

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: P140605

Luminaire Tested: **ECM-F03-LED-E1-5XQ**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140605
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F03-LED-E1-5XQ
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7384 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

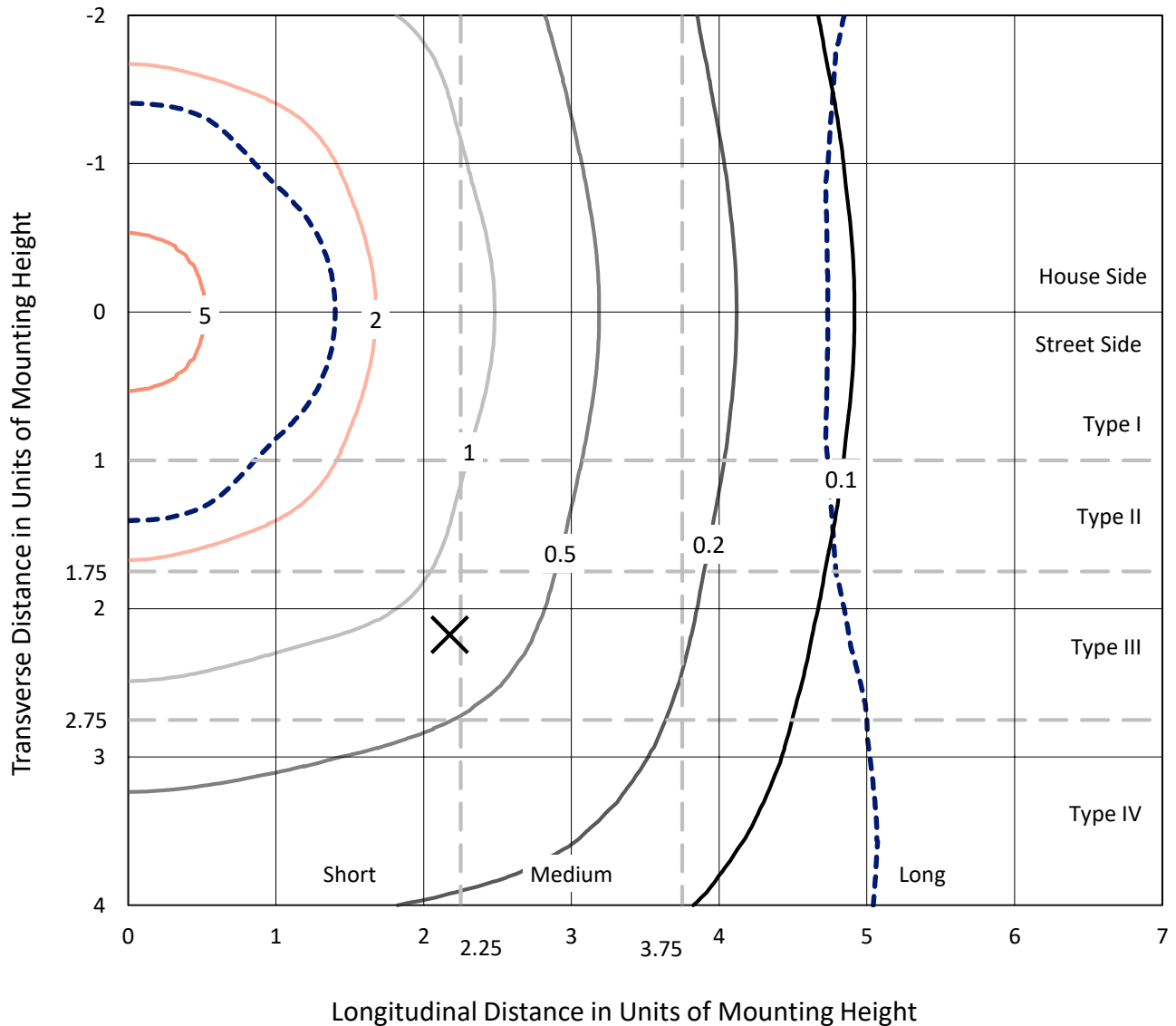
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

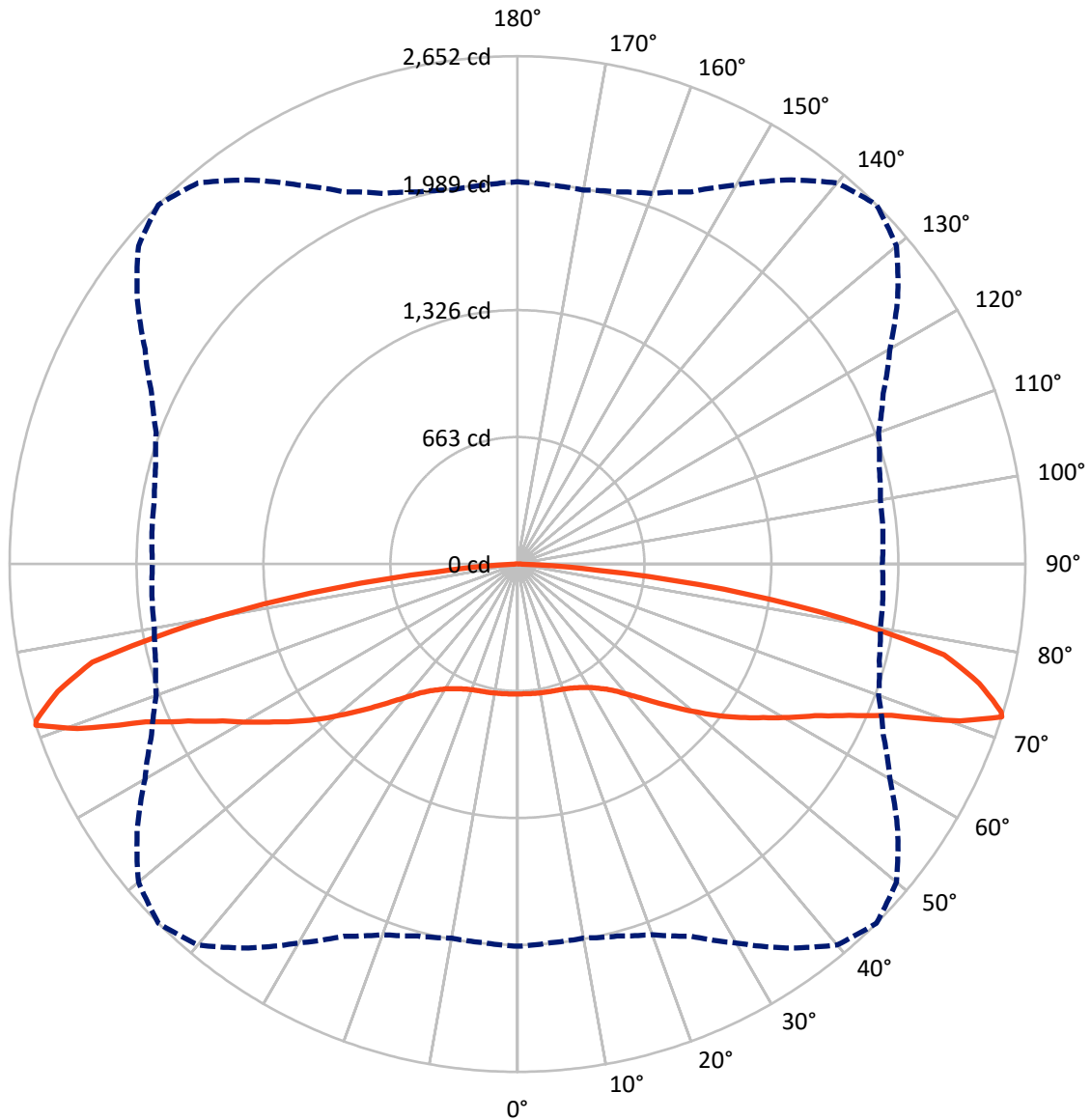
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3692.0	0.0	3692.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3692.0	0.0	3692.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	7384.0	0.0	7384.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	0.9
10°-20°	195.9	2.7
20°-30°	331.5	4.5
30°-40°	504.3	6.8
40°-50°	798.4	10.8
50°-60°	1223.5	16.6
60°-70°	1796.2	24.3
70°-80°	2037.6	27.6
80°-90°	431.6	5.8
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°	7384.0	100.0
0°-180°	7384.0	100.0



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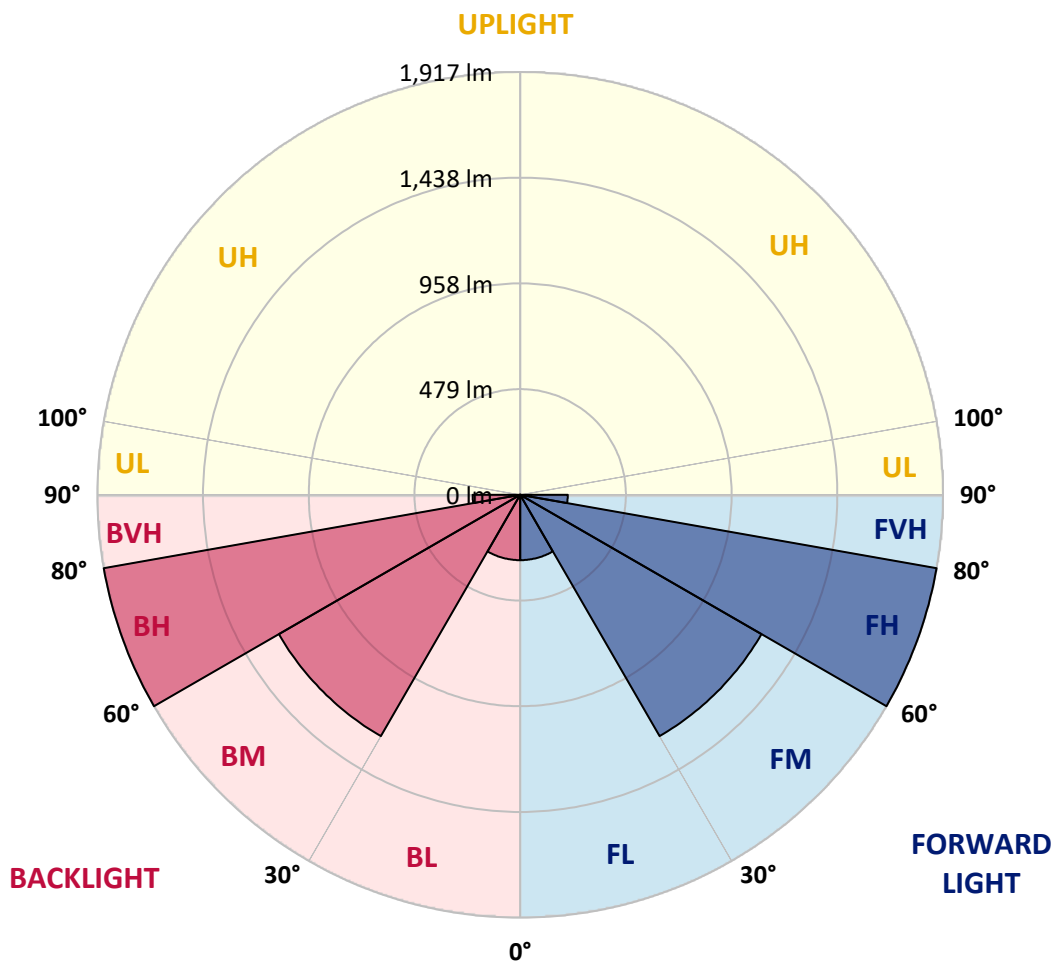
CATALOG NUMBER: ECM-F03-LED-E1-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.2	4.0			
FM	(30°-60°)	1263.1	17.1			
FH	(60°-80°)	1916.9	26.0			G2/5000
FVH	(80°-90°)	215.8	2.9			G2/225
