

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: P140428

Luminaire Tested: **ECM-E02-LED-E1-5WQ-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140428  
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-E02-LED-E1-5WQ-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5042.6 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G1

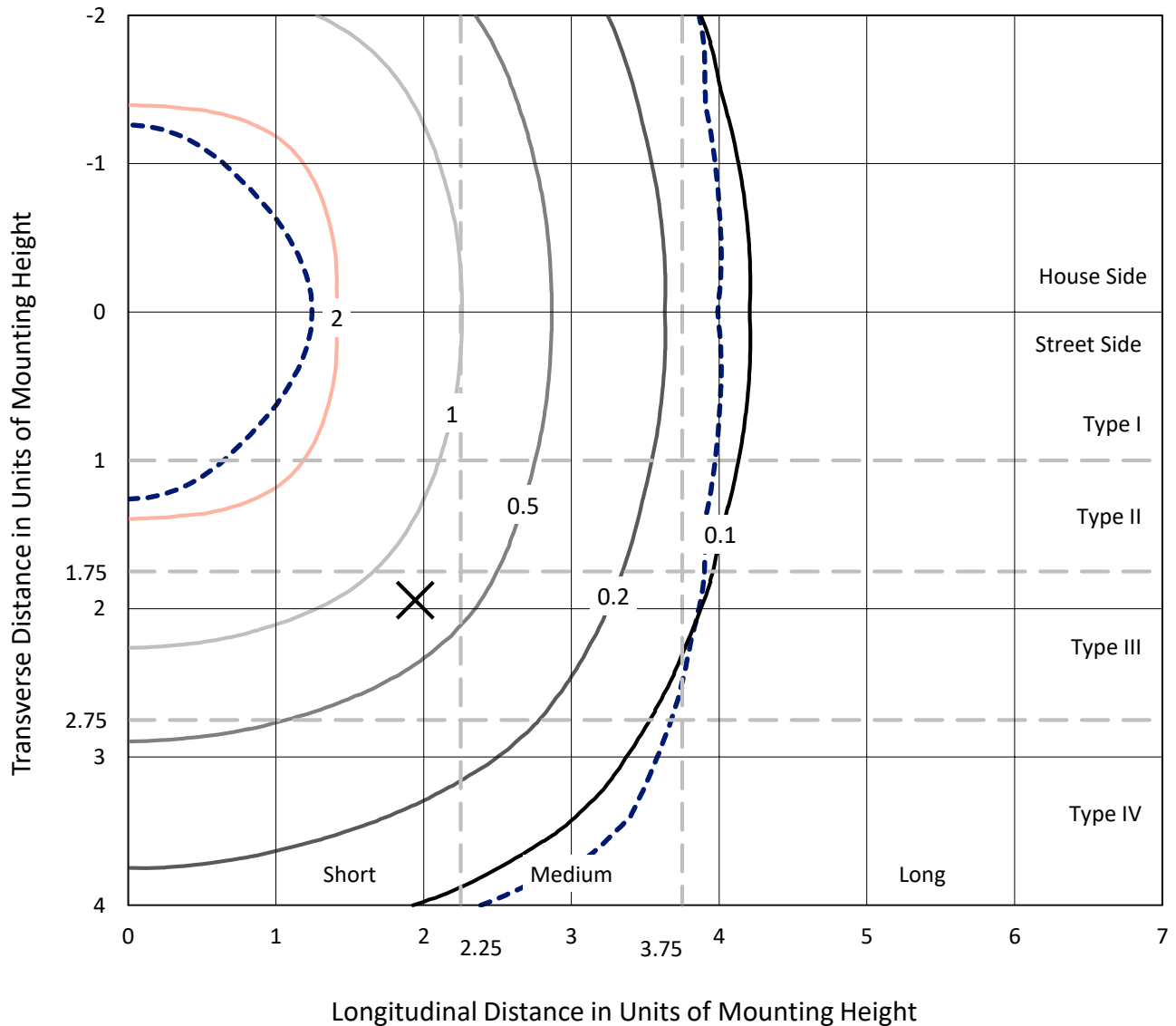
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

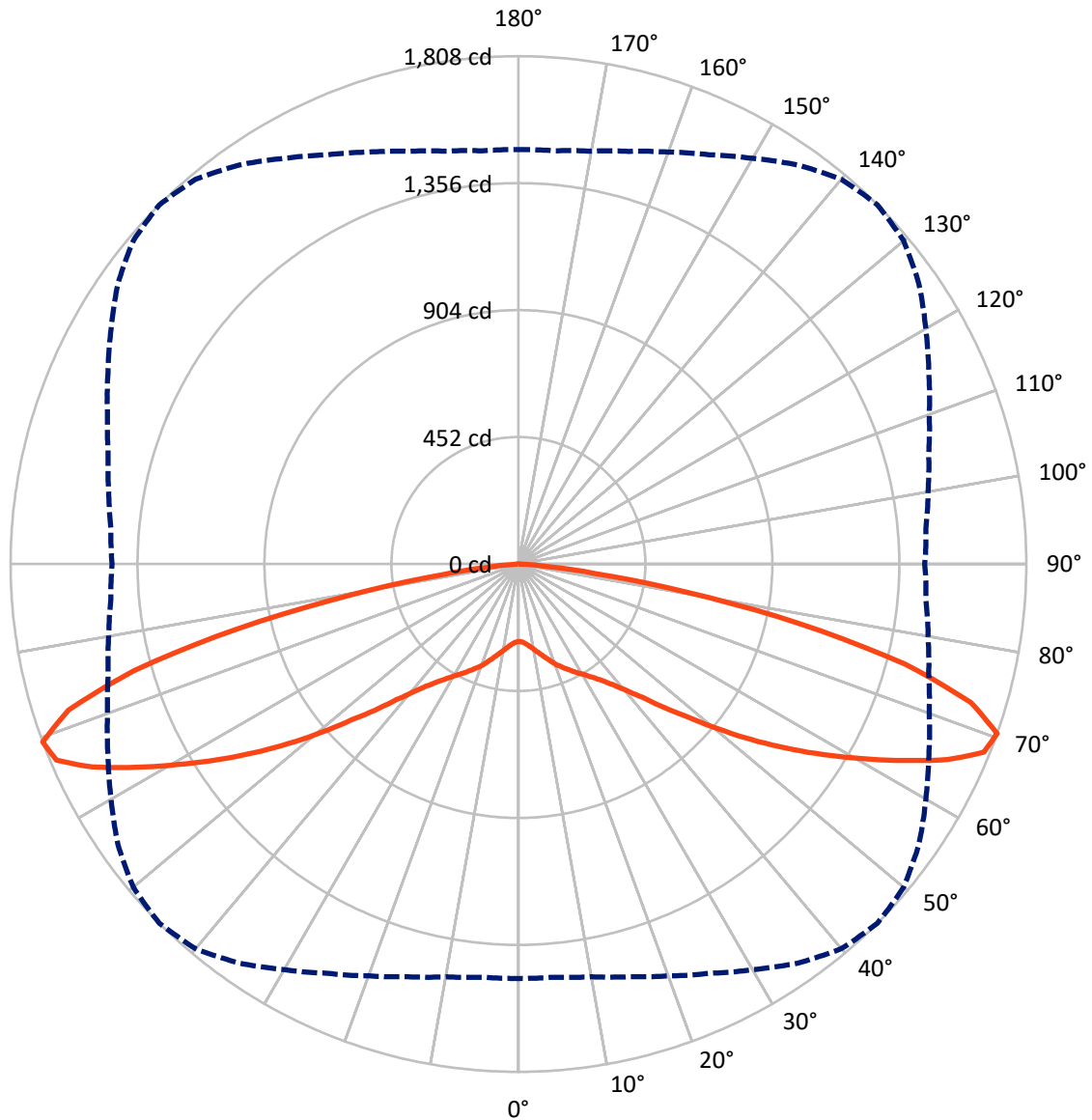
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.2 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
<b>House Side</b>	Lumens	2521.3	0.0	2521.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2521.3	0.0	2521.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5042.6	0.0	5042.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.0	0.6
10°-20°	97.6	1.9
20°-30°	191.9	3.8
30°-40°	317.5	6.3
40°-50°	555.7	11.0
50°-60°	991.2	19.7
60°-70°	1530.3	30.3
70°-80°	1211.3	24.0
80°-90°	119.2	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°	5042.6	100.0
0°-180°	5042.6	100.0



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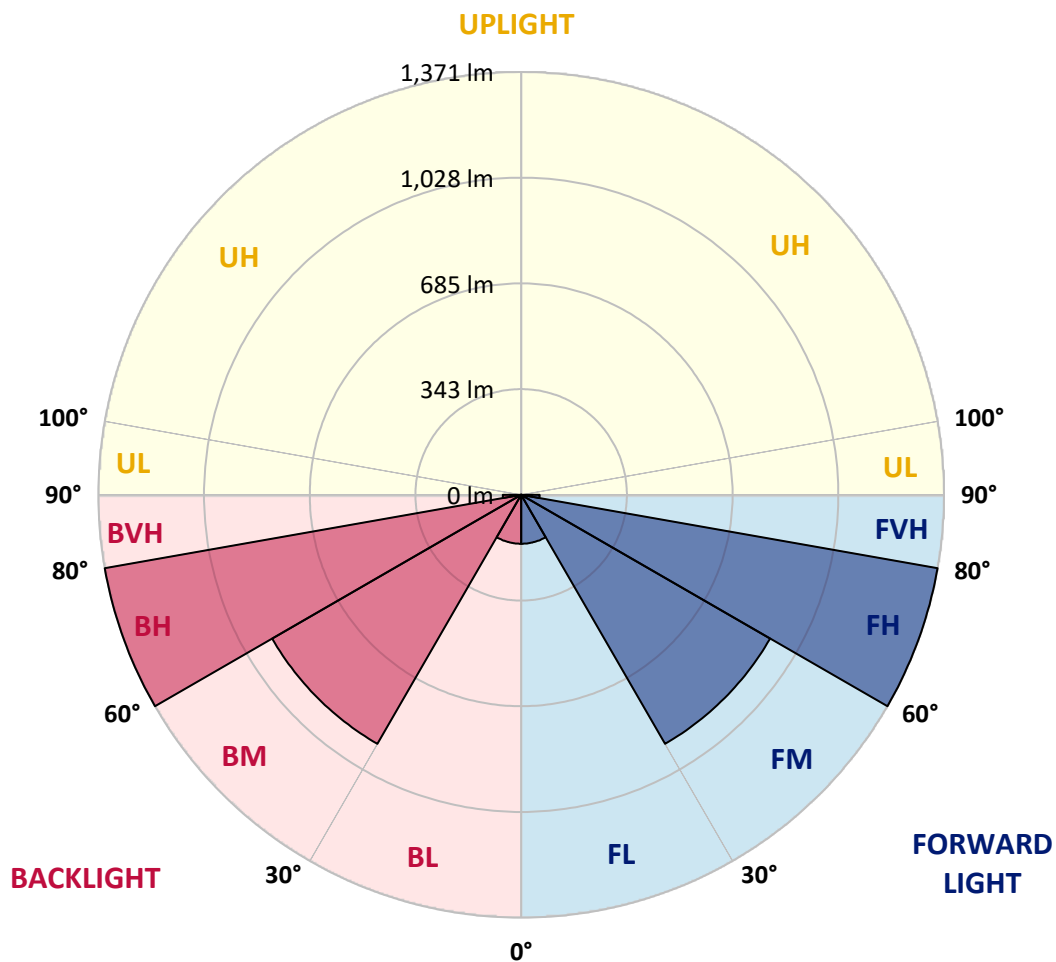
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	158.7	3.1			
