

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: P959222

Luminaire Tested: **NAV-SB1A-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4338.8 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

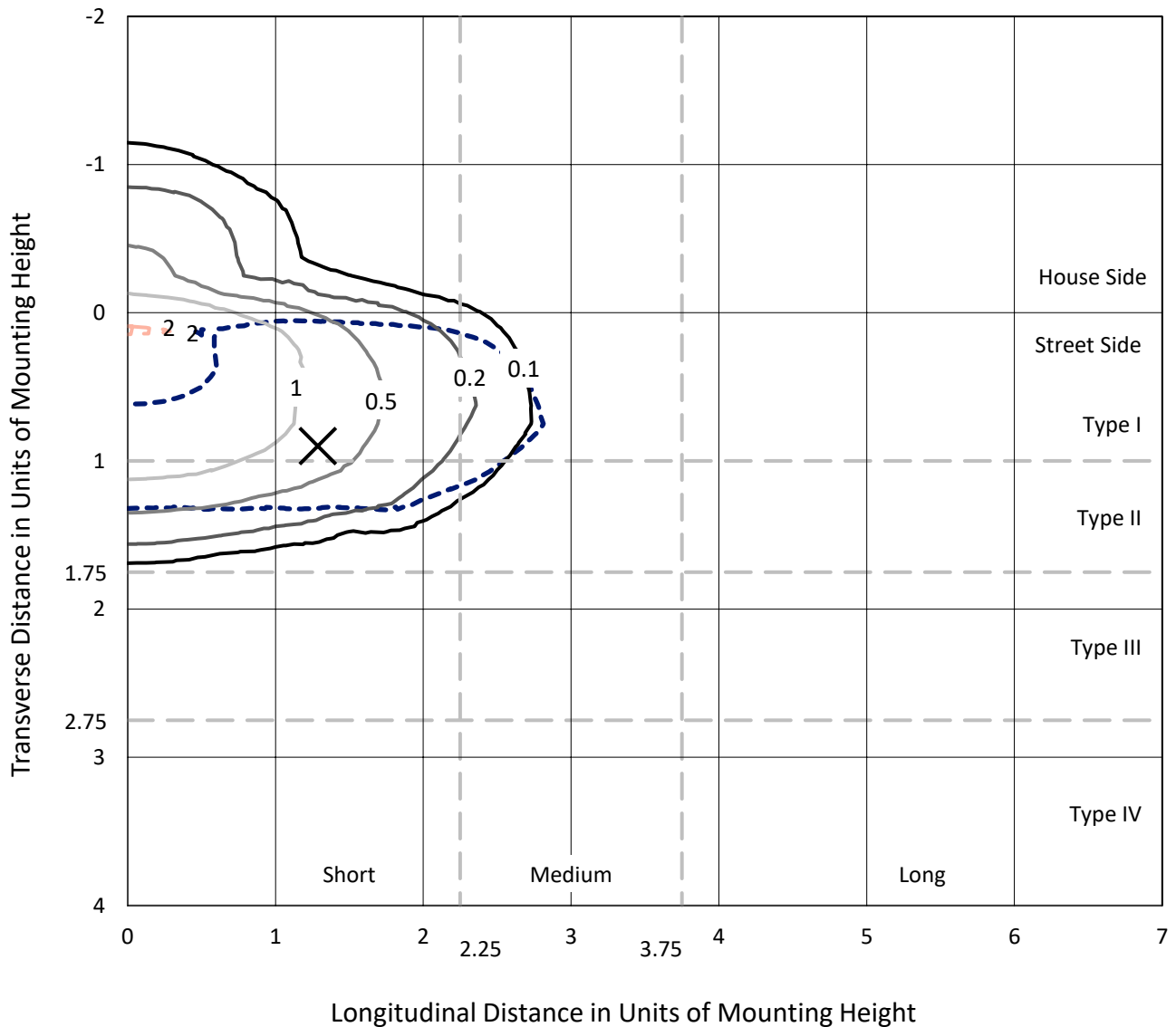
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959222
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Iso-Footcandle Lines of Horizontal Illumination

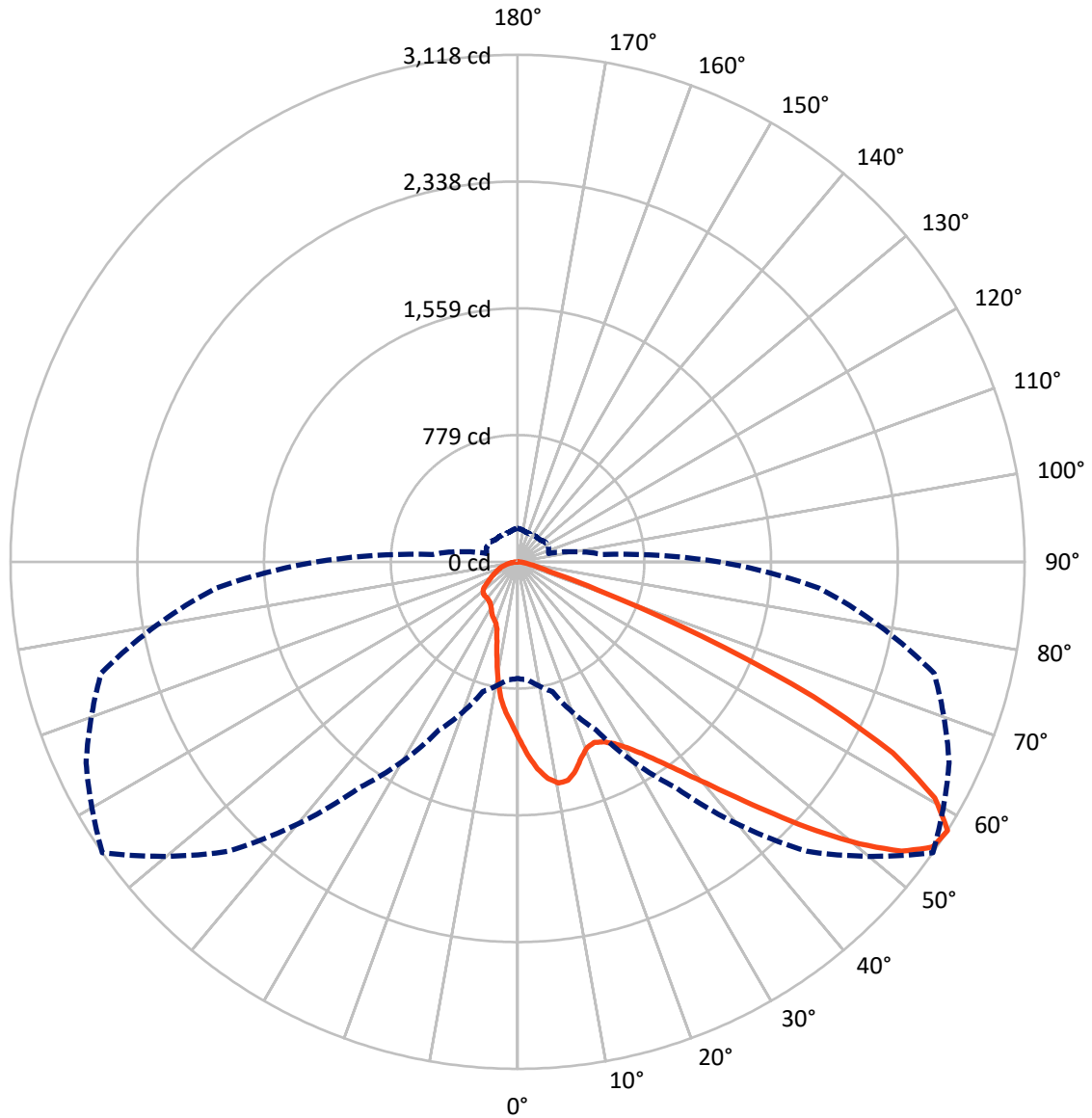
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Short - N/A

REPORT NUMBER: P959222
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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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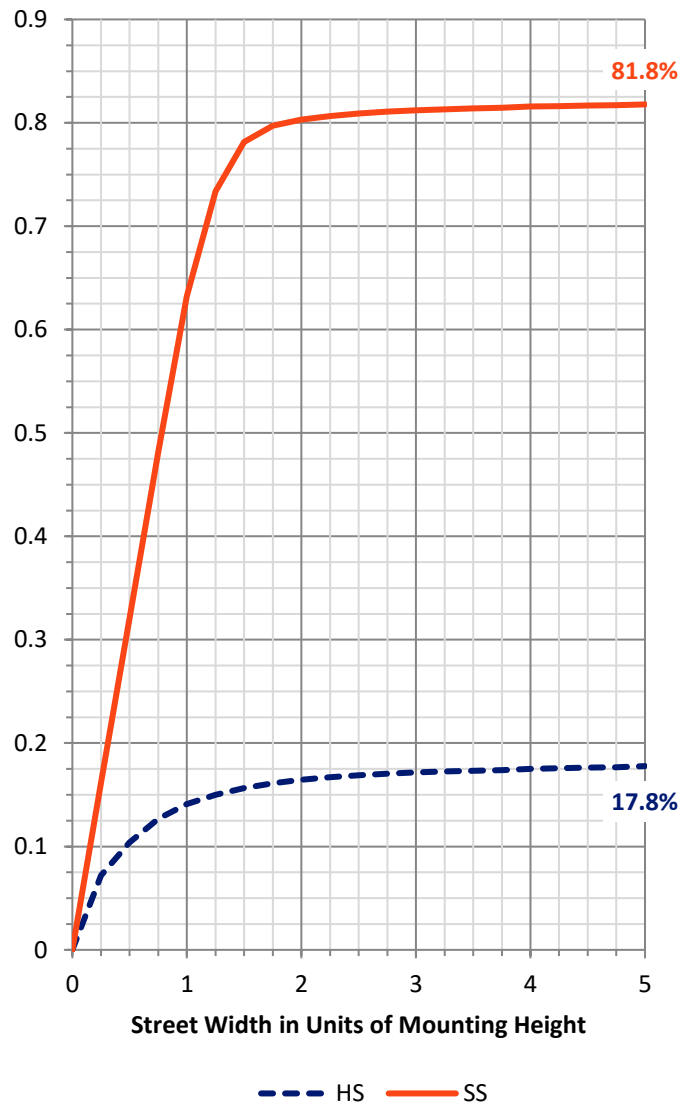
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	785.1	0.0	785.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3553.7	0.0	3553.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	4338.8	0.0	4338.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	2.3
10°-20°	254.6	5.9
20°-30°	406.3	9.4
30°-40°	643.3	14.8
40°-50°	984.6	22.7
50°-60°	1054.7	24.3
60°-70°	663.5	15.3
70°-80°	196.2	4.5
80°-90°	34.7	0.8
