

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: P882034

Luminaire Tested: **NAV-SB1D-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8045 lumens
Efficiency: N/A
Efficacy: 101.1 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

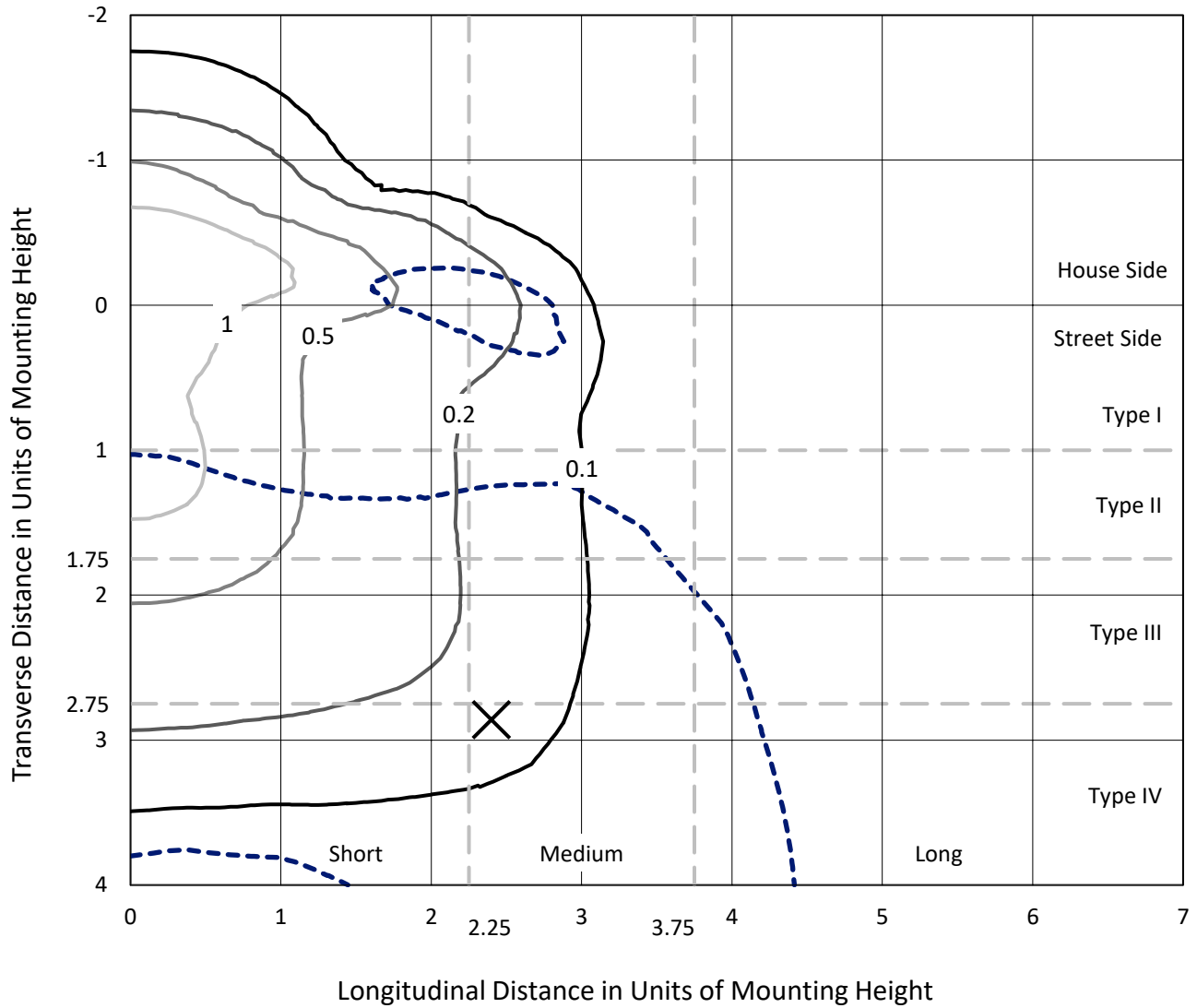
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882034
 CATALOG NUMBER: NAV-SB1D-722-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

