

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: P140446

Luminaire Tested: **ECM-F03-LED-E1-5WQ-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140446
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-F03-LED-E1-5WQ-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7591.5 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

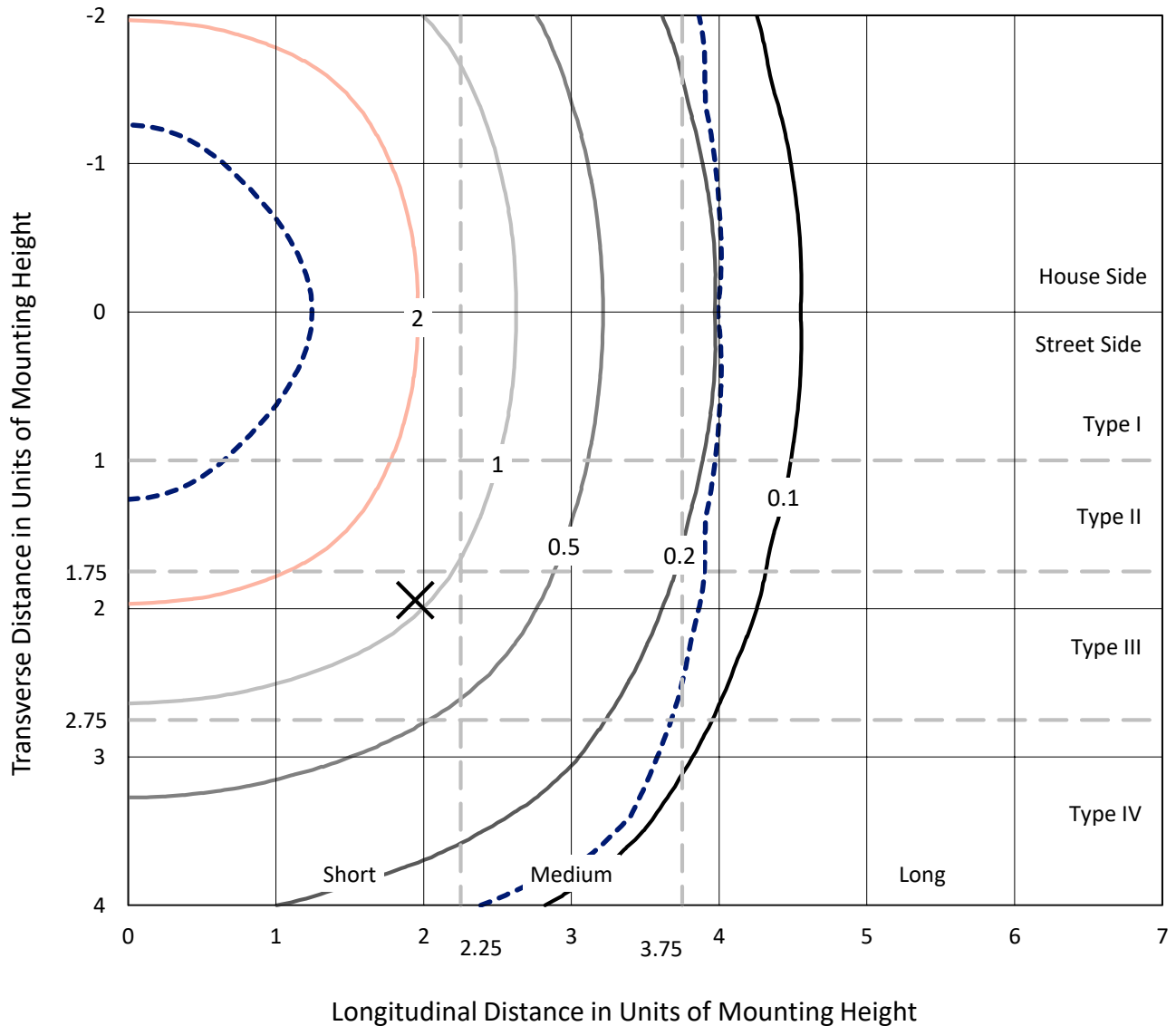
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

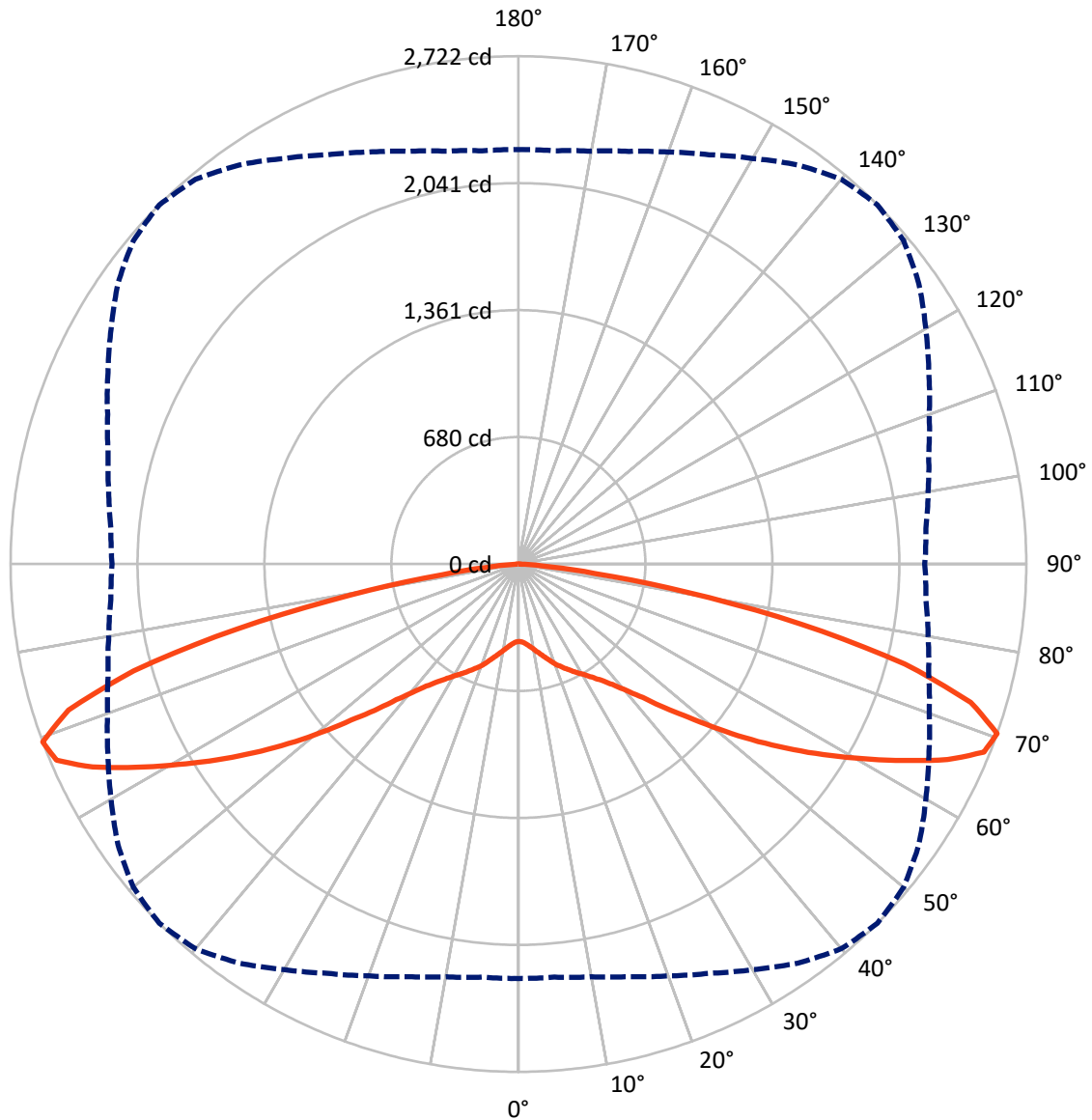
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 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	3795.8	0.0	3795.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3795.8	0.0	3795.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	7591.5	0.0	7591.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	0.6
10°-20°	147.0	1.9
20°-30°	288.8	3.8
30°-40°	477.9	6.3
40°-50°	836.6	11.0
50°-60°	1492.2	19.7
60°-70°	2303.8	30.3
70°-80°	1823.6	24.0
80°-90°	179.5	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°	7591.5	100.0
0°-180°	7591.5	100.0



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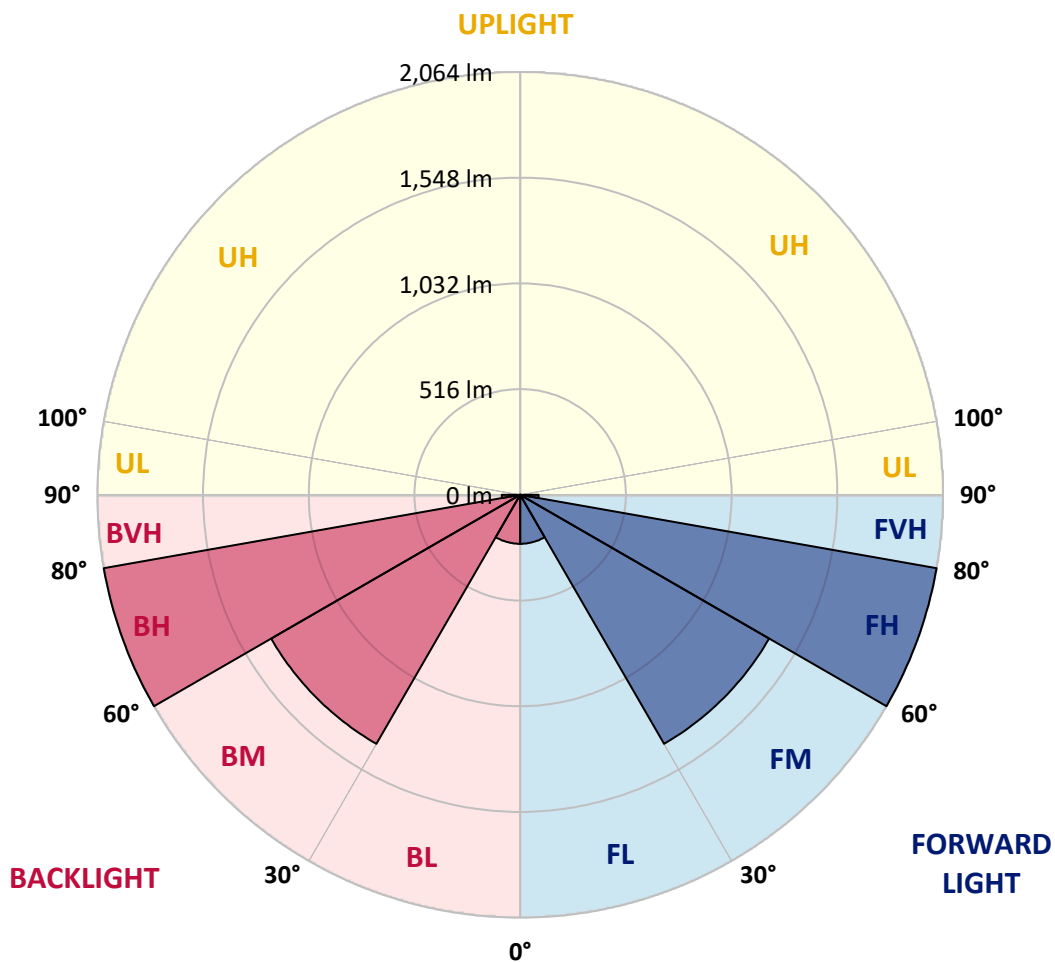
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	239.0	3.1			
FM (30°-60°)	1403.4	18.5			
FH (60°-80°)	2063.7	27.2			G2/5000
