

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: P144254

Luminaire Tested: **LDRL-5XQ-F04-E-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144254  
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-F04-E-7030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (28) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9325.7 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 102.2  
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

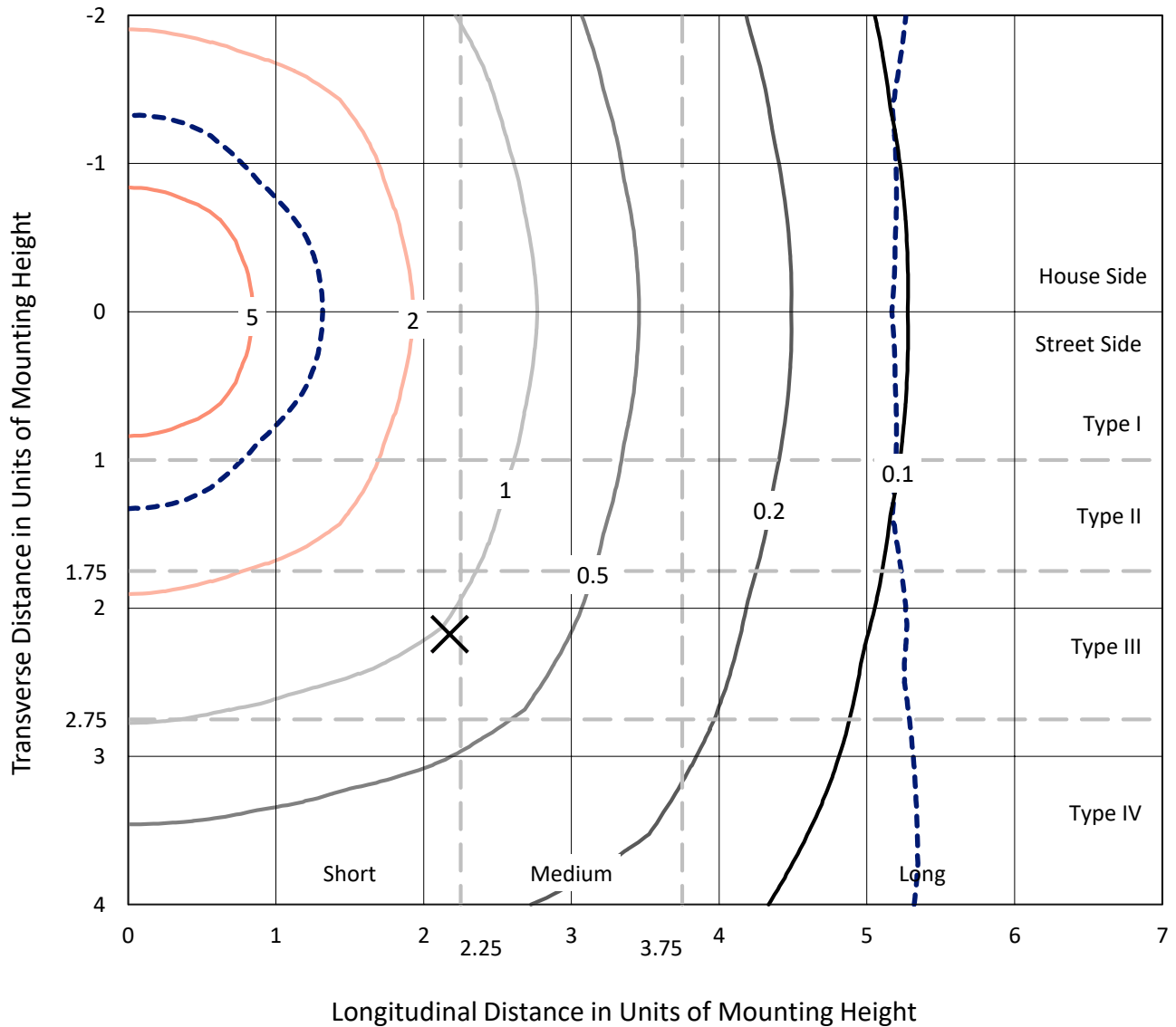


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### Iso-Footcandle Lines of Horizontal Illumination

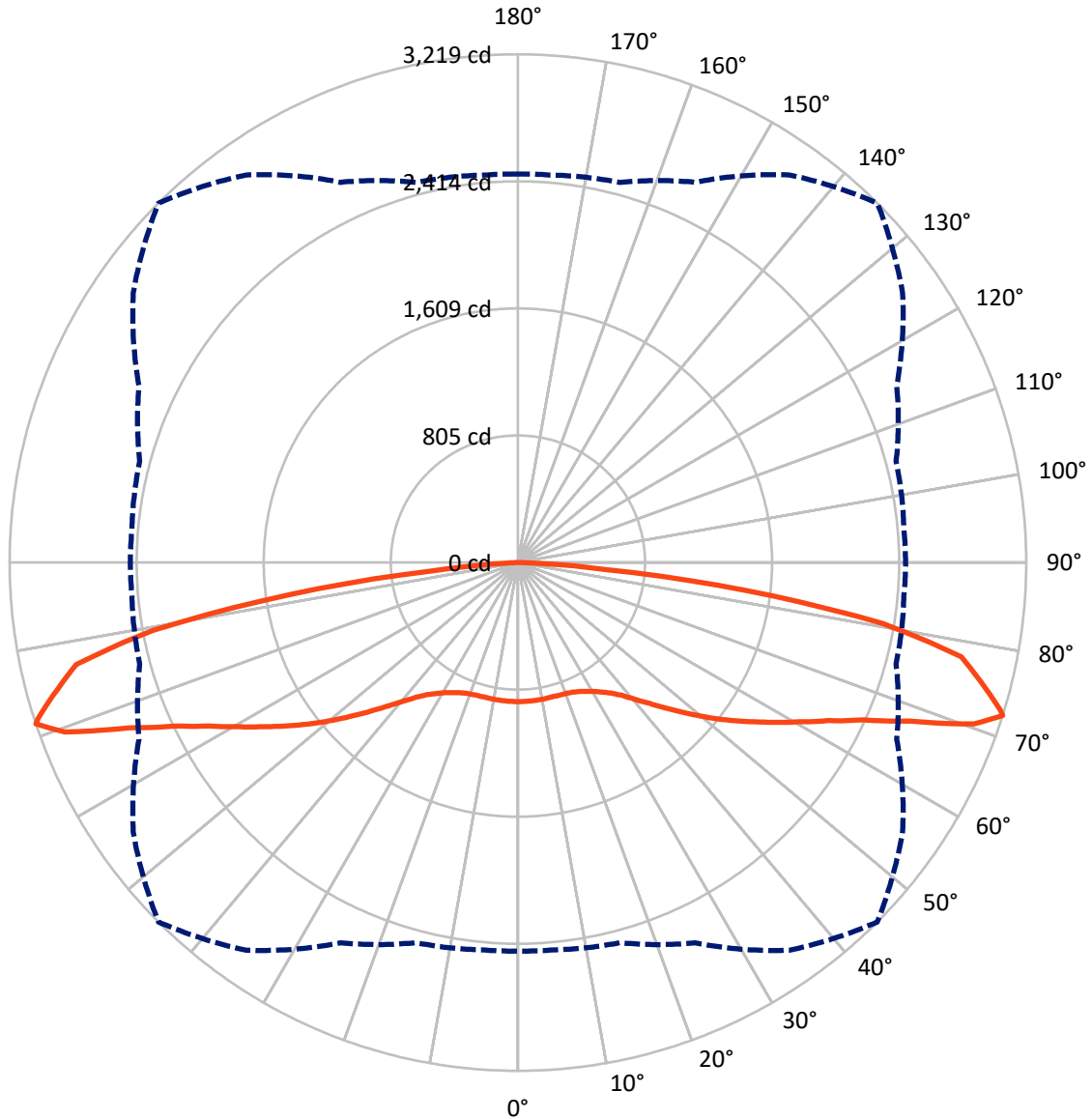
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.8 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	4662.8	0.0	4662.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4662.8	0.0	4662.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	9325.7	0.0	9325.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.0	0.9
10°-20°	249.7	2.7
20°-30°	419.4	4.5
30°-40°	638.3	6.8
40°-50°	1009.1	10.8
50°-60°	1541.3	16.5
60°-70°	2258.1	24.2
70°-80°	2565.3	27.5
80°-90°	560.3	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°	9325.7	100.0
0°-180°	9325.7	100.0



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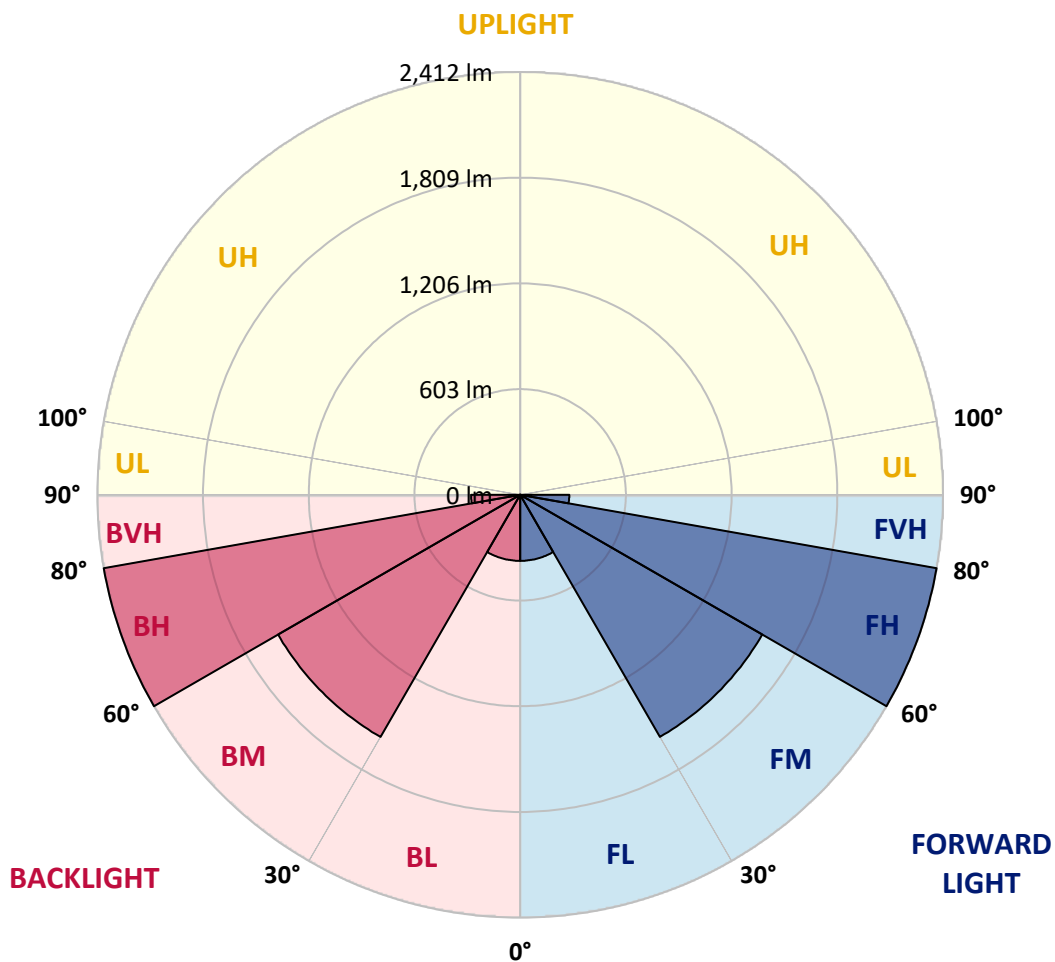
