

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: P961413

Luminaire Tested: **NAV-SB2A-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961413
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-SB2A-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9439.2 lumens
Efficiency: N/A
Efficacy: 164.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

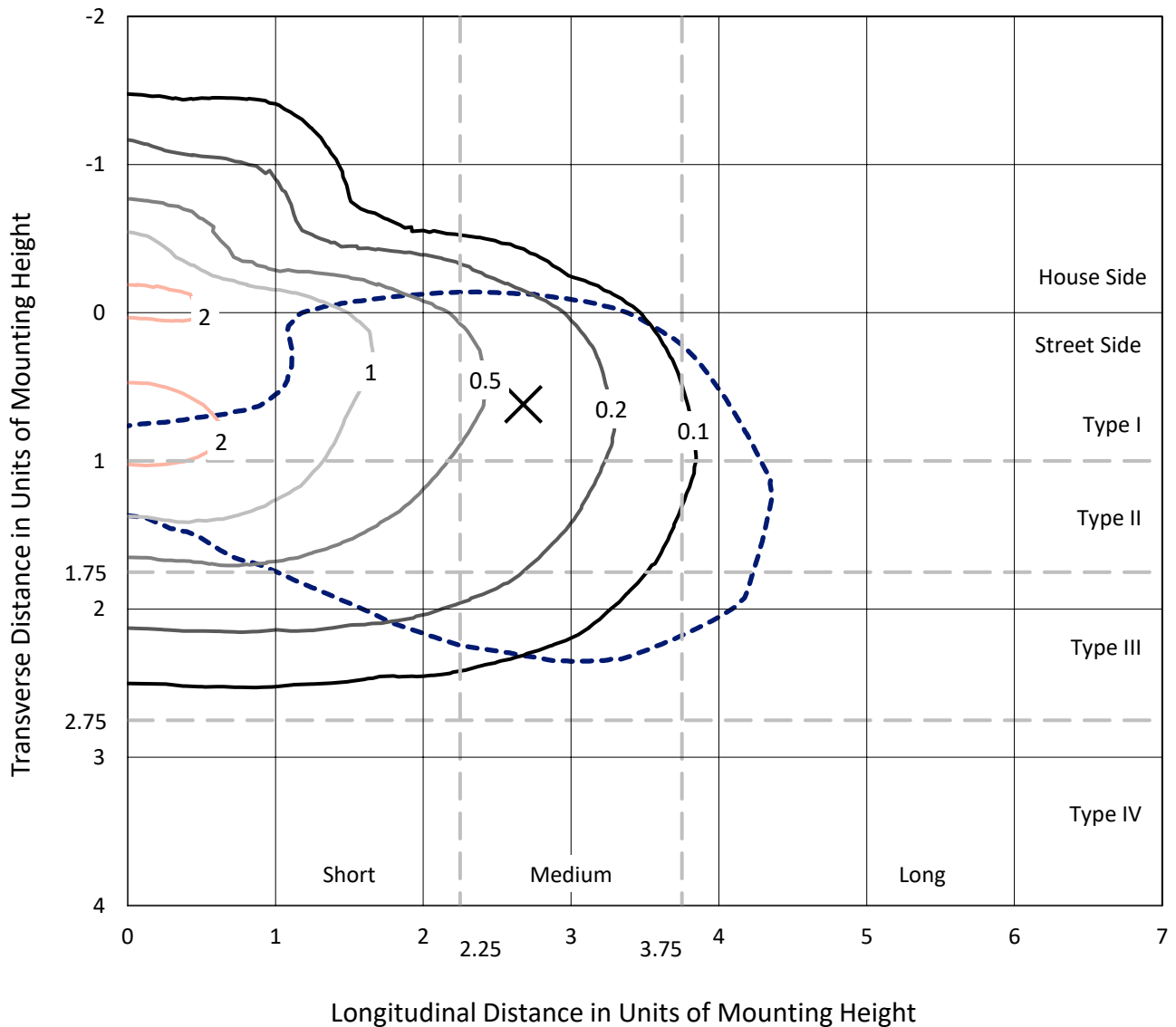
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

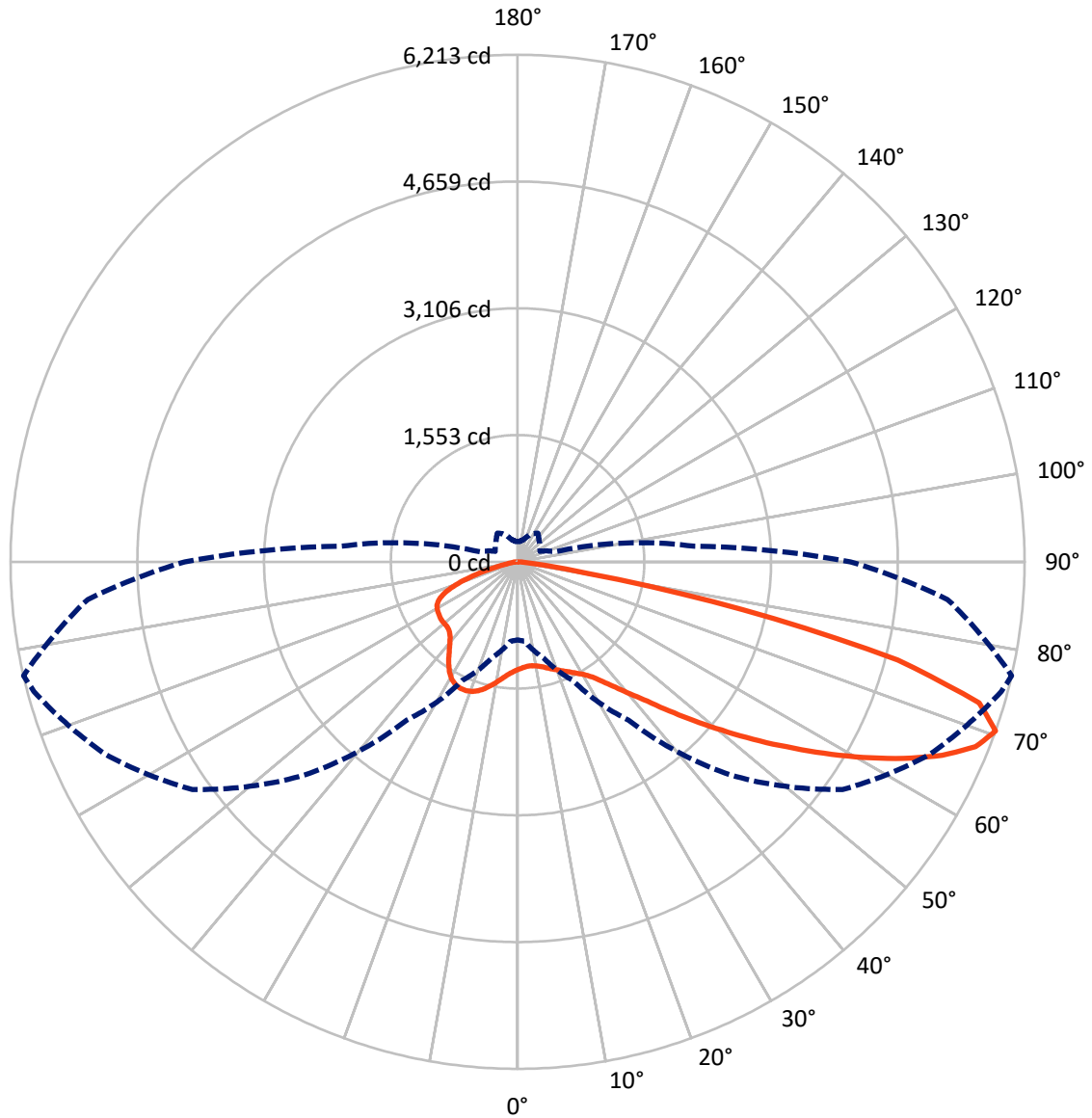
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type 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	2067.0	0.0	2067.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	7372.2	0.0	7372.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	9439.2	0.0	9439.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.6	1.3
10°-20°	362.5	3.8
20°-30°	619.9	6.6
30°-40°	996.8	10.6
40°-50°	1556.3	16.5
50°-60°	2078.9	22.0
60°-70°	2215.7	23.5
70°-80°	1364.0	14.5
80°-90°	119.5	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°	9439.2	100.0
0°-180°	9439.2	100.0

Coefficient of Utilization

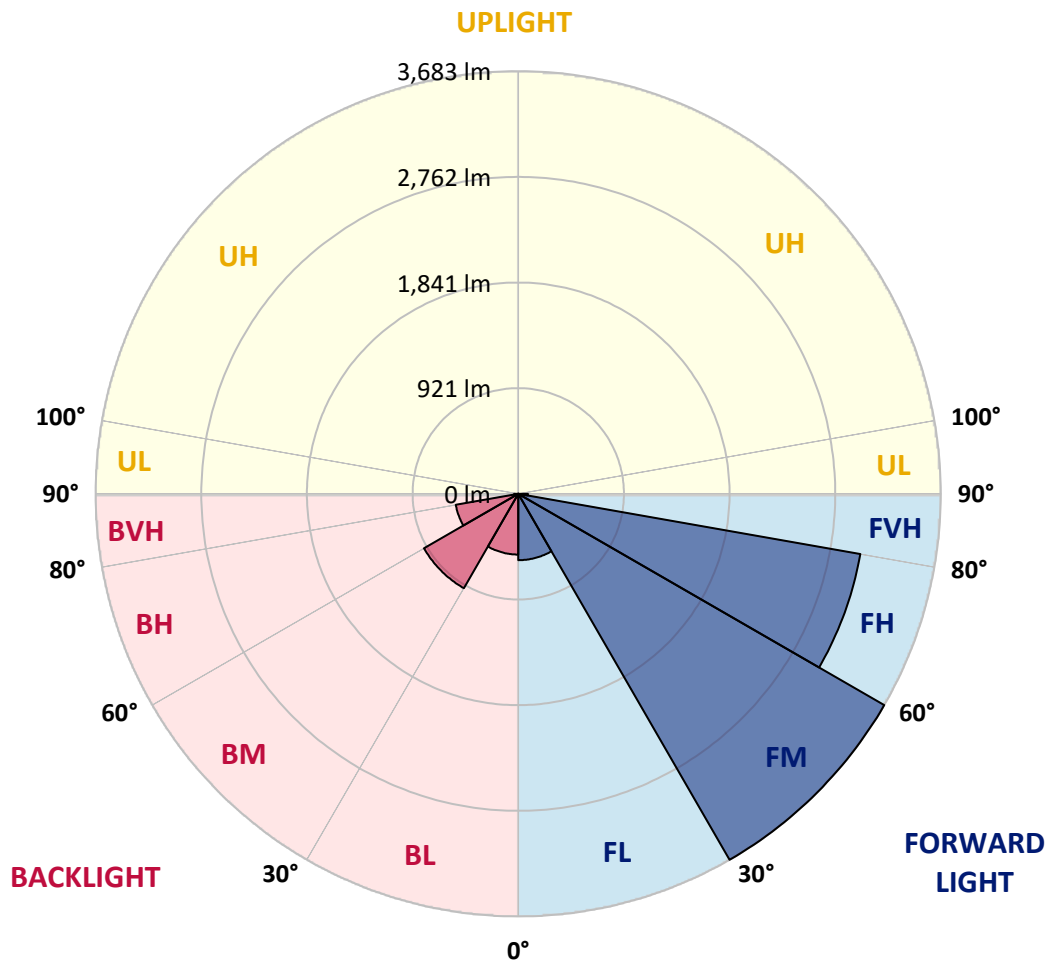


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	578.3	6.1			
FM (30°-60°)	3683.0	39.0			
FH (60°-80°)	3027.3	32.1			G2/5000
FVH (80°-90°)	83.6	0.9			G1/100
BL (0°-30°)	529.6	5.6	B2/1000		
BM (30°-60°)	949.0	10.1	B1/1000		
BH (60°-80°)	552.4	5.9	B2/1000		G2/1000
