

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: P959301

Luminaire Tested: **NAV-SB1A-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4660.7 lumens
Efficiency: N/A
Efficacy: 150.8 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

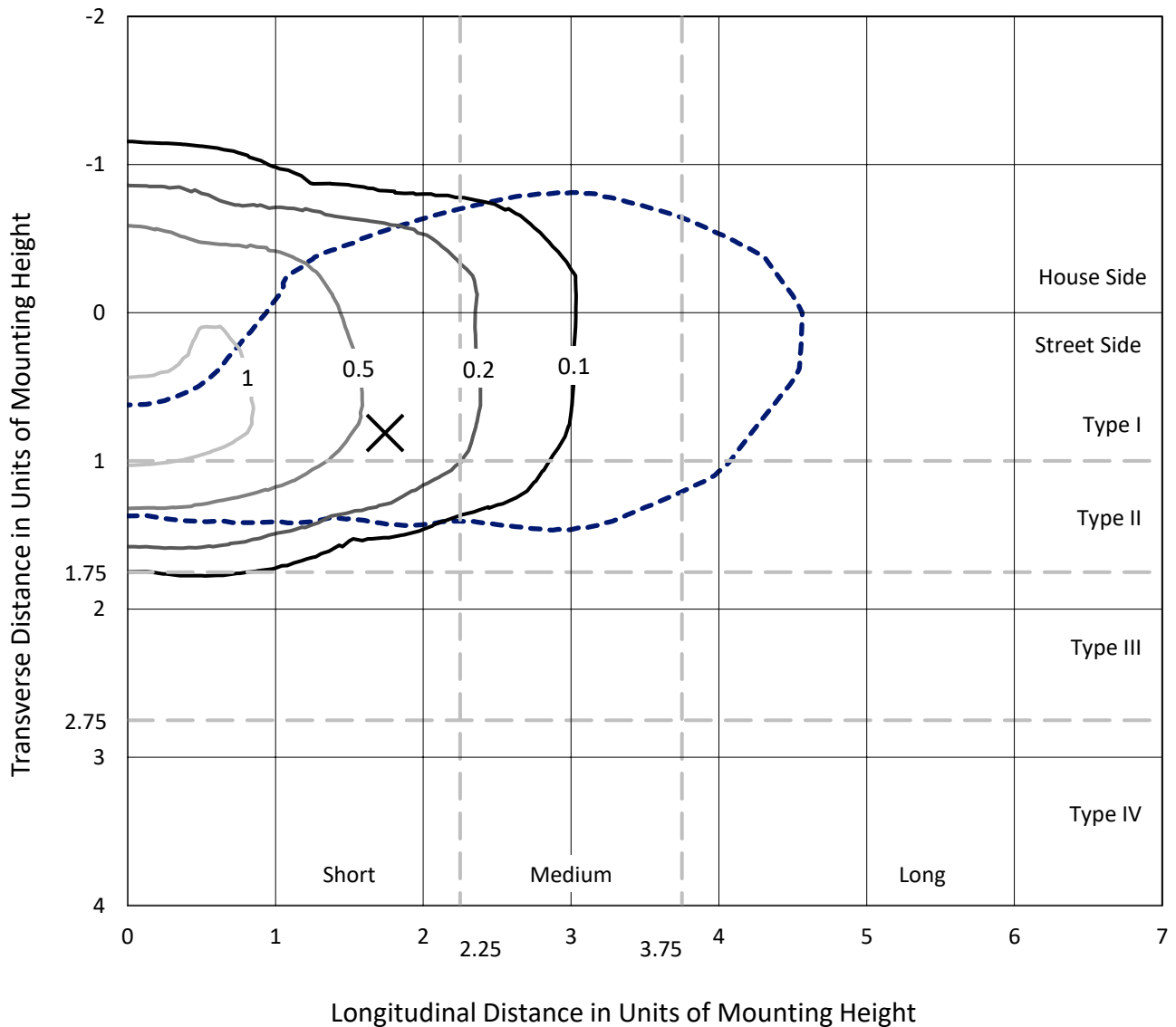
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

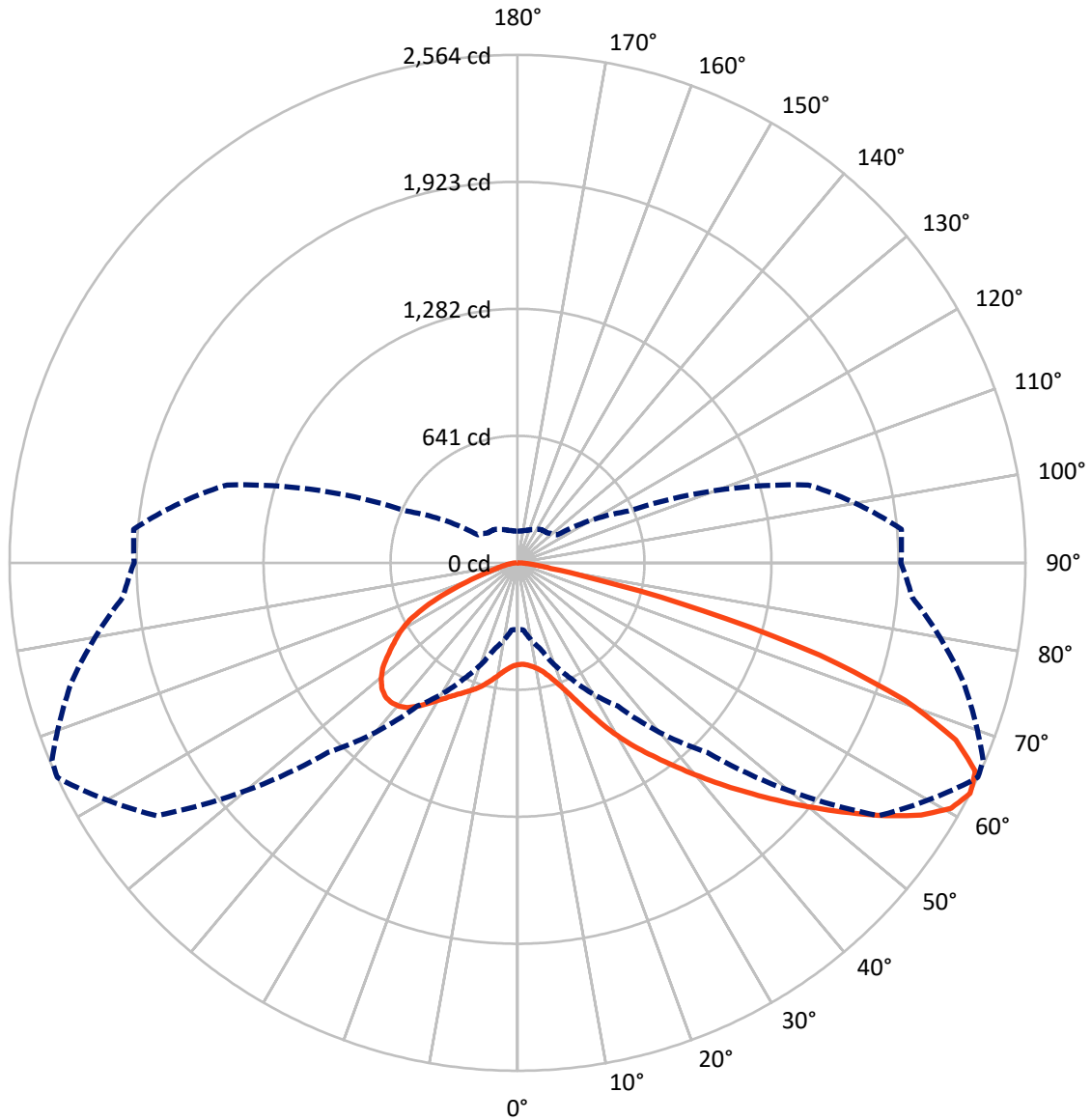
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1470.7	0.0	1470.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	3190.0	0.0	3190.0
	% Fixture	68.4	0.0	68.4
Total	Lumens	4660.7	0.0	4660.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	1.1
10°-20°	173.6	3.7
20°-30°	352.1	7.6
30°-40°	609.2	13.1
40°-50°	922.0	19.8
50°-60°	1081.0	23.2
60°-70°	906.3	19.4
70°-80°	500.3	10.7
80°-90°	65.0	1.4
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°	4660.7	100.0
0°-180°	4660.7	100.0

Coefficient of Utilization



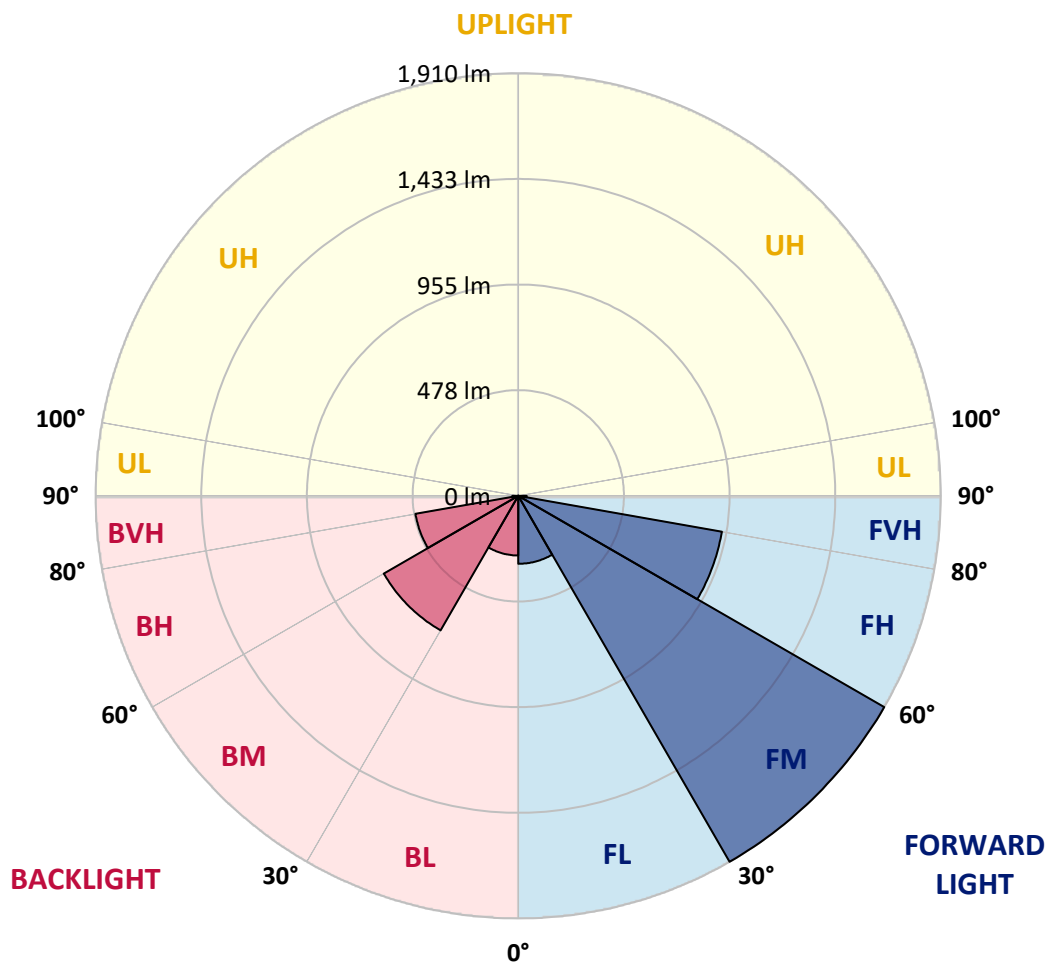
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	307.2	6.6			
FM (30°-60°)	1910.1	41.0			
FH (60°-80°)	934.8	20.1			G1/1800
FVH (80°-90°)	37.9	0.8			G1/100
BL (0°-30°)	269.7	5.8	B1/500		
BM (30°-60°)	702.1	15.1	B1/1000		
BH (60°-80°)	471.8	10.1	B1/500		G1/500
BVH (80°-90°)	27.1	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6
