

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: P959408

Luminaire Tested: **NAV-SB1A-827-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959408
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-827-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

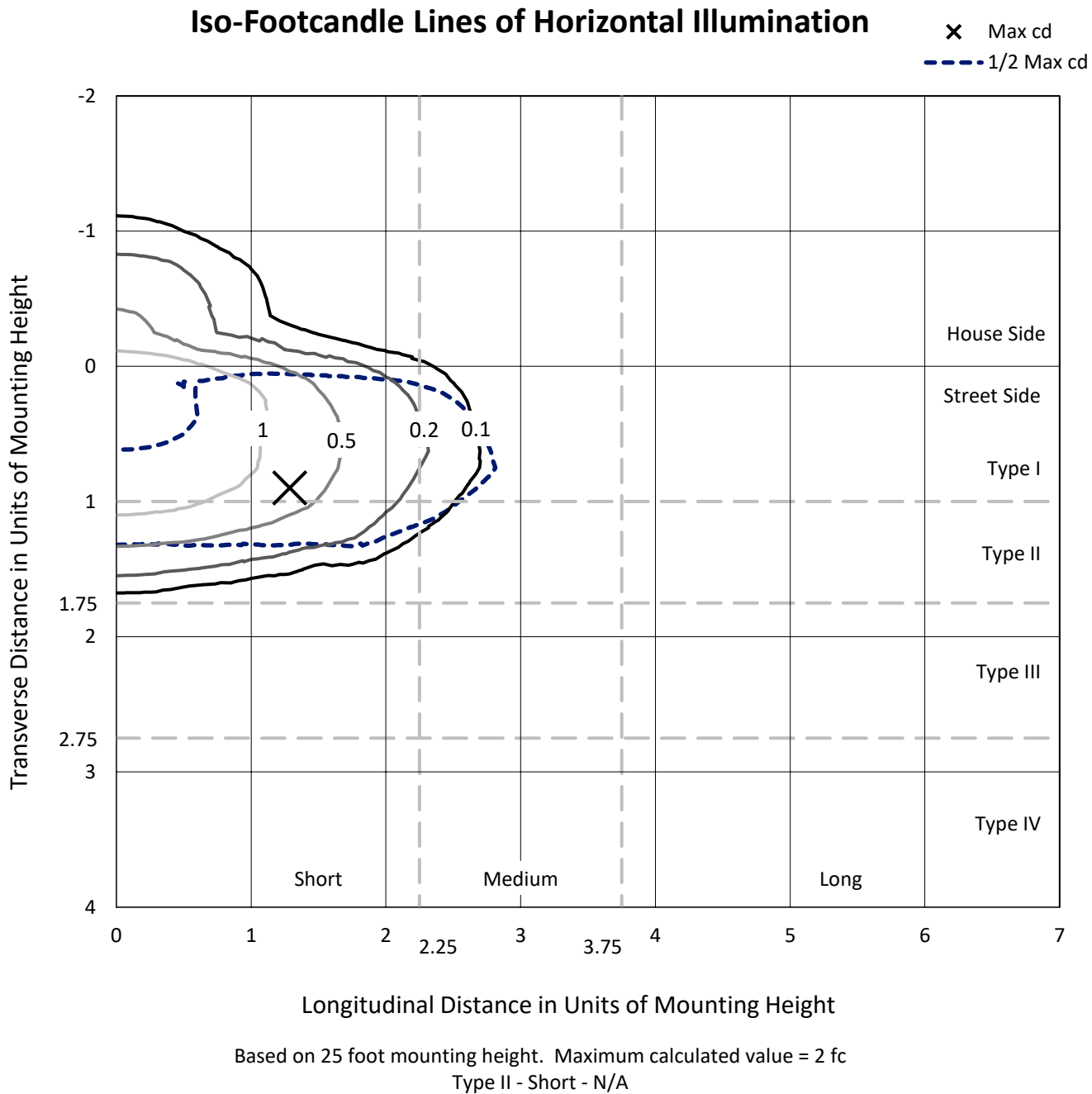
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4067.2 lumens
Efficiency: N/A
Efficacy: 131.6 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

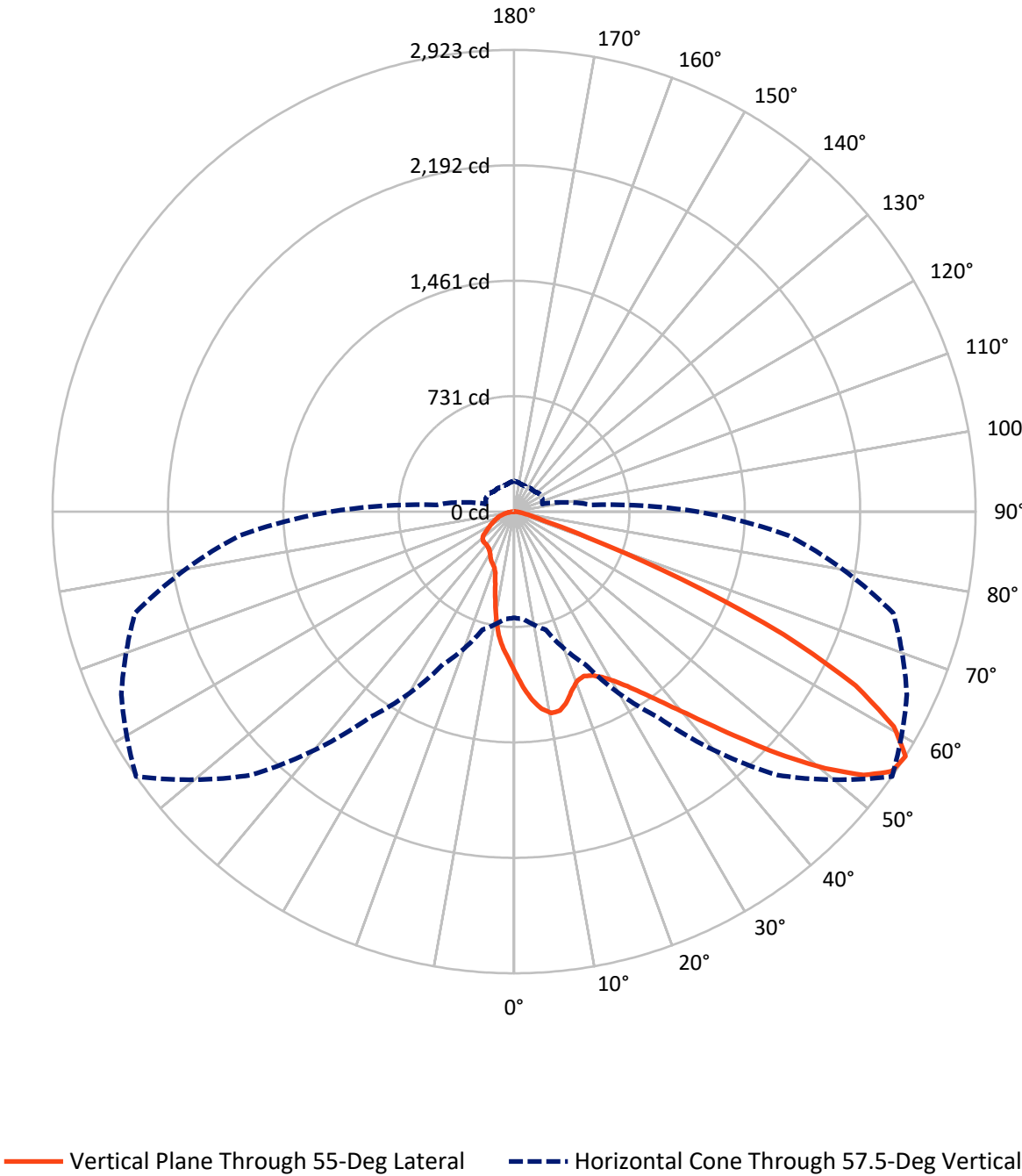


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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	735.9	0.0	735.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3331.2	0.0	3331.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	4067.2	0.0	4067.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	2.3
10°-20°	238.7	5.9
20°-30°	380.9	9.4
30°-40°	603.0	14.8
40°-50°	923.0	22.7
50°-60°	988.6	24.3
60°-70°	621.9	15.3
70°-80°	183.9	4.5
80°-90°	32.5	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°	4067.2	100.0
0°-180°	4067.2	100.0

Coefficient of Utilization



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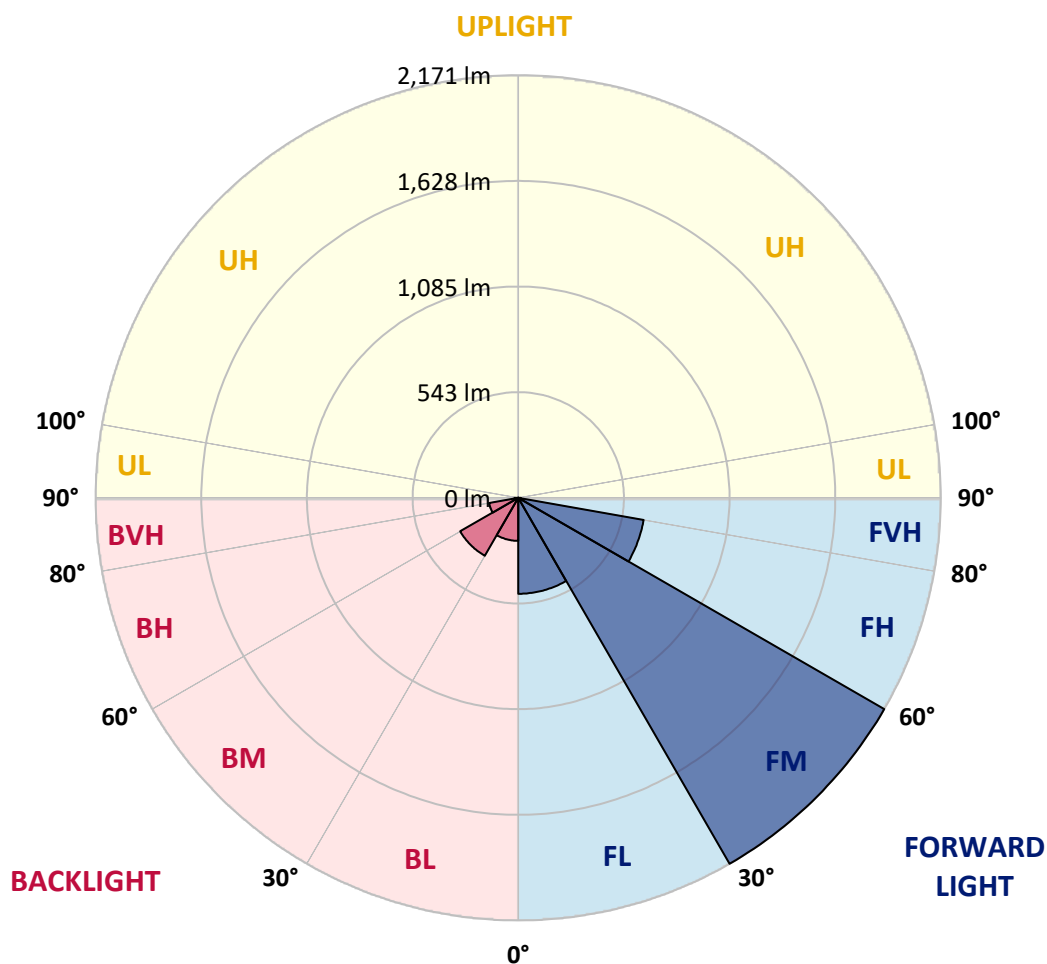
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	492.9	12.1			
FM	(30°-60°)	2170.7	53.4			
FH	(60°-80°)	653.9	16.1			G0/660
