

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: P144229

Luminaire Tested: **LDRL-5XQ-E02-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144229
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-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5648.4 lumens
Efficiency: N/A
Efficacy: 108.4 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

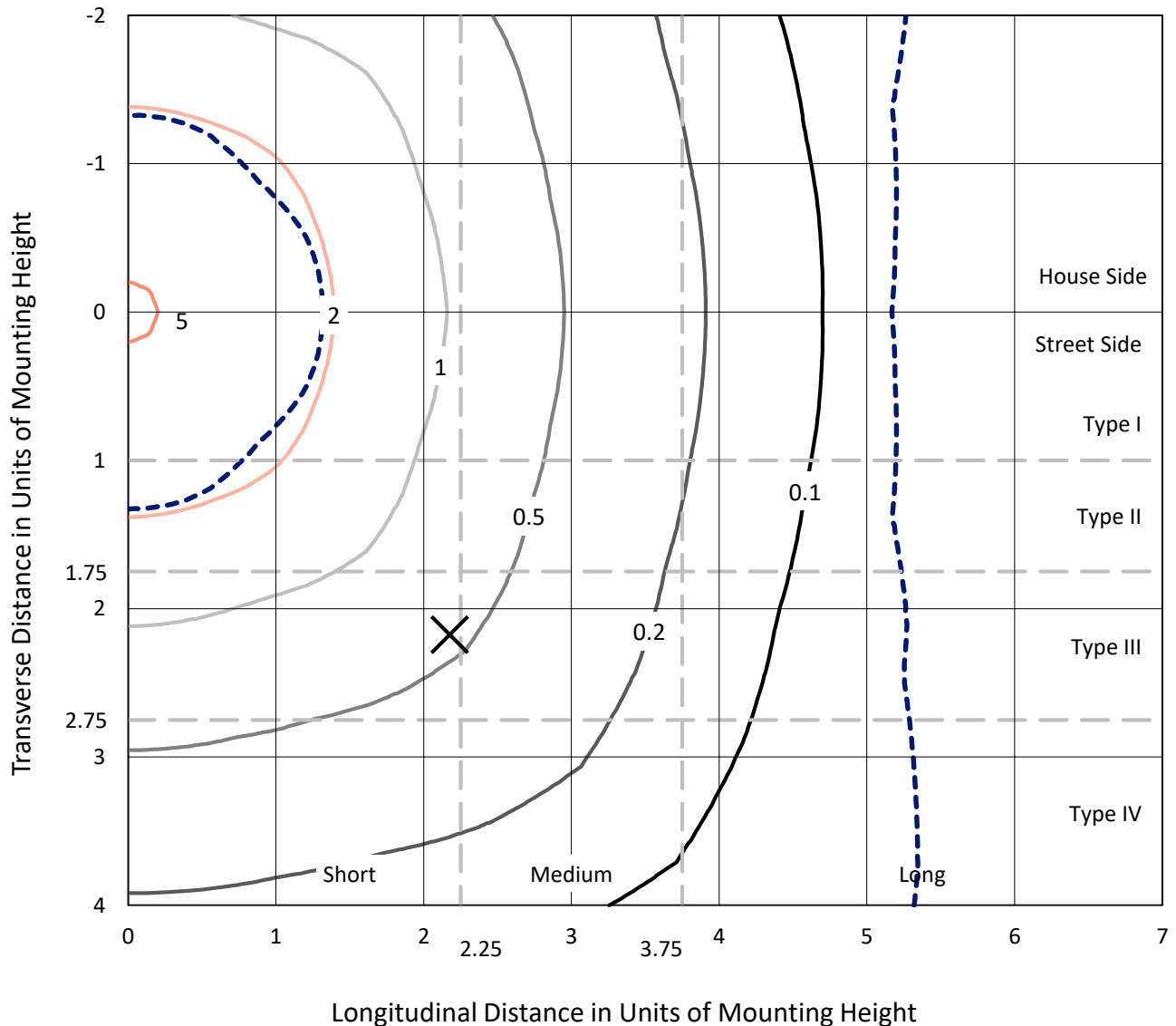


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

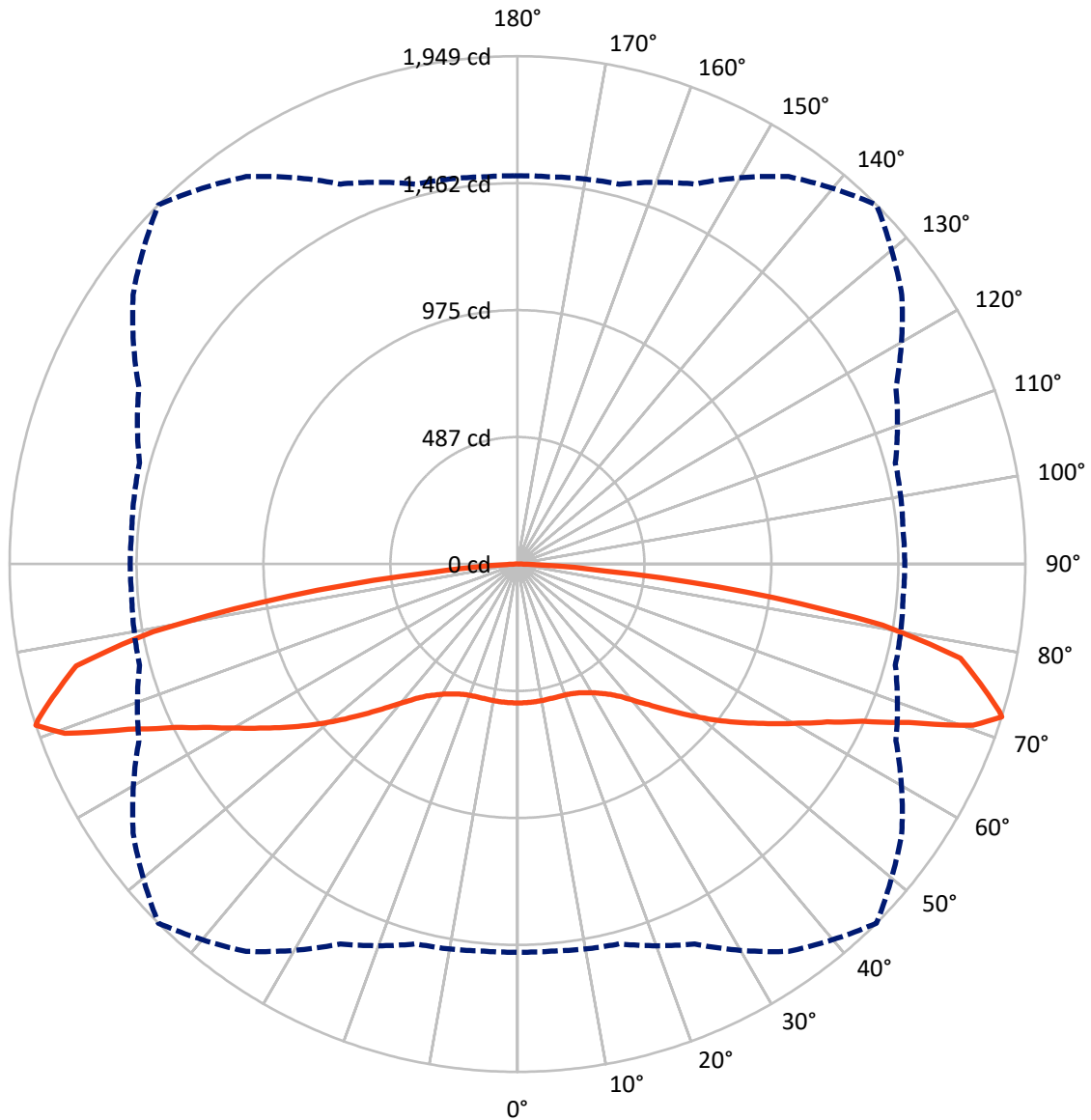


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc
 Type V - Short - Non-Cutoff

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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	2824.2	0.0	2824.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2824.2	0.0	2824.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	5648.4	0.0	5648.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.9	0.9
10°-20°	151.2	2.7
20°-30°	254.0	4.5
30°-40°	386.6	6.8
40°-50°	611.2	10.8
50°-60°	933.5	16.5
60°-70°	1367.7	24.2
70°-80°	1553.8	27.5
80°-90°	339.4	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°	5648.4	100.0
0°-180°	5648.4	100.0



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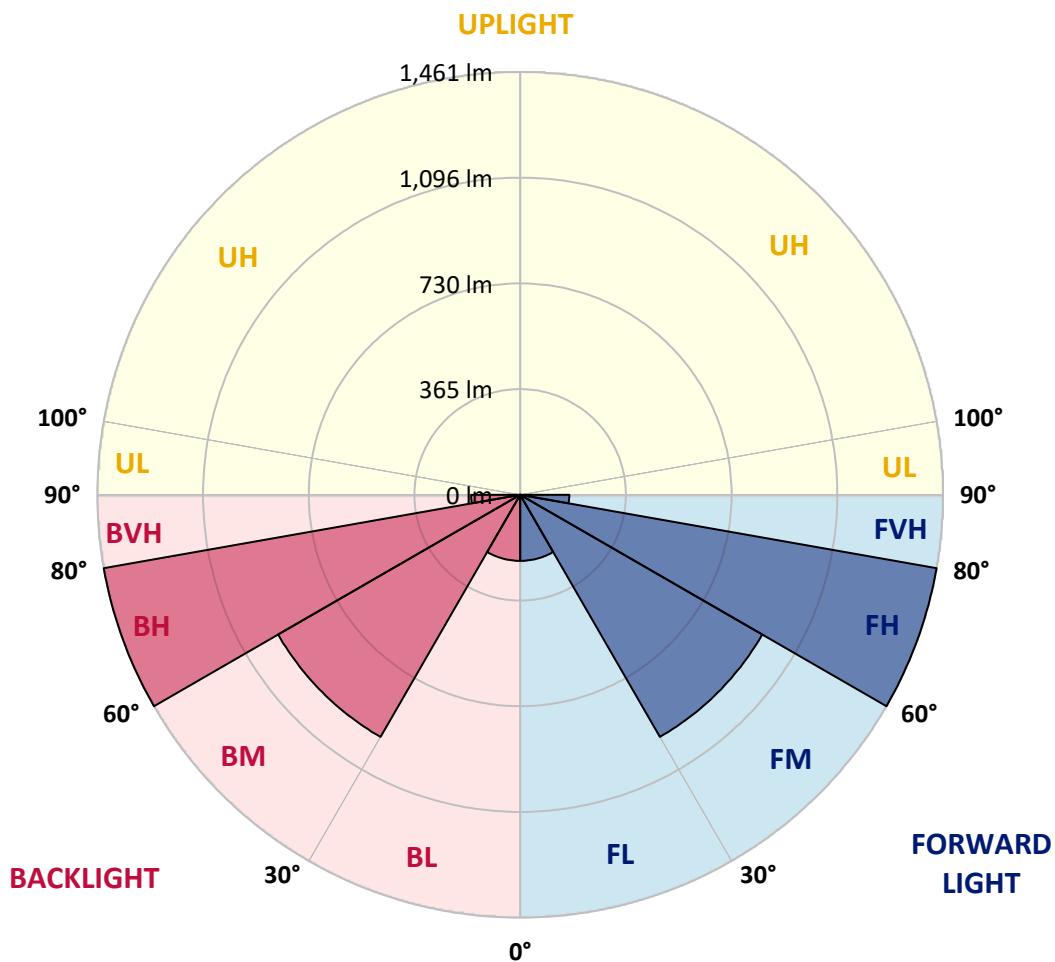
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	228.1	4.0			
