

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: P959979

Luminaire Tested: **NAV-SB1B-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959979
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3788.4 lumens
Efficiency: N/A
Efficacy: 95.2 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

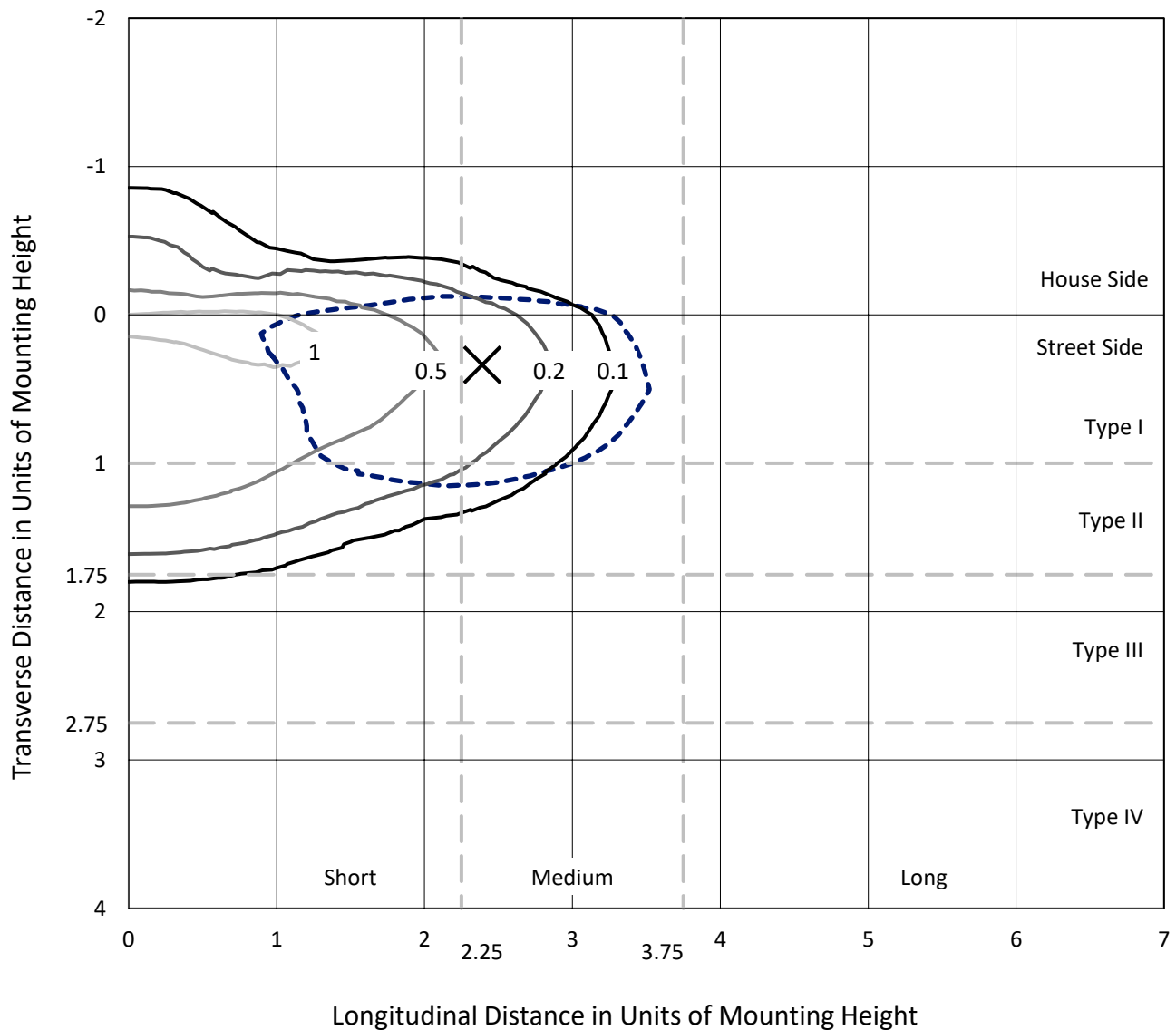


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Iso-Footcandle Lines of Horizontal Illumination

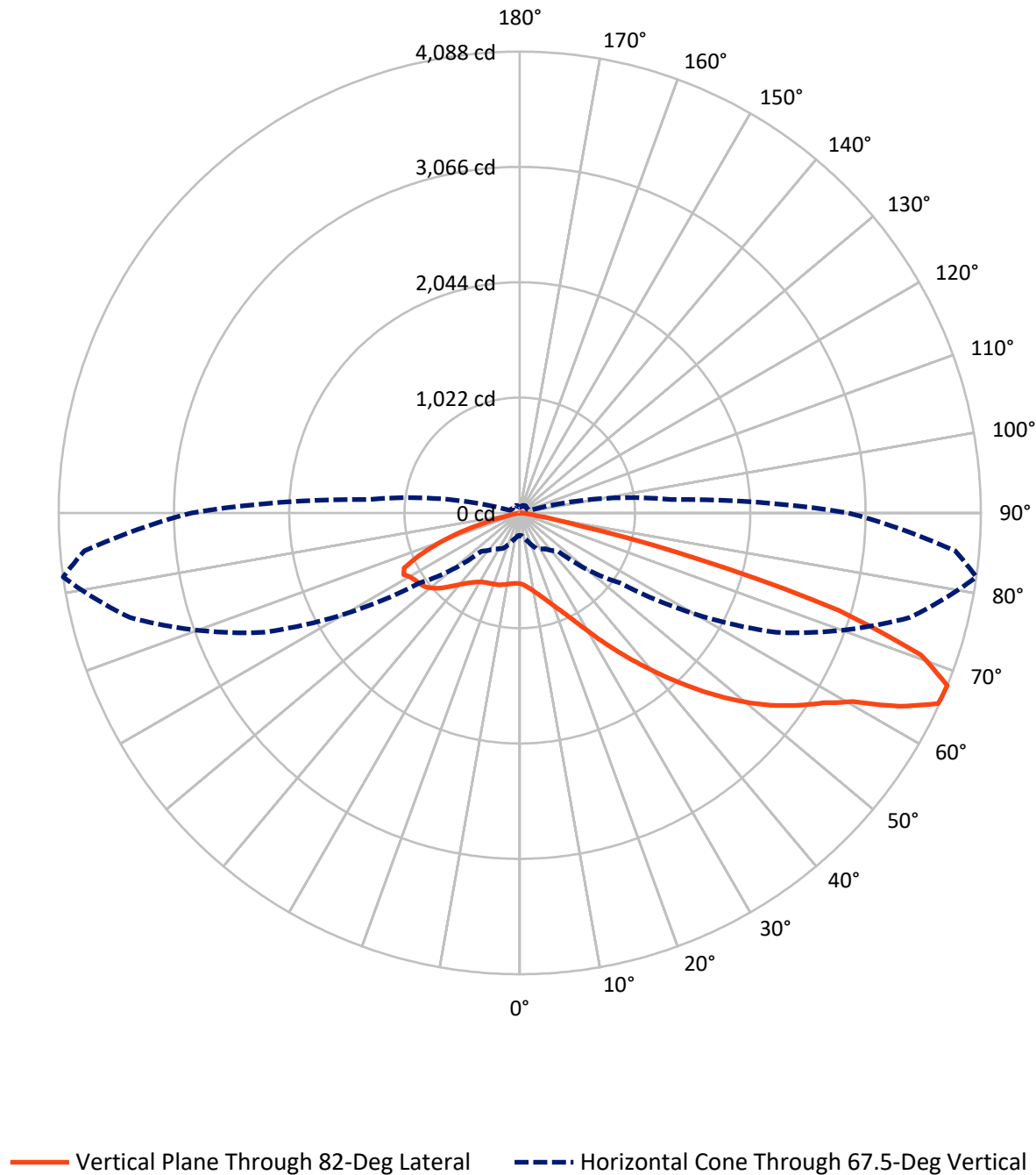
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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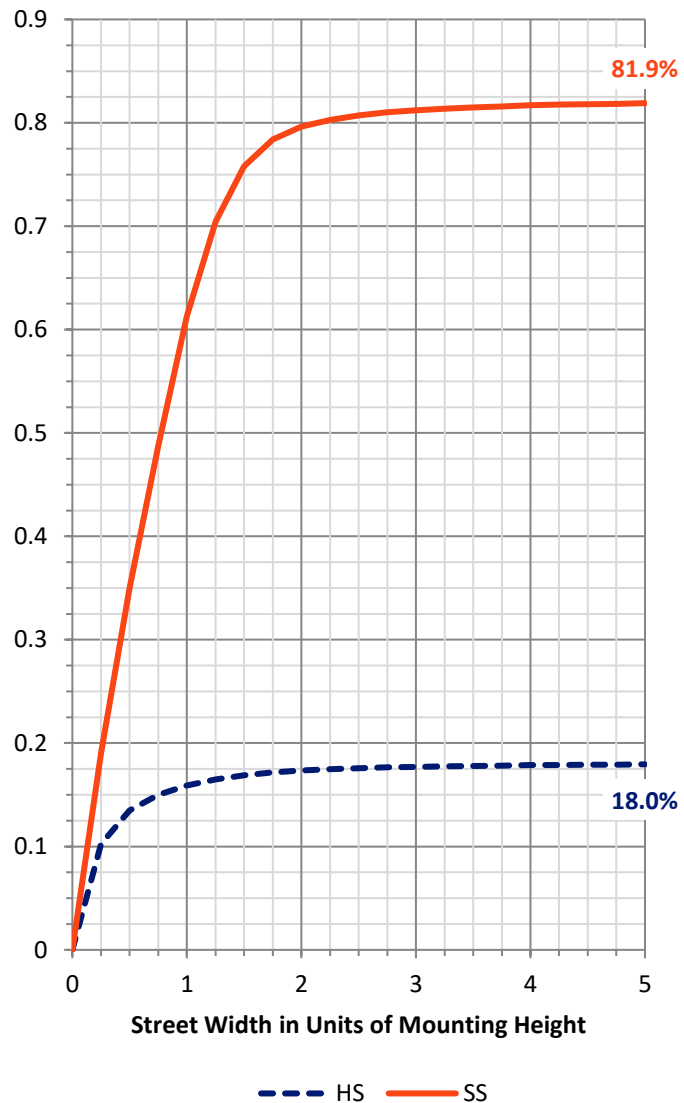
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	686.2	0.0	686.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3102.2	0.0	3102.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	3788.4	0.0	3788.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	1.5
10°-20°	145.3	3.8
20°-30°	232.7	6.1
30°-40°	411.5	10.9
40°-50°	721.0	19.0
50°-60°	961.7	25.4
60°-70°	895.3	23.6
70°-80°	343.6	9.1
80°-90°	21.3	0.6
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°	3788.4	100.0
