

Scaled data based on original data using
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact
Fluorescent Lamps

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SHAPER

Report Number: 20060A

Luminaire Tested: **691-CF2/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 20060A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 691-CF2/26
Description: INTERIOR WALL MOUNT LUMINAIRE WHITE BACK AND COPPER BOWL INTERIOR
WITH NO LENS
Light Source: TWO 26 WATT CPFL LAMPS. LUMEN RATING = 3600 LMS.

Ballast/Driver: -

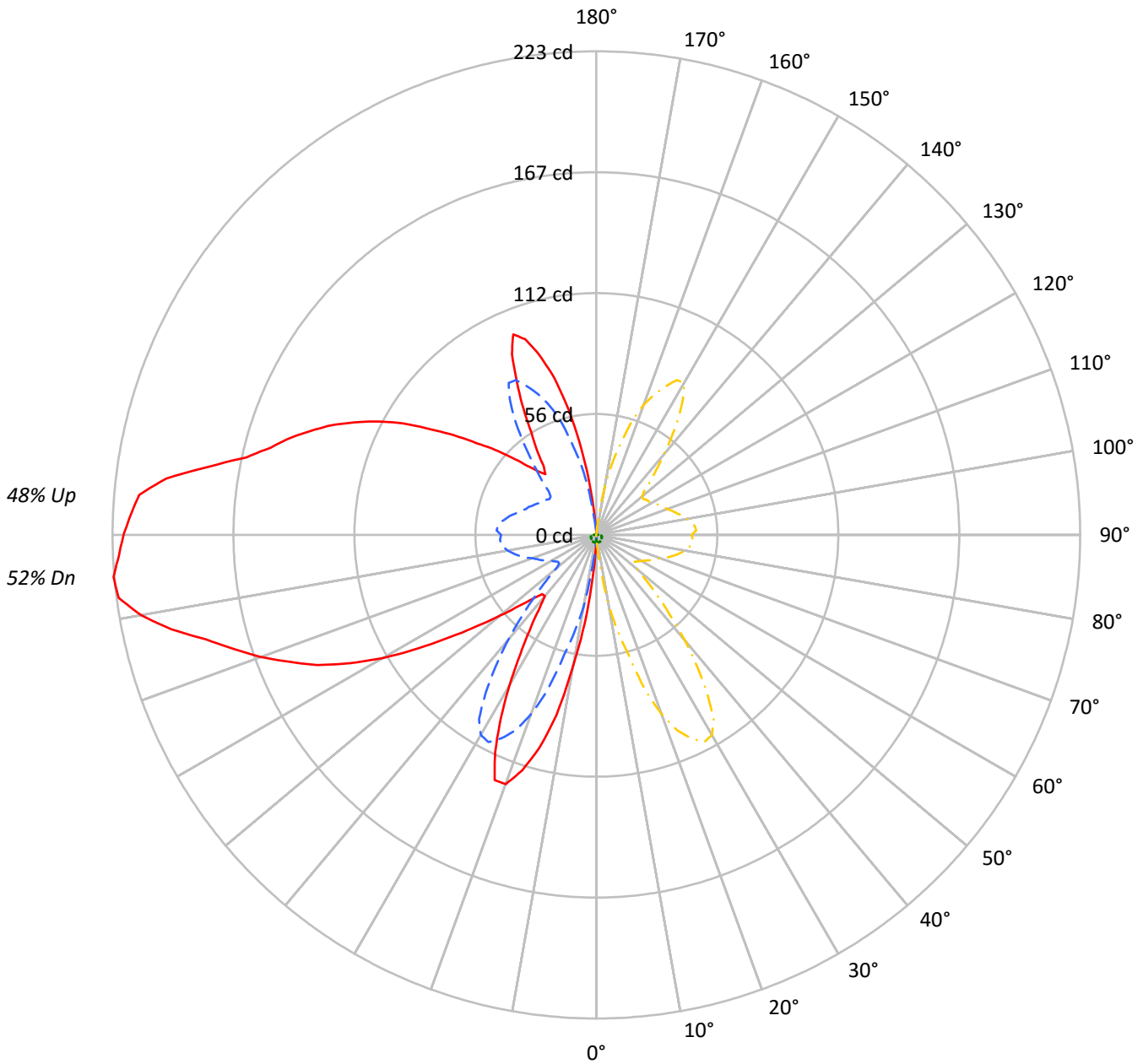
Summary

Lumens per Lamp: 3600 (1 lamp)
Luminaire Lumens: 386.9 lumens
Efficiency: 10.7%
Efficacy: -
Spacing Criteria (0/90/45): 9.08 / 2.2 / 4.19
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: General Diffuse

