

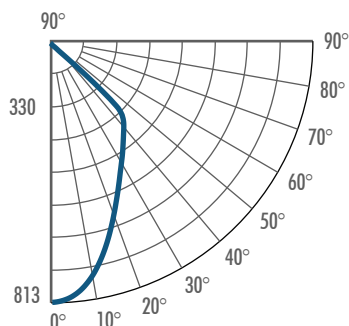
WD1360 - PHOTOMETRY

6" Round 1-Direction Wall Mount

WD1360WUE-DUN - 1,250Lm - 4,000K

System Power	:15.0W	Multipliers	
Test Date	:9/2016	3,500K	0.99
Beam Angle 50%	:70.4°	3,000K	0.97
Field Angle 10%	:100.2°	2,700K	0.95
Color Temperature	:3,930K		
	:83.8		
R9 Value	:21.0		
Lumens Delivered	:1,069Lm		
CBCP	:813cd		
Power Factor	:0.99		

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.3'	12.7
10.0'	14.1'	8.1
12.0'	16.9'	5.6
14.0'	19.8'	4.1
16.0'	22.6'	3.2

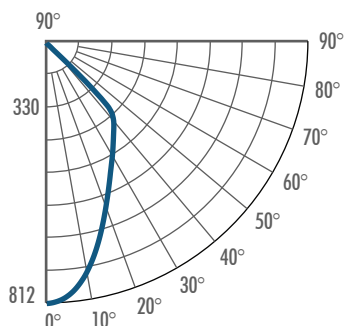
WD1Q360 - PHOTOMETRY

6" Square 1-Direction Wall Mount

WD1Q360WUE-DUN - 1,000Lm - 4,000K

System Power	:15.0W	Multipliers	
Test Date	:9/2016	3,500K	0.99
Beam Angle 50%	:70.4°	3,000K	0.97
Field Angle 10%	:100.2°	2,700K	0.95
Color Temperature	:3,930K		
CRI	:83.8		
R9 Value	:20.7		
Lumens Delivered	:1,069Lm		
CBCP	:812cd		
Power Factor	:0.99		

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.3'	12.7
10.0'	14.1'	8.1
12.0'	16.9'	5.6
14.0'	19.8'	4.1
16.0'	22.6'	3.2

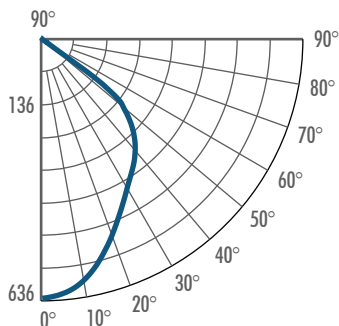
DL360 - PHOTOMETRY

6" ROUND CEILING DOWNLIGHT

DL360WUE-DUN - 1,200Lm - 4,000K

System Power	:15.1W	Multipliers	
Test Date	:9/2016	3,500K	0.99
Beam Angle 50%	:92.6°	3,000K	0.97
Field Angle 10%	:111.1°	2,700K	0.95
Color Temperature	:3,903K		
CRI	:84.0		
R9 Value	:21.0		
Lumens Delivered	:1,113Lm		
CBCP	:636cd		
Power Factor	:0.99		

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
6.0'	12.6'	17.7
8.0'	16.7'	9.9
10.0'	20.9'	6.4
12.0'	25.1'	4.4
14.0'	29.3'	3.2

DLQ360 - PHOTOMETRY

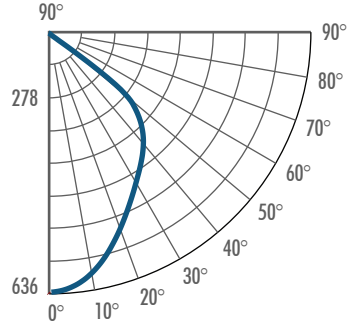
6" SQUARE CEILING DOWNLIGHT

DLQ360WUE-DUN - 1,200Lm - 4,000K

CANDELA TABULATION

FOOTCANDLE DISTRIBUTION

System Power	:15.1W	Multipliers	
Test Date	:9/2016	3,500K	0.99
Beam Angle 50%	:92.6°	3,000K	0.97
Field Angle 10%	:111.1°	2,700K	0.95
Color Temperature	:3,903K		
CRI	:84.0		
R9 Value	:21.0		
Lumens Delivered	:1,113Lm		
CBCP	:636cd		
Power Factor	:0.99		



