

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: P882981

Luminaire Tested: **NAV-SB3A-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882981
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-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 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: 11221 lumens
Efficiency: N/A
Efficacy: 132.5 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

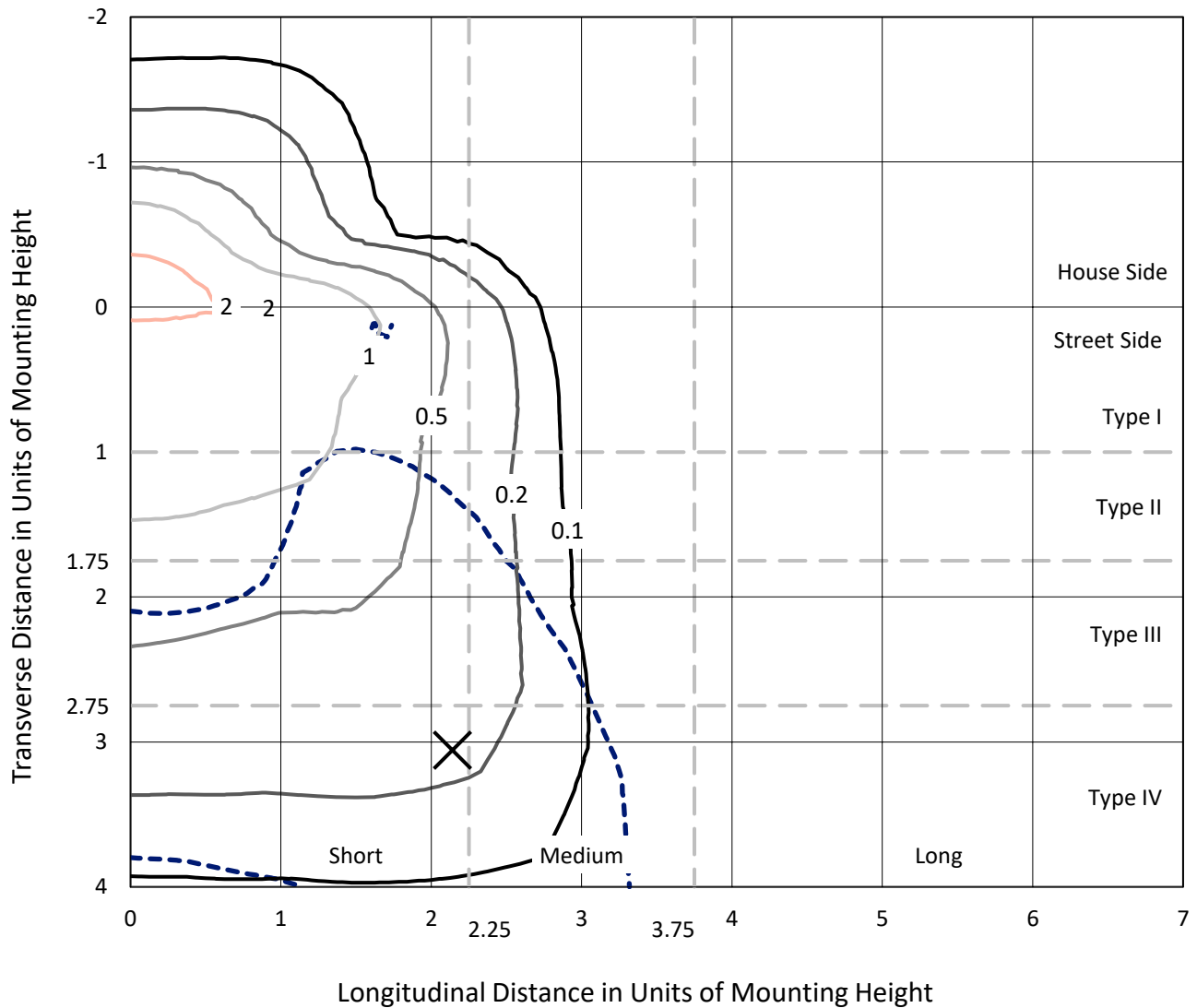
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

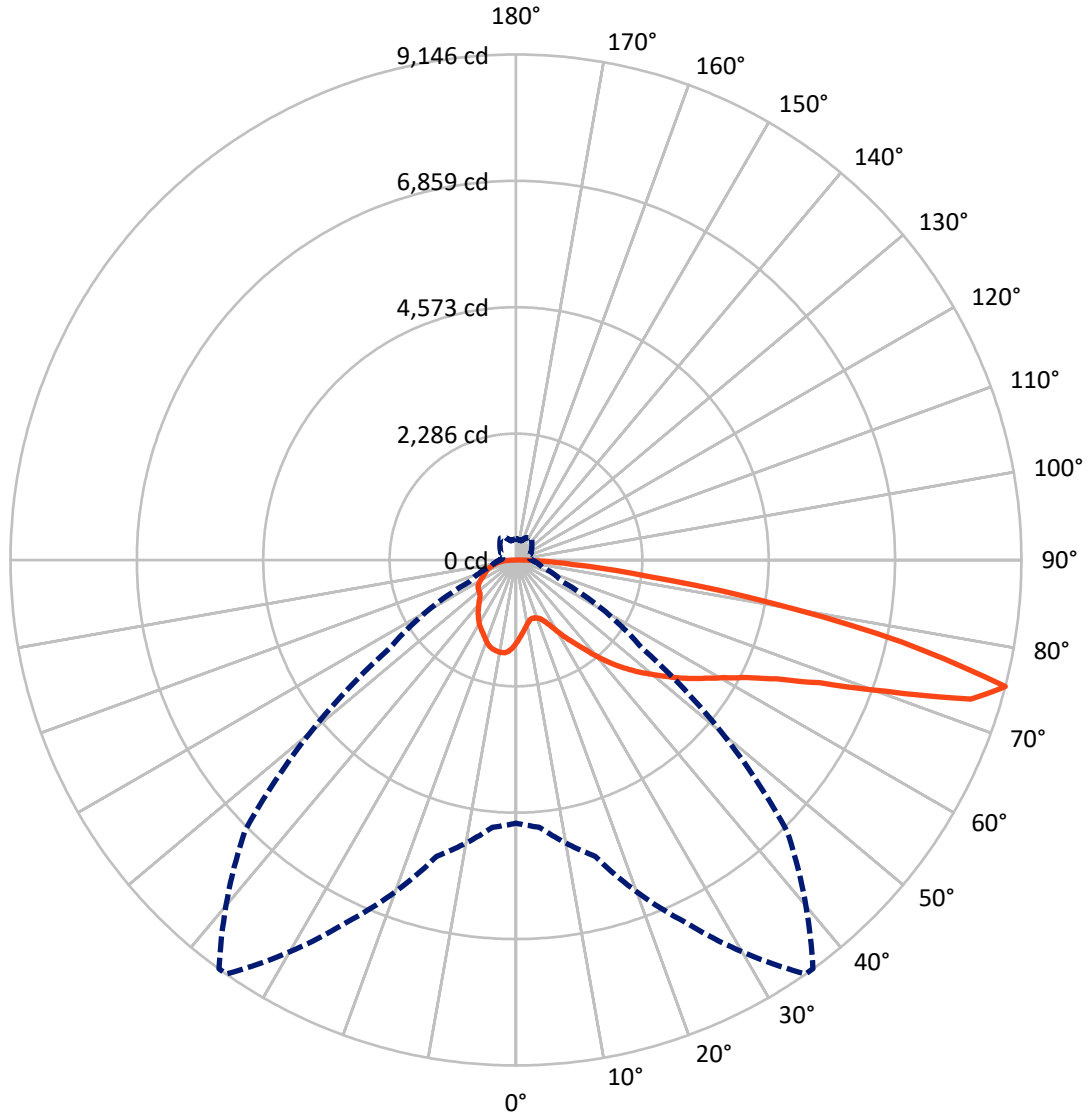
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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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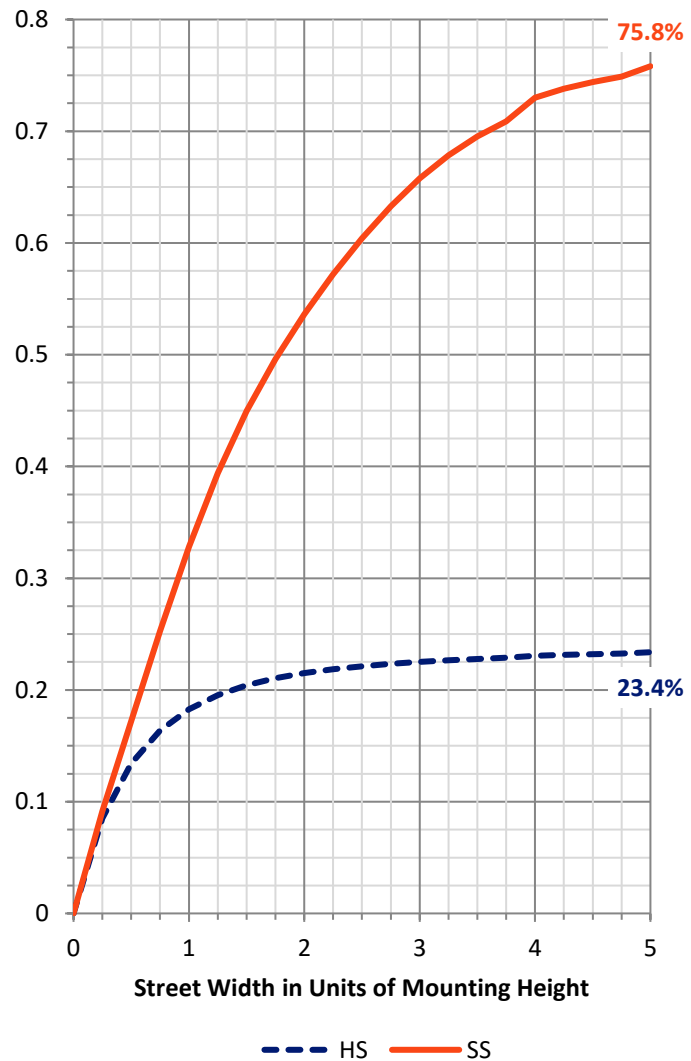
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2670.3	0.0	2670.3
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	8550.7	0.0	8550.7
	% Fixture	76.2	0.0	76.2
Total	Lumens	11221.0	0.0	11221.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	1.3
10°-20°	408.4	3.6
20°-30°	685.7	6.1
30°-40°	1065.7	9.5
40°-50°	1581.8	14.1
50°-60°	2183.8	19.5
60°-70°	2649.5	23.6
70°-80°	2189.6	19.5
80°-90°	314.9	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°	11221.0	100.0