BL	(0°-30°)	296.2	4.0	B1/500		
BM	(30°-60°)	1263.1	17.1	B2/2500		
BH	(60°-80°)	1916.9	26.0	B3/2500		G2/5000
BVH	(80°-90°)	215.8	2.9			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°	678.6	678.6	678.6	678.6	678.6	678.6	678.6	678.6	678.6	678.6	678.6
2.5°	681.1	681.9	681.1	680.2	680.2	679.4	679.4	679.4	680.2	678.6	678.6
5°	682.7	683.5	682.7	681.1	681.1	681.1	680.2	680.2	681.1	680.2	680.2
7.5°	685.2	686.0	685.2	683.5	683.5	682.7	681.9	681.9	683.5	681.9	681.9
10°	687.7	689.3	687.7	686.0	686.0	685.2	684.4	684.4	685.2	683.5	683.5
12.5°	691.8	691.8	691.0	690.1	690.1	689.3	688.5	687.7	686.8	686.0	685.2
15°	695.1	695.9	694.3	693.4	692.6	691.8	691.0	691.0	689.3	688.5	688.5
17.5°	699.2	700.0	698.4	696.7	696.7	695.1	694.3	694.3	692.6	691.8	691.0
20°	703.3	704.2	702.5	701.7	700.9	700.0	698.4	699.2	698.4	696.7	696.7
22.5°	708.3	708.3	707.5	706.6	706.6	705.8	705.0	706.6	705.0	705.0	704.2
25°	713.3	714.1	713.3	713.3	714.1	714.1	714.9	716.6	716.6	715.7	714.9
27.5°	724.0	724.0	724.0	724.0	726.5	726.5	727.3	729.8	730.6	730.6	730.6
30°	738.0	738.8	738.0	738.0	740.5	741.3	743.8	746.3	747.9	747.9	748.8
32.5°	758.7	757.8	758.7	760.3	762.0	763.6	766.1	770.2	772.7	773.5	773.5
35°	785.1	785.9	785.1	785.9	789.2	791.7	794.2	799.1	800.8	802.4	803.2
37.5°	823.9	826.4	824.7	824.7	828.8	830.5	833.8	837.9	841.2	842.9	842.0
