

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: P143941

Luminaire Tested: **LDRL-5WQ-E03-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143941
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-E03-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9436.8 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G2

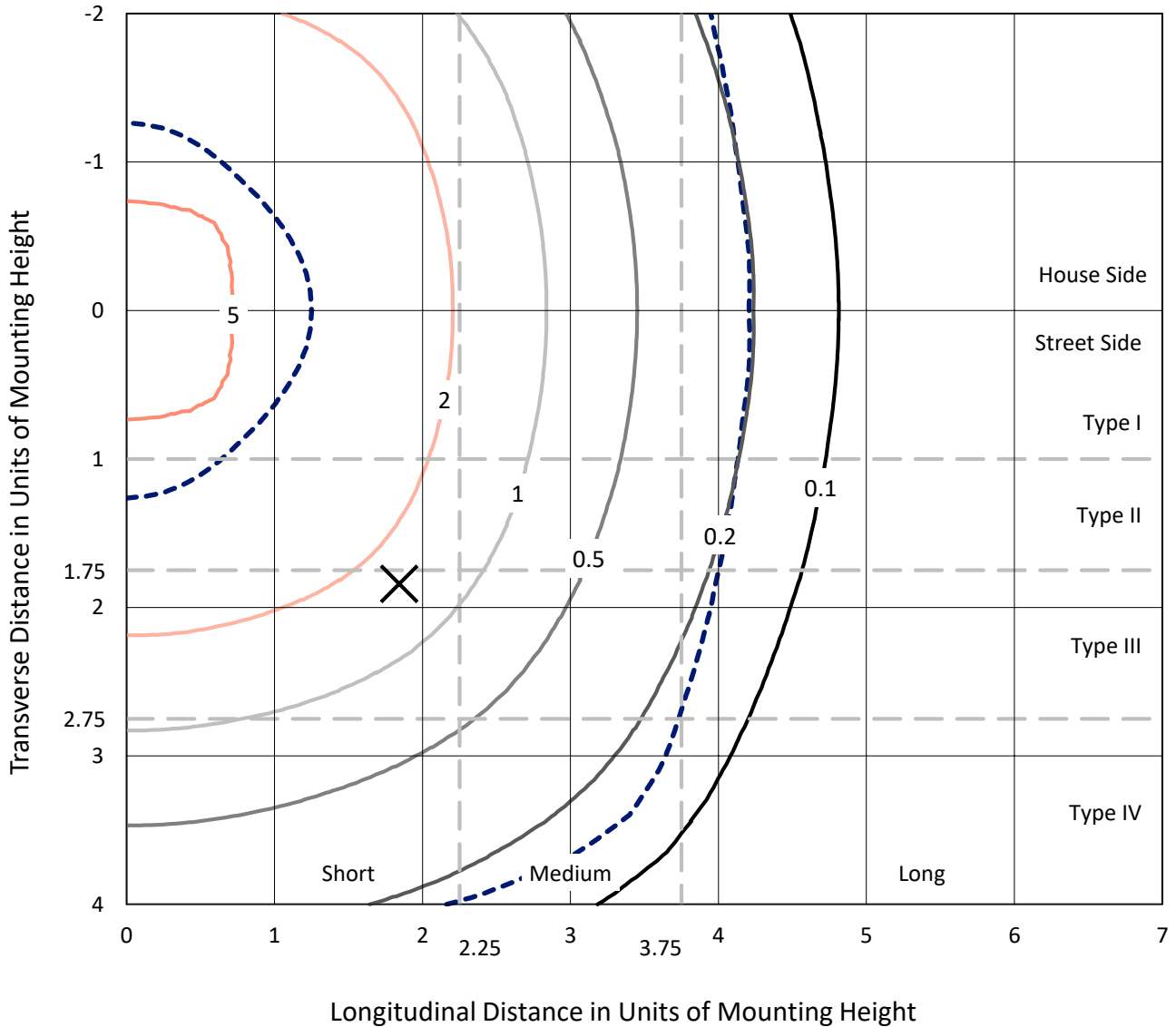
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

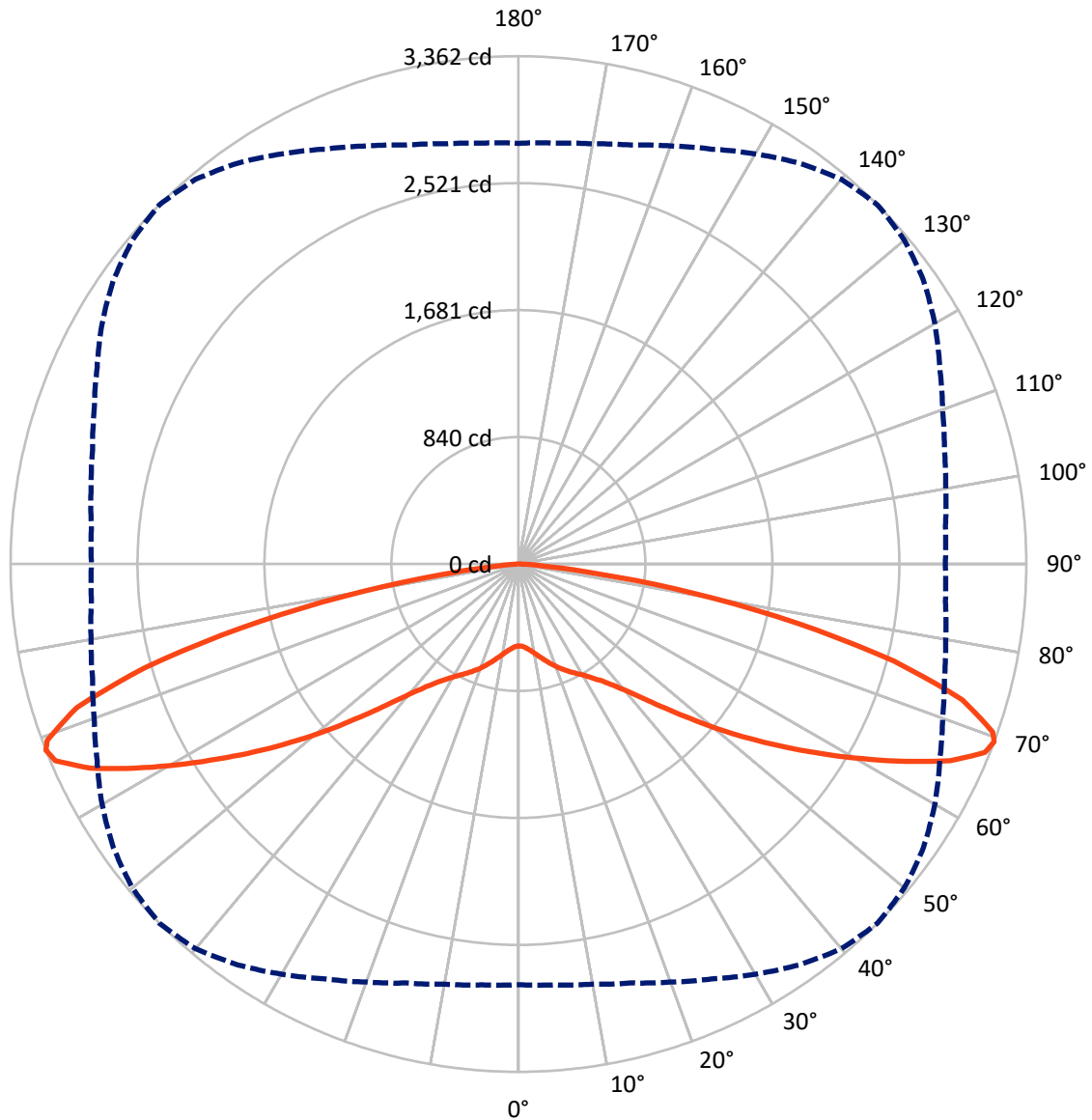
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 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	4718.4	0.0	4718.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4718.4	0.0	4718.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	9436.8	0.0	9436.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	0.6
10°-20°	188.6	2.0
20°-30°	363.5	3.9
30°-40°	595.7	6.3
40°-50°	1035.8	11.0
50°-60°	1839.9	19.5
60°-70°	2856.5	30.3
70°-80°	2275.9	24.1
80°-90°	226.3	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°	9436.8	100.0
0°-180°	9436.8	100.0



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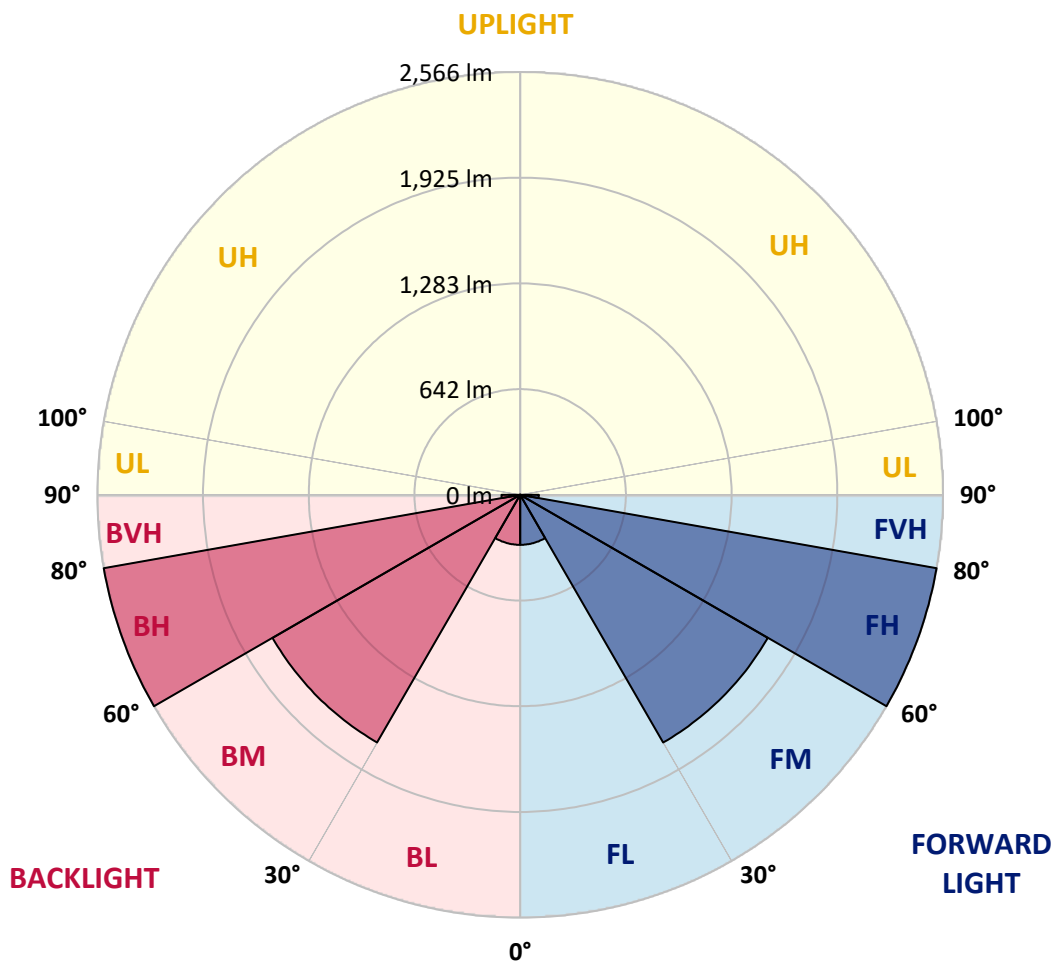
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	303.4	3.2			
FM	(30°-60°)	1735.6	18.4			
FH	(60°-80°)	2566.2	27.2			G2/5000
FVH	(80°-90°)	113.2	1.2			G2/225