FM	(30°-60°)	965.7	17.1			
FH	(60°-80°)	1460.7	25.9			G1/1800
FVH	(80°-90°)	169.7	3.0			G2/225
BL	(0°-30°)	228.1	4.0	B1/500		
BM	(30°-60°)	965.7	17.1	B1/1000		
BH	(60°-80°)	1460.7	25.9	B3/2500		G1/1800
BVH	(80°-90°)	169.7	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°	533.4	533.4	533.4	533.4	533.4	533.4	533.4	533.4	533.4	533.4	533.4
2.5°	534.5	534.3	533.9	533.6	533.4	533.2	533.2	533.2	533.1	533.0	533.1
5°	534.5	534.3	534.0	533.8	533.5	533.2	533.2	533.2	533.2	533.0	533.2
7.5°	533.8	534.0	533.6	533.4	533.3	533.2	533.1	533.0	532.8	532.7	532.8
10°	534.0	534.7	534.2	533.6	533.4	533.2	532.8	532.4	532.4	532.3	532.1
12.5°	534.4	535.0	534.4	533.8	533.5	533.2	532.8	532.4	532.2	531.9	531.6
15°	535.4	536.0	535.4	534.9	534.3	533.8	533.4	533.0	532.5	532.0	531.7
17.5°	536.2	537.0	536.4	535.8	535.1	534.5	534.1	533.8	533.4	533.0	532.6
20°	537.4	538.4	537.8	537.2	536.9	536.5	536.2	536.0	535.7	535.4	534.8
22.5°	539.8	540.5	540.3	540.2	540.2	540.3	540.4	540.6	540.3	540.2	539.5
25°	544.7	544.8	545.1	545.4	546.0	546.6	547.0	547.4	547.7	548.0	547.2
27.5°	553.3	554.0	554.3	554.6	555.5	556.4	557.4	558.4	559.0	559.6	558.7
30°	564.4	564.4	565.1	565.8	567.3	568.8	570.1	571.4	572.4	573.4	572.8
32.5°	578.7	579.6	580.5	581.4	583.3	585.2	587.5	589.7	591.0	592.2	591.2
