

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: P143938

Luminaire Tested: **LDRL-5WQ-E03-E-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143938
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-8030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (63) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7761.9 lumens
Efficiency: N/A
Efficacy: 103.2 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

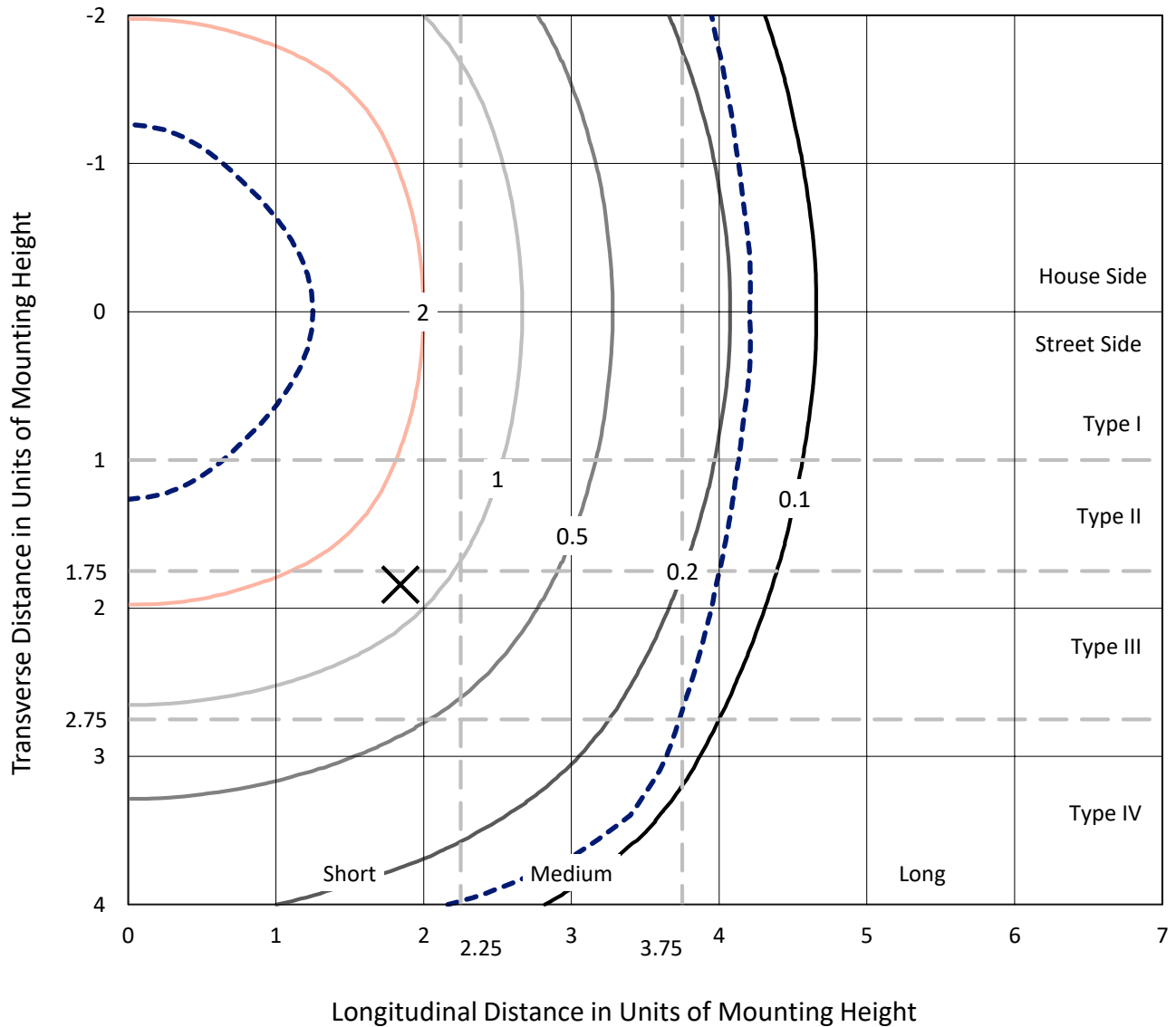
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

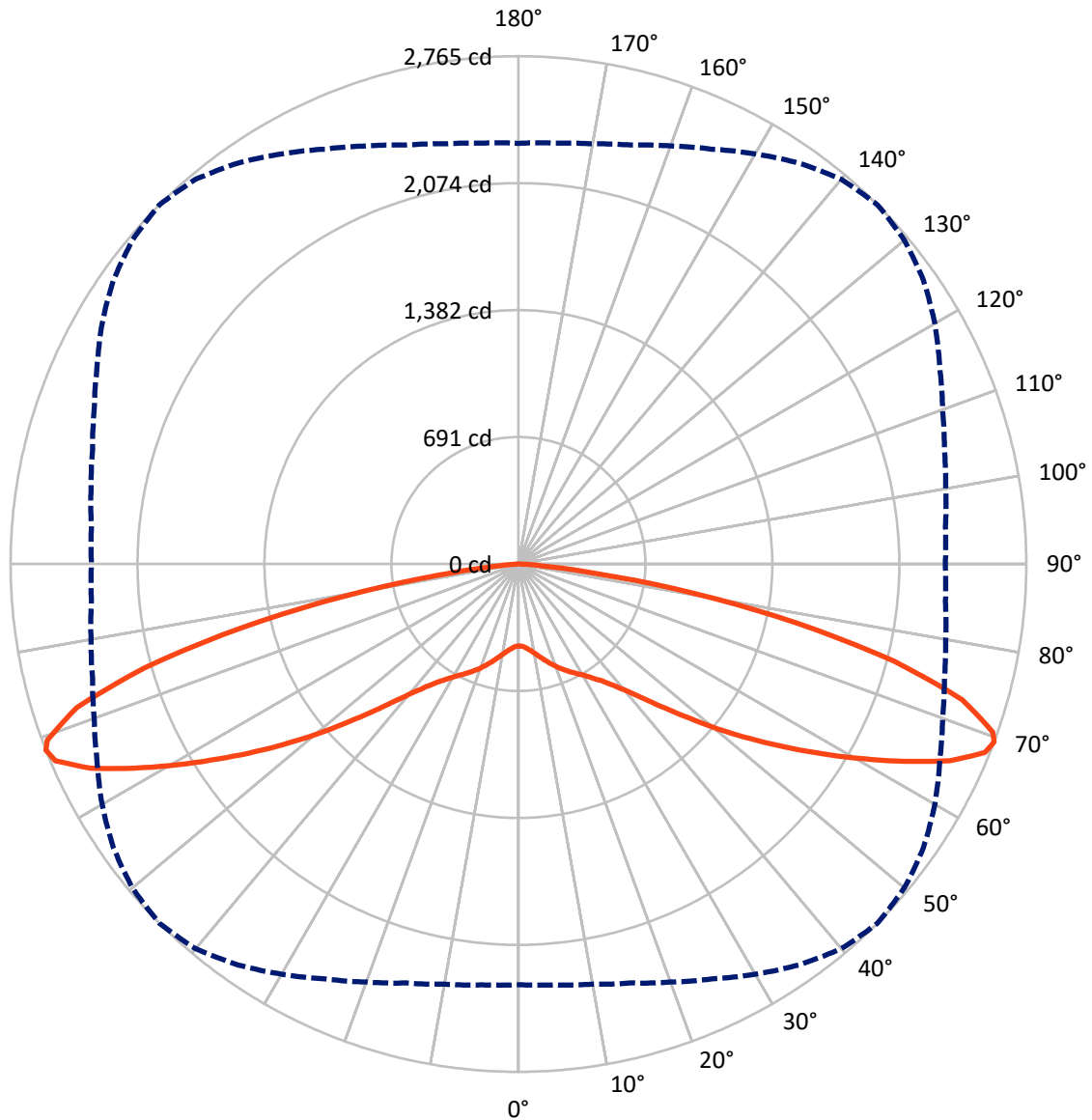
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 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	3881.0	0.0	3881.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3881.0	0.0	3881.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	7761.9	0.0	7761.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.6
10°-20°	155.1	2.0
20°-30°	299.0	3.9
30°-40°	489.9	6.3
40°-50°	851.9	11.0
50°-60°	1513.3	19.5
60°-70°	2349.5	30.3
70°-80°	1872.0	24.1
80°-90°	186.1	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°	7761.9	100.0
0°-180°	7761.9	100.0



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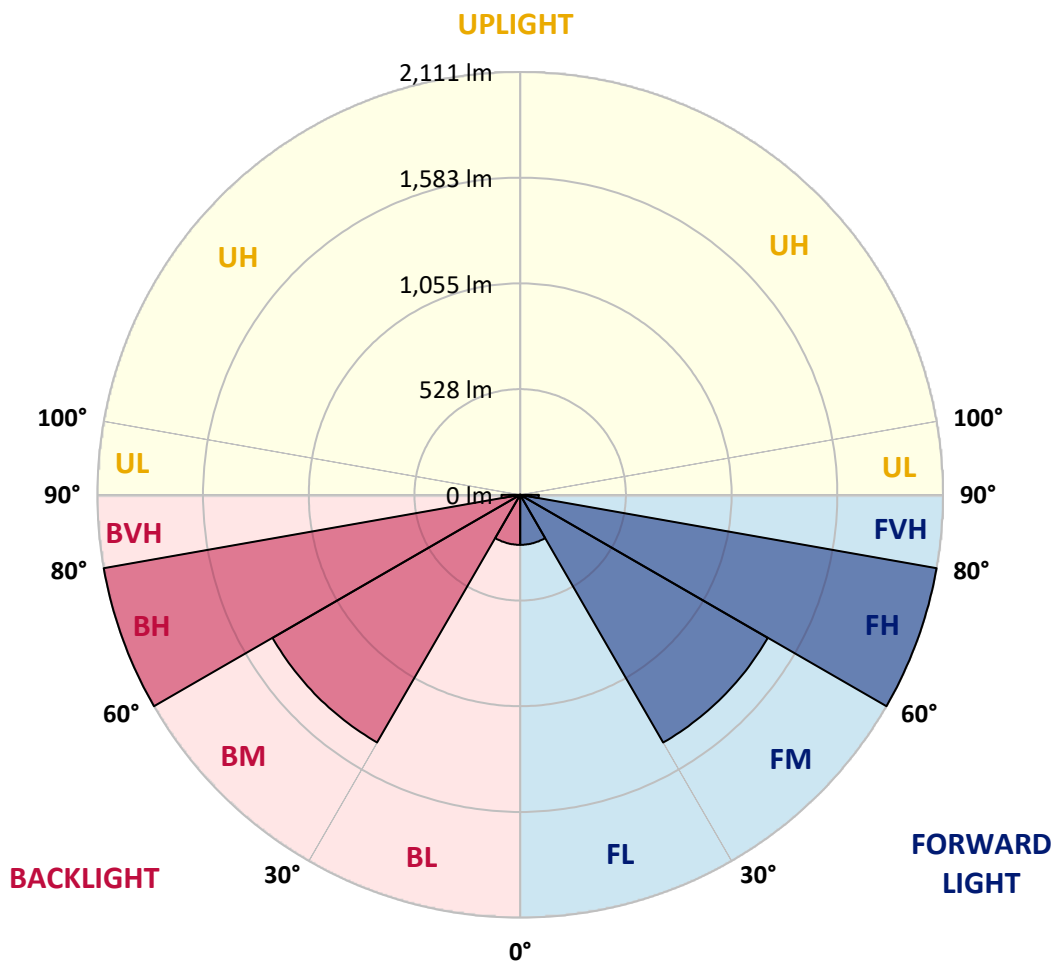
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	249.5	3.2			
