

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: P962091

Luminaire Tested: **NAV-SB2B-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10510.3 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

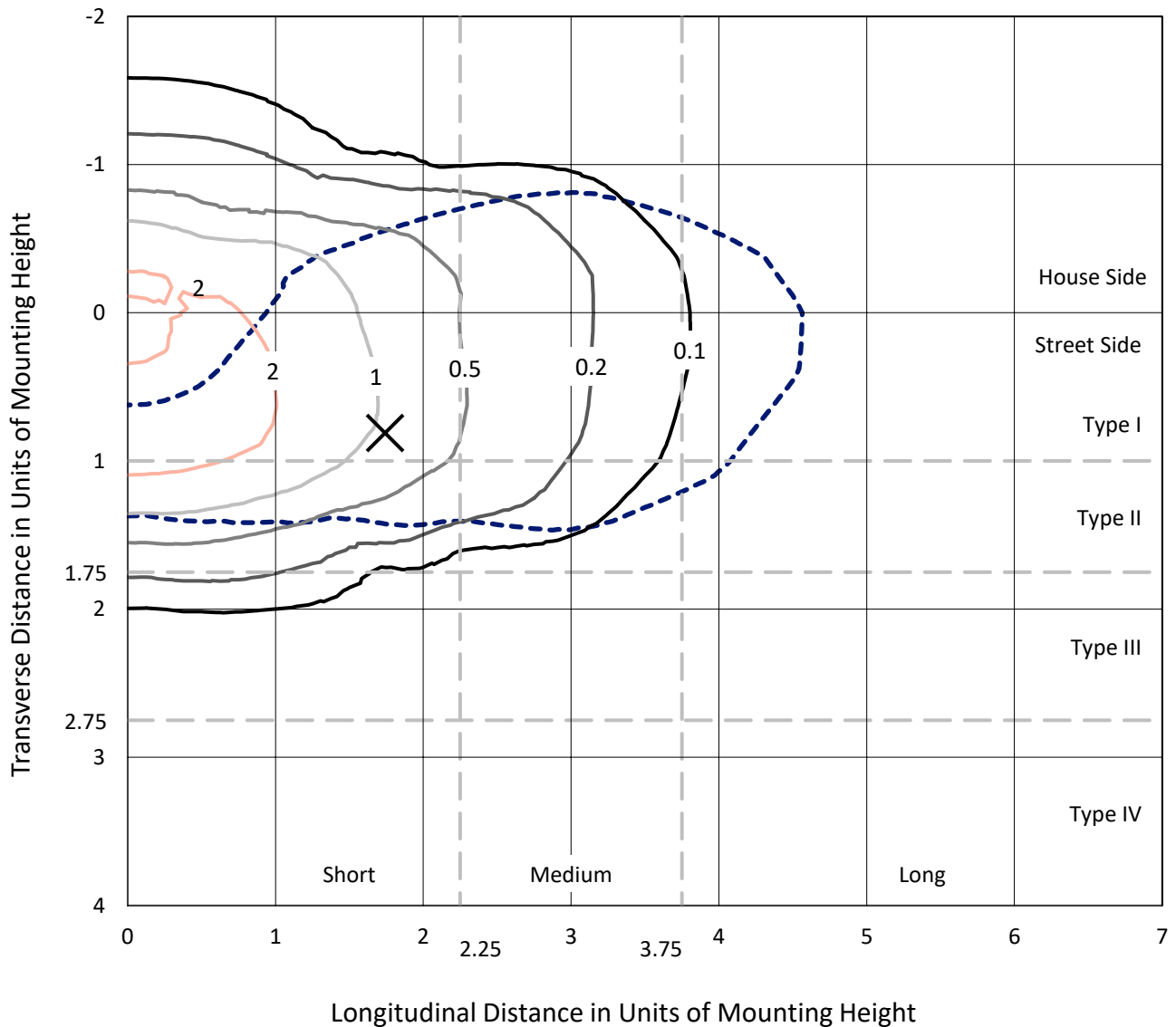
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

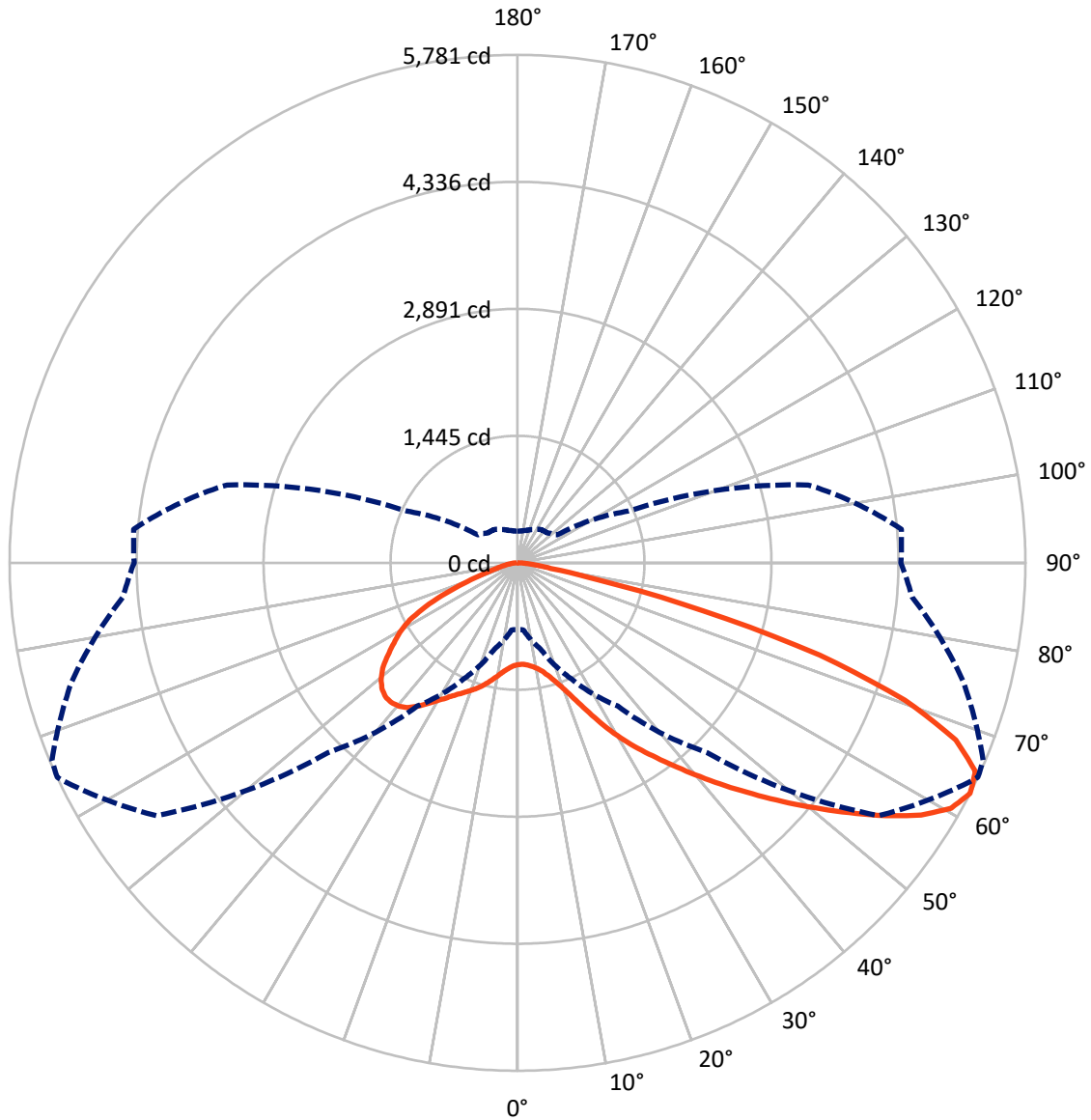
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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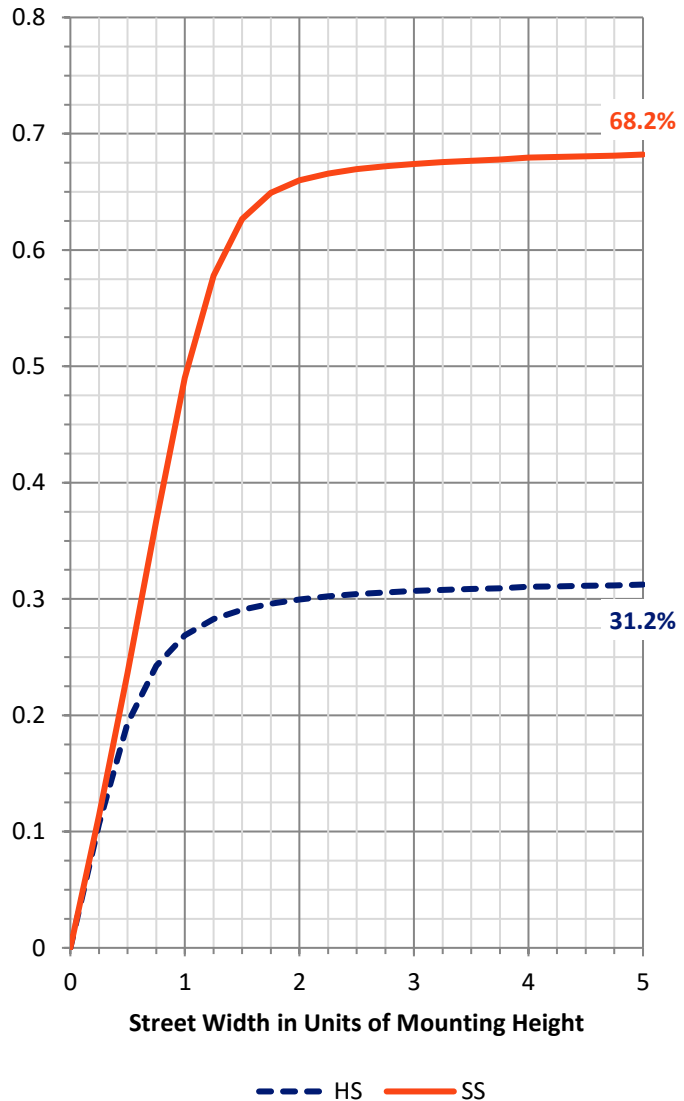
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3316.6	0.0	3316.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	7193.7	0.0	7193.7
	% Fixture	68.4	0.0	68.4
Total	Lumens	10510.3	0.0	10510.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	1.1
10°-20°	391.6	3.7
20°-30°	794.0	7.6
30°-40°	1373.9	13.1
40°-50°	2079.2	19.8
50°-60°	2437.7	23.2
60°-70°	2043.7	19.4
70°-80°	1128.3	10.7
80°-90°	146.6	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°	10510.3	100.0
0°-180°	10510.3	100.0

Coefficient of Utilization



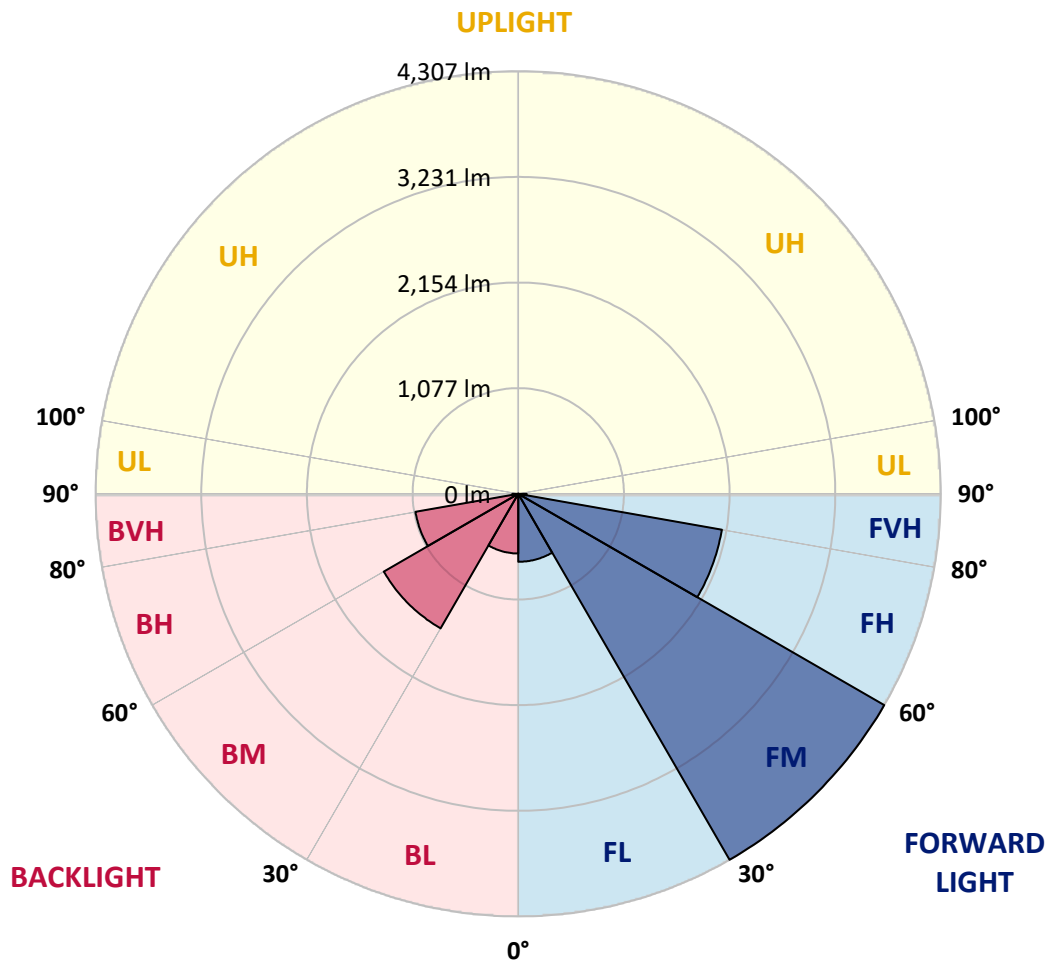
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	692.8	6.6			
FM (30°-60°)	4307.5	41.0			
