

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: INVUE

Report Number: P140273

Luminaire Tested: **ECM-F02-LED-E1-5MQ-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140273  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F02-LED-E1-5MQ-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4255.3 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G1

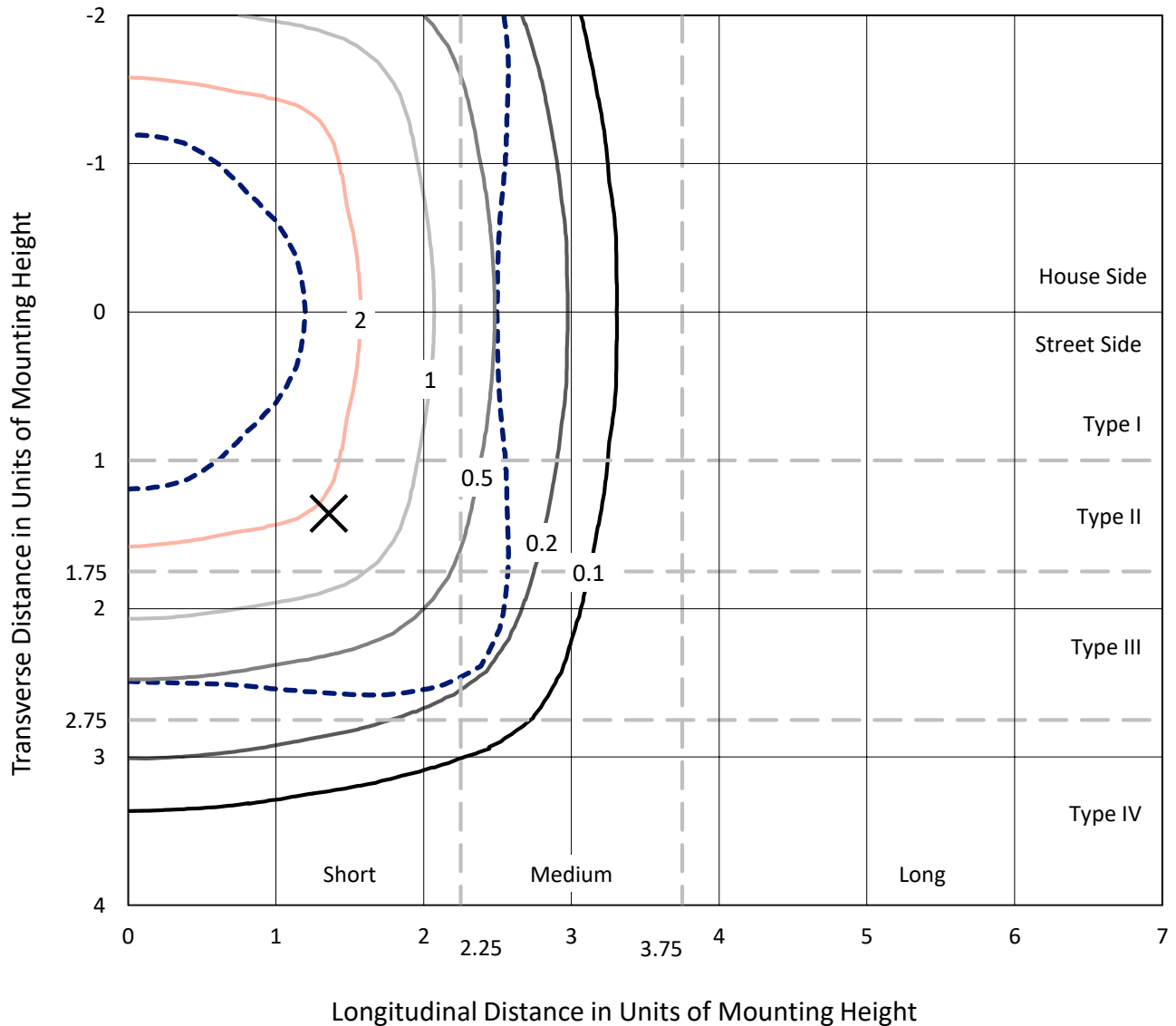
Input Watts (W): 55  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

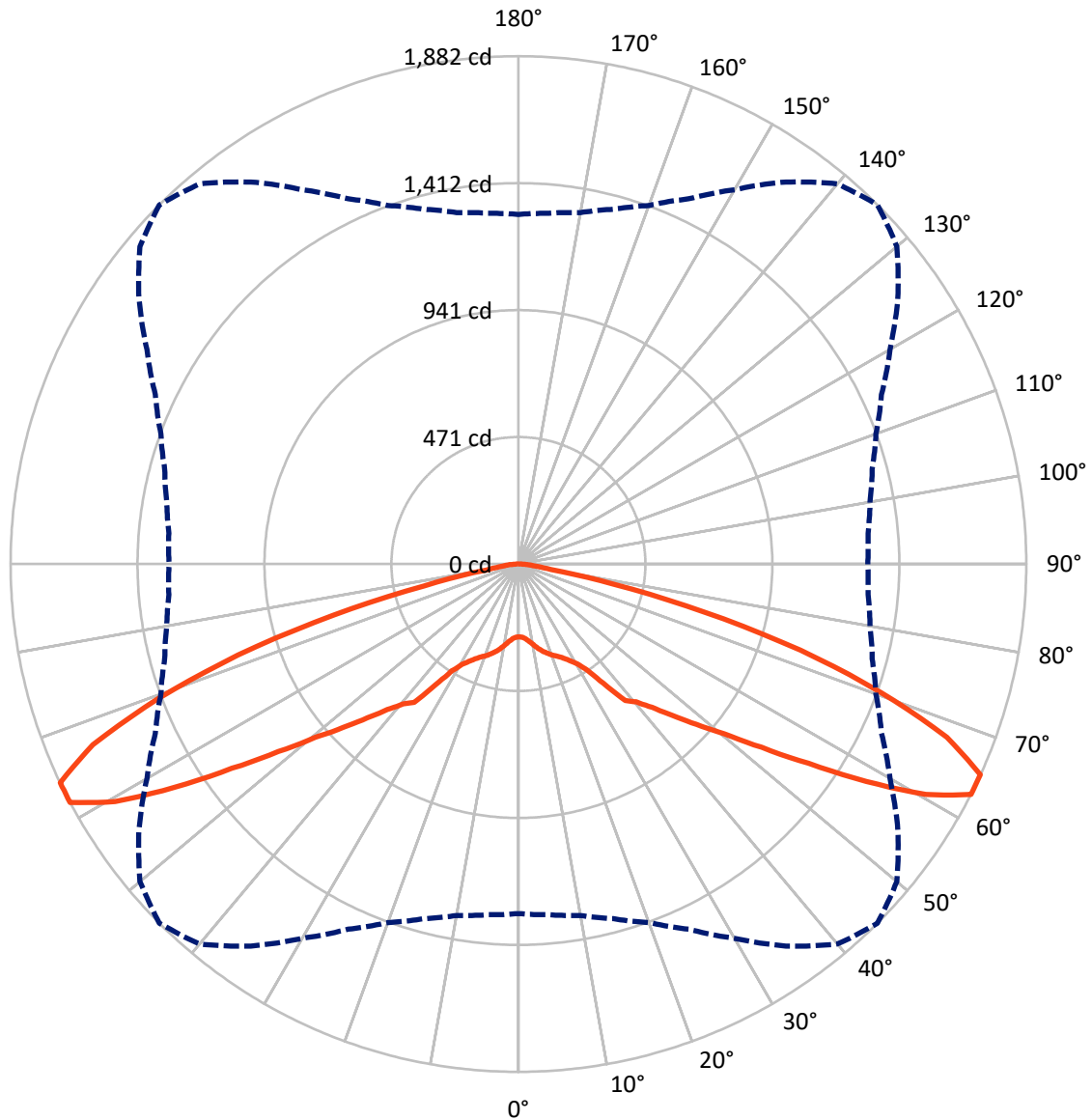
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2127.7	0.0	2127.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2127.7	0.0	2127.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	4255.3	0.0	4255.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	0.6
10°-20°	95.6	2.2
20°-30°	183.7	4.3
30°-40°	353.3	8.3
40°-50°	615.0	14.5
50°-60°	1104.6	26.0
60°-70°	1354.1	31.8
70°-80°	477.5	11.2
80°-90°	44.2	1.0
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°	4255.3	100.0
0°-180°	4255.3	100.0



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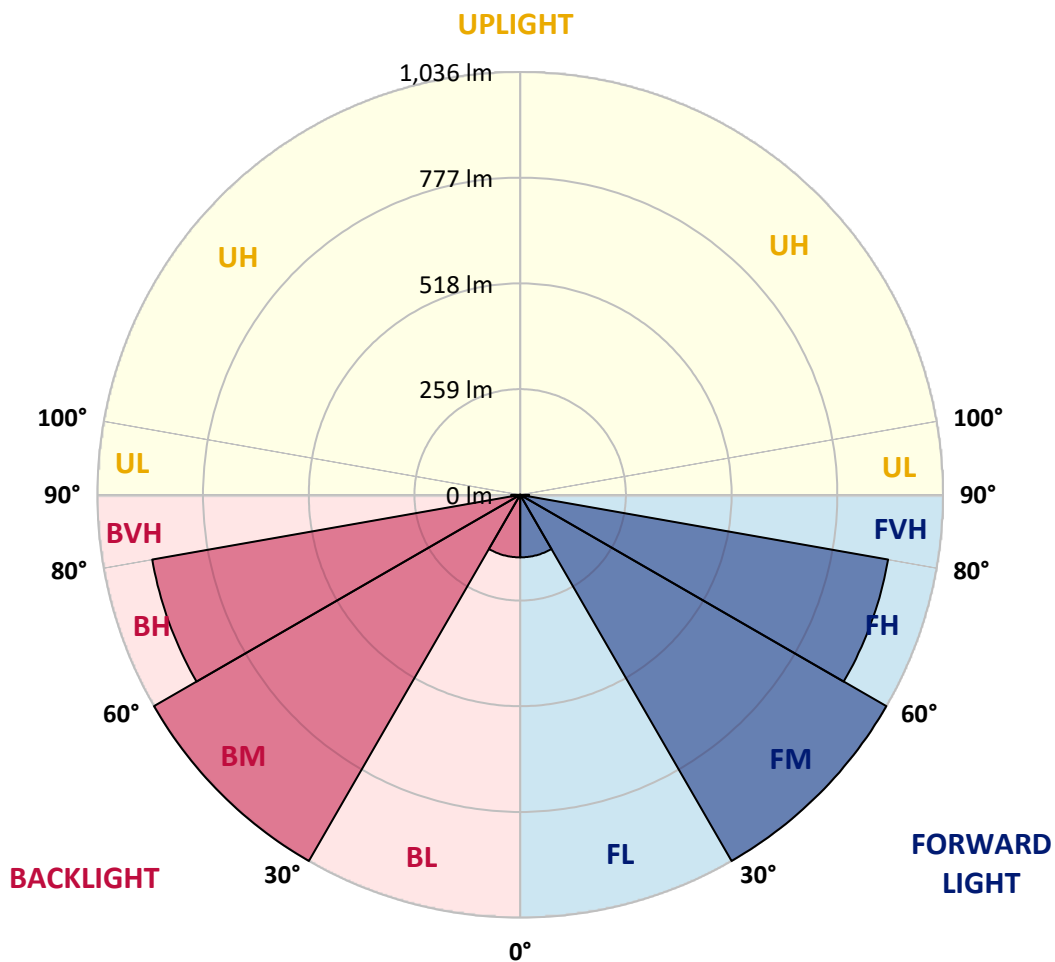
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	153.4	3.6			
FM (30°-60°)	1036.4	24.4			
