

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: P960824

Luminaire Tested: **NAV-SB1D-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960824
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9935.3 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

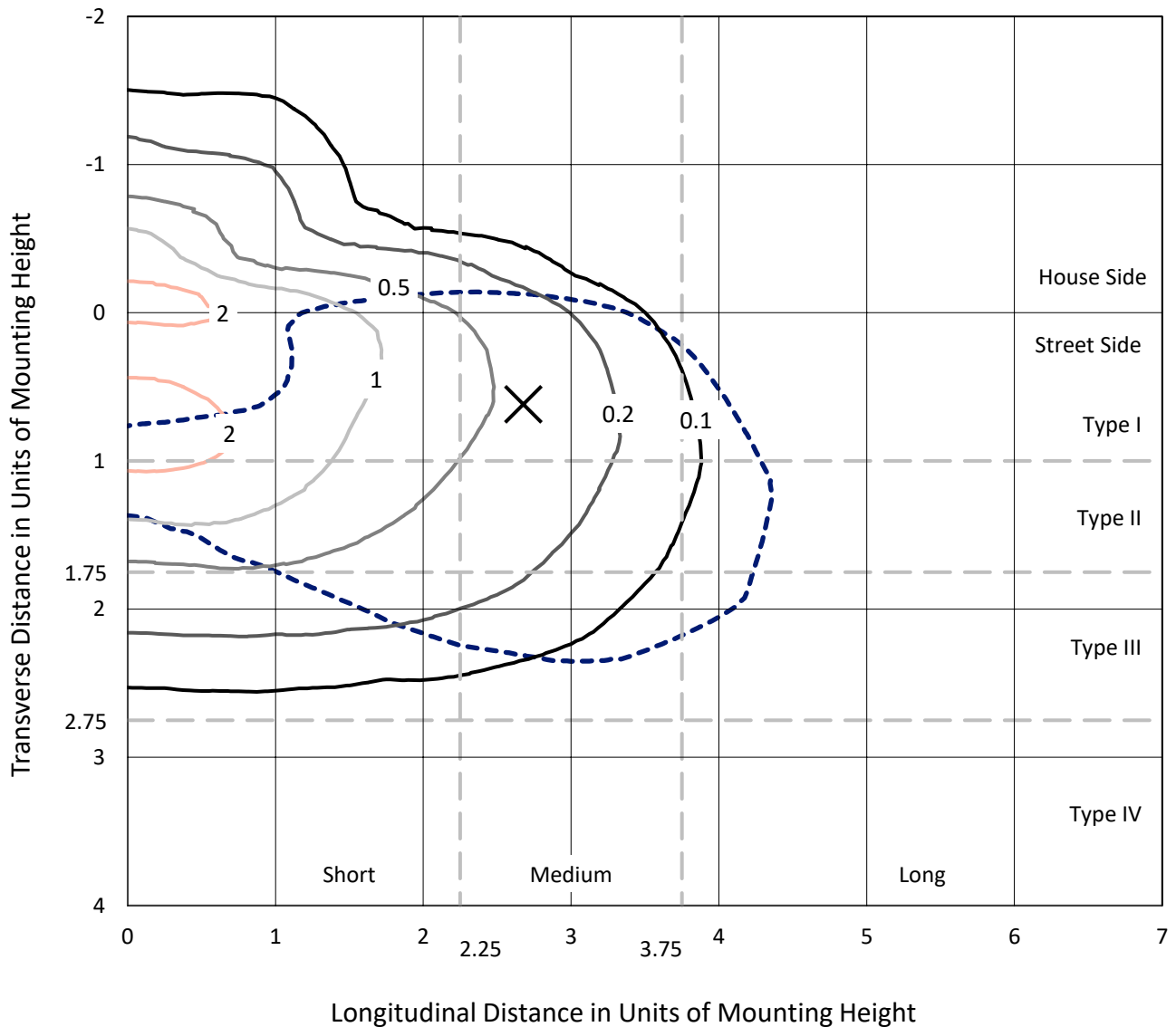
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

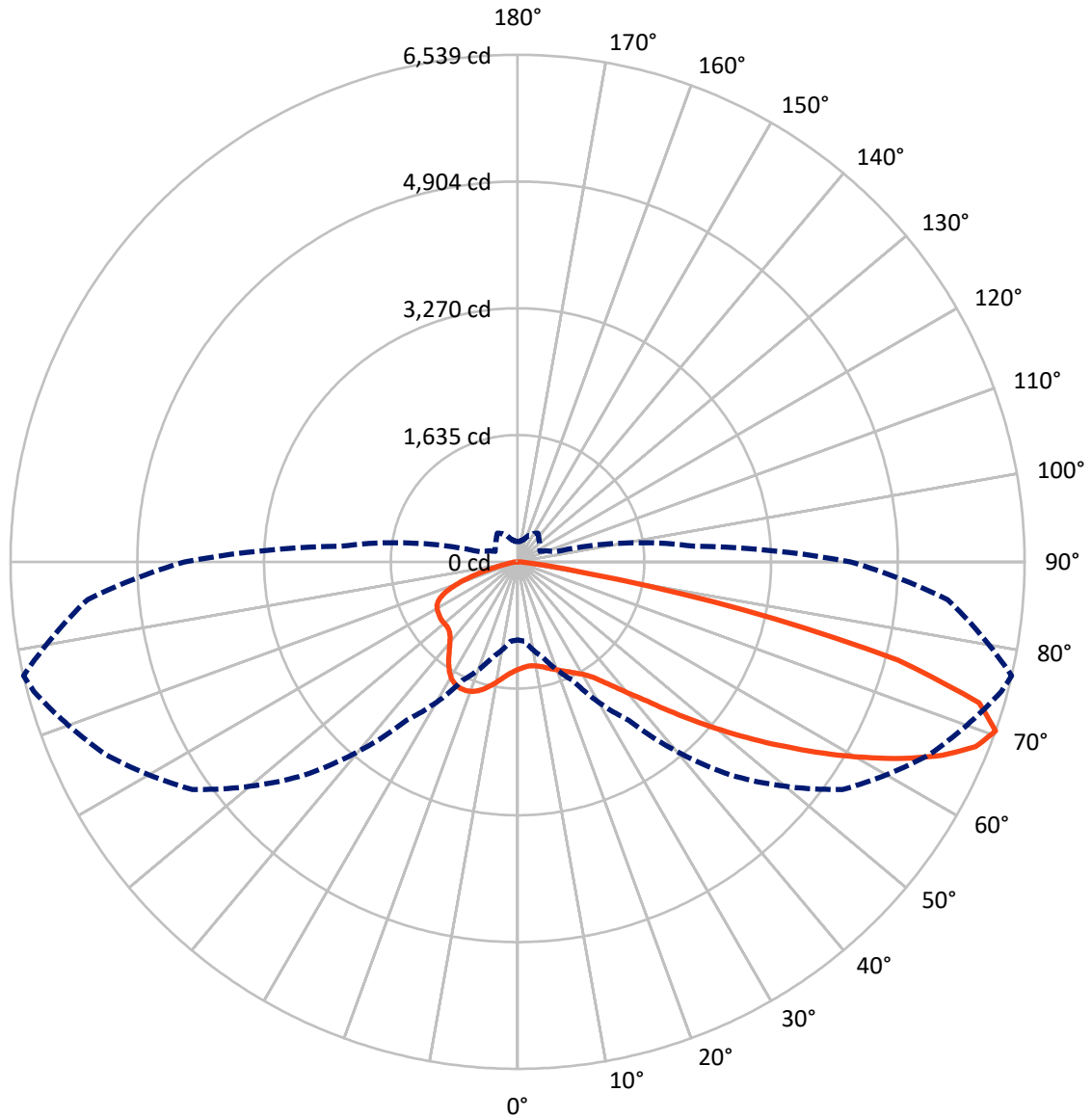
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2175.7	0.0	2175.7
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	7759.6	0.0	7759.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	9935.3	0.0	9935.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.2	1.3
10°-20°	381.5	3.8
20°-30°	652.5	6.6
30°-40°	1049.2	10.6
40°-50°	1638.1	16.5
50°-60°	2188.1	22.0
60°-70°	2332.2	23.5
70°-80°	1435.7	14.5
80°-90°	125.8	1.3
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°	9935.3	100.0
0°-180°	9935.3	100.0

Coefficient of Utilization

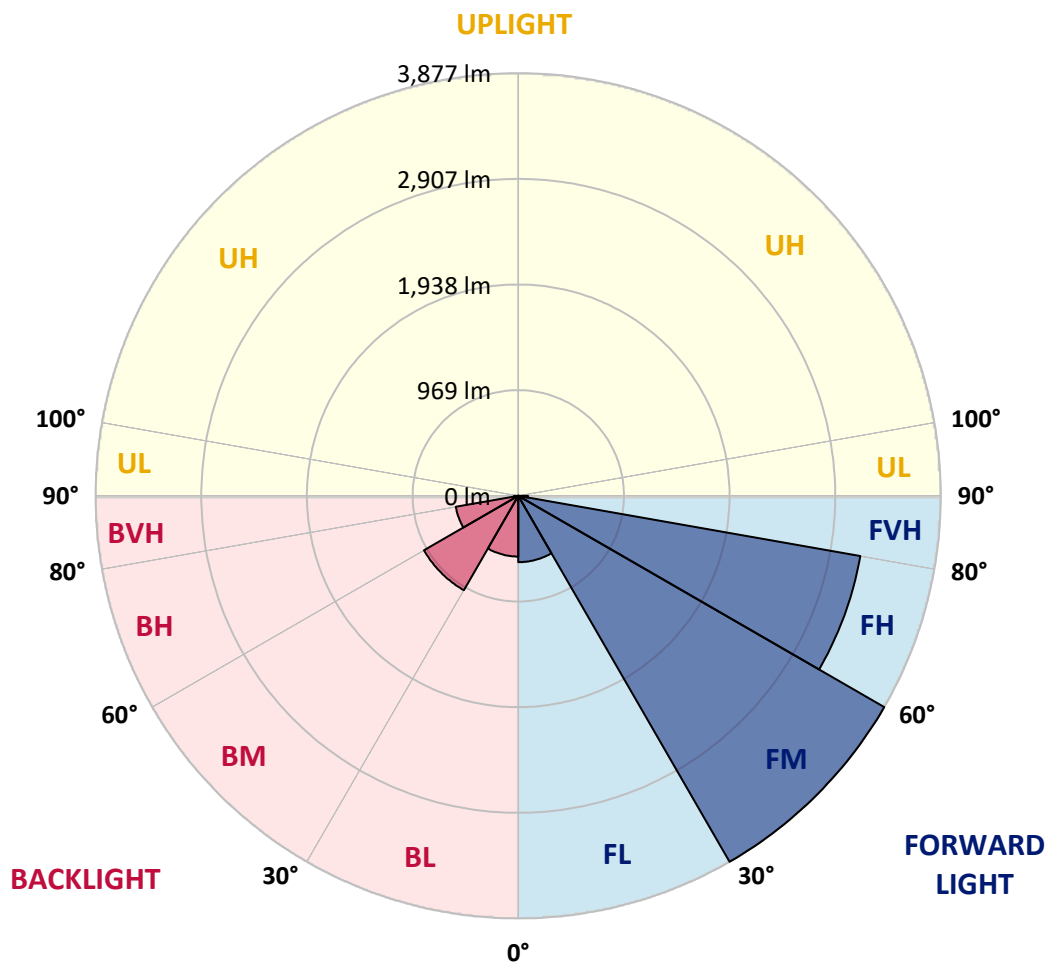


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	608.7	6.1			
FM (30°-60°)	3876.5	39.0			
FH (60°-80°)	3186.4	32.1			G2/5000
FVH (80°-90°)	88.0	0.9			G1/100
BL (0°-30°)	557.5	5.6	B2/1000		
BM (30°-60°)	998.9	10.1	B1/1000		
BH (60°-80°)	581.5	5.9	B2/1000		G2/1000
BVH (80°-90°)	37.8	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-G2
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1
