119.07 cd
Max.Intensity Angle: C=180 Gamma=9
Upward Ratio: 100.00%
Efficacy: 100.00%
Center Intensity: 1111.64 cd

Picture of Luminaire



Luminous Intensity Distribution Curve



Beam Angle(50%Imax): 127.04 deg

C0-180 — C90-270 —

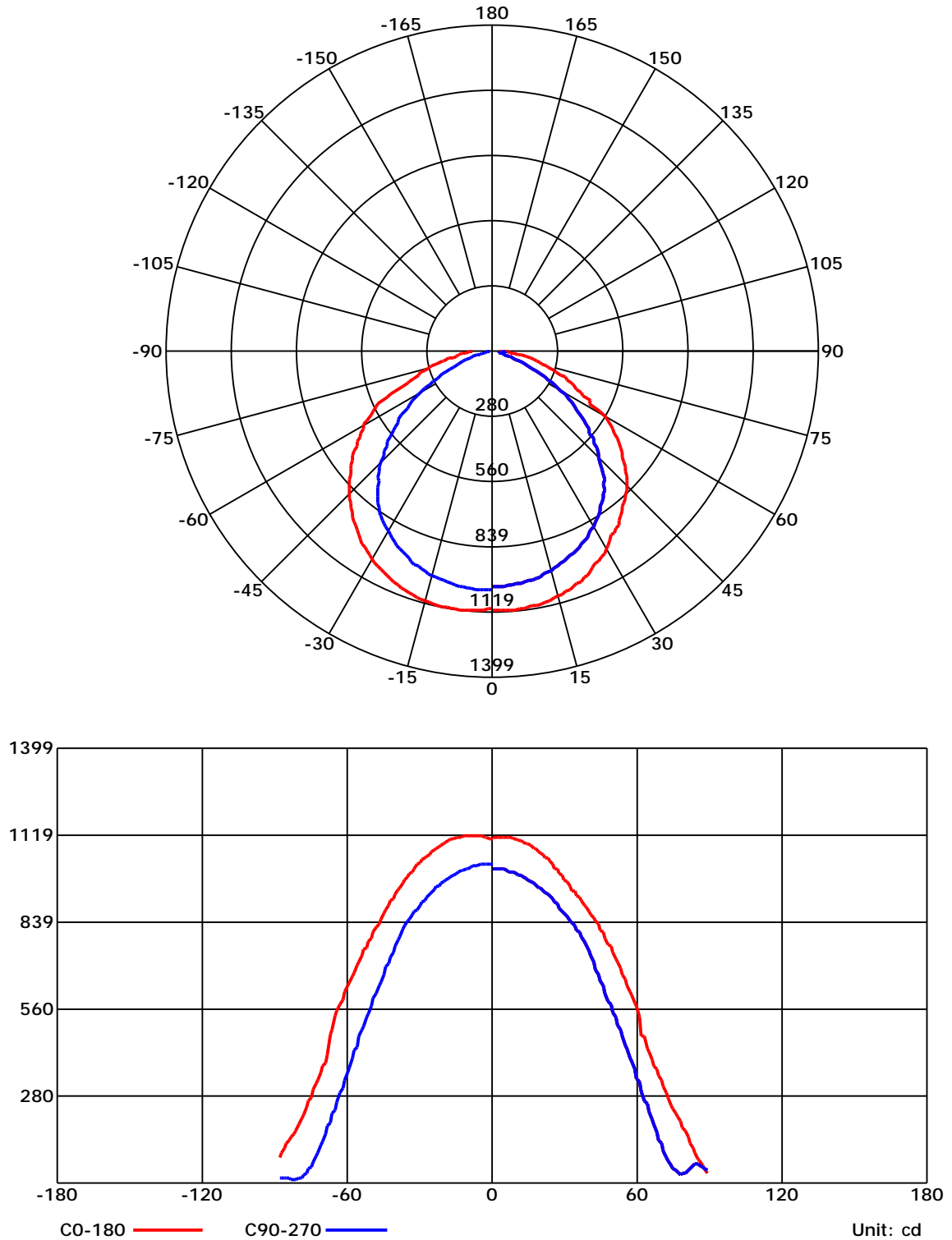
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

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Luminous Intensity Distribution Curve



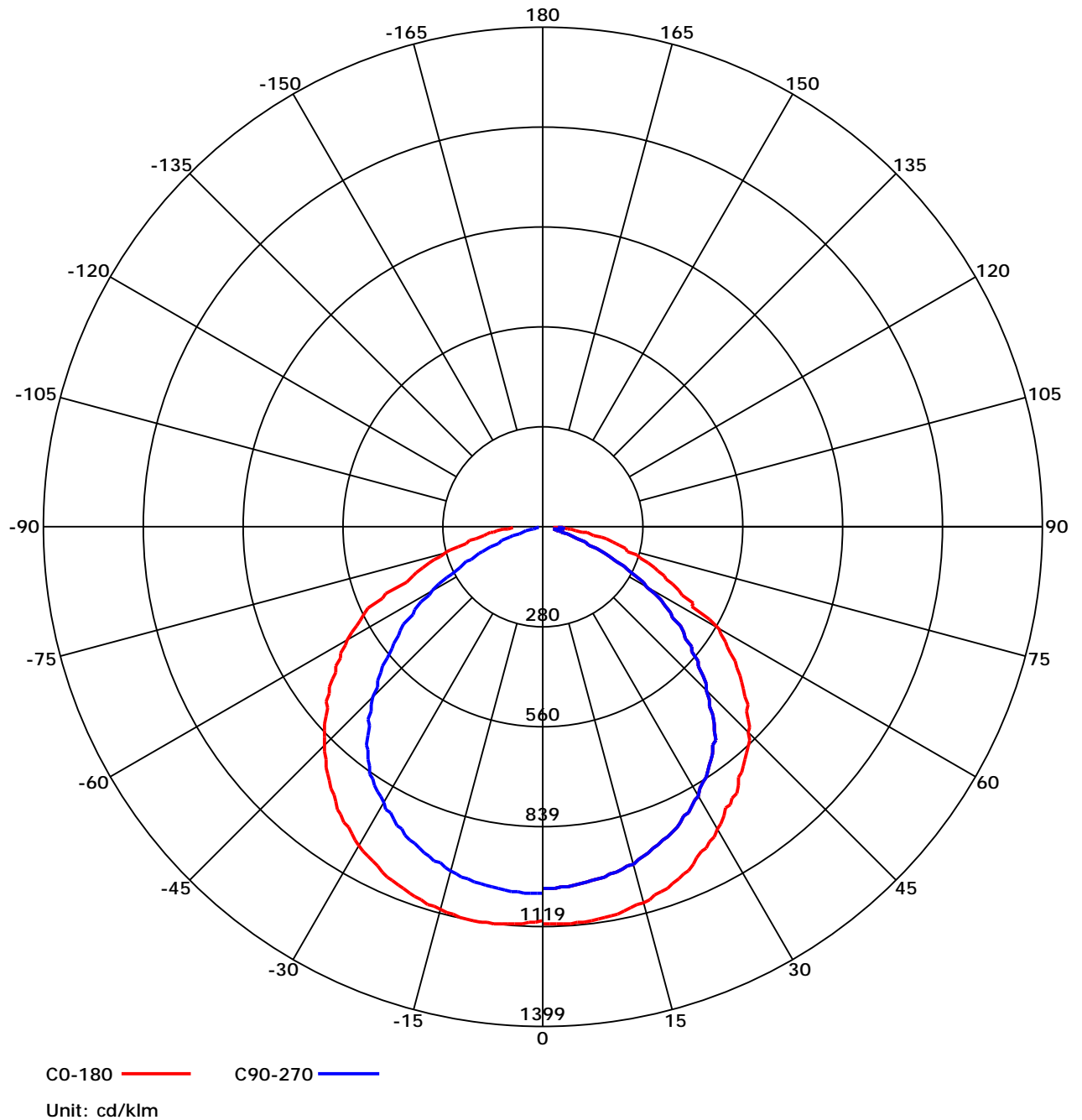
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

