

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Morning

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	9:13
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



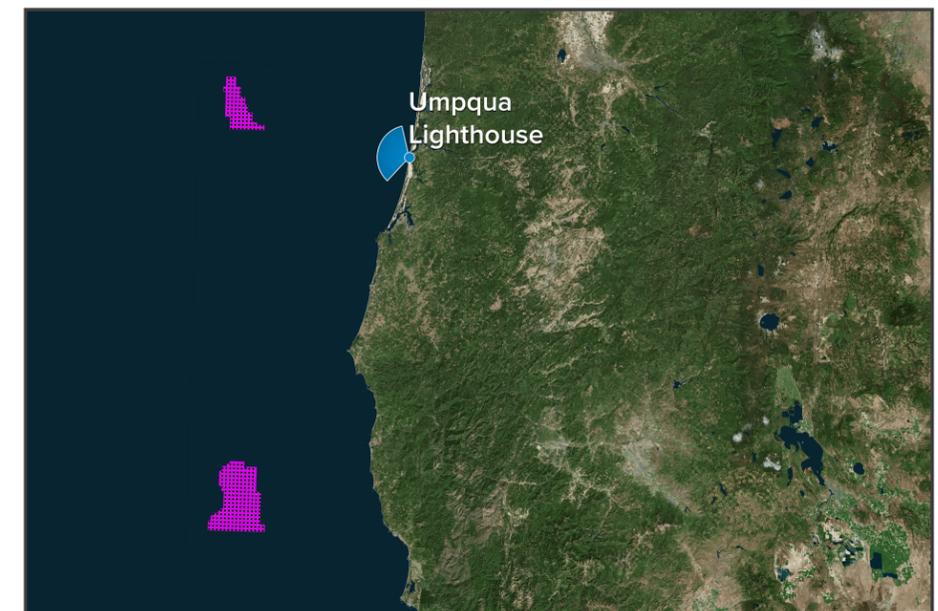
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A031
Lens Focal Length:	20mm
Field of View:	65.47° (H) / 46.397° (V)

Sun, Sky, and Weather Information

Sun Azimuth:	115.76
Sun Elevation:	42.01
Lighting Angle (On Turbines):	Left Lit
Weather Conditions:	Partly Cloudy
Predicted Visibility (Miles):	11.93
Temperature (°F):	43
Temperature (°C):	6
Humidity (%):	86
SQM Reading:	N/A

Context Map



● Key Observation Point (KOP) ● Turbines

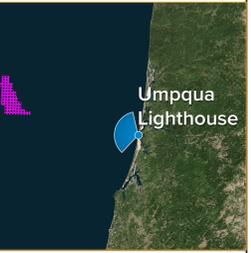
Viewing Instructions

For 11 x 17 inch Printed Display: Viewing distance is 19.7 inches (500 mm)
 For On-Screen Display: Viewing distance is 19.7 inches (500 mm)



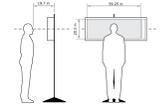
Umpqua Lighthouse, Morning, Heading WNW - Existing View

For on-screen display:
 Scale bar to be 4 inches wide
 Viewing distance 19.7 inches



Latitude: 43.66301076
 Longitude: -124.1988873
 Elevation of Viewpoint Position: 113.9009
 Height of Camera Above Ground: 5.41 ft
 Date of Photography: 3/29/2023 at 9:13
 Horizontal Field of View: 124'
 Vertical Field of View: 55'

CORRECT VIEWING OF TRUEVIEW™ PHOTO SIMULATIONS



NOTES:
 Viewpoint locations have been precision surveyed by
Surveyor
 Westland Resources
 Engineering & Environmental Services Inc.
 Portland, OR
 (971) 256-0046
 Heights are above mean sea level.
 Structure design and placement are subject to final engineering.
 No part of this photo simulation shall be altered in any way.

