

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: McGRAW-EDISON

Report Number: P299941

Luminaire Tested: **GLNA-AF-02-LED-E1-5WQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-5WQ-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7316.4 lumens
Efficiency: N/A
Efficacy: 110.9 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): 66
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

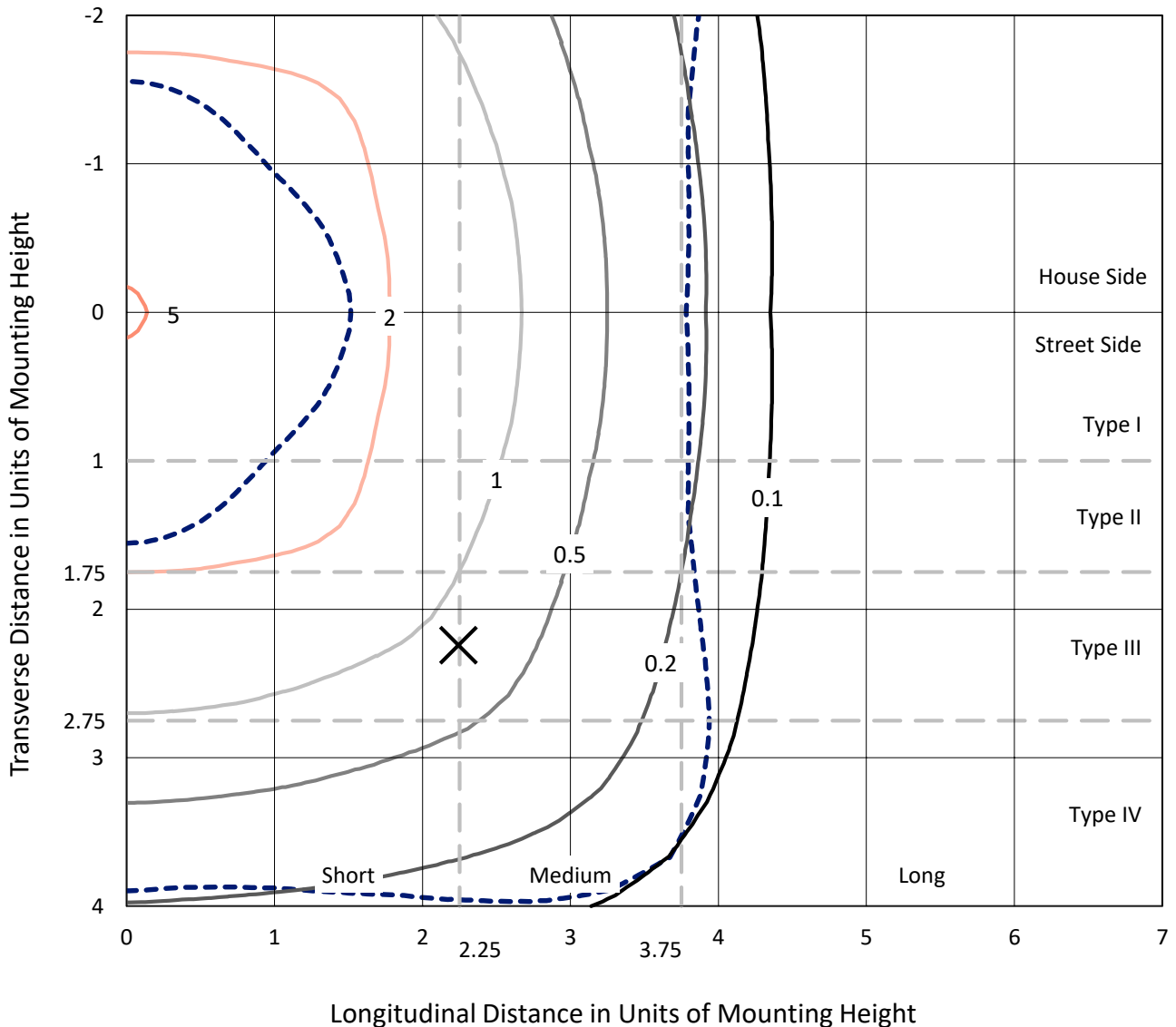


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

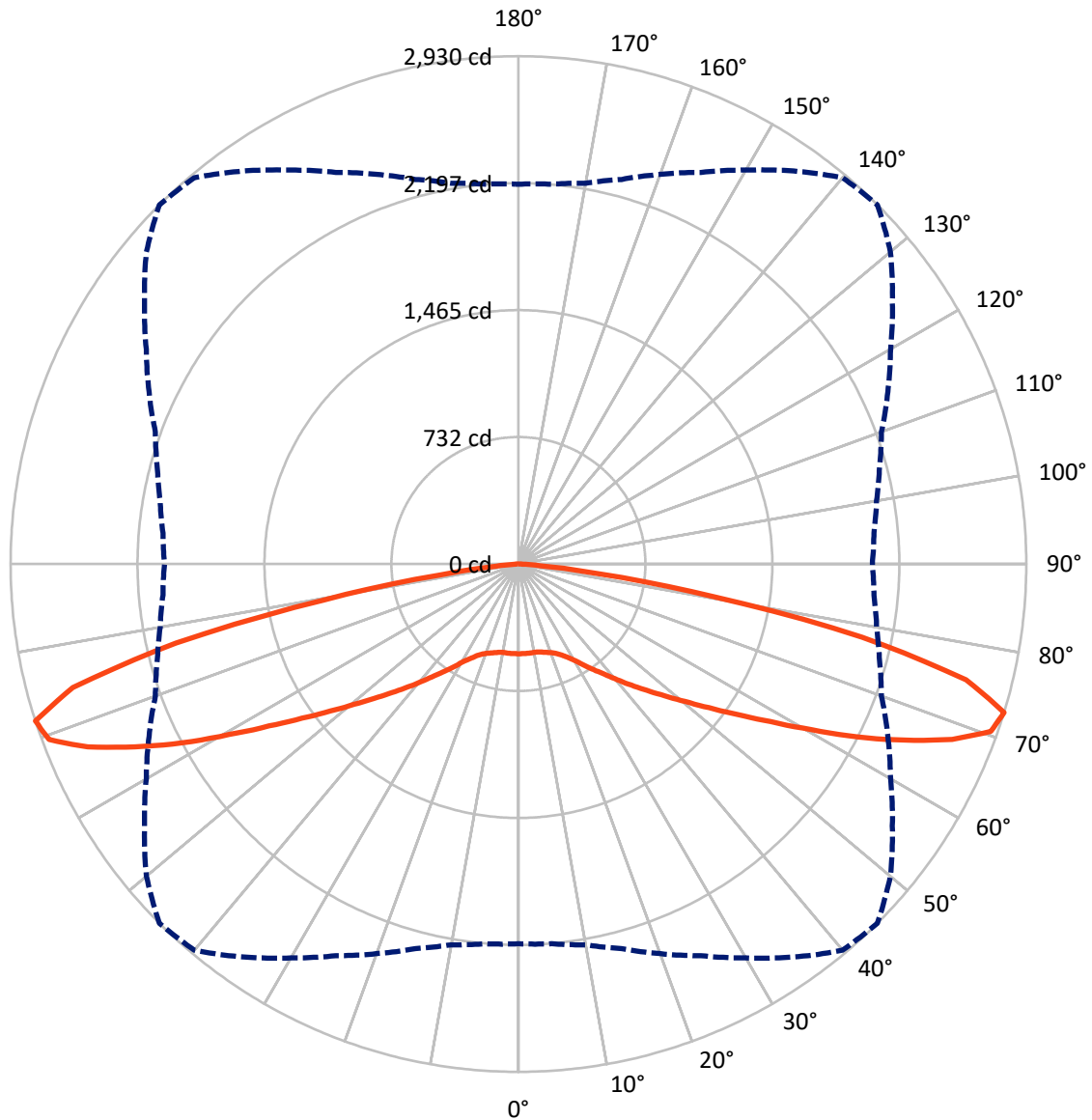


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3658.2	0.0	3658.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3658.2	0.0	3658.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	7316.4	0.0	7316.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	0.7
10°-20°	150.3	2.1
20°-30°	274.6	3.8
30°-40°	473.4	6.5
40°-50°	809.3	11.1
50°-60°	1311.8	17.9
60°-70°	2176.2	29.7
70°-80°	1916.7	26.2
80°-90°	154.5	2.1
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°	7316.4	100.0
0°-180°	7316.4	100.0



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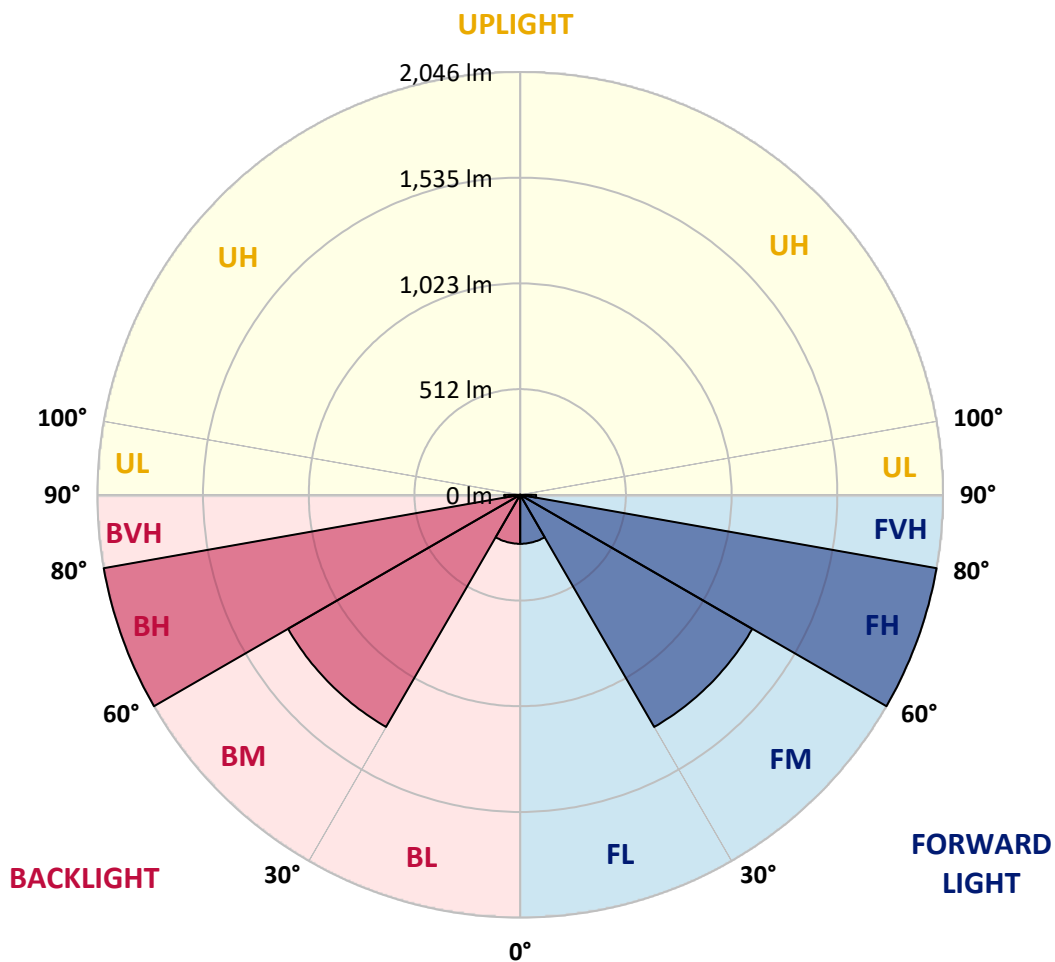
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	237.2	3.2			
FM	(30°-60°)	1297.3	17.7			
