

LAMP PHOTOMETRIC REPORT

MODEL: DL-GW40C

POWER: 40W

VOLTAGE: 220V

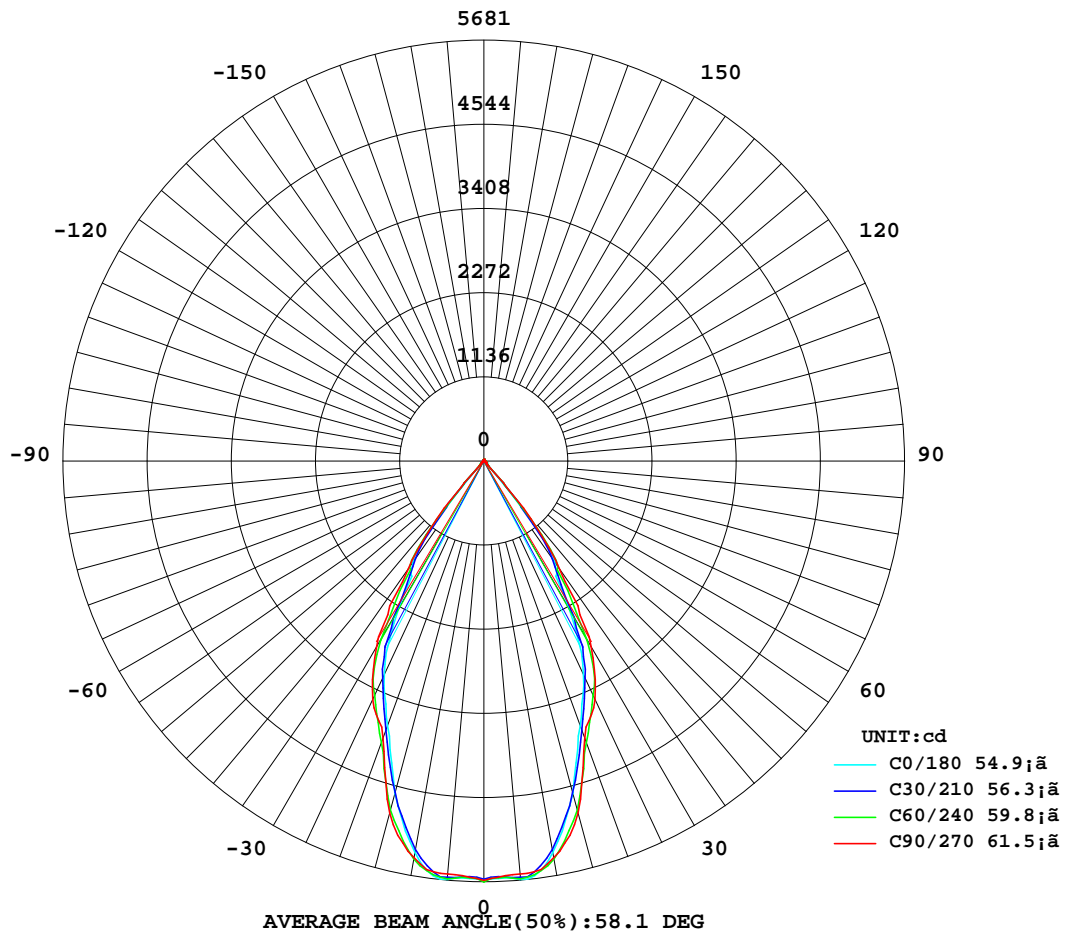
WORKING VOLTAGE: 219.8V

MANUFACTURER: CONG TY CO PHAN VINALED

TOTAL FLUX: 4628.6 lm

Efficiency: 116.70 lm/W

Test: U: 219.8V I: 0.184A P: 39.66W PF: -0.975



Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

**ZONAL FLUX DIAGRAM**

Report number: 03042019

<b>MANUFACTURER: CONG TY CO PHAN VINALED</b>	<b>Address:152/24 THANH THAI,P.12,Q.10,TP.HCM</b>	
<b>NAME: DEN AM TRAN 40W</b>	<b>TYPE:DL-GW40C</b>	<b>WEIGHT:1.KG</b>
<b>SPECIFICATION:AC220-240V</b>	<b>DIMENSION: 10M</b>	<b>SERIAL No.:1705479</b>

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	zone	total
5.0	5671	5650	5596	5650	5671	5650	5596	5650	0- 5	134.8	134.8
10.0	5366	5377	5437	5377	5366	5377	5437	5377	5- 10	397.4	532.2
15.0	4642	4736	4922	4736	4642	4736	4922	4736	10- 15	601.9	1134
20.0	3802	3979	3991	3979	3802	3979	3991	3979	15- 20	712.7	1847
25.0	3186	3373	3557	3373	3186	3373	3557	3373	20- 25	763.3	2610
30.0	2310	2579	2896	2579	2310	2579	2896	2579	25- 30	763.9	3374
35.0	1671	1689	1788	1689	1671	1689	1788	1689	30- 35	607.5	3982
40.0	553.7	689.1	833.9	689.1	553.7	689.1	833.9	689.1	35- 40	417.9	4400
45.0	81.19	72.85	73.69	72.85	81.19	72.85	73.69	72.85	40- 45	90.17	4490
50.0	58.99	52.45	52.20	52.45	58.99	52.45	52.20	52.45	45- 50	25.61	4516
55.0	43.70	38.69	37.90	38.69	43.70	38.69	37.90	38.69	50- 55	19.71	4535
60.0	34.79	30.90	30.10	30.90	34.79	30.90	30.10	30.90	55- 60	16.49	4552
65.0	27.20	24.00	23.10	24.00	27.20	24.00	23.10	24.00	60- 65	13.66	4565
70.0	21.00	18.04	17.00	18.04	21.00	18.04	17.00	18.04	65- 70	10.95	4576
75.0	16.20	13.15	11.80	13.15	16.20	13.15	11.80	13.15	70- 75	8.448	4585
80.0	10.70	7.900	6.100	7.900	10.70	7.900	6.100	7.900	75- 80	5.976	4591
85.0	4.400	2.900	0.600	2.900	4.400	2.900	0.600	2.900	80- 85	2.533	4593
90.0	3.400	2.100	0	2.100	3.400	2.100	0	2.100	85- 90	1.360	4595
95.0	3.000	1.850	0	1.850	3.000	1.850	0	1.850	90- 95	1.049	4596
100.0	2.700	1.750	0	1.750	2.700	1.750	0	1.750	95-100	0.976	4597
105.0	2.600	1.750	0	1.750	2.600	1.750	0	1.750	100-105	0.915	4598
110.0	2.300	1.700	0.100	1.700	2.300	1.700	0.100	1.700	105-110	0.870	4599
115.0	2.400	1.950	0.300	1.950	2.400	1.950	0.300	1.950	110-115	0.852	4599
120.0	2.700	2.250	0.900	2.250	2.700	2.250	0.900	2.250	115-120	0.991	4600
125.0	3.500	3.150	1.800	3.150	3.500	3.150	1.800	3.150	120-125	1.233	4602
130.0	4.800	4.550	3.300	4.550	4.800	4.550	3.300	4.550	125-130	1.625	4603
135.0	6.400	6.250	5.100	6.250	6.400	6.250	5.100	6.250	130-135	2.135	4605
140.0	8.500	8.100	7.200	8.100	8.500	8.100	7.200	8.100	135-140	2.643	4608
145.0	10.70	10.35	9.500	10.35	10.70	10.35	9.500	10.35	140-145	3.075	4611
150.0	12.90	12.55	11.70	12.55	12.90	12.55	11.70	12.55	145-150	3.375	4614
155.0	15.20	14.80	13.90	14.80	15.20	14.80	13.90	14.80	150-155	3.464	4618
160.0	17.50	17.04	16.30	17.04	17.50	17.04	16.30	17.04	155-160	3.354	4621
165.0	19.30	18.90	18.50	18.90	19.30	18.90	18.50	18.90	160-165	2.987	4624
170.0	20.90	20.35	20.20	20.35	20.90	20.35	20.20	20.35	165-170	2.353	4627
175.0	22.10	21.25	21.40	21.25	22.10	21.25	21.40	21.25	170-175	1.505	4628
180.0	22.50	21.70	22.10	21.70	22.50	21.70	22.10	21.70	175-180	0.520	4629
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

