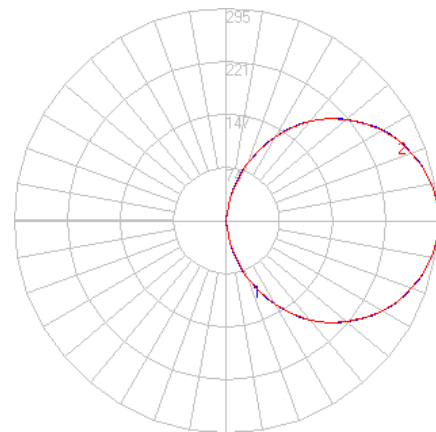


BEGA

File: 84411K4_BEGA_IES.ies

TEST: BE_84411K4
 TEST LAB: BEGA
 DATE: 04/26/2017
 LUMINAIRE: 84 411K4
 LAMP: 9.3W LED



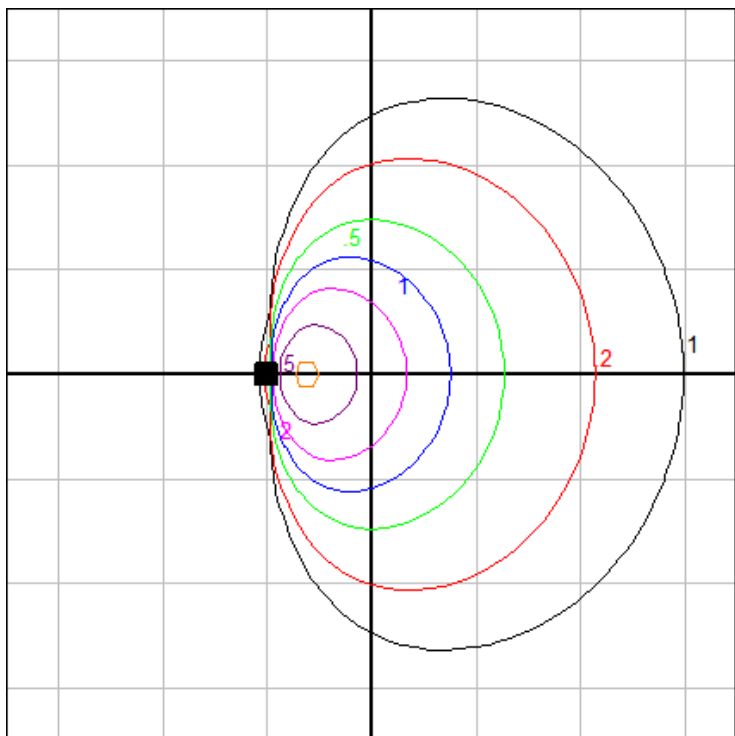
Characteristics

IES Classification	N.A.
Longitudinal Classification	N.A.
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	853
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	57
Total Luminaire Watts	15
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Max. Cd.	294.9 (0H, 90V)
Max. Cd. (<90 Vert.)	294.7 (0H, 87.5V)
Max. Cd. (At 90 Deg. Vert.)	294.9 (34.6%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	294.7 (34.5%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

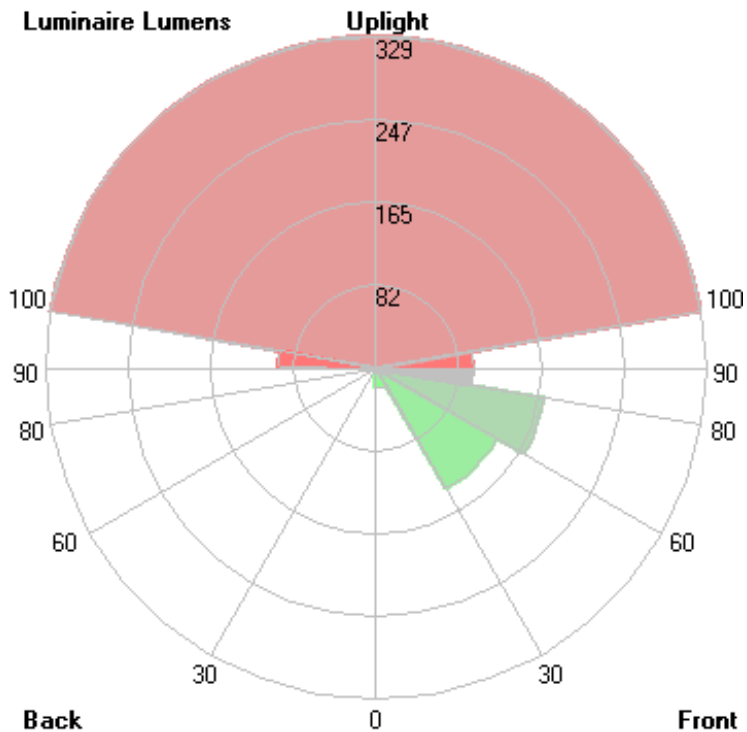
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	19.7	N.A.	2.3
FM (30-60)	139.4	N.A.	16.3
FH (60-80)	170.2	N.A.	20.0
FVH (80-90)	97.1	N.A.	11.4
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)	97.1	N.A.	11.4
UH (100-180)	329.3	N.A.	38.6
Total	852.8	N.A.	100.0