40°	880.0	879.2	877.5	878.4	879.2	880.8	884.1	892.4	896.5	896.5	896.5
42.5°	944.4	945.2	942.7	941.9	942.7	944.4	949.4	956.0	962.6	960.9	961.7
45°	1017.9	1012.1	1013.7	1012.1	1012.9	1018.7	1027.0	1030.3	1036.9	1036.9	1038.5
47.5°	1089.7	1087.2	1086.4	1085.6	1088.0	1093.8	1103.7	1114.5	1120.2	1123.5	1126.0
50°	1170.6	1166.5	1165.6	1166.5	1167.3	1168.9	1187.9	1198.7	1212.7	1215.2	1214.3
52.5°	1249.0	1245.7	1244.1	1244.1	1247.4	1253.1	1273.0	1290.3	1306.0	1315.9	1311.8
55°	1334.0	1334.0	1329.1	1327.4	1332.4	1338.2	1365.4	1385.2	1407.5	1414.9	1403.4
57.5°	1421.6	1420.7	1413.3	1410.8	1414.9	1429.8	1452.9	1483.5	1507.4	1514.0	1507.4
60°	1507.4	1507.4	1503.3	1501.6	1505.8	1523.9	1552.0	1585.8	1614.7	1627.1	1616.4
62.5°	1605.6	1605.6	1594.9	1599.9	1605.6	1619.7	1655.2	1698.9	1737.7	1744.3	1734.4
65°	1717.1	1722.0	1713.8	1712.1	1719.6	1746.0	1786.4	1841.7	1887.1	1904.5	1889.6
67.5°	1887.1	1879.7	1869.8	1865.7	1877.2	1902.0	1951.5	2024.2	2091.1	2107.6	2090.2
70°	2063.8	2056.4	2053.1	2066.3	2091.1	2143.1	2219.0	2320.6	2413.8	2453.5	2417.1
72°	1996.1	1986.2	1983.7	2011.8	2059.7	2144.7	2285.1	2448.5	2597.1	2652.4	2583.9
72.5°	1961.4	1953.2	1952.4	1978.8	2030.8	2116.6	2254.5	2422.9	2582.2	2642.5	2569.0
75°	1821.1	1812.9	1821.1	1850.8	1902.8	1995.3	2135.6	2293.3	2436.9	2492.3	2420.4