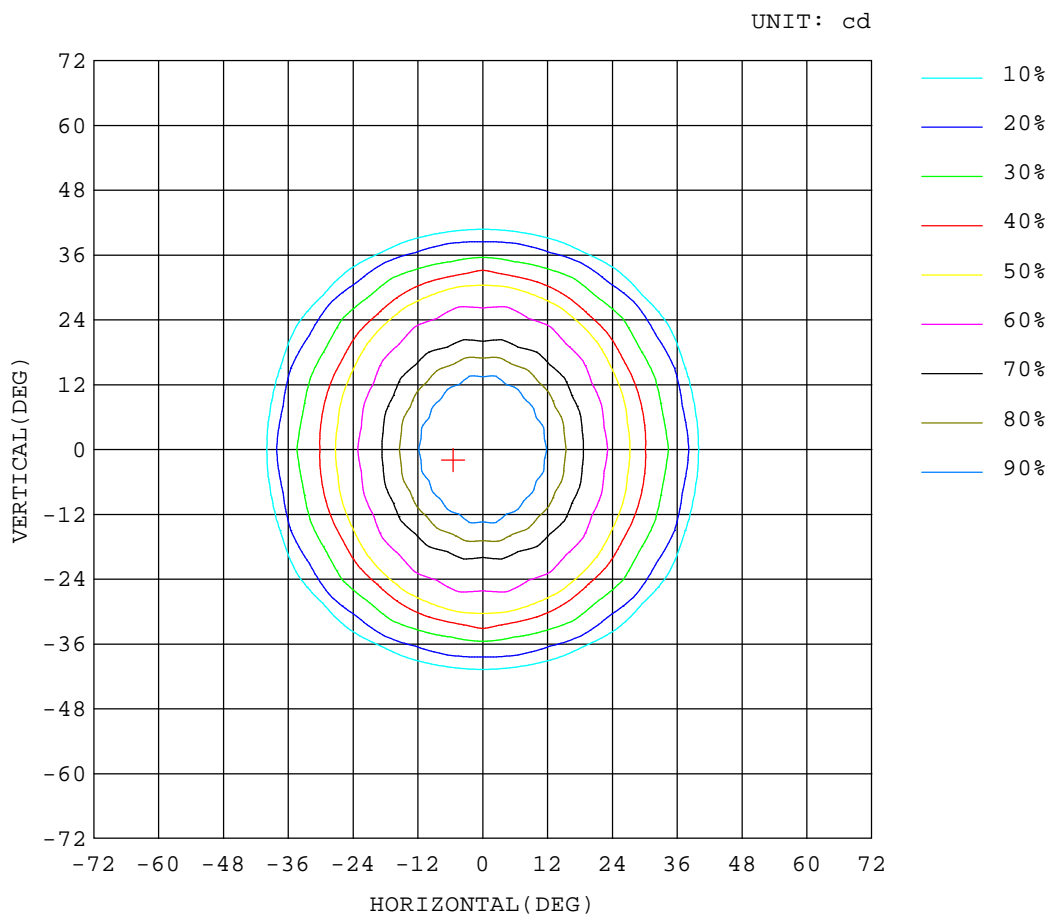
 Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

 Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

ISOCANDELA DIAGRAM

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479



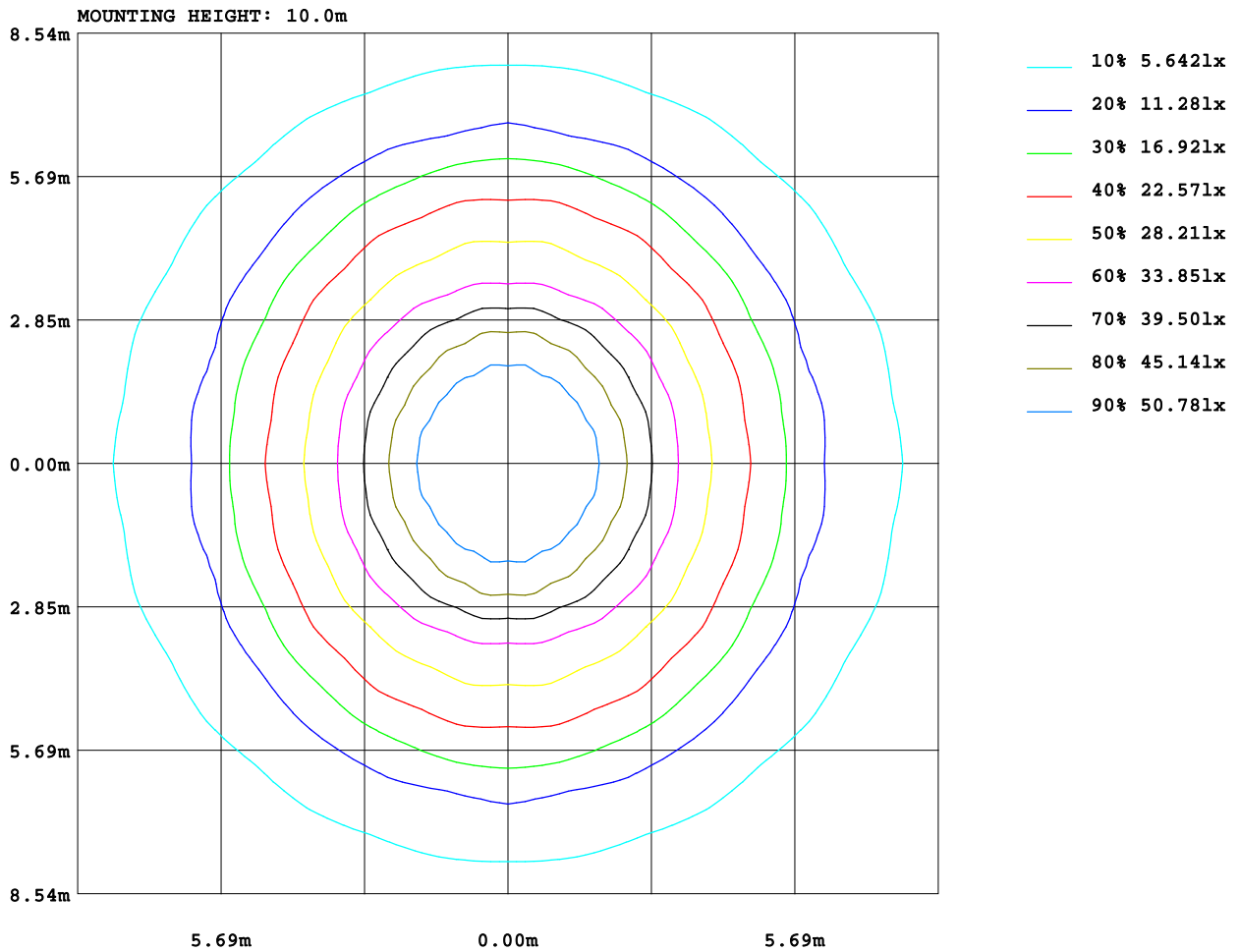
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ISOLUX DIAGRAM

