

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: P144240

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144240
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
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9276.3 lumens
Efficiency: N/A
Efficacy: 123.4 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

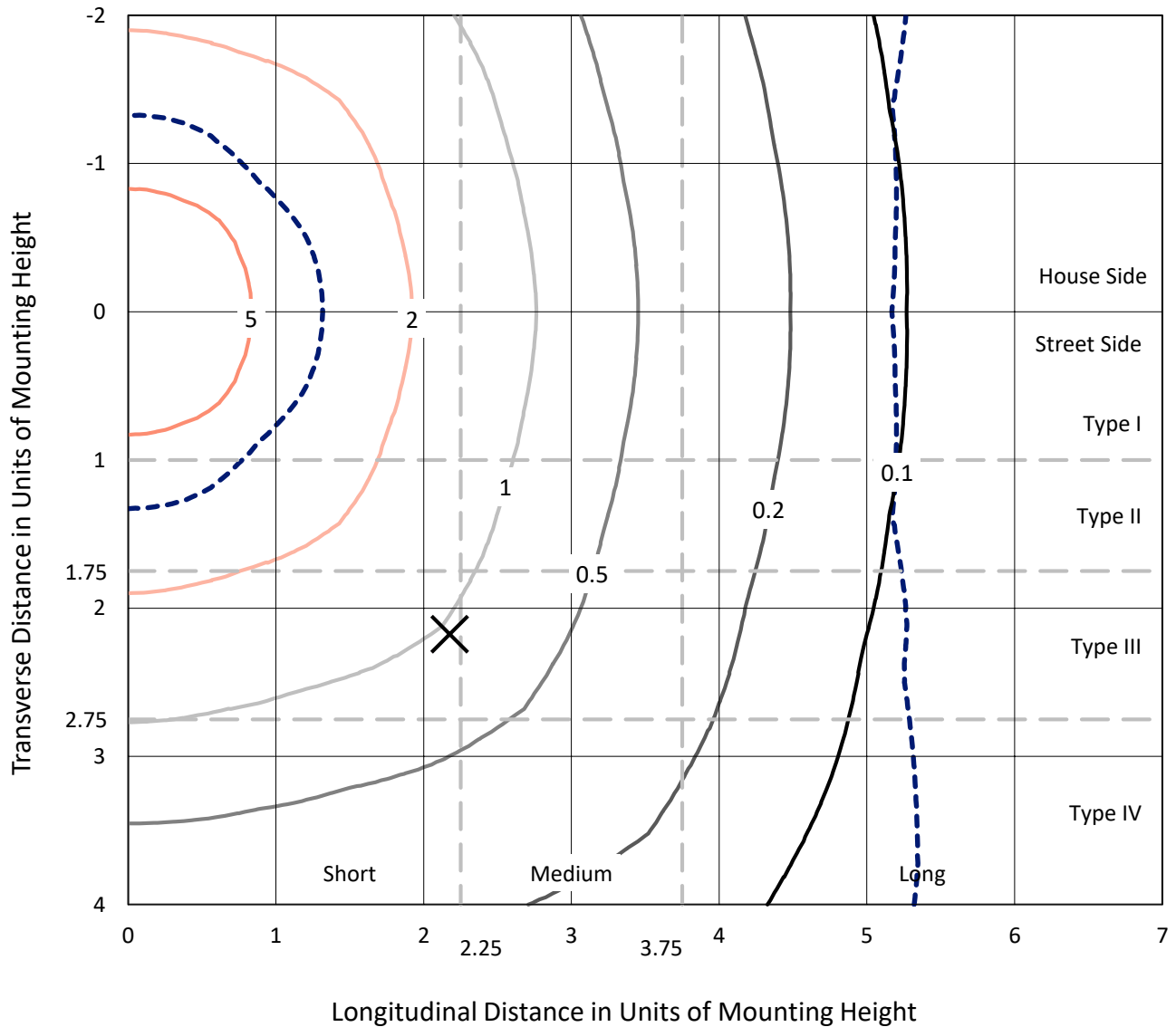
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

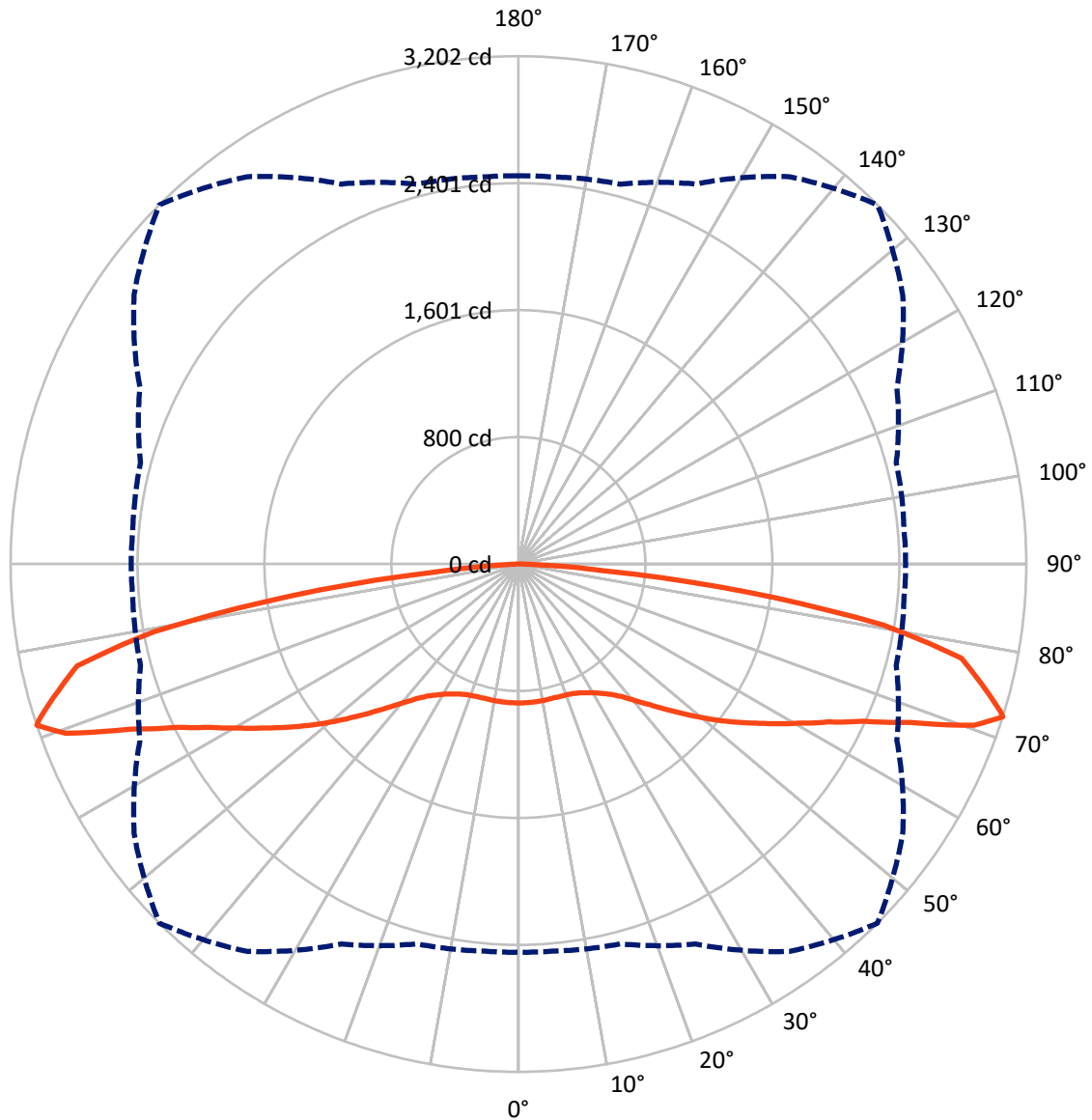
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 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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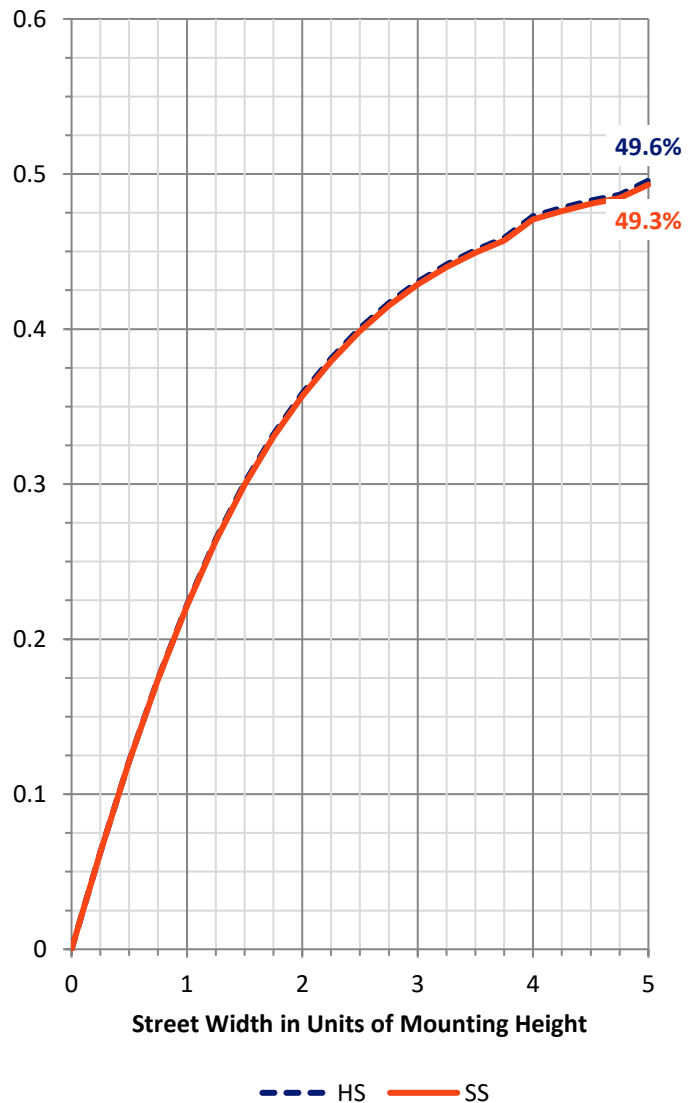
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4638.2	0.0	4638.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4638.2	0.0	4638.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	9276.3	0.0	9276.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	0.9
10°-20°	248.4	2.7
20°-30°	417.2	4.5
30°-40°	635.0	6.8
40°-50°	1003.8	10.8
50°-60°	1533.1	16.5
60°-70°	2246.1	24.2
70°-80°	2551.7	27.5
