

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: P143626

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143626  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5MQ-F01-E-7050  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (7) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2632.4 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G1

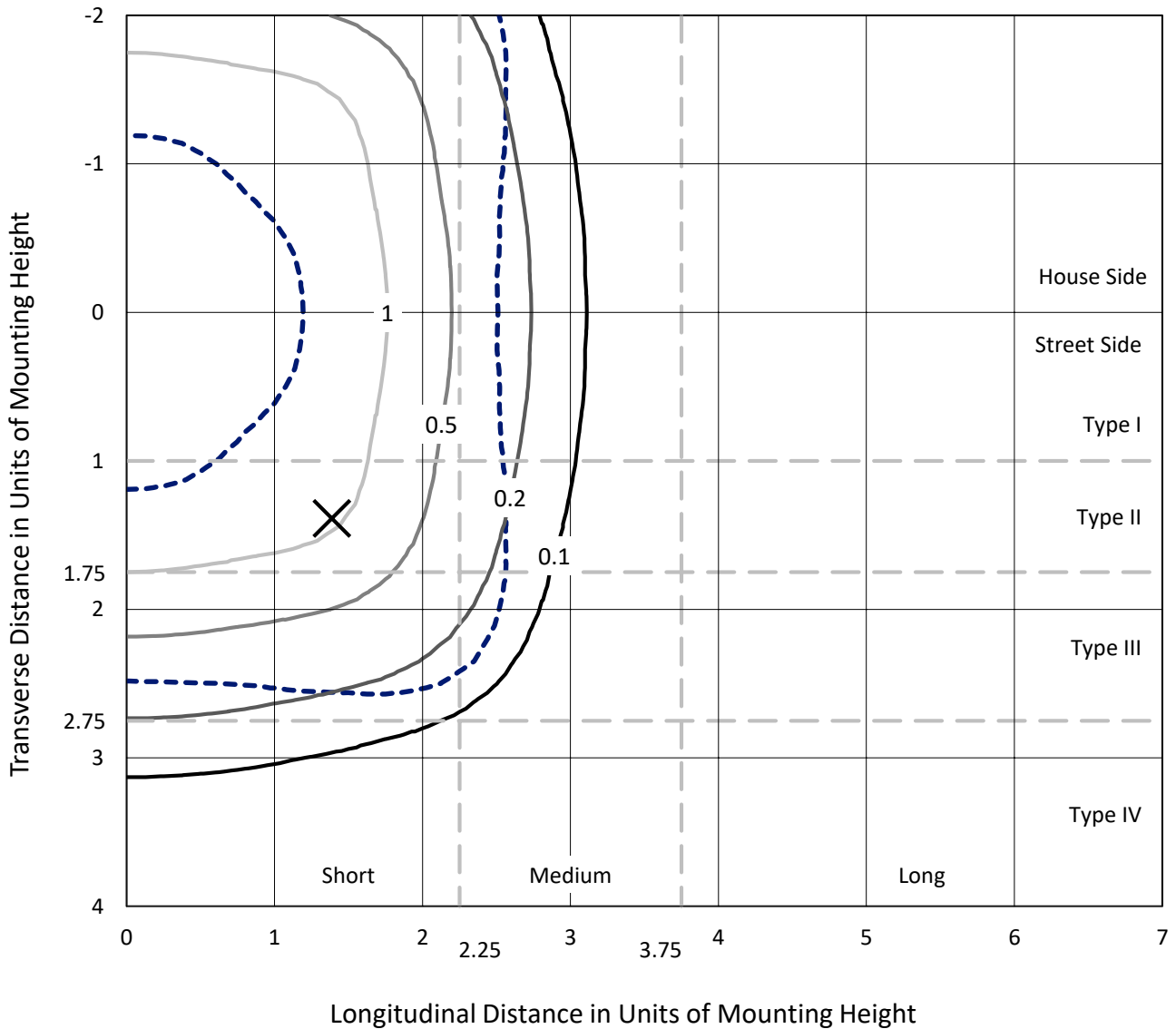
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P143626  
 CATALOG NUMBER: LDRL-5MQ-F01-E-7050

