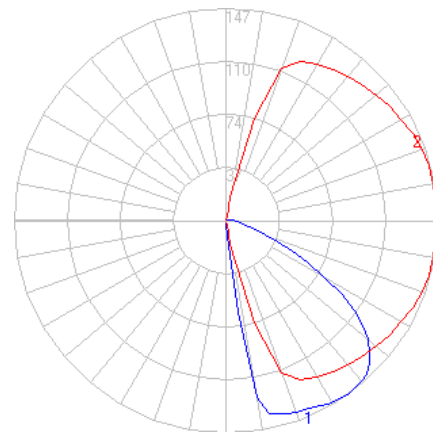


BEGA

File: 24151K4_BEGA_IES.ies

TEST: BE_24151K4
 TEST LAB: BEGA
 DATE: 04/18/2016
 LUMINAIRE: 24 151K4
 LAMP: 4.0W LED



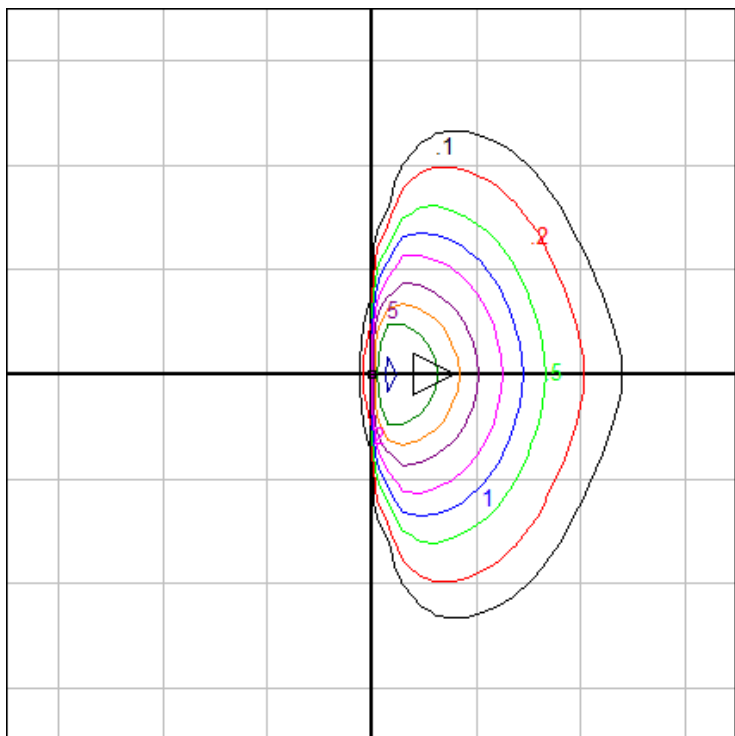
Characteristics

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	191
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	27
Total Luminaire Watts	7
Ballast Factor	1.00
Upward Waste Light Ratio	0.01
Max. Cd.	147 (0H, 35V)
Max. Cd. (<90 Vert.)	147 (0H, 35V)
Max. Cd. (At 90 Deg. Vert.)	6.4 (3.4%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	10.9 (5.7%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

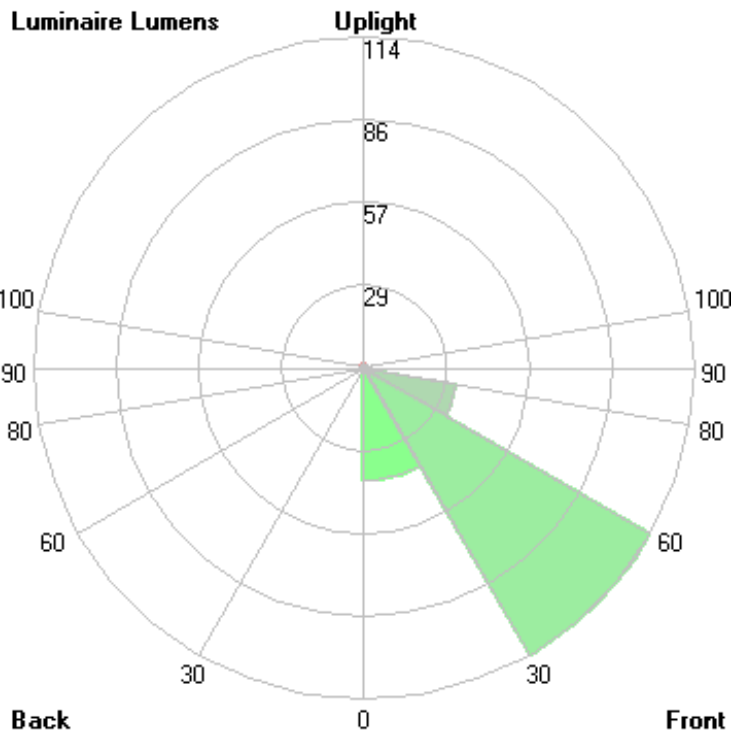
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	39.0	N.A.	20.5
FM (30-60)	114.3	N.A.	59.9
FH (60-80)	32.5	N.A.	17.0
FVH (80-90)	2.5	N.A.	1.3
BL (0-30)	< 0.05	N.A.	0.0
BM (30-60)	< 0.05	N.A.	0.0
BH (60-80)	< 0.05	N.A.	0.0
BVH (80-90)	< 0.05	N.A.	0.0
UL (90-100)	1.1	N.A.	0.6
UH (100-180)	1.4	N.A.	0.7
Total	190.8	N.A.	100.0