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	376.6	4.0			
FM	(30°-60°)	1594.4	17.1			
FH	(60°-80°)	2411.7	25.9			G2/5000
FVH	(80°-90°)	280.2	3.0			G3/500
BL	(0°-30°)	376.6	4.0	B1/500		
BM	(30°-60°)	1594.4	17.1	B2/2500		
BH	(60°-80°)	2411.7	25.9	B3/2500		G2/5000
BVH	(80°-90°)	280.2	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°	880.7	880.7	880.7	880.7	880.7	880.7	880.7	880.7	880.7	880.7	880.7
2.5°	882.4	882.2	881.6	881.0	880.6	880.4	880.4	880.4	880.2	880.0	880.2
5°	882.4	882.2	881.7	881.2	880.8	880.4	880.4	880.4	880.2	880.0	880.4
7.5°	881.2	881.6	881.1	880.6	880.5	880.4	880.2	880.0	879.8	879.4	879.6
10°	881.6	882.8	881.8	881.0	880.6	880.4	879.8	879.2	879.0	878.8	878.6
12.5°	882.2	883.4	882.3	881.2	880.8	880.4	879.8	879.2	878.7	878.2	877.8
15°	884.0	884.9	884.0	883.0	882.2	881.2	880.6	880.0	879.2	878.2	877.8
17.5°	885.2	886.7	885.6	884.6	883.5	882.4	881.8	881.2	880.6	880.0	879.3
20°	887.3	888.8	887.9	887.0	886.4	885.8	885.3	884.8	884.4	884.0	882.9
22.5°	891.2	892.4	892.2	891.8	892.0	892.2	892.3	892.4	892.2	891.8	890.8
25°	899.4	899.4	900.0	900.6	901.4	902.4	903.1	903.8	904.3	904.8	903.4
27.5°	913.6	914.8	915.2	915.6	917.2	918.6	920.3	922.0	922.9	923.8	922.4
30°	931.9	931.9	933.0	934.0	936.6	939.2	941.3	943.4	945.0	946.7	945.6
32.5°	955.4	957.0	958.5	960.0	963.2	966.3	969.9	973.6	975.7	977.8	976.1
