



Shenzhen Belling Efficiency Testing Laboratory Co., Ltd.
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LumCAT:

Luminaire:

Report No:

Test No:

LampCAT:

Lamp flux(lm): 1459.4

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.01

Current(A): 0.0862

Power (W): 9.9410

PF: 0.9612

Ballast type:

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 1459.44

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 146.81

Central intensity(cd): 512.056

Maximum intensity(cd): 513.575

Angle of maximum intensity: C=180.0 $\gamma=5.0$

Beam Angle(50%Imax): [C0/180]Total=112.5

[C90/270]Total=111.8

Field angle(10%Imax): [C0/180]Total=158.6

[C90/270]Total=157.8

Maximum s/h(1/2): C0_180=1.30 C90_270=1.28

Maximum s/h(1/4): C0_180=1.85 C90_270=1.39

Up flux rate of lamp(%): 0.41%

Down flux rate of lamp(%): 99.59%

Up flux rate of LUM(%): 0.41%

Down flux rate of LUM(%): 99.59%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 80.293%

Equipment: GMS-3000
Temperature(°C): 25

Date:
Humidity(%): 58%

Operator: Zac

Zonal flux distribution table

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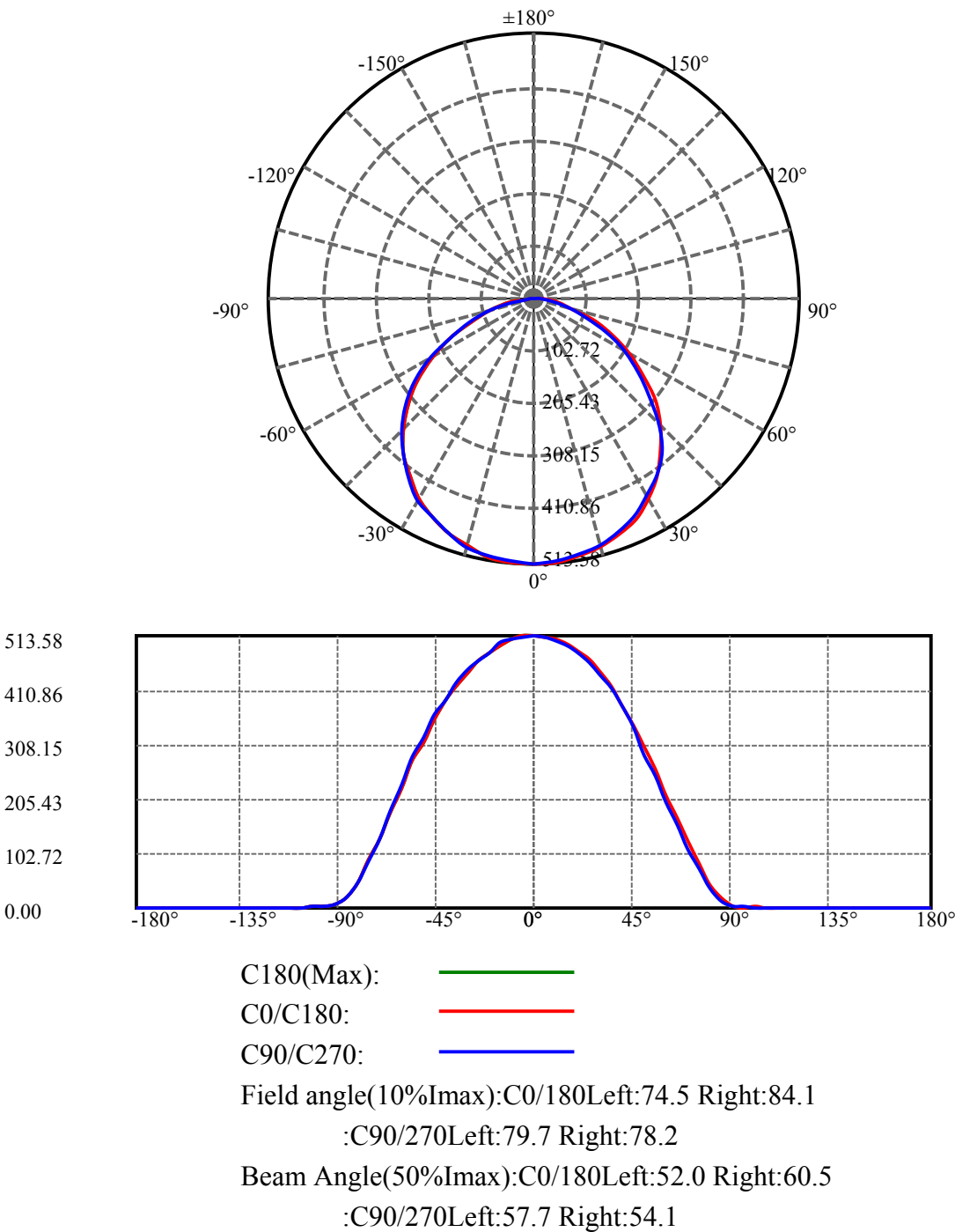
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	511.161	.000	.000	.000%	.000%
5.0	510.754	12.217	12.217	.837%	.837%
10.0	505.588	36.358	48.574	2.491%	3.328%
15.0	495.349	59.375	107.949	4.068%	7.397%
20.0	482.724	80.607	188.556	5.523%	12.920%
25.0	465.461	99.447	288.003	6.814%	19.734%
30.0	443.981	115.091	403.094	7.886%	27.620%
35.0	418.582	127.018	530.112	8.703%	36.323%
40.0	386.402	134.305	664.418	9.203%	45.526%
45.0	349.842	136.321	800.739	9.341%	54.866%
50.0	309.851	133.301	934.040	9.134%	64.000%
55.0	267.460	125.527	1059.566	8.601%	72.601%
60.0	218.234	112.267	1171.833	7.692%	80.293%
65.0	170.120	94.410	1266.243	6.469%	86.762%
70.0	124.895	74.700	1340.942	5.118%	91.881%
75.0	82.545	54.221	1395.164	3.715%	95.596%
80.0	45.659	34.304	1429.467	2.350%	97.946%
85.0	18.443	17.418	1446.885	1.193%	99.140%
90.0	5.600	6.583	1453.469	.451%	99.591%
95.0	2.590	2.243	1455.711	.154%	99.745%
100.0	1.112	1.006	1456.717	.069%	99.813%
105.0	.651	.472	1457.189	.032%	99.846%
110.0	.448	.287	1457.476	.020%	99.865%
115.0	.190	.161	1457.638	.011%	99.877%
120.0	.244	.106	1457.743	.007%	99.884%
125.0	.339	.135	1457.878	.009%	99.893%
130.0	.420	.165	1458.043	.011%	99.904%
135.0	.448	.175	1458.219	.012%	99.916%
140.0	.570	.188	1458.407	.013%	99.929%
145.0	.624	.199	1458.606	.014%	99.943%
150.0	.678	.192	1458.798	.013%	99.956%
155.0	.773	.184	1458.981	.013%	99.969%
160.0	.760	.161	1459.142	.011%	99.980%
165.0	.841	.132	1459.274	.009%	99.989%
170.0	.719	.093	1459.366	.006%	99.995%
175.0	.787	.054	1459.420	.004%	99.999%
180.0	.814	.019	1459.439	.001%	100.000%