BVH (80°-90°)	35.9	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°	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8
2.5°	1213.9	1213.4	1219.6	1221.6	1233.2	1241.5	1257.0	1273.4	1294.6	1297.0	1310.1
5°	1143.8	1143.8	1151.1	1158.8	1173.7	1190.2	1213.9	1242.4	1279.2	1284.9	1317.3
7.5°	1084.3	1088.2	1094.5	1109.5	1126.9	1150.6	1186.8	1227.4	1275.8	1284.9	1337.1
10°	1036.5	1040.8	1048.6	1060.7	1086.7	1119.6	1167.0	1219.2	1284.0	1298.5	1366.1
12.5°	1021.5	1025.8	1030.2	1039.4	1063.5	1102.2	1158.8	1223.0	1303.8	1318.4	1405.8
15°	1056.3	1061.6	1058.2	1055.9	1068.4	1103.6	1162.7	1237.1	1328.5	1349.2	1454.7
17.5°	1136.5	1138.5	1130.8	1108.0	1106.1	1124.9	1181.0	1256.4	1359.4	1382.1	1504.0
20°	1266.1	1262.7	1246.8	1201.8	1176.2	1172.3	1212.5	1285.5	1391.3	1415.5	1557.1
22.5°	1442.1	1438.2	1406.3	1335.3	1278.2	1240.5	1257.9	1323.2	1427.1	1454.2	1608.8
25°	1661.5	1656.2	1609.4	1512.7	1424.1	1330.9	1319.8	1372.9	1471.1	1496.2	1663.0
27.5°	1917.8	1913.4	1862.6	1735.0	1607.4	1454.7	1396.7	1431.4	1517.0	1545.5	1723.9
30°	2193.3	2205.9	2116.0	1978.7	1817.2	1616.1	1500.1	1503.5	1576.4	1602.1	1797.8
32.5°	2517.2	2538.9	2430.7	2256.6	2036.2	1791.6	1630.6	1604.0	1663.0	1684.3	1891.1
35°	2838.2	2862.8	2772.9	2580.5	2326.8	1998.4	1766.9	1719.5	1778.1	1801.2	2014.9
37.5°	3115.7	3148.6	3102.2	2934.9	2637.6	2247.9	1944.8	1855.4	1919.7	1948.7	2181.2
40°	3334.7	3385.0	3381.6	3277.1	3004.1	2550.6	2170.6	2023.1	2095.6	2127.1	2382.8