FVH	(80°-90°)	13.7	0.3			G1/100
BL	(0°-30°)	221.2	5.4	B1/500		
BM	(30°-60°)	344.0	8.5	B1/1000		
BH	(60°-80°)	152.0	3.7	B1/500		G1/500
BVH	(80°-90°)	18.8	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2
2.5°	1169.2	1168.4	1173.0	1157.2	1146.6	1132.0	1112.8	1088.4	1062.2	1034.4	1022.4
5°	1274.6	1267.2	1272.0	1260.2	1248.4	1226.6	1198.2	1158.6	1110.0	1054.6	1025.2
7.5°	1258.0	1253.0	1265.4	1275.8	1284.6	1282.0	1261.2	1219.4	1156.8	1076.6	1033.8
10°	1124.0	1118.4	1135.8	1172.2	1225.6	1272.0	1297.2	1271.4	1204.8	1100.4	1042.2
12.5°	1005.8	1003.2	1014.6	1044.2	1103.4	1192.6	1292.6	1316.8	1254.6	1128.8	1053.6
15°	955.4	952.0	959.4	974.4	1012.2	1095.2	1250.6	1348.0	1303.6	1161.6	1071.6
17.5°	944.2	940.4	943.6	951.4	975.8	1039.0	1187.1	1363.2	1354.6	1198.2	1086.8
20°	964.8	961.8	962.2	961.8	978.8	1029.0	1143.0	1357.4	1399.2	1231.8	1101.6
22.5°	1014.6	1009.4	1009.6	998.5	1007.8	1046.6	1131.4	1341.6	1439.0	1261.4	1112.6
25°	1095.8	1086.4	1088.2	1059.8	1057.4	1086.2	1149.4	1329.4	1478.6	1284.8	1114.8
27.5°	1206.8	1196.2	1190.4	1148.2	1128.0	1142.4	1186.2	1333.6	1516.0	1305.2	1109.6
30°	1345.6	1332.6	1321.0	1261.2	1224.6	1219.2	1243.4	1361.4	1560.0	1326.8	1100.4
32.5°	1515.8	1500.6	1479.6	1400.0	1348.6	1321.0	1317.4	1410.8	1611.8	1354.0	1095.8