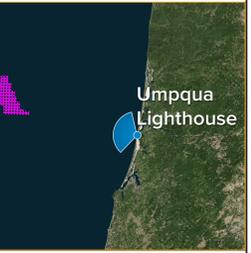
Photo Simulation Created Using
 TrueView™ Technology
 (Patent No.: US 6,184,906 B2)
 Provided by

3/29/2023 9:13:10 AM KDP 5



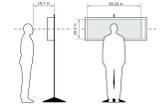
Umpqua Lighthouse, Morning, Heading WNW - Proposed View - Predicted Visibility

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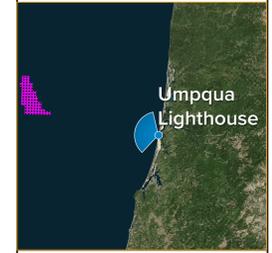


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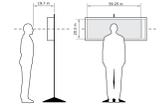
Umpqua Lighthouse, Morning, Heading WNW - Proposed View - Maximum Visibility

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3/29/2023 9:13:18 KOP 5



For on-screen display:
Scale bar to be 4 inches wide
Viewing distance 19.7 inches

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Noon

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	12:18
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



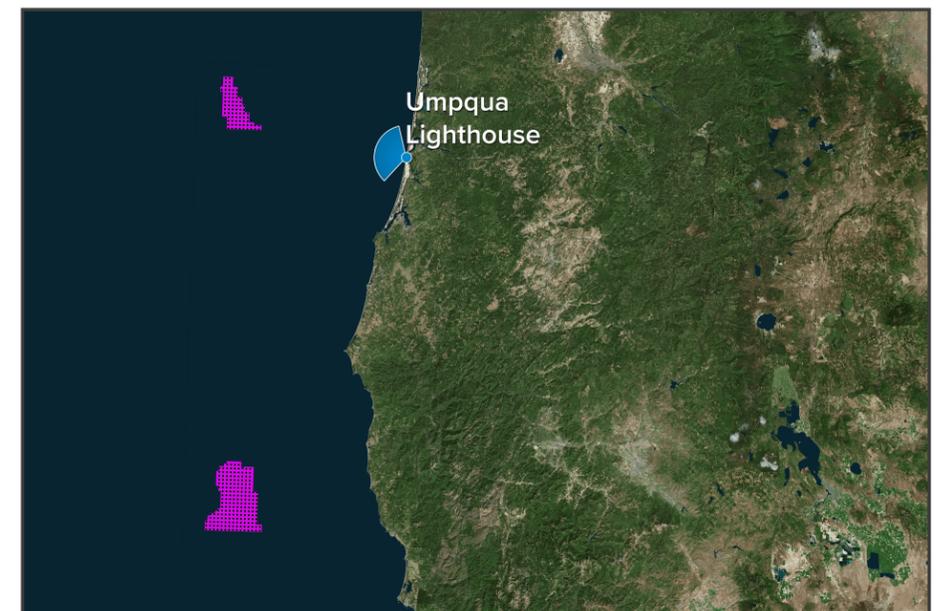
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A032
Lens Focal Length:	20mm
Field of View:	65.47° (H) / 46.397° (V)

Sun, Sky, and Weather Information

Sun Azimuth:	184.72
Sun Elevation:	58.99
Lighting Angle (On Turbines):	Top-Left Lit
Weather Conditions:	Sunny
Predicted Visibility (Miles):	26.71
Temperature (°F):	55
Temperature (°C):	13
Humidity (%):	53
SQM Reading:	N/A

Context Map



Viewing Instructions

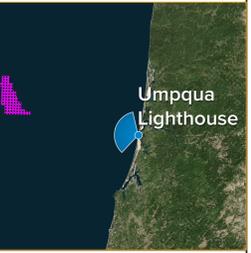
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● Key Observation Point (KOP) ● Turbines



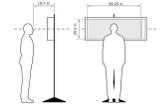
Umpqua Lighthouse, Noon, Heading WNW - Existing View

For on-screen display:
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 Viewing distance 19.7 inches



Latitude: 43.66301076
 Longitude: -124.1988873
 Elevation of Viewpoint Position: 113.9009
 Height of Camera Above Ground: 5.41 ft
 Date of Photography: 3/29/2023 at 12:18
 Horizontal Field of View: 124'
 Vertical Field of View: 55'

