

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: P140289

Luminaire Tested: **ECM-E04-LED-E1-5MQ-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140289  
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-E04-LED-E1-5MQ-7030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (84) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11156.6 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

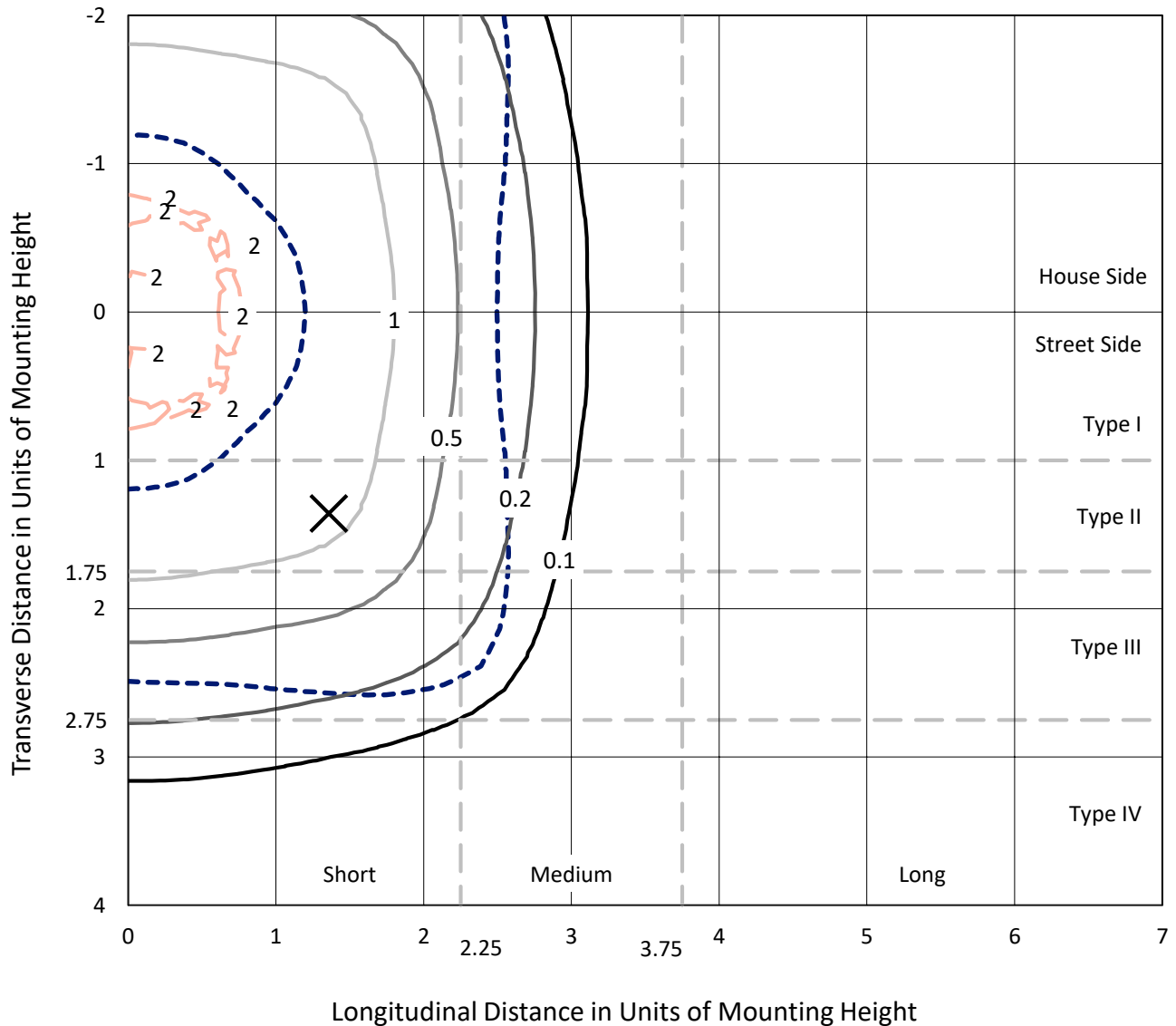
Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

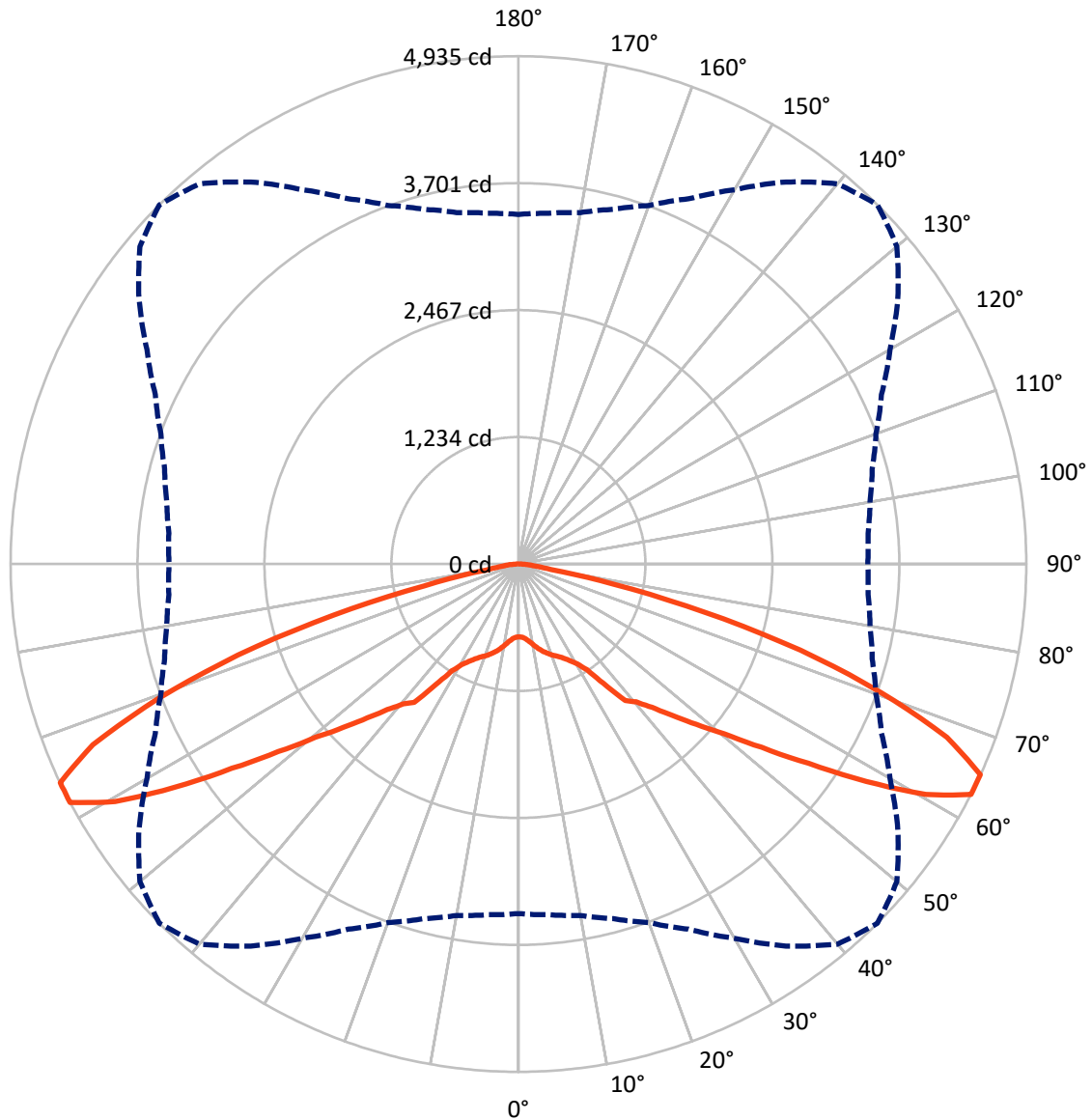
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2 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	5578.3	0.0	5578.3
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5578.3	0.0	5578.3
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	11156.6	0.0	11156.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	0.6
10°-20°	250.6	2.2
20°-30°	481.6	4.3
30°-40°	926.4	8.3
40°-50°	1612.3	14.5
50°-60°	2896.0	26.0
60°-70°	3550.0	31.8
70°-80°	1251.9	11.2
80°-90°	115.8	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°	11156.6	100.0
0°-180°	11156.6	100.0



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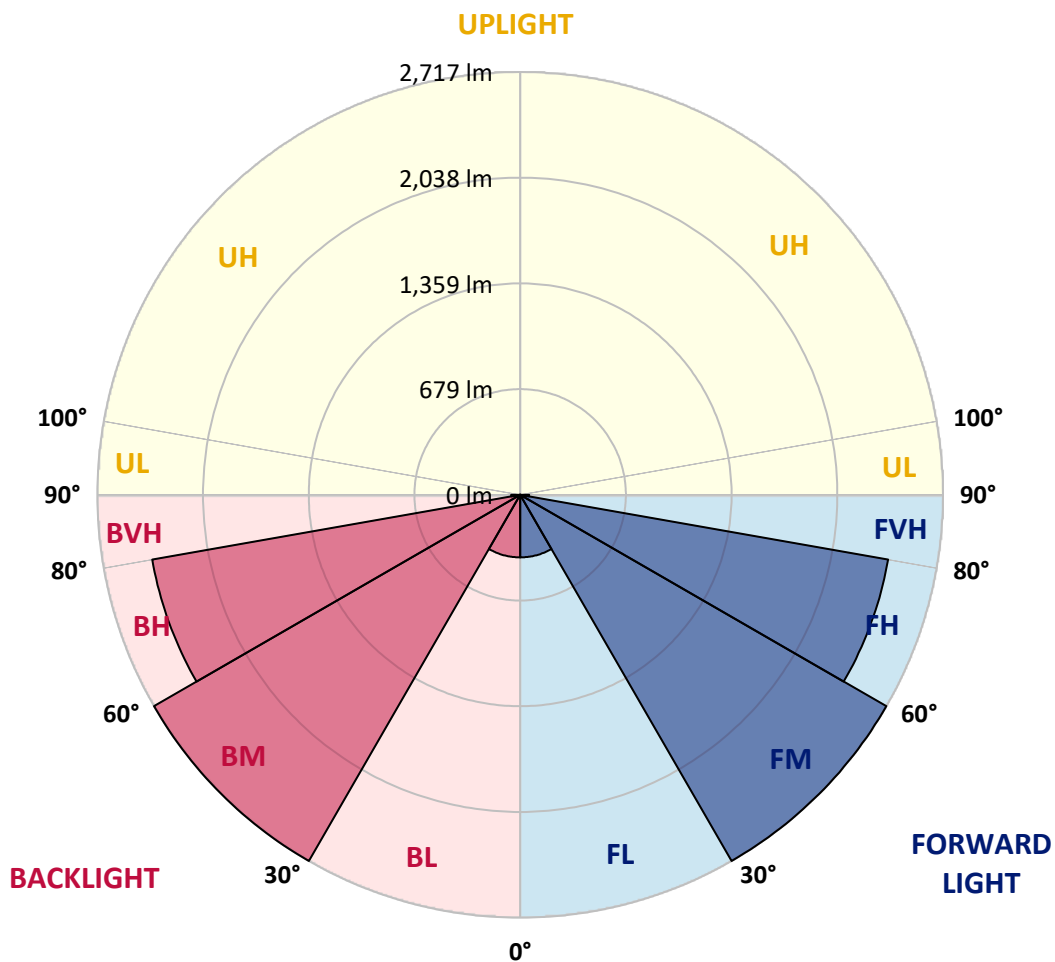
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	402.1	3.6			
FM (30°-60°)	2717.3	24.4			
