

Play 13W

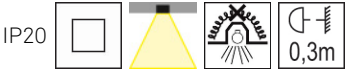
Leds C4 Team

71-3226-14-37

Module Play 13W 13W 3000K CRI 80 White IP20 1297lm



TECHNICAL FEATURES

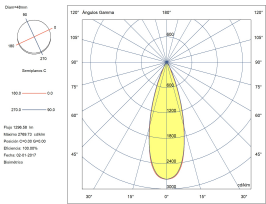
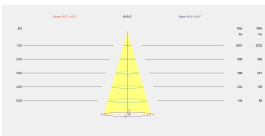


Power (W) : 13W
Total power consumption of light (W) : 14.4W
Real lumens : 1297
Real lm/W : 90
Correlated Colour Temperature (CCT) : LED warm-white 3000K
Lens / reflector angle : MEDIUM 33°
Structure material : Polycarbonate, Aluminium
Structure finish : White
Diffuser material : Methacrylate
Diffuser finish : Transparent

Equipment included : Yes, electronic
Voltage / frequency : 100-240V/50-60Hz
Warranty : 2 Years
Useful life : 50.000h L80B20
Max. temperature : 25°C
Energy efficiency : LED A++

LUMINOTECHNIC FEATURES

Light source: LED CREE
CRI: 80
MacAdam steps: 2
Photobiological risk: RG1



LOGISTICS

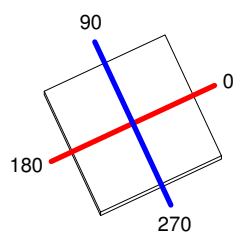




Luminaire			Measurem.			Lamp		
Code	71-3226+71-3283		Code	71-3226+71-3283		Code	LED	
Name	REFLECTOR 15º		Name	REFLECTOR 15º		Number	1	
Line	PLAY		Date	15-10-2013		Position		
Efficiency			95.61%		Coordinate system	CG	Total Flux	1200.00 lm
Maximum value			4089.67 cd		Position	C=120.00 G=0.00	Asymmetrical	
Rectangular Luminaire			Length	39 mm	Width	39 mm	Height	1 mm
Rectangular Luminous Area			Length	39 mm	Width	39 mm	Height	0 mm
Horizontal Luminous Area			0.001521 m2		Emitting area on Plane 180º		0.000000 m2	
Emitting area on Plane 0º			0.000000 m2		Emitting area on Plane 270º		0.000000 m2	
Emitting area on Plane 90º			0.000000 m2		Glare area at 76º		0.000368 m2	
Symmetry Type			Asymmetrical		Maximum Gamma Angle		90	
Measurement Distance			0.00		Measurement Flux		1200.00 lm	
Operator					Source voltage			
Temperature			25.00 °C		Source current			
Humidity			60.00 %		Photocell			
Notes								

Luminaire Lamps					
Line	Code	Name	Flux [lm]	Pow. [W]	Q.ty
Eulumdat	LED	LED - 13.00 W	1200.00	13.00	1
C.I.E.	91 98 99 100 96	D DIN 5040		A60	
F UTE	0.96 A	B NBN		BZ 1	

