

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: P882961

Luminaire Tested: **NAV-SB3A-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10805 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

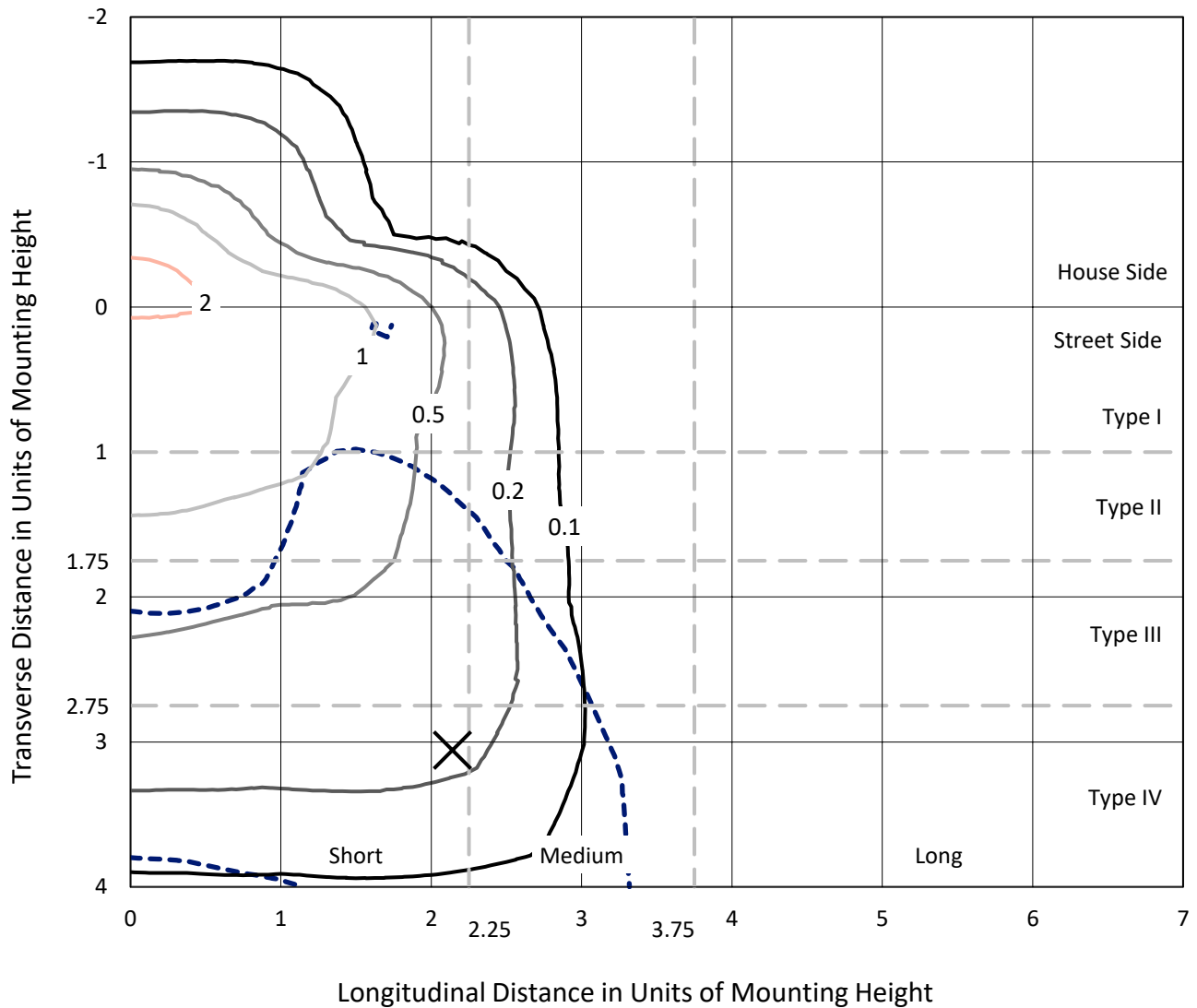
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

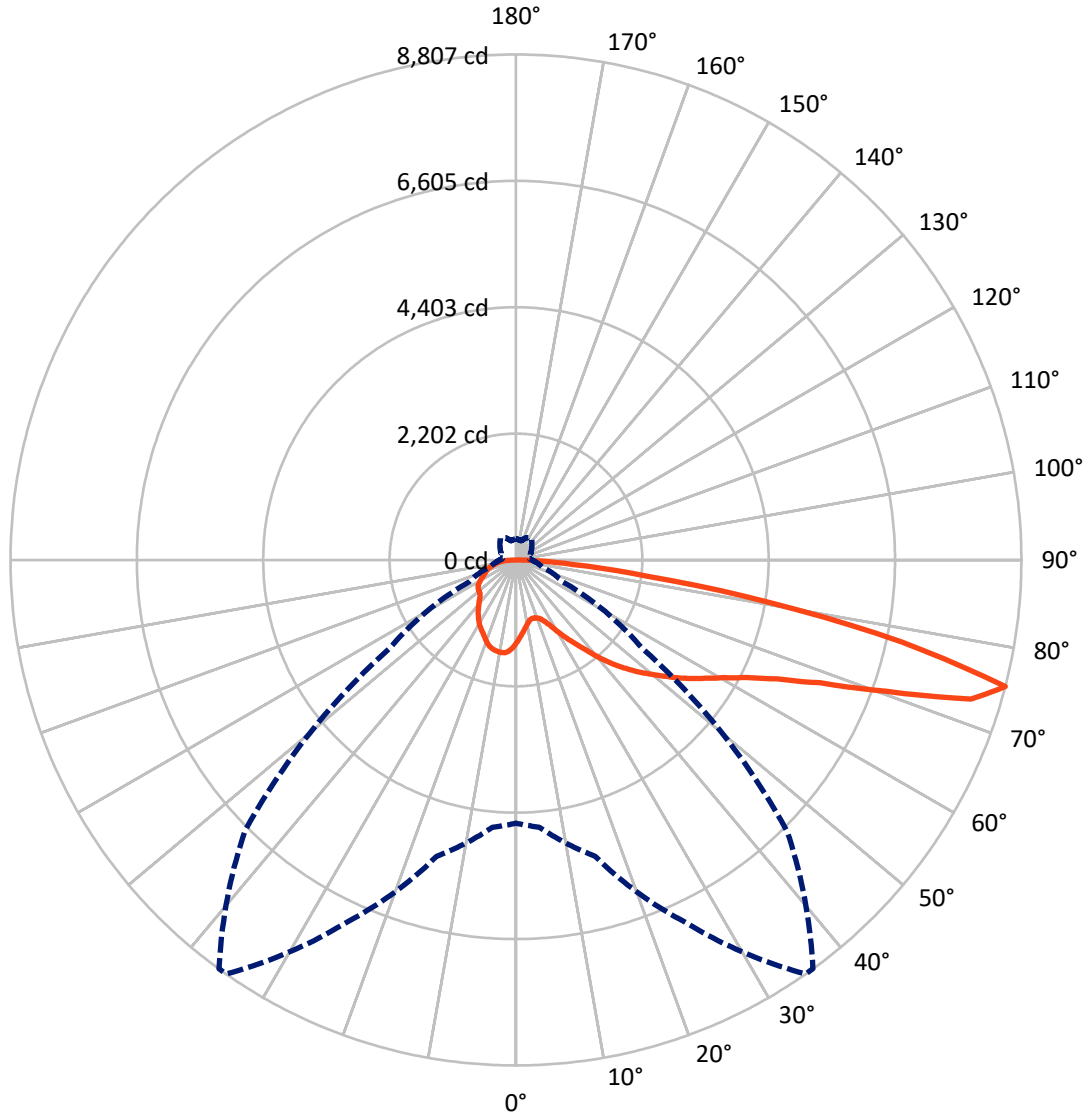
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2571.3	0.0	2571.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	8233.7	0.0	8233.7
	% Fixture	76.2	0.0	76.2
Total	Lumens	10805.0	0.0	10805.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	1.3
10°-20°	393.2	3.6
20°-30°	660.3	6.1
30°-40°	1026.2	9.5
40°-50°	1523.2	14.1
50°-60°	2102.8	19.5
60°-70°	2551.2	23.6
70°-80°	2108.4	19.5
80°-90°	303.3	2.8
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°	10805.0	100.0
0°-180°	10805.0	100.0

Coefficient of Utilization



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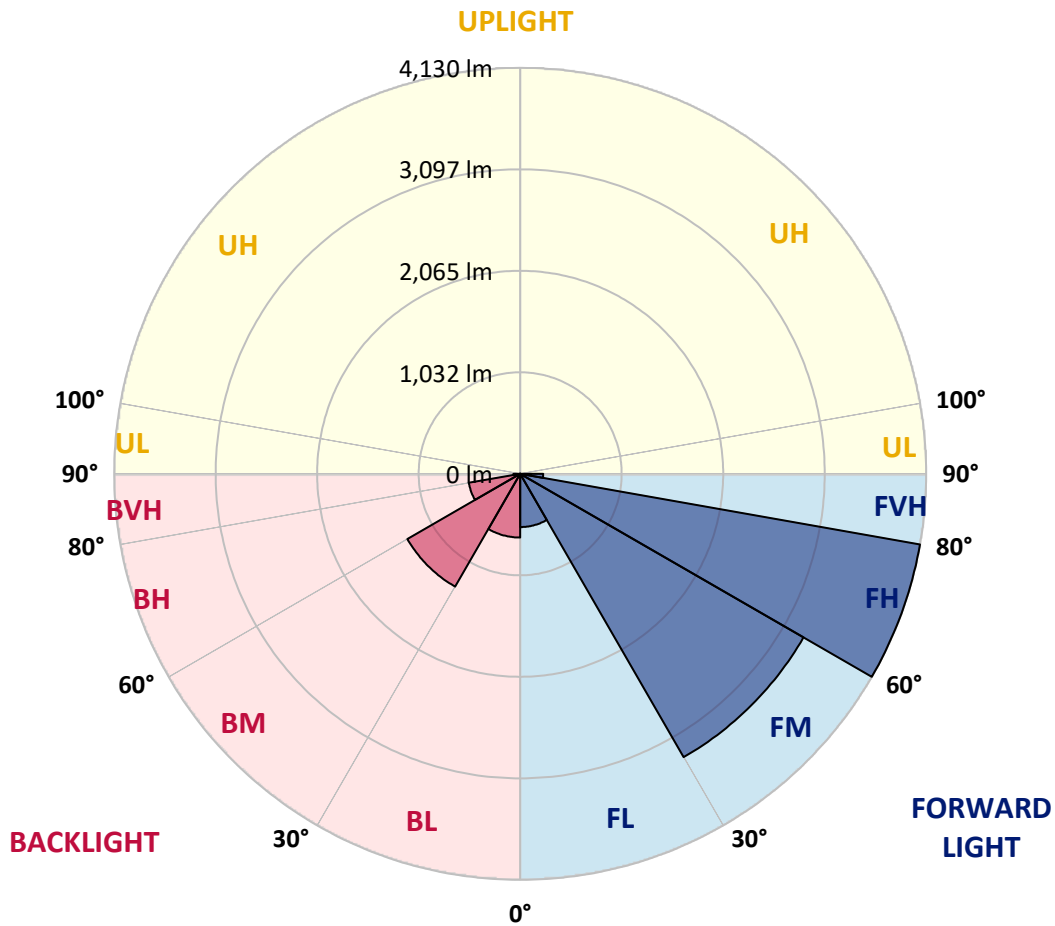
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	541.8	5.0			
FM (30°-60°)	3327.4	30.8			
FH (60°-80°)	4129.5	38.2			G2/5000
FVH (80°-90°)	235.0	2.2			G3/500
BL (0°-30°)	648.0	6.0	B2/1000		
BM (30°-60°)	1324.9	12.3	B2/2500		
BH (60°-80°)	530.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	68.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8
2.5°	1327.7	1335.9	1339.4	1337.6	1346.4	1345.2	1357.5	1372.7	1393.7	1414.1	1443.9
