

Indoor Luminaire Photometric Data

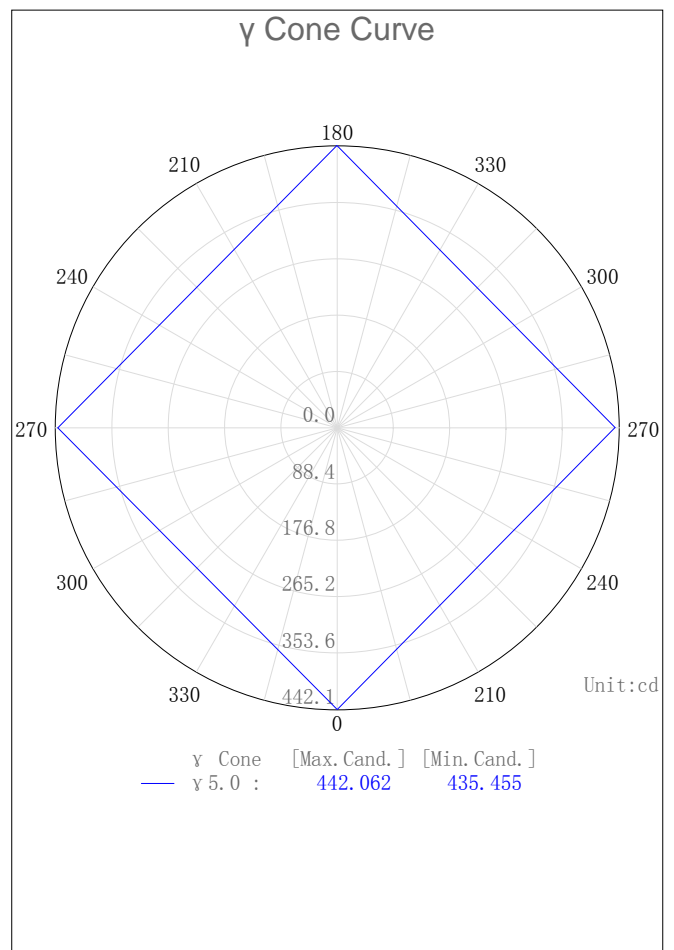
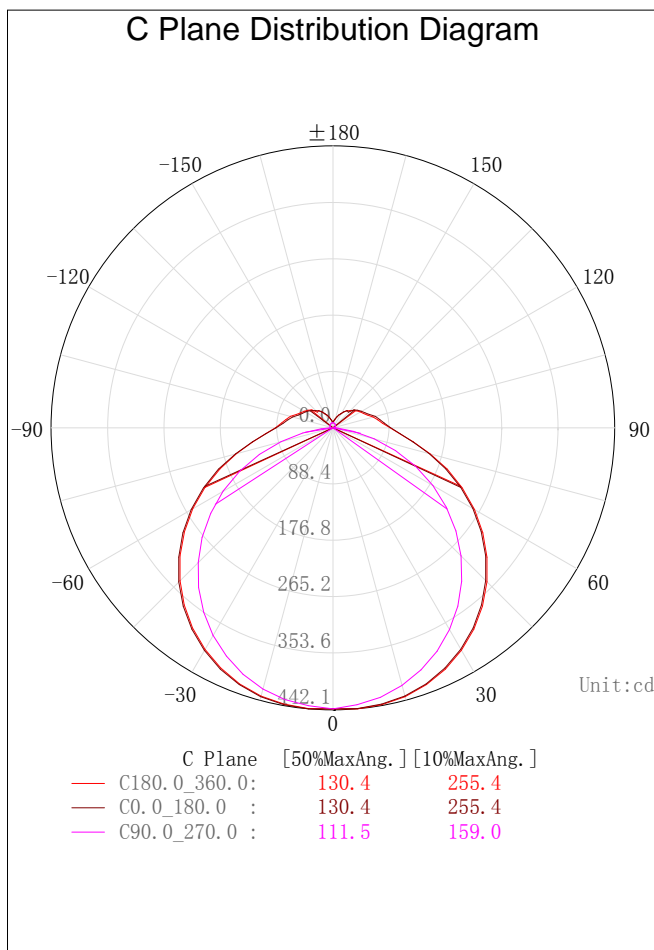
Description Information

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Date: 2018/10/27
Manufacture:	ShldAngle(°):	Test Machine: GON-2000
Test Lab:	Frequency (Hz):	Lamp CCT (K): Ra:
Lum. Size (W*L*H): 0.080m*0.600m*0.065m	Lum. Area (m2): 0.087	Lum. W (kg): 2.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity (%):

Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux (lm): 1600.170	Luminaire Flux: 1600.167lm	Field Angle (10%Imax): 255.4	
Rated Power (W):	Luminaire Efficiency: 100.00%	Down Lumens&Percent: 1425.784lm 89.10%	
Rated Voltage (V):	Luminaire EER (lm/W): 85.525	Up Lumens&Percent: 174.383lm 10.90%	
Tested Power (W): 18.710	Max. Cand. (cd): 442.062	S/MH: C0_a180=1.354 C90_270=1.252	
Lamps' Inside: 1	Max Cand@Ang. (°): C=180.0 γ=5.0	CIE Type: General Diffuse	
Tested Electric: U=241.0V, I=0.082A, PF=0.000	Beam Angle (50%Imax): 130.4	ErP Φ use (120°): 1046.610lm	
Lamp Size (W*L*H): 0.080m*0.600m*0.065m	Left=-65.0 Right=65.4	IRF: 103.186%	