35°	1718.2	1698.4	1668.6	1565.8	1500.6	1444.2	1415.0	1482.0	1682.6	1395.2	1101.2
37.5°	1926.8	1904.4	1877.2	1754.8	1674.6	1591.6	1534.0	1578.8	1777.0	1451.2	1115.0
40°	2119.2	2094.2	2068.7	1959.8	1873.8	1773.8	1679.8	1701.2	1892.6	1518.0	1138.6
42.5°	2232.7	2214.2	2204.6	2145.6	2079.2	1977.6	1861.0	1846.2	2022.2	1595.0	1165.4
45°	2227.6	2220.0	2250.0	2274.4	2258.6	2202.2	2073.4	2006.6	2152.4	1661.6	1190.2
47.5°	2108.6	2113.7	2180.4	2317.4	2377.8	2407.2	2315.2	2164.2	2265.5	1711.4	1201.4
50°	1784.8	1789.0	1943.4	2239.0	2408.4	2574.4	2555.0	2317.8	2353.2	1742.0	1198.8
52.5°	1528.6	1531.2	1597.6	2006.4	2307.2	2658.4	2771.2	2462.8	2417.3	1750.4	1184.8
55°	1151.4	1160.8	1235.0	1574.2	2043.4	2591.8	2902.8	2612.0	2457.8	1751.2	1170.0
57.5°	672.6	683.0	774.6	1068.6	1588.2	2359.4	2922.8	2744.4	2485.4	1744.4	1161.2
60°	329.4	333.8	373.8	561.6	979.4	1911.8	2762.2	2808.6	2500.8	1741.0	1160.8
62.5°	222.0	221.4	223.0	277.2	482.6	1228.4	2427.4	2696.4	2492.6	1727.2	1156.6
65°	191.0	188.6	182.2	194.4	250.0	561.8	1875.4	2361.2	2430.2	1693.0	1127.8
67.5°	165.0	165.2	165.4	161.6	178.6	259.2	1146.1	1860.0	2206.0	1530.6	1016.8
70°	136.6	138.6	139.4	139.4	145.4	170.0	489.2	1274.8	1740.0	1200.2	819.0
72.5°	124.4	120.4	120.8	118.8	118.8	129.6	197.0	722.6	1096.2	675.2	499.8
75°	101.6	104.0	104.4	103.0	98.2	98.8	117.0	303.2	469.0	280.0	247.0