FH (60°-80°)	2401.0	21.5			G2/5000
FVH (80°-90°)	57.9	0.5			G1/100
BL (0°-30°)	402.1	3.6	B1/500		
BM (30°-60°)	2717.3	24.4	B3/5000		
BH (60°-80°)	2401.0	21.5	B3/2500		G2/5000
BVH (80°-90°)	57.9	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-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	707.5	707.5	707.5	707.5	707.5	707.5	707.5	707.5	707.5	707.5	707.5
2.5°	716.1	716.1	714.8	713.6	713.6	713.6	712.4	712.4	713.6	711.2	711.2
5°	734.3	735.6	734.3	733.1	731.9	731.9	730.7	730.7	731.9	729.5	728.2
7.5°	768.4	769.6	767.2	766.0	764.8	763.6	762.3	761.1	762.3	758.7	758.7
10°	812.3	812.3	812.3	807.4	807.4	803.7	802.5	800.1	801.3	797.7	797.7
12.5°	856.1	856.1	854.9	852.5	851.2	848.8	846.4	846.4	843.9	839.1	836.6
15°	895.1	896.3	895.1	891.4	890.2	886.6	886.6	884.1	880.5	878.0	875.6
17.5°	931.6	932.8	929.2	928.0	924.3	921.9	919.4	918.2	915.8	912.1	910.9
20°	966.9	965.7	962.1	957.2	954.8	952.3	949.9	948.7	947.4	945.0	945.0
22.5°	1001.0	1001.0	997.4	990.1	985.2	982.8	979.1	976.7	974.2	973.0	975.5
25°	1052.2	1051.0	1043.7	1036.3	1027.8	1020.5	1015.6	1014.4	1012.0	1012.0	1013.2
27.5°	1117.9	1115.5	1104.5	1094.8	1085.1	1075.3	1069.2	1064.4	1063.1	1061.9	1061.9
30°	1200.8	1197.1	1187.4	1175.2	1164.2	1152.0	1139.9	1136.2	1130.1	1125.2	1133.8
32.5°	1359.1	1361.5	1342.0	1317.7	1293.3	1270.2	1249.5	1233.6	1223.9	1225.1	1225.1
