

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: P454102

Luminaire Tested: **GALN-SA5A-830-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-830-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18159 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

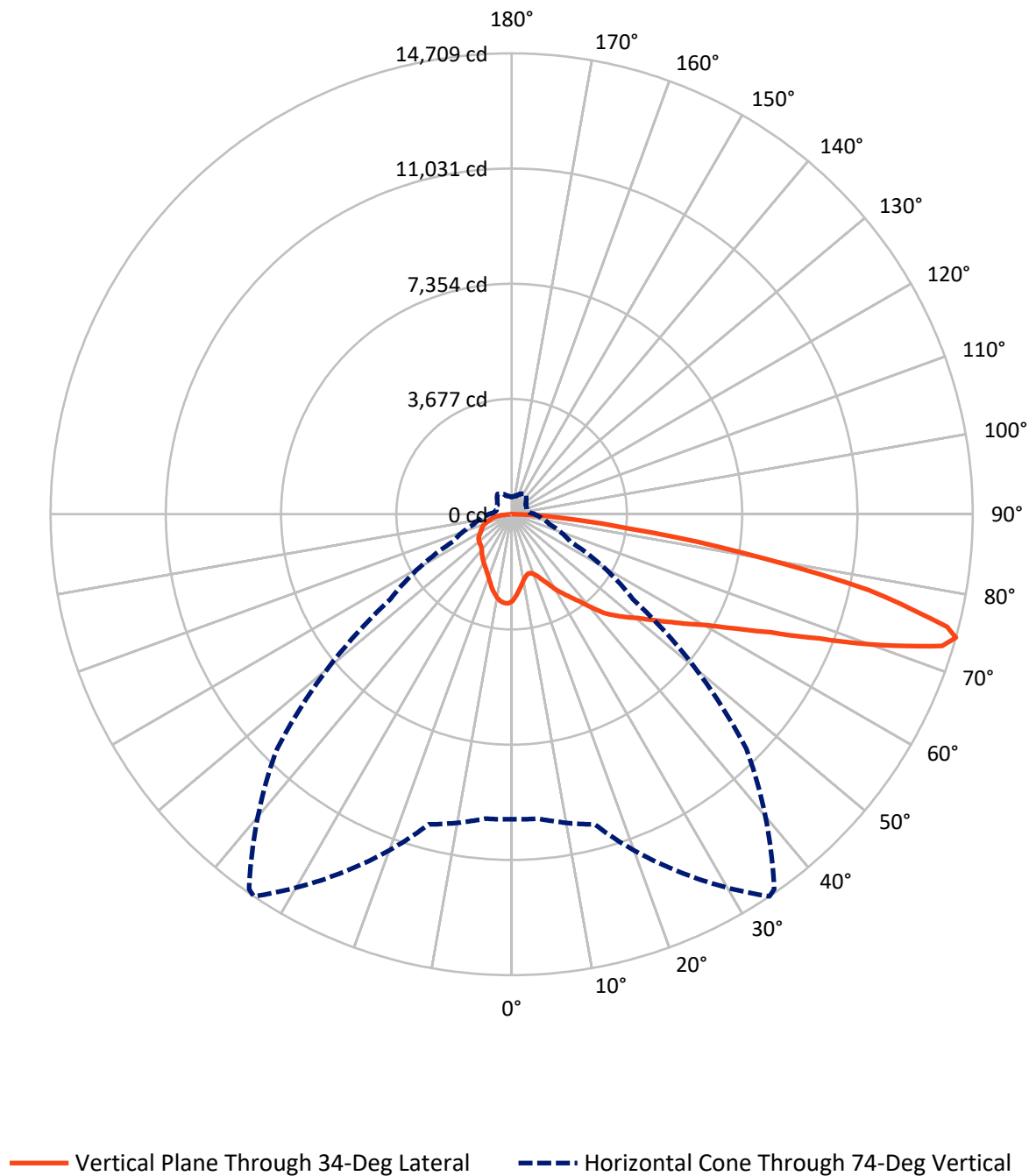
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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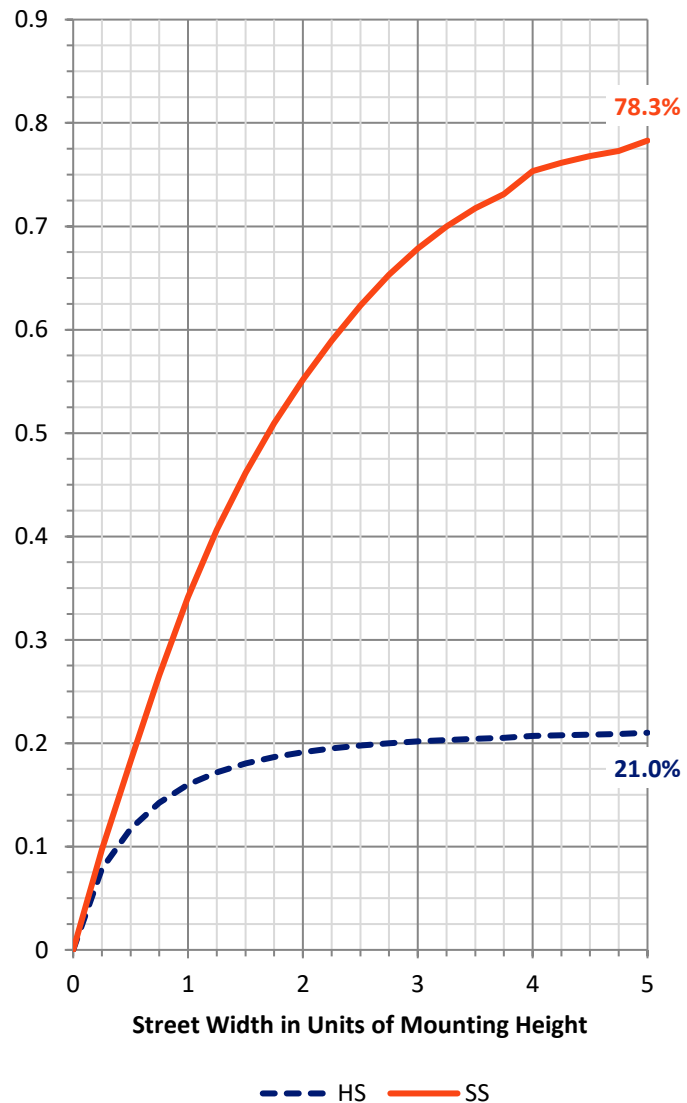
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3864.4	0.0	3864.4
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	14294.6	0.0	14294.6
	% Fixture	78.7	0.0	78.7
Total	Lumens	18159.0	0.0	18159.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.2	1.4
10°-20°	690.2	3.8
20°-30°	1138.0	6.3
30°-40°	1704.7	9.4
40°-50°	2478.1	13.6
50°-60°	3461.3	19.1
60°-70°	4333.4	23.9
70°-80°	3583.4	19.7
80°-90°	517.8	2.9
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°	18159.0	100.0
0°-180°	18159.0	100.0

Coefficient of Utilization



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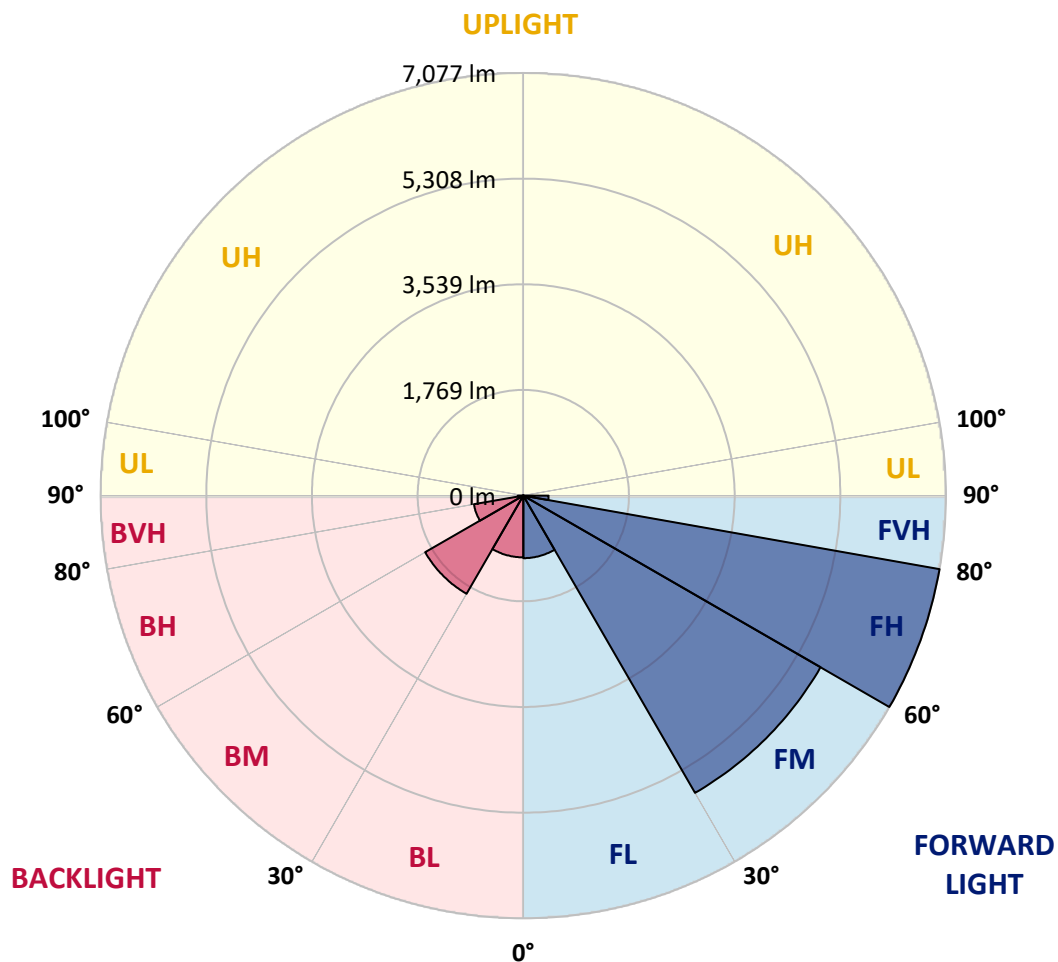
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1046.8	5.8			
FM	(30°-60°)	5746.3	31.6			
FH	(60°-80°)	7077.4	39.0			G3/7500
FVH	(80°-90°)	424.2	2.3			G3/500
BL	(0°-30°)	1033.7	5.7	B3/2500		
BM	(30°-60°)	1897.8	10.5	B2/2500		
BH	(60°-80°)	839.3	4.6	B2/1000		G2/1000
BVH	(80°-90°)	93.6	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5
