

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: P144231

Luminaire Tested: **LDRL-5XQ-E02-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144231
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-E02-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6345.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

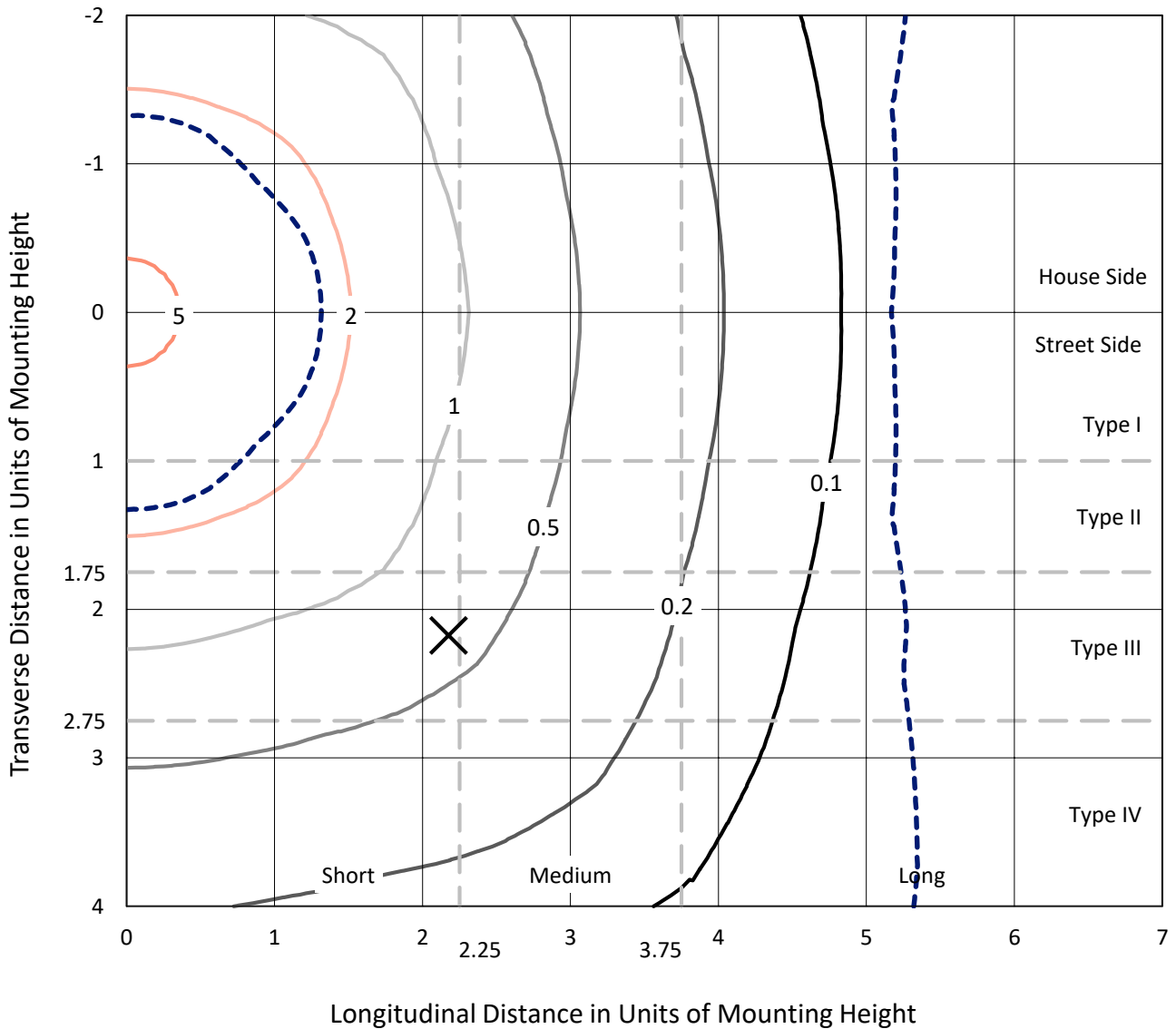
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

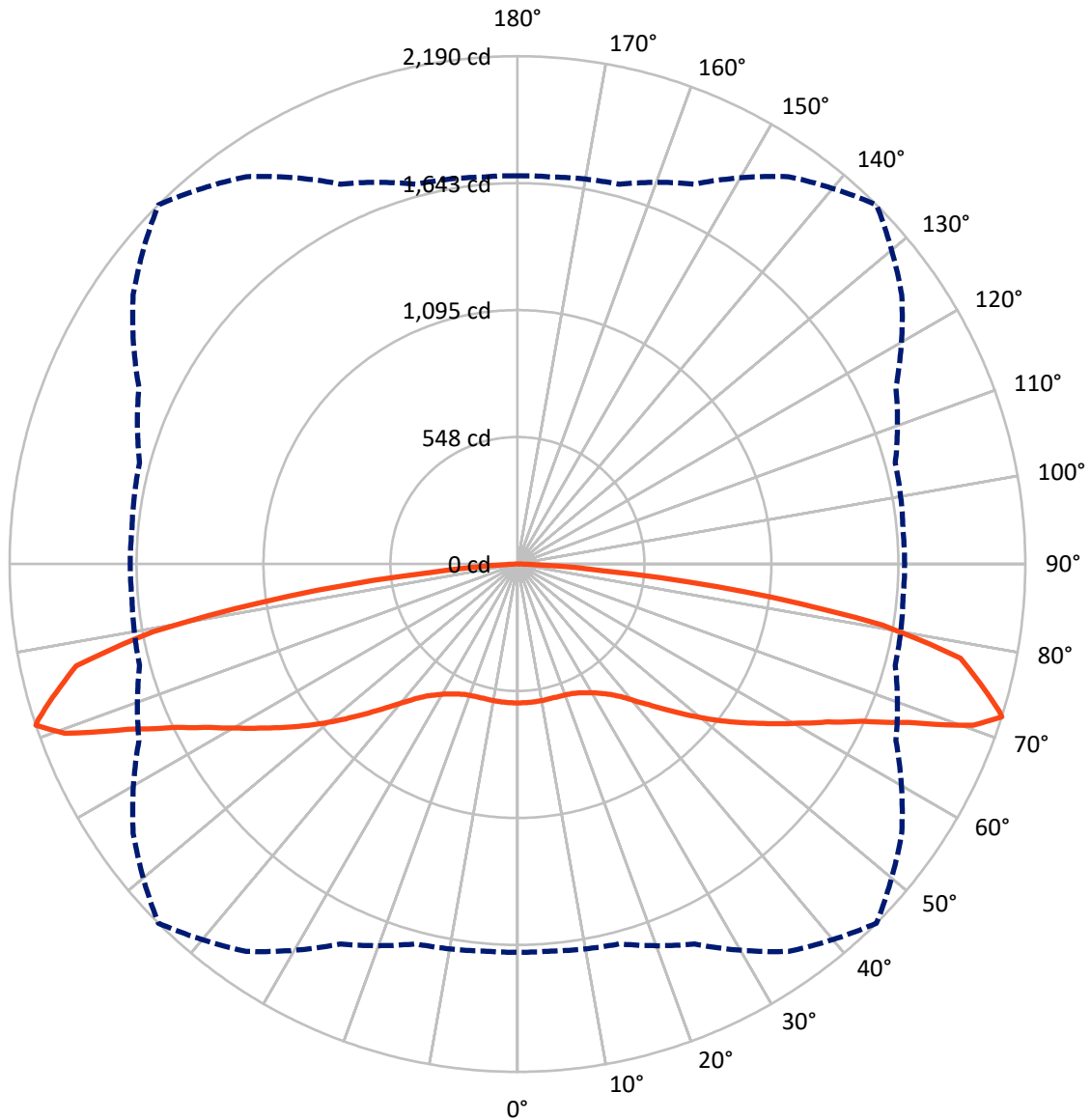
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 fc
 Type V - Short - 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	3172.8	0.0	3172.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3172.8	0.0	3172.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	6345.7	0.0	6345.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	0.9
10°-20°	169.9	2.7
20°-30°	285.4	4.5
30°-40°	434.4	6.8
40°-50°	686.7	10.8
50°-60°	1048.8	16.5
60°-70°	1536.5	24.2
70°-80°	1745.6	27.5
80°-90°	381.3	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°	6345.7	100.0
0°-180°	6345.7	100.0



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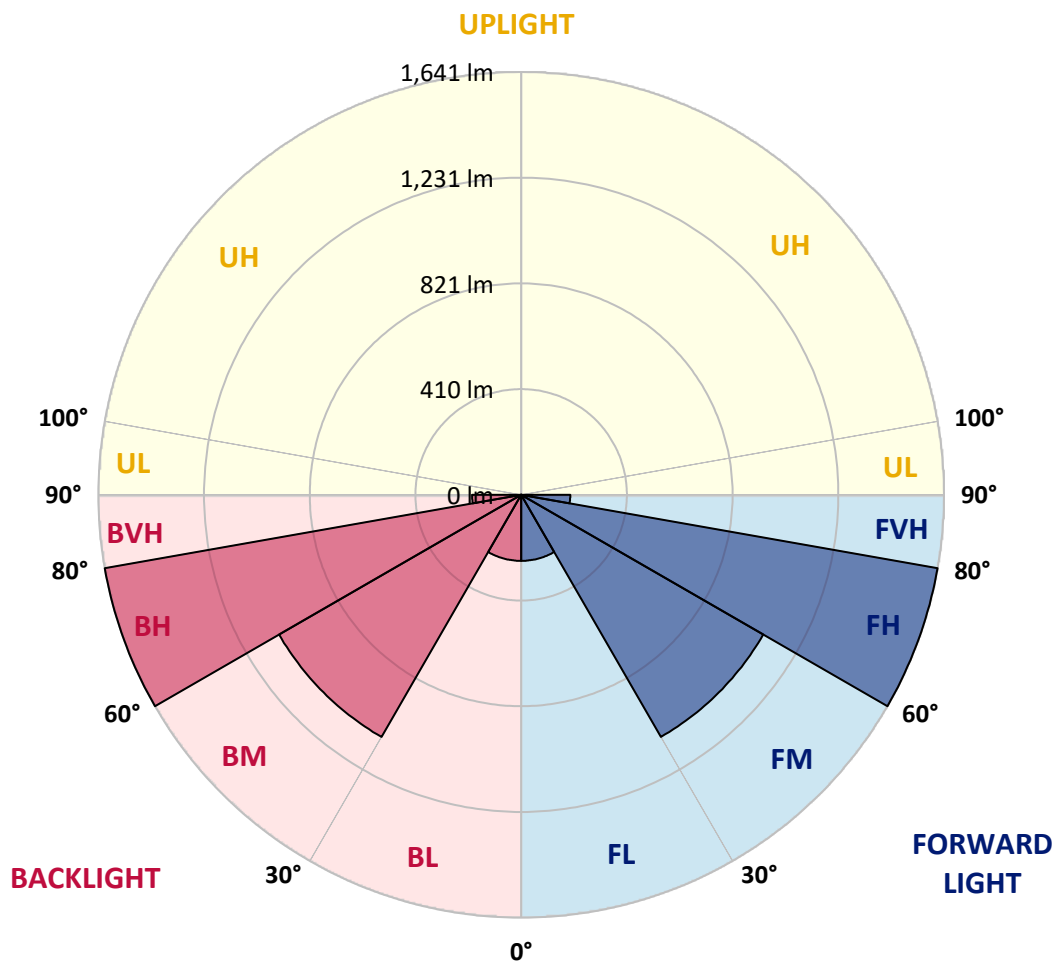
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	256.2	4.0			
FM	(30°-60°)	1084.9	17.1			
FH	(60°-80°)	1641.0	25.9			G1/1800