BUG Rating B0-U3-G1



Grid Spacing: 5 ft.

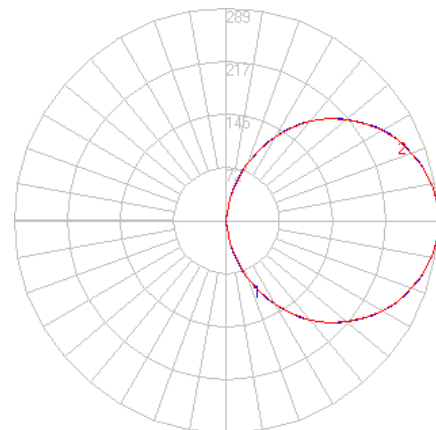


In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 84411K35_BEGA_IES.ies

TEST: BE_84411K4
 TEST LAB: BEGA
 DATE: 04/26/2017
 LUMINAIRE: 84 411K35
 LAMP: 9.3W LED



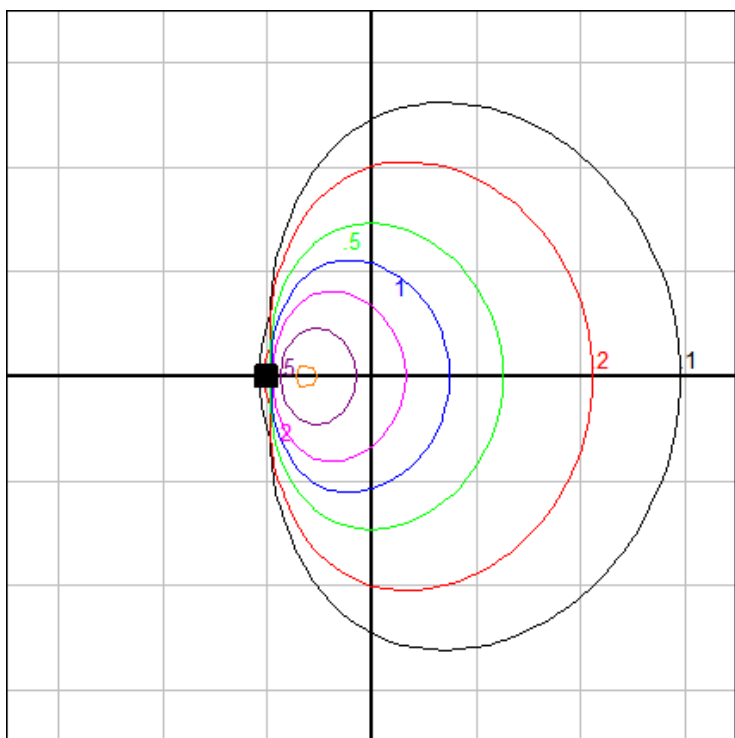
Characteristics

IES Classification	N.A.
Longitudinal Classification	N.A.
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	836
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	56
Total Luminaire Watts	15
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Max. Cd.	289.002 (0H, 90V)
Max. Cd. (<90 Vert.)	288.806 (0H, 87.5V)
Max. Cd. (At 90 Deg. Vert.)	289.002 (34.6%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	288.806 (34.5%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