2.5°	2562.3	2575.3	2582.4	2607.5	2613.6	2621.6	2642.7	2670.9	2707.1	2739.3	2767.5
5°	2349.0	2369.1	2381.2	2403.3	2446.6	2450.6	2506.9	2571.3	2644.8	2713.2	2769.5
7.5°	2146.8	2168.9	2179.0	2219.2	2276.6	2285.6	2368.1	2469.7	2592.4	2696.1	2782.6
10°	1994.9	2006.0	2028.1	2058.3	2126.7	2132.7	2240.3	2376.2	2535.1	2688.0	2804.7
12.5°	1912.4	1918.4	1923.5	1955.7	2023.1	2032.1	2144.8	2298.7	2489.8	2694.1	2840.9
15°	1924.5	1926.5	1904.3	1910.4	1964.7	1977.8	2089.5	2247.4	2461.7	2709.1	2895.3
17.5°	2026.1	2019.0	1964.7	1936.5	1974.8	1980.8	2078.4	2227.3	2448.6	2737.3	2951.6
20°	2186.0	2176.0	2082.4	2020.0	2042.2	2047.2	2114.6	2242.4	2461.7	2783.6	3039.1
22.5°	2385.2	2381.2	2239.3	2163.9	2162.9	2162.9	2198.1	2296.7	2500.9	2847.0	3130.7
25°	2663.9	2642.7	2457.6	2360.1	2332.9	2330.9	2326.9	2386.2	2551.2	2914.4	3239.3
27.5°	2949.6	2913.4	2748.4	2598.5	2540.1	2533.1	2506.9	2513.0	2615.6	2990.8	3363.0
30°	3206.1	3183.0	3028.0	2862.1	2792.6	2776.5	2704.1	2670.9	2723.2	3128.6	3560.2
32.5°	3402.3	3388.2	3267.5	3116.6	3014.0	3010.9	2905.3	2878.1	2891.2	3295.6	3785.6
35°	3561.2	3566.2	3504.9	3374.1	3256.4	3239.3	3168.9	3134.7	3096.5	3537.1	4069.2
37.5°	3778.5	3789.6	3785.6	3672.9	3529.0	3533.1	3517.0	3460.6	3359.0	3806.7	4384.1
40°	4017.9	4026.0	4025.0	3981.7	3906.3	3910.3	3904.3	3839.9	3688.0	4149.7	4734.2
42.5°	4348.9	4310.7	4211.1	4254.3	4298.6	4317.7	4359.0	4297.6	4089.4	4515.9	5063.2
45°	4719.1	4646.7	4421.3	4441.5	4605.4	4641.7	4869.0	4784.5	4525.0	4936.4	5450.5