FH (60°-80°)	2108.1	20.1			G2/5000
FVH (80°-90°)	85.4	0.8			G1/100
BL (0°-30°)	608.2	5.8	B2/1000		
BM (30°-60°)	1583.3	15.1	B2/2500		
BH (60°-80°)	1063.9	10.1	B3/2500		G3/2500
BVH (80°-90°)	61.1	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1
2.5°	1150.6	1147.3	1150.0	1150.0	1151.1	1150.6	1154.4	1155.5	1157.1	1160.4	1160.4
5°	1139.1	1138.6	1143.5	1147.8	1152.2	1156.0	1160.9	1168.0	1169.1	1172.9	1177.8
7.5°	1135.3	1132.0	1139.7	1145.1	1155.5	1164.7	1177.8	1189.8	1194.7	1196.4	1205.6
10°	1164.7	1159.3	1166.3	1169.6	1178.3	1187.7	1202.9	1222.0	1227.4	1234.0	1244.4
12.5°	1214.9	1208.9	1219.2	1224.2	1232.4	1240.6	1250.9	1269.5	1272.1	1284.1	1294.0
15°	1283.6	1276.5	1283.1	1289.0	1302.7	1310.4	1320.7	1338.6	1338.6	1348.0	1355.0
17.5°	1376.9	1367.6	1372.5	1374.6	1383.4	1394.8	1412.3	1428.1	1436.3	1433.1	1423.2
20°	1515.9	1504.5	1504.5	1493.5	1490.2	1499.6	1522.4	1544.3	1553.0	1536.1	1512.1
22.5°	1724.8	1708.4	1699.1	1662.0	1647.3	1648.4	1671.3	1698.0	1705.1	1675.2	1621.1
25°	1990.3	1964.7	1952.1	1897.6	1864.4	1835.5	1853.4	1887.7	1897.6	1860.5	1773.2
27.5°	2255.8	2257.5	2245.5	2180.1	2125.0	2072.1	2062.8	2098.8	2109.1	2067.2	1959.2
