

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: IRiS

Report Number: P108844

Luminaire Tested: **PN3LED12FL40930-E3LWWH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P108844
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13686)
Test Lab: PEACHTREE CITY
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: IRiS
Catalog Number: PN3LED12FL40930-E3LWWH
Description: IRIS 3 INCH LED LENSED WALL WASH FIXTURE WITH
SEMI SPECULAR CLEAR OPTICAL ELEMENT
AND 40 DEGREE PRIMARY OPTIC, 20 DEGREE AIMING ANGLE
Light Source: (1) 3000K 90CRI LED
Ballast/Driver: (1) 450mA ELECTRONIC DRIVER

Summary

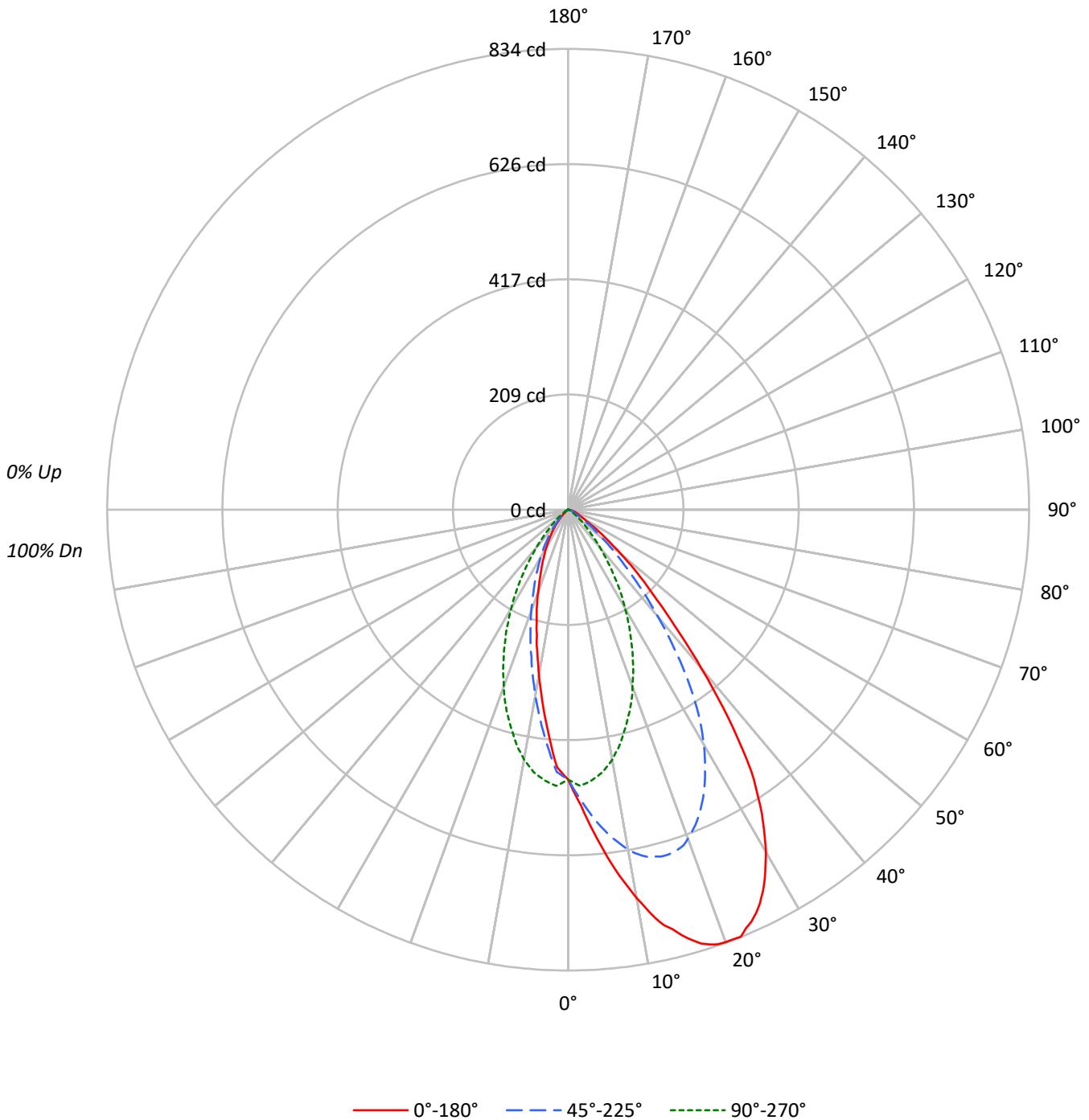
Lumens per Lamp: N/A
Luminaire Lumens: 581.8 lumens
Efficiency: N/A
Efficacy: 31.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.82 / 0.99
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
Input Voltage (V): NR
Input Current (Ain): 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: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	105	110	108	105	103	103	102	100	100	98	97	96	95	94	92					92			
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	88	83	98	92	87	82	89	85	81	86	83	80	84	81	79	77					77			
4	94	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	70					70			
5	89	80	73	68	87	79	73	68	77	72	67	75	70	67	73	69	66	65					65			
6	84	74	67	63	82	73	67	62	72	66	62	70	65	61	69	64	61	59					59			
7	79	69	62	58	78	68	62	57	67	61	57	66	61	57	64	60	56	55					55			
8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	52	51					51			
9	71	60	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47					47			
10	67	57	50	46	66	56	50	46	55	50	46	54	49	46	54	49	46	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	78683	78683	78683
5°	96530	79501	65804
10°	116688	75120	49731
15°	133096	67465	36977
20°	142778	58359	27277
25°	143113	48546	19980
30°	133121	38284	14584
35°	113656	28183	10266
40°	78907	19138	6667
45°	49417	11369	3418
50°	31154	6943	1980
55°	18229	3988	899
60°	10472	2030	516
65°	8158	2097	1220
70°	6689	754	377
75°	5415	498	0
80°	4360	742	0
85°	1479	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	8.1
10°-20°	128.1	22.0
20°-30°	165.7	28.5
30°-40°	139.3	23.9
40°-50°	68.5	11.8
50°-60°	22.2	3.8
60°-70°	7.3	1.3
70°-80°	3.1	0.5
80°-90°	0.7	0.1
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°	340.8	58.6
0°-40°	480.0	82.5
0°-60°	570.7	98.1
