

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: P144253

Luminaire Tested: **LDRL-5XQ-F04-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144253  
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-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (28) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8617.5 lumens  
Efficiency: N/A  
Efficacy: 84.3 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

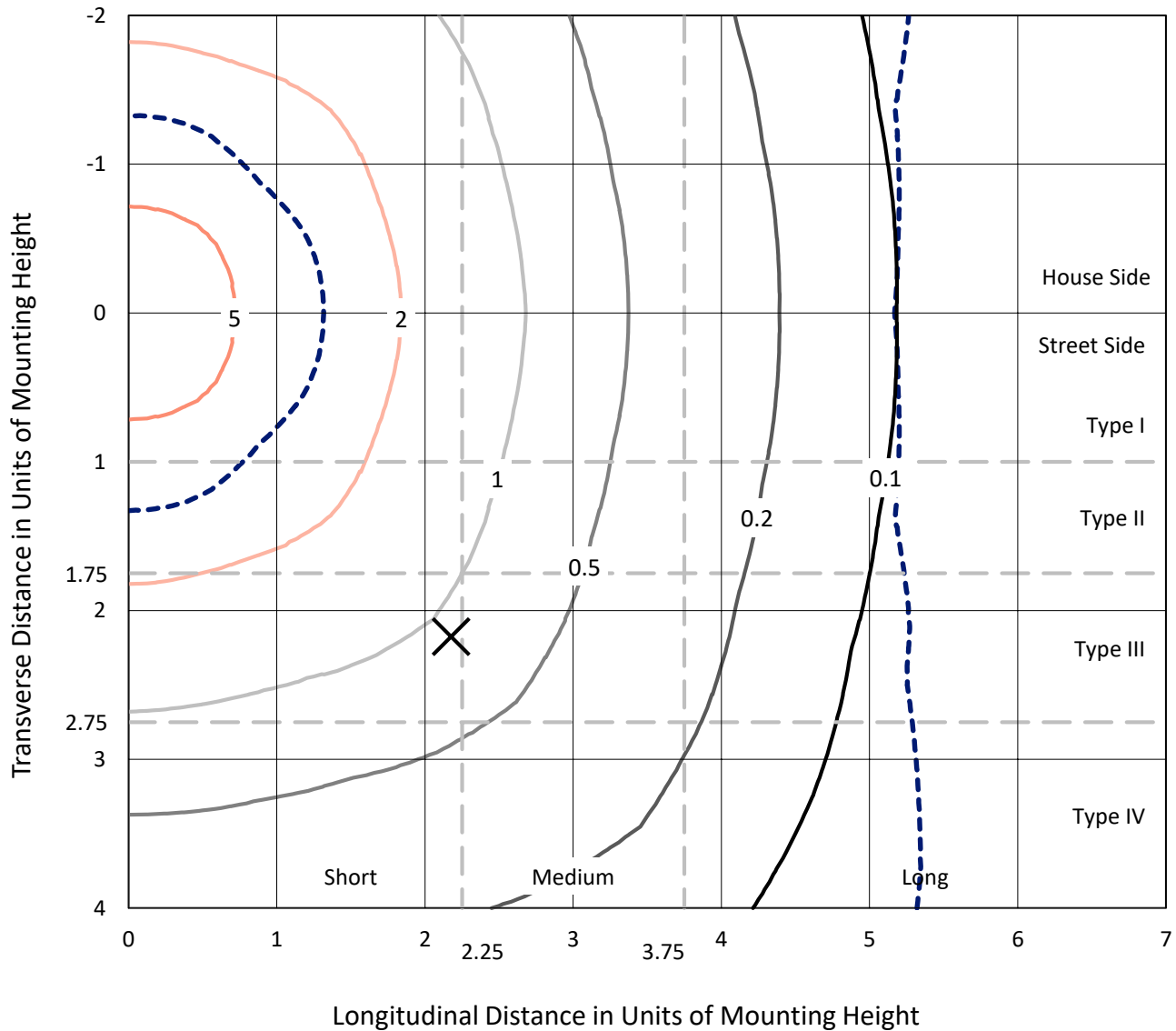


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### Iso-Footcandle Lines of Horizontal Illumination

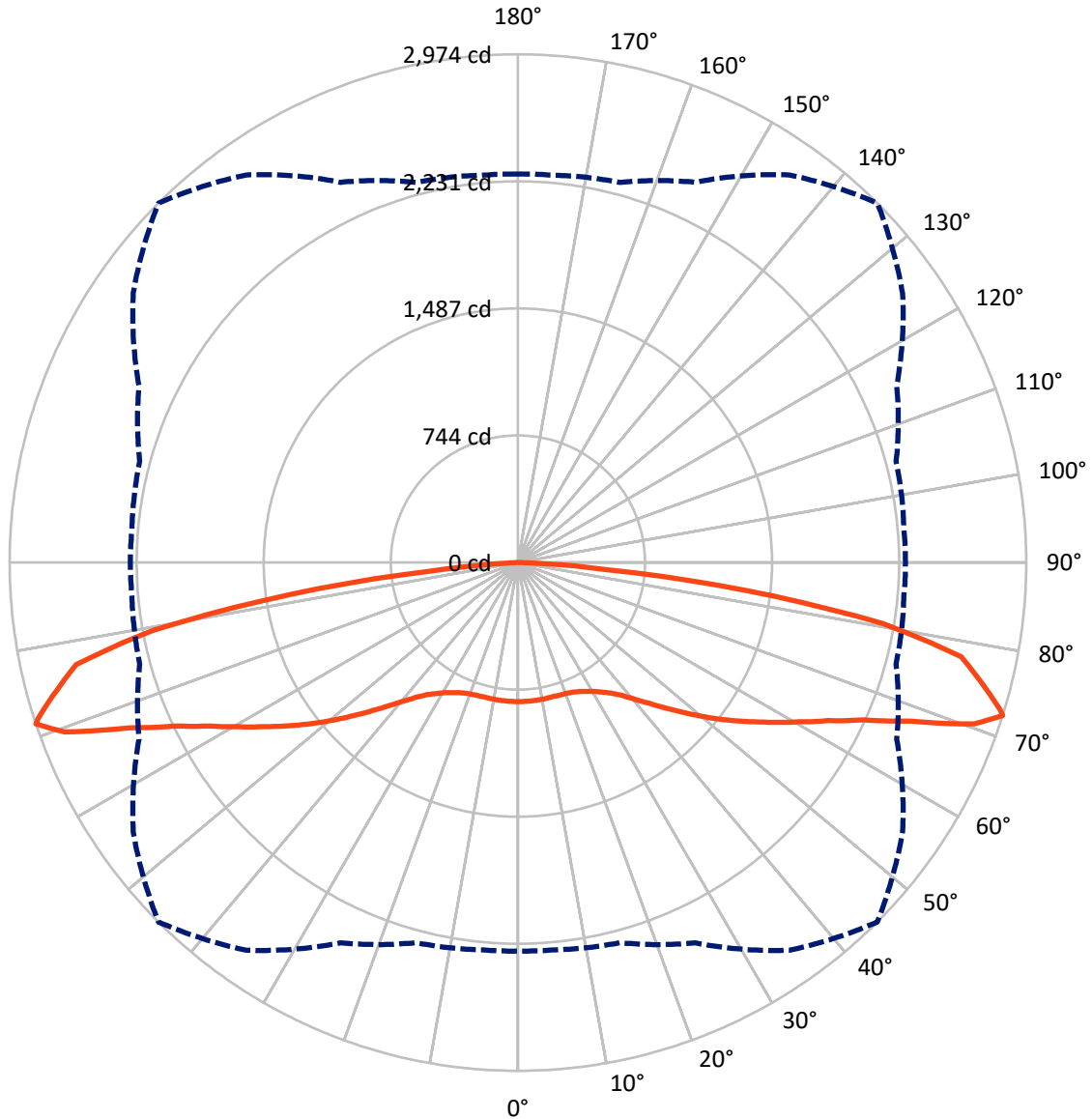
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.1 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	4308.8	0.0	4308.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4308.8	0.0	4308.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8617.5	0.0	8617.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	0.9
10°-20°	230.7	2.7
20°-30°	387.6	4.5
30°-40°	589.9	6.8
40°-50°	932.5	10.8
50°-60°	1424.3	16.5
60°-70°	2086.6	24.2
70°-80°	2370.5	27.5
80°-90°	517.8	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°	8617.5	100.0
0°-180°	8617.5	100.0



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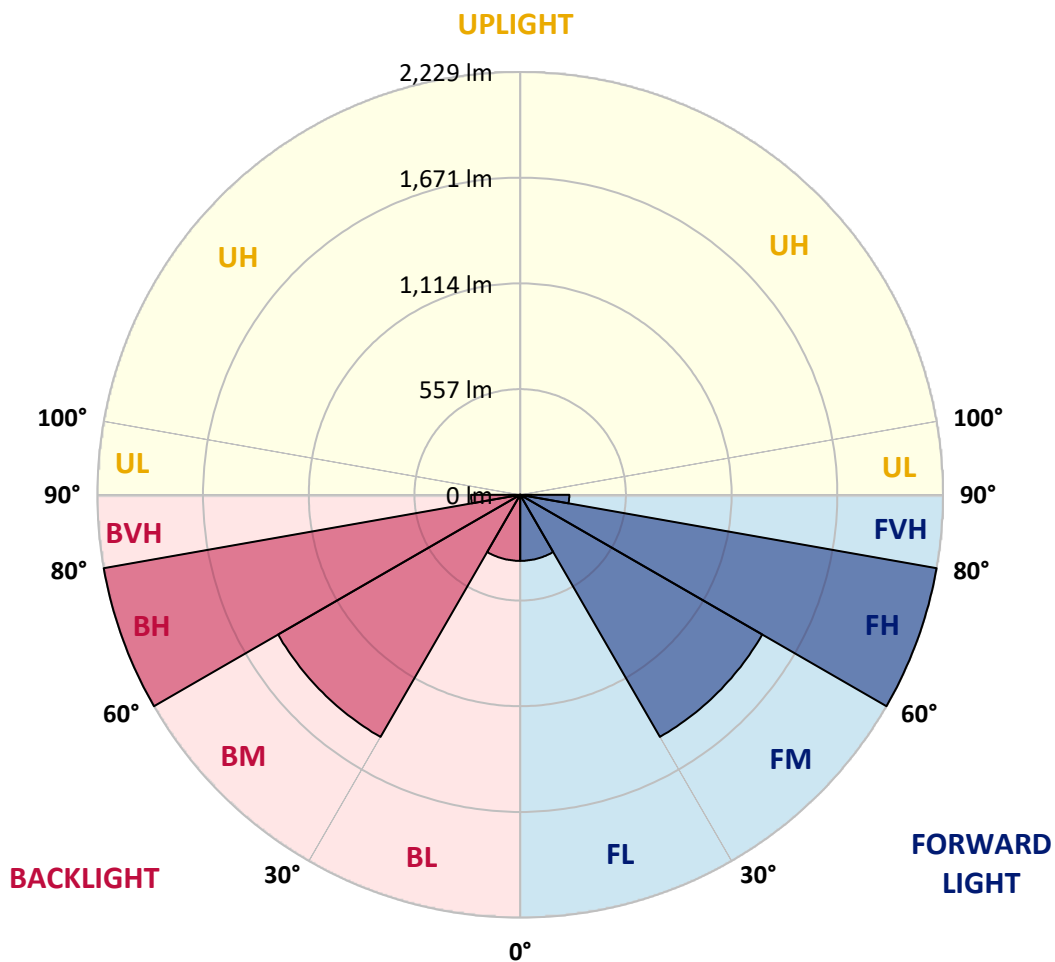
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	348.0	4.0			
