

Monday, April 15

Morning

09:00		09:00
-	OPENING CEREMONY	-
09:10		09:10
	Keynote & Plenary Session 1: History of Lighting and Art (Chair: Ann Webb, GB)	
09:10	Keynote:	09:10
-	Jean Bastie, FR	-
09:40	ONE HUNDRED YEARS OF CIE AND EVOLUTION OF LIGHTING	09:40
09:40	OP01	09:40
-	Gertrud Olsson, SE	-
10:00	ONE AND A HALF MILLENNIUM OF COLOURED LIGHT	10:00
10:00	OP02 (Invited Talk)	10:00
-	Jean-Jacques Ezrati, FR	-
10:20	BACK ON A HUNDRED YEARS OF TECHNOLOGICAL DEVELOPMENT IN THE SERVICE OF THE MUSEUM LIGHTING	10:20
10:20	Discussion	10:20
-		-
10:35		10:35
10:35	COFFEE BREAK	10:35
-		-
11:00		11:00
	Plenary Session 2: Hot Topics in Outdoor Lighting (Chair: Ron Gibbons, US)	
11:00	OP03	11:00
-	Steve Fotios, GB	-
11:20	RELATIVE WEIGHTING OF LIGHTING ALONGSIDE OTHER ENVIRONMENTAL FEATURES IN AFFECTING PEDESTRIAN REASSURANCE	11:20
11:20	OP04	11:20
-	Ambroise Romnée, BE	-
11:40	A NEW REAL TIME INTELLIGENT MANAGEMENT MODEL FOR STREET LIGHTING	11:40
11:40	OP05	11:40
-	Ingrid Heynderickx, NL	-
12:00	ESTIMATING EYE ADAPTATION FOR TYPICAL LUMINANCE VALUES IN THE FIELD OF VIEW WHILE DRIVING IN URBAN STREETS	12:00
12:00	Discussion	12:00
-		-
12:20		12:20
-	LUNCH	-
14:20		14:20

Monday, April 15
Afternoon

Colour Quality Assessment (Chair: Ronnier Luo, GB)		Health and Wellbeing (Chair: John O'Hagan, GB)		Workplace Lighting Concepts (Chair: Yasuko Koga, JP)	
14:20 - 14:35	OP06 Peter Bodrogi, DE SEMANTIC INTERPRETATION OF COLOUR RENDERING INDICES AND COLOUR FIDELITY INDICES: A COMPARISON OF CRI AND CRI2012	14:20 - 14:35	OP12 Andreea Biro, RO LIGHT AS A MOTOR FOR INNOVATION AND WELLBEING	14:20 - 14:35	OP18 Miyoshi Ayama, JP DISCOMFORT GLARE OF WHITE LED SOURCES OF DIFFERENT SPATIAL ARRANGEMENTS
14:35 - 14:50	OP07 Sophie Jost, FR COLOUR RENDERING OF FACE COMPLEXION AND HAIR UNDER LED SOURCES	14:35 - 14:50	OP13 Ann Webb, GB THE RHYTHM OF THE SUN VS MODERN LIFE AND CULTURE IN SUN EXPOSURE FOR VITAMIN D SYNTHESIS	14:35 - 14:50	OP19 Celine Villa, FR SUITABLE LUMINOUS ENVIRONMENT FOR VARIOUS ACTIVITIES IN SHARED OFFICE
14:50 - 15:05	OP08 Yoshie Imai, JP A STUDY OF COLOR RENDERING PROPERTIES BASED ON COLOR PREFERENCE OF OBJECTS IN ADAPTATION TO LED LIGHTING	14:50 - 15:05	OP14 Andreas Wojtyasiak, DE APPLICATION STUDIES ON NON-VISUAL EFFECTS OF LIGHT WITH TRADITIONAL AND SOLID STATE LIGHT SOURCES	14:50 - 15:05	OP20 Youko Inoue, JP STUDY ON ILLUMINANCE BALANCE BETWEEN WORKING AREA AND AMBIENT EFFECTS OF DISTRIBUTION OF LUMINOUS INTENSITY OF AMBIENT LIGHTING AND THE ORDER AND SPEED OF ADJUSTMENT
15:05 - 15:20	OP09 Ayako Tsukitani, JP OPTIMIZATION OF COLOR QUALITY FOR LANDSCAPE LIGHTING BASED ON FEELING OF CONTRAST INDEX	15:05 - 15:20	OP15 Tommy Goven, SE VISUAL AND NON-VISUAL EFFECTS OF DIFFERENT SPECTRAL POWER DISTRIBUTIONS FROM LIGHT SOURCES - LIGHT EMITTING DIODES (LED) VS. 3-PHOSPHORUS FLUORESCENT TUBES	15:05 - 15:20	OP21 Naoyuki Suzuki, JP A STUDY ON THE PERMISSIBLE RANGE OF UNIFORMITY BY AMBIENT LIGHTING IN A WORKPLACE
15:20 - 15:35	OP10 Balázs Nagy, BR THE EFFECT OF AMBIENT ILLUMINATION SPECTRUM ON VISUAL PERFORMANCE	15:20 - 15:35	OP16 Maria Ámundadóttir, CH MODELING NON-VISUAL RESPONSES TO LIGHT: UNIFYING SPECTRAL SENSITIVITY AND TEMPORAL CHARACTERISTICS IN A SINGLE MODEL STRUCTURE	15:20 - 15:35	OP22 Annika Kronqvist, SE REVIEW OF OFFICE LIGHTING RESEARCH
15:35 - 15:50	OP11 Justine Decuyper, BE SIMULATION OF THE RETINA RESPONSE TO MESOPIC VISUAL SCENES	15:35 - 15:50	OP17 Pierre Boulanguéz, FR BLUE-LIGHT HAZARD OF LEDS - COMPARISON OF THE PHOTOBIOLOGICAL RISK GROUPS OF FIFTEEN LEDS ASSESSED USING THE STANDARD PROTOCOL AND A NEW SPECTRAL IMAGING APPROACH	15:35 - 15:50	OP23 Ásta Logadóttir, DK COMPARISON OF USER SATISFACTION WITH FOUR DIFFERENT LIGHTING CONCEPTS
15:50 - 16:20	Discussion	15:50 - 16:20	Discussion	15:50 - 16:20	Discussion
COFFEE BREAK (during Poster Viewing)					
16:20 - 18:00	Poster Viewing				16:20 - 18:00