35°	1533.2	1534.4	1525.9	1516.2	1508.9	1495.5	1472.3	1452.8	1438.2	1422.4	1429.7
37.5°	1608.7	1609.9	1602.6	1601.4	1606.3	1614.8	1637.9	1655.0	1680.6	1684.2	1676.9
40°	1741.5	1735.4	1725.6	1723.2	1719.5	1731.7	1741.5	1750.0	1753.6	1760.9	1753.6
42.5°	1880.3	1877.8	1870.5	1862.0	1862.0	1864.5	1880.3	1893.7	1902.2	1903.4	1902.2
45°	2036.2	2032.5	2026.4	2025.2	2028.9	2039.8	2050.8	2067.8	2094.6	2095.8	2094.6
47.5°	2207.9	2210.3	2200.6	2204.2	2210.3	2228.6	2259.0	2287.0	2316.3	2327.2	2313.8
50°	2442.9	2434.4	2434.4	2430.7	2446.6	2473.4	2509.9	2542.8	2584.2	2593.9	2573.2
52.5°	2762.0	2743.7	2747.4	2737.6	2746.1	2770.5	2830.2	2881.3	2933.7	2959.3	2919.1
55°	3145.6	3115.1	3118.8	3128.5	3135.8	3177.2	3252.7	3311.2	3409.8	3418.4	3372.1
57.5°	3459.8	3451.2	3456.1	3479.3	3525.5	3597.4	3692.4	3833.6	3955.4	3984.6	3934.7
60°	3574.2	3580.3	3614.4	3675.3	3763.0	3890.9	4076.0	4296.4	4490.0	4548.5	4473.0
62.5°	3396.4	3420.8	3467.1	3568.2	3707.0	3915.2	4199.0	4531.4	4821.3	4934.5	4799.4
65°	3049.4	3065.2	3140.7	3227.2	3406.2	3644.9	3993.2	4425.5	4782.3	4932.1	4781.1
67.5°	2593.9	2624.4	2690.1	2797.3	2951.9	3194.3	3559.6	4001.7	4359.7	4491.2	4358.5
70°	2082.4	2095.8	2137.2	2221.3	2382.0	2596.4	2909.3	3305.1	3653.4	3736.2	3630.3
72.5°	1444.3	1471.1	1506.4	1583.1	1684.2	1865.7	2123.8	2414.9	2695.0	2866.7	2710.8