FH (60°-80°)	915.8	21.5			G1/1800
FVH (80°-90°)	22.1	0.5			G1/100
BL (0°-30°)	153.4	3.6	B1/500		
BM (30°-60°)	1036.4	24.4	B2/2500		
BH (60°-80°)	915.8	21.5	B2/1000		G1/1800
BVH (80°-90°)	22.1	0.5			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	269.9	269.9	269.9	269.9	269.9	269.9	269.9	269.9	269.9	269.9	269.9
2.5°	273.1	273.1	272.7	272.2	272.2	272.2	271.7	271.7	272.2	271.3	271.3
5°	280.1	280.6	280.1	279.6	279.2	279.2	278.7	278.7	279.2	278.2	277.8
7.5°	293.1	293.6	292.6	292.2	291.7	291.2	290.8	290.3	290.8	289.4	289.4
10°	309.8	309.8	309.8	308.0	308.0	306.6	306.1	305.2	305.6	304.2	304.2
12.5°	326.5	326.5	326.1	325.1	324.7	323.7	322.8	322.8	321.9	320.0	319.1
15°	341.4	341.9	341.4	340.0	339.5	338.1	338.1	337.2	335.8	334.9	334.0
17.5°	355.3	355.8	354.4	353.9	352.5	351.6	350.7	350.2	349.3	347.9	347.4
20°	368.8	368.3	366.9	365.1	364.2	363.2	362.3	361.8	361.4	360.4	360.4
22.5°	381.8	381.8	380.4	377.6	375.8	374.8	373.5	372.5	371.6	371.1	372.1
25°	401.3	400.9	398.1	395.3	392.0	389.2	387.4	386.9	386.0	386.0	386.5
27.5°	426.4	425.5	421.3	417.6	413.9	410.1	407.8	406.0	405.5	405.0	405.0
30°	458.0	456.6	452.9	448.2	444.1	439.4	434.8	433.4	431.0	429.2	432.4
32.5°	518.4	519.3	511.9	502.6	493.3	484.5	476.6	470.5	466.8	467.3	467.3