Tuesday, April 16
Morning

Plenary Session 3: Hot Topics in Interior Lighting (Chair: Marc Fontoynt, FR)			
08:30 -	OP24 Jennifer Veitch, CA	08:30 -	
08:50	WHAT WE KNOW ABOUT WINDOWS AND WELL-BEING AND WHAT WE NEED TO KNOW	08:50	
08:50 -	OP25 John Mardaljevic, GB	08:50 -	
09:10	A ROADMAP FOR UPGRADING NATIONAL/EU STANDARDS FOR DAYLIGHT IN BUILDINGS	09:10	
09:10 -	OP26 Naomi Miller, US	09:10 -	
09:30	FLICKER IN SOLID-STATE LIGHTING: MEASUREMENT TECHNIQUES AND PROPOSED REPORTING AND APPLICATION CRITERIA	09:30	
09:30 -	OP27 Jonathon Porritt, GB	09:30 -	
09:50	THE REBOUND EFFECT - AN OVERVIEW OF THE IMPLICATIONS FOR LIGHTING ENERGY	09:50	
09:50 -	Discussion	09:50 -	
10:10 -	Discussion	10:10 -	
10:10 -	COFFEE BREAK	10:10 -	
10:40	COFFEE BREAK	10:40	
Advanced Correction Methods for Spectroradiometry and Goniophotometry (Chair: Peter Blattner, CH)	Lighting the City - Applications and Economics (Chair: Yandan Lin, CN)	Integrating Daylight and Electric Lighting (Chair: Dominique Dumortier, FR)	
10:40 -	OP28 Yuqin Zong, US DETECTOR-BASED METHOD FOR CALIBRATION OF SPECTRORADIOMETERS USING AN AUTOMATED KHZ TUNEABLE OPO LASER SYSTEM	10:40 -	
10:55	OP29 Günther Heidel, DE PRACTICAL EXPERIENCES WITH STRAY LIGHT CORRECTION ON ARRAY SPECTROMETERS FOR LED-PRODUCTION	10:55 -	
11:10	OP30 Jianping Wang, CN STRAY LIGHT CORRECTION IN GONIOPHOTOMETRY MEASUREMENT	11:10 -	
11:25	OP31 Cong Chen, CN DETERMINATION OF SCANNING RESOLUTION BASED ON NYQUIST SAMPLING THEOREM IN GONIOSPECTRORADIOMETRY	11:25 -	
11:40	OP32 Jean-Michel Deswert, BE INTELLIGENT STREET LIGHTING AND LEDS: BUSINESS CASE AND RETURN ON EXPERIENCE	11:40 -	
11:55	OP33 Steve Fotios, GB CRITICAL PEDESTRIAN TASKS: USING EYE-TRACKING WITHIN A DUAL TASK PARADIGM	11:55 -	
12:00	OP34 Ronald Gibbons, US A FIELD TEST OF THE SPECTRAL IMPACTS OF ROADWAY LIGHT SOURCES	12:00 -	
12:05	OP35 Riad Sarajji, AE PEDESTRIAN CONTRAST PROFILE	12:05 -	
12:10	OP36 Mandana Sarey Khanie, CH INVESTIGATION OF GAZE PATTERNS IN DAYLIT WORKPLACES: USING EYE-TRACKING METHODS TO OBJECTIFY VIEW DIRECTION AS A FUNCTION OF LIGHTING CONDITIONS	12:10 -	
12:15	OP37 Birgit Painter, GB CAPTURING THE USER EXPERIENCE OF ELECTROCHROMIC GLAZING IN AN OPEN PLAN OFFICE	12:15 -	
12:20	OP38 Cláudia Amorim, BR LIGHTING AND DAYLIGHTING QUALITY: CRITICAL REVIEW OF CRITERIA AND RECOMMENDATIONS AND ITS INSERTION IN BRAZILIAN CONTEXT	12:20 -	
12:25	OP39 Yoshiki Nakamura, JP JUST SUFFICIENT LIGHTING CONDITION UNDER HYBRID-LIGHTING OF REAL DAYLIGHT AND ARTIFICIAL LIGHT	12:25 -	
12:30	Discussion	12:30	
12:40	Discussion	12:40	
12:50	Discussion	12:50	
13:00	LUNCH	13:00	
14:00	LUNCH	14:00	

