

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: P140448

Luminaire Tested: **ECM-E04-LED-E1-5WQ-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140448
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-E04-LED-E1-5WQ-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10085.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

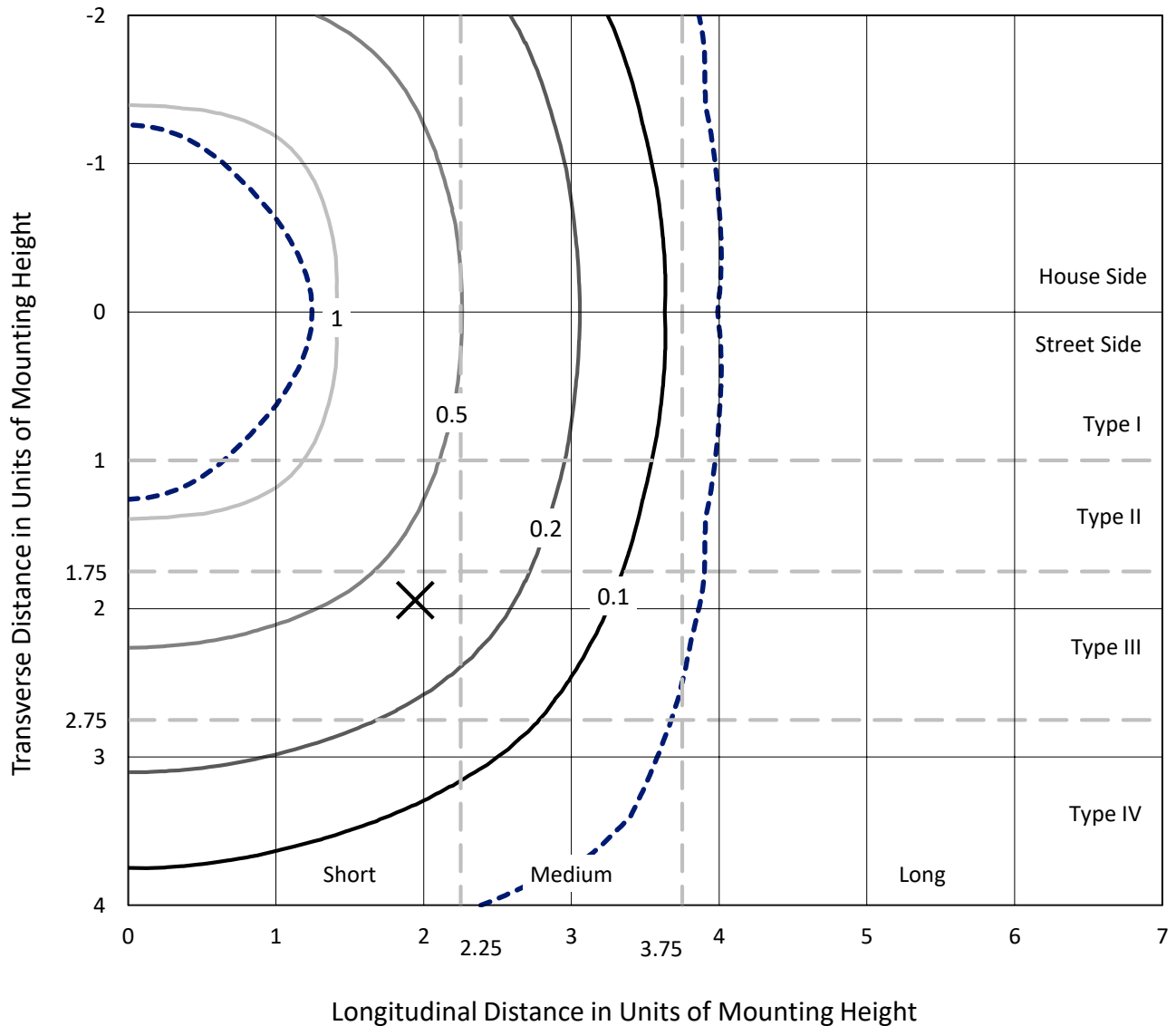
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

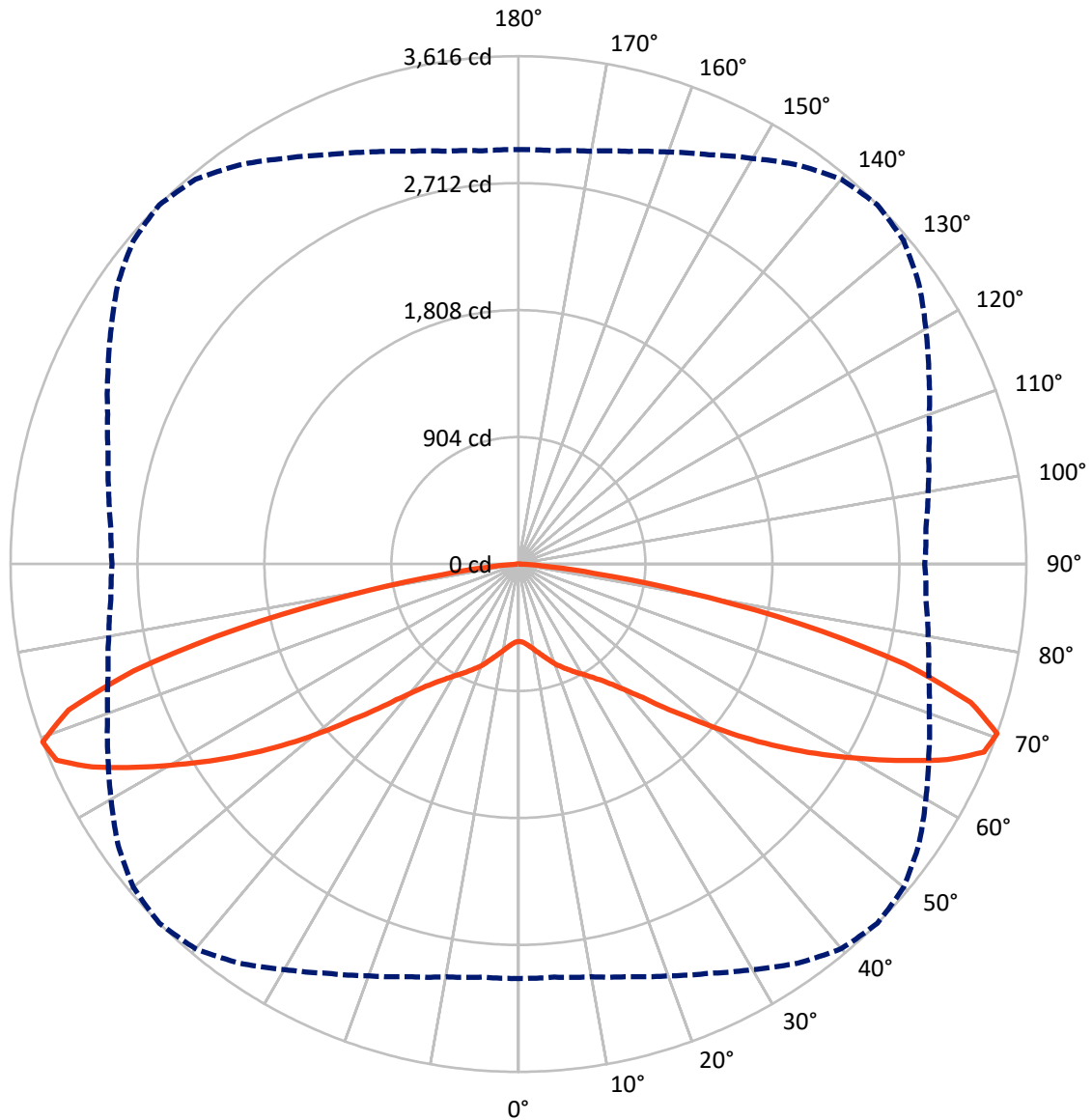
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 1.6 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	5042.6	0.0	5042.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5042.6	0.0	5042.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	10085.2	0.0	10085.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	0.6
10°-20°	195.3	1.9
20°-30°	383.7	3.8
30°-40°	634.9	6.3
40°-50°	1111.4	11.0
50°-60°	1982.4	19.7
60°-70°	3060.5	30.3
70°-80°	2422.6	24.0
80°-90°	238.4	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°	10085.2	100.0
0°-180°	10085.2	100.0



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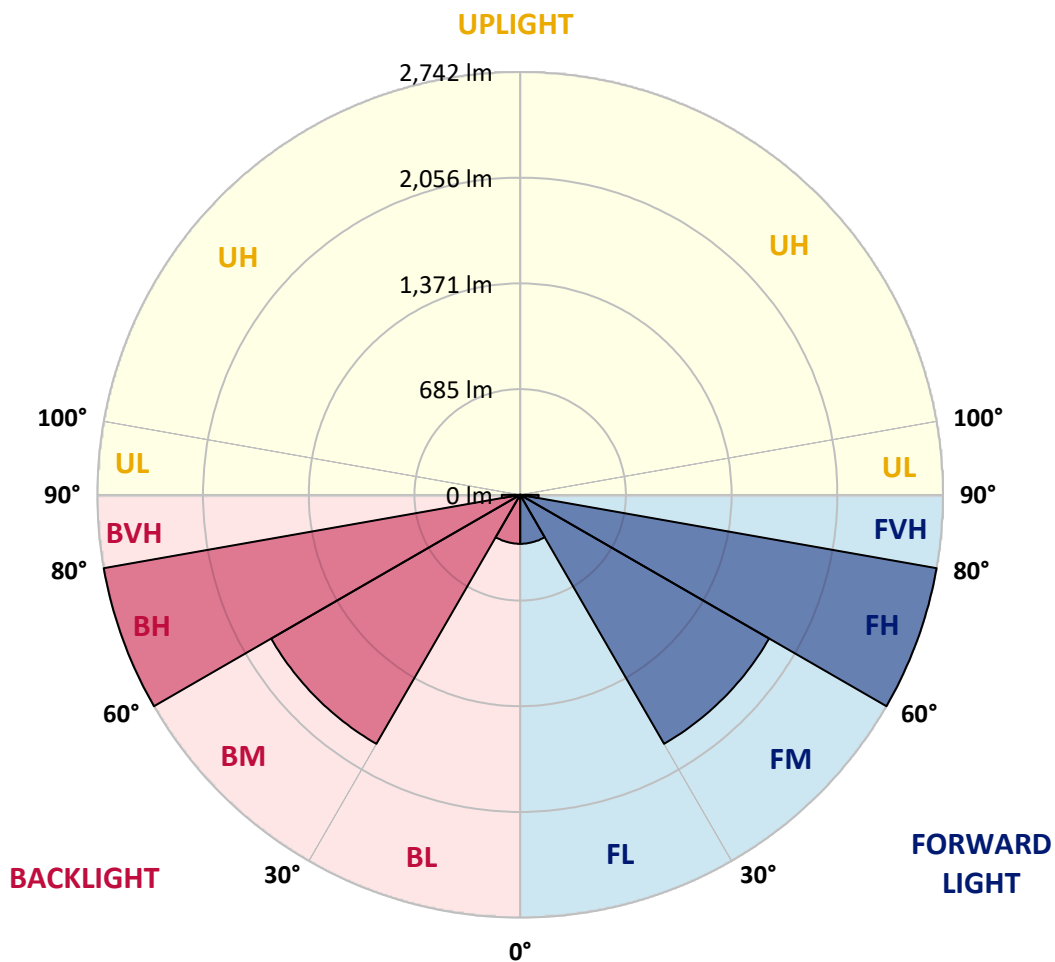
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	317.5	3.1			
FM	(30°-60°)	1864.4	18.5			
FH	(60°-80°)	2741.6	27.2			G2/5000
