

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: P960858

Luminaire Tested: **NAV-SB1D-730-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960858
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10312.5 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

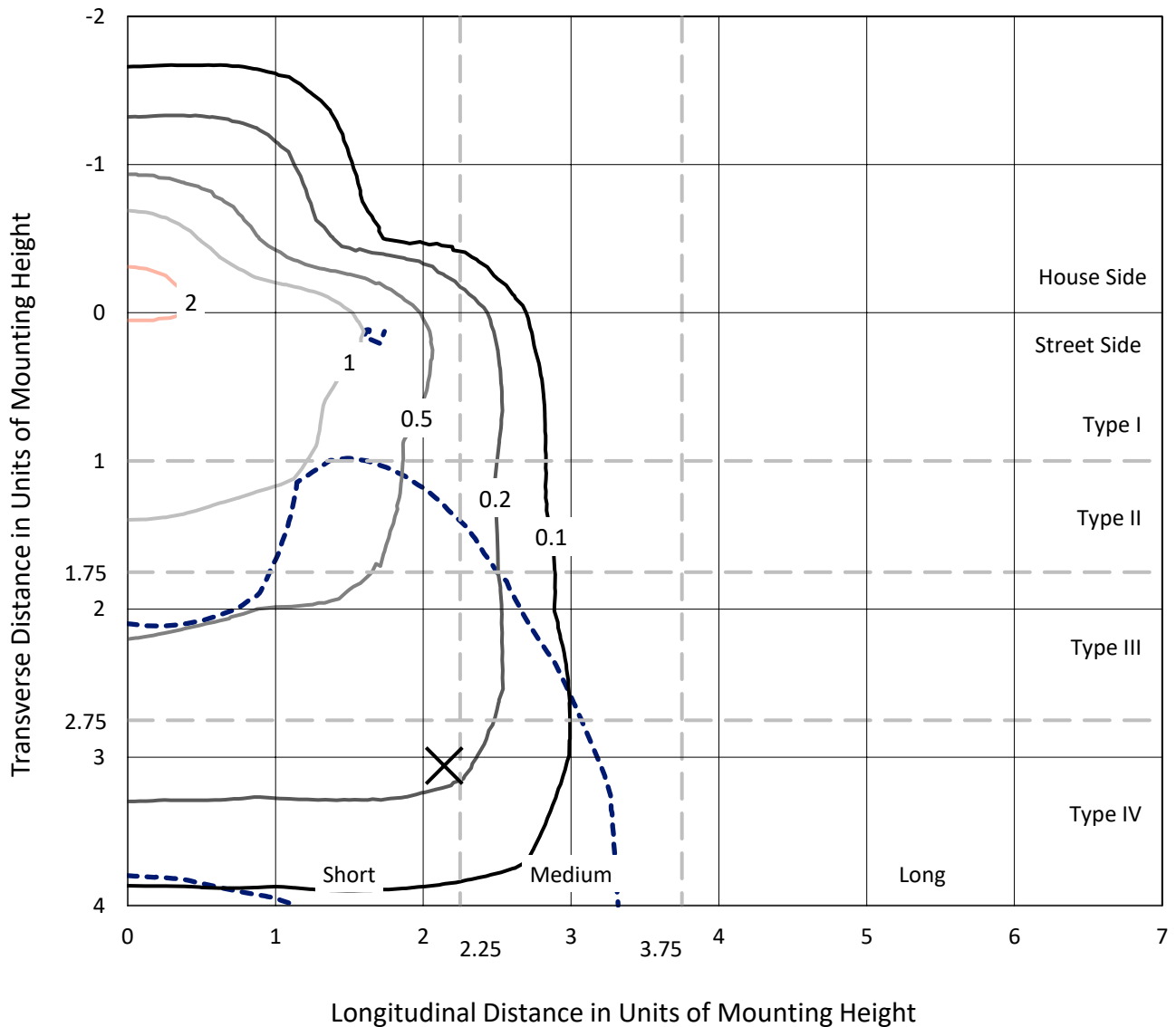
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

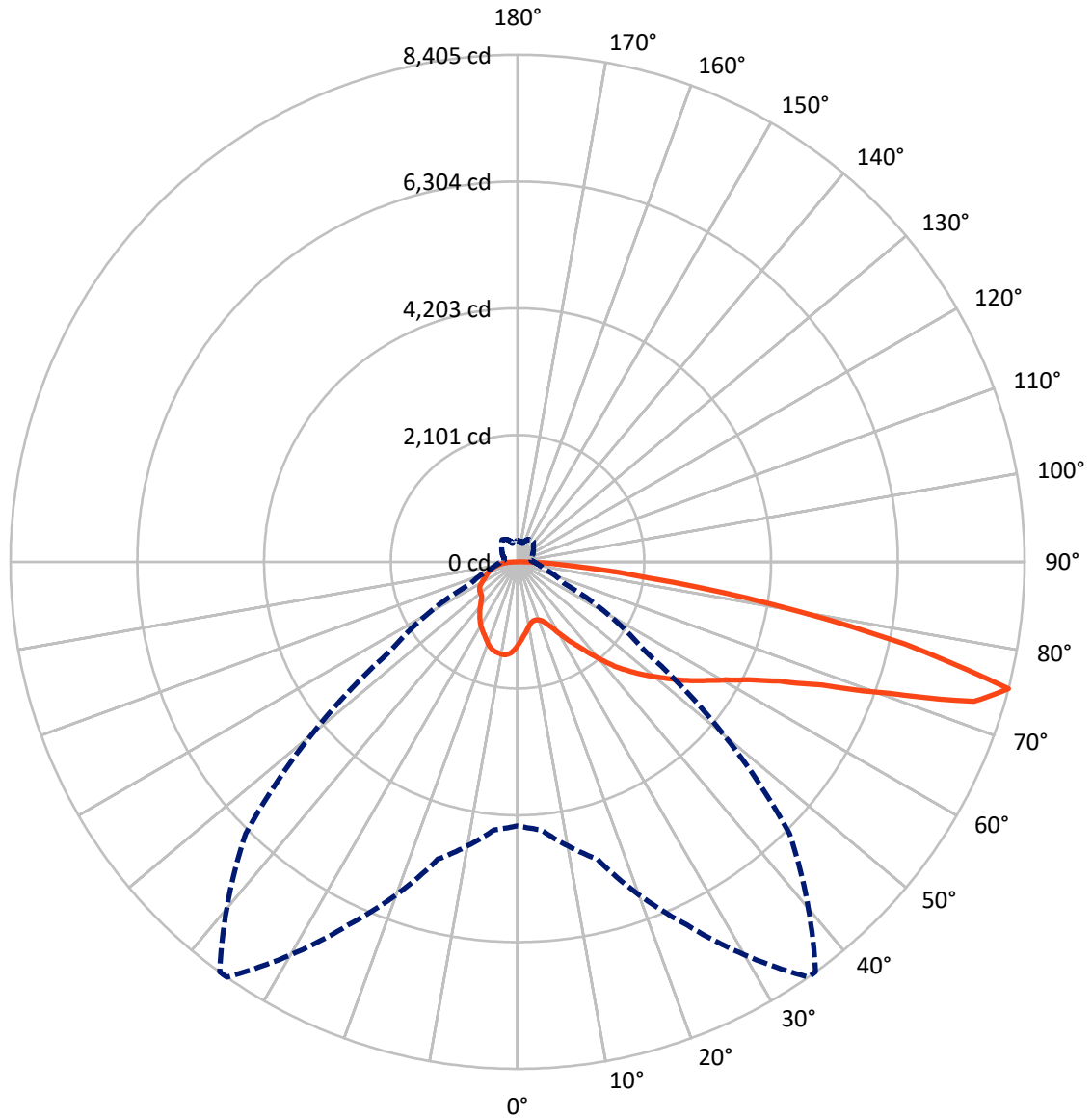
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	2454.1	0.0	2454.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	7858.4	0.0	7858.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	10312.5	0.0	10312.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	1.3
10°-20°	375.3	3.6
20°-30°	630.2	6.1
30°-40°	979.4	9.5
40°-50°	1453.8	14.1
50°-60°	2007.0	19.5
60°-70°	2435.0	23.6
70°-80°	2012.3	19.5
80°-90°	289.4	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°	10312.5	100.0
0°-180°	10312.5	100.0

Coefficient of Utilization



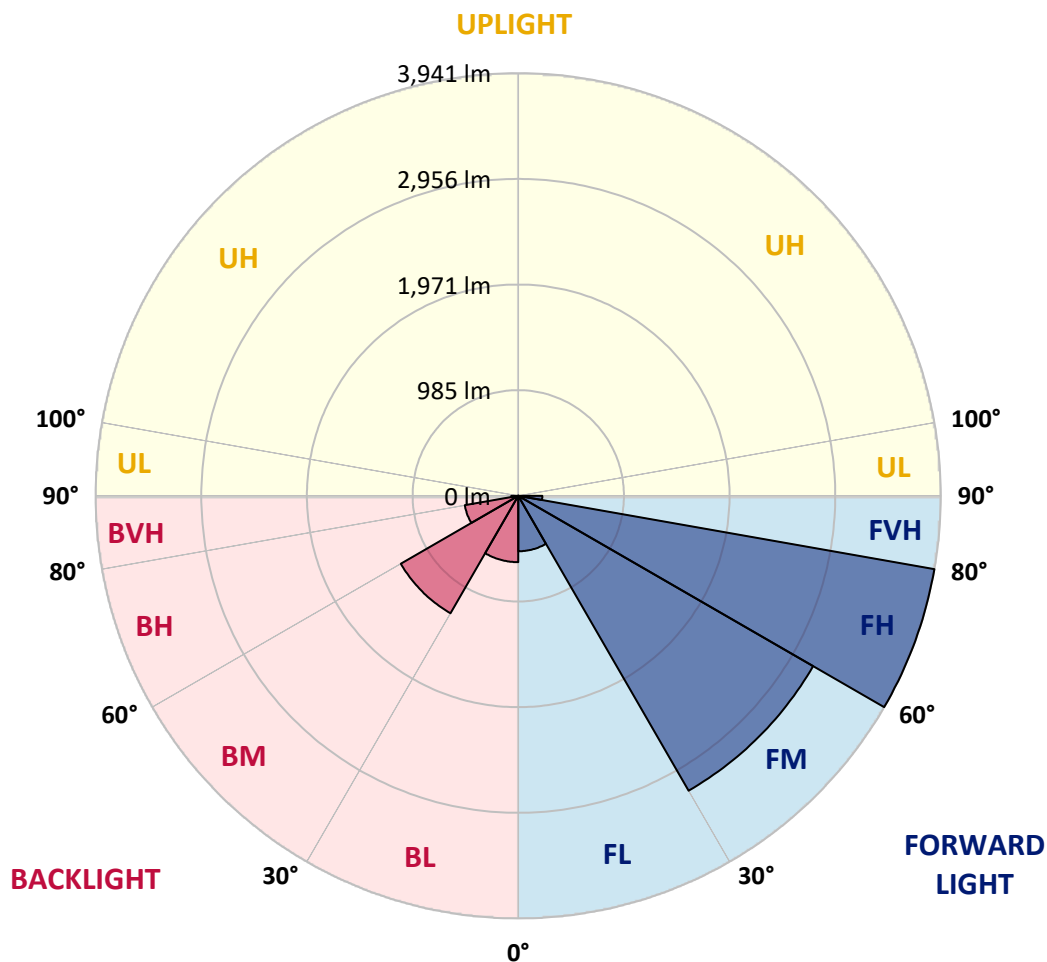
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	517.2	5.0			
FM (30°-60°)	3175.7	30.8			
FH (60°-80°)	3941.3	38.2			G2/5000
FVH (80°-90°)	224.3	2.2			G2/225
BL (0°-30°)	618.5	6.0	B2/1000		
BM (30°-60°)	1264.5	12.3	B2/2500		
BH (60°-80°)	506.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	65.2	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2
2.5°	1267.2	1275.0	1278.3	1276.6	1285.0	1283.9	1295.6	1310.1	1330.1	1349.7	1378.1
