

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: P882576

Luminaire Tested: **NAV-SB2C-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882576
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-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 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: 11146 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

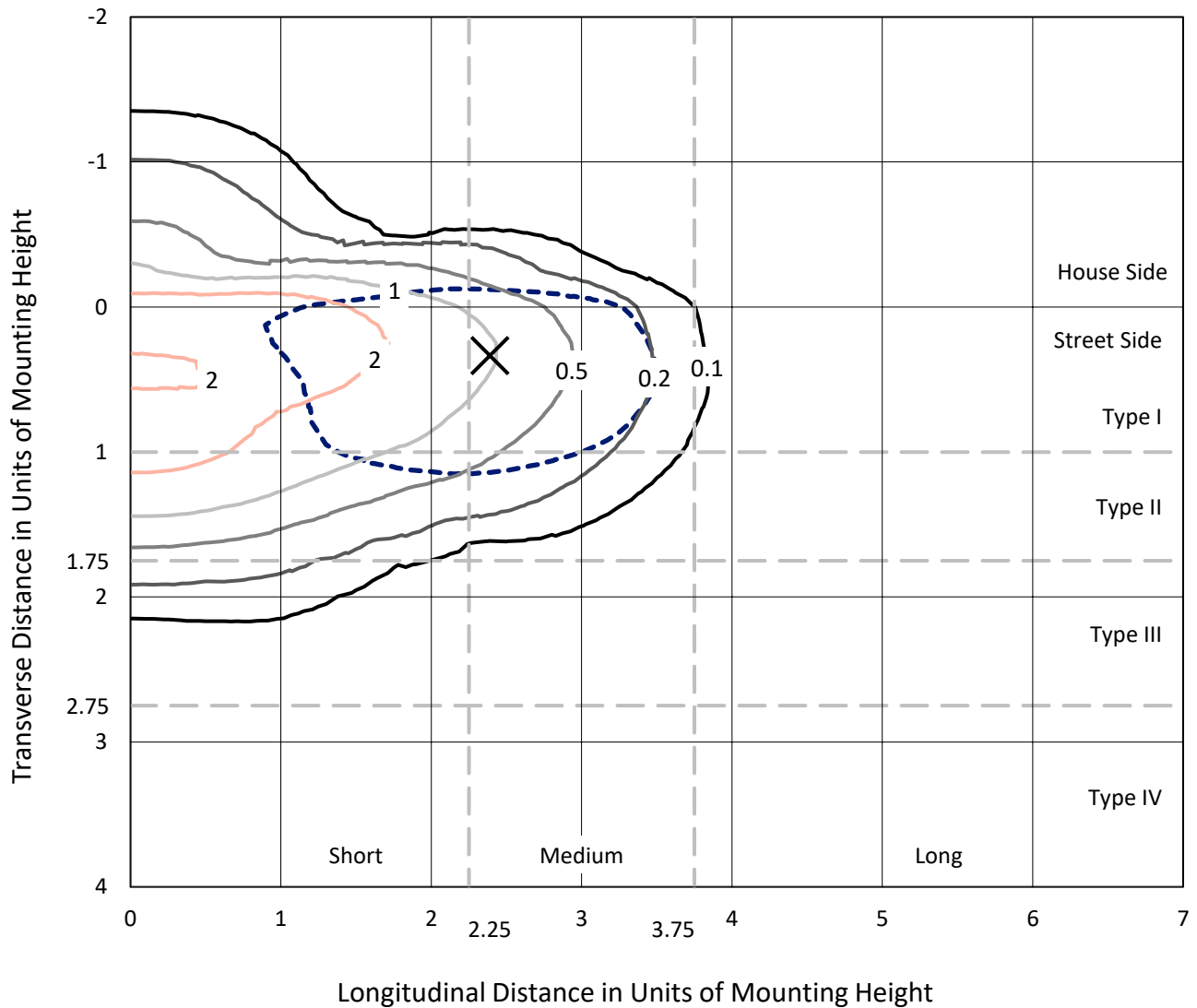
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

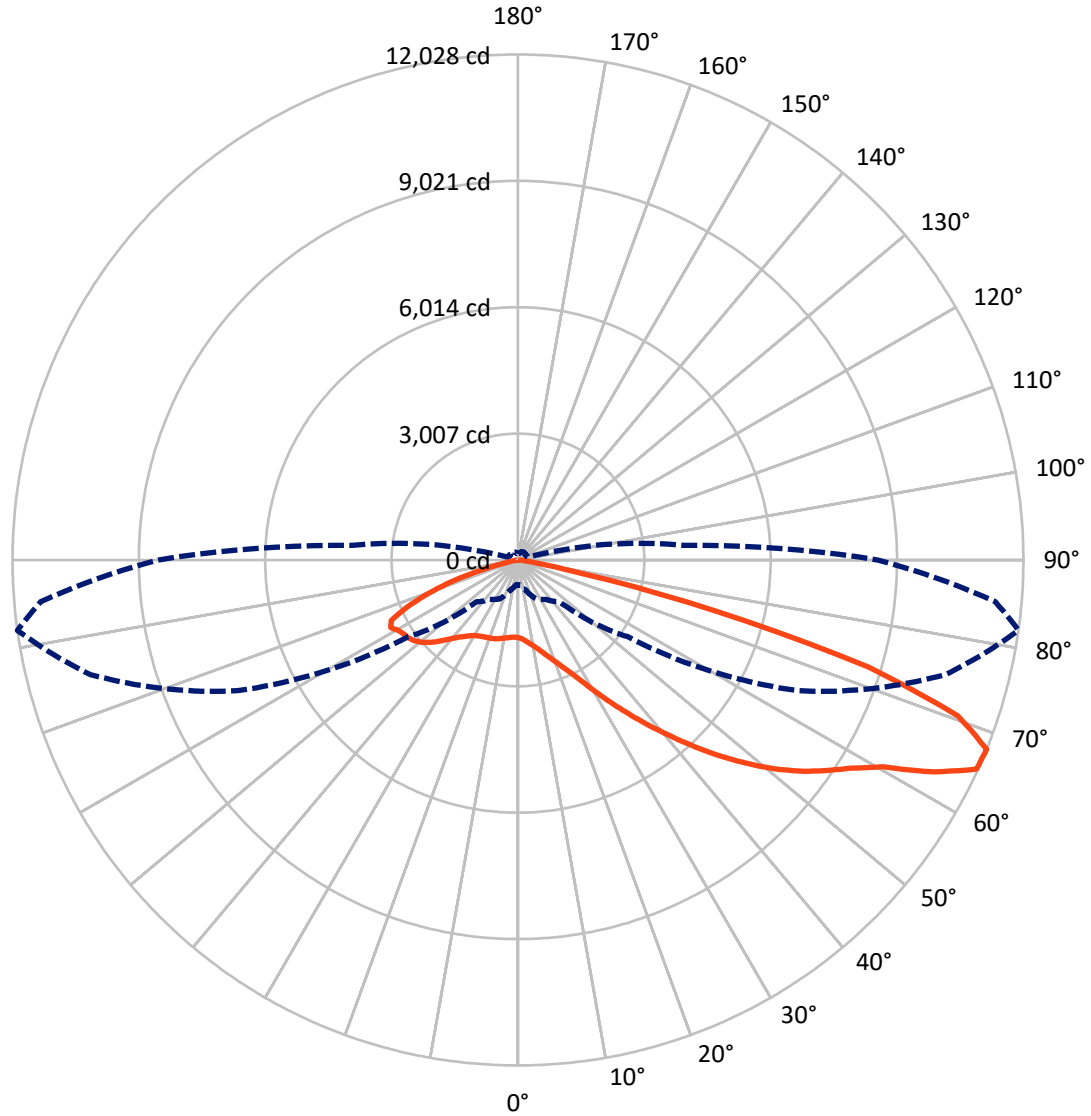
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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	2019.0	0.0	2019.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	9127.0	0.0	9127.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	11146.0	0.0	11146.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	1.5
10°-20°	427.5	3.8
20°-30°	684.7	6.1
30°-40°	1210.8	10.9
40°-50°	2121.4	19.0
50°-60°	2829.4	25.4
60°-70°	2634.0	23.6
70°-80°	1010.9	9.1
80°-90°	62.8	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°	11146.0	100.0
0°-180°	11146.0	100.0

Coefficient of Utilization



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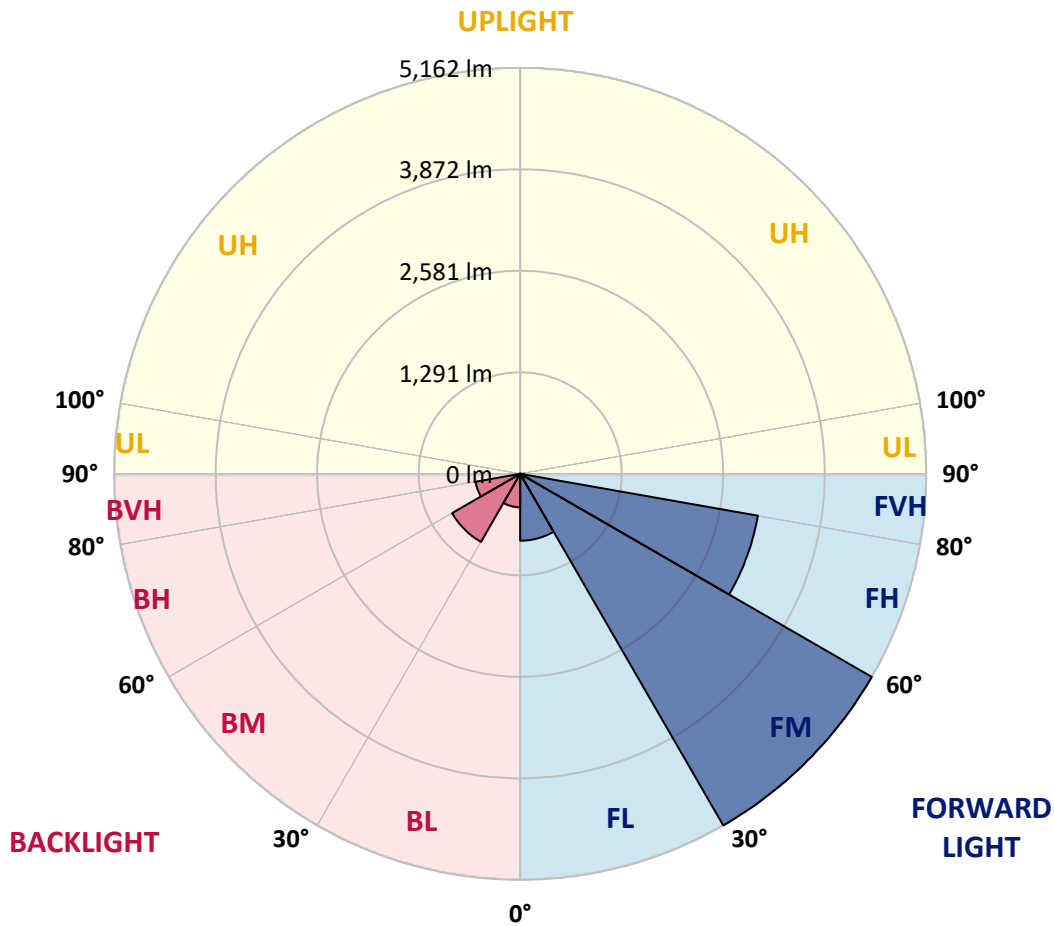
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	850.3	7.6			
FM (30°-60°)	5162.4	46.3			
FH (60°-80°)	3068.7	27.5			G2/5000
FVH (80°-90°)	45.6	0.4			G1/100
BL (0°-30°)	426.4	3.8	B1/500		
BM (30°-60°)	999.2	9.0	B1/1000		
BH (60°-80°)	576.3	5.2	B2/1000		G2/1000
BVH (80°-90°)	17.1	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5
2.5°	1951.6	1962.9	1956.5	1953.2	1947.6	1939.6	1933.2	1913.1	1892.3	1878.6	1873.8
5°	1991.0	2002.2	2001.4	2004.6	2008.6	2011.0	2009.4	1986.9	1957.3	1934.0	1920.3
7.5°	1957.3	1970.1	1980.5	1996.6	2024.7	2054.4	2068.8	2064.0	2033.5	2001.4	1984.5
10°	1861.8	1875.4	1900.3	1938.0	1997.4	2061.6	2115.3	2140.2	2121.0	2085.7	2062.4
12.5°	1686.8	1700.5	1749.4	1831.3	1930.8	2042.3	2145.0	2211.6	2216.5	2181.2	2153.9
15°	1490.2	1503.9	1556.0	1658.7	1810.4	1989.4	2161.1	2287.1	2329.6	2299.1	2266.2
17.5°	1368.2	1380.3	1419.6	1502.2	1660.3	1883.4	2155.5	2367.3	2464.4	2440.4	2401.0
20°	1331.3	1341.8	1360.2	1418.0	1549.6	1773.5	2118.6	2442.8	2609.7	2596.0	2551.9
22.5°	1370.6	1380.3	1385.9	1411.6	1494.2	1701.3	2072.0	2519.8	2778.2	2779.8	2726.0
25°	1461.3	1471.0	1464.5	1480.6	1516.7	1678.8	2054.4	2610.5	2990.1	3007.7	2946.7
27.5°	1610.6	1611.4	1596.1	1595.3	1601.0	1712.5	2072.8	2707.6	3257.3	3290.2	3214.7
30°	1909.9	1897.9	1839.3	1775.9	1747.0	1813.6	2124.2	2822.3	3572.7	3631.2	3536.5
32.5°	2371.3	2353.7	2246.2	2094.5	1942.0	1976.5	2216.5	2953.1	3916.1	4022.0	3906.5
35°	2872.1	2867.3	2754.9	2529.4	2263.0	2208.4	2366.5	3124.9	4290.9	4459.4	4322.2
37.5°	3337.5	3335.1	3270.9	3005.3	2681.1	2531.8	2607.3	3349.6	4692.1	4936.1	4774.0
40°	3762.8	3770.1	3705.9	3468.3	3141.7	2946.7	2934.7	3627.2	5138.3	5455.3	5262.7
42.5°	4130.4	4138.4	4073.4	3897.7	3596.7	3405.7	3336.7	3967.5	5574.1	6013.0	5785.1
45°	4380.0	4429.7	4420.1	4279.6	4063.8	3865.6	3819.8	4394.4	6070.8	6604.4	6337.2
47.5°	4450.6	4496.3	4568.5	4587.8	4456.2	4261.2	4315.8	4908.8	6573.1	7196.7	6892.5
50°	4276.4	4319.0	4469.0	4668.9	4760.3	4700.1	4798.1	5460.1	7087.5	7787.3	7437.4
52.5°	3933.0	3976.3	4165.7	4481.9	4855.0	5044.4	5281.9	6003.4	7585.9	8346.6	7953.4
55°	3436.2	3482.0	3725.1	4083.0	4674.5	5186.5	5685.6	6545.9	8042.5	8849.8	8418.9
57.5°	2760.5	2794.2	3047.0	3547.8	4220.3	5045.2	5983.3	7138.1	8472.6	9344.1	8880.3
60°	1799.2	1828.9	2122.6	2681.1	3467.5	4573.4	6042.7	7798.5	9044.0	9986.9	9502.2
62.5°	1196.5	1216.6	1390.7	1800.8	2442.0	3667.4	5695.2	8325.8	9881.8	11105.6	10568.7
65°	820.9	841.0	1015.1	1300.8	1577.7	2425.9	4696.1	8256.0	10640.9	11993.9	11359.2
67.5°	585.8	602.7	750.3	1020.0	1141.9	1409.2	3183.5	7363.6	10531.8	12027.6	11401.7
70°	419.7	429.3	551.3	794.5	907.6	846.6	1770.3	5631.8	9221.3	11106.4	10533.4
72.5°	293.7	296.9	382.8	605.1	731.1	617.9	842.6	3754.8	6974.4	8717.4	8166.1
75°	199.0	203.0	257.6	443.8	586.6	471.9	446.2	2013.4	4094.3	4825.3	4325.4
77.5°	122.0	123.6	166.1	303.3	439.0	359.5	287.3	853.0	1584.1	1555.2	1325.7
80°	69.0	69.0	105.9	188.6	299.3	231.9	201.4	362.7	501.6	440.6	388.4
82.5°	38.5	39.3	77.0	117.2	198.2	137.2	110.7	167.7	216.7	191.8	166.9
