

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: P144257

Luminaire Tested: **LDRL-5XQ-F04-E-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144257  
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-7060  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (28) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10477 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - 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

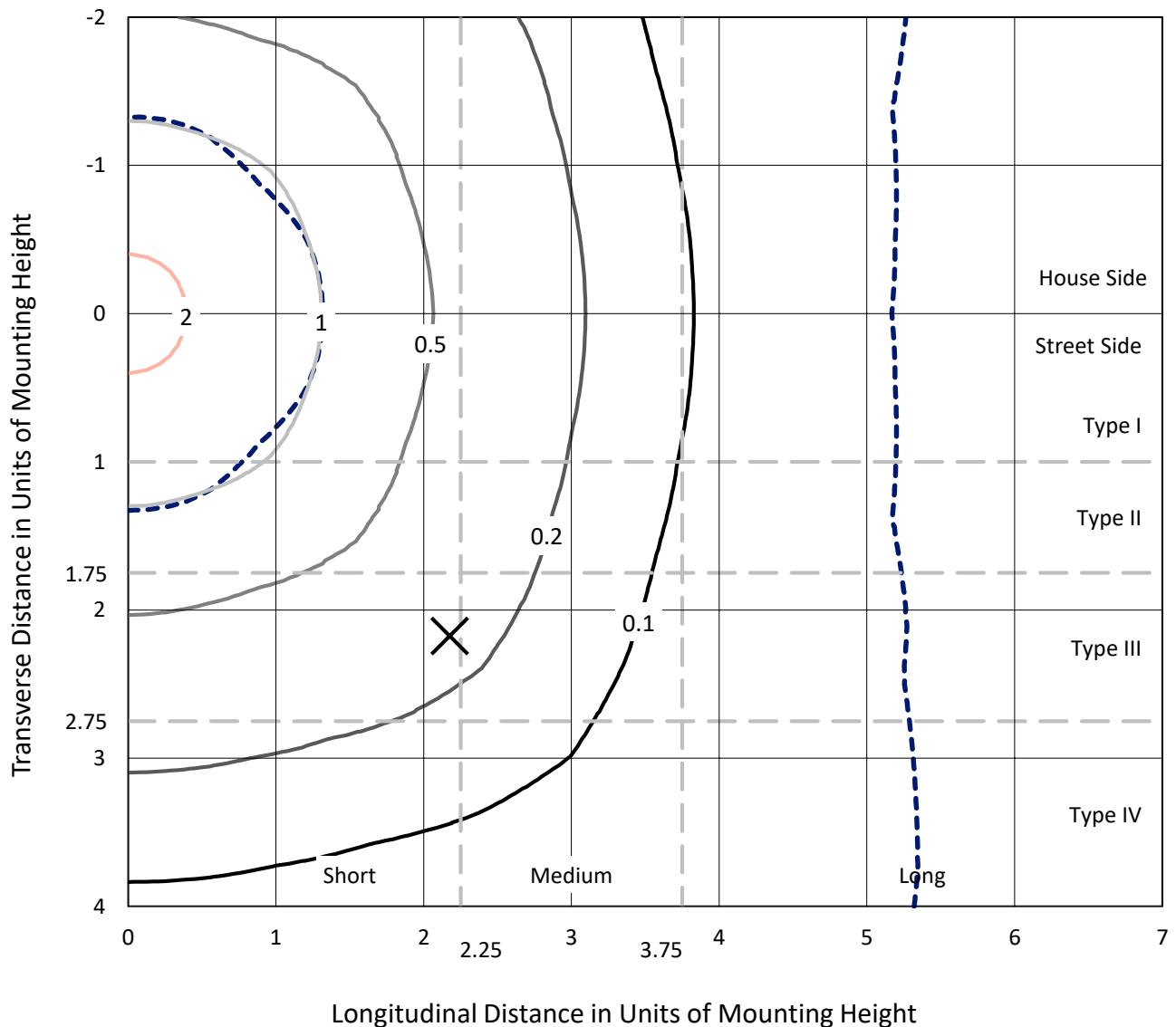


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### Iso-Footcandle Lines of Horizontal Illumination

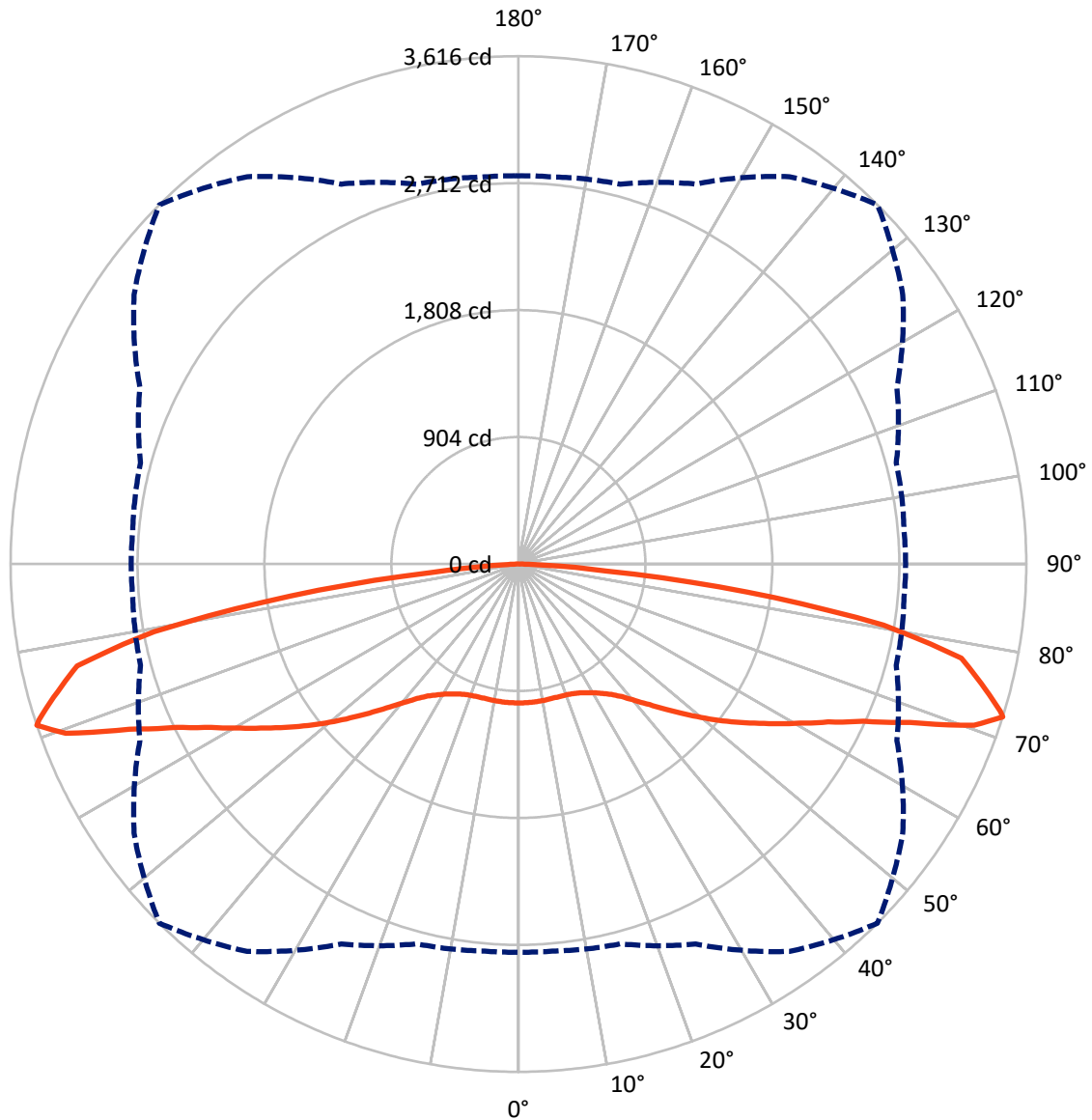
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.5 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	5238.5	0.0	5238.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5238.5	0.0	5238.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10477.0	0.0	10477.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.4	0.9
10°-20°	280.5	2.7
20°-30°	471.2	4.5
30°-40°	717.2	6.8
40°-50°	1133.7	10.8
50°-60°	1731.6	16.5
60°-70°	2536.8	24.2
70°-80°	2882.0	27.5
80°-90°	629.5	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°	10477.0	100.0
0°-180°	10477.0	100.0



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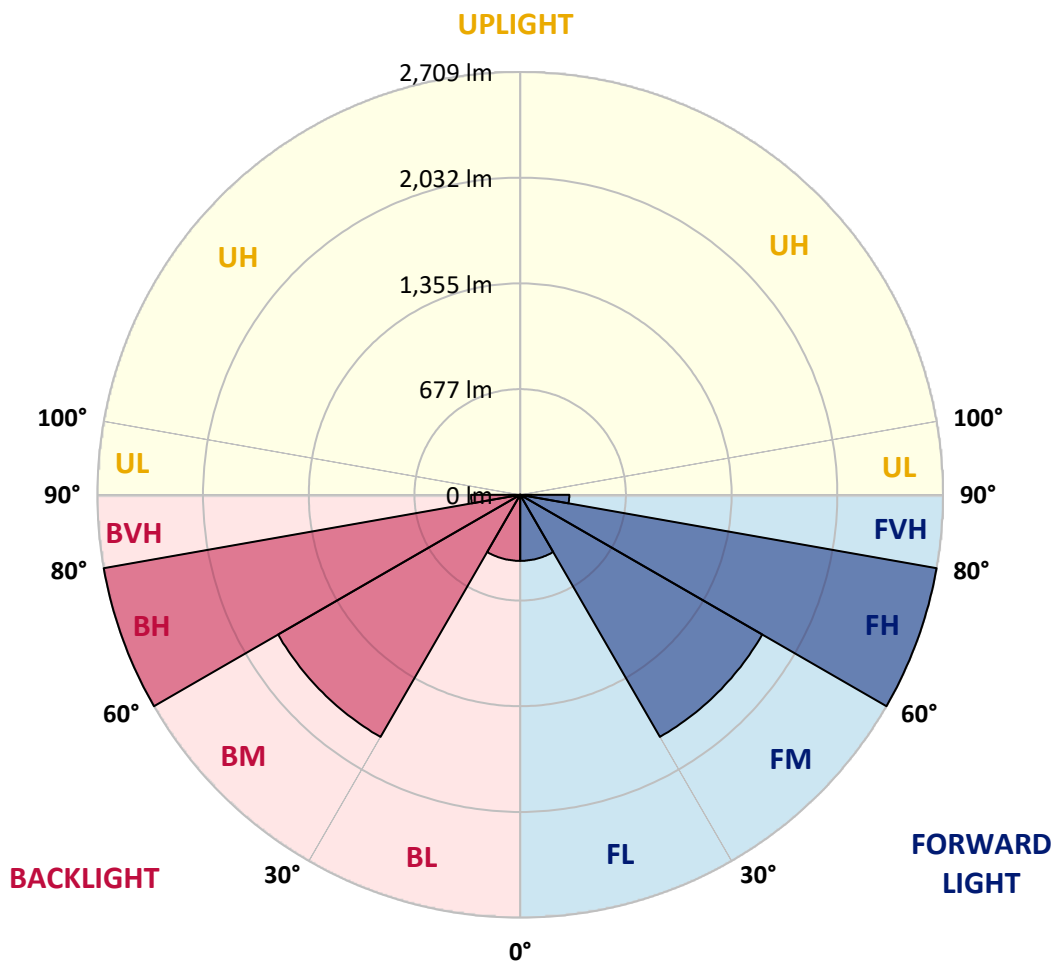
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	423.1	4.0			
