

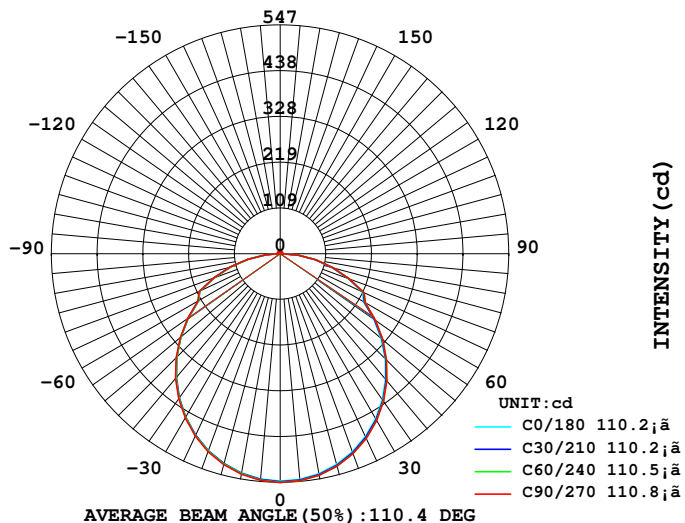
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number: GO2018-058

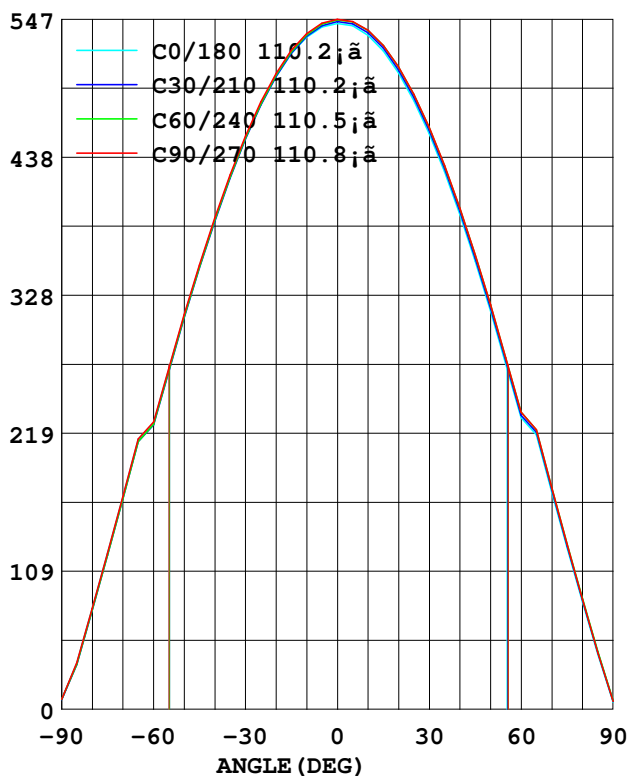
MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

DATA OF LAMP		Imax(cd)	549.2	S/MH (C0/180)	1.24
MODEL	MAGIC CLOUD_26W_3.0x3.0ft	EFFICIENCY (%)	100.0	S/MH (C90/270)	1.24
NOMINAL POWER(W)	22.8	TOTAL FLUX(lm)	1632.2	Voltage(V)	24.00
RATED VOLTAGE(V)	24	EFFICIENCY (lm/W)	71.6	Current (A)	0.950
NOMINAL FLUX(lm)	1632.2	η up (%)	2.2	Power (W)	22.79
LAMPS QUANTITY	1	η down (%)	97.8	Power Factor (PF)	1.000
TEST VOLTAGE(V)	24.0	Effective Flux(lm)	1579.3	EEI	0.226

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System: LSG-1800
 Temperature: 25.3 DEG
 Operators: G
 Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

ZONAL FLUX DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
10.0	533.0	532.9	535.9	537.0	534.7	538.7	538.6	539.5	0- 10	51.73	51.73
20.0	502.0	500.1	504.4	505.8	504.8	511.0	509.7	510.6	10- 20	147.8	199.6
30.0	453.2	448.7	454.6	455.8	456.6	464.3	461.7	463.2	20- 30	223.1	422.8
40.0	388.3	382.2	389.5	390.1	392.3	401.2	397.5	400.0	30- 40	267.1	689.9
50.0	311.7	304.3	312.7	312.5	315.7	325.7	320.9	324.3	40- 50	274.5	964.5
60.0	227.3	219.1	227.9	226.6	231.5	241.8	235.8	240.0	50- 60	245.5	1210
70.0	168.5	159.0	168.8	166.3	172.3	183.1	175.8	180.2	60- 70	205.2	1415
80.0	79.79	72.50	79.90	78.69	85.09	94.30	87.09	90.00	70- 80	134.5	1550
90.0	7.700	5.400	7.900	5.400	5.400	10.20	6.100	7.500	80- 90	46.90	1597
100.0	6.900	5.200	7.100	5.300	3.800	6.300	4.400	6.300	90-100	6.660	1603
110.0	6.500	4.900	6.700	4.700	3.800	5.500	4.300	5.600	100-110	5.808	1609
120.0	6.200	5.100	6.300	5.100	3.900	5.600	4.500	5.700	110-120	5.287	1615
130.0	6.100	5.200	6.200	5.200	4.400	5.900	5.100	6.000	120-130	4.893	1619
140.0	5.900	5.300	6.100	5.400	5.000	6.200	5.300	6.200	130-140	4.353	1624
150.0	6.000	5.400	6.000	5.600	5.300	6.300	5.500	6.300	140-150	3.628	1627
160.0	5.900	5.500	5.900	5.600	5.500	6.300	5.500	6.300	150-160	2.704	1630
170.0	5.900	5.400	5.800	5.600	5.600	6.300	5.600	6.200	160-170	1.646	1632
180.0	5.600	5.300	5.600	5.300	5.600	5.600	5.400	5.600	170-180	0.538	1632
DEG	LUMINOUS INTENSITY: cd									UNIT: lm	

Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

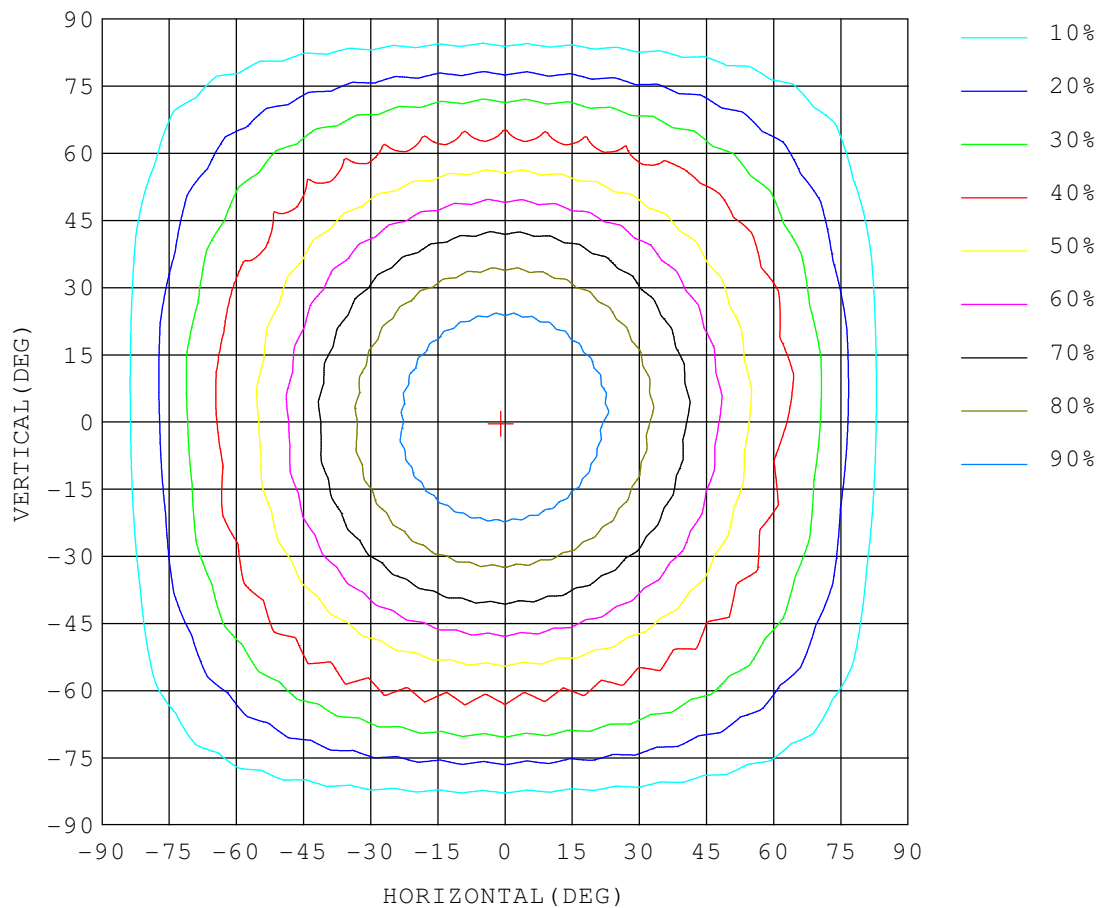
Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

