

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: P959829

Luminaire Tested: **NAV-SB1B-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959829
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5720.5 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

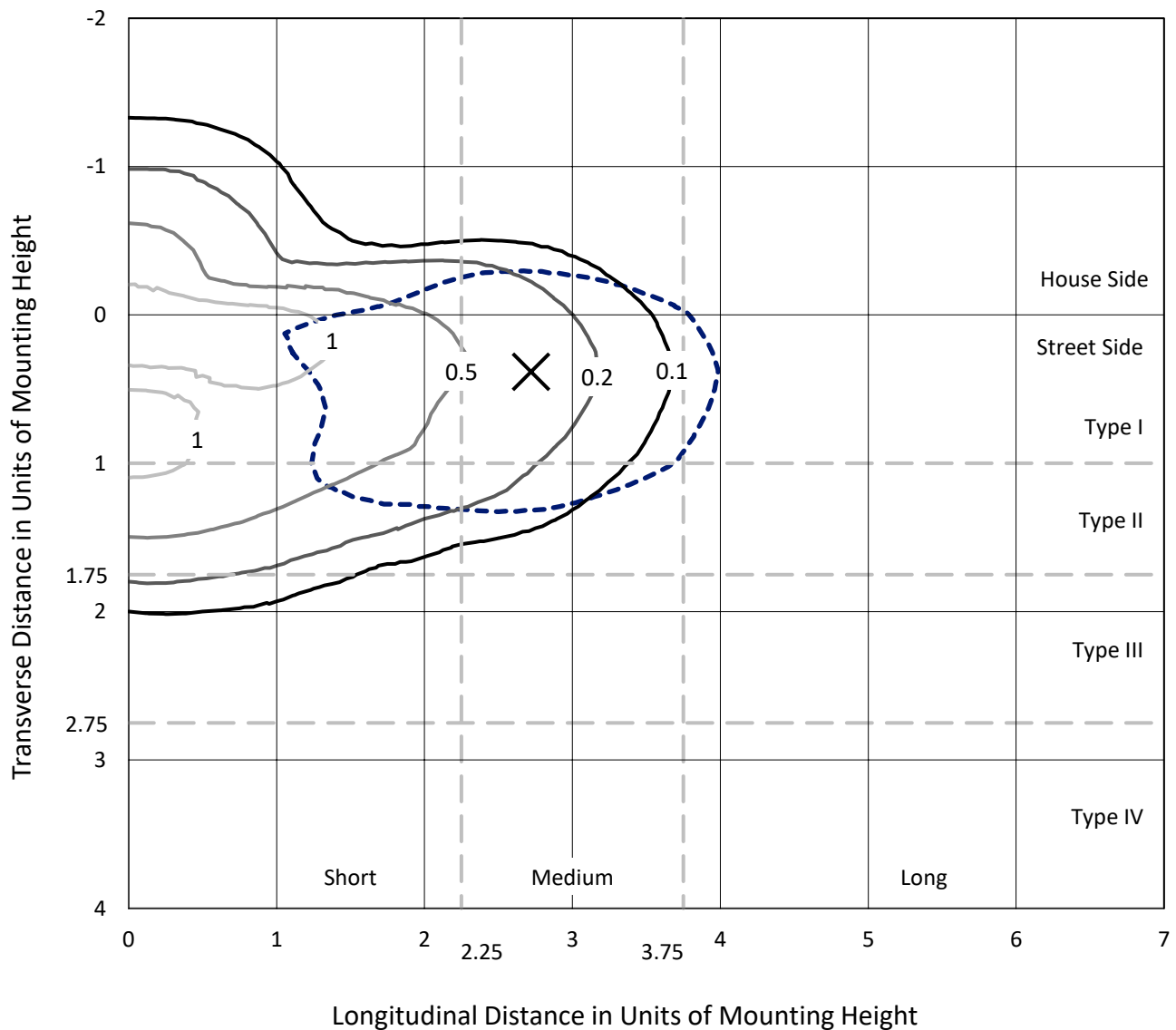
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

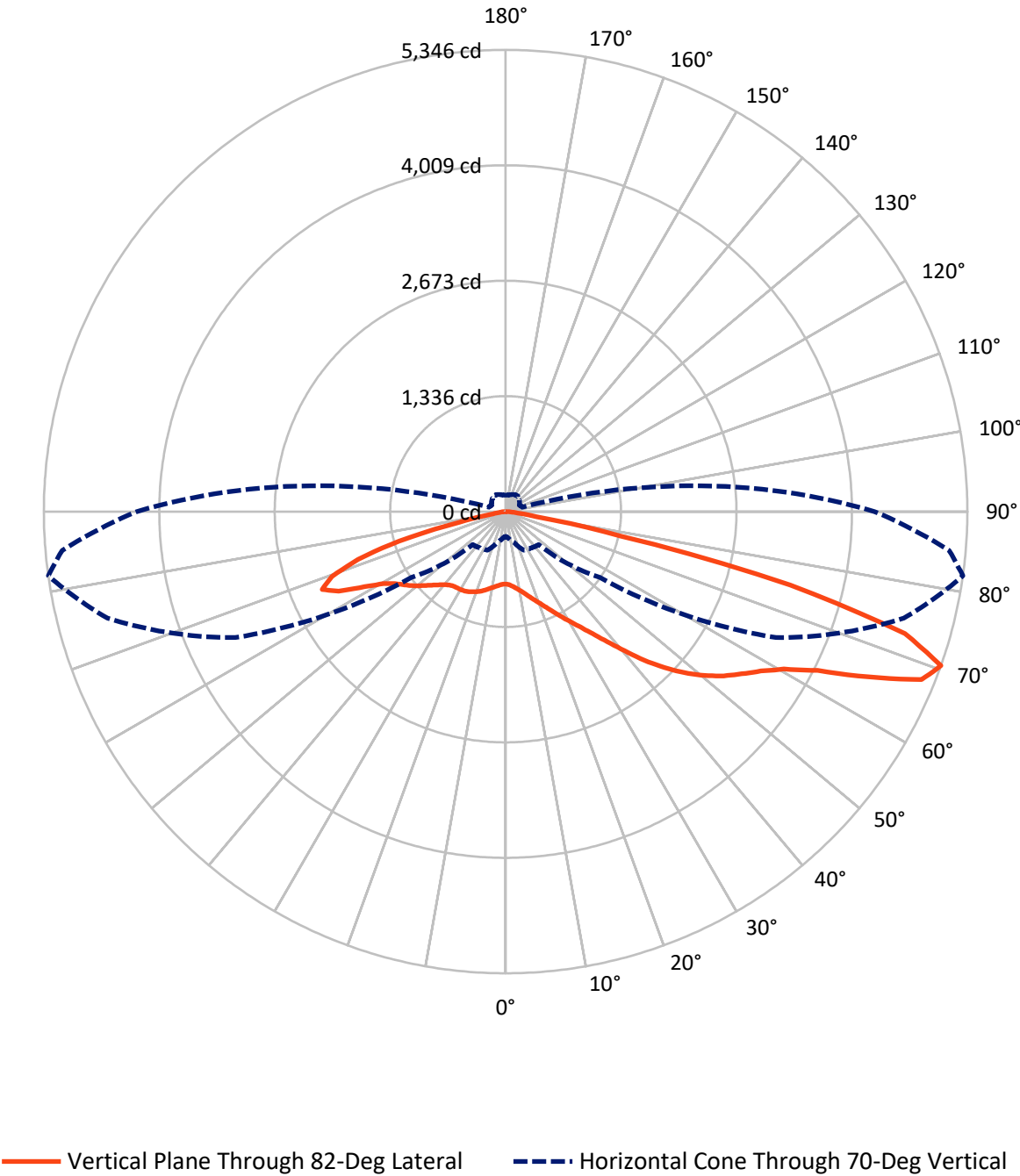
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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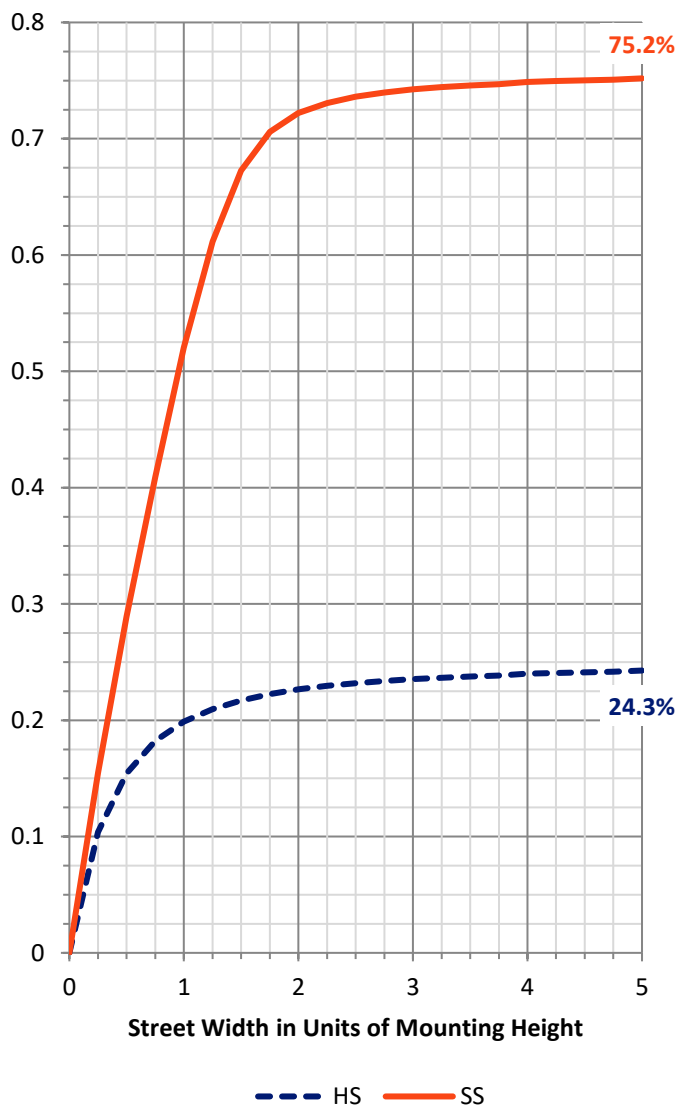
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1410.2	0.0	1410.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	4310.3	0.0	4310.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	5720.5	0.0	5720.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	1.4
10°-20°	227.5	4.0
20°-30°	380.6	6.7
30°-40°	594.6	10.4
40°-50°	947.0	16.6
50°-60°	1317.8	23.0
60°-70°	1378.5	24.1
70°-80°	720.5	12.6
80°-90°	74.8	1.3
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°	5720.5	100.0
0°-180°	5720.5	100.0

Coefficient of Utilization



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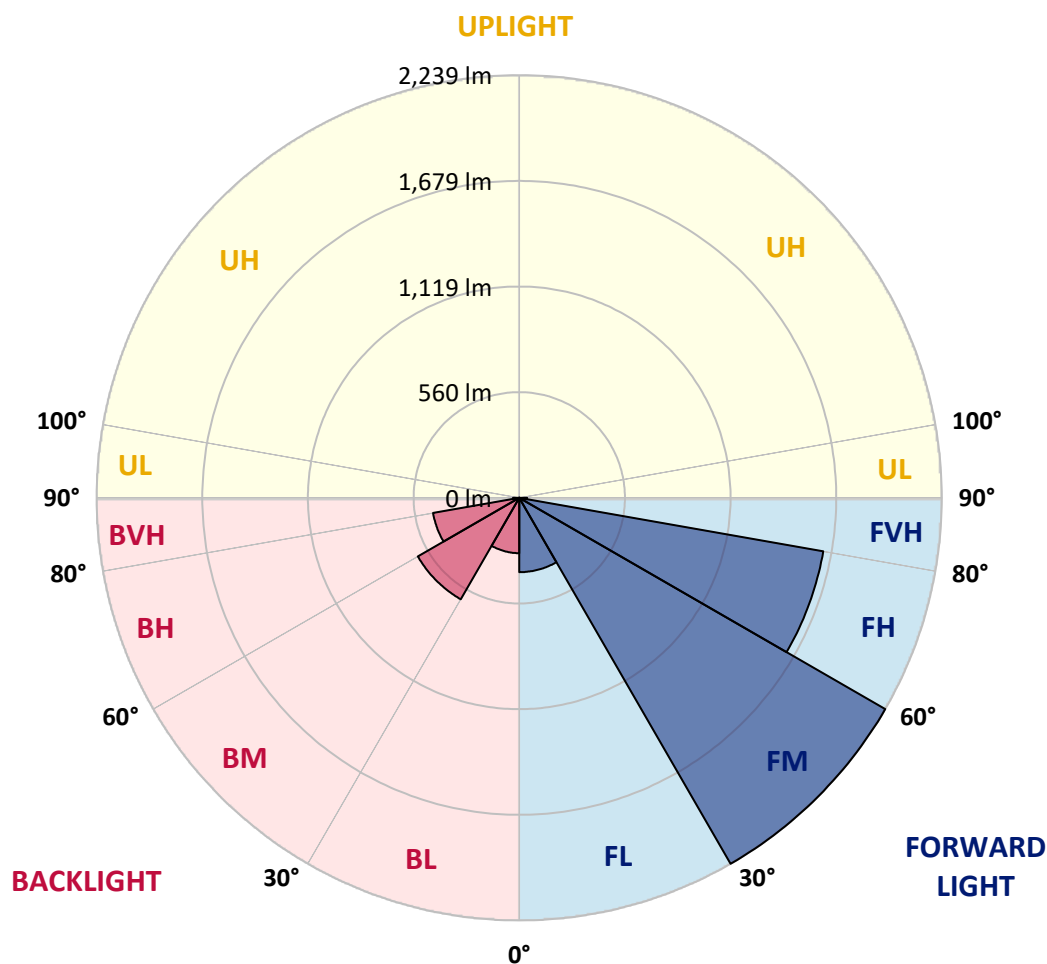
