

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: P881737

Luminaire Tested: **NAV-SB1B-740-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6020 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

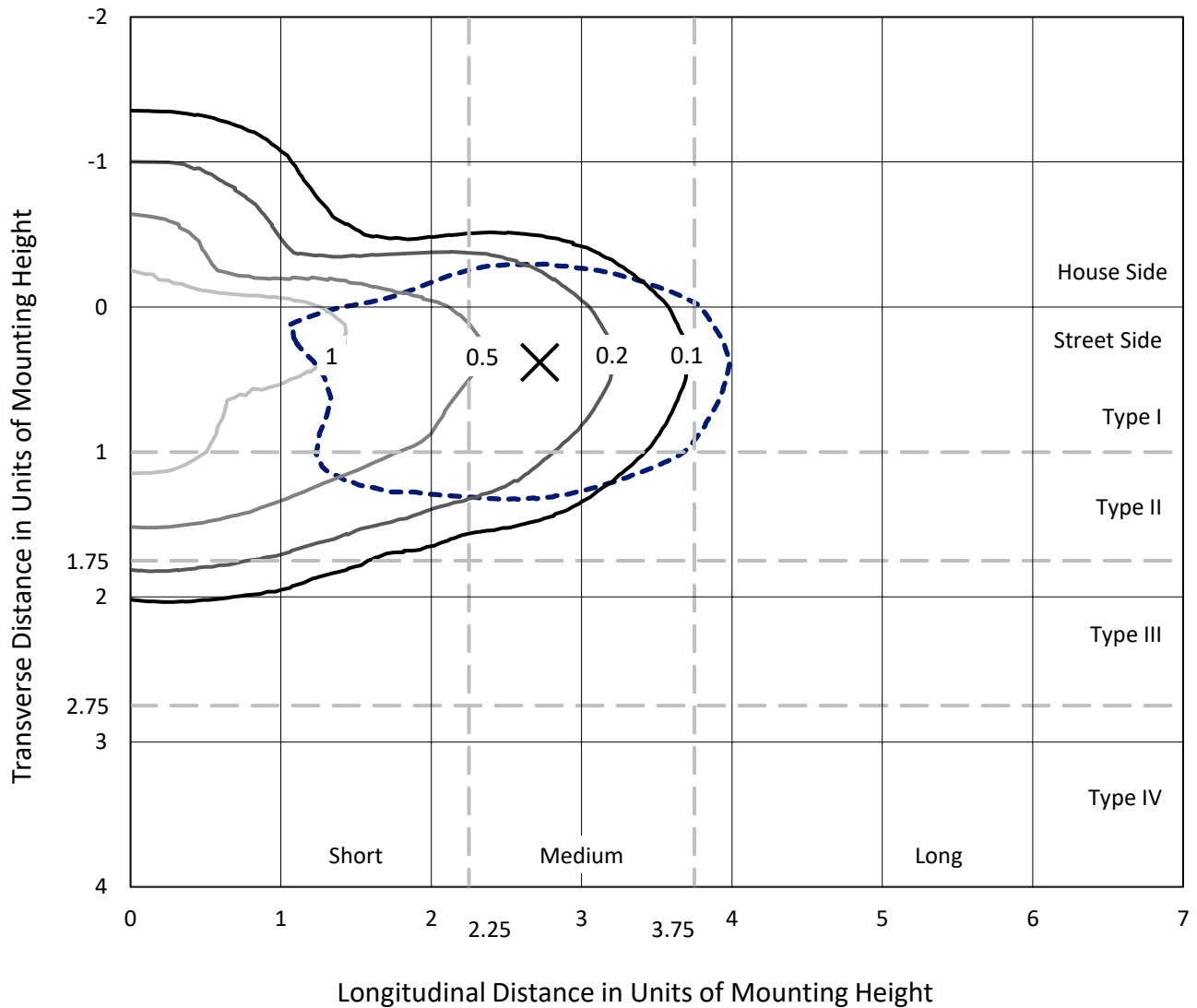
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

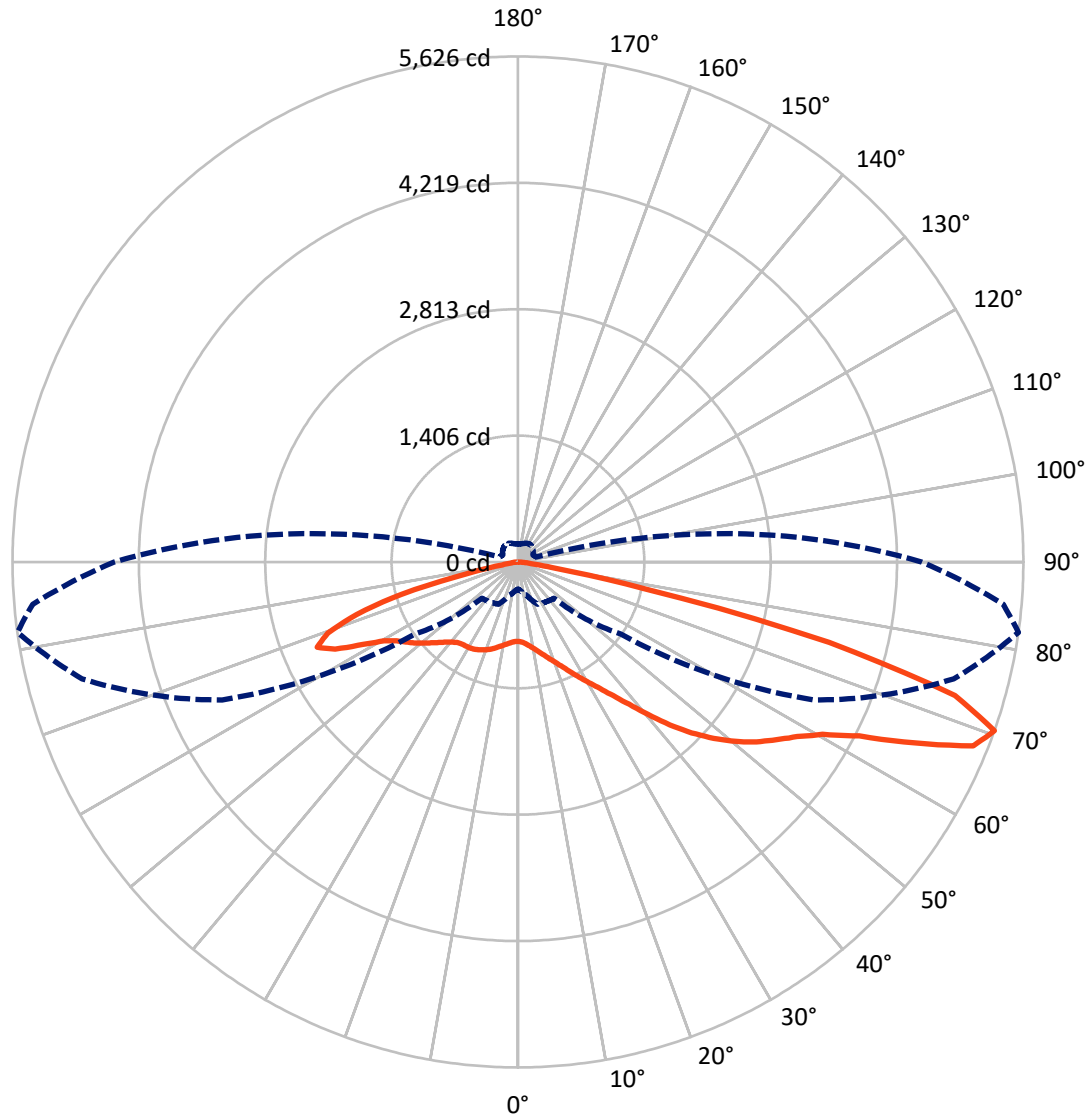
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1484.1	0.0	1484.1
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	4535.9	0.0	4535.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	6020.0	0.0	6020.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	1.4
10°-20°	239.4	4.0
20°-30°	400.5	6.7
30°-40°	625.7	10.4
40°-50°	996.6	16.6
50°-60°	1386.8	23.0
60°-70°	1450.7	24.1
70°-80°	758.2	12.6
80°-90°	78.7	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°	6020.0	100.0
0°-180°	6020.0	100.0

Coefficient of Utilization



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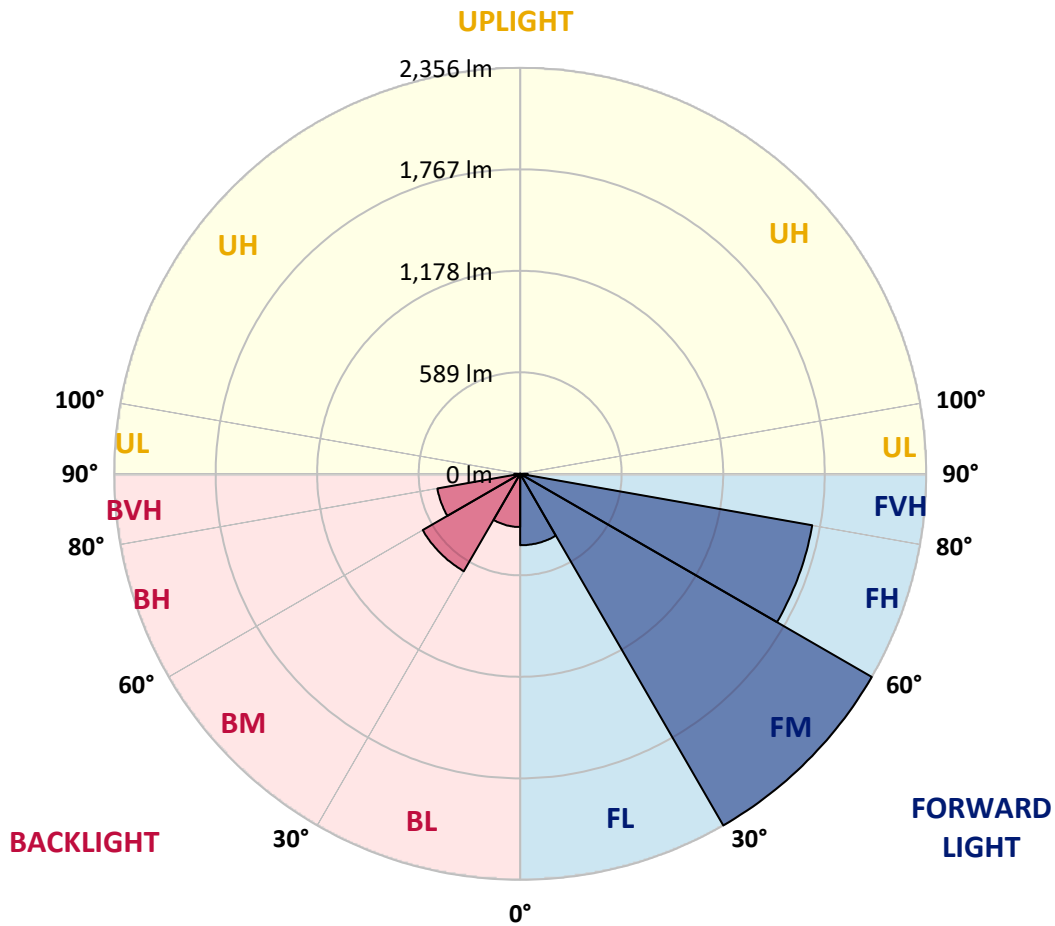
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	414.5	6.9			
FM (30°-60°)	2356.2	39.1			
FH (60°-80°)	1721.1	28.6			G1/1800
FVH (80°-90°)	44.1	0.7			G1/100
BL (0°-30°)	308.7	5.1	B1/500		
BM (30°-60°)	652.9	10.8	B1/1000		
BH (60°-80°)	487.7	8.1	B1/500		G1/500
BVH (80°-90°)	34.7	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6