BL	(0°-30°)	303.4	3.2	B1/500		
BM	(30°-60°)	1735.6	18.4	B2/2500		
BH	(60°-80°)	2566.2	27.2	B4/5000		G2/5000
BVH	(80°-90°)	113.2	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4
2.5°	546.7	546.7	546.7	546.1	546.1	545.5	546.1	545.5	545.5	545.5	545.5
5°	560.9	559.6	559.6	559.0	560.3	560.3	559.0	559.6	559.0	559.6	559.6
7.5°	578.7	578.7	578.7	578.1	579.3	578.7	578.1	578.7	578.7	578.1	578.1
10°	600.9	601.5	600.9	600.9	602.7	602.1	602.7	602.7	603.4	602.7	602.7
12.5°	626.7	626.7	627.4	628.0	628.6	629.2	631.1	630.4	631.7	630.4	630.4
15°	656.9	658.1	656.9	656.9	658.8	660.0	660.6	660.6	661.8	661.2	660.0
17.5°	688.9	689.5	688.9	688.3	690.2	692.0	692.6	692.6	694.5	693.2	693.2
20°	721.6	722.2	720.9	720.3	722.8	722.8	724.0	724.6	726.5	727.1	725.3
22.5°	751.7	752.3	751.7	751.1	753.6	753.6	755.4	756.0	758.5	757.9	757.9
25°	781.3	781.3	780.7	780.7	783.1	783.7	785.6	786.8	789.3	789.3	789.3
27.5°	808.4	809.0	807.8	807.1	812.1	813.9	815.1	817.6	819.4	820.7	820.1
30°	839.1	839.1	838.5	840.4	843.5	845.9	848.4	852.1	855.8	854.5	854.5
32.5°	875.5	876.7	876.1	878.6	882.2	885.9	889.0	893.3	895.2	898.3	895.8
35°	924.1	926.6	925.3	927.8	930.9	933.3	940.1	944.4	947.5	949.4	948.1
37.5°	985.1	983.8	986.3	986.9	993.1	996.1	1004.1	1010.3	1015.2	1017.1	1015.8
