

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: P959461

Luminaire Tested: **NAV-SB1A-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4135.9 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

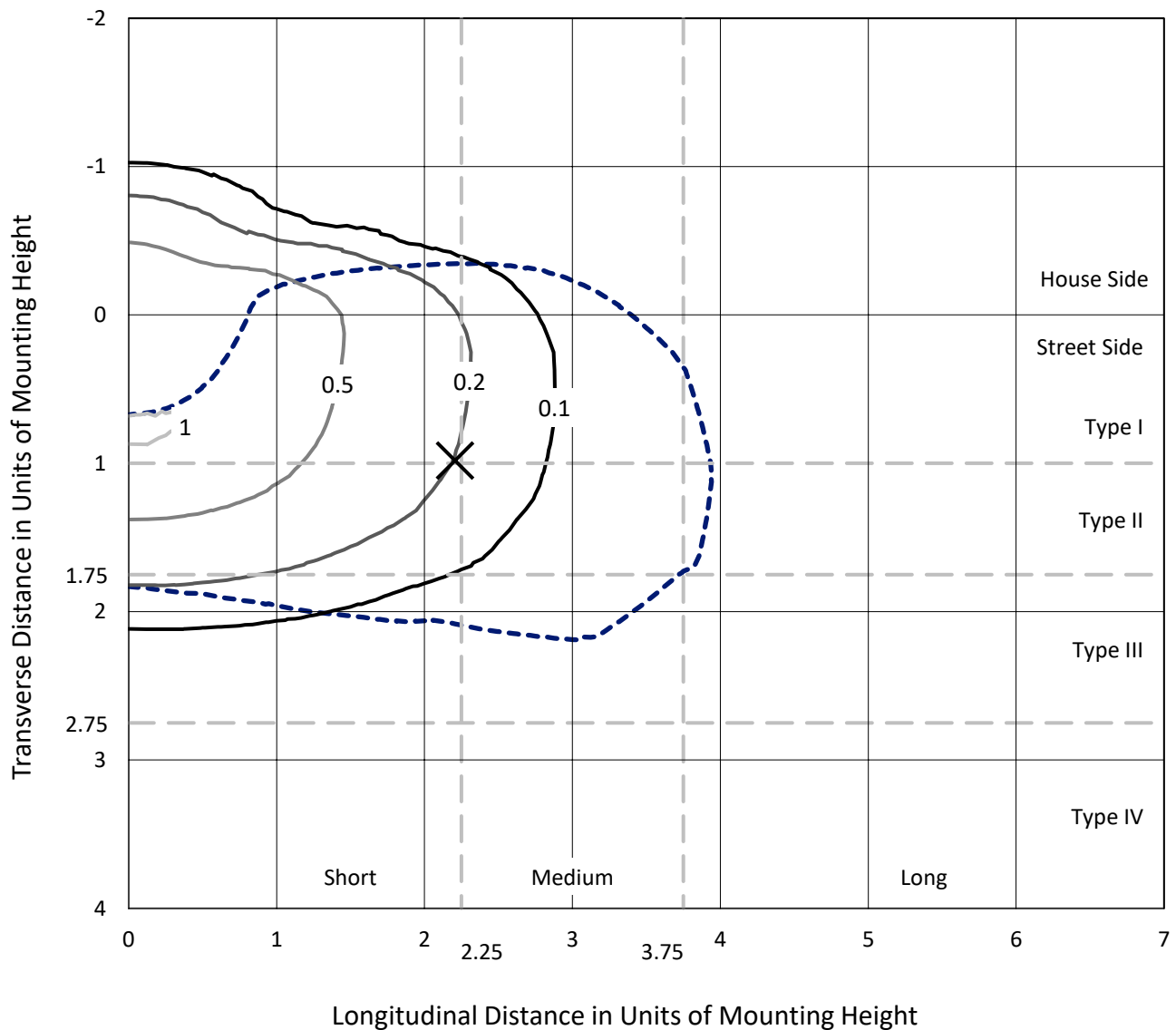
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

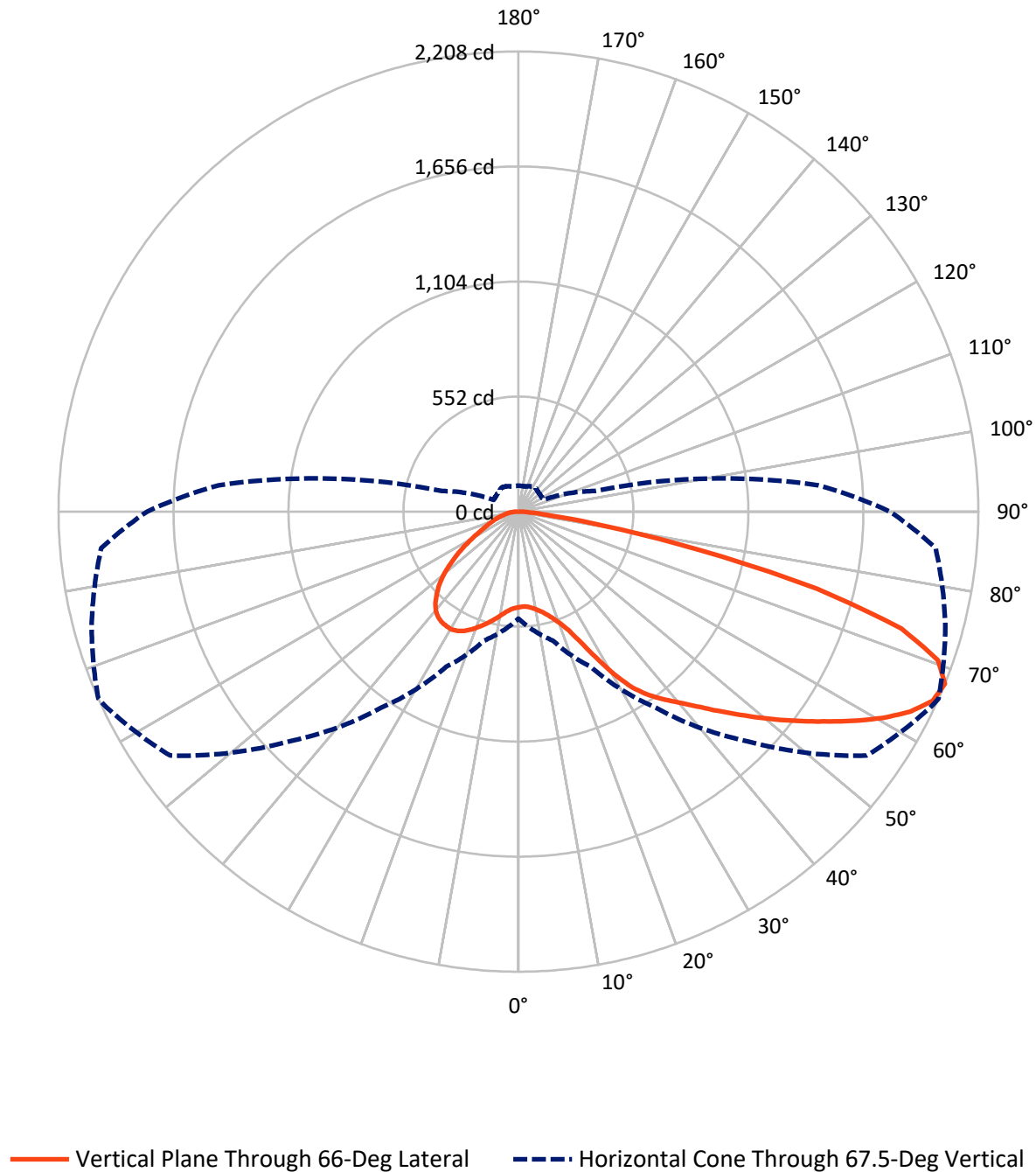
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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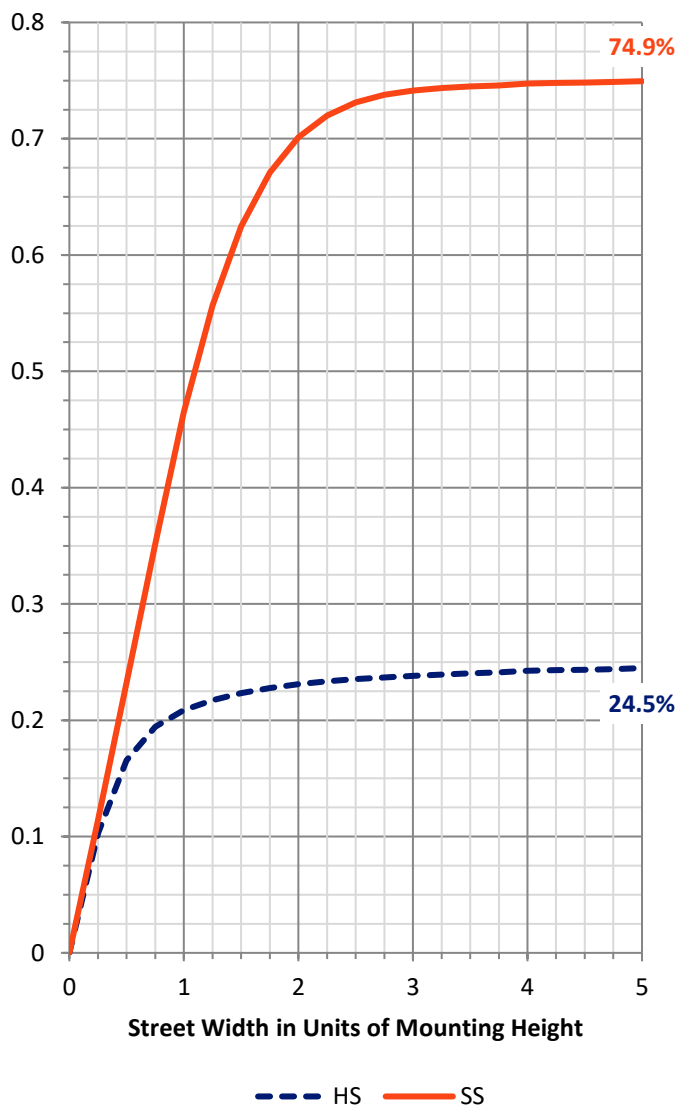
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1028.4	0.0	1028.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3107.5	0.0	3107.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	4135.9	0.0	4135.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	1.1
10°-20°	150.3	3.6
20°-30°	289.6	7.0
30°-40°	507.8	12.3
40°-50°	755.0	18.3
50°-60°	957.0	23.1
60°-70°	936.4	22.6
70°-80°	446.7	10.8
80°-90°	47.7	1.2
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°	4135.9	100.0
0°-180°	4135.9	100.0

Coefficient of Utilization



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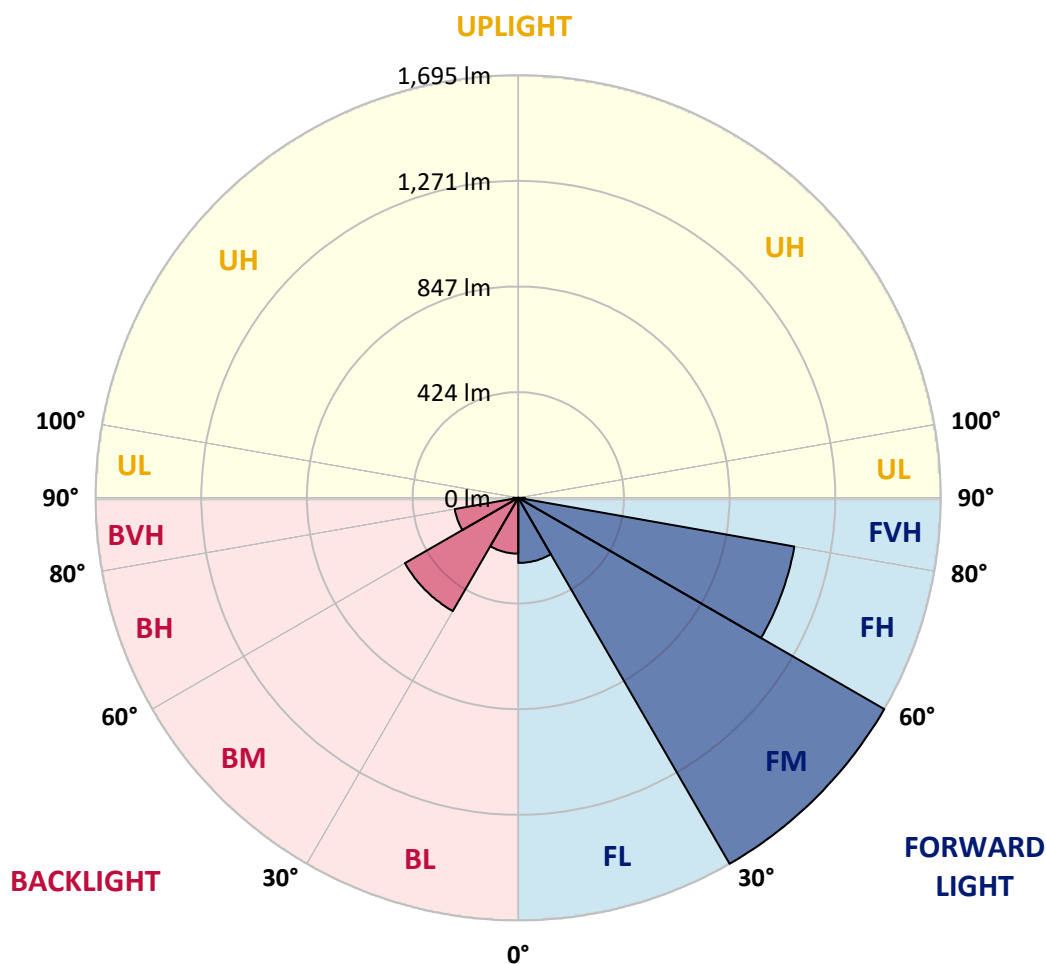