75°	622.3	587.0	664.9	741.6	865.9	1033.9	1236.1	1474.8	1752.4	1866.9	1713.4
77.5°	186.3	185.1	197.3	219.2	263.0	348.3	488.3	649.1	863.4	937.7	805.0
80°	152.2	157.1	162.0	166.8	171.7	177.8	188.8	220.4	270.4	319.1	259.4
82.5°	129.1	135.2	148.6	155.9	159.5	160.7	160.7	159.5	153.4	151.0	149.8
85°	97.4	107.2	125.4	136.4	136.4	136.4	136.4	132.7	124.2	109.6	121.8
87.5°	32.9	43.8	73.1	77.9	80.4	74.3	77.9	79.2	65.8	49.9	63.3
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°	707.5	707.5	707.5	707.5	707.5	707.5	707.5	707.5
2.5°	711.2	711.2	711.2	712.4	711.2	711.2	711.2	711.2
5°	729.5	728.2	729.5	728.2	729.5	729.5	728.2	729.5
7.5°	757.5	757.5	758.7	758.7	757.5	757.5	757.5	757.5
10°	795.2	792.8	794.0	794.0	794.0	792.8	792.8	791.6
12.5°	834.2	831.8	831.8	831.8	831.8	830.5	831.8	831.8
15°	870.7	868.3	865.9	865.9	867.1	868.3	868.3	867.1
17.5°	906.0	903.6	900.0	900.0	898.7	901.2	903.6	902.4
20°	941.4	940.1	934.1	934.1	934.1	936.5	937.7	941.4
22.5°	976.7	975.5	970.6	969.4	970.6	975.5	979.1	979.1
25°	1014.4	1016.9	1015.6	1015.6	1018.1	1025.4	1029.0	1033.9
27.5°	1068.0	1072.9	1074.1	1079.0	1080.2	1088.7	1094.8	1102.1
30°	1137.4	1146.0	1150.8	1159.3	1165.4	1170.3	1178.8	1184.9
32.5°	1233.6	1254.3	1278.7	1306.7	1318.9	1340.8	1350.5	1353.0
35°	1455.3	1477.2	1497.9	1510.1	1505.2	1511.3	1511.3	1516.2