2.5°	903.7	908.8	907.2	905.6	905.6	903.4	903.1	899.9	897.3	893.1	892.2
5°	915.2	920.6	920.0	921.3	925.4	926.4	927.3	925.4	920.3	915.2	913.0
7.5°	905.0	911.0	913.0	920.6	933.4	944.9	953.5	957.0	952.2	944.9	941.4
10°	870.5	877.2	883.9	902.1	924.8	951.9	974.9	988.7	987.7	980.7	974.6
12.5°	800.5	807.5	821.9	857.4	898.9	946.8	989.6	1018.4	1028.3	1023.2	1012.6
15°	744.6	750.7	761.5	798.0	851.9	924.8	995.0	1051.0	1076.2	1073.3	1060.5
17.5°	743.0	745.6	752.3	769.5	811.1	890.3	989.3	1082.9	1131.1	1130.8	1114.8
20°	771.1	772.1	775.9	779.4	803.1	864.1	974.6	1109.4	1192.8	1192.8	1175.5
22.5°	810.1	809.5	813.3	810.1	821.6	861.8	965.3	1132.7	1261.5	1266.6	1244.9
25°	868.6	865.4	864.4	857.1	859.3	882.6	975.6	1159.2	1342.9	1353.5	1326.3
27.5°	946.5	941.4	937.9	920.9	915.2	925.4	1006.9	1191.2	1433.6	1451.8	1417.3
30°	1048.1	1038.8	1033.7	1004.3	983.5	985.1	1054.1	1233.7	1528.5	1557.9	1514.1
32.5°	1186.7	1172.3	1158.6	1110.4	1072.4	1059.9	1115.2	1292.4	1631.4	1678.3	1622.1
35°	1342.0	1330.5	1315.8	1241.3	1182.9	1154.1	1197.6	1374.5	1751.8	1826.2	1753.1
37.5°	1491.5	1481.6	1488.6	1388.3	1312.9	1271.0	1305.5	1484.7	1900.3	2010.2	1917.3
40°	1646.1	1638.4	1639.4	1543.5	1455.7	1408.7	1436.5	1623.1	2070.6	2229.0	2114.7
42.5°	1814.1	1808.3	1789.2	1704.2	1605.5	1561.7	1587.3	1782.8	2253.3	2478.2	2331.3
45°	2002.2	1998.7	1980.8	1883.4	1770.3	1721.1	1755.6	1959.1	2437.0	2712.7	2548.8
