

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: P963631

Luminaire Tested: **NAV-SB3A-827-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963631
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-SB3A-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11891 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 84.7
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



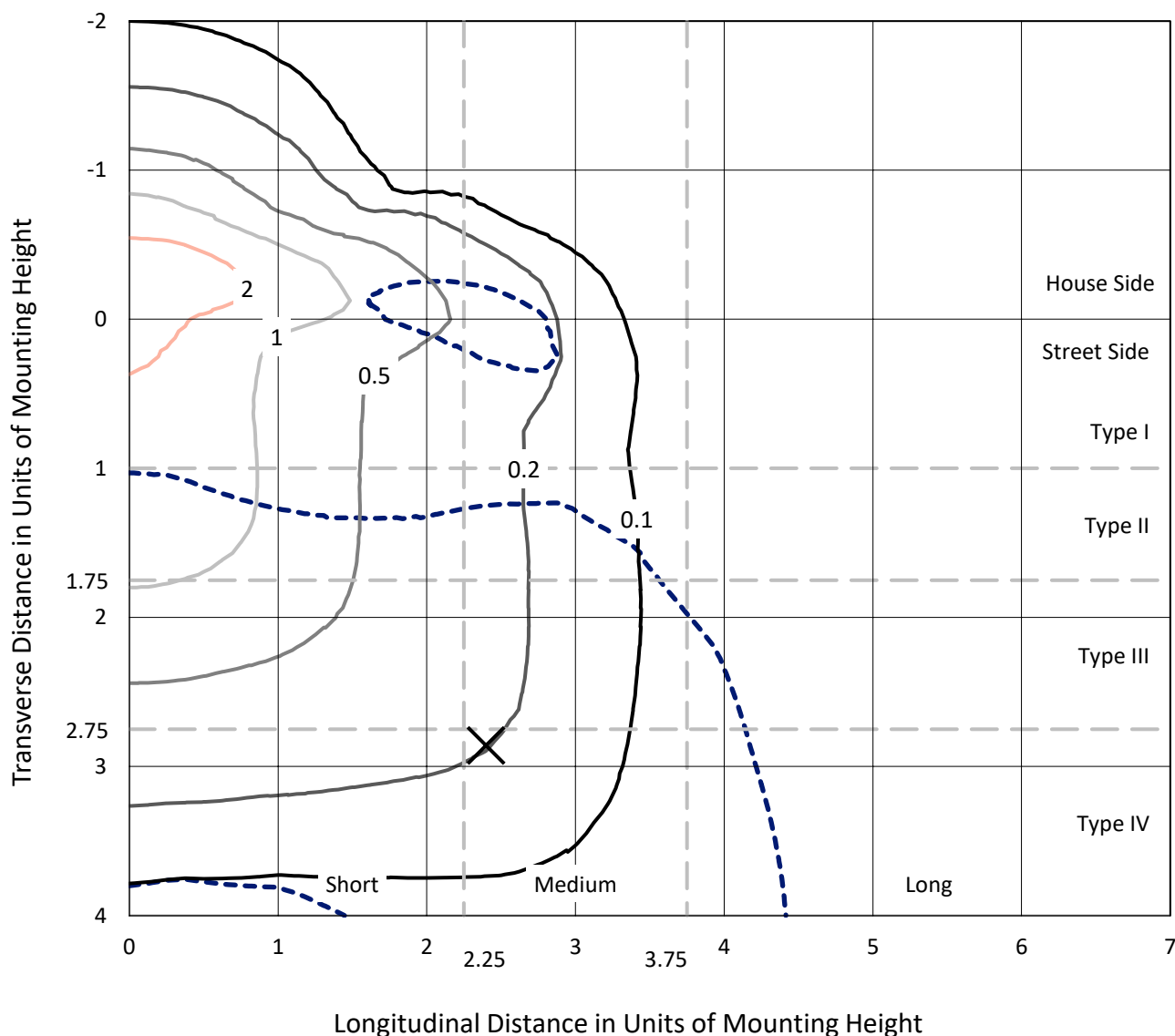
REPORT NUMBER: P963631

CATALOG NUMBER: NAV-SB3A-827-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

