

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: P196495

Luminaire Tested: **NAV-AF-01-D-UNV-AFL-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196495  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-AFL-7030-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4890.4 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
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: 25 FT

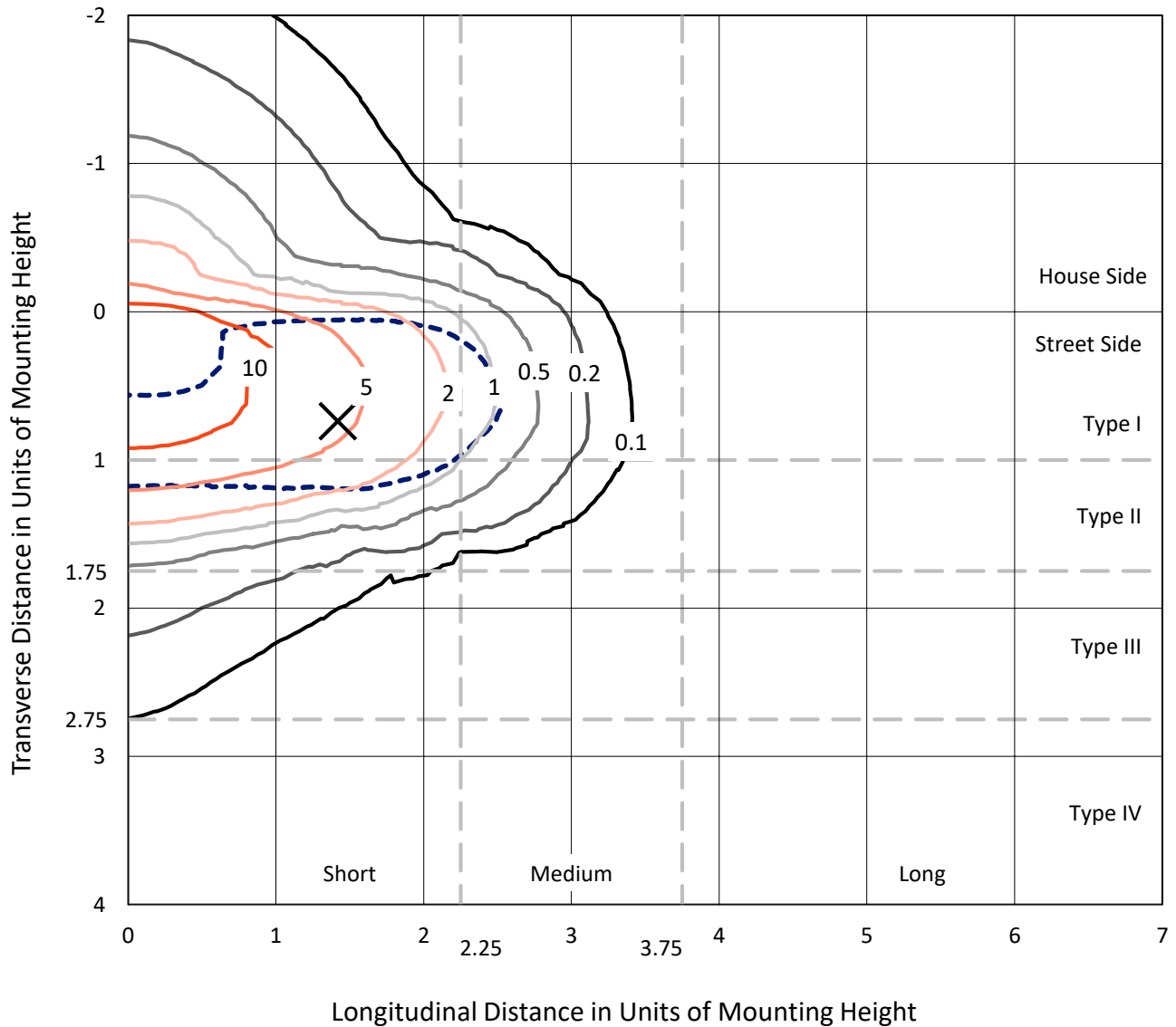


REPORT NUMBER: P196495

CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

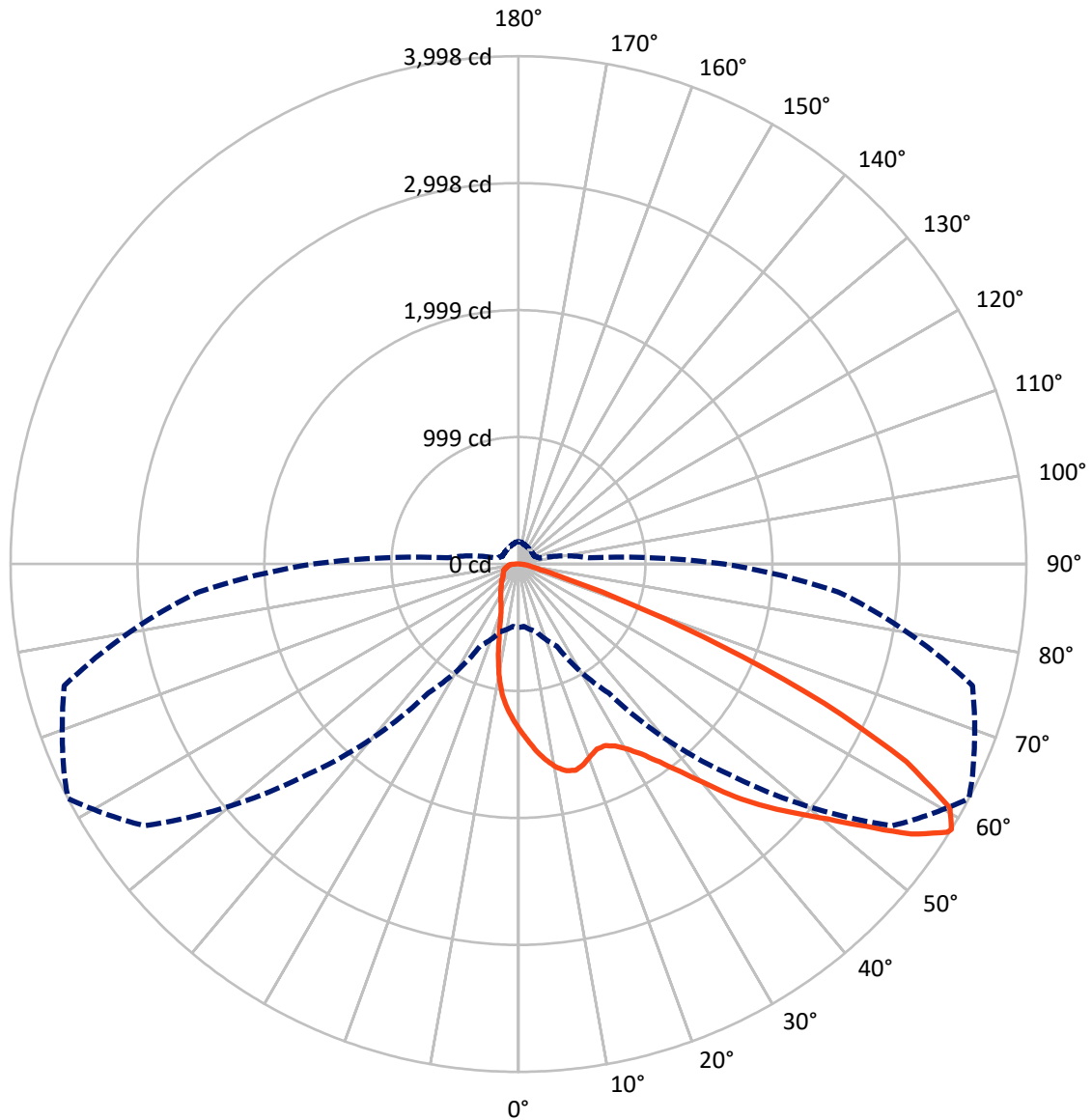
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.3 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P196495  
CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P196495

CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

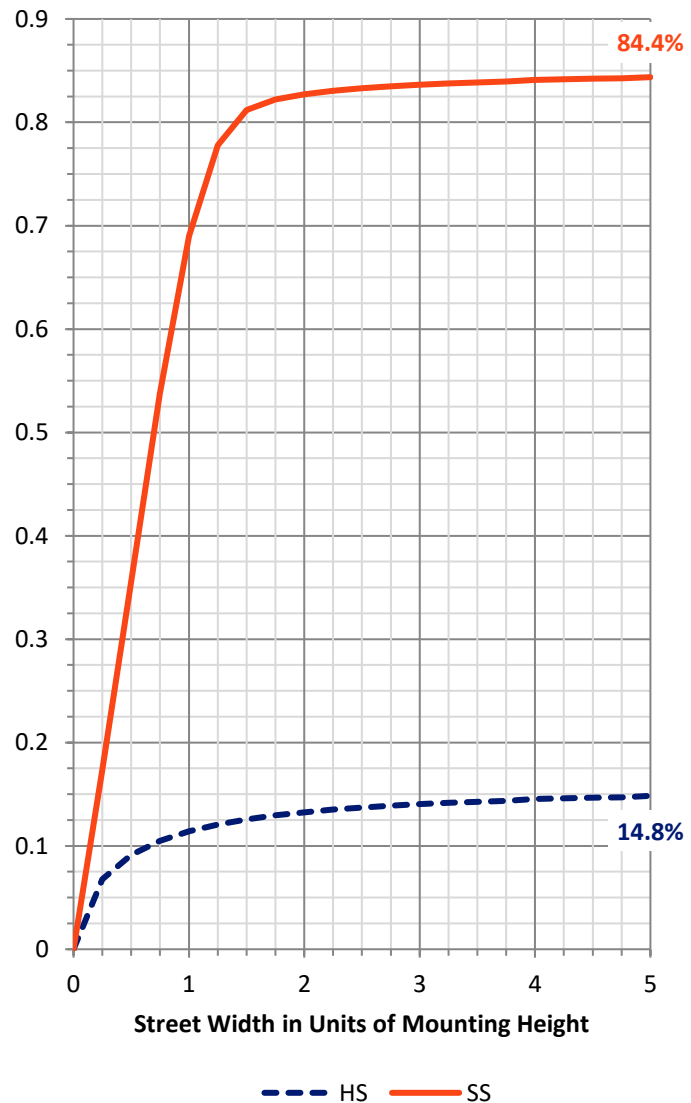
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	750.9	0.0	750.9
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	4139.5	0.0	4139.5
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	4890.4	0.0	4890.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.7	2.4
10°-20°	294.5	6.0
20°-30°	477.3	9.8
30°-40°	762.1	15.6
40°-50°	1108.5	22.7
50°-60°	1160.0	23.7
60°-70°	707.2	14.5
70°-80°	197.8	4.0
80°-90°	66.3	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°	4890.4	100.0
0°-180°	4890.4	100.0

**Coefficient of Utilization**



REPORT NUMBER: P196495

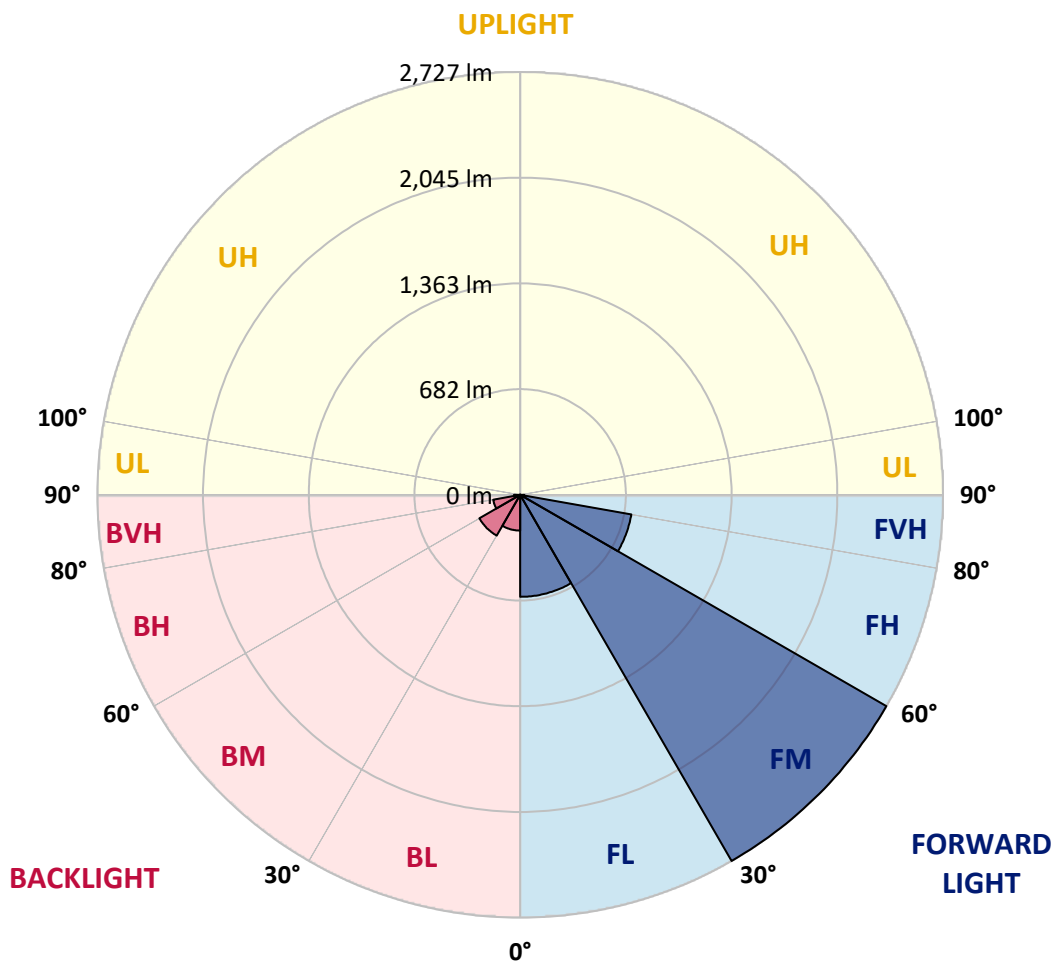
CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	657.8	13.5			
FM	(30°-60°)	2727.0	55.8			
FH	(60°-80°)	728.2	14.9			G1/1800
FVH	(80°-90°)	26.7	0.5			G1/100
BL	(0°-30°)	230.8	4.7	B1/500		
BM	(30°-60°)	303.7	6.2	B1/1000		
BH	(60°-80°)	176.8	3.6	B1/500		G1/500
BVH	(80°-90°)	39.6	0.8			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: P196495

CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7
2.5°	1482.1	1481.1	1468.7	1460.4	1450.6	1428.0	1405.4	1388.5	1380.0	1347.2	1315.5
5°	1604.7	1600.9	1594.0	1585.1	1572.2	1543.9	1508.1	1477.1	1464.9	1406.9	1348.5
7.5°	1539.8	1545.7	1567.4	1591.8	1617.5	1619.3	1594.0	1557.3	1543.9	1466.1	1380.6
10°	1360.4	1358.0	1385.2	1432.8	1517.5	1601.3	1643.2	1625.1	1611.0	1522.4	1412.7
12.5°	1305.9	1305.4	1310.0	1322.2	1375.3	1490.3	1630.5	1669.7	1664.9	1582.1	1446.9
15°	1322.5	1323.1	1322.8	1324.3	1339.1	1393.7	1560.7	1684.7	1700.0	1641.0	1481.8
17.5°	1375.3	1373.3	1366.5	1359.1	1361.4	1380.9	1485.2	1659.0	1704.9	1693.6	1511.2
20°	1457.0	1457.0	1439.0	1418.5	1405.1	1409.3	1453.7	1615.1	1682.3	1738.2	1533.1
22.5°	1559.3	1560.9	1534.3	1497.1	1466.5	1454.9	1471.7	1582.3	1654.7	1779.5	1552.7
25°	1686.5	1686.2	1647.4	1594.0	1545.7	1517.8	1517.5	1583.8	1646.2	1827.8	1573.2
27.5°	1844.0	1829.5	1784.3	1708.3	1640.1	1597.6	1578.4	1622.4	1664.2	1887.0	1600.6
30°	2021.6	2006.9	1947.5	1849.8	1757.4	1695.3	1663.6	1689.0	1719.3	1962.6	1642.2
32.5°	2197.3	2200.7	2131.0	2020.6	1901.9	1814.6	1767.6	1783.1	1804.2	2054.8	1698.4
35°	2454.6	2454.3	2363.3	2225.4	2084.4	1963.5	1903.9	1912.1	1931.3	2185.0	1777.3
37.5°	2646.6	2643.5	2584.8	2462.9	2304.3	2159.1	2072.8	2074.1	2090.5	2348.5	1881.2
40°	2666.2	2665.5	2665.3	2647.8	2539.3	2402.4	2294.5	2272.1	2278.9	2522.1	1991.6
42.5°	2516.7	2538.9	2603.2	2701.6	2731.8	2660.0	2558.0	2508.1	2493.4	2721.4	2108.3
45°	2303.6	2314.9	2427.4	2648.8	2828.7	2902.2	2825.3	2720.2	2695.2	2915.2	2203.4
47.5°	2204.7	2199.7	2264.8	2506.0	2819.3	3094.7	3100.1	2927.8	2885.3	3082.4	2284.4
50°	1992.3	1985.8	2068.0	2296.0	2715.9	3190.4	3382.2	3154.0	3075.4	3241.4	2357.7
52.5°	1568.9	1562.7	1673.1	1966.7	2484.9	3154.6	3620.1	3431.5	3297.6	3394.4	2426.2
55°	1020.8	1021.5	1126.6	1429.5	2010.8	2946.0	3731.6	3752.1	3602.1	3547.6	2481.5
57.5°	562.0	556.9	631.7	818.0	1383.3	2472.6	3638.7	3983.1	3904.9	3679.1	2521.6
58°	499.8	493.7	551.4	711.9	1240.3	2339.1	3591.9	3997.8	3943.7	3700.7	2527.3
60°	356.0	345.7	336.8	401.3	714.5	1686.5	3280.2	3902.7	3955.0	3744.2	2521.9
62.5°	300.1	288.2	256.4	254.0	336.5	824.9	2594.1	3427.5	3573.9	3644.3	2433.2
65°	278.7	266.8	225.0	210.0	228.4	356.0	1604.0	2646.6	2842.2	3296.7	2210.1
67.5°	263.5	249.4	204.5	184.8	188.6	213.0	680.6	1730.8	1957.7	2570.8	1773.1
70°	249.7	234.2	188.3	165.6	162.6	162.0	265.9	903.8	1122.3	1682.3	1187.7
72.5°	234.2	218.8	173.9	149.8	143.0	131.4	159.8	373.4	512.0	824.6	544.3
75°	211.5	199.0	158.0	136.6	125.0	106.6	118.0	179.0	220.7	315.8	252.7
77.5°	186.2	176.0	141.8	125.6	110.1	87.1	90.1	121.4	136.3	177.9	146.4
80°	131.7	135.4	123.8	110.7	96.9	70.3	69.4	88.9	97.8	119.5	98.5
82.5°	90.8	93.5	100.8	87.4	78.2	54.7	51.1	61.7	66.3	72.1	47.6
85°	64.8	63.0	70.0	62.6	57.5	34.9	32.7	39.2	41.8	44.0	23.0
87.5°	39.5	39.2	40.3	32.4	29.9	17.7	16.2	18.7	19.8	19.2	11.0
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: P196495

CATALOG NUMBER: NAV-AF-01-D-UNV-AFL-7030-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7	1305.7
2.5°	1303.6	1288.6	1255.9	1229.6	1201.2	1179.5	1157.8	1145.6	1132.2	1124.5	1123.5
5°	1318.0	1287.4	1217.7	1152.9	1086.2	1026.4	967.7	924.3	888.9	868.6	867.4
7.5°	1333.8	1285.9	1178.3	1066.1	947.5	829.5	725.3	651.6	604.3	582.3	580.7
10°	1346.1	1279.4	1130.3	955.8	767.8	611.9	517.2	473.7	459.4	455.7	455.1
12.5°	1360.8	1274.8	1069.7	814.2	586.8	465.8	437.0	434.3	437.4	439.2	439.6
15°	1374.5	1266.0	988.1	657.4	459.4	416.3	417.0	422.8	428.9	431.6	431.9
17.5°	1380.9	1244.3	880.8	518.1	402.0	394.0	401.0	408.6	414.2	416.3	416.3
20°	1380.9	1209.4	756.5	419.7	371.9	373.4	382.1	387.9	389.1	387.3	386.3
22.5°	1375.1	1166.4	635.5	366.1	347.6	353.4	360.0	356.0	341.8	330.7	328.6
25°	1369.9	1115.3	519.0	333.5	326.1	333.8	331.0	303.8	281.8	270.5	268.7
27.5°	1361.4	1053.6	421.7	306.6	305.4	311.5	284.3	258.0	246.9	240.8	239.6
30°	1359.1	986.6	353.0	282.8	284.8	276.3	245.2	236.5	234.2	230.7	229.2
32.5°	1366.3	919.6	310.0	263.2	265.3	237.2	225.3	226.5	226.1	221.9	220.3
35°	1385.5	854.6	282.4	245.4	239.3	212.4	213.9	217.7	217.7	212.4	210.6
37.5°	1419.1	794.1	265.0	230.4	209.3	199.6	203.5	208.4	208.4	204.8	203.2
40°	1454.9	735.1	251.9	218.5	190.4	190.7	194.7	198.5	200.0	200.5	199.3
42.5°	1487.2	673.9	237.7	205.7	181.8	184.0	185.8	188.6	195.0	199.3	198.7
45°	1506.2	612.5	222.6	189.8	176.0	177.0	176.4	181.3	188.9	195.3	195.3
47.5°	1523.6	562.0	210.0	173.9	170.2	170.2	168.4	173.2	180.3	187.9	188.6
50°	1540.1	529.4	201.1	161.7	162.9	162.0	161.3	166.0	175.5	184.6	186.2
52.5°	1557.0	518.3	193.2	152.9	155.2	154.0	154.7	161.0	171.7	181.3	182.8
55°	1580.6	525.4	184.8	146.7	147.9	147.6	150.1	157.5	166.8	176.4	177.0
57.5°	1609.5	551.1	177.9	142.1	141.0	142.7	146.7	153.7	162.9	174.3	175.2
58°	1615.3	557.2	176.7	141.0	139.5	142.1	146.1	152.9	162.2	174.3	175.2
60°	1624.2	578.8	173.6	138.4	134.2	139.1	144.0	150.7	161.0	175.8	177.5
62.5°	1581.4	583.1	172.7	135.7	128.7	134.8	140.6	148.3	159.8	181.0	184.8
65°	1433.2	539.2	166.3	131.1	124.1	131.4	137.5	146.4	163.6	196.5	198.5
67.5°	1150.5	447.8	150.7	124.1	118.9	127.5	135.1	146.4	165.1	199.0	200.2
70°	791.0	336.5	131.1	116.5	112.7	122.6	134.2	149.8	159.8	188.3	184.6
72.5°	413.2	234.2	114.9	107.6	105.4	118.3	143.0	146.4	153.7	175.8	172.1
75°	208.1	159.2	101.2	97.5	97.2	116.8	160.2	141.0	147.3	165.3	173.2
77.5°	122.9	124.7	90.1	88.1	89.6	113.9	160.5	135.4	140.0	152.2	160.7
80°	84.0	103.0	81.6	81.0	82.3	104.9	147.9	128.7	131.4	144.0	153.2
82.5°	47.4	56.9	71.6	75.5	74.9	85.9	127.8	117.0	120.4	170.2	180.1
85°	23.0	34.2	59.9	70.6	63.9	57.2	103.9	103.9	104.9	122.0	123.5
87.5°	8.5	15.3	40.3	55.9	44.6	34.2	70.6	73.6	82.0	84.3	86.2
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)