47.5°	2164.8	2167.7	2165.5	2083.4	1966.1	1893.9	1935.2	2143.1	2607.9	2933.1	2757.4
50°	2243.1	2258.1	2280.1	2254.6	2181.8	2108.3	2116.3	2320.7	2770.8	3139.8	2957.4
52.5°	2202.2	2230.6	2290.7	2331.6	2359.7	2344.4	2323.0	2497.0	2924.1	3326.3	3146.5
55°	2049.8	2089.8	2189.4	2288.1	2431.6	2543.0	2571.2	2692.5	3073.6	3490.5	3325.3
57.5°	1772.2	1837.1	1926.5	2126.2	2367.7	2639.2	2860.6	2963.7	3232.1	3665.9	3512.5
60°	1296.3	1383.2	1494.3	1791.4	2144.1	2587.8	3106.9	3380.3	3457.3	3893.0	3756.3
62.5°	829.6	883.2	985.5	1265.3	1670.7	2324.2	3182.2	3901.0	3839.0	4265.5	4121.7
65°	568.0	602.5	696.1	853.2	1080.0	1730.1	2980.4	4291.3	4445.3	4855.8	4746.5
67.5°	412.7	438.9	518.8	656.4	703.7	1023.8	2312.7	4273.4	5034.7	5464.0	5294.0
70°	300.9	319.4	386.5	518.8	541.4	569.6	1401.1	3632.6	5021.9	5625.6	5422.1
72.5°	223.0	235.7	280.8	402.5	438.3	384.6	693.5	2640.2	4315.3	5088.3	4925.1
75°	161.3	170.9	204.1	307.9	350.7	292.9	346.0	1542.9	3010.1	3579.3	3608.1
77.5°	123.3	130.7	152.4	225.5	280.8	219.8	214.7	709.8	1427.2	1434.3	1514.8
80°	99.0	103.8	115.6	158.8	215.3	164.5	139.9	286.5	451.0	381.7	400.6
82.5°	72.8	80.8	97.7	111.5	154.0	113.4	85.3	144.7	171.5	147.6	148.9
85°	41.5	47.0	59.1	79.9	98.4	69.3	48.9	64.2	79.9	65.5	58.5
87.5°	14.7	19.2	20.8	31.3	42.8	28.7	18.8	18.5	26.2	19.5	16.3
