

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: P143935

Luminaire Tested: **LDRL-5WQ-F02-E**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143935
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-F02-E
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5061.4 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G1

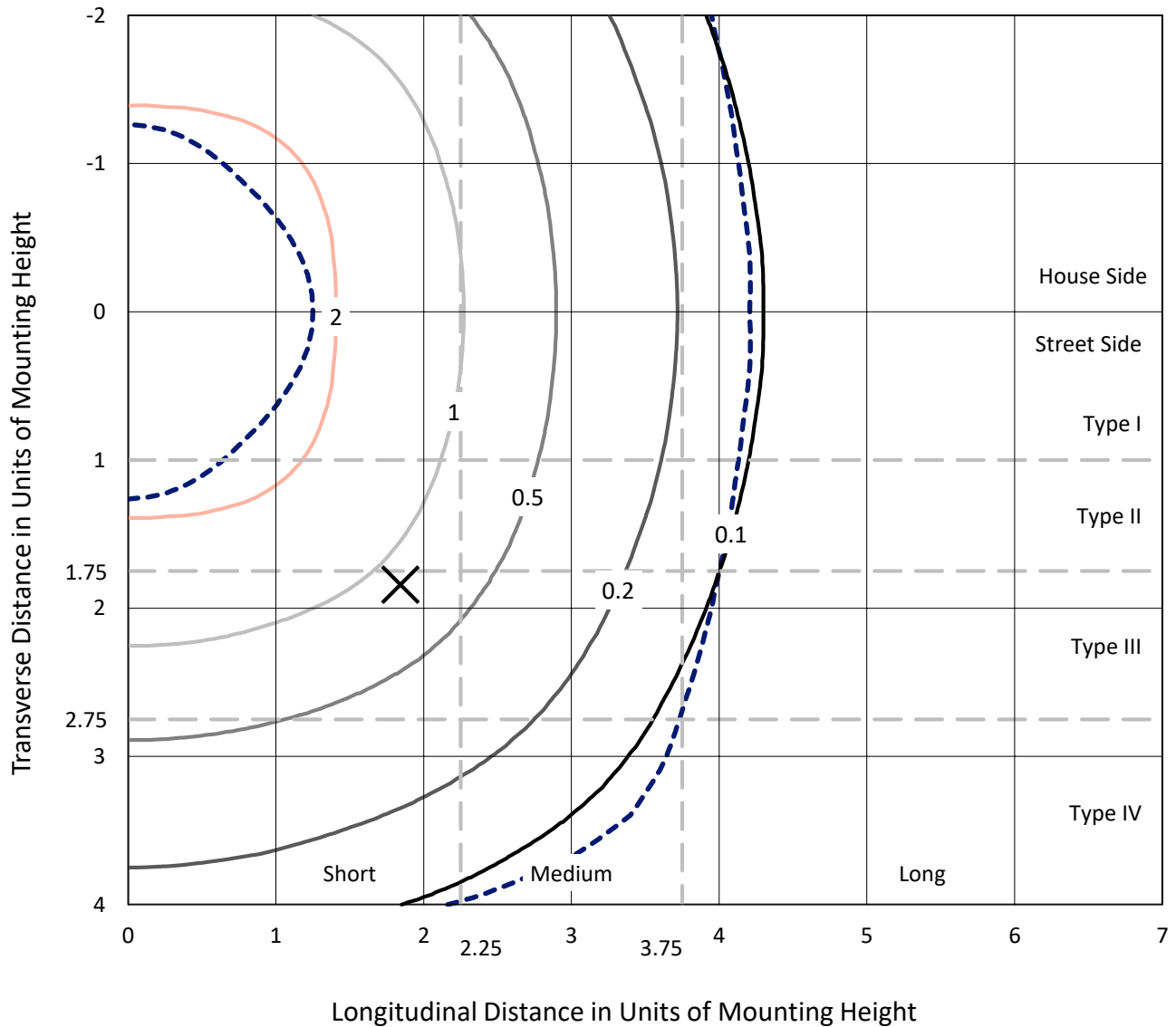
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143935
 CATALOG NUMBER: LDRL-5WQ-F02-E