42.5°	3512.6	3556.1	3593.9	3588.5	3386.4	2894.3	2436.0	2241.2	2296.3	2332.5	2609.5
45°	3635.4	3681.8	3763.0	3850.5	3754.3	3262.2	2740.0	2499.8	2550.1	2604.7	2879.7
47.5°	3745.1	3797.8	3903.2	4042.0	4066.6	3631.5	3073.2	2801.0	2846.9	2903.5	3151.0
50°	3754.8	3800.2	3963.7	4160.4	4288.5	3986.3	3430.9	3138.9	3181.9	3242.4	3441.5
52.5°	3521.3	3592.8	3878.1	4157.0	4390.5	4283.2	3786.2	3490.3	3538.7	3611.2	3742.2
55°	2733.3	2838.2	3627.2	4027.4	4354.2	4475.0	4124.1	3864.0	3926.0	4001.8	4044.9
57.5°	2354.3	2400.2	2879.3	3791.5	4188.9	4524.9	4409.3	4241.6	4341.2	4424.3	4364.9
60°	2116.0	2154.1	2437.4	3424.6	3971.4	4446.0	4629.8	4593.5	4765.6	4864.8	4692.1
62.5°	1860.7	1897.0	2154.7	2859.4	3692.9	4315.0	4769.0	4918.4	5200.7	5309.0	5000.6
65°	1607.4	1638.4	1885.4	2402.6	3339.0	4184.0	4841.1	5199.3	5603.4	5715.6	5256.8
67.5°	1325.1	1350.7	1584.2	2027.0	2908.7	4004.7	4876.8	5420.2	5953.9	6050.1	5383.5
70°	956.2	976.0	1217.3	1603.0	2368.8	3696.3	4862.3	5576.8	6135.6	6212.5	5287.8
72.5°	452.0	469.9	753.2	1040.8	1673.1	3095.9	4568.8	5452.6	5951.0	5912.8	4701.8
75°	241.2	256.7	432.7	570.9	883.8	2122.3	3738.8	4697.0	4997.2	4811.6	3474.9
77.5°	163.4	175.5	267.8	342.8	403.6	1007.5	2403.1	3252.0	3128.7	2822.2	1740.3
80°	129.6	142.2	219.5	232.1	195.3	364.0	992.9	1505.4	1081.5	864.9	495.1
82.5°	99.6	113.6	184.7	168.2	106.4	149.3	289.0	476.2	277.0	210.7	119.9
85°	60.9	75.8	145.0	107.3	60.0	68.2	98.1	132.4	84.6	70.6	43.0
