



NVLAP®
TESTING
NVLAP LAB CODE 200770-0



ANSI/IES LM-79-19 TEST REPORT

Applicant's name : P.Q.L., Inc.

Address : 2285 Ward Avenue / Simi Valley, CA 93065

Brand Name : PQL

Report No. : BTR66.181.20.0029.33-2

Product Name : Ceiling Mount

Model Number : TSPC-W-D5CT-X-X-8

Tested by
(printed name and signature) : Xia Zeng

Title : Test Engineer

Approved by
(printed name and signature) : Zack Zhao

Title : Approved By

Date of issue : Oct 13, 2022

Testing Laboratory Name : BEST Test Service Shenzhen Co., Ltd.

Address : 1st Floor, 1st Building, Weitai Industrial Park, Yingrenshi, Shiyan, Baoan, Shenzhen, China

Tel:+86-755-28236006, Email: service@bestcert.cn

Accreditation : DLC/Lighting Facts/UL/ETL/ELI/CEC/EPA/DOE
NVLAP Testing Lab Code: 200770-0

Test specification

Standard : ANSI/IES LM-79-19

Test procedure/method : ANSI/IES LM-79-19 Test Procedure

Non-standard test method : No

Test Report Form No. : BEST_LM-79-19

TRF originator : BEST Test Service Shenzhen Co., Ltd. Mr Tseng

Master TRF : BEST_LM-79-19.doc

Note:

The laboratory has not been responsible for the sampling stage (e.g. the sample has been provided by the customer), the results relate only to the items tested.

This report is not valid as a BEST Test Report unless signed by an approved BEST Test Service Shenzhen Co., Ltd. This report shall not be reproduced except in full without approval of BEST TEST SERVICE SHENZHEN CO., LTD can provide assurance that parts of a report are not taken out of context. The test report only allows to be revised within the retention period unless further standard or the requirement was noticed. This report is for the exclusive use of BEST's Client and is provided pursuant to the agreement between BEST and its Client. BEST's responsibility and Liability are limited to the terms and conditions of the agreement. BEST assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the BEST name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by BEST. The observations and test results in this report are relevant only to the sample tested. This report by itself does not cover that the material, product, of service is or has ever been under a BEST certification program. National Voluntary Laboratory Accreditation Program (NVLAP) has accredited this laboratory under ISO17025: 2017 for specific laboratory activities as listed in the NVLAP directory of accredited laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation. This report must not be used by the client to claim product endorsement by NVLAP, NIST or any agency of the U.S. Government.

Description:	
The date of sampling	N/A
The date of receipt of the test sample / requirement /item(s)	Sep 30, 2022
Test date.....	Sep 30, 2022 to Oct 13, 2022
Model Number	TSPC-W-D5CT-X-X-8
Note	<p>Declared by the applicant that</p> <p>1.TSPC stands for series.</p> <p>2.W is wattage can be 15, 21, 25, 28.</p> <p>D5CT= Dimmable/5CCT.</p> <p>3.First X= Type of diffuser which can be SL (slim), MU (mushroom), SR (saturn ring), TR (trim), DT (double trim), & SP (slim puff).</p> <p>4.Second X=Color of housing which can be B (black), O (oil rubbed bronze), N (nickle), W (white), S (silver), Y (yellow) etc.</p> <p>5.Third X= CRI which can be 7 (70), 8 (80), & 9 (90).</p> <p>6.Chosen by applicant that TSPC-21-D5CT-SR-N-8 as basic model to be tested and others share the test data</p>
The condition of the item	N/A
Sampling method.....	Provided by Applicant
Sample Quantity	1 unit
SKU	N/A
Rating(s) (V; Hz).....	AC 120V/60Hz
Nominal Power	21W
Nominal Power Factor	N/A
Nominal Lumen Output.....	1470 lm
Nominal CCT	2700K
Note	This product is adjustable CCT and is tested in 2700K setting according to the applicant's requirements.
Nominal CRI(Ra)	90
Number of hours operated prior to measurement.....	0H
Total operating time of the product for measurements including stabilization:	3.5H
Ambient temperature	24.7°C
Orientation (burning position) of SSL product during test.....	Lighting Surface Down or Base Up
Stabilization time	1.5 H
Photometric method	Sphere-spectroradiometer+Goniophotometer
Calibration standard lamp used	DC 24V 100W Omni-Directional Halogen Calibrated by NIM China(Sphere) DC 120V 500W Omni-Directional Halogen Calibrated by NIM China(Goniophotometer)
Correction factors applied.....	Self absorbing applied
Photometric measurement conditions	See test method description below
Bandwidth of spectroradiometer	1nm
Statement of uncertainties	3.1%
LED Light engine monitoring temperature °C	N/A
Deviation.....	None

Photometric and Electrical Measurement

Total light output (luminous flux) for the $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ambient temperature conditions is measured using a $\phi 2.0\text{m}$ 4II geometry integrating sphere. Temperature is measured at a position inside the sphere. Spectral radiant flux are measured using the photo detector built in the integrating sphere. Each lamp is operated at rated voltage in its designated orientation. Each lamp is in a stable state before measurements are done as below:

Step 1 Take 3 measurements of the lamp light output at 10-minute interval (total time=20mintues.), the pre-burning time is not included in the formal testing time period.

Step 2 Calculate the difference in percentage between the maximum measured value and the minimum measured value with the three consecutive measurements.

Step 3 If the value calculated in Step 2 does not exceed 0.5 percent, the lamp is considered stable.

Luminous flux, chromaticity coordinates, correlated color temperature and color rendering index for each lamp are calculated from the spectral radiant flux measurements taken at 1 nm increment over the range of 380 to 780 nm. The calibration of the sphere photometer-spectrometer system can be traced back to the NIM. Lamp efficacy (lumens per watt) for each lamp model is computed based on the luminous flux result revised taking the self-absorbing correction factor into consideration. Electrical measurements including voltage, current, power and power factor are measured using the digital power meter.

Luminous Intensity

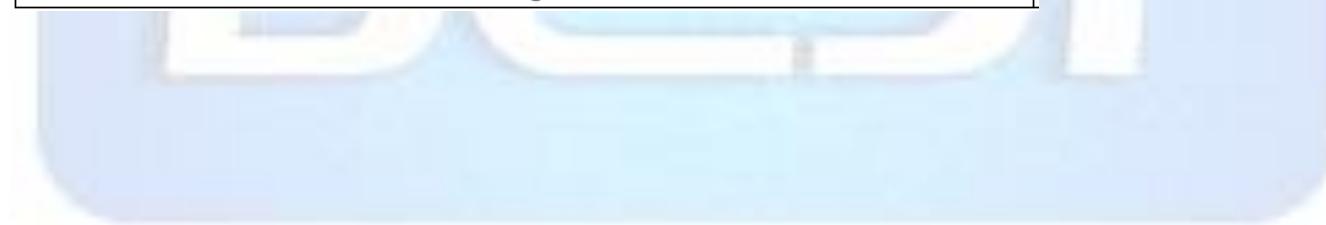
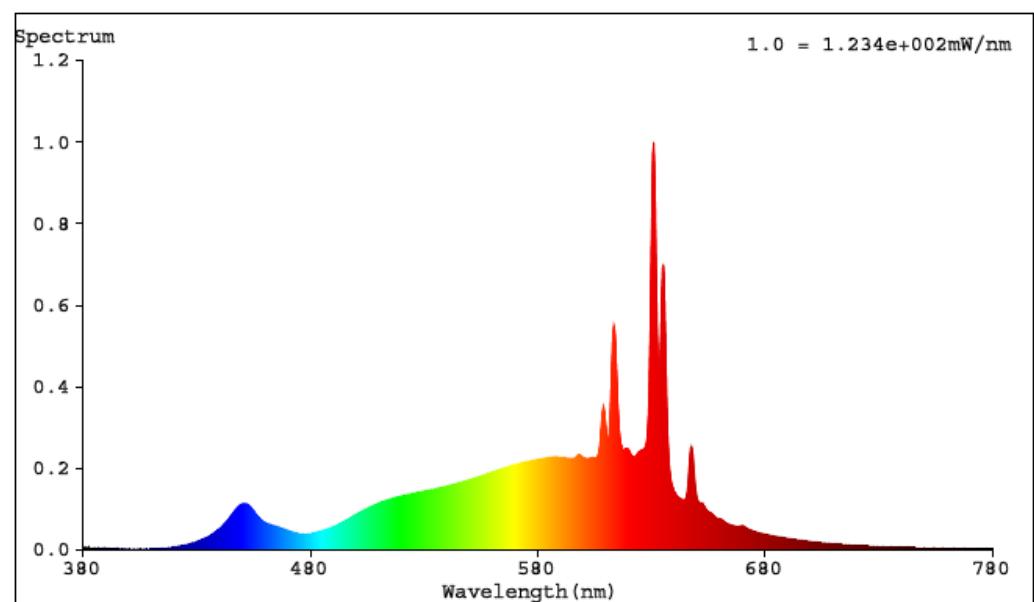
A goniophotometer is used to measure the intensity distribution at each angle, Luminous intensity (cd) is measured within each vertical plane at a 22.5° vertical angle increment (maximum) from 0° to 360° , measurements are repeated in vertical planes about the lamp (polar) axis in an increment of 1° from 0° to 180° , and the intensity data are exported to a file in excel format.