0°-180°	11221.0	100.0



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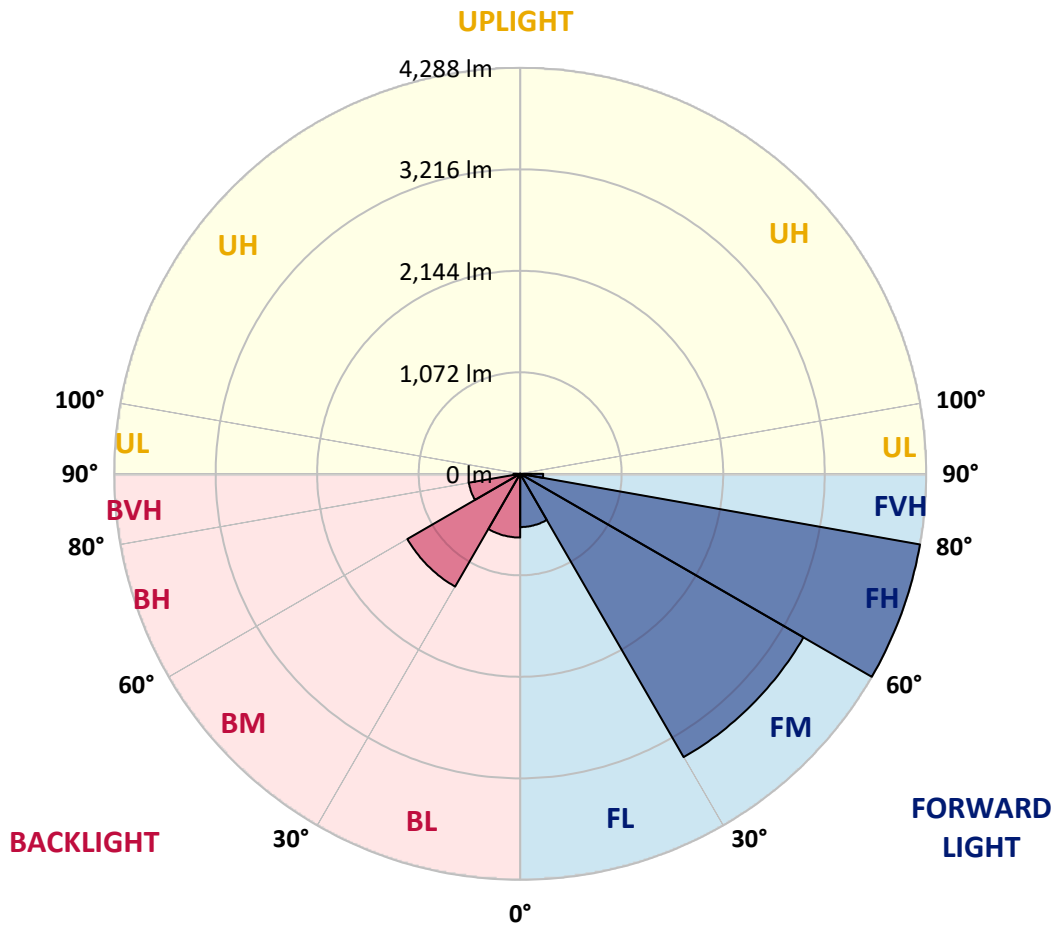
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	562.7	5.0			
FM (30°-60°)	3455.5	30.8			
FH (60°-80°)	4288.5	38.2			G2/5000
FVH (80°-90°)	244.0	2.2			G3/500
BL (0°-30°)	673.0	6.0	B2/1000		
BM (30°-60°)	1375.9	12.3	B2/2500		
BH (60°-80°)	550.5	4.9	B2/1000		G2/1000
BVH (80°-90°)	70.9	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°	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3
2.5°	1378.8	1387.3	1390.9	1389.1	1398.2	1397.0	1409.7	1425.5	1447.4	1468.6	1499.5
5°	1272.7	1281.8	1289.6	1296.9	1314.5	1320.0	1340.0	1370.3	1410.3	1451.0	1501.9
7.5°	1173.8	1181.7	1193.8	1207.1	1236.9	1242.3	1275.7	1323.0	1378.8	1438.3	1508.6
10°	1093.1	1101.0	1113.7	1128.9	1165.9	1172.6	1215.0	1278.1	1350.9	1426.1	1515.9
12.5°	1058.5	1060.9	1068.2	1083.4	1115.5	1119.8	1166.5	1238.7	1323.6	1417.0	1526.8
15°	1056.7	1061.6	1062.2	1070.0	1096.7	1098.6	1141.6	1213.2	1306.6	1415.2	1543.2
17.5°	1074.9	1078.5	1073.1	1077.9	1100.4	1103.4	1137.4	1201.1	1301.2	1423.1	1571.1
20°	1123.4	1126.5	1110.1	1103.4	1119.8	1122.2	1155.6	1209.0	1306.6	1439.5	1609.3
22.5°	1226.5	1228.4	1188.3	1161.0	1162.2	1163.5	1192.6	1241.1	1327.9	1469.2	1657.8