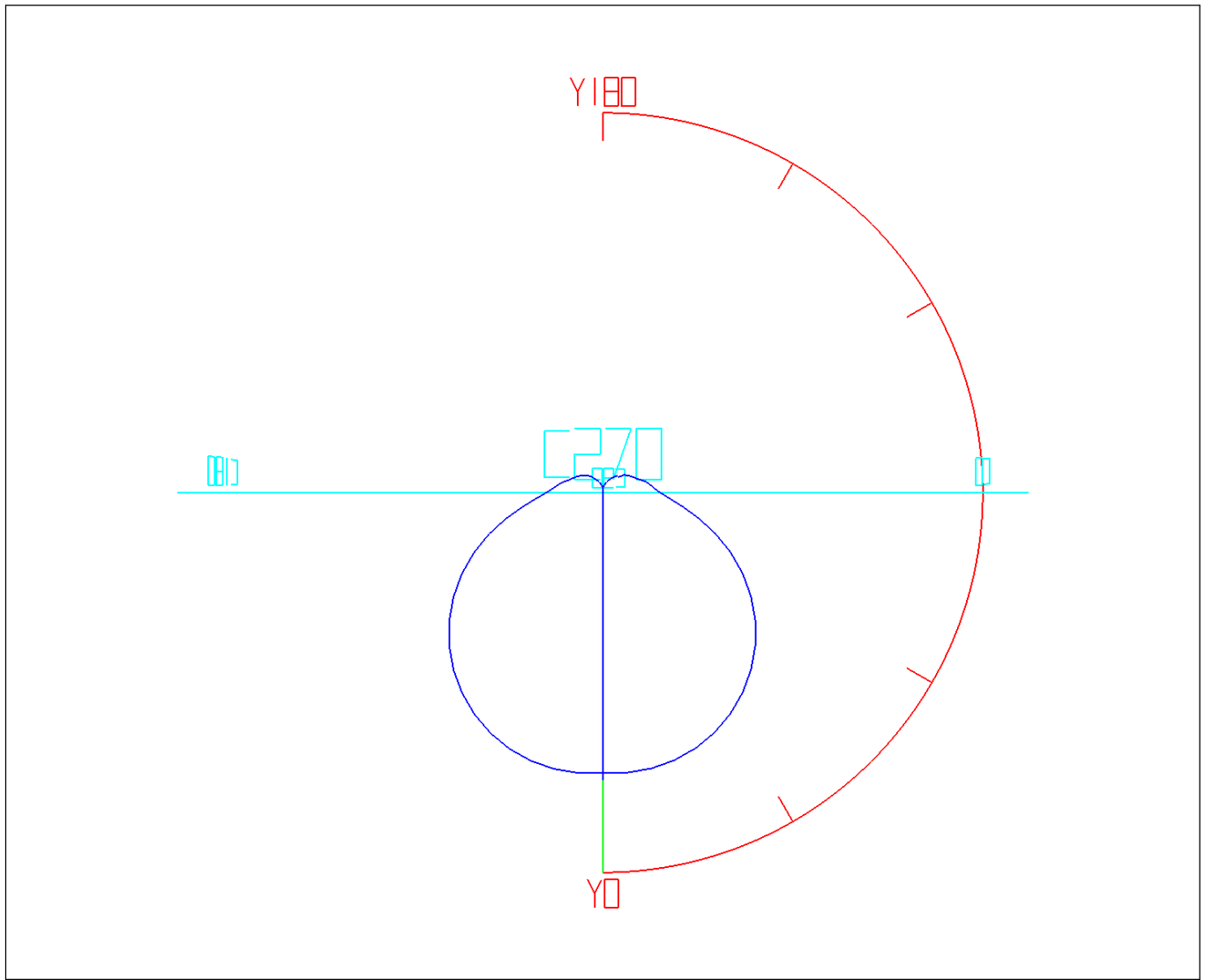
Lighting Distribution Diagram



3D Light Intensity Distribution Modal

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
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3D Light Intensity Distribution Modal



