

Rapport de test

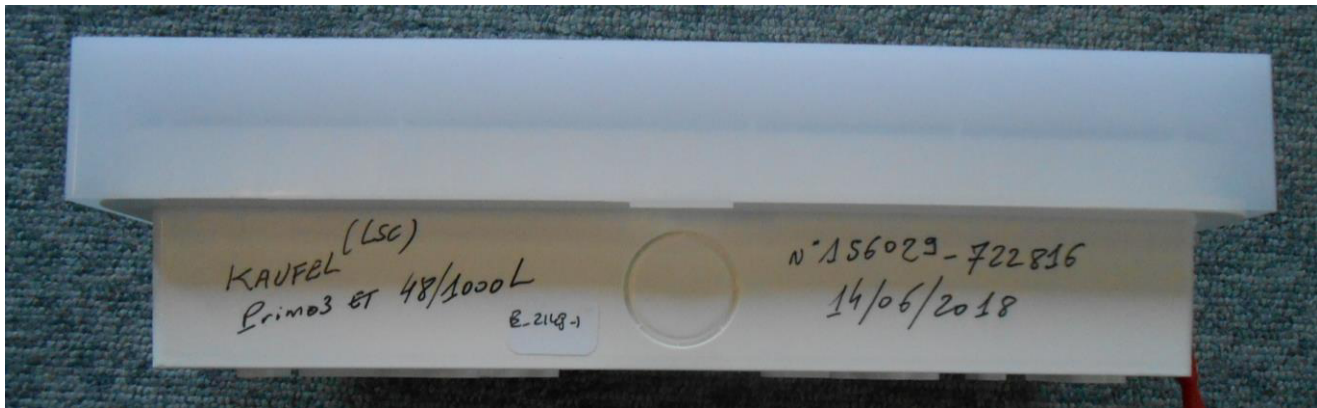
Gonio-photométrie

R-2148-1 V1

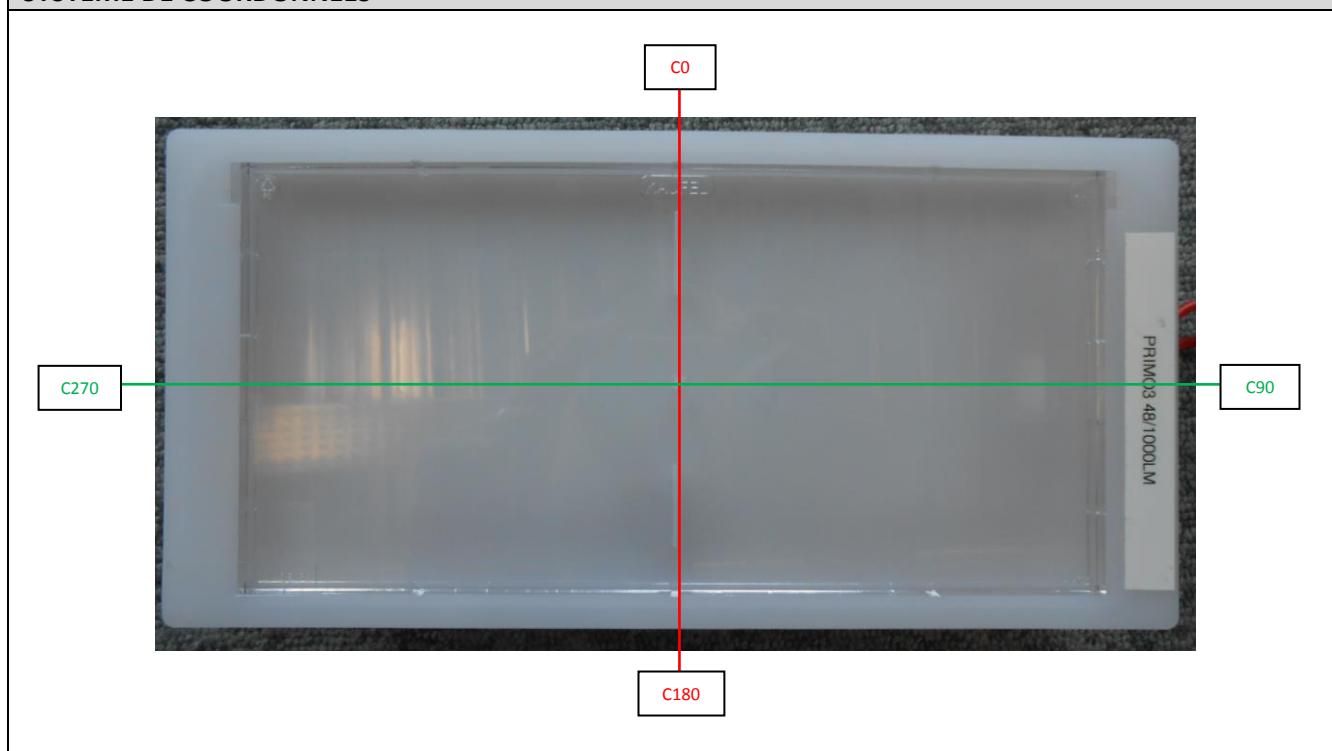
INFORMATIONS CLIENT	
Client	LCIE IDF 33, Avenue Général LECLERC F-92260 FONTENAY -AUX-ROSES
Affaire suivie par	Mr TECHER Jean-Pierre
Référence client	BPA par MAIL sur Devis D-2148 du 13/07/2018
INFORMATIONS LABORATOIRE PISEO	
Laboratoire d'essais	PISEO SAS, Parc Lyon Sud, 4 Rue de l'Arsenal, F-69200 VENISSIEUX
Instruments de test	Gonio-photomètre à miroir LMT GO-DS 2000 - Asset N°049 Tête PhotometriqueSP 30 SOT-1S - Asset N°050 Régulation de température Daikin Sonde Pt100, 1/10 Din 4 fils SF50-10-4-PB-1-6-50 - Asset N°145 Sonde Humidité EE061-F61 - Asset N°134 Centrale d'acquisition National Instruments 9219 - Asset N°139 Yokogawa WT3000 - Asset N°007 Keithley DC Power Supply 60V 2,5A - Asset N°017
Référence devis / prestation	D-2148 - Photometrie 1 Hémisphère
Version et date du rapport	V1 du 09/08/2018
Date des tests	Le 02 Août 2018
PROCEDURE DE TEST	
Type	Gonio-Photomètre LMT à miroir de type C avec cellule en champ lointain à 16.5m
Conformément aux spécifications des normes	<input checked="" type="checkbox"/> NF EN 13032-01 + A1 - Mai 2012 <input checked="" type="checkbox"/> NF EN 13032-4 - Septembre 2015
Position de montage	Downlight
Température ambiante	25.0°C +/- 1.0°C et humidité relative < 65.0 %
Temps de stabilisation	15 minutes
Vieillessement	NC
REMARQUES	
<ul style="list-style-type: none"> - La traçabilité et les références aux certificats d'étalonnage du ou des étalons pour les grandeurs photométriques et colorimétriques peuvent être communiqués sur demande - Le présent document résulte de tests sur un spécimen, ou échantillon d'un produit. Il ne préjuge pas de la conformité de l'ensemble des produits fabriqués à l'échantillon testé. Il n'est pas permis de transférer les résultats sur d'autres systèmes ou configurations. La reproduction ou publication de ce rapport de test n'est autorisée que sous sa forme intégrale. La reproduction de tout ou partie des rapports ainsi transmis par PISEO, faite sans l'accord de PISEO est interdite. - Le relevé de température ainsi que d'humidité relative durant la mesure et la phase de stabilisation est disponible sur demande - Les mesures précédées du signe « # » ne font pas partie de la portée d'accréditation validée par le COFRAC - Les résultats de mesure ne prennent pas en compte les incertitudes. Elles sont disponibles sur simple demande 	