80°-90°	557.4	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°	9276.3	100.0
0°-180°	9276.3	100.0

Coefficient of Utilization



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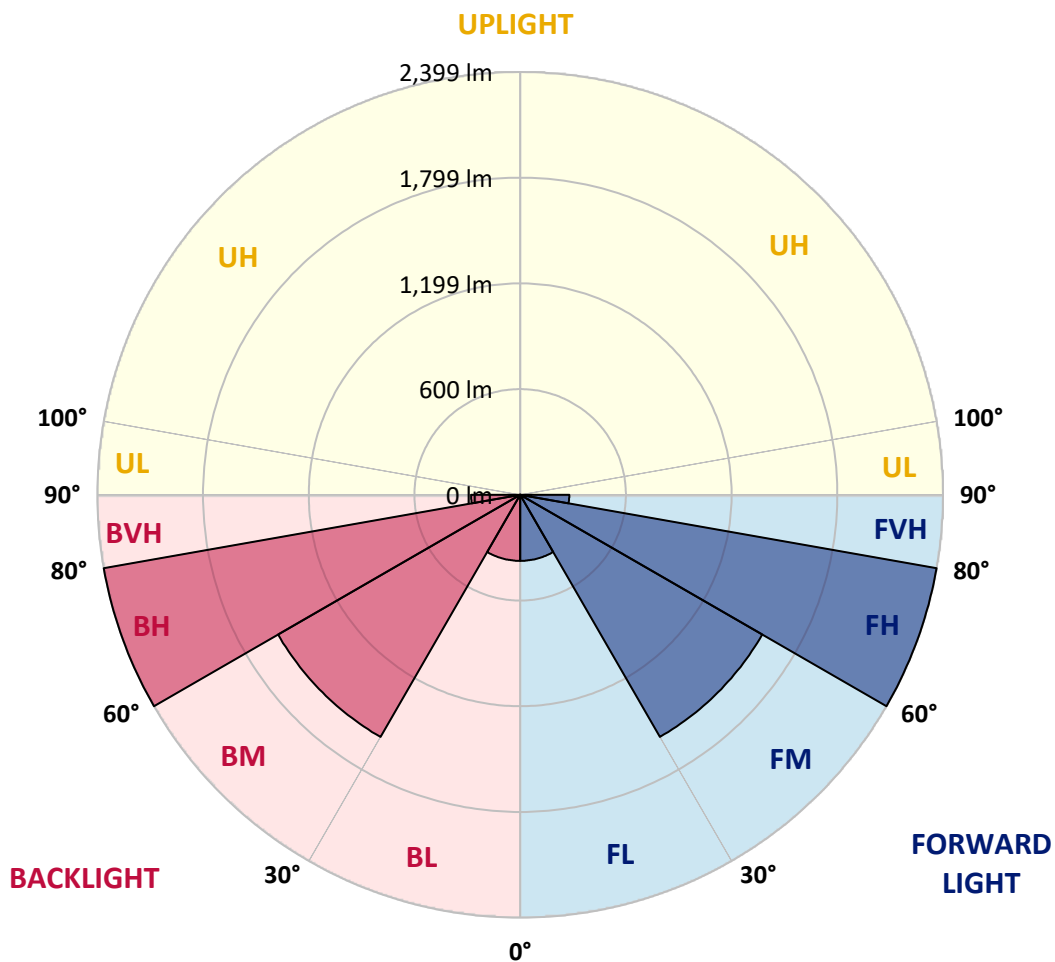
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	374.6	4.0			
FM	(30°-60°)	1586.0	17.1			
FH	(60°-80°)	2398.9	25.9			G2/5000
FVH	(80°-90°)	278.7	3.0			G3/500
BL	(0°-30°)	374.6	4.0	B1/500		
BM	(30°-60°)	1586.0	17.1	B2/2500		
BH	(60°-80°)	2398.9	25.9	B3/2500		G2/5000
BVH	(80°-90°)	278.7	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°	876.0	876.0	876.0	876.0	876.0	876.0	876.0	876.0	876.0	876.0	876.0
2.5°	877.8	877.5	876.9	876.3	876.0	875.7	875.7	875.7	875.6	875.4	875.6
5°	877.8	877.5	877.0	876.6	876.2	875.7	875.7	875.7	875.6	875.4	875.7
7.5°	876.6	876.9	876.4	876.0	875.8	875.7	875.6	875.4	875.1	874.8	875.0
10°	876.9	878.1	877.2	876.3	876.0	875.7	875.1	874.5	874.4	874.2	873.9
12.5°	877.5	878.7	877.6	876.6	876.2	875.7	875.1	874.5	874.0	873.6	873.2
15°	879.3	880.2	879.3	878.4	877.5	876.6	876.0	875.4	874.5	873.6	873.2
17.5°	880.5	882.0	881.0	879.9	878.8	877.8	877.2	876.6	876.0	875.4	874.6
