

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: P140454

Luminaire Tested: **ECM-F04-LED-E1-5WQ-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140454
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F04-LED-E1-5WQ-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9009.7 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

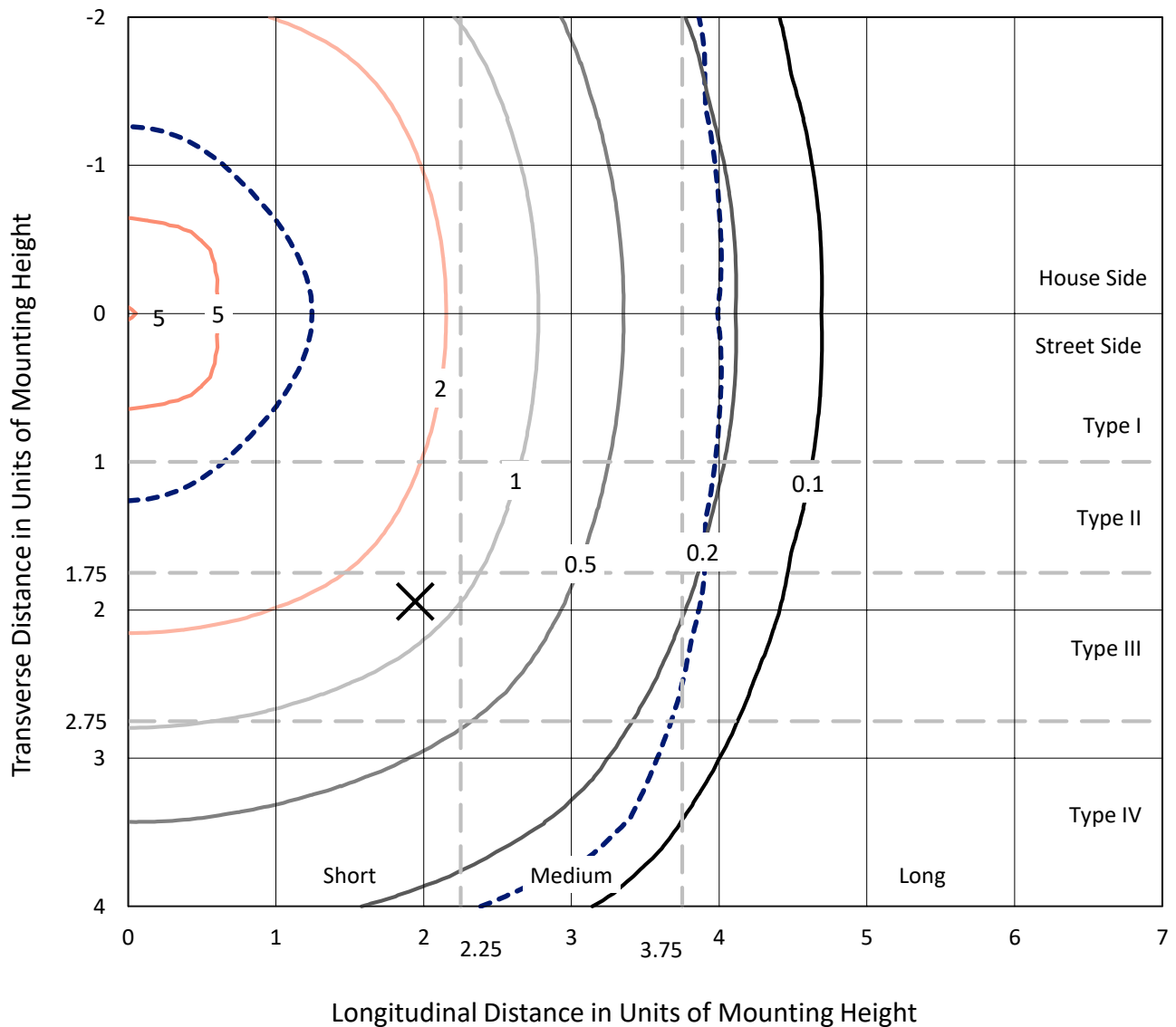
Input Watts (W): 102.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

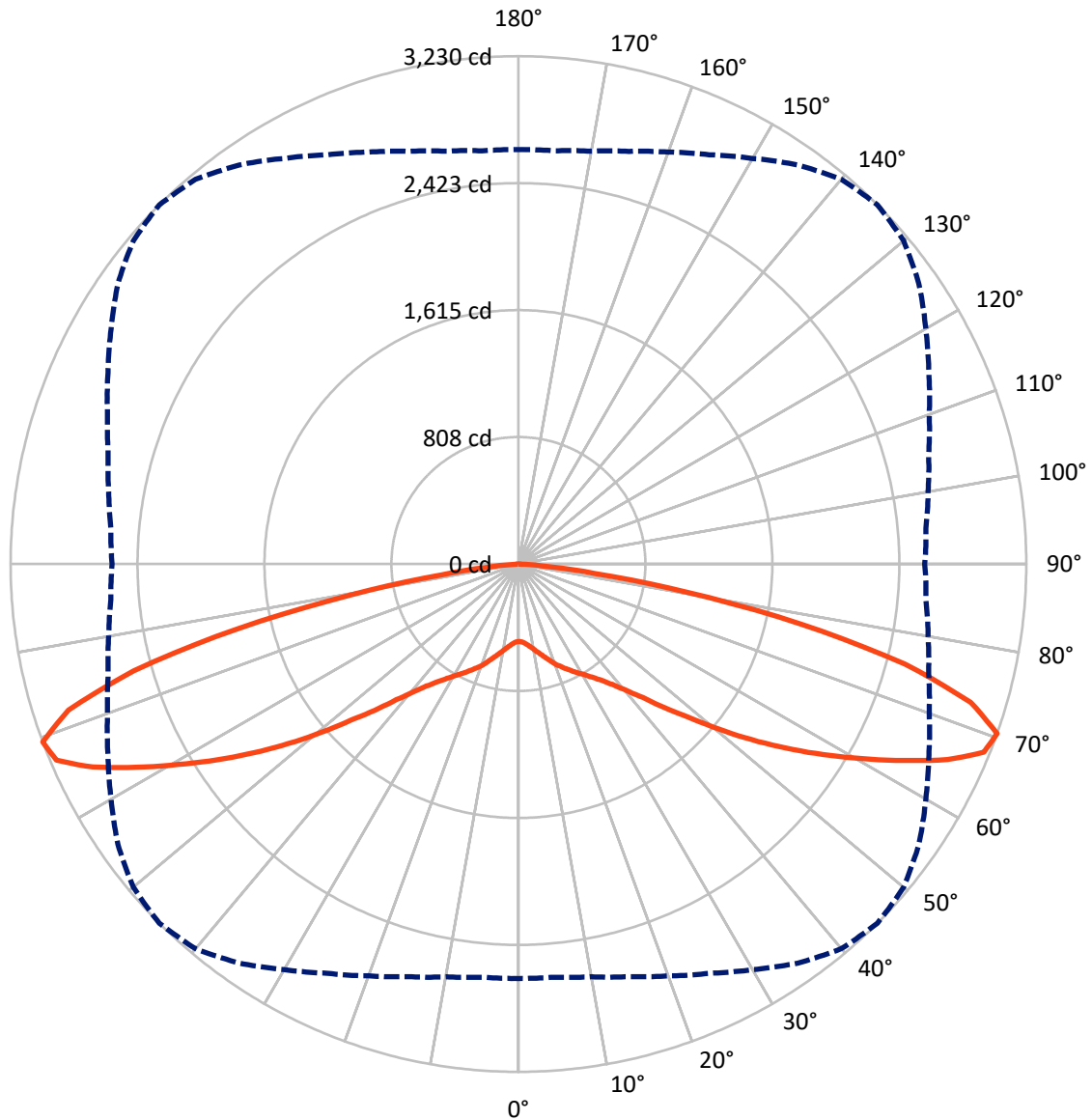
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4504.9	0.0	4504.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4504.9	0.0	4504.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	9009.7	0.0	9009.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	0.6
10°-20°	174.5	1.9
20°-30°	342.8	3.8
30°-40°	567.2	6.3
40°-50°	992.9	11.0
50°-60°	1771.0	19.7
60°-70°	2734.2	30.3
70°-80°	2164.3	24.0
80°-90°	213.0	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°	9009.7	100.0
0°-180°	9009.7	100.0



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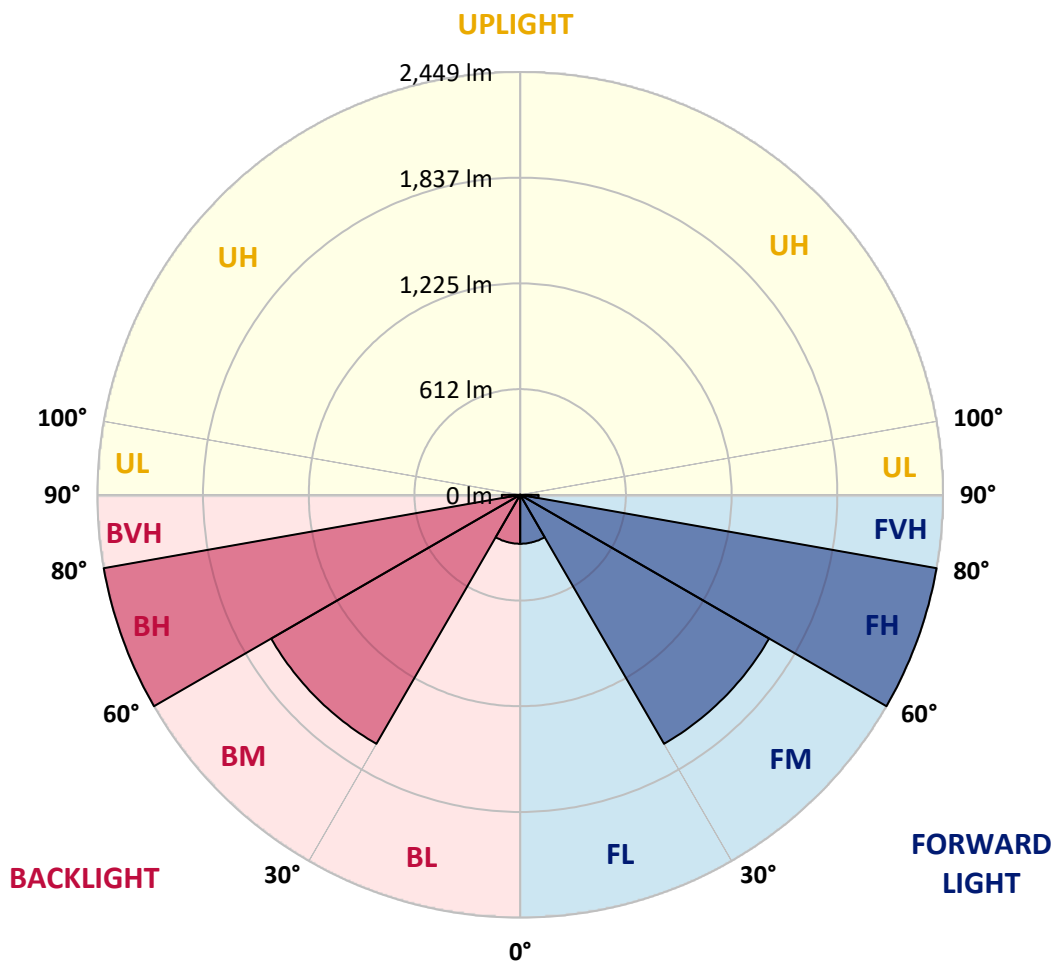
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	283.6	3.1			
FM	(30°-60°)	1665.5	18.5			
FH	(60°-80°)	2449.2	27.2			G2/5000
FVH	(80°-90°)	106.5	1.2			G2/225
