

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: P143947

Luminaire Tested: **LDRL-5WQ-F03-E-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143947
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5WQ-F03-E-7060
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7790.3 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

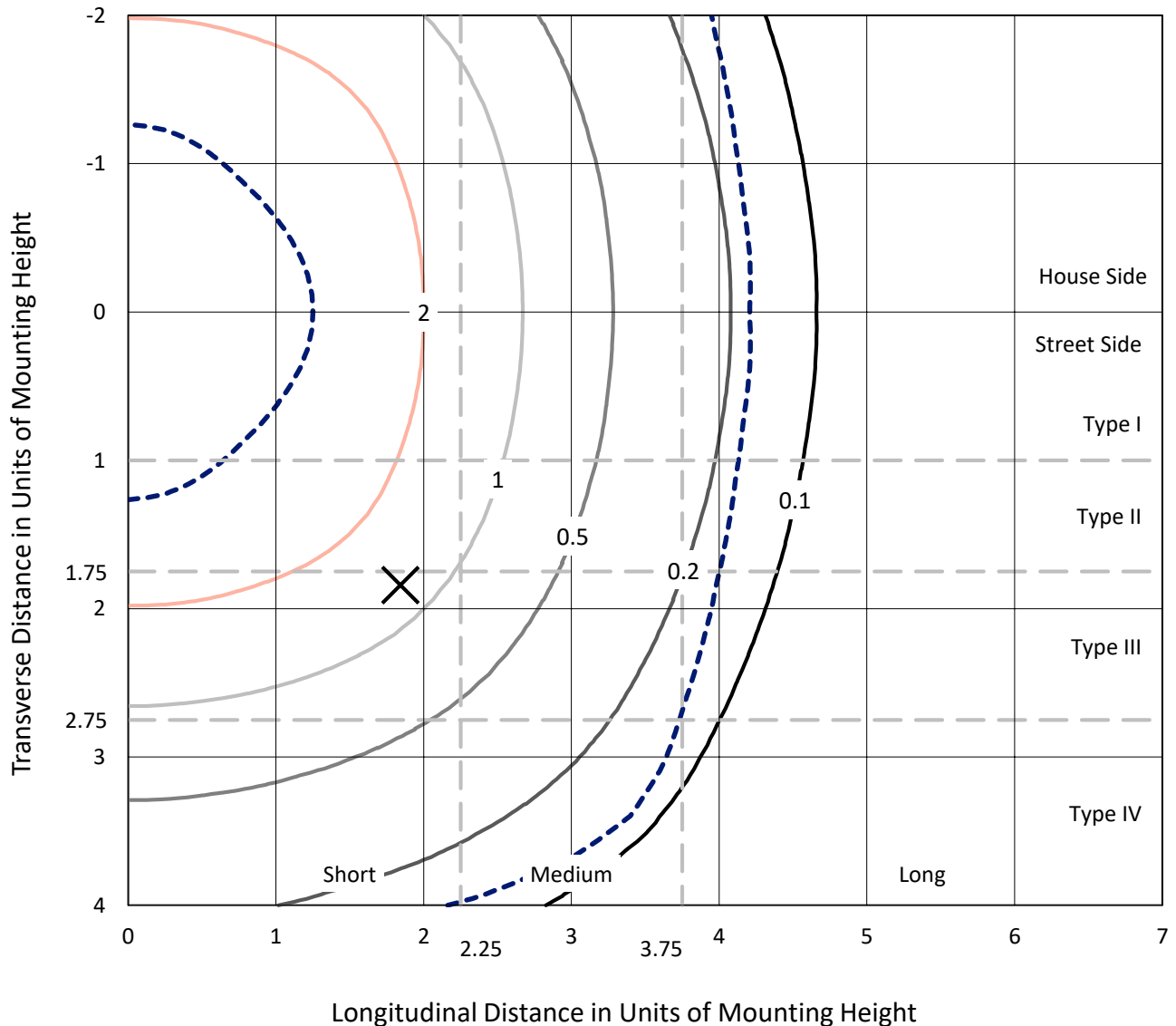
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

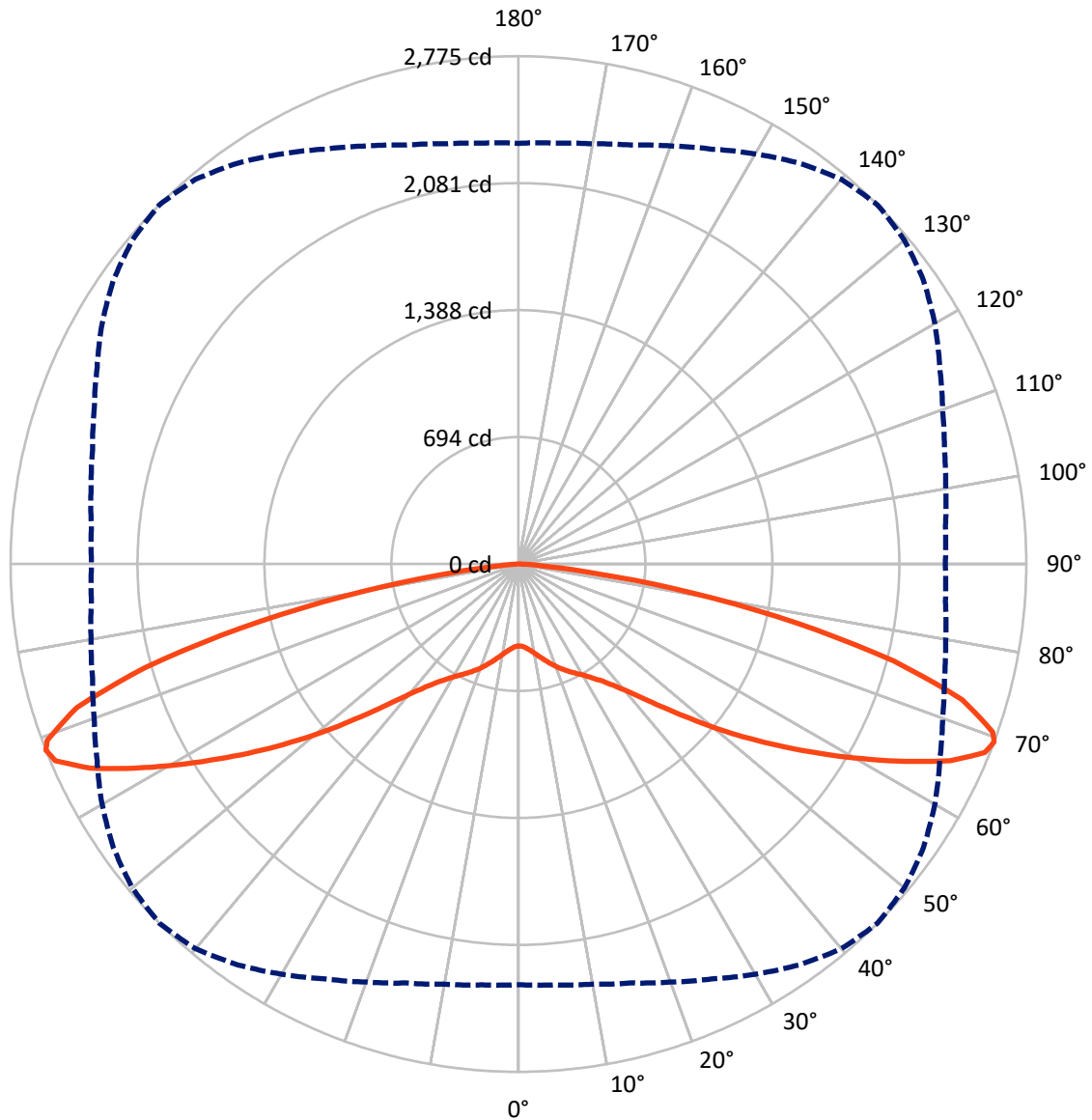
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3895.1	0.0	3895.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3895.1	0.0	3895.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	7790.3	0.0	7790.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	0.6
10°-20°	155.7	2.0
20°-30°	300.1	3.9
30°-40°	491.7	6.3
40°-50°	855.0	11.0
50°-60°	1518.9	19.5
60°-70°	2358.1	30.3
70°-80°	1878.8	24.1
80°-90°	186.8	2.4
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°	7790.3	100.0
0°-180°	7790.3	100.0



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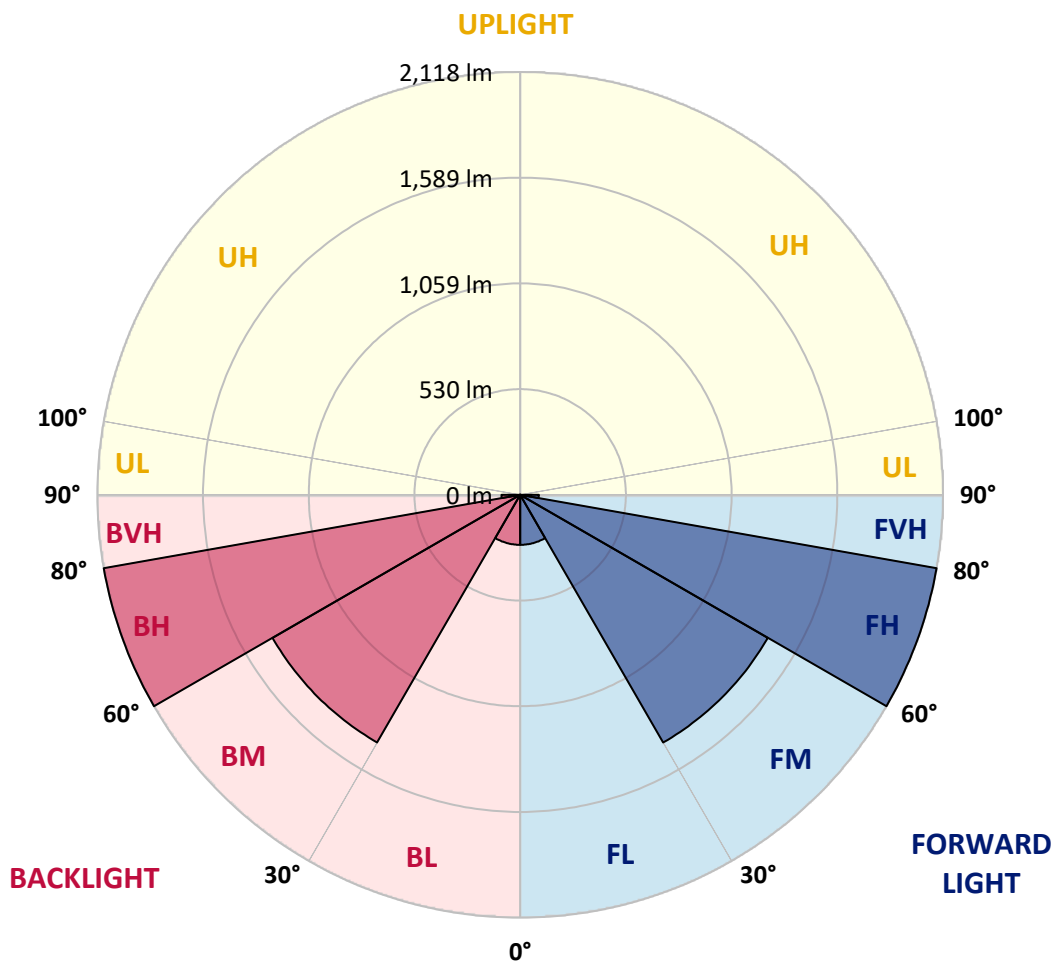
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	250.5	3.2			
FM	(30°-60°)	1432.8	18.4			
FH	(60°-80°)	2118.5	27.2			G2/5000
FVH	(80°-90°)	93.4	1.2			G1/100
BL	(0°-30°)	250.5	3.2	B1/500		
