

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: P882381

Luminaire Tested: **NAV-SB2B-722-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-722-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9039 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

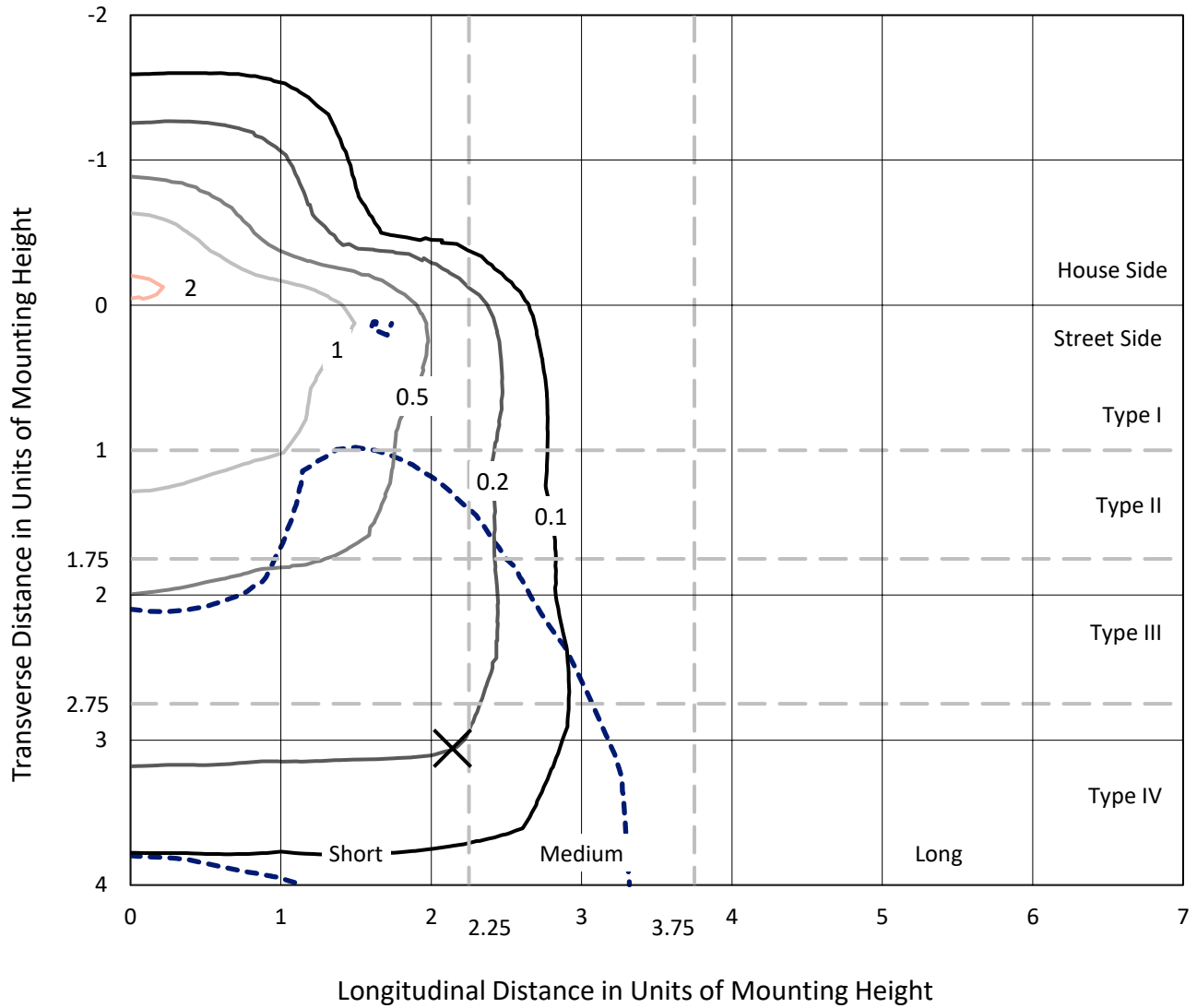
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

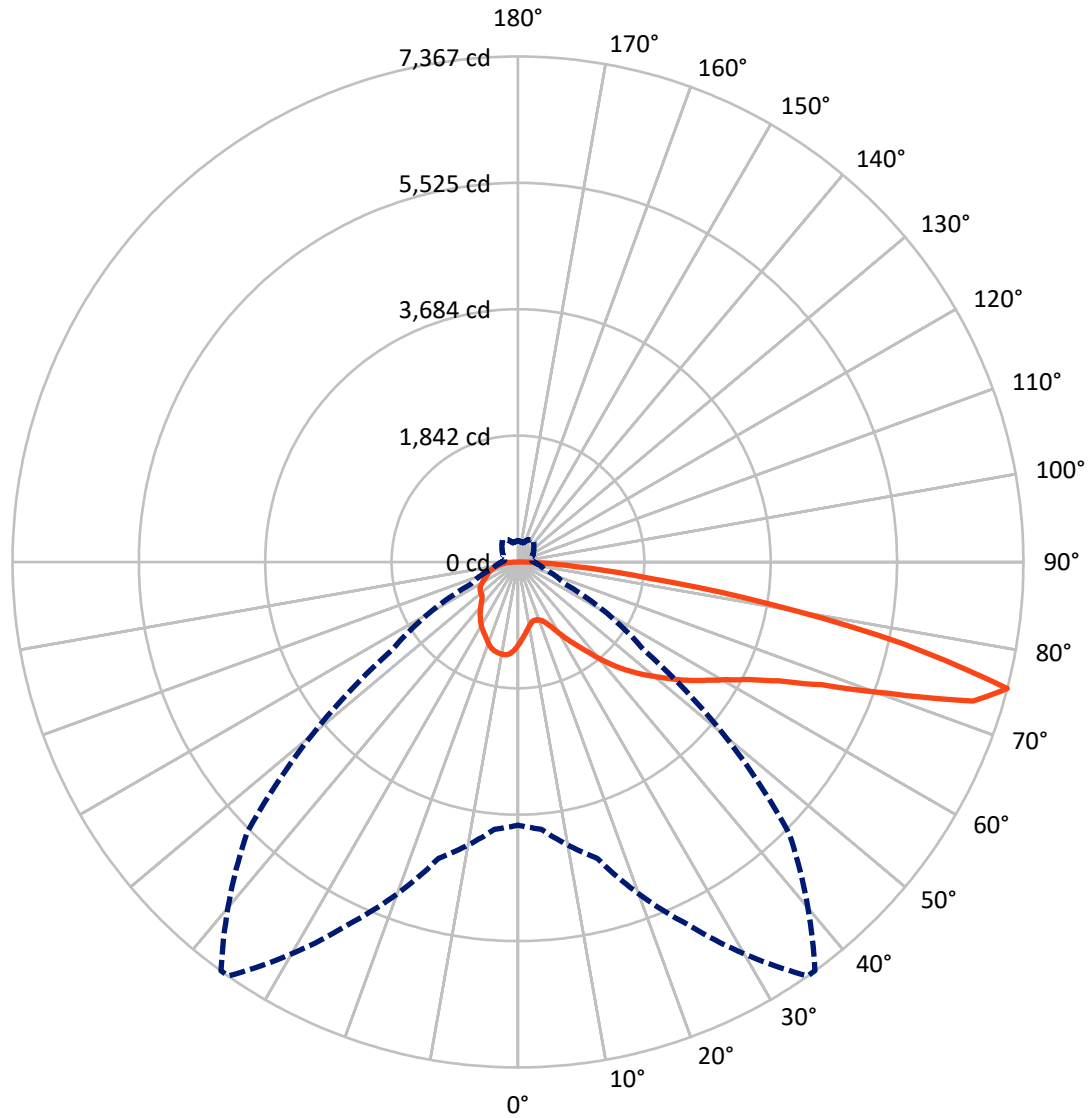
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2151.1	0.0	2151.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	6887.9	0.0	6887.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	9039.0	0.0	9039.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.0	1.3
10°-20°	328.9	3.6
20°-30°	552.4	6.1
30°-40°	858.5	9.5
40°-50°	1274.2	14.1
50°-60°	1759.1	19.5
60°-70°	2134.2	23.6
70°-80°	1763.8	19.5
80°-90°	253.7	2.8
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°	9039.0	100.0
0°-180°	9039.0	100.0

Coefficient of Utilization



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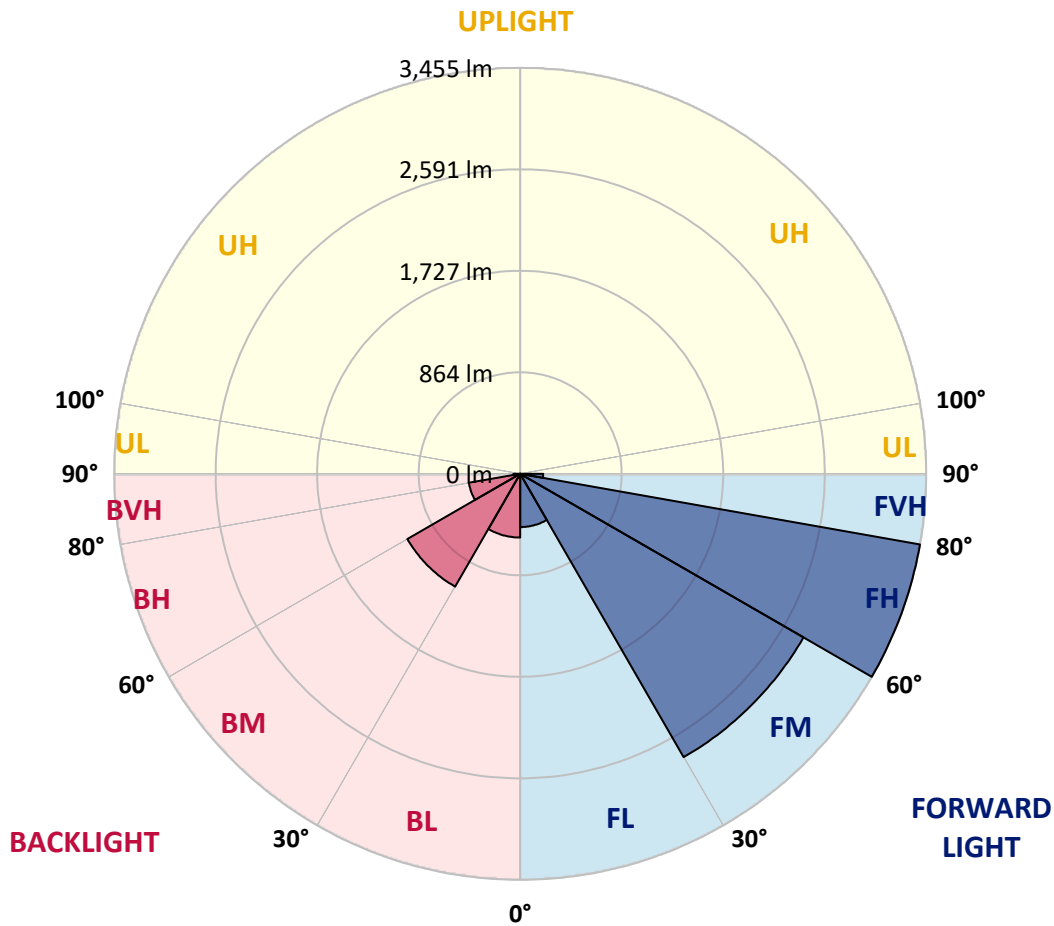
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	453.3	5.0			
FM (30°-60°)	2783.5	30.8			
FH (60°-80°)	3454.6	38.2			G2/5000
FVH (80°-90°)	196.6	2.2			G2/225
BL (0°-30°)	542.1	6.0	B2/1000		
BM (30°-60°)	1108.4	12.3	B2/2500		
BH (60°-80°)	443.5	4.9	B1/500		G1/500
BVH (80°-90°)	57.1	0.6			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5