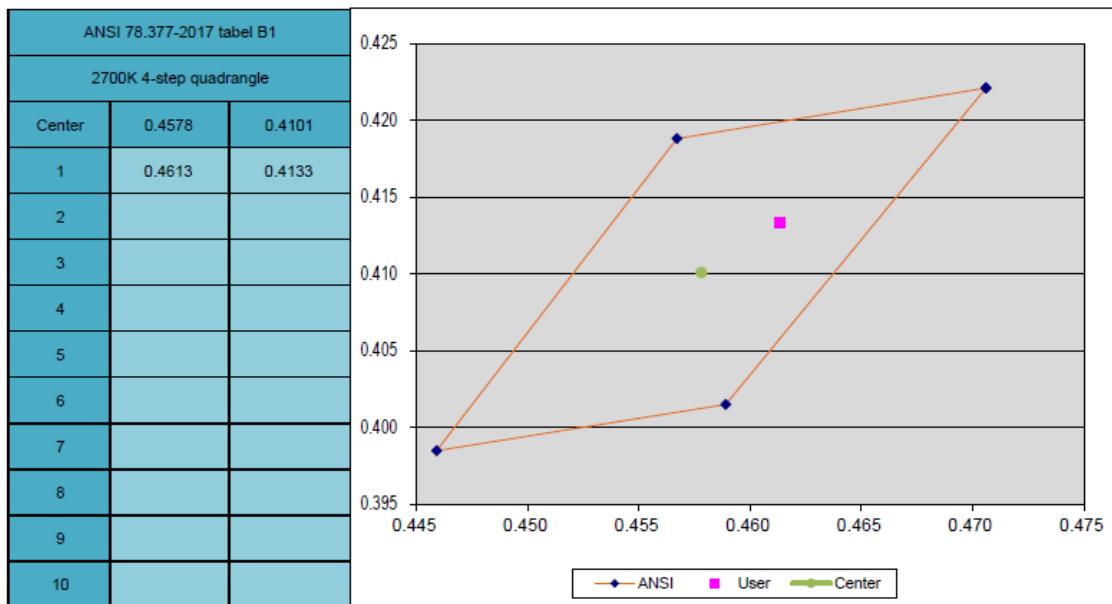


Photometric and Electrical Test Data

Model Number	Input Voltage (V)	Frequency (Hz)	Input Current (A)	ITHD	Input Power (W)	Power Factor	Lumen Output (Lumens)	Efficiency (Lumen/W)
TSPC-21-D5CT-SR-N-8 (2700K)	120.02	60.0	0.180	N/A	19.74	0.912	1704.87	86.36
Model Number	CCT (K)	CRI (Ra)	R9	x CIE1931	y CIE1931	u' CIE1976	v' CIE1976	Duv CIE1976
TSPC-21-D5CT-SR-N-8 (2700K)	2701	92.2	55	0.4613	0.4133	0.2622	0.5286	0.0009

Spectrum Plots



4-step quadrangle of ANSI 78.377-2017

Spectral Energy Distribution

WL(nm)	Spectrum	Spectrum	WL(nm)	Spectrum	Spectrum
380	0.0034	0.4246	581	0.2218	27.3700
381	0.0052	0.6432	582	0.2227	27.4800
382	0.0034	0.4208	583	0.2238	27.6100
383	0.0026	0.3215	584	0.2247	27.7300
384	0.0026	0.3202	585	0.2259	27.8700
385	0.0032	0.3994	586	0.2264	27.9400
386	0.0026	0.3204	587	0.2274	28.0600
387	0.0032	0.3967	588	0.2277	28.0900
388	0.0021	0.2537	589	0.2268	27.9800
389	0.0019	0.2397	590	0.2261	27.9000
390	0.0025	0.3139	591	0.2259	27.8800
391	0.0023	0.2889	592	0.2252	27.7900
392	0.0018	0.2226	593	0.2244	27.6900
393	0.0021	0.2558	594	0.2235	27.5700
394	0.0023	0.2828	595	0.2230	27.5100
395	0.0023	0.2887	596	0.2232	27.5400
396	0.0009	0.1063	597	0.2278	28.1000
397	0.0016	0.1949	598	0.2325	28.6800
398	0.0017	0.2104	599	0.2297	28.3400
399	0.0012	0.1542	600	0.2253	27.7900
400	0.0015	0.1871	601	0.2241	27.6500
401	0.0017	0.2055	602	0.2233	27.5600
402	0.0013	0.1620	603	0.2243	27.6700
403	0.0011	0.1412	604	0.2253	27.8000
404	0.0013	0.1619	605	0.2248	27.7300
405	0.0018	0.2217	606	0.2252	27.7900
406	0.0014	0.1680	607	0.2456	30.3000
407	0.0012	0.1528	608	0.3113	38.4100
408	0.0019	0.2321	609	0.3490	43.0600
409	0.0017	0.2059	610	0.2982	36.7900
410	0.0015	0.1912	611	0.2670	32.9400
411	0.0016	0.1968	612	0.3606	44.5000
412	0.0023	0.2821	613	0.5214	64.3300
413	0.0024	0.3002	614	0.5205	64.2200
414	0.0029	0.3612	615	0.3822	47.1500
415	0.0033	0.4053	616	0.2842	35.0600
416	0.0038	0.4703	617	0.2499	30.8400
417	0.0041	0.5035	618	0.2444	30.1600
418	0.0052	0.6411	619	0.2476	30.5500
419	0.0055	0.6756	620	0.2434	30.0400
420	0.0065	0.7973	621	0.2334	28.8000
421	0.0073	0.8947	622	0.2273	28.0500
422	0.0083	1.0200	623	0.2285	28.1900

423	0.0092	1.1370	624	0.2362	29.1400
424	0.0103	1.2740	625	0.2413	29.7700
425	0.0115	1.4220	626	0.2449	30.2200
426	0.0125	1.5380	627	0.2480	30.6000
427	0.0141	1.7340	628	0.2747	33.9000
428	0.0161	1.9820	629	0.4112	50.7400
429	0.0174	2.1480	630	0.7860	96.9800
430	0.0197	2.4280	631	0.9965	122.9000
431	0.0218	2.6850	632	0.7260	89.5700
432	0.0235	2.9020	633	0.4459	55.0100
433	0.0263	3.2490	634	0.5094	62.8500
434	0.0288	3.5520	635	0.6955	85.8100
435	0.0316	3.8970	636	0.5595	69.0300
436	0.0348	4.2910	637	0.3112	38.3900
437	0.0381	4.7020	638	0.1977	24.4000
438	0.0421	5.1990	639	0.1591	19.6300
439	0.0464	5.7290	640	0.1419	17.5100
440	0.0508	6.2650	641	0.1335	16.4700
441	0.0561	6.9190	642	0.1277	15.7500
442	0.0621	7.6670	643	0.1243	15.3300
443	0.0678	8.3650	644	0.1223	15.0900
444	0.0745	9.1900	645	0.1243	15.3300
445	0.0821	10.1300	646	0.1567	19.3300
446	0.0891	11.0000	647	0.2346	28.9500
447	0.0967	11.9300	648	0.2429	29.9700
448	0.1031	12.7200	649	0.1723	21.2600
449	0.1086	13.3900	650	0.1266	15.6100
450	0.1120	13.8200	651	0.1149	14.1700
451	0.1130	13.9400	652	0.1140	14.0700
452	0.1114	13.7500	653	0.1080	13.3300
453	0.1071	13.2100	654	0.0988	12.1800
454	0.1007	12.4200	655	0.0932	11.5000
455	0.0939	11.5800	656	0.0901	11.1100
456	0.0864	10.6600	657	0.0860	10.6000
457	0.0799	9.8550	658	0.0801	9.8830
458	0.0740	9.1260	659	0.0766	9.4450
459	0.0692	8.5420	660	0.0755	9.3130
460	0.0663	8.1780	661	0.0730	9.0030
461	0.0634	7.8210	662	0.0686	8.4600
462	0.0617	7.6140	663	0.0648	7.9940
463	0.0598	7.3790	664	0.0621	7.6640
464	0.0584	7.2060	665	0.0603	7.4410
465	0.0565	6.9750	666	0.0586	7.2270
466	0.0545	6.7290	667	0.0574	7.0790
467	0.0524	6.4610	668	0.0565	6.9760
468	0.0506	6.2430	669	0.0576	7.1040

469	0.0487	6.0120	670	0.0587	7.2370
470	0.0465	5.7390	671	0.0558	6.8850
471	0.0444	5.4820	672	0.0519	6.3980
472	0.0430	5.3100	673	0.0491	6.0600
473	0.0412	5.0840	674	0.0469	5.7820
474	0.0402	4.9610	675	0.0446	5.5060
475	0.0392	4.8320	676	0.0429	5.2980
476	0.0388	4.7910	677	0.0415	5.1210
477	0.0387	4.7740	678	0.0401	4.9480
478	0.0386	4.7680	679	0.0387	4.7750
479	0.0391	4.8280	680	0.0374	4.6200
480	0.0398	4.9080	681	0.0362	4.4640
481	0.0406	5.0120	682	0.0350	4.3190
482	0.0415	5.1240	683	0.0340	4.1920
483	0.0429	5.2880	684	0.0329	4.0620
484	0.0442	5.4510	685	0.0320	3.9440
485	0.0459	5.6600	686	0.0311	3.8420
486	0.0475	5.8590	687	0.0300	3.7020
487	0.0495	6.1110	688	0.0292	3.6000
488	0.0513	6.3280	689	0.0282	3.4800
489	0.0532	6.5680	690	0.0273	3.3740
490	0.0557	6.8720	691	0.0266	3.2870
491	0.0580	7.1540	692	0.0259	3.1930
492	0.0607	7.4910	693	0.0252	3.1060
493	0.0637	7.8630	694	0.0243	3.0040
494	0.0665	8.2050	695	0.0236	2.9170
495	0.0693	8.5550	696	0.0229	2.8250
496	0.0728	8.9780	697	0.0221	2.7220
497	0.0758	9.3480	698	0.0214	2.6440
498	0.0790	9.7490	699	0.0207	2.5560
499	0.0826	10.1900	700	0.0201	2.4780
500	0.0857	10.5700	701	0.0194	2.3940
501	0.0888	10.9600	702	0.0188	2.3240
502	0.0923	11.3900	703	0.0183	2.2570
503	0.0949	11.7000	704	0.0177	2.1790
504	0.0980	12.0900	705	0.0172	2.1240
505	0.1008	12.4400	706	0.0167	2.0570
506	0.1037	12.8000	707	0.0162	2.0030
507	0.1063	13.1200	708	0.0158	1.9500
508	0.1086	13.4000	709	0.0152	1.8710
509	0.1110	13.7000	710	0.0148	1.8200
510	0.1133	13.9700	711	0.0142	1.7560
511	0.1156	14.2700	712	0.0138	1.7050
512	0.1175	14.4900	713	0.0134	1.6540
513	0.1197	14.7700	714	0.0130	1.6020
514	0.1218	15.0300	715	0.0125	1.5480