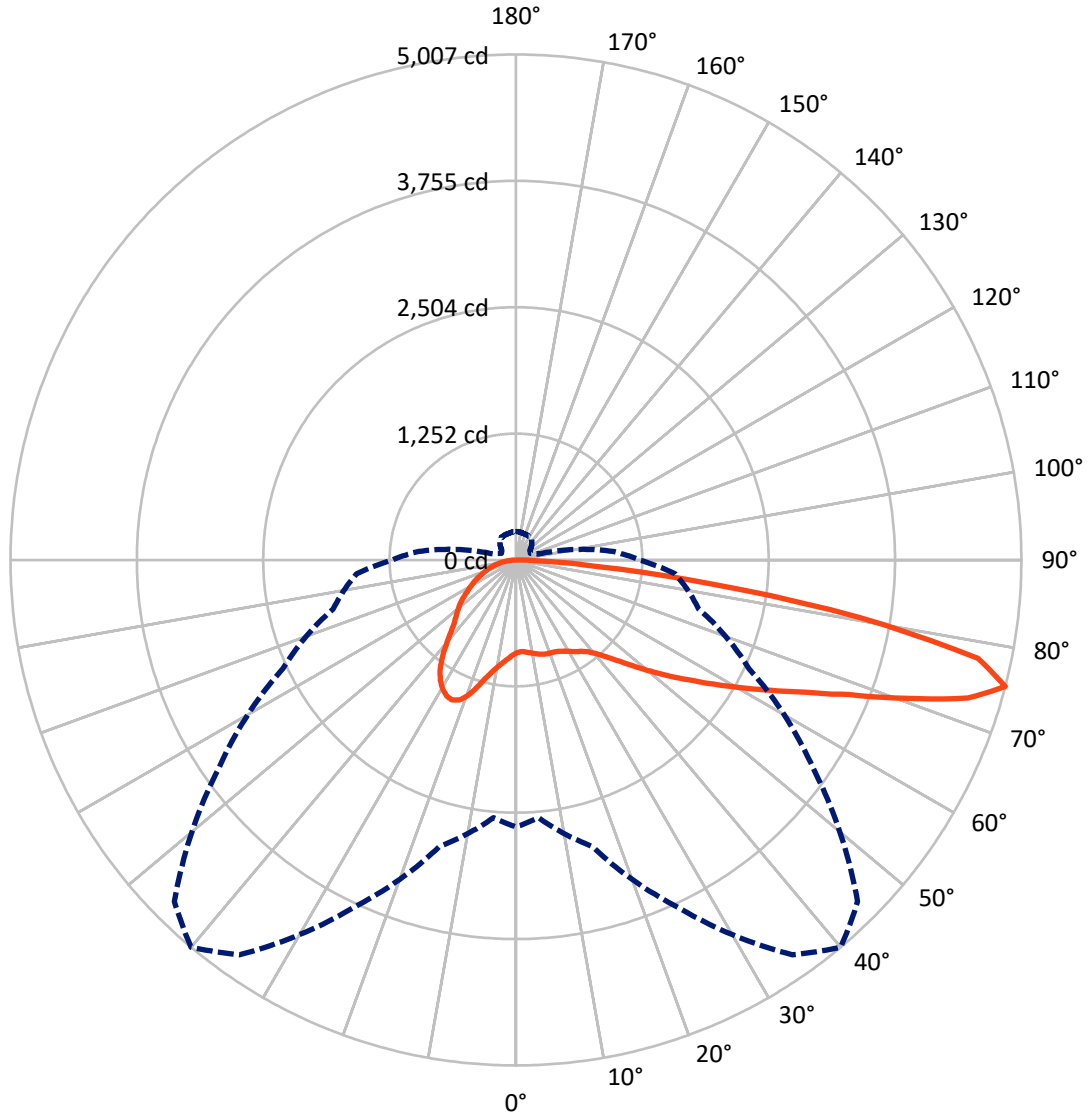
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P882034
CATALOG NUMBER: NAV-SB1D-722-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P882034

CATALOG NUMBER: NAV-SB1D-722-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2492.6	0.0	2492.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5552.4	0.0	5552.4
	% Fixture	69.0	0.0	69.0
Total	Lumens	8045.0	0.0	8045.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	1.1
10°-20°	308.3	3.8
20°-30°	563.0	7.0
30°-40°	798.4	9.9
40°-50°	1078.1	13.4
50°-60°	1450.3	18.0
60°-70°	1840.8	22.9
70°-80°	1670.7	20.8
80°-90°	243.5	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°	8045.0	100.0
0°-180°	8045.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882034