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°	4338.8	100.0
0°-180°	4338.8	100.0

Coefficient of Utilization

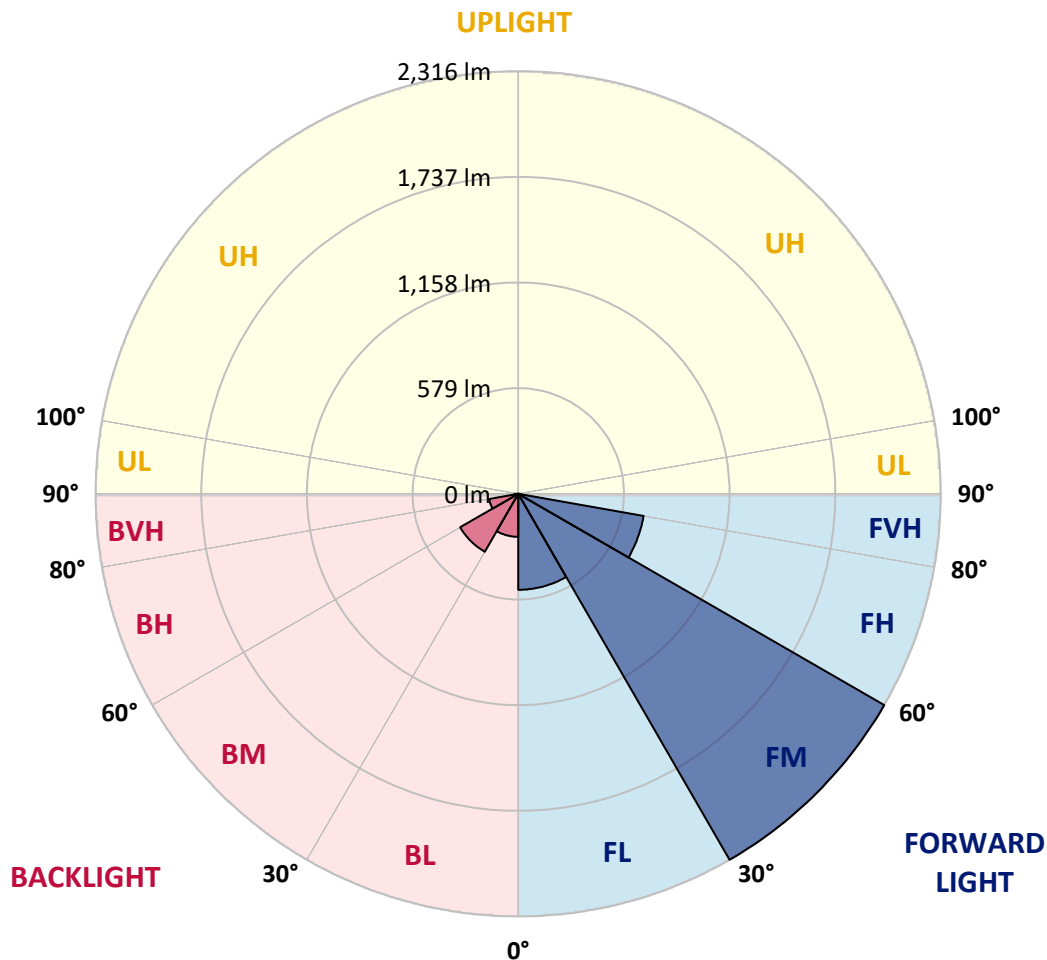


REPORT NUMBER: P959222
 CATALOG NUMBER: NAV-SB1A-727-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	525.9	12.1			
FM (30°-60°)	2315.7	53.4			
FH (60°-80°)	697.5	16.1			G1/1800
FVH (80°-90°)	14.7	0.3			G1/100
BL (0°-30°)	236.0	5.4	B1/500		
BM (30°-60°)	366.9	8.5	B1/1000		
BH (60°-80°)	162.1	3.7	B1/500		G1/500
BVH (80°-90°)	20.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Short



REPORT NUMBER: P959222
 CATALOG NUMBER: NAV-SB1A-727-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2
2.5°	1247.3	1246.4	1251.3	1234.5	1223.1	1207.7	1187.2	1161.2	1133.1	1103.5	1090.8
5°	1359.7	1351.9	1357.0	1344.4	1331.9	1308.5	1278.3	1235.8	1184.1	1125.0	1093.7
7.5°	1341.9	1336.6	1349.8	1361.0	1370.4	1367.6	1345.3	1300.9	1234.1	1148.4	1102.9
10°	1199.0	1193.0	1211.7	1250.5	1307.4	1357.0	1384.0	1356.3	1285.2	1173.9	1111.8
12.5°	1073.1	1070.1	1082.5	1113.9	1177.1	1272.2	1378.9	1404.8	1338.3	1204.3	1123.9
15°	1019.2	1015.6	1023.5	1039.4	1079.7	1168.4	1334.1	1438.0	1390.6	1239.2	1143.3
