



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  
Eaton Lighting Division  
(formerly Cooper Lighting)

Brand: FAIL-SAFE

Report Number: P212892

Luminaire Tested: **FPS-4-LD4-1HI-40-CLR**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Eaton or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P212892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35664)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-1HI-40-CLR  
Description: FPS 4' LED FIXTURE WITH CLEAR LENS  
Light Source: (84) EATON 4000K CCT, 85 CRI LEDS  
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	a	good	reflector
	b	good	lens
	c	good	housing
	d	good	cord

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4616.9 lumens  
Efficiency: N/A  
Efficacy: 104.2 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 4.1' x H: 0.33')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B2 - U3 - G2

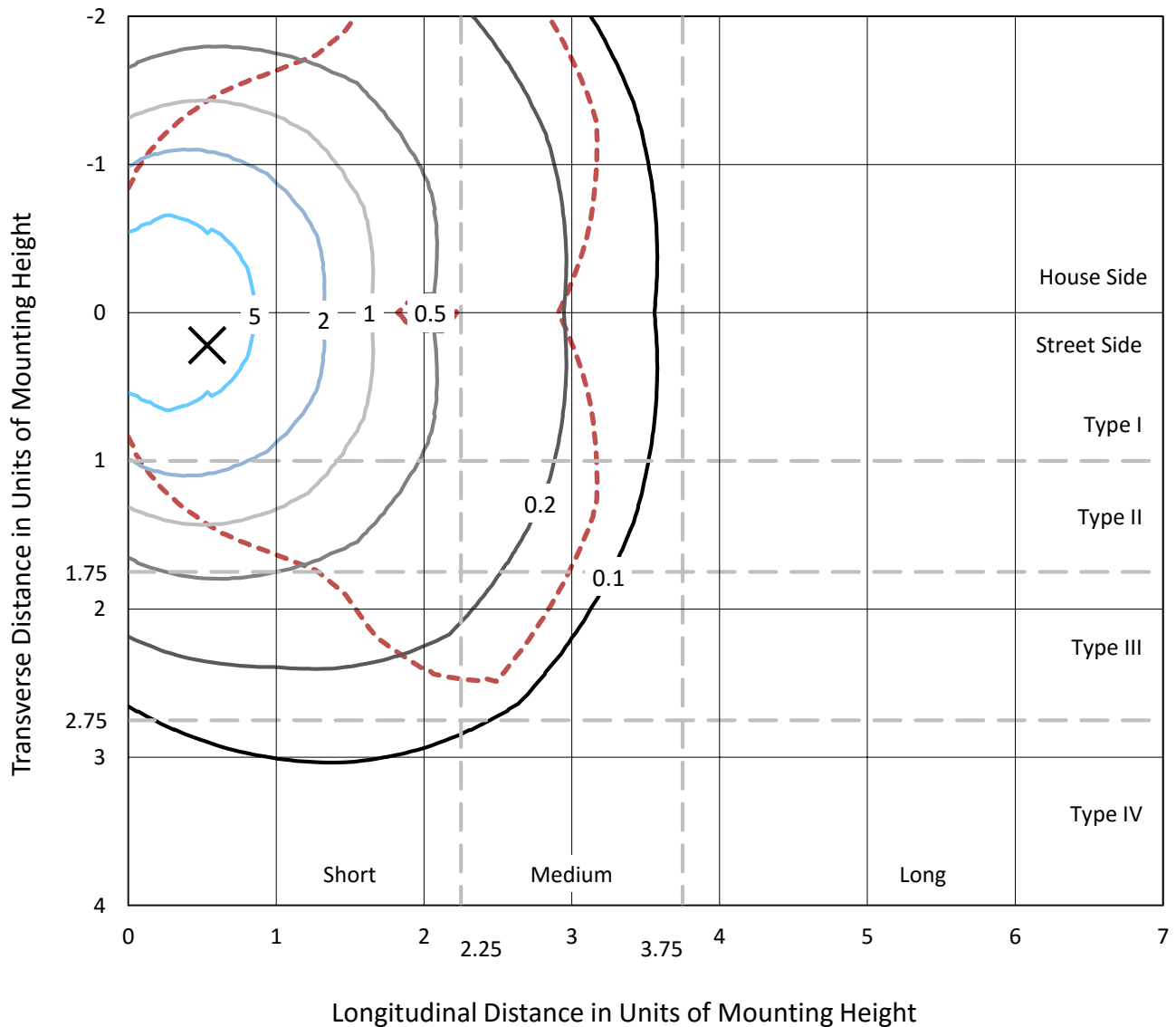
Input Watts (W): 44.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

