

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: P140271

Luminaire Tested: **ECM-E02-LED-E1-5MQ-7050**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140271  
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-E02-LED-E1-5MQ-7050  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6267 lumens  
Efficiency: N/A  
Efficacy: 120.3 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

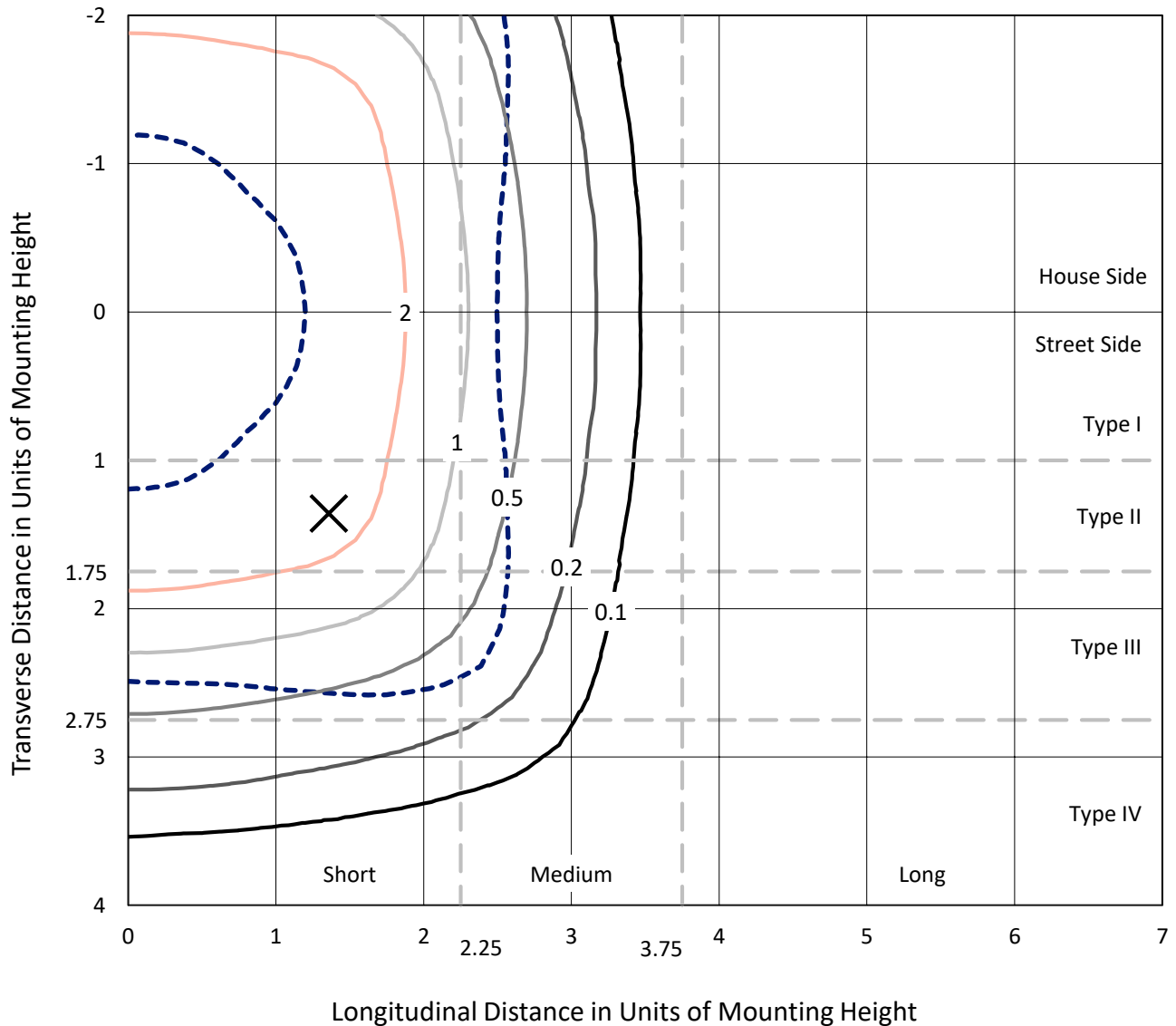
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

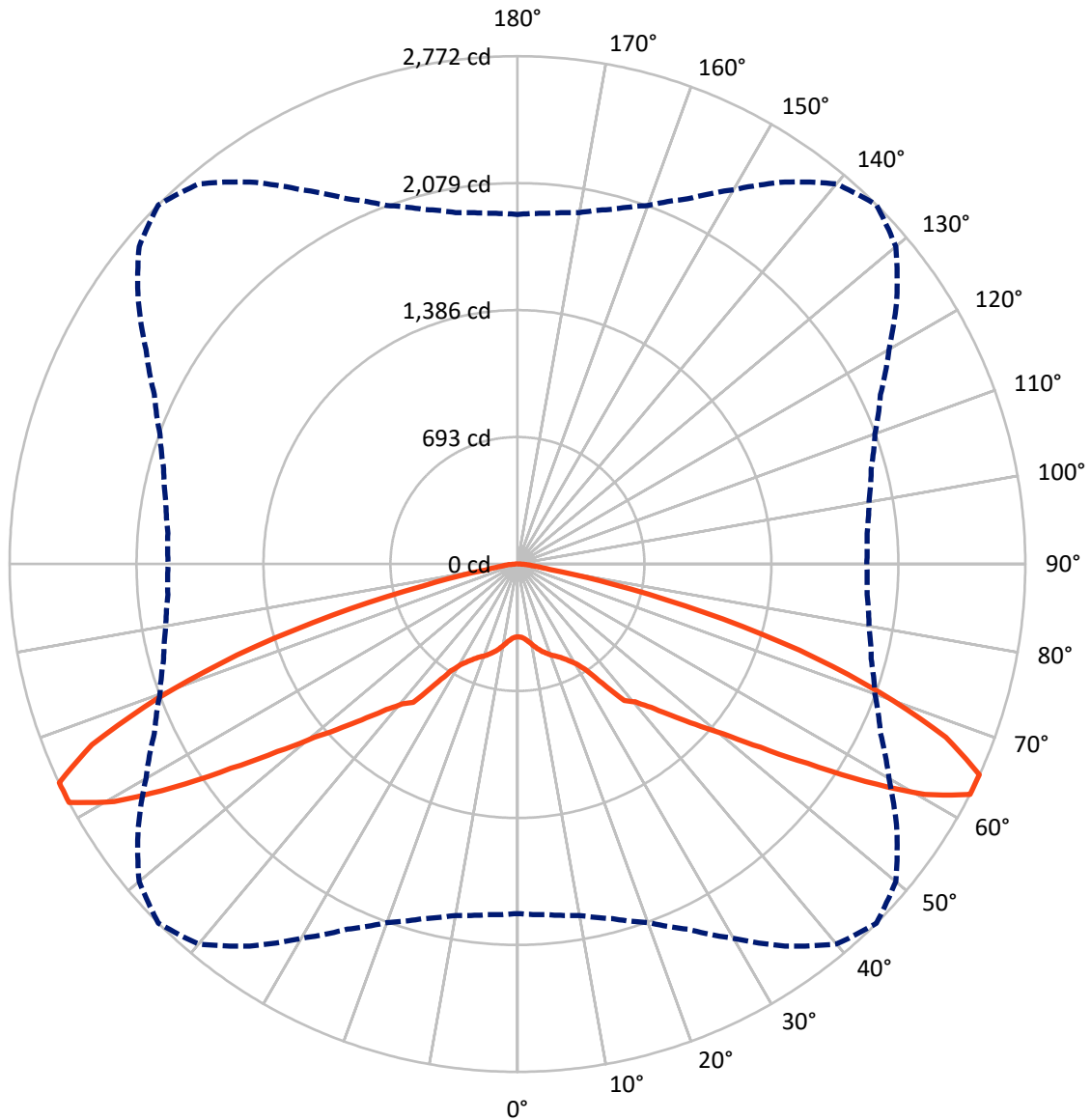
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 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	3133.5	0.0	3133.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3133.5	0.0	3133.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6267.0	0.0	6267.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	0.6
10°-20°	140.8	2.2
20°-30°	270.5	4.3
30°-40°	520.4	8.3
40°-50°	905.7	14.5
50°-60°	1626.8	26.0
60°-70°	1994.2	31.8
70°-80°	703.2	11.2
80°-90°	65.0	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°	6267.0	100.0
0°-180°	6267.0	100.0



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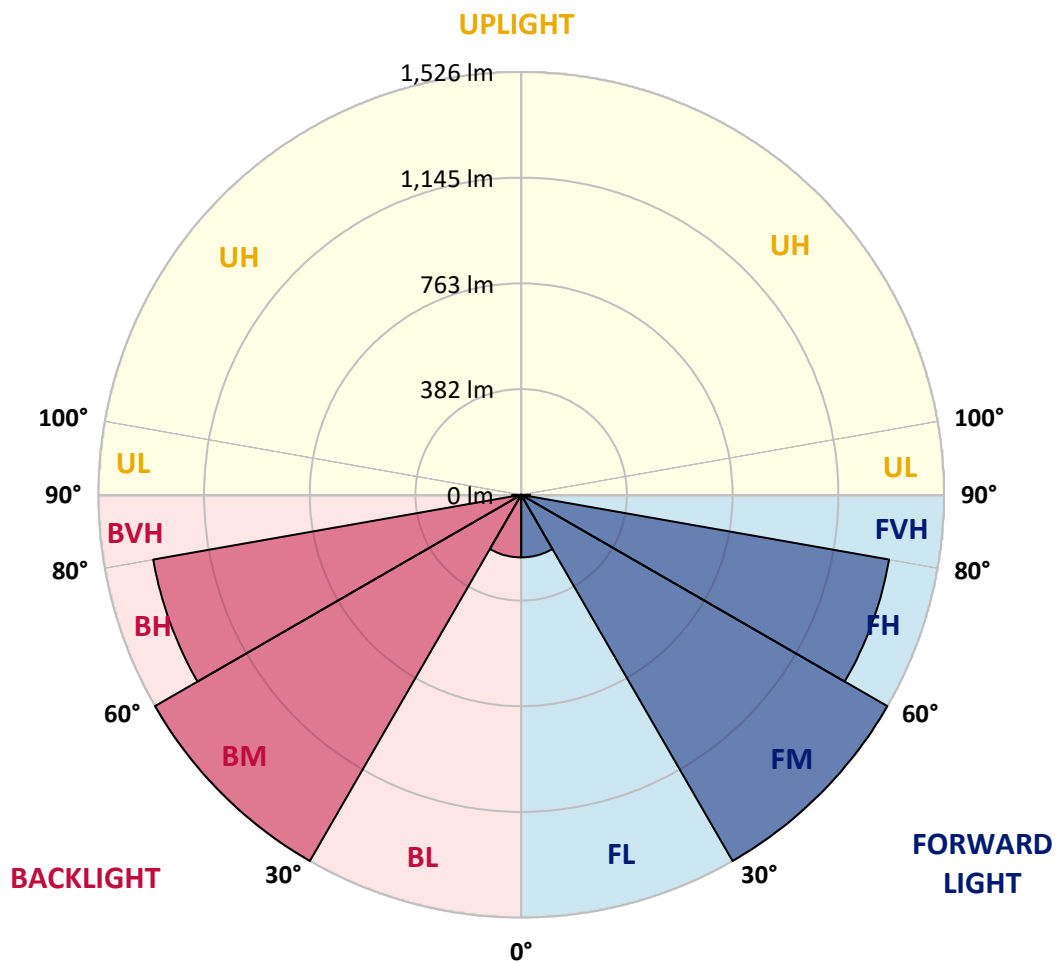
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	225.9	3.6			