0°-90°	581.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	581.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	488	488	488	488	488	
5°	597	564	492	429	407	61
15°	798	650	404	261	222	226
25°	805	577	273	142	112	366
35°	578	378	143	66	52	349
45°	217	150	50	21	15	176
55°	65	44	14	6	3	61
65°	21	12	6	2	3	22
75°	9	4	1	1	0	10
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	536.7	536.7	536.7	535.2	534.4	532.8	531.2	529.6	528.0	525.7	523.3
5°	596.9	597.7	596.1	594.5	590.6	586.6	581.9	577.1	570.8	564.4	558.9
7.5°	657.9	656.3	653.9	649.9	645.2	637.3	629.4	619.1	608.8	597.7	585.0
10°	713.3	711.7	707.7	701.4	693.5	683.2	670.5	656.3	641.2	624.6	607.2
11°	733.9	730.7	727.5	720.4	711.7	698.2	686.4	668.9	651.5	633.3	612.7
12°	755.2	751.3	747.3	738.6	727.5	713.3	699.0	680.0	660.2	639.6	617.5
13°	771.9	769.5	763.1	753.6	742.6	726.7	709.3	689.5	667.4	645.2	621.4
14°	782.9	781.4	775.8	766.3	752.1	736.2	718.0	695.9	671.3	646.8	620.6
15°	798.0	796.4	790.1	779.0	765.5	747.3	726.7	703.0	676.9	649.9	621.4
16°	809.9	808.3	801.1	791.6	772.6	753.6	732.3	705.4	678.4	649.9	619.1
17°	820.9	818.6	810.6	797.2	779.8	760.8	736.2	710.1	680.0	649.1	616.7
18°	827.3	824.1	816.2	803.5	786.1	763.9	737.8	710.1	679.2	646.0	612.7
19°	832.0	828.1	819.4	805.9	787.7	763.9	737.0	706.9	674.5	642.0	606.4
20°	832.8	830.4	821.7	806.7	786.9	762.4	734.6	703.0	669.7	633.3	597.7
21°	832.8	828.9	819.4	804.3	783.7	758.4	729.1	696.6	661.0	624.6	589.0
22°	833.6	825.7	818.6	801.9	779.0	752.9	722.8	688.7	652.3	615.1	577.9
23°	823.3	819.4	809.1	793.2	770.3	743.4	713.3	676.9	642.0	603.2	564.4
24°	815.4	814.6	801.9	785.3	760.8	733.9	702.2	667.4	630.1	590.6	551.8
25°	805.1	801.1	790.1	772.6	749.7	721.2	689.5	653.1	615.9	577.1	536.7
26°	791.6	787.7	777.4	759.2	736.2	707.7	676.1	639.6	601.7	561.3	522.5
27°	775.8	771.1	760.8	744.1	718.8	690.3	658.6	623.0	585.0	545.4	505.1
28°	757.6	753.6	742.6	724.4	700.6	672.9	640.4	604.0	566.8	527.2	487.7
29°	736.2	732.3	722.8	704.6	682.4	654.7	620.6	585.0	548.6	509.8	471.0
30°	715.6	713.3	703.8	685.6	661.0	634.1	600.9	566.8	529.6	490.8	452.0
32.5°	652.3	648.4	639.6	623.0	600.9	573.9	543.9	510.6	475.0	439.4	402.9
35°	577.9	571.6	561.3	546.2	524.9	500.3	472.6	441.7	410.9	377.6	345.2
37.5°	476.6	474.2	465.5	452.0	436.2	414.0	393.4	367.3	340.4	313.5	286.6
40°	375.2	372.1	366.5	357.0	345.9	331.7	313.5	293.7	273.9	252.5	232.0
42.5°	285.0	284.2	279.5	273.9	265.2	254.1	241.5	227.2	213.7	197.9	181.3
45°	216.9	216.1	213.0	208.2	201.1	193.2	182.9	172.6	161.5	150.4	138.5