30°	2628.3	2589.6	2566.7	2488.2	2409.7	2335.5	2297.3	2312.0	2314.8	2264.6	2139.2
32.5°	2949.4	2939.7	2890.6	2821.8	2721.0	2604.8	2541.1	2517.6	2513.2	2441.9	2292.9
35°	3315.4	3309.9	3258.1	3176.3	3067.2	2905.9	2790.8	2723.7	2718.3	2618.0	2445.0
37.5°	3687.2	3687.2	3636.5	3547.1	3434.3	3232.4	3057.5	2951.1	2933.7	2802.8	2599.9
40°	3983.9	3965.9	3975.2	3937.5	3808.3	3594.0	3353.5	3199.2	3175.8	3018.7	2764.6
42.5°	4152.4	4146.4	4202.0	4244.0	4191.1	4019.8	3679.6	3468.1	3435.3	3256.4	2954.4
45°	4190.0	4183.4	4282.7	4436.5	4510.6	4440.3	4034.1	3751.1	3711.2	3505.1	3157.8
47.5°	4103.3	4090.3	4235.8	4478.4	4716.2	4839.9	4418.0	4058.1	4000.3	3747.2	3366.6
50°	3842.6	3830.1	4050.4	4372.6	4785.4	5111.6	4834.5	4383.6	4295.3	4006.8	3577.7
52.5°	3276.1	3282.0	3627.3	4070.1	4694.4	5280.6	5193.4	4726.6	4620.2	4272.3	3775.6
55°	2551.9	2565.1	2989.3	3476.8	4330.1	5255.0	5438.1	5079.9	4974.1	4522.1	3980.1
57.5°	1827.3	1885.1	2282.6	2765.1	3630.6	4848.8	5491.6	5415.8	5313.3	4794.7	4180.2
60°	1184.4	1194.7	1603.7	2090.1	2764.6	4126.8	5383.1	5670.5	5590.3	5072.8	4347.6
62.5°	759.0	766.1	1015.4	1462.0	1989.7	3053.1	5017.8	5781.2	5756.6	5256.6	4508.5
65°	557.8	552.4	682.1	966.3	1340.3	1882.9	4308.4	5727.7	5776.3	5371.6	4641.5