Tuesday, April 16
Afternoon

LED Photometry and Performance of Photometers (Chair: Armin Sperling, DE)		Lighting the City - Luminaires and Design (Chair: Peter Schwarcz, HU)		Concepts in Lighting Quality (Chair: Anna Pellegrino, IT)		
14:00	OP40 Roman Dubnicka, SK ANALYSIS OF PERFORMANCE PARAMETERS OF ILLUMINANCE METERS PER CIE DS 023 QUALITY INDICES FOR SPECIFIC FIELD MEASUREMENTS	14:00	OP44 Dionyz Gasparovsky, SK LIGHTING PROPERTIES AND EFFICIENCY OF LUMINAIRES EXCEEDING THEIR LIFETIME	14:00	OP48 Raphael Labayrade, FR VISUAL QUALITY ASSESSMENT OF LED SPOTS IN COMPARISON TO LOW-VOLTAGE HALOGEN SPOTS	
14:15	OP41 Christophe Martinsons, FR INFLUENCE OF CURRENT AND VOLTAGE HARMONIC DISTORTION ON THE POWER MEASUREMENT OF LED LAMPS AND LUMINAIRES	14:30	OP45 Yukio Akashi, JP VISUAL MECHANISMS OF DISCOMFORT GLARE SENSATION CAUSED BY LEDS	14:15	OP49 Ronnier Luo, TW ASSESSING COLOR HARMONY IN A ROOM USING LED LIGHTINGS	
14:30	OP42 Udo Krüger, DE SPECTRAL MISMATCH CORRECTION FACTOR ESTIMATION FOR WHITE LED SPECTRA BASED ON THE PHOTOMETER'S F1' VALUE	14:45	OP46 Xiaoyan Zhu, CN THE LUMINAIRE BEAM-SHAPE INFLUENCE ON DISCOMFORT GLARE FROM LED ROAD LIGHTING	14:30	OP50 Chloé Pagot, FR EVALUATION OF INDOOR LIGHTING SITUATIONS IN PUBLIC ACCESS BUILDINGS AND OUTDOOR SITUATIONS AT NIGHT BY VISUALLY IMPAIRED PEOPLE	
14:45	OP43 Petri Kärhä, FI RADIOMETRIC DETERMINATION OF THE JUNCTION TEMPERATURE OF AN LED	15:00	OP47 Mathias Niedling, DE INFLUENCE OF A GLARE SOURCES SPECTRUM ON DISCOMFORT AND DISABILITY GLARE UNDER MESOPIC CONDITIONS	14:45	OP51 Nozomu Yoshizawa, JP A STUDY ON THE APPEARANCE OF PAINTINGS IN THE MUSEUM UNDER VIOLET AND BLUE LED	
15:00	Discussion	15:00	Discussion	15:00	Discussion	
15:20	COFFEE BREAK				15:20	
15:50	Brightness and Colour, Individual or Shared Percepts (Chair: Miyoshi Ayama, JP)	15:50	Lighting the City - Spaces (Chair: Dionyz Gasparovsky, SK)	15:50	Well-being, Glare and Comfort (Chair: Alessandro Rizzi, IT)	
15:50	OP52 Laurent Blondé, FR COLORIMETRIC OBSERVER CATEGORIES AND THEIR APPLICATIONS IN COLOR AND VISION SCIENCES	16:05	OP55 Katja Bülow, DK INTEGRATION OF RHYTHMIC URBAN LIGHTING INTO ARCHITECTURAL CONCEPTS	15:50	OP58 Shau-Wei Hsu, TW RELATIONS BETWEEN FLICKER GLARE AND PERCEPTUAL RATINGS OF LED BILLBOARDS UNDER VARIOUS CONDITIONS	
16:05	OP53 Janos Schanda, HU INDIVIDUAL CHANGES OF BRIGHTNESS PERCEPTION	16:20	OP56 Roselane Bezerra, PT REINVENTING URBAN SPACES THROUGH LIGHT AND COLOUR: CACILHAS PROJECT	16:05	OP59 Yi-Chun Chen, TW FLICKER AND VISUAL COMFORT EVALUATIONS OF LED PANEL DISPLAY	
16:20	OP54 Miki Kozaki, JP A PROPOSAL OF PREDICTIVE EQUATION FOR "SPATIAL BRIGHTNESS" CONSIDERING THE EFFECT OF LOOKING AROUND AND ITS APPLICATION TO REAL PROJECT	16:35	OP57 Thomas Conniasselle, BE IMPRESSION OF LIGHT AND FEELING OF SECURITY IN THE CITY - EXPERIMENTING MESOPIC VISION	16:20	OP60 Ronnier Luo, TW INVESTIGATION OF DISCOMFORT GLARE OF RGB LED BILLBOARD AT NIGHT	
16:35	Discussion	16:35	Discussion	16:35	Discussion	
16:50	Keynote: Towards a New Century of Light (Chair: Yoshi Ohno, US)				16:50	
16:55	Cyril Chain, FR TOWARDS A NEW CENTURY OF LIGHT				16:55	
17:30	CLOSING CEREMONY				17:30	
17:40	CLOSING CEREMONY				17:40	

