

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: LUMARK

Report Number: P143926

Luminaire Tested: **LDRL-5WQ-F01-E-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143926  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5WQ-F01-E-7050  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (7) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2596.8 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G1

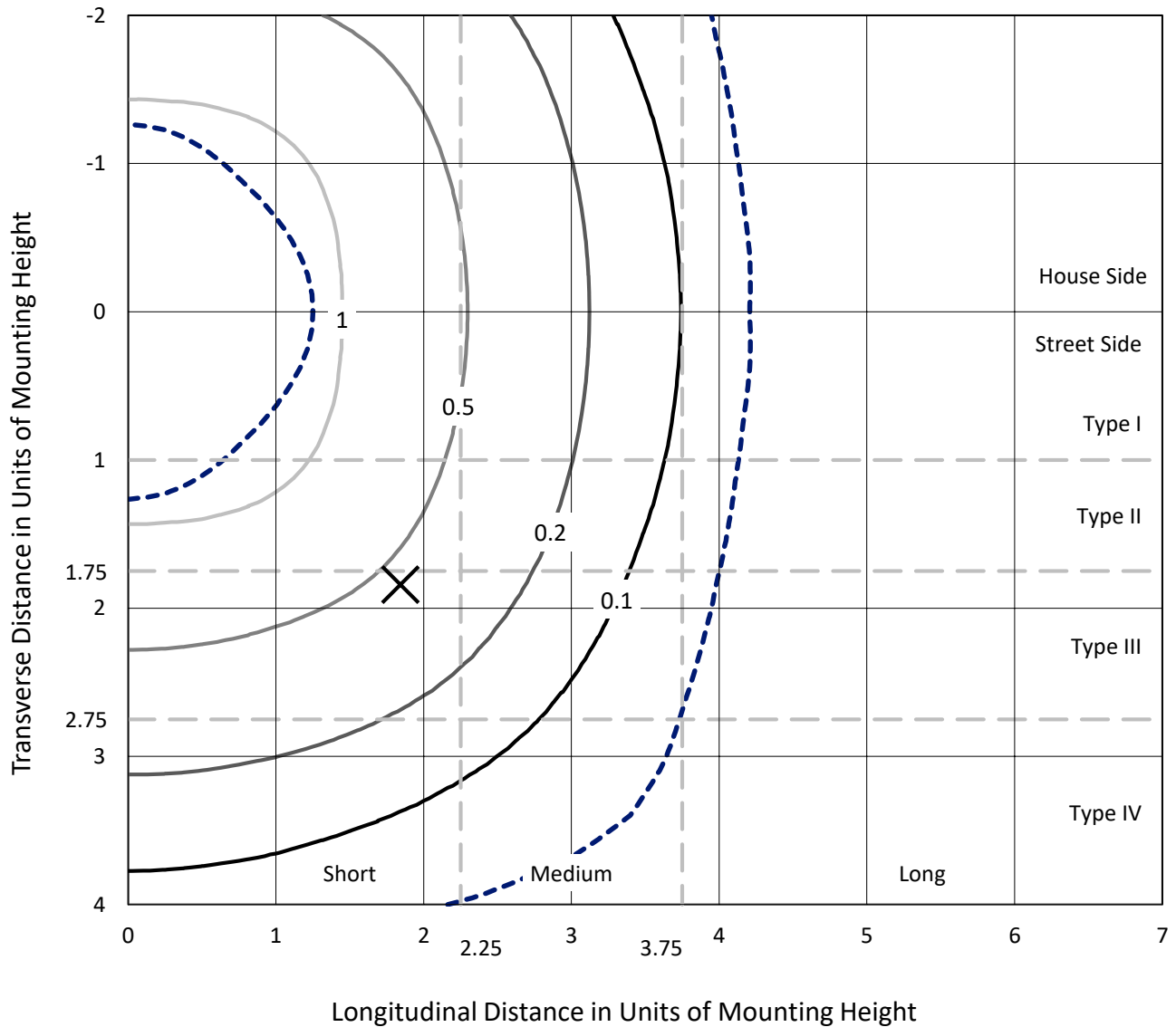
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P143926  
 CATALOG NUMBER: LDRL-5WQ-F01-E-7050