47.5°	4952.5	4881.1	4691.0	4686.9	4904.2	4939.4	5341.8	5310.6	4921.3	5390.1	5923.3
50°	5160.8	5150.7	4936.4	4987.7	5200.0	5252.3	5856.9	5827.7	5316.7	5925.3	6438.4
52.5°	5469.6	5388.1	5217.1	5322.7	5603.4	5671.8	6367.9	6282.4	5679.8	6398.1	6938.3
55°	5608.4	5589.3	5579.2	5670.8	6056.1	6105.4	6864.9	6668.7	5989.7	6798.5	7318.6
57.5°	5979.6	5944.4	6044.0	6106.4	6589.3	6664.7	7384.0	7072.1	6261.3	7116.4	7503.7
60°	6460.5	6441.4	6532.9	6645.6	7184.8	7299.5	7975.5	7416.2	6479.6	7276.4	7402.1
62.5°	7178.8	7176.8	7159.7	7401.1	8028.8	8134.5	8654.6	7751.2	6513.8	7156.6	6877.0
65°	8208.9	8172.7	8023.8	8287.4	9079.1	9202.8	9361.8	7938.3	6307.6	6542.0	5790.5
67.5°	9286.3	9284.3	9163.6	9505.6	10587.1	10714.8	10246.1	7897.1	5735.2	5299.6	4112.5
70°	10179.7	10136.4	10290.3	11201.7	12513.6	12661.4	11019.7	7411.2	4568.2	3499.9	2443.6
72.5°	10393.9	10395.9	10715.9	12509.5	14363.6	14386.7	11298.3	6006.8	3057.2	1930.5	1222.3
74°	9734.0	9751.1	10247.1	12574.9	14708.6	14604.0	10586.1	4721.1	2067.3	1260.5	881.3
75°	8884.9	8777.3	9494.6	12139.3	14350.5	14237.8	9752.1	3788.6	1577.4	1007.0	771.6
77.5°	4750.3	4860.0	5966.6	9059.0	11658.5	11528.7	6612.4	1816.8	852.1	701.2	555.3
80°	1691.1	1865.1	2621.6	4740.2	7474.5	7514.8	3155.8	833.0	599.6	517.1	392.3
82.5°	690.1	709.2	1125.7	2103.5	3795.6	3831.8	1288.7	494.9	428.6	356.1	234.4
85°	269.6	277.7	498.0	945.6	1619.7	1725.3	445.7	261.6	263.6	204.2	119.7
