

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: P961878

Luminaire Tested: **NAV-SB2B-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961878
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-SB2B-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10991.1 lumens
Efficiency: N/A
Efficacy: 148.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

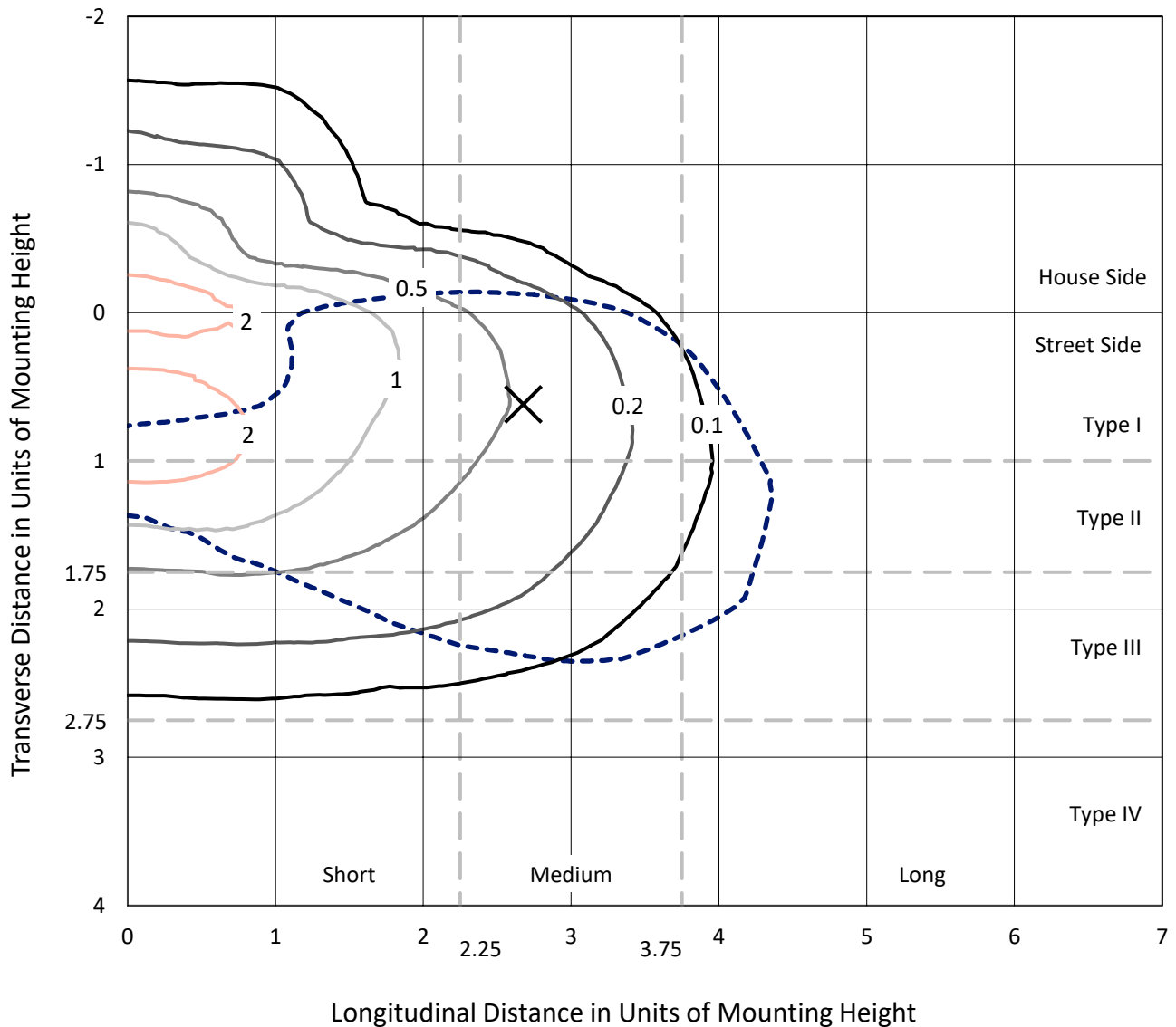
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

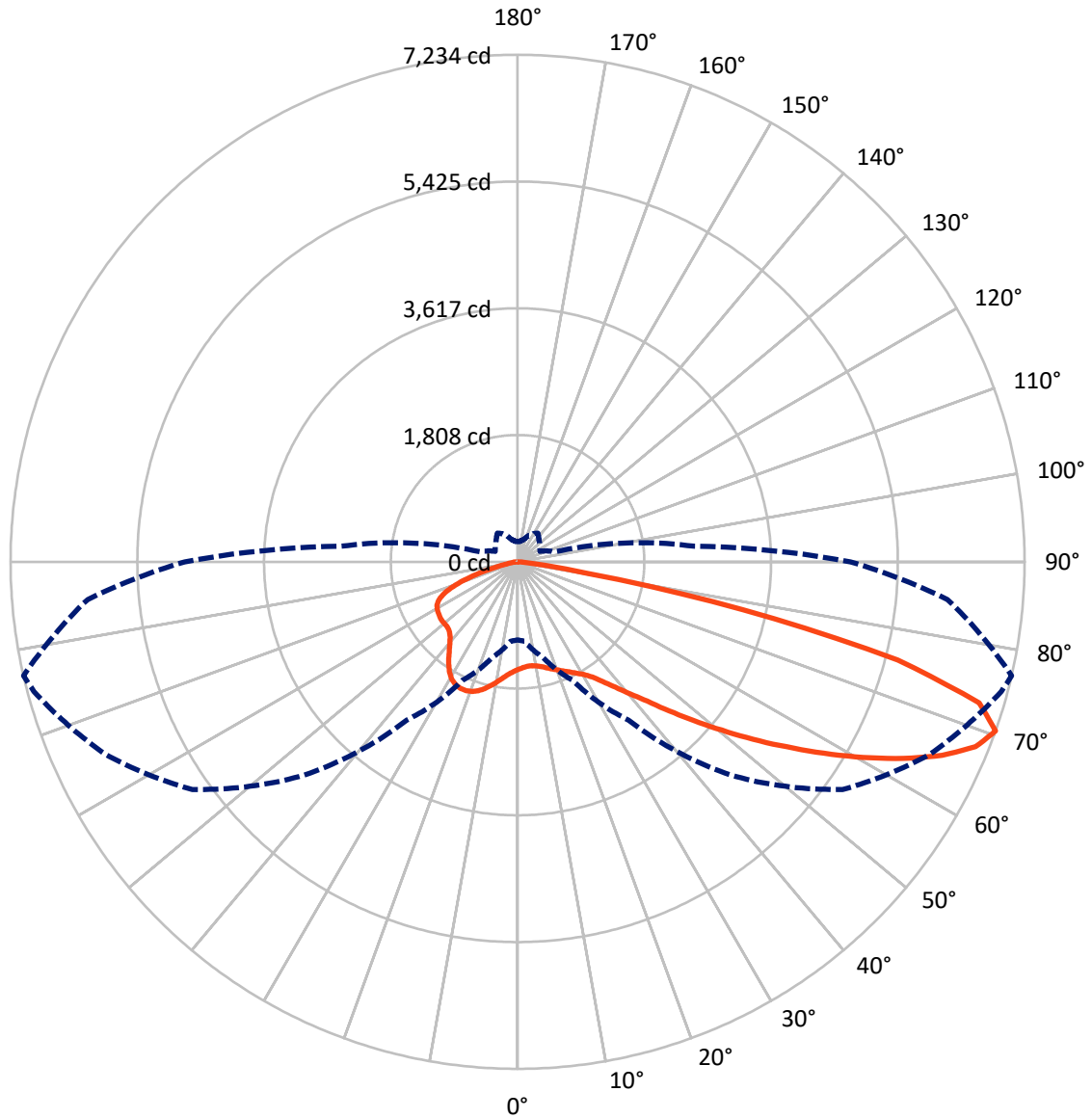
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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	2406.9	0.0	2406.9
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	8584.2	0.0	8584.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	10991.1	0.0	10991.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.2	1.3
10°-20°	422.1	3.8
20°-30°	721.8	6.6
30°-40°	1160.7	10.6
40°-50°	1812.2	16.5
50°-60°	2420.6	22.0
60°-70°	2580.0	23.5
70°-80°	1588.3	14.5
80°-90°	139.2	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°	10991.1	100.0
0°-180°	10991.1	100.0

Coefficient of Utilization

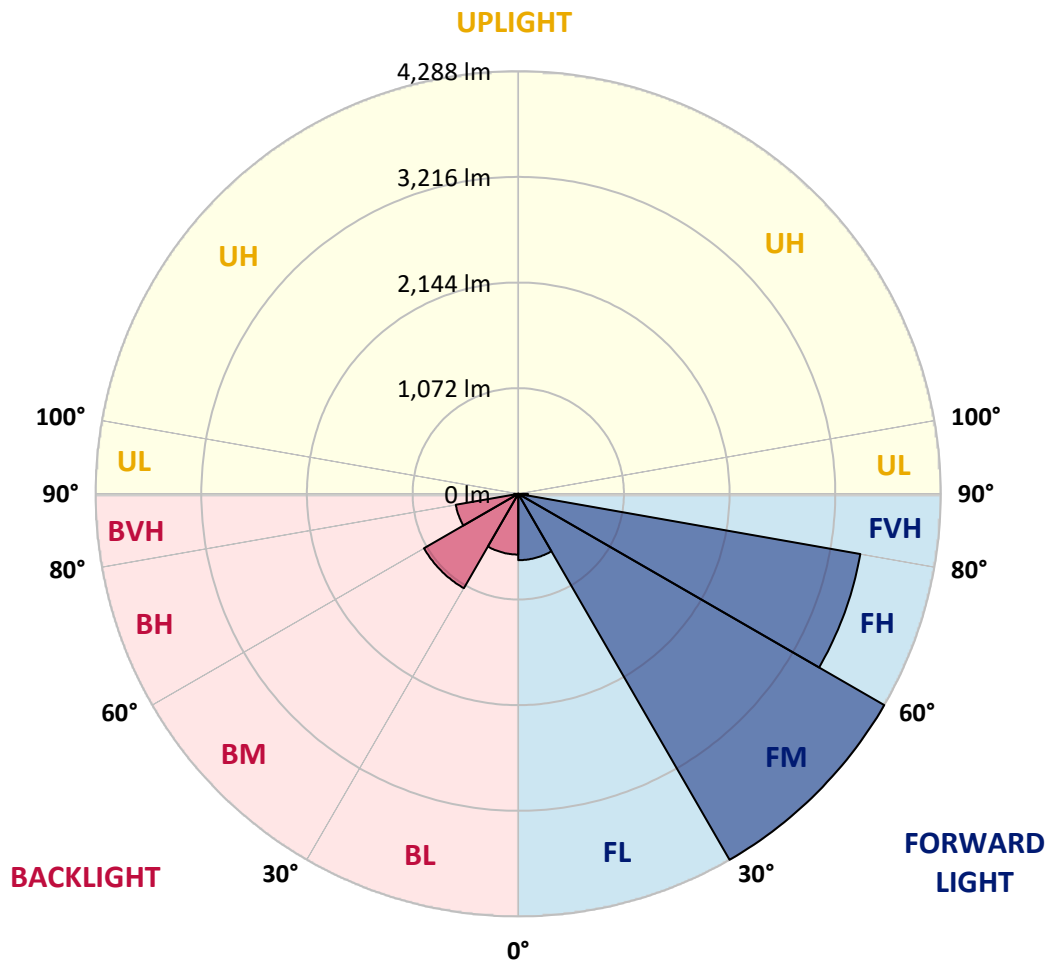


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	673.4	6.1			
FM (30°-60°)	4288.5	39.0			
FH (60°-80°)	3525.0	32.1			G2/5000
FVH (80°-90°)	97.3	0.9			G1/100
BL (0°-30°)	616.7	5.6	B2/1000		
BM (30°-60°)	1105.0	10.1	B2/2500		
BH (60°-80°)	643.2	5.9	B2/1000		G2/1000
