

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: P960847

Luminaire Tested: **NAV-SB1D-730-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7618.8 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

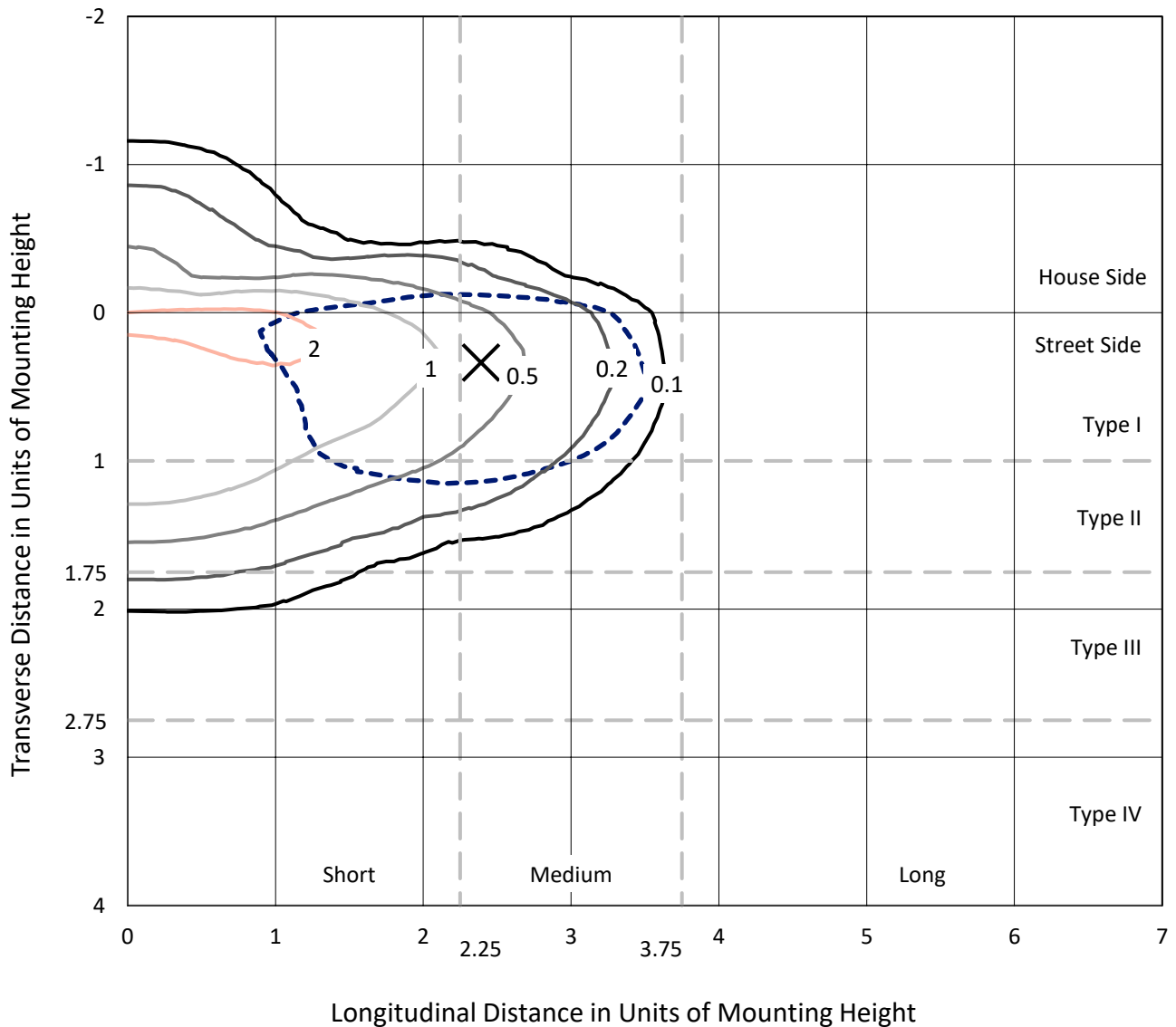
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P960847
 CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

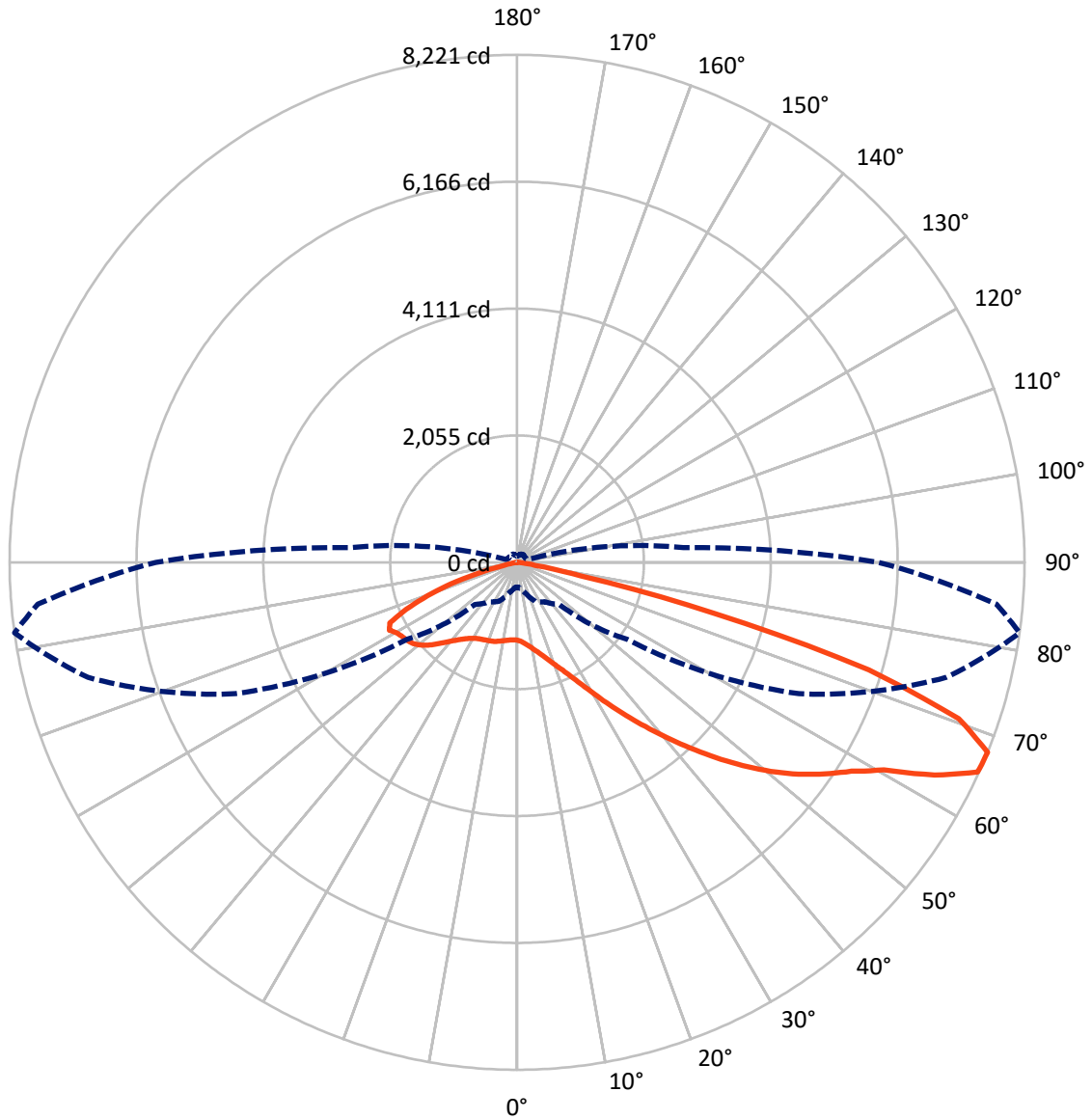
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P960847
CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P960847
 CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

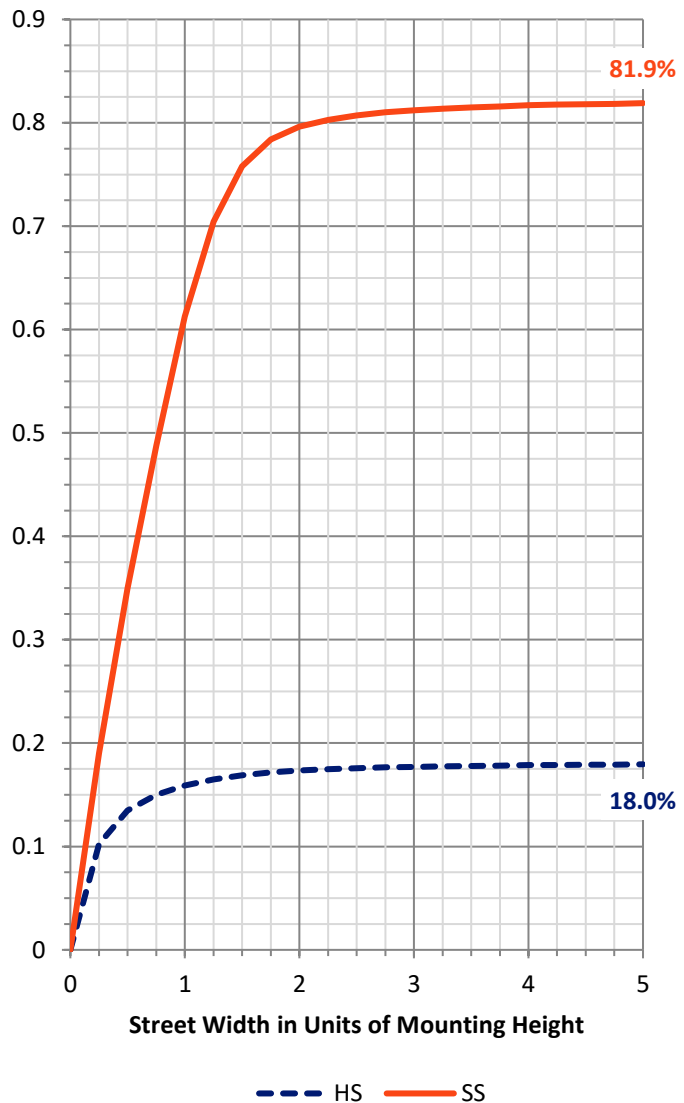
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1380.1	0.0	1380.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6238.7	0.0	6238.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	7618.8	0.0	7618.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.5	1.5
10°-20°	292.2	3.8
20°-30°	468.0	6.1
30°-40°	827.6	10.9
40°-50°	1450.1	19.0
50°-60°	1934.0	25.4
60°-70°	1800.5	23.6
70°-80°	691.0	9.1
80°-90°	42.9	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°	7618.8	100.0
0°-180°	7618.8	100.0

Coefficient of Utilization



