OAL5
LED Area Light

Project

Catalog

Type

Date

Product Description

The OAL5 LED Area Light delivers high efficiency with maximum energy savings and advanced controls to suit a variety of applications. Its robust, low-profile housing is comprised of die-cast aluminum and includes an adjustable, multi-function mounting arm (pole+slipfitter) for simpler, quicker installation. The OAL5 is a versatile fixture offering 50/60/80W selectability with 3/4/5K CCT and distribution options of Type II, III, IV and V. It is ideal for lower mounting heights in parking lots, recreational or public venues, walkways, campuses, and other commercial environments.

Construction
- Heavy duty die-cast construction with single piece housing
- Low profile 3" design provides low wind resistance
- UV stabilized powder coat finish
- Stainless steel hardware and electrical SJ cord connection

Optical System
- Impact resistant polycarbonate lens
- Type II, III, IV or V distribution available
- Selectable CCT of 3000/4000/5000K
- Standard 80 CRI to improve safety and color definition in public places
- BUG rating of B3-U0-G3 (Type II, III, IV) B3-U0-G1 (Type V)

Electrical
- Wattage selectable 50/60/80W
- Input voltage of 120-277VAC or 277-480VAC
- Surge protection 10kV (20kV on HV models) provides single phase protection for line/neutral, line/ground and neutral/ground in accordance with IEEE C62.41 2002 C High category
- Operating temperature rating of -40° to 122°F (-40°C to 50°C)

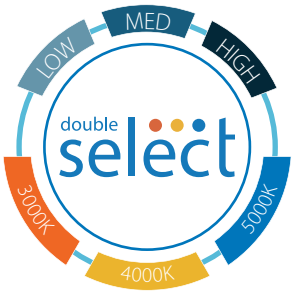
Controls
- 3-pin receptacle with shunt standard
- Optional 7 pin receptacle and shunt available
- Optional Microwave motion sensor accessories available
- 12V sensor socket preinstalled
- Standard full-range dimming with 0-10VDC dimmers

Mounting and installation
- Adjustable, multi-function mounting arm (pole+slipfitter) ships with fixture standard
- Fixture mounts to arms via unique dove tail system for easy installation
- Mounting arms available for a variety of installations.
  - Adjustable Pole Mount Arm provides -30°/+30° of adjustability and mounts to round or square poles
  - Slipfitter Mount Adaptor installs directly to a nominal 2 ⅜" tenon
  - Straight Mount Arm mounts to a round or square pole
  - Trunnion Mounting Arm easily mounts to a variety of surfaces
  - Wall Mount Box allows for wall mounting in tandem with the Straight Arm or Pole Mount Arm
- All mounting arms are die-cast aluminum and available in Bronze
- EPA: Frontal - 0.259ft2, Side - 0.320ft2
- EPA with arms will vary. Consult NICOR for additional information

Listings
- cULus1598 Listed for Wet locations
- RoHS Compliant
- IP65 Rated
- DLC 5.1 Premium Listed
- Vibration rated to 3G per ANSI/IEEE C136.31-2010
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- TM-21 Reported L90(9k) life >50,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards

Warranty
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)





OAL5
LED Area Light
Selectable Wattage
Selectable CCT

OAL5

LED Area Light

Ordering

Ordering Information

Example: OAL5080SUS8BZ3S

Series	Ver.	Wattage	Voltage	CCTs	CRI	Finish	Optic	Photocell Receptacle	Motion Sensor Socket
OAL	**5**	**080S** (50/60/80W)	☐ **U** (120-277 VAC)	**S** (3000/4000/5000K)	**8** (80+)	☐ **BK** (Black)	☐ **2** (Type II)[2]	☐ **Blank** (3 pin with cap)	**S** (12V Socket)
			☐ **H** (277-480 VAC)			☐ **BZ** (Bronze)	☐ **3** (Type III)[1]	☐ **7** (7 pin)	
							☐ **4** (Type IV)[2]		
							☐ **5** (Type V)[2]		

Specifications and dimensions subject to change without notice.
1. Stocked distribution
2. Distribution type has modification lead time. Consult NICOR.

