

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: P144223

Luminaire Tested: **LDRL-5XQ-F01-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144223  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5XQ-F01-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (7) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2154.4 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G1

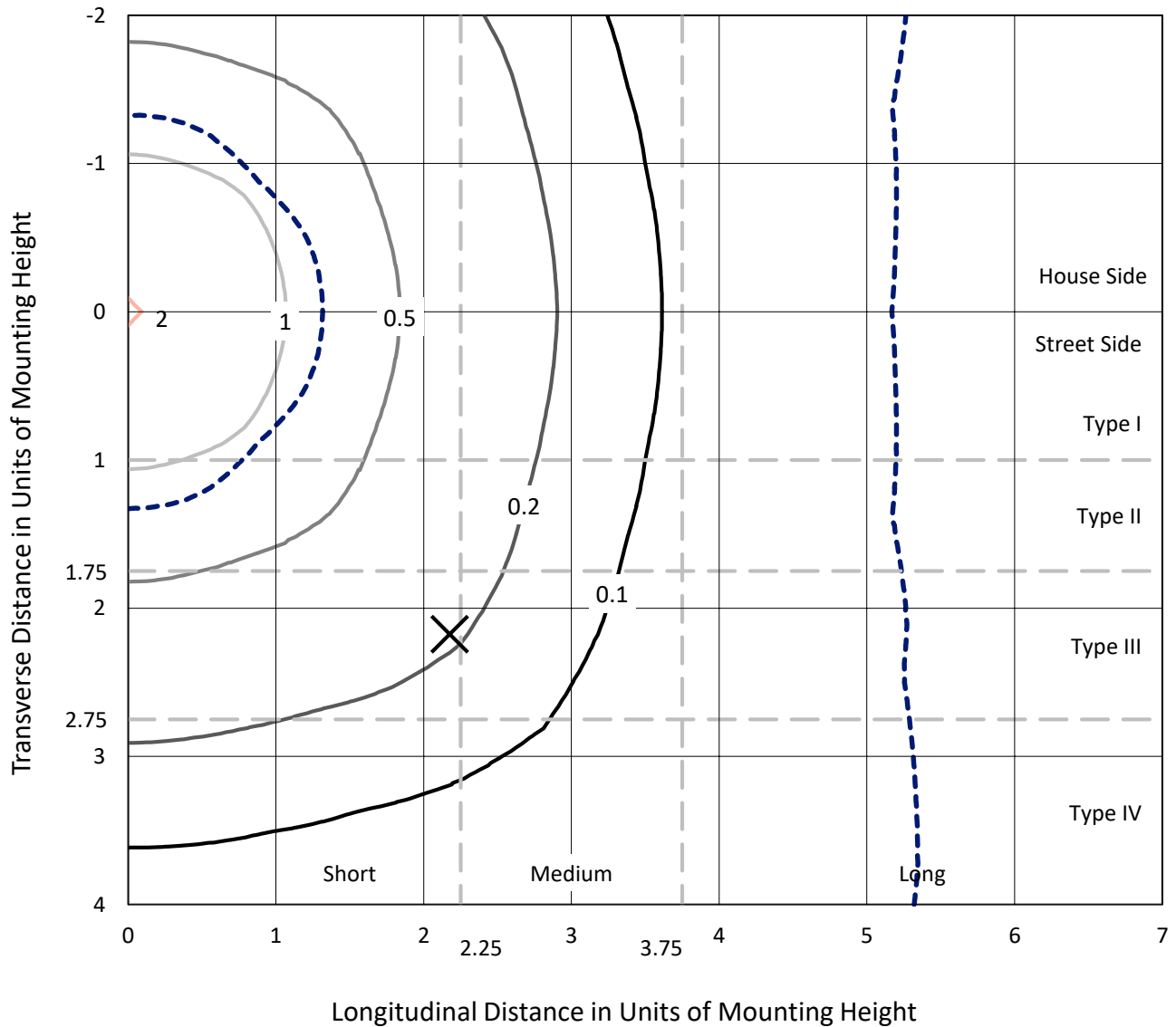
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P144223  
 CATALOG NUMBER: LDRL-5XQ-F01-E-8030

