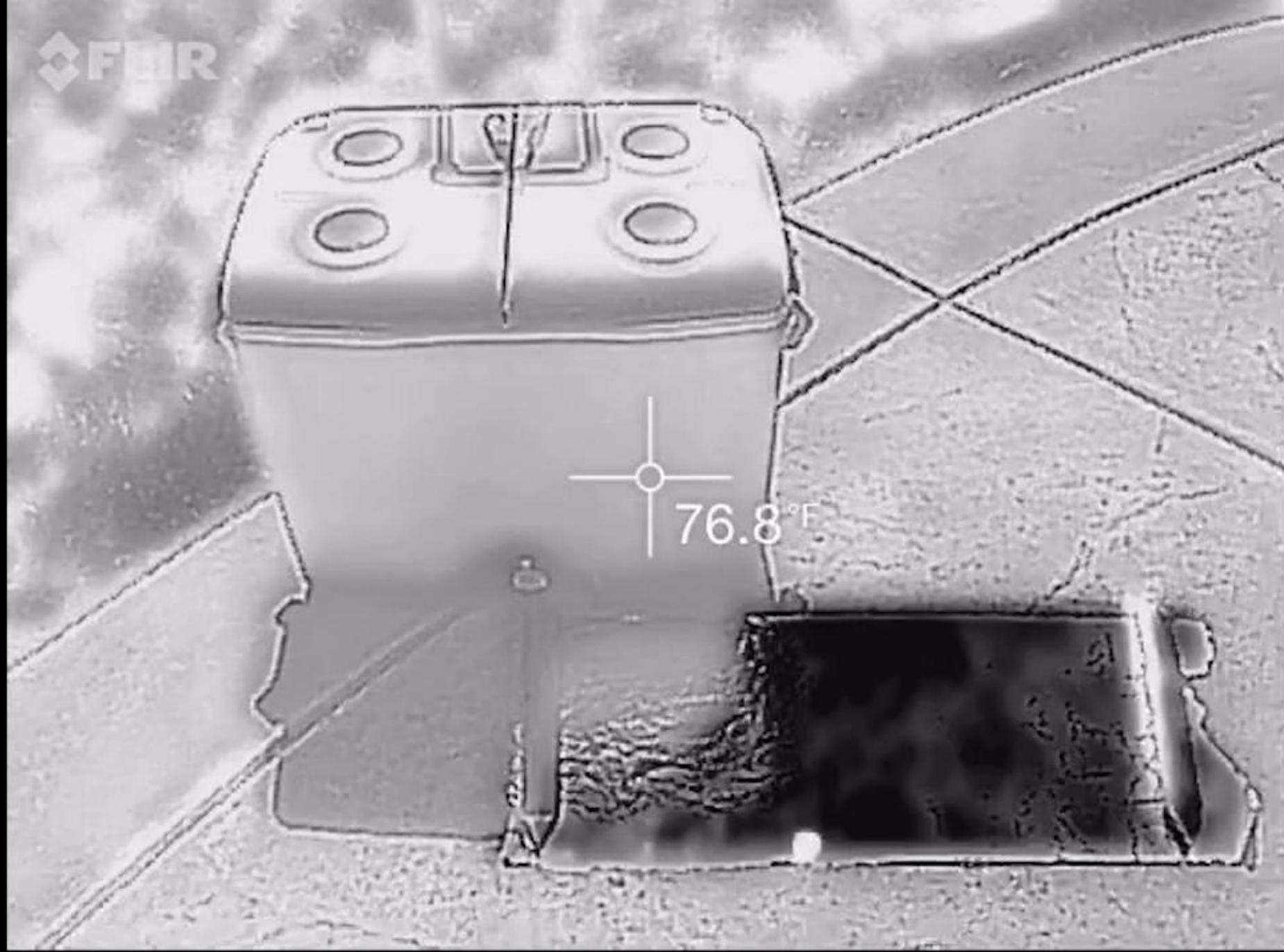


FIR

76.8°F



1  
00:00:04,579 --> 00:00:02,330  
so I saw this video on YouTube which

2  
00:00:05,930 --> 00:00:04,589  
supposedly shows a difference in

3  
00:00:08,089 --> 00:00:05,940  
temperature of some aluminum foil

4  
00:00:12,249 --> 00:00:08,099  
depending on whether it is in the shade

5  
00:00:14,480 --> 00:00:12,259  
or if it's in in the direct moonlight

6  
00:00:15,829 --> 00:00:14,490  
you see there's a plastic table they're

7  
00:00:17,900 --> 00:00:15,839  
covering one side and the other side

8  
00:00:19,790 --> 00:00:17,910  
it's exposed to the moon another plastic

9  
00:00:21,380 --> 00:00:19,800  
tableside it shows 40 degrees and on the

10  
00:00:23,929 --> 00:00:21,390  
other side it shows a much lower

11  
00:00:26,150 --> 00:00:23,939  
temperature but what's actually going on

12  
00:00:28,370 --> 00:00:26,160  
here is that it's actually the

13  
00:00:30,919 --> 00:00:28,380

reflection of the sky or the reflection

14

00:00:33,319 --> 00:00:30,929

or the table here's an experiment that I

15

00:00:36,830 --> 00:00:33,329

did to demonstrate what's actually going

16

00:00:38,330 --> 00:00:36,840

on here and this one's in the Sun so

17

00:00:41,299 --> 00:00:38,340

here's a set up to show the problem with

18

00:00:42,650 --> 00:00:41,309

reflected readings the aluminum foil on

19

00:00:46,340 --> 00:00:42,660

the ground here

20

00:00:48,049 --> 00:00:46,350

is going to be reflecting the radiation

21

00:00:51,619 --> 00:00:48,059

of Rome or whatever is directly behind

22

00:00:55,189 --> 00:00:51,629

it now in this case we've got a cloudy

23

00:00:58,099 --> 00:00:55,199

sky with a bit of Sun and I put this

24

00:01:01,220 --> 00:00:58,109

plastic cooler here to provide some

25

00:01:02,959 --> 00:01:01,230

shade on this side and I put this dark

26  
00:01:06,260 --> 00:01:02,969  
line they're roughly indicating whether

27  
00:01:08,810 --> 00:01:06,270  
the shadow line is so this side is in

28  
00:01:11,240 --> 00:01:08,820  
the shade this side is in the Sun now

29  
00:01:13,250 --> 00:01:11,250  
it's probably going to warm up because

30  
00:01:15,350 --> 00:01:13,260  
it's in the Sun this side you can

31  
00:01:17,480 --> 00:01:15,360  
actually feel it actually feels a little

32  
00:01:20,300 --> 00:01:17,490  
bit cooler but what's the infrared

33  
00:01:23,179 --> 00:01:20,310  
actually going to show us so let's let's

34  
00:01:26,330 --> 00:01:23,189  
flip over to infrared the foil actually

35  
00:01:28,580 --> 00:01:26,340  
appears to be warmer in front of the

36  
00:01:33,410 --> 00:01:28,590  
cooler now if I move this down and have

37  
00:01:36,410 --> 00:01:33,420  
a look this is saying that it's one

38  
00:01:37,580 --> 00:01:36,420

degree right here this foil which is

39

00:01:40,960 --> 00:01:37,590

obviously isn't it's actually a lot

40

00:01:44,389 --> 00:01:40,970

warmer and over in the shade over here

41

00:01:45,950 --> 00:01:44,399

