

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: P959718

Luminaire Tested: **NAV-SB1B-722-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-722-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4850.3 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

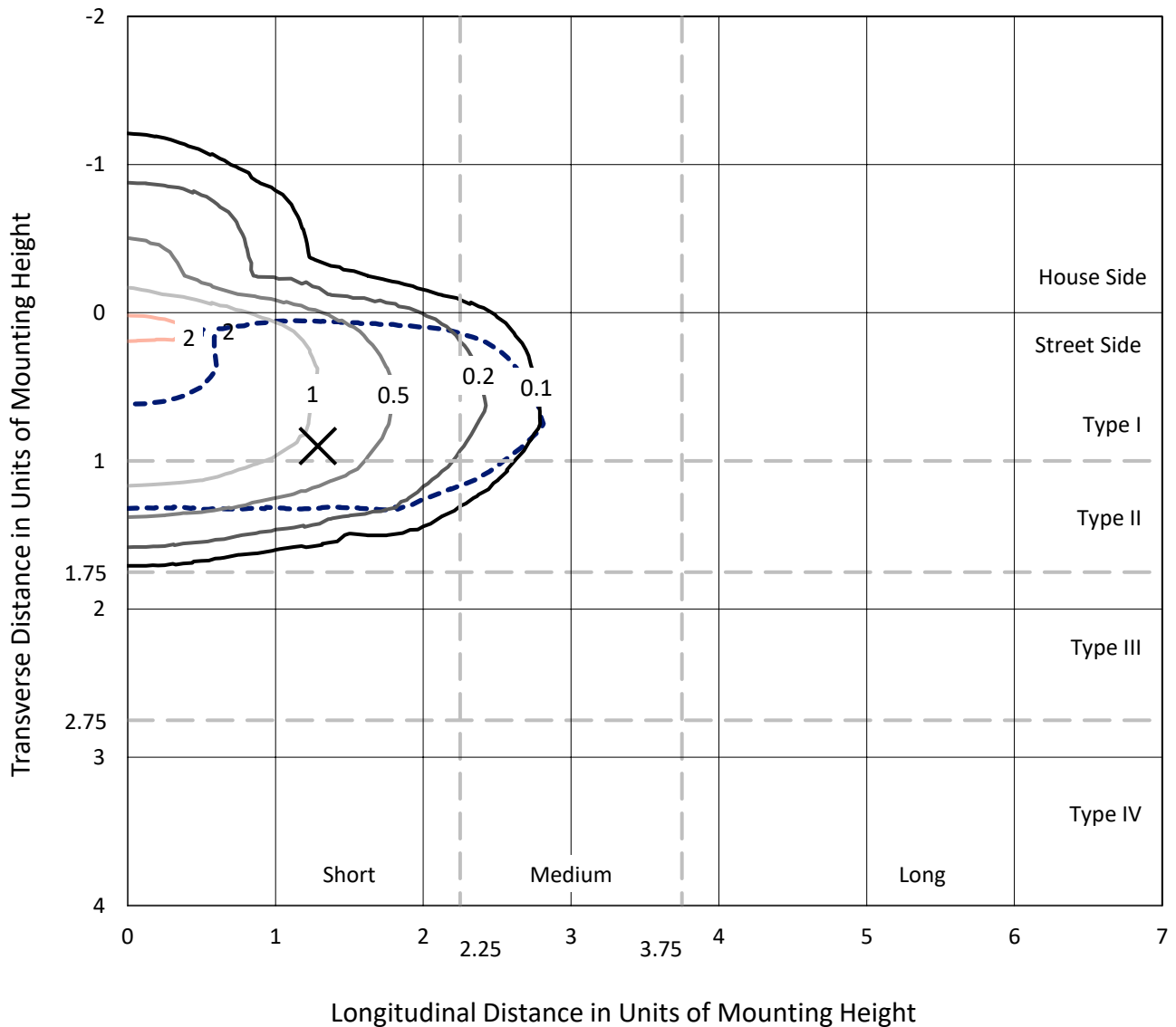
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

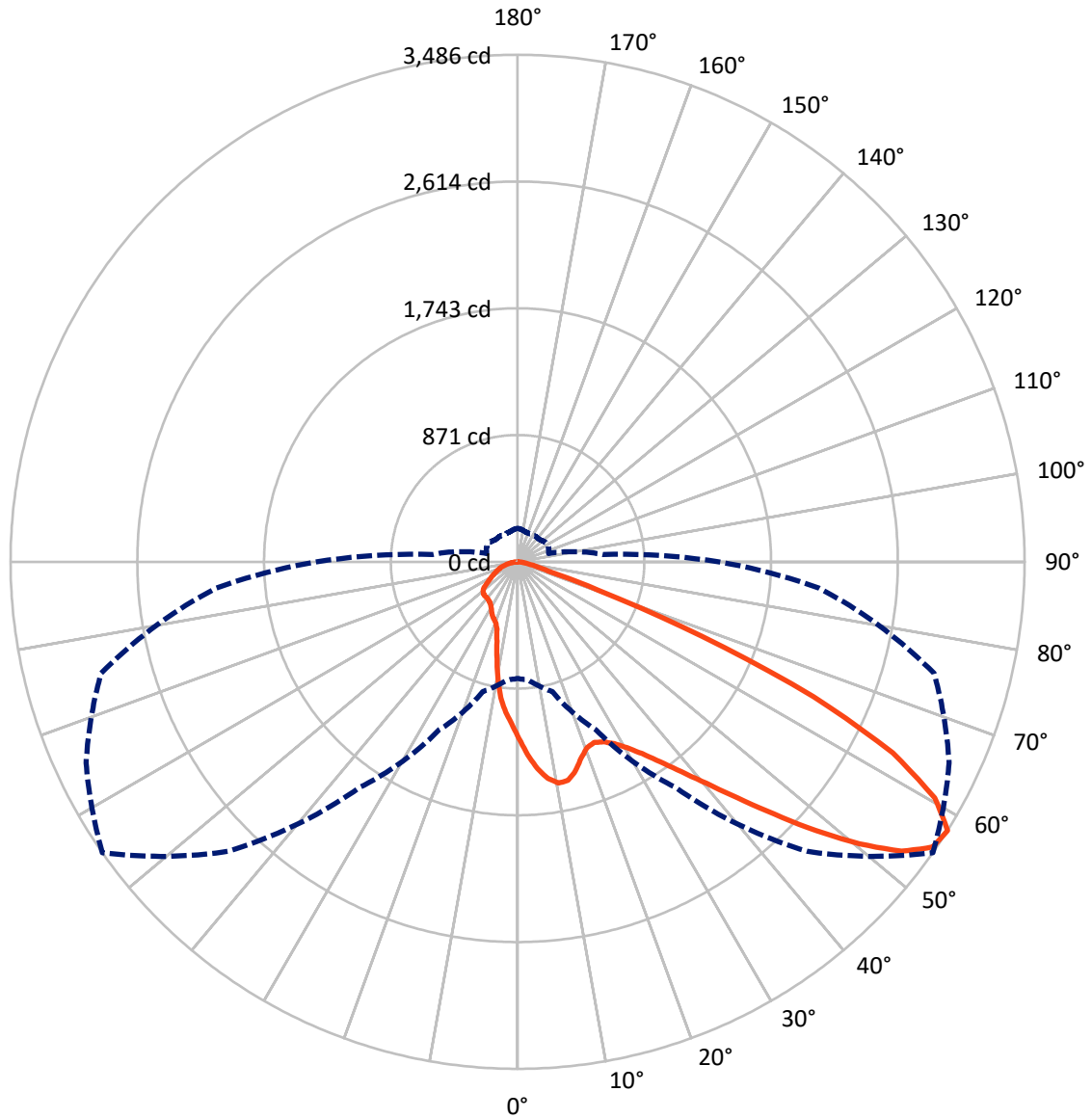
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	877.6	0.0	877.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3972.7	0.0	3972.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	4850.3	0.0	4850.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	2.3
10°-20°	284.6	5.9
20°-30°	454.2	9.4
30°-40°	719.1	14.8
40°-50°	1100.7	22.7
50°-60°	1179.0	24.3
60°-70°	741.7	15.3
70°-80°	219.3	4.5
80°-90°	38.8	0.8
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°	4850.3	100.0
0°-180°	4850.3	100.0

Coefficient of Utilization

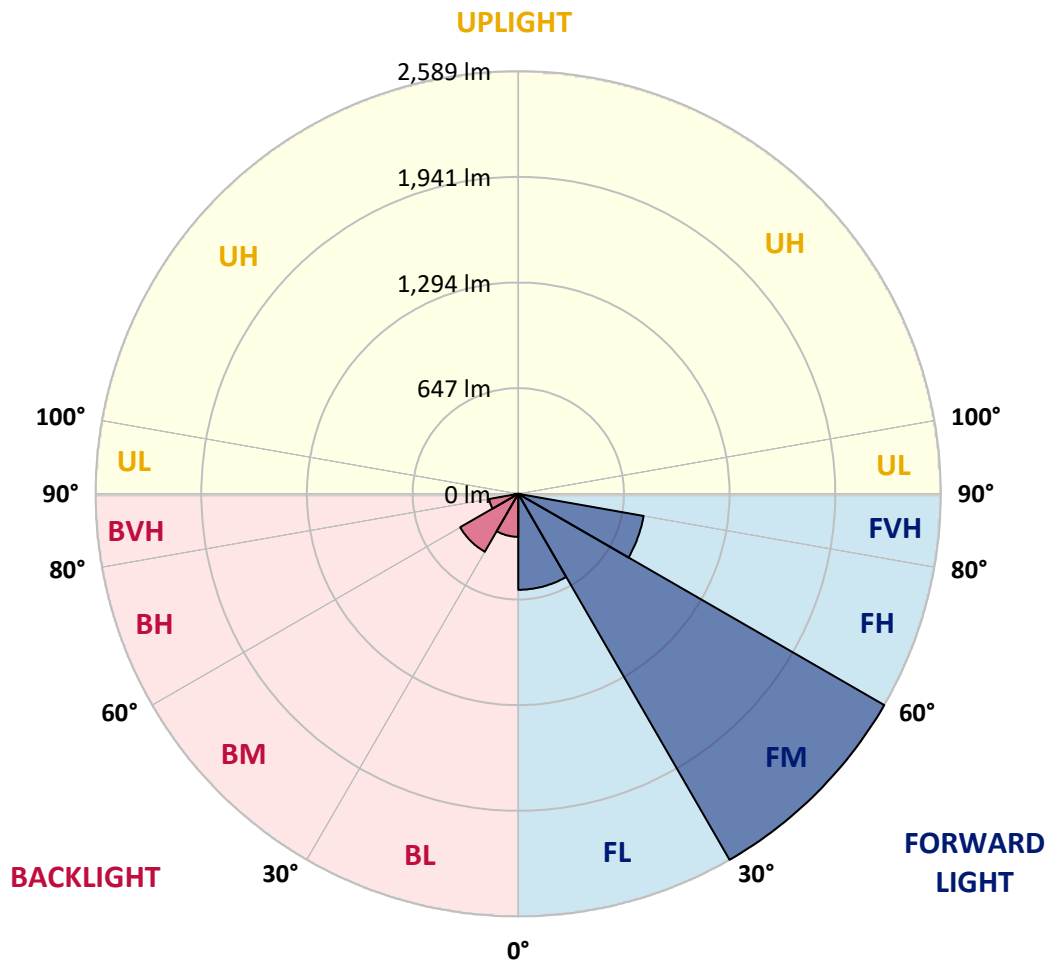


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	587.9	12.1			
FM (30°-60°)	2588.6	53.4			
FH (60°-80°)	779.8	16.1			G1/1800
FVH (80°-90°)	16.4	0.3			G1/100
BL (0°-30°)	263.8	5.4	B1/500		
BM (30°-60°)	410.2	8.5	B1/1000		
BH (60°-80°)	181.2	3.7	B1/500		G1/500
