

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: iO LED

Report Number: P869255

Luminaire Tested: SEL50 UPDATED OPTIC

Issue Date: 8/27/2024

Test Information

Test Method: LM-79-2019
Report Number: P869255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (SEL50-5_IESNA95 ns)
Test Lab: EVERFINE
Issue Date: 8/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: SEL50 UPDATED OPTIC
Description: WHITE EMERGENCY LIGHT SINGLE HEAD
Light Source: HIGH LUMEN LED
Ballast/Driver: -

Summary

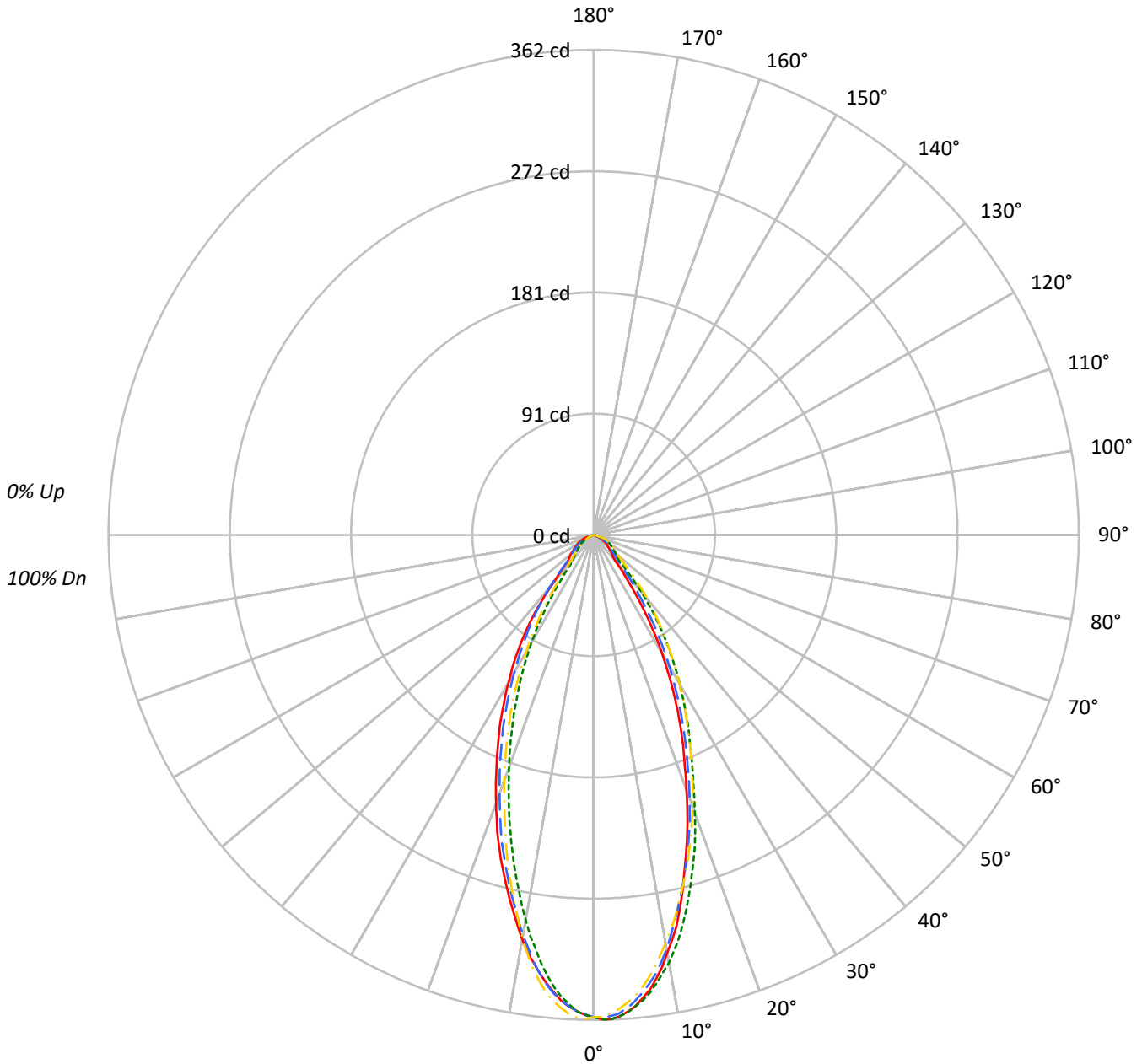
Lumens per Lamp: N/A
Luminaire Lumens: 265.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 0.69 / 0.75
Luminous Opening: (L: 0 ' x W: -0.25 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 2.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P869255
CATALOG NUMBER: SEL50 UPDATED OPTIC