515	0.1236	15.2500	716	0.0123	1.5130
516	0.1249	15.4100	717	0.0119	1.4710
517	0.1268	15.6500	718	0.0116	1.4260
518	0.1279	15.7800	719	0.0112	1.3800
519	0.1299	16.0300	720	0.0109	1.3460
520	0.1311	16.1700	721	0.0105	1.3000
521	0.1324	16.3300	722	0.0102	1.2580
522	0.1339	16.5300	723	0.0099	1.2270
523	0.1353	16.6900	724	0.0096	1.1860
524	0.1360	16.7800	725	0.0094	1.1620
525	0.1375	16.9700	726	0.0090	1.1130
526	0.1387	17.1100	727	0.0088	1.0890
527	0.1399	17.2600	728	0.0085	1.0430
528	0.1409	17.3800	729	0.0082	1.0100
529	0.1424	17.5700	730	0.0079	0.9805
530	0.1434	17.6900	731	0.0076	0.9428
531	0.1442	17.7900	732	0.0075	0.9255
532	0.1454	17.9400	733	0.0073	0.9006
533	0.1465	18.0800	734	0.0072	0.8889
534	0.1475	18.2000	735	0.0071	0.8791
535	0.1489	18.3700	736	0.0069	0.8563
536	0.1497	18.4700	737	0.0067	0.8325
537	0.1512	18.6500	738	0.0067	0.8275
538	0.1524	18.8000	739	0.0066	0.8123
539	0.1540	19.0000	740	0.0064	0.7861
540	0.1553	19.1600	741	0.0063	0.7748
541	0.1567	19.3300	742	0.0061	0.7539
542	0.1583	19.5300	743	0.0061	0.7576
543	0.1595	19.6700	744	0.0058	0.7180
544	0.1611	19.8700	745	0.0058	0.7195
545	0.1628	20.0800	746	0.0056	0.6907
546	0.1643	20.2700	747	0.0055	0.6802
547	0.1661	20.4900	748	0.0054	0.6621
548	0.1670	20.6000	749	0.0053	0.6562
549	0.1692	20.8700	750	0.0052	0.6361
550	0.1710	21.1000	751	0.0050	0.6161
551	0.1726	21.2900	752	0.0049	0.6095
552	0.1743	21.5100	753	0.0047	0.5774
553	0.1761	21.7300	754	0.0047	0.5782
554	0.1781	21.9800	755	0.0045	0.5501
555	0.1799	22.2000	756	0.0044	0.5456
556	0.1821	22.4600	757	0.0042	0.5214
557	0.1839	22.6900	758	0.0042	0.5137
558	0.1859	22.9300	759	0.0040	0.4955
559	0.1880	23.1900	760	0.0040	0.4946
560	0.1898	23.4200	761	0.0039	0.4809

561	0.1914	23.6200	762	0.0037	0.4612
562	0.1937	23.9000	763	0.0037	0.4569
563	0.1954	24.1100	764	0.0036	0.4403
564	0.1973	24.3500	765	0.0034	0.4203
565	0.1996	24.6300	766	0.0033	0.4133
566	0.2011	24.8100	767	0.0033	0.4050
567	0.2030	25.0500	768	0.0031	0.3885
568	0.2051	25.3000	769	0.0031	0.3825
569	0.2063	25.4500	770	0.0030	0.3695
570	0.2079	25.6500	771	0.0029	0.3584
571	0.2094	25.8400	772	0.0028	0.3413
572	0.2111	26.0400	773	0.0027	0.3283
573	0.2129	26.2600	774	0.0026	0.3214
574	0.2138	26.3800	775	0.0025	0.3101
575	0.2153	26.5600	776	0.0023	0.2882
576	0.2166	26.7200	777	0.0023	0.2779
577	0.2173	26.8100	778	0.0022	0.2680
578	0.2186	26.9700	779	0.0022	0.2687
579	0.2198	27.1200	780	0.0022	0.2692
580	0.2207	27.2200			



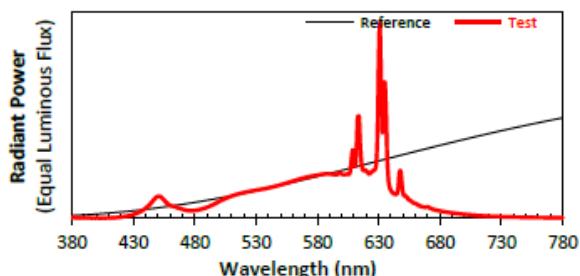
IES-TM-30-18 Report

ANSI/IES TM-30-18 Color Rendition Report

Source:

Ceiling Mount

Date:

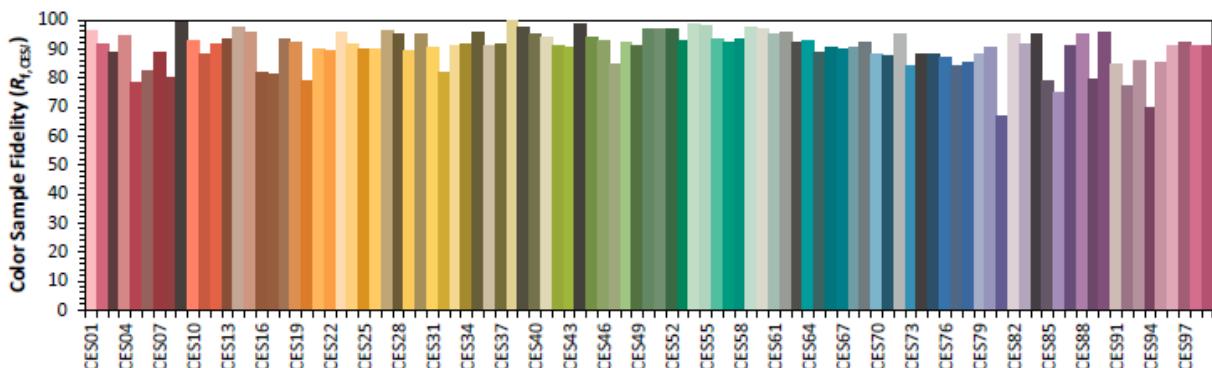
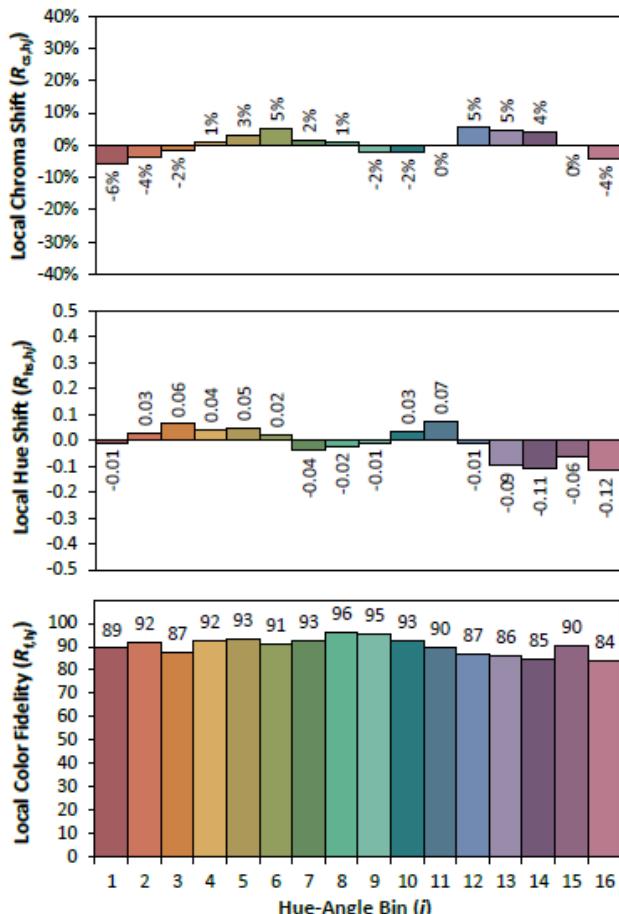
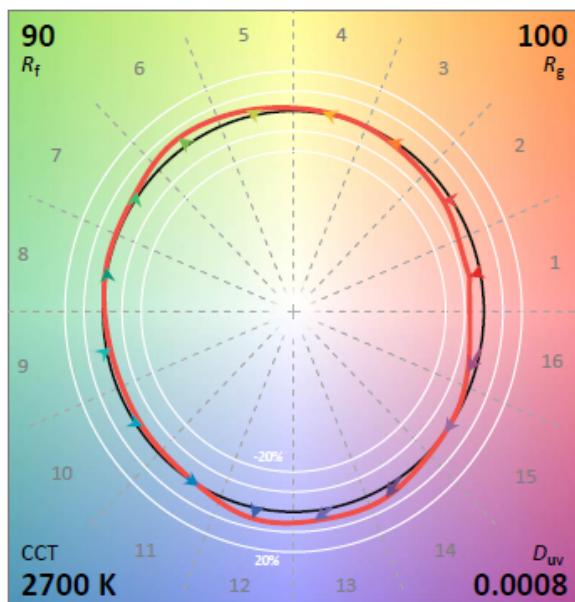


Manufacturer:

P.Q.L., Inc.

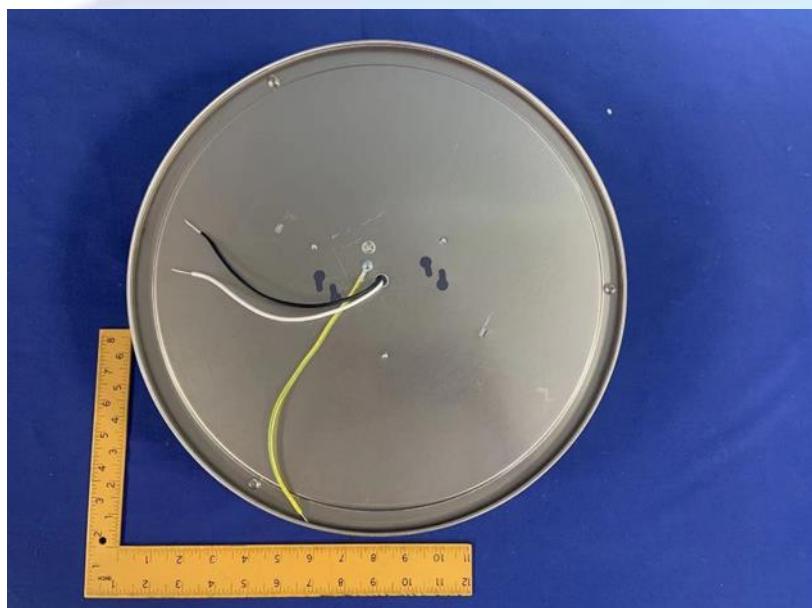
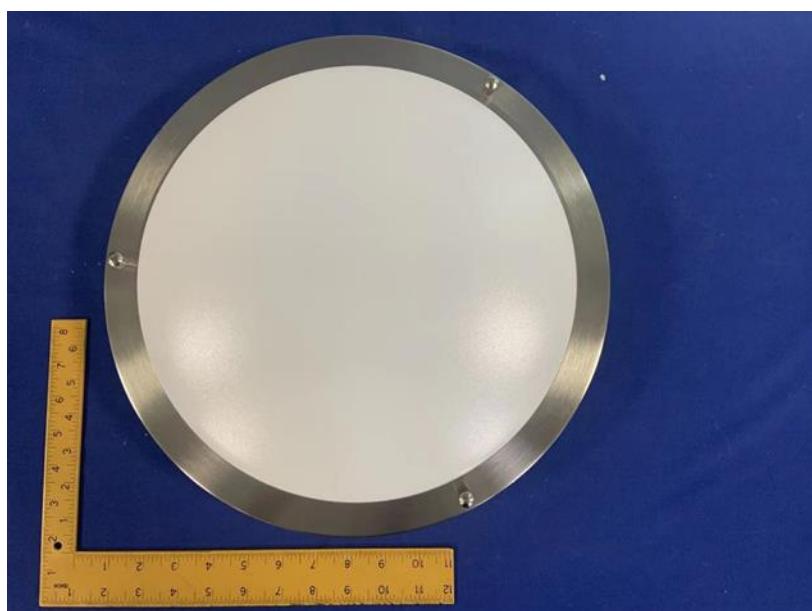
Model:

TSPC-21-D5CT-SR-N-8



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

 x 0.4613 y 0.4132 u' 0.2623 v' 0.5285CIE 13.3-1995
(CRI) R_a 92 R_g 56

EUT Photo

Equipment list			
B073	Standard Light Source	2019/8/26	Every 50 hours life
B186	Digital CC&CV DC Power Supply	2022/4/17	2023/4/16
B059	Second Meter	2022/4/17	2023/4/16
B178	Spectroradio Meter	Calibrated before measurement	N/A
B174	Integral Sphere	Calibrated before measurement	N/A
B188	AC Source	2022/4/17	2023/4/16
B012	Digital Power Meter	2022/4/17	2023/4/16
B161	Temperature Meter	2022/4/17	2023/4/16
B184	Aux Lamp DC Source	N/A	N/A
B045	Temperature Meter	2022/4/17	2023/4/16
B015	AC Power Source	N/A	N/A
B133	Goniophotometer	2022/4/17	2023/4/16
B181	Spectroradio Meter	2022/4/17	2023/4/16
B084	Digital Power Meter	2022/4/17	2023/4/16
B232	Standard Light Source	2019/8/26	Every 50hours life
B144	Digital CC&CV DC Power Supply	2022/4/17	2023/4/16
B250	Air Flow Meter	2022/4/17	2023/4/16

Uncertainty of Measure item		
NO.	Measure item	Uncertainty
1	Temperature	±0.4°C
2	AC Voltage	±0.1%
3	AC Current	±0.14%
4	Power≥1W	±0.17%
5	Power<1W	±0.02W
6	luminous flux(ϕ)	±1.6%
7	CCT	±15K
8	CRI(Ra)	±0.2
9	Beam Angle	±1°
10	DC Voltage	±0.07%
11	DC Current	±0.03%
12	Starting Time	±0.005ms
13	Life Time	±0.2h

Annex

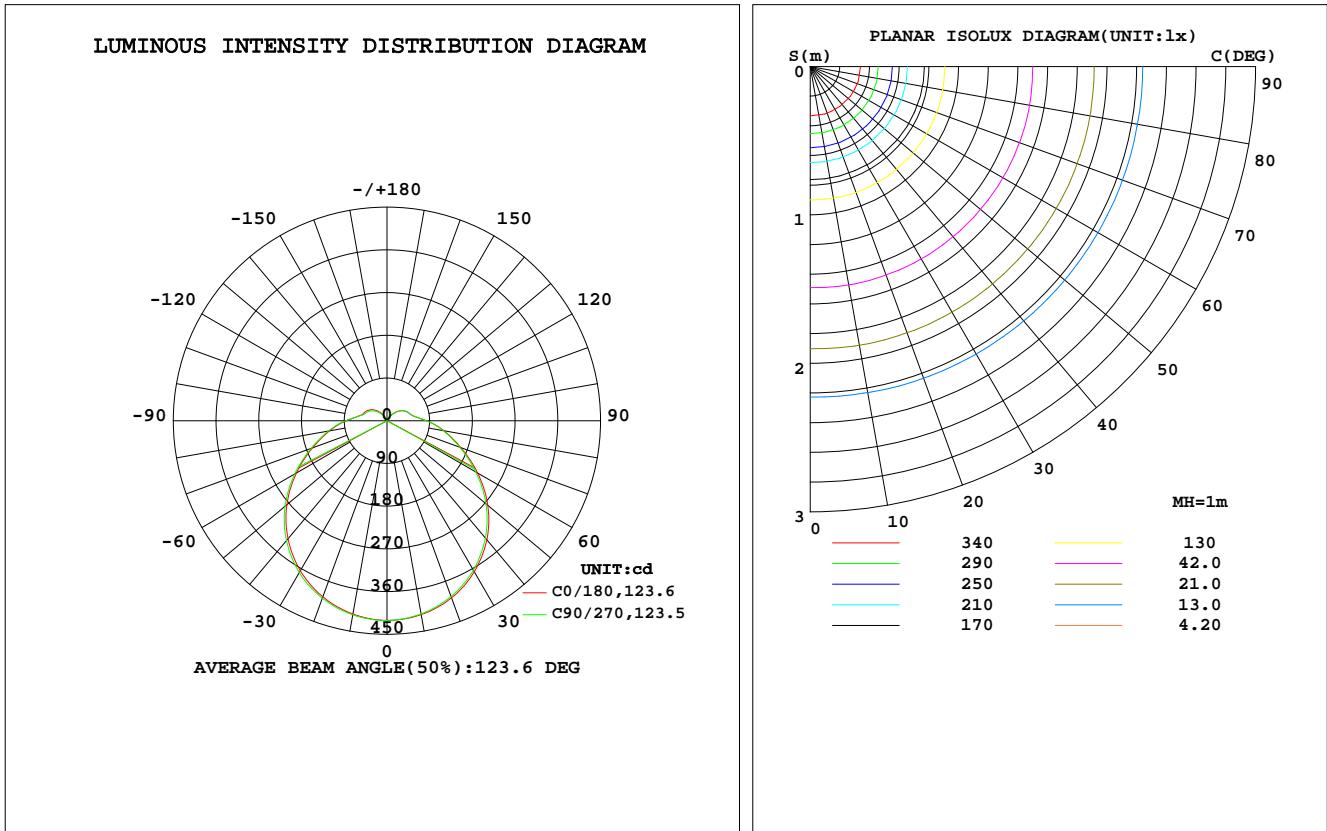
Please see the next page for the luminous intensity test data

-----END-----

LUMINAIRE PHOTOMETRIC TEST REPORT

Test: U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355,H=0.07	SERIAL NO.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 86.36 lm/W
MODEL	TSPC-21-D5CT-SR-N-8	I _{max} (cd)	420.8	S/MH(C0/180)
NOMINAL POWER(W)	21.0	LOR(%)	100.0	S/MH(C90/270)
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	1704.9	η UP,DN(C0-180)
NOMINAL FLUX(lm)	1704.87	CIE CLASS	SEMI-D.	η UP,DN(C180-360)
LAMPS INSIDE	1	η up(%)	14.4	CIBSE SHR NOM
TEST VOLTAGE(V)	120	η down(%)	85.6	CIBSE SHR MAX



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM**ZONAL FLUX DIAGRAM:**

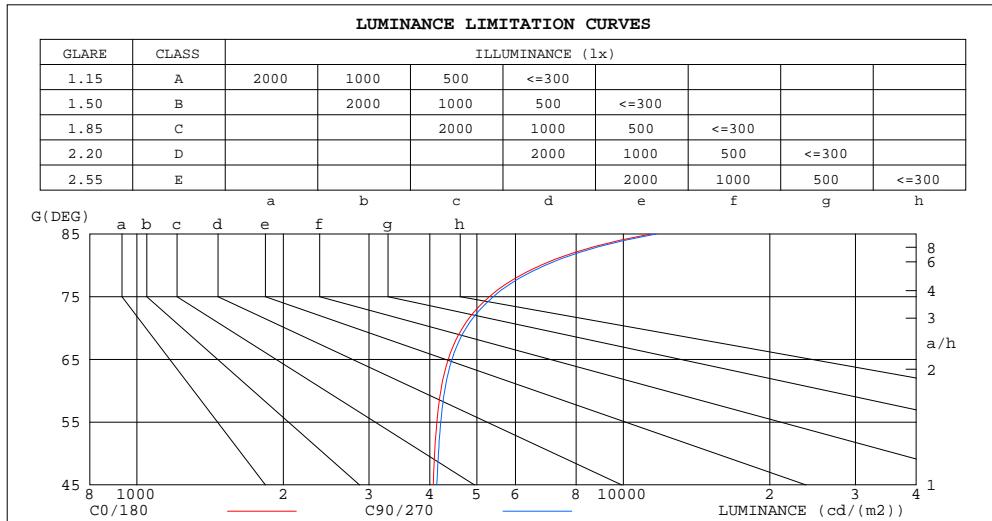
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lamp
10	413.4	414.8	415.1	415.5	414.8	413.6	413.2	412.3	0- 10	39.83	39.83	2.34
20	394.9	397.0	398.0	398.8	397.1	395.0	394.0	392.8	10- 20	114.8	154.6	9.07
30	364.9	368.2	369.4	370.6	367.5	364.6	363.8	361.8	20- 30	176.4	331.1	19.4
40	324.4	328.4	329.4	331.3	327.3	323.7	322.6	320.2	30- 40	217.4	548.4	32.2
50	275.4	279.5	280.3	282.5	277.3	273.1	272.0	269.7	40- 50	233.1	781.6	45.8
60	220.6	224.2	224.7	226.8	220.5	216.7	216.0	213.8	50- 60	222.5	1004	58.9
70	167.1	169.7	170.1	172.4	165.7	163.1	163.2	160.6	60- 70	191.1	1195	70.1
80	122.8	124.9	125.5	126.7	121.8	119.7	120.6	118.4	70- 80	151.8	1347	79
90	85.71	87.99	87.53	87.02	83.27	81.57	83.20	82.22	80- 90	112.9	1460	85.6
100	60.01	59.92	58.87	58.84	57.24	56.88	57.98	57.79	90-100	76.52	1536	90.1
110	51.06	49.04	47.99	49.25	48.91	48.89	49.30	49.44	100-110	55.77	1592	93.4
120	44.94	42.66	41.22	42.98	41.77	41.71	42.16	42.66	110-120	45.83	1638	96.1
130	35.84	33.19	31.03	33.55	31.54	30.92	31.55	32.60	120-130	34.03	1672	98.1
140	23.65	21.27	18.65	20.39	18.41	17.26	18.20	19.88	130-140	20.47	1692	99.3
150	10.92	9.839	8.708	8.648	8.787	7.273	7.620	8.508	140-150	8.757	1701	99.8
160	3.731	4.351	3.650	3.362	3.843	3.537	3.311	3.495	150-160	2.759	1704	99.9
170	2.443	2.181	2.432	2.300	2.021	2.007	2.055	2.142	160-170	0.8260	1705	100
180	0	0	0	0	0.0415	0.0445	0.0430	0.0424	170-180	0.1460	1705	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:Xia Zeng
Test Date:2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.444
Humidity:56.5%
Test Distance:2.497m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test: U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355, H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A