BVH (80°-90°)	22.4	0.5			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3
2.5°	1394.3	1393.4	1398.8	1380.1	1367.2	1349.9	1327.2	1298.1	1266.7	1233.6	1219.3
5°	1520.0	1511.2	1517.0	1503.0	1488.9	1462.8	1429.0	1381.6	1323.7	1257.7	1222.6
7.5°	1500.2	1494.1	1508.9	1521.5	1532.0	1528.8	1503.9	1454.3	1379.5	1283.8	1232.9
10°	1340.5	1333.6	1354.5	1397.9	1461.5	1517.0	1547.0	1516.2	1436.7	1312.4	1242.9
12.5°	1199.6	1196.3	1210.0	1245.2	1315.9	1422.2	1541.5	1570.4	1496.2	1346.2	1256.4
15°	1139.4	1135.4	1144.1	1161.9	1207.0	1306.1	1491.4	1607.5	1554.6	1385.3	1278.0
17.5°	1126.1	1121.6	1125.3	1134.6	1163.7	1239.1	1415.6	1625.8	1615.5	1429.0	1296.1
20°	1150.7	1146.9	1147.4	1146.9	1167.2	1227.1	1363.0	1618.8	1668.7	1469.0	1313.6
22.5°	1210.0	1203.8	1204.1	1190.7	1201.8	1248.1	1349.2	1599.9	1716.1	1504.2	1326.9
25°	1306.9	1295.6	1297.9	1263.9	1261.0	1295.3	1370.8	1585.4	1763.2	1532.3	1329.4
27.5°	1439.2	1426.5	1419.7	1369.3	1345.2	1362.2	1414.7	1590.4	1807.8	1556.6	1323.2
30°	1604.7	1589.2	1575.4	1503.9	1460.3	1454.1	1482.9	1623.5	1860.5	1582.2	1312.4
32.5°	1807.6	1789.5	1764.4	1669.6	1608.2	1575.4	1571.1	1682.4	1922.2	1614.8	1306.9
35°	2049.1	2025.5	1989.8	1867.2	1789.5	1722.3	1687.5	1767.4	2006.6	1663.9	1313.1
37.5°	2297.7	2271.2	2238.6	2092.6	1997.1	1898.1	1829.4	1882.8	2119.2	1730.6	1329.6