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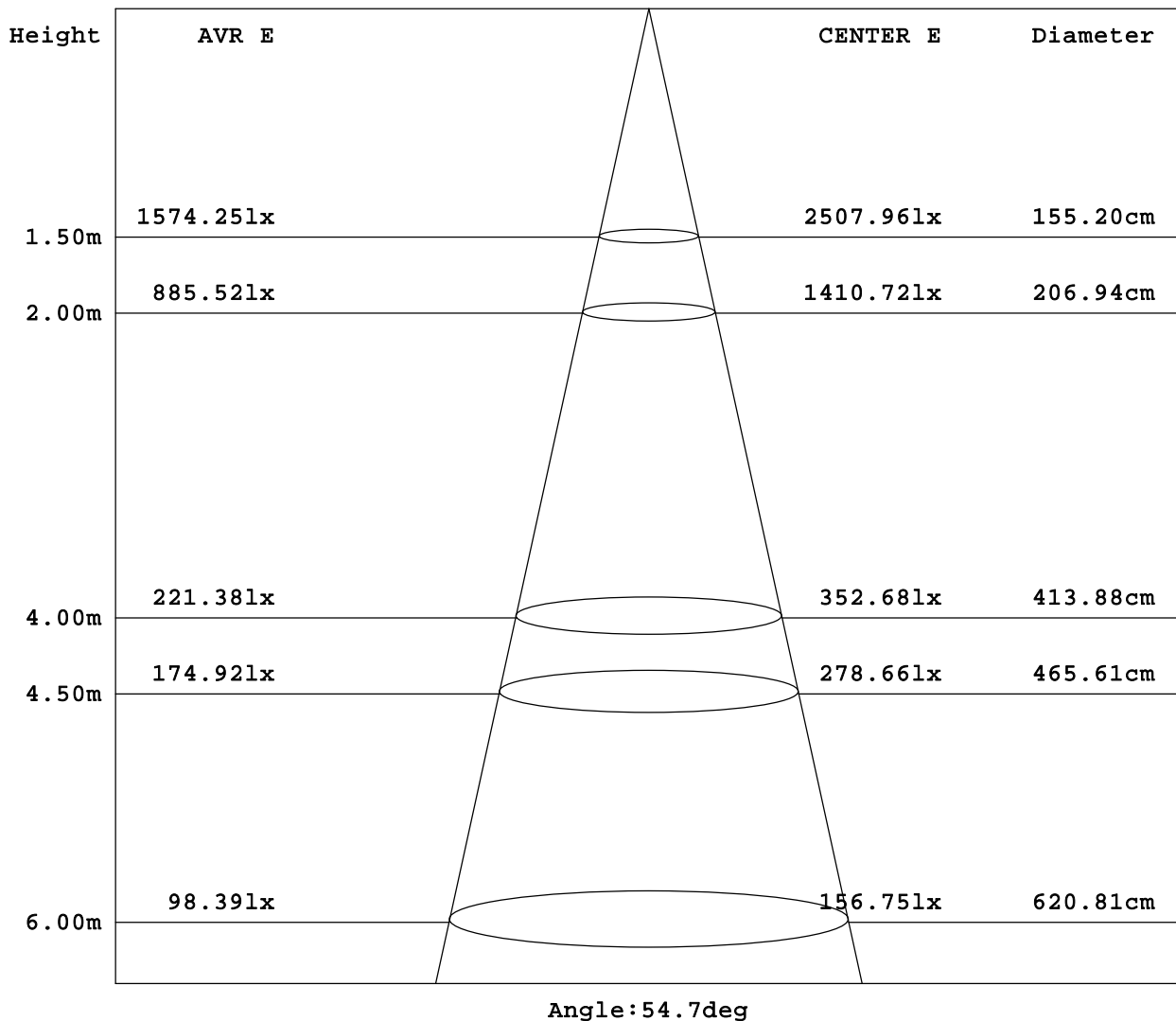
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AVERAGE AND CENTER E Figure

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 Remarks: LED SOURCE:CITIZEN

AREA LUMINOUS FLUX

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479

VERTICAL (DEG)	AREA FLUX DIAGRAM																	UNIT:lm		Φ t	Φ a
	0.05	0.07	0.15	0.20	0.23	0.34	0.33	0.44	0.43	0.43	0.44	0.33	0.34	0.23	0.20	0.15	0.07	0.05	4.48	0.00	
72	0.08	0.12	0.19	0.29	0.33	0.49	0.52	0.65	0.66	0.66	0.65	0.52	0.49	0.33	0.29	0.19	0.12	0.08	6.63	0.00	
64	0.10	0.16	0.23	0.39	0.46	0.64	0.76	0.91	1.00	1.00	0.91	0.76	0.64	0.46	0.39	0.23	0.16	0.10	9.29	0.00	
56	0.11	0.21	0.28	0.46	0.65	0.85	1.26	2.23	3.74	3.74	2.23	1.26	0.85	0.65	0.46	0.28	0.21	0.11	19.5	1.52	
48	0.11	0.24	0.37	0.52	0.92	2.45	12.0	23.3	30.0	30.0	23.3	12.0	2.45	0.92	0.52	0.37	0.24	0.11	140	125	
40	0.12	0.25	0.46	0.67	2.10	16.2	34.1	50.7	60.4	60.4	50.7	34.1	16.2	2.10	0.67	0.46	0.25	0.12	330	321	
32	0.13	0.25	0.47	0.91	9.20	30.3	53.0	69.4	78.2	78.2	69.4	53.0	30.3	9.20	0.91	0.47	0.25	0.13	484	477	
24	0.15	0.28	0.48	1.18	17.6	39.7	63.6	84.1	99.5	99.5	84.1	63.6	39.7	17.6	1.18	0.48	0.28	0.15	614	607	
16	0.17	0.32	0.58	1.90	21.7	45.0	69.1	94.4	109	109	94.4	69.1	45.0	21.7	1.90	0.58	0.32	0.17	684	678	
8	0.17	0.32	0.58	1.90	21.7	45.0	69.1	94.4	109	109	94.4	69.1	45.0	21.7	1.90	0.58	0.32	0.17	684	678	
0	0.15	0.28	0.48	1.18	17.6	39.7	63.6	84.1	99.5	99.5	84.1	63.6	39.7	17.6	1.18	0.48	0.28	0.15	614	607	
-8	0.13	0.25	0.47	0.91	9.20	30.3	53.0	69.4	78.2	78.2	69.4	53.0	30.3	9.20	0.91	0.47	0.25	0.13	484	477	
-16	0.12	0.25	0.46	0.67	2.10	16.2	34.1	50.7	60.4	60.4	50.7	34.1	16.2	2.10	0.67	0.46	0.25	0.12	330	321	
-24	0.11	0.24	0.37	0.52	0.92	2.45	12.0	23.3	30.0	30.0	23.3	12.0	2.45	0.92	0.52	0.37	0.24	0.11	140	125	
-32	0.11	0.21	0.28	0.46	0.65	0.85	1.26	2.23	3.74	3.74	2.23	1.26	0.85	0.65	0.46	0.28	0.21	0.11	19.5	1.52	
-40	0.10	0.16	0.23	0.39	0.46	0.64	0.76	0.91	1.00	1.00	0.91	0.76	0.64	0.46	0.39	0.23	0.16	0.10	9.29	0.00	
-48	0.08	0.12	0.19	0.29	0.33	0.49	0.52	0.65	0.66	0.66	0.65	0.52	0.49	0.33	0.29	0.19	0.12	0.08	6.63	0.00	
-56	0.05	0.07	0.15	0.20	0.23	0.34	0.33	0.44	0.43	0.43	0.44	0.33	0.34	0.23	0.20	0.15	0.07	0.05	4.48	0.00	
-64	0.05	0.07	0.15	0.20	0.23	0.34	0.33	0.44	0.43	0.43	0.44	0.33	0.34	0.23	0.20	0.15	0.07	0.05	4.48	0.00	
-72																					
	-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL (DEG)				16	24	32	40	48	56	64	72	
Φ t	2.01	3.80	6.39	13.0	107	272	470	653	766	766	653	470	272	107	13.0	6.39	3.80	2.01	4629		
Φ a	0.00	0.00	0.00	0.00	90.7	262	459	642	756	756	642	459	262	90.7	0.00	0.00	0.00	0.00		4422	