2.5°	510.2	508.7	509.9	509.9	510.4	510.2	511.9	512.4	513.1	514.6	514.6
5°	505.1	504.9	507.1	509.0	511.0	512.6	514.8	517.9	518.4	520.1	522.3
7.5°	503.5	501.9	505.3	507.8	512.4	516.5	522.3	527.6	529.8	530.5	534.6
10°	516.5	514.0	517.2	518.6	522.5	526.6	533.4	541.9	544.3	547.2	551.8
12.5°	538.7	536.1	540.7	542.8	546.4	550.1	554.7	562.9	564.2	569.5	573.8
15°	569.2	566.1	569.0	571.6	577.7	581.1	585.7	593.6	593.6	597.8	600.9
17.5°	610.6	606.4	608.6	609.6	613.5	618.5	626.3	633.2	636.9	635.5	631.1
20°	672.2	667.2	667.2	662.3	660.8	664.9	675.1	684.8	688.7	681.1	670.6
22.5°	764.9	757.6	753.5	737.0	730.5	730.9	741.1	753.0	756.1	742.8	718.8
25°	882.5	871.2	865.6	841.4	826.8	814.0	821.8	837.1	841.4	825.0	786.4
27.5°	1000.3	1001.0	995.8	966.7	942.3	918.8	914.7	930.7	935.3	916.7	868.8
30°	1165.5	1148.3	1138.2	1103.3	1068.6	1035.7	1018.7	1025.2	1026.4	1004.2	948.6
32.5°	1307.9	1303.6	1281.8	1251.3	1206.6	1155.1	1126.8	1116.4	1114.5	1082.8	1016.8
35°	1470.2	1467.7	1444.7	1408.5	1360.2	1288.5	1237.6	1207.8	1205.4	1160.9	1084.2
37.5°	1635.1	1635.1	1612.5	1573.0	1522.8	1433.4	1355.8	1308.6	1300.9	1242.8	1152.9
40°	1766.6	1758.6	1762.7	1746.1	1688.8	1593.7	1487.1	1418.6	1408.2	1338.6	1225.9
42.5°	1841.3	1838.6	1863.3	1881.9	1858.5	1782.6	1631.7	1537.8	1523.4	1444.0	1310.1
45°	1858.0	1855.1	1899.1	1967.3	2000.2	1969.0	1788.8	1663.4	1645.7	1554.3	1400.3