2.5°	1277.7	1277.1	1283.8	1285.9	1298.1	1306.7	1323.0	1340.3	1362.6	1365.2	1378.9
5°	1203.9	1203.9	1211.6	1219.6	1235.4	1252.8	1277.7	1307.7	1346.3	1352.5	1386.6
7.5°	1141.3	1145.4	1152.0	1167.8	1186.1	1211.0	1249.2	1291.9	1342.9	1352.5	1407.4
10°	1090.9	1095.5	1103.6	1116.4	1143.9	1178.4	1228.4	1283.3	1351.5	1366.7	1438.0
12.5°	1075.1	1079.7	1084.3	1094.0	1119.4	1160.1	1219.6	1287.4	1372.4	1387.6	1479.7
15°	1111.8	1117.4	1113.9	1111.3	1124.5	1161.6	1223.7	1302.2	1398.3	1420.1	1531.0
17.5°	1196.3	1198.3	1190.1	1166.2	1164.2	1184.1	1243.1	1322.5	1430.8	1454.8	1583.0
20°	1332.6	1329.1	1312.3	1265.0	1238.0	1233.9	1276.1	1353.0	1464.4	1489.8	1639.0
22.5°	1517.8	1513.8	1480.2	1405.4	1345.3	1305.6	1324.0	1392.7	1502.0	1530.5	1693.4
25°	1748.9	1743.3	1693.9	1592.1	1499.1	1400.9	1389.1	1445.0	1548.4	1574.8	1750.4
27.5°	2018.5	2014.0	1960.5	1826.2	1691.9	1531.0	1470.1	1506.6	1596.7	1626.8	1814.6
30°	2308.6	2321.8	2227.2	2082.7	1912.8	1701.0	1578.9	1582.5	1659.3	1686.3	1892.4
32.5°	2649.5	2672.4	2558.4	2375.2	2143.2	1885.8	1716.3	1688.3	1750.4	1772.7	1990.5
35°	2987.4	3013.3	2918.7	2716.1	2449.0	2103.5	1859.8	1809.9	1871.5	1895.9	2120.8
37.5°	3279.5	3314.0	3265.2	3089.1	2776.2	2366.1	2047.0	1952.9	2020.6	2051.1	2295.9
40°	3509.9	3562.9	3559.3	3449.4	3161.9	2684.6	2284.6	2129.4	2205.8	2238.9	2508.1
42.5°	3697.2	3743.0	3782.7	3777.1	3564.4	3046.4	2564.0	2358.9	2417.0	2455.2	2746.7