FVH	(80°-90°)	119.2	1.2			G2/225
BL	(0°-30°)	317.5	3.1	B1/500		
BM	(30°-60°)	1864.4	18.5	B2/2500		
BH	(60°-80°)	2741.6	27.2	B4/5000		G2/5000
BVH	(80°-90°)	119.2	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	551.4	551.4	551.4	551.4	551.4	551.4	551.4	551.4	551.4	551.4	551.4
2.5°	558.2	558.2	557.0	557.0	557.0	557.0	555.9	555.9	557.0	555.9	555.9
5°	571.7	572.8	572.8	571.7	571.7	571.7	571.7	571.7	572.8	571.7	571.7
7.5°	591.9	593.0	593.0	591.9	591.9	591.9	591.9	591.9	593.0	593.0	590.8
10°	616.7	617.8	617.8	616.7	616.7	617.8	617.8	617.8	618.9	618.9	617.8
12.5°	645.9	647.1	648.2	647.1	648.2	648.2	649.3	650.4	650.4	650.4	648.2
15°	679.7	683.1	680.8	680.8	681.9	683.1	683.1	686.4	685.3	684.2	683.1
17.5°	719.1	718.0	718.0	719.1	720.2	719.1	720.2	723.6	722.5	721.3	720.2
20°	756.2	756.2	756.2	755.1	757.3	757.3	758.5	759.6	759.6	761.8	758.5
22.5°	792.2	792.2	791.1	791.1	793.4	793.4	795.6	797.9	797.9	797.9	795.6
25°	826.0	826.0	827.1	826.0	827.1	828.2	830.5	832.7	833.9	833.9	833.9
27.5°	856.4	859.7	858.6	859.7	862.0	864.2	866.5	869.9	872.1	873.2	869.9
30°	894.6	894.6	893.5	894.6	896.9	900.3	904.8	910.4	910.4	911.5	911.5
32.5°	935.1	936.3	934.0	936.3	939.6	944.1	948.6	953.1	955.4	959.9	958.8
35°	988.0	984.7	985.8	989.2	991.4	995.9	1001.5	1009.4	1013.9	1016.2	1013.9