Mounting Accessories

accessories sold separately

OAL3 mounting accessories are compatible with the OAL5 Fixture

Bronze Adjustable Pole Mounting Arm	☐ **OAL3JPOLEJARMBZ**
Bronze 2 ⅜" Diameter Slipfitter Adapter	☐ **OAL3SLIPFITARMBZ**
Bronze 6" Straight Mounting Arm	☐ **OAL3STRAIGHTARMBZ**
Bronze 4" Trunnion Mounting Arm	☐ **OAL3TRUNIONBZ**
Bronze Wall Mount Box[1]	☐ **OAL3WALLBOXBZ**

Accessories are subject to change without notice.
1) The Wall Box accessory requires one of the following mounting arms:
OAL3STRAIGHTARMXX or OAL3JPOLEJARMXX

Shield Accessories

Front/Back Shield : **B**ronze Finish	☐ **OAL5FRNTBACKSHLDBZ**

Daylight Sensor Accessories

Standard Voltage 3-Pin photocell (120-277 VAC)	☐ **OAL-PHOTOCELL**
High Voltage 3-Pin photocell (347-480 VAC)	☐ **OALHVPHOTOCELL**

Motion Sensor Accessories

Bronze Microwave Motion Sensor	☐ **H12V3SENSORMW3PBG**
Remote Control for Sensors	☐ **H12V2REMOTE**
NLC 3-Pin to 3.5mm Adapter	☐ **NLCWS06W**
NLC Long-Range Controller Node	☐ **NLCWPPA102AUXWC1**
NLC Long-Range Sensor with Lens	☐ **NLCEFS106-WHBL**

See individual Motion Sensor Spec Sheets for more information
Accessories are subject to change without notice.



H12V3SENSORMW3PBG



H12V3SENSORMW3PWH



NLCWS06W



NLCWPPA102AUXWC1



NLCEFS106-WHBL

OAL5

LED Area Light

Performance Data

Performance Data			Type II				Type III			
Model	Watts Setting	CCT	Lumens	Watts	Efficiency	BUG	Lumens	Watts	Efficiency	BUG
OAL5080S	50	3000	6975	53.0	131.7	B3-U0-G3	6794	52.6	129.1	B3-U0-G3
		4000	7635	51.7	147.8		7436	51.3	144.9	
		5000	7436	53.0	140.4		7102	52.6	135.0	
	60	3000	8371	62.8	133.4		8153	62.4	130.8	
		4000	9162	61.0	150.2		8923	60.6	147.3	
		5000	8691	62.8	138.4		8522	62.4	136.7	
	80	3000	10870	80.5	135.1		10870	79.9	135.1	
		4000	11898	77.4	153.7		11898	76.9	153.7	
		5000	11588	80.1	144.6		11363	79.6	142.8	

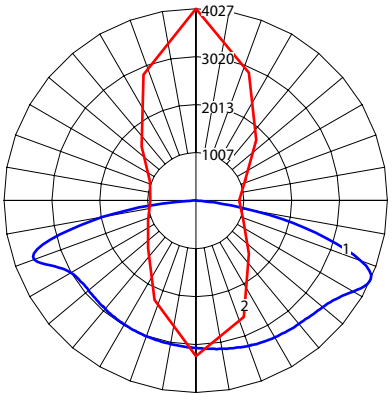
Performance Data			Type IV				Type V			
Model	Watts Setting	CCT	Lumens	Watts	Efficiency	BUG	Lumens	Watts	Efficiency	BUG
OAL5080S	50	3000	6906	53.2	129.9	B3-U0-G3	6882	52.8	130.4	B3-U0-G1
		4000	7559	51.9	145.8		7532	51.5	146.3	
		5000	7219	53.2	135.8		7194	52.8	136.3	
	60	3000	8287	63.0	131.5		8258	62.5	132.0	
		4000	9071	61.2	148.2		9039	60.8	148.7	
		5000	8663	63.0	137.5		8633	62.6	138.0	
	80	3000	11050	80.8	135.1		11011	80.2	135.1	
		4000	12095	77.7	153.7		12052	77.1	153.7	
		5000	11551	80.5	145.1		11510	79.9	144.6	