FVH (80°-90°)	89.7	1.2			G1/100
BL (0°-30°)	239.0	3.1	B1/500		
BM (30°-60°)	1403.4	18.5	B2/2500		
BH (60°-80°)	2063.7	27.2	B3/2500		G2/5000
BVH (80°-90°)	89.7	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-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1
2.5°	420.1	420.1	419.3	419.3	419.3	419.3	418.5	418.5	419.3	418.5	418.5
5°	430.3	431.2	431.2	430.3	430.3	430.3	430.3	430.3	431.2	430.3	430.3
7.5°	445.6	446.4	446.4	445.6	445.6	445.6	445.6	445.6	446.4	446.4	444.7
10°	464.2	465.0	465.0	464.2	464.2	465.0	465.0	465.0	465.9	465.9	465.0
12.5°	486.2	487.1	487.9	487.1	487.9	487.9	488.8	489.6	489.6	489.6	487.9
15°	511.6	514.2	512.5	512.5	513.3	514.2	514.2	516.7	515.9	515.0	514.2
17.5°	541.3	540.4	540.4	541.3	542.1	541.3	542.1	544.7	543.8	543.0	542.1
20°	569.2	569.2	569.2	568.4	570.1	570.1	570.9	571.8	571.8	573.5	570.9
22.5°	596.3	596.3	595.5	595.5	597.2	597.2	598.9	600.6	600.6	600.6	598.9
25°	621.8	621.8	622.6	621.8	622.6	623.4	625.1	626.8	627.7	627.7	627.7
27.5°	644.6	647.2	646.3	647.2	648.9	650.6	652.2	654.8	656.5	657.3	654.8
30°	673.4	673.4	672.6	673.4	675.1	677.7	681.0	685.3	685.3	686.1	686.1
32.5°	703.9	704.8	703.1	704.8	707.3	710.7	714.1	717.5	719.2	722.6	721.7
35°	743.7	741.2	742.0	744.6	746.3	749.7	753.9	759.8	763.2	764.9	763.2