Colour Key

DAY	TOPIC
KEYNOTE SPEECH / PLENARY TALK	POSTER
BREAK	OPENING/CLOSING CEREMONY

POSTERS

D1 - Vision and Colour			
Colorimetry			
PP001	INFORMATION ENTROPY AND THE COLORIMETRY OF SPECTRA	Price, Luke L.	GB
PP002	TOWARDS A FIELD SIZE INDEPENDENT METAMERISM	Polster, Saskia; Schierz, Christoph	DE
PP003	TESTING A COLOUR-DIFFERENCE FORMULA FOR THE AUTOMOTIVE INDUSTRY USING THE EXPERIMENTAL VISUAL DATASETS EMPLOYED IN CIEDE2000 DEVELOPMENT	Melgosa, Manuel; Gómez-Robledo, Luis; Martínez, Juan; Perales, Esther; Martínez-Verdu, Francisco M.; Dauser, Thomas	ES
PP004	COLOUR RENDERING EVALUATION OF THE LED LIGHT SOURCE BY THE RELATIVE EVALUATION	Kobayashi, Shinji; Komatsubara, Hitoshi; Nasuno, Nobuyuki; Fuchida, Takayoshi; Hashimoto, Kenjiro	JP
PP005	AFFECTIVE EVALUATION ON COLOR SAMPLES ILLUMINATED BY LED LIGHT SOURCES - INFLUENCE OF ILLUMINANCE LEVEL -	Nakajima, Yuki; Fuchida, Takayoshi	JP
PP006	SUBJECTIVE ASSESSMENT OF UNIQUE COLOURS AS A TOOL TO EVALUATE THE QUALITY OF WHITE LIGHT SOURCES.	da Pos, Osvaldo; Fiorentin, Pietro; Scroccaro, Alessandro; Fontana, Carlotta; Guerra, Davide; Gardin, Eliana; Filippi, Anna	IT
PP008	USER EVALUATION OF EIGHT LED LIGHT SOURCES WITH DIFFERENT SPECIAL COLOUR RENDERING INDICES $R_{sub>9>}$	Iversen, Anne; Markvart, Jakob; Logadottir, Asta; Corell, Dennis D.; Thorseth, Anders; Dam-Hansen, Carsten	DK
PP009	SPAN OF FUNDAMENTAL COLORS OF PEOPLE WITH COLOR VISION DEFECT	Sagawa, Ken; Itoh, Nana	JP
PP010	THE COLOR OF WHITE LIGHT	Hertog, Wim; Higuera Portilla, Jorge E.; Perálvarez, Mariano; Carreras, Josep	ES
PP011	AN INTELLIGENT COLOR TEMPERATURE CONVERSION FUNCTION WITH MULTI-PRIMARY COLORS FOR INDOOR SOLID-STATE LIGHTING	Huang, Ting-Wei; Ou-Yang, Mang; Luo, Ronnier	TW
PP012	INFLUENCE OF SPECTRAL POWER DISTRIBUTION OF LIGHT SOURCES ON THE COLOUR APPEARANCE OF GONIOCHROMATIC COLOURS	Perales, Esther; Chorro, Elísabet ; Wener, Cramer; Viqueira, Valentin; Gómez, Omar; Martínez-Verdu, Francisco M.	ES
Mesopic Vision			
PP013	EFFECT OF HIGH LUMINANCE SOURCES TO PERIPHERAL ADAPTATION STATE IN MESOPIC RANGE	Uchida, Tatsukiyo; Ohno, Yoshi	US
Miscellaneous			
PP014	PUTTING SHADOW INTO NUMBERS	Yao, Hua; Li, Xinwei	CN
PP015	EILV ONLINE – AN EXCELLENT PRINCIPLE	Liljefors, Anders	SE
PP016	THE LIGHT DIRECTION AND DIRECTIONAL LIGHT—TOWARDS A NEW QUANTIFICATION OF AN ESSENTIAL LIGHTING QUALITY CRITERION	Liedtke, Carolin; Völker, Stephan; Knoop, Martine	DE
D2 - Measurement			
Measurement of Material			
PP018	LIGHT DIFFUSING POWER OF TRANSLUCENT GLAZING	Matusiak, Barbara S.	NO
PP019	EVALUATION OF REFLECTIVE AND TRANSPARENT DISPLAYS USING BRDF/BTDF MEASUREMENT SYSTEM	Hwang, Jisoo; Lee, Dong-Hoon	KR
PP020	BI-DIRECTIONAL SCATTERING DISTRIBUTION DATA OF SOLAR SHADING : CHARACTERIZATION AND PERFORMANCES	Deneyer, Arnaud; Deroisy, Bertrand	BE
PP021	MEASUREMENT OF TYPICAL ROAD SURFACE REFLECTANCE IN CHINA	Li, Wenyi; Zeng, Xu; Cheng, Wenting; Demirdes, Nurullah Haldun; Heynderickx, Ingrid; Heynderickx, Ingrid; Liu, Muqing; Shen, Haiping	CN
Measurement of LEDs			
PP026	OPTIMAL THERMAL MANAGEMENT OF LED LIGHTING SYSTEMS REGARDING EFFICIENCY AND COSTS	Tarbeyevskaya, Alena; Herbold, Christian; Hornberg, Alexander; Neumann, Cornelius; Schierz, Christoph	DE
PP027	APPLICATION OF LIGHT-EMITTING DIODES IN OPTICAL METROLOGY	Lee, Dong-Hoon; Park, Seongchong; Shin, Dong-Joo; Kim, Seung-Kwan; Jeong, Ki-Lyong; Mahmoud, Khaled; Park, Seung-Nam	KR
PP028	SPATIAL COLOR DISTRIBUTION OF WHITE LED LUMINAIRES	Bensel, Silvia; Völker, Stephan	DE
PP029	EVALUATION OF LED SOURCE DEGRADATION	Govorov, Pylyp P.; Romanova, Tetiana; Nosanov, Mikola; Pylypchuk, Roman; Korol, Olga	UA