FM	(30°-60°)	1526.4	24.4			
FH	(60°-80°)	1348.7	21.5			G1/1800
FVH	(80°-90°)	32.5	0.5			G1/100
BL	(0°-30°)	225.9	3.6	B1/500		
BM	(30°-60°)	1526.4	24.4	B2/2500		
BH	(60°-80°)	1348.7	21.5	B3/2500		G1/1800
BVH	(80°-90°)	32.5	0.5			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°	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4
2.5°	402.2	402.2	401.5	400.9	400.9	400.9	400.2	400.2	400.9	399.5	399.5
5°	412.5	413.2	412.5	411.8	411.1	411.1	410.4	410.4	411.1	409.8	409.1
7.5°	431.6	432.3	431.0	430.3	429.6	428.9	428.2	427.5	428.2	426.2	426.2
10°	456.3	456.3	456.3	453.5	453.5	451.5	450.8	449.4	450.1	448.1	448.1
12.5°	480.9	480.9	480.2	478.8	478.2	476.8	475.4	475.4	474.1	471.3	470.0
15°	502.8	503.5	502.8	500.7	500.1	498.0	498.0	496.6	494.6	493.2	491.8
17.5°	523.3	524.0	521.9	521.3	519.2	517.8	516.5	515.8	514.4	512.4	511.7
20°	543.2	542.5	540.4	537.7	536.3	534.9	533.6	532.9	532.2	530.8	530.8
22.5°	562.3	562.3	560.3	556.1	553.4	552.0	550.0	548.6	547.3	546.6	547.9
25°	591.0	590.4	586.2	582.1	577.4	573.3	570.5	569.8	568.5	568.5	569.1
27.5°	628.0	626.6	620.5	615.0	609.5	604.0	600.6	597.9	597.2	596.5	596.5
30°	674.5	672.4	667.0	660.1	654.0	647.1	640.3	638.2	634.8	632.1	636.9
32.5°	763.4	764.8	753.8	740.2	726.5	713.5	701.9	693.0	687.5	688.2	688.2
