

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: P140285

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140285  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F03-LED-E1-5MQ  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (21) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7562.9 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

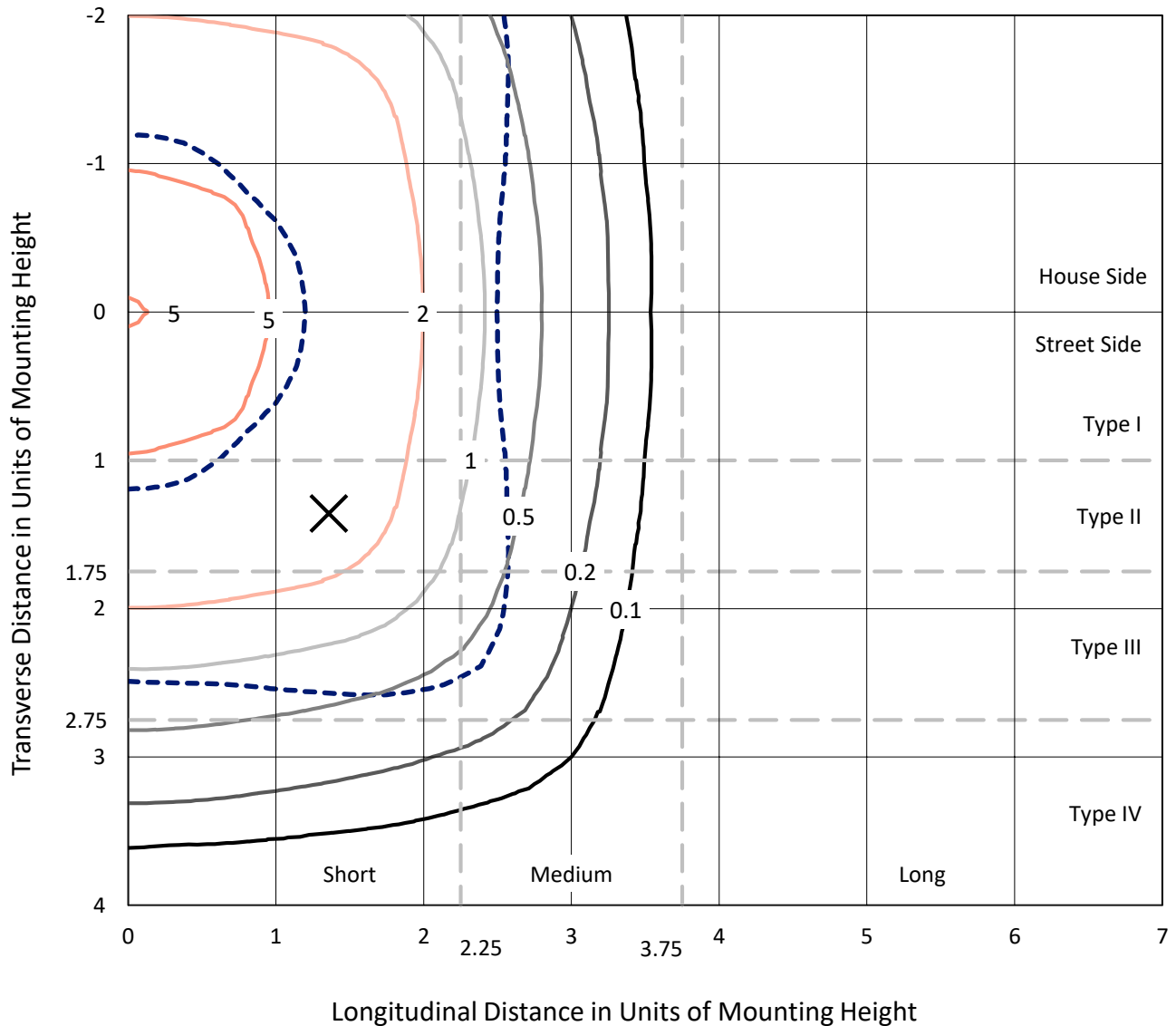
Input Watts (W): 78.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

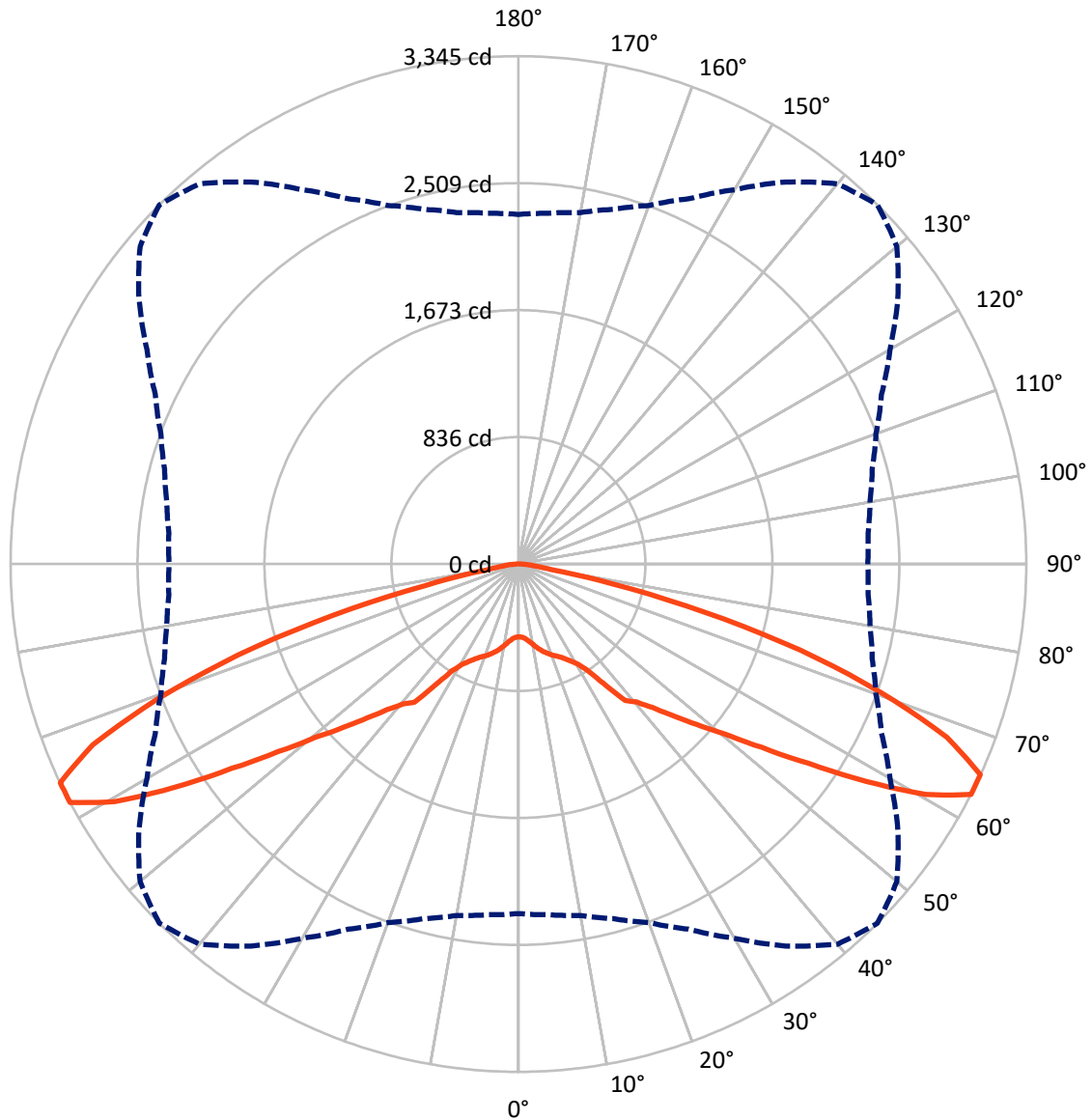
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3781.4	0.0	3781.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3781.4	0.0	3781.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	7562.9	0.0	7562.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	0.6
10°-20°	169.9	2.2
20°-30°	326.4	4.3
30°-40°	628.0	8.3
40°-50°	1093.0	14.5
50°-60°	1963.1	26.0
60°-70°	2406.5	31.8
70°-80°	848.7	11.2
80°-90°	78.5	1.0
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°	7562.9	100.0
0°-180°	7562.9	100.0



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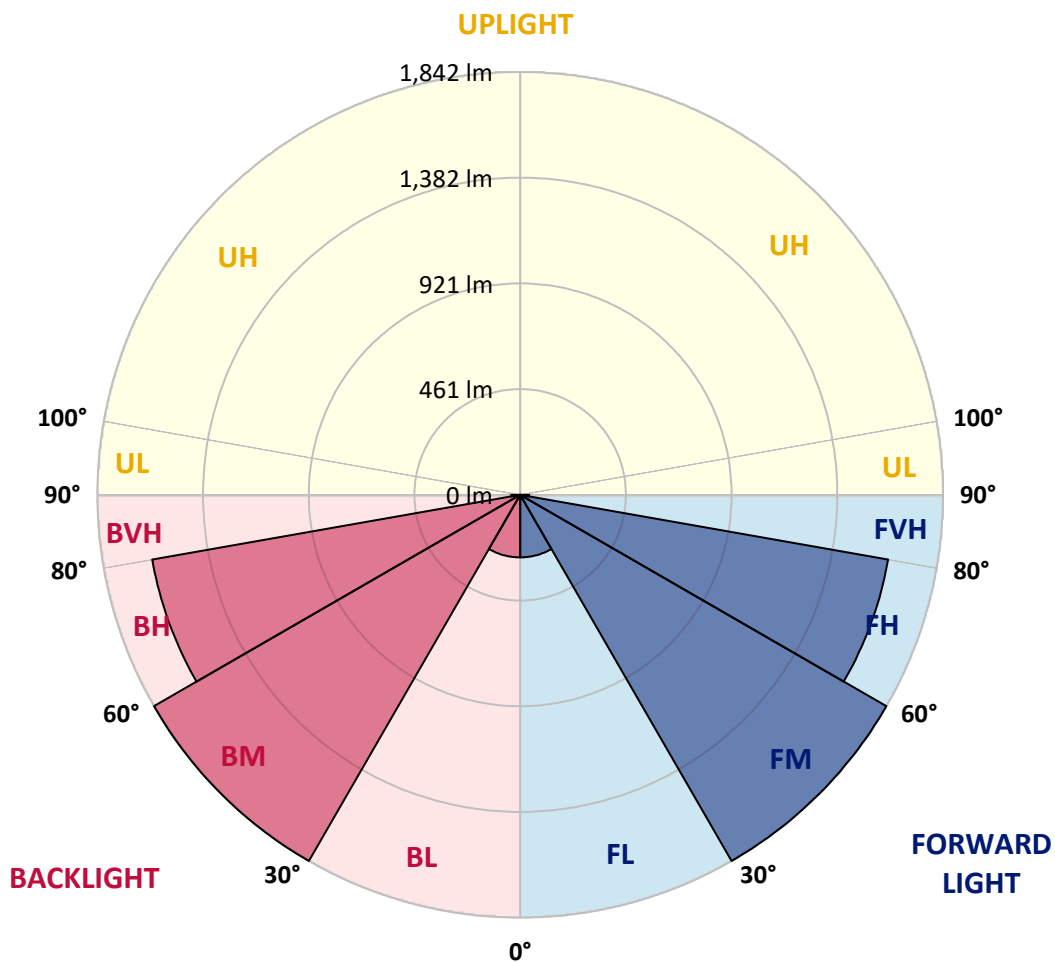
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	272.6	3.6			
FM	(30°-60°)	1842.0	24.4			
FH	(60°-80°)	1627.6	21.5			G1/1800