BL	(0°-30°)	283.6	3.1	B1/500		
BM	(30°-60°)	1665.5	18.5	B2/2500		
BH	(60°-80°)	2449.2	27.2	B3/2500		G2/5000
BVH	(80°-90°)	106.5	1.2			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°	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6
2.5°	498.6	498.6	497.6	497.6	497.6	497.6	496.6	496.6	497.6	496.6	496.6
5°	510.7	511.7	511.7	510.7	510.7	510.7	510.7	510.7	511.7	510.7	510.7
7.5°	528.8	529.8	529.8	528.8	528.8	528.8	528.8	528.8	529.8	529.8	527.8
10°	550.9	551.9	551.9	550.9	550.9	551.9	551.9	551.9	552.9	552.9	551.9
12.5°	577.1	578.1	579.1	578.1	579.1	579.1	580.1	581.1	581.1	581.1	579.1
15°	607.2	610.2	608.2	608.2	609.2	610.2	610.2	613.2	612.2	611.2	610.2
17.5°	642.4	641.4	641.4	642.4	643.4	642.4	643.4	646.4	645.4	644.4	643.4
20°	675.6	675.6	675.6	674.6	676.6	676.6	677.6	678.6	678.6	680.6	677.6
22.5°	707.7	707.7	706.7	706.7	708.8	708.8	710.8	712.8	712.8	712.8	710.8
25°	737.9	737.9	738.9	737.9	738.9	739.9	741.9	743.9	744.9	744.9	744.9
27.5°	765.1	768.1	767.1	768.1	770.1	772.1	774.1	777.1	779.1	780.1	777.1
30°	799.2	799.2	798.2	799.2	801.2	804.3	808.3	813.3	813.3	814.3	814.3
32.5°	835.4	836.4	834.4	836.4	839.4	843.5	847.5	851.5	853.5	857.5	856.5
35°	882.7	879.7	880.7	883.7	885.7	889.7	894.7	901.8	905.8	907.8	905.8