### Iso-Footcandle Lines of Horizontal Illumination

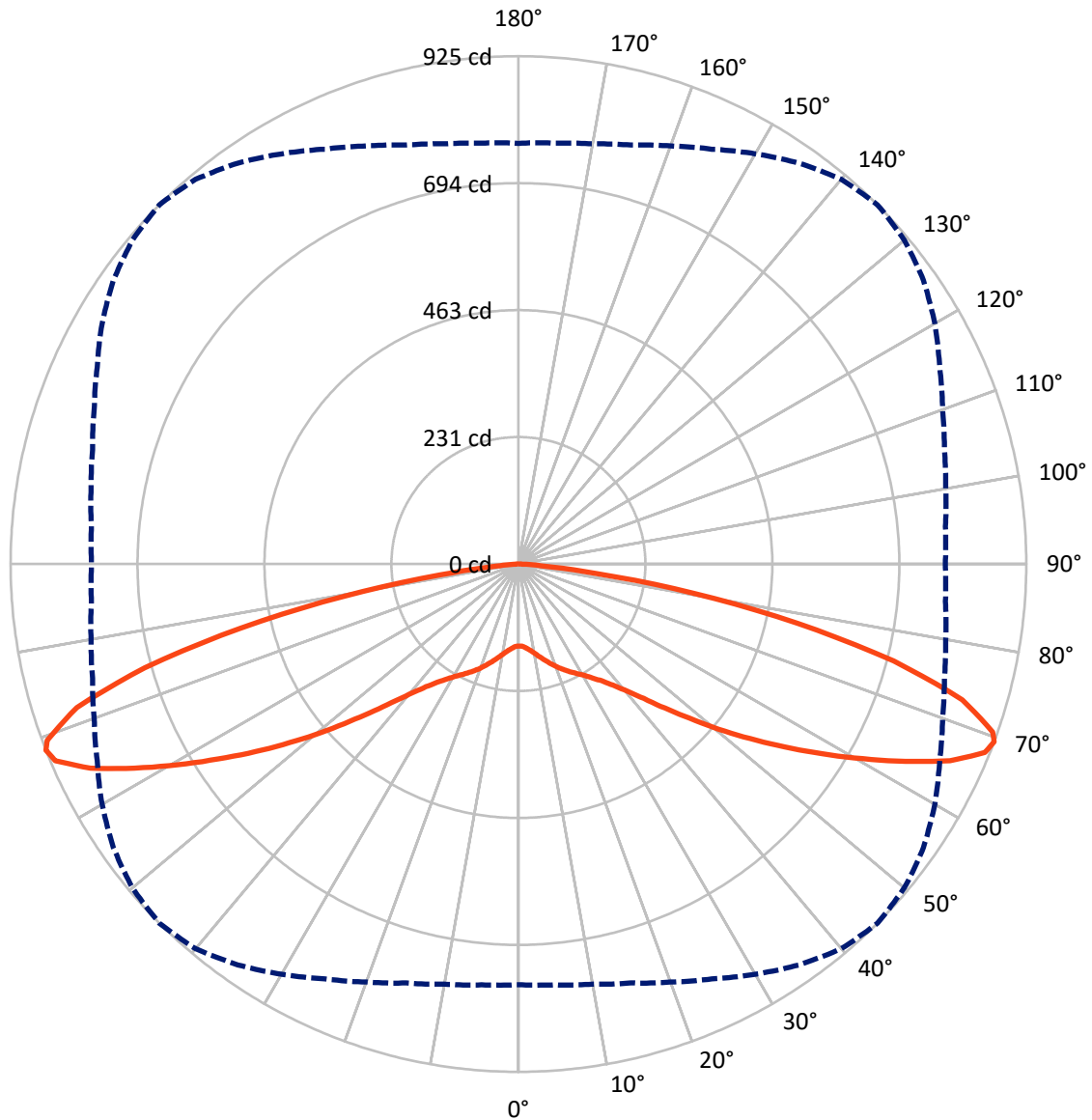
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.7 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P143926  
CATALOG NUMBER: LDRL-5WQ-F01-E-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P143926