67.5°	465.7	458.1	521.8	669.1	987.5	1069.3	3187.7	5380.3	5558.2	5358.6	4739.1
70°	424.2	417.7	456.4	496.7	770.5	716.0	1607.0	4677.5	4951.3	5209.7	4723.3
72.5°	359.4	347.9	400.8	441.2	599.3	549.1	664.2	3592.9	3926.7	4732.5	4500.8
75°	278.6	271.0	316.3	388.3	450.4	428.6	419.8	2181.7	2546.0	3660.0	3937.5
77.5°	220.9	210.4	251.9	302.7	405.2	323.4	305.9	939.5	1300.5	2336.6	2946.2
80°	166.4	157.0	191.4	239.3	311.4	243.7	197.9	383.3	490.3	1183.8	1481.5
82.5°	118.3	110.2	133.6	175.6	209.4	218.6	121.6	214.8	241.6	456.4	331.0
85°	75.7	70.9	89.4	110.2	133.0	140.7	74.2	112.3	123.2	188.1	138.0
87.5°	41.4	33.8	48.0	51.2	61.6	56.2	35.5	40.9	44.2	68.2	58.3
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°	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1	1158.1
2.5°	1162.6	1164.2	1169.6	1171.3	1175.1	1180.0	1183.3	1186.5	1186.5	1189.8	1189.8
5°	1178.3	1182.2	1193.6	1199.7	1209.5	1219.2	1225.3	1232.4	1236.8	1238.9	1239.9
7.5°	1208.9	1214.9	1231.2	1241.6	1258.5	1272.1	1281.5	1291.3	1293.4	1299.4	1297.2
10°	1250.4	1257.5	1276.0	1295.6	1315.8	1332.7	1341.4	1348.5	1351.3	1352.3	1349.6
12.5°	1297.8	1308.1	1332.2	1356.2	1377.4	1392.2	1394.3	1392.7	1385.1	1378.5	1378.5
15°	1356.2	1365.4	1392.2	1418.3	1439.0	1441.8	1428.1	1419.4	1410.1	1408.5	1408.5
17.5°	1426.0	1430.8	1455.4	1481.0	1482.7	1473.3	1453.2	1445.0	1436.3	1430.3	1430.8
20°	1507.2	1505.5	1522.9	1533.9	1522.4	1494.1	1463.6	1450.0	1441.1	1434.1	1434.7
22.5°	1604.2	1591.7	1589.6	1586.8	1556.3	1496.8	1455.4	1438.0	1424.3	1414.5	1417.8
25°	1745.5	1697.5	1664.2	1645.6	1577.0	1482.0	1429.2	1390.5	1364.9	1348.0	1354.5
27.5°	1922.2	1841.4	1757.5	1712.2	1577.0	1452.1	1365.9	1303.3	1261.3	1243.8	1252.6
30°	2090.6	2006.1	1882.3	1792.4	1573.2	1403.0	1264.0	1176.7	1127.7	1110.2	1120.5
32.5°	2234.6	2142.5	2014.8	1880.2	1563.8	1323.4	1137.4	1041.0	993.5	972.8	983.2
35°	2368.2	2270.1	2147.9	1976.7	1539.3	1206.7	998.5	924.9	872.0	838.7	849.5
37.5°	2505.1	2388.4	2273.9	2063.9	1495.2	1070.4	891.5	828.8	766.7	722.0	734.0
40°	2653.9	2514.3	2408.5	2115.7	1422.7	940.6	808.6	751.4	685.4	638.0	647.3
42.5°	2827.9	2665.4	2558.5	2142.5	1323.4	848.5	754.7	698.5	636.3	597.7	605.3
45°	3009.5	2831.7	2695.3	2141.9	1212.7	805.3	737.3	681.6	612.9	572.6	579.1
47.5°	3199.7	3005.6	2813.7	2107.0	1116.7	811.4	727.4	645.0	569.3	530.0	535.5
50°	3390.6	3196.0	2928.2	2041.6	1075.8	798.3	690.8	593.8	504.4	468.9	471.1