REPORT NUMBER: P960847

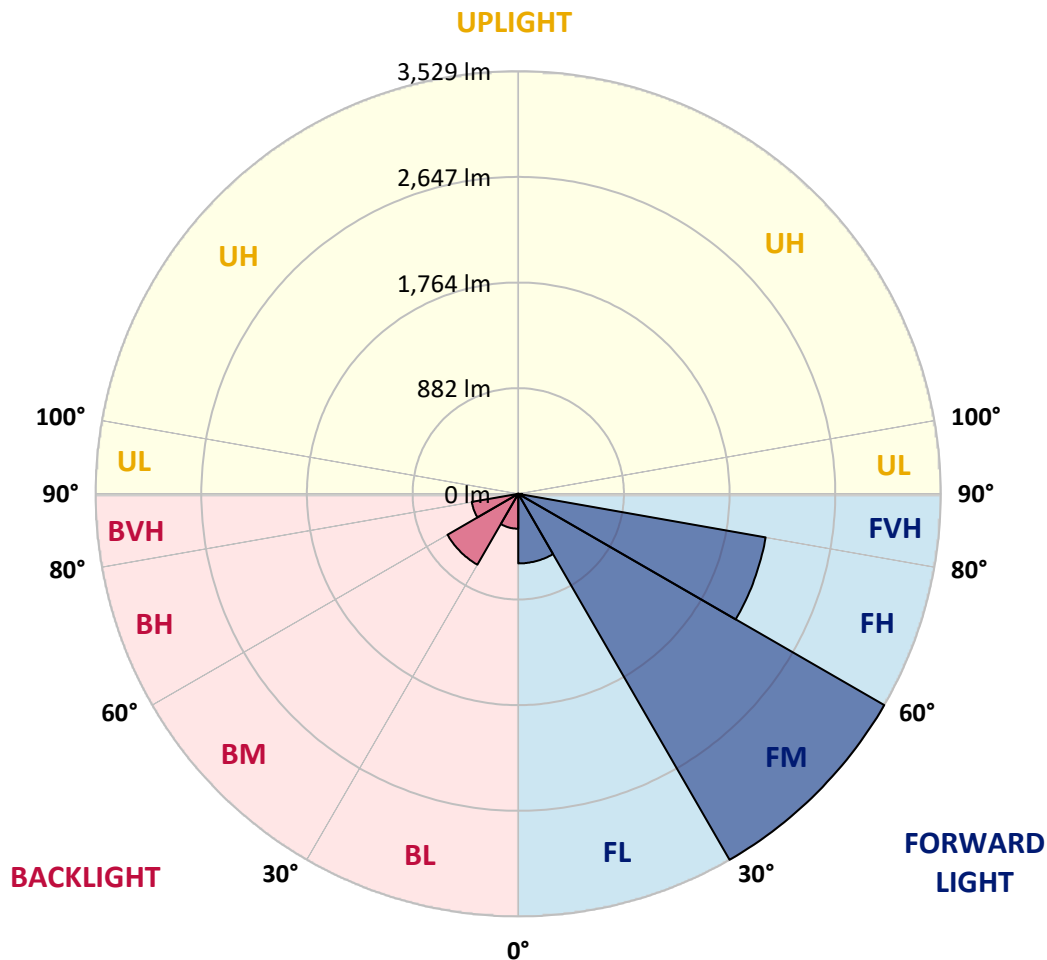
CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	581.2	7.6			
FM (30°-60°)	3528.7	46.3			
FH (60°-80°)	2097.6	27.5			G2/5000
FVH (80°-90°)	31.2	0.4			G1/100
BL (0°-30°)	291.5	3.8	B1/500		
BM (30°-60°)	683.0	9.0	B1/1000		
BH (60°-80°)	393.9	5.2	B1/500		G1/500
BVH (80°-90°)	11.7	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



REPORT NUMBER: P960847
 CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2
2.5°	1334.0	1341.7	1337.3	1335.2	1331.3	1325.8	1321.4	1307.7	1293.4	1284.1	1280.8
5°	1360.9	1368.6	1368.1	1370.2	1373.0	1374.6	1373.5	1358.1	1337.8	1321.9	1312.6
7.5°	1337.8	1346.6	1353.8	1364.8	1384.0	1404.2	1414.1	1410.8	1390.0	1368.1	1356.5
10°	1272.6	1282.0	1299.0	1324.7	1365.3	1409.2	1446.0	1463.0	1449.8	1425.7	1409.8
12.5°	1153.0	1162.4	1195.8	1251.7	1319.8	1396.0	1466.3	1511.8	1515.1	1491.0	1472.3
15°	1018.6	1028.0	1063.6	1133.9	1237.5	1359.9	1477.2	1563.3	1592.4	1571.5	1549.1
17.5°	935.2	943.5	970.4	1026.8	1134.9	1287.4	1473.3	1618.2	1684.6	1668.1	1641.2
20°	910.0	917.2	929.8	969.2	1059.2	1212.3	1448.1	1669.7	1783.8	1774.5	1744.3
22.5°	936.8	943.5	947.3	964.8	1021.4	1162.9	1416.3	1722.4	1899.0	1900.1	1863.3