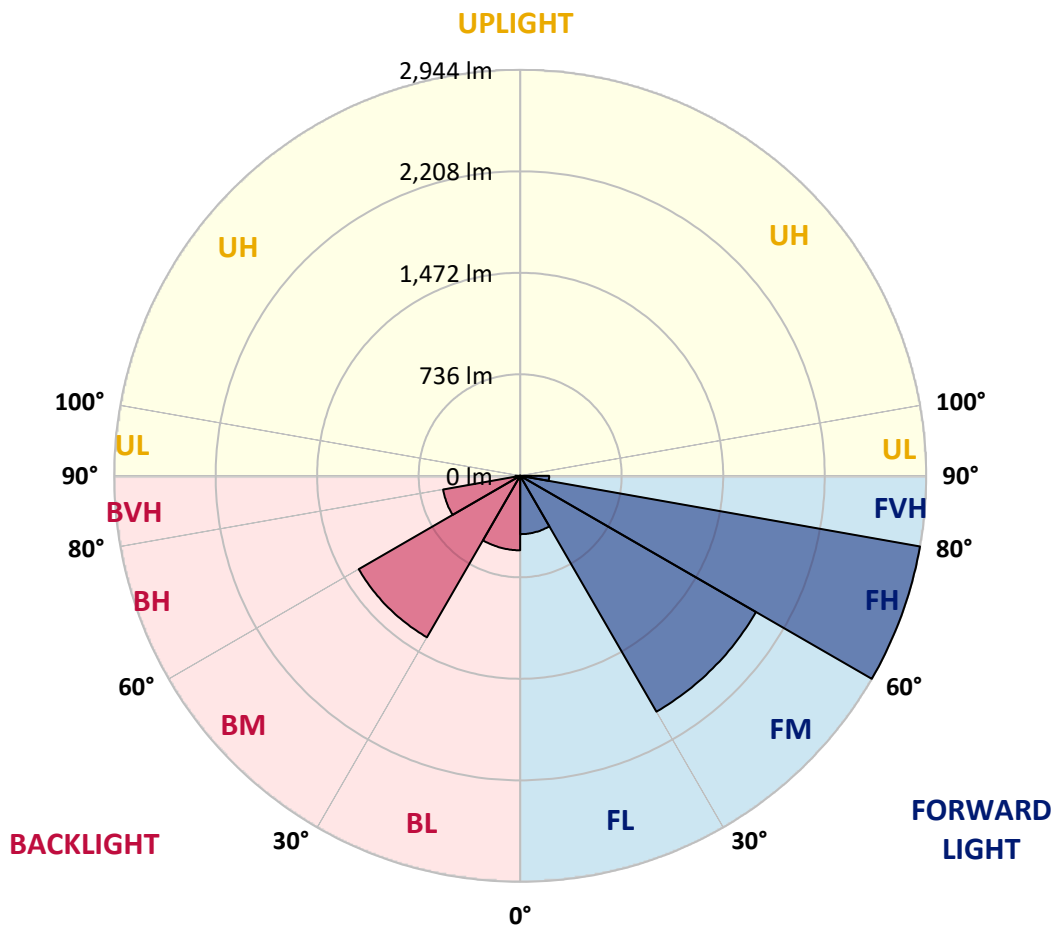
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	423.2	5.3			
FM (30°-60°)	1974.9	24.5			
FH (60°-80°)	2944.3	36.6			G2/5000
FVH (80°-90°)	210.0	2.6			G2/225
BL (0°-30°)	539.9	6.7	B2/1000		
BM (30°-60°)	1352.0	16.8	B2/2500		
BH (60°-80°)	567.1	7.0	B2/1000		G2/1000
BVH (80°-90°)	33.5	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