FH	(60°-80°)	2046.5	28.0			G2/5000
FVH	(80°-90°)	77.3	1.1			G1/100
BL	(0°-30°)	237.2	3.2	B1/500		
BM	(30°-60°)	1297.3	17.7	B2/2500		
BH	(60°-80°)	2046.5	28.0	B3/2500		G2/5000
BVH	(80°-90°)	77.3	1.1			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°	518.1	518.1	518.1	518.1	518.1	518.1	518.1	518.1	518.1	518.1	518.1
2.5°	518.1	518.4	518.8	518.4	518.4	518.1	517.8	518.1	517.8	517.1	517.4
5°	519.8	520.5	520.5	519.8	520.1	519.8	519.1	519.5	518.8	517.8	517.8
7.5°	521.8	522.1	522.1	521.5	521.8	521.1	520.5	520.1	519.5	518.1	517.1
10°	524.8	525.2	524.8	524.2	524.2	523.1	521.5	520.8	519.5	517.4	516.4
12.5°	528.2	528.5	528.2	527.5	527.2	525.5	524.2	523.1	522.1	520.5	518.8
15°	532.9	533.5	532.9	531.5	530.5	529.2	528.5	528.9	529.2	527.8	526.2
17.5°	541.6	541.9	540.9	537.9	536.6	535.2	535.2	535.9	536.9	536.2	534.6
20°	557.7	556.7	554.4	550.7	549.0	546.6	546.3	546.6	546.6	546.3	545.0
22.5°	577.8	577.2	574.2	569.5	567.1	565.8	563.7	562.1	561.7	560.7	559.4
25°	602.0	601.7	598.0	593.9	592.3	590.6	588.9	586.6	584.6	582.2	580.9
27.5°	632.9	631.5	626.2	624.2	621.8	620.8	618.4	615.8	614.1	611.1	609.4
30°	666.8	666.8	662.4	661.7	661.7	659.4	656.7	652.0	649.0	646.0	645.0
32.5°	700.7	701.0	696.6	698.0	699.0	700.7	701.3	699.7	697.6	697.3	695.3