UNIT: cd



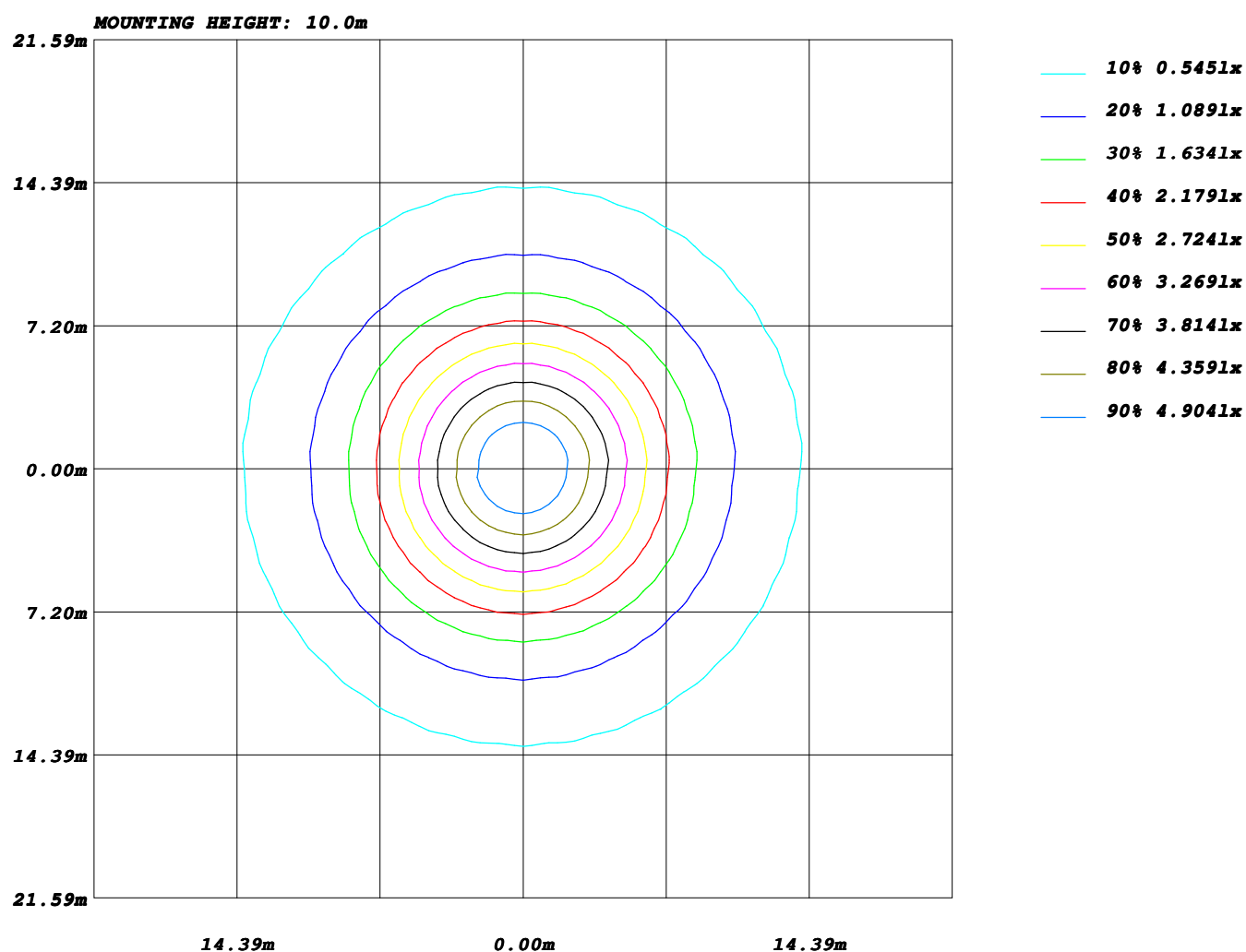
Test System: LSG-1800
 Temperature: 25.3 DEG
 Operators: G
 Test Date: 03-06-2018

Test Set: 5.0 deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

ISOLUX DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:



Test System: LSG-1800
Temperature: 25.3DEG
Operators: G
Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