85°	16.0	17.7	47.3	55.4	94.7	68.2	44.9	70.6	80.2	71.4	52.2
87.5°	1.6	2.4	14.4	10.4	11.2	13.6	6.4	13.6	11.2	11.2	8.0
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°	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5
2.5°	1858.6	1846.5	1816.0	1780.7	1734.2	1711.7	1681.2	1660.3	1642.7	1644.3	1628.2
5°	1894.7	1864.2	1796.0	1710.9	1605.0	1529.5	1449.3	1393.9	1349.0	1339.3	1317.7
7.5°	1944.4	1896.3	1776.7	1623.4	1444.5	1308.9	1187.7	1109.8	1054.5	1036.8	1019.2
10°	2008.6	1938.8	1751.8	1513.5	1255.9	1083.4	953.4	892.4	854.6	841.8	832.2
12.5°	2083.2	1987.8	1718.9	1379.5	1061.7	895.6	812.9	782.4	770.4	766.4	764.0
15°	2177.1	2048.7	1669.2	1220.6	897.2	780.8	745.5	741.5	743.1	741.5	740.7
17.5°	2288.7	2115.3	1588.1	1056.9	786.4	722.2	709.4	712.6	716.6	715.8	714.2
20°	2410.7	2181.2	1484.6	911.6	711.0	680.5	673.3	676.5	679.7	678.1	677.3
22.5°	2549.5	2251.8	1369.8	798.5	660.4	642.0	634.0	634.8	634.8	631.6	629.9
25°	2715.6	2329.6	1249.5	718.2	621.9	607.5	597.9	594.6	589.8	580.2	578.6
27.5°	2913.8	2412.3	1133.9	662.0	591.4	577.8	566.6	558.5	546.5	530.4	528.8
30°	3136.9	2512.6	1036.0	626.7	567.4	553.7	540.9	528.8	511.2	491.1	489.5
32.5°	3399.3	2620.1	964.6	603.5	545.7	531.2	516.0	501.6	482.3	462.2	463.0
35°	3712.3	2750.1	922.9	587.4	528.8	509.6	492.7	476.7	462.2	444.6	443.0
37.5°	4051.7	2888.1	910.0	579.4	517.6	487.9	468.7	457.4	455.8	445.4	444.6
40°	4423.3	3051.8	919.6	574.6	505.6	467.0	446.2	443.8	447.8	429.3	430.1
