

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: P144233

Luminaire Tested: **LDRL-5XQ-F02-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144233  
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-F02-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4308.8 lumens  
Efficiency: N/A  
Efficacy: 78.3 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 55  
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

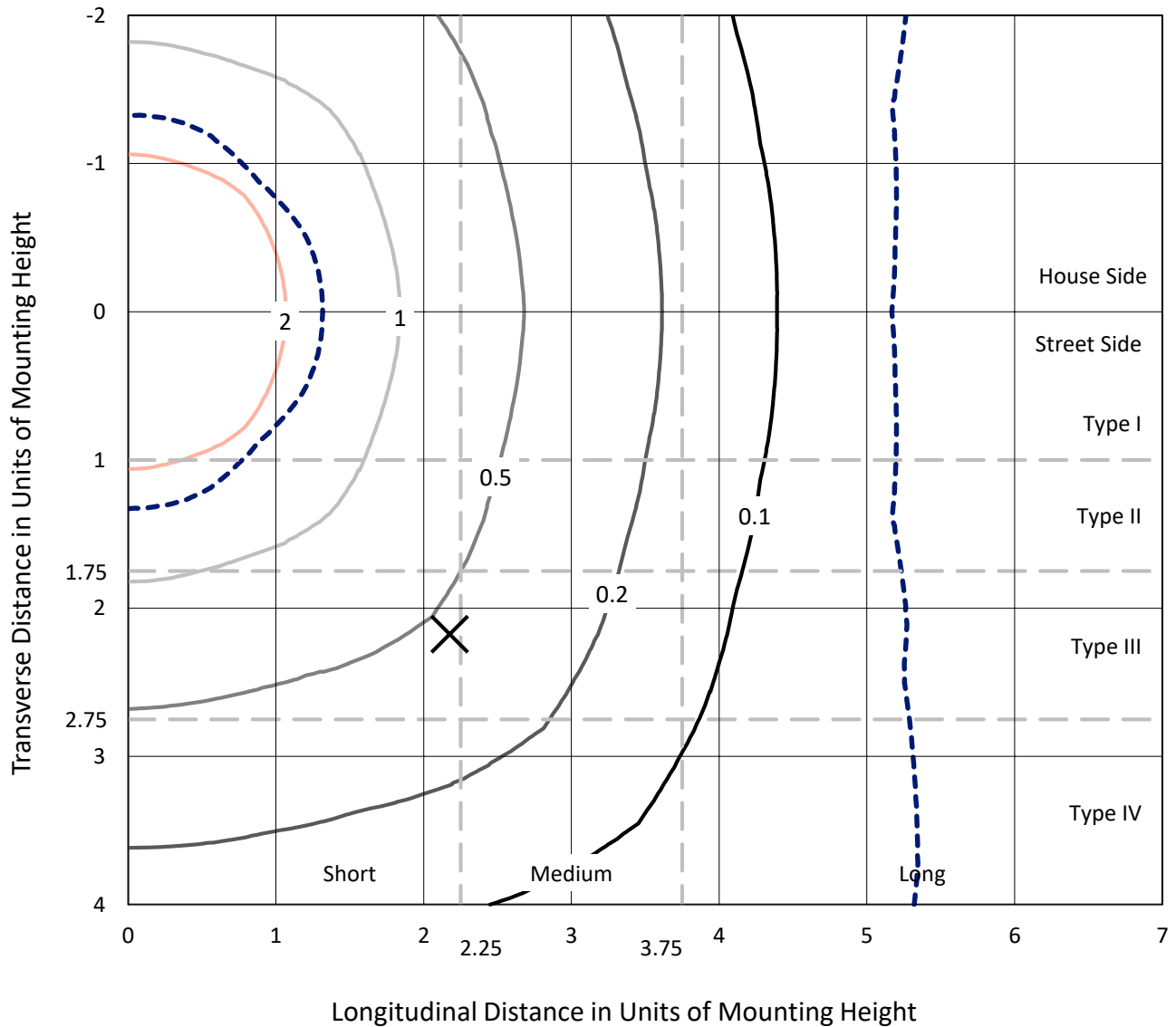


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

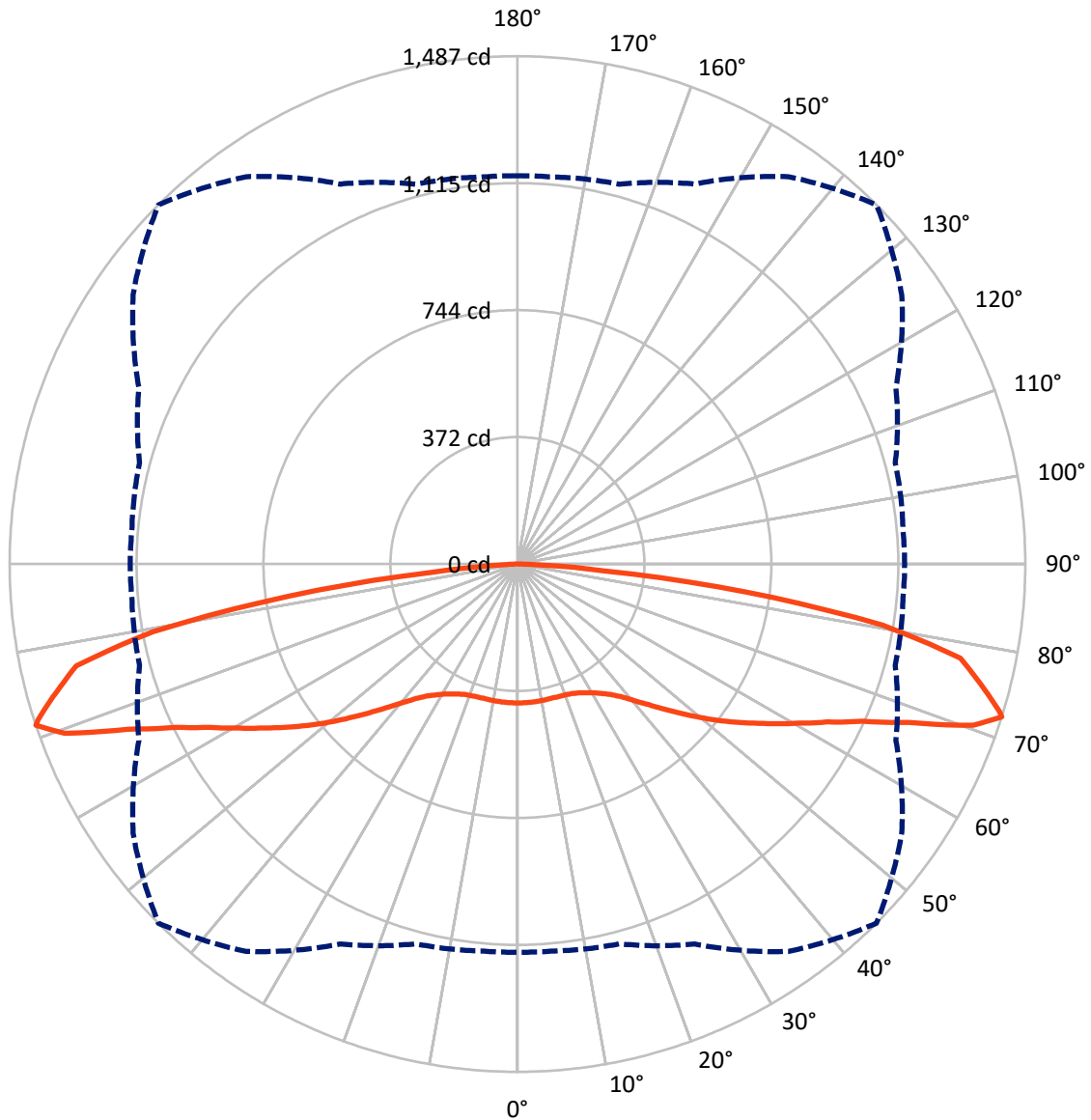


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2154.4	0.0	2154.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2154.4	0.0	2154.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4308.8	0.0	4308.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.8	0.9
10°-20°	115.4	2.7
20°-30°	193.8	4.5
30°-40°	294.9	6.8
40°-50°	466.3	10.8
50°-60°	712.1	16.5
60°-70°	1043.3	24.2
70°-80°	1185.3	27.5
80°-90°	258.9	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°	4308.8	100.0
0°-180°	4308.8	100.0



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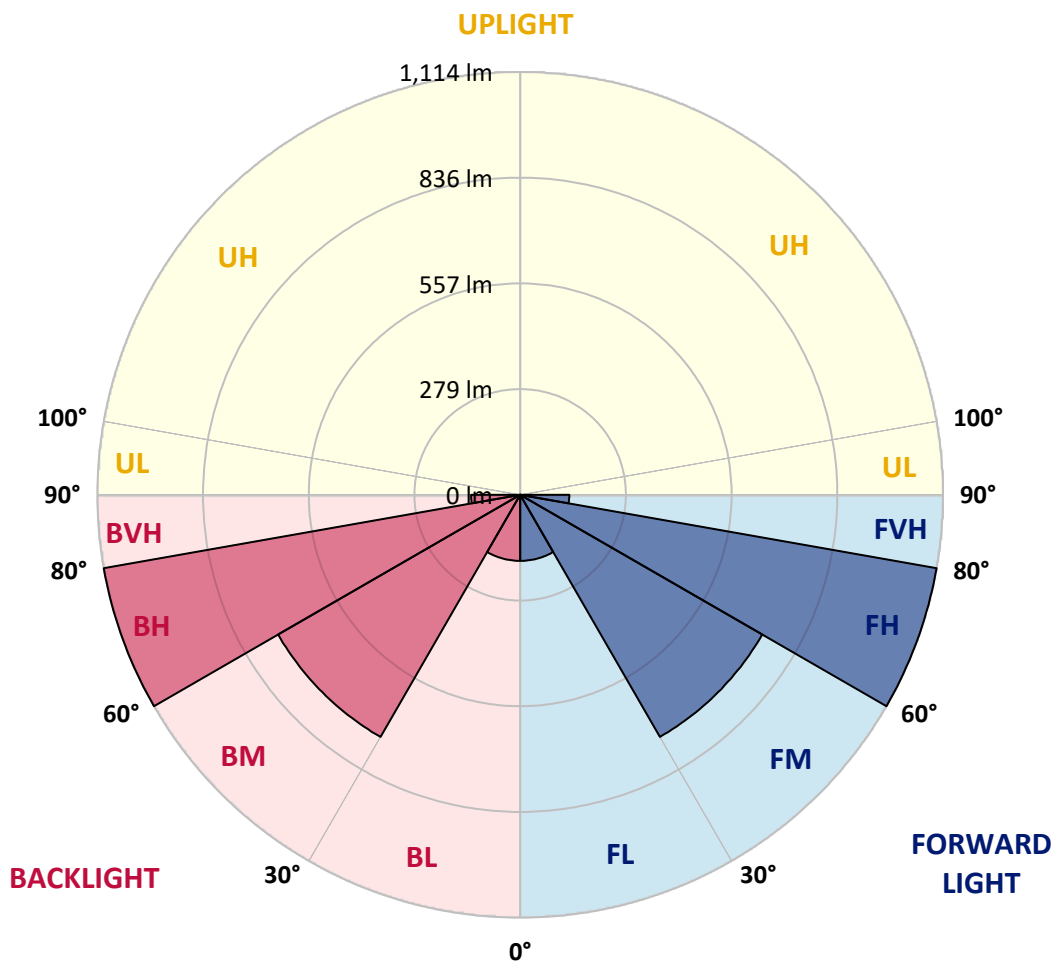
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	174.0	4.0			
