

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: P962112

Luminaire Tested: **NAV-SB2B-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962112
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10612.8 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 73.9
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: 24 FT



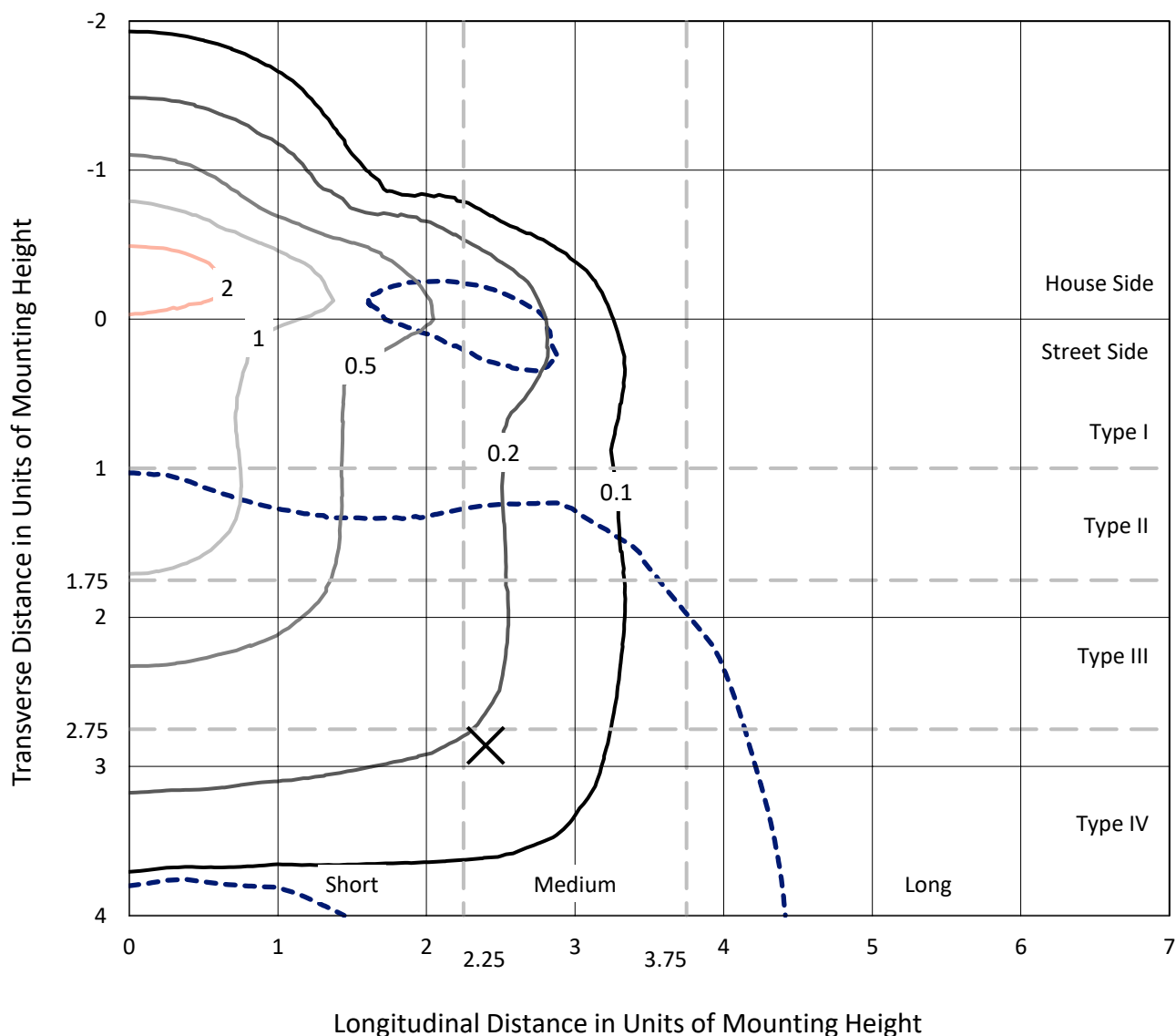
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

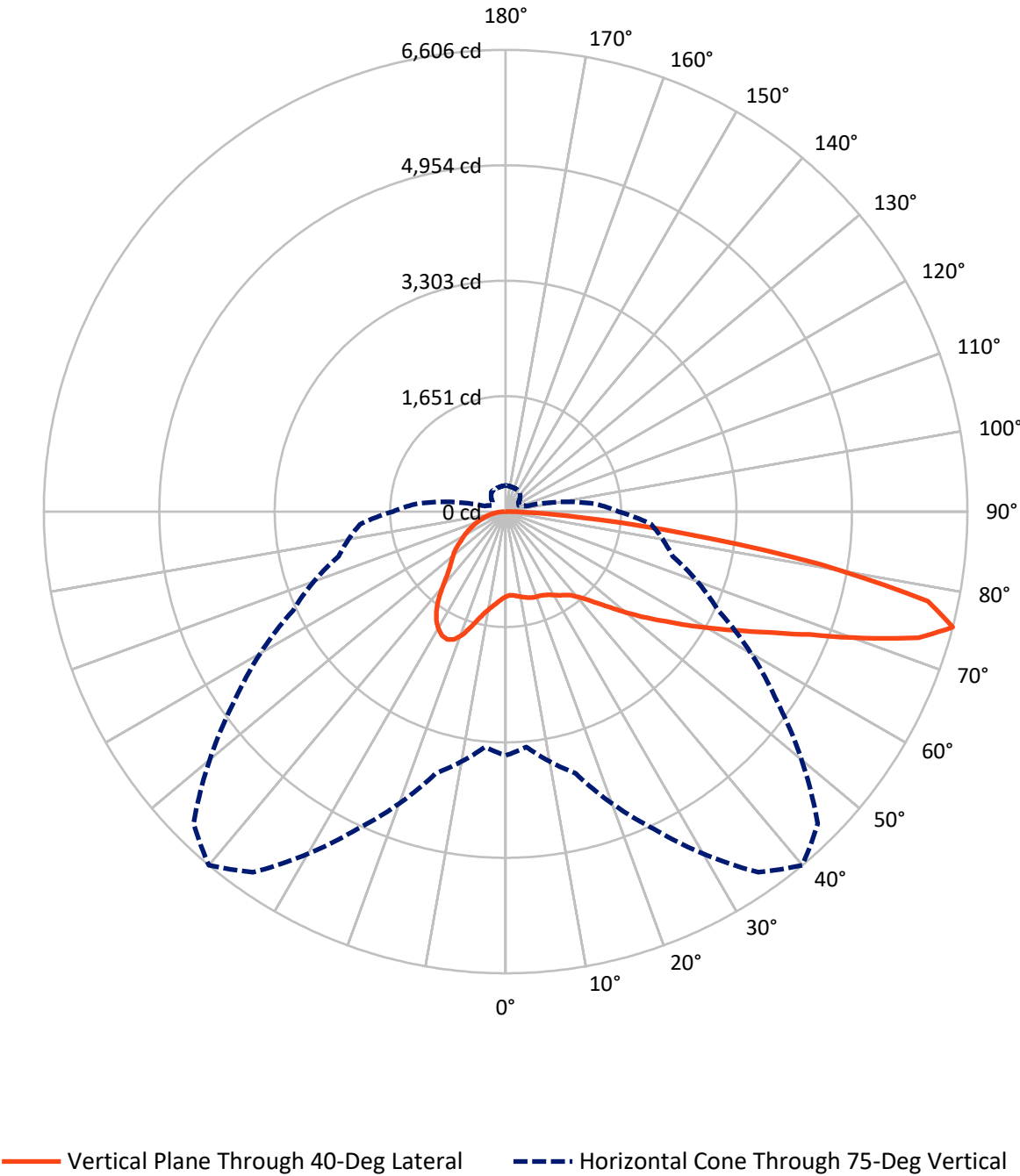
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3288.2	0.0	3288.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	7324.6	0.0	7324.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	10612.8	0.0	10612.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	1.1
10°-20°	406.7	3.8
20°-30°	742.6	7.0
30°-40°	1053.3	9.9
40°-50°	1422.2	13.4
50°-60°	1913.3	18.0
60°-70°	2428.4	22.9
70°-80°	2203.9	20.8
80°-90°	321.2	3.0
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°	10612.8	100.0
0°-180°	10612.8	100.0

Coefficient of Utilization



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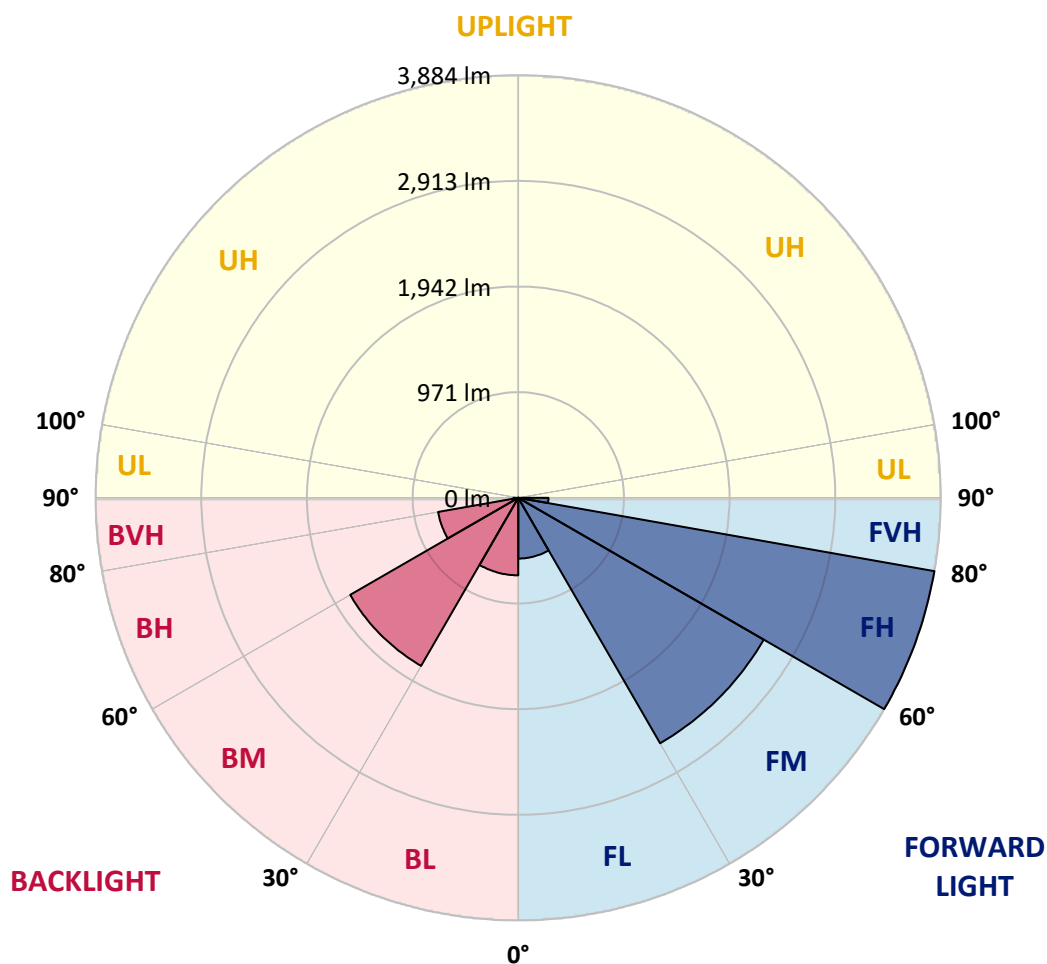
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	558.2	5.3			
FM	(30°-60°)	2605.2	24.5			
FH	(60°-80°)	3884.1	36.6			G2/5000
FVH	(80°-90°)	277.0	2.6			G3/500
BL	(0°-30°)	712.3	6.7	B2/1000		
BM	(30°-60°)	1783.6	16.8	B2/2500		
BH	(60°-80°)	748.2	7.0	B2/1000		G2/1000
BVH	(80°-90°)	44.2	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6