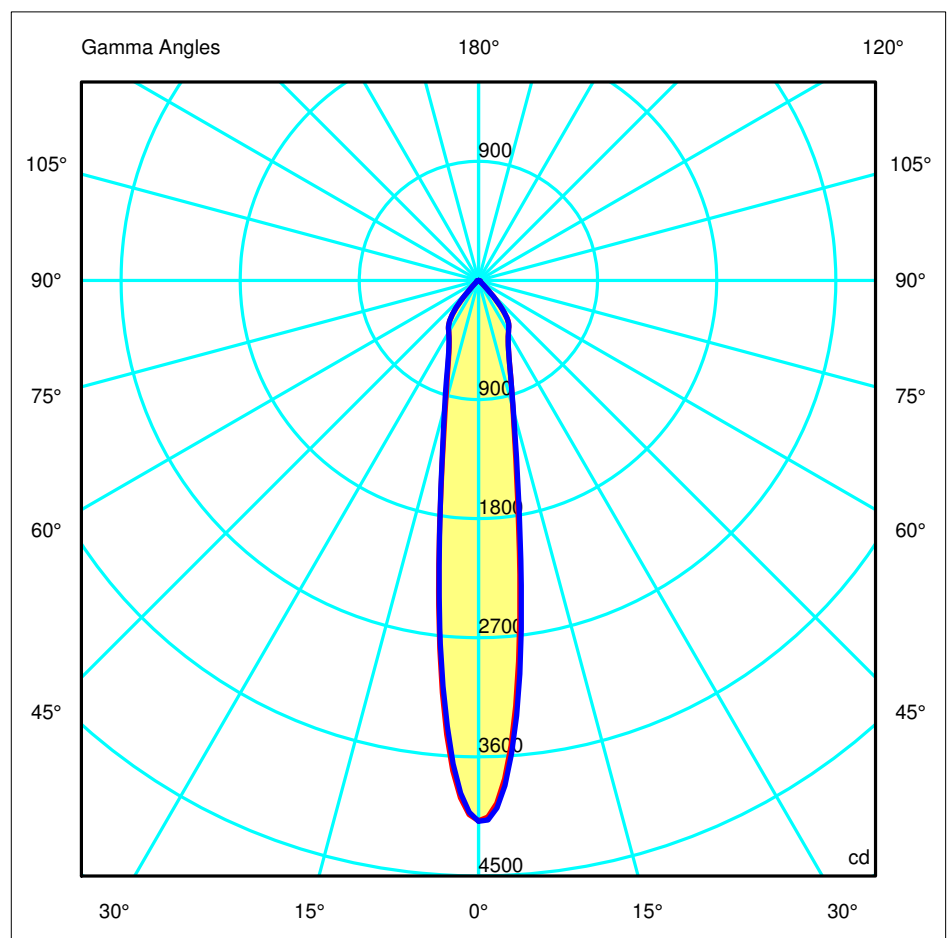
39mm x 39mm



C Halfplanes

180.0 — 0.0
270.0 — 90.0

ULOR 0.00 %
DLOR 95.61 %
RN 0.00 %

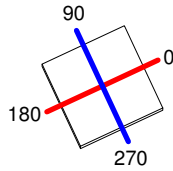
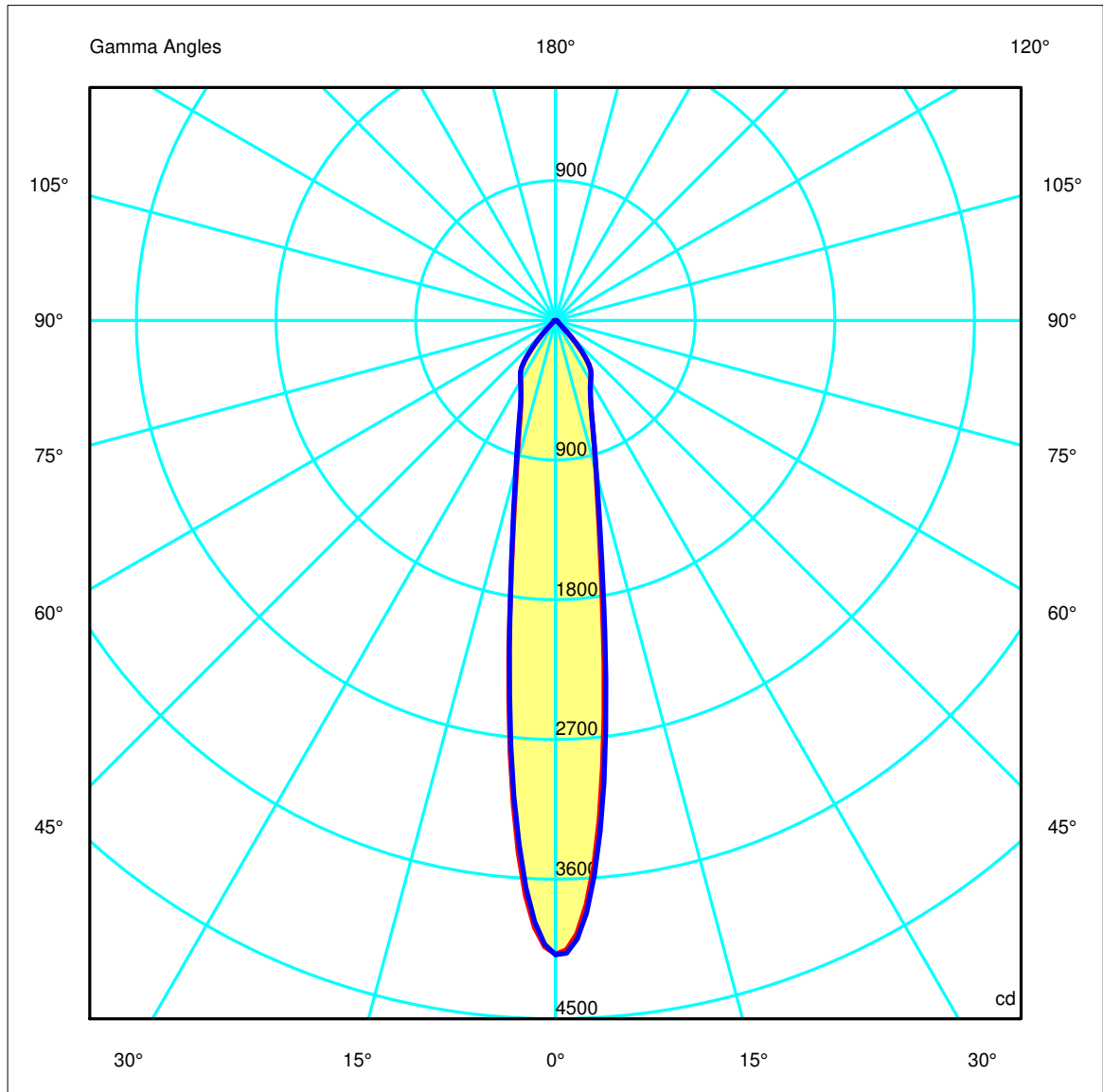


Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

39mm x 39mm

C Halfplanes

180.0 ————— 0.0
270.0 ————— 90.0

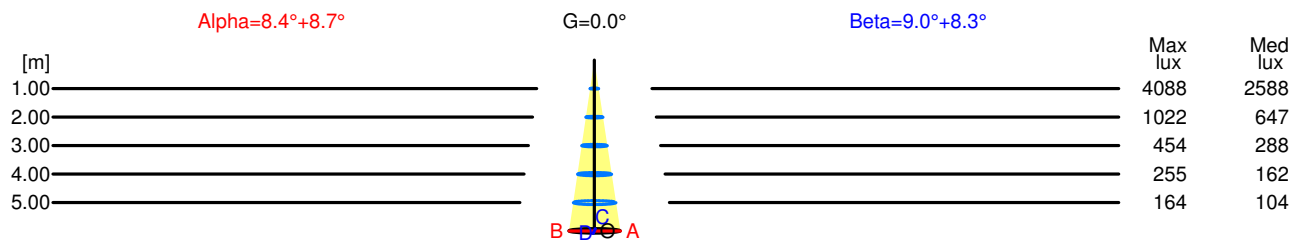


Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

Width at 50.00 % of MaxLux

H[m]	1.00	2.00	3.00	4.00	5.00	H[m]	1.00	2.00	3.00	4.00	5.00
OA	0.15	0.31	0.46	0.61	0.77	OC	0.16	0.32	0.47	0.63	0.79
OB	0.15	0.30	0.44	0.59	0.74	OD	0.15	0.29	0.44	0.59	0.73

	Luminous Intensities [cd]									
	0	5	15	25	35	45	55	65	75	85
OA	4082.47	3229.16	1009.17	530.79	399.10	104.66	20.12	12.16	9.91	1.20
OB	4082.47	3126.75	962.47	523.73	388.59	83.48	20.12	12.16	10.06	1.05
OC	4085.77	3300.18	1019.23	531.69	397.30	102.85	21.92	12.46	10.51	1.35
OD	4085.77	3077.20	988.45	528.23	388.29	86.49	20.27	12.01	10.06	1.50



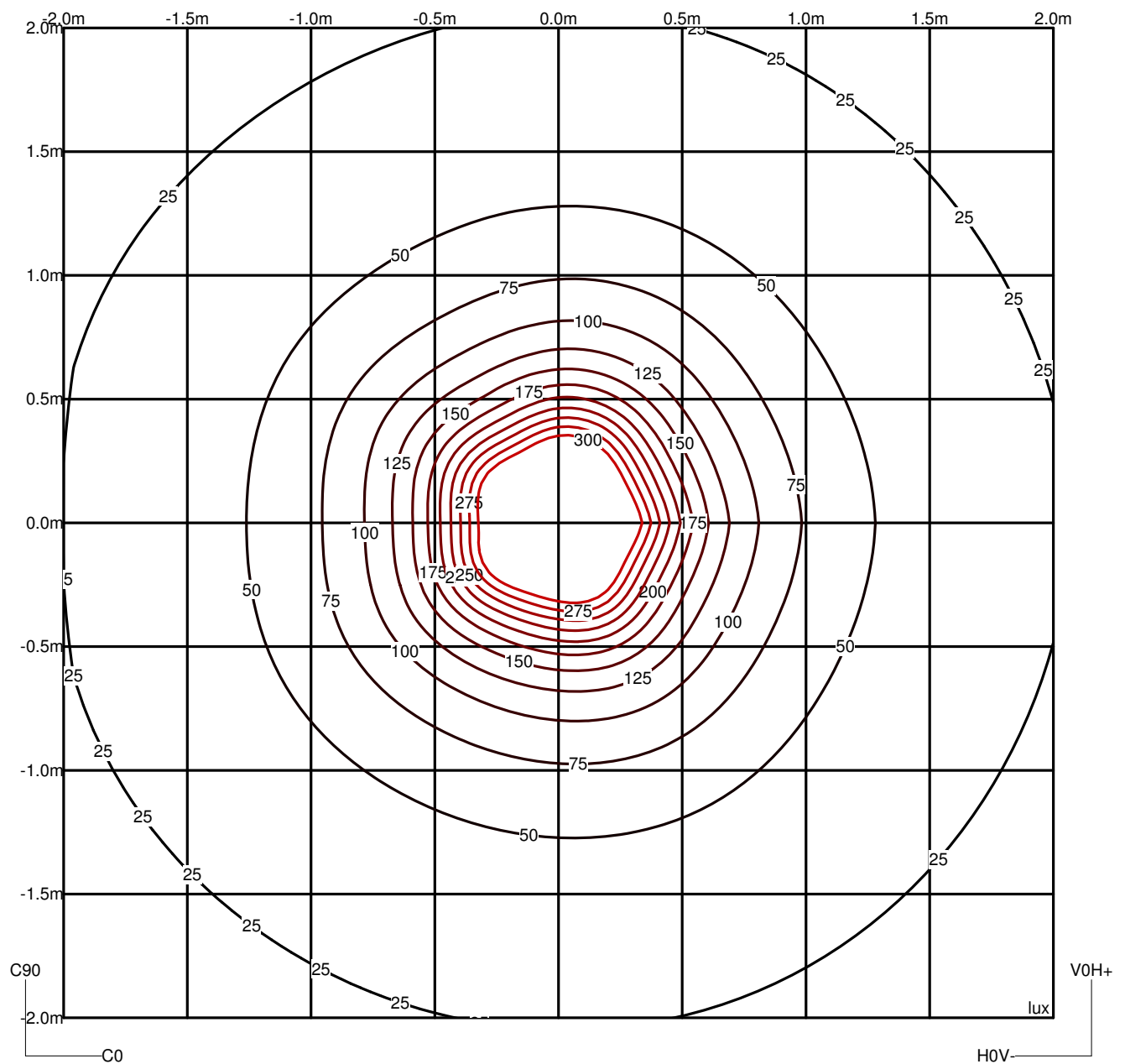
H[m]	D[m]	Max lux	Med lux	Alpha=8.4°+8.7°	G=0.0	
1.00	0.30	4088	2588			
2.00	0.60	1022	647			
3.00	0.90	454	288			
4.00	1.20	255	162			
5.00	1.51	164	104			