35°	749.7	748.3	743.9	745.0	744.6	744.3	744.3	748.0	748.6	749.3	745.3
37.5°	810.4	810.4	806.0	806.0	804.0	802.0	799.3	801.7	805.4	806.4	803.7
40°	879.9	882.2	876.8	876.5	877.2	870.8	867.8	871.5	873.8	877.8	874.8
42.5°	961.7	960.1	954.7	954.0	950.3	948.3	945.6	948.6	952.3	955.0	956.0
45°	1040.3	1038.9	1032.9	1032.9	1029.2	1027.5	1028.8	1033.9	1035.6	1039.2	1042.9
47.5°	1117.8	1116.1	1112.1	1113.7	1114.1	1117.1	1121.5	1126.2	1130.9	1135.9	1137.6
50°	1197.0	1197.3	1192.9	1197.0	1202.0	1210.4	1222.1	1229.8	1239.6	1246.0	1248.0
52.5°	1269.1	1270.4	1275.1	1284.5	1294.6	1311.1	1331.2	1350.0	1366.1	1376.8	1376.2
55°	1355.7	1357.7	1369.1	1385.2	1401.7	1426.5	1456.4	1489.6	1516.4	1531.9	1522.1
57.5°	1466.4	1470.8	1483.5	1505.3	1529.8	1562.1	1603.0	1653.0	1694.6	1715.4	1699.6
60°	1618.4	1621.1	1636.5	1660.7	1690.2	1730.2	1784.9	1852.0	1910.7	1938.2	1920.1
62.5°	1818.8	1823.8	1836.2	1860.7	1890.9	1936.2	2003.0	2086.9	2160.0	2198.3	2157.3
65°	2058.0	2074.1	2084.5	2109.4	2137.5	2185.5	2255.3	2345.3	2423.8	2449.0	2401.6
67.5°	2294.9	2309.0	2327.1	2355.7	2384.2	2438.2	2503.0	2590.2	2676.5	2699.3	2625.8
70°	2398.6	2406.7	2434.9	2473.8	2528.5	2592.2	2667.1	2765.1	2871.8	2890.6	2797.3
72.5°	2190.9	2199.0	2230.5	2296.6	2391.9	2493.2	2623.8	2767.7	2908.7	2929.8	2801.3
