

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: P959308

Luminaire Tested: **NAV-SB1A-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959308
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4545.9 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

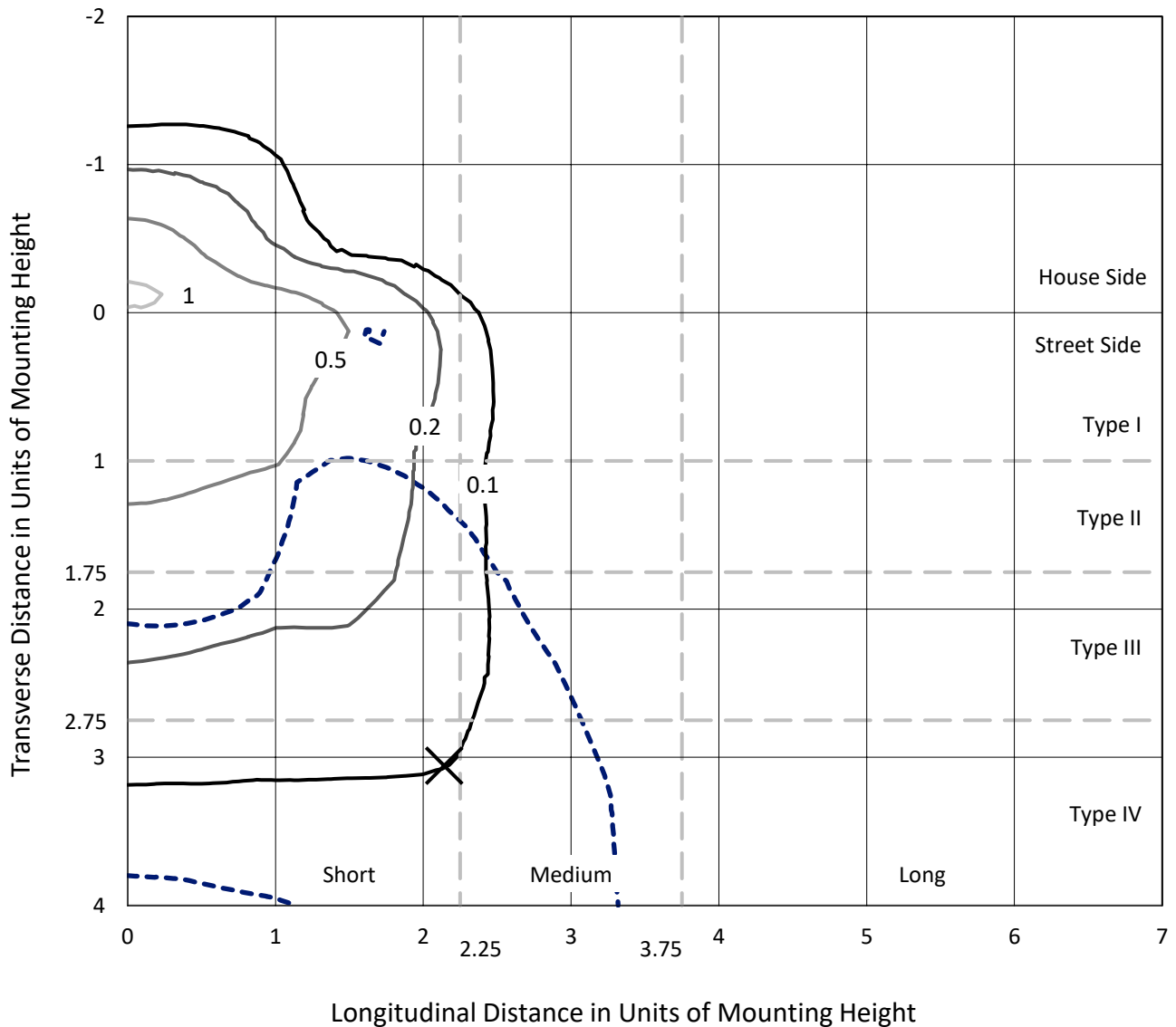
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

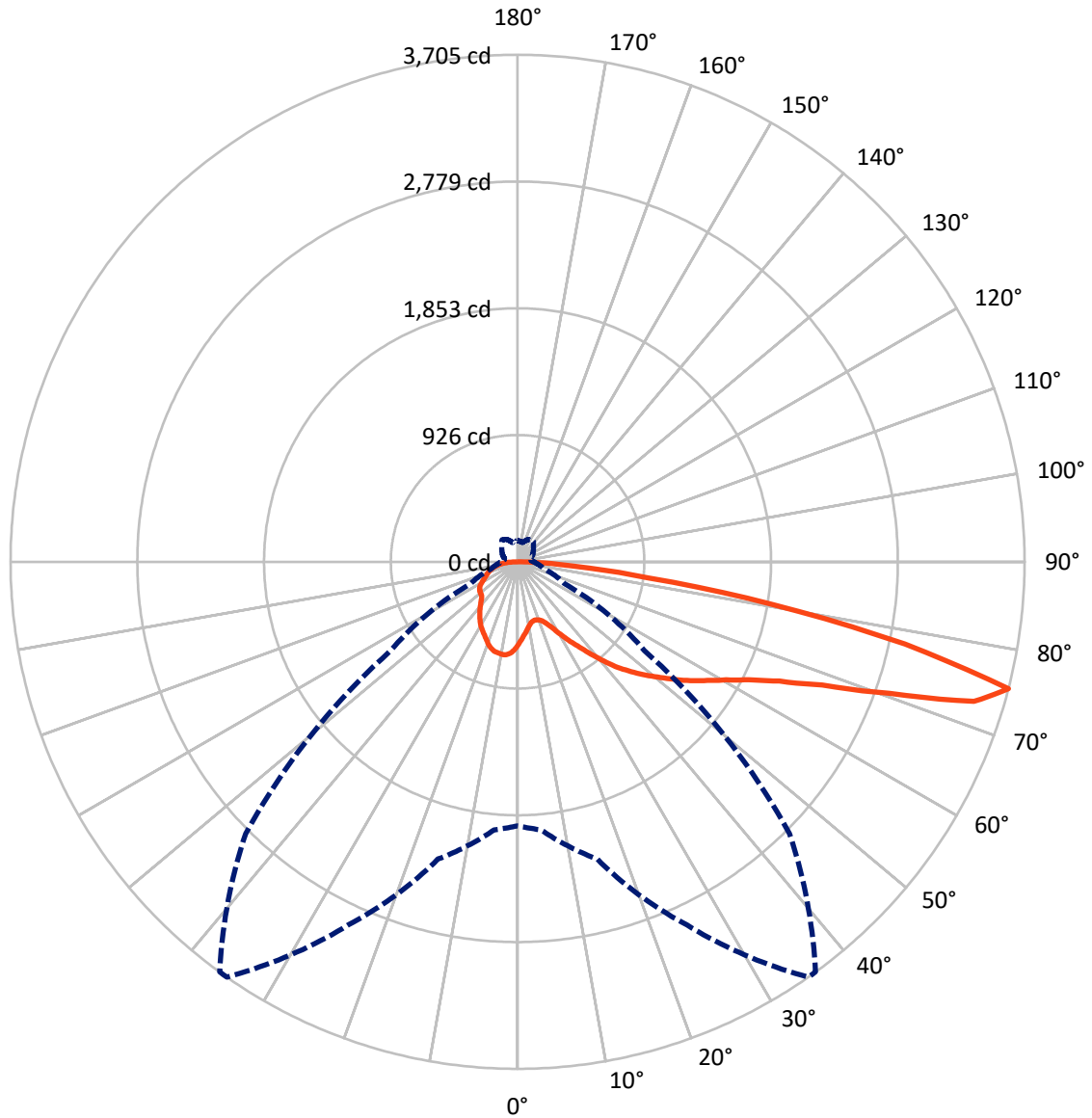
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1081.8	0.0	1081.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3464.1	0.0	3464.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	4545.9	0.0	4545.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	1.3
10°-20°	165.4	3.6
20°-30°	277.8	6.1
30°-40°	431.8	9.5
40°-50°	640.8	14.1
50°-60°	884.7	19.5
60°-70°	1073.4	23.6
70°-80°	887.0	19.5
80°-90°	127.6	2.8
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°	4545.9	100.0
0°-180°	4545.9	100.0

Coefficient of Utilization



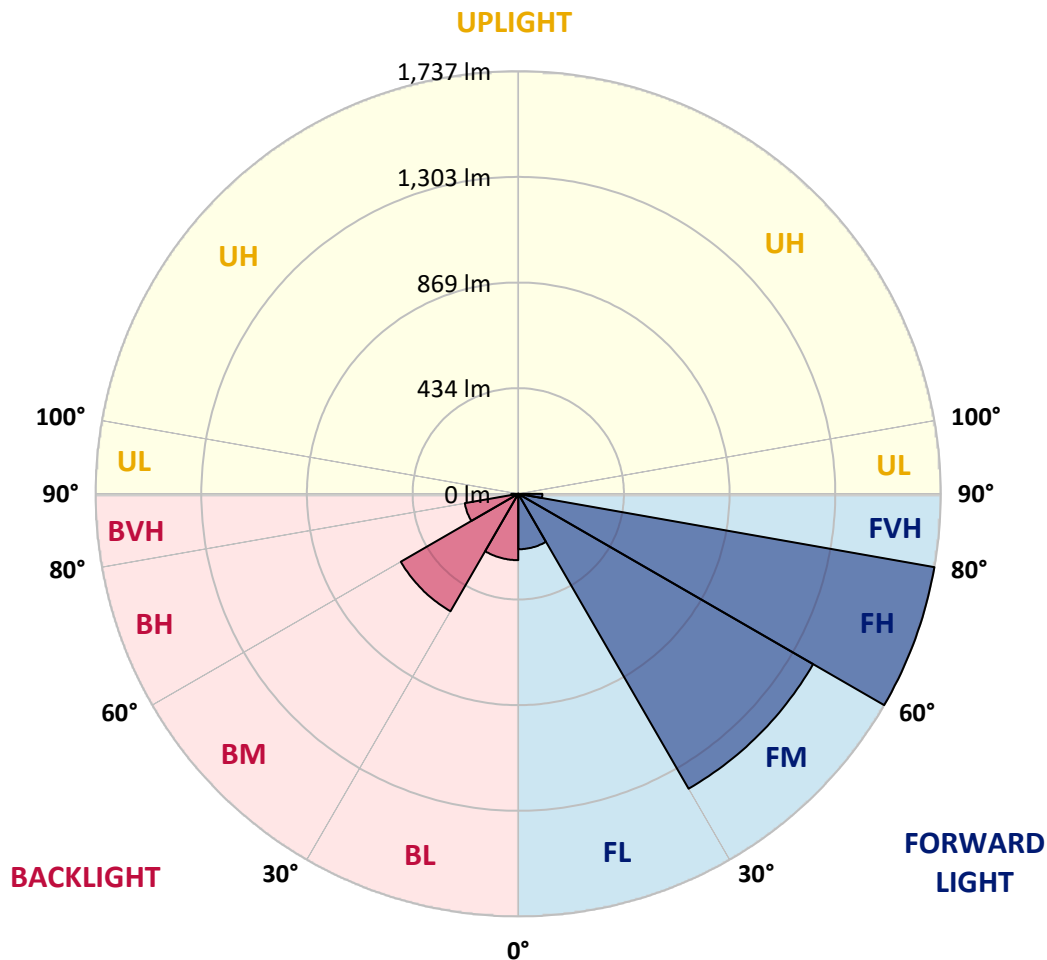
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	228.0	5.0			
FM (30°-60°)	1399.9	30.8			
FH (60°-80°)	1737.4	38.2			G1/1800
FVH (80°-90°)	98.9	2.2			G1/100
BL (0°-30°)	272.6	6.0	B1/500		
BM (30°-60°)	557.4	12.3	B1/1000		
BH (60°-80°)	223.0	4.9	B1/500		G1/500
BVH (80°-90°)	28.7	0.6			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8