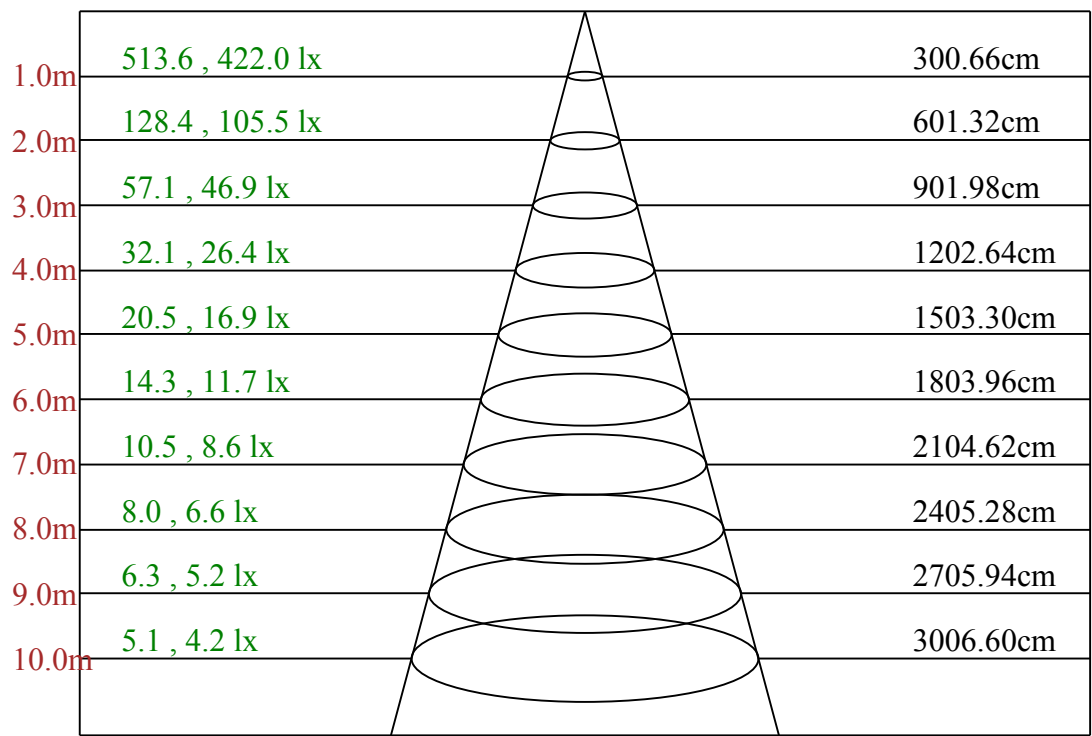
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	403.09	27.62%	27.62%
0-40	664.42	45.53%	45.53%
0-60	1171.83	80.29%	80.29%
0-90	1453.47	99.59%	99.59%
0-120	1457.74	99.88%	99.88%
0-180	1459.44	100.00%	100.00%
60-90	393.90	26.99%	26.99%
90-120	10.86	0.74%	0.74%
90-130	11.16	0.76%	0.76%
90-150	11.91	0.82%	0.82%
90-180	12.53	0.86%	0.86%
0-59.81	1167.55	80.00%	80.00%