45°	3826.4	3875.3	3960.8	4052.8	3951.6	3433.6	2884.0	2631.2	2684.1	2741.6	3031.1
47.5°	3941.9	3997.4	4108.3	4254.4	4280.3	3822.3	3234.7	2948.2	2996.5	3056.0	3316.6
50°	3952.1	4000.0	4172.0	4379.0	4513.9	4195.8	3611.2	3303.9	3349.2	3412.7	3622.5
52.5°	3706.4	3781.6	4081.9	4375.5	4621.2	4508.3	3985.2	3673.8	3724.6	3801.0	3938.9
55°	2877.0	2987.4	3817.8	4239.1	4583.1	4710.3	4340.9	4067.1	4132.3	4212.1	4257.4
57.5°	2478.0	2526.4	3030.6	3990.8	4409.0	4762.7	4641.1	4464.5	4569.3	4656.9	4594.3
60°	2227.2	2267.4	2565.6	3604.6	4180.1	4679.7	4873.2	4834.9	5016.1	5120.4	4938.8
62.5°	1958.5	1996.7	2267.9	3009.8	3887.0	4541.9	5019.6	5176.9	5474.0	5588.0	5263.4
65°	1691.9	1724.5	1984.5	2528.9	3514.5	4404.0	5095.5	5472.6	5898.0	6015.9	5533.1
67.5°	1394.7	1421.7	1667.5	2133.5	3061.7	4215.2	5133.1	5705.0	6266.8	6368.1	5666.4
70°	1006.4	1027.4	1281.2	1687.3	2493.3	3890.6	5117.8	5870.0	6458.1	6539.1	5565.6
72.5°	475.8	494.6	792.7	1095.5	1761.1	3258.6	4809.0	5739.2	6263.8	6223.6	4948.9
75°	253.9	270.2	455.4	601.0	930.2	2233.8	3935.4	4943.9	5259.8	5064.4	3657.5
77.5°	172.0	184.7	281.9	360.8	424.9	1060.4	2529.4	3423.0	3293.2	2970.6	1831.8
80°	136.3	149.5	231.0	244.3	205.6	383.1	1045.2	1584.5	1138.3	910.3	521.0
82.5°	104.9	119.6	194.3	177.1	111.9	157.2	304.3	501.2	291.6	221.8	126.2
85°	64.1	79.8	152.6	113.0	63.1	71.8	103.3	139.4	89.1	74.3	45.3
87.5°	32.6	45.8	77.4	41.2	28.5	16.8	27.5	27.5	23.4	20.4	11.7
