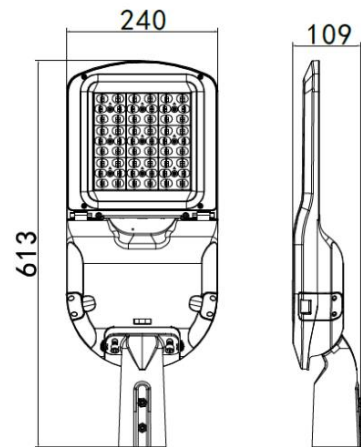




Product Overview

Product Name / Code	KINGSTON 75W Streetlight - LC6130-T3
Description	Spigot Dia 60mm, IP65, 4000K, T3 Optic
Manufacturer	Decrolux Lighting Pty Ltd



Laboratory and Equipment

System Name / Model	LabSpion / Freedom VIS (Custom Viso)
Manufacturer / Serial Number	Ibsen Photonics, Denmark / 2417457569
Sensor Name	LabSensor Model2
Sensor Serial Number / Calibration Date	3430823524 / 7/12/2022

Measurement Details

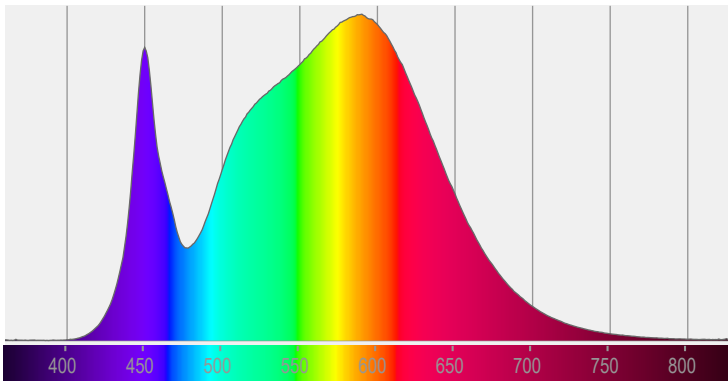
Test Date and Time	11/04/2023 12:23:19 PM
Operator	Johnny Elmer
C-Planes Measured	72
Measurement Resolution	5°
Measurement Distance	457.7cm
Measurement Number	VFR-230411-0050-MS
Tracking Link	http://www.visosystems.com/tracking/?id=VT230411-000555



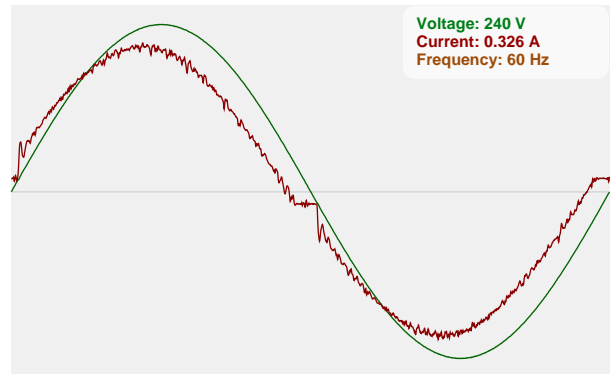
Performance

Total Lumen Output	11314 lm
Light Efficiency	148 Lumen/Watt
Peak (cd)	6199 cd
Nominal Power	76.6 W
Input Voltage	240 V
Frequency of Input Power	60 Hz
Power Factor	0.98
Warm-up (stabilisation) Time	Lamp stabilized in 56 min 13 sec
Warm-up Variation	-3.2

Spectral Power Distribution (SPD)



