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brideglux

LumCAT: 4-1886-E
Luminaire: 92.76.263.00
Report No: NATA0100
Test No: 2017011401
LampCAT: BRIDGELUX VERO 13
Lamp flux(lm): 1556.0
Number of Lamps: 1
Length(mm): 100
Phm Type: C

Voltage(V): 33.0000
Current(A): 0.5500
Power (W): 18.1500
PF: 0.0000
Ballast type:
Width(mm): 100
Height(mm): 0

Photometric Results

Lumens(lm): 1445.70
Efficiency(%): 92.91%
Lumens(lm)/Power(W): 80.94
Central intensity(cd): 4145.747
Maximum intensity(cd): 4145.747
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=26.5
[C90/270]Total=26.5
Field angle(10%Imax): [C0/180]Total=69.3
[C90/270]Total=69.3
Maximum s/h(1/2): C0_180=0.44 C90_270=0.44
Maximum s/h(1/4): C0_180=0.49 C90_270=0.49
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.42%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.027%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4145.747	24.792	24.792	1.593%	1.715%
5.0	3624.019	173.131	197.924	11.127%	13.690%
10.0	2696.938	256.703	454.627	16.498%	31.447%
15.0	1742.810	247.250	701.876	15.890%	48.549%
20.0	1105.257	207.207	909.083	13.317%	62.882%
25.0	824.669	191.037	1100.12	12.277%	76.096%
30.0	651.964	178.683	1278.803	11.483%	88.455%
35.0	397.810	125.071	1403.874	8.038%	97.107%
40.0	26.021	9.168	1413.042	.589%	97.741%
45.0	7.859	3.046	1416.089	.196%	97.951%
50.0	7.261	3.049	1419.137	.196%	98.162%
55.0	6.937	3.115	1422.252	.200%	98.378%
60.0	6.738	3.198	1425.45	.206%	98.599%
65.0	6.614	3.286	1428.736	.211%	98.826%
70.0	6.524	3.360	1432.096	.216%	99.059%
75.0	6.455	3.418	1435.514	.220%	99.295%
80.0	7.584	4.094	1439.608	.263%	99.578%
85.0	7.969	4.352	1443.96	.280%	99.879%
90.0	6.366	1.745	1445.705	.112%	100.000%

Zonal flux distribution table

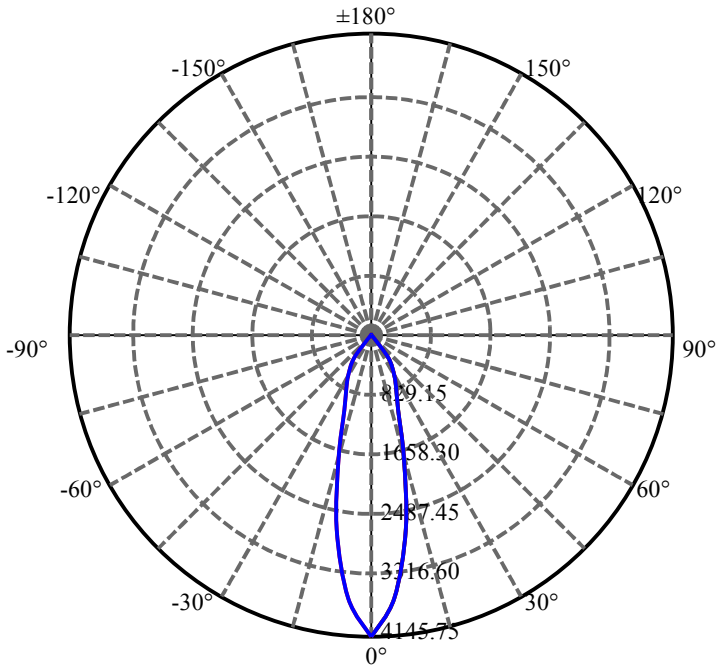
ZONAL LUMEN SUMMARY

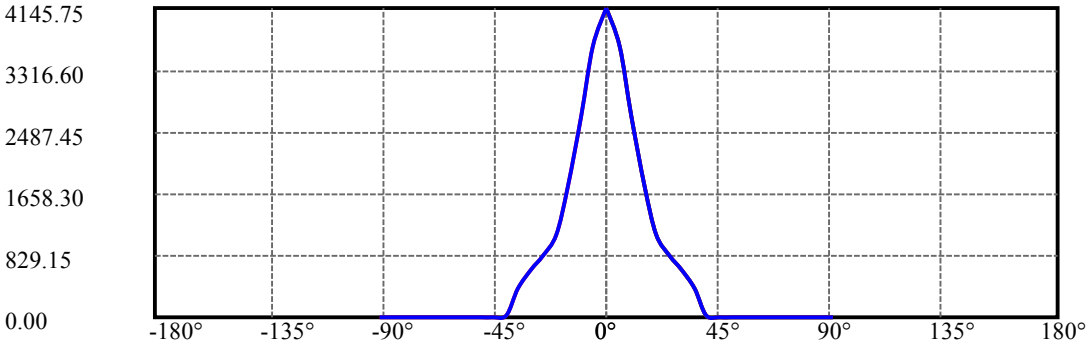
Zone	Lumens	%Lamp	%Fixt
0-30	1278.80	82.19%	88.46%
0-40	1413.04	90.81%	97.74%
0-60	1425.45	91.61%	98.60%
0-90	1443.96	92.80%	99.88%
0-120	1443.96	92.80%	99.88%
0-180	1445.70	92.91%	100.00%
60-90	21.71	1.40%	1.50%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.58	1156.56	74.33%	80.00%