35°	861.2	861.9	857.1	851.7	847.6	840.0	827.0	816.1	807.9	799.0	803.1
37.5°	903.7	904.3	900.2	899.6	902.3	907.1	920.1	929.7	944.0	946.1	942.0
40°	978.2	974.8	969.3	968.0	965.9	972.7	978.2	983.0	985.1	989.2	985.1
42.5°	1056.2	1054.8	1050.7	1045.9	1045.9	1047.3	1056.2	1063.7	1068.5	1069.2	1068.5
45°	1143.8	1141.7	1138.3	1137.6	1139.7	1145.8	1152.0	1161.6	1176.6	1177.3	1176.6
47.5°	1240.2	1241.6	1236.1	1238.2	1241.6	1251.8	1269.0	1284.7	1301.1	1307.3	1299.7
50°	1372.2	1367.5	1367.5	1365.4	1374.3	1389.3	1409.9	1428.3	1451.6	1457.1	1445.4
52.5°	1551.5	1541.2	1543.3	1537.8	1542.6	1556.3	1589.8	1618.5	1647.9	1662.3	1639.7
55°	1767.0	1749.9	1751.9	1757.4	1761.5	1784.7	1827.2	1860.0	1915.4	1920.2	1894.2
57.5°	1943.4	1938.7	1941.4	1954.4	1980.4	2020.7	2074.1	2153.5	2221.9	2238.3	2210.2
60°	2007.7	2011.2	2030.3	2064.5	2113.8	2185.6	2289.6	2413.4	2522.2	2555.0	2512.6
62.5°	1907.9	1921.6	1947.5	2004.3	2082.3	2199.3	2358.7	2545.4	2708.2	2771.9	2695.9
65°	1712.9	1721.8	1764.2	1812.8	1913.3	2047.4	2243.1	2485.9	2686.3	2770.5	2685.7
67.5°	1457.1	1474.2	1511.1	1571.3	1658.2	1794.3	1999.5	2247.9	2449.0	2522.9	2448.3
70°	1169.8	1177.3	1200.5	1247.7	1338.0	1458.4	1634.2	1856.6	2052.2	2098.7	2039.2