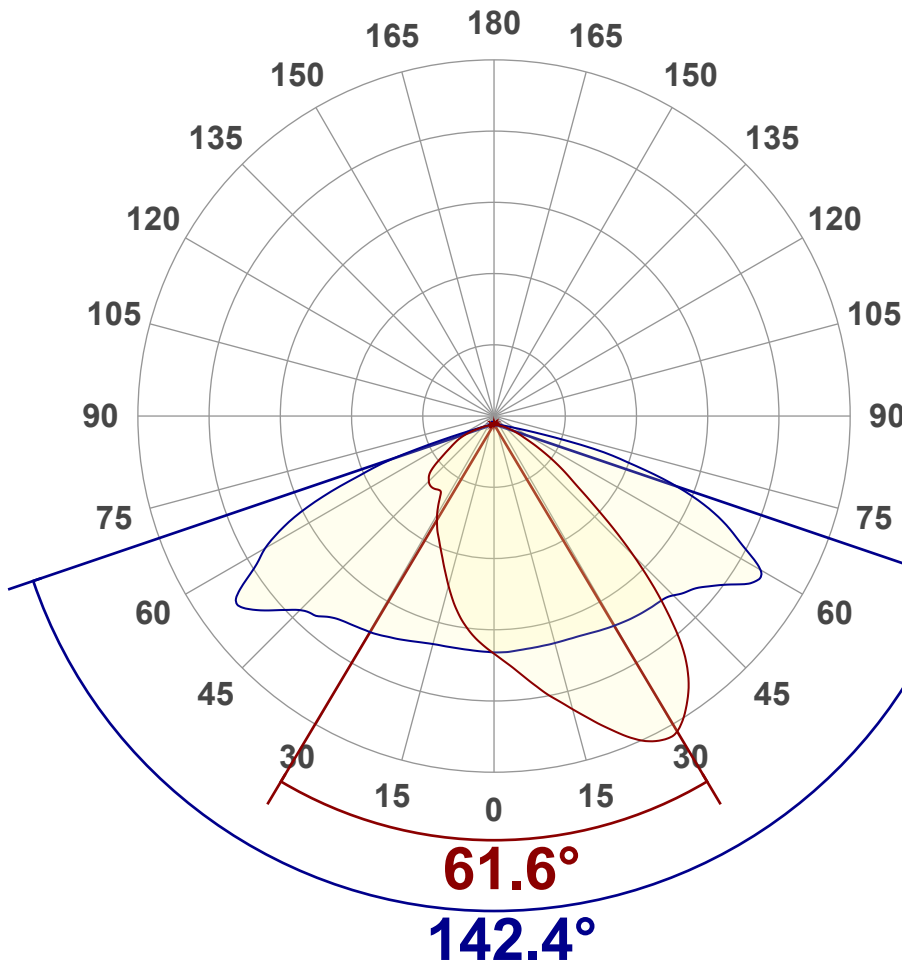
Input Power Curve



Optic Specifications

Correlated Colour Temperature, Target	4000K
Correlated Colour Temperature, Measured	4106K
Colour Rendering Index	CRI 78.9
R9 Value	R9 = -15.1
Colour Rendering TM30-18	R _f 83.1 - R _g 91.6
Colour Quality Scale	CQS = 80.8
Beam Angle	74.8°



Angular Distribution – 0° / 90° Plane

Main Values

Total Lumen Output	11314 lm
Lumen Up% / Down%	0.21 % / 99.79%
Peak Intensity	6199 cd
Beam Angle (50%)	74.8°
Beam Angle (90%)	142.4°
Beam Angle (10%)	62.2°