FVH	(80°-90°)	190.6	3.0			G2/225
BL	(0°-30°)	256.2	4.0	B1/500		
BM	(30°-60°)	1084.9	17.1	B2/2500		
BH	(60°-80°)	1641.0	25.9	B3/2500		G1/1800
BVH	(80°-90°)	190.6	3.0			G2/225
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°	599.2	599.2	599.2	599.2	599.2	599.2	599.2	599.2	599.2	599.2	599.2
2.5°	600.5	600.3	599.9	599.4	599.2	599.0	599.0	599.0	599.0	598.8	598.9
5°	600.5	600.3	600.0	599.7	599.4	599.0	599.0	599.0	599.0	598.8	599.0
7.5°	599.6	599.8	599.6	599.2	599.2	599.0	598.9	598.8	598.6	598.4	598.5
10°	599.8	600.7	600.1	599.4	599.2	599.0	598.7	598.2	598.1	598.0	597.8
12.5°	600.3	601.1	600.4	599.7	599.4	599.0	598.7	598.2	598.0	597.6	597.3
15°	601.5	602.1	601.5	600.9	600.3	599.7	599.3	598.8	598.2	597.6	597.3
17.5°	602.3	603.4	602.6	601.9	601.2	600.5	600.1	599.6	599.2	598.8	598.3
20°	603.8	604.8	604.2	603.6	603.2	602.7	602.4	602.1	601.8	601.5	600.8
22.5°	606.4	607.2	607.0	606.8	606.9	607.0	607.1	607.2	607.0	606.8	606.1
25°	612.0	612.0	612.4	612.8	613.4	614.0	614.5	615.0	615.4	615.7	614.8
27.5°	621.6	622.4	622.8	623.0	624.1	625.1	626.2	627.4	628.0	628.6	627.7
30°	634.1	634.1	634.8	635.6	637.4	639.1	640.5	642.0	643.0	644.2	643.4
32.5°	650.2	651.2	652.2	653.2	655.4	657.6	660.0	662.5	663.9	665.4	664.2
35°	674.6	675.8	676.8	677.8	680.1	682.4	685.1	687.9	689.2	690.4	689.7