REPORT NUMBER: P882034

CATALOG NUMBER: NAV-SB1D-722-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0
2.5°	905.9	911.0	909.7	908.0	908.0	908.4	908.0	911.0	914.0	917.0	921.7
5°	915.3	920.4	917.8	915.7	914.0	913.6	912.3	911.8	913.6	917.4	923.8
7.5°	933.6	938.7	934.9	931.1	927.6	925.9	924.2	921.7	920.4	922.5	931.5
10°	954.1	959.2	954.5	947.7	942.1	940.0	938.3	935.7	934.0	935.3	945.1
12.5°	974.6	979.7	973.3	963.9	956.7	955.4	953.2	952.4	952.0	951.5	961.3
15°	993.8	998.0	989.9	978.8	971.2	969.0	966.9	968.2	970.3	972.9	984.0
17.5°	1008.7	1013.0	1001.0	986.5	979.3	978.4	977.1	981.4	987.4	993.8	1007.4
20°	1022.4	1026.6	1011.3	991.6	983.1	983.1	983.5	992.5	1001.0	1010.4	1029.2
22.5°	1041.6	1045.0	1026.2	999.3	986.9	987.8	991.2	1000.2	1010.8	1023.6	1049.7
25°	1070.2	1072.7	1049.7	1013.8	999.7	1002.3	1005.3	1009.6	1019.8	1034.7	1069.7
27.5°	1116.2	1118.4	1088.1	1039.4	1018.1	1022.4	1026.6	1023.6	1028.3	1041.1	1085.9
30°	1181.1	1182.4	1144.0	1079.5	1049.2	1051.4	1052.2	1039.9	1030.9	1041.1	1097.5
32.5°	1257.9	1257.5	1211.8	1128.2	1084.7	1082.5	1075.3	1051.0	1030.0	1039.0	1107.7
35°	1376.9	1372.3	1313.4	1196.5	1124.8	1111.5	1094.5	1063.3	1034.3	1036.9	1116.7
37.5°	1574.1	1559.6	1478.1	1308.2	1184.5	1150.8	1125.6	1083.4	1043.7	1036.0	1127.3
40°	1796.4	1778.0	1688.4	1461.4	1274.1	1219.9	1179.4	1112.0	1059.1	1039.9	1143.1
42.5°	2060.1	2034.1	1937.6	1641.9	1387.6	1309.1	1248.1	1148.2	1081.7	1052.2	1164.5
45°	2384.0	2349.4	2212.8	1845.5	1530.6	1426.0	1344.5	1203.3	1116.2	1076.1	1196.5
47.5°	2711.2	2719.8	2525.6	2078.4	1702.1	1570.2	1465.3	1286.1	1166.6	1114.5	1248.1
50°	3059.0	3065.0	2836.7	2336.6	1896.7	1733.2	1601.0	1378.7	1236.6	1169.1	1325.3
52.5°	3330.4	3331.2	3119.1	2606.7	2099.3	1912.5	1747.3	1484.5	1317.6	1241.7	1428.2
55°	3500.2	3498.1	3317.1	2862.3	2332.3	2100.6	1909.5	1604.8	1416.6	1327.0	1557.4
57.5°	3623.5	3617.1	3453.7	3082.0	2580.7	2322.9	2092.9	1741.3	1533.5	1428.6	1727.7
60°	3670.4	3666.6	3546.3	3271.9	2841.8	2568.7	2304.6	1894.1	1666.2	1548.5	1946.6
62.5°	3688.4	3695.6	3637.2	3455.8	3121.3	2840.9	2537.1	2076.7	1815.6	1684.2	2177.4
65°	3751.5	3764.7	3752.8	3696.5	3437.0	3159.7	2845.6	2293.9	1978.6	1829.7	2418.5
67.5°	3876.5	3889.8	3894.9	3984.5	3822.8	3556.9	3230.5	2564.4	2169.3	1980.7	2599.9
70°	3873.5	3869.7	3960.2	4213.6	4305.8	4106.9	3749.4	2897.3	2396.8	2106.2	2622.9
72.5°	3525.8	3495.1	3708.8	4211.1	4707.7	4681.3	4383.0	3326.5	2593.0	2121.5	2276.0
75°	2645.1	2563.2	2940.8	3795.0	4774.7	5007.3	4785.8	3592.8	2546.5	1874.5	1583.9
77.5°	1131.2	1048.8	1493.9	2809.4	4273.4	4680.9	4416.3	3134.5	2032.8	1239.6	777.9
80°	296.1	295.7	451.4	1273.7	2906.2	3456.7	3032.5	2024.2	1161.5	442.9	214.6
82.5°	122.5	119.5	166.0	495.4	1420.0	1939.8	1583.0	902.9	419.4	119.9	71.3
85°	45.7	45.2	80.6	171.1	500.9	800.1	579.0	230.8	104.5	58.5	32.0
87.5°	12.8	12.4	17.5	59.3	122.0	185.2	99.0	38.0	29.4	23.0	9.4
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: P882034

