

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: P882036

Luminaire Tested: **NAV-SB1D-722-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882036  
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-SB1D-722-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH  
HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

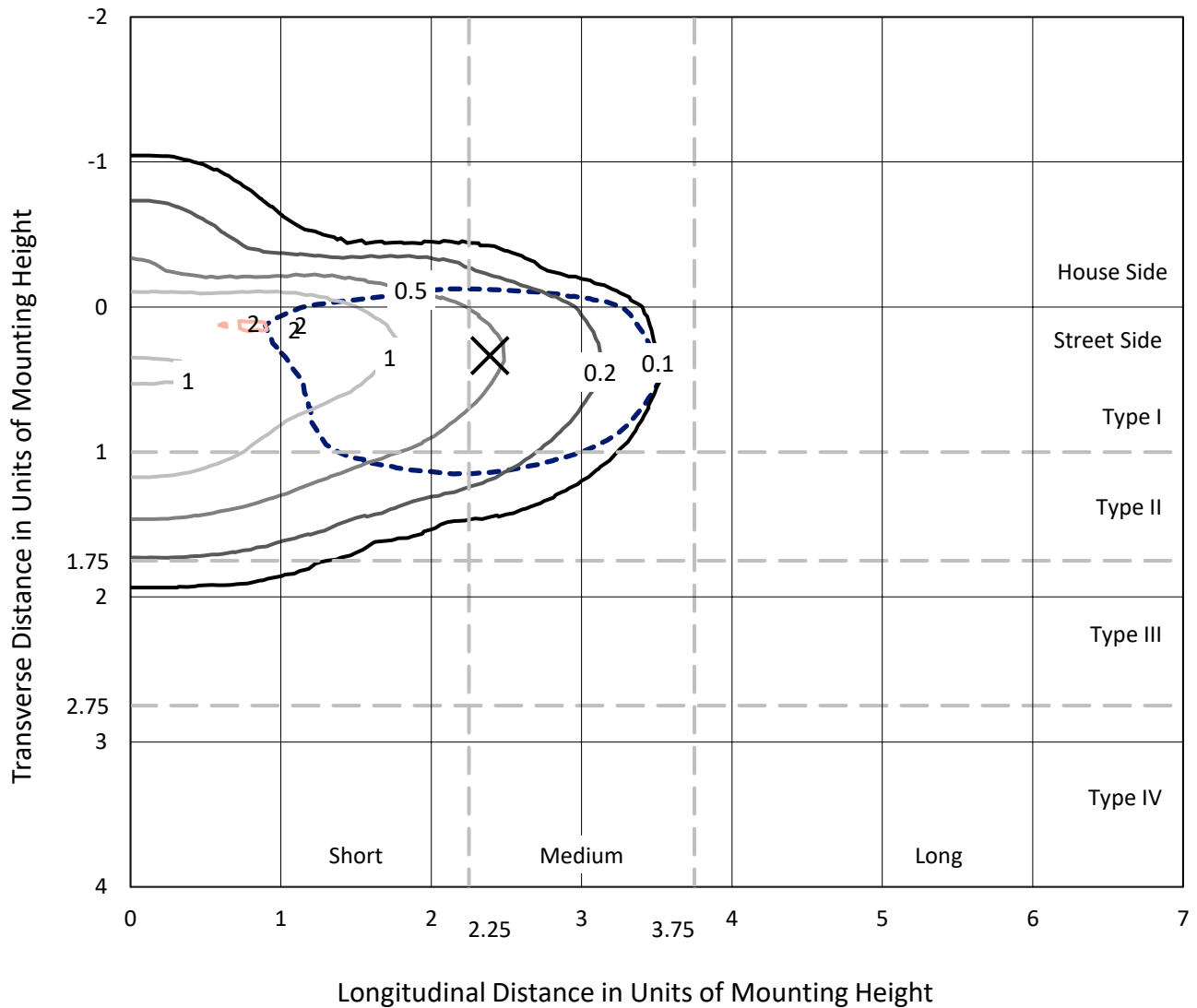
Lumens per Lamp: N/A  
Luminaire Lumens: 5926 lumens  
Efficiency: N/A  
Efficacy: 74.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.638  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.673  
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

