

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: P959243

Luminaire Tested: **NAV-SB1A-727-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4379.8 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

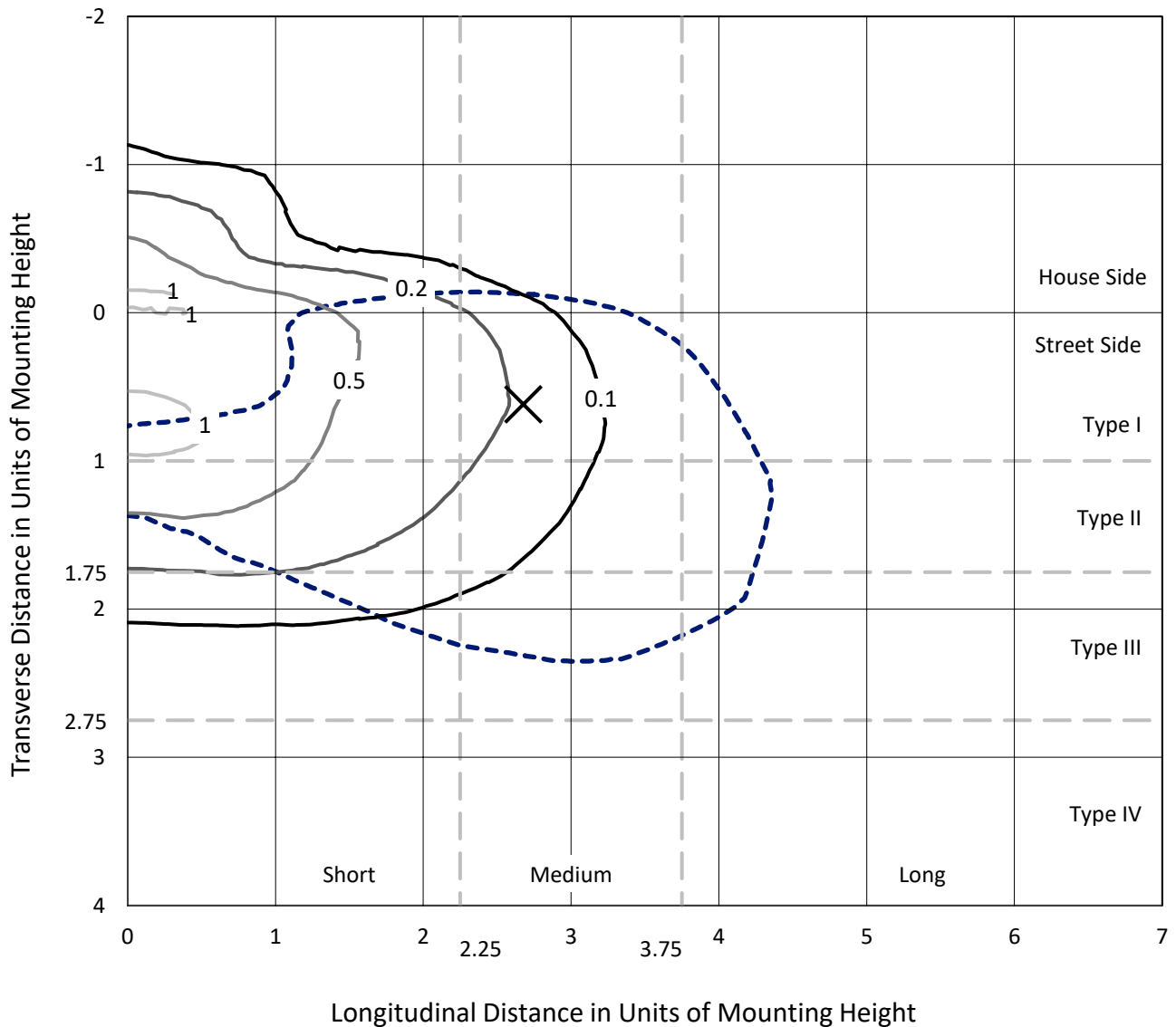
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

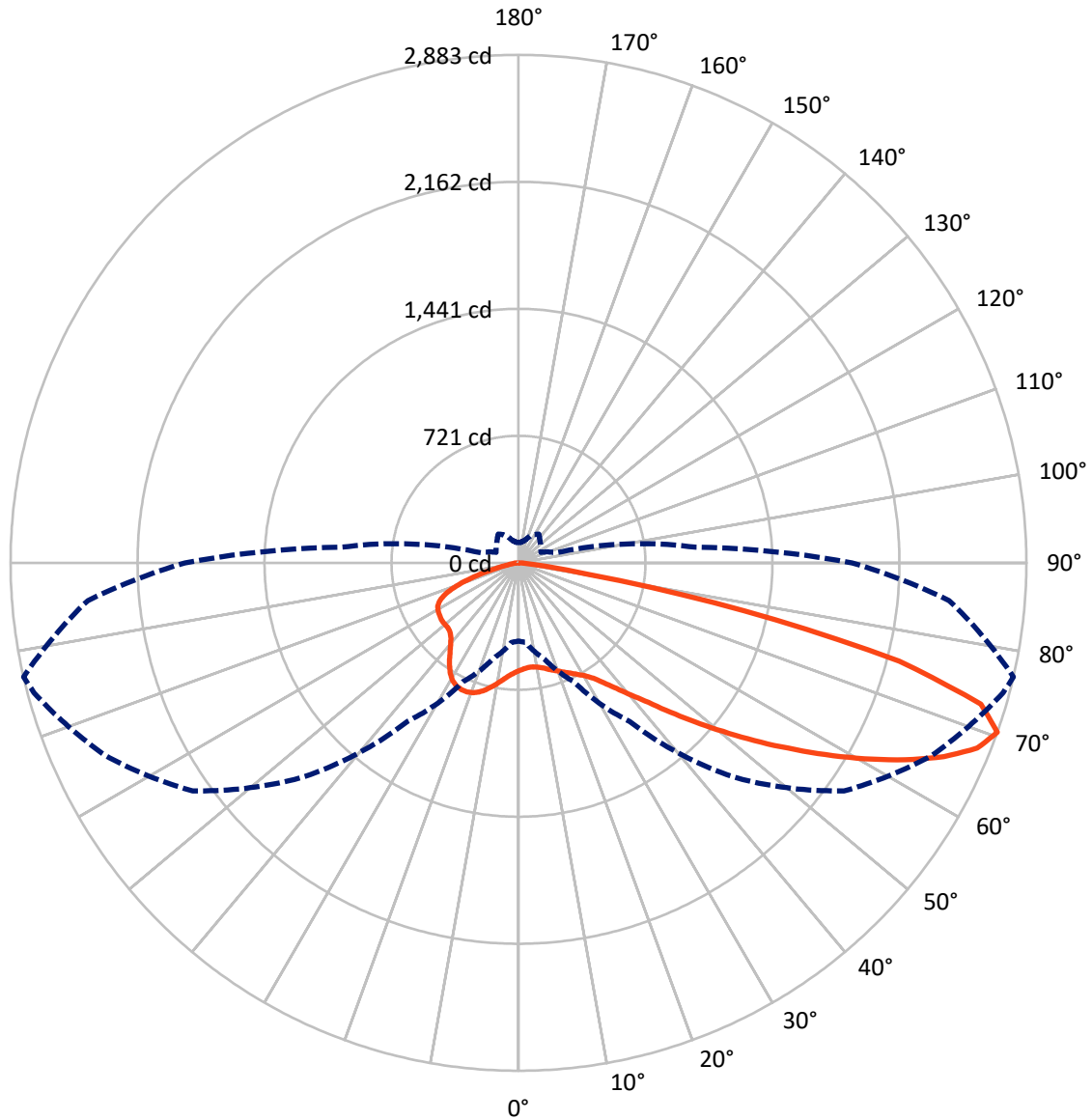
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	959.1	0.0	959.1
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	3420.7	0.0	3420.7
	% Fixture	78.1	0.0	78.1
Total	Lumens	4379.8	0.0	4379.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	1.3
10°-20°	168.2	3.8
20°-30°	287.6	6.6
30°-40°	462.5	10.6
40°-50°	722.1	16.5
50°-60°	964.6	22.0
60°-70°	1028.1	23.5
70°-80°	632.9	14.5
80°-90°	55.5	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°	4379.8	100.0
0°-180°	4379.8	100.0

Coefficient of Utilization

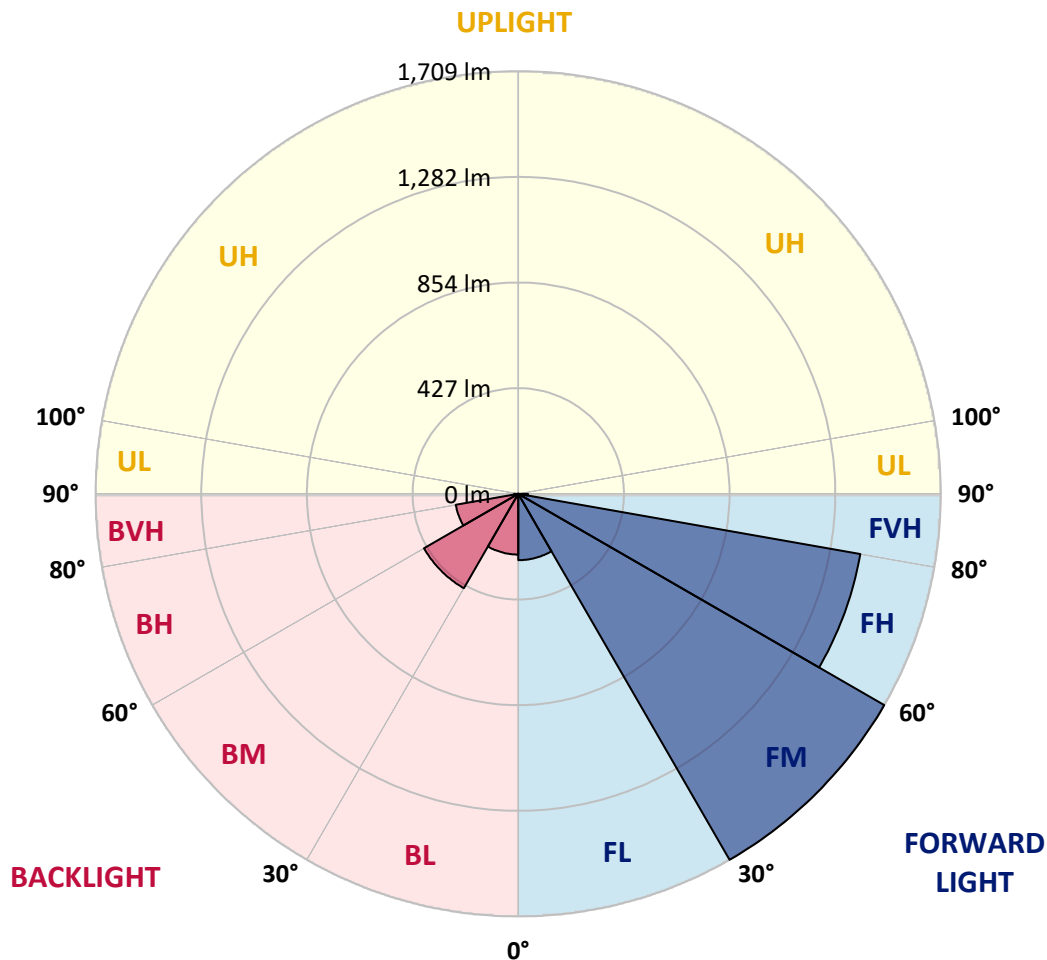


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	268.3	6.1			
FM (30°-60°)	1708.9	39.0			
FH (60°-80°)	1404.7	32.1			G1/1800
FVH (80°-90°)	38.8	0.9			G1/100
BL (0°-30°)	245.8	5.6	B1/500		
BM (30°-60°)	440.4	10.1	B1/1000		
BH (60°-80°)	256.3	5.9	B1/500		G1/500
BVH (80°-90°)	16.7	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0
2.5°	563.2	563.0	565.9	566.8	572.3	576.0	583.2	590.8	600.8	601.9	607.9