47.5°	1819.6	1813.7	1878.3	1985.9	2091.3	2146.2	1959.1	1799.5	1773.9	1661.6	1492.9
50°	1704.0	1698.4	1796.1	1939.0	2122.1	2266.7	2143.8	1943.8	1904.7	1776.7	1586.5
52.5°	1452.7	1455.4	1608.4	1804.8	2081.7	2341.6	2302.9	2095.9	2048.8	1894.5	1674.2
55°	1131.6	1137.4	1325.5	1541.7	1920.1	2330.2	2411.5	2252.6	2205.7	2005.3	1764.9
57.5°	810.3	835.9	1012.2	1226.2	1609.9	2150.1	2435.2	2401.6	2356.1	2126.2	1853.6
60°	525.2	529.8	711.1	926.8	1225.9	1829.9	2387.0	2514.5	2479.0	2249.5	1927.9
62.5°	336.6	339.7	450.3	648.3	882.3	1353.8	2225.1	2563.6	2552.7	2331.0	1999.3
65°	247.3	245.0	302.5	428.4	594.4	835.0	1910.5	2539.8	2561.4	2382.0	2058.2
67.5°	206.5	203.2	231.4	296.7	437.9	474.2	1413.6	2385.9	2464.7	2376.2	2101.5
70°	188.1	185.2	202.4	220.3	341.6	317.4	712.6	2074.2	2195.5	2310.1	2094.5
72.5°	159.4	154.3	177.7	195.6	265.8	243.5	294.5	1593.3	1741.2	2098.6	1995.9
75°	123.5	120.1	140.2	172.2	199.8	190.0	186.1	967.5	1128.9	1623.0	1746.1
77.5°	97.9	93.4	111.7	134.2	179.7	143.4	135.6	416.7	576.7	1036.1	1306.5
80°	73.8	69.6	84.9	106.2	138.1	108.0	87.7	169.9	217.4	524.9	657.0
82.5°	52.5	48.9	59.2	77.9	92.9	97.0	53.9	95.2	107.1	202.4	146.8
85°	33.6	31.5	39.7	48.9	59.0	62.4	32.9	49.8	54.6	83.4	61.2
87.5°	18.3	15.0	21.3	22.8	27.4	24.9	15.7	18.1	19.6	30.2	25.8