5°	1225.5	1234.2	1241.8	1248.8	1265.8	1271.0	1290.3	1319.5	1358.1	1397.2	1446.3
7.5°	1130.3	1137.9	1149.5	1162.4	1191.0	1196.3	1228.4	1274.0	1327.7	1384.9	1452.7
10°	1052.6	1060.2	1072.4	1087.0	1122.7	1129.1	1170.0	1230.7	1300.8	1373.3	1459.7
12.5°	1019.3	1021.6	1028.6	1043.2	1074.2	1078.3	1123.2	1192.8	1274.5	1364.5	1470.2
15°	1017.5	1022.2	1022.8	1030.4	1056.1	1057.8	1099.3	1168.2	1258.2	1362.7	1486.0
17.5°	1035.0	1038.6	1033.3	1038.0	1059.6	1062.5	1095.2	1156.5	1252.9	1370.3	1512.9
20°	1081.8	1084.7	1068.9	1062.5	1078.3	1080.6	1112.7	1164.1	1258.2	1386.1	1549.7
22.5°	1181.1	1182.8	1144.3	1118.0	1119.2	1120.3	1148.4	1195.1	1278.6	1414.7	1596.4
25°	1335.9	1334.7	1273.4	1222.5	1193.3	1186.9	1205.6	1245.3	1313.1	1452.7	1656.5
27.5°	1516.9	1508.2	1446.8	1370.9	1307.2	1297.9	1293.8	1310.8	1362.2	1502.9	1730.1
30°	1721.4	1713.2	1647.2	1547.9	1459.7	1444.5	1406.0	1397.2	1435.2	1571.3	1832.4
32.5°	1945.7	1940.4	1861.6	1741.2	1623.3	1605.7	1540.9	1517.5	1547.3	1674.7	1974.9
35°	2133.8	2129.1	2063.7	1939.8	1795.6	1774.0	1707.9	1681.7	1696.8	1807.2	2161.2
37.5°	2303.7	2301.4	2245.3	2147.8	1998.8	1972.6	1898.4	1889.6	1886.7	1981.9	2387.3
40°	2461.5	2455.6	2397.2	2345.8	2235.4	2211.5	2146.0	2138.4	2116.2	2196.9	2643.1
42.5°	2636.1	2620.9	2536.2	2512.3	2482.5	2462.6	2423.5	2424.7	2375.6	2439.3	2914.1
45°	2778.6	2769.9	2682.8	2668.8	2700.9	2692.8	2726.6	2735.4	2640.2	2693.3	3195.7