2.5°	558.6	562.0	563.5	562.7	566.4	566.0	571.1	577.5	586.4	594.9	607.5
5°	515.6	519.3	522.4	525.4	532.5	534.7	542.8	555.1	571.3	587.8	608.4
7.5°	475.5	478.7	483.6	489.0	501.1	503.3	516.8	536.0	558.6	582.7	611.2
10°	442.8	446.1	451.2	457.4	472.3	475.0	492.2	517.8	547.2	577.8	614.1
12.5°	428.9	429.8	432.8	438.9	451.9	453.7	472.5	501.8	536.2	574.1	618.6
15°	428.1	430.1	430.3	433.5	444.3	445.1	462.5	491.5	529.3	573.3	625.1
17.5°	435.4	437.0	434.7	436.6	445.8	447.0	460.7	486.6	527.2	576.6	636.5
20°	455.1	456.3	449.7	447.0	453.7	454.6	468.1	489.7	529.3	583.1	652.0
22.5°	496.9	497.6	481.4	470.4	470.9	471.3	483.2	502.8	537.9	595.2	671.6
25°	562.0	561.5	535.8	514.3	502.0	499.4	507.3	524.0	552.5	611.2	696.9
27.5°	638.2	634.5	608.7	576.8	550.0	546.0	544.4	551.4	573.1	632.3	728.0
30°	724.3	720.8	693.0	651.2	614.1	607.7	591.5	587.8	603.8	661.0	770.9
32.5°	818.6	816.4	783.2	732.6	683.0	675.6	648.3	638.5	651.0	704.6	830.9
35°	897.7	895.7	868.3	816.1	755.4	746.3	718.5	707.6	713.9	760.3	909.3
37.5°	969.2	968.2	944.6	903.6	840.9	829.8	798.7	795.0	793.8	833.8	1004.4
40°	1035.6	1033.1	1008.6	987.0	940.4	930.4	902.9	899.6	890.3	924.2	1112.0
42.5°	1109.0	1102.7	1067.0	1057.0	1044.5	1036.1	1019.6	1020.1	999.5	1026.2	1226.0
45°	1169.0	1165.3	1128.7	1122.8	1136.3	1132.9	1147.2	1150.9	1110.8	1133.1	1344.5