Iso-Footcandle Lines of Horizontal Illumination

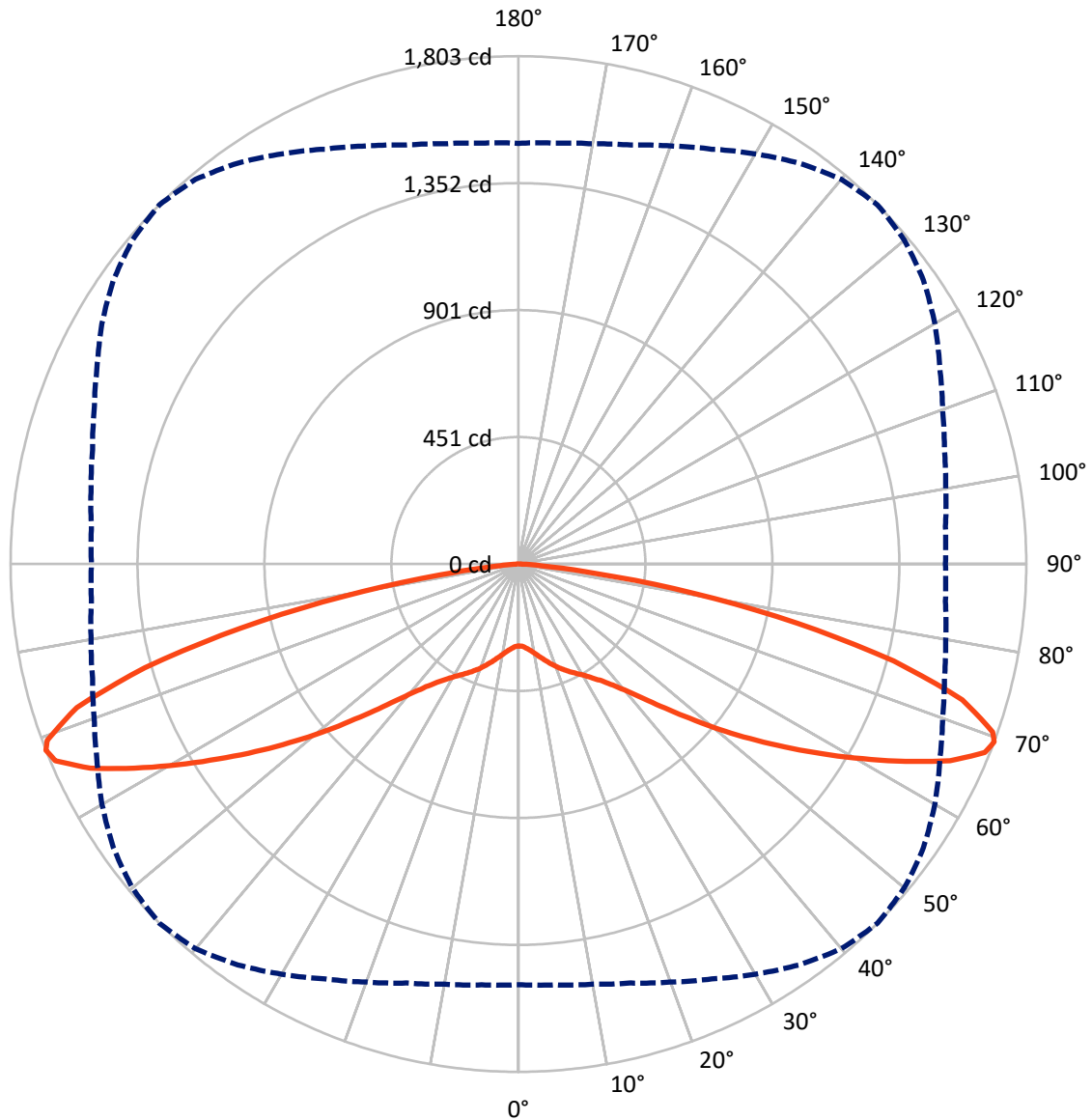
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P143935
CATALOG NUMBER: LDRL-5WQ-F02-E