37.5°	789.5	788.6	790.3	790.3	796.3	799.6	807.3	812.3	814.9	819.1	817.4
40°	847.1	850.5	851.3	853.9	857.2	864.0	872.5	881.0	886.0	889.4	890.3
42.5°	925.0	926.7	923.3	932.6	941.9	946.2	956.3	968.2	975.8	978.4	979.2
45°	1020.7	1020.7	1025.8	1031.7	1043.6	1052.1	1063.1	1082.6	1089.3	1098.7	1098.7
47.5°	1135.1	1138.5	1138.5	1152.0	1161.3	1178.3	1199.5	1215.6	1230.0	1225.7	1240.1
50°	1267.2	1269.8	1279.1	1286.7	1302.8	1322.3	1341.8	1365.5	1386.7	1389.2	1391.7
52.5°	1405.3	1408.7	1416.3	1434.1	1453.6	1475.6	1511.2	1531.5	1551.8	1562.9	1561.2
55°	1563.7	1562.0	1574.7	1588.3	1617.1	1646.7	1676.4	1705.2	1726.3	1741.6	1740.7
57.5°	1729.7	1735.7	1750.1	1767.0	1791.6	1817.8	1853.4	1882.2	1916.9	1926.2	1912.7
60°	1922.9	1916.9	1931.3	1957.6	1979.6	2013.5	2044.8	2082.1	2106.7	2117.7	2113.5
62.5°	2120.2	2115.1	2126.2	2160.0	2186.3	2210.9	2254.1	2294.7	2315.1	2319.3	2311.7
65°	2265.1	2266.8	2284.6	2314.2	2355.7	2393.0	2441.3	2490.4	2522.6	2527.7	2510.7
67.5°	2299.0	2302.4	2326.9	2365.0	2416.7	2478.5	2550.5	2623.4	2678.5	2690.3	2665.7
70°	2221.0	2222.7	2246.4	2289.6	2348.9	2420.1	2509.9	2610.7	2691.2	2721.7	2694.5
72.5°	2060.9	2067.7	2087.2	2123.6	2170.2	2240.5	2326.9	2416.7	2496.3	2535.3	2535.3
