

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: P960500

Luminaire Tested: **NAV-SB1C-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960500
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-SB1C-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6839.8 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

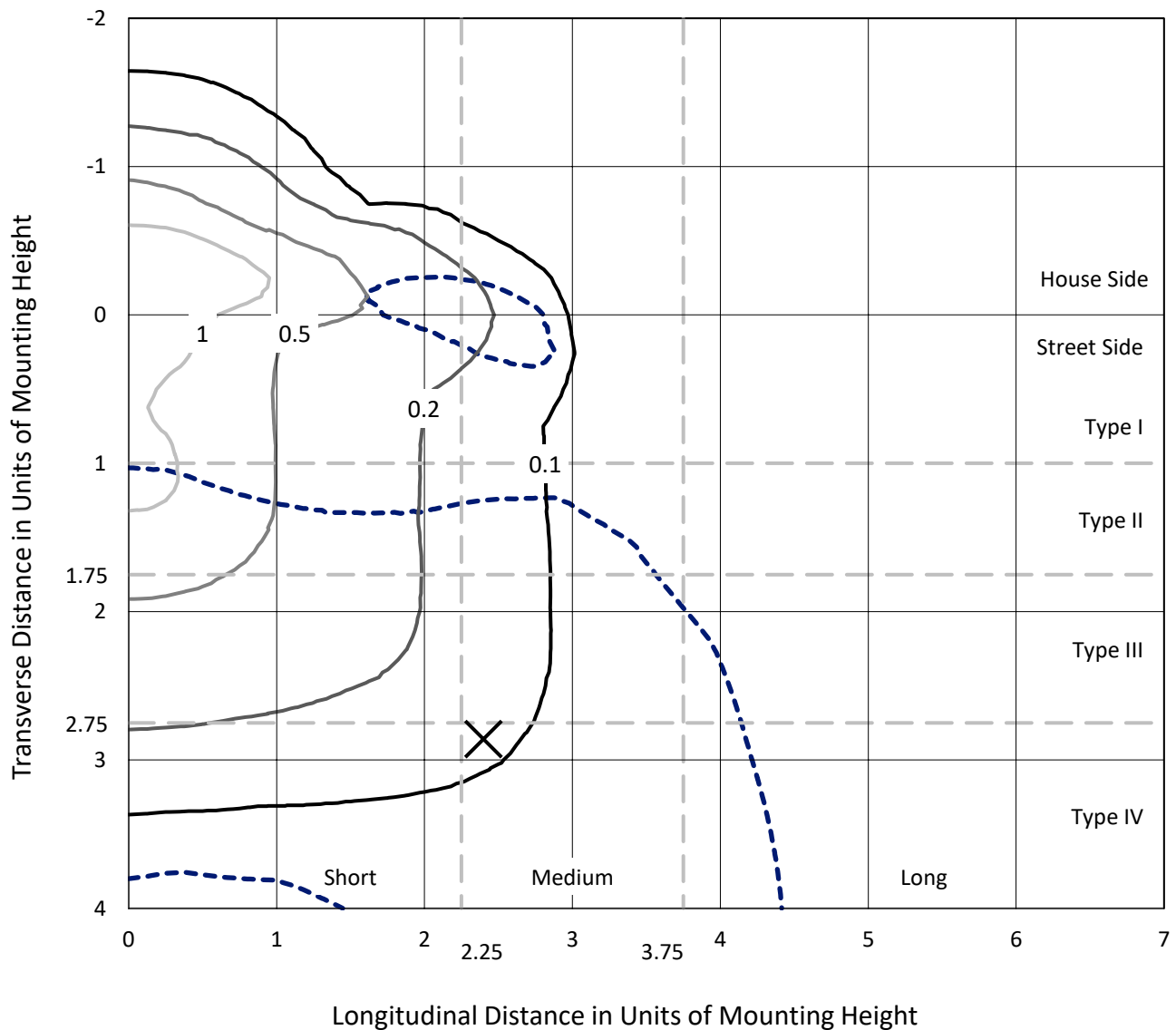
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

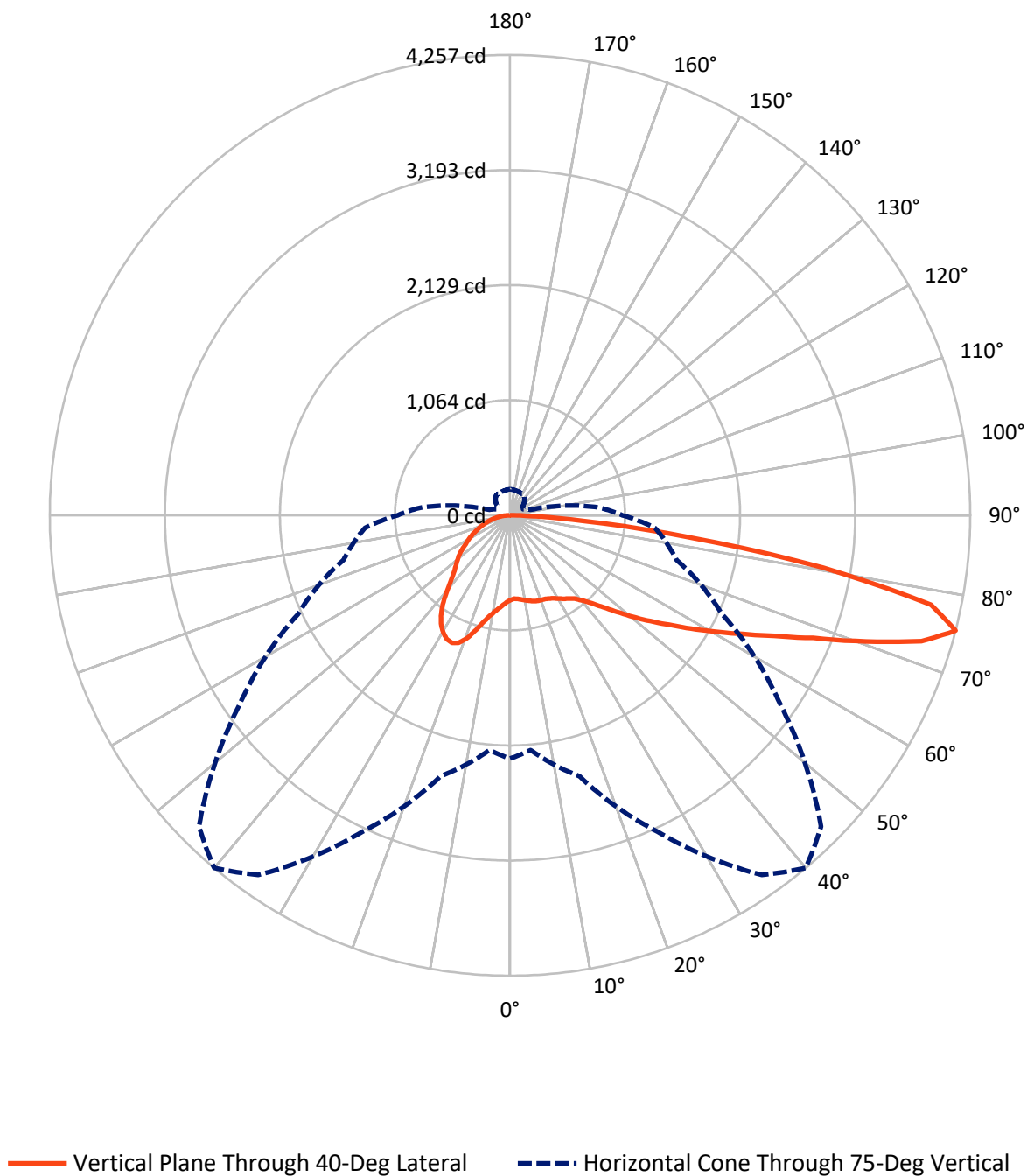
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2119.2	0.0	2119.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	4720.6	0.0	4720.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	6839.8	0.0	6839.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	1.1
10°-20°	262.1	3.8
20°-30°	478.6	7.0
30°-40°	678.8	9.9
40°-50°	916.6	13.4
50°-60°	1233.1	18.0
60°-70°	1565.1	22.9
70°-80°	1420.4	20.8
80°-90°	207.1	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°	6839.8	100.0
0°-180°	6839.8	100.0

Coefficient of Utilization



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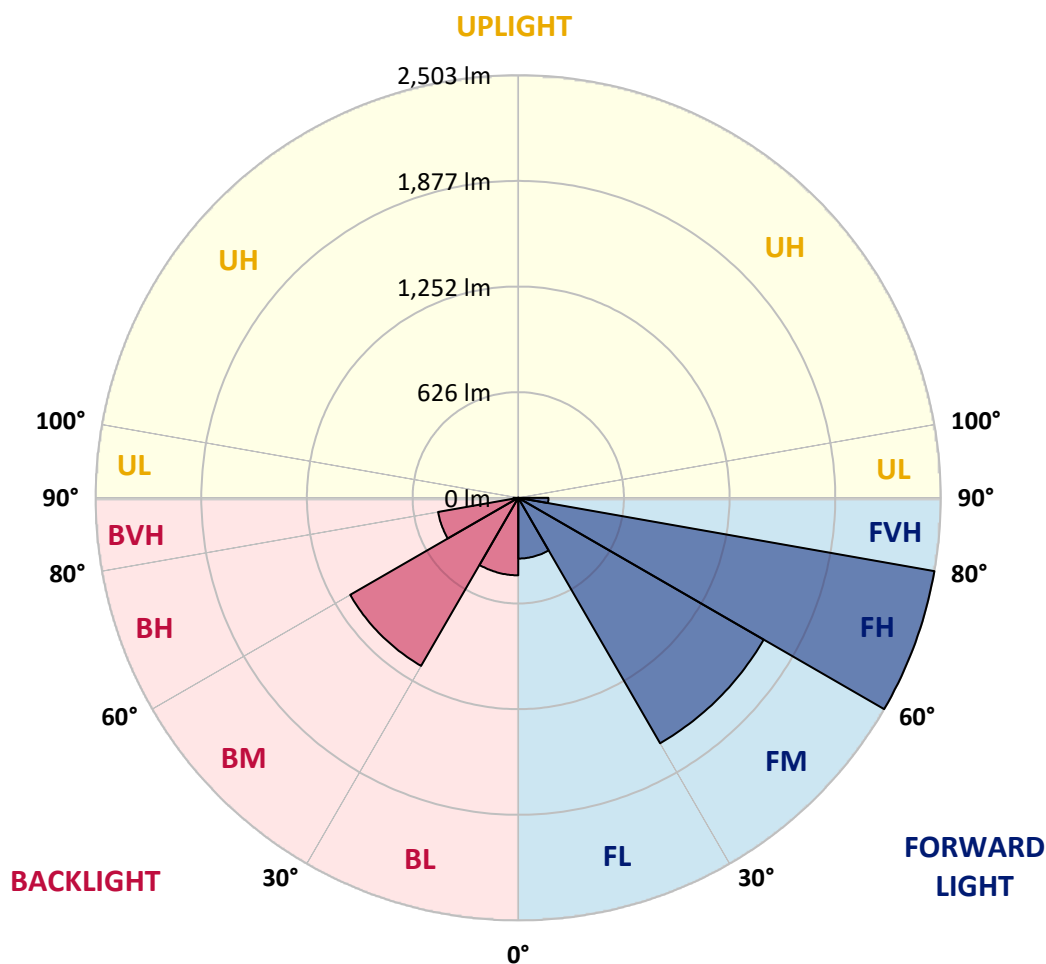
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	359.8	5.3			
FM	(30°-60°)	1679.0	24.5			
FH	(60°-80°)	2503.3	36.6			G2/5000
FVH	(80°-90°)	178.5	2.6			G2/225
BL	(0°-30°)	459.0	6.7	B1/500		
BM	(30°-60°)	1149.5	16.8	B2/2500		
BH	(60°-80°)	482.2	7.0	B1/500		G1/500