FM (30°-60°)	736.7	17.1			
FH (60°-80°)	1114.3	25.9			G1/1800
FVH (80°-90°)	129.4	3.0			G2/225
BL (0°-30°)	174.0	4.0	B1/500		
BM (30°-60°)	736.7	17.1	B1/1000		
BH (60°-80°)	1114.3	25.9	B3/2500		G1/1800
BVH (80°-90°)	129.4	3.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9
2.5°	407.7	407.6	407.3	407.0	406.9	406.8	406.8	406.8	406.7	406.6	406.7
5°	407.8	407.6	407.4	407.2	407.0	406.8	406.8	406.8	406.7	406.6	406.8
7.5°	407.2	407.3	407.1	406.9	406.8	406.8	406.7	406.6	406.5	406.3	406.4
10°	407.3	407.8	407.4	407.0	406.9	406.8	406.5	406.2	406.1	406.0	405.9
12.5°	407.6	408.2	407.7	407.2	407.0	406.8	406.5	406.2	406.0	405.8	405.6
15°	408.5	408.8	408.4	408.0	407.6	407.2	406.9	406.6	406.2	405.8	405.6
17.5°	409.0	409.7	409.2	408.7	408.2	407.7	407.4	407.2	406.9	406.6	406.2
20°	410.0	410.6	410.2	409.8	409.6	409.2	409.0	408.8	408.6	408.5	408.0
22.5°	411.8	412.4	412.2	412.0	412.1	412.2	412.3	412.4	412.2	412.0	411.6
25°	415.5	415.6	415.8	416.1	416.5	417.0	417.3	417.6	417.8	418.0	417.4
27.5°	422.0	422.6	422.8	423.0	423.8	424.4	425.2	426.0	426.4	426.8	426.2
30°	430.6	430.6	431.1	431.6	432.7	433.9	434.9	435.8	436.6	437.4	437.0
32.5°	441.4	442.2	442.8	443.6	445.0	446.5	448.2	449.8	450.8	451.8	451.0
35°	458.0	458.9	459.6	460.2	461.8	463.3	465.2	467.0	467.9	468.8	468.3