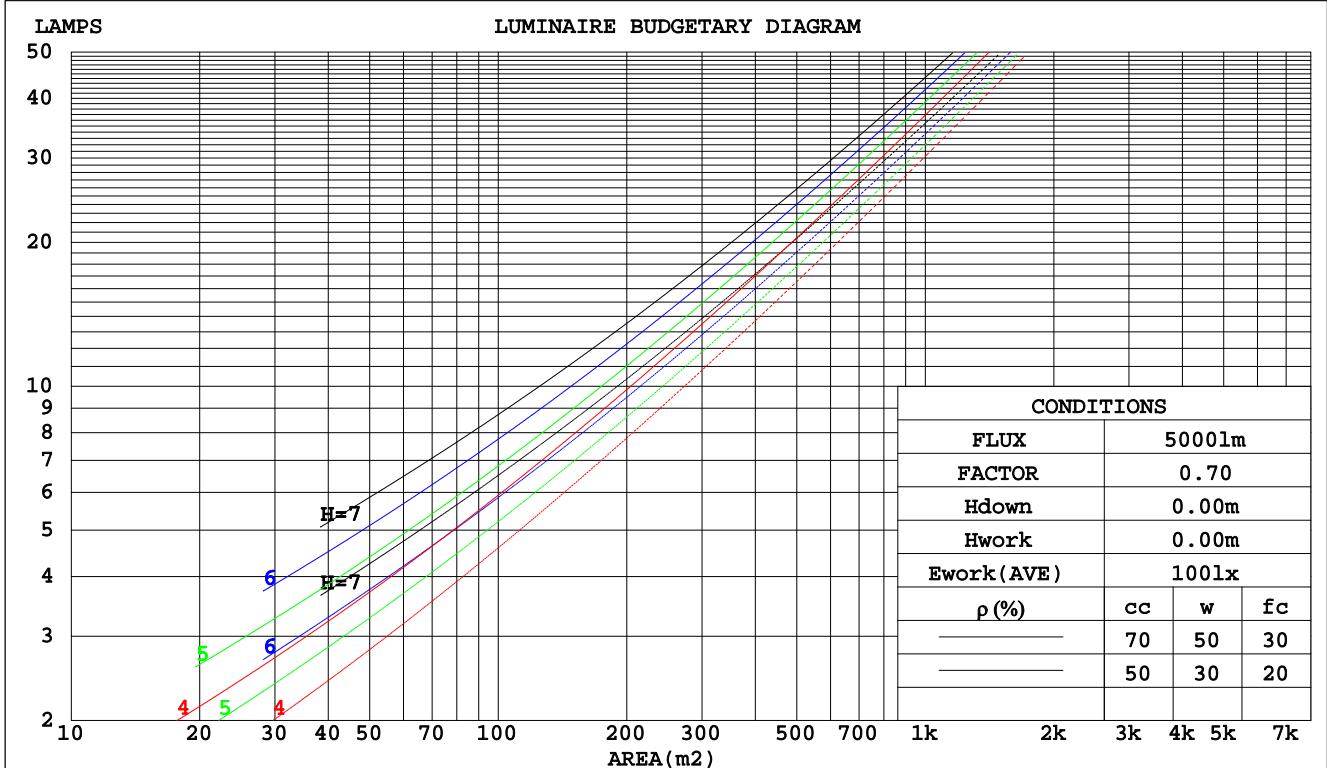
LUMINANCE cd/(m ²)		
G(DEG)	C0/180	C90/270
85	11395	11677
80	6758	6905
75	5302	5405
70	4670	4753
65	4366	4445
60	4216	4294
55	4138	4214
50	4094	4168
45	4067	4135

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Xia Zeng
Test Date: 2022-09-30

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
Humidity: 56.5%
Test Distance: 2.497m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test: U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm																																																																												
NAME: Ceiling Mount							TYPE: TSPC-21-D5CT-SR-N-8			WEIGHT: 0.815 kg																																																																		
SPEC.: 21.0W 1470 Lumen							DIM.: D=0.355, H=0.07			SERIAL No.: N/A																																																																		
MFR.: P.Q.L., Inc.							UR.: 3.14*0.155*(0.155+2*0.03) Shielding Angle: N/A																																																																					
<table border="1"> <thead> <tr> <th>ρ_{cc}</th><th colspan="3">80%</th><th colspan="3">70%</th><th colspan="3">50%</th><th colspan="3">30%</th><th colspan="2">10%</th><th>0</th></tr> <tr> <th>ρ_w</th><th>50%</th><th>30%</th><th>10%</th><th>50%</th><th>30%</th><th>10%</th><th>50%</th><th>30%</th><th>10%</th><th>50%</th><th>30%</th><th>10%</th><th>50%</th><th>0</th></tr> <tr> <th>ρ_{fc}</th><td colspan="3">20%</td><td colspan="3">20%</td><td colspan="3" rowspan="2">20%</td><td colspan="3" rowspan="2">20%</td><td colspan="2">20%</td><th>0</th></tr> </thead> <tbody> <tr> <td>RCR</td><td colspan="3">RCR: Room Cavity Ratio</td><td colspan="10">Coefficients of Utilization(CU)</td><td></td></tr> </tbody> </table>														ρ_{cc}	80%			70%			50%			30%			10%		0	ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	0	ρ_{fc}	20%			20%			20%			20%			20%		0	RCR	RCR: Room Cavity Ratio			Coefficients of Utilization(CU)											
ρ_{cc}	80%			70%			50%			30%			10%		0																																																													
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	0																																																														
ρ_{fc}	20%			20%			20%			20%			20%		0																																																													
RCR	RCR: Room Cavity Ratio			Coefficients of Utilization(CU)																																																																								



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm											
NAME: Ceiling Mount						TYPE: TSPC-21-D5CT-SR-N-8			WEIGHT: 0.815 kg		
SPEC.: 21.0W 1470 Lumen						DIM.: D=0.355,H=0.07			SERIAL No.: N/A		
MFR.: P.Q.L., Inc.						UR.: 3.14*0.155*(0.155+2*0.03)Shielding Angle: N/A					

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 Wall Exitance Coeffcients(WEC)															
0.0	.371	.211	.067	.360	.205	.065	.338	.194	.062	.318	.183	.059	.300	.174	.056	
1.0	.325	.178	.055	.315	.173	.053	.295	.164	.051	.277	.155	.049	.260	.147	.046	
2.0	.291	.155	.046	.281	.151	.045	.264	.143	.043	.247	.135	.042	.232	.128	.040	
3.0	.263	.136	.040	.254	.133	.039	.238	.126	.038	.223	.120	.036	.210	.114	.035	
4.0	.239	.122	.035	.232	.119	.035	.217	.113	.033	.204	.108	.032	.191	.102	.031	
5.0	.220	.110	.032	.213	.108	.031	.200	.102	.030	.188	.097	.029	.176	.093	.028	
6.0	.203	.100	.028	.197	.098	.028	.185	.093	.027	.174	.089	.026	.163	.085	.025	
7.0	.189	.092	.026	.183	.090	.025	.172	.086	.025	.162	.082	.024	.152	.078	.023	
8.0	.176	.085	.024	.171	.083	.023	.161	.079	.023	.151	.076	.022	.142	.072	.021	
9.0	.165	.079	.022	.160	.077	.022	.151	.074	.021	.142	.071	.020	.134	.067	.019	

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 Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.300	.300	.300	.256	.256	.256	.175	.175	.175	.101	.101	.101	.032	.032	.032	
1.0	.295	.266	.240	.252	.228	.207	.173	.157	.143	.099	.091	.083	.032	.029	.027	
2.0	.288	.243	.205	.247	.209	.177	.169	.145	.124	.097	.084	.073	.031	.027	.024	
3.0	.280	.226	.183	.240	.195	.159	.165	.136	.111	.095	.079	.066	.031	.026	.022	
4.0	.272	.214	.169	.234	.185	.146	.161	.129	.103	.093	.075	.061	.030	.025	.020	
5.0	.265	.204	.158	.227	.176	.138	.157	.123	.097	.091	.072	.058	.029	.024	.019	
6.0	.257	.196	.151	.221	.169	.132	.153	.119	.093	.089	.070	.055	.029	.023	.018	
7.0	.250	.189	.146	.215	.164	.127	.149	.115	.090	.086	.068	.054	.028	.022	.018	
8.0	.244	.183	.142	.210	.159	.124	.145	.112	.088	.084	.066	.052	.027	.022	.017	
9.0	.237	.178	.139	.205	.155	.121	.142	.109	.086	.083	.064	.051	.027	.021	.017	
10.0	.232	.174	.136	.200	.151	.119	.139	.107	.084	.081	.063	.050	.026	.021	.017	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Xia Zeng
Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
Humidity: 56.5%
Test Distance: 2.497m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm										
NAME: Ceiling Mount					TYPE: TSPC-21-D5CT-SR-N-8			WEIGHT: 0.815 kg		
SPEC.: 21.0W 1470 Lumen					DIM.: D=0.355,H=0.07			SERIAL No.: N/A		
MFR.: P.Q.L., Inc.					UR.: 3.14*0.155*(0.155+2*0.03)Shielding Angle: N/A					
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	16.9	18.3	17.4	18.8	19.3	17.0	18.4	17.5	18.8	19.3
	19.0	20.3	19.5	20.7	21.3	19.0	20.3	19.5	20.8	21.3
	20.0	21.3	20.5	21.8	22.3	20.1	21.3	20.6	21.8	22.4
	21.2	22.4	21.7	22.9	23.5	21.3	22.4	21.8	23.0	23.5
	21.8	23.0	22.4	23.5	24.1	21.9	23.1	22.5	23.6	24.2
	22.6	23.7	23.1	24.2	24.8	22.7	23.8	23.2	24.3	24.9
4H	17.6	18.9	18.2	19.4	19.9	17.7	18.9	18.2	19.4	20.0
	19.9	21.0	20.4	21.5	22.1	19.9	21.0	20.5	21.6	22.2
	21.1	22.1	21.7	22.7	23.3	21.2	22.2	21.8	22.7	23.4
	22.5	23.4	23.1	24.0	24.6	22.6	23.4	23.2	24.0	24.7
	23.2	24.1	23.9	24.7	25.4	23.3	24.1	23.9	24.8	25.4
	24.1	24.9	24.7	25.5	26.2	24.2	25.0	24.8	25.6	26.3
8H	21.6	22.5	22.2	23.1	23.7	21.7	22.5	22.3	23.1	23.8
	23.3	24.0	23.9	24.6	25.3	23.3	24.0	24.0	24.7	25.4
	24.2	24.8	24.9	25.5	26.2	24.3	24.9	24.9	25.6	26.3
	25.3	25.8	26.0	26.5	27.3	25.4	25.9	26.1	26.6	27.4
12H	21.7	22.5	22.4	23.1	23.8	21.8	22.5	22.4	23.2	23.9
	23.5	24.1	24.1	24.8	25.5	23.5	24.2	24.2	24.8	25.6
	24.5	25.1	25.2	25.8	26.5	24.6	25.1	25.3	25.8	26.6
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 1705 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.9$)
Area: 0.10464 m²