Photometric Data

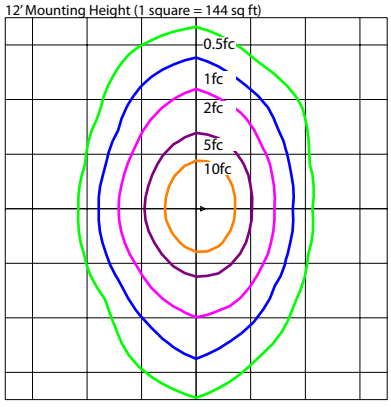
OAL5 80W Type II 5000K

Input Voltage (VAC)	120-277
System Level Power (W)	80.1
120V Current (A)	0.67
277V Current (A)	0.29
Delivered Lumens (Lm)	11588
System Efficacy (Lm/W)	144.7
Correlated Color Temp (K)	4866
Color Rendering Index (CRI)	83
Horizontal Beam Angle	157.2
Vertical Beam Angle	102.2
Spacing Criteria (0-180)	1.36
Spacing Criteria (90-270)	1.66
BUG Rating	B3-U0-G3

Intensity Summary (Candle Power)	
Angle	Mean CP
0	2682
5	2766
15	2932
25	3045
35	3067
45	2944
55	2632
65	2155
75	1332
85	211
90	0



1 - Vertical Plane Through Horizontal Angle
2 - Horizontal Cone Through Vertical Angle



Zonal Lumen Summary		
Zone	Lumens	% of Luminaire
0-30	2500	21.6%
0-40	4224	36.5%
0-60	8188	70.7%
0-90	11588	100%
90-180	0	0%
0-180	11588	100%

Data Multiplier			
	3000K	4000K	5000K
50W	0.586	0.642	0.625
60W	0.704	0.770	0.750
80W	0.938	1.027	1.000

OAL5

LED Area Light

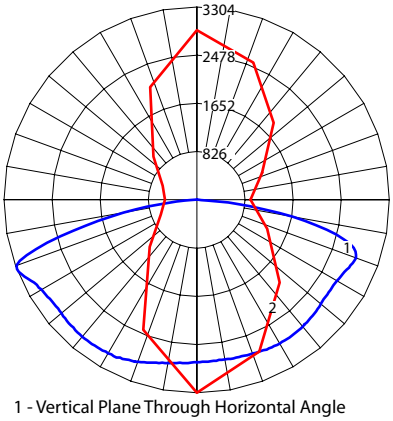
Photometric Data

OAL5 80W Type III 5000K

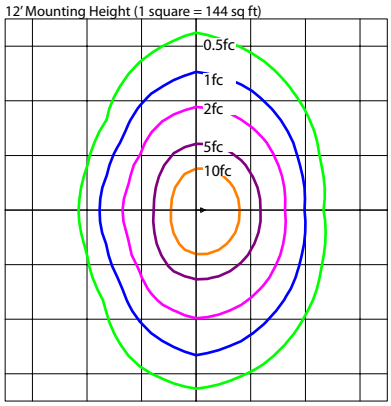
Input Voltage (VAC)	120-277
System Level Power (W)	79.6
120V Current (A)	0.66
277V Current (A)	0.29
Delivered Lumens (Lm)	11363
System Efficacy (Lm/W)	142.8
Correlated Color Temp (K)	4867
Color Rendering Index (CRI)	83
Horizontal Beam Angle	155.3
Vertical Beam Angle	110.1
Spacing Criteria (0-180)	1.64
Spacing Criteria (90-270)	1.56
BUG Rating	B3-U0-G3

Intensity Summary (Candle Power)

Angle	Mean CP
0	2781
5	2878
15	2996
25	3050
35	3048
45	2894
55	2460
65	1616
75	673
85	153
90	0



1 - Vertical Plane Through Horizontal Angle
2 - Horizontal Cone Through Vertical Angle



Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	2291	20.2%
0-40	3929	34.6%
0-60	7907	69.6%
0-90	11363	100%
90-180	0	0%
0-180	11363	100%