2.5°	1195.0	1201.8	1200.1	1197.8	1197.8	1198.4	1197.8	1201.8	1205.7	1209.6	1215.9
5°	1207.4	1214.1	1210.7	1208.0	1205.7	1205.2	1203.5	1202.9	1205.2	1210.2	1218.6
7.5°	1231.6	1238.4	1233.3	1228.3	1223.7	1221.5	1219.2	1215.9	1214.1	1217.0	1228.8
10°	1258.6	1265.4	1259.2	1250.2	1242.9	1240.0	1237.8	1234.4	1232.2	1233.9	1246.8
12.5°	1285.7	1292.4	1283.9	1271.6	1262.0	1260.3	1257.5	1256.3	1255.8	1255.2	1268.2
15°	1311.0	1316.6	1306.0	1291.3	1281.1	1278.3	1275.5	1277.1	1280.0	1283.4	1298.1
17.5°	1330.7	1336.3	1320.5	1301.4	1291.8	1290.7	1289.0	1294.7	1302.6	1311.0	1329.0
20°	1348.7	1354.3	1334.0	1308.2	1296.9	1296.9	1297.4	1309.3	1320.5	1332.9	1357.7
22.5°	1374.0	1378.5	1353.7	1318.3	1302.0	1303.1	1307.6	1319.4	1333.5	1350.3	1384.7
25°	1411.7	1415.1	1384.7	1337.4	1318.9	1322.2	1326.1	1331.8	1345.3	1365.0	1411.1
27.5°	1472.5	1475.4	1435.4	1371.2	1343.1	1348.7	1354.3	1350.3	1356.6	1373.5	1432.5
30°	1558.1	1559.7	1509.1	1424.1	1384.2	1386.9	1388.1	1371.8	1360.0	1373.5	1447.7
32.5°	1659.4	1658.9	1598.6	1488.3	1430.9	1428.0	1418.5	1386.4	1358.8	1370.6	1461.2
35°	1816.4	1810.3	1732.6	1578.4	1483.8	1466.4	1443.8	1402.7	1364.5	1367.9	1473.1
37.5°	2076.5	2057.4	1949.9	1725.8	1562.6	1518.1	1484.9	1429.2	1376.9	1366.7	1487.2
40°	2369.8	2345.6	2227.3	1927.9	1680.8	1609.4	1555.8	1466.9	1397.1	1371.8	1508.0
42.5°	2717.7	2683.3	2556.0	2166.0	1830.5	1726.9	1646.5	1514.7	1426.9	1388.1	1536.2