Luminous Intensity Polar Plot



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

REPORT NUMBER: P143935

CATALOG NUMBER: LDRL-5WQ-F02-E

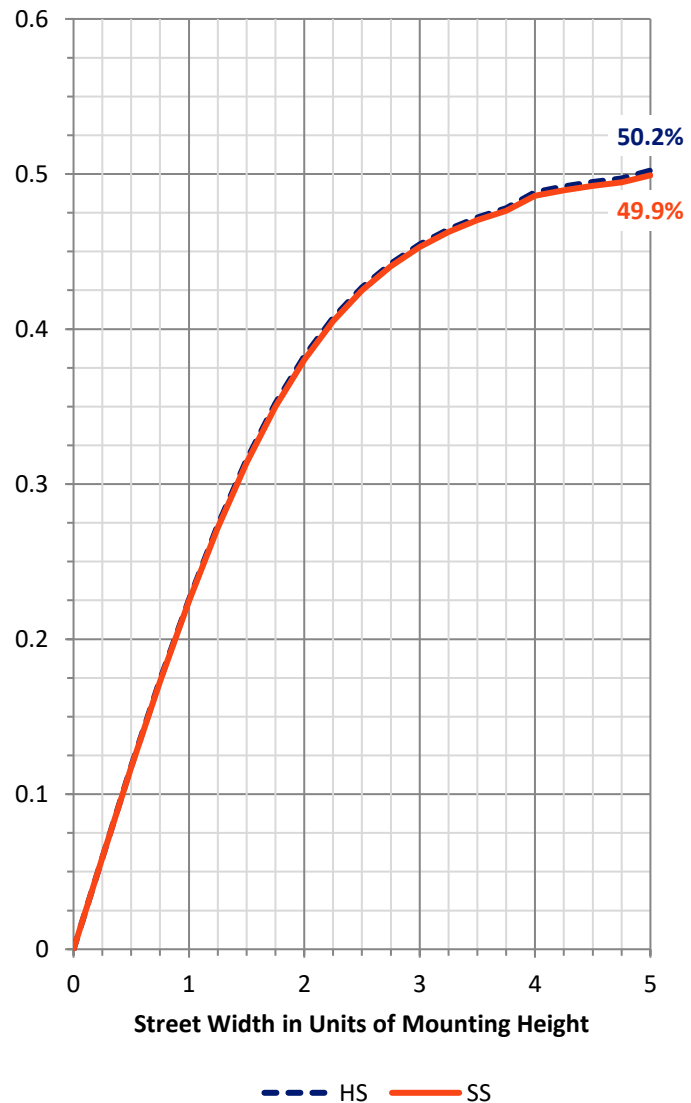
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2530.7	0.0	2530.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2530.7	0.0	2530.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	5061.4	0.0	5061.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	0.6
10°-20°	101.1	2.0
20°-30°	195.0	3.9
30°-40°	319.5	6.3
40°-50°	555.5	11.0
50°-60°	986.8	19.5
60°-70°	1532.1	30.3
70°-80°	1220.7	24.1
80°-90°	121.4	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°	5061.4	100.0
0°-180°	5061.4	100.0