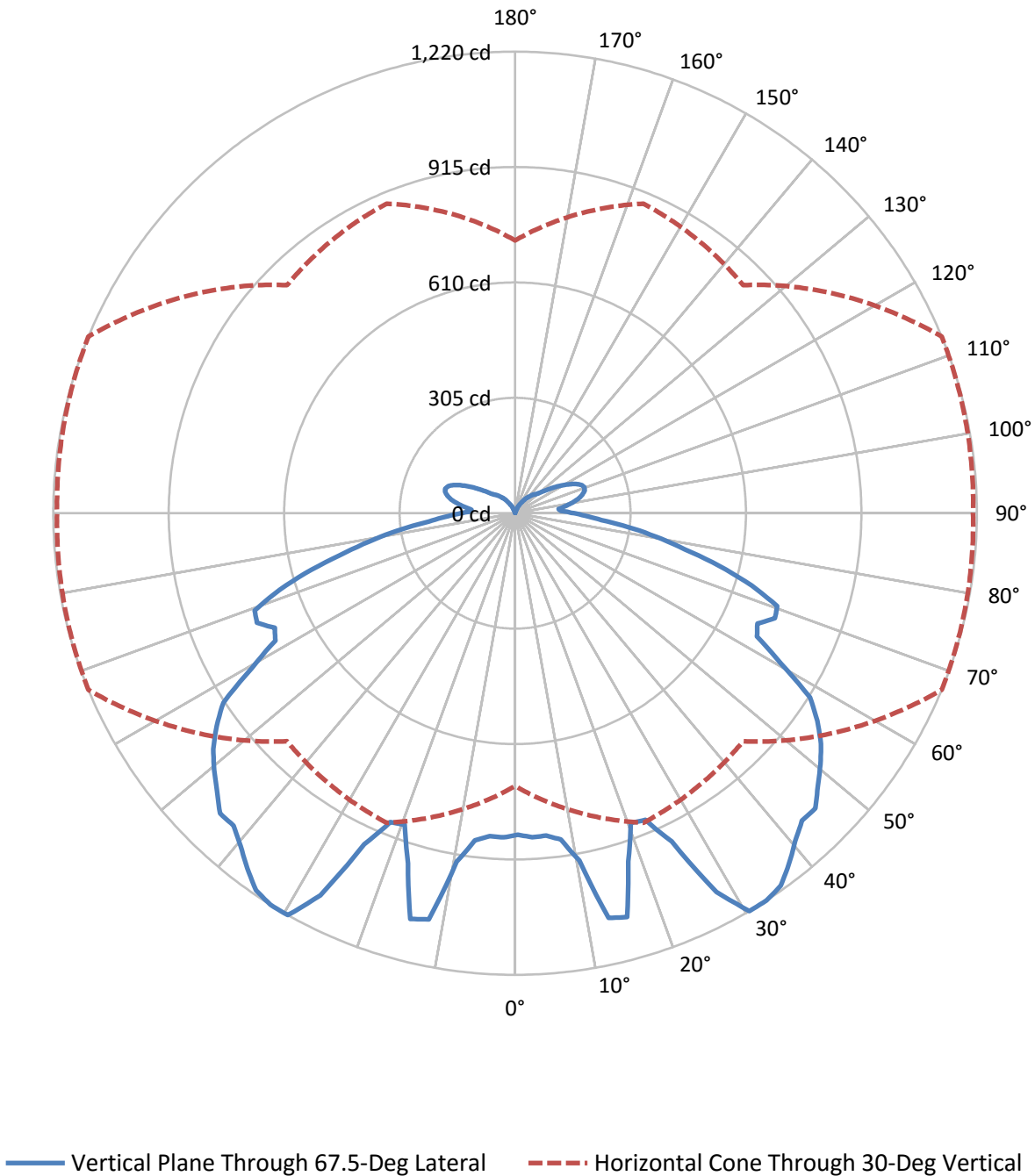
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.7 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot





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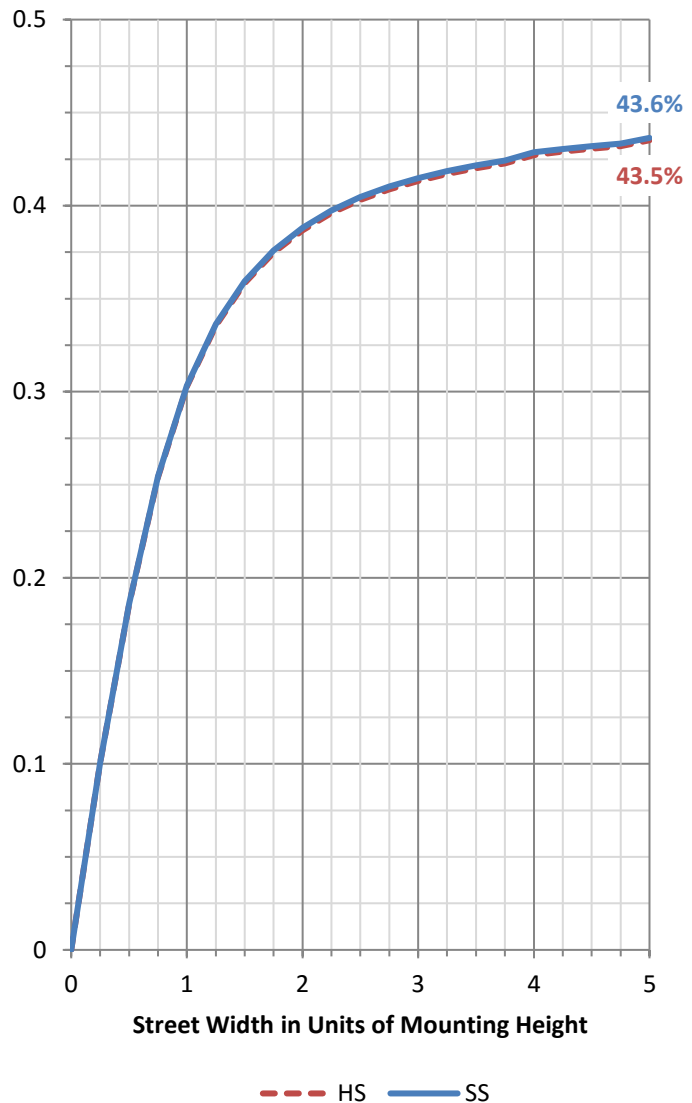
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2059.8	248.6	2308.4
	% Fixture	44.6	5.4	50.0
<b>Street Side</b>	Lumens	2059.8	248.6	2308.4
	% Fixture	44.6	5.4	50.0
<b>Total</b>	Lumens	4119.6	497.3	4616.9
	% Fixture	89.2	10.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	1.8
10°-20°	267.5	5.8
20°-30°	429.8	9.3
30°-40°	627.9	13.6
40°-50°	729.7	15.8
50°-60°	694.6	15.0
60°-70°	588.6	12.7
70°-80°	479.5	10.4
80°-90°	219.4	4.8
90°-100°	105.2	2.3
100°-110°	139.2	3.0
110°-120°	123.2	2.7
120°-130°	69.3	1.5
130°-140°	35.3	0.8
140°-150°	16.9	0.4
150°-160°	6.3	0.1
160°-170°	1.4	0.0
170°-180°	0.4	0.0
0°-90°	4119.6	89.2
0°-180°	4616.9	100.0