BVH (80°-90°)	41.9	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°	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4
2.5°	1413.5	1412.9	1420.2	1422.5	1435.9	1445.6	1463.6	1482.7	1507.5	1510.2	1525.5
5°	1331.9	1331.9	1340.3	1349.3	1366.7	1385.9	1413.5	1446.7	1489.4	1496.2	1533.9
7.5°	1262.6	1267.1	1274.4	1291.9	1312.1	1339.7	1381.9	1429.3	1485.5	1496.2	1557.0
10°	1206.8	1212.0	1221.0	1235.0	1265.4	1303.7	1358.8	1419.6	1495.1	1512.0	1590.8
12.5°	1189.4	1194.5	1199.6	1210.2	1238.4	1283.4	1349.3	1424.1	1518.1	1535.0	1636.9
15°	1230.0	1236.1	1232.2	1229.4	1244.0	1285.1	1353.8	1440.4	1546.8	1571.1	1693.8
17.5°	1323.4	1325.6	1316.6	1290.2	1287.9	1309.8	1375.1	1463.0	1582.9	1609.4	1751.2
20°	1474.3	1470.3	1451.7	1399.4	1369.5	1365.1	1411.7	1496.8	1620.0	1648.2	1813.1
22.5°	1679.2	1674.6	1637.5	1554.7	1488.3	1444.4	1464.7	1540.7	1661.7	1693.2	1873.4
25°	1934.7	1928.5	1873.9	1761.4	1658.3	1549.7	1536.8	1598.7	1712.9	1742.2	1936.4
27.5°	2233.1	2227.9	2168.9	2020.3	1871.6	1693.8	1626.3	1666.8	1766.4	1799.6	2007.4
30°	2553.9	2568.5	2463.8	2304.0	2116.0	1881.8	1746.7	1750.6	1835.7	1865.5	2093.5
32.5°	2931.1	2956.4	2830.3	2627.7	2370.9	2086.1	1898.7	1867.8	1936.4	1961.1	2202.1
35°	3304.8	3333.5	3228.9	3004.8	2709.3	2327.1	2057.4	2002.2	2070.4	2097.4	2346.2
37.5°	3627.9	3666.2	3612.2	3417.4	3071.2	2617.5	2264.5	2160.4	2235.3	2269.0	2539.8
40°	3882.9	3941.4	3937.5	3816.0	3497.9	2969.9	2527.4	2355.8	2440.2	2476.8	2774.6