35°	991.4	993.2	994.6	996.2	999.5	1002.8	1006.9	1011.0	1012.8	1014.6	1013.5
37.5°	1042.0	1042.0	1044.2	1046.2	1048.4	1050.4	1055.9	1061.4	1063.6	1065.8	1064.0
40°	1110.5	1110.8	1111.2	1111.7	1113.6	1115.6	1122.2	1128.8	1132.8	1136.8	1133.0
42.5°	1189.2	1192.5	1192.4	1192.2	1193.6	1194.9	1201.2	1207.6	1213.2	1218.8	1216.5
45°	1282.0	1281.4	1280.2	1279.1	1283.1	1287.2	1296.2	1305.3	1310.3	1315.3	1310.6
47.5°	1375.9	1375.0	1373.3	1371.6	1375.7	1379.8	1393.4	1406.9	1414.0	1421.1	1413.6
50°	1469.4	1473.0	1470.9	1468.8	1474.8	1480.8	1498.1	1515.2	1525.6	1536.0	1527.3
52.5°	1572.8	1575.6	1573.1	1570.7	1579.0	1587.3	1607.7	1628.0	1641.9	1655.8	1644.0
55°	1679.9	1676.6	1677.9	1679.3	1687.2	1695.0	1720.0	1745.0	1761.6	1778.2	1764.9
57.5°	1780.0	1781.2	1779.9	1778.6	1790.9	1803.2	1834.8	1866.3	1887.1	1907.9	1891.3
60°	1882.6	1882.8	1879.8	1876.8	1890.2	1903.6	1948.9	1994.2	2021.2	2048.2	2025.4
62.5°	1997.2	1996.9	1991.6	1986.3	2002.1	2018.0	2074.1	2130.2	2167.3	2204.4	2176.6
65°	2137.7	2134.1	2131.1	2128.1	2146.3	2164.6	2234.2	2303.9	2354.0	2404.0	2368.3
67.5°	2344.9	2342.2	2335.9	2329.6	2349.9	2370.3	2459.6	2548.8	2613.5	2678.2	2631.0
70°	2572.9	2567.8	2572.2	2576.6	2623.6	2670.6	2790.4	2910.1	2986.7	3063.4	2984.0
72°	2460.4	2462.6	2477.2	2491.8	2574.3	2656.8	2826.9	2997.0	3107.8	3218.6	3096.0
72.5°	2421.2	2423.0	2439.6	2456.2	2535.0	2613.6	2789.0	2964.4	3079.2	3194.0	3067.9