### Iso-Footcandle Lines of Horizontal Illumination

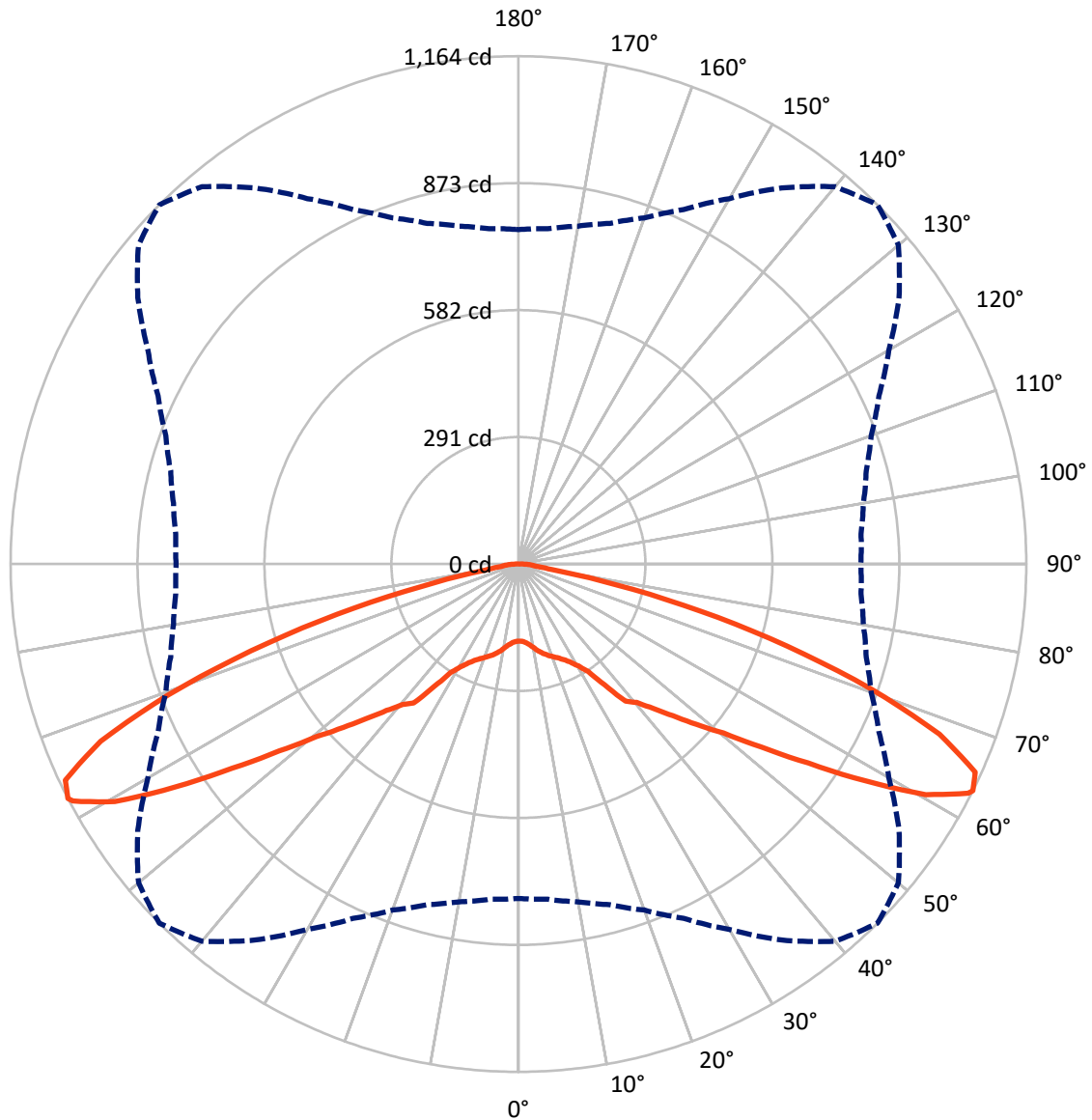
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P143626  
CATALOG NUMBER: LDRL-5MQ-F01-E-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P143626