BUG Rating B0-U1-G0



Mounting Height: 1.5 ft.

Grid Spacing: 2.5 ft.

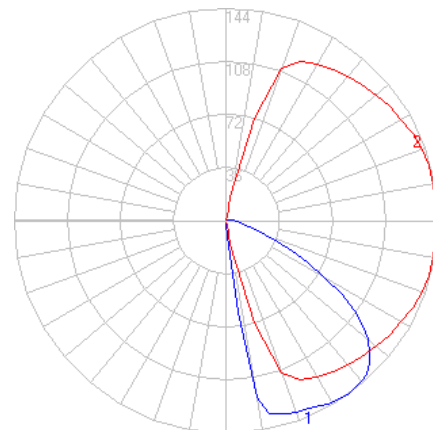


In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 24151K35_BEGA_IES.ies

TEST: BE_24151K4
 TEST LAB: BEGA
 DATE: 04/18/2016
 LUMINAIRE: 24 151K35
 LAMP: 4.0W LED



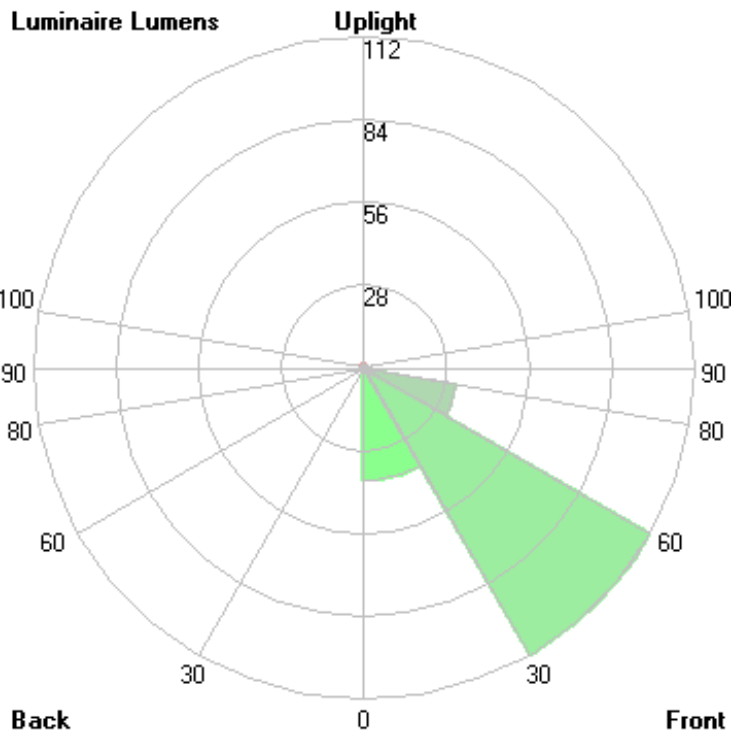
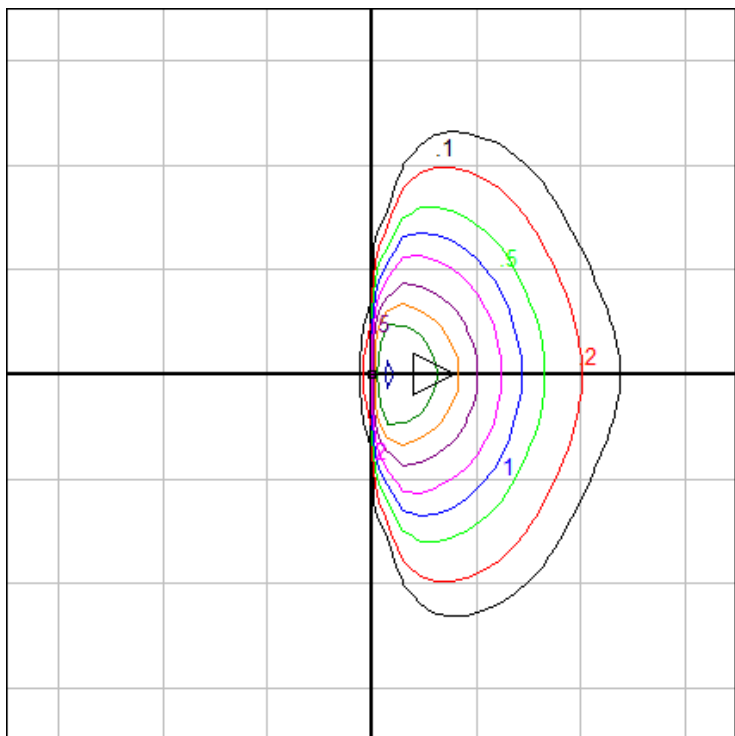
Characteristics