DESCRIPTION DU SYSTEME TESTE	
Désignation du produit	LSC
Fabricant	KAUFEL
Type	LSC
Identification / Numéro de série	Primo3 ET 48/1000L
Désignation de la source lumineuse	LEDs
Dimensions du produit	240x120x70mm
Dimensions de la surface éclairante	205x100mm
Date et méthode d'échantillonnage	Système fourni par le client
Alimentation	48.0 VDC - Utilisation d'une alimentation du laboratoire
Identification par le laboratoire	E-2143-1
DESCRIPTION DES EQUIPEMENTS AUXILIAIRES	
Système	-
Fabricant	-
Type / Modèle	-
Identification / Numéro de série	-

VALEURS ASSIGNÉES DU PRODUIT			
Courant / Tension	48.0 VDC	Température de couleur (CCT)	-
Flux Lumineux (lm)	-	Indice de Rendu des Couleurs (IRC)	-
Puissance	-	Température max de fonctionnement (t_p)	-
Efficacité (lm/W)	-	Température max de fonctionnement (t_q)	-

PHOTO DU SYSTEME TESTE



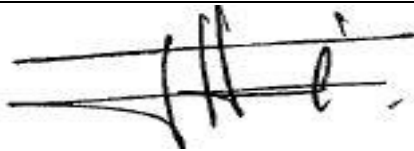
SYSTEME DE COORDONNEES



PRINCIPAUX RESULTATS*	
Flux nominal de la source lumineuse	NA
Flux du luminaire ou système	963,9 lm
Puissance consommée du système**	10,3 W
Facteur de puissance**	# 1,000
Efficacité	93,6 lm/W

*Les incertitudes de mesure des principaux résultats sont disponibles sur demande

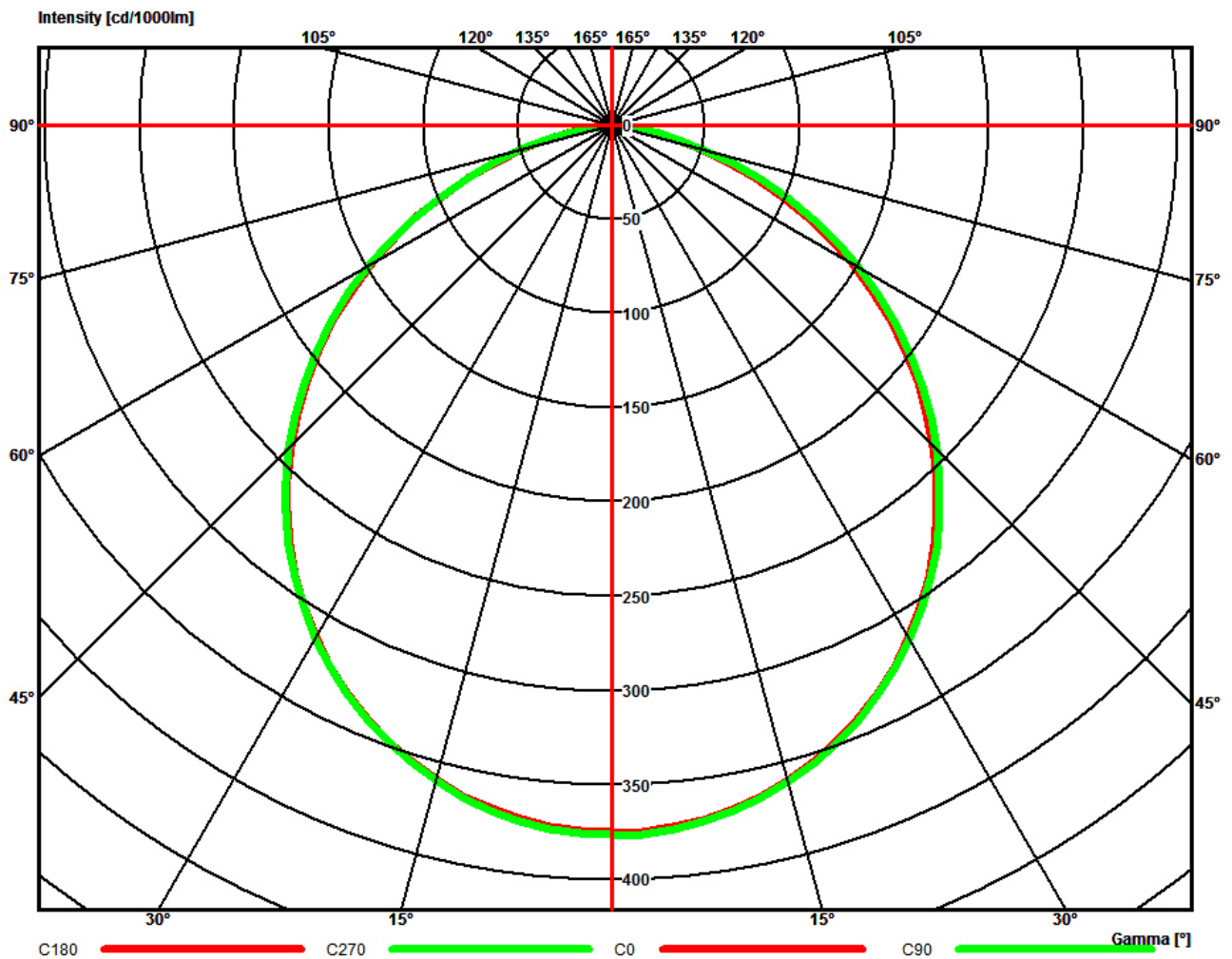
** Les données électriques annoncées sont mesurées en fin de mesure : le détail des mesures électriques pendant la mesure photométrique est disponible sur demande

Nombre de pages du rapport	4 pages de rapport + 12 pages annexes
Fichiers associés	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L.IES
Technicien Mesures et Essais	Mr Cédric VERHÉE
Signature	
Directeur	Mr Joël THOME
Signature	
Vénissieux, le 9 août 2018	