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Xia Zeng
Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
Humidity: 56.5%
Test Distance: 2.497m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355,H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A

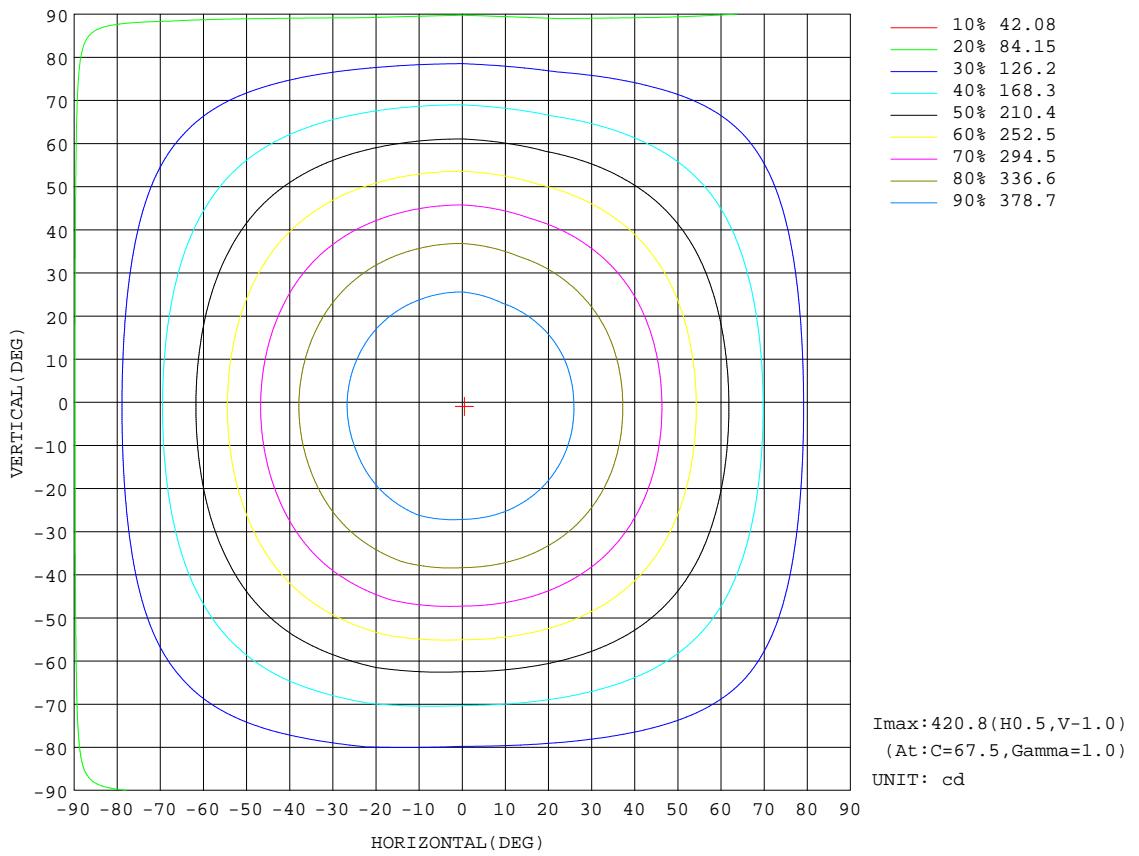
REFLECTANCE																			
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0									
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0									
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0									
ROOM INDEX																			
UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5																			
k = 0.60	50	38	30	49	37	30	47	36	30	23									
0.80	59	47	39	58	46	38	55	45	38	30									
1.00	67	55	46	65	54	46	62	54	45	36									
1.25	74	62	54	72	61	53	68	58	51	42									
1.50	79	67	59	77	66	58	72	63	56	46									
2.00	86	76	68	83	74	66	78	70	64	53									
2.50	91	81	73	87	79	72	82	74	69	57									
3.00	94	85	78	91	83	76	85	78	73	60									
4.00	99	91	85	95	88	83	89	83	78	65									
5.00	102	95	90	98	92	87	91	86	82	68									
ROOM INDEX	UF(total)									Direct									
According to DIN EN 13032-2 2004																			
Suspended																			
SHRNOM = 1.25																			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test: U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz <u>Lamp Flux:1704.87x1 lm</u>		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355, H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A



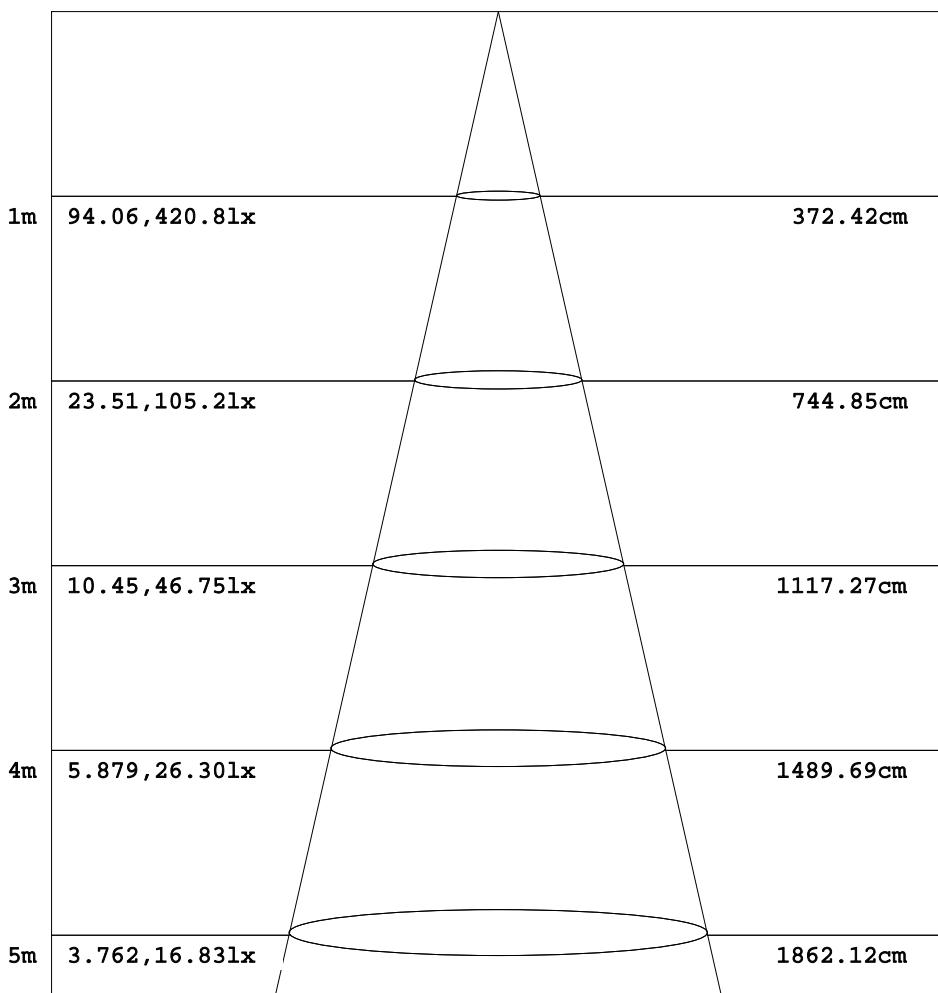
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355,H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: $3.14 * 0.155 * (0.155 + 2 * 0.03)$	Shielding Angle: N/A