42.5°	4090.1	4140.7	4184.7	4178.4	3943.2	3370.1	2836.5	2609.6	2673.8	2716.0	3038.6
45°	4233.0	4287.1	4381.7	4483.6	4371.5	3798.4	3190.5	2910.8	2969.3	3033.0	3353.2
47.5°	4360.9	4422.2	4544.8	4706.5	4735.2	4228.5	3578.4	3261.4	3315.0	3380.9	3669.0
50°	4372.1	4425.0	4615.3	4844.4	4993.5	4641.7	3994.9	3654.9	3705.1	3775.4	4007.3
52.5°	4100.2	4183.5	4515.6	4840.5	5112.3	4987.3	4408.6	4064.2	4120.5	4204.9	4357.5
55°	3182.6	3304.8	4223.5	4689.6	5070.1	5210.8	4802.1	4499.3	4571.4	4659.8	4709.9
57.5°	2741.4	2794.9	3352.7	4414.9	4877.6	5268.8	5134.2	4939.0	5054.9	5151.8	5082.5
60°	2463.8	2508.3	2838.1	3987.7	4624.3	5177.1	5391.0	5348.8	5549.1	5664.6	5463.6
62.5°	2166.6	2208.9	2508.9	3329.6	4300.1	5024.4	5553.0	5727.0	6055.7	6181.9	5822.7
65°	1871.6	1907.7	2195.3	2797.6	3888.0	4871.9	5637.0	6054.1	6524.6	6655.2	6121.0
67.5°	1542.9	1572.8	1844.7	2360.3	3387.0	4663.1	5678.6	6311.3	6932.8	7044.7	6268.5
70°	1113.5	1136.5	1417.4	1866.6	2758.3	4304.0	5661.7	6493.7	7144.4	7233.9	6157.1
72.5°	526.3	547.1	877.0	1212.0	1948.2	3604.8	5320.1	6349.1	6929.4	6884.9	5474.8
75°	280.8	298.9	503.8	664.8	1029.0	2471.2	4353.5	5469.2	5818.7	5602.6	4046.2
77.5°	190.2	204.4	311.8	399.1	470.1	1173.1	2798.2	3786.7	3643.2	3286.3	2026.4
80°	150.9	165.5	255.5	270.2	227.4	423.8	1156.2	1752.9	1259.2	1007.1	576.5
82.5°	115.9	132.3	215.0	195.9	123.8	173.9	336.6	554.4	322.6	245.4	139.6
85°	70.9	88.4	168.9	124.9	69.8	79.3	114.3	154.3	98.5	82.2	50.1
87.5°	36.0	50.6	85.6	45.6	31.6	18.6	30.4	30.4	25.9	22.5	12.9