2.5°	1110.7	1117.5	1120.5	1119.0	1126.3	1125.3	1135.6	1148.3	1165.9	1183.0	1207.9
5°	1025.2	1032.5	1038.9	1044.7	1058.9	1063.3	1079.4	1103.8	1136.1	1168.8	1209.9
7.5°	945.5	951.9	961.7	972.4	996.3	1000.7	1027.6	1065.7	1110.7	1158.6	1215.3
10°	880.5	886.9	897.2	909.4	939.2	944.5	978.8	1029.6	1088.2	1148.8	1221.1
12.5°	852.7	854.6	860.5	872.7	898.6	902.0	939.7	997.8	1066.2	1141.5	1229.9
15°	851.2	855.1	855.6	862.0	883.5	884.9	919.6	977.3	1052.5	1140.0	1243.1
17.5°	865.9	868.8	864.4	868.3	886.4	888.8	916.2	967.5	1048.1	1146.4	1265.6
20°	905.0	907.4	894.2	888.8	902.0	904.0	930.9	973.9	1052.5	1159.6	1296.4
22.5°	988.0	989.5	957.3	935.3	936.2	937.2	960.7	999.8	1069.6	1183.5	1335.5
25°	1117.5	1116.6	1065.2	1022.7	998.3	992.9	1008.6	1041.8	1098.5	1215.3	1385.8
27.5°	1269.0	1261.7	1210.4	1146.8	1093.6	1085.8	1082.3	1096.5	1139.5	1257.3	1447.4
30°	1440.0	1433.2	1378.0	1294.9	1221.1	1208.4	1176.2	1168.8	1200.6	1314.5	1532.9
32.5°	1627.7	1623.3	1557.3	1456.6	1357.9	1343.3	1289.0	1269.5	1294.4	1400.9	1652.1
35°	1785.0	1781.1	1726.4	1622.8	1502.1	1484.0	1428.8	1406.8	1419.5	1511.9	1808.0
37.5°	1927.2	1925.3	1878.3	1796.7	1672.1	1650.2	1588.1	1580.8	1578.3	1658.0	1997.1
40°	2059.1	2054.3	2005.4	1962.4	1870.0	1850.0	1795.3	1788.9	1770.4	1837.8	2211.1
42.5°	2205.3	2192.5	2121.7	2101.7	2076.7	2060.1	2027.4	2028.4	1987.3	2040.6	2437.8
45°	2324.5	2317.2	2244.3	2232.6	2259.5	2252.6	2281.0	2288.3	2208.7	2253.1	2673.4