25°	1387.3	1386.1	1322.4	1269.6	1239.3	1232.6	1252.0	1293.3	1363.6	1508.6	1720.3
27.5°	1575.3	1566.2	1502.6	1423.7	1357.6	1347.9	1343.6	1361.2	1414.6	1560.8	1796.8
30°	1787.7	1779.2	1710.6	1607.5	1515.9	1500.1	1460.1	1451.0	1490.4	1631.8	1902.9
32.5°	2020.6	2015.1	1933.2	1808.3	1685.7	1667.5	1600.2	1576.0	1606.9	1739.1	2050.9
35°	2215.9	2211.1	2143.1	2014.5	1864.7	1842.3	1773.7	1746.4	1762.2	1876.8	2244.4
37.5°	2392.4	2390.0	2331.8	2230.5	2075.8	2048.5	1971.5	1962.4	1959.3	2058.2	2479.2
40°	2556.2	2550.2	2489.5	2436.1	2321.5	2296.6	2228.7	2220.8	2197.7	2281.4	2744.9
42.5°	2737.6	2721.8	2633.9	2609.0	2578.1	2557.4	2516.8	2518.0	2467.1	2533.2	3026.3
45°	2885.6	2876.5	2786.1	2771.6	2804.9	2796.4	2831.6	2840.7	2741.8	2797.0	3318.7
47.5°	3044.5	3036.0	2959.6	2949.3	3039.7	3042.1	3166.5	3169.5	3010.0	3071.2	3611.7
50°	3240.5	3228.3	3152.5	3165.2	3266.6	3275.7	3503.1	3482.5	3256.8	3349.7	3902.3
52.5°	3369.7	3377.0	3360.6	3381.2	3519.5	3528.0	3834.3	3781.6	3501.3	3624.4	4187.4
55°	3464.9	3479.5	3530.4	3577.7	3786.4	3794.9	4146.7	4066.1	3703.9	3879.2	4455.5
57.5°	3587.4	3566.8	3662.1	3754.3	4040.0	4062.4	4450.6	4340.2	3883.5	4098.8	4639.3
60°	3763.4	3748.8	3822.8	3959.3	4323.9	4359.6	4772.1	4587.1	4015.1	4272.9	4675.1