BVH	(80°-90°)	28.5	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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2
2.5°	770.2	774.5	773.5	772.0	772.0	772.3	772.0	774.5	777.1	779.6	783.6
5°	778.2	782.5	780.3	778.5	777.1	776.7	775.6	775.2	776.7	779.9	785.5
7.5°	793.8	798.1	794.9	791.6	788.6	787.2	785.8	783.6	782.5	784.3	791.9
10°	811.2	815.5	811.5	805.8	801.0	799.2	797.8	795.6	794.1	795.2	803.5
12.5°	828.6	832.9	827.5	819.5	813.3	812.2	810.5	809.7	809.3	809.0	817.3
15°	844.9	848.5	841.6	832.2	825.6	823.9	822.0	823.2	824.9	827.2	836.6
17.5°	857.6	861.2	851.1	838.8	832.6	831.9	830.8	834.4	839.5	844.9	856.5
20°	869.2	872.8	859.8	843.1	835.8	835.8	836.2	843.8	851.1	859.1	875.0
22.5°	885.5	888.5	872.5	849.6	839.1	839.8	842.8	850.3	859.5	870.3	892.5
25°	909.8	912.0	892.5	861.9	850.0	852.2	854.7	858.3	867.0	879.8	909.5
27.5°	949.0	950.8	925.1	883.8	865.6	869.2	872.8	870.3	874.3	885.2	923.2
30°	1004.2	1005.2	972.6	917.8	892.1	893.9	894.6	884.1	876.5	885.2	933.1
32.5°	1069.5	1069.1	1030.3	959.2	922.2	920.3	914.2	893.5	875.8	883.3	941.8
35°	1170.7	1166.7	1116.6	1017.2	956.3	945.0	930.5	904.0	879.3	881.5	949.4
37.5°	1338.2	1325.9	1256.6	1112.2	1007.1	978.4	957.0	921.1	887.3	880.8	958.5
40°	1527.2	1511.7	1435.5	1242.5	1083.2	1037.2	1002.8	945.4	900.4	884.1	971.9
42.5°	1751.5	1729.4	1647.4	1395.9	1179.8	1112.9	1061.1	976.2	919.6	894.6	990.0