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

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1316.2	0.0	1316.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1316.2	0.0	1316.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2632.4	0.0	2632.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	17.8	0.7
10°-20°	60.8	2.3
20°-30°	116.1	4.4
30°-40°	221.1	8.4
40°-50°	380.8	14.5
50°-60°	680.5	25.8
60°-70°	828.8	31.5
70°-80°	295.2	11.2
80°-90°	31.3	1.2
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°	2632.4	100.0
0°-180°	2632.4	100.0



REPORT NUMBER: P143626

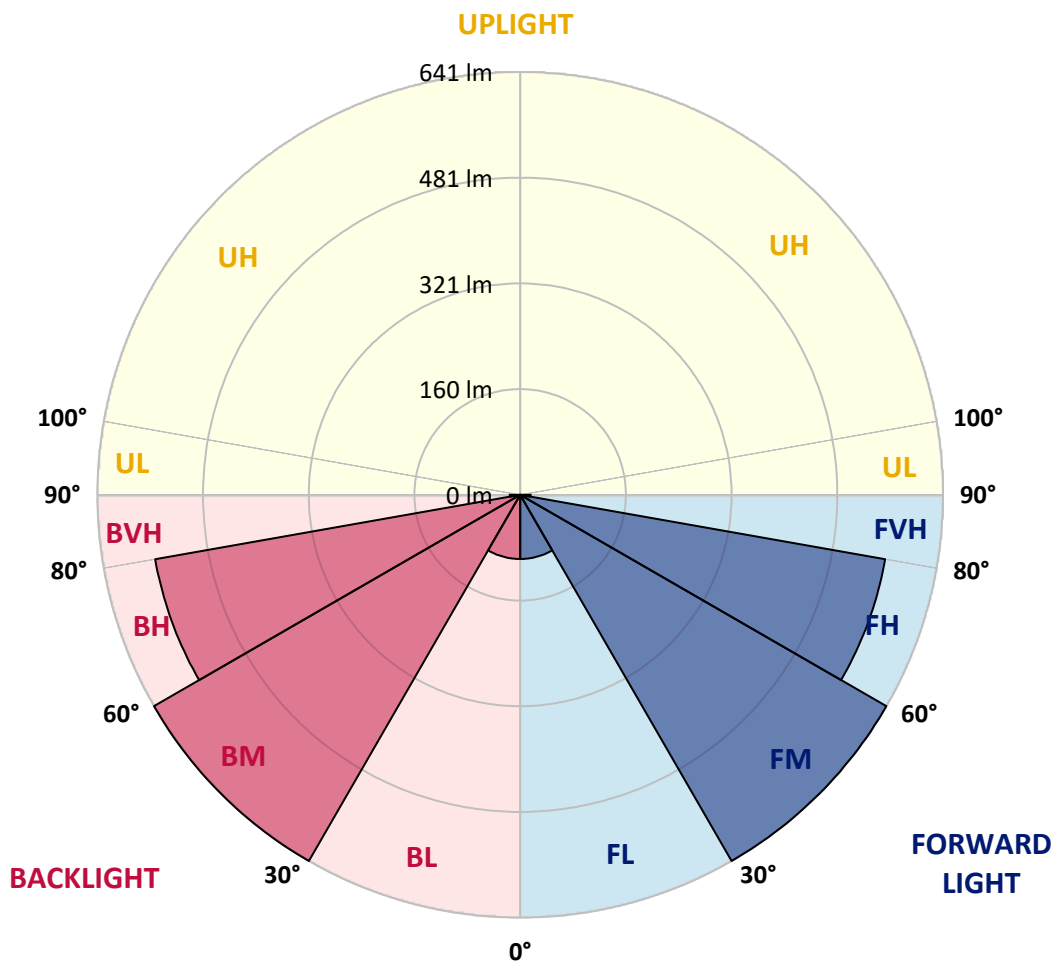
CATALOG NUMBER: LDRL-5MQ-F01-E-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	97.3	3.7			
FM (30°-60°)	641.2	24.4			
FH (60°-80°)	562.0	21.4			G0/660
FVH (80°-90°)	15.6	0.6			G1/100
BL (0°-30°)	97.3	3.7	B0/110		
BM (30°-60°)	641.2	24.4	B1/1000		
BH (60°-80°)	562.0	21.4	B2/1000		G0/660
BVH (80°-90°)	15.6	0.6			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: P143626