47.5°	2931.7	2923.5	2849.9	2840.0	2927.0	2929.3	3049.1	3052.0	2898.4	2957.4	3477.8
50°	3120.3	3108.7	3035.6	3047.9	3145.5	3154.2	3373.3	3353.4	3136.1	3225.5	3757.6
52.5°	3244.7	3251.8	3236.0	3255.8	3389.0	3397.2	3692.2	3641.4	3371.5	3490.1	4032.1
55°	3336.5	3350.5	3399.5	3445.1	3646.0	3654.2	3993.0	3915.3	3566.6	3735.4	4290.3
57.5°	3454.4	3434.6	3526.3	3615.1	3890.2	3911.8	4285.6	4179.3	3739.5	3946.9	4467.3
60°	3623.8	3609.8	3681.1	3812.5	4163.6	4198.0	4595.2	4417.1	3866.2	4114.5	4501.8
62.5°	3967.3	3932.3	3943.3	4059.6	4508.2	4553.7	4944.5	4624.4	3929.3	4179.9	4317.2
65°	4480.7	4420.6	4364.5	4445.1	4993.6	5038.6	5338.8	4787.4	3906.0	4053.2	3827.1
67.5°	5127.3	5067.8	4998.8	5074.8	5708.5	5744.2	5825.4	4879.1	3722.0	3564.8	2960.9
70°	5660.6	5638.4	5720.8	6033.3	6850.5	6851.6	6449.2	4803.2	3217.9	2527.5	1713.2
72.5°	5590.0	5576.5	6010.5	6976.6	8289.7	8258.8	7039.7	4228.4	2167.6	1140.2	641.9
75°	4585.9	4672.9	5345.2	6959.7	8806.7	8802.6	6678.2	2688.1	896.6	472.5	331.8
77.5°	2459.1	2597.0	3470.2	5138.4	6875.0	6978.4	4695.1	940.4	384.9	302.6	229.6
80°	802.0	922.3	1383.2	2616.2	4467.3	4448.0	2012.3	369.2	263.4	214.4	158.9
82.5°	340.5	354.6	618.0	1235.4	2292.6	2257.0	640.8	212.0	185.2	146.6	98.1
85°	133.2	148.9	272.8	571.3	993.0	971.4	231.3	105.1	118.6	95.8	58.4
87.5°	43.8	53.2	97.5	195.7	309.0	297.9	56.7	36.2	51.4	43.8	21.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8	1439.8
