

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: P143944

Luminaire Tested: **LDRL-5WQ-F03-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143944
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-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6934.2 lumens
Efficiency: N/A
Efficacy: 88.6 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

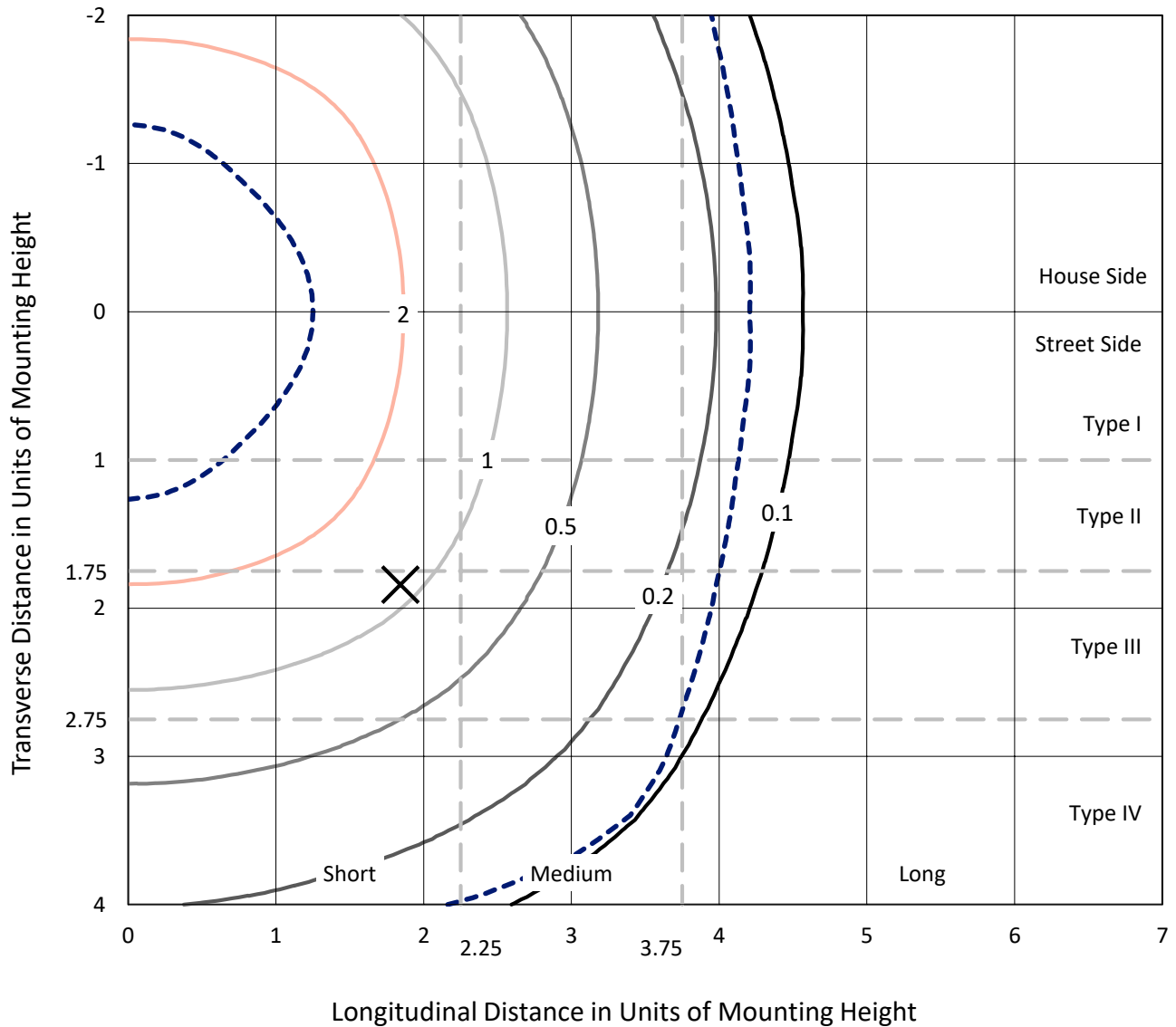
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143944
 CATALOG NUMBER: LDRL-5WQ-F03-E-7030

Iso-Footcandle Lines of Horizontal Illumination

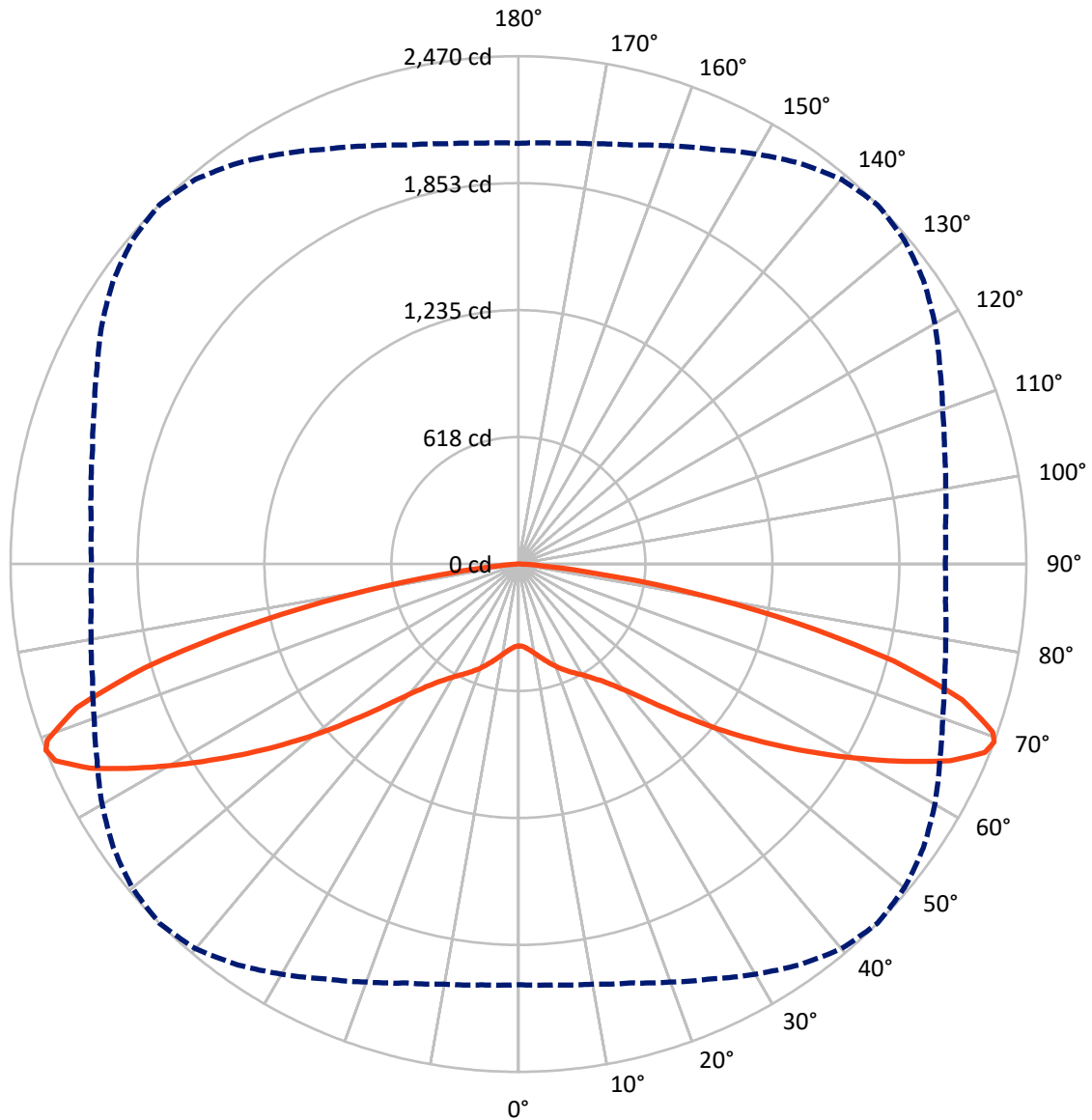
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P143944
CATALOG NUMBER: LDRL-5WQ-F03-E-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P143944

CATALOG NUMBER: LDRL-5WQ-F03-E-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3467.1	0.0	3467.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3467.1	0.0	3467.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	6934.2	0.0	6934.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.2	0.6
10°-20°	138.6	2.0
20°-30°	267.1	3.9
30°-40°	437.7	6.3
40°-50°	761.1	11.0
50°-60°	1352.0	19.5
60°-70°	2099.0	30.3
70°-80°	1672.3	24.1
80°-90°	166.3	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°	6934.2	100.0
0°-180°	6934.2	100.0



REPORT NUMBER: P143944

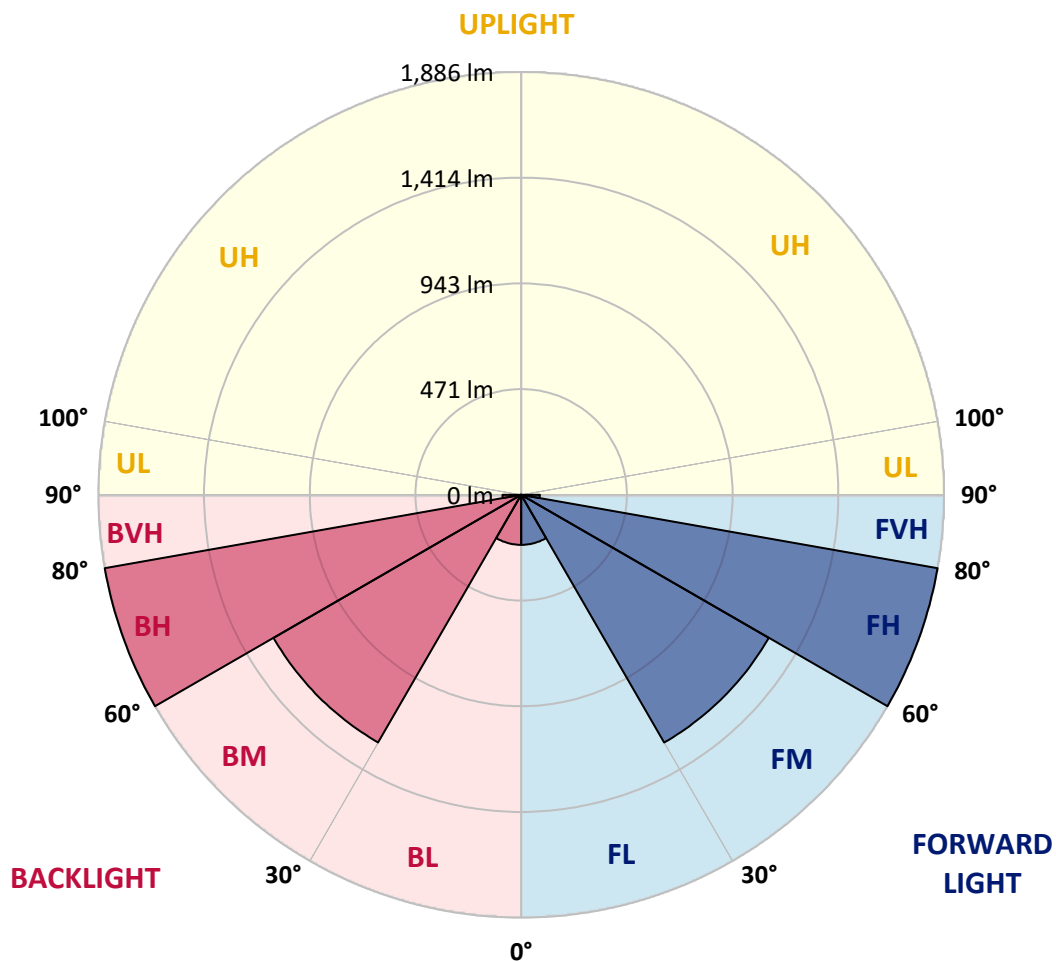
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	222.9	3.2			
FM	(30°-60°)	1275.4	18.4			
FH	(60°-80°)	1885.7	27.2			G2/5000
FVH	(80°-90°)	83.1	1.2			G1/100
BL	(0°-30°)	222.9	3.2	B1/500		
BM	(30°-60°)	1275.4	18.4	B2/2500		
BH	(60°-80°)	1885.7	27.2	B3/2500		G2/5000
BVH	(80°-90°)	83.1	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





REPORT NUMBER: P143944

CATALOG NUMBER: LDRL-5WQ-F03-E-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	398.6	398.6	398.6	398.6	398.6	398.6	398.6	398.6	398.6	398.6	398.6
2.5°	401.7	401.7	401.7	401.3	401.3	400.8	401.3	400.8	400.8	400.8	400.8
5°	412.1	411.2	411.2	410.8	411.7	411.7	410.8	411.2	410.8	411.2	411.2
7.5°	425.3	425.3	425.3	424.8	425.7	425.3	424.8	425.3	425.3	424.8	424.8
10°	441.5	442.0	441.5	441.5	442.9	442.4	442.9	442.9	443.3	442.9	442.9
12.5°	460.5	460.5	461.0	461.4	461.9	462.3	463.7	463.3	464.2	463.3	463.3
15°	482.7	483.6	482.7	482.7	484.1	485.0	485.4	485.4	486.3	485.9	485.0
17.5°	506.2	506.7	506.2	505.8	507.1	508.5	508.9	508.9	510.3	509.4	509.4
20°	530.2	530.7	529.8	529.3	531.1	531.1	532.0	532.5	533.8	534.3	532.9
22.5°	552.4	552.8	552.4	551.9	553.7	553.7	555.1	555.5	557.4	556.9	556.9
25°	574.1	574.1	573.6	573.6	575.4	575.9	577.3	578.2	580.0	580.0	580.0
27.5°	594.0	594.4	593.5	593.1	596.7	598.1	599.0	600.8	602.1	603.0	602.6
30°	616.6	616.6	616.2	617.5	619.8	621.6	623.4	626.1	628.8	627.9	627.9
32.5°	643.3	644.2	643.8	645.6	648.3	651.0	653.3	656.4	657.8	660.0	658.2
35°	679.0	680.9	680.0	681.8	684.0	685.8	690.8	694.0	696.2	697.6	696.7
37.5°	723.8	722.9	724.7	725.2	729.7	732.0	737.9	742.4	746.0	747.4	746.5
40°	779.5	778.1	780.4	782.6	788.5	790.8	797.6	804.4	809.3	811.1	810.2
42.5°	846.0	847.8	851.4	854.6	862.7	869.1	876.7	886.7	892.1	894.4	891.2
45°	933.3	930.1	936.9	945.1	949.6	963.6	976.3	986.7	995.7	999.3	995.7
47.5°	1032.8	1032.4	1040.5	1050.5	1062.2	1075.3	1090.3	1103.8	1119.7	1120.6	1116.1
50°	1142.8	1151.8	1156.3	1166.3	1188.0	1204.3	1223.3	1243.6	1258.1	1262.6	1254.5
52.5°	1275.3	1282.1	1284.8	1301.5	1321.4	1341.4	1368.0	1392.5	1409.2	1411.0	1407.0
55°	1419.2	1424.6	1429.6	1449.9	1471.6	1489.3	1523.2	1547.2	1563.9	1570.3	1567.6
57.5°	1568.0	1573.0	1579.3	1601.5	1623.6	1648.5	1680.7	1708.7	1728.2	1739.9	1736.7
60°	1733.1	1733.1	1747.6	1769.8	1787.9	1817.3	1850.8	1883.3	1904.6	1923.1	1918.2
62.5°	1906.8	1911.8	1925.9	1943.9	1962.9	1990.1	2028.1	2067.0	2099.6	2113.6	2113.1
65°	2038.5	2047.5	2066.1	2086.9	2118.6	2150.7	2198.6	2247.1	2286.4	2306.8	2306.8
67.5°	2077.0	2082.8	2105.9	2137.6	2183.3	2234.4	2299.5	2366.9	2420.8	2447.5	2430.7
69°	2046.2	2054.8	2075.1	2109.5	2163.8	2226.2	2303.6	2380.1	2442.5	2470.1	2450.6
70°	2010.4	2019.9	2040.3	2074.2	2130.3	2196.8	2274.2	2356.5	2423.5	2447.0	2424.8
72.5°	1864.8	1876.5	1891.0	1920.4	1971.1	2033.5	2103.2	2175.6	2239.8	2258.4	2230.8
75°	1616.4	1618.7	1625.9	1647.6	1665.7	1710.1	1769.3	1826.8	1875.2	1886.0	1856.6
77.5°	1144.1	1131.9	1119.7	1138.2	1152.7	1209.7	1273.9	1321.0	1371.7	1387.0	1357.2
80°	501.7	497.2	514.4	538.8	602.6	640.6	703.5	770.9	813.9	864.1	810.2
82.5°	99.1	104.5	120.8	149.3	184.1	231.6	272.8	319.4	361.5	380.5	361.0
85°	40.3	43.9	49.8	55.6	59.7	67.0	78.7	97.7	107.7	109.0	103.6
87.5°	16.7	19.5	26.2	31.2	31.7	30.3	31.2	32.1	26.2	21.3	26.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143944

CATALOG NUMBER: LDRL-5WQ-F03-E-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	398.6	398.6	398.6	398.6	398.6	398.6	398.6	398.6
2.5°	400.8	401.3	400.8	401.3	400.8	400.8	401.3	400.8
5°	410.8	411.2	410.8	410.3	409.9	410.3	410.3	410.3
7.5°	424.8	424.3	423.9	423.9	423.4	423.0	423.9	423.9
10°	442.0	441.5	440.6	440.6	440.2	440.2	440.2	440.2
12.5°	462.8	461.4	461.0	459.6	459.2	458.7	458.7	459.2
15°	484.5	483.2	482.7	480.4	480.4	480.0	480.0	480.0
17.5°	507.6	506.2	504.4	504.4	503.1	502.2	502.6	501.7
20°	531.1	529.3	528.4	527.9	526.1	526.1	526.1	525.7
22.5°	554.2	552.8	551.5	549.7	547.9	547.4	547.4	546.9
25°	577.7	575.4	572.7	570.9	569.1	567.8	567.8	567.8
27.5°	601.2	598.5	594.4	592.2	589.5	588.1	588.1	587.7
30°	626.1	622.9	619.3	616.2	612.5	611.2	610.7	609.8
32.5°	656.0	652.8	649.2	644.7	641.0	638.8	638.8	637.4
35°	694.0	690.4	687.6	681.8	677.2	673.6	674.1	675.0
37.5°	743.7	739.2	737.0	729.7	723.8	720.2	720.2	719.8
40°	807.1	802.6	797.6	790.8	783.6	778.6	777.2	777.2
42.5°	887.6	883.5	876.7	867.2	858.6	853.2	848.7	849.1
45°	988.5	983.5	974.0	962.2	951.8	944.2	937.8	937.8
47.5°	1111.1	1100.7	1087.6	1077.2	1059.5	1047.7	1043.2	1042.3
50°	1250.9	1231.4	1215.1	1200.2	1181.7	1169.4	1162.7	1160.8
52.5°	1397.5	1377.1	1356.7	1337.3	1314.7	1302.0	1291.1	1290.2
55°	1556.7	1530.9	1505.1	1486.1	1459.4	1446.3	1435.5	1429.1
57.5°	1719.1	1690.2	1671.6	1644.5	1616.4	1606.9	1596.5	1588.8
60°	1901.9	1870.2	1845.8	1817.3	1799.2	1778.8	1768.9	1763.0
62.5°	2088.7	2059.3	2028.1	2000.9	1975.6	1961.6	1948.0	1941.2
65°	2278.7	2230.3	2193.2	2155.7	2125.8	2100.5	2079.2	2076.5
67.5°	2395.4	2334.4	2272.4	2217.6	2173.8	2138.0	2116.3	2108.6
69°	2404.9	2338.4	2261.1	2195.5	2144.8	2110.4	2084.6	2076.5
70°	2378.7	2311.7	2230.3	2159.7	2107.3	2069.7	2048.4	2034.9
72.5°	2186.9	2128.1	2049.8	1980.1	1932.6	1888.8	1867.5	1862.1
75°	1804.2	1741.7	1669.8	1636.3	1603.3	1575.7	1561.2	1559.9
77.5°	1281.2	1217.4	1162.7	1118.8	1083.0	1065.4	1069.5	1054.5
80°	733.3	650.1	584.0	545.1	492.2	460.5	424.8	450.6
82.5°	315.3	254.7	194.1	157.9	120.3	95.5	78.7	73.3
85°	88.2	71.9	60.2	55.2	49.8	44.3	37.5	34.8
87.5°	29.9	28.5	25.3	25.3	23.1	19.5	13.6	12.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)