

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: P881947

Luminaire Tested: **NAV-SB1C-830-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881947
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-SB1C-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6498 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

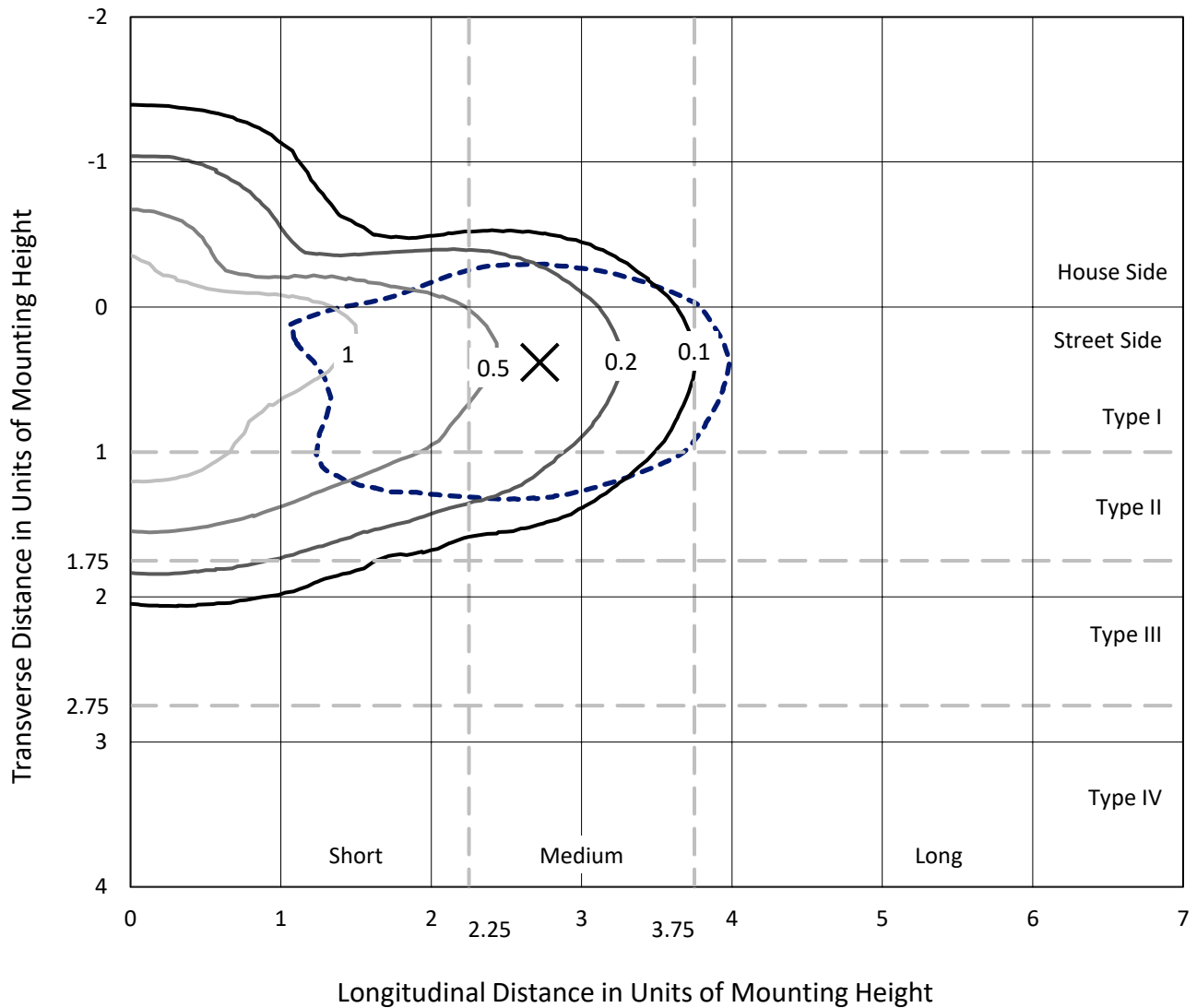
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

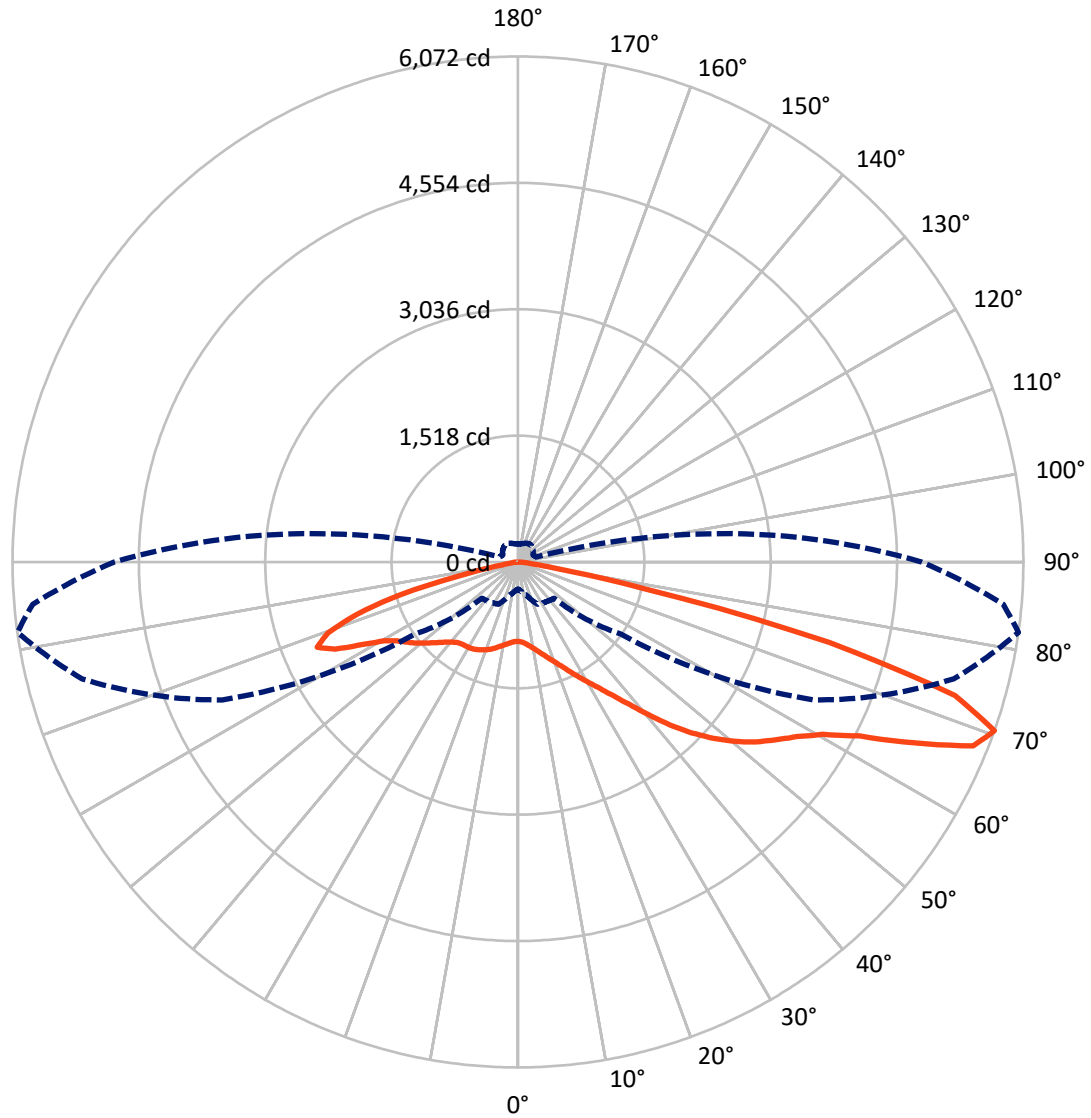
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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	1601.9	0.0	1601.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	4896.1	0.0	4896.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	6498.0	0.0	6498.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	1.4
10°-20°	258.4	4.0
20°-30°	432.3	6.7
30°-40°	675.4	10.4
40°-50°	1075.7	16.6
50°-60°	1496.9	23.0
60°-70°	1565.9	24.1
70°-80°	818.4	12.6
80°-90°	85.0	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°	6498.0	100.0
0°-180°	6498.0	100.0

Coefficient of Utilization



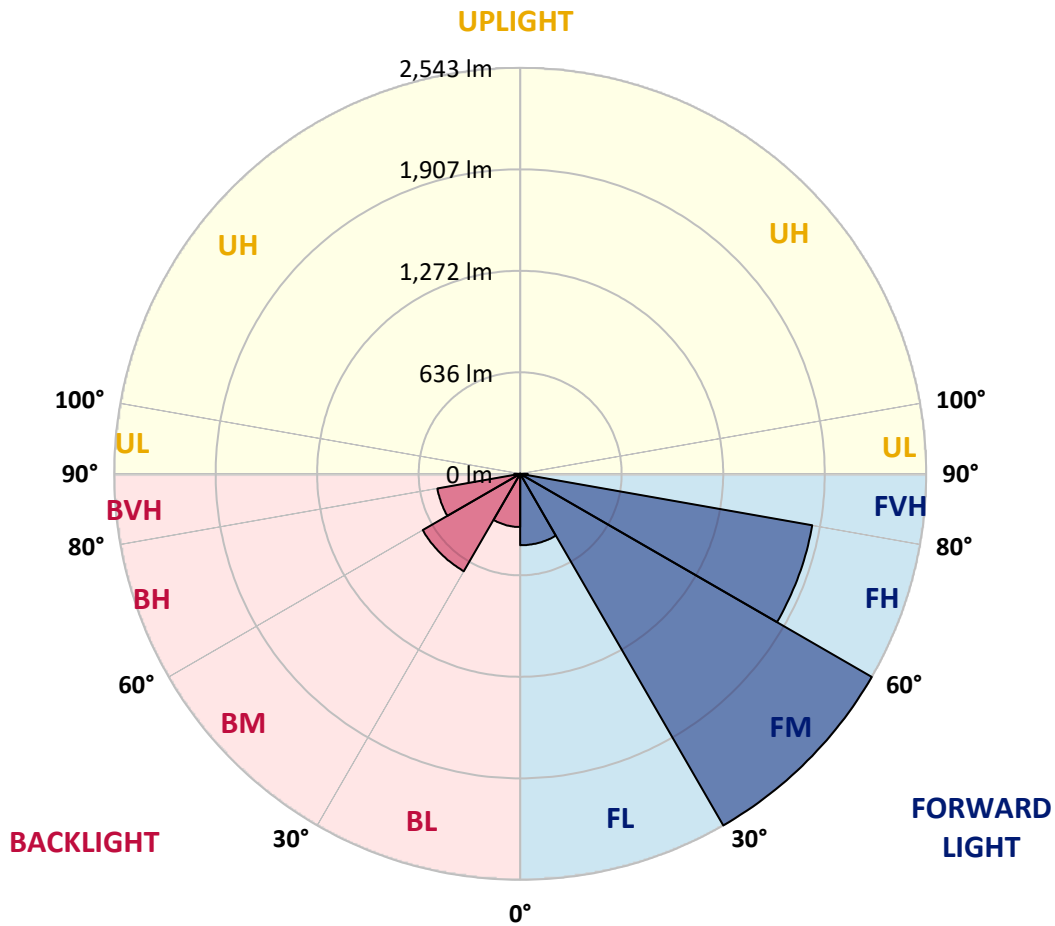
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	447.5	6.9			
FM (30°-60°)	2543.3	39.1			
FH (60°-80°)	1857.8	28.6			G2/5000
FVH (80°-90°)	47.6	0.7			G1/100
BL (0°-30°)	333.3	5.1	B1/500		
BM (30°-60°)	704.8	10.8	B1/1000		
BH (60°-80°)	526.5	8.1	B2/1000		G2/1000