Fin du rapport accrédité COFRAC

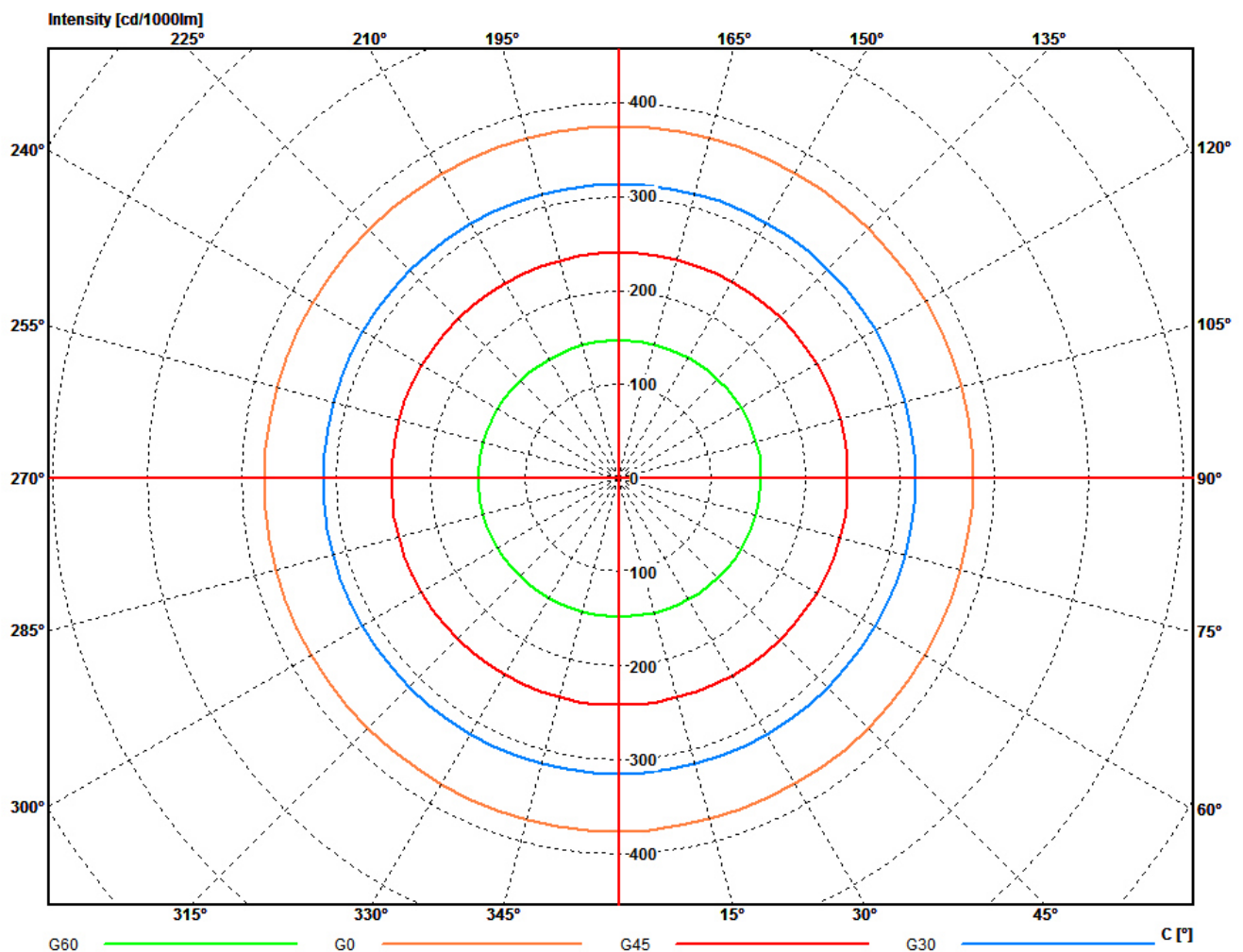
Report:	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L
Source:	LEDS..
Date:	8/2/2018 5:04:56 PM

Polar diagram R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L / C0 to C355 in 5 - Gamma 90 to 180



Report:	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L
Source:	LEDS..
Date:	8/2/2018 5:04:56 PM

Cone diagram R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L / C0 to C355 in 5 - Gamma 90 to 180



Report:	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L
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Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	374.8	374.7	374.6	374.6	374.7	374.6	374.5	374.5	374.5
2.5	374.5	374.4	374.3	374.2	374.2	374.2	374.1	374.1	374.0
5.0	373.1	373.0	373.1	373.0	373.0	372.9	372.9	372.8	372.8
7.5	371.1	371.0	371.0	370.9	370.9	370.9	370.8	370.8	370.7
10.0	368.1	368.0	368.0	368.0	367.9	367.9	367.8	367.6	367.5
12.5	364.3	364.2	364.2	364.2	364.1	364.1	363.8	363.7	363.7
15.0	359.5	359.4	359.4	359.5	359.4	359.4	359.2	359.1	359.1
17.5	353.7	353.7	353.9	353.9	353.9	353.9	353.8	353.7	353.6
20.0	347.2	347.3	347.5	347.5	347.6	347.5	347.5	347.3	347.2
22.5	340.1	340.2	340.3	340.3	340.4	340.3	340.3	340.2	340.1
25.0	332.1	332.1	332.2	332.2	332.3	332.3	332.2	332.2	332.1
27.5	323.2	323.2	323.4	323.5	323.6	323.7	323.7	323.4	323.3
30.0	313.7	313.7	313.7	313.9	314.0	314.0	314.0	314.0	313.9
32.5	303.2	303.3	303.4	303.5	303.7	303.8	303.8	303.8	303.8
35.0	292.1	292.2	292.3	292.4	292.5	292.6	292.7	292.7	292.8
37.5	280.2	280.3	280.4	280.6	280.7	281.0	281.1	281.2	281.2
40.0	267.5	267.7	267.7	267.9	268.0	268.2	268.3	268.5	268.5
42.5	254.3	254.4	254.5	254.6	254.9	255.1	255.3	255.5	255.6
45.0	240.5	240.6	240.6	240.8	241.0	241.2	241.4	241.7	241.9
47.5	226.1	226.2	226.4	226.5	226.7	226.8	227.1	227.4	227.7
50.0	211.2	211.3	211.4	211.5	211.8	212.0	212.3	212.6	212.9
52.5	195.9	196.0	196.1	196.2	196.4	196.6	196.9	197.2	197.4
55.0	179.8	179.9	180.1	180.2	180.4	180.6	181.0	181.2	181.6
57.5	163.3	163.5	163.7	163.9	164.1	164.3	164.6	165.0	165.3
60.0	146.7	146.8	147.0	147.2	147.4	147.7	148.0	148.4	148.7
62.5	130.1	130.1	130.4	130.5	130.8	131.1	131.4	131.8	132.2
65.0	113.1	113.2	113.4	113.5	113.8	114.2	114.5	114.8	115.2
67.5	96.2	96.3	96.5	96.7	97.0	97.3	97.7	98.0	98.4
70.0	79.8	79.9	80.1	80.3	80.6	80.9	81.3	81.6	82.0
72.5	63.9	64.0	64.3	64.5	64.8	65.1	65.4	65.7	66.0
75.0	48.9	49.0	49.2	49.5	49.8	50.1	50.4	50.7	51.1
77.5	35.3	35.4	35.7	35.9	36.2	36.5	36.7	37.0	37.3
80.0	23.7	23.8	24.0	24.3	24.5	24.7	24.9	25.1	25.3
82.5	14.8	14.9	15.1	15.3	15.4	15.6	15.7	15.8	16.0
85.0	9.1	9.2	9.4	9.5	9.6	9.7	9.7	9.7	9.8
87.5	6.5	6.6	6.8	6.9	6.9	6.9	6.9	6.9	6.8
90.0	5.6	5.6	5.8	5.9	5.9	5.9	5.8	5.8	5.7