FM	(30°-60°)	1473.3	17.1			
FH	(60°-80°)	2228.6	25.9			G2/5000
FVH	(80°-90°)	258.9	3.0			G3/500
BL	(0°-30°)	348.0	4.0	B1/500		
BM	(30°-60°)	1473.3	17.1	B2/2500		
BH	(60°-80°)	2228.6	25.9	B3/2500		G2/5000
BVH	(80°-90°)	258.9	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°	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8
2.5°	815.4	815.2	814.6	814.0	813.8	813.5	813.5	813.5	813.4	813.2	813.4
5°	815.4	815.2	814.8	814.4	813.9	813.5	813.5	813.5	813.4	813.2	813.5
7.5°	814.4	814.6	814.2	813.8	813.6	813.5	813.4	813.2	813.0	812.7	812.8
10°	814.6	815.8	814.9	814.1	813.8	813.5	813.0	812.4	812.2	812.1	811.8
12.5°	815.2	816.3	815.3	814.4	813.9	813.6	813.0	812.4	812.0	811.6	811.2
15°	816.8	817.7	816.9	816.0	815.2	814.4	813.8	813.2	812.4	811.6	811.1
17.5°	818.0	819.4	818.4	817.4	816.4	815.4	814.9	814.4	813.8	813.2	812.6
20°	819.9	821.3	820.5	819.6	819.1	818.6	818.1	817.7	817.3	816.8	815.9
22.5°	823.6	824.6	824.4	824.1	824.2	824.4	824.5	824.6	824.4	824.1	823.1
25°	831.0	831.0	831.6	832.2	833.0	833.8	834.6	835.2	835.6	836.0	834.8
27.5°	844.2	845.3	845.7	846.1	847.5	848.9	850.4	852.0	852.8	853.6	852.4
30°	861.2	861.2	862.2	863.2	865.5	867.8	869.8	871.8	873.3	874.8	873.8
32.5°	882.9	884.3	885.7	887.1	890.0	892.9	896.3	899.6	901.6	903.6	902.0
35°	916.1	917.8	919.1	920.5	923.6	926.6	930.4	934.2	935.8	937.5	936.6