77.5°	1627.1	1612.3	1619.7	1661.0	1718.7	1819.5	1968.1	2154.6	2293.3	2278.4	2172.0
80°	1298.6	1265.5	1301.0	1313.4	1379.5	1447.1	1590.8	1674.2	1722.0	1724.5	1648.6
82.5°	567.1	580.3	624.9	662.1	709.1	787.6	845.3	935.3	1040.2	1088.9	1030.3
85°	37.1	46.2	73.5	87.5	121.4	147.8	212.2	308.7	372.3	426.0	359.1
87.5°	6.6	9.1	16.5	19.8	21.5	23.9	23.9	33.0	34.7	28.1	31.4
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°	678.6	678.6	678.6	678.6	678.6	678.6	678.6	678.6
2.5°	678.6	678.6	679.4	678.6	678.6	678.6	677.8	677.8
5°	679.4	679.4	680.2	680.2	679.4	679.4	679.4	679.4
7.5°	681.9	681.1	681.9	681.9	681.1	681.1	680.2	681.1
10°	682.7	682.7	683.5	683.5	682.7	682.7	682.7	682.7
12.5°	685.2	685.2	685.2	686.0	685.2	685.2	686.0	685.2
15°	687.7	686.8	686.8	686.8	686.8	687.7	687.7	688.5
17.5°	690.1	690.1	689.3	690.1	690.1	691.0	691.0	691.0
20°	695.1	694.3	692.6	694.3	694.3	694.3	694.3	695.1
22.5°	702.5	700.9	699.2	699.2	698.4	699.2	698.4	698.4
25°	713.3	710.8	708.3	707.5	706.6	705.8	705.0	705.8
27.5°	728.9	725.6	722.3	720.7	719.9	718.2	717.4	717.4
30°	746.3	743.8	738.8	737.2	734.7	732.2	732.2	731.4
32.5°	772.7	769.4	763.6	761.1	757.0	754.5	753.7	753.7
35°	799.9	795.8	793.3	790.0	785.1	782.6	781.8	781.8
37.5°	841.2	836.3	833.0	828.8	828.0	824.7	824.7	824.7
