

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: P882466

Luminaire Tested: **NAV-SB2B-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7071 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

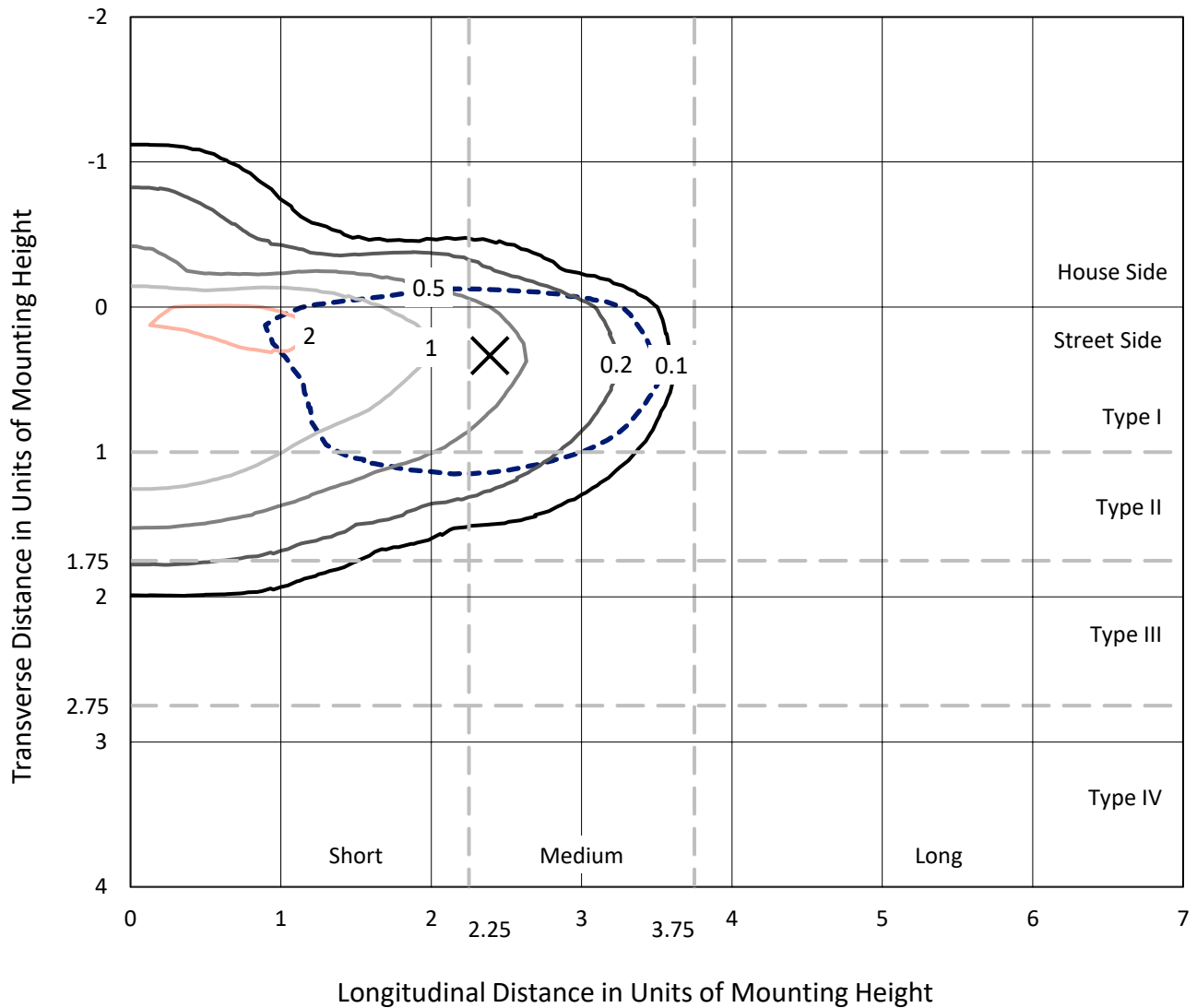
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

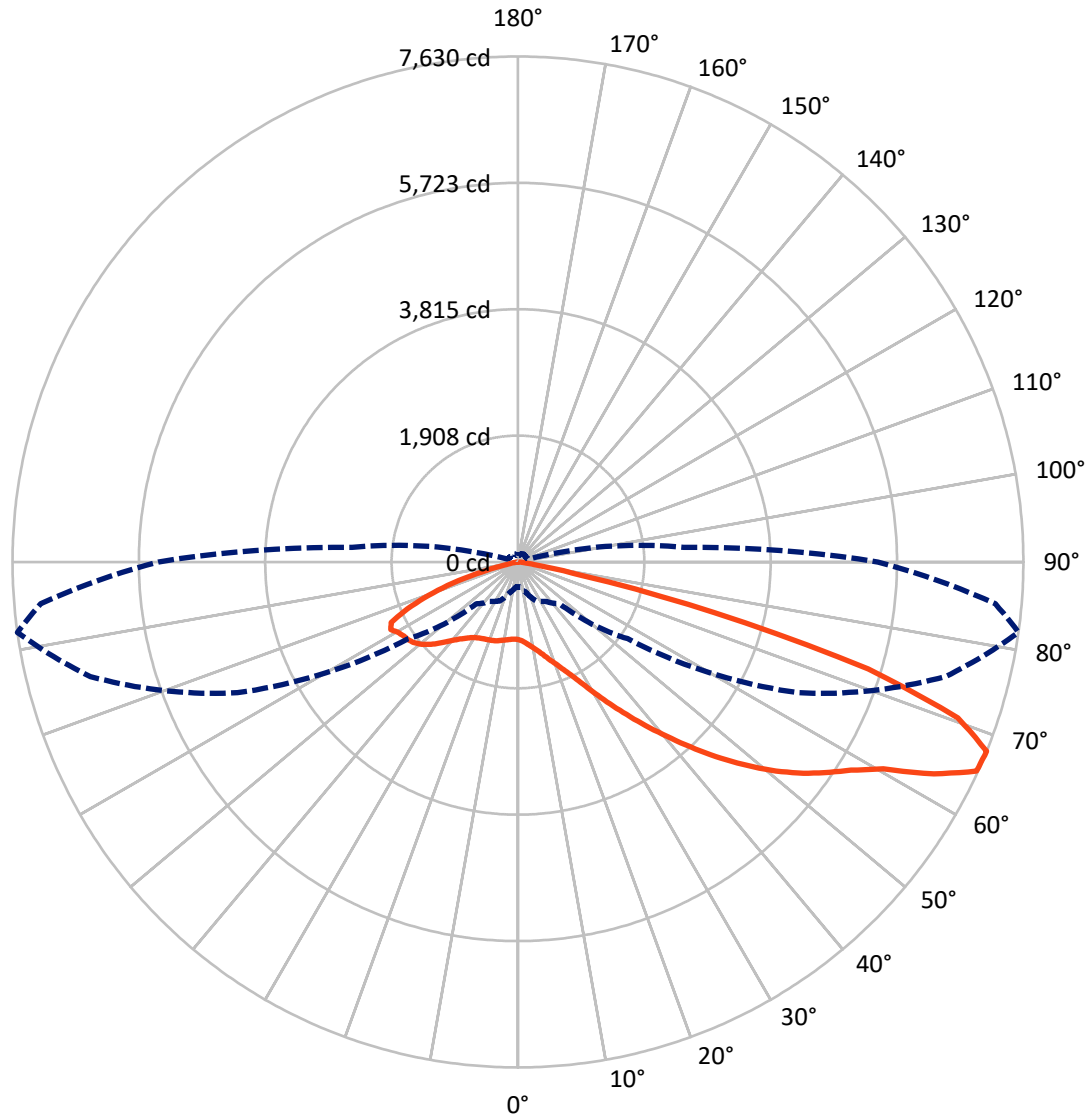
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1280.8	0.0	1280.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5790.2	0.0	5790.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	7071.0	0.0	7071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	1.5
10°-20°	271.2	3.8
20°-30°	434.4	6.1
30°-40°	768.1	10.9
40°-50°	1345.8	19.0
50°-60°	1794.9	25.4
60°-70°	1671.0	23.6
70°-80°	641.3	9.1
80°-90°	39.8	0.6
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°	7071.0	100.0
0°-180°	7071.0	100.0

Coefficient of Utilization



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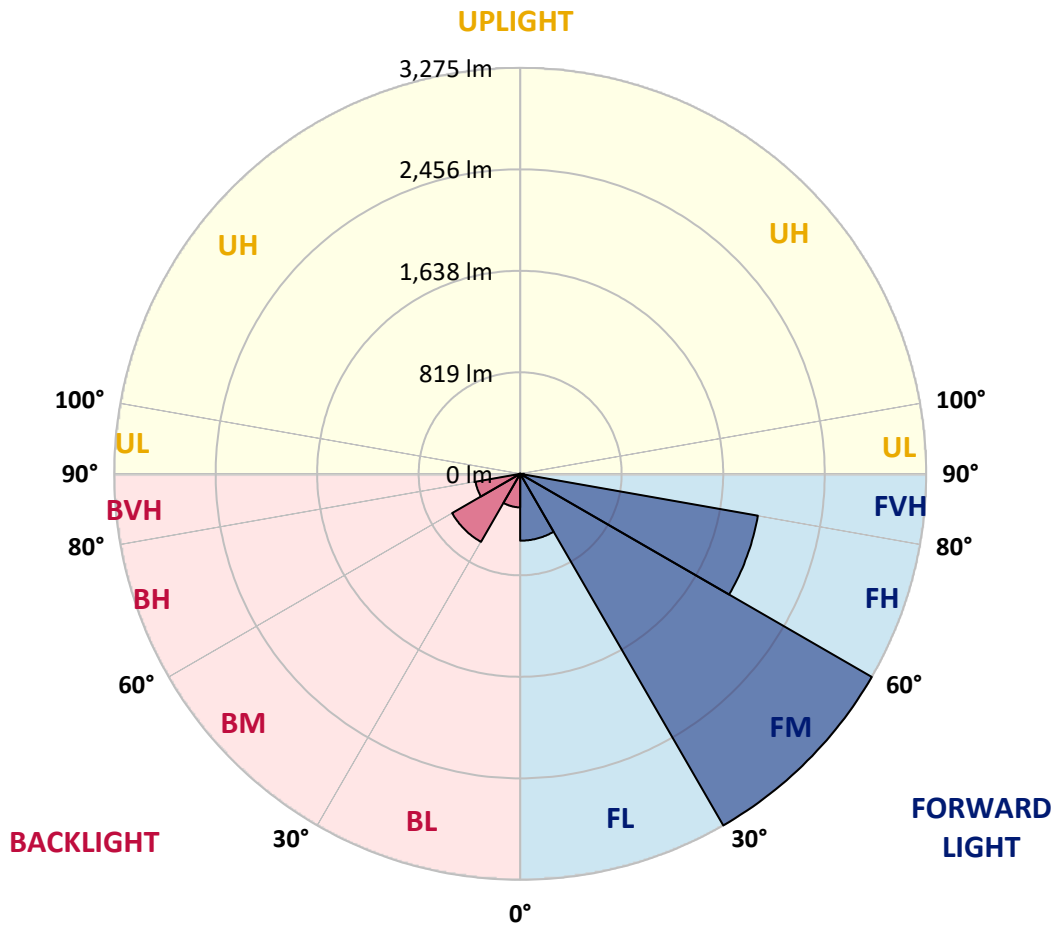
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	539.4	7.6			
FM (30°-60°)	3275.0	46.3			
FH (60°-80°)	1946.8	27.5			G2/5000
FVH (80°-90°)	29.0	0.4			G1/100
BL (0°-30°)	270.5	3.8	B1/500		
BM (30°-60°)	633.9	9.0	B1/1000		
BH (60°-80°)	365.6	5.2	B1/500		G1/500
BVH (80°-90°)	10.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4