45°	3144.9	3099.3	2919.2	2434.5	2019.0	1881.2	1773.7	1587.3	1472.5	1419.6	1578.4
47.5°	3576.6	3587.9	3331.8	2741.9	2245.4	2071.4	1932.9	1696.6	1538.9	1470.3	1646.5
50°	4035.3	4043.2	3742.1	3082.4	2502.0	2286.5	2112.0	1818.7	1631.3	1542.3	1748.3
52.5°	4393.4	4394.5	4114.8	3438.7	2769.4	2522.8	2305.0	1958.3	1738.2	1638.1	1884.0
55°	4617.4	4614.5	4375.9	3775.9	3076.7	2771.1	2518.9	2117.0	1868.8	1750.6	2054.5
57.5°	4780.1	4771.6	4556.0	4065.8	3404.3	3064.3	2760.9	2297.1	2023.0	1884.6	2279.2
60°	4842.0	4837.0	4678.2	4316.3	3748.8	3388.6	3040.1	2498.6	2198.1	2042.7	2567.9
62.5°	4865.7	4875.2	4798.1	4558.9	4117.5	3747.7	3346.9	2739.6	2395.1	2221.7	2872.5
65°	4948.9	4966.4	4950.6	4876.3	4534.1	4168.2	3754.0	3026.1	2610.2	2413.7	3190.5
67.5°	5113.8	5131.4	5138.1	5256.3	5042.9	4692.2	4261.6	3383.0	2861.7	2612.9	3429.6
70°	5109.9	5104.9	5224.2	5558.6	5680.1	5417.8	4946.1	3822.0	3161.7	2778.5	3460.1
72.5°	4651.1	4610.7	4892.6	5555.2	6210.4	6175.5	5782.0	4388.3	3420.7	2798.7	3002.4
75°	3489.4	3381.3	3879.4	5006.3	6298.7	6605.5	6313.4	4739.5	3359.3	2472.8	2089.5
77.5°	1492.2	1383.5	1970.7	3706.1	5637.4	6174.9	5825.9	4135.0	2681.6	1635.2	1026.1
80°	390.6	390.1	595.5	1680.2	3833.8	4560.0	4000.5	2670.3	1532.2	584.2	283.1
82.5°	161.5	157.6	218.9	653.5	1873.3	2558.9	2088.3	1191.0	553.3	158.2	94.0
85°	60.3	59.7	106.4	225.7	660.8	1055.4	763.8	304.5	137.9	77.1	42.2
87.5°	16.9	16.3	23.1	78.2	161.0	244.3	130.6	50.1	38.8	30.4	12.4