BVH (80°-90°)	37.4	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7
2.5°	975.4	981.0	979.2	977.5	977.5	975.1	974.8	971.3	968.5	964.1	963.0
5°	987.9	993.7	993.0	994.4	998.9	999.9	1001.0	998.9	993.4	987.9	985.4
7.5°	976.8	983.4	985.4	993.7	1007.5	1019.9	1029.2	1033.0	1027.9	1019.9	1016.1
10°	939.6	946.8	954.1	973.7	998.2	1027.5	1052.3	1067.2	1066.1	1058.5	1052.0
12.5°	864.1	871.7	887.2	925.4	970.3	1022.0	1068.2	1099.2	1109.9	1104.4	1093.0
15°	803.7	810.3	822.0	861.3	919.6	998.2	1074.1	1134.4	1161.6	1158.5	1144.7
17.5°	802.0	804.8	812.0	830.6	875.5	961.0	1067.9	1168.9	1220.9	1220.6	1203.4
20°	832.4	833.4	837.5	841.3	866.8	932.7	1052.0	1197.5	1287.5	1287.5	1268.9
22.5°	874.4	873.7	877.9	874.4	886.8	930.3	1042.0	1222.7	1361.6	1367.1	1343.7
25°	937.5	934.1	933.0	925.1	927.5	952.7	1053.0	1251.3	1449.5	1460.9	1431.6
27.5°	1021.6	1016.1	1012.3	994.1	987.9	998.9	1086.8	1285.8	1547.5	1567.1	1529.9
30°	1131.3	1121.3	1115.8	1084.1	1061.6	1063.4	1137.8	1331.6	1649.9	1681.6	1634.4
32.5°	1280.9	1265.4	1250.6	1198.5	1157.5	1144.1	1203.7	1395.1	1760.9	1811.6	1750.9
35°	1448.5	1436.1	1420.2	1339.9	1276.8	1245.8	1292.7	1483.7	1890.9	1971.2	1892.3
37.5°	1609.9	1599.2	1606.8	1498.5	1417.1	1372.0	1409.2	1602.6	2051.2	2169.8	2069.5
40°	1776.8	1768.5	1769.5	1666.1	1571.3	1520.6	1550.6	1751.9	2235.0	2406.0	2282.6
42.5°	1958.1	1951.9	1931.2	1839.5	1733.0	1685.7	1713.3	1924.3	2432.2	2675.0	2516.4