ZONAL LUMEN SUMMARY

0-10	454.63
10-20	454.46
20-30	369.72
30-40	134.24
40-50	6.09
50-60	6.31
60-70	6.65
70-80	7.51
80-90	4.35
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

Light Distribution Curve [Unit:cd]





C0(Max):

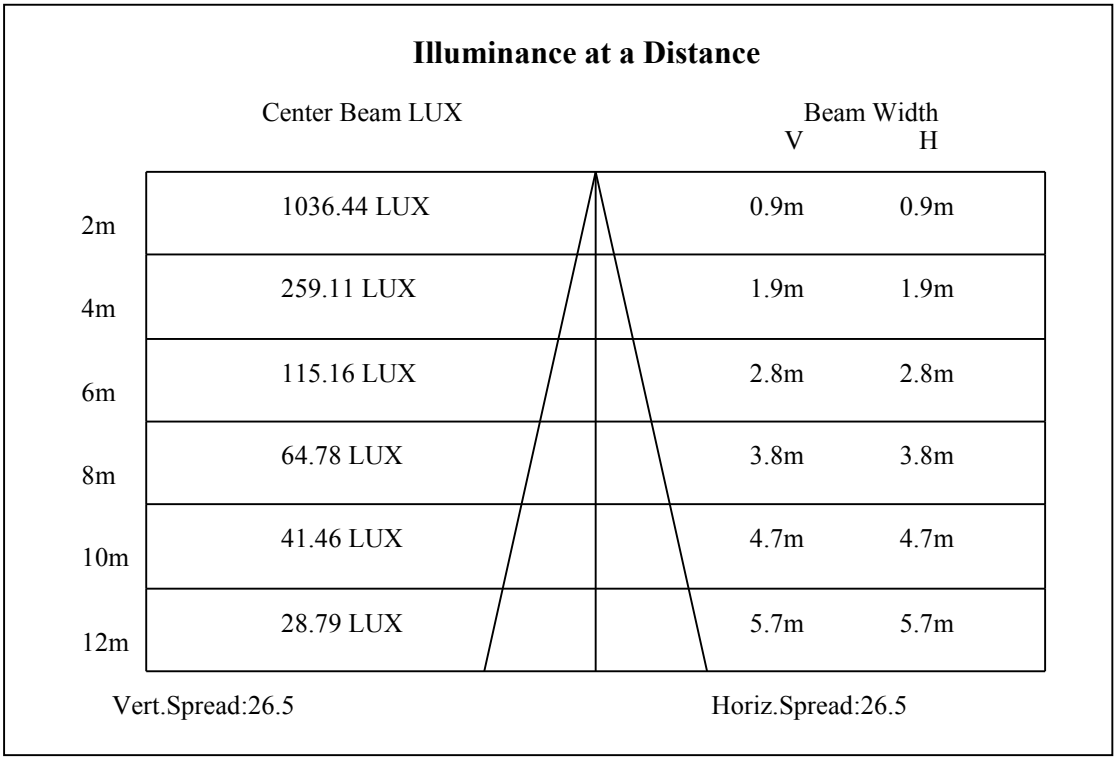
C0/C180:

C90/C270:

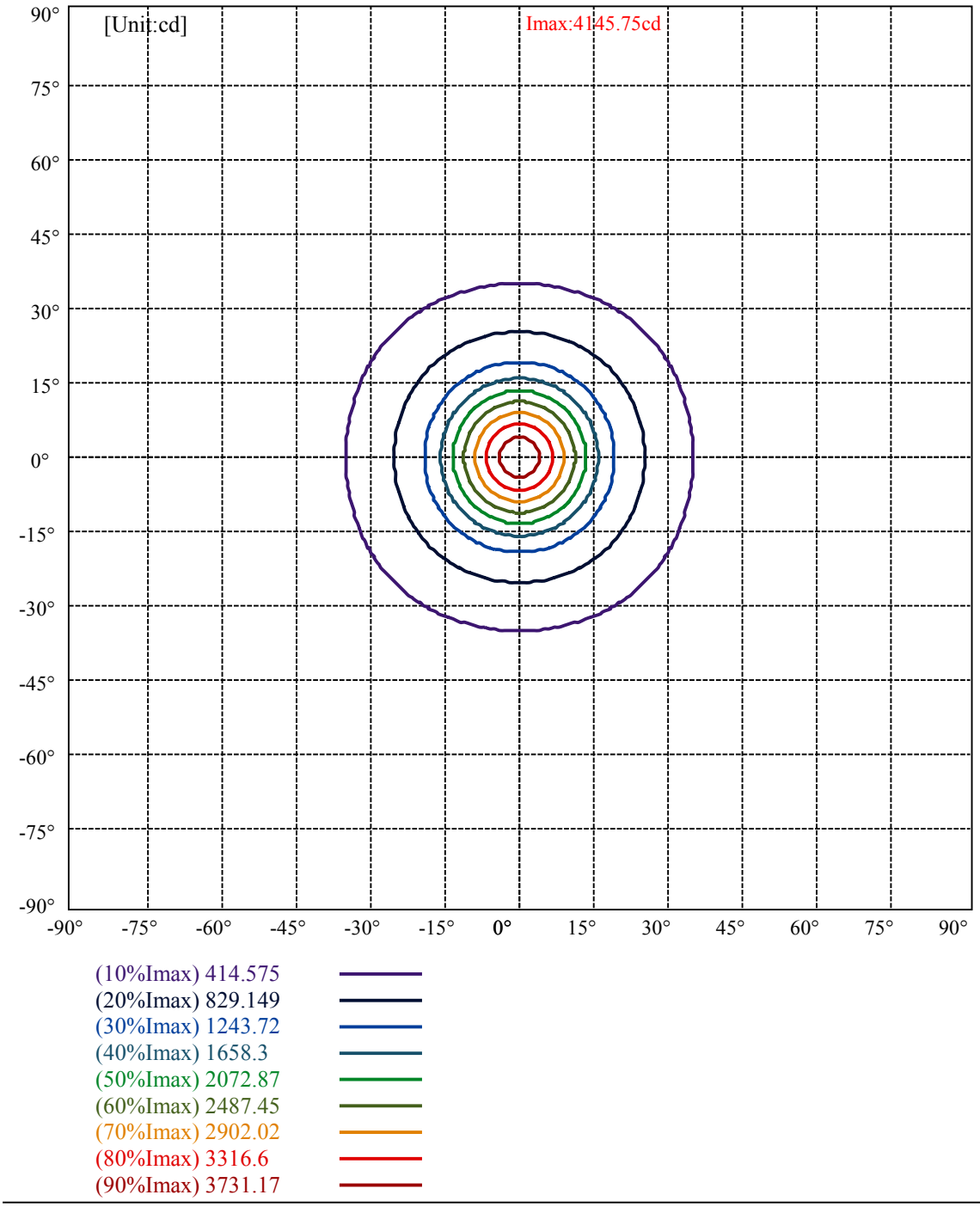
Field angle(10%Imax):C0/180Left:34.7 Right:34.7
:C90/270Left:34.7 Right:34.7

Beam Angle(50%Imax):C0/180Left:13.3 Right:13.3
:C90/270Left:13.3 Right:13.3

Lux distance Curve



ISO-Intensity(V-H)