35°	600.4	601.6	602.4	603.3	605.3	607.3	609.8	612.3	613.4	614.5	613.8
37.5°	631.1	631.1	632.4	633.7	635.0	636.2	639.6	642.8	644.2	645.6	644.4
40°	672.6	672.8	673.0	673.3	674.5	675.7	679.7	683.7	686.1	688.4	686.2
42.5°	720.3	722.2	722.2	722.1	722.9	723.8	727.6	731.4	734.8	738.2	736.8
45°	776.6	776.2	775.4	774.8	777.2	779.6	785.1	790.6	793.6	796.6	793.8
47.5°	833.4	832.8	831.8	830.8	833.2	835.7	843.9	852.2	856.4	860.7	856.2
50°	890.0	892.2	890.9	889.6	893.2	896.9	907.3	917.7	924.0	930.4	925.0
52.5°	952.6	954.3	952.8	951.4	956.4	961.4	973.7	986.0	994.4	1002.8	995.7
55°	1017.4	1015.5	1016.3	1017.2	1021.9	1026.6	1041.8	1056.9	1067.0	1077.0	1069.0
57.5°	1078.1	1078.8	1078.0	1077.2	1084.7	1092.2	1111.3	1130.4	1143.0	1155.6	1145.5
60°	1140.2	1140.4	1138.6	1136.8	1144.9	1153.0	1180.4	1207.8	1224.2	1240.5	1226.7
62.5°	1209.6	1209.5	1206.3	1203.1	1212.6	1222.2	1256.2	1290.2	1312.7	1335.2	1318.4
65°	1294.8	1292.6	1290.8	1288.9	1299.9	1311.0	1353.2	1395.4	1425.7	1456.0	1434.4
67.5°	1420.2	1418.6	1414.8	1411.0	1423.3	1435.6	1489.6	1543.7	1582.9	1622.1	1593.5
70°	1558.4	1555.2	1557.9	1560.6	1589.0	1617.6	1690.1	1762.6	1809.0	1855.4	1807.3
72°	1490.2	1491.5	1500.4	1509.2	1559.2	1609.2	1712.2	1815.2	1882.3	1949.4	1875.2
72.5°	1466.4	1467.6	1477.6	1487.6	1535.3	1583.0	1689.2	1795.4	1865.0	1934.5	1858.1