35°	584.8	585.3	582.0	578.3	575.5	570.4	561.6	554.1	548.6	542.5	545.3
37.5°	613.6	614.1	611.3	610.8	612.7	615.9	624.7	631.2	641.0	642.4	639.6
40°	664.2	661.9	658.2	657.3	655.9	660.5	664.2	667.5	668.9	671.7	668.9
42.5°	717.2	716.2	713.5	710.2	710.2	711.1	717.2	722.3	725.5	726.0	725.5
45°	776.6	775.2	772.9	772.4	773.8	778.0	782.2	788.7	798.9	799.4	798.9
47.5°	842.1	843.1	839.3	840.7	843.1	850.0	861.6	872.3	883.5	887.6	882.5
50°	931.8	928.5	928.5	927.1	933.2	943.4	957.3	969.9	985.6	989.4	981.5
52.5°	1053.5	1046.5	1047.9	1044.2	1047.4	1056.7	1079.5	1099.0	1119.0	1128.7	1113.4
55°	1199.8	1188.2	1189.6	1193.3	1196.1	1211.9	1240.7	1262.9	1300.6	1303.8	1286.2
57.5°	1319.6	1316.4	1318.2	1327.0	1344.7	1372.1	1408.3	1462.2	1508.7	1519.8	1500.8
60°	1363.3	1365.6	1378.6	1401.8	1435.3	1484.0	1554.6	1638.7	1712.6	1734.9	1706.1
62.5°	1295.5	1304.8	1322.4	1361.0	1413.9	1493.3	1601.6	1728.4	1838.9	1882.1	1830.6
65°	1163.1	1169.1	1197.9	1230.9	1299.2	1390.2	1523.1	1688.0	1824.1	1881.2	1823.6
67.5°	989.4	1001.0	1026.1	1066.9	1125.9	1218.4	1357.7	1526.3	1662.9	1713.0	1662.4
70°	794.3	799.4	815.2	847.2	908.5	990.3	1109.7	1260.6	1393.5	1425.1	1384.6
72.5°	550.9	561.1	574.6	603.8	642.4	711.6	810.1	921.1	1027.9	1093.4	1034.0