52.5°	3579.8	3398.3	3026.9	1948.3	1034.4	749.8	644.0	527.3	477.6	453.2	453.2
55°	3770.2	3598.4	3134.3	1812.5	930.8	693.1	565.5	502.2	456.4	434.1	431.8
57.5°	3961.0	3829.6	3236.3	1676.8	800.5	623.3	522.3	471.7	435.1	416.0	412.8
60°	4159.4	4094.1	3341.5	1551.8	671.8	533.8	490.8	447.1	410.1	388.8	387.1
62.5°	4363.9	4385.3	3423.9	1391.0	553.5	479.3	462.4	417.7	381.7	361.5	361.0
65°	4570.1	4666.0	3477.8	1168.0	448.7	427.5	431.8	385.5	349.0	331.5	331.0
67.5°	4725.5	4868.3	3462.6	884.0	368.1	378.4	393.7	351.7	317.3	303.7	304.3
70°	4742.9	4844.4	3312.1	605.3	308.1	330.5	351.2	318.5	283.0	273.2	273.8
72.5°	4510.6	4517.2	2892.8	395.3	260.7	290.1	306.5	284.6	250.3	240.5	240.0
75°	3901.6	3735.8	2123.9	260.7	218.1	249.2	264.4	249.2	216.0	218.1	210.4
77.5°	2956.0	2645.7	1289.7	185.4	182.1	209.4	230.1	219.2	190.9	214.3	188.7
80°	1522.9	1431.4	575.2	138.5	143.9	167.4	189.2	175.1	151.1	143.9	131.4
82.5°	349.0	405.7	226.8	99.2	104.1	120.5	144.5	131.4	108.5	91.6	90.5
85°	122.2	133.6	100.3	62.1	61.1	75.2	98.2	87.8	73.6	58.9	62.1
87.5°	38.7	50.7	37.6	25.1	26.1	33.8	45.3	41.4	34.3	22.3	23.5
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)