FM	(30°-60°)	932.2	18.5			
FH	(60°-80°)	1370.8	27.2			G1/1800
FVH	(80°-90°)	59.6	1.2			G1/100
BL	(0°-30°)	158.7	3.1	B1/500		
BM	(30°-60°)	932.2	18.5	B1/1000		
BH	(60°-80°)	1370.8	27.2	B3/2500		G1/1800
BVH	(80°-90°)	59.6	1.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7
2.5°	279.1	279.1	278.5	278.5	278.5	278.5	278.0	278.0	278.5	278.0	278.0
5°	285.8	286.4	286.4	285.8	285.8	285.8	285.8	285.8	286.4	285.8	285.8
7.5°	296.0	296.5	296.5	296.0	296.0	296.0	296.0	296.0	296.5	296.5	295.4
10°	308.3	308.9	308.9	308.3	308.3	308.9	308.9	308.9	309.5	309.5	308.9
12.5°	323.0	323.5	324.1	323.5	324.1	324.1	324.7	325.2	325.2	325.2	324.1
15°	339.8	341.5	340.4	340.4	341.0	341.5	341.5	343.2	342.7	342.1	341.5
17.5°	359.5	359.0	359.0	359.5	360.1	359.5	360.1	361.8	361.2	360.7	360.1
20°	378.1	378.1	378.1	377.5	378.7	378.7	379.2	379.8	379.8	380.9	379.2
22.5°	396.1	396.1	395.6	395.6	396.7	396.7	397.8	398.9	398.9	398.9	397.8
25°	413.0	413.0	413.6	413.0	413.6	414.1	415.2	416.4	416.9	416.9	416.9
27.5°	428.2	429.9	429.3	429.9	431.0	432.1	433.2	434.9	436.1	436.6	434.9
30°	447.3	447.3	446.8	447.3	448.4	450.1	452.4	455.2	455.2	455.8	455.8
32.5°	467.6	468.1	467.0	468.1	469.8	472.1	474.3	476.6	477.7	479.9	479.4