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

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	176.7	176.7	176.7	176.7	176.7	176.7	176.7	176.7	176.7	176.7	176.7
2.5°	178.1	177.9	178.1	177.7	177.7	177.5	177.5	177.5	177.2	177.5	177.2
5°	181.8	181.6	181.8	181.4	181.4	181.1	181.1	181.1	180.8	181.1	180.9
7.5°	188.2	188.6	188.2	187.9	187.9	187.5	187.4	187.4	187.2	187.0	187.4
10°	197.2	197.5	197.0	196.7	196.5	196.4	196.0	195.8	195.8	195.2	195.3
12.5°	206.7	206.7	206.2	206.0	206.0	205.7	205.0	204.8	204.8	204.5	204.1
15°	215.2	215.2	214.8	214.1	214.3	213.8	213.3	213.0	213.0	212.6	212.3
17.5°	223.0	223.0	222.4	221.8	221.4	221.3	220.6	220.2	220.2	219.9	219.6
20°	230.7	231.1	230.2	229.6	228.9	228.2	227.5	227.2	226.7	226.8	226.7
22.5°	240.1	240.2	238.9	238.0	236.7	235.8	234.8	234.5	233.8	233.8	234.1
25°	251.9	251.8	250.2	248.7	247.2	245.5	244.0	243.6	242.9	242.8	242.9
27.5°	267.5	267.3	265.5	263.4	261.4	258.9	257.0	256.0	255.5	254.8	255.1
30°	286.7	287.0	284.8	282.4	279.9	276.8	274.5	273.1	272.1	271.4	271.7
32.5°	325.6	325.3	321.9	316.8	311.4	304.3	298.5	296.1	294.3	293.6	294.1
35°	364.8	364.4	363.1	361.5	360.2	355.6	351.4	346.5	342.4	339.8	340.5
37.5°	383.2	383.2	382.2	381.9	381.9	384.6	388.0	394.1	398.8	399.1	397.6
40°	412.0	412.0	410.3	409.5	409.0	409.8	412.0	414.2	416.6	417.1	415.4
42.5°	445.9	444.4	443.2	441.5	441.3	442.2	444.5	447.3	449.6	451.7	448.1
45°	482.5	481.1	480.0	478.9	479.6	481.8	485.0	489.8	493.2	496.2	493.3
47.5°	523.3	520.4	521.6	520.6	522.3	526.7	532.5	539.6	543.1	548.6	544.0
50°	574.1	574.8	574.1	574.1	576.2	581.9	590.4	600.1	606.2	609.2	606.5
52.5°	649.7	647.7	643.1	644.5	647.2	656.3	667.3	680.9	688.7	696.0	687.5
55°	732.4	732.7	732.0	733.9	739.2	748.5	762.4	782.9	792.7	805.4	795.2
57.5°	800.8	803.2	807.3	812.9	824.2	839.8	867.1	898.4	924.5	938.2	922.3
60°	823.0	825.4	835.2	850.8	872.1	904.0	948.2	1001.9	1048.8	1073.2	1052.4
62.5°	780.3	784.7	799.3	820.8	856.1	905.9	971.6	1051.1	1123.4	1156.8	1131.5
63°	766.4	771.3	786.3	808.1	844.0	896.0	967.0	1052.1	1128.6	1163.9	1136.6
65°	704.8	708.0	723.7	748.6	788.6	842.8	921.8	1022.4	1109.7	1150.5	1121.5
67.5°	607.7	611.9	626.3	647.8	686.6	744.1	821.7	922.0	1007.9	1040.5	1015.8
70°	487.4	492.2	504.0	524.0	554.5	607.7	674.1	767.8	832.3	857.9	831.5
72.5°	342.6	344.6	353.2	374.2	397.1	439.5	492.2	565.0	627.0	643.8	618.4
75°	145.0	145.2	156.5	169.9	198.6	240.7	286.7	349.3	405.1	431.2	399.0
77.5°	46.4	46.9	50.1	55.1	64.5	83.4	117.2	151.6	202.8	227.5	197.4
80°	38.8	39.5	40.8	41.8	42.5	43.5	47.4	52.9	66.6	77.4	62.5
82.5°	33.4	34.6	37.6	38.8	39.5	39.8	40.3	40.2	39.3	39.0	39.1
85°	25.4	28.3	31.7	34.4	34.7	34.9	35.9	36.3	33.5	30.8	33.5
87.5°	11.0	14.2	21.9	24.2	23.7	22.0	23.5	24.9	22.7	16.6	22.2
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: P143626