Input Watts (W): 0
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

TEST NUMBER: 20060A
CATALOG NUMBER: 691-CF2/26

Luminous Intensity Polar Plot



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	12	12	12	12	11	11	11	11	9	9	9	8	8	8	6	6	6	6	6	6
1	10	9	9	8	9	8	8	7	7	7	6	6	5	5	5	4	4	5	4	4
2	9	8	7	6	8	7	6	6	6	5	5	5	4	4	4	3	3	4	3	3
3	8	7	6	5	7	6	5	5	5	4	4	4	4	3	3	3	2	3	3	2
4	7	6	5	4	7	5	4	4	4	4	3	4	3	3	3	2	2	3	2	2
5	7	5	4	3	6	5	4	3	4	3	3	3	3	2	2	2	2	2	2	2
6	6	5	4	3	6	4	3	3	4	3	2	3	2	2	2	2	1	2	2	1
7	6	4	3	3	5	4	3	2	3	2	2	3	2	2	2	2	1	2	2	1
8	5	4	3	2	5	3	3	2	3	2	2	2	2	1	2	1	1	2	1	1
9	5	3	3	2	4	3	2	2	3	2	2	2	2	1	2	1	1	2	1	1
10	5	3	2	2	4	3	2	2	2	2	1	2	1	1	2	1	1	2	1	1

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	Luminaire represents a point source (luminous area is zero).			
5°	No luminance values can be calculated.			
10°				
15°				
20°				
25°				
30°				
35°				
40°				
45°				
50°				
55°				
60°				
65°				
70°				
75°				
80°				
85°				



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.9	0.2	0.0
10°-20°	8.2	2.1	0.2
20°-30°	18.4	4.8	0.5
30°-40°	20.3	5.2	0.6
40°-50°	17.5	4.5	0.5
50°-60°	20.2	5.2	0.6
60°-70°	27.9	7.2	0.8
70°-80°	39.6	10.2	1.1
80°-90°	47.6	12.3	1.3
90°-100°	47.5	12.3	1.3
100°-110°	37.2	9.6	1.0
110°-120°	27.7	7.2	0.8
120°-130°	21.1	5.4	0.6
130°-140°	16.7	4.3	0.5
140°-150°	16.0	4.1	0.4
150°-160°	13.8	3.6	0.4
160°-170°	5.8	1.5	0.2
170°-180°	0.4	0.1	0.0
0°-30°	27.5	7.1	0.8
0°-40°	47.8	12.3	1.3
0°-60°	85.5	22.1	2.4
0°-90°	200.6	51.9	5.6
90°-120°	112.4	29.1	3.1
90°-150°	166.2	43.0	4.6
90°-180°	186.0	48.1	5.2
0°-180°	386.9	100.0	10.7