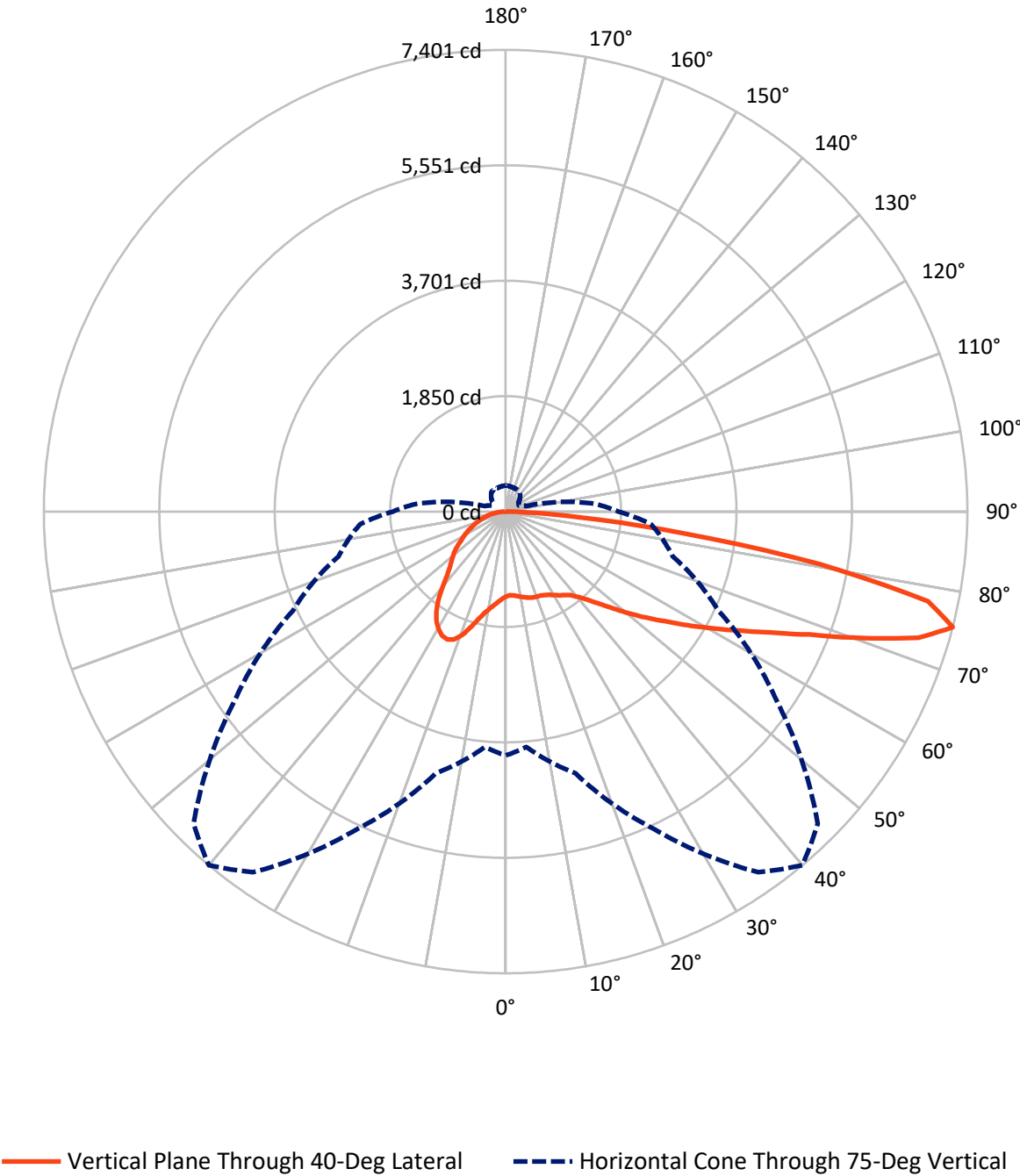


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc

Type IV - Medium - N/A

REPORT NUMBER: P963631
CATALOG NUMBER: NAV-SB3A-827-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P963631

CATALOG NUMBER: NAV-SB3A-827-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3684.3	0.0	3684.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	8206.8	0.0	8206.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	11891.0	0.0	11891.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.7	1.1
10°-20°	455.7	3.8
20°-30°	832.1	7.0
30°-40°	1180.1	9.9
40°-50°	1593.5	13.4
50°-60°	2143.7	18.0
60°-70°	2720.9	22.9
70°-80°	2469.4	20.8
80°-90°	360.0	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°	11891.0	100.0
0°-180°	11891.0	100.0