FM	(30°-60°)	1427.6	18.4			
FH	(60°-80°)	2110.7	27.2			G2/5000
FVH	(80°-90°)	93.1	1.2			G1/100
BL	(0°-30°)	249.5	3.2	B1/500		
BM	(30°-60°)	1427.6	18.4	B2/2500		
BH	(60°-80°)	2110.7	27.2	B3/2500		G2/5000
BVH	(80°-90°)	93.1	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°	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1
2.5°	449.7	449.7	449.7	449.2	449.2	448.7	449.2	448.7	448.7	448.7	448.7
5°	461.3	460.3	460.3	459.8	460.8	460.8	459.8	460.3	459.8	460.3	460.3
7.5°	476.0	476.0	476.0	475.5	476.5	476.0	475.5	476.0	476.0	475.5	475.5
10°	494.2	494.7	494.2	494.2	495.8	495.3	495.8	495.8	496.3	495.8	495.8
12.5°	515.5	515.5	516.0	516.5	517.0	517.5	519.1	518.5	519.6	518.5	518.5
15°	540.3	541.3	540.3	540.3	541.8	542.9	543.4	543.4	544.4	543.9	542.9
17.5°	566.7	567.2	566.7	566.1	567.7	569.2	569.7	569.7	571.2	570.2	570.2
20°	593.5	594.0	593.0	592.5	594.5	594.5	595.5	596.0	597.5	598.1	596.5
22.5°	618.3	618.8	618.3	617.8	619.8	619.8	621.3	621.9	623.9	623.4	623.4
25°	642.6	642.6	642.1	642.1	644.1	644.6	646.2	647.2	649.2	649.2	649.2
27.5°	664.9	665.4	664.4	663.9	667.9	669.5	670.5	672.5	674.0	675.0	674.5
30°	690.2	690.2	689.7	691.2	693.8	695.8	697.8	700.9	703.9	702.9	702.9
32.5°	720.1	721.1	720.6	722.6	725.7	728.7	731.2	734.8	736.3	738.8	736.8
35°	760.1	762.1	761.1	763.1	765.7	767.7	773.3	776.8	779.3	780.9	779.8
