

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: P959828

Luminaire Tested: **NAV-SB1B-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959828
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-SB1B-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

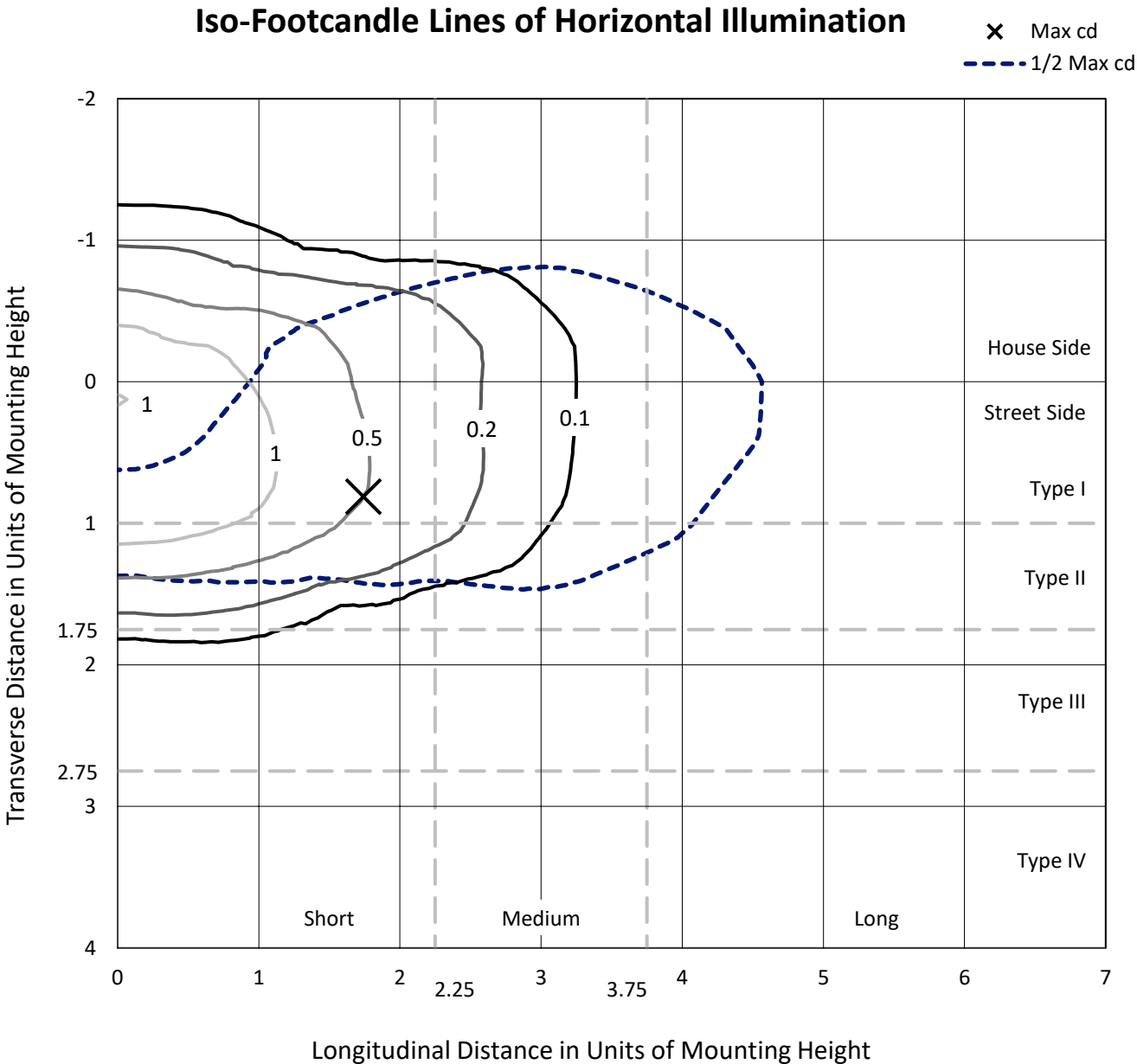
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5850.7 lumens
Efficiency: N/A
Efficacy: 147.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - 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



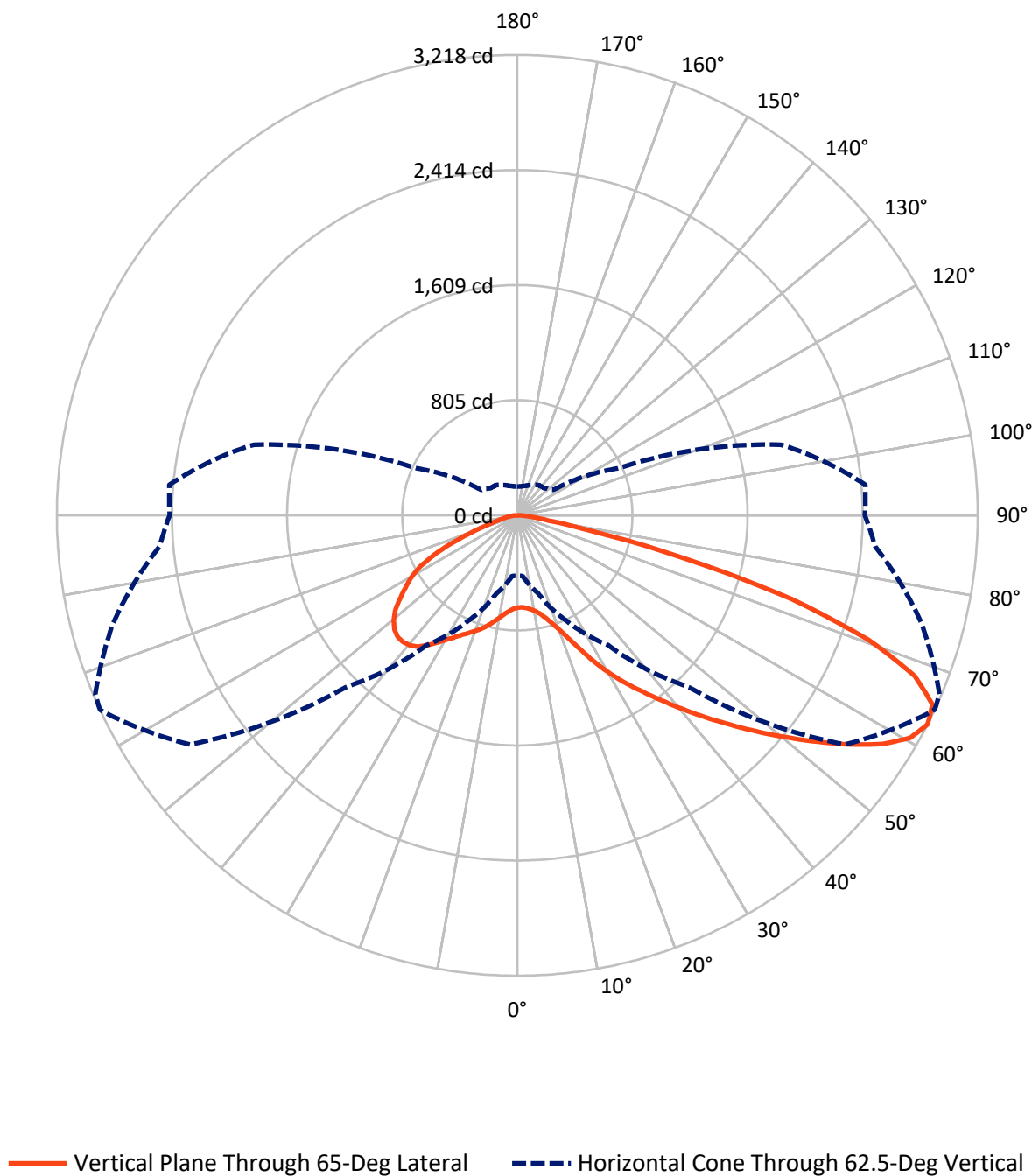
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Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1846.2	0.0	1846.2
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	4004.5	0.0	4004.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	5850.7	0.0	5850.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	1.1
10°-20°	218.0	3.7
20°-30°	442.0	7.6
30°-40°	764.8	13.1
40°-50°	1157.4	19.8
50°-60°	1357.0	23.2
60°-70°	1137.7	19.4
70°-80°	628.1	10.7
80°-90°	81.6	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°	5850.7	100.0
0°-180°	5850.7	100.0

Coefficient of Utilization



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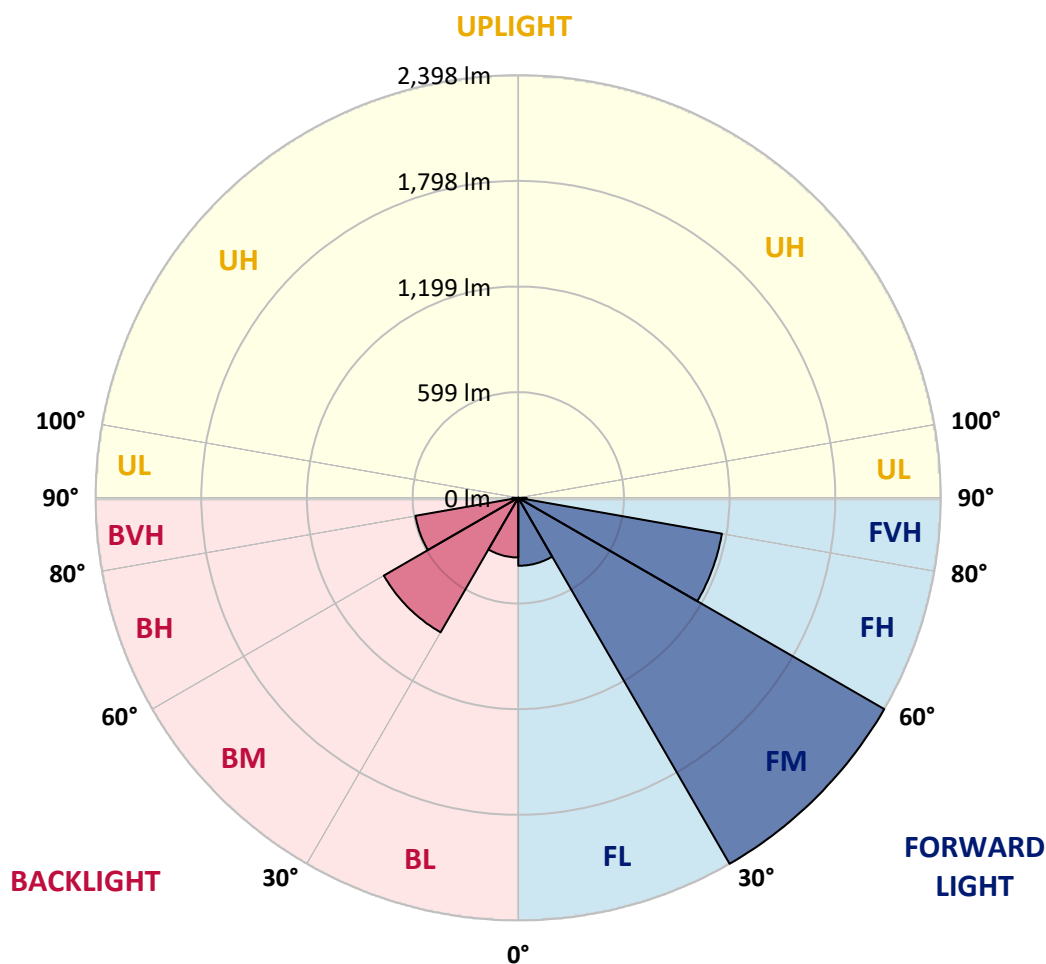
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	385.6	6.6			
FM	(30°-60°)	2397.8	41.0			
FH	(60°-80°)	1173.5	20.1			G1/1800