Data Multiplier

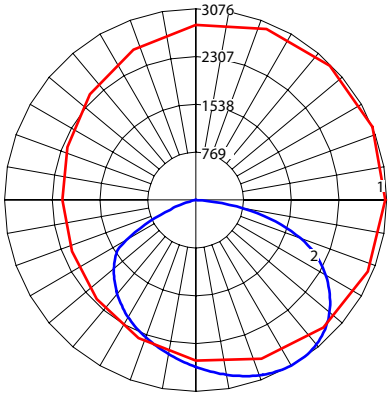
	3000K	4000K	5000K
50W	0.598	0.654	0.625
60W	0.717	0.785	0.750
80W	0.957	1.047	1.000

OAL5 80W Type IV 5000K

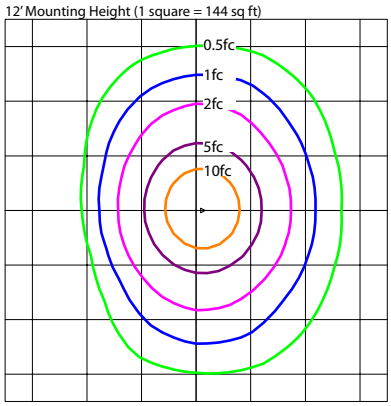
Input Voltage (VAC)	120-277
System Level Power (W)	80.5
120V Current (A)	0.67
277V Current (A)	0.29
Delivered Lumens (Lm)	11551
System Efficacy (Lm/W)	143.5
Correlated Color Temp (K)	4869
Color Rendering Index (CRI)	83
Horizontal Beam Angle	149.0
Vertical Beam Angle	126.6
Spacing Criteria (0-180)	1.68
Spacing Criteria (90-270)	1.62
BUG Rating	B3-U0-G3

Intensity Summary (Candle Power)

Angle	Mean CP
0	2682
5	2766
15	2932
25	3045
35	3067
45	2944
55	2632
65	2155
75	1332
85	211
90	0



1 - Vertical Plane Through Horizontal Angle
2 - Horizontal Cone Through Vertical Angle



Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	2254	19.5%
0-40	3900	33.8%
0-60	7946	68.8%
0-90	11551	100%
90-180	0	0%
0-180	11551	100%

Data Multiplier

	3000K	4000K	5000K
50W	0.598	0.654	0.625
60W	0.717	0.785	0.750
80W	0.957	1.047	1.000

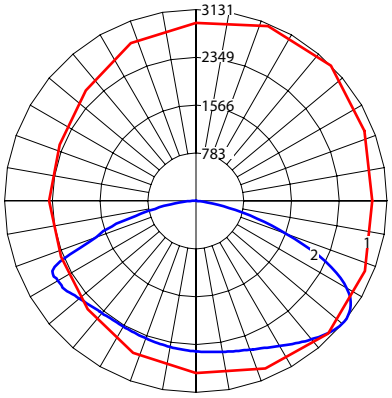
OAL5

LED Area Light

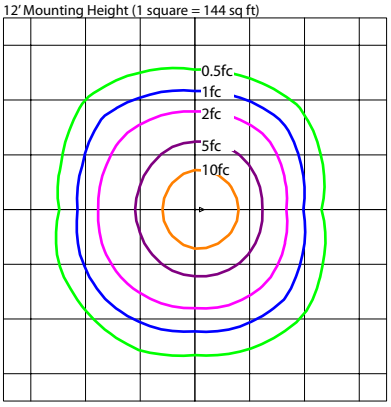
Photometric Data

OAL5 80W Type V 5000K	
Input Voltage (VAC)	120-277
System Level Power (W)	79.9
120V Current (A)	0.67
277V Current (A)	0.29
Delivered Lumens (Lm)	11510
System Efficacy (Lm/W)	144.1
Correlated Color Temp (K)	4871
Color Rendering Index (CRI)	83
Horizontal Beam Angle	124.7
Vertical Beam Angle	132.2
Spacing Criteria (0-180)	1.82
Spacing Criteria (90-270)	1.70
BUG Rating	B3-U0-G1

Intensity Summary (Candle Power)	
Angle	Mean CP
0	2461
5	2489
15	2568
25	2715
35	2919
45	3049
55	2830
65	1729
75	836
85	15
90	0



1 - Vertical Plane Through Horizontal Angle
2 - Horizontal Cone Through Vertical Angle