H[m]	D[m]	Max lux	Med lux	Beta=8.3°+9.0°	G=0.0	
1.00	0.30	4088	2588			
2.00	0.61	1022	647			
3.00	0.91	454	288			
4.00	1.22	255	162			
5.00	1.52	164	104			

Luminaire		Measurem.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

Isolux (Floor)

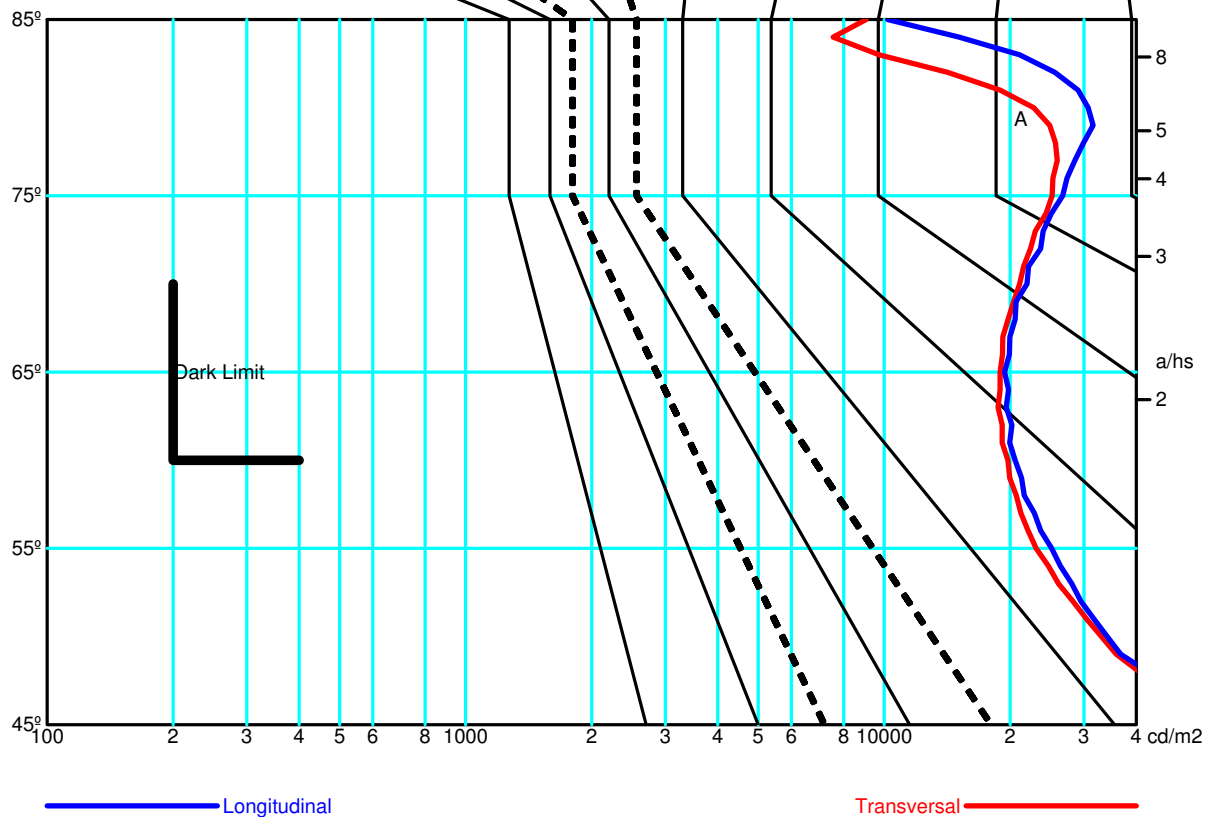
Luminaire position X=0.00m Y=0.00m Z=3.00m



Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

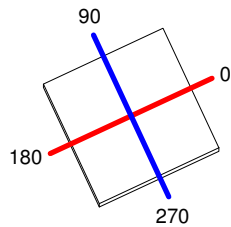
	45°	50°	55°	60°	65°	70°	75°	80°	85°	
0.0°	97312	33017	23063	19750	18917	21068	25174	22755	9052	---
90.0°	95629	34091	25126	20539	19384	21933	26698	30706	10184	---