5°	530.7	530.7	534.1	537.7	544.6	552.3	563.2	576.5	593.6	596.2	611.2
7.5°	503.2	504.9	507.9	514.8	522.9	533.8	550.7	569.5	591.9	596.2	620.4
10°	480.9	483.0	486.6	492.1	504.3	519.5	541.5	565.7	595.7	602.5	633.9
12.5°	474.0	476.0	478.0	482.3	493.4	511.5	537.7	567.5	605.0	611.7	652.3
15°	490.2	492.6	491.0	489.8	495.7	512.1	539.5	574.0	616.4	626.1	675.0
17.5°	527.4	528.3	524.7	514.1	513.2	521.9	548.0	583.0	630.8	641.3	697.8
20°	587.4	585.9	578.5	557.6	545.7	544.0	562.6	596.4	645.5	656.8	722.5
22.5°	669.1	667.4	652.5	619.5	593.1	575.5	583.6	614.0	662.2	674.8	746.5
25°	771.0	768.4	746.7	701.9	660.8	617.6	612.3	637.0	682.5	694.2	771.6
27.5°	889.8	887.9	864.3	805.0	745.8	675.0	648.0	664.2	703.9	717.1	799.9
30°	1017.7	1023.6	981.8	918.1	843.2	749.9	696.1	697.6	731.4	743.3	834.2
32.5°	1168.0	1178.1	1127.8	1047.0	944.8	831.3	756.7	744.3	771.6	781.5	877.5
35°	1316.9	1328.4	1286.7	1197.4	1079.6	927.3	819.9	797.9	825.0	835.8	934.9
37.5°	1445.7	1460.9	1439.4	1361.8	1223.8	1043.0	902.4	860.9	890.7	904.2	1012.1
40°	1547.3	1570.6	1569.1	1520.6	1393.9	1183.5	1007.2	938.7	972.4	987.0	1105.7
42.5°	1629.9	1650.0	1667.6	1665.1	1571.3	1343.0	1130.3	1039.9	1065.5	1082.3	1210.8
45°	1686.8	1708.4	1746.1	1786.7	1742.0	1513.6	1271.4	1159.9	1183.3	1208.6	1336.2