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Luminous Intensity Distribution Curve



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

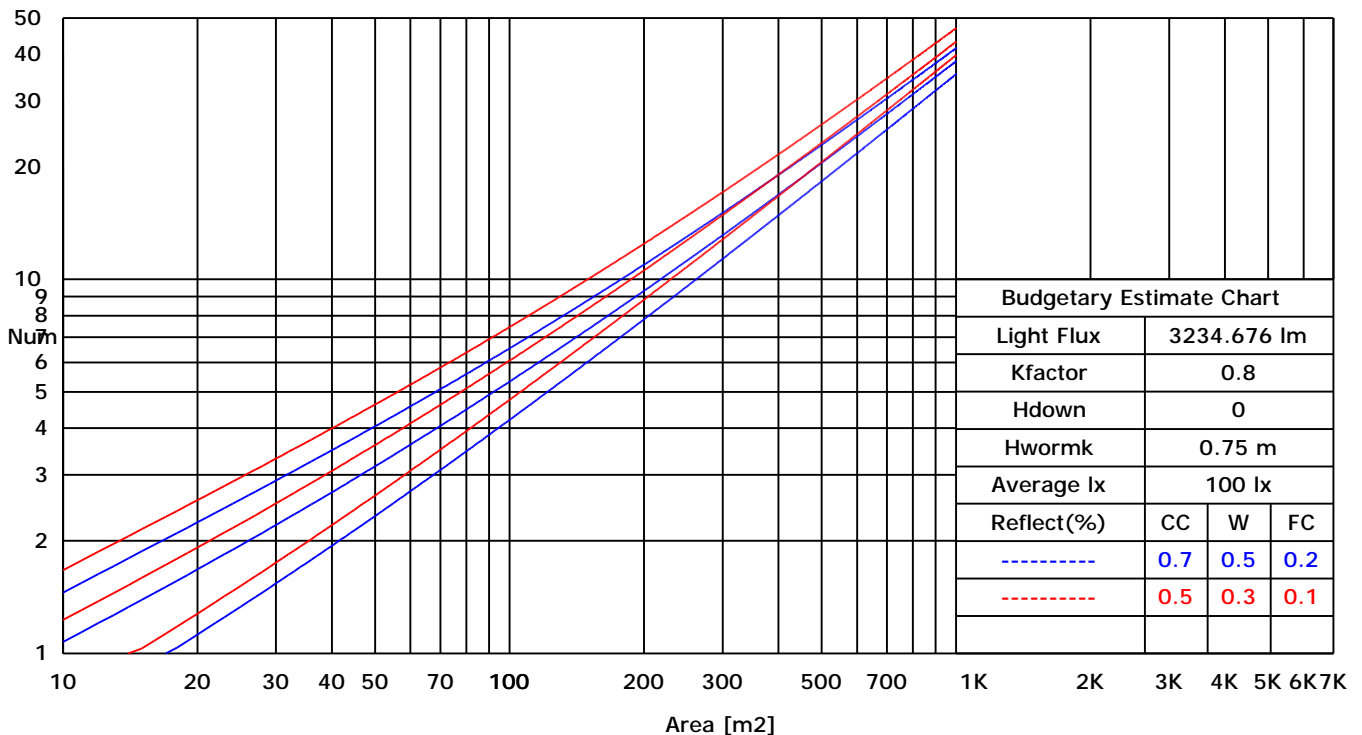
Report No.:

Test Time: 2019/11/29 8:52:11

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	1.06	1.05	1.03	1.05	1.03	1.02	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.88	0.86	0.80
2	0.94	0.92	0.90	0.93	0.90	0.88	0.90	0.87	0.85	0.87	0.83	0.80	0.82	0.78	0.75	0.70
3	0.83	0.81	0.79	0.83	0.80	0.78	0.81	0.77	0.74	0.78	0.74	0.71	0.75	0.70	0.66	0.62
4	0.74	0.72	0.70	0.74	0.71	0.69	0.73	0.69	0.66	0.71	0.67	0.63	0.69	0.63	0.59	0.55
5	0.67	0.65	0.63	0.67	0.64	0.62	0.67	0.62	0.59	0.65	0.60	0.56	0.63	0.58	0.53	0.49
6	0.61	0.58	0.57	0.61	0.58	0.56	0.61	0.56	0.53	0.60	0.55	0.51	0.59	0.53	0.48	0.44
7	0.56	0.53	0.52	0.56	0.53	0.51	0.56	0.52	0.49	0.56	0.50	0.46	0.55	0.49	0.44	0.40
8	0.51	0.49	0.48	0.52	0.48	0.47	0.52	0.48	0.45	0.52	0.46	0.42	0.51	0.45	0.40	0.37
9	0.47	0.45	0.44	0.48	0.45	0.43	0.48	0.44	0.41	0.48	0.43	0.39	0.48	0.42	0.37	0.34
10	0.44	0.42	0.41	0.44	0.42	0.40	0.45	0.41	0.38	0.45	0.40	0.36	0.45	0.39	0.35	0.32

LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



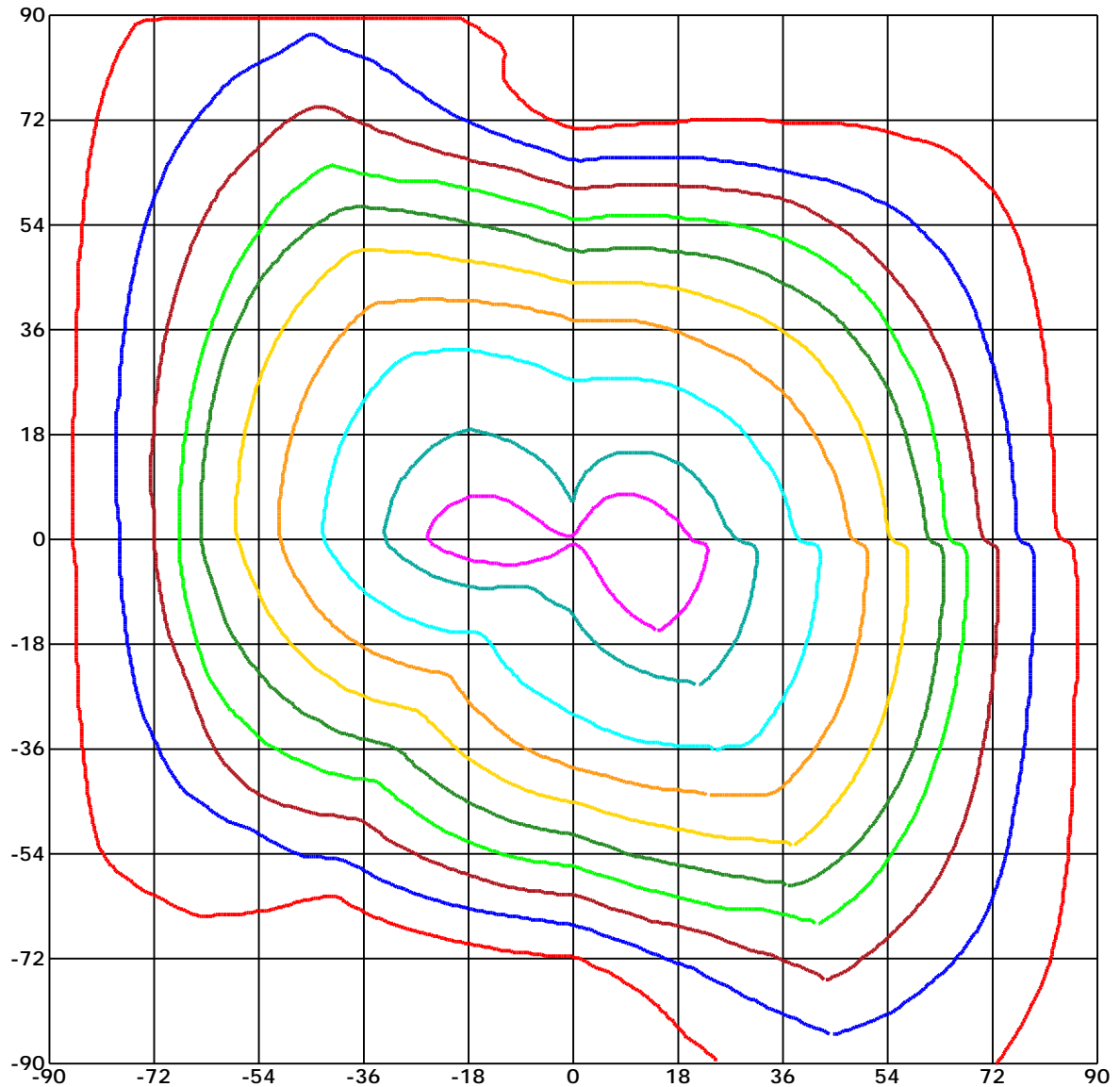
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 5.95 m
 Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

ISOCANDELA DIAGRAM (RECTANGULAR)



Unit of intensity:cd Imax(100%): 1119.073 cd

1063.119(95%Imax)	559.537(50%Imax)
1007.166(90%Imax)	447.629(40%Imax)
895.258(80%Imax)	335.722(30%Imax)
783.351(70%Imax)	223.815(20%Imax)
671.444(60%Imax)	111.907(10%Imax)

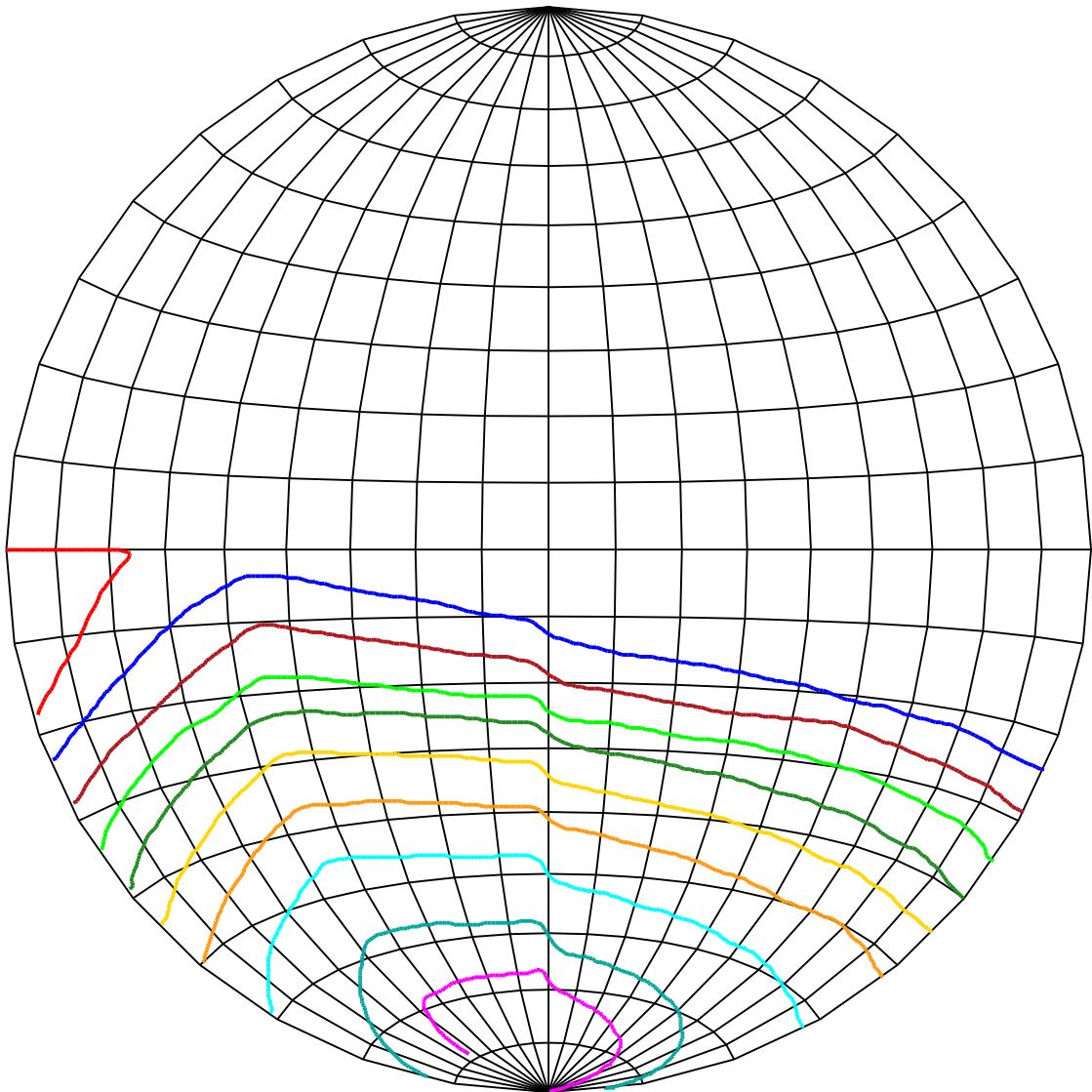
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