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: P961878
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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4	1533.4
2.5°	1538.9	1550.2	1569.4	1587.4	1601.5	1615.0	1628.5	1635.8	1638.1	1647.1	1652.1
5°	1557.0	1577.8	1615.0	1649.8	1671.9	1685.3	1694.9	1700.6	1701.7	1704.5	1709.0
7.5°	1590.2	1623.4	1675.2	1710.1	1726.4	1725.3	1721.4	1707.3	1701.7	1696.6	1697.7
10°	1636.9	1680.8	1744.4	1768.6	1758.5	1731.5	1696.6	1655.5	1636.4	1617.8	1612.1
12.5°	1694.9	1750.6	1813.1	1812.0	1761.9	1692.7	1611.6	1548.6	1508.6	1479.9	1473.1
15°	1765.3	1829.4	1877.3	1839.1	1729.3	1604.8	1486.0	1403.8	1367.9	1336.3	1332.9
17.5°	1837.9	1906.6	1928.5	1830.5	1647.1	1474.8	1340.3	1275.5	1240.0	1223.2	1228.3
20°	1908.9	1976.9	1958.9	1782.2	1522.1	1327.4	1207.4	1172.0	1164.6	1168.6	1166.9
22.5°	1983.7	2044.5	1965.1	1688.7	1362.8	1176.5	1110.6	1111.7	1128.0	1139.9	1142.7
25°	2060.2	2101.4	1948.7	1553.6	1191.7	1065.6	1049.3	1067.2	1099.3	1122.5	1128.6
27.5°	2133.9	2152.0	1913.4	1386.4	1044.8	986.3	989.0	1026.1	1074.6	1106.7	1114.6
30°	2217.3	2197.0	1845.2	1198.4	942.9	918.1	941.8	985.1	1033.5	1062.2	1069.0
32.5°	2311.3	2235.8	1737.2	1024.5	870.8	863.5	902.3	930.5	951.9	960.3	964.8
35°	2428.3	2290.5	1598.7	902.3	806.1	823.5	860.7	846.6	838.1	833.6	838.1
37.5°	2580.3	2364.2	1436.5	823.0	753.7	794.8	810.1	766.1	732.9	716.6	720.5
40°	2763.3	2472.3	1280.6	761.6	720.5	770.1	743.6	690.6	648.5	625.4	627.1