47.5°	2452.5	2445.7	2384.1	2375.8	2448.6	2450.6	2550.7	2553.2	2424.7	2474.0	2909.4
50°	2610.3	2600.6	2539.5	2549.7	2631.3	2638.7	2821.9	2805.3	2623.5	2698.3	3143.4
52.5°	2714.4	2720.3	2707.1	2723.7	2835.1	2842.0	3088.7	3046.2	2820.5	2919.6	3373.1
55°	2791.1	2802.9	2843.9	2882.0	3050.1	3057.0	3340.4	3275.4	2983.7	3124.9	3589.1
57.5°	2889.8	2873.2	2949.9	3024.2	3254.4	3272.5	3585.2	3496.2	3128.3	3301.8	3737.2
60°	3031.5	3019.8	3079.4	3189.4	3483.1	3511.9	3844.2	3695.1	3234.3	3442.0	3766.0
62.5°	3318.9	3289.6	3298.8	3396.1	3771.4	3809.5	4136.4	3868.6	3287.1	3496.7	3611.6
65°	3748.4	3698.1	3651.1	3718.6	4177.4	4215.0	4466.2	4004.9	3267.6	3390.7	3201.6
67.5°	4289.3	4239.5	4181.8	4245.3	4775.5	4805.3	4873.2	4081.6	3113.6	2982.2	2476.9
70°	4735.5	4716.9	4785.8	5047.2	5730.8	5731.8	5395.1	4018.1	2691.9	2114.4	1433.2
72.5°	4676.3	4665.1	5028.1	5836.4	6934.8	6908.9	5889.1	3537.3	1813.4	953.8	537.0
75°	3836.3	3909.2	4471.6	5822.2	7367.3	7363.9	5586.7	2248.7	750.1	395.3	277.5
77.5°	2057.2	2172.5	2903.0	4298.6	5751.3	5837.8	3927.7	786.7	322.0	253.1	192.0
80°	670.9	771.6	1157.1	2188.6	3737.2	3721.0	1683.4	308.8	220.4	179.3	132.9
82.5°	284.9	296.6	517.0	1033.5	1917.9	1888.1	536.0	177.4	154.9	122.6	82.1
85°	111.4	124.6	228.2	477.9	830.7	812.6	193.5	88.0	99.2	80.1	48.9
87.5°	36.6	44.5	81.6	163.7	258.5	249.2	47.4	30.3	43.0	36.6	17.6