FVH	(80°-90°)	47.6	0.8			G1/100
BL	(0°-30°)	338.6	5.8	B1/500		
BM	(30°-60°)	881.4	15.1	B1/1000		
BH	(60°-80°)	592.3	10.1	B2/1000		G2/1000
BVH	(80°-90°)	34.0	0.6			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7
2.5°	640.5	638.7	640.2	640.2	640.7	640.5	642.6	643.2	644.1	646.0	646.0
5°	634.1	633.8	636.5	639.0	641.3	643.5	646.3	650.2	650.8	652.9	655.7
7.5°	632.0	630.2	634.4	637.4	643.2	648.4	655.7	662.4	665.0	665.9	671.2
10°	648.4	645.3	649.2	651.1	656.0	661.1	669.6	680.2	683.3	687.0	692.7
12.5°	676.3	672.9	678.8	681.4	686.0	690.5	696.3	706.6	708.2	714.8	720.3
15°	714.5	710.6	714.2	717.6	725.2	729.4	735.1	745.2	745.2	750.4	754.3
17.5°	766.4	761.3	764.0	765.3	770.1	776.4	786.2	795.0	799.5	797.8	792.2
20°	843.9	837.4	837.4	831.4	829.5	834.8	847.5	859.7	864.5	855.1	841.7
22.5°	960.1	951.0	945.9	925.2	917.0	917.6	930.4	945.3	949.1	932.4	902.4
25°	1107.9	1093.7	1086.7	1056.4	1037.8	1021.7	1031.8	1050.8	1056.4	1035.7	987.1
27.5°	1255.7	1256.6	1250.0	1213.6	1182.8	1153.4	1148.3	1168.3	1174.1	1150.8	1090.6
30°	1463.1	1441.6	1428.7	1385.1	1341.3	1300.1	1278.8	1287.0	1288.5	1260.6	1190.7
32.5°	1641.8	1636.4	1609.0	1570.8	1514.6	1450.1	1414.5	1401.5	1399.0	1359.3	1276.4
35°	1845.5	1842.5	1813.6	1768.1	1707.4	1617.6	1553.5	1516.2	1513.1	1457.3	1361.1
37.5°	2052.6	2052.6	2024.3	1974.6	1911.7	1799.4	1701.9	1642.8	1633.0	1560.2	1447.3
40°	2217.7	2207.6	2212.8	2191.9	2119.9	2000.6	1866.7	1780.8	1767.8	1680.4	1538.9