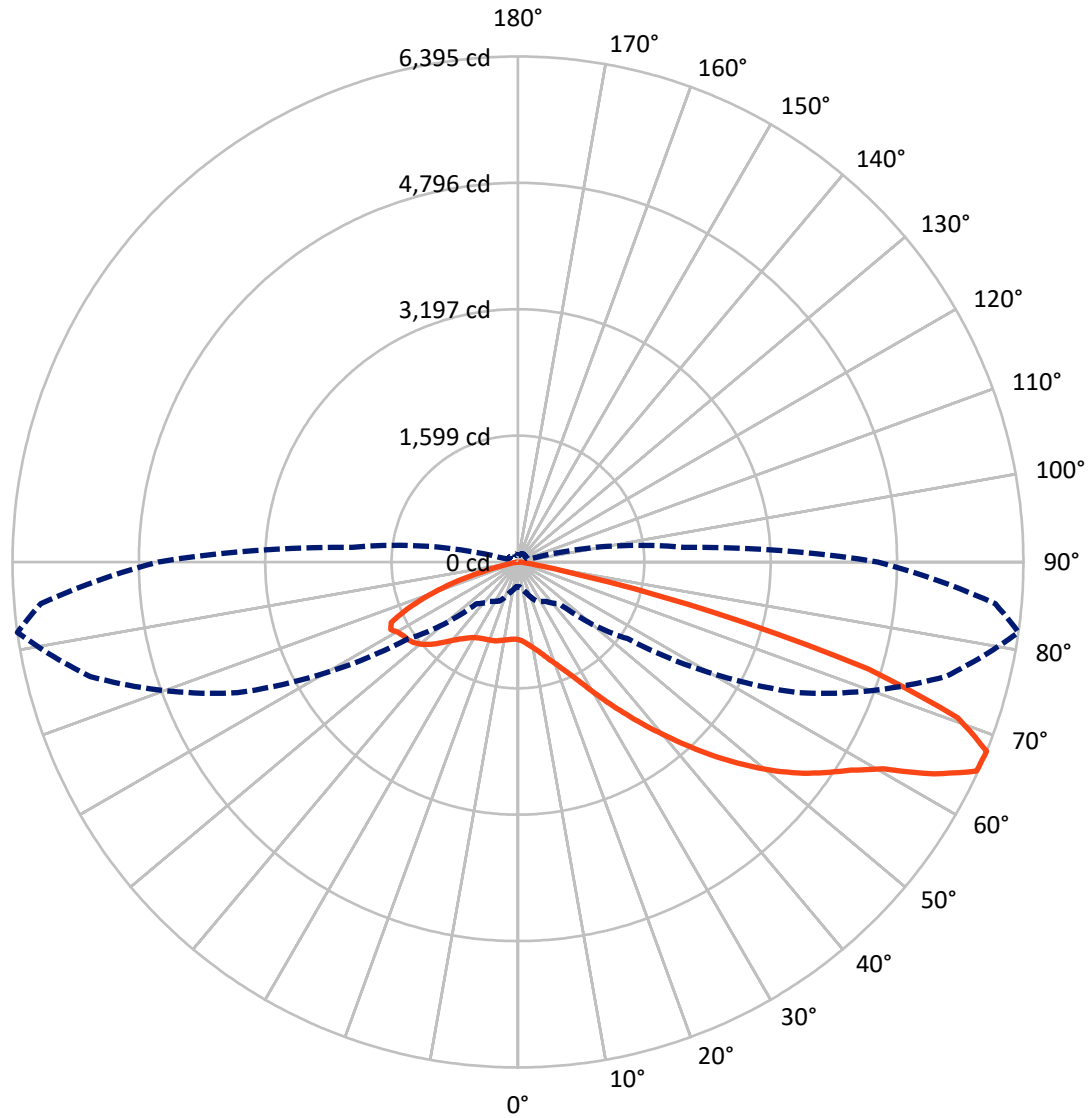
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type 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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CATALOG NUMBER: NAV-SB1D-722-U-T2-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1073.4	0.0	1073.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	4852.6	0.0	4852.6
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	5926.0	0.0	5926.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	1.5
10°-20°	227.3	3.8
20°-30°	364.0	6.1
30°-40°	643.7	10.9
40°-50°	1127.9	19.0
50°-60°	1504.3	25.4
60°-70°	1400.4	23.6
70°-80°	537.5	9.1
80°-90°	33.4	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°	5926.0	100.0
0°-180°	5926.0	100.0