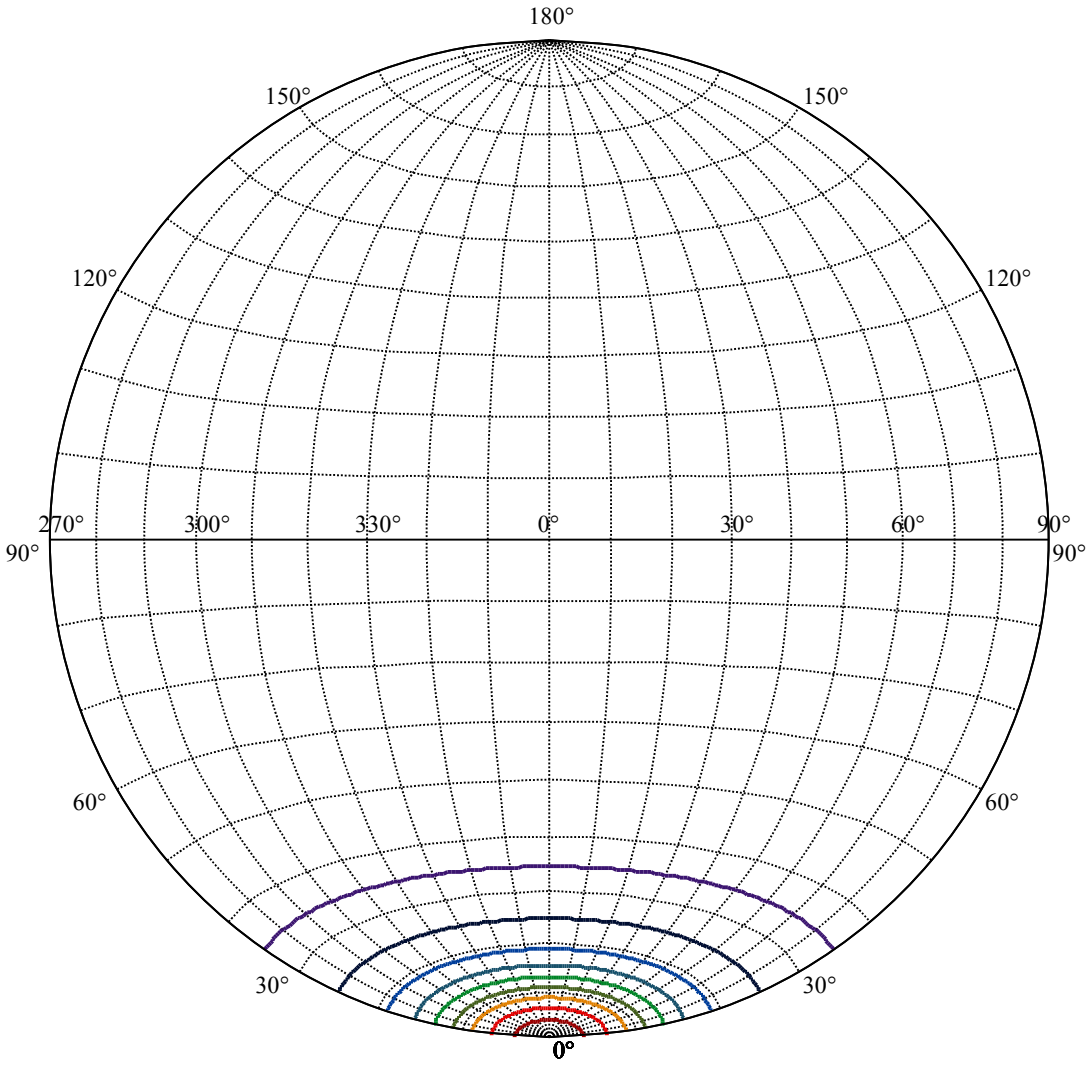


Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/1/14
Humidity(%): 60.0%

Operator: NT03
Distance(m): 7.42

ISO candela diagram on circular web



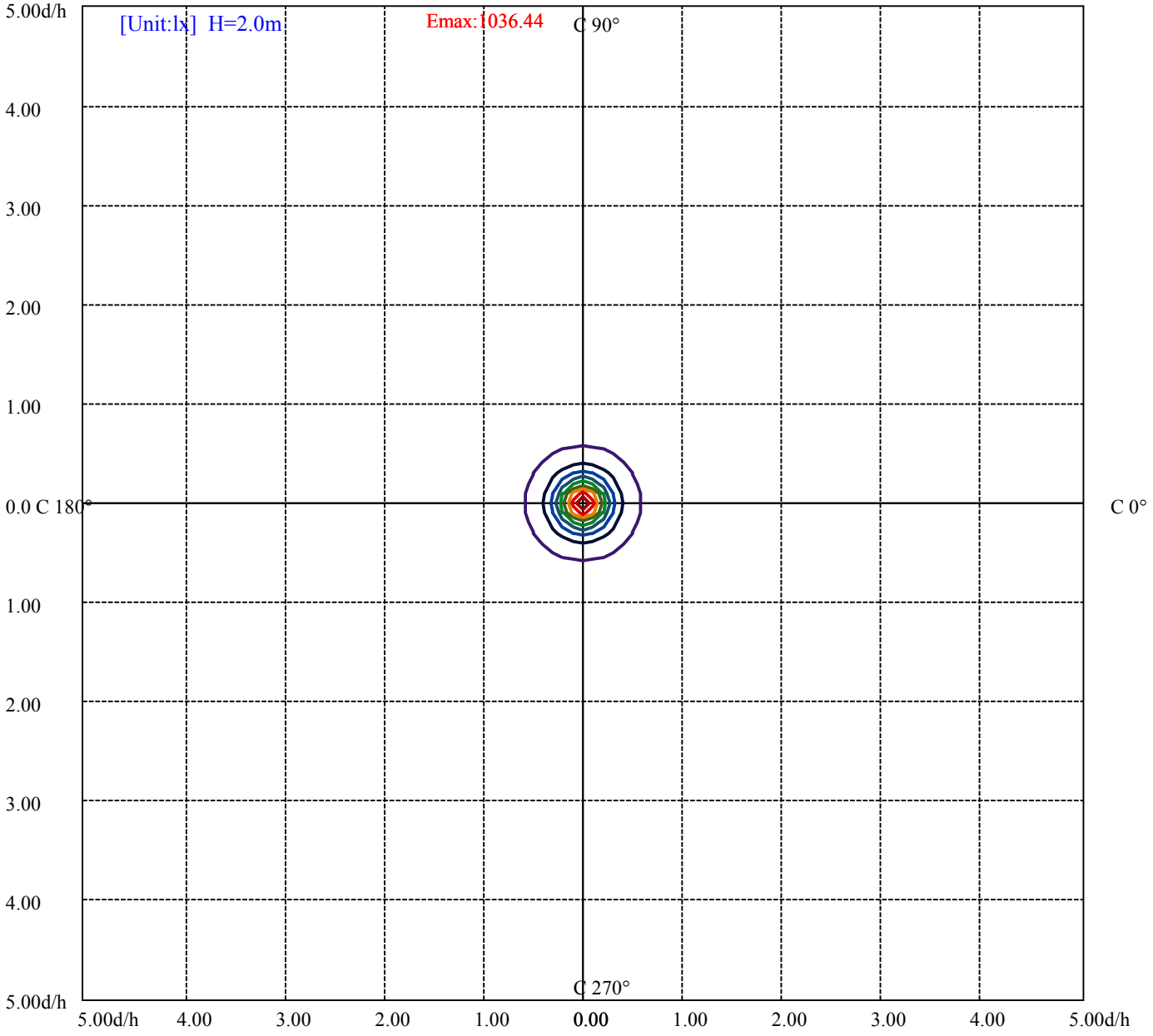
House [Unit:cd] Road

Imax:4145.75

(10%Imax) 414.575
(20%Imax) 829.149
(30%Imax) 1243.72
(40%Imax) 1658.3
(50%Imax) 2072.87
(60%Imax) 2487.45
(70%Imax) 2902.02
(80%Imax) 3316.6
(90%Imax) 3731.17