FVH	(80°-90°)	39.2	0.5			G1/100
BL	(0°-30°)	272.6	3.6	B1/500		
BM	(30°-60°)	1842.0	24.4	B2/2500		
BH	(60°-80°)	1627.6	21.5	B3/2500		G1/1800
BVH	(80°-90°)	39.2	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-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	479.6	479.6	479.6	479.6	479.6	479.6	479.6	479.6	479.6	479.6	479.6
2.5°	485.4	485.4	484.6	483.8	483.8	483.8	482.9	482.9	483.8	482.1	482.1
5°	497.8	498.6	497.8	497.0	496.1	496.1	495.3	495.3	496.1	494.5	493.7
7.5°	520.9	521.7	520.1	519.3	518.4	517.6	516.8	516.0	516.8	514.3	514.3
10°	550.6	550.6	550.6	547.3	547.3	544.8	544.0	542.4	543.2	540.7	540.7
12.5°	580.3	580.3	579.5	577.9	577.0	575.4	573.7	573.7	572.1	568.8	567.1
15°	606.8	607.6	606.8	604.3	603.5	601.0	601.0	599.3	596.9	595.2	593.6
17.5°	631.5	632.4	629.9	629.0	626.6	624.9	623.3	622.4	620.8	618.3	617.5
20°	655.5	654.6	652.2	648.9	647.2	645.6	643.9	643.1	642.3	640.6	640.6
22.5°	678.6	678.6	676.1	671.2	667.8	666.2	663.7	662.1	660.4	659.6	661.2
25°	713.3	712.4	707.5	702.5	696.7	691.8	688.5	687.7	686.0	686.0	686.8
27.5°	757.8	756.2	748.8	742.1	735.5	728.9	724.8	721.5	720.7	719.9	719.9
30°	814.0	811.5	804.9	796.6	789.2	780.9	772.7	770.2	766.1	762.8	768.6
32.5°	921.3	922.9	909.7	893.2	876.7	861.0	847.0	836.3	829.7	830.5	830.5