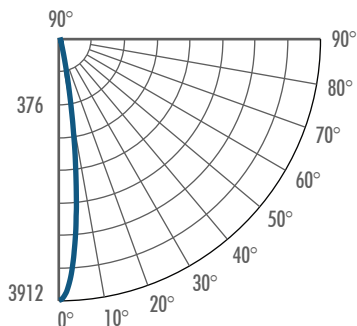
Height	Beam Diameter	FC
6.0'	12.6'	17.7
8.0'	16.7'	9.9
10.0'	20.9'	6.4
12.0'	25.1'	4.4
14.0'	29.3'	3.2

LRLD621 - PHOTOMETRY 6" AMBER LED REFLECTOR

LRLD621-TAM-B25 - 10W/450LM - NARROW FLOOD

System Power	:9.2W
Test Date	:9/2016
Beam Angle 50%	:14.5°
Field Angle 10%	:26.5°
Color Temperature	:1,442K
Peak Wavelength	:595
Lumens Delivered	:379Lm
CBCP	:3,913cd
Power Factor	:0.83

CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
3.3'	0.8'	363.5
6.6'	1.7'	90.9
9.8'	2.5'	40.4
13.1'	3.3'	22.7
16.4'	4.2'	14.5

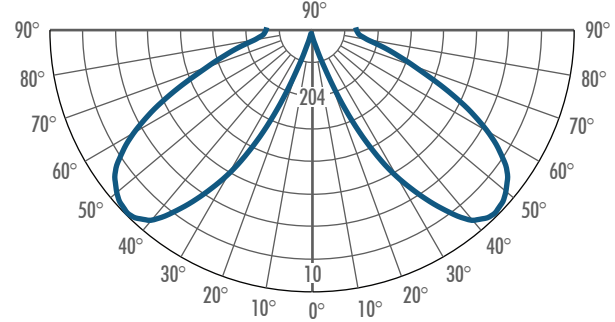
BL31 - PHOTOMETRY

7" LED Round Bollard - Cone Reflector

BL31BUE-T40 - 2300lm - 4000K

System Power	:27.7W	Multipliers	
Test Date	:6/2017	3000K	0.97
Beam Angle 50%	:46.6°	5000K	1.30
Field Angle 10%	:180°		
Color Temperature	:4200K		
CRI	:84.2		
R9 Value	:16.7		
Lumens Delivered	:2317lm		
CBCP	:550cd		
Power Factor	:0.99		

CANDELA TABULATION



Statistics:

Description	Bollard Symbol	FC loc. Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	○	+	4.9fc	28.1fc	0.20fc	141:1	25:1

NOTES:

1. On center spacing: 20 ft
2. Distance between fc reading: 2 ft

+0.2	+0.3	+0.5	+0.8	+1.0	+1.2	+1.1	+0.8	+0.6	+0.4	+0.4	+0.4	+0.6	+0.8	+1.1	+1.2	+1.1	+0.8	+0.5	+0.3	+0.2
+0.3	+0.5	+0.9	+1.7	+2.9	+3.6	+2.9	+1.8	+1.0	+0.6	+0.5	+0.6	+1.0	+1.8	+2.9	+3.6	+2.9	+1.7	+0.9	+0.5	+0.3
+0.4	+0.8	+1.7	+4.4	+9.3	+12.4	+9.3	+4.4	+1.8	+0.9	+0.7	+0.9	+1.8	+4.4	+9.3	+12.4	+9.3	+4.4	+1.7	+0.8	+0.4
+0.5	+1.0	+2.9	+9.7	+9.3	+28.1	+23.5	+9.3	+3.0	+1.2	+0.9	+1.2	+3.0	+9.3	+23.5	+28.1	+23.5	+9.3	+2.9	+1.0	+0.5
+0.5	+1.2	+3.5	+12.4	+28.0	+1.1	+28.1	+12.5	+3.7	+1.4	+1.0	+1.4	+3.7	+12.5	+28.1	+1.0	+28.0	+12.4	+3.5	+1.2	+0.5