42.5°	2966.6	2585.5	1149.4	715.4	701.9	749.8	694.6	631.6	563.4	556.2	563.4
45°	3179.9	2701.9	1060.0	680.0	692.9	732.4	666.5	564.6	516.2	546.0	561.8
47.5°	3393.2	2808.9	1005.9	653.5	688.4	712.7	641.8	527.5	493.1	536.5	556.7
50°	3630.8	2904.5	981.7	634.4	683.4	704.8	604.5	517.8	468.9	497.6	519.0
52.5°	3866.6	2978.9	963.7	615.2	676.1	698.5	586.5	506.7	439.6	441.4	453.2
55°	4101.8	3027.3	944.0	589.9	659.7	685.0	584.9	494.3	417.7	409.8	415.4
57.5°	4353.0	3054.9	919.8	561.8	631.6	650.7	583.1	484.6	410.9	398.0	399.6
60°	4608.5	3095.4	888.3	527.5	593.9	609.7	579.2	481.2	407.0	385.0	386.7
62.5°	4837.6	3109.5	850.5	494.8	545.5	569.1	570.8	478.5	396.3	358.5	358.5
65°	4988.0	3048.7	784.7	457.7	493.1	527.5	554.4	468.9	377.1	339.5	339.5
67.5°	4981.7	2875.3	681.7	409.8	442.5	481.2	530.8	452.5	354.0	315.8	317.4
70°	4749.7	2533.1	551.0	354.0	386.7	431.7	500.4	428.3	326.5	289.9	293.3
72.5°	4073.8	1982.6	400.3	288.7	322.0	380.5	461.0	399.1	298.4	266.8	265.2
75°	2910.2	1254.7	271.3	221.8	250.5	322.6	412.0	364.8	272.4	267.9	252.8
77.5°	1486.7	599.5	179.6	162.2	174.5	254.4	346.1	326.0	276.3	221.2	197.0
80°	483.5	221.2	113.2	110.3	115.9	169.4	267.9	267.4	209.4	150.3	132.8
82.5°	154.3	95.1	73.7	70.9	68.2	106.4	186.9	211.7	141.2	95.1	94.6
85°	61.4	56.9	43.4	40.0	28.7	50.1	98.0	140.7	105.3	68.7	70.3
87.5°	22.5	22.5	11.8	8.4	6.1	16.9	26.4	42.2	60.3	35.5	34.8
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)