72.5°	811.3	826.4	846.2	889.3	946.1	1048.0	1193.0	1356.5	1513.8	1610.3	1522.7
75°	349.6	329.7	373.5	416.6	486.4	580.8	694.3	828.4	984.4	1048.7	962.5
77.5°	104.7	104.0	110.8	123.1	147.8	195.6	274.3	364.6	485.0	526.7	452.2
80°	85.5	88.2	91.0	93.7	96.5	99.9	106.0	123.8	151.9	179.2	145.7
82.5°	72.5	75.9	83.5	87.6	89.6	90.3	90.3	89.6	86.2	84.8	84.1
85°	54.7	60.2	70.5	76.6	76.6	76.6	76.6	74.6	69.8	61.6	68.4
87.5°	18.5	24.6	41.0	43.8	45.1	41.7	43.8	44.5	36.9	28.0	35.6
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°	397.4	397.4	397.4	397.4	397.4	397.4	397.4	397.4
2.5°	399.5	399.5	399.5	400.2	399.5	399.5	399.5	399.5
5°	409.8	409.1	409.8	409.1	409.8	409.8	409.1	409.8
7.5°	425.5	425.5	426.2	426.2	425.5	425.5	425.5	425.5
10°	446.7	445.3	446.0	446.0	446.0	445.3	445.3	444.6
12.5°	468.6	467.2	467.2	467.2	467.2	466.5	467.2	467.2
15°	489.1	487.7	486.4	486.4	487.1	487.7	487.7	487.1
17.5°	508.9	507.6	505.5	505.5	504.8	506.2	507.6	506.9
20°	528.8	528.1	524.7	524.7	524.7	526.1	526.7	528.8
22.5°	548.6	547.9	545.2	544.5	545.2	547.9	550.0	550.0
25°	569.8	571.2	570.5	570.5	571.9	576.0	578.0	580.8
27.5°	599.9	602.7	603.4	606.1	606.8	611.6	615.0	619.1
30°	638.9	643.7	646.4	651.2	654.7	657.4	662.2	665.6
32.5°	693.0	704.6	718.3	734.0	740.8	753.2	758.6	760.0
35°	817.5	829.8	841.4	848.2	845.5	848.9	848.9	851.7