37.5°	937.0	936.0	938.0	938.0	945.0	949.0	958.1	964.1	967.1	972.1	970.1
40°	1005.3	1009.3	1010.4	1013.4	1017.4	1025.4	1035.5	1045.5	1051.6	1055.6	1056.6
42.5°	1097.8	1099.8	1095.8	1106.9	1117.9	1122.9	1135.0	1149.1	1158.1	1161.1	1162.2
45°	1211.4	1211.4	1217.4	1224.5	1238.6	1248.6	1261.7	1284.8	1292.8	1303.9	1303.9
47.5°	1347.1	1351.2	1351.2	1367.2	1378.3	1398.4	1423.5	1442.6	1459.7	1454.7	1471.8
50°	1504.0	1507.0	1518.0	1527.1	1546.2	1569.3	1592.4	1620.6	1645.7	1648.7	1651.7
52.5°	1667.8	1671.9	1680.9	1702.0	1725.1	1751.3	1793.5	1817.6	1841.8	1854.8	1852.8
55°	1855.8	1853.8	1868.9	1885.0	1919.2	1954.4	1989.5	2023.7	2048.9	2066.9	2065.9
57.5°	2052.9	2059.9	2077.0	2097.1	2126.3	2157.4	2199.7	2233.8	2275.0	2286.1	2270.0
60°	2282.1	2275.0	2292.1	2323.3	2349.4	2389.7	2426.9	2471.1	2500.2	2513.3	2508.3
62.5°	2516.3	2510.3	2523.4	2563.6	2594.7	2623.9	2675.2	2723.4	2747.6	2752.6	2743.5
65°	2688.2	2690.2	2711.4	2746.5	2795.8	2840.0	2897.3	2955.7	2993.9	2999.9	2979.8
67.5°	2728.5	2732.5	2761.6	2806.9	2868.2	2941.6	3027.0	3113.5	3178.8	3192.9	3163.8
70°	2636.0	2638.0	2666.1	2717.4	2787.8	2872.2	2978.8	3098.4	3193.9	3230.1	3197.9
72.5°	2446.0	2454.0	2477.1	2520.3	2575.6	2659.1	2761.6	2868.2	2962.7	3008.9	3008.9
75°	2103.1	2121.2	2132.3	2146.4	2194.6	2262.0	2345.4	2429.9	2513.3	2539.5	2466.1