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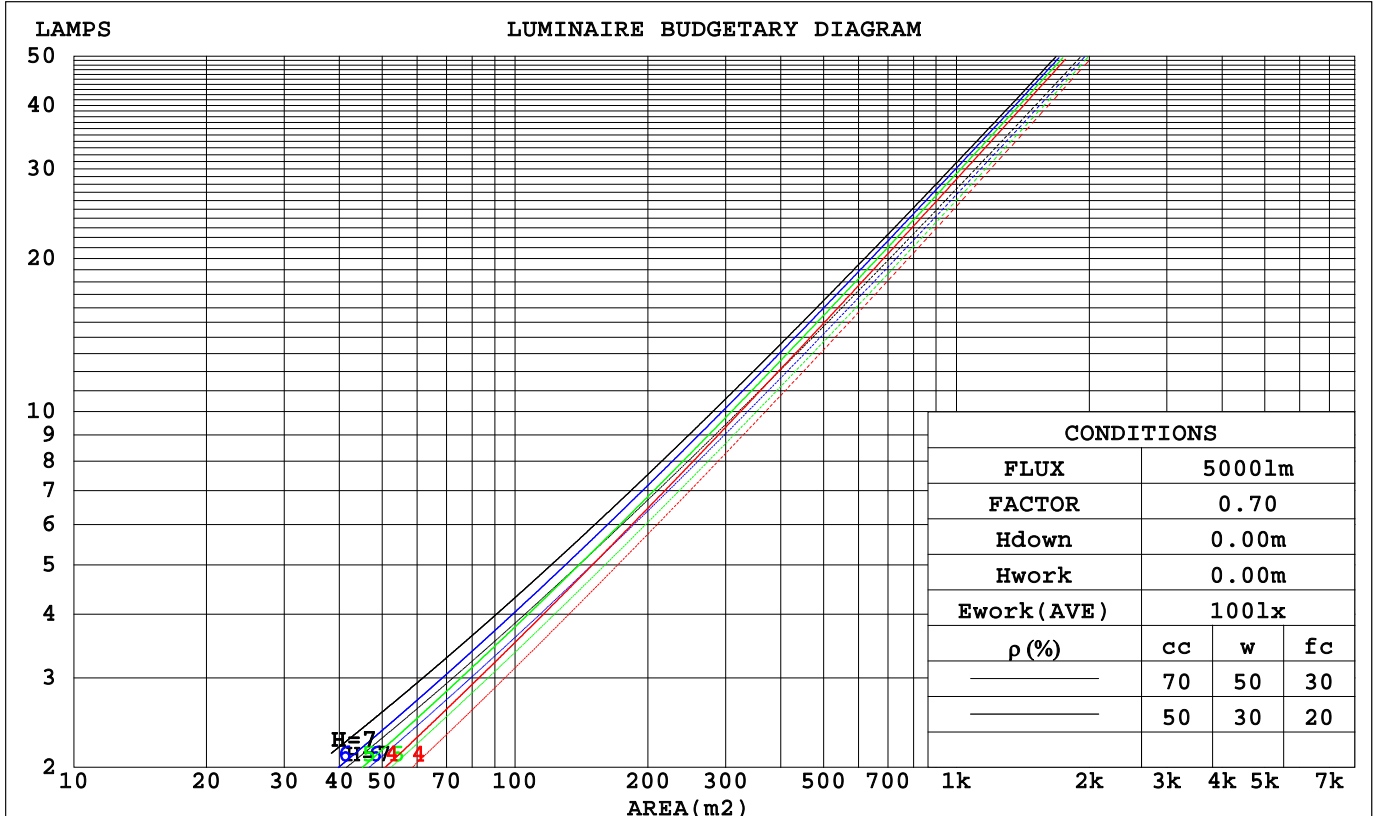
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**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Report number: 03042019

<b>MANUFACTURER: CONG TY CO PHAN VINALED</b>		<b>Address:152/24 THANH THAI,P.12,Q.10,TP.HCM</b>			
<b>NAME: DEN AM TRAN 40W</b>		<b>TYPE:DL-GW40C</b>		<b>WEIGHT:1.KG</b>	
<b>SPECIFICATION:AC220-240V</b>		<b>DIMENSION: 10M</b>		<b>SERIAL No.:1705479</b>	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Coefficients of Utilization(CU)</b>									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.11	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.92	.95	.93	.90	.92	.90	.88	.87
3.0	.96	.91	.88	.95	.90	.87	.92	.88	.85	.90	.87	.84	.87	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.82	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.85	.79	.75	.84	.78	.74	.82	.77	.74	.80	.76	.73	.78	.75	.72	.71
6.0	.80	.74	.70	.79	.73	.69	.77	.72	.69	.76	.71	.68	.74	.71	.68	.66
7.0	.75	.69	.65	.74	.69	.65	.73	.68	.64	.72	.67	.64	.71	.67	.64	.62
8.0	.71	.65	.61	.70	.65	.61	.69	.64	.60	.68	.63	.60	.67	.63	.60	.59
9.0	.67	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.64	.59	.56	.55
10.0	.63	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.61	.56	.53	.52


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**WEC AND CCEC**

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<b>SPECIFICATION:AC220-240V</b>	<b>DIMENSION: 10M</b>			<b>SERIAL No.:1705479</b>		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Wall Exitance Coefficients(WEC)</b>									
0.0																
1.0	.177	.100	.032	.170	.097	.031	.157	.090	.029	.145	.084	.027	.134	.078	.025	
2.0	.169	.092	.028	.163	.090	.028	.152	.084	.026	.142	.079	.025	.132	.075	.024	
3.0	.160	.085	.026	.155	.083	.025	.146	.079	.024	.137	.075	.023	.129	.071	.022	
4.0	.152	.079	.023	.148	.078	.023	.140	.074	.022	.132	.071	.021	.125	.068	.021	
5.0	.145	.074	.021	.142	.073	.021	.134	.070	.021	.128	.067	.020	.122	.065	.020	
6.0	.139	.070	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.133	.066	.019	.130	.065	.018	.124	.063	.018	.119	.061	.018	.114	.059	.017	
8.0	.127	.062	.017	.124	.061	.017	.119	.060	.017	.115	.058	.017	.110	.057	.016	
9.0	.122	.059	.016	.119	.058	.016	.115	.057	.016	.111	.055	.016	.107	.054	.016	
10.0	.117	.056	.016	.115	.055	.015	.111	.054	.015	.107	.053	.015	.103	.052	.015	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Ceiling Cavity Exitance Coefficients(CCEC)</b>									
0.0	.196	.196	.196	.168	.168	.168	.114	.114	.114	.066	.066	.066	.021	.021	.021	
1.0	.177	.163	.151	.151	.140	.130	.103	.096	.090	.060	.056	.052	.019	.018	.017	
2.0	.161	.138	.119	.138	.119	.103	.095	.082	.072	.055	.048	.042	.018	.015	.014	
3.0	.149	.119	.096	.128	.103	.083	.088	.071	.058	.051	.042	.034	.016	.014	.011	
4.0	.139	.105	.078	.119	.090	.068	.082	.063	.048	.047	.037	.028	.015	.012	.009	
5.0	.130	.093	.066	.112	.080	.057	.077	.056	.040	.045	.033	.024	.014	.011	.008	
6.0	.123	.084	.056	.105	.072	.049	.073	.051	.034	.042	.030	.020	.014	.010	.007	
7.0	.116	.076	.048	.100	.066	.042	.069	.046	.030	.040	.027	.018	.013	.009	.006	
8.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005	
9.0	.105	.065	.037	.091	.056	.032	.063	.039	.023	.037	.023	.014	.012	.008	.005	
10.0	.101	.060	.033	.087	.052	.029	.060	.037	.021	.035	.022	.012	.011	.007	.004	