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	187
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	27
Total Luminaire Watts	7
Ballast Factor	1.00
Upward Waste Light Ratio	0.01
Max. Cd.	144.06 (0H, 35V)
Max. Cd. (<90 Vert.)	144.06 (0H, 35V)
Max. Cd. (At 90 Deg. Vert.)	6.272 (3.4%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	10.682 (5.7%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	38.2	N.A.	20.5
FM (30-60)	112.0	N.A.	60.0
FH (60-80)	31.8	N.A.	17.0
FVH (80-90)	2.4	N.A.	1.3
BL (0-30)	< 0.05	N.A.	0.0
BM (30-60)	< 0.05	N.A.	0.0
BH (60-80)	< 0.05	N.A.	0.0
BVH (80-90)	< 0.05	N.A.	0.0
UL (90-100)	1.0	N.A.	0.6
UH (100-180)	1.4	N.A.	0.7
Total	186.8	N.A.	100.0

BUG Rating B0-U1-G0



Mounting Height: 1.5 ft.

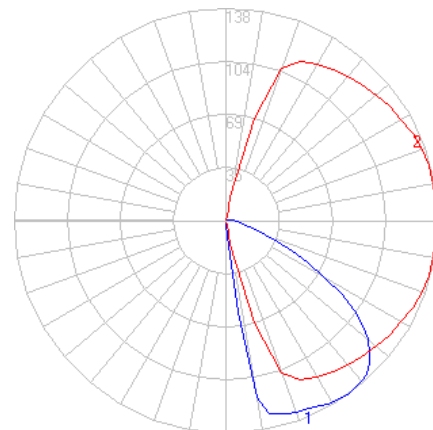
Grid Spacing: 2.5 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 24151K3_BEGA_IES.ies