42.5°	2311.5	2308.1	2339.0	2362.4	2333.0	2237.7	2048.3	1930.5	1912.3	1812.7	1644.6
45°	2332.4	2328.8	2384.0	2469.6	2510.9	2471.8	2245.6	2088.0	2065.9	1951.2	1757.8
47.5°	2284.1	2276.8	2357.9	2493.0	2625.3	2694.2	2459.3	2259.0	2226.8	2086.0	1874.1
50°	2139.1	2132.1	2254.7	2434.1	2663.9	2845.4	2691.2	2440.2	2391.0	2230.4	1991.6
52.5°	1823.7	1827.1	2019.1	2265.7	2613.2	2939.5	2890.9	2631.1	2571.9	2378.2	2101.8
55°	1420.5	1427.8	1664.0	1935.4	2410.4	2925.2	3027.2	2827.8	2768.9	2517.3	2215.5
57.5°	1017.2	1049.3	1270.6	1539.2	2021.0	2699.1	3057.0	3014.7	2957.7	2669.0	2327.0
60°	659.3	665.0	892.7	1163.5	1538.9	2297.2	2996.6	3156.5	3111.9	2823.9	2420.1
62.5°	422.5	426.5	565.2	813.7	1107.6	1699.6	2793.2	3218.2	3204.5	2926.2	2509.7
65°	310.5	307.5	379.8	537.9	746.1	1048.2	2398.3	3188.4	3215.4	2990.2	2583.7
67.5°	259.2	255.0	290.5	372.5	549.7	595.2	1774.5	2995.0	3094.0	2982.9	2638.0
70°	236.2	232.5	254.1	276.5	428.9	398.5	894.5	2603.8	2756.1	2900.0	2629.2
72.5°	200.1	193.6	223.1	245.6	333.6	305.7	369.7	2000.1	2185.8	2634.5	2505.4
75°	155.1	150.9	176.1	216.2	250.7	238.6	233.7	1214.4	1417.3	2037.4	2191.9
77.5°	122.9	117.2	140.2	168.5	225.5	180.0	170.3	523.0	724.0	1300.7	1640.0
80°	92.6	87.4	106.5	133.2	173.3	135.7	110.2	213.4	272.9	659.0	824.7
82.5°	65.9	61.3	74.4	97.8	116.5	121.8	67.6	119.6	134.5	254.1	184.3
85°	42.2	39.5	49.8	61.3	74.1	78.3	41.3	62.5	68.6	104.8	76.8
87.5°	23.1	18.9	26.8	28.5	34.3	31.3	19.7	22.8	24.6	37.9	32.5
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°	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7	644.7
2.5°	647.2	648.1	651.1	652.0	654.2	656.8	658.7	660.5	660.5	662.4	662.4
5°	656.0	658.0	664.4	667.8	673.2	678.8	682.0	686.0	688.4	689.6	690.2
7.5°	672.9	676.3	685.4	691.2	700.6	708.2	713.3	718.8	720.0	723.3	722.1
10°	696.0	700.0	710.3	721.2	732.5	741.9	746.7	750.6	752.1	752.8	751.2
12.5°	722.4	728.2	741.6	754.9	766.7	774.9	776.1	775.2	771.0	767.3	767.3
15°	754.9	760.0	774.9	789.6	801.0	802.6	795.0	790.1	784.9	784.0	784.0
17.5°	793.8	796.5	810.2	824.4	825.3	820.2	808.9	804.4	799.5	796.2	796.5
20°	839.0	838.0	847.8	853.8	847.5	831.7	814.7	807.1	802.3	798.3	798.6
22.5°	893.0	886.0	884.8	883.3	866.3	833.2	810.2	800.4	792.8	787.4	789.2
25°	971.6	944.9	926.4	916.0	877.8	825.0	795.6	774.1	759.7	750.4	754.0
27.5°	1070.0	1025.1	978.4	953.1	877.8	808.3	760.3	725.5	702.1	692.4	697.2
30°	1163.8	1116.7	1047.9	997.7	875.8	781.0	703.6	655.1	627.7	618.0	623.8
32.5°	1243.9	1192.6	1121.6	1046.6	870.5	736.7	633.1	579.4	553.1	541.5	547.2
35°	1318.3	1263.6	1195.7	1100.3	856.9	671.8	555.8	514.8	485.3	466.9	472.9
37.5°	1394.5	1329.5	1265.8	1148.9	832.3	595.8	496.3	461.4	426.8	401.9	408.6
40°	1477.3	1399.6	1340.7	1177.7	791.9	523.6	450.2	418.3	381.5	355.2	360.3
