

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: LUMARK

Report Number: P144242

Luminaire Tested: **LDRL-5XQ-E03-E-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144242  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5XQ-E03-E-7060  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (63) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9518.5 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 75.2  
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

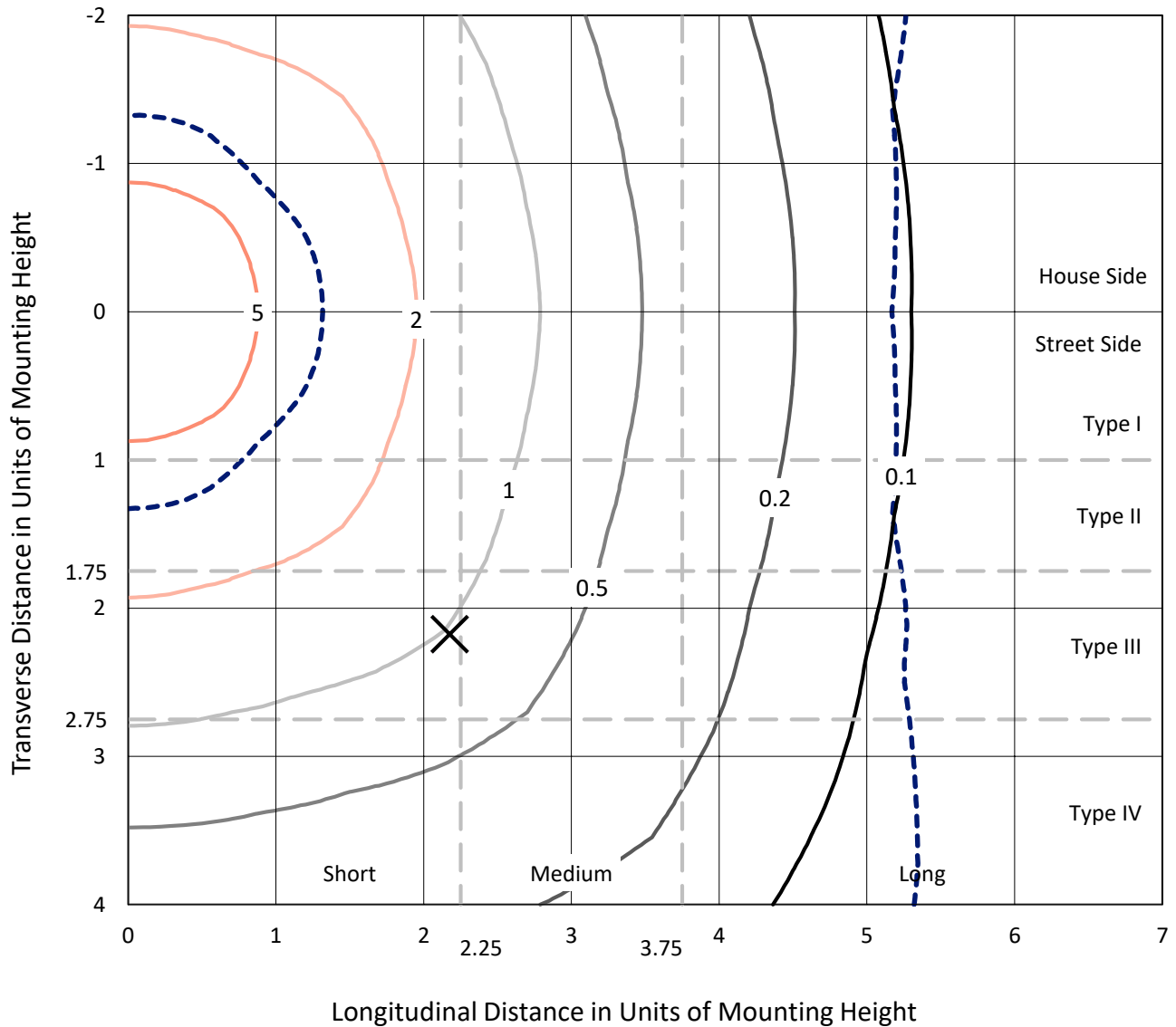


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

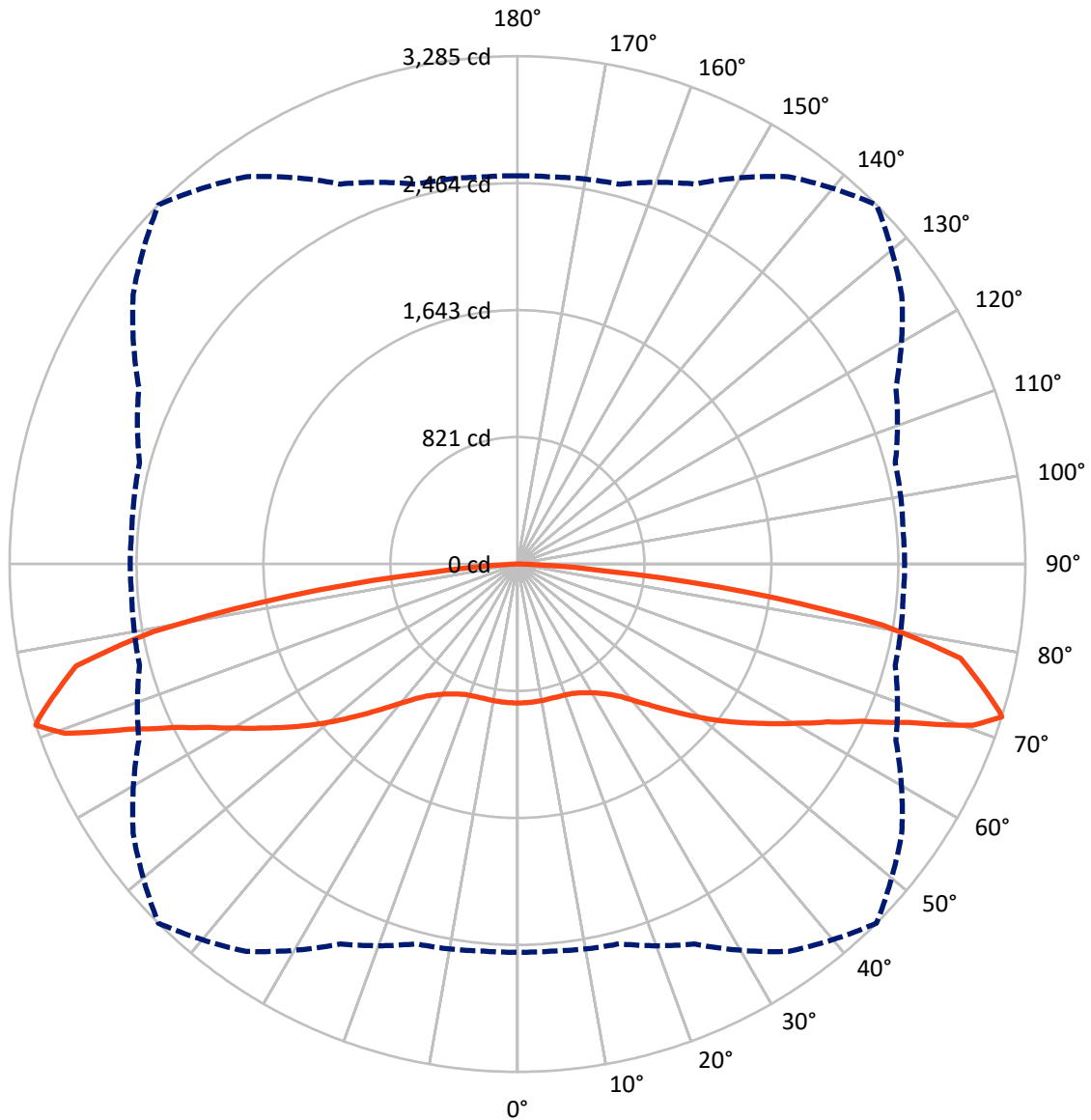


Based on 10 foot mounting height. Maximum calculated value = 9 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4759.2	0.0	4759.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4759.2	0.0	4759.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9518.5	0.0	9518.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.8	0.9
10°-20°	254.8	2.7
20°-30°	428.1	4.5
30°-40°	651.5	6.8
40°-50°	1030.0	10.8
50°-60°	1573.2	16.5
60°-70°	2304.7	24.2
70°-80°	2618.4	27.5
80°-90°	571.9	6.0
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°	9518.5	100.0
0°-180°	9518.5	100.0



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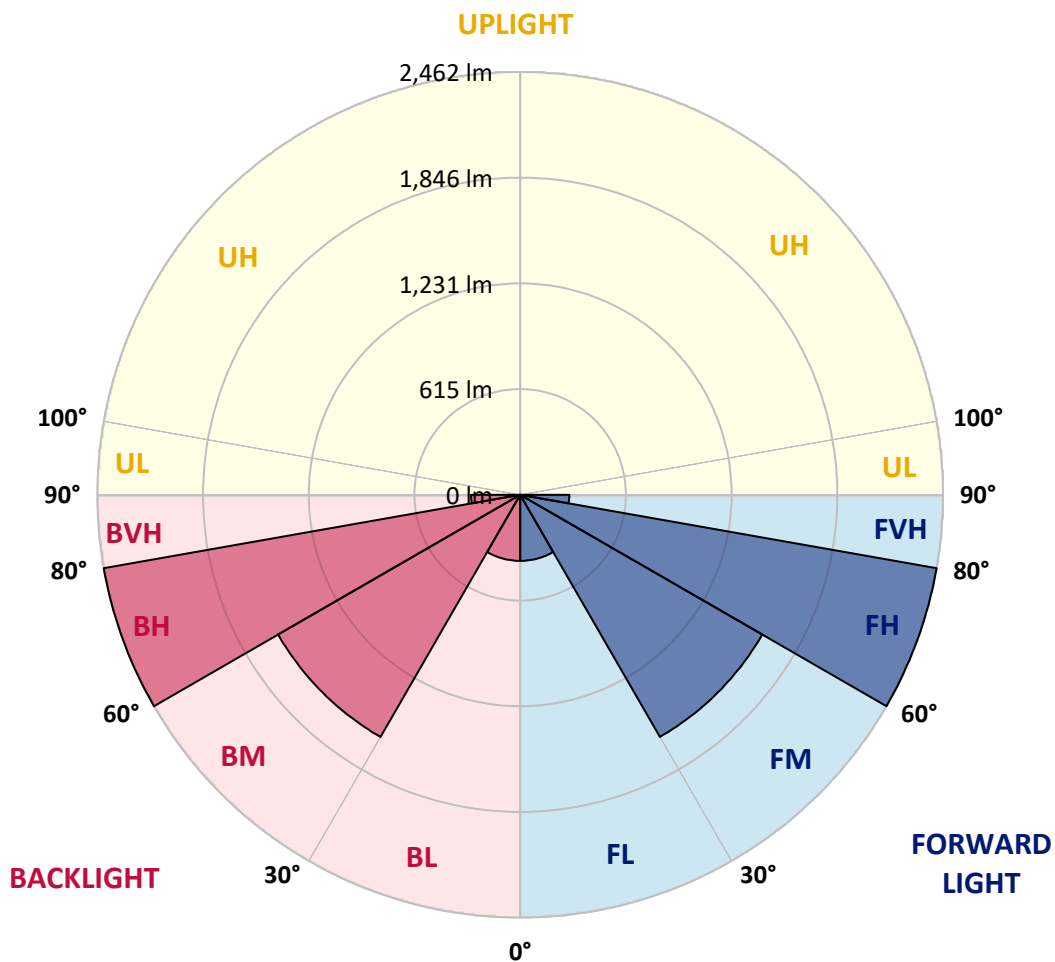
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.4	4.0			