PP030	THE FEATURES OF THE TESTING PROGRAM FOR LED LUMINAIRES AT VNISI TESTING CENTRE	Bartsev, Alexey; Stolyarevskaya, Raisa ; Belyaev, Roman	RU
Measurement Systems			
PP032	CHARACTERIZATION OF A PHOTOPIC-SCOTOPIC LUMINANCE METER FOR MEASUREMENTS IN THE MESOPIC REGION	Shpak, Maksim; Kärhä, Petri; Porrovecchio, Geiland; Smid, Marek; Ikonen, Erkki	FI
PP033	LOW NOISE DETECTION SYSTEM FOR MESOPIC AND SCOTOPIC PHOTOMETRY	Porrovecchio, Geiland; Shpak, Maksim; Smid, Marek; Kärhä, Petri; Ikonen, Erkki	CZ
PP035	EFFECT OF ROTATION AXIS ON THE VALUE OF PHOTOMETER DIRECTIONAL RESPONSE INDEX F2	Poikonen, Tuomas; Pulli, Tomi; Kärhä, Petri; Ikonen, Erkki	FI
PP036	USING OF CCD BASED FIBRE OPTIC SPECTRORADIOMETERS IN PHOTOMETRIC MEASUREMENTS UNDER DIFFERENT CONDITIONS	Dubnicka, Roman; Rusnak, Anton; Pipa, Marek	SK
PP037	AN IMPROVED CCT-TLF CALIBRATION METHOD FOR SPHERE-SPECTRORADIOMETERS	Pan, Jiangen; Li, Sheng; Li, Qian; Huang, Yan	CN
PP038	TEST OF AN OPEN HARDWARE COLORIMETER	Bonanomi, Cristian; Calore, Enrico; Gadia, Davide; Rizzi, Alessandro	IT
PP039	GLARE EVALUATION SYSTEM USING PHOTOGRAPHIC PHOTOMETRY	Yamada, Tetsuji	JP
PP040	COMPARISON ON TOTAL LUMINOUS FLUX MEASUREMENT OF SPECTROGONIPHOTOMETER AND GONIPHOTOMETER	Zhao, Weiqiang; Liu , Hui ; Liu, Jian; Zhao , Haisu ; Cui, Tong	CN
PP041	IMAGING SPECTROPHOTOMETRY WITH A HIGH STABLE AND MONOCHROMATIC LED-BASED TUNABLE SOURCE	Mahmoud, Khaled; Park, Seongchong; Park, Seung-Nam; Lee, Dong-Hoon	KR
Miscellaneous			
PP042	LIGHTING QUALITY AND CHARACTERIZATION OF LAMPS AND LUMINAIRES: BRAZIL GETS READY FOR THE ADVANCEMENT OF SOLID STATE ILLUMINATION	Costa, Claudia L.; Vieira, Rafaela R.; Pereira, Rodrigo C.; Silva, Paulo V.; Oliveira, Ivo Antônio A.; Sardinha, André S.; Viana, Domingos D.; Barbosa, Amanda H.; Souza, Liliane P.; Alvarenga, Ana Paula D.	BR
PP043	REALIZATION OF THE CANDELA AT INMETRO	Coelho, Carla T.; Alves, Luciana	BR
D3 - Interior Lighting			
Glare			
PP044	THE DEVELOPMENT OF EVALUATION FOR DISCOMFORT GLARE IN LED LIGHTING OF INDOOR WORK PLACE: THE EFFECT OF THE LUMINANCE DISTRIBUTION OF LUMINOUS PARTS ON SUBJECTIVE EVALUATION	Higashi, Hirokuni; Koga, Shota; Kotani, Tomoko	JP
PP045	THE DEVELOPMENT OF EVALUATION FOR DISCOMFORT GLARE IN LED LIGHTING OF INDOOR WORK PLACE: THE MODIFICATION OF G-CLASSIFICATION USING LUMINANCE DISTRIBUTION OF LUMINOUS PARTS.	Koga, Shota; Higashi, Hirokuni; Kotani, Tomoko	JP
PP046	A STUDY ON DEVELOPING VEILING GLARE RATING ACCORDING TO CHARACTERISTICS OF REFLECTED IMAGES ON SCREENS AND HUMAN RESPONSES	Chao, Wei-Cheng; Chiang, Ya-Hu; Tu, HsiaoWen	TW
PP048	VISUAL COMFORT LIGHTING FOR COMPUTER USE AT HOME	Peng, Sheng; Liu, Kangjun; Chen, Yawen; Heynderickx, Ingrid	CN
PP049	SUBJECTIVE RESPONSES TO DIFFERENT LIGHT SOURCES. A STUDY ON LIGHT PREFERENCES AND COMPARISON OF STANDARD LIGHT MEASURES WITH HUMAN INDIVIDUAL ESTIMATES	Bellia, Laura; Barbato, Giuseppe; De Padova, Vittoria; Pedace, Alessia	IT
Homes			
PP050	AN INVESTIGATION INTO LUMINOUS COMFORT IN THE SUMMER SEASON OF PALESTINIAN DWELLINGS: INHABITANTS' POINT OF VIEW.	Haj Hussein, Muhannad; Semidor, Catherine	PS
PP051	TAKING INTO ACCOUNT THE NATURAL LIGHTING IN INTERIOR SPACES OF JEDDAH HISTORICAL HOUSES IN SAUDI ARABIA	Khan, Ahmed A.; Semidor, Catherine	FR
PP052	A STUDY ON PREFERENCE AND SUBJECTIVE EVALUATION EXPERIMENT FOR ARCHITECTURAL LIGHTING TYPES AND CORRELATED COLOR TEMPERATURE BY RESIDENTIAL SPACE	Lee, Jinsook ; Choi, Jongmoon; Kim, Soyeon; Park, Jiyoung	KR
PP053	A STUDY ON THE PERCEPTION CHANGE OF FINISHING MATERIAL BY LIGHTING IN RESIDENTIAL SPACE	Gok-Sook, Lee; Ji-Eun, Seo	KR
PP054	PREFERRED HOME LIGHTING DESIGN	Csuti, Peter; Szabo, Ferenc; Schanda, Janos D.	HU
PP055	EXPERIMENTAL STUDY ON THE LIGHTING ENVIRONMENT FOR RESIDENTS' DOINGS IN LIVINGROOM	Kim, Hoon; Kim, Hyun-Ji; Woo, Seong Jun	KR