20°	882.6	884.1	883.2	882.3	881.7	881.1	880.6	880.2	879.8	879.3	878.2
22.5°	886.5	887.7	887.4	887.1	887.2	887.4	887.6	887.7	887.4	887.1	886.0
25°	894.6	894.6	895.2	895.8	896.7	897.6	898.4	899.1	899.6	900.0	898.6
27.5°	908.7	909.9	910.4	910.8	912.3	913.8	915.4	917.1	918.0	918.9	917.6
30°	927.0	927.0	928.0	929.1	931.6	934.2	936.3	938.4	940.0	941.7	940.6
32.5°	950.4	951.9	953.4	954.9	958.0	961.2	964.8	968.4	970.5	972.6	971.0
35°	986.1	987.9	989.4	990.9	994.2	997.5	1001.6	1005.6	1007.4	1009.2	1008.2
37.5°	1036.5	1036.5	1038.6	1040.7	1042.8	1044.9	1050.3	1055.7	1058.0	1060.2	1058.4
40°	1104.6	1104.9	1105.4	1105.8	1107.8	1109.7	1116.3	1122.9	1126.8	1130.7	1127.0
42.5°	1182.9	1186.2	1186.0	1185.9	1187.2	1188.6	1194.9	1201.2	1206.8	1212.3	1210.1
45°	1275.3	1274.7	1273.5	1272.3	1276.4	1280.4	1289.4	1298.4	1303.4	1308.3	1303.6
47.5°	1368.6	1367.7	1366.1	1364.4	1368.4	1372.5	1386.0	1399.5	1406.6	1413.6	1406.1
50°	1461.6	1465.2	1463.1	1461.0	1467.0	1473.0	1490.1	1507.2	1517.6	1527.9	1519.2
52.5°	1564.5	1567.2	1564.8	1562.4	1570.6	1578.9	1599.1	1619.4	1633.2	1647.0	1635.3
55°	1671.0	1667.7	1669.0	1670.4	1678.2	1686.0	1710.9	1735.8	1752.3	1768.8	1755.6