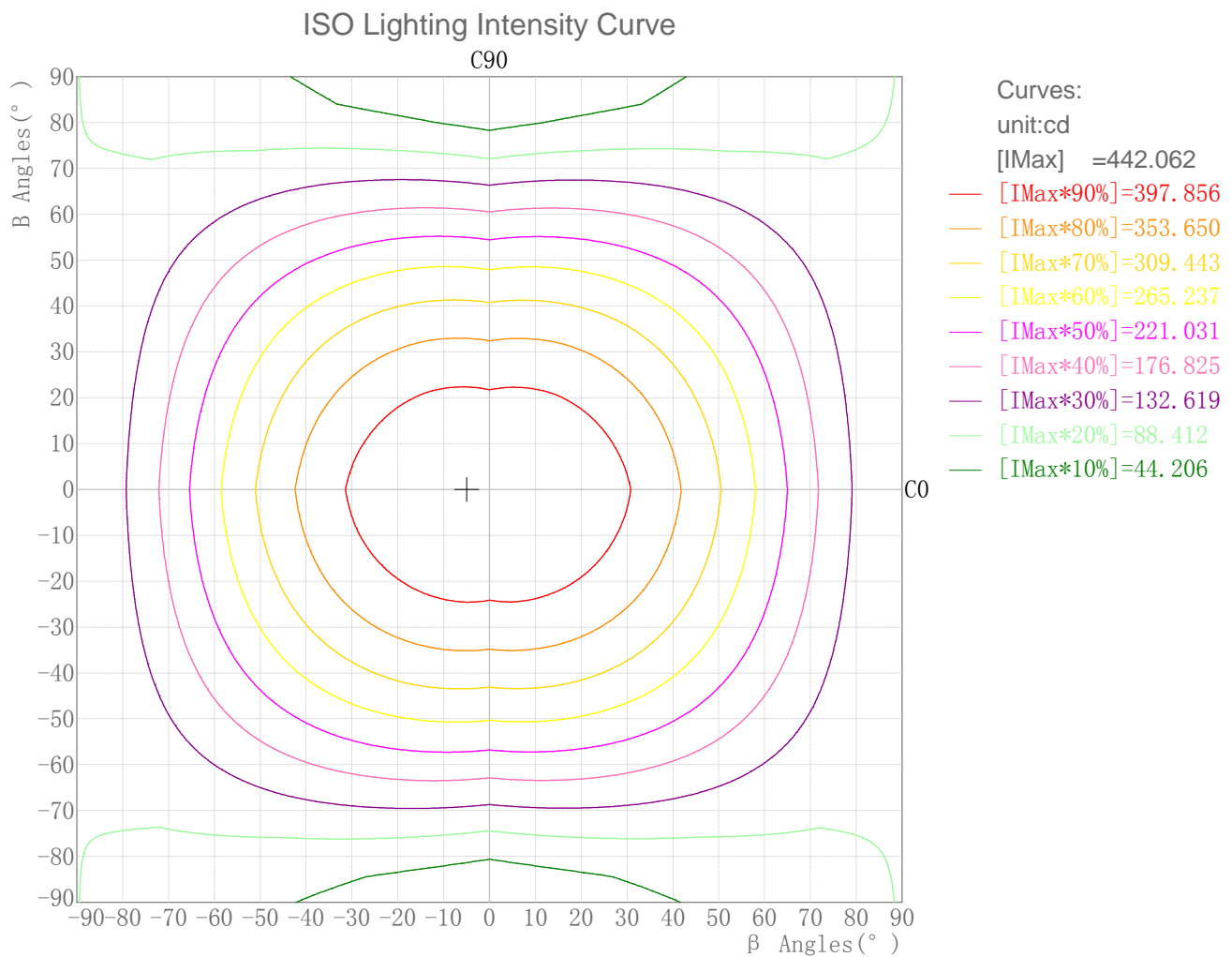
Curves: 3D Model ——— Fixture ——— Vert. HUD ——— Hori. HUD ———
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

Zonal Flux Tabulation

Zone (y)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	10.51	10.51	0.66	0.66
5.0-10.0	31.29	41.80	1.96	2.61
10.0-15.0	51.24	93.04	3.20	5.81
15.0-20.0	69.72	162.77	4.36	10.17
20.0-25.0	86.13	248.89	5.38	15.55
25.0-30.0	99.92	348.82	6.24	21.80
30.0-35.0	110.68	459.50	6.92	28.72
35.0-40.0	118.04	577.54	7.38	36.09
40.0-45.0	121.77	699.31	7.61	43.70
45.0-50.0	121.72	821.03	7.61	51.31
50.0-55.0	117.89	938.91	7.37	58.68
55.0-60.0	110.38	1049.29	6.90	65.57
60.0-65.0	99.48	1148.77	6.22	71.79
65.0-70.0	85.70	1234.47	5.36	77.15
70.0-75.0	69.89	1304.36	4.37	81.51
75.0-80.0	53.54	1357.91	3.35	84.86
80.0-85.0	38.92	1396.83	2.43	87.29
85.0-90.0	28.95	1425.78	1.81	89.10
90.0-95.0	24.14	1449.92	1.51	90.61
95.0-100.0	21.75	1471.67	1.36	91.97
100.0-105.0	19.78	1491.45	1.24	93.21
105.0-110.0	17.53	1508.98	1.10	94.30
110.0-115.0	15.44	1524.42	0.97	95.27
115.0-120.0	13.84	1538.27	0.87	96.13
120.0-125.0	12.35	1550.61	0.77	96.90
125.0-130.0	10.82	1561.44	0.68	97.58
130.0-135.0	9.07	1570.51	0.57	98.15
135.0-140.0	7.64	1578.14	0.48	98.62
140.0-145.0	6.42	1584.57	0.40	99.02
145.0-150.0	5.03	1589.59	0.31	99.34
150.0-155.0	3.81	1593.41	0.24	99.58
155.0-160.0	2.79	1596.20	0.17	99.75
160.0-165.0	1.92	1598.12	0.12	99.87
165.0-170.0	1.21	1599.33	0.08	99.95
170.0-175.0	0.64	1599.97	0.04	99.99
175.0-180.0	0.20	1600.17	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