LED			
PP056	INFLUENCE OF TECHNICAL PARAMETERS OF LED INDIRECT LIGHTING INSTALLATIONS ON ILLUMINATION PARAMETERS	Pawlak, Andrzej; Zaremba, Krzysztof	PL
PP057	A STUDY ON SPACING TO HEIGHT RATIO OF CONVENTIONAL FLUORESCENT LUMINAIRES AND LED FLAT LUMINAIRE	Lee, Yoon Chul; Her, Jun; Chae, Sung Gi; Jung, Dong Hwan; Kim, Kang Ho; Cho, Yong-Ick	KR
PP058	COMPARISON BETWEEN FLUORESCENT AND LED LIGHTING ON VISIBILITY AND VISUAL COMFORT IN SCHOOL CLASSROOMS	Chen, Yawen; Peng, Sheng; Tang, Xiaodan; Heynderickx, Ingrid	CN
PP059	SUBJECTIVE PREFERENCES FOR LED LIGHTING IN OFFICE	Dangol, Rajendra; Bhusal, Pramod; Puolakka, Marjukka; Halonen, Liisa	FI
PP060	USER PREFERENCES IN INDOOR LED LIGHTING	Tetri, Eino; Alhaddad, Ahmed I.; Halonen, Liisa	FI
PP061	A STUDY OF THE SUSTAINED PUPIL RESPONSE UNDER A VARIETY OF LED ILLUMINATIONS	Le Rohellec, Jean; Viénot, Françoise; Anton, Jean-Luc; Nazarian, Bruno; Attia, Dina; Merckel, Olivier; Rosenfeld, Frédérique; Lavédrine, Bertrand	FR
Museums			
PP062	DESIGN OF LED (LIGHTING EMITTING DIODES) FOR MUSEUM LIGHTING APPLICATION	Mou, Xi; Berns, Roy S.	US
PP063	LIGHT EMITTING DIODES IN MUSEUM LIGHTING - COLOR QUALITY REQUIREMENTS FOR VISITORS' ACCEPTANCE	Szabo, Ferenc; Csuti, Peter; Schanda, Janos D.	HU
PP064	USING LED SOURCES FOR WORKS OF ART LIGHTING	Iacomussi, Paola; Piccablotto, Gabriele; Radis, Michela; Rossi, Laura; Rossi, Giuseppe	IT
PP065	SUBJECTIVE AND OBJECTIVE ASSESSMENT ON LED LIGHTING QUALITY FOR MUSEUM SHOWCASES	Pellegrino, Anna; Piccablotto, Gabriele; Aghemo, Chiara	IT
PP066	MUSEUM OBJECTS ON THE INTERNET, IN PRINT AND IN REALITY	Sik Lanyi, Cecilia; Schanda, Janos D.; Nagy, Eszter	HU
PP067	DYNAMIC LIGHTING SYSTEM WITH LOW CORRELATED COLOUR TEMPERATURE AND HIGH COLOUR RENDERING INDEX FOR MUSEUM LIGHTING OF FRAGILE ARTIFACTS.	Thorseth, Anders; Corell, Dennis D.; Poulsen, Peter B.; Dam-Hansen, Carsten	DK
Daylight			
PP069	EFFECT OF COLOUR TEMPERATURE ON HUMAN DEPENDING ON WEATHER, DAYLIGHT AND TIME - FIELD STUDY IN A SCHOOL	Tralau, Birthe; Schierz, Christoph	AT
PP070	SIMULATION OF ANNUAL DAYLIGHT PERFORMANCE UNDER HONG KONG REPRESENTATIVE SKIES FOR USINE LIGHTING ENERGY INTELLIGENTLY	Ho, Justin C. K.; Ng, Edward ; Chan, P. W.	HK
PP071	A REVIEW OF HISTORICAL CHANGES IN JAPANESE REGULATIONS AND STANDARDS FOR SUNLIGHT AND DAYLIGHTING	Koga, Yasuko; Miki, Yasuhiro	JP
PP072	DAYLIGHT AND SOLAR ACCESS AT URBAN SCALE : A METHODOLOGY AND ITS APPLICATION TO A HIGH DENSITY DEVELOPMENT IN BRUSSELS	Deroisy, Bertrand; Deneyer, Arnaud	BE
PP073	DAYLIGHTING DESIGN TOOL FOR ARCHITECTS	Filetoth, Levente	HU
PP074	SKY CLASSIFICATION METRICS FOR HIGH DYNAMIC RANGE IMAGES	Souza, Dennis F.; Scarazzato, Paulo S.; Pedrini, H.	BR
PP075	RESEARCH ON PREFERABLE LUMINANCE CONTRAST OF WINDOW AND WALL AT DAYTIME	Kato, Mika; Yamaguchi, Hideki; Yoshizawa, Nozomu; Miki, Yasuhiro	JP
PP076	PROPOSAL OF SIMPLE DAYLIGHTING PERFORMANCE INDICES FOR REGULATIONS: VALIDATION WITH ON-SITE MEASUREMENT CAMPAIGN.	Fontoynt, Marc R.; Larsen, Dorte; Andersen, Lærke; Grün-Royen, Martin	DK
PP077	HOLLOW LIGHT GUIDES: 50 YEARS OF RESEARCH, DEVELOPMENT, MANUFACTURE AND APPLICATION	Aizenberg, Julian B.	RU
PP079	ASSESSMENT OF DAYLIGHT CONDITIONS IN OFFICE BUILDINGS WITH THE INTEGRATION OF EXTERNAL BLINDS	Tsikaloudaki, Katerina; Axarli, Cleo; Ilioudi, Charoula	GR
PP081	DESIGN OF LATERAL OPENINGS FOR NATURAL ILLUMINATION IN RESIDENTIAL BUILDINGS IN BRAZIL: ANALYSIS OF THE BUILDINGS CODES AND SUGGESTIONS OF NEW PARAMETERS TO THE CITY OF BRASÍLIA	de Sousa, Juliana A.; Amorim, Cláudia	BR
PP083	EVALUATION WINDOW LIGHTING CONSIDERING THE CIRCADIAN EFFECT	Mou, Tongsheng; Mou, Xi; Wen, Xiaofang	CN