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	261.3	6.3			
FM	(30°-60°)	1694.8	41.0			
FH	(60°-80°)	1124.2	27.2			G1/1800
FVH	(80°-90°)	27.1	0.7			G1/100
BL	(0°-30°)	224.0	5.4	B1/500		
BM	(30°-60°)	524.9	12.7	B1/1000		
BH	(60°-80°)	258.8	6.3	B1/500		G1/500
BVH	(80°-90°)	20.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7
2.5°	454.0	456.5	455.9	454.8	454.6	455.0	455.7	456.3	456.1	457.3	458.9
5°	452.6	455.2	455.0	455.0	455.9	457.7	458.7	459.8	458.7	460.0	462.4
7.5°	453.5	455.5	456.3	457.3	459.4	462.7	465.2	467.6	466.4	467.8	470.9
10°	464.6	466.1	467.0	467.0	468.5	472.2	474.8	479.2	478.1	480.4	484.4
12.5°	484.8	486.4	486.4	485.4	486.6	488.9	489.8	494.6	492.6	496.5	500.4
15°	509.5	512.6	510.2	508.7	509.1	511.6	511.3	515.0	513.0	516.3	519.8
17.5°	537.0	540.9	537.0	536.7	535.9	538.4	538.7	541.9	538.4	540.9	543.2
20°	569.3	574.7	571.5	572.6	570.6	571.7	572.8	577.6	572.2	573.9	573.3
22.5°	615.0	621.5	618.0	622.2	620.8	619.9	619.7	628.2	619.7	620.4	614.1
25°	681.4	689.3	683.2	688.8	688.8	691.7	694.9	705.8	691.7	687.6	671.3
27.5°	779.7	787.5	775.5	779.0	778.0	784.8	781.5	808.3	793.1	786.4	753.6