5°	1169.6	1177.9	1185.2	1191.9	1208.1	1213.1	1231.5	1259.4	1296.2	1333.5	1380.4
7.5°	1078.7	1086.0	1097.2	1109.4	1136.7	1141.7	1172.4	1215.9	1267.2	1321.8	1386.5
10°	1004.6	1011.9	1023.6	1037.5	1071.5	1077.6	1116.6	1174.6	1241.5	1310.7	1393.2
12.5°	972.8	975.1	981.7	995.7	1025.2	1029.1	1072.0	1138.4	1216.5	1302.3	1403.2
15°	971.2	975.6	976.2	983.4	1008.0	1009.6	1049.2	1115.0	1200.8	1300.6	1418.3
17.5°	987.9	991.2	986.2	990.7	1011.3	1014.0	1045.3	1103.8	1195.9	1307.9	1443.9
20°	1032.5	1035.2	1020.2	1014.0	1029.1	1031.4	1062.0	1111.1	1200.8	1323.0	1479.0
22.5°	1127.3	1128.9	1092.1	1067.0	1068.2	1069.3	1096.0	1140.6	1220.4	1350.2	1523.7
25°	1275.0	1273.9	1215.3	1166.9	1139.0	1132.8	1150.7	1188.6	1253.3	1386.5	1581.1
27.5°	1447.8	1439.4	1380.9	1308.4	1247.6	1238.7	1234.8	1251.0	1300.1	1434.4	1651.3
30°	1643.0	1635.1	1572.1	1477.3	1393.2	1378.6	1341.9	1333.5	1369.7	1499.7	1748.9
32.5°	1857.0	1852.0	1776.7	1661.8	1549.3	1532.6	1470.7	1448.3	1476.8	1598.3	1884.9
35°	2036.5	2032.1	1969.6	1851.5	1713.7	1693.1	1630.1	1605.0	1619.5	1724.9	2062.7
37.5°	2198.7	2196.5	2143.0	2049.9	1907.7	1882.6	1811.9	1803.5	1800.7	1891.5	2278.5
40°	2349.3	2343.7	2287.9	2238.9	2133.5	2110.7	2048.3	2041.0	2019.8	2096.7	2522.6
42.5°	2516.0	2501.4	2420.6	2397.8	2369.3	2350.4	2313.0	2314.1	2267.3	2328.1	2781.3
45°	2652.0	2643.6	2560.6	2547.1	2577.9	2570.0	2602.4	2610.8	2519.9	2570.6	3050.0