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°	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.6
2.5°	515.5	516.3	518.6	519.4	521.1	523.3	524.7	526.1	526.1	527.6	527.6
5°	522.5	524.2	529.3	532.0	536.3	540.7	543.4	546.4	548.4	549.4	549.8
7.5°	536.1	538.7	546.0	550.6	558.1	564.2	568.3	572.6	573.6	576.3	575.2
10°	554.4	557.6	565.8	574.5	583.4	590.9	594.8	598.0	599.2	599.6	598.5
12.5°	575.5	580.0	590.7	601.4	610.8	617.4	618.3	617.6	614.2	611.3	611.3
15°	601.4	605.5	617.4	628.9	638.2	639.3	633.2	629.5	625.2	624.5	624.5
17.5°	632.3	634.5	645.3	656.7	657.4	653.3	644.4	640.7	636.9	634.3	634.5
20°	668.3	667.6	675.4	680.2	675.1	662.6	649.0	643.0	639.1	635.9	636.2
22.5°	711.3	705.8	704.9	703.7	690.1	663.8	645.3	637.7	631.6	627.2	628.6
25°	774.0	752.8	738.0	729.8	699.3	657.2	633.8	616.6	605.3	597.8	600.6
27.5°	852.4	816.5	779.3	759.2	699.3	643.9	605.7	577.9	559.2	551.6	555.4
30°	927.1	889.6	834.7	794.8	697.6	622.2	560.5	521.8	500.0	492.3	496.9
32.5°	990.9	950.1	893.5	833.7	693.5	586.8	504.4	461.6	440.5	431.4	435.9
35°	1050.1	1006.7	952.4	876.6	682.6	535.2	442.7	410.1	386.6	371.9	376.7
37.5°	1110.8	1059.1	1008.3	915.2	663.0	474.7	395.3	367.6	340.0	320.1	325.4
40°	1176.8	1115.0	1068.0	938.2	630.9	417.1	358.5	333.2	303.9	282.9	287.0
42.5°	1254.0	1181.9	1134.6	950.1	586.8	376.3	334.7	309.8	282.2	265.1	268.4