47.5°	1233.4	1230.0	1199.0	1194.8	1231.4	1232.5	1282.8	1284.0	1219.4	1244.2	1463.2
50°	1312.8	1307.9	1277.1	1282.3	1323.4	1327.1	1419.2	1410.8	1319.4	1357.0	1580.9
52.5°	1365.1	1368.1	1361.4	1369.8	1425.9	1429.3	1553.4	1532.0	1418.5	1468.3	1696.4
55°	1403.7	1409.6	1430.3	1449.5	1533.9	1537.4	1680.0	1647.3	1500.5	1571.5	1805.0
57.5°	1453.3	1445.0	1483.6	1520.9	1636.7	1645.7	1803.1	1758.3	1573.3	1660.5	1879.4
60°	1524.6	1518.7	1548.7	1604.0	1751.7	1766.2	1933.3	1858.3	1626.6	1731.0	1894.0
62.5°	1669.1	1654.4	1659.1	1708.0	1896.7	1915.8	2080.2	1945.6	1653.1	1758.6	1816.3
65°	1885.2	1859.9	1836.2	1870.1	2100.9	2119.8	2246.2	2014.1	1643.3	1705.3	1610.2
67.5°	2157.2	2132.1	2103.1	2135.1	2401.7	2416.6	2450.9	2052.8	1565.9	1499.8	1245.7
70°	2381.6	2372.2	2406.9	2538.3	2882.1	2882.6	2713.3	2020.8	1353.8	1063.3	720.8
72.5°	2351.8	2346.1	2528.8	2935.2	3487.7	3474.6	2961.7	1779.0	911.9	479.7	270.1
75°	1929.4	1966.0	2248.8	2928.1	3705.2	3703.4	2809.6	1130.9	377.2	198.8	139.6
77.5°	1034.6	1092.5	1460.0	2161.8	2892.4	2935.9	1975.3	395.6	162.0	127.3	96.6
80°	337.4	388.1	581.9	1100.7	1879.4	1871.3	846.6	155.3	110.8	90.2	66.8
82.5°	143.3	149.1	260.0	519.8	964.5	949.6	269.6	89.2	77.9	61.7	41.3
85°	56.1	62.6	114.8	240.4	417.8	408.7	97.3	44.3	49.9	40.3	24.6
87.5°	18.4	22.3	41.0	82.3	130.0	125.4	23.9	15.3	21.6	18.4	8.8