Flush mounted or longitudinal view												
		Illumination(lx)										
A	A	2000	1000	750	500		<300					1.15
B	1		2000	1500	1000	750	500	<300				1.5
C					2000		1000	500	<300			1.85
D	2						2000	1000	500	<300		2.2
E	3							2000	1000	500	<300	2.55



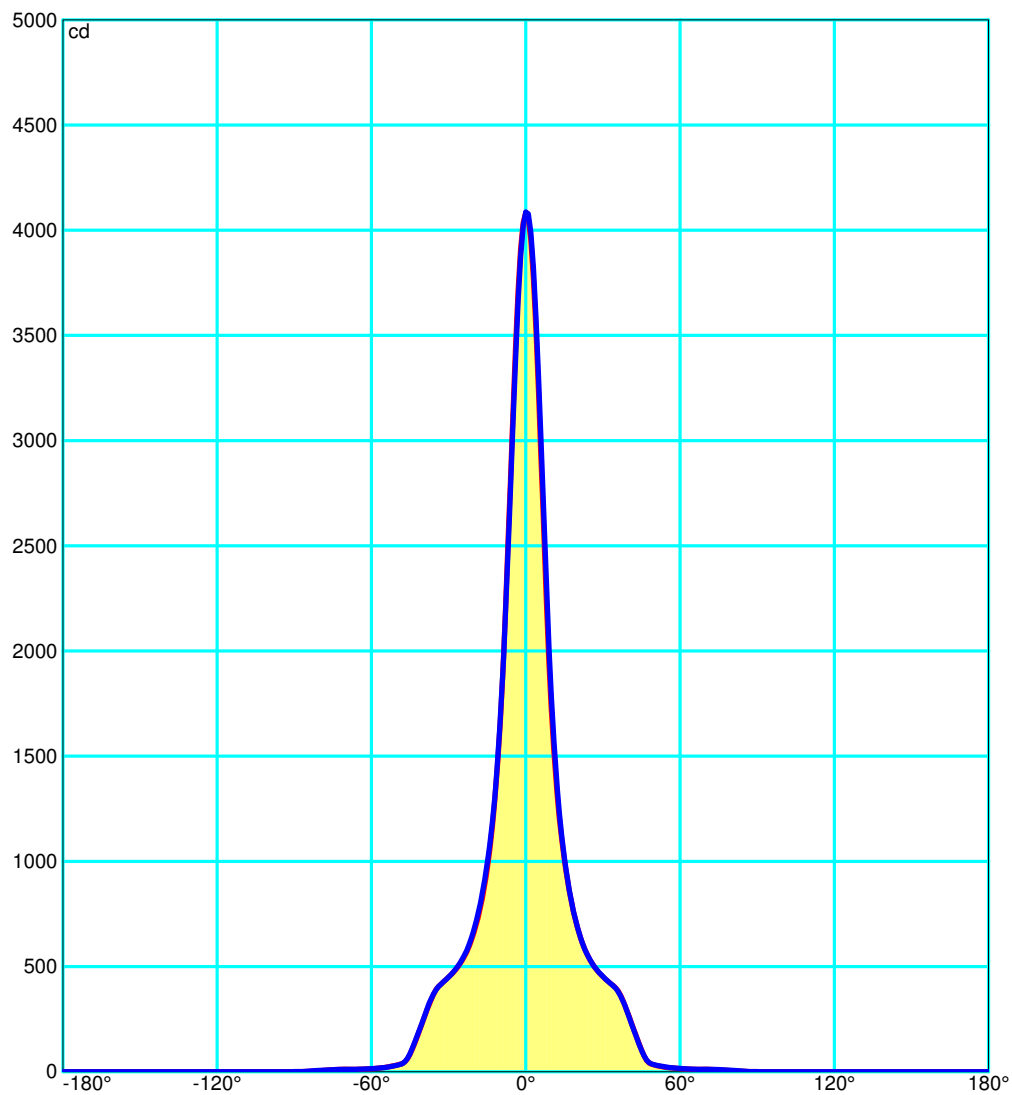
Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