Flux out:1045 lm



Height Eavg ,Emax Angle:123.53deg Diameter

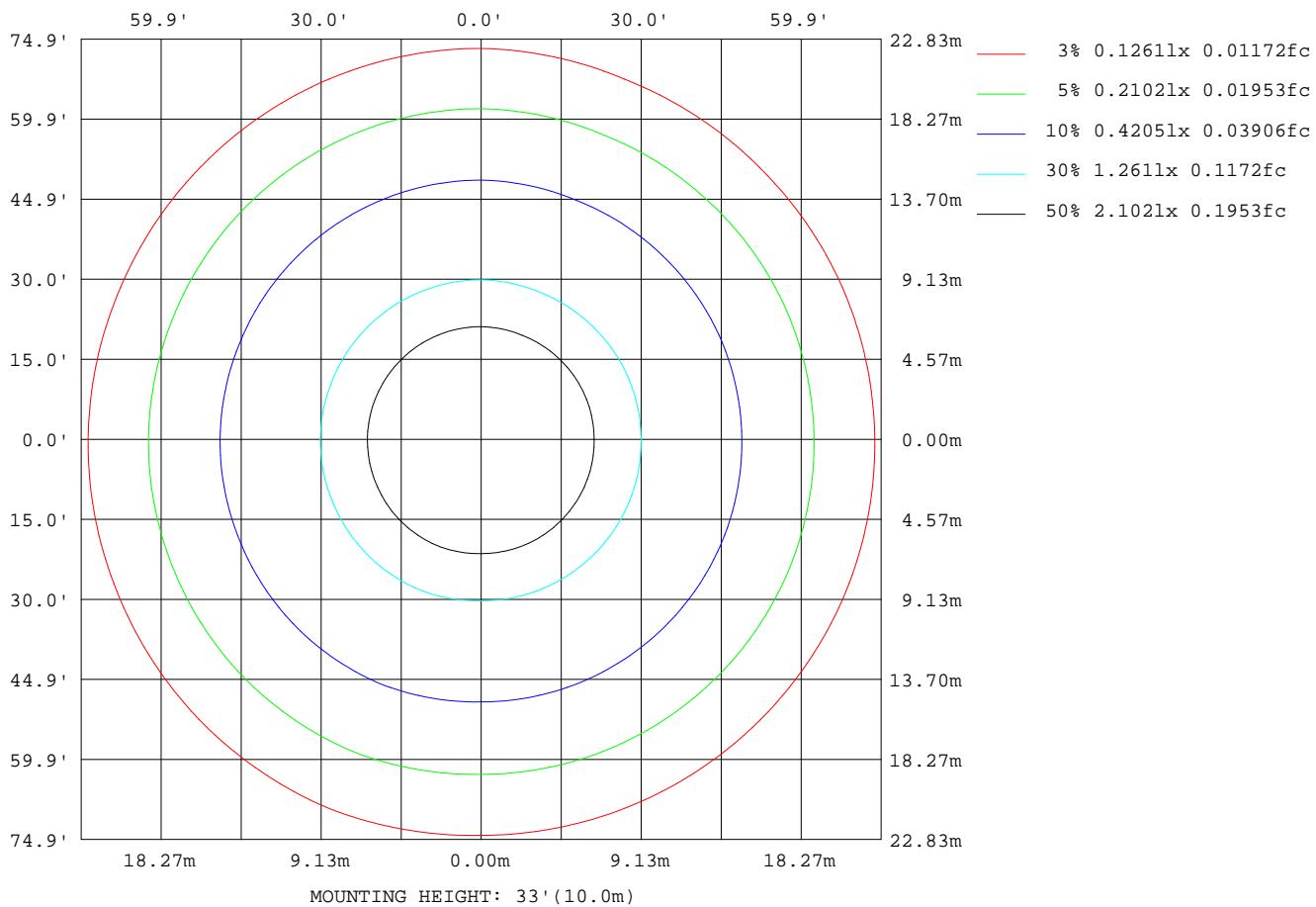
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test: U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355, H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

LED Avg.L Report

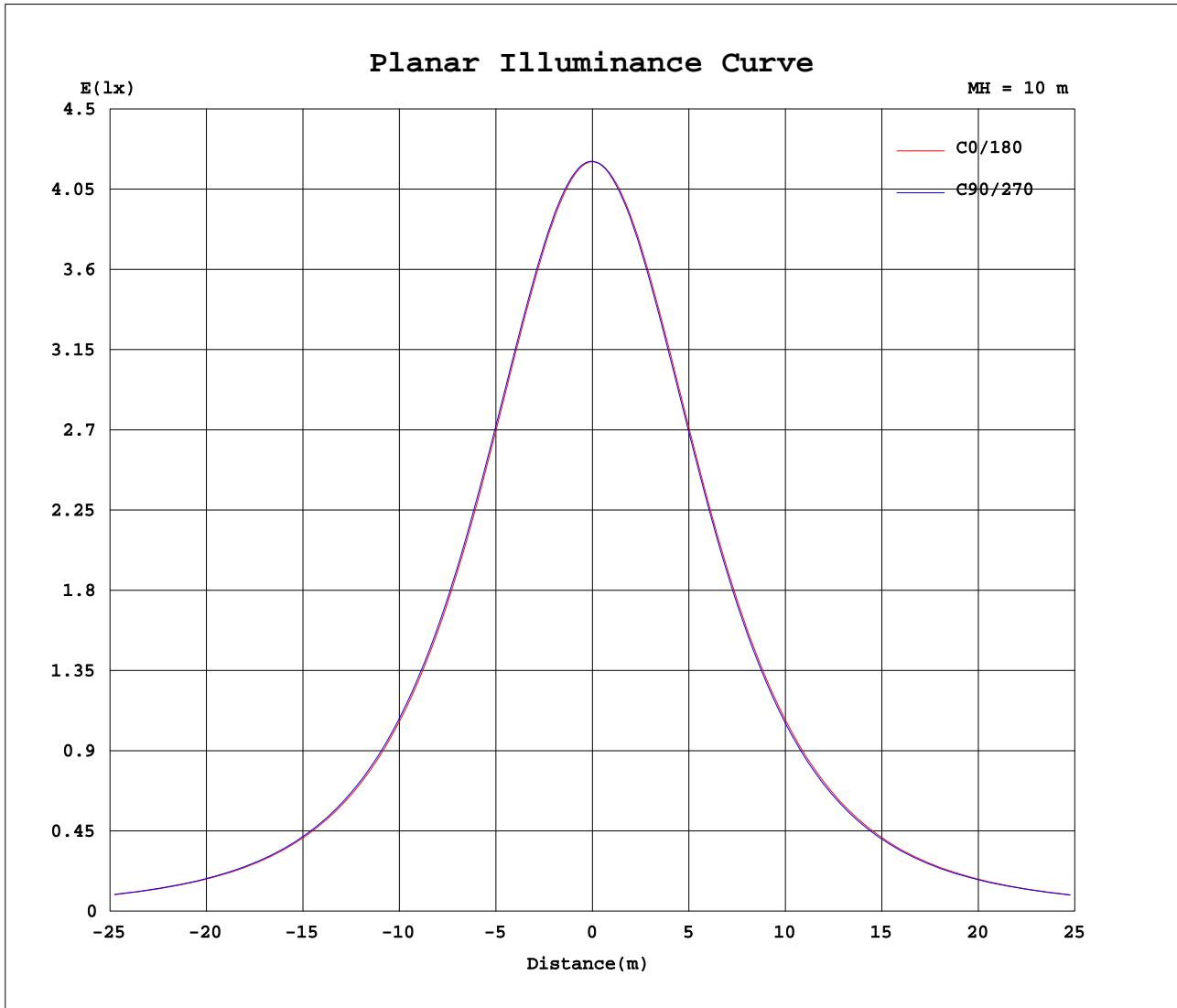
Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz <u>Lamp Flux:1704.87x1 lm</u>		
NAME: Ceiling Mount	TYPE: TSPC-21-D5CT-SR-N-8	WEIGHT: 0.815 kg
SPEC.: 21.0W 1470 Lumen	DIM.: D=0.355,H=0.07	SERIAL No.: N/A
MFR.: P.Q.L., Inc.	UR.: 3.14*0.155*(0.155+2*0.03)	Shielding Angle: N/A

AvgL	cd/m2
L_0~180(65)av	4356
L_0~180(75)av	5280
L_0~180(85)av	11315
L_90~270(65)av	4355
L_90~270(75)av	5297
L_90~270(85)av	11418
L_45(65)av	4354
L_45(75)av	5283
L_45(85)av	11333

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators:Xia Zeng
 Test Date:2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:

Planar Illuminance Curve

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: Xia Zeng
Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
Humidity: 56.5%
Test Distance: 2.497m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.02V I:0.1804A P:19.742W PF:0.9120 Freq:60.00Hz Lamp Flux:1704.87x1 lm																		
NAME: Ceiling Mount										TYPE: TSPC-21-D5CT-SR-N-8			WEIGHT: 0.815 kg					
SPEC.: 21.0W 1470 Lumen						DIM.: D=0.355, H=0.07						SERIAL No.: N/A						
MFR.: P.Q.L., Inc.										UR.: 3.14*0.155*(0.155+2*0.03) Shielding Angle: N/A								