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																		
	1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	94	93																		
	2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85																		
	3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78																		
	4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72																		
	5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67																		
	6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63																		
	7	81	72	65	61	80	71	65	61	70	64	61	69	64	60	67	63	60	58																		
	8	78	68	61	57	76	67	61	57	66	61	57	65	60	56	64	60	56	55																		
	9	74	64	58	54	73	63	58	54	62	57	53	61	57	53	61	56	53	52																		
	10	70	60	55	51	69	60	54	50	59	54	50	58	54	50	58	53	50	49																		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	Luminous shape not found, reference photometric report, or contact the photometric lab for calculations.			
5°				
10°				
15°				
20°				
25°				
30°				
35°				
40°				
45°				
50°				
55°				
60°				
65°				
70°				
75°				
80°				
85°				

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: -
 Vertical Angle: -
 Luminance: -



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	12.0
10°-20°	71.5	27.0
20°-30°	72.0	27.2
30°-40°	46.8	17.7
40°-50°	21.0	7.9
50°-60°	13.3	5.0
60°-70°	7.3	2.8
70°-80°	1.1	0.4
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	175.4	66.2
0°-40°	222.2	83.9
0°-60°	256.5	96.8
0°-90°	265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	265.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	360	360	360	360	360	
5°	353	354	342	339	353	33
15°	261	276	260	237	261	72
25°	150	170	168	137	150	68
35°	56	90	88	50	56	36
45°	19	27	27	19	19	14
55°	12	18	18	11	12	10
65°	4	10	11	4	4	3
75°	0	1	1	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P869255

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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0
1°	361.7	360.6	359.7	361.7	360.9	359.0	358.5	358.4	357.8	358.4	360.5
2°	361.7	360.1	358.8	362.0	359.0	356.6	355.8	356.2	355.3	355.9	359.2
3°	360.1	358.3	357.4	360.0	356.3	352.9	352.5	353.6	351.2	350.8	355.6
4°	357.0	354.9	353.7	357.8	352.3	348.8	348.5	349.1	347.2	345.6	351.4
5°	353.4	349.7	349.6	353.6	348.3	344.2	342.5	344.1	342.8	338.8	346.8
6°	347.9	343.6	344.6	349.5	342.9	338.1	336.6	337.8	336.4	330.7	339.6
7°	342.3	337.8	338.2	344.4	336.4	331.1	329.7	331.0	328.6	322.0	331.2
8°	334.7	331.7	330.9	337.9	329.6	322.4	322.5	323.4	320.4	311.7	322.1
9°	326.6	322.5	323.5	330.7	320.8	314.3	315.4	315.4	309.5	302.8	310.6
10°	316.6	312.8	314.7	324.0	312.9	305.7	306.6	306.9	299.5	292.0	299.7
11°	307.5	302.0	304.5	315.6	304.8	296.8	297.3	298.1	289.5	281.4	288.2
12°	298.0	291.7	293.8	307.1	296.0	287.5	287.8	287.9	279.3	269.9	276.4
13°	286.1	282.2	283.0	297.0	286.3	277.6	278.8	278.5	269.9	259.4	265.8
14°	274.1	272.4	272.5	286.8	277.2	268.5	269.6	268.5	260.0	248.2	255.7
15°	261.3	263.5	260.5	276.3	267.4	259.2	260.3	258.6	250.6	237.3	245.3
16°	249.6	252.8	251.7	265.0	257.5	250.3	251.4	249.5	241.3	226.5	233.6
17°	238.0	239.7	243.3	254.7	248.0	241.1	241.9	240.3	231.2	216.1	222.0
18°	226.3	228.8	233.2	244.4	237.9	231.6	232.9	229.4	221.1	205.1	212.4
19°	214.5	216.8	223.0	232.6	228.4	222.1	222.4	218.6	211.7	194.7	201.9
20°	202.6	205.9	212.5	220.7	218.6	213.4	213.1	208.5	201.9	184.6	192.4
21°	191.2	195.1	202.2	209.2	209.0	203.9	203.6	199.3	192.8	174.8	182.5
22°	180.4	183.7	191.5	198.1	198.7	194.9	194.3	190.3	183.2	165.4	172.8
23°	170.7	173.0	182.1	188.5	189.2	185.6	185.4	181.0	174.0	155.5	163.4
24°	160.7	162.5	172.5	179.0	179.5	177.1	176.3	172.4	164.8	146.1	153.7
25°	150.5	153.2	163.2	169.7	169.9	167.8	168.1	164.5	155.8	136.7	144.8
26°	140.6	143.5	153.8	161.5	161.1	159.4	160.0	156.4	146.3	127.9	135.6
27°	130.8	133.9	144.1	152.9	152.7	151.4	151.4	148.6	137.3	118.9	125.8
28°	120.8	125.0	134.7	144.4	143.9	143.3	142.7	140.7	128.2	110.0	115.8
29°	111.3	116.4	126.0	136.1	135.9	135.7	135.0	132.8	119.8	101.3	106.3
30°	102.2	107.8	116.7	128.2	128.0	127.8	126.8	125.1	111.6	92.7	97.0
31°	92.9	99.2	108.7	120.5	120.3	120.2	119.6	117.4	103.7	84.1	88.2
32°	83.1	90.5	100.7	112.7	112.8	112.8	112.4	110.1	95.9	75.9	79.8
33°	74.5	81.9	92.8	104.9	105.3	105.7	104.6	103.4	88.6	67.2	71.8
34°	65.5	73.2	85.4	97.7	98.3	99.1	96.5	96.9	81.6	59.0	63.4
35°	56.4	64.4	78.0	90.3	91.4	92.5	88.5	90.4	75.2	50.4	55.4
36°	48.8	56.5	71.0	83.0	84.9	86.2	80.9	83.7	68.3	41.7	48.1
37°	41.3	49.4	64.2	76.1	78.4	79.7	73.0	77.0	62.2	34.1	41.3
38°	35.4	43.2	57.4	68.9	72.4	73.8	64.7	70.1	55.8	28.7	35.2
39°	29.6	38.4	51.6	61.7	66.2	67.7	56.7	64.4	50.0	25.3	29.7
40°	24.7	33.7	45.6	54.3	61.3	62.5	48.2	57.6	44.6	23.6	25.4
41°	22.7	29.4	40.1	47.6	55.6	57.5	41.9	51.2	39.3	22.4	23.0
42°	21.4	26.2	35.7	41.4	50.6	51.9	36.6	45.2	34.5	21.4	21.8