40°	2527.2	2497.3	2467.0	2337.1	2234.6	2115.2	2003.2	2028.7	2256.8	1810.4	1357.7
42.5°	2662.5	2640.5	2629.0	2558.8	2479.6	2358.4	2219.3	2201.7	2411.6	1902.1	1389.8
45°	2656.6	2647.6	2683.1	2712.3	2693.4	2626.3	2472.5	2393.1	2566.8	1981.6	1419.4
47.5°	2514.6	2520.7	2600.1	2763.6	2835.6	2870.7	2760.8	2580.8	2701.7	2041.0	1432.7
50°	2128.5	2133.5	2317.5	2670.1	2872.3	3070.1	3047.0	2764.1	2806.2	2077.4	1429.7
52.5°	1822.9	1826.1	1905.1	2392.8	2751.3	3170.3	3304.7	2936.9	2882.7	2087.4	1412.9
55°	1373.1	1384.4	1472.8	1877.3	2436.9	3090.9	3461.7	3114.9	2931.1	2088.4	1395.3
57.5°	802.1	814.4	923.7	1274.3	1894.1	2813.8	3485.5	3272.9	2964.0	2080.3	1384.9
60°	392.9	398.2	445.8	669.7	1168.0	2280.0	3293.9	3349.4	2982.2	2076.1	1384.4
62.5°	264.8	264.0	266.0	330.5	575.4	1464.8	2894.8	3215.4	2972.5	2059.8	1379.3
65°	227.7	224.9	217.4	232.0	298.2	669.9	2236.5	2815.8	2898.0	2018.9	1345.0
67.5°	196.8	197.1	197.3	192.8	212.9	309.1	1366.7	2218.0	2630.8	1825.4	1212.6
70°	163.0	165.2	166.3	166.3	173.5	202.8	583.4	1520.2	2075.1	1431.2	976.6
72.5°	148.4	143.7	144.2	141.7	141.7	154.5	234.9	861.8	1307.4	805.1	596.0
75°	121.2	124.1	124.6	122.9	117.1	117.9	139.4	361.5	559.4	333.9	294.6
77.5°	104.6	104.6	105.6	104.3	99.8	88.3	93.1	140.1	190.3	136.9	147.2
80°	83.9	83.7	88.0	90.5	83.5	65.2	59.4	77.5	84.5	60.2	76.5