Cut-off Angle

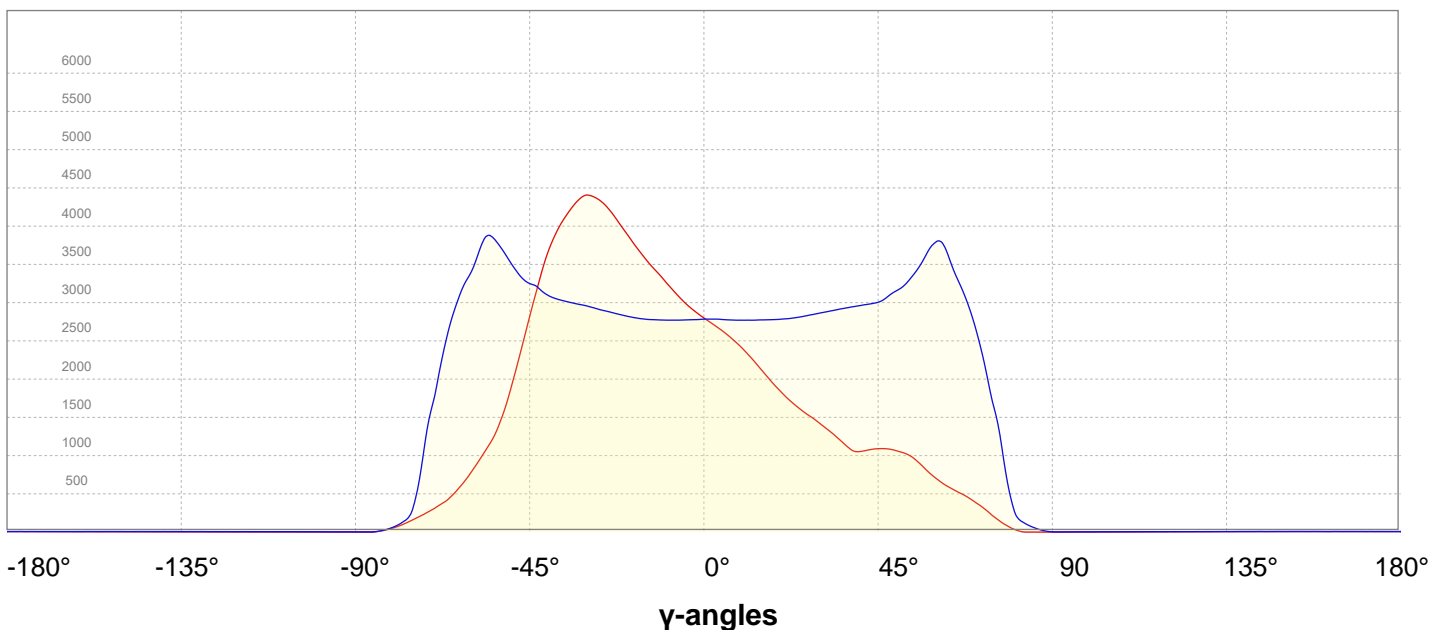
Average 2.5%	159.6°
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Field Angle

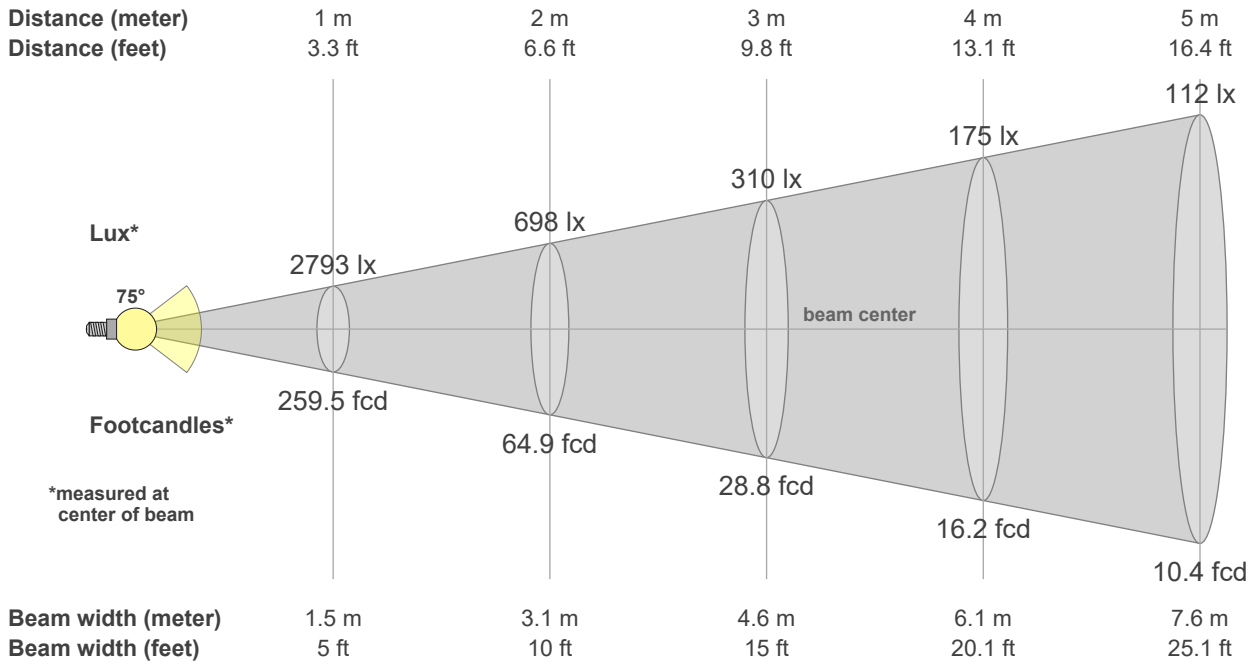
Average 10%	145.6°
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Intensity Ratio