57.5°	1770.6	1771.8	1770.4	1769.1	1781.4	1793.7	1825.0	1856.4	1877.1	1897.8	1881.3
60°	1872.6	1872.9	1869.9	1866.9	1880.2	1893.6	1938.6	1983.6	2010.4	2037.3	2014.6
62.5°	1986.6	1986.3	1981.0	1975.8	1991.6	2007.3	2063.1	2118.9	2155.8	2192.7	2165.1
65°	2126.4	2122.8	2119.8	2116.8	2135.0	2153.1	2222.4	2291.7	2341.5	2391.3	2355.8
67.5°	2332.5	2329.8	2323.5	2317.2	2337.4	2357.7	2446.5	2535.3	2599.6	2664.0	2617.0
70°	2559.3	2554.2	2558.6	2562.9	2609.7	2656.5	2775.6	2894.7	2970.9	3047.1	2968.2
72°	2447.4	2449.5	2464.0	2478.6	2560.6	2642.7	2811.9	2981.1	3091.4	3201.6	3079.7
72.5°	2408.4	2410.2	2426.7	2443.2	2521.5	2599.8	2774.2	2948.7	3062.8	3177.0	3051.6
75°	2242.8	2247.6	2266.6	2285.7	2365.0	2444.4	2620.4	2796.3	2905.6	3015.0	2889.5
77.5°	1972.5	1987.5	2006.8	2026.2	2120.7	2215.2	2414.1	2613.0	2733.8	2854.5	2712.0
80°	1505.4	1500.0	1533.3	1566.6	1656.9	1747.2	1901.1	2055.0	2194.0	2333.1	2172.9
82.5°	585.0	597.9	666.9	735.9	830.6	925.2	1063.0	1200.9	1326.2	1451.4	1318.0
85°	60.3	68.7	93.4	118.2	169.8	221.4	305.4	389.4	471.8	554.1	464.7