Coefficient of Utilization



REPORT NUMBER: P963631

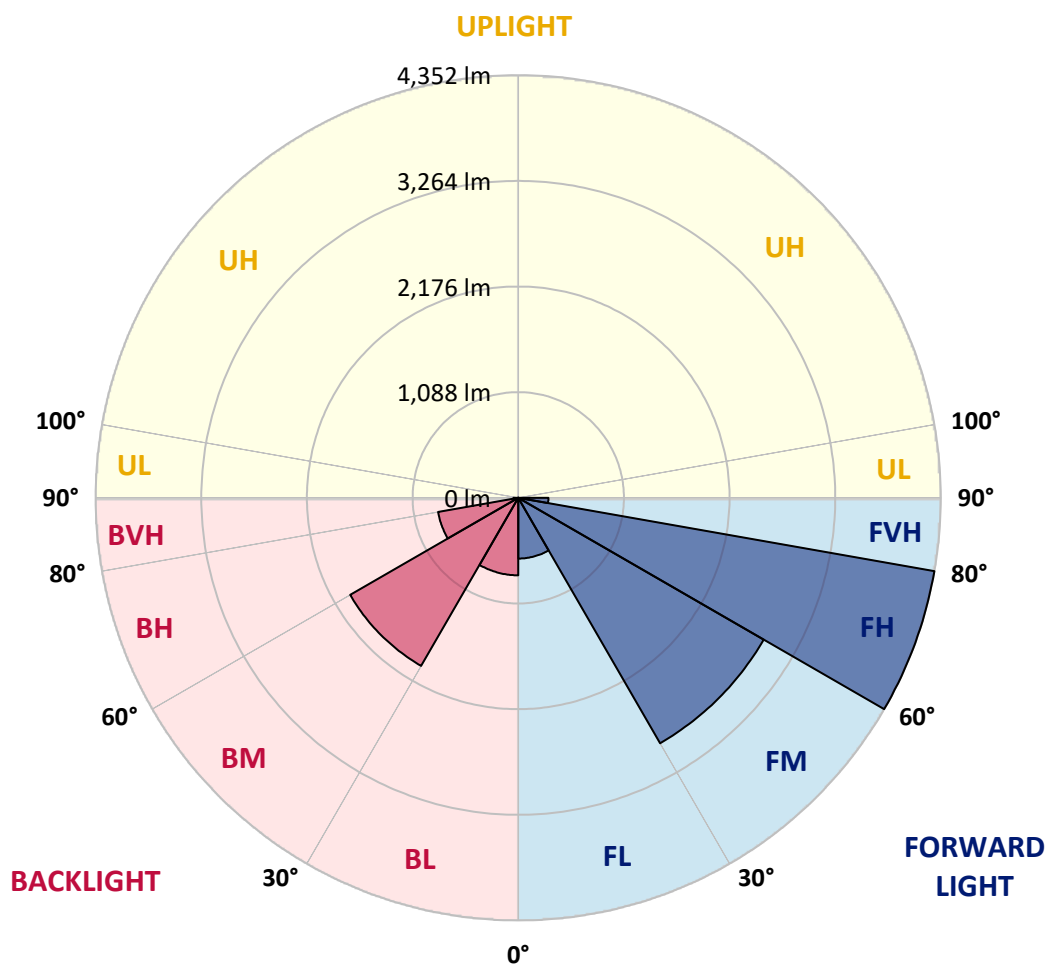
CATALOG NUMBER: NAV-SB3A-827-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	625.5	5.3			
FM	(30°-60°)	2919.0	24.5			
FH	(60°-80°)	4351.9	36.6			G2/5000
FVH	(80°-90°)	310.4	2.6			G3/500
BL	(0°-30°)	798.0	6.7	B2/1000		
BM	(30°-60°)	1998.4	16.8	B2/2500		
BH	(60°-80°)	838.3	7.0	B2/1000		G2/1000
BVH	(80°-90°)	49.6	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