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	374.5	374.5	374.6	374.7	374.8	375.3	375.4	375.7	375.9
2.5	374.1	374.1	374.2	374.3	374.4	374.7	375.1	375.3	375.4
5.0	372.8	372.9	372.8	373.0	373.1	373.4	373.7	373.9	374.2
7.5	370.7	370.7	370.7	370.8	370.9	371.1	371.4	371.6	371.8
10.0	367.6	367.6	367.8	367.8	367.9	368.1	368.3	368.5	368.7
12.5	363.7	363.7	363.7	363.8	363.9	364.2	364.4	364.6	364.7
15.0	359.1	359.1	359.2	359.3	359.3	359.5	359.6	359.8	360.0
17.5	353.6	353.7	353.6	353.7	353.7	353.9	354.1	354.2	354.4
20.0	347.3	347.3	347.2	347.3	347.3	347.5	347.6	347.7	347.9
22.5	340.2	340.2	340.2	340.2	340.2	340.3	340.4	340.6	340.7
25.0	332.2	332.2	332.1	332.2	332.2	332.3	332.5	332.6	332.7
27.5	323.4	323.4	323.5	323.4	323.5	323.5	323.7	323.8	324.0
30.0	313.9	313.9	314.0	314.2	314.3	314.3	314.4	314.4	314.5
32.5	303.9	303.8	303.9	304.0	304.0	304.1	304.2	304.2	304.3
35.0	292.8	292.8	292.9	293.0	293.1	293.2	293.3	293.3	293.4
37.5	281.2	281.4	281.4	281.6	281.7	281.8	281.9	281.9	281.9
40.0	268.6	268.8	269.0	269.0	269.2	269.3	269.4	269.4	269.4
42.5	255.8	255.9	256.1	256.2	256.4	256.5	256.6	256.6	256.6
45.0	242.1	242.4	242.6	242.7	242.8	243.0	243.1	243.1	243.1
47.5	228.0	228.2	228.5	228.7	228.8	228.9	229.0	229.0	229.1
50.0	213.2	213.4	213.6	213.9	214.0	214.2	214.3	214.4	214.3
52.5	197.7	198.2	198.5	198.8	199.0	199.2	199.3	199.3	199.3
55.0	181.9	182.3	182.5	182.8	183.1	183.3	183.6	183.6	183.6
57.5	165.7	166.0	166.3	166.6	166.9	167.2	167.5	167.6	167.6
60.0	149.1	149.4	149.7	150.0	150.3	150.5	150.7	151.0	150.9
62.5	132.6	132.9	133.2	133.5	133.8	134.1	134.4	134.5	134.5
65.0	115.6	115.9	116.3	116.6	116.8	117.0	117.2	117.3	117.3
67.5	98.8	99.1	99.4	99.6	99.9	100.1	100.3	100.4	100.4
70.0	82.3	82.6	82.9	83.2	83.4	83.6	83.7	83.8	83.9
72.5	66.4	66.7	66.9	67.2	67.3	67.4	67.5	67.6	67.7
75.0	51.3	51.6	51.7	52.0	52.1	52.1	52.2	52.2	52.2
77.5	37.6	37.7	37.8	38.0	38.1	38.1	38.0	38.0	38.0
80.0	25.5	25.6	25.7	25.8	25.8	25.8	25.6	25.5	25.4
82.5	16.1	16.1	16.1	16.1	16.0	15.9	15.7	15.4	15.3
85.0	9.8	9.7	9.6	9.5	9.3	9.0	8.7	8.5	8.2
87.5	6.7	6.6	6.4	6.1	5.7	5.3	4.9	4.6	4.4
90.0	5.6	5.4	5.2	5.0	4.5	4.0	3.6	3.3	3.1

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	376.2	376.2	376.3	376.4	376.4	376.3	376.3	376.0	375.9
2.5	375.8	375.8	376.0	376.1	376.1	375.9	375.8	375.6	375.4
5.0	374.5	374.5	374.7	374.7	374.7	374.5	374.4	374.1	374.0
7.5	372.1	372.4	372.5	372.5	372.5	372.2	372.2	371.9	371.8
10.0	369.0	369.1	369.2	369.2	369.1	369.0	369.0	368.7	368.6
12.5	365.1	365.2	365.4	365.4	365.5	365.4	365.3	365.0	364.9
15.0	360.3	360.3	360.4	360.5	360.5	360.4	360.4	360.2	360.1
17.5	354.6	354.7	354.8	354.9	355.0	354.9	354.9	354.7	354.6
20.0	348.3	348.2	348.4	348.4	348.6	348.5	348.6	348.3	348.2
22.5	340.9	340.9	341.2	341.3	341.4	341.4	341.4	341.2	341.0
25.0	332.9	332.9	333.0	333.1	333.3	333.3	333.3	333.1	332.9
27.5	324.2	324.2	324.4	324.4	324.6	324.6	324.6	324.3	324.2
30.0	314.8	314.8	314.9	315.0	315.1	315.0	315.0	314.7	314.5
32.5	304.5	304.5	304.6	304.7	304.8	304.7	304.6	304.4	304.2
35.0	293.6	293.6	293.7	293.8	293.8	293.6	293.5	293.2	293.1
37.5	282.2	282.2	282.4	282.5	282.5	282.3	282.1	281.8	281.7
40.0	269.7	269.8	270.0	270.1	270.1	269.8	269.6	269.3	269.0
42.5	256.8	256.9	257.1	257.2	257.1	256.9	256.7	256.4	256.1
45.0	243.3	243.4	243.6	243.7	243.6	243.3	243.1	242.9	242.5
47.5	229.3	229.4	229.6	229.6	229.5	229.2	228.9	228.5	228.1
50.0	214.7	214.7	214.9	215.0	214.8	214.4	214.2	213.8	213.5
52.5	199.4	199.5	199.6	199.6	199.4	199.2	198.9	198.5	198.2
55.0	183.7	183.8	183.9	183.8	183.6	183.4	183.1	182.7	182.3
57.5	167.7	167.8	167.9	167.8	167.5	167.2	166.8	166.5	166.1
60.0	151.1	151.2	151.3	151.1	150.9	150.5	150.2	149.8	149.4
62.5	134.6	134.8	134.8	134.7	134.5	134.1	133.7	133.4	133.0
65.0	117.5	117.8	117.9	117.5	117.3	117.1	116.7	116.3	115.9
67.5	100.6	100.8	100.9	100.7	100.5	100.2	99.9	99.5	99.2
70.0	84.0	84.2	84.3	84.1	84.0	83.7	83.4	83.0	82.7
72.5	67.8	68.0	68.1	68.0	67.8	67.6	67.3	67.0	66.7
75.0	52.4	52.6	52.7	52.7	52.5	52.4	52.2	51.9	51.7
77.5	38.1	38.4	38.6	38.5	38.5	38.4	38.2	38.0	37.9
80.0	25.7	26.0	26.1	26.1	26.1	26.1	26.0	25.9	25.8
82.5	15.5	15.9	16.1	16.1	16.2	16.3	16.3	16.3	16.2
85.0	8.5	8.9	9.1	9.2	9.4	9.5	9.6	9.7	9.8
87.5	4.6	5.1	5.3	5.5	5.7	6.0	6.2	6.4	6.6
90.0	3.4	3.8	4.1	4.3	4.5	4.7	4.9	5.2	5.4