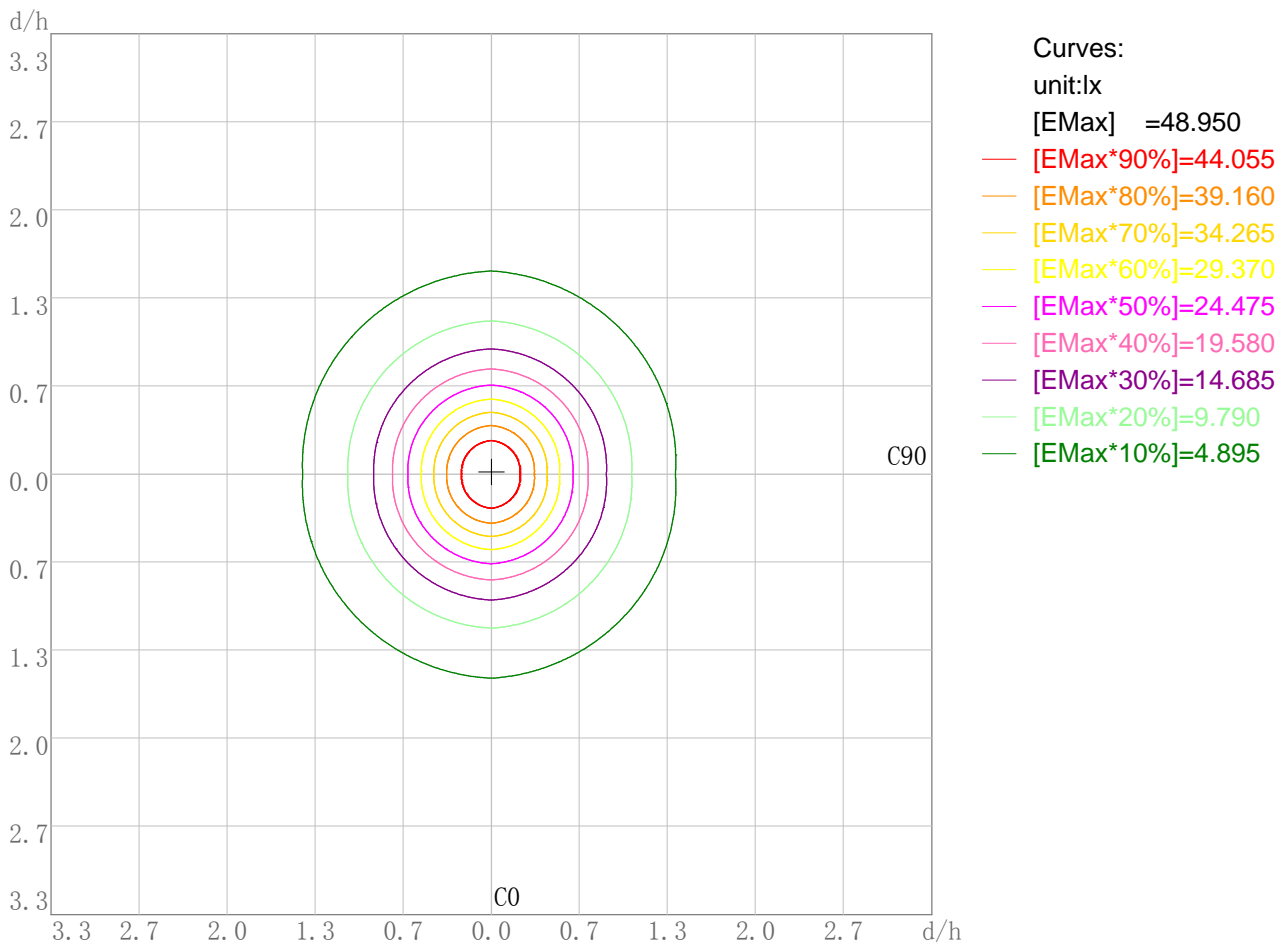
Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27