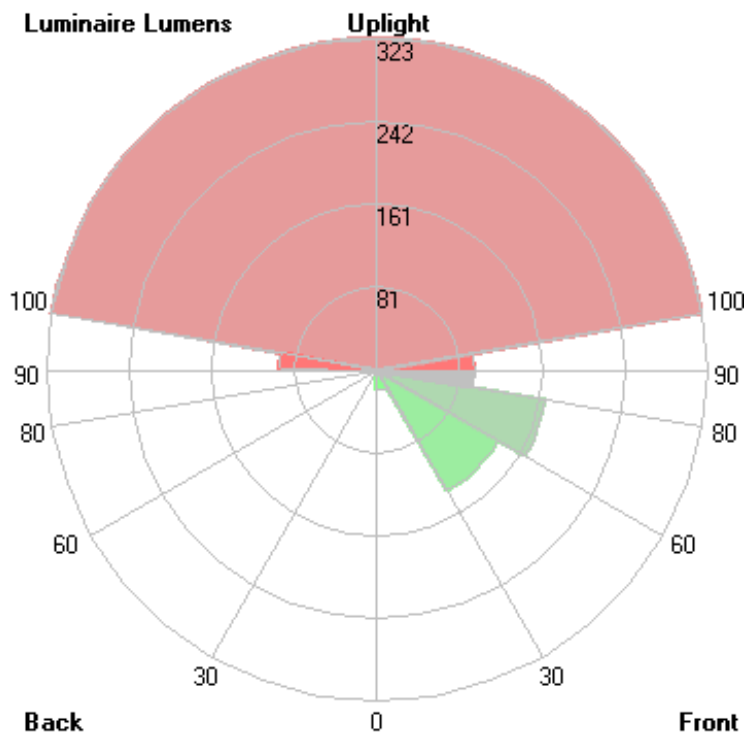
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	19.3	N.A.	2.3
FM (30-60)	136.6	N.A.	16.3
FH (60-80)	166.8	N.A.	20.0
FVH (80-90)	95.1	N.A.	11.4
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)	95.1	N.A.	11.4
UH (100-180)	322.7	N.A.	38.6
Total	835.6	N.A.	100.0

BUG Rating B0-U3-G1



Grid Spacing: 5 ft.