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°	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8	605.8
2.5°	610.9	614.9	619.5	626.4	632.3	637.2	642.4	645.5	646.8	650.5	650.3
5°	615.3	623.9	635.5	646.8	657.8	664.5	670.3	673.3	676.1	678.0	678.6
7.5°	622.7	633.8	652.0	666.8	676.1	681.4	685.4	684.4	685.4	685.9	686.6
10°	629.1	644.6	666.2	680.2	687.4	687.6	686.6	683.2	681.4	681.7	682.2
12.5°	636.7	653.9	677.3	689.1	691.1	685.6	681.4	675.6	673.3	672.4	671.9
15°	647.1	666.8	689.3	693.7	688.8	681.9	674.9	665.2	660.3	656.4	657.6
17.5°	659.6	681.2	698.6	695.5	684.9	673.6	662.0	647.6	637.4	633.2	633.6
20°	677.0	696.5	705.8	691.8	675.8	658.6	639.0	621.3	611.9	607.7	607.2
22.5°	698.1	716.9	712.7	685.4	662.8	635.3	610.7	597.7	593.0	590.0	590.5
25°	723.4	739.4	717.6	676.1	641.4	604.3	585.4	581.2	579.0	576.8	576.8
27.5°	756.4	765.1	721.3	662.3	608.0	571.3	564.5	565.2	564.5	560.8	561.5
30°	799.9	798.2	724.7	639.9	569.6	541.6	542.1	545.3	545.8	543.4	544.6
32.5°	857.2	839.7	726.4	610.9	533.0	515.6	516.1	519.5	521.9	517.8	519.8
35°	926.5	888.2	723.8	574.5	504.8	490.8	487.1	488.1	488.8	484.8	487.6
37.5°	1007.4	942.5	711.7	534.2	481.4	466.5	458.6	451.9	448.0	444.3	446.8
40°	1096.0	1001.6	689.5	495.0	455.4	440.6	428.9	416.3	403.0	398.1	400.4
42.5°	1188.9	1062.6	662.8	457.4	425.4	413.4	400.8	382.6	362.7	352.6	353.8