**Coefficient of Utilization**



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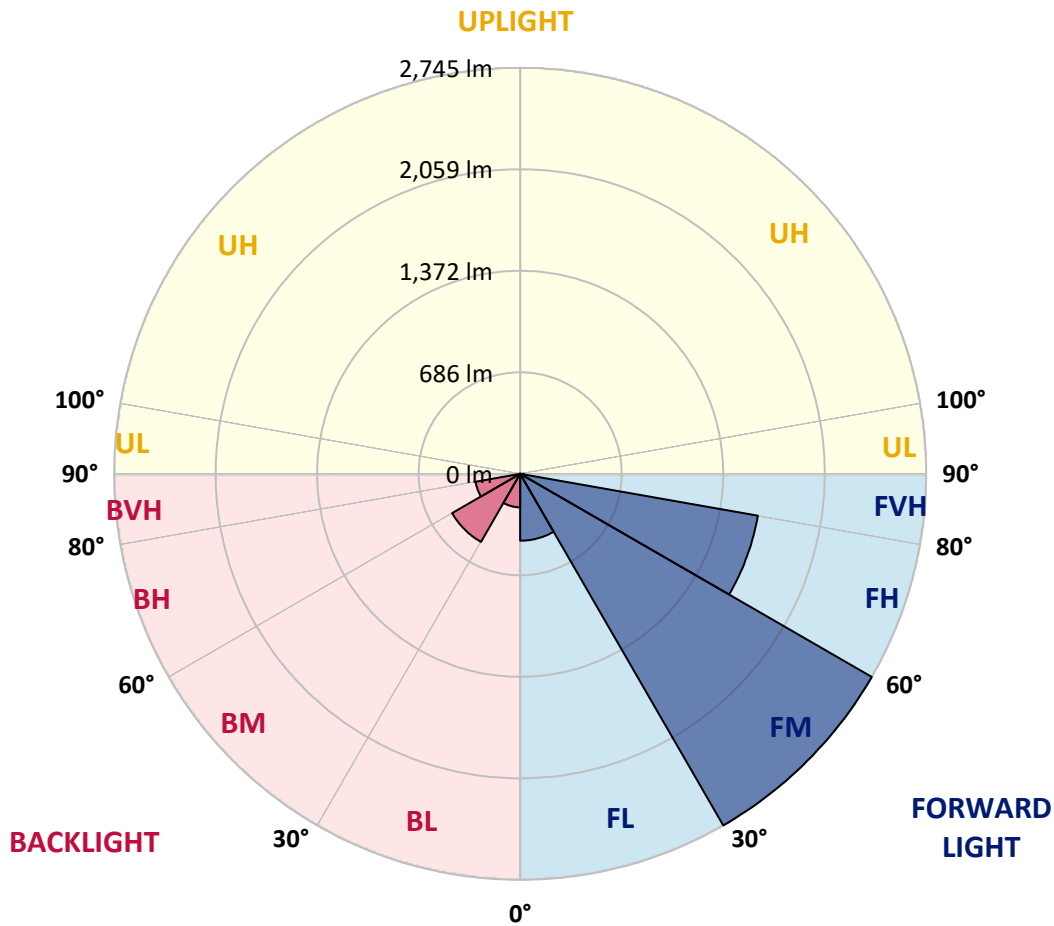
CATALOG NUMBER: NAV-SB1D-722-U-T2-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	452.1	7.6			
FM (30°-60°)	2744.7	46.3			
FH (60°-80°)	1631.5	27.5			G1/1800
FVH (80°-90°)	24.3	0.4			G1/100
BL (0°-30°)	226.7	3.8	B1/500		
BM (30°-60°)	531.2	9.0	B1/1000		
BH (60°-80°)	306.4	5.2	B1/500		G1/500
BVH (80°-90°)	9.1	0.2			G0/10
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