Equipment: gms1980 Date: 2017/1/14 Operator: NT03
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

ISO illuminance diagram

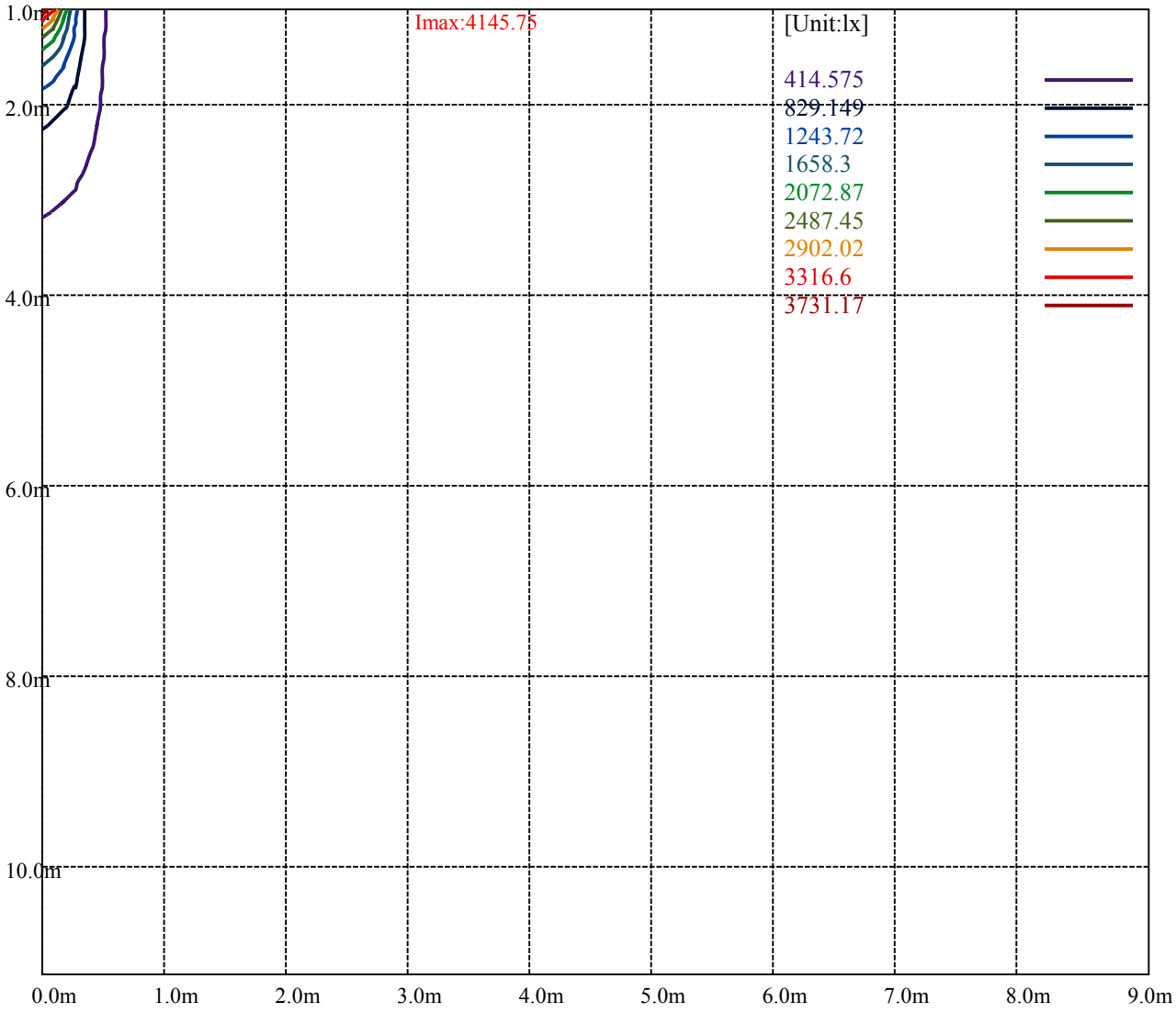


Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/1/14
Humidity(%): 60.0%

Operator: NT03
Distance(m): 7.42

Space ISO Lux diagram



Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/1/14
Humidity(%): 60.0%

Operator: NT03
Distance(m): 7.42

Luminance Limitting Curve(no luminous side)