75°	1657.0	1643.9	1690.6	1778.2	1906.7	2048.0	2230.5	2436.9	2640.6	2667.1	2513.7
77.5°	856.4	854.7	889.9	998.6	1152.0	1312.7	1513.7	1747.0	1946.3	2026.8	1902.0
80°	241.3	244.0	260.7	314.8	404.4	520.5	677.5	896.0	1059.0	1142.3	1072.5
82.5°	94.6	102.0	108.4	118.5	130.2	147.3	196.6	292.6	392.6	469.1	384.2
85°	33.9	36.2	51.3	60.7	61.7	65.1	74.2	86.6	104.4	124.5	102.3
87.5°	12.8	14.1	16.4	27.2	26.8	24.5	29.9	31.2	23.5	21.5	26.5
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°	518.1	518.1	518.1	518.1	518.1	518.1	518.1	518.1
2.5°	516.8	517.1	517.1	517.4	517.8	517.8	518.4	518.4
5°	517.1	517.1	516.4	516.8	516.4	516.4	516.8	516.8
7.5°	516.4	516.1	515.4	515.1	514.4	514.4	514.4	514.4
10°	515.4	515.1	514.4	514.1	513.7	513.7	513.7	513.7
12.5°	518.1	517.1	516.4	516.1	516.1	516.1	516.1	516.1
15°	525.2	522.8	521.1	521.1	521.5	522.1	522.1	522.8
17.5°	533.9	531.2	529.5	528.2	528.9	529.9	530.5	531.2
20°	544.3	542.9	540.6	539.3	539.3	540.6	541.3	541.6
22.5°	558.7	557.7	556.7	555.0	555.0	555.7	557.0	557.0
25°	580.2	579.5	578.8	577.5	577.2	577.2	577.8	578.5
27.5°	607.0	607.4	606.7	606.4	605.4	605.0	606.0	605.7
30°	642.9	644.6	646.3	645.0	643.3	642.3	641.3	639.9
32.5°	691.6	689.6	688.2	685.9	682.9	680.2	678.2	675.8
35°	737.6	734.2	732.9	734.9	734.6	732.9	730.5	728.5