2.5°	1452.1	1461.5	1472.5	1488.9	1502.9	1514.6	1526.9	1534.5	1537.4	1546.1	1545.6
5°	1462.6	1483.1	1510.5	1537.4	1563.7	1579.4	1593.5	1600.5	1606.9	1611.6	1612.7
7.5°	1480.1	1506.4	1549.7	1584.7	1606.9	1619.7	1629.1	1626.8	1629.1	1630.3	1632.0
10°	1495.3	1532.1	1583.5	1616.8	1633.8	1634.3	1632.0	1623.8	1619.7	1620.3	1621.5
12.5°	1513.4	1554.3	1609.8	1637.9	1642.5	1629.7	1619.7	1605.7	1600.5	1598.1	1597.0
15°	1538.0	1584.7	1638.4	1649.0	1637.3	1620.9	1604.0	1581.2	1569.5	1560.2	1563.1
17.5°	1567.8	1619.2	1660.6	1653.0	1627.9	1601.1	1573.6	1539.1	1515.2	1505.3	1505.8
20°	1609.2	1655.4	1677.6	1644.3	1606.3	1565.4	1518.7	1476.6	1454.4	1444.5	1443.3
22.5°	1659.5	1703.9	1693.9	1629.1	1575.4	1509.9	1451.5	1420.6	1409.5	1402.5	1403.6
25°	1719.6	1757.6	1705.6	1606.9	1524.5	1436.3	1391.4	1381.4	1376.2	1370.9	1370.9
27.5°	1797.9	1818.3	1714.4	1574.2	1445.1	1358.1	1341.7	1343.5	1341.7	1332.9	1334.7
30°	1901.3	1897.2	1722.6	1521.0	1354.0	1287.4	1288.6	1296.1	1297.3	1291.5	1294.4
32.5°	2037.4	1995.9	1726.6	1452.1	1266.9	1225.5	1226.6	1234.8	1240.7	1230.7	1235.4
35°	2202.1	2111.0	1720.2	1365.7	1199.8	1166.5	1157.7	1160.0	1161.8	1152.5	1158.9
37.5°	2394.3	2240.1	1691.6	1269.9	1144.3	1108.6	1090.0	1074.2	1064.8	1056.1	1061.9
40°	2605.1	2380.8	1639.0	1176.4	1082.4	1047.3	1019.3	989.5	957.9	946.3	951.5