BM	(30°-60°)	1432.8	18.4	B2/2500		
BH	(60°-80°)	2118.5	27.2	B3/2500		G2/5000
BVH	(80°-90°)	93.4	1.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	447.8	447.8	447.8	447.8	447.8	447.8	447.8	447.8	447.8	447.8	447.8
2.5°	451.3	451.3	451.3	450.8	450.8	450.3	450.8	450.3	450.3	450.3	450.3
5°	463.0	462.0	462.0	461.5	462.5	462.5	461.5	462.0	461.5	462.0	462.0
7.5°	477.8	477.8	477.8	477.2	478.3	477.8	477.2	477.8	477.8	477.2	477.2
10°	496.0	496.6	496.0	496.0	497.6	497.1	497.6	497.6	498.1	497.6	497.6
12.5°	517.4	517.4	517.9	518.4	518.9	519.4	521.0	520.4	521.5	520.4	520.4
15°	542.3	543.3	542.3	542.3	543.8	544.8	545.3	545.3	546.4	545.9	544.8
17.5°	568.7	569.2	568.7	568.2	569.7	571.3	571.8	571.8	573.3	572.3	572.3
20°	595.7	596.2	595.2	594.6	596.7	596.7	597.7	598.2	599.7	600.2	598.7
22.5°	620.6	621.1	620.6	620.1	622.1	622.1	623.6	624.1	626.2	625.7	625.7
25°	645.0	645.0	644.5	644.5	646.5	647.0	648.5	649.5	651.6	651.6	651.6
27.5°	667.3	667.8	666.8	666.3	670.4	671.9	672.9	674.9	676.5	677.5	677.0
30°	692.7	692.7	692.2	693.8	696.3	698.3	700.4	703.4	706.5	705.4	705.4
32.5°	722.7	723.7	723.2	725.3	728.3	731.4	733.9	737.5	739.0	741.5	739.5
35°	762.9	764.9	763.9	765.9	768.5	770.5	776.1	779.6	782.2	783.7	782.7
37.5°	813.2	812.2	814.2	814.7	819.8	822.3	828.9	834.0	838.1	839.6	838.6