PP084	A CLIMATE-BASED GRAPHICAL TOOL TO PREDICT THE DAYLIGHT AVAILABILITY WITHIN A ROOM AT THE EARLIEST DESIGN STAGES	Pellegrino, Anna; Aghemo, Chiara; Lo Verso, Valerio R.; Cammarano, Silvia	IT
Controls			
PP085	DEVELOPMENT OF AUTOMATIC LIGHTING CONTROL SYSTEM USING BRIGHTNESS IMAGE	Kojima, Yoshikane; Ohki, Chikako; Nakamura, Yoshiki; Kanaya, Sueko	JP
PP086	ENERGY HARVESTING SOURCES FOR INTELLIGENT LED LIGHTING SYSTEMS	Higuera Portilla, Jorge E.; Carreras, Josep; Hertog, Wim; Perálvarez, Mariano	ES
PP087	EFFECTS ON ENERGY SAVINGS OF PERSONAL LIGHTING CONTROL SYSTEM IN AN OFFICE BUILDING IN JAPAN PART 1 OUTLINE OF THE MEASUREMENT AND EFFECTS ON LOWERING ELECTRICAL POWER CONSUMPTION FOR LIGHTING	Mochizuki, Etsuko; Oikawa, Daisuke; Kim, Jeongsoo; Tashiro, Kazuhiro; Iida, Koichi	JP
PP088	EFFECTS ON ENERGY SAVINGS OF PERSONAL LIGHTING CONTROL SYSTEM IN AN OFFICE BUILDING IN JAPAN PART 2 EVALUATION OF LIGHTING ENVIRONMENT AND OCCUPANTS' RESPONSE TO PERSONAL LIGHTING CONTROL SYSTEM	Oikawa, Daisuke; Mochizuki, Etsuko; Kim, Jeongsoo; Tashiro, Kazuhiro; Iida, Koichi	JP
PP089	RESEARCH ON EVALUATION OF ENERGY CONSUMPTION OF INTELLIGENT LIGHTING CONTROL SYSTEM	Wang, Lei	CN
PP090	SMART LIGHTING CONTROL USING HUMAN MOTION TRACKING FROM DEPTH CAMERAS	Chun, SungYong; Lee, Chan-Su	KR
Energy Efficiency			
PP091	LIGHTING QUALITY VERSUS ENERGY EFFICIENCY	Kirsch, Raphael; Völker, Stephan	DE
PP093	DEVELOPMENT OF THE METHOD TO EVALUATE ECONOMICAL EFFICIENCY OF A LIGHTING SYSTEM	Kim, Hoon; Cho, Sook Hyun	KR
PP094	THE REQUIREMENTS FOR THE LIGHTING ENERGY PERFORMANCE ASSESSMENT OF NON-RESIDENTIAL AND RESIDENTIAL BUILDINGS CONSIDERING ASSUMPTION OF BUILDING USAGE CONDITIONS	Miki, Yasuhiro	JP
PP095	UNRAVELLING EFFICACY, MAINTENANCE AND LIGHTING ENERGY FOR THE END USER	Mucklejohn, Stuart; Whittaker, Anna P.; Gore, Julie	GB
PP097	SOFTWARE CALCULATION TOOL FOR LIGHT SAVINGS IN THE BUILDINGS	Novak, Tomas; Sokansky, Karel	CZ
Lighting Design			
PP098	LIGHTING DESIGN BASED ON HUMAN PRINCIPLES	Säter, Monica B.	SE
PP102	RELATION BETWEEN THE GRID FOR CALCULATION/MEASUREMENT AND RESULTING LUMINOUS PARAMETERS FOR ILLUMINATION OF INDOOR WORKPLACES	Dubnicka, Roman; Rusnak, Anton; Gasparovsky, Dionyz	SK
PP103	HIGH DYNAMIC RANGE (HDR) IMAGES FROM SMART PHONES FOR LIGHTING RESEARCH OFFICE SPACES	Garcia-Hansen, Veronica; Smith, Simon S.; Isoardi, Gillian	AU
PP104	GLOBAL ILLUMINATION ALGORITHM USED IN COMPUTER AIDED ARCHITECTURAL DESIGN PRESENTATION	Filetoth, Levente	HU
PP105	HOW TO CHOOSE SIMULATION PARAMETERS TO IMPROVE ACCURACY?	Ábrahám, György; Németh, Zoltán; Nagy, Balazs Vince; Samu, Krisztián; Veres, Adam	HU
D4 - Lighting and Signalling for Transport			
LED			
PP106	THE FIELD EXPERIMENTS OF THE HIGH S/P RATIO LED STREET LIGHTING	Saito, Takashi; Akashi, Yukio	JP
PP107	STUDIES ON TUNNEL LIGHTING VISIBILITY AND ENERGY-SAVING EFFECT IN HIGH-OVERALL-UNIFORMITY (APPLICATION OF LED IN TUNNEL LIGHTING)	Hirakawa, Satoshi; Hayakawa, Masaaki; Okada, Akio; Hagio, Tomokazu	JP
PP108	A SET OF QUALITY CRITERIA FOR SELECTION AND INSTALLATION OF LED ROAD LIGHTING	Kim, Hoon; Lee, Min-Wook	KR
PP109	PERCEPTION OF HUMAN SKIN IN STREET LIGHTING UNDER FIVE TYPES OF LED SPECTRA.	Fontoynt, Marc R.; Bruyère, Lucie; Blanc Gonnet, Joachim	DK
Road Lighting			
PP110	MEASURING THE IMPACT OF LIGHTING ON INTERPERSONAL JUDGEMENTS OF PEDESTRIANS AT NIGHT-TIME	Fotios, Steve; Yang, Biao	GB

PP111	CRITICAL PEDESTRIAN TASKS: USING EYE-TRACKING WITHIN A DUAL TASK PARADIGM	Fotios, Steve; Uttley, Jim; Hara, Naoya	GB
PP112	THE APPLICATION OF ADAPTIVE LIGHTING IN URBAN AREAS	Gibbons, Ronald; Clanton, Nancy; Terry, Travis; Garcia, Jessica; Givler, Todd	US
PP113	CALCULATION OF THE OPERATION TIME OF ROAD LIGHTING	Gasparovsky, Dionyz	SK
PP114	IN DEPTH INVENTORY FOR A HIGHER QUALITY OF STREET LIGHTING	Deswert, Jean-Michel; Markey, Yves	BE
PP115	RENEWAL OF STREET AND ROAD LIGHTING IN SWEDISH MUNICIPALITIES	Jägerbrand, Annika K.	SE
PP116	COMPARISON OF DIFFERENT LIGHT SOURCES ON PEDESTRIAN AND BICYCLE ROAD	Jägerbrand, Annika K.	SE
PP117	RESEARCH ON TESTING METHODS OF RELATIVE PARAMETERS OF OVERPASS LIGHTING SAFETY BY HDR IMAGE	Wang, Lixiong; Zhang, Mingyu	CN
PP118	A STUDY ON THE LIMIT OF LIGHTING POWER DENSITY FOR ROAD LIGHTING	Kim, Hoon; Lee, Min-Wook; Lee, Sang-Jin	KR
PP119	OPTIMISING VISIBILITY IN STREET LIGHTING BY OPTIMISING AND COMPARING LUMINOUS INTENSITY DISTRIBUTIONS	Schade, Sebastian; Völker, Stephan	DE
PP120	APPLICATION OF ROAD LIGHTING ENERGY EFFICIENCY EVALUATION SYSTEM IN PRACTICE	Pracki, Piotr; Jägerbrand, Annika	PL
PP121	ENVIRONMENTAL COMPATIBILITY IN ROAD LIGHTING AN INSTRUMENTED DRONE MEASURES THE UPWARD SPILL LIGHT	Iacomussi, Paola; Rossi, Giuseppe ; Soardo, Paolo	IT
PP123	THE EFFECT OF ONCOMING CAR HEADLIGHTS ON PEDESTRIAN VISIBILITY	Sarajji, Riad; Younis, Dana ; Madi, Mouhamad; Gibbons, Ronald	AE
PP125	DRIVER VISUAL FIELD ANALYSIS	Gibbons, Ronald; Bhagavathula, Rajaram	US
Road Surface / Objects			
PP126	RELATIONSHIP BETWEEN LUMINANCE DISTRIBUTIONS OF ROAD SURFACE AND VISIBILITY IN STREET LIGHTING DESIGN	Akizuki, Yuki; Okuda, Shino	JP
PP127	LUMIROUTE : OPTIMISATION OF ROAD SURFACES REFLECTION PROPERTIES AND LIGHTING	Lecocq, Jacques; Jakubowski, Marc; Couffinal, Benoit; Chain, Cyril	FR
PP128	THE STUDY OF REFLECTANCE FACTOR'S DISTRIBUTION OF FALLEN OBJECTS AND THE INFLUENCE ON VISIBILITY	Hagio, Tomokazu; Hirakawa, Satoshi; Sato, Motohisa; Ito, Hayato; Sakamoto, Sho'etsu; Sugawara, Tsuyoshi	JP
PP129	APPROXIMATION OF ROAD SURFACE LUMINANCE COEFFICIENT	Korobko, Alexey	RU
Tunnel Lighting			
PP131	VISIBILITY OF THE CRITICAL OBJECT AND ENERGY EFFICIENCY OF PRO-BEAM LIGHTING FOR TUNNEL INTERIOR LIGHTING	Ito, Hayato; Uruno, Takemi; Hirakawa, Satoshi; Sato, Motohisa	JP
PP132	VISIBILITY EVALUATION OF TUNNEL LIGHTING TAKING VEHICLE HEADLAMPS IN CONSIDERATION	Hirakawa, Satoshi; Hayakawa, Masaaki; Okada, Akio; Karasawa, Yoshinori	JP
PP133	DETERIORATION PREDICTION IN CONSIDERATION OF THE DIFFERENCE IN LIGHTNING TIME OF A TUNNEL LIGHTING EQUIPMENT.	Miyazaki, Bumpei; Mizutani, Daijiro; Hirakawa, Satoshi; Kaito, Kiyoyuki	JP
Miscellaneous			
PP134	LUMINANCE RANGE AND ARRANGEMENT OF PANELS AGAINST GLARE SENSATION IN NIGHTTIME FOR CIVIAL AIRCRAFT COCKPIT LIGHTING DESIGN	Lin, Yandan; Liu, Yihong; Sun, Yaojie; Qiu, Jingjing	CN
D5			
Exterior Lighting			
PP136	RHYTHM OF LIGHT CREATED BY STATIC LIGHT PATTERNS	Wänström Lindh, Ulrika	SE
PP137	SUBJECTIVE IMPRESSIONS AS QUALITY INDICATORS OF AMBIENT LIGHTING	Djokic, Lidija; Kostic, Aleksandra M.; Kostic, Miomir B.	RS
PP139	INVESTIGATION ON RESIDENTIAL LIGHTING STATUS IN PART AREA OF CHINA	Zou, Nianyu; Fang, Yuan; Cao, Guanying; Jiang, Jiali; Zhang, Yuncui; He, Xiaoyang	CN