Luminance Table

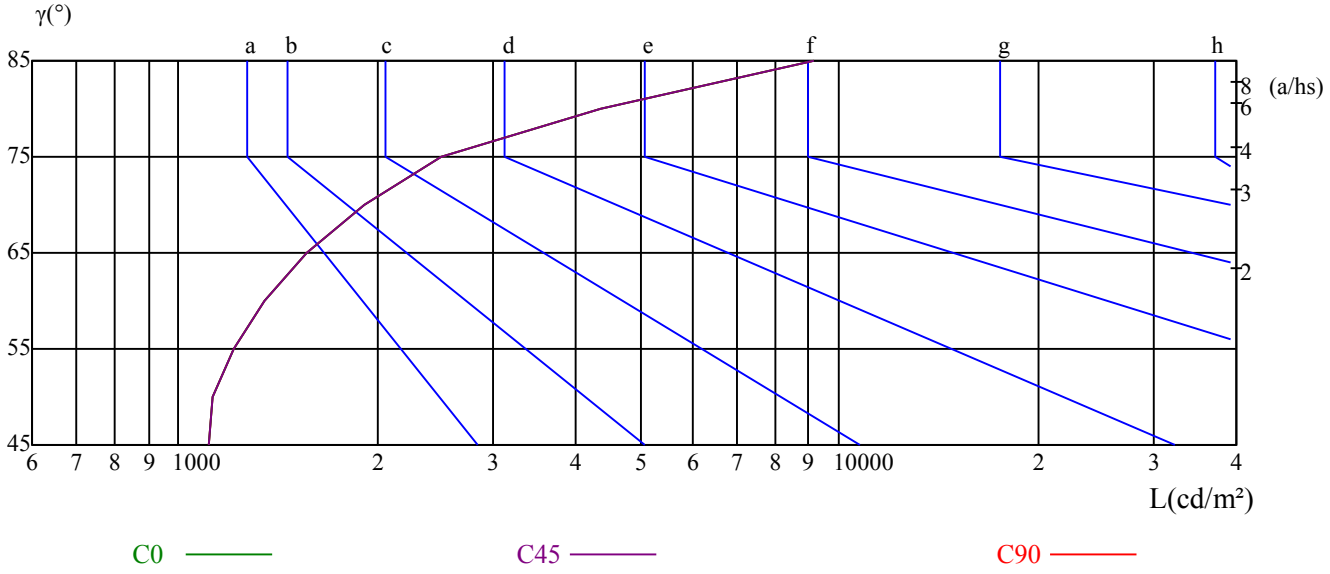
γ	45	50	55	60	65	70	75	80	85
C0	1111	1130	1209	1348	1565	1908	2494	4367	9144
C45	1111	1130	1209	1348	1565	1908	2494	4367	9144
C90	1111	1130	1209	1348	1565	1908	2494	4367	9144

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1565	1565	1565	2494	2494	2494	9144	9144	9144

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
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