75°	2254.8	2259.6	2278.7	2297.9	2377.6	2457.4	2634.3	2811.2	2921.1	3031.0	2904.8
77.5°	1983.0	1998.0	2017.5	2037.0	2132.0	2227.0	2427.0	2626.9	2748.3	2869.7	2726.4
80°	1513.4	1508.0	1541.5	1574.9	1665.7	1756.5	1911.2	2066.0	2205.7	2345.5	2184.4
82.5°	588.1	601.1	670.5	739.8	835.0	930.2	1068.7	1207.3	1333.2	1459.1	1325.1
85°	60.6	69.0	93.9	118.8	170.7	222.6	307.0	391.5	474.3	557.0	467.2
87.5°	24.5	26.8	34.5	42.2	44.2	46.1	55.8	65.4	65.0	64.6	63.6
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°	880.7	880.7	880.7	880.7	880.7	880.7	880.7	880.7
2.5°	880.4	880.7	881.0	881.0	881.0	881.4	881.9	881.3
5°	880.6	880.8	881.0	881.0	881.0	881.4	881.9	881.3
7.5°	879.8	879.8	879.8	880.2	880.7	880.8	881.0	880.7
10°	878.2	878.4	878.6	879.0	879.4	879.9	880.4	880.7
12.5°	877.4	877.5	877.6	878.1	878.6	879.0	879.5	880.1
15°	877.4	877.5	877.6	878.0	878.2	878.9	879.5	880.1
17.5°	878.6	878.2	878.0	878.2	878.6	879.3	880.1	880.7
20°	881.8	881.4	881.0	881.0	881.0	881.7	882.5	882.5
22.5°	889.8	888.2	886.7	886.4	886.1	886.2	886.4	886.7
25°	902.0	899.6	897.2	896.5	895.8	895.4	895.1	895.7
27.5°	921.0	918.4	915.6	914.0	912.4	911.4	910.5	910.8
30°	944.6	941.4	938.2	935.6	932.8	931.6	930.4	930.7
32.5°	974.4	970.7	967.0	963.3	959.6	958.0	956.4	956.7
35°	1012.4	1008.1	1003.7	1000.7	997.6	995.1	992.6	994.7