TEST: BE_24151K4
 TEST LAB: BEGA
 DATE: 04/18/2016
 LUMINAIRE: 24 151K3
 LAMP: 4.0W LED



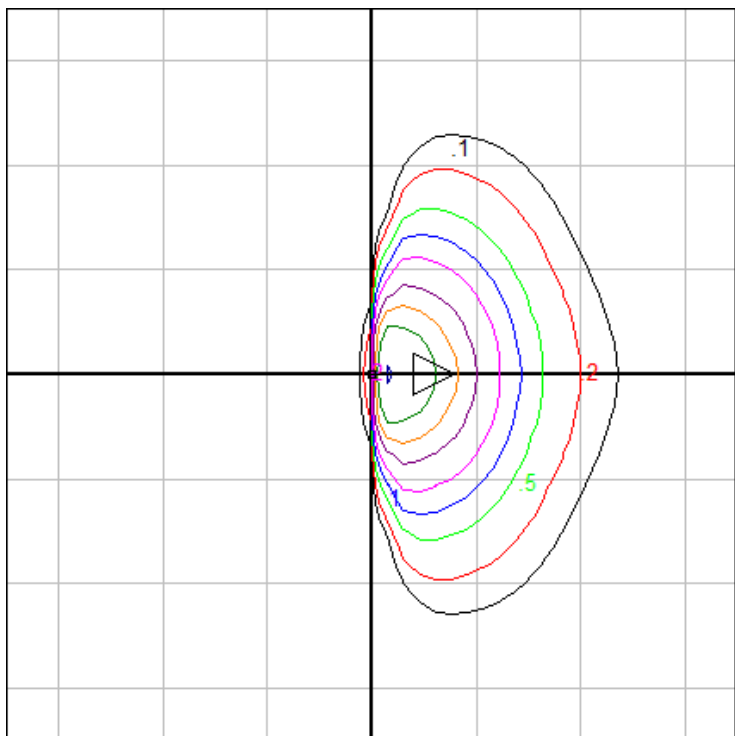
Characteristics

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	179
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	26
Total Luminaire Watts	7
Ballast Factor	1.00
Upward Waste Light Ratio	0.01
Max. Cd.	138.18 (0H, 35V)
Max. Cd. (<90 Vert.)	138.18 (0H, 35V)
Max. Cd. (At 90 Deg. Vert.)	6.016 (3.4%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	10.246 (5.7%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

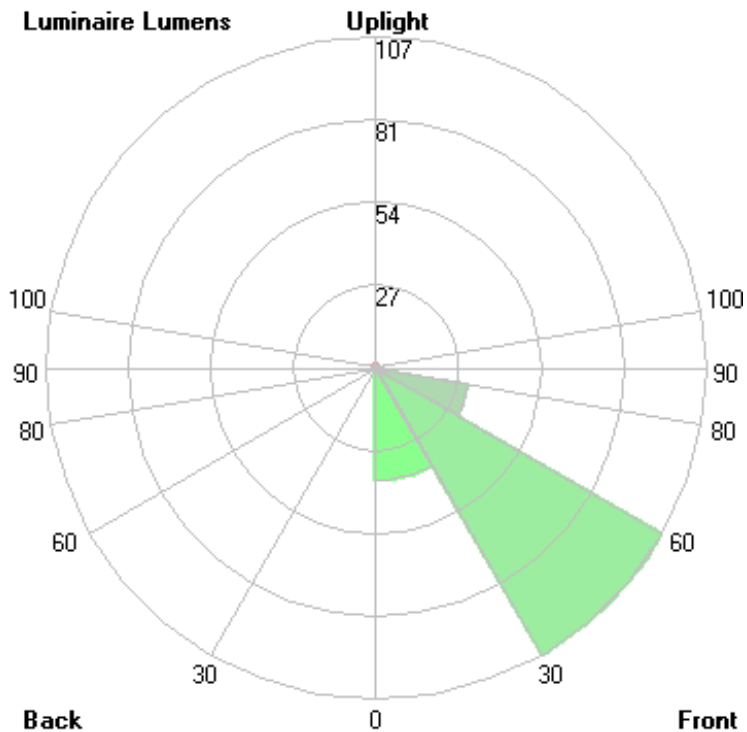
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	36.7	N.A.	20.5
FM (30-60)	107.5	N.A.	59.9
FH (60-80)	30.5	N.A.	17.0
FVH (80-90)	2.3	N.A.	1.3
BL (0-30)	< 0.05	N.A.	0.0
BM (30-60)	< 0.05	N.A.	0.0
BH (60-80)	< 0.05	N.A.	0.0
BVH (80-90)	< 0.05	N.A.	0.0
UL (90-100)	1.0	N.A.	0.6
UH (100-180)	1.3	N.A.	0.7
Total	179.3	N.A.	100.0

BUG Rating B0-U1-G0



Mounting Height: 1.5 ft.

Grid Spacing: 2.5 ft.

