

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: P881541

Luminaire Tested: **NAV-SB1A-727-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881541
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4021 lumens
Efficiency: N/A
Efficacy: 130.1 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

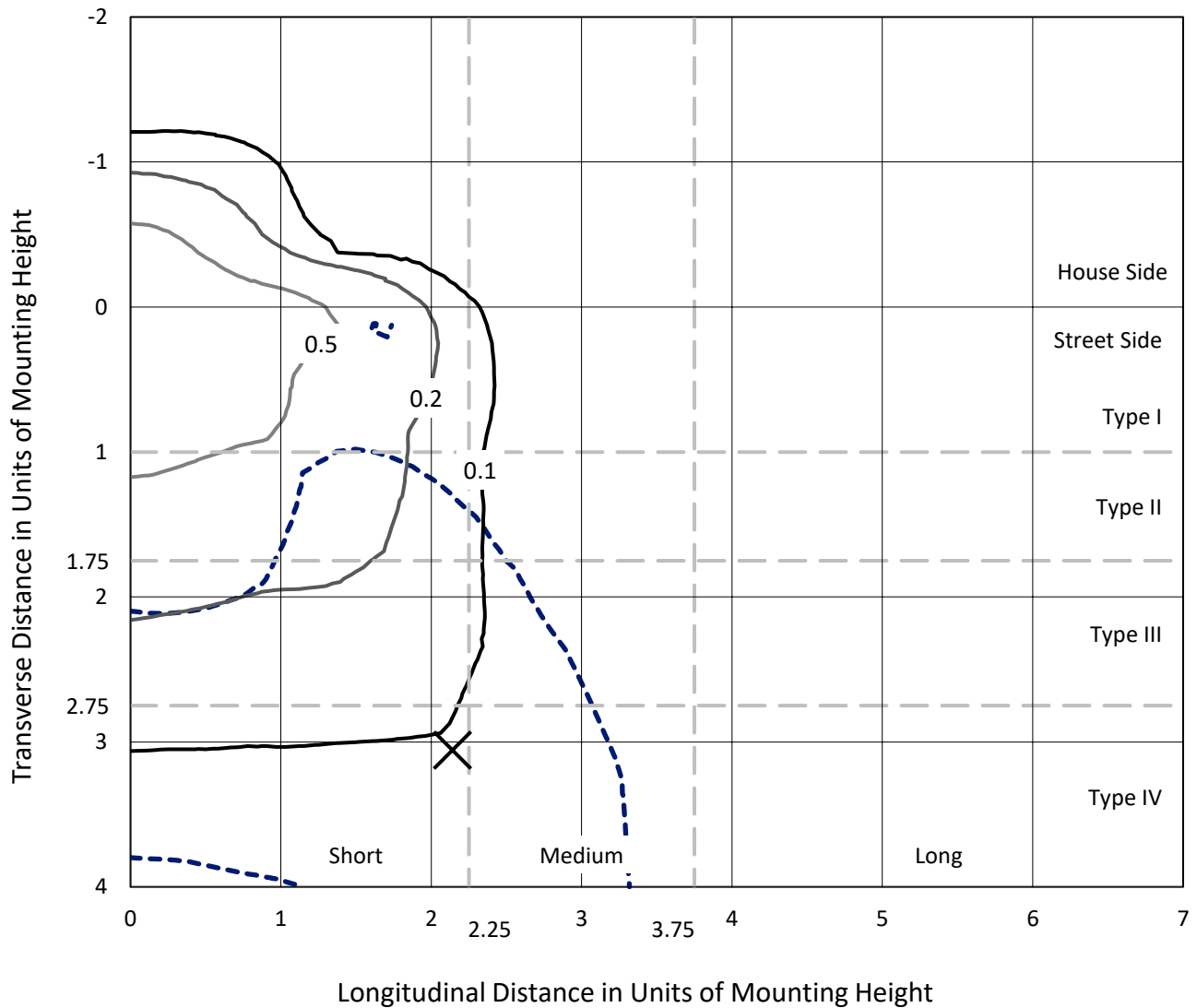
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

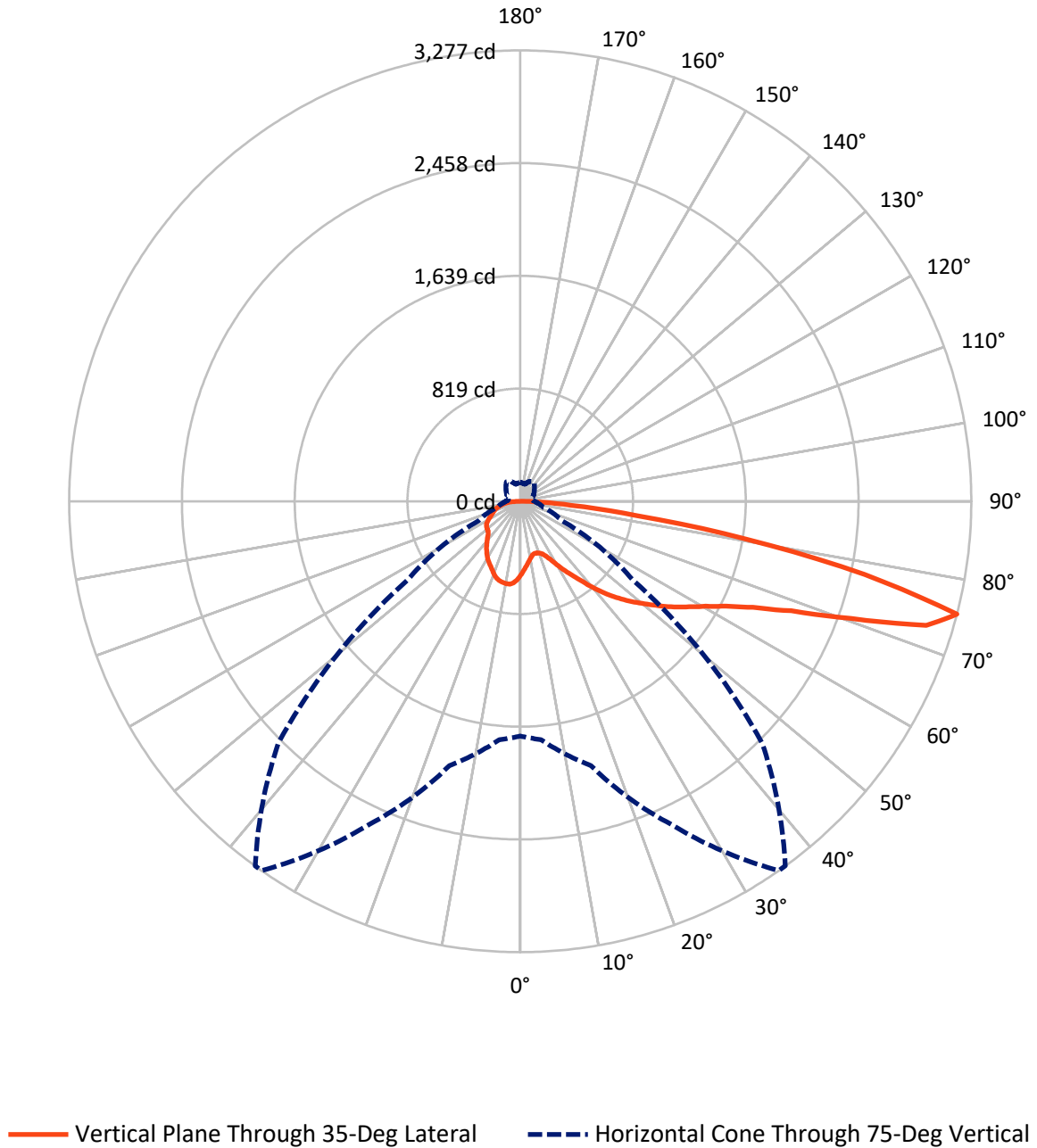
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	956.9	0.0	956.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3064.1	0.0	3064.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	4021.0	0.0	4021.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	1.3
10°-20°	146.3	3.6
20°-30°	245.7	6.1
30°-40°	381.9	9.5
40°-50°	566.8	14.1
50°-60°	782.6	19.5
60°-70°	949.4	23.6
70°-80°	784.6	19.5
80°-90°	112.9	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°	4021.0	100.0
0°-180°	4021.0	100.0

Coefficient of Utilization



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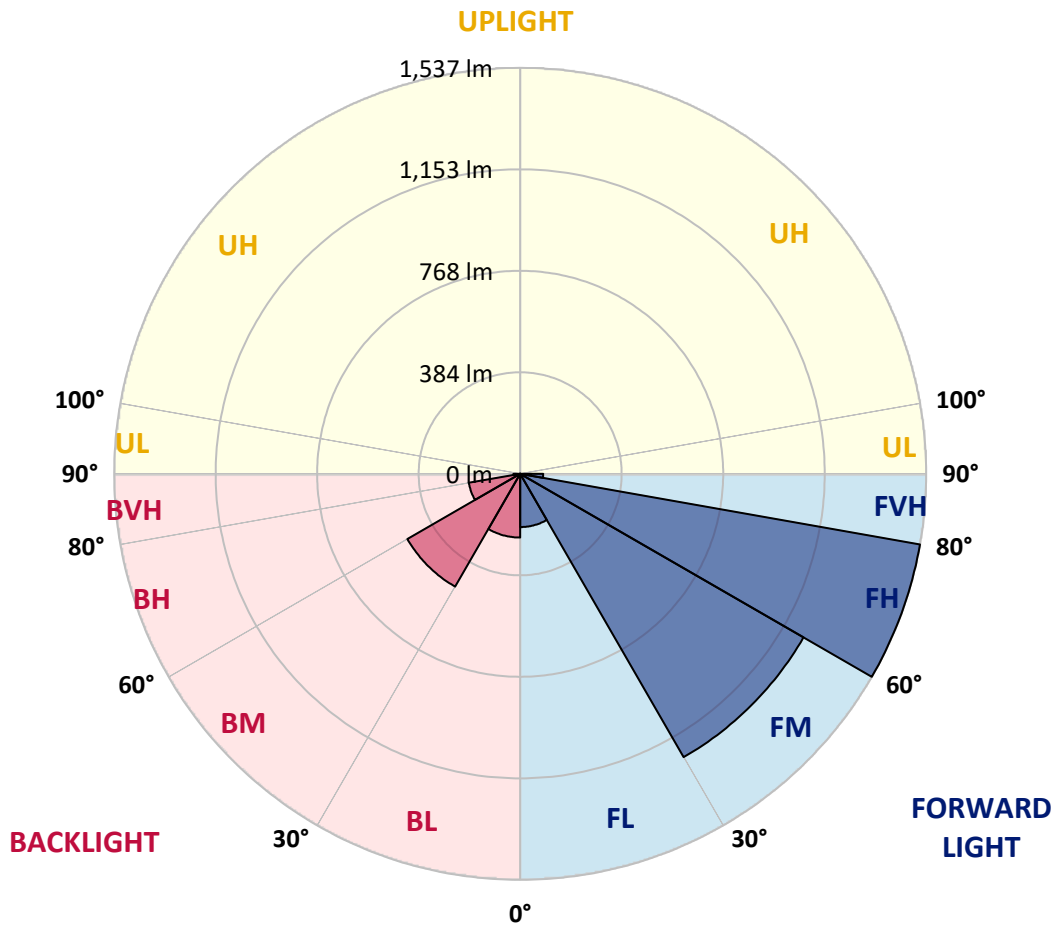
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	201.6	5.0			
FM (30°-60°)	1238.3	30.8			
FH (60°-80°)	1536.8	38.2			G1/1800
FVH (80°-90°)	87.4	2.2			G1/100
BL (0°-30°)	241.2	6.0	B1/500		
BM (30°-60°)	493.0	12.3	B1/1000		
BH (60°-80°)	197.3	4.9	B1/500		G1/500
BVH (80°-90°)	25.4	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°	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8
2.5°	494.1	497.1	498.4	497.8	501.0	500.6	505.2	510.8	518.7	526.3	537.3
5°	456.0	459.3	462.1	464.7	471.0	473.0	480.2	491.0	505.4	520.0	538.2
7.5°	420.6	423.4	427.8	432.6	443.2	445.2	457.1	474.1	494.1	515.4	540.6
10°	391.7	394.5	399.1	404.5	417.8	420.2	435.4	458.0	484.1	511.0	543.2
12.5°	379.3	380.2	382.8	388.2	399.7	401.3	418.0	443.9	474.3	507.8	547.1
15°	378.7	380.4	380.6	383.4	393.0	393.7	409.1	434.7	468.2	507.1	553.0
17.5°	385.2	386.5	384.5	386.3	394.3	395.4	407.6	430.4	466.3	510.0	563.0
20°	402.6	403.7	397.8	395.4	401.3	402.1	414.1	433.2	468.2	515.8	576.7
22.5°	439.5	440.2	425.8	416.1	416.5	416.9	427.4	444.7	475.8	526.5	594.1
25°	497.1	496.7	473.9	455.0	444.1	441.7	448.7	463.4	488.7	540.6	616.5
27.5°	564.5	561.3	538.4	510.2	486.5	483.0	481.5	487.8	506.9	559.3	643.9
30°	640.6	637.6	613.0	576.0	543.2	537.6	523.2	520.0	534.1	584.7	681.9
32.5°	724.1	722.1	692.8	648.0	604.1	597.6	573.4	564.7	575.8	623.2	734.9
35°	794.1	792.3	768.0	721.9	668.2	660.2	635.6	625.8	631.5	672.6	804.3
37.5°	857.3	856.5	835.6	799.3	743.9	734.1	706.5	703.2	702.1	737.5	888.4
40°	916.0	913.8	892.1	873.0	831.9	823.0	798.6	795.8	787.5	817.5	983.6
42.5°	981.0	975.4	943.8	934.9	923.8	916.4	901.9	902.3	884.1	907.8	1084.5
45°	1034.0	1030.8	998.4	993.2	1005.1	1002.1	1014.7	1018.0	982.5	1002.3	1189.2
47.5°	1091.0	1088.0	1060.6	1056.9	1089.3	1090.1	1134.7	1135.8	1078.6	1100.6	1294.2
50°	1161.2	1156.9	1129.7	1134.3	1170.6	1173.8	1255.3	1247.9	1167.1	1200.3	1398.4
52.5°	1207.5	1210.1	1204.2	1211.6	1261.2	1264.2	1374.0	1355.1	1254.7	1298.8	1500.5
55°	1241.6	1246.9	1265.1	1282.1	1356.8	1359.9	1486.0	1457.1	1327.3	1390.1	1596.6
57.5°	1285.5	1278.2	1312.3	1345.3	1447.7	1455.7	1594.9	1555.3	1391.6	1468.8	1662.5
60°	1348.6	1343.4	1369.9	1418.8	1549.4	1562.3	1710.1	1643.8	1438.8	1531.2	1675.3
62.5°	1476.4	1463.4	1467.5	1510.7	1677.7	1694.6	1840.1	1720.9	1462.3	1555.5	1606.6
65°	1667.5	1645.1	1624.2	1654.2	1858.3	1875.1	1986.8	1781.6	1453.6	1508.4	1424.2
67.5°	1908.1	1885.9	1860.3	1888.5	2124.4	2137.7	2167.9	1815.7	1385.1	1326.6	1101.9
70°	2106.6	2098.3	2129.0	2245.2	2549.4	2549.8	2400.0	1787.5	1197.5	940.6	637.6
72.5°	2080.3	2075.3	2236.8	2596.3	3085.0	3073.4	2619.8	1573.6	806.7	424.3	238.9
75°	1706.6	1739.0	1989.2	2590.0	3277.3	3275.8	2485.2	1000.4	333.7	175.9	123.5
77.5°	915.1	966.4	1291.4	1912.2	2558.5	2597.0	1747.2	350.0	143.2	112.6	85.4
80°	298.5	343.2	514.7	973.6	1662.5	1655.3	748.9	137.4	98.0	79.8	59.1
82.5°	126.7	131.9	230.0	459.7	853.2	839.9	238.5	78.9	68.9	54.6	36.5
85°	49.6	55.4	101.5	212.6	369.5	361.5	86.1	39.1	44.1	35.6	21.7
87.5°	16.3	19.8	36.3	72.8	115.0	110.9	21.1	13.5	19.1	16.3	7.8
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°	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8	535.8
2.5°	540.4	543.9	548.0	554.1	559.3	563.6	568.2	571.0	572.1	575.4	575.2
5°	544.3	551.9	562.1	572.1	581.9	587.8	593.0	595.6	598.0	599.7	600.2
7.5°	550.8	560.6	576.7	589.7	598.0	602.8	606.3	605.4	606.3	606.7	607.3
10°	556.5	570.2	589.3	601.7	608.0	608.2	607.3	604.3	602.8	603.0	603.4
12.5°	563.2	578.4	599.1	609.5	611.3	606.5	602.8	597.6	595.6	594.7	594.3
15°	572.3	589.7	609.7	613.6	609.3	603.2	596.9	588.4	584.1	580.6	581.7
17.5°	583.4	602.6	618.0	615.2	605.8	595.8	585.6	572.8	563.9	560.2	560.4
20°	598.9	616.0	624.3	611.9	597.8	582.6	565.2	549.5	541.3	537.6	537.1
22.5°	617.6	634.1	630.4	606.3	586.3	561.9	540.2	528.7	524.5	521.9	522.3
25°	639.9	654.1	634.7	598.0	567.3	534.5	517.8	514.1	512.1	510.2	510.2
27.5°	669.1	676.7	638.0	585.8	537.8	505.4	499.3	500.0	499.3	496.0	496.7
30°	707.6	706.0	641.0	566.0	503.9	479.1	479.5	482.4	482.8	480.6	481.7
32.5°	758.2	742.8	642.6	540.4	471.5	456.0	456.5	459.5	461.7	458.0	459.7
35°	819.5	785.6	640.2	508.2	446.5	434.1	430.8	431.7	432.4	428.9	431.3
37.5°	891.0	833.6	629.5	472.6	425.8	412.6	405.6	399.7	396.3	393.0	395.2
40°	969.5	886.0	609.9	437.8	402.8	389.8	379.3	368.2	356.5	352.1	354.1
42.5°	1051.7	939.9	586.3	404.5	376.3	365.6	354.5	338.5	320.8	311.9	313.0
45°	1136.9	995.1	563.0	371.7	349.1	344.5	331.7	312.4	293.2	281.9	281.1
47.5°	1220.3	1047.3	528.9	338.7	323.7	328.7	318.7	300.8	279.5	261.7	259.8
50°	1300.1	1096.2	473.0	305.2	303.0	323.9	314.3	288.7	264.3	241.5	239.5
52.5°	1379.2	1135.8	401.5	274.8	291.9	322.6	308.7	280.4	250.6	226.7	224.1
55°	1446.4	1156.2	332.6	248.7	275.8	311.5	301.9	270.6	231.3	205.9	203.7
57.5°	1484.7	1139.7	275.2	223.0	253.7	293.2	290.4	249.8	208.2	188.7	186.1
60°	1468.1	1072.7	228.2	200.6	232.6	273.5	270.4	229.1	190.6	172.2	169.6
62.5°	1377.1	945.1	191.1	181.1	213.5	253.2	250.4	213.2	177.2	159.3	156.5
65°	1193.6	768.8	162.2	164.8	194.1	228.9	233.0	200.0	166.5	149.1	146.3
67.5°	910.4	556.9	139.6	150.6	175.2	205.0	216.9	190.4	157.6	141.1	138.5
70°	518.9	316.3	120.4	136.9	158.5	182.8	204.5	182.8	148.0	134.3	132.6
72.5°	196.7	145.2	104.1	123.3	142.4	164.1	190.9	170.9	136.9	126.7	125.0
75°	105.0	88.5	87.6	107.2	123.9	145.9	173.7	159.1	128.7	133.9	138.2
77.5°	71.5	62.6	73.3	91.7	103.7	125.6	155.4	141.3	111.5	111.1	102.4
80°	49.6	44.3	59.6	73.9	80.2	105.6	135.6	121.3	90.9	84.8	81.1
82.5°	29.8	28.9	44.6	55.2	56.7	81.5	112.4	101.7	74.3	64.8	65.2
85°	16.3	17.2	28.5	32.4	33.0	57.0	88.0	78.7	57.2	48.0	48.5
87.5°	4.6	5.9	10.4	12.8	15.9	29.6	52.4	46.7	28.7	20.0	20.0
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)