

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: P959835

Luminaire Tested: **NAV-SB1B-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959835
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-SB1B-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5706.2 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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



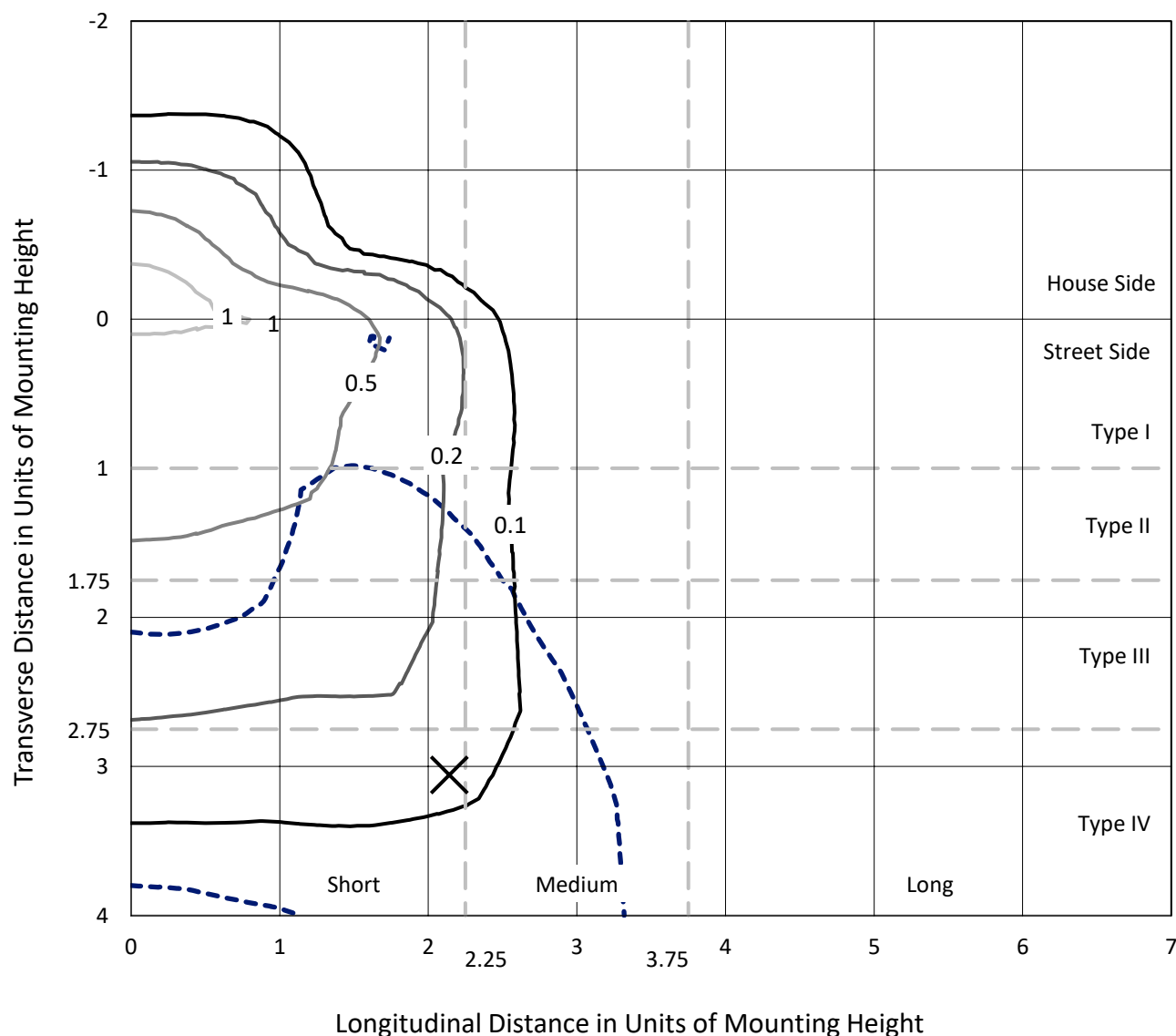
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

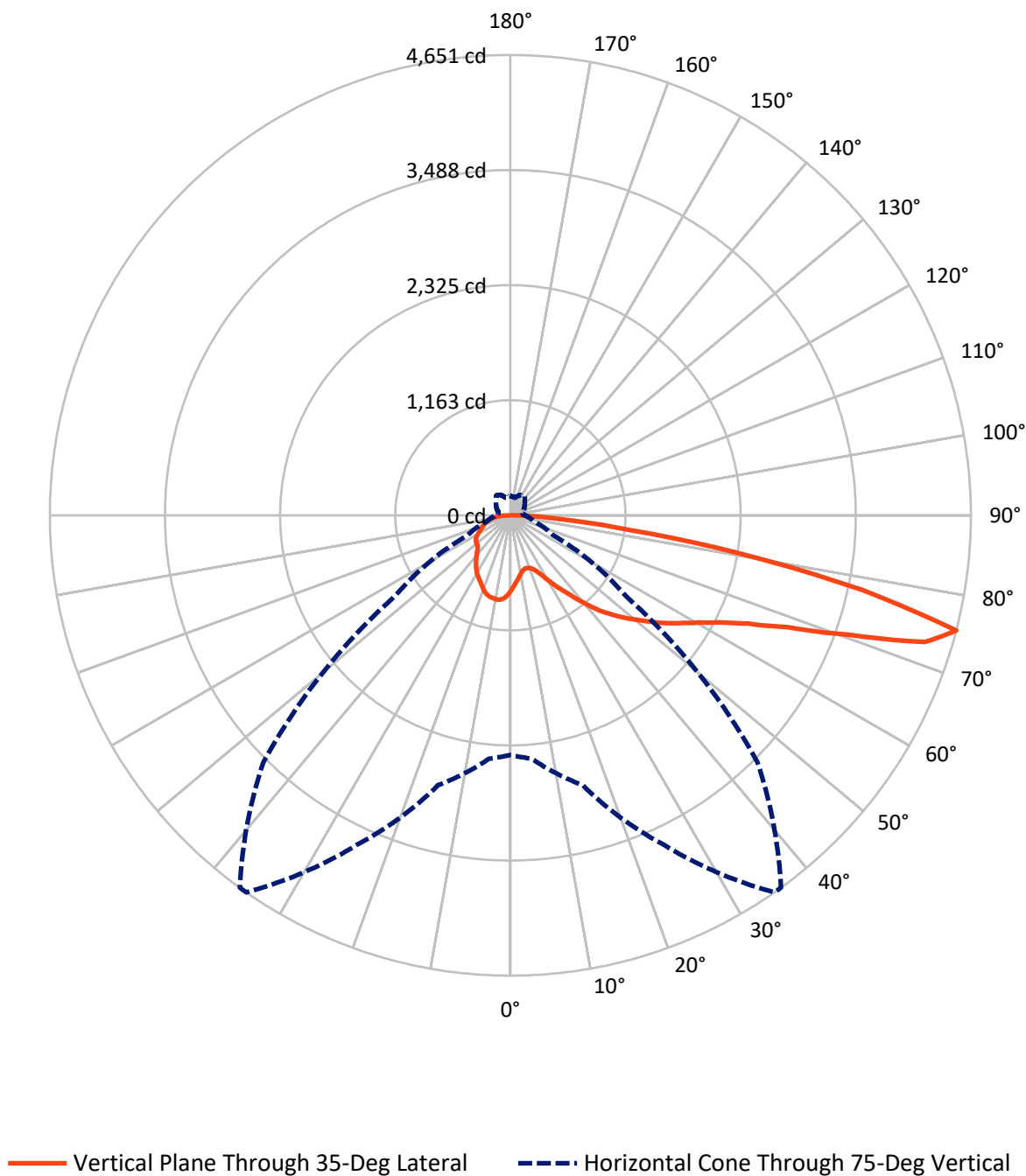


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1357.9	0.0	1357.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	4348.3	0.0	4348.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	5706.2	0.0	5706.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	1.3
10°-20°	207.7	3.6
20°-30°	348.7	6.1
30°-40°	542.0	9.5
40°-50°	804.4	14.1
50°-60°	1110.5	19.5
60°-70°	1347.3	23.6
70°-80°	1113.5	19.5
80°-90°	160.1	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°	5706.2	100.0
0°-180°	5706.2	100.0

Coefficient of Utilization



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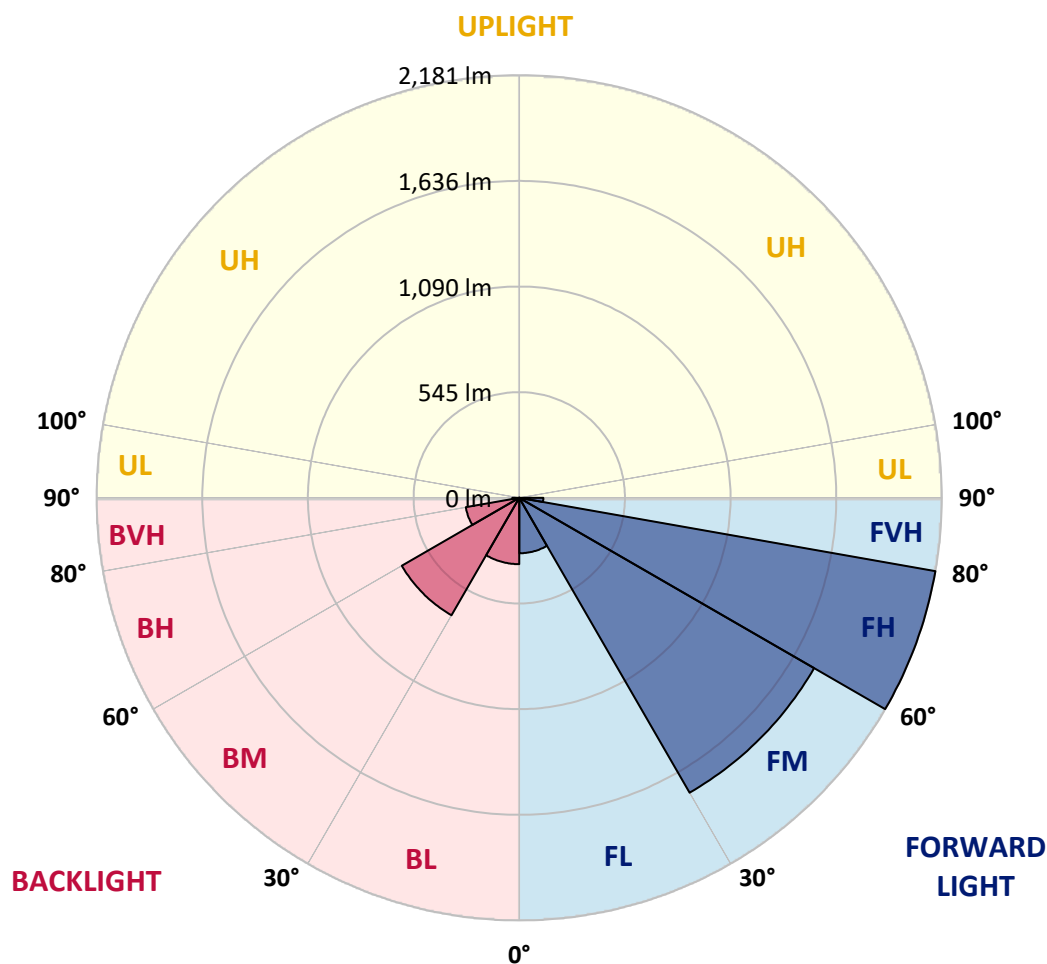
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	286.2	5.0			
FM	(30°-60°)	1757.2	30.8			
FH	(60°-80°)	2180.8	38.2			G2/5000
FVH	(80°-90°)	124.1	2.2			G2/225
BL	(0°-30°)	342.2	6.0	B1/500		
BM	(30°-60°)	699.7	12.3	B1/1000		
BH	(60°-80°)	280.0	4.9	B1/500		G1/500
BVH	(80°-90°)	36.1	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3
2.5°	701.2	705.5	707.4	706.4	711.0	710.4	716.9	724.9	736.1	746.8	762.5
5°	647.2	651.8	655.8	659.5	668.5	671.3	681.4	696.8	717.2	737.9	763.8
7.5°	596.9	600.9	607.1	613.9	628.9	631.7	648.7	672.8	701.2	731.4	767.2
10°	555.9	559.9	566.3	574.1	592.9	596.2	617.9	650.0	687.0	725.2	770.9
12.5°	538.3	539.6	543.2	550.9	567.2	569.5	593.2	629.9	673.1	720.6	776.4
15°	537.4	539.9	540.2	544.2	557.7	558.6	580.6	616.9	664.4	719.7	784.7
17.5°	546.6	548.5	545.7	548.2	559.5	561.1	578.4	610.8	661.6	723.6	799.0
20°	571.3	572.9	564.5	561.1	569.5	570.7	587.6	614.8	664.4	732.1	818.4
22.5°	623.7	624.6	604.3	590.4	591.0	591.6	606.5	631.1	675.3	747.1	843.1
25°	705.5	704.9	672.5	645.6	630.2	626.8	636.7	657.6	693.4	767.2	874.8
27.5°	801.1	796.5	764.1	724.0	690.3	685.4	683.3	692.2	719.3	793.7	913.7
30°	909.1	904.8	869.9	817.4	770.9	762.8	742.5	737.9	757.9	829.8	967.7
32.5°	1027.6	1024.8	983.1	919.5	857.2	848.0	813.7	801.4	817.1	884.4	1042.9
35°	1126.9	1124.4	1089.9	1024.5	948.2	936.8	902.0	888.1	896.2	954.4	1141.3
37.5°	1216.6	1215.3	1185.7	1134.3	1055.5	1041.7	1002.6	997.9	996.4	1046.6	1260.8
40°	1299.9	1296.8	1266.0	1238.8	1180.5	1167.9	1133.3	1129.3	1117.6	1160.2	1395.8
42.5°	1392.2	1384.2	1339.4	1326.8	1311.0	1300.5	1279.8	1280.4	1254.6	1288.2	1538.9