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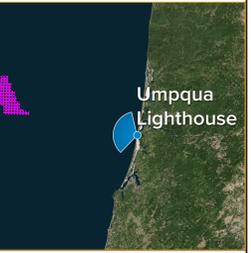
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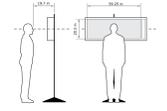
Umpqua Lighthouse, Noon, Heading WNW - Proposed View - Predicted Visibility

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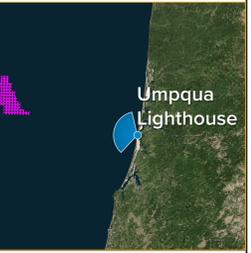


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Viewing distance 19.7 inches



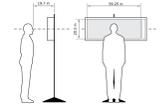
Umpqua Lighthouse, Noon, Heading WNW - Proposed View - Maximum Visibility

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3/29/2023 at 12:18 - 100% 5



For on-screen display:
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Viewing distance 19.7 inches

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Afternoon

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	15:13
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



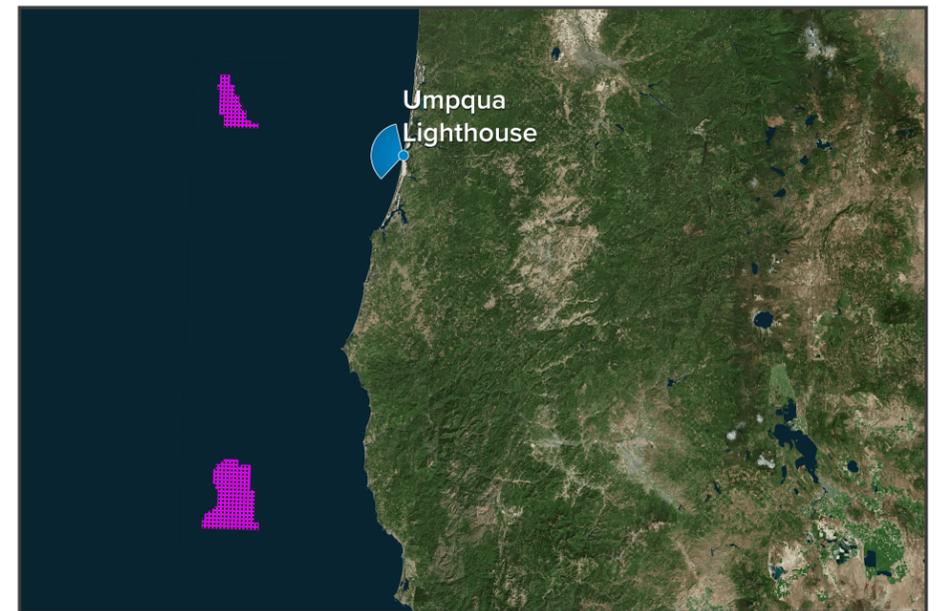
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A033
Lens Focal Length:	20mm
Field of View:	65.47° (H) / 46.397° (V)

Sun, Sky, and Weather Information

Sun Azimuth:	246.74
Sun Elevation:	40.46
Lighting Angle (On Turbines):	Right Lit
Weather Conditions:	Sunny
Predicted Visibility (Miles):	19.70
Temperature (°F):	51
Temperature (°C):	11
Humidity (%):	71
SQM Reading:	N/A

Context Map



Viewing Instructions

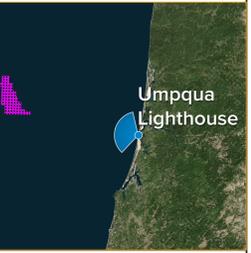
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● Key Observation Point (KOP) ● Turbines



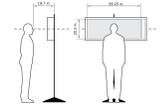
Umpqua Lighthouse, Afternoon, Heading WNW - Existing View

For on-screen display:
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 Viewing distance 19.7 inches



Latitude: 43.56301076
 Longitude: -124.1988873
 Elevation of Viewpoint Position: 113.9009
 Height of Camera Above Ground: 5.41 ft
 Date of Photography: 3/29/2023 at 15:13
 Horizontal Field of View: 124'
 Vertical Field of View: 55'