87.5°	31.0	43.5	73.5	39.2	27.1	16.0	26.1	26.1	22.2	19.4	11.1
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°	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8	1316.8
2.5°	1321.7	1331.4	1347.8	1363.2	1375.3	1386.9	1398.5	1404.9	1406.8	1414.5	1418.9
5°	1337.1	1355.0	1386.9	1417.0	1435.8	1447.4	1455.6	1460.4	1461.4	1463.8	1467.7
7.5°	1365.7	1394.2	1438.7	1468.6	1482.7	1481.7	1478.4	1466.3	1461.4	1457.0	1458.1
10°	1405.8	1443.5	1498.1	1518.9	1510.2	1487.1	1457.0	1421.8	1405.3	1389.4	1384.6
12.5°	1455.6	1503.5	1557.1	1556.2	1513.1	1453.7	1384.1	1329.9	1295.6	1270.9	1265.2
15°	1516.1	1571.1	1612.2	1579.3	1485.1	1378.2	1276.2	1205.7	1174.8	1147.7	1144.7
17.5°	1578.4	1637.3	1656.2	1572.1	1414.5	1266.6	1151.1	1095.4	1065.0	1050.5	1054.8
20°	1639.3	1697.8	1682.3	1530.5	1307.2	1139.9	1037.0	1006.4	1000.2	1003.6	1002.1
22.5°	1703.6	1755.8	1687.7	1450.3	1170.3	1010.3	953.8	954.8	968.8	979.0	981.3
25°	1769.4	1804.6	1673.6	1334.2	1023.5	915.1	901.1	916.6	944.1	963.9	969.2
27.5°	1832.7	1848.2	1643.2	1190.6	897.3	847.0	849.4	881.3	922.9	950.4	957.1
30°	1904.2	1886.8	1584.6	1029.2	809.7	788.4	808.7	846.0	887.5	912.2	918.0
32.5°	1984.9	1920.1	1491.9	879.9	747.8	741.6	774.9	799.1	817.4	824.7	828.6
35°	2085.5	1967.1	1372.9	774.9	692.3	707.2	739.1	727.0	719.9	716.0	719.9
37.5°	2216.0	2030.4	1233.7	706.7	647.3	682.6	695.7	657.9	629.5	615.4	618.8
40°	2373.2	2123.2	1099.8	654.1	618.8	661.3	638.6	593.2	556.9	537.1	538.5