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

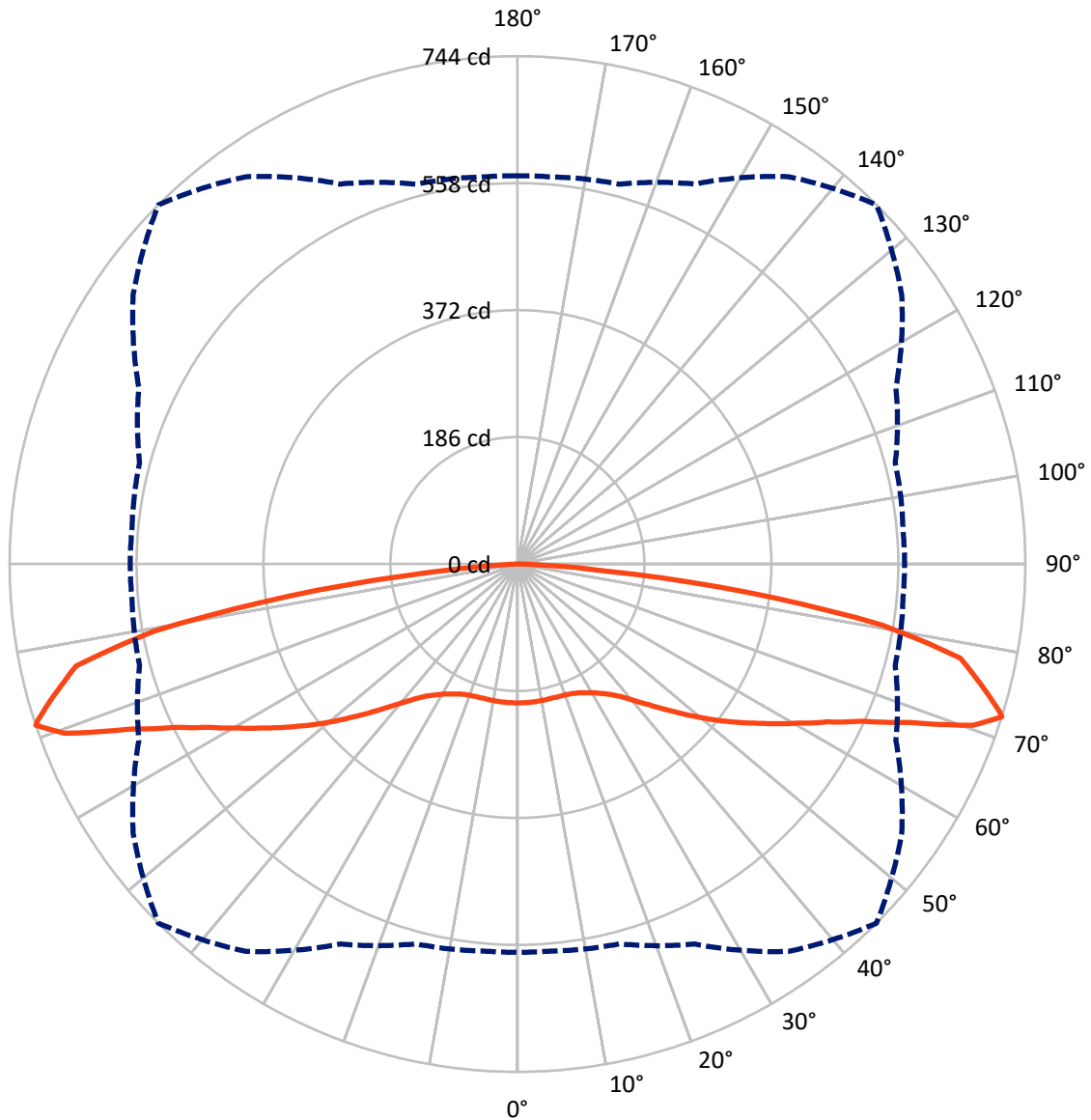


Based on 10 foot mounting height. Maximum calculated value = 2 fc  
 Type V - Short - Non-Cutoff