62.5°	4120.0	4083.6	4095.2	4215.9	4681.8	4729.1	5134.9	4802.5	4080.6	4340.8	4483.4
65°	4653.2	4590.8	4532.5	4616.2	5185.8	5232.5	5544.3	4971.7	4056.3	4209.2	3974.5
67.5°	5324.8	5262.9	5191.3	5270.2	5928.3	5965.3	6049.6	5066.9	3865.3	3702.1	3074.9
70°	5878.6	5855.5	5941.1	6265.6	7114.2	7115.4	6697.5	4988.1	3341.8	2624.8	1779.2
72.5°	5805.2	5791.2	6241.9	7245.3	8608.9	8576.7	7310.8	4391.2	2251.1	1184.1	666.7
75°	4762.4	4852.8	5551.0	7227.7	9145.7	9141.5	6935.3	2791.6	931.1	490.7	344.5
77.5°	2553.8	2697.0	3603.8	5336.3	7139.7	7247.1	4875.9	976.6	399.8	314.2	238.4
80°	832.9	957.8	1436.4	2717.0	4639.3	4619.3	2089.7	383.4	273.6	222.6	165.0
82.5°	353.6	368.2	641.8	1283.0	2380.9	2343.9	665.4	220.2	192.3	152.3	101.9
85°	138.3	154.7	283.3	593.3	1031.2	1008.8	240.2	109.2	123.1	99.5	60.7
87.5°	45.5	55.2	101.3	203.2	320.9	309.4	58.8	37.6	53.4	45.5	21.8
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°	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3	1495.3
2.5°	1508.0	1517.7	1529.2	1546.2	1560.8	1572.9	1585.7	1593.5	1596.6	1605.7	1605.1
5°	1518.9	1540.2	1568.7	1596.6	1623.9	1640.3	1654.8	1662.1	1668.8	1673.6	1674.8
7.5°	1537.1	1564.4	1609.3	1645.7	1668.8	1682.1	1691.8	1689.4	1691.8	1693.0	1694.8