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°	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1	1386.1
2.5°	1391.1	1401.4	1418.6	1434.9	1447.6	1459.8	1472.1	1478.7	1480.7	1488.8	1493.4
5°	1407.4	1426.3	1459.8	1491.4	1511.3	1523.5	1532.1	1537.2	1538.2	1540.8	1544.8
7.5°	1437.5	1467.5	1514.3	1545.8	1560.6	1559.5	1556.1	1543.3	1538.2	1533.6	1534.6
10°	1479.7	1519.4	1576.9	1598.8	1589.6	1565.2	1533.6	1496.5	1479.2	1462.4	1457.3
12.5°	1532.1	1582.5	1639.0	1637.9	1592.6	1530.1	1456.8	1399.8	1363.7	1337.7	1331.6
15°	1595.7	1653.7	1697.0	1662.3	1563.1	1450.7	1343.4	1269.1	1236.5	1208.0	1204.9
17.5°	1661.3	1723.4	1743.3	1654.8	1488.8	1333.1	1211.6	1153.0	1120.9	1105.7	1110.3
20°	1725.5	1787.0	1770.8	1611.0	1375.9	1199.9	1091.4	1059.4	1052.8	1056.4	1054.8
22.5°	1793.1	1848.1	1776.3	1526.5	1231.8	1063.4	1003.9	1004.9	1019.7	1030.4	1032.9
25°	1862.3	1899.5	1761.6	1404.4	1077.2	963.2	948.4	964.7	993.7	1014.6	1020.2
27.5°	1928.9	1945.2	1729.5	1253.3	944.4	891.4	894.0	927.6	971.4	1000.4	1007.5
30°	2004.3	1985.9	1668.0	1083.3	852.3	829.9	851.3	890.4	934.2	960.2	966.3
32.5°	2089.3	2021.1	1570.3	926.1	787.2	780.5	815.7	841.1	860.5	868.1	872.2
35°	2195.1	2070.5	1445.0	815.7	728.7	744.5	778.0	765.3	757.7	753.6	757.7
37.5°	2332.5	2137.1	1298.6	743.9	681.3	718.5	732.3	692.5	662.5	647.7	651.3
40°	2497.9	2234.8	1157.6	688.5	651.3	696.1	672.2	624.3	586.2	565.3	566.8