REPORT NUMBER: P144223

CATALOG NUMBER: LDRL-5XQ-F01-E-8030

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P144223

CATALOG NUMBER: LDRL-5XQ-F01-E-8030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1077.2	0.0	1077.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1077.2	0.0	1077.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2154.4	0.0	2154.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.4	0.9
10°-20°	57.7	2.7
20°-30°	96.9	4.5
30°-40°	147.5	6.8
40°-50°	233.1	10.8
50°-60°	356.1	16.5
60°-70°	521.6	24.2
70°-80°	592.6	27.5
80°-90°	129.4	6.0
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°	2154.4	100.0
0°-180°	2154.4	100.0



REPORT NUMBER: P144223

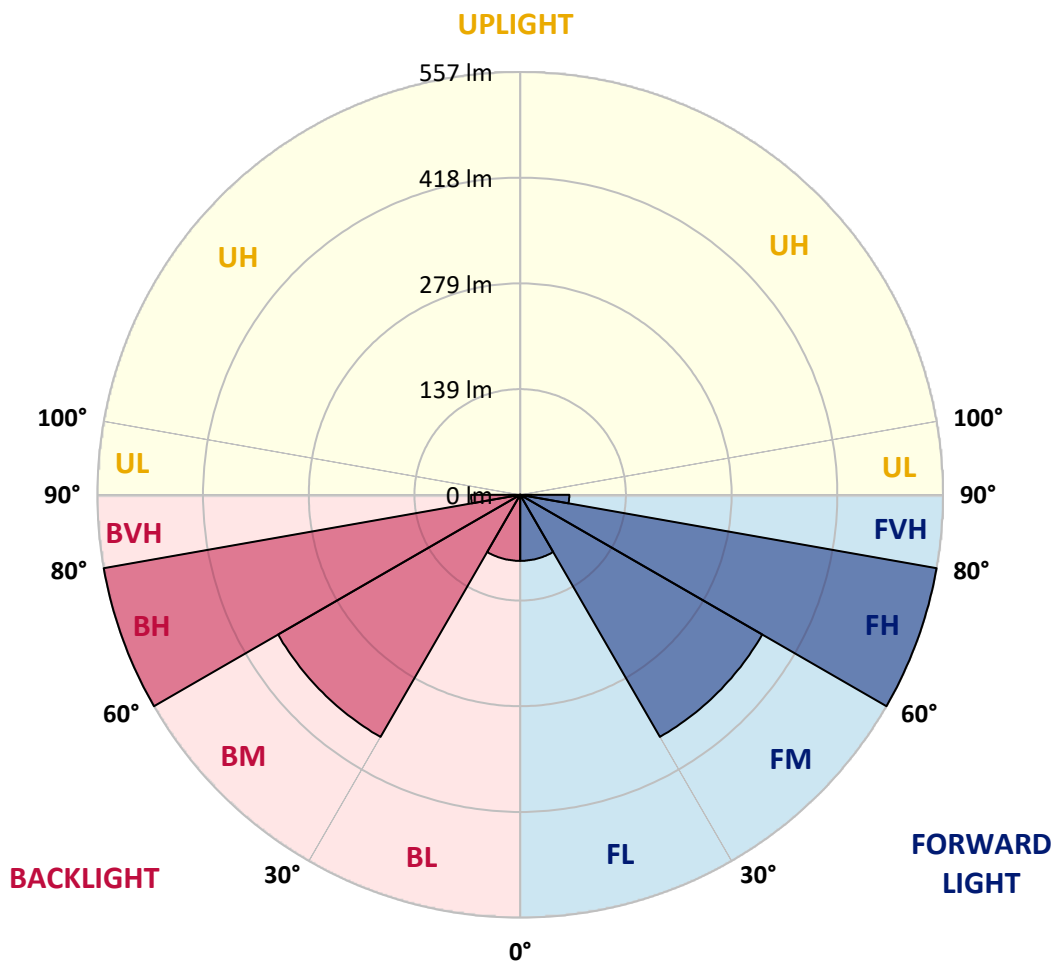
CATALOG NUMBER: LDRL-5XQ-F01-E-8030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	87.0	4.0			
FM (30°-60°)	368.3	17.1			
FH (60°-80°)	557.1	25.9			G0/660
FVH (80°-90°)	64.7	3.0			G1/100
BL (0°-30°)	87.0	4.0	B0/110		
BM (30°-60°)	368.3	17.1	B1/1000		
BH (60°-80°)	557.1	25.9	B2/1000		G0/660
BVH (80°-90°)	64.7	3.0			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: P144223