47.5°	169.4	165.5	163.1	158.3	152.8	145.7	139.3	130.6	122.7	113.2	103.7
50°	124.3	123.5	121.1	118.0	113.2	108.5	103.7	96.6	90.2	83.1	77.6
52.5°	88.7	90.2	88.7	85.5	83.9	78.4	75.2	70.5	65.7	60.2	54.6
55°	64.9	64.1	63.3	61.7	59.4	57.0	54.6	51.5	47.5	43.5	39.6
57.5°	42.0	41.2	42.0	39.6	38.0	38.0	34.0	32.5	28.5	26.1	25.3
60°	32.5	31.7	30.9	30.1	28.5	27.7	26.1	23.7	22.2	19.8	19.0
62.5°	25.3	25.3	24.5	23.7	23.0	21.4	20.6	19.0	17.4	15.8	13.5
65°	21.4	20.6	20.6	19.8	19.0	18.2	16.6	15.8	13.5	11.9	11.9
67.5°	18.2	15.8	16.6	15.0	14.2	14.2	12.7	10.3	9.5	7.9	7.9
70°	14.2	14.2	14.2	14.2	12.7	11.9	10.3	11.9	9.5	7.9	7.1
72.5°	12.7	11.9	12.7	12.7	11.1	10.3	9.5	9.5	7.1	6.3	6.3
75°	8.7	7.9	9.5	7.1	7.1	6.3	4.7	4.7	5.5	4.0	4.0
77.5°	5.5	5.5	5.5	5.5	4.7	4.7	4.7	3.2	3.2	2.4	1.6
80°	4.7	4.7	5.5	4.0	4.0	4.0	3.2	4.0	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
82.5°	1.6	2.4	2.4	1.6	2.4	2.4	1.6	1.6	0.8	0.8	1.6
85°	0.8	1.6	0.8	0.0	2.4	0.8	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.8	0.8	0.0	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
0°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	520.9	517.7	515.4	513.0	509.0	505.9	503.5	500.3	486.9	475.0	467.9
5°	550.2	542.3	534.4	524.9	517.7	509.0	500.3	491.6	456.8	429.1	412.4
7.5°	573.2	558.9	545.4	532.8	519.3	505.1	490.8	478.9	424.3	384.7	361.8
10°	589.0	569.2	551.0	532.0	513.0	494.0	475.8	459.2	390.3	341.2	312.7
11°	592.2	570.8	550.2	528.8	508.2	488.4	467.9	448.9	375.2	323.8	295.3
12°	595.3	572.4	549.4	525.7	502.7	480.5	460.7	439.4	361.8	307.9	277.9
13°	596.1	570.8	546.2	520.9	497.2	472.6	450.4	428.3	346.7	292.1	261.2
14°	592.9	566.0	539.1	512.2	487.7	462.3	437.8	415.6	330.1	274.7	243.8
15°	592.9	562.9	535.9	506.7	480.5	453.6	428.3	404.5	317.4	261.2	231.2
16°	589.0	558.1	528.8	499.5	470.2	442.5	415.6	391.9	302.4	247.8	217.7
17°	584.2	552.6	522.5	491.6	461.5	431.4	405.3	380.8	289.0	233.5	205.0
18°	578.7	545.4	513.0	481.3	449.7	420.4	393.4	368.1	276.3	220.9	190.8
19°	570.8	534.4	501.9	469.4	438.6	407.7	380.8	355.4	263.6	207.4	178.9
20°	561.3	525.7	491.6	456.8	425.1	395.0	367.3	340.4	249.4	194.7	167.0
21°	551.8	513.0	478.2	443.3	411.7	380.8	353.1	326.9	235.9	182.9	156.7
22°	539.1	501.9	466.3	431.4	399.0	368.1	341.2	314.3	224.0	172.6	146.5
23°	525.7	486.9	452.0	418.0	384.7	353.1	325.4	299.2	209.8	160.7	136.2
24°	512.2	474.2	437.0	402.9	369.7	340.4	312.7	286.6	199.5	150.4	126.7
25°	498.7	459.2	424.3	388.7	355.4	326.2	298.5	273.1	187.6	141.7	118.0