REPORT NUMBER: P882036

CATALOG NUMBER: NAV-SB1D-722-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7
2.5°	1037.6	1043.6	1040.2	1038.5	1035.5	1031.2	1027.8	1017.2	1006.1	998.8	996.2
5°	1058.5	1064.5	1064.1	1065.8	1067.9	1069.2	1068.3	1056.4	1040.6	1028.2	1021.0
7.5°	1040.6	1047.4	1053.0	1061.5	1076.5	1092.2	1099.9	1097.4	1081.1	1064.1	1055.1
10°	989.8	997.1	1010.3	1030.4	1061.9	1096.1	1124.7	1137.9	1127.7	1108.9	1096.5
12.5°	896.8	904.1	930.1	973.6	1026.5	1085.8	1140.5	1175.9	1178.4	1159.7	1145.1
15°	792.3	799.6	827.3	881.9	962.5	1057.7	1149.0	1216.0	1238.6	1222.4	1204.9
17.5°	727.5	733.8	754.8	798.7	882.8	1001.4	1146.0	1258.6	1310.3	1297.5	1276.6
20°	707.8	713.4	723.2	753.9	823.9	942.9	1126.4	1298.7	1387.5	1380.2	1356.8
22.5°	728.7	733.8	736.8	750.5	794.4	904.5	1101.6	1339.7	1477.1	1477.9	1449.4
25°	776.9	782.1	778.6	787.2	806.4	892.6	1092.2	1387.9	1589.7	1599.1	1566.7
27.5°	856.3	856.7	848.6	848.2	851.2	910.5	1102.1	1439.5	1731.8	1749.3	1709.2
30°	1015.4	1009.0	977.9	944.2	928.8	964.2	1129.4	1500.6	1899.5	1930.6	1880.3
32.5°	1260.8	1251.4	1194.2	1113.6	1032.5	1050.9	1178.4	1570.1	2082.1	2138.4	2077.0
35°	1527.0	1524.4	1464.7	1344.8	1203.2	1174.2	1258.2	1661.4	2281.3	2370.9	2298.0
37.5°	1774.5	1773.2	1739.1	1597.8	1425.5	1346.1	1386.2	1780.9	2494.7	2624.4	2538.2
40°	2000.6	2004.4	1970.3	1844.0	1670.4	1566.7	1560.3	1928.5	2731.9	2900.4	2798.0
42.5°	2196.0	2200.3	2165.7	2072.3	1912.3	1810.7	1774.0	2109.4	2963.6	3196.9	3075.8
45°	2328.7	2355.1	2350.0	2275.4	2160.6	2055.2	2030.9	2336.4	3227.7	3511.4	3369.3
47.5°	2366.2	2390.6	2429.0	2439.2	2369.2	2265.5	2294.6	2609.9	3494.7	3826.3	3664.6
50°	2273.7	2296.3	2376.1	2482.3	2530.9	2498.9	2551.0	2903.0	3768.2	4140.3	3954.3
52.5°	2091.0	2114.1	2214.8	2382.9	2581.3	2682.0	2808.3	3191.8	4033.2	4437.7	4228.6
55°	1826.9	1851.3	1980.5	2170.8	2485.3	2757.5	3022.9	3480.2	4276.0	4705.2	4476.1
57.5°	1467.7	1485.6	1620.0	1886.3	2243.8	2682.4	3181.2	3795.1	4504.6	4968.0	4721.4
60°	956.6	972.4	1128.5	1425.5	1843.6	2431.5	3212.7	4146.3	4808.4	5309.7	5052.0
62.5°	636.1	646.8	739.4	957.4	1298.3	1949.8	3028.0	4426.6	5253.9	5904.5	5619.1
65°	436.5	447.1	539.7	691.6	838.8	1289.8	2496.8	4389.4	5657.5	6376.8	6039.3
67.5°	311.5	320.4	398.9	542.3	607.1	749.2	1692.5	3915.0	5599.4	6394.7	6061.9
70°	223.1	228.3	293.1	422.4	482.5	450.1	941.2	2994.3	4902.7	5904.9	5600.3
72.5°	156.2	157.9	203.5	321.7	388.7	328.5	448.0	1996.3	3708.1	4634.8	4341.7
75°	105.8	107.9	137.0	235.9	311.9	250.9	237.2	1070.5	2176.8	2565.5	2299.7
77.5°	64.9	65.7	88.3	161.3	233.4	191.1	152.7	453.5	842.2	826.9	704.8
80°	36.7	36.7	56.3	100.3	159.1	123.3	107.1	192.8	266.7	234.2	206.5
82.5°	20.5	20.9	41.0	62.3	105.4	73.0	58.9	89.2	115.2	102.0	88.7
85°	8.5	9.4	25.2	29.4	50.3	36.3	23.9	37.5	42.7	38.0	27.7
87.5°	0.9	1.3	7.7	5.5	6.0	7.3	3.4	7.3	6.0	6.0	4.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P882036