82.5°	40.9	43.4	60.5	69.0	63.4	47.2	36.4	48.2	45.1	26.5	34.3
85°	23.8	22.5	27.1	38.3	36.4	26.0	17.5	25.1	23.6	13.5	13.8
87.5°	7.5	7.0	5.5	13.0	10.6	7.3	4.7	7.3	6.6	3.0	3.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3	1215.3
2.5°	1201.5	1172.0	1142.6	1115.8	1099.5	1089.0	1078.4	1066.6	1062.1	1055.3
5°	1189.5	1132.3	1081.5	1037.5	997.7	966.4	934.8	909.2	897.6	905.4
7.5°	1182.4	1099.7	1021.2	940.7	863.3	801.3	747.4	709.6	692.5	696.8
10°	1176.2	1062.9	943.3	816.1	704.8	628.1	573.0	544.1	533.3	535.6
12.5°	1170.4	1021.5	849.2	682.0	563.6	513.0	497.2	497.4	499.5	501.0
15°	1169.4	971.6	744.2	564.7	487.4	484.2	501.2	512.0	517.7	519.6
17.5°	1168.0	911.9	637.1	484.7	468.8	491.0	506.8	513.7	518.2	518.5
20°	1161.9	836.2	538.3	446.6	464.8	483.9	493.7	499.2	503.0	504.2
22.5°	1143.4	751.9	461.4	429.5	448.8	464.1	475.6	482.0	484.2	485.6
25°	1110.0	657.6	408.2	413.2	426.5	445.8	455.1	456.3	455.6	457.9
27.5°	1066.4	556.7	375.2	391.1	408.2	424.8	429.8	429.0	427.5	430.0
30°	1013.7	465.9	354.0	366.3	389.6	404.7	409.2	407.4	404.5	407.2
32.5°	958.1	391.7	336.7	349.0	374.3	389.2	393.7	391.9	389.6	391.9
35°	906.2	339.8	320.7	337.5	362.3	376.9	382.6	382.8	382.8	385.6
37.5°	858.5	309.4	307.4	330.3	354.0	367.1	375.4	375.9	365.1	365.8