35°	1039.3	1040.2	1034.4	1027.8	1022.8	1013.7	998.1	984.9	974.9	964.2	969.2
37.5°	1090.5	1091.3	1086.4	1085.6	1088.9	1094.6	1110.3	1121.9	1139.2	1141.7	1136.7
40°	1180.5	1176.4	1169.8	1168.1	1165.6	1173.9	1180.5	1186.3	1188.8	1193.7	1188.8
42.5°	1274.6	1273.0	1268.0	1262.2	1262.2	1263.9	1274.6	1283.7	1289.5	1290.3	1289.5
45°	1380.3	1377.8	1373.7	1372.8	1375.3	1382.8	1390.2	1401.7	1419.9	1420.7	1419.9
47.5°	1496.7	1498.3	1491.7	1494.2	1498.3	1510.7	1531.3	1550.3	1570.1	1577.6	1568.5
50°	1656.0	1650.2	1650.2	1647.7	1658.5	1676.6	1701.4	1723.7	1751.8	1758.4	1744.3
52.5°	1872.3	1859.9	1862.4	1855.8	1861.6	1878.1	1918.5	1953.2	1988.7	2006.0	1978.8
55°	2132.3	2111.7	2114.2	2120.8	2125.7	2153.8	2205.0	2244.6	2311.5	2317.2	2285.9
57.5°	2345.3	2339.5	2342.8	2358.5	2389.9	2438.6	2503.0	2598.8	2681.3	2701.1	2667.3
60°	2422.9	2427.0	2450.2	2491.4	2550.9	2637.6	2763.0	2912.5	3043.7	3083.3	3032.2
62.5°	2302.4	2318.9	2350.3	2418.8	2512.9	2654.1	2846.4	3071.8	3268.3	3345.0	3253.4
65°	2067.1	2077.8	2129.0	2187.6	2309.0	2470.8	2706.9	3000.0	3241.8	3343.4	3241.0
67.5°	1758.4	1779.0	1823.6	1896.2	2001.1	2165.4	2413.0	2712.7	2955.4	3044.5	2954.6
70°	1411.6	1420.7	1448.8	1505.8	1614.7	1760.0	1972.2	2240.5	2476.6	2532.7	2460.9
72.5°	979.1	997.2	1021.2	1073.2	1141.7	1264.7	1439.7	1637.0	1826.9	1943.3	1837.6