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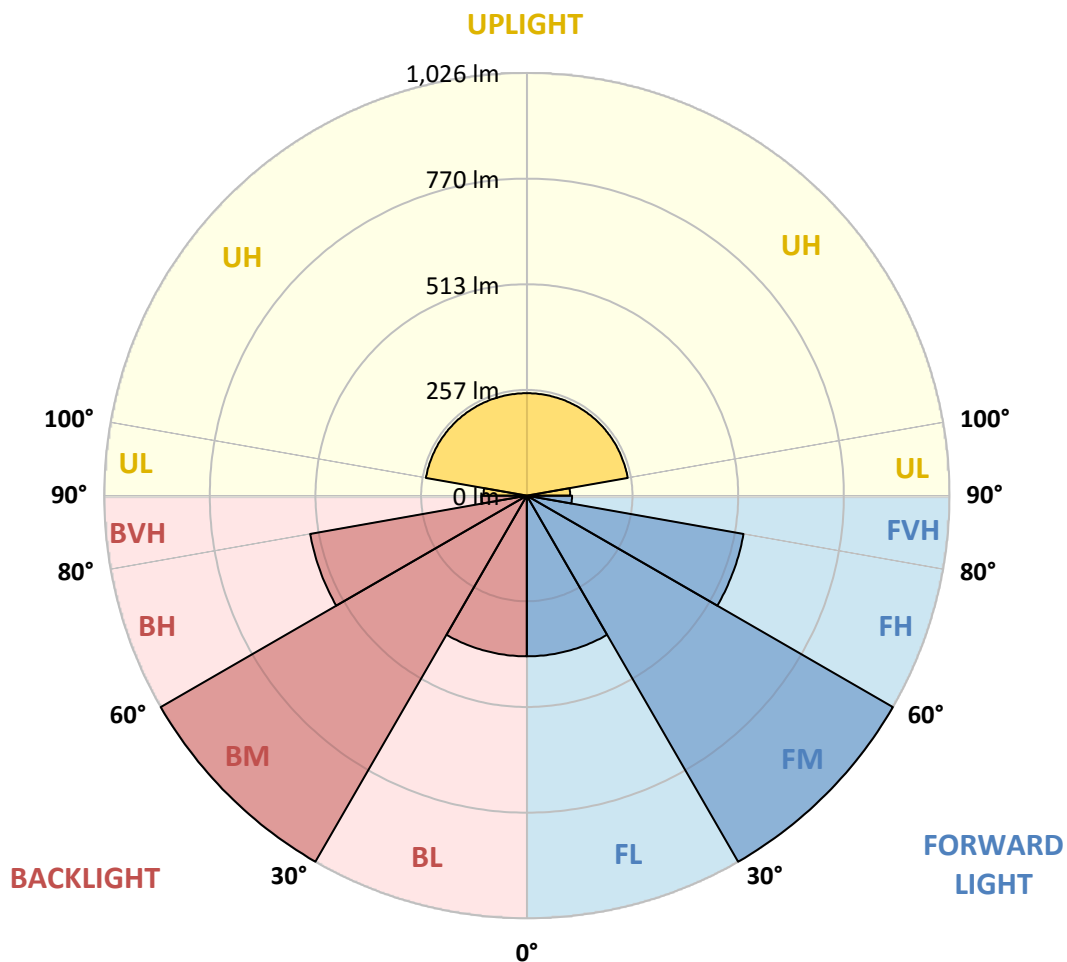
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	390.0	8.4			
FM (30°-60°)	1026.1	22.2			
FH (60°-80°)	534.0	11.6			G0/660
FVH (80°-90°)	109.7	2.4			G2/225
BL (0°-30°)	390.0	8.4	B1/500		
BM (30°-60°)	1026.1	22.2	B2/2500		
BH (60°-80°)	534.0	11.6	B2/1000		G0/660
BVH (80°-90°)	109.7	2.4			G2/225
UL (90°-100°)	105.2	2.3		U3/500	
UH (100°-180°)	248.6	5.4		U3/500	