FM	(30°-60°)	1627.4	17.1			
FH	(60°-80°)	2461.6	25.9			G2/5000
FVH	(80°-90°)	286.0	3.0			G3/500
BL	(0°-30°)	384.4	4.0	B1/500		
BM	(30°-60°)	1627.4	17.1	B2/2500		
BH	(60°-80°)	2461.6	25.9	B3/2500		G2/5000
BVH	(80°-90°)	286.0	3.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	898.9	898.9	898.9	898.9	898.9	898.9	898.9	898.9	898.9	898.9	898.9
2.5°	900.8	900.4	899.8	899.2	898.9	898.6	898.6	898.6	898.4	898.2	898.4
5°	900.7	900.4	899.9	899.4	899.0	898.6	898.6	898.6	898.4	898.2	898.6
7.5°	899.5	899.8	899.4	898.9	898.7	898.6	898.4	898.2	898.0	897.6	897.8
10°	899.8	901.0	900.1	899.2	898.8	898.6	897.9	897.3	897.2	897.0	896.7
12.5°	900.4	901.6	900.6	899.5	899.0	898.6	898.0	897.4	896.9	896.4	896.0
15°	902.2	903.2	902.2	901.3	900.4	899.5	898.9	898.2	897.4	896.4	896.0
17.5°	903.5	905.0	904.0	902.9	901.8	900.7	900.1	899.5	898.9	898.2	897.5
20°	905.6	907.2	906.2	905.3	904.7	904.1	903.6	903.2	902.7	902.2	901.2
22.5°	909.6	910.9	910.6	910.3	910.4	910.6	910.8	910.9	910.6	910.2	909.2
25°	918.0	918.0	918.6	919.2	920.1	921.0	921.8	922.6	923.0	923.5	922.1
27.5°	932.4	933.6	934.1	934.6	936.1	937.6	939.4	941.0	942.0	942.9	941.5
30°	951.2	951.2	952.3	953.4	956.0	958.6	960.7	962.9	964.6	966.3	965.2
32.5°	975.2	976.8	978.3	979.8	983.1	986.3	990.0	993.6	995.8	998.0	996.3
35°	1011.8	1013.7	1015.2	1016.8	1020.2	1023.6	1027.7	1031.8	1033.7	1035.6	1034.5