FM (30°-60°)	1791.2	17.1			
FH (60°-80°)	2709.4	25.9			G2/5000
FVH (80°-90°)	314.8	3.0			G3/500
BL (0°-30°)	423.1	4.0	B1/500		
BM (30°-60°)	1791.2	17.1	B2/2500		
BH (60°-80°)	2709.4	25.9	B4/5000		G2/5000
BVH (80°-90°)	314.8	3.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4
2.5°	991.4	991.0	990.4	989.7	989.4	989.0	989.0	989.0	988.9	988.7	988.9
5°	991.4	991.1	990.6	990.1	989.6	989.0	989.0	989.0	988.9	988.8	989.1
7.5°	990.1	990.4	989.9	989.4	989.2	989.0	988.9	988.7	988.4	988.0	988.2
10°	990.4	991.8	990.7	989.7	989.4	989.0	988.4	987.7	987.5	987.4	987.0
12.5°	991.0	992.4	991.2	990.0	989.6	989.0	988.4	987.7	987.2	986.7	986.2
15°	993.1	994.2	993.1	992.0	991.0	990.0	989.4	988.7	987.7	986.6	986.2
17.5°	994.5	996.2	995.0	993.8	992.6	991.4	990.8	990.1	989.4	988.7	987.8
20°	996.8	998.5	997.5	996.5	995.8	995.2	994.6	994.1	993.6	993.1	991.9
22.5°	1001.2	1002.6	1002.2	1001.9	1002.1	1002.2	1002.4	1002.6	1002.3	1002.0	1000.8
25°	1010.4	1010.4	1011.1	1011.8	1012.8	1013.8	1014.6	1015.5	1016.0	1016.4	1015.0
27.5°	1026.4	1027.6	1028.2	1028.7	1030.4	1032.0	1033.9	1035.8	1036.8	1037.8	1036.3
30°	1046.9	1046.9	1048.1	1049.4	1052.2	1055.2	1057.5	1059.8	1061.7	1063.6	1062.4
32.5°	1073.4	1075.1	1076.8	1078.5	1082.1	1085.6	1089.7	1093.8	1096.1	1098.4	1096.6
35°	1113.7	1115.8	1117.5	1119.2	1122.9	1126.6	1131.2	1135.8	1137.8	1139.8	1138.6