75°	421.8	397.9	450.7	502.7	586.9	700.9	837.9	999.7	1187.9	1265.5	1161.5
77.5°	126.3	125.5	133.7	148.6	178.3	236.1	331.0	440.0	585.3	635.7	545.7
80°	103.2	106.5	109.8	113.1	116.4	120.5	128.0	149.4	183.3	216.3	175.8
82.5°	87.5	91.6	100.7	105.7	108.1	109.0	109.0	108.1	104.0	102.4	101.5
85°	66.0	72.6	85.0	92.5	92.5	92.5	92.5	90.0	84.2	74.3	82.6
87.5°	22.3	29.7	49.5	52.8	54.5	50.4	52.8	53.7	44.6	33.8	42.9
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°	479.6	479.6	479.6	479.6	479.6	479.6	479.6	479.6
2.5°	482.1	482.1	482.1	482.9	482.1	482.1	482.1	482.1
5°	494.5	493.7	494.5	493.7	494.5	494.5	493.7	494.5
7.5°	513.5	513.5	514.3	514.3	513.5	513.5	513.5	513.5
10°	539.1	537.4	538.2	538.2	538.2	537.4	537.4	536.6
12.5°	565.5	563.8	563.8	563.8	563.8	563.0	563.8	563.8
15°	590.3	588.6	586.9	586.9	587.8	588.6	588.6	587.8
17.5°	614.2	612.5	610.1	610.1	609.2	610.9	612.5	611.7
20°	638.1	637.3	633.2	633.2	633.2	634.8	635.7	638.1
22.5°	662.1	661.2	657.9	657.1	657.9	661.2	663.7	663.7
25°	687.7	689.3	688.5	688.5	690.1	695.1	697.6	700.9
27.5°	724.0	727.3	728.1	731.4	732.2	738.0	742.1	747.1
30°	771.0	776.8	780.1	785.9	790.0	793.3	799.1	803.2
32.5°	836.3	850.3	866.8	885.8	894.0	908.9	915.5	917.2
35°	986.5	1001.4	1015.4	1023.7	1020.3	1024.5	1024.5	1027.8