37.5°	481.4	481.4	482.4	483.4	484.4	485.4	487.9	490.4	491.4	492.4	491.6
40°	513.1	513.2	513.4	513.7	514.6	515.4	518.5	521.6	523.4	525.2	523.5
42.5°	549.4	551.0	550.9	550.8	551.5	552.1	555.0	558.0	560.5	563.1	562.0
45°	592.4	592.1	591.6	591.0	592.8	594.7	598.9	603.1	605.4	607.7	605.6
47.5°	635.7	635.3	634.5	633.8	635.6	637.5	643.8	650.0	653.3	656.6	653.1
50°	678.9	680.6	679.6	678.6	681.4	684.2	692.1	700.0	704.9	709.7	705.6
52.5°	726.7	728.0	726.8	725.7	729.5	733.3	742.8	752.2	758.6	765.0	759.6
55°	776.2	774.6	775.2	775.8	779.5	783.2	794.7	806.2	813.9	821.6	815.5
57.5°	822.4	823.0	822.4	821.8	827.4	833.2	847.7	862.3	871.9	881.5	873.8
60°	869.8	870.0	868.6	867.2	873.4	879.6	900.4	921.4	933.8	946.3	935.8
62.5°	922.8	922.6	920.2	917.7	925.0	932.4	958.3	984.2	1001.4	1018.5	1005.7
65°	987.7	986.0	984.6	983.2	991.7	1000.1	1032.3	1064.4	1087.6	1110.7	1094.2
67.5°	1083.4	1082.2	1079.2	1076.3	1085.7	1095.1	1136.4	1177.6	1207.5	1237.4	1215.6
70°	1188.8	1186.4	1188.4	1190.4	1212.2	1234.0	1289.2	1344.6	1380.0	1415.4	1378.7
72°	1136.8	1137.8	1144.5	1151.3	1189.4	1227.5	1306.1	1384.6	1435.9	1487.1	1430.4
72.5°	1118.7	1119.5	1127.2	1134.8	1171.2	1207.6	1288.6	1369.6	1422.7	1475.7	1417.4