37.5°	1048.8	1047.7	1049.9	1049.9	1057.8	1062.3	1072.4	1079.2	1082.6	1088.2	1085.9
40°	1125.3	1129.8	1130.9	1134.3	1138.8	1147.8	1159.1	1170.3	1177.1	1181.6	1182.7
42.5°	1228.9	1231.1	1226.6	1239.0	1251.4	1257.0	1270.5	1286.2	1296.4	1299.7	1300.9
45°	1356.0	1356.0	1362.8	1370.6	1386.4	1397.6	1412.3	1438.2	1447.2	1459.5	1459.5
47.5°	1507.9	1512.4	1512.4	1530.4	1542.8	1565.3	1593.5	1614.8	1634.0	1628.3	1647.5
50°	1683.5	1686.9	1699.2	1709.4	1730.7	1756.6	1782.5	1814.0	1842.2	1845.5	1848.9
52.5°	1866.9	1871.4	1881.5	1905.2	1931.1	1960.3	2007.6	2034.6	2061.6	2076.2	2074.0
55°	2077.3	2075.1	2092.0	2110.0	2148.2	2187.6	2227.0	2265.3	2293.4	2313.7	2312.5
57.5°	2297.9	2305.8	2324.9	2347.4	2380.1	2414.9	2462.2	2500.5	2546.6	2559.0	2541.0
60°	2554.5	2546.6	2565.7	2600.6	2629.9	2674.9	2716.5	2766.0	2798.7	2813.3	2807.7
62.5°	2816.7	2809.9	2824.6	2869.6	2904.5	2937.1	2994.5	3048.5	3075.5	3081.1	3071.0
65°	3009.1	3011.4	3035.0	3074.4	3129.5	3179.0	3243.2	3308.4	3351.2	3358.0	3335.5
67.5°	3054.1	3058.6	3091.3	3141.9	3210.5	3292.7	3388.3	3485.1	3558.3	3574.0	3541.4
70°	2950.6	2952.8	2984.4	3041.7	3120.5	3215.0	3334.3	3468.2	3575.1	3615.7	3579.6
72.5°	2737.9	2746.9	2772.8	2821.2	2883.1	2976.5	3091.3	3210.5	3316.3	3368.1	3368.1