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	393.9	6.9			
FM	(30°-60°)	2239.0	39.1			
FH	(60°-80°)	1635.5	28.6			G1/1800
FVH	(80°-90°)	41.9	0.7			G1/100
BL	(0°-30°)	293.4	5.1	B1/500		
BM	(30°-60°)	620.5	10.8	B1/1000		
BH	(60°-80°)	463.5	8.1	B1/500		G1/500
BVH	(80°-90°)	32.9	0.6			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7
2.5°	858.7	863.6	862.0	860.6	860.6	858.4	858.1	855.1	852.7	848.7	847.8
5°	869.7	874.8	874.2	875.5	879.3	880.3	881.2	879.3	874.5	869.7	867.6
7.5°	860.0	865.7	867.6	874.8	886.9	897.9	906.1	909.4	904.9	897.9	894.5
10°	827.2	833.5	839.9	857.2	878.7	904.6	926.4	939.5	938.6	931.9	926.1
12.5°	760.7	767.4	781.0	814.7	854.1	899.7	940.4	967.7	977.1	972.2	962.3
15°	707.6	713.3	723.6	758.3	809.5	878.7	945.6	998.7	1022.6	1019.9	1007.8
17.5°	706.0	708.5	714.8	731.2	770.7	846.0	940.1	1029.0	1074.8	1074.5	1059.3
20°	732.8	733.7	737.3	740.7	763.1	821.1	926.1	1054.2	1133.4	1133.4	1117.0
22.5°	769.8	769.2	772.8	769.8	780.7	819.0	917.3	1076.4	1198.7	1203.6	1183.0
25°	825.3	822.4	821.4	814.5	816.5	838.7	927.0	1101.6	1276.1	1286.2	1260.3
27.5°	899.4	894.5	891.2	875.1	869.7	879.3	956.7	1131.9	1362.3	1379.6	1346.8
30°	995.9	987.2	982.3	954.4	934.6	936.1	1001.7	1172.3	1452.4	1480.4	1438.8
32.5°	1127.7	1114.0	1101.0	1055.1	1019.1	1007.2	1059.6	1228.2	1550.2	1594.8	1541.4
35°	1275.2	1264.2	1250.3	1179.6	1124.0	1096.8	1138.0	1306.2	1664.7	1735.4	1665.8
37.5°	1417.3	1407.8	1414.5	1319.2	1247.5	1207.9	1240.6	1410.9	1805.8	1910.2	1821.9
40°	1564.1	1556.9	1557.8	1466.8	1383.2	1338.6	1365.1	1542.3	1967.6	2118.2	2009.5
42.5°	1723.8	1718.4	1700.2	1619.4	1525.6	1484.0	1508.3	1694.1	2141.2	2354.9	2215.3
45°	1902.6	1899.3	1882.3	1789.8	1682.2	1635.5	1668.3	1861.6	2315.8	2577.8	2422.0
47.5°	2057.2	2059.8	2057.8	1979.7	1868.4	1799.7	1838.8	2036.5	2478.1	2787.2	2620.2
50°	2131.5	2145.7	2166.7	2142.5	2073.3	2003.4	2011.0	2205.3	2632.9	2983.6	2810.2
52.5°	2092.6	2119.7	2176.7	2215.6	2242.3	2227.7	2207.4	2372.9	2778.7	3160.8	2989.9
55°	1947.9	1985.8	2080.5	2174.3	2310.6	2416.5	2443.3	2558.6	2920.7	3316.9	3160.0
57.5°	1684.1	1745.7	1830.6	2020.4	2249.9	2507.9	2718.3	2816.3	3071.3	3483.5	3337.8
60°	1231.8	1314.4	1420.0	1702.3	2037.4	2459.1	2952.3	3212.1	3285.3	3699.3	3569.5
62.5°	788.3	839.3	936.4	1202.3	1587.5	2208.6	3024.0	3706.9	3648.1	4053.3	3916.6
65°	539.7	572.5	661.4	810.8	1026.3	1644.0	2832.1	4077.9	4224.1	4614.2	4510.4
67.5°	392.2	417.1	492.9	623.8	668.7	972.8	2197.7	4060.8	4784.2	5192.1	5030.7
70°	286.0	303.5	367.3	492.9	514.6	541.2	1331.4	3451.9	4772.1	5345.8	5152.4
72.5°	211.9	224.1	266.8	382.4	416.5	365.5	659.0	2508.8	4100.6	4835.2	4680.0
75°	153.3	162.4	193.9	292.6	333.3	278.4	328.7	1466.2	2860.4	3401.3	3428.5
77.5°	117.2	124.1	144.8	214.3	266.8	208.8	204.0	674.4	1356.3	1362.9	1439.4
80°	94.1	98.6	109.9	150.9	204.6	156.3	132.9	272.2	428.7	362.7	380.7
82.5°	69.2	76.8	92.9	106.0	146.3	107.7	81.1	137.6	163.0	140.2	141.4
85°	39.5	44.6	56.2	75.8	93.5	65.9	46.4	61.0	75.8	62.2	55.6
87.5°	13.9	18.2	19.7	29.7	40.7	27.4	17.9	17.6	24.9	18.6	15.5
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°	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7
2.5°	844.8	843.3	837.2	829.0	820.5	812.3	809.5	803.8	799.8	797.8	800.1
5°	861.8	856.9	842.7	824.4	805.3	784.6	770.1	756.8	747.0	737.9	741.6
7.5°	886.0	877.6	853.0	821.1	787.1	752.8	727.3	707.9	694.8	686.3	688.2
10°	914.3	901.2	863.6	815.9	763.4	714.2	684.2	667.5	659.3	654.8	656.0
12.5°	946.8	928.2	874.5	804.1	727.3	671.2	650.5	645.6	646.0	646.3	646.9
15°	986.9	961.0	883.3	778.3	680.3	638.1	634.4	642.3	650.5	654.5	654.2
17.5°	1032.1	995.7	884.9	735.8	634.1	616.8	628.3	645.3	657.7	663.3	664.5
20°	1080.7	1030.8	873.9	675.7	596.1	599.5	620.1	642.0	655.7	662.7	664.5
22.5°	1136.2	1068.5	847.8	612.5	565.2	580.7	605.0	626.2	640.5	647.5	649.3
25°	1199.7	1110.7	806.8	559.4	538.5	559.4	583.7	601.4	612.8	619.2	621.0
27.5°	1270.1	1154.7	752.1	517.2	515.2	537.6	557.6	571.2	577.4	582.2	584.0
30°	1340.8	1194.7	686.0	485.3	494.8	516.0	530.3	536.4	538.2	539.2	541.2
32.5°	1417.3	1229.4	616.5	459.0	475.4	495.1	503.6	506.4	497.8	492.0	493.8
35°	1509.8	1266.4	548.5	438.0	456.2	473.2	476.0	473.6	463.5	451.7	452.3
37.5°	1624.3	1312.5	494.2	423.1	438.3	449.6	446.2	445.6	446.5	432.6	433.5
40°	1764.5	1372.7	454.4	411.6	423.7	426.2	416.8	421.9	426.5	405.3	405.8
42.5°	1920.2	1445.1	429.2	403.7	411.6	405.8	391.2	397.1	396.5	368.5	368.2
45°	2079.0	1524.1	420.5	397.9	400.4	388.9	372.8	374.2	361.5	336.3	337.2
47.5°	2236.9	1608.8	425.9	393.1	386.4	373.4	360.9	354.2	335.4	316.6	316.6
50°	2391.6	1697.7	445.9	383.3	367.3	359.7	350.5	338.8	318.8	302.7	301.5
52.5°	2535.2	1787.3	468.3	367.3	343.3	347.9	342.1	328.4	308.7	292.3	292.6
55°	2671.3	1876.9	477.1	345.1	320.8	337.5	334.3	309.0	285.4	271.9	270.8
57.5°	2819.4	1984.6	467.5	316.9	302.7	325.7	312.9	285.1	271.4	261.4	260.5
60°	3024.6	2153.6	446.5	282.0	285.4	308.1	286.3	274.7	259.8	248.6	247.9
62.5°	3365.4	2469.0	412.9	247.4	265.0	282.0	273.5	262.0	246.8	235.9	235.9
65°	3869.3	2907.4	349.4	220.4	242.2	256.5	259.8	248.3	232.5	221.0	221.6
67.5°	4294.2	3182.4	264.3	197.9	218.8	235.9	245.3	234.0	217.3	206.1	206.4
70°	4270.9	2982.6	201.8	175.8	198.2	215.6	227.7	218.8	200.9	190.3	191.3
72.5°	3793.4	2495.2	163.3	153.3	177.2	194.2	208.8	202.1	184.0	173.6	173.6
75°	2786.9	1771.2	130.5	130.5	151.2	172.1	188.2	184.0	167.3	160.0	157.8
77.5°	1174.8	743.1	102.3	108.3	125.7	147.8	167.9	169.3	154.8	163.9	148.7
80°	312.3	204.9	78.0	85.3	98.6	122.0	146.0	145.4	129.7	121.2	112.6
82.5°	119.0	80.8	55.6	60.1	71.3	93.5	115.6	119.3	103.5	89.6	89.6
85°	45.8	34.6	34.3	36.1	41.6	61.9	87.4	90.5	78.0	66.2	68.3
87.5°	11.8	10.4	12.7	12.1	19.2	33.1	50.1	51.9	47.7	27.6	39.5
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)