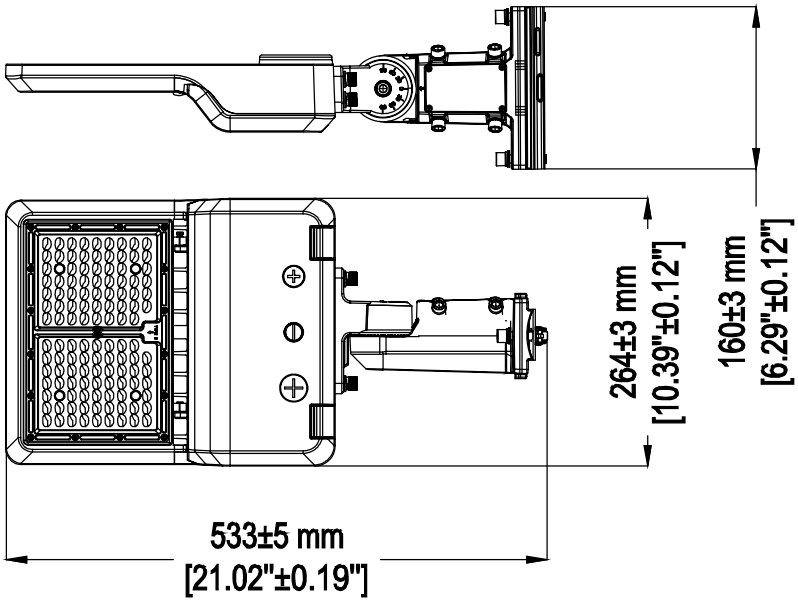
Zonal Lumen Summary		
Zone	Lumens	% of Luminaire
0-30	2108	18.3%
0-40	3755	32.6%
0-60	8333	72.4%
0-90	11510	100%
90-180	0	0%
0-180	11510	100%

Data Multiplier			
	3000K	4000K	5000K
50W	0.598	0.654	0.625
60W	0.717	0.785	0.750
80W	0.957	1.047	1.000