40°	1060.8	1058.9	1062.0	1065.1	1073.1	1076.2	1085.4	1094.6	1101.4	1103.9	1102.7
42.5°	1151.3	1153.8	1158.7	1163.0	1174.1	1182.7	1193.2	1206.7	1214.1	1217.2	1212.9
45°	1270.1	1265.8	1275.0	1286.1	1292.3	1311.4	1328.6	1342.8	1355.1	1360.0	1355.1
47.5°	1405.6	1404.9	1416.0	1429.6	1445.6	1463.4	1483.7	1502.2	1523.8	1525.0	1518.8
50°	1555.2	1567.5	1573.6	1587.2	1616.7	1638.9	1664.8	1692.5	1712.2	1718.3	1707.2
52.5°	1735.6	1744.8	1748.5	1771.3	1798.4	1825.4	1861.8	1895.0	1917.8	1920.3	1914.7
55°	1931.3	1938.7	1945.5	1973.2	2002.8	2026.8	2072.9	2105.6	2128.3	2137.0	2133.3
57.5°	2133.9	2140.7	2149.3	2179.4	2209.6	2243.5	2287.2	2325.4	2351.8	2367.8	2363.5
60°	2358.6	2358.6	2378.3	2408.5	2433.1	2473.1	2518.7	2563.0	2591.9	2617.2	2610.4
62.5°	2595.0	2601.8	2620.9	2645.5	2671.4	2708.3	2760.0	2813.0	2857.3	2876.4	2875.8
65°	2774.2	2786.5	2811.7	2840.1	2883.2	2926.9	2992.1	3058.0	3111.6	3139.3	3139.3
67.5°	2826.5	2834.5	2865.9	2909.0	2971.2	3040.8	3129.4	3221.2	3294.4	3330.7	3308.0
69°	2784.6	2796.3	2824.0	2870.8	2944.7	3029.7	3135.0	3239.0	3324.0	3361.5	3335.0
70°	2736.0	2748.9	2776.6	2822.8	2899.2	2989.7	3094.9	3207.0	3298.1	3330.1	3300.0
72.5°	2537.8	2553.8	2573.5	2613.5	2682.4	2767.4	2862.2	2960.7	3048.1	3073.4	3035.8
75°	2199.8	2202.8	2212.7	2242.2	2266.9	2327.2	2407.9	2486.0	2551.9	2566.7	2526.7