2.5°	1238.1	1245.2	1241.2	1239.1	1235.6	1230.5	1226.4	1213.7	1200.4	1191.8	1188.7
5°	1263.1	1270.2	1269.7	1271.7	1274.3	1275.8	1274.8	1260.5	1241.7	1226.9	1218.3
7.5°	1241.7	1249.8	1256.4	1266.6	1284.4	1303.3	1312.4	1309.4	1290.0	1269.7	1259.0
10°	1181.1	1189.8	1205.5	1229.5	1267.1	1307.9	1342.0	1357.8	1345.5	1323.1	1308.4
12.5°	1070.1	1078.8	1109.8	1161.8	1224.9	1295.6	1360.8	1403.1	1406.1	1383.7	1366.4
15°	945.4	954.0	987.1	1052.3	1148.5	1262.0	1371.0	1450.9	1477.9	1458.6	1437.7
17.5°	868.0	875.6	900.6	953.0	1053.3	1194.8	1367.4	1501.8	1563.4	1548.2	1523.2
20°	844.6	851.2	862.9	899.6	983.1	1125.1	1344.0	1549.7	1655.6	1646.9	1618.9
22.5°	869.5	875.6	879.2	895.5	947.9	1079.3	1314.5	1598.6	1762.5	1763.5	1729.4
25°	927.1	933.2	929.1	939.3	962.2	1065.0	1303.3	1656.1	1896.9	1908.1	1869.4
27.5°	1021.8	1022.3	1012.6	1012.1	1015.6	1086.4	1315.0	1717.7	2066.4	2087.3	2039.4
30°	1211.6	1204.0	1166.8	1126.6	1108.3	1150.6	1347.6	1790.5	2266.5	2303.7	2243.6
32.5°	1504.4	1493.2	1425.0	1328.7	1232.0	1253.9	1406.1	1873.5	2484.4	2551.6	2478.3
35°	1822.0	1819.0	1747.7	1604.7	1435.6	1401.0	1501.3	1982.4	2722.1	2829.0	2742.0
37.5°	2117.3	2115.8	2075.1	1906.6	1700.9	1606.2	1654.0	2125.0	2976.7	3131.4	3028.6
40°	2387.1	2391.7	2351.0	2200.3	1993.1	1869.4	1861.8	2301.1	3259.7	3460.8	3338.6
42.5°	2620.3	2625.4	2584.2	2472.7	2281.8	2160.6	2116.8	2517.0	3536.2	3814.6	3670.1