In 120° Cone	78.0%
In 90° Cone	47.9%

C000-C180
C090-C270
Linear Distribution Diagram – Intensity (candela) vs γ -angle


Beam Details



Beam intensities from 1 – 20m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	m
3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6	ft
2793	698	310	175	112	78	57	44	34	28	23	19	17	14	12	11	10	9	8	7	lux
259.5	64.9	28.8	16.2	10.4	7.2	5.3	4.1	3.2	2.6	2.1	1.8	1.5	1.3	1.2	1	0.9	0.8	0.7	0.6	fc

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
2793	3003	3278	3566	3906	4247	4403	4179	3694	2817	1853	1181	791	480	298	165	58	4	1	1	cd
100%	108%	117%	128%	140%	152%	158%	150%	132%	101%	66%	42%	28%	17%	11%	6%	2%	0%	0%	0%	of 0°val

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
2793	2778	2770	2774	2783	2814	2864	2914	2958	3005	3163	3424	3791	3364	2692	1611	313	64	4	2	cd
100%	99%	99%	99%	100%	101%	103%	104%	106%	108%	113%	123%	136%	120%	96%	58%	11%	2%	0%	0%	of 0°val

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
2793	2621	2398	2112	1829	1602	1418	1210	1053	1090	1059	930	701	540	393	198	39	1	1	1	cd
100%	94%	86%	76%	65%	57%	51%	43%	38%	39%	38%	33%	25%	19%	14%	7%	1%	0%	0%	0%	of 0°val

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
2793	2773	2771	2783	2824	2886	2953	3008	3089	3250	3529	3865	3414	2809	1685	348	70	5	2	3	cd
100%	99%	99%	100%	101%	103%	106%	108%	111%	116%	126%	138%	122%	101%	60%	12%	3%	0%	0%	0%	Of 0°val

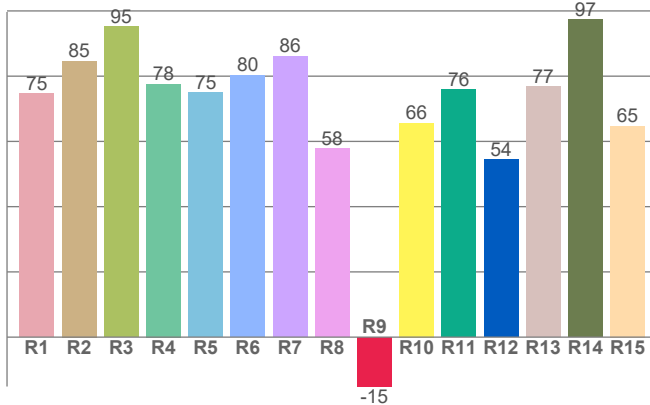


Colour Details

Correlated Colour Temperature, Target	CCT = 4000K
Correlated Colour Temperature, Measured	CCT = 4106K
Colour Rendering Index	CRI 78.9
Colour Rendering Index R9 Value	R9 = -15.1
Colour Rendering TM30-18	R _f 83.1, R _g 91.6
Colour Quality Scale	CQS = 80.8

MacAdam Steps	SDCM = 8.6
Colour Coordinates CIE 1931	(x;y) = (0.381;0.377)
Colour Coordinates CIEs 1960	(u;v) = (0.225; 0.334)
Colour Deviation from BBL	Duv = 0.0104
Colour Coordinate CIEs 1976 (CIELUV)	(u';v') = (0.225;0.225)