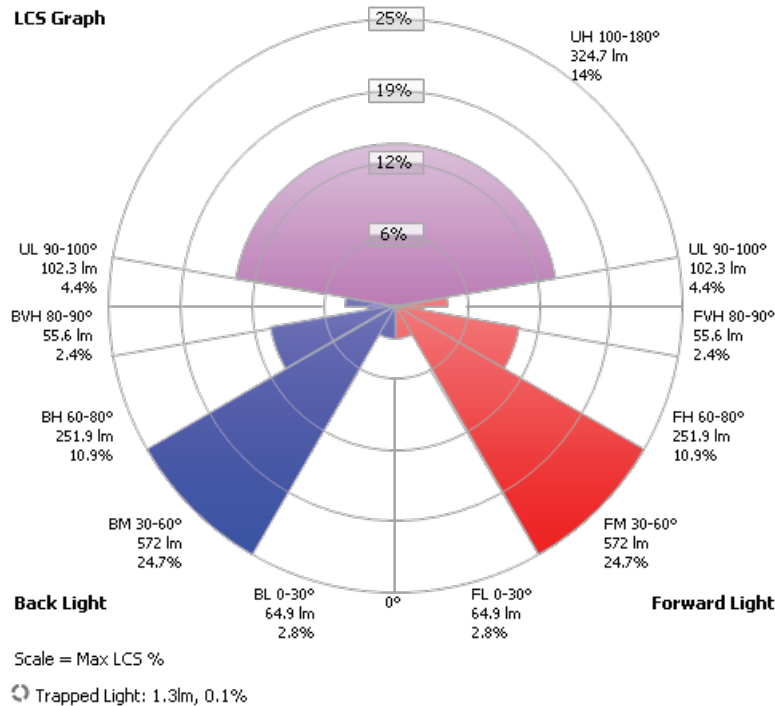
LCS TABLE

BUG Rating

B1 - U3 - G1

Forward Light	Lumens	Lumens %
Low (0-30):	64.9	2.80%
Medium (30-60):	572	24.70%
High (60-80):	251.9	10.90%
Very High (80-90):	55.6	2.40%
Back Light		
Low (0-30):	64.9	2.80%
Medium (30-60):	572	24.70%
High (60-80):	251.9	10.90%
Very High (80-90):	55.6	2.40%
Back Light		
Low (0-30):	102.3	4.40%
High (100-180):	324.7	14%
Trapped Light:	1.3	0%

LCS Graph



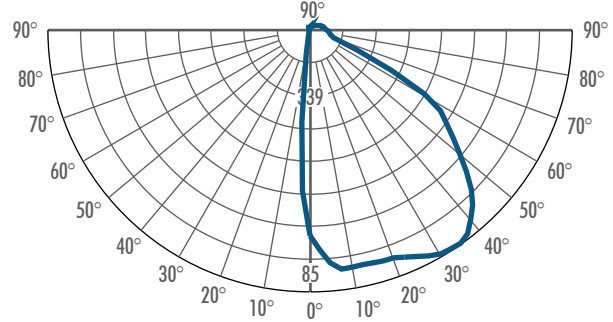
BL721-20BUE-DUN - 850lm - 4000K

System Power	:10.3W
Test Date	:12/2017
Beam Angle 50%	:157.9° H / 61.9° V
Field Angle 10%	:146.3° H / 81.1° V
Color Temperature	:3801K
CRI	:86.7
R9 Value	:28.5
Lumens Delivered	:931lm
CBCP	:339cd
Power Factor	:0.99

Multipliers

3000K	0.79
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CANDELA TABULATION



Statistics:

Description	Bollard Symbol	FC loc. Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1		+	3.4fc	143.3fc	0.10fc	143.3:1	34:01:00

NOTES:

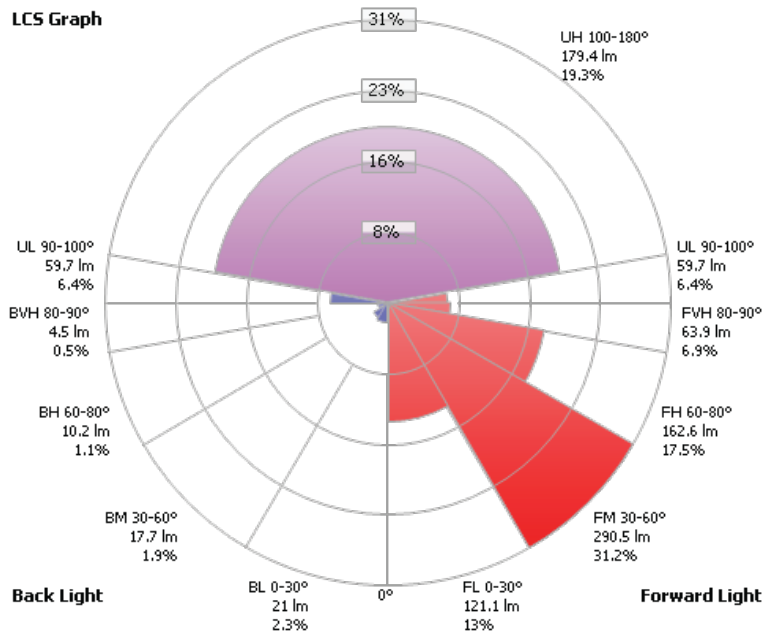
1. On center spacing: 20 ft
2. Distance between fc reading: 2 ft

+0.2	+0.4	+0.6	+0.1	+0.2	+0.2	+0.6	+0.4	+0.3	+0.3	+0.3	+0.4	+0.6	+0.2	+0.2	+0.1	+0.6	+0.4	+0.2
+0.3	+0.7	+1.3	+1.8	+0.6	+1.8	+1.3	+0.7	+0.4	+0.4	+0.4	+0.7	+1.3	+1.8	+0.6	+1.8	+1.3	+0.7	+0.3
+0.4	+0.8	+2.8	+8.7	+18.1	+8.8	+2.7	+0.1	+0.6	+0.4	+0.6	+1.0	+2.7	+8.8	+18.1	+8.7	+2.8	+0.8	+0.4
+0.4	+0.8	+2.8	+18.1	+44.3	+18.3	+2.8	+0.8	+0.6	+0.4	+0.6	+0.8	+2.8	+18.3	+44.3	+18.1	+2.8	+0.8	+0.4

LCS TABLE

BUG Rating	B1 - U3 - G1	
Forward Light	Lumens	Lumens %
Low (0-30):	121.1	13.00%
Medium (30-60):	290.5	31.20%
High (60-80):	162.6	17.50%
Very High (80-90):	63.9	6.90%
Back Light		
Low (0-30):	21	2.30%
Medium (30-60):	17.7	1.90%
High (60-80):	10.2	1.10%
Very High (80-90):	4.5	0.50%
Back Light		
Low (0-30):	59.7	6.40%
High (100-180):	179.4	19%
Trapped Light:	0.4	0%

LCS Graph

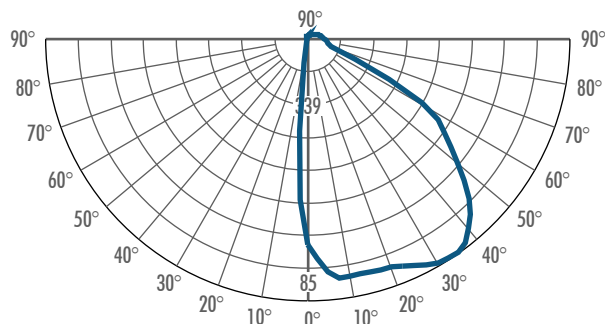


Scale = Max LCS %

Trapped Light: 0.4lm, 0%

CANDELA TABULATION

Multipliers	
3000K	0.78



Description	Bollard Symbol	FC loc. Symbol	Avg	Max	Min	Max/Min	AvgMin
Calc Zone #1		+	1.7fc	29.5fc	0.10fc	295:1	17:1