45°	2778.6	2810.2	2804.1	2715.0	2578.1	2452.3	2423.3	2787.8	3851.3	4189.8	4020.3
47.5°	2823.4	2852.5	2898.3	2910.5	2827.0	2703.3	2737.9	3114.1	4170.0	4565.6	4372.6
50°	2713.0	2739.9	2835.1	2961.9	3019.9	2981.8	3043.9	3463.9	4496.3	4940.2	4718.3
52.5°	2495.1	2522.6	2642.7	2843.3	3080.0	3200.2	3350.9	3808.5	4812.5	5295.1	5045.6
55°	2179.9	2209.0	2363.2	2590.3	2965.5	3290.3	3606.9	4152.7	5102.1	5614.3	5340.9
57.5°	1751.3	1772.7	1933.0	2250.7	2677.3	3200.7	3795.8	4528.4	5375.0	5927.9	5633.6
60°	1141.4	1160.2	1346.6	1700.9	2199.8	2901.3	3833.5	4947.4	5737.5	6335.7	6028.2
62.5°	759.1	771.8	882.3	1142.4	1549.2	2326.6	3613.0	5281.9	6269.0	7045.4	6704.8
65°	520.8	533.5	644.0	825.2	1000.9	1539.0	2979.2	5237.6	6750.6	7608.9	7206.2
67.5°	371.6	382.3	476.0	647.1	724.4	894.0	2019.6	4671.4	6681.4	7630.3	7233.2
70°	266.3	272.4	349.7	504.0	575.8	537.1	1123.1	3572.8	5850.0	7045.9	6682.4
72.5°	186.3	188.4	242.8	383.9	463.8	392.0	534.5	2382.1	4424.5	5530.3	5180.5
75°	126.3	128.8	163.4	281.5	372.1	299.3	283.1	1277.3	2597.4	3061.2	2744.0
77.5°	77.4	78.4	105.4	192.4	278.5	228.1	182.3	541.2	1005.0	986.6	841.0
80°	43.8	43.8	67.2	119.6	189.9	147.1	127.8	230.1	318.2	279.5	246.4
82.5°	24.4	24.9	48.9	74.3	125.7	87.1	70.3	106.4	137.5	121.7	105.9
85°	10.2	11.2	30.0	35.1	60.1	43.3	28.5	44.8	50.9	45.3	33.1
87.5°	1.0	1.5	9.2	6.6	7.1	8.7	4.1	8.7	7.1	7.1	5.1