77.5°	87.6	87.6	88.6	87.4	83.6	74.0	78.0	117.6	159.6	114.8	123.4
80°	70.4	70.2	73.8	76.0	70.0	54.6	49.8	65.0	70.8	50.4	64.2
82.5°	34.2	36.4	50.6	57.8	53.2	39.6	30.4	40.4	37.8	22.2	28.8
85°	20.0	19.0	22.8	32.2	30.4	21.8	14.8	21.0	19.8	11.4	11.6
87.5°	6.4	5.8	4.6	11.0	8.8	6.0	4.0	6.0	5.4	2.6	2.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2	1019.2
2.5°	1007.6	982.8	958.2	935.6	922.0	913.2	904.4	894.4	890.6	885.0
5°	997.4	949.6	906.8	870.0	836.6	810.4	783.8	762.4	752.8	759.2
7.5°	991.6	922.2	856.4	788.8	724.0	672.0	626.8	595.0	580.8	584.2
10°	986.4	891.2	791.0	684.4	591.0	526.6	480.4	456.2	447.2	449.2
12.5°	981.4	856.6	712.2	571.8	472.6	430.2	417.0	417.2	418.8	420.0
15°	980.6	814.8	624.0	473.4	408.8	406.0	420.2	429.4	434.2	435.6
17.5°	979.4	764.6	534.2	406.4	393.2	411.6	425.0	430.8	434.6	434.8
20°	974.4	701.2	451.4	374.4	389.8	405.8	414.0	418.6	421.8	422.8
22.5°	958.8	630.6	386.8	360.2	376.4	389.2	398.8	404.2	406.0	407.2
25°	930.8	551.4	342.2	346.4	357.6	373.8	381.6	382.6	382.0	384.0
27.5°	894.2	466.8	314.6	328.0	342.2	356.2	360.4	359.8	358.4	360.6
30°	850.0	390.6	296.8	307.2	326.8	339.4	343.2	341.6	339.2	341.4
32.5°	803.4	328.4	282.4	292.6	314.0	326.4	330.0	328.6	326.8	328.6
35°	759.8	284.8	269.0	283.0	303.8	316.0	320.8	321.0	321.0	323.4
37.5°	720.0	259.4	257.8	277.0	296.8	307.8	314.8	315.2	306.2	306.8