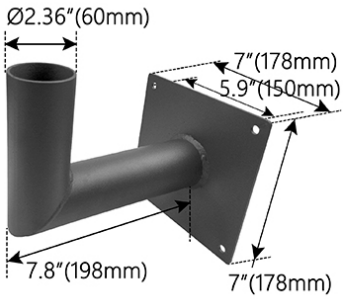
OAL5

LED Area Light

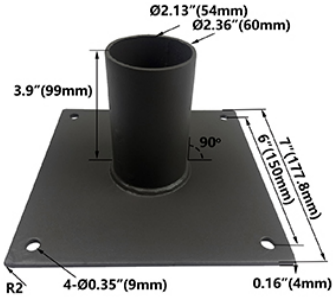
Dimensions



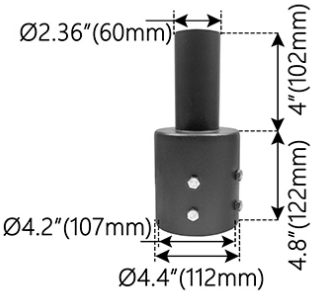
Mounting Accessories



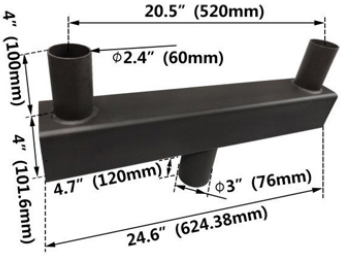
Wallmount 90° Bracket
OPL41WM2



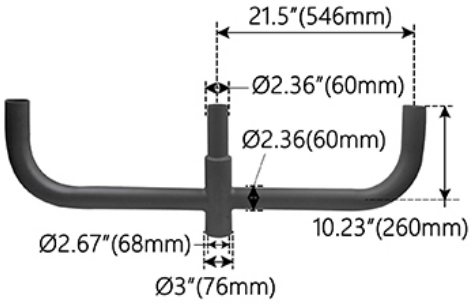
180° Wallmount Bracket
OPL41WM1



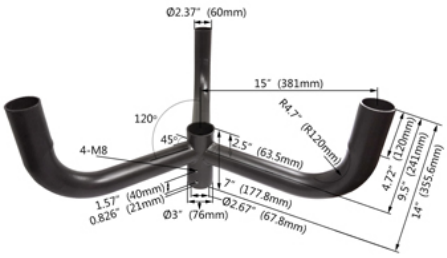
4" Round Tenon Adapter
OPL41TNA



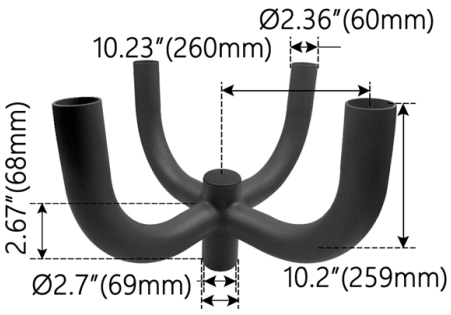
Low Profile Double Tenon
OPL41TN2



180° Triple Bullhorn
OPL41BH3S



Triple 120° Bullhorn
OPL41BH3A



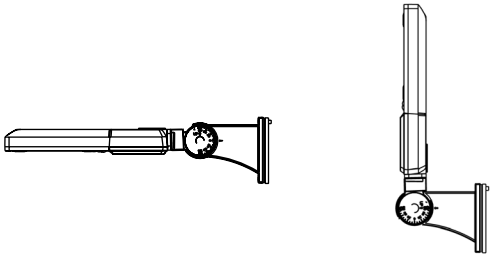
90° Quad Bullhorn
OPL41BH4A

OAL5

LED Area Light

EPA Data

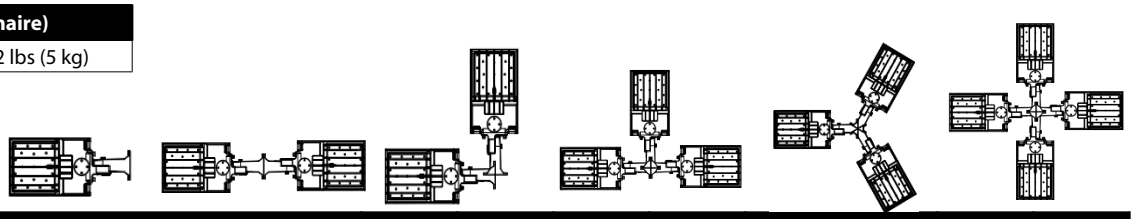
Conditions: Horizontal winds only for calculations. Worst case total projected area used for calculations. All drag coefficients are set as worst case 1.2. Fixture image not representative of actual fixture.



Mounting Angle 0° **Mounting Angle 90°**

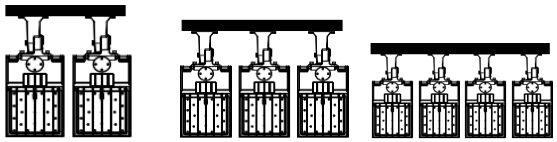
Weight (1 Luminaire)	
80W	11.02 lbs (5 kg)

Wind Direction



Fixture	Angle	1 Luminaire		2 Luminaires 180°		2 Luminaires 90°		3 Luminaires 90°		3 Luminaires 120°		4 Luminaires 90°	
		ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²	ft²	m²
80W	0	0.409	0.038	0.818	0.076	0.669	0.062	1.079	0.100	0.000	0.000	1.339	0.124
	30	0.628	0.058	1.256	0.117	1.037	0.096	1.884	0.175	2.260	0.210	2.074	0.193
	45	0.853	0.079	1.707	0.159	1.263	0.117	2.560	0.238	2.628	0.244	2.525	0.235
	60	1.026	0.095	2.053	0.191	1.436	0.133	3.079	0.286	2.853	0.265	2.871	0.267
	90	1.172	0.109	2.345	0.218	1.582	0.147	3.517	0.327	3.026	0.281	3.163	0.294

Wind Direction



Fixture	Angle	Double Bullhorn		Triple Bullhorn		Quad Bullhorn	
		ft²	m²	ft²	m²	ft²	m²
80W	0	0.818	0.076	1.228	0.114	1.637	0.152
	30	1.256	0.117	1.884	0.175	2.511	0.233
	45	1.707	0.159	2.560	0.238	3.414	0.317
	60	2.053	0.191	3.079	0.286	4.106	0.381
	90	2.345	0.218	3.517	0.327	4.690	0.436

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.