42.5°	2681.6	2337.1	1039.0	646.8	634.5	677.7	627.9	570.9	509.3	502.8	509.3
45°	2874.4	2442.4	958.2	614.7	626.4	661.9	602.5	510.3	466.6	493.5	507.8
47.5°	3067.3	2539.1	909.3	590.7	622.3	644.2	580.0	476.8	445.8	484.9	503.3
50°	3281.9	2625.6	887.4	573.5	617.8	637.0	546.5	468.1	423.8	449.8	469.1
52.5°	3495.1	2692.8	871.1	556.2	611.1	631.5	530.2	458.0	397.4	398.9	409.6
55°	3707.8	2736.5	853.3	533.3	596.3	619.2	528.7	446.8	377.5	370.4	375.6
57.5°	3934.9	2761.5	831.5	507.8	570.9	588.2	527.2	438.1	371.5	359.8	361.3
60°	4165.8	2798.0	803.0	476.8	536.8	551.0	523.6	435.0	367.9	348.1	349.5
62.5°	4373.0	2810.9	768.9	447.3	493.0	514.4	516.0	432.6	358.2	324.1	324.1
65°	4508.8	2755.8	709.3	413.7	445.8	476.8	501.2	423.8	340.9	306.8	306.8
67.5°	4503.2	2599.1	616.2	370.4	400.0	435.0	479.8	409.1	320.1	285.5	287.0
70°	4293.5	2289.7	498.2	320.1	349.5	390.3	452.3	387.2	295.1	262.1	265.1
72.5°	3682.4	1792.1	361.8	261.1	291.1	344.0	416.8	360.8	269.7	241.2	239.6
75°	2630.7	1134.2	245.3	200.5	226.4	291.6	372.5	329.7	246.3	242.2	228.5
77.5°	1343.9	541.9	162.4	146.6	157.7	230.0	312.9	294.6	249.8	200.0	178.0
80°	437.1	200.0	102.3	99.7	104.9	153.1	242.2	241.7	189.3	135.8	120.1
82.5°	139.4	86.0	66.6	64.1	61.6	96.1	168.9	191.4	127.7	86.0	85.5
85°	55.5	51.4	39.2	36.1	25.9	45.3	88.6	127.2	95.1	62.1	63.7
87.5°	20.4	20.4	10.7	7.6	5.6	15.3	23.9	38.1	54.4	32.1	31.6
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)