47.5°	2798.0	2790.3	2720.0	2710.5	2793.5	2795.8	2910.1	2912.8	2766.3	2822.5	3319.3
50°	2978.1	2967.0	2897.3	2909.0	3002.1	3010.4	3219.5	3200.6	2993.2	3078.5	3586.4
52.5°	3096.8	3103.6	3088.5	3107.5	3234.6	3242.4	3523.8	3475.4	3217.9	3331.0	3848.4
55°	3184.4	3197.8	3244.6	3288.1	3479.9	3487.7	3811.1	3736.8	3404.0	3565.2	4094.8
57.5°	3297.0	3278.1	3365.6	3450.4	3712.9	3733.6	4090.3	3988.9	3569.0	3767.0	4263.7
60°	3458.7	3445.3	3513.3	3638.7	3973.8	4006.7	4385.8	4215.7	3690.0	3927.0	4296.6
62.5°	3786.5	3753.0	3763.6	3874.6	4302.7	4346.2	4719.2	4413.6	3750.3	3989.4	4120.4
65°	4276.5	4219.1	4165.6	4242.5	4765.9	4808.9	5095.5	4569.1	3727.9	3868.5	3652.7
67.5°	4893.7	4836.8	4771.0	4843.4	5448.4	5482.3	5559.8	4656.7	3552.3	3402.4	2825.9
70°	5402.7	5381.5	5460.1	5758.3	6538.3	6539.4	6155.2	4584.2	3071.2	2412.2	1635.1
72.5°	5335.2	5322.3	5736.6	6658.7	7911.9	7882.4	6718.9	4035.6	2068.9	1088.2	612.6
75°	4376.9	4459.9	5101.6	6642.5	8405.3	8401.4	6373.8	2565.6	855.8	451.0	316.6
77.5°	2347.0	2478.6	3312.1	4904.2	6561.6	6660.3	4481.1	897.6	367.4	288.7	219.0
80°	765.5	880.3	1320.1	2497.0	4263.7	4245.2	1920.5	352.3	251.4	204.6	151.6
82.5°	325.0	338.4	589.8	1179.1	2188.2	2154.1	611.6	202.3	176.7	139.9	93.7
85°	127.1	142.2	260.3	545.2	947.7	927.1	220.8	100.3	113.2	91.4	55.8
87.5°	41.8	50.7	93.1	186.8	294.9	284.3	54.1	34.5	49.1	41.8	20.1