87.5°	90.5	102.6	204.2	314.9	550.3	539.2	129.8	77.5	94.6	88.5	37.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5	2772.5
2.5°	2781.6	2800.7	2813.8	2827.8	2840.9	2845.0	2841.9	2851.0	2852.0	2853.0	2854.0
5°	2797.7	2823.8	2849.0	2863.1	2869.1	2864.1	2847.0	2837.9	2829.9	2823.8	2825.8
7.5°	2819.8	2857.0	2880.2	2886.2	2870.1	2847.0	2804.7	2771.5	2750.4	2736.3	2735.3
10°	2854.0	2890.2	2909.3	2892.2	2848.0	2791.6	2725.2	2662.9	2615.6	2601.5	2600.5
12.5°	2897.3	2938.5	2937.5	2887.2	2809.7	2709.1	2601.5	2529.1	2464.7	2432.5	2445.6
15°	2953.6	2984.8	2955.6	2865.1	2742.3	2604.5	2471.7	2373.1	2300.7	2266.5	2268.5
17.5°	3019.0	3046.2	2968.7	2825.8	2647.8	2470.7	2316.8	2223.2	2165.9	2140.8	2138.7
20°	3100.5	3108.5	2968.7	2757.4	2526.1	2314.8	2167.9	2102.5	2070.3	2057.3	2061.3
22.5°	3188.0	3171.9	2952.6	2660.9	2366.1	2151.8	2053.2	2024.1	2008.0	2006.0	2008.0
25°	3286.6	3241.3	2919.4	2530.1	2199.1	2011.0	1953.6	1958.7	1961.7	1961.7	1968.7
27.5°	3407.3	3316.8	2864.1	2365.1	2003.9	1880.2	1864.1	1899.3	1915.4	1918.4	1923.5
30°	3566.2	3399.3	2772.5	2158.9	1838.0	1762.5	1790.7	1838.0	1856.1	1867.1	1865.1
32.5°	3755.4	3489.8	2648.8	1952.6	1704.2	1680.0	1714.2	1762.5	1782.6	1788.7	1780.6
35°	3977.7	3592.4	2485.8	1759.5	1587.5	1601.5	1641.8	1656.9	1675.0	1675.0	1679.0
37.5°	4217.1	3674.9	2286.6	1582.4	1496.9	1548.2	1577.4	1563.3	1555.3	1545.2	1550.2
40°	4460.6	3736.3	2028.1	1407.4	1406.4	1492.9	1500.9	1460.7	1428.5	1418.5	1413.4
42.5°	4672.8	3774.5	1794.7	1271.6	1320.9	1438.6	1444.6	1380.2	1328.9	1298.7	1288.7