37.5°	1062.2	1058.1	1054.1	1052.1	1050.2	1047.9	1045.6	1045.9
40°	1129.2	1124.9	1120.7	1119.1	1117.4	1114.6	1111.7	1112.3
42.5°	1214.2	1207.9	1201.6	1198.6	1195.6	1194.2	1192.8	1193.7
45°	1306.0	1299.6	1293.2	1290.7	1288.1	1284.5	1280.9	1284.2
47.5°	1406.0	1398.1	1390.1	1385.5	1381.0	1382.2	1383.4	1380.7
50°	1518.6	1505.1	1491.7	1486.4	1481.1	1481.1	1481.2	1480.8
52.5°	1632.2	1613.7	1595.2	1590.6	1586.1	1585.0	1584.0	1582.8
55°	1751.6	1728.9	1706.2	1697.7	1689.2	1690.4	1691.6	1695.0
57.5°	1874.8	1844.8	1814.8	1805.1	1795.4	1796.2	1796.9	1802.3
60°	2002.6	1963.8	1925.1	1914.4	1903.7	1906.6	1909.4	1912.7
62.5°	2148.9	2102.0	2055.0	2040.8	2026.4	2030.0	2033.6	2042.4
65°	2332.6	2274.0	2215.6	2200.6	2185.7	2187.4	2189.0	2204.1
67.5°	2583.8	2505.8	2427.8	2414.1	2400.4	2402.8	2405.2	2429.7
70°	2904.7	2789.2	2673.6	2616.8	2560.0	2551.0	2542.2	2555.1
72°	2973.5	2810.3	2647.1	2563.2	2479.4	2466.3	2453.2	2454.4
72.5°	2941.8	2776.8	2611.8	2530.4	2449.0	2438.3	2427.6	2425.4
75°	2778.6	2617.2	2455.9	2371.8	2287.6	2267.2	2246.9	2246.9
77.5°	2583.2	2379.8	2176.4	2085.6	1994.8	1973.5	1952.2	1935.7
80°	2023.4	1841.1	1658.8	1566.6	1474.5	1440.4	1406.4	1386.1
82.5°	1191.0	1023.4	855.6	738.6	621.6	586.4	551.3	502.5
85°	377.3	290.3	203.3	158.6	114.0	92.2	70.3	61.5
87.5°	62.8	51.0	39.2	37.8	36.5	28.6	20.8	17.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)