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 Remarks: LED SOURCE:CITIZEN



Uncorrected UGR Table

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479

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	13.0	14.0	13.3	14.1	14.3	14.2	15.1	14.4	15.3	15.5
3H	12.9	13.8	13.2	14.0	14.2	14.1	14.9	14.3	15.1	15.3
4H	12.9	13.7	13.1	13.9	14.1	14.0	14.8	14.3	15.0	15.3
6H	12.8	13.6	13.1	13.8	14.1	13.9	14.7	14.3	15.0	15.2
8H	12.8	13.5	13.1	13.7	14.0	13.9	14.6	14.2	14.9	15.2
12H	12.7	13.4	13.0	13.7	14.0	13.9	14.6	14.2	14.8	15.1
4H 2H	12.8	13.6	13.1	13.8	14.1	13.9	14.8	14.2	15.0	15.2
3H	12.7	13.4	13.0	13.7	14.0	13.8	14.5	14.2	14.8	15.1
4H	12.7	13.3	13.0	13.6	13.9	13.8	14.4	14.1	14.7	15.0
6H	12.6	13.2	13.0	13.5	13.9	13.7	14.3	14.1	14.6	15.0
8H	12.6	13.1	13.0	13.4	13.8	13.7	14.2	14.1	14.6	15.0
12H	12.5	13.0	12.9	13.4	13.8	13.6	14.1	14.1	14.5	14.9
8H 4H	12.5	13.0	12.9	13.4	13.8	13.7	14.2	14.1	14.5	14.9
6H	12.5	12.9	12.9	13.3	13.8	13.6	14.0	14.1	14.4	14.9
8H	12.5	12.8	12.9	13.3	13.7	13.6	13.9	14.0	14.4	14.8
12H	12.4	12.7	12.9	13.2	13.7	13.5	13.8	14.0	14.3	14.8
12H 4H	12.5	13.0	12.9	13.3	13.7	13.6	14.1	14.0	14.5	14.9
6H	12.5	12.8	12.9	13.3	13.7	13.6	13.9	14.0	14.4	14.8
8H	12.4	12.7	12.9	13.2	13.7	13.5	13.8	14.0	14.3	14.8
Variations with the observer position at spacings:										
S = 1.0H	+ 3.9 / - 8.7					+ 4.0 / - 8.7				
1.5H	+ 6.6 / - 8.6					+ 6.8 / - 8.4				
2.0H	+ 1.4 / - 1.0					+ 0.9 / - 1.0				

CIE Pub.117 Corrected 4629 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.3)

Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

UTILIZATION FACTORS TABLE

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479

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	89	82	79	88	82	79	87	82	79	75
0.80	96	90	87	95	90	86	94	89	86	82
1.00	100	94	91	99	94	91	97	94	90	86
1.25	104	99	95	103	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	104	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	108	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

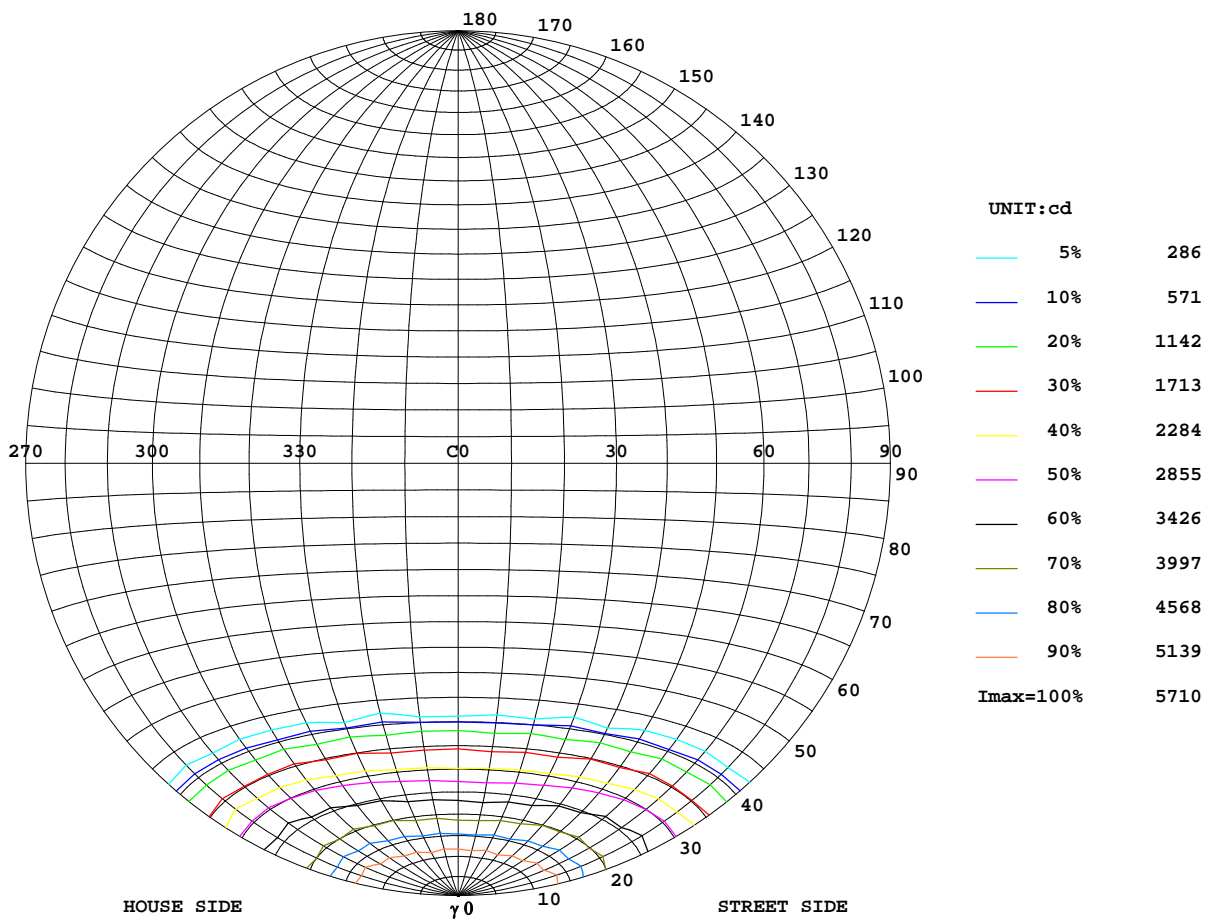
Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