CATALOG NUMBER: NAV-SB1D-722-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7
2.5°	988.1	981.7	965.5	946.8	922.0	910.1	893.8	882.8	873.4	874.2	865.7
5°	1007.3	991.1	954.9	909.6	853.3	813.2	770.5	741.1	717.2	712.1	700.6
7.5°	1033.8	1008.2	944.6	863.1	768.0	695.9	631.5	590.1	560.6	551.2	541.9
10°	1067.9	1030.8	931.4	804.7	667.7	576.0	506.9	474.4	454.4	447.6	442.4
12.5°	1107.6	1056.8	913.9	733.4	564.5	476.1	432.2	416.0	409.6	407.5	406.2
15°	1157.5	1089.3	887.4	648.9	477.0	415.1	396.4	394.2	395.1	394.2	393.8
17.5°	1216.8	1124.7	844.4	561.9	418.1	384.0	377.2	378.9	381.0	380.6	379.7
20°	1281.7	1159.7	789.3	484.7	378.0	361.8	358.0	359.7	361.4	360.5	360.1
22.5°	1355.5	1197.2	728.3	424.5	351.1	341.3	337.1	337.5	337.5	335.8	334.9
25°	1443.8	1238.6	664.3	381.9	330.7	323.0	317.9	316.2	313.6	308.5	307.6
27.5°	1549.2	1282.5	602.9	352.0	314.4	307.2	301.2	297.0	290.6	282.0	281.2
30°	1667.8	1335.9	550.8	333.2	301.6	294.4	287.6	281.2	271.8	261.1	260.3
32.5°	1807.3	1393.0	512.8	320.8	290.1	282.4	274.3	266.7	256.4	245.8	246.2
35°	1973.7	1462.2	490.7	312.3	281.2	270.9	262.0	253.4	245.8	236.4	235.5
37.5°	2154.2	1535.5	483.8	308.0	275.2	259.4	249.2	243.2	242.3	236.8	236.4
40°	2351.7	1622.6	488.9	305.5	268.8	248.3	237.2	235.9	238.1	228.3	228.7
42.5°	2560.8	1725.8	497.5	302.5	259.8	237.2	226.6	226.6	224.8	211.2	211.2
45°	2786.9	1844.9	506.0	295.2	249.2	226.1	218.0	215.0	207.8	194.6	194.1
47.5°	3014.8	1966.0	512.4	282.0	236.4	216.7	209.5	202.7	192.0	180.0	179.6
50°	3231.1	2074.8	505.6	262.4	221.9	207.8	200.1	190.7	179.2	171.1	169.8
52.5°	3424.3	2169.1	476.6	239.4	206.5	198.4	191.6	181.8	172.4	163.8	163.0
55°	3592.5	2245.5	425.4	217.6	192.8	190.3	183.5	171.1	158.3	151.0	150.2
57.5°	3753.7	2303.5	361.4	199.7	180.5	181.3	171.1	160.0	148.0	140.4	139.5
60°	3968.3	2381.2	296.5	183.0	167.2	169.8	158.7	150.6	135.7	125.9	124.6
62.5°	4311.4	2501.9	235.5	162.6	151.9	152.7	148.0	138.2	120.3	108.8	107.9
65°	4583.6	2457.5	185.6	140.4	134.4	135.7	135.7	125.0	105.8	92.6	91.3
67.5°	4552.9	2104.3	148.0	118.6	117.8	118.6	121.6	112.6	93.9	83.2	81.5
70°	4194.0	1673.8	118.6	98.6	102.4	100.3	108.8	102.8	84.5	73.8	72.5
72.5°	3422.2	1205.7	90.5	81.5	78.5	81.9	98.1	92.6	70.4	58.5	57.2
75°	1999.7	643.4	67.4	64.4	56.7	68.3	87.0	78.9	53.8	43.1	41.8
77.5°	651.1	224.4	49.5	47.4	42.2	55.0	74.2	66.6	43.9	34.1	32.9
80°	174.5	67.8	33.7	31.1	27.3	41.0	58.9	52.9	31.6	22.2	21.8
82.5°	70.0	28.6	19.6	17.5	14.9	28.2	46.5	42.7	23.5	14.1	14.1
85°	22.6	9.4	7.3	5.5	6.8	17.5	27.7	29.0	16.6	7.3	5.5
87.5°	3.0	1.3	1.3	1.7	1.3	3.0	8.5	8.1	4.7	0.9	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)