17.5°	1007.4	1003.3	1006.7	1015.0	1041.0	1108.4	1266.4	1454.4	1445.1	1278.3	1159.4
20°	1029.3	1025.9	1026.4	1025.9	1044.1	1097.7	1219.2	1448.0	1492.7	1314.2	1175.1
22.5°	1082.5	1076.9	1077.1	1065.2	1075.0	1116.5	1206.9	1431.2	1535.0	1345.5	1186.9
25°	1169.0	1159.0	1160.9	1130.7	1128.0	1158.8	1226.2	1418.2	1577.3	1370.6	1189.2
27.5°	1287.5	1276.0	1270.0	1224.9	1203.4	1218.6	1265.5	1422.7	1617.1	1392.5	1183.6
30°	1435.5	1421.6	1409.3	1345.3	1306.3	1300.7	1326.5	1452.3	1664.3	1415.3	1173.9
32.5°	1616.9	1600.8	1578.4	1493.6	1438.7	1409.3	1405.5	1505.0	1719.4	1444.4	1169.0
35°	1833.0	1811.9	1780.0	1670.3	1600.8	1540.7	1509.5	1581.1	1795.1	1488.4	1174.6
37.5°	2055.4	2031.7	2002.5	1872.0	1786.6	1697.9	1636.5	1684.3	1895.7	1548.1	1189.4
40°	2260.7	2234.0	2206.8	2090.7	1999.0	1892.2	1791.9	1814.8	2018.9	1619.4	1214.5
42.5°	2381.8	2362.1	2351.8	2288.9	2218.1	2109.8	1985.2	1969.5	2157.3	1701.5	1243.3
45°	2376.5	2368.4	2400.2	2426.2	2409.4	2349.3	2211.7	2140.7	2296.1	1772.6	1269.8
47.5°	2249.5	2254.9	2325.9	2472.2	2536.6	2567.9	2469.7	2308.7	2416.8	1825.7	1281.7
50°	1904.0	1908.5	2073.2	2388.6	2569.4	2746.3	2725.7	2472.6	2510.3	1858.3	1278.9