REPORT NUMBER: P963631

CATALOG NUMBER: NAV-SB3A-827-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8
2.5°	1339.0	1346.5	1344.6	1342.1	1342.1	1342.7	1342.1	1346.5	1350.9	1355.4	1362.3
5°	1352.8	1360.4	1356.6	1353.4	1350.9	1350.3	1348.4	1347.8	1350.3	1356.0	1365.4
7.5°	1380.0	1387.5	1381.8	1376.2	1371.1	1368.6	1366.0	1362.3	1360.4	1363.6	1376.8
10°	1410.2	1417.8	1410.8	1400.8	1392.6	1389.4	1386.8	1383.1	1380.6	1382.4	1397.0
12.5°	1440.4	1448.0	1438.6	1424.7	1414.0	1412.1	1409.0	1407.7	1407.0	1406.4	1421.0
15°	1468.8	1475.2	1463.2	1446.8	1435.4	1432.2	1429.2	1431.0	1434.2	1438.0	1454.4
17.5°	1491.0	1497.2	1479.6	1458.2	1447.4	1446.2	1444.2	1450.6	1459.4	1468.8	1489.0
20°	1511.2	1517.4	1494.8	1465.7	1453.1	1453.1	1453.8	1467.0	1479.6	1493.4	1521.2
22.5°	1539.6	1544.6	1516.8	1477.0	1458.8	1460.0	1465.0	1478.4	1494.0	1513.0	1551.4
25°	1581.8	1585.6	1551.4	1498.6	1477.7	1481.4	1485.9	1492.2	1507.4	1529.4	1581.2
27.5°	1649.8	1653.0	1608.2	1536.4	1504.8	1511.2	1517.4	1513.0	1520.0	1538.8	1605.0
30°	1745.8	1747.6	1690.8	1595.6	1550.8	1554.0	1555.2	1537.0	1523.8	1538.8	1622.2
32.5°	1859.2	1858.6	1791.2	1667.6	1603.2	1600.0	1589.4	1553.4	1522.4	1535.8	1637.2
35°	2035.2	2028.3	1941.2	1768.4	1662.4	1643.0	1617.7	1571.6	1528.8	1532.6	1650.5
37.5°	2326.5	2305.1	2184.7	1933.7	1750.8	1701.0	1663.8	1601.4	1542.6	1531.4	1666.2
40°	2655.2	2628.1	2495.6	2160.1	1883.2	1803.1	1743.2	1643.6	1565.4	1537.0	1689.6
42.5°	3045.0	3006.4	2864.0	2426.9	2051.0	1934.9	1844.8	1697.2	1598.8	1555.2	1721.2
45°	3523.6	3472.5	3270.8	2727.7	2262.3	2107.7	1987.3	1778.5	1649.8	1590.6	1768.4
47.5°	4007.3	4019.9	3733.0	3072.0	2515.8	2320.9	2165.7	1900.9	1724.3	1647.4	1844.8
50°	4521.4	4530.2	4192.8	3453.6	2803.4	2561.9	2366.3	2037.7	1827.7	1728.0	1958.9
52.5°	4922.5	4923.8	4610.3	3852.9	3103.0	2826.7	2582.7	2194.1	1947.6	1835.3	2110.9
55°	5173.5	5170.3	4903.0	4230.6	3447.3	3104.8	2822.3	2372.0	2093.9	1961.4	2302.0
57.5°	5355.7	5346.3	5104.7	4555.4	3814.3	3433.4	3093.6	2573.8	2266.7	2111.5	2553.7
60°	5425.1	5419.5	5241.6	4836.1	4200.3	3796.7	3406.3	2799.6	2462.9	2288.7	2877.2
62.5°	5451.7	5462.3	5375.9	5107.9	4613.4	4199.1	3750.1	3069.6	2683.6	2489.3	3218.4
65°	5544.9	5564.5	5546.9	5463.7	5080.2	4670.2	4206.0	3390.6	2924.5	2704.4	3574.7
67.5°	5729.7	5749.3	5756.9	5889.3	5650.3	5257.4	4774.9	3790.4	3206.4	2927.6	3842.7
70°	5725.3	5719.7	5853.4	6228.0	6364.2	6070.4	5541.9	4282.3	3542.5	3113.0	3876.9
72.5°	5211.3	5165.9	5481.9	6224.2	6958.3	6919.3	6478.4	4916.8	3832.7	3135.8	3364.0
75°	3909.7	3788.5	4346.7	5609.3	7057.3	7401.1	7073.7	5310.3	3763.9	2770.6	2341.1
77.5°	1672.0	1550.2	2208.1	4152.4	6316.3	6918.6	6527.6	4633.0	3004.6	1832.2	1149.7
80°	437.7	437.1	667.3	1882.6	4295.6	5109.2	4482.2	2992.0	1716.8	654.7	317.2
82.5°	181.0	176.6	245.4	732.3	2098.9	2867.1	2339.9	1334.6	619.9	177.2	105.4
85°	67.4	66.8	119.2	252.9	740.5	1182.5	855.9	341.2	154.5	86.4	47.3
87.5°	19.0	18.2	25.8	87.6	180.4	273.7	146.3	56.2	43.6	34.0	13.8
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: P963631