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°	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6	1213.6
2.5°	1217.5	1220.4	1225.4	1229.4	1234.4	1240.0	1247.9	1253.0	1258.1	1261.5	1259.2
5°	1222.6	1228.8	1241.8	1254.7	1269.9	1283.9	1300.3	1312.1	1321.6	1324.5	1325.6
7.5°	1233.9	1243.9	1266.0	1287.9	1312.1	1335.2	1358.8	1379.0	1395.4	1401.6	1402.2
10°	1253.6	1267.1	1298.1	1329.0	1361.1	1396.6	1426.9	1456.2	1479.3	1488.8	1489.4
12.5°	1278.3	1295.2	1335.8	1378.5	1423.0	1472.0	1511.4	1547.3	1576.1	1589.1	1589.1
15°	1310.4	1332.4	1384.2	1441.6	1506.9	1575.0	1625.0	1665.0	1697.1	1712.9	1711.7
17.5°	1345.3	1374.6	1439.9	1526.5	1620.0	1709.5	1768.0	1797.3	1830.5	1845.7	1845.2
20°	1379.0	1415.1	1508.6	1634.7	1759.0	1854.1	1901.5	1909.4	1911.6	1913.3	1917.8
22.5°	1414.0	1462.4	1594.7	1770.9	1904.2	1970.2	1976.9	1943.1	1895.8	1873.9	1880.1
25°	1452.2	1516.4	1707.2	1921.2	2029.2	2037.1	1985.3	1903.1	1813.6	1772.5	1778.8
27.5°	1489.4	1578.9	1842.3	2064.7	2119.3	2050.0	1938.6	1822.0	1714.0	1670.6	1675.8
30°	1526.5	1650.4	1991.5	2190.2	2160.4	2017.9	1864.9	1734.8	1626.2	1580.6	1585.7
32.5°	1564.3	1733.7	2163.2	2280.8	2153.0	1949.9	1773.1	1636.9	1541.2	1493.3	1499.6
35°	1607.1	1836.2	2325.8	2330.3	2104.1	1849.6	1652.1	1519.8	1436.5	1398.2	1406.7
37.5°	1662.8	1966.2	2469.4	2342.7	2018.5	1702.7	1501.8	1381.3	1312.6	1295.2	1307.6
40°	1732.0	2122.7	2579.2	2323.1	1891.8	1524.3	1337.4	1241.2	1202.3	1206.3	1219.8