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	375.7	375.5	375.4	375.4	375.3	375.2	375.1	374.8	374.6
2.5	375.2	375.1	374.9	374.7	374.6	374.5	374.4	374.2	374.0
5.0	373.9	373.8	373.6	373.4	373.3	373.3	373.2	373.0	372.8
7.5	371.6	371.5	371.3	371.3	371.2	371.0	370.9	370.8	370.5
10.0	368.4	368.3	368.2	368.2	368.1	368.0	367.8	367.5	367.4
12.5	364.7	364.7	364.6	364.5	364.4	364.1	363.9	363.8	363.8
15.0	359.9	359.8	359.7	359.6	359.6	359.5	359.4	359.2	358.9
17.5	354.6	354.4	354.3	354.1	354.0	353.9	353.8	353.5	353.3
20.0	348.0	347.9	347.7	347.6	347.5	347.3	347.2	347.0	346.8
22.5	340.8	340.6	340.4	340.3	340.3	340.2	340.0	339.8	339.6
25.0	332.7	332.5	332.4	332.3	332.3	332.2	332.0	331.8	331.7
27.5	323.9	323.8	323.7	323.6	323.4	323.3	323.2	323.0	322.8
30.0	314.3	314.3	314.0	313.9	313.8	313.6	313.5	313.3	313.1
32.5	304.0	303.9	303.7	303.5	303.4	303.3	303.2	302.9	302.8
35.0	292.8	292.6	292.4	292.3	292.2	291.9	291.8	291.7	291.6
37.5	281.4	281.1	280.8	280.7	280.5	280.3	280.2	280.0	279.9
40.0	268.7	268.4	268.2	268.0	267.8	267.6	267.4	267.2	267.0
42.5	255.7	255.4	255.0	254.8	254.5	254.3	254.1	254.0	253.9
45.0	242.1	241.8	241.4	241.1	240.9	240.6	240.4	240.2	240.1
47.5	227.9	227.5	227.2	226.9	226.6	226.3	226.1	225.9	225.8
50.0	213.2	212.8	212.4	212.0	211.6	211.3	211.0	210.9	210.8
52.5	197.7	197.3	197.0	196.7	196.3	196.0	195.8	195.7	195.6
55.0	181.9	181.5	181.0	180.7	180.3	180.0	179.8	179.6	179.6
57.5	165.7	165.3	164.9	164.5	164.2	163.8	163.6	163.3	163.2
60.0	149.0	148.7	148.4	147.9	147.5	147.2	147.0	146.7	146.6
62.5	132.6	132.2	131.9	131.4	131.0	130.6	130.3	130.2	130.0
65.0	115.6	115.2	114.8	114.4	114.1	113.7	113.4	113.2	113.1
67.5	98.8	98.5	98.1	97.7	97.3	96.9	96.6	96.4	96.3
70.0	82.4	82.0	81.7	81.3	80.9	80.6	80.2	80.0	79.9
72.5	66.5	66.1	65.8	65.4	65.1	64.7	64.4	64.1	64.0
75.0	51.4	51.1	50.8	50.5	50.1	49.8	49.4	49.2	49.0
77.5	37.6	37.4	37.1	36.8	36.5	36.2	35.9	35.6	35.4
80.0	25.6	25.4	25.2	25.0	24.7	24.5	24.2	24.0	23.8
82.5	16.1	16.0	15.9	15.7	15.6	15.4	15.2	15.0	14.8
85.0	9.8	9.8	9.7	9.7	9.6	9.5	9.3	9.2	9.0
87.5	6.7	6.8	6.8	6.8	6.8	6.8	6.7	6.6	6.4
90.0	5.6	5.7	5.7	5.7	5.7	5.7	5.6	5.5	5.4