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ISOCANDELA DIAGRAM (SPHERE)



Unit of intensity:cd Imax(100%): 1119.073 cd

1063.119(95%Imax)
1007.166(90%Imax)
895.258(80%Imax)
783.351(70%Imax)
671.444(60%Imax)

559.537(50%Imax)
447.629(40%Imax)
335.722(30%Imax)
223.815(20%Imax)
111.907(10%Imax)

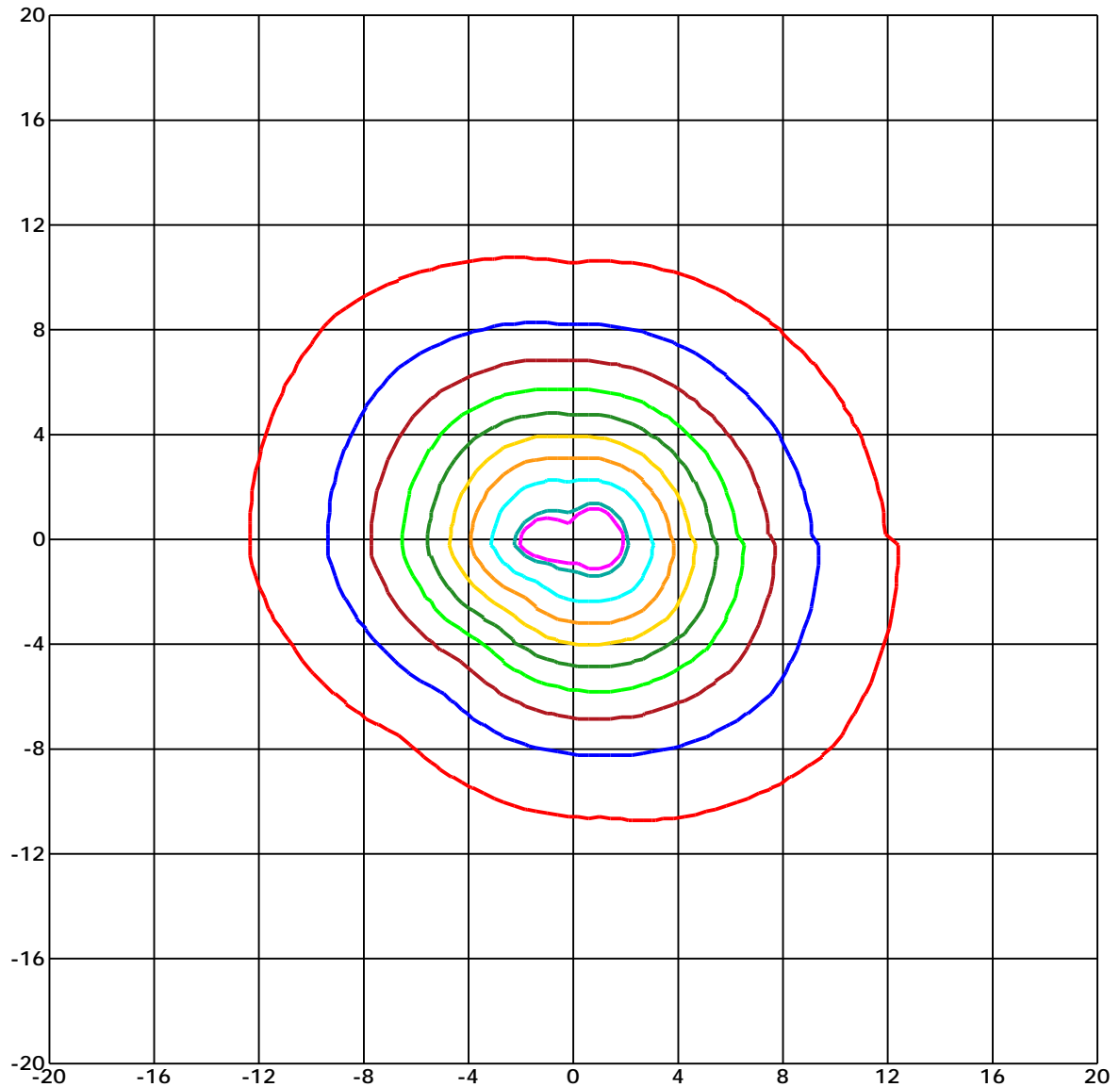
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

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ISOLX DIAGRAM



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

15.988(1%Emax)	8.689(1%Emax)
15.64(1%Emax)	6.951(1%Emax)
13.902(1%Emax)	5.213(0%Emax)
12.165(1%Emax)	3.476(0%Emax)
10.427(1%Emax)	1.738(0%Emax)