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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	176.7	176.7	176.7	176.7	176.7	176.7	176.7	176.7
2.5°	177.4	177.7	177.7	177.7	177.7	177.9	178.1	177.9
5°	181.1	181.4	181.3	181.4	181.4	181.6	181.8	181.6
7.5°	187.5	187.5	187.5	187.9	187.9	188.2	188.2	188.2
10°	195.5	195.3	195.3	195.7	196.0	196.2	196.5	196.4
12.5°	204.1	203.8	204.0	204.3	204.7	204.8	205.2	205.0
15°	211.9	211.8	211.8	212.3	212.4	212.6	213.3	213.3
17.5°	219.4	219.4	219.4	220.1	220.2	220.9	221.4	221.4
20°	226.8	226.8	226.8	227.5	228.0	229.0	230.1	229.9
22.5°	234.5	234.6	235.0	235.7	236.8	238.4	239.2	239.2
25°	244.0	244.6	245.3	246.3	248.0	250.1	251.4	251.9
27.5°	256.2	257.7	259.4	260.9	262.8	265.3	267.2	267.5
30°	272.8	275.0	277.7	279.7	282.1	285.0	287.2	288.3
32.5°	296.3	301.7	305.3	312.6	317.0	321.9	326.0	327.6
35°	344.8	350.2	354.9	359.8	360.9	362.5	364.8	365.3
37.5°	392.7	388.3	384.1	383.9	382.7	383.0	383.7	384.6
40°	413.5	412.2	410.0	410.8	411.0	411.0	412.4	412.5
42.5°	447.1	443.9	441.3	443.4	443.7	444.0	445.4	446.9
45°	489.8	484.9	481.6	480.5	481.6	481.3	483.2	483.5
47.5°	538.6	532.1	524.8	522.5	521.8	520.3	523.5	523.2
50°	598.4	588.0	579.2	575.8	574.1	573.3	574.1	574.1
52.5°	674.1	663.8	651.7	647.8	646.5	648.4	645.6	648.5
55°	778.3	761.5	745.1	739.8	739.0	738.1	738.5	739.7
57.5°	895.5	865.7	843.7	830.8	822.5	818.4	814.0	813.4
60°	1008.7	954.5	912.6	884.2	864.0	848.8	841.0	838.3
62.5°	1063.2	984.0	918.9	870.5	840.5	815.6	801.8	798.3
63°	1064.8	980.2	911.3	860.1	825.2	802.9	788.3	784.6
65°	1036.5	940.3	859.4	803.2	766.3	742.9	724.9	721.0
67.5°	933.5	840.1	757.5	700.4	660.4	641.6	621.8	621.2
70°	766.1	682.7	613.1	560.6	527.2	508.6	488.4	488.9
72.5°	560.1	486.1	438.1	397.1	361.9	344.3	325.3	327.1
75°	337.1	271.1	227.9	192.3	156.0	134.3	119.8	111.5
77.5°	144.2	98.6	70.8	56.2	47.4	43.9	42.2	41.7
80°	50.1	44.4	41.8	41.2	40.7	40.0	38.8	37.6
82.5°	40.7	40.7	39.3	39.1	37.6	36.4	33.4	31.9
85°	36.1	35.4	34.2	33.7	33.4	30.8	26.9	24.9
87.5°	23.9	22.2	21.2	21.7	21.0	18.8	11.5	9.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)