52.5°	1630.7	1633.5	1704.2	2140.5	2461.2	2836.0	2956.2	2627.2	2578.7	1867.2	1263.9
55°	1228.3	1238.3	1317.5	1679.4	2180.0	2764.9	3096.6	2786.5	2622.1	1868.2	1248.2
57.5°	717.5	728.5	826.4	1139.9	1694.3	2517.1	3117.9	2927.7	2651.4	1861.0	1238.8
60°	351.5	356.2	398.8	599.1	1044.8	2039.5	2946.6	2996.2	2667.8	1857.2	1238.3
62.5°	236.9	236.2	238.0	295.6	514.8	1310.4	2589.6	2876.4	2659.1	1842.6	1233.9
65°	203.7	201.2	194.4	207.5	266.7	599.3	2000.7	2518.8	2592.4	1806.0	1203.1
67.5°	176.1	176.3	176.5	172.5	190.4	276.5	1222.6	1984.1	2353.3	1632.9	1084.7
70°	145.8	147.8	148.7	148.7	155.2	181.4	521.9	1359.9	1856.3	1280.3	873.6
72.5°	132.7	128.5	128.9	126.7	126.7	138.2	210.1	770.9	1169.5	720.3	533.2
75°	108.3	111.0	111.5	109.9	104.8	105.4	124.7	323.4	500.4	298.8	263.5
77.5°	93.6	93.6	94.4	93.3	89.3	78.9	83.2	125.4	170.3	122.5	131.7
80°	75.1	74.9	78.7	81.0	74.7	58.3	53.2	69.3	75.5	53.8	68.4
82.5°	36.6	38.8	54.0	61.7	56.8	42.1	32.5	43.0	40.4	23.8	30.7
85°	21.3	20.2	24.2	34.3	32.5	23.4	15.7	22.4	21.1	12.1	12.3
87.5°	6.8	6.3	4.9	11.7	9.4	6.5	4.3	6.5	5.8	2.7	2.7
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: P959222
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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2	1087.2