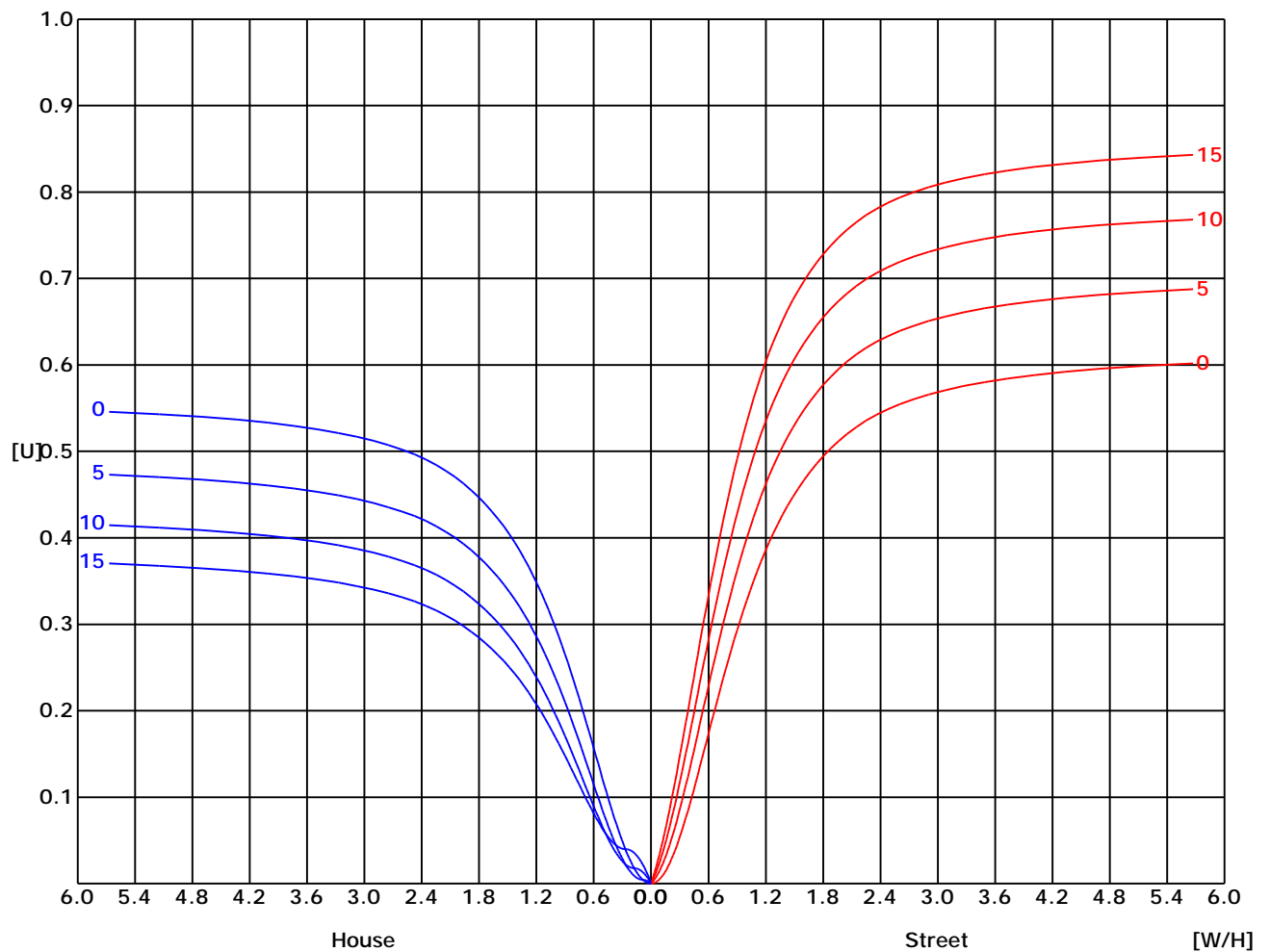
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

UTILIZATION FACTOR DIAGRAM (ROAD)



C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

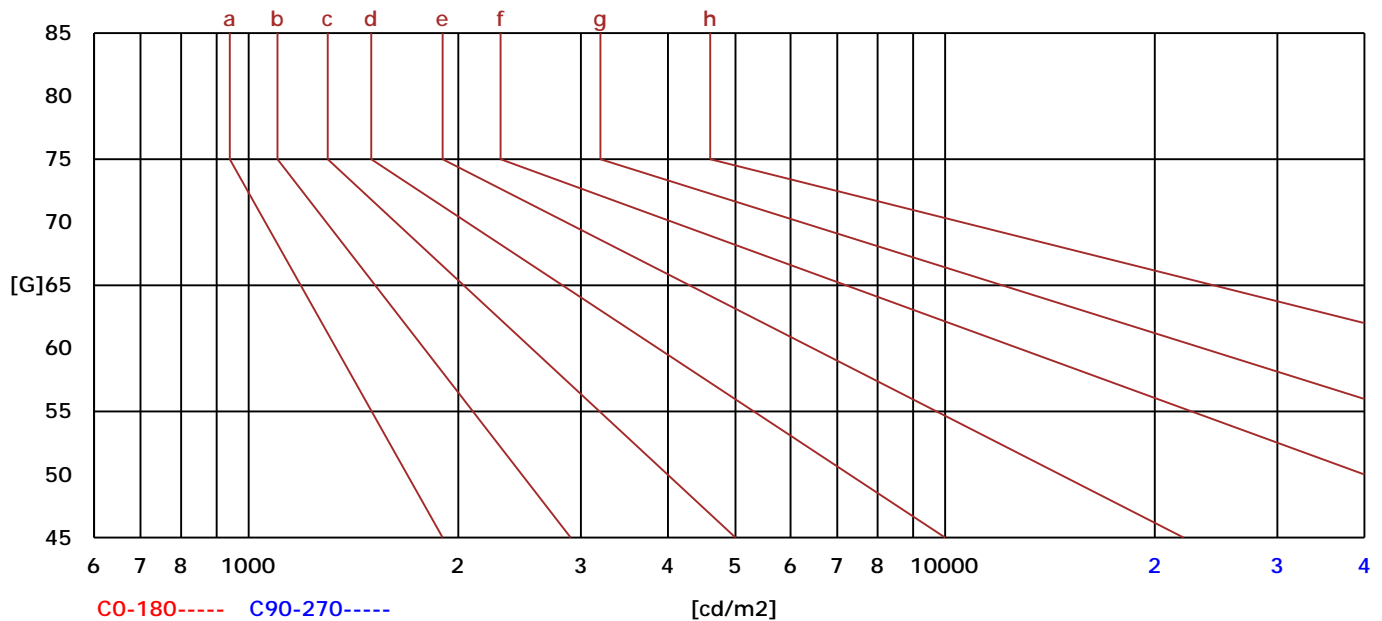
G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

Report No.:

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BRIGHT LIMIT DIAGRAM

C/G	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	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