0°-180°	3788.4	100.0

Coefficient of Utilization



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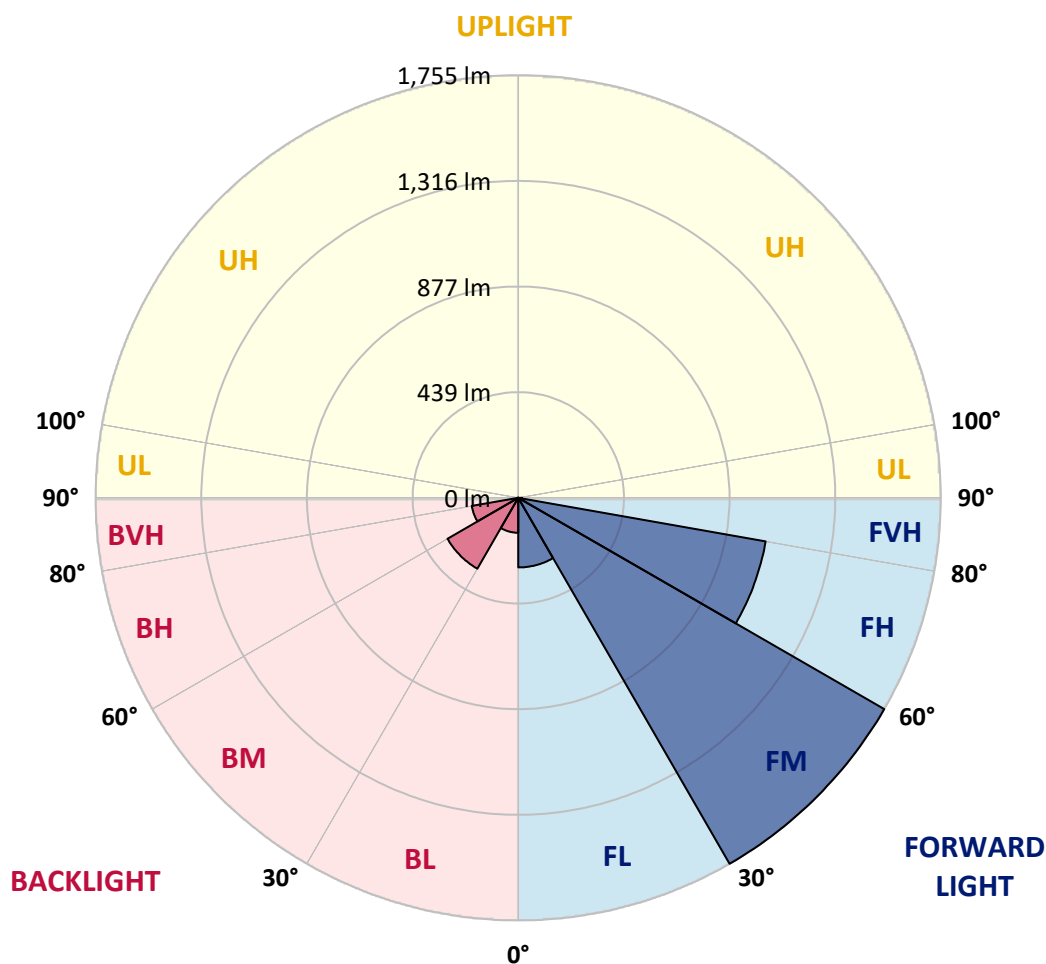
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.0	7.6			
FM	(30°-60°)	1754.6	46.3			
FH	(60°-80°)	1043.0	27.5			G1/1800
FVH	(80°-90°)	15.5	0.4			G1/100
BL	(0°-30°)	144.9	3.8	B1/500		
BM	(30°-60°)	339.6	9.0	B1/1000		
BH	(60°-80°)	195.9	5.2	B1/500		G1/500
BVH	(80°-90°)	5.8	0.2			G0/10
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°	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6
2.5°	663.4	667.2	665.0	663.9	661.9	659.3	657.0	650.3	643.2	638.5	636.8
5°	676.7	680.5	680.3	681.3	682.8	683.6	683.0	675.4	665.2	657.3	652.7
7.5°	665.2	669.6	673.1	678.7	688.2	698.2	703.2	701.5	691.2	680.3	674.6
10°	632.8	637.4	645.9	658.7	678.9	700.7	718.9	727.4	720.9	708.9	701.0
12.5°	573.3	578.0	594.6	622.4	656.2	694.1	729.1	751.7	753.4	741.4	732.1
15°	506.6	511.2	528.9	563.8	615.3	676.2	734.5	777.4	791.8	781.5	770.3
17.5°	465.0	469.1	482.5	510.6	564.4	640.1	732.7	804.6	837.6	829.4	816.1
20°	452.5	456.0	462.3	482.0	526.6	602.8	720.1	830.2	887.0	882.3	867.4