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	18.7	20.6	25.8	26.8	37.0	35.8	27.1	30.3	24.6	18.7	19.0
46°	17.8	19.5	23.7	25.3	33.5	32.2	25.7	27.7	23.2	17.7	17.9
47°	16.8	18.4	22.5	24.1	30.5	29.3	24.6	26.0	22.1	16.7	16.9
48°	15.9	17.5	21.5	23.1	27.8	27.4	23.6	24.6	21.1	15.7	15.8
49°	15.1	16.4	20.5	22.2	25.6	26.0	22.7	23.5	20.1	14.7	14.9
50°	14.4	15.6	19.6	21.5	24.2	24.7	21.8	22.4	18.9	13.9	14.0
51°	13.7	14.9	18.5	20.7	23.0	23.7	21.0	21.4	17.7	13.2	13.3
52°	13.1	14.2	17.5	19.8	22.0	22.8	20.1	20.4	16.7	12.6	12.6
53°	13.0	13.7	16.6	18.9	21.1	21.8	19.1	19.1	15.9	12.2	12.2
54°	12.4	13.3	15.9	18.1	20.2	20.8	18.3	17.9	15.1	11.7	11.6
55°	11.5	12.8	15.3	17.5	19.4	19.8	17.5	16.8	14.4	11.3	11.0
56°	10.7	12.1	14.8	16.6	18.5	18.7	16.6	15.9	13.7	10.7	10.3
57°	9.9	11.3	14.3	16.0	17.8	17.9	15.8	15.1	13.1	10.0	9.3
58°	8.9	10.5	13.5	15.3	17.0	17.0	15.2	14.3	12.4	9.1	8.4
59°	8.1	9.7	12.7	14.8	16.3	16.2	14.6	13.6	11.7	8.3	7.6
60°	7.4	8.9	11.8	14.5	15.9	15.5	14.0	12.9	10.9	7.5	6.9
61°	6.6	8.2	10.8	13.9	15.1	15.0	13.6	12.3	10.0	6.7	6.2
62°	5.7	7.5	9.9	13.1	14.4	14.6	13.0	11.6	9.2	5.9	5.6
63°	5.0	7.0	9.1	12.3	13.8	13.9	12.1	11.0	8.4	5.3	5.0
64°	4.3	6.2	8.4	11.4	13.0	13.0	11.4	10.1	7.7	4.8	4.4
65°	3.7	5.4	7.7	10.5	12.1	12.3	10.7	9.7	7.1	4.3	3.8
66°	3.0	4.6	7.0	9.8	11.3	11.4	10.0	8.5	6.3	3.7	3.1
67°	1.8	3.9	6.1	9.1	10.6	10.8	9.3	7.9	5.6	3.0	1.7
68°	0.8	1.1	5.4	8.4	9.9	10.1	8.6	7.3	5.0	1.2	0.8
69°	0.6	0.7	4.6	7.7	9.1	9.4	8.2	6.8	4.4	0.8	0.6
70°	0.5	0.6	1.1	7.0	8.3	8.7	7.5	6.0	3.5	0.6	0.5
71°	0.4	0.5	0.7	6.3	7.6	8.1	6.7	5.2	1.0	0.5	0.4
72°	0.3	0.4	0.6	5.4	6.9	7.4	5.8	4.0	0.7	0.4	0.3
73°	0.2	0.2	0.4	1.1	2.6	6.7	2.7	0.9	0.6	0.3	0.2
74°	0.1	0.2	0.3	0.7	1.1	1.1	0.8	0.7	0.5	0.2	0.1
75°	0.1	0.1	0.2	0.6	0.8	0.7	0.6	0.6	0.4	0.2	0.1
76°	0.1	0.1	0.1	0.4	0.6	0.6	0.5	0.4	0.2	0.1	0.1
77°	0.1	0.1	0.1	0.3	0.4	0.5	0.4	0.3	0.1	0.1	0.1
78°	0.1	0.0	0.0	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.1
79°	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
80°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
81°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	360.0	360.0
1°	362.2	361.7
2°	361.4	361.7
3°	360.4	360.1
4°	356.1	357.0
5°	351.6	353.4
6°	346.0	347.9
7°	339.0	342.3
8°	331.1	334.7
9°	322.1	326.6
10°	311.9	316.6
11°	299.7	307.5
12°	287.9	298.0
13°	276.9	286.1
14°	265.1	274.1
15°	253.6	261.3
16°	241.9	249.6
17°	230.7	238.0
18°	218.8	226.3
19°	207.9	214.5
20°	198.1	202.6
21°	187.6	191.2
22°	177.1	180.4
23°	167.4	170.7
24°	157.7	160.7
25°	148.7	150.5
26°	139.2	140.6
27°	130.3	130.8
28°	121.3	120.8
29°	112.4	111.3
30°	104.5	102.2
31°	96.2	92.9
32°	88.3	83.1
33°	80.2	74.5
34°	72.2	65.5
35°	64.3	56.4
36°	57.1	48.8
37°	50.6	41.3
38°	44.6	35.4
39°	39.4	29.6
40°	34.5	24.7
41°	30.2	22.7
42°	26.6	21.4