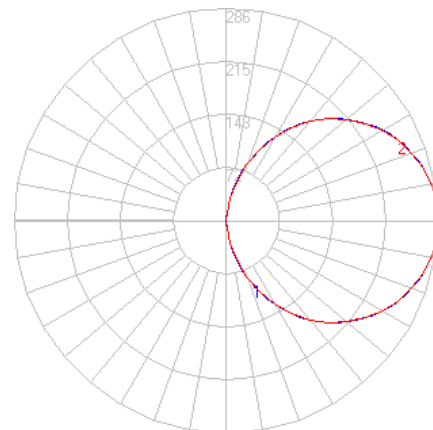


In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 84411K3_BEGA_IES.ies

TEST: BE_84411K4
 TEST LAB: BEGA
 DATE: 04/26/2017
 LUMINAIRE: 84 411K3
 LAMP: 9.3W LED



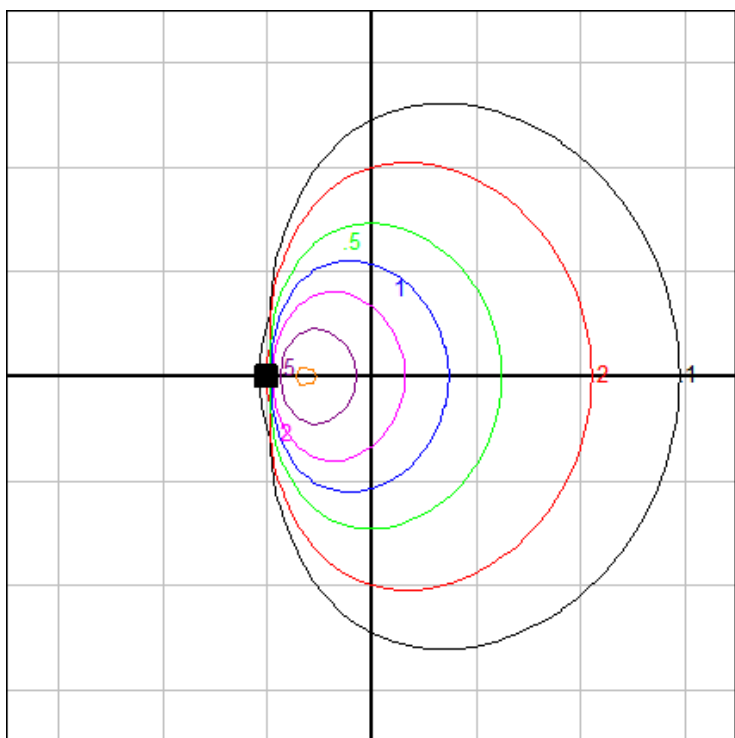
Characteristics

IES Classification	N.A.
Longitudinal Classification	N.A.
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	827
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	55
Total Luminaire Watts	15
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Max. Cd.	286.053 (0H, 90V)
Max. Cd. (<90 Vert.)	285.859 (0H, 87.5V)
Max. Cd. (At 90 Deg. Vert.)	286.053 (34.6%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	285.859 (34.6%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

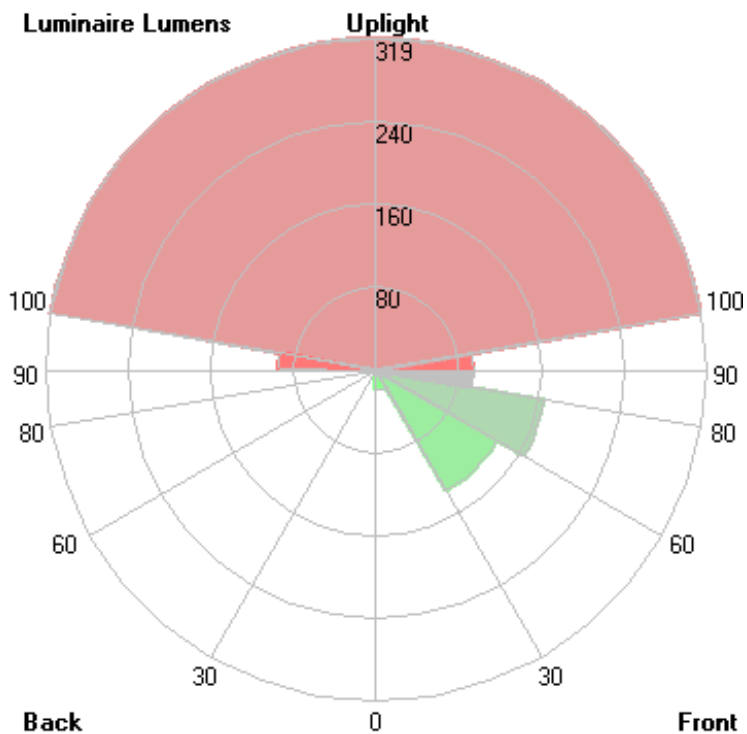
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	19.1	N.A.	2.3
FM (30-60)	135.2	N.A.	16.3
FH (60-80)	165.1	N.A.	20.0
FVH (80-90)	94.2	N.A.	11.4
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)	94.2	N.A.	11.4
UH (100-180)	319.4	N.A.	38.6
Total	827.2	N.A.	100.0

BUG Rating B0-U3-G1



Grid Spacing: 5 ft.