REPORT NUMBER: P143935

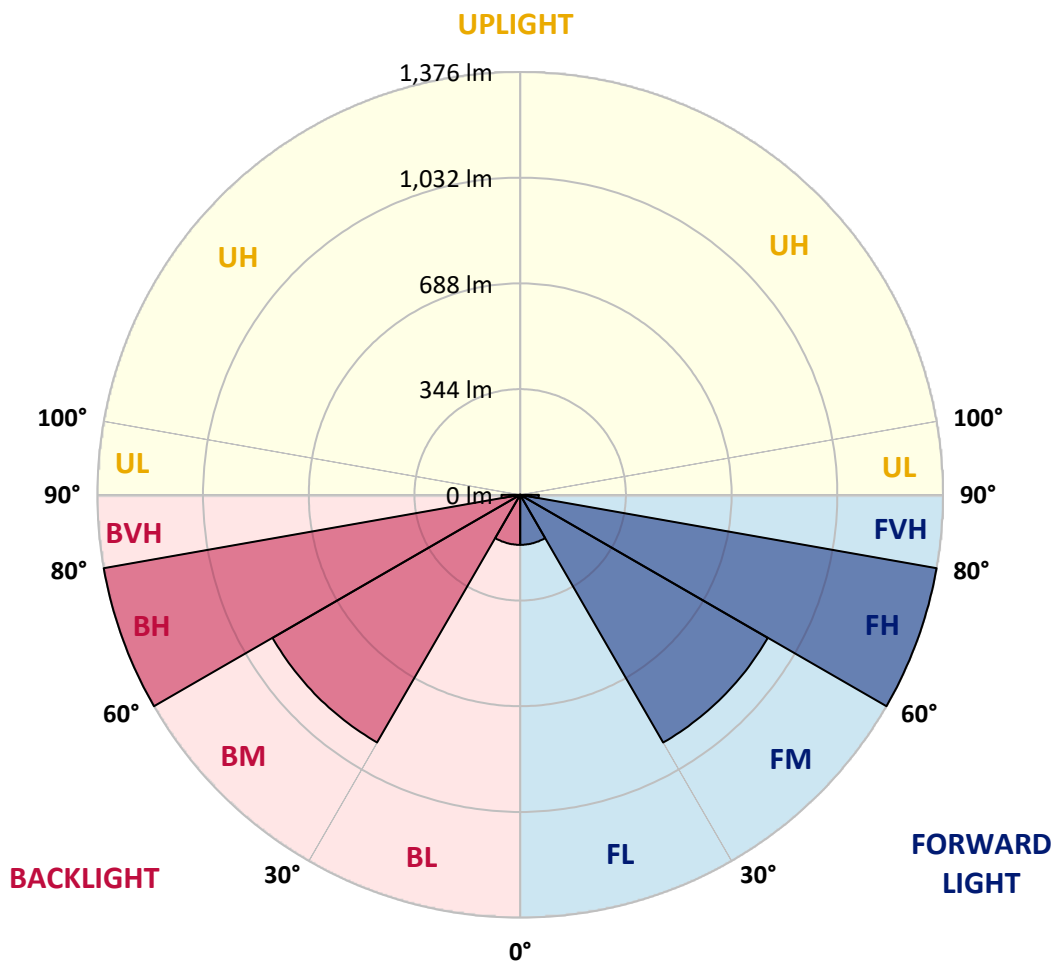
CATALOG NUMBER: LDRL-5WQ-F02-E

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	162.7	3.2			
FM	(30°-60°)	930.9	18.4			
FH	(60°-80°)	1376.4	27.2			G1/1800
FVH	(80°-90°)	60.7	1.2			G1/100
BL	(0°-30°)	162.7	3.2	B1/500		
BM	(30°-60°)	930.9	18.4	B1/1000		
BH	(60°-80°)	1376.4	27.2	B3/2500		G1/1800
BVH	(80°-90°)	60.7	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-G1