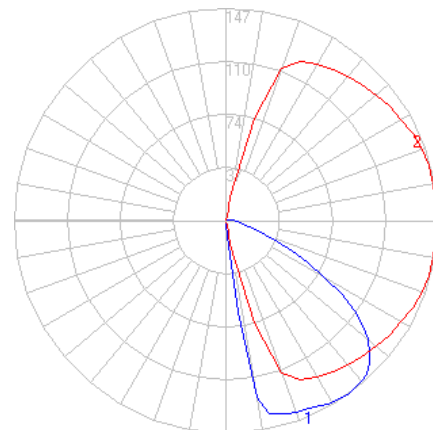


In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 24151K27_BEGA_IES.ies

TEST: BE_24151K4
 TEST LAB: BEGA
 DATE: 04/18/2016
 LUMINAIRE: 24 151K27
 LAMP: 4.0W LED



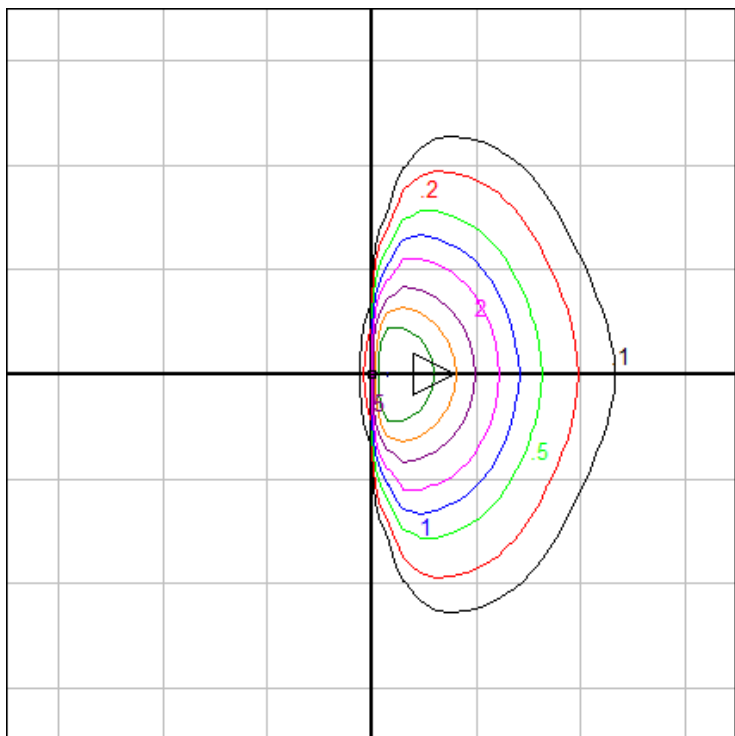
Characteristics

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	172
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	25
Total Luminaire Watts	7
Ballast Factor	1.00
Upward Waste Light Ratio	0.01
Max. Cd.	132.3 (0H, 35V)
Max. Cd. (<90 Vert.)	132.3 (0H, 35V)
Max. Cd. (At 90 Deg. Vert.)	5.76 (3.3%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	9.81 (5.7%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

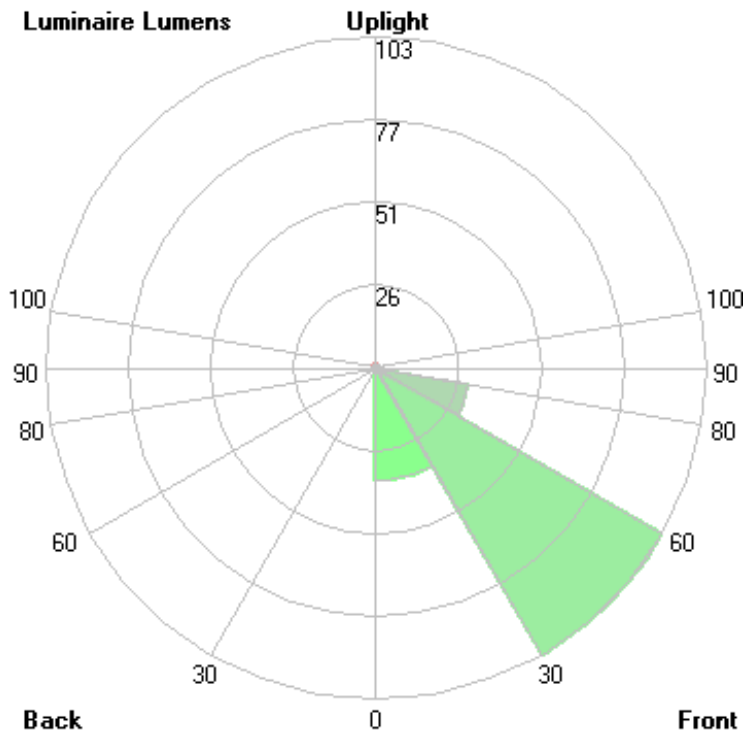
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	35.1	N.A.	20.5
FM (30-60)	102.9	N.A.	59.9
FH (60-80)	29.2	N.A.	17.0
FVH (80-90)	2.2	N.A.	1.3
BL (0-30)	< 0.05	N.A.	0.0
BM (30-60)	< 0.05	N.A.	0.0
BH (60-80)	< 0.05	N.A.	0.0
BVH (80-90)	< 0.05	N.A.	0.0
UL (90-100)	1.0	N.A.	0.6
UH (100-180)	1.3	N.A.	0.7
Total	171.7	N.A.	100.0

BUG Rating B0-U1-G0



Mounting Height: 1.5 ft.

Grid Spacing: 2.5 ft.



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.