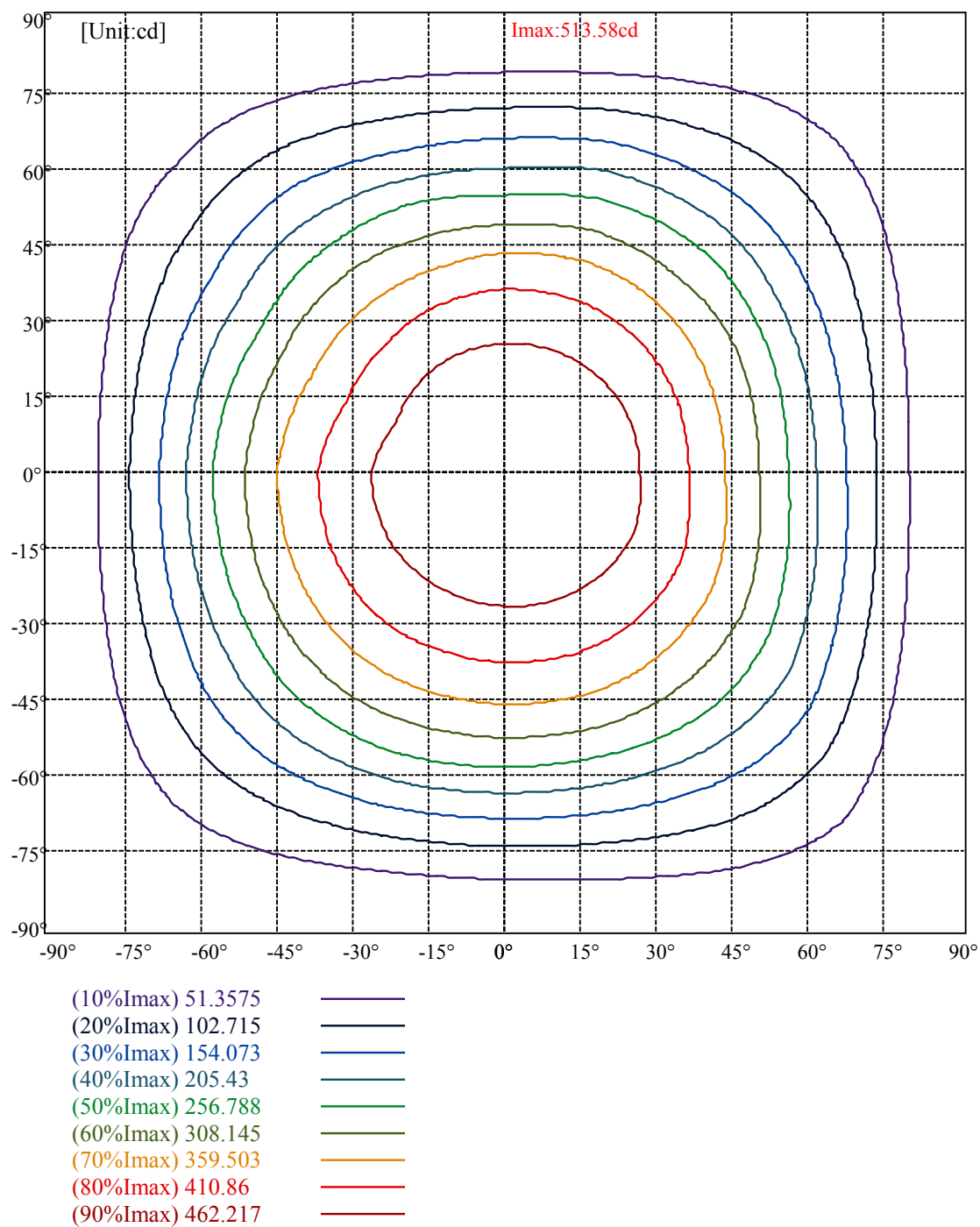
ZONAL LUMEN SUMMARY

0-10	48.57
10-20	139.98
20-30	214.54
30-40	261.32
40-50	269.62
50-60	237.79
60-70	169.11
70-80	88.53
80-90	24.00
90-100	3.25
100-110	0.76
110-120	0.27
120-130	0.30
130-140	0.36
140-150	0.39
150-160	0.34
160-170	0.22
170-180	0.05





Max , Ave Beam angle of C180plane112.71



Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	512.06	511.84	505.76	496.43	484.28	468.44	447.40	418.76	381.22
22.5	511.41	511.84	508.15	496.87	486.67	467.79	448.27	419.63	384.26
45.0	509.45	511.84	505.55	495.35	483.20	465.62	444.79	417.24	386.86
67.5	511.84	510.54	505.11	494.48	481.25	464.54	442.19	417.46	386.00
90.0	513.14	509.45	502.94	494.92	481.90	462.80	440.02	415.29	384.26
112.5	510.97	510.54	503.38	494.48	481.03	461.07	440.24	410.08	372.98
135.0	508.59	509.02	502.73	490.36	476.69	457.60	431.99	402.05	367.55
157.5	511.84	507.93	501.42	490.36	475.82	454.56	429.39	402.49	369.51
180.0	512.06	513.58	506.63	495.13	482.77	466.71	443.93	418.54	390.77
202.5	511.41	511.19	505.98	495.57	482.55	466.49	444.58	420.71	389.25
225.0	509.45	509.89	506.42	493.61	481.68	464.97	443.93	422.23	390.99
247.5	511.84	510.75	507.07	494.92	483.63	465.62	445.23	421.36	391.42
270.0	513.14	509.67	506.20	499.26	482.77	466.71	448.27	424.40	393.37
292.5	510.97	509.45	507.50	497.52	484.93	469.53	448.92	427.65	396.84
315.0	508.59	510.97	507.07	496.87	486.02	471.48	451.09	429.39	397.93
337.5	511.84	513.58	507.50	499.47	488.41	473.44	453.47	430.04	399.23
360.0	512.06	511.84	505.76	496.43	484.28	468.44	447.40	418.76	381.22
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	345.86	306.58	261.45	214.80	170.11	126.50	82.23	44.91	17.79
22.5	345.42	308.32	260.80	208.51	158.82	122.16	83.97	47.95	18.88
45.0	346.72	300.94	260.80	210.68	159.04	119.34	83.54	46.00	19.31