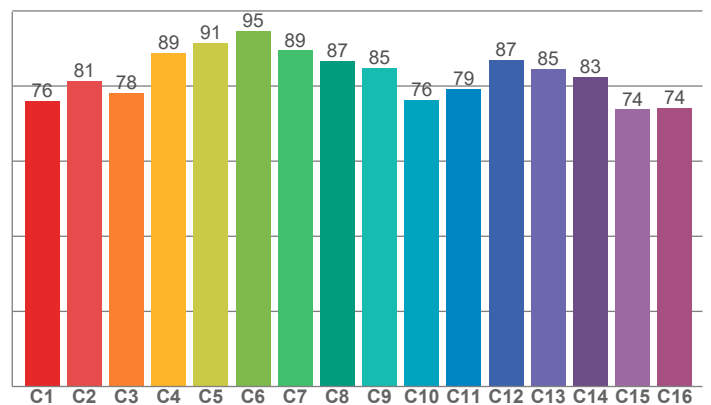
Colour Rendering Index per reference colour (CIE 1995)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
74.6	84.7	95.2	77.6	74.9	80.3	86.1	57.8	-15.1	65.6	75.8	54.4	76.8	97.3	64.7

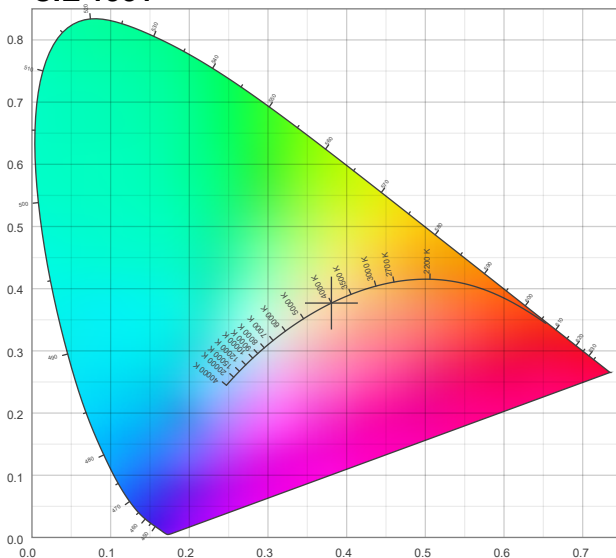
TM30-18 Rf-values per hue bin



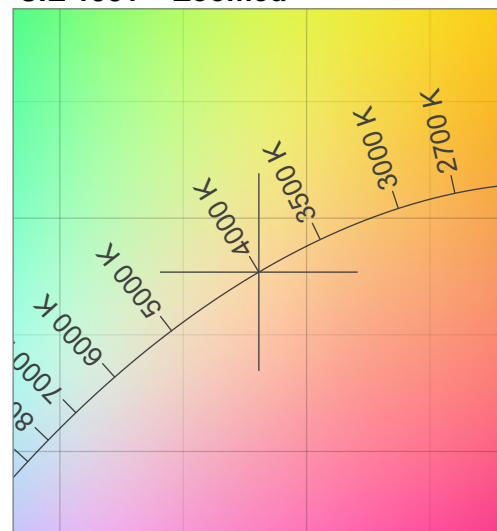
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76.0	81.3	78.3	88.9	91.4	94.6	89.5	86.7	84.9	76.4	79.3	87.0	84.6	82.5	73.8	74.2