CATALOG NUMBER: LDRL-5WQ-F01-E-7050

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1298.4	0.0	1298.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1298.4	0.0	1298.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2596.8	0.0	2596.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.1	0.6
10°-20°	51.9	2.0
20°-30°	100.0	3.9
30°-40°	163.9	6.3
40°-50°	285.0	11.0
50°-60°	506.3	19.5
60°-70°	786.0	30.3
70°-80°	626.3	24.1
80°-90°	62.3	2.4
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°-90°	2596.8	100.0
0°-180°	2596.8	100.0



REPORT NUMBER: P143926

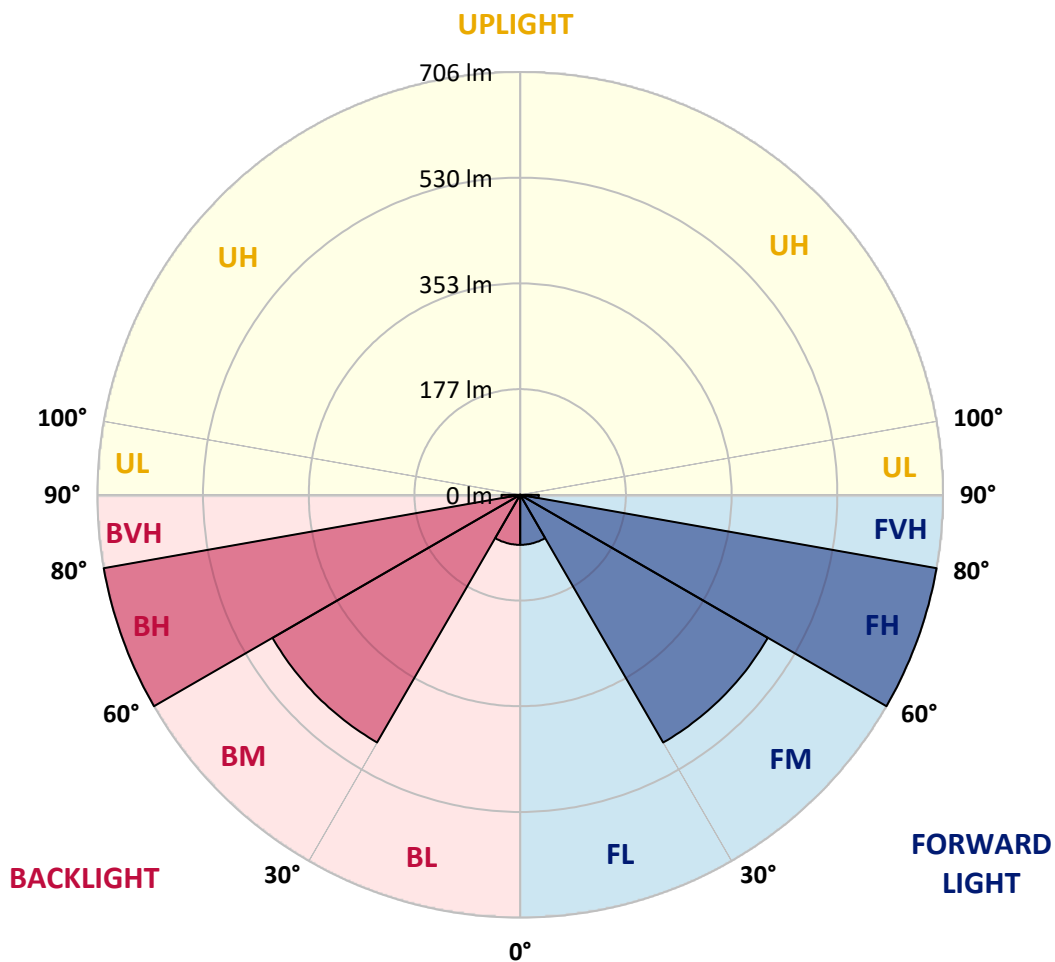
CATALOG NUMBER: LDRL-5WQ-F01-E-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	83.5	3.2			
FM (30°-60°)	477.6	18.4			
FH (60°-80°)	706.2	27.2			G1/1800
FVH (80°-90°)	31.1	1.2			G1/100
BL (0°-30°)	83.5	3.2	B0/110		
BM (30°-60°)	477.6	18.4	B1/1000		
BH (60°-80°)	706.2	27.2	B2/1000		G1/1800
BVH (80°-90°)	31.1	1.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type V Short