37.5°	793.9	793.3	793.9	797.6	797.0	798.6	793.9	793.6
40°	865.1	865.8	870.5	874.8	877.2	879.5	876.8	874.1
42.5°	947.6	947.3	949.0	955.0	959.0	961.7	956.0	955.4
45°	1034.9	1032.5	1033.9	1038.9	1042.9	1046.0	1039.6	1039.6
47.5°	1130.9	1126.8	1122.5	1128.2	1130.5	1132.5	1127.5	1125.8
50°	1237.9	1229.5	1220.1	1222.5	1222.5	1221.8	1215.4	1215.1
52.5°	1360.7	1345.3	1328.2	1321.8	1318.1	1314.1	1303.0	1297.6
55°	1502.0	1478.8	1452.0	1435.5	1426.8	1415.7	1397.3	1392.3
57.5°	1667.1	1630.8	1584.5	1564.4	1544.9	1526.8	1506.4	1500.6
60°	1862.7	1809.4	1748.0	1710.7	1689.6	1672.1	1651.0	1650.0
62.5°	2080.8	1996.6	1927.1	1893.6	1878.2	1862.7	1842.6	1845.3
65°	2302.6	2214.7	2149.6	2122.4	2108.0	2095.3	2075.1	2078.2
67.5°	2521.4	2440.6	2369.1	2341.2	2325.1	2309.0	2290.9	2293.9
70°	2678.5	2578.1	2497.6	2435.9	2397.3	2353.7	2325.5	2318.4
72.5°	2633.5	2478.8	2351.0	2228.5	2156.7	2098.3	2058.7	2041.6
75°	2279.2	2067.8	1903.3	1753.0	1668.4	1599.6	1549.6	1518.4
77.5°	1692.6	1455.0	1260.7	1087.6	950.7	858.7	793.9	752.0
80°	926.5	704.7	515.1	362.1	266.1	221.1	195.3	182.9
82.5°	288.6	186.2	137.2	118.5	110.1	105.4	97.6	85.2
85°	91.9	80.5	74.8	71.5	68.1	59.4	40.9	37.2
87.5°	35.6	36.6	36.2	34.2	34.9	25.2	20.1	17.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)