26°	483.7	443.3	409.3	374.4	341.2	311.9	285.0	258.9	177.3	132.2	111.6
27°	466.3	427.5	393.4	357.8	326.9	296.1	270.7	246.2	165.5	122.7	103.7
28°	449.7	412.4	376.8	342.0	311.9	281.8	256.5	232.0	155.2	114.8	95.8
29°	434.6	395.8	361.0	328.5	296.1	267.6	242.2	219.3	144.9	106.9	89.5
30°	415.6	378.4	344.4	311.9	281.8	254.1	228.0	205.8	135.4	100.5	83.9
32.5°	367.3	332.5	300.0	270.0	242.2	215.3	194.0	175.0	112.4	82.3	68.9
35°	311.9	281.0	254.9	228.0	202.7	180.5	160.7	143.3	89.5	66.5	55.4
37.5°	260.5	233.5	209.8	186.8	165.5	146.5	129.8	114.8	70.5	52.2	42.7
40°	211.4	189.2	168.6	150.4	133.8	116.4	102.9	91.0	54.6	41.2	34.8
42.5°	164.7	148.0	132.2	116.4	102.1	89.5	77.6	68.1	42.0	30.1	25.3
45°	125.9	112.4	99.7	88.7	76.0	65.7	57.0	49.9	30.9	21.4	16.6
47.5°	94.2	83.9	76.0	65.7	57.8	49.9	43.5	37.2	23.7	16.6	11.9
50°	68.9	62.5	54.6	46.7	40.4	35.6	31.7	27.7	17.4	10.3	6.3
52.5°	49.1	42.7	38.8	34.8	29.3	25.3	21.4	19.0	11.9	6.3	6.3
55°	34.8	30.9	27.7	24.5	19.8	17.4	15.8	14.2	8.7	5.5	4.0
57.5°	20.6	18.2	14.2	11.9	10.3	9.5	7.9	6.3	1.6	0.0	0.0
60°	16.6	14.2	13.5	11.1	9.5	8.7	7.9	6.3	4.0	2.4	2.4
62.5°	12.7	11.1	10.3	9.5	8.7	7.9	7.1	5.5	3.2	2.4	2.4
65°	10.3	9.5	7.9	7.1	6.3	5.5	4.0	5.5	2.4	1.6	0.8
67.5°	6.3	4.0	4.0	3.2	2.4	2.4	2.4	0.8	0.0	0.0	0.0
70°	6.3	5.5	6.3	4.0	4.0	3.2	2.4	1.6	1.6	0.0	0.0
72.5°	4.7	4.0	4.7	3.2	3.2	2.4	2.4	1.6	0.8	1.6	1.6
75°	4.0	3.2	3.2	1.6	2.4	1.6	0.0	0.8	1.6	0.8	0.8
77.5°	2.4	0.8	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.8
80°	2.4	2.4	1.6	1.6	0.8	1.6	3.2	0.8	0.8	0.8	1.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	112.5°	135°	157.5°
82.5°	0.8	0.0	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0.8
85°	1.6	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.8	0.0	0.8
87.5°	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	180°
0°	488.4
2.5°	466.3
5°	406.9
7.5°	353.1
10°	304.0
11°	285.0
12°	267.6
13°	252.5
14°	234.3
15°	221.7
16°	206.6
17°	194.7
18°	183.7
19°	170.2
20°	159.1
21°	148.0
22°	138.5
23°	128.2
24°	119.5
25°	112.4
26°	105.3
27°	97.4
28°	91.0
29°	84.7
30°	78.4
32.5°	64.1
35°	52.2
37.5°	40.4
40°	31.7
42.5°	23.0
45°	15.0
47.5°	11.1
50°	7.9
52.5°	4.0
55°	3.2
57.5°	0.0
60°	1.6
62.5°	2.4
65°	3.2
67.5°	0.0
70°	0.8
72.5°	0.8
75°	0.0
77.5°	0.0
80°	0.0



TEST NUMBER: P108844

CATALOG NUMBER: PN3LED12FL40930-E3LWWH

CANDELA DISTRIBUTION (continued):

	180°
82.5°	0.8
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)