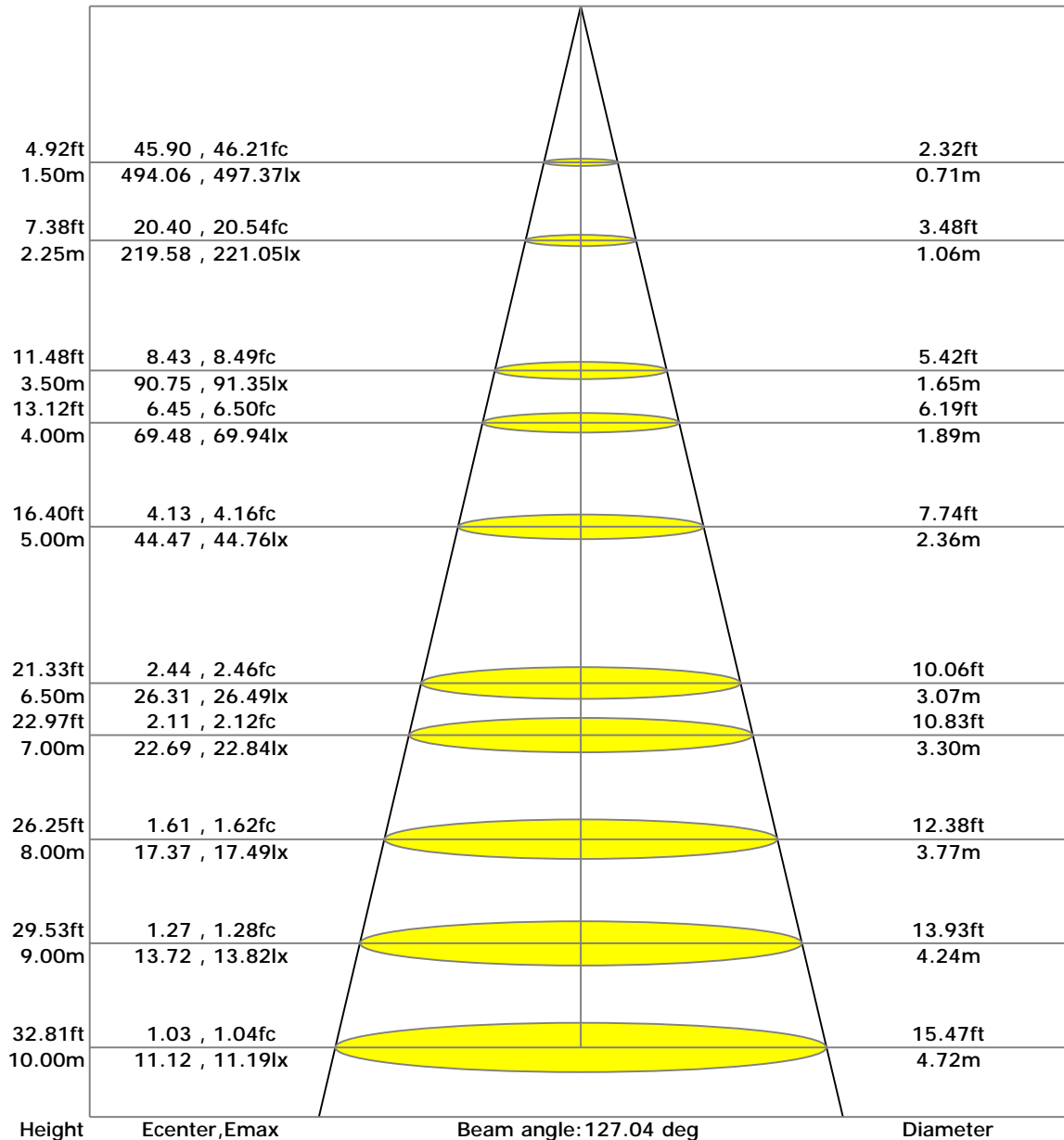
C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 5.95 m
 Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

LX-DISTANCE DIAGRAM



C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

UGR(Unified Glare Rating) TABLE

RHOCC	80	80	70	70	70	50	50	50	30	30
RHOW	50	30	10	50	30	10	50	30	10	50
RHOF	20	20	20	20	20	20	20	20	20	20
Room Size X Y	Weft to light axis direction of observation					Direction of light axis parallel observation				
2H 2H	19.15	18.86	18.62	18.89	18.56	18.29	18.22	17.86	17.54	17.33
3H	16.92	16.52	16.24	16.76	16.29	15.92	16.28	15.72	15.25	15.60
4H	15.00	14.57	14.27	14.93	14.38	13.98	14.60	13.92	13.39	14.10
6H	13.41	12.96	12.66	13.38	12.81	12.40	13.19	12.44	11.87	12.83
8H	12.07	11.63	11.34	12.09	11.50	11.11	11.99	11.20	10.63	11.74
12H	10.95	10.52	10.25	11.00	10.42	10.03	10.96	10.17	9.60	10.81
4H 2H	10.00	9.59	9.33	10.07	9.50	9.14	10.09	9.30	8.74	10.00
3H	9.20	8.80	8.55	9.28	8.73	8.38	9.34	8.55	8.02	9.30
4H	8.51	8.13	7.90	8.59	8.07	7.73	8.68	7.92	7.40	8.68
6H	7.91	7.55	7.33	8.00	7.50	7.18	8.11	7.37	6.87	8.14
8H	7.39	7.05	6.84	7.49	7.00	6.70	7.61	6.89	6.42	7.66
12H	6.94	6.61	6.41	7.04	6.57	6.28	7.17	6.47	6.02	7.23
8H 4H	6.54	6.23	6.04	6.64	6.19	5.91	6.77	6.10	5.67	6.85
6H	6.19	5.89	5.71	6.28	5.85	5.59	6.42	5.77	5.36	6.51
8H	5.88	5.59	5.42	5.97	5.55	5.31	6.11	5.48	5.08	6.20
12H	5.59	5.32	5.16	5.69	5.29	5.05	5.83	5.22	4.84	5.92
12H 4H	5.34	5.08	4.92	5.43	5.05	4.82	5.57	4.98	4.62	5.66
6H	5.12	4.86	4.71	5.20	4.84	4.62	5.34	4.77	4.42	5.43

C Range: 0 - 360 Deg
 C Interval: 45.0 Deg
 Test Speed: High
 Temperature:
 Operators:
 Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
 G Interval: 1.0 Deg
 Test System: Huipu CPM-1800B Goniophotometer
 Humidity:
 Test Distance: 5.95 m
 Remarks:

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ZONAL LUMINOUS FLUX TABLE

[illegible]