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°	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5	1204.5
2.5°	1214.8	1222.6	1231.9	1245.6	1257.3	1267.1	1277.3	1283.7	1286.1	1293.4	1293.0
5°	1223.6	1240.7	1263.6	1286.1	1308.1	1321.3	1333.0	1338.9	1344.3	1348.2	1349.1
7.5°	1238.2	1260.2	1296.4	1325.7	1344.3	1355.0	1362.8	1360.9	1362.8	1363.8	1365.3
10°	1250.9	1281.7	1324.7	1352.6	1366.7	1367.2	1365.3	1358.4	1355.0	1355.5	1356.5
12.5°	1266.1	1300.3	1346.7	1370.2	1374.1	1363.3	1355.0	1343.3	1338.9	1336.9	1336.0
15°	1286.6	1325.7	1370.6	1379.4	1369.7	1356.0	1341.8	1322.8	1313.0	1305.2	1307.6
17.5°	1311.5	1354.5	1389.2	1382.9	1361.9	1339.4	1316.4	1287.6	1267.5	1259.2	1259.7
20°	1346.2	1384.8	1403.4	1375.5	1343.8	1309.6	1270.5	1235.3	1216.7	1208.4	1207.4
22.5°	1388.2	1425.4	1417.1	1362.8	1317.9	1263.1	1214.3	1188.4	1179.1	1173.2	1174.2
25°	1438.6	1470.3	1426.8	1344.3	1275.4	1201.6	1164.0	1155.6	1151.2	1146.8	1146.8
27.5°	1504.0	1521.1	1434.2	1316.9	1208.9	1136.1	1122.4	1123.9	1122.4	1115.1	1116.6
30°	1590.5	1587.1	1441.0	1272.4	1132.7	1077.0	1077.9	1084.3	1085.3	1080.4	1082.8
32.5°	1704.4	1669.7	1444.4	1214.8	1059.9	1025.2	1026.2	1033.0	1037.9	1029.6	1033.5
35°	1842.2	1766.0	1439.1	1142.5	1003.7	975.8	968.5	970.4	971.9	964.1	969.5
37.5°	2003.0	1874.0	1415.1	1062.3	957.3	927.4	911.8	898.6	890.8	883.5	888.4
40°	2179.4	1991.7	1371.1	984.1	905.5	876.1	852.7	827.8	801.4	791.6	796.0