ISOCANDELA DIAGRAM

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479



Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

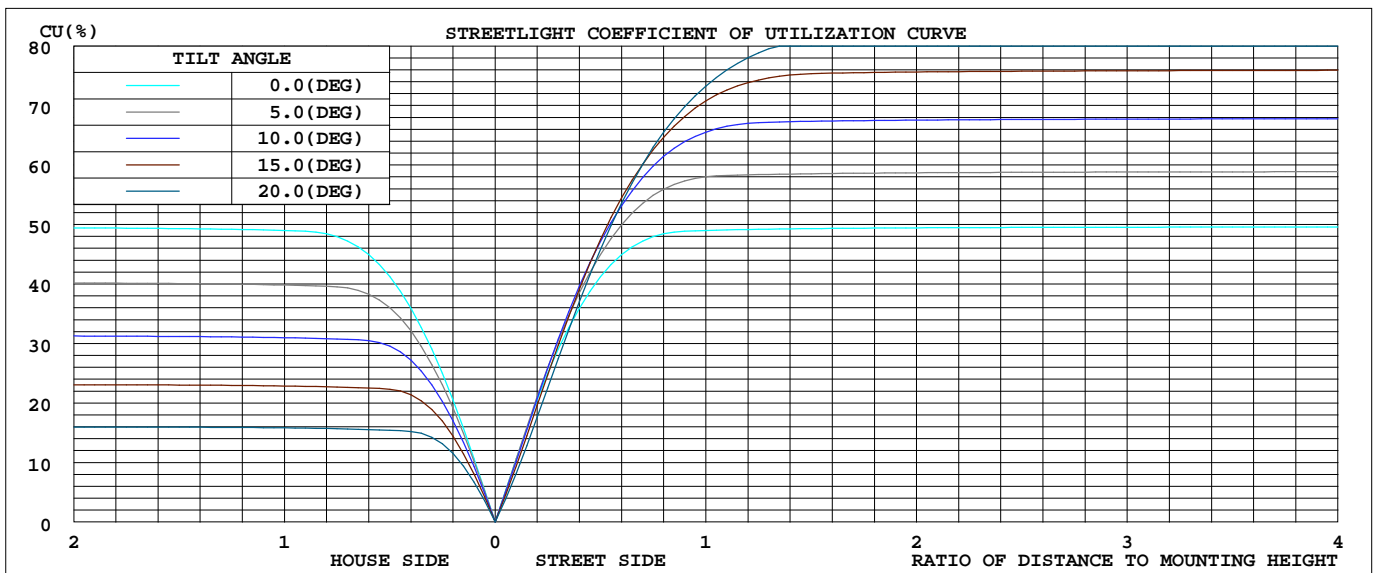
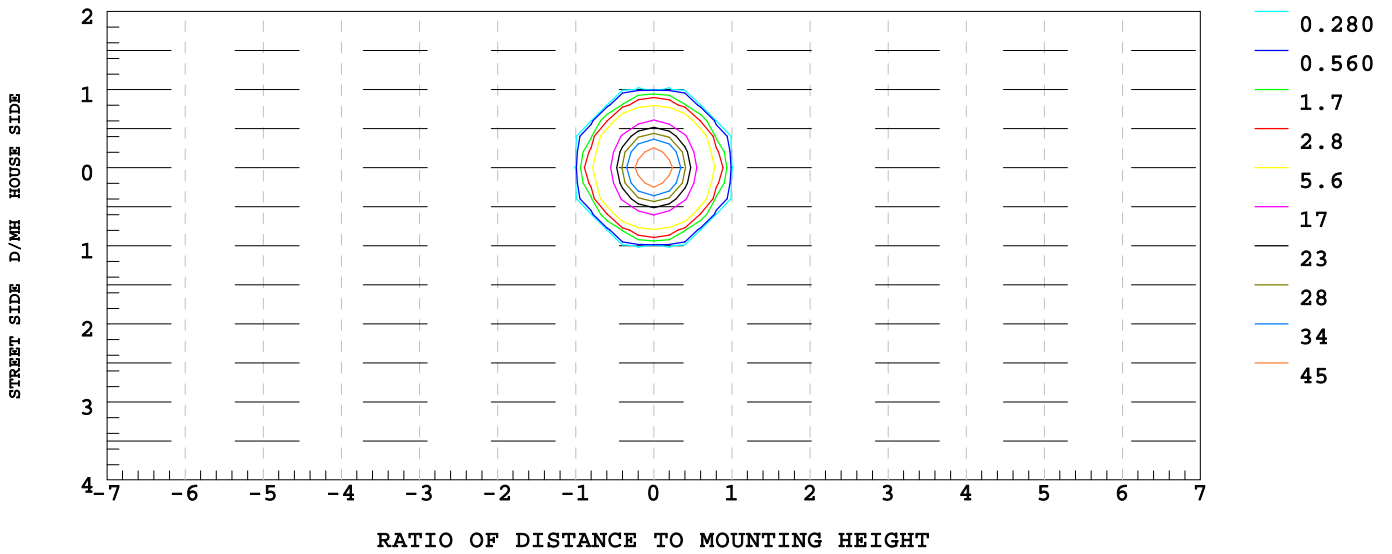
Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

ISOLUX DIAGRAM

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479

ILLUMINANCE AT MH=10 m,Enadir = 56.43 lx



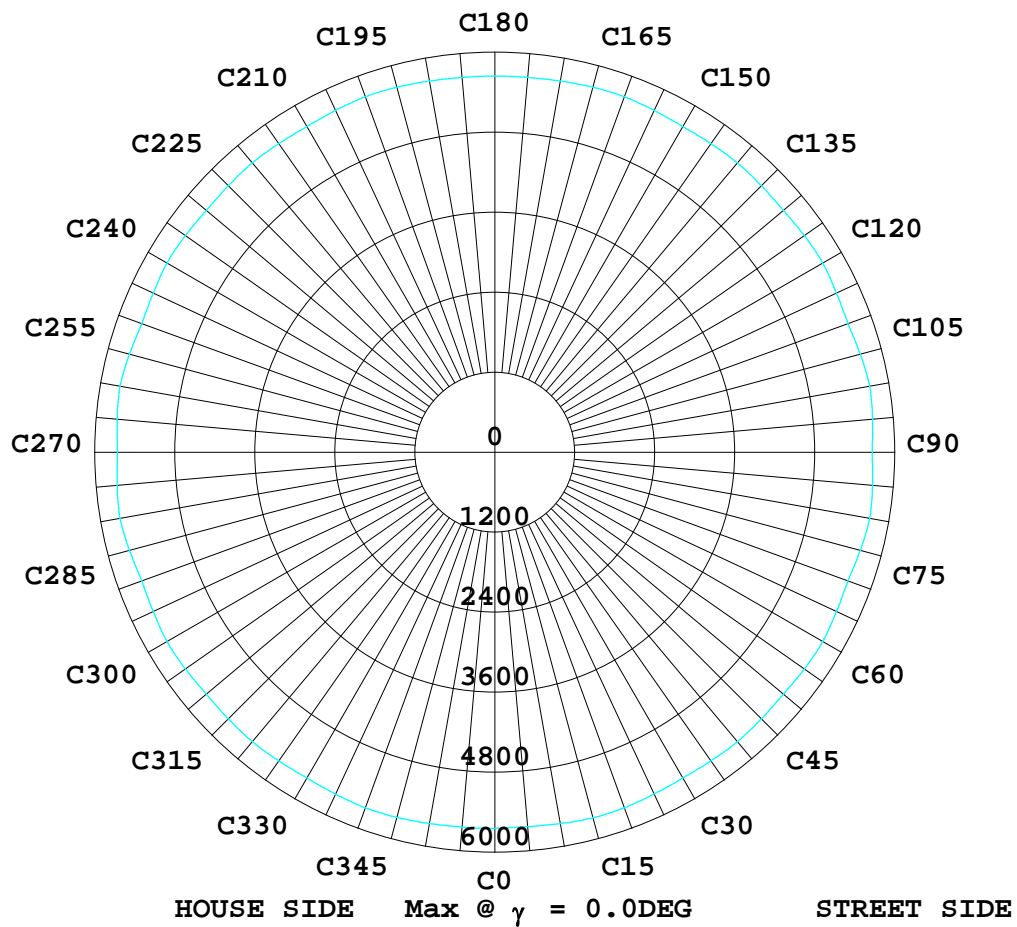
Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

ISOCANDELA DIAGRAM

Report number: 03042019

MANUFACTURER: CONG TY CO PHAN VINALED	Address:152/24 THANH THAI,P.12,Q.10,TP.HCM	
NAME: DEN AM TRAN 40W	TYPE:DL-GW40C	WEIGHT:1.KG
SPECIFICATION:AC220-240V	DIMENSION: 10M	SERIAL No.:1705479



Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

**LUMINOUS DISTRIBUTION INTENSITY DATA**
**Report number: 03042019**

<b>MANUFACTURER: CONG TY CO PHAN VINALED</b>	<b>Address:152/24 THANH THAI,P.12,Q.10,TP.HCM</b>	
<b>NAME: DEN AM TRAN 40W</b>	<b>TYPE:DL-GW40C</b>	<b>WEIGHT:1.KG</b>
<b>SPECIFICATION:AC220-240V</b>	<b>DIMENSION: 10M</b>	<b>SERIAL No.:1705479</b>

UNIT: cd

γ (DEG)	C(DEG)														
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
0.0	5643	5654	5676	5642	5665	5648	5681	5639	5710	5660	5710	5639	5681	5648	5665
5.0	5671	5674	5701	5638	5676	5624	5659	5610	5668	5596	5668	5610	5659	5624	5676
10.0	5366	5355	5389	5324	5381	5373	5453	5389	5491	5437	5491	5389	5453	5373	5381
15.0	4642	4607	4689	4632	4744	4728	4875	4839	4991	4922	4991	4839	4875	4728	4744
20.0	3802	3796	3881	3870	3987	3971	4048	3983	4049	3991	4049	3983	4048	3971	3987
25.0	3186	3146	3220	3233	3368	3378	3492	3483	3613	3557	3613	3483	3492	3378	3368
30.0	2310	2378	2395	2437	2569	2589	2790	2851	2932	2896	2932	2851	2790	2589	2569
35.0	1671	1595	1663	1615	1705	1674	1751	1749	1727	1788	1727	1749	1751	1674	1705
40.0	554	520	570	749	607	771	669	801	749	834	749	801	669	771	607
45.0	81.1	63.3	79.5	62.4	80.5	65.2	86.6	71.1	92.4	73.6	92.4	71.1	86.6	65.2	80.5
50.0	58.9	46.2	57.5	45.2	57.9	47.0	61.0	50.3	64.8	52.2	64.8	50.3	61.0	47.0	57.9
55.0	43.7	34.0	42.7	33.3	43.0	34.2	45.1	36.5	47.7	37.9	47.7	36.5	45.1	34.2	43.0
60.0	34.7	26.6	34.5	26.3	34.7	27.0	36.5	28.9	38.8	30.1	38.8	28.9	36.5	27.0	34.7
65.0	27.2	20.7	27.2	20.4	27.2	20.7	28.5	22.0	30.5	23.1	30.5	22.0	28.5	20.7	27.2
70.0	21.0	15.5	21.2	15.0	21.0	15.0	21.6	16.1	23.5	17.0	23.5	16.1	21.6	15.0	21.0
75.0	16.2	11.1	16.4	10.5	16.0	10.3	16.3	11.1	17.8	11.8	17.8	11.1	16.3	10.3	16.0
80.0	10.7	6.10	10.9	5.60	10.4	5.40	10.7	5.80	11.7	6.10	11.7	5.80	10.7	5.40	10.4
85.0	4.40	0.90	5.00	0.80	4.90	0.90	5.10	0.70	5.30	0.60	5.30	0.70	5.10	0.90	4.90
90.0	3.40	0.30	4.00	0.20	3.90	0.30	4.10	0.00	4.20	0.00	4.20	0.00	4.10	0.30	3.90
95.0	3.00	0.30	3.50	0.20	3.40	0.30	3.60	0.00	3.70	0.00	3.70	0.00	3.60	0.30	3.40
100.0	2.70	0.30	3.30	0.20	3.20	0.30	3.40	0.00	3.50	0.00	3.50	0.00	3.40	0.30	3.20
105.0	2.60	0.40	3.10	0.30	3.10	0.40	3.20	0.10	3.30	0.00	3.30	0.10	3.20	0.40	3.10
110.0	2.30	0.50	2.90	0.40	2.90	0.50	3.00	0.20	3.10	0.10	3.10	0.20	3.00	0.50	2.90
115.0	2.40	0.70	3.10	0.80	3.10	0.80	3.10	0.60	3.10	0.30	3.10	0.60	3.10	0.80	3.10
120.0	2.70	1.30	3.50	1.30	3.20	1.30	3.60	1.20	3.40	0.90	3.40	1.20	3.60	1.30	3.20
125.0	3.50	2.40	4.20	2.30	4.00	2.30	4.20	2.00	4.10	1.80	4.10	2.00	4.20	2.30	4.00
130.0	4.80	3.80	5.40	3.60	5.30	3.80	5.40	3.40	5.50	3.30	5.50	3.40	5.40	3.80	5.30
135.0	6.40	5.60	7.00	5.50	6.90	5.60	7.00	5.20	7.00	5.10	7.00	5.20	7.00	5.60	6.90
140.0	8.50	7.70	8.90	7.50	8.70	7.50	8.90	7.30	9.00	7.20	9.00	7.30	8.90	7.50	8.70
145.0	10.7	10.1	11.1	9.70	10.9	9.80	10.9	9.50	11.1	9.50	11.1	9.50	10.9	9.80	10.9
150.0	12.9	12.4	13.3	12.2	13.0	12.1	13.0	11.8	13.0	11.7	13.0	11.8	13.0	12.1	13.0
155.0	15.2	14.7	15.5	14.5	15.2	14.3	15.2	14.2	15.5	13.9	15.5	14.2	15.2	14.3	15.2
160.0	17.5	17.0	17.7	16.6	17.5	16.5	17.6	16.5	17.9	16.3	17.9	16.5	17.6	16.5	17.5
165.0	19.3	18.7	19.6	18.6	19.3	18.5	19.5	18.6	20.1	18.5	20.1	18.6	19.5	18.5	19.3
170.0	20.9	20.2	21.0	20.0	20.8	19.9	20.9	20.0	21.6	20.2	21.6	20.0	20.9	19.9	20.8
175.0	22.1	21.2	22.0	21.0	21.6	20.9	21.9	21.0	22.6	21.4	22.6	21.0	21.9	20.9	21.6
180.0	22.5	22.0	22.3	21.4	22.0	21.4	22.2	21.5	22.7	22.1	22.7	21.5	22.2	21.4	22.0

**Test System:LSG-1800**  
**Temperature:25.3DEG**  
**Operators:NGUYEN BA HUNG**  
**Test Date:04-03-2019**
**Test Set: 8.0deg/s C-Gamma (TYPE C)**  
**Humidity:65.0%**  
**Test Distance:10.000 m**  
**Remarks: LED SOURCE:CITIZEN**

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 03042019

<b>MANUFACTURER: CONG TY CO PHAN VINALED</b>	<b>Address:152/24 THANH THAI,P.12,Q.10,TP.HCM</b>	
<b>NAME: DEN AM TRAN 40W</b>	<b>TYPE:DL-GW40C</b>	<b>WEIGHT:1.KG</b>
<b>SPECIFICATION:AC220-240V</b>	<b>DIMENSION: 10M</b>	<b>SERIAL No.:1705479</b>