45°	1285.2	1125.0	636.5	420.2	394.6	389.5	375.0	353.1	331.5	318.8	317.8
47.5°	1379.6	1184.0	597.9	382.8	365.9	371.6	360.3	340.1	316.0	295.9	293.7
50°	1469.8	1239.3	534.7	345.0	342.6	366.1	355.4	326.4	298.8	273.1	270.8
52.5°	1559.2	1284.0	453.9	310.6	330.0	364.7	349.0	317.0	283.3	256.4	253.4
55°	1635.2	1307.2	376.0	281.2	311.8	352.2	341.3	306.0	261.5	232.7	230.2
57.5°	1678.4	1288.4	311.1	252.2	286.8	331.5	328.3	282.4	235.4	213.3	210.3
60°	1659.8	1212.8	258.0	226.8	262.9	309.1	305.8	259.0	215.6	194.6	191.7
62.5°	1556.8	1068.6	216.0	204.7	241.3	286.3	283.1	241.1	200.3	180.1	176.9
65°	1349.4	869.2	183.4	186.2	219.5	258.8	263.4	226.1	188.3	168.6	165.4
67.5°	1029.2	629.6	157.7	170.3	198.0	231.8	245.3	215.2	178.1	159.5	156.5
70°	586.6	357.5	136.1	154.8	179.2	206.6	231.2	206.6	167.4	151.9	149.9
72.5°	222.4	164.2	117.7	139.3	160.9	185.5	215.8	193.1	154.8	143.3	141.3
75°	118.7	100.0	99.0	121.2	140.1	164.9	196.4	179.9	145.4	151.4	156.3
77.5°	80.9	70.7	82.8	103.7	117.3	142.1	175.7	159.7	126.1	125.6	115.7
80°	56.1	50.1	67.3	83.5	90.7	119.4	153.3	137.1	102.7	95.8	91.6
82.5°	33.6	32.7	50.3	62.4	64.2	92.1	127.1	115.0	84.0	73.2	73.7
85°	18.4	19.4	32.2	36.6	37.3	64.4	99.5	89.0	64.7	54.3	54.8
87.5°	5.1	6.7	11.8	14.5	17.9	33.4	59.2	52.8	32.4	22.7	22.7
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)