AREA LUMINOUS FLUX

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT:lm		Φ t	Φ a
	0.03	0.14	0.32	0.54	0.79	1.03	1.24	1.39	1.46	1.45	1.34	1.17	0.95	0.70	0.47	0.27	0.12	0.03	13.4	5.97		
90																						
80	0.06	0.31	0.76	1.36	2.06	2.76	3.37	3.83	4.06	4.05	3.79	3.31	2.67	1.96	1.27	0.68	0.26	0.05	36.6	35.2		
70	0.08	0.47	1.20	2.19	3.34	4.43	5.35	6.00	6.34	6.33	5.98	5.30	4.38	3.27	2.11	1.12	0.42	0.07	58.4	58.0		
60	0.10	0.63	1.61	2.97	4.35	5.67	6.95	7.95	8.48	8.47	7.93	6.91	5.70	4.44	2.91	1.54	0.57	0.09	77.3	77.0		
50	0.12	0.76	1.99	3.52	5.16	7.08	8.85	10.2	10.9	10.9	10.2	8.82	7.03	5.16	3.60	1.93	0.71	0.10	97.1	96.9		
40	0.14	0.87	2.33	3.99	6.09	8.44	10.5	12.1	13.0	13.0	12.1	10.5	8.39	6.03	3.98	2.28	0.82	0.12	115	115		
30	0.15	0.98	2.54	4.39	6.87	9.51	11.9	13.7	14.7	14.7	13.7	11.8	9.47	6.82	4.33	2.49	0.93	0.13	129	129		
	0.15	1.05	2.69	4.66	7.41	10.2	12.8	14.7	15.8	15.8	14.7	12.8	10.2	7.35	4.60	2.64	1.01	0.14	139	139		
	0.15	1.05	2.73	4.85	7.67	10.6	13.2	15.2	16.3	16.4	15.3	13.2	10.5	7.60	4.78	2.69	1.02	0.14	144	144		
	0.15	1.03	2.69	4.77	7.63	10.6	13.3	15.3	16.3	16.2	15.1	13.0	10.3	7.45	4.64	2.61	0.99	0.14	143	143		
	0.14	0.99	2.64	4.64	7.36	10.2	12.7	14.7	15.7	15.6	14.5	12.5	9.97	7.15	4.48	2.53	0.93	0.13	137	137		
	0.13	0.94	2.52	4.31	6.80	9.42	11.7	13.5	14.4	14.4	13.3	11.5	9.19	6.58	4.15	2.42	0.87	0.12	127	127		
-30	0.12	0.86	2.25	3.97	5.98	8.29	10.3	11.9	12.6	12.6	11.7	10.1	8.07	5.78	3.82	2.14	0.79	0.10	112	112		
-40	0.10	0.73	1.93	3.56	5.08	6.88	8.60	9.86	10.5	10.4	9.74	8.43	6.69	4.90	3.42	1.82	0.66	0.09	93.6	93.4		
-50	0.09	0.58	1.54	2.88	4.37	5.60	6.68	7.58	8.08	8.04	7.48	6.53	5.43	4.21	2.73	1.44	0.52	0.07	73.9	73.6		
-60	0.07	0.43	1.11	2.06	3.16	4.27	5.22	5.85	6.14	6.11	5.76	5.09	4.12	3.00	1.93	1.01	0.36	0.06	55.8	55.2		
-70	0.05	0.27	0.67	1.23	1.86	2.50	3.05	3.45	3.65	3.62	3.38	2.93	2.36	1.72	1.10	0.58	0.22	0.04	32.7	30.9		
-80	0.03	0.13	0.27	0.45	0.65	0.84	1.00	1.11	1.16	1.14	1.06	0.93	0.76	0.57	0.38	0.23	0.11	0.03	10.8	2.91		
-90																						
-90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL (DEG) 20 30 40 50 60 70 80 90																						
Φ t	1.86	12.2	31.8	56.4	86.7	119	147	169	180	180	168	145	116	84.7	54.7	30.4	11.3	1.62	1632			
Φ a	0.84	11.0	30.6	55.2	85.5	117	146	168	179	178	166	144	115	83.5	53.5	29.2	9.99	0.56		1579		

Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

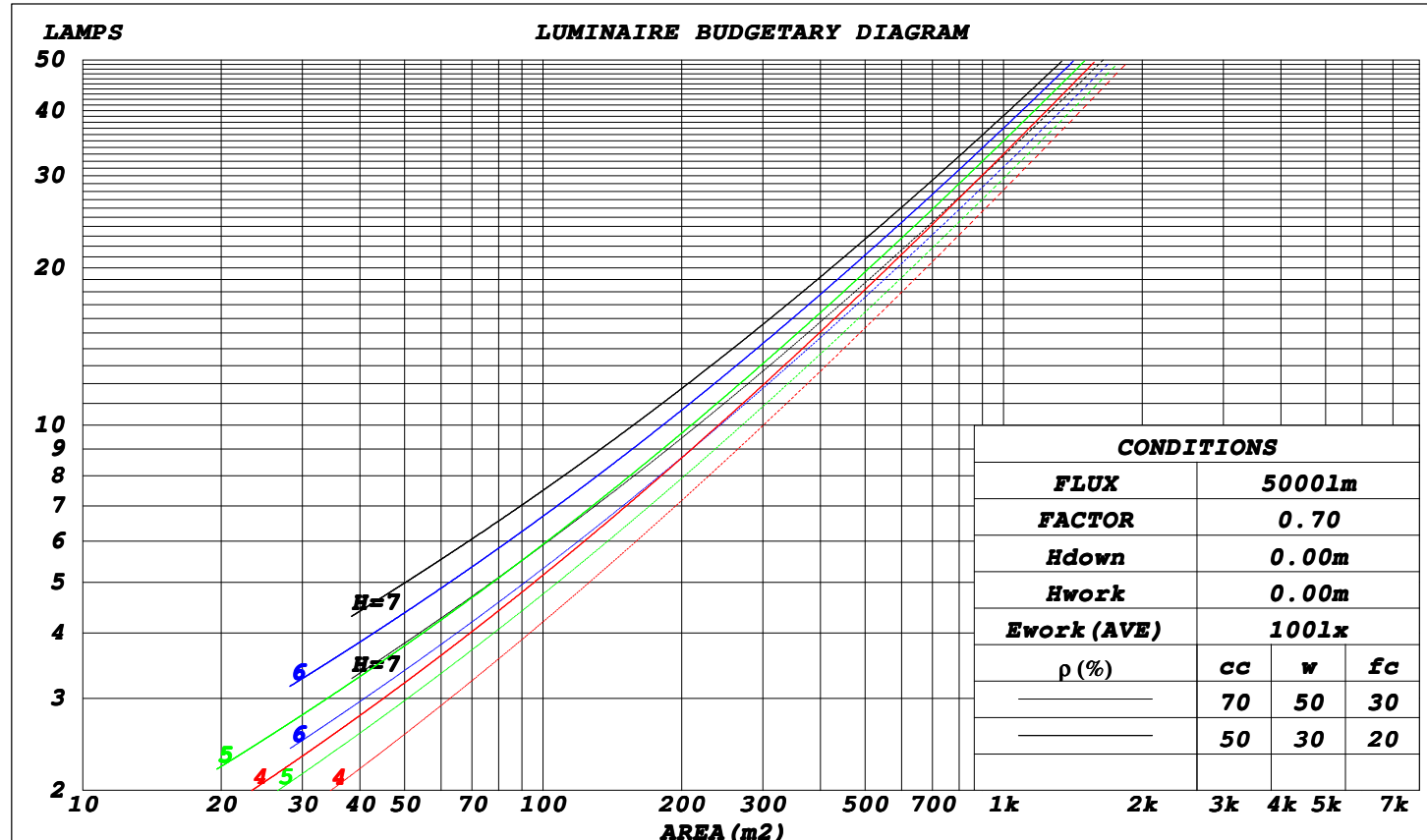
Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)				
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall			WEIGHT:	
SPECIFICATION: wall	DIMENSION: 914x914x21			SERIAL No.:	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization (CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.02	.98	.94	.90	.96	.92	.95	.92	.89	.91	.88	.86	.87	.85	.83	.80
2.0	.89	.82	.76	.87	.80	.75	.83	.77	.73	.79	.75	.71	.76	.72	.69	.66
3.0	.78	.69	.63	.76	.68	.62	.73	.66	.61	.70	.64	.59	.67	.62	.58	.56
4.0	.69	.60	.53	.67	.59	.52	.64	.57	.51	.62	.56	.50	.59	.54	.50	.47
5.0	.61	.52	.45	.60	.51	.45	.58	.50	.44	.55	.49	.44	.53	.48	.43	.41
6.0	.55	.46	.40	.54	.46	.39	.52	.44	.39	.50	.43	.38	.48	.42	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.47	.40	.34	.46	.39	.34	.44	.38	.33	.31
8.0	.46	.37	.31	.45	.37	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.37	.31	.27	.25
10.0	.39	.31	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23



Test System: LSG-1800
 Temperature: 25.3DEG
 Operators: G
 Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

WEC AND CCEC

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)				
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall			WEIGHT:	
SPECIFICATION: wall	DIMENSION: 914x914x21			SERIAL No.:	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pf _c	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.327	.186	.059	.319	.182	.058	.304	.175	.056	.291	.168	.054	.279	.162	.052	
2.0	.302	.166	.051	.295	.163	.050	.282	.157	.049	.270	.152	.047	.259	.147	.046	
3.0	.277	.147	.044	.271	.145	.044	.259	.140	.043	.249	.136	.042	.239	.132	.041	
4.0	.254	.132	.039	.248	.130	.038	.238	.126	.038	.229	.123	.037	.220	.119	.036	
5.0	.234	.119	.034	.229	.117	.034	.220	.114	.034	.211	.111	.033	.203	.109	.033	
6.0	.216	.108	.031	.212	.107	.031	.203	.104	.030	.196	.102	.030	.189	.099	.030	
7.0	.200	.099	.028	.197	.098	.028	.189	.096	.028	.182	.094	.027	.176	.091	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.146	.074	.021	

pcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022	
1.0	.198	.173	.150	.170	.148	.129	.116	.102	.089	.067	.059	.052	.021	.019	.017	
2.0	.190	.149	.114	.163	.128	.098	.112	.089	.068	.064	.052	.040	.021	.017	.013	
3.0	.183	.131	.090	.157	.113	.078	.108	.079	.055	.062	.046	.032	.020	.015	.011	
4.0	.175	.118	.075	.150	.102	.065	.103	.071	.046	.060	.042	.027	.019	.014	.009	
5.0	.167	.108	.064	.144	.093	.055	.099	.065	.039	.057	.038	.023	.018	.012	.008	
6.0	.160	.099	.056	.138	.086	.049	.095	.060	.034	.055	.035	.020	.018	.012	.007	
7.0	.153	.093	.050	.132	.080	.044	.091	.056	.031	.053	.033	.018	.017	.011	.006	
8.0	.147	.087	.046	.126	.075	.040	.087	.053	.028	.051	.031	.017	.016	.010	.006	
9.0	.140	.082	.042	.121	.071	.037	.084	.050	.026	.049	.030	.016	.016	.010	.005	
10.0	.135	.078	.040	.116	.067	.035	.081	.047	.025	.047	.028	.015	.015	.009	.005	

Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

Uncorrected UGR Table

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL						Address:Via Volta 5 – Ornago (MB)					
NAME: MAGIC CLOUD_26W_3.0x3.0ft						TYPE:wall		WEIGHT:			
SPECIFICATION:wall						DIMENSION: 914x914x21		SERIAL No.:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	18.0	19.6	18.3	19.8	20.0	18.1	19.6	18.4	19.8	20.1	
	3H	19.9	21.3	20.2	21.5	21.8	19.9	21.3	20.2	21.6	21.8
	4H	20.6	21.9	21.0	22.2	22.5	20.6	22.0	21.0	22.2	22.5
	6H	21.2	22.4	21.5	22.7	23.1	21.2	22.4	21.5	22.7	23.1
	8H	21.3	22.5	21.7	22.8	23.2	21.3	22.5	21.7	22.8	23.2
	12H	21.4	22.5	21.8	22.9	23.2	21.4	22.6	21.8	22.9	23.3
4H	2H	18.8	20.1	19.1	20.4	20.7	18.8	20.1	19.1	20.4	20.7
	3H	20.7	21.9	21.1	22.2	22.6	20.7	21.9	21.1	22.3	22.6
	4H	21.6	22.7	22.0	23.0	23.4	21.6	22.7	22.0	23.0	23.4
	6H	22.3	23.2	22.7	23.6	24.0	22.3	23.2	22.7	23.6	24.0
	8H	22.4	23.3	22.9	23.7	24.2	22.5	23.3	22.9	23.8	24.2
	12H	22.6	23.4	23.0	23.8	24.3	22.6	23.4	23.1	23.8	24.3
8H	4H	21.9	22.8	22.4	23.2	23.6	21.9	22.8	22.4	23.2	23.7
	6H	22.7	23.5	23.2	23.9	24.4	22.7	23.5	23.2	23.9	24.4
	8H	23.0	23.6	23.5	24.1	24.6	23.0	23.6	23.5	24.1	24.6
	12H	23.2	23.8	23.7	24.2	24.8	23.2	23.8	23.7	24.2	24.8
12H	4H	21.9	22.7	22.4	23.2	23.6	21.9	22.8	22.4	23.2	23.6
	6H	22.8	23.4	23.3	23.9	24.4	22.8	23.4	23.3	23.9	24.4
	8H	23.1	23.6	23.6	24.1	24.6	23.1	23.6	23.6	24.1	24.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / – 0.1					+ 0.2 / – 0.1					
1.5H	+ 0.1 / – 0.2					+ 0.1 / – 0.2					
2.0H	+ 0.2 / – 0.2					+ 0.2 / – 0.2					

CIE Pub.117 Corrected 1632 lm Total Lamp Luminous Flux. (8log(F/F0) = 1.7)

Test System: LSG-1800
 Temperature: 25.3DEG
 Operators: G
 Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

UTILIZATION FACTORS TABLE

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	45	38	56	44	37	54	44	37	31
0.80	66	54	47	65	54	47	63	53	46	39
1.00	74	63	55	73	62	55	70	63	54	47
1.25	81	70	63	80	70	63	77	68	62	54
1.50	86	76	69	84	75	68	81	73	67	59
2.00	93	84	77	91	83	77	87	80	75	66
2.50	97	89	83	95	87	82	91	85	80	71
3.00	101	93	88	98	92	86	94	88	84	75
4.00	105	99	94	102	97	92	98	93	89	80
5.00	107	102	98	105	100	96	100	96	93	83
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SERNOM = 1.25		