REPORT NUMBER: P143926

CATALOG NUMBER: LDRL-5WQ-F01-E-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
2.5°	150.4	150.4	150.4	150.3	150.3	150.1	150.3	150.1	150.1	150.1	150.1
5°	154.3	154.0	154.0	153.8	154.2	154.2	153.8	154.0	153.8	154.0	154.0
7.5°	159.3	159.3	159.3	159.1	159.4	159.3	159.1	159.3	159.3	159.1	159.1
10°	165.3	165.5	165.3	165.3	165.9	165.7	165.9	165.9	166.0	165.9	165.9
12.5°	172.5	172.5	172.6	172.8	173.0	173.1	173.7	173.5	173.8	173.5	173.5
15°	180.8	181.1	180.8	180.8	181.3	181.6	181.8	181.8	182.1	182.0	181.6
17.5°	189.6	189.7	189.6	189.4	189.9	190.4	190.6	190.6	191.1	190.8	190.8
20°	198.6	198.7	198.4	198.2	198.9	198.9	199.2	199.4	199.9	200.1	199.6
22.5°	206.9	207.0	206.9	206.7	207.4	207.4	207.9	208.0	208.7	208.6	208.6
25°	215.0	215.0	214.8	214.8	215.5	215.7	216.2	216.5	217.2	217.2	217.2
27.5°	222.4	222.6	222.3	222.1	223.5	224.0	224.3	225.0	225.5	225.8	225.7
30°	230.9	230.9	230.7	231.3	232.1	232.8	233.5	234.5	235.5	235.1	235.1
32.5°	240.9	241.2	241.1	241.8	242.8	243.8	244.6	245.8	246.3	247.2	246.5
35°	254.3	255.0	254.6	255.3	256.2	256.8	258.7	259.9	260.7	261.2	260.9
37.5°	271.1	270.7	271.4	271.6	273.3	274.1	276.3	278.0	279.4	279.9	279.5
40°	291.9	291.4	292.2	293.1	295.3	296.1	298.7	301.2	303.1	303.8	303.4
42.5°	316.8	317.5	318.8	320.0	323.1	325.4	328.3	332.1	334.1	334.9	333.7
45°	349.5	348.3	350.9	353.9	355.6	360.9	365.6	369.5	372.9	374.2	372.9
47.5°	386.8	386.6	389.7	393.4	397.8	402.7	408.3	413.4	419.3	419.6	417.9
50°	427.9	431.3	433.0	436.8	444.9	451.0	458.1	465.7	471.1	472.8	469.8
52.5°	477.6	480.1	481.1	487.4	494.9	502.3	512.3	521.5	527.7	528.4	526.9
55°	531.5	533.5	535.4	543.0	551.1	557.7	570.4	579.4	585.7	588.0	587.0
57.5°	587.2	589.1	591.4	599.7	608.0	617.3	629.4	639.9	647.2	651.6	650.4
60°	649.0	649.0	654.5	662.8	669.5	680.5	693.1	705.3	713.2	720.2	718.3
62.5°	714.1	715.9	721.2	728.0	735.1	745.3	759.5	774.1	786.3	791.5	791.3
65°	763.4	766.8	773.7	781.5	793.4	805.4	823.4	841.5	856.2	863.8	863.8
67.5°	777.8	780.0	788.6	800.5	817.6	836.7	861.1	886.4	906.5	916.5	910.3
69°	766.3	769.5	777.1	790.0	810.3	833.7	862.7	891.3	914.7	925.0	917.7
70°	752.9	756.4	764.1	776.8	797.8	822.7	851.6	882.5	907.6	916.4	908.1
72.5°	698.3	702.7	708.2	719.2	738.1	761.5	787.6	814.7	838.8	845.7	835.4
75°	605.3	606.2	608.9	617.0	623.8	640.4	662.6	684.1	702.2	706.3	695.3
77.5°	428.5	423.9	419.3	426.2	431.7	453.0	477.1	494.7	513.7	519.4	508.2
80°	187.9	186.2	192.6	201.8	225.7	239.9	263.4	288.7	304.8	323.6	303.4
82.5°	37.1	39.1	45.2	55.9	69.0	86.7	102.2	119.6	135.4	142.5	135.2
85°	15.1	16.4	18.6	20.8	22.4	25.1	29.5	36.6	40.3	40.8	38.8
87.5°	6.3	7.3	9.8	11.7	11.9	11.4	11.7	12.0	9.8	8.0	10.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143926