Luminance Limitting Curve



UGR Glare

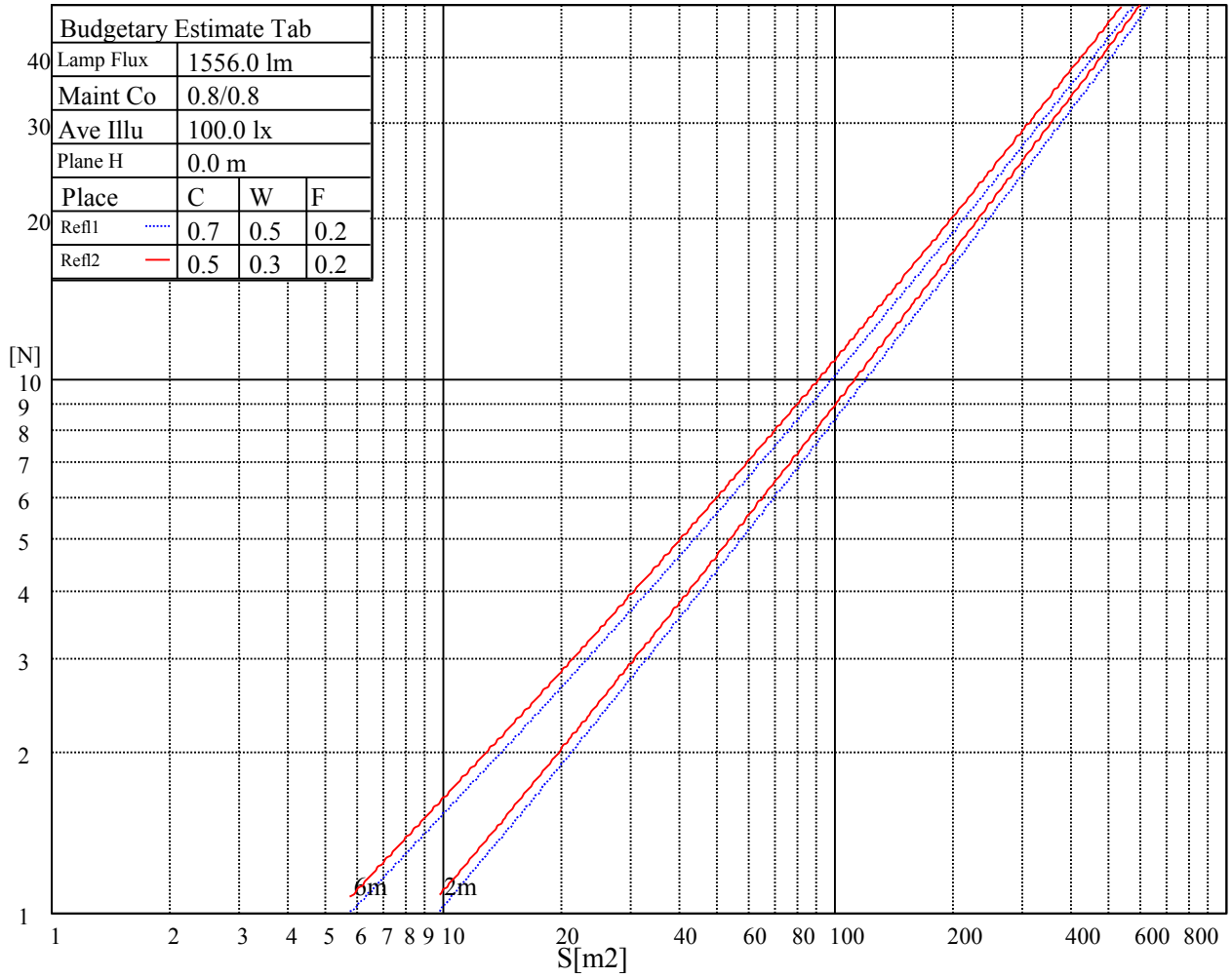
Illumination assessment according UGR

Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	0.36	1.27	0.72	1.58	1.90	0.31	1.23	0.68	1.54	1.85
	3H	3.67	4.48	4.06	4.81	5.18	3.63	4.44	4.01	4.77	5.14
	4H	5.48	6.22	5.88	6.58	6.97	5.42	6.16	5.83	6.52	6.91
	6H	8.10	8.78	8.52	9.16	9.56	7.77	8.45	8.19	8.83	9.23
	8H	9.66	10.30	10.09	10.69	11.10	9.03	9.67	9.46	10.06	10.47
	12H	12.04	12.65	12.48	13.04	13.47	10.89	11.51	11.33	11.89	12.32
4H	2H	1.30	2.04	1.71	2.40	2.79	1.27	2.01	1.67	2.37	2.76
	3H	4.84	5.45	5.26	5.86	6.27	4.80	5.42	5.22	5.83	6.23
	4H	6.83	7.37	7.26	7.80	8.25	6.76	7.31	7.20	7.74	8.18
	6H	9.46	9.93	9.93	10.38	10.85	9.20	9.67	9.67	10.12	10.60
	8H	11.17	11.61	11.65	12.06	12.53	10.59	11.03	11.07	11.48	11.96
	12H	13.44	13.82	13.93	14.31	14.79	12.37	12.74	12.86	13.23	13.71
8H	4H	7.64	8.08	8.12	8.53	9.01	7.59	8.03	8.07	8.48	8.95
	6H	10.59	10.94	11.11	11.44	11.93	10.35	10.69	10.86	11.20	11.69
	8H	12.45	12.76	12.99	13.28	13.78	11.92	12.23	12.45	12.75	13.25
	12H	14.76	15.02	15.29	15.52	16.11	13.79	14.05	14.31	14.55	15.13
12H	4H	7.92	8.30	8.41	8.79	9.27	7.90	8.28	8.39	8.77	9.25
	6H	11.17	11.27	11.51	11.75	12.30	10.97	11.07	11.30	11.54	12.09
	8H	12.94	13.20	13.46	13.70	14.28	12.46	12.72	12.98	13.22	13.80

Variation with the observer position at spacings:

S = 1.0H	5.7/-8.2	5.7/-8.2
S = 1.5H	7.8/-6.0	7.8/-6.0
S = 2.0H	9.0/-4.2	9.0/-4.2
Standard tables:	BK3	BK3
Uncorrected UGR	-1.5	-1.5