1. On center spacing: 20 ft
2. Distance between fc reading: 2 ft

+0.2	+0.3	+0.2	+0.1	+0.1	+0.1	+0.2	+0.3	+0.3	+0.4	+0.3	+0.3	+0.2	+0.1	+0.1	+0.1	+0.2	+0.3	+0.2
+0.4	+0.5	+0.5	+0.2	+0.2	+0.3	+0.6	+0.6	+0.5	+0.5	+0.5	+0.6	+0.6	+0.3	+0.2	+0.2	+0.5	+0.5	+0.4
+0.6	+0.9	+1.1	+1.3	+1.0	+1.4	+1.2	+1.0	+0.8	+0.7	+0.8	+1.0	+1.2	+1.4	+1.0	+1.3	+1.1	+0.9	+0.6
+0.7	+1.4	+2.7	+4.2	+5.4	+4.3	+2.8	+1.5	+1.0	+0.8	+1.0	+1.5	+2.8	+4.3	+5.4	+4.2	+2.7	+1.4	+0.7
+0.9	+1.8	+4.4	+11.8	+21.4	+11.8	+4.5	+2.0	+1.1	+0.9	+1.1	+2.0	+4.5	+11.8	+21.4	+11.8	+4.4	+1.8	+0.9
+0.8	+1.7	+4.6	+14.1	+29.5	+14.2	+4.7	+1.9	+1.0	+0.8	+1.0	+1.9	+4.7	+14.2	+29.5	+14.1	+4.6	+1.7	+0.8

LCS Graph

LCS Graph

Beam Type	Angle	Distance (lm)	Percentage
UH	100-180°	179.4	19.3%
UL	90-100°	59.7	6.4%
BVH	80-90°	4.5	0.5%
BH	60-80°	10.2	1.1%
BM	30-60°	17.7	1.9%
BL	0-30°	21	2.3%
FL	0-30°	121.1	13%
FM	30-60°	290.5	31.2%
FH	60-80°	162.6	17.5%
FVH	80-90°	63.9	6.9%

Scale = Max LCS %

Trapped Light: 0.4lm, 0%

BL731 - PHOTOMETRY

8" X 4" TRAPEZOID BOLLARD

BL731-20BUE-DUN - 850lm - 4000K

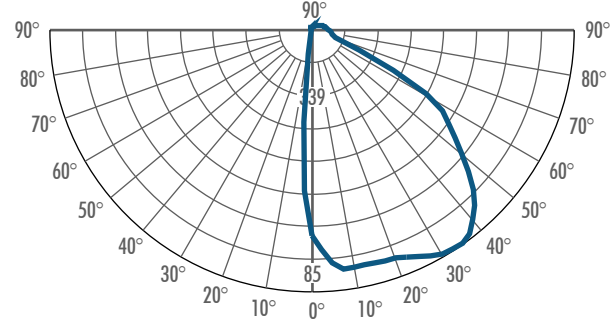
System Power	:10.3W
Test Date	:12/2017
Beam Angle 50%	:157.9° H / 61.9° V
Field Angle 10%	:146.3° H / 81.1° V
Color Temperature	:3801K
CRI	:86.7
R9 Value	:28.5
Lumens Delivered	:931lm
CBCP	:339cd
Power Factor	:0.99

Multipliers

3000K

0.79

CANDELA TABULATION



Statistics:

Description	Bollard Symbol	FC loc. Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1		+	3.4fc	143.3fc	0.10fc	143.3:1	34:01:00

NOTES:

1. On center spacing: 20 ft
2. Distance between fc reading: 2 ft

+0.2	+0.4	+0.6	+0.1	+0.2	+0.2	+0.6	+0.4	+0.3	+0.3	+0.3	+0.4	+0.6	+0.2	+0.2	+0.1	+0.6	+0.4	+0.2
+0.3	+0.7	+1.3	+1.8	+0.6	+1.8	+1.3	+0.7	+0.4	+0.4	+0.4	+0.7	+1.3	+1.8	+0.6	+1.8	+1.3	+0.7	+0.3
+0.4	+0.8	+2.8	+8.7	+18.1	+8.8	+2.7	+0.1	+0.6	+0.4	+0.6	+1.0	+2.7	+8.8	+18.1	+8.7	+2.8	+0.8	+0.4
+0.4	+0.8	+2.8	+18.1	+44.3	+18.3	+2.8	+0.8	+0.6	+0.4	+0.6	+0.8	+2.8	+18.3	+44.3	+18.1	+2.8	+0.8	+0.4