75°	237.4	223.9	253.6	282.9	330.3	394.4	471.5	562.5	668.4	712.1	653.5
77.5°	71.1	70.6	75.2	83.6	100.3	132.8	186.3	247.6	329.3	357.7	307.0
80°	58.1	59.9	61.8	63.6	65.5	67.8	72.0	84.1	103.1	121.7	98.9
82.5°	49.2	51.6	56.7	59.5	60.8	61.3	61.3	60.8	58.5	57.6	57.1
85°	37.2	40.9	47.8	52.0	52.0	52.0	52.0	50.6	47.4	41.8	46.4
87.5°	12.5	16.7	27.9	29.7	30.7	28.3	29.7	30.2	25.1	19.0	24.2
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°	269.9	269.9	269.9	269.9	269.9	269.9	269.9	269.9
2.5°	271.3	271.3	271.3	271.7	271.3	271.3	271.3	271.3
5°	278.2	277.8	278.2	277.8	278.2	278.2	277.8	278.2
7.5°	288.9	288.9	289.4	289.4	288.9	288.9	288.9	288.9
10°	303.3	302.4	302.8	302.8	302.8	302.4	302.4	301.9
12.5°	318.2	317.2	317.2	317.2	317.2	316.8	317.2	317.2
15°	332.1	331.2	330.3	330.3	330.7	331.2	331.2	330.7
17.5°	345.6	344.7	343.3	343.3	342.8	343.7	344.7	344.2
20°	359.1	358.6	356.3	356.3	356.3	357.2	357.7	359.1
22.5°	372.5	372.1	370.2	369.7	370.2	372.1	373.5	373.5
25°	386.9	387.8	387.4	387.4	388.3	391.1	392.5	394.4
27.5°	407.4	409.2	409.7	411.5	412.0	415.3	417.6	420.4
30°	433.8	437.1	438.9	442.2	444.5	446.4	449.6	451.9
32.5°	470.5	478.4	487.7	498.4	503.0	511.4	515.1	516.0