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°	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4	1171.4
2.5°	1179.1	1171.4	1152.1	1129.7	1100.2	1085.9	1066.6	1053.3	1042.1	1043.1	1033.0
5°	1202.0	1182.6	1139.4	1085.4	1018.2	970.3	919.4	884.3	855.8	849.7	835.9
7.5°	1233.5	1203.0	1127.1	1029.9	916.4	830.3	753.5	704.1	668.9	657.7	646.5
10°	1274.3	1230.0	1111.4	960.2	796.7	687.3	604.8	566.1	542.2	534.0	527.9
12.5°	1321.6	1261.0	1090.5	875.1	673.5	568.1	515.7	496.4	488.7	486.2	484.7
15°	1381.2	1299.7	1058.9	774.3	569.2	495.3	472.9	470.4	471.4	470.4	469.9
17.5°	1451.9	1342.0	1007.5	670.5	498.9	458.2	450.0	452.1	454.6	454.1	453.1
20°	1529.3	1383.7	941.8	578.3	451.1	431.7	427.1	429.2	431.2	430.2	429.7
22.5°	1617.4	1428.5	869.0	506.5	419.0	407.3	402.2	402.7	402.7	400.7	399.6
25°	1722.8	1477.9	792.7	455.6	394.5	385.4	379.3	377.2	374.2	368.1	367.1
27.5°	1848.5	1530.3	719.3	420.0	375.2	366.5	359.4	354.3	346.7	336.5	335.5
30°	1990.0	1594.0	657.2	397.6	359.9	351.3	343.1	335.5	324.3	311.6	310.5
32.5°	2156.5	1662.2	611.9	382.8	346.2	337.0	327.3	318.2	306.0	293.2	293.7
35°	2355.1	1744.7	585.5	372.7	335.5	323.3	312.6	302.4	293.2	282.0	281.0
37.5°	2570.4	1832.2	577.3	367.6	328.4	309.5	297.3	290.2	289.2	282.5	282.0
40°	2806.1	1936.1	583.4	364.5	320.7	296.3	283.1	281.5	284.1	272.4	272.9