47.5°	1737.8	1762.2	1811.1	1875.4	1886.9	1685.0	1426.0	1299.7	1321.0	1347.3	1462.1
50°	1742.2	1763.3	1839.2	1930.4	1989.8	1849.7	1591.9	1456.4	1476.4	1504.5	1596.8
52.5°	1633.8	1667.1	1799.4	1928.8	2037.2	1987.4	1756.8	1619.5	1641.9	1675.6	1736.4
55°	1268.2	1316.9	1683.0	1868.8	2020.4	2076.4	1913.6	1792.9	1821.6	1856.9	1876.8
57.5°	1092.4	1113.7	1336.0	1759.3	1943.7	2099.6	2045.9	1968.1	2014.3	2052.9	2025.3
60°	981.8	999.6	1131.0	1589.1	1842.7	2063.0	2148.2	2131.4	2211.2	2257.3	2177.2
62.5°	863.4	880.2	999.8	1326.8	1713.5	2002.2	2212.9	2282.2	2413.2	2463.4	2320.3
65°	745.8	760.2	874.8	1114.8	1549.3	1941.5	2246.3	2412.4	2600.0	2652.1	2439.2
67.5°	614.8	626.7	735.0	940.5	1349.7	1858.2	2262.9	2514.9	2762.6	2807.3	2497.9
70°	443.7	452.8	564.8	743.8	1099.1	1715.1	2256.1	2587.6	2846.9	2882.6	2453.5
72.5°	209.7	218.0	349.5	483.0	776.3	1436.5	2120.0	2530.0	2761.2	2743.5	2181.6
75°	111.9	119.1	200.8	265.0	410.0	984.7	1734.8	2179.5	2318.8	2232.6	1612.3
77.5°	75.8	81.4	124.2	159.1	187.3	467.5	1115.1	1508.9	1451.7	1309.5	807.5
80°	60.1	65.9	101.9	107.6	90.6	168.9	460.7	698.5	501.7	401.3	229.7
82.5°	46.2	52.7	85.7	78.1	49.3	69.3	134.2	221.0	128.5	97.8	55.7
85°	28.3	35.3	67.3	49.8	27.8	31.7	45.5	61.5	39.3	32.8	20.0
87.5°	14.3	20.2	34.1	18.1	12.6	7.4	12.1	12.1	10.4	9.0	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°	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0	611.0