67.5	348.03	303.76	262.10	214.37	165.33	120.85	77.46	42.31	15.19
90.0	340.43	291.61	248.87	199.40	156.00	111.96	73.34	38.62	13.67
112.5	326.54	294.87	253.64	195.93	149.71	108.49	70.08	37.75	13.67
135.0	331.54	291.83	243.88	197.45	153.62	111.09	70.08	36.23	13.02
157.5	334.57	290.53	242.58	197.88	150.80	110.66	69.00	32.98	11.50
180.0	355.40	313.96	276.64	227.61	177.05	129.97	88.09	46.87	19.53
202.5	353.67	314.18	270.35	220.45	175.75	129.32	84.84	47.52	18.88
225.0	356.05	317.21	276.64	226.30	176.18	126.50	80.28	45.13	18.88
247.5	358.22	319.60	282.72	232.16	180.52	126.28	82.67	44.05	16.49
270.0	362.78	323.51	283.15	233.46	182.04	130.62	86.79	48.82	18.88
292.5	364.73	327.63	283.15	232.81	184.21	133.66	90.04	52.94	23.65
315.0	364.73	324.59	285.97	238.89	186.16	141.47	96.99	58.58	27.12
337.5	362.78	328.50	286.62	241.06	196.58	149.49	101.33	59.89	28.64
360.0	345.86	306.58	261.45	214.80	170.11	126.50	82.23	44.91	17.79
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	3.91	0.22	1.95	1.09	0.43	0.22	0.00	0.00	0.43
22.5	4.34	0.65	1.09	0.43	0.43	0.22	0.22	0.43	0.43
45.0	4.99	1.30	0.87	0.87	0.65	0.43	0.65	0.65	0.43
67.5	5.21	3.26	0.22	0.43	0.22	0.43	0.43	0.65	0.65
90.0	4.56	3.26	0.22	0.43	0.22	0.43	0.43	0.43	0.43
112.5	5.21	3.26	0.22	0.43	0.65	0.43	0.65	0.65	0.65
135.0	5.42	1.52	1.09	1.74	0.65	0.43	0.65	0.65	0.65
157.5	5.42	0.65	1.52	0.65	0.65	0.43	0.65	0.65	0.87
180.0	6.29	2.82	1.74	1.52	1.09	0.00	0.22	0.00	0.43
202.5	5.86	2.82	1.74	0.43	0.43	0.00	0.00	0.00	0.22
225.0	5.86	4.34	0.00	0.87	0.43	0.00	0.00	0.22	0.22
247.5	5.86	4.34	1.74	0.00	0.22	0.00	0.00	0.00	0.00
270.0	5.21	3.69	2.17	0.00	0.00	0.00	0.00	0.22	0.22
292.5	5.86	3.69	1.74	0.00	0.22	0.00	0.00	0.22	0.43
315.0	7.38	3.47	0.00	0.65	0.65	0.00	0.00	0.22	0.43
337.5	8.25	2.17	1.52	0.87	0.22	0.00	0.00	0.43	0.22
360.0	3.91	0.22	1.95	1.09	0.43	0.22	0.00	0.00	0.43