10°	1552.9	1591.1	1644.5	1679.1	1696.7	1697.3	1694.8	1686.4	1682.1	1682.7	1683.9
12.5°	1571.7	1614.2	1671.8	1700.9	1705.8	1692.4	1682.1	1667.5	1662.1	1659.7	1658.5
15°	1597.2	1645.7	1701.5	1712.4	1700.3	1683.3	1665.7	1642.1	1629.9	1620.2	1623.3
17.5°	1628.1	1681.5	1724.6	1716.7	1690.6	1662.7	1634.2	1598.4	1573.5	1563.2	1563.8
20°	1671.2	1719.1	1742.2	1707.6	1668.2	1625.7	1577.2	1533.5	1510.4	1500.1	1498.9
22.5°	1723.4	1769.5	1759.1	1691.8	1636.0	1568.1	1507.4	1475.3	1463.7	1456.5	1457.7
25°	1785.8	1825.3	1771.3	1668.8	1583.2	1491.6	1444.9	1434.6	1429.2	1423.7	1423.7
27.5°	1867.1	1888.4	1780.4	1634.8	1500.7	1410.3	1393.4	1395.2	1393.4	1384.3	1386.1
30°	1974.5	1970.2	1788.9	1579.6	1406.1	1337.0	1338.2	1346.1	1347.3	1341.2	1344.2
32.5°	2115.8	2072.8	1793.1	1508.0	1315.7	1272.7	1273.9	1282.4	1288.4	1278.1	1283.0
35°	2286.9	2192.3	1786.4	1418.2	1246.0	1211.4	1202.3	1204.7	1206.5	1196.8	1203.5
37.5°	2486.5	2326.3	1756.7	1318.8	1188.3	1151.3	1131.9	1115.5	1105.8	1096.7	1102.8
40°	2705.4	2472.5	1702.1	1221.7	1124.0	1087.6	1058.5	1027.6	994.8	982.7	988.2
42.5°	2934.7	2622.9	1636.0	1128.9	1050.0	1020.3	989.4	944.5	895.3	870.5	873.5
45°	3172.5	2777.0	1571.1	1037.3	974.2	961.5	925.7	871.7	818.3	786.8	784.3