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	180.0	185.0	190.0	195.0	200.0	205.0	210.0	215.0	220.0
0.0	374.5	374.5	374.5	374.6	374.6	374.6	374.6	374.5	374.4
2.5	373.9	374.0	374.1	374.1	374.2	374.2	374.2	374.1	374.0
5.0	372.7	372.6	372.7	372.9	373.0	372.9	372.8	372.6	372.5
7.5	370.4	370.4	370.5	370.7	370.7	370.7	370.6	370.5	370.4
10.0	367.4	367.5	367.6	367.7	367.8	367.7	367.6	367.5	367.3
12.5	363.8	363.7	363.8	363.9	363.9	363.9	363.9	363.7	363.5
15.0	358.9	358.9	359.1	359.1	359.2	359.2	359.1	359.0	358.8
17.5	353.3	353.3	353.5	353.6	353.7	353.6	353.5	353.4	353.3
20.0	346.7	346.7	346.8	346.9	347.0	347.0	347.0	347.0	346.8
22.5	339.5	339.6	339.7	339.9	339.9	339.9	339.8	339.7	339.6
25.0	331.5	331.6	331.7	331.8	331.8	331.8	331.7	331.6	331.4
27.5	322.8	322.8	322.9	323.0	323.0	323.0	323.0	322.9	322.7
30.0	313.0	313.2	313.3	313.4	313.4	313.3	313.3	313.2	313.1
32.5	302.7	302.7	302.8	302.8	302.8	302.8	302.7	302.7	302.6
35.0	291.5	291.6	291.6	291.6	291.6	291.6	291.5	291.5	291.4
37.5	279.8	279.9	280.0	280.0	280.0	279.9	279.9	279.9	279.8
40.0	266.9	266.9	267.0	267.2	267.2	267.2	267.2	267.2	267.2
42.5	253.8	253.9	254.0	254.0	254.1	254.1	254.1	254.1	254.1
45.0	240.1	240.1	240.2	240.2	240.3	240.3	240.4	240.5	240.5
47.5	225.8	225.9	225.9	225.8	225.9	225.9	226.0	226.1	226.2
50.0	210.8	210.9	211.0	211.0	211.0	211.0	211.1	211.2	211.4
52.5	195.5	195.6	195.6	195.7	195.7	195.6	195.6	195.7	195.9
55.0	179.5	179.6	179.7	179.7	179.7	179.7	179.7	179.9	180.0
57.5	163.2	163.3	163.4	163.5	163.5	163.5	163.5	163.6	163.7
60.0	146.5	146.6	146.7	146.7	146.8	146.9	146.9	147.0	147.1
62.5	129.9	130.0	130.0	130.1	130.2	130.3	130.4	130.4	130.5
65.0	113.0	113.0	113.1	113.1	113.2	113.3	113.4	113.5	113.6
67.5	96.2	96.2	96.3	96.4	96.5	96.5	96.7	96.8	96.9
70.0	79.8	79.8	79.9	80.0	80.1	80.2	80.3	80.4	80.5
72.5	63.9	63.9	64.0	64.1	64.2	64.3	64.4	64.5	64.6
75.0	48.9	49.0	49.0	49.1	49.2	49.3	49.5	49.5	49.6
77.5	35.4	35.4	35.4	35.5	35.6	35.7	35.7	35.8	35.8
80.0	23.7	23.7	23.8	23.9	23.9	23.9	23.9	23.9	23.9
82.5	14.7	14.8	14.8	14.8	14.8	14.8	14.8	14.7	14.6
85.0	9.0	9.0	9.0	9.0	9.0	9.0	8.9	8.8	8.7
87.5	6.4	6.4	6.4	6.4	6.4	6.3	6.1	6.0	5.8
90.0	5.4	5.4	5.4	5.4	5.3	5.2	5.1	4.9	4.7

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	225.0	230.0	235.0	240.0	245.0	250.0	255.0	260.0	265.0
0.0	374.4	374.4	374.4	374.5	374.7	374.9	375.3	375.6	375.8
2.5	374.0	374.0	374.1	374.2	374.4	374.5	374.8	375.2	375.5
5.0	372.6	372.6	372.6	372.7	372.9	373.1	373.4	373.7	374.0
7.5	370.4	370.5	370.4	370.5	370.6	370.8	371.0	371.3	371.6
10.0	367.4	367.3	367.3	367.5	367.7	367.8	367.9	368.1	368.5
12.5	363.5	363.4	363.3	363.5	363.6	363.6	363.7	364.1	364.5
15.0	358.8	358.8	358.7	358.7	358.8	358.9	359.1	359.3	359.6
17.5	353.3	353.3	353.3	353.3	353.4	353.4	353.5	353.6	353.9
20.0	346.8	346.7	346.7	346.7	346.7	346.7	346.8	346.9	347.2
22.5	339.7	339.6	339.6	339.6	339.7	339.7	339.6	339.7	339.9
25.0	331.5	331.5	331.5	331.5	331.6	331.6	331.7	331.7	331.9
27.5	322.7	322.7	322.7	322.8	322.9	322.9	322.8	322.9	323.0
30.0	313.0	313.1	313.1	313.2	313.3	313.3	313.4	313.4	313.4
32.5	302.6	302.5	302.6	302.8	302.9	302.9	302.9	303.0	303.2
35.0	291.5	291.5	291.6	291.8	291.9	291.9	291.9	291.9	292.1
37.5	279.9	279.9	279.9	280.1	280.2	280.3	280.3	280.3	280.4
40.0	267.3	267.4	267.5	267.6	267.8	267.9	267.9	267.9	268.0
42.5	254.2	254.3	254.5	254.6	254.8	254.9	254.9	254.9	255.0
45.0	240.6	240.6	240.9	241.0	241.2	241.3	241.3	241.3	241.4
47.5	226.3	226.4	226.6	226.7	226.8	227.0	227.2	227.2	227.2
50.0	211.5	211.6	211.9	212.1	212.2	212.3	212.4	212.4	212.4
52.5	196.1	196.2	196.4	196.6	196.8	197.0	197.1	197.1	197.1
55.0	180.2	180.4	180.6	180.8	181.0	181.1	181.2	181.2	181.2
57.5	164.0	164.2	164.4	164.5	164.8	164.9	165.1	165.1	165.1
60.0	147.2	147.5	147.8	148.0	148.2	148.3	148.5	148.5	148.4
62.5	130.6	130.9	131.2	131.4	131.7	131.8	131.9	131.9	131.8
65.0	113.8	114.0	114.2	114.4	114.6	114.7	114.8	114.8	114.7
67.5	97.0	97.3	97.4	97.6	97.7	97.8	97.9	97.8	97.8
70.0	80.6	80.8	81.0	81.1	81.2	81.3	81.3	81.3	81.2
72.5	64.7	64.8	65.0	65.1	65.2	65.2	65.2	65.1	65.0
75.0	49.7	49.8	49.9	50.0	50.0	50.0	49.9	49.8	49.6
77.5	35.9	36.0	36.0	36.0	36.0	35.9	35.8	35.6	35.4
80.0	23.9	23.9	23.9	23.9	23.8	23.7	23.5	23.3	23.1
82.5	14.6	14.5	14.4	14.3	14.1	13.9	13.7	13.4	13.2
85.0	8.5	8.3	8.2	8.0	7.7	7.4	7.1	6.8	6.5
87.5	5.6	5.3	5.0	4.7	4.4	4.1	3.7	3.4	3.1
90.0	4.5	4.2	3.9	3.6	3.2	2.9	2.5	2.2	1.9