45°	1334.6	1255.6	1195.3	949.8	537.8	357.1	326.9	302.3	271.8	253.9	256.8
47.5°	1418.9	1332.8	1247.7	934.3	495.2	359.8	322.6	286.1	252.5	235.0	237.5
50°	1503.5	1417.2	1298.5	905.3	477.0	354.0	306.4	263.3	223.7	208.0	208.9
52.5°	1587.4	1507.0	1342.2	864.0	458.7	332.5	285.6	233.8	211.9	200.9	200.9
55°	1671.8	1595.6	1389.9	803.7	412.8	307.3	250.7	222.7	202.4	192.5	191.5
57.5°	1756.4	1698.2	1435.1	743.5	355.0	276.3	231.6	209.2	193.0	184.5	183.1
60°	1844.5	1815.5	1481.7	688.2	297.9	236.7	217.6	198.2	181.8	172.4	171.7
62.5°	1935.1	1944.5	1518.2	616.8	245.4	212.6	205.0	185.2	169.2	160.3	160.1
65°	2026.5	2069.1	1542.2	517.9	199.0	189.5	191.5	171.0	154.8	147.0	146.8
67.5°	2095.4	2158.8	1535.4	392.0	163.2	167.8	174.6	156.0	140.7	134.7	134.9
70°	2103.2	2148.2	1468.7	268.4	136.6	146.6	155.7	141.2	125.5	121.2	121.4
72.5°	2000.2	2003.1	1282.8	175.3	115.6	128.6	135.9	126.2	111.0	106.6	106.4
75°	1730.1	1656.6	941.8	115.6	96.8	110.5	117.3	110.5	95.7	96.8	93.4
77.5°	1310.8	1173.2	571.8	82.2	80.8	92.9	102.1	97.2	84.7	95.0	83.6
80°	675.4	634.7	255.1	61.4	63.9	74.2	83.9	77.6	66.9	63.9	58.3
82.5°	154.8	179.9	100.6	44.0	46.2	53.4	64.1	58.3	48.1	40.6	40.2
85°	54.1	59.2	44.5	27.6	27.1	33.4	43.6	38.9	32.6	26.1	27.6
87.5°	17.1	22.4	16.7	11.2	11.6	15.0	20.1	18.3	15.3	9.9	10.4
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)