75°	1365.6	1368.6	1380.2	1391.8	1440.1	1488.4	1595.5	1702.6	1769.2	1835.8	1759.4
77.5°	1201.0	1210.2	1222.0	1233.8	1291.3	1348.8	1469.9	1591.0	1664.6	1738.1	1651.4
80°	916.6	913.4	933.6	953.9	1008.9	1063.8	1157.6	1251.3	1336.0	1420.6	1323.1
82.5°	356.2	364.0	406.1	448.1	505.7	563.4	647.3	731.2	807.5	883.8	802.6
85°	36.7	41.8	56.9	72.0	103.4	134.8	186.0	237.1	287.2	337.4	283.0
87.5°	14.8	16.2	20.9	25.6	26.8	28.0	33.8	39.6	39.4	39.1	38.5
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°	533.4	533.4	533.4	533.4	533.4	533.4	533.4	533.4
2.5°	533.2	533.4	533.6	533.6	533.6	533.9	534.2	533.8
5°	533.4	533.5	533.6	533.6	533.6	533.9	534.2	533.8
7.5°	532.8	532.8	532.8	533.1	533.4	533.5	533.6	533.4
10°	531.9	532.0	532.1	532.4	532.7	532.9	533.2	533.4
12.5°	531.4	531.5	531.6	531.8	532.2	532.4	532.7	533.0
15°	531.4	531.5	531.6	531.8	532.0	532.3	532.6	533.0
17.5°	532.2	532.0	531.8	531.9	532.1	532.6	533.0	533.4
20°	534.1	533.8	533.6	533.6	533.6	534.1	534.5	534.5
22.5°	538.9	538.0	537.0	536.8	536.7	536.8	536.8	537.0
25°	546.4	544.9	543.4	543.0	542.5	542.3	542.2	542.5
27.5°	557.9	556.2	554.6	553.6	552.6	552.0	551.4	551.7
30°	572.2	570.2	568.2	566.6	565.0	564.3	563.6	563.7
32.5°	590.2	588.0	585.6	583.4	581.2	580.2	579.2	579.4
35°	613.2	610.6	608.0	606.1	604.2	602.7	601.2	602.4