Plane ISO-Illuminance Diagram

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

Plane ISO-Illuminance Curve

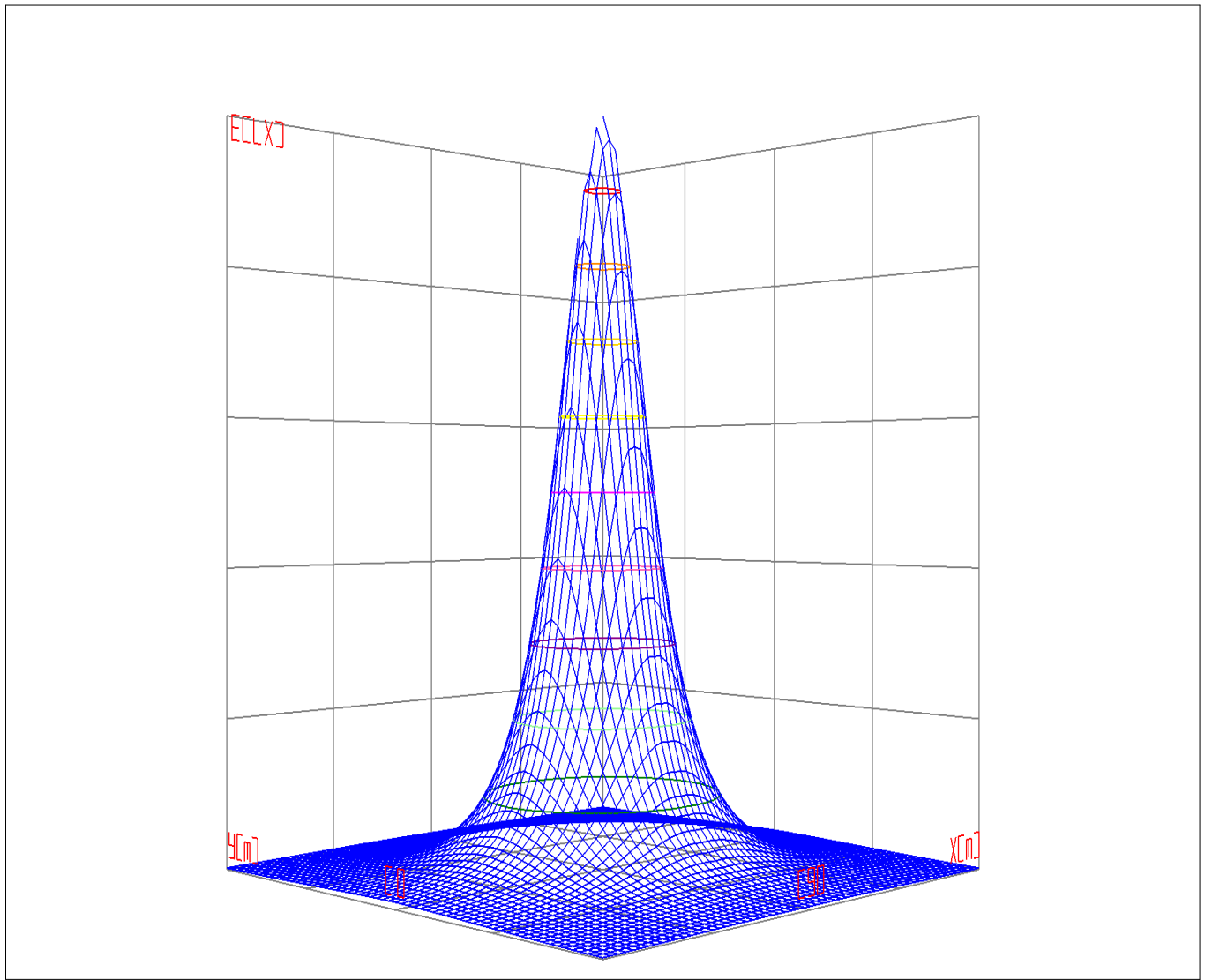


Working Plane Luminaire Mounting Height(m): 3.00
 Working Plane Maximum Illuminance(lx): 48.95
 Working Plane Maximum Illuminance Position(d/h): H0.0 V-0.0