45°	1467.4	1462.8	1416.9	1409.4	1426.4	1422.1	1439.9	1444.5	1394.3	1422.4	1687.7
47.5°	1548.3	1544.0	1505.0	1499.8	1545.8	1547.0	1610.3	1611.8	1530.6	1561.8	1836.7
50°	1647.9	1641.7	1603.1	1609.7	1661.1	1665.7	1781.4	1771.0	1656.2	1703.3	1984.4
52.5°	1713.6	1717.3	1709.0	1719.4	1789.8	1794.1	1949.9	1923.0	1780.5	1843.2	2129.4
55°	1762.0	1769.4	1795.3	1819.4	1925.5	1929.8	2108.7	2067.7	1883.5	1972.7	2265.8
57.5°	1824.3	1813.8	1862.2	1909.2	2054.4	2065.9	2263.3	2207.1	1974.9	2084.3	2359.2
60°	1913.8	1906.4	1944.0	2013.4	2198.8	2217.0	2426.8	2332.7	2041.8	2172.9	2377.4
62.5°	2095.1	2076.6	2082.5	2143.9	2380.8	2404.9	2611.2	2442.2	2075.1	2207.4	2279.9
65°	2366.3	2334.5	2304.9	2347.5	2637.1	2660.9	2819.5	2528.3	2062.7	2140.5	2021.1
67.5°	2707.7	2676.3	2639.9	2680.0	3014.7	3033.5	3076.4	2576.6	1965.5	1882.6	1563.6
70°	2989.4	2977.7	3021.2	3186.2	3617.7	3618.4	3405.9	2536.6	1699.3	1334.8	904.8
72.5°	2952.1	2945.0	3174.2	3684.4	4377.9	4361.5	3717.7	2233.1	1144.7	602.2	339.0
75°	2421.9	2467.8	2822.8	3675.4	4650.8	4648.7	3526.8	1419.6	473.6	249.6	175.2
77.5°	1298.7	1371.4	1832.6	2713.7	3630.8	3685.3	2479.5	496.6	203.3	159.8	121.3
80°	423.5	487.1	730.4	1381.7	2359.2	2349.0	1062.7	195.0	139.1	113.2	83.9
82.5°	179.9	187.3	326.4	652.4	1210.7	1192.0	338.4	111.9	97.8	77.4	51.9
85°	70.3	78.6	144.0	301.7	524.4	513.0	122.2	55.6	62.6	50.6	30.9
87.5°	23.2	28.1	51.6	103.3	163.2	157.3	29.9	19.2	27.2	23.2	11.1
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°	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3
2.5°	766.9	771.8	777.7	786.3	793.7	799.9	806.4	810.4	811.9	816.5	816.2
5°	772.4	783.2	797.8	811.9	825.7	834.1	841.5	845.2	848.6	851.1	851.7
7.5°	781.7	795.5	818.4	836.9	848.6	855.4	860.3	859.1	860.3	860.9	861.9
10°	789.7	809.1	836.3	853.8	862.8	863.2	861.9	857.5	855.4	855.7	856.3
12.5°	799.3	820.8	850.1	865.0	867.5	860.6	855.4	848.0	845.2	844.0	843.4
15°	812.2	836.9	865.3	870.8	864.7	856.0	847.1	835.1	828.9	823.9	825.4
17.5°	827.9	855.1	877.0	873.0	859.7	845.5	831.1	812.8	800.2	794.9	795.2
20°	849.8	874.2	885.9	868.4	848.3	826.7	802.1	779.8	768.1	762.8	762.2
22.5°	876.4	899.8	894.6	860.3	832.0	797.4	766.6	750.2	744.4	740.7	741.3
25°	908.2	928.2	900.8	848.6	805.1	758.5	734.8	729.5	726.7	724.0	724.0
27.5°	949.5	960.3	905.4	831.4	763.1	717.2	708.6	709.5	708.6	704.0	704.9
30°	1004.1	1001.9	909.7	803.3	715.0	679.9	680.5	684.5	685.1	682.0	683.6
32.5°	1075.9	1054.0	911.8	766.9	669.1	647.2	647.8	652.1	655.2	650.0	652.4
35°	1163.0	1114.8	908.5	721.2	633.7	616.0	611.4	612.6	613.6	608.6	612.0
37.5°	1264.4	1183.0	893.3	670.7	604.3	585.5	575.6	567.2	562.3	557.7	560.8
40°	1375.8	1257.4	865.6	621.3	571.6	553.1	538.3	522.5	505.9	499.7	502.5