75°	1041.8	1044.0	1052.8	1061.7	1098.6	1135.4	1217.1	1298.8	1349.6	1400.4	1342.1
77.5°	916.2	923.2	932.1	941.2	985.0	1029.0	1121.4	1213.8	1269.8	1325.8	1259.7
80°	699.2	696.8	712.2	727.7	769.6	811.6	883.0	954.5	1019.1	1083.7	1009.3
82.5°	271.8	277.7	309.8	341.8	385.8	429.8	493.8	557.8	616.0	674.2	612.2
85°	28.0	32.0	43.4	54.9	78.8	102.8	141.8	180.8	219.1	257.4	215.8
87.5°	11.3	12.4	16.0	19.5	20.4	21.3	25.8	30.2	30.0	29.8	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	406.9	406.9	406.9	406.9	406.9	406.9	406.9	406.9
2.5°	406.8	406.9	407.0	407.0	407.0	407.2	407.4	407.2
5°	406.9	407.0	407.0	407.0	407.0	407.2	407.4	407.2
7.5°	406.5	406.5	406.4	406.7	406.9	407.0	407.0	406.9
10°	405.8	405.8	405.9	406.1	406.4	406.6	406.8	406.9
12.5°	405.4	405.5	405.5	405.7	406.0	406.1	406.3	406.6
15°	405.4	405.4	405.5	405.6	405.8	406.1	406.4	406.6
17.5°	405.9	405.8	405.6	405.8	406.0	406.3	406.6	406.9
20°	407.4	407.2	407.0	407.0	407.0	407.4	407.8	407.7
22.5°	411.1	410.4	409.6	409.6	409.5	409.5	409.6	409.7
25°	416.8	415.6	414.6	414.2	413.9	413.7	413.6	413.9
27.5°	425.6	424.3	423.0	422.3	421.6	421.1	420.7	420.8
30°	436.4	435.0	433.5	432.2	431.0	430.4	429.9	430.0
32.5°	450.2	448.5	446.8	445.1	443.4	442.6	441.8	442.0
35°	467.8	465.8	463.8	462.4	461.0	459.8	458.6	459.6