37.5°	709.0	709.0	710.5	711.9	713.4	714.8	718.5	722.2	723.7	725.2	724.0
40°	755.6	755.8	756.2	756.4	757.8	759.2	763.7	768.2	770.8	773.4	770.9
42.5°	809.2	811.4	811.4	811.2	812.2	813.0	817.4	821.7	825.5	829.3	827.8
45°	872.4	872.0	871.2	870.4	873.1	875.8	882.0	888.2	891.6	895.0	891.8
47.5°	936.2	935.6	934.4	933.3	936.1	938.8	948.1	957.4	962.2	967.0	961.9
50°	999.8	1002.3	1000.9	999.4	1003.6	1007.6	1019.3	1031.0	1038.1	1045.2	1039.2
52.5°	1070.2	1072.1	1070.4	1068.8	1074.4	1080.0	1093.9	1107.8	1117.2	1126.6	1118.6
55°	1143.1	1140.8	1141.7	1142.6	1148.0	1153.4	1170.4	1187.4	1198.7	1210.0	1201.0
57.5°	1211.2	1212.0	1211.1	1210.2	1218.6	1227.0	1248.4	1269.9	1284.1	1298.2	1287.0
60°	1281.0	1281.2	1279.2	1277.1	1286.2	1295.4	1326.1	1356.9	1375.3	1393.7	1378.2
62.5°	1359.0	1358.8	1355.2	1351.6	1362.4	1373.2	1411.3	1449.5	1474.7	1500.0	1481.1
65°	1454.6	1452.2	1450.1	1448.1	1460.5	1472.9	1520.3	1567.7	1601.8	1635.8	1611.5
67.5°	1595.6	1593.8	1589.5	1585.2	1599.0	1612.8	1673.6	1734.3	1778.3	1822.4	1790.2
70°	1750.7	1747.2	1750.2	1753.2	1785.2	1817.2	1898.7	1980.2	2032.3	2084.4	2030.4
72°	1674.2	1675.6	1685.6	1695.6	1751.7	1807.8	1923.5	2039.2	2114.7	2190.2	2106.7
72.5°	1647.5	1648.8	1660.0	1671.3	1724.9	1778.4	1897.8	2017.2	2095.2	2173.3	2087.5
75°	1534.2	1537.5	1550.6	1563.6	1617.9	1672.2	1792.5	1912.9	1987.7	2062.4	1976.6
77.5°	1349.4	1359.6	1372.8	1386.1	1450.7	1515.4	1651.4	1787.5	1870.1	1952.6	1855.2
80°	1029.8	1026.1	1048.9	1071.6	1133.4	1195.2	1300.5	1405.8	1500.9	1596.0	1486.4
82.5°	400.2	409.0	456.2	503.4	568.2	632.9	727.2	821.5	907.2	992.8	901.6
85°	41.2	47.0	63.9	80.9	116.2	151.4	208.9	266.4	322.7	379.0	317.9
87.5°	16.6	18.2	23.5	28.7	30.0	31.4	38.0	44.6	44.2	43.9	43.3
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°	599.2	599.2	599.2	599.2	599.2	599.2	599.2	599.2
2.5°	599.0	599.2	599.4	599.4	599.4	599.8	600.0	599.7
5°	599.2	599.3	599.4	599.4	599.4	599.8	600.0	599.7
7.5°	598.7	598.7	598.6	599.0	599.2	599.4	599.4	599.2
10°	597.6	597.7	597.8	598.1	598.4	598.7	599.0	599.2
12.5°	597.0	597.1	597.2	597.5	597.8	598.1	598.4	598.8
15°	597.0	597.1	597.2	597.4	597.7	598.0	598.4	598.8
17.5°	597.8	597.6	597.4	597.6	597.8	598.3	598.8	599.2
20°	600.0	599.8	599.4	599.4	599.4	600.0	600.5	600.5
22.5°	605.4	604.4	603.3	603.2	603.0	603.0	603.2	603.4
25°	613.8	612.2	610.6	610.0	609.5	609.3	609.1	609.5
27.5°	626.8	624.9	623.0	621.9	620.8	620.2	619.6	619.8
30°	642.8	640.6	638.4	636.6	634.7	633.9	633.1	633.3
32.5°	663.0	660.5	658.0	655.5	653.0	651.9	650.8	651.0
35°	689.0	686.0	683.0	680.9	678.8	677.1	675.4	676.8
37.5°	722.8	720.0	717.2	715.9	714.6	713.0	711.5	711.7
40°	768.3	765.5	762.6	761.5	760.4	758.4	756.4	756.9
42.5°	826.2	821.9	817.6	815.5	813.4	812.6	811.6	812.3
45°	888.6	884.3	880.0	878.2	876.5	874.0	871.6	873.8
47.5°	956.8	951.3	945.9	942.8	939.7	940.5	941.4	939.5
50°	1033.3	1024.2	1015.0	1011.4	1007.8	1007.8	1007.8	1007.6
52.5°	1110.6	1098.0	1085.4	1082.3	1079.2	1078.5	1077.8	1077.0
55°	1191.9	1176.4	1160.9	1155.2	1149.4	1150.2	1151.0	1153.3
57.5°	1275.6	1255.2	1234.8	1228.2	1221.7	1222.2	1222.7	1226.4
60°	1362.6	1336.3	1310.0	1302.7	1295.4	1297.3	1299.2	1301.5
62.5°	1462.2	1430.3	1398.4	1388.6	1378.9	1381.4	1383.8	1389.8
65°	1587.2	1547.4	1507.6	1497.4	1487.2	1488.4	1489.5	1499.8
67.5°	1758.1	1705.1	1652.0	1642.7	1633.4	1635.0	1636.6	1653.3
70°	1976.5	1897.9	1819.3	1780.6	1741.9	1735.8	1729.8	1738.6
72°	2023.2	1912.2	1801.2	1744.2	1687.2	1678.2	1669.2	1670.1
72.5°	2001.7	1889.4	1777.2	1721.8	1666.4	1659.1	1651.8	1650.4
75°	1890.7	1780.9	1671.2	1613.9	1556.6	1542.8	1528.9	1528.9
77.5°	1757.8	1619.3	1480.8	1419.1	1357.3	1342.8	1328.4	1317.1
80°	1376.8	1252.8	1128.8	1066.1	1003.4	980.1	956.9	943.2
82.5°	810.4	696.3	582.2	502.6	423.0	399.0	375.2	341.9
85°	256.8	197.6	138.4	108.0	77.6	62.7	47.8	41.9
87.5°	42.7	34.7	26.6	25.8	24.8	19.5	14.2	11.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)