

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: P960953

Luminaire Tested: **NAV-SB1D-750-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-750-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11016.7 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 79.6
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

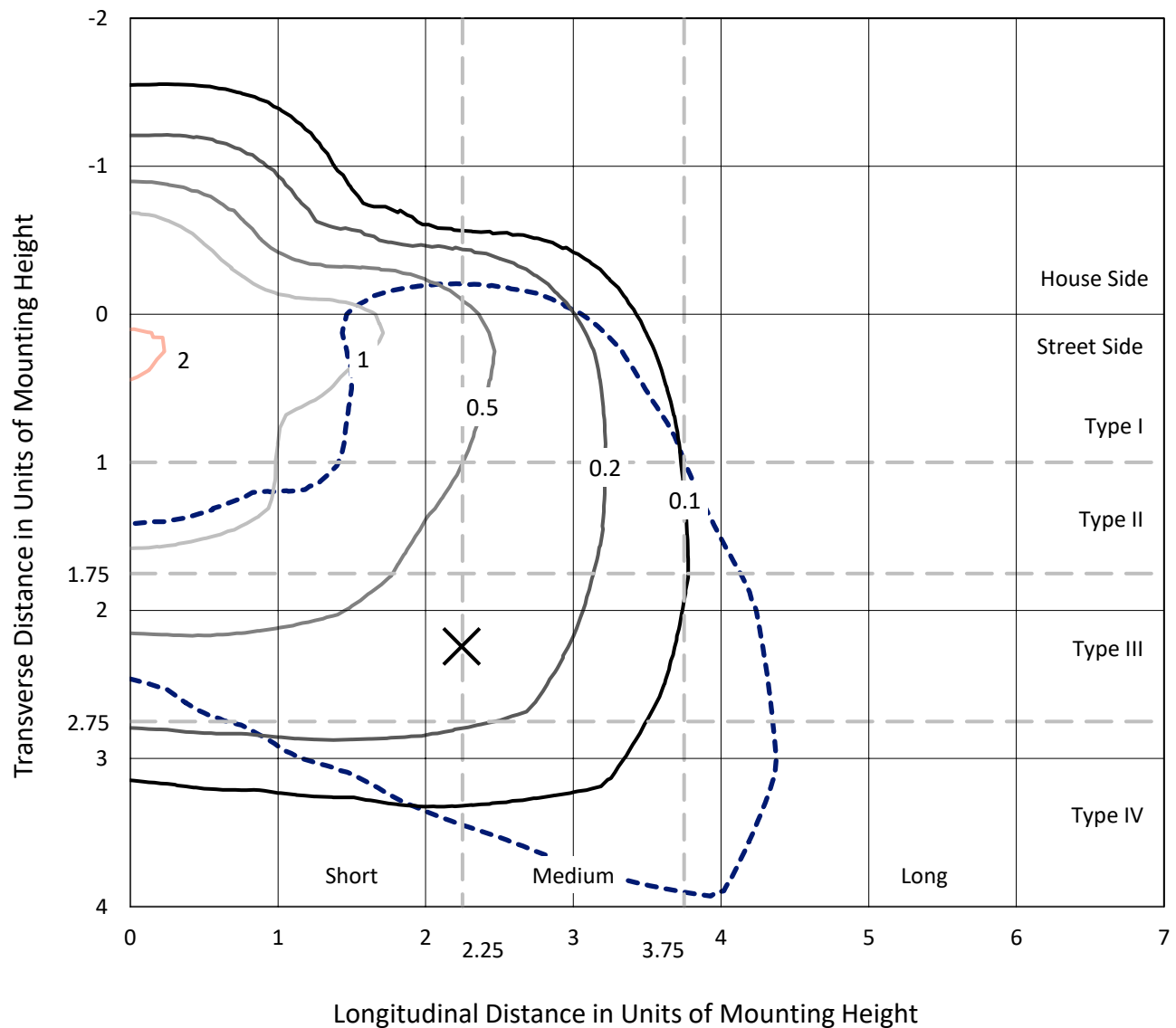


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Iso-Footcandle Lines of Horizontal Illumination

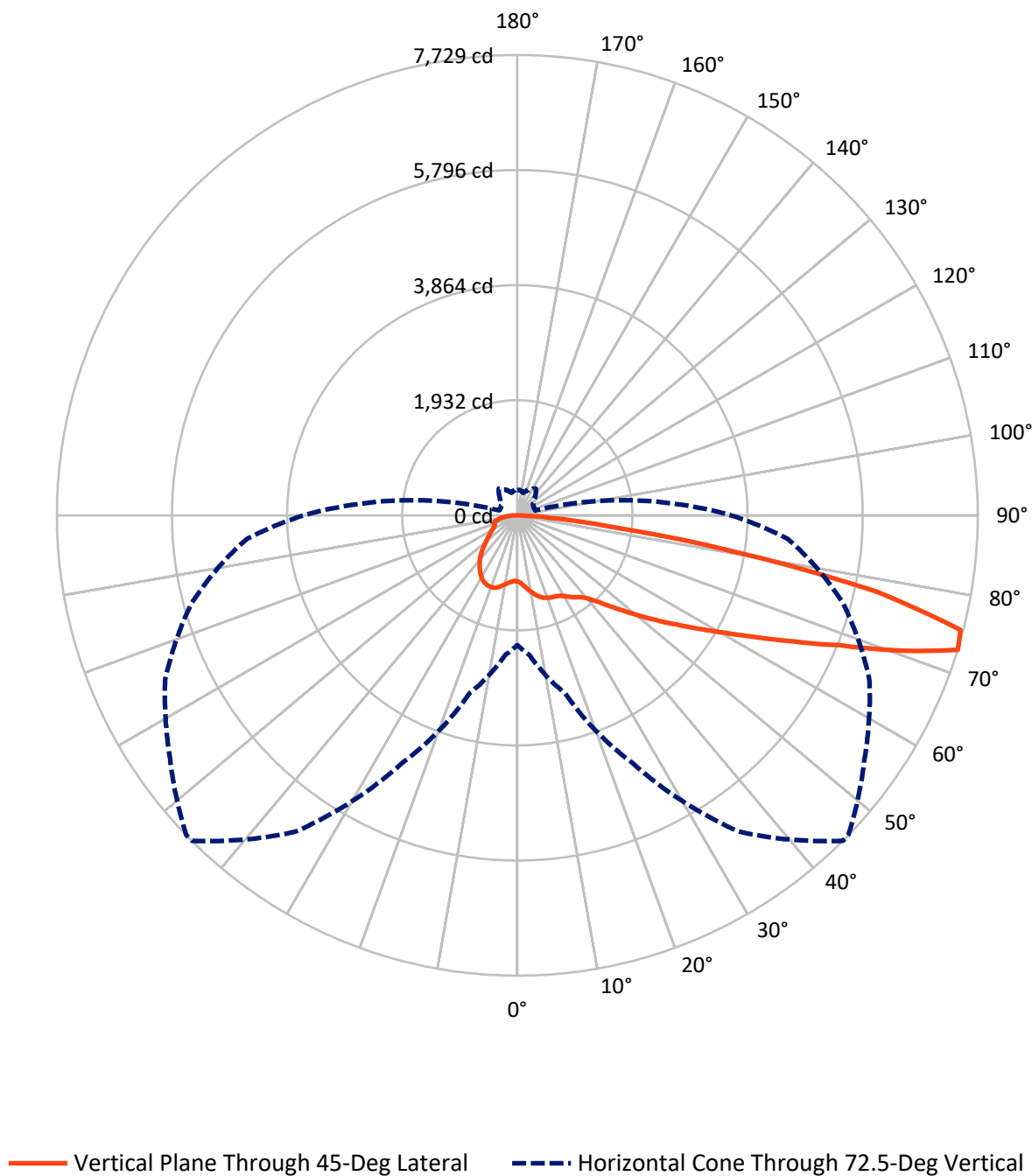
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2490.5	0.0	2490.5
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	8526.2	0.0	8526.2
	% Fixture	77.4	0.0	77.4
Total	Lumens	11016.7	0.0	11016.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.1	1.0
10°-20°	377.1	3.4
20°-30°	656.1	6.0
30°-40°	940.5	8.5
40°-50°	1324.3	12.0
50°-60°	2028.4	18.4
60°-70°	2938.4	26.7
70°-80°	2346.5	21.3
80°-90°	292.2	2.7
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°	11016.7	100.0
0°-180°	11016.7	100.0

Coefficient of Utilization



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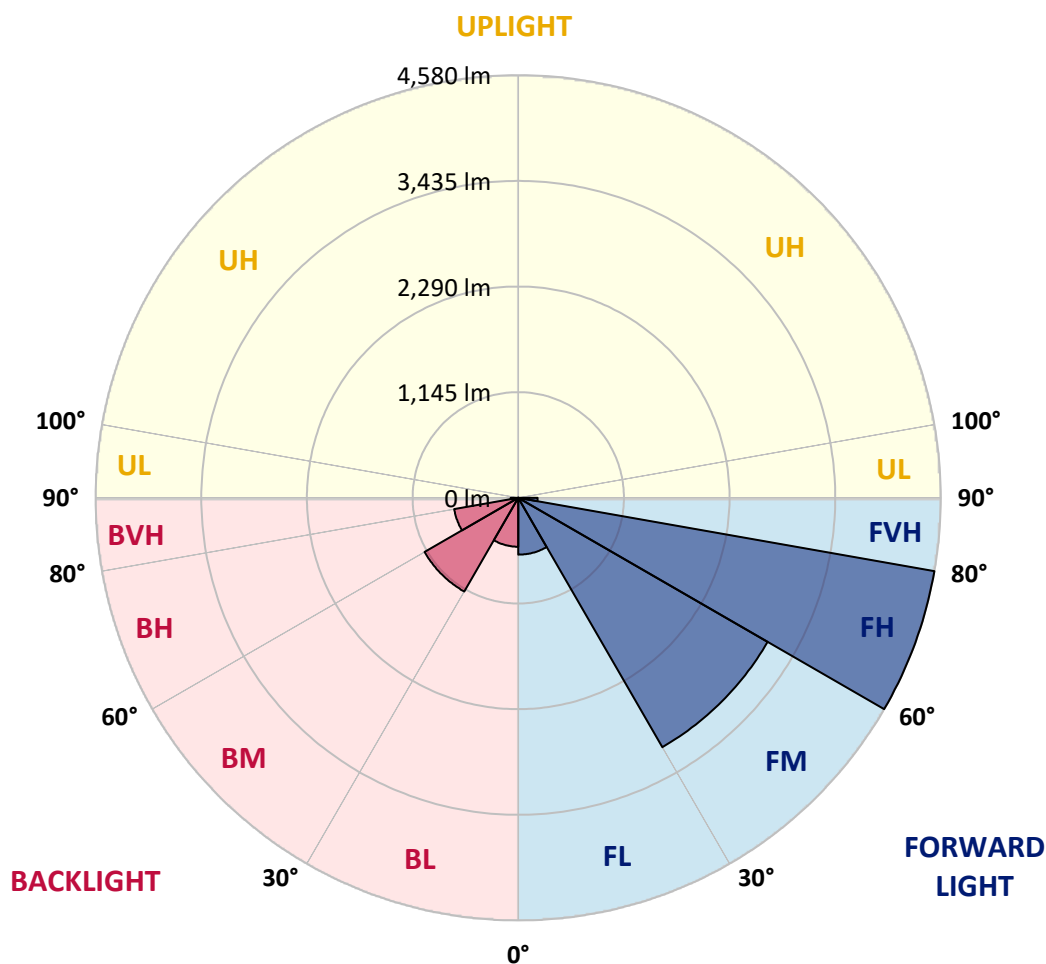
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	616.1	5.6			
FM	(30°-60°)	3120.5	28.3			
FH	(60°-80°)	4580.0	41.6			G2/5000
FVH	(80°-90°)	209.7	1.9			G2/225
BL	(0°-30°)	530.2	4.8	B2/1000		
BM	(30°-60°)	1172.7	10.6	B2/2500		
BH	(60°-80°)	705.0	6.4	B2/1000		G2/1000