42.5°	2364.1	2112.9	1317.9	909.4	845.8	821.9	797.0	760.8	721.2	701.2	703.6
45°	2555.6	2237.0	1265.6	835.6	784.8	774.5	745.7	702.2	659.2	633.8	631.8
47.5°	2743.2	2354.3	1188.9	761.3	727.6	738.8	716.4	676.3	628.4	588.3	583.9
50°	2922.6	2464.2	1063.3	686.1	681.2	728.1	706.6	648.9	594.2	542.9	538.5
52.5°	3100.4	2553.2	902.5	617.6	656.2	725.1	693.9	630.4	563.4	509.7	503.8
55°	3251.4	2599.1	747.6	559.0	620.1	700.2	678.7	608.4	519.9	462.7	457.9
57.5°	3337.4	2562.0	618.6	501.3	570.2	659.2	652.8	561.5	468.1	424.1	418.3
60°	3300.3	2411.5	513.1	451.0	522.8	614.7	607.9	515.0	428.5	387.0	381.1
62.5°	3095.6	2124.6	429.5	407.0	479.8	569.3	562.9	479.4	398.2	358.2	351.8
65°	2683.1	1728.3	364.5	370.4	436.4	514.5	523.8	449.6	374.3	335.2	328.9
67.5°	2046.4	1251.9	313.7	338.6	393.8	460.8	487.7	428.1	354.3	317.1	311.3
70°	1166.4	711.0	270.7	307.8	356.2	410.9	459.8	410.9	332.8	302.0	298.1
72.5°	442.2	326.4	234.1	277.1	320.1	368.9	429.0	384.1	307.8	284.9	281.0
75°	236.0	198.9	196.9	240.9	278.5	327.9	390.4	357.7	289.3	301.0	310.8
77.5°	160.8	140.7	164.7	206.2	233.1	282.4	349.4	317.6	250.7	249.7	230.2
80°	111.4	99.7	133.9	166.1	180.3	237.5	304.9	272.7	204.3	190.6	182.3
82.5°	66.9	65.0	100.2	124.1	127.5	183.2	252.6	228.7	167.1	145.6	146.6
85°	36.6	38.6	64.0	72.8	74.3	128.0	197.9	176.9	128.5	108.0	109.0
87.5°	10.3	13.2	23.5	28.8	35.7	66.5	117.8	105.1	64.5	45.0	45.0
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)