40°	875.7	874.2	876.7	879.3	885.9	888.4	896.0	903.7	909.3	911.3	910.3
42.5°	950.4	952.5	956.5	960.1	969.2	976.3	985.0	996.2	1002.3	1004.8	1001.2
45°	1048.5	1045.0	1052.6	1061.7	1066.8	1082.6	1096.8	1108.5	1118.6	1122.7	1118.6
47.5°	1160.3	1159.8	1169.0	1180.1	1193.4	1208.1	1224.9	1240.1	1257.9	1258.9	1253.8
50°	1283.8	1294.0	1299.1	1310.3	1334.7	1352.9	1374.3	1397.2	1413.4	1418.5	1409.4
52.5°	1432.7	1440.4	1443.4	1462.2	1484.6	1506.9	1536.9	1564.4	1583.2	1585.2	1580.6
55°	1594.4	1600.5	1606.1	1628.9	1653.3	1673.1	1711.3	1738.2	1757.0	1764.1	1761.1
57.5°	1761.6	1767.2	1774.3	1799.2	1824.1	1852.0	1888.1	1919.6	1941.5	1954.7	1951.2
60°	1947.1	1947.1	1963.4	1988.3	2008.6	2041.6	2079.2	2115.8	2139.7	2160.6	2155.0
62.5°	2142.3	2147.8	2163.6	2183.9	2205.3	2235.8	2278.5	2322.2	2358.8	2374.5	2374.0
65°	2290.2	2300.3	2321.2	2344.5	2380.1	2416.2	2470.1	2524.5	2568.7	2591.5	2591.5
67.5°	2333.4	2340.0	2365.9	2401.5	2452.8	2510.2	2583.4	2659.1	2719.6	2749.6	2730.8
69°	2298.8	2308.5	2331.3	2369.9	2430.9	2501.1	2588.0	2673.9	2744.0	2775.0	2753.2
70°	2258.6	2269.3	2292.2	2330.3	2393.3	2468.0	2554.9	2647.5	2722.7	2749.1	2724.2
72.5°	2095.0	2108.2	2124.5	2157.5	2214.4	2284.6	2362.8	2444.2	2516.3	2537.2	2506.2
75°	1816.0	1818.5	1826.6	1851.0	1871.4	1921.2	1987.7	2052.3	2106.7	2118.9	2085.8