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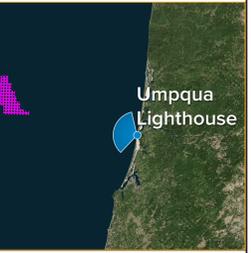
3/29/2023 at 15:13 - 100% 5



Umpqua Lighthouse, Afternoon, Heading WNW - Proposed View - Predicted Visibility

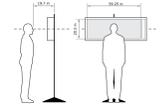
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● Viewpoint Location ● Project Area



Latitude: 43.66301076
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 Date of Photography: 3/29/2023 at 15:13
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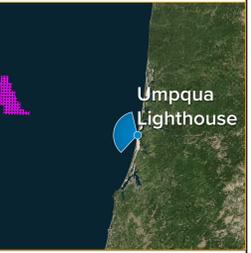


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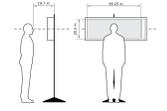
Umpqua Lighthouse, Afternoon, Heading WNW - Proposed View - Maximum Visibility

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KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Night

Base Photographic Documentation

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GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

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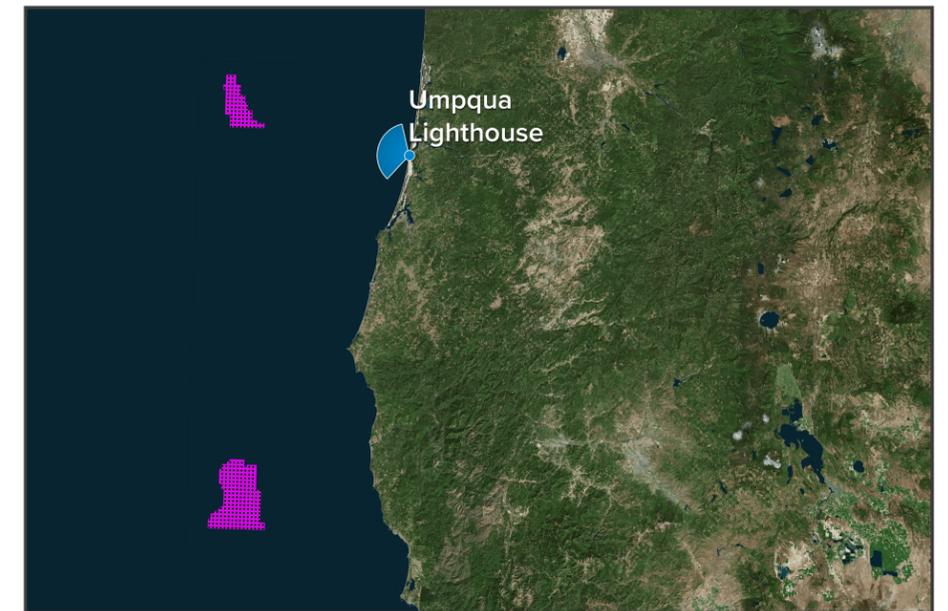
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Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A034
Lens Focal Length:	20mm
Field of View:	65.47° (H) / 46.397° (V)

Sun, Sky, and Weather Information

Sun Azimuth:	N/A
Sun Elevation:	N/A
Lighting Angle (On Turbines):	N/A
Weather Conditions:	Fair
Predicted Visibility (Miles):	N/A
Temperature (°F):	43
Temperature (°C):	6
Humidity (%):	97
SQM Reading:	20.17

Context Map



● Key Observation Point (KOP) ● Turbines

Viewing Instructions

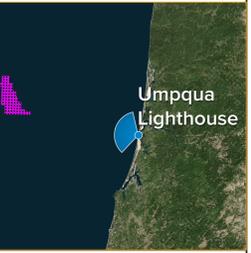
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Umpqua Lighthouse, Night, Heading WNW - Existing View

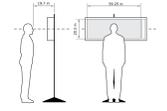
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● Viewpoint Location ● Project Area



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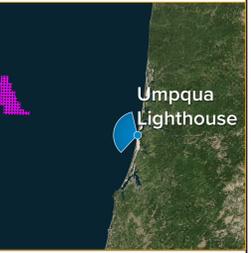
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Umpqua Lighthouse, Night, Heading WNW - Proposed View - Maximum Visibility

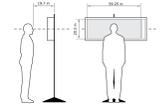
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