**BUG Rating: B2-U3-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	849.3	849.3	849.3	849.3	849.3
2.5°	856.8	855.5	854.3	856.8	854.3
5°	855.5	861.7	856.8	855.5	850.6
7.5°	848.1	860.5	854.3	870.4	872.9
10°	848.1	859.2	870.4	933.5	974.4
12.5°	840.7	849.3	908.8	1097.0	1116.8
15°	828.3	841.9	1017.7	1106.9	1028.9
17.5°	819.6	843.1	1104.4	967.0	880.3
20°	808.5	844.4	1084.6	872.9	863.0
22.5°	789.9	846.9	989.2	880.3	926.1
25°	767.6	850.6	887.7	960.8	1098.2
27.5°	745.3	864.2	851.8	1132.9	1210.9
30°	720.6	885.2	851.8	1219.5	1209.6
32.5°	693.3	915.0	881.5	1219.5	1204.7
35°	669.8	936.0	945.9	1208.4	1171.2
37.5°	637.6	936.0	1027.6	1175.0	1146.5
40°	605.4	931.1	1079.6	1139.1	1157.6
42.5°	573.2	896.4	1064.8	1110.6	1123.0
45°	544.8	845.6	1037.5	1111.8	1080.9
47.5°	510.1	796.1	1004.1	1075.9	996.7
50°	481.6	749.1	950.9	1045.0	963.2
52.5°	445.7	704.5	912.5	1011.5	905.1
55°	411.0	657.4	872.9	968.2	858.0
57.5°	376.4	615.3	832.0	918.7	749.1
60°	344.2	568.3	776.3	807.2	625.2
62.5°	313.2	518.8	734.2	716.9	585.6
65°	281.0	475.4	692.1	703.2	589.3
67.5°	250.1	437.1	687.1	740.4	641.3
70°	220.4	417.2	703.2	734.2	635.1
72.5°	189.4	407.3	663.6	653.7	564.6
75°	158.5	388.8	575.7	557.1	480.4
77.5°	130.0	339.2	486.6	458.1	399.9
80°	99.0	278.6	399.9	377.6	328.1
82.5°	74.3	219.1	328.1	300.9	265.0
85°	47.0	165.9	245.1	229.0	203.0
87.5°	28.5	116.4	188.2	184.5	163.4
90°	14.9	78.0	138.7	148.6	131.2
92.5°	17.3	63.1	104.0	121.3	110.2
95°	19.8	65.6	105.2	115.1	105.2
97.5°	22.3	71.8	120.1	133.7	120.1
100°	22.3	80.5	139.9	153.5	136.2
102.5°	22.3	87.9	156.0	172.1	151.0
105°	22.3	92.9	168.4	184.5	163.4
107.5°	21.0	94.1	175.8	193.1	170.9
110°	19.8	91.6	175.8	195.6	173.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	18.6	86.7	169.6	190.7	168.4
115°	17.3	79.2	158.5	179.5	157.2
117.5°	16.1	69.3	143.6	163.4	143.6
120°	14.9	59.4	126.3	144.9	128.8
122.5°	13.6	50.8	110.2	127.5	113.9
125°	12.4	42.1	95.3	109.0	99.0
127.5°	11.1	34.7	83.0	94.1	87.9
130°	9.9	28.5	73.0	80.5	76.8
132.5°	9.9	23.5	65.6	73.0	69.3
135°	8.7	18.6	55.7	69.3	66.9
137.5°	8.7	16.1	45.8	61.9	63.1
140°	8.7	12.4	38.4	54.5	57.0
142.5°	7.4	9.9	32.2	50.8	52.0
145°	7.4	8.7	27.2	43.3	45.8
147.5°	7.4	8.7	22.3	35.9	39.6
150°	7.4	7.4	18.6	29.7	33.4
152.5°	7.4	7.4	14.9	24.8	28.5
155°	7.4	7.4	11.1	19.8	23.5
157.5°	6.2	7.4	7.4	13.6	17.3
160°	6.2	7.4	6.2	8.7	12.4
162.5°	6.2	6.2	5.0	3.7	5.0
165°	6.2	6.2	5.0	2.5	1.2
167.5°	6.2	6.2	5.0	2.5	0.0
170°	6.2	6.2	5.0	2.5	0.0
172.5°	6.2	6.2	5.0	2.5	0.0
175°	6.2	6.2	5.0	1.2	0.0
177.5°	6.2	6.2	5.0	1.2	0.0
180°	3.7	3.7	3.7	3.7	3.7

(END OF REPORT)