CATALOG NUMBER: NAV-SB3A-827-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8	1359.8
2.5°	1364.2	1367.4	1373.0	1377.4	1383.1	1389.4	1398.2	1403.9	1409.6	1413.4	1410.8
5°	1369.8	1376.8	1391.3	1405.8	1422.8	1438.6	1456.8	1470.2	1480.8	1484.0	1485.2
7.5°	1382.4	1393.8	1418.4	1443.0	1470.2	1496.0	1522.4	1545.2	1563.4	1570.4	1571.0
10°	1404.6	1419.6	1454.4	1489.0	1525.0	1564.8	1598.8	1631.6	1657.4	1668.2	1668.8
12.5°	1432.2	1451.2	1496.6	1544.6	1594.4	1649.2	1693.4	1733.8	1765.9	1780.4	1780.4
15°	1468.2	1492.8	1550.8	1615.2	1688.4	1764.6	1820.8	1865.6	1901.5	1919.2	1917.9
17.5°	1507.4	1540.2	1613.2	1710.4	1815.1	1915.4	1981.0	2013.8	2051.0	2068.0	2067.4
20°	1545.2	1585.6	1690.2	1831.5	1970.9	2077.5	2130.5	2139.3	2141.8	2143.7	2148.7
22.5°	1584.2	1638.6	1786.7	1984.1	2133.6	2207.4	2214.9	2177.1	2124.1	2099.5	2106.5
25°	1627.2	1699.0	1912.9	2152.5	2273.7	2282.5	2224.5	2132.3	2032.1	1986.0	1993.0
27.5°	1668.8	1769.0	2064.2	2313.3	2374.5	2296.9	2172.1	2041.5	1920.4	1871.9	1877.6
30°	1710.4	1849.2	2231.3	2454.0	2420.5	2261.0	2089.5	1943.8	1822.0	1771.0	1776.6
32.5°	1752.6	1942.5	2423.7	2555.5	2412.3	2184.7	1986.7	1834.0	1726.8	1673.2	1680.2
35°	1800.6	2057.3	2606.0	2611.0	2357.5	2072.4	1851.0	1702.8	1609.5	1566.6	1576.0
37.5°	1863.0	2202.9	2766.8	2624.9	2261.7	1907.8	1682.6	1547.6	1470.8	1451.2	1465.0
40°	1940.6	2378.3	2889.8	2602.8	2119.7	1707.9	1498.6	1390.6	1347.2	1351.6	1366.7
42.5°	2041.5	2574.5	2976.2	2546.1	1922.3	1501.6	1337.0	1289.1	1309.9	1327.6	1344.0
45°	2172.7	2778.2	3029.8	2449.5	1699.0	1327.0	1241.8	1253.2	1268.9	1270.8	1283.4
47.5°	2340.5	2984.4	3065.2	2303.9	1471.4	1204.0	1181.3	1183.8	1180.6	1167.4	1177.5
50°	2549.9	3185.0	3096.6	2110.9	1277.8	1127.0	1096.8	1087.9	1044.4	1001.5	1007.2
52.5°	2788.2	3369.1	3110.0	1871.2	1127.0	1062.7	1013.5	958.0	876.7	863.4	867.9
55°	3053.2	3539.4	3075.8	1576.8	1000.3	980.1	905.7	838.9	829.9	818.7	820.5
57.5°	3369.8	3722.9	3006.4	1248.1	870.3	883.6	811.1	818.7	802.9	785.3	782.1
60°	3716.0	3912.7	2884.8	948.5	736.1	763.1	786.5	785.9	781.5	766.9	761.9
62.5°	4027.5	4037.7	2645.1	726.5	618.1	669.8	733.5	732.9	729.1	720.9	717.7
65°	4213.0	4018.7	2245.3	572.1	520.9	592.9	661.6	666.7	667.3	666.7	666.7
67.5°	4180.2	3797.3	1696.6	455.3	440.9	514.7	590.3	597.3	602.3	603.5	604.9
70°	3809.3	3311.1	1106.2	363.3	369.6	445.9	522.9	529.8	534.2	539.3	541.7
72.5°	2969.2	2434.5	633.2	293.9	307.2	386.6	456.0	464.2	466.7	476.2	479.9
75°	1809.4	1431.6	341.8	231.4	252.3	330.5	389.8	399.2	403.6	415.0	416.3
77.5°	860.3	619.9	194.9	180.4	203.1	269.9	329.2	339.9	328.0	334.3	329.2
80°	290.8	230.2	123.0	137.5	155.2	210.6	263.6	274.4	249.1	247.8	245.4
82.5°	101.6	93.4	78.2	91.4	100.2	150.8	199.3	213.2	185.4	184.8	176.0
85°	39.8	37.8	43.6	49.8	60.0	92.7	131.2	138.2	114.2	92.0	90.8
87.5°	8.2	8.8	10.8	11.4	18.2	32.2	47.3	58.0	46.0	39.1	36.0
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)