37.5°	962.9	962.9	964.8	966.8	968.7	970.7	975.7	980.7	982.8	984.9	983.2
40°	1026.2	1026.4	1026.9	1027.3	1029.1	1030.9	1037.0	1043.2	1046.8	1050.4	1046.9
42.5°	1098.9	1102.0	1101.8	1101.7	1103.0	1104.2	1110.0	1115.8	1121.0	1126.2	1124.1
45°	1184.7	1184.2	1183.1	1182.0	1185.7	1189.4	1197.8	1206.2	1210.8	1215.4	1211.1
47.5°	1271.4	1270.6	1269.0	1267.5	1271.3	1275.1	1287.6	1300.1	1306.6	1313.2	1306.2
50°	1357.8	1361.2	1359.2	1357.2	1362.8	1368.4	1384.3	1400.2	1409.8	1419.4	1411.3
52.5°	1453.4	1455.9	1453.7	1451.4	1459.1	1466.8	1485.6	1504.4	1517.2	1530.0	1519.2
55°	1552.4	1549.3	1550.5	1551.8	1559.0	1566.2	1589.4	1612.6	1627.8	1643.2	1630.9
57.5°	1644.8	1646.0	1644.7	1643.4	1654.9	1666.3	1695.4	1724.6	1743.8	1763.0	1747.7
60°	1739.6	1739.9	1737.1	1734.4	1746.7	1759.1	1800.9	1842.7	1867.6	1892.6	1871.6
62.5°	1845.5	1845.2	1840.4	1835.5	1850.1	1864.7	1916.6	1968.4	2002.7	2037.0	2011.4
65°	1975.4	1972.0	1969.2	1966.4	1983.3	2000.2	2064.6	2129.0	2175.2	2221.4	2188.4
67.5°	2166.9	2164.4	2158.5	2152.6	2171.4	2190.2	2272.8	2355.2	2415.0	2474.8	2431.2
70°	2377.6	2372.8	2376.9	2380.9	2424.4	2467.9	2578.5	2689.1	2759.9	2830.7	2757.4
72°	2273.6	2275.6	2289.0	2302.6	2378.8	2455.0	2612.2	2769.4	2871.8	2974.2	2861.0
72.5°	2237.4	2239.0	2254.4	2269.6	2342.4	2415.2	2577.2	2739.3	2845.3	2951.4	2834.8