Intensity data(cd)									Page: 8 Total:8
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.43	0.43	0.43	0.43	0.22	0.22	0.65	0.43	0.65
22.5	0.65	0.65	0.65	0.87	0.87	1.09	0.87	0.65	0.87
45.0	0.65	0.43	0.87	0.87	0.87	0.65	0.87	0.65	0.87
67.5	0.65	0.65	0.65	0.65	1.09	0.87	1.09	0.87	0.65
90.0	0.65	0.87	0.65	0.87	0.87	1.09	0.87	0.87	0.87
112.5	0.65	0.87	0.87	1.09	0.87	0.87	0.65	0.87	0.87
135.0	0.87	0.87	0.87	0.87	1.09	0.87	0.87	0.87	0.87
157.5	0.65	0.65	0.87	0.65	0.87	0.87	1.09	0.87	0.87
180.0	0.22	0.43	0.43	0.43	0.43	0.65	0.65	0.43	0.65
202.5	0.22	0.65	0.65	0.65	0.65	0.87	0.65	0.65	0.87
225.0	0.43	0.43	0.43	0.43	0.87	0.65	0.65	0.65	0.65
247.5	0.22	0.43	0.43	0.65	0.65	0.65	0.87	0.43	0.65
270.0	0.00	0.43	0.65	0.43	0.43	0.65	0.87	0.65	0.87
292.5	0.22	0.43	0.65	0.65	0.87	0.65	1.09	0.87	0.65
315.0	0.43	0.43	0.43	0.65	0.87	0.87	0.87	0.87	0.87
337.5	0.22	0.43	0.43	0.65	0.87	0.65	0.87	0.87	0.87
360.0	0.43	0.43	0.43	0.43	0.22	0.22	0.65	0.43	0.65
C/γ(°)	180.0								
0.0	0.43								
22.5	0.87								
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67.5	1.09								
90.0	0.65								
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135.0	0.87								
157.5	0.87								
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