45°	2026.8	1997.4	1881.4	1569.0	1301.2	1212.4	1143.1	1023.1	949.0	914.9	1017.2
47.5°	2305.1	2312.3	2147.3	1767.1	1447.1	1335.1	1245.8	1093.4	991.8	947.6	1061.1
50°	2600.7	2605.9	2411.7	1986.6	1612.5	1473.6	1361.1	1172.1	1051.3	994.0	1126.8
52.5°	2831.5	2832.2	2651.9	2216.2	1784.8	1626.0	1485.5	1262.1	1120.2	1055.6	1214.2
55°	2975.9	2974.0	2820.2	2433.5	1983.0	1786.0	1623.4	1364.4	1204.4	1128.2	1324.1
57.5°	3080.6	3075.2	2936.3	2620.3	2194.1	1975.0	1779.4	1480.5	1303.8	1214.5	1468.9
60°	3120.6	3117.3	3015.0	2781.7	2416.1	2183.9	1959.4	1610.4	1416.7	1316.5	1655.0
62.5°	3135.8	3142.0	3092.3	2938.2	2653.7	2415.3	2157.0	1765.7	1543.6	1431.8	1851.3
65°	3189.5	3200.8	3190.6	3142.8	2922.2	2686.3	2419.3	1950.3	1682.2	1555.5	2056.3
67.5°	3295.8	3307.1	3311.4	3387.6	3250.1	3024.1	2746.6	2180.3	1844.4	1684.0	2210.4
70°	3293.2	3290.0	3366.9	3582.4	3660.8	3491.7	3187.7	2463.3	2037.7	1790.7	2230.0
72.5°	2997.6	2971.5	3153.2	3580.2	4002.5	3980.0	3726.4	2828.2	2204.6	1803.7	1935.0
75°	2248.8	2179.1	2500.3	3226.5	4059.4	4257.1	4068.8	3054.6	2165.0	1593.7	1346.6
77.5°	961.8	891.7	1270.1	2388.6	3633.2	3979.7	3754.7	2664.9	1728.3	1053.9	661.3
80°	251.7	251.4	383.9	1082.9	2470.9	2938.9	2578.3	1721.0	987.5	376.6	182.4
82.5°	104.1	101.6	141.1	421.2	1207.3	1649.2	1345.9	767.6	356.6	102.0	60.6
85°	38.8	38.4	68.6	145.4	425.9	680.2	492.3	196.3	88.9	49.7	27.2
87.5°	10.9	10.6	14.9	50.4	103.7	157.4	84.2	32.3	25.0	19.6	8.0