77.5°	1285.4	1271.6	1257.9	1278.7	1295.0	1359.0	1431.2	1484.1	1541.0	1558.3	1524.7
80°	563.6	558.6	577.9	605.3	677.0	719.7	790.3	866.1	914.3	970.7	910.3
82.5°	111.3	117.4	135.7	167.7	206.9	260.2	306.5	358.8	406.1	427.4	405.6
85°	45.2	49.3	55.9	62.5	67.1	75.2	88.4	109.8	121.0	122.5	116.4
87.5°	18.8	21.9	29.5	35.1	35.6	34.1	35.1	36.1	29.5	23.9	30.0
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°	447.8	447.8	447.8	447.8	447.8	447.8	447.8	447.8
2.5°	450.3	450.8	450.3	450.8	450.3	450.3	450.8	450.3
5°	461.5	462.0	461.5	461.0	460.5	461.0	461.0	461.0
7.5°	477.2	476.7	476.2	476.2	475.7	475.2	476.2	476.2
10°	496.6	496.0	495.0	495.0	494.5	494.5	494.5	494.5
12.5°	519.9	518.4	517.9	516.4	515.9	515.4	515.4	515.9
15°	544.3	542.8	542.3	539.8	539.8	539.2	539.2	539.2
17.5°	570.3	568.7	566.7	566.7	565.2	564.2	564.7	563.6
20°	596.7	594.6	593.6	593.1	591.1	591.1	591.1	590.6
22.5°	622.6	621.1	619.6	617.5	615.5	615.0	615.0	614.5
25°	649.0	646.5	643.4	641.4	639.4	637.8	637.8	637.8
27.5°	675.5	672.4	667.8	665.3	662.2	660.7	660.7	660.2
30°	703.4	699.9	695.8	692.2	688.2	686.6	686.1	685.1
32.5°	737.0	733.4	729.3	724.2	720.2	717.6	717.6	716.1
35°	779.6	775.6	772.5	765.9	760.8	756.8	757.3	758.3
37.5°	835.6	830.5	827.9	819.8	813.2	809.1	809.1	808.6