BVH	(80°-90°)	82.6	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4
2.5°	1154.9	1162.5	1155.5	1149.1	1146.2	1138.7	1138.1	1133.4	1130.5	1122.4	1120.1
5°	1235.5	1245.5	1233.8	1221.1	1209.5	1190.8	1188.6	1175.2	1160.1	1142.7	1132.8
7.5°	1326.7	1335.4	1322.0	1302.9	1282.6	1251.8	1251.2	1226.8	1203.0	1173.4	1156.6
10°	1406.2	1417.8	1399.8	1373.7	1348.2	1313.3	1309.2	1281.5	1251.2	1212.9	1187.4
12.5°	1476.4	1484.5	1467.1	1435.2	1405.6	1370.8	1365.6	1334.8	1301.1	1257.6	1225.1
15°	1532.2	1542.5	1519.4	1485.1	1453.8	1419.5	1414.9	1387.0	1353.4	1307.5	1265.8
17.5°	1568.7	1577.4	1553.6	1515.3	1485.1	1456.7	1453.2	1430.0	1400.4	1353.9	1309.2
20°	1582.6	1591.9	1566.9	1528.1	1500.2	1478.2	1476.4	1459.6	1439.3	1396.9	1351.7
22.5°	1596.5	1605.3	1572.8	1532.2	1507.8	1493.8	1493.2	1482.3	1474.1	1439.3	1395.1
25°	1652.8	1655.2	1611.6	1553.0	1518.2	1506.0	1505.4	1504.8	1508.3	1481.0	1442.2
27.5°	1701.6	1701.0	1663.9	1608.7	1554.7	1529.2	1528.7	1534.4	1545.5	1522.8	1491.0
30°	1772.9	1766.6	1722.5	1665.0	1615.7	1576.2	1572.8	1567.5	1576.2	1558.2	1539.7
32.5°	1924.4	1904.1	1832.7	1730.6	1666.1	1636.0	1631.4	1598.9	1602.4	1591.3	1582.0
35°	2141.5	2114.8	2019.7	1854.8	1728.9	1685.9	1683.6	1642.4	1635.4	1625.5	1629.0
37.5°	2399.7	2366.6	2255.8	2034.7	1836.8	1743.9	1740.4	1703.3	1674.8	1664.4	1684.2
40°	2659.2	2617.3	2525.7	2254.1	1995.8	1840.9	1829.8	1773.6	1741.1	1723.6	1765.5
42.5°	2911.0	2876.3	2797.8	2500.2	2192.0	1982.5	1958.1	1861.8	1837.4	1821.1	1896.6
45°	3133.9	3102.6	3045.1	2763.1	2421.8	2175.2	2151.4	1994.0	1986.6	1986.6	2095.6
47.5°	3315.0	3308.0	3247.1	3031.1	2692.8	2394.5	2353.3	2178.0	2198.3	2229.7	2378.3
50°	3515.7	3496.6	3431.6	3295.3	3011.4	2645.8	2612.1	2403.8	2479.9	2565.7	2786.9
52.5°	3700.4	3710.8	3638.2	3570.3	3371.2	2926.2	2866.9	2670.2	2834.4	2976.6	3265.6
55°	3890.1	3890.7	3870.4	3861.1	3748.5	3236.0	3171.0	2990.5	3251.7	3428.1	3824.0
57.5°	4068.2	4069.5	4099.6	4181.4	4186.1	3593.5	3519.8	3384.0	3715.4	3895.3	4399.6
60°	4227.3	4235.4	4317.8	4509.3	4570.9	4003.2	3933.6	3848.9	4194.8	4375.8	5005.0
62.5°	4280.7	4310.2	4493.7	4765.8	4951.0	4505.8	4437.3	4386.9	4698.5	4866.8	5511.0
65°	4190.1	4258.1	4612.6	4977.7	5342.1	5103.1	5035.1	4980.0	5222.0	5380.4	5926.5
67.5°	3967.9	4055.5	4605.6	5199.9	5816.9	5821.5	5758.2	5628.8	5783.2	5844.1	6061.7
70°	3382.3	3513.4	4200.0	5283.0	6361.8	6804.1	6743.1	6409.9	6343.2	6048.4	5681.1
72.5°	2179.3	2355.7	3092.7	4599.9	6483.1	7728.5	7725.0	7115.1	6520.2	5651.4	4556.3
75°	795.1	903.0	1436.9	2887.2	5441.9	7681.6	7704.1	6994.4	5952.1	4365.4	2838.5
77.5°	289.6	316.8	468.9	1109.7	3346.8	6163.3	6210.4	5591.7	4236.5	2190.8	1124.7
80°	152.0	167.2	240.3	430.6	1434.1	3660.3	3734.0	3323.0	1991.2	659.9	337.2
82.5°	84.2	91.1	134.7	233.9	646.0	1565.2	1609.4	1312.7	700.5	279.7	139.3
85°	45.3	48.2	63.2	127.7	315.7	542.6	554.8	392.3	279.1	164.2	67.3
87.5°	13.3	16.3	20.9	40.6	123.6	121.9	124.7	77.8	110.3	83.0	22.0
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°	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4	1111.4
2.5°	1116.6	1114.9	1108.4	1105.6	1102.1	1101.5	1104.4	1104.9	1105.6	1106.2	1108.4
5°	1127.1	1121.2	1115.4	1111.9	1113.1	1113.7	1119.5	1123.6	1126.5	1128.7	1130.0
7.5°	1147.4	1142.7	1132.8	1132.2	1134.0	1139.2	1146.8	1156.1	1161.3	1165.3	1166.6
10°	1177.5	1168.8	1157.2	1159.0	1162.5	1169.9	1185.6	1193.2	1201.9	1209.5	1207.8
12.5°	1208.3	1200.8	1187.4	1188.6	1194.3	1207.8	1222.8	1232.0	1237.9	1243.7	1246.0
15°	1248.3	1235.0	1220.5	1220.5	1230.9	1245.5	1252.3	1259.9	1263.4	1269.8	1272.1
17.5°	1289.6	1272.1	1253.0	1251.8	1264.5	1271.5	1275.6	1276.7	1278.0	1284.9	1287.2
20°	1330.8	1311.6	1284.3	1282.0	1284.9	1283.7	1283.2	1282.0	1283.7	1292.4	1295.9
22.5°	1371.3	1349.3	1311.6	1301.1	1293.0	1282.0	1281.5	1280.8	1282.0	1290.7	1296.5
25°	1418.9	1392.3	1341.7	1310.5	1283.2	1268.0	1269.8	1270.4	1271.5	1278.5	1287.8
27.5°	1470.6	1441.0	1369.6	1307.5	1258.2	1247.7	1244.9	1246.6	1250.7	1261.7	1272.7
30°	1522.2	1487.5	1395.1	1295.9	1226.8	1212.4	1203.0	1207.1	1219.9	1230.9	1243.1
32.5°	1569.3	1534.4	1415.5	1270.4	1186.8	1164.2	1152.0	1157.2	1169.9	1174.0	1188.6
35°	1624.4	1585.0	1424.1	1229.8	1143.3	1108.4	1092.2	1084.7	1091.0	1087.0	1099.7
37.5°	1685.9	1644.7	1423.0	1176.4	1092.2	1052.2	1029.5	1001.1	987.8	973.9	982.6
40°	1777.0	1717.8	1409.1	1111.9	1029.0	992.4	951.8	903.6	873.4	846.1	847.9
42.5°	1901.3	1819.4	1383.5	1041.2	957.6	923.3	868.2	811.9	764.3	719.0	715.0
45°	2086.4	1952.3	1351.7	965.7	880.4	846.8	787.0	723.6	669.7	611.7	604.8
47.5°	2353.3	2131.1	1321.4	879.9	799.2	768.3	714.4	655.8	591.9	535.7	529.3
50°	2720.1	2387.5	1293.6	796.2	719.0	695.9	652.9	593.2	528.7	483.4	480.5
52.5°	3186.7	2736.3	1282.0	715.6	644.2	635.5	601.3	545.5	484.6	446.3	443.4
55°	3722.4	3153.6	1282.0	638.4	578.6	581.5	557.7	506.0	453.3	419.0	415.5
57.5°	4269.0	3576.1	1258.8	567.0	522.9	535.0	520.0	474.7	427.1	391.8	385.9
60°	4772.8	3930.2	1164.8	502.0	473.6	492.7	482.9	443.9	385.9	356.3	351.7
62.5°	5159.8	4129.7	983.7	450.4	433.0	455.0	449.8	403.3	378.4	366.2	362.1
65°	5353.8	4097.2	752.1	404.5	398.7	433.0	421.9	420.1	400.5	386.5	381.9
67.5°	5234.8	3817.5	545.5	370.8	378.9	412.7	455.0	462.0	425.4	398.1	393.5
70°	4713.1	3311.5	406.2	339.0	354.0	413.2	518.9	483.4	417.3	385.4	380.2
72.5°	3585.4	2469.4	315.1	305.2	321.5	416.2	547.2	473.6	394.0	426.0	422.5
75°	2050.4	1355.7	253.1	264.0	280.8	388.9	532.8	448.0	376.1	391.1	391.1
77.5°	781.8	521.1	208.9	223.4	225.7	339.5	509.5	446.3	358.0	349.3	318.6
80°	271.0	203.7	172.9	177.6	174.7	301.8	488.6	388.3	293.0	262.3	253.6
82.5°	110.8	101.6	136.9	131.2	124.2	234.4	394.6	317.4	239.6	211.9	209.5
85°	48.2	64.4	90.5	79.5	72.0	162.5	316.3	268.7	202.5	174.7	174.1
87.5°	9.8	24.4	38.3	36.0	37.1	108.5	224.6	191.0	143.4	107.3	84.2
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)