42.5°	1822.0	2297.7	2656.3	2272.4	1715.6	1340.3	1193.3	1150.6	1169.1	1184.9	1199.6
45°	1939.2	2479.6	2704.2	2186.2	1516.4	1184.3	1108.3	1118.5	1132.5	1134.3	1145.4
47.5°	2088.8	2663.6	2735.6	2056.3	1313.2	1074.6	1054.3	1056.6	1053.7	1041.9	1050.9
50°	2275.8	2842.6	2763.8	1884.0	1140.4	1005.9	978.9	971.0	932.1	893.9	898.9
52.5°	2488.5	3006.9	2775.6	1670.1	1005.9	948.4	904.6	855.1	782.4	770.6	774.5
55°	2725.0	3158.9	2745.3	1407.2	892.8	874.7	808.3	748.7	740.8	730.6	732.4
57.5°	3007.6	3322.7	2683.3	1114.0	776.7	788.6	723.9	730.6	716.6	700.8	698.0
60°	3316.6	3492.2	2574.7	846.5	656.9	681.1	701.9	701.4	697.4	684.5	680.0
62.5°	3594.6	3603.6	2360.8	648.4	551.7	597.8	654.7	654.1	650.7	643.4	640.5
65°	3760.1	3586.8	2003.9	510.6	464.9	529.1	590.5	595.0	595.5	595.0	595.0
67.5°	3730.8	3389.2	1514.1	406.4	393.5	459.3	526.8	533.1	537.5	538.6	539.8
70°	3399.8	2955.2	987.3	324.2	329.8	398.0	466.7	472.8	476.7	481.2	483.5
72.5°	2650.1	2172.8	565.2	262.3	274.1	345.0	406.9	414.3	416.6	425.0	428.3
75°	1614.9	1277.8	305.0	206.5	225.2	295.0	347.9	356.3	360.3	370.3	371.5
77.5°	767.8	553.3	173.9	161.0	181.2	240.9	293.9	303.4	292.7	298.4	293.9
80°	259.5	205.4	109.8	122.7	138.5	188.0	235.2	244.9	222.3	221.2	218.9
82.5°	90.6	83.3	69.8	81.6	89.5	134.5	177.8	190.2	165.5	164.9	157.0
85°	35.5	33.7	38.8	44.5	53.5	82.7	117.1	123.3	101.9	82.2	81.1
87.5°	7.3	7.9	9.5	10.1	16.3	28.7	42.2	51.8	41.1	34.8	32.1
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)