35°	494.0	492.3	492.9	494.6	495.7	498.0	500.8	504.7	507.0	508.1	507.0
37.5°	524.4	523.8	525.0	525.0	528.9	531.2	536.2	539.6	541.3	544.1	543.0
40°	562.7	564.9	565.5	567.2	569.4	573.9	579.5	585.2	588.5	590.8	591.4
42.5°	614.4	615.6	613.3	619.5	625.7	628.5	635.2	643.1	648.2	649.9	650.4
45°	678.0	678.0	681.4	685.3	693.2	698.8	706.1	719.1	723.6	729.8	729.8
47.5°	754.0	756.2	756.2	765.2	771.4	782.7	796.7	807.4	817.0	814.2	823.7
50°	841.7	843.4	849.6	854.7	865.4	878.3	891.3	907.0	921.1	922.8	924.5
52.5°	933.5	935.7	940.8	952.6	965.5	980.2	1003.8	1017.3	1030.8	1038.1	1037.0
55°	1038.7	1037.5	1046.0	1055.0	1074.1	1093.8	1113.5	1132.6	1146.7	1156.8	1156.3
57.5°	1149.0	1152.9	1162.5	1173.7	1190.0	1207.5	1231.1	1250.2	1273.3	1279.5	1270.5
60°	1277.2	1273.3	1282.9	1300.3	1314.9	1337.4	1358.3	1383.0	1399.3	1406.7	1403.8
62.5°	1408.3	1405.0	1412.3	1434.8	1452.2	1468.5	1497.2	1524.2	1537.8	1540.6	1535.5
65°	1504.6	1505.7	1517.5	1537.2	1564.8	1589.5	1621.6	1654.2	1675.6	1679.0	1667.7
67.5°	1527.1	1529.3	1545.6	1570.9	1605.3	1646.3	1694.2	1742.6	1779.1	1787.0	1770.7
70°	1475.3	1476.4	1492.2	1520.9	1560.3	1607.5	1667.2	1734.1	1787.6	1807.8	1789.8
72.5°	1369.0	1373.5	1386.4	1410.6	1441.5	1488.2	1545.6	1605.3	1658.2	1684.0	1684.0