77.5°	1557.0	1540.4	1523.8	1549.0	1568.7	1646.3	1733.7	1797.7	1866.7	1887.6	1847.0
80°	682.8	676.6	700.0	733.3	820.1	871.8	957.4	1049.1	1107.6	1175.9	1102.7
82.5°	134.8	142.2	164.4	203.2	250.6	315.2	371.2	434.7	491.9	517.8	491.3
85°	54.8	59.7	67.7	75.7	81.3	91.1	107.1	133.0	146.5	148.4	141.0
87.5°	22.8	26.5	35.7	42.5	43.1	41.2	42.5	43.7	35.7	28.9	36.3
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°	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4
2.5°	545.5	546.1	545.5	546.1	545.5	545.5	546.1	545.5
5°	559.0	559.6	559.0	558.4	557.8	558.4	558.4	558.4
7.5°	578.1	577.5	576.9	576.9	576.3	575.6	576.9	576.9
10°	601.5	600.9	599.7	599.7	599.0	599.0	599.0	599.0
12.5°	629.8	628.0	627.4	625.5	624.9	624.3	624.3	624.9
15°	659.4	657.5	656.9	653.8	653.8	653.2	653.2	653.2
17.5°	690.8	688.9	686.5	686.5	684.6	683.4	684.0	682.8
20°	722.8	720.3	719.1	718.5	716.0	716.0	716.0	715.4
22.5°	754.2	752.3	750.5	748.0	745.6	745.0	745.0	744.3
25°	786.2	783.1	779.4	777.0	774.5	772.7	772.7	772.7
27.5°	818.2	814.5	809.0	805.9	802.2	800.4	800.4	799.7
30°	852.1	847.8	842.8	838.5	833.6	831.8	831.1	829.9
32.5°	892.7	888.4	883.5	877.3	872.4	869.3	869.3	867.5
35°	944.4	939.5	935.8	927.8	921.6	916.7	917.3	918.6
37.5°	1012.2	1006.0	1002.9	993.1	985.1	980.1	980.1	979.5