UNIT: cd

C(DEG)\ γ (DEG)	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
0.0	5642	5676	5654	5643	5654	5676	5642	5665	5648	5681	5639	5710	5660	5710	5639
5.0	5638	5701	5674	5671	5674	5701	5638	5676	5624	5659	5610	5668	5596	5668	5610
10.0	5324	5389	5355	5366	5355	5389	5324	5381	5373	5453	5389	5491	5437	5491	5389
15.0	4632	4689	4607	4642	4607	4689	4632	4744	4728	4875	4839	4991	4922	4991	4839
20.0	3870	3881	3796	3802	3796	3881	3870	3987	3971	4048	3983	4049	3991	4049	3983
25.0	3233	3220	3146	3186	3146	3220	3233	3368	3378	3492	3483	3613	3557	3613	3483
30.0	2437	2395	2378	2310	2378	2395	2437	2569	2589	2790	2851	2932	2896	2932	2851
35.0	1615	1663	1595	1671	1595	1663	1615	1705	1674	1751	1749	1727	1788	1727	1749
40.0	749	570	520	554	520	570	749	607	771	669	801	749	834	749	801
45.0	62.4	79.5	63.3	81.1	63.3	79.5	62.4	80.5	65.2	86.6	71.1	92.4	73.6	92.4	71.1
50.0	45.2	57.5	46.2	58.9	46.2	57.5	45.2	57.9	47.0	61.0	50.3	64.8	52.2	64.8	50.3
55.0	33.3	42.7	34.0	43.7	34.0	42.7	33.3	43.0	34.2	45.1	36.5	47.7	37.9	47.7	36.5
60.0	26.3	34.5	26.6	34.7	26.6	34.5	26.3	34.7	27.0	36.5	28.9	38.8	30.1	38.8	28.9
65.0	20.4	27.2	20.7	27.2	20.7	27.2	20.4	27.2	20.7	28.5	22.0	30.5	23.1	30.5	22.0
70.0	15.0	21.2	15.5	21.0	15.5	21.2	15.0	21.0	15.0	21.6	16.1	23.5	17.0	23.5	16.1
75.0	10.5	16.4	11.1	16.2	11.1	16.4	10.5	16.0	10.3	16.3	11.1	17.8	11.8	17.8	11.1
80.0	5.60	10.9	6.10	10.7	6.10	10.9	5.60	10.4	5.40	10.7	5.80	11.7	6.10	11.7	5.80
85.0	0.80	5.00	0.90	4.40	0.90	5.00	0.80	4.90	0.90	5.10	0.70	5.30	0.60	5.30	0.70
90.0	0.20	4.00	0.30	3.40	0.30	4.00	0.20	3.90	0.30	4.10	0.00	4.20	0.00	4.20	0.00
95.0	0.20	3.50	0.30	3.00	0.30	3.50	0.20	3.40	0.30	3.60	0.00	3.70	0.00	3.70	0.00
100.0	0.20	3.30	0.30	2.70	0.30	3.30	0.20	3.20	0.30	3.40	0.00	3.50	0.00	3.50	0.00
105.0	0.30	3.10	0.40	2.60	0.40	3.10	0.30	3.10	0.40	3.20	0.10	3.30	0.00	3.30	0.10
110.0	0.40	2.90	0.50	2.30	0.50	2.90	0.40	2.90	0.50	3.00	0.20	3.10	0.10	3.10	0.20
115.0	0.80	3.10	0.70	2.40	0.70	3.10	0.80	3.10	0.80	3.10	0.60	3.10	0.30	3.10	0.60
120.0	1.30	3.50	1.30	2.70	1.30	3.50	1.30	3.20	1.30	3.60	1.20	3.40	0.90	3.40	1.20
125.0	2.30	4.20	2.40	3.50	2.40	4.20	2.30	4.00	2.30	4.20	2.00	4.10	1.80	4.10	2.00
130.0	3.60	5.40	3.80	4.80	3.80	5.40	3.60	5.30	3.80	5.40	3.40	5.50	3.30	5.50	3.40
135.0	5.50	7.00	5.60	6.40	5.60	7.00	5.50	6.90	5.60	7.00	5.20	7.00	5.10	7.00	5.20
140.0	7.50	8.90	7.70	8.50	7.70	8.90	7.50	8.70	7.50	8.90	7.30	9.00	7.20	9.00	7.30
145.0	9.70	11.1	10.1	10.7	10.1	11.1	9.70	10.9	9.80	10.9	9.50	11.1	9.50	11.1	9.50
150.0	12.2	13.3	12.4	12.9	12.4	13.3	12.2	13.0	12.1	13.0	11.8	13.0	11.7	13.0	11.8
155.0	14.5	15.5	14.7	15.2	14.7	15.5	14.5	15.2	14.3	15.2	14.2	15.5	13.9	15.5	14.2
160.0	16.6	17.7	17.0	17.5	17.0	17.7	16.6	17.5	16.5	17.6	16.5	17.9	16.3	17.9	16.5
165.0	18.6	19.6	18.7	19.3	18.7	19.6	18.6	19.3	18.5	19.5	18.6	20.1	18.5	20.1	18.6
170.0	20.0	21.0	20.2	20.9	20.2	21.0	20.0	20.8	19.9	20.9	20.0	21.6	20.2	21.6	20.0
175.0	21.0	22.0	21.2	22.1	21.2	22.0	21.0	21.6	20.9	21.9	21.0	22.6	21.4	22.6	21.0
180.0	21.4	22.3	22.0	22.5	22.0	22.3	21.4	22.0	21.4	22.2	21.5	22.7	22.1	22.7	21.5

Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number: 03042019

<b>MANUFACTURER: CONG TY CO PHAN VINALED</b>	<b>Address:152/24 THANH THAI,P.12,Q.10,TP.HCM</b>	
<b>NAME: DEN AM TRAN 40W</b>	<b>TYPE:DL-GW40C</b>	<b>WEIGHT:1.KG</b>
<b>SPECIFICATION:AC220-240V</b>	<b>DIMENSION: 10M</b>	<b>SERIAL No.:1705479</b>

UNIT: cd

C(DEG) γ (DEG)	300	310	320	330	340	350
0.0	5681	5648	5665	5642	5676	5654
5.0	5659	5624	5676	5638	5701	5674
10.0	5453	5373	5381	5324	5389	5355
15.0	4875	4728	4744	4632	4689	4607
20.0	4048	3971	3987	3870	3881	3796
25.0	3492	3378	3368	3233	3220	3146
30.0	2790	2589	2569	2437	2395	2378
35.0	1751	1674	1705	1615	1663	1595
40.0	669	771	607	749	570	520
45.0	86.6	65.2	80.5	62.4	79.5	63.3
50.0	61.0	47.0	57.9	45.2	57.5	46.2
55.0	45.1	34.2	43.0	33.3	42.7	34.0
60.0	36.5	27.0	34.7	26.3	34.5	26.6
65.0	28.5	20.7	27.2	20.4	27.2	20.7
70.0	21.6	15.0	21.0	15.0	21.2	15.5
75.0	16.3	10.3	16.0	10.5	16.4	11.1
80.0	10.7	5.40	10.4	5.60	10.9	6.10
85.0	5.10	0.90	4.90	0.80	5.00	0.90
90.0	4.10	0.30	3.90	0.20	4.00	0.30
95.0	3.60	0.30	3.40	0.20	3.50	0.30
100.0	3.40	0.30	3.20	0.20	3.30	0.30
105.0	3.20	0.40	3.10	0.30	3.10	0.40
110.0	3.00	0.50	2.90	0.40	2.90	0.50
115.0	3.10	0.80	3.10	0.80	3.10	0.70
120.0	3.60	1.30	3.20	1.30	3.50	1.30
125.0	4.20	2.30	4.00	2.30	4.20	2.40
130.0	5.40	3.80	5.30	3.60	5.40	3.80
135.0	7.00	5.60	6.90	5.50	7.00	5.60
140.0	8.90	7.50	8.70	7.50	8.90	7.70
145.0	10.9	9.80	10.9	9.70	11.1	10.1
150.0	13.0	12.1	13.0	12.2	13.3	12.4
155.0	15.2	14.3	15.2	14.5	15.5	14.7
160.0	17.6	16.5	17.5	16.6	17.7	17.0
165.0	19.5	18.5	19.3	18.6	19.6	18.7
170.0	20.9	19.9	20.8	20.0	21.0	20.2
175.0	21.9	20.9	21.6	21.0	22.0	21.2
180.0	22.2	21.4	22.0	21.4	22.3	22.0

Test System:LSG-1800  
 Temperature:25.3DEG  
 Operators:NGUYEN BA HUNG  
 Test Date:04-03-2019

Test Set: 8.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks: LED SOURCE:CITIZEN