3D Plane ISO Illuminance Diagram

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

3D Plane Illuminance Modal

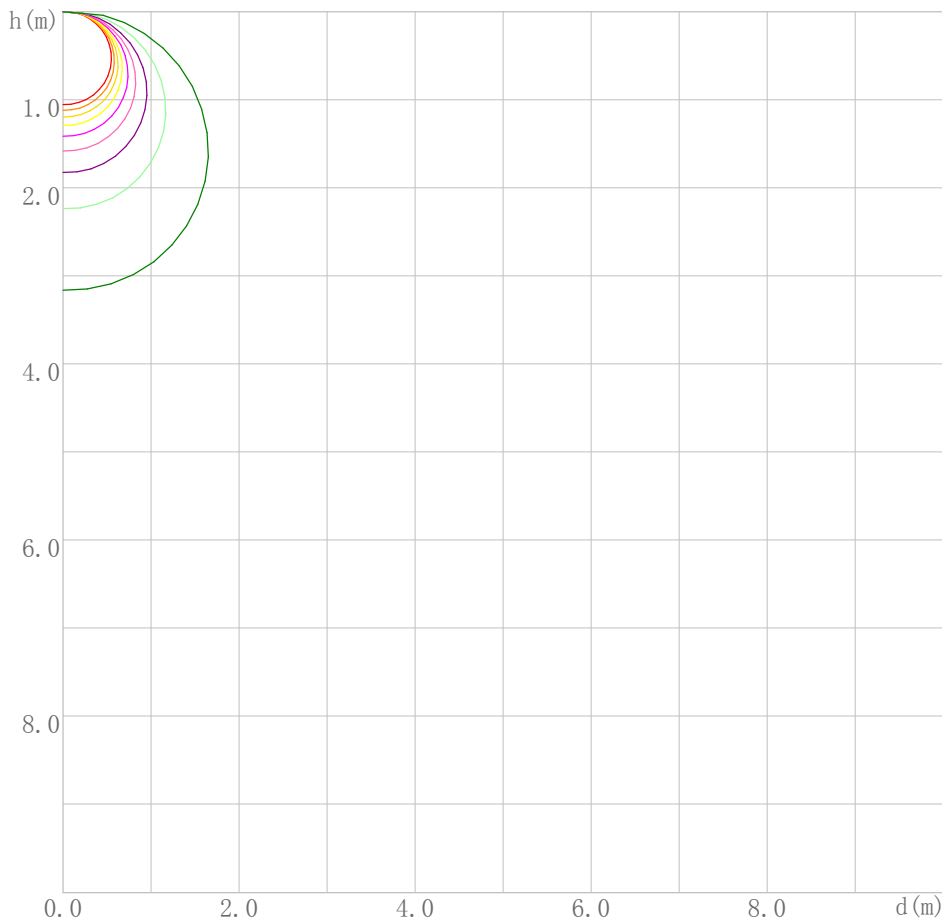


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

Space ISO Illuminance Curve

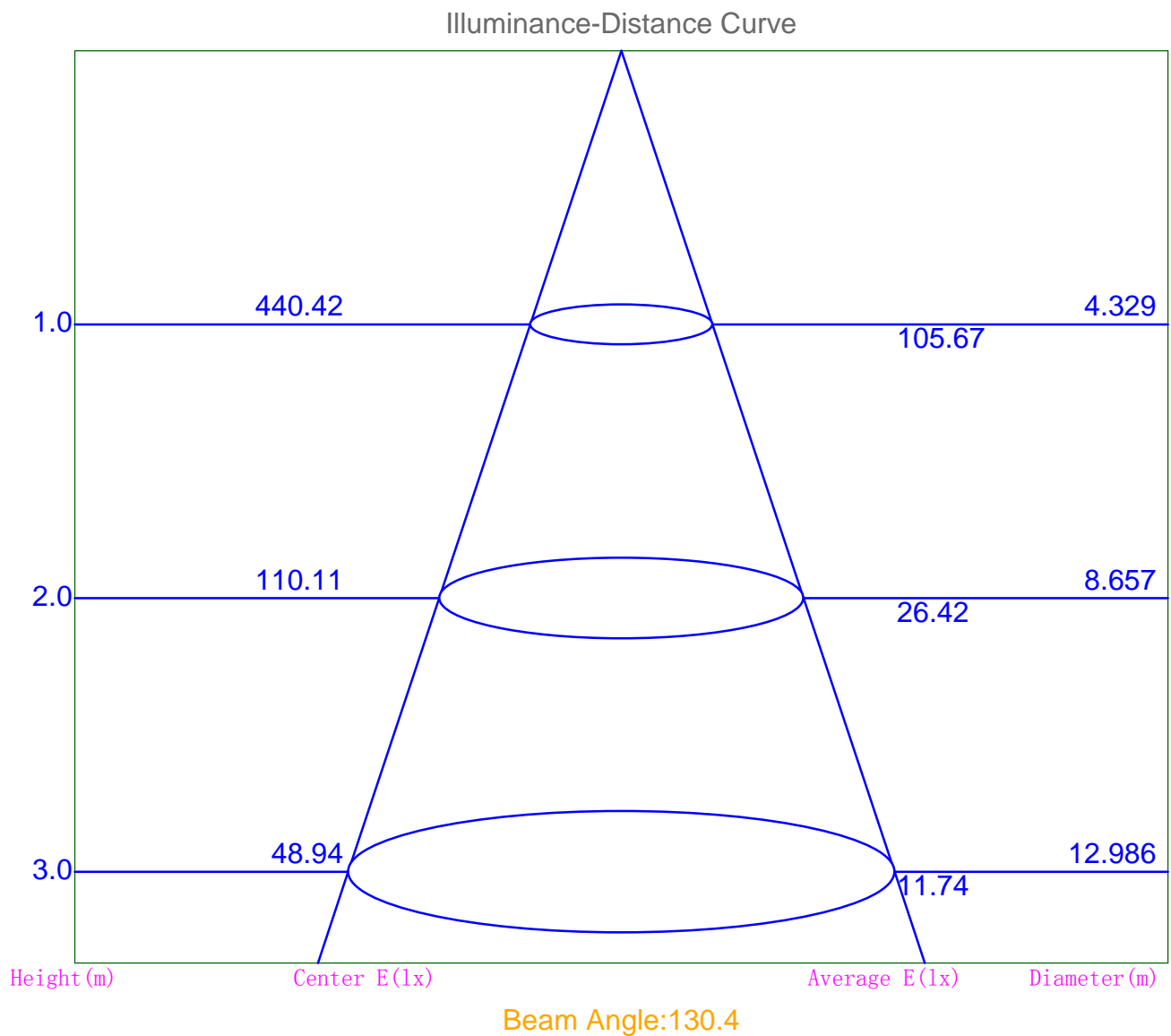


- Curves:
unit:lx
[EMax] =440.423
- [EMax*90%]=396.381
 - [EMax*80%]=352.338
 - [EMax*70%]=308.296
 - [EMax*60%]=264.254
 - [EMax*50%]=220.212
 - [EMax*40%]=176.169
 - [EMax*30%]=132.127
 - [EMax*20%]=88.085
 - [EMax*10%]=44.042

Space Plane Maximum Illuminance and @Angle:440.42,0.0deg
Plane Maximum Lighting Intensity and @Angle:441.529cd,0deg

Illuminance-Distance Diagram

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27



Indoor Luminance Limiting Curves

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

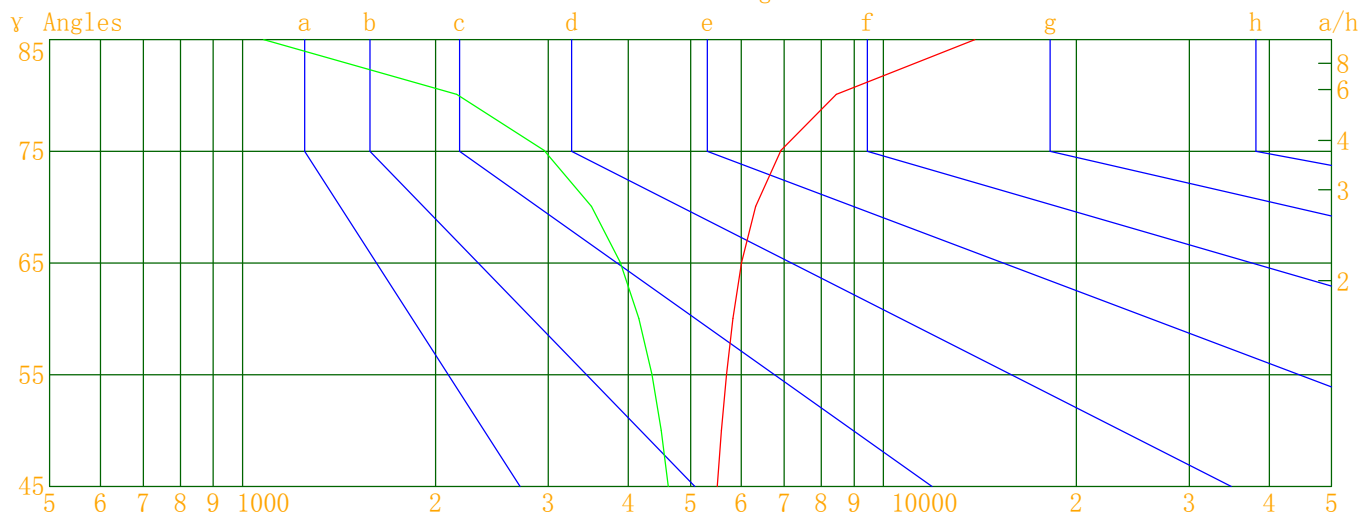
Glare Grade Table

GI	Quality	Using Illuminance							
		a	b	c	d	e	f	g	h
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	a				2000	1000	500	<=300
			b	c	d	e	f	g	h