37.5°	1063.6	1063.6	1065.7	1067.9	1070.0	1072.2	1077.8	1083.3	1085.6	1087.9	1086.1
40°	1133.4	1133.8	1134.2	1134.7	1136.7	1138.6	1145.4	1152.2	1156.2	1160.2	1156.4
42.5°	1213.8	1217.2	1217.0	1216.9	1218.3	1219.6	1226.1	1232.6	1238.2	1244.0	1241.6
45°	1308.6	1307.9	1306.8	1305.6	1309.7	1313.8	1323.0	1332.3	1337.4	1342.4	1337.7
47.5°	1404.4	1403.4	1401.7	1400.0	1404.2	1408.3	1422.2	1436.0	1443.2	1450.5	1442.8
50°	1499.8	1503.4	1501.3	1499.2	1505.3	1511.4	1529.0	1546.6	1557.2	1567.8	1558.9
52.5°	1605.4	1608.1	1605.6	1603.2	1611.6	1620.1	1640.9	1661.7	1675.8	1690.0	1678.0
55°	1714.6	1711.2	1712.6	1714.0	1722.0	1730.0	1755.6	1781.1	1798.0	1815.0	1801.4
57.5°	1816.8	1818.0	1816.7	1815.3	1827.9	1840.6	1872.7	1904.9	1926.1	1947.4	1930.4
60°	1921.4	1921.8	1918.7	1915.6	1929.4	1943.0	1989.2	2035.4	2063.0	2090.5	2067.2
62.5°	2038.5	2038.2	2032.8	2027.4	2043.5	2059.7	2117.0	2174.2	2212.1	2250.0	2221.6
65°	2181.9	2178.2	2175.1	2172.0	2190.7	2209.3	2280.4	2351.6	2402.6	2453.7	2417.2
67.5°	2393.4	2390.6	2384.2	2377.7	2398.5	2419.2	2510.4	2601.5	2667.5	2733.6	2685.4
70°	2626.1	2620.8	2625.3	2629.8	2677.8	2725.9	2848.1	2970.3	3048.5	3126.6	3045.7
72°	2511.2	2513.4	2528.4	2543.3	2627.5	2711.7	2885.3	3058.9	3172.0	3285.2	3160.0
72.5°	2471.2	2473.2	2490.1	2507.0	2587.3	2667.6	2846.7	3025.7	3142.8	3260.0	3131.3