45°	2161.2	2157.4	2138.1	2033.0	1910.9	1857.8	1895.0	2114.7	2630.5	2928.1	2751.2
47.5°	2336.7	2339.8	2337.4	2248.8	2122.3	2044.3	2088.8	2313.3	2815.0	3166.0	2976.3
50°	2421.2	2437.4	2461.2	2433.6	2355.0	2275.7	2284.3	2505.0	2990.8	3389.1	3192.2
52.5°	2377.1	2407.8	2472.6	2516.7	2547.1	2530.5	2507.4	2695.3	3156.3	3590.4	3396.3
55°	2212.6	2255.7	2363.3	2469.8	2624.6	2745.0	2775.3	2906.3	3317.7	3767.7	3589.4
57.5°	1913.0	1983.0	2079.5	2295.0	2555.7	2848.8	3087.7	3199.1	3488.7	3956.9	3791.4
60°	1399.2	1493.0	1613.0	1933.6	2314.3	2793.2	3353.5	3648.7	3731.8	4202.1	4054.5
62.5°	895.5	953.4	1063.7	1365.8	1803.3	2508.8	3434.9	4210.7	4143.8	4604.1	4449.0
65°	613.1	650.3	751.3	921.0	1165.8	1867.4	3217.0	4632.1	4798.3	5241.3	5123.4
67.5°	445.5	473.8	560.0	708.6	759.6	1105.1	2496.4	4612.8	5434.4	5897.8	5714.4
70°	324.8	344.8	417.2	560.0	584.4	614.8	1512.3	3921.1	5420.6	6072.3	5852.7
72.5°	240.7	254.5	303.1	434.5	473.1	415.1	748.6	2849.8	4657.9	5492.4	5316.2
75°	174.1	184.5	220.3	332.4	378.6	316.2	373.4	1665.4	3249.1	3863.5	3894.5
77.5°	133.1	141.0	164.5	243.4	303.1	237.2	231.7	766.2	1540.6	1548.2	1635.1
80°	106.9	112.1	124.8	171.4	232.4	177.6	151.0	309.3	486.9	412.0	432.4
82.5°	78.6	87.2	105.5	120.3	166.2	122.4	92.1	156.2	185.2	159.3	160.7
85°	44.8	50.7	63.8	86.2	106.2	74.8	52.8	69.3	86.2	70.7	63.1