CATALOG NUMBER: LDRL-5WQ-F01-E-7050

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
2.5°	150.1	150.3	150.1	150.3	150.1	150.1	150.3	150.1
5°	153.8	154.0	153.8	153.7	153.5	153.7	153.7	153.7
7.5°	159.1	158.9	158.7	158.7	158.6	158.4	158.7	158.7
10°	165.5	165.3	165.0	165.0	164.8	164.8	164.8	164.8
12.5°	173.3	172.8	172.6	172.1	172.0	171.8	171.8	172.0
15°	181.4	180.9	180.8	179.9	179.9	179.7	179.7	179.7
17.5°	190.1	189.6	188.9	188.9	188.4	188.1	188.2	187.9
20°	198.9	198.2	197.9	197.7	197.0	197.0	197.0	196.9
22.5°	207.5	207.0	206.5	205.8	205.2	205.0	205.0	204.8
25°	216.3	215.5	214.5	213.8	213.1	212.6	212.6	212.6
27.5°	225.2	224.1	222.6	221.8	220.7	220.2	220.2	220.1
30°	234.5	233.3	231.9	230.7	229.4	228.9	228.7	228.4
32.5°	245.7	244.5	243.1	241.4	240.1	239.2	239.2	238.7
35°	259.9	258.5	257.5	255.3	253.6	252.3	252.4	252.8
37.5°	278.5	276.8	276.0	273.3	271.1	269.7	269.7	269.5
40°	302.2	300.5	298.7	296.1	293.4	291.6	291.1	291.1
42.5°	332.4	330.9	328.3	324.8	321.5	319.5	317.8	318.0
45°	370.2	368.3	364.8	360.3	356.4	353.6	351.2	351.2
47.5°	416.1	412.2	407.3	403.4	396.8	392.4	390.7	390.3
50°	468.4	461.1	455.0	449.5	442.5	437.9	435.4	434.7
52.5°	523.3	515.7	508.1	500.8	492.3	487.6	483.5	483.2
55°	583.0	573.3	563.6	556.5	546.5	541.6	537.6	535.2
57.5°	643.8	632.9	626.0	615.8	605.3	601.8	597.9	595.0
60°	712.2	700.4	691.2	680.5	673.8	666.1	662.4	660.2
62.5°	782.2	771.2	759.5	749.3	739.8	734.6	729.5	727.0
65°	853.3	835.2	821.3	807.3	796.1	786.6	778.6	777.6
67.5°	897.1	874.2	851.0	830.5	814.0	800.7	792.5	789.6
69°	900.6	875.7	846.7	822.2	803.2	790.3	780.7	777.6
70°	890.8	865.7	835.2	808.8	789.1	775.1	767.1	762.0
72.5°	819.0	796.9	767.6	741.5	723.7	707.3	699.3	697.3
75°	675.6	652.2	625.3	612.8	600.4	590.1	584.7	584.1
77.5°	479.8	455.9	435.4	419.0	405.6	399.0	400.5	394.9
80°	274.6	243.4	218.7	204.1	184.3	172.5	159.1	168.7
82.5°	118.1	95.4	72.7	59.1	45.1	35.7	29.5	27.4
85°	33.0	26.9	22.5	20.7	18.6	16.6	14.1	13.0
87.5°	11.2	10.7	9.5	9.5	8.6	7.3	5.1	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)