37.5°	1170.7	1170.6	1173.0	1175.4	1177.8	1180.2	1186.2	1192.4	1194.9	1197.4	1195.4
40°	1247.6	1247.9	1248.4	1248.9	1251.1	1253.4	1260.8	1268.2	1272.6	1277.1	1272.8
42.5°	1336.0	1339.7	1339.6	1339.4	1340.9	1342.4	1349.6	1356.6	1362.9	1369.2	1366.6
45°	1440.4	1439.7	1438.4	1437.0	1441.6	1446.1	1456.3	1466.4	1472.0	1477.6	1472.4
47.5°	1545.8	1544.8	1542.9	1541.0	1545.6	1550.2	1565.4	1580.6	1588.6	1596.6	1588.1
50°	1650.8	1654.8	1652.5	1650.1	1656.9	1663.6	1683.0	1702.2	1714.0	1725.6	1715.8
52.5°	1767.0	1770.0	1767.3	1764.6	1773.9	1783.2	1806.1	1829.0	1844.6	1860.2	1847.0
55°	1887.3	1883.6	1885.1	1886.6	1895.4	1904.2	1932.3	1960.4	1979.1	1997.8	1982.8
57.5°	1999.8	2001.2	1999.6	1998.0	2012.0	2025.8	2061.3	2096.7	2120.1	2143.4	2124.8
60°	2115.0	2115.4	2111.9	2108.5	2123.6	2138.7	2189.5	2240.4	2270.7	2301.0	2275.4
62.5°	2243.8	2243.4	2237.5	2231.6	2249.4	2267.2	2330.2	2393.2	2434.8	2476.5	2445.3
65°	2401.6	2397.6	2394.2	2390.8	2411.3	2431.8	2510.0	2588.3	2644.6	2700.8	2660.6
67.5°	2634.4	2631.4	2624.2	2617.1	2640.0	2662.9	2763.2	2863.5	2936.1	3008.8	2955.8
70°	2890.6	2884.8	2889.7	2894.6	2947.5	3000.4	3134.8	3269.4	3355.4	3441.5	3352.4
72°	2764.2	2766.6	2783.0	2799.4	2892.1	2984.8	3175.8	3367.0	3491.5	3616.0	3478.3
72.5°	2720.2	2722.1	2740.8	2759.4	2847.9	2936.3	3133.3	3330.4	3459.3	3588.2	3446.6