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°	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2	1374.2
2.5°	1385.9	1394.8	1405.5	1421.1	1434.4	1445.6	1457.2	1464.5	1467.3	1475.7	1475.1
5°	1395.9	1415.4	1441.7	1467.3	1492.4	1507.5	1520.8	1527.6	1533.6	1538.1	1539.2
7.5°	1412.7	1437.8	1479.0	1512.5	1533.6	1545.9	1554.8	1552.6	1554.8	1555.9	1557.6
10°	1427.2	1462.3	1511.4	1543.1	1559.3	1559.8	1557.6	1549.8	1545.9	1546.5	1547.5
12.5°	1444.4	1483.5	1536.5	1563.2	1567.6	1555.4	1545.9	1532.6	1527.6	1525.3	1524.2
15°	1467.9	1512.5	1563.7	1573.8	1562.6	1547.0	1530.8	1509.1	1497.9	1489.0	1491.9
17.5°	1496.3	1545.4	1585.0	1577.7	1553.7	1528.1	1501.8	1469.0	1446.2	1436.6	1437.3
20°	1535.9	1579.9	1601.2	1569.4	1533.1	1494.0	1449.5	1409.4	1388.2	1378.6	1377.6
22.5°	1583.8	1626.2	1616.7	1554.8	1503.6	1441.1	1385.4	1355.8	1345.2	1338.5	1339.7
25°	1641.2	1677.5	1627.9	1533.6	1455.1	1370.8	1328.0	1318.5	1313.4	1308.4	1308.4
27.5°	1716.0	1735.4	1636.2	1502.4	1379.2	1296.2	1280.5	1282.3	1280.5	1272.2	1273.9
30°	1814.7	1810.8	1644.0	1451.7	1292.2	1228.7	1229.8	1237.1	1238.2	1232.6	1235.4
32.5°	1944.5	1905.0	1647.9	1385.9	1209.2	1169.6	1170.8	1178.5	1184.1	1174.6	1179.1
35°	2101.8	2014.7	1641.8	1303.4	1145.1	1113.4	1104.9	1107.2	1108.8	1099.9	1106.1
37.5°	2285.1	2137.9	1614.5	1212.0	1092.1	1058.1	1040.3	1025.2	1016.3	1008.0	1013.5
40°	2486.4	2272.3	1564.4	1122.8	1033.0	999.6	972.8	944.4	914.3	903.1	908.2