2.5°	613.3	617.8	625.4	632.5	638.2	643.6	648.9	651.9	652.7	656.3	658.4
5°	620.4	628.7	643.6	657.4	666.2	671.6	675.4	677.6	678.1	679.3	681.0
7.5°	633.7	646.9	667.6	681.4	688.0	687.5	685.9	680.3	678.1	676.1	676.5
10°	652.3	669.8	695.2	704.8	700.8	690.0	676.1	659.7	652.1	644.6	642.5
12.5°	675.4	697.6	722.5	722.0	702.1	674.6	642.2	617.0	601.2	589.7	587.0
15°	703.5	729.0	748.0	732.9	689.1	639.5	592.1	559.4	545.1	532.5	531.2
17.5°	732.4	759.7	768.4	729.5	656.3	587.7	534.1	508.3	494.2	487.4	489.4
20°	760.7	787.8	780.6	710.2	606.5	528.9	481.1	467.0	464.1	465.7	465.0
22.5°	790.5	814.7	783.1	672.9	543.0	468.8	442.6	443.0	449.6	454.3	455.3
25°	821.0	837.3	776.5	619.1	474.9	424.7	418.1	425.3	438.1	447.3	449.8
27.5°	850.3	857.5	762.4	552.5	416.4	393.0	394.1	408.9	428.2	441.0	444.1
30°	883.6	875.5	735.3	477.5	375.8	365.8	375.3	392.6	411.8	423.3	426.0
32.5°	921.1	890.9	692.2	408.3	347.0	344.1	359.6	370.7	379.4	382.6	384.5
35°	967.7	912.8	637.0	359.6	321.2	328.2	343.0	337.3	334.0	332.2	334.0
37.5°	1028.3	942.1	572.5	327.9	300.3	316.7	322.8	305.2	292.0	285.6	287.1
40°	1101.2	985.1	510.3	303.5	287.1	306.9	296.3	275.2	258.4	249.2	249.9
42.5°	1182.1	1030.2	458.1	285.1	279.7	298.8	276.8	251.6	224.6	221.6	224.6