40°	683.0	248.8	252.8	273.0	290.2	300.6	301.0	277.6	261.0	260.6
42.5°	652.6	246.6	254.2	272.4	285.4	285.8	256.0	237.8	233.2	233.4
45°	624.2	246.0	257.6	272.4	278.2	246.8	226.8	222.0	222.4	224.2
47.5°	592.4	243.4	258.2	268.8	257.6	219.6	213.6	211.6	210.6	211.0
50°	557.8	234.4	250.2	261.2	222.2	207.8	200.4	199.8	200.8	201.4
52.5°	521.2	219.8	236.6	247.4	206.0	197.4	189.2	190.8	195.4	196.8
55°	497.2	202.4	218.4	220.2	194.6	187.8	180.8	184.2	192.8	195.6
57.5°	491.0	184.2	197.8	196.0	180.2	179.4	175.2	178.0	189.0	193.0
60°	489.0	167.8	177.6	176.2	166.2	170.0	169.0	170.6	174.4	175.6
62.5°	474.4	154.8	159.6	157.4	153.4	160.4	163.0	159.8	162.8	164.2
65°	437.0	144.2	142.0	140.4	142.2	148.4	153.4	147.2	150.0	154.2
67.5°	375.0	130.0	123.6	125.4	130.6	134.0	140.4	133.4	135.6	142.8
70°	303.4	111.8	106.2	111.0	116.0	123.0	124.0	119.2	124.6	132.6
72.5°	214.6	93.6	89.6	99.4	101.2	110.2	107.8	105.6	113.2	115.8
75°	148.8	75.4	73.2	80.8	86.8	94.6	93.0	95.6	111.6	113.0
77.5°	94.2	58.6	57.2	62.0	70.4	79.0	81.8	113.0	190.8	198.2
80°	54.6	43.8	42.0	45.8	53.2	61.2	78.8	138.6	125.8	124.2
82.5°	30.4	30.0	28.0	29.0	35.6	44.2	111.4	97.6	79.2	81.8
85°	14.2	17.6	15.2	14.6	20.0	51.8	74.4	55.8	37.0	36.2
87.5°	3.8	3.4	3.4	3.8	8.4	44.6	29.6	23.8	14.0	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)