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°	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6	882.6
2.5°	889.0	887.4	881.0	872.4	863.4	854.8	851.9	845.9	841.7	839.5	842.0
5°	906.9	901.8	886.8	867.6	847.5	825.7	810.4	796.4	786.1	776.6	780.4
7.5°	932.4	923.5	897.6	864.1	828.3	792.2	765.4	744.9	731.2	722.2	724.2
10°	962.1	948.4	908.8	858.6	803.4	751.6	720.0	702.4	693.8	689.0	690.3
12.5°	996.3	976.8	920.3	846.2	765.4	706.3	684.6	679.4	679.8	680.1	680.7
15°	1038.5	1011.3	929.6	819.0	715.9	671.5	667.6	675.9	684.6	688.7	688.4
17.5°	1086.1	1047.8	931.2	774.3	667.3	649.1	661.2	679.1	692.2	698.0	699.2
20°	1137.2	1084.8	919.7	711.1	627.4	630.9	652.6	675.6	690.0	697.3	699.2
22.5°	1195.7	1124.4	892.2	644.6	594.8	611.1	636.6	659.0	674.0	681.4	683.3
25°	1262.4	1168.8	849.1	588.7	566.7	588.7	614.3	632.8	644.9	651.7	653.6
27.5°	1336.5	1215.1	791.6	544.3	542.1	565.7	586.8	601.2	607.6	612.7	614.6
30°	1411.0	1257.3	721.9	510.8	520.7	543.0	558.1	564.4	566.4	567.3	569.6
32.5°	1491.5	1293.7	648.8	483.0	500.2	521.0	529.9	532.8	523.9	517.8	519.7
35°	1588.9	1332.7	577.2	460.9	480.1	498.0	500.9	498.3	487.8	475.3	476.0
37.5°	1709.3	1381.3	520.0	445.3	461.3	473.1	469.6	468.9	469.9	455.2	456.2
40°	1856.9	1444.5	478.2	433.2	445.9	448.5	438.6	444.0	448.8	426.4	427.1
42.5°	2020.8	1520.8	451.7	424.9	433.2	427.1	411.8	417.8	417.2	387.8	387.5