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°	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2	782.2
2.5°	784.6	786.5	789.8	792.3	795.6	799.2	804.3	807.5	810.8	813.0	811.5
5°	787.9	791.9	800.3	808.6	818.5	827.5	838.0	845.6	851.8	853.6	854.3
7.5°	795.2	801.8	815.9	830.0	845.6	860.5	875.8	888.8	899.3	903.3	903.6
10°	807.9	816.6	836.6	856.5	877.2	900.1	919.6	938.5	953.4	959.5	959.9
12.5°	823.9	834.8	860.9	888.5	917.1	948.6	974.1	997.2	1015.8	1024.1	1024.1
15°	844.5	858.6	892.1	929.1	971.2	1015.1	1047.3	1073.1	1093.8	1103.9	1103.2
17.5°	867.0	885.9	927.9	983.8	1044.1	1101.8	1139.5	1158.4	1179.8	1189.5	1189.2
20°	888.8	912.0	972.2	1053.5	1133.6	1194.9	1225.5	1230.5	1231.9	1233.1	1235.9
22.5°	911.3	942.5	1027.8	1141.3	1227.2	1269.7	1274.1	1252.3	1221.8	1207.7	1211.7
25°	935.9	977.3	1100.3	1238.2	1307.8	1312.9	1279.5	1226.5	1168.9	1142.4	1146.4
27.5°	959.9	1017.6	1187.4	1330.7	1365.8	1321.2	1249.4	1174.3	1104.6	1076.8	1079.9
30°	983.8	1063.6	1283.5	1411.5	1392.4	1300.5	1201.9	1118.1	1048.1	1018.6	1021.9
32.5°	1008.2	1117.4	1394.1	1470.0	1387.6	1256.6	1142.8	1054.9	993.3	962.5	966.5
35°	1035.8	1183.4	1499.0	1501.9	1356.1	1192.1	1064.8	979.5	925.8	901.2	906.6
37.5°	1071.6	1267.2	1591.5	1509.8	1300.9	1097.4	967.9	890.2	846.0	834.8	842.8
40°	1116.2	1368.1	1662.2	1497.2	1219.2	982.4	861.9	799.9	774.9	777.5	786.2