39mm x 39mm



C Halfplanes

180.0 ————— 0.0
270.0 ————— 90.0



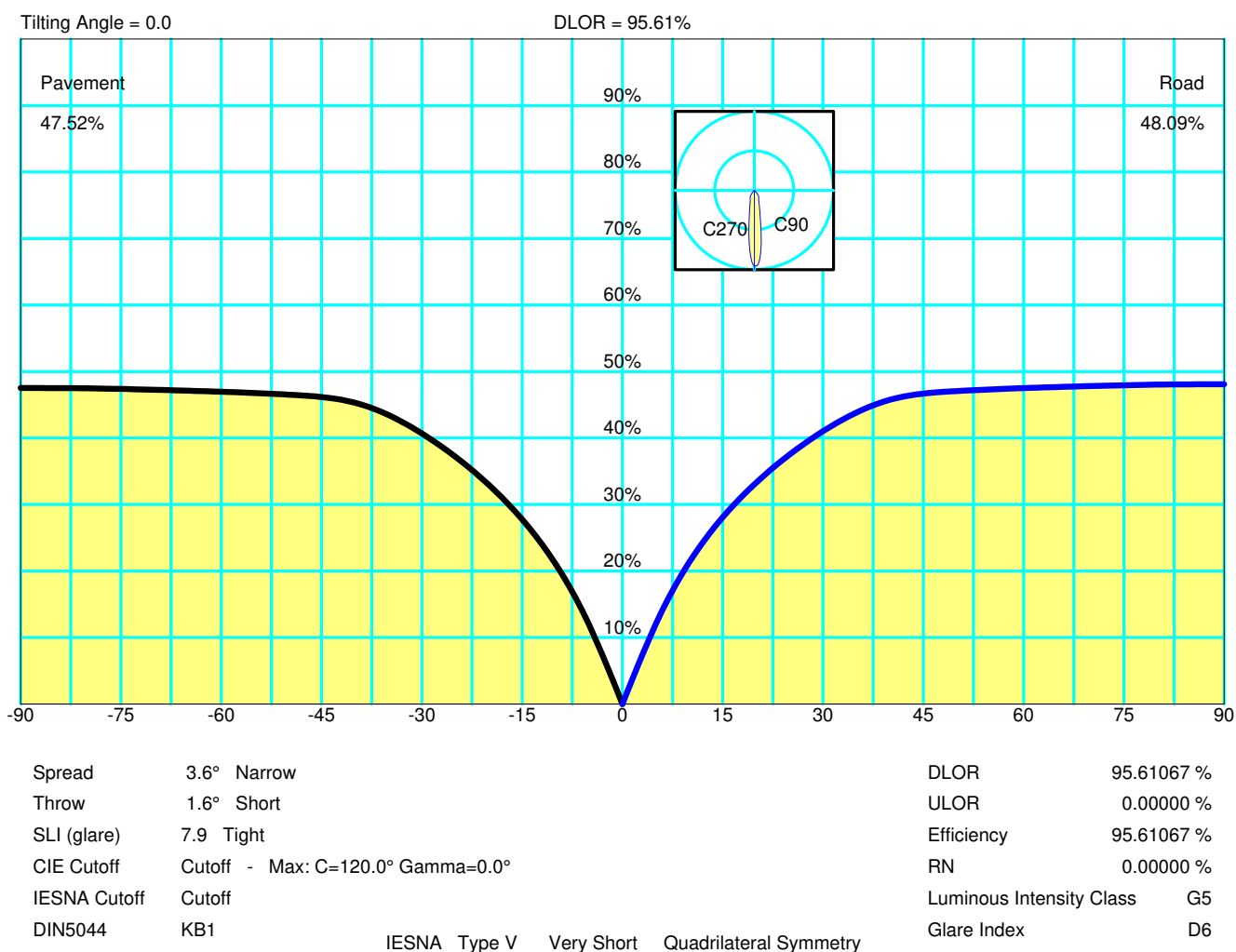
Luminaire		Measurem.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
Name	REFLECTOR 15°	Name	REFLECTOR 15°	Number	1
Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

UGR
S = 0.250

Reflectancies										
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
WorkingPlane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
RoomDimensions	ViewedCrosswise					ViewedEndwise				
x=2H y=2H	23.6	24.4	23.9	24.6	24.7	23.6	24.3	23.8	24.5	24.7
x=2H y=3H	23.7	24.4	24.0	24.6	24.8	23.6	24.3	23.9	24.6	24.8
x=2H y=4H	23.8	24.5	24.1	24.7	24.9	23.8	24.4	24.1	24.7	24.9
x=2H y=6H	24.0	24.5	24.3	24.8	25.1	24.0	24.5	24.3	24.8	25.1
x=2H y=8H	24.0	24.5	24.3	24.8	25.2	24.0	24.6	24.4	24.9	25.2
x=2H y=12H	23.9	24.5	24.3	24.8	25.2	24.0	24.5	24.4	24.8	25.2
x=4H y=2H	23.5	24.1	23.8	24.4	24.6	23.5	24.1	23.8	24.3	24.6
x=4H y=3H	23.7	24.2	24.0	24.5	24.8	23.6	24.2	24.0	24.5	24.8
x=4H y=4H	23.9	24.4	24.3	24.7	25.0	23.9	24.3	24.3	24.7	25.0
x=4H y=6H	24.2	24.6	24.6	25.0	25.4	24.2	24.6	24.6	25.0	25.4
x=4H y=8H	24.2	24.6	24.6	24.9	25.4	24.3	24.7	24.7	25.0	25.4
x=4H y=12H	24.2	24.5	24.6	24.9	25.5	24.3	24.6	24.8	25.0	25.5
x=8H y=4H	24.0	24.4	24.5	24.8	25.1	24.0	24.3	24.4	24.7	25.1
x=8H y=6H	24.4	24.7	24.9	25.1	25.5	24.4	24.7	24.9	25.1	25.5
x=8H y=8H	24.4	24.7	24.9	25.1	25.7	24.5	24.8	25.0	25.2	25.7
x=8H y=12H	24.4	24.6	24.9	25.0	25.7	24.5	24.7	25.0	25.2	25.7
x=12H y=4H	24.0	24.3	24.5	24.7	25.1	24.0	24.3	24.4	24.7	25.1
x=12H y=6H	24.4	24.6	24.9	25.1	25.5	24.4	24.6	24.9	25.1	25.5
x=12H y=8H	24.4	24.6	24.9	25.1	25.7	24.5	24.7	25.0	25.2	25.7

Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
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Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

Pavement			Road		
Piano	0	0.00%	Piano	0	0.00%
Piano	-5	11.93%	Piano	5	12.03%
Piano	-10	21.07%	Piano	10	21.33%
Piano	-15	27.77%	Piano	15	28.08%
Piano	-20	32.98%	Piano	20	33.29%
Piano	-25	37.20%	Piano	25	37.52%
Piano	-30	40.69%	Piano	30	41.02%
Piano	-35	43.47%	Piano	35	43.83%
Piano	-40	45.30%	Piano	40	45.75%
Piano	-45	46.17%	Piano	45	46.68%
Piano	-50	46.53%	Piano	50	47.06%
Piano	-55	46.77%	Piano	55	47.31%
Piano	-60	46.96%	Piano	60	47.51%
Piano	-65	47.12%	Piano	65	47.67%
Piano	-70	47.26%	Piano	70	47.81%
Piano	-75	47.38%	Piano	75	47.94%
Piano	-80	47.47%	Piano	80	48.03%
Piano	-85	47.51%	Piano	85	48.07%
Piano	-90	47.52%	Piano	90	48.09%



Luminaire		Measur.		Lamp	
Code	71-3226+71-3283	Code	71-3226+71-3283	Code	LED
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Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm

Total Flux=1200.00 Luminaire Flux=1147.33

RI	0.60	0.80	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	10.00	20.00
DRR	0.66	0.71	0.77	0.81	0.84	0.89	0.92	0.95	0.97	0.98	1.00	1.01
RC	-	-	-	-	-	-	-	-	-	-	-	-

Zonal Flux per 1000 Lumen

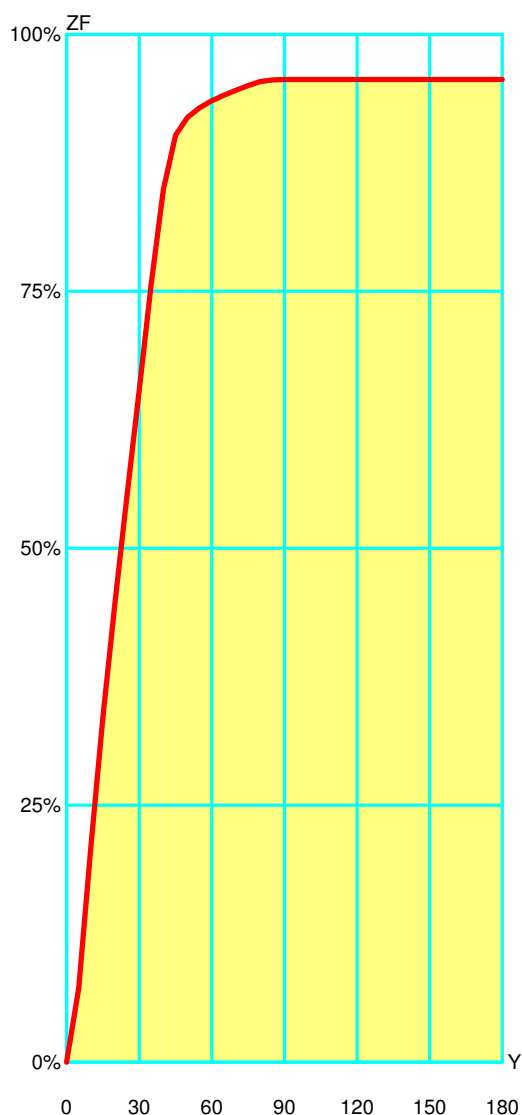
Y°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
ZF(Y)	210	448	654	849	919	935	946	954	956	956	956	956	956	956	956	956	956	956