87.5°	24.3	26.7	34.4	42.0	44.0	45.9	55.5	65.1	64.6	64.2	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°	876.0	876.0	876.0	876.0	876.0	876.0	876.0	876.0
2.5°	875.7	876.0	876.3	876.3	876.3	876.8	877.2	876.6
5°	876.0	876.2	876.3	876.3	876.3	876.8	877.2	876.6
7.5°	875.1	875.1	875.1	875.6	876.0	876.2	876.3	876.0
10°	873.6	873.8	873.9	874.4	874.8	875.2	875.7	876.0
12.5°	872.7	872.8	873.0	873.4	873.9	874.4	874.8	875.4
15°	872.7	872.8	873.0	873.3	873.6	874.2	874.8	875.4
17.5°	873.9	873.6	873.3	873.6	873.9	874.6	875.4	876.0
20°	877.2	876.8	876.3	876.3	876.3	877.0	877.8	877.8
22.5°	885.0	883.5	882.0	881.7	881.4	881.6	881.7	882.0
25°	897.3	894.9	892.5	891.8	891.0	890.7	890.4	891.0
27.5°	916.2	913.5	910.8	909.2	907.5	906.6	905.7	906.0
30°	939.6	936.4	933.3	930.6	927.9	926.7	925.5	925.8
32.5°	969.3	965.6	961.8	958.2	954.6	953.0	951.3	951.6
35°	1007.1	1002.8	998.4	995.4	992.4	989.8	987.3	989.4
37.5°	1056.6	1052.6	1048.5	1046.6	1044.6	1042.4	1040.1	1040.4
40°	1123.2	1119.0	1114.8	1113.2	1111.5	1108.6	1105.8	1106.4
42.5°	1207.8	1201.5	1195.2	1192.2	1189.2	1187.8	1186.5	1187.4
45°	1299.0	1292.7	1286.4	1283.8	1281.3	1277.7	1274.1	1277.4