TEST NUMBER: P869255
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CANDELA DISTRIBUTION (continued):

	330°	360°
45°	21.1	18.7
46°	20.0	17.8
47°	18.6	16.8
48°	17.4	15.9
49°	16.2	15.1
50°	15.2	14.4
51°	14.4	13.7
52°	14.0	13.1
53°	13.4	13.0
54°	12.7	12.4
55°	11.9	11.5
56°	11.0	10.7
57°	10.1	9.9
58°	9.1	8.9
59°	8.1	8.1
60°	7.3	7.4
61°	6.3	6.6
62°	5.5	5.7
63°	4.9	5.0
64°	4.3	4.3
65°	3.8	3.7
66°	3.1	3.0
67°	1.2	1.8
68°	0.7	0.8
69°	0.6	0.6
70°	0.5	0.5
71°	0.4	0.4
72°	0.3	0.3
73°	0.2	0.2
74°	0.1	0.1
75°	0.1	0.1
76°	0.1	0.1
77°	0.1	0.1
78°	0.1	0.1
79°	0.1	0.0
80°	0.0	0.0
81°	0.0	0.0
82°	0.0	0.0
83°	0.0	0.0
84°	0.0	0.0
85°	0.0	0.0
86°	0.0	0.0
87°	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



TEST NUMBER: P869255
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CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.0	0.0

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

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43°	20.5	23.7	32.0	35.5	45.6	46.4	32.4	38.5	30.0	20.4	20.8
44°	19.6	21.8	28.8	29.6	41.1	40.9	29.2	33.6	26.7	19.6	20.1



88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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43°	23.8	20.5
44°	22.3	19.6

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88°	0.0	0.0
89°	0.0	0.0

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Scaled Data Report



(END OF REPORT)