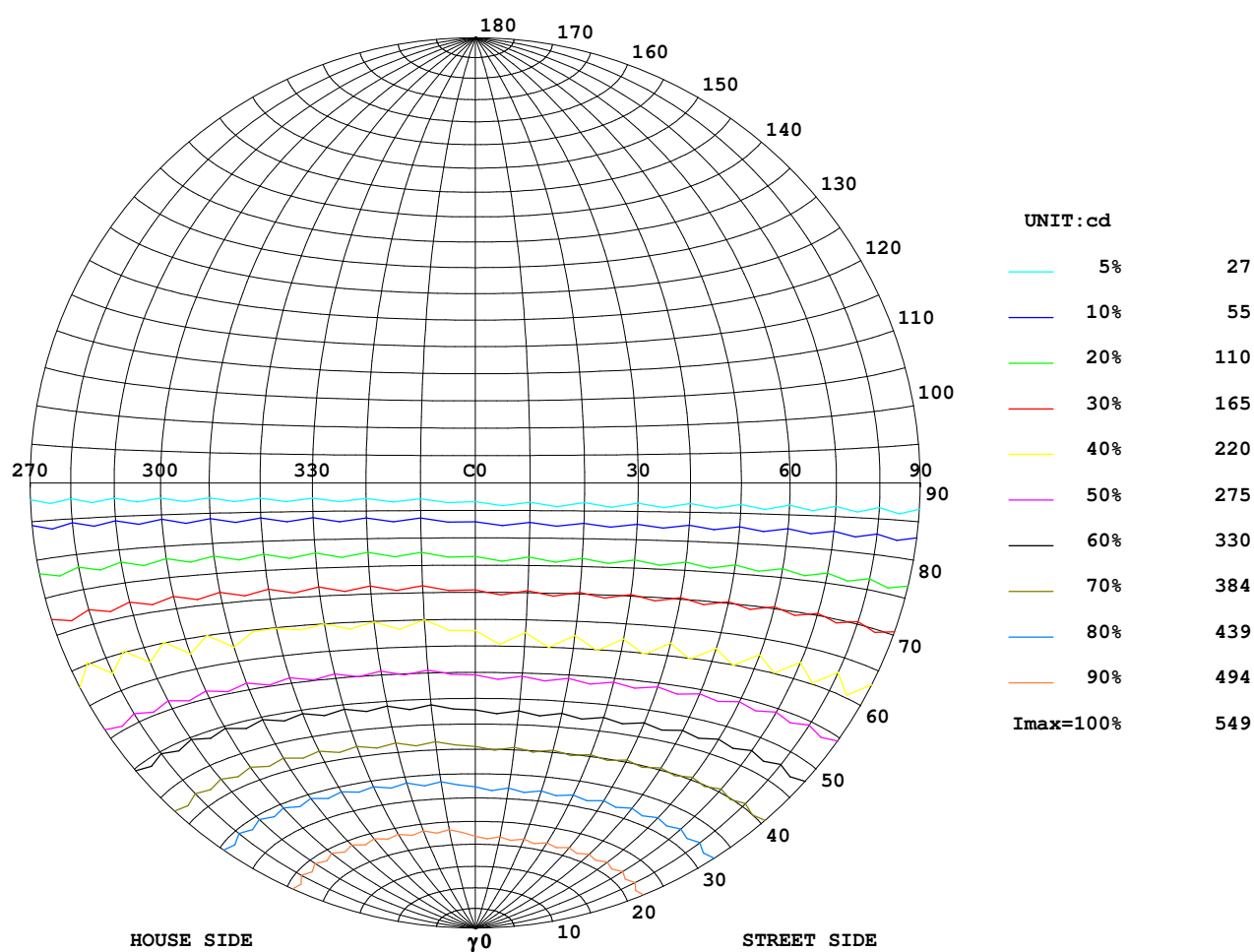
Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:



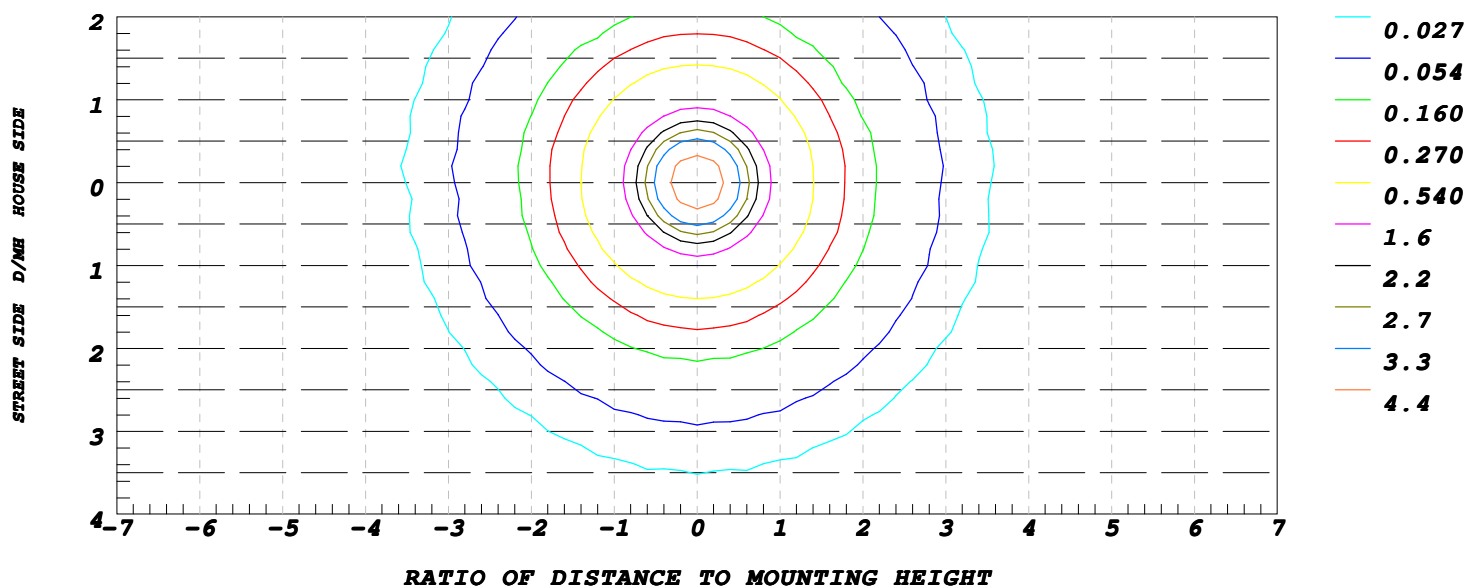
Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOLUX DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:

ILLUMINANCE AT MH=10 m, Enadir = 5.44 lx

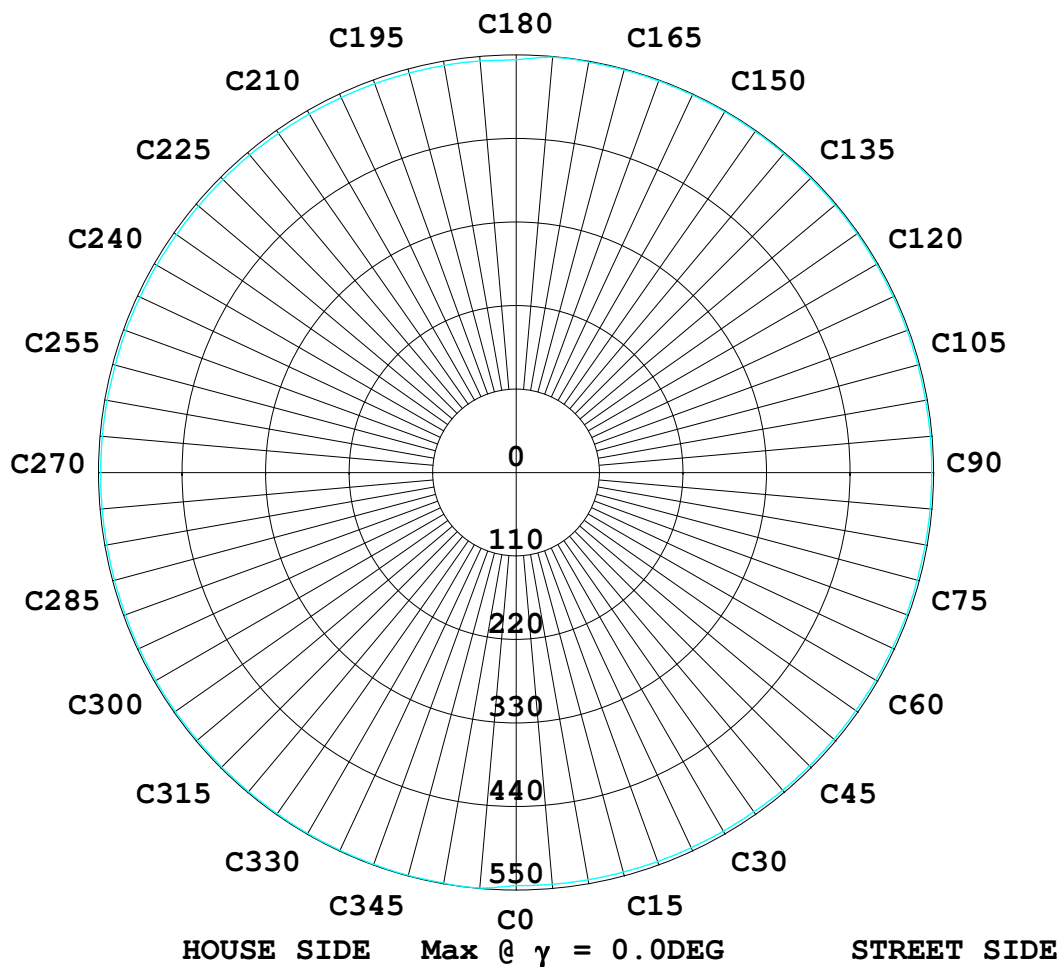
Test System: LSG-1800
Temperature: 25.3 DEG
Operators: G
Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

ISOCANDELA DIAGRAM

Report number: GO2018-058

MANUFACTURER: BACKLIGHT SRL	Address: Via Volta 5 - Ornago (MB)	
NAME: MAGIC CLOUD_26W_3.0x3.0ft	TYPE: wall	WEIGHT:
SPECIFICATION: wall	DIMENSION: 914x914x21	SERIAL No.:



Test System: LSG-1800
 Temperature: 25.3DEG
 Operators: G
 Test Date: 03-06-2018

Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks: