

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: P882636

Luminaire Tested: **NAV-SB2C-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882636
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-SB2C-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9404 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

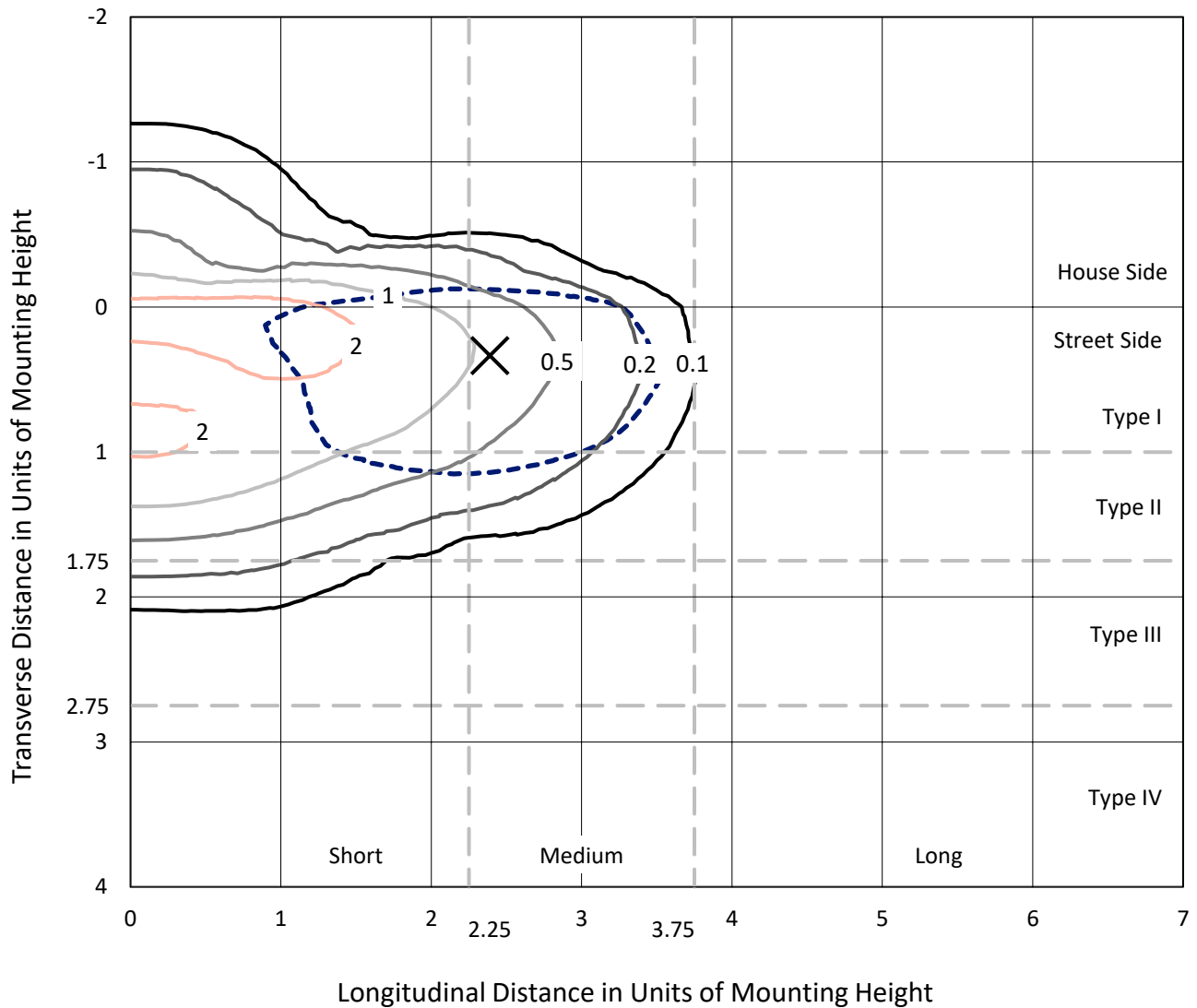
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

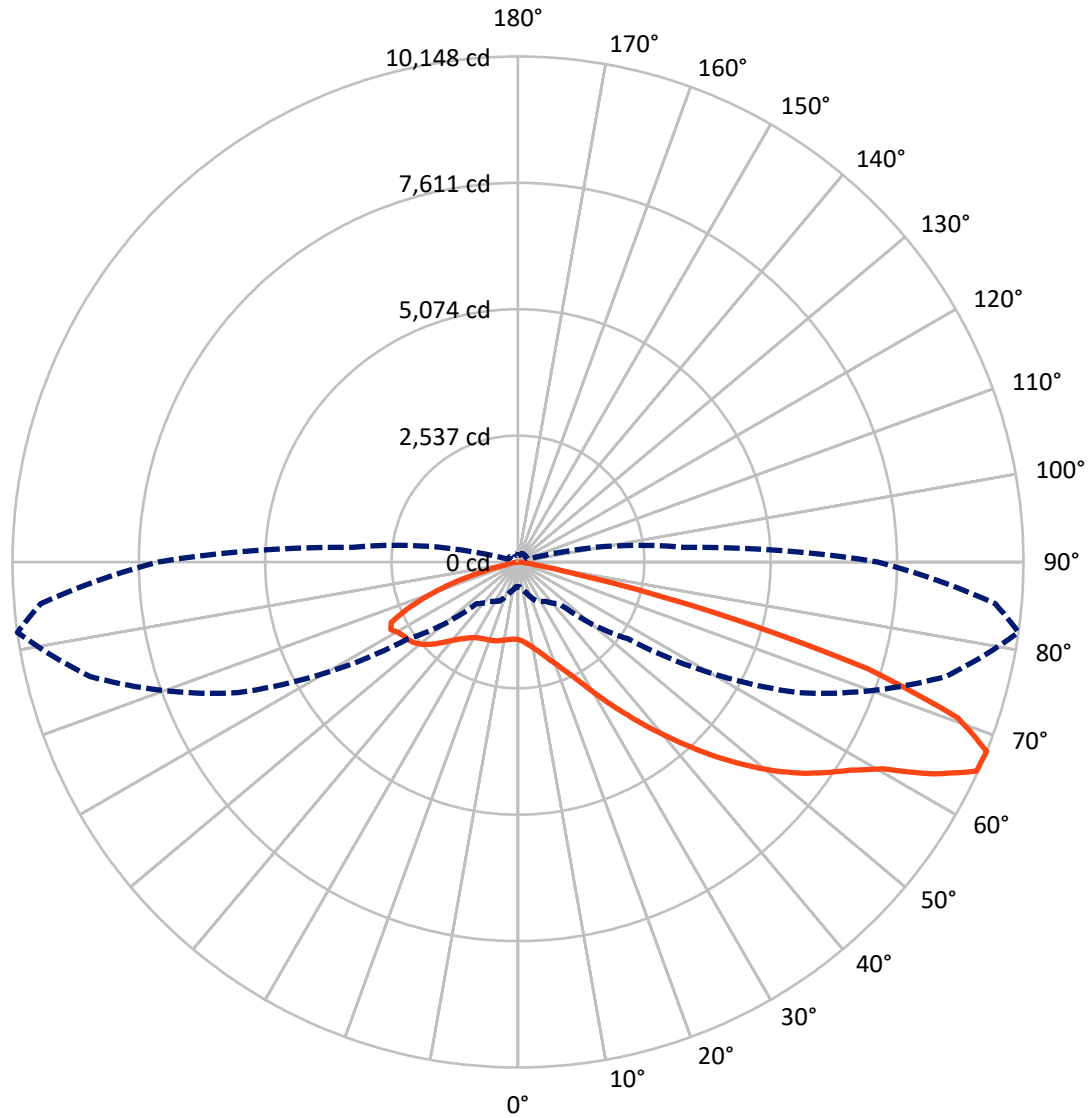
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1703.4	0.0	1703.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7700.5	0.0	7700.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	9404.0	0.0	9404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	1.5
10°-20°	360.7	3.8
20°-30°	577.7	6.1
30°-40°	1021.6	10.9
40°-50°	1789.9	19.0
50°-60°	2387.2	25.4
60°-70°	2222.3	23.6
70°-80°	852.9	9.1
80°-90°	53.0	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°	9404.0	100.0
0°-180°	9404.0	100.0

Coefficient of Utilization



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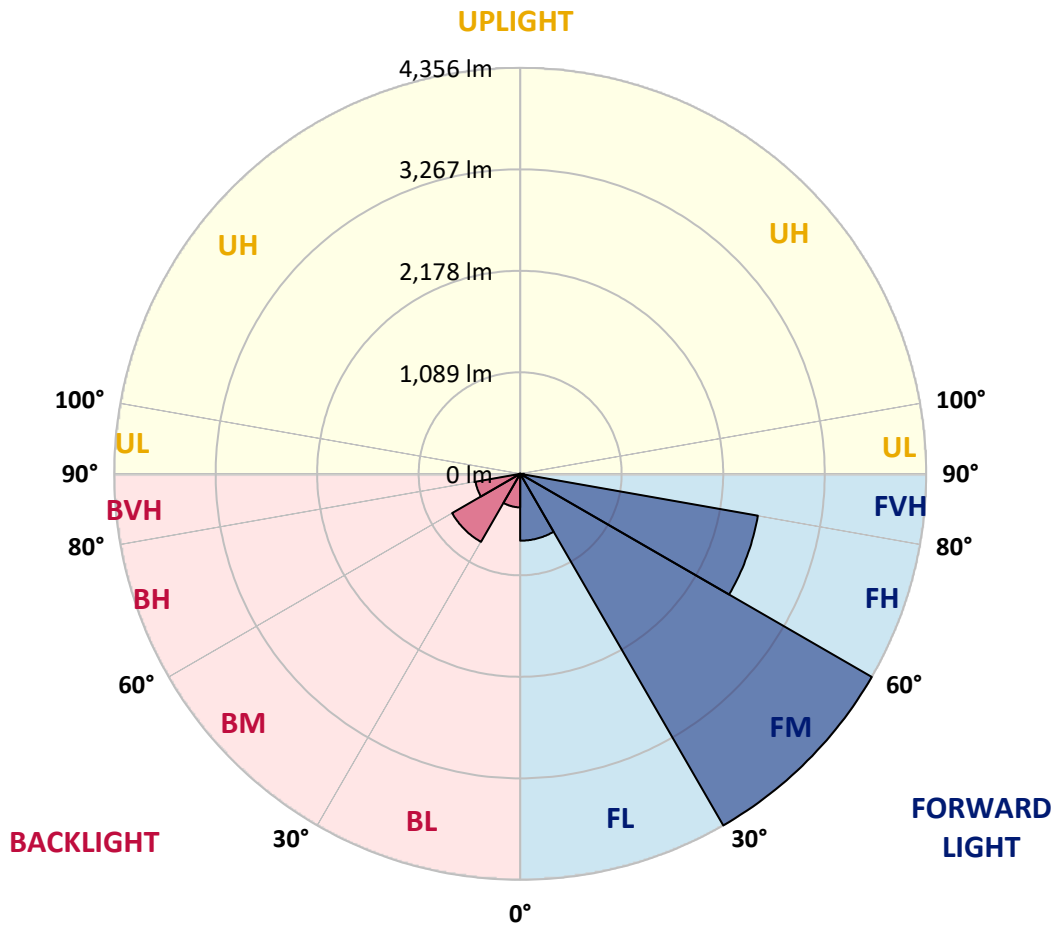
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	717.4	7.6			
FM (30°-60°)	4355.5	46.3			
FH (60°-80°)	2589.1	27.5			G2/5000
FVH (80°-90°)	38.5	0.4			G1/100
BL (0°-30°)	359.8	3.8	B1/500		
BM (30°-60°)	843.0	9.0	B1/1000		
BH (60°-80°)	486.2	5.2	B1/500		G1/500
BVH (80°-90°)	14.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9
2.5°	1646.6	1656.1	1650.7	1648.0	1643.2	1636.5	1631.0	1614.1	1596.5	1585.0	1580.9
5°	1679.8	1689.3	1688.6	1691.3	1694.7	1696.7	1695.4	1676.4	1651.4	1631.7	1620.2
7.5°	1651.4	1662.2	1671.0	1684.5	1708.2	1733.3	1745.5	1741.4	1715.7	1688.6	1674.4
10°	1570.8	1582.3	1603.3	1635.1	1685.2	1739.4	1784.7	1805.7	1789.5	1759.7	1740.1
12.5°	1423.2	1434.7	1476.0	1545.1	1629.0	1723.1	1809.8	1866.0	1870.1	1840.3	1817.2
15°	1257.3	1268.8	1312.8	1399.5	1527.5	1678.4	1823.3	1929.6	1965.5	1939.8	1912.0
17.5°	1154.4	1164.6	1197.7	1267.5	1400.8	1589.1	1818.6	1997.3	2079.3	2059.0	2025.8
20°	1123.2	1132.1	1147.6	1196.4	1307.4	1496.3	1787.4	2061.0	2201.8	2190.3	2153.1
22.5°	1156.4	1164.6	1169.3	1191.0	1260.7	1435.4	1748.2	2126.0	2344.0	2345.4	2300.0
25°	1232.9	1241.1	1235.6	1249.2	1279.7	1416.4	1733.3	2202.5	2522.7	2537.6	2486.2
27.5°	1358.9	1359.5	1346.7	1346.0	1350.7	1444.9	1748.9	2284.4	2748.2	2776.0	2712.3
30°	1611.4	1601.3	1551.8	1498.3	1474.0	1530.2	1792.2	2381.2	3014.3	3063.7	2983.8
32.5°	2000.7	1985.8	1895.1	1767.1	1638.5	1667.6	1870.1	2491.6	3304.1	3393.4	3295.9
35°	2423.2	2419.2	2324.4	2134.1	1909.3	1863.3	1996.7	2636.5	3620.3	3762.4	3646.7
37.5°	2815.9	2813.9	2759.7	2535.6	2262.1	2136.1	2199.8	2826.1	3958.8	4164.6	4027.9
40°	3174.8	3180.8	3126.7	2926.3	2650.7	2486.2	2476.0	3060.3	4335.2	4602.7	4440.2
42.5°	3484.8	3491.6	3436.8	3288.5	3034.6	2873.5	2815.2	3347.4	4702.9	5073.2	4881.0
45°	3695.4	3737.4	3729.3	3610.8	3428.7	3261.4	3222.8	3707.6	5122.0	5572.2	5346.8
47.5°	3755.0	3793.6	3854.5	3870.8	3759.7	3595.2	3641.3	4141.6	5545.8	6071.9	5815.3
50°	3608.1	3644.0	3770.6	3939.2	4016.3	3965.6	4048.2	4606.7	5979.8	6570.2	6275.0
52.5°	3318.3	3354.9	3514.6	3781.4	4096.2	4256.0	4456.4	5065.1	6400.3	7042.1	6710.4
55°	2899.2	2937.8	3142.9	3444.9	3943.9	4375.9	4797.0	5522.8	6785.5	7466.7	7103.1
57.5°	2329.1	2357.5	2570.8	2993.3	3560.7	4256.7	5048.2	6022.5	7148.4	7883.7	7492.4
60°	1518.0	1543.0	1790.8	2262.1	2925.6	3858.6	5098.3	6579.7	7630.5	8426.1	8017.1
62.5°	1009.5	1026.4	1173.4	1519.3	2060.3	3094.2	4805.1	7024.5	8337.4	9369.9	8916.9
65°	692.6	709.6	856.5	1097.5	1331.1	2046.8	3962.2	6965.6	8977.9	10119.4	9583.8
67.5°	494.3	508.5	633.1	860.5	963.5	1188.9	2685.9	6212.7	8885.8	10147.8	9619.7
70°	354.1	362.2	465.1	670.3	765.8	714.3	1493.6	4751.6	7780.1	9370.6	8887.1
72.5°	247.8	250.5	323.0	510.5	616.8	521.3	710.9	3168.0	5884.4	7354.9	6889.8
75°	167.9	171.3	217.3	374.4	494.9	398.1	376.4	1698.8	3454.4	4071.2	3649.4
77.5°	102.9	104.3	140.2	255.9	370.4	303.3	242.4	719.7	1336.5	1312.2	1118.5
80°	58.2	58.2	89.4	159.1	252.5	195.7	169.9	306.0	423.2	371.7	327.7
82.5°	32.5	33.2	65.0	98.9	167.2	115.8	93.4	141.5	182.8	161.8	140.8
85°	13.5	14.9	39.9	46.7	79.9	57.6	37.9	59.6	67.7	60.3	44.0
87.5°	1.4	2.0	12.2	8.8	9.5	11.5	5.4	11.5	9.5	9.5	6.8
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°	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9	1557.9
2.5°	1568.1	1557.9	1532.2	1502.4	1463.1	1444.2	1418.4	1400.8	1386.0	1387.3	1373.8
5°	1598.5	1572.8	1515.3	1443.5	1354.1	1290.5	1222.8	1176.1	1138.1	1130.0	1111.7
7.5°	1640.5	1599.9	1499.0	1369.7	1218.7	1104.3	1002.1	936.4	889.7	874.8	859.9
10°	1694.7	1635.8	1478.0	1276.9	1059.6	914.0	804.4	752.9	721.1	710.2	702.1
12.5°	1757.7	1677.1	1450.3	1163.9	895.8	755.6	685.9	660.1	650.0	646.6	644.6
15°	1836.9	1728.5	1408.3	1029.8	757.0	658.8	629.0	625.6	627.0	625.6	624.9
17.5°	1931.0	1784.7	1339.9	891.7	663.5	609.4	598.5	601.2	604.6	603.9	602.6
20°	2033.9	1840.3	1252.6	769.1	599.9	574.2	568.1	570.8	573.5	572.1	571.4
22.5°	2151.0	1899.8	1155.7	673.7	557.2	541.7	534.9	535.6	535.6	532.8	531.5
25°	2291.2	1965.5	1054.2	606.0	524.7	512.5	504.4	501.7	497.6	489.5	488.2
27.5°	2458.4	2035.3	956.7	558.6	499.0	487.5	478.0	471.2	461.1	447.5	446.2
30°	2646.6	2119.9	874.1	528.8	478.7	467.2	456.3	446.2	431.3	414.4	413.0
32.5°	2868.0	2210.6	813.8	509.2	460.4	448.2	435.4	423.2	406.9	390.0	390.7
35°	3132.1	2320.3	778.6	495.6	446.2	429.9	415.7	402.2	390.0	375.1	373.7
37.5°	3418.5	2436.8	767.8	488.8	436.7	411.7	395.4	385.9	384.6	375.8	375.1
40°	3732.0	2574.9	775.9	484.8	426.6	394.1	376.4	374.4	377.8	362.2	362.9