45°	4923.3	3818.8	1566.3	1158.9	1241.4	1395.3	1410.4	1323.9	1248.4	1185.1	1169.0
47.5°	5266.4	3919.4	1386.3	1071.4	1184.1	1368.2	1389.3	1277.6	1178.0	1095.5	1082.4
50°	5653.7	4057.2	1246.4	1012.0	1139.8	1344.0	1370.2	1230.3	1112.6	1021.1	1011.0
52.5°	6008.8	4131.6	1125.7	958.7	1096.5	1299.7	1345.0	1196.1	1048.2	946.6	937.6
55°	6203.0	4010.9	1007.0	906.4	1037.2	1242.4	1309.8	1148.8	985.9	907.4	894.3
57.5°	6229.1	3761.4	899.4	850.1	974.8	1172.0	1244.4	1091.5	945.6	880.2	869.2
60°	6026.9	3389.2	815.9	803.8	911.4	1092.5	1171.0	1041.2	904.4	850.1	839.0
62.5°	5523.9	2984.8	757.5	761.5	847.0	1009.0	1116.7	992.9	865.2	816.9	806.8
65°	4658.8	2463.7	701.2	718.3	789.7	943.6	1067.4	952.7	825.9	791.7	782.7
67.5°	3236.3	1778.6	654.9	673.0	735.4	877.2	1010.0	909.4	781.7	763.5	749.5
70°	1791.7	1094.5	600.6	621.7	679.0	802.8	945.6	844.0	717.3	709.2	689.1
72.5°	941.6	697.2	539.2	562.4	602.6	707.2	847.0	772.6	653.9	619.7	593.5
74°	735.4	571.4	498.0	522.1	549.3	650.9	788.7	721.3	608.6	568.4	548.3
75°	640.8	509.0	462.8	493.9	518.1	612.7	743.4	685.1	583.5	545.2	527.1
77.5°	452.7	381.3	378.3	415.5	428.6	537.2	670.0	623.7	520.1	479.9	462.8
80°	317.9	285.7	299.8	322.9	341.0	474.8	621.7	539.2	426.5	379.3	373.2
82.5°	207.2	187.1	214.3	235.4	241.4	350.1	502.0	409.4	310.9	252.5	234.4
85°	95.6	93.6	122.7	119.7	118.7	171.0	297.8	239.4	179.1	133.8	125.7
87.5°	24.1	23.1	30.2	25.1	30.2	26.2	27.2	7.0	1.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)