47.5°	3405.5	2922.6	1475.9	945.1	903.2	917.2	889.3	839.5	780.1	730.3	724.9
50°	3628.1	3059.1	1320.0	851.7	845.6	903.8	877.1	805.6	737.6	673.9	668.5
52.5°	3848.9	3169.5	1120.4	766.7	814.7	900.2	861.4	782.5	699.4	632.7	625.4
55°	4036.3	3226.5	928.1	694.0	769.8	869.3	842.6	755.2	645.4	574.5	568.4
57.5°	4143.1	3180.4	768.0	622.4	707.9	818.3	810.4	697.0	581.1	526.5	519.3
60°	4097.0	2993.6	636.9	559.9	649.1	763.1	754.6	639.4	532.0	480.4	473.1
62.5°	3842.8	2637.5	533.2	505.3	595.7	706.7	698.8	595.1	494.4	444.6	436.8
65°	3330.9	2145.6	452.5	459.8	541.7	638.8	650.3	558.1	464.7	416.1	408.2
67.5°	2540.4	1554.1	389.4	420.4	488.9	572.0	605.4	531.4	439.8	393.7	386.4
70°	1448.0	882.6	336.1	382.2	442.2	510.2	570.8	510.2	413.1	374.9	370.0
72.5°	549.0	405.2	290.6	343.9	397.3	458.0	532.6	476.8	382.2	353.6	348.8
75°	293.0	246.9	244.5	299.1	345.8	407.0	484.7	444.0	359.1	373.7	385.8
77.5°	199.6	174.7	204.4	256.0	289.3	350.6	433.7	394.3	311.2	310.0	285.7
80°	138.3	123.7	166.2	206.2	223.8	294.8	378.5	338.5	253.6	236.6	226.3
82.5°	83.1	80.7	124.4	154.1	158.3	227.5	313.6	283.9	207.5	180.8	182.0
85°	45.5	47.9	79.5	90.4	92.2	158.9	245.7	219.6	159.5	134.1	135.3
87.5°	12.7	16.4	29.1	35.8	44.3	82.5	146.2	130.4	80.1	55.8	55.8
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)