42.5°	1492.4	1333.8	832.0	574.1	533.9	518.9	503.1	480.3	455.3	442.7	444.2
45°	1613.4	1412.1	799.0	527.5	495.4	488.9	470.7	443.3	416.2	400.1	398.8
47.5°	1731.7	1486.2	750.5	480.6	459.3	466.4	452.2	426.9	396.7	371.4	368.6
50°	1845.0	1555.6	671.3	433.1	430.0	459.6	446.1	409.7	375.2	342.8	339.9
52.5°	1957.2	1611.8	569.8	389.9	414.3	457.8	438.0	397.9	355.7	321.7	318.1
55°	2052.6	1640.8	472.0	352.9	391.4	442.1	428.4	384.1	328.2	292.1	289.0
57.5°	2106.9	1617.3	390.5	316.5	360.0	416.2	412.2	354.4	295.5	267.7	264.0
60°	2083.4	1522.3	323.9	284.7	330.0	388.1	383.8	325.1	270.5	244.4	240.6
62.5°	1954.2	1341.2	271.1	257.0	302.9	359.4	355.4	302.6	251.4	226.1	222.1
65°	1693.8	1091.1	230.1	233.8	275.4	324.8	330.7	283.8	236.3	211.7	207.6
67.5°	1291.9	790.3	198.0	213.8	248.7	290.9	307.8	270.2	223.7	200.2	196.5
70°	736.4	448.8	170.9	194.3	224.9	259.4	290.3	259.4	210.0	190.6	188.2
72.5°	279.2	206.0	147.8	174.9	202.0	232.9	270.8	242.4	194.3	179.9	177.3
75°	149.0	125.6	124.3	152.1	175.8	206.9	246.5	225.8	182.7	190.0	196.2
77.5°	101.5	88.9	103.9	130.2	147.2	178.2	220.6	200.5	158.3	157.6	145.2
80°	70.3	62.9	84.6	104.9	113.9	150.0	192.5	172.1	128.9	120.3	115.1
82.5°	42.2	41.0	63.2	78.3	80.5	115.7	159.5	144.3	105.5	91.9	92.6
85°	23.2	24.4	40.4	45.9	46.8	80.8	124.9	111.6	81.1	68.2	68.8
87.5°	6.5	8.3	14.8	18.2	22.5	41.9	74.3	66.3	40.7	28.4	28.4
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)