42.5°	2825.9	2525.7	1575.4	1087.0	1011.1	982.5	952.7	909.5	862.2	838.2	841.1
45°	3054.9	2674.1	1512.9	998.8	938.1	925.8	891.4	839.4	788.0	757.6	755.3
47.5°	3279.2	2814.3	1421.1	910.0	869.7	883.2	856.3	808.4	751.2	703.3	698.0
50°	3493.6	2945.7	1271.0	820.1	814.3	870.3	844.6	775.7	710.3	648.9	643.7
52.5°	3706.2	3052.0	1078.9	738.3	784.5	866.8	829.4	753.5	673.5	609.2	602.2
55°	3886.7	3106.9	893.7	668.2	741.2	837.0	811.3	727.2	621.5	553.2	547.3
57.5°	3989.5	3062.5	739.5	599.3	681.7	788.0	780.4	671.1	559.6	507.0	500.0
60°	3945.1	2882.6	613.3	539.1	625.0	734.8	726.6	615.7	512.3	462.6	455.6
62.5°	3700.4	2539.7	513.4	486.6	573.6	680.5	672.9	573.0	476.1	428.2	420.6
65°	3207.4	2066.0	435.7	442.8	521.6	615.1	626.2	537.4	447.4	400.7	393.1
67.5°	2446.3	1496.5	375.0	404.8	470.8	550.8	582.9	511.7	423.5	379.1	372.1
70°	1394.3	849.9	323.6	368.0	425.8	491.2	549.7	491.2	397.8	361.0	356.3
72.5°	528.6	390.2	279.8	331.2	382.6	441.0	512.9	459.1	368.0	340.5	335.9
75°	282.1	237.7	235.4	288.0	332.9	391.9	466.7	427.6	345.8	359.8	371.5
77.5°	192.2	168.2	196.8	246.5	278.6	337.6	417.6	379.7	299.7	298.5	275.1
80°	133.2	119.2	160.0	198.6	215.5	283.9	364.5	325.9	244.2	227.8	217.9
82.5°	80.0	77.7	119.7	148.4	152.5	219.0	302.0	273.4	199.8	174.1	175.2
85°	43.8	46.1	76.5	87.0	88.8	153.0	236.6	211.4	153.6	129.1	130.3
87.5°	12.3	15.8	28.0	34.5	42.6	79.4	140.8	125.6	77.1	53.7	53.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)