75°	2301.4	2306.2	2325.8	2345.4	2426.8	2508.2	2688.8	2869.3	2981.5	3093.7	2964.9
77.5°	2024.0	2039.4	2059.2	2079.1	2176.1	2273.0	2477.1	2681.2	2805.1	2929.0	2782.8
80°	1544.7	1539.2	1573.3	1607.5	1700.2	1792.8	1950.7	2108.6	2251.3	2394.0	2229.6
82.5°	600.2	613.5	684.3	755.1	852.2	949.4	1090.8	1232.2	1360.8	1489.3	1352.5
85°	61.8	70.4	95.9	121.3	174.2	227.2	313.4	399.6	484.1	568.6	476.8
87.5°	24.9	27.4	35.2	43.1	45.1	47.1	57.0	66.8	66.3	65.8	65.0
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°	898.9	898.9	898.9	898.9	898.9	898.9	898.9	898.9
2.5°	898.6	898.8	899.2	899.2	899.2	899.6	900.1	899.5
5°	898.9	899.0	899.2	899.2	899.2	899.6	900.1	899.5
7.5°	898.0	898.0	898.0	898.4	898.8	899.0	899.2	898.9
10°	896.4	896.6	896.7	897.2	897.6	898.1	898.6	898.9
12.5°	895.5	895.6	895.8	896.2	896.7	897.2	897.6	898.3
15°	895.5	895.6	895.8	896.1	896.4	897.0	897.6	898.3
17.5°	896.8	896.4	896.1	896.4	896.7	897.5	898.2	898.9
20°	900.1	899.6	899.2	899.2	899.2	900.0	900.7	900.7
22.5°	908.1	906.6	905.0	904.7	904.4	904.6	904.7	905.0
25°	920.7	918.2	915.8	915.0	914.2	914.0	913.6	914.3
27.5°	940.1	937.3	934.6	932.8	931.2	930.2	929.4	929.7
30°	964.2	960.9	957.6	954.9	952.2	950.9	949.6	950.0
32.5°	994.6	990.8	986.9	983.2	979.5	977.8	976.2	976.4
35°	1033.4	1028.9	1024.4	1021.4	1018.3	1015.7	1013.0	1015.2