Type V Short





REPORT NUMBER: P143935
 CATALOG NUMBER: LDRL-5WQ-F02-E

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9
2.5°	293.2	293.2	293.2	292.9	292.9	292.6	292.9	292.6	292.6	292.6	292.6
5°	300.8	300.2	300.2	299.8	300.5	300.5	299.8	300.2	299.8	300.2	300.2
7.5°	310.4	310.4	310.4	310.1	310.7	310.4	310.1	310.4	310.4	310.1	310.1
10°	322.3	322.6	322.3	322.3	323.3	322.9	323.3	323.3	323.6	323.3	323.3
12.5°	336.2	336.2	336.5	336.8	337.1	337.5	338.5	338.1	338.8	338.1	338.1
15°	352.3	353.0	352.3	352.3	353.3	354.0	354.3	354.3	355.0	354.6	354.0
17.5°	369.5	369.8	369.5	369.2	370.2	371.2	371.5	371.5	372.5	371.8	371.8
20°	387.0	387.3	386.7	386.3	387.7	387.7	388.3	388.7	389.6	390.0	389.0
22.5°	403.2	403.5	403.2	402.9	404.2	404.2	405.2	405.5	406.8	406.5	406.5
25°	419.0	419.0	418.7	418.7	420.0	420.4	421.3	422.0	423.3	423.3	423.3
27.5°	433.6	433.9	433.2	432.9	435.5	436.5	437.2	438.5	439.5	440.2	439.8
30°	450.1	450.1	449.7	450.7	452.4	453.7	455.0	457.0	459.0	458.3	458.3
32.5°	469.6	470.2	469.9	471.2	473.2	475.2	476.8	479.1	480.1	481.8	480.5
35°	495.6	497.0	496.3	497.6	499.3	500.6	504.2	506.5	508.2	509.2	508.5
37.5°	528.3	527.7	529.0	529.3	532.6	534.3	538.6	541.9	544.5	545.5	544.8
40°	569.0	568.0	569.6	571.3	575.6	577.2	582.2	587.1	590.7	592.1	591.4
42.5°	617.5	618.8	621.5	623.8	629.7	634.3	639.9	647.2	651.2	652.8	650.5
45°	681.2	678.9	683.9	689.8	693.1	703.3	712.6	720.2	726.8	729.4	726.8
47.5°	753.9	753.5	759.5	766.7	775.3	784.9	795.8	805.7	817.3	817.9	814.6
50°	834.1	840.7	844.0	851.3	867.1	879.0	892.9	907.7	918.3	921.6	915.7
52.5°	930.9	935.8	937.8	950.0	964.5	979.1	998.6	1016.4	1028.6	1029.9	1027.0
55°	1035.9	1039.8	1043.5	1058.3	1074.2	1087.1	1111.8	1129.3	1141.5	1146.2	1144.2
57.5°	1144.5	1148.1	1152.8	1168.9	1185.1	1203.3	1226.7	1247.2	1261.4	1270.0	1267.7
60°	1265.0	1265.0	1275.6	1291.8	1305.0	1326.5	1350.9	1374.7	1390.2	1403.7	1400.1
62.5°	1391.8	1395.5	1405.7	1418.9	1432.8	1452.6	1480.3	1508.7	1532.5	1542.7	1542.4
65°	1487.9	1494.5	1508.1	1523.3	1546.4	1569.8	1604.8	1640.2	1668.9	1683.7	1683.7
67.5°	1516.0	1520.3	1537.1	1560.2	1593.6	1630.9	1678.5	1727.7	1767.0	1786.4	1774.2
69°	1493.5	1499.8	1514.7	1539.8	1579.4	1625.0	1681.4	1737.2	1782.8	1802.9	1788.7
70°	1467.5	1474.4	1489.2	1514.0	1555.0	1603.5	1660.0	1720.1	1768.9	1786.1	1769.9
72.5°	1361.1	1369.7	1380.3	1401.7	1438.7	1484.3	1535.1	1588.0	1634.9	1648.4	1628.3
75°	1179.8	1181.5	1186.8	1202.6	1215.8	1248.2	1291.5	1333.4	1368.7	1376.6	1355.2
77.5°	835.1	826.2	817.3	830.8	841.4	883.0	929.9	964.2	1001.2	1012.4	990.6
80°	366.2	362.9	375.4	393.3	439.8	467.6	513.5	562.7	594.0	630.7	591.4
82.5°	72.3	76.3	88.2	109.0	134.4	169.1	199.1	233.1	263.8	277.7	263.5
85°	29.4	32.0	36.3	40.6	43.6	48.9	57.5	71.3	78.6	79.6	75.6
87.5°	12.2	14.2	19.2	22.8	23.1	22.1	22.8	23.4	19.2	15.5	19.5
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: P143935
 CATALOG NUMBER: LDRL-5WQ-F02-E