75°	2354.2	2374.4	2386.8	2402.6	2456.6	2532.0	2625.4	2719.9	2813.3	2842.6	2760.4
77.5°	1680.1	1646.3	1654.2	1742.0	1729.6	1815.1	1918.7	1986.2	2069.5	2057.1	1938.9
80°	770.8	751.7	795.6	854.1	928.4	985.8	1097.2	1108.4	1204.1	1209.7	1124.2
82.5°	154.2	162.0	193.6	238.6	297.1	361.2	419.7	469.3	534.5	546.9	507.5
85°	48.4	52.9	66.4	73.1	76.5	87.8	100.2	135.0	155.3	160.9	150.8
87.5°	10.1	15.8	25.9	29.3	30.4	29.3	29.3	28.1	22.5	18.0	21.4
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°	551.4	551.4	551.4	551.4	551.4	551.4	551.4	551.4
2.5°	554.8	554.8	555.9	555.9	555.9	554.8	553.7	554.8
5°	570.5	570.5	570.5	570.5	568.3	568.3	567.2	567.2
7.5°	590.8	589.7	589.7	588.5	587.4	587.4	586.3	587.4
10°	617.8	615.6	614.4	613.3	612.2	612.2	611.0	609.9
12.5°	647.1	645.9	644.8	642.6	641.4	639.2	639.2	639.2
15°	680.8	679.7	678.6	675.2	675.2	671.8	672.9	672.9
17.5°	718.0	715.7	712.3	711.2	710.1	706.7	706.7	706.7
20°	756.2	751.7	749.5	747.2	747.2	743.8	742.7	742.7
22.5°	793.4	788.9	784.3	782.1	779.8	778.7	776.5	775.3
25°	830.5	826.0	821.5	818.1	813.6	811.4	809.1	809.1
27.5°	867.6	863.1	856.4	851.9	847.4	842.9	840.6	841.7
30°	905.9	901.4	894.6	889.0	883.4	878.9	876.6	875.5
32.5°	954.3	948.6	940.8	935.1	925.0	920.5	918.3	919.4
35°	1010.5	1002.7	997.0	988.0	980.2	974.5	971.2	971.2