22.5°	465.9	469.1	471.1	479.8	507.9	578.2	704.3	856.5	944.2	944.8	926.6
25°	496.7	500.0	497.7	503.3	515.5	570.6	698.2	887.2	1016.3	1022.3	1001.5
27.5°	547.5	547.7	542.5	542.2	544.2	582.1	704.5	920.2	1107.1	1118.3	1092.6
30°	649.1	645.0	625.1	603.6	593.8	616.4	722.0	959.3	1214.3	1234.2	1202.0
32.5°	806.0	800.0	763.4	711.9	660.1	671.8	753.4	1003.8	1331.1	1367.0	1327.8
35°	976.2	974.6	936.3	859.8	769.2	750.6	804.3	1062.1	1458.5	1515.7	1469.0
37.5°	1134.4	1133.5	1111.7	1021.5	911.2	860.6	886.2	1138.5	1594.8	1677.7	1622.6
40°	1279.0	1281.5	1259.6	1178.9	1067.8	1001.5	997.4	1232.9	1746.5	1854.2	1788.7
42.5°	1403.8	1406.6	1384.5	1324.8	1222.5	1157.5	1134.2	1348.5	1894.5	2043.7	1966.3
45°	1488.7	1505.6	1502.3	1454.6	1381.2	1313.8	1298.3	1493.6	2063.4	2244.8	2153.9
47.5°	1512.7	1528.3	1552.8	1559.3	1514.6	1448.3	1466.9	1668.4	2234.1	2446.1	2342.7
50°	1453.6	1468.0	1518.9	1586.9	1618.0	1597.6	1630.8	1855.9	2409.0	2646.9	2527.9
52.5°	1336.8	1351.5	1415.8	1523.4	1650.1	1714.5	1795.3	2040.5	2578.4	2836.9	2703.2
55°	1168.0	1183.5	1266.1	1387.7	1588.7	1762.8	1932.4	2224.9	2733.6	3008.0	2861.5
57.5°	938.3	949.8	1035.7	1205.8	1434.4	1714.8	2033.7	2426.2	2879.7	3176.0	3018.3