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9
2.5°	292.6	292.9	292.6	292.9	292.6	292.6	292.9	292.6
5°	299.8	300.2	299.8	299.5	299.2	299.5	299.5	299.5
7.5°	310.1	309.7	309.4	309.4	309.1	308.7	309.4	309.4
10°	322.6	322.3	321.6	321.6	321.3	321.3	321.3	321.3
12.5°	337.8	336.8	336.5	335.5	335.2	334.8	334.8	335.2
15°	353.7	352.7	352.3	350.7	350.7	350.4	350.4	350.4
17.5°	370.5	369.5	368.2	368.2	367.2	366.5	366.9	366.2
20°	387.7	386.3	385.7	385.4	384.0	384.0	384.0	383.7
22.5°	404.5	403.5	402.5	401.2	399.9	399.6	399.6	399.2
25°	421.7	420.0	418.0	416.7	415.4	414.4	414.4	414.4
27.5°	438.8	436.9	433.9	432.2	430.3	429.3	429.3	428.9
30°	457.0	454.7	452.1	449.7	447.1	446.1	445.8	445.1
32.5°	478.8	476.5	473.9	470.5	467.9	466.3	466.3	465.3
35°	506.5	503.9	501.9	497.6	494.3	491.7	492.0	492.7
37.5°	542.9	539.6	537.9	532.6	528.3	525.7	525.7	525.4
40°	589.1	585.8	582.2	577.2	571.9	568.3	567.3	567.3
42.5°	647.9	644.9	639.9	633.0	626.7	622.8	619.5	619.8
45°	721.5	717.9	710.9	702.4	694.8	689.1	684.5	684.5
47.5°	811.0	803.4	793.8	786.2	773.4	764.8	761.5	760.8
50°	913.0	898.8	886.9	876.0	862.5	853.6	848.6	847.3
52.5°	1020.0	1005.2	990.3	976.1	959.6	950.3	942.4	941.8
55°	1136.3	1117.4	1098.6	1084.7	1065.3	1055.7	1047.8	1043.1
57.5°	1254.8	1233.7	1220.1	1200.3	1179.8	1172.9	1165.3	1159.7
60°	1388.2	1365.1	1347.3	1326.5	1313.2	1298.4	1291.1	1286.8
62.5°	1524.6	1503.1	1480.3	1460.5	1442.0	1431.8	1421.9	1416.9
65°	1663.3	1627.9	1600.9	1573.5	1551.7	1533.2	1517.6	1515.7
67.5°	1748.5	1703.9	1658.6	1618.7	1586.7	1560.6	1544.7	1539.1
69°	1755.4	1706.9	1650.4	1602.5	1565.5	1540.4	1521.6	1515.7
70°	1736.2	1687.4	1627.9	1576.4	1538.1	1510.7	1495.2	1485.3
72.5°	1596.2	1553.3	1496.2	1445.3	1410.7	1378.6	1363.1	1359.1
75°	1316.9	1271.3	1218.8	1194.4	1170.3	1150.1	1139.6	1138.6
77.5°	935.2	888.6	848.6	816.6	790.5	777.6	780.6	769.7
80°	535.3	474.5	426.3	397.9	359.3	336.2	310.1	328.9
82.5°	230.2	185.9	141.7	115.2	87.8	69.7	57.5	53.5
85°	64.4	52.5	43.9	40.3	36.3	32.4	27.4	25.4
87.5°	21.8	20.8	18.5	18.5	16.8	14.2	9.9	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)