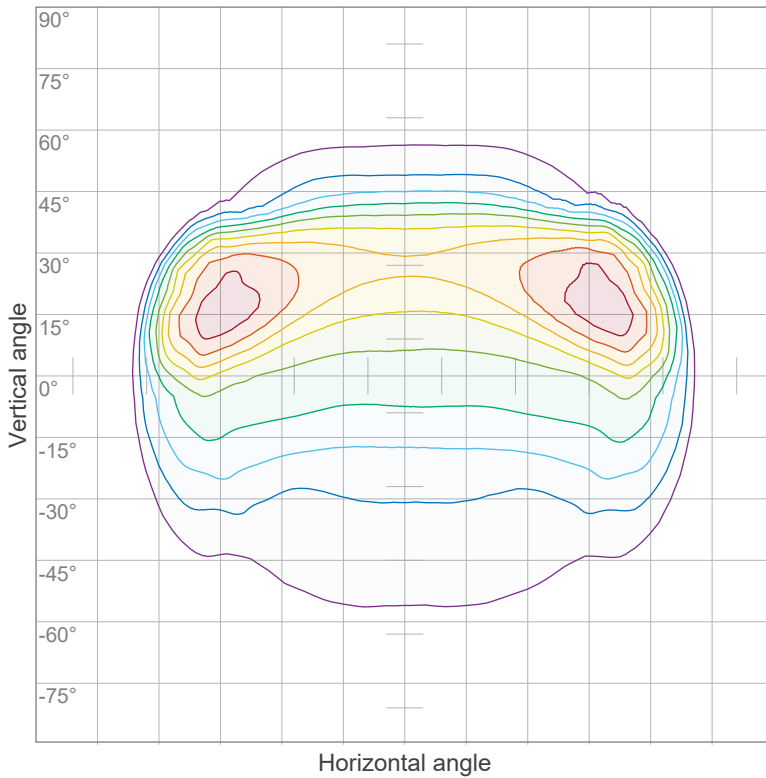
CIE 1931



CIE 1931 – Zoomed



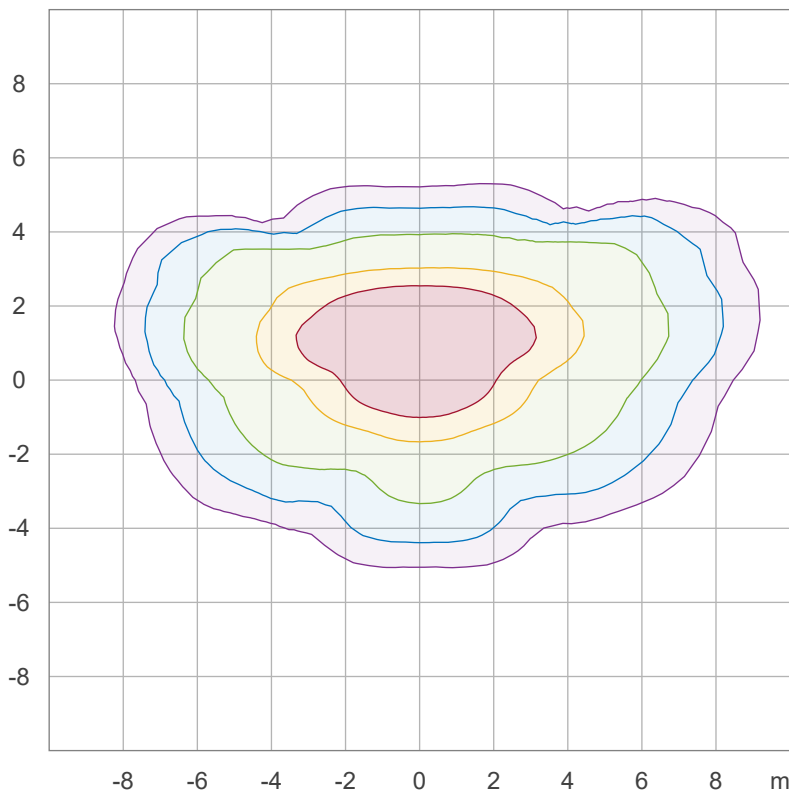
Iso-intensity Diagram (Iso-Candela)



90 %	5576.6 cd
80 %	4957.0 cd
70 %	4337.4 cd
60 %	3717.7 cd
50 %	3098.1 cd
40 %	2478.5 cd
30 %	1858.9 cd
20 %	1239.2 cd
10 %	619.6 cd

Peak intensity: 6196.2 cd
Number of c-planes: 72

Iso-illuminance Diagram (Iso-lux)



50.0 %	180.1 lx
30.0 %	108.0 lx
10.0 %	36.0 lx
5.0 %	18.0 lx
3.0 %	10.8 lx

Peak illuminance: 360.1 lx
Mounting height: 3.0 m
Number of c-planes: 72



Light Planning – UGR table

Uncorrected, comprehensive UGR table according to 117-1995

Reflectances		70	70	50	50	30	70	70	50	50	30
ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20
Room size		Viewed Crosswise					Viewed Endwise				
H = mounting height above eye level		(Viewing direction orthogonal to lamp length axis)					(Viewing direction parallel to lamp length axis)				
X	Y	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Variations with the observer position for the luminaire spacings, S:		
n/a		n/a
n/a		n/a
n/a		n/a

UGR data could not be calculated due to missing dimensions. Goto Edit->Photometric->Dimensions and set the fixture/lamp dimensions.