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

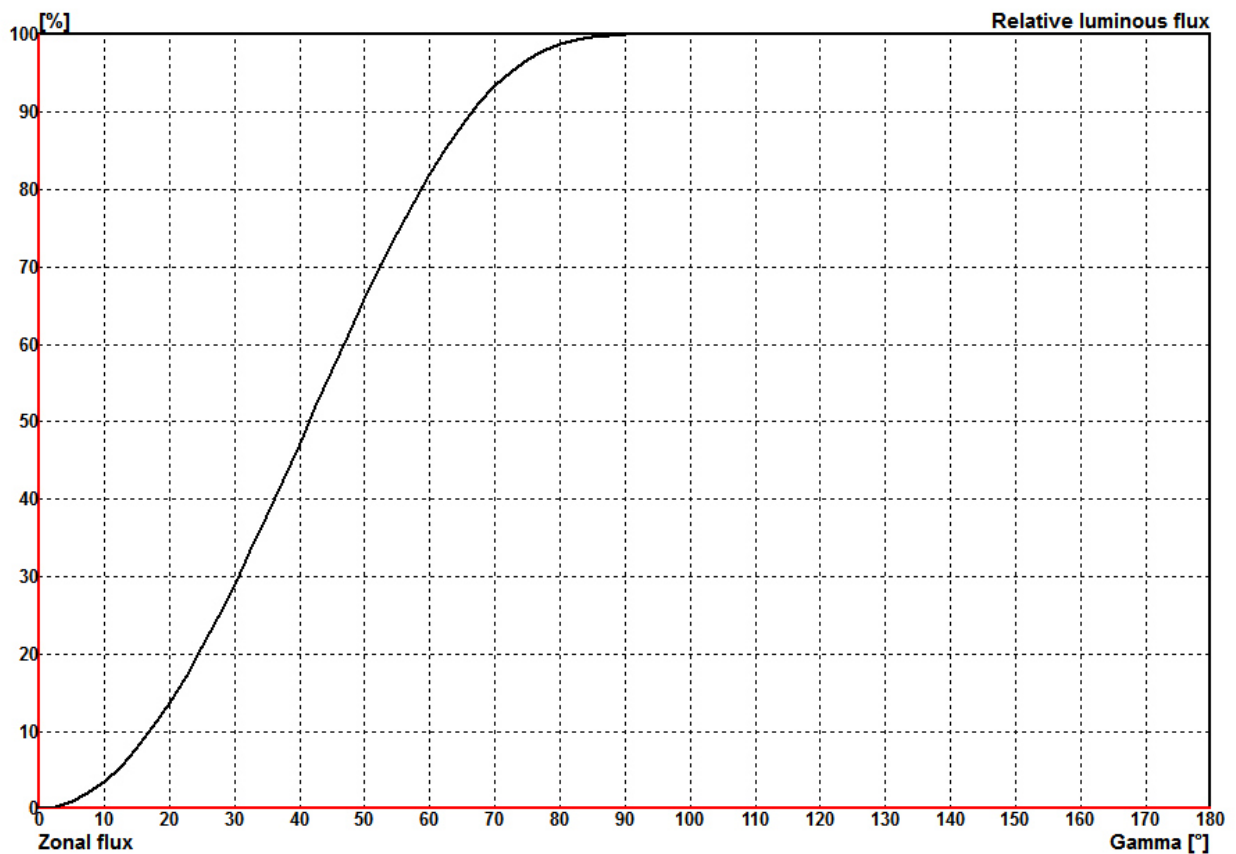
G/C [cd/klm]	270.0	275.0	280.0	285.0	290.0	295.0	300.0	305.0	310.0
0.0	375.9	376.2	376.2	376.2	376.1	376.1	376.0	376.0	375.9
2.5	375.5	375.8	375.8	375.7	375.7	375.7	375.5	375.5	375.4
5.0	374.0	374.3	374.3	374.3	374.2	374.2	374.1	374.1	374.0
7.5	371.7	371.9	371.9	371.9	371.8	371.9	371.8	371.8	371.7
10.0	368.5	368.8	368.8	368.7	368.7	368.8	368.6	368.7	368.6
12.5	364.5	364.8	364.9	364.9	364.9	364.9	364.9	364.8	364.7
15.0	359.6	359.9	360.0	360.0	360.0	360.0	359.9	359.9	359.9
17.5	353.8	354.1	354.1	354.1	354.2	354.2	354.2	354.3	354.3
20.0	347.3	347.7	347.7	347.8	347.9	347.9	347.7	347.7	347.6
22.5	340.0	340.2	340.2	340.3	340.4	340.5	340.5	340.5	340.4
25.0	331.9	332.0	332.1	332.2	332.3	332.4	332.3	332.3	332.3
27.5	323.0	323.1	323.2	323.3	323.4	323.5	323.4	323.4	323.4
30.0	313.5	313.5	313.6	313.7	313.8	313.9	313.8	313.8	313.7
32.5	303.0	303.0	303.2	303.2	303.4	303.5	303.4	303.3	303.3
35.0	292.1	292.2	292.3	292.3	292.4	292.4	292.4	292.4	292.3
37.5	280.4	280.5	280.6	280.7	280.8	280.8	280.7	280.7	280.6
40.0	268.0	268.1	268.2	268.2	268.2	268.2	268.2	268.1	267.9
42.5	255.0	255.0	255.1	255.2	255.2	255.2	255.1	255.1	254.9
45.0	241.4	241.5	241.6	241.6	241.6	241.5	241.4	241.3	241.2
47.5	227.2	227.3	227.3	227.3	227.2	227.2	227.1	227.0	226.8
50.0	212.5	212.5	212.6	212.6	212.5	212.3	212.2	212.1	212.0
52.5	197.2	197.2	197.3	197.3	197.2	197.1	196.8	196.7	196.6
55.0	181.4	181.4	181.5	181.4	181.2	181.1	180.9	180.8	180.6
57.5	165.2	165.2	165.2	165.1	164.9	164.8	164.5	164.4	164.2
60.0	148.5	148.5	148.6	148.5	148.4	148.2	147.9	147.8	147.5
62.5	131.8	131.9	131.9	131.8	131.7	131.6	131.3	131.1	130.9
65.0	114.7	114.8	114.8	114.6	114.5	114.4	114.3	114.1	113.9
67.5	97.7	97.8	97.8	97.8	97.7	97.5	97.4	97.2	97.0
70.0	81.1	81.2	81.2	81.2	81.1	81.0	80.9	80.7	80.6
72.5	64.9	65.0	65.0	65.1	65.0	65.0	64.9	64.8	64.6
75.0	49.5	49.6	49.7	49.8	49.8	49.8	49.7	49.7	49.6
77.5	35.3	35.4	35.6	35.7	35.8	35.9	35.9	35.9	35.8
80.0	23.0	23.1	23.3	23.5	23.7	23.8	23.9	23.9	23.9
82.5	13.1	13.2	13.5	13.8	14.0	14.2	14.4	14.5	14.5
85.0	6.5	6.7	7.0	7.3	7.6	7.8	8.1	8.3	8.5
87.5	3.0	3.2	3.5	3.9	4.3	4.6	4.9	5.2	5.5
90.0	1.8	2.0	2.3	2.7	3.1	3.4	3.8	4.1	4.4