37.5°	929.7	917.3	907.1	905.0	899.6	897.5	898.2	900.2
40°	981.6	975.5	971.4	973.4	970.7	968.6	970.0	970.7
42.5°	1065.8	1056.2	1052.8	1052.1	1050.7	1052.1	1055.5	1054.2
45°	1164.3	1152.0	1147.2	1146.5	1144.4	1143.8	1145.1	1147.9
47.5°	1282.6	1267.6	1252.5	1247.7	1247.7	1243.6	1246.4	1242.3
50°	1427.7	1403.0	1387.3	1378.4	1372.9	1366.8	1372.2	1363.4
52.5°	1618.5	1583.6	1566.5	1554.9	1539.2	1539.8	1541.2	1537.8
55°	1859.3	1821.0	1787.5	1764.9	1755.3	1749.9	1748.5	1759.4
57.5°	2136.4	2068.6	2015.3	1975.6	1960.5	1940.0	1930.4	1930.4
60°	2399.7	2276.6	2170.6	2104.2	2054.9	2020.1	1996.8	1990.0
62.5°	2528.3	2341.6	2186.3	2076.8	1998.9	1948.9	1915.4	1906.5
65°	2472.9	2235.5	2052.9	1929.8	1839.5	1775.2	1736.2	1725.2
67.5°	2249.9	2001.6	1809.4	1685.5	1588.4	1518.6	1489.2	1476.9
70°	1868.2	1640.4	1473.5	1352.4	1251.2	1192.3	1152.0	1135.6
72.5°	1342.8	1169.8	1016.5	912.5	821.6	790.8	736.1	730.6
75°	793.5	643.0	516.5	437.1	355.7	311.3	285.9	258.6
77.5°	322.9	230.5	173.1	130.7	112.2	101.9	97.1	95.8
80°	110.1	98.5	93.0	91.0	88.2	86.9	83.5	80.7
82.5°	86.9	86.2	83.5	82.8	80.0	75.9	69.1	65.0
85°	72.5	71.1	67.7	67.0	65.0	59.5	52.0	47.2
87.5°	41.0	37.6	34.2	34.9	32.8	28.7	21.2	15.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)