42.5°	4063.7	2738.7	789.5	480.0	412.3	376.4	359.5	359.5	356.8	335.1	335.1
45°	4422.6	2927.6	803.0	468.5	395.4	358.8	346.0	341.2	329.7	308.7	308.1
47.5°	4784.1	3119.9	813.2	447.5	375.1	343.9	332.4	321.6	304.7	285.7	285.0
50°	5127.4	3292.6	802.3	416.4	352.1	329.7	317.5	302.6	284.4	271.5	269.5
52.5°	5434.1	3442.2	756.3	379.8	327.7	314.8	304.0	288.4	273.5	260.0	258.6
55°	5700.9	3563.4	675.0	345.3	306.0	302.0	291.1	271.5	251.2	239.7	238.3
57.5°	5956.8	3655.5	573.5	316.9	286.4	287.8	271.5	253.9	234.9	222.8	221.4
60°	6297.4	3778.7	470.6	290.5	265.4	269.5	251.9	239.0	215.3	199.7	197.7
62.5°	6841.7	3970.3	373.7	258.0	241.0	242.4	234.9	219.4	190.9	172.7	171.3
65°	7273.7	3899.9	294.5	222.8	213.3	215.3	215.3	198.4	167.9	146.9	144.9
67.5°	7225.0	3339.3	234.9	188.2	186.9	188.2	193.0	178.7	149.0	132.0	129.3
70°	6655.5	2656.1	188.2	156.4	162.5	159.1	172.7	163.2	134.1	117.1	115.1
72.5°	5430.7	1913.4	143.5	129.3	124.6	130.0	155.7	146.9	111.7	92.8	90.7
75°	3173.4	1021.0	107.0	102.2	90.0	108.3	138.1	125.3	85.3	68.4	66.4
77.5°	1033.2	356.1	78.5	75.2	67.0	87.3	117.8	105.6	69.7	54.2	52.1
80°	276.9	107.7	53.5	49.4	43.3	65.0	93.4	84.0	50.1	35.2	34.5
82.5°	111.0	45.4	31.1	27.8	23.7	44.7	73.8	67.7	37.2	22.3	22.3
85°	35.9	14.9	11.5	8.8	10.8	27.8	44.0	46.0	26.4	11.5	8.8
87.5°	4.7	2.0	2.0	2.7	2.0	4.7	13.5	12.9	7.4	1.4	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)