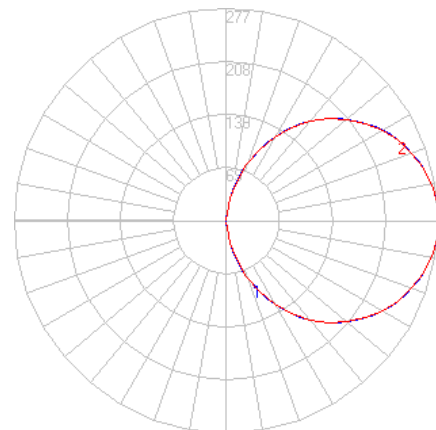


In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA

File: 84411K27_BEGA_IES.ies

TEST: BE_84411K4
 TEST LAB: BEGA
 DATE: 04/26/2017
 LUMINAIRE: 84 411K27
 LAMP: 9.3W LED



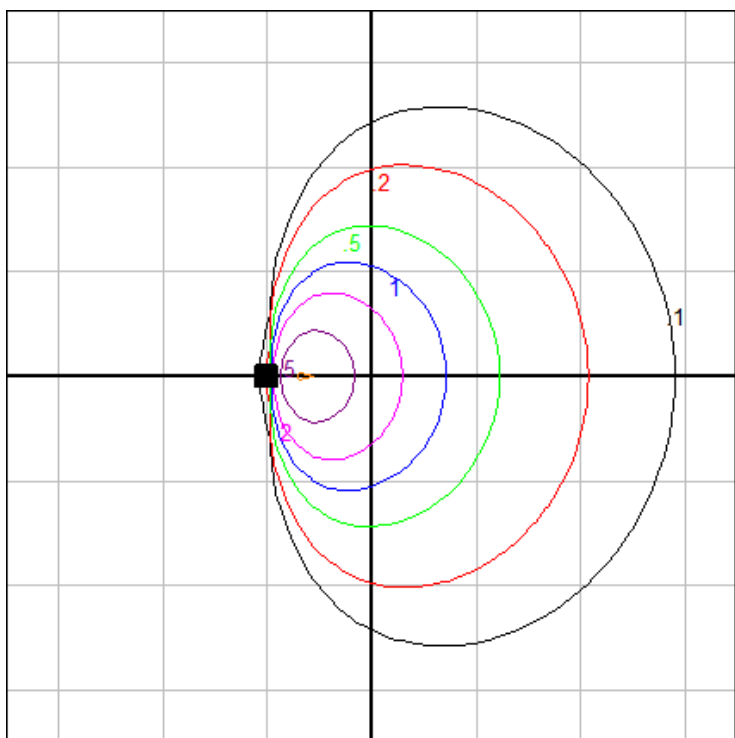
Characteristics

IES Classification	N.A.
Longitudinal Classification	N.A.
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	802
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	53
Total Luminaire Watts	15
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Max. Cd.	277.206 (0H, 90V)
Max. Cd. (<90 Vert.)	277.018 (0H, 87.5V)
Max. Cd. (At 90 Deg. Vert.)	277.206 (34.6%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	277.018 (34.5%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

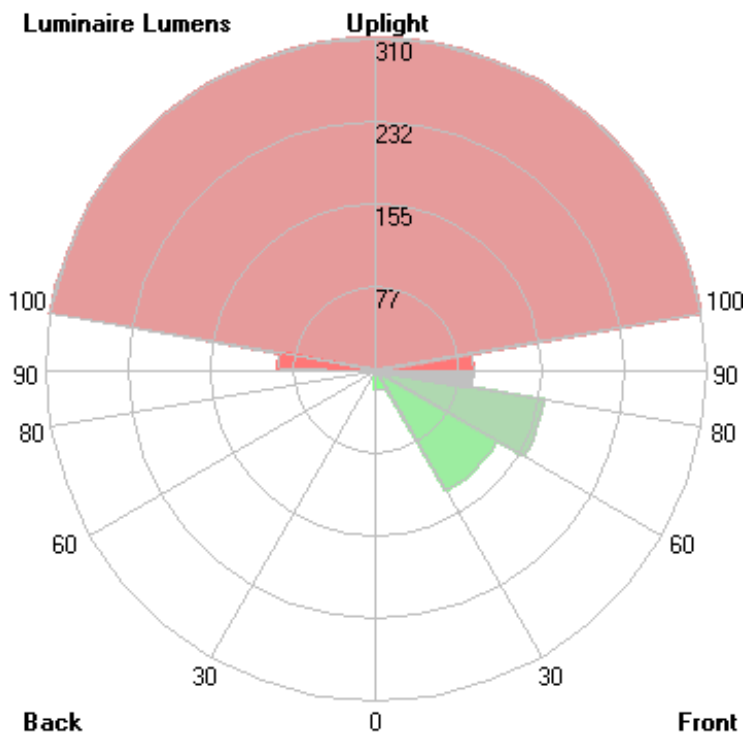
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	18.5	N.A.	2.3
FM (30-60)	131.0	N.A.	16.3
FH (60-80)	160.0	N.A.	20.0
FVH (80-90)	91.2	N.A.	11.4
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)	91.2	N.A.	11.4
UH (100-180)	309.5	N.A.	38.6
Total	801.4	N.A.	100.0

BUG Rating B0-U3-G1



Grid Spacing: 5 ft.



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