CATALOG NUMBER: NAV-SB1D-722-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0	920.0
2.5°	922.9	925.1	928.9	931.9	935.7	940.0	946.0	949.8	953.7	956.2	954.5
5°	926.8	931.5	941.3	951.1	962.6	973.3	985.7	994.6	1001.9	1004.0	1004.9
7.5°	935.3	943.0	959.6	976.3	994.6	1012.1	1030.0	1045.4	1057.8	1062.5	1062.9
10°	950.3	960.5	984.0	1007.4	1031.8	1058.6	1081.7	1103.9	1121.4	1128.6	1129.0
12.5°	969.0	981.8	1012.5	1045.0	1078.7	1115.8	1145.7	1173.0	1194.7	1204.6	1204.6
15°	993.3	1010.0	1049.2	1092.8	1142.3	1193.9	1231.9	1262.2	1286.5	1298.4	1297.6
17.5°	1019.8	1042.0	1091.5	1157.2	1228.0	1295.9	1340.3	1362.4	1387.6	1399.1	1398.7
20°	1045.4	1072.7	1143.5	1239.1	1333.4	1405.5	1441.4	1447.4	1449.1	1450.3	1453.8
22.5°	1071.9	1108.6	1208.8	1342.4	1443.5	1493.4	1498.6	1473.0	1437.1	1420.5	1425.2
25°	1100.9	1149.5	1294.2	1456.3	1538.2	1544.2	1505.0	1442.7	1374.8	1343.7	1348.4
27.5°	1129.0	1196.9	1396.6	1565.1	1606.5	1554.0	1469.5	1381.2	1299.3	1266.4	1270.3
30°	1157.2	1251.1	1509.7	1660.3	1637.7	1529.7	1413.6	1315.1	1232.7	1198.2	1202.0
32.5°	1185.8	1314.2	1639.8	1729.0	1632.1	1478.1	1344.1	1240.8	1168.3	1132.0	1136.7
35°	1218.2	1391.9	1763.1	1766.5	1595.0	1402.1	1252.4	1152.1	1088.9	1059.9	1066.3
37.5°	1260.5	1490.4	1871.9	1775.9	1530.1	1290.8	1138.4	1047.1	995.1	981.8	991.2
40°	1312.9	1609.1	1955.1	1761.0	1434.1	1155.5	1013.8	940.9	911.4	914.4	924.7
42.5°	1381.2	1741.8	2013.6	1722.6	1300.6	1016.0	904.6	872.2	886.2	898.2	909.3
45°	1470.0	1879.6	2049.8	1657.3	1149.5	897.8	840.2	847.8	858.5	859.8	868.3
47.5°	1583.5	2019.1	2073.7	1558.7	995.5	814.6	799.2	800.9	798.8	789.8	796.6
50°	1725.1	2154.8	2095.1	1428.2	864.5	762.5	742.0	736.1	706.6	677.6	681.4
52.5°	1886.4	2279.4	2104.0	1266.0	762.5	719.0	685.7	648.2	593.1	584.1	587.1
55°	2065.6	2394.6	2081.0	1066.7	676.7	663.1	612.7	567.5	561.5	553.9	555.1
57.5°	2279.8	2518.8	2034.1	844.4	588.8	597.8	548.7	553.9	543.2	531.2	529.1
60°	2514.1	2647.2	1951.7	641.8	498.0	516.3	532.1	531.7	528.7	518.9	515.4
62.5°	2724.9	2731.7	1789.6	491.6	418.2	453.2	496.2	495.8	493.3	487.7	485.6
65°	2850.3	2718.9	1519.0	387.0	352.5	401.1	447.6	451.0	451.4	451.0	451.0
67.5°	2828.1	2569.1	1147.8	308.1	298.3	348.2	399.4	404.1	407.5	408.3	409.2
70°	2577.2	2240.2	748.4	245.8	250.0	301.7	353.7	358.4	361.4	364.8	366.5
72.5°	2008.9	1647.0	428.4	198.8	207.8	261.6	308.5	314.0	315.8	322.2	324.7
75°	1224.2	968.6	231.3	156.6	170.7	223.6	263.7	270.1	273.1	280.8	281.6
77.5°	582.0	419.4	131.8	122.0	137.4	182.6	222.7	230.0	221.9	226.1	222.7
80°	196.7	155.7	83.2	93.0	105.0	142.5	178.4	185.6	168.5	167.7	166.0
82.5°	68.7	63.2	52.9	61.9	67.8	102.0	134.8	144.2	125.4	125.0	119.0
85°	26.9	25.6	29.4	33.7	40.5	62.7	88.8	93.4	77.2	62.3	61.4
87.5°	5.5	6.0	7.3	7.7	12.4	21.8	32.0	39.3	31.1	26.5	24.3
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)