Luminance Table

Gama (deg)	45	50	55	60	65	70	75	80	85
C0	5506	5589	5690	5822	6008	6320	6923	8444	13889
C90	4617	4502	4352	4154	3884	3503	2956	2160	1079

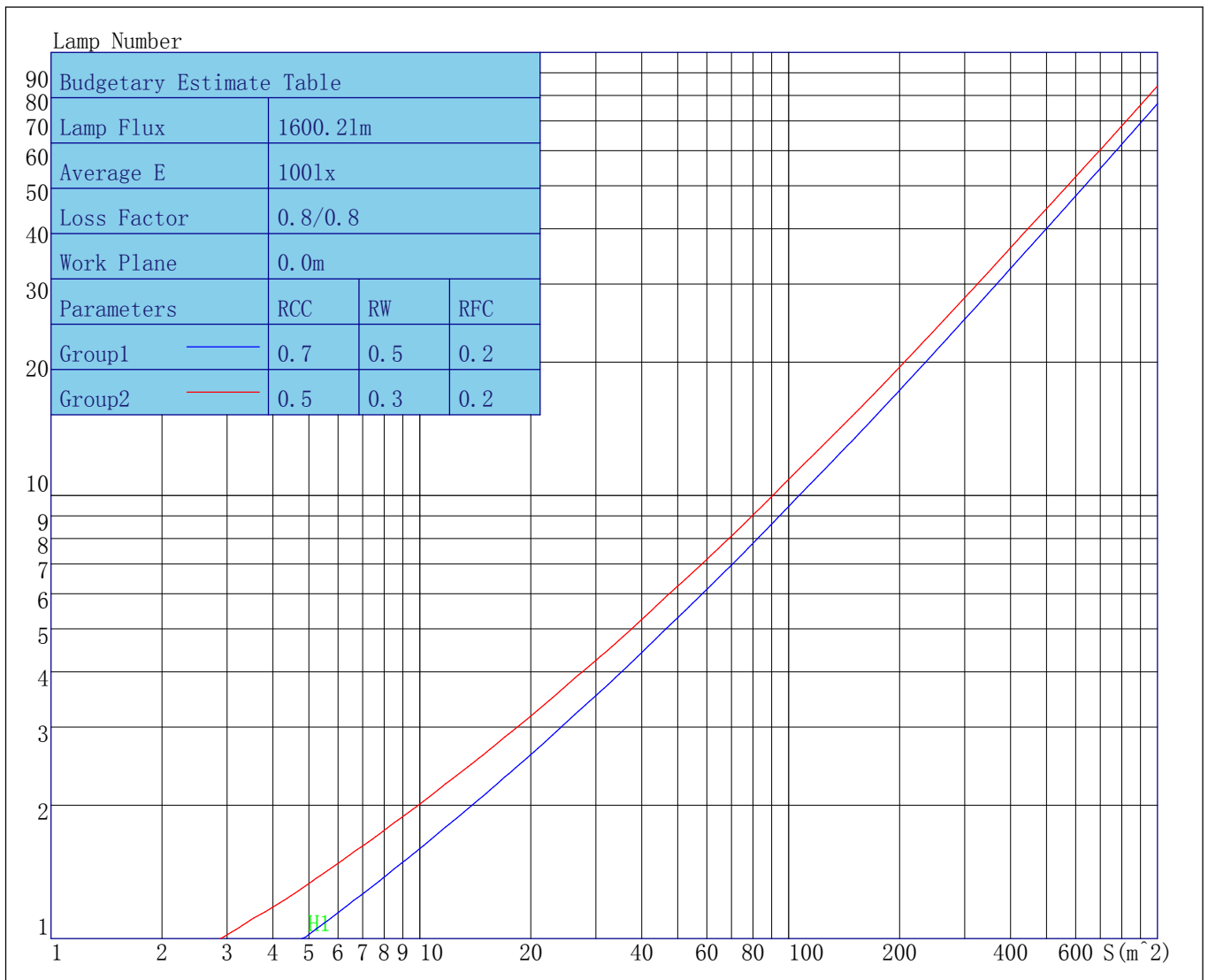
Luminance Limiting Curve



Luminous Size: Length(m)=0.600 Width(m)=0.080 Height(m)=0.065 Area(m²)=0.087000
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: ——— C90-C270 Color: ———

Indoor Budgetary Estimate Table

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
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Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27



Parameters1: Rhocc = 0.7 Rhow = 0.5 Rhofc = 0.2 LLF = 0.8
 Parameters2: Rhocc = 0.5 Rhow = 0.3 Rhofc = 0.2 LLF = 0.8
 Average Illuminance(lx): 100 Cavity Height: H1(m) = 2

Indoor Coefficient of Utilization Table

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

Coefficients of Utilization - Zonal Cavity Method																		
Coef.	Effective Floor Cavity Reflectance RFC=0.20																	
RhoCC (%)	80				70				50			30			10			0
RhoW (%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	Coefficient of Utilization (%)																	
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	105	100	95	91	101	96	92	88	90	87	83	84	81	79	79	77	75	72
2	95	86	79	73	91	83	77	71	78	72	68	73	68	65	68	65	62	59
3	86	75	67	60	83	73	65	59	68	62	56	64	58	54	60	55	52	49
4	79	66	57	50	75	64	56	49	60	53	47	57	51	46	53	48	44	41
5	72	59	50	43	69	57	49	42	54	46	41	51	44	39	48	42	38	35
6	67	53	44	37	64	51	43	37	48	41	35	46	39	34	43	38	33	31
7	62	48	39	33	59	47	38	32	44	37	31	42	35	30	39	34	29	27
8	57	44	35	29	55	42	34	29	40	33	28	38	32	27	36	30	26	24
9	53	40	32	26	51	39	31	26	37	30	25	35	29	24	33	28	24	22
10	50	37	29	23	48	36	28	23	34	27	23	32	26	22	31	25	21	20