42.5°	4816.5	3246.0	935.7	569.0	488.7	446.2	426.1	426.1	422.9	397.2	397.2
45°	5241.8	3469.9	951.7	555.3	468.7	425.3	410.1	404.5	390.8	365.9	365.1
47.5°	5670.3	3697.8	963.8	530.4	444.6	407.7	394.0	381.2	361.1	338.6	337.8
50°	6077.2	3902.5	950.9	493.5	417.3	390.8	376.4	358.7	337.0	321.8	319.4
52.5°	6440.7	4079.8	896.4	450.2	388.4	373.2	360.3	341.9	324.2	308.2	306.5
55°	6756.9	4223.5	800.1	409.3	362.7	357.9	345.1	321.8	297.7	284.1	282.5
57.5°	7060.3	4332.6	679.7	375.6	339.5	341.1	321.8	300.9	278.5	264.0	262.4
60°	7463.9	4478.7	557.7	344.3	314.6	319.4	298.5	283.3	255.2	236.7	234.3
62.5°	8109.1	4705.8	443.0	305.7	285.7	287.3	278.5	260.0	226.3	204.6	203.0
65°	8621.1	4622.3	349.1	264.0	252.8	255.2	255.2	235.1	199.0	174.1	171.7
67.5°	8563.3	3957.8	278.5	223.1	221.5	223.1	228.7	211.9	176.5	156.5	153.3
70°	7888.4	3148.1	223.1	185.4	192.6	188.6	204.6	193.4	158.9	138.8	136.4
72.5°	6436.7	2267.8	170.1	153.3	147.7	154.1	184.6	174.1	132.4	109.9	107.5
75°	3761.2	1210.1	126.8	121.2	106.7	128.4	163.7	148.5	101.1	81.1	78.6
77.5°	1224.6	422.1	93.1	89.1	79.4	103.5	139.6	125.2	82.7	64.2	61.8
80°	328.2	127.6	63.4	58.6	51.4	77.0	110.7	99.5	59.4	41.7	40.9
82.5°	131.6	53.8	36.9	32.9	28.1	53.0	87.5	80.2	44.1	26.5	26.5
85°	42.5	17.7	13.6	10.4	12.8	32.9	52.2	54.6	31.3	13.6	10.4
87.5°	5.6	2.4	2.4	3.2	2.4	5.6	16.0	15.2	8.8	1.6	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)