PP141	THE QUALITATIVE EVALUATION OF LIGHT QUALITY IN URBAN SQUARE LIGHTING	Song, Gang	CN
PP143	LIGHT AND PARTICIPATION NIGHT EXPLORATORY WALKING	Corten, Isabelle	BE
D6			
Photobiology			
PP145	ECO-FRIENDLY COLOR TUNABLE LED OFFICE LIGHTING INCORPORATING CIRCADIAN PHYSIOLOGY	Noguchi, Hiroki; Toda, Naohiro; Yasukouchi, Akira; Nan, Qiong	JP
PP146	RESEARCH TREND ON QUANTIFICATION SYSTEM FOR BIOLOGICAL CLOCK	Takahashi, Yoshika	JP
PP149	COMPUTER AIDED DESIGN (CAD) FOR APPLYING UPPER ROOM UVGI FIXTURES TO CONTROL AIRBORNE DISEASE TRANSMISSION	Vincent, Richard L.; Brickner, Philip W.	US
PP152	COMBINED EFFECTS ON SLEEPING EFFICIENCY OF LIGHTING ENVIRONMENT IN THE DAYTIME AND THAT IN THE NIGHTTIME	Ishii, Chieko; Mochizuki, Etsuko	JP
PP153	A STUDY ON DEVELOPMENT AND PERFORMANCE OF LIGHT SOURCE'S UV-IR WAVELENGTH BLOCKING FILTER	Lim, Jong-Min; Ko, Jeong-Bae; Lee, Hyun-Young; Lee, Keum; Lim, Jong-Min	KR
PP154	LIGHT IN THE BODY – BODY IN THE LIGHT REVISIONING THE BALANCE OF LIGHT AND DARK	Diethelm, Barbara	CH
PP155	BALANCING BENEFITS WITH EXPOSURE RISKS OF ULTRAVIOLET EMISSIONS FROM LAMPS	Sliney, David H.; Lyon, Terry L.	US
PP156	MELANOPIC ASSESSMENT OF LIGHT – STANDARDIZATION ACTIVITIES	Lang, Dieter; Wojtysiak, Andreas	DE
PP157	RELATION BETWEEN THE PROFILE OF MOOD STATES AND LIGHTING ENVIRONMENT EVALUATION	Umemiya, Noriko; Arai, Tetsuro; Iwata, Tomoko; Suzuki, Tamami	JP
PP159	SPECTRAL REFLECTANCE MEASUREMENTS ON VERVET MONKEY PELTS	Coetzee, Elsie M.; McFarland, Richard; Henzi, Peter	ZA
PP160	LED LIGHT SUPPLEMENT TECHNIQUE FOR INDOOR PLANTS	Zou, Nianyu; Jiang, Jiali; Fang, Yuan; Niu, Yuxi	CN
PP161	OPTIMAL ILLUMINATION OF PLANTS IN GROWTH CHAMBERS WITH LOW ENERGY DEMAND	Škoda, Jan; Krbal, Michal; Sumec, Stanislav; Baxant, Petr; Parma, Mikuláš	CZ
D8			
Image Technology			
PP162	EVALUATION OF ILLUMINATION USING DIGITAL PHOTOGRAPHY	Sumec, Stanislav; Škoda, Jan; Krbal, Michal; Baxant, Petr	CZ
PP163	TOWARD A VALID IMAGE PROCESSING SYSTEM THROUGH COLOUR STANDARDS	Richard, Noël; Ledoux, Audrey; Capelle-Laizé, Anne-Sophie; Fernandez-Maloigne, Christine	FR
PP164	EYE-TRACKING FOR 3D-APPLICATION: GAZE-POINT DETECTION TAKING INTO CONSIDERATION DISPARITY	Iatsun, Iana	FR
PP165	DEVELOPMENT OF GENERIC COLORIMETRY SYSTEM FOR LIGHTING ENVIRONMENT BY USING CCD CAMERA	Yamaguchi, Hideki; Kato, Mika; Hara, Naoya; Ito, Daisuke; Miki, Yasuhiro	JP