40°	906.7	901.6	896.0	888.4	880.3	874.7	873.2	873.2
42.5°	997.2	992.6	985.0	974.3	964.6	958.6	953.5	954.0
45°	1110.5	1104.9	1094.3	1081.0	1069.3	1060.7	1053.6	1053.6
47.5°	1248.3	1236.6	1221.8	1210.1	1190.3	1177.1	1172.0	1171.0
50°	1405.3	1383.4	1365.1	1348.4	1327.5	1313.8	1306.2	1304.2
52.5°	1570.0	1547.1	1524.2	1502.4	1477.0	1462.7	1450.5	1449.5
55°	1748.9	1719.9	1690.9	1669.6	1639.6	1624.9	1612.7	1605.5
57.5°	1931.3	1898.8	1878.0	1847.5	1816.0	1805.3	1793.6	1785.0
60°	2136.7	2101.1	2073.6	2041.6	2021.3	1998.4	1987.2	1980.6
62.5°	2346.6	2313.5	2278.5	2248.0	2219.5	2203.8	2188.5	2180.9
65°	2560.0	2505.6	2464.0	2421.8	2388.2	2359.8	2335.9	2332.8
67.5°	2691.2	2622.5	2552.9	2491.4	2442.1	2402.0	2377.6	2368.9
69°	2701.8	2627.1	2540.2	2466.5	2409.6	2371.0	2342.0	2332.8
70°	2672.4	2597.1	2505.6	2426.4	2367.4	2325.2	2301.3	2286.1
72.5°	2456.9	2390.8	2302.9	2224.6	2171.2	2121.9	2098.0	2091.9
75°	2026.9	1956.7	1875.9	1838.3	1801.2	1770.2	1754.0	1752.4
77.5°	1439.4	1367.7	1306.2	1256.9	1216.7	1196.9	1201.5	1184.7
80°	823.9	730.3	656.1	612.4	553.0	517.4	477.2	506.2
82.5°	354.2	286.1	218.0	177.4	135.2	107.2	88.4	82.3
85°	99.1	80.8	67.6	62.0	55.9	49.8	42.2	39.1
87.5°	33.5	32.0	28.5	28.5	25.9	21.9	15.2	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)