42.5°	2697.2	2410.6	1503.6	1037.5	965.0	937.7	909.3	868.0	822.9	800.0	802.8
45°	2915.7	2552.1	1443.9	953.4	895.3	883.7	850.7	801.1	752.0	723.0	720.9
47.5°	3129.7	2686.0	1356.4	868.6	830.1	843.0	817.2	771.5	716.9	671.2	666.2
50°	3334.3	2811.5	1213.1	782.7	777.2	830.7	806.2	740.4	677.9	619.4	614.4
52.5°	3537.3	2912.8	1029.7	704.7	748.7	827.3	791.6	719.1	642.8	581.5	574.8
55°	3709.6	2965.3	853.0	637.8	707.5	798.9	774.4	694.0	593.2	528.0	522.3
57.5°	3807.7	2922.9	705.8	571.9	650.6	752.0	744.8	640.5	534.0	483.9	477.2
60°	3765.3	2751.2	585.4	514.6	596.6	701.3	693.5	587.6	488.9	441.6	434.8
62.5°	3531.7	2423.9	490.1	464.4	547.5	649.4	642.3	546.9	454.4	408.7	401.4
65°	3061.2	1971.8	415.8	422.6	497.8	587.0	597.7	512.9	427.0	382.4	375.2
67.5°	2334.7	1428.3	357.9	386.3	449.4	525.7	556.4	488.4	404.2	361.8	355.2
70°	1330.8	811.2	308.8	351.3	406.4	468.8	524.6	468.8	379.7	344.5	340.1
72.5°	504.5	372.4	267.0	316.1	365.1	420.9	489.4	438.2	351.3	325.0	320.5
75°	269.3	226.9	224.7	274.8	317.8	374.1	445.5	408.1	330.0	343.4	354.5
77.5°	183.4	160.5	187.9	235.2	265.9	322.3	398.6	362.3	286.0	284.8	262.6
80°	127.1	113.8	152.7	189.5	205.7	270.9	347.9	311.1	233.0	217.4	208.0
82.5°	76.4	74.1	114.3	141.6	145.5	209.1	288.2	260.9	190.6	166.2	167.3
85°	41.8	44.1	73.0	83.0	84.8	146.1	225.8	201.8	146.6	123.2	124.3
87.5°	11.7	15.1	26.8	32.9	40.7	75.8	134.4	119.8	73.6	51.2	51.2
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)