47.5°	1398.6	1390.6	1382.7	1378.2	1373.7	1374.9	1376.1	1373.4
50°	1510.5	1497.1	1483.8	1478.6	1473.3	1473.3	1473.3	1473.0
52.5°	1623.6	1605.2	1586.7	1582.2	1577.7	1576.6	1575.6	1574.4
55°	1742.4	1719.8	1697.1	1688.7	1680.3	1681.5	1682.7	1686.0
57.5°	1864.8	1835.0	1805.1	1795.5	1785.9	1786.6	1787.4	1792.8
60°	1992.0	1953.5	1914.9	1904.2	1893.6	1896.4	1899.3	1902.6
62.5°	2137.5	2090.8	2044.2	2030.0	2015.7	2019.3	2022.9	2031.6
65°	2320.2	2262.0	2203.8	2189.0	2174.1	2175.8	2177.4	2192.4
67.5°	2570.1	2492.6	2415.0	2401.4	2387.7	2390.1	2392.5	2416.8
70°	2889.3	2774.4	2659.5	2603.0	2546.4	2537.6	2528.7	2541.6
72°	2957.7	2795.4	2633.1	2549.7	2466.3	2453.2	2440.2	2441.4
72.5°	2926.2	2762.1	2598.0	2517.0	2436.0	2425.4	2414.7	2412.6
75°	2763.9	2603.4	2442.9	2359.2	2275.5	2255.2	2235.0	2235.0
77.5°	2569.5	2367.2	2164.8	2074.5	1984.2	1963.0	1941.9	1925.4
80°	2012.7	1831.4	1650.0	1558.4	1466.7	1432.8	1398.9	1378.8
82.5°	1184.7	1017.9	851.1	734.7	618.3	583.4	548.4	499.8
85°	375.3	288.8	202.2	157.8	113.4	91.6	69.9	61.2
87.5°	62.4	50.7	39.0	37.7	36.3	28.5	20.7	17.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)