37.5°	490.8	488.9	487.0	486.1	485.2	484.2	483.1	483.3
40°	521.8	519.8	517.8	517.0	516.3	515.0	513.6	513.9
42.5°	561.0	558.1	555.2	553.8	552.4	551.8	551.2	551.5
45°	603.4	600.4	597.5	596.3	595.2	593.5	591.8	593.3
47.5°	649.6	645.9	642.2	640.2	638.0	638.6	639.2	637.9
50°	701.6	695.4	689.2	686.8	684.3	684.3	684.3	684.2
52.5°	754.2	745.6	737.0	734.9	732.8	732.3	731.8	731.3
55°	809.4	798.8	788.2	784.4	780.5	781.0	781.6	783.1
57.5°	866.2	852.3	838.4	834.0	829.6	829.9	830.2	832.7
60°	925.2	907.4	889.4	884.5	879.6	880.9	882.2	883.7
62.5°	992.8	971.2	949.6	942.9	936.2	937.9	939.6	943.7
65°	1077.7	1050.7	1023.6	1016.8	1009.8	1010.6	1011.4	1018.3
67.5°	1193.8	1157.8	1121.8	1115.4	1109.0	1110.2	1111.3	1122.6
70°	1342.1	1288.7	1235.3	1209.0	1182.8	1178.6	1174.6	1180.5
72°	1373.8	1298.4	1223.1	1184.3	1145.6	1139.5	1133.4	1134.0
72.5°	1359.2	1283.0	1206.8	1169.1	1131.5	1126.6	1121.6	1120.6
75°	1283.8	1209.3	1134.8	1095.9	1057.0	1047.6	1038.2	1038.1
77.5°	1193.5	1099.5	1005.6	963.6	921.6	911.8	902.0	894.3
80°	934.8	850.6	766.4	723.8	681.3	665.6	649.8	640.4
82.5°	550.2	472.8	395.3	341.2	287.2	271.0	254.8	232.2
85°	174.4	134.1	93.9	73.3	52.7	42.6	32.4	28.4
87.5°	29.0	23.6	18.1	17.5	16.8	13.2	9.6	8.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)