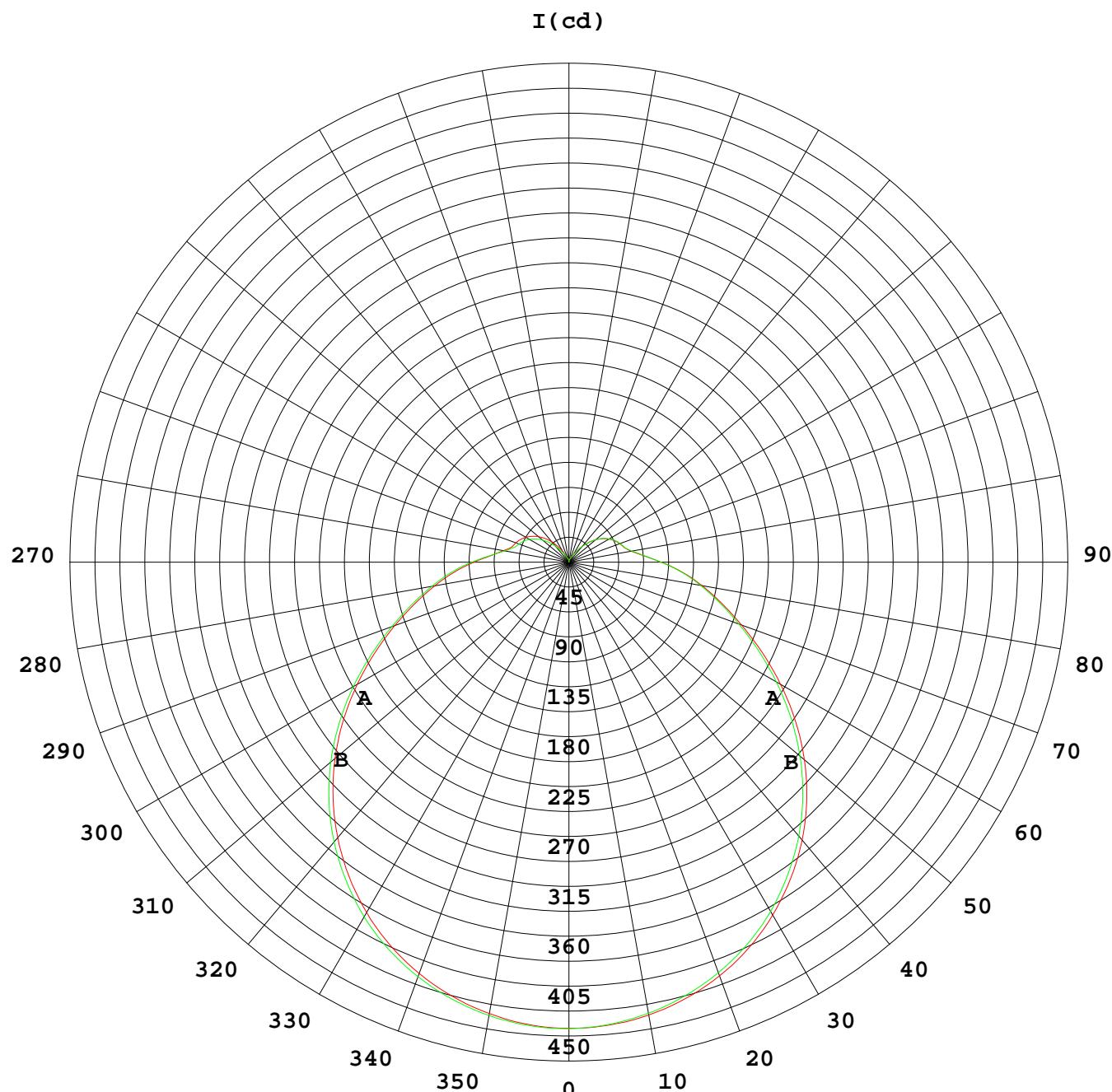
Table--1

UNIT: cd

C(DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5		
γ (DEG)																		
0	420	421	421	421	421	420	420	420	420	421	421	421	421	420	420	420		
5	419	419	419	420	419	420	419	419	419	419	419	418	419	418	418	418		
10	413	414	415	415	415	416	416	415	415	414	414	413	413	412	412	413		
15	406	406	407	408	408	409	409	408	407	406	406	405	405	403	404	405		
20	395	396	397	398	398	400	399	397	397	396	395	394	394	392	393	394		
25	381	383	384	385	385	387	386	384	384	382	381	381	380	378	379	380		
30	365	367	368	369	369	372	371	368	368	366	365	364	364	361	362	364		
35	346	348	349	350	350	354	352	350	349	347	345	345	344	341	342	344		
40	324	327	328	329	329	333	331	329	327	325	324	323	323	319	320	323		
45	301	303	305	306	306	310	308	305	303	301	299	299	298	294	296	299		
50	275	278	280	280	280	285	282	279	277	275	273	272	272	268	270	273		
55	248	251	252	253	253	257	255	251	249	247	245	244	244	240	242	246		
60	221	223	224	225	225	229	227	223	220	218	217	216	216	211	214	218		
65	193	195	196	197	197	201	199	194	192	190	189	189	189	184	186	190		
70	167	169	170	170	170	175	172	168	166	164	163	163	163	159	161	164		
75	144	145	146	146	146	151	148	145	142	140	140	140	141	137	138	141		
80	123	125	125	125	125	129	127	124	122	120	120	120	121	117	118	121		
85	104	106	106	107	106	109	107	104	102	101	100	100	102	98.8	100	102		
90	85.7	87.2	88.0	87.9	87.5	90.0	87.0	84.9	83.3	81.9	81.6	81.4	83.2	80.8	82.2	84.6		
95	70.4	71.4	71.7	71.4	70.9	72.8	70.5	69.0	67.7	66.8	66.8	66.6	68.3	66.5	67.8	69.6		
100	60.0	60.5	59.9	59.3	58.9	60.5	58.8	58.3	57.2	56.7	56.9	56.4	58.0	56.8	57.8	59.4		
105	53.3	53.2	52.6	51.7	51.5	52.4	51.5	52.0	51.6	51.2	51.4	50.8	51.8	51.4	52.2	53.3		
110	51.1	50.6	49.0	47.9	48.0	49.4	49.3	49.4	48.9	48.5	48.9	48.5	49.3	48.7	49.4	50.6		
115	48.4	47.9	46.2	45.0	45.0	46.5	46.4	46.3	45.7	45.4	45.8	45.7	46.1	45.5	46.4	47.7		
120	44.9	44.5	42.7	41.4	41.2	43.0	43.0	42.6	41.8	41.5	41.7	42.2	42.2	41.4	42.7	44.1		
125	40.8	40.3	38.4	36.9	36.5	38.6	38.8	37.9	37.1	36.6	36.8	37.5	37.3	36.6	38.0	39.8		
130	35.8	35.4	33.2	31.6	31.0	33.0	33.5	32.2	31.5	30.8	30.9	31.6	31.6	30.8	32.6	34.7		
135	30.2	29.6	27.4	25.7	25.0	26.9	27.3	25.9	25.2	24.3	24.3	24.9	25.0	24.4	26.4	28.9		
140	23.6	23.1	21.3	19.5	18.6	20.1	20.4	19.2	18.4	17.6	17.3	17.8	18.2	17.8	19.9	22.2		
145	17.2	16.6	15.3	13.7	12.8	13.6	13.8	13.1	12.4	11.6	11.0	11.3	11.8	11.8	13.5	15.5		
150	10.9	10.5	9.84	9.24	8.71	8.89	8.65	8.73	8.79	7.82	7.27	7.16	7.62	7.83	8.51	9.83		
155	6.31	6.55	6.52	6.37	5.46	5.53	5.10	5.55	5.69	5.40	4.85	4.54	4.78	5.00	5.36	6.13		
160	3.73	4.08	4.35	4.34	3.65	3.25	3.36	3.78	3.84	3.81	3.54	3.24	3.31	3.41	3.49	3.63		
165	2.80	2.73	3.13	3.22	2.97	2.52	2.58	3.15	2.79	2.80	2.76	2.64	2.63	2.57	2.62	2.73		
170	2.44	2.06	2.18	2.40	2.43	2.34	2.30	2.52	2.02	2.02	2.01	2.06	2.06	2.00	2.14	2.07		
175	1.44	1.48	1.47	1.45	1.41	1.62	1.68	1.52	1.01	1.01	0.76	0.80	0.89	0.72	0.96	1.15		
180	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.05	0.04	0.05	0.04	0.04	0.04		

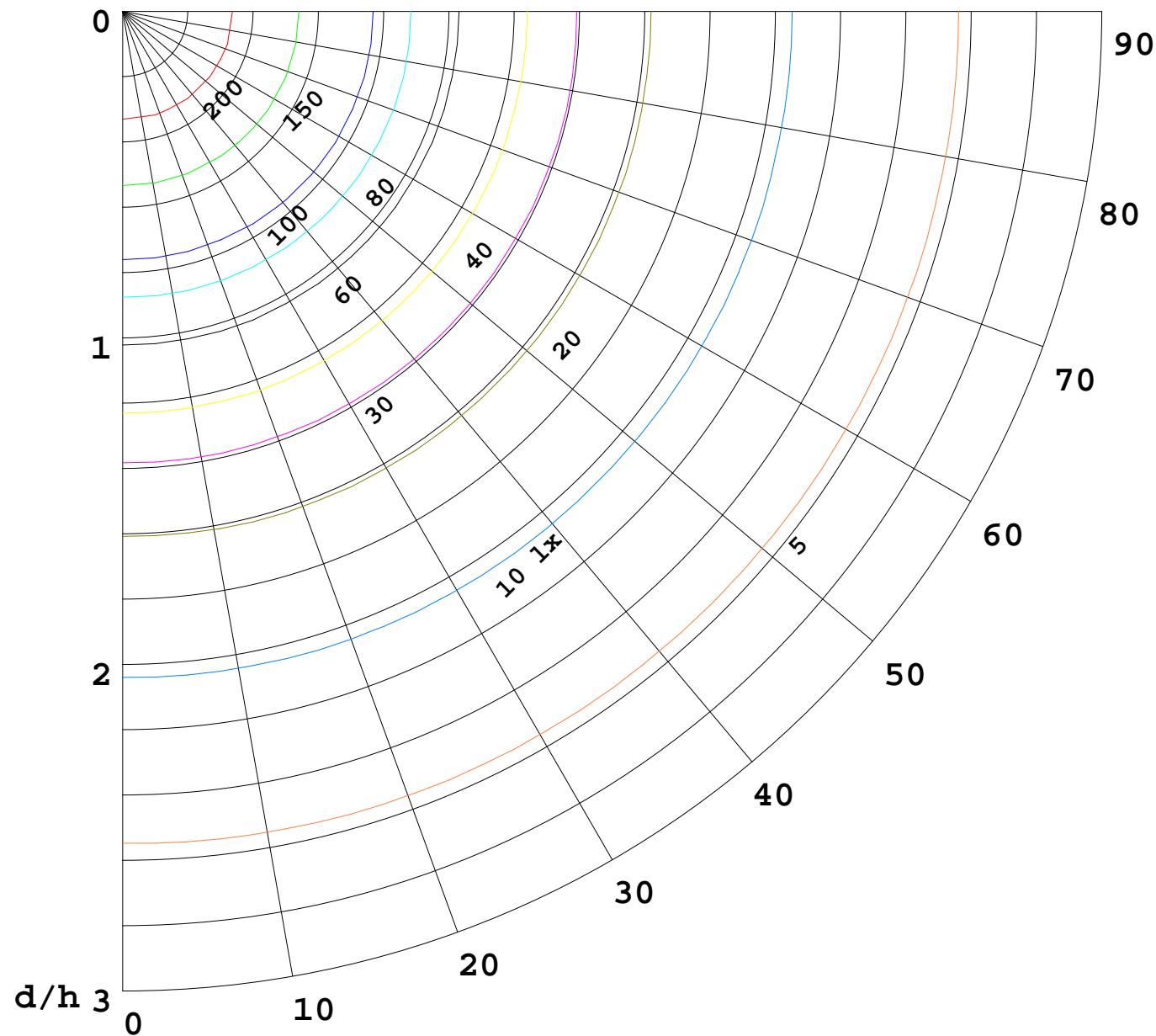
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: Xia Zeng
 Test Date: 2022-09-30

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.444
 Humidity: 56.5%
 Test Distance: 2.497m [K=1.0000]
 Remarks:



1000 lm

K = 1



$F = 5000 \text{ lm}$
 $K = 0.7$
 $H_{cc} = 0.0 \text{ m}$
 $H_{fc} = 0.0 \text{ m}$
 $Eave = 100 \text{ lx}$

	Pcc	Pw	Pfc
———	70	50	30
———	50	30	20