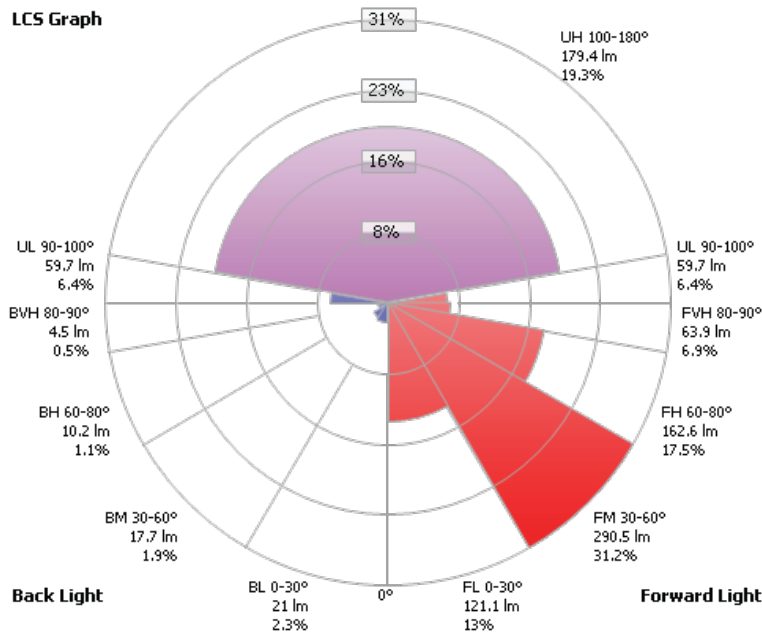
LCS TABLE

BUG Rating

B1 - U3 - G1

Forward Light	Lumens	Lumens %
Low (0-30):	121.1	13.00%
Medium (30-60):	290.5	31.20%
High (60-80):	162.6	17.50%
Very High (80-90):	63.9	6.90%
Back Light		
Low (0-30):	21	2.30%
Medium (30-60):	17.7	1.90%
High (60-80):	10.2	1.10%
Very High (80-90):	4.5	0.50%
Back Light		
Low (0-30):	59.7	6.40%
High (100-180):	179.4	19%
Trapped Light:	0.4	0%

LCS Graph



Back Light

Scale = Max LCS %

Trapped Light: 0.4lm, 0%

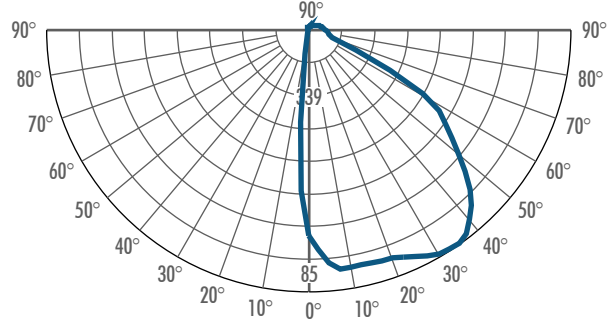
BL731-40UE-DUN - 850lm - 4000K

System Power	: 10.3W
Test Date	: 12/2017
Beam Angle 50%	: 157.9° H / 61.9° V
Field Angle 10%	: 146.3° H / 81.1° V
Color Temperature	: 3801K
CRI	: 86.7
R9 Value	: 28.5
Lumens Delivered	: 931lm
CBCP	: 339cd
Power Factor	: 0.99

Multipliers

3000K | 0.78

CANDELA TABULATION



Statistics:

Description	Bollard Symbol	FC loc. Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1		+	1.7fc	29.5fc	0.10fc	295:1	17:1

NOTES:

1. On center spacing: 20 ft
2. Distance between fc reading: 2 ft

+0.2	+0.3	+0.2	+0.1	+0.1	+0.1	+0.2	+0.3	+0.3	+0.4	+0.3	+0.3	+0.2	+0.1	+0.1	+0.1	+0.2	+0.3	+0.2
+0.4	+0.5	+0.5	+0.2	+0.2	+0.3	+0.6	+0.6	+0.5	+0.5	+0.5	+0.6	+0.6	+0.3	+0.2	+0.2	+0.5	+0.5	+0.4
+0.6	+0.9	+1.1	+1.3	+1.0	+1.4	+1.2	+1.0	+0.8	+0.7	+0.8	+1.0	+1.2	+1.4	+1.0	+1.3	+1.1	+0.9	+0.6
+0.7	+1.4	+2.7	+4.2	+5.4	+4.3	+2.8	+1.5	+1.0	+0.8	+1.0	+1.5	+2.8	+4.3	+5.4	+4.2	+2.7	+1.4	+0.7
+0.9	+1.8	+4.4	+11.8	+21.4	+11.8	+4.5	+2.0	+1.1	+0.9	+1.1	+2.0	+4.5	+11.8	+21.4	+11.8	+4.4	+1.8	+0.9
+0.8	+1.7	+4.6	+14.1	+29.5	+14.2	+4.7	+1.9	+1.0	+0.8	+1.0	+1.9	+4.7	+14.2	+29.5	+14.1	+4.6	+1.7	+0.8