Budgetary Estimate Table



Equipment: gms1980
Temperature(°C): 25.0

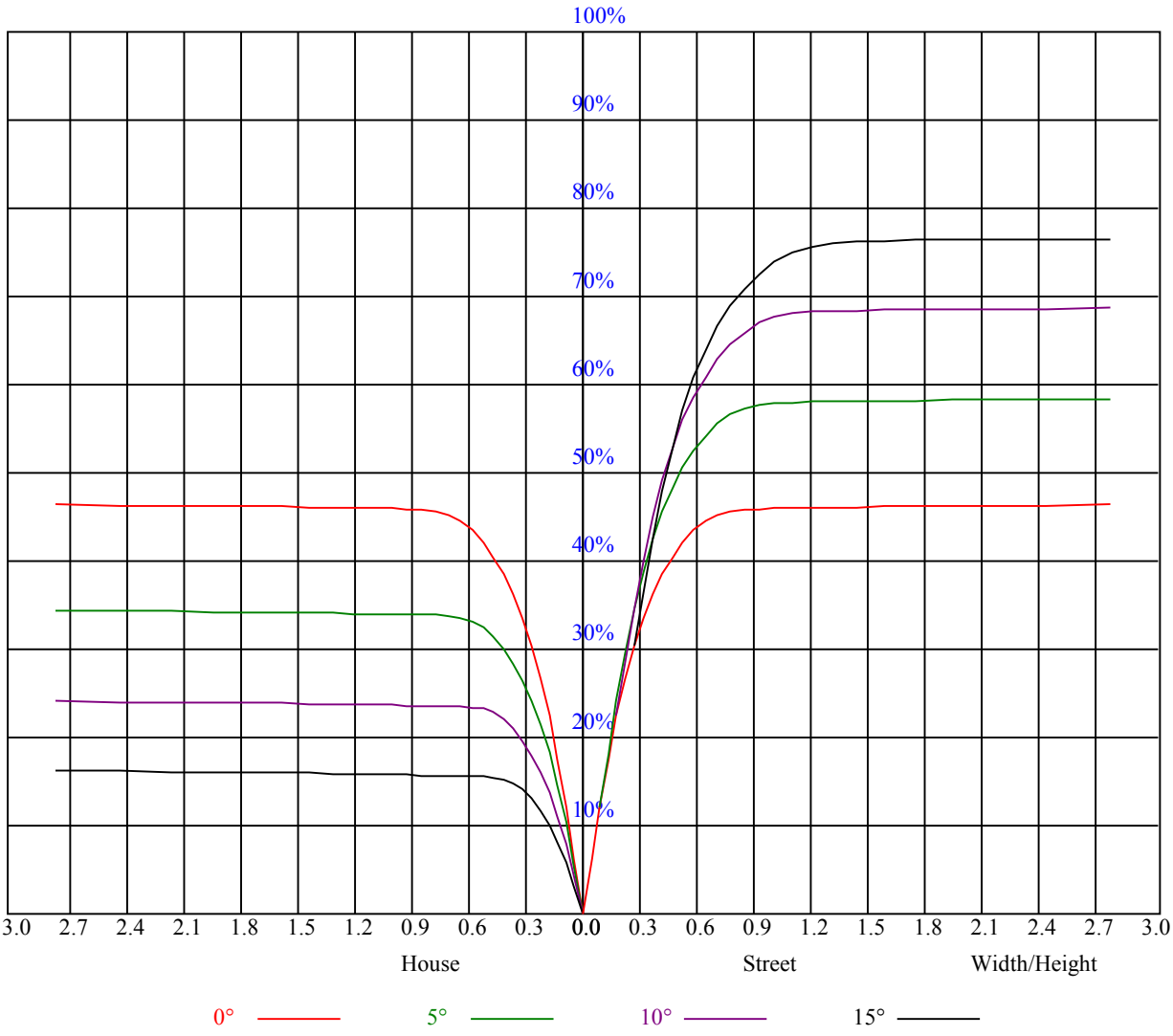
Date: 2017/1/14
Humidity(%): 60.0%

Operator: NT03
Distance(m): 7.42

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.12	1.12	1.12	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.04	1.01	0.99	1.02	0.99	0.97	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.87
2	0.98	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.83
3	0.93	0.89	0.85	0.92	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.79
4	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.76
5	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.73
6	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.70
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.67
8	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.72	0.68	0.66	0.65
9	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63
10	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61

Coefficient Utilization Curve



Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/1/14
Humidity(%): 60.0%

Operator: NT03
Distance(m): 7.42

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	4147.40	3536.82	2616.28	1640.68	1068.09	803.82	641.41	372.18	11.40
45.0	4150.15	3742.73	2777.04	1814.11	1136.91	828.60	665.08	435.50	24.28
90.0	4157.31	3564.35	2681.80	1707.85	1087.14	822.27	647.90	369.81	15.03
135.0	4128.13	3870.46	2938.36	1994.69	1236.02	871.54	692.06	473.49	73.78
180.0	4147.40	3712.45	2764.38	1761.80	1079.22	846.49	647.96	438.08	40.52
225.0	4150.15	3523.06	2633.90	1686.93	1094.58	815.61	631.88	380.16	14.53
270.0	4157.31	3663.45	2782.55	1784.38	1124.80	831.35	671.14	420.63	17.84
315.0	4128.13	3378.81	2381.19	1552.04	1015.30	777.67	618.28	292.62	10.79
360.0	4147.40	3536.82	2616.28	1640.68	1068.09	803.82	641.41	372.18	11.40

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	7.82	7.21	6.88	6.66	6.61	6.50	6.44	6.88	6.77
45.0	7.76	7.27	6.94	6.77	6.66	6.55	6.50	7.32	8.15
90.0	7.76	7.21	6.94	6.77	6.61	6.55	6.50	9.97	11.01
135.0	8.04	7.38	7.05	6.77	6.66	6.55	6.44	7.10	7.60
180.0	7.82	7.27	6.88	6.72	6.55	6.50	6.39	7.82	6.94
225.0	7.82	7.21	6.94	6.72	6.55	6.50	6.44	8.26	8.86
270.0	8.04	7.32	6.99	6.77	6.66	6.55	6.50	6.55	7.71
315.0	7.82	7.21	6.88	6.72	6.61	6.50	6.44	6.77	6.72
360.0	7.82	7.21	6.88	6.66	6.61	6.50	6.44	6.88	6.77

C/γ(°)	90.0
0.0	6.33
45.0	6.39
90.0	6.39
135.0	6.39
180.0	6.33
225.0	6.39
270.0	6.39
315.0	6.33
360.0	6.33