CATALOG NUMBER: LDRL-5XQ-F01-E-8030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	203.4	203.4	203.4	203.4	203.4	203.4	203.4	203.4	203.4	203.4	203.4
2.5°	203.8	203.8	203.7	203.6	203.5	203.4	203.4	203.4	203.4	203.3	203.4
5°	203.8	203.8	203.7	203.6	203.5	203.4	203.4	203.4	203.3	203.3	203.4
7.5°	203.6	203.6	203.5	203.4	203.4	203.4	203.4	203.4	203.2	203.2	203.2
10°	203.7	204.0	203.7	203.5	203.5	203.4	203.2	203.1	203.1	203.0	203.0
12.5°	203.8	204.1	203.8	203.6	203.4	203.4	203.2	203.1	203.0	202.9	202.8
15°	204.2	204.4	204.2	204.0	203.8	203.6	203.4	203.3	203.1	202.9	202.8
17.5°	204.5	204.8	204.6	204.4	204.1	203.8	203.7	203.6	203.4	203.3	203.1
20°	205.0	205.3	205.1	204.9	204.8	204.6	204.5	204.4	204.3	204.2	204.0
22.5°	205.9	206.2	206.1	206.0	206.0	206.0	206.1	206.2	206.1	206.0	205.8
25°	207.8	207.8	207.9	208.0	208.2	208.4	208.6	208.8	208.9	209.0	208.7
27.5°	211.0	211.3	211.4	211.6	211.9	212.2	212.6	213.0	213.2	213.4	213.1
30°	215.3	215.3	215.6	215.8	216.4	217.0	217.4	218.0	218.3	218.7	218.4
32.5°	220.7	221.0	221.4	221.8	222.5	223.2	224.0	224.9	225.4	225.9	225.5
35°	229.0	229.4	229.8	230.2	230.9	231.7	232.6	233.6	234.0	234.4	234.1
37.5°	240.7	240.7	241.2	241.7	242.2	242.6	243.9	245.2	245.7	246.2	245.8
40°	256.6	256.6	256.7	256.8	257.3	257.8	259.3	260.8	261.7	262.6	261.7
42.5°	274.8	275.5	275.4	275.4	275.7	276.0	277.5	279.0	280.2	281.6	281.0
45°	296.2	296.0	295.8	295.4	296.4	297.4	299.5	301.6	302.7	303.8	302.8
47.5°	317.8	317.6	317.2	316.8	317.8	318.8	321.9	325.0	326.6	328.3	326.6
50°	339.5	340.2	339.8	339.3	340.7	342.1	346.1	350.0	352.4	354.8	352.8
52.5°	363.4	364.0	363.4	362.8	364.8	366.7	371.4	376.1	379.3	382.5	379.8
55°	388.1	387.3	387.6	388.0	389.8	391.6	397.4	403.2	407.0	410.8	407.7
57.5°	411.2	411.4	411.2	410.8	413.7	416.6	423.9	431.2	436.0	440.8	436.9
60°	434.9	435.0	434.3	433.6	436.7	439.8	450.2	460.7	466.9	473.2	467.9
62.5°	461.4	461.3	460.1	458.9	462.6	466.2	479.2	492.1	500.6	509.2	502.8
65°	493.8	493.0	492.3	491.6	495.8	500.0	516.2	532.2	543.8	555.4	547.1
67.5°	541.7	541.1	539.6	538.2	542.8	547.6	568.2	588.8	603.8	618.7	607.8
70°	594.4	593.2	594.2	595.2	606.1	617.0	644.6	672.3	690.0	707.6	689.4
72°	568.4	568.9	572.3	575.7	594.7	613.8	653.0	692.4	718.0	743.6	715.2
72.5°	559.4	559.8	563.6	567.4	585.6	603.8	644.3	684.8	711.3	737.8	708.7
75°	520.8	522.0	526.4	530.8	549.3	567.7	608.6	649.4	674.8	700.2	671.0
77.5°	458.2	461.6	466.1	470.6	492.5	514.5	560.7	606.8	634.9	663.0	629.8
80°	349.6	348.4	356.1	363.8	384.8	405.8	441.6	477.3	509.6	541.8	504.6
82.5°	135.8	138.8	154.9	170.9	192.9	214.9	246.9	278.9	308.0	337.0	306.1
85°	14.0	16.0	21.7	27.4	39.4	51.4	71.0	90.4	109.5	128.6	107.9
87.5°	5.6	6.2	8.0	9.8	10.2	10.7	12.9	15.2	15.0	14.9	14.7
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: P144223