40°	814.4	296.6	301.3	325.4	346.0	358.5	359.1	331.0	311.2	310.7
42.5°	778.3	294.1	303.1	324.9	340.3	340.7	305.4	283.6	278.1	278.3
45°	744.5	293.4	307.2	324.9	331.7	294.4	270.5	264.8	265.3	267.3
47.5°	706.5	290.4	307.9	320.4	307.2	261.8	254.7	252.3	251.2	251.7
50°	665.2	279.6	298.4	311.4	265.1	247.7	238.9	238.2	239.4	240.2
52.5°	621.6	262.0	282.1	295.1	245.7	235.4	225.7	227.4	233.0	234.7
55°	593.0	241.5	260.6	262.5	232.2	223.9	215.7	219.7	229.9	233.2
57.5°	585.5	219.7	236.0	233.7	214.8	213.9	208.9	212.4	225.4	230.2
60°	583.2	200.1	211.9	210.1	198.1	202.8	201.6	203.4	207.9	209.4
62.5°	565.7	184.5	190.3	187.8	183.1	191.3	194.3	190.5	194.0	195.9
65°	521.0	172.0	169.2	167.5	169.5	177.0	183.1	175.5	178.8	183.8
67.5°	447.3	155.0	147.4	149.4	155.7	159.7	167.5	159.0	161.7	170.3
70°	361.8	133.4	126.6	132.4	138.4	146.7	147.9	142.2	148.7	158.3
72.5°	256.0	111.6	106.8	118.6	120.6	131.4	128.6	125.9	134.9	138.2
75°	177.5	90.0	87.2	96.2	103.5	112.9	110.8	114.1	133.1	134.7
77.5°	112.3	69.9	68.2	74.0	83.9	94.3	97.6	134.7	227.4	236.5
80°	65.2	52.2	50.1	54.6	63.4	73.0	94.0	165.2	150.0	148.2
82.5°	36.4	35.9	33.3	34.6	42.3	52.7	132.8	116.3	94.5	97.6
85°	17.0	21.0	18.0	17.3	23.8	61.7	88.8	66.4	44.2	43.2
87.5°	4.5	4.0	4.0	4.5	10.0	53.2	35.4	28.3	16.8	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)