35°	555.1	563.4	571.3	576.0	574.1	576.4	576.4	578.3
37.5°	631.2	622.9	615.9	614.5	610.8	609.4	609.9	611.3
40°	666.5	662.4	659.6	661.0	659.1	657.7	658.6	659.1
42.5°	723.7	717.2	714.9	714.4	713.5	714.4	716.7	715.8
45°	790.6	782.2	779.0	778.5	777.1	776.6	777.6	779.4
47.5°	870.9	860.7	850.5	847.2	847.2	844.4	846.3	843.5
50°	969.4	952.7	942.0	935.9	932.2	928.1	931.8	925.7
52.5°	1099.0	1075.3	1063.7	1055.8	1045.1	1045.6	1046.5	1044.2
55°	1262.5	1236.5	1213.7	1198.4	1191.9	1188.2	1187.2	1194.7
57.5°	1450.6	1404.6	1368.4	1341.4	1331.2	1317.3	1310.8	1310.8
60°	1629.4	1545.8	1473.8	1428.8	1395.3	1371.6	1355.8	1351.2
62.5°	1716.8	1590.0	1484.5	1410.2	1357.2	1323.3	1300.6	1294.5
65°	1679.1	1518.0	1393.9	1310.3	1249.0	1205.4	1178.9	1171.4
67.5°	1527.7	1359.1	1228.6	1144.5	1078.5	1031.2	1011.2	1002.8
70°	1268.5	1113.8	1000.5	918.3	849.6	809.6	782.2	771.1
72.5°	911.8	794.3	690.2	619.6	557.9	537.0	499.8	496.1
75°	538.8	436.6	350.7	296.8	241.5	211.3	194.2	175.6
77.5°	219.2	156.5	117.5	88.7	76.2	69.2	66.0	65.0
80°	74.8	66.9	63.2	61.8	59.9	59.0	56.7	54.8
82.5°	59.0	58.5	56.7	56.2	54.3	51.6	46.9	44.1
85°	49.2	48.3	46.0	45.5	44.1	40.4	35.3	32.0
87.5°	27.9	25.5	23.2	23.7	22.3	19.5	14.4	10.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)