75°	1772.1	1787.3	1796.6	1808.5	1849.2	1905.9	1976.2	2047.4	2117.7	2139.7	2077.9
77.5°	1264.7	1239.3	1245.2	1311.3	1302.0	1366.3	1444.3	1495.1	1557.8	1548.5	1459.5
80°	580.2	565.8	598.9	642.9	698.8	742.0	825.9	834.4	906.4	910.6	846.2
82.5°	116.0	122.0	145.7	179.6	223.6	271.9	316.0	353.2	402.4	411.7	382.0
85°	36.4	39.8	50.0	55.1	57.6	66.1	75.4	101.6	116.9	121.1	113.5
87.5°	7.6	11.9	19.5	22.0	22.9	22.0	22.0	21.2	16.9	13.6	16.1
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°	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1
2.5°	417.6	417.6	418.5	418.5	418.5	417.6	416.8	417.6
5°	429.5	429.5	429.5	429.5	427.8	427.8	426.9	426.9
7.5°	444.7	443.9	443.9	443.0	442.2	442.2	441.3	442.2
10°	465.0	463.4	462.5	461.7	460.8	460.8	460.0	459.1
12.5°	487.1	486.2	485.4	483.7	482.8	481.1	481.1	481.1
15°	512.5	511.6	510.8	508.2	508.2	505.7	506.6	506.6
17.5°	540.4	538.7	536.2	535.4	534.5	532.0	532.0	532.0
20°	569.2	565.8	564.2	562.5	562.5	559.9	559.1	559.1
22.5°	597.2	593.8	590.4	588.7	587.0	586.2	584.5	583.6
25°	625.1	621.8	618.4	615.8	612.4	610.7	609.0	609.0
27.5°	653.1	649.7	644.6	641.2	637.8	634.5	632.8	633.6
30°	681.9	678.5	673.4	669.2	665.0	661.6	659.9	659.0
32.5°	718.3	714.1	708.2	703.9	696.3	692.9	691.2	692.1
35°	760.7	754.7	750.5	743.7	737.8	733.6	731.0	731.0