Coefficients of Utilization

Ceiling reflectance	80	70	50	30	10	0
Wall reflectance	70 50 30	10 70 50	30 10 50	30 10 50	30 10 50	30 10 0
Floor reflectance	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20	20 20 0
RCR (RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumen delivered to the task surface						
0	119 119 119	119 116 116	116 116 111	111 111 106	106 106 102	102 102 100
1	109 104 100	96 106 102	98 94 98	94 91 94	91 89 90	88 86 84
2	98 90 83	77 96 88	82 76 84	79 74 81	77 73 78	74 71 69
3	89 78 70	63 86 76	69 62 73	67 61 71	65 60 68	63 59 57
4	81 68 59	52 79 67	58 52 64	57 51 62	56 50 60	54 50 47
5	74 60 51	44 72 59	50 44 57	49 43 55	48 43 53	47 42 40
6	68 54 45	38 66 53	44 38 51	43 37 49	42 37 48	41 37 34
7	63 48 39	33 61 48	39 33 46	38 32 44	37 32 43	37 32 30
8	58 44 35	29 56 43	35 29 42	34 29 40	33 28 39	33 28 26
9	54 40 31	26 52 39	31 25 38	31 25 37	30 25 36	30 25 23
10	50 37 28	23 49 36	28 23 35	28 23 34	27 23 33	27 22 21

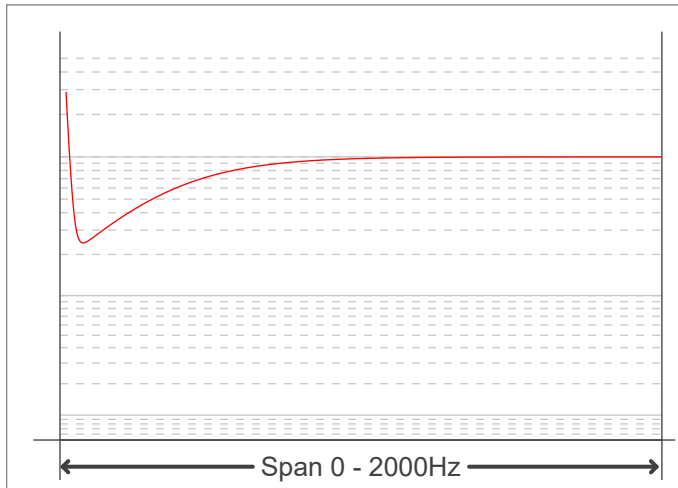
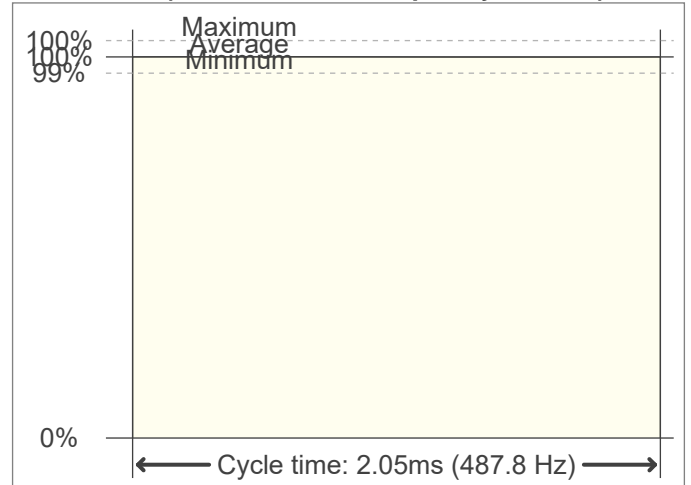


Flicker Details

Flicker Meter Type	Viso Systems LabFlicker
Frequency of Input Power	60 Hz
Flicker/TLA Sample Rate	20000 sample/s
Measurement Time	
PstLM	180 sec
All other indices	1.2 sec

Flicker Indices (IES)

Flicker Percentage	0.22%
Flicker Frequency	487.8 Hz
Flicker Index	0
Flicker SVM Value	0
Flicker PstLM Value	0.04

Flicker Frame

Flicker FFT (flicker curve in frequency domain)

IEEE 1789 Frequency/Modulation Plot