75°	2533.1	2538.5	2560.0	2581.6	2671.1	2760.8	2959.5	3158.2	3281.8	3405.2	3263.4
77.5°	2227.8	2244.8	2266.6	2288.4	2395.2	2501.9	2726.6	2951.2	3087.6	3224.0	3063.0
80°	1700.2	1694.2	1731.8	1769.4	1871.4	1973.4	2147.2	2321.0	2478.0	2635.1	2454.1
82.5°	660.8	675.2	753.2	831.2	938.0	1045.0	1200.6	1356.4	1497.8	1639.2	1488.6
85°	68.1	77.6	105.6	133.5	191.8	250.0	344.9	439.8	532.8	625.8	524.9
87.5°	27.4	30.2	38.8	47.4	49.6	51.8	62.7	73.5	73.0	72.5	71.5
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°	989.4	989.4	989.4	989.4	989.4	989.4	989.4	989.4
2.5°	989.0	989.4	989.8	989.7	989.7	990.2	990.8	990.1
5°	989.4	989.6	989.8	989.7	989.7	990.2	990.8	990.1
7.5°	988.4	988.4	988.4	988.9	989.4	989.6	989.8	989.4
10°	986.7	986.8	987.0	987.5	988.0	988.5	989.0	989.4
12.5°	985.7	985.8	986.0	986.5	987.0	987.5	988.0	988.7
15°	985.6	985.8	986.0	986.4	986.7	987.4	988.0	988.7
17.5°	987.0	986.7	986.4	986.7	987.0	987.8	988.7	989.4
20°	990.8	990.2	989.7	989.7	989.7	990.6	991.4	991.4
22.5°	999.6	997.8	996.2	995.8	995.4	995.6	995.8	996.2
25°	1013.4	1010.7	1008.0	1007.2	1006.3	1006.0	1005.6	1006.3
27.5°	1034.8	1031.7	1028.6	1026.8	1025.0	1023.9	1022.9	1023.3
30°	1061.2	1057.6	1054.1	1051.0	1048.0	1046.6	1045.3	1045.6
32.5°	1094.8	1090.5	1086.3	1082.2	1078.2	1076.3	1074.4	1074.8
35°	1137.4	1132.6	1127.6	1124.2	1120.8	1118.0	1115.1	1117.5