87.5°	15.9	20.7	22.4	33.8	46.2	31.0	20.3	20.0	28.3	21.0	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°	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7	952.7
2.5°	959.6	957.9	951.0	941.7	932.0	922.7	919.6	913.0	908.6	906.1	908.9
5°	978.9	973.4	957.2	936.5	914.8	891.3	874.8	859.6	848.6	838.2	842.4
7.5°	1006.5	996.8	968.9	932.7	894.1	855.1	826.1	804.1	789.3	779.6	781.7
10°	1038.5	1023.7	981.0	926.8	867.2	811.3	777.2	758.2	748.9	743.7	745.1
12.5°	1075.4	1054.4	993.4	913.4	826.1	762.4	738.9	733.4	733.7	734.1	734.8
15°	1121.0	1091.6	1003.4	884.1	772.7	724.8	720.6	729.6	738.9	743.4	743.0
17.5°	1172.3	1131.0	1005.1	835.8	720.3	700.6	713.7	733.0	747.2	753.4	754.8
20°	1227.5	1170.9	992.7	767.5	677.2	681.0	704.4	729.3	744.8	752.7	754.8
22.5°	1290.6	1213.7	963.0	695.8	642.0	659.6	687.2	711.3	727.5	735.5	737.5
25°	1362.7	1261.6	916.5	635.5	611.7	635.5	663.1	683.1	696.2	703.4	705.5
27.5°	1442.7	1311.6	854.4	587.5	585.1	610.6	633.4	648.9	655.8	661.3	663.4
30°	1523.0	1357.1	779.3	551.3	562.0	586.2	602.4	609.3	611.3	612.4	614.8
32.5°	1609.9	1396.4	700.3	521.3	540.0	562.4	572.0	575.1	565.5	558.9	561.0
35°	1715.0	1438.5	623.1	497.5	518.2	537.5	540.6	537.9	526.5	513.1	513.8
37.5°	1845.0	1490.9	561.3	480.7	497.9	510.7	506.9	506.2	507.2	491.3	492.4
40°	2004.3	1559.2	516.2	467.6	481.3	484.1	473.4	479.3	484.4	460.3	461.0
42.5°	2181.2	1641.6	487.6	458.6	467.6	461.0	444.4	451.0	450.3	418.6	418.2