40°	1098.3	1092.2	1085.4	1076.2	1066.3	1059.6	1057.7	1057.7
42.5°	1207.9	1202.4	1193.2	1180.2	1168.5	1161.1	1155.0	1155.6
45°	1345.2	1338.5	1325.5	1309.5	1295.4	1284.9	1276.3	1276.3
47.5°	1512.1	1497.9	1480.1	1465.9	1441.9	1425.9	1419.7	1418.5
50°	1702.3	1675.8	1653.7	1633.4	1608.1	1591.5	1582.3	1579.8
52.5°	1901.8	1874.1	1846.4	1819.9	1789.1	1771.9	1757.1	1755.9
55°	2118.5	2083.4	2048.3	2022.5	1986.1	1968.3	1953.5	1944.9
57.5°	2339.5	2300.1	2274.9	2237.9	2199.8	2186.8	2172.7	2162.2
60°	2588.2	2545.2	2511.9	2473.1	2448.5	2420.8	2407.2	2399.2
62.5°	2842.5	2802.5	2760.0	2723.1	2688.6	2669.5	2651.0	2641.8
65°	3101.1	3035.2	2984.7	2933.6	2893.0	2858.5	2829.6	2825.9
67.5°	3259.9	3176.8	3092.5	3018.0	2958.3	2909.6	2880.1	2869.6
69°	3272.9	3182.4	3077.1	2987.8	2918.9	2872.1	2837.0	2825.9
70°	3237.2	3146.0	3035.2	2939.2	2867.8	2816.7	2787.7	2769.3
72.5°	2976.1	2896.1	2789.6	2694.8	2630.1	2570.4	2541.5	2534.1
75°	2455.3	2370.3	2272.4	2226.9	2181.9	2144.4	2124.7	2122.8
77.5°	1743.6	1656.7	1582.3	1522.5	1473.9	1449.9	1455.4	1435.1
80°	998.0	884.7	794.8	741.9	669.8	626.7	578.1	613.2
82.5°	429.1	346.6	264.1	214.9	163.8	129.9	107.1	99.7
85°	120.1	97.9	81.9	75.1	67.7	60.3	51.1	47.4
87.5°	40.6	38.8	34.5	34.5	31.4	26.5	18.5	16.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)