70 degrees so what's actually going on

42

00:01:48,920 --> 00:01:45,960

here it's actually measuring the

43

00:01:52,520 --> 00:01:48,930

reflection of the heat of the cooler

44

00:01:57,010 --> 00:01:52,530

here 70-something degrees we go down to

45

00:02:00,020 --> 00:01:57,020

here 70 something degrees go over here

46

00:02:02,389 --> 00:02:00,030

10 degrees so what we're actually seeing

47

00:02:03,319 --> 00:02:02,399

here on this side is the temperature of

48

00:02:07,100 --> 00:02:03,329

the sky

49

00:02:10,540 --> 00:02:07,110

maybe I pan out and have a look as the

50

00:02:13,540 --> 00:02:10,550

trees and Sun there's some blue sky

51  
00:02:16,780 --> 00:02:13,550  
it's negative 40 degrees Fahrenheit if I

52  
00:02:18,340 --> 00:02:16,790  
move over to the clouds there at 39

53  
00:02:21,610 --> 00:02:18,350  
degrees which is a more reasonable one

54  
00:02:25,900 --> 00:02:21,620  
let's see if I can get the Sun if you're

55  
00:02:27,700 --> 00:02:25,910  
gonna do something ridiculous yeah it

56  
00:02:30,250 --> 00:02:27,710  
doesn't realize not really calibrated

57  
00:02:33,280 --> 00:02:30,260  
for measuring the Sun predictor here

58  
00:02:35,710 --> 00:02:33,290  
this is a overloaded temperature above

59  
00:02:37,780 --> 00:02:35,720  
two hundred and something degrees so I

60  
00:02:40,810 --> 00:02:37,790  
could probably find some hot spots on

61  
00:02:43,240 --> 00:02:40,820  
this side and the other thing you can do

62  
00:02:45,400 --> 00:02:43,250  
is if I move around I'm still in the

63  
00:02:49,330 --> 00:02:45,410

shade here but if I get it so I'm

64

00:02:52,390 --> 00:02:49,340

reflecting the sky in the shade should

65

00:02:54,850 --> 00:02:52,400

be a find a spot where it is about four

66

00:02:59,980 --> 00:02:54,860

degrees and I can't actually good at my

67

00:03:02,230 --> 00:02:59,990

angle let me get from this side here we

68

00:03:06,070 --> 00:03:02,240

go they're measuring in the shade again

69

00:03:10,990 --> 00:03:06,080

it's very low zero degrees Fahrenheit

70

00:03:14,590 --> 00:03:11,000

and that's actually in the Sun Shade in

71

00:03:18,610 --> 00:03:14,600

mind the moon shape so you get the exact

72

00:03:19,630 --> 00:03:18,620

same results as you would in and what in

73

00:03:22,330 --> 00:03:19,640

the moon you wouldn't get any

74

00:03:25,060 --> 00:03:22,340

temperature difference okay look at this

75

00:03:28,480 --> 00:03:25,070

bit of concrete right next where this

76

00:03:31,930 --> 00:03:28,490

was this has been shaded so that's 69

77

00:03:34,750 --> 00:03:31,940

degrees and whereas in the Sun 75

78

00:03:37,360 --> 00:03:34,760

degrees so the shading has a little fat

79

00:03:39,160 --> 00:03:37,370

from the Sun on the concrete but on this

80

00:03:40,660 --> 00:03:39,170

aluminum foil is completely useless

81

00:03:43,090 --> 00:03:40,670

because you can't actually measure the

82

00:03:45,290 --> 00:03:43,100

temperature of the aluminum foil here is