75°	2083.5	2088.0	2105.6	2123.4	2197.1	2270.8	2434.3	2597.8	2699.3	2800.9	2684.2
77.5°	1832.4	1846.4	1864.3	1882.3	1970.1	2057.8	2242.6	2427.4	2539.6	2651.8	2519.4
80°	1398.5	1393.5	1424.4	1455.4	1539.2	1623.1	1766.1	1909.0	2038.2	2167.4	2018.6
82.5°	543.4	555.4	619.6	683.6	771.6	859.4	987.5	1115.6	1232.0	1348.4	1224.5
85°	56.0	63.8	86.8	109.8	157.8	205.7	283.7	361.8	438.2	514.8	431.7
87.5°	22.6	24.8	31.9	39.0	40.8	42.7	51.6	60.4	60.0	59.6	58.8
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°	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8
2.5°	813.5	813.8	814.0	814.1	814.1	814.5	814.9	814.3
5°	813.8	813.9	814.0	814.1	814.1	814.5	814.9	814.3
7.5°	812.9	813.0	813.0	813.4	813.8	813.9	814.0	813.8
10°	811.6	811.7	811.8	812.2	812.6	813.1	813.5	813.8
12.5°	810.7	810.8	811.0	811.4	811.8	812.2	812.7	813.2
15°	810.7	810.8	811.0	811.3	811.6	812.1	812.7	813.2
17.5°	811.8	811.6	811.2	811.6	811.8	812.6	813.2	813.8
20°	814.9	814.5	814.1	814.1	814.0	814.8	815.4	815.5
22.5°	822.2	820.8	819.4	819.1	818.8	818.9	819.1	819.4
25°	833.6	831.4	829.1	828.4	827.7	827.4	827.2	827.7
27.5°	851.2	848.6	846.1	844.6	843.0	842.2	841.4	841.7
30°	872.9	870.0	867.0	864.5	862.0	860.9	859.8	860.1
32.5°	900.4	897.0	893.5	890.2	886.8	885.3	883.8	884.0
35°	935.6	931.6	927.5	924.7	922.0	919.6	917.2	919.1
37.5°	981.6	977.8	974.0	972.2	970.4	968.4	966.2	966.5