CIE Flux Codes

91 98 99 100 96

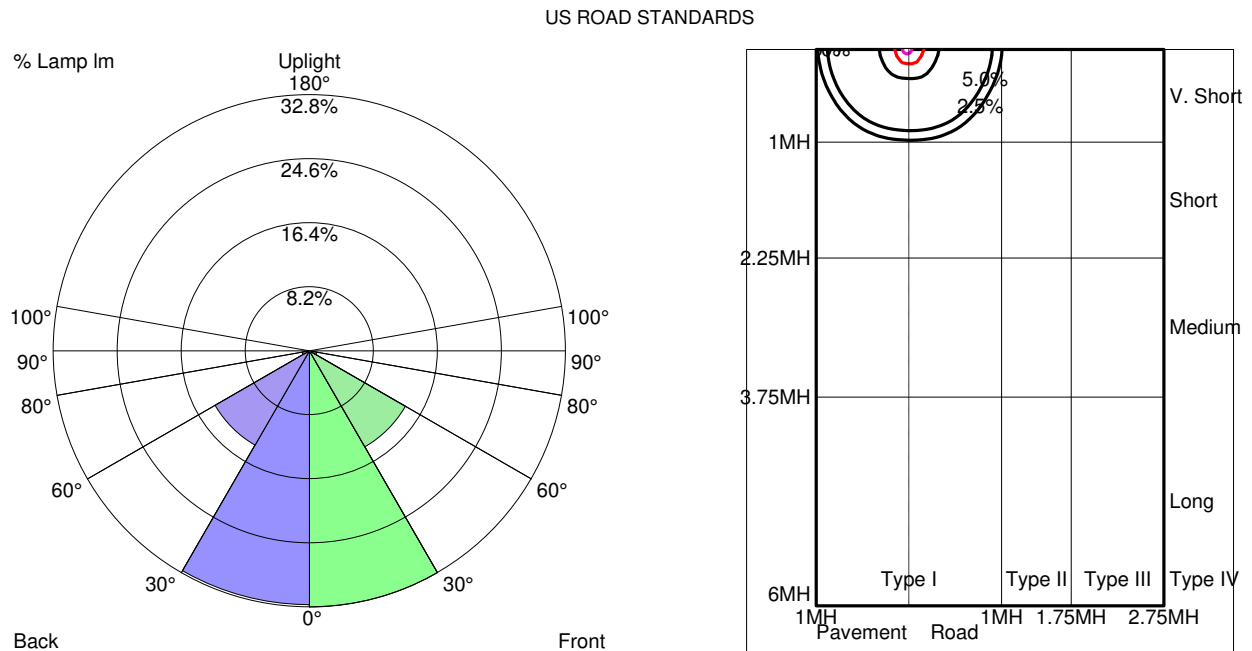
C.I.E. -/-/-/-/-/-/-/-/-
D DIN 5040 A60
F UTE 0.96 A
B NBN BZ 1
RN 0.00000 %
BLF 1.0

LOR 95.61067 %
ULOR 0.00000 %
DLOR 95.61067 %
UFF 0.00000 %
DFF 100.00000 %
FFR 0.00000 %



Zonal Flux				
Gamma °	Flux	Sum lm	Flux [%]	Sum [%]
0°	0.00	0.00	0.00 %	0.00 %
5°	72.02	72.02	7.53 %	7.53 %
10°	137.81	209.83	14.41 %	21.95 %
15°	125.66	335.50	13.14 %	35.09 %
20°	112.38	447.88	11.75 %	46.84 %
25°	103.95	551.82	10.87 %	57.72 %
30°	102.17	653.99	10.69 %	68.40 %
35°	103.50	757.50	10.83 %	79.23 %
40°	91.70	849.19	9.59 %	88.82 %
45°	52.67	901.86	5.51 %	94.33 %
50°	17.47	919.33	1.83 %	96.15 %
55°	9.35	928.68	0.98 %	97.13 %
60°	6.70	935.38	0.70 %	97.83 %
65°	5.39	940.77	0.56 %	98.40 %
70°	4.83	945.59	0.50 %	98.90 %
75°	4.57	950.16	0.48 %	99.38 %
80°	3.90	954.06	0.41 %	99.79 %
85°	1.58	955.64	0.16 %	99.95 %
90°	0.47	956.11	0.05 %	100.00 %
95°	0.00	956.11	0.00 %	100.00 %
100°	0.00	956.11	0.00 %	100.00 %
105°	0.00	956.11	0.00 %	100.00 %
110°	0.00	956.11	0.00 %	100.00 %
115°	0.00	956.11	0.00 %	100.00 %
120°	0.00	956.11	0.00 %	100.00 %
125°	0.00	956.11	0.00 %	100.00 %
130°	0.00	956.11	0.00 %	100.00 %
135°	0.00	956.11	0.00 %	100.00 %
140°	0.00	956.11	0.00 %	100.00 %
145°	0.00	956.11	0.00 %	100.00 %
150°	0.00	956.11	0.00 %	100.00 %
155°	0.00	956.11	0.00 %	100.00 %
160°	0.00	956.11	0.00 %	100.00 %
165°	0.00	956.11	0.00 %	100.00 %
170°	0.00	956.11	0.00 %	100.00 %
175°	0.00	956.11	0.00 %	100.00 %
180°	0.00	956.11	0.00 %	100.00 %

Luminaire		Measur.		Lamp	
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Line	PLAY	Date	15-10-2013	Position	
Efficiency	95.61%	Coordinate system	CG	Total Flux	1200.00 lm



Luminaire Classification System (LCS)				
LCS Zone		Lumens	%Lamp	%Lum
FL	0° -- 30°	394.0 lm	32.8 %	34.3 %
FM	30° -- 60°	170.5 lm	14.2 %	14.9 %
FH	60° -- 80°	11.3 lm	0.9 %	1.0 %
FVH	80° -- 90°	1.3 lm	0.1 %	0.1 %
BL	0° -- 30°	390.5 lm	32.5 %	34.0 %
BM	30° -- 60°	167.5 lm	14.0 %	14.6 %
BH	60° -- 80°	11.2 lm	0.9 %	1.0 %
BVH	80° -- 90°	1.2 lm	0.1 %	0.1 %
UL	90° -- 100°	0.0 lm	0.0 %	0.0 %
UH	100° -- 180°	0.0 lm	0.0 %	0.0 %
TOTALS		1147.3 lm	95.6 %	100.0 %
BUG B1 U0 G0 Type V Very Short Quadrilateral Symmetry				