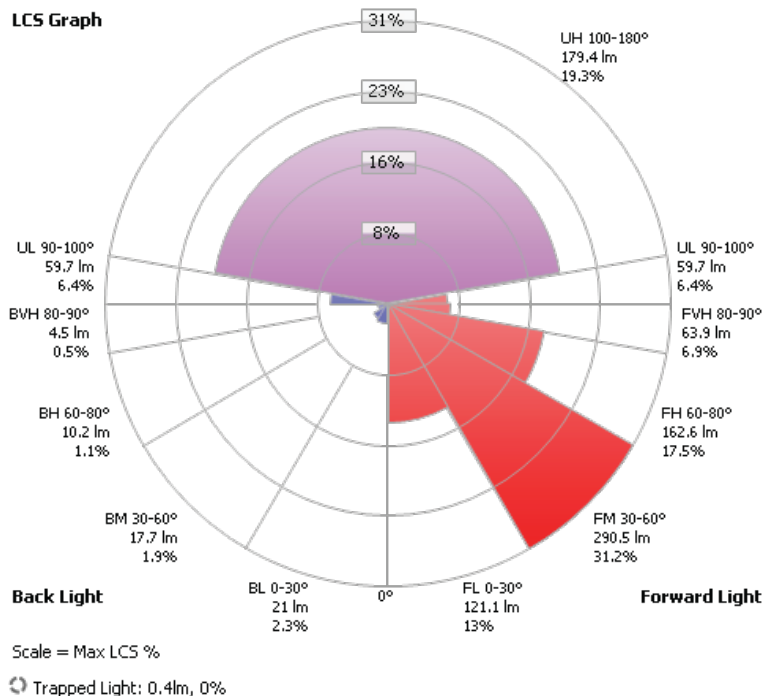
LCS TABLE

BUG Rating

B1 - U3 - G1

Forward Light	Lumens	Lumens %
Low (0-30):	121.1	13.00%
Medium (30-60):	290.5	31.20%
High (60-80):	162.6	17.50%
Very High (80-90):	63.9	6.90%
Back Light		
Low (0-30):	21	2.30%
Medium (30-60):	17.7	1.90%
High (60-80):	10.2	1.10%
Very High (80-90):	4.5	0.50%
Back Light		
Low (0-30):	59.7	6.40%
High (100-180):	179.4	19%
Trapped Light:	0.4	0%

LCS Graph

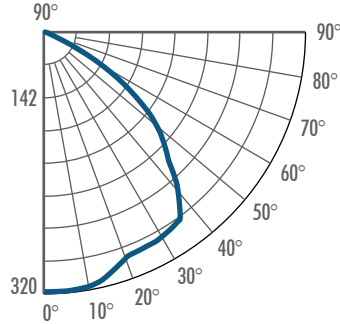


WD1472 - PHOTOMETRY SCOOP 1-DIRECTION WALL MOUNT

WD1472B - 15W/850lm - 4000K

System Power	: 10.8W	Multipliers	
Test Date	: 6/2014	3000K	0.78
Beam Angle 50%	: 114.4°		
Field Angle 10%	: 152.5°		
Color Temperature	: 3860K		
CRI	: 86.9		
R9 Value	: 27.5		
Lumens Delivered	: 823lm		
CBCP	: 320cd		
Power Factor	: 0.98		