2.5°	1074.8	1048.4	1022.1	998.1	983.6	974.2	964.7	954.2	950.1	944.0
5°	1064.1	1012.9	967.4	928.1	892.5	864.5	836.2	813.3	803.0	810.0
7.5°	1057.8	983.8	913.6	841.5	772.2	716.9	668.6	634.8	619.5	623.3
10°	1052.2	950.8	843.8	730.1	630.5	561.9	512.5	486.8	477.0	479.1
12.5°	1047.0	913.8	759.7	610.1	504.2	458.9	444.7	445.1	446.8	448.1
15°	1046.1	869.2	665.7	505.1	436.0	433.2	448.3	458.0	463.2	464.7
17.5°	1044.8	815.8	569.9	433.6	419.4	439.2	453.3	459.6	463.6	463.8
20°	1039.4	748.0	481.5	399.4	415.8	432.9	441.7	446.6	450.0	451.1
22.5°	1022.7	672.7	412.7	384.2	401.5	415.1	425.5	431.1	433.2	434.5
25°	992.9	588.3	365.1	369.6	381.5	398.8	407.1	408.3	407.5	409.6
27.5°	954.0	497.9	335.6	349.9	365.1	380.0	384.5	383.8	382.4	384.7
30°	906.8	416.8	316.7	327.7	348.6	362.0	366.0	364.5	361.8	364.3
32.5°	857.0	350.3	301.2	312.2	334.9	348.1	352.2	350.5	348.6	350.5
35°	810.6	303.9	286.9	301.9	324.1	337.1	342.2	342.5	342.5	345.0
37.5°	768.0	276.8	275.0	295.4	316.7	328.4	335.8	336.2	326.6	327.3
40°	728.5	265.4	269.6	291.1	309.5	320.7	321.2	296.1	278.4	277.9
42.5°	696.2	263.1	271.2	290.7	304.3	304.8	273.2	253.7	248.8	249.0