37.5°	814.9	809.8	805.6	798.8	790.3	785.2	781.9	784.4
40°	885.2	881.0	872.5	862.3	855.5	851.3	847.9	848.8
42.5°	975.0	966.5	958.9	953.0	942.8	936.9	927.5	930.9
45°	1088.5	1079.2	1071.6	1062.2	1052.9	1041.1	1037.7	1030.9
47.5°	1225.7	1218.9	1202.0	1193.5	1181.7	1164.7	1156.3	1149.5
50°	1377.3	1364.6	1352.8	1331.6	1318.0	1298.6	1290.9	1288.4
52.5°	1548.5	1527.3	1507.8	1488.3	1461.2	1442.6	1427.3	1430.7
55°	1717.9	1693.3	1665.4	1644.2	1623.0	1600.1	1584.0	1574.7
57.5°	1896.6	1869.5	1839.8	1809.4	1791.6	1764.5	1754.3	1749.2
60°	2080.4	2055.9	2026.2	1998.3	1973.7	1942.3	1925.4	1918.6
62.5°	2283.7	2249.8	2214.3	2179.5	2152.4	2129.5	2111.8	2099.9
65°	2470.9	2424.3	2387.9	2343.9	2314.2	2281.2	2259.2	2254.9
67.5°	2610.7	2538.7	2475.2	2418.4	2372.7	2332.0	2304.0	2293.0
70°	2620.0	2520.9	2426.9	2343.0	2276.1	2229.5	2192.2	2177.8
72.5°	2438.7	2315.9	2188.8	2106.7	2035.5	1971.1	1944.9	1939.0
75°	1983.9	1881.4	1775.5	1682.3	1633.2	1601.0	1578.9	1546.8
77.5°	1378.2	1284.2	1227.4	1123.2	1104.6	1078.3	1056.3	1035.1
80°	771.7	689.5	626.0	560.8	521.0	498.9	476.1	463.4
82.5°	346.5	284.6	226.2	175.3	144.8	114.4	85.6	90.6
85°	86.4	72.8	55.9	46.6	42.4	39.0	31.3	28.0
87.5°	16.1	15.2	13.6	13.6	14.4	11.9	6.8	5.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)