42.5°	2547.6	2220.4	987.2	614.5	602.8	643.9	596.6	542.4	483.9	477.6	483.9
45°	2730.9	2320.5	910.3	583.9	595.1	628.9	572.4	484.9	443.3	468.9	482.5
47.5°	2914.1	2412.3	863.9	561.3	591.2	612.0	551.1	452.9	423.5	460.7	478.1
50°	3118.2	2494.4	843.1	544.8	586.9	605.3	519.2	444.7	402.7	427.3	445.7
52.5°	3320.7	2558.3	827.6	528.4	580.6	599.9	503.7	435.1	377.5	379.0	389.2
55°	3522.7	2599.9	810.7	506.7	566.6	588.3	502.2	424.5	358.7	352.0	356.8
57.5°	3738.4	2623.6	790.0	482.5	542.4	558.8	500.8	416.3	352.9	341.7	343.3
60°	3957.8	2658.3	762.8	452.9	510.0	523.6	497.4	413.3	349.5	330.7	332.1
62.5°	4154.5	2670.4	730.4	425.0	468.4	488.7	490.2	410.9	340.3	307.9	307.9
65°	4283.7	2618.3	673.9	393.0	423.5	452.9	476.2	402.7	323.9	291.5	291.5
67.5°	4278.3	2469.3	585.5	352.0	380.0	413.3	455.9	388.7	304.1	271.2	272.6
70°	4079.2	2175.5	473.2	304.1	332.1	370.7	429.8	367.9	280.3	249.0	251.8
72.5°	3498.5	1702.6	343.7	247.9	276.5	326.8	396.0	342.8	256.2	229.2	227.7
75°	2499.4	1077.6	233.0	190.4	215.1	277.0	353.8	313.2	234.0	230.1	217.1
77.5°	1276.7	514.9	154.3	139.2	149.9	218.5	297.4	279.9	237.4	190.0	169.2
80°	415.2	190.0	97.2	94.7	99.6	145.5	230.1	229.6	179.8	129.0	114.1
82.5°	132.4	81.7	63.3	60.9	58.5	91.3	160.5	181.7	121.4	81.7	81.2
85°	52.7	48.8	37.2	34.3	24.7	43.0	84.2	120.8	90.4	58.9	60.5
87.5°	19.4	19.4	10.1	7.3	5.3	14.5	22.8	36.3	51.8	30.4	29.9
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)