37.5°	643.3	640.9	638.4	637.2	636.0	634.7	633.3	633.5
40°	683.9	681.4	678.8	677.8	676.8	675.1	673.3	673.7
42.5°	735.4	731.6	727.8	725.9	724.1	723.3	722.5	723.0
45°	790.9	787.1	783.3	781.8	780.2	778.0	775.8	777.8
47.5°	851.6	846.8	842.0	839.2	836.4	837.2	837.9	836.3
50°	919.8	911.6	903.4	900.3	897.1	897.1	897.1	896.9
52.5°	988.6	977.4	966.2	963.4	960.6	960.0	959.4	958.7
55°	1061.0	1047.2	1033.4	1028.2	1023.1	1023.8	1024.6	1026.6
57.5°	1135.5	1117.3	1099.2	1093.3	1087.4	1087.9	1088.4	1091.6
60°	1212.9	1189.5	1166.0	1159.5	1153.0	1154.7	1156.4	1158.5
62.5°	1301.6	1273.1	1244.7	1236.0	1227.4	1229.6	1231.8	1237.0
65°	1412.8	1377.3	1341.9	1332.8	1323.8	1324.8	1325.8	1335.0
67.5°	1565.0	1517.7	1470.5	1462.2	1453.9	1455.4	1456.8	1471.6
70°	1759.3	1689.3	1619.4	1584.9	1550.5	1545.1	1539.7	1547.6
72°	1801.0	1702.1	1603.2	1552.5	1501.8	1493.8	1485.8	1486.6
72.5°	1781.8	1681.8	1582.0	1532.6	1483.2	1476.8	1470.4	1469.0
75°	1683.0	1585.2	1487.5	1436.5	1385.6	1373.2	1360.9	1360.9
77.5°	1564.6	1441.4	1318.2	1263.2	1208.2	1195.3	1182.4	1172.4
80°	1225.6	1115.1	1004.7	948.9	893.0	872.4	851.8	839.6
82.5°	721.3	619.8	518.2	447.4	376.5	355.2	334.0	304.3
85°	228.5	175.8	123.2	96.1	69.0	55.8	42.6	37.3
87.5°	38.0	30.8	23.8	22.9	22.1	17.4	12.6	10.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)