Intensity [cd/klm] R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

G/C [cd/klm]	315.0	320.0	325.0	330.0	335.0	340.0	345.0	350.0	355.0
0.0	375.9	375.8	375.7	375.7	375.7	375.6	375.5	375.4	375.2
2.5	375.4	375.3	375.3	375.3	375.2	375.1	374.9	374.7	374.6
5.0	373.9	373.9	374.0	374.0	373.9	373.8	373.7	373.6	373.4
7.5	371.7	371.7	371.8	371.8	371.7	371.6	371.5	371.4	371.3
10.0	368.3	368.4	368.6	368.7	368.6	368.5	368.4	368.3	368.1
12.5	364.7	364.7	364.8	364.9	364.8	364.8	364.7	364.5	364.3
15.0	359.9	359.9	360.0	360.0	360.0	359.9	359.8	359.7	359.6
17.5	354.2	354.1	354.2	354.3	354.2	354.1	354.0	353.9	353.8
20.0	347.7	347.7	347.8	347.8	347.8	347.7	347.6	347.5	347.3
22.5	340.4	340.4	340.5	340.5	340.5	340.4	340.4	340.3	340.2
25.0	332.2	332.2	332.3	332.3	332.3	332.3	332.2	332.2	332.1
27.5	323.4	323.4	323.4	323.4	323.5	323.4	323.4	323.4	323.3
30.0	313.7	313.8	313.8	313.9	313.9	313.8	313.8	313.8	313.8
32.5	303.3	303.4	303.4	303.5	303.5	303.4	303.4	303.4	303.3
35.0	292.3	292.3	292.1	292.2	292.2	292.2	292.1	292.2	292.1
37.5	280.5	280.5	280.5	280.5	280.4	280.3	280.3	280.3	280.2
40.0	267.8	267.7	267.7	267.7	267.6	267.5	267.6	267.6	267.5
42.5	254.7	254.6	254.5	254.6	254.5	254.4	254.3	254.3	254.3
45.0	241.0	241.0	240.9	240.7	240.6	240.5	240.4	240.5	240.5
47.5	226.7	226.5	226.4	226.2	226.1	226.1	226.1	226.2	226.1
50.0	211.9	211.8	211.4	211.3	211.1	211.1	211.1	211.1	211.1
52.5	196.3	196.1	196.0	195.9	195.8	195.8	195.8	195.8	195.8
55.0	180.4	180.2	180.1	179.9	179.8	179.8	179.7	179.8	179.8
57.5	164.0	163.8	163.7	163.6	163.5	163.4	163.3	163.3	163.3
60.0	147.4	147.2	147.0	146.9	146.8	146.7	146.7	146.7	146.6
62.5	130.7	130.6	130.4	130.3	130.2	130.1	130.0	130.0	130.0
65.0	113.7	113.5	113.4	113.3	113.1	113.0	113.0	113.0	113.0
67.5	96.8	96.7	96.6	96.5	96.3	96.2	96.1	96.1	96.2
70.0	80.4	80.3	80.2	80.0	79.9	79.8	79.8	79.7	79.7
72.5	64.5	64.4	64.3	64.2	64.0	64.0	63.9	63.8	63.9
75.0	49.5	49.4	49.3	49.2	49.1	49.0	48.9	48.9	48.8
77.5	35.8	35.7	35.6	35.6	35.5	35.4	35.3	35.3	35.2
80.0	23.9	23.9	23.9	23.9	23.8	23.8	23.7	23.7	23.7
82.5	14.6	14.7	14.8	14.8	14.8	14.8	14.8	14.8	14.7
85.0	8.7	8.8	9.0	9.1	9.2	9.2	9.2	9.2	9.1
87.5	5.8	6.0	6.2	6.3	6.5	6.5	6.6	6.6	6.5
90.0	4.7	4.9	5.1	5.3	5.4	5.5	5.6	5.6	5.6

Report:	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L
Source:	
Date:	8/2/2018 5:04:56 PM

Zonal flux diagram R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution



Report:	R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48/1000L
Source:	
Date:	8/2/2018 5:04:56 PM

Zonal flux R-2148-1 V2 - LCIE IDF - KAUFEL LSC Primo3 ET 48_1000L / Distribution

Gamma [°]	Imin [cd/klm]	Imax [cd/klm]	Imean [cd/klm]	Zonal flux [lm]	Sum. zonal flux [lm]	Rel. zonal flux [%]	Sum. rel. zonal flux [%]
0.0	374.4	376.4	375.3	0.00	0.00	0.00	0.00
2.5	373.9	376.1	374.8	2.16	2.16	0.22	0.22
5.0	372.5	374.7	373.5	6.47	8.63	0.67	0.90
7.5	370.4	372.5	371.3	10.71	19.34	1.11	2.01
10.0	367.3	369.2	368.2	14.86	34.20	1.54	3.55
12.5	363.3	365.5	364.3	18.88	53.08	1.96	5.51
15.0	358.7	360.5	359.5	22.73	75.81	2.36	7.87
17.5	353.3	355.0	353.9	26.38	102.19	2.74	10.60
20.0	346.7	348.6	347.5	29.79	131.97	3.09	13.69
22.5	339.5	341.4	340.3	32.93	164.90	3.42	17.11
25.0	331.4	333.3	332.2	35.78	200.68	3.71	20.82
27.5	322.7	324.6	323.4	38.31	238.99	3.97	24.80
30.0	313.0	315.1	313.9	40.49	279.49	4.20	29.00
32.5	302.5	304.8	303.5	42.31	321.80	4.39	33.39
35.0	291.4	293.8	292.4	43.73	365.53	4.54	37.92
37.5	279.8	282.5	280.8	44.78	410.31	4.65	42.57
40.0	266.9	270.1	268.1	45.39	455.70	4.71	47.28
42.5	253.8	257.2	255.1	45.58	501.28	4.73	52.01
45.0	240.1	243.7	241.4	45.36	546.65	4.71	56.71
47.5	225.8	229.6	227.2	44.72	591.37	4.64	61.35
50.0	210.8	215.0	212.4	43.66	635.03	4.53	65.88
52.5	195.5	199.6	197.0	42.18	677.21	4.38	70.26
55.0	179.5	183.9	181.1	40.29	717.50	4.18	74.44
57.5	163.2	167.9	164.9	38.01	755.51	3.94	78.38
60.0	146.5	151.3	148.2	35.37	790.87	3.67	82.05
62.5	129.9	134.8	131.7	32.42	823.30	3.36	85.42
65.0	113.0	117.9	114.7	29.19	852.49	3.03	88.44
67.5	96.1	100.9	97.8	25.70	878.18	2.67	91.11
70.0	79.7	84.3	81.4	22.06	900.25	2.29	93.40
72.5	63.8	68.1	65.4	18.36	918.61	1.90	95.30
75.0	48.8	52.7	50.3	14.67	933.27	1.52	96.83
77.5	35.2	38.6	36.4	11.13	944.40	1.15	97.98
80.0	23.0	26.1	24.5	7.89	952.29	0.82	98.80
82.5	13.1	16.3	15.0	5.16	957.45	0.54	99.33
85.0	6.5	9.8	8.8	3.13	960.58	0.33	99.66
87.5	3.0	6.9	5.8	1.92	962.51	0.20	99.86
90.0	1.8	5.9	4.6	1.37	963.88	0.14	100.00