25°	998.9	1005.4	1001.1	1012.1	1036.7	1147.5	1404.2	1784.4	2043.8	2055.9	2014.2
27.5°	1101.0	1101.5	1091.0	1090.5	1094.3	1170.6	1416.9	1850.7	2226.5	2249.0	2197.4
30°	1305.5	1297.2	1257.3	1213.9	1194.1	1239.7	1452.0	1929.2	2442.1	2482.1	2417.4
32.5°	1620.9	1608.8	1535.3	1431.7	1327.5	1351.1	1515.1	2018.6	2676.9	2749.3	2670.2
35°	1963.2	1959.9	1883.1	1729.0	1546.8	1509.6	1617.7	2136.0	2933.0	3048.2	2954.5
37.5°	2281.3	2279.7	2235.8	2054.3	1832.7	1730.6	1782.2	2289.5	3207.3	3374.1	3263.2
40°	2572.1	2577.1	2533.2	2370.7	2147.5	2014.2	2006.0	2479.4	3512.3	3729.0	3597.3
42.5°	2823.4	2828.8	2784.4	2664.3	2458.6	2328.0	2280.8	2711.9	3810.1	4110.1	3954.3
45°	2993.9	3028.0	3021.3	2925.4	2777.7	2642.3	2611.0	3003.8	4149.7	4514.4	4331.8
47.5°	3042.2	3073.5	3122.8	3136.0	3046.0	2912.7	2950.1	3355.4	4493.1	4919.3	4711.4
50°	2923.2	2952.2	3054.8	3191.3	3254.0	3212.8	3279.7	3732.2	4844.7	5323.0	5083.8
52.5°	2688.4	2718.0	2847.4	3063.6	3318.6	3448.1	3610.5	4103.6	5185.3	5705.4	5436.5
55°	2348.8	2380.0	2546.3	2791.0	3195.2	3545.2	3886.4	4474.4	5497.4	6049.2	5754.7
57.5°	1886.9	1910.0	2082.8	2425.0	2884.8	3448.6	4089.9	4879.2	5791.5	6387.2	6070.0
60°	1229.8	1250.1	1450.9	1832.7	2370.2	3126.1	4130.4	5330.7	6182.0	6826.5	6495.2
62.5°	817.8	831.6	950.6	1230.9	1669.2	2506.8	3893.0	5691.1	6754.6	7591.2	7224.2
65°	561.2	574.8	693.9	889.2	1078.4	1658.2	3210.0	5643.3	7273.6	8198.5	7764.5
67.5°	400.5	411.9	512.9	697.2	780.5	963.2	2176.1	5033.4	7199.0	8221.4	7793.6
70°	286.9	293.5	376.9	543.0	620.4	578.7	1210.1	3849.6	6303.2	7591.8	7200.1
72.5°	200.8	203.0	261.7	413.6	499.7	422.4	575.9	2566.6	4767.4	5958.7	5581.9
75°	136.0	138.8	176.1	303.3	401.0	322.6	304.9	1376.3	2798.7	3298.3	2956.6
77.5°	83.3	84.5	113.6	207.4	300.0	245.8	196.4	583.1	1082.8	1063.0	906.2
80°	47.2	47.2	72.4	128.9	204.6	158.6	137.7	247.9	342.9	301.1	265.5
82.5°	26.3	26.9	52.7	80.1	135.5	93.8	75.7	114.6	148.1	131.1	114.1
85°	11.0	12.1	32.4	37.8	64.7	46.6	30.7	48.3	54.8	48.8	35.7
87.5°	1.1	1.6	9.8	7.2	7.7	9.3	4.4	9.3	7.7	7.7	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P960847

CATALOG NUMBER: NAV-SB1D-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2	1262.2
2.5°	1270.4	1262.2	1241.4	1217.2	1185.4	1170.0	1149.2	1134.9	1122.9	1123.9	1112.9
5°	1295.1	1274.3	1227.6	1169.5	1097.1	1045.5	990.7	952.8	922.1	915.5	900.7