77.5°	1500.9	1470.8	1477.8	1556.2	1545.2	1621.6	1714.1	1774.4	1848.8	1837.7	1732.2
80°	688.6	671.6	710.8	763.0	829.4	880.7	980.2	990.2	1075.7	1080.7	1004.3
82.5°	137.7	144.8	172.9	213.1	265.4	322.7	375.0	419.2	477.5	488.6	453.4
85°	43.2	47.3	59.3	65.3	68.4	78.4	89.5	120.6	138.7	143.8	134.7
87.5°	9.0	14.1	23.1	26.1	27.1	26.1	26.1	25.1	20.1	16.1	19.1
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°	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6
2.5°	495.6	495.6	496.6	496.6	496.6	495.6	494.6	495.6
5°	509.7	509.7	509.7	509.7	507.7	507.7	506.7	506.7
7.5°	527.8	526.8	526.8	525.8	524.8	524.8	523.8	524.8
10°	551.9	549.9	548.9	547.9	546.9	546.9	545.9	544.9
12.5°	578.1	577.1	576.1	574.0	573.0	571.0	571.0	571.0
15°	608.2	607.2	606.2	603.2	603.2	600.2	601.2	601.2
17.5°	641.4	639.4	636.4	635.4	634.4	631.3	631.3	631.3
20°	675.6	671.6	669.5	667.5	667.5	664.5	663.5	663.5
22.5°	708.8	704.7	700.7	698.7	696.7	695.7	693.7	692.7
25°	741.9	737.9	733.9	730.9	726.8	724.8	722.8	722.8
27.5°	775.1	771.1	765.1	761.0	757.0	753.0	751.0	752.0
30°	809.3	805.3	799.2	794.2	789.2	785.2	783.1	782.1
32.5°	852.5	847.5	840.5	835.4	826.4	822.4	820.3	821.4
35°	902.8	895.7	890.7	882.7	875.6	870.6	867.6	867.6