42.5°	1174.3	1480.8	1712.0	1464.5	1105.8	863.8	769.1	741.5	753.5	763.6	773.1
45°	1249.8	1598.0	1742.8	1409.1	977.3	763.3	714.3	720.9	729.9	731.0	738.2
47.5°	1346.2	1716.7	1763.1	1325.2	846.3	692.5	679.5	680.9	679.2	671.5	677.3
50°	1466.7	1832.0	1781.2	1214.2	735.0	648.3	630.9	625.8	600.8	576.0	579.3
52.5°	1603.8	1938.0	1788.8	1076.4	648.3	611.3	583.0	551.0	504.3	496.6	499.2
55°	1756.2	2035.9	1769.3	906.9	575.3	563.8	520.9	482.5	477.4	470.9	472.0
57.5°	1938.3	2141.4	1729.4	717.9	500.6	508.3	466.6	470.9	461.8	451.6	449.9
60°	2137.4	2250.7	1659.4	545.6	423.3	439.0	452.3	452.0	449.5	441.2	438.2
62.5°	2316.7	2322.4	1521.5	417.9	355.5	385.3	421.9	421.6	419.3	414.6	412.9
65°	2423.3	2311.6	1291.5	329.0	299.6	341.0	380.6	383.5	383.9	383.5	383.5
67.5°	2404.4	2184.3	975.9	261.9	253.6	296.0	339.6	343.6	346.4	347.2	347.9
70°	2191.1	1904.6	636.3	209.0	212.6	256.5	300.7	304.7	307.3	310.2	311.6
72.5°	1708.0	1400.4	364.2	169.0	176.7	222.4	262.3	267.0	268.4	273.9	276.0
75°	1040.8	823.5	196.6	133.1	145.1	190.1	224.2	229.6	232.2	238.7	239.4
77.5°	494.9	356.6	112.1	103.7	116.8	155.3	189.3	195.6	188.6	192.3	189.3
80°	167.3	132.4	70.7	79.1	89.3	121.2	151.6	157.8	143.3	142.6	141.1
82.5°	58.4	53.7	45.0	52.6	57.7	86.7	114.6	122.6	106.7	106.3	101.2
85°	22.9	21.7	25.0	28.7	34.4	53.3	75.4	79.4	65.7	53.0	52.3
87.5°	4.7	5.1	6.1	6.6	10.6	18.6	27.2	33.4	26.4	22.4	20.7
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)