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2	2	2	2	2	
5°	0	4	20	4	0	0
15°	0	4	102	4	0	0
25°	0	4	110	4	0	0
35°	0	3	54	3	0	0
45°	0	3	42	3	0	0
55°	0	3	82	3	0	0
65°	0	3	142	3	0	0
75°	0	3	186	3	0	0
85°	0	2	223	2	0	0
90°	0	2	218	2	0	0
95°	0	1	212	1	0	0
105°	0	1	155	1	0	0
115°	0	1	123	1	0	0
125°	0	0	80	0	0	0
135°	0	0	45	0	0	0
145°	0	0	48	0	0	0
155°	0	0	92	0	0	0
165°	0	0	75	0	0	0
175°	0	0	5	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
2.5°	0.8	0.9	0.5	2.0	3.6	2.9	1.8	4.3	5.6	4.3	1.8
5°	0.5	0.5	0.8	2.5	3.5	3.3	6.7	14.4	19.6	14.4	6.7
7.5°	0.3	0.3	0.6	2.4	3.2	3.9	16.0	34.4	40.8	34.4	16.0
10°	0.0	0.6	0.5	2.3	3.7	6.9	32.9	52.2	60.7	52.2	32.9
12.5°	0.0	0.0	0.0	2.1	3.3	10.8	44.9	72.3	85.3	72.3	44.9
15°	0.0	0.1	0.2	2.2	3.5	19.3	57.3	92.0	101.7	92.0	57.3
17.5°	0.0	0.0	0.1	2.0	3.4	28.2	75.1	105.2	113.8	105.2	75.1
20°	0.0	0.0	0.0	2.0	3.4	35.7	87.9	113.7	122.3	113.7	87.9
22.5°	0.0	0.0	0.0	1.8	3.7	41.7	97.6	120.8	122.4	120.8	97.6
25°	0.0	0.0	0.0	1.8	3.6	46.7	103.5	116.8	110.3	116.8	103.5
27.5°	0.0	0.0	0.0	1.1	3.4	53.9	107.7	103.7	95.2	103.7	107.7
30°	0.0	0.0	0.0	1.5	3.6	62.9	106.5	89.0	80.1	89.0	106.5
32.5°	0.0	0.0	0.0	1.5	3.5	72.6	100.6	74.8	65.3	74.8	100.6
35°	0.0	0.0	0.0	1.4	3.4	79.4	88.8	61.8	53.6	61.8	88.8
37.5°	0.0	0.0	0.0	1.0	3.5	83.1	75.9	50.1	43.5	50.1	75.9
40°	0.0	0.0	0.0	1.1	3.4	84.5	63.3	41.0	36.9	41.0	63.3
42.5°	0.0	0.0	0.0	1.1	3.4	82.6	50.6	33.4	37.0	33.4	50.6
45°	0.0	0.0	0.0	1.0	3.4	78.8	40.1	33.2	41.7	33.2	40.1
47.5°	0.0	0.0	0.0	0.6	3.3	73.6	31.3	36.5	48.4	36.5	31.3
50°	0.0	0.0	0.0	0.9	3.0	70.0	23.9	41.1	57.8	41.1	23.9
52.5°	0.0	0.0	0.0	0.9	2.9	64.6	21.6	46.9	68.8	46.9	21.6
55°	0.0	0.0	0.0	0.2	2.9	59.1	21.6	54.0	81.8	54.0	21.6
57.5°	0.0	0.0	0.0	0.2	3.0	52.1	22.7	60.4	97.4	60.4	22.7
60°	0.0	0.0	0.0	0.5	2.6	44.1	23.9	69.2	113.5	69.2	23.9
62.5°	0.0	0.0	0.0	0.4	2.7	36.7	25.5	78.7	128.0	78.7	25.5
65°	0.0	0.0	0.0	0.6	2.7	30.8	27.7	91.6	141.9	91.6	27.7
67.5°	0.0	0.0	0.0	0.5	2.8	26.4	29.3	104.4	152.9	104.4	29.3
70°	0.0	0.0	0.0	0.4	2.7	23.0	31.5	117.5	164.6	117.5	31.5
72.5°	0.0	0.0	0.0	0.4	2.7	21.6	34.4	131.4	175.0	131.4	34.4
75°	0.0	0.0	0.0	0.4	2.7	20.6	36.9	144.5	186.2	144.5	36.9
77.5°	0.0	0.0	0.0	0.3	2.6	21.0	39.4	157.7	200.8	157.7	39.4
80°	0.0	0.0	0.0	0.1	2.6	21.2	41.5	166.4	213.1	166.4	41.5
82.5°	0.0	0.0	0.0	0.3	2.2	22.5	43.2	171.9	222.1	171.9	43.2