42.5°	3055.6	2059.3	593.6	360.9	310.0	283.1	270.3	270.3	268.3	252.0	252.0
45°	3325.4	2201.3	603.8	352.3	297.3	269.8	260.1	256.6	247.9	232.1	231.6
47.5°	3597.3	2345.9	611.4	336.5	282.0	258.6	250.0	241.8	229.1	214.8	214.3
50°	3855.4	2475.7	603.3	313.1	264.7	247.9	238.8	227.6	213.8	204.1	202.6
52.5°	4086.0	2588.2	568.7	285.6	246.4	236.7	228.6	216.9	205.7	195.5	194.5
55°	4286.6	2679.4	507.6	259.6	230.1	227.1	218.9	204.1	188.9	180.2	179.2
57.5°	4479.0	2748.6	431.2	238.3	215.3	216.4	204.1	190.9	176.7	167.5	166.5
60°	4735.1	2841.3	353.8	218.4	199.6	202.6	189.4	179.7	161.9	150.2	148.7
62.5°	5144.4	2985.3	281.0	194.0	181.2	182.3	176.7	164.9	143.6	129.8	128.8
65°	5469.2	2932.4	221.5	167.5	160.4	161.9	161.9	149.2	126.3	110.5	108.9
67.5°	5432.5	2510.9	176.7	141.5	140.5	141.5	145.1	134.4	112.0	99.3	97.2
70°	5004.4	1997.2	141.5	117.6	122.2	119.6	129.8	122.7	100.8	88.1	86.5
72.5°	4083.4	1438.7	107.9	97.2	93.7	97.7	117.1	110.5	84.0	69.7	68.2
75°	2386.1	767.7	80.4	76.9	67.7	81.5	103.9	94.2	64.1	51.4	49.9
77.5°	776.9	267.8	59.1	56.5	50.4	65.7	88.6	79.4	52.4	40.7	39.2
80°	208.2	80.9	40.2	37.2	32.6	48.9	70.3	63.1	37.7	26.5	26.0
82.5°	83.5	34.1	23.4	20.9	17.8	33.6	55.5	50.9	28.0	16.8	16.8
85°	27.0	11.2	8.7	6.6	8.1	20.9	33.1	34.6	19.9	8.7	6.6
87.5°	3.6	1.5	1.5	2.0	1.5	3.6	10.2	9.7	5.6	1.0	0.0
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)