37.5°	967.1	961.1	956.1	948.0	938.0	931.9	927.9	930.9
40°	1050.6	1045.5	1035.5	1023.4	1015.4	1010.4	1006.3	1007.3
42.5°	1157.1	1147.1	1138.0	1131.0	1118.9	1111.9	1100.8	1104.9
45°	1291.8	1280.8	1271.7	1260.7	1249.6	1235.5	1231.5	1223.5
47.5°	1454.7	1446.7	1426.6	1416.5	1402.4	1382.3	1372.3	1364.2
50°	1634.7	1619.6	1605.5	1580.4	1564.3	1541.2	1532.1	1529.1
52.5°	1837.7	1812.6	1789.5	1766.4	1734.2	1712.1	1694.0	1698.0
55°	2038.8	2009.6	1976.5	1951.3	1926.2	1899.1	1880.0	1868.9
57.5°	2250.9	2218.8	2183.6	2147.4	2126.3	2094.1	2082.0	2076.0
60°	2469.1	2439.9	2404.7	2371.6	2342.4	2305.2	2285.1	2277.1
62.5°	2710.4	2670.1	2627.9	2586.7	2554.5	2527.4	2506.3	2492.2
65°	2932.5	2877.2	2834.0	2781.7	2746.5	2707.3	2681.2	2676.2
67.5°	3098.4	3013.0	2937.6	2870.2	2815.9	2767.7	2734.5	2721.4
70°	3109.5	2991.8	2880.3	2780.7	2701.3	2646.0	2601.8	2584.7
72.5°	2894.3	2748.6	2597.8	2500.2	2415.8	2339.4	2308.2	2301.2
75°	2354.5	2232.8	2107.2	1996.6	1938.3	1900.1	1873.9	1835.7
77.5°	1635.7	1524.1	1456.7	1333.1	1310.9	1279.8	1253.6	1228.5
80°	915.9	818.3	742.9	665.5	618.3	592.1	565.0	549.9
82.5°	411.2	337.8	268.4	208.1	171.9	135.7	101.5	107.6
85°	102.5	86.5	66.4	55.3	50.3	46.2	37.2	33.2
87.5°	19.1	18.1	16.1	16.1	17.1	14.1	8.0	7.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)