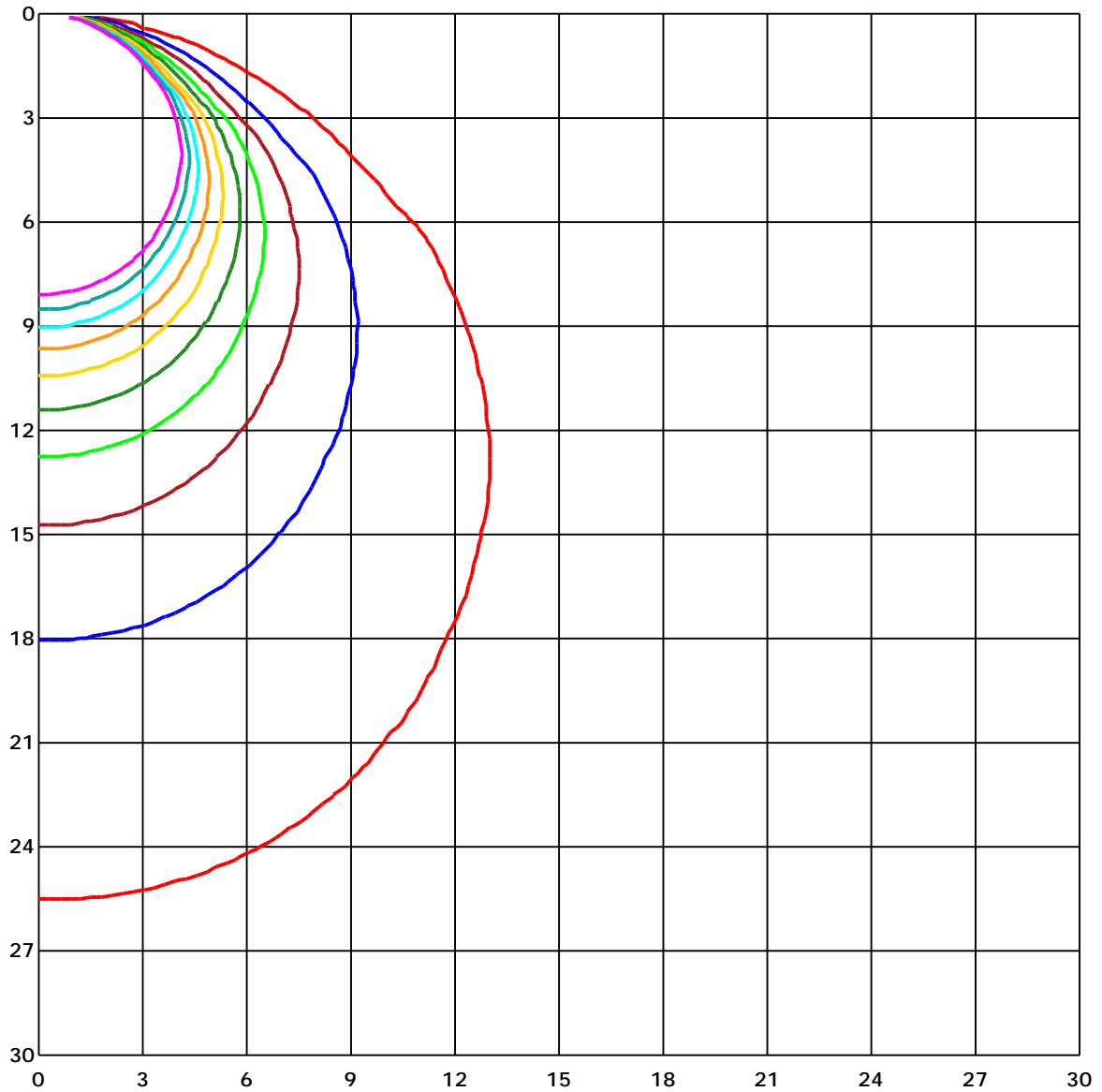
C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks:

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SPACE ISOLX DIAGRAM



Unit of illumination: lx

17.077

15.37

13.662

11.954

10.246

8.539

6.831

5.123

3.415

1.708

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

LUMINOUS DISTRIBUTION INTENSITY DATA

GammaC	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G0	1111.64	1096.42	1012.51	1010.03	1104.56	1070.57	1026.32	1049.33	1097.48	
G1	1112.7	1095.0	1012.16	1014.99	1108.1	1068.09	1026.32	1051.81	1101.02	
G2	1113.41	1093.94	1011.8	1017.82	1109.87	1062.08	1026.32	1056.77	1102.43	
G3	1114.12	1091.81	1010.39	1022.07	1112.7	1055.7	1026.32	1059.24	1104.91	
G4	1113.76	1090.75	1008.97	1025.61	1115.18	1052.87	1025.26	1063.14	1105.62	
G5	1113.76	1086.86	1008.97	1027.38	1116.24	1046.14	1023.84	1067.03	1107.39	
G6	1112.7	1083.32	1005.79	1030.57	1117.66	1038.71	1023.13	1068.45	1108.81	
G7	1111.99	1081.19	1002.6	1031.98	1118.72	1034.46	1020.65	1070.93	1109.16	
G8	1109.87	1077.3	1001.89	1034.11	1119.07	1026.67	1019.24	1072.34	1108.81	
G9	1107.39	1074.82	998.35	1035.88	1119.07	1022.07	1016.41	1074.11	1108.81	
G10	1105.97	1069.16	995.52	1036.94	1118.01	1012.87	1012.87	1075.88	1108.45	
G11	1103.14	1063.85	991.62	1037.65	1118.01	1002.95	1011.45	1076.24	1107.04	
G12	1101.02	1061.01	989.5	1038.71	1116.24	998.0	1007.56	1076.59	1105.62	
G13	1097.12	1054.29	984.54	1038.36	1114.12	986.67	1005.08	1076.94	1104.2	
G14	1092.17	1051.1	978.53	1038.36	1113.06	972.15	1000.48	1076.59	1101.73	
G15	1089.69	1044.02	976.05	1037.65	1109.87	965.07	997.29	1076.24	1097.83	
G16	1084.38	1040.13	970.03	1036.94	1106.33	958.35	991.98	1074.82	1096.42	
G17	1078.71	1032.34	965.43	1035.17	1104.56	948.08	985.61	1074.11	1092.17	
G18	1075.53	1024.55	959.05	1033.05	1099.96	938.17	982.42	1071.99	1087.57	
G19	1068.8	1020.3	951.97	1031.28	1095.35	931.09	975.69	1069.51	1085.09	
G20	1061.01	1012.16	948.08	1028.44	1092.52	916.22	971.8	1067.74	1079.42	
G21	1057.47	1002.6	940.29	1024.9	1086.15	909.49	964.72	1064.55	1076.94	
G22	1048.27	997.64	936.04	1022.42	1083.32	894.27	956.58	1060.66	1070.57	
G23	1044.37	988.44	927.19	1018.18	1076.59	881.17	952.33	1058.18	1063.49	
G24	1034.11	977.82	922.24	1016.41	1072.34	874.44	943.83	1053.22	1059.6	
G25	1023.84	971.8	911.97	1011.1	1065.62	860.28	934.27	1051.45	1051.81	
G26	1012.51	960.12	902.41	1008.62	1057.12	852.85	929.67	1045.44	1047.91	
G27	1010.39	947.72	896.75	1002.25	1052.16	837.62	919.4	1042.6	1039.77	
G28	997.64	941.35	885.77	996.23	1044.02	821.69	908.78	1036.23	1035.52	
G29	991.27	928.96	874.8	992.33	1038.71	812.84	903.47	1029.15	1026.32	
G30	976.05	916.57	869.84	985.61	1028.8	788.77	892.5	1025.61	1016.41	
G31	971.09	910.2	857.45	982.07	1024.19	779.56	880.81	1017.82	1010.74	
G32	956.93	896.04	845.06	973.92	1012.16	766.46	874.44	1013.93	1000.12	
G33	939.23	889.31	838.33	965.43	1001.89	754.43	862.4	1005.43	994.81	
G34	939.23	874.44	825.94	960.82	996.23	731.77	849.66	996.23	982.42	
G35	925.42	858.86	812.84	951.62	983.48	722.57	842.93	991.27	970.74	
G36	921.17	850.72	805.05	947.02	977.11	702.74	828.06	981.71	964.72	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