30°	897.9	911.8	889.2	888.4	887.2	898.3	903.3	921.2	905.7	898.9	859.5
32.5°	1025.6	1040.3	1013.3	1005.4	1001.3	1008.1	1003.9	1018.2	1007.7	997.2	948.3
35°	1160.8	1175.2	1149.5	1134.3	1117.8	1103.7	1088.9	1092.5	1082.6	1066.7	1016.1
37.5°	1288.6	1314.9	1287.7	1271.4	1241.0	1213.4	1172.1	1155.0	1145.6	1131.1	1079.9
40°	1418.8	1433.8	1413.1	1399.2	1366.2	1323.0	1256.9	1220.6	1208.0	1193.8	1150.6
42.5°	1514.5	1528.9	1517.8	1508.3	1482.5	1432.2	1346.8	1301.4	1283.2	1267.3	1230.6
45°	1590.6	1601.3	1594.4	1597.8	1586.7	1538.0	1440.0	1388.2	1369.2	1349.9	1321.0
47.5°	1621.2	1632.6	1643.7	1664.3	1683.3	1647.4	1540.3	1481.9	1462.0	1442.3	1413.8
50°	1617.8	1629.3	1661.5	1705.4	1764.0	1752.1	1645.8	1582.0	1563.4	1540.9	1514.5
52.5°	1590.0	1603.0	1644.3	1717.3	1810.8	1830.5	1753.4	1685.2	1667.8	1640.8	1614.6
55°	1517.0	1524.8	1586.7	1690.1	1821.8	1885.3	1858.8	1795.1	1777.8	1740.1	1711.4
57.5°	1381.6	1392.9	1483.1	1616.9	1794.1	1922.5	1951.4	1910.7	1894.0	1839.9	1809.9
60°	1204.9	1222.9	1326.1	1493.9	1723.2	1922.3	2035.4	2024.4	2010.4	1938.1	1906.8
62.5°	1005.0	1025.9	1125.1	1320.1	1599.3	1867.8	2088.0	2119.6	2112.4	2028.7	1988.7