37.5°	1084.2	1080.1	1075.9	1073.9	1071.8	1069.6	1067.2	1067.6
40°	1152.5	1148.2	1143.9	1142.2	1140.6	1137.6	1134.6	1135.3
42.5°	1239.4	1232.9	1226.4	1223.3	1220.2	1218.9	1217.5	1218.4
45°	1332.9	1326.4	1320.0	1317.4	1314.8	1311.1	1307.4	1310.7
47.5°	1435.1	1426.9	1418.8	1414.2	1409.6	1410.8	1412.0	1409.3
50°	1549.9	1536.2	1522.5	1517.2	1511.8	1511.8	1511.8	1511.5
52.5°	1666.0	1647.0	1628.2	1623.5	1618.9	1617.8	1616.7	1615.5
55°	1787.9	1764.6	1741.4	1732.8	1724.2	1725.4	1726.6	1730.0
57.5°	1913.5	1882.8	1852.2	1842.4	1832.6	1833.3	1834.0	1839.6
60°	2044.0	2004.4	1964.9	1954.0	1943.0	1946.0	1948.9	1952.3
62.5°	2193.3	2145.4	2097.6	2082.9	2068.3	2072.0	2075.7	2084.6
65°	2380.8	2321.0	2261.3	2246.1	2230.9	2232.6	2234.2	2249.6
67.5°	2637.2	2557.6	2478.0	2464.0	2450.0	2452.5	2455.0	2479.9
70°	2964.7	2846.8	2728.9	2670.9	2612.9	2603.8	2594.7	2607.9
72°	3034.9	2868.4	2701.9	2616.2	2530.6	2517.3	2503.9	2505.1
72.5°	3002.6	2834.2	2665.8	2582.7	2499.6	2488.7	2477.8	2475.6
75°	2836.0	2671.4	2506.6	2420.8	2334.9	2314.1	2293.4	2293.3
77.5°	2636.6	2429.0	2221.4	2128.7	2036.0	2014.3	1992.6	1975.7
80°	2065.2	1879.2	1693.0	1599.0	1505.0	1470.2	1435.4	1414.8
82.5°	1215.6	1044.5	873.4	753.9	634.4	598.6	562.7	512.8
85°	385.1	296.3	207.5	162.0	116.4	94.1	71.7	62.8
87.5°	64.0	52.0	40.0	38.6	37.2	29.2	21.2	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)