45°	1267.1	1076.7	422.4	271.0	276.1	291.8	265.6	225.0	205.7	217.6	223.9
47.5°	1352.2	1119.3	400.9	260.5	274.3	284.0	255.7	210.2	196.5	213.8	221.8
50°	1446.8	1157.4	391.2	252.8	272.3	280.8	240.9	206.3	186.9	198.3	206.8
52.5°	1540.8	1187.1	384.1	245.2	269.4	278.4	233.7	201.9	175.2	175.9	180.6
55°	1634.6	1206.3	376.2	235.0	262.9	273.0	233.1	196.9	166.5	163.3	165.5
57.5°	1734.6	1217.3	366.5	223.9	251.6	259.3	232.4	193.1	163.8	158.6	159.3
60°	1836.5	1233.5	353.9	210.2	236.7	242.9	230.8	191.8	162.2	153.4	154.1
62.5°	1927.7	1239.1	339.0	197.2	217.4	226.7	227.4	190.6	158.0	142.9	142.9
65°	1987.6	1214.8	312.7	182.3	196.5	210.2	221.0	186.9	150.3	135.3	135.3
67.5°	1985.1	1145.7	271.6	163.3	176.3	191.8	211.6	180.3	141.1	125.9	126.5
70°	1892.8	1009.4	219.6	141.1	154.1	172.1	199.4	170.7	130.1	115.5	116.8
72.5°	1623.4	790.1	159.5	115.1	128.3	151.6	183.7	159.1	118.9	106.3	105.7
75°	1159.7	500.0	108.1	88.4	99.8	128.5	164.2	145.3	108.5	106.8	100.8
77.5°	592.4	238.9	71.5	64.6	69.5	101.4	138.0	129.9	110.2	88.1	78.5
80°	192.7	88.1	45.1	44.0	46.2	67.5	106.8	106.5	83.4	59.9	52.9
82.5°	61.5	37.9	29.4	28.3	27.2	42.4	74.5	84.4	56.3	37.9	37.7
85°	24.5	22.7	17.3	15.9	11.5	20.0	39.1	56.1	41.9	27.4	28.1
87.5°	9.0	9.0	4.7	3.4	2.5	6.8	10.6	16.8	24.0	14.1	13.9
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)