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Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 1)

Gamma/C	C0	C45	C90	C135	C180	C225	C270	C315	C360	
G37	1111.64	1096.42	1012.51	1010.03	1104.56	1070.57	1026.32	1049.33	1097.48	
G38	1112.7	1095.0	1012.16	1014.99	1108.1	1068.09	1026.32	1051.81	1101.02	
G39	1113.41	1093.94	1011.8	1017.82	1109.87	1062.08	1026.32	1056.77	1102.43	
G40	1114.12	1091.81	1010.39	1022.07	1112.7	1055.7	1026.32	1059.24	1104.91	
G41	1113.76	1090.75	1008.97	1025.61	1115.18	1052.87	1025.26	1063.14	1105.62	
G42	1113.76	1086.86	1008.97	1027.38	1116.24	1046.14	1023.84	1067.03	1107.39	
G43	1112.7	1083.32	1005.79	1030.57	1117.66	1038.71	1023.13	1068.45	1108.81	
G44	1111.99	1081.19	1002.6	1031.98	1118.72	1034.46	1020.65	1070.93	1109.16	
G45	1109.87	1077.3	1001.89	1034.11	1119.07	1026.67	1019.24	1072.34	1108.81	
G46	1107.39	1074.82	998.35	1035.88	1119.07	1022.07	1016.41	1074.11	1108.81	
G47	1105.97	1069.16	995.52	1036.94	1118.01	1012.87	1012.87	1075.88	1108.45	
G48	1103.14	1063.85	991.62	1037.65	1118.01	1002.95	1011.45	1076.24	1107.04	
G49	1101.02	1061.01	989.5	1038.71	1116.24	998.0	1007.56	1076.59	1105.62	
G50	1097.12	1054.29	984.54	1038.36	1114.12	986.67	1005.08	1076.94	1104.2	
G51	1092.17	1051.1	978.53	1038.36	1113.06	972.15	1000.48	1076.59	1101.73	
G52	1089.69	1044.02	976.05	1037.65	1109.87	965.07	997.29	1076.24	1097.83	
G53	1084.38	1040.13	970.03	1036.94	1106.33	958.35	991.98	1074.82	1096.42	
G54	1078.71	1032.34	965.43	1035.17	1104.56	948.08	985.61	1074.11	1092.17	
G55	1075.53	1024.55	959.05	1033.05	1099.96	938.17	982.42	1071.99	1087.57	
G56	1068.8	1020.3	951.97	1031.28	1095.35	931.09	975.69	1069.51	1085.09	
G57	1061.01	1012.16	948.08	1028.44	1092.52	916.22	971.8	1067.74	1079.42	
G58	1057.47	1002.6	940.29	1024.9	1086.15	909.49	964.72	1064.55	1076.94	
G59	1048.27	997.64	936.04	1022.42	1083.32	894.27	956.58	1060.66	1070.57	
G60	1044.37	988.44	927.19	1018.18	1076.59	881.17	952.33	1058.18	1063.49	
G61	1034.11	977.82	922.24	1016.41	1072.34	874.44	943.83	1053.22	1059.6	
G62	1023.84	971.8	911.97	1011.1	1065.62	860.28	934.27	1051.45	1051.81	
G63	1012.51	960.12	902.41	1008.62	1057.12	852.85	929.67	1045.44	1047.91	
G64	1010.39	947.72	896.75	1002.25	1052.16	837.62	919.4	1042.6	1039.77	
G65	997.64	941.35	885.77	996.23	1044.02	821.69	908.78	1036.23	1035.52	
G66	991.27	928.96	874.8	992.33	1038.71	812.84	903.47	1029.15	1026.32	
G67	976.05	916.57	869.84	985.61	1028.8	788.77	892.5	1025.61	1016.41	
G68	971.09	910.2	857.45	982.07	1024.19	779.56	880.81	1017.82	1010.74	
G69	956.93	896.04	845.06	973.92	1012.16	766.46	874.44	1013.93	1000.12	
G70	939.23	889.31	838.33	965.43	1001.89	754.43	862.4	1005.43	994.81	
G71	939.23	874.44	825.94	960.82	996.23	731.77	849.66	996.23	982.42	
G72	925.42	858.86	812.84	951.62	983.48	722.57	842.93	991.27	970.74	
G73	921.17	850.72	805.05	947.02	977.11	702.74	828.06	981.71	964.72	

C Range: 0 - 360 Deg

C Interval: 45.0 Deg

Test Speed: High

Temperature:

Operators:

Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg

G Interval: 1.0 Deg

Test System: Huipu CPM-1800B Goniophotometer

Humidity:

Test Distance: 5.95 m

Remarks:

Report No.:

Test Time: 2019/11/29 8:52:11

LUMINOUS DISTRIBUTION INTENSITY DATA(Continue 2)

[illegible]

C Range: 0 - 360 Deg
C Interval: 45.0 Deg
Test Speed: High
Temperature:
Operators:
Test Date: 2019/11/29 8:52:11

G Range: 0 - 90 Deg
G Interval: 1.0 Deg
Test System: Huipu CPM-1800B Goniophotometer
Humidity:
Test Distance: 5.95 m
Remarks: