

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: P144246

Luminaire Tested: **LDRL-5XQ-F03-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144246
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-F03-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7857.8 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

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

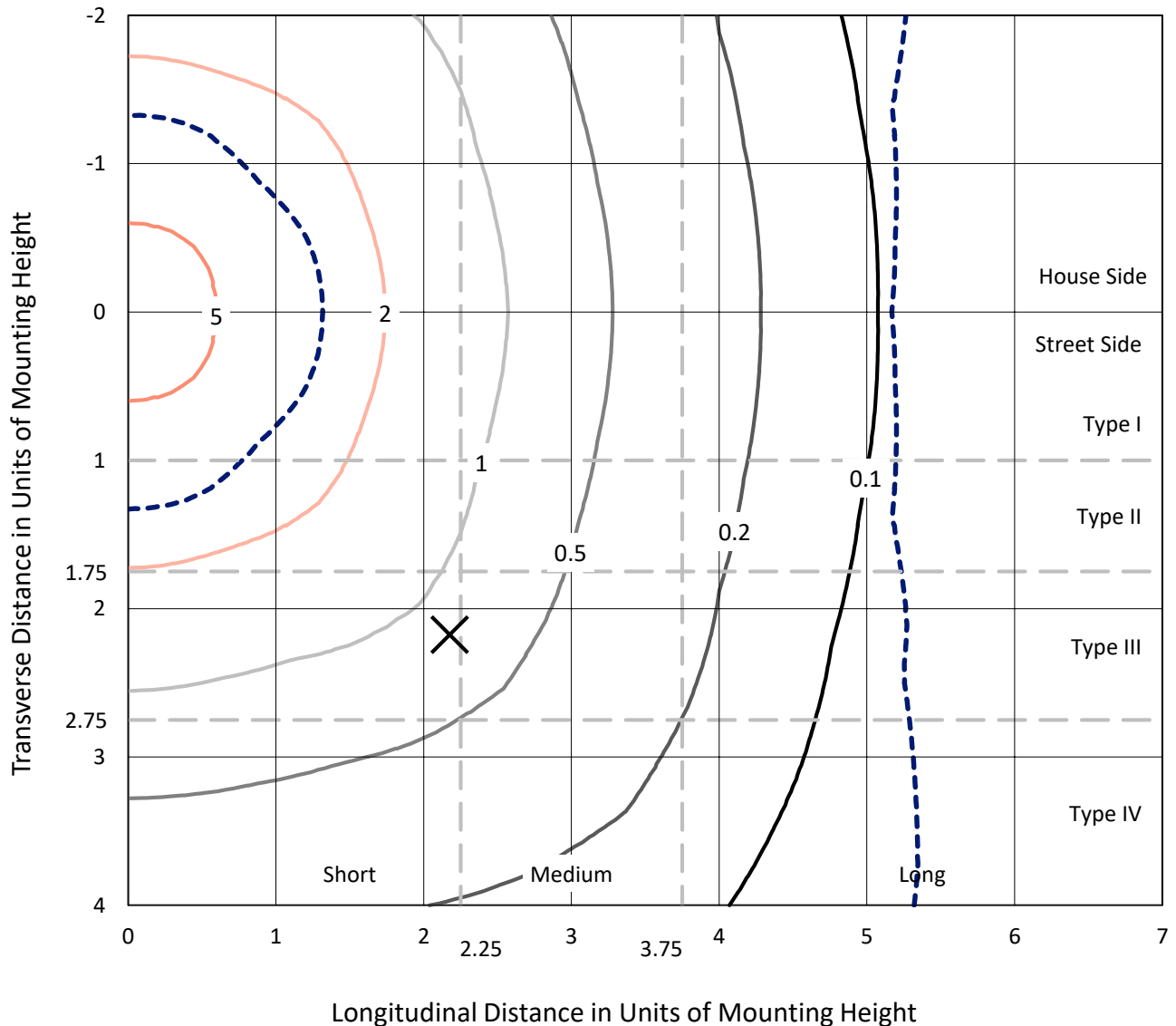


REPORT NUMBER: P144246

CATALOG NUMBER: LDRL-5XQ-F03-E-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

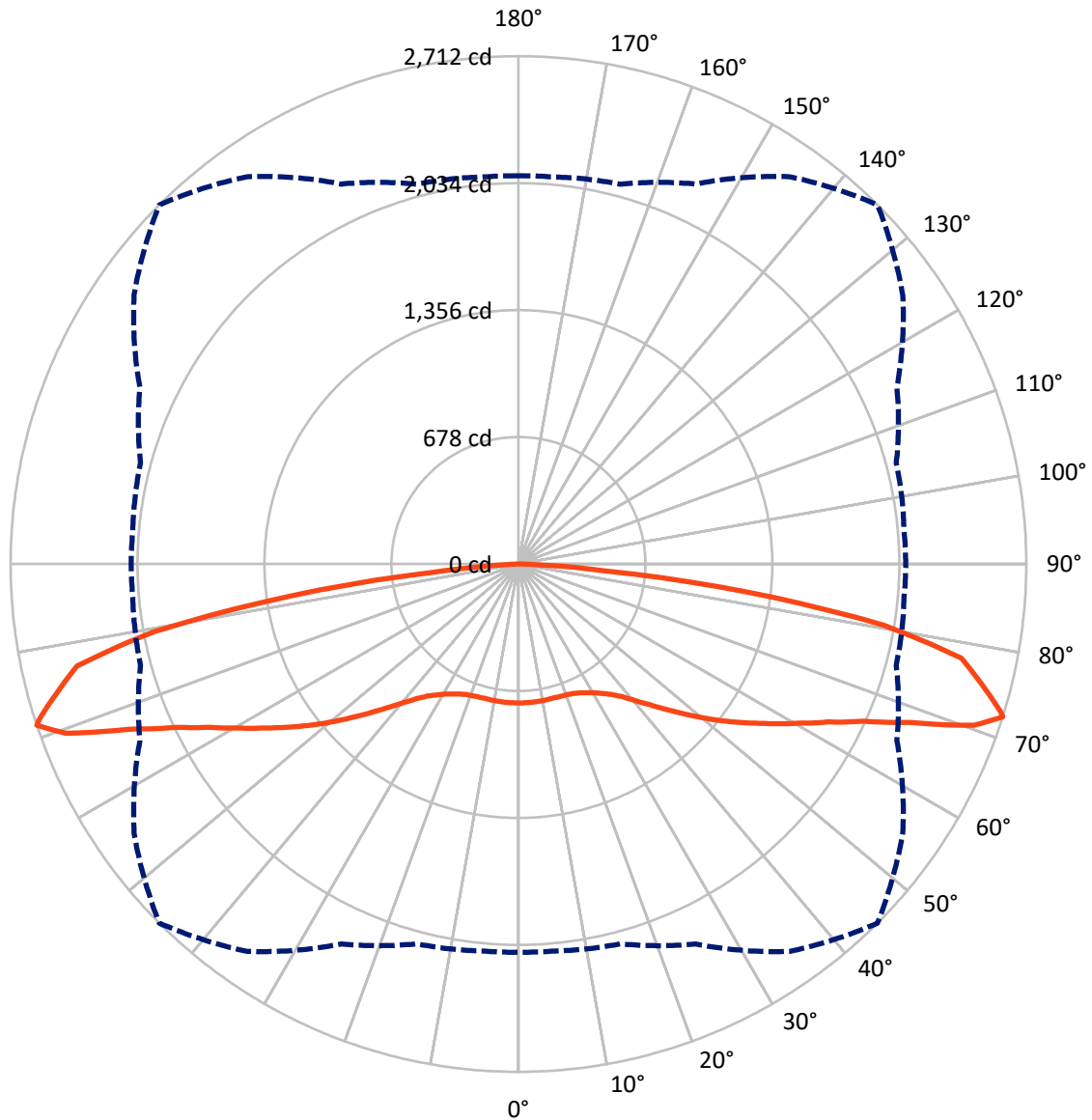


Based on 10 foot mounting height. Maximum calculated value = 7.4 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P144246

CATALOG NUMBER: LDRL-5XQ-F03-E-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P144246

CATALOG NUMBER: LDRL-5XQ-F03-E-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3928.9	0.0	3928.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3928.9	0.0	3928.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	7857.8	0.0	7857.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	0.9
10°-20°	210.4	2.7
20°-30°	353.4	4.5
30°-40°	537.9	6.8
40°-50°	850.3	10.8
50°-60°	1298.7	16.5
60°-70°	1902.6	24.2
70°-80°	2161.5	27.5
80°-90°	472.2	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°	7857.8	100.0
0°-180°	7857.8	100.0



REPORT NUMBER: P144246

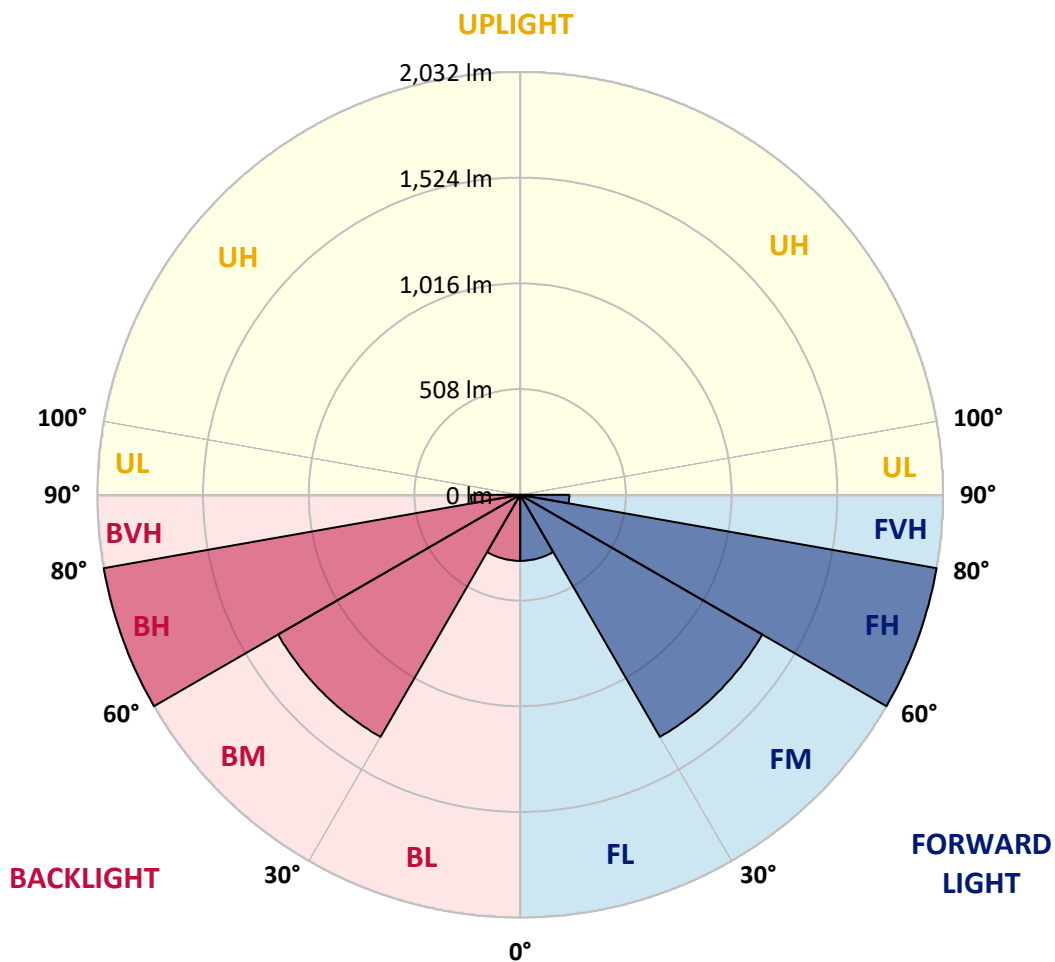
CATALOG NUMBER: LDRL-5XQ-F03-E-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	317.3	4.0			
FM	(30°-60°)	1343.4	17.1			
FH	(60°-80°)	2032.1	25.9			G2/5000
FVH	(80°-90°)	236.1	3.0			G3/500
BL	(0°-30°)	317.3	4.0	B1/500		
BM	(30°-60°)	1343.4	17.1	B2/2500		
BH	(60°-80°)	2032.1	25.9	B3/2500		G2/5000
BVH	(80°-90°)	236.1	3.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type V Short





REPORT NUMBER: P144246

CATALOG NUMBER: LDRL-5XQ-F03-E-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0
2.5°	743.6	743.3	742.8	742.3	742.0	741.8	741.8	741.8	741.7	741.6	741.7
5°	743.6	743.3	743.0	742.6	742.2	741.8	741.8	741.8	741.7	741.6	741.8
7.5°	742.6	742.8	742.4	742.0	741.9	741.8	741.6	741.6	741.3	741.0	741.2
10°	742.8	743.8	743.0	742.3	742.0	741.8	741.3	740.8	740.6	740.5	740.2
12.5°	743.3	744.3	743.4	742.6	742.2	741.8	741.3	740.8	740.4	740.0	739.6
15°	744.8	745.6	744.8	744.0	743.3	742.6	742.0	741.6	740.8	740.0	739.6
17.5°	745.8	747.2	746.2	745.3	744.4	743.6	743.0	742.6	742.0	741.6	740.9
20°	747.7	748.9	748.2	747.4	746.9	746.3	746.0	745.6	745.2	744.8	743.9
22.5°	750.9	752.0	751.7	751.4	751.6	751.7	751.8	752.0	751.7	751.4	750.5
25°	757.8	757.8	758.3	758.8	759.6	760.4	761.0	761.6	762.0	762.4	761.2
27.5°	769.8	770.8	771.1	771.5	772.8	774.1	775.5	776.8	777.6	778.4	777.2
30°	785.2	785.2	786.1	787.0	789.2	791.4	793.1	794.9	796.3	797.6	796.8
32.5°	805.1	806.4	807.6	808.8	811.5	814.2	817.2	820.3	822.1	823.9	822.5
35°	835.3	836.8	838.1	839.4	842.2	845.0	848.4	851.8	853.3	854.8	854.0
37.5°	878.0	878.0	879.8	881.6	883.3	885.1	889.7	894.2	896.2	898.1	896.6
40°	935.7	936.0	936.3	936.7	938.4	940.0	945.6	951.2	954.5	957.8	954.6
42.5°	1002.0	1004.8	1004.7	1004.6	1005.7	1006.8	1012.2	1017.5	1022.2	1026.9	1025.0
45°	1080.3	1079.8	1078.8	1077.8	1081.2	1084.6	1092.2	1099.8	1104.1	1108.2	1104.3
47.5°	1159.3	1158.6	1157.2	1155.8	1159.2	1162.6	1174.1	1185.5	1191.5	1197.4	1191.1
50°	1238.1	1241.2	1239.4	1237.6	1242.7	1247.8	1262.2	1276.8	1285.5	1294.2	1286.9
52.5°	1325.2	1327.5	1325.5	1323.4	1330.4	1337.4	1354.6	1371.8	1383.4	1395.1	1385.2
55°	1415.4	1412.7	1413.8	1415.0	1421.6	1428.2	1449.3	1470.4	1484.3	1498.3	1487.1
57.5°	1499.9	1500.9	1499.7	1498.6	1509.0	1519.4	1546.0	1572.6	1590.0	1607.6	1593.6
60°	1586.2	1586.5	1584.0	1581.4	1592.7	1604.0	1642.2	1680.3	1703.0	1725.8	1706.6
62.5°	1682.8	1682.6	1678.1	1673.6	1687.0	1700.3	1747.6	1794.9	1826.1	1857.4	1834.0
65°	1801.2	1798.2	1795.6	1793.1	1808.5	1823.8	1882.6	1941.2	1983.4	2025.6	1995.5
67.5°	1975.8	1973.5	1968.2	1962.8	1980.0	1997.2	2072.4	2147.6	2202.1	2256.6	2216.8
70°	2167.9	2163.6	2167.3	2171.0	2210.6	2250.2	2351.2	2452.0	2516.6	2581.1	2514.3
72°	2073.1	2074.9	2087.2	2099.6	2169.0	2238.6	2381.9	2525.2	2618.6	2712.0	2608.7
72.5°	2040.1	2041.6	2055.6	2069.6	2135.9	2202.2	2350.0	2497.8	2594.5	2691.2	2585.0
75°	1899.8	1903.9	1920.0	1936.2	2003.4	2070.6	2219.6	2368.6	2461.3	2554.0	2447.6
77.5°	1670.9	1683.6	1700.0	1716.4	1796.4	1876.4	2044.9	2213.4	2315.7	2418.0	2297.3
80°	1275.2	1270.6	1298.8	1327.0	1403.5	1480.0	1610.4	1740.8	1858.5	1976.3	1840.6
82.5°	495.6	506.4	564.9	623.4	703.5	783.7	900.5	1017.2	1123.4	1229.4	1116.5
85°	51.1	58.2	79.2	100.2	143.8	187.6	258.7	329.8	399.6	469.4	393.6
87.5°	20.6	22.6	29.1	35.6	37.2	38.8	47.0	55.2	54.8	54.4	53.6
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: P144246

CATALOG NUMBER: LDRL-5XQ-F03-E-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0
2.5°	741.8	742.0	742.3	742.3	742.3	742.7	743.0	742.5
5°	742.0	742.2	742.3	742.3	742.3	742.7	743.0	742.5
7.5°	741.3	741.3	741.3	741.7	742.0	742.2	742.2	742.0
10°	740.0	740.2	740.3	740.7	741.0	741.4	741.8	742.0
12.5°	739.2	739.4	739.5	739.9	740.2	740.6	741.0	741.5
15°	739.2	739.4	739.5	739.8	740.0	740.5	741.0	741.5
17.5°	740.2	740.0	739.8	740.0	740.3	740.9	741.5	742.0
20°	743.0	742.7	742.2	742.3	742.3	742.9	743.6	743.6
22.5°	749.7	748.4	747.1	746.9	746.7	746.8	746.8	747.1
25°	760.1	758.0	756.0	755.4	754.8	754.5	754.2	754.7
27.5°	776.1	773.8	771.5	770.1	768.7	768.0	767.2	767.5
30°	795.9	793.2	790.6	788.3	786.0	785.0	784.0	784.2
32.5°	821.0	817.9	814.8	811.7	808.6	807.2	805.8	806.1
35°	853.1	849.4	845.7	843.2	840.6	838.4	836.3	838.1
37.5°	895.0	891.6	888.2	886.5	884.8	882.9	881.0	881.3
40°	951.4	947.9	944.4	942.9	941.5	939.1	936.7	937.2
42.5°	1023.1	1017.8	1012.4	1009.9	1007.3	1006.2	1005.1	1005.8
45°	1100.4	1095.0	1089.7	1087.5	1085.4	1082.3	1079.3	1082.1
47.5°	1184.8	1178.0	1171.2	1167.4	1163.6	1164.6	1165.6	1163.4
50°	1279.5	1268.2	1256.9	1252.4	1248.0	1248.0	1248.0	1247.7
52.5°	1375.3	1359.7	1344.1	1340.2	1336.4	1335.5	1334.6	1333.6
55°	1475.9	1456.8	1437.6	1430.4	1423.4	1424.4	1425.4	1428.2
57.5°	1579.6	1554.4	1529.0	1520.9	1512.8	1513.4	1514.1	1518.6
60°	1687.4	1654.7	1622.0	1613.0	1604.0	1606.4	1608.8	1611.6
62.5°	1810.6	1771.1	1731.6	1719.5	1707.4	1710.5	1713.6	1720.9
65°	1965.4	1916.1	1866.8	1854.2	1841.6	1843.0	1844.4	1857.1
67.5°	2177.0	2111.4	2045.7	2034.1	2022.6	2024.6	2026.6	2047.2
70°	2447.4	2350.1	2252.8	2204.9	2157.0	2149.5	2142.0	2152.9
72°	2505.4	2367.9	2230.4	2159.8	2089.2	2078.1	2067.0	2068.1
72.5°	2478.8	2339.7	2200.7	2132.1	2063.5	2054.5	2045.4	2043.7
75°	2341.2	2205.3	2069.4	1998.4	1927.6	1910.4	1893.2	1893.2
77.5°	2176.6	2005.2	1833.8	1757.2	1680.8	1662.8	1645.0	1631.0
80°	1704.9	1551.3	1397.7	1320.0	1242.4	1213.7	1185.0	1167.9
82.5°	1003.5	862.2	721.0	622.4	523.8	494.2	464.6	423.4
85°	317.9	244.6	171.3	133.7	96.1	77.7	59.2	51.8
87.5°	52.8	43.0	33.0	31.9	30.8	24.2	17.6	14.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)