45°	2361.5	1731.3	477.6	452.0	454.8	441.7	423.4	425.1	410.7	382.0	383.1
47.5°	2540.8	1827.5	483.8	446.5	438.9	424.1	410.0	402.4	381.0	359.6	359.6
50°	2716.7	1928.5	506.5	435.5	417.2	408.6	398.2	384.8	362.0	343.8	342.4
52.5°	2879.8	2030.2	532.0	417.2	390.0	395.1	388.6	373.1	350.7	332.0	332.4
55°	3034.3	2131.9	542.0	392.0	364.5	383.4	379.6	351.0	324.1	308.9	307.6
57.5°	3202.5	2254.3	531.0	360.0	343.8	370.0	355.5	323.8	308.3	296.9	295.8
60°	3435.6	2446.4	507.2	320.3	324.1	350.0	325.1	312.0	295.2	282.4	281.7
62.5°	3822.8	2804.6	468.9	281.0	301.0	320.3	310.7	297.6	280.3	267.9	267.9
65°	4395.2	3302.5	396.9	250.3	275.2	291.4	295.2	282.0	264.1	251.0	251.7
67.5°	4877.9	3614.9	300.3	224.8	248.6	267.9	278.6	265.8	246.9	234.1	234.5
70°	4851.4	3388.0	229.3	199.6	225.2	244.8	258.6	248.6	228.3	216.2	217.2
72.5°	4309.0	2834.3	185.5	174.1	201.4	220.7	237.2	229.6	209.0	197.2	197.2
75°	3165.6	2011.9	148.3	148.3	171.7	195.5	213.8	209.0	190.0	181.7	179.3
77.5°	1334.4	844.1	116.2	123.1	142.7	167.9	190.7	192.4	175.8	186.2	169.0
80°	354.8	232.7	88.6	96.9	112.1	138.6	165.8	165.2	147.2	137.6	127.9
82.5°	135.2	91.7	63.1	68.3	81.0	106.2	131.4	135.5	117.6	101.7	101.7
85°	52.1	39.3	39.0	41.0	47.2	70.3	99.3	102.8	88.6	75.2	77.6
87.5°	13.4	11.7	14.5	13.8	21.7	37.6	56.9	59.0	54.1	31.4	44.8
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)