85°	0.0	0.0	0.0	0.3	2.3	23.0	44.4	172.1	223.4	172.1	44.4
87.5°	0.0	0.0	0.0	0.0	2.4	24.4	44.4	169.0	220.3	169.0	44.4
90°	0.0	0.0	0.0	0.0	2.4	25.1	43.9	161.7	217.9	161.7	43.9
92.5°	0.0	0.0	0.0	0.0	0.6	37.4	46.0	170.9	214.8	170.9	46.0
95°	0.0	0.0	0.0	0.0	0.6	35.6	45.6	168.8	211.5	168.8	45.6
97.5°	0.0	0.0	0.0	0.0	0.4	34.6	44.5	163.9	199.8	163.9	44.5
100°	0.0	0.0	0.0	0.0	0.6	33.1	42.5	155.0	181.1	155.0	42.5
102.5°	0.0	0.0	0.0	0.0	0.4	32.5	40.7	143.3	165.2	143.3	40.7
105°	0.0	0.0	0.0	0.0	0.7	31.1	38.4	131.1	155.4	131.1	38.4
107.5°	0.0	0.0	0.0	0.0	0.4	31.5	36.7	119.6	148.3	119.6	36.7
110°	0.0	0.0	0.0	0.0	0.5	32.0	34.7	109.1	140.1	109.1	34.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.0	0.0	0.0	0.0	0.5	34.1	33.7	99.2	132.2	99.2	33.7
115°	0.0	0.0	0.0	0.0	0.6	36.5	32.2	91.0	122.8	91.0	32.2
117.5°	0.0	0.0	0.0	0.0	0.5	40.0	31.1	83.2	113.3	83.2	31.1
120°	0.0	0.0	0.0	0.0	0.6	44.0	29.4	77.0	102.8	77.0	29.4
122.5°	0.0	0.0	0.0	0.0	0.6	49.0	28.7	70.6	90.6	70.6	28.7
125°	0.0	0.0	0.0	0.0	0.5	53.9	28.2	64.6	80.0	64.6	28.2
127.5°	0.0	0.0	0.0	0.0	0.6	59.3	27.2	57.9	69.4	57.9	27.2
130°	0.0	0.0	0.0	0.0	0.5	64.7	27.5	51.9	61.1	51.9	27.5
132.5°	0.0	0.0	0.0	0.0	0.5	70.2	29.8	45.4	52.7	45.4	29.8
135°	0.0	0.0	0.0	0.0	0.3	73.6	35.4	40.3	45.1	40.3	35.4
137.5°	0.0	0.0	0.0	0.0	0.1	74.8	41.0	36.0	39.6	36.0	41.0
140°	0.0	0.0	0.0	0.0	0.2	74.0	48.3	36.1	36.6	36.1	48.3
142.5°	0.0	0.0	0.0	0.0	0.3	71.6	56.9	41.4	39.7	41.4	56.9
145°	0.0	0.0	0.0	0.0	0.1	68.1	66.0	46.8	47.8	46.8	66.0
147.5°	0.0	0.0	0.0	0.0	0.3	62.0	74.3	54.7	55.6	54.7	74.3
150°	0.0	0.0	0.0	0.0	0.1	55.1	80.9	62.6	67.2	62.6	80.9
152.5°	0.0	0.0	0.0	0.0	0.4	47.3	80.5	71.9	79.0	71.9	80.5
155°	0.0	0.0	0.0	0.0	0.3	42.6	75.6	81.5	92.0	81.5	75.6
157.5°	0.0	0.0	0.0	0.0	0.4	37.7	70.2	83.0	100.1	83.0	70.2
160°	0.0	0.0	0.0	0.0	0.1	32.1	63.7	76.6	96.0	76.6	63.7
162.5°	0.0	0.0	0.0	0.0	0.0	27.7	55.4	70.1	86.7	70.1	55.4
165°	0.0	0.0	0.0	0.0	0.1	18.6	43.7	61.5	74.9	61.5	43.7
167.5°	0.0	0.0	0.0	0.0	0.1	9.4	34.0	46.0	59.0	46.0	34.0
170°	0.0	0.0	0.0	0.0	0.2	5.7	22.1	32.8	40.7	32.8	22.1
172.5°	0.0	0.0	0.0	0.1	0.3	2.0	8.6	16.8	23.2	16.8	8.6
175°	0.0	0.0	0.0	0.1	0.1	0.9	2.6	4.4	5.4	4.4	2.6
177.5°	0.0	0.0	0.1	0.0	0.2	0.0	0.7	0.1	0.8	0.1	0.7
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: 20060A
 CATALOG NUMBER: 691-CF2/26