40°	894.9	890.7	886.6	883.3	880.8	878.4	875.1	875.1
42.5°	960.9	954.3	951.8	947.7	944.4	941.9	940.3	940.3
45°	1033.6	1027.8	1024.5	1018.7	1017.9	1016.2	1012.9	1012.9
47.5°	1115.3	1107.0	1100.4	1098.8	1094.6	1090.5	1088.9	1089.7
50°	1204.4	1190.4	1181.3	1181.3	1176.4	1170.6	1171.4	1170.6
52.5°	1296.1	1280.4	1268.8	1260.6	1254.8	1254.0	1254.8	1254.0
55°	1388.5	1372.0	1358.0	1348.9	1343.1	1337.4	1336.5	1336.5
57.5°	1484.3	1463.7	1441.4	1433.1	1427.3	1424.0	1424.0	1424.9
60°	1592.4	1558.6	1530.5	1519.8	1515.7	1517.3	1516.5	1517.3
62.5°	1702.2	1663.4	1630.4	1618.0	1612.3	1611.4	1618.0	1620.5
65°	1840.9	1793.0	1755.9	1732.8	1732.8	1730.3	1737.7	1734.4
67.5°	2021.7	1954.0	1908.6	1871.5	1872.3	1874.8	1885.5	1884.7
70°	2329.6	2209.9	2125.7	2062.2	2037.4	2020.9	2017.6	2017.6
72°	2424.6	2246.3	2107.6	2007.7	1956.5	1925.1	1916.0	1906.1
72.5°	2399.8	2216.5	2076.2	1972.2	1919.3	1888.0	1873.9	1861.6
75°	2243.8	2039.0	1886.3	1777.4	1718.7	1680.8	1673.3	1667.6
77.5°	1979.6	1798.0	1640.3	1527.2	1468.6	1419.9	1400.1	1398.4
80°	1526.4	1362.9	1241.6	1153.3	1100.4	1064.1	1065.8	1054.2
82.5°	900.6	762.8	658.8	540.7	463.1	418.5	390.5	387.2
85°	265.0	180.0	114.7	82.6	59.4	44.6	33.0	29.7
87.5°	23.9	19.0	15.7	13.2	12.4	10.7	6.6	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)