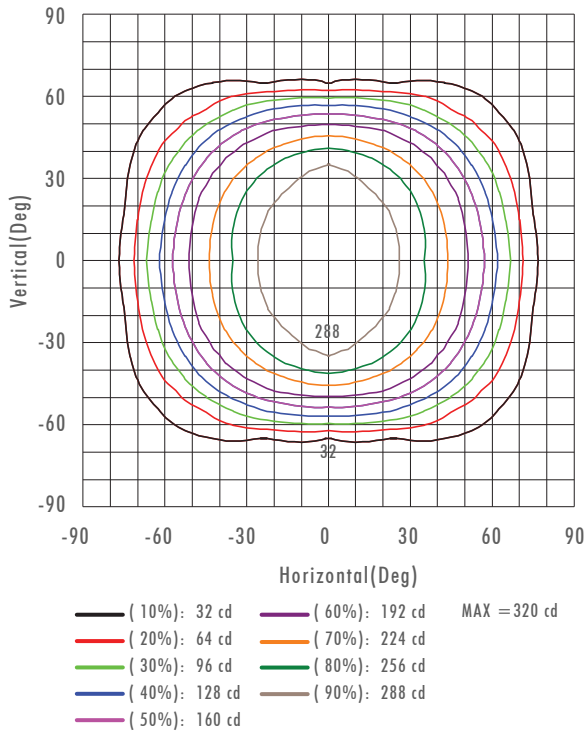
CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter Horizontal (Dh) / Vertical (Dv)	FC
3.0'	9.3"/8.2"	35.56
6.0'	18.6"/16.5"	8.89
9.0'	27.9"/24.7"	4.0
12.0'	37.2"/32.9"	2.2
15.0'	46.6"/41.1"	1.4

ISOCANDELA

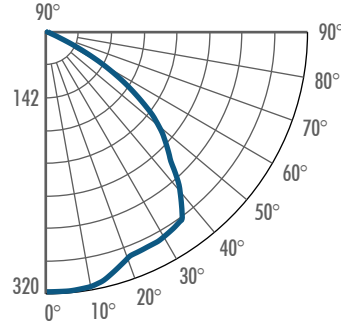


WD1473 - PHOTOMETRY TRAPEZOID 1-DIRECTION WALL MOUNT

WD1473B - 15W/850lm - 4000K

System Power	: 10.8W	Multipliers	
Test Date	: 6/2014	3000K	0.78
Beam Angle 50%	: 114.1°		
Field Angle 10%	: 152.5°		
Color Temperature	: 3860K		
CRI	: 86.9		
R9 Value	: 27.5		
Lumens Delivered	: 823lm		
CBCP	: 320cd		
Power Factor	: 0.98		

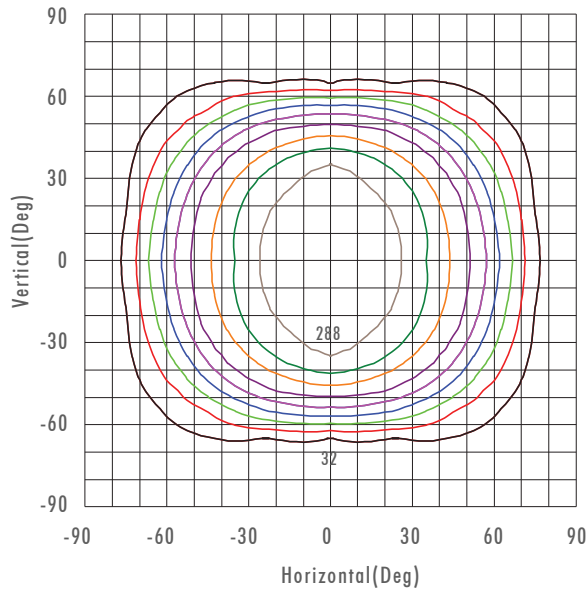
CANDELA TABULATION



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter Horizontal (Dh) / Vertical (Dv)	FC
3.0'	9.3'/8.2'	35.56
6.0'	18.6'/16.5'	8.89
9.0'	27.9'/24.7'	4.0
12.0'	37.2'/32.9'	2.2
15.0'	46.6'/41.1'	1.4

ISOCANDELA



(10%): 32 cd	(60%): 192 cd	MAX = 320 cd
(20%): 64 cd	(70%): 224 cd	
(30%): 96 cd	(80%): 256 cd	
(40%): 128 cd	(90%): 288 cd	
(50%): 160 cd		