7.5°	1329.1	1296.2	1214.4	1109.7	987.4	894.6	811.8	758.6	720.8	708.7	696.6
10°	1373.0	1325.2	1197.4	1034.5	858.4	740.6	651.7	610.0	584.1	575.4	568.9
12.5°	1424.0	1358.7	1175.0	942.9	725.7	612.1	555.7	534.8	526.6	523.9	522.2
15°	1488.2	1400.5	1140.9	834.4	613.3	533.7	509.6	506.9	508.0	506.9	506.4
17.5°	1564.5	1446.0	1085.6	722.4	537.6	493.6	484.9	487.1	489.8	489.3	488.2
20°	1647.8	1491.0	1014.7	623.1	486.0	465.1	460.2	462.4	464.6	463.5	463.0
22.5°	1742.7	1539.2	936.3	545.8	451.4	438.8	433.4	433.9	433.9	431.7	430.6
25°	1856.3	1592.4	854.0	491.0	425.1	415.2	408.7	406.5	403.1	396.6	395.4
27.5°	1991.8	1648.9	775.1	452.5	404.3	394.9	387.2	381.8	373.5	362.5	361.5
30°	2144.2	1717.5	708.2	428.4	387.9	378.5	369.7	361.5	349.4	335.7	334.6
32.5°	2323.6	1791.0	659.4	412.5	373.0	363.2	352.7	342.9	329.6	316.0	316.5
35°	2537.5	1879.8	630.8	401.5	361.5	348.3	336.8	325.8	316.0	303.9	302.8
37.5°	2769.5	1974.2	622.1	396.1	353.8	333.5	320.3	312.6	311.6	304.4	303.9
40°	3023.5	2086.1	628.6	392.8	345.5	319.3	304.9	303.3	306.1	293.5	294.0
42.5°	3292.3	2218.8	639.6	388.9	334.0	304.9	291.3	291.3	289.0	271.5	271.5
45°	3583.0	2371.8	650.6	379.6	320.3	290.7	280.3	276.4	267.1	250.1	249.6