60°	611.5	621.6	721.4	911.2	1178.5	1554.4	2053.9	2650.6	3074.0	3394.4	3229.7
62.5°	406.7	413.5	472.7	612.0	830.0	1246.5	1935.7	2829.8	3358.7	3774.7	3592.2
65°	279.0	285.9	345.0	442.2	536.3	824.5	1596.1	2806.1	3616.7	4076.6	3860.9
67.5°	199.2	204.8	255.0	346.7	388.2	479.0	1082.0	2502.8	3579.6	4088.0	3875.3
70°	142.7	146.0	187.4	270.0	308.5	287.7	601.7	1914.2	3134.2	3775.0	3580.2
72.5°	99.8	101.0	130.1	205.6	248.5	210.0	286.4	1276.2	2370.5	2963.0	2775.6
75°	67.6	69.0	87.5	150.9	199.4	160.4	151.7	684.4	1391.6	1640.1	1470.2
77.5°	41.4	42.0	56.5	103.1	149.2	122.2	97.7	290.0	538.4	528.6	450.6
80°	23.5	23.5	36.0	64.1	101.8	78.8	68.5	123.3	170.5	149.8	132.0
82.5°	13.1	13.3	26.1	39.9	67.3	46.6	37.6	57.0	73.6	65.2	56.7
85°	5.4	6.0	16.1	18.9	32.2	23.2	15.3	24.0	27.3	24.3	17.7
87.5°	0.5	0.8	4.9	3.6	3.8	4.6	2.2	4.6	3.8	3.8	2.8
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°	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6	627.6
2.5°	631.7	627.6	617.3	605.3	589.4	581.8	571.4	564.4	558.3	558.8	553.4
5°	644.0	633.7	610.4	581.5	545.5	519.9	492.6	473.8	458.5	455.2	447.8
7.5°	660.9	644.5	603.9	551.8	491.0	444.8	403.6	377.2	358.4	352.4	346.4
10°	682.8	659.0	595.4	514.4	426.9	368.2	324.0	303.3	290.5	286.1	282.8
12.5°	708.1	675.6	584.2	468.8	360.9	304.4	276.3	266.0	261.9	260.5	259.6
15°	739.9	696.4	567.3	414.8	304.9	265.4	253.4	252.0	252.6	252.0	251.7
17.5°	777.9	718.9	539.8	359.3	267.3	245.5	241.1	242.2	243.5	243.3	242.7
20°	819.4	741.4	504.6	309.9	241.7	231.3	228.9	229.9	231.0	230.5	230.2
22.5°	866.5	765.4	465.6	271.4	224.5	218.2	215.5	215.8	215.8	214.6	214.1
25°	923.0	791.8	424.7	244.2	211.4	206.4	203.2	202.1	200.5	197.2	196.7
27.5°	990.4	819.9	385.4	225.0	201.0	196.4	192.6	189.8	185.7	180.3	179.8
30°	1066.2	854.0	352.1	213.0	192.8	188.2	183.9	179.8	173.7	167.0	166.4
32.5°	1155.4	890.5	327.9	205.1	185.4	180.6	175.4	170.5	163.9	157.1	157.3
35°	1261.8	934.7	313.6	199.7	179.8	173.2	167.5	162.1	157.1	151.1	150.6
37.5°	1377.2	981.6	309.3	196.9	175.9	165.8	159.3	155.5	154.9	151.4	151.1
40°	1503.5	1037.3	312.6	195.3	171.8	158.8	151.7	150.9	152.2	146.0	146.2
42.5°	1637.0	1103.3	318.1	193.4	166.2	151.7	144.8	144.8	143.7	135.0	135.0
45°	1781.7	1179.4	323.5	188.7	159.3	144.5	139.4	137.5	132.8	124.3	124.1
47.5°	1927.3	1256.9	327.6	180.3	151.1	138.6	134.0	129.6	122.7	115.1	114.8
50°	2065.6	1326.5	323.2	167.8	141.9	132.8	127.9	121.9	114.6	109.4	108.5
52.5°	2189.1	1386.7	304.6	153.0	132.0	126.8	122.5	116.2	110.2	104.8	104.2
55°	2296.6	1435.5	271.9	139.1	123.3	121.7	117.3	109.4	101.2	96.6	96.0
57.5°	2399.7	1472.6	231.0	127.6	115.4	115.9	109.4	102.3	94.6	89.7	89.2
60°	2536.9	1522.2	189.5	117.1	106.9	108.5	101.5	96.2	86.7	80.5	79.6
62.5°	2756.2	1599.4	150.6	103.9	97.1	97.7	94.6	88.4	76.9	69.6	69.0
65°	2930.2	1571.1	118.7	89.7	85.9	86.7	86.7	79.9	67.6	59.1	58.3
67.5°	2910.6	1345.2	94.6	75.8	75.2	75.8	77.7	72.1	60.0	53.2	52.1
70°	2681.2	1070.0	75.8	63.0	65.5	64.1	69.6	65.7	54.0	47.2	46.3
72.5°	2187.8	770.8	57.8	52.1	50.2	52.4	62.7	59.1	45.0	37.4	36.6
75°	1278.4	411.3	43.0	41.2	36.3	43.7	55.7	50.4	34.3	27.6	26.8
77.5°	416.3	143.5	31.7	30.2	27.0	35.2	47.5	42.5	28.1	21.8	21.0
80°	111.5	43.4	21.5	19.9	17.4	26.1	37.6	33.8	20.2	14.1	13.9
82.5°	44.7	18.2	12.5	11.2	9.5	18.0	29.7	27.3	15.0	9.0	9.0
85°	14.5	6.0	4.6	3.6	4.4	11.2	17.7	18.6	10.7	4.6	3.6
87.5°	1.9	0.8	0.8	1.1	0.8	1.9	5.4	5.2	3.0	0.5	0.0
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)