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2.0	2.0	2.0	2.0	2.0	2.0
2.5°	2.9	3.6	2.0	0.5	0.9	0.8
5°	3.3	3.5	2.5	0.8	0.5	0.5
7.5°	3.9	3.2	2.4	0.6	0.3	0.3
10°	6.9	3.7	2.3	0.5	0.6	0.0
12.5°	10.8	3.3	2.1	0.0	0.0	0.0
15°	19.3	3.5	2.2	0.2	0.1	0.0
17.5°	28.2	3.4	2.0	0.1	0.0	0.0
20°	35.7	3.4	2.0	0.0	0.0	0.0
22.5°	41.7	3.7	1.8	0.0	0.0	0.0
25°	46.7	3.6	1.8	0.0	0.0	0.0
27.5°	53.9	3.4	1.1	0.0	0.0	0.0
30°	62.9	3.6	1.5	0.0	0.0	0.0
32.5°	72.6	3.5	1.5	0.0	0.0	0.0
35°	79.4	3.4	1.4	0.0	0.0	0.0
37.5°	83.1	3.5	1.0	0.0	0.0	0.0
40°	84.5	3.4	1.1	0.0	0.0	0.0
42.5°	82.6	3.4	1.1	0.0	0.0	0.0
45°	78.8	3.4	1.0	0.0	0.0	0.0
47.5°	73.6	3.3	0.6	0.0	0.0	0.0
50°	70.0	3.0	0.9	0.0	0.0	0.0
52.5°	64.6	2.9	0.9	0.0	0.0	0.0
55°	59.1	2.9	0.2	0.0	0.0	0.0
57.5°	52.1	3.0	0.2	0.0	0.0	0.0
60°	44.1	2.6	0.5	0.0	0.0	0.0
62.5°	36.7	2.7	0.4	0.0	0.0	0.0
65°	30.8	2.7	0.6	0.0	0.0	0.0
67.5°	26.4	2.8	0.5	0.0	0.0	0.0
70°	23.0	2.7	0.4	0.0	0.0	0.0
72.5°	21.6	2.7	0.4	0.0	0.0	0.0
75°	20.6	2.7	0.4	0.0	0.0	0.0
77.5°	21.0	2.6	0.3	0.0	0.0	0.0
80°	21.2	2.6	0.1	0.0	0.0	0.0
82.5°	22.5	2.2	0.3	0.0	0.0	0.0
85°	23.0	2.3	0.3	0.0	0.0	0.0
87.5°	24.4	2.4	0.0	0.0	0.0	0.0
90°	25.1	2.4	0.0	0.0	0.0	0.0
92.5°	37.4	0.6	0.0	0.0	0.0	0.0
95°	35.6	0.6	0.0	0.0	0.0	0.0
97.5°	34.6	0.4	0.0	0.0	0.0	0.0
100°	33.1	0.6	0.0	0.0	0.0	0.0
102.5°	32.5	0.4	0.0	0.0	0.0	0.0
105°	31.1	0.7	0.0	0.0	0.0	0.0
107.5°	31.5	0.4	0.0	0.0	0.0	0.0
110°	32.0	0.5	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	34.1	0.5	0.0	0.0	0.0	0.0
115°	36.5	0.6	0.0	0.0	0.0	0.0
117.5°	40.0	0.5	0.0	0.0	0.0	0.0
120°	44.0	0.6	0.0	0.0	0.0	0.0
122.5°	49.0	0.6	0.0	0.0	0.0	0.0
125°	53.9	0.5	0.0	0.0	0.0	0.0
127.5°	59.3	0.6	0.0	0.0	0.0	0.0
130°	64.7	0.5	0.0	0.0	0.0	0.0
132.5°	70.2	0.5	0.0	0.0	0.0	0.0
135°	73.6	0.3	0.0	0.0	0.0	0.0
137.5°	74.8	0.1	0.0	0.0	0.0	0.0
140°	74.0	0.2	0.0	0.0	0.0	0.0
142.5°	71.6	0.3	0.0	0.0	0.0	0.0
145°	68.1	0.1	0.0	0.0	0.0	0.0
147.5°	62.0	0.3	0.0	0.0	0.0	0.0
150°	55.1	0.1	0.0	0.0	0.0	0.0
152.5°	47.3	0.4	0.0	0.0	0.0	0.0
155°	42.6	0.3	0.0	0.0	0.0	0.0
157.5°	37.7	0.4	0.0	0.0	0.0	0.0
160°	32.1	0.1	0.0	0.0	0.0	0.0
162.5°	27.7	0.0	0.0	0.0	0.0	0.0
165°	18.6	0.1	0.0	0.0	0.0	0.0
167.5°	9.4	0.1	0.0	0.0	0.0	0.0
170°	5.7	0.2	0.0	0.0	0.0	0.0
172.5°	2.0	0.3	0.1	0.0	0.0	0.0
175°	0.9	0.1	0.1	0.0	0.0	0.0
177.5°	0.0	0.2	0.0	0.1	0.0	0.0
180°	0.1	0.1	0.1	0.1	0.1	0.1

(END OF REPORT)