40°	1043.4	1039.5	1035.6	1034.1	1032.6	1029.9	1027.2	1027.8
42.5°	1122.1	1116.2	1110.4	1107.6	1104.8	1103.5	1102.2	1103.1
45°	1206.8	1200.9	1195.0	1192.7	1190.3	1187.0	1183.6	1186.7
47.5°	1299.3	1291.9	1284.5	1280.3	1276.2	1277.2	1278.4	1275.9
50°	1403.2	1390.8	1378.4	1373.5	1368.7	1368.7	1368.6	1368.4
52.5°	1508.2	1491.1	1474.0	1469.8	1465.6	1464.7	1463.7	1462.6
55°	1618.6	1597.6	1576.6	1568.8	1561.0	1562.1	1563.2	1566.3
57.5°	1732.4	1704.6	1677.0	1668.0	1659.1	1659.8	1660.4	1665.5
60°	1850.5	1814.7	1778.9	1769.0	1759.2	1761.8	1764.4	1767.5
62.5°	1985.7	1942.4	1899.0	1885.8	1872.6	1875.9	1879.2	1887.3
65°	2155.4	2101.4	2047.3	2033.5	2019.7	2021.2	2022.8	2036.7
67.5°	2387.6	2315.5	2243.5	2230.8	2218.1	2220.3	2222.6	2245.2
70°	2684.1	2577.4	2470.6	2418.1	2365.6	2357.4	2349.2	2361.1
72°	2747.6	2596.9	2446.1	2368.6	2291.1	2279.0	2266.9	2268.0
72.5°	2718.4	2565.9	2413.5	2338.2	2263.0	2253.1	2243.2	2241.3
75°	2567.6	2418.5	2269.4	2191.6	2113.8	2095.0	2076.2	2076.3
77.5°	2387.0	2199.0	2011.0	1927.2	1843.3	1823.6	1804.0	1788.7
80°	1869.8	1701.3	1532.8	1447.7	1362.6	1331.0	1299.6	1280.9
82.5°	1100.6	945.6	790.6	682.5	574.4	541.9	509.4	464.3
85°	348.6	268.2	187.8	146.6	105.3	85.1	65.0	56.9
87.5°	58.0	47.1	36.2	35.0	33.8	26.5	19.2	16.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)