75°	1177.1	1187.2	1193.4	1201.3	1228.3	1266.0	1312.7	1360.0	1406.7	1421.3	1380.2
77.5°	840.1	823.2	827.1	871.0	864.8	907.6	959.3	993.1	1034.7	1028.5	969.5
80°	385.4	375.9	397.8	427.1	464.2	492.9	548.6	554.2	602.0	604.9	562.1
82.5°	77.1	81.0	96.8	119.3	148.5	180.6	209.9	234.6	267.3	273.5	253.8
85°	24.2	26.4	33.2	36.6	38.3	43.9	50.1	67.5	77.6	80.5	75.4
87.5°	5.1	7.9	12.9	14.6	15.2	14.6	14.6	14.1	11.3	9.0	10.7
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°	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7
2.5°	277.4	277.4	278.0	278.0	278.0	277.4	276.8	277.4
5°	285.3	285.3	285.3	285.3	284.1	284.1	283.6	283.6
7.5°	295.4	294.8	294.8	294.3	293.7	293.7	293.1	293.7
10°	308.9	307.8	307.2	306.7	306.1	306.1	305.5	305.0
12.5°	323.5	323.0	322.4	321.3	320.7	319.6	319.6	319.6
15°	340.4	339.8	339.3	337.6	337.6	335.9	336.5	336.5
17.5°	359.0	357.9	356.2	355.6	355.0	353.4	353.4	353.4
20°	378.1	375.9	374.7	373.6	373.6	371.9	371.4	371.4
22.5°	396.7	394.4	392.2	391.0	389.9	389.4	388.2	387.7
25°	415.2	413.0	410.7	409.1	406.8	405.7	404.6	404.6
27.5°	433.8	431.6	428.2	425.9	423.7	421.4	420.3	420.9
30°	452.9	450.7	447.3	444.5	441.7	439.4	438.3	437.7
32.5°	477.1	474.3	470.4	467.6	462.5	460.3	459.1	459.7
35°	505.3	501.3	498.5	494.0	490.1	487.3	485.6	485.6