37.5°	810.2	809.2	811.2	811.8	816.8	819.3	825.9	831.0	835.0	836.6	835.6
40°	872.5	871.0	873.5	876.1	882.6	885.2	892.8	900.4	905.9	908.0	907.0
42.5°	947.0	949.0	953.0	956.6	965.7	972.8	981.4	992.5	998.6	1001.1	997.6
45°	1044.7	1041.1	1048.7	1057.9	1062.9	1078.6	1092.8	1104.4	1114.6	1118.6	1114.6
47.5°	1156.1	1155.6	1164.7	1175.8	1189.0	1203.7	1220.4	1235.6	1253.3	1254.3	1249.3
50°	1279.2	1289.3	1294.3	1305.5	1329.8	1348.0	1369.3	1392.1	1408.3	1413.3	1404.2
52.5°	1427.5	1435.1	1438.2	1456.9	1479.2	1501.5	1531.3	1558.7	1577.4	1579.4	1574.9
55°	1588.6	1594.6	1600.2	1623.0	1647.3	1667.1	1705.0	1731.9	1750.6	1757.7	1754.7
57.5°	1755.2	1760.7	1767.8	1792.6	1817.5	1845.3	1881.3	1912.7	1934.4	1947.6	1944.0
60°	1940.0	1940.0	1956.2	1981.0	2001.3	2034.2	2071.7	2108.1	2131.9	2152.7	2147.1
62.5°	2134.5	2140.0	2155.7	2176.0	2197.2	2227.6	2270.2	2313.7	2350.2	2365.9	2365.4
65°	2281.8	2291.9	2312.7	2336.0	2371.4	2407.4	2461.1	2515.3	2559.3	2582.1	2582.1
67.5°	2324.9	2331.4	2357.3	2392.7	2443.9	2501.1	2574.0	2649.5	2709.7	2739.6	2720.9
69°	2290.4	2300.0	2322.8	2361.3	2422.1	2492.0	2578.6	2664.1	2734.0	2764.9	2743.1
70°	2250.4	2261.1	2283.8	2321.8	2384.6	2459.1	2545.6	2637.8	2712.8	2739.1	2714.3
72.5°	2087.4	2100.5	2116.7	2149.6	2206.4	2276.2	2354.2	2435.3	2507.2	2527.9	2497.0
75°	1809.3	1811.9	1820.0	1844.3	1864.5	1914.2	1980.5	2044.8	2099.0	2111.2	2078.2
77.5°	1280.7	1267.0	1253.3	1274.1	1290.3	1354.1	1426.0	1478.7	1535.4	1552.6	1519.2
80°	561.6	556.5	575.8	603.1	674.5	717.1	787.4	862.9	911.0	967.2	907.0
82.5°	110.9	117.0	135.2	167.1	206.1	259.3	305.4	357.5	404.6	425.9	404.1
85°	45.1	49.1	55.7	62.3	66.8	74.9	88.1	109.4	120.5	122.0	116.0
87.5°	18.7	21.8	29.4	34.9	35.4	33.9	34.9	36.0	29.4	23.8	29.9
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°	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1
2.5°	448.7	449.2	448.7	449.2	448.7	448.7	449.2	448.7
5°	459.8	460.3	459.8	459.3	458.8	459.3	459.3	459.3
7.5°	475.5	475.0	474.5	474.5	474.0	473.5	474.5	474.5
10°	494.7	494.2	493.2	493.2	492.7	492.7	492.7	492.7
12.5°	518.0	516.5	516.0	514.5	514.0	513.5	513.5	514.0
15°	542.3	540.8	540.3	537.8	537.8	537.3	537.3	537.3
17.5°	568.2	566.7	564.6	564.6	563.1	562.1	562.6	561.6
20°	594.5	592.5	591.5	591.0	588.9	588.9	588.9	588.4
22.5°	620.3	618.8	617.3	615.3	613.2	612.7	612.7	612.2
25°	646.7	644.1	641.1	639.1	637.0	635.5	635.5	635.5
27.5°	673.0	670.0	665.4	662.9	659.8	658.3	658.3	657.8
30°	700.9	697.3	693.3	689.7	685.7	684.1	683.6	682.6
32.5°	734.3	730.7	726.7	721.6	717.6	715.0	715.0	713.5
35°	776.8	772.8	769.7	763.1	758.1	754.0	754.5	755.5
37.5°	832.5	827.4	824.9	816.8	810.2	806.2	806.2	805.7
40°	903.4	898.3	892.8	885.2	877.1	871.5	870.0	870.0
42.5°	993.5	989.0	981.4	970.8	961.1	955.1	950.0	950.5
45°	1106.5	1100.9	1090.3	1077.1	1065.5	1056.8	1049.8	1049.8
47.5°	1243.7	1232.1	1217.4	1205.7	1186.0	1172.8	1167.7	1166.7
50°	1400.2	1378.4	1360.2	1343.5	1322.7	1309.0	1301.4	1299.4
52.5°	1564.3	1541.5	1518.7	1496.9	1471.6	1457.4	1445.3	1444.2
55°	1742.5	1713.6	1684.8	1663.5	1633.6	1618.9	1606.8	1599.7
57.5°	1924.3	1891.9	1871.1	1840.7	1809.3	1798.7	1787.1	1778.5
60°	2128.9	2093.4	2066.1	2034.2	2013.9	1991.1	1980.0	1973.4
62.5°	2338.0	2305.1	2270.2	2239.8	2211.4	2195.7	2180.5	2172.9
65°	2550.7	2496.5	2455.0	2413.0	2379.5	2351.2	2327.4	2324.4
67.5°	2681.4	2613.0	2543.6	2482.3	2433.2	2393.2	2368.9	2360.3
69°	2692.0	2617.6	2531.0	2457.5	2400.8	2362.3	2333.5	2324.4
70°	2662.6	2587.7	2496.5	2417.5	2358.8	2316.8	2293.0	2277.8
72.5°	2447.9	2382.1	2294.5	2216.5	2163.3	2114.2	2090.4	2084.3
75°	2019.5	1949.6	1869.1	1831.6	1794.7	1763.8	1747.6	1746.0
77.5°	1434.1	1362.7	1301.4	1252.3	1212.3	1192.6	1197.1	1180.4
80°	820.9	727.7	653.8	610.2	551.0	515.5	475.5	504.4
82.5°	353.0	285.1	217.2	176.7	134.7	106.8	88.1	82.0
85°	98.7	80.5	67.4	61.8	55.7	49.6	42.0	39.0
87.5°	33.4	31.9	28.4	28.4	25.8	21.8	15.2	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)