37.5°	1655.0	1633.1	1614.8	1611.2	1601.4	1597.8	1599.0	1602.6
40°	1747.5	1736.6	1729.3	1732.9	1728.1	1724.4	1726.8	1728.1
42.5°	1897.3	1880.3	1874.2	1873.0	1870.5	1873.0	1879.1	1876.6
45°	2072.7	2050.8	2042.3	2041.0	2037.4	2036.2	2038.6	2043.5
47.5°	2283.4	2256.6	2229.8	2221.3	2221.3	2214.0	2218.8	2211.5
50°	2541.5	2497.7	2469.7	2453.9	2444.1	2433.2	2442.9	2427.1
52.5°	2881.3	2819.2	2788.8	2768.1	2740.1	2741.3	2743.7	2737.6
55°	3310.0	3241.8	3182.1	3141.9	3124.9	3115.1	3112.7	3132.2
57.5°	3803.2	3682.6	3587.6	3517.0	3490.2	3453.7	3436.6	3436.6
60°	4272.0	4052.8	3864.1	3746.0	3658.3	3596.2	3554.8	3542.6
62.5°	4501.0	4168.5	3892.1	3697.2	3558.4	3469.5	3409.8	3394.0
65°	4402.3	3979.8	3654.6	3435.4	3274.7	3160.2	3090.8	3071.3
67.5°	4005.3	3563.3	3221.1	3000.7	2827.7	2703.5	2651.2	2629.2
70°	3325.8	2920.3	2623.1	2407.6	2227.4	2122.6	2050.8	2021.5
72.5°	2390.5	2082.4	1809.7	1624.5	1462.6	1407.8	1310.4	1300.6
75°	1412.6	1144.7	919.4	778.2	633.3	554.1	509.0	460.3
77.5°	574.8	410.4	308.1	232.6	199.7	181.5	172.9	170.5
80°	196.1	175.4	165.6	162.0	157.1	154.7	148.6	143.7
82.5°	154.7	153.4	148.6	147.4	142.5	135.2	123.0	115.7
85°	129.1	126.7	120.6	119.3	115.7	105.9	92.6	84.0
87.5°	73.1	67.0	60.9	62.1	58.5	51.1	37.8	26.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)