37.5°	541.3	537.9	535.1	530.6	525.0	521.6	519.3	521.0
40°	588.0	585.2	579.5	572.8	568.3	565.5	563.2	563.8
42.5°	647.6	642.0	636.9	633.0	626.2	622.3	616.1	618.4
45°	723.0	716.8	711.8	705.6	699.4	691.5	689.3	684.8
47.5°	814.2	809.7	798.4	792.8	784.9	773.7	768.0	763.5
50°	914.9	906.4	898.6	884.5	875.5	862.6	857.5	855.8
52.5°	1028.5	1014.5	1001.5	988.6	970.6	958.2	948.1	950.3
55°	1141.1	1124.8	1106.2	1092.1	1078.1	1062.9	1052.2	1046.0
57.5°	1259.8	1241.8	1222.1	1201.8	1190.0	1172.0	1165.3	1161.9
60°	1381.9	1365.6	1345.9	1327.3	1311.0	1290.2	1278.9	1274.4
62.5°	1516.9	1494.4	1470.8	1447.7	1429.7	1414.5	1402.7	1394.8
65°	1641.3	1610.3	1586.1	1556.9	1537.2	1515.2	1500.6	1497.8
67.5°	1734.1	1686.3	1644.1	1606.4	1576.0	1549.0	1530.4	1523.1
70°	1740.3	1674.5	1612.0	1556.3	1511.9	1480.9	1456.2	1446.6
72.5°	1619.9	1538.3	1453.9	1399.3	1352.1	1309.3	1291.9	1287.9
75°	1317.8	1249.7	1179.3	1117.4	1084.8	1063.4	1048.8	1027.4
77.5°	915.4	853.0	815.3	746.1	733.7	716.3	701.6	687.6
80°	512.6	458.0	415.8	372.5	346.0	331.4	316.2	307.8
82.5°	230.1	189.1	150.2	116.5	96.2	76.0	56.8	60.2
85°	57.4	48.4	37.1	30.9	28.1	25.9	20.8	18.6
87.5°	10.7	10.1	9.0	9.0	9.6	7.9	4.5	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)