45°	2187.8	1603.9	442.4	418.8	421.3	409.2	392.3	393.9	380.5	353.9	354.9
47.5°	2353.9	1693.0	448.2	413.7	406.6	392.9	379.8	372.8	353.0	333.2	333.2
50°	2516.9	1786.6	469.3	403.5	386.5	378.5	369.0	356.5	335.4	318.5	317.2
52.5°	2667.9	1880.9	492.9	386.5	361.3	366.1	360.0	345.6	324.9	307.6	307.9
55°	2811.1	1975.1	502.2	363.2	337.6	355.2	351.7	325.2	300.3	286.2	284.9
57.5°	2966.9	2088.5	491.9	333.5	318.5	342.8	329.3	300.0	285.6	275.0	274.1
60°	3182.9	2266.4	469.9	296.8	300.3	324.2	301.2	289.1	273.4	261.6	261.0
62.5°	3541.6	2598.3	434.4	260.3	278.9	296.8	287.8	275.7	259.7	248.2	248.2
65°	4071.9	3059.6	367.7	231.9	254.9	269.9	273.4	261.3	244.7	232.6	233.2
67.5°	4519.1	3349.0	278.2	208.3	230.3	248.2	258.1	246.3	228.7	216.9	217.2
70°	4494.5	3138.8	212.4	185.0	208.6	226.8	239.6	230.3	211.5	200.3	201.2
72.5°	3992.0	2625.8	171.9	161.3	186.6	204.4	219.8	212.7	193.6	182.7	182.7
75°	2932.8	1863.9	137.4	137.4	159.1	181.1	198.1	193.6	176.0	168.3	166.1
77.5°	1236.2	782.0	107.7	114.0	132.2	155.6	176.6	178.2	162.9	172.5	156.5
80°	328.7	215.6	82.1	89.8	103.8	128.4	153.6	153.0	136.4	127.5	118.5
82.5°	125.2	85.0	58.5	63.2	75.1	98.4	121.7	125.5	108.9	94.2	94.2
85°	48.2	36.4	36.1	38.0	43.8	65.2	92.0	95.2	82.1	69.6	71.9
87.5°	12.5	10.9	13.4	12.8	20.1	34.8	52.7	54.6	50.2	29.1	41.5
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)