CATALOG NUMBER: LDRL-5XQ-F01-E-8030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	203.4	203.4	203.4	203.4	203.4	203.4	203.4	203.4
2.5°	203.4	203.4	203.5	203.5	203.5	203.6	203.7	203.6
5°	203.4	203.5	203.5	203.5	203.5	203.6	203.7	203.6
7.5°	203.2	203.2	203.2	203.4	203.4	203.5	203.5	203.4
10°	202.8	202.9	203.0	203.1	203.1	203.2	203.4	203.4
12.5°	202.7	202.7	202.8	202.8	203.0	203.1	203.2	203.3
15°	202.7	202.7	202.8	202.8	202.9	203.0	203.1	203.3
17.5°	203.0	202.9	202.9	202.9	203.0	203.1	203.3	203.4
20°	203.8	203.6	203.5	203.5	203.5	203.7	203.8	203.9
22.5°	205.5	205.2	204.8	204.8	204.7	204.8	204.8	204.8
25°	208.4	207.8	207.3	207.1	207.0	206.9	206.8	206.9
27.5°	212.8	212.2	211.6	211.2	210.8	210.6	210.4	210.4
30°	218.2	217.5	216.8	216.1	215.5	215.2	215.0	215.0
32.5°	225.1	224.2	223.4	222.5	221.7	221.3	220.9	221.0
35°	233.8	232.8	231.8	231.2	230.5	229.9	229.2	229.8
37.5°	245.4	244.4	243.5	243.0	242.6	242.1	241.6	241.6
40°	260.8	259.9	258.9	258.5	258.1	257.5	256.8	257.0
42.5°	280.5	279.0	277.6	276.8	276.2	275.8	275.6	275.8
45°	301.7	300.2	298.8	298.2	297.6	296.8	295.9	296.7
47.5°	324.8	323.0	321.1	320.0	319.0	319.3	319.6	319.0
50°	350.8	347.7	344.6	343.4	342.2	342.2	342.2	342.1
52.5°	377.1	372.8	368.5	367.4	366.4	366.2	366.0	365.6
55°	404.6	399.4	394.2	392.2	390.2	390.5	390.8	391.6
57.5°	433.1	426.2	419.2	417.0	414.8	415.0	415.2	416.4
60°	462.6	453.7	444.7	442.2	439.8	440.4	441.1	441.9
62.5°	496.4	485.6	474.8	471.4	468.2	469.0	469.8	471.8
65°	538.8	525.4	511.8	508.4	505.0	505.3	505.7	509.2
67.5°	596.9	578.9	560.8	557.7	554.6	555.1	555.6	561.3
70°	671.0	644.4	617.6	604.5	591.4	589.3	587.3	590.3
72°	686.9	649.2	611.6	592.2	572.8	569.8	566.7	567.0
72.5°	679.6	641.5	603.4	584.6	565.8	563.3	560.8	560.3
75°	641.9	604.6	567.4	547.9	528.4	523.8	519.1	519.1
77.5°	596.8	549.8	502.8	481.8	460.8	455.9	451.0	447.2
80°	467.4	425.3	383.2	361.9	340.6	332.8	324.9	320.2
82.5°	275.2	236.4	197.6	170.6	143.6	135.5	127.4	116.1
85°	87.2	67.1	47.0	36.7	26.3	21.3	16.2	14.2
87.5°	14.5	11.8	9.1	8.8	8.4	6.6	4.8	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)