37.5°	1082.6	1075.8	1070.2	1061.2	1049.9	1043.2	1038.7	1042.0
40°	1176.0	1170.3	1159.1	1145.6	1136.6	1130.9	1126.4	1127.6
42.5°	1295.2	1284.0	1273.9	1266.0	1252.5	1244.6	1232.2	1236.7
45°	1446.0	1433.7	1423.5	1411.2	1398.8	1383.0	1378.5	1369.5
47.5°	1628.3	1619.3	1596.8	1585.6	1569.8	1547.3	1536.1	1527.1
50°	1829.8	1812.9	1797.1	1769.0	1751.0	1725.1	1715.0	1711.6
52.5°	2057.1	2029.0	2003.1	1977.2	1941.2	1916.4	1896.2	1900.7
55°	2282.2	2249.5	2212.4	2184.2	2156.1	2125.7	2104.4	2092.0
57.5°	2519.6	2483.6	2444.2	2403.7	2380.1	2344.0	2330.5	2323.8
60°	2763.8	2731.2	2691.8	2654.6	2622.0	2580.4	2557.9	2548.9
62.5°	3033.9	2988.9	2941.6	2895.5	2859.4	2829.1	2805.4	2789.7
65°	3282.6	3220.7	3172.3	3113.8	3074.4	3030.5	3001.2	2995.6
67.5°	3468.2	3372.6	3288.2	3212.8	3152.0	3098.0	3060.9	3046.2
70°	3480.6	3349.0	3224.0	3112.6	3023.7	2961.8	2912.3	2893.2
72.5°	3239.8	3076.6	2907.8	2798.7	2704.1	2618.6	2583.7	2575.9
75°	2635.5	2499.3	2358.7	2234.9	2169.6	2126.9	2097.6	2054.8
77.5°	1830.9	1706.0	1630.6	1492.2	1467.4	1432.5	1403.3	1375.1
80°	1025.2	916.0	831.6	745.0	692.1	662.8	632.4	615.6
82.5°	460.3	378.1	300.5	232.9	192.4	151.9	113.7	120.4
85°	114.8	96.8	74.3	61.9	56.3	51.8	41.6	37.1
87.5°	21.4	20.3	18.0	18.0	19.1	15.8	9.0	7.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)