37.5°	1193.4	1188.8	1184.2	1182.0	1179.8	1177.3	1174.8	1175.1
40°	1268.6	1263.8	1259.1	1257.2	1255.4	1252.1	1248.9	1249.6
42.5°	1364.1	1357.0	1349.9	1346.5	1343.2	1341.6	1340.0	1341.1
45°	1467.1	1460.0	1452.9	1450.0	1447.2	1443.1	1439.0	1442.7
47.5°	1579.6	1570.6	1561.6	1556.6	1551.5	1552.9	1554.2	1551.2
50°	1706.0	1690.9	1675.8	1669.9	1664.0	1664.0	1664.0	1663.7
52.5°	1833.8	1812.9	1792.1	1787.0	1781.9	1780.7	1779.6	1778.2
55°	1968.0	1942.4	1916.8	1907.3	1897.8	1899.1	1900.5	1904.2
57.5°	2106.2	2072.5	2038.8	2027.9	2017.0	2017.9	2018.8	2024.8
60°	2249.9	2206.3	2162.8	2150.7	2138.6	2141.9	2145.1	2148.9
62.5°	2414.2	2361.5	2308.8	2292.7	2276.6	2280.6	2284.7	2294.6
65°	2620.5	2554.8	2489.0	2472.3	2455.5	2457.4	2459.2	2476.2
67.5°	2902.8	2815.2	2727.6	2712.2	2696.8	2699.5	2702.2	2729.6
70°	3263.2	3133.5	3003.7	2939.8	2876.0	2866.0	2856.0	2870.6
72°	3340.6	3157.2	2973.9	2879.7	2785.5	2770.8	2756.0	2757.4
72.5°	3305.0	3119.6	2934.2	2842.8	2751.3	2739.3	2727.2	2724.9
75°	3121.6	2940.4	2759.1	2664.5	2570.0	2547.2	2524.3	2524.3
77.5°	2902.1	2673.6	2445.0	2343.0	2241.0	2217.1	2193.2	2174.6
80°	2273.2	2068.4	1863.6	1760.0	1656.5	1618.2	1580.0	1557.3
82.5°	1338.1	1149.6	961.2	829.8	698.3	658.9	619.4	564.5
85°	423.9	326.1	228.4	178.2	128.1	103.5	78.9	69.1
87.5°	70.5	57.3	44.0	42.5	41.0	32.2	23.4	19.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)