45°	665.9	262.4	274.8	290.7	296.7	263.3	242.0	236.9	237.3	239.1
47.5°	632.1	259.7	275.4	286.7	274.8	234.2	227.9	225.6	224.8	225.2
50°	595.0	250.1	266.9	278.6	237.1	221.6	213.7	213.1	214.2	214.8
52.5°	556.1	234.4	252.4	264.0	219.9	210.6	201.8	203.5	208.4	209.9
55°	530.4	216.0	233.1	234.8	207.7	200.3	192.9	196.5	205.7	208.6
57.5°	523.8	196.5	211.0	209.0	192.2	191.4	186.9	189.9	201.6	205.9
60°	521.7	179.0	189.5	188.0	177.2	181.4	180.3	181.9	185.9	187.3
62.5°	506.0	165.1	170.3	168.0	163.7	171.2	173.8	170.5	173.6	175.2
65°	466.1	153.9	151.4	149.9	151.6	158.4	163.7	157.0	159.9	164.4
67.5°	400.2	138.6	131.9	133.7	139.3	142.9	149.9	142.2	144.6	152.3
70°	323.7	119.3	113.3	118.4	123.8	131.2	132.3	127.2	133.0	141.6
72.5°	229.0	99.8	95.5	106.1	107.9	117.6	115.1	112.6	120.6	123.6
75°	158.8	80.6	78.1	86.1	92.7	101.0	99.1	102.1	119.1	120.4
77.5°	100.4	62.6	61.0	66.2	75.1	84.4	87.2	120.4	203.5	211.6
80°	58.3	46.6	44.9	48.9	56.8	65.3	84.2	147.8	134.2	132.5
82.5°	32.5	32.1	29.8	31.0	37.9	47.2	118.9	104.0	84.6	87.2
85°	15.3	18.9	16.2	15.5	21.3	55.1	79.4	59.4	39.5	38.5
87.5°	4.0	3.6	3.6	4.0	9.0	47.6	31.7	25.3	15.1	14.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)