65°	771.8	786.2	885.1	1095.2	1406.6	1750.6	2094.2	2184.5	2185.8	2097.6	2031.5
67.5°	513.9	555.2	641.0	821.8	1148.4	1559.1	2040.7	2195.1	2207.7	2121.3	2010.0
70°	250.7	305.0	389.2	534.1	821.8	1265.6	1901.0	2107.8	2135.9	2052.2	1881.8
72.5°	104.0	121.7	167.6	263.6	471.8	854.0	1620.2	1870.9	1922.9	1818.4	1582.2
75°	70.2	76.1	95.8	135.2	214.9	421.2	1168.4	1395.0	1478.8	1373.3	1122.6
77.5°	54.1	57.8	69.8	94.5	127.8	159.3	625.4	840.7	884.0	818.4	584.1
80°	42.6	45.4	52.2	68.9	90.6	85.2	213.2	380.9	405.9	340.5	187.8
82.5°	36.9	38.0	37.4	46.7	60.2	49.7	70.0	140.6	155.2	112.5	61.3
85°	26.8	29.7	31.1	28.9	32.0	25.2	28.7	49.7	54.7	48.9	34.5
87.5°	10.9	16.1	19.8	18.7	11.7	7.2	8.9	14.6	16.7	18.2	11.3
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°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7
2.5°	459.2	460.6	461.8	463.1	463.9	465.2	467.8	469.3	469.6	470.7	470.5
5°	463.3	465.5	467.8	471.3	475.2	478.5	483.5	487.0	488.3	489.3	489.1
7.5°	472.2	475.2	479.6	485.6	491.3	495.7	501.7	505.8	510.0	511.6	511.8
10°	485.4	489.8	496.1	504.4	510.4	516.1	522.4	525.8	530.0	531.8	532.6
12.5°	501.9	506.6	514.8	526.3	532.0	535.9	538.0	537.2	538.0	539.6	540.0
15°	520.9	525.8	535.3	547.6	551.6	548.1	543.2	538.9	538.2	538.7	540.2
17.5°	543.2	546.9	557.8	568.3	565.4	551.0	540.7	533.7	530.2	529.1	530.6
20°	574.5	574.5	583.4	590.0	571.0	546.7	530.4	519.2	512.0	508.9	508.3
22.5°	612.5	609.1	614.8	610.2	570.0	534.5	512.0	492.4	481.5	477.2	476.5
25°	660.8	656.7	655.2	626.9	562.1	515.3	478.5	454.8	445.3	442.9	443.3
27.5°	733.6	723.1	703.4	636.0	547.9	484.8	439.4	417.5	412.0	412.3	412.9
30°	830.6	809.6	761.2	637.6	524.4	441.8	399.4	383.8	381.2	382.2	385.9
32.5°	920.2	900.5	820.3	630.6	488.3	399.6	363.6	353.1	349.2	350.5	352.3
35°	990.7	985.2	875.0	620.8	443.9	360.1	331.4	322.5	314.9	313.1	314.5
37.5°	1057.2	1055.0	916.1	607.1	400.1	332.0	305.6	293.8	282.7	276.6	276.9
40°	1130.2	1128.0	943.1	586.1	361.1	307.7	282.3	266.8	253.2	242.1	243.1
42.5°	1212.4	1199.5	955.9	555.9	328.1	287.1	263.3	242.5	224.5	214.2	214.9
45°	1302.1	1273.2	955.7	517.4	300.3	268.1	243.1	213.6	196.9	187.3	186.9
47.5°	1397.3	1343.6	943.9	474.8	273.4	247.3	211.9	189.3	178.1	172.3	171.0
50°	1495.5	1409.4	923.9	425.9	245.8	223.6	192.3	176.9	168.4	163.0	161.0