37.5°	1121.9	1107.0	1094.6	1092.2	1085.6	1083.1	1083.9	1086.4
40°	1184.6	1177.2	1172.2	1174.7	1171.4	1168.9	1170.6	1171.4
42.5°	1286.2	1274.6	1270.5	1269.7	1268.0	1269.7	1273.8	1272.1
45°	1405.0	1390.2	1384.4	1383.6	1381.1	1380.3	1381.9	1385.2
47.5°	1547.9	1529.7	1511.5	1505.8	1505.8	1500.8	1504.1	1499.2
50°	1722.9	1693.2	1674.2	1663.4	1656.8	1649.4	1656.0	1645.3
52.5°	1953.2	1911.1	1890.5	1876.4	1857.4	1858.3	1859.9	1855.8
55°	2243.8	2197.5	2157.1	2129.9	2118.3	2111.7	2110.0	2123.3
57.5°	2578.1	2496.4	2432.0	2384.1	2366.0	2341.2	2329.6	2329.6
60°	2895.9	2747.3	2619.4	2539.3	2479.9	2437.8	2409.7	2401.5
62.5°	3051.1	2825.8	2638.4	2506.3	2412.2	2351.9	2311.5	2300.7
65°	2984.3	2697.8	2477.4	2328.8	2219.8	2142.2	2095.2	2082.0
67.5°	2715.2	2415.5	2183.5	2034.1	1916.9	1832.7	1797.2	1782.3
70°	2254.5	1979.6	1778.2	1632.1	1509.9	1438.9	1390.2	1370.4
72.5°	1620.5	1411.6	1226.7	1101.3	991.5	954.3	888.3	881.7
75°	957.6	776.0	623.3	527.5	429.3	375.6	345.1	312.0
77.5°	389.6	278.2	208.9	157.7	135.4	123.0	117.2	115.6
80°	132.9	118.9	112.3	109.8	106.5	104.8	100.7	97.4
82.5°	104.8	104.0	100.7	99.9	96.6	91.6	83.4	78.4
85°	87.5	85.9	81.7	80.9	78.4	71.8	62.7	57.0
87.5°	49.5	45.4	41.3	42.1	39.6	34.7	25.6	18.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)