47.5°	3875.9	2527.6	658.8	362.5	303.9	278.7	269.4	260.6	246.8	231.4	230.9
50°	4154.0	2667.6	650.1	337.3	285.3	267.1	257.3	245.2	230.4	220.0	218.3
52.5°	4402.6	2788.7	612.7	307.7	265.5	255.0	246.3	233.7	221.6	210.6	209.5
55°	4618.6	2886.9	546.9	279.7	247.9	244.7	235.9	220.0	203.5	194.1	193.1
57.5°	4826.0	2961.5	464.6	256.8	232.1	233.1	220.0	205.7	190.3	180.5	179.4
60°	5101.9	3061.4	381.2	235.3	215.0	218.3	204.1	193.6	174.5	161.8	160.2
62.5°	5543.0	3216.7	302.8	209.0	195.3	196.4	190.3	177.7	154.7	139.9	138.8
65°	5892.9	3159.6	238.6	180.5	172.8	174.5	174.5	160.7	136.0	119.0	117.4
67.5°	5853.5	2705.4	190.3	152.5	151.4	152.5	156.3	144.8	120.6	107.0	104.8
70°	5392.1	2151.9	152.5	126.7	131.6	128.9	139.9	132.2	108.6	94.9	93.3
72.5°	4399.8	1550.2	116.3	104.8	101.0	105.4	126.2	119.0	90.5	75.1	73.5
75°	2571.0	827.2	86.7	82.8	73.0	87.7	111.9	101.5	69.1	55.5	53.7
77.5°	837.0	288.5	63.7	60.9	54.3	70.7	95.4	85.6	56.5	43.9	42.2
80°	224.4	87.2	43.4	40.1	35.2	52.7	75.7	68.1	40.6	28.5	28.0
82.5°	90.0	36.8	25.2	22.4	19.2	36.2	59.8	54.8	30.1	18.1	18.1
85°	29.1	12.1	9.3	7.2	8.8	22.4	35.7	37.3	21.4	9.3	7.2
87.5°	3.8	1.6	1.6	2.2	1.6	3.8	11.0	10.5	6.0	1.1	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)