52.5°	1587.8	1469.1	899.8	370.5	217.7	200.6	183.6	171.7	162.8	156.7	154.1
55°	1673.6	1520.7	865.7	313.8	195.0	185.1	179.5	169.5	159.3	152.1	149.2
57.5°	1749.9	1554.1	806.9	260.6	178.7	174.5	175.2	165.8	154.1	148.0	144.1
60°	1813.4	1578.7	719.7	211.3	165.3	164.1	168.4	158.9	145.1	138.2	135.2
62.5°	1851.5	1578.3	612.7	173.0	154.1	154.5	159.5	150.2	136.2	129.8	127.8
65°	1848.2	1539.6	495.5	148.0	143.2	143.6	150.2	140.6	128.8	124.9	124.7
67.5°	1782.8	1445.2	380.1	131.7	131.2	133.2	140.8	134.1	124.3	123.8	124.5
70°	1605.7	1249.5	273.8	118.7	118.9	121.7	131.7	130.0	121.9	122.8	122.6
72.5°	1287.5	952.6	183.9	105.0	105.2	109.8	123.0	126.7	119.5	131.0	132.7
75°	857.5	594.1	118.2	90.4	90.6	96.5	115.4	120.3	113.0	130.6	131.7
77.5°	412.0	267.0	85.6	76.1	76.1	81.5	99.7	107.8	96.2	101.5	93.0
80°	142.4	100.3	67.3	61.3	60.0	63.7	84.0	93.5	83.0	76.5	71.8
82.5°	56.1	52.2	54.1	47.6	43.3	45.6	65.4	77.2	61.1	55.1	54.9
85°	32.2	33.9	38.2	31.5	25.0	28.0	48.1	55.5	46.0	40.6	41.5
87.5°	8.7	12.0	17.6	16.3	11.3	12.0	22.9	30.6	26.5	20.4	21.1
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)