42.5°	1574.2	1483.7	1424.2	1192.6	736.7	472.3	420.1	388.9	354.2	332.7	336.9
45°	1675.3	1576.2	1500.4	1192.3	675.1	448.3	410.4	379.5	341.2	318.7	322.4
47.5°	1781.1	1673.1	1566.3	1172.9	621.7	451.7	404.9	359.1	316.9	295.0	298.1
50°	1887.4	1779.1	1630.1	1136.4	598.9	444.3	384.6	330.6	280.7	261.1	262.3
52.5°	1992.7	1891.6	1685.0	1084.6	575.8	417.4	358.4	293.6	265.9	252.3	252.3
55°	2098.7	2003.1	1744.8	1009.0	518.1	385.8	314.8	279.5	254.1	241.6	240.4
57.5°	2204.9	2131.8	1801.5	933.4	445.6	347.0	290.8	262.6	242.2	231.6	229.8
60°	2315.4	2279.0	1860.1	863.9	373.9	297.1	273.2	248.9	228.3	216.4	215.6
62.5°	2429.2	2441.0	1905.9	774.3	308.1	266.8	257.4	232.5	212.5	201.2	200.9
65°	2543.9	2597.5	1936.0	650.2	249.8	238.0	240.4	214.6	194.2	184.6	184.3
67.5°	2630.5	2710.0	1927.5	492.0	204.9	210.6	219.1	195.8	176.7	169.0	169.3
70°	2640.2	2696.7	1843.7	336.9	171.5	184.0	195.5	177.2	157.5	152.1	152.4
72.5°	2510.9	2514.5	1610.3	220.1	145.1	161.4	170.6	158.5	139.3	133.9	133.6
75°	2171.9	2079.5	1182.3	145.1	121.5	138.7	147.2	138.7	120.2	121.5	117.2
77.5°	1645.5	1472.8	717.9	103.2	101.4	116.5	128.1	122.0	106.2	119.3	105.1
80°	847.8	796.8	320.2	77.1	80.2	93.2	105.4	97.5	84.0	80.2	73.2
82.5°	194.2	225.8	126.3	55.2	58.0	67.0	80.5	73.2	60.4	51.0	50.4
85°	68.0	74.4	55.9	34.6	34.0	41.9	54.6	48.9	41.0	32.8	34.6
87.5°	21.5	28.2	20.9	13.9	14.6	18.9	25.2	23.1	19.2	12.4	13.0
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)