Unified Glare Rating Table

Lum. Name: B20W-CC-MS 3K	Lum. Catalog: LED BATTEN	Test ID:
Lamp Name: 3000K	Lamp Catalog: SMD2835	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2018/10/27

Unified Glare Rating Table

Ceiling RCC	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
Wall RW	0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Floor RFC	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room Size	Vewed crosswise					Vewed endwise				
X=2H Y=2H	22.8	26.2	24.0	27.4	28.7	21.2	24.5	22.4	25.8	27.0
Y=3H	28.7	32.0	29.9	33.2	34.5	25.4	28.7	26.6	29.9	31.2
Y=4H	32.4	35.3	33.6	36.6	37.8	27.7	30.6	28.9	31.9	33.2
Y=6H	35.7	38.6	37.0	39.8	41.1	28.9	31.8	30.2	33.0	34.3
Y=8H	37.5	40.4	38.8	41.6	42.9	29.3	32.1	30.5	33.4	34.6
Y=12H	39.6	42.4	40.8	43.7	44.9	29.4	32.3	30.7	33.5	34.8
X=4H Y=2H	24.1	27.0	25.3	28.3	29.5	23.4	26.4	24.7	27.6	28.9
Y=3H	30.2	33.1	31.4	34.4	35.6	27.9	30.9	29.2	32.1	33.4
Y=4H	32.4	34.2	33.9	35.7	37.2	28.8	30.7	30.4	32.2	33.7
Y=6H	36.3	38.0	37.9	39.5	41.0	30.7	32.4	32.3	33.9	35.4
Y=8H	38.6	40.2	40.1	41.7	43.2	31.4	33.0	32.9	34.5	36.0
Y=12H	40.3	41.6	41.9	43.2	44.9	30.9	32.3	32.6	33.9	35.5
X=8H Y=4H	32.7	34.3	34.3	35.9	37.4	29.9	31.5	31.5	33.0	34.6
Y=6H	36.1	37.3	37.8	38.9	40.6	31.5	32.6	33.2	34.3	35.9
Y=8H	38.2	39.1	40.0	40.8	42.5	32.1	33.0	33.8	34.7	36.4
Y=12H	41.2	42.1	43.0	43.8	45.5	33.0	33.8	34.8	35.6	37.3
X=12H Y=4H	31.8	33.2	33.5	34.8	36.4	29.3	30.6	31.0	32.3	33.9
Y=6H	35.7	36.7	37.5	38.4	40.1	31.4	32.4	33.2	34.1	35.8
Y=8H	38.3	39.1	40.1	40.9	42.6	32.7	33.6	34.5	35.3	37.0
Variations with the observer position at spacings										
S=1.0H	2.1/-1.9					2.3/-0.3				
S=1.5H	-1.9/-20.3					-0.3/-16.8				
S=2.0H	-1.9/-20.3					-0.3/-16.8				

IES Indoor Report

Photometric Filename: B20W-CC-MS 3K.IES

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
Y 0.0	440.42	440.42	440.42	440.42
Y 5.0	441.53	435.45	442.06	437.42
Y 10.0	439.87	428.78	440.82	432.44
Y 15.0	435.08	418.24	436.33	423.70
Y 20.0	426.98	403.95	428.48	411.29
Y 25.0	415.52	386.23	417.25	395.07
Y 30.0	400.79	365.19	402.81	375.54
Y 35.0	382.97	341.05	385.22	352.84
Y 40.0	362.22	313.86	364.76	327.10
Y 45.0	338.70	284.04	341.38	298.51
Y 50.0	312.53	251.74	315.30	267.35
Y 55.0	283.91	217.17	286.86	233.81
Y 60.0	253.25	180.70	256.19	198.18
Y 65.0	220.92	142.82	223.82	160.97
Y 70.0	188.05	104.25	190.53	122.49
Y 75.0	155.88	66.55	157.76	84.04
Y 80.0	127.57	32.63	128.22	47.79
Y 85.0	105.31	8.19	105.11	18.19
Y 90.0	90.00	2.49	88.91	4.79
Y 95.0	80.75	2.78	78.48	4.38
Y 100.0	74.79	3.18	71.49	4.36
Y 105.0	68.76	3.52	65.08	4.48
Y 110.0	60.42	3.88	57.49	4.63
Y 115.0	55.36	4.20	53.08	4.89
Y 120.0	51.30	4.57	49.22	5.13
Y 125.0	47.54	4.94	45.54	5.43
Y 130.0	42.92	5.26	41.81	5.71
Y 135.0	34.32	5.55	37.97	6.00
Y 140.0	34.81	5.91	34.09	6.30
Y 145.0	30.12	6.21	30.05	6.53
Y 150.0	25.41	6.51	24.93	6.84
Y 155.0	21.68	6.81	21.29	7.05
Y 160.0	17.74	7.05	17.54	7.32
Y 165.0	14.18	7.32	14.30	